1216608 - R8 SDMS

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30S9

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-14A

Sample wt/vol: 30.5 (g/mL) G Lab File ID: S2H5265.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 34 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: 7.3 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
100-52-7	Benzaldehyde	250	U
108-95-2	Phenol	250	U
111-44-4	Bis(2-chloroethyl)ether	250	U
95-57-8	2-Chlorophenol	250	U
95-48-7	2-Methylphenol	250	U
108-60-1	2,2'-Oxybis(1-chloropropane)	250	U
98-86-2	Acetophenone	250	U
106-44-5	4-Methylphenol	250	U
621-64-7	N-Nitroso-di-n-propylamine	250	U
67-72-1	Hexachloroethane	250	U
98-95-3	Nitrobenzene	250	U
78-59-1	Isophorone	250	U
88-75-5	2-Nitrophenol	250	U
105-67-9	2,4-Dimethylphenol	250	U
111-91-1	Bis(2-chloroethoxy)methane	250	U
120-83-2	2,4-Dichlorophenol	250	U
91-20-3	Naphthalene	250	U
106-47-8	4-Chloroaniline	250	U
87-68-3	Hexachlorobutadiene	250	U
105-60-2	Caprolactam	250	U
59-50-7	4-Chloro-3-methylphenol	250	U
91-57-6	2-Methylnaphthalene	250	U
77-47-4	Hexachlorocyclopentadiene	250	U
88-06-2	2,4,6-Trichlorophenol	250	U
95-95-4	2,4,5-Trichlorophenol	250	U
92-52-4	1,1'-Biphenyl	250	U
91-58-7	2-Chloronaphthalene	250	U
88-74-4	2-Nitroaniline	490	U
131-11-3	Dimethylphthalate	250	U
606-20-2	2,6-Dinitrotoluene	250	U
208-96-8	Acenaphthylene	250	U
99-09-2	3-Nitroaniline	490	U
83-32-9	Acenaphthene	250	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30S9

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-14A

Sample wt/vol: 30.5 (g/mL) G Lab File ID: S2H5265.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 34 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: 7.3 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	490	U
100-02-7	4-Nitrophenol	490	U
132-64-9	Dibenzofuran	250	U
121-14-2	2,4-Dinitrotoluene	250	U
84-66-2	Diethylphthalate	250	U
86-73-7	Fluorene	250	U
7005-72-3	4-Chlorophenyl-phenylether	250	U
100-01-6	4-Nitroaniline	490	U
534-52-1	4,6-Dinitro-2-methylphenol	490	U
86-30-6	N-Nitrosodiphenylamine (1)	250	U
95-94-3	1,2,4,5-Tetrachlorobenzene	250	U
101-55-3	4-Bromophenyl-phenylether	250	U
118-74-1	Hexachlorobenzene	250	U
1912-24-9	Atrazine	250	U
87-86-5	Pentachlorophenol	490	U
85-01-8	Phenanthrene	250	U
120-12-7	Anthracene	250	U
86-74-8	Carbazole	250	U
84-74-2	Di-n-butylphthalate	250	U
206-44-0	Fluoranthene	250	U
129-00-0	Pyrene	250	U
85-68-7	Butylbenzylphthalate	250	U
91-94-1	3,3'-Dichlorobenzidine	250	U
56-55-3	Benzo(a)anthracene	250	U
218-01-9	Chrysene	250	U
117-81-7	Bis(2-ethylhexyl)phthalate	250	U
117-84-0	Di-n-octylphthalate	250	U
205-99-2	Benzo(b)fluoranthene	250	U
207-08-9	Benzo(k)fluoranthene	250	U
50-32-8	Benzo(a)pyrene	250	U
193-39-5	Indeno(1,2,3-cd)pyrene	250	U
53-70-3	Dibenzo(a,h)anthracene	250	U
191-24-2	Benzo(g,h,i)perylene	250	U
58-90-2	2,3,4,6-Tetrachlorophenol	250	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30S9

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-14A

Sample wt/vol: 30.5 (g/mL) G Lab File ID: S2H5265.D

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 34 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: 7.3 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.996	180	J
02		Unknown-02	3.156	110	J
03	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.486	320	BNJ
04		Unknown-03	4.690	260	J
05		Unknown-04	5.215	350	J
06		Unknown-05	5.344	140	J
07	57-10-3	n-Hexadecanoic acid	7.907	220	NJ
08		Unknown-06	9.215	240	J
09		Unknown-07	9.601	200	J
10	301-02-0	9-Octadecenamide, (Z)-	10.448	410	NJ
	E96679[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5265.D
Report Date: 11-Nov-2011 13:36

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5265.D
Lab Smp Id: K2198-14A Client Smp ID: H30S9
Inj Date : 10-NOV-2011 15:38
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-14A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment :
Method : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.500	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)
$	2 Phenol-d5	71	3.381	3.373	(0.916)	126502	31.4106	510
$	4 bis(2-Chloroethyl)ether-d8	67	3.424	3.427	(0.927)	146772	26.4472	430
$	6 2-Chlorophenol-d4	132	3.510	3.491	(0.951)	117323	33.6756	550
*	8 1,4-Dichlorobenzene-d4	152	3.692	3.684	(1.000)	127894	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.014	4.006	(1.087)	201115	36.8342	600
$	16 Nitrobenzene-d5	128	4.153	4.145	(0.874)	68833	32.4777	530(Q)
$	19 2-Nitrophenol-d4	143	4.421	4.424	(0.930)	75259	32.1665	530
$	23 2,4-Dichlorophenol-d3	165	4.636	4.628	(0.975)	145421	34.0477	560
*	25 Naphthalene-d8	136	4.754	4.746	(1.000)	406966	40.0000	
$	27 4-Chloroaniline-d4	131	4.818	4.810	(1.014)	26482	6.98298	110(aQ)
$	40 Dimethylphthalate-d6	166	5.976	5.968	(0.962)	458735	39.1475	640
$	43 Acenaphthylene-d8	160	6.084	6.076	(0.979)	474611	31.1464	510
*	46 Acenaphthene-d10	164	6.212	6.204	(1.000)	318703	40.0000	
$	49 4-Nitrophenol-d4	143	6.319	6.312	(1.017)	67026	39.6901	650
$	54 Fluorene-d10	176	6.641	6.633	(1.069)	343107	31.8756	520(R)
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.705	6.698	(0.902)	76974	35.7570	590(Q)
*	65 Phenanthrene-d10	188	7.435	7.438	(1.000)	551660	40.0000	
$	67 Anthracene-d10	188	7.488	7.480	(1.007)	503120	31.9272	520
$	72 Pyrene-d10	212	8.625	8.606	(0.889)	446063	37.2408	610(R)

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5265.D
Report Date: 11-Nov-2011 13:36

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 77 Chrysene-d12	240	9.697	9.668	(1.000)	380220	40.0000	(Q)
$ 83 Benzo(a)pyrene-d12	264	10.931	10.891	(1.000)	190420	31.5392	520(R)
* 85 Perylene-d12	264	11.006	10.966	(1.000)	246045	40.0000	(H)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5265.D
Report Date: 11-Nov-2011 13:36

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5265.D
Lab Smp Id: K2198-14A Client Smp ID: H30S9
Inj Date : 10-NOV-2011 15:38
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-14A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment :
Method : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.500	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 8 1,4-Dichlorobenzene-d4	3.693	1160111	40.000
* 25 Naphthalene-d8	4.754	1335250	40.000
* 65 Phenanthrene-d10	7.435	1603769	40.000
* 77 Chrysene-d12	9.698	1064140	40.000

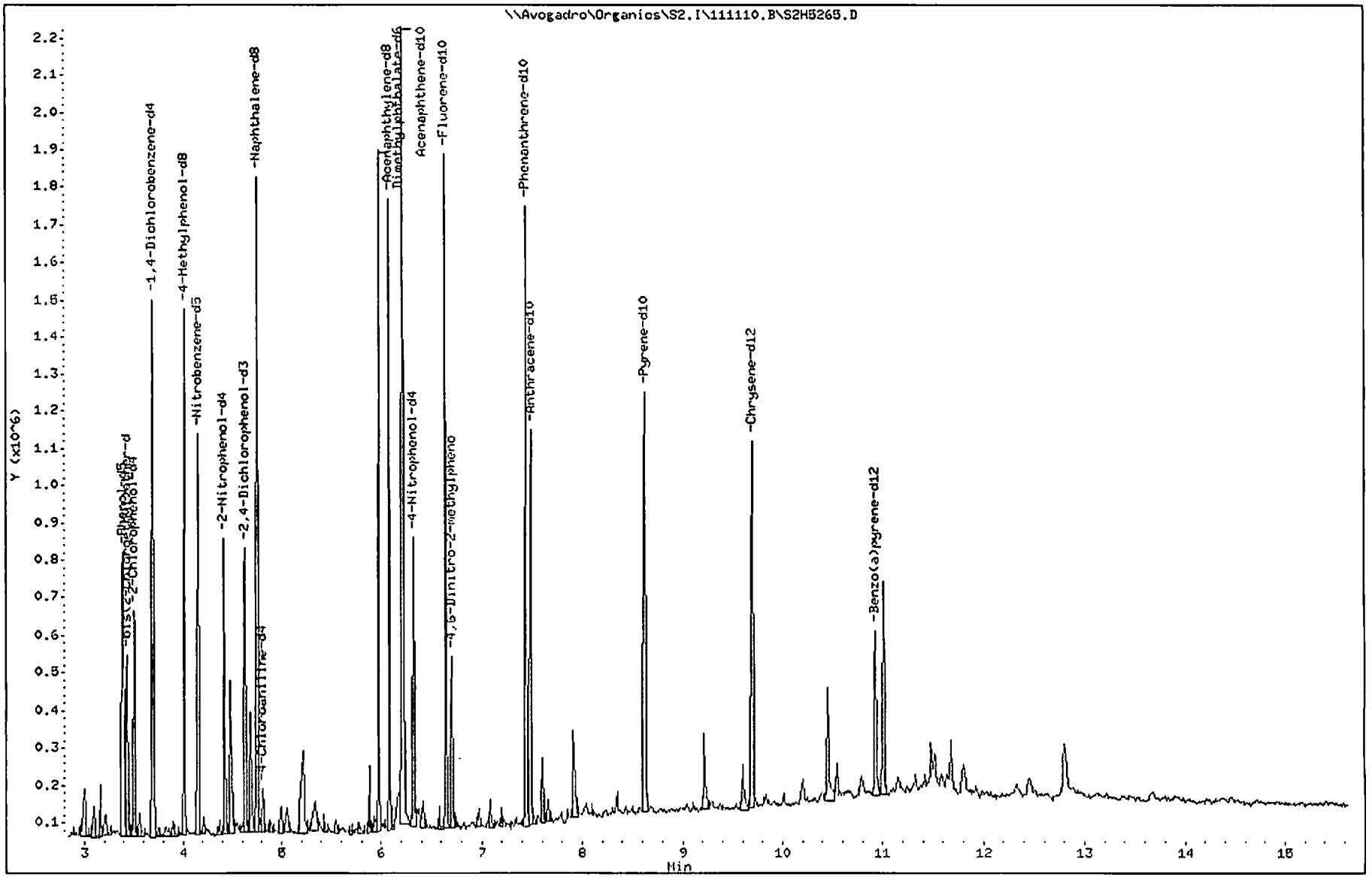
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.996	210180	7.24688583	120	0		0	8
Unknown				CAS #:			
3.156	125337	4.32154409	71	0		0	8

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5265.D
Report Date: 11-Nov-2011 13:36

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
2(3H)-Furanone, dihydro-4-hydroxy-					CAS #: 5469-16-9		
4.486	433076	12.9736170	210	90	NIST2002.L	4145	25
Unknown					CAS #:		
4.690	343704	10.2963283	170	0		0	25
Unknown					CAS #:		
5.215	472902	14.1666907	230	0		0	25
Unknown					CAS #:		
5.344	193819	5.80623115	95	0		0	25
n-Hexadecanoic acid					CAS #: 57-10-3		
7.907	358389	8.93666658	150	93	NIST2002.L	92227	65
Unknown					CAS #:		
9.215	260366	9.78690115	160	0		0	77
Unknown					CAS #:		
9.601	213598	8.02893708	130	0		0	77
9-Octadecenamide, (Z)-					CAS #: 301-02-0		
10.448	443307	16.6634948	270	90	NIST2002.L	106877	77

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5265.D
Date : 10-NOV-2011 15:38
Client ID: H30S9
Sample Info: K2198-14A,,62764,,
Volume Injected (uL): 2.0
Column phase: RXI-5SILMS

Instrument: S2.i
Operator: SRC: LIMS
Column diameter: 0.25



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Date : 10-NOV-2011 15:38

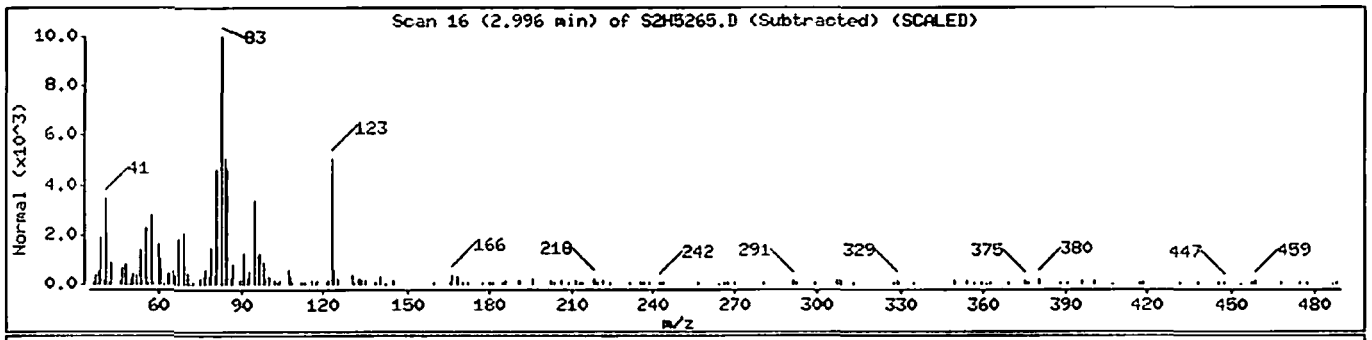
Client ID: H30S9 Instrument: S2.i

Sample Info: K2198-14A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 15:38

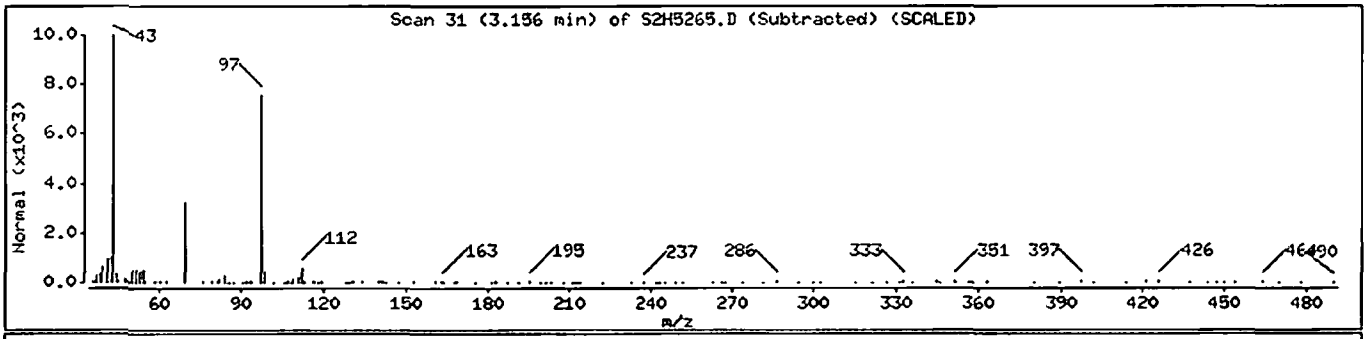
Client ID: H30S9 Instrument: S2.i

Sample Info: K2198-14A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 15:38

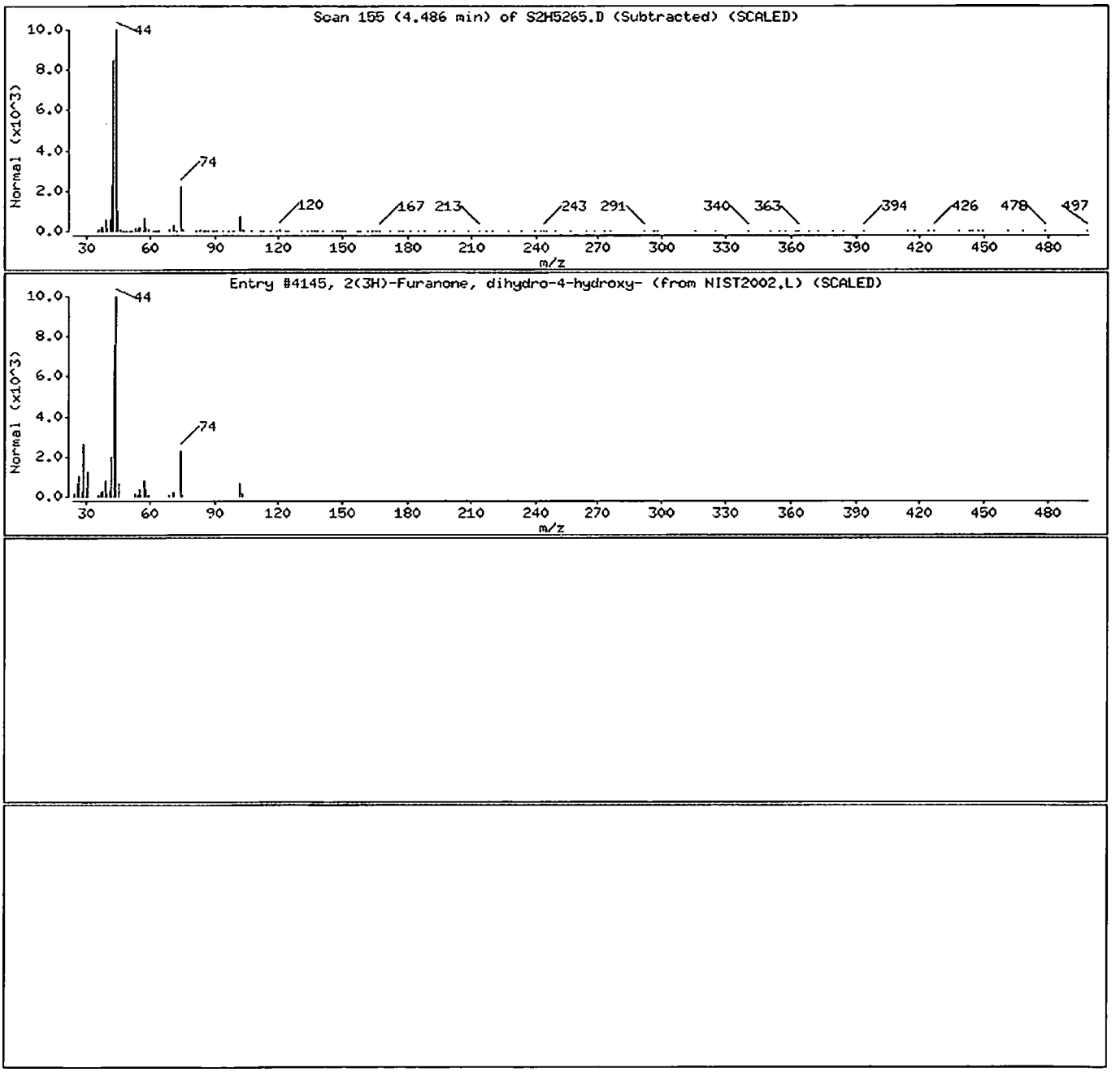
Client ID: H30S9 Instrument: S2.i

Sample Info: K2198-14A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2(3H)-Furanone, dihydro-4-hydroxy-	5469-16-9	NIST2002.L	4145	90	C4H6O3	102



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Date : 10-NOV-2011 15:38

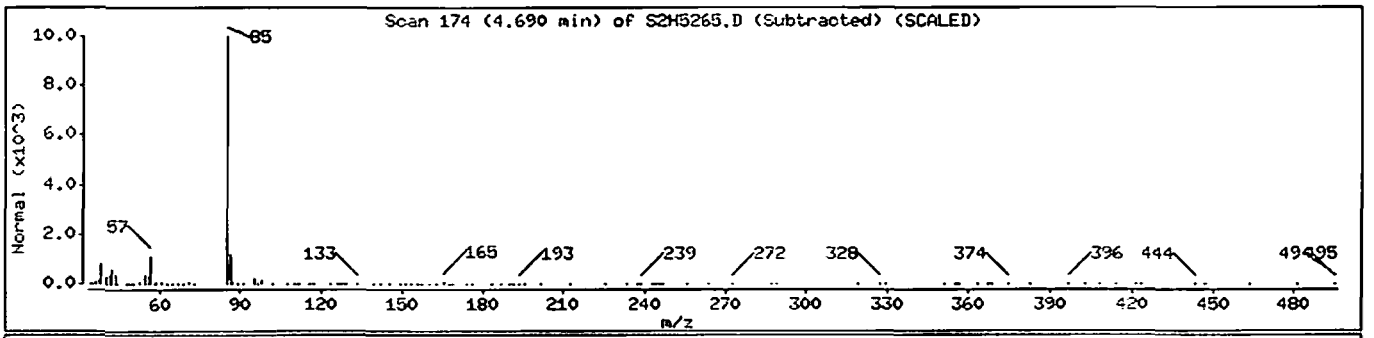
Client ID: H30S9 Instrument: S2.i

Sample Info: K2198-14A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 15:38

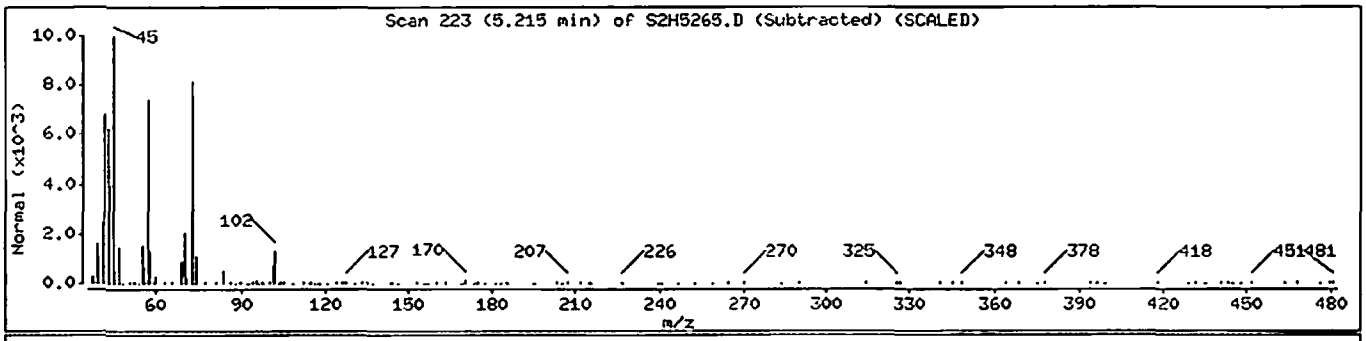
Client ID: H30S9 Instrument: S2.i

Sample Info: K2198-14A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 15:38

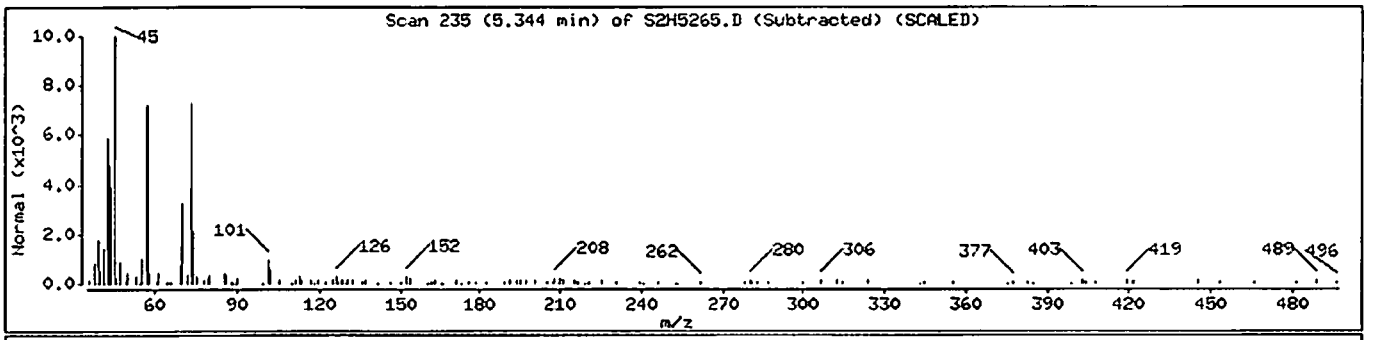
Client ID: H30S9 Instrument: S2.i

Sample Info: K2198-14A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5265.D

Date : 10-NOV-2011 15:38

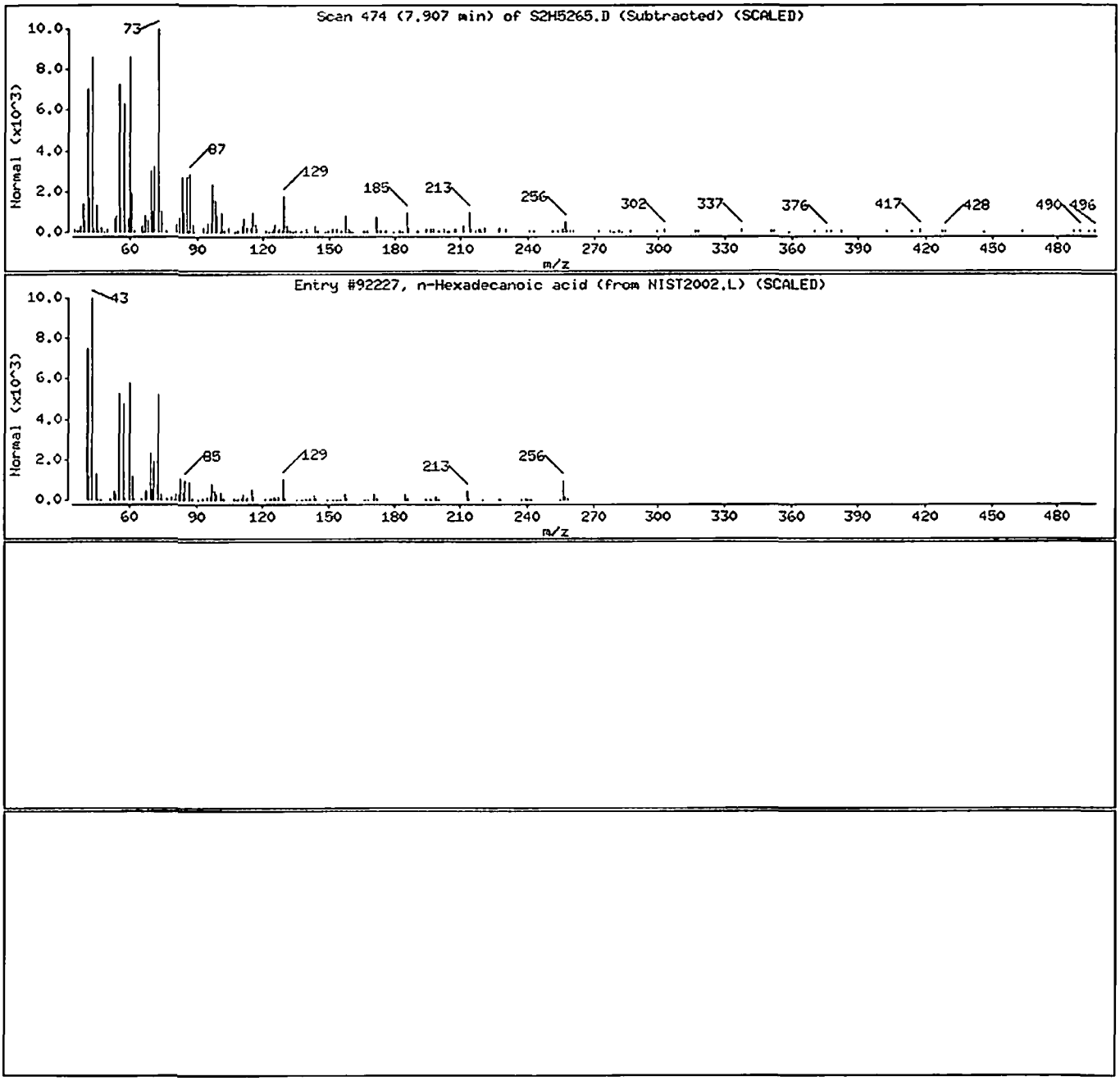
Client ID: H30S9 Instrument: S2.i

Sample Info: K2198-14A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIHS

Column phase: RXI-5SILHS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
n-Hexadecanoic acid	57-10-3	NIST2002.L	92227	93	C16H3202	256



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5265.D

Date : 10-NOV-2011 15:38

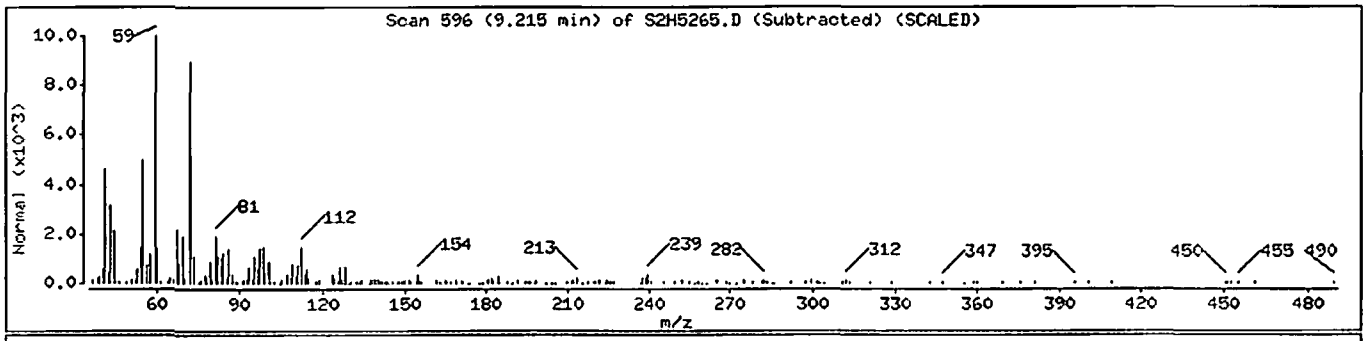
Client ID: H30S9 Instrument: S2.i

Sample Info: K2198-14A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.i\111110.B\S2H5265.D

Date : 10-NOV-2011 15:38

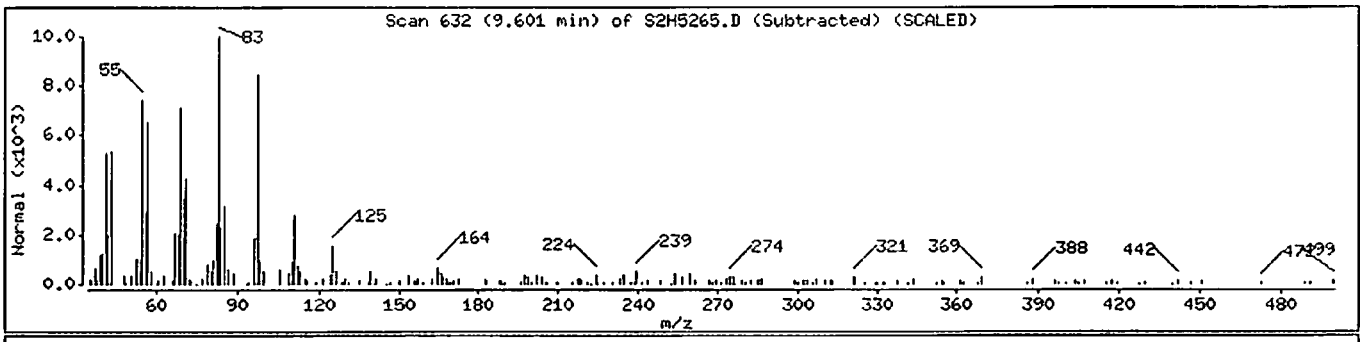
Client ID: H30S9 Instrument: S2.i

Sample Info: K2198-14A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Hatch	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5265.D

Date : 10-NOV-2011 15:38

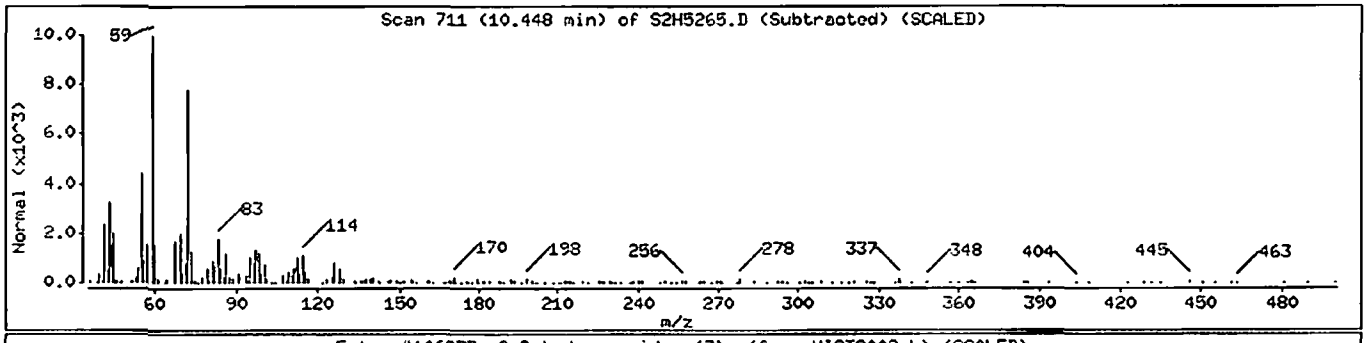
Client ID: H30S9 Instrument: S2.i

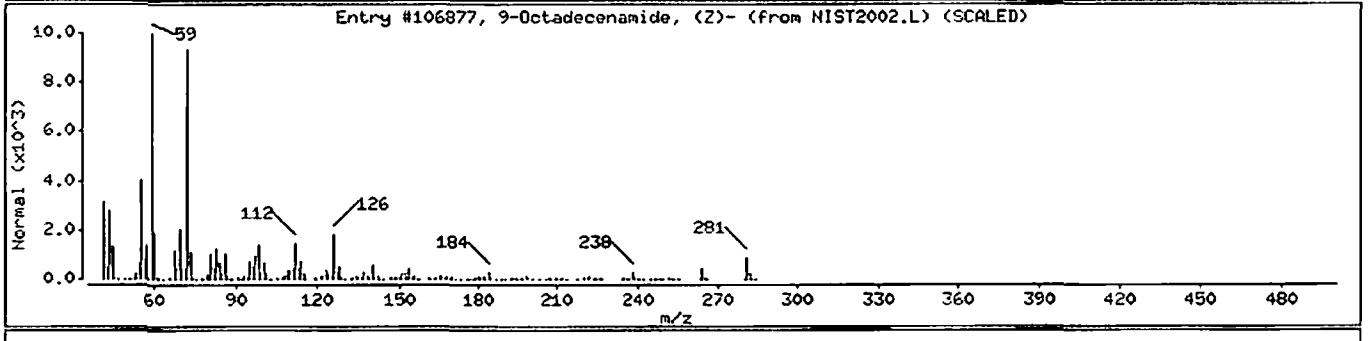
Sample Info: K2193-14A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST2002.L	106877	90	C18H35NO	281





1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T0

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-15A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: S2H5266.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 28 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
100-52-7	Benzaldehyde	230	U
108-95-2	Phenol	230	U
111-44-4	Bis(2-chloroethyl)ether	230	U
95-57-8	2-Chlorophenol	230	U
95-48-7	2-Methylphenol	230	U
108-60-1	2,2'-Oxybis(1-chloropropane)	230	U
98-86-2	Acetophenone	230	U
106-44-5	4-Methylphenol	230	U
621-64-7	N-Nitroso-di-n-propylamine	230	U
67-72-1	Hexachloroethane	230	U
98-95-3	Nitrobenzene	230	U
78-59-1	Isophorone	230	U
88-75-5	2-Nitrophenol	230	U
105-67-9	2,4-Dimethylphenol	230	U
111-91-1	Bis(2-chloroethoxy)methane	230	U
120-83-2	2,4-Dichlorophenol	230	U
91-20-3	Naphthalene	230	U
106-47-8	4-Chloroaniline	230	U
87-68-3	Hexachlorobutadiene	230	U
105-60-2	Caprolactam	230	U
59-50-7	4-Chloro-3-methylphenol	230	U
91-57-6	2-Methylnaphthalene	230	U
77-47-4	Hexachlorocyclopentadiene	230	U
88-06-2	2,4,6-Trichlorophenol	230	U
95-95-4	2,4,5-Trichlorophenol	230	U
92-52-4	1,1'-Biphenyl	230	U
91-58-7	2-Chloronaphthalene	230	U
88-74-4	2-Nitroaniline	450	U
131-11-3	Dimethylphthalate	230	U
606-20-2	2,6-Dinitrotoluene	230	U
208-96-8	Acenaphthylene	230	U
99-09-2	3-Nitroaniline	450	U
83-32-9	Acenaphthene	230	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T0

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-15A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: S2H5266.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 28 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	450	U
100-02-7	4-Nitrophenol	450	U
132-64-9	Dibenzofuran	230	U
121-14-2	2,4-Dinitrotoluene	230	U
84-66-2	Diethylphthalate	230	U
86-73-7	Fluorene	230	U
7005-72-3	4-Chlorophenyl-phenylether	230	U
100-01-6	4-Nitroaniline	450	U
534-52-1	4,6-Dinitro-2-methylphenol	450	U
86-30-6	N-Nitrosodiphenylamine (1)	230	U
95-94-3	1,2,4,5-Tetrachlorobenzene	230	U
101-55-3	4-Bromophenyl-phenylether	230	U
118-74-1	Hexachlorobenzene	230	U
1912-24-9	Atrazine	230	U
87-86-5	Pentachlorophenol	450	U
85-01-8	Phenanthrene	230	U
120-12-7	Anthracene	230	U
86-74-8	Carbazole	230	U
84-74-2	Di-n-butylphthalate	230	U
206-44-0	Fluoranthene	230	U
129-00-0	Pyrene	230	U
85-68-7	Butylbenzylphthalate	230	U
91-94-1	3,3'-Dichlorobenzidine	230	U
56-55-3	Benzo(a)anthracene	230	U
218-01-9	Chrysene	230	U
117-81-7	Bis(2-ethylhexyl)phthalate	230	U
117-84-0	Di-n-octylphthalate	230	U
205-99-2	Benzo(b)fluoranthene	230	U
207-08-9	Benzo(k)fluoranthene	230	U
50-32-8	Benzo(a)pyrene	230	U
193-39-5	Indeno(1,2,3-cd)pyrene	230	U
53-70-3	Dibenzo(a,h)anthracene	230	U
191-24-2	Benzo(g,h,i)perylene	230	U
58-90-2	2,3,4,6-Tetrachlorophenol	230	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: H30T0

Lab Name: MITKEM LABORATORIES | Contract: EP-W-11-033

Lab Code: MITKEM | Case No.: 41926 | Mod. Ref No.: | SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL | Lab Sample ID: K2198-15A

Sample wt/vol: 30.2 (g/mL) G | Lab File ID: S2H5266.D

Level: (TRACE or LOW/MED) LOW | Extraction: (Type) SONC

% Moisture: 28 | Decanted: (Y/N) N | Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) | Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) | GPC Factor: 2.00 | Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y | pH: 7.0 | Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.996	240	J
02	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.486	290	BNJ
03	32780-06-6	(S)-(+)-2',3'-Dideoxyribonol	4.690	250	NJ
04		Unknown-02	5.215	340	J
05		Unknown-03	5.344	150	J
06		Unknown-04	7.607	110	J
07	57-10-3	n-Hexadecanoic acid	7.907	260	NJ
08		Unknown-05	9.205	190	J
09		Unknown-06	9.591	250	J
10		Unknown-07	10.170	230	J
11		Unknown-08	10.427	610	J
12	83-47-6	.gamma.-Sitosterol	12.776	1300	NJ
	E96679[2]	Total Alkanes	N/A	770	J

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5266.D
Report Date: 11-Nov-2011 13:36

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5266.D
Lab Smp Id: K2198-15A Client Smp ID: H30T0
Inj Date : 10-NOV-2011 15:59
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-15A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment :
Method : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.200	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)
$ 2 Phenol-d5	71	3.381	3.373	(0.916)	93356	23.6591	390(Q)
$ 4 bis(2-Chloroethyl)ether-d8	67	3.424	3.427	(0.927)	117853	21.6748	360
$ 6 2-Chlorophenol-d4	132	3.510	3.491	(0.951)	92206	27.0128	450
* 8 1,4-Dichlorobenzene-d4	152	3.692	3.684	(1.000)	125306	40.0000	(Q)
$ 11 4-Methylphenol-d8	113	4.014	4.006	(1.087)	164693	30.7865	510
$ 16 Nitrobenzene-d5	128	4.153	4.145	(0.874)	49175	25.6103	420
$ 19 2-Nitrophenol-d4	143	4.421	4.424	(0.930)	57118	26.9464	450
$ 23 2,4-Dichlorophenol-d3	165	4.636	4.628	(0.975)	112340	29.0320	480
* 25 Naphthalene-d8	136	4.754	4.746	(1.000)	368702	40.0000	
$ 27 4-Chloroaniline-d4	131	4.807	4.810	(1.011)	13662	3.97637	66(aQ)
$ 40 Dimethylphthalate-d6	166	5.976	5.968	(0.962)	340064	32.2494	530(R)
$ 43 Acenaphthylene-d8	160	6.084	6.076	(0.979)	378993	27.6389	460
* 46 Acenaphthene-d10	164	6.212	6.204	(1.000)	286792	40.0000	
$ 49 4-Nitrophenol-d4	143	6.320	6.312	(1.017)	45380	29.8623	490(Q)
$ 54 Fluorene-d10	176	6.641	6.633	(1.069)	271479	28.0275	460(R)
$ 58 4,6-Dinitro-2-methylphenol-d2	200	6.706	6.698	(0.902)	53304	28.2549	470(Q)
* 65 Phenanthrene-d10	188	7.435	7.438	(1.000)	483453	40.0000	
$ 67 Anthracene-d10	188	7.488	7.480	(1.007)	377068	27.3040	450
$ 72 Pyrene-d10	212	8.614	8.606	(0.890)	314302	32.2779	530(R)

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5266.D
Report Date: 11-Nov-2011 13:36

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 77 Chrysene-d12	240	9.676	9.668	(1.000)	309100	40.0000	(Q)
s 83 Benzo(a)pyrene-d12	264	10.898	10.891	(0.992)	147655	28.2478	470(R)
* 85 Perylene-d12	264	10.984	10.966	(1.000)	213018	40.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5266.D
Report Date: 11-Nov-2011 13:36

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5266.D
Lab Smp Id: K2198-15A Client Smp ID: H30T0
Inj Date : 10-NOV-2011 15:59
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-15A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment :
Method : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.200	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 8 1,4-Dichlorobenzene-d4	3.693	1089420	40.000
* 25 Naphthalene-d8	4.754	1216520	40.000
* 65 Phenanthrene-d10	7.435	1376922	40.000
* 77 Chrysene-d12	9.676	864425	40.000
* 85 Perylene-d12	10.985	559103	40.000

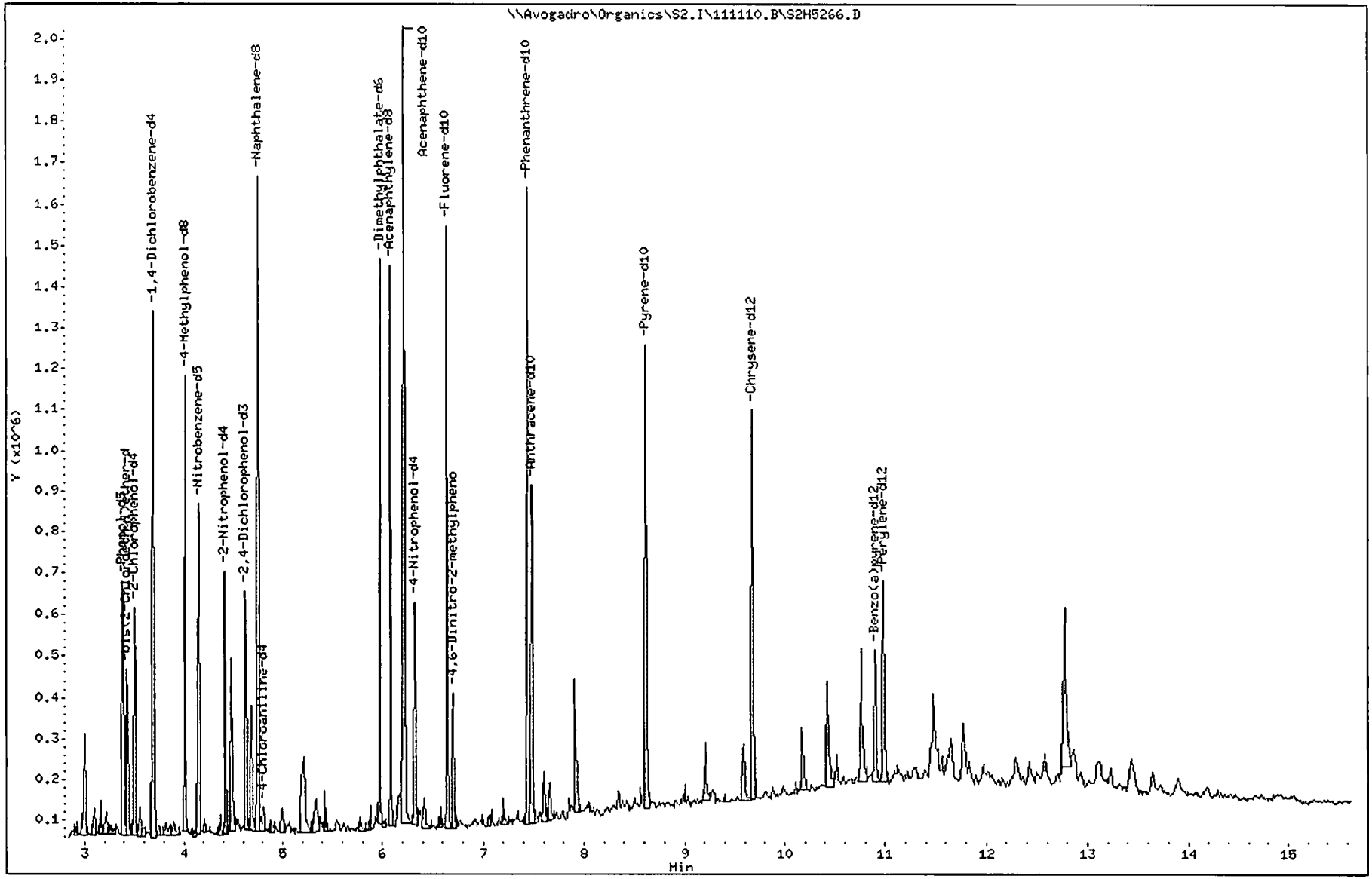
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.996	287079	10.5406090	170	0		0	8
2(3H)-Furanone, dihydro-4-hydroxy-				CAS #: 5469-16-9			
4.486	391511	12.8731531	210	90	NIST2002.L	4145	25

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5266.D
Report Date: 11-Nov-2011 13:36

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
(S)-(+)-2',3'-Dideoxyribonolactone				CAS #: 32780-06-6			
4.690	332499	10.9327776	180	86	NIST2002.L	7822	25
Unknown				CAS #:			
5.215	447587	14.7169463	240	0		0	25
Unknown				CAS #:			
5.344	195173	6.41741113	110	0		0	25
Unknown				CAS #:			
7.607	163644	4.75389779	79	0		0	65
n-Hexadecanoic acid				CAS #: 57-10-3			
7.907	388622	11.2895927	190	93	NIST2002.L	92226	65
Unknown				CAS #:			
9.205	175205	8.10736710	130	0		0	77
Unknown				CAS #:			
9.591	235643	10.9040267	180	0		0	77
Unknown				CAS #:			
10.170	219239	10.1449694	170	0		0	77
Unknown				CAS #:			
10.427	370128	26.4801323	440	0		0	85
Straight-chain Alkane				CAS #:			
10.760	473625	33.8845595	560	0		0	85
.gamma.-Sitosterol				CAS #: 83-47-6			
12.776	817035	58.4532162	970	99	NIST2002.L	159285	85

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5266.D
Date : 10-NOV-2011 15:59
Client ID: H30T0
Sample Info: K2198-15A,,62764,,
Volume Injected (uL): 2.0
Column phase: RXI-5SILMS

Instrument: S2.i
Operator: SRC: LIMS
Column diameter: 0.25



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Date : 10-NOV-2011 15:59

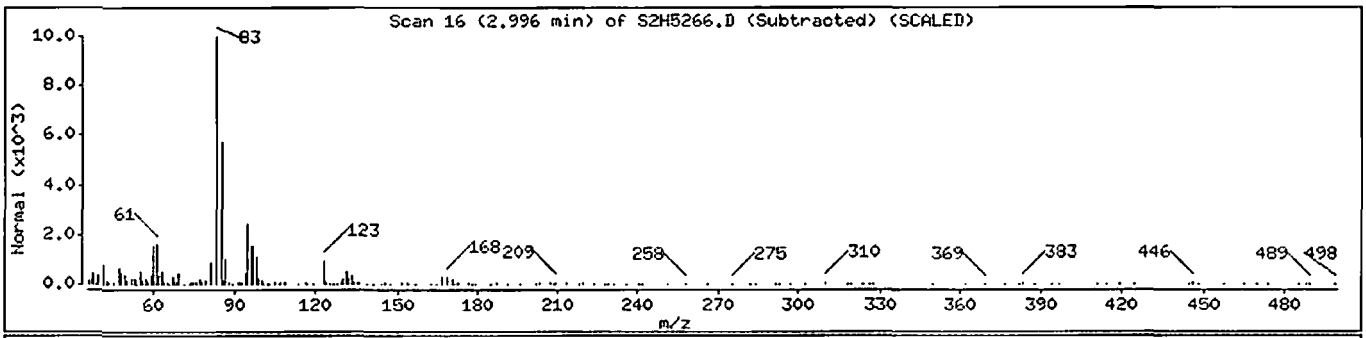
Client ID: H30T0 Instrument: S2.i

Sample Info: K2198-15A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 15:59

Client ID: H30To

Instrument: S2.i

Sample Info: K2198-15A,,62764,,

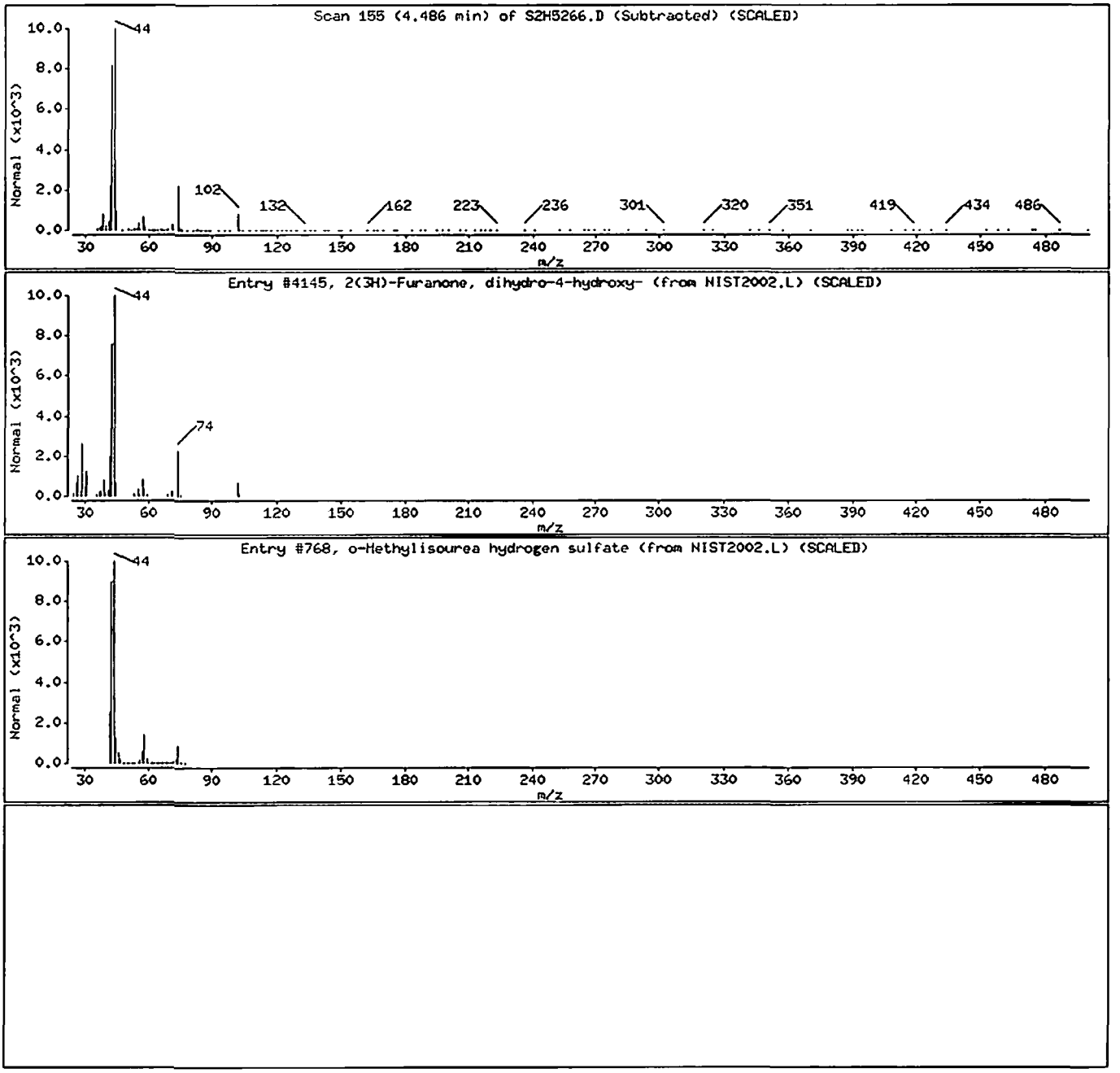
Volume Injected (uL): 2.0

Operator: SRC: LIMS

Column phase: RXI-5SILMS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2(3H)-Furanone, dihydro-4-hydroxy-	5469-16-9	NIST2002.L	4145	90	C4H6O3	102
o-Methylisourea hydrogen sulfate	29427-58-5	NIST2002.L	768	86	C2H6N2O	74



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Date : 10-NOV-2011 15:59

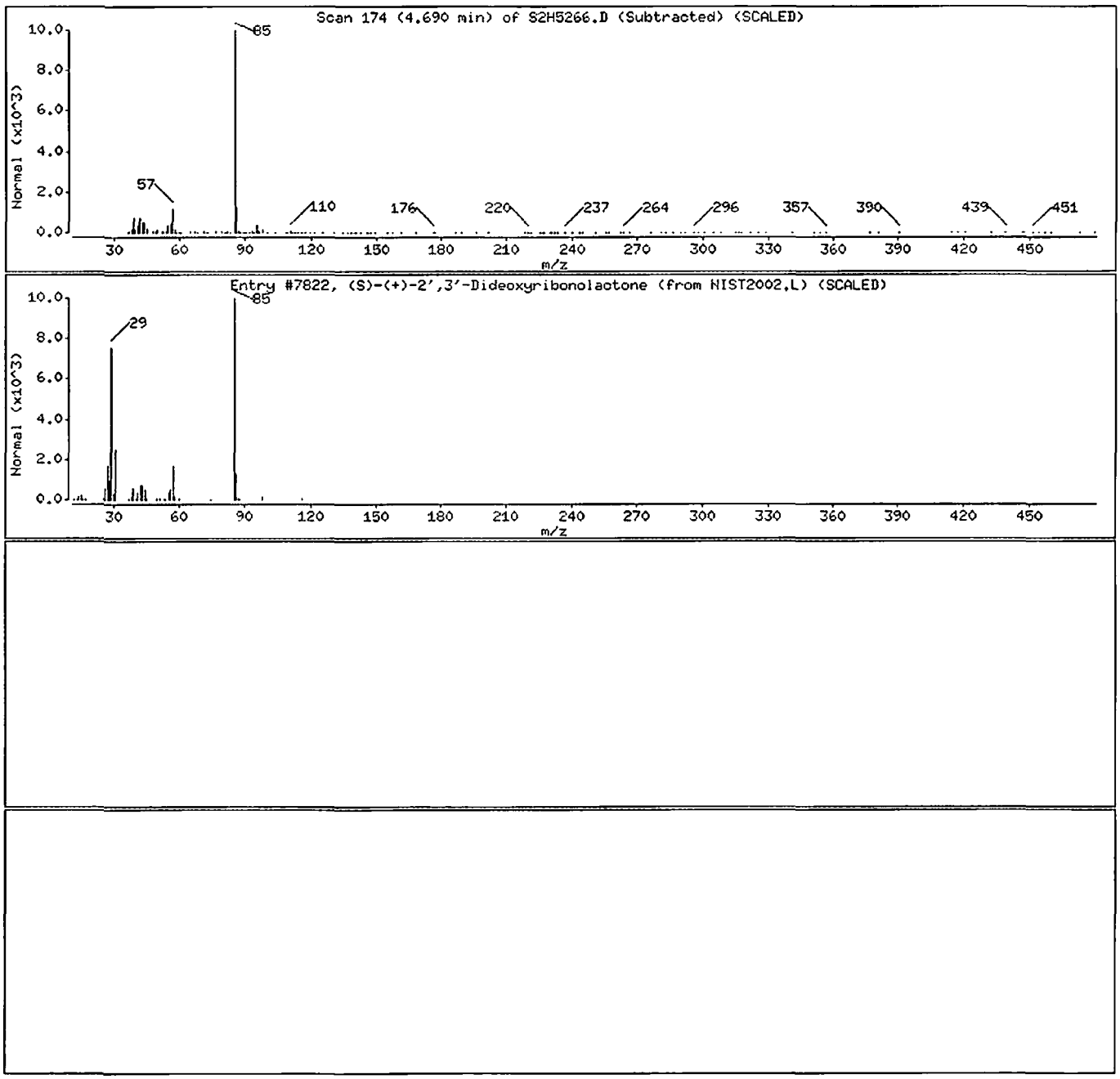
Client ID: H30T0 Instrument: S2.i

Sample Info: K2198-15A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
(S)-(+)-2',3'-Dideoxyribonolactone	32780-06-6	NIST2002.L	7822	86	C5H8O3	116



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5266.D

Date : 10-NOV-2011 15:59

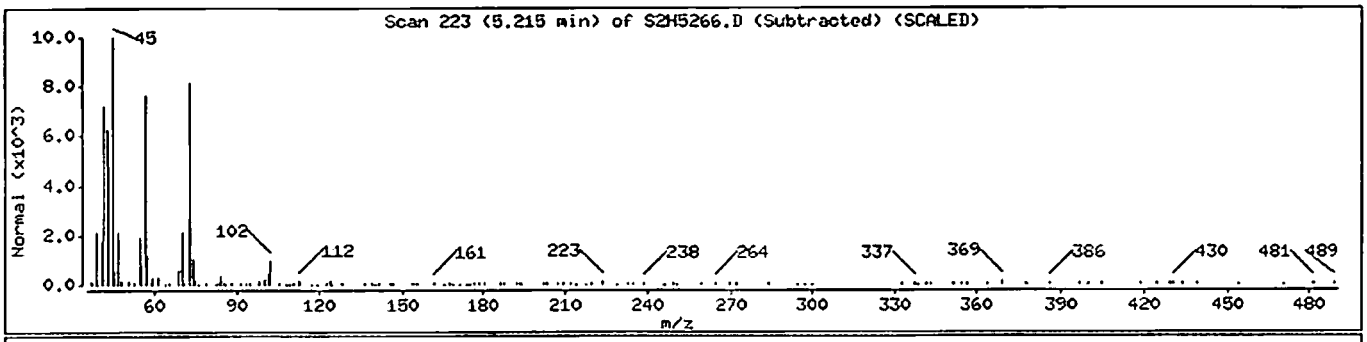
Client ID: H30T0 Instrument: S2.i

Sample Info: K2198-15A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 15:59

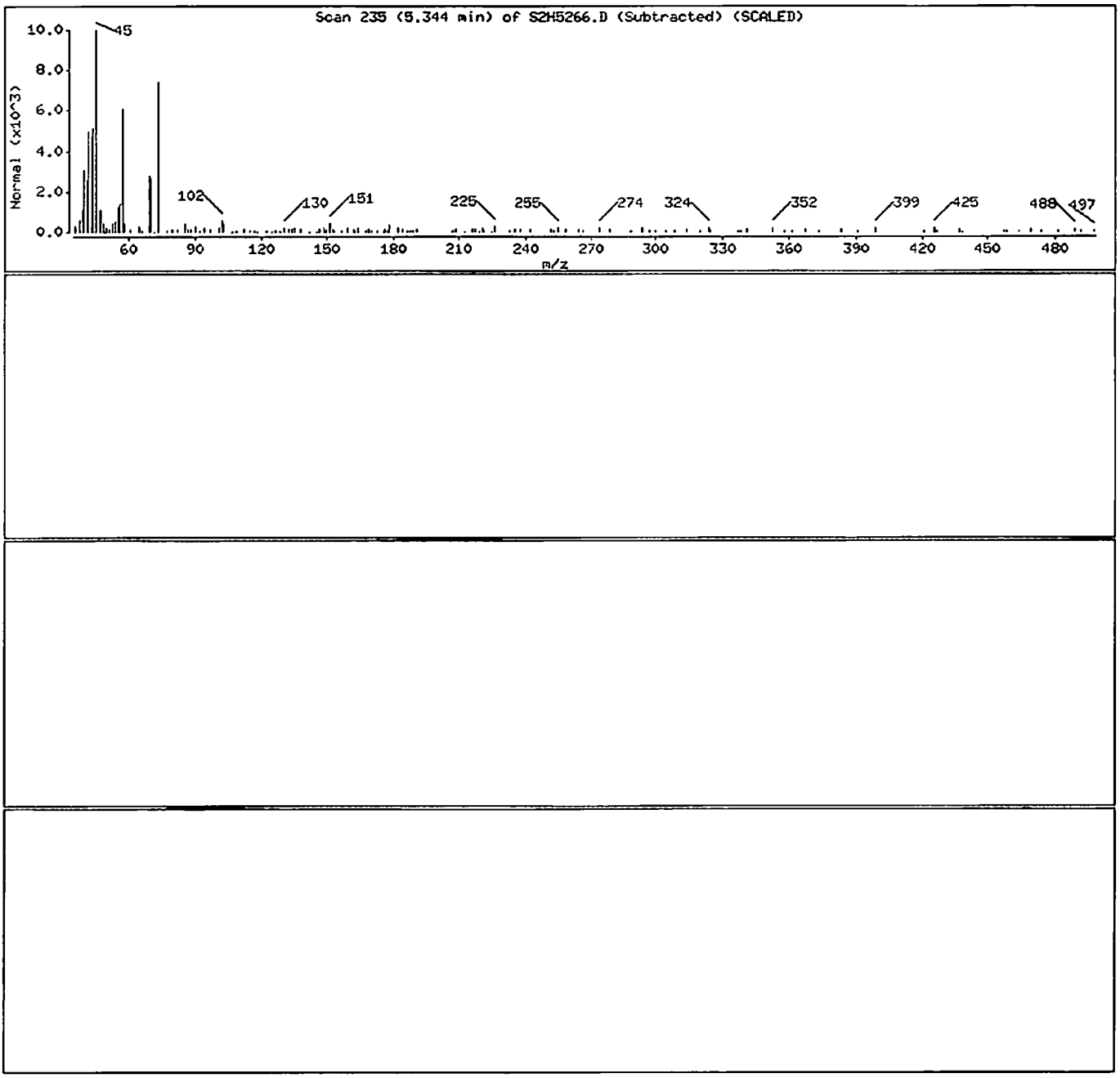
Client ID: H30T0 Instrument: S2.i

Sample Info: K2198-15A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5266.D

Date : 10-NOV-2011 15:59

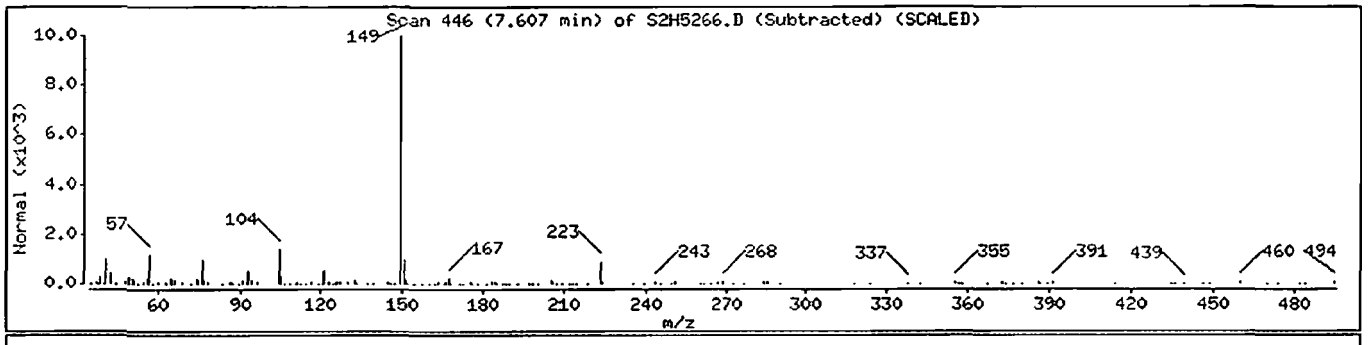
Client ID: H30T0 Instrument: S2.i

Sample Info: K2198-15A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5266.D

Date : 10-NOV-2011 15:59

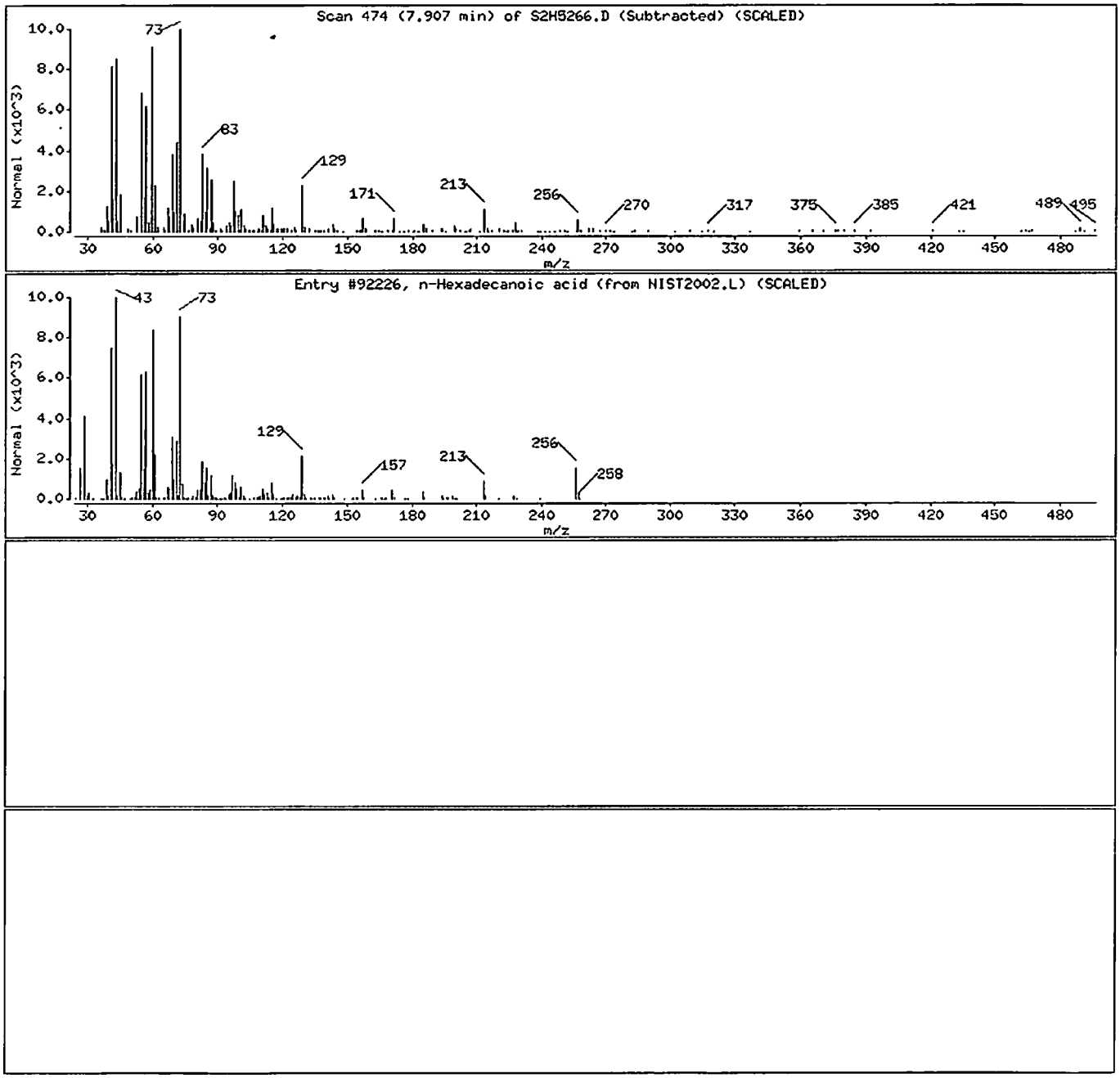
Client ID: H30T0 Instrument: S2.i

Sample Info: K2198-15A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
n-Hexadecanoic acid	57-10-3	NIST2002.L	92226	93	C16H32O2	256



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5266.D

Date : 10-NOV-2011 15:59

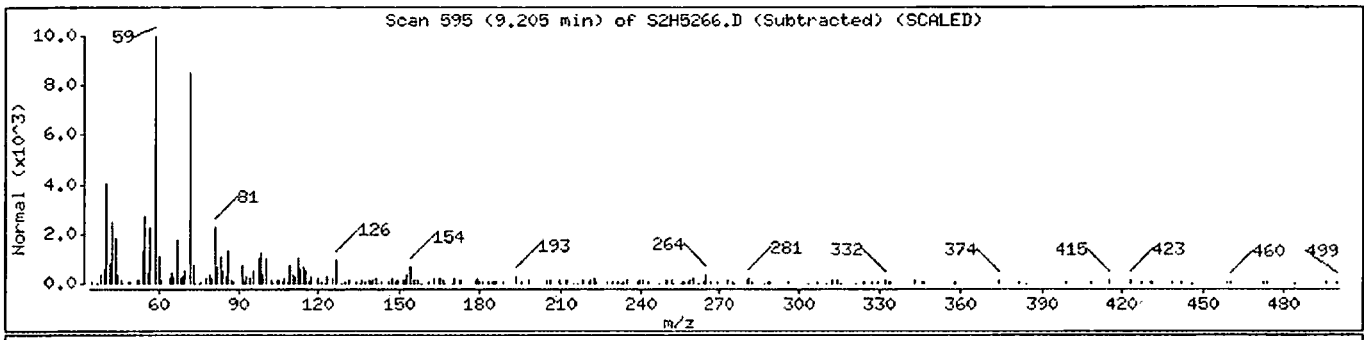
Client ID: H30T0 Instrument: S2.i

Sample Info: K2198-15A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5266.D

Date : 10-NOV-2011 15:59

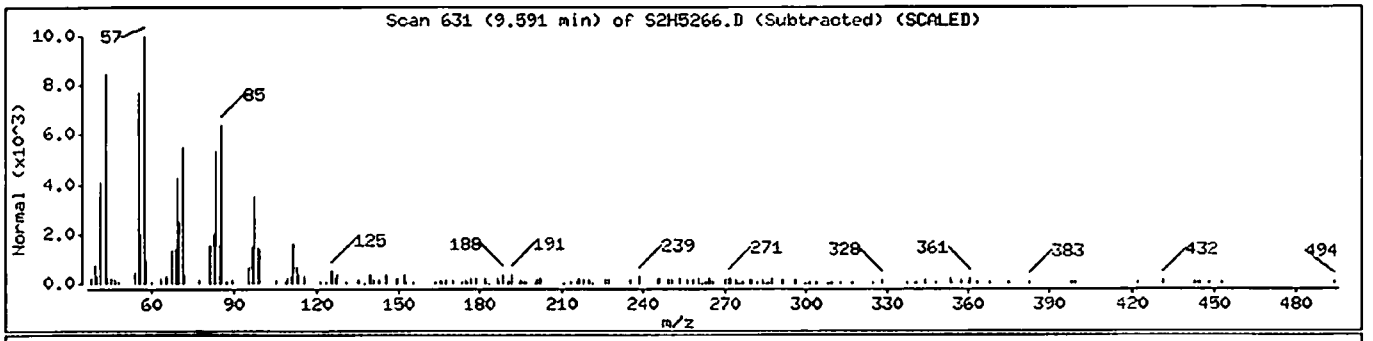
Client ID: H30T0 Instrument: S2.i

Sample Info: K2198-15A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.i\111110.B\S2H5266.D

Date : 10-NOV-2011 15:59

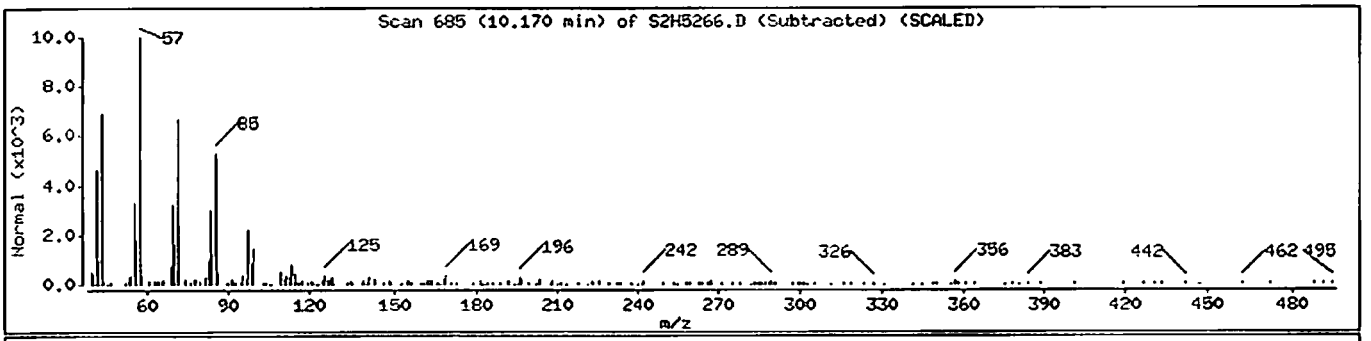
Client ID: H30T0 Instrument: S2.i

Sample Info: K2198-15A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5266.D

Date : 10-NOV-2011 15:59

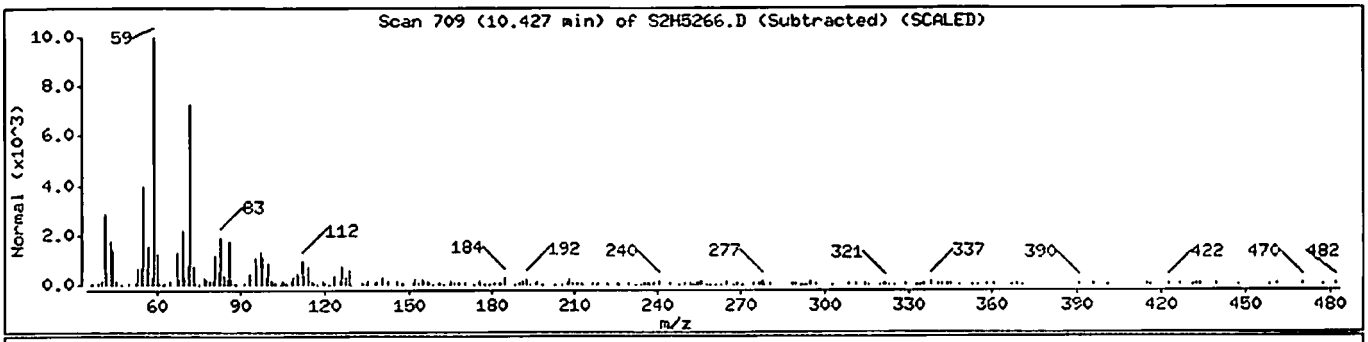
Client ID: H30T0 Instrument: S2.i

Sample Info: K2198-15A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILHS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5266.D

Date : 10-NOV-2011 15:59

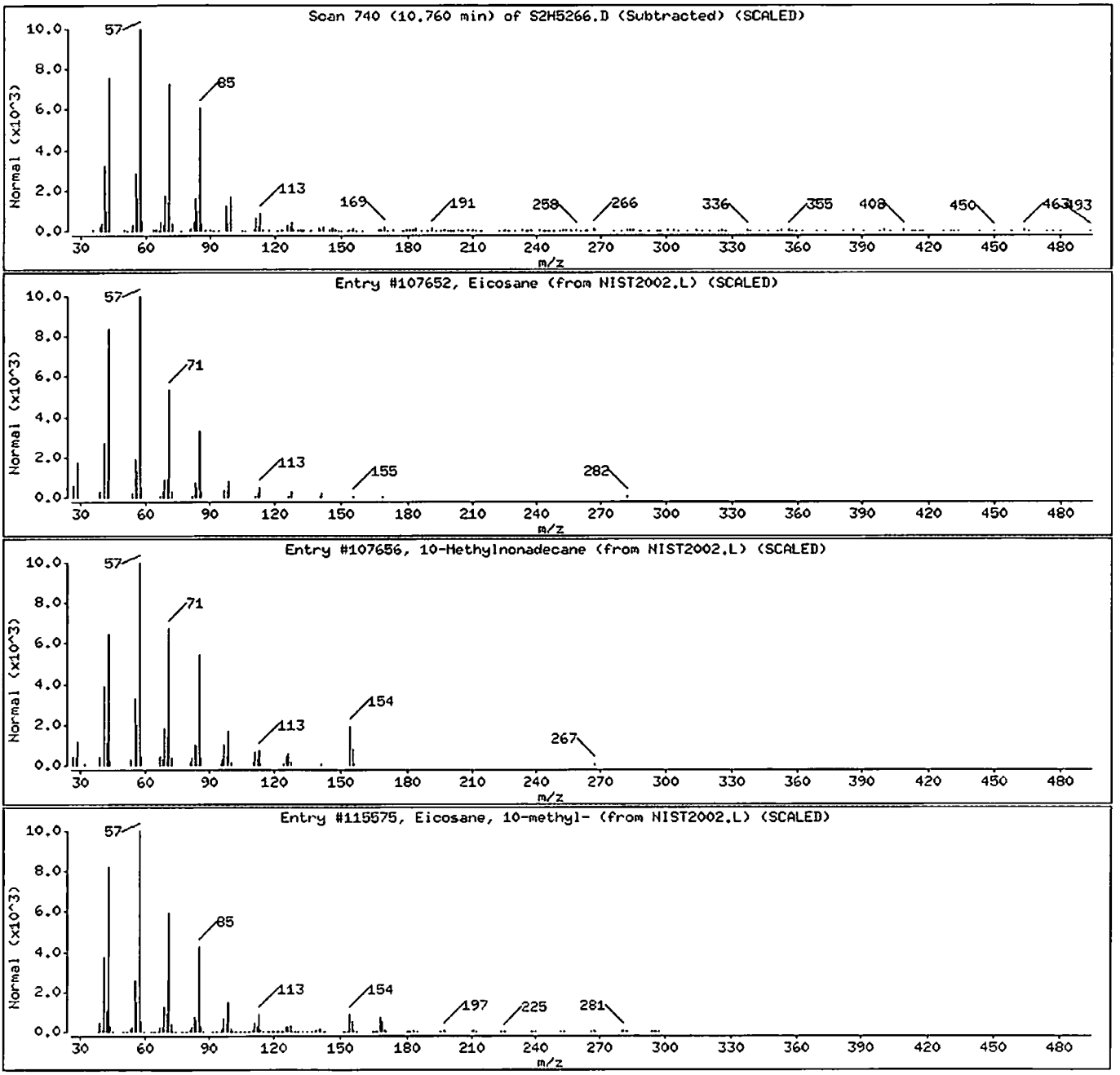
Client ID: H30T0 Instrument: S2.i

Sample Info: K2198-15A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Straight-chain Alkane						
Eicosane	112-95-8	NIST2002.L	107652	95	C20H42	282
10-Methylnonadecane	56862-62-5	NIST2002.L	107656	91	C20H42	282
Eicosane, 10-methyl-	54833-23-7	NIST2002.L	115575	90	C21H44	296



Data File: \\Avogadro\Organics\S2.i\111110.B\S2H5266.D

Date : 10-NOV-2011 15:59

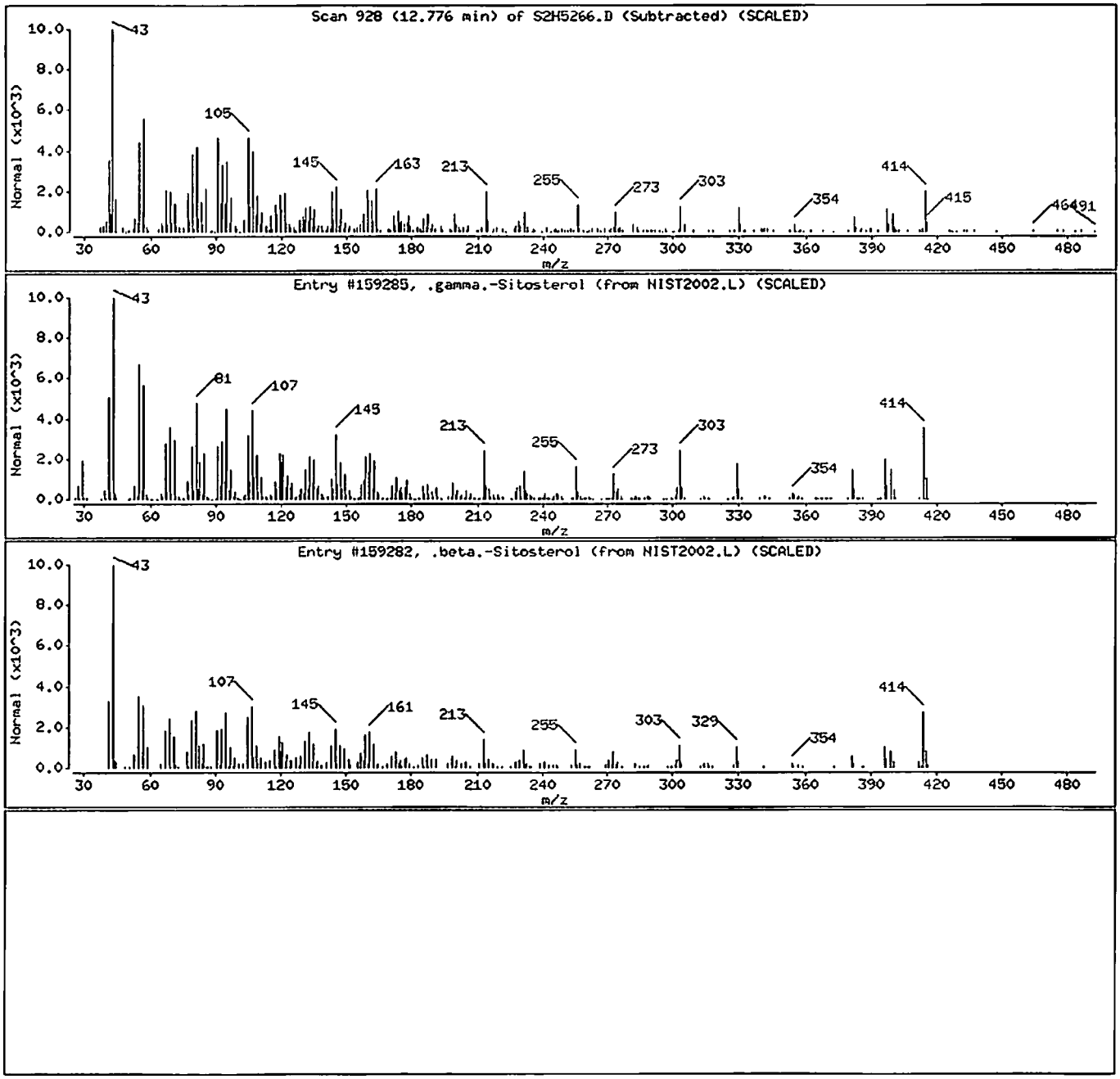
Client ID: H30T0 Instrument: S2.i

Sample Info: K2198-15A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.gamma.-Sitosterol	83-47-6	NIST2002.L	159285	99	C29H500	414
.beta.-Sitosterol	83-46-5	NIST2002.L	159282	86	C29H500	414



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-16A

Sample wt/vol: 30.5 (g/mL) G Lab File ID: S2H5267.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 9.6 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: 7.1 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
100-52-7	Benzaldehyde	180	U
108-95-2	Phenol	180	U
111-44-4	Bis(2-chloroethyl)ether	180	U
95-57-8	2-Chlorophenol	180	U
95-48-7	2-Methylphenol	180	U
108-60-1	2,2'-Oxybis(1-chloropropane)	180	U
98-86-2	Acetophenone	180	U
106-44-5	4-Methylphenol	180	U
621-64-7	N-Nitroso-di-n-propylamine	180	U
67-72-1	Hexachloroethane	180	U
98-95-3	Nitrobenzene	180	U
78-59-1	Isophorone	180	U
88-75-5	2-Nitrophenol	180	U
105-67-9	2,4-Dimethylphenol	180	U
111-91-1	Bis(2-chloroethoxy)methane	180	U
120-83-2	2,4-Dichlorophenol	180	U
91-20-3	Naphthalene	180	U
106-47-8	4-Chloroaniline	180	U
87-68-3	Hexachlorobutadiene	180	U
105-60-2	Caprolactam	180	U
59-50-7	4-Chloro-3-methylphenol	180	U
91-57-6	2-Methylnaphthalene	180	U
77-47-4	Hexachlorocyclopentadiene	180	U
88-06-2	2,4,6-Trichlorophenol	180	U
95-95-4	2,4,5-Trichlorophenol	180	U
92-52-4	1,1'-Biphenyl	180	U
91-58-7	2-Chloronaphthalene	180	U
88-74-4	2-Nitroaniline	360	U
131-11-3	Dimethylphthalate	180	U
606-20-2	2,6-Dinitrotoluene	180	U
208-96-8	Acenaphthylene	180	U
99-09-2	3-Nitroaniline	360	U
83-32-9	Acenaphthene	180	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-16A

Sample wt/vol: 30.5 (g/mL) G Lab File ID: S2H5267.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 9.6 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: 7.1 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
51-28-5	2,4-Dinitrophenol	360	U
100-02-7	4-Nitrophenol	360	U
132-64-9	Dibenzofuran	180	U
121-14-2	2,4-Dinitrotoluene	180	U
84-66-2	Diethylphthalate	180	U
86-73-7	Fluorene	180	U
7005-72-3	4-Chlorophenyl-phenylether	180	U
100-01-6	4-Nitroaniline	360	U
534-52-1	4,6-Dinitro-2-methylphenol	360	U
86-30-6	N-Nitrosodiphenylamine (1)	180	U
95-94-3	1,2,4,5-Tetrachlorobenzene	180	U
101-55-3	4-Bromophenyl-phenylether	180	U
118-74-1	Hexachlorobenzene	180	U
1912-24-9	Atrazine	180	U
87-86-5	Pentachlorophenol	360	U
85-01-8	Phenanthrene	180	U
120-12-7	Anthracene	180	U
86-74-8	Carbazole	180	U
84-74-2	Di-n-butylphthalate	40	J
206-44-0	Fluoranthene	180	U
129-00-0	Pyrene	180	U
85-68-7	Butylbenzylphthalate	180	U
91-94-1	3,3'-Dichlorobenzidine	180	U
56-55-3	Benzo(a)anthracene	180	U
218-01-9	Chrysene	180	U
117-81-7	Bis(2-ethylhexyl)phthalate	180	U
117-84-0	Di-n-octylphthalate	180	U
205-99-2	Benzo(b)fluoranthene	180	U
207-08-9	Benzo(k)fluoranthene	180	U
50-32-8	Benzo(a)pyrene	180	U
193-39-5	Indeno(1,2,3-cd)pyrene	180	U
53-70-3	Dibenzo(a,h)anthracene	180	U
191-24-2	Benzo(g,h,i)perylene	180	U
58-90-2	2,3,4,6-Tetrachlorophenol	180	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30T1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-16A

Sample wt/vol: 30.5 (g/mL) G Lab File ID: S2H5267.D

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 9.6 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: 7.1 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.988	130	J
02	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.489	290	BNJ
03	1000194-17-0	5-Hydroxymethyldihydrofuran-	4.693	230	NJ
04		Unknown-02	5.218	290	J
05		Unknown-03	5.304	200	J
06		Unknown-04	7.084	78	J
07		Unknown-05	7.599	110	J
08	57-10-3	n-Hexadecanoic acid	7.910	200	NJ
09		Unknown-06	9.218	170	J
10		Unknown-07	10.462	300	J
	E966796[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5267.D
Report Date: 11-Nov-2011 13:37

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5267.D
Lab Smp Id: K2198-16A Client Smp ID: H30T1
Inj Date : 10-NOV-2011 16:20
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-16A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment :
Method : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.500	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)
$	2 Phenol-d5	71	3.384	3.373	(0.916)	131738	37.7927	620
$	4 bis(2-Chloroethyl)ether-d8	67	3.427	3.427	(0.927)	164018	34.1465	560
$	6 2-Chlorophenol-d4	132	3.502	3.491	(0.948)	125275	41.5446	680
*	8 1,4-Dichlorobenzene-d4	152	3.695	3.684	(1.000)	110696	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.016	4.006	(1.087)	193847	41.0189	670
$	16 Nitrobenzene-d5	128	4.156	4.145	(0.874)	67244	38.4548	630(Q)
$	19 2-Nitrophenol-d4	143	4.424	4.424	(0.930)	83562	43.2875	710
$	23 2,4-Dichlorophenol-d3	165	4.628	4.628	(0.973)	152762	43.3495	710
*	25 Naphthalene-d8	136	4.756	4.746	(1.000)	335776	40.0000	
$	27 4-Chloroaniline-d4	131	4.810	4.810	(1.011)	59416	18.9890	310(Q)
$	40 Dimethylphthalate-d6	166	5.979	5.968	(0.962)	443319	45.1251	740
$	43 Acenaphthylene-d8	160	6.086	6.076	(0.979)	509310	39.8669	650
*	46 Acenaphthene-d10	164	6.215	6.204	(1.000)	267194	40.0000	
$	49 4-Nitrophenol-d4	143	6.322	6.312	(1.017)	63630	44.9429	740
$	54 Fluorene-d10	176	6.644	6.633	(1.069)	363245	40.2521	660
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.708	6.698	(0.902)	64260	36.4628	600
*	65 Phenanthrene-d10	188	7.437	7.438	(1.000)	451626	40.0000	
$	67 Anthracene-d10	188	7.480	7.480	(1.006)	486547	37.7144	620
	70 Di-n-butylphthalate	149	7.931	7.931	(1.066)	24445	2.18403	36(a)

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5267.D
Report Date: 11-Nov-2011 13:37

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)
$ 72 Pyrene-d10	212	8.617	8.606	(0.888)	425433	47.6323	780
* 77 Chrysene-d12	240	9.700	9.668	(1.000)	283522	40.0000	(Q)
79 bis(2-Ethylhexyl)phthalate	149	9.732	9.700	(1.003)	8918	2.07047	34(a)
$ 83 Benzo(a)pyrene-d12	264	10.944	10.891	(1.000)	198051	40.3774	660
* 85 Perylene-d12	264	11.019	10.966	(1.000)	199890	40.0000	(H)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5267.D
Report Date: 11-Nov-2011 13:37

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5267.D
Lab Smp Id: K2198-16A Client Smp ID: H30T1
Inj Date : 10-NOV-2011 16:20
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-16A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment :
Method : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.500	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 8 1,4-Dichlorobenzene-d4	3.695	948338	40.000
* 25 Naphthalene-d8	4.757	1097690	40.000
* 65 Phenanthrene-d10	7.438	1231272	40.000
* 77 Chrysene-d12	9.700	791676	40.000

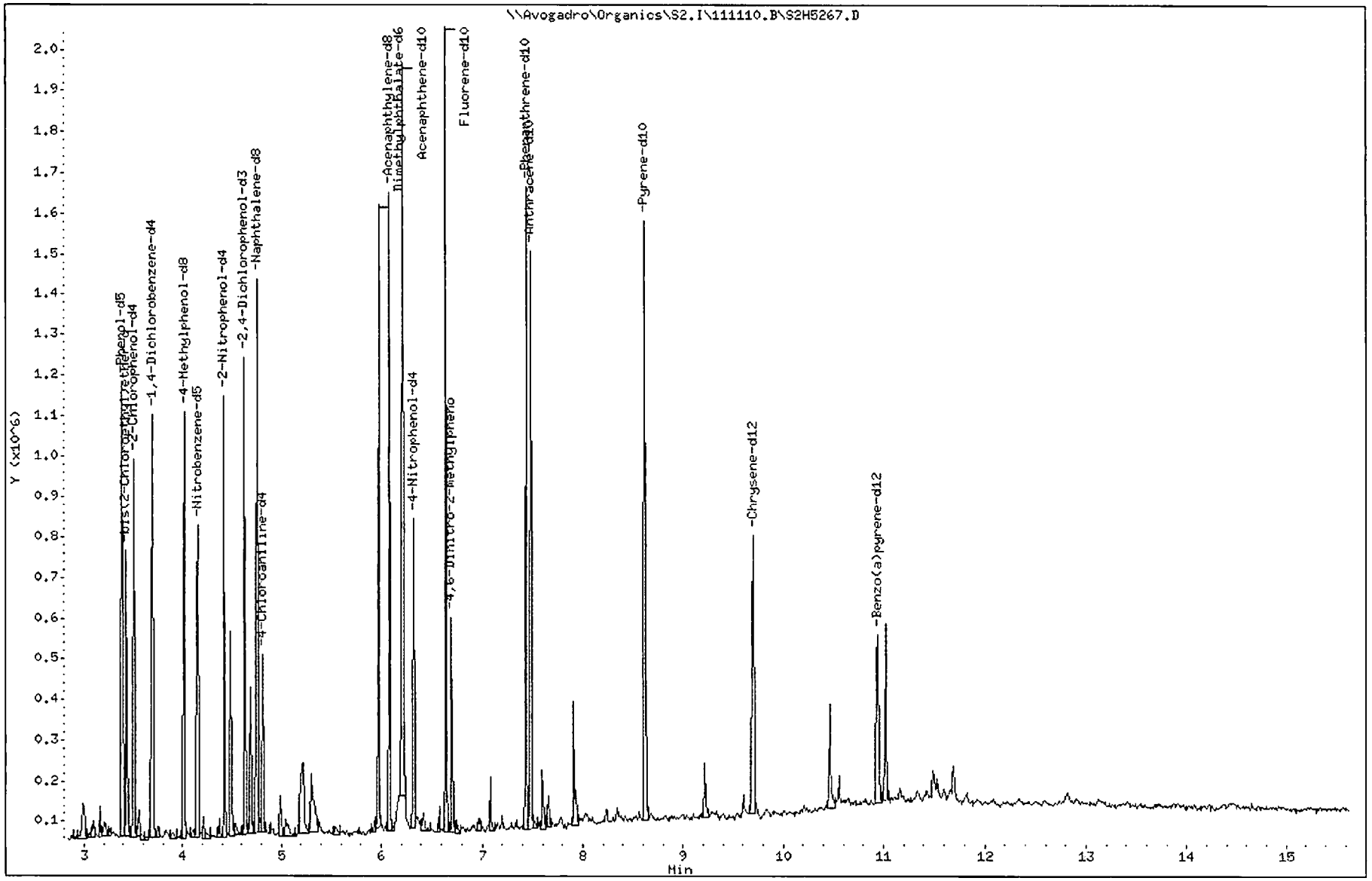
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.988	176154	7.43002904	120	0		0	8
2(3H)-Furanone, dihydro-4-hydroxy-				CAS #: 5469-16-9			
4.489	437932	15.9583091	260	90	NIST2002.L	4145	25

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5267.D
Report Date: 11-Nov-2011 13:37

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
5-Hydroxymethyldihydrofuran-2-one				CAS #: 1000194-17-0			
4.693	353342	12.8758394	210	86	NIST2002.L	7821	25
Unknown				CAS #:			
5.218	437747	15.9515461	260	0		0	25
Unknown				CAS #:			
5.304	300976	10.9676069	180	0		0	25
Unknown				CAS #:			
7.084	131955	4.28678016	70	0		0	65
Unknown				CAS #:			
7.599	180760	5.87229729	96	0		0	65
n-Hexadecanoic acid				CAS #: 57-10-3			
7.910	333107	10.8215435	180	96	NIST2002.L	92227	65
Unknown				CAS #:			
9.218	186125	9.40408393	150	0		0	77
Unknown				CAS #:			
10.462	328361	16.5906921	270	0		0	77

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5267.D
Date : 10-NOV-2011 16:20
Client ID: H30T1
Sample Info: K2198-16A,,62764,,
Volume Injected (uL): 2.0
Column phase: RXI-5SILMS

Instrument: S2.i
Operator: SRC: LIMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5267.D

Date : 10-NOV-2011 16:20

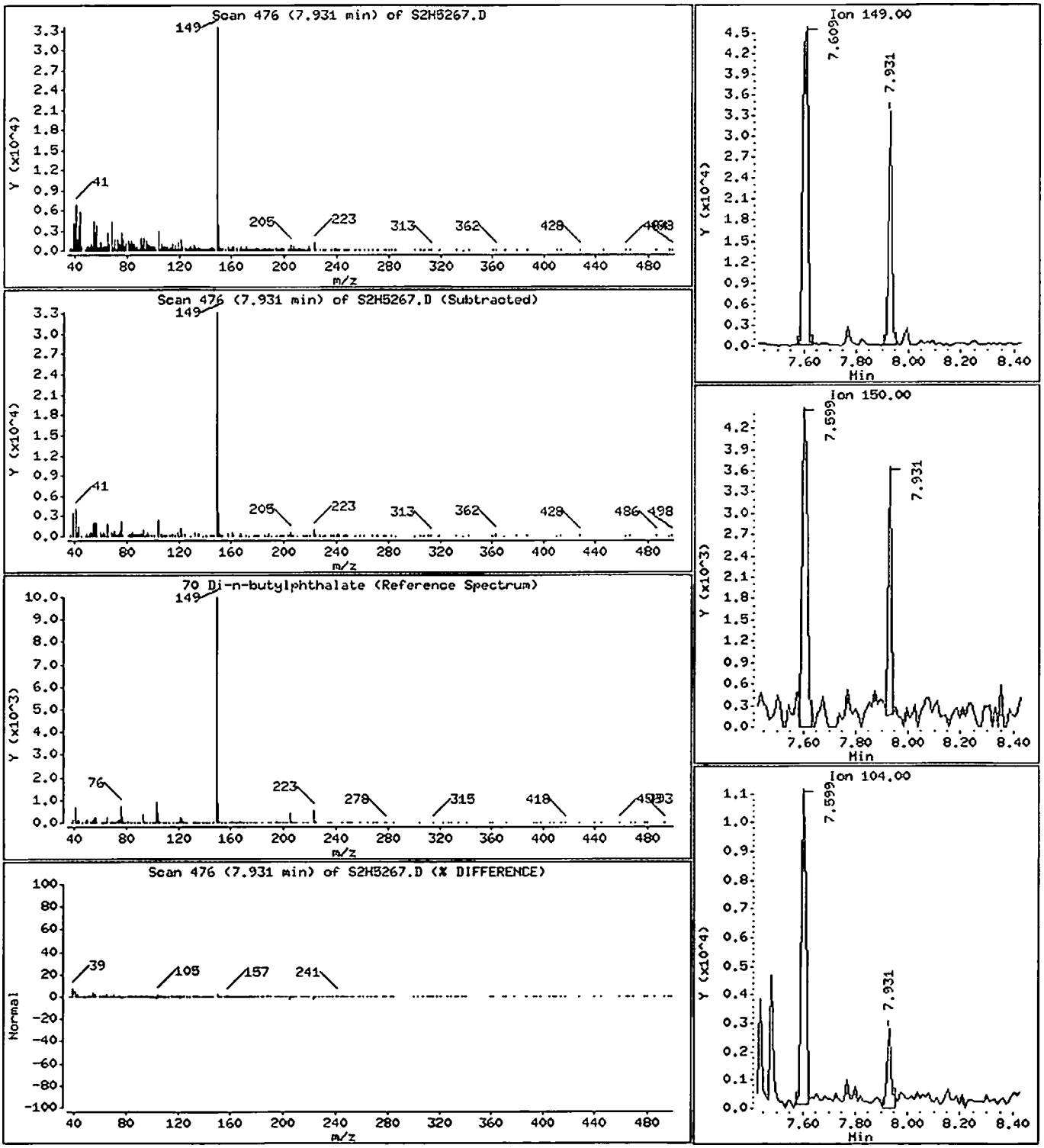
Client ID: H30T1 Instrument: S2.i

Sample Info: K2198-16A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

70 Di-n-butylphthalate Concentration: 36 ug/Kg



Data File: \\Avogadro\Organics\S2.i\111110.B\S2H5267.D

Date : 10-NOV-2011 16:20

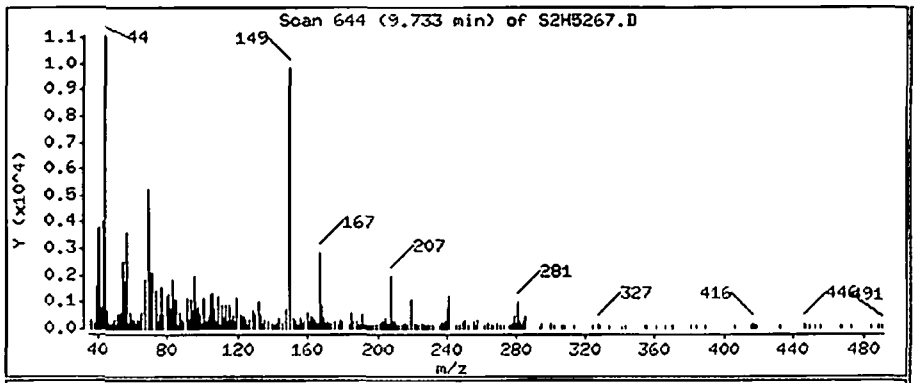
Client ID: H30T1 Instrument: S2.i

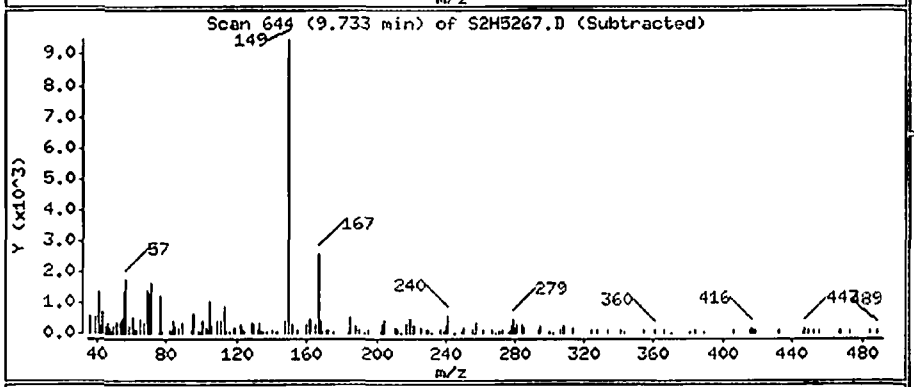
Sample Info: K2198-16A,,62764,,

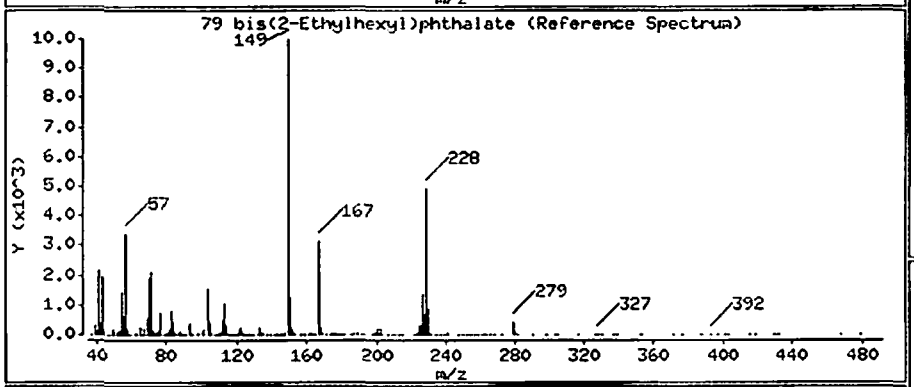
Volume Injected (uL): 2.0 Operator: SRC: LIMS

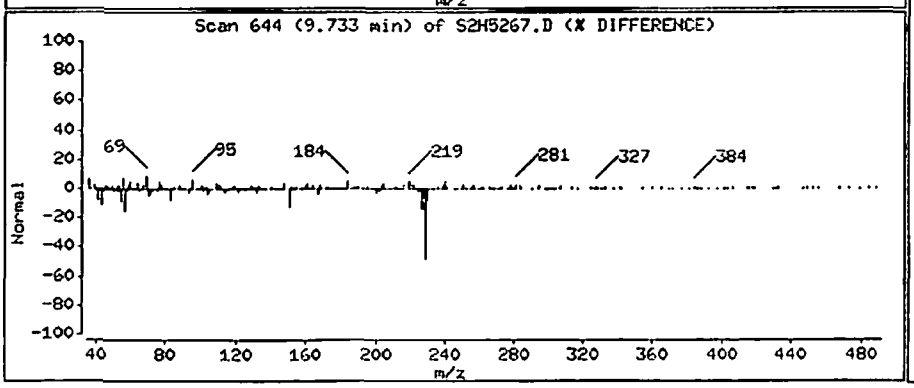
Column phase: RXI-5SILMS Column diameter: 0.25

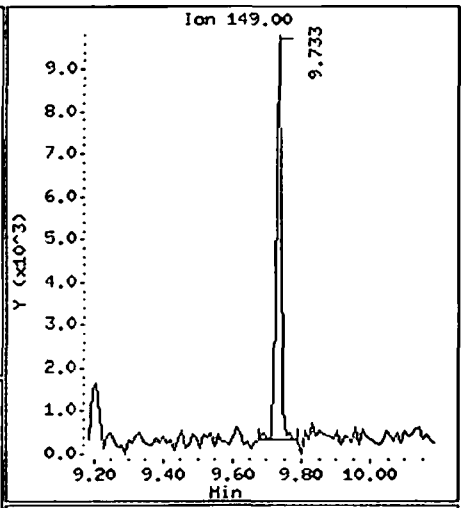
79 bis(2-Ethylhexyl)phthalate Concentration: 34 ug/Kg

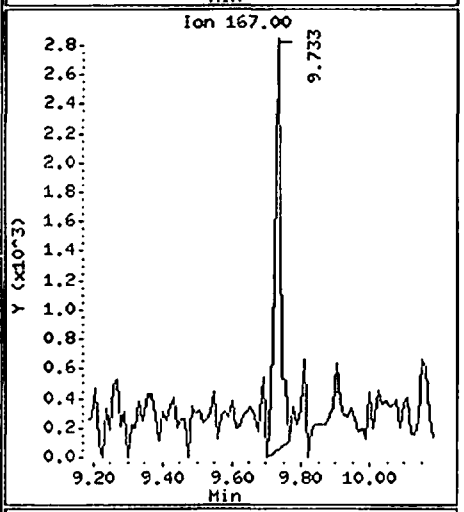


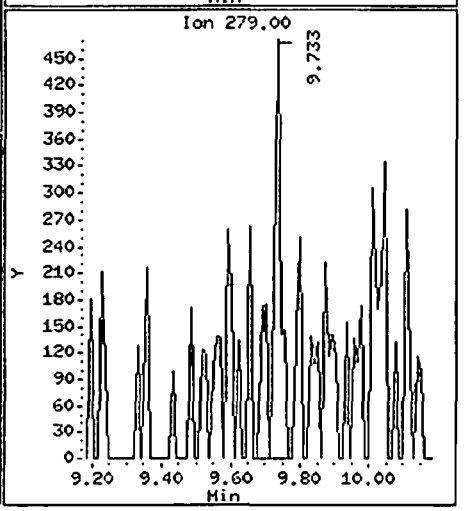












Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5267.D

Date : 10-NOV-2011 16:20

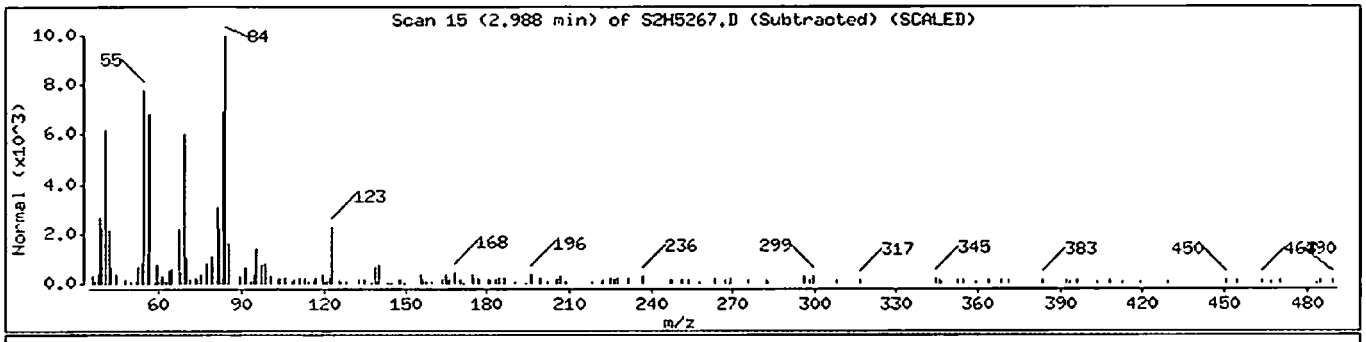
Client ID: H30T1 Instrument: S2.i

Sample Info: K2198-16A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5267.D

Date : 10-NOV-2011 16:20

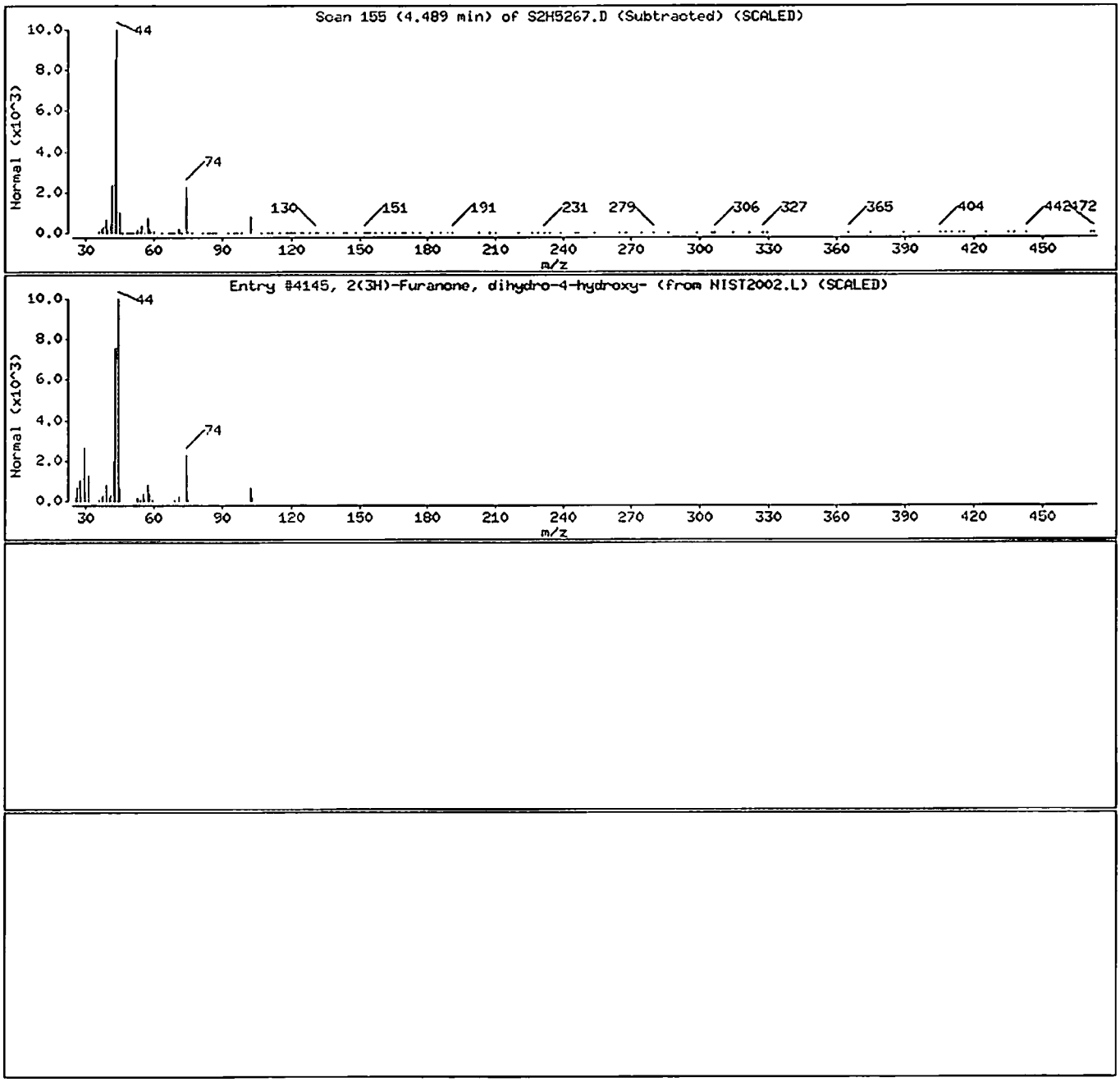
Client ID: H30T1 Instrument: S2.i

Sample Info: K2198-16A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2(3H)-Furanone, dihydro-4-hydroxy-	5469-16-9	NIST2002.L	4145	90	C4H6O3	102



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Date : 10-NOV-2011 16:20

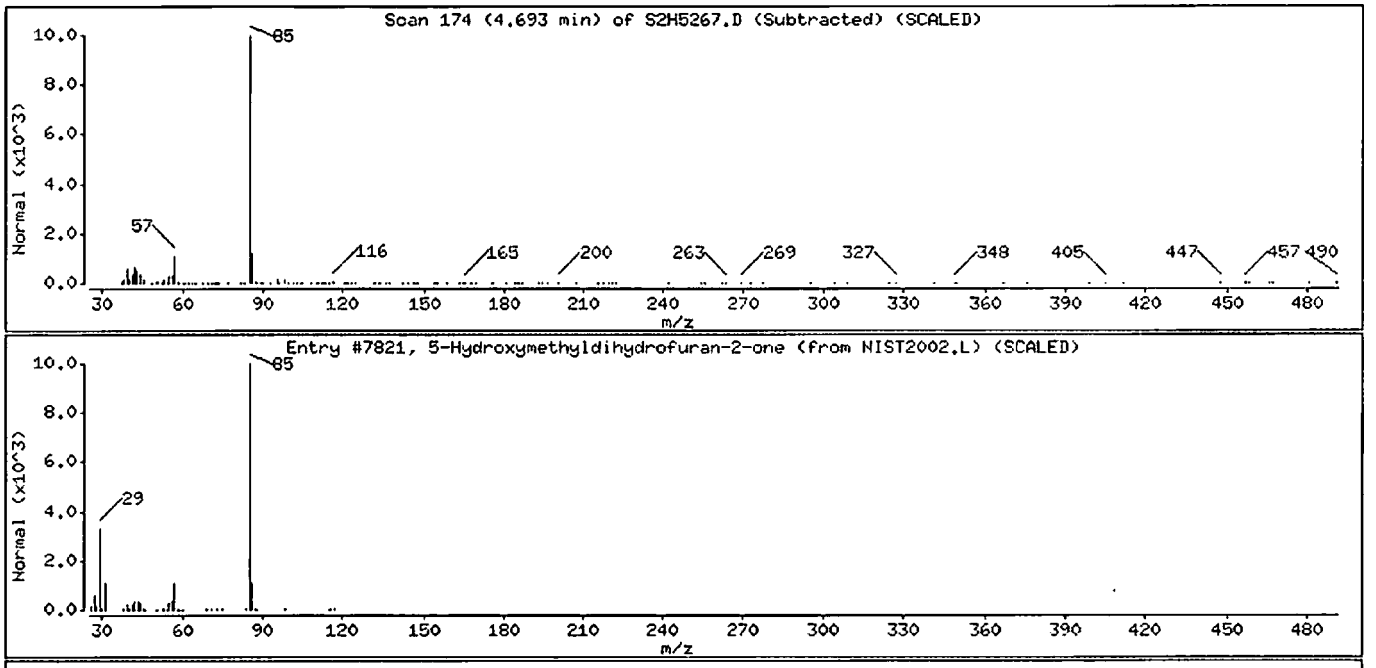
Client ID: H30T1 Instrument: S2.i

Sample Info: K2198-16A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
5-Hydroxymethyldihydrofuran-2-one	1000194-17-0	NIST2002.L	7821	86	C5H8O3	116



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Date : 10-NOV-2011 16:20

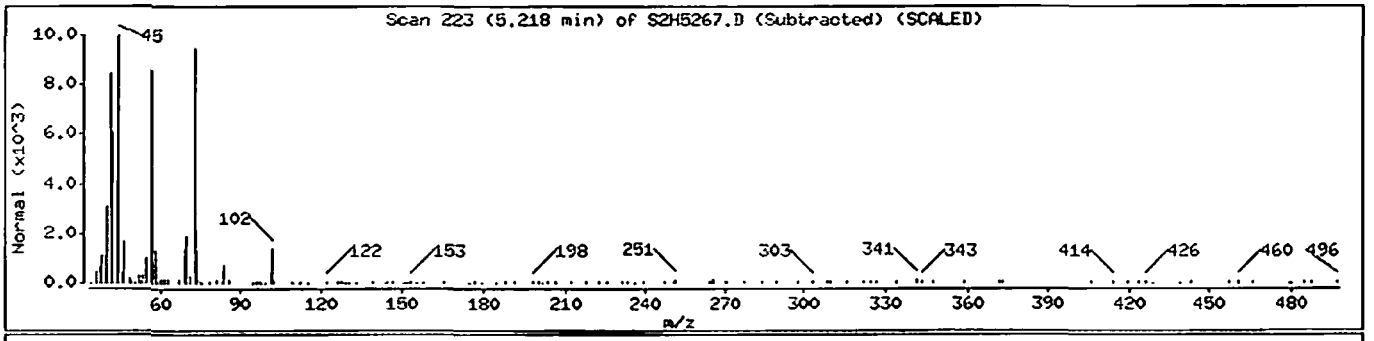
Client ID: H30T1 Instrument: S2.i

Sample Info: K2198-16A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5267.D

Date : 10-NOV-2011 16:20

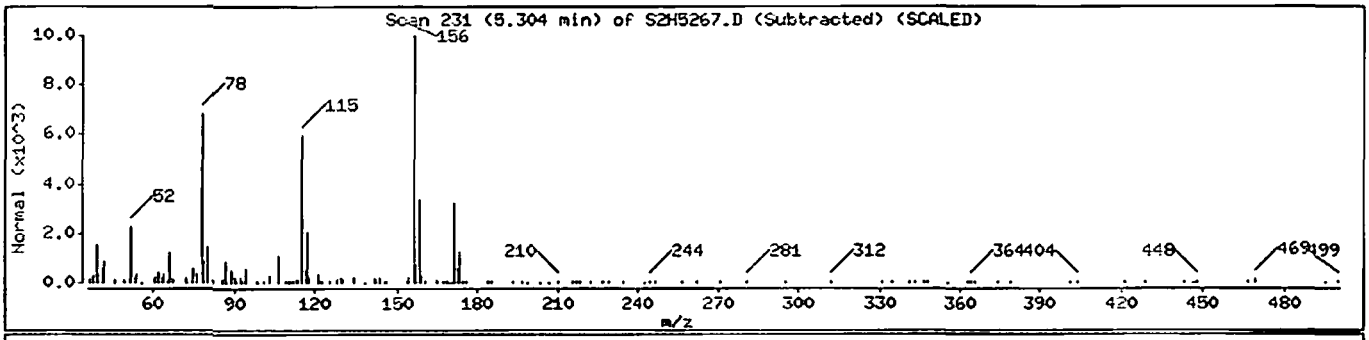
Client ID: H30T1 Instrument: S2.i

Sample Info: K2198-16A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 16:20

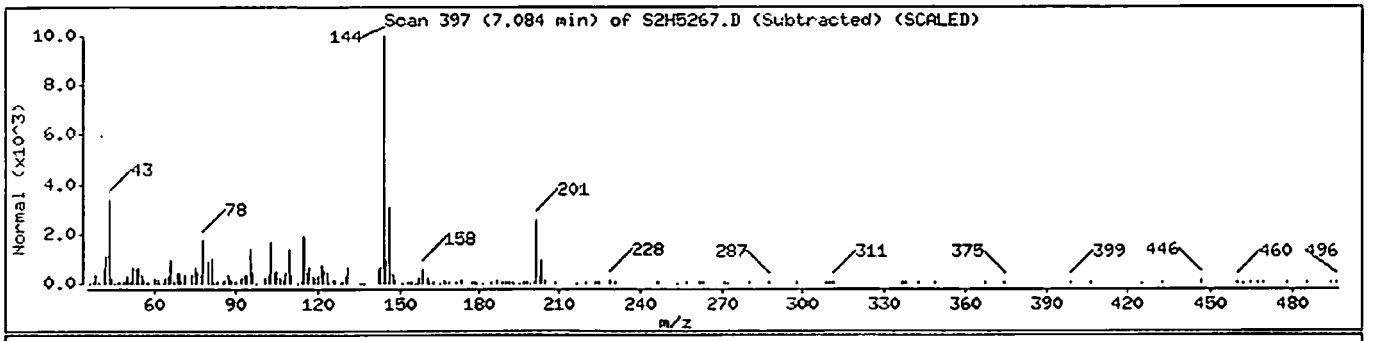
Client ID: H30T1 Instrument: S2.i

Sample Info: K2198-16A..62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5267.D

Date : 10-NOV-2011 16:20

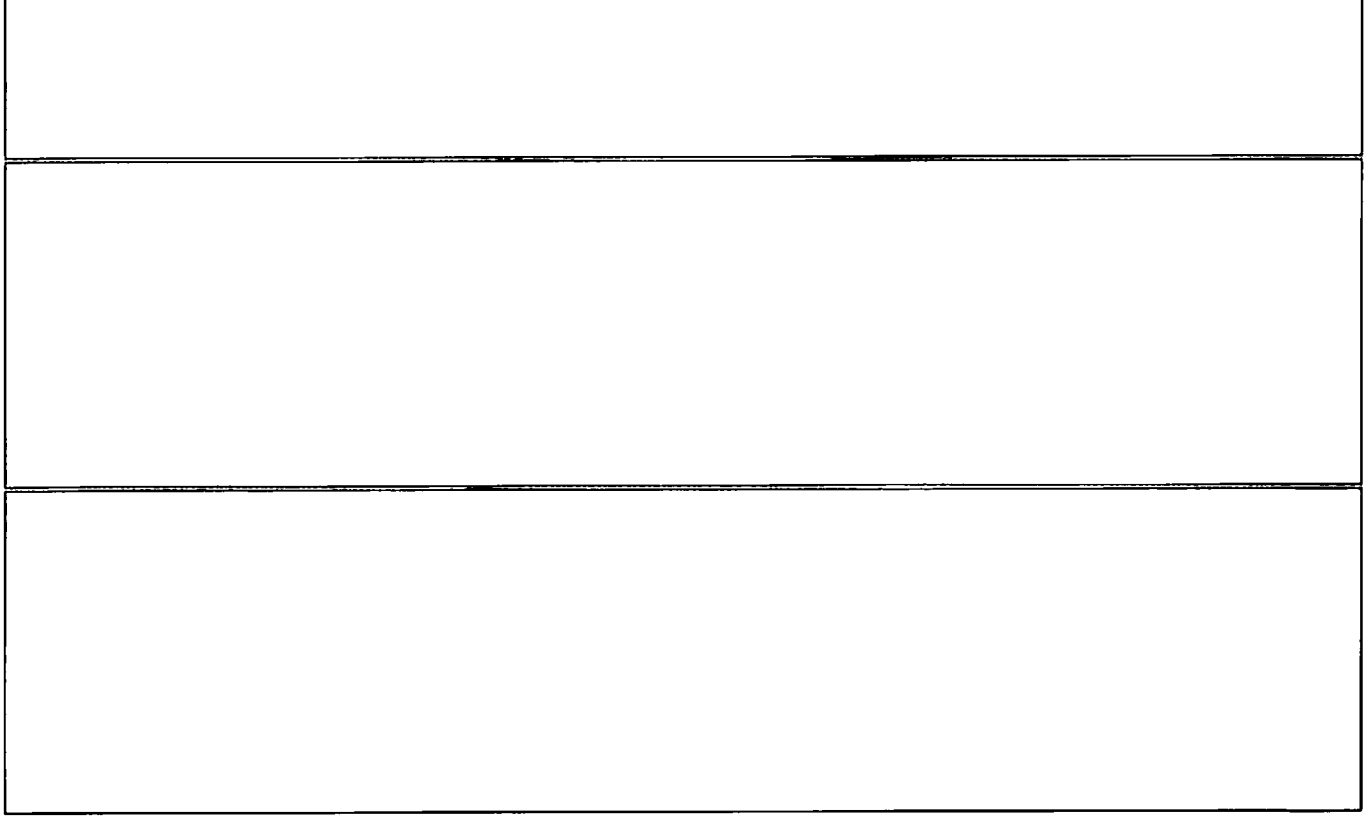
Client ID: H30T1 Instrument: S2.i

Sample Info: K2198-16A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5267.D

Date : 10-NOV-2011 16:20

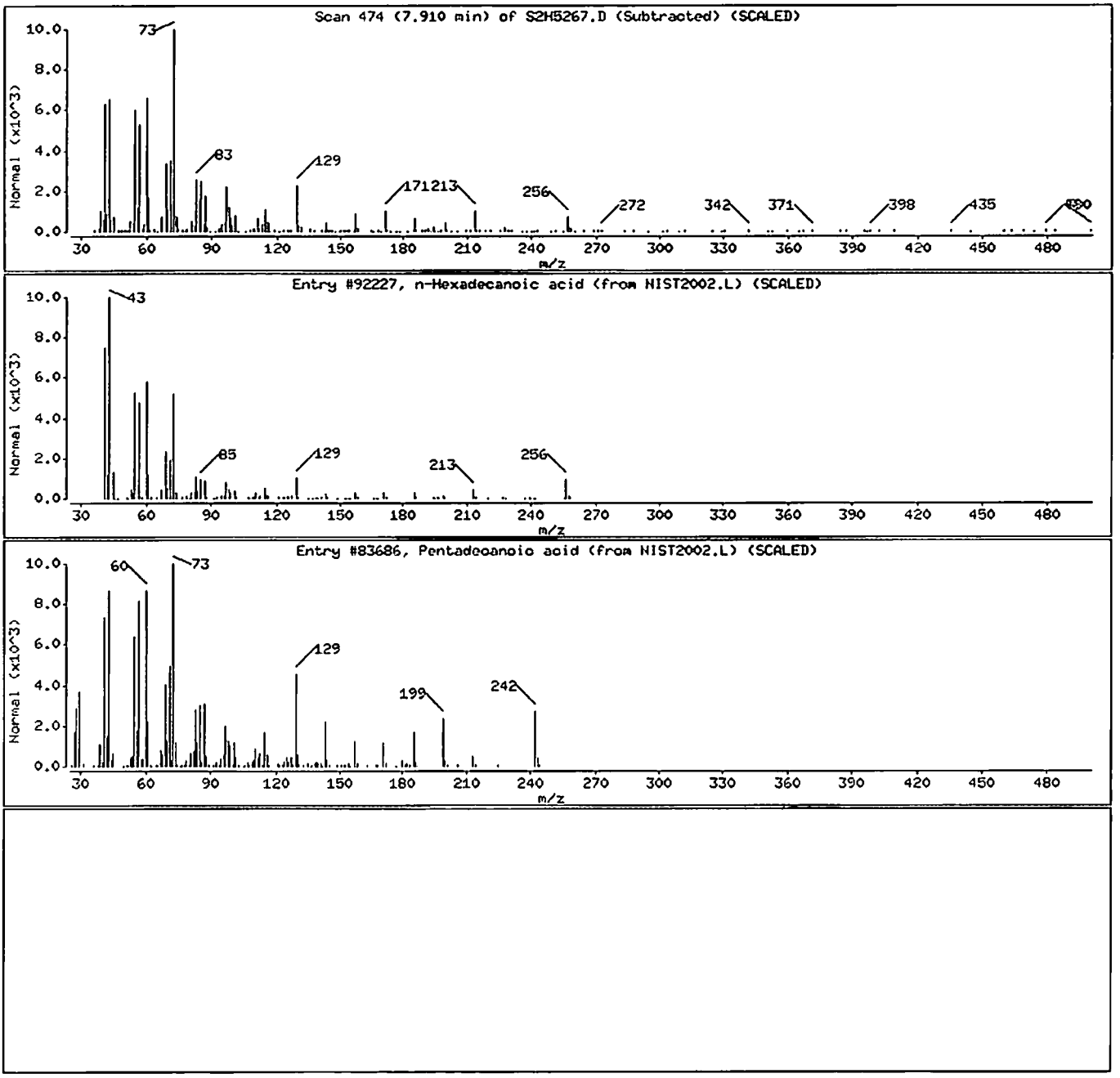
Client ID: H30T1 Instrument: S2.i

Sample Info: K2198-16A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
n-Hexadecanoic acid	57-10-3	NIST2002.L	92227	96	C16H3202	256
Pentadecanoic acid	1002-84-2	NIST2002.L	83686	86	C15H3002	242



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5267.D

Date : 10-NOV-2011 16:20

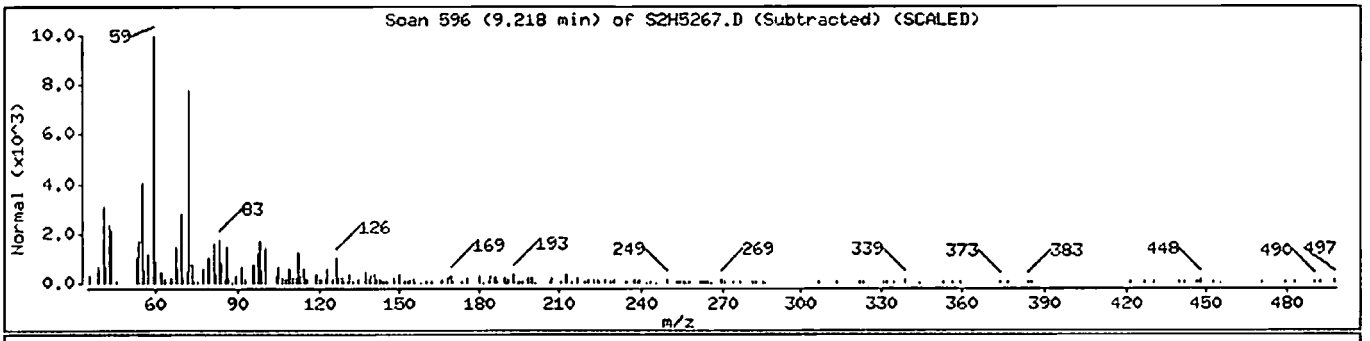
Client ID: H30T1 Instrument: S2.i

Sample Info: K2198-16A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5267.D

Date : 10-NOV-2011 16:20

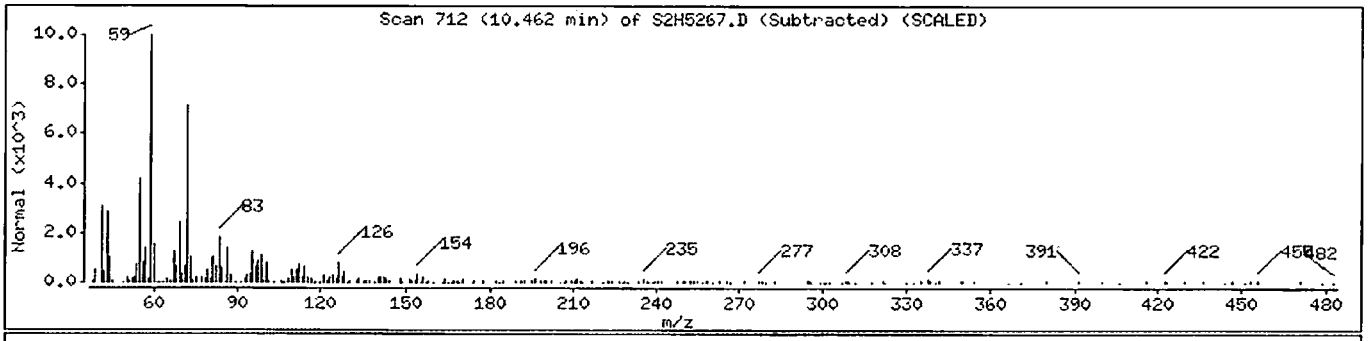
Client ID: H30T1 Instrument: S2.i

Sample Info: K2198-16A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T2

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-17A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: S2H5268.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 24 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: 7.3 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
100-52-7	Benzaldehyde	220	U
108-95-2	Phenol	220	U
111-44-4	Bis(2-chloroethyl)ether	220	U
95-57-8	2-Chlorophenol	220	U
95-48-7	2-Methylphenol	220	U
108-60-1	2,2'-Oxybis(1-chloropropane)	220	U
98-86-2	Acetophenone	220	U
106-44-5	4-Methylphenol	220	U
621-64-7	N-Nitroso-di-n-propylamine	220	U
67-72-1	Hexachloroethane	220	U
98-95-3	Nitrobenzene	220	U
78-59-1	Isophorone	220	U
88-75-5	2-Nitrophenol	220	U
105-67-9	2,4-Dimethylphenol	220	U
111-91-1	Bis(2-chloroethoxy)methane	220	U
120-83-2	2,4-Dichlorophenol	220	U
91-20-3	Naphthalene	220	U
106-47-8	4-Chloroaniline	220	U
87-68-3	Hexachlorobutadiene	220	U
105-60-2	Caprolactam	220	U
59-50-7	4-Chloro-3-methylphenol	220	U
91-57-6	2-Methylnaphthalene	220	U
77-47-4	Hexachlorocyclopentadiene	220	U
88-06-2	2,4,6-Trichlorophenol	220	U
95-95-4	2,4,5-Trichlorophenol	220	U
92-52-4	1,1'-Biphenyl	220	U
91-58-7	2-Chloronaphthalene	220	U
88-74-4	2-Nitroaniline	430	U
131-11-3	Dimethylphthalate	220	U
606-20-2	2,6-Dinitrotoluene	220	U
208-96-8	Acenaphthylene	220	U
99-09-2	3-Nitroaniline	430	U
83-32-9	Acenaphthene	220	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T2

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-17A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: S2H5268.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 24 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: 7.3 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
51-28-5	2,4-Dinitrophenol	430	U
100-02-7	4-Nitrophenol	430	U
132-64-9	Dibenzofuran	220	U
121-14-2	2,4-Dinitrotoluene	220	U
84-66-2	Diethylphthalate	220	U
86-73-7	Fluorene	220	U
7005-72-3	4-Chlorophenyl-phenylether	220	U
100-01-6	4-Nitroaniline	430	U
534-52-1	4,6-Dinitro-2-methylphenol	430	U
86-30-6	N-Nitrosodiphenylamine (1)	220	U
95-94-3	1,2,4,5-Tetrachlorobenzene	220	U
101-55-3	4-Bromophenyl-phenylether	220	U
118-74-1	Hexachlorobenzene	220	U
1912-24-9	Atrazine	220	U
87-86-5	Pentachlorophenol	430	U
85-01-8	Phenanthrene	220	U
120-12-7	Anthracene	220	U
86-74-8	Carbazole	220	U
84-74-2	Di-n-butylphthalate	220	U
206-44-0	Fluoranthene	220	U
129-00-0	Pyrene	220	U
85-68-7	Butylbenzylphthalate	220	U
91-94-1	3,3'-Dichlorobenzidine	220	U
56-55-3	Benzo(a)anthracene	220	U
218-01-9	Chrysene	220	U
117-81-7	Bis(2-ethylhexyl)phthalate	220	U
117-84-0	Di-n-octylphthalate	220	U
205-99-2	Benzo(b)fluoranthene	220	U
207-08-9	Benzo(k)fluoranthene	220	U
50-32-8	Benzo(a)pyrene	220	U
193-39-5	Indeno(1,2,3-cd)pyrene	220	U
53-70-3	Dibenzo(a,h)anthracene	220	U
191-24-2	Benzo(g,h,i)perylene	220	U
58-90-2	2,3,4,6-Tetrachlorophenol	220	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30T2

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-17A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: S2H5268.D

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 24 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: 7.3 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.999	170	J
02	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.490	310	BNJ
03		Unknown-02	4.694	240	J
04		Unknown-03	4.994	88	J
05		Unknown-04	5.208	310	J
06		Unknown-05	5.337	160	J
07		Unknown-06	7.600	90	J
08	57-10-3	n-Hexadecanoic acid	7.911	290	NJ
09		Unknown-07	9.208	200	J
10	57-87-4	Ergosterol	9.594	260	NJ
11		Unknown-08	10.184	230	J
12	301-02-0	9-Octadecenamide, (Z)-	10.431	630	NJ
	E96679[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5268.D
Report Date: 11-Nov-2011 13:37

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5268.D
Lab Smp Id: K2198-17A Client Smp ID: H30T2
Inj Date : 10-NOV-2011 16:41
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-17A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment :
Method : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.200	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)
$	2 Phenol-d5	71	3.385	3.373	(0.916)	117457	33.1351	550
$	4 bis(2-Chloroethyl)ether-d8	67	3.428	3.427	(0.927)	139745	28.6091	470
$	6 2-Chlorophenol-d4	132	3.503	3.491	(0.948)	110115	35.9095	590
*	8 1,4-Dichlorobenzene-d4	152	3.696	3.684	(1.000)	112569	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.018	4.006	(1.087)	177561	36.9475	610
$	16 Nitrobenzene-d5	128	4.157	4.145	(0.874)	59083	32.3222	540
$	19 2-Nitrophenol-d4	143	4.425	4.424	(0.930)	77248	38.2809	630
$	23 2,4-Dichlorophenol-d3	165	4.629	4.628	(0.973)	143564	38.9723	650
*	25 Naphthalene-d8	136	4.758	4.746	(1.000)	351001	40.0000	
$	27 4-Chloroaniline-d4	131	4.811	4.810	(1.011)	21810	6.66800	110(aQ)
$	40 Dimethylphthalate-d6	166	5.980	5.968	(0.962)	404124	35.7274	590
$	43 Acenaphthylene-d8	160	6.087	6.076	(0.979)	467200	31.7628	530
*	46 Acenaphthene-d10	164	6.216	6.204	(1.000)	307639	40.0000	
$	49 4-Nitrophenol-d4	143	6.323	6.312	(1.017)	67936	41.6758	690
$	54 Fluorene-d10	176	6.645	6.633	(1.069)	354347	34.1038	560
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.699	6.698	(0.901)	67899	30.5191	510
*	65 Phenanthrene-d10	188	7.439	7.438	(1.000)	570138	40.0000	
$	67 Anthracene-d10	188	7.481	7.480	(1.006)	508675	31.2336	520
$	72 Pyrene-d10	212	8.618	8.606	(0.890)	447260	40.6475	670(R)

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5268.D
Report Date: 11-Nov-2011 13:37

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 77 Chrysene-d12	240	9.680	9.668	(1.000)	349288	40.0000	(Q)
$ 83 Benzo(a)pyrene-d12	264	10.913	10.891	(0.993)	176894	31.8759	530(R)
* 85 Perylene-d12	264	10.988	10.966	(1.000)	226153	40.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5268.D
Report Date: 11-Nov-2011 13:37

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5268.D
Lab Smp Id: K2198-17A Client Smp ID: H30T2
Inj Date : 10-NOV-2011 16:41
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-17A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment :
Method : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.200	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 8 1,4-Dichlorobenzene-d4	3.696	998600	40.000
* 25 Naphthalene-d8	4.758	1213153	40.000
* 65 Phenanthrene-d10	7.439	1636343	40.000
* 77 Chrysene-d12	9.680	985147	40.000
* 85 Perylene-d12	10.989	560674	40.000

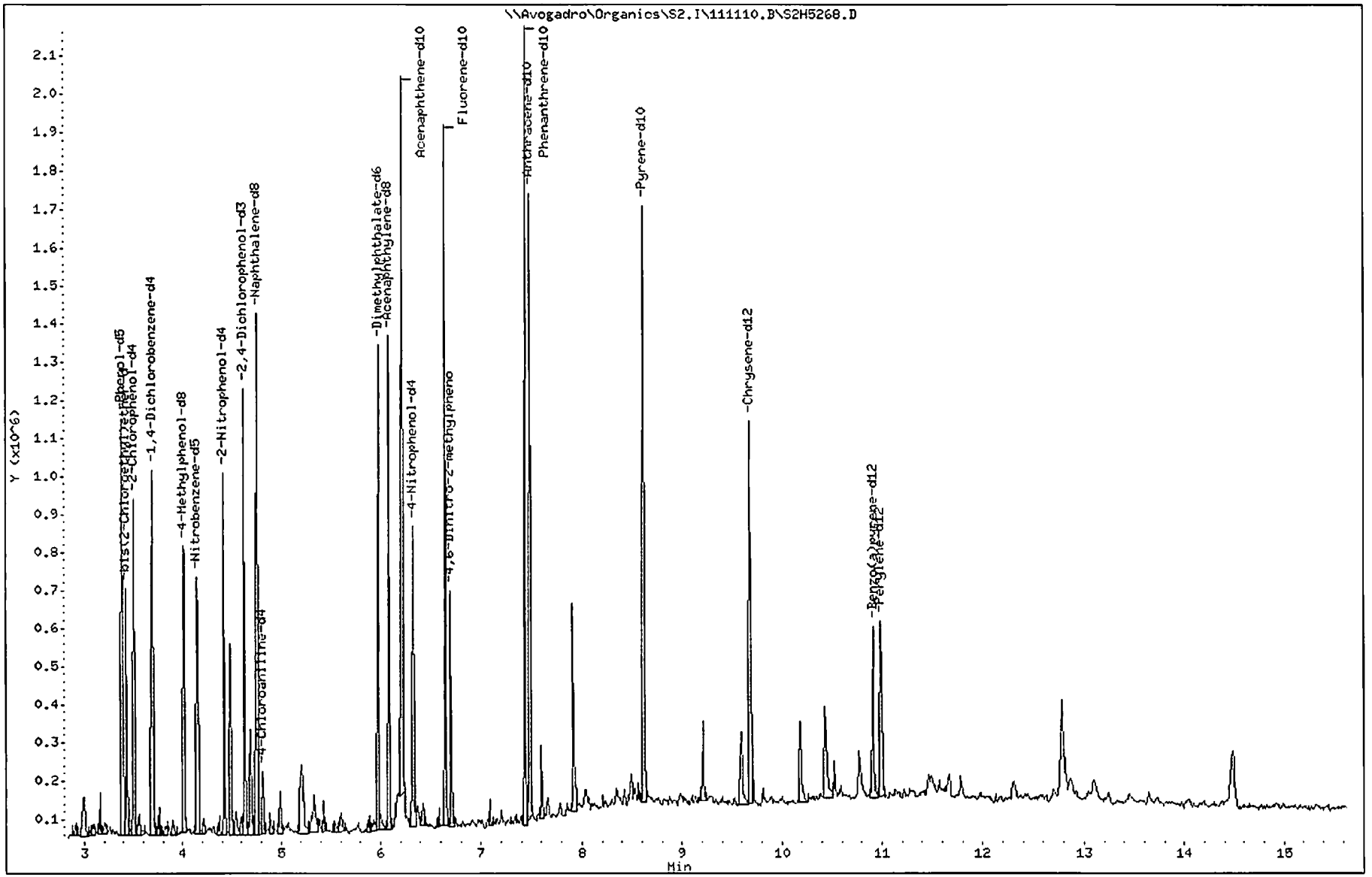
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.999	191156	7.65693599	130	0		0	8
2(3H)-Furanone, dihydro-4-hydroxy-				CAS #: 5469-16-9			
4.490	428251	14.1202743	230	90	NIST2002.L	4145	25

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5268.D
Report Date: 11-Nov-2011 13:37

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.694	332878	10.9756223	180	0		0	25
Unknown				CAS #:			
4.994	122344	4.03393201	67	0		0	25
Unknown				CAS #:			
5.208	436961	14.4074455	240	0		0	25
Unknown				CAS #:			
5.337	229279	7.55976745	130	0		0	25
Unknown				CAS #:			
7.600	170072	4.15736817	69	0		0	65
n-Hexadecanoic acid				CAS #: 57-10-3			
7.911	539140	13.1791310	220	93	NIST2002.L	92227	65
Unknown				CAS #:			
9.208	227505	9.23739503	150	0		0	77
Ergosterol				CAS #: 57-87-4			
9.594	293661	11.9235241	200	90	NIST2002.L	155624	77
Unknown				CAS #:			
10.184	260455	10.5752564	180	0		0	77
9-Octadecenamide, (Z)-				CAS #: 301-02-0			
10.431	407472	29.0701205	480	90	NIST2002.L	106874	85

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5268.D
Date : 10-NOV-2011 16:41
Client ID: H30T2
Sample Info: K2198-17A,,62764,,
Volume Injected (uL): 2.0
Column phase: RXI-5SILMS

Instrument: S2.i
Operator: SRC: LIMS
Column diameter: 0.25



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Date : 10-NOV-2011 16:41

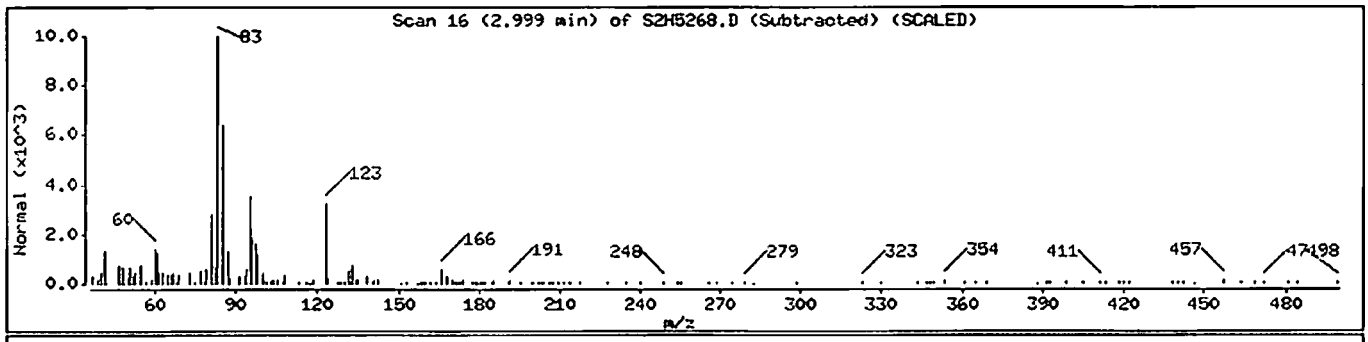
Client ID: H30T2 Instrument: S2.i

Sample Info: K2198-17A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 16:41

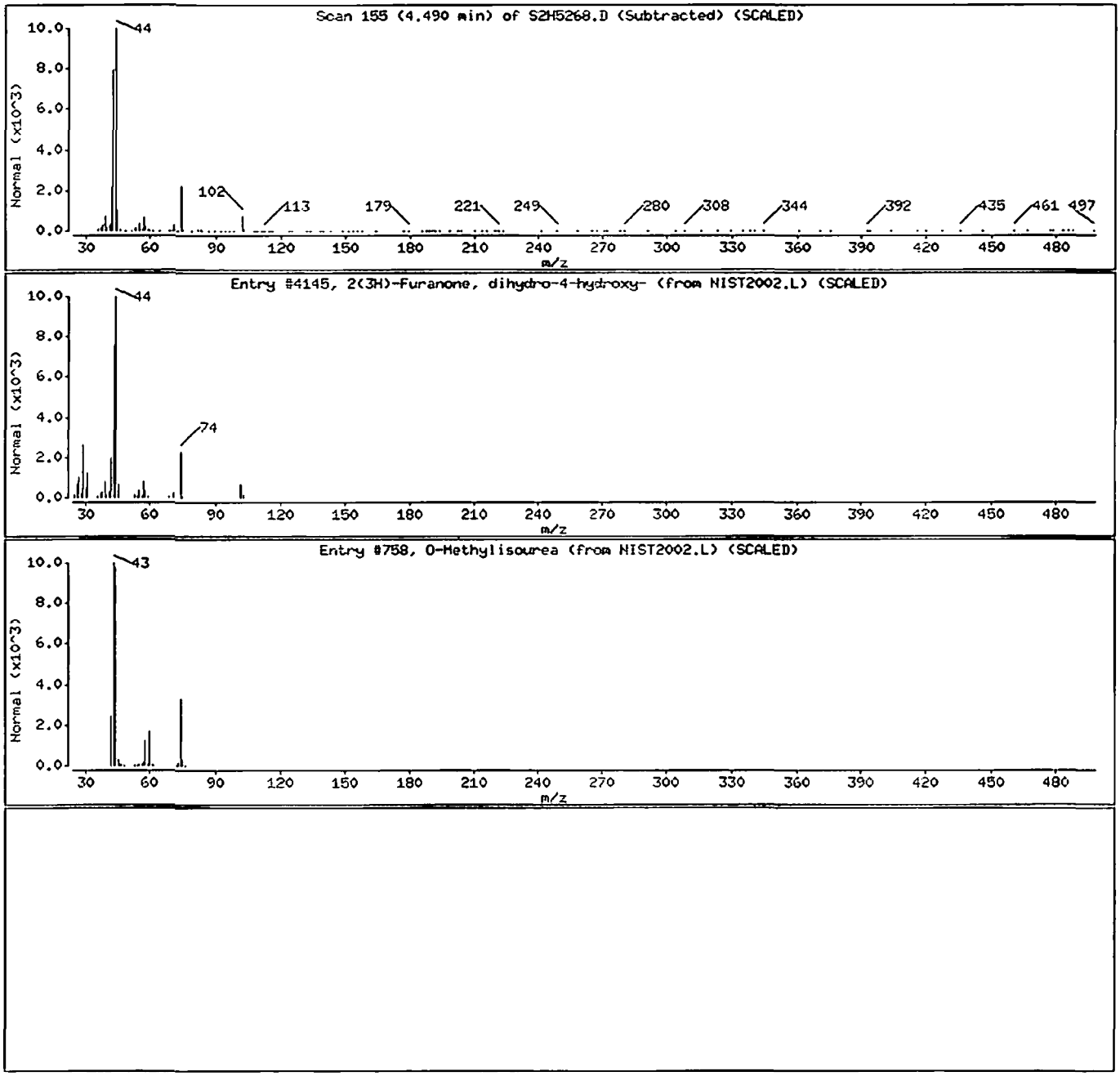
Client ID: H30T2 Instrument: S2.i

Sample Info: K2198-17A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2(3H)-Furanone, dihydro-4-hydroxy-	5469-16-9	NIST2002.L	4145	90	C4H6O3	102
O-Methylisourea	2440-60-0	NIST2002.L	758	86	C2H6N2O	74



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Date : 10-NOV-2011 16:41

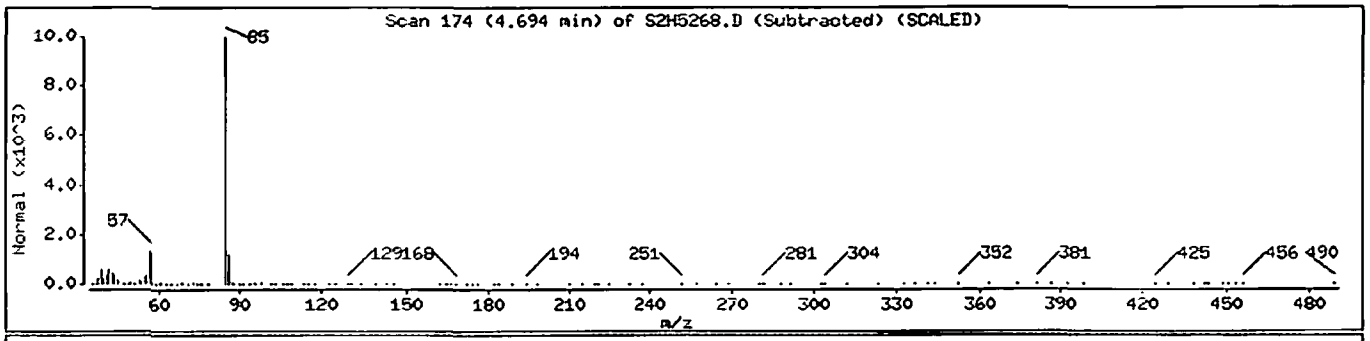
Client ID: H30T2 Instrument: S2.i

Sample Info: K2198-17A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 16:41

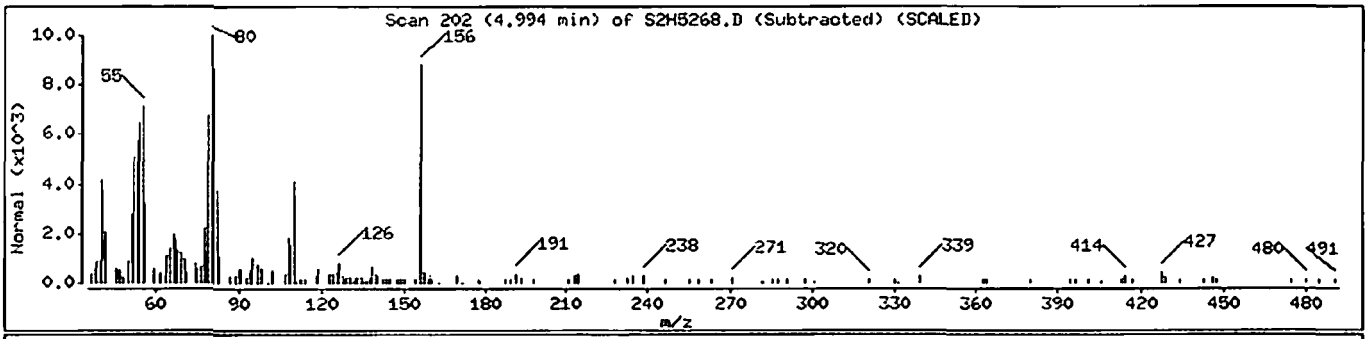
Client ID: H30T2 Instrument: S2.i

Sample Info: K2198-17A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 16:41

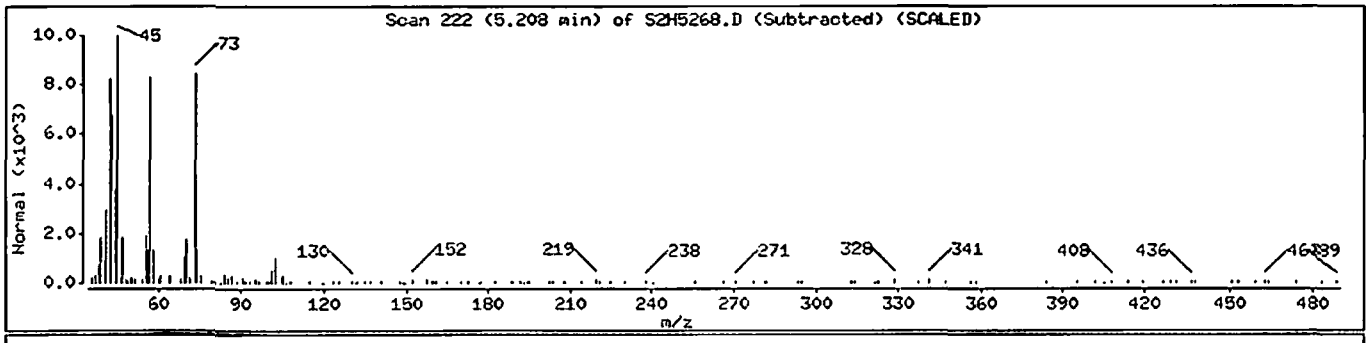
Client ID: H30T2 Instrument: S2.i

Sample Info: K2198-17A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 16:41

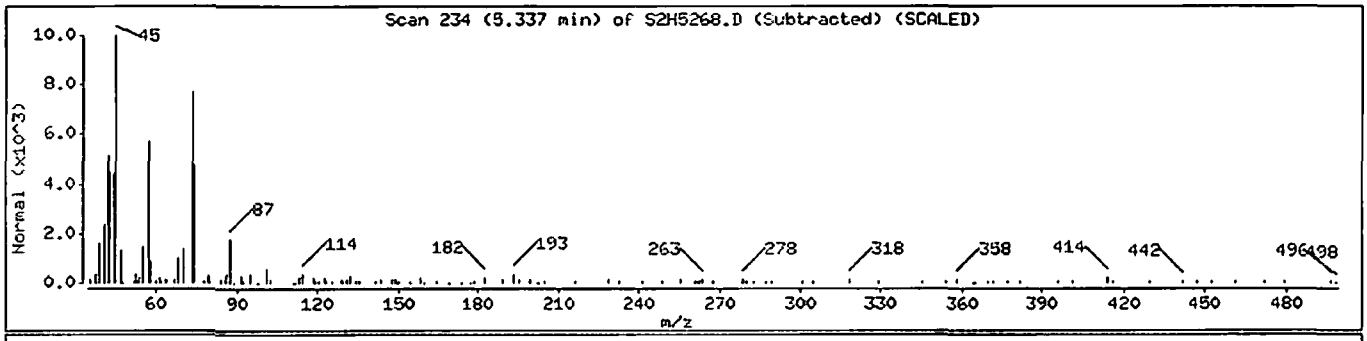
Client ID: H30T2 Instrument: S2.i

Sample Info: K2198-17A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5268.D

Date : 10-NOV-2011 16:41

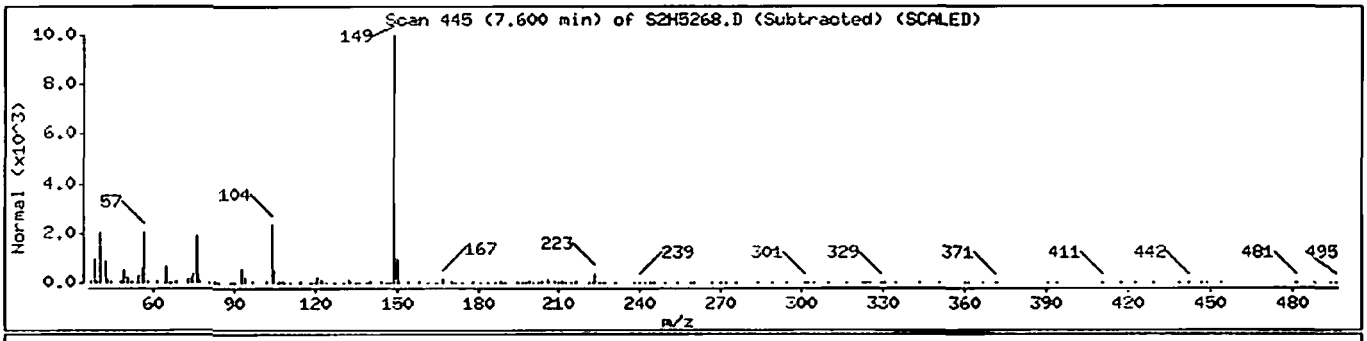
Client ID: H30T2 Instrument: S2.i

Sample Info: K2198-17A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 16:41

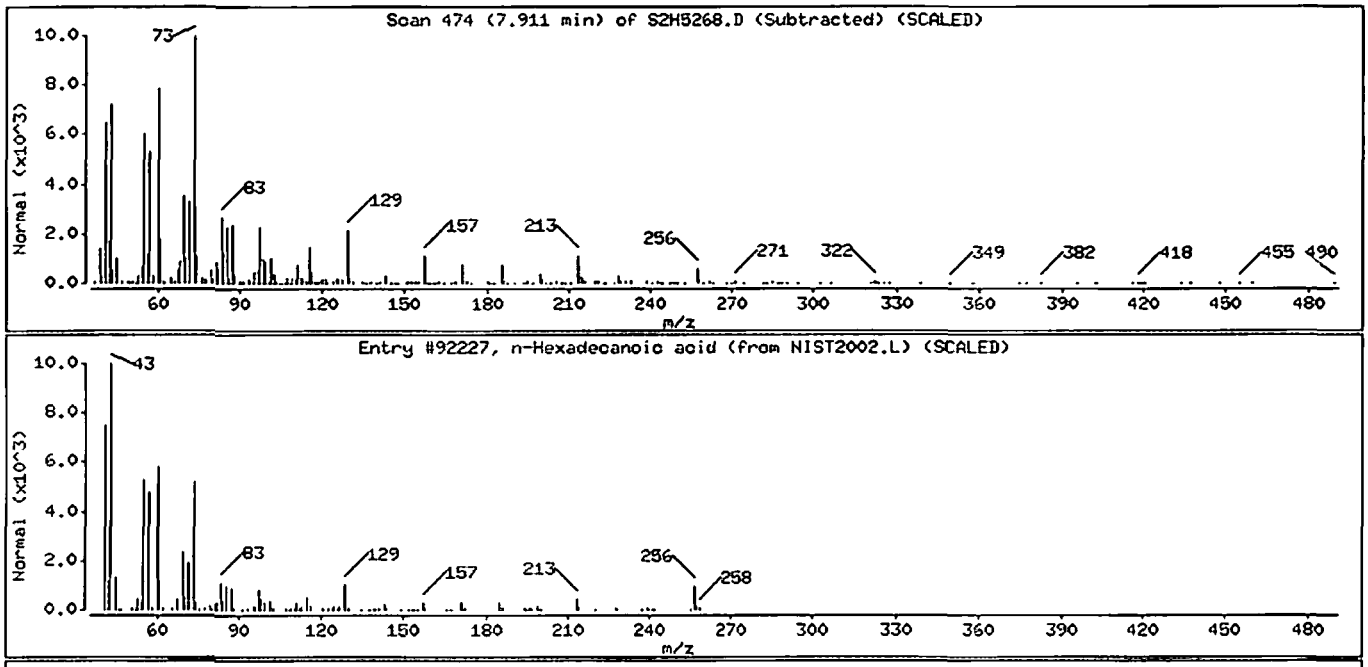
Client ID: H30T2 Instrument: S2.i

Sample Info: K2198-17A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
n-Hexadecanoic acid	57-10-3	NIST2002.L	92227	93	C16H32O2	256



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5268.D

Date : 10-NOV-2011 16:41

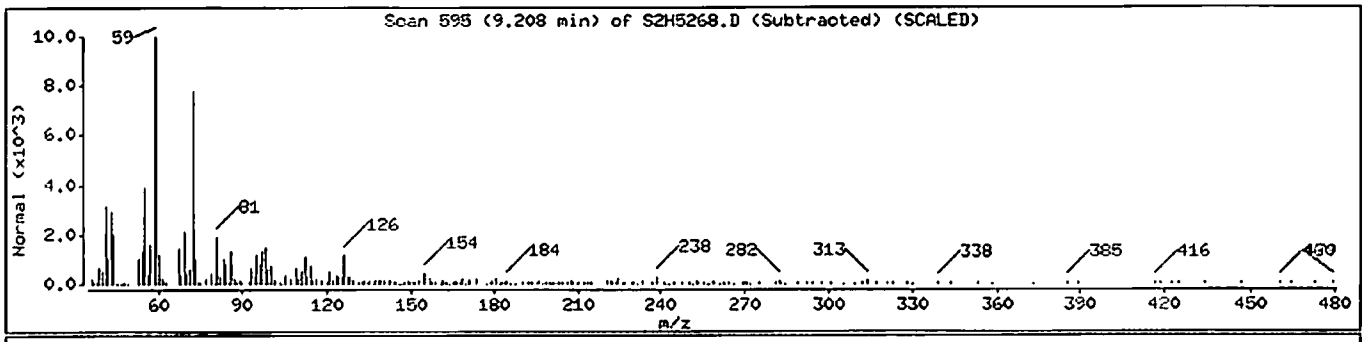
Client ID: H30T2 Instrument: S2.i

Sample Info: K2198-17A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5268.D

Date : 10-NOV-2011 16:41

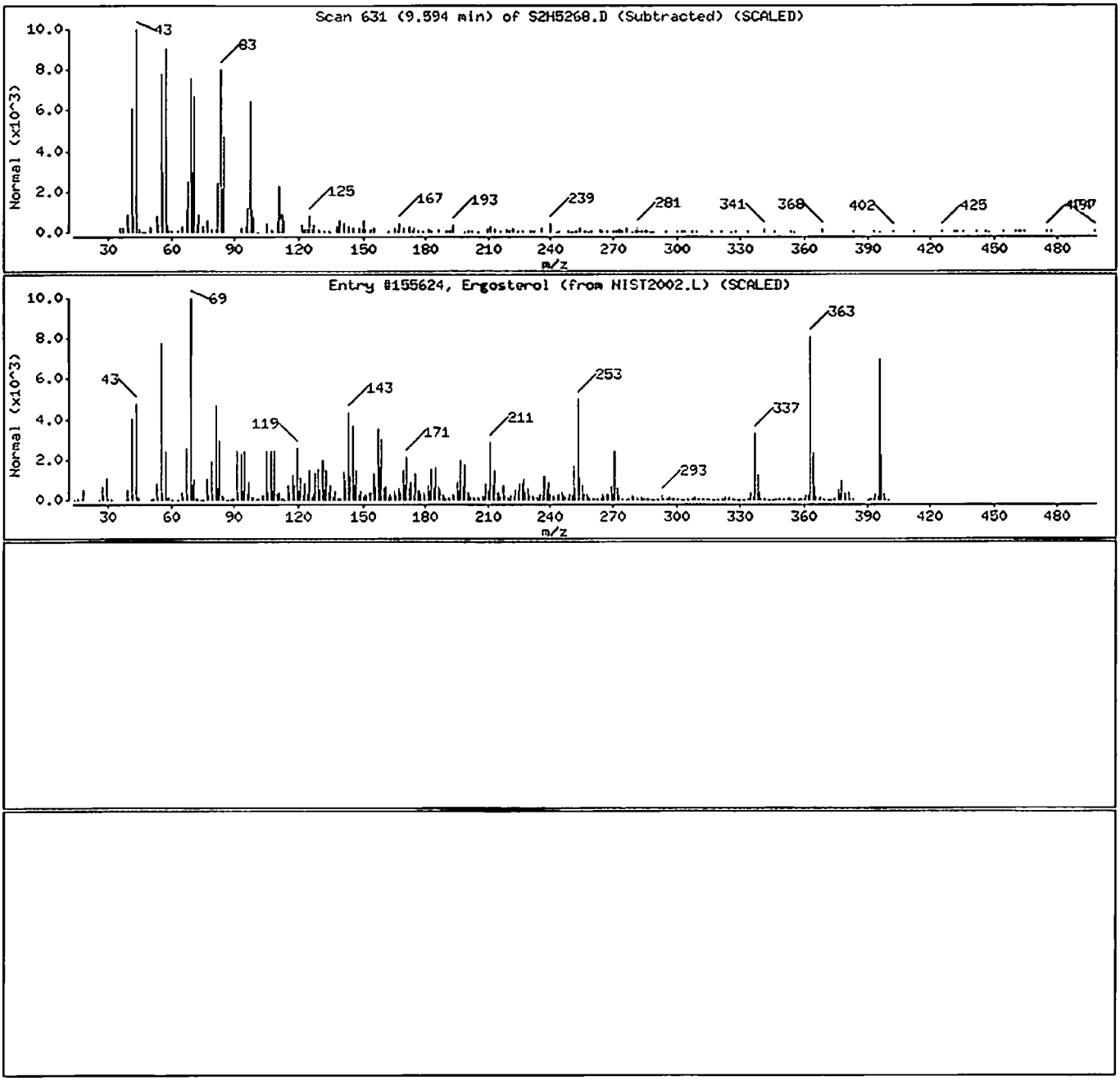
Client ID: H30T2 Instrument: S2.i

Sample Info: K2198-17A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ergosterol	57-87-4	NIST2002.L	155624	90	C28H44O	396



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5268.D

Date : 10-NOV-2011 16:41

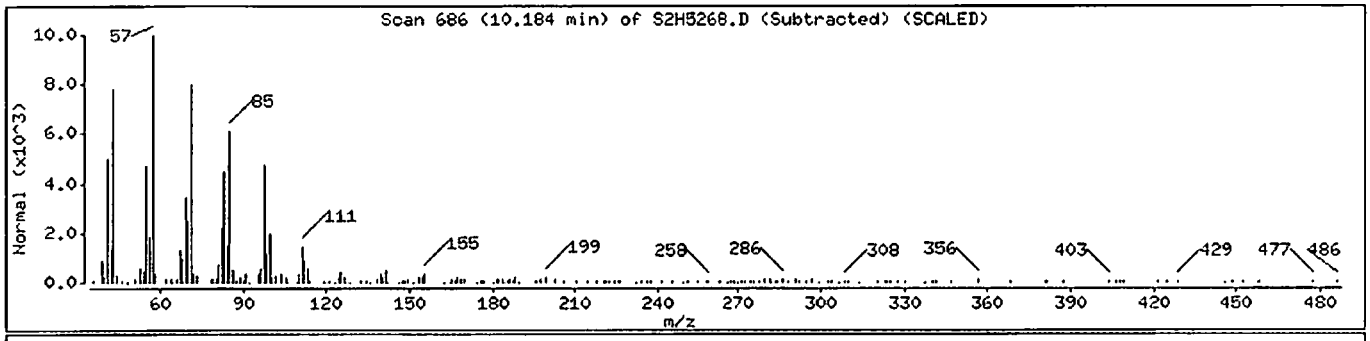
Client ID: H30T2 Instrument: S2.i

Sample Info: K2198-17A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5268.D

Date : 10-NOV-2011 16:41

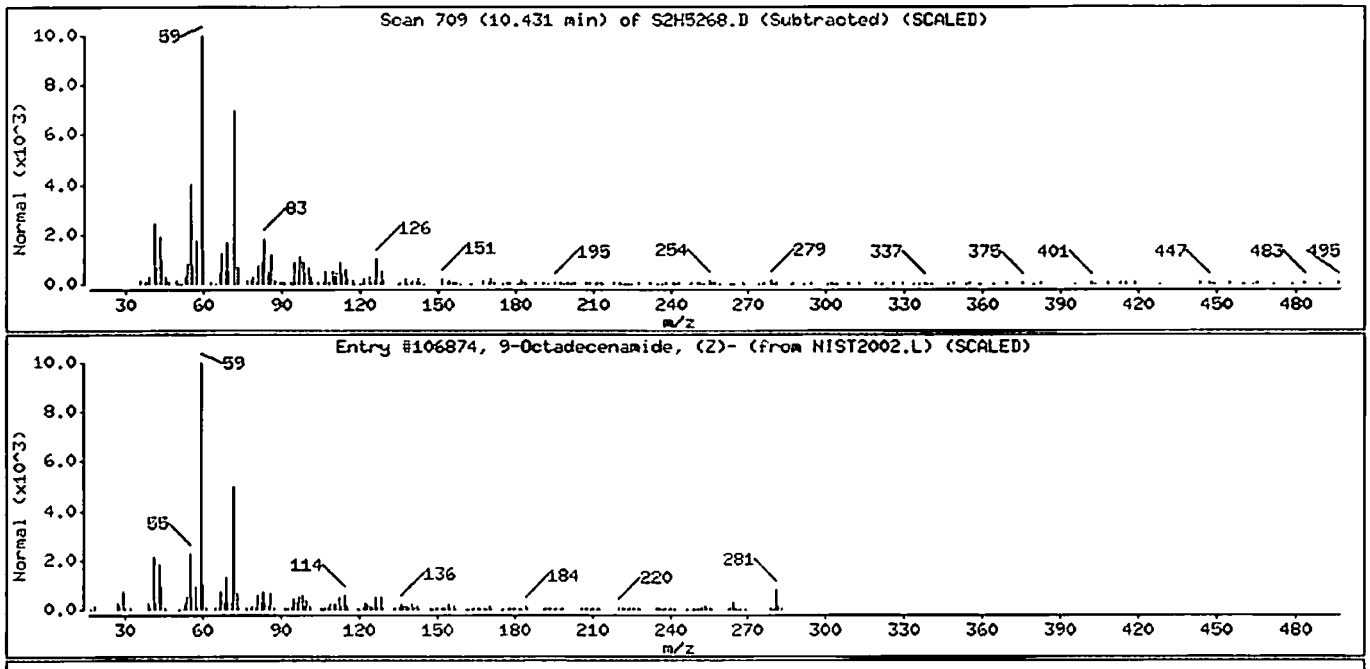
Client ID: H30T2 Instrument: S2.i

Sample Info: K2198-17A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST2002.L	106874	90	C18H35NO	281



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.: H30T3

Lab Name: MITKEM LABORATORIES | Contract: EP-W-11-033

Lab Code: MITKEM | Case No.: 41926 | Mod. Ref No.: | SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL | Lab Sample ID: K2198-18A

Sample wt/vol: 30.4 (g/mL) G | Lab File ID: S2H5269.D

Level: (LOW/MED) LOW | Extraction: (Type) SONC

% Moisture: 22 | Decanted: (Y/N) N | Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) | Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) | GPC Factor: 2.00 | Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y | pH: 7.3 | Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	210	U
108-95-2	Phenol	210	U
111-44-4	Bis(2-chloroethyl)ether	210	U
95-57-8	2-Chlorophenol	210	U
95-48-7	2-Methylphenol	210	U
108-60-1	2,2'-Oxybis(1-chloropropane)	210	U
98-86-2	Acetophenone	210	U
106-44-5	4-Methylphenol	210	U
621-64-7	N-Nitroso-di-n-propylamine	210	U
67-72-1	Hexachloroethane	210	U
98-95-3	Nitrobenzene	210	U
78-59-1	Isophorone	210	U
88-75-5	2-Nitrophenol	210	U
105-67-9	2,4-Dimethylphenol	210	U
111-91-1	Bis(2-chloroethoxy)methane	210	U
120-83-2	2,4-Dichlorophenol	210	U
91-20-3	Naphthalene	210	U
106-47-8	4-Chloroaniline	210	U
87-68-3	Hexachlorobutadiene	210	U
105-60-2	Caprolactam	210	U
59-50-7	4-Chloro-3-methylphenol	210	U
91-57-6	2-Methylnaphthalene	210	U
77-47-4	Hexachlorocyclopentadiene	210	U
88-06-2	2,4,6-Trichlorophenol	210	U
95-95-4	2,4,5-Trichlorophenol	210	U
92-52-4	1,1'-Biphenyl	210	U
91-58-7	2-Chloronaphthalene	210	U
88-74-4	2-Nitroaniline	420	U
131-11-3	Dimethylphthalate	210	U
606-20-2	2,6-Dinitrotoluene	210	U
208-96-8	Acenaphthylene	210	U
99-09-2	3-Nitroaniline	420	U
83-32-9	Acenaphthene	210	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T3

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-18A

Sample wt/vol: 30.4 (g/mL) G Lab File ID: S2H5269.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 22 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: 7.3 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
51-28-5	2,4-Dinitrophenol	420	U
100-02-7	4-Nitrophenol	420	U
132-64-9	Dibenzofuran	210	U
121-14-2	2,4-Dinitrotoluene	210	U
84-66-2	Diethylphthalate	210	U
86-73-7	Fluorene	210	U
7005-72-3	4-Chlorophenyl-phenylether	210	U
100-01-6	4-Nitroaniline	420	U
534-52-1	4,6-Dinitro-2-methylphenol	420	U
86-30-6	N-Nitrosodiphenylamine (1)	210	U
95-94-3	1,2,4,5-Tetrachlorobenzene	210	U
101-55-3	4-Bromophenyl-phenylether	210	U
118-74-1	Hexachlorobenzene	210	U
1912-24-9	Atrazine	210	U
87-86-5	Pentachlorophenol	420	U
85-01-8	Phenanthrene	210	U
120-12-7	Anthracene	210	U
86-74-8	Carbazole	210	U
84-74-2	Di-n-butylphthalate	44	J
206-44-0	Fluoranthene	210	U
129-00-0	Pyrene	210	U
85-68-7	Butylbenzylphthalate	210	U
91-94-1	3,3'-Dichlorobenzidine	210	U
56-55-3	Benzo(a)anthracene	210	U
218-01-9	Chrysene	210	U
117-81-7	Bis(2-ethylhexyl)phthalate	210	U
117-84-0	Di-n-octylphthalate	210	U
205-99-2	Benzo(b)fluoranthene	210	U
207-08-9	Benzo(k)fluoranthene	210	U
50-32-8	Benzo(a)pyrene	210	U
193-39-5	Indeno(1,2,3-cd)pyrene	210	U
53-70-3	Dibenzo(a,h)anthracene	210	U
191-24-2	Benzo(g,h,i)perylene	210	U
58-90-2	2,3,4,6-Tetrachlorophenol	210	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: H30T3

Lab Name: MITKEM LABORATORIES | Contract: EP-W-11-033

Lab Code: MITKEM | Case No.: 41926 | Mod. Ref No.: | SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL | Lab Sample ID: K2198-18A

Sample wt/vol: 30.4 (g/mL) G | Lab File ID: S2H5269.D

Level: (TRACE or LOW/MED) LOW | Extraction: (Type) SONC

% Moisture: 22 | Decanted: (Y/N) N | Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) | Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) | GPC Factor: 2.00 | Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y | pH: 7.3 | Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.996	160	J
02		Unknown-02	3.157	120	J
03	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.487	280	BNJ
04		Unknown-03	4.691	210	J
05		Unknown-04	5.205	260	J
06		Unknown-05	5.334	110	J
07		Unknown-06	5.431	100	J
08		Unknown-07	7.608	110	J
09	57-10-3	n-Hexadecanoic acid	7.908	250	NJ
10	1000197-14-1	4b,8-Dimethyl-2-isopropylphe	8.240	150	NJ
11		Unknown-08	9.205	200	J
12		Unknown-09	9.591	140	J
13		Unknown-10	10.439	560	J
	E96679[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5269.D
Report Date: 11-Nov-2011 13:37

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5269.D
Lab Smp Id: K2198-18A Client Smp ID: H30T3
Inj Date : 10-NOV-2011 17:01
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-18A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment :
Method : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.400	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)
$	2 Phenol-d5	71	3.382	3.373	(0.916)	120135	32.5520	540
$	4 bis(2-Chloroethyl)ether-d8	67	3.425	3.427	(0.927)	144007	28.3172	470
$	6 2-Chlorophenol-d4	132	3.500	3.491	(0.948)	111976	35.0741	580
*	8 1,4-Dichlorobenzene-d4	152	3.693	3.684	(1.000)	117198	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.015	4.006	(1.087)	188310	37.6365	620
$	16 Nitrobenzene-d5	128	4.154	4.145	(0.874)	61144	33.2960	550
$	19 2-Nitrophenol-d4	143	4.422	4.424	(0.930)	72273	35.6509	590
$	23 2,4-Dichlorophenol-d3	165	4.637	4.628	(0.975)	133536	36.0835	590
*	25 Naphthalene-d8	136	4.755	4.746	(1.000)	352621	40.0000	
$	27 4-Chloroaniline-d4	131	4.808	4.810	(1.011)	17160	5.22225	86(aQ)
$	40 Dimethylphthalate-d6	166	5.977	5.968	(0.962)	405266	41.7394	690
$	43 Acenaphthylene-d8	160	6.084	6.076	(0.979)	437950	34.6864	570
*	46 Acenaphthene-d10	164	6.213	6.204	(1.000)	264072	40.0000	
$	49 4-Nitrophenol-d4	143	6.320	6.312	(1.017)	55580	39.7211	650
$	54 Fluorene-d10	176	6.642	6.633	(1.069)	320370	35.9207	590
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.706	6.698	(0.902)	62539	36.7217	600(Q)
*	65 Phenanthrene-d10	188	7.435	7.438	(1.000)	436431	40.0000	
$	67 Anthracene-d10	188	7.489	7.480	(1.007)	447946	35.9312	590
	70 Di-n-butylphthalate	149	7.929	7.931	(1.066)	22827	2.11048	35(aH)

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5269.D
Report Date: 11-Nov-2011 13:37

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)
$ 72 Pyrene-d10	212	8.615	8.606	(0.889)	402128	42.6787	700
* 77 Chrysene-d12	240	9.687	9.668	(1.000)	299096	40.0000	(Q)
$ 83 Benzo(a)pyrene-d12	264	10.910	10.891	(0.992)	181413	34.4336	570(M)M6 MMS 11/11
* 85 Perylene-d12	264	10.996	10.966	(1.000)	214703	40.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5269.D
Report Date: 11-Nov-2011 13:37

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5269.D
Lab Smp Id: K2198-18A Client Smp ID: H30T3
Inj Date : 10-NOV-2011 17:01
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-18A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment :
Method : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.400	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 8 1,4-Dichlorobenzene-d4	3.693	1049092	40.000
* 25 Naphthalene-d8	4.755	1190563	40.000
* 65 Phenanthrene-d10	7.436	1242041	40.000
* 77 Chrysene-d12	9.688	847851	40.000
* 85 Perylene-d12	10.996	509724	40.000

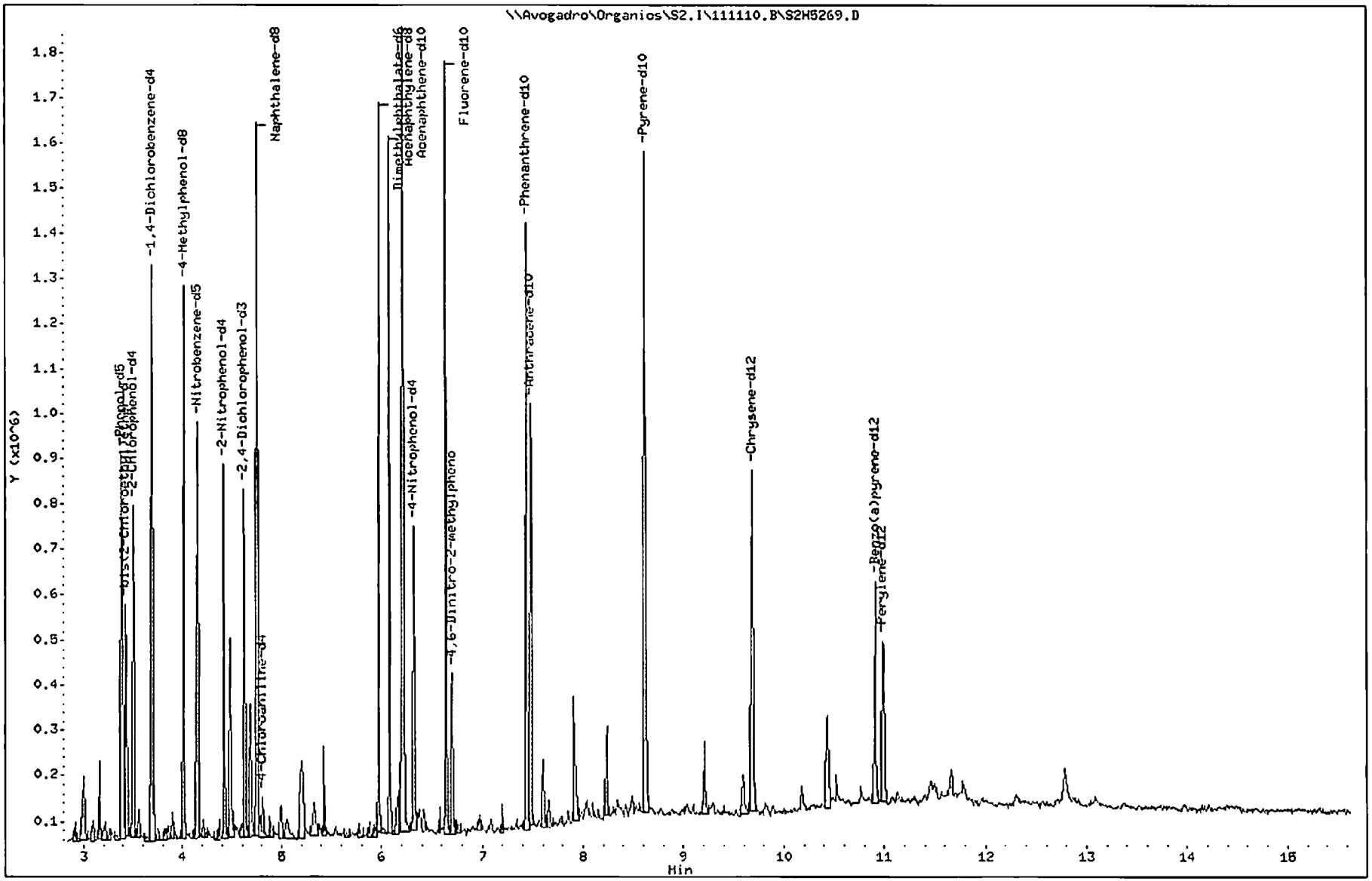
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.996	198883	7.58305113	120	0		0	8
Unknown				CAS #:			
3.157	144576	5.51243581	91	0		0	8

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5269.D
Report Date: 11-Nov-2011 13:37

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
2(3H)-Furanone, dihydro-4-hydroxy-				CAS #: 5469-16-9			
4.487	389677	13.0921940	220	90	NIST2002.L	4145	25
Unknown				CAS #:			
4.691	298917	10.0428713	170	0		0	25
Unknown				CAS #:			
5.205	362096	12.1655261	200	0		0	25
Unknown				CAS #:			
5.334	159829	5.36985750	88	0		0	25
Unknown				CAS #:			
5.431	148173	4.97824521	82	0		0	25
Unknown				CAS #:			
7.608	163234	5.25696141	86	0		0	65
n-Hexadecanoic acid				CAS #: 57-10-3			
7.908	370960	11.9467975	200	94	NIST2002.L	92227	65
4b,8-Dimethyl-2-isopropylphenanthrene, 4				CAS #: 1000197-14-1			
8.240	227996	7.34262588	120	93	NIST2002.L	92361	65
Unknown				CAS #:			
9.205	202054	9.53250330	160	0		0	77
Unknown				CAS #:			
9.591	138558	6.53689348	110	0		0	77
Unknown				CAS #:			
10.439	338719	26.5805479	440	0		0	85

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5269.D
Date : 10-NOV-2011 17:01
Client ID: H30T3
Sample Info: K2198-18A,,62764,,
Volume Injected (uL): 2.0
Column phase: RXI-5SILHS

Instrument: S2.I
Operator: SRC: LIMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5269.D

Date : 10-NOV-2011 17:01

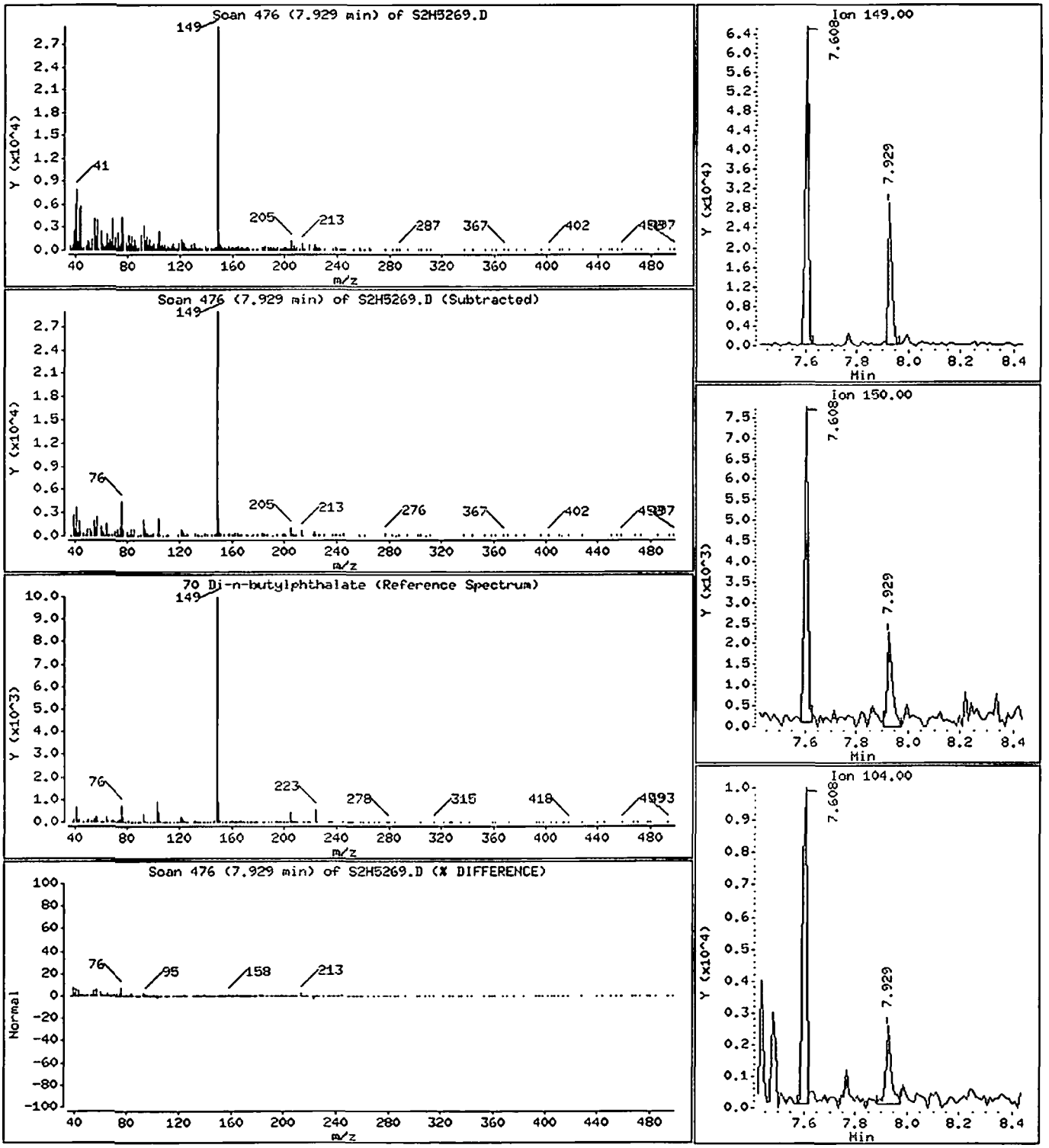
Client ID: H30T3 Instrument: S2.i

Sample Info: K2198-18A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

70 Di-n-butylphthalate Concentration: 35 ug/Kg



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5269.D

Date : 10-NOV-2011 17:01

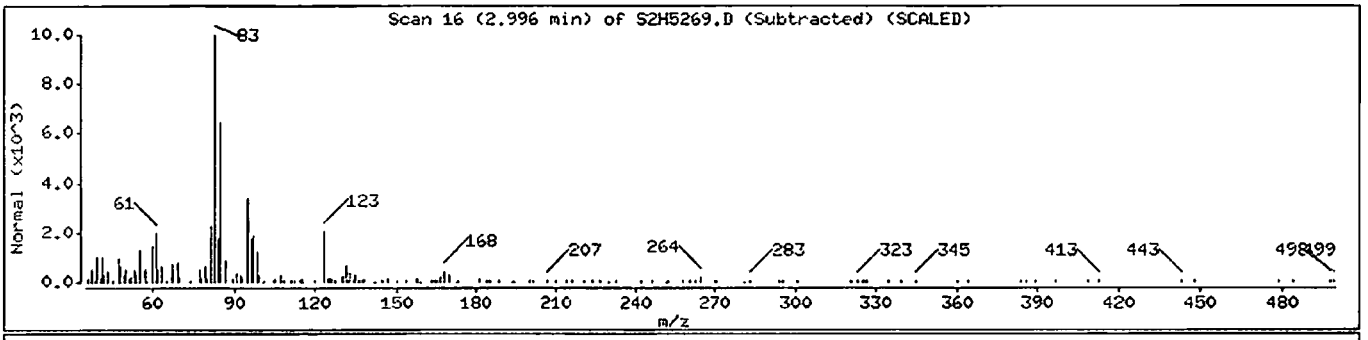
Client ID: H30T3 Instrument: S2.i

Sample Info: K2198-18A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5269.D

Date : 10-NOV-2011 17:01

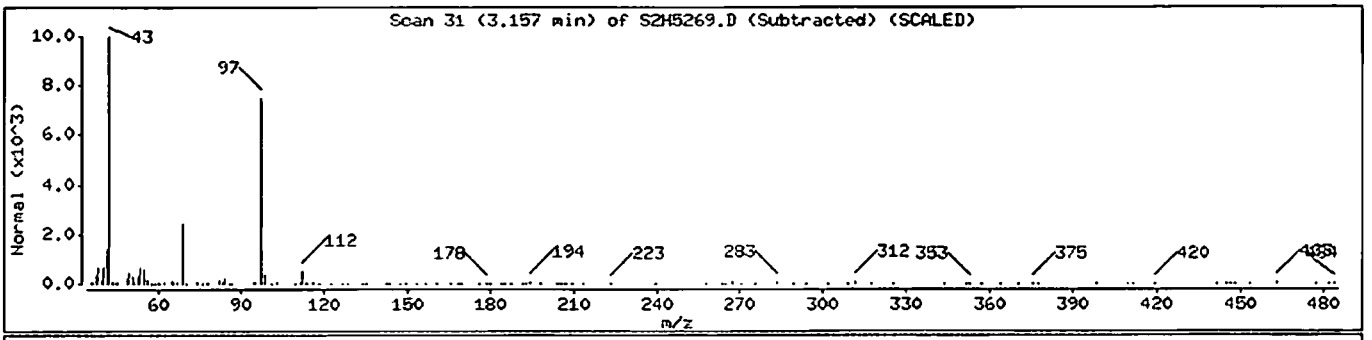
Client ID: H30T3 Instrument: S2.i

Sample Info: K2198-18A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5269.D

Date : 10-NOV-2011 17:01

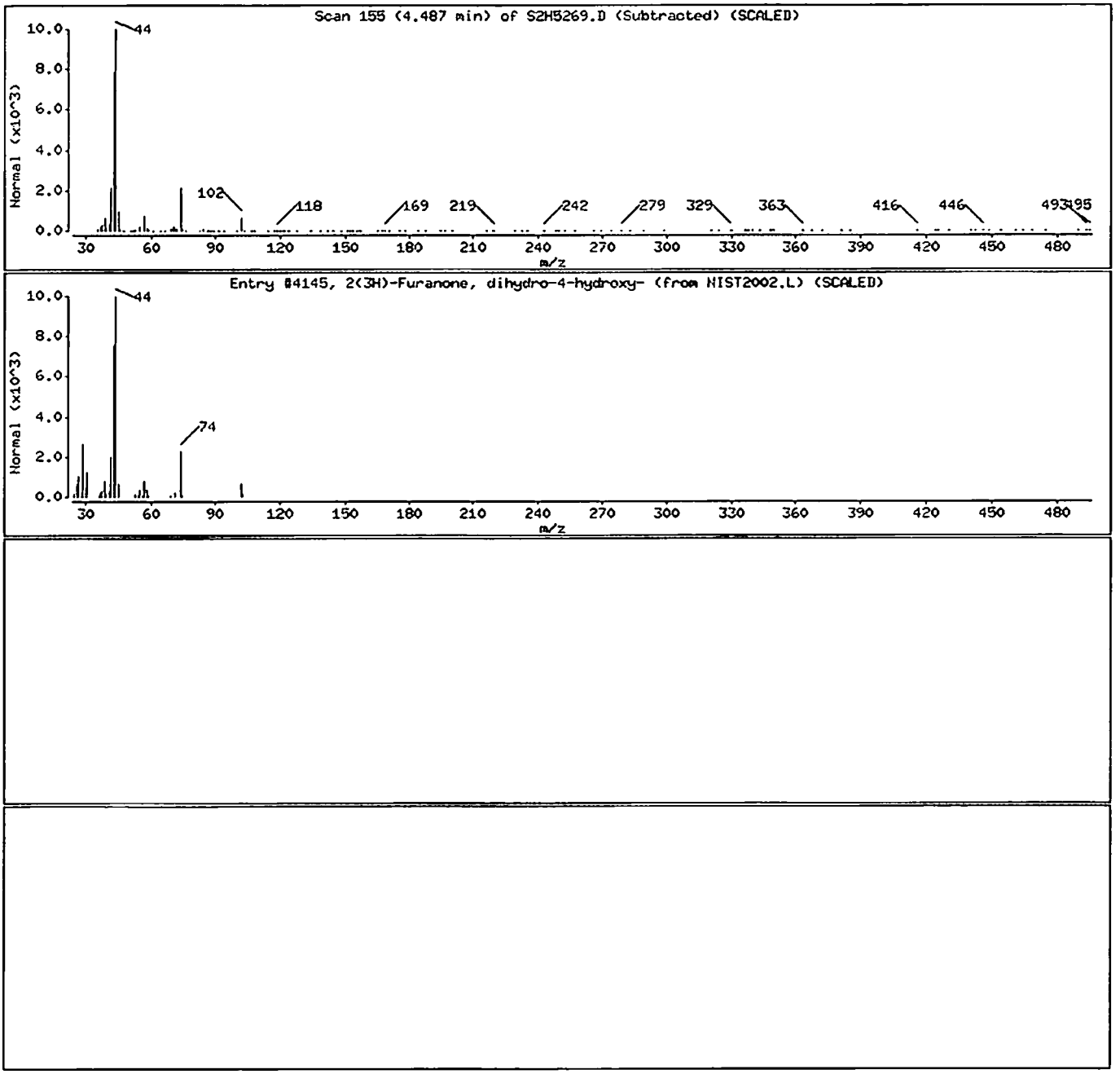
Client ID: H30T3 Instrument: S2.i

Sample Info: K2198-18A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2(3H)-Furanone, dihydro-4-hydroxy-	5469-16-9	NIST2002.L	4145	90	C4H6O3	102



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5269.D

Date : 10-NOV-2011 17:01

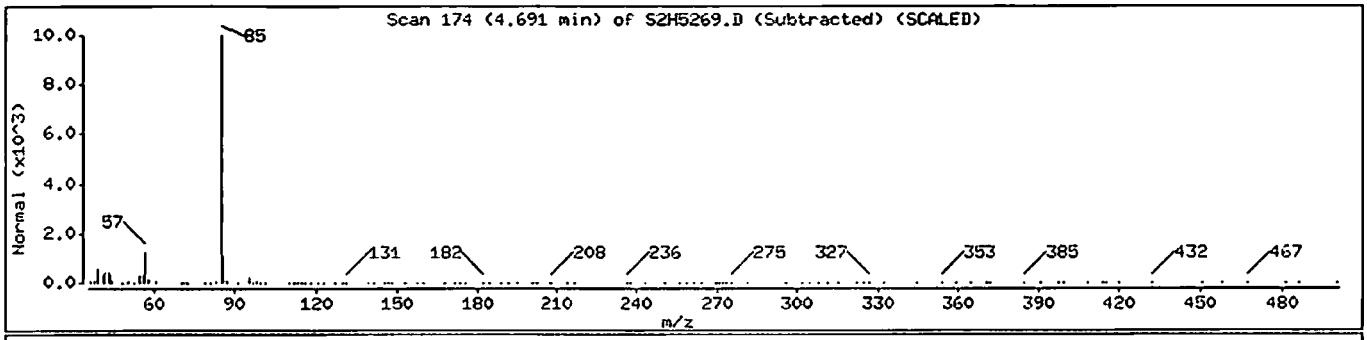
Client ID: H30T3 Instrument: S2.i

Sample Info: K2198-18A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.i\111110.B\S2H5269.D

Date : 10-NOV-2011 17:01

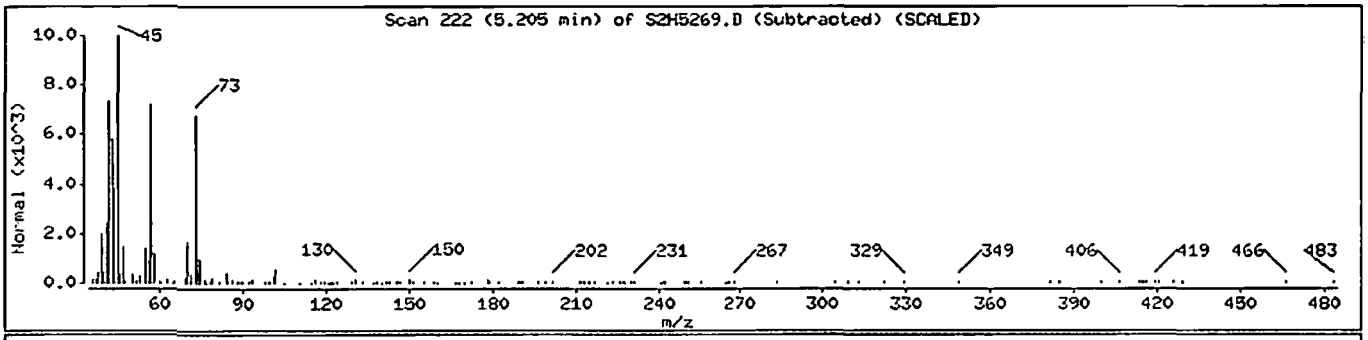
Client ID: M30T3 Instrument: S2.i

Sample Info: K2198-18A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5269.D

Date : 10-NOV-2011 17:01

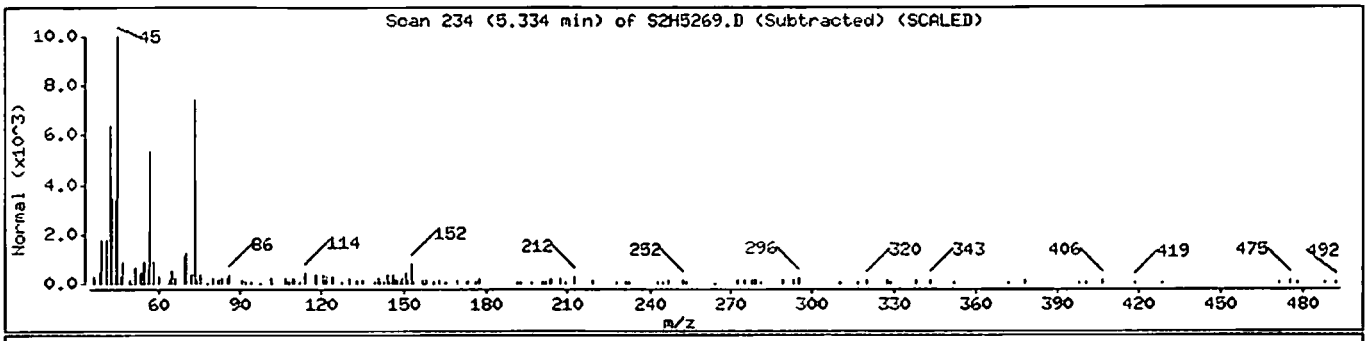
Client ID: H30T3 Instrument: S2.i

Sample Info: K2198-18A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.i\111110.B\S2H5269.D

Date : 10-NOV-2011 17:01

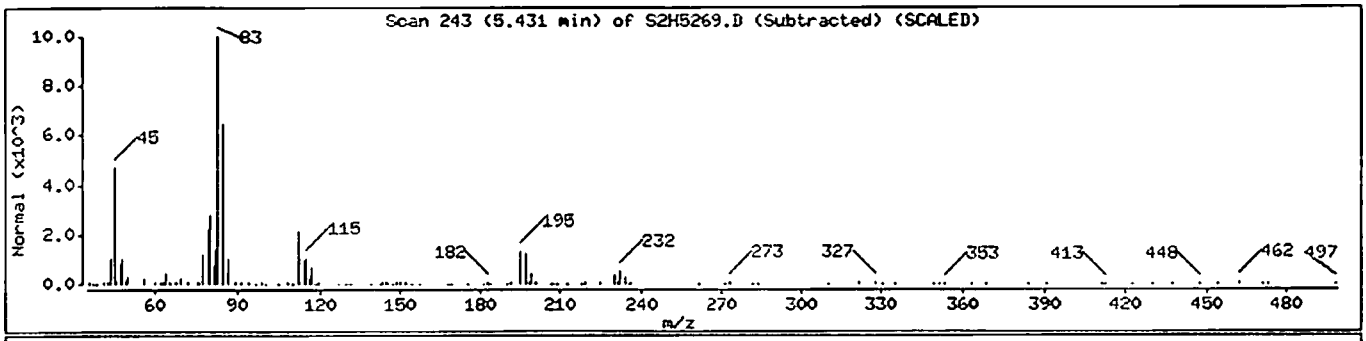
Client ID: H30T3 Instrument: S2.i

Sample Info: K2198-18A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5269.D

Date : 10-NOV-2011 17:01

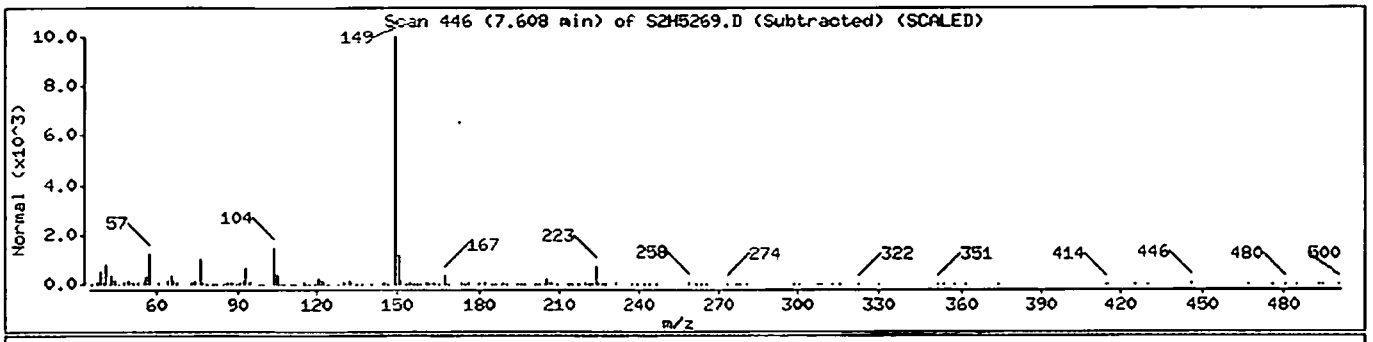
Client ID: H30T3 Instrument: S2.i

Sample Info: K2198-18A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5269.D

Date : 10-NOV-2011 17:01

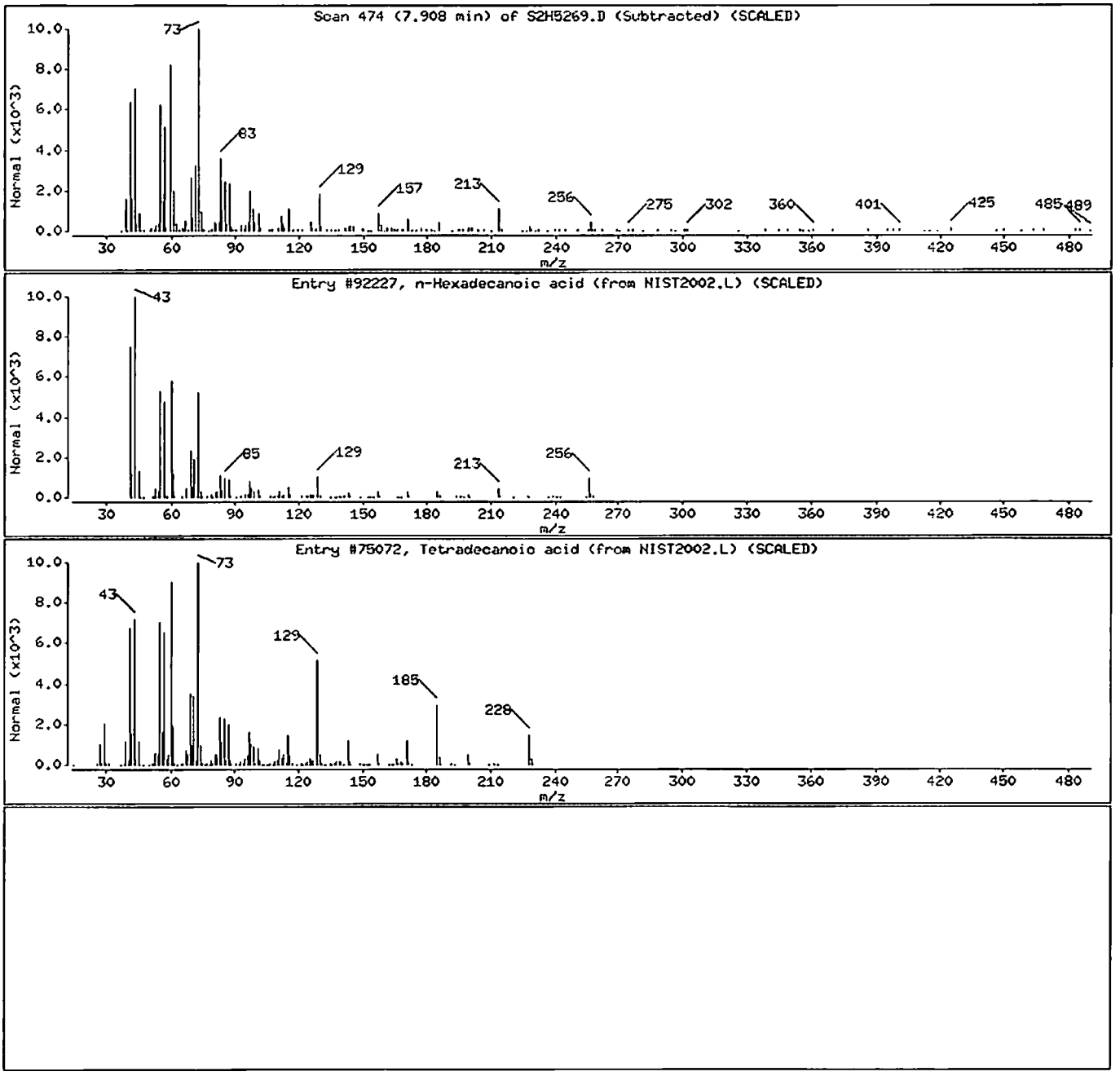
Client ID: H30T3 Instrument: S2.i

Sample Info: K2198-18A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
n-Hexadecanoic acid	57-10-3	NIST2002.L	92227	94	C16H3202	256
Tetradecanoic acid	544-63-8	NIST2002.L	75072	86	C14H2802	228



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5269.D

Date : 10-NOV-2011 17:01

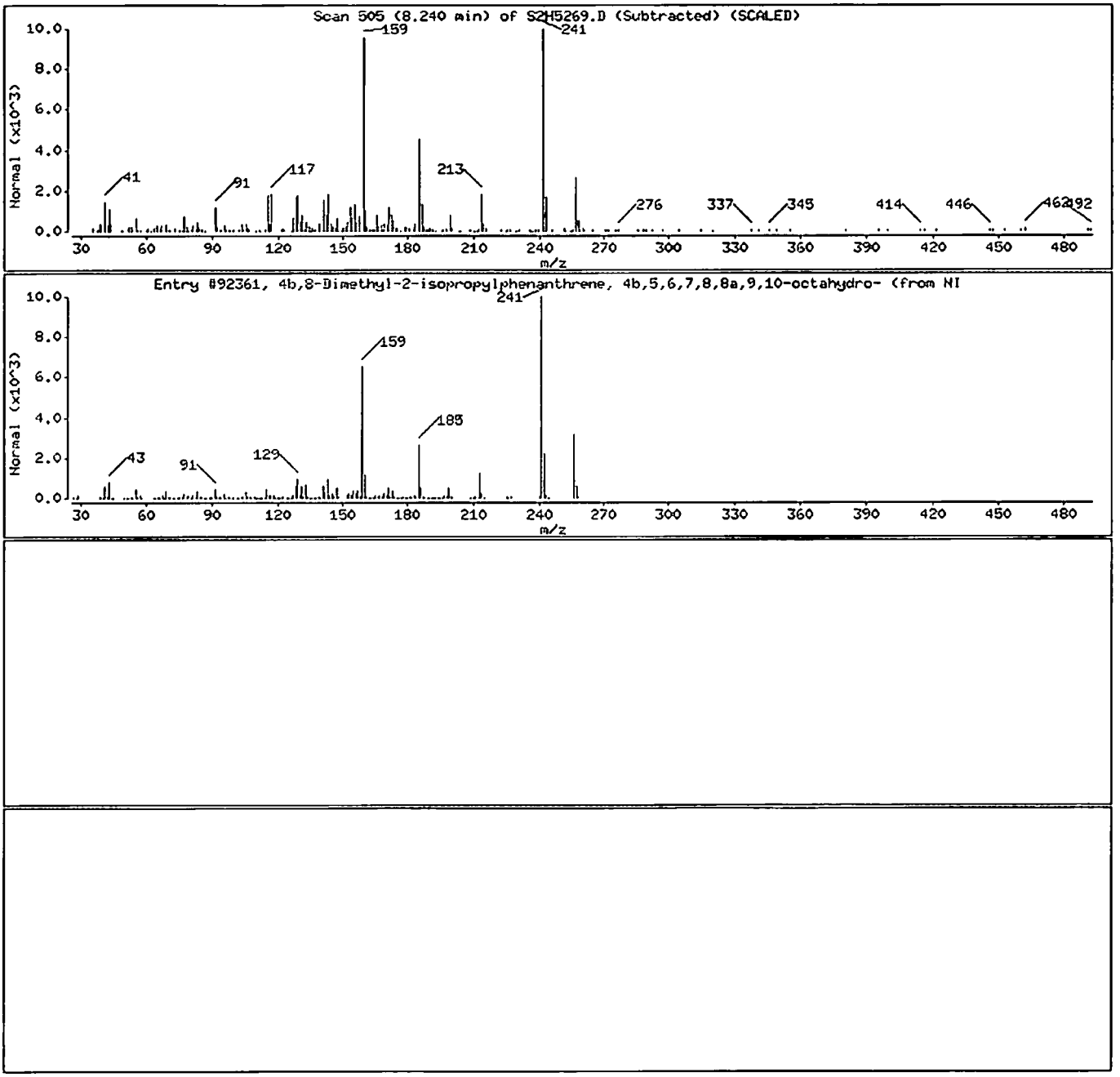
Client ID: H30T3 Instrument: S2.i

Sample Info: K2198-18A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
4b,8-Dimethyl-2-isopropylphenanthrene, 4	1000197-14-1	NIST2002.L	92361	93	C19H28	256



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5269.D

Date : 10-NOV-2011 17:01

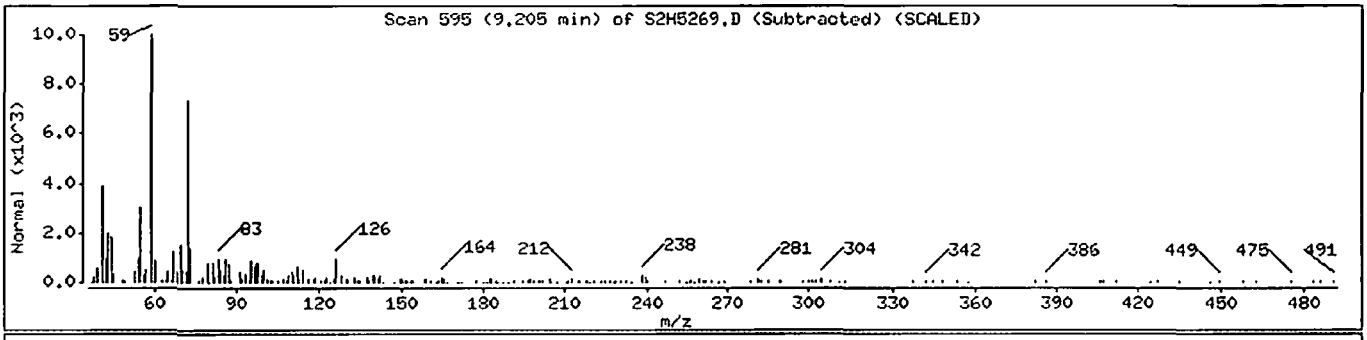
Client ID: M30T3 Instrument: S2.i

Sample Info: K2198-18A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5269.D

Date : 10-NOV-2011 17:01

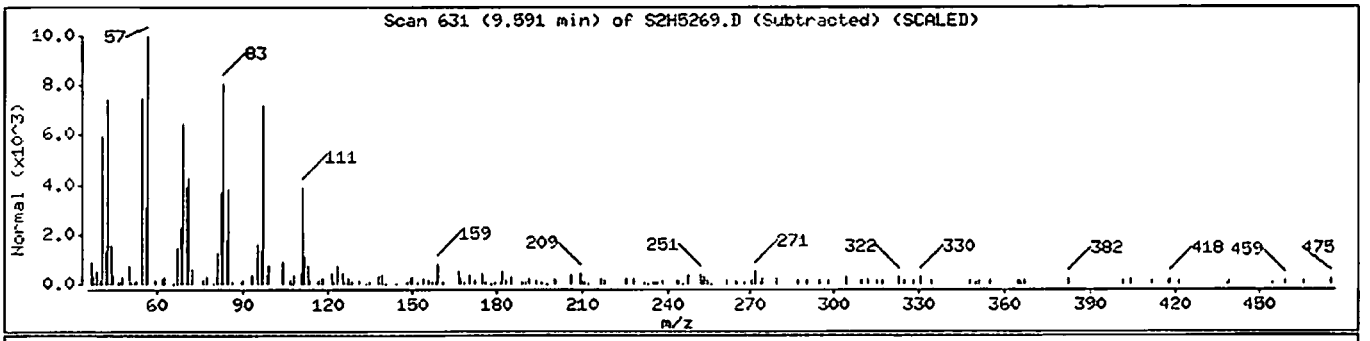
Client ID: H30T3 Instrument: S2.i

Sample Info: K2198-18A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILHS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5269.D

Date : 10-NOV-2011 17:01

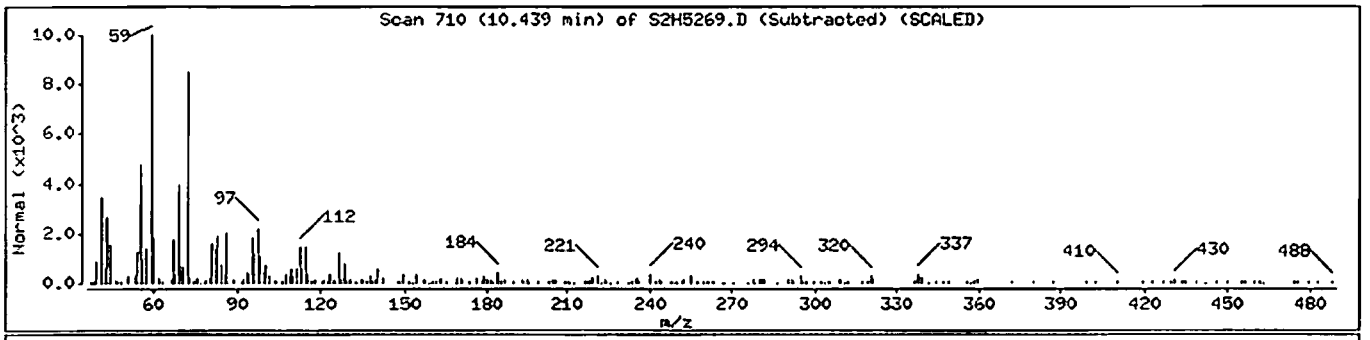
Client ID: H30T3 Instrument: S2.i

Sample Info: K2198-18A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-19A

Sample wt/vol: 30.4 (g/mL) G Lab File ID: S2H5277.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 20 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/11/2011

GPC Cleanup: (Y/N) Y pH: 8.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
100-52-7	Benzaldehyde	210	U
108-95-2	Phenol	210	U
111-44-4	Bis(2-chloroethyl)ether	210	U
95-57-8	2-Chlorophenol	210	U
95-48-7	2-Methylphenol	210	U
108-60-1	2,2'-Oxybis(1-chloropropane)	210	U
98-86-2	Acetophenone	210	U
106-44-5	4-Methylphenol	210	U
621-64-7	N-Nitroso-di-n-propylamine	210	U
67-72-1	Hexachloroethane	210	U
98-95-3	Nitrobenzene	210	U
78-59-1	Isophorone	210	U
88-75-5	2-Nitrophenol	210	U
105-67-9	2,4-Dimethylphenol	210	U
111-91-1	Bis(2-chloroethoxy)methane	210	U
120-83-2	2,4-Dichlorophenol	210	U
91-20-3	Naphthalene	210	U
106-47-8	4-Chloroaniline	210	U
87-68-3	Hexachlorobutadiene	210	U
105-60-2	Caprolactam	210	U
59-50-7	4-Chloro-3-methylphenol	210	U
91-57-6	2-Methylnaphthalene	210	U
77-47-4	Hexachlorocyclopentadiene	210	U
88-06-2	2,4,6-Trichlorophenol	210	U
95-95-4	2,4,5-Trichlorophenol	210	U
92-52-4	1,1'-Biphenyl	210	U
91-58-7	2-Chloronaphthalene	210	U
88-74-4	2-Nitroaniline	410	U
131-11-3	Dimethylphthalate	210	U
606-20-2	2,6-Dinitrotoluene	210	U
208-96-8	Acenaphthylene	210	U
99-09-2	3-Nitroaniline	410	U
83-32-9	Acenaphthene	210	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-19A

Sample wt/vol: 30.4 (g/mL) G Lab File ID: S2H5277.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 20 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/11/2011

GPC Cleanup: (Y/N) Y pH: 8.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
51-28-5	2,4-Dinitrophenol	410	U
100-02-7	4-Nitrophenol	410	U
132-64-9	Dibenzofuran	210	U
121-14-2	2,4-Dinitrotoluene	210	U
84-66-2	Diethylphthalate	210	U
86-73-7	Fluorene	210	U
7005-72-3	4-Chlorophenyl-phenylether	210	U
100-01-6	4-Nitroaniline	410	U
534-52-1	4,6-Dinitro-2-methylphenol	410	U
86-30-6	N-Nitrosodiphenylamine (1)	210	U
95-94-3	1,2,4,5-Tetrachlorobenzene	210	U
101-55-3	4-Bromophenyl-phenylether	210	U
118-74-1	Hexachlorobenzene	210	U
1912-24-9	Atrazine	210	U
87-86-5	Pentachlorophenol	410	U
85-01-8	Phenanthrene	210	U
120-12-7	Anthracene	210	U
86-74-8	Carbazole	210	U
84-74-2	Di-n-butylphthalate	210	U
206-44-0	Fluoranthene	210	U
129-00-0	Pyrene	210	U
85-68-7	Butylbenzylphthalate	210	U
91-94-1	3,3'-Dichlorobenzidine	210	U
56-55-3	Benzo(a)anthracene	210	U
218-01-9	Chrysene	210	U
117-81-7	Bis(2-ethylhexyl)phthalate	210	U
117-84-0	Di-n-octylphthalate	210	U
205-99-2	Benzo(b)fluoranthene	210	U
207-08-9	Benzo(k)fluoranthene	210	U
50-32-8	Benzo(a)pyrene	210	U
193-39-5	Indeno(1,2,3-cd)pyrene	210	U
53-70-3	Dibenzo(a,h)anthracene	210	U
191-24-2	Benzo(g,h,i)perylene	210	U
58-90-2	2,3,4,6-Tetrachlorophenol	210	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30T4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-19A

Sample wt/vol: 30.4 (g/mL) G Lab File ID: S2H5277.D

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 20 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/11/2011

GPC Cleanup: (Y/N) Y pH: 8.0 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.996	100	J
02		Unknown-02	3.168	110	J
03	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.497	260	BNJ
04		Unknown-03	4.701	240	J
05		Unknown-04	5.216	250	J
06		Unknown-05	5.344	130	J
07		Unknown-06	7.618	100	J
08		Unknown-07	7.929	150	J
09	301-02-0	9-Octadecenamide, (Z)-	9.259	160	NJ
10		Unknown-08	9.666	130	J
11		Unknown-09	10.545	220	J
	E96679[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5277.D
Report Date: 14-Nov-2011 14:27

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111111.B\S2H5277.D
Lab Smp Id: K2198-19A Client Smp ID: H30T4
Inj Date : 11-NOV-2011 09:38
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-19A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment :
Method : \\Avogadro\Organics\S2.I\111111.B\S2_SOM.m
Meth Date : 14-Nov-2011 14:27 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.400	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)
$ 2 Phenol-d5	71	3.392	3.393	(0.916)	111638	37.6828	620
$ 4 bis(2-Chloroethyl)ether-d8	67	3.435	3.436	(0.928)	144254	35.3360	580
$ 6 2-Chlorophenol-d4	132	3.510	3.511	(0.948)	102014	39.8056	650
* 8 1,4-Dichlorobenzene-d4	152	3.703	3.693	(1.000)	94080	40.0000	(Q)
$ 11 4-Methylphenol-d8	113	4.025	4.015	(1.087)	146268	36.4174	600
$ 16 Nitrobenzene-d5	128	4.164	4.154	(0.874)	53932	37.0385	610(Q)
$ 19 2-Nitrophenol-d4	143	4.432	4.433	(0.930)	60860	37.8612	620
$ 23 2,4-Dichlorophenol-d3	165	4.636	4.637	(0.973)	116011	39.5346	650
* 25 Naphthalene-d8	136	4.765	4.765	(1.000)	279602	40.0000	
$ 27 4-Chloroaniline-d4	131	4.818	4.819	(1.011)	29030	11.1418	180(Q)
$ 40 Dimethylphthalate-d6	166	5.987	5.988	(0.962)	345470	42.6840	700
$ 43 Acenaphthylene-d8	160	6.095	6.095	(0.979)	376113	35.7357	590
* 46 Acenaphthene-d10	164	6.223	6.224	(1.000)	220127	40.0000	
$ 49 4-Nitrophenol-d4	143	6.330	6.331	(1.017)	36467	31.2646	510
$ 54 Fluorene-d10	176	6.652	6.653	(1.069)	263727	35.4729	580
$ 58 4,6-Dinitro-2-methylphenol-d2	200	6.717	6.706	(0.902)	47807	33.7736	560(Q)
* 65 Phenanthrene-d10	188	7.446	7.446	(1.000)	362746	40.0000	
$ 67 Anthracene-d10	188	7.499	7.489	(1.007)	371716	35.8732	590
$ 72 Pyrene-d10	212	8.647	8.626	(0.887)	334773	46.0369	760

Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5277.D
Report Date: 14-Nov-2011 14:27

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)
* 77 Chrysene-d12	240	9.751	9.709	(1.000)	230835	40.0000	(Q)
$ 83 Benzo(a)pyrene-d12	264	11.017	10.964	(1.000)	134486	36.5007	600
* 85 Perylene-d12	264	11.102	11.039	(1.000)	150151	40.0000	(H)

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5277.D
Report Date: 14-Nov-2011 14:27

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111111.B\S2H5277.D
Lab Smp Id: K2198-19A Client Smp ID: H30T4
Inj Date : 11-NOV-2011 09:38
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-19A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment :
Method : \\Avogadro\Organics\S2.I\111111.B\S2_SOM.m
Meth Date : 14-Nov-2011 14:27 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.400	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 8 1,4-Dichlorobenzene-d4	3.704	838879	40.000
* 25 Naphthalene-d8	4.765	938169	40.000
* 65 Phenanthrene-d10	7.446	1035739	40.000
* 77 Chrysene-d12	9.752	631258	40.000

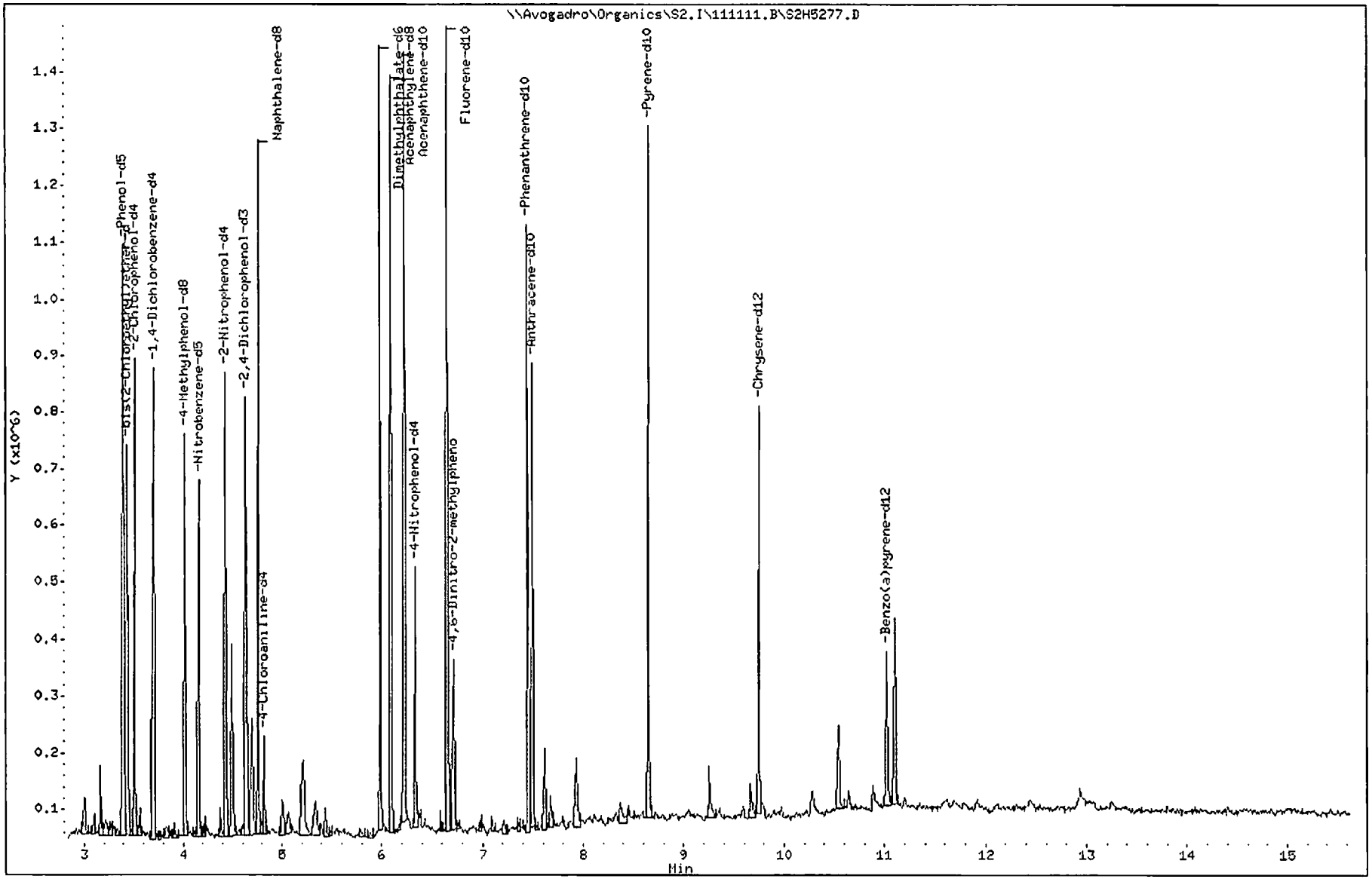
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.996	104038	4.96080733	82	0		0	8
Unknown				CAS #:			
3.168	115746	5.51906490	91	0		0	8

Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5277.D
Report Date: 14-Nov-2011 14:27

RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
2(3H)-Furanone, dihydro-4-hydroxy-					CAS #: 5469-16-9		
4.497	299832	12.7837124	210	90	NIST2002.L	4145	25
Unknown					CAS #:		
4.701	276067	11.7704471	190	0		0	25
Unknown					CAS #:		
5.216	288796	12.3131529	200	0		0	25
Unknown					CAS #:		
5.344	144834	6.17516674	100	0		0	25
Unknown					CAS #:		
7.618	131586	5.08182004	84	0		0	65
Unknown					CAS #:		
7.929	187920	7.25741065	120	0		0	65
9-Octadecenamide, (Z)-					CAS #: 301-02-0		
9.259	121642	7.70792322	130	93	NIST2002.L	106874	77
Unknown					CAS #:		
9.666	101144	6.40906912	110	0		0	77
Unknown					CAS #:		
10.545	170785	10.8218477	180	0		0	77

Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5277.D
Date : 11-NOV-2011 09:38
Client ID: H30T4
Sample Info: K2198-19A,,62764,,
Volume Injected (uL): 2.0
Column phase: RXI-5SILMS

Instrument: S2.i
Operator: SRC: LIMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5277.D

Date : 11-NOV-2011 09:38

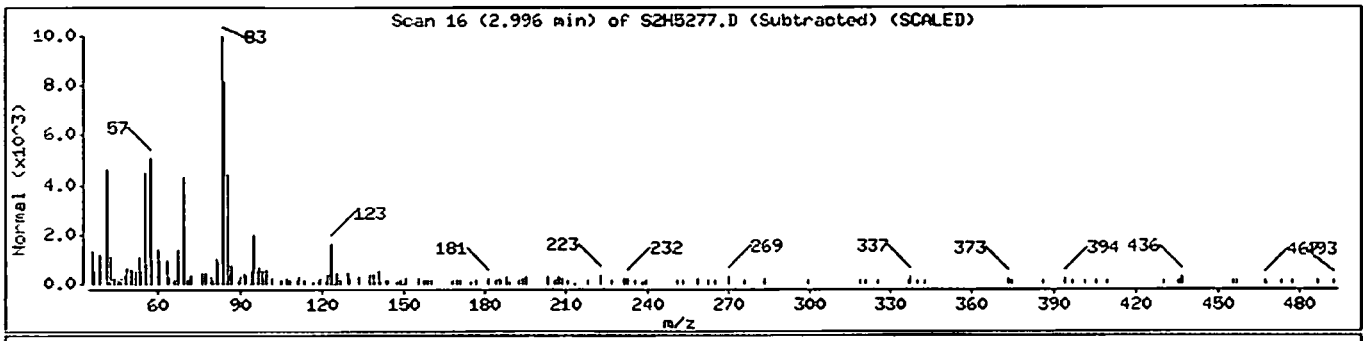
Client ID: H30T4 Instrument: S2.i

Sample Info: K2198-19A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5277.D

Date : 11-NOV-2011 09:38

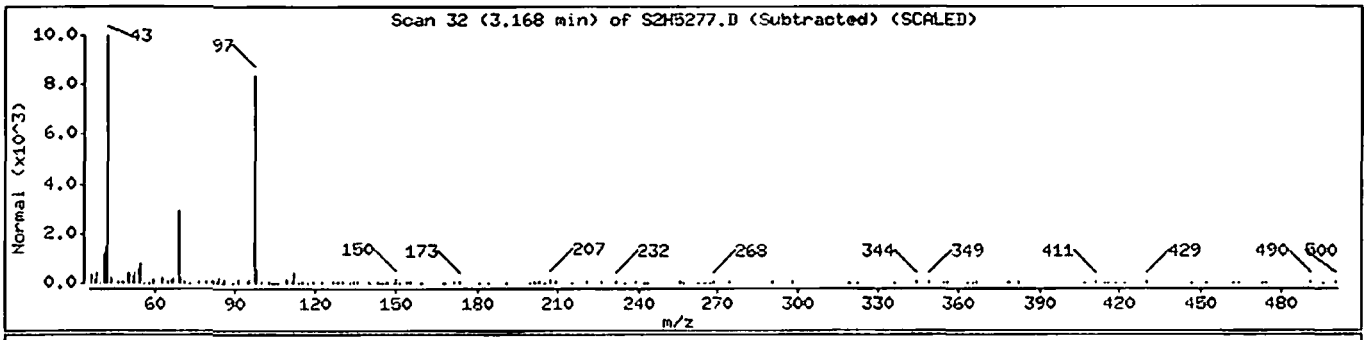
Client ID: H30T4 Instrument: S2.i

Sample Info: K2198-19A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.i\111111.B\S2H5277.D

Date : 11-NOV-2011 09:38

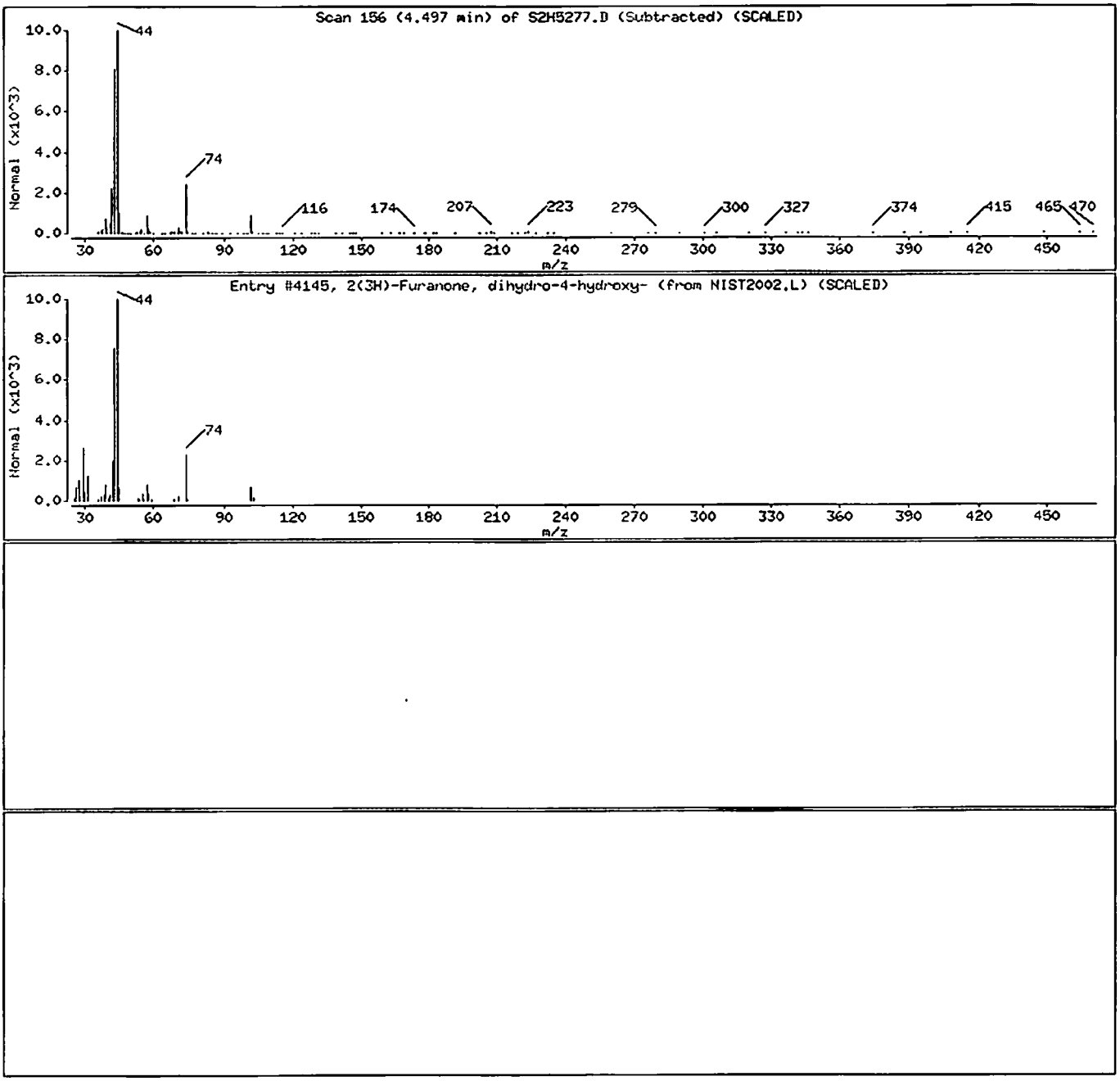
Client ID: H30T4 Instrument: S2.i

Sample Info: K2198-19A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2(3H)-Furanone, dihydro-4-hydroxy-	5469-16-9	NIST2002.L	4145	90	C4H6O3	102



Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5277.D

Date : 11-NOV-2011 09:38

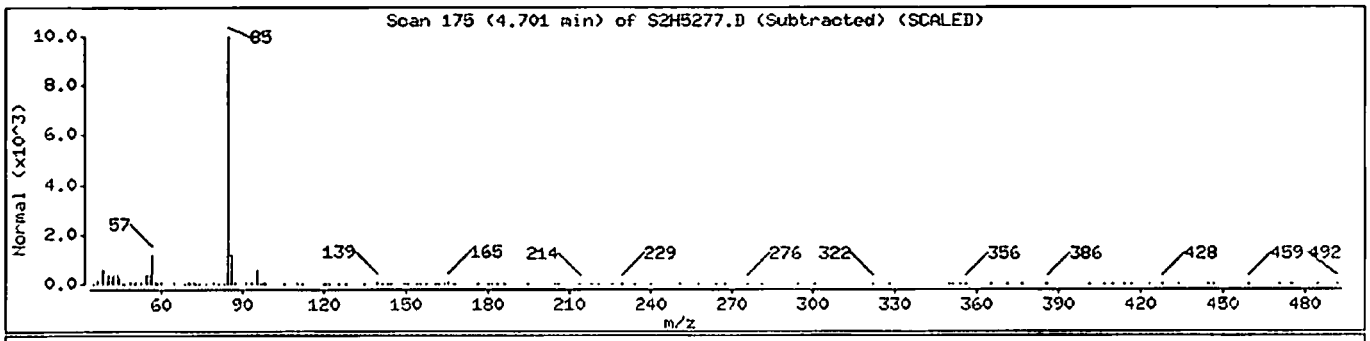
Client ID: H30T4 Instrument: S2.i

Sample Info: K2198-19A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIHS

Column phase: RXI-5SILHS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5277.D

Date : 11-NOV-2011 09:38

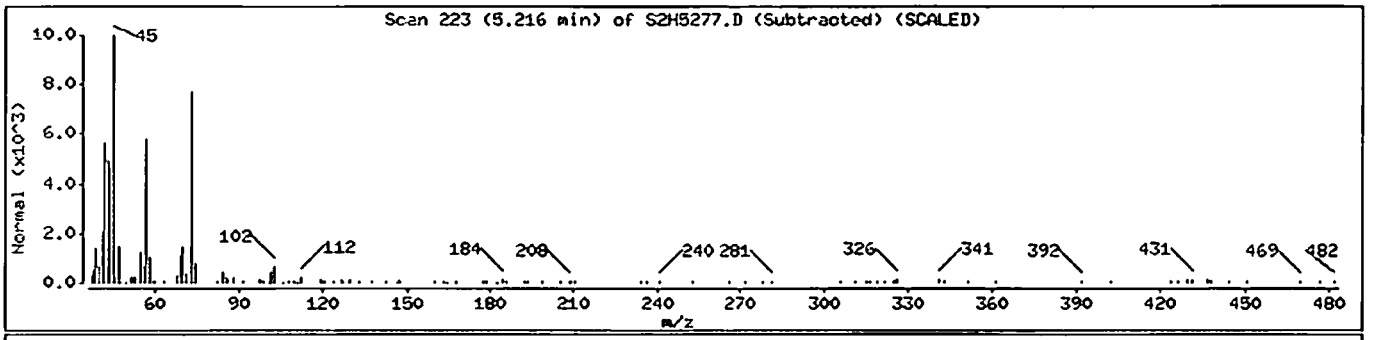
Client ID: H30T4 Instrument: S2.i

Sample Info: K2198-19A.,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5277.D

Date : 11-NOV-2011 09:38

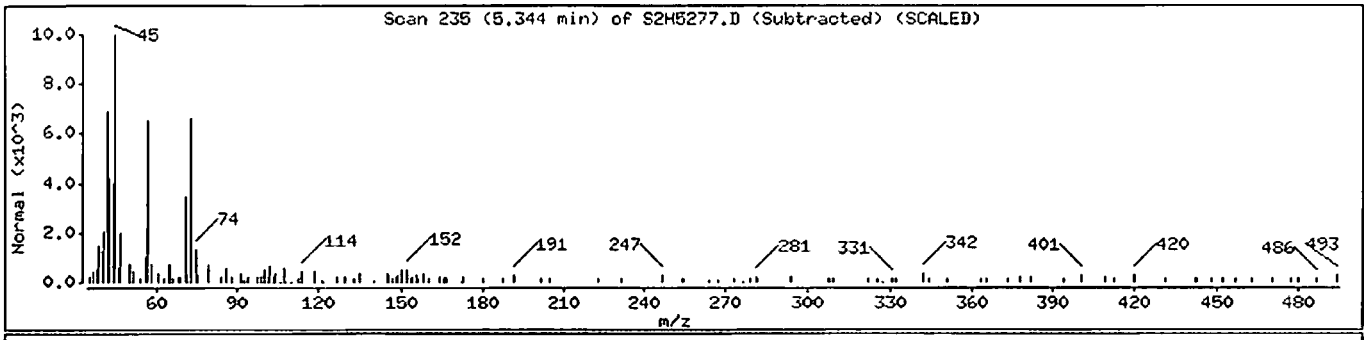
Client ID: H30T4 Instrument: S2.i

Sample Info: K2198-19A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5277.D

Date : 11-NOV-2011 09:38

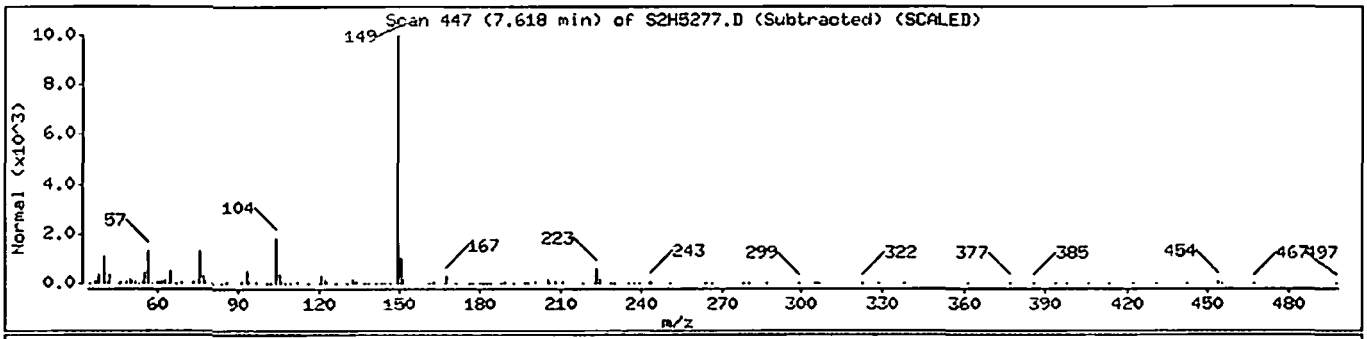
Client ID: H30T4 Instrument: S2.i

Sample Info: K2198-19A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5277.D

Date : 11-NOV-2011 09:38

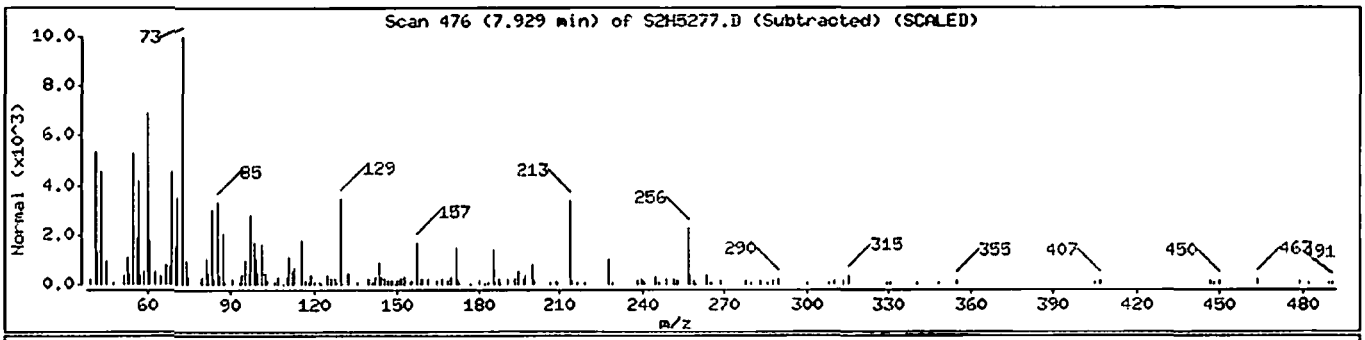
Client ID: M30T4 Instrument: S2.i

Sample Info: K2198-19A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5277.D

Date : 11-NOV-2011 09:38

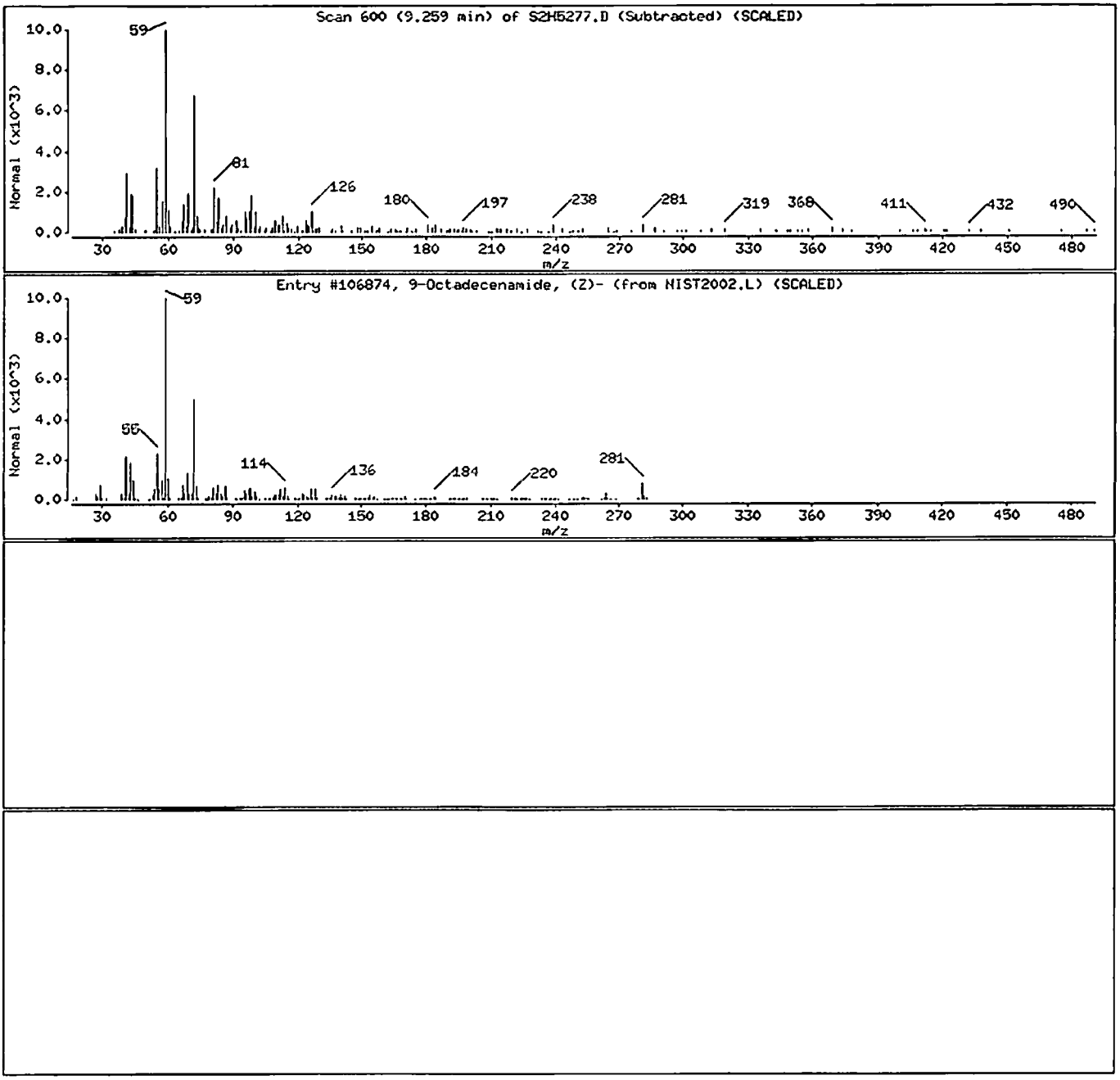
Client ID: H30T4 Instrument: S2.i

Sample Info: K2198-19A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST2002.L	106874	93	C18H35NO	281



Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5277.D

Date : 11-NOV-2011 09:38

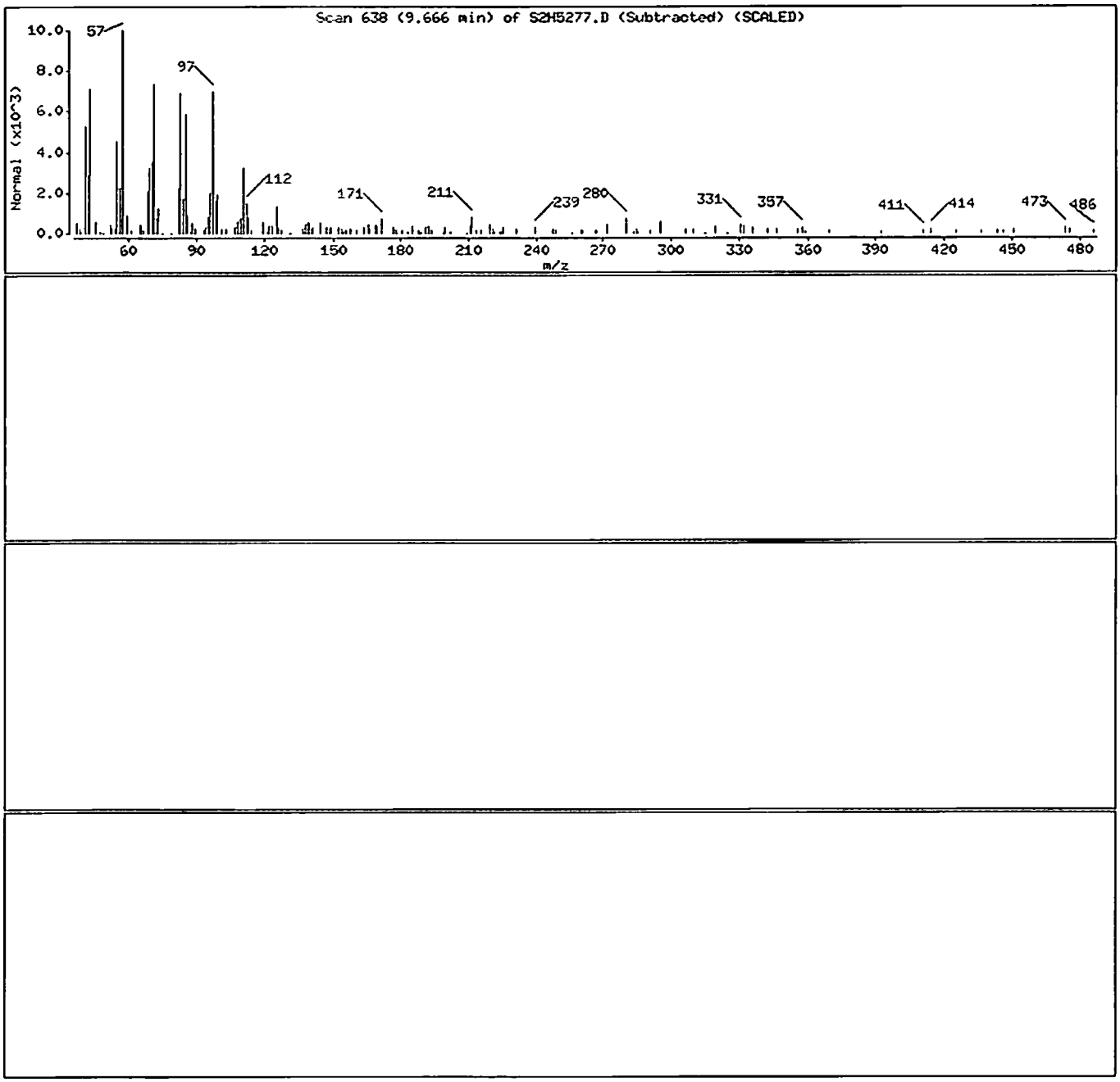
Client ID: H30T4 Instrument: S2.i

Sample Info: K2198-19A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5277.D

Date : 11-NOV-2011 09:38

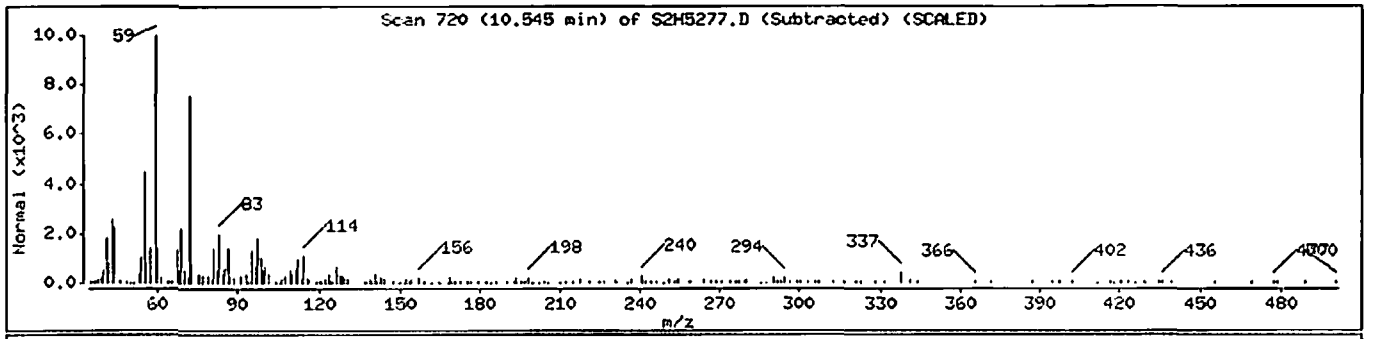
Client ID: H30T4 Instrument: S2.i

Sample Info: K2198-19A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-20A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: S2H5271.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 24 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: 8.2 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
100-52-7	Benzaldehyde	220	U
108-95-2	Phenol	220	U
111-44-4	Bis(2-chloroethyl)ether	220	U
95-57-8	2-Chlorophenol	220	U
95-48-7	2-Methylphenol	220	U
108-60-1	2,2'-Oxybis(1-chloropropane)	220	U
98-86-2	Acetophenone	220	U
106-44-5	4-Methylphenol	220	U
621-64-7	N-Nitroso-di-n-propylamine	220	U
67-72-1	Hexachloroethane	220	U
98-95-3	Nitrobenzene	220	U
78-59-1	Isophorone	220	U
88-75-5	2-Nitrophenol	220	U
105-67-9	2,4-Dimethylphenol	220	U
111-91-1	Bis(2-chloroethoxy)methane	220	U
120-83-2	2,4-Dichlorophenol	220	U
91-20-3	Naphthalene	220	U
106-47-8	4-Chloroaniline	220	U
87-68-3	Hexachlorobutadiene	220	U
105-60-2	Caprolactam	220	U
59-50-7	4-Chloro-3-methylphenol	220	U
91-57-6	2-Methylnaphthalene	220	U
77-47-4	Hexachlorocyclopentadiene	220	U
88-06-2	2,4,6-Trichlorophenol	220	U
95-95-4	2,4,5-Trichlorophenol	220	U
92-52-4	1,1'-Biphenyl	220	U
91-58-7	2-Chloronaphthalene	220	U
88-74-4	2-Nitroaniline	430	U
131-11-3	Dimethylphthalate	220	U
606-20-2	2,6-Dinitrotoluene	220	U
208-96-8	Acenaphthylene	220	U
99-09-2	3-Nitroaniline	430	U
83-32-9	Acenaphthene	220	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-20A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: S2H5271.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 24 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: 8.2 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	430	U
100-02-7	4-Nitrophenol	430	U
132-64-9	Dibenzofuran	220	U
121-14-2	2,4-Dinitrotoluene	220	U
84-66-2	Diethylphthalate	220	U
86-73-7	Fluorene	220	U
7005-72-3	4-Chlorophenyl-phenylether	220	U
100-01-6	4-Nitroaniline	430	U
534-52-1	4,6-Dinitro-2-methylphenol	430	U
86-30-6	N-Nitrosodiphenylamine (1)	220	U
95-94-3	1,2,4,5-Tetrachlorobenzene	220	U
101-55-3	4-Bromophenyl-phenylether	220	U
118-74-1	Hexachlorobenzene	220	U
1912-24-9	Atrazine	220	U
87-86-5	Pentachlorophenol	430	U
85-01-8	Phenanthrene	220	U
120-12-7	Anthracene	220	U
86-74-8	Carbazole	220	U
84-74-2	Di-n-butylphthalate	52	J
206-44-0	Fluoranthene	220	U
129-00-0	Pyrene	220	U
85-68-7	Butylbenzylphthalate	220	U
91-94-1	3,3'-Dichlorobenzidine	220	U
56-55-3	Benzo(a)anthracene	220	U
218-01-9	Chrysene	220	U
117-81-7	Bis(2-ethylhexyl)phthalate	220	U
117-84-0	Di-n-octylphthalate	220	U
205-99-2	Benzo(b)fluoranthene	220	U
207-08-9	Benzo(k)fluoranthene	220	U
50-32-8	Benzo(a)pyrene	220	U
193-39-5	Indeno(1,2,3-cd)pyrene	220	U
53-70-3	Dibenzo(a,h)anthracene	220	U
191-24-2	Benzo(g,h,i)perylene	220	U
58-90-2	2,3,4,6-Tetrachlorophenol	220	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30T5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-20A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: S2H5271.D

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 24 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: 8.2 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.996	92	J
02		Unknown-02	3.157	88	J
03	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.486	340	BNJ
04		Unknown-03	4.690	260	J
05		Unknown-04	5.215	370	J
06		Unknown-05	7.607	130	J
07	57-10-3	n-Hexadecanoic acid	7.907	220	NJ
08		Unknown-06	9.183	210	J
09	930-02-9	Octadecane, 1-(ethenyloxy)-	9.559	180	NJ
10		Unknown-07	10.127	160	J
11		Unknown-08	10.363	590	J
12		Unknown-09	10.695	280	J
	E966796[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5271.D
Report Date: 11-Nov-2011 13:37

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5271.D
Lab Smp Id: K2198-20A Client Smp ID: H30T5
Inj Date : 10-NOV-2011 17:44
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-20A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment :
Method : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)
$	2 Phenol-d5	71	3.392	3.373	(0.919)	109434	30.0905	500
$	4 bis(2-Chloroethyl)ether-d8	67	3.435	3.427	(0.930)	137354	27.4079	460
$	6 2-Chlorophenol-d4	132	3.510	3.491	(0.951)	108159	34.3789	570
*	8 1,4-Dichlorobenzene-d4	152	3.692	3.684	(1.000)	115492	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.014	4.006	(1.087)	183384	37.1934	620
$	16 Nitrobenzene-d5	128	4.153	4.145	(0.874)	58488	33.9571	570
$	19 2-Nitrophenol-d4	143	4.432	4.424	(0.932)	66401	34.9217	580
$	23 2,4-Dichlorophenol-d3	165	4.636	4.628	(0.975)	134032	38.6140	640
*	25 Naphthalene-d8	136	4.754	4.746	(1.000)	330737	40.0000	
$	27 4-Chloroaniline-d4	131	4.818	4.810	(1.014)	29337	9.51878	160(aQ)
$	40 Dimethylphthalate-d6	166	5.976	5.968	(0.962)	392564	40.6230	680
$	43 Acenaphthylene-d8	160	6.084	6.076	(0.979)	420561	33.4672	560
*	46 Acenaphthene-d10	164	6.212	6.204	(1.000)	262825	40.0000	
$	49 4-Nitrophenol-d4	143	6.320	6.312	(1.017)	51595	37.0481	620
$	54 Fluorene-d10	176	6.641	6.633	(1.069)	300385	33.8397	560
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.706	6.698	(0.902)	63605	36.4985	610(Q)
*	65 Phenanthrene-d10	188	7.435	7.428	(1.000)	446585	40.0000	
$	67 Anthracene-d10	188	7.488	7.480	(1.007)	438319	34.3595	570
	70 Di-n-butylphthalate	149	7.928	7.931	(1.066)	26539	2.39789	40(a)

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5271.D
Report Date: 11-Nov-2011 13:37

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)	
$ 72 Pyrene-d10	212	8.614	8.606	(0.892)	402249	40.5363	680	(R)
* 77 Chrysene-d12	240	9.655	9.668	(1.000)	314998	40.0000		(Q)
$ 83 Benzo(a)pyrene-d12	264	10.845	10.891	(0.993)	167179	33.5082	560	(RM)M6 MMS 11/11
* 85 Perylene-d12	264	10.920	10.966	(1.000)	203321	40.0000		

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5271.D
Report Date: 11-Nov-2011 13:37

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5271.D
Lab Smp Id: K2198-20A Client Smp ID: H30T5
Inj Date : 10-NOV-2011 17:44
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-20A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment :
Method : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 8 1,4-Dichlorobenzene-d4	3.693	969247	40.000
* 25 Naphthalene-d8	4.754	1097560	40.000
* 65 Phenanthrene-d10	7.435	1294483	40.000
* 77 Chrysene-d12	9.655	826225	40.000
* 85 Perylene-d12	10.920	501797	40.000

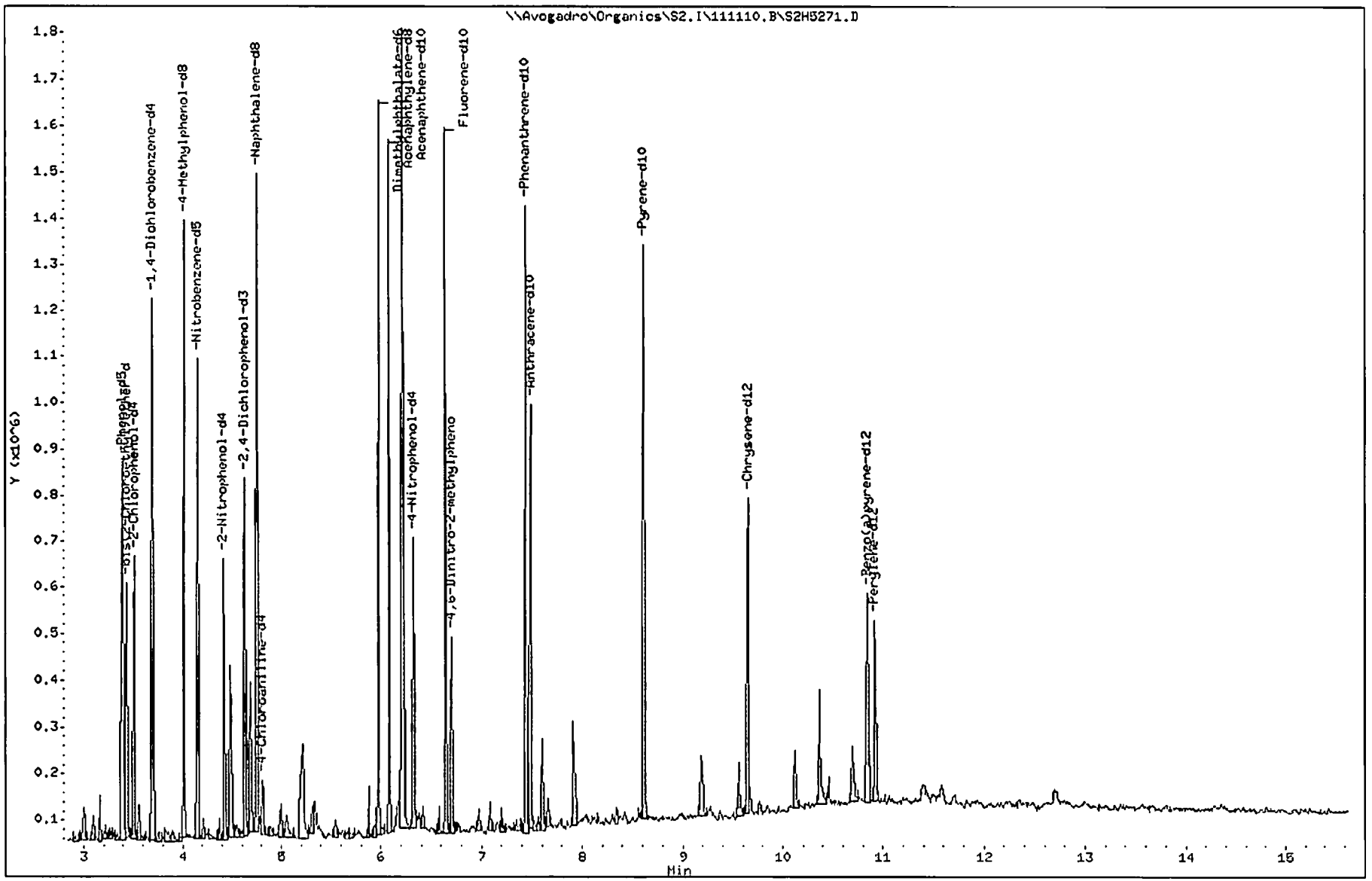
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.996	101853	4.20336558	70	0		0	8
Unknown				CAS #:			
3.157	97636	4.02934737	67	0		0	8

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5271.D
Report Date: 11-Nov-2011 13:37

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
2(3H)-Furanone, dihydro-4-hydroxy-				CAS #: 5469-16-9			
4.486	424222	15.4605448	260	90	NIST2002.L	4145	25
Unknown				CAS #:			
4.690	327396	11.9317660	200	0		0	25
Unknown				CAS #:			
5.215	463838	16.9043267	280	0		0	25
Unknown				CAS #:			
7.607	198016	6.11876486	100	0		0	65
n-Hexadecanoic acid				CAS #: 57-10-3			
7.907	327703	10.1261398	170	95	NIST2002.L	92227	65
Unknown				CAS #:			
9.183	202413	9.79940816	160	0		0	77
Octadecane, 1-(ethenyloxy)-				CAS #: 930-02-9			
9.559	165440	8.00941657	130	91	NIST2002.L	115549	77
Unknown				CAS #:			
10.127	149316	7.22881476	120	0		0	77
Unknown				CAS #:			
10.363	340043	27.1060054	450	0		0	85
Unknown				CAS #:			
10.695	158637	12.6455292	210	0		0	85

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5271.D
Date : 10-NOV-2011 17:44
Client ID: H30T5
Sample Info: K2198-20A,,62764,,
Volume Injected (uL): 2.0
Column phase: RXI-5SILMS

Instrument: S2.i
Operator: SRC: LIMS
Column diameter: 0.25



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Date : 10-NOV-2011 17:44

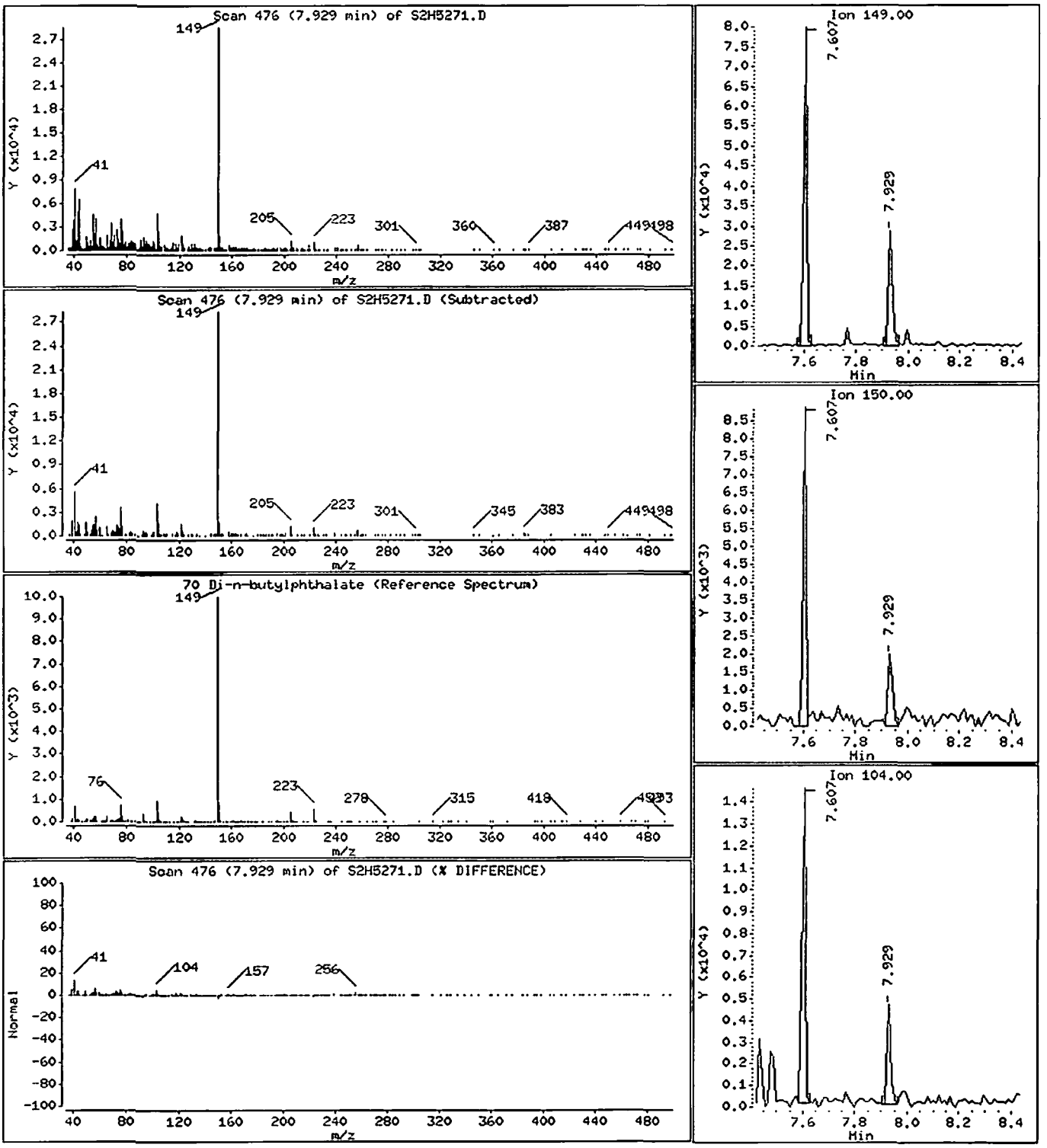
Client ID: H30T5 Instrument: S2.i

Sample Info: K2198-20A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

70 Di-n-butylphthalate Concentration: 40 ug/Kg



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Date : 10-NOV-2011 17:44

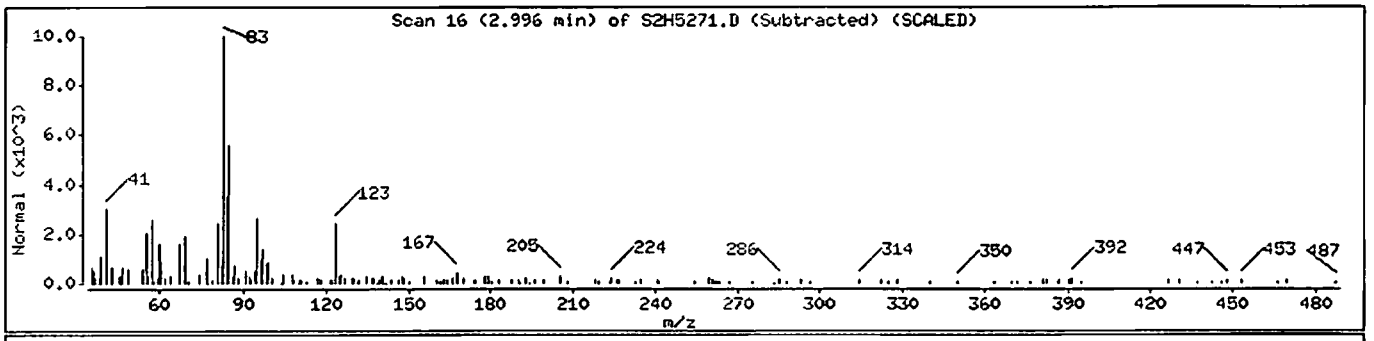
Client ID: H30T5 Instrument: S2.i

Sample Info: K2198-20A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 17:44

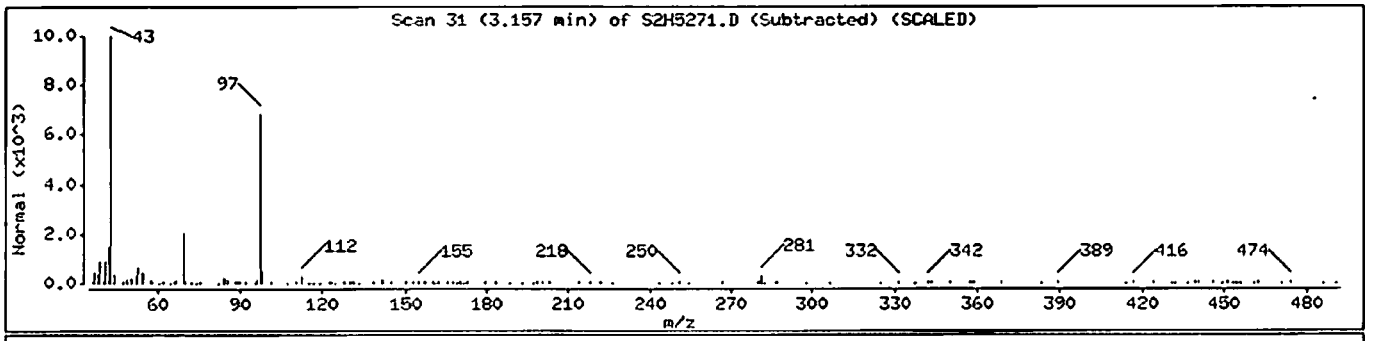
Client ID: H3OT5 Instrument: S2.i

Sample Info: K2198-20A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIHS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 17:44

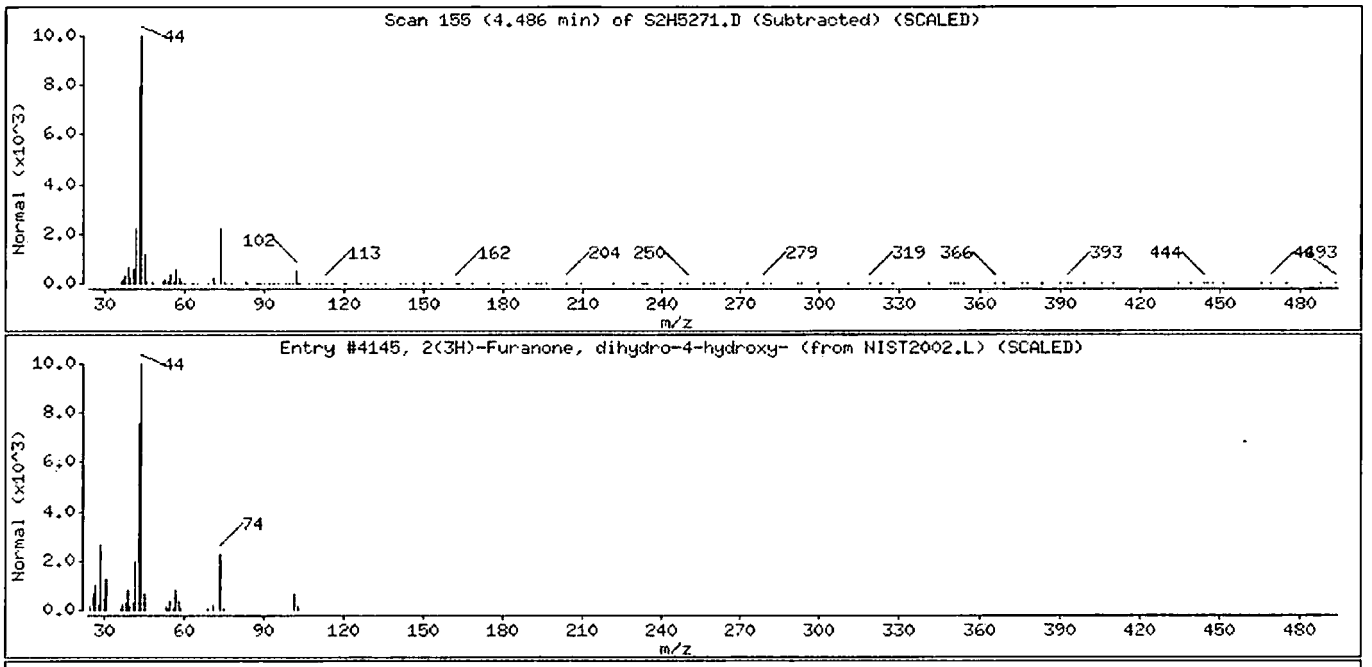
Client ID: H30T5 Instrument: S2.i

Sample Info: K2198-20A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2(3H)-Furanone, dihydro-4-hydroxy-	5469-16-9	NIST2002.L	4145	90	C4H6O3	102



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Date : 10-NOV-2011 17:44

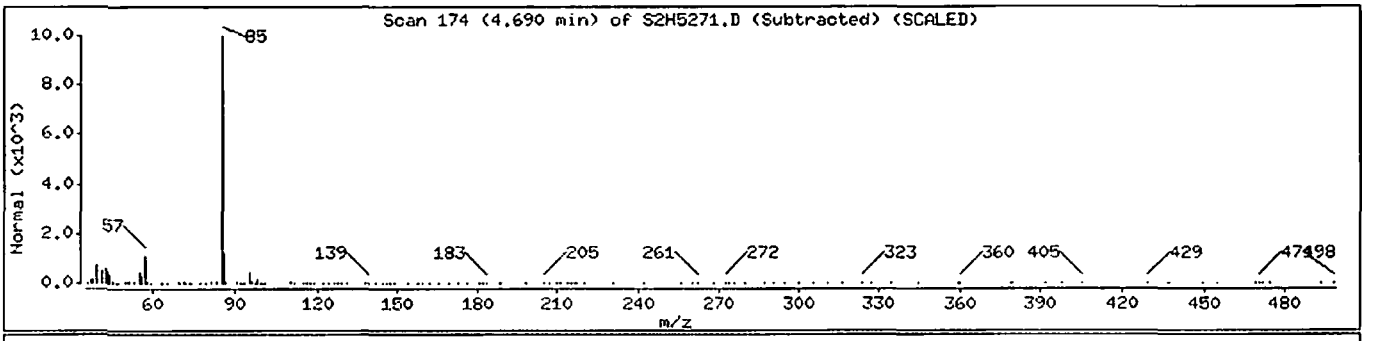
Client ID: H30T5 Instrument: S2.i

Sample Info: K2198-20A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 17:44

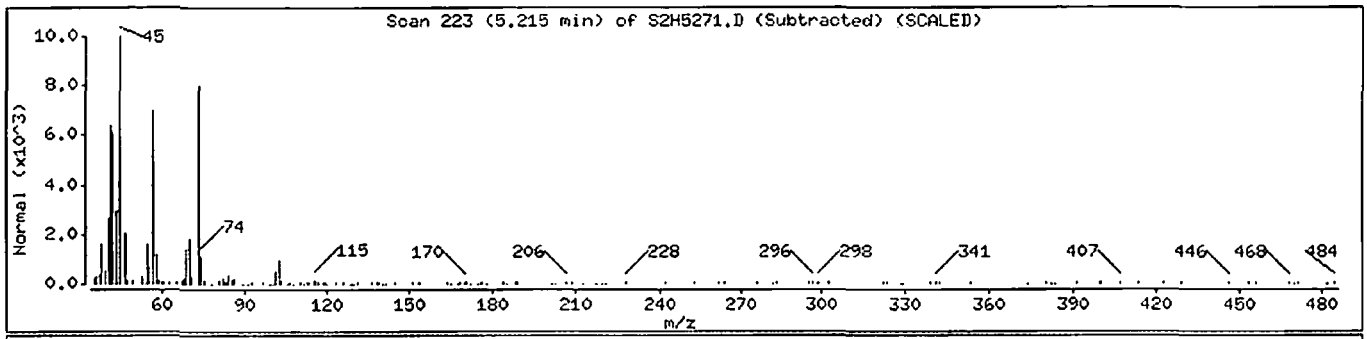
Client ID: H30T5 Instrument: S2.i

Sample Info: K2198-20A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 17:44

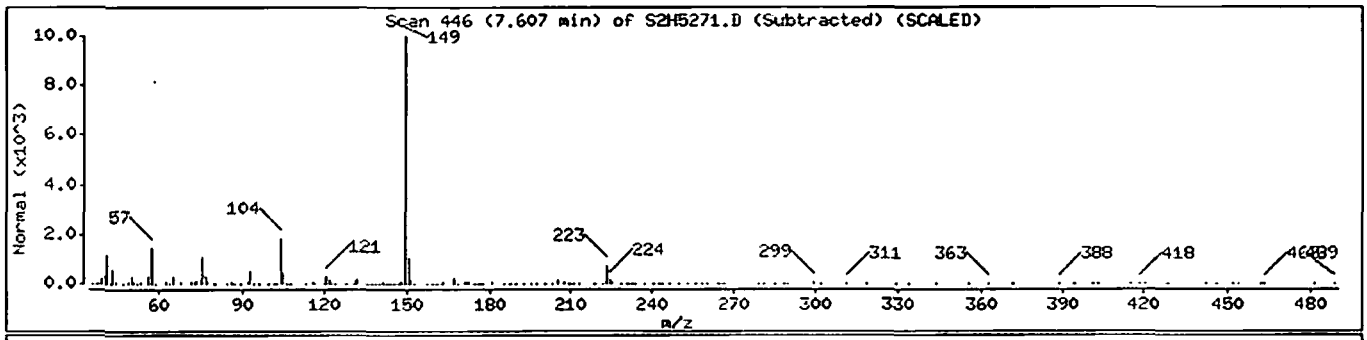
Client ID: H30T5 Instrument: S2.i

Sample Info: K2198-20A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 17:44

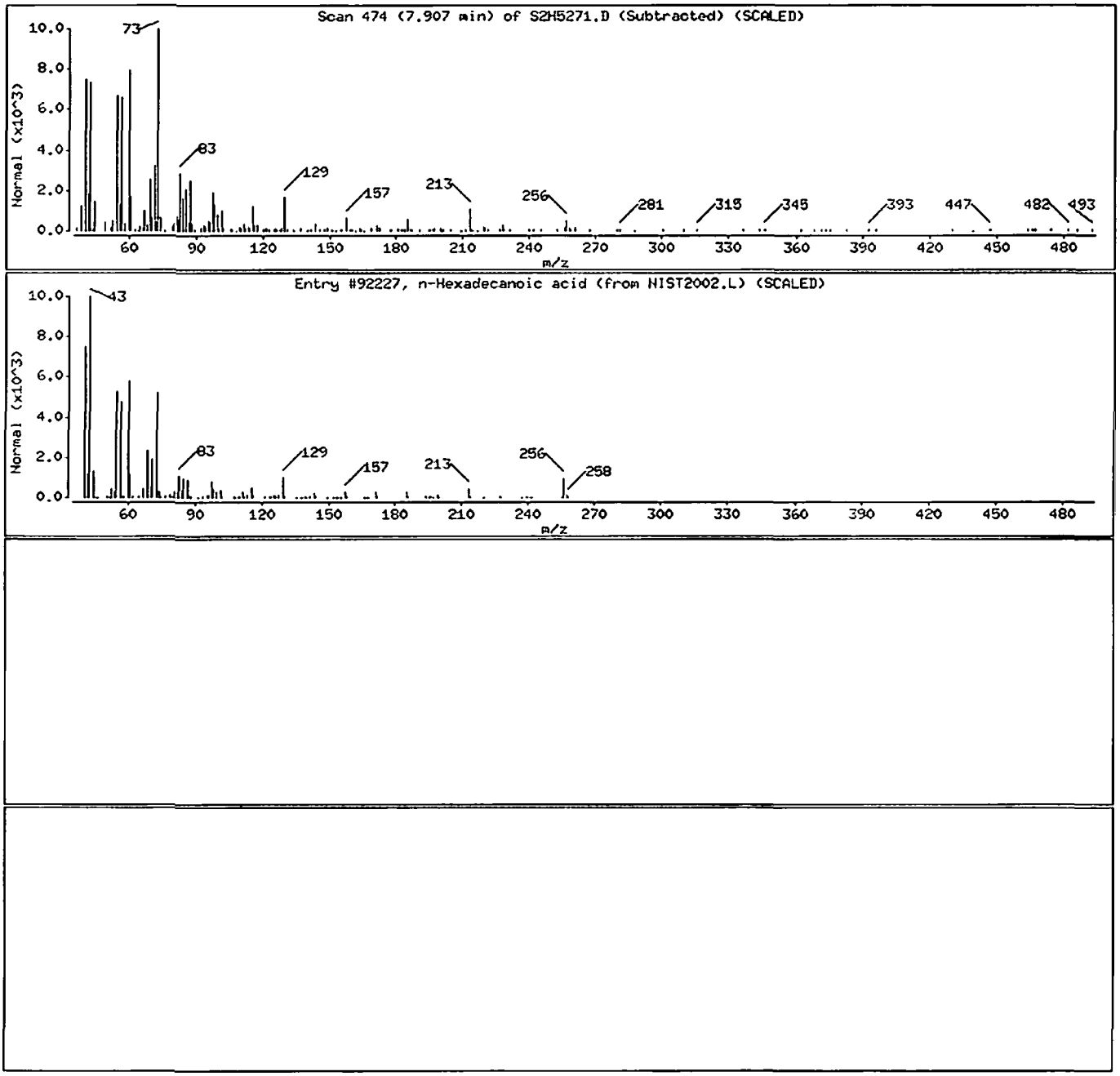
Client ID: H30T5 Instrument: S2.i

Sample Info: K2198-20A,,62764,.

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
n-Hexadecanoic acid	57-10-3	NIST2002.L	92227	95	C16H3202	256



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5271.D

Date : 10-NOV-2011 17:44

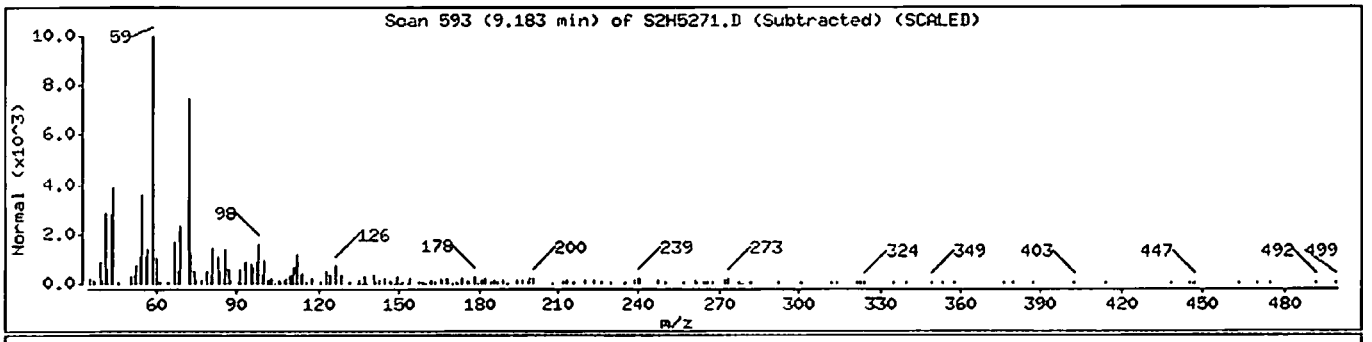
Client ID: H30T5 Instrument: S2.i

Sample Info: K2198-20A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5271.D

Date : 10-NOV-2011 17:44

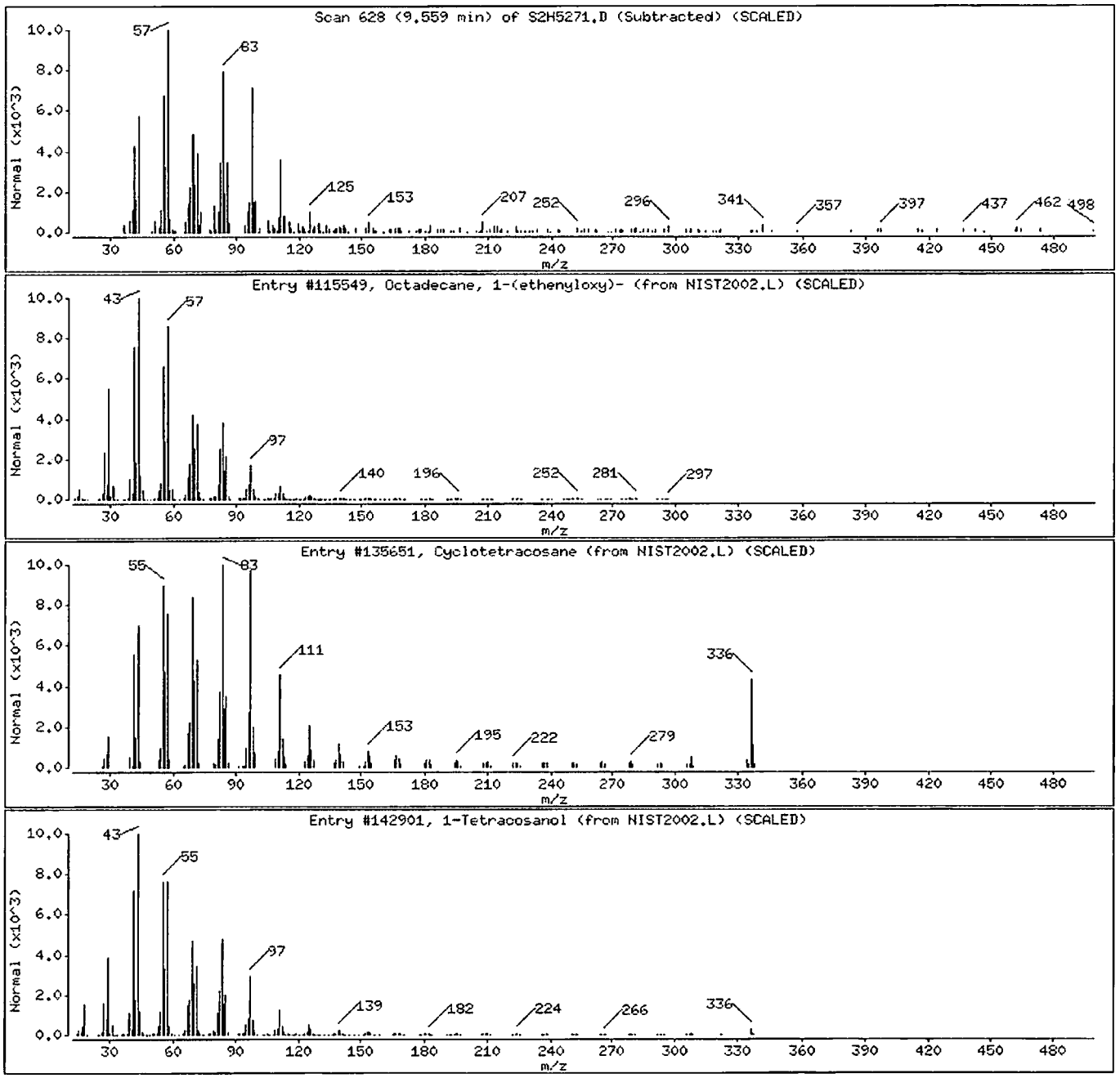
Client ID: H30T5 Instrument: S2.i

Sample Info: K2198-20A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Octadecane, 1-(ethenyloxy)-	930-02-9	NIST2002.L	115549	91	C20H40O	296
Cyclotetracosane	297-03-0	NIST2002.L	135651	91	C24H48	336
1-Tetracosanol	506-51-4	NIST2002.L	142901	90	C24H50O	354



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Date : 10-NOV-2011 17:44

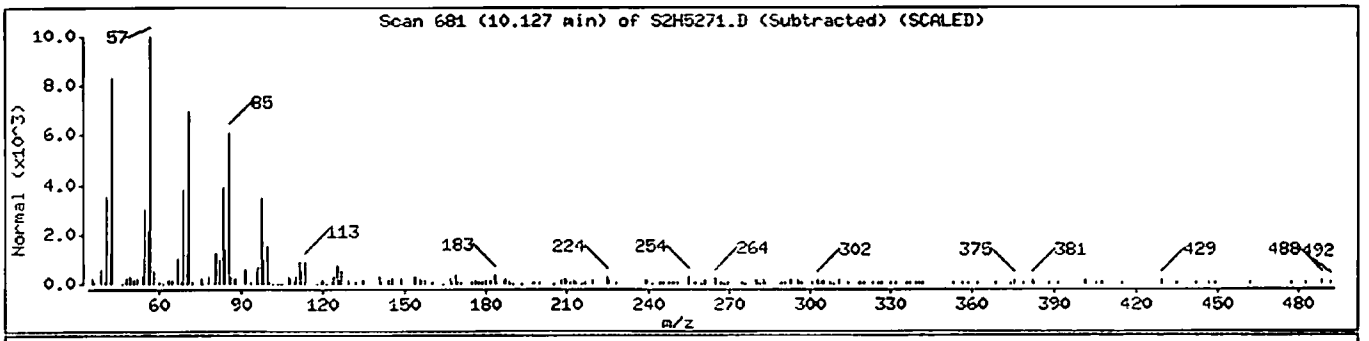
Client ID: H30T5 Instrument: S2.i

Sample Info: K2198-20A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5271.D

Date : 10-NOV-2011 17:44

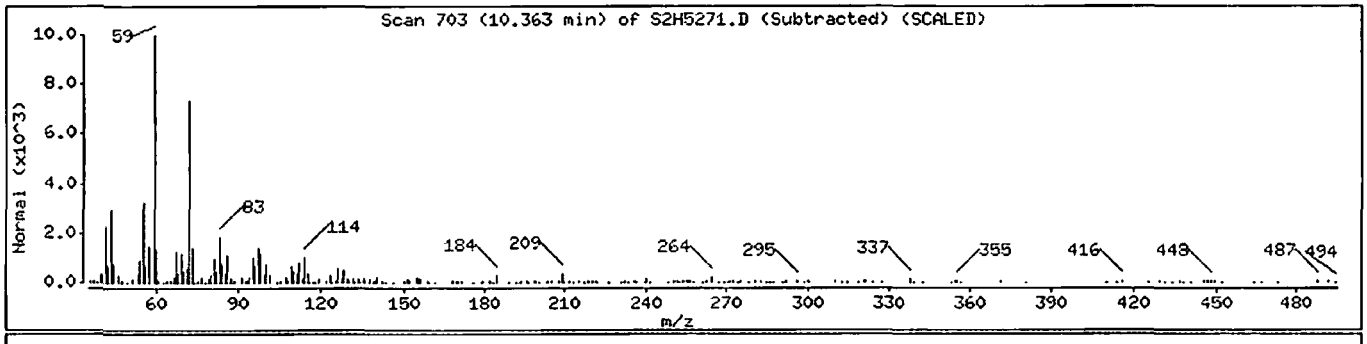
Client ID: H30T5 Instrument: S2.i

Sample Info: K2198-20A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5271.D

Date : 10-NOV-2011 17:44

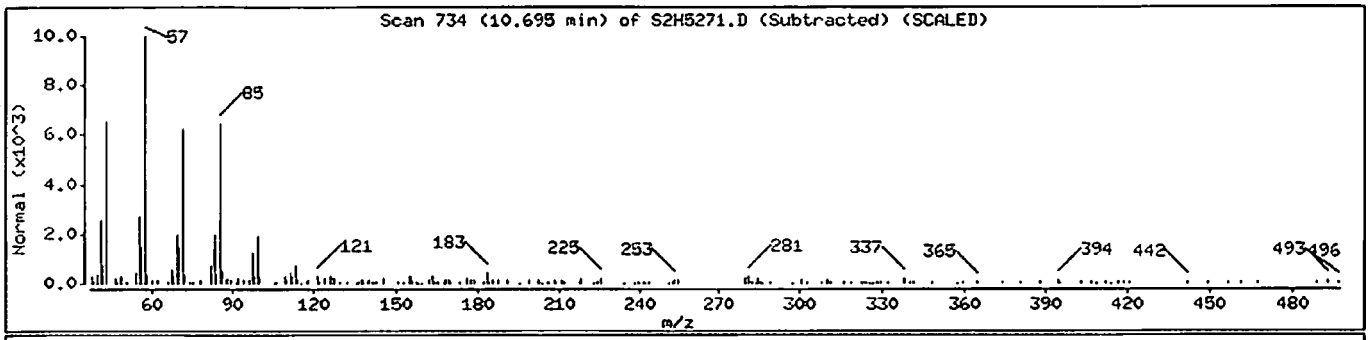
Client ID: H30T5 Instrument: S2.i

Sample Info: K2198-20A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



6E - FORM VI SV-1

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date(s): 10/25/2011 10/25/2011

Calibration Time(s): 11:35 13:07

LAB FILE ID: RRF005 = S2H5054.D RRF010 = S2H5056.D

RRF020 = S2H5053C.D RRF040 = S2H5057.D RRF080 = S2H5055.D

COMPOUND	RRF005	RRF010	RRF020	RRF040	RRF080	$\overline{RRF}$	%RSD
Benzaldehyde	2.238	2.088	1.996	1.799	1.697	1.964	11.1
Phenol	3.264	3.126	3.243	3.654	3.986	3.455	10.4
Bis(2-chloroethyl)ether	2.496	2.382	2.380	2.659	2.778	2.539	6.9
2-Chlorophenol	1.116	1.069	1.027	1.148	1.244	1.121	7.4
2-Methylphenol	1.812	1.713	1.823	1.969	2.165	1.896	9.3
2,2'-Oxybis(1-chloropropane)	2.580	2.510	2.457	2.602	2.681	2.566	3.3
Acetophenone	3.194	3.056	3.031	3.339	3.732	3.271	8.7
4-Methylphenol	1.714	1.624	1.887	2.101	2.386	1.942	15.8
N-Nitroso-di-n-propylamine	1.539	1.455	1.517	1.645	1.742	1.580	7.2
Hexachloroethane	0.886	0.841	0.848	0.887	0.897	0.872	2.9
Nitrobenzene	1.014	1.004	1.032	1.102	1.065	1.043	3.9
Isophorone	1.766	1.706	1.680	1.877	1.878	1.782	5.2
2-Nitrophenol	0.230	0.228	0.209	0.234	0.228	0.226	4.4
2,4-Dimethylphenol	0.741	0.729	0.788	0.833	0.834	0.785	6.3
Bis(2-chloroethoxy)methane	0.926	0.963	0.980	1.050	1.041	0.992	5.3
2,4-Dichlorophenol	0.373	0.359	0.373	0.412	0.415	0.386	6.6
Naphthalene	1.004	1.023	1.032	1.025	1.064	1.030	2.1
4-Chloroaniline	0.394	0.412	0.382	0.436	0.440	0.413	6.1
Hexachlorobutadiene	0.285	0.303	0.268	0.292	0.287	0.287	4.4
Caprolactam	0.134	0.143	0.147	0.174	0.171	0.154	11.5
4-Chloro-3-methylphenol	0.596	0.532	0.618	0.680	0.701	0.625	10.8
2-Methylnaphthalene	0.705	0.674	0.679	0.725	0.737	0.704	4.0
Hexachlorocyclopentadiene	0.374	0.460	0.429	0.492	0.495	0.450	11.1
2,4,6-Trichlorophenol	0.486	0.549	0.410	0.458	0.566	0.494	13.0
2,4,5-Trichlorophenol	0.470	0.494	0.471	0.518	0.588	0.508	9.6
1,1'-Biphenyl	1.420	1.359	1.411	1.420	1.462	1.414	2.6
2-Chloronaphthalene	1.260	1.314	1.169	1.190	1.383	1.263	7.0
2-Nitroaniline		0.582	0.578	0.592	0.673	0.606	7.4
Dimethylphthalate	1.378	1.275	1.397	1.410	1.392	1.370	4.0
2,6-Dinitrotoluene	0.342	0.329	0.303	0.341	0.378	0.339	8.0
Acenaphthylene	1.744	1.679	1.703	1.746	1.836	1.742	3.4
3-Nitroaniline		0.212	0.210	0.237	0.238	0.224	6.7
Acenaphthene	1.160	1.139	1.003	1.097	1.239	1.128	7.7
2,4-Dinitrophenol		0.105	0.115	0.185	0.215	0.155	34.7
4-Nitrophenol		0.345	0.386	0.437	0.472	0.410	13.7
Dibenzofuran	1.717	1.689	1.524	1.633	1.721	1.657	5.0

6F - FORM VI SV-2

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date(s): 10/25/2011 10/25/2011

Calibration Time(s): 11:35 13:07

LAB FILE ID: RRF005 = S2H5054.D RRF010 = S2H5056.D

RRF020 = S2H5053C.D RRF040 = S2H5057.D RRF080 = S2H5055.D

COMPOUND	RRF005	RRF010	RRF020	RRF040	RRF080	$\overline{RRF}$	%RSD
2,4-Dinitrotoluene	0.416	0.417	0.419	0.438	0.462	0.430	4.6
Diethylphthalate	1.448	1.297	1.115	1.284	1.294	1.288	9.2
Fluorene	1.349	1.262	1.269	1.409	1.472	1.352	6.7
4-Chlorophenyl-phenylether	0.756	0.694	0.685	0.725	0.736	0.719	4.1
4-Nitroaniline		0.258	0.243	0.253	0.232	0.246	4.6
4,6-Dinitro-2-methylphenol		0.117	0.151	0.165	0.177	0.152	17.1
N-Nitrosodiphenylamine [1]	0.603	0.627	0.561	0.609	0.650	0.610	5.4
1,2,4,5-Tetrachlorobenzene	1.521	1.696	1.412	1.604	1.816	1.610	9.7
4-Bromophenyl-phenylether	0.224	0.221	0.199	0.214	0.225	0.217	4.9
Hexachlorobenzene	0.244	0.236	0.210	0.228	0.235	0.231	5.4
Atrazine	0.210	0.216	0.207	0.247	0.220	0.220	7.2
Pentachlorophenol		0.087	0.098	0.134	0.131	0.113	20.8
Phenanthrene	1.175	1.105	1.029	1.137	1.168	1.123	5.3
Anthracene	1.137	1.140	1.057	1.171	1.204	1.142	4.8
Carbazole	0.906	0.931	0.863	0.968	0.947	0.923	4.4
Di-n-butylphthalate	0.920	1.030	1.044	1.064	0.899	0.991	7.7
Fluoranthene	1.199	1.151	1.112	1.254	1.062	1.156	6.4
Pyrene	1.452	1.426	1.456	1.572	2.116	1.604	18.2
Butylbenzylphthalate	0.418	0.467	0.490	0.527	0.581	0.497	12.4
3,3'-Dichlorobenzidine	0.256	0.297	0.310	0.332	0.289	0.297	9.5
Benzo(a)anthracene	1.259	1.159	1.085	1.205	1.227	1.187	5.7
Chrysene	1.034	1.048	1.058	1.050	1.044	1.047	0.8
Bis(2-ethylhexyl)phthalate	0.568	0.598	0.596	0.628	0.647	0.608	5.0
Di-n-octylphthalate	1.199	1.313	1.343	1.605	1.819	1.456	17.3
Benzo(b)fluoranthene	1.201	1.200	1.227	1.487	1.375	1.298	9.9
Benzo(k)fluoranthene	1.609	1.468	1.328	1.479	1.620	1.501	8.0
Benzo(a)pyrene	1.137	1.104	1.073	1.224	1.163	1.140	5.1
Indeno(1,2,3-cd)pyrene	0.895	0.903	0.825	0.907	0.863	0.878	3.9
Dibenzo(a,h)anthracene	0.740	0.743	0.670	0.760	0.704	0.723	5.0
Benzo(g,h,i)perylene	0.734	0.778	0.666	0.760	0.681	0.724	6.7
2,3,4,6-Tetrachlorophenol	0.350	0.314	0.316	0.373	0.389	0.348	9.6

(1) Cannot be separated from Diphenylamine

6G - FORM VI SV-3

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date(s): 10/25/2011 10/25/2011

Calibration Time(s): 11:35 13:07

LAB FILE ID: RRF005 = S2H5054.D RRF010 = S2H5056.D

RRF020 = S2H5053C.D RRF040 = S2H5057.D RRF080 = S2H5055.D

COMPOUND	RRF005	RRF010	RRF020	RRF040	RRF080	$\overline{RRF}$	%RSD
Phenol-d5	1.119	1.199	1.190	1.325	1.463	1.260	10.8
Bis(2-chloroethyl)ether-d8	1.729	1.678	1.652	1.774	1.846	1.736	4.5
2-Chlorophenol-d4	1.053	1.045	1.043	1.088	1.219	1.090	6.8
4-Methylphenol-d8	1.514	1.507	1.637	1.859	2.021	1.708	13.2
Nitrobenzene-d5	0.232	0.204	0.190	0.205	0.212	0.208	7.4
2-Nitrophenol-d4	0.214	0.212	0.229	0.250	0.244	0.230	7.4
2,4-Dichlorophenol-d3	0.378	0.399	0.417	0.448	0.457	0.420	7.9
4-Chloroaniline-d4	0.397	0.370	0.330	0.395	0.371	0.373	7.2
Dimethylphthalate-d6	1.405	1.403	1.441	1.557	1.548	1.471	5.2
Acenaphthylene-d8	1.920	1.918	1.803	1.882	2.039	1.913	4.5
4-Nitrophenol-d4		0.181	0.200	0.229	0.239	0.212	12.6
Fluorene-d10	1.387	1.332	1.283	1.356	1.397	1.351	3.4
4,6-Dinitro-2-methylphenol-d2		0.132	0.142	0.167	0.184	0.156	15.1
Anthracene-d10	1.157	1.104	1.133	1.182	1.137	1.143	2.5
Pyrene-d10	1.190	1.152	1.087	1.171	1.700	1.260	19.8
Benzo(a)pyrene-d12	0.972	0.972	0.944	1.039	0.980	0.982	3.6

Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5053C.D
Report Date: 26-Oct-2011 09:59

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111025.B\S2H5053C.D
Lab Smp Id: SSTD0202W Client Smp ID: SSTD0202W
Inj Date : 25-OCT-2011 11:35
Operator : SRC: Inst ID: S2.i
Smp Info : SSTD0202W,SSTD0202W
Misc Info : 2,3
Comment :
Method : \\Avogadro\Organics\S2.I\111025.B\S2_SOM.m
Meth Date : 26-Oct-2011 09:59 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * (Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vi	2.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
	1 Benzaldehyde	77	3.712	3.712	(0.911)	212664	40.0000	41
$	2 Phenol-d5	71	3.754	3.754	(0.921)	126811	40.0000	38
	3 Phenol	94	3.765	3.765	(0.924)	345410	40.0000	38
$	4 bis(2-Chloroethyl)ether-d8	67	3.797	3.797	(0.932)	175972	40.0000	38
	5 bis(2-Chloroethyl)ether	93	3.840	3.840	(0.942)	253570	40.0000	38
$	6 2-Chlorophenol-d4	132	3.883	3.883	(0.953)	111135	40.0000	38
	7 2-Chlorophenol	128	3.894	3.894	(0.955)	109408	40.0000	37
*	8 1,4-Dichlorobenzene-d4	152	4.076	4.076	(1.000)	106521	40.0000	(Q)
	9 2-Methylphenol	108	4.269	4.269	(1.047)	194214	40.0000	38
	10 2,2'-oxybis(1-Chloropropane)	45	4.291	4.291	(1.053)	261761	40.0000	38
$	11 4-Methylphenol-d8	113	4.376	4.376	(1.074)	174423	40.0000	38
	13 Acetophenone	105	4.398	4.398	(1.079)	322879	40.0000	37
	14 N-Nitroso-di-n-propylamine	70	4.398	4.398	(1.079)	161634	40.0000	38(Q)
	12 4-Methylphenol	108	4.398	4.398	(1.079)	201003	40.0000	39
	15 Hexachloroethane	117	4.505	4.505	(1.105)	90337	40.0000	39(Q)
$	16 Nitrobenzene-d5	128	4.527	4.527	(0.881)	57076	40.0000	36
	17 Nitrobenzene	77	4.548	4.548	(0.885)	310502	40.0000	40
	18 Isophorone	82	4.741	4.741	(0.923)	505668	40.0000	38
$	19 2-Nitrophenol-d4	143	4.805	4.805	(0.935)	68900	40.0000	40
	20 2-Nitrophenol	139	4.816	4.816	(0.937)	62769	40.0000	37
	21 2,4-Dimethylphenol	107	4.848	4.848	(0.944)	237161	40.0000	40(Q)

Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5053C.D
Report Date: 26-Oct-2011 09:59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
	22 bis(2-Chloroethoxy)methane	93	4.923	4.923	(0.958)	294797	40.0000	40
$	23 2,4-Dichlorophenol-d3	165	5.009	5.009	(0.975)	125497	40.0000	40
	24 2,4-Dichlorophenol	162	5.020	5.020	(0.977)	112143	40.0000	39
*	25 Naphthalene-d8	136	5.138	5.138	(1.000)	300917	40.0000	
	26 Naphthalene	128	5.159	5.159	(1.004)	310657	40.0000	40
$	27 4-Chloroaniline-d4	131	5.191	5.191	(1.010)	99425	40.0000	35(Q)
	28 4-Chloroaniline	127	5.191	5.191	(1.010)	115019	40.0000	37
	29 Hexachlorobutadiene	225	5.267	5.267	(1.025)	80580	40.0000	37
	30 Caprolactam	113	5.460	5.460	(1.063)	44349	40.0000	36
	31 4-Chloro-3-methylphenol	107	5.599	5.599	(1.090)	186082	40.0000	40
	32 2-Methylnaphthalene	142	5.738	5.738	(1.117)	204355	40.0000	39
	33 Hexachlorocyclopentadiene	237	5.878	5.878	(0.890)	88898	40.0000	38(Q)
	34 1,2,4,5-Tetrachlorobenzene	216	5.878	5.878	(0.890)	292425	40.0000	35
	35 2,4,6-Trichlorophenol	196	5.974	5.974	(0.904)	84990	40.0000	33
	36 2,4,5-Trichlorophenol	196	5.996	5.996	(0.907)	97633	40.0000	37
	37 1,1'-Biphenyl	154	6.124	6.124	(0.927)	292109	40.0000	40
	38 2-Chloronaphthalene	162	6.146	6.146	(0.930)	242079	40.0000	37
	39 2-Nitroaniline	65	6.221	6.221	(0.942)	119689	40.0000	38
$	40 Dimethylphthalate-d6	166	6.350	6.350	(0.961)	298307	40.0000	39
	41 Dimethylphthalate	163	6.371	6.371	(0.964)	289261	40.0000	41
	42 2,6-Dinitrotoluene	165	6.414	6.414	(0.971)	62729	40.0000	36
$	43 Acenaphthylene-d8	160	6.478	6.478	(0.981)	373422	40.0000	38
	44 Acenaphthylene	152	6.489	6.489	(0.982)	352578	40.0000	39
	45 3-Nitroaniline	138	6.553	6.553	(0.992)	43524	40.0000	37(Q)
*	46 Acenaphthene-d10	164	6.607	6.607	(1.000)	207073	40.0000	
	47 Acenaphthene	153	6.628	6.628	(1.003)	207719	40.0000	36
	48 2,4-Dinitrophenol	184	6.639	6.639	(1.005)	23834	40.0000	30(Q)
	52 Dibenzofuran	168	6.779	6.779	(1.026)	315518	40.0000	37
$	49 4-Nitrophenol-d4	143	6.682	6.682	(1.011)	41327	40.0000	38(Q)
	50 4-Nitrophenol	109	6.693	6.693	(1.013)	79876	40.0000	38
	51 2,4-Dinitrotoluene	165	6.757	6.757	(1.023)	86741	40.0000	39(Q)
	118 2,3,4,6-Tetrachlorophenol	232	6.875	6.875	(1.041)	65445	40.0000	36
	53 Diethylphthalate	149	6.950	6.950	(1.052)	230831	40.0000	35
$	54 Fluorene-d10	176	7.036	7.036	(1.065)	265573	40.0000	38
	56 Fluorene	166	7.057	7.057	(1.068)	262738	40.0000	38
	55 4-Chlorophenyl-phenylether	204	7.057	7.057	(1.068)	141928	40.0000	38
	57 4-Nitroaniline	138	7.068	7.068	(1.070)	50246	40.0000	39(Q)
$	58 4,6-Dinitro-2-methylphenol-d2	200	7.090	7.090	(0.904)	50456	40.0000	36(Q)
	59 4,6-Dinitro-2-methylphenol	198	7.090	7.090	(0.904)	53526	40.0000	40(Q)
	60 N-Nitrosodiphenylamine	169	7.154	7.154	(0.912)	198880	40.0000	37
	61 4-Bromophenyl-phenylether	248	7.465	7.465	(0.952)	70715	40.0000	37
	62 Hexachlorobenzene	284	7.529	7.529	(0.960)	74606	40.0000	37
	63 Atrazine	200	7.583	7.583	(0.967)	73499	40.0000	38
	64 Pentachlorophenol	266	7.679	7.679	(0.979)	34766	40.0000	35
*	65 Phenanthrene-d10	188	7.840	7.840	(1.000)	354560	40.0000	
	66 Phenanthrene	178	7.862	7.862	(1.003)	364758	40.0000	37
$	67 Anthracene-d10	188	7.883	7.883	(1.005)	401646	40.0000	40
	68 Anthracene	178	7.894	7.894	(1.007)	374852	40.0000	37
	117 Carbazole	167	8.022	8.022	(1.023)	305887	40.0000	37
	70 Di-n-butylphthalate	149	8.312	8.312	(1.060)	370152	40.0000	42
	71 Fluoranthene	202	8.859	8.859	(1.130)	394426	40.0000	39
$	72 Pyrene-d10	212	9.041	9.041	(0.890)	309917	40.0000	35
	73 Pyrene	202	9.063	9.063	(0.892)	414941	40.0000	36
	74 Butylbenzylphthalate	149	9.620	9.620	(0.947)	139765	40.0000	40

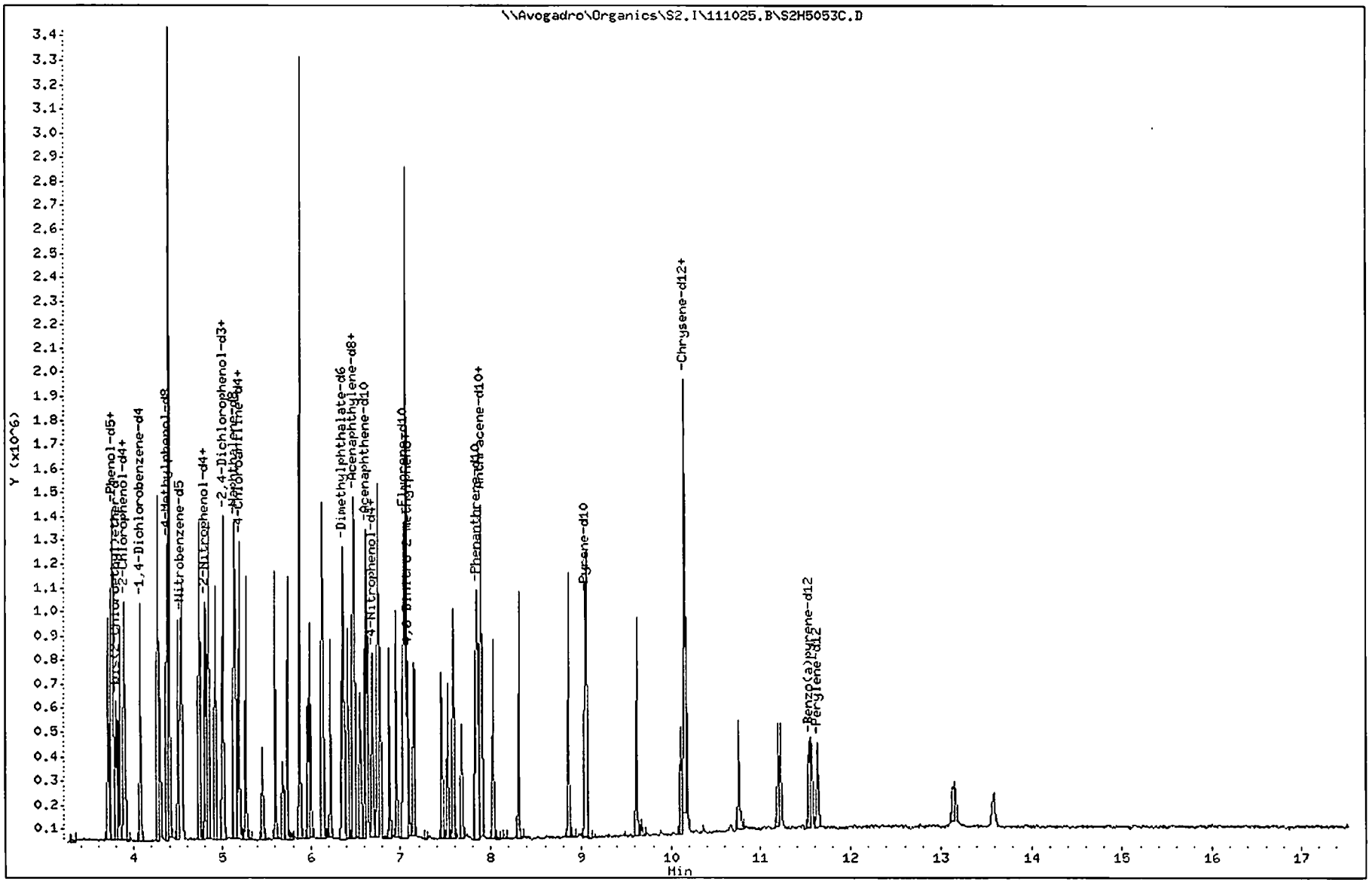
Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5053C.D
Report Date: 26-Oct-2011 09:59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	
	75 3,3'-Dichlorobenzidine	252	10.114	10.114	(0.996)	88348	40.0000	42	
	76 Benzo(a)anthracene	228	10.146	10.146	(0.999)	309195	40.0000	37	
*	77 Chrysene-d12	240	10.156	10.156	(1.000)	285011	40.0000		(Q)
	78 Chrysene	228	10.178	10.178	(1.002)	301594	40.0000	40	
	79 bis(2-Ethylhexyl)phthalate	149	10.146	10.146	(0.999)	169935	40.0000	39	
	80 Di-n-octylphthalate	149	10.757	10.757	(0.924)	252614	40.0000	37	
	81 Benzo(b)fluoranthene	252	11.197	11.197	(0.962)	230677	40.0000	38	
	82 Benzo(k)fluoranthene	252	11.218	11.218	(0.964)	249777	40.0000	35	
S	83 Benzo(a)pyrene-d12	264	11.540	11.540	(0.992)	177567	40.0000	38	
	84 Benzo(a)pyrene	252	11.572	11.572	(0.994)	201749	40.0000	38	
*	85 Perylene-d12	264	11.636	11.636	(1.000)	188055	40.0000		
	86 Indeno(1,2,3-cd)pyrene	276	13.127	13.127	(1.128)	155216	40.0000	38	
	87 Dibenzo(a,h)anthracene	278	13.159	13.159	(1.131)	126027	40.0000	37	
	88 Benzo(g,h,i)perylene	276	13.588	13.588	(1.168)	125220	40.0000	37	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5053C.D
Date : 25-OCT-2011 11:35
Client ID: SSTD0202W
Instrument: S2.i
Sample Info: SSTD0202W,SSTD0202W
Volume Injected (uL): 2.0
Operator: SRC:
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5054.D
Report Date: 26-Oct-2011 09:59

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111025.B\S2H5054.D
Lab Smp Id: SSTD0052W Client Smp ID: SSTD0052W
Inj Date : 25-OCT-2011 11:58
Operator : SRC: Inst ID: S2.i
Smp Info : SSTD0052W,SSTD0052W
Misc Info : 1,1
Comment :
Method : \\Avogadro\Organics\S2.I\111025.B\S2_SOM.m
Meth Date : 26-Oct-2011 09:59 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * (Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vi	2.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	1 Benzaldehyde	77	3.701	3.712	(0.908)	45515	10.0000	11
$	2 Phenol-d5	71	3.744	3.754	(0.918)	22760	10.0000	8.9(Q)
	3 Phenol	94	3.755	3.765	(0.921)	66381	10.0000	9.4
$	4 bis(2-Chloroethyl)ether-d8	67	3.798	3.797	(0.932)	35163	10.0000	10
	5 bis(2-Chloroethyl)ether	93	3.841	3.840	(0.942)	50765	10.0000	9.8
$	6 2-Chlorophenol-d4	132	3.884	3.883	(0.953)	21416	10.0000	9.7
	7 2-Chlorophenol	128	3.894	3.894	(0.955)	22691	10.0000	10
*	8 1,4-Dichlorobenzene-d4	152	4.077	4.076	(1.000)	81345	40.0000	(Q)
	9 2-Methylphenol	108	4.270	4.269	(1.047)	36849	10.0000	9.6
	10 2,2'-oxybis(1-Chloropropane)	45	4.291	4.291	(1.053)	52469	10.0000	10
$	11 4-Methylphenol-d8	113	4.366	4.376	(1.071)	30786	10.0000	8.9
	13 Acetophenone	105	4.398	4.398	(1.079)	64947	10.0000	9.8
	14 N-Nitroso-di-n-propylamine	70	4.398	4.398	(1.079)	31300	10.0000	9.7(Q)
	12 4-Methylphenol	108	4.388	4.398	(1.076)	34863	10.0000	8.8
	15 Hexachloroethane	117	4.495	4.505	(1.103)	18023	10.0000	10(Q)
$	16 Nitrobenzene-d5	128	4.527	4.527	(0.881)	13404	10.0000	11(Q)
	17 Nitrobenzene	77	4.549	4.548	(0.885)	58616	10.0000	9.7
	18 Isophorone	82	4.742	4.741	(0.923)	102107	10.0000	9.9
$	19 2-Nitrophenol-d4	143	4.806	4.805	(0.935)	12398	10.0000	9.3(Q)
	20 2-Nitrophenol	139	4.817	4.816	(0.937)	13281	10.0000	10(Q)
	21 2,4-Dimethylphenol	107	4.849	4.848	(0.944)	42871	10.0000	9.4(Q)

Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5054.D
Report Date: 26-Oct-2011 09:59

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
	22	bis(2-Chloroethoxy)methane	93	4.924	4.923	(0.958)	53562	10.0000	9.3
$	23	2,4-Dichlorophenol-d3	165	4.999	5.009	(0.973)	21850	10.0000	9.0
	24	2,4-Dichlorophenol	162	5.010	5.020	(0.975)	21540	10.0000	9.6
*	25	Naphthalene-d8	136	5.138	5.138	(1.000)	231295	40.0000	
	26	Naphthalene	128	5.149	5.159	(1.002)	58053	10.0000	9.8
$	27	4-Chloroaniline-d4	131	5.181	5.191	(1.008)	22939	10.0000	11(Q)
	28	4-Chloroaniline	127	5.192	5.191	(1.010)	22811	10.0000	9.6
	29	Hexachlorobutadiene	225	5.267	5.267	(1.025)	16469	10.0000	9.9
	30	Caprolactam	113	5.449	5.460	(1.061)	7762	10.0000	8.7(Q)
	31	4-Chloro-3-methylphenol	107	5.599	5.599	(1.090)	34445	10.0000	9.5
	32	2-Methylnaphthalene	142	5.728	5.738	(1.115)	40737	10.0000	10
	33	Hexachlorocyclopentadiene	237	5.878	5.878	(0.891)	14600	10.0000	8.3(Q)
	34	1,2,4,5-Tetrachlorobenzene	216	5.878	5.878	(0.891)	59367	10.0000	9.5
	35	2,4,6-Trichlorophenol	196	5.964	5.974	(0.904)	18971	10.0000	9.8
	36	2,4,5-Trichlorophenol	196	5.996	5.996	(0.909)	18342	10.0000	9.3(a)
	37	1,1'-Biphenyl	154	6.114	6.124	(0.927)	55394	10.0000	10
	38	2-Chloronaphthalene	162	6.136	6.146	(0.930)	49179	10.0000	10
	39	2-Nitroaniline	65	6.211	6.221	(0.941)	24626	10.0000	10
$	40	Dimethylphthalate-d6	166	6.350	6.350	(0.963)	54840	10.0000	9.6
	41	Dimethylphthalate	163	6.361	6.371	(0.964)	53763	10.0000	10
	42	2,6-Dinitrotoluene	165	6.414	6.414	(0.972)	13354	10.0000	10
$	43	Acenaphthylene-d8	160	6.468	6.478	(0.980)	74903	10.0000	10
	44	Acenaphthylene	152	6.479	6.489	(0.982)	68062	10.0000	10
	45	3-Nitroaniline	138	6.554	6.553	(0.993)	10623	10.0000	12(Q)
*	46	Acenaphthene-d10	164	6.597	6.607	(1.000)	156075	40.0000	
	47	Acenaphthene	153	6.629	6.628	(1.005)	45256	10.0000	10
	48	2,4-Dinitrophenol	184	6.640	6.639	(1.007)	3291	10.0000	5.4(aQ)
	52	Dibenzofuran	168	6.768	6.779	(1.026)	67008	10.0000	10
$	49	4-Nitrophenol-d4	143	6.682	6.682	(1.013)	7212	10.0000	8.7
	50	4-Nitrophenol	109	6.682	6.693	(1.013)	13820	10.0000	8.6(a)
	51	2,4-Dinitrotoluene	165	6.747	6.757	(1.023)	16234	10.0000	9.7(Q)
	118	2,3,4,6-Tetrachlorophenol	232	6.876	6.875	(1.042)	13651	10.0000	10
	53	Diethylphthalate	149	6.951	6.950	(1.054)	56488	10.0000	11
$	54	Fluorene-d10	176	7.026	7.036	(1.065)	54133	10.0000	10
	56	Fluorene	166	7.058	7.057	(1.070)	52647	10.0000	10
	55	4-Chlorophenyl-phenylether	204	7.047	7.057	(1.068)	29496	10.0000	11
	57	4-Nitroaniline	138	7.058	7.068	(1.070)	9393	10.0000	9.8(aQ)
$	58	4,6-Dinitro-2-methylphenol-d2	200	7.079	7.090	(0.904)	7797	10.0000	7.0(Q)
	59	4,6-Dinitro-2-methylphenol	198	7.090	7.090	(0.906)	6910	10.0000	6.3(aQ)
	60	N-Nitrosodiphenylamine	169	7.144	7.154	(0.912)	43144	10.0000	9.9
	61	4-Bromophenyl-phenylether	248	7.455	7.465	(0.952)	16040	10.0000	10
	62	Hexachlorobenzene	284	7.519	7.529	(0.960)	17444	10.0000	11
	63	Atrazine	200	7.583	7.583	(0.969)	15010	10.0000	9.5
	64	Pentachlorophenol	266	7.680	7.679	(0.981)	5841	10.0000	7.2(a)
*	65	Phenanthrene-d10	188	7.830	7.840	(1.000)	286359	40.0000	
	66	Phenanthrene	178	7.851	7.862	(1.003)	84149	10.0000	10
$	67	Anthracene-d10	188	7.884	7.883	(1.007)	82836	10.0000	10
	68	Anthracene	178	7.894	7.894	(1.008)	81407	10.0000	10
	117	Carbazole	167	8.023	8.022	(1.025)	64840	10.0000	9.8
	70	Di-n-butylphthalate	149	8.312	8.312	(1.062)	65846	10.0000	9.3
	71	Fluoranthene	202	8.859	8.859	(1.131)	85860	10.0000	10
$	72	Pyrene-d10	212	9.042	9.041	(0.890)	68402	10.0000	9.4
	73	Pyrene	202	9.063	9.063	(0.892)	83460	10.0000	9.1
	74	Butylbenzylphthalate	149	9.621	9.620	(0.947)	24001	10.0000	8.4

Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5054.D
Report Date: 26-Oct-2011 09:59

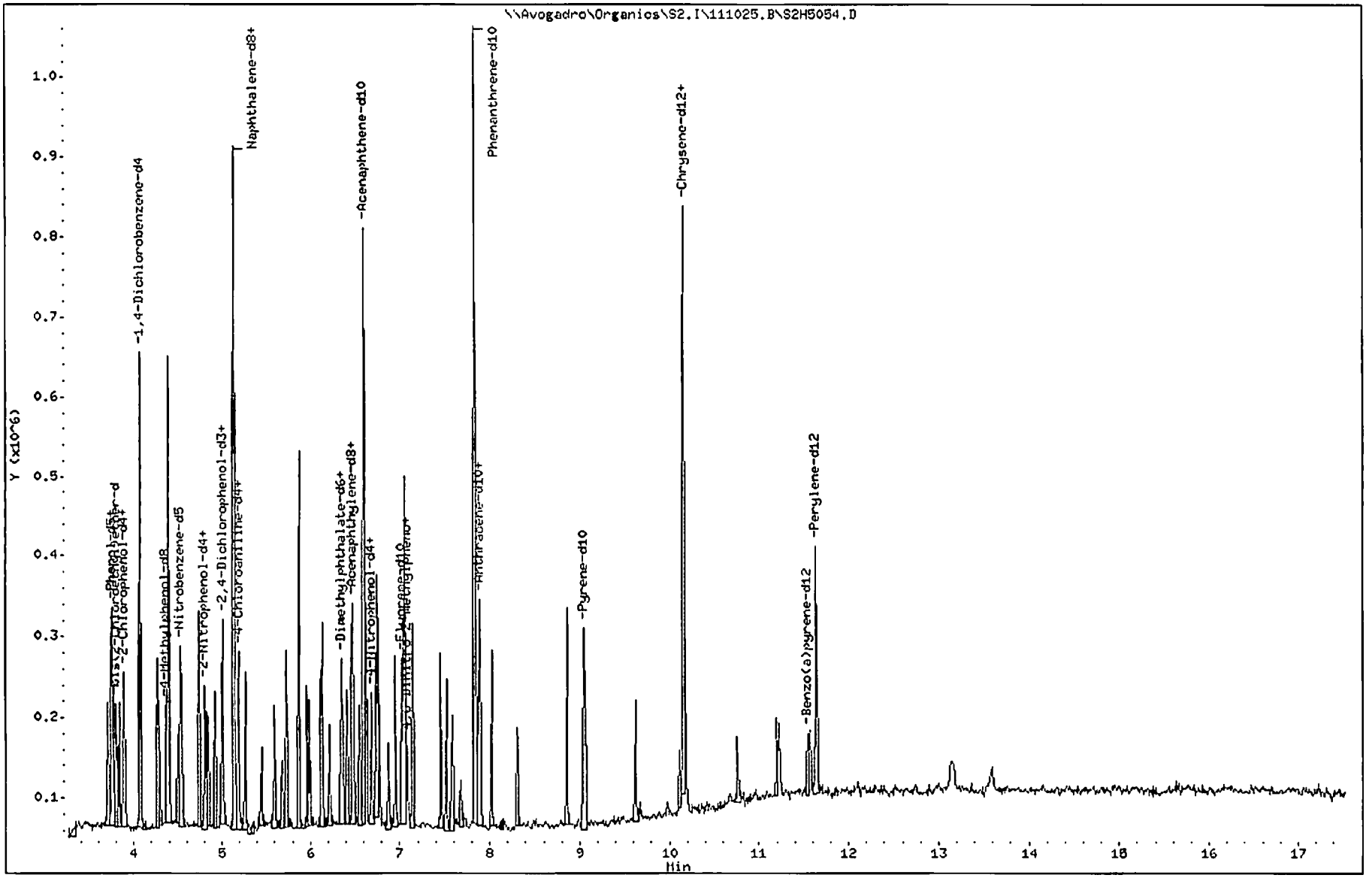
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	
75	3,3'-Dichlorobenzidine	252	10.114	10.114	(0.996)	14684	10.0000	8.6	
76	Benzo(a)anthracene	228	10.146	10.146	(0.999)	72341	10.0000	11	
* 77	Chrysene-d12	240	10.157	10.156	(1.000)	229879	40.0000		(Q)
78	Chrysene	228	10.178	10.178	(1.002)	59445	10.0000	9.9	
79	bis(2-Ethylhexyl)phthalate	149	10.157	10.146	(1.000)	32662	10.0000	9.4	
80	Di-n-octylphthalate	149	10.757	10.757	(0.924)	43628	10.0000	8.2	
81	Benzo(b)fluoranthene	252	11.197	11.197	(0.962)	43681	10.0000	9.3	
82	Benzo(k)fluoranthene	252	11.229	11.218	(0.965)	58547	10.0000	11	
S 83	Benzo(a)pyrene-d12	264	11.540	11.540	(0.992)	35368	10.0000	9.9	
84	Benzo(a)pyrene	252	11.572	11.572	(0.994)	41382	10.0000	10	
* 85	Perylene-d12	264	11.637	11.636	(1.000)	145535	40.0000		
86	Indeno(1,2,3-cd)pyrene	276	13.138	13.127	(1.129)	32547	10.0000	10	
87	Dibenzo(a,h)anthracene	278	13.160	13.159	(1.131)	26928	10.0000	10	
88	Benzo(g,h,i)perylene	276	13.588	13.588	(1.168)	26705	10.0000	10	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5054.D
Date : 25-OCT-2011 11:58
Client ID: SSTD0052W
Sample Info: SSTD0052W,SSTD0052W
Volume Injected (uL): 2.0
Column phase: RXI-5SILMS

Instrument: S2.i
Operator: SRC:
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5055.D
Report Date: 26-Oct-2011 09:59

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111025.B\S2H5055.D
Lab Smp Id: SSTD0802W Client Smp ID: SSTD0802W
Inj Date : 25-OCT-2011 12:21
Operator : SRC: Inst ID: S2.i
Smp Info : SSTD0802W,SSTD0802W
Misc Info : 1,5
Comment :
Method : \\Avogadro\Organics\S2.I\111025.B\S2_SOM.m
Meth Date : 26-Oct-2011 09:59 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 3 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * (Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vi	2.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	1 Benzaldehyde	77	3.704	3.712	(0.910)	451731	160.000	140
$	2 Phenol-d5	71	3.747	3.754	(0.921)	389542	160.000	190(A)
	3 Phenol	94	3.768	3.765	(0.926)	1061024	160.000	180(A)
$	4 bis(2-Chloroethyl)ether-d8	67	3.800	3.797	(0.934)	491270	160.000	170(A)
	5 bis(2-Chloroethyl)ether	93	3.843	3.840	(0.945)	739408	160.000	180(A)
$	6 2-Chlorophenol-d4	132	3.886	3.883	(0.955)	324350	160.000	180(A)
	7 2-Chlorophenol	128	3.897	3.894	(0.958)	331093	160.000	180(A)
*	8 1,4-Dichlorobenzene-d4	152	4.069	4.076	(1.000)	66544	40.0000	(Q)
	9 2-Methylphenol	108	4.272	4.269	(1.050)	576248	160.000	180(A)
	10 2,2'-oxybis(1-Chloropropane)	45	4.294	4.291	(1.055)	713521	160.000	170(A)
$	11 4-Methylphenol-d8	113	4.379	4.376	(1.076)	538063	160.000	190(A)
	13 Acetophenone	105	4.401	4.398	(1.082)	993466	160.000	180(A)
	14 N-Nitroso-di-n-propylamine	70	4.401	4.398	(1.082)	463610	160.000	180(AQ)
	12 4-Methylphenol	108	4.401	4.398	(1.082)	634982	160.000	200(A)
	15 Hexachloroethane	117	4.497	4.505	(1.105)	238653	160.000	160(AQ)
$	16 Nitrobenzene-d5	128	4.530	4.527	(0.881)	171606	160.000	160(A)
	17 Nitrobenzene	77	4.551	4.548	(0.885)	864223	160.000	160(A)
	18 Isophorone	82	4.744	4.741	(0.923)	1523694	160.000	170(A)
$	19 2-Nitrophenol-d4	143	4.808	4.805	(0.935)	198212	160.000	170(A)
	20 2-Nitrophenol	139	4.819	4.816	(0.937)	184702	160.000	160(A)
	21 2,4-Dimethylphenol	107	4.851	4.848	(0.944)	676917	160.000	170(AQ)

Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5055.D
Report Date: 26-Oct-2011 09:59

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
	22	bis(2-Chloroethoxy)methane	93	4.926	4.923	(0.958)	844250	160.000	170(A)
$	23	2,4-Dichlorophenol-d3	165	5.012	5.009	(0.975)	370810	160.000	170(A)
	24	2,4-Dichlorophenol	162	5.012	5.020	(0.975)	336936	160.000	170(A)
*	25	Naphthalene-d8	136	5.141	5.138	(1.000)	202795	40.0000	
	26	Naphthalene	128	5.152	5.159	(1.002)	862863	160.000	170(A)
$	27	4-Chloroaniline-d4	131	5.184	5.191	(1.008)	301135	160.000	160(Q)
	28	4-Chloroaniline	127	5.194	5.191	(1.010)	356828	160.000	170(A)
	29	Hexachlorobutadiene	225	5.270	5.267	(1.025)	232801	160.000	160(A)
	30	Caprolactam	113	5.463	5.460	(1.063)	139061	160.000	180(A)
	31	4-Chloro-3-methylphenol	107	5.602	5.599	(1.090)	568462	160.000	180(A)
	32	2-Methylnaphthalene	142	5.731	5.738	(1.115)	598179	160.000	170(A)
	33	Hexachlorocyclopentadiene	237	5.881	5.878	(0.891)	259779	160.000	180(AQ)
	34	1,2,4,5-Tetrachlorobenzene	216	5.881	5.878	(0.891)	954196	160.000	180(A)
	35	2,4,6-Trichlorophenol	196	5.967	5.974	(0.904)	297313	160.000	180(A)
	36	2,4,5-Trichlorophenol	196	5.999	5.996	(0.909)	308771	160.000	190(A)
	37	1,1'-Biphenyl	154	6.117	6.124	(0.927)	767912	160.000	170(A)
	38	2-Chloronaphthalene	162	6.138	6.146	(0.930)	726576	160.000	180(A)
	39	2-Nitroaniline	65	6.213	6.221	(0.942)	353321	160.000	180(A)
$	40	Dimethylphthalate-d6	166	6.353	6.350	(0.963)	813301	160.000	170(A)
	41	Dimethylphthalate	163	6.374	6.371	(0.966)	731022	160.000	160(A)
	42	2,6-Dinitrotoluene	165	6.417	6.414	(0.972)	198638	160.000	180(A)
$	43	Acenaphthylene-d8	160	6.471	6.478	(0.981)	1071404	160.000	170(A)
	44	Acenaphthylene	152	6.481	6.489	(0.982)	964311	160.000	170(A)
	45	3-Nitroaniline	138	6.556	6.553	(0.994)	124790	160.000	170(A)
*	46	Acenaphthene-d10	164	6.599	6.607	(1.000)	131332	40.0000	
	47	Acenaphthene	153	6.631	6.628	(1.005)	650871	160.000	180(A)
	48	2,4-Dinitrophenol	184	6.642	6.639	(1.007)	113177	160.000	220(AQ)
	52	Dibenzofuran	168	6.771	6.779	(1.026)	904327	160.000	170(A)
$	49	4-Nitrophenol-d4	143	6.685	6.682	(1.013)	125573	160.000	180(A)
	50	4-Nitrophenol	109	6.696	6.693	(1.015)	247914	160.000	180(A)
	51	2,4-Dinitrotoluene	165	6.749	6.757	(1.023)	242541	160.000	170(AQ)
	118	2,3,4,6-Tetrachlorophenol	232	6.878	6.875	(1.042)	204288	160.000	180(A)
	53	Diethylphthalate	149	6.953	6.950	(1.054)	679754	160.000	160(A)
$	54	Fluorene-d10	176	7.039	7.036	(1.067)	733898	160.000	170(A)
	56	Fluorene	166	7.060	7.057	(1.070)	773517	160.000	170(A)
	55	4-Chlorophenyl-phenylether	204	7.050	7.057	(1.068)	386824	160.000	160(A)
	57	4-Nitroaniline	138	7.060	7.068	(1.070)	122002	160.000	150(Q)
$	58	4,6-Dinitro-2-methylphenol-d2	200	7.082	7.090	(0.904)	166098	160.000	190(A)
	59	4,6-Dinitro-2-methylphenol	198	7.093	7.090	(0.906)	160228	160.000	190(AQ)
	60	N-Nitrosodiphenylamine	169	7.146	7.154	(0.912)	587468	160.000	170(A)
	61	4-Bromophenyl-phenylether	248	7.457	7.465	(0.952)	203259	160.000	170(A)
	62	Hexachlorobenzene	284	7.522	7.529	(0.960)	212255	160.000	160(A)
	63	Atrazine	200	7.586	7.583	(0.969)	198672	160.000	160
	64	Pentachlorophenol	266	7.682	7.679	(0.981)	118477	160.000	190(A)
*	65	Phenanthrene-d10	188	7.832	7.840	(1.000)	226084	40.0000	
	66	Phenanthrene	178	7.854	7.862	(1.003)	1056637	160.000	170(A)
$	67	Anthracene-d10	188	7.886	7.883	(1.007)	1028619	160.000	160
	68	Anthracene	178	7.897	7.894	(1.008)	1088821	160.000	170(A)
	117	Carbazole	167	8.026	8.022	(1.025)	856417	160.000	160(A)
	70	Di-n-butylphthalate	149	8.304	8.312	(1.060)	813103	160.000	150
	71	Fluoranthene	202	8.862	8.859	(1.131)	960445	160.000	150
$	72	Pyrene-d10	212	9.044	9.041	(0.892)	745046	160.000	220(A)
	73	Pyrene	202	9.055	9.063	(0.893)	927058	160.000	210(A)
	74	Butylbenzylphthalate	149	9.613	9.620	(0.948)	254386	160.000	190(A)

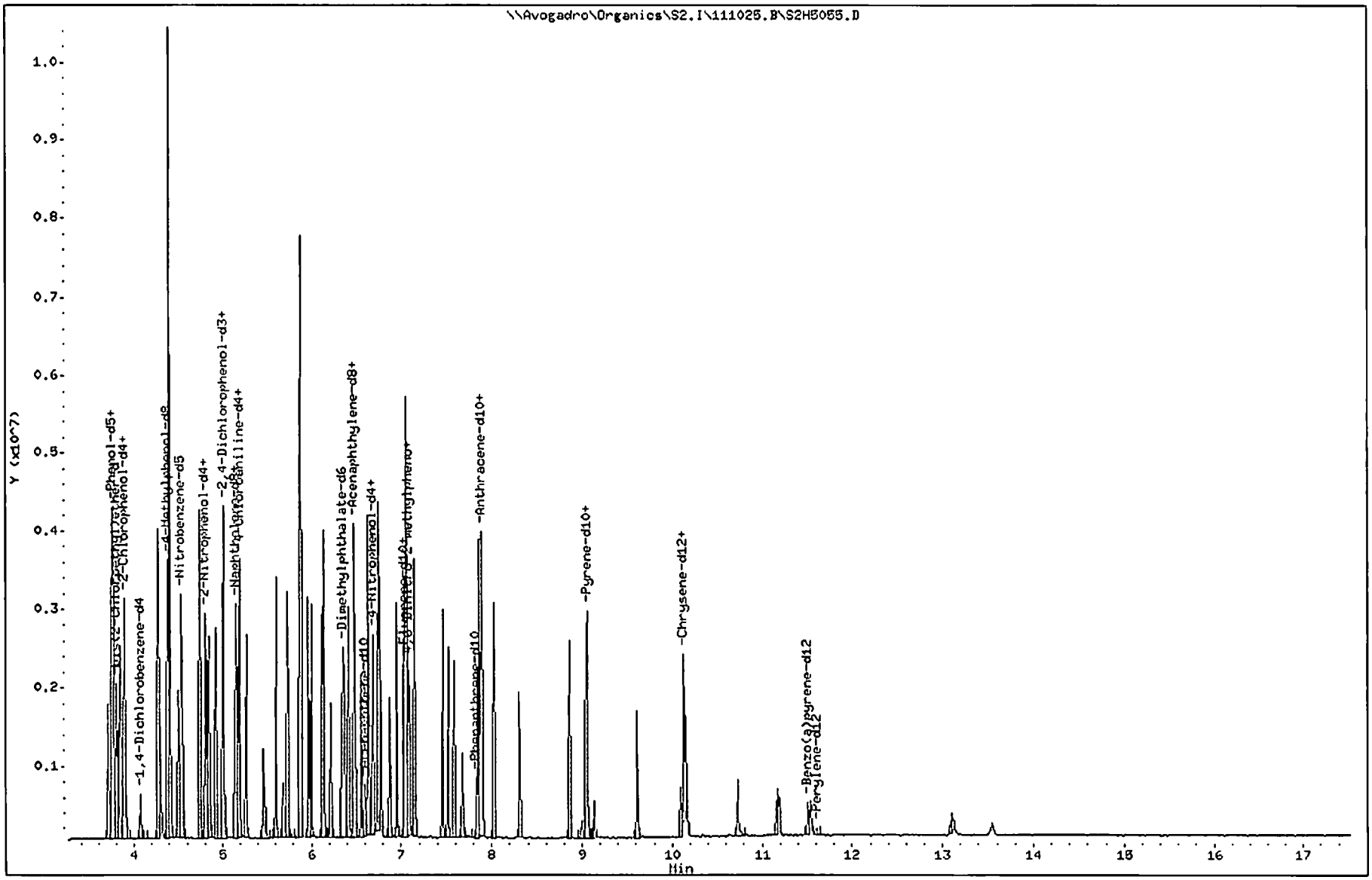
Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5055.D
Report Date: 26-Oct-2011 09:59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	75 3,3'-Dichlorobenzidine	252	10.095	10.114	(0.996)	126489	160.000	160
	76 Benzo(a)anthracene	228	10.127	10.146	(0.999)	537512	160.000	170(A)
*	77 Chrysene-d12	240	10.138	10.156	(1.000)	109544	40.0000	(Q)
	78 Chrysene	228	10.159	10.178	(1.002)	457251	160.000	160
	79 bis(2-Ethylhexyl)phthalate	149	10.138	10.146	(1.000)	283596	160.000	170(A)
	80 Di-n-octylphthalate	149	10.728	10.757	(0.924)	371034	160.000	200(A)
	81 Benzo(b)fluoranthene	252	11.168	11.197	(0.962)	280439	160.000	170(A)
	82 Benzo(k)fluoranthene	252	11.200	11.218	(0.965)	330277	160.000	170(A)
$	83 Benzo(a)pyrene-d12	264	11.511	11.540	(0.992)	199793	160.000	160
	84 Benzo(a)pyrene	252	11.543	11.572	(0.994)	237127	160.000	160(A)
*	85 Perylene-d12	264	11.607	11.636	(1.000)	50981	40.0000	
	86 Indeno(1,2,3-cd)pyrene	276	13.098	13.127	(1.128)	176065	160.000	160
	87 Dibenzo(a,h)anthracene	278	13.130	13.159	(1.131)	143627	160.000	160
	88 Benzo(g,h,i)perylene	276	13.548	13.588	(1.167)	138852	160.000	150

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5055.D
Date : 25-OCT-2011 12:21
Client ID: SSTD0802W
Instrument: S2.i
Sample Info: SSTD0802W,SSTD0802W
Volume Injected (uL): 2.0
Operator: SRC:
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5056.D
Report Date: 26-Oct-2011 09:59

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111025.B\S2H5056.D
Lab Smp Id: SSTD0102W Client Smp ID: SSTD0102W
Inj Date : 25-OCT-2011 12:44
Operator : SRC: Inst ID: S2.i
Smp Info : SSTD0102W,SSTD0102W
Misc Info : 1,2
Comment :
Method : \\Avogadro\Organics\S2.I\111025.B\S2_SOM.m
Meth Date : 26-Oct-2011 09:59 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * (Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vi	2.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	1 Benzaldehyde	77	3.703	3.712	(0.908)	125412	20.0000	21
$	2 Phenol-d5	71	3.746	3.754	(0.919)	72033	20.0000	19
	3 Phenol	94	3.757	3.765	(0.921)	187725	20.0000	18
$	4 bis(2-Chloroethyl)ether-d8	67	3.800	3.797	(0.932)	100785	20.0000	19
	5 bis(2-Chloroethyl)ether	93	3.843	3.840	(0.942)	143038	20.0000	19
$	6 2-Chlorophenol-d4	132	3.885	3.883	(0.953)	62775	20.0000	19
	7 2-Chlorophenol	128	3.896	3.894	(0.955)	64198	20.0000	19
	8 1,4-Dichlorobenzene-d4	152	4.078	4.076	(1.000)	120111	40.0000	(Q)
	9 2-Methylphenol	108	4.271	4.269	(1.047)	102895	20.0000	18
	10 2,2'-oxybis(1-Chloropropane)	45	4.293	4.291	(1.053)	150766	20.0000	20
$	11 4-Methylphenol-d8	113	4.368	4.376	(1.071)	90503	20.0000	18
	13 Acetophenone	105	4.400	4.398	(1.079)	183559	20.0000	19
	14 N-Nitroso-di-n-propylamine	70	4.400	4.398	(1.079)	87385	20.0000	18(Q)
	12 4-Methylphenol	108	4.389	4.398	(1.076)	97545	20.0000	17
	15 Hexachloroethane	117	4.497	4.505	(1.103)	50482	20.0000	19(Q)
$	16 Nitrobenzene-d5	128	4.529	4.527	(0.881)	32853	20.0000	20
	17 Nitrobenzene	77	4.540	4.548	(0.883)	161880	20.0000	19
	18 Isophorone	82	4.743	4.741	(0.923)	275053	20.0000	19
$	19 2-Nitrophenol-d4	143	4.808	4.805	(0.935)	34189	20.0000	18
	20 2-Nitrophenol	139	4.818	4.816	(0.937)	36775	20.0000	20
	21 2,4-Dimethylphenol	107	4.851	4.848	(0.944)	117444	20.0000	19(Q)

Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5056.D
Report Date: 26-Oct-2011 09:59

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
	22	bis(2-Chloroethoxy)methane	93	4.926	4.923	(0.958)	155215	20.0000	19
$	23	2,4-Dichlorophenol-d3	165	5.001	5.009	(0.973)	64330	20.0000	19
	24	2,4-Dichlorophenol	162	5.011	5.020	(0.975)	57855	20.0000	19
*	25	Naphthalene-d8	136	5.140	5.138	(1.000)	322412	40.0000	
	26	Naphthalene	128	5.151	5.159	(1.002)	164907	20.0000	20
$	27	4-Chloroaniline-d4	131	5.183	5.191	(1.008)	59697	20.0000	20(Q)
	28	4-Chloroaniline	127	5.194	5.191	(1.010)	66465	20.0000	20
	29	Hexachlorobutadiene	225	5.269	5.267	(1.025)	48784	20.0000	21
	30	Caprolactam	113	5.451	5.460	(1.060)	22983	20.0000	19
	31	4-Chloro-3-methylphenol	107	5.601	5.599	(1.090)	85751	20.0000	17
	32	2-Methylnaphthalene	142	5.730	5.738	(1.115)	108595	20.0000	19
	33	Hexachlorocyclopentadiene	237	5.880	5.878	(0.891)	47469	20.0000	20(Q)
	34	1,2,4,5-Tetrachlorobenzene	216	5.880	5.878	(0.891)	175138	20.0000	21
	35	2,4,6-Trichlorophenol	196	5.966	5.974	(0.904)	56712	20.0000	22
	36	2,4,5-Trichlorophenol	196	5.998	5.996	(0.909)	50977	20.0000	19(a)
	37	1,1'-Biphenyl	154	6.127	6.124	(0.928)	140310	20.0000	19
	38	2-Chloronaphthalene	162	6.137	6.146	(0.930)	135707	20.0000	21
	39	2-Nitroaniline	65	6.212	6.221	(0.941)	60092	20.0000	19
$	40	Dimethylphthalate-d6	166	6.352	6.350	(0.963)	144862	20.0000	19
	41	Dimethylphthalate	163	6.363	6.371	(0.964)	131624	20.0000	19
	42	2,6-Dinitrotoluene	165	6.416	6.414	(0.972)	33942	20.0000	19
$	43	Acenaphthylene-d8	160	6.470	6.478	(0.980)	198044	20.0000	20
	44	Acenaphthylene	152	6.481	6.489	(0.982)	173387	20.0000	19
	45	3-Nitroaniline	138	6.556	6.553	(0.993)	21927	20.0000	19
*	46	Acenaphthene-d10	164	6.599	6.607	(1.000)	206539	40.0000	
	47	Acenaphthene	153	6.631	6.628	(1.005)	117622	20.0000	20
	48	2,4-Dinitrophenol	184	6.641	6.639	(1.007)	10809	20.0000	13(Q)
	52	Dibenzofuran	168	6.770	6.779	(1.026)	174468	20.0000	20
$	49	4-Nitrophenol-d4	143	6.684	6.682	(1.013)	18648	20.0000	17
	50	4-Nitrophenol	109	6.684	6.693	(1.013)	35589	20.0000	17
	51	2,4-Dinitrotoluene	165	6.749	6.757	(1.023)	43019	20.0000	19(Q)
	118	2,3,4,6-Tetrachlorophenol	232	6.877	6.875	(1.042)	32406	20.0000	18
	53	Diethylphthalate	149	6.952	6.950	(1.054)	133920	20.0000	20
$	54	Fluorene-d10	176	7.027	7.036	(1.065)	137530	20.0000	20
	56	Fluorene	166	7.060	7.057	(1.070)	130330	20.0000	19
	55	4-Chlorophenyl-phenylether	204	7.049	7.057	(1.068)	71631	20.0000	19
	57	4-Nitroaniline	138	7.060	7.068	(1.070)	26593	20.0000	21(Q)
$	58	4,6-Dinitro-2-methylphenol-d2	200	7.081	7.090	(0.904)	22647	20.0000	17
	59	4,6-Dinitro-2-methylphenol	198	7.092	7.090	(0.906)	20088	20.0000	15(aQ)
	60	N-Nitrosodiphenylamine	169	7.145	7.154	(0.912)	107883	20.0000	21
	61	4-Bromophenyl-phenylether	248	7.456	7.465	(0.952)	38077	20.0000	20
	62	Hexachlorobenzene	284	7.521	7.529	(0.960)	40531	20.0000	20
	63	Atrazine	200	7.585	7.583	(0.969)	37213	20.0000	20
	64	Pentachlorophenol	266	7.682	7.679	(0.981)	15010	20.0000	16
*	65	Phenanthrene-d10	188	7.832	7.840	(1.000)	343880	40.0000	
	66	Phenanthrene	178	7.853	7.862	(1.003)	190037	20.0000	20
$	67	Anthracene-d10	188	7.885	7.883	(1.007)	189817	20.0000	19
	68	Anthracene	178	7.896	7.894	(1.008)	195947	20.0000	20
	117	Carbazole	167	8.025	8.022	(1.025)	160106	20.0000	20
	70	Di-n-butylphthalate	149	8.304	8.312	(1.060)	177045	20.0000	21
	71	Fluoranthene	202	8.850	8.859	(1.130)	197940	20.0000	20
$	72	Pyrene-d10	212	9.033	9.041	(0.893)	157501	20.0000	18(H)
	73	Pyrene	202	9.043	9.063	(0.894)	195088	20.0000	18
	74	Butylbenzylphthalate	149	9.590	9.620	(0.948)	63891	20.0000	19

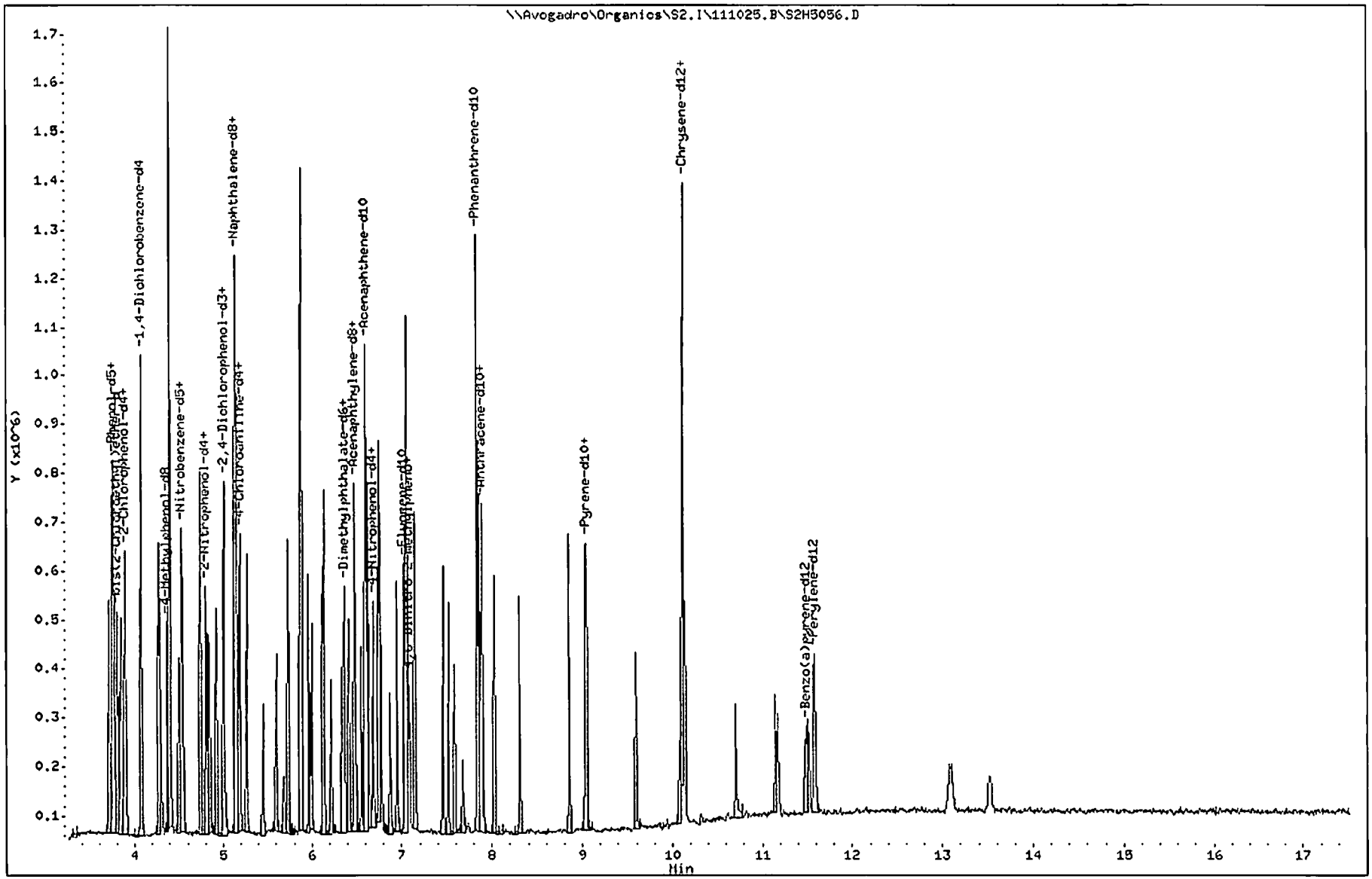
Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5056.D
Report Date: 26-Oct-2011 09:59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)	
	75 3,3'-Dichlorobenzidine	252	10.073	10.114	(0.996)	40595	20.0000	20	
	76 Benzo(a)anthracene	228	10.105	10.146	(0.999)	158537	20.0000	20	
*	77 Chrysene-d12	240	10.116	10.156	(1.000)	273540	40.0000		(Q)
	78 Chrysene	228	10.137	10.178	(1.002)	143301	20.0000	20	
	79 bis(2-Ethylhexyl)phthalate	149	10.116	10.146	(1.000)	81805	20.0000	20	
	80 Di-n-octylphthalate	149	10.706	10.757	(0.924)	120856	20.0000	18	
	81 Benzo(b)fluoranthene	252	11.145	11.197	(0.962)	110449	20.0000	18	
	82 Benzo(k)fluoranthene	252	11.177	11.218	(0.965)	135076	20.0000	20	
$	83 Benzo(a)pyrene-d12	264	11.488	11.540	(0.992)	89501	20.0000	20	
	84 Benzo(a)pyrene	252	11.510	11.572	(0.994)	101587	20.0000	19	
*	85 Perylene-d12	264	11.585	11.636	(1.000)	184086	40.0000		
	86 Indeno(1,2,3-cd)pyrene	276	13.076	13.127	(1.129)	83072	20.0000	21	
	87 Dibenzo(a,h)anthracene	278	13.097	13.159	(1.131)	68344	20.0000	21	
	88 Benzo(g,h,i)perylene	276	13.526	13.588	(1.168)	71594	20.0000	21	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\S2.I\111025.B\S2H3056.D
Date : 25-OCT-2011 12:44
Client ID: SSTD0102W
Instrument: S2.i
Sample Info: SSTD0102W,SSTD0102W
Volume Injected (uL): 2.0
Operator: SRC:
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5057.D
Report Date: 26-Oct-2011 09:59

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111025.B\S2H5057.D
Lab Smp Id: SSTD0402W Client Smp ID: SSTD0402W
Inj Date : 25-OCT-2011 13:07
Operator : SRC: Inst ID: S2.i
Smp Info : SSTD0402W,SSTD0402W
Misc Info : 1,4
Comment :
Method : \\Avogadro\Organics\S2.I\111025.B\S2_SOM.m
Meth Date : 26-Oct-2011 09:59 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 5 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * (Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vi	2.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	1 Benzaldehyde	77	3.712	3.712	(0.911)	288681	80.0000	73
$	2 Phenol-d5	71	3.754	3.754	(0.921)	212629	80.0000	84
	3 Phenol	94	3.765	3.765	(0.924)	586212	80.0000	85
$	4 bis(2-Chloroethyl)ether-d8	67	3.797	3.797	(0.932)	284521	80.0000	82
	5 bis(2-Chloroethyl)ether	93	3.840	3.840	(0.942)	426615	80.0000	84
$	6 2-Chlorophenol-d4	132	3.883	3.883	(0.953)	174526	80.0000	80
	7 2-Chlorophenol	128	3.894	3.894	(0.955)	184166	80.0000	82
*	8 1,4-Dichlorobenzene-d4	152	4.076	4.076	(1.000)	80213	40.0000	(Q)
	9 2-Methylphenol	108	4.269	4.269	(1.047)	315832	80.0000	83
	10 2,2'-oxybis(1-Chloropropane)	45	4.291	4.291	(1.053)	417484	80.0000	81
$	11 4-Methylphenol-d8	113	4.376	4.376	(1.074)	298167	80.0000	87
	13 Acetophenone	105	4.398	4.398	(1.079)	535739	80.0000	82
	14 N-Nitroso-di-n-propylamine	70	4.398	4.398	(1.079)	263946	80.0000	83(Q)
	12 4-Methylphenol	108	4.398	4.398	(1.079)	337112	80.0000	87
	15 Hexachloroethane	117	4.505	4.505	(1.105)	142345	80.0000	81(Q)
$	16 Nitrobenzene-d5	128	4.527	4.527	(0.881)	96319	80.0000	79(Q)
	17 Nitrobenzene	77	4.548	4.548	(0.885)	518558	80.0000	85
	18 Isophorone	82	4.741	4.741	(0.923)	882963	80.0000	84
$	19 2-Nitrophenol-d4	143	4.805	4.805	(0.935)	117618	80.0000	87
	20 2-Nitrophenol	139	4.816	4.816	(0.937)	110164	80.0000	83
	21 2,4-Dimethylphenol	107	4.848	4.848	(0.944)	391699	80.0000	85(Q)

Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5057.D
Report Date: 26-Oct-2011 09:59

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
	22	bis(2-Chloroethoxy)methane	93	4.923	4.923	(0.958)	494082	80.0000	85
$	23	2,4-Dichlorophenol-d3	165	5.009	5.009	(0.975)	210720	80.0000	85
	24	2,4-Dichlorophenol	162	5.020	5.020	(0.977)	193773	80.0000	85
*	25	Naphthalene-d8	136	5.138	5.138	(1.000)	235234	40.0000	
	26	Naphthalene	128	5.159	5.159	(1.004)	482017	80.0000	80
$	27	4-Chloroaniline-d4	131	5.191	5.191	(1.010)	185866	80.0000	85(Q)
	28	4-Chloroaniline	127	5.191	5.191	(1.010)	205320	80.0000	85
	29	Hexachlorobutadiene	225	5.266	5.267	(1.025)	137369	80.0000	81
	30	Caprolactam	113	5.459	5.460	(1.063)	81646	80.0000	90
	31	4-Chloro-3-methylphenol	107	5.599	5.599	(1.090)	319912	80.0000	87
	32	2-Methylnaphthalene	142	5.738	5.738	(1.117)	341151	80.0000	82
	33	Hexachlorocyclopentadiene	237	5.878	5.878	(0.890)	166402	80.0000	88(Q)
	34	1,2,4,5-Tetrachlorobenzene	216	5.878	5.878	(0.890)	542388	80.0000	80
	35	2,4,6-Trichlorophenol	196	5.963	5.974	(0.903)	154742	80.0000	74
	36	2,4,5-Trichlorophenol	196	5.996	5.996	(0.907)	175026	80.0000	82
	37	1,1'-Biphenyl	154	6.124	6.124	(0.927)	480034	80.0000	80
	38	2-Chloronaphthalene	162	6.135	6.146	(0.929)	402180	80.0000	75
	39	2-Nitroaniline	65	6.221	6.221	(0.942)	200029	80.0000	78
$	40	Dimethylphthalate-d6	166	6.350	6.350	(0.961)	526305	80.0000	85
	41	Dimethylphthalate	163	6.371	6.371	(0.964)	476639	80.0000	82
	42	2,6-Dinitrotoluene	165	6.414	6.414	(0.971)	115289	80.0000	81
$	43	Acenaphthylene-d8	160	6.478	6.478	(0.981)	636418	80.0000	79
	44	Acenaphthylene	152	6.489	6.489	(0.982)	590360	80.0000	80
	45	3-Nitroaniline	138	6.553	6.553	(0.992)	80117	80.0000	85
*	46	Acenaphthene-d10	164	6.607	6.607	(1.000)	169053	40.0000	
	47	Acenaphthene	153	6.628	6.628	(1.003)	370943	80.0000	78
	48	2,4-Dinitrophenol	184	6.639	6.639	(1.005)	62664	80.0000	96(Q)
	52	Dibenzofuran	168	6.768	6.779	(1.024)	551983	80.0000	79
$	49	4-Nitrophenol-d4	143	6.682	6.682	(1.011)	77295	80.0000	86
	50	4-Nitrophenol	109	6.693	6.693	(1.013)	147800	80.0000	85
	51	2,4-Dinitrotoluene	165	6.746	6.757	(1.021)	147926	80.0000	81(Q)
	118	2,3,4,6-Tetrachlorophenol	232	6.875	6.875	(1.041)	126259	80.0000	86
	53	Diethylphthalate	149	6.950	6.950	(1.052)	434279	80.0000	80
$	54	Fluorene-d10	176	7.036	7.036	(1.065)	458533	80.0000	80
	56	Fluorene	166	7.057	7.057	(1.068)	476393	80.0000	83
	55	4-Chlorophenyl-phenylether	204	7.057	7.057	(1.068)	245071	80.0000	81
	57	4-Nitroaniline	138	7.057	7.068	(1.068)	85579	80.0000	82
$	58	4,6-Dinitro-2-methylphenol-d2	200	7.079	7.090	(0.904)	97757	80.0000	85(Q)
	59	4,6-Dinitro-2-methylphenol	198	7.089	7.090	(0.906)	96645	80.0000	86(Q)
	60	N-Nitrosodiphenylamine	169	7.143	7.154	(0.912)	357175	80.0000	80
	61	4-Bromophenyl-phenylether	248	7.454	7.465	(0.952)	125318	80.0000	79
	62	Hexachlorobenzene	284	7.518	7.529	(0.960)	133889	80.0000	79
	63	Atrazine	200	7.583	7.583	(0.969)	144690	80.0000	90
	64	Pentachlorophenol	266	7.679	7.679	(0.981)	78593	80.0000	95
*	65	Phenanthrene-d10	188	7.829	7.840	(1.000)	293271	40.0000	
	66	Phenanthrene	178	7.851	7.862	(1.003)	666621	80.0000	81
$	67	Anthracene-d10	188	7.883	7.883	(1.007)	693154	80.0000	83
	68	Anthracene	178	7.894	7.894	(1.008)	686895	80.0000	82
	117	Carbazole	167	8.022	8.022	(1.025)	567776	80.0000	84
	70	Di-n-butylphthalate	149	8.301	8.312	(1.060)	624097	80.0000	86
	71	Fluoranthene	202	8.848	8.859	(1.130)	735264	80.0000	87
$	72	Pyrene-d10	212	9.020	9.041	(0.888)	551098	80.0000	74
	73	Pyrene	202	9.041	9.063	(0.890)	739941	80.0000	78
	74	Butylbenzylphthalate	149	9.577	9.620	(0.943)	248048	80.0000	85

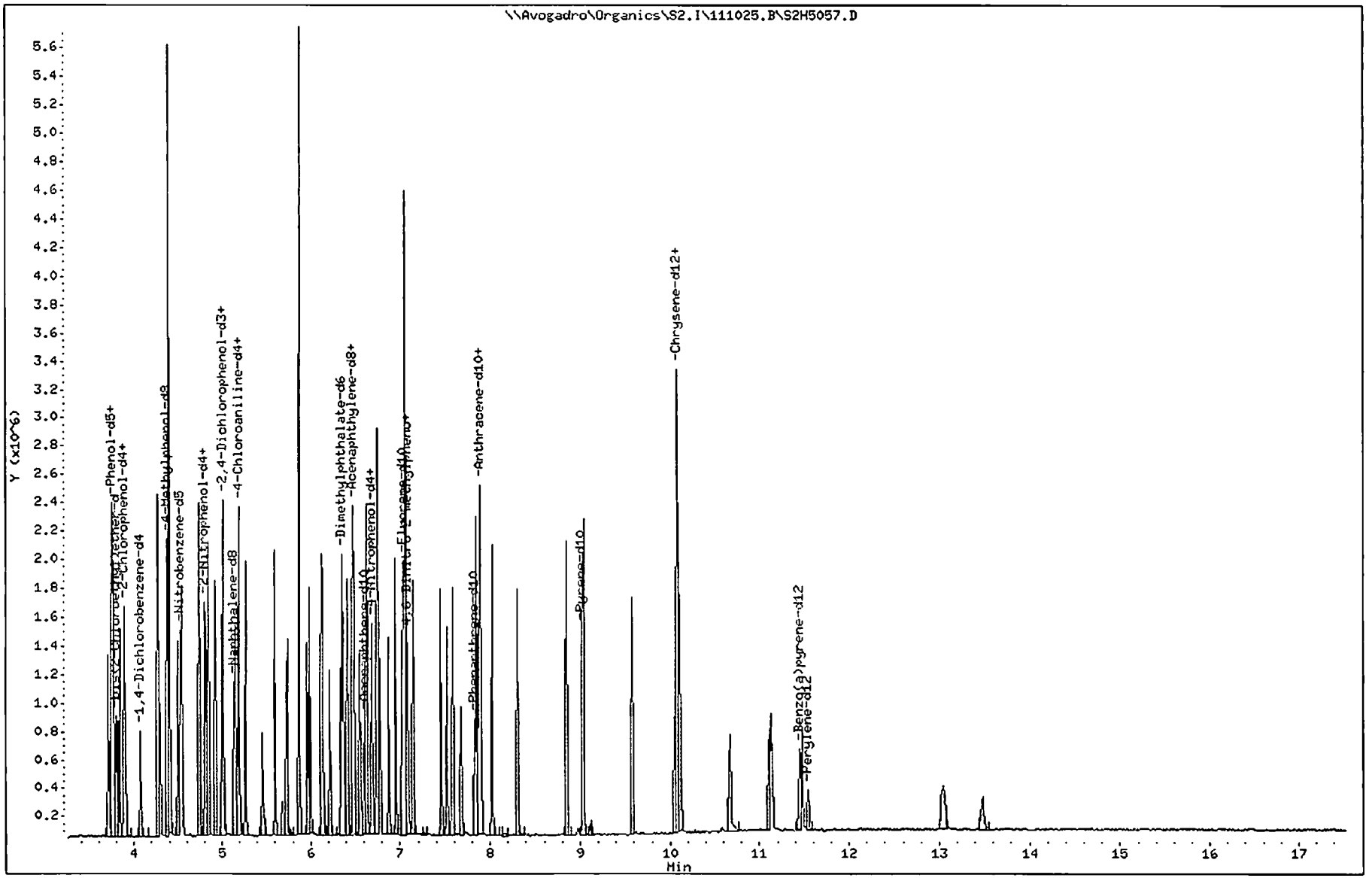
Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5057.D
Report Date: 26-Oct-2011 09:59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
75	3,3'-Dichlorobenzidine	252	10.049	10.114	(0.989)	156205	80.0000	90
76	Benzo(a)anthracene	228	10.081	10.146	(0.993)	567091	80.0000	81(H)
* 77	Chrysene-d12	240	10.092	10.156	(1.000)	235322	40.0000	(QH)
78	Chrysene	228	10.114	10.178	(0.996)	494156	80.0000	80(H)
79	bis(2-Ethylhexyl)phthalate	149	10.081	10.146	(0.993)	295783	80.0000	83
80	Di-n-octylphthalate	149	10.671	10.757	(0.925)	431178	80.0000	88
81	Benzo(b)fluoranthene	252	11.111	11.197	(0.963)	399407	80.0000	92
82	Benzo(k)fluoranthene	252	11.132	11.218	(0.965)	397379	80.0000	79
$ 83	Benzo(a)pyrene-d12	264	11.443	11.540	(0.992)	279187	80.0000	85
84	Benzo(a)pyrene	252	11.475	11.572	(0.994)	328830	80.0000	86
* 85	Perylene-d12	264	11.540	11.636	(1.000)	134320	40.0000	
86	Indeno(1,2,3-cd)pyrene	276	13.030	13.127	(1.129)	243524	80.0000	83
87	Dibenzo(a,h)anthracene	278	13.052	13.159	(1.131)	204038	80.0000	84
88	Benzo(g,h,i)perylene	276	13.481	13.588	(1.168)	204085	80.0000	84

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5057.D
Date : 25-OCT-2011 13:07
Client ID: SSTD0402W
Instrument: S2.i
Sample Info: SSTD0402W,SSTD0402W
Volume Injected (uL): 2.0
Operator: SRC:
Column phase: RXI-5SILMS
Column diameter: 0.25



7E - FORM VII SV-1

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date: 11/10/2011 Time: 9:31

Lab File ID: S2H5248.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202X Init. Calib. Time(s): 11:35 13:07

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
Benzaldehyde	1.964	1.871	0.010	-4.7	40.0
Phenol	3.455	3.207	0.800	-7.2	25.0
Bis(2-chloroethyl)ether	2.539	2.322	0.700	-8.5	25.0
2-Chlorophenol	1.121	1.125	0.800	0.4	25.0
2-Methylphenol	1.896	1.998	0.700	5.4	25.0
2,2´-Oxybis(1-chloropropane)	2.566	2.328	0.010	-9.3	40.0
Acetophenone	3.271	3.333	0.010	1.9	40.0
4-Methylphenol	1.942	2.158	0.600	11.1	25.0
N-Nitroso-di-n-propylamine	1.580	1.678	0.500	6.3	25.0
Hexachloroethane	0.872	0.871	0.300	-0.1	25.0
Nitrobenzene	1.043	0.954	0.200	-8.5	25.0
Isophorone	1.782	1.862	0.400	4.5	25.0
2-Nitrophenol	0.226	0.209	0.100	-7.3	25.0
2,4-Dimethylphenol	0.785	0.762	0.200	-2.9	25.0
Bis(2-chloroethoxy)methane	0.992	1.029	0.300	3.7	25.0
2,4-Dichlorophenol	0.386	0.400	0.200	3.6	25.0
Naphthalene	1.030	1.074	0.700	4.3	25.0
4-Chloroaniline	0.413	0.450	0.010	8.9	40.0
Hexachlorobutadiene	0.287	0.317	0.010	10.5	40.0
Caprolactam	0.154	0.182	0.010	18.2	40.0
4-Chloro-3-methylphenol	0.625	0.744	0.200	19.0	25.0
2-Methylnaphthalene	0.704	0.858	0.400	21.8	25.0
Hexachlorocyclopentadiene	0.450	0.395	0.010	-12.2	40.0
2,4,6-Trichlorophenol	0.494	0.527	0.200	6.6	25.0
2,4,5-Trichlorophenol	0.508	0.522	0.200	2.8	25.0
1,1´-Biphenyl	1.414	1.414	0.010	0.0	40.0
2-Chloronaphthalene	1.263	1.113	0.800	-11.9	25.0
2-Nitroaniline	0.606	0.555	0.010	-8.5	25.0
Dimethylphthalate	1.370	1.528	0.010	11.5	40.0
2,6-Dinitrotoluene	0.339	0.360	0.200	6.2	25.0
Acenaphthylene	1.742	1.619	0.900	-7.0	25.0
3-Nitroaniline	0.224	0.232	0.010	3.6	40.0
Acenaphthene	1.128	1.130	0.900	0.2	25.0

7F - FORM VII SV-2

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date: 11/10/2011 Time: 9:31

Lab File ID: S2H5248.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202X Init. Calib. Time(s): 11:35 13:07

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
2,4-Dinitrophenol	0.155	0.153	0.010	-1.5	40.0
4-Nitrophenol	0.410	0.402	0.010	-1.9	40.0
Dibenzofuran	1.657	1.600	0.800	-3.4	25.0
2,4-Dinitrotoluene	0.430	0.454	0.200	5.4	25.0
Diethylphthalate	1.288	1.194	0.010	-7.2	40.0
Fluorene	1.352	1.352	0.900	0.0	25.0
4-Chlorophenyl-phenylether	0.719	0.802	0.400	11.5	25.0
4-Nitroaniline	0.246	0.250	0.010	1.6	40.0
4,6-Dinitro-2-methylphenol	0.152	0.125	0.010	-17.8	40.0
N-Nitrosodiphenylamine (1)	0.610	0.674	0.010	10.4	40.0
1,2,4,5-Tetrachlorobenzene	1.610	1.338	0.010	-16.9	40.0
4-Bromophenyl-phenylether	0.217	0.204	0.100	-5.9	25.0
Hexachlorobenzene	0.231	0.214	0.100	-7.0	25.0
Atrazine	0.220	0.197	0.010	-10.4	40.0
Pentachlorophenol	0.113	0.100	0.050	-11.3	25.0
Phenanthrene	1.123	1.026	0.700	-8.7	25.0
Anthracene	1.142	1.057	0.700	-7.5	25.0
Carbazole	0.923	0.935	0.010	1.3	40.0
Di-n-butylphthalate	0.991	0.930	0.010	-6.2	40.0
Fluoranthene	1.156	1.175	0.600	1.7	25.0
Pyrene	1.604	1.479	0.600	-7.8	25.0
Butylbenzylphthalate	0.497	0.509	0.010	2.5	40.0
3,3'-Dichlorobenzidine	0.297	0.311	0.010	5.0	40.0
Benzo(a)anthracene	1.187	1.077	0.800	-9.3	25.0
Chrysene	1.047	1.008	0.700	-3.7	25.0
Bis(2-ethylhexyl)phthalate	0.608	0.663	0.010	9.1	40.0
Di-n-octylphthalate	1.456	0.890	0.010	-38.9	40.0
Benzo(b)fluoranthene	1.298	1.497	0.700	15.4	25.0
Benzo(k)fluoranthene	1.501	1.154	0.700	-23.1	25.0
Benzo(a)pyrene	1.140	1.013	0.700	-11.1	25.0
Indeno(1,2,3-cd)pyrene	0.878	0.825	0.500	-6.0	25.0
Dibenzo(a,h)anthracene	0.723	0.701	0.400	-3.1	25.0
Benzo(g,h,i)perylene	0.724	0.699	0.500	-3.4	25.0
2,3,4,6-Tetrachlorophenol	0.348	0.337	0.100	-3.4	25.0

(1) Cannot be separated from Diphenylamine

7G - FORM VII SV-3

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date: 11/10/2011 Time: 9:31

Lab File ID: S2H5248.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202X Init. Calib. Time(s): 11:35 13:07

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	RRF	RRF020	MIN RRF	%D	MAX %D
Phenol-d5	1.260	1.214	0.010	-3.6	25.0
Bis(2-chloroethyl)ether-d8	1.736	1.514	0.010	-12.8	25.0
2-Chlorophenol-d4	1.090	1.055	0.010	-3.2	25.0
4-Methylphenol-d8	1.708	1.950	0.010	14.2	25.0
Nitrobenzene-d5	0.208	0.217	0.010	4.0	40.0
2-Nitrophenol-d4	0.230	0.227	0.010	-1.3	25.0
2,4-Dichlorophenol-d3	0.420	0.456	0.010	8.6	25.0
4-Chloroaniline-d4	0.373	0.411	0.010	10.1	40.0
Dimethylphthalate-d6	1.471	1.461	0.010	-0.6	40.0
Acenaphthylene-d8	1.913	1.840	0.010	-3.8	25.0
4-Nitrophenol-d4	0.212	0.207	0.010	-2.5	40.0
Fluorene-d10	1.351	1.274	0.010	-5.7	25.0
4,6-Dinitro-2-methylphenol-d2	0.156	0.156	0.010	-0.2	25.0
Anthracene-d10	1.143	1.111	0.010	-2.7	25.0
Pyrene-d10	1.260	1.127	0.010	-10.6	25.0
Benzo(a)pyrene-d12	0.982	0.846	0.010	-13.8	25.0

7E - FORM VII SV-1

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date: 11/10/2011 Time: 18:26

Lab File ID: S2H5273.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202Y Init. Calib. Time(s): 11:35 13:07

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
Benzaldehyde	1.964	1.724	0.010	-12.2	50.0
Phenol	3.455	3.047	0.010	-11.8	50.0
Bis(2-chloroethyl)ether	2.539	2.080	0.010	-18.1	50.0
2-Chlorophenol	1.121	1.048	0.010	-6.4	50.0
2-Methylphenol	1.896	1.798	0.010	-5.2	50.0
2,2'-Oxybis(1-chloropropane)	2.566	1.972	0.010	-23.2	50.0
Acetophenone	3.271	3.075	0.010	-6.0	50.0
4-Methylphenol	1.942	1.860	0.010	-4.2	50.0
N-Nitroso-di-n-propylamine	1.580	1.416	0.010	-10.4	50.0
Hexachloroethane	0.872	0.804	0.010	-7.8	50.0
Nitrobenzene	1.043	0.830	0.010	-20.5	50.0
Isophorone	1.782	1.678	0.010	-5.8	50.0
2-Nitrophenol	0.226	0.191	0.010	-15.3	50.0
2,4-Dimethylphenol	0.785	0.684	0.010	-12.9	50.0
Bis(2-chloroethoxy)methane	0.992	0.906	0.010	-8.7	50.0
2,4-Dichlorophenol	0.386	0.373	0.010	-3.4	50.0
Naphthalene	1.030	1.025	0.010	-0.4	50.0
4-Chloroaniline	0.413	0.411	0.010	-0.6	50.0
Hexachlorobutadiene	0.287	0.333	0.010	16.2	50.0
Caprolactam	0.154	0.148	0.010	-4.0	50.0
4-Chloro-3-methylphenol	0.625	0.647	0.010	3.5	50.0
2-Methylnaphthalene	0.704	0.748	0.010	6.3	50.0
Hexachlorocyclopentadiene	0.450	0.338	0.010	-24.9	50.0
2,4,6-Trichlorophenol	0.494	0.548	0.010	10.9	50.0
2,4,5-Trichlorophenol	0.508	0.529	0.010	4.2	50.0
1,1'-Biphenyl	1.414	1.359	0.010	-3.9	50.0
2-Chloronaphthalene	1.263	1.121	0.010	-11.3	50.0
2-Nitroaniline	0.606	0.482	0.010	-20.4	50.0
Dimethylphthalate	1.370	1.569	0.010	14.5	50.0
2,6-Dinitrotoluene	0.339	0.362	0.010	7.0	50.0
Acenaphthylene	1.742	1.662	0.010	-4.6	50.0
3-Nitroaniline	0.224	0.212	0.010	-5.5	50.0
Acenaphthene	1.128	1.039	0.010	-7.9	50.0

7F - FORM VII SV-2

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date: 11/10/2011 Time: 18:26

Lab File ID: S2H5273.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202Y Init. Calib. Time(s): 11:35 13:07

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	RRF	RRF020	MIN RRF	%D	MAX %D
2,4-Dinitrophenol	0.155	0.113	0.010	-26.9	50.0
4-Nitrophenol	0.410	0.351	0.010	-14.3	50.0
Dibenzofuran	1.657	1.630	0.010	-1.6	50.0
2,4-Dinitrotoluene	0.430	0.440	0.010	2.2	50.0
Diethylphthalate	1.288	1.122	0.010	-12.9	50.0
Fluorene	1.352	1.225	0.010	-9.4	50.0
4-Chlorophenyl-phenylether	0.719	0.833	0.010	15.8	50.0
4-Nitroaniline	0.246	0.199	0.010	-19.4	50.0
4,6-Dinitro-2-methylphenol	0.152	0.124	0.010	-18.7	50.0
N-Nitrosodiphenylamine (1)	0.610	0.659	0.010	8.0	50.0
1,2,4,5-Tetrachlorobenzene	1.610	1.376	0.010	-14.5	50.0
4-Bromophenyl-phenylether	0.217	0.212	0.010	-2.0	50.0
Hexachlorobenzene	0.231	0.235	0.010	1.7	50.0
Atrazine	0.220	0.226	0.010	2.6	50.0
Pentachlorophenol	0.113	0.088	0.010	-21.4	50.0
Phenanthrene	1.123	1.057	0.010	-5.9	50.0
Anthracene	1.142	1.104	0.010	-3.3	50.0
Carbazole	0.923	0.804	0.010	-12.9	50.0
Di-n-butylphthalate	0.991	0.977	0.010	-1.4	50.0
Fluoranthene	1.156	1.081	0.010	-6.4	50.0
Pyrene	1.604	1.539	0.010	-4.1	50.0
Butylbenzylphthalate	0.497	0.516	0.010	3.9	50.0
3,3'-Dichlorobenzidine	0.297	0.269	0.010	-9.1	50.0
Benzo(a)anthracene	1.187	1.049	0.010	-11.6	50.0
Chrysene	1.047	0.956	0.010	-8.7	50.0
Bis(2-ethylhexyl)phthalate	0.608	0.725	0.010	19.3	50.0
Di-n-octylphthalate	1.456	0.973	0.010	-33.1	50.0
Benzo(b)fluoranthene	1.298	1.084	0.010	-16.4	50.0
Benzo(k)fluoranthene	1.501	1.380	0.010	-8.0	50.0
Benzo(a)pyrene	1.140	0.982	0.010	-13.9	50.0
Indeno(1,2,3-cd)pyrene	0.878	0.863	0.010	-1.8	50.0
Dibenzo(a,h)anthracene	0.723	0.720	0.010	-0.4	50.0
Benzo(g,h,i)perylene	0.724	0.779	0.010	7.6	50.0
2,3,4,6-Tetrachlorophenol	0.348	0.331	0.010	-4.9	50.0

(1) Cannot be separated from Diphenylamine

7G - FORM VII SV-3

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date: 11/10/2011 Time: 18:26

Lab File ID: S2H5273.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202Y Init. Calib. Time(s): 11:35 13:07

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
Phenol-d5	1.260	1.036	0.010	-17.7	50.0
Bis(2-chloroethyl)ether-d8	1.736	1.384	0.010	-20.3	50.0
2-Chlorophenol-d4	1.090	1.002	0.010	-8.0	50.0
4-Methylphenol-d8	1.708	1.856	0.010	8.7	50.0
Nitrobenzene-d5	0.208	0.192	0.010	-8.0	50.0
2-Nitrophenol-d4	0.230	0.208	0.010	-9.6	50.0
2,4-Dichlorophenol-d3	0.420	0.439	0.010	4.5	50.0
4-Chloroaniline-d4	0.373	0.370	0.010	-0.6	50.0
Dimethylphthalate-d6	1.471	1.595	0.010	8.4	50.0
Acenaphthylene-d8	1.913	1.922	0.010	0.5	50.0
4-Nitrophenol-d4	0.212	0.150	0.010	-29.1	50.0
Fluorene-d10	1.351	1.289	0.010	-4.6	50.0
4,6-Dinitro-2-methylphenol-d2	0.156	0.140	0.010	-10.6	50.0
Anthracene-d10	1.143	1.078	0.010	-5.6	50.0
Pyrene-d10	1.260	1.262	0.010	0.1	50.0
Benzo(a)pyrene-d12	0.982	0.858	0.010	-12.5	50.0

7E - FORM VII SV-1

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date: 11/11/2011 Time: 9:01

Lab File ID: S2H5276.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202Z Init. Calib. Time(s): 11:35 13:07

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	RRF	RRF020	MIN RRF	%D	MAX %D
Benzaldehyde	1.964	1.896	0.010	-3.5	40.0
Phenol	3.455	3.239	0.800	-6.2	25.0
Bis(2-chloroethyl)ether	2.539	2.238	0.700	-11.9	25.0
2-Chlorophenol	1.121	1.028	0.800	-8.3	25.0
2-Methylphenol	1.896	1.810	0.700	-4.6	25.0
2,2´-Oxybis(1-chloropropane)	2.566	2.193	0.010	-14.5	40.0
Acetophenone	3.271	2.989	0.010	-8.6	40.0
4-Methylphenol	1.942	1.903	0.600	-2.0	25.0
N-Nitroso-di-n-propylamine	1.580	1.593	0.500	0.9	25.0
Hexachloroethane	0.872	0.863	0.300	-1.1	25.0
Nitrobenzene	1.043	0.987	0.200	-5.4	25.0
Isophorone	1.782	1.721	0.400	-3.4	25.0
2-Nitrophenol	0.226	0.236	0.100	4.5	25.0
2,4-Dimethylphenol	0.785	0.817	0.200	4.0	25.0
Bis(2-chloroethoxy)methane	0.992	1.091	0.300	10.0	25.0
2,4-Dichlorophenol	0.386	0.449	0.200	16.2	25.0
Naphthalene	1.030	1.092	0.700	6.0	25.0
4-Chloroaniline	0.413	0.466	0.010	12.8	40.0
Hexachlorobutadiene	0.287	0.339	0.010	18.1	40.0
Caprolactam	0.154	0.162	0.010	5.1	40.0
4-Chloro-3-methylphenol	0.625	0.648	0.200	3.7	25.0
2-Methylnaphthalene	0.704	0.794	0.400	12.7	25.0
Hexachlorocyclopentadiene	0.450	0.297	0.010	-34.0	40.0
2,4,6-Trichlorophenol	0.494	0.390	0.200	-21.0	25.0
2,4,5-Trichlorophenol	0.508	0.432	0.200	-14.9	25.0
1,1´-Biphenyl	1.414	1.200	0.010	-15.1	40.0
2-Chloronaphthalene	1.263	1.144	0.800	-9.4	25.0
2-Nitroaniline	0.606	0.495	0.010	-18.3	25.0
Dimethylphthalate	1.370	1.274	0.010	-7.0	40.0
2,6-Dinitrotoluene	0.339	0.321	0.200	-5.1	25.0
Acenaphthylene	1.742	1.598	0.900	-8.3	25.0
3-Nitroaniline	0.224	0.204	0.010	-9.0	40.0
Acenaphthene	1.128	1.030	0.900	-8.6	25.0

7F - FORM VII SV-2

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date: 11/11/2011 Time: 9:01

Lab File ID: S2H5276.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202Z Init. Calib. Time(s): 11:35 13:07

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	RRF	RRF020	MIN RRF	%D	MAX %D
2,4-Dinitrophenol	0.155	0.115	0.010	-25.9	40.0
4-Nitrophenol	0.410	0.351	0.010	-14.4	40.0
Dibenzofuran	1.657	1.466	0.800	-11.5	25.0
2,4-Dinitrotoluene	0.430	0.392	0.200	-9.0	25.0
Diethylphthalate	1.288	1.237	0.010	-3.9	40.0
Fluorene	1.352	1.237	0.900	-8.5	25.0
4-Chlorophenyl-phenylether	0.719	0.710	0.400	-1.3	25.0
4-Nitroaniline	0.246	0.208	0.010	-15.7	40.0
4,6-Dinitro-2-methylphenol	0.152	0.114	0.010	-25.0	40.0
N-Nitrosodiphenylamine (1)	0.610	0.565	0.010	-7.4	40.0
1,2,4,5-Tetrachlorobenzene	1.610	1.352	0.010	-16.0	40.0
4-Bromophenyl-phenylether	0.217	0.217	0.100	-0.1	25.0
Hexachlorobenzene	0.231	0.216	0.100	-6.4	25.0
Atrazine	0.220	0.214	0.010	-2.7	40.0
Pentachlorophenol	0.113	0.079	0.050	-29.8	25.0
Phenanthrene	1.123	0.991	0.700	-11.8	25.0
Anthracene	1.142	0.934	0.700	-18.2	25.0
Carbazole	0.923	0.789	0.010	-14.5	40.0
Di-n-butylphthalate	0.991	1.041	0.010	5.0	40.0
Fluoranthene	1.156	1.061	0.600	-8.2	25.0
Pyrene	1.604	1.627	0.600	1.4	25.0
Butylbenzylphthalate	0.497	0.566	0.010	14.0	40.0
3,3'-Dichlorobenzidine	0.297	0.327	0.010	10.3	40.0
Benzo(a)anthracene	1.187	1.066	0.800	-10.2	25.0
Chrysene	1.047	0.991	0.700	-5.3	25.0
Bis(2-ethylhexyl)phthalate	0.608	0.732	0.010	20.4	40.0
Di-n-octylphthalate	1.456	1.492	0.010	2.5	40.0
Benzo(b)fluoranthene	1.298	1.268	0.700	-2.3	25.0
Benzo(k)fluoranthene	1.501	1.198	0.700	-20.2	25.0
Benzo(a)pyrene	1.140	1.034	0.700	-9.3	25.0
Indeno(1,2,3-cd)pyrene	0.878	0.934	0.500	6.3	25.0
Dibenzo(a,h)anthracene	0.723	0.747	0.400	3.3	25.0
Benzo(g,h,i)perylene	0.724	0.791	0.500	9.3	25.0
2,3,4,6-Tetrachlorophenol	0.348	0.294	0.100	-15.6	25.0

(1) Cannot be separated from Diphenylamine

7G - FORM VII SV-3

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date: 11/11/2011 Time: 9:01

Lab File ID: S2H5276.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202Z Init. Calib. Time(s): 11:35 13:07

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
Phenol-d5	1.260	1.136	0.010	-9.8	25.0
Bis(2-chloroethyl)ether-d8	1.736	1.552	0.010	-10.6	25.0
2-Chlorophenol-d4	1.090	1.073	0.010	-1.5	25.0
4-Methylphenol-d8	1.708	1.855	0.010	8.6	25.0
Nitrobenzene-d5	0.208	0.215	0.010	3.0	40.0
2-Nitrophenol-d4	0.230	0.250	0.010	8.8	25.0
2,4-Dichlorophenol-d3	0.420	0.495	0.010	17.8	25.0
4-Chloroaniline-d4	0.373	0.475	0.010	27.4	40.0
Dimethylphthalate-d6	1.471	1.335	0.010	-9.2	40.0
Acenaphthylene-d8	1.913	1.672	0.010	-12.6	25.0
4-Nitrophenol-d4	0.212	0.132	0.010	-37.7	40.0
Fluorene-d10	1.351	1.317	0.010	-2.5	25.0
4,6-Dinitro-2-methylphenol-d2	0.156	0.114	0.010	-26.9	25.0
Anthracene-d10	1.143	1.056	0.010	-7.6	25.0
Pyrene-d10	1.260	1.199	0.010	-4.9	25.0
Benzo(a)pyrene-d12	0.982	0.852	0.010	-13.2	25.0

7E - FORM VII SV-1

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date: 11/11/2011 Time: 9:59

Lab File ID: S2H5278.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202A Init. Calib. Time(s): 11:35 13:07

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
Benzaldehyde	1.964	1.823	0.010	-7.1	40.0
Phenol	3.455	3.091	0.800	-10.5	25.0
Bis(2-chloroethyl)ether	2.539	2.192	0.700	-13.7	25.0
2-Chlorophenol	1.121	1.100	0.800	-1.9	25.0
2-Methylphenol	1.896	1.778	0.700	-6.3	25.0
2,2'-Oxybis(1-chloropropane)	2.566	2.101	0.010	-18.1	40.0
Acetophenone	3.271	3.010	0.010	-8.0	40.0
4-Methylphenol	1.942	1.970	0.600	1.4	25.0
N-Nitroso-di-n-propylamine	1.580	1.634	0.500	3.4	25.0
Hexachloroethane	0.872	0.866	0.300	-0.7	25.0
Nitrobenzene	1.043	0.920	0.200	-11.8	25.0
Isophorone	1.782	1.653	0.400	-7.2	25.0
2-Nitrophenol	0.226	0.227	0.100	0.6	25.0
2,4-Dimethylphenol	0.785	0.809	0.200	3.1	25.0
Bis(2-chloroethoxy)methane	0.992	1.026	0.300	3.5	25.0
2,4-Dichlorophenol	0.386	0.394	0.200	2.1	25.0
Naphthalene	1.030	1.115	0.700	8.3	25.0
4-Chloroaniline	0.413	0.433	0.010	4.7	40.0
Hexachlorobutadiene	0.287	0.331	0.010	15.5	40.0
Caprolactam	0.154	0.158	0.010	2.7	40.0
4-Chloro-3-methylphenol	0.625	0.698	0.200	11.6	25.0
2-Methylnaphthalene	0.704	0.812	0.400	15.4	25.0
Hexachlorocyclopentadiene	0.450	0.314	0.010	-30.2	40.0
2,4,6-Trichlorophenol	0.494	0.436	0.200	-11.7	25.0
2,4,5-Trichlorophenol	0.508	0.520	0.200	2.2	25.0
1,1'-Biphenyl	1.414	1.281	0.010	-9.4	40.0
2-Chloronaphthalene	1.263	1.108	0.800	-12.3	25.0
2-Nitroaniline	0.606	0.513	0.010	-15.3	25.0
Dimethylphthalate	1.370	1.408	0.010	2.8	40.0
2,6-Dinitrotoluene	0.339	0.329	0.200	-3.0	25.0
Acenaphthylene	1.742	1.571	0.900	-9.8	25.0
3-Nitroaniline	0.224	0.222	0.010	-0.8	40.0
Acenaphthene	1.128	1.139	0.900	1.0	25.0

7F - FORM VII SV-2

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date: 11/11/2011 Time: 9:59

Lab File ID: S2H5278.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202A Init. Calib. Time(s): 11:35 13:07

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
2,4-Dinitrophenol	0.155	0.121	0.010	-22.0	40.0
4-Nitrophenol	0.410	0.353	0.010	-13.9	40.0
Dibenzofuran	1.657	1.539	0.800	-7.1	25.0
2,4-Dinitrotoluene	0.430	0.427	0.200	-0.8	25.0
Diethylphthalate	1.288	1.329	0.010	3.2	40.0
Fluorene	1.352	1.375	0.900	1.7	25.0
4-Chlorophenyl-phenylether	0.719	0.797	0.400	10.8	25.0
4-Nitroaniline	0.246	0.234	0.010	-4.9	40.0
4,6-Dinitro-2-methylphenol	0.152	0.111	0.010	-27.2	40.0
N-Nitrosodiphenylamine (1)	0.610	0.568	0.010	-6.8	40.0
1,2,4,5-Tetrachlorobenzene	1.610	1.340	0.010	-16.8	40.0
4-Bromophenyl-phenylether	0.217	0.199	0.100	-8.2	25.0
Hexachlorobenzene	0.231	0.219	0.100	-4.9	25.0
Atrazine	0.220	0.196	0.010	-11.0	40.0
Pentachlorophenol	0.113	0.087	0.050	-23.0	25.0
Phenanthrene	1.123	0.948	0.700	-15.6	25.0
Anthracene	1.142	0.931	0.700	-18.5	25.0
Carbazole	0.923	0.791	0.010	-14.3	40.0
Di-n-butylphthalate	0.991	0.903	0.010	-8.9	40.0
Fluoranthene	1.156	1.041	0.600	-10.0	25.0
Pyrene	1.604	1.433	0.600	-10.7	25.0
Butylbenzylphthalate	0.497	0.495	0.010	-0.4	40.0
3,3'-Dichlorobenzidine	0.297	0.312	0.010	5.2	40.0
Benzo(a)anthracene	1.187	1.145	0.800	-3.5	25.0
Chrysene	1.047	0.971	0.700	-7.2	25.0
Bis(2-ethylhexyl)phthalate	0.608	0.661	0.010	8.8	40.0
Di-n-octylphthalate	1.456	1.511	0.010	3.8	40.0
Benzo(b)fluoranthene	1.298	1.444	0.700	11.2	25.0
Benzo(k)fluoranthene	1.501	1.206	0.700	-19.6	25.0
Benzo(a)pyrene	1.140	1.016	0.700	-10.9	25.0
Indeno(1,2,3-cd)pyrene	0.878	0.985	0.500	12.1	25.0
Dibenzo(a,h)anthracene	0.723	0.812	0.400	12.3	25.0
Benzo(g,h,i)perylene	0.724	0.829	0.500	14.5	25.0
2,3,4,6-Tetrachlorophenol	0.348	0.292	0.100	-16.3	25.0

(1) Cannot be separated from Diphenylamine

7G - FORM VII SV-3

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date: 11/11/2011 Time: 9:59

Lab File ID: S2H5278.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202A Init. Calib. Time(s): 11:35 13:07

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
Phenol-d5	1.260	1.168	0.010	-7.3	25.0
Bis(2-chloroethyl)ether-d8	1.736	1.533	0.010	-11.7	25.0
2-Chlorophenol-d4	1.090	1.035	0.010	-5.0	25.0
4-Methylphenol-d8	1.708	1.884	0.010	10.3	25.0
Nitrobenzene-d5	0.208	0.203	0.010	-2.4	40.0
2-Nitrophenol-d4	0.230	0.229	0.010	-0.5	25.0
2,4-Dichlorophenol-d3	0.420	0.508	0.010	20.9	25.0
4-Chloroaniline-d4	0.373	0.394	0.010	5.8	40.0
Dimethylphthalate-d6	1.471	1.454	0.010	-1.2	40.0
Acenaphthylene-d8	1.913	1.781	0.010	-6.9	25.0
4-Nitrophenol-d4	0.212	0.150	0.010	-29.4	40.0
Fluorene-d10	1.351	1.329	0.010	-1.6	25.0
4,6-Dinitro-2-methylphenol-d2	0.156	0.133	0.010	-14.7	25.0
Anthracene-d10	1.143	1.057	0.010	-7.5	25.0
Pyrene-d10	1.260	1.087	0.010	-13.7	25.0
Benzo(a)pyrene-d12	0.982	0.845	0.010	-13.9	25.0

7E - FORM VII SV-1

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date: 11/14/2011 Time: 16:35

Lab File ID: S2H5290.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202C Init. Calib. Time(s): 11:35 13:07

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
Benzaldehyde	1.964	1.963	0.010	-0.1	40.0
Phenol	3.455	3.698	0.800	7.0	25.0
Bis(2-chloroethyl)ether	2.539	2.369	0.700	-6.7	25.0
2-Chlorophenol	1.121	1.178	0.800	5.1	25.0
2-Methylphenol	1.896	1.982	0.700	4.5	25.0
2,2'-Oxybis(1-chloropropane)	2.566	2.509	0.010	-2.2	40.0
Acetophenone	3.271	3.660	0.010	11.9	40.0
4-Methylphenol	1.942	2.209	0.600	13.7	25.0
N-Nitroso-di-n-propylamine	1.580	2.104	0.500	33.2	25.0
Hexachloroethane	0.872	0.910	0.300	4.4	25.0
Nitrobenzene	1.043	0.970	0.200	-7.0	25.0
Isophorone	1.782	1.835	0.400	3.0	25.0
2-Nitrophenol	0.226	0.247	0.100	9.4	25.0
2,4-Dimethylphenol	0.785	0.753	0.200	-4.1	25.0
Bis(2-chloroethoxy)methane	0.992	0.994	0.300	0.2	25.0
2,4-Dichlorophenol	0.386	0.468	0.200	21.2	25.0
Naphthalene	1.030	1.125	0.700	9.3	25.0
4-Chloroaniline	0.413	0.511	0.010	23.7	40.0
Hexachlorobutadiene	0.287	0.278	0.010	-3.0	40.0
Caprolactam	0.154	0.214	0.010	39.3	40.0
4-Chloro-3-methylphenol	0.625	0.792	0.200	26.6	25.0
2-Methylnaphthalene	0.704	0.827	0.400	17.5	25.0
Hexachlorocyclopentadiene	0.450	0.370	0.010	-17.7	40.0
2,4,6-Trichlorophenol	0.494	0.462	0.200	-6.5	25.0
2,4,5-Trichlorophenol	0.508	0.456	0.200	-10.2	25.0
1,1'-Biphenyl	1.414	1.252	0.010	-11.5	40.0
2-Chloronaphthalene	1.263	1.128	0.800	-10.7	25.0
2-Nitroaniline	0.606	0.556	0.010	-8.3	25.0
Dimethylphthalate	1.370	1.485	0.010	8.4	40.0
2,6-Dinitrotoluene	0.339	0.362	0.200	7.0	25.0
Acenaphthylene	1.742	1.613	0.900	-7.4	25.0
3-Nitroaniline	0.224	0.242	0.010	7.9	40.0
Acenaphthene	1.128	1.067	0.900	-5.3	25.0

7F - FORM VII SV-2

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date: 11/14/2011 Time: 16:35

Lab File ID: S2H5290.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202C Init. Calib. Time(s): 11:35 13:07

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	RRF	RRF020	MIN RRF	%D	MAX %D
2,4-Dinitrophenol	0.155	0.161	0.010	4.0	40.0
4-Nitrophenol	0.410	0.412	0.010	0.5	40.0
Dibenzofuran	1.657	1.541	0.800	-7.0	25.0
2,4-Dinitrotoluene	0.430	0.458	0.200	6.5	25.0
Diethylphthalate	1.288	1.336	0.010	3.8	40.0
Fluorene	1.352	1.421	0.900	5.1	25.0
4-Chlorophenyl-phenylether	0.719	0.721	0.400	0.2	25.0
4-Nitroaniline	0.246	0.237	0.010	-3.7	40.0
4,6-Dinitro-2-methylphenol	0.152	0.150	0.010	-1.9	40.0
N-Nitrosodiphenylamine (1)	0.610	0.592	0.010	-2.9	40.0
1,2,4,5-Tetrachlorobenzene	1.610	1.356	0.010	-15.8	40.0
4-Bromophenyl-phenylether	0.217	0.206	0.100	-5.0	25.0
Hexachlorobenzene	0.231	0.200	0.100	-13.2	25.0
Atrazine	0.220	0.243	0.010	10.5	40.0
Pentachlorophenol	0.113	0.106	0.050	-6.3	25.0
Phenanthrene	1.123	1.004	0.700	-10.6	25.0
Anthracene	1.142	1.076	0.700	-5.7	25.0
Carbazole	0.923	0.910	0.010	-1.4	40.0
Di-n-butylphthalate	0.991	1.131	0.010	14.1	40.0
Fluoranthene	1.156	1.142	0.600	-1.2	25.0
Pyrene	1.604	1.740	0.600	8.4	25.0
Butylbenzylphthalate	0.497	0.610	0.010	22.9	40.0
3,3'-Dichlorobenzidine	0.297	0.330	0.010	11.4	40.0
Benzo(a)anthracene	1.187	1.097	0.800	-7.6	25.0
Chrysene	1.047	0.985	0.700	-5.9	25.0
Bis(2-ethylhexyl)phthalate	0.608	0.731	0.010	20.4	40.0
Di-n-octylphthalate	1.456	1.910	0.010	31.2	40.0
Benzo(b)fluoranthene	1.298	1.390	0.700	7.1	25.0
Benzo(k)fluoranthene	1.501	1.343	0.700	-10.5	25.0
Benzo(a)pyrene	1.140	1.070	0.700	-6.2	25.0
Indeno(1,2,3-cd)pyrene	0.878	0.907	0.500	3.3	25.0
Dibenzo(a,h)anthracene	0.723	0.749	0.400	3.6	25.0
Benzo(g,h,i)perylene	0.724	0.743	0.500	2.7	25.0
2,3,4,6-Tetrachlorophenol	0.348	0.333	0.100	-4.4	25.0

(1) Cannot be separated from Diphenylamine

7G - FORM VII SV-3

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date: 11/14/2011 Time: 16:35

Lab File ID: S2H5290.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202C Init. Calib. Time(s): 11:35 13:07

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	RRF	RRF020	MIN RRF	%D	MAX %D
Phenol-d5	1.260	1.331	0.010	5.7	25.0
Bis(2-chloroethyl)ether-d8	1.736	1.663	0.010	-4.2	25.0
2-Chlorophenol-d4	1.090	1.168	0.010	7.2	25.0
4-Methylphenol-d8	1.708	2.233	0.010	30.8	25.0
Nitrobenzene-d5	0.208	0.206	0.010	-1.2	40.0
2-Nitrophenol-d4	0.230	0.262	0.010	13.7	25.0
2,4-Dichlorophenol-d3	0.420	0.514	0.010	22.4	25.0
4-Chloroaniline-d4	0.373	0.458	0.010	23.0	40.0
Dimethylphthalate-d6	1.471	1.641	0.010	11.6	40.0
Acenaphthylene-d8	1.913	1.748	0.010	-8.6	25.0
4-Nitrophenol-d4	0.212	0.242	0.010	14.3	40.0
Fluorene-d10	1.351	1.298	0.010	-4.0	25.0
4,6-Dinitro-2-methylphenol-d2	0.156	0.148	0.010	-4.9	25.0
Anthracene-d10	1.143	1.134	0.010	-0.7	25.0
Pyrene-d10	1.260	1.275	0.010	1.2	25.0
Benzo(a)pyrene-d12	0.982	0.936	0.010	-4.7	25.0

7E - FORM VII SV-1

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date: 11/14/2011 Time: 18:23

Lab File ID: S2H5295.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202D Init. Calib. Time(s): 11:35 13:07

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
Benzaldehyde	1.964	1.936	0.010	-1.4	50.0
Phenol	3.455	3.417	0.010	-1.1	50.0
Bis(2-chloroethyl)ether	2.539	2.582	0.010	1.7	50.0
2-Chlorophenol	1.121	1.144	0.010	2.1	50.0
2-Methylphenol	1.896	2.144	0.010	13.0	50.0
2,2'-Oxybis(1-chloropropane)	2.566	2.418	0.010	-5.8	50.0
Acetophenone	3.271	3.856	0.010	17.9	50.0
4-Methylphenol	1.942	2.495	0.010	28.5	50.0
N-Nitroso-di-n-propylamine	1.580	1.913	0.010	21.1	50.0
Hexachloroethane	0.872	0.873	0.010	0.2	50.0
Nitrobenzene	1.043	0.871	0.010	-16.5	50.0
Isophorone	1.782	1.821	0.010	2.2	50.0
2-Nitrophenol	0.226	0.212	0.010	-6.3	50.0
2,4-Dimethylphenol	0.785	0.726	0.010	-7.6	50.0
Bis(2-chloroethoxy)methane	0.992	0.943	0.010	-4.9	50.0
2,4-Dichlorophenol	0.386	0.393	0.010	1.7	50.0
Naphthalene	1.030	0.894	0.010	-13.2	50.0
4-Chloroaniline	0.413	0.470	0.010	13.9	50.0
Hexachlorobutadiene	0.287	0.265	0.010	-7.7	50.0
Caprolactam	0.154	0.204	0.010	32.7	50.0
4-Chloro-3-methylphenol	0.625	0.763	0.010	22.1	50.0
2-Methylnaphthalene	0.704	0.757	0.010	7.6	50.0
Hexachlorocyclopentadiene	0.450	0.347	0.010	-22.9	50.0
2,4,6-Trichlorophenol	0.494	0.433	0.010	-12.4	50.0
2,4,5-Trichlorophenol	0.508	0.496	0.010	-2.4	50.0
1,1'-Biphenyl	1.414	1.263	0.010	-10.7	50.0
2-Chloronaphthalene	1.263	1.067	0.010	-15.5	50.0
2-Nitroaniline	0.606	0.526	0.010	-13.1	50.0
Dimethylphthalate	1.370	1.455	0.010	6.2	50.0
2,6-Dinitrotoluene	0.339	0.351	0.010	3.7	50.0
Acenaphthylene	1.742	1.619	0.010	-7.0	50.0
3-Nitroaniline	0.224	0.237	0.010	5.7	50.0
Acenaphthene	1.128	0.878	0.010	-22.1	50.0

7F - FORM VII SV-2

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date: 11/14/2011 Time: 18:23

Lab File ID: S2H5295.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202D Init. Calib. Time(s): 11:35 13:07

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
2,4-Dinitrophenol	0.155	0.159	0.010	2.7	50.0
4-Nitrophenol	0.410	0.438	0.010	6.8	50.0
Dibenzofuran	1.657	1.555	0.010	-6.2	50.0
2,4-Dinitrotoluene	0.430	0.483	0.010	12.4	50.0
Diethylphthalate	1.288	1.172	0.010	-9.0	50.0
Fluorene	1.352	1.320	0.010	-2.4	50.0
4-Chlorophenyl-phenylether	0.719	0.693	0.010	-3.7	50.0
4-Nitroaniline	0.246	0.245	0.010	-0.6	50.0
4,6-Dinitro-2-methylphenol	0.152	0.125	0.010	-18.1	50.0
N-Nitrosodiphenylamine (1)	0.610	0.489	0.010	-19.8	50.0
1,2,4,5-Tetrachlorobenzene	1.610	1.235	0.010	-23.3	50.0
4-Bromophenyl-phenylether	0.217	0.211	0.010	-2.5	50.0
Hexachlorobenzene	0.231	0.213	0.010	-7.6	50.0
Atrazine	0.220	0.230	0.010	4.6	50.0
Pentachlorophenol	0.113	0.105	0.010	-6.3	50.0
Phenanthrene	1.123	0.980	0.010	-12.7	50.0
Anthracene	1.142	0.945	0.010	-17.2	50.0
Carbazole	0.923	0.914	0.010	-1.0	50.0
Di-n-butylphthalate	0.991	1.089	0.010	9.9	50.0
Fluoranthene	1.156	1.188	0.010	2.8	50.0
Pyrene	1.604	1.619	0.010	0.9	50.0
Butylbenzylphthalate	0.497	0.589	0.010	18.7	50.0
3,3'-Dichlorobenzidine	0.297	0.341	0.010	14.9	50.0
Benzo(a)anthracene	1.187	1.088	0.010	-8.3	50.0
Chrysene	1.047	0.972	0.010	-7.1	50.0
Bis(2-ethylhexyl)phthalate	0.608	0.743	0.010	22.3	50.0
Di-n-octylphthalate	1.456	2.087	0.010	43.4	50.0
Benzo(b)fluoranthene	1.298	1.294	0.010	-0.3	50.0
Benzo(k)fluoranthene	1.501	1.577	0.010	5.1	50.0
Benzo(a)pyrene	1.140	1.061	0.010	-7.0	50.0
Indeno(1,2,3-cd)pyrene	0.878	0.748	0.010	-14.9	50.0
Dibenzo(a,h)anthracene	0.723	0.654	0.010	-9.6	50.0
Benzo(g,h,i)perylene	0.724	0.592	0.010	-18.2	50.0
2,3,4,6-Tetrachlorophenol	0.348	0.354	0.010	1.7	50.0

(1) Cannot be separated from Diphenylamine

7G - FORM VII SV-3

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date: 11/14/2011 Time: 18:23

Lab File ID: S2H5295.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202D Init. Calib. Time(s): 11:35 13:07

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
Phenol-d5	1.260	1.296	0.010	2.9	50.0
Bis(2-chloroethyl)ether-d8	1.736	1.633	0.010	-5.9	50.0
2-Chlorophenol-d4	1.090	1.145	0.010	5.1	50.0
4-Methylphenol-d8	1.708	2.403	0.010	40.7	50.0
Nitrobenzene-d5	0.208	0.189	0.010	-9.2	50.0
2-Nitrophenol-d4	0.230	0.226	0.010	-1.9	50.0
2,4-Dichlorophenol-d3	0.420	0.441	0.010	5.1	50.0
4-Chloroaniline-d4	0.373	0.396	0.010	6.3	50.0
Dimethylphthalate-d6	1.471	1.451	0.010	-1.3	50.0
Acenaphthylene-d8	1.913	1.696	0.010	-11.3	50.0
4-Nitrophenol-d4	0.212	0.223	0.010	5.4	50.0
Fluorene-d10	1.351	1.345	0.010	-0.5	50.0
4,6-Dinitro-2-methylphenol-d2	0.156	0.144	0.010	-7.6	50.0
Anthracene-d10	1.143	1.117	0.010	-2.2	50.0
Pyrene-d10	1.260	1.394	0.010	10.6	50.0
Benzo(a)pyrene-d12	0.982	0.892	0.010	-9.1	50.0

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5248.D
Report Date: 11-Nov-2011 13:31

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5248.D
Lab Smp Id: SSTD0202X Client Smp ID: SSTD0202X
Inj Date : 10-NOV-2011 09:31
Operator : SRC: Inst ID: S2.i
Smp Info : SSTD0202X,SSTD0202X
Misc Info : 2,3
Comment :
Method : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * (Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vi	2.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	1 Benzaldehyde	77	3.320	3.320	(0.901)	151837	40.0000	38
$	2 Phenol-d5	71	3.373	3.373	(0.916)	98558	40.0000	39
	3 Phenol	94	3.384	3.384	(0.919)	260270	40.0000	37
$	4 bis(2-Chloroethyl)ether-d8	67	3.427	3.427	(0.930)	122865	40.0000	35
	5 bis(2-Chloroethyl)ether	93	3.459	3.459	(0.939)	188483	40.0000	37
$	6 2-Chlorophenol-d4	132	3.491	3.491	(0.948)	85606	40.0000	39
	7 2-Chlorophenol	128	3.513	3.513	(0.953)	91329	40.0000	40
*	8 1,4-Dichlorobenzene-d4	152	3.684	3.684	(1.000)	81169	40.0000	(Q)
	9 2-Methylphenol	108	3.899	3.899	(1.058)	162205	40.0000	42
	10 2,2'-oxybis(1-Chloropropane)	45	3.920	3.920	(1.064)	188950	40.0000	36(Q)
$	11 4-Methylphenol-d8	113	4.006	4.006	(1.087)	158281	40.0000	46
	13 Acetophenone	105	4.017	4.017	(1.090)	270534	40.0000	41
	14 N-Nitroso-di-n-propylamine	70	4.027	4.027	(1.093)	136241	40.0000	43(Q)
	12 4-Methylphenol	108	4.027	4.027	(1.093)	175187	40.0000	44
	15 Hexachloroethane	117	4.113	4.113	(1.116)	70677	40.0000	40(Q)
$	16 Nitrobenzene-d5	128	4.145	4.145	(0.873)	52408	40.0000	42(Q)
	17 Nitrobenzene	77	4.156	4.156	(0.876)	230880	40.0000	37
	18 Isophorone	82	4.360	4.360	(0.919)	450289	40.0000	42
$	19 2-Nitrophenol-d4	143	4.424	4.424	(0.932)	54922	40.0000	39
	20 2-Nitrophenol	139	4.435	4.435	(0.934)	50611	40.0000	37
	21 2,4-Dimethylphenol	107	4.478	4.478	(0.944)	184402	40.0000	39(Q)

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5248.D
Report Date: 11-Nov-2011 13:31

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
	22	bis(2-Chloroethoxy)methane	93	4.553	4.553	(0.959)	248922	40.0000	41
$	23	2,4-Dichlorophenol-d3	165	4.628	4.628	(0.975)	110297	40.0000	43
	24	2,4-Dichlorophenol	162	4.639	4.639	(0.977)	96777	40.0000	41
*	25	Naphthalene-d8	136	4.746	4.746	(1.000)	241890	40.0000	
	26	Naphthalene	128	4.767	4.767	(1.004)	259859	40.0000	42
$	27	4-Chloroaniline-d4	131	4.810	4.810	(1.014)	99309	40.0000	44(Q)
	28	4-Chloroaniline	127	4.810	4.810	(1.014)	108795	40.0000	44
	29	Hexachlorobutadiene	225	4.885	4.885	(1.029)	76689	40.0000	44
	30	Caprolactam	113	5.078	5.078	(1.070)	43984	40.0000	47
	31	4-Chloro-3-methylphenol	107	5.228	5.228	(1.102)	180040	40.0000	48
	32	2-Methylnaphthalene	142	5.346	5.346	(1.127)	207465	40.0000	49
	33	Hexachlorocyclopentadiene	237	5.486	5.486	(0.884)	76055	40.0000	35(Q)
	34	1,2,4,5-Tetrachlorobenzene	216	5.486	5.486	(0.884)	257507	40.0000	33
	35	2,4,6-Trichlorophenol	196	5.582	5.582	(0.900)	101351	40.0000	43
	36	2,4,5-Trichlorophenol	196	5.615	5.615	(0.905)	100500	40.0000	41
	37	1,1'-Biphenyl	154	5.732	5.732	(0.924)	272093	40.0000	40
	38	2-Chloronaphthalene	162	5.743	5.743	(0.926)	214175	40.0000	35
	39	2-Nitroaniline	65	5.829	5.829	(0.940)	106783	40.0000	37
$	40	Dimethylphthalate-d6	166	5.968	5.968	(0.962)	281291	40.0000	40
	41	Dimethylphthalate	163	5.990	5.990	(0.965)	294018	40.0000	45
	42	2,6-Dinitrotoluene	165	6.033	6.033	(0.972)	69198	40.0000	42
$	43	Acenaphthylene-d8	160	6.076	6.076	(0.979)	354147	40.0000	38
	44	Acenaphthylene	152	6.086	6.086	(0.981)	311706	40.0000	37
	45	3-Nitroaniline	138	6.172	6.172	(0.995)	44734	40.0000	41(Q)
*	46	Acenaphthene-d10	164	6.204	6.204	(1.000)	192460	40.0000	
	47	Acenaphthene	153	6.236	6.236	(1.005)	217417	40.0000	40
	48	2,4-Dinitrophenol	184	6.258	6.258	(1.009)	29420	40.0000	39(Q)
	52	Dibenzofuran	168	6.376	6.376	(1.028)	307980	40.0000	39
$	49	4-Nitrophenol-d4	143	6.312	6.312	(1.017)	39793	40.0000	39(Q)
	50	4-Nitrophenol	109	6.322	6.322	(1.019)	77387	40.0000	39
	51	2,4-Dinitrotoluene	165	6.365	6.365	(1.026)	87293	40.0000	42(Q)
	118	2,3,4,6-Tetrachlorophenol	232	6.483	6.483	(1.045)	64789	40.0000	39
	53	Diethylphthalate	149	6.580	6.580	(1.060)	229868	40.0000	37
$	54	Fluorene-d10	176	6.633	6.633	(1.069)	245305	40.0000	38
	56	Fluorene	166	6.665	6.665	(1.074)	260277	40.0000	40
	55	4-Chlorophenyl-phenylether	204	6.665	6.665	(1.074)	154405	40.0000	45
	57	4-Nitroaniline	138	6.676	6.676	(1.076)	48182	40.0000	41(Q)
$	58	4,6-Dinitro-2-methylphenol-d2	200	6.698	6.698	(0.901)	52495	40.0000	40
	59	4,6-Dinitro-2-methylphenol	198	6.708	6.708	(0.902)	42176	40.0000	33(Q)
	60	N-Nitrosodiphenylamine	169	6.762	6.762	(0.909)	226823	40.0000	44
	61	4-Bromophenyl-phenylether	248	7.073	7.073	(0.951)	68682	40.0000	38
	62	Hexachlorobenzene	284	7.127	7.127	(0.958)	72182	40.0000	37
	63	Atrazine	200	7.202	7.202	(0.968)	66389	40.0000	36
	64	Pentachlorophenol	266	7.287	7.287	(0.980)	33629	40.0000	35
*	65	Phenanthrene-d10	188	7.438	7.438	(1.000)	336767	40.0000	
	66	Phenanthrene	178	7.448	7.448	(1.001)	345394	40.0000	37
$	67	Anthracene-d10	188	7.480	7.480	(1.006)	374242	40.0000	39
	68	Anthracene	178	7.491	7.491	(1.007)	355846	40.0000	37
	117	Carbazole	167	7.631	7.631	(1.026)	314719	40.0000	41
	70	Di-n-butylphthalate	149	7.931	7.931	(1.066)	313180	40.0000	38
	71	Fluoranthene	202	8.435	8.435	(1.134)	395710	40.0000	41
$	72	Pyrene-d10	212	8.606	8.606	(0.890)	293406	40.0000	36
	73	Pyrene	202	8.628	8.628	(0.892)	384954	40.0000	37
	74	Butylbenzylphthalate	149	9.185	9.185	(0.950)	132544	40.0000	41

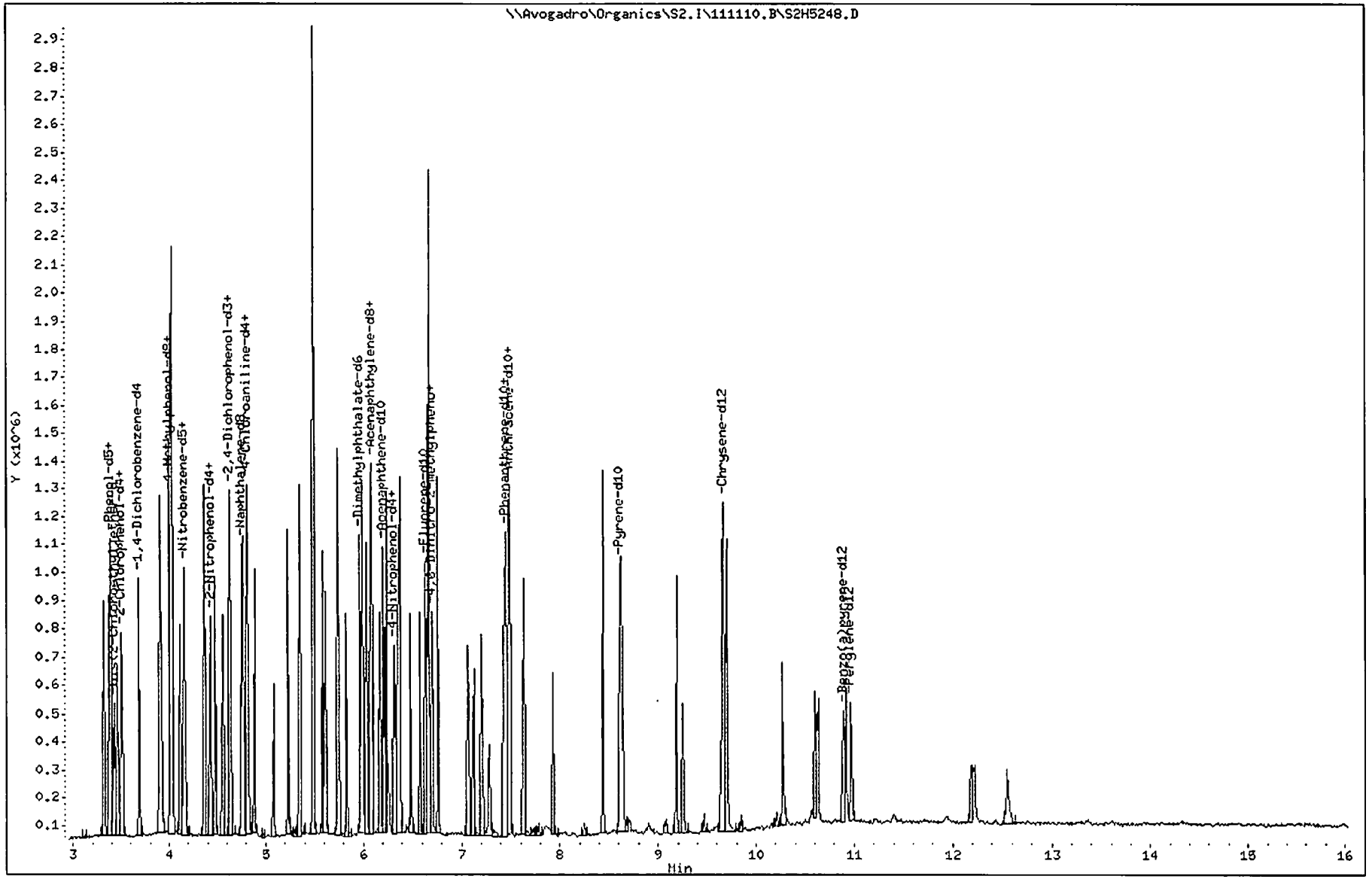
Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5248.D
Report Date: 11-Nov-2011 13:31

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	
	75 3,3'-Dichlorobenzidine	252	9.647	9.647	(0.998)	81084	40.0000	42	
	76 Benzo(a)anthracene	228	9.657	9.657	(0.999)	280303	40.0000	36	
*	77 Chrysene-d12	240	9.668	9.668	(1.000)	260346	40.0000		(Q)
	78 Chrysene	228	9.689	9.689	(1.002)	262365	40.0000	39	
	79 bis(2-Ethylhexyl)phthalate	149	9.700	9.700	(1.003)	172633	40.0000	44	
	80 Di-n-octylphthalate	149	9.700	9.700	(0.885)	168791	40.0000	24	
	81 Benzo(b)fluoranthene	252	10.601	10.601	(0.967)	284057	40.0000	46	
	82 Benzo(k)fluoranthene	252	10.633	10.633	(0.970)	218970	40.0000	31	(Q)
S	83 Benzo(a)pyrene-d12	264	10.891	10.891	(0.993)	160563	40.0000	34	
	84 Benzo(a)pyrene	252	10.912	10.912	(0.995)	192253	40.0000	36	(Q)
*	85 Perylene-d12	264	10.966	10.966	(1.000)	189730	40.0000		
	86 Indeno(1,2,3-cd)pyrene	276	12.188	12.188	(1.111)	156608	40.0000	38	
	87 Dibenzo(a,h)anthracene	278	12.220	12.220	(1.114)	133037	40.0000	39	
	88 Benzo(g,h,i)perylene	276	12.553	12.553	(1.145)	132591	40.0000	39	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5248.D
Date : 10-NOV-2011 09:31
Client ID: SSTD0202X
Instrument: S2.i
Sample Info: SSTD0202X,SSTD0202X
Volume Injected (uL): 2.0
Operator: SRC:
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5273.D
Report Date: 15-Nov-2011 14:34

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5273.D
Lab Smp Id: SSTD0202Y Client Smp ID: SSTD0202Y
Inj Date : 10-NOV-2011 18:26
Operator : SRC: Inst ID: S2.i
Smp Info : SSTD0202Y,SSTD0202Y
Misc Info : 2,3
Comment :
Method : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 15-Nov-2011 14:34 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * (Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vi	2.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	1	Benzaldehyde	77	3.328	3.328	(0.901)	120262	40.0000	35
$	2	Phenol-d5	71	3.393	3.393	(0.919)	72287	40.0000	33
	3	Phenol	94	3.403	3.403	(0.922)	212534	40.0000	35
$	4	bis(2-Chloroethyl)ether-d8	67	3.435	3.435	(0.930)	96530	40.0000	32
	5	bis(2-Chloroethyl)ether	93	3.468	3.468	(0.939)	145117	40.0000	33
$	6	2-Chlorophenol-d4	132	3.511	3.511	(0.951)	69898	40.0000	37
	7	2-Chlorophenol	128	3.521	3.521	(0.954)	73135	40.0000	37
*	8	1,4-Dichlorobenzene-d4	152	3.693	3.693	(1.000)	69753	40.0000	(Q)
	9	2-Methylphenol	108	3.907	3.907	(1.058)	125447	40.0000	38
	10	2,2'-oxybis(1-Chloropropane)	45	3.929	3.929	(1.064)	137527	40.0000	31
$	11	4-Methylphenol-d8	113	4.015	4.015	(1.087)	129438	40.0000	43
	13	Acetophenone	105	4.025	4.025	(1.090)	214502	40.0000	38
	14	N-Nitroso-di-n-propylamine	70	4.036	4.036	(1.093)	98751	40.0000	36(Q)
	12	4-Methylphenol	108	4.036	4.036	(1.093)	129768	40.0000	38
	15	Hexachloroethane	117	4.122	4.122	(1.116)	56069	40.0000	37(Q)
$	16	Nitrobenzene-d5	128	4.154	4.154	(0.874)	39366	40.0000	37
	17	Nitrobenzene	77	4.165	4.165	(0.876)	170489	40.0000	32
	18	Isophorone	82	4.368	4.368	(0.919)	344804	40.0000	38
$	19	2-Nitrophenol-d4	143	4.433	4.433	(0.932)	42722	40.0000	36
	20	2-Nitrophenol	139	4.443	4.443	(0.935)	39268	40.0000	34
	21	2,4-Dimethylphenol	107	4.486	4.486	(0.944)	140529	40.0000	35(Q)

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5273.D
Report Date: 15-Nov-2011 14:34

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
	22	bis(2-Chloroethoxy)methane	93	4.561	4.561	(0.959)	186105	40.0000	37
$	23	2,4-Dichlorophenol-d3	165	4.637	4.637	(0.975)	90165	40.0000	42
	24	2,4-Dichlorophenol	162	4.647	4.647	(0.977)	76656	40.0000	39
*	25	Naphthalene-d8	136	4.754	4.754	(1.000)	205471	40.0000	
	26	Naphthalene	128	4.776	4.776	(1.004)	210616	40.0000	40
$	27	4-Chloroaniline-d4	131	4.819	4.819	(1.014)	76105	40.0000	40(Q)
	28	4-Chloroaniline	127	4.819	4.819	(1.014)	84372	40.0000	40
	29	Hexachlorobutadiene	225	4.894	4.894	(1.029)	68482	40.0000	46
	30	Caprolactam	113	5.087	5.087	(1.070)	30328	40.0000	38
	31	4-Chloro-3-methylphenol	107	5.237	5.237	(1.101)	132942	40.0000	41
	32	2-Methylnaphthalene	142	5.355	5.355	(1.126)	153770	40.0000	43
	33	Hexachlorocyclopentadiene	237	5.494	5.494	(0.884)	52876	40.0000	30(Q)
	34	1,2,4,5-Tetrachlorobenzene	216	5.494	5.494	(0.884)	215418	40.0000	34
	35	2,4,6-Trichlorophenol	196	5.591	5.591	(0.900)	85740	40.0000	44
	36	2,4,5-Trichlorophenol	196	5.623	5.623	(0.905)	82882	40.0000	42
	37	1,1'-Biphenyl	154	5.741	5.741	(0.924)	212758	40.0000	38
	38	2-Chloronaphthalene	162	5.752	5.752	(0.926)	175452	40.0000	35
	39	2-Nitroaniline	65	5.838	5.838	(0.940)	75508	40.0000	32
$	40	Dimethylphthalate-d6	166	5.977	5.977	(0.962)	249692	40.0000	43
	41	Dimethylphthalate	163	5.998	5.998	(0.965)	245681	40.0000	46
	42	2,6-Dinitrotoluene	165	6.041	6.041	(0.972)	56715	40.0000	43
$	43	Acenaphthylene-d8	160	6.084	6.084	(0.979)	300893	40.0000	40
	44	Acenaphthylene	152	6.095	6.095	(0.981)	260154	40.0000	38
	45	3-Nitroaniline	138	6.181	6.181	(0.995)	33179	40.0000	38
*	46	Acenaphthene-d10	164	6.213	6.213	(1.000)	156570	40.0000	
	47	Acenaphthene	153	6.245	6.245	(1.005)	162599	40.0000	37
	48	2,4-Dinitrophenol	184	6.266	6.266	(1.009)	17759	40.0000	29
	52	Dibenzofuran	168	6.384	6.384	(1.028)	255261	40.0000	39
$	49	4-Nitrophenol-d4	143	6.320	6.320	(1.017)	23529	40.0000	28
	50	4-Nitrophenol	109	6.331	6.331	(1.019)	55003	40.0000	34
	51	2,4-Dinitrotoluene	165	6.374	6.374	(1.026)	68844	40.0000	41(Q)
	118	2,3,4,6-Tetrachlorophenol	232	6.492	6.492	(1.045)	51901	40.0000	38
	53	Diethylphthalate	149	6.577	6.577	(1.059)	175607	40.0000	35
$	54	Fluorene-d10	176	6.642	6.642	(1.069)	201788	40.0000	38
	56	Fluorene	166	6.674	6.674	(1.074)	191823	40.0000	36
	55	4-Chlorophenyl-phenylether	204	6.674	6.674	(1.074)	130443	40.0000	46
	57	4-Nitroaniline	138	6.685	6.685	(1.076)	31105	40.0000	32
$	58	4,6-Dinitro-2-methylphenol-d2	200	6.706	6.706	(0.902)	37525	40.0000	36
	59	4,6-Dinitro-2-methylphenol	198	6.706	6.706	(0.902)	33313	40.0000	33(Q)
	60	N-Nitrosodiphenylamine	169	6.771	6.771	(0.911)	177111	40.0000	43
	61	4-Bromophenyl-phenylether	248	7.071	7.071	(0.951)	57071	40.0000	39
	62	Hexachlorobenzene	284	7.135	7.135	(0.960)	63026	40.0000	41
	63	Atrazine	200	7.210	7.210	(0.970)	60648	40.0000	41
	64	Pentachlorophenol	266	7.296	7.296	(0.981)	23780	40.0000	31
*	65	Phenanthrene-d10	188	7.435	7.435	(1.000)	268766	40.0000	
	66	Phenanthrene	178	7.457	7.457	(1.003)	283975	40.0000	38
$	67	Anthracene-d10	188	7.489	7.489	(1.007)	289838	40.0000	38
	68	Anthracene	178	7.500	7.500	(1.009)	296743	40.0000	39
	117	Carbazole	167	7.639	7.639	(1.027)	216117	40.0000	35
	70	Di-n-butylphthalate	149	7.929	7.929	(1.066)	262597	40.0000	39
	71	Fluoranthene	202	8.443	8.443	(1.136)	290641	40.0000	37
$	72	Pyrene-d10	212	8.615	8.615	(0.892)	242449	40.0000	40
	73	Pyrene	202	8.626	8.626	(0.893)	295732	40.0000	38
	74	Butylbenzylphthalate	149	9.183	9.183	(0.951)	99104	40.0000	42

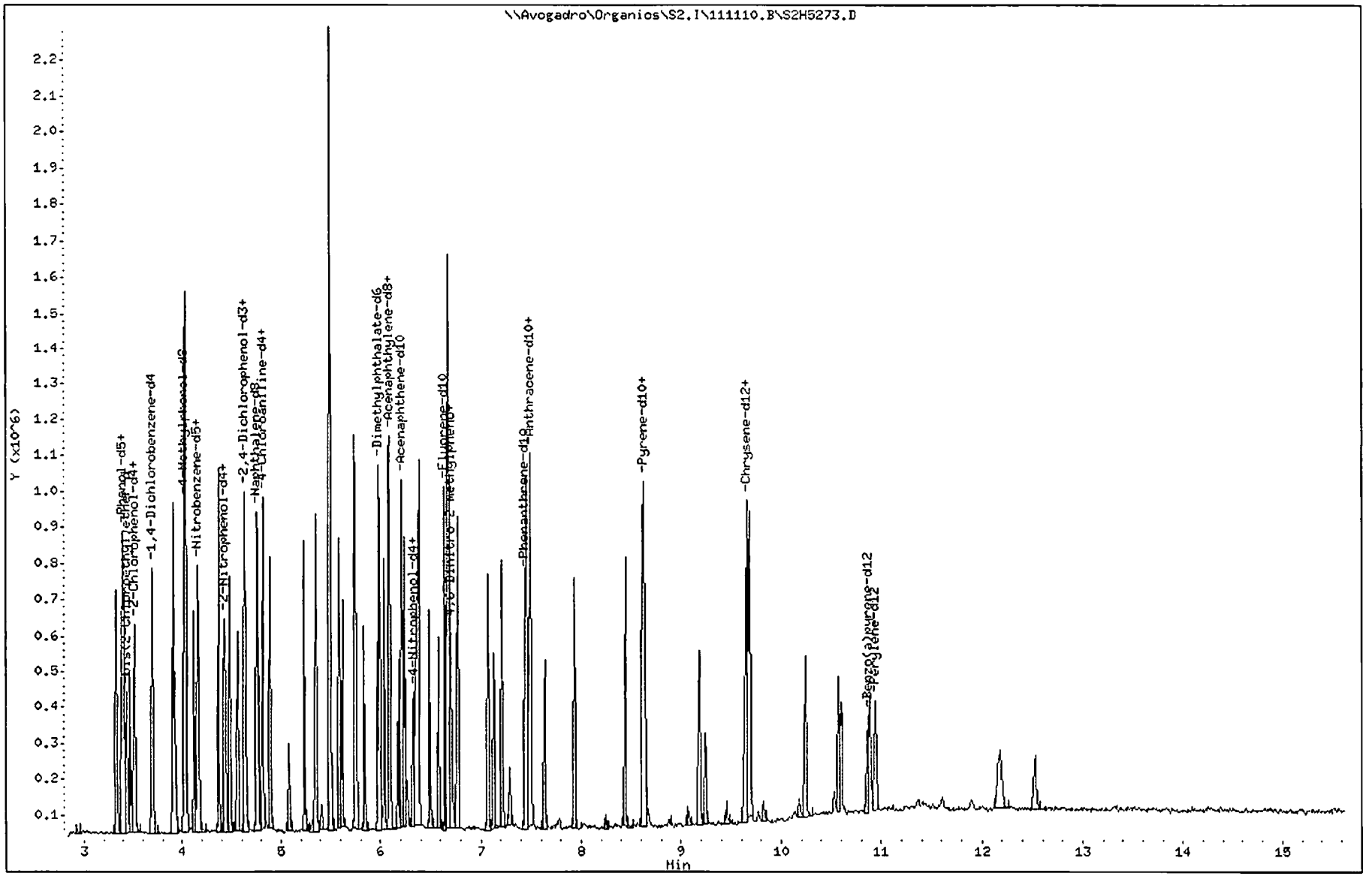
Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5273.D
Report Date: 15-Nov-2011 14:34

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)	
75	3,3'-Dichlorobenzidine	252	9.634	9.634	(0.998)	51787	40.0000	36	
76	Benzo(a)anthracene	228	9.644	9.644	(0.999)	201558	40.0000	35	
* 77	Chrysene-d12	240	9.655	9.655	(1.000)	192161	40.0000	(Q)	
78	Chrysene	228	9.677	9.677	(1.002)	183656	40.0000	37	
79	bis(2-Ethylhexyl)phthalate	149	9.687	9.687	(1.003)	139345	40.0000	48	
80	Di-n-octylphthalate	149	9.687	9.687	(0.885)	136928	40.0000	27(H)	
81	Benzo(b)fluoranthene	252	10.577	10.577	(0.967)	152544	40.0000	33(M)M6 MMS 11/15	
82	Benzo(k)fluoranthene	252	10.599	10.599	(0.969)	194156	40.0000	37(M)M6 MMS 11/15	
$ 83	Benzo(a)pyrene-d12	264	10.867	10.867	(0.993)	120760	40.0000	35(M)M6 MMS 11/15	
84	Benzo(a)pyrene	252	10.888	10.888	(0.995)	138118	40.0000	34(M)M6 MMS 11/15	
* 85	Perylene-d12	264	10.942	10.942	(1.000)	140676	40.0000		
86	Indeno(1,2,3-cd)pyrene	276	12.164	12.164	(1.112)	121388	40.0000	39	
87	Dibenzo(a,h)anthracene	278	12.186	12.186	(1.114)	101327	40.0000	40	
88	Benzo(g,h,i)perylene	276	12.529	12.529	(1.145)	109519	40.0000	43	

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5273.D
Date : 10-NOV-2011 18:26
Client ID: SSTD0202Y
Instrument: S2.i
Sample Info: SSTD0202Y,SSTD0202Y
Volume Injected (uL): 2.0
Operator: SRC:
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5276.D
Report Date: 14-Nov-2011 14:27

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111111.B\S2H5276.D
Lab Smp Id: SSTD0202Z Client Smp ID: SSTD0202Z
Inj Date : 11-NOV-2011 09:01
Operator : SRC: Inst ID: S2.i
Smp Info : SSTD0202Z,SSTD0202Z
Misc Info : 2,3
Comment :
Method : \\Avogadro\Organics\S2.I\111111.B\S2_SOM.m
Meth Date : 14-Nov-2011 14:27 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * (Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vi	2.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	1	Benzaldehyde	77	3.328	3.328	(0.901)	131069	40.0000	39
$	2	Phenol-d5	71	3.393	3.393	(0.919)	78537	40.0000	36
	3	Phenol	94	3.403	3.403	(0.922)	223969	40.0000	38
$	4	bis(2-Chloroethyl)ether-d8	67	3.436	3.436	(0.930)	107284	40.0000	36
	5	bis(2-Chloroethyl)ether	93	3.468	3.468	(0.939)	154697	40.0000	35
$	6	2-Chlorophenol-d4	132	3.511	3.511	(0.951)	74205	40.0000	39
	7	2-Chlorophenol	128	3.521	3.521	(0.954)	71059	40.0000	37
*	8	1,4-Dichlorobenzene-d4	152	3.693	3.693	(1.000)	69137	40.0000	(Q)
	9	2-Methylphenol	108	3.907	3.907	(1.058)	125108	40.0000	38
	10	2,2'-oxybis(1-Chloropropane)	45	3.929	3.929	(1.064)	151636	40.0000	34
$	11	4-Methylphenol-d8	113	4.015	4.015	(1.087)	128232	40.0000	43
	13	Acetophenone	105	4.036	4.036	(1.093)	206665	40.0000	37
	14	N-Nitroso-di-n-propylamine	70	4.036	4.036	(1.093)	110166	40.0000	40(Q)
	12	4-Methylphenol	108	4.036	4.036	(1.093)	131594	40.0000	39
	15	Hexachloroethane	117	4.122	4.122	(1.116)	59632	40.0000	40(Q)
$	16	Nitrobenzene-d5	128	4.154	4.154	(0.872)	41052	40.0000	41(Q)
	17	Nitrobenzene	77	4.176	4.176	(0.876)	188794	40.0000	38
	18	Isophorone	82	4.369	4.369	(0.917)	329259	40.0000	39
$	19	2-Nitrophenol-d4	143	4.433	4.433	(0.930)	47853	40.0000	44
	20	2-Nitrophenol	139	4.444	4.444	(0.932)	45093	40.0000	42
	21	2,4-Dimethylphenol	107	4.487	4.487	(0.941)	156223	40.0000	42(Q)

Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5276.D
Report Date: 14-Nov-2011 14:27

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
	22	bis(2-Chloroethoxy)methane	93	4.562	4.562	(0.957)	208611	40.0000	44
$	23	2,4-Dichlorophenol-d3	165	4.637	4.637	(0.973)	94624	40.0000	47
	24	2,4-Dichlorophenol	162	4.647	4.647	(0.975)	85810	40.0000	46
•	25	Naphthalene-d8	136	4.765	4.765	(1.000)	191263	40.0000	
	26	Naphthalene	128	4.776	4.776	(1.002)	208782	40.0000	42
$	27	4-Chloroaniline-d4	131	4.819	4.819	(1.011)	90843	40.0000	51(Q)
	28	4-Chloroaniline	127	4.830	4.830	(1.013)	89124	40.0000	45
	29	Hexachlorobutadiene	225	4.894	4.894	(1.027)	64792	40.0000	47
	30	Caprolactam	113	5.087	5.087	(1.068)	30923	40.0000	42
	31	4-Chloro-3-methylphenol	107	5.237	5.237	(1.099)	124013	40.0000	41
	32	2-Methylnaphthalene	142	5.355	5.355	(1.124)	151779	40.0000	45
	33	Hexachlorocyclopentadiene	237	5.505	5.505	(0.885)	47457	40.0000	26(Q)
	34	1,2,4,5-Tetrachlorobenzene	216	5.505	5.505	(0.885)	216022	40.0000	34
	35	2,4,6-Trichlorophenol	196	5.602	5.602	(0.900)	62342	40.0000	32
	36	2,4,5-Trichlorophenol	196	5.623	5.623	(0.904)	69108	40.0000	34
	37	1,1'-Biphenyl	154	5.752	5.752	(0.924)	191778	40.0000	34
	38	2-Chloronaphthalene	162	5.763	5.763	(0.926)	182814	40.0000	36
	39	2-Nitroaniline	65	5.848	5.848	(0.940)	79144	40.0000	33
$	40	Dimethylphthalate-d6	166	5.988	5.988	(0.962)	213294	40.0000	36
	41	Dimethylphthalate	163	5.999	5.999	(0.964)	203632	40.0000	37
	42	2,6-Dinitrotoluene	165	6.041	6.041	(0.971)	51328	40.0000	38
$	43	Acenaphthylene-d8	160	6.095	6.095	(0.979)	267240	40.0000	35
	44	Acenaphthylene	152	6.106	6.106	(0.981)	255321	40.0000	37
	45	3-Nitroaniline	138	6.181	6.181	(0.993)	32626	40.0000	36
•	46	Acenaphthene-d10	164	6.224	6.224	(1.000)	159791	40.0000	
	47	Acenaphthene	153	6.245	6.245	(1.003)	164634	40.0000	37
	48	2,4-Dinitrophenol	184	6.277	6.277	(1.009)	18369	40.0000	30(Q)
	52	Dibenzofuran	168	6.395	6.395	(1.028)	234254	40.0000	35
$	49	4-Nitrophenol-d4	143	6.331	6.331	(1.017)	21115	40.0000	25
	50	4-Nitrophenol	109	6.331	6.331	(1.017)	56088	40.0000	34
	51	2,4-Dinitrotoluene	165	6.385	6.385	(1.026)	62576	40.0000	36(Q)
	118	2,3,4,6-Tetrachlorophenol	232	6.503	6.503	(1.045)	47001	40.0000	34
	53	Diethylphthalate	149	6.588	6.588	(1.059)	197692	40.0000	38
$	54	Fluorene-d10	176	6.653	6.653	(1.069)	210370	40.0000	39
	56	Fluorene	166	6.674	6.674	(1.072)	197626	40.0000	37
	55	4-Chlorophenyl-phenylether	204	6.674	6.674	(1.072)	113382	40.0000	39
	57	4-Nitroaniline	138	6.685	6.685	(1.074)	33205	40.0000	34(Q)
$	58	4,6-Dinitro-2-methylphenol-d2	200	6.706	6.706	(0.901)	31777	40.0000	29
	59	4,6-Dinitro-2-methylphenol	198	6.717	6.717	(0.902)	31824	40.0000	30(Q)
	60	N-Nitrosodiphenylamine	169	6.771	6.771	(0.909)	157290	40.0000	37
	61	4-Bromophenyl-phenylether	248	7.082	7.082	(0.951)	60283	40.0000	40
	62	Hexachlorobenzene	284	7.135	7.135	(0.958)	60067	40.0000	37
	63	Atrazine	200	7.221	7.221	(0.970)	59603	40.0000	39
	64	Pentachlorophenol	266	7.296	7.296	(0.980)	21990	40.0000	28
•	65	Phenanthrene-d10	188	7.446	7.446	(1.000)	278381	40.0000	
	66	Phenanthrene	178	7.468	7.468	(1.003)	275777	40.0000	35
$	67	Anthracene-d10	188	7.489	7.489	(1.006)	293932	40.0000	37
	68	Anthracene	178	7.511	7.511	(1.009)	260147	40.0000	33
	117	Carbazole	167	7.639	7.639	(1.026)	219629	40.0000	34
	70	Di-n-butylphthalate	149	7.940	7.940	(1.066)	289837	40.0000	42
	71	Fluoranthene	202	8.454	8.454	(1.135)	295436	40.0000	37
$	72	Pyrene-d10	212	8.626	8.626	(0.888)	225617	40.0000	38
	73	Pyrene	202	8.647	8.647	(0.891)	306213	40.0000	41
	74	Butylbenzylphthalate	149	9.216	9.216	(0.949)	106519	40.0000	46

Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5276.D
Report Date: 14-Nov-2011 14:27

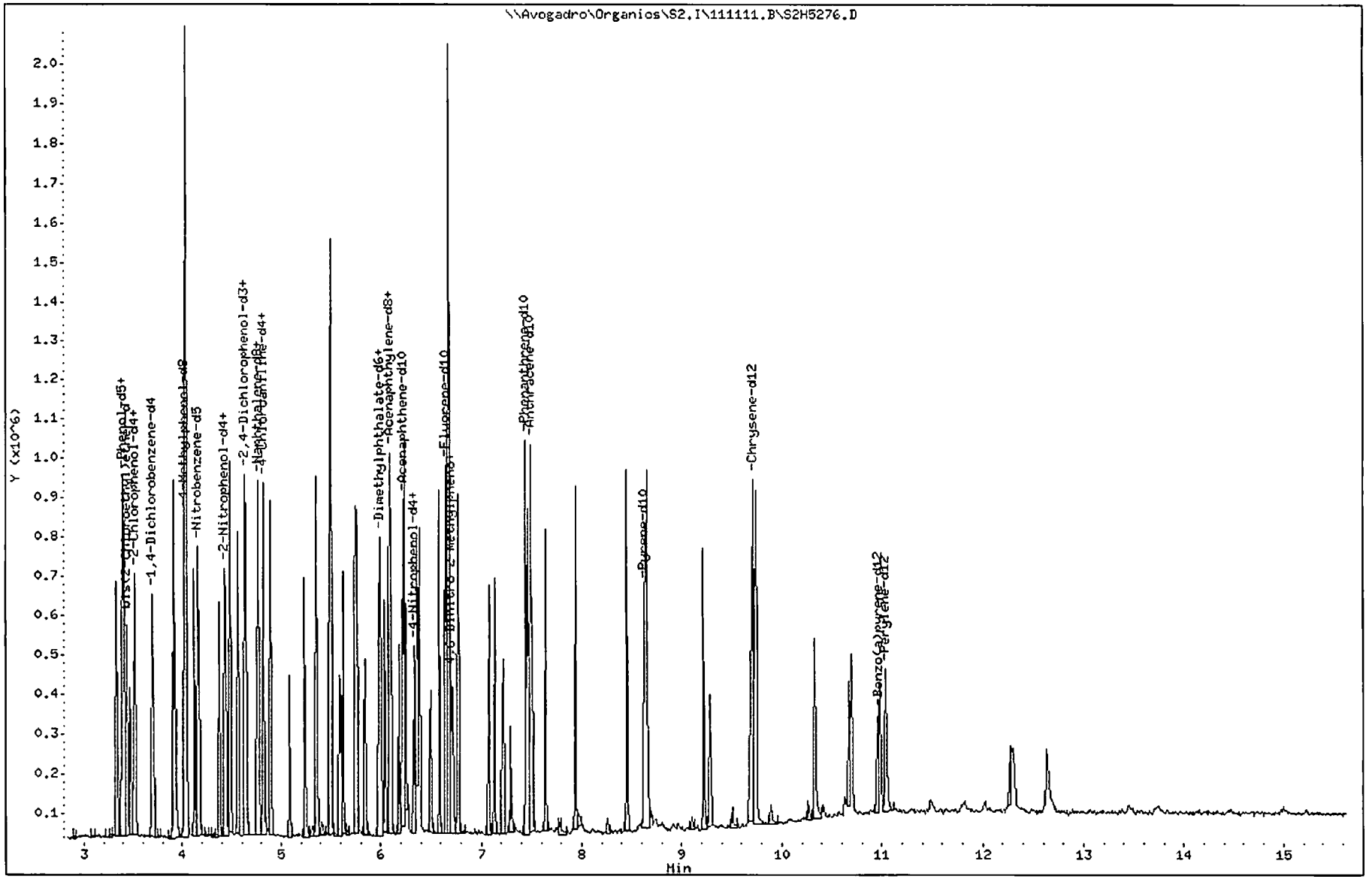
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	
	75 3,3'-Dichlorobenzidine	252	9.687	9.687	(0.998)	61546	40.0000	44	
	76 Benzo(a)anthracene	228	9.698	9.698	(0.999)	200593	40.0000	36	
*	77 Chrysene-d12	240	9.709	9.709	(1.000)	188206	40.0000		(Q)
	78 Chrysene	228	9.741	9.741	(1.003)	186515	40.0000	38	
	79 bis(2-Ethylhexyl)phthalate	149	9.741	9.741	(1.003)	137747	40.0000	48	
	80 Di-n-octylphthalate	149	10.331	10.331	(0.936)	225057	40.0000	41	
	81 Benzo(b)fluoranthene	252	10.674	10.674	(0.967)	191352	40.0000	39	
	82 Benzo(k)fluoranthene	252	10.695	10.695	(0.969)	180747	40.0000	32	
S	83 Benzo(a)pyrene-d12	264	10.964	10.964	(0.993)	128501	40.0000	35	
	84 Benzo(a)pyrene	252	10.985	10.985	(0.995)	155979	40.0000	36	
*	85 Perylene-d12	264	11.039	11.039	(1.000)	150875	40.0000		
	86 Indeno(1,2,3-cd)pyrene	276	12.272	12.272	(1.112)	140934	40.0000	43	
	87 Dibenzo(a,h)anthracene	278	12.304	12.304	(1.115)	112760	40.0000	41	
	88 Benzo(g,h,i)perylene	276	12.636	12.636	(1.145)	119293	40.0000	44	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5276.D
Date : 11-NOV-2011 09:01
Client ID: SSTD0202Z
Sample Info: SSTD0202Z,SSTD0202Z
Volume Injected (uL): 2.0
Column phase: RXI-5SILMS

Instrument: S2.I
Operator: SRC:
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5278.D
Report Date: 14-Nov-2011 14:27

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111111.B\S2H5278.D
Lab Smp Id: SSTD0202A Client Smp ID: SSTD0202A
Inj Date : 11-NOV-2011 09:59
Operator : SRC: Inst ID: S2.i
Smp Info : SSTD0202A,SSTD0202A
Misc Info : 2,3
Comment :
Method : \\Avogadro\Organics\S2.I\111111.B\S2_SOM.m
Meth Date : 14-Nov-2011 14:27 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * (Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vi	2.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
	1 Benzaldehyde	77	3.328	3.328	(0.901)	146181	40.0000	37
$	2 Phenol-d5	71	3.392	3.392	(0.919)	93633	40.0000	37
	3 Phenol	94	3.403	3.403	(0.922)	247778	40.0000	36
$	4 bis(2-Chloroethyl)ether-d8	67	3.435	3.435	(0.930)	122879	40.0000	35
	5 bis(2-Chloroethyl)ether	93	3.467	3.467	(0.939)	175708	40.0000	35
$	6 2-Chlorophenol-d4	132	3.510	3.510	(0.951)	83008	40.0000	38
	7 2-Chlorophenol	128	3.521	3.521	(0.954)	88165	40.0000	39
	8 1,4-Dichlorobenzene-d4	152	3.693	3.693	(1.000)	80166	40.0000	(Q)
	9 2-Methylphenol	108	3.907	3.907	(1.058)	142507	40.0000	37
	10 2,2'-oxybis(1-Chloropropane)	45	3.929	3.929	(1.064)	168461	40.0000	33
$	11 4-Methylphenol-d8	113	4.014	4.014	(1.087)	151040	40.0000	44
	13 Acetophenone	105	4.025	4.025	(1.090)	241319	40.0000	37
	14 N-Nitroso-di-n-propylamine	70	4.036	4.036	(1.093)	130984	40.0000	41(Q)
	12 4-Methylphenol	108	4.036	4.036	(1.093)	157967	40.0000	41
	15 Hexachloroethane	117	4.122	4.122	(1.116)	69431	40.0000	40(Q)
$	16 Nitrobenzene-d5	128	4.154	4.154	(0.874)	47147	40.0000	39
	17 Nitrobenzene	77	4.175	4.175	(0.878)	213286	40.0000	35
	18 Isophorone	82	4.368	4.368	(0.919)	383203	40.0000	37
$	19 2-Nitrophenol-d4	143	4.433	4.433	(0.932)	53048	40.0000	40
	20 2-Nitrophenol	139	4.443	4.443	(0.935)	52641	40.0000	40
	21 2,4-Dimethylphenol	107	4.486	4.486	(0.944)	187622	40.0000	41(Q)

Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5278.D
Report Date: 14-Nov-2011 14:27

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
	22	bis(2-Chloroethoxy)methane	93	4.561	4.561	(0.959)	237919	40.0000	41
$	23	2,4-Dichlorophenol-d3	165	4.636	4.636	(0.975)	117671	40.0000	48
	24	2,4-Dichlorophenol	162	4.647	4.647	(0.977)	91416	40.0000	41
*	25	Naphthalene-d8	136	4.754	4.754	(1.000)	231786	40.0000	
	26	Naphthalene	128	4.776	4.776	(1.004)	258463	40.0000	43
$	27	4-Chloroaniline-d4	131	4.819	4.819	(1.014)	91368	40.0000	42(Q)
	28	4-Chloroaniline	127	4.829	4.829	(1.016)	100265	40.0000	42
	29	Hexachlorobutadiene	225	4.894	4.894	(1.029)	76795	40.0000	46
	30	Caprolactam	113	5.087	5.087	(1.070)	36603	40.0000	41
	31	4-Chloro-3-methylphenol	107	5.237	5.237	(1.101)	161822	40.0000	45
	32	2-Methylnaphthalene	142	5.355	5.355	(1.126)	188314	40.0000	46
	33	Hexachlorocyclopentadiene	237	5.494	5.494	(0.883)	59637	40.0000	28(Q)
	34	1,2,4,5-Tetrachlorobenzene	216	5.505	5.505	(0.885)	254494	40.0000	33
	35	2,4,6-Trichlorophenol	196	5.591	5.591	(0.898)	82858	40.0000	35
	36	2,4,5-Trichlorophenol	196	5.623	5.623	(0.904)	98659	40.0000	41
	37	1,1'-Biphenyl	154	5.741	5.741	(0.922)	243236	40.0000	36
	38	2-Chloronaphthalene	162	5.762	5.762	(0.926)	210349	40.0000	35
	39	2-Nitroaniline	65	5.837	5.837	(0.938)	97433	40.0000	34
$	40	Dimethylphthalate-d6	166	5.977	5.977	(0.960)	276046	40.0000	40
	41	Dimethylphthalate	163	5.998	5.998	(0.964)	267421	40.0000	41
	42	2,6-Dinitrotoluene	165	6.041	6.041	(0.971)	62385	40.0000	39
$	43	Acenaphthylene-d8	160	6.084	6.084	(0.978)	338164	40.0000	37
	44	Acenaphthylene	152	6.105	6.105	(0.981)	298354	40.0000	36
	45	3-Nitroaniline	138	6.181	6.181	(0.993)	42224	40.0000	40
*	46	Acenaphthene-d10	164	6.223	6.223	(1.000)	189897	40.0000	
	47	Acenaphthene	153	6.245	6.245	(1.003)	216240	40.0000	40
	48	2,4-Dinitrophenol	184	6.266	6.266	(1.007)	22991	40.0000	31
	52	Dibenzofuran	168	6.384	6.384	(1.026)	292252	40.0000	37
$	49	4-Nitrophenol-d4	143	6.331	6.331	(1.017)	28399	40.0000	28(Q)
	50	4-Nitrophenol	109	6.331	6.331	(1.017)	67038	40.0000	34
	51	2,4-Dinitrotoluene	165	6.374	6.374	(1.024)	81047	40.0000	40(Q)
	118	2,3,4,6-Tetrachlorophenol	232	6.502	6.502	(1.045)	55386	40.0000	33
	53	Diethylphthalate	149	6.588	6.588	(1.059)	252294	40.0000	41
$	54	Fluorene-d10	176	6.652	6.652	(1.069)	252410	40.0000	39
	56	Fluorene	166	6.674	6.674	(1.072)	261079	40.0000	41
	55	4-Chlorophenyl-phenylether	204	6.674	6.674	(1.072)	151387	40.0000	44
	57	4-Nitroaniline	138	6.685	6.685	(1.074)	44489	40.0000	38
$	58	4,6-Dinitro-2-methylphenol-d2	200	6.706	6.706	(0.901)	49725	40.0000	34
	59	4,6-Dinitro-2-methylphenol	198	6.717	6.717	(0.902)	41437	40.0000	29(Q)
	60	N-Nitrosodiphenylamine	169	6.770	6.770	(0.909)	212251	40.0000	37
	61	4-Bromophenyl-phenylether	248	7.081	7.081	(0.951)	74295	40.0000	37
	62	Hexachlorobenzene	284	7.135	7.135	(0.958)	81911	40.0000	38
	63	Atrazine	200	7.221	7.221	(0.970)	73155	40.0000	36
	64	Pentachlorophenol	266	7.296	7.296	(0.980)	32394	40.0000	31
*	65	Phenanthrene-d10	188	7.446	7.446	(1.000)	373560	40.0000	
	66	Phenanthrene	178	7.467	7.467	(1.003)	354106	40.0000	34
$	67	Anthracene-d10	188	7.489	7.489	(1.006)	395027	40.0000	37
	68	Anthracene	178	7.500	7.500	(1.007)	347619	40.0000	33
	117	Carbazole	167	7.639	7.639	(1.026)	295300	40.0000	34
	70	Di-n-butylphthalate	149	7.939	7.939	(1.066)	337217	40.0000	36
	71	Fluoranthene	202	8.443	8.443	(1.134)	388724	40.0000	36
$	72	Pyrene-d10	212	8.626	8.626	(0.890)	307061	40.0000	35
	73	Pyrene	202	8.636	8.636	(0.892)	404789	40.0000	36
	74	Butylbenzylphthalate	149	9.194	9.194	(0.949)	139690	40.0000	40

Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5278.D
Report Date: 14-Nov-2011 14:27

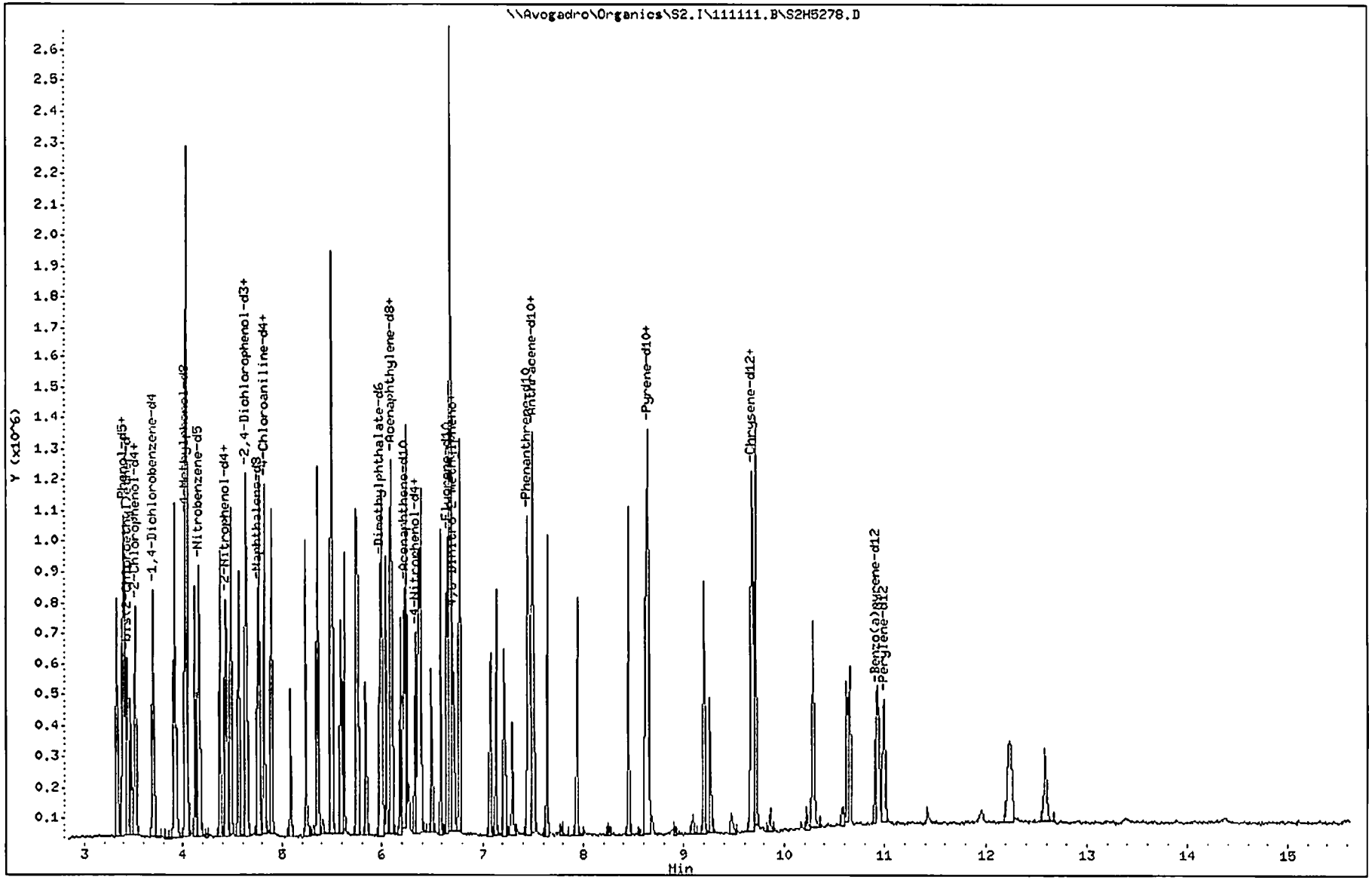
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	
	75 3,3'-Dichlorobenzidine	252	9.655	9.655	(0.997)	88100	40.0000	42	
	76 Benzo(a)anthracene	228	9.676	9.676	(0.999)	323370	40.0000	39	
*	77 Chrysene-d12	240	9.687	9.687	(1.000)	282412	40.0000		(Q)
	78 Chrysene	228	9.709	9.709	(1.002)	274200	40.0000	37	
	79 bis(2-Ethylhexyl)phthalate	149	9.719	9.719	(1.003)	186668	40.0000	44	
	80 Di-n-octylphthalate	149	10.288	10.288	(0.936)	314227	40.0000	42	
	81 Benzo(b)fluoranthene	252	10.620	10.620	(0.966)	300307	40.0000	44	
	82 Benzo(k)fluoranthene	252	10.652	10.652	(0.969)	250839	40.0000	32	
S	83 Benzo(a)pyrene-d12	264	10.910	10.910	(0.992)	175826	40.0000	34	
	84 Benzo(a)pyrene	252	10.931	10.931	(0.994)	211224	40.0000	36	
*	85 Perylene-d12	264	10.995	10.995	(1.000)	207993	40.0000		
	86 Indeno(1,2,3-cd)pyrene	276	12.218	12.218	(1.111)	204870	40.0000	45	
	87 Dibenzo(a,h)anthracene	278	12.250	12.250	(1.114)	168938	40.0000	45	
	88 Benzo(g,h,i)perylene	276	12.583	12.583	(1.144)	172363	40.0000	46	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5278.D
Date : 11-NOV-2011 09:59
Client ID: SSTD0202A
Sample Info: SSTD0202A,SSTD0202A
Volume Injected (uL): 2.0
Column phase: RXI-5SILMS

Instrument: S2.i
Operator: SRC:
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111114.B\S2H5290.D
Report Date: 15-Nov-2011 10:25

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111114.B\S2H5290.D
Lab Smp Id: SSTD0202C Client Smp ID: SSTD0202C
Inj Date : 14-NOV-2011 16:35
Operator : SRC: Inst ID: S2.i
Smp Info : SSTD0202C,SSTD0202C
Misc Info : 2,3
Comment :
Method : \\Avogadro\Organics\S2.I\111114.B\S2_SOM.m
Meth Date : 15-Nov-2011 10:25 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * (Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vi	2.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
	1 Benzaldehyde	77	3.246	3.246	(0.899)	179269	40.0000	40
$	2 Phenol-d5	71	3.311	3.311	(0.917)	121585	40.0000	42
	3 Phenol	94	3.321	3.321	(0.920)	337732	40.0000	43
$	4 bis(2-Chloroethyl)ether-d8	67	3.354	3.354	(0.929)	151889	40.0000	38
	5 bis(2-Chloroethyl)ether	93	3.396	3.396	(0.941)	216344	40.0000	37
$	6 2-Chlorophenol-d4	132	3.429	3.429	(0.950)	106715	40.0000	43
	7 2-Chlorophenol	128	3.439	3.439	(0.952)	107559	40.0000	42
*	8 1,4-Dichlorobenzene-d4	152	3.611	3.611	(1.000)	91340	40.0000	(Q)
	9 2-Methylphenol	108	3.836	3.836	(1.062)	181028	40.0000	42
	10 2,2'-oxybis(1-Chloropropane)	45	3.847	3.847	(1.065)	229130	40.0000	39
$	11 4-Methylphenol-d8	113	3.943	3.943	(1.092)	203964	40.0000	52
	13 Acetophenone	105	3.954	3.954	(1.095)	334265	40.0000	45
	14 N-Nitroso-di-n-propylamine	70	3.954	3.954	(1.095)	192153	40.0000	53(Q)
	12 4-Methylphenol	108	3.965	3.965	(1.098)	201797	40.0000	45
	15 Hexachloroethane	117	4.040	4.040	(1.119)	83112	40.0000	42(Q)
$	16 Nitrobenzene-d5	128	4.072	4.072	(0.869)	61746	40.0000	40
	17 Nitrobenzene	77	4.094	4.094	(0.874)	291032	40.0000	37
	18 Isophorone	82	4.297	4.297	(0.918)	550263	40.0000	41
$	19 2-Nitrophenol-d4	143	4.351	4.351	(0.929)	78459	40.0000	45
	20 2-Nitrophenol	139	4.362	4.362	(0.931)	74024	40.0000	44
	21 2,4-Dimethylphenol	107	4.404	4.404	(0.940)	225712	40.0000	38(Q)

Data File: \\Avogadro\Organics\S2.I\111114.B\S2H5290.D
Report Date: 15-Nov-2011 10:25

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	22	bis(2-Chloroethoxy)methane	93	4.480	4.480	(0.956)	298138	40.0000	40
$	23	2,4-Dichlorophenol-d3	165	4.555	4.555	(0.973)	154120	40.0000	49
	24	2,4-Dichlorophenol	162	4.565	4.565	(0.975)	140402	40.0000	48
*	25	Naphthalene-d8	136	4.683	4.683	(1.000)	299945	40.0000	
	26	Naphthalene	128	4.694	4.694	(1.002)	337424	40.0000	44
$	27	4-Chloroaniline-d4	131	4.737	4.737	(1.011)	137519	40.0000	49(Q)
	28	4-Chloroaniline	127	4.748	4.748	(1.014)	153236	40.0000	49
	29	Hexachlorobutadiene	225	4.812	4.812	(1.027)	83424	40.0000	39
	30	Caprolactam	113	5.016	5.016	(1.071)	64273	40.0000	56
	31	4-Chloro-3-methylphenol	107	5.166	5.166	(1.103)	237428	40.0000	51
	32	2-Methylnaphthalene	142	5.273	5.273	(1.126)	248034	40.0000	47
	33	Hexachlorocyclopentadiene	237	5.423	5.423	(0.883)	103479	40.0000	33(Q)
	34	1,2,4,5-Tetrachlorobenzene	216	5.423	5.423	(0.883)	379178	40.0000	34
	35	2,4,6-Trichlorophenol	196	5.520	5.520	(0.899)	129084	40.0000	37
	36	2,4,5-Trichlorophenol	196	5.541	5.541	(0.902)	127565	40.0000	36
	37	1,1'-Biphenyl	154	5.670	5.670	(0.923)	349970	40.0000	35
	38	2-Chloronaphthalene	162	5.681	5.681	(0.925)	315382	40.0000	36
	39	2-Nitroaniline	65	5.766	5.766	(0.939)	155440	40.0000	37
$	40	Dimethylphthalate-d6	166	5.906	5.906	(0.962)	458789	40.0000	45
	41	Dimethylphthalate	163	5.927	5.927	(0.965)	415193	40.0000	43
	42	2,6-Dinitrotoluene	165	5.970	5.970	(0.972)	101261	40.0000	43
$	43	Acenaphthylene-d8	160	6.013	6.013	(0.979)	488682	40.0000	37
	44	Acenaphthylene	152	6.024	6.024	(0.981)	450928	40.0000	37
	45	3-Nitroaniline	138	6.099	6.099	(0.993)	67625	40.0000	43
*	46	Acenaphthene-d10	164	6.142	6.142	(1.000)	279595	40.0000	
	47	Acenaphthene	153	6.163	6.163	(1.003)	298440	40.0000	38
	48	2,4-Dinitrophenol	184	6.195	6.195	(1.009)	45120	40.0000	42(Q)
	52	Dibenzofuran	168	6.313	6.313	(1.028)	430729	40.0000	37
$	49	4-Nitrophenol-d4	143	6.249	6.249	(1.017)	67741	40.0000	46
	50	4-Nitrophenol	109	6.260	6.260	(1.019)	115161	40.0000	40
	51	2,4-Dinitrotoluene	165	6.303	6.303	(1.026)	128038	40.0000	43(Q)
	118	2,3,4,6-Tetrachlorophenol	232	6.421	6.421	(1.045)	93083	40.0000	38
	53	Diethylphthalate	149	6.506	6.506	(1.059)	373547	40.0000	42
$	54	Fluorene-d10	176	6.571	6.571	(1.070)	362784	40.0000	38
	56	Fluorene	166	6.592	6.592	(1.073)	397314	40.0000	42
	55	4-Chlorophenyl-phenylether	204	6.592	6.592	(1.073)	201589	40.0000	40
	57	4-Nitroaniline	138	6.603	6.603	(1.075)	66331	40.0000	39
$	58	4,6-Dinitro-2-methylphenol-d2	200	6.624	6.624	(0.900)	76646	40.0000	38(Q)
	59	4,6-Dinitro-2-methylphenol	198	6.635	6.635	(0.901)	77275	40.0000	39(Q)
	60	N-Nitrosodiphenylamine	169	6.689	6.689	(0.908)	305889	40.0000	39
	61	4-Bromophenyl-phenylether	248	7.000	7.000	(0.950)	106286	40.0000	38
	62	Hexachlorobenzene	284	7.053	7.053	(0.958)	103390	40.0000	35
	63	Atrazine	200	7.139	7.139	(0.969)	125604	40.0000	44
	64	Pentachlorophenol	266	7.214	7.214	(0.980)	54500	40.0000	37
*	65	Phenanthrene-d10	188	7.364	7.364	(1.000)	516565	40.0000	
	66	Phenanthrene	178	7.375	7.375	(1.001)	518572	40.0000	36
$	67	Anthracene-d10	188	7.407	7.407	(1.006)	585923	40.0000	40
	68	Anthracene	178	7.418	7.418	(1.007)	555913	40.0000	38
	117	Carbazole	167	7.557	7.557	(1.026)	470246	40.0000	39
	70	Di-n-butylphthalate	149	7.857	7.857	(1.067)	584045	40.0000	46
	71	Fluoranthene	202	8.361	8.361	(1.135)	590006	40.0000	40
$	72	Pyrene-d10	212	8.533	8.533	(0.888)	438099	40.0000	40
	73	Pyrene	202	8.555	8.555	(0.891)	597954	40.0000	43
	74	Butylbenzylphthalate	149	9.123	9.123	(0.950)	209641	40.0000	49

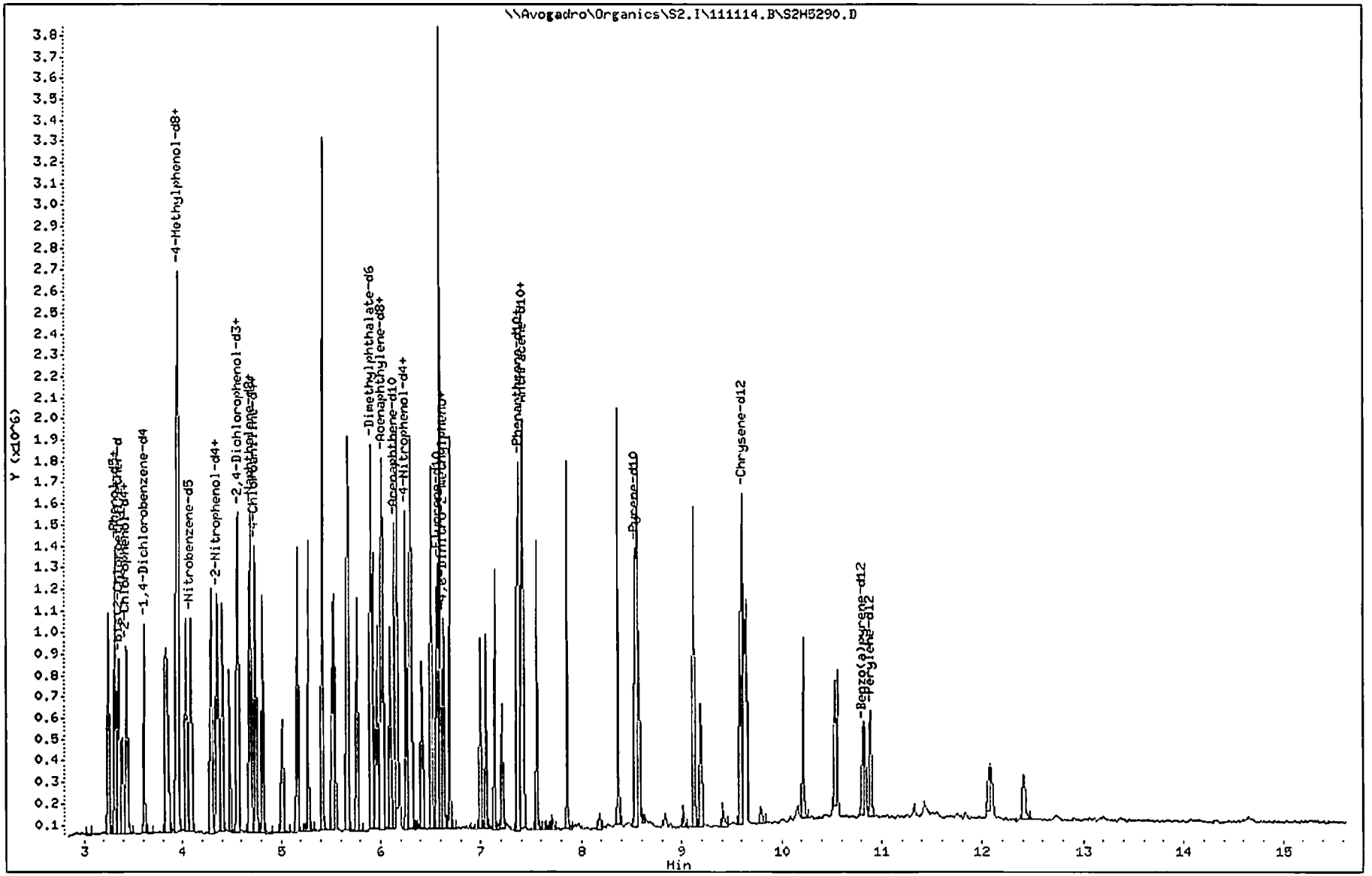
Data File: \\Avogadro\Organics\S2.I\111114.B\S2H5290.D
Report Date: 15-Nov-2011 10:25

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	
75	3,3'-Dichlorobenzidine	252	9.584	9.584	(0.998)	113513	40.0000	45	
76	Benzo(a)anthracene	228	9.595	9.595	(0.999)	376950	40.0000	37	
* 77	Chrysene-d12	240	9.605	9.605	(1.000)	343656	40.0000		(Q)
78	Chrysene	228	9.627	9.627	(1.002)	338373	40.0000	38	
79	bis(2-Ethylhexyl)phthalate	149	9.648	9.648	(1.004)	251349	40.0000	48	
80	Di-n-octyiphthalate	149	10.217	10.217	(0.938)	387858	40.0000	52	
81	Benzo(b)fluoranthene	252	10.538	10.538	(0.968)	282250	40.0000	43	
82	Benzo(k)fluoranthene	252	10.560	10.560	(0.969)	272586	40.0000	36	
$ 83	Benzo(a)pyrene-d12	264	10.806	10.806	(0.992)	189942	40.0000	38	
84	Benzo(a)pyrene	252	10.839	10.839	(0.995)	217143	40.0000	38	
* 85	Perylene-d12	264	10.892	10.892	(1.000)	203023	40.0000		
86	Indeno(1,2,3-cd)pyrene	276	12.061	12.061	(1.107)	184224	40.0000	41	
87	Dibenzo(a,h)anthracene	278	12.093	12.093	(1.110)	152125	40.0000	41	
88	Benzo(g,h,i)perylene	276	12.415	12.415	(1.140)	150891	40.0000	41	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S2.I\111114.B\S2H5290.D
Date : 14-NOV-2011 16:35
Client ID: SSTD0202C
Instrument: S2.i
Sample Info: SSTD0202C,SSTD0202C
Volume Injected (uL): 2.0
Operator: SRC:
Column phase: RXI-5SILHS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111114.B\S2H5295.D
Report Date: 15-Nov-2011 10:25

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111114.B\S2H5295.D
Lab Smp Id: SSTD0202D Client Smp ID: SSTD0202D
Inj Date : 14-NOV-2011 18:23
Operator : SRC: Inst ID: S2.i
Smp Info : SSTD0202D,SSTD0202D
Misc Info : 2,3
Comment :
Method : \\Avogadro\Organics\S2.I\111114.B\S2_SOM.m
Meth Date : 15-Nov-2011 10:25 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * (Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vi	2.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
	1 Benzaldehyde	77	3.243	3.243	(0.896)	233244	40.0000	39
$	2 Phenol-d5	71	3.307	3.307	(0.914)	156205	40.0000	41
	3 Phenol	94	3.318	3.318	(0.917)	411758	40.0000	40
$	4 bis(2-Chloroethyl)ether-d8	67	3.350	3.350	(0.926)	196755	40.0000	38
	5 bis(2-Chloroethyl)ether	93	3.393	3.393	(0.938)	311159	40.0000	41
$	6 2-Chlorophenol-d4	132	3.425	3.425	(0.947)	137971	40.0000	42
	7 2-Chlorophenol	128	3.436	3.436	(0.950)	137842	40.0000	41
-	8 1,4-Dichlorobenzene-d4	152	3.618	3.618	(1.000)	120504	40.0000	(Q)
	9 2-Methylphenol	108	3.833	3.833	(1.059)	258312	40.0000	45
	10 2,2'-oxybis(1-Chloropropane)	45	3.844	3.844	(1.062)	291435	40.0000	38
$	11 4-Methylphenol-d8	113	3.940	3.940	(1.089)	289528	40.0000	56
	13 Acetophenone	105	3.951	3.951	(1.092)	464699	40.0000	47
	14 N-Nitroso-di-n-propylamine	70	3.961	3.961	(1.095)	230487	40.0000	48(Q)
	12 4-Methylphenol	108	3.961	3.961	(1.095)	300678	40.0000	51
	15 Hexachloroethane	117	4.037	4.037	(1.116)	105229	40.0000	40(Q)
$	16 Nitrobenzene-d5	128	4.079	4.079	(0.872)	83502	40.0000	36
	17 Nitrobenzene	77	4.090	4.090	(0.874)	384372	40.0000	33
	18 Isophorone	82	4.294	4.294	(0.918)	803582	40.0000	41
$	19 2-Nitrophenol-d4	143	4.348	4.348	(0.929)	99620	40.0000	39
	20 2-Nitrophenol	139	4.358	4.358	(0.931)	93357	40.0000	37
	21 2,4-Dimethylphenol	107	4.412	4.412	(0.943)	320287	40.0000	37(Q)

Data File: \\Avogadro\Organics\S2.I\111114.B\S2H5295.D
Report Date: 15-Nov-2011 10:25

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	
	22	bis(2-Chloroethoxy)methane	93	4.487	4.487	(0.959)	416240	40.0000	38	
$	23	2,4-Dichlorophenol-d3	165	4.562	4.562	(0.975)	194781	40.0000	42	
	24	2,4-Dichlorophenol	162	4.562	4.562	(0.975)	173311	40.0000	41	
*	25	Naphthalene-d8	136	4.680	4.680	(1.000)	441374	40.0000		
	26	Naphthalene	128	4.691	4.691	(1.002)	394625	40.0000	35	
$	27	4-Chloroaniline-d4	131	4.734	4.734	(1.011)	174942	40.0000	43	(Q)
	28	4-Chloroaniline	127	4.744	4.744	(1.014)	207569	40.0000	46	
	29	Hexachlorobutadiene	225	4.819	4.819	(1.030)	116913	40.0000	37	
	30	Caprolactam	113	5.012	5.012	(1.071)	90074	40.0000	53	
	31	4-Chloro-3-methylphenol	107	5.162	5.162	(1.103)	336983	40.0000	49	
	32	2-Methylnaphthalene	142	5.280	5.280	(1.128)	334192	40.0000	43	
	33	Hexachlorocyclopentadiene	237	5.420	5.420	(0.883)	148804	40.0000	31	(Q)
	34	1,2,4,5-Tetrachlorobenzene	216	5.420	5.420	(0.883)	529800	40.0000	31	
	35	2,4,6-Trichlorophenol	196	5.516	5.516	(0.899)	185493	40.0000	35	
	36	2,4,5-Trichlorophenol	196	5.549	5.549	(0.904)	212732	40.0000	39	
	37	1,1'-Biphenyl	154	5.667	5.667	(0.923)	541497	40.0000	36	
	38	2-Chloronaphthalene	162	5.677	5.677	(0.925)	457564	40.0000	34	
	39	2-Nitroaniline	65	5.763	5.763	(0.939)	225702	40.0000	35	
$	40	Dimethylphthalate-d6	166	5.902	5.902	(0.962)	622353	40.0000	39	
	41	Dimethylphthalate	163	5.924	5.924	(0.965)	624115	40.0000	42	
	42	2,6-Dinitrotoluene	165	5.967	5.967	(0.972)	150535	40.0000	41	
$	43	Acenaphthylene-d8	160	6.010	6.010	(0.979)	727380	40.0000	35	
	44	Acenaphthylene	152	6.020	6.020	(0.981)	694368	40.0000	37	
	45	3-Nitroaniline	138	6.106	6.106	(0.995)	101610	40.0000	42	
*	46	Acenaphthene-d10	164	6.138	6.138	(1.000)	428821	40.0000		
	47	Acenaphthene	153	6.160	6.160	(1.003)	376660	40.0000	31	
	48	2,4-Dinitrophenol	184	6.192	6.192	(1.009)	68354	40.0000	41	(Q)
	52	Dibenzofuran	168	6.310	6.310	(1.028)	666706	40.0000	38	
$	49	4-Nitrophenol-d4	143	6.246	6.246	(1.017)	95841	40.0000	42	
	50	4-Nitrophenol	109	6.256	6.256	(1.019)	187782	40.0000	43	
	51	2,4-Dinitrotoluene	165	6.299	6.299	(1.026)	207257	40.0000	45	(Q)
	118	2,3,4,6-Tetrachlorophenol	232	6.417	6.417	(1.045)	151967	40.0000	41	
	53	Diethylphthalate	149	6.514	6.514	(1.061)	502560	40.0000	36	
$	54	Fluorene-d10	176	6.567	6.567	(1.070)	576711	40.0000	40	
	56	Fluorene	166	6.589	6.589	(1.073)	565966	40.0000	39	
	55	4-Chlorophenyl-phenylether	204	6.599	6.599	(1.075)	297003	40.0000	39	
	57	4-Nitroaniline	138	6.610	6.610	(1.077)	104998	40.0000	40	
$	58	4,6-Dinitro-2-methylphenol-d2	200	6.632	6.632	(0.901)	125325	40.0000	37	(Q)
	59	4,6-Dinitro-2-methylphenol	198	6.632	6.632	(0.901)	108530	40.0000	33	(Q)
	60	N-Nitrosodiphenylamine	169	6.696	6.696	(0.910)	425254	40.0000	32	
	61	4-Bromophenyl-phenylether	248	6.996	6.996	(0.950)	183642	40.0000	39	
	62	Hexachlorobenzene	284	7.050	7.050	(0.958)	185080	40.0000	37	
	63	Atrazine	200	7.136	7.136	(0.969)	199863	40.0000	42	
	64	Pentachlorophenol	266	7.211	7.211	(0.980)	91662	40.0000	37	
*	65	Phenanthrene-d10	188	7.361	7.361	(1.000)	868857	40.0000		
	66	Phenanthrene	178	7.382	7.382	(1.003)	851433	40.0000	35	
$	67	Anthracene-d10	188	7.404	7.404	(1.006)	970464	40.0000	39	
	68	Anthracene	178	7.414	7.414	(1.007)	821405	40.0000	33	
	117	Carbazole	167	7.554	7.554	(1.026)	793946	40.0000	40	
	70	Di-n-butylphthalate	149	7.854	7.854	(1.067)	946329	40.0000	44	
	71	Fluoranthene	202	8.358	8.358	(1.135)	1032566	40.0000	41	
$	72	Pyrene-d10	212	8.530	8.530	(0.891)	784089	40.0000	44	
	73	Pyrene	202	8.540	8.540	(0.892)	911044	40.0000	40	
	74	Butylbenzylphthalate	149	9.098	9.098	(0.951)	331455	40.0000	47	

Data File: \\Avogadro\Organics\S2.I\111114.B\S2H5295.D
Report Date: 15-Nov-2011 10:25

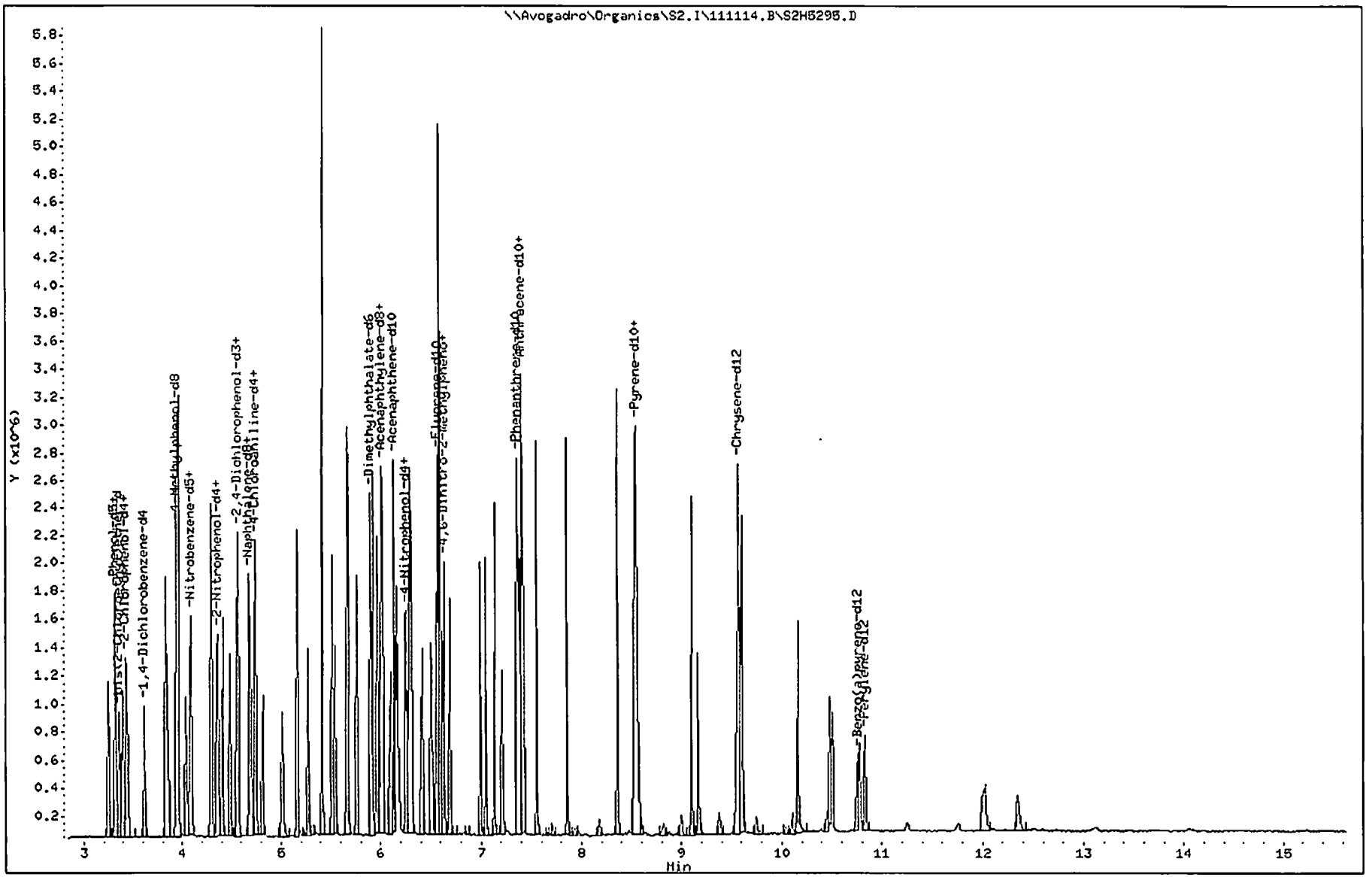
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)	
	75 3,3'-Dichlorobenzidine	252	9.548	9.548	(0.998)	191703	40.0000	46	
	76 Benzo(a)anthracene	228	9.559	9.559	(0.999)	612192	40.0000	37	
*	77 Chrysene-d12	240	9.570	9.570	(1.000)	562566	40.0000		(Q)
	78 Chrysene	228	9.591	9.591	(1.002)	546916	40.0000	37	
	79 bis(2-Ethylhexyl)phthalate	149	9.602	9.602	(1.003)	417954	40.0000	49	
	80 Di-n-octylphthalate	149	10.160	10.160	(0.938)	595819	40.0000	57	
	81 Benzo(b)fluoranthene	252	10.481	10.481	(0.967)	369340	40.0000	40	
	82 Benzo(k)fluoranthene	252	10.503	10.503	(0.969)	450019	40.0000	42	
S	83 Benzo(a)pyrene-d12	264	10.760	10.760	(0.993)	254673	40.0000	36	
	84 Benzo(a)pyrene	252	10.782	10.782	(0.995)	302822	40.0000	37	
*	85 Perylene-d12	264	10.835	10.835	(1.000)	285438	40.0000		
	86 Indeno(1,2,3-cd)pyrene	276	12.004	12.004	(1.108)	213397	40.0000	34	
	87 Dibenzo(a,h)anthracene	278	12.026	12.026	(1.110)	186645	40.0000	36	
	88 Benzo(g,h,i)perylene	276	12.347	12.347	(1.140)	169031	40.0000	33	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S2.I\111114.B\S2H5295.D
Date : 14-NOV-2011 18:23
Client ID: SSTD0202D
Sample Info: SSTD0202D,SSTD0202D
Volume Injected (uL): 2.0
Column phase: RXI-5SILMS

Instrument: S2.i
Operator: SRC:
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\Avogadro\Organics\S2.I\111025.B\S2H5052.D
Lab Smp Id: DFTPP2W Client Smp ID: DFTPP2W
Inj Date : 25-OCT-2011 09:32
Operator : SRC: Inst ID: S2.i
Smp Info : DFTPP2W,DFTPP2W
Misc Info : 3,3
Comment :
Method : \\Avogadro\Organics\S2.I\111025.B\S2_dftppSOM.m
Meth Date : 19-Oct-2011 10:51 mscarpaci Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 100 QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf * Vf/Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 dftpp						CAS #: 5074-71-5		
5.674	6.035	-0.361	198	237696			0.00- 100.00	100.00
5.674	6.035	-0.361	51	145024			10.00- 80.00	61.01
5.674	6.035	-0.361	68	0	0.0	0.0	0.00- 2.00	0.00
5.674	6.035	-0.361	69	199040			0.00- 0.00	83.74
5.674	6.035	-0.361	70	0	0.0	0.0	0.00- 2.00	0.00
5.674	6.035	-0.361	127	111936			10.00- 80.00	47.09
5.674	6.035	-0.361	197	0	0.0	0.0	0.00- 2.00	0.00
5.674	6.035	-0.361	199	16123			5.00- 9.00	6.78
5.674	6.035	-0.361	275	36352			10.00- 60.00	15.29
5.674	6.035	-0.361	365	3657			1.00- 0.00	1.54
5.674	6.035	-0.361	441	21896			0.01- 99.99	91.26
5.674	6.035	-0.361	442	124880			50.00- 100.00	52.54
5.674	6.035	-0.361	443	23992			15.00- 24.00	19.21

Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5052.D

Date : 25-OCT-2011 09:32

Client ID: DFTPP2W

Instrument: S2.i

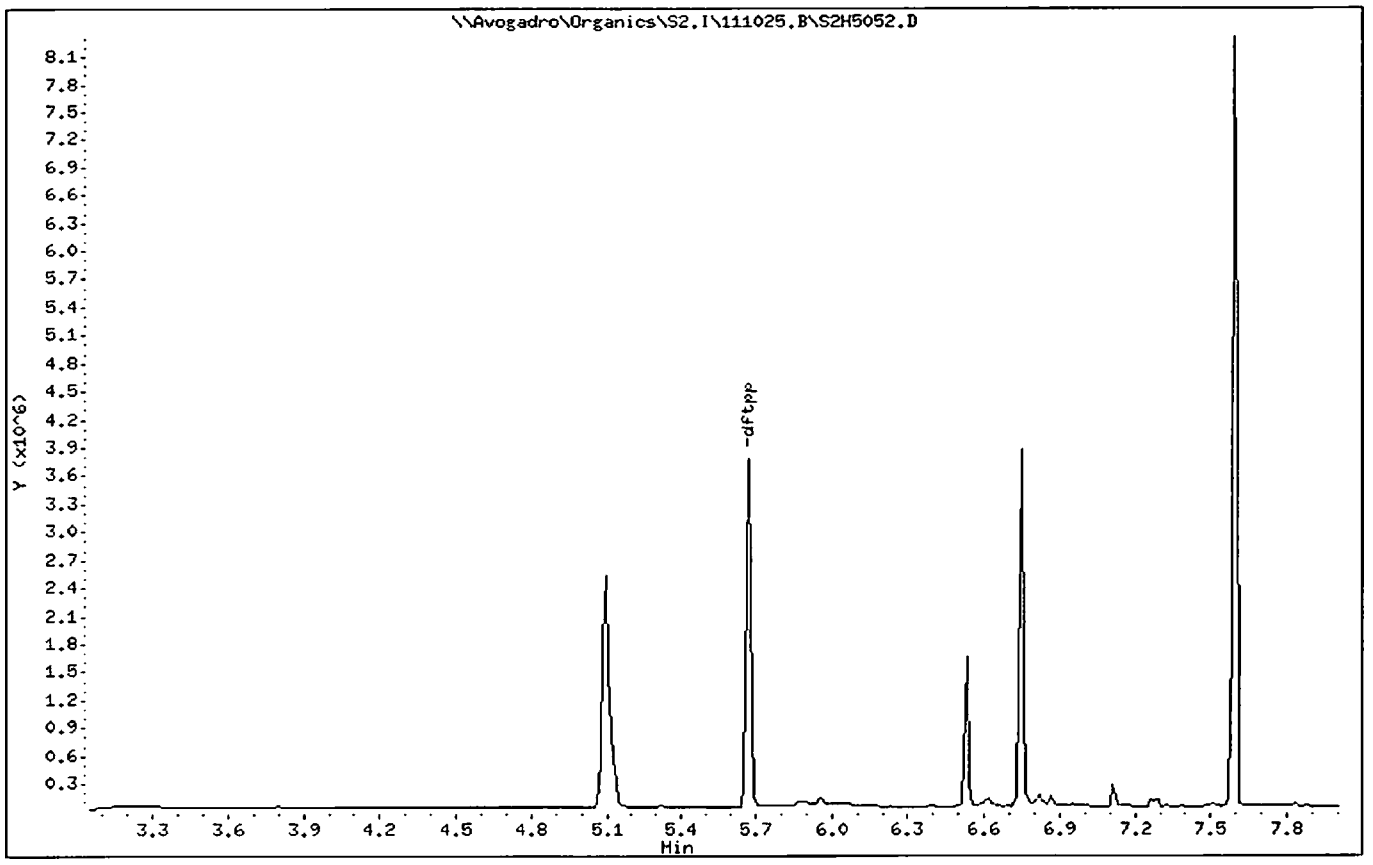
Sample Info: DFTPP2W,DFTPP2W

Volume Injected (uL): 2.0

Operator: SRC:

Column phase: RXi-5SILMS

Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5052.D

Date : 25-OCT-2011 09:32

Client ID: DFTPP2W

Instrument: S2.i

Sample Info: DFTPP2W,DFTPP2W

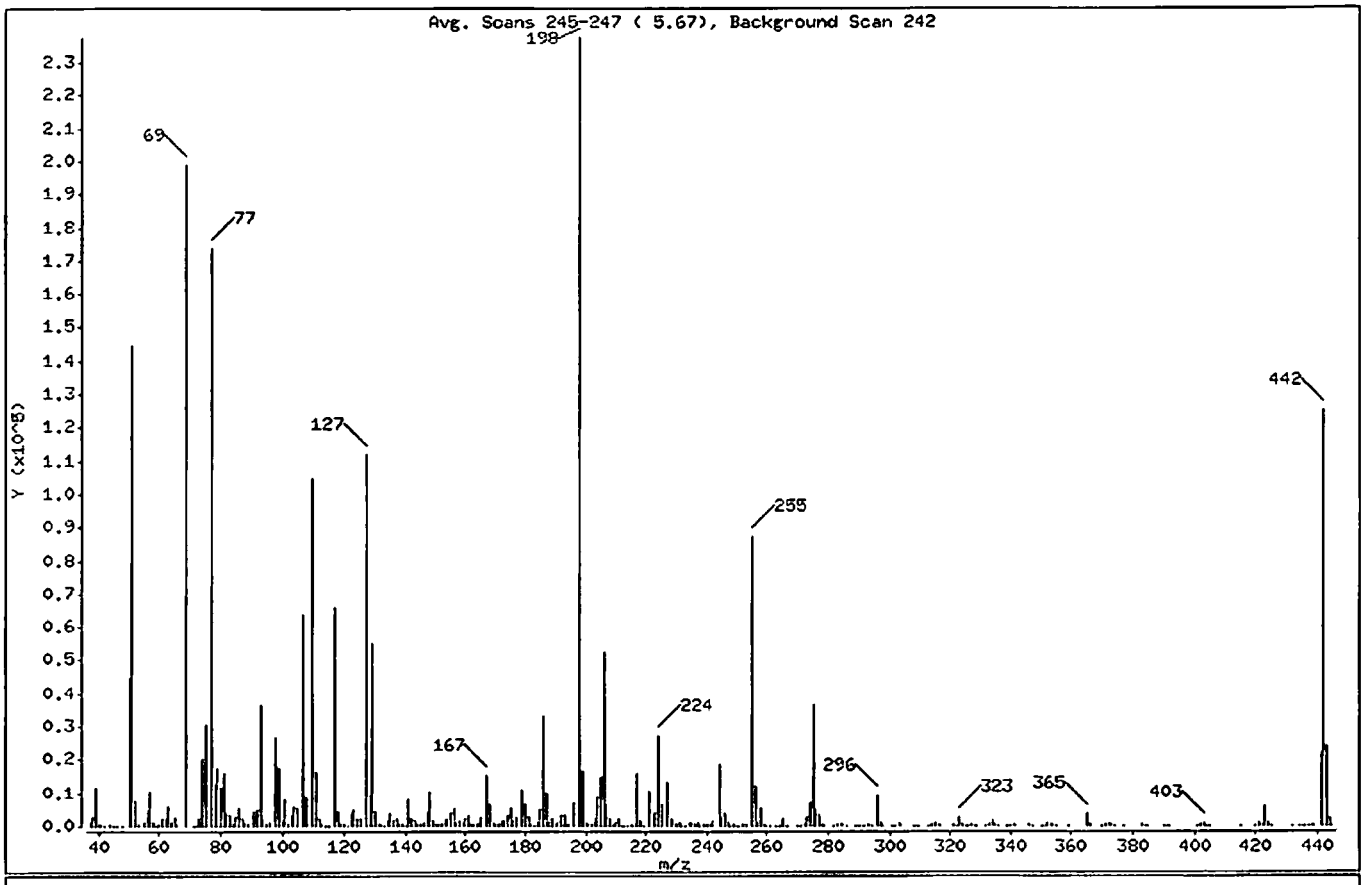
Volume Injected (uL): 2.0

Operator: SRC:

Column phase: RXi-5SILMS

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	61.01
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	83.74
70	Less than 2.00% of mass 69	0.00 (0.00)
127	10.00 - 80.00% of mass 198	47.09
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.78
275	10.00 - 60.00% of mass 198	15.29
365	Greater than 1.00% of mass 198	1.54
441	Present, but less than mass 443	9.21
442	50.00 - 100.00% of mass 198	52.54
443	15.00 - 24.00% of mass 442	10.09 (19.21)

Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5052.D

Date : 25-OCT-2011 09:32

Client ID: DFTPP2W

Instrument: S2.i

Sample Info: DFTPP2W,DFTPP2W

Volume Injected (uL): 2.0

Operator: SRC:

Column phase: RXi-5SILMS

Column diameter: 0.25

Data File: S2H5052.D
Spectrum: Avg. Scans 245-247 (5.67), Background Scan 242
Location of Maximum: 198.00
Number of points: 308

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	887	129.00	55200	211.00	2362	304.00	325
38.00	2682	130.00	4483	212.00	249	308.00	115
39.00	11719	131.00	688	213.00	204	309.00	150
40.00	670	132.00	462	214.00	54	310.00	214
41.00	474	133.00	266	215.00	751	313.00	76
42.00	44	134.00	1630	216.00	214	314.00	451
44.00	751	135.00	4058	217.00	15846	315.00	1039
45.00	234	136.00	1797	218.00	1851	316.00	552
46.00	13	137.00	2009	219.00	177	317.00	85
48.00	258	138.00	395	221.00	10424	321.00	313
50.00	44544	139.00	300	223.00	3644	322.00	130
51.00	145024	140.00	182	224.00	27192	323.00	2631
52.00	7590	141.00	7964	225.00	6722	324.00	519
53.00	381	142.00	2409	227.00	13254	325.00	37
55.00	1128	143.00	1757	228.00	2001	326.00	98
56.00	4760	144.00	504	229.00	2299	327.00	634
57.00	10599	145.00	371	230.00	331	328.00	257
58.00	1020	146.00	1300	231.00	1171	329.00	49
59.00	161	147.00	4174	232.00	184	332.00	229
60.00	329	148.00	10447	233.00	240	333.00	319
61.00	1915	149.00	1650	234.00	824	334.00	1692
62.00	2253	150.00	478	235.00	916	335.00	429
63.00	5846	151.00	736	236.00	602	336.00	79
64.00	821	152.00	575	237.00	822	339.00	49
65.00	2558	153.00	2419	238.00	198	340.00	37
66.00	563	154.00	2046	239.00	394	341.00	290
69.00	199040	155.00	4043	240.00	393	342.00	77
71.00	245	156.00	5410	241.00	656	346.00	590
72.00	208	157.00	887	242.00	1412	347.00	111
73.00	2001	158.00	1385	244.00	18744	350.00	110
74.00	20192	159.00	1170	245.00	2688	351.00	46
75.00	30352	160.00	2326	246.00	3874	352.00	849
77.00	174016	161.00	3402	247.00	881	353.00	585
78.00	12544	162.00	728	248.00	240	354.00	692
79.00	17224	163.00	287	249.00	609	355.00	166

Date : 25-OCT-2011 09:32

Client ID: DFTPP2W Instrument: S2.i

Sample Info: DFTPP2W,DFTPP2W

Volume Injected (uL): 2.0 Operator: SRC:

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S2H5052.D

Spectrum: Avg. Scans 245-247 (5.67), Background Scan 242

Location of Maximum: 198.00

Number of points: 308

m/z	Y	m/z	Y	m/z	Y	m/z	Y
80.00	11731	164.00	338	250.00	191	359.00	53
81.00	15941	165.00	2925	251.00	247	365.00	3657
82.00	3577	167.00	15178	252.00	277	366.00	483
83.00	3265	168.00	6390	253.00	665	370.00	76
84.00	392	169.00	1228	255.00	87624	371.00	292
85.00	2597	170.00	748	256.00	12126	372.00	1311
86.00	5634	171.00	687	257.00	1136	373.00	408
87.00	2359	172.00	1391	258.00	5533	374.00	39
88.00	938	173.00	1693	259.00	811	377.00	35
89.00	466	174.00	3059	260.00	115	383.00	340
91.00	4110	175.00	5272	261.00	156	384.00	123
92.00	4915	176.00	1474	263.00	34	385.00	44
93.00	36536	177.00	2827	264.00	20	390.00	160
94.00	2070	179.00	10743	265.00	2216	391.00	95
95.00	414	180.00	6612	266.00	251	392.00	76
96.00	1266	181.00	2975	267.00	33	401.00	76
98.00	26712	182.00	563	270.00	175	402.00	578
99.00	17696	183.00	219	271.00	208	403.00	938
100.00	1505	184.00	1034	272.00	325	404.00	257
101.00	8423	185.00	4935	273.00	2525	405.00	42
102.00	455	186.00	33544	274.00	7031	415.00	38
103.00	3136	187.00	9632	275.00	36352	420.00	35
104.00	5860	188.00	998	276.00	5041	421.00	836
105.00	5248	189.00	2373	277.00	3128	422.00	677
107.00	63784	190.00	553	278.00	567	423.00	6131
108.00	8919	191.00	1015	279.00	59	424.00	1267
110.00	105016	192.00	3252	282.00	36	425.00	58
111.00	16381	193.00	3405	283.00	413	432.00	36
112.00	2021	194.00	680	284.00	279	434.00	107
113.00	640	196.00	7359	285.00	598	435.00	65
114.00	45	198.00	237696	286.00	126	436.00	164
115.00	111	199.00	16123	289.00	175	437.00	252
117.00	66072	200.00	1299	290.00	85	438.00	342
118.00	4481	201.00	293	291.00	34	439.00	241
119.00	473	202.00	776	292.00	139	441.00	21896

Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5052.D

Date : 25-OCT-2011 09:32

Client ID: DFTPP2W

Instrument: S2.i

Sample Info: DFTPP2W,DFTPP2W

Volume Injected (uL): 2.0

Operator: SRC:

Column phase: RXi-5SILMS

Column diameter: 0.25

Data File: S2H5052.D

Spectrum: Avg. Scans 245-247 (5.67), Background Scan 242

Location of Maximum: 198.00

Number of points: 308

m/z	Y	m/z	Y	m/z	Y	m/z	Y
120.00	702	203.00	1974	293.00	630	442.00	124880
121.00	106	204.00	8596	294.00	211	443.00	23992
122.00	3904	205.00	14687	296.00	9424	444.00	2149
123.00	5097	206.00	52392	297.00	1327	445.00	154
124.00	2427	207.00	6769	298.00	51		
125.00	1989	208.00	2114	301.00	80		
127.00	111936	209.00	770	302.00	203		
128.00	9377	210.00	914	303.00	1040		

Spectrum Analytical, Inc. RI Division

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5247.D
Lab Smp Id: DFTPP2X Client Smp ID: DFTPP2X
Inj Date : 10-NOV-2011 09:18
Operator : SRC: Inst ID: S2.i
Smp Info : DFTPP2X,DFTPP2X
Misc Info : 3,3
Comment :
Method : \\Avogadro\Organics\S2.I\111110.B\S2_dftppSOM.m
Meth Date : 28-Oct-2011 11:08 mscarpaci Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 100 QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf * Vf/Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 dftpp						CAS #: 5074-71-5		
5.251	5.552	-0.301	198	314624			0.00- 100.00	100.00
5.251	5.552	-0.301	51	165760			10.00- 80.00	52.69
5.251	5.552	-0.301	68	0	0.0	0.0	0.00- 2.00	0.00
5.251	5.552	-0.301	69	223552			0.00- 0.00	71.05
5.251	5.552	-0.301	70	0	0.0	0.0	0.00- 2.00	0.00
5.251	5.552	-0.301	127	144576			10.00- 80.00	45.95
5.251	5.552	-0.301	197	0	0.0	0.0	0.00- 2.00	0.00
5.251	5.552	-0.301	199	21888			5.00- 9.00	6.96
5.251	5.552	-0.301	275	48688			10.00- 60.00	15.47
5.251	5.552	-0.301	365	5200			1.00- 0.00	1.65
5.251	5.552	-0.301	441	30432			0.01- 99.99	91.86
5.251	5.552	-0.301	442	169344			50.00- 100.00	53.82
5.251	5.552	-0.301	443	33128			15.00- 24.00	19.56

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5247.D

Date : 10-NOV-2011 09:18

Client ID: DFTPP2X

Instrument: S2.i

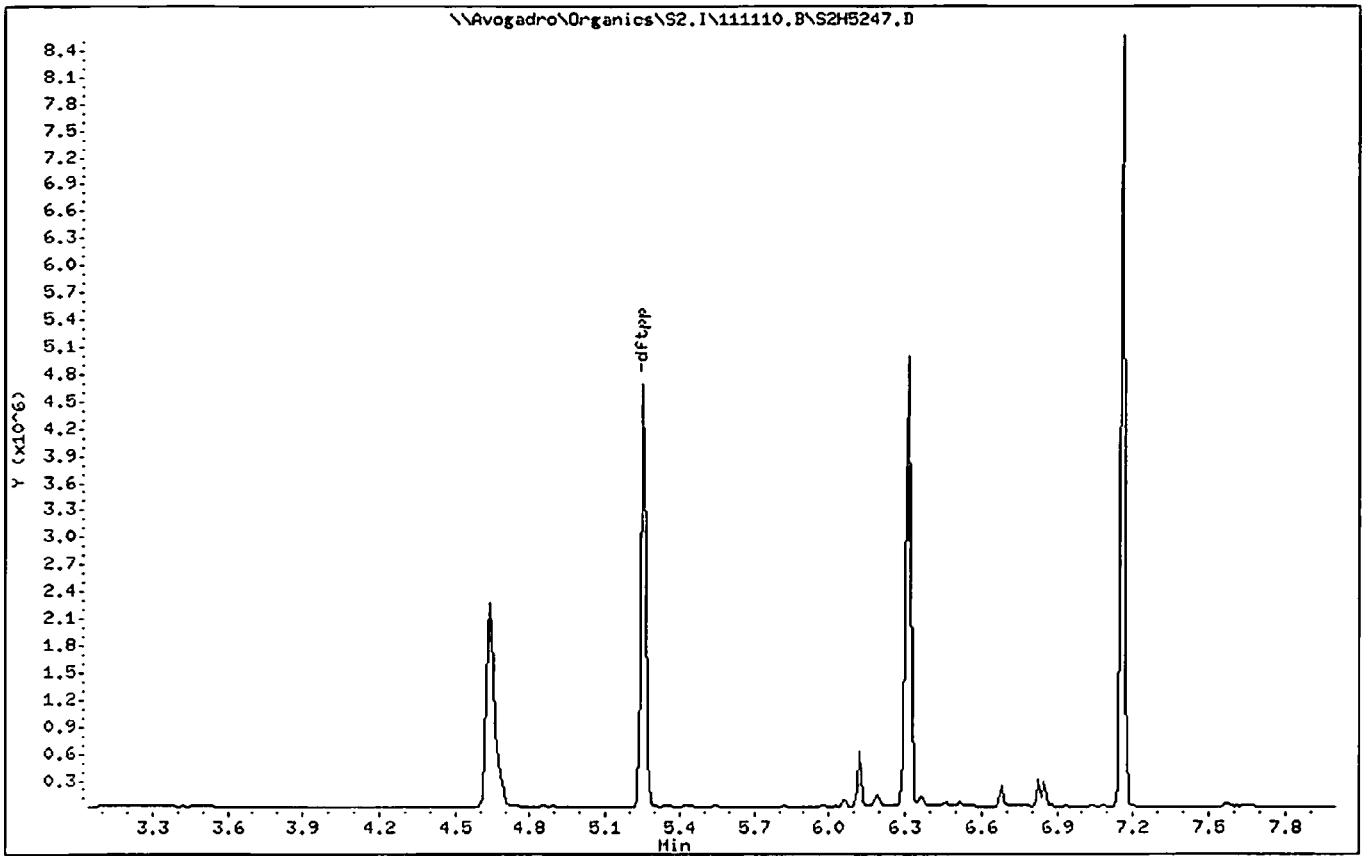
Sample Info: DFTPP2X,DFTPP2X

Volume Injected (uL): 2.0

Operator: SRC:

Column phase: RXi-5SILMS

Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5247.D

Date : 10-NOV-2011 09:18

Client ID: DFTPP2X

Instrument: S2.i

Sample Info: DFTPP2X,DFTPP2X

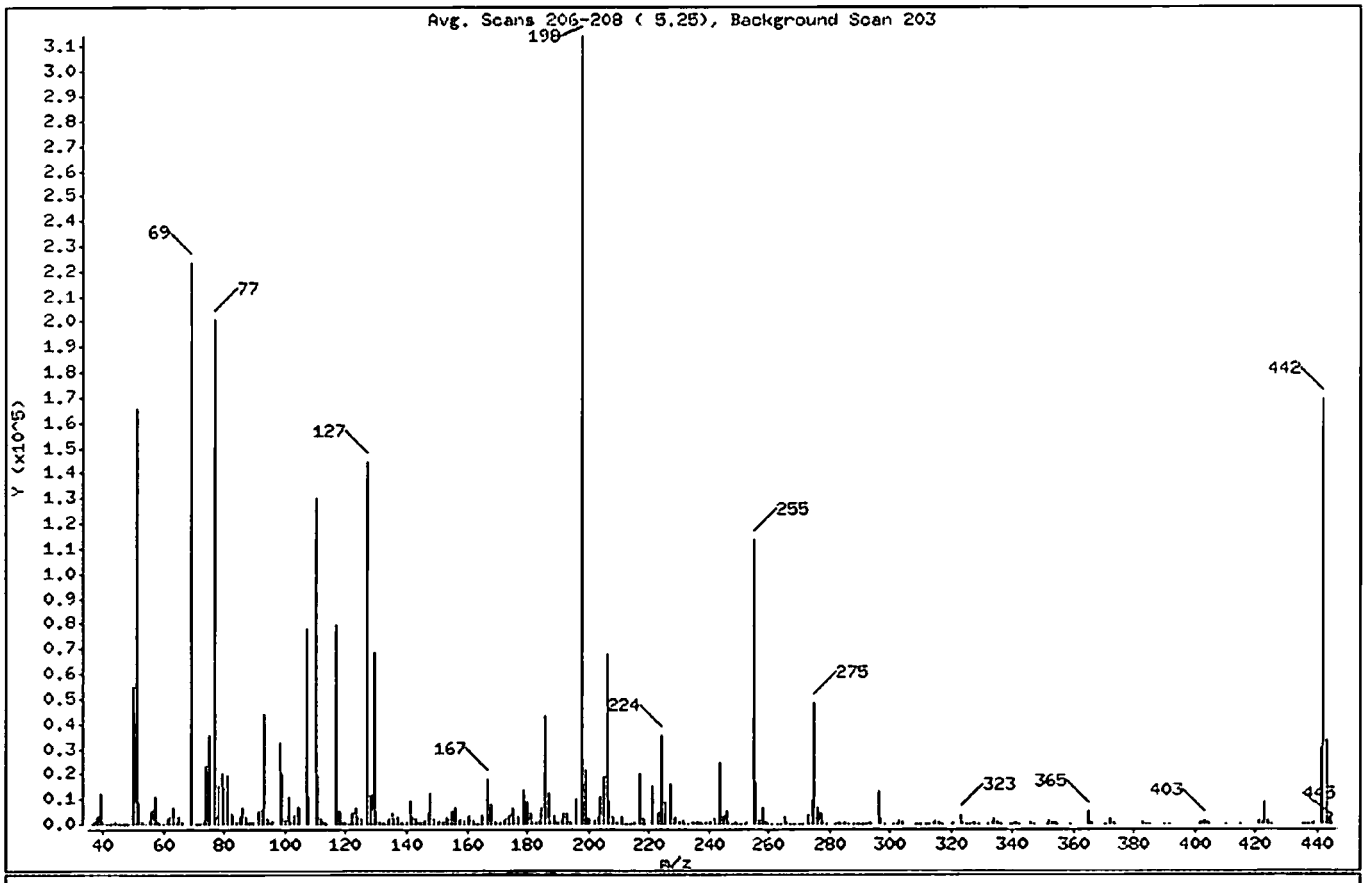
Volume Injected (uL): 2.0

Operator: SRC:

Column phase: RXi-5SILMS

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	52.69
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	71.05
70	Less than 2.00% of mass 69	0.00 (0.00)
127	10.00 - 80.00% of mass 198	45.95
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.96
275	10.00 - 60.00% of mass 198	15.47
365	Greater than 1.00% of mass 198	1.65
441	Present, but less than mass 443	9.67
442	50.00 - 100.00% of mass 198	53.82
443	15.00 - 24.00% of mass 442	10.53 (19.56)

Date : 10-NOV-2011 09:18

Client ID: DFTPP2X Instrument: S2.i

Sample Info: DFTPP2X,DFTPP2X

Volume Injected (uL): 2.0 Operator: SRC:

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S2H5247.D
Spectrum: Avg. Scans 206-208 (5.25), Background Scan 203
Location of Maximum: 198.00
Number of points: 309

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	103	125.00	2488	209.00	901	298.00	124
37.00	1016	127.00	144576	210.00	702	301.00	175
38.00	3058	128.00	11924	211.00	3010	302.00	239
39.00	12355	129.00	68424	212.00	69	303.00	1519
40.00	410	130.00	5379	213.00	164	304.00	375
41.00	310	131.00	1028	214.00	107	308.00	179
42.00	1	132.00	608	215.00	861	309.00	127
43.00	192	133.00	265	217.00	19912	310.00	163
44.00	535	134.00	1991	218.00	2352	312.00	50
45.00	349	135.00	4448	219.00	247	313.00	167
46.00	154	136.00	2053	221.00	14858	314.00	641
47.00	74	137.00	2792	223.00	4083	315.00	1261
48.00	208	138.00	573	224.00	35144	316.00	748
50.00	54648	139.00	523	225.00	8563	317.00	129
51.00	165760	140.00	474	227.00	15606	320.00	34
52.00	8991	141.00	9321	228.00	2292	321.00	373
53.00	439	142.00	2961	229.00	2882	323.00	3660
54.00	77	143.00	1858	230.00	434	324.00	724
55.00	1225	144.00	590	231.00	1265	325.00	33
56.00	5419	145.00	396	232.00	216	326.00	59
57.00	10732	146.00	1794	233.00	285	327.00	605
58.00	611	147.00	4378	234.00	953	328.00	358
59.00	198	148.00	12263	235.00	959	329.00	57
60.00	34	149.00	2150	236.00	811	332.00	334
61.00	2216	150.00	621	237.00	1064	333.00	428
62.00	2769	151.00	1151	238.00	142	334.00	2370
63.00	6301	152.00	487	239.00	605	335.00	586
64.00	1042	153.00	2986	240.00	459	336.00	51
65.00	2594	154.00	2374	241.00	843	339.00	94
66.00	524	155.00	4762	242.00	1859	340.00	96
69.00	223552	156.00	6617	243.00	222	341.00	423
71.00	239	157.00	1173	244.00	24280	342.00	91
72.00	75	158.00	1855	245.00	3250	346.00	786
73.00	910	159.00	1367	246.00	5268	347.00	147
74.00	23288	160.00	2832	247.00	906	351.00	114

Date : 10-NOV-2011 09:18

Client ID: DFTPP2X Instrument: S2.i

Sample Info: DFTPP2X,DFTPP2X

Volume Injected (uL): 2.0 Operator: SRC:

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S2H5247.D
Spectrum: Avg. Scans 206-208 (5.25), Background Scan 203
Location of Maximum: 198.00
Number of points: 309

m/z	Y	m/z	Y	m/z	Y	m/z	Y
75.00	35416	161.00	3971	248.00	277	352.00	1127
77.00	201088	162.00	1092	249.00	831	353.00	855
78.00	15064	163.00	295	250.00	204	354.00	997
79.00	20192	164.00	228	251.00	210	355.00	232
80.00	14449	165.00	3393	252.00	281	359.00	90
81.00	19296	167.00	18184	253.00	632	365.00	5200
82.00	4356	168.00	8227	255.00	113728	366.00	625
83.00	3791	169.00	1434	256.00	16920	370.00	144
84.00	384	170.00	767	257.00	1465	371.00	348
85.00	3227	171.00	787	258.00	6848	372.00	1945
86.00	6378	172.00	1580	259.00	1056	373.00	478
87.00	2624	173.00	2044	260.00	225	374.00	86
88.00	895	174.00	3660	261.00	249	383.00	584
89.00	642	175.00	6373	263.00	93	384.00	182
91.00	4991	176.00	1896	264.00	313	385.00	41
92.00	5912	177.00	3199	265.00	2736	390.00	265
93.00	44376	179.00	13450	266.00	493	391.00	206
94.00	2514	180.00	8331	267.00	41	392.00	164
95.00	388	181.00	4036	268.00	84	401.00	176
96.00	1401	182.00	761	269.00	35	402.00	822
98.00	32832	183.00	431	270.00	193	403.00	1225
99.00	20192	184.00	1162	271.00	307	404.00	440
100.00	1676	185.00	6444	273.00	3644	405.00	52
101.00	10655	186.00	43168	274.00	9576	410.00	34
102.00	726	187.00	12526	275.00	48688	415.00	91
103.00	3921	188.00	1331	276.00	6645	421.00	1132
104.00	7352	189.00	3385	277.00	4031	422.00	407
105.00	6778	190.00	555	278.00	705	423.00	8422
107.00	77848	191.00	1512	279.00	181	424.00	1714
108.00	10782	192.00	4275	282.00	121	425.00	161
110.00	130000	193.00	4011	283.00	495	435.00	115
111.00	19408	194.00	866	284.00	350	436.00	102
112.00	2406	196.00	10148	285.00	623	437.00	61
113.00	1077	198.00	314624	286.00	115	438.00	232
114.00	257	199.00	21888	288.00	85	439.00	466

Date : 10-NOV-2011 09:18

Client ID: DFTPP2X Instrument: S2.i

Sample Info: DFTPP2X,DFTPP2X

Volume Injected (uL): 2.0 Operator: SRC:

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S2H5247.D

Spectrum: Avg. Scans 206-208 (5.25), Background Scan 203

Location of Maximum: 198.00

Number of points: 309

m/z	Y	m/z	Y	m/z	Y	m/z	Y
117.00	79920	200.00	1828	289.00	180	441.00	30432
118.00	5199	202.00	1616	290.00	138	442.00	169344
119.00	487	203.00	2547	291.00	92	443.00	33128
120.00	697	204.00	10693	292.00	175	444.00	2997
121.00	92	205.00	18624	293.00	854	445.00	218
122.00	4649	206.00	67968	294.00	240		
123.00	6183	207.00	9095	296.00	13001		
124.00	3053	208.00	2615	297.00	1825		

Spectrum Analytical, Inc. RI Division

Data file : \\Avogadro\Organics\S2.I\111111.B\S2H5275.D
Lab Smp Id: DFTPP2Z Client Smp ID: DFTPP2Z
Inj Date : 11-NOV-2011 08:43
Operator : SRC: Inst ID: S2.i
Smp Info : DFTPP2Z,DFTPP2Z
Misc Info : 3,3
Comment :
Method : \\Avogadro\Organics\S2.I\111111.B\S2_dftppSOM.m
Meth Date : 28-Oct-2011 11:08 mscarpaci Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 100 QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf * Vf/Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume (uL)
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
1 dftpp						CAS #: 5074-71-5		
5.283	5.552	-0.269	198	332416			0.00- 100.00	100.00
5.283	5.552	-0.269	51	166912			10.00- 80.00	50.21
5.283	5.552	-0.269	68	0	0.0	0.0	0.00- 2.00	0.00
5.283	5.552	-0.269	69	222016			0.00- 0.00	66.79
5.283	5.552	-0.269	70	0	0.0	0.0	0.00- 2.00	0.00
5.283	5.552	-0.269	127	144896			10.00- 80.00	43.59
5.283	5.552	-0.269	197	0	0.0	0.0	0.00- 2.00	0.00
5.283	5.552	-0.269	199	22832			5.00- 9.00	6.87
5.283	5.552	-0.269	275	51648			10.00- 60.00	15.54
5.283	5.552	-0.269	365	5512			1.00- 0.00	1.66
5.283	5.552	-0.269	441	31176			0.01- 99.99	92.04
5.283	5.552	-0.269	442	173696			50.00- 100.00	52.25
5.283	5.552	-0.269	443	33872			15.00- 24.00	19.50

Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5275.D

Date : 11-NOV-2011 08:43

Client ID: DFTPP2Z

Instrument: S2.i

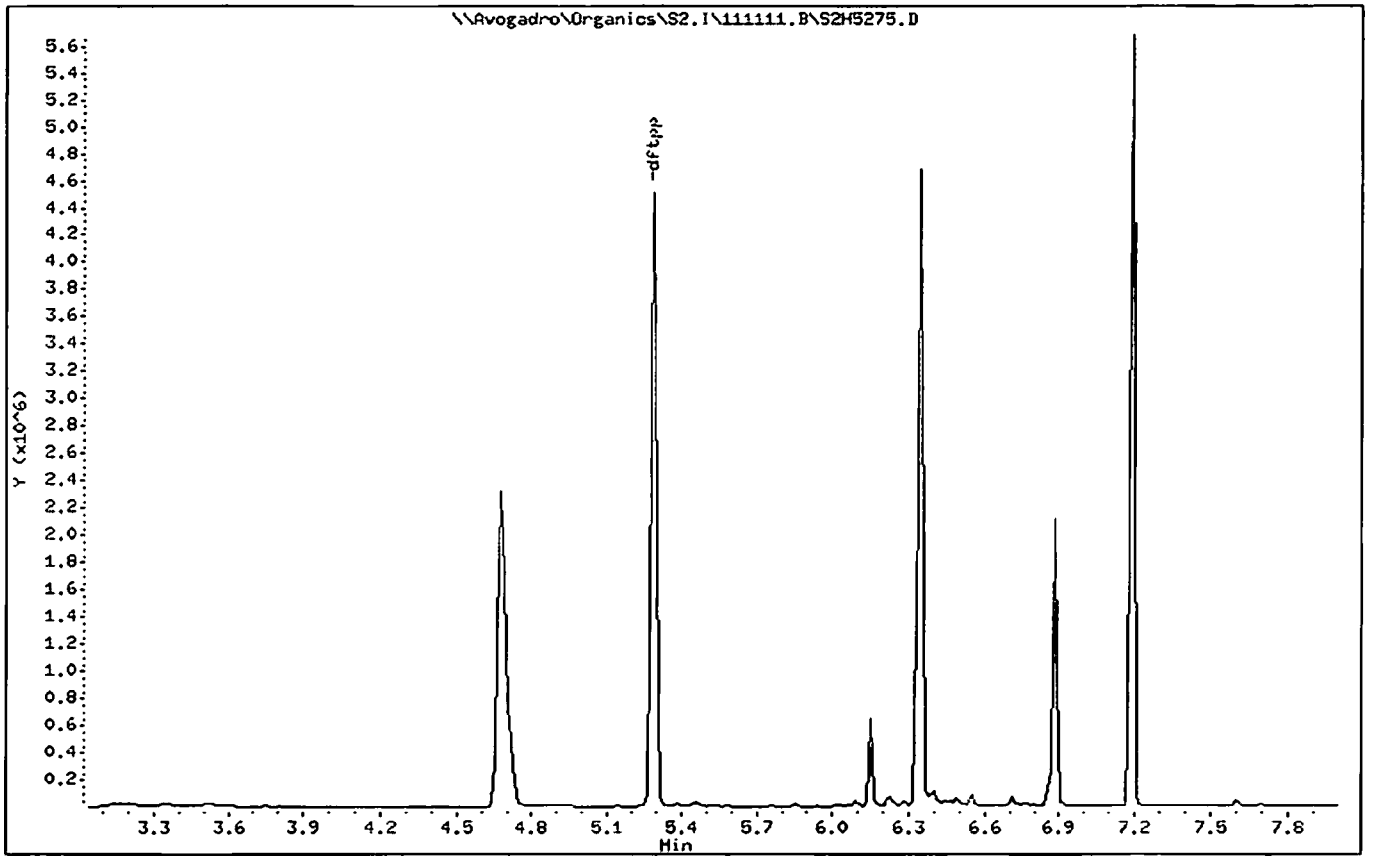
Sample Info: DFTPP2Z,DFTPP2Z

Volume Injected (uL): 2.0

Operator: SRC:

Column phase: RXi-5SILMS

Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5275.D

Date : 11-NOV-2011 08:43

Client ID: DFTPP2Z

Instrument: S2.i

Sample Info: DFTPP2Z,DFTPP2Z

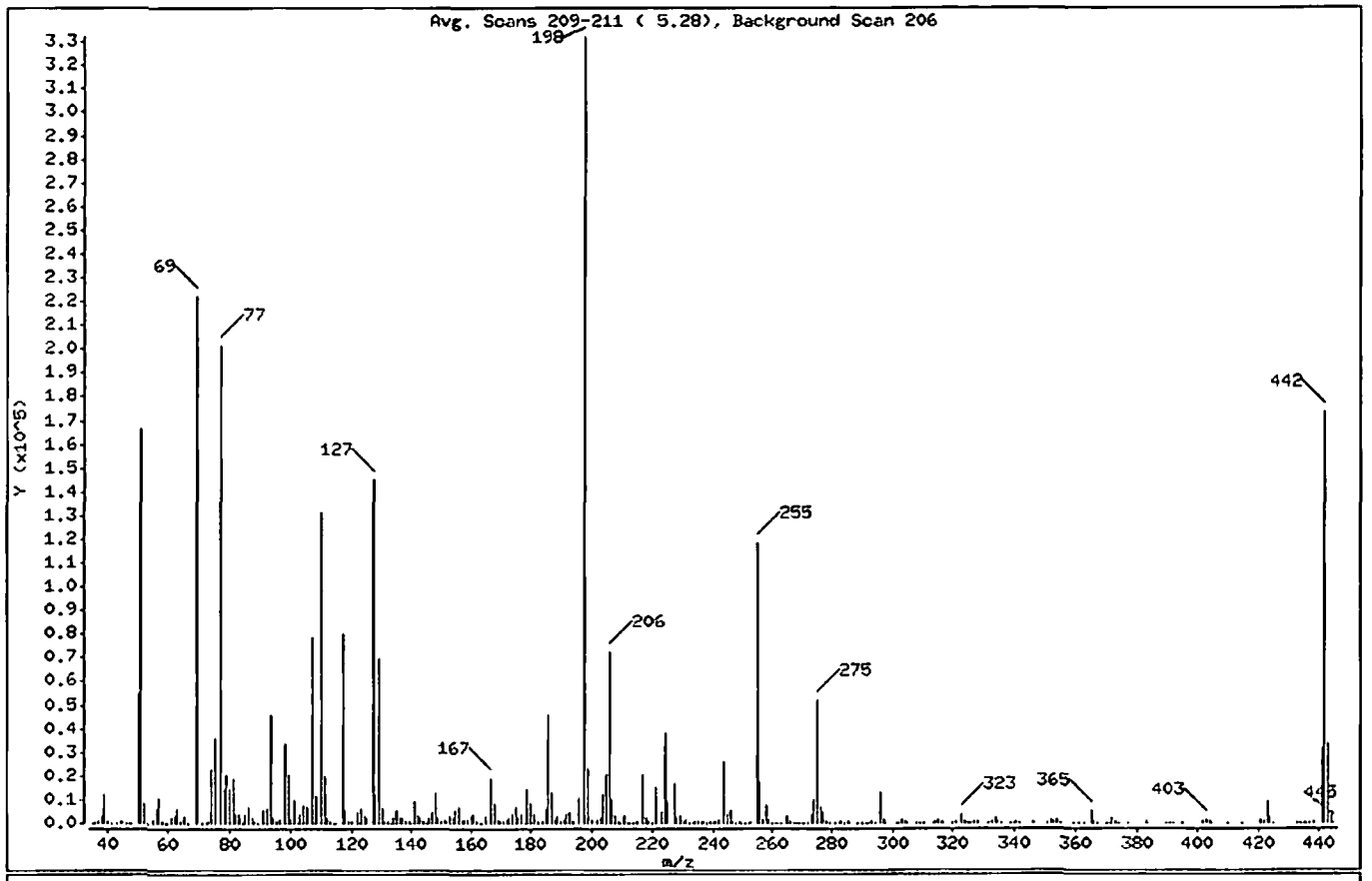
Volume Injected (uL): 2.0

Operator: SRC:

Column phase: RXi-5SILMS

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	50.21
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	66.79
70	Less than 2.00% of mass 69	0.00 (0.00)
127	10.00 - 80.00% of mass 198	43.59
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.87
275	10.00 - 60.00% of mass 198	15.54
365	Greater than 1.00% of mass 198	1.66
441	Present, but less than mass 443	9.38
442	50.00 - 100.00% of mass 198	52.25
443	15.00 - 24.00% of mass 442	10.19 (19.50)

Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5275.D

Date : 11-NOV-2011 08:43

Client ID: DFTPP2Z

Instrument: S2.i

Sample Info: DFTPP2Z,DFTPP2Z

Volume Injected (uL): 2.0

Operator: SRC:

Column phase: RXi-5SILMS

Column diameter: 0.25

Data File: S2H5275.D

Spectrum: Avg. Scans 209-211 (5.28), Background Scan 206

Location of Maximum: 198.00

Number of points: 315

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	197	128.00	12319	211.00	3057	301.00	128
36.00	83	129.00	69728	212.00	61	302.00	346
37.00	1003	130.00	5875	213.00	220	303.00	1597
38.00	3012	131.00	1113	214.00	44	304.00	426
39.00	12552	132.00	725	215.00	819	305.00	33
40.00	1089	133.00	202	217.00	20544	308.00	177
41.00	141	134.00	2084	218.00	2441	309.00	92
43.00	68	135.00	5022	219.00	439	310.00	228
44.00	636	136.00	1935	220.00	62	313.00	39
45.00	401	137.00	2403	221.00	15288	314.00	682
46.00	91	138.00	746	223.00	4713	315.00	1362
47.00	86	139.00	535	224.00	37912	316.00	744
48.00	103	140.00	188	225.00	9360	317.00	164
50.00	54760	141.00	9260	227.00	17056	320.00	43
51.00	166912	142.00	2865	228.00	2491	321.00	495
52.00	8697	143.00	2194	229.00	3145	323.00	3938
53.00	354	144.00	462	230.00	470	324.00	744
55.00	1223	145.00	197	231.00	1270	325.00	53
56.00	5871	146.00	2047	232.00	306	326.00	34
57.00	10984	147.00	4622	233.00	277	327.00	788
58.00	558	148.00	13235	234.00	1123	328.00	423
59.00	111	149.00	2133	235.00	1029	332.00	323
60.00	16	150.00	576	236.00	530	333.00	539
61.00	2448	151.00	1258	237.00	1017	334.00	2393
62.00	2881	152.00	652	238.00	24	335.00	717
63.00	6444	153.00	2865	239.00	628	336.00	76
64.00	910	154.00	2169	240.00	537	339.00	60
65.00	2927	155.00	5090	241.00	986	340.00	55
66.00	298	156.00	7152	242.00	1902	341.00	465
69.00	222016	157.00	1378	244.00	26160	342.00	129
71.00	298	158.00	1710	245.00	3788	346.00	850
72.00	137	159.00	1472	246.00	5198	347.00	154
73.00	588	160.00	2833	247.00	1137	351.00	70
74.00	23160	161.00	4167	248.00	287	352.00	1290
75.00	35888	162.00	1074	249.00	814	353.00	845

Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5275.D

Date : 11-NOV-2011 08:43

Client ID: DFTPP2Z

Instrument: S2.i

Sample Info: DFTPP2Z,DFTPP2Z

Volume Injected (uL): 2.0

Operator: SRC:

Column phase: RXi-5SILMS

Column diameter: 0.25

Data File: S2H5275.D

Spectrum: Avg. Scans 209-211 (5.28), Background Scan 206

Location of Maximum: 198.00

Number of points: 315

m/z	Y	m/z	Y	m/z	Y	m/z	Y
77.00	201664	163.00	362	250.00	139	354.00	1186
78.00	14700	164.00	309	251.00	252	355.00	212
79.00	20792	165.00	3306	252.00	314	359.00	74
80.00	14530	167.00	19128	253.00	801	361.00	40
81.00	18744	168.00	8248	255.00	118568	363.00	37
82.00	4085	169.00	1405	256.00	17624	365.00	5512
83.00	3686	170.00	712	257.00	1467	366.00	900
84.00	110	171.00	913	258.00	7598	367.00	41
85.00	3570	172.00	1790	259.00	1244	370.00	42
86.00	6682	173.00	2119	260.00	255	371.00	321
87.00	2551	174.00	3616	261.00	272	372.00	2060
88.00	863	175.00	6569	262.00	41	373.00	556
89.00	303	176.00	2021	263.00	50	374.00	46
91.00	5080	177.00	3582	265.00	2935	377.00	89
92.00	5943	178.00	158	266.00	426	383.00	594
93.00	45584	179.00	14224	267.00	36	384.00	158
94.00	2529	180.00	8613	268.00	159	390.00	294
95.00	489	181.00	3973	269.00	39	391.00	203
96.00	1255	182.00	622	270.00	239	392.00	128
98.00	33680	183.00	346	271.00	312	395.00	57
99.00	20312	184.00	717	272.00	277	402.00	902
100.00	1858	185.00	5894	273.00	3758	403.00	1167
101.00	9944	186.00	45664	274.00	10267	404.00	395
102.00	219	187.00	12892	275.00	51648	405.00	51
103.00	3724	188.00	1430	276.00	7068	410.00	44
104.00	7760	189.00	3332	277.00	4275	415.00	37
105.00	6555	190.00	588	278.00	715	421.00	1221
107.00	78408	191.00	1431	279.00	144	422.00	900
108.00	11441	192.00	3961	281.00	40	423.00	8871
110.00	131072	193.00	4309	282.00	131	424.00	1931
111.00	19792	194.00	939	283.00	488	425.00	171
112.00	2630	196.00	10562	284.00	307	433.00	37
113.00	878	198.00	332416	285.00	754	434.00	38
114.00	347	199.00	22832	286.00	110	435.00	73
115.00	154	200.00	1824	288.00	35	436.00	132

Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5275.D

Date : 11-NOV-2011 08:43

Client ID: DFTPP2Z

Instrument: S2.i

Sample Info: DFTPP2Z,DFTPP2Z

Volume Injected (uL): 2.0

Operator: SRC:

Column phase: RXi-5SILMS

Column diameter: 0.25

Data File: S2H5275.D

Spectrum: Avg. Scans 209-211 (5.28), Background Scan 206

Location of Maximum: 198.00

Number of points: 315

m/z	Y	m/z	Y	m/z	Y	m/z	Y
117.00	80360	202.00	1730	289.00	225	437.00	144
118.00	5444	203.00	2418	290.00	155	438.00	493
119.00	751	204.00	11933	291.00	2	439.00	234
120.00	796	205.00	20336	292.00	89	441.00	31176
122.00	4634	206.00	72680	293.00	888	442.00	173696
123.00	6036	207.00	9992	294.00	224	443.00	33872
124.00	3158	208.00	2769	296.00	13266	444.00	3083
125.00	2670	209.00	919	297.00	1901	445.00	174
127.00	144896	210.00	188	298.00	143		

Spectrum Analytical, Inc. RI Division

Data file : \\Avogadro\Organics\S2.I\111114.B\S2H5289.D
Lab Smp Id: DFTPP2C Client Smp ID: DFTPP2C
Inj Date : 14-NOV-2011 16:22
Operator : SRC: Inst ID: S2.i
Smp Info : DFTPP2C,DFTPP2C
Misc Info : 3,3
Comment :
Method : \\Avogadro\Organics\S2.I\111114.B\S2_dftppSOM.m
Meth Date : 28-Oct-2011 11:08 mscarpaci Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 100 QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf * Vf/Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume (uL)
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL			
RT	EXP RT	DLT RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
1 dftpp						CAS #: 5074-71-5			
5.177	5.552	-0.375	198	79264			0.00-	100.00	100.00
5.177	5.552	-0.375	51	50184			10.00-	80.00	63.31
5.177	5.552	-0.375	68	0	0.0	0.0	0.00-	2.00	0.00
5.177	5.552	-0.375	69	65536			0.00-	0.00	82.68
5.177	5.552	-0.375	70	0	0.0	0.0	0.00-	2.00	0.00
5.177	5.552	-0.375	127	38968			10.00-	80.00	49.16
5.177	5.552	-0.375	197	0	0.0	0.0	0.00-	2.00	0.00
5.177	5.552	-0.375	199	5479			5.00-	9.00	6.91
5.177	5.552	-0.375	275	12239			10.00-	60.00	15.44
5.177	5.552	-0.375	365	1249			1.00-	0.00	1.58
5.177	5.552	-0.375	441	7923			0.01-	99.99	91.34
5.177	5.552	-0.375	442	44568			50.00-	100.00	56.23
5.177	5.552	-0.375	443	8674			15.00-	24.00	19.46

Data File: \\Avogadro\Organics\S2.I\111114.B\S2H5289.D

Date : 14-NOV-2011 16:22

Client ID: DFTPP2C

Instrument: S2.i

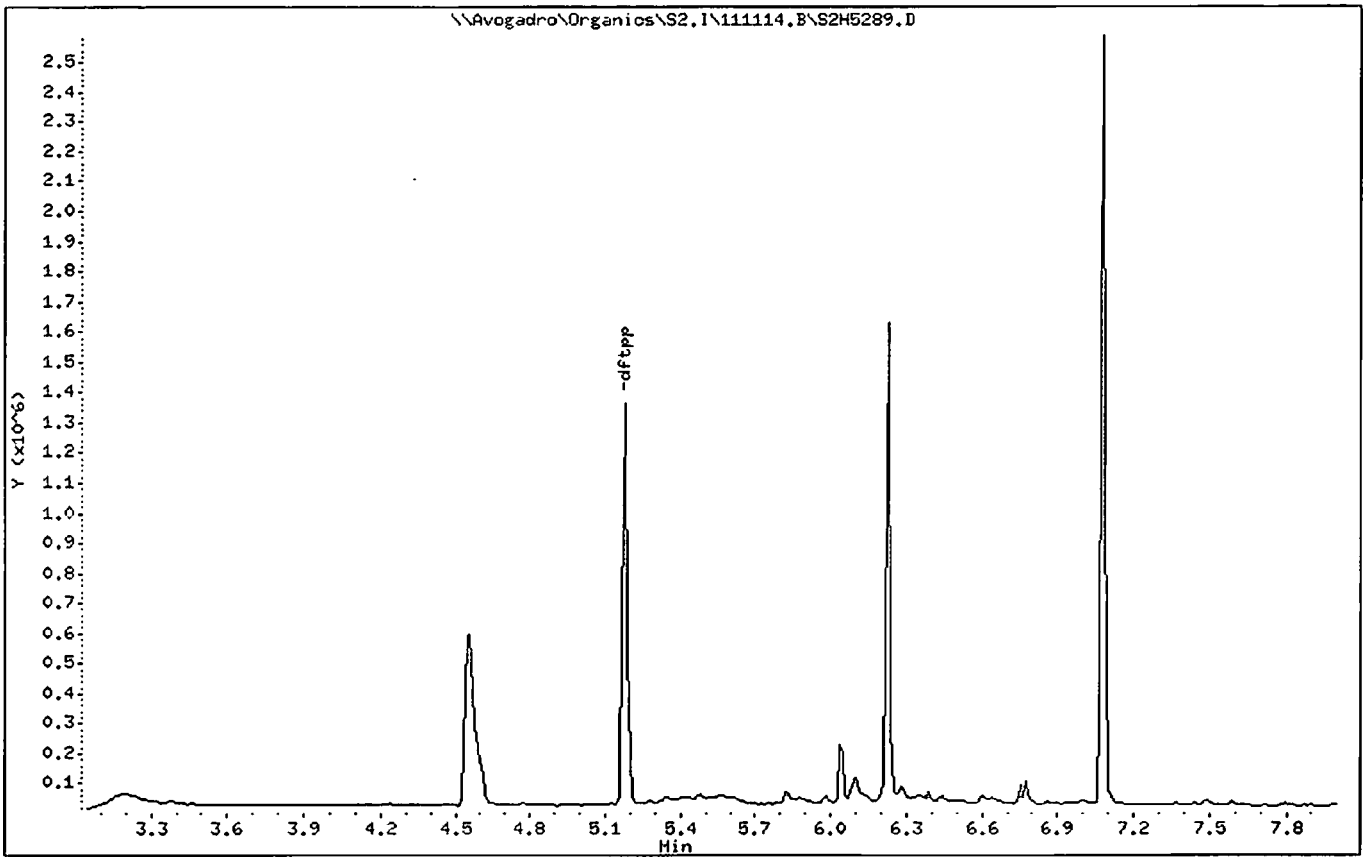
Sample Info: DFTPP2C,DFTPP2C

Volume Injected (uL): 2.0

Operator: SRC:

Column phase: RXi-5SILMS

Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111114.B\S2H5289.D

Date : 14-NOV-2011 16:22

Client ID: DFTPP2C

Instrument: S2.i

Sample Info: DFTPP2C,DFTPP2C

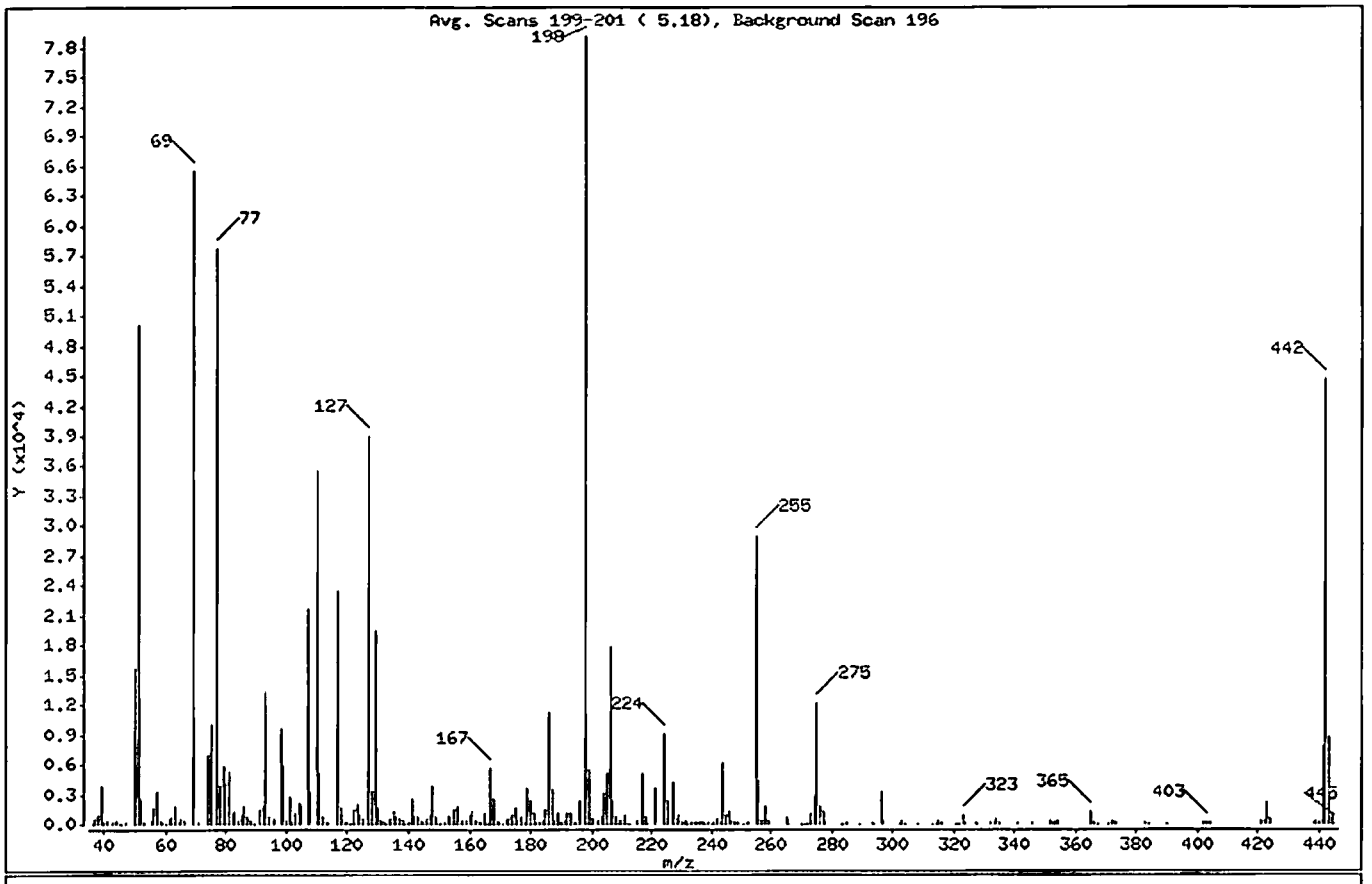
Volume Injected (uL): 2.0

Operator: SRC:

Column phase: RXi-5SILMS

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	63.31
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	82.68
70	Less than 2.00% of mass 69	0.00 (0.00)
127	10.00 - 80.00% of mass 198	49.16
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.91
275	10.00 - 60.00% of mass 198	15.44
365	Greater than 1.00% of mass 198	1.58
441	Present, but less than mass 443	10.00
442	50.00 - 100.00% of mass 198	56.23
443	15.00 - 24.00% of mass 442	10.94 (19.46)

Date : 14-NOV-2011 16:22

Client ID: DFTPP2C Instrument: S2.i

Sample Info: DFTPP2C,DFTPP2C

Volume Injected (uL): 2.0 Operator: SRC:

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S2H5289.D
Spectrum: Avg. Scans 199-201 (5.18), Background Scan 196
Location of Maximum: 198.00
Number of points: 262

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	4	119.00	191	186.00	11297	270.00	36
37.00	526	120.00	270	187.00	3438	271.00	45
38.00	931	121.00	51	188.00	355	272.00	46
39.00	3858	122.00	1518	189.00	1022	273.00	1004
40.00	104	123.00	1969	190.00	184	274.00	2657
41.00	315	124.00	962	191.00	407	275.00	12239
43.00	268	125.00	597	192.00	1055	276.00	1781
44.00	419	127.00	38968	193.00	1121	277.00	1230
45.00	27	128.00	3270	194.00	248	278.00	123
46.00	80	129.00	19432	195.00	135	283.00	83
47.00	150	130.00	1610	196.00	2294	284.00	85
50.00	15711	131.00	340	198.00	79264	285.00	213
51.00	50184	132.00	192	199.00	5479	289.00	35
52.00	2625	133.00	23	200.00	484	293.00	193
53.00	129	134.00	581	202.00	359	294.00	39
55.00	281	135.00	1277	203.00	771	296.00	3351
56.00	1713	136.00	679	204.00	3034	297.00	420
57.00	3322	137.00	632	205.00	5193	302.00	70
58.00	377	138.00	315	206.00	17928	303.00	351
59.00	127	139.00	53	207.00	2396	304.00	63
60.00	84	140.00	183	208.00	727	308.00	41
61.00	556	141.00	2509	209.00	284	313.00	38
62.00	692	142.00	805	210.00	414	314.00	85
63.00	1777	143.00	659	211.00	893	315.00	294
64.00	263	144.00	280	212.00	43	316.00	217
65.00	505	145.00	160	213.00	82	321.00	86
66.00	311	146.00	557	215.00	281	322.00	40
69.00	65536	147.00	922	217.00	5160	323.00	972
71.00	157	148.00	3803	218.00	696	324.00	153
74.00	6894	149.00	783	219.00	5	327.00	177
75.00	10093	150.00	78	221.00	3575	328.00	65
77.00	57832	151.00	202	224.00	9119	332.00	98
78.00	3834	152.00	169	225.00	2321	333.00	175
79.00	5920	153.00	969	227.00	4217	334.00	594
80.00	4069	154.00	815	228.00	575	335.00	142

Date : 14-NOV-2011 16:22

Client ID: DFTPP2C Instrument: S2.i

Sample Info: DFTPP2C,DFTPP2C

Volume Injected (uL): 2.0 Operator: SRC:

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S2H5289.D

Spectrum: Avg. Scans 199-201 (5.18), Background Scan 196

Location of Maximum: 198.00

Number of points: 262

m/z	Y	m/z	Y	m/z	Y	m/z	Y
81.00	5268	155.00	1470	229.00	887	341.00	122
82.00	1129	156.00	1871	230.00	109	346.00	197
83.00	1200	157.00	418	231.00	357	352.00	313
84.00	275	158.00	438	232.00	83	353.00	129
85.00	982	159.00	448	233.00	102	354.00	316
86.00	1744	160.00	861	234.00	251	365.00	1249
87.00	714	161.00	1217	235.00	256	366.00	153
88.00	323	162.00	318	236.00	231	367.00	38
89.00	59	163.00	205	237.00	224	371.00	74
91.00	1372	164.00	105	238.00	47	372.00	451
92.00	1748	165.00	1003	239.00	143	373.00	153
93.00	13282	166.00	75	240.00	78	383.00	199
94.00	725	167.00	5574	241.00	223	384.00	49
96.00	489	168.00	2523	242.00	504	390.00	48
98.00	9742	169.00	419	243.00	109	402.00	176
99.00	5810	170.00	210	244.00	6208	403.00	262
100.00	452	171.00	80	245.00	859	404.00	130
101.00	2705	172.00	536	246.00	1316	421.00	330
102.00	155	173.00	623	247.00	292	422.00	305
103.00	1168	174.00	948	248.00	97	423.00	2275
104.00	2211	175.00	1671	249.00	219	424.00	553
105.00	1914	176.00	427	251.00	76	438.00	92
107.00	21608	177.00	737	252.00	118	439.00	288
108.00	3237	178.00	246	253.00	215	440.00	106
110.00	35472	179.00	3680	255.00	29016	441.00	7923
111.00	5136	180.00	2359	256.00	4436	442.00	44568
112.00	767	181.00	1152	257.00	411	443.00	8674
113.00	242	182.00	124	258.00	1830	444.00	828
114.00	201	183.00	146	259.00	307	445.00	68
117.00	23464	184.00	333	265.00	701		
118.00	1683	185.00	1387	266.00	73		

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK2X

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-62764

Sample wt/vol: 30.0 (g/mL) G Lab File ID: S2H5249.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
100-52-7	Benzaldehyde	170	U
108-95-2	Phenol	170	U
111-44-4	Bis(2-chloroethyl)ether	170	U
95-57-8	2-Chlorophenol	170	U
95-48-7	2-Methylphenol	170	U
108-60-1	2,2'-Oxybis(1-chloropropane)	170	U
98-86-2	Acetophenone	170	U
106-44-5	4-Methylphenol	170	U
621-64-7	N-Nitroso-di-n-propylamine	170	U
67-72-1	Hexachloroethane	170	U
98-95-3	Nitrobenzene	170	U
78-59-1	Isophorone	170	U
88-75-5	2-Nitrophenol	170	U
105-67-9	2,4-Dimethylphenol	170	U
111-91-1	Bis(2-chloroethoxy)methane	170	U
120-83-2	2,4-Dichlorophenol	170	U
91-20-3	Naphthalene	170	U
106-47-8	4-Chloroaniline	170	U
87-68-3	Hexachlorobutadiene	170	U
105-60-2	Caprolactam	170	U
59-50-7	4-Chloro-3-methylphenol	170	U
91-57-6	2-Methylnaphthalene	170	U
77-47-4	Hexachlorocyclopentadiene	170	U
88-06-2	2,4,6-Trichlorophenol	170	U
95-95-4	2,4,5-Trichlorophenol	170	U
92-52-4	1,1'-Biphenyl	170	U
91-58-7	2-Chloronaphthalene	170	U
88-74-4	2-Nitroaniline	330	U
131-11-3	Dimethylphthalate	170	U
606-20-2	2,6-Dinitrotoluene	170	U
208-96-8	Acenaphthylene	170	U
99-09-2	3-Nitroaniline	330	U
83-32-9	Acenaphthene	170	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK2X

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-62764

Sample wt/vol: 30.0 (g/mL) G Lab File ID: S2H5249.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
51-28-5	2,4-Dinitrophenol	330	U
100-02-7	4-Nitrophenol	330	U
132-64-9	Dibenzofuran	170	U
121-14-2	2,4-Dinitrotoluene	170	U
84-66-2	Diethylphthalate	170	U
86-73-7	Fluorene	170	U
7005-72-3	4-Chlorophenyl-phenylether	170	U
100-01-6	4-Nitroaniline	330	U
534-52-1	4,6-Dinitro-2-methylphenol	330	U
86-30-6	N-Nitrosodiphenylamine (1)	170	U
95-94-3	1,2,4,5-Tetrachlorobenzene	170	U
101-55-3	4-Bromophenyl-phenylether	170	U
118-74-1	Hexachlorobenzene	170	U
1912-24-9	Atrazine	170	U
87-86-5	Pentachlorophenol	330	U
85-01-8	Phenanthrene	170	U
120-12-7	Anthracene	170	U
86-74-8	Carbazole	170	U
84-74-2	Di-n-butylphthalate	170	U
206-44-0	Fluoranthene	170	U
129-00-0	Pyrene	170	U
85-68-7	Butylbenzylphthalate	170	U
91-94-1	3,3'-Dichlorobenzidine	170	U
56-55-3	Benzo(a)anthracene	170	U
218-01-9	Chrysene	170	U
117-81-7	Bis(2-ethylhexyl)phthalate	170	U
117-84-0	Di-n-octylphthalate	170	U
205-99-2	Benzo(b)fluoranthene	170	U
207-08-9	Benzo(k)fluoranthene	170	U
50-32-8	Benzo(a)pyrene	170	U
193-39-5	Indeno(1,2,3-cd)pyrene	170	U
53-70-3	Dibenzo(a,h)anthracene	170	U
191-24-2	Benzo(g,h,i)perylene	170	U
58-90-2	2,3,4,6-Tetrachlorophenol	170	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK2X

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-62764

Sample wt/vol: 30.0 (g/mL) G Lab File ID: S2H5249.D

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	3.210	79	J
02	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.486	150	NJ
03		Unknown-02	4.690	86	J
04		Unknown-03	4.990	71	J
05		Unknown-04	5.194	150	J
06		Unknown-05	5.301	210	J
	E96679[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5249.D
Report Date: 11-Nov-2011 13:31

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5249.D
Lab Smp Id: MB-62764 Client Smp ID: SBLK2X
Inj Date : 10-NOV-2011 09:57
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : MB-62764,SBLK2X,62764
Misc Info :
Comment :
Method : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 2 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)
$	2 Phenol-d5	71	3.381	3.373	(0.916)	174582	51.8490	860
$	4 bis(2-Chloroethyl)ether-d8	67	3.424	3.427	(0.927)	223679	48.2087	800
$	6 2-Chlorophenol-d4	132	3.499	3.491	(0.948)	157661	54.1276	900
*	8 1,4-Dichlorobenzene-d4	152	3.692	3.684	(1.000)	106927	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.003	4.006	(1.084)	242640	53.1535	890
$	16 Nitrobenzene-d5	128	4.142	4.145	(0.871)	80170	50.4873	840
$	19 2-Nitrophenol-d4	143	4.421	4.424	(0.930)	97462	55.5984	930
$	23 2,4-Dichlorophenol-d3	165	4.625	4.628	(0.973)	187627	58.6325	980
*	25 Naphthalene-d8	136	4.754	4.746	(1.000)	304913	40.0000	
$	27 4-Chloroaniline-d4	131	4.807	4.810	(1.011)	109099	38.3966	640(Q)
$	40 Dimethylphthalate-d6	166	5.976	5.968	(0.962)	519440	59.4757	990
$	43 Acenaphthylene-d8	160	6.083	6.076	(0.979)	609945	53.7061	900
*	46 Acenaphthene-d10	164	6.212	6.204	(1.000)	237533	40.0000	
$	49 4-Nitrophenol-d4	143	6.319	6.312	(1.017)	79114	62.8572	1000
$	54 Fluorene-d10	176	6.641	6.633	(1.069)	433137	53.9904	900
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.705	6.698	(0.902)	79961	46.4082	770(Q)
*	65 Phenanthrene-d10	188	7.434	7.438	(1.000)	441541	40.0000	
$	67 Anthracene-d10	188	7.477	7.480	(1.006)	636477	50.4630	840
$	72 Pyrene-d10	212	8.625	8.606	(0.892)	568507	54.8683	910

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5249.D
Report Date: 11-Nov-2011 13:31

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)	
* 77 Chrysene-d12	240	9.697	9.668	(1.000)	328906	40.0000		(QH)
S 83 Benzo(a)pyrene-d12	264	10.941	10.891	(1.000)	310599	52.1113	870	
* 85 Perylene-d12	264	11.016	10.966	(1.000)	242896	40.0000		(H)

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5249.D
Report Date: 11-Nov-2011 13:31

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5249.D
Lab Smp Id: MB-62764 Client Smp ID: SBLK2X
Inj Date : 10-NOV-2011 09:57
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : MB-62764,SBLK2X,62764
Misc Info :
Comment :
Method : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 2 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 8 1,4-Dichlorobenzene-d4	3.692	943641	40.000
* 25 Naphthalene-d8	4.754	1014118	40.000

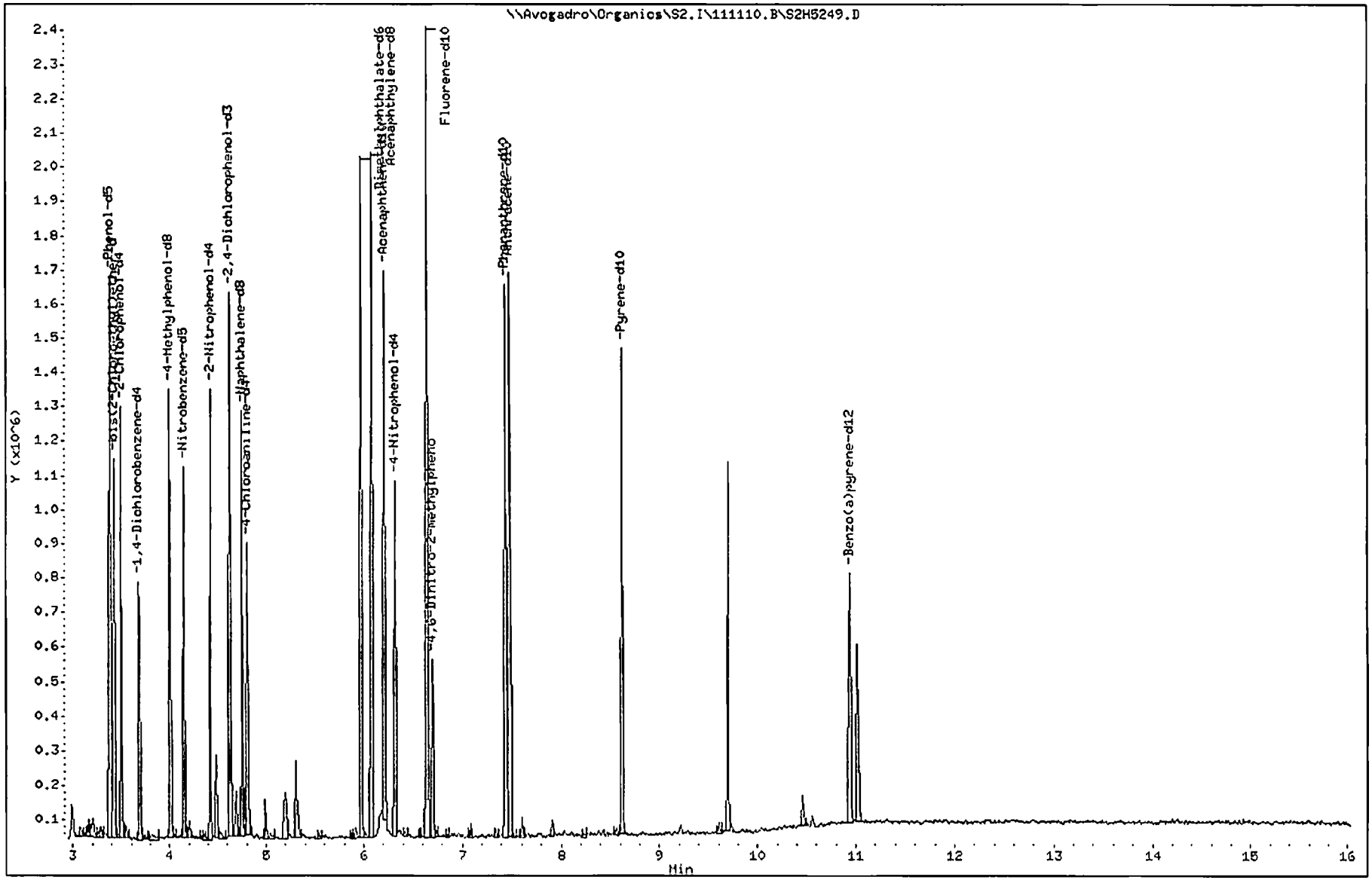
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
3.210	112009	4.74792427	79	0		0	8
2(3H)-Furanone, dihydro-4-hydroxy-				CAS #: 5469-16-9			
4.486	224623	8.85984911	150	90	NIST2002.L	4145	25
Unknown				CAS #:			
4.690	130787	5.15865513	86	0		0	25
Unknown				CAS #:			
4.990	108063	4.26234215	71	0		0	25

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5249.D
Report Date: 11-Nov-2011 13:31

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
5.194	234660	9.25571488	150	0		0	25
Unknown				CAS #:			
5.301	324700	12.8071791	210	0		0	25

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5249.D
Date : 10-NOV-2011 09:57
Client ID: SBLK2X
Sample Info: HB-62764,SBLK2X,62764
Volume Injected (uL): 2.0
Column phase: RXI-5SILMS

Instrument: S2.i
Operator: SRC: LIMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5249.D

Date : 10-NOV-2011 09:37

Client ID: SBLK2X

Instrument: S2.i

Sample Info: MB-62764,SBLK2X,62764

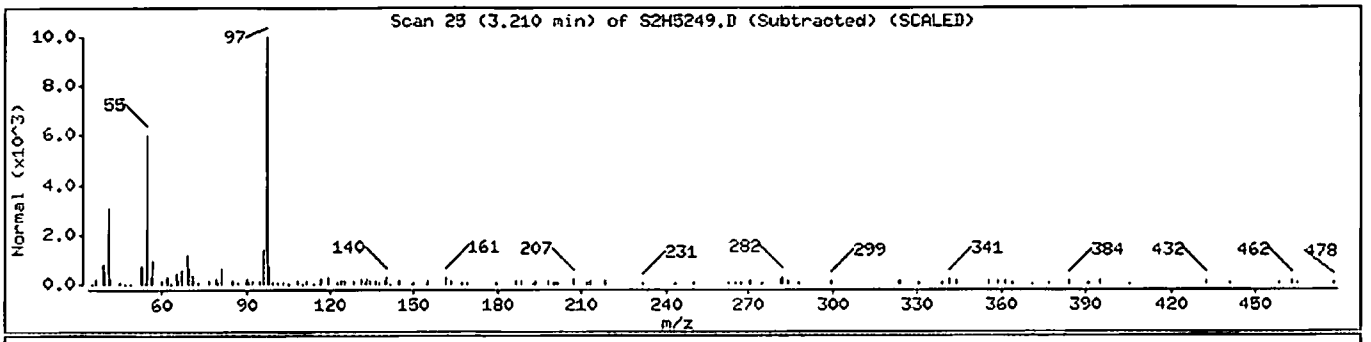
Volume Injected (uL): 2.0

Operator: SRC: LIMS

Column phase: RXI-5SILMS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5249.D

Date : 10-NOV-2011 09:57

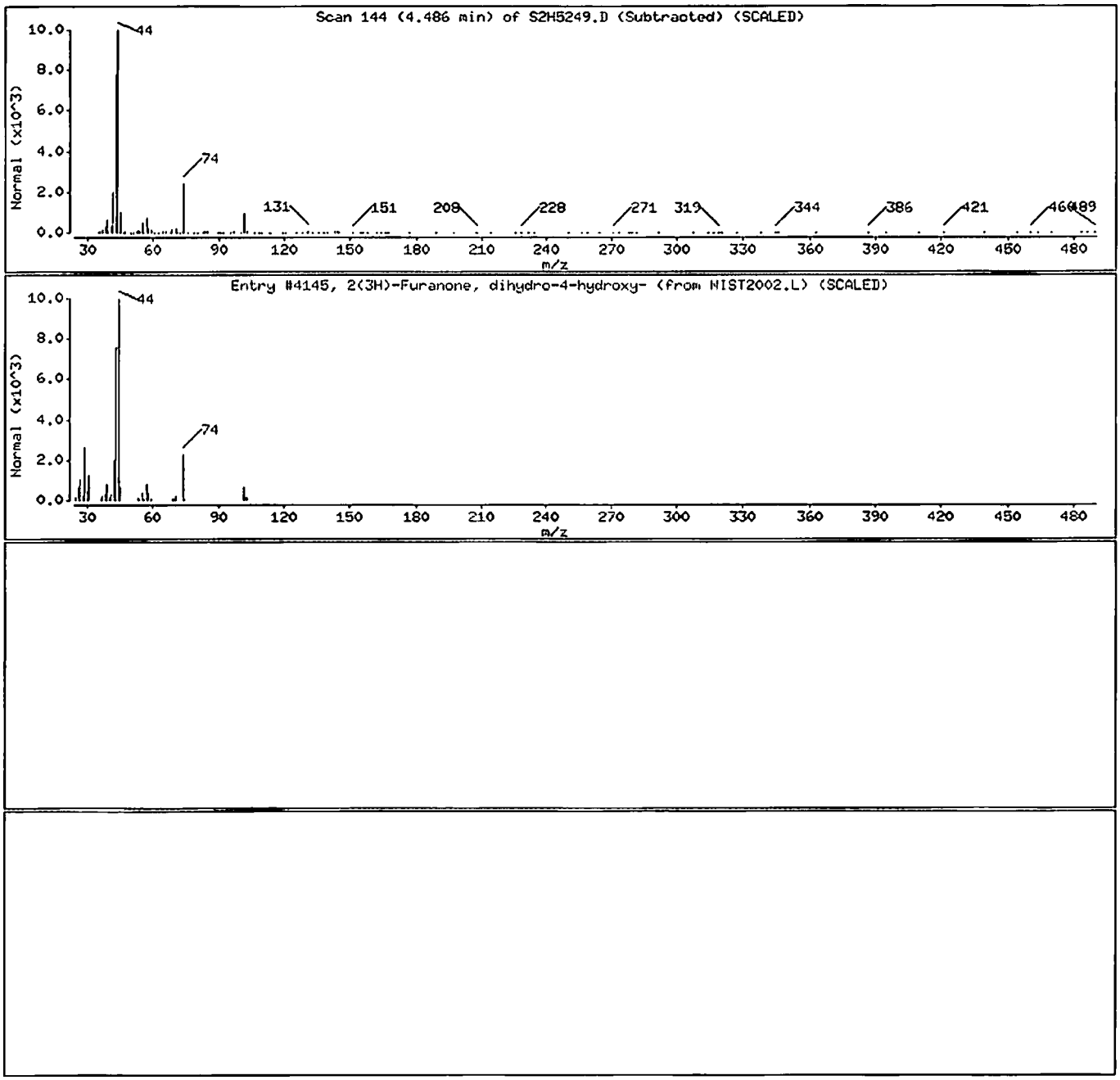
Client ID: SBLK2X Instrument: S2.i

Sample Info: MB-62764,SBLK2X,62764

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2(3H)-Furanone, dihydro-4-hydroxy-	5469-16-9	NIST2002.L	4145	90	C4H6O3	102



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5249.D

Date : 10-NOV-2011 09:57

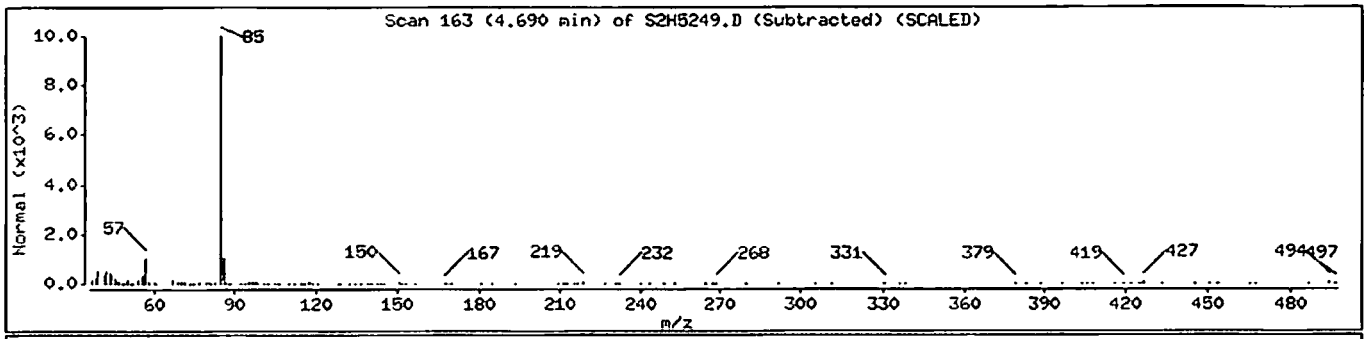
Client ID: SBLK2X Instrument: S2.i

Sample Info: MB-62764,SBLK2X,62764

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.i\111110.B\S2H5249.D

Date : 10-NOV-2011 09:37

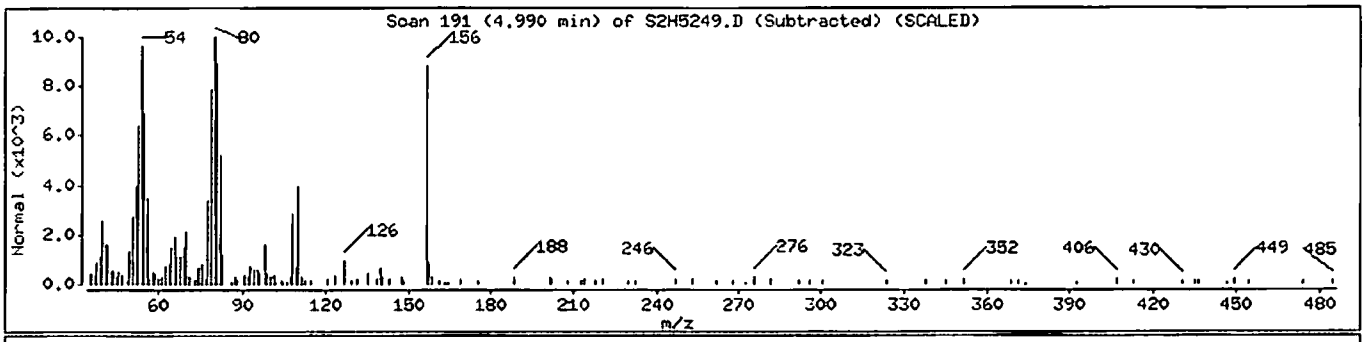
Client ID: SBLK2X Instrument: S2.i

Sample Info: MB-62764,SBLK2X,62764

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5249.D

Date : 10-NOV-2011 09:57

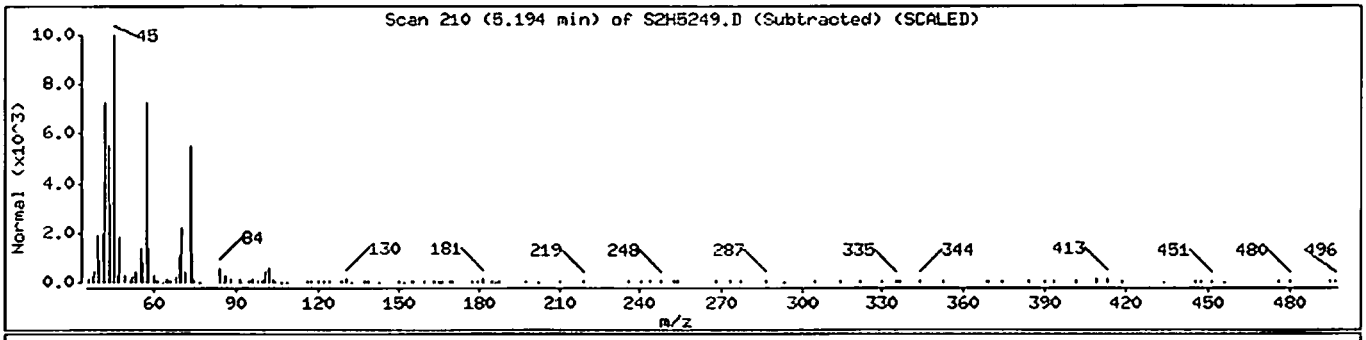
Client ID: SBLK2X Instrument: S2.i

Sample Info: MB-62764,SBLK2X,62764

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5249.D

Date : 10-NOV-2011 09:57

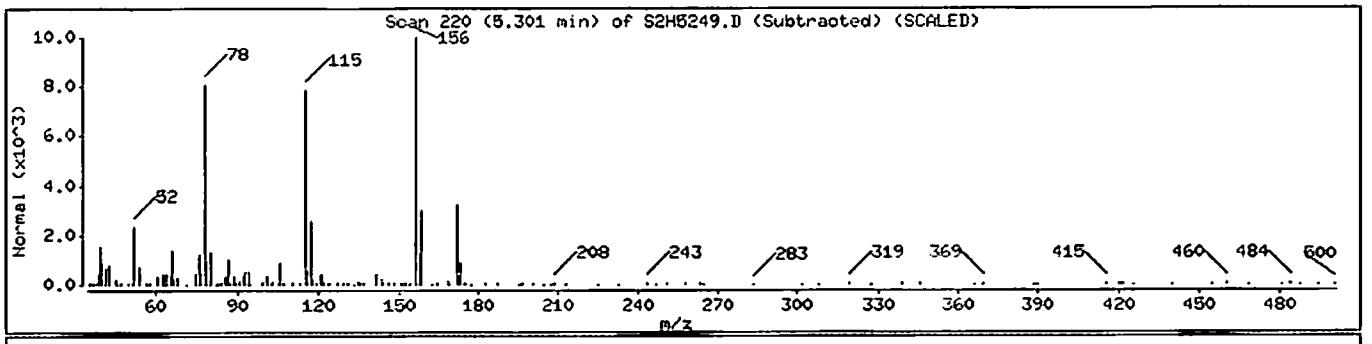
Client ID: SBLK2X Instrument: S2.i

Sample Info: MB-62764,SBLK2X,62764

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q0MS

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-01AMS

Sample wt/vol: 30.1 (g/mL) G Lab File ID: S2H5251.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 15 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: 8.2 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
100-52-7	Benzaldehyde	200	U
108-95-2	Phenol	780	
111-44-4	Bis(2-chloroethyl)ether	200	U
95-57-8	2-Chlorophenol	740	
95-48-7	2-Methylphenol	200	U
108-60-1	2,2'-Oxybis(1-chloropropane)	200	U
98-86-2	Acetophenone	200	U
106-44-5	4-Methylphenol	200	U
621-64-7	N-Nitroso-di-n-propylamine	770	
67-72-1	Hexachloroethane	200	U
98-95-3	Nitrobenzene	200	U
78-59-1	Isophorone	200	U
88-75-5	2-Nitrophenol	200	U
105-67-9	2,4-Dimethylphenol	200	U
111-91-1	Bis(2-chloroethoxy)methane	200	U
120-83-2	2,4-Dichlorophenol	200	U
91-20-3	Naphthalene	200	U
106-47-8	4-Chloroaniline	200	U
87-68-3	Hexachlorobutadiene	200	U
105-60-2	Caprolactam	200	U
59-50-7	4-Chloro-3-methylphenol	1000	
91-57-6	2-Methylnaphthalene	200	U
77-47-4	Hexachlorocyclopentadiene	200	U
88-06-2	2,4,6-Trichlorophenol	200	U
95-95-4	2,4,5-Trichlorophenol	200	U
92-52-4	1,1'-Biphenyl	200	U
91-58-7	2-Chloronaphthalene	200	U
88-74-4	2-Nitroaniline	390	U
131-11-3	Dimethylphthalate	200	U
606-20-2	2,6-Dinitrotoluene	200	U
208-96-8	Acenaphthylene	200	U
99-09-2	3-Nitroaniline	390	U
83-32-9	Acenaphthene	770	

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q0MS

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-01AMS

Sample wt/vol: 30.1 (g/mL) G Lab File ID: S2H5251.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 15 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: 8.2 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
51-28-5	2,4-Dinitrophenol	390	U
100-02-7	4-Nitrophenol	910	
132-64-9	Dibenzofuran	200	U
121-14-2	2,4-Dinitrotoluene	800	
84-66-2	Diethylphthalate	200	U
86-73-7	Fluorene	200	U
7005-72-3	4-Chlorophenyl-phenylether	200	U
100-01-6	4-Nitroaniline	390	U
534-52-1	4,6-Dinitro-2-methylphenol	390	U
86-30-6	N-Nitrosodiphenylamine (1)	200	U
95-94-3	1,2,4,5-Tetrachlorobenzene	200	U
101-55-3	4-Bromophenyl-phenylether	200	U
118-74-1	Hexachlorobenzene	200	U
1912-24-9	Atrazine	200	U
87-86-5	Pentachlorophenol	950	
85-01-8	Phenanthrene	200	U
120-12-7	Anthracene	200	U
86-74-8	Carbazole	200	U
84-74-2	Di-n-butylphthalate	52	J
206-44-0	Fluoranthene	200	U
129-00-0	Pyrene	610	
85-68-7	Butylbenzylphthalate	200	U
91-94-1	3,3'-Dichlorobenzidine	200	U
56-55-3	Benzo(a)anthracene	200	U
218-01-9	Chrysene	200	U
117-81-7	Bis(2-ethylhexyl)phthalate	73	J
117-84-0	Di-n-octylphthalate	200	U
205-99-2	Benzo(b)fluoranthene	200	U
207-08-9	Benzo(k)fluoranthene	200	U
50-32-8	Benzo(a)pyrene	200	U
193-39-5	Indeno(1,2,3-cd)pyrene	200	U
53-70-3	Dibenzo(a,h)anthracene	200	U
191-24-2	Benzo(g,h,i)perylene	200	U
58-90-2	2,3,4,6-Tetrachlorophenol	200	U

(1) Cannot be separated from Diphenylamine

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5251.D
Report Date: 11-Nov-2011 13:32

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5251.D
Lab Smp Id: K2198-01AMS Client Smp ID: H30Q0MS
Inj Date : 10-NOV-2011 10:44
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-01AMS,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment :
Method : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 4 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.100	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)
$	2	Phenol-d5	71	3.381	3.373	(0.916)	110453	38.1922	630
	3	Phenol	94	3.392	3.384	(0.919)	318223	40.1202	670
$	4	bis(2-Chloroethyl)ether-d8	67	3.424	3.427	(0.927)	140183	35.1763	580
$	6	2-Chlorophenol-d4	132	3.499	3.491	(0.948)	98246	39.2704	650
	7	2-Chlorophenol	128	3.510	3.513	(0.951)	97929	38.0567	630
*	8	1,4-Dichlorobenzene-d4	152	3.692	3.684	(1.000)	91840	40.0000	(Q)
$	11	4-Methylphenol-d8	113	4.003	4.006	(1.084)	159785	40.7531	680
	14	N-Nitroso-di-n-propylamine	70	4.024	4.027	(1.090)	143709	39.6215	660(Q)
$	16	Nitrobenzene-d5	128	4.142	4.145	(0.871)	48039	39.1263	650(Q)
$	19	2-Nitrophenol-d4	143	4.421	4.424	(0.930)	60659	44.7534	740
$	23	2,4-Dichlorophenol-d3	165	4.625	4.628	(0.973)	123926	50.0852	830
*	25	Naphthalene-d8	136	4.753	4.746	(1.000)	235761	40.0000	
$	27	4-Chloroaniline-d4	131	4.807	4.810	(1.011)	50202	22.8506	380(Q)
	31	4-Chloro-3-methylphenol	107	5.225	5.228	(1.099)	192022	52.0969	870
$	40	Dimethylphthalate-d6	166	5.976	5.968	(0.962)	292504	40.1217	670
$	43	Acenaphthylene-d8	160	6.083	6.076	(0.979)	334662	35.3006	590
*	46	Acenaphthene-d10	164	6.212	6.204	(1.000)	198281	40.0000	
	47	Acenaphthene	153	6.233	6.236	(1.003)	221509	39.6288	660
$	49	4-Nitrophenol-d4	143	6.319	6.312	(1.017)	44892	42.7281	710

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5251.D
Report Date: 11-Nov-2011 13:32

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)
	50	4-Nitrophenol	109	6.319	6.322	(1.017)	94589	46.5573	770
	51	2,4-Dinitrotoluene	165	6.373	6.365	(1.026)	87791	41.1731	680(Q)
$	54	Fluorene-d10	176	6.641	6.633	(1.069)	260377	38.8809	650
$	58	4,6-Dinitro-2-methylphenol-d2	200	6.694	6.698	(0.900)	50367	34.6105	570
	64	Pentachlorophenol	266	7.284	7.287	(0.980)	51428	48.9934	810
*	65	Phenanthrene-d10	188	7.434	7.438	(1.000)	372929	40.0000	
$	67	Anthracene-d10	188	7.477	7.480	(1.006)	410465	38.5311	640
	70	Di-n-butylphthalate	149	7.928	7.931	(1.066)	24484	2.64914	44(a)
$	72	Pyrene-d10	212	8.603	8.606	(0.891)	331986	42.9181	710
	73	Pyrene	202	8.625	8.628	(0.893)	308802	31.3522	520
*	77	Chrysene-d12	240	9.654	9.668	(1.000)	245548	40.0000	(Q)
	79	bis(2-Ethylhexyl)phthalate	149	9.686	9.700	(1.003)	14059	3.76883	63(a)
$	83	Benzo(a)pyrene-d12	264	10.855	10.891	(0.992)	152613	38.6412	640
*	85	Perylene-d12	264	10.941	10.966	(1.000)	160951	40.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5251.D
Report Date: 11-Nov-2011 13:32

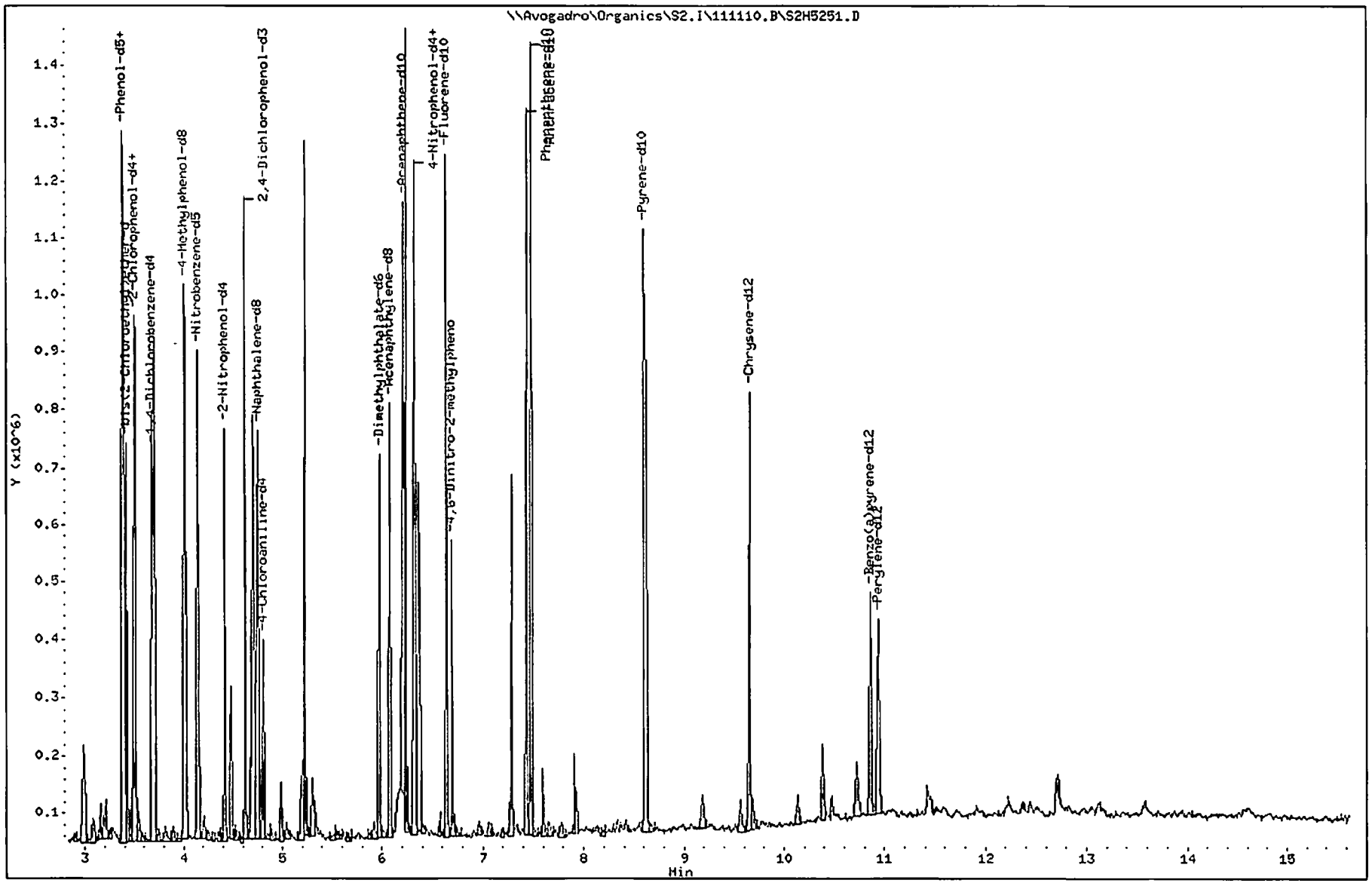
Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5251.D
Lab Smp Id: K2198-01AMS Client Smp ID: H30Q0MS
Inj Date : 10-NOV-2011 10:44
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-01AMS,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment :
Method : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 4 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5251.D
Date : 10-NOV-2011 10:44
Client ID: H30Q0MS
Instrument: S2.i
Sample Info: K2198-01AMS,,62764,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q0MSD

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-01AMSD

Sample wt/vol: 30.4 (g/mL) G Lab File ID: S2H5252.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 15 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: 8.2 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	200	U
108-95-2	Phenol	720	
111-44-4	Bis(2-chloroethyl)ether	200	U
95-57-8	2-Chlorophenol	680	
95-48-7	2-Methylphenol	200	U
108-60-1	2,2'-Oxybis(1-chloropropane)	200	U
98-86-2	Acetophenone	200	U
106-44-5	4-Methylphenol	200	U
621-64-7	N-Nitroso-di-n-propylamine	660	
67-72-1	Hexachloroethane	200	U
98-95-3	Nitrobenzene	200	U
78-59-1	Isophorone	200	U
88-75-5	2-Nitrophenol	200	U
105-67-9	2,4-Dimethylphenol	200	U
111-91-1	Bis(2-chloroethoxy)methane	200	U
120-83-2	2,4-Dichlorophenol	200	U
91-20-3	Naphthalene	200	U
106-47-8	4-Chloroaniline	200	U
87-68-3	Hexachlorobutadiene	200	U
105-60-2	Caprolactam	200	U
59-50-7	4-Chloro-3-methylphenol	870	
91-57-6	2-Methylnaphthalene	200	U
77-47-4	Hexachlorocyclopentadiene	200	U
88-06-2	2,4,6-Trichlorophenol	200	U
95-95-4	2,4,5-Trichlorophenol	200	U
92-52-4	1,1'-Biphenyl	200	U
91-58-7	2-Chloronaphthalene	200	U
88-74-4	2-Nitroaniline	380	U
131-11-3	Dimethylphthalate	200	U
606-20-2	2,6-Dinitrotoluene	200	U
208-96-8	Acenaphthylene	200	U
99-09-2	3-Nitroaniline	380	U
83-32-9	Acenaphthene	640	

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q0MSD

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-01AMSD

Sample wt/vol: 30.4 (g/mL) G Lab File ID: S2H5252.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 15 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: 8.2 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
51-28-5	2,4-Dinitrophenol	380	U
100-02-7	4-Nitrophenol	760	
132-64-9	Dibenzofuran	200	U
121-14-2	2,4-Dinitrotoluene	720	
84-66-2	Diethylphthalate	200	U
86-73-7	Fluorene	200	U
7005-72-3	4-Chlorophenyl-phenylether	200	U
100-01-6	4-Nitroaniline	380	U
534-52-1	4,6-Dinitro-2-methylphenol	380	U
86-30-6	N-Nitrosodiphenylamine 1	200	U
95-94-3	1,2,4,5-Tetrachlorobenzene	200	U
101-55-3	4-Bromophenyl-phenylether	200	U
118-74-1	Hexachlorobenzene	200	U
1912-24-9	Atrazine	200	U
87-86-5	Pentachlorophenol	850	
85-01-8	Phenanthrene	200	U
120-12-7	Anthracene	200	U
86-74-8	Carbazole	200	U
84-74-2	Di-n-butylphthalate	200	U
206-44-0	Fluoranthene	200	U
129-00-0	Pyrene	490	
85-68-7	Butylbenzylphthalate	200	U
91-94-1	3,3'-Dichlorobenzidine	200	U
56-55-3	Benzo(a)anthracene	200	U
218-01-9	Chrysene	200	U
117-81-7	Bis(2-ethylhexyl)phthalate	200	U
117-84-0	Di-n-octylphthalate	200	U
205-99-2	Benzo(b)fluoranthene	200	U
207-08-9	Benzo(k)fluoranthene	200	U
50-32-8	Benzo(a)pyrene	200	U
193-39-5	Indeno(1,2,3-cd)pyrene	200	U
53-70-3	Dibenzo(a,h)anthracene	200	U
191-24-2	Benzo(g,h,i)perylene	200	U
58-90-2	2,3,4,6-Tetrachlorophenol	200	U

(1) Cannot be separated from Diphenylamine

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5252.D
Report Date: 11-Nov-2011 13:32

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5252.D
Lab Smp Id: K2198-01AMSD Client Smp ID: H30Q0MSD
Inj Date : 10-NOV-2011 11:05
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-01AMSD,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment :
Method : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 5 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.400	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
$	2 Phenol-d5	71	3.382	3.373	(0.918)	145339	37.7743	620
	3 Phenol	94	3.393	3.384	(0.921)	393123	37.2544	610
$	4 bis(2-Chloroethyl)ether-d8	67	3.425	3.427	(0.930)	166008	31.3114	510
$	6 2-Chlorophenol-d4	132	3.500	3.491	(0.950)	117068	35.1727	580
	7 2-Chlorophenol	128	3.511	3.513	(0.953)	120201	35.1112	580
*	8 1,4-Dichlorobenzene-d4	152	3.682	3.684	(1.000)	122184	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.004	4.006	(1.087)	215072	41.2312	680
	14 N-Nitroso-di-n-propylamine	70	4.025	4.027	(1.093)	164020	33.9908	560(Q)
$	16 Nitrobenzene-d5	128	4.143	4.145	(0.871)	66283	37.1414	610
$	19 2-Nitrophenol-d4	143	4.422	4.424	(0.930)	80032	40.6235	670
$	23 2,4-Dichlorophenol-d3	165	4.626	4.628	(0.973)	159193	44.2642	730
*	25 Naphthalene-d8	136	4.754	4.746	(1.000)	342681	40.0000	
$	27 4-Chloroaniline-d4	131	4.808	4.810	(1.011)	36100	11.3049	190(Q)
	31 4-Chloro-3-methylphenol	107	5.226	5.228	(1.099)	242233	45.2143	740
$	40 Dimethylphthalate-d6	166	5.977	5.968	(0.962)	384540	36.0811	590
$	43 Acenaphthylene-d8	160	6.084	6.076	(0.979)	441348	31.8455	520
*	46 Acenaphthene-d10	164	6.213	6.204	(1.000)	289861	40.0000	
	47 Acenaphthene	153	6.234	6.236	(1.003)	273022	33.4125	550
$	49 4-Nitrophenol-d4	143	6.320	6.312	(1.017)	63836	41.5625	680

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5252.D
Report Date: 11-Nov-2011 13:32

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)
	50	4-Nitrophenol	109	6.320	6.322	(1.017)	116730	39.3026	650
	51	2,4-Dinitrotoluene	165	6.374	6.365	(1.026)	116024	37.2223	610(Q)
$	54	Fluorene-d10	176	6.642	6.633	(1.069)	348956	35.6448	590
$	58	4,6-Dinitro-2-methylphenol-d2	200	6.695	6.698	(0.900)	72875	33.4780	550
	64	Pentachlorophenol	266	7.285	7.287	(0.980)	68820	43.8301	720
*	65	Phenanthrene-d10	188	7.435	7.438	(1.000)	557836	40.0000	
$	67	Anthracene-d10	188	7.478	7.480	(1.006)	560725	35.1888	580
$	72	Pyrene-d10	212	8.604	8.606	(0.892)	482190	37.9119	620(R)
	73	Pyrene	202	8.626	8.628	(0.894)	411459	25.4069	420
*	77	Chrysene-d12	240	9.644	9.668	(1.000)	403738	40.0000	(Q)
	79	bis(2-Ethylhexyl)phthalate	149	9.677	9.700	(1.003)	12553	2.04661	34(a)
$	83	Benzo(a)pyrene-d12	264	10.845	10.891	(0.993)	253510	37.0207	610(H)
*	85	Perylene-d12	264	10.921	10.966	(1.000)	279063	40.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5252.D
Report Date: 11-Nov-2011 13:32

Spectrum Analytical, Inc. RI Division

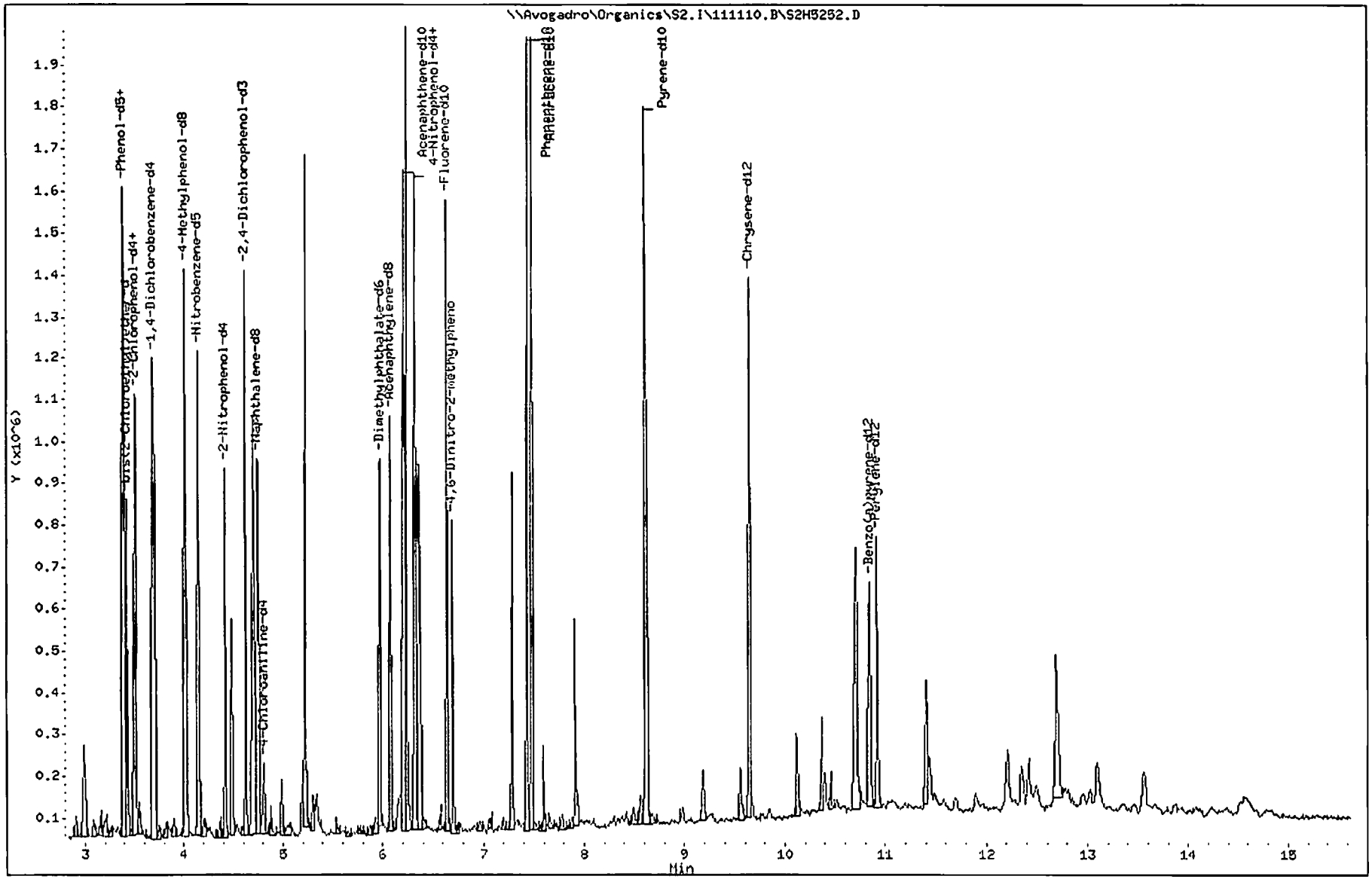
CLP SOM QUANTITATION REPORT

Data file	: \\Avogadro\Organics\S2.I\111110.B\S2H5252.D		
Lab Smp Id	: K2198-01AMSD	Client Smp ID	: H30Q0MSD
Inj Date	: 10-NOV-2011 11:05		
Operator	: SRC: LIMS	Inst ID	: S2.i
Smp Info	: K2198-01AMSD,,62764,,		
Misc Info	: ****** CHECK MOISTURE ******		
Comment	:		
Method	: \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m		
Meth Date	: 11-Nov-2011 13:31 S2.i	Quant Type	: ISTD
Cal Date	: 25-OCT-2011 13:07	Cal File	: S2H5057.D
Als bottle	: 5	QC Sample	: MSD
Dil Factor	: 1.00000		
Integrator	: HP RTE	Compound Sublist	: SOM.sub
Target Version	: 4.14		
Processing Host	: TARGET104		

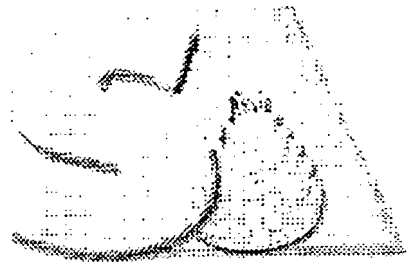
- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5252.D
Date : 10-NOV-2011 11:05
Client ID: H30Q0HSD
Sample Info: K2198-01AHSD,,62764,,
Volume Injected (uL): 2.0
Column phase: RXI-5SILHS

Instrument: S2.i
Operator: SRC: LIHS
Column diameter: 0.25



Print Date: 11/1/2011
Print Time: 8:33:18AM



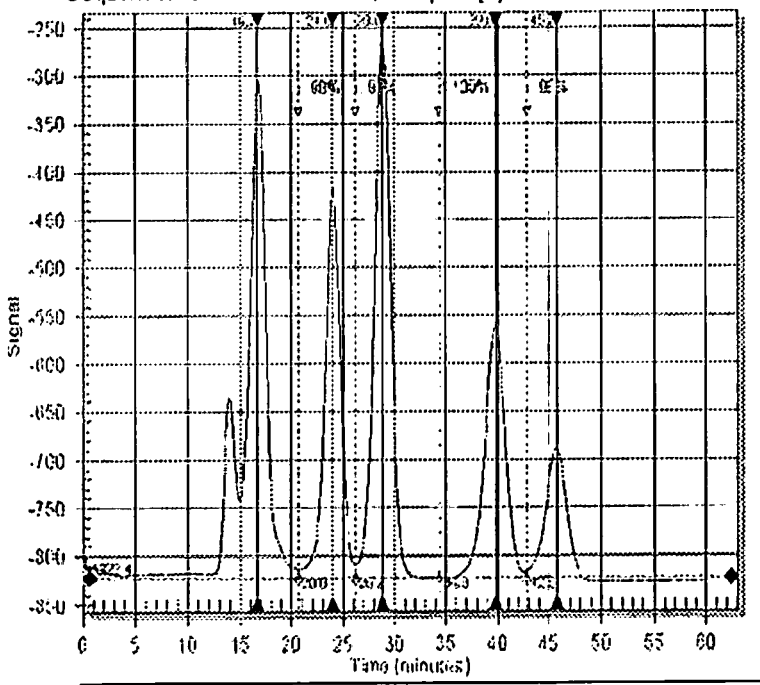
SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

olumn Calibration Report

Sample ID: GPC3111031-UV1
Sequence: GPC3111031-UV1
Description: sample
Volume: 5000
Method: EPA_CAL70
Position: 1
Outcome: Sample processed normally

Start Time: 17:43:21, 10/31/11
End Time: 18:47:04, 10/31/11
Column Name: DCMTrad
Description: DCMTrad
Serial #:
Pressure Limit: 350

Sequence: GPC3111031-UV1, Sample: [1] GPC3111031-UV1



GPC3111031-UV1

Peak	Sample	Retention Time	Pk Ht	Base	Res.	Tol.	P/F
1	Corn Oil	16.7	-815	-814.7			
2	BEHP	24.0	-815	-814.7	97.9	85.0	P
3	Methoxychlor	28.8	-815	-814.7	97.0	85.0	P
4	Perylene	39.8	-815	-814.7	100.0	85.0	P
5	Sulfur	45.7	-815	-814.7	96.0	90.0	P

Print Date: 11/1/2011
Print Time: 8:35:58AM

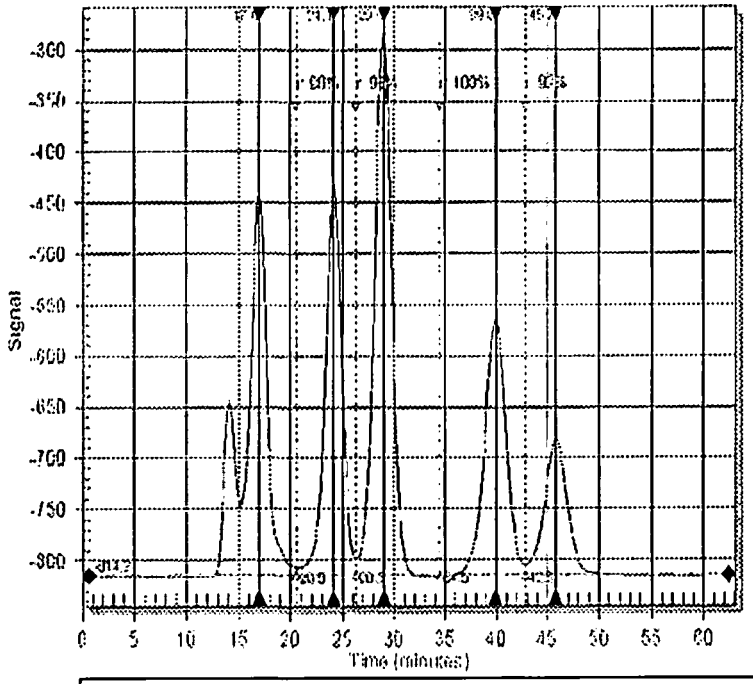
SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

olumn Calibration Report

Sample ID: GPC3111031-UV2
Sequence: GPC3111031-UV1
Description: sample
Volume: 5000
Method: EPA_CAL70
Position: 2
Outcome: Sample processed normally

Start Time: 18:47:05, 10/31/11
End Time: 19:50:35, 10/31/11
Column Name: DCMTrad
Description: DCMTrad
Serial #:
Pressure Limit: 350

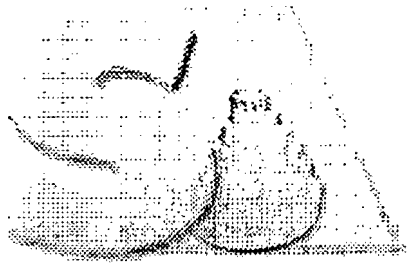
Sequence: GPC3111031-UV1, Sample: [2] GPC3111031-UV2



GPC3111031-UV2

Peak	Sample	Retention Time	Pk Ht	Base	Res.	Tol.	P/F
1	Corn Oil	17.0	-814	-814.2			
2	BEHP	24.1	-814	-814.2	98.1	85.0	P
3	Methoxychlor	29.0	-814	-814.2	95.8	85.0	P
4	Perylene	39.9	-814	-814.2	100.0	85.0	P
5	Sulfur	45.7	-814	-814.2	92.2	90.0	P

Print Date: 10/26/201
Print Time: 3:26:54PI



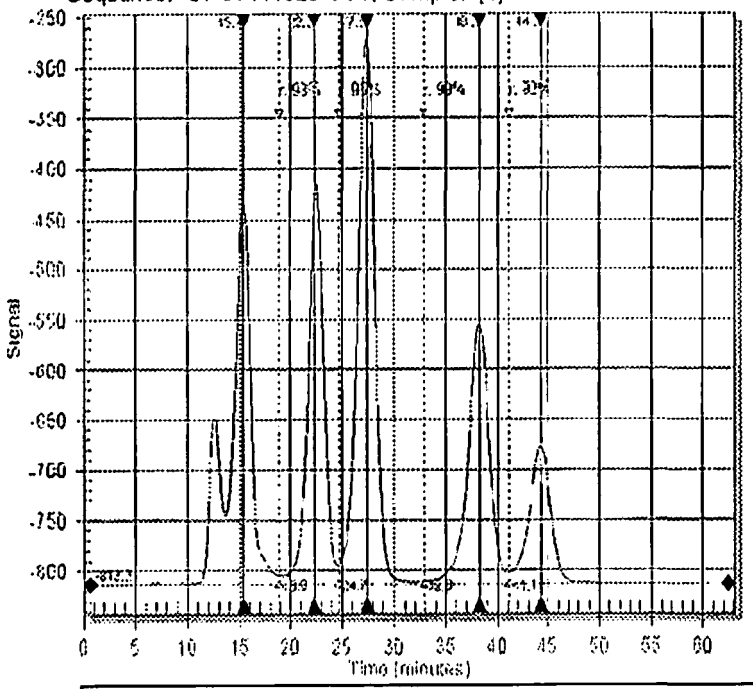
SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

olumn Calibration Report

Sample ID: GPC3111026-UV2
Sequence: GPC3111026-UV1
Description: sample
Volume: 5000
Method: EPA_CAL70
Position: 2
Outcome: Sample processed normally

Start Time: 14:16:33, 10/26/11
End Time: 15:20:02, 10/26/11
Column Name: DCMTrad
Description: DCMTrad
Serial #:
Pressure Limit: 350

Sequence: GPC3111026-UV1, Sample: [2] GPC3111026-UV2



GPC3111026-UV2

Peak	Sample	Retention Time	Pk Ht	Base	Res.	Tol.	P/F
1	Corn Oil	15.4	-813	-813.3			
2	BEHP	22.3	-813	-813.3	97.8	85.0	P
3	Methoxychlor	27.5	-813	-813.3	94.9	85.0	P
4	Perylene	38.2	-813	-813.3	99.1	85.0	P
5	Sulfur	44.3	-813	-813.3	91.7	90.0	P

Data File: \\Avogadro\Organics\S2.I\111108.B\S2H5243.D
Report Date: 09-Nov-2011 11:21

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111108.B\S2H5243.D
Lab Smp Id: SSTD0202W Client Smp ID: SSTD0202W
Inj Date : 08-NOV-2011 15:21
Operator : SRC: Inst ID: S2.i
Smp Info : SSTD0202W,SSTD0202W
Misc Info : 2,3
Comment :
Method : \\Avogadro\Organics\S4.I\111108.B\S4_SOM.m
Meth Date : 08-Nov-2011 16:34 mscarpaci Quant Type: ISTD
Cal Date : 31-OCT-2011 16:34 Cal File: S4E8468.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * (Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vi	2.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
	1 Benzaldehyde	77	3.445	3.445	(0.904)	342642	40.0000	86
$	2 Phenol-d5	71	3.498	3.498	(0.918)	200900	40.0000	59
	3 Phenol	94	3.509	3.509	(0.921)	562406	40.0000	82
$	4 bis(2-Chloroethyl)ether-d8	67	3.552	3.552	(0.932)	280823	40.0000	79
	5 bis(2-Chloroethyl)ether	93	3.584	3.584	(0.941)	428846	40.0000	93
$	6 2-Chlorophenol-d4	132	3.627	3.627	(0.952)	181675	40.0000	34
	7 2-Chlorophenol	128	3.638	3.638	(0.955)	189511	40.0000	37
*	8 1,4-Dichlorobenzene-d4	152	3.809	3.809	(1.000)	164010	40.0000	(Q)
	9 2-Methylphenol	108	4.024	4.024	(1.056)	322851	40.0000	68
	10 2,2'-oxybis(1-Chloropropane)	45	4.045	4.045	(1.062)	414600	40.0000	250(A)
$	11 4-Methylphenol-d8	113	4.131	4.131	(1.084)	326002	40.0000	58
	13 Acetophenone	105	4.152	4.152	(1.090)	533031	40.0000	64
	14 N-Nitroso-di-n-propylamine	70	4.152	4.152	(1.090)	310156	40.0000	64(Q)
	12 4-Methylphenol	108	4.024	4.024	(1.056)	323646	40.0000	59
	15 Hexachloroethane	117	4.238	4.238	(1.113)	154533	40.0000	56(Q)
$	16 Nitrobenzene-d5	128	4.281	4.281	(0.877)	94062	40.0000	46
	17 Nitrobenzene	77	4.292	4.292	(0.879)	500070	40.0000	89
	18 Isophorone	82	4.496	4.496	(0.921)	912278	40.0000	97
$	19 2-Nitrophenol-d4	143	4.549	4.549	(0.932)	112608	40.0000	44
	20 2-Nitrophenol	139	4.560	4.560	(0.934)	103319	40.0000	38
	21 2,4-Dimethylphenol	107	4.603	4.603	(0.943)	395981	40.0000	72(Q)

Data File: \\Avogadro\Organics\S2.I\111108.B\S2H5243.D
Report Date: 09-Nov-2011 11:21

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
	22	bis(2-Chloroethoxy)methane	93	4.678	4.678	(0.958)	516603	40.0000	100
$	23	2,4-Dichlorophenol-d3	165	4.753	4.753	(0.974)	212999	40.0000	49
	24	2,4-Dichlorophenol	162	4.764	4.764	(0.976)	197461	40.0000	44
*	25	Naphthalene-d8	136	4.882	4.882	(1.000)	492357	40.0000	
	26	Naphthalene	128	4.903	4.903	(1.004)	499475	40.0000	39
$	27	4-Chloroaniline-d4	131	4.935	4.935	(1.011)	192326	40.0000	43 (Q)
	28	4-Chloroaniline	127	4.946	4.946	(1.013)	223104	40.0000	47
	29	Hexachlorobutadiene	225	5.021	5.021	(1.029)	139170	40.0000	36
	30	Caprolactam	113	5.214	5.214	(1.068)	86293	40.0000	58
	31	4-Chloro-3-methylphenol	107	5.364	5.364	(1.099)	283359	40.0000	63
	32	2-Methylnaphthalene	142	5.482	5.482	(1.123)	368006	40.0000	37
	33	Hexachlorocyclopentadiene	237	5.621	5.621	(0.885)	162304	40.0000	47 (Q)
	34	1,2,4,5-Tetrachlorobenzene	216	5.621	5.621	(0.885)	496308	40.0000	78
	35	2,4,6-Trichlorophenol	196	5.718	5.718	(0.900)	166261	40.0000	39
	36	2,4,5-Trichlorophenol	196	5.750	5.750	(0.905)	196206	40.0000	40
	37	1,1'-Biphenyl	154	5.868	5.868	(0.924)	477361	40.0000	36
	38	2-Chloronaphthalene	162	5.890	5.890	(0.927)	406366	40.0000	37
	39	2-Nitroaniline	65	5.965	5.965	(0.939)	195734	40.0000	60
$	40	Dimethylphthalate-d6	166	6.104	6.104	(0.961)	542269	40.0000	41
	41	Dimethylphthalate	163	6.126	6.126	(0.965)	533656	40.0000	39
	42	2,6-Dinitrotoluene	165	6.168	6.168	(0.971)	122052	40.0000	36
$	43	Acenaphthylene-d8	160	6.222	6.222	(0.980)	631908	40.0000	38
	44	Acenaphthylene	152	6.233	6.233	(0.981)	585077	40.0000	32
	45	3-Nitroaniline	138	6.308	6.308	(0.993)	77720	40.0000	29
*	46	Acenaphthene-d10	164	6.351	6.351	(1.000)	380415	40.0000	
	47	Acenaphthene	153	6.372	6.372	(1.003)	354774	40.0000	30
	48	2,4-Dinitrophenol	184	6.394	6.394	(1.007)	44431	40.0000	26
	52	Dibenzofuran	168	6.522	6.522	(1.027)	538895	40.0000	34
$	49	4-Nitrophenol-d4	143	6.447	6.447	(1.015)	61096	40.0000	28
	50	4-Nitrophenol	109	6.458	6.458	(1.017)	106362	40.0000	37
	51	2,4-Dinitrotoluene	165	6.501	6.501	(1.024)	145604	40.0000	32 (Q)
	118	2,3,4,6-Tetrachlorophenol	232	6.630	6.630	(1.044)	108086	40.0000	29
	53	Diethylphthalate	149	6.715	6.715	(1.057)	420678	40.0000	28
$	54	Fluorene-d10	176	6.780	6.780	(1.068)	484133	40.0000	41
	56	Fluorene	166	6.801	6.801	(1.071)	473981	40.0000	33
	55	4-Chlorophenyl-phenylether	204	6.801	6.801	(1.071)	271279	40.0000	35
	57	4-Nitroaniline	138	6.812	6.812	(1.073)	75468	40.0000	23
$	58	4,6-Dinitro-2-methylphenol-d2	200	6.833	6.833	(0.902)	89450	40.0000	40
	59	4,6-Dinitro-2-methylphenol	198	6.844	6.844	(0.904)	84475	40.0000	34 (Q)
	60	N-Nitrosodiphenylamine	169	6.898	6.898	(0.911)	385774	40.0000	44
	61	4-Bromophenyl-phenylether	248	7.209	7.209	(0.952)	143662	40.0000	40
	62	Hexachlorobenzene	284	7.262	7.262	(0.959)	128156	40.0000	34
	63	Atrazine	200	7.337	7.337	(0.969)	133994	40.0000	34
	64	Pentachlorophenol	266	7.423	7.423	(0.980)	63768	40.0000	34
*	65	Phenanthrene-d10	188	7.573	7.573	(1.000)	616967	40.0000	
	66	Phenanthrene	178	7.595	7.595	(1.003)	670652	40.0000	42
$	67	Anthracene-d10	188	7.627	7.627	(1.007)	635339	40.0000	38
	68	Anthracene	178	7.638	7.638	(1.008)	656282	40.0000	41
	117	Carbazole	167	7.766	7.766	(1.025)	482071	40.0000	31
	70	Di-n-butylphthalate	149	8.066	8.066	(1.065)	704745	40.0000	35
	71	Fluoranthene	202	8.592	8.592	(1.135)	649180	40.0000	30
$	72	Pyrene-d10	212	8.774	8.774	(0.887)	498633	40.0000	62
	73	Pyrene	202	8.796	8.796	(0.889)	690124	40.0000	71
	74	Butylbenzylphthalate	149	9.375	9.375	(0.948)	212139	40.0000	45

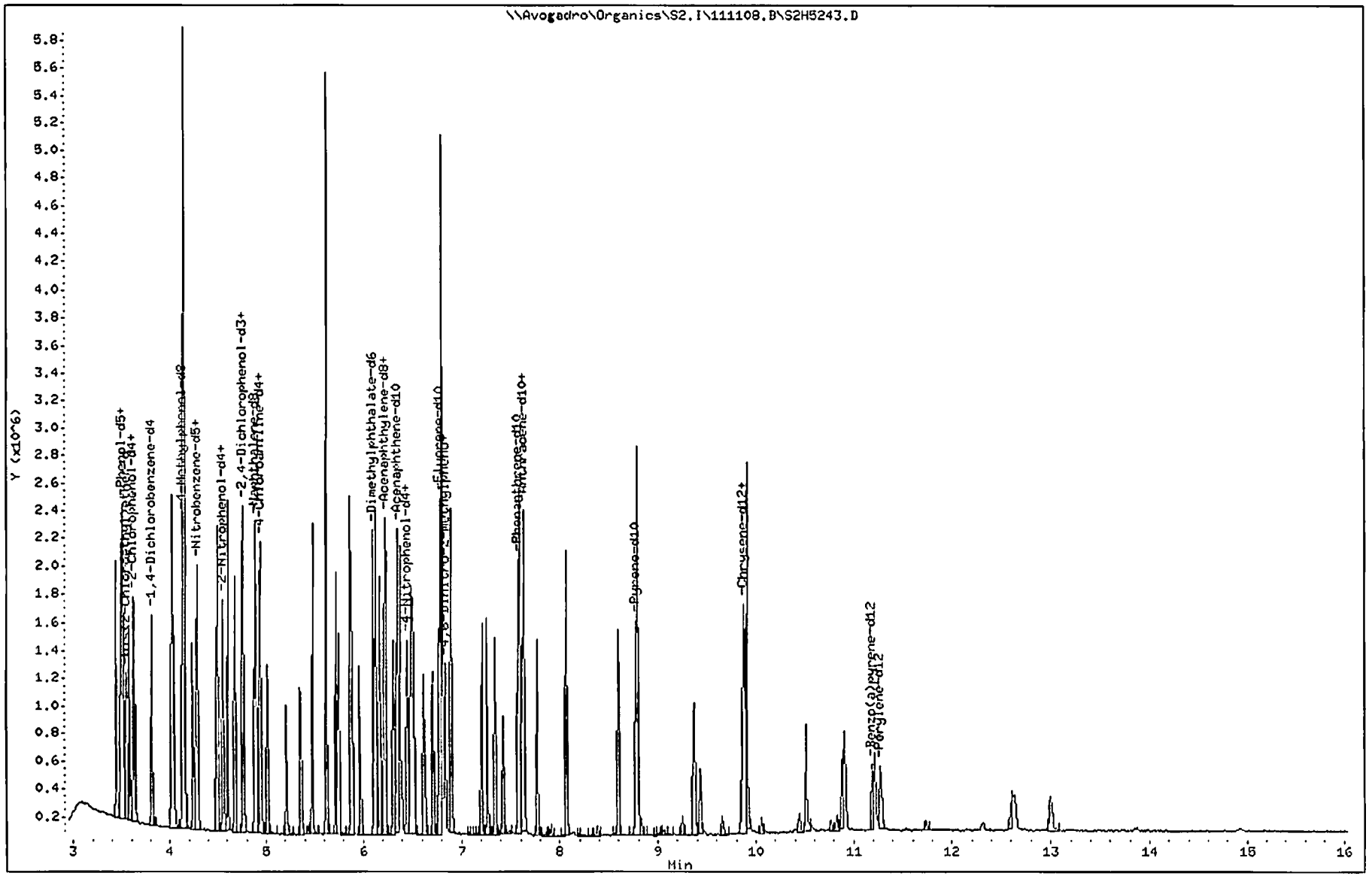
Data File: \\Avogadro\Organics\S2.I\111108.B\S2H5243.D
Report Date: 09-Nov-2011 11:21

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	
	75 3,3'-Dichlorobenzidine	252	9.857	9.857	(0.997)	118999	40.0000	31	
	76 Benzo(a)anthracene	228	9.879	9.879	(0.999)	443975	40.0000	39	
*	77 Chrysene-d12	240	9.889	9.889	(1.000)	395172	40.0000		(Q)
	78 Chrysene	228	9.911	9.911	(1.002)	368615	40.0000	39	
	79 bis(2-Ethylhexyl)phthalate	149	9.911	9.911	(1.002)	303221	40.0000	46	
	80 Di-n-octylphthalate	149	10.511	10.511	(0.932)	408692	40.0000	53	
	81 Benzo(b)fluoranthene	252	10.887	10.887	(0.966)	323533	40.0000	41	
	82 Benzo(k)fluoranthene	252	10.908	10.908	(0.968)	313796	40.0000	34	
$	83 Benzo(a)pyrene-d12	264	11.187	11.187	(0.992)	226222	40.0000	41	
	84 Benzo(a)pyrene	252	11.219	11.219	(0.995)	265369	40.0000	39	
*	85 Perylene-d12	264	11.273	11.273	(1.000)	250366	40.0000		
	86 Indeno(1,2,3-cd)pyrene	276	12.603	12.603	(1.118)	218532	40.0000	30	
	87 Dibenzo(a,h)anthracene	278	12.635	12.635	(1.121)	170150	40.0000	27	
	88 Benzo(g,h,i)perylene	276	12.999	12.999	(1.153)	181817	40.0000	31	

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S2.I\111108.B\S2H5243.D
Date : 08-NOV-2011 15:21
Client ID: SSTD0202W
Instrument: S2.i
Sample Info: SSTD0202W,SSTD0202W
Volume Injected (uL): 2.0
Operator: SRC:
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111108.B\S2H5244.D
Report Date: 09-Nov-2011 11:21

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111108.B\S2H5244.D
Lab Smp Id: GPC3111103-SB
Inj Date : 08-NOV-2011 15:42
Operator : SRC: Inst ID: S2.i
Smp Info : GPC3111103-SB
Misc Info :
Comment :
Method : \\Avogadro\Organics\S2.I\111108.B\S2_SOM.m
Meth Date : 08-Nov-2011 11:01 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 3 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * (Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vi	2.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)	
* 8 1,4-Dichlorobenzene-d4	152	3.812	3.809	(1.000)	218032	40.0000		(Q)
* 25 Naphthalene-d8	136	4.873	4.871	(1.000)	550304	40.0000		
* 46 Acenaphthene-d10	164	6.342	6.340	(1.000)	487000	40.0000		
* 65 Phenanthrene-d10	188	7.565	7.573	(1.000)	822676	40.0000		
* 77 Chrysene-d12	240	9.795	9.803	(1.000)	614386	40.0000		(Q)
* 85 Perylene-d12	264	11.125	11.133	(1.000)	405234	40.0000		

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S2.I\111108.B\S2H5244.D
Report Date: 09-Nov-2011 11:21

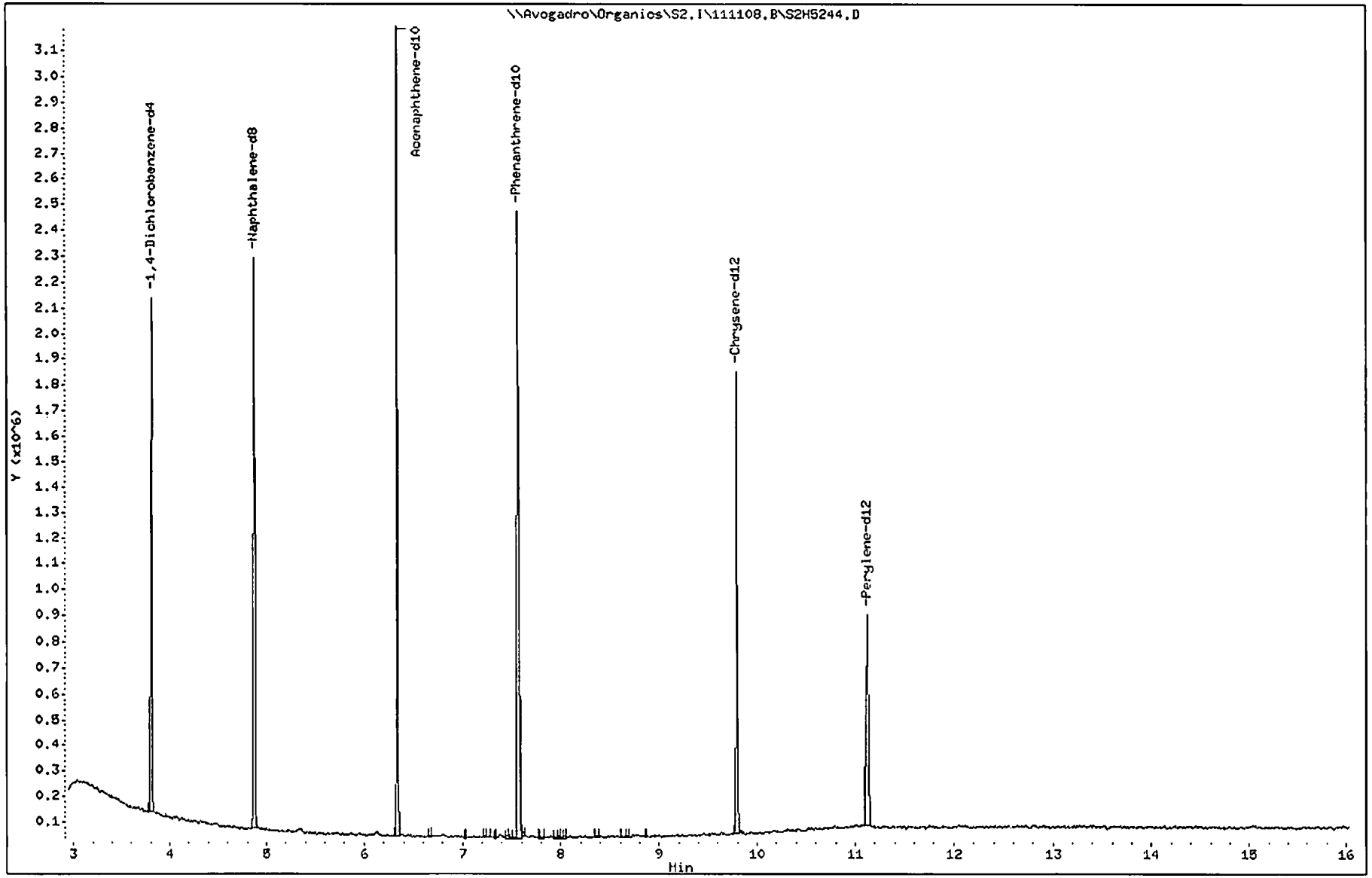
Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111108.B\S2H5244.D
Lab Smp Id: GPC3111103-SB
Inj Date : 08-NOV-2011 15:42
Operator : SRC: Inst ID: S2.i
Smp Info : GPC3111103-SB
Misc Info :
Comment :
Method : \\Avogadro\Organics\S2.I\111108.B\S2_SOM.m
Meth Date : 08-Nov-2011 11:01 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 3 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\S2.I\111108.B\S2H5244.D
Date : 08-NOV-2011 15:42
Client ID:
Instrument: S2.i
Sample Info: GPC3111103-SB
Volume Injected (uL): 2.0
Operator: SRC:
Column phase: RXI-5SILMS
Column diameter: 0.25



2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC	#	TCX 2 %REC	#	DCB 1 %REC	#	DCB 2 %REC	#	OTHER (1)	OTHER (2)	TOT OUT
01	ABLK2F	59		63		64		66				0
02	ALCS2F	62		67		89		95				0
03	H30Q0	46		49		52		52				0
04	H30Q0MS	46		50		55		56				0
05	H30Q0MSD	45		49		48		49				0
06	H30Q1	42		44		43		42				0
07	H30Q2	56		61		56		56				0
08	H30Q4	29		30		48		47				0
09	H30Q6	26		28		42		50				0
10	H30Q8	61		65		73		74				0
11	H30Q9	64		63		58		63				0
12	H30R0	43		46		68		66				0
13	H30R1	56		61		47		50				0
14	H30S4	40		42		40		41				0
15	H30S5	52		56		46		48				0
16	H30S8	53		57		55		55				0
17	H30S9	54		58		57		58				0
18	H30T0	69		76		73		77				0
19	H30T1	63		70		68		70				0
20	H30T3	56		61		73		71				0
21	H30T4	59		64		64		67				0
22	H30T5	67		74		72		75				0
23	H30Q3	51		55		54		54				0
24	H30T2	52		57		59		60				0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(30-150)
DCB = Decachlorobiphenyl	(30-150)

Column to be used to flag recovery values

+ Values outside of QC limits

D Surrogate diluted out

3K - FORM III ARO-2

SOIL AROCLOR MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix Spike - EPA Sample No.: H30Q0

Instrument ID: E2 GC Column : CLPPest ID: 0.53 (mm)

COMPOUND	SPIKE ADDED (µg/Kg)	SAMPLE CONCENTRATION (µg/Kg)	MS CONCENTRATION (µg/Kg)	MS %REC	#	QC. LIMITS REC.
AR1016	156.3007	0.0000	93.5581	60		29-135
AR1260	156.3042	0.0000	106.0796	68		29-135

COMPOUND	SPIKE ADDED (µg/Kg)	MSD CONCENTRATION (µg/Kg)	MSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
AR1016	156.3007	82.1382	53		13		0-15	29-135
AR1260	156.3042	94.5386	60		12		0-20	29-135

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 2 outside limits

Spike Recovery: 0 out of 4 outside limits

COMMENTS:

3K - FORM III ARO-2

SOIL AROCLOR MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix Spike - EPA Sample No.: H30Q0

Instrument ID: E2 GC Column : CLPPestII ID: 0.53 (mm)

COMPOUND	SPIKE ADDED (µg/Kg)	SAMPLE CONCENTRATION (µg/Kg)	MS CONCENTRATION (µg/Kg)	MS %REC	#	QC. LIMITS REC.
AR1016	156.3007	0.0000	93.8246	60		29-135
AR1260	156.3042	0.0000	112.3330	72		29-135

COMPOUND	SPIKE ADDED (µg/Kg)	MSD CONCENTRATION (µg/Kg)	MSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
AR1016	156.3007	76.2468	49		21	*	0-15	29-135
AR1260	156.3042	93.1904	60		19		0-20	29-135

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 1 out of 2 outside limits

Spike Recovery: 0 out of 4 outside limits

COMMENTS:

3P - FORM III ARO-4

SOIL AROCLOR LABORATORY CONTROL SAMPLE RECOVERY

EPA SAMPLE NO.

ALCS2F

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Lab Sample ID: LCS-62776 LCS Lot No.:

Date Extracted: 11/06/2011 Date Analyzed (1): 11/08/2011

Instrument ID (1): E2 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS
Aroclor-1016	33.3330	25.9449	78		50-150
Aroclor-1260	33.3330	40.8681	123		50-150

Instrument ID (2): E2 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 11/08/2011

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS
Aroclor-1016	33.3330	24.3793	73		50-150
Aroclor-1260	33.3330	32.2925	97		50-150

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

LCS Recovery: 0 out of 4 outside limits.

COMMENTS:

4F - FORM IV ARO

AROCLOR METHOD BLANK SUMMARY

EPA SAMPLE NO.

ABLK2F

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Lab File ID: E2K7575F.D / E2K7575R.D Lab Sample ID: MB-62776

Matrix: (SOIL/SED/WATER) SOIL Extraction: (Type) SONC Date Extracted: 11/06/2011

Sulfur Cleanup: (Y/N) Y GPC Cleanup: (Y/N) N

Acid Cleanup: (Y/N Y

Date Analyzed (1): 11/08/2011 Date Analyzed (2): 11/08/2011

Time Analyzed (1): 0:21 Time Analyzed (2): 0:21

Instrument ID (1): E2 Instrument ID (2): E2

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED (1)	DATE ANALYZED (2)
01	ALCS2F	LCS-62776	11/08/2011	11/08/2011
02	H30Q0	K2198-01B	11/08/2011	11/08/2011
03	H30Q0MS	K2198-01BMS	11/08/2011	11/08/2011
04	H30Q0MSD	K2198-01BMSD	11/08/2011	11/08/2011
05	H30Q1	K2198-02B	11/08/2011	11/08/2011
06	H30Q2	K2198-03B	11/08/2011	11/08/2011
07	H30Q4	K2198-05B	11/08/2011	11/08/2011
08	H30Q6	K2198-06B	11/08/2011	11/08/2011
09	H30Q8	K2198-07B	11/08/2011	11/08/2011
10	H30Q9	K2198-08B	11/08/2011	11/08/2011
11	H30R0	K2198-09B	11/08/2011	11/08/2011
12	H30R1	K2198-10B	11/08/2011	11/08/2011
13	H30S4	K2198-11B	11/08/2011	11/08/2011
14	H30S5	K2198-12B	11/08/2011	11/08/2011
15	H30S8	K2198-13B	11/08/2011	11/08/2011
16	H30S9	K2198-14B	11/08/2011	11/08/2011
17	H30T0	K2198-15B	11/08/2011	11/08/2011
18	H30T1	K2198-16B	11/08/2011	11/08/2011
19	H30T3	K2198-18B	11/08/2011	11/08/2011
20	H30T4	K2198-19B	11/08/2011	11/08/2011
21	H30T5	K2198-20B	11/08/2011	11/08/2011
22	H30Q3	K2198-04B	11/08/2011	11/08/2011

COMMENTS:

4F - FORM IV ARO

AROCLOR METHOD BLANK SUMMARY

EPA SAMPLE NO.

ABLK2F

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Lab File ID: E2K7575F.D / E2K7575R.D Lab Sample ID: MB-62776

Matrix: (SOIL/SED/WATER) SOIL Extraction: (Type) SONC Date Extracted: 11/06/2011

Sulfur Cleanup: (Y/N) Y GPC Cleanup: (Y/N) N

Acid Cleanup: (Y/N Y

Date Analyzed (1): 11/08/2011 Date Analyzed (2): 11/08/2011

Time Analyzed (1): 0:21 Time Analyzed (2): 0:21

Instrument ID (1): E2 Instrument ID (2): E2

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED (1)	DATE ANALYZED (2)
23	H30T2	K2198-17B	11/08/2011	11/08/2011

COMMENTS:

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q0

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-01B

Sample wt/vol: 30.5 (g/mL) G Lab File ID: E2K7577F.D/E2K7577R.D

% Moisture: 15 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.2 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	38	U
11096-82-5	Aroclor-1260	38	U
37324-23-5	Aroclor-1262	38	U
11100-14-4	Aroclor-1268	38	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7577F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

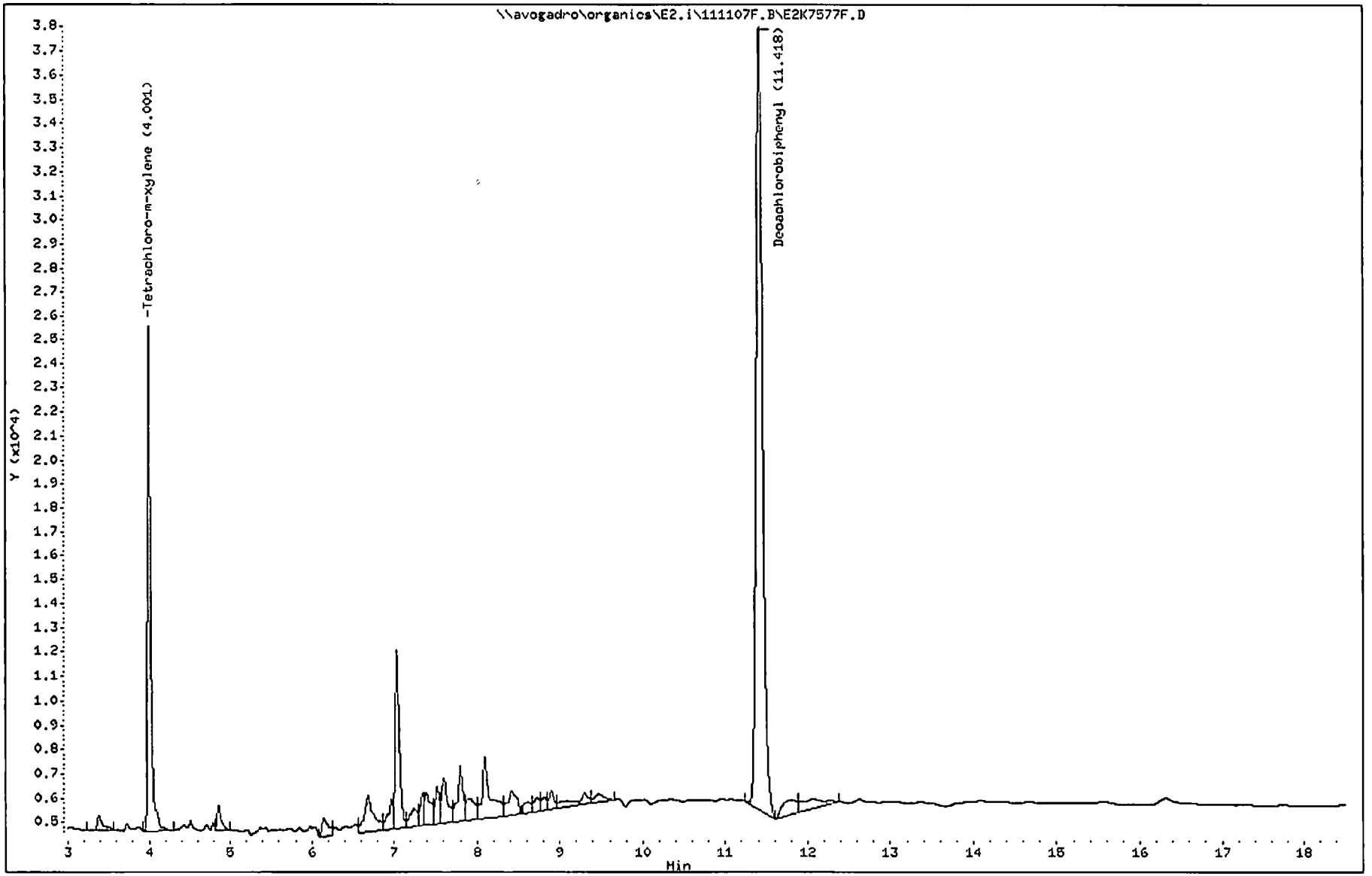
Data file : \\avogadro\organics\E2.i\111107F.B\E2K7577F.D
Lab Smp Id: K2198-01B Client Smp ID: H30Q0
Inj Date : 08-NOV-2011 01:02
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-01B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.500	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.000	3.999	0.001	569209	0.02741	9.0		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.417	11.417	0.000	1797200	0.06269	20		

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7577F.D
Date : 08-NOV-2011 01:02
Client ID: H3000
Instrument: E2.i
Sample Info: K2198-01B,,62776,somaro.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7577R.D
Report Date: 08-Nov-2011 11:43

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

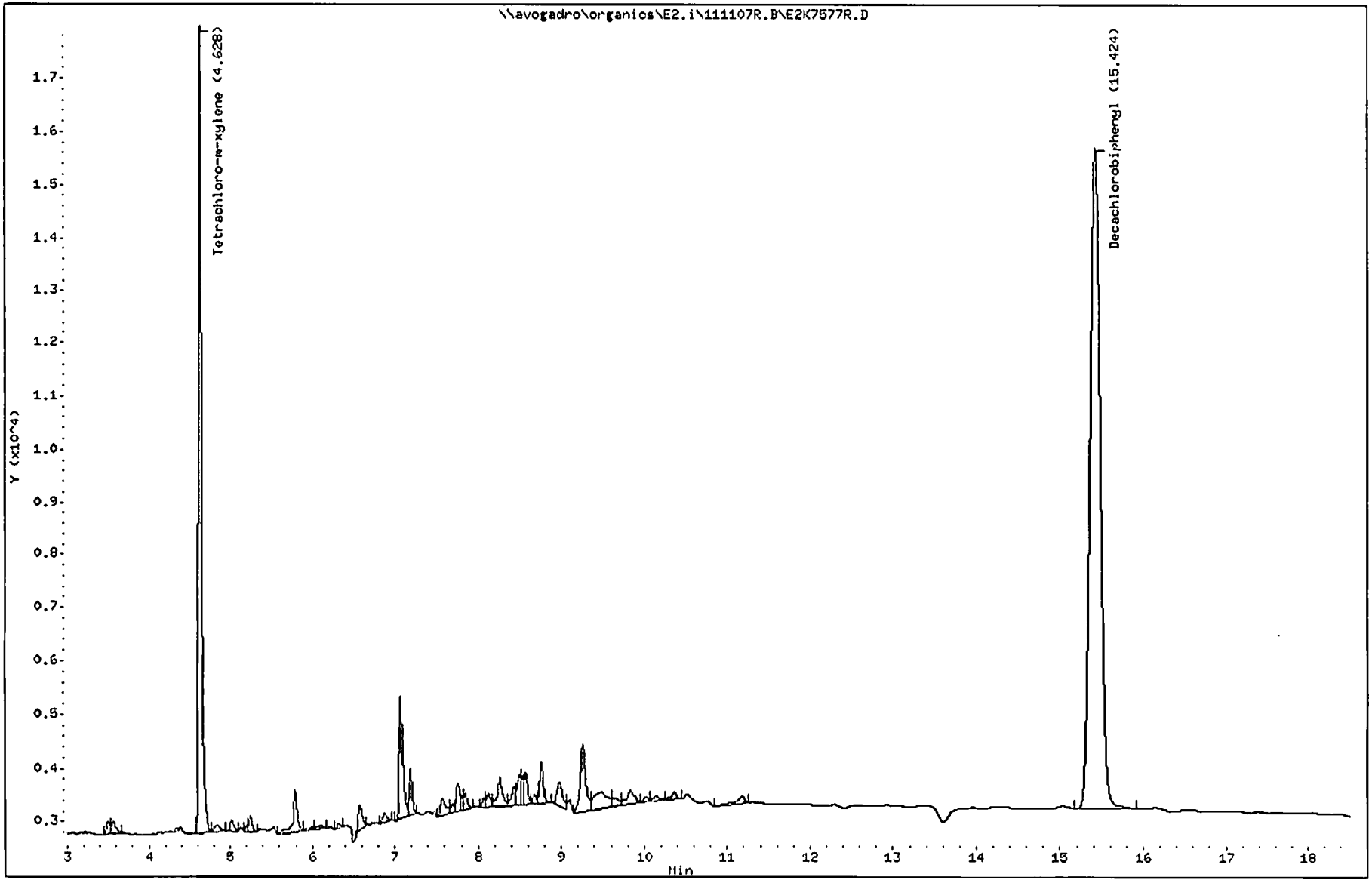
Data file : \\avogadro\organics\E2.i\111107R.B\E2K7577R.D
Lab Smp Id: K2198-01B Client Smp ID: H30Q0
Inj Date : 08-NOV-2011 01:02
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-01B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.500	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.627	4.627	0.000	373154	0.02967	9.7		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.424	15.423	0.001	1060617	0.06257	20		

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7577R.D
Date : 08-NOV-2011 01:02
Client ID: H30Q0
Instrument: E2.i
Sample Info: K2198-01B,,62776,somaro.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-02B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E2K7580F.D/E2K7580R.D

% Moisture: 22 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.5 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	43	U
11104-28-2	Aroclor-1221	43	U
11141-16-5	Aroclor-1232	43	U
53469-21-9	Aroclor-1242	43	U
12672-29-6	Aroclor-1248	43	U
11097-69-1	Aroclor-1254	43	U
11096-82-5	Aroclor-1260	43	U
37324-23-5	Aroclor-1262	43	U
11100-14-4	Aroclor-1268	43	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7580F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

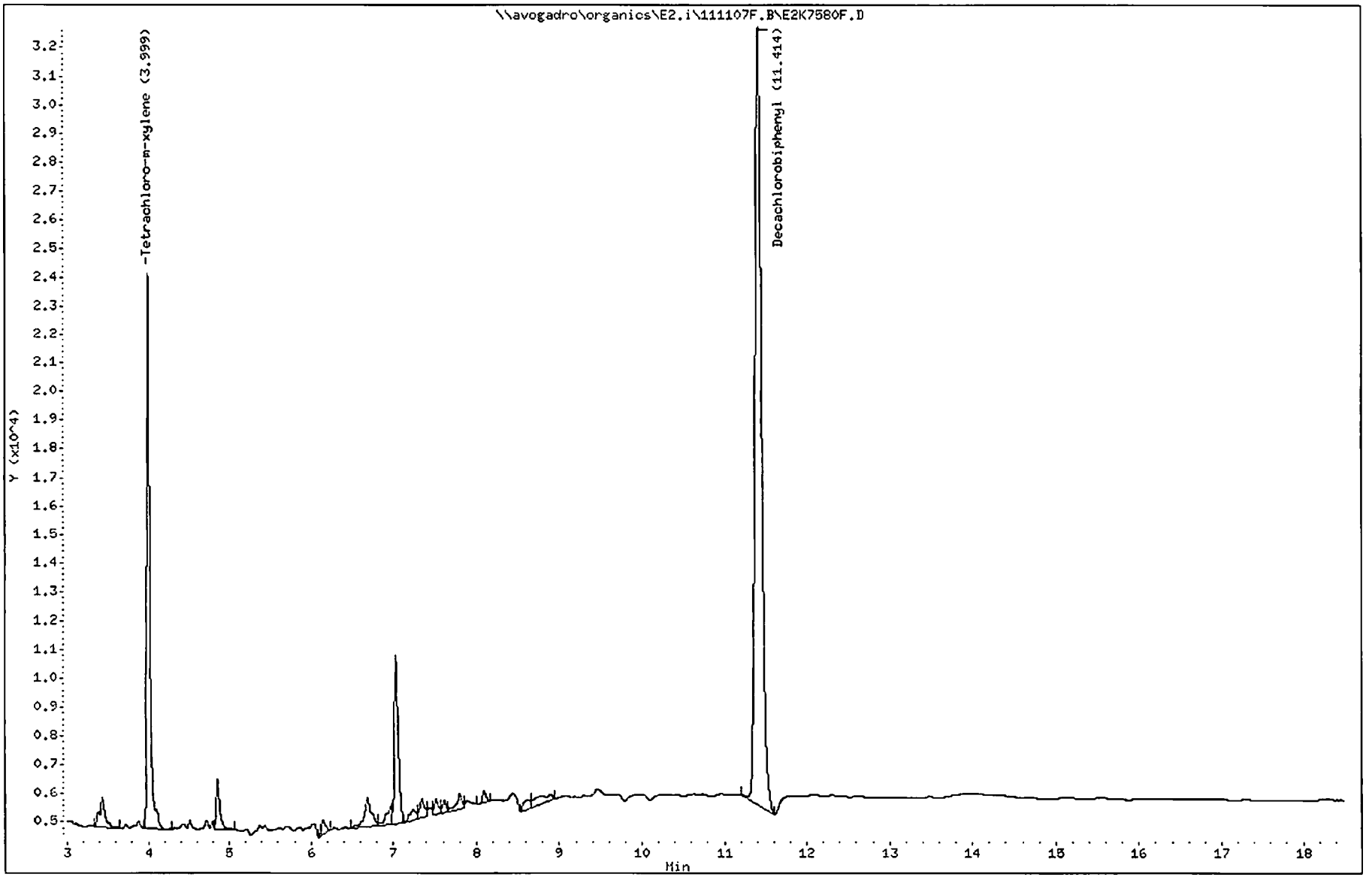
Data file : \\avogadro\organics\E2.i\111107F.B\E2K7580F.D
Lab Smp Id: K2198-02B Client Smp ID: H30Q1
Inj Date : 08-NOV-2011 02:05
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-02B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
S 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
3.999	3.999	0.000	517786	0.02493	8.3		
S 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.413	11.417	-0.004	1494538	0.05213	17		

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7580F.D
Date : 08-NOV-2011 02:05
Client ID: H30Q1
Instrument: E2.i
Sample Info: K2198-02B,,62776,somaro.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7580R.D
Report Date: 08-Nov-2011 11:43

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

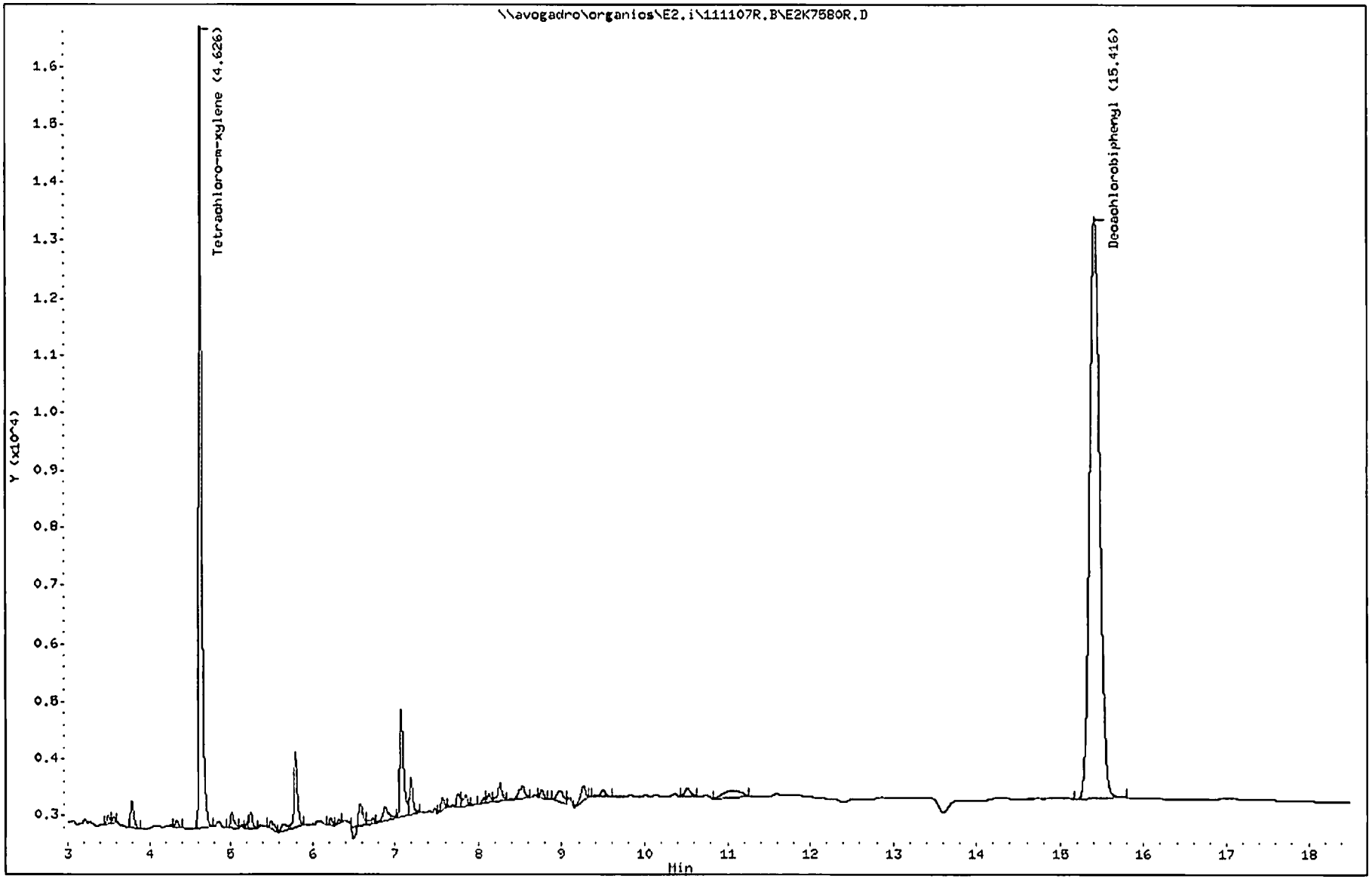
Data file : \\avogadro\organics\E2.i\111107R.B\E2K7580R.D
Lab Smp Id: K2198-02B Client Smp ID: H30Q1
Inj Date : 08-NOV-2011 02:05
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-02B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.625	4.627	-0.002	335435	0.02667	8.9		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.416	15.423	-0.007	850974	0.05020	17		

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7580R.D
Date : 08-NOV-2011 02:05
Client ID: H30Q1 Instrument: E2.i
Sample Info: K2198-02B,,62776,somaro.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPestII Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q2

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-03B

Sample wt/vol: 30.4 (g/mL) G Lab File ID: E2K7581F.D/E2K7581R.D

% Moisture: 16 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.7 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	39	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	39	U
11096-82-5	Aroclor-1260	39	U
37324-23-5	Aroclor-1262	39	U
11100-14-4	Aroclor-1268	39	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7581F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

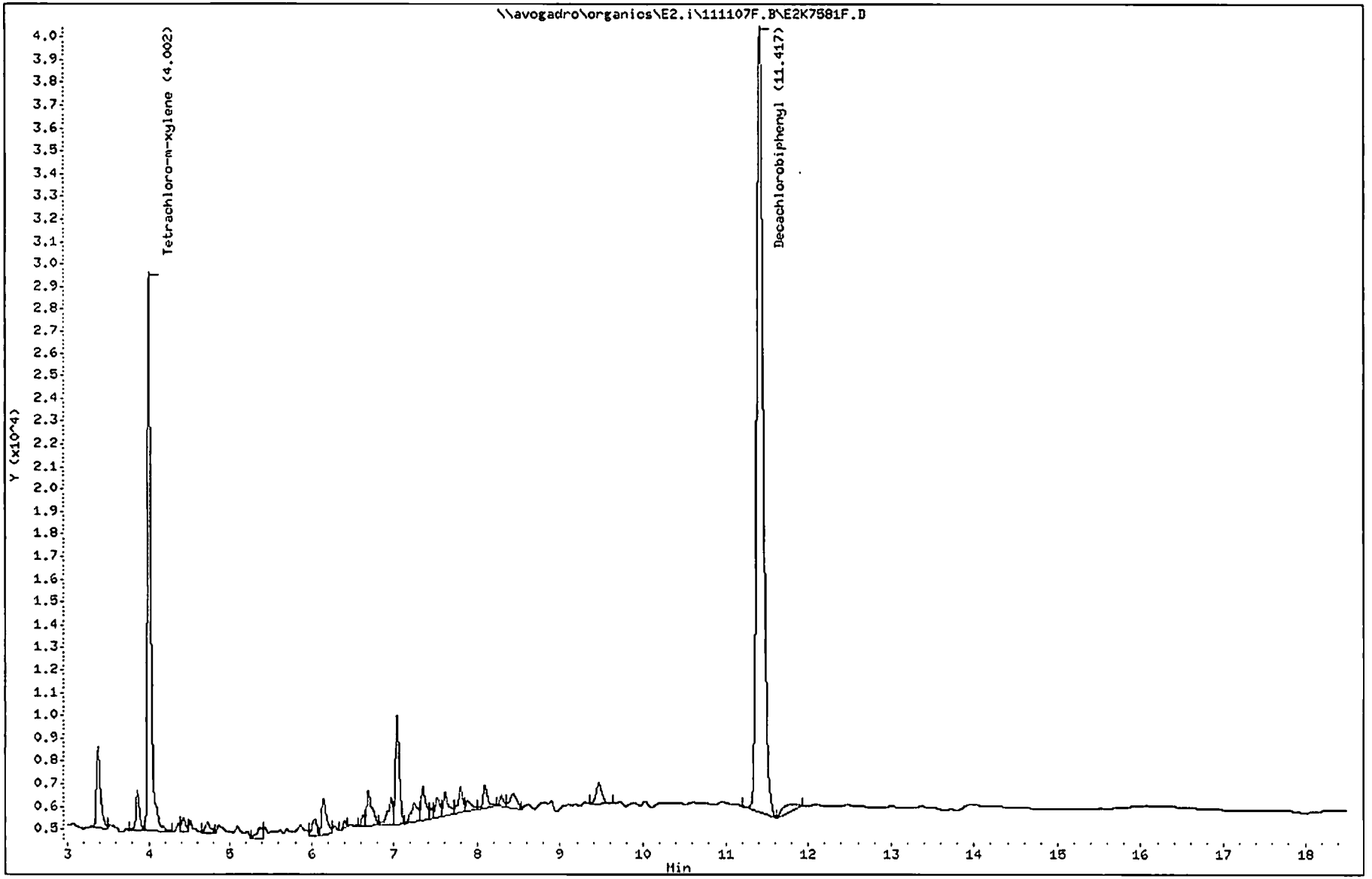
Data file : \\avogadro\organics\E2.i\111107F.B\E2K7581F.D
Lab Smp Id: K2198-03B Client Smp ID: H30Q2
Inj Date : 08-NOV-2011 02:26
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-03B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.400	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.002	3.999	0.003	696231	0.03353	11		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.416	11.417	-0.001	1912296	0.06671	22		

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7581F.D
Date : 08-NOV-2011 02:26
Client ID: H30Q2
Instrument: E2.i
Sample Info: K2198-03B,,62776,somaro.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7581R.D
Report Date: 08-Nov-2011 11:44

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

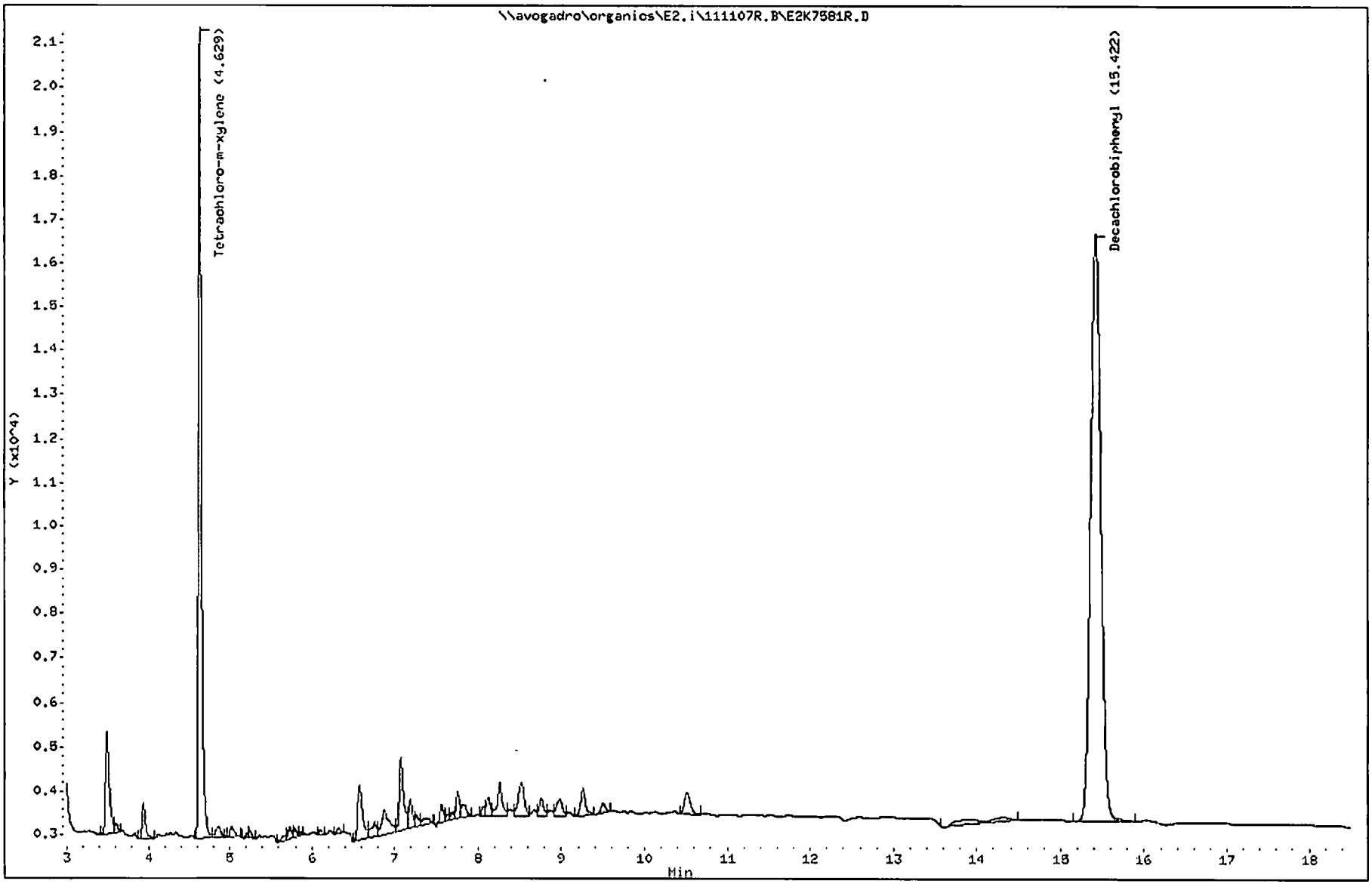
Data file : \\avogadro\organics\E2.i\111107R.B\E2K7581R.D
Lab Smp Id: K2198-03B Client Smp ID: H30Q2
Inj Date : 08-NOV-2011 02:26
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-03B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.400	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.628	4.627	0.001	457645	0.03639	12		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.421	15.423	-0.002	1135429	0.06698	22		

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7581R.D
Date : 08-NOV-2011 02:26
Client ID: H3002 Instrument: E2.i
Sample Info: K2198-03B,,62776,somaro.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPestII Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q3

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-04B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E2K7604F.D/E2K7604R.D

% Moisture: 19 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.3 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	41	U
11104-28-2	Aroclor-1221	41	U
11141-16-5	Aroclor-1232	41	U
53469-21-9	Aroclor-1242	41	U
12672-29-6	Aroclor-1248	41	U
11097-69-1	Aroclor-1254	41	U
11096-82-5	Aroclor-1260	41	U
37324-23-5	Aroclor-1262	41	U
11100-14-4	Aroclor-1268	41	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7604F.D
Report Date: 08-Nov-2011 14:43

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

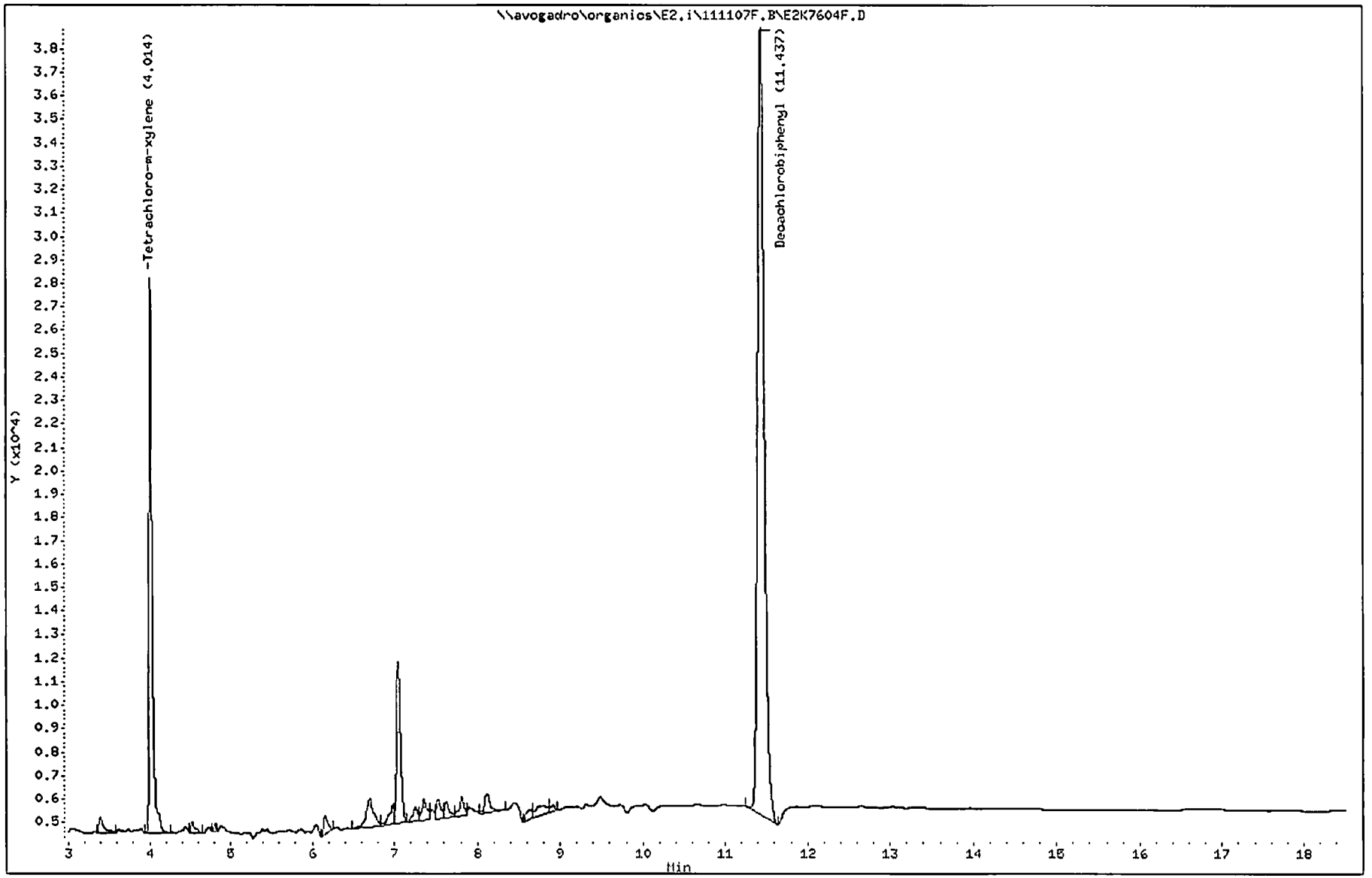
Data file : \\avogadro\organics\E2.i\111107F.B\E2K7604F.D
Lab Smp Id: K2198-04B Client Smp ID: H30Q3
Inj Date : 08-NOV-2011 10:47
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-04B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 14:41 E2.i Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.013	3.999	0.014	634174	0.03054		10	
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
11.437	11.417	0.020	1871456	0.06528		22	

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7604F.D
Date : 08-NOV-2011 10:47
Client ID: H30Q3
Instrument: E2.i
Sample Info: K2198-04B,,62776,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7604R.D
Report Date: 08-Nov-2011 14:44

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111107R.B\E2K7604R.D
Lab Smp Id: K2198-04B Client Smp ID: H30Q3
Inj Date : 08-NOV-2011 10:47
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-04B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 14:42 E2.i Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL

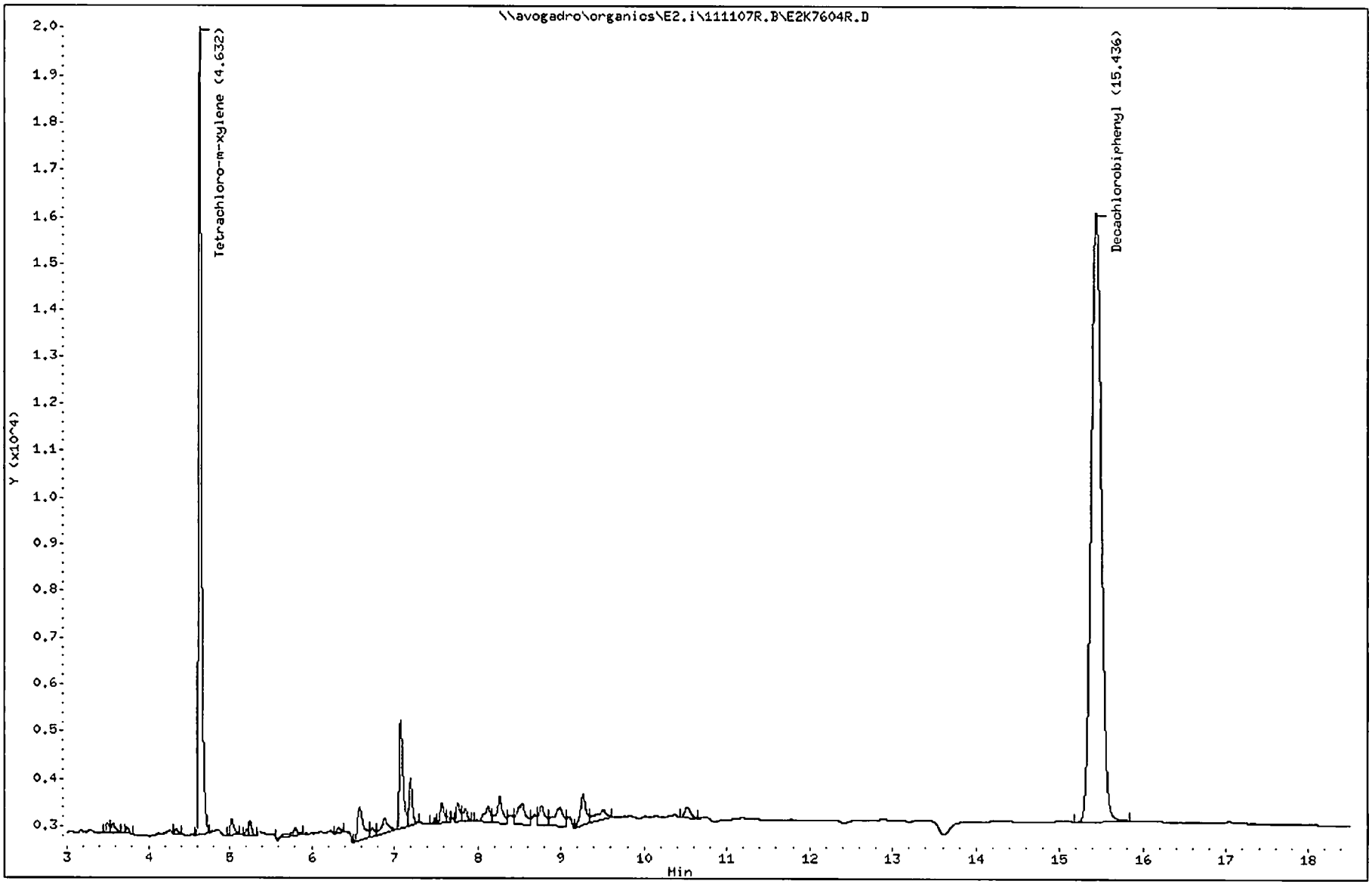
Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
S 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.632	4.627	0.005	414707	0.03297		11	
S 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.436	15.423	0.013	1101566	0.06498		22	

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7604R.D
Date : 08-NOV-2011 10:47
Client ID: H30Q3
Sample Info: K2198-04B,,62776,somaro.sub,,
Volume Injected (uL): 1.0
Column phase: CLPPestII

Instrument: E2.i
Operator: DL SRC: LIMS
Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-05B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E2K7583F.D/E2K7583R.D

% Moisture: 16 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.9 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	39	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	39	U
11096-82-5	Aroclor-1260	39	U
37324-23-5	Aroclor-1262	39	U
11100-14-4	Aroclor-1268	39	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7583F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111107F.B\E2K7583F.D
Lab Smp Id: K2198-05B Client Smp ID: H30Q4
Inj Date : 08-NOV-2011 03:08
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-05B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

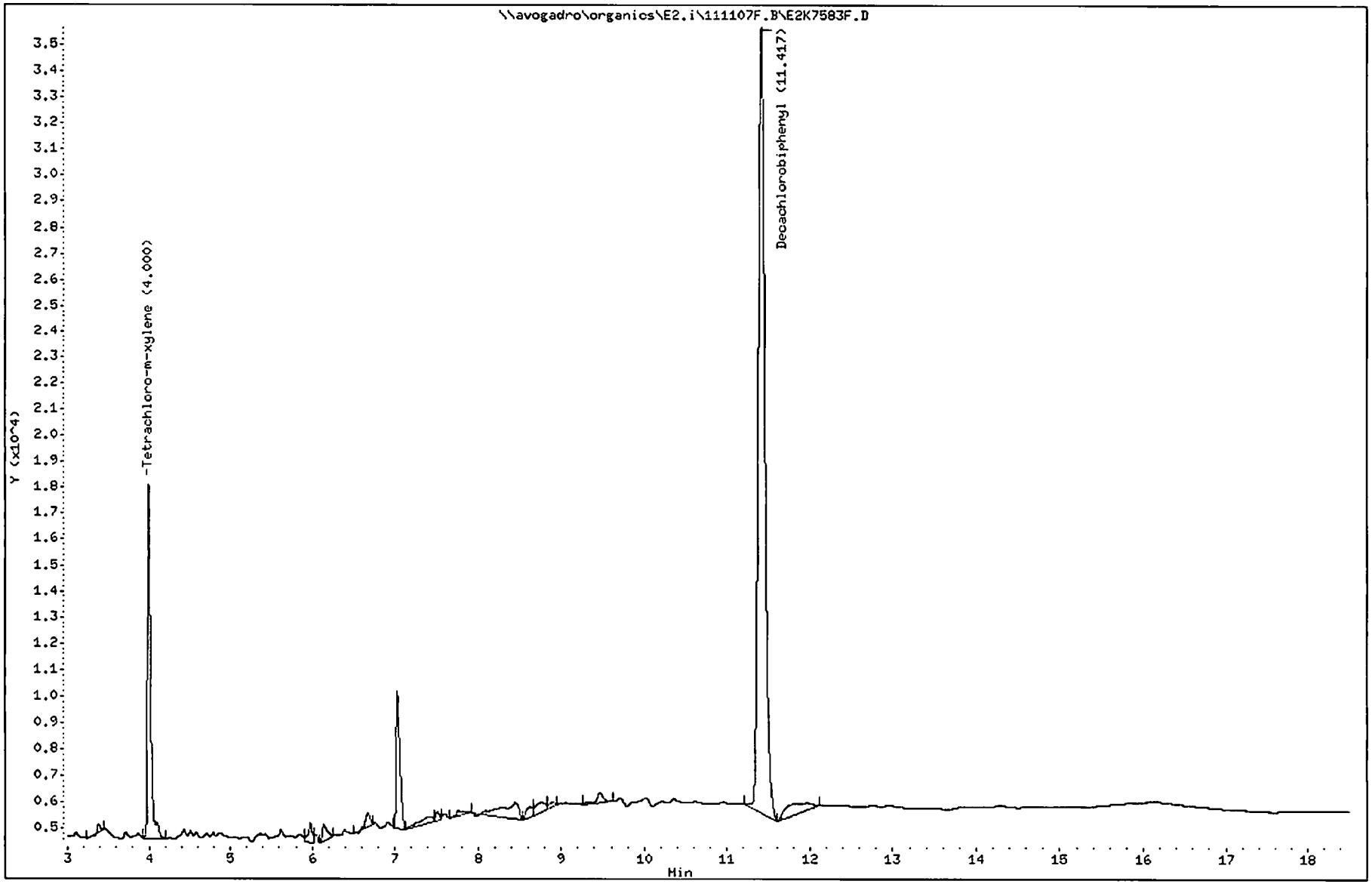
RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
3.999	3.999	0.000	365144	0.01758	5.9			(R)
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.416	11.417	-0.001	1658710	0.05786	19			

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7583F.D
Date : 08-NOV-2011 03:08
Client ID: H30Q4
Sample Info: K2198-05B,,62776,somaro,sub,,
Volume Injected (uL): 1.0
Column phase: CLPPest

Instrument: E2.i
Operator: DL SRC: LIMS
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7583R.D
Report Date: 08-Nov-2011 11:44

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111107R.B\E2K7583R.D
Lab Smp Id: K2198-05B Client Smp ID: H30Q4
Inj Date : 08-NOV-2011 03:08
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-05B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

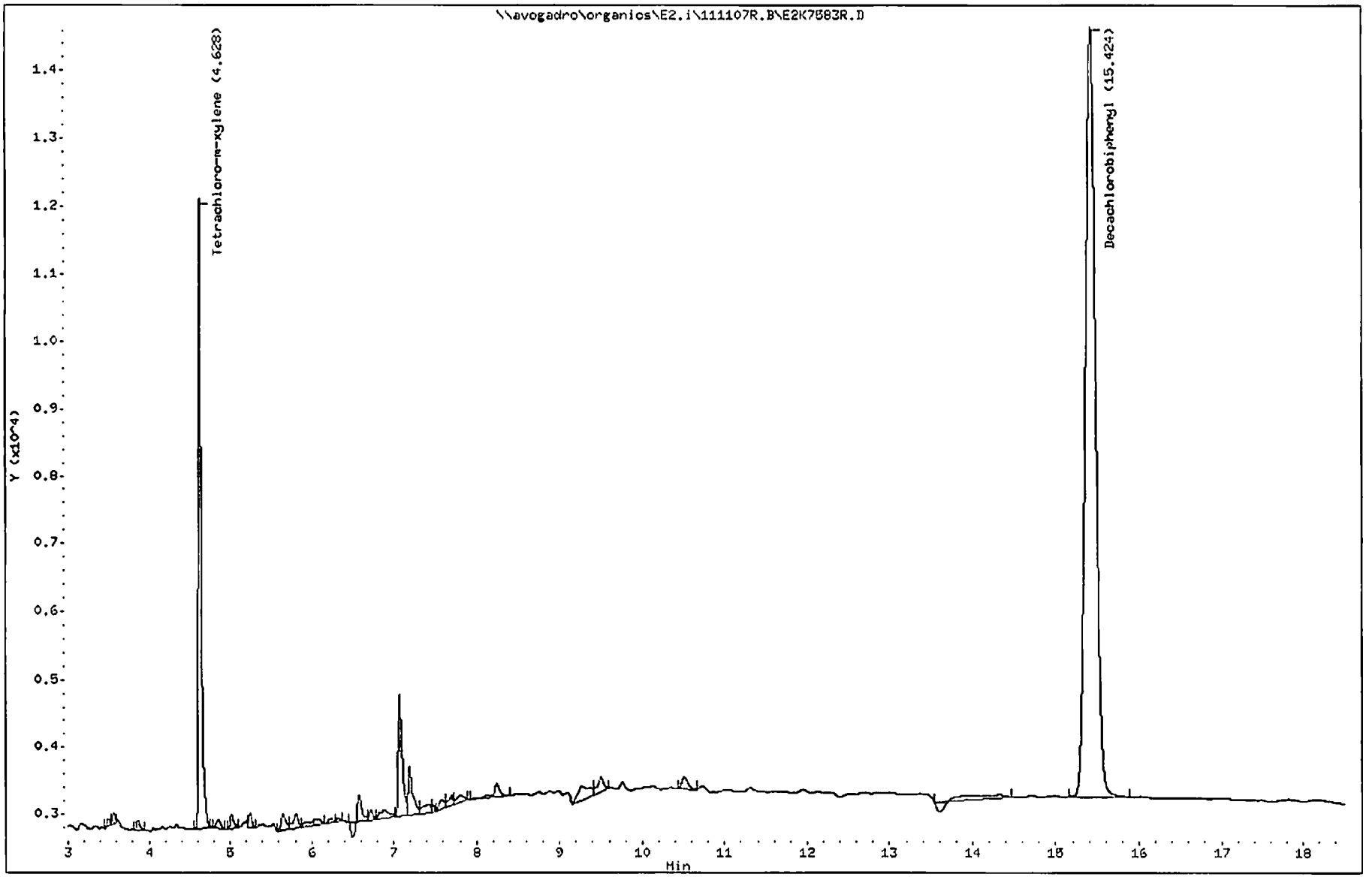
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.628	4.627	0.001	223922	0.01780	5.9			(R)
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.424	15.423	0.001	965876	0.05698	19			

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7583R.D
Date : 08-NOV-2011 03:08
Client ID: H30Q4 Instrument: E2.i
Sample Info: K2198-05B,,62776,somaro.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPestII Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q6

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-06B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E2K7584F.D/E2K7584R.D

% Moisture: 48 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 9.1 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/KG	Q
12674-11-2	Aroclor-1016	63	U
11104-28-2	Aroclor-1221	63	U
11141-16-5	Aroclor-1232	63	U
53469-21-9	Aroclor-1242	63	U
12672-29-6	Aroclor-1248	63	U
11097-69-1	Aroclor-1254	63	U
11096-82-5	Aroclor-1260	63	U
37324-23-5	Aroclor-1262	63	U
11100-14-4	Aroclor-1268	63	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7584F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111107F.B\E2K7584F.D
Lab Smp Id: K2198-06B Client Smp ID: H30Q6
Inj Date : 08-NOV-2011 03:29
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-06B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 26
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

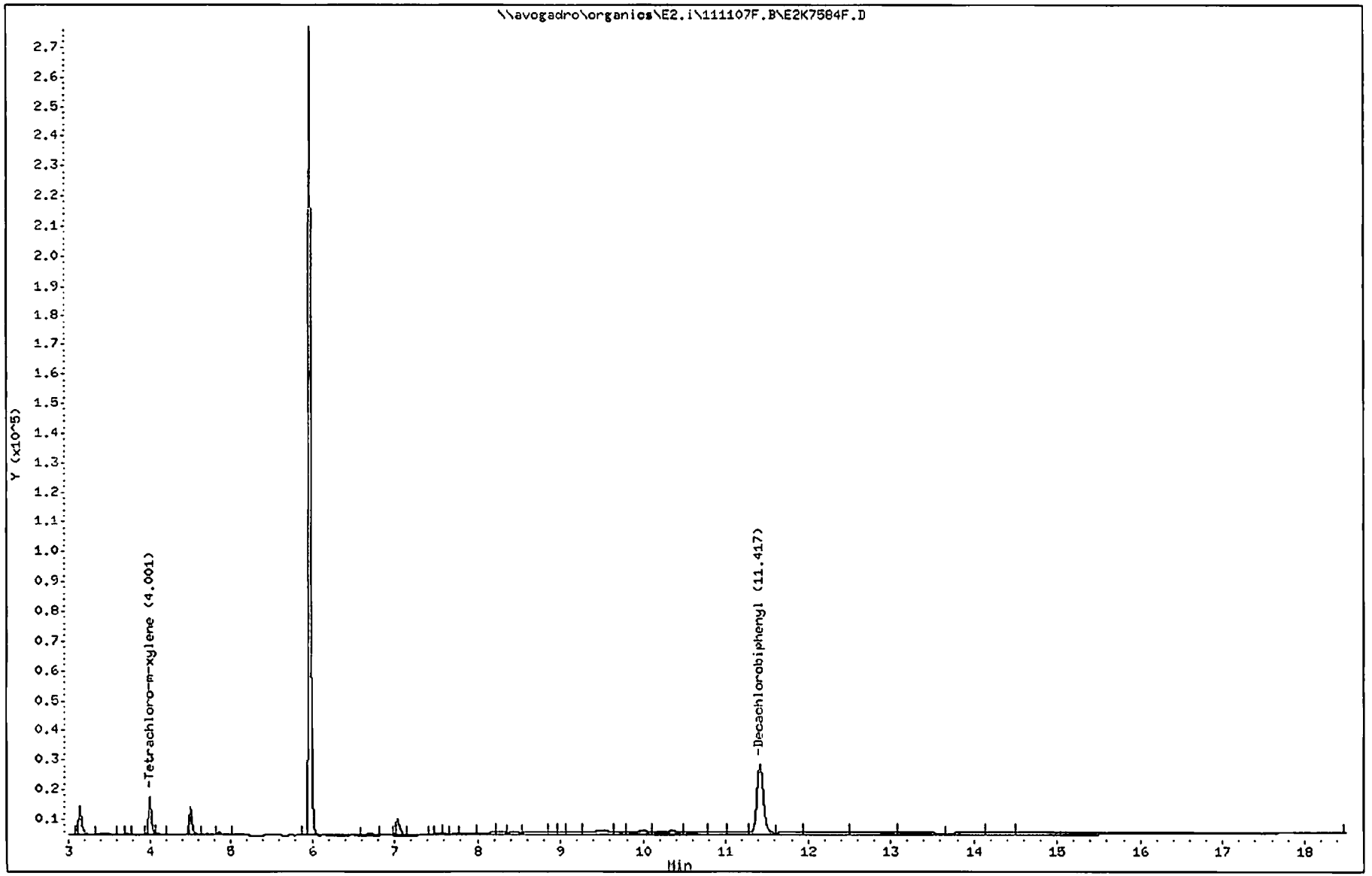
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.001	3.999	0.002	324890	0.01564	5.2			(R)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.417	11.417	0.000	1452031	0.05065	17			

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7584F.D
Date : 08-NOV-2011 03:29
Client ID: H30Q6 Instrument: E2.i
Sample Info: K2198-06B,,62776,somaro,sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPest Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7584R.D
Report Date: 08-Nov-2011 11:44

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111107R.B\E2K7584R.D
Lab Smp Id: K2198-06B Client Smp ID: H30Q6
Inj Date : 08-NOV-2011 03:29
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-06B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 26
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

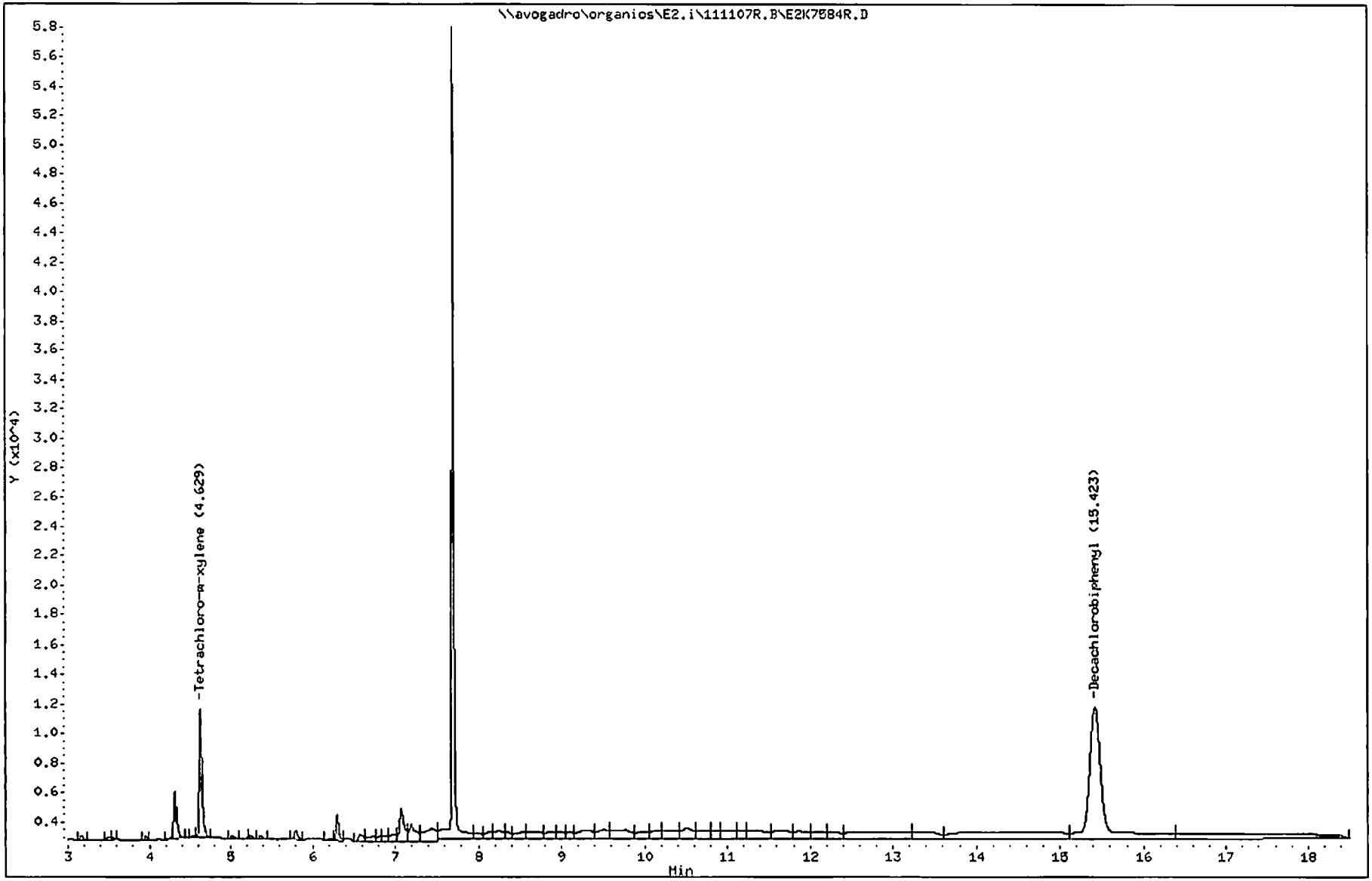
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
S 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.628	4.627	0.001	210459	0.01673	5.6		(R)
S 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.422	15.423	-0.001	1014513	0.05985	20		

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7584R.D
Date : 08-NOV-2011 03:29
Client ID: H30Q6 Instrument: E2.i
Sample Info: K2198-06B,,62776,somaro.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPestII Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q8

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-07B

Sample wt/vol: 30.5 (g/mL) G Lab File ID: E2K7585F.D/E2K7585R.D

% Moisture: 70 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 9.1 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	110	U
11104-28-2	Aroclor-1221	110	U
11141-16-5	Aroclor-1232	110	U
53469-21-9	Aroclor-1242	110	U
12672-29-6	Aroclor-1248	110	U
11097-69-1	Aroclor-1254	110	U
11096-82-5	Aroclor-1260	110	U
37324-23-5	Aroclor-1262	110	U
11100-14-4	Aroclor-1268	110	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7585F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

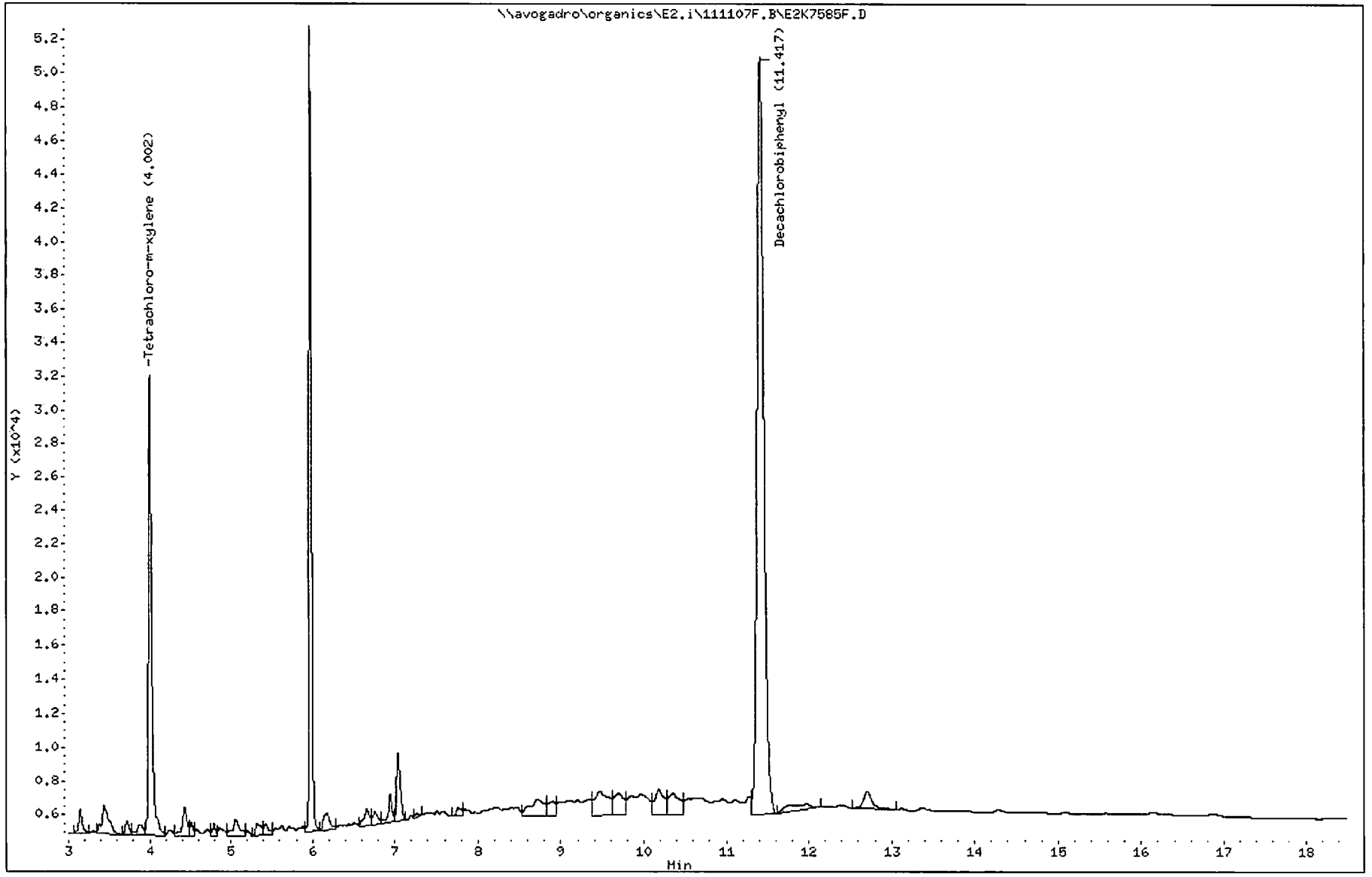
Data file : \\avogadro\organics\E2.i\111107F.B\E2K7585F.D
Lab Smp Id: K2198-07B Client Smp ID: H30Q8
Inj Date : 08-NOV-2011 03:50
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-07B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 27
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.500	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.001	3.999	0.002	755747	0.03639		12	
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.416	11.417	-0.001	2510194	0.08756		29	

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7585F.D
Date : 08-NOV-2011 03:50
Client ID: H30Q8
Instrument: E2.i
Sample Info: K2198-07B,,62776,somaro.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7585R.D
Report Date: 08-Nov-2011 11:44

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

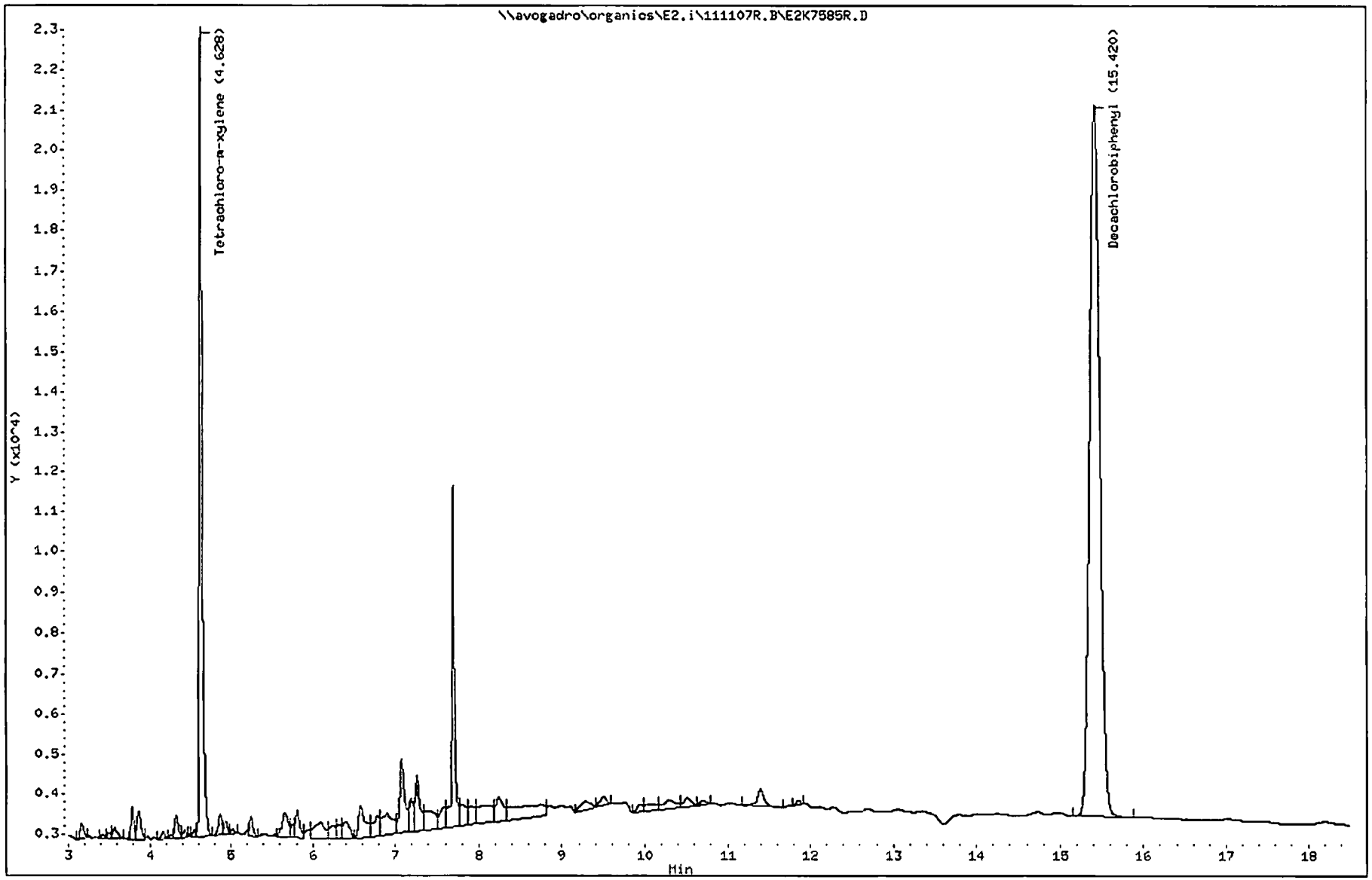
Data file : \\avogadro\organics\E2.i\111107R.B\E2K7585R.D
Lab Smp Id: K2198-07B Client Smp ID: H30Q8
Inj Date : 08-NOV-2011 03:50
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-07B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 27
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.500	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
S 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.628	4.627	0.001	491851	0.03911	13		
S 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.420	15.423	-0.003	1510842	0.08913	29		

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7585R.D
Date : 08-NOV-2011 03:50
Client ID: H3008
Instrument: E2.i
Sample Info: K2198-07B,,62776,somaro.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q9

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-08B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E2K7586F.D/E2K7586R.D

% Moisture: 62 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.5 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	87	U
11104-28-2	Aroclor-1221	87	U
11141-16-5	Aroclor-1232	87	U
53469-21-9	Aroclor-1242	87	U
12672-29-6	Aroclor-1248	87	U
11097-69-1	Aroclor-1254	87	U
11096-82-5	Aroclor-1260	87	U
37324-23-5	Aroclor-1262	87	U
11100-14-4	Aroclor-1268	87	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7586F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

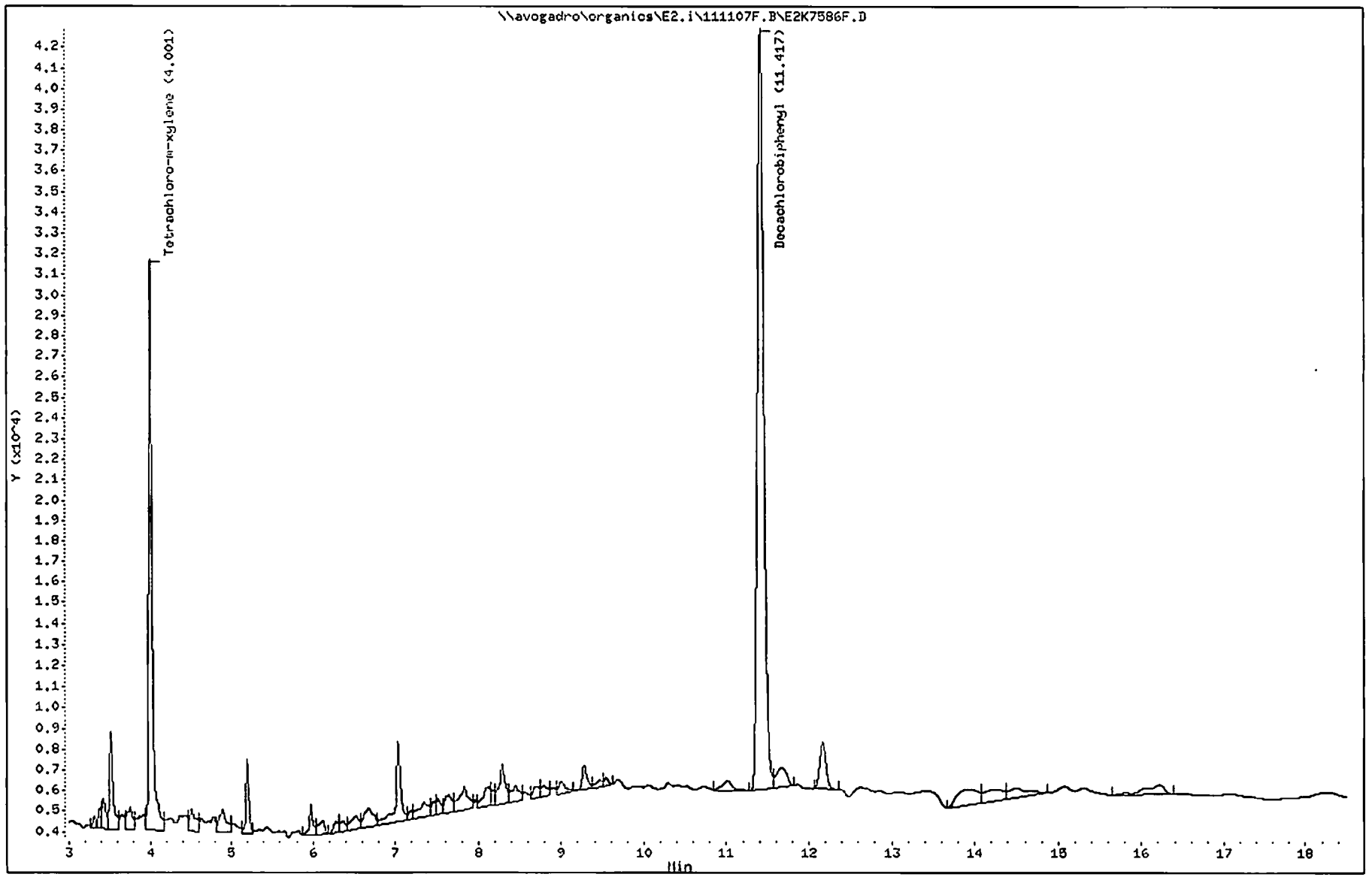
Data file : \\avogadro\organics\E2.i\111107F.B\E2K7586F.D
Lab Smp Id: K2198-08B Client Smp ID: H30Q9
Inj Date : 08-NOV-2011 04:11
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-08B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 28
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.000	3.999	0.001	798211	0.03844	13		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.417	11.417	0.000	2000498	0.06978	23		

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7586F.D
Date : 08-NOV-2011 04:11
Client ID: H30Q9 Instrument: E2.i
Sample Info: K2198-08B,,62776,somaro.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPest Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7586R.D
Report Date: 08-Nov-2011 11:44

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

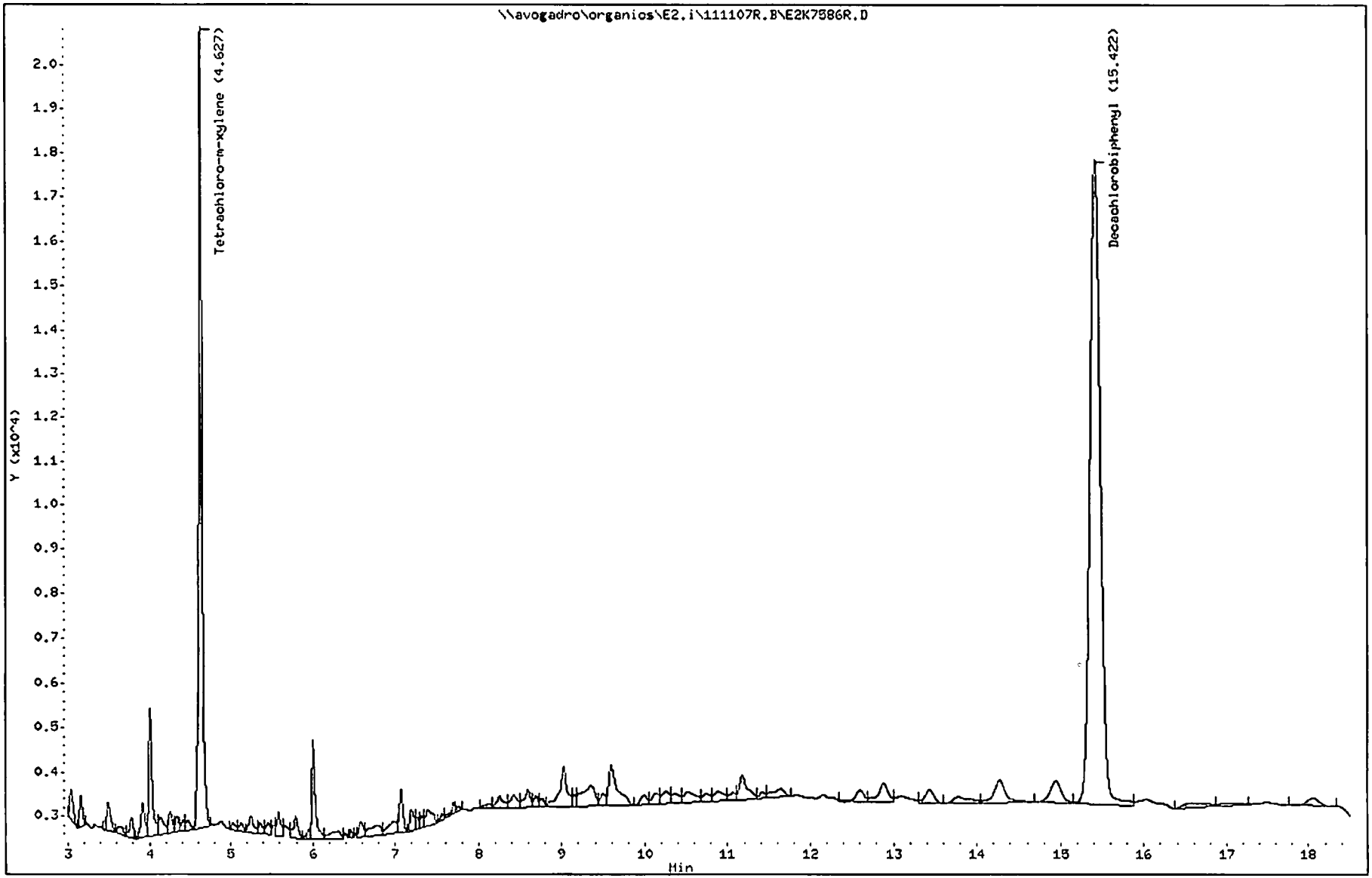
Data file : \\avogadro\organics\E2.i\111107R.B\E2K7586R.D
Lab Smp Id: K2198-08B Client Smp ID: H30Q9
Inj Date : 08-NOV-2011 04:11
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-08B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 28
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.627	4.627	0.000	475156	0.03778	12		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.422	15.423	-0.001	1281555	0.07560	25		

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7586R.D
Date : 08-NOV-2011 04:11
Client ID: H30Q9
Instrument: E2.i
Sample Info: K2198-08B,,62776,somaro.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30R0

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-09B

Sample wt/vol: 30.7 (g/mL) G Lab File ID: E2K7587F.D/E2K7587R.D

% Moisture: 74 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 9.0 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	120	U
11104-28-2	Aroclor-1221	120	U
11141-16-5	Aroclor-1232	120	U
53469-21-9	Aroclor-1242	120	U
12672-29-6	Aroclor-1248	120	U
11097-69-1	Aroclor-1254	120	U
11096-82-5	Aroclor-1260	120	U
37324-23-5	Aroclor-1262	120	U
11100-14-4	Aroclor-1268	120	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7587F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

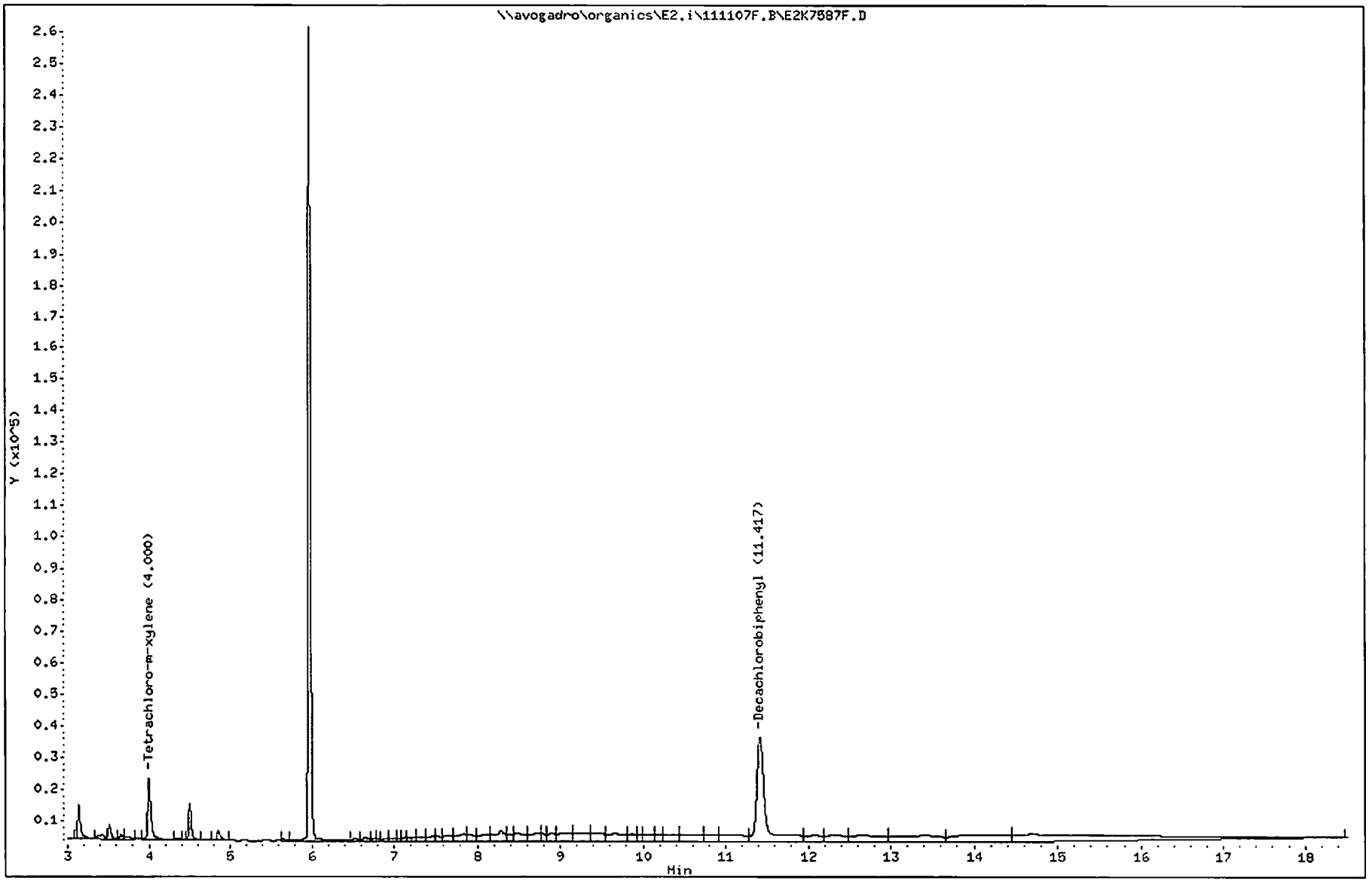
Data file : \\avogadro\organics\E2.i\111107F.B\E2K7587F.D
Lab Smp Id: K2198-09B Client Smp ID: H30R0
Inj Date : 08-NOV-2011 04:32
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-09B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 29
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.700	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.000	3.999	0.001	540999	0.02605	8.5		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.417	11.417	0.000	2347682	0.08189	27		

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7587F.D
Date : 08-NOV-2011 04:32
Client ID: H30R0 Instrument: E2.i
Sample Info: K2198-09B,,62776,somaro.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPest Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7587R.D
Report Date: 08-Nov-2011 11:44

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

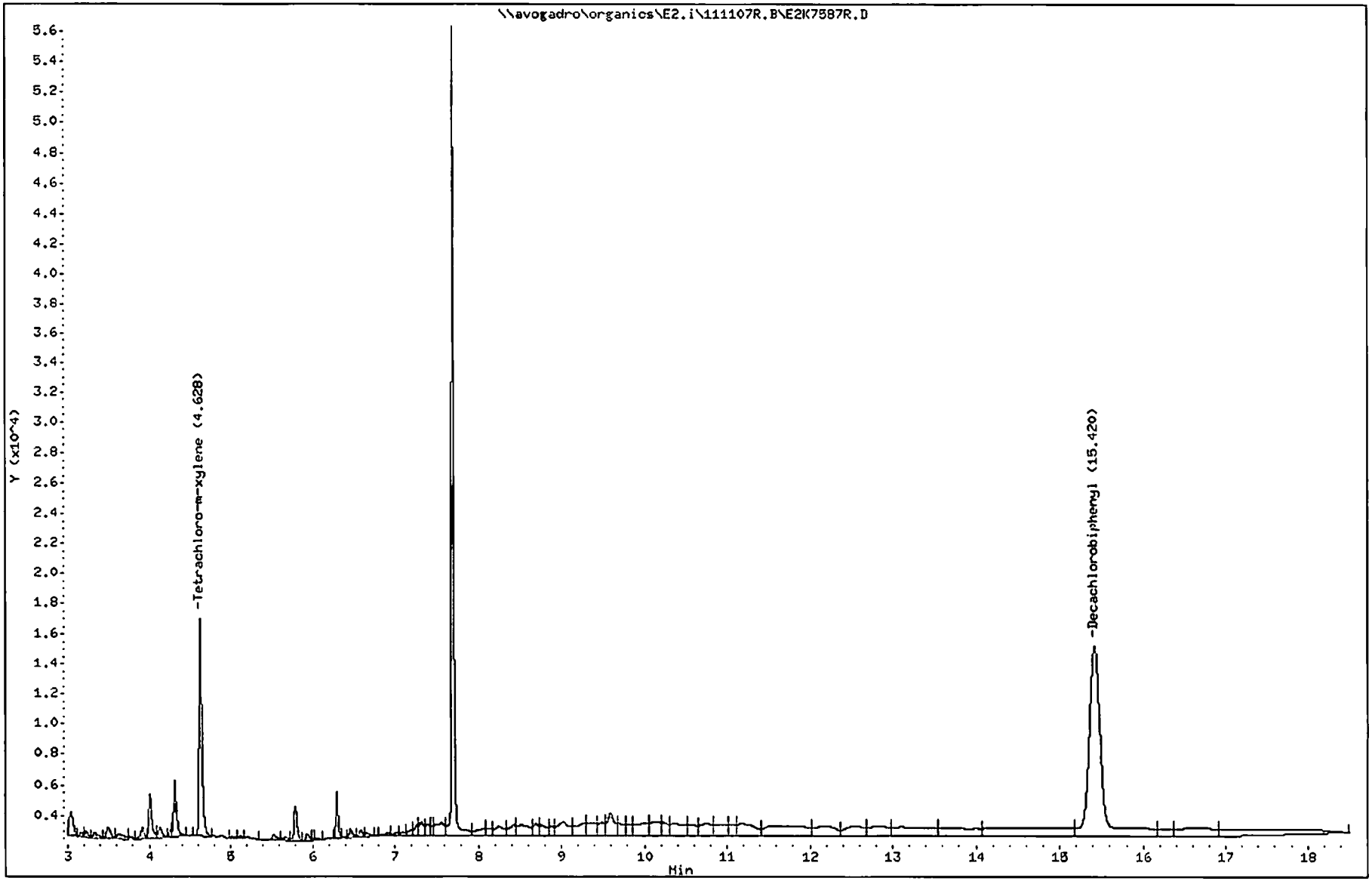
Data file : \\avogadro\organics\E2.i\111107R.B\E2K7587R.D
Lab Smp Id: K2198-09B Client Smp ID: H30R0
Inj Date : 08-NOV-2011 04:32
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-09B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 29
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.700	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
S 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.627	4.627	0.000	350120	0.02784	9.1		
S 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.419	15.423	-0.004	1345311	0.07936	26		

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7587R.D
Date : 08-NOV-2011 04:32
Client ID: H30R0
Instrument: E2.i
Sample Info: K2198-09B,,62776,somaro.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30R1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-10B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E2K7588F.D/E2K7588R.D

% Moisture: 54 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.5 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	72	U
11104-28-2	Aroclor-1221	72	U
11141-16-5	Aroclor-1232	72	U
53469-21-9	Aroclor-1242	72	U
12672-29-6	Aroclor-1248	72	U
11097-69-1	Aroclor-1254	72	U
11096-82-5	Aroclor-1260	72	U
37324-23-5	Aroclor-1262	72	U
11100-14-4	Aroclor-1268	72	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7588F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

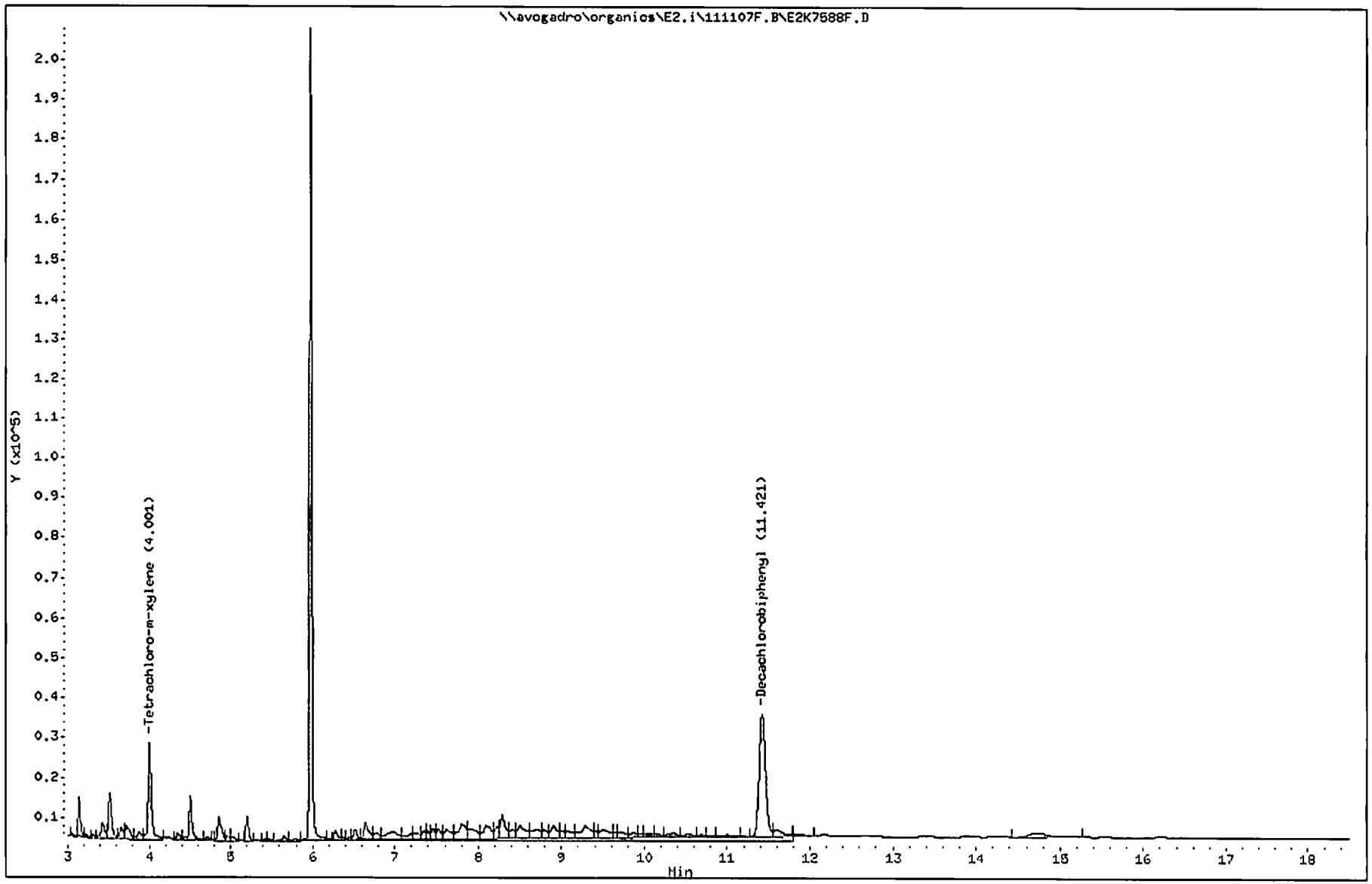
Data file : \\avogadro\organics\E2.i\111107F.B\E2K7588F.D
Lab Smp Id: K2198-10B Client Smp ID: H30R1
Inj Date : 08-NOV-2011 04:53
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-10B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 30
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.001	3.999	0.002	696569	0.03354	11		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.420	11.417	0.003	1633487	0.05698	19		

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7588F.D
Date : 08-NOV-2011 04:53
Client ID: H30R1
Instrument: E2.i
Sample Info: K2198-10B,,62776,somaro.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7588R.D
Report Date: 08-Nov-2011 11:44

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

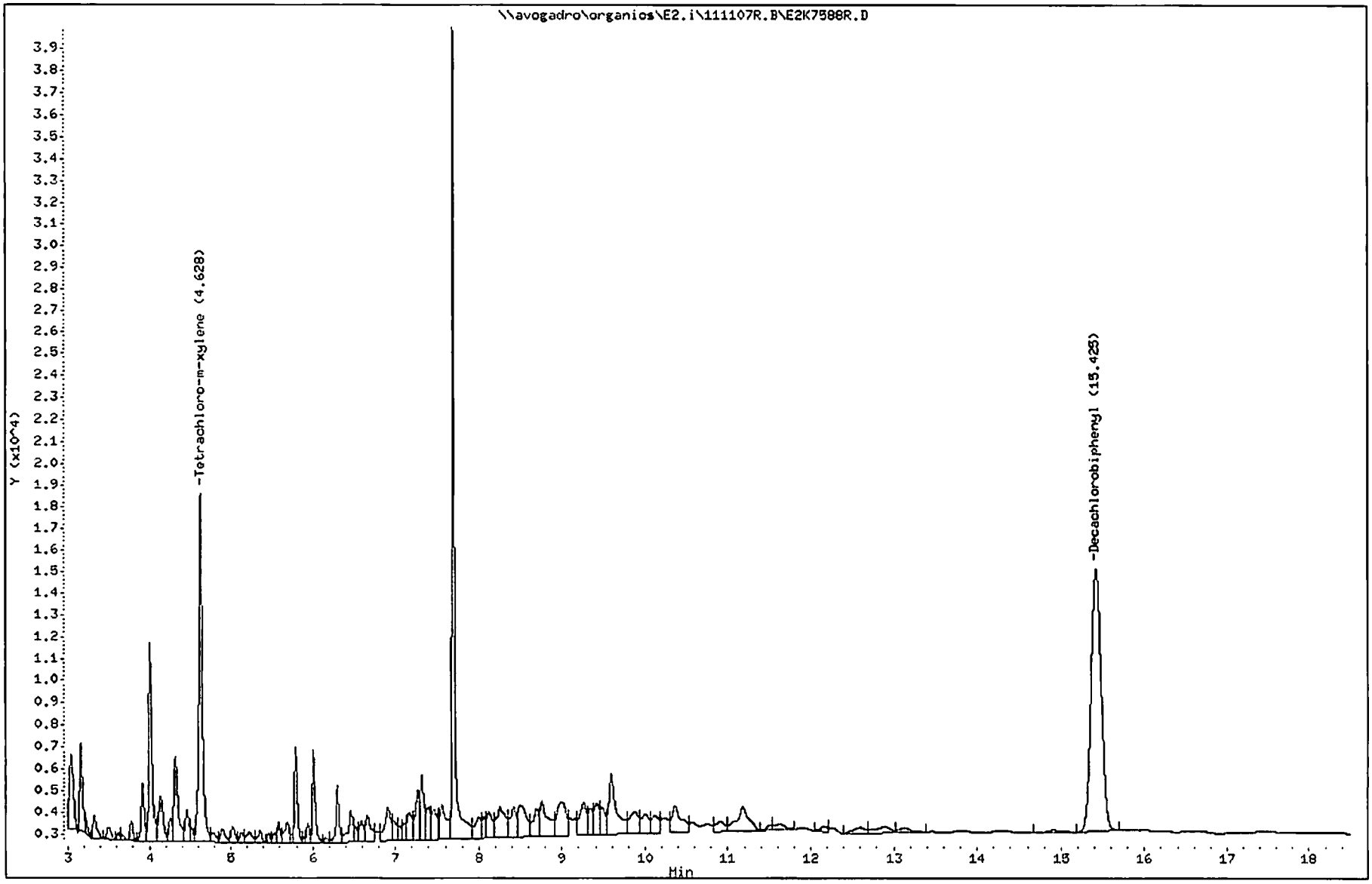
Data file : \\avogadro\organics\E2.i\111107R.B\E2K7588R.D
Lab Smp Id: K2198-10B Client Smp ID: H30R1
Inj Date : 08-NOV-2011 04:53
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-10B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 30
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
S 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.627	4.627	0.000	457630	0.03638		12	
S 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.425	15.423	0.002	1009049	0.05953		20	

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7588R.D
Date : 08-NOV-2011 04:53
Client ID: H30R1 Instrument: E2.i
Sample Info: K2198-10B,,62776,somaro.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPestII Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30S4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-11B

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E2K7589F.D/E2K7589R.D

% Moisture: 38 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.8 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	53	U
11104-28-2	Aroclor-1221	53	U
11141-16-5	Aroclor-1232	53	U
53469-21-9	Aroclor-1242	53	U
12672-29-6	Aroclor-1248	53	U
11097-69-1	Aroclor-1254	53	U
11096-82-5	Aroclor-1260	53	U
37324-23-5	Aroclor-1262	53	U
11100-14-4	Aroclor-1268	53	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7589F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

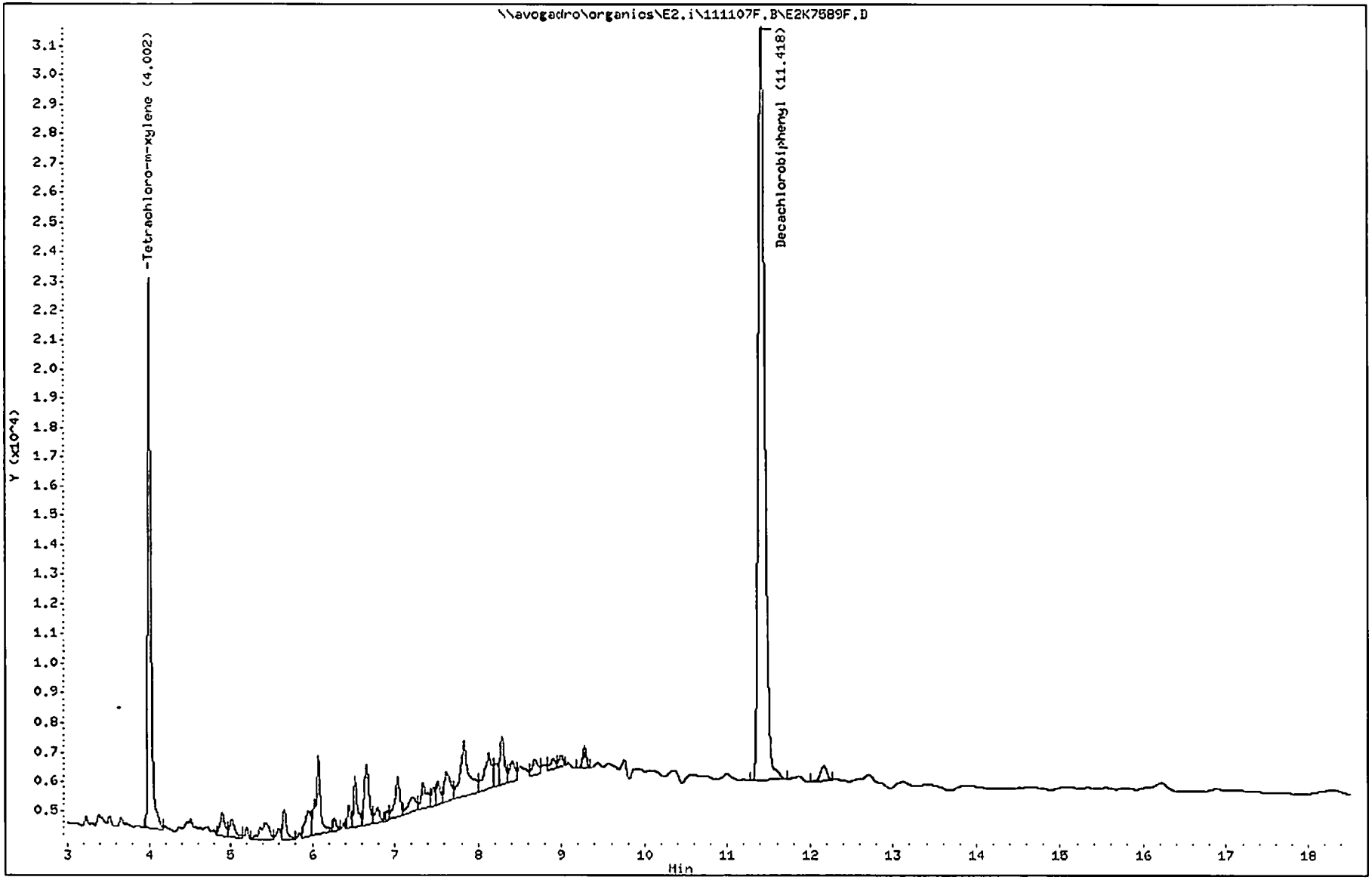
Data file : \\avogadro\organics\E2.i\111107F.B\E2K7589F.D
Lab Smp Id: K2198-11B Client Smp ID: H30S4
Inj Date : 08-NOV-2011 05:13
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-11B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 31
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.100	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.002	3.999	0.003	495793	0.02387	7.9		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.417	11.417	0.000	1374208	0.04794	16		

Data File: \\avogadro\organios\E2.i\111107F.B\E2K7589F.D
Date : 08-NOV-2011 05:13
Client ID: H30S4 Instrument: E2.i
Sample Info: K2198-11B,,62776,somaro.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPest Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7589R.D
Report Date: 08-Nov-2011 11:44

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

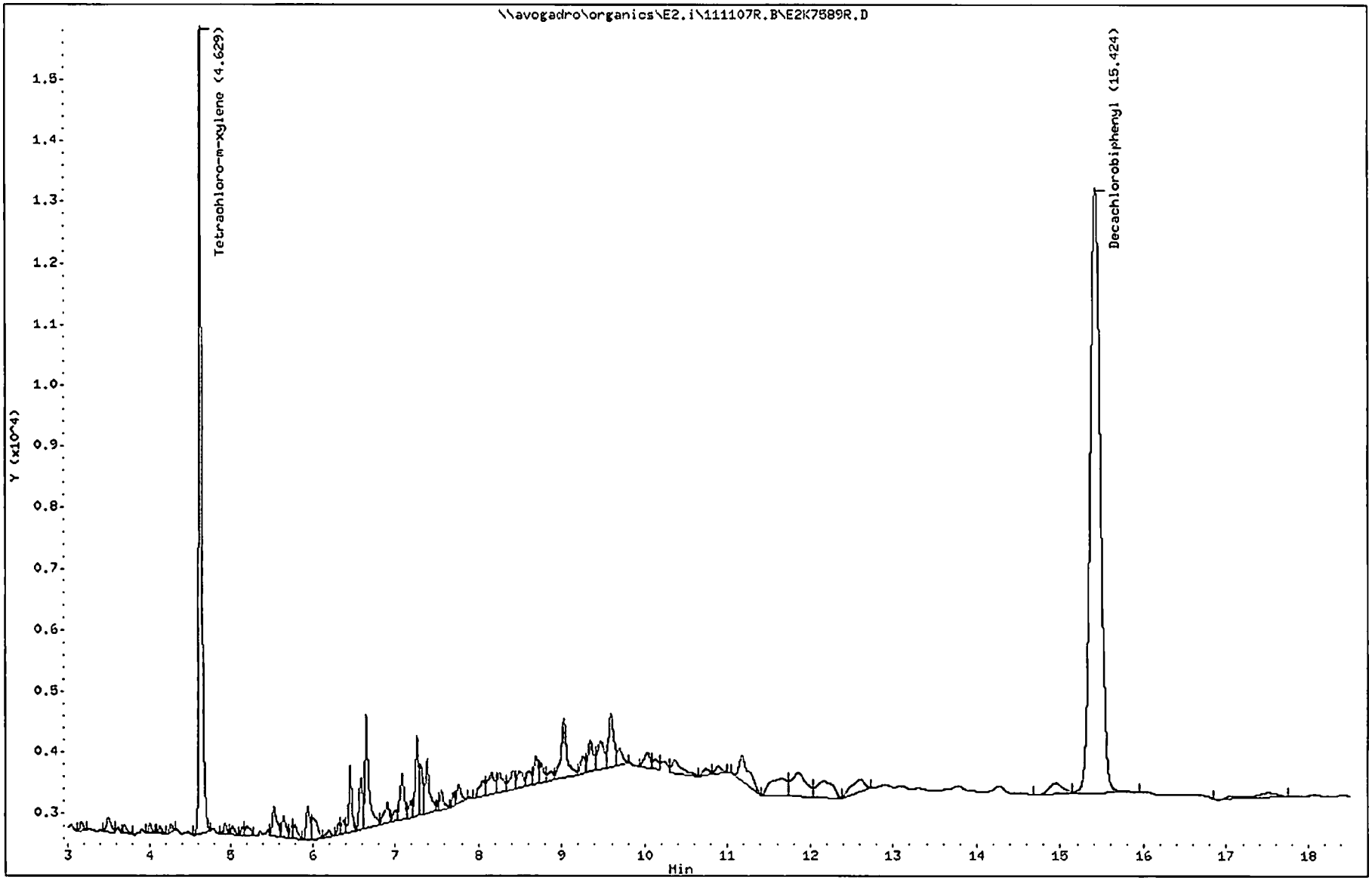
Data file : \\avogadro\organics\E2.i\111107R.B\E2K7589R.D
Lab Smp Id: K2198-11B Client Smp ID: H30S4
Inj Date : 08-NOV-2011 05:13
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-11B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 31
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.100	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.628	4.627	0.001	316418	0.02516	8.4		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.423	15.423	0.000	842472	0.04970	16		

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7589R.D
Date : 08-NOV-2011 05:13
Client ID: H30S4 Instrument: E2.i
Sample Info: K2198-11B,,62776,somaro.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPestII Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30S5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-12B

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E2K7590F.D/E2K7590R.D

% Moisture: 14 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.5 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	38	U
11096-82-5	Aroclor-1260	38	U
37324-23-5	Aroclor-1262	38	U
11100-14-4	Aroclor-1268	38	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7590F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

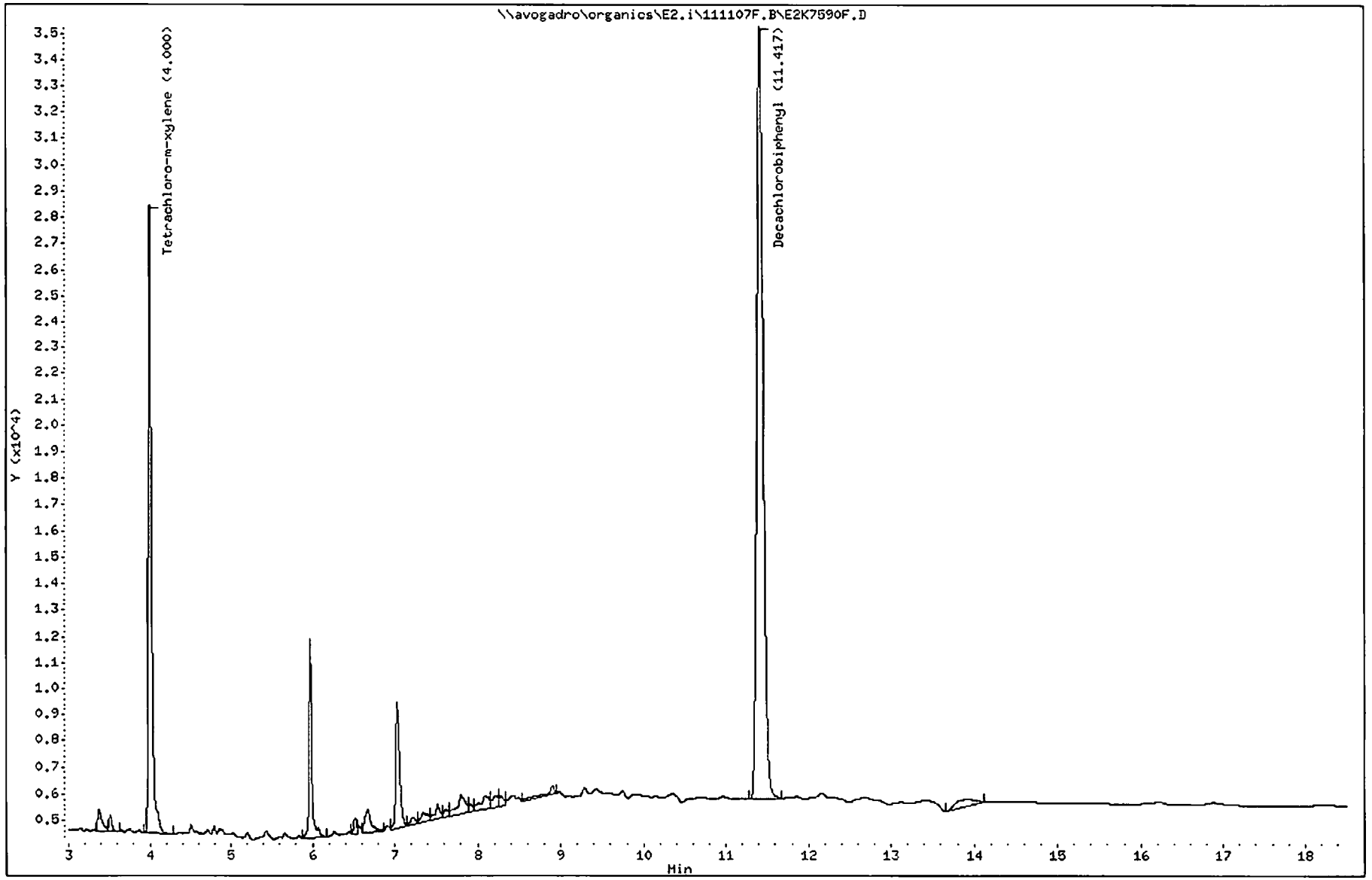
Data file : \\avogadro\organics\E2.i\111107F.B\E2K7590F.D
Lab Smp Id: K2198-12B Client Smp ID: H30S5
Inj Date : 08-NOV-2011 05:34
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-12B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 32
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.100	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
3.999	3.999	0.000	644273	0.03102	10		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.416	11.417	-0.001	1581776	0.05518	18		

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7590F.D
Date : 08-NOV-2011 05:34
Client ID: H30S5
Instrument: E2.i
Sample Info: K2198-12B,,62776,somaro.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7590R.D
Report Date: 08-Nov-2011 11:44

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

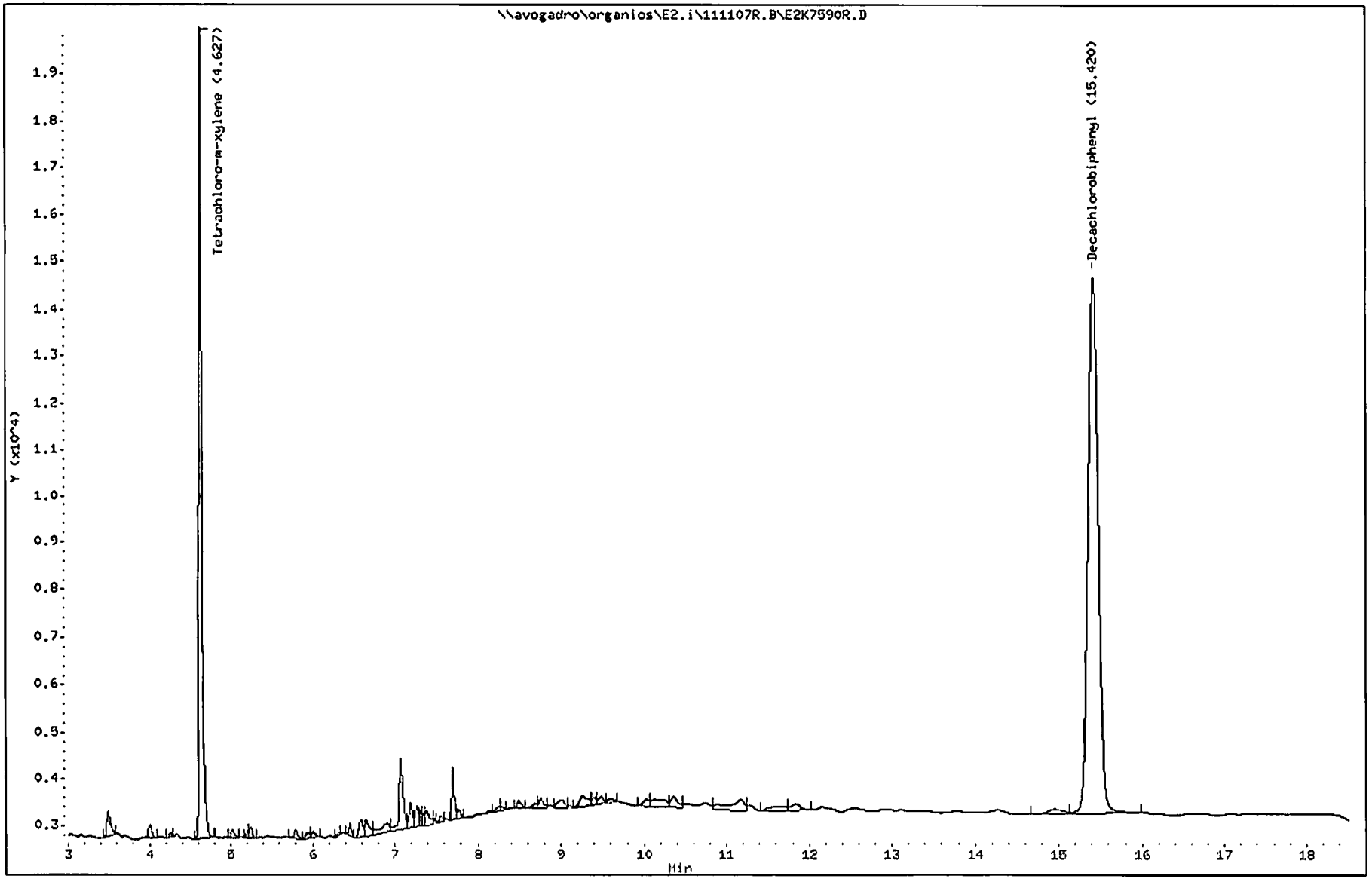
Data file : \\avogadro\organics\E2.i\111107R.B\E2K7590R.D
Lab Smp Id: K2198-12B Client Smp ID: H30S5
Inj Date : 08-NOV-2011 05:34
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-12B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 32
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.100	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.627	4.627	0.000	420169	0.03341		11	
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.420	15.423	-0.003	975907	0.05757		19	

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7590R.D
Date : 08-NOV-2011 05:34
Client ID: H30S5
Instrument: E2.i
Sample Info: K2198-12B,,62776,somaro.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30S8

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-13B

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E2K7591F.D/E2K7591R.D

% Moisture: 33 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.3 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	49	U
11104-28-2	Aroclor-1221	49	U
11141-16-5	Aroclor-1232	49	U
53469-21-9	Aroclor-1242	49	U
12672-29-6	Aroclor-1248	49	U
11097-69-1	Aroclor-1254	49	U
11096-82-5	Aroclor-1260	49	U
37324-23-5	Aroclor-1262	49	U
11100-14-4	Aroclor-1268	49	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7591F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

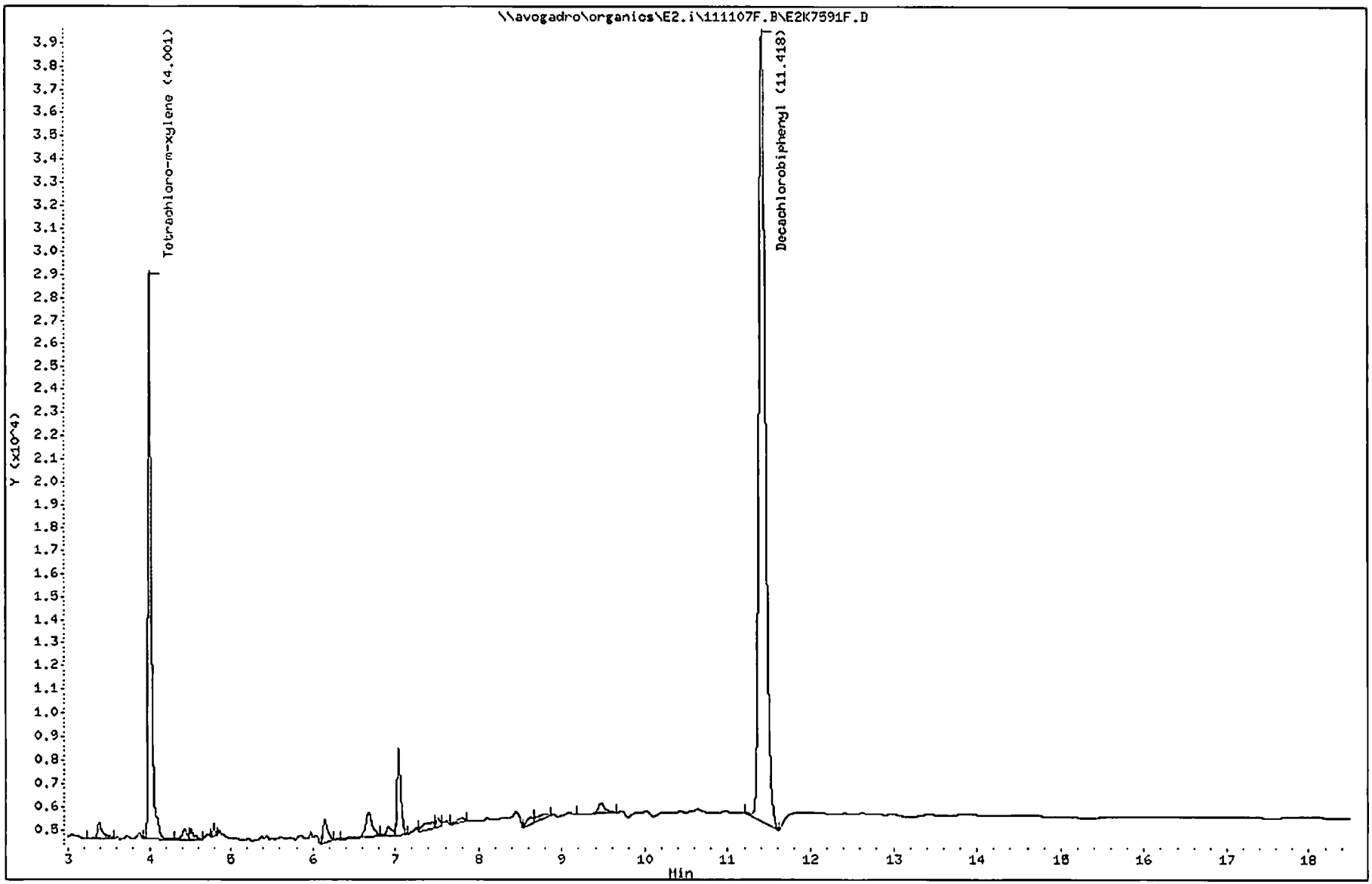
Data file : \\avogadro\organics\E2.i\111107F.B\E2K7591F.D
Lab Smp Id: K2198-13B Client Smp ID: H30S8
Inj Date : 08-NOV-2011 05:55
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-13B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 33
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.100	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.001	3.999	0.002	659803	0.03177	10		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.417	11.417	0.000	1892395	0.06601	22		

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7591F.D
Date : 08-NOV-2011 05:55
Client ID: H30S8
Instrument: E2.i
Sample Info: K2198-13B,,62776,somaro.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7591R.D
Report Date: 08-Nov-2011 11:44

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

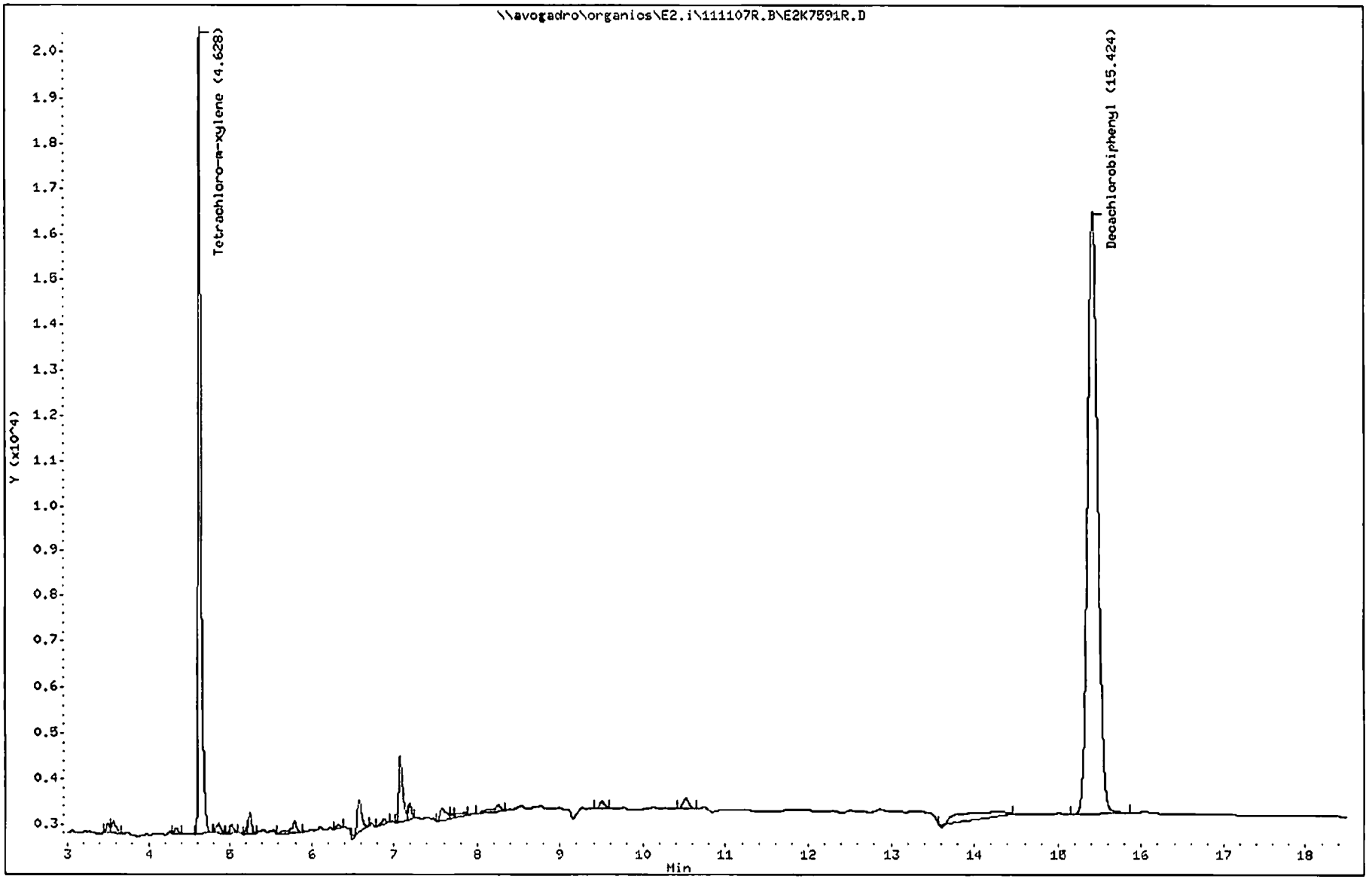
Data file : \\avogadro\organics\E2.i\111107R.B\E2K7591R.D
Lab Smp Id: K2198-13B Client Smp ID: H30S8
Inj Date : 08-NOV-2011 05:55
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-13B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 33
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.100	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.627	4.627	0.000	431934	0.03434		11	
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.423	15.423	0.000	1126288	0.06644		22	

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7591R.D
Date : 08-NOV-2011 05:55
Client ID: H30S8
Instrument: E2.i
Sample Info: K2198-13B,,62776,somaro.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30S9

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-14B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E2K7592F.D/E2K7592R.D

% Moisture: 34 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.3 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	50	U
11104-28-2	Aroclor-1221	50	U
11141-16-5	Aroclor-1232	50	U
53469-21-9	Aroclor-1242	50	U
12672-29-6	Aroclor-1248	50	U
11097-69-1	Aroclor-1254	50	U
11096-82-5	Aroclor-1260	50	U
37324-23-5	Aroclor-1262	50	U
11100-14-4	Aroclor-1268	50	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7592F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

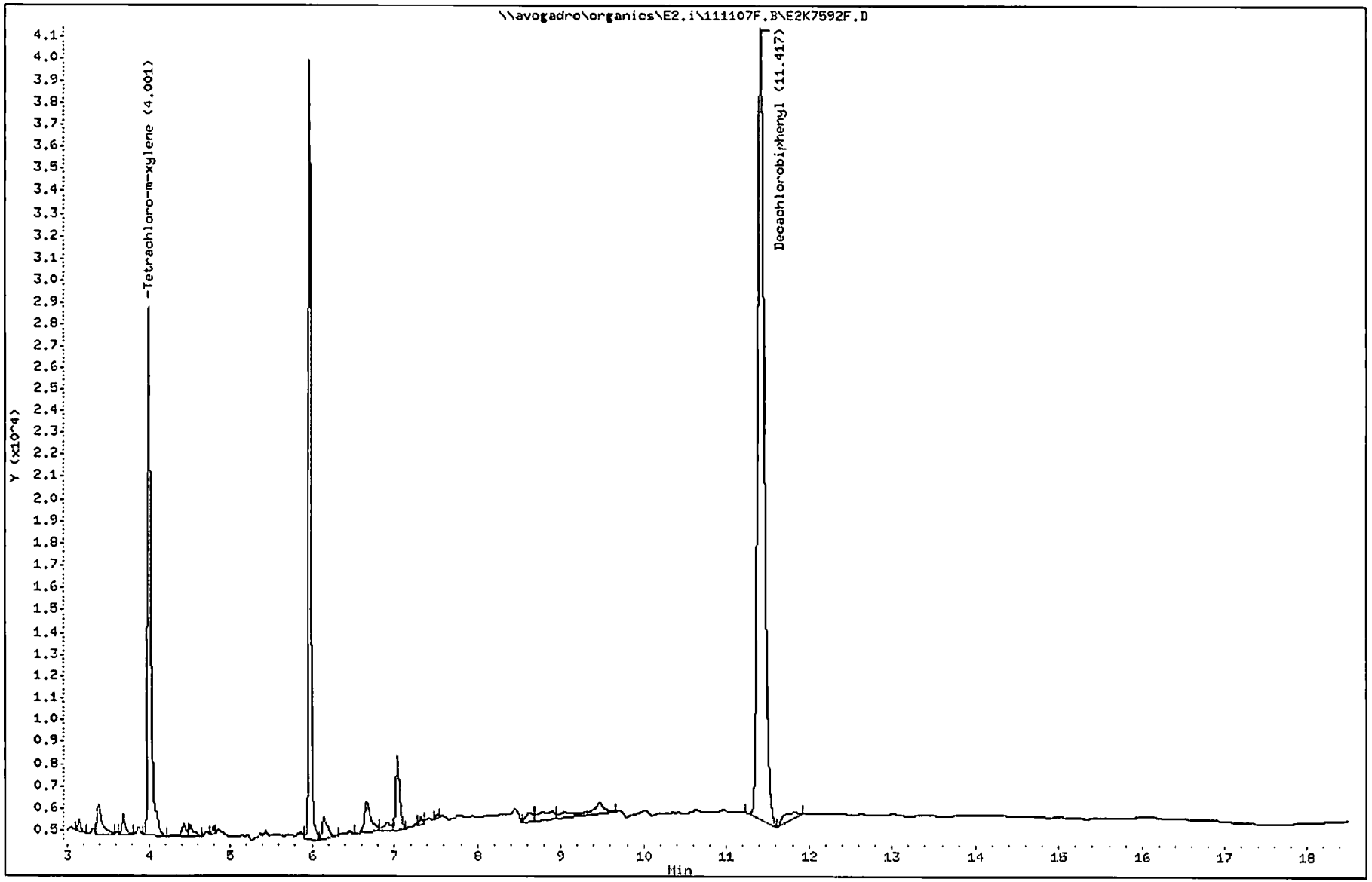
Data file : \\avogadro\organics\E2.i\111107F.B\E2K7592F.D
Lab Smp Id: K2198-14B Client Smp ID: H30S9
Inj Date : 08-NOV-2011 06:16
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-14B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 34
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.001	3.999	0.002	666793	0.03211	11		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.417	11.417	0.000	1973832	0.06885	23		

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7592F.D
Date : 08-NOV-2011 06:16
Client ID: H30S9
Instrument: E2.i
Sample Info: K2198-14B,,62776,somaro.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7592R.D
Report Date: 08-Nov-2011 11:44

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

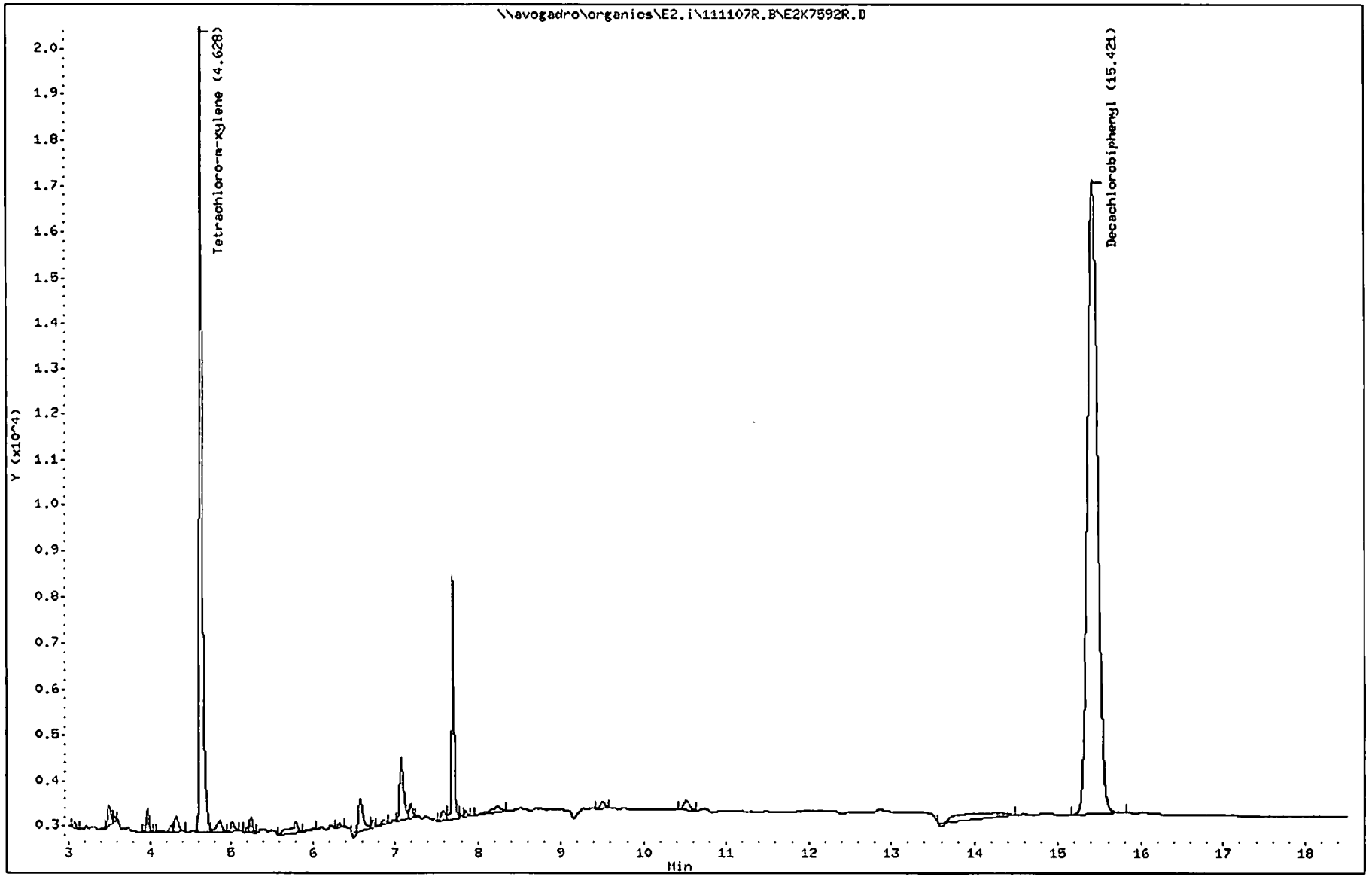
Data file : \\avogadro\organics\E2.i\111107R.B\E2K7592R.D
Lab Smp Id: K2198-14B Client Smp ID: H30S9
Inj Date : 08-NOV-2011 06:16
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-14B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 34
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.627	4.627	0.000	436284	0.03469		12	
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.421	15.423	-0.002	1174650	0.06930		23	

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7592R.D
Date : 08-NOV-2011 06:16
Client ID: H30S9 Instrument: E2.i
Sample Info: K2198-14B,,62776,somaro.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPestII Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T0

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-15B

Sample wt/vol: 30.5 (g/mL) G Lab File ID: E2K7593F.D/E2K7593R.D

% Moisture: 28 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	45	U
11104-28-2	Aroclor-1221	45	U
11141-16-5	Aroclor-1232	45	U
53469-21-9	Aroclor-1242	45	U
12672-29-6	Aroclor-1248	45	U
11097-69-1	Aroclor-1254	45	U
11096-82-5	Aroclor-1260	45	U
37324-23-5	Aroclor-1262	45	U
11100-14-4	Aroclor-1268	45	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7593F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

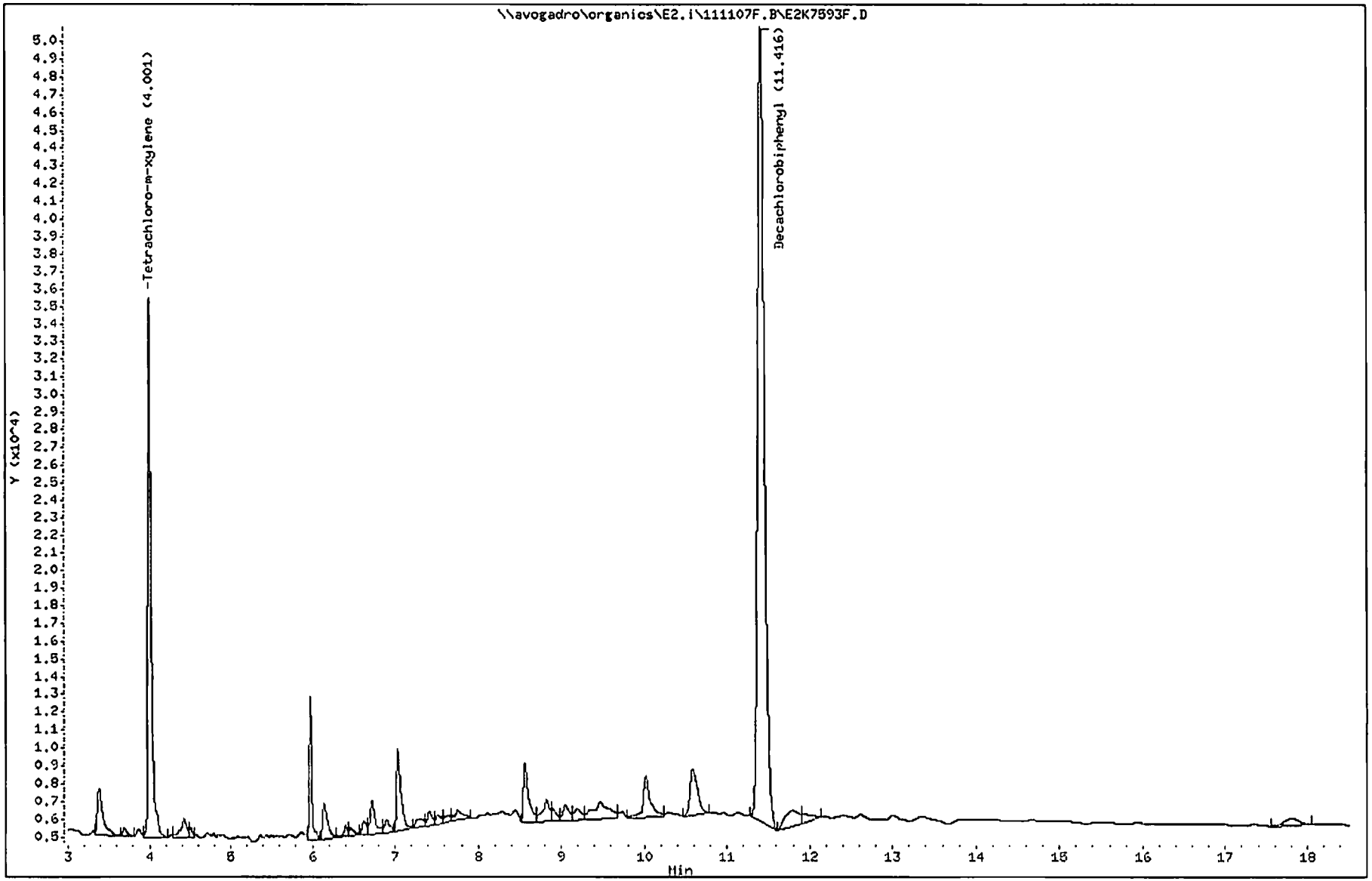
Data file : \\avogadro\organics\E2.i\111107F.B\E2K7593F.D
Lab Smp Id: K2198-15B Client Smp ID: H30T0
Inj Date : 08-NOV-2011 06:37
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-15B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 35
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.500	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
	RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
S	1 Tetrachloro-m-xylene					CAS #: 877-09-8		
	4.000	3.999	0.001	855731	0.04121		14	
S	11 Decachlorobiphenyl					CAS #: 2051-24-3		
	11.416	11.417	-0.001	2497938	0.08713		28	

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7593F.D
Date : 08-NOV-2011 06:37
Client ID: H30T0
Instrument: E2.i
Sample Info: K2198-15B,,62776,somaro.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7593R.D
Report Date: 08-Nov-2011 11:44

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

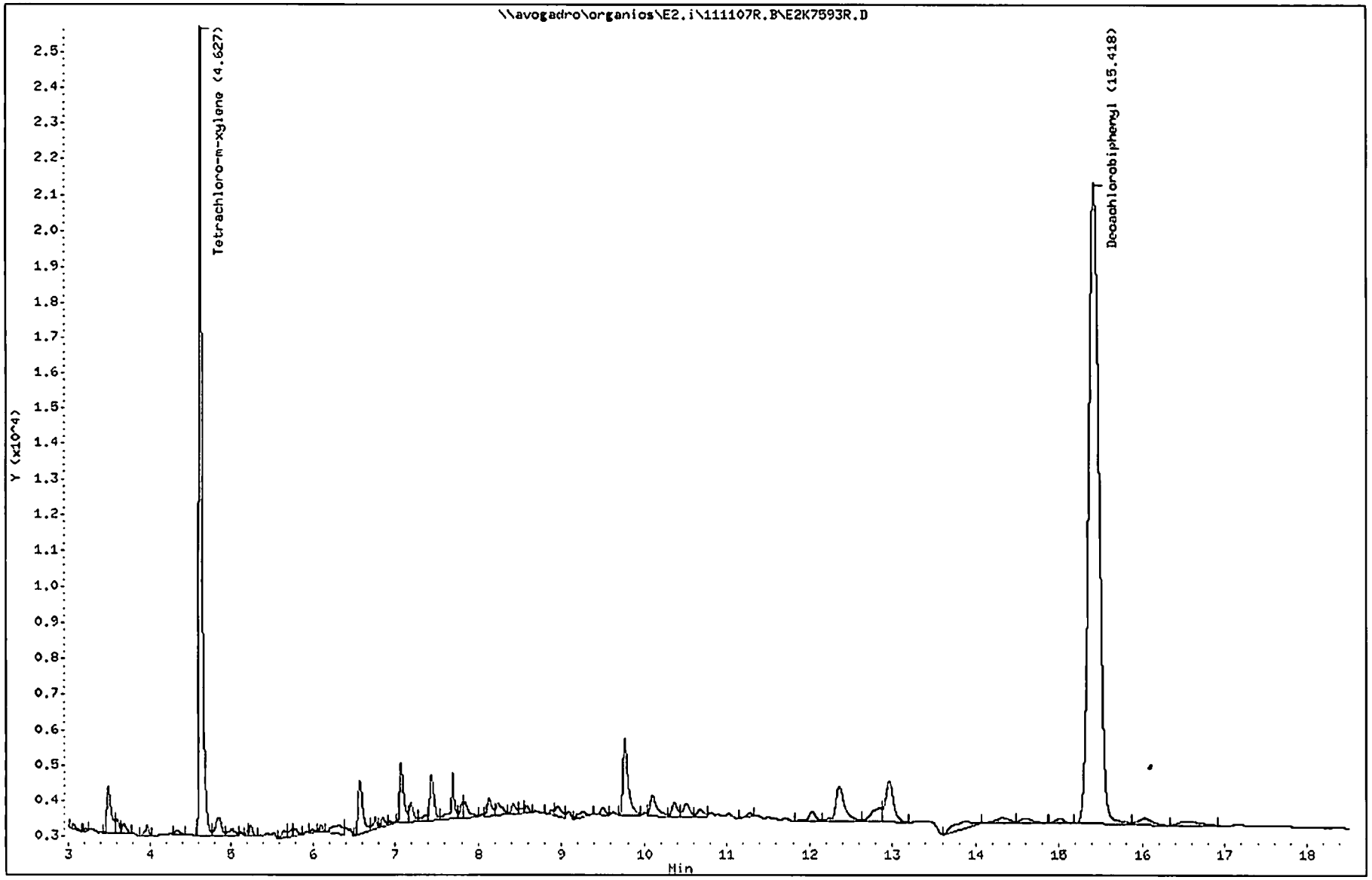
Data file : \\avogadro\organics\E2.i\111107R.B\E2K7593R.D
Lab Smp Id: K2198-15B Client Smp ID: H30T0
Inj Date : 08-NOV-2011 06:37
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-15B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 35
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.500	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.627	4.627	0.000	575217	0.04573		15	
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.418	15.423	-0.005	1556532	0.09182		30	

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7593R.D
Date : 08-NOV-2011 06:37
Client ID: H30T0
Instrument: E2.i
Sample Info: K2198-15B,,62776,somaro.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-16B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E2K7594F.D/E2K7594R.D

% Moisture: 9.6 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.1 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	37	U
11104-28-2	Aroclor-1221	37	U
11141-16-5	Aroclor-1232	37	U
53469-21-9	Aroclor-1242	37	U
12672-29-6	Aroclor-1248	37	U
11097-69-1	Aroclor-1254	37	U
11096-82-5	Aroclor-1260	37	U
37324-23-5	Aroclor-1262	37	U
11100-14-4	Aroclor-1268	37	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7594F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

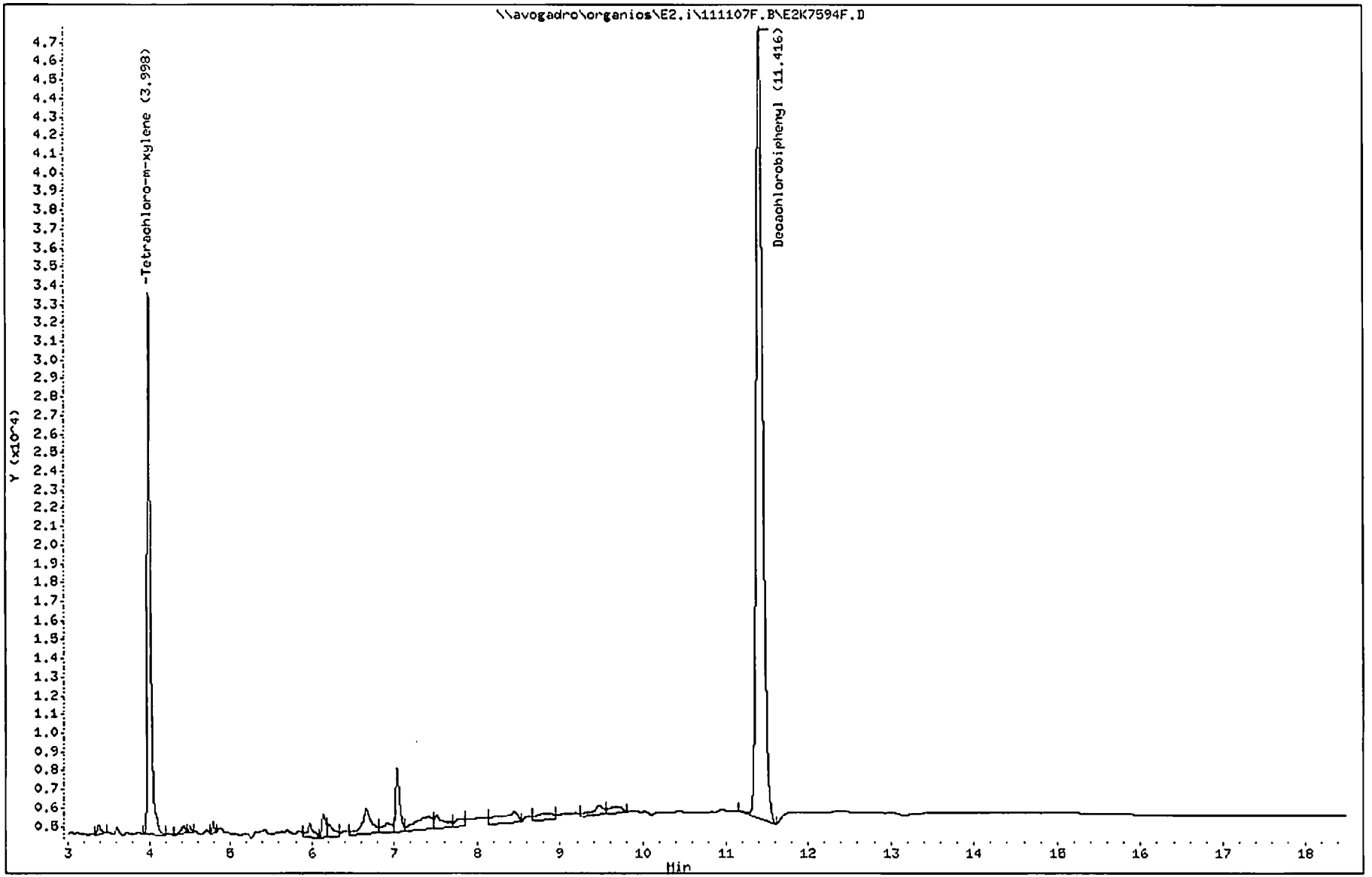
Data file : \\avogadro\organics\E2.i\111107F.B\E2K7594F.D
Lab Smp Id: K2198-16B Client Smp ID: H30T1
Inj Date : 08-NOV-2011 06:58
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-16B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 36
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
3.998	3.999	-0.001	789018	0.03799		13	
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.415	11.417	-0.002	2350755	0.08200		27	

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7594F.D
Date : 08-NOV-2011 06:58
Client ID: H30T1 Instrument: E2.i
Sample Info: K2198-16B,,62776,somaro.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPest Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7594R.D
Report Date: 08-Nov-2011 11:44

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

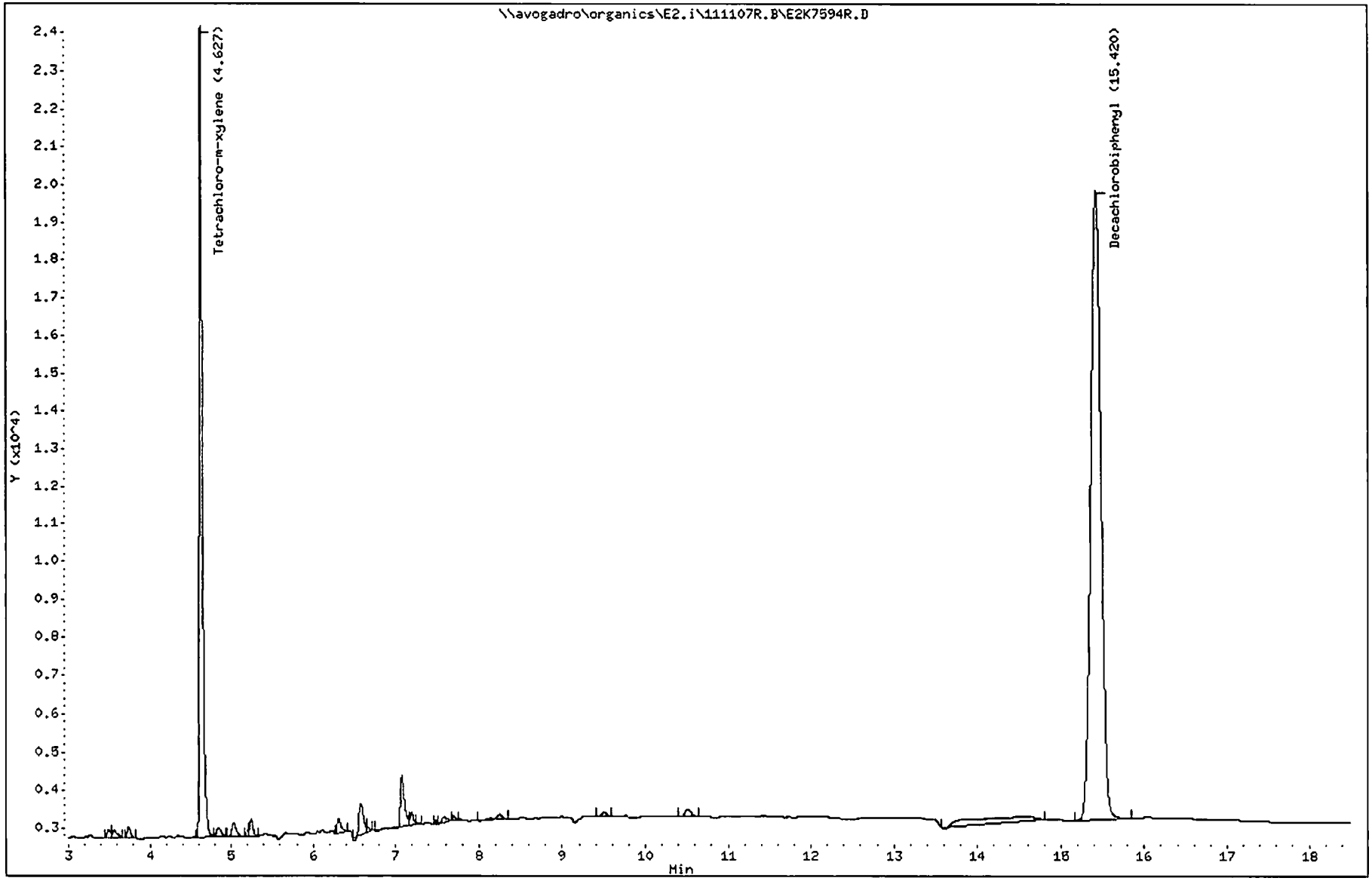
Data file : \\avogadro\organics\E2.i\111107R.B\E2K7594R.D
Lab Smp Id: K2198-16B Client Smp ID: H30T1
Inj Date : 08-NOV-2011 06:58
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-16B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 36
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.626	4.627	-0.001	528450	0.04201	14		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.420	15.423	-0.003	1419066	0.08371	28		

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7594R.D
Date : 08-NOV-2011 06:58
Client ID: H30T1 Instrument: E2.i
Sample Info: K2198-16B,,62776,somaro.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPestII Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T2

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-17B

Sample wt/vol: 30.9 (g/mL) G Lab File ID: E2K7605F.D/E2K7605R.D

% Moisture: 24 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.3 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	42	U
11104-28-2	Aroclor-1221	42	U
11141-16-5	Aroclor-1232	42	U
53469-21-9	Aroclor-1242	42	U
12672-29-6	Aroclor-1248	42	U
11097-69-1	Aroclor-1254	42	U
11096-82-5	Aroclor-1260	42	U
37324-23-5	Aroclor-1262	42	U
11100-14-4	Aroclor-1268	42	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7605F.D
Report Date: 08-Nov-2011 14:43

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

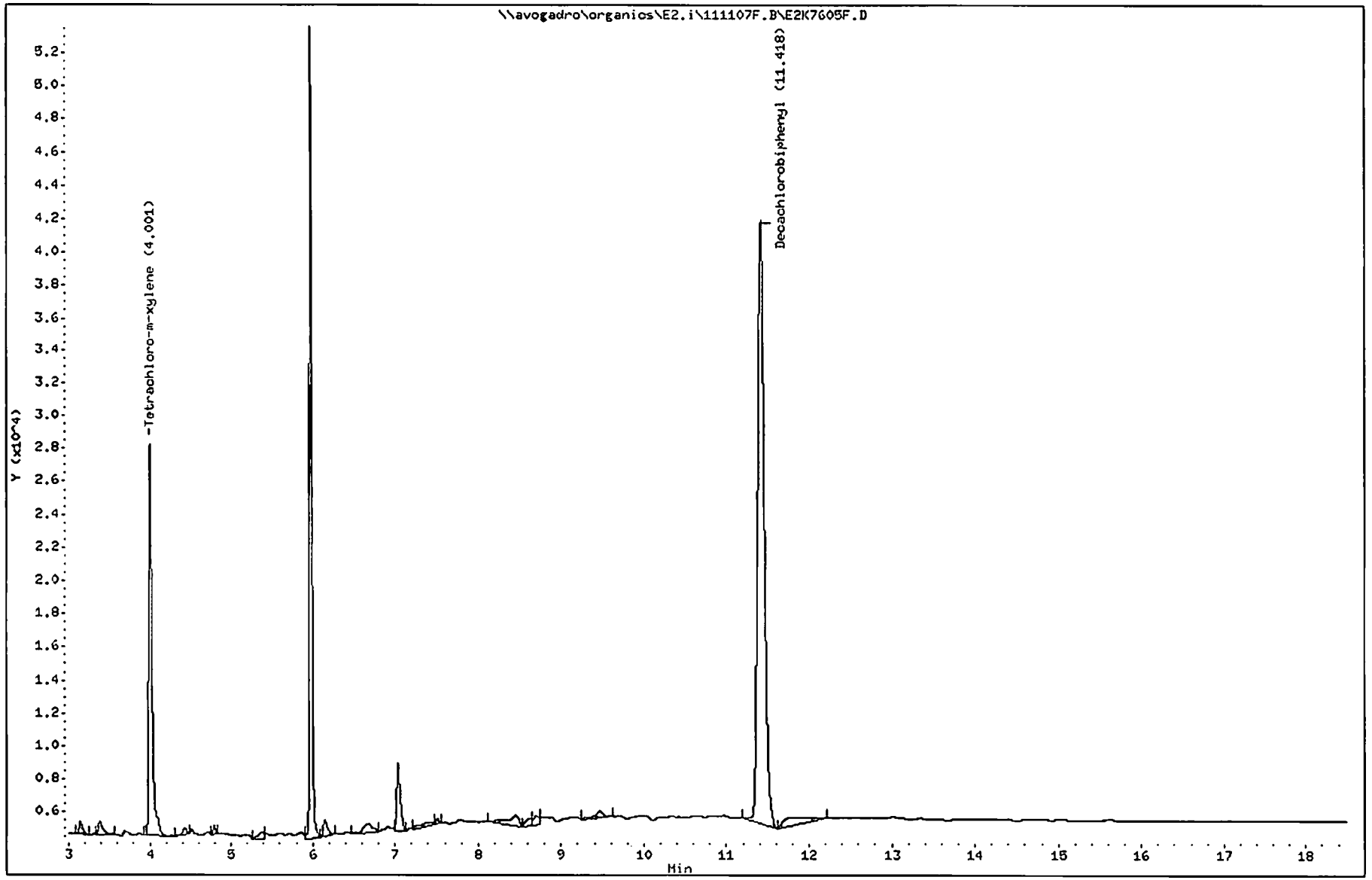
Data file : \\avogadro\organics\E2.i\111107F.B\E2K7605F.D
Lab Smp Id: K2198-17B Client Smp ID: H30T2
Inj Date : 08-NOV-2011 11:08
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-17B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 14:41 E2.i Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.900	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.001	3.999	0.002	652125	0.03140	10		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.417	11.417	0.000	2035710	0.07101	23		

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7605F.D
Date : 08-NOV-2011 11:08
Client ID: H30T2
Instrument: E2.i
Sample Info: K2198-17B,,62776,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7605R.D
Report Date: 08-Nov-2011 14:44

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

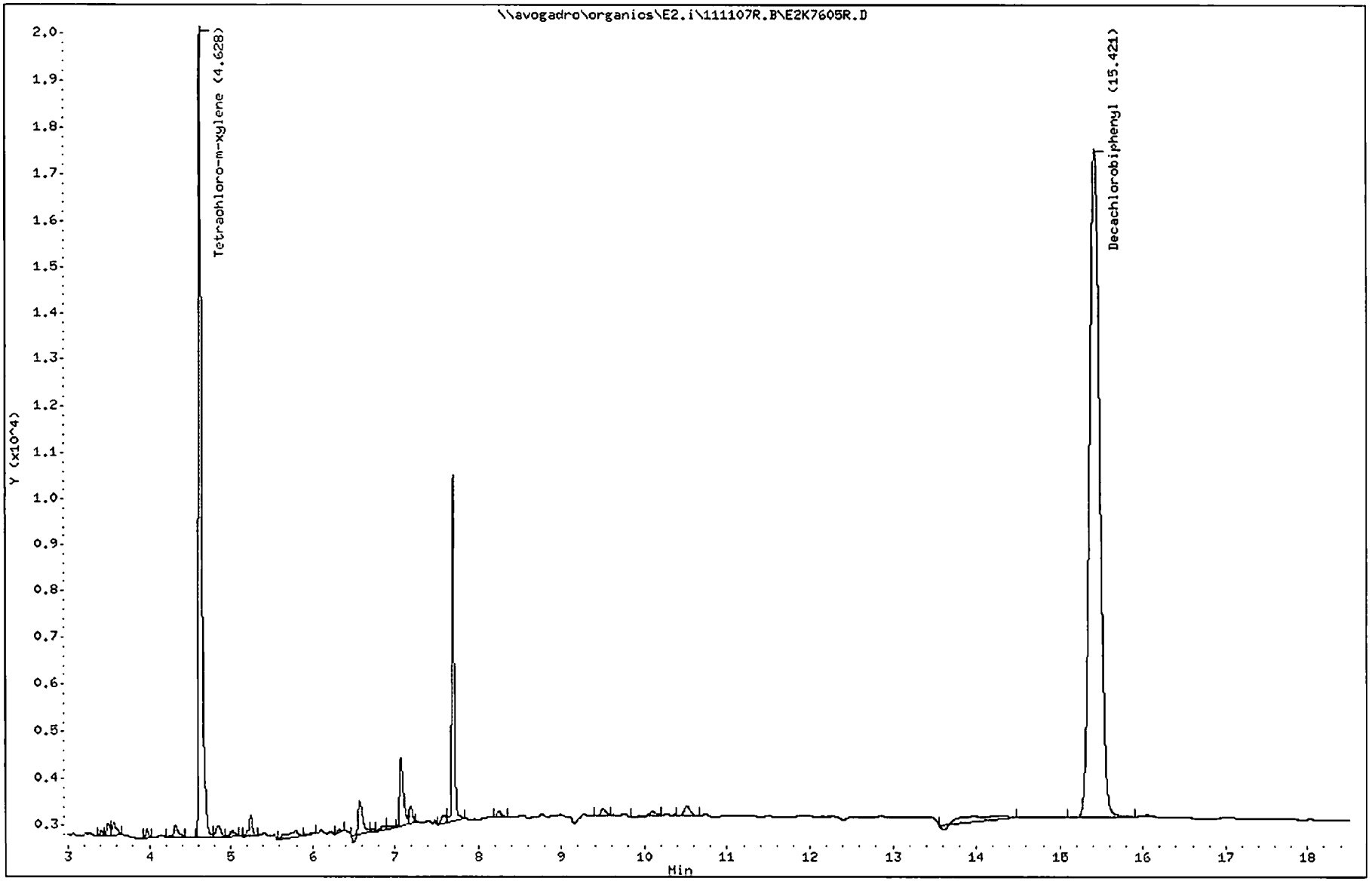
Data file : \\avogadro\organics\E2.i\111107R.B\E2K7605R.D
Lab Smp Id: K2198-17B Client Smp ID: H30T2
Inj Date : 08-NOV-2011 11:08
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-17B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 14:42 E2.i Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.900	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.627	4.627	0.000	432833	0.03441		11	
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.421	15.423	-0.002	1220672	0.07201		23	

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7605R.D
Date : 08-NOV-2011 11:08
Client ID: H30T2 Instrument: E2.i
Sample Info: K2198-17B,,62776,somaro.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPestII Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T3

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-18B

Sample wt/vol: 30.3 (g/mL) G Lab File ID: E2K7596F.D/E2K7596R.D

% Moisture: 22 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.3 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	42	U
11104-28-2	Aroclor-1221	42	U
11141-16-5	Aroclor-1232	42	U
53469-21-9	Aroclor-1242	42	U
12672-29-6	Aroclor-1248	42	U
11097-69-1	Aroclor-1254	42	U
11096-82-5	Aroclor-1260	42	U
37324-23-5	Aroclor-1262	42	U
11100-14-4	Aroclor-1268	42	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7596F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

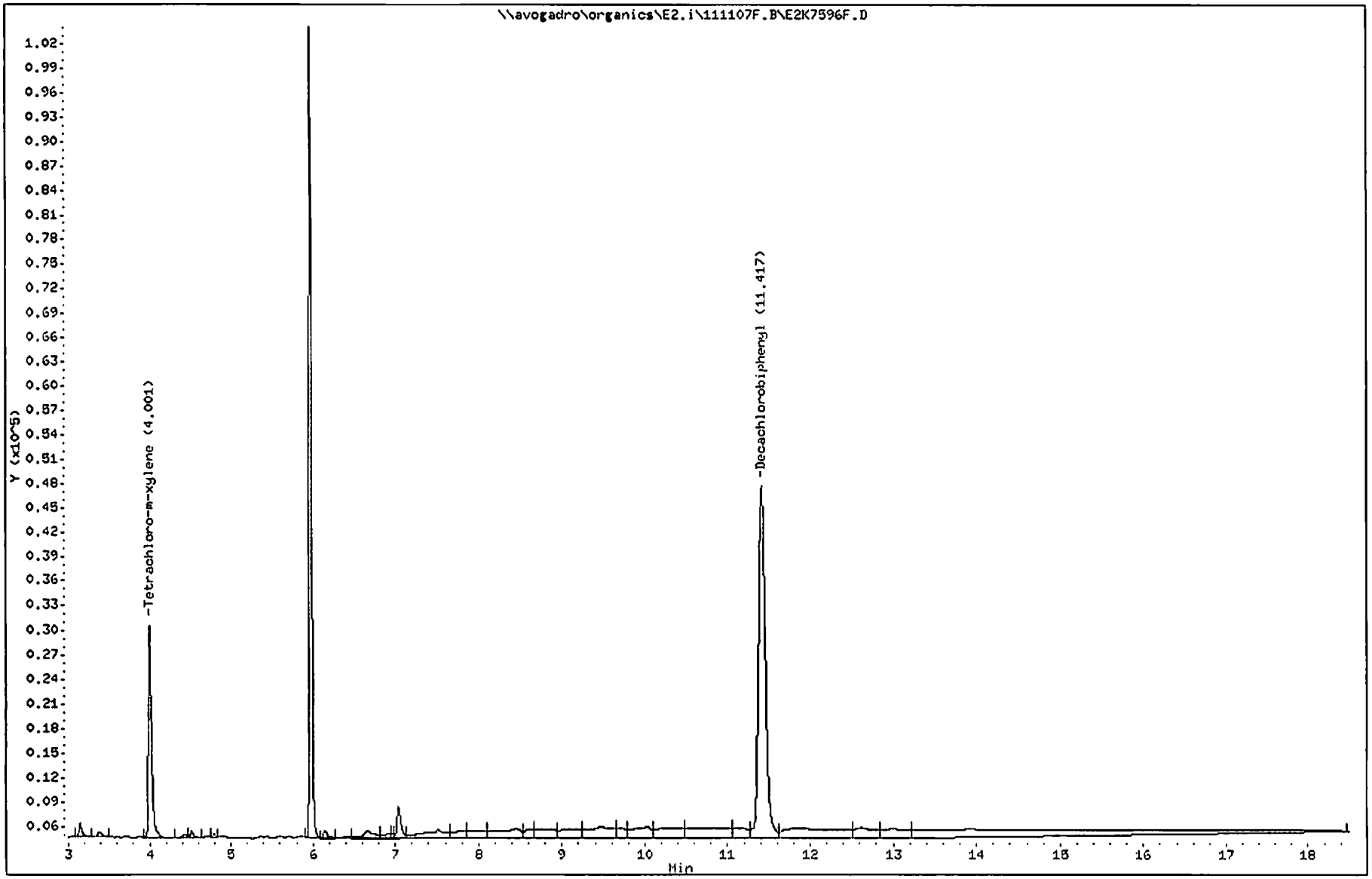
Data file : \\avogadro\organics\E2.i\111107F.B\E2K7596F.D
Lab Smp Id: K2198-18B Client Smp ID: H30T3
Inj Date : 08-NOV-2011 07:40
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-18B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 38
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.300	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.001	3.999	0.002	692252	0.03333	1i		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.416	11.417	-0.001	2513689	0.08768	29		

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7596F.D
Date : 08-NOV-2011 07:40
Client ID: H30T3 Instrument: E2.i
Sample Info: K2198-18B,,62776,somaro.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPest Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7596R.D
Report Date: 08-Nov-2011 11:44

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

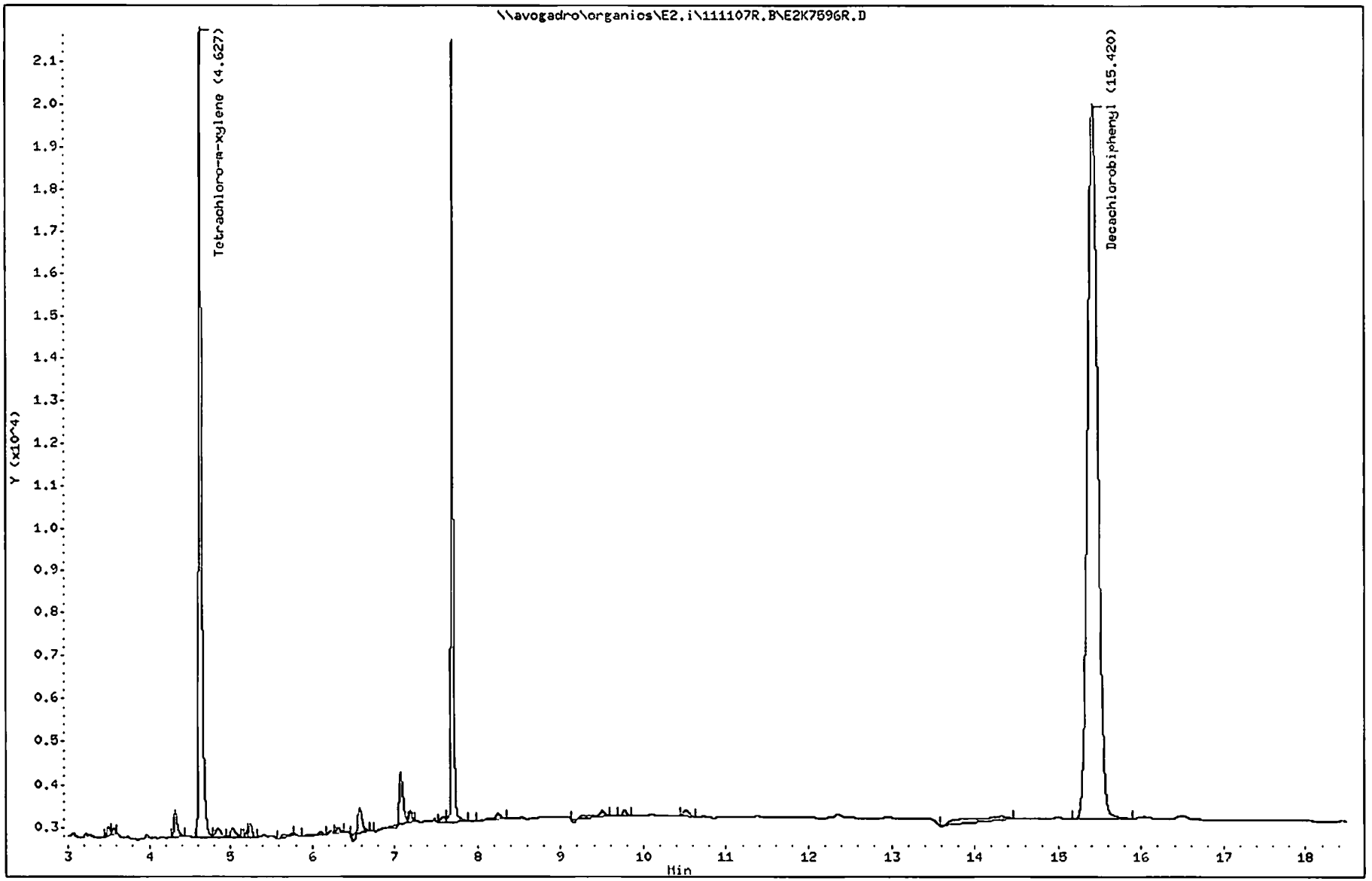
Data file : \\avogadro\organics\E2.i\111107R.B\E2K7596R.D
Lab Smp Id: K2198-18B Client Smp ID: H30T3
Inj Date : 08-NOV-2011 07:40
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-18B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 38
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.300	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.627	4.627	0.000	462475	0.03677	12		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.420	15.423	-0.003	1435360	0.08468	28		

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7596R.D
Date : 08-NOV-2011 07:40
Client ID: H30T3 Instrument: E2.i
Sample Info: K2198-18B,,62776,somaro.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPestII Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-19B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E2K7597F.D/E2K7597R.D

% Moisture: 20 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	41	U
11104-28-2	Aroclor-1221	41	U
11141-16-5	Aroclor-1232	41	U
53469-21-9	Aroclor-1242	41	U
12672-29-6	Aroclor-1248	41	U
11097-69-1	Aroclor-1254	41	U
11096-82-5	Aroclor-1260	41	U
37324-23-5	Aroclor-1262	41	U
11100-14-4	Aroclor-1268	41	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7597F.D
Report Date: 08-Nov-2011 14:43

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

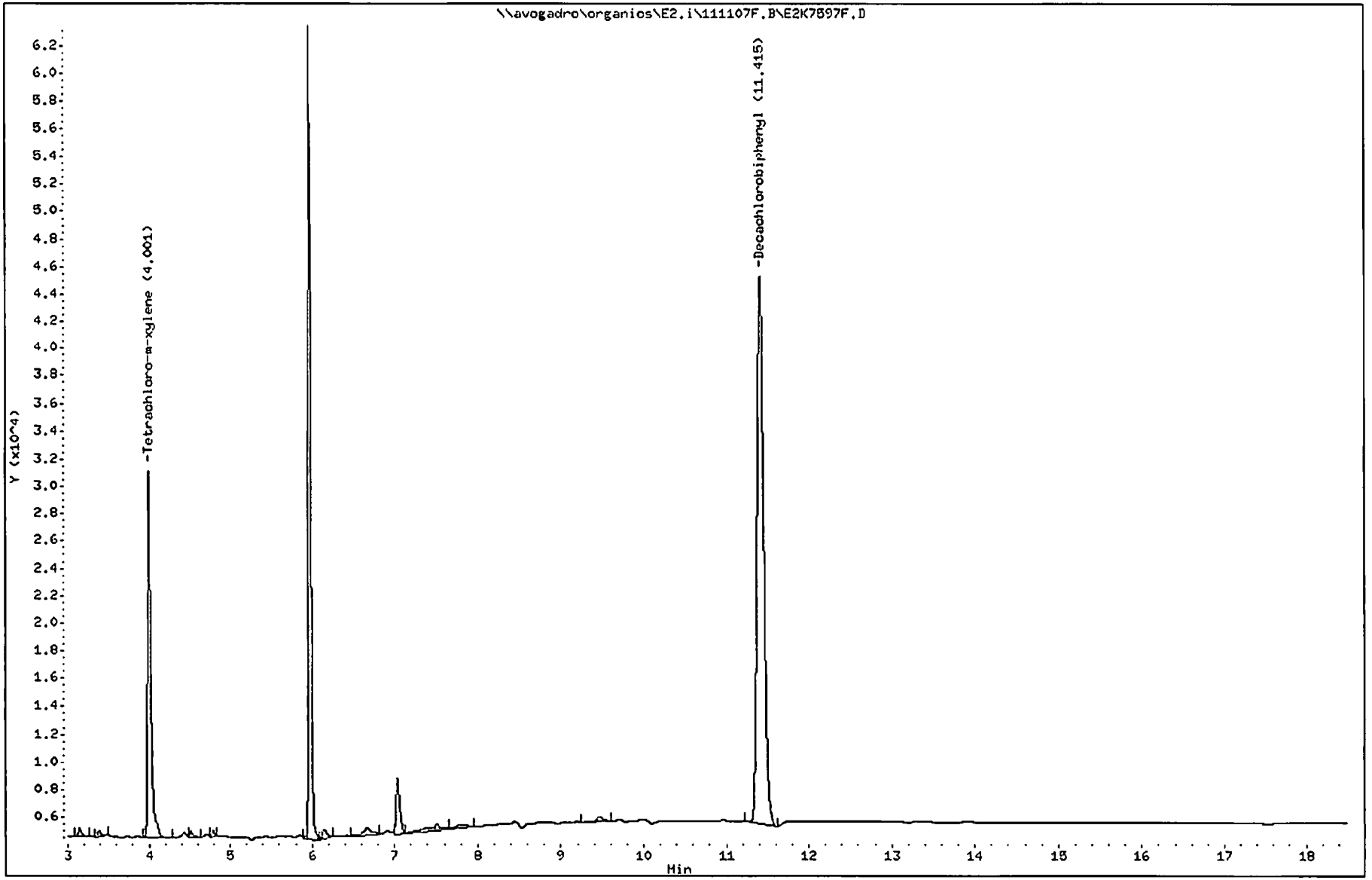
Data file : \\avogadro\organics\E2.i\111107F.B\E2K7597F.D
Lab Smp Id: K2198-19B Client Smp ID: H30T4
Inj Date : 08-NOV-2011 08:01
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-19B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 14:41 E2.i Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 39
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.000	3.999	0.001	732748	0.03528	12		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.415	11.417	-0.002	2197659	0.07666	26		

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7597F.D
Date : 08-NOV-2011 08:01
Client ID: H30T4 Instrument: E2.i
Sample Info: K2198-19B,,62776,somaro.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPest Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7597R.D
Report Date: 08-Nov-2011 14:43

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

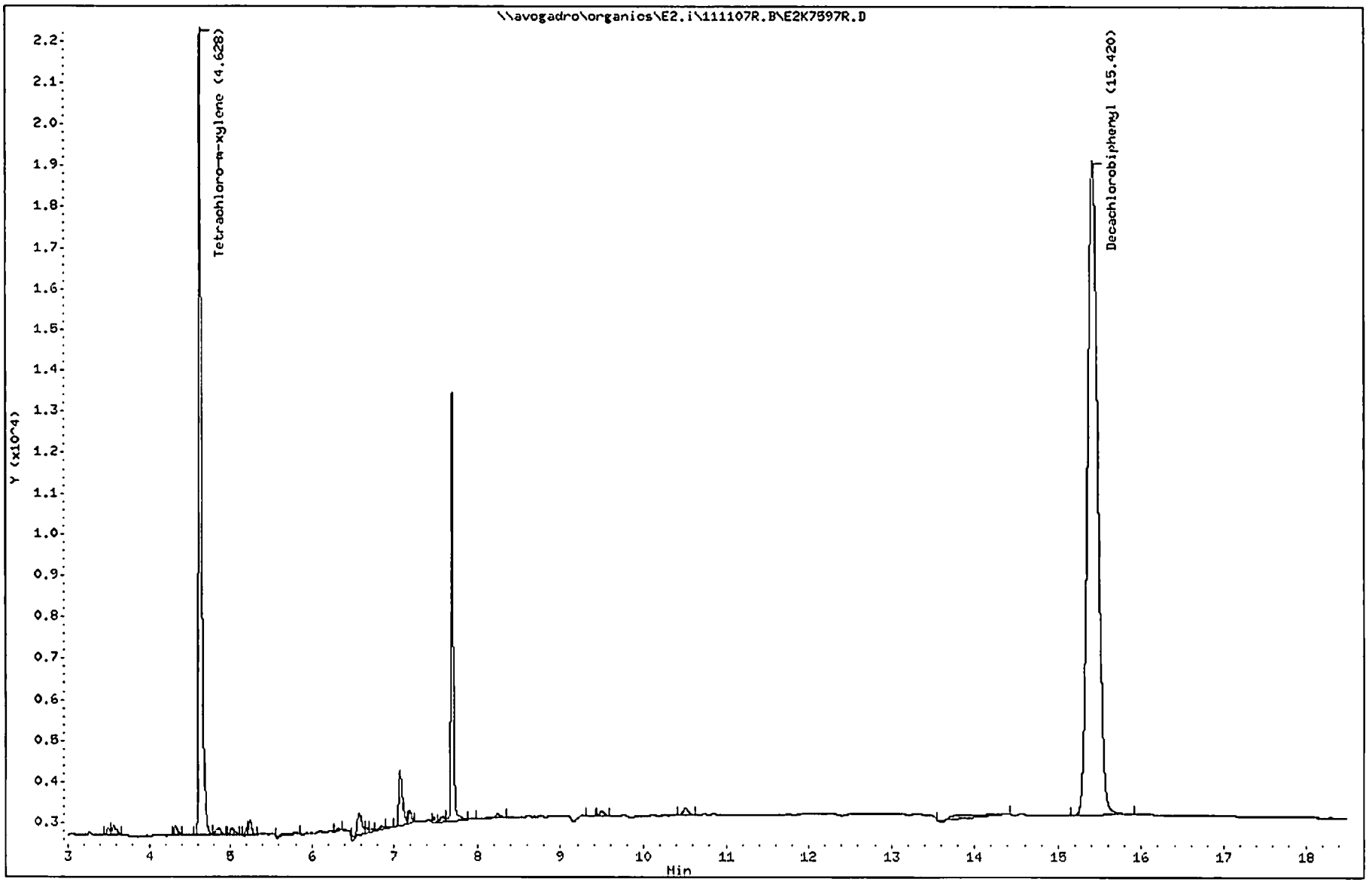
Data file : \\avogadro\organics\E2.i\111107R.B\E2K7597R.D
Lab Smp Id: K2198-19B Client Smp ID: H30T4
Inj Date : 08-NOV-2011 08:01
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-19B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 14:42 E2.i Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 39
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.627	4.627	0.000	486238	0.03866		13	
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.420	15.423	-0.003	1352916	0.07981		27	

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7597R.D
Date : 08-NOV-2011 08:01
Client ID: H30T4 Instrument: E2.i
Sample Info: K2198-19B,,62776,somaro.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPestII Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-20B

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E2K7598F.D/E2K7598R.D

% Moisture: 24 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.2 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	43	U
11104-28-2	Aroclor-1221	43	U
11141-16-5	Aroclor-1232	43	U
53469-21-9	Aroclor-1242	43	U
12672-29-6	Aroclor-1248	43	U
11097-69-1	Aroclor-1254	43	U
11096-82-5	Aroclor-1260	43	U
37324-23-5	Aroclor-1262	43	U
11100-14-4	Aroclor-1268	43	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7598F.D
Report Date: 09-Nov-2011 15:59

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

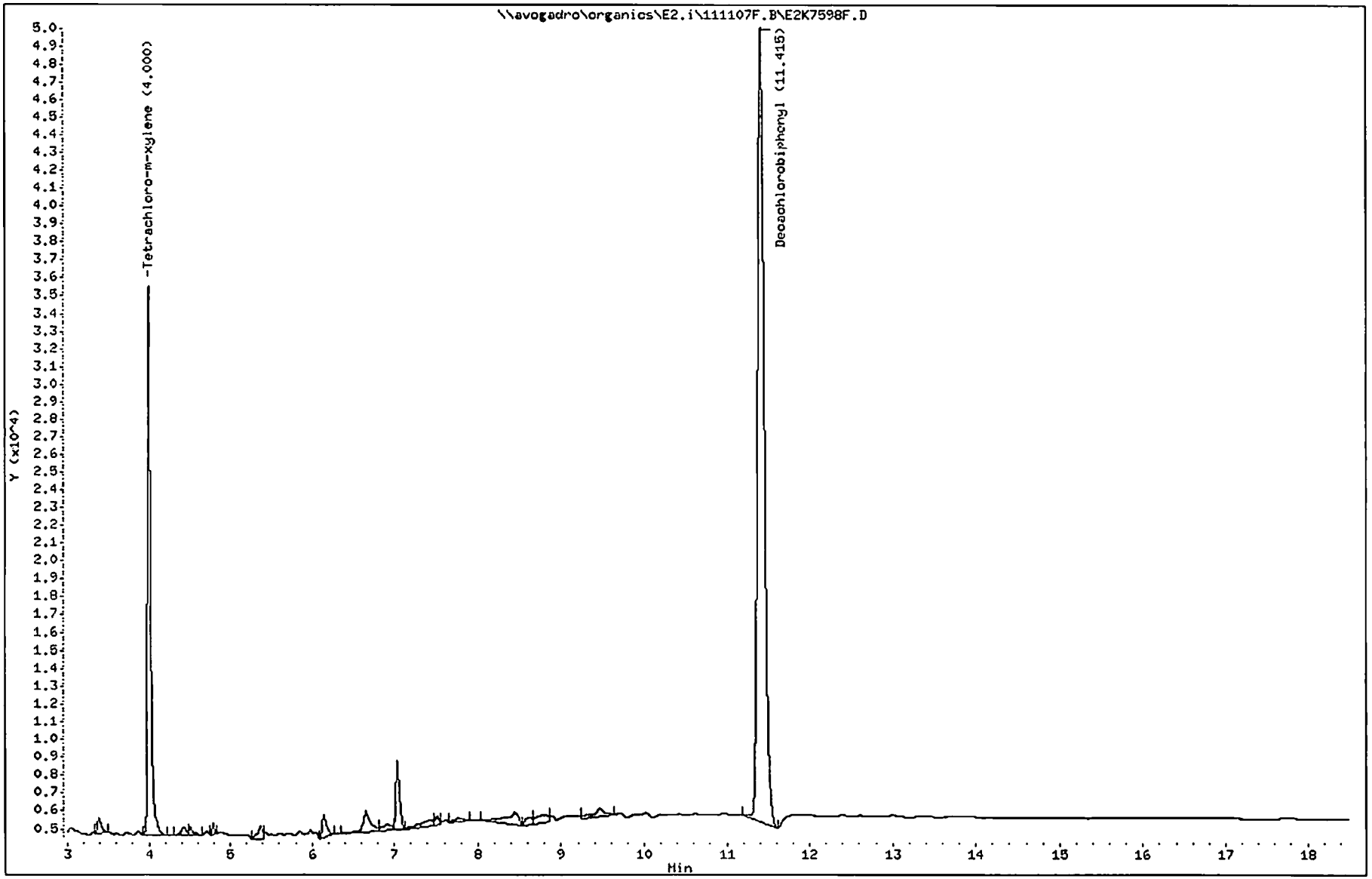
Data file : \\avogadro\organics\E2.i\111107F.B\E2K7598F.D
Lab Smp Id: K2198-20B Client Smp ID: H30T5
Inj Date : 08-NOV-2011 08:22
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-20B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 16:14 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 40
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.100	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.000	3.999	0.001	832277	0.04008		13	
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
11.414	11.417	-0.003	2481469	0.08656		29	

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7598F.D
Date : 08-NOV-2011 08:22
Client ID: H30T5
Instrument: E2.i
Sample Info: K2198-20B,,62776,somaro.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7598R.D
Report Date: 09-Nov-2011 15:59

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

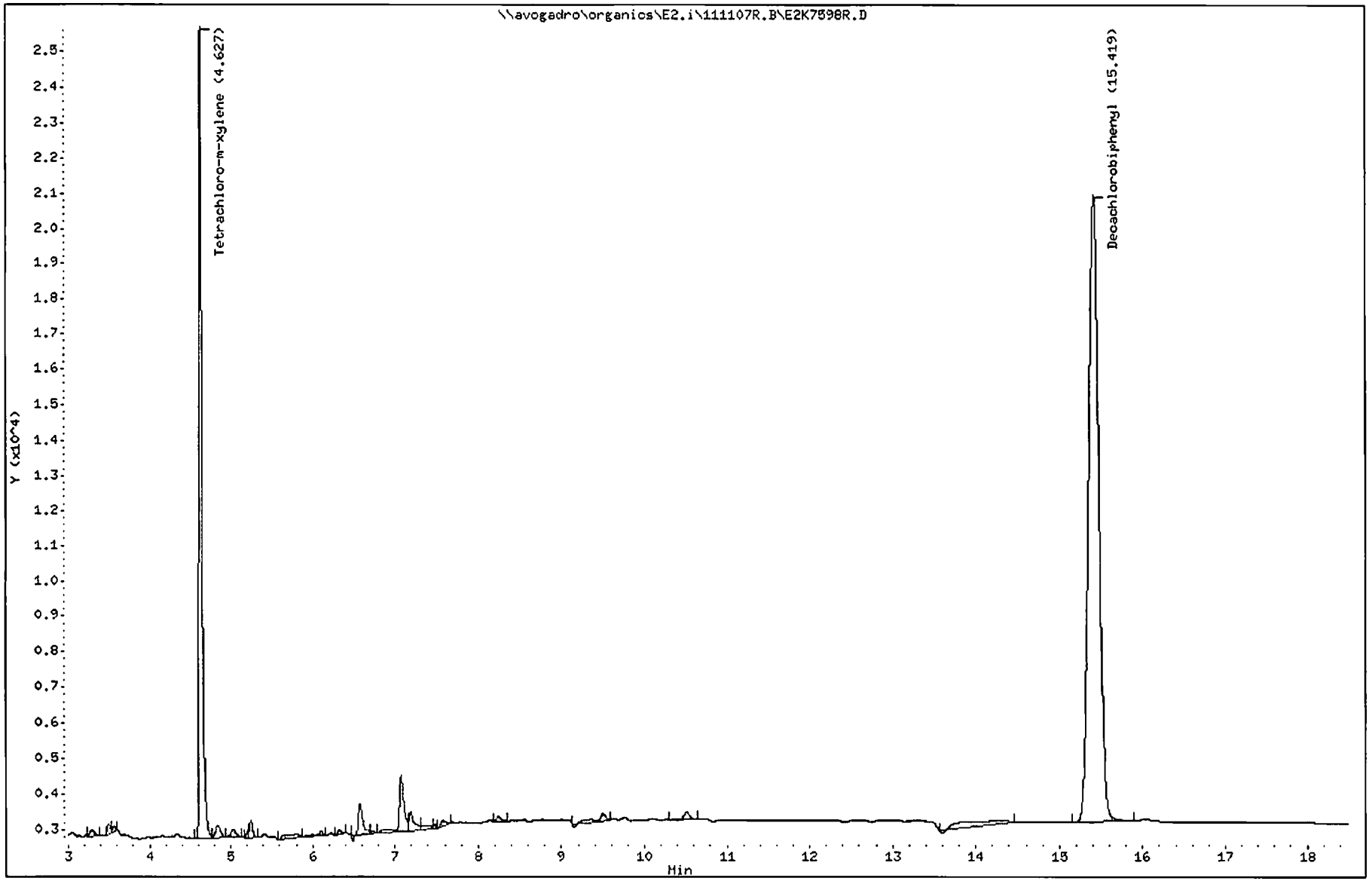
Data file : \\avogadro\organics\E2.i\111107R.B\E2K7598R.D
Lab Smp Id: K2198-20B Client Smp ID: H30T5
Inj Date : 08-NOV-2011 08:22
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-20B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 16:15 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 40
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.100	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.627	4.627	0.000	559493	0.04448		15	
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.418	15.423	-0.005	1518968	0.08961		30	

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7598R.D
Date : 08-NOV-2011 08:22
Client ID: H30T5
Instrument: E2.i
Sample Info: K2198-20B,,62776,somaro.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.32



6N - FORM VI ARO-1

AROCLORS INITIAL CALIBRATION (MULTIPOINT)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: E2

Level (x CS1): CS1 1.0 CS2 2.0 CS3 4.0 CS4 8.0 CS5 16.0

GC Column: CLPPest ID: 0.53 (mm) Date(s) Analyzed (1): 11/04/2011 11/05/2011

COMPOUND	PEAK*	RT OF STANDARDS					RT	RT WINDOW **	
		CS1	CS2	CS3	CS4	CS5		FROM	TO
AR1016	1	5.606	5.606	5.605	5.606	5.605	5.605	5.535	5.675
	2	5.784	5.784	5.783	5.783	5.782	5.783	5.713	5.853
	3	6.040	6.040	6.040	6.040	6.039	6.040	5.970	6.110
AR1260	1	7.799	7.799	7.798	7.798	7.797	7.798	7.728	7.868
	2	8.093	8.093	8.092	8.092	8.092	8.093	8.023	8.163
	3	8.504	8.504	8.503	8.504	8.503	8.503	8.433	8.573
AR1242	1	5.241	5.241	5.240	5.239	5.238	5.240	5.170	5.310
	2	5.860	5.860	5.859	5.858	5.858	5.859	5.789	5.929
	3	6.416	6.416	6.415	6.414	6.413	6.415	6.345	6.485
AR1248	1	6.281	6.283	6.282	6.282	6.281	6.282	6.212	6.352
	2	6.377	6.378	6.378	6.378	6.377	6.377	6.307	6.447
	3	6.761	6.762	6.763	6.762	6.762	6.762	6.692	6.832
AR1254	1	6.967	6.966	6.964	6.965	6.963	6.965	6.895	7.035
	2	7.348	7.348	7.346	7.347	7.346	7.347	7.277	7.417
	3	7.615	7.615	7.613	7.614	7.612	7.614	7.544	7.684
TCX		4.000	4.001	3.999	4.001	4.000	4.000	3.950	4.050
DCB		11.417	11.418	11.417	11.418	11.417	11.417	11.317	11.517

* At least three peaks for each column are required for identification of Aroclors.

**Retention Time windows are ± 0.07 minutes for each Aroclor peak; 0.05 minutes for tetrachloro-m-xylene; ± 0.10 minutes for decachlorobiphenyl.

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

6N - FORM VI ARO-1

AROCLORS INITIAL CALIBRATION (MULTIPOINT)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: E2

Level (x CS1): CS1 1.0 CS2 2.0 CS3 4.0 CS4 8.0 CS5 16.0

GC Column: CLPPestII ID: 0.53 (mm) Date(s) Analyzed (1): 11/04/2011 11/05/2011

COMPOUND	PEAK*	RT OF STANDARDS					RT	RT WINDOW **	
		CS1	CS2	CS3	CS4	CS5		FROM	TO
AR1016	1	6.252	6.252	6.252	6.252	6.251	6.252	6.182	6.322
	2	6.504	6.504	6.504	6.504	6.504	6.504	6.434	6.574
	3	6.660	6.659	6.659	6.659	6.658	6.659	6.589	6.729
AR1260	1	9.256	9.255	9.255	9.256	9.256	9.256	9.186	9.326
	2	9.400	9.399	9.399	9.399	9.399	9.399	9.329	9.469
	3	9.885	9.885	9.884	9.885	9.884	9.884	9.814	9.954
AR1242	1	5.951	5.952	5.950	5.949	5.949	5.950	5.880	6.020
	2	6.252	6.253	6.252	6.251	6.251	6.252	6.182	6.322
	3	6.770	6.771	6.770	6.769	6.769	6.770	6.700	6.840
AR1248	1	7.151	7.151	7.151	7.150	7.149	7.151	7.081	7.221
	2	7.273	7.273	7.273	7.273	7.271	7.272	7.202	7.342
	3	7.457	7.457	7.457	7.457	7.456	7.457	7.387	7.527
AR1254	1	7.755	7.755	7.754	7.753	7.752	7.754	7.684	7.824
	2	8.258	8.258	8.257	8.257	8.255	8.257	8.187	8.327
	3	8.529	8.529	8.529	8.528	8.527	8.528	8.458	8.598
TCX		4.628	4.628	4.627	4.627	4.627	4.628	4.578	4.678
DCB		15.421	15.421	15.421	15.423	15.424	15.422	15.322	15.522

* At least three peaks for each column are required for identification of Aroclors.

**Retention Time windows are ± 0.07 minutes for each Aroclor peak; 0.05 minutes for tetrachloro-m-xylene; ± 0.10 minutes for decachlorobiphenyl.

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

6P - FORM VI ARO-2

AROCLOR INITIAL CALIBRATION (MULTIPOINT)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: E2 Date(s) Analyzed: 11/04/2011 11/05/2011

GC Column: CLPPest ID: 0.53 (mm)

Level (x CS1): CS1 1.0 CS2 2.0 CS3 4.0 CS4 8.0 CS5 16.0

COMPOUND	PEAK [1]	CALIBRATION FACTORS (CFs)					% RSD
		CS1	CS2	CS3	CS4	CS5	
AR1016	1	2352670	2098610	2086390	1928969	1782733	10.4
	2	890520	786840	795198	725274	678734	10.3
	3	1589370	1420650	1395743	1291368	1183862	11.0
AR1260	1	2844030	2476720	2414708	2205755	2005208	13.2
	2	2126670	1873750	1869350	1772705	1645746	9.5
	3	2350260	2079220	2087110	1983990	1853849	8.8
AR1242	1	562830	544365	542323	571053	487556	6.0
	2	447170	426820	427223	458434	401683	5.0
	3	773230	738205	730928	771896	666716	5.9
AR1248	1	1223890	1136335	1080685	1013635	894194	11.7
	2	1048630	997430	987973	968959	891123	5.8
	3	2236250	2322680	2240783	1876371	1650019	14.0
AR1254	1	2611200	2498175	2321008	2091419	1875726	13.1
	2	1740330	1708515	1631425	1495668	1376551	9.6
	3	1422980	1409165	1342780	1213521	1124626	9.9
TCX		20485600	19940900	21080550	21207125	21121838	2.6
DCB		31577100	29458600	29514050	27374463	25415444	8.2

[1]At least three peaks for each column are required for identification of Aroclors.

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

6P - FORM VI ARO-2

AROCLOR INITIAL CALIBRATION (MULTIPOINT)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: E2 Date(s) Analyzed: 11/04/2011 11/05/2011

GC Column: CLPPestII ID: 0.53 (mm)

Level (x CS1): CS1 1.0 CS2 2.0 CS3 4.0 CS4 8.0 CS5 16.0

COMPOUND	PEAK [1]	CALIBRATION FACTORS (CFs)					% RSD
		CS1	CS2	CS3	CS4	CS5	
AR1016	1	326940	302990	310628	302709	295544	3.9
	2	1225290	1129870	1205005	1173018	1147013	3.4
	3	563220	514000	532413	513773	500824	4.6
AR1260	1	1273100	1160920	1238890	1221516	1204447	3.4
	2	815950	734350	754660	723844	691482	6.2
	3	843670	763725	796823	781670	769545	4.0
AR1242	1	734610	685425	665475	679505	570207	9.0
	2	258100	251655	254350	272938	239547	4.7
	3	287310	277210	280933	311851	283469	4.8
AR1248	1	799240	774425	767833	757853	698626	4.9
	2	593960	594525	602585	608309	574827	2.1
	3	301730	297275	299598	301028	284277	2.4
AR1254	1	853070	814230	769410	702884	640330	11.3
	2	1216470	1184505	1154710	1091033	1037933	6.3
	3	1368340	1356155	1319160	1227664	1175775	6.5
TCX		11461200	11491500	12675600	13297275	13962813	8.8
DCB		17496700	16633350	17258700	16846038	16521238	2.4

[1]At least three peaks for each column are required for identification of Aroclors.

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

6Q - FORM VI ARO-3

AROCLOR INITIAL CALIBRATION (SINGLE POINT)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: E2 Date(s) Analyzed: 11/04/2011 11/05/2011

GC Column: CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT (ng)	PEAK [1]	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR
Aroclor-1221	0.4	1	3.36	3.29	3.43	231755
		2	3.84	3.77	3.91	86535
		3	4.23	4.16	4.30	261795
		4				
		5				
Aroclor-1232	0.4	1	4.22	4.15	4.29	177788
		2	4.47	4.40	4.54	719540
		3	4.96	4.89	5.03	506223
		4				
		5				
Aroclor-1262	0.4	1	8.90	8.83	8.97	3087075
		2	9.35	9.28	9.42	1360215
		3	9.87	9.80	9.94	508595
		4				
		5				
Aroclor-1268	0.4	1	9.71	9.64	9.78	2949570
		2	10.35	10.28	10.42	1278423
		3	10.96	10.89	11.03	9297535
		4				
		5				

[1] At least three peaks for each column are required for identification of multicomponent analytes.

6Q - FORM VI ARO-3

AROCLOR INITIAL CALIBRATION (SINGLE POINT)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: E2 Date(s) Analyzed: 11/04/2011 11/05/2011

GC Column: CLPPestII ID: 0.53 (mm)

COMPOUND	AMOUNT (ng)	PEAK [1]	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR
Aroclor-1221	0.4	1	3.97	3.90	4.04	193565
		2	4.49	4.42	4.56	71775
		3	5.06	4.99	5.13	169120
		4				
		5				
Aroclor-1232	0.4	1	5.06	4.99	5.13	115775
		2	5.28	5.21	5.35	96073
		3	5.37	5.30	5.44	397935
		4				
		5				
Aroclor-1262	0.4	1	11.17	11.10	11.24	1313125
		2	11.30	11.23	11.37	786835
		3	12.35	12.28	12.42	262003
		4				
		5				
Aroclor-1268	0.4	1	11.98	11.91	12.05	1723658
		2	12.93	12.86	13.00	679578
		3	14.22	14.15	14.29	5639533
		4				
		5				

[1] At least three peaks for each column are required for identification of multicomponent analytes.

7N - FORM VII ARO

AROCLOR CALIBRATION VERIFICATION SUMMARY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

GC Column: CLPPest ID: 0.53 (mm) Calibration Date(s): 11/04/2011 11/05/2011

EPA Sample No. (AR####3##): AR16603DJ Date Analyzed: 11/08/2011

Lab Sample ID: AR16603DJ Time Analyzed: 9:05

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

AROCLOR COMPOUND	PEAK	RETENTION RT	RT WINDOW FROM	RT WINDOW TO	$\overline{CF}$	CF	%D
AR1016	1	5.606	5.535	5.675	2049874.375	2145947.5	4.7
	2	5.784	5.713	5.853	775313	802075	3.5
	3	6.040	5.970	6.110	1376198.375	1436362.5	4.4
AR1260	1	7.798	7.728	7.868	2389284	2469482.5	3.4
	2	8.092	8.023	8.163	1857644.25	1937972.5	4.3
	3	8.503	8.433	8.573	2070885.75	2189772.5	5.7
TCX		4.001	3.950	4.050	20767202.5	21978900	5.8
DCB		11.415	11.317	11.517	28667931.25	29910650	4.3

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

7N - FORM VII ARO

AROCLOR CALIBRATION VERIFICATION SUMMARY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

GC Column: CLPPestII ID: 0.53 (mm) Calibration Date(s): 11/04/2011 11/05/2011

EPA Sample No. (AR####3##): AR16603DJ Date Analyzed: 11/08/2011

Lab Sample ID: AR16603DJ Time Analyzed: 9:05

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

AROCLOR COMPOUND	PEAK	RETENTION RT	RT WINDOW FROM	RT WINDOW TO	$\overline{CF}$	CF	%D
AR1016	1	6.252	6.182	6.322	307762.125	320572.5	4.2
	2	6.504	6.434	6.574	1176039.125	1221972.5	3.9
	3	6.659	6.589	6.729	524845.75	540905	3.1
AR1260	1	9.254	9.186	9.326	1219774.625	1262332.5	3.5
	2	9.398	9.329	9.469	744057.125	770512.5	3.6
	3	9.883	9.814	9.954	791086.5	811632.5	2.6
TCX		4.628	4.578	4.678	12577677.5	13202950	5.0
DCB		15.418	15.322	15.522	16951205	17596150	3.8

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

7N - FORM VII ARO

AROCLOR CALIBRATION VERIFICATION SUMMARY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

GC Column: CLPPest ID: 0.53 (mm) Calibration Date(s): 11/04/2011 11/05/2011

EPA Sample No. (AR####3##): AR16603JD Date Analyzed: 11/07/2011

Lab Sample ID: AR16603JD Time Analyzed: 21:12

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

AROCLOR COMPOUND	PEAK	RETENTION RT	RT WINDOW FROM	RT WINDOW TO	$\overline{CF}$	CF	%D
AR1016	1	5.606	5.535	5.675	2049874.375	2065425	0.8
	2	5.784	5.713	5.853	775313	774120	-0.2
	3	6.041	5.970	6.110	1376198.375	1393592.5	1.3
AR1260	1	7.798	7.728	7.868	2389284	2326212.5	-2.6
	2	8.093	8.023	8.163	1857644.25	1833570	-1.3
	3	8.504	8.433	8.573	2070885.75	2078092.5	0.3
TCX		4.000	3.950	4.050	20767202.5	21237200	2.3
DCB		11.420	11.317	11.517	28667931.25	28981275	1.1

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

7N - FORM VII ARO

AROCLOR CALIBRATION VERIFICATION SUMMARY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

GC Column: CLPPestII ID: 0.53 (mm) Calibration Date(s): 11/04/2011 11/05/2011

EPA Sample No. (AR####3##): AR16603JD Date Analyzed: 11/07/2011

Lab Sample ID: AR16603JD Time Analyzed: 21:12

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

AROCLOR COMPOUND	PEAK	RETENTION RT	RT WINDOW FROM	RT WINDOW TO	$\overline{CF}$	CF	%D
AR1016	1	6.253	6.182	6.322	307762.125	312385	1.5
	2	6.504	6.434	6.574	1176039.125	1179960	0.3
	3	6.659	6.589	6.729	524845.75	523587.5	-0.2
AR1260	1	9.256	9.186	9.326	1219774.625	1191170	-2.3
	2	9.400	9.329	9.469	744057.125	728637.5	-2.1
	3	9.886	9.814	9.954	791086.5	761680	-3.7
TCX		4.628	4.578	4.678	12577677.5	12846250	2.1
DCB		15.427	15.322	15.522	16951205	16758875	-1.1

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

7N - FORM VII ARO

AROCLOR CALIBRATION VERIFICATION SUMMARY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

GC Column: CLPPest ID: 0.53 (mm) Calibration Date(s): 11/04/2011 11/05/2011

EPA Sample No. (AR####3##): AR16603JE Date Analyzed: 11/08/2011

Lab Sample ID: AR16603JE Time Analyzed: 13:05

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

AROCLOR COMPOUND	PEAK	RETENTION RT	RT WINDOW FROM	RT WINDOW TO	$\overline{CF}$	CF	%D
AR1016	1	5.608	5.535	5.675	2049874.375	2169695	5.8
	2	5.786	5.713	5.853	775313	798077.5	2.9
	3	6.042	5.970	6.110	1376198.375	1293575	-6.0
AR1260	1	7.800	7.728	7.868	2389284	2579112.5	7.9
	2	8.095	8.023	8.163	1857644.25	1988640	7.1
	3	8.505	8.433	8.573	2070885.75	2305475	11.3
TCX		4.004	3.950	4.050	20767202.5	22094200	6.4
DCB		11.421	11.317	11.517	28667931.25	31178000	8.8

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

7N - FORM VII ARO

AROCLOR CALIBRATION VERIFICATION SUMMARY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

GC Column: CLPPestII ID: 0.53 (mm) Calibration Date(s): 11/04/2011 11/05/2011

EPA Sample No. (AR####3##): AR16603JE Date Analyzed: 11/08/2011

Lab Sample ID: AR16603JE Time Analyzed: 13:05

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

AROCLOR COMPOUND	PEAK	RETENTION RT	RT WINDOW FROM	RT WINDOW TO	$\overline{CF}$	CF	%D
AR1016	1	6.253	6.182	6.322	307762.125	324785	5.5
	2	6.505	6.434	6.574	1176039.125	1252667.5	6.5
	3	6.660	6.589	6.729	524845.75	555430	5.8
AR1260	1	9.256	9.186	9.326	1219774.625	1310227.5	7.4
	2	9.400	9.329	9.469	744057.125	796582.5	7.1
	3	9.885	9.814	9.954	791086.5	838735	6.0
TCX		4.630	4.578	4.678	12577677.5	13495650	7.3
DCB		15.423	15.322	15.522	16951205	18278850	7.8

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 11/04/2011 11/05/2011

Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 4.000 DCB: 11.417

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT	#	DCB RT	#
01	AR12213J2	E2K7479F.D	11/4/2011	19:17	4.000		11.418	
02	AR12323J2	E2K7480F.D	11/4/2011	19:38	4.000		11.419	
03	AR12421J2	E2K7481F.D	11/4/2011	19:59	4.002		11.419	
04	AR12422J2	E2K7483F.D	11/4/2011	20:41	4.002		11.419	
05	AR12423J2	E2K7484F.D	11/4/2011	21:01	3.999		11.418	
06	AR12424J2	E2K7485F.D	11/4/2011	21:22	4.000		11.419	
07	AR12425J2	E2K7486F.D	11/4/2011	21:43	3.997		11.420	
08	AR12481J2	E2K7487F.D	11/4/2011	22:04	3.998		11.417	
09	AR12482J2	E2K7489F.D	11/4/2011	22:46	4.002		11.418	
10	AR12483J2	E2K7490F.D	11/4/2011	23:07	4.001		11.420	
11	AR12484J2	E2K7491F.D	11/4/2011	23:28	4.001		11.420	
12	AR12485J2	E2K7492F.D	11/4/2011	23:49	4.001		11.419	
13	AR12541J2	E2K7493F.D	11/5/2011	0:10	4.002		11.418	
14	AR12542J2	E2K7495F.D	11/5/2011	0:52	4.001		11.420	
15	AR12543J2	E2K7496F.D	11/5/2011	1:13	4.000		11.418	
16	AR12544J2	E2K7497F.D	11/5/2011	1:34	4.001		11.419	
17	AR12545J2	E2K7498F.D	11/5/2011	1:54	4.000		11.418	
18	AR12623J2	E2K7499F.D	11/5/2011	2:15	4.001		11.418	
19	AR12683J2	E2K7500F.D	11/5/2011	2:36	4.001		11.419	
20	AR16601J2	E2K7501F.D	11/5/2011	2:57	4.000		11.417	
21	AR16602J2	E2K7503F.D	11/5/2011	3:39	4.001		11.418	
22	AR16603J2	E2K7504F.D	11/5/2011	4:00	3.999		11.417	
23	AR16604J2	E2K7505F.D	11/5/2011	4:21	4.001		11.418	
24	AR16605J2	E2K7506F.D	11/5/2011	4:42	4.000		11.417	
25	AIBLKJD	E2K7565F.D	11/7/2011	20:51	4.002		11.420	
26	AR16603JD	E2K7566F.D	11/7/2011	21:12	4.000		11.420	
27	ZZZZZ	E2K7570F.D	11/7/2011	22:36	4.000		11.420	

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 11/04/2011 11/05/2011

Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 4.000 DCB: 11.417

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	ZZZZZ	E2K7571F.D	11/7/2011	22:57	4.001	11.419
29	ZZZZZ	E2K7572F.D	11/7/2011	23:18	4.000	11.419
30	ZZZZZ	E2K7573F.D	11/7/2011	23:39	4.001	11.420
31	ZZZZZ	E2K7574F.D	11/8/2011	0:00	3.999	11.416
32	ABLK2F	E2K7575F.D	11/8/2011	0:21	3.999	11.417
33	ALCS2F	E2K7576F.D	11/8/2011	0:41	3.999	11.417
34	H30Q0	E2K7577F.D	11/8/2011	1:02	4.001	11.418
35	H30Q0MS	E2K7578F.D	11/8/2011	1:23	4.000	11.418
36	H30Q0MSD	E2K7579F.D	11/8/2011	1:44	4.000	11.417
37	H30Q1	E2K7580F.D	11/8/2011	2:05	3.999	11.414
38	H30Q2	E2K7581F.D	11/8/2011	2:26	4.002	11.417
39	ZZZZZ	E2K7582F.D	11/8/2011	2:47	*	*
40	H30Q4	E2K7583F.D	11/8/2011	3:08	4.000	11.417
41	H30Q6	E2K7584F.D	11/8/2011	3:29	4.001	11.417
42	H30Q8	E2K7585F.D	11/8/2011	3:50	4.002	11.417
43	H30Q9	E2K7586F.D	11/8/2011	4:11	4.001	11.417
44	H30R0	E2K7587F.D	11/8/2011	4:32	4.000	11.417
45	H30R1	E2K7588F.D	11/8/2011	4:53	4.001	11.421
46	H30S4	E2K7589F.D	11/8/2011	5:13	4.002	11.418
47	H30S5	E2K7590F.D	11/8/2011	5:34	4.000	11.417
48	H30S8	E2K7591F.D	11/8/2011	5:55	4.001	11.418
49	H30S9	E2K7592F.D	11/8/2011	6:16	4.001	11.417
50	H30T0	E2K7593F.D	11/8/2011	6:37	4.001	11.416
51	H30T1	E2K7594F.D	11/8/2011	6:58	3.998	11.416
52	ZZZZZ	E2K7595F.D	11/8/2011	7:19	*	*
53	H30T3	E2K7596F.D	11/8/2011	7:40	4.001	11.417
54	H30T4	E2K7597F.D	11/8/2011	8:01	4.001	11.415

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 11/04/2011 11/05/2011

Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 4.000 DCB: 11.417

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
55	H30T5	E2K7598F.D	11/8/2011	8:22	4.000	11.415
56	AIBLKDJ	E2K7599F.D	11/8/2011	8:44	4.005	11.421
57	AR16603DJ	E2K7600F.D	11/8/2011	9:05	4.001	11.415
58	H30Q3	E2K7604F.D	11/8/2011	10:47	4.014	11.437
59	H30T2	E2K7605F.D	11/8/2011	11:08	4.001	11.418
60	AIBLKJE	E2K7606F.D	11/8/2011	12:45	4.018	11.444
61	AR16603JE	E2K7607F.D	11/8/2011	13:05	4.004	11.421

	QC LIMITS
TCX = Tetrachloro-m-xylene	(± 0.05 MINUTES)
DCB = Decachlorobiphenyl	(± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 11/04/2011 11/05/2011

Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 4.628 DCB: 15.422

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12213J2	E2K7479R.D	11/4/2011	19:17	4.628	15.421
02	AR12323J2	E2K7480R.D	11/4/2011	19:38	4.628	15.423
03	AR12421J2	E2K7481R.D	11/4/2011	19:59	4.628	15.422
04	AR12422J2	E2K7483R.D	11/4/2011	20:41	4.629	15.421
05	AR12423J2	E2K7484R.D	11/4/2011	21:01	4.628	15.422
06	AR12424J2	E2K7485R.D	11/4/2011	21:22	4.627	15.422
07	AR12425J2	E2K7486R.D	11/4/2011	21:43	4.625	15.428
08	AR12481J2	E2K7487R.D	11/4/2011	22:04	4.628	15.421
09	AR12482J2	E2K7489R.D	11/4/2011	22:46	4.629	15.421
10	AR12483J2	E2K7490R.D	11/4/2011	23:07	4.628	15.424
11	AR12484J2	E2K7491R.D	11/4/2011	23:28	4.628	15.426
12	AR12485J2	E2K7492R.D	11/4/2011	23:49	4.627	15.424
13	AR12541J2	E2K7493R.D	11/5/2011	0:10	4.629	15.422
14	AR12542J2	E2K7495R.D	11/5/2011	0:52	4.628	15.423
15	AR12543J2	E2K7496R.D	11/5/2011	1:13	4.628	15.423
16	AR12544J2	E2K7497R.D	11/5/2011	1:34	4.627	15.425
17	AR12545J2	E2K7498R.D	11/5/2011	1:54	4.626	15.425
18	AR12623J2	E2K7499R.D	11/5/2011	2:15	4.628	15.422
19	AR12683J2	E2K7500R.D	11/5/2011	2:36	4.628	15.425
20	AR16601J2	E2K7501R.D	11/5/2011	2:57	4.628	15.421
21	AR16602J2	E2K7503R.D	11/5/2011	3:39	4.628	15.421
22	AR16603J2	E2K7504R.D	11/5/2011	4:00	4.627	15.421
23	AR16604J2	E2K7505R.D	11/5/2011	4:21	4.627	15.423
24	AR16605J2	E2K7506R.D	11/5/2011	4:42	4.627	15.424
25	AIBLKJD	E2K7565R.D	11/7/2011	20:51	4.629	15.426
26	AR16603JD	E2K7566R.D	11/7/2011	21:12	4.628	15.427
27	ZZZZZ	E2K7570R.D	11/7/2011	22:36	4.627	15.426

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 11/04/2011 11/05/2011

Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 4.628 DCB: 15.422

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT	#	DCB RT	#
28	ZZZZZ	E2K7571R.D	11/7/2011	22:57	4.628		15.426	
29	ZZZZZ	E2K7572R.D	11/7/2011	23:18	4.627		15.426	
30	ZZZZZ	E2K7573R.D	11/7/2011	23:39	4.628		15.429	
31	ZZZZZ	E2K7574R.D	11/8/2011	0:00	4.627		15.424	
32	ABLK2F	E2K7575R.D	11/8/2011	0:21	4.627		15.425	
33	ALCS2F	E2K7576R.D	11/8/2011	0:41	4.627		15.423	
34	H30Q0	E2K7577R.D	11/8/2011	1:02	4.628		15.424	
35	H30Q0MS	E2K7578R.D	11/8/2011	1:23	4.628		15.426	
36	H30Q0MSD	E2K7579R.D	11/8/2011	1:44	4.627		15.423	
37	H30Q1	E2K7580R.D	11/8/2011	2:05	4.626		15.416	
38	H30Q2	E2K7581R.D	11/8/2011	2:26	4.629		15.422	
39	ZZZZZ	E2K7582R.D	11/8/2011	2:47		*		*
40	H30Q4	E2K7583R.D	11/8/2011	3:08	4.628		15.424	
41	H30Q6	E2K7584R.D	11/8/2011	3:29	4.629		15.423	
42	H30Q8	E2K7585R.D	11/8/2011	3:50	4.628		15.420	
43	H30Q9	E2K7586R.D	11/8/2011	4:11	4.627		15.422	
44	H30R0	E2K7587R.D	11/8/2011	4:32	4.628		15.420	
45	H30R1	E2K7588R.D	11/8/2011	4:53	4.628		15.425	
46	H30S4	E2K7589R.D	11/8/2011	5:13	4.629		15.424	
47	H30S5	E2K7590R.D	11/8/2011	5:34	4.627		15.420	
48	H30S8	E2K7591R.D	11/8/2011	5:55	4.628		15.424	
49	H30S9	E2K7592R.D	11/8/2011	6:16	4.628		15.421	
50	H30T0	E2K7593R.D	11/8/2011	6:37	4.627		15.418	
51	H30T1	E2K7594R.D	11/8/2011	6:58	4.627		15.420	
52	ZZZZZ	E2K7595R.D	11/8/2011	7:19		*		*
53	H30T3	E2K7596R.D	11/8/2011	7:40	4.627		15.420	
54	H30T4	E2K7597R.D	11/8/2011	8:01	4.628		15.420	

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 11/04/2011 11/05/2011

Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

	MEAN SURROGATE RT FROM INITIAL CALIBRATION TCX: 4.628			DCB: 15.422		
	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
55	H30T5	E2K7598R.D	11/8/2011	8:22	4.627	15.419
56	AIBLKDJ	E2K7599R.D	11/8/2011	8:44	4.628	15.421
57	AR16603DJ	E2K7600R.D	11/8/2011	9:05	4.628	15.418
58	H30Q3	E2K7604R.D	11/8/2011	10:47	4.632	15.436
59	H30T2	E2K7605R.D	11/8/2011	11:08	4.628	15.421
60	AIBLKJE	E2K7606R.D	11/8/2011	12:45	4.634	15.440
61	AR16603JE	E2K7607R.D	11/8/2011	13:05	4.630	15.423

	QC LIMITS
TCX = Tetrachloro-m-xylene	(± 0.05 MINUTES)
DCB = Decachlorobiphenyl	(± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

10C - FORM X ARO
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.
H30Q0MSD

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Lab Sample ID: K2198-01BMSD Date(s) Analyzed: 11/08/2011 11/08/2011

Instrument ID (1): E2 Instrument ID (2): E2

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (MM)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION PEAK	CONCENTRATION MEAN	%D
Aroclor-1016	1	5.606	5.535	5.675	85.1461		
	2	5.784	5.713	5.853	81.4296		
COLUMN 1	3	6.040	5.970	6.110	79.8390		
	4						
	5					82.138215	
	1	6.252	6.182	6.322	78.7308		
	2	6.505	6.434	6.574	69.5924		
COLUMN 2	3	6.660	6.589	6.729	80.4171		
	4						
	5					76.246752	7.7
Aroclor-1260	1	7.798	7.728	7.868	96.0001		
	2	8.092	8.023	8.163	101.5947		
COLUMN 1	3	8.503	8.433	8.573	86.0210		
	4						
	5					94.538615	
	1	9.255	9.186	9.326	100.2328		
	2	9.399	9.329	9.469	89.0359		
COLUMN 2	3	9.884	9.814	9.954	90.3025		
	4						
	5					93.190394	1.4

At least 3 peaks for each column are required for identification of multicomponent analytes

10C - FORM X ARO
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.
H30Q0MS

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Lab Sample ID: K2198-01BMS Date(s) Analyzed: 11/08/2011 11/08/2011

Instrument ID (1): E2 Instrument ID (2): E2

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (MM)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION PEAK	CONCENTRATION MEAN	%D
Aroclor-1016	1	5.606	5.535	5.675	97.6363		
	2	5.784	5.713	5.853	92.3866		
COLUMN 1	3	6.040	5.970	6.110	90.6513		
	4						
	5					93.558079	
	1	6.252	6.182	6.322	97.4117		
	2	6.505	6.434	6.574	84.9343		
COLUMN 2	3	6.660	6.589	6.729	99.1278		
	4						
	5					93.824574	0.3
Aroclor-1260	1	7.799	7.728	7.868	108.2387		
	2	8.093	8.023	8.163	113.7793		
COLUMN 1	3	8.502	8.433	8.573	96.2210		
	4						
	5					106.079642	
	1	9.257	9.186	9.326	116.9182		
	2	9.400	9.329	9.469	108.1633		
COLUMN 2	3	9.886	9.814	9.954	111.9175		
	4						
	5					112.333016	5.9

At least 3 peaks for each column are required for identification of multicomponent analytes

10C - FORM X ARO
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.
ALCS2F

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Lab Sample ID: LCS-62776 Date(s) Analyzed: 11/08/2011 11/08/2011

Instrument ID (1): E2 Instrument ID (2): E2

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (MM)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION PEAK	CONCENTRATION MEAN	%D
Aroclor-1016	1	5.605	5.535	5.675	27.1306		
	2	5.783	5.713	5.853	26.9749		
COLUMN 1	3	6.041	5.970	6.110	23.7291		
	4						
	5					25.944885	
	1	6.252	6.182	6.322	26.5746		
	2	6.505	6.434	6.574	18.0547		
COLUMN 2	3	6.660	6.589	6.729	28.5087		
	4						
	5					24.379334	6.4
Aroclor-1260	1	7.798	7.728	7.868	42.2415		
	2	8.092	8.023	8.163	38.5612		
COLUMN 1	3	8.502	8.433	8.573	41.8016		
	4						
	5					40.868109	
	1	9.256	9.186	9.326	32.4984		
	2	9.400	9.329	9.469	32.1328		
COLUMN 2	3	9.885	9.814	9.954	32.2464		
	4						
	5					32.292520	26.6

At least 3 peaks for each column are required for identification of multicomponent analytes

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7479F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7479F.D
Lab Smp Id: AR12213J2 Client Smp ID: AR12213J2
Inj Date : 04-NOV-2011 19:17
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR12213J2,AR12213J2,,ar1221.sub,,
Misc Info : 1,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1221.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

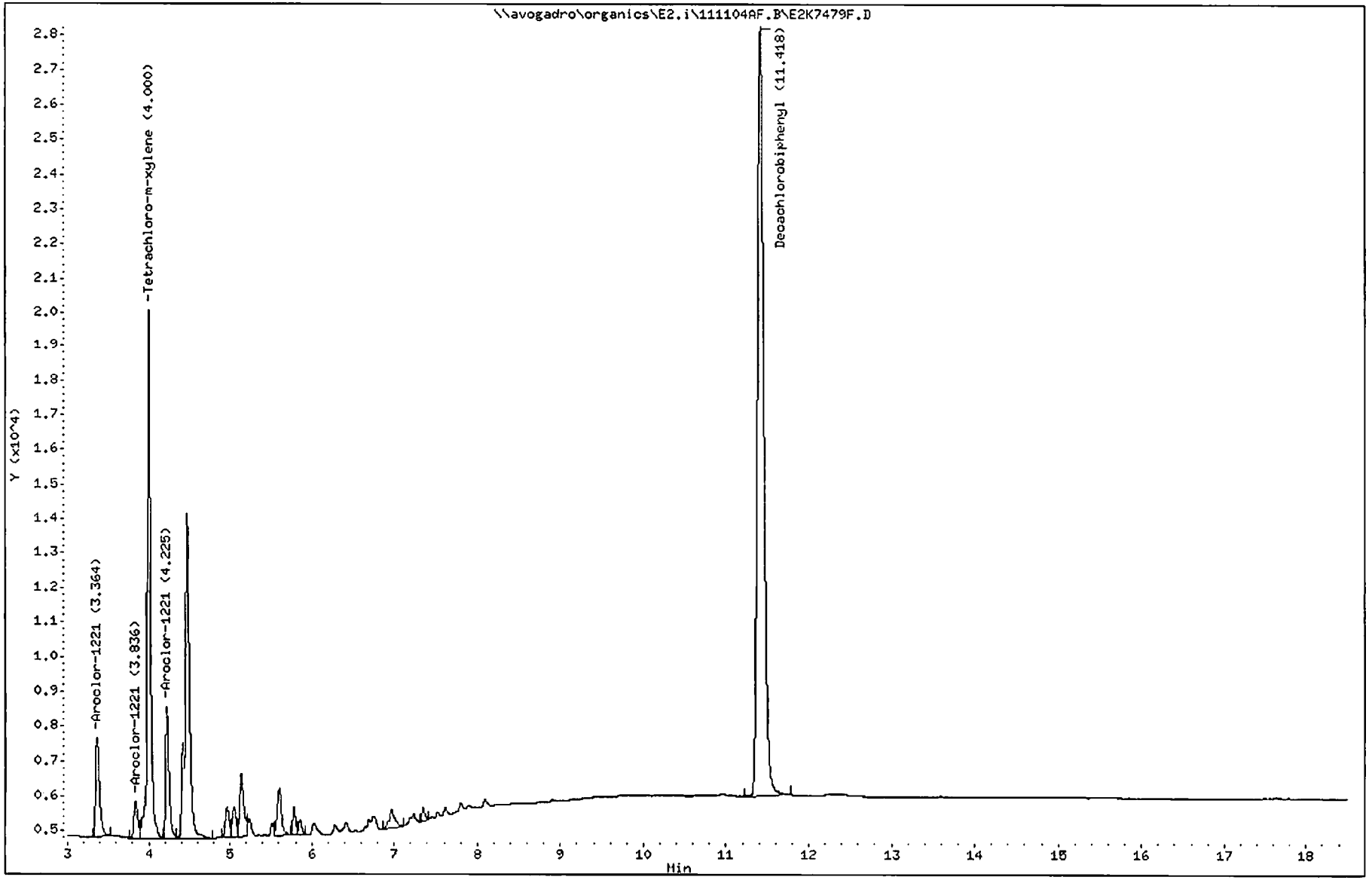
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.000	3.999	0.001	434796	0.02000	0.021			(a)
3 Aroclor-1221					CAS #: 11104-28-2			
3.363	3.363	0.000	92702	0.40000	0.40	80.00- 120.00	100.00	(a)
3.835	3.835	0.000	34614	0.40000	0.40	17.34- 57.34	37.34	
4.225	4.225	0.000	104718	0.40000	0.40	92.96- 132.96	112.96	
Average of Peak Amounts =				0.40000				
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.418	11.417	0.001	1188633	0.04000	0.041			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7479F.D
Date : 04-NOV-2011 19:17
Client ID: AR12213J2
Instrument: E2.i
Sample Info: AR12213J2,AR12213J2,,ar1221.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7479R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7479R.D
Lab Smp Id: AR12213J2 Client Smp ID: AR12213J2
Inj Date : 04-NOV-2011 19:17
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR12213J2,AR12213J2,,ar1221.sub,,
Misc Info : 1,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:00 Cal File: E2K7504R.D
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1221.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

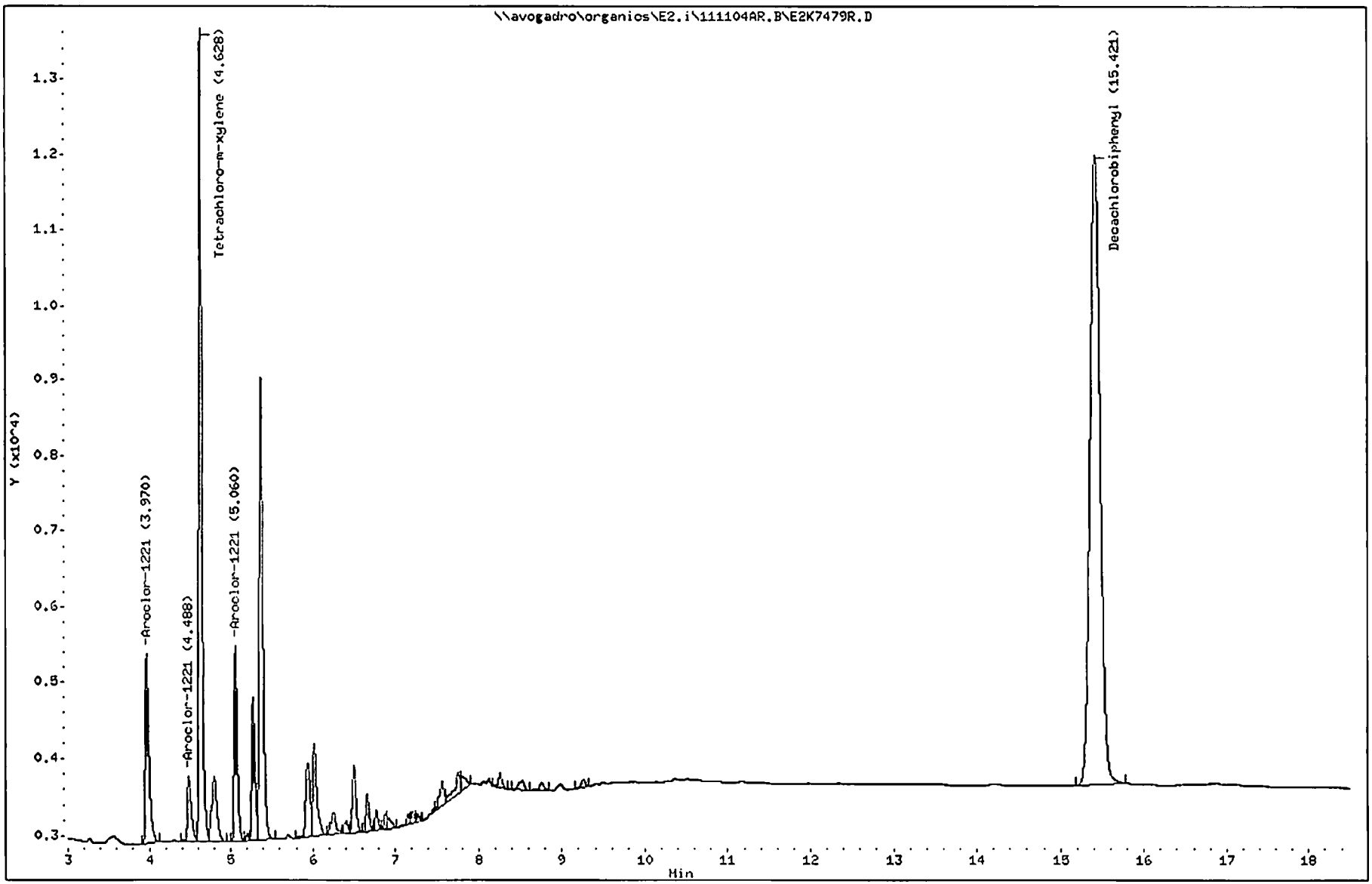
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
S 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.628	4.627	0.001	254149	0.02000	0.020		(a)
2 Aroclor-1221					CAS #: 11104-28-2		
3.969	3.969	0.000	77426	0.40000	0.40	80.00- 120.00	100.00(a)
4.487	4.487	0.000	28710	0.40000	0.40	17.08- 57.08	37.08
5.060	5.060	0.000	67648	0.40000	0.40	67.37- 107.37	87.37
Average of Peak Amounts =				0.40000			
S 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.420	15.423	-0.003	700038	0.04000	0.040		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7479R.D
Date : 04-NOV-2011 19:17
Client ID: AR12213J2 Instrument: E2.i
Sample Info: AR12213J2,AR12213J2,,ar1221.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPestII Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7480F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7480F.D
Lab Smp Id: AR12323J2 Client Smp ID: AR12323J2
Inj Date : 04-NOV-2011 19:38
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR12323J2,AR12323J2,,ar1232.sub,,
Misc Info : 1,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 2 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1232.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

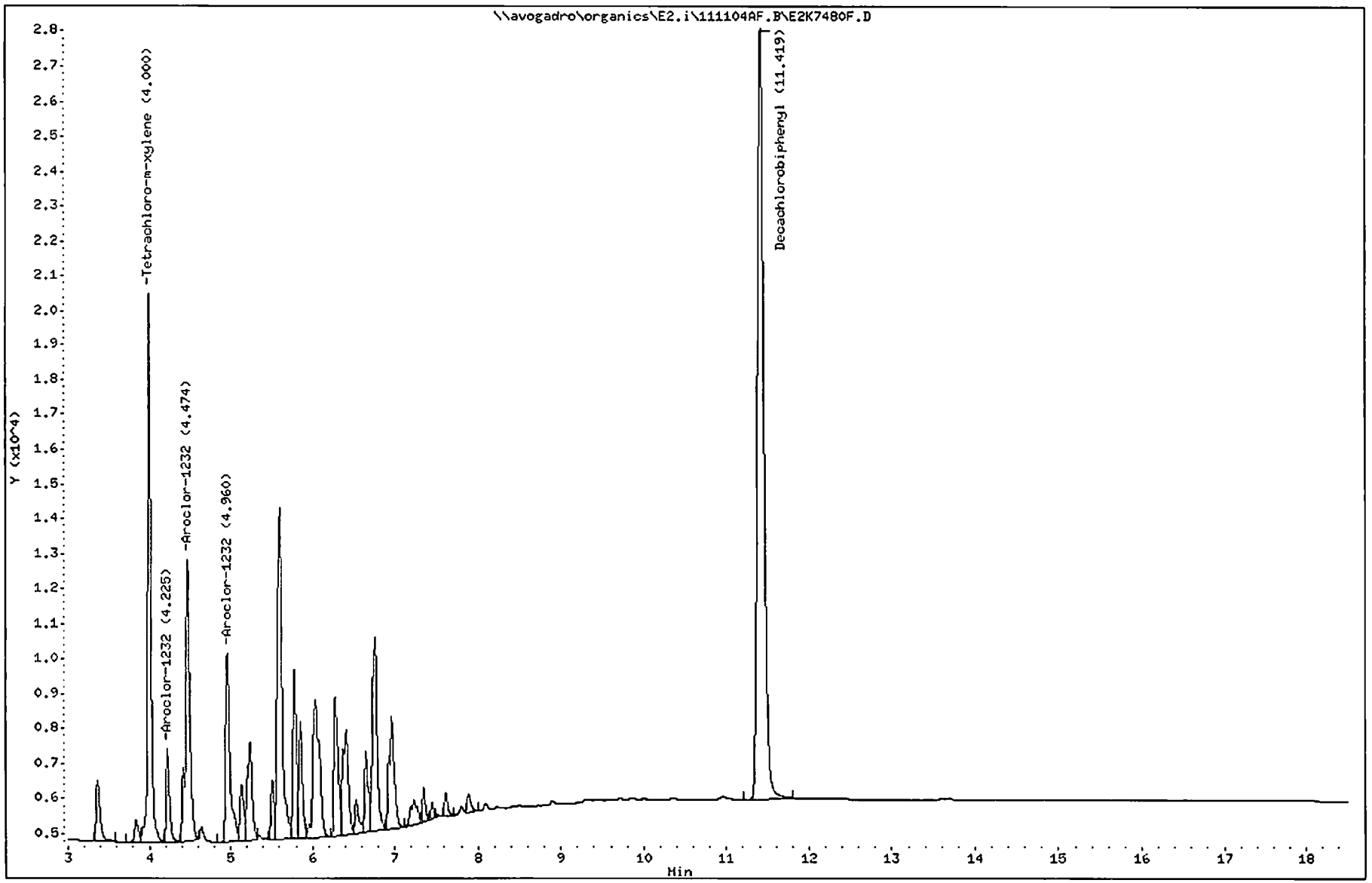
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT	AMOUNTS ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
S 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
3.999	3.999	0.000	428035	0.02000	0.021			(a)
4 Aroclor-1232					CAS #: 11141-16-5			
4.224	4.224	0.000	71115	0.40000	0.40	80.00- 120.00		100.00(a)
4.473	4.473	0.000	287816	0.40000	0.40	384.72- 424.72		404.72
4.960	4.960	0.000	202489	0.40000	0.40	264.73- 304.73		284.73
Average of Peak Amounts =				0.40000				
S 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.418	11.417	0.001	1185977	0.04000	0.041			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7480F.D
Date : 04-NOV-2011 19:38
Client ID: AR12323J2
Instrument: E2.i
Sample Info: AR12323J2,AR12323J2,,ar1232.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7480R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7480R.D
Lab Smp Id: AR12323J2 Client Smp ID: AR12323J2
Inj Date : 04-NOV-2011 19:38
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR12323J2,AR12323J2,,ar1232.sub,,
Misc Info : 1,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:00 Cal File: E2K7504R.D
Als bottle: 2 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1232.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

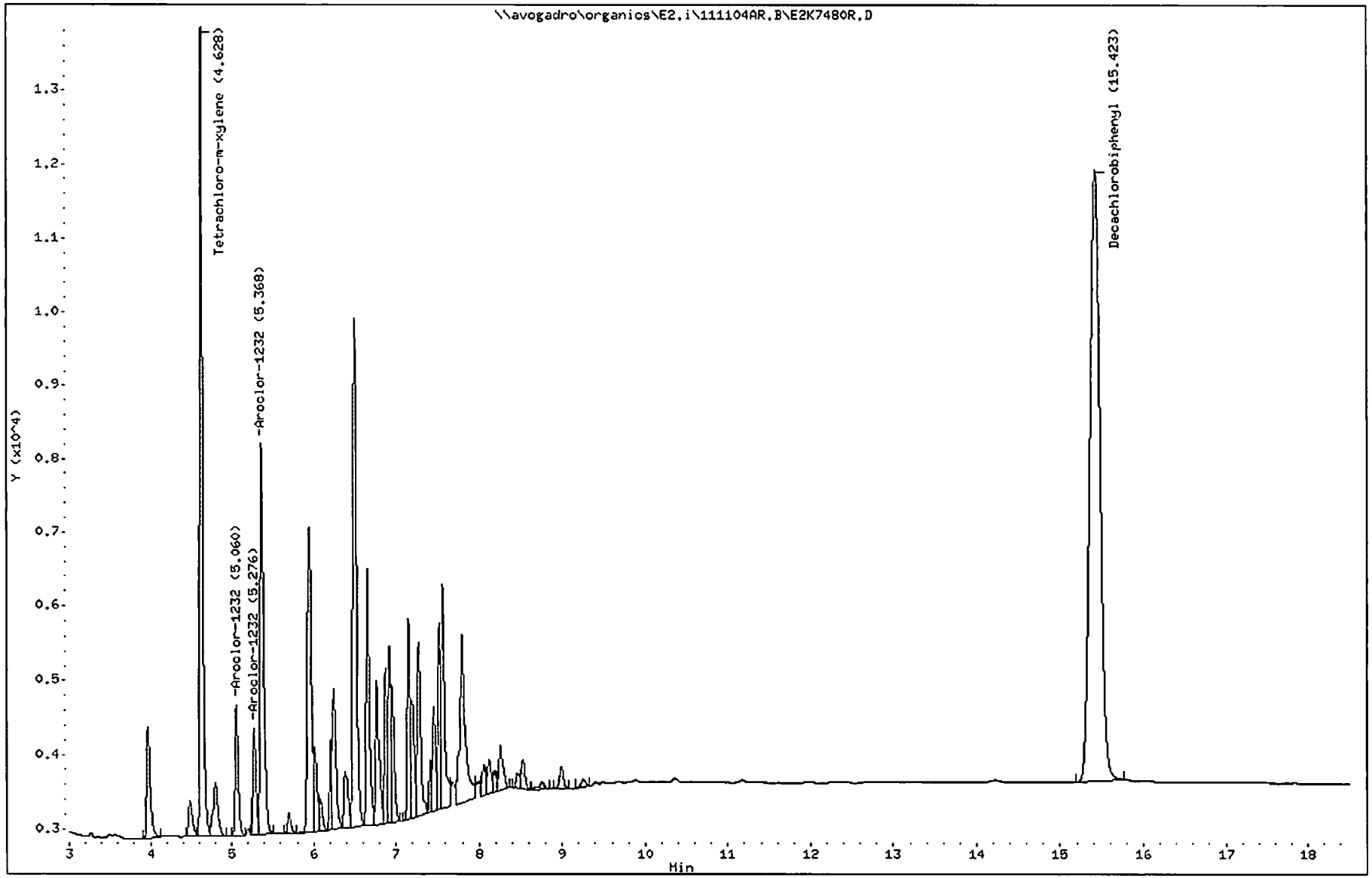
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.627	4.627	0.000	254882	0.02000	0.020			(a)
3 Aroclor-1232					CAS #: 11141-16-5			
5.059	5.059	0.000	46310	0.40000	0.40	80.00- 120.00	100.00	(a)
5.275	5.275	0.000	38429	0.40000	0.40	62.98- 102.98	82.98	
5.368	5.368	0.000	159174	0.40000	0.40	323.71- 363.71	343.71	
Average of Peak Amounts =				0.40000				
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.423	15.423	0.000	697053	0.04000	0.040			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7480R.D
Date : 04-NOV-2011 19:38
Client ID: AR12323J2 Instrument: E2.i
Sample Info: AR12323J2,AR12323J2,,ar1232.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPestII Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7481F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7481F.D
Lab Smp Id: AR12421J2 Client Smp ID: AR12421J2
Inj Date : 04-NOV-2011 19:59
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR12421J2,AR12421J2,,ar1242.sub,,
Misc Info : 1,1,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

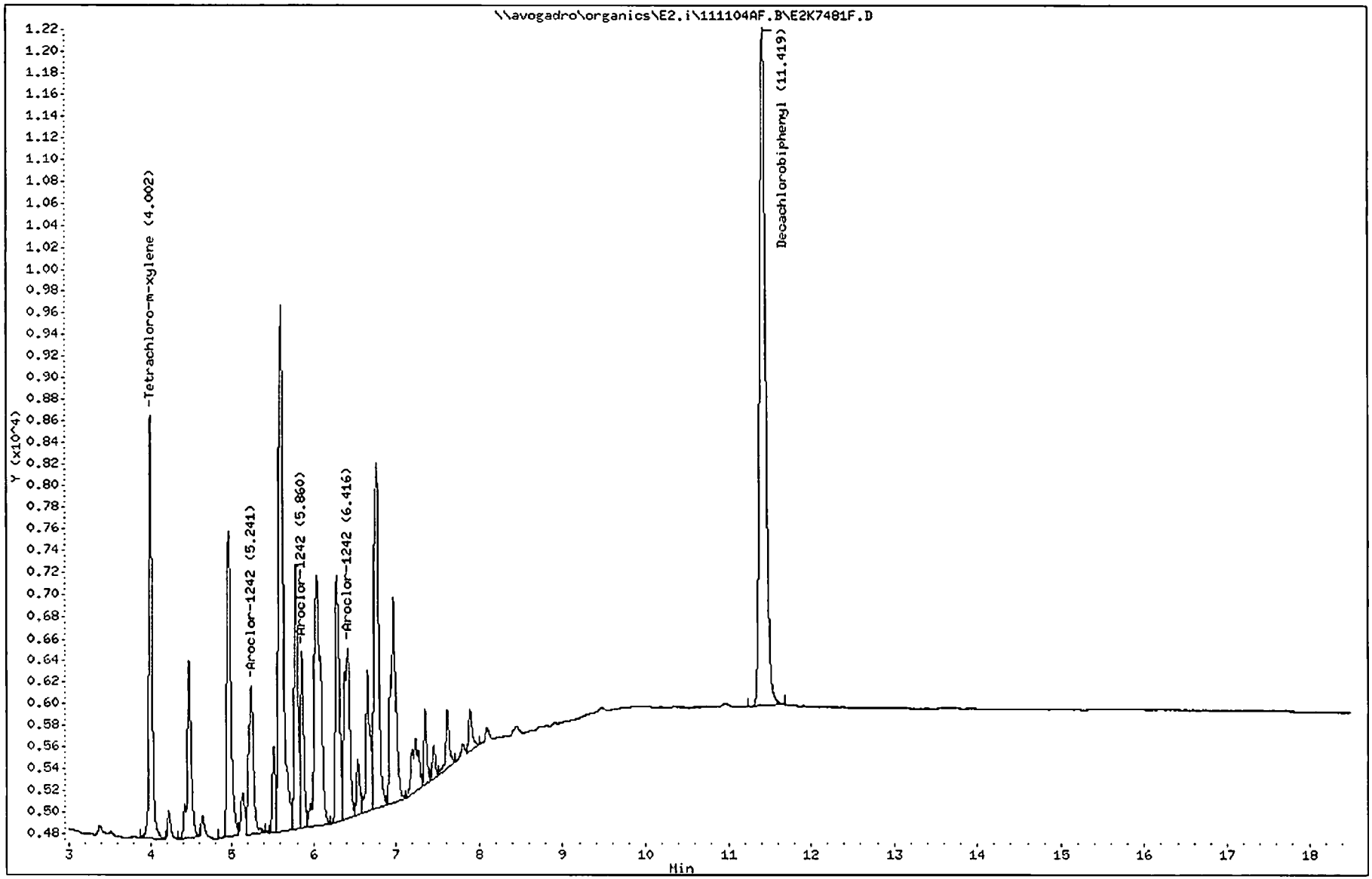
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.001	3.999	0.002	100505	0.00500	0.0048			(a)
6 Aroclor-1242					CAS #: 53469-21-9			
5.241	5.237	0.004	56283	0.10000	0.10	80.00- 120.00	100.00	(a)
5.859	5.858	0.001	44717	0.10000	0.10	62.39- 102.39	79.45	
6.416	6.412	0.004	77323	0.10000	0.10	116.75- 156.75	137.38	
Average of Peak Amounts =				0.10000				
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.418	11.417	0.001	316615	0.01000	0.011			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7481F.D
Date : 04-NOV-2011 19:59
Client ID: AR12421J2 Instrument: E2.i
Sample Info: AR12421J2,AR12421J2,,ar1242.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPest Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7481R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7481R.D
Lab Smp Id: AR12421J2 Client Smp ID: AR12421J2
Inj Date : 04-NOV-2011 19:59
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR12421J2,AR12421J2,,ar1242.sub,,
Misc Info : 1,1,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 04-NOV-2011 19:59 Cal File: E2K7481R.D
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

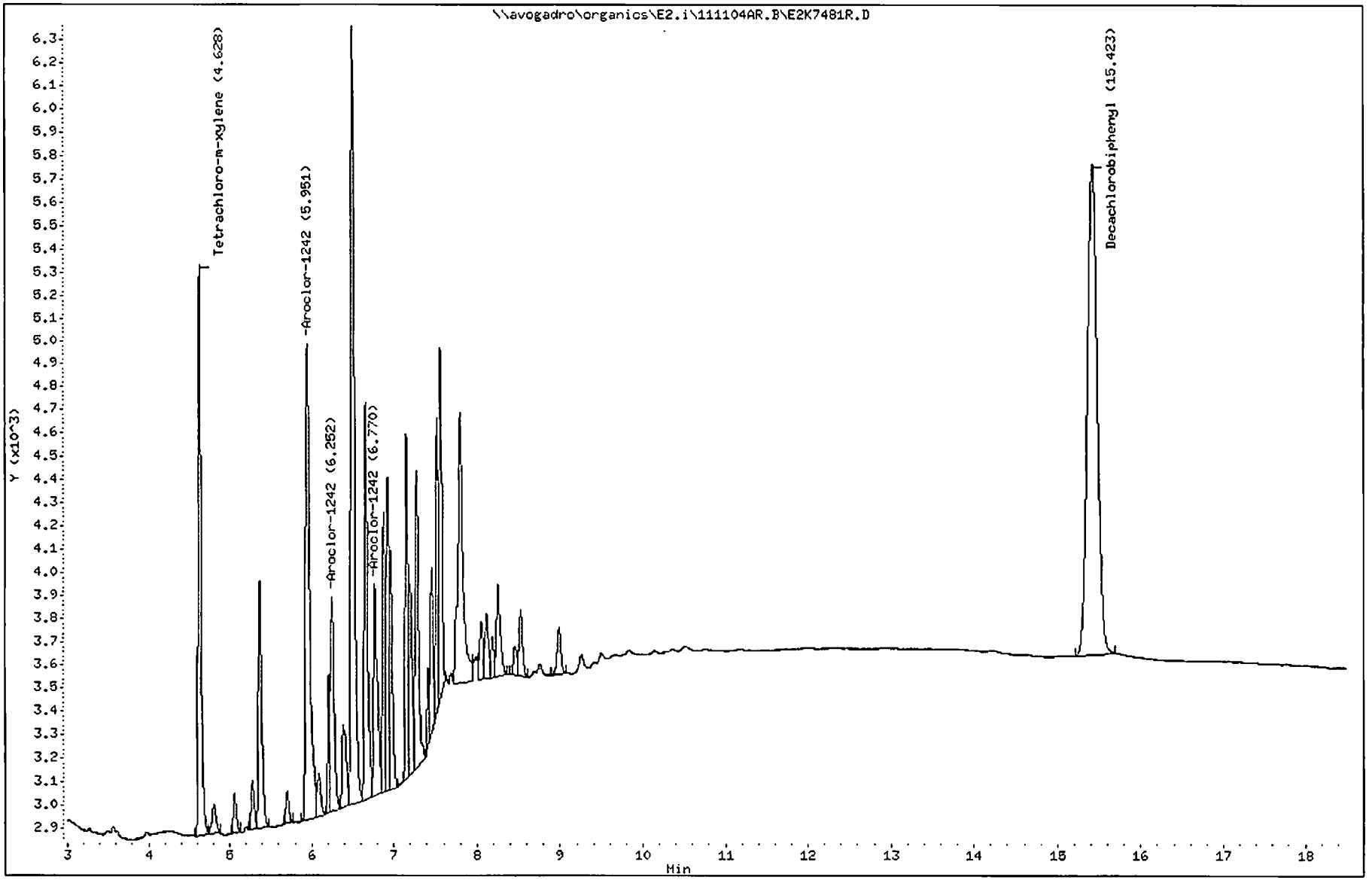
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
S 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.628	4.627	0.001	58298	0.00500	0.0048			(a)
4 Aroclor-1242					CAS #: 53469-21-9			
5.951	5.948	0.003	73461	0.10000	0.10	80.00- 120.00	100.00	(a)
6.252	6.250	0.002	25810	0.10000	0.10	22.01- 62.01	35.13	
6.769	6.769	0.000	28731	0.10000	0.10	29.71- 69.71	39.11	
Average of Peak Amounts =				0.10000				
S 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.422	15.423	-0.001	176282	0.01000	0.010			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7481R.D
Date : 04-NOV-2011 19:59
Client ID: AR12421J2 Instrument: E2.i
Sample Info: AR12421J2,AR12421J2,,ar1242.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPestII Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7483F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7483F.D
Lab Smp Id: AR12422J2 Client Smp ID: AR12422J2
Inj Date : 04-NOV-2011 20:41
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR12422J2,AR12422J2,,ar1242.sub,,
Misc Info : 1,2,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 5 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

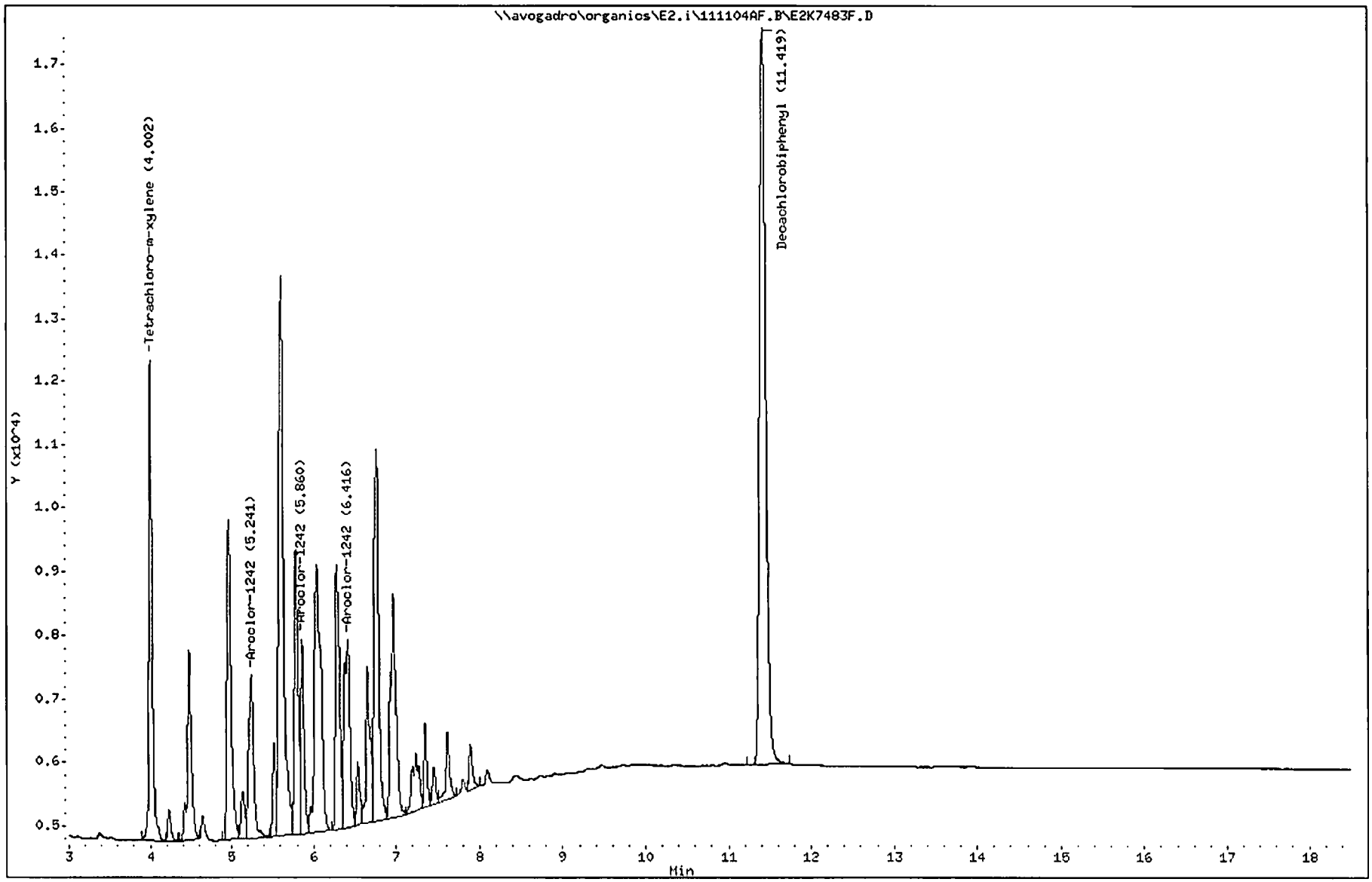
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.001	3.999	0.002	199999	0.01000	0.0096			(a)
6 Aroclor-1242					CAS #: 53469-21-9			
5.241	5.237	0.004	108873	0.20000	0.20	80.00- 120.00	100.00	(a)
5.860	5.858	0.002	85364	0.20000	0.20	62.39- 102.39	78.41	
6.416	6.412	0.004	147641	0.20000	0.20	116.75- 156.75	135.61	
Average of Peak Amounts =				0.20000				
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.418	11.417	0.001	607170	0.02000	0.021			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7483F.D
Date : 04-NOV-2011 20:41
Client ID: AR12422J2
Instrument: E2.i
Sample Info: AR12422J2,AR12422J2,,ar1242,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7483R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7483R.D
Lab Smp Id: AR12422J2 Client Smp ID: AR12422J2
Inj Date : 04-NOV-2011 20:41
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR12422J2,AR12422J2,,ar1242.sub,,
Misc Info : 1,2,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 04-NOV-2011 20:41 Cal File: E2K7483R.D
Als bottle: 5 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

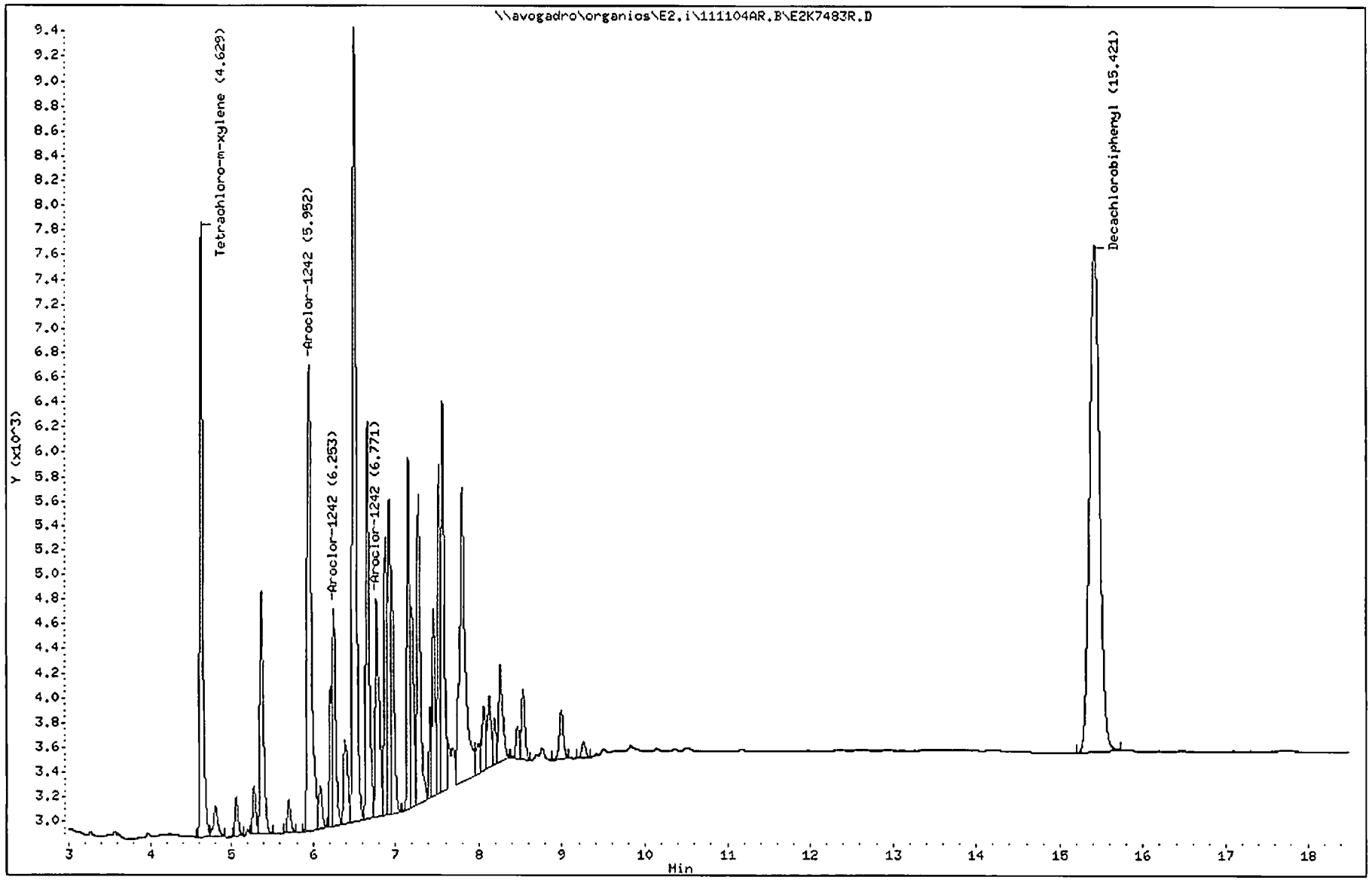
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.628	4.627	0.001	119092	0.01000	0.0098			(a)
4 Aroclor-1242					CAS #: 53469-21-9			
5.951	5.948	0.003	137085	0.20000	0.20	80.00- 120.00	100.00	(a)
6.253	6.250	0.003	50331	0.20000	0.20	22.01- 62.01	36.72	
6.770	6.769	0.001	55442	0.20000	0.20	29.71- 69.71	40.44	
Average of Peak Amounts =				0.20000				
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.421	15.423	-0.002	343043	0.02000	0.020			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7483R.D
Date : 04-NOV-2011 20:41
Client ID: AR12422J2
Instrument: E2.i
Sample Info: AR12422J2,AR12422J2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7484F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7484F.D
Lab Smp Id: AR12423J2 Client Smp ID: AR12423J2
Inj Date : 04-NOV-2011 21:01
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR12423J2,AR12423J2,,ar1242.sub,,
Misc Info : 1,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 6 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

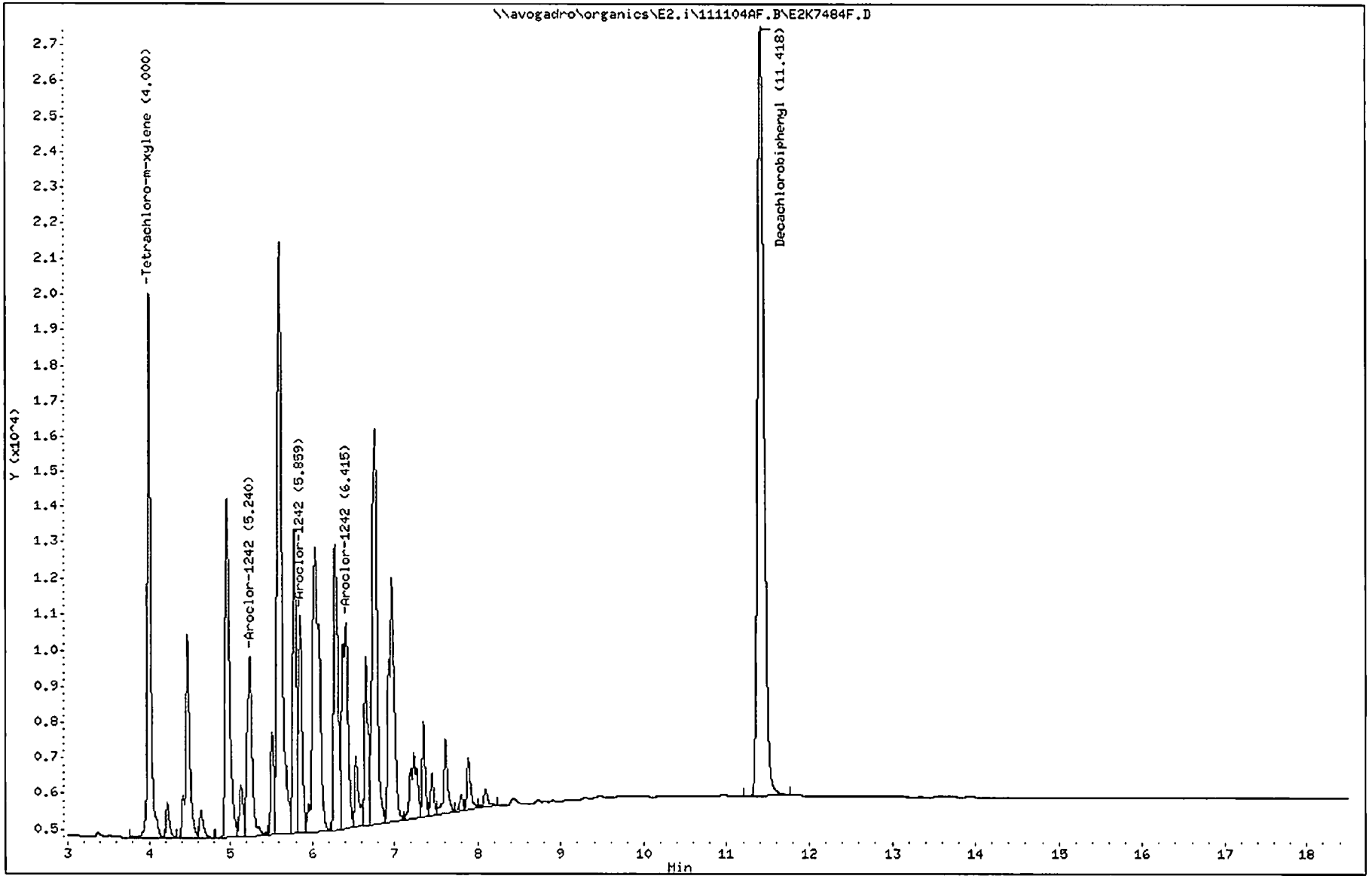
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
3.999	3.999	0.000	416464	0.02000	0.020			(a)
6 Aroclor-1242					CAS #: 53469-21-9			
5.239	5.237	0.002	216929	0.40000	0.40	80.00- 120.00	100.00	(a)
5.858	5.858	0.000	170889	0.40000	0.40	62.39- 102.39	78.78	
6.414	6.412	0.002	292371	0.40000	0.40	116.75- 156.75	134.78	
Average of Peak Amounts =				0.40000				
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.418	11.417	0.001	1153664	0.04000	0.040			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7484F.D
Date : 04-NOV-2011 21:01
Client ID: AR12423J2
Instrument: E2.i
Sample Info: AR12423J2,AR12423J2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7484R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7484R.D
Lab Smp Id: AR12423J2 Client Smp ID: AR12423J2
Inj Date : 04-NOV-2011 21:01
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR12423J2,AR12423J2,,ar1242.sub,,
Misc Info : 1,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:00 Cal File: E2K7504R.D
Als bottle: 6 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

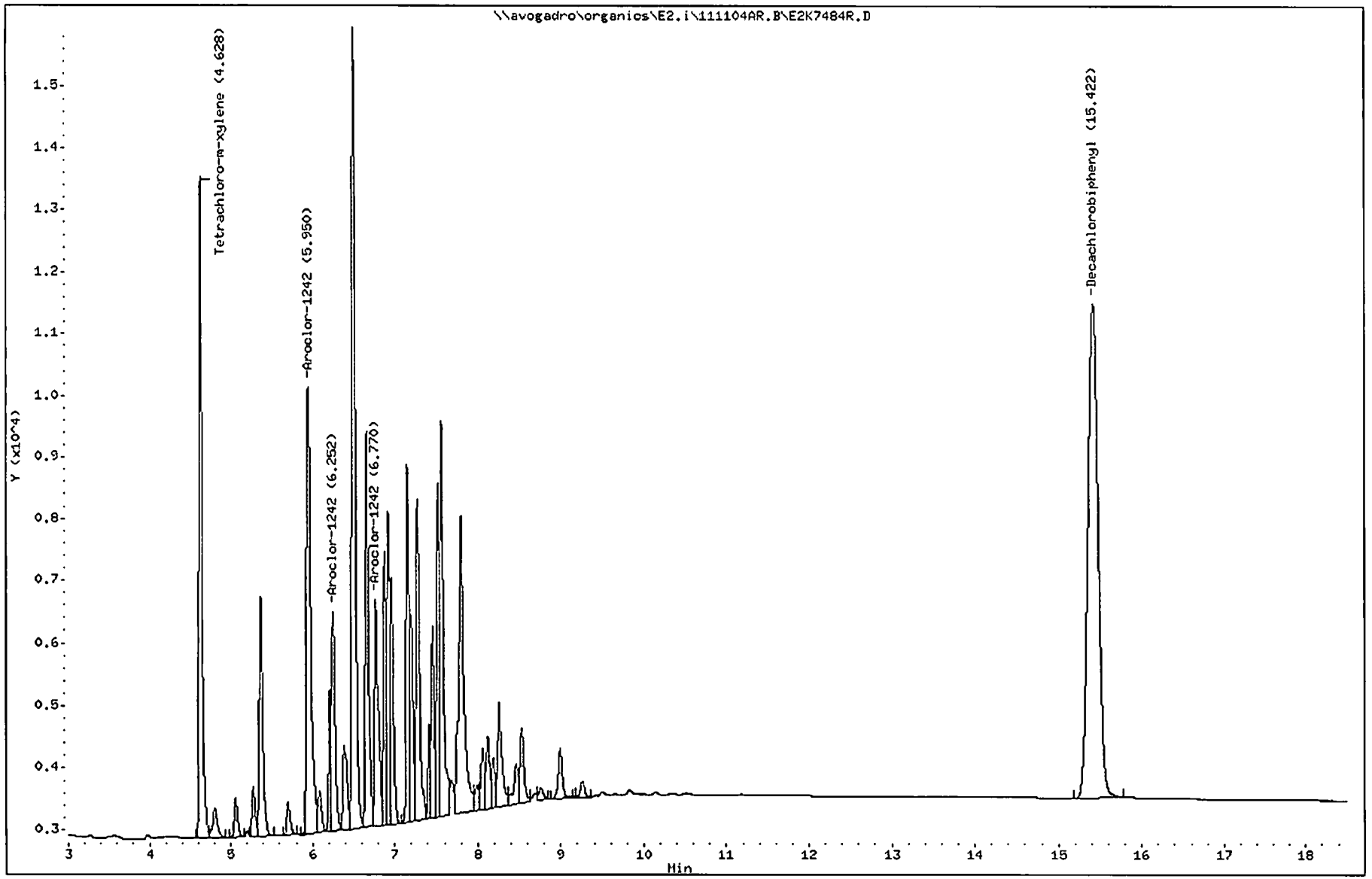
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.627	4.627	0.000	255597	0.02000	0.021			(a)
4 Aroclor-1242					CAS #: 53469-21-9			
5.950	5.948	0.002	266190	0.40000	0.38	80.00- 120.00	100.00	(a)
6.252	6.250	0.002	101740	0.40000	0.40	22.01- 62.01	38.22	
6.770	6.769	0.001	112373	0.40000	0.40	29.71- 69.71	42.22	
Average of Peak Amounts =					0.39333			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.421	15.423	-0.002	675680	0.04000	0.039			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7484R.D
Date : 04-NOV-2011 21:01
Client ID: AR12423J2 Instrument: E2.i
Sample Info: AR12423J2,AR12423J2,,ar1242.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPestII Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7485F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7485F.D
Lab Smp Id: AR12424J2 Client Smp ID: AR12424J2
Inj Date : 04-NOV-2011 21:22
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR12424J2,AR12424J2,,ar1242.sub,,
Misc Info : 1,4,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 7 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

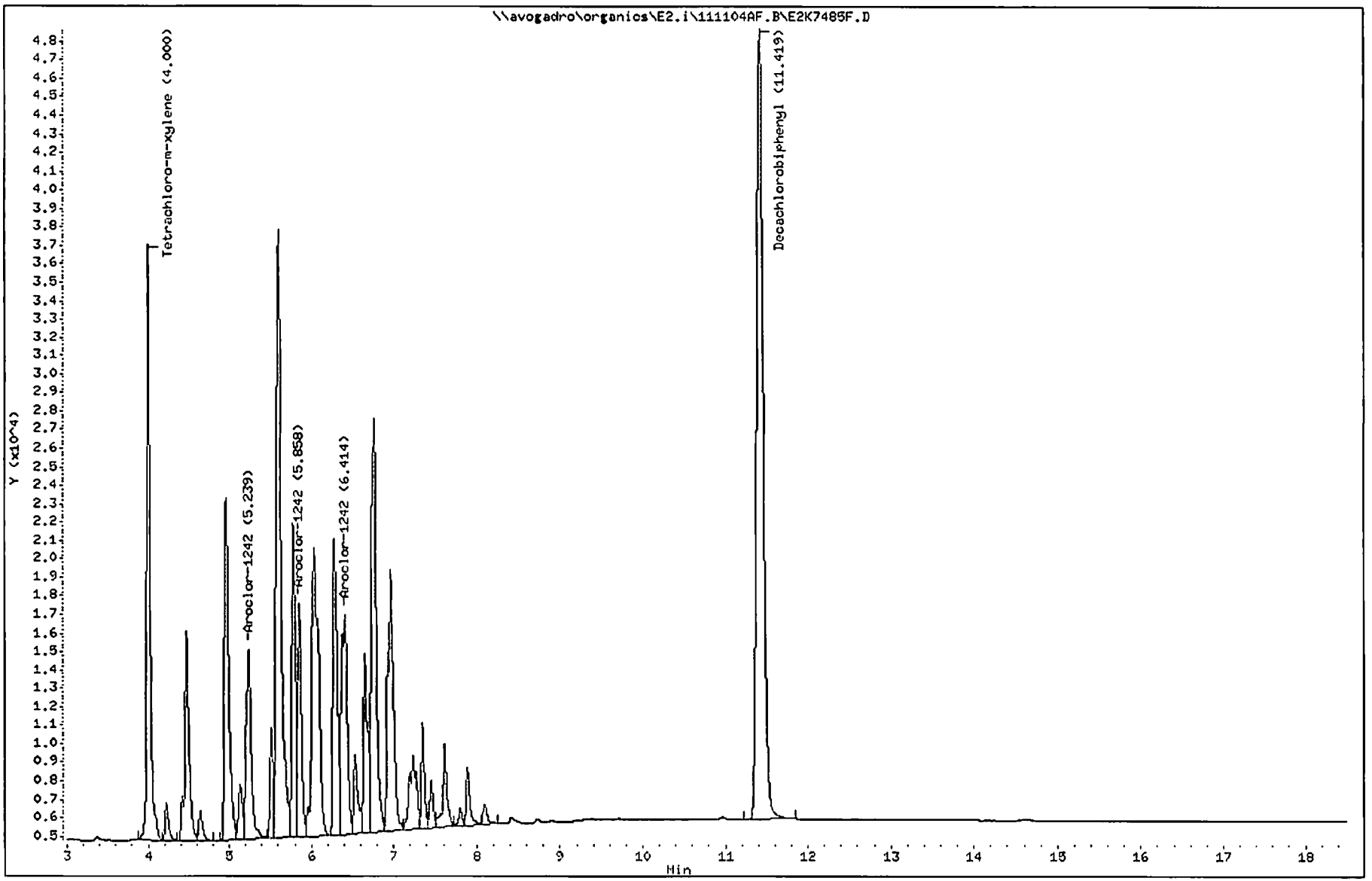
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.000	3.999	0.001	915474	0.04000	0.044			(a)
6 Aroclor-1242					CAS #: 53469-21-9			
5.239	5.237	0.002	456842	0.80000	0.84	80.00- 120.00	100.00	(a)
5.858	5.858	0.000	366747	0.80000	0.85	62.39- 102.39	80.28	
6.413	6.412	0.001	617517	0.80000	0.84	116.75- 156.75	135.17	
Average of Peak Amounts =					0.84333			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.418	11.417	0.001	2355215	0.08000	0.082			

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7485F.D
Date : 04-NOV-2011 21:22
Client ID: AR12424J2
Instrument: E2.i
Sample Info: AR12424J2,AR12424J2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7485R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7485R.D
Lab Smp Id: AR12424J2 Client Smp ID: AR12424J2
Inj Date : 04-NOV-2011 21:22
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR12424J2,AR12424J2,,ar1242.sub,,
Misc Info : 1,4,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 04-NOV-2011 21:22 Cal File: E2K7485R.D
Als bottle: 7 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

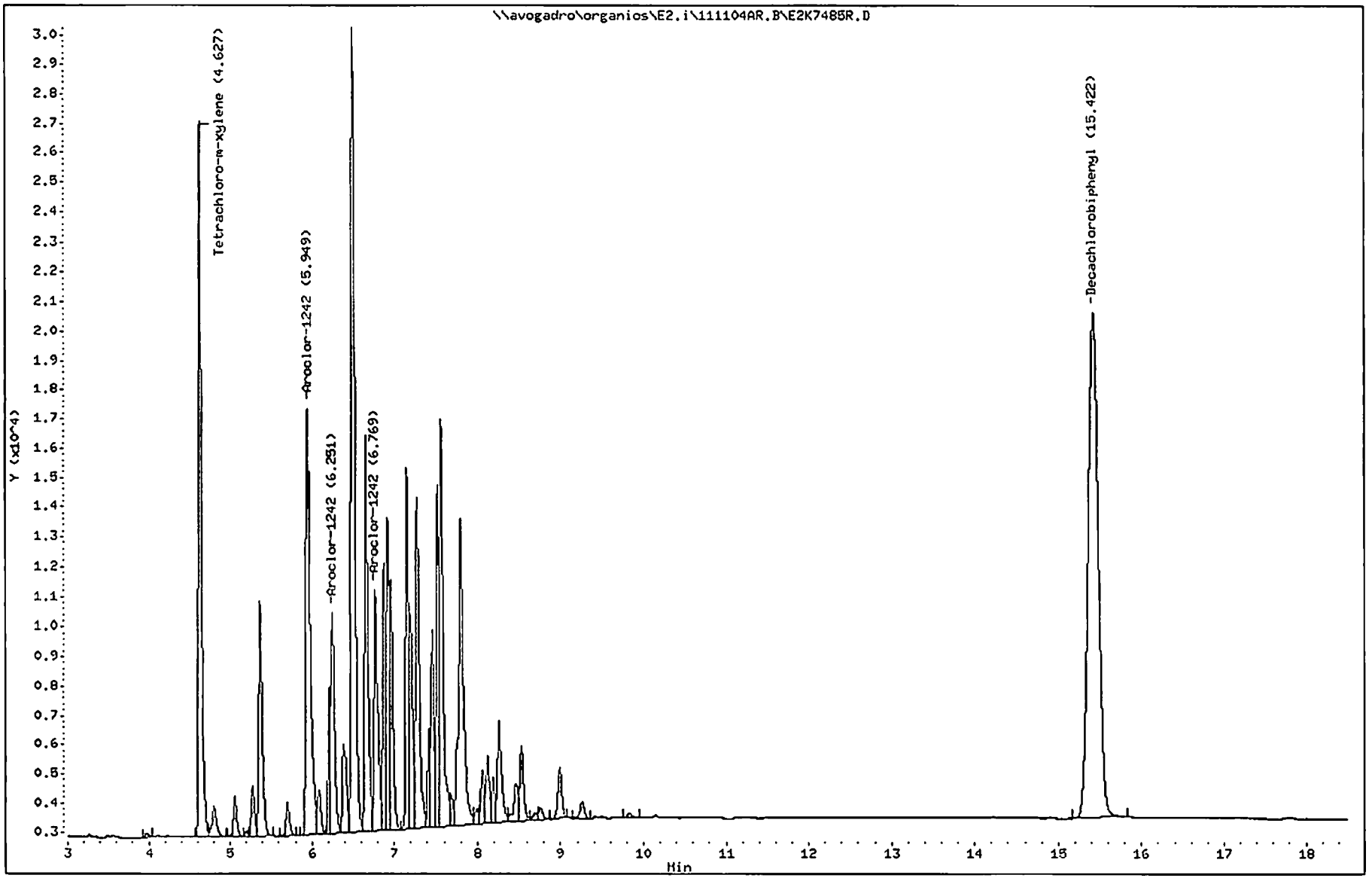
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.627	4.627	0.000	597554	0.04000	0.047			(a)
4 Aroclor-1242					CAS #: 53469-21-9			
5.949	5.948	0.001	543604	0.80000	0.79	80.00- 120.00	100.00	(a)
6.250	6.250	0.000	218350	0.80000	0.84	22.01- 62.01	40.17	
6.769	6.769	0.000	249481	0.80000	0.86	29.71- 69.71	45.89	
Average of Peak Amounts =					0.83000			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.422	15.423	-0.001	1458586	0.08000	0.083			

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7485R.D
Date : 04-NOV-2011 21:22
Client ID: AR12424J2 Instrument: E2.i
Sample Info: AR12424J2,AR12424J2,,ar1242,sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPestII Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7486F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

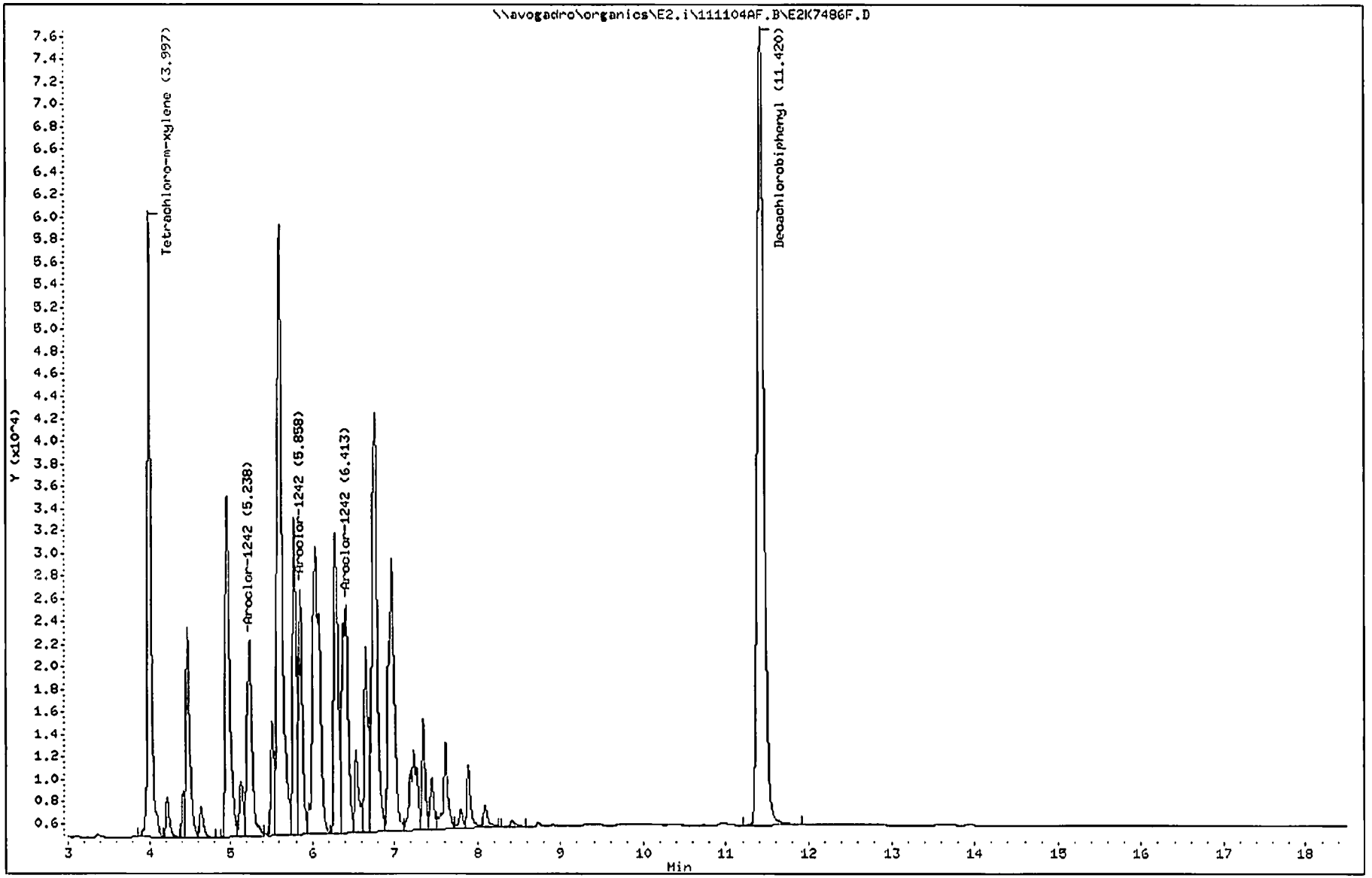
Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7486F.D
Lab Smp Id: AR12425J2 Client Smp ID: AR12425J2
Inj Date : 04-NOV-2011 21:43
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR12425J2,AR12425J2,,ar1242.sub,,
Misc Info : 1,5,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 8 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
3.997	3.999	-0.002	1619653	0.08000	0.078			
6 Aroclor-1242					CAS #: 53469-21-9			
5.237	5.237	0.000	780090	1.60000	1.4	80.00- 120.00		100.00
5.858	5.858	0.000	642692	1.60000	1.5	62.39- 102.39		82.39
6.412	6.412	0.000	1066746	1.60000	1.4	116.75- 156.75		136.75
Average of Peak Amounts =					1.43333			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.420	11.417	0.003	3965418	0.16000	0.14			

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7486F.D
Date : 04-NOV-2011 21:43
Client ID: AR12425J2 Instrument: E2.i
Sample Info: AR12425J2,AR12425J2,,ar1242.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPest Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7486R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

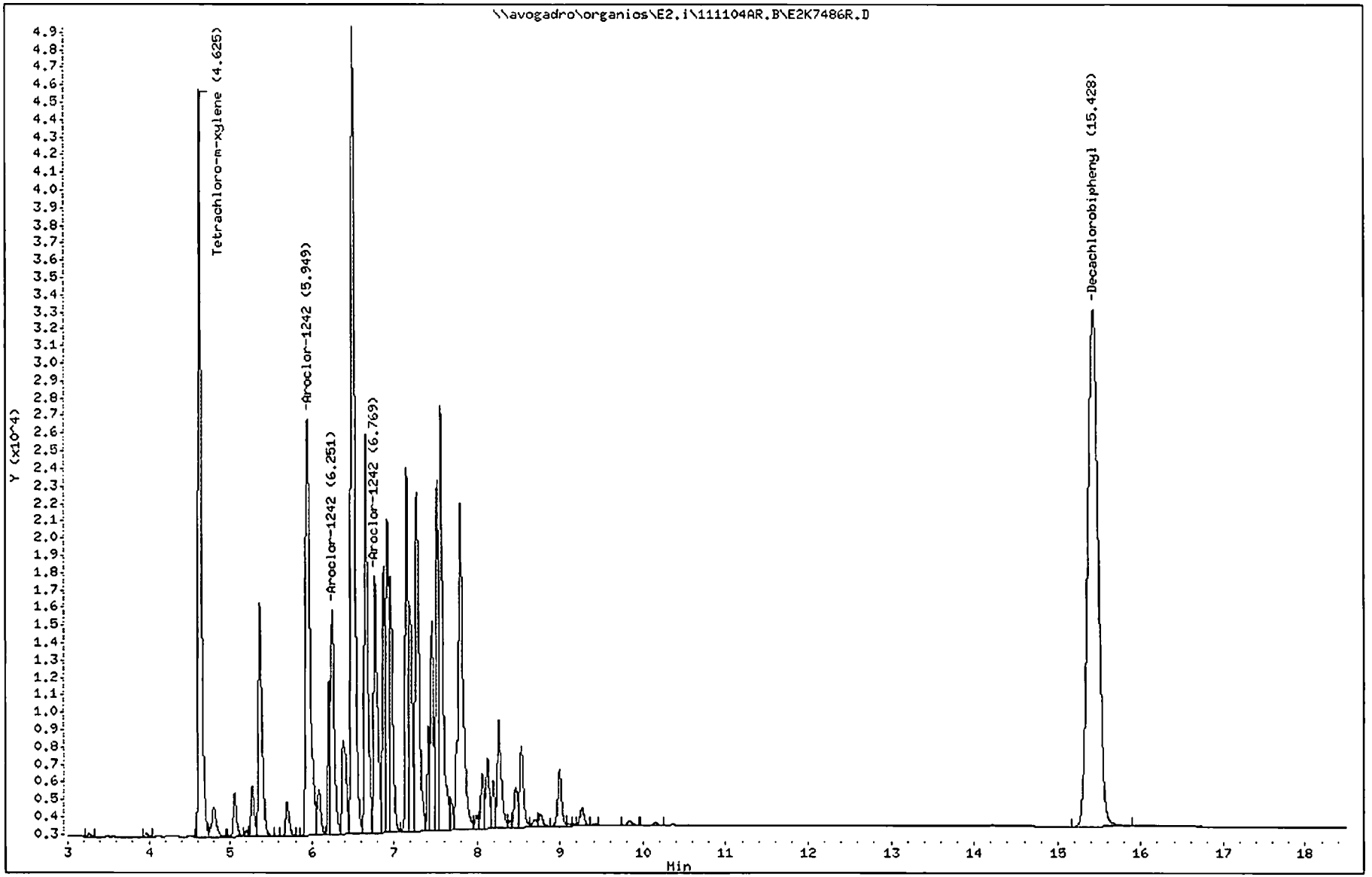
Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7486R.D
Lab Smp Id: AR12425J2 Client Smp ID: AR12425J2
Inj Date : 04-NOV-2011 21:43
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR12425J2,AR12425J2,,ar1242.sub,,
Misc Info : 1,5,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 04-NOV-2011 21:43 Cal File: E2K7486R.D
Als bottle: 8 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

			AMOUNTS CAL-AMT	AMOUNTS ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.625	4.627	-0.002	1100411	0.08000	0.084		
4 Aroclor-1242					CAS #: 53469-21-9		
5.948	5.948	0.000	912331	1.60000	1.4	80.00- 120.00	100.00
6.250	6.250	0.000	383275	1.60000	1.5	22.01- 62.01	42.01
6.769	6.769	0.000	453551	1.60000	1.6	29.71- 69.71	49.71
Average of Peak Amounts =					1.50000		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.427	15.423	0.004	2566319	0.16000	0.15		

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7486R.D
Date : 04-NOV-2011 21:43
Client ID: AR12425J2 Instrument: E2.i
Sample Info: AR12425J2,AR12425J2,,ar1242.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPestII Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7487F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7487F.D
Lab Smp Id: AR12481J2 Client Smp ID: AR12481J2
Inj Date : 04-NOV-2011 22:04
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR12481J2,AR12481J2,,ar1248.sub,,
Misc Info : 1,1,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 9 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

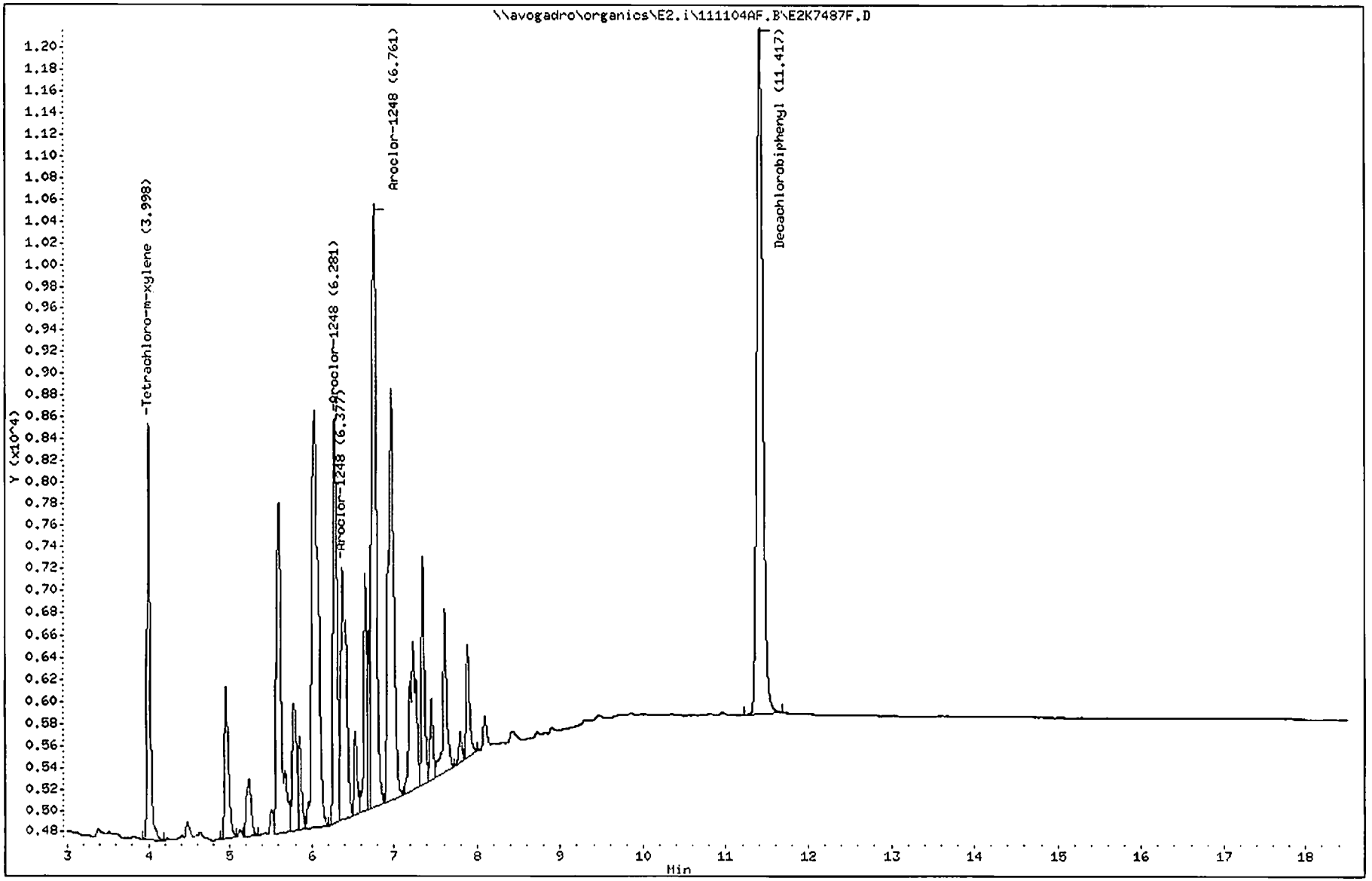
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
3.998	3.999	-0.001	95918	0.00500	0.0046			(a)
7 Aroclor-1248					CAS #: 12672-29-6			
6.280	6.280	0.000	122389	0.10000	0.11	80.00- 120.00	100.00	(a)
6.376	6.376	0.000	104863	0.10000	0.11	79.66- 119.66	85.68	
6.760	6.762	-0.002	223625	0.10000	0.11	164.53- 204.53	182.72	
Average of Peak Amounts =				0.11000				
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.416	11.417	-0.001	320773	0.01000	0.011			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7487F.D
Date : 04-NOV-2011 22:04
Client ID: AR12481J2
Instrument: E2.i
Sample Info: AR12481J2,AR12481J2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7487R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7487R.D
Lab Smp Id: AR12481J2 Client Smp ID: AR12481J2
Inj Date : 04-NOV-2011 22:04
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR12481J2,AR12481J2,,ar1248.sub,,
Misc Info : 1,1,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 04-NOV-2011 22:04 Cal File: E2K7487R.D
Als bottle: 9 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

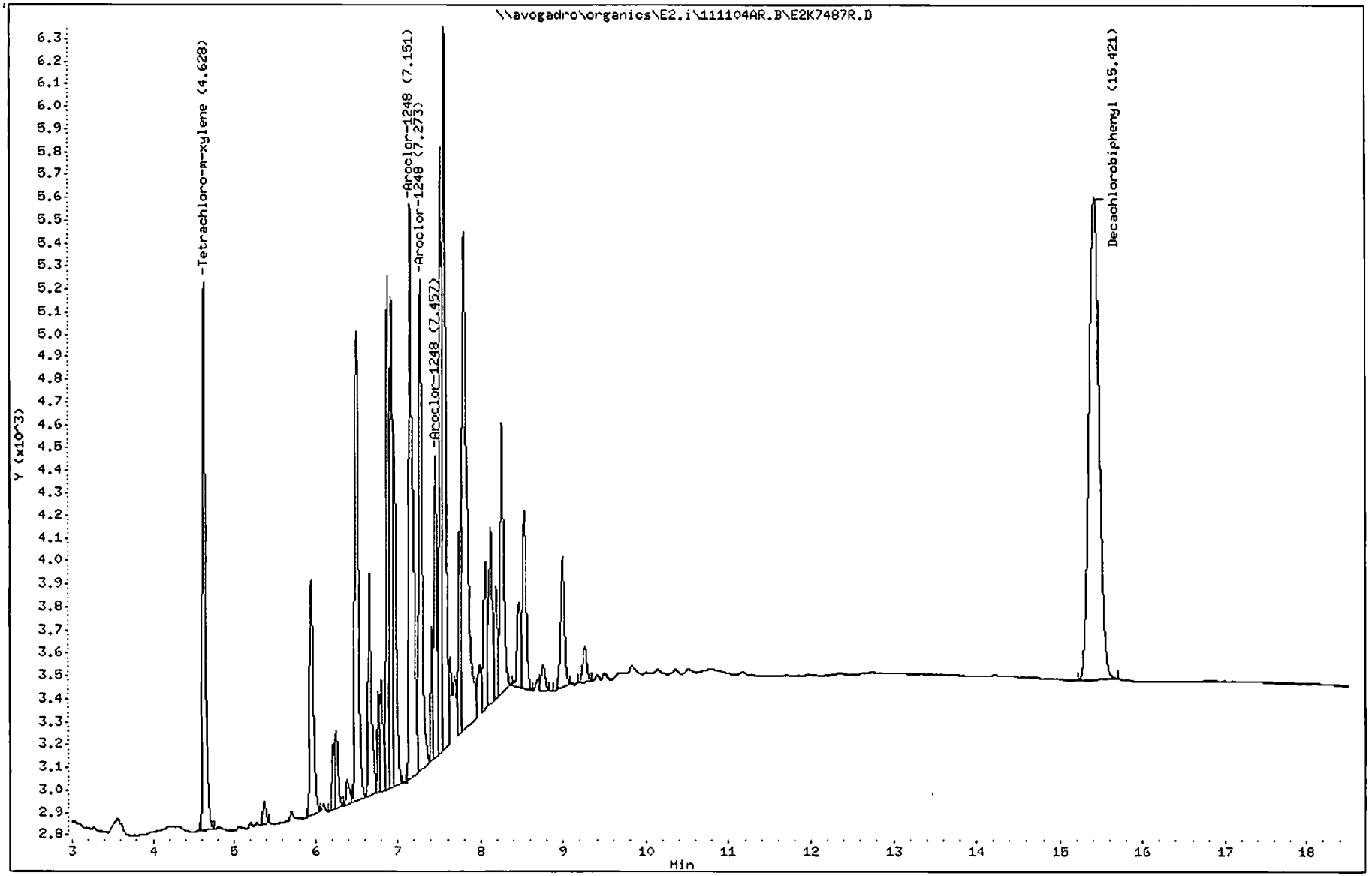
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.627	4.627	0.000	57813	0.00500	0.0044			(a)
5 Aroclor-1248					CAS #: 12672-29-6			
7.151	7.149	0.002	79924	0.10000	0.10	80.00- 120.00	100.00	(a)
7.272	7.271	0.001	59396	0.10000	0.099	62.28- 102.28	74.32	
7.457	7.455	0.002	30173	0.10000	0.10	20.69- 60.69	37.75	
Average of Peak Amounts =					0.09967			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.420	15.423	-0.003	177547	0.01000	0.010			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7487R.D
Date : 04-NOV-2011 22:04
Client ID: AR12481J2
Instrument: E2.i
Sample Info: AR12481J2,AR12481J2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7489F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7489F.D
Lab Smp Id: AR12482J2 Client Smp ID: AR12482J2
Inj Date : 04-NOV-2011 22:46
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR12482J2,AR12482J2,,ar1248.sub,,
Misc Info : 1,2,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 11 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

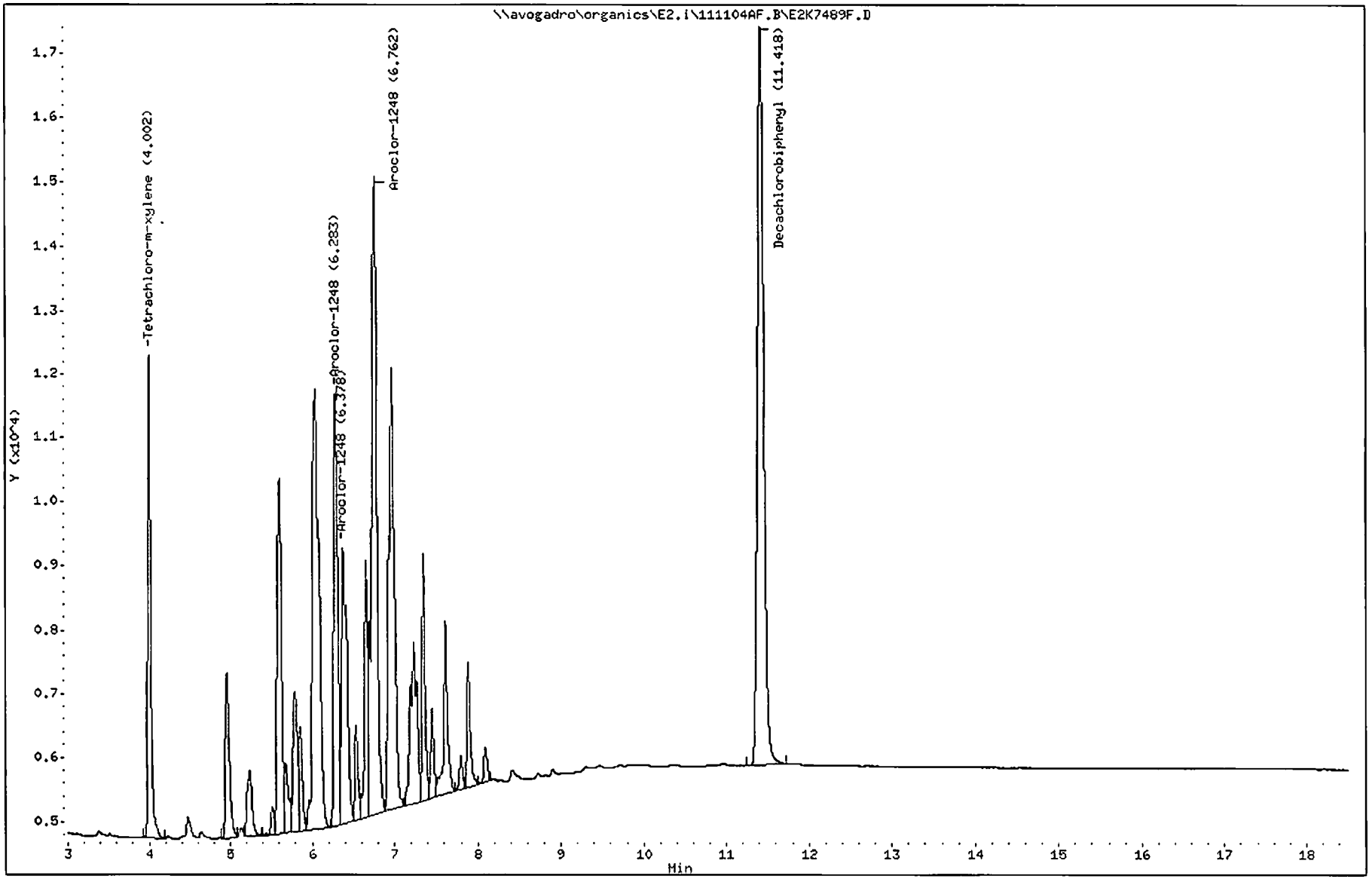
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.001	3.999	0.002	190934	0.01000	0.0092			(a)
7 Aroclor-1248					CAS #: 12672-29-6			
6.282	6.280	0.002	227267	0.20000	0.21	80.00- 120.00	100.00	(a)
6.378	6.376	0.002	199486	0.20000	0.20	79.66- 119.66	87.78	
6.761	6.762	-0.001	464536	0.20000	0.22	164.53- 204.53	204.40	
Average of Peak Amounts =					0.21000			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.418	11.417	0.001	600896	0.02000	0.021			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7489F.D
Date : 04-NOV-2011 22:46
Client ID: AR12482J2
Instrument: E2.i
Sample Info: AR12482J2,AR12482J2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7489R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7489R.D
Lab Smp Id: AR12482J2 Client Smp ID: AR12482J2
Inj Date : 04-NOV-2011 22:46
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR12482J2,AR12482J2,,ar1248.sub,,
Misc Info : 1,2,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 04-NOV-2011 22:46 Cal File: E2K7489R.D
Als bottle: 11 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

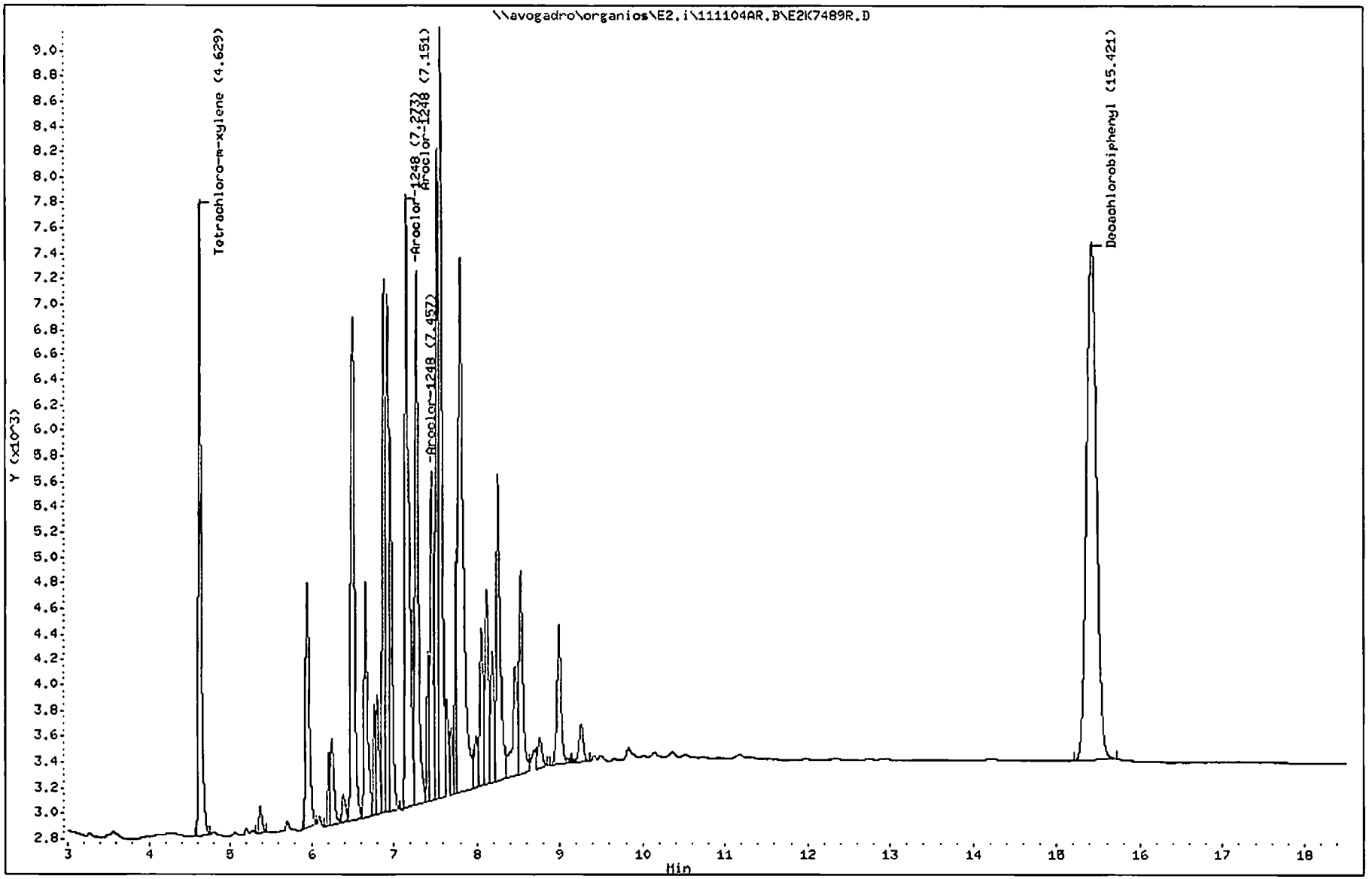
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.628	4.627	0.001	118224	0.01000	0.0091			(a)
5 Aroclor-1248					CAS #: 12672-29-6			
7.151	7.149	0.002	154885	0.20000	0.20	80.00- 120.00	100.00	(a)
7.272	7.271	0.001	118905	0.20000	0.20	62.28- 102.28	76.77	
7.457	7.455	0.002	59455	0.20000	0.20	20.69- 60.69	38.39	
Average of Peak Amounts =				0.20000				
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.421	15.423	-0.002	339380	0.02000	0.020			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7489R.D
Date : 04-NOV-2011 22:46
Client ID: AR12482J2
Instrument: E2.i
Sample Info: AR12482J2,AR12482J2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7490F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7490F.D
Lab Smp Id: AR12483J2 Client Smp ID: AR12483J2
Inj Date : 04-NOV-2011 23:07
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR12483J2,AR12483J2,,ar1248.sub,,
Misc Info : 1,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 12 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

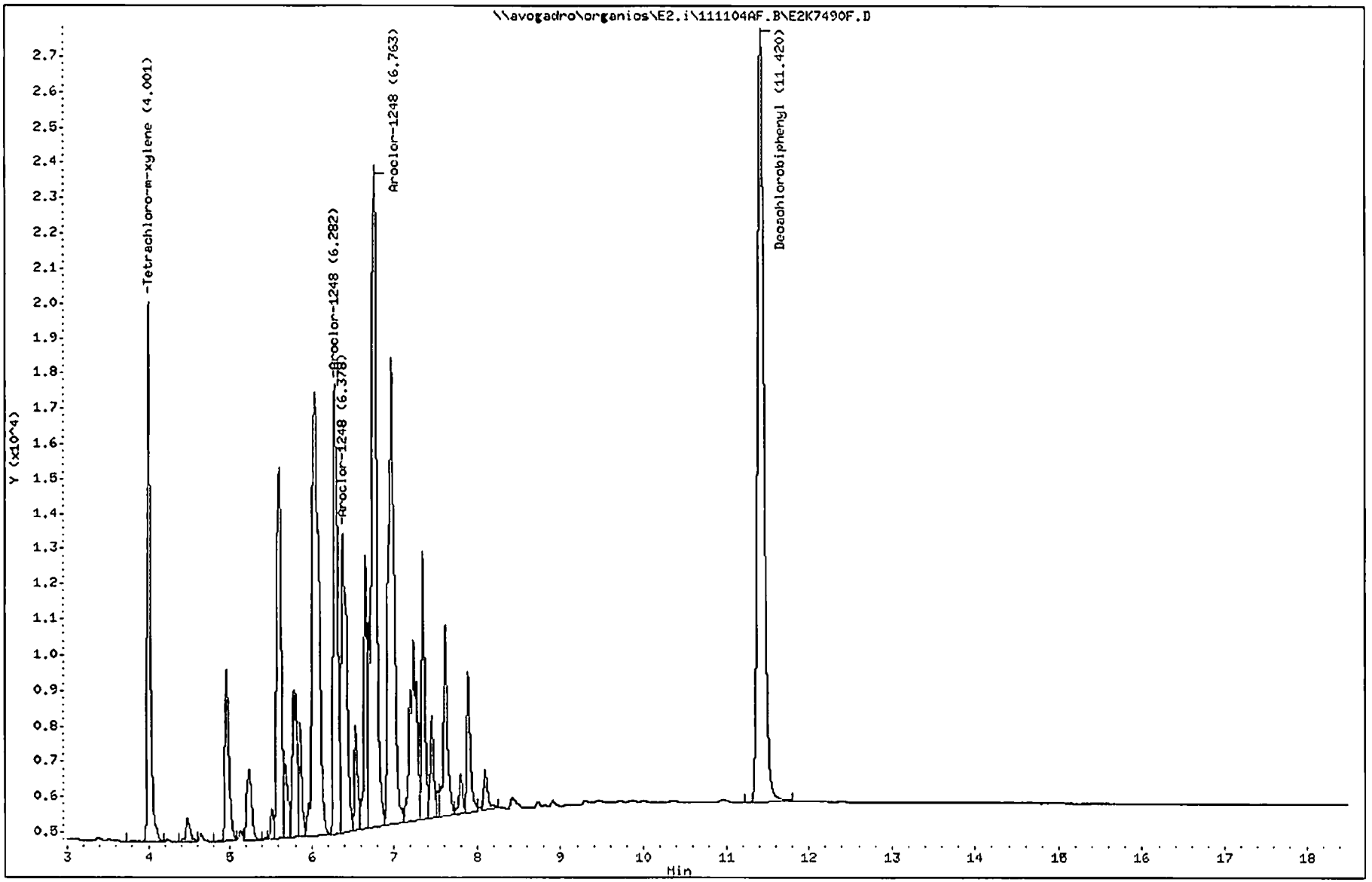
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO	
RT	EXP RT	DLT RT	RESPONSE					
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.001	3.999	0.002	394001	0.02000	0.019			(a)
7 Aroclor-1248					CAS #: 12672-29-6			
6.282	6.280	0.002	432274	0.40000	0.40	80.00- 120.00	100.00	(a)
6.377	6.376	0.001	395189	0.40000	0.40	79.66- 119.66	91.42	
6.762	6.762	0.000	896313	0.40000	0.43	164.53- 204.53	207.35	
Average of Peak Amounts =					0.41000			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.420	11.417	0.003	1175181	0.04000	0.041			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7490F.D
Date : 04-NOV-2011 23:07
Client ID: AR12483J2
Instrument: E2.i
Sample Info: AR12483J2,AR12483J2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7490R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7490R.D
Lab Smp Id: AR12483J2 Client Smp ID: AR12483J2
Inj Date : 04-NOV-2011 23:07
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR12483J2,AR12483J2,,ar1248.sub,,
Misc Info : 1,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:00 Cal File: E2K7504R.D
Als bottle: 12 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

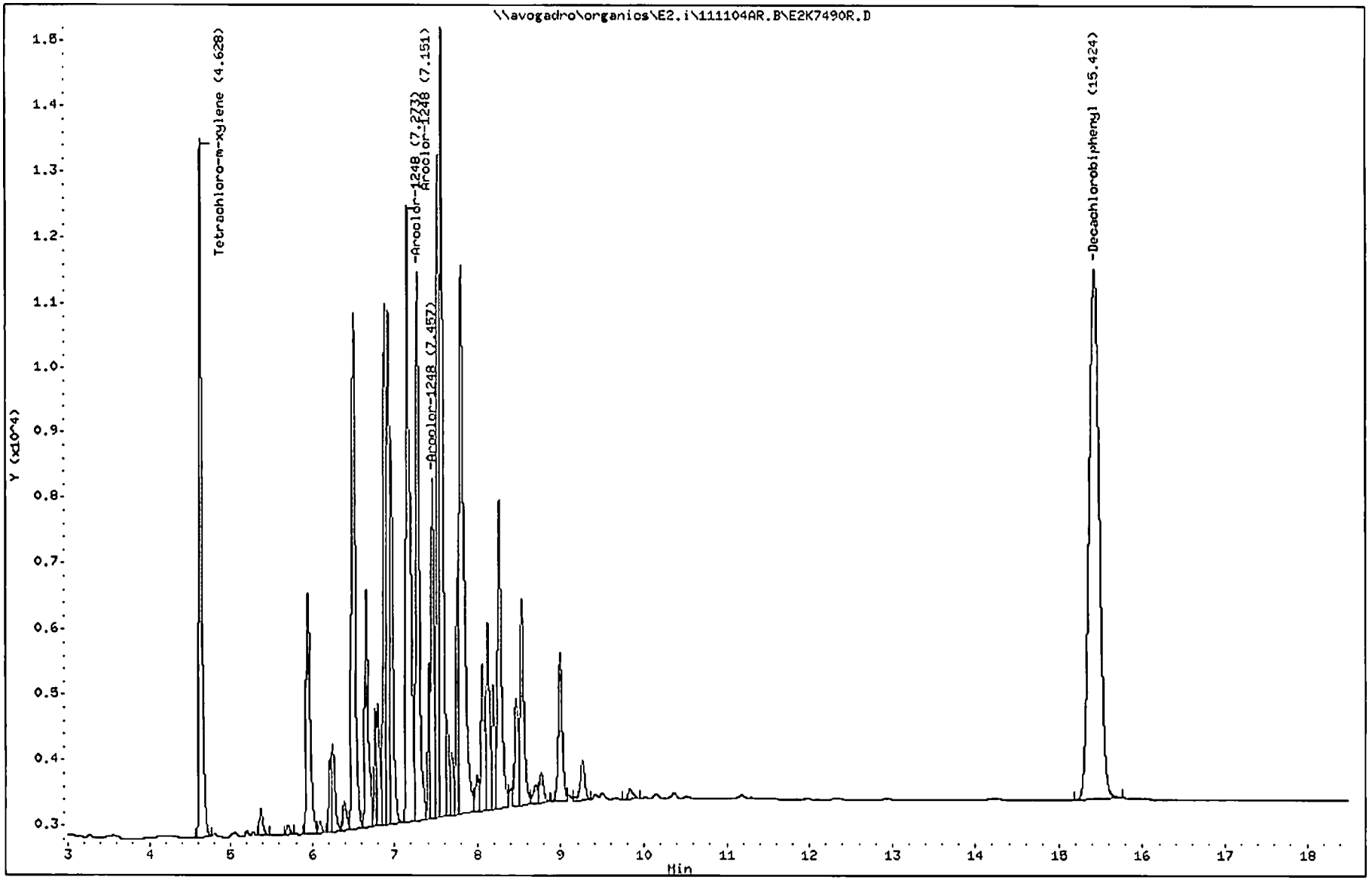
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT	AMOUNTS ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.628	4.627	0.001	252067	0.02000	0.019		(a)
5 Aroclor-1248					CAS #: 12672-29-6		
7.151	7.149	0.002	307133	0.40000	0.39	80.00- 120.00	100.00(a)
7.272	7.271	0.001	241034	0.40000	0.40	62.28- 102.28	78.48
7.457	7.455	0.002	119839	0.40000	0.40	20.69- 60.69	39.02
Average of Peak Amounts =					0.39667		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.423	15.423	0.000	688747	0.04000	0.040		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7490R.D
Date : 04-NOV-2011 23:07
Client ID: AR12483J2
Instrument: E2.i
Sample Info: AR12483J2,AR12483J2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7491F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7491F.D
Lab Smp Id: AR12484J2 Client Smp ID: AR12484J2
Inj Date : 04-NOV-2011 23:28
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR12484J2,AR12484J2,,ar1248.sub,,
Misc Info : 1,4,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 13 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

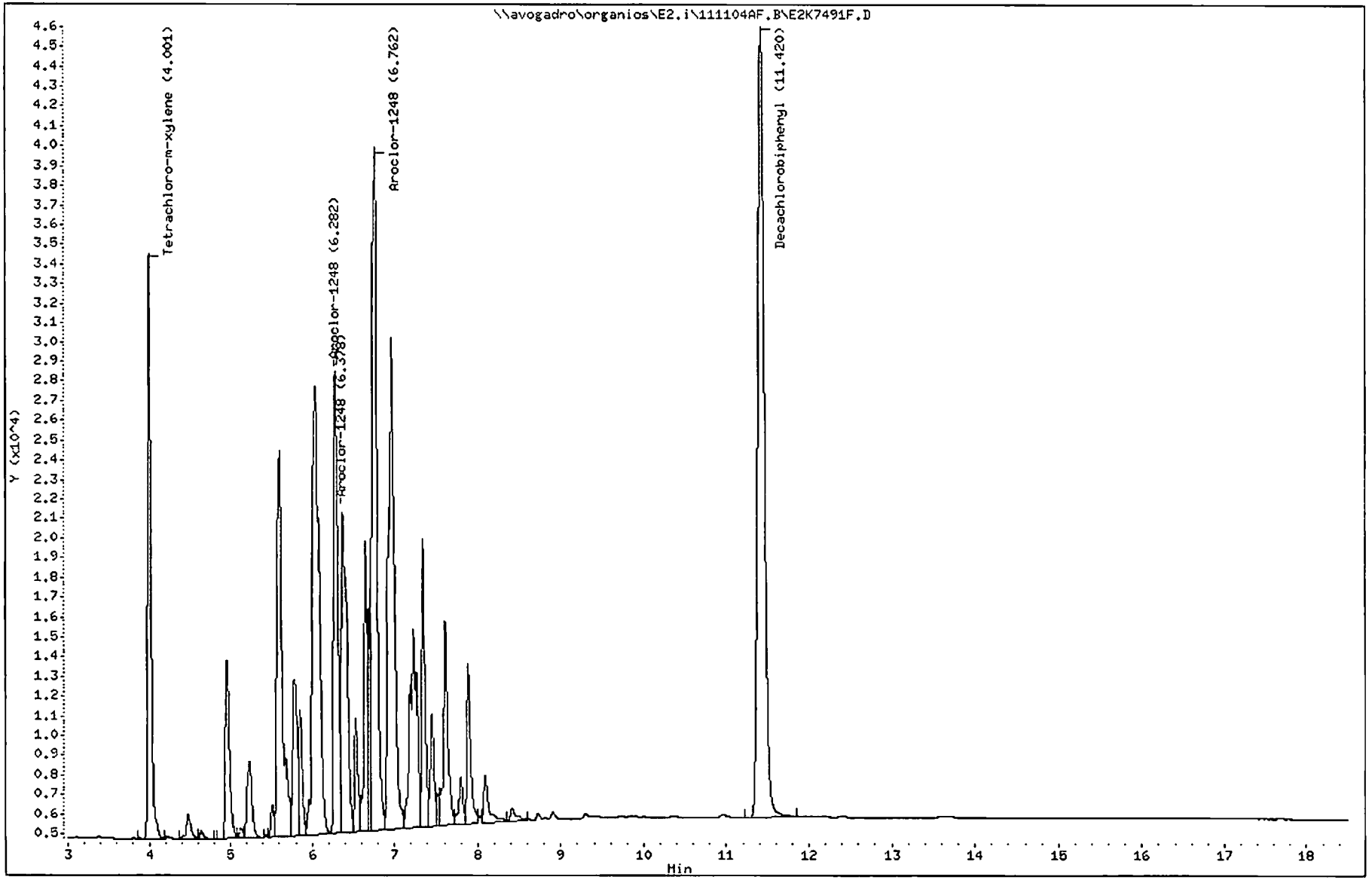
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.001	3.999	0.002	796726	0.04000	0.038			(a)
7 Aroclor-1248					CAS #: 12672-29-6			
6.281	6.280	0.001	810908	0.80000	0.76	80.00- 120.00	100.00	(a)
6.377	6.376	0.001	775167	0.80000	0.79	79.66- 119.66	95.59	
6.762	6.762	0.000	1501097	0.80000	0.73	164.53- 204.53	185.11	
Average of Peak Amounts =					0.76000			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.420	11.417	0.003	2210267	0.08000	0.077			

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7491F.D
Date : 04-NOV-2011 23:28
Client ID: AR12484J2
Instrument: E2.i
Sample Info: AR12484J2,AR12484J2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7491R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7491R.D
Lab Smp Id: AR12484J2 Client Smp ID: AR12484J2
Inj Date : 04-NOV-2011 23:28
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR12484J2,AR12484J2,,ar1248.sub,,
Misc Info : 1,4,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 04-NOV-2011 23:28 Cal File: E2K7491R.D
Als bottle: 13 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

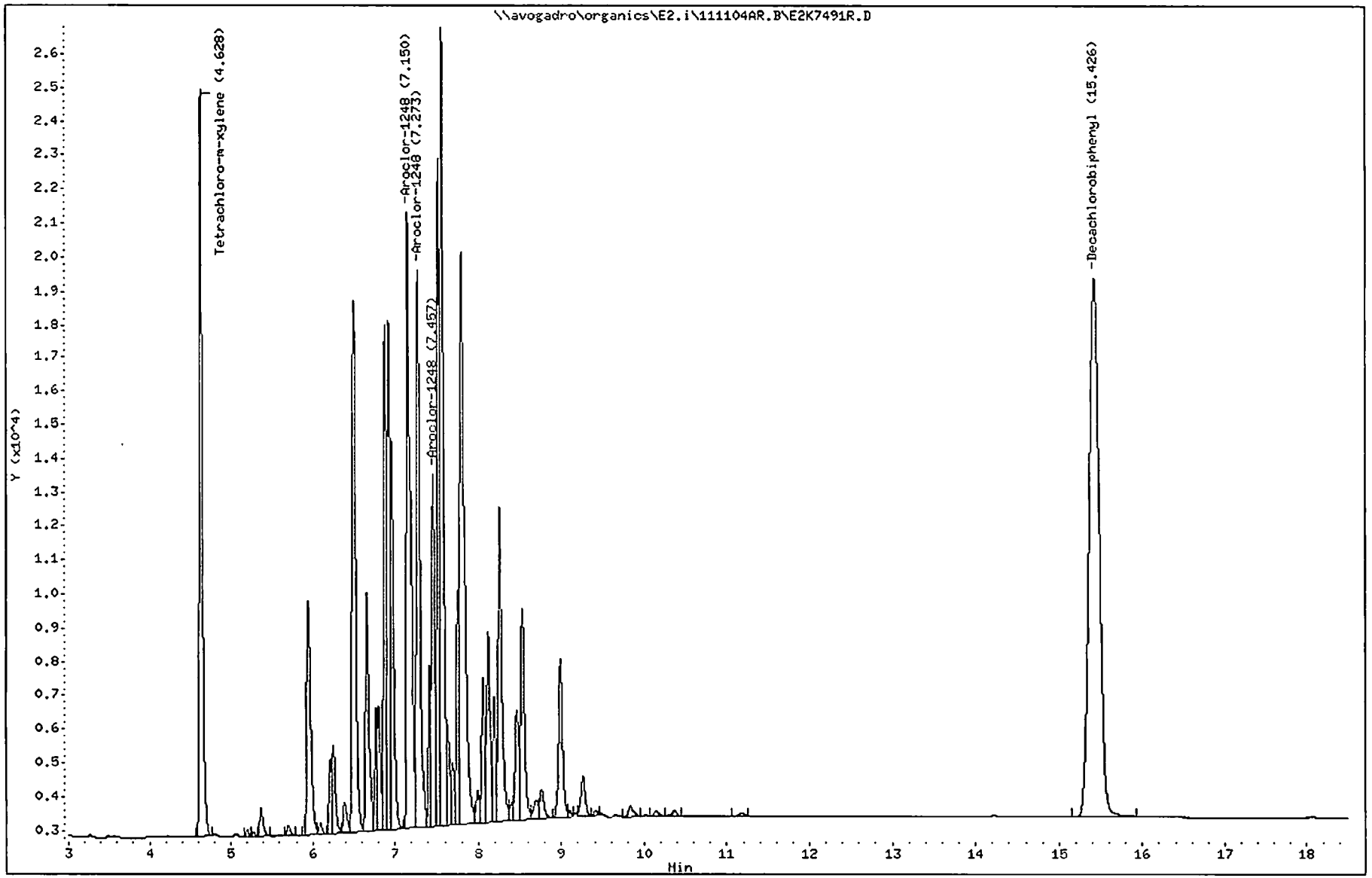
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.627	4.627	0.000	536251	0.04000	0.042			(a)
5 Aroclor-1248					CAS #: 12672-29-6			
7.150	7.149	0.001	606282	0.80000	0.78	80.00- 120.00	100.00	(a)
7.272	7.271	0.001	486647	0.80000	0.81	62.28- 102.28	80.27	
7.456	7.455	0.001	240822	0.80000	0.80	20.69- 60.69	39.72	
Average of Peak Amounts =					0.79667			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.425	15.423	0.002	1368127	0.08000	0.080			

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7491R.D
Date : 04-NOV-2011 23:28
Client ID: AR12484J2 Instrument: E2.i
Sample Info: AR12484J2,AR12484J2,,ar1248.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPestII Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7492F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

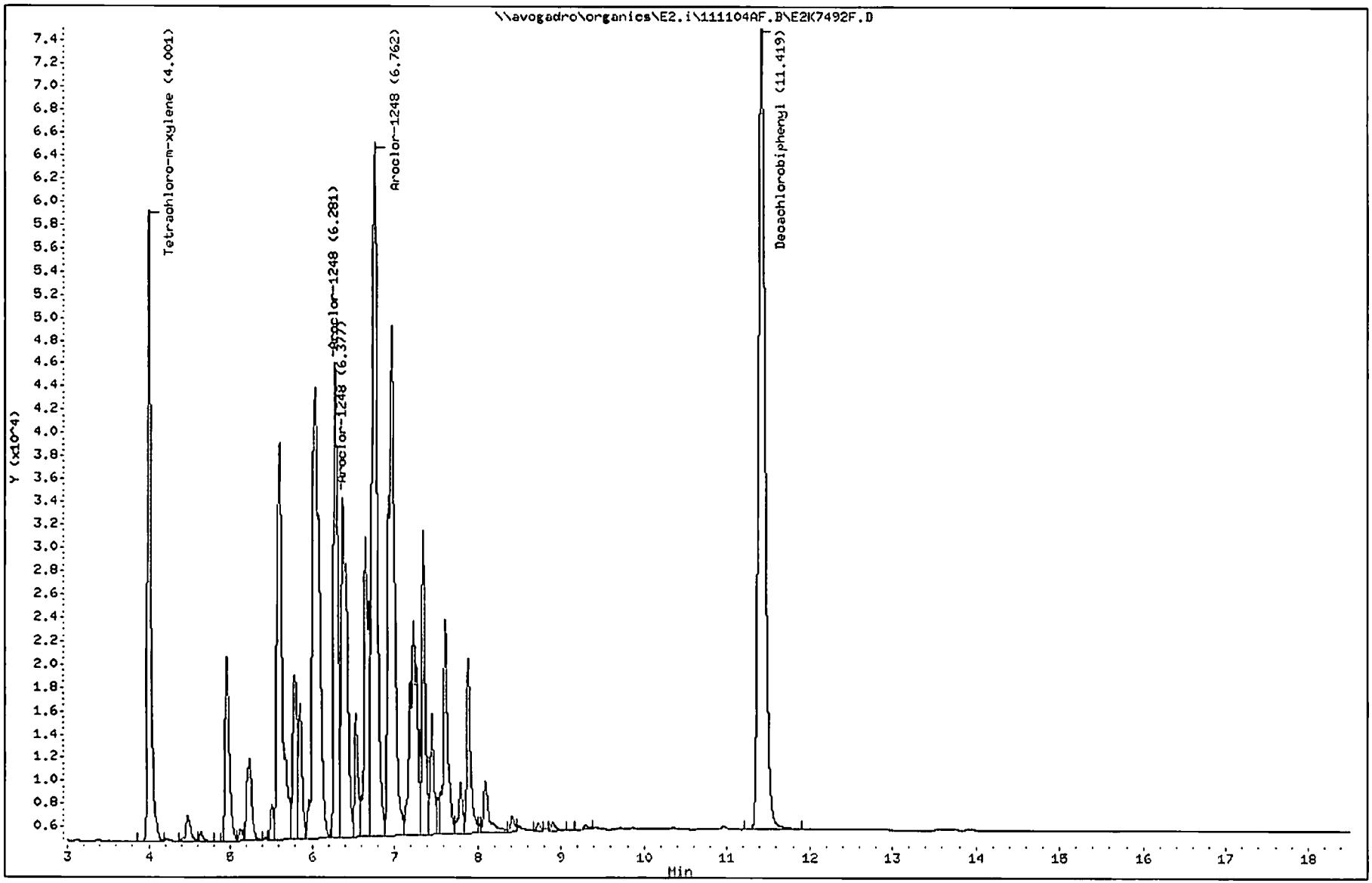
Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7492F.D
Lab Smp Id: AR12485J2 Client Smp ID: AR12485J2
Inj Date : 04-NOV-2011 23:49
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR12485J2,AR12485J2,,ar1248.sub,,
Misc Info : 1,5,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 14 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.001	3.999	0.002	1512567	0.08000	0.073		
7 Aroclor-1248					CAS #: 12672-29-6		
6.280	6.280	0.000	1430710	1.60000	1.3	80.00- 120.00	100.00
6.376	6.376	0.000	1425796	1.60000	1.4	79.66- 119.66	99.66
6.762	6.762	0.000	2640030	1.60000	1.3	164.53- 204.53	184.53
Average of Peak Amounts =					1.33333		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.419	11.417	0.002	3879165	0.16000	0.14		

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7492F.D
Date : 04-NOV-2011 23:49
Client ID: AR12485J2
Instrument: E2.i
Sample Info: AR12485J2,AR12485J2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7492R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

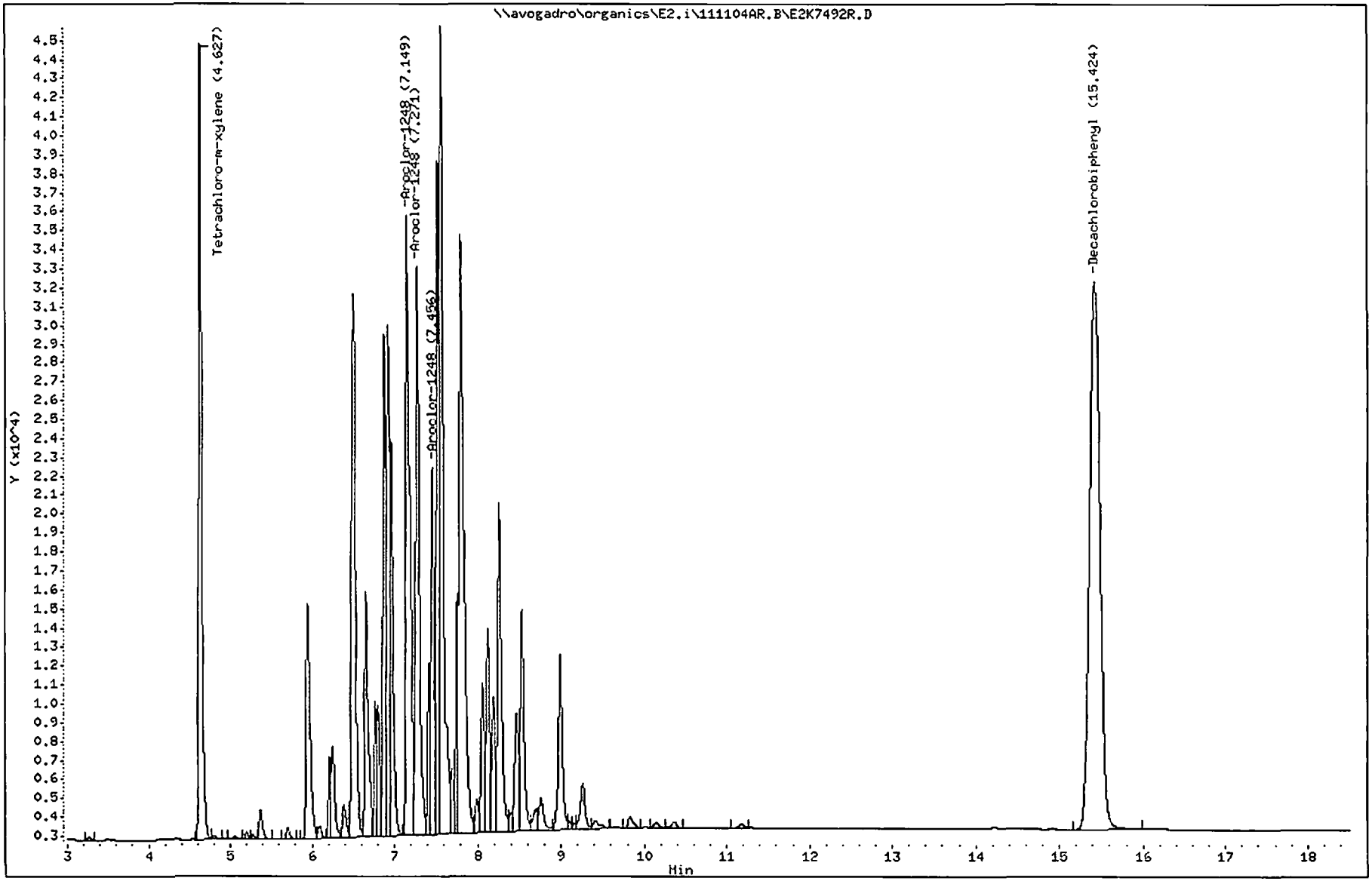
Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7492R.D
Lab Smp Id: AR12485J2 Client Smp ID: AR12485J2
Inj Date : 04-NOV-2011 23:49
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR12485J2,AR12485J2,,ar1248.sub,,
Misc Info : 1,5,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 04-NOV-2011 23:49 Cal File: E2K7492R.D
Als bottle: 14 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

			AMOUNTS				
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.627	4.627	0.000	1066659	0.08000	0.085		
5 Aroclor-1248					CAS #: 12672-29-6		
7.149	7.149	0.000	1117802	1.60000	1.5	80.00- 120.00	100.00
7.271	7.271	0.000	919723	1.60000	1.5	62.28- 102.28	82.28
7.455	7.455	0.000	454843	1.60000	1.5	20.69- 60.69	40.69
Average of Peak Amounts =					1.50000		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.423	15.423	0.000	2514626	0.16000	0.15		

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7492R.D
Date : 04-NOV-2011 23:49
Client ID: AR12485J2 Instrument: E2.i
Sample Info: AR12485J2,AR12485J2,,ar1248.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPestII Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7493F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7493F.D
Lab Smp Id: AR12541J2 Client Smp ID: AR12541J2
Inj Date : 05-NOV-2011 00:10
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR12541J2,AR12541J2,,ar1254.sub,,
Misc Info : 1,1,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 15 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

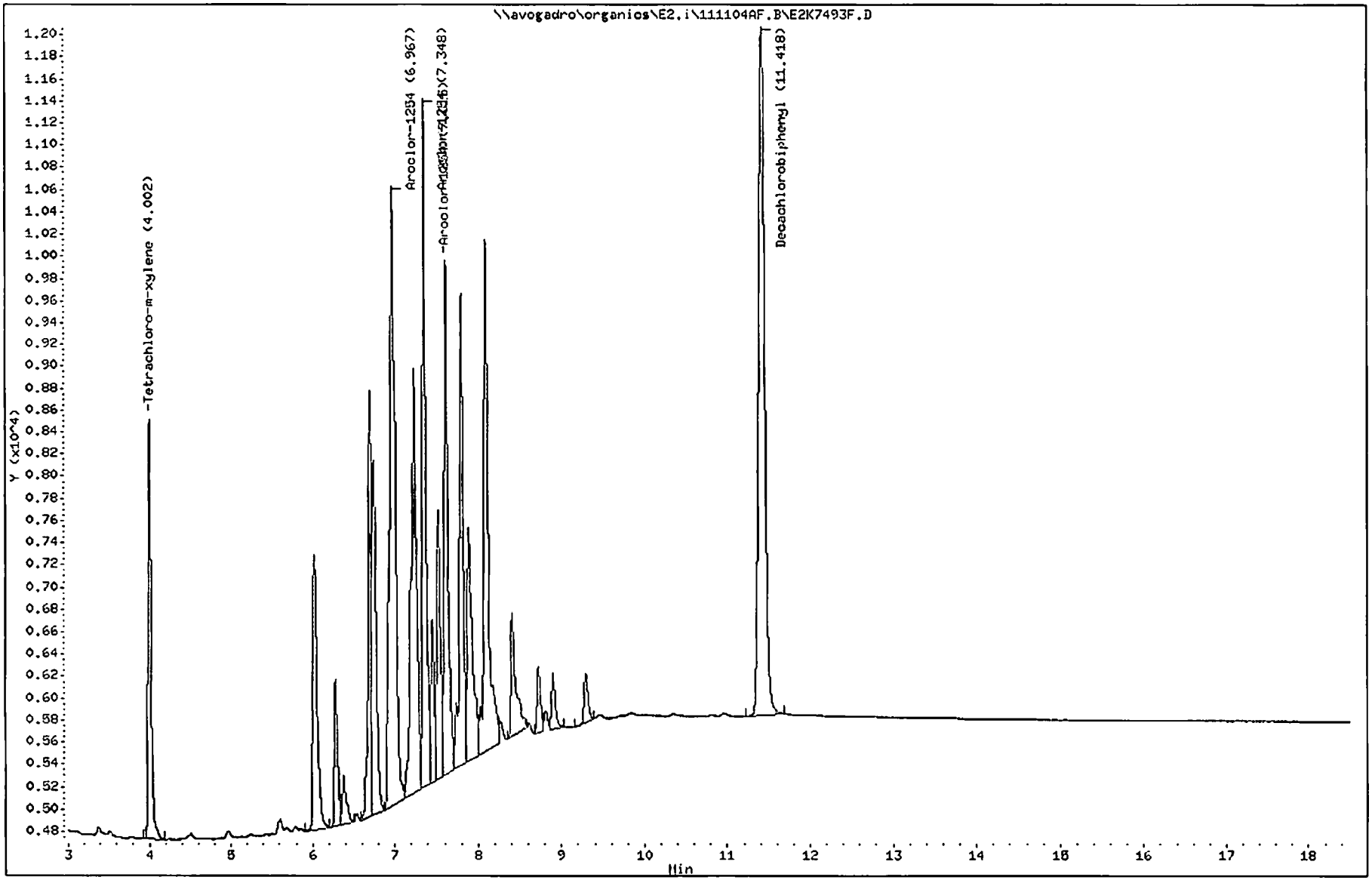
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.001	3.999	0.002	95318	0.00500	0.0046			(a)
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.417	11.417	0.000	317163	0.01000	0.011			(a)
8 Aroclor-1254					CAS #: 11097-69-1			
6.966	6.963	0.003	261120	0.10000	0.11	80.00- 120.00	100.00	(a)
7.348	7.345	0.003	174033	0.10000	0.11	53.39- 93.39	66.65	
7.615	7.612	0.003	142298	0.10000	0.11	39.96- 79.96	54.50	
Average of Peak Amounts =					0.11000			

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7493F.D
Date : 05-NOV-2011 00:10
Client ID: AR12541J2 Instrument: E2.i
Sample Info: AR12541J2,AR12541J2,,ar1254.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPest Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7493R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7493R.D
Lab Smp Id: AR12541J2 Client Smp ID: AR12541J2
Inj Date : 05-NOV-2011 00:10
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR12541J2,AR12541J2,,ar1254.sub,,
Misc Info : 1,1,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 00:10 Cal File: E2K7493R.D
Als bottle: 15 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

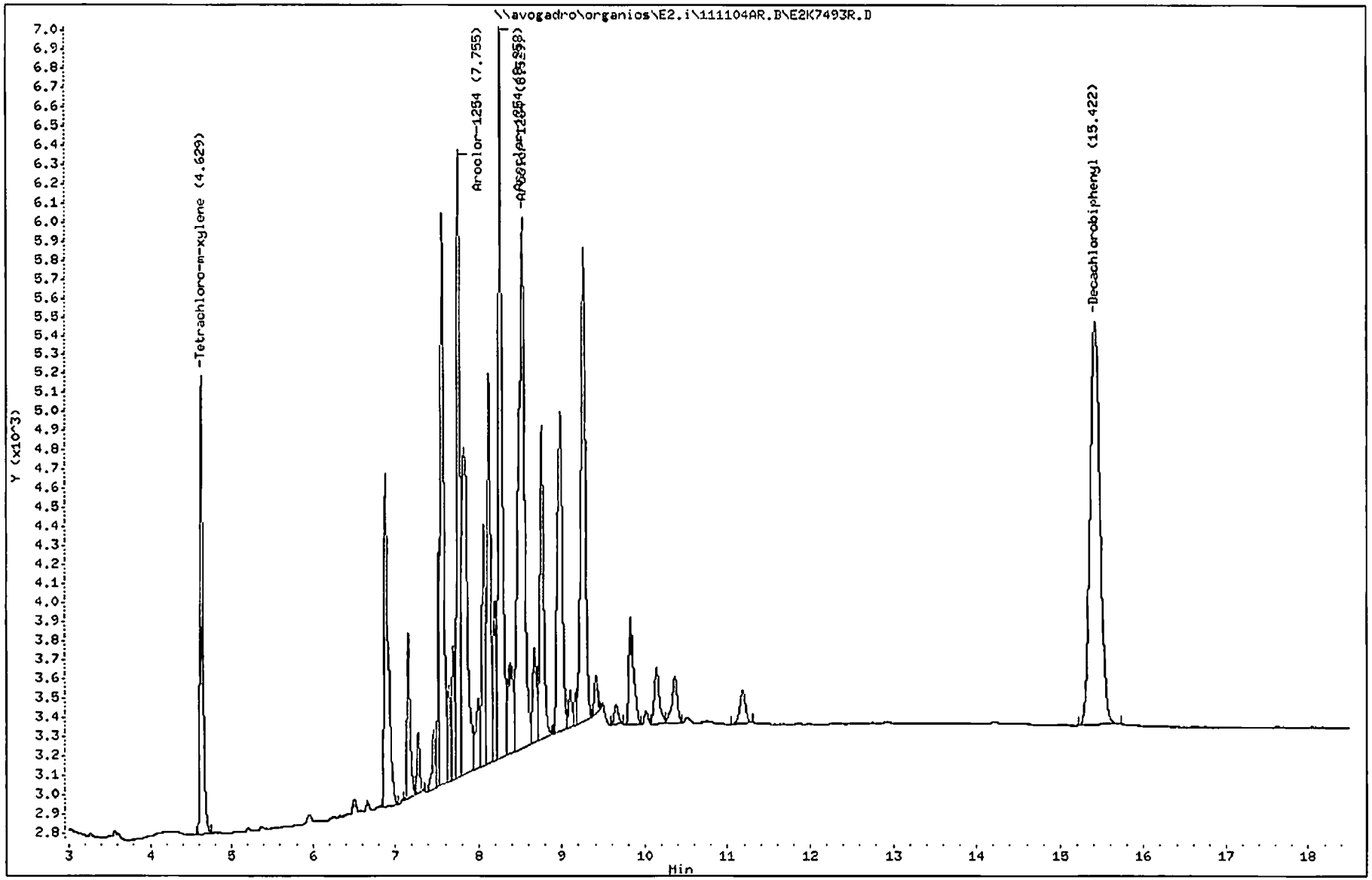
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.628	4.627	0.001	57711	0.00500	0.0046			(a)
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.422	15.423	-0.001	176170	0.01000	0.010			(a)
7 Aroclor-1254					CAS #: 11097-69-1			
7.754	7.752	0.002	85307	0.10000	0.10	80.00- 120.00	100.00	(a)
8.257	8.255	0.002	121647	0.10000	0.10	142.09- 182.09	142.60	
8.528	8.527	0.001	136834	0.10000	0.10	163.62- 203.62	160.40	
Average of Peak Amounts =				0.10000				

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7493R.D
Date : 05-NOV-2011 00:10
Client ID: AR12541J2
Instrument: E2.i
Sample Info: AR12541J2,AR12541J2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7495F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7495F.D
Lab Smp Id: AR12542J2 Client Smp ID: AR12542J2
Inj Date : 05-NOV-2011 00:52
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR12542J2,AR12542J2,,ar1254.sub,,
Misc Info : 1,2,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 17 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

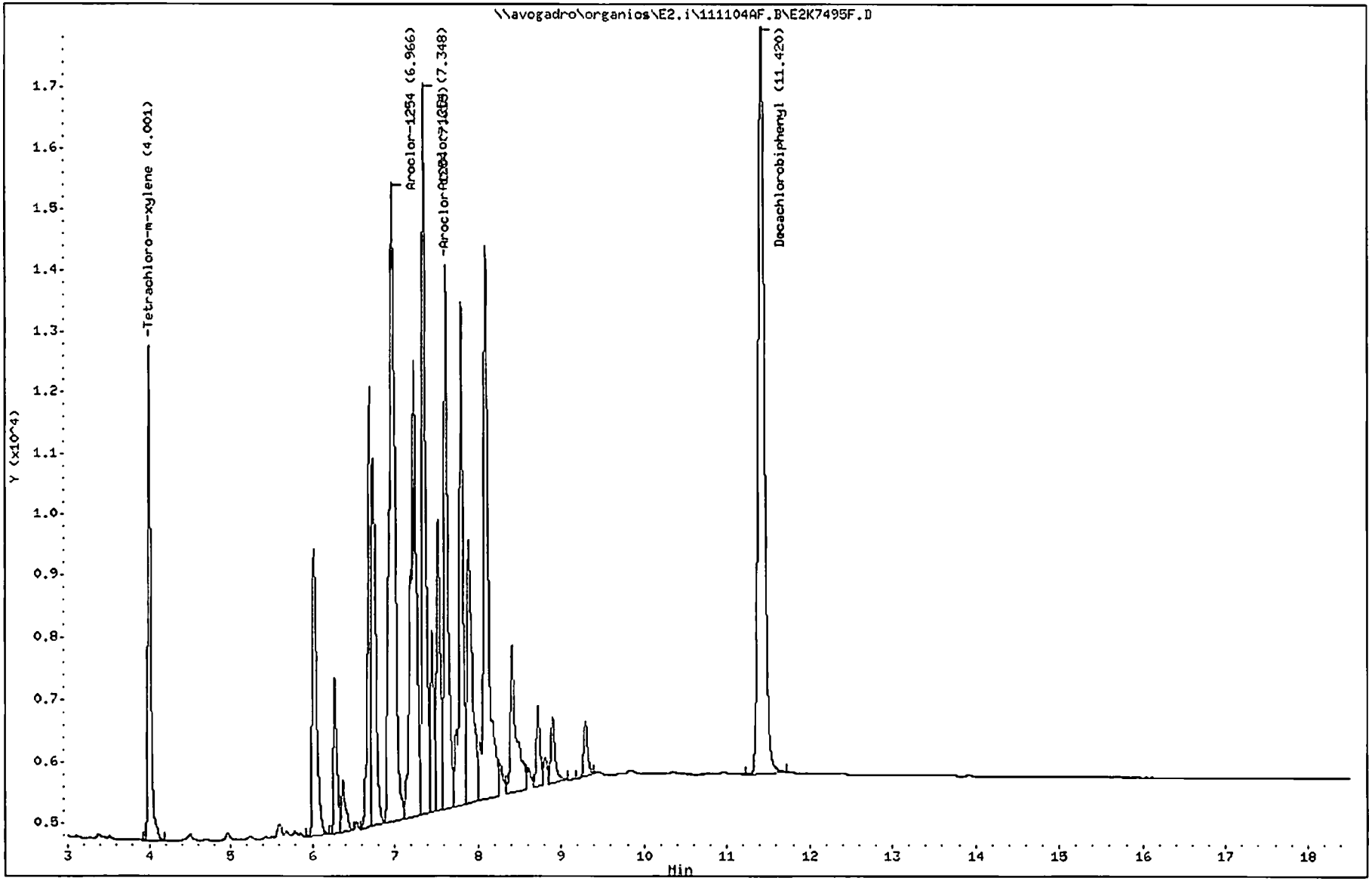
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

			AMOUNTS				
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.000	3.999	0.001	204064	0.01000	0.0098		(a)
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.419	11.417	0.002	638484	0.02000	0.022		(a)
8 Aroclor-1254					CAS #: 11097-69-1		
6.965	6.963	0.002	499635	0.20000	0.22	80.00- 120.00	100.00(a)
7.347	7.345	0.002	341703	0.20000	0.21	53.39- 93.39	68.39
7.614	7.612	0.002	281833	0.20000	0.22	39.96- 79.96	56.41
Average of Peak Amounts =					0.21667		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7495F.D
Date : 05-NOV-2011 00:52
Client ID: AR12542J2
Instrument: E2.i
Sample Info: AR12542J2,AR12542J2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7495R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7495R.D
Lab Smp Id: AR12542J2 Client Smp ID: AR12542J2
Inj Date : 05-NOV-2011 00:52
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR12542J2,AR12542J2,,ar1254.sub,,
Misc Info : 1,2,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 00:52 Cal File: E2K7495R.D
Als bottle: 17 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

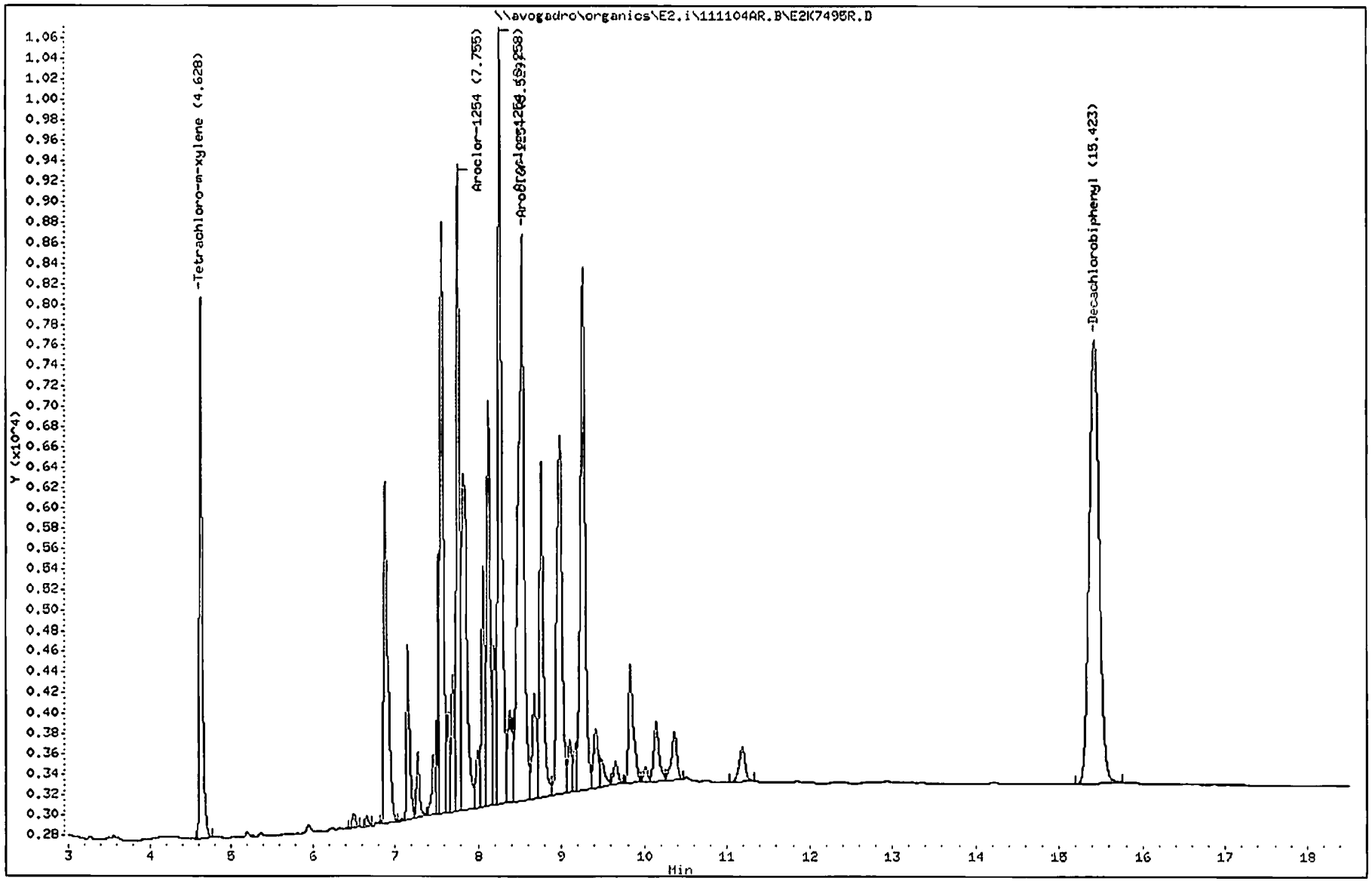
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.627	4.627	0.000	126509	0.01000	0.0100			(a)
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.423	15.423	0.000	362203	0.02000	0.021			(a)
7 Aroclor-1254					CAS #: 11097-69-1			
7.754	7.752	0.002	162846	0.20000	0.20	80.00- 120.00	100.00	(a)
8.257	8.255	0.002	236901	0.20000	0.20	142.09- 182.09	145.47	
8.529	8.527	0.002	271231	0.20000	0.20	163.62- 203.62	166.56	
Average of Peak Amounts =				0.20000				

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7495R.D
Date : 05-NOV-2011 00:52
Client ID: AR12542J2
Instrument: E2.i
Sample Info: AR12542J2,AR12542J2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7496F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7496F.D
Lab Smp Id: AR12543J2 Client Smp ID: AR12543J2
Inj Date : 05-NOV-2011 01:13
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR12543J2,AR12543J2,,ar1254.sub,,
Misc Info : 1,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 18 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

			AMOUNTS				
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.000	3.999	0.001	390859	0.02000	0.019		(a)
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.418	11.417	0.001	1181173	0.04000	0.041		(a)
8 Aroclor-1254					CAS #: 11097-69-1		
6.964	6.963	0.001	928403	0.40000	0.41	80.00- 120.00	100.00(a)
7.346	7.345	0.001	652570	0.40000	0.41	53.39- 93.39	70.29
7.613	7.612	0.001	537112	0.40000	0.41	39.96- 79.96	57.85
Average of Peak Amounts =					0.41000		

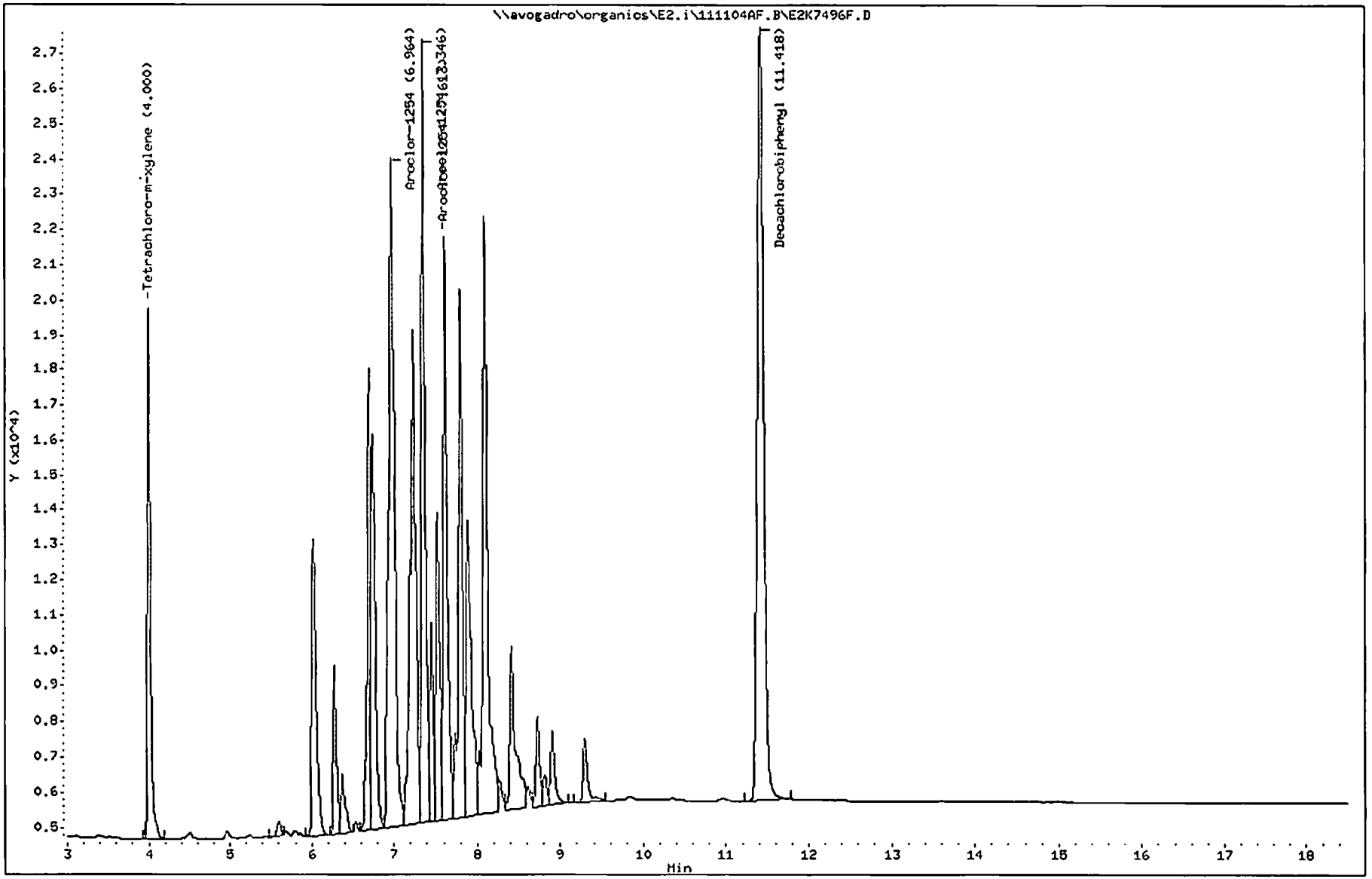
QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7496F.D
Date : 05-NOV-2011 01:13
Client ID: AR12543J2
Sample Info: AR12543J2,AR12543J2,,ar1254.sub,,
Volume Injected (uL): 1.0
Column phase: CLPPest

Instrument: E2.i

Operator: DL SRC: DL
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7496R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7496R.D
Lab Smp Id: AR12543J2 Client Smp ID: AR12543J2
Inj Date : 05-NOV-2011 01:13
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR12543J2,AR12543J2,,ar1254.sub,,
Misc Info : 1,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:00 Cal File: E2K7504R.D
Als bottle: 18 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

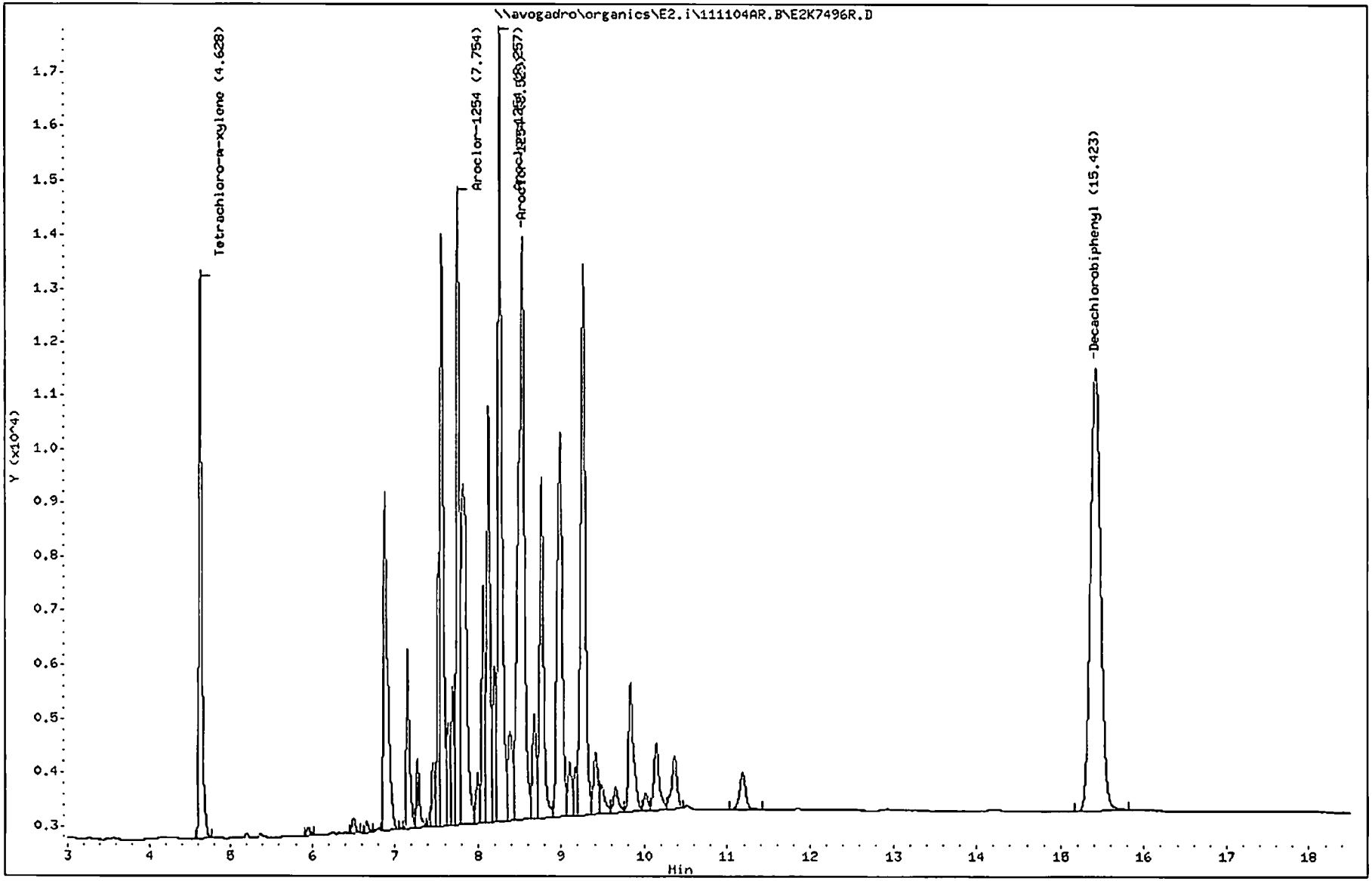
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

			AMOUNTS				
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.628	4.627	0.001	250938	0.02000	0.020		(a)
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.422	15.423	-0.001	693252	0.04000	0.040		(a)
7 Aroclor-1254					CAS #: 11097-69-1		
7.754	7.752	0.002	307764	0.40000	0.38	80.00- 120.00	100.00(a)
8.257	8.255	0.002	461884	0.40000	0.39	142.09- 182.09	150.08
8.528	8.527	0.001	527664	0.40000	0.39	163.62- 203.62	171.45
		Average of Peak Amounts =			0.38667		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7496R.D
Date : 05-NOV-2011 01:13
Client ID: AR12543J2
Instrument: E2.i
Sample Info: AR12543J2,AR12543J2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7497F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7497F.D
Lab Smp Id: AR12544J2 Client Smp ID: AR12544J2
Inj Date : 05-NOV-2011 01:34
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR12544J2,AR12544J2,,ar1254.sub,,
Misc Info : 1,4,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 19 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

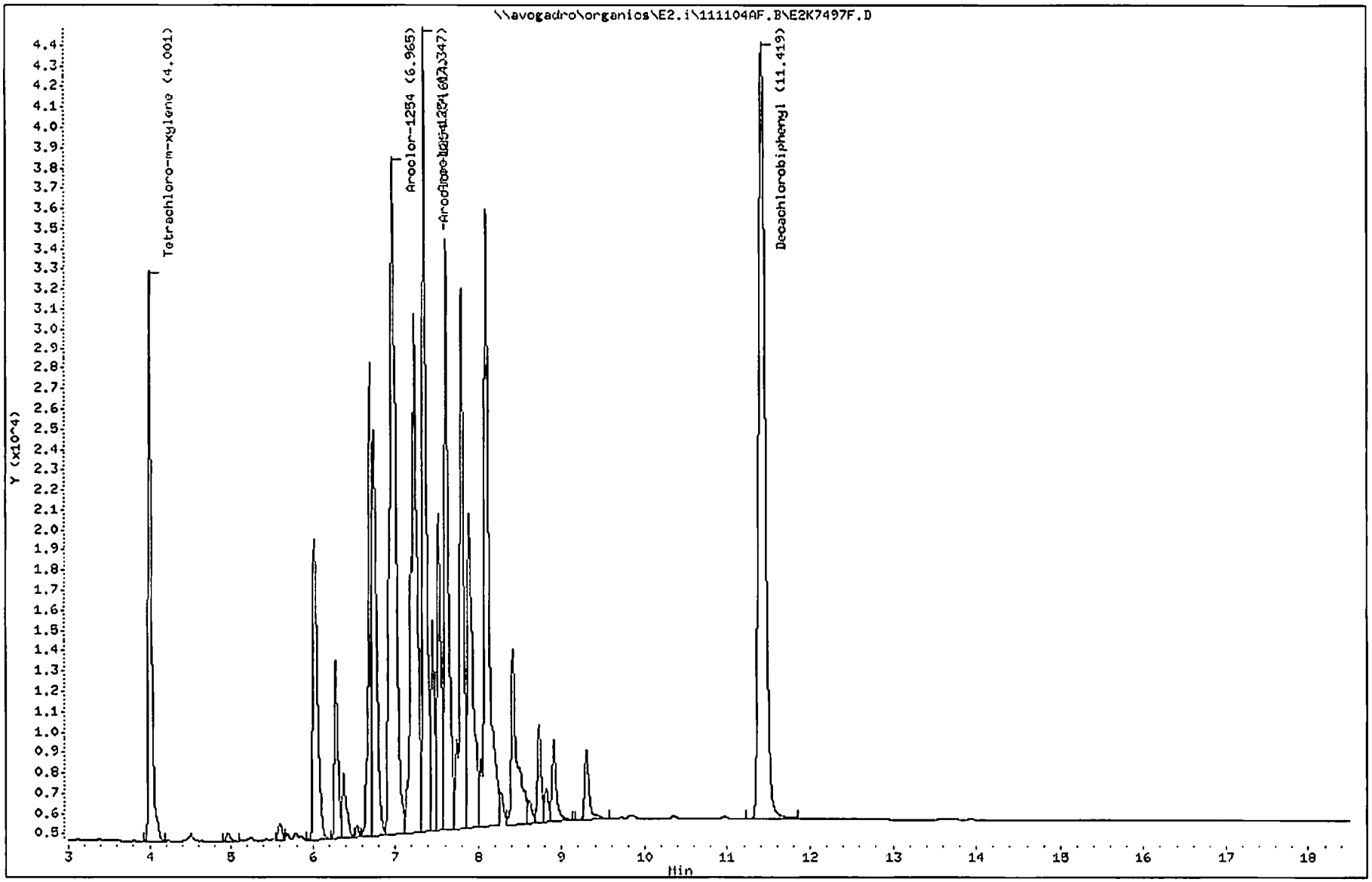
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.000	3.999	0.001	767319	0.04000	0.037			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.418	11.417	0.001	2115345	0.08000	0.074			
8 Aroclor-1254						CAS #: 11097-69-1		
6.964	6.963	0.001	1673135	0.80000	0.73	80.00- 120.00		100.00(a)
7.346	7.345	0.001	1196534	0.80000	0.75	53.39- 93.39		71.51
7.613	7.612	0.001	970817	0.80000	0.74	39.96- 79.96		58.02
		Average of Peak Amounts =			0.74000			

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7497F.D
Date : 05-NOV-2011 01:34
Client ID: AR12544J2
Instrument: E2.i
Sample Info: AR12544J2,AR12544J2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7497R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7497R.D
Lab Smp Id: AR12544J2 Client Smp ID: AR12544J2
Inj Date : 05-NOV-2011 01:34
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR12544J2,AR12544J2,,ar1254.sub,,
Misc Info : 1,4,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 01:34 Cal File: E2K7497R.D
Als bottle: 19 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

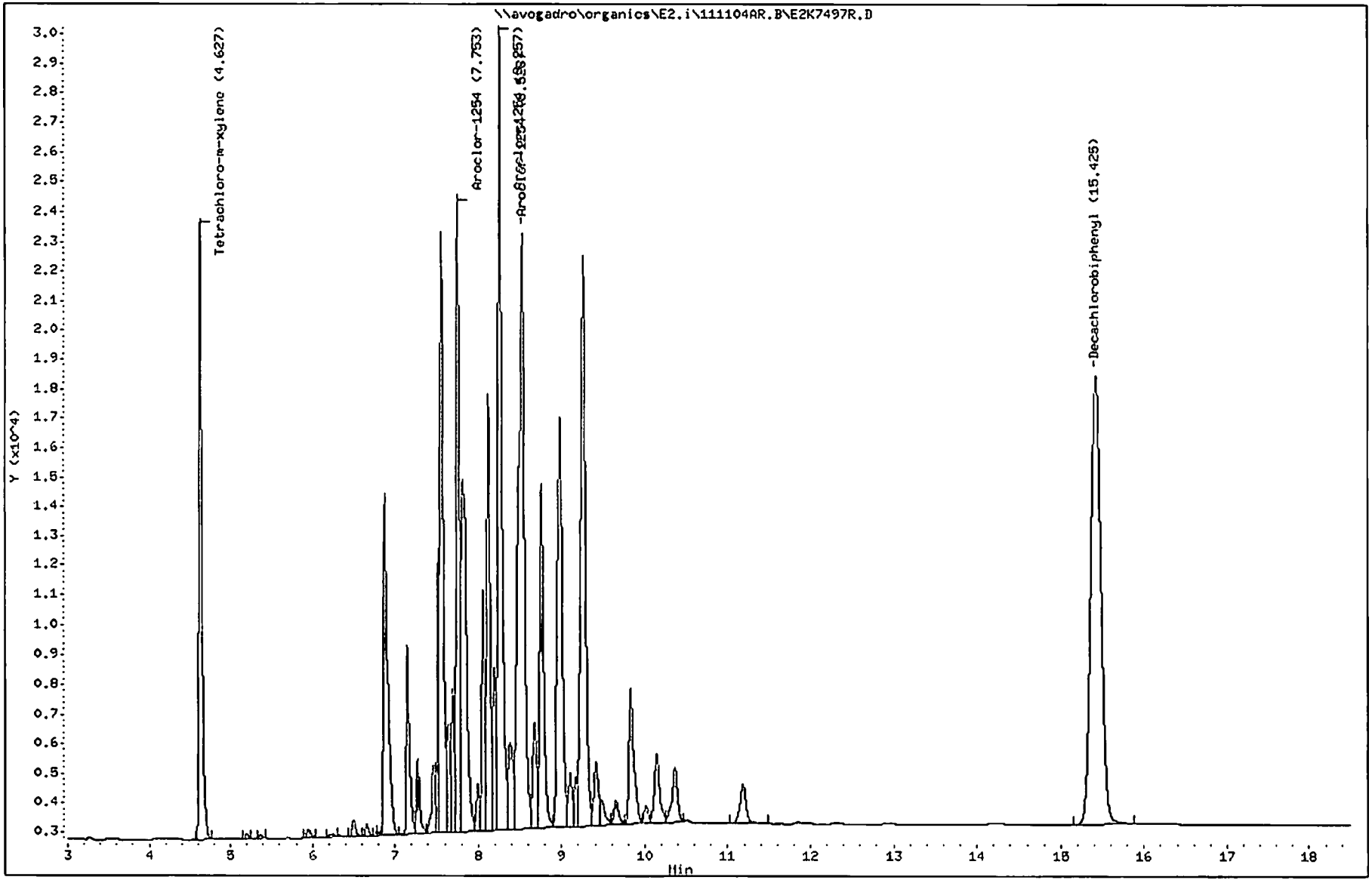
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.627	4.627	0.000	514813	0.04000	0.041			(a)
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.424	15.423	0.001	1299597	0.08000	0.076			
7 Aroclor-1254					CAS #: 11097-69-1			
7.753	7.752	0.001	562307	0.80000	0.72	80.00- 120.00	100.00	(a)
8.256	8.255	0.001	872826	0.80000	0.75	142.09- 182.09	155.22	
8.528	8.527	0.001	982131	0.80000	0.74	163.62- 203.62	174.66	
Average of Peak Amounts =					0.73667			

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7497R.D
Date : 05-NOV-2011 01:34
Client ID: AR12544J2
Instrument: E2.i
Sample Info: AR12544J2,AR12544J2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7498F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7498F.D
Lab Smp Id: AR12545J2 Client Smp ID: AR12545J2
Inj Date : 05-NOV-2011 01:54
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR12545J2,AR12545J2,,ar1254.sub,,
Misc Info : 1,5,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 20 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

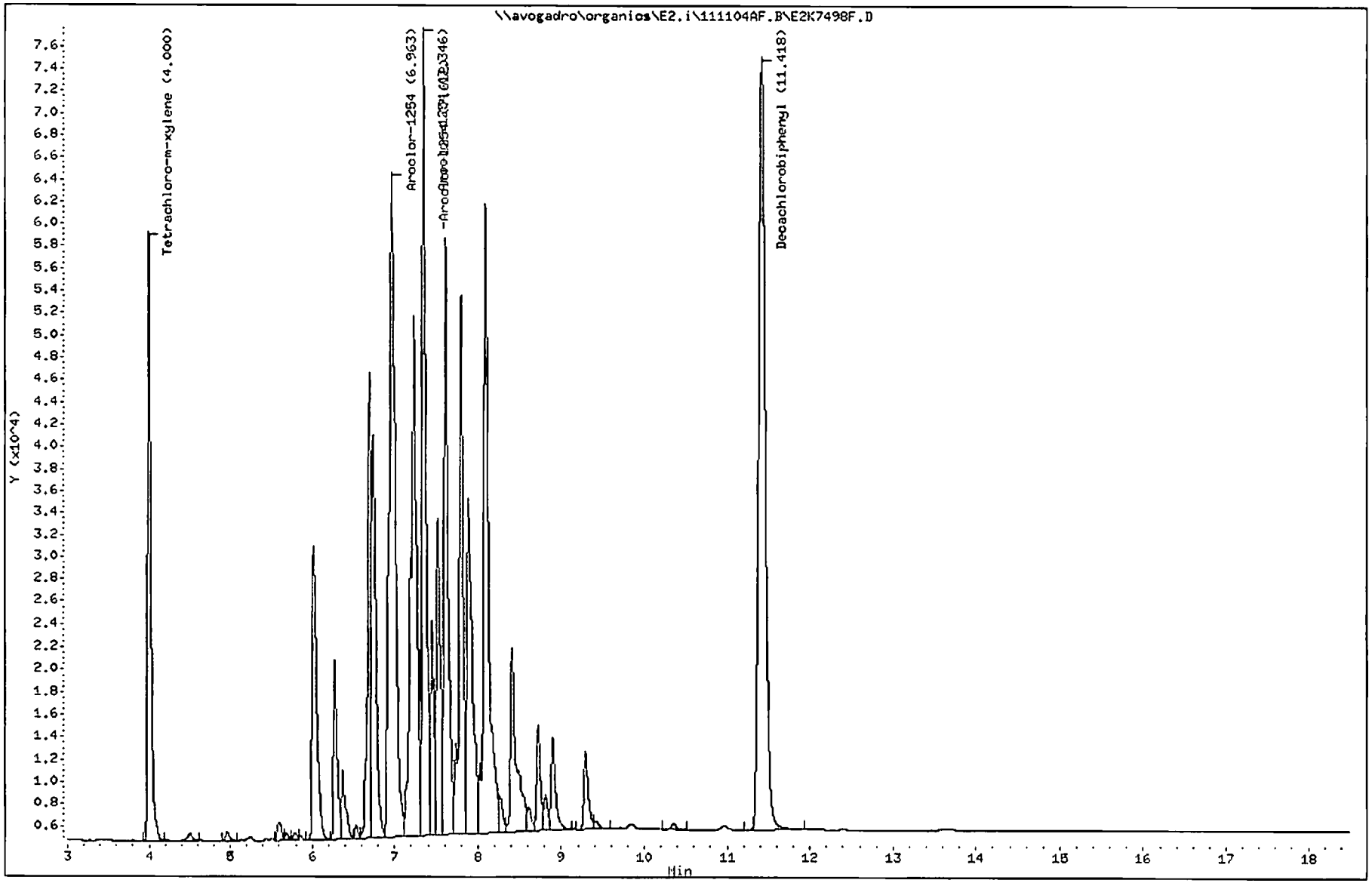
Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT	AMOUNTS ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
3.999	3.999	0.000	1495567	0.08000	0.072			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.417	11.417	0.000	3892433	0.16000	0.14			
8 Aroclor-1254					CAS #: 11097-69-1			
6.963	6.963	0.000	3001161	1.60000	1.3	80.00- 120.00		100.00
7.345	7.345	0.000	2202482	1.60000	1.4	53.39- 93.39		73.39
7.612	7.612	0.000	1799401	1.60000	1.4	39.96- 79.96		59.96
Average of Peak Amounts =					1.36667			

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7498F.D
Date : 05-NOV-2011 01:54
Client ID: AR12545J2
Sample Info: AR12545J2,AR12545J2,,ar1254.sub,,
Volume Injected (uL): 1.0
Column phase: CLPPest

Instrument: E2.i
Operator: DL SRC: DL
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7498R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7498R.D
Lab Smp Id: AR12545J2 Client Smp ID: AR12545J2
Inj Date : 05-NOV-2011 01:54
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR12545J2,AR12545J2,,ar1254.sub,,
Misc Info : 1,5,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 01:54 Cal File: E2K7498R.D
Als bottle: 20 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

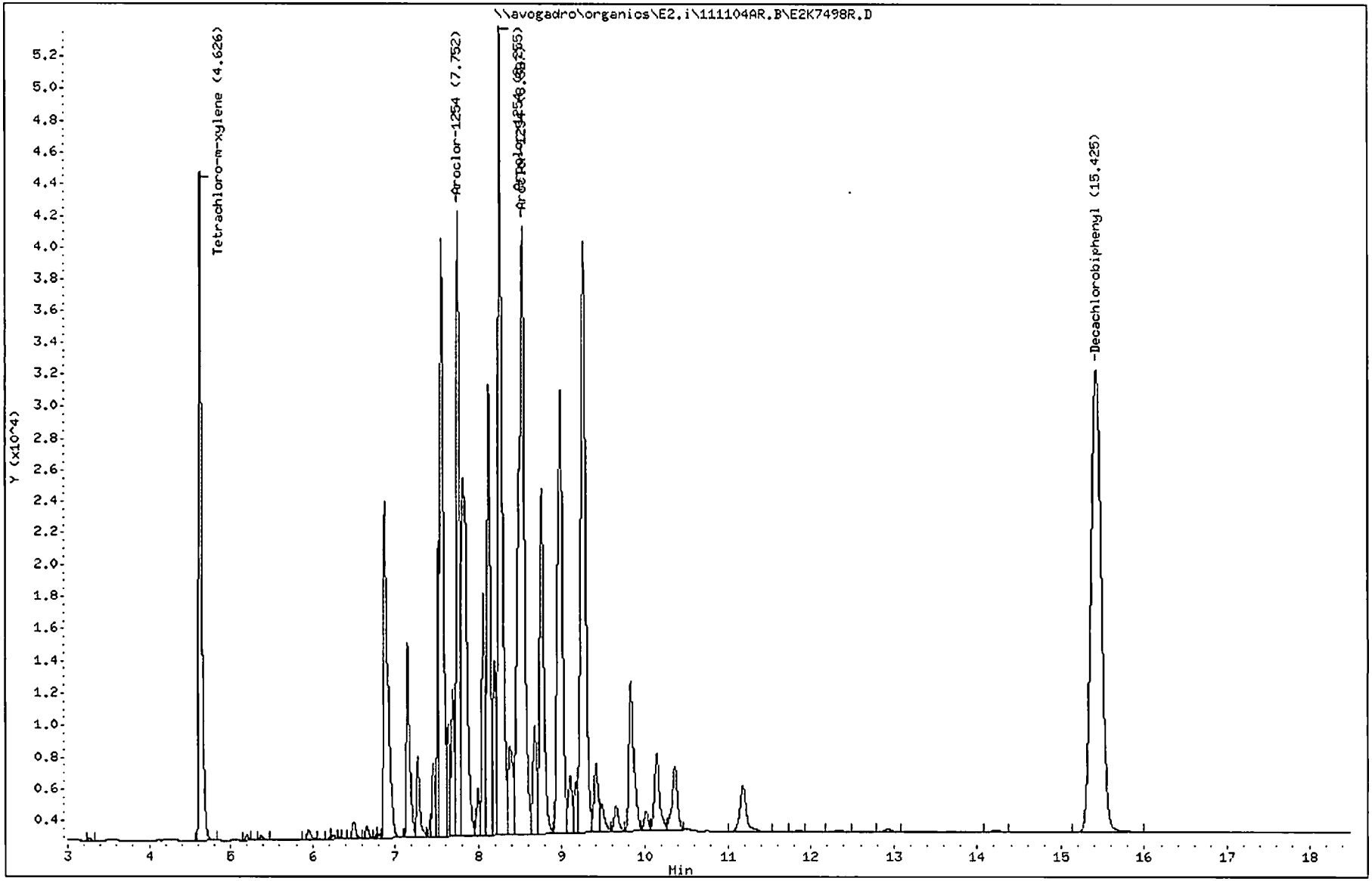
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT	AMOUNTS ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.526	4.627	-0.001	1056264	0.08000	0.084		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.425	15.423	0.002	2521189	0.16000	0.15		
7 Aroclor-1254					CAS #: 11097-69-1		
7.752	7.752	0.000	1024528	1.60000	1.4	80.00- 120.00	100.00
8.255	8.255	0.000	1660693	1.60000	1.5	142.09- 182.09	162.09
8.527	8.527	0.000	1881240	1.60000	1.4	163.62- 203.62	183.62
Average of Peak Amounts =					1.43333		

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7498R.D
Date : 05-NOV-2011 01:54
Client ID: AR12545J2
Sample Info: AR12545J2,AR12545J2,,ar1254,sub,,
Volume Injected (uL): 1.0
Column phase: CLPPestII

Instrument: E2.i

Operator: DL SRC: DL
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7499F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7499F.D
Lab Smp Id: AR12623J2 Client Smp ID: AR12623J2
Inj Date : 05-NOV-2011 02:15
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR12623J2,AR12623J2,,ar1262.sub,,
Misc Info : 1,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 21 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1262.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

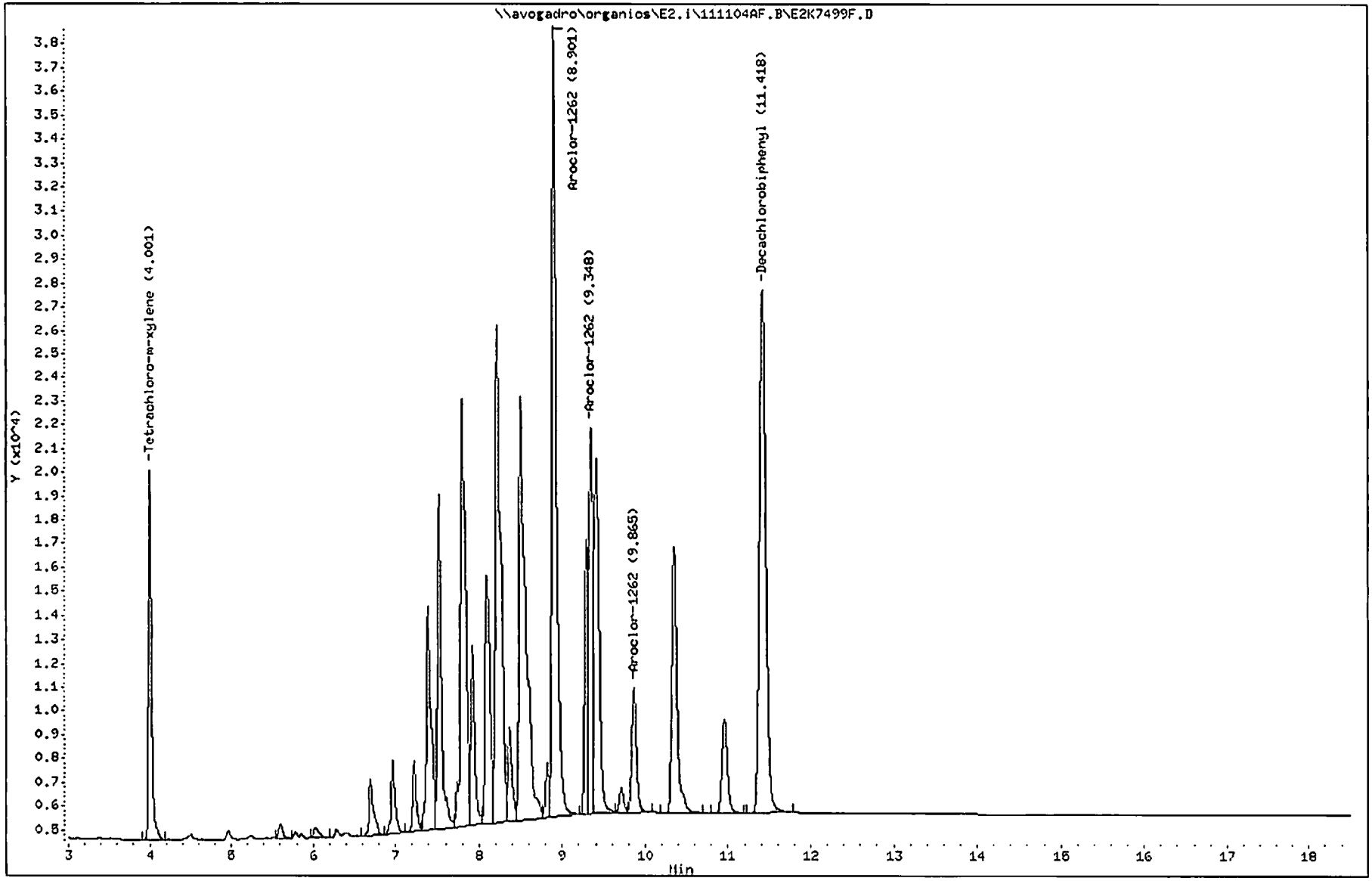
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.001	3.999	0.002	397187	0.02000	0.019			(a)
2 Aroclor-1262					CAS #: 37324-23-5			
8.901	8.901	0.000	1234830	0.40000	0.40	80.00- 120.00	100.00	
9.347	9.347	0.000	544086	0.40000	0.40	24.06- 64.06	44.06	
9.865	9.865	0.000	203438	0.40000	0.40	0.00- 36.47	16.47	
Average of Peak Amounts =					0.40000			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.418	11.417	0.001	1180373	0.04000	0.041			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7499F.D
Date : 05-NOV-2011 02:15
Client ID: AR12623J2 Instrument: E2.i
Sample Info: AR12623J2,AR12623J2,,ar1262.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPest Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7499R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7499R.D
Lab Smp Id: AR12623J2 Client Smp ID: AR12623J2
Inj Date : 05-NOV-2011 02:15
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR12623J2,AR12623J2,,ar1262.sub,,
Misc Info : 1,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:00 Cal File: E2K7504R.D
Als bottle: 21 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1262.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

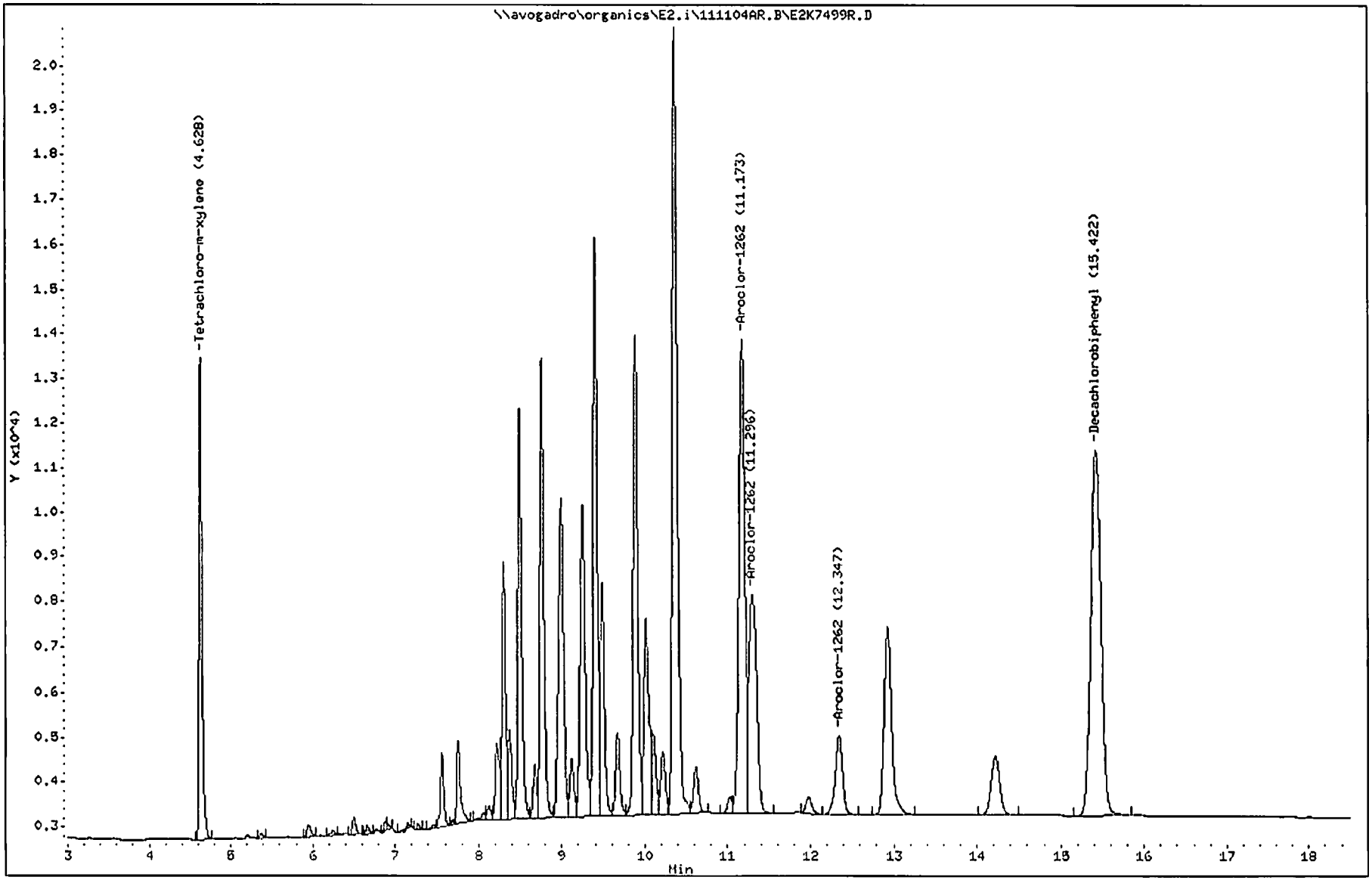
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.628	4.627	0.001	254895	0.02000	0.020			(a)
10 Aroclor-1262					CAS #: 37324-23-5			
11.173	11.173	0.000	525250	0.40000	0.40	80.00- 120.00		100.00
11.295	11.295	0.000	314734	0.40000	0.40	39.92- 79.92		59.92
12.346	12.346	0.000	104801	0.40000	0.40	0.00- 39.95		19.95
Average of Peak Amounts =					0.40000			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.421	15.423	-0.002	691352	0.04000	0.041			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7499R.D
Date : 05-NOV-2011 02:15
Client ID: AR12623J2 Instrument: E2.i
Sample Info: AR12623J2,AR12623J2,,ar1262.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPestII Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7500F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7500F.D
Lab Smp Id: AR12683J2 Client Smp ID: AR12683J2
Inj Date : 05-NOV-2011 02:36
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR12683J2,AR12683J2,,ar1268.sub,,
Misc Info : 1,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 22 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1268.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

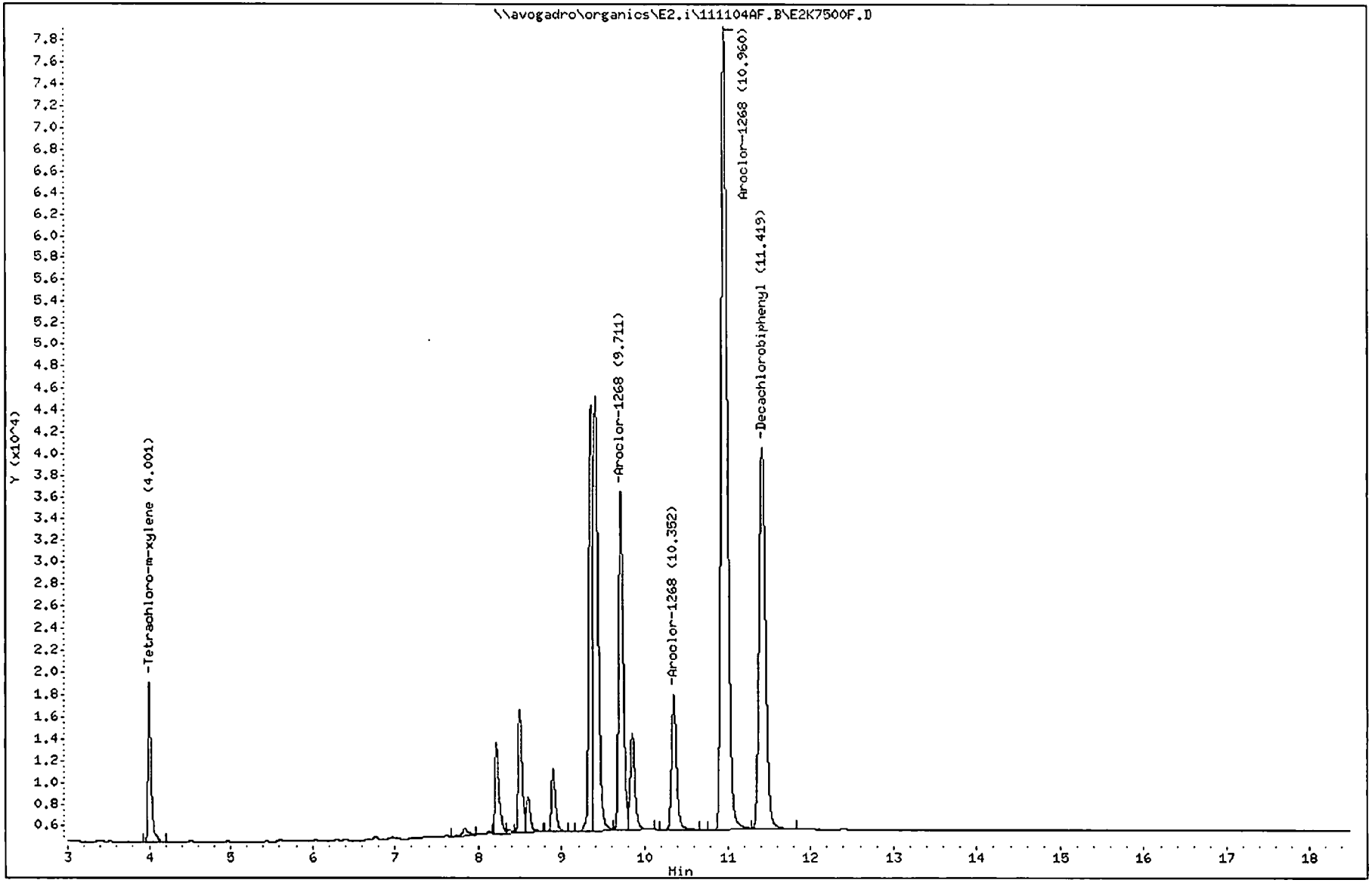
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.001	3.999	0.002	383164	0.02000	0.018			(a)
10 Aroclor-1268					CAS #: 11100-14-4			
9.711	9.711	0.000	1179828	0.40000	0.40	80.00- 120.00	100.00	(a)
10.351	10.351	0.000	511369	0.40000	0.40	23.34- 63.34	43.34	
10.960	10.960	0.000	3719014	0.40000	0.40	295.22- 335.22	315.22	
Average of Peak Amounts =					0.40000			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.418	11.417	0.001	1924351	0.04000	0.067			

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7500F.D
Date : 05-NOV-2011 02:36
Client ID: AR12683J2
Instrument: E2.i
Sample Info: AR12683J2,AR12683J2,,ar1268.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7500R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7500R.D
Lab Smp Id: AR12683J2 Client Smp ID: AR12683J2
Inj Date : 05-NOV-2011 02:36
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR12683J2,AR12683J2,,ar1268.sub,,
Misc Info : 1,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:00 Cal File: E2K7504R.D
Als bottle: 22 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1268.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

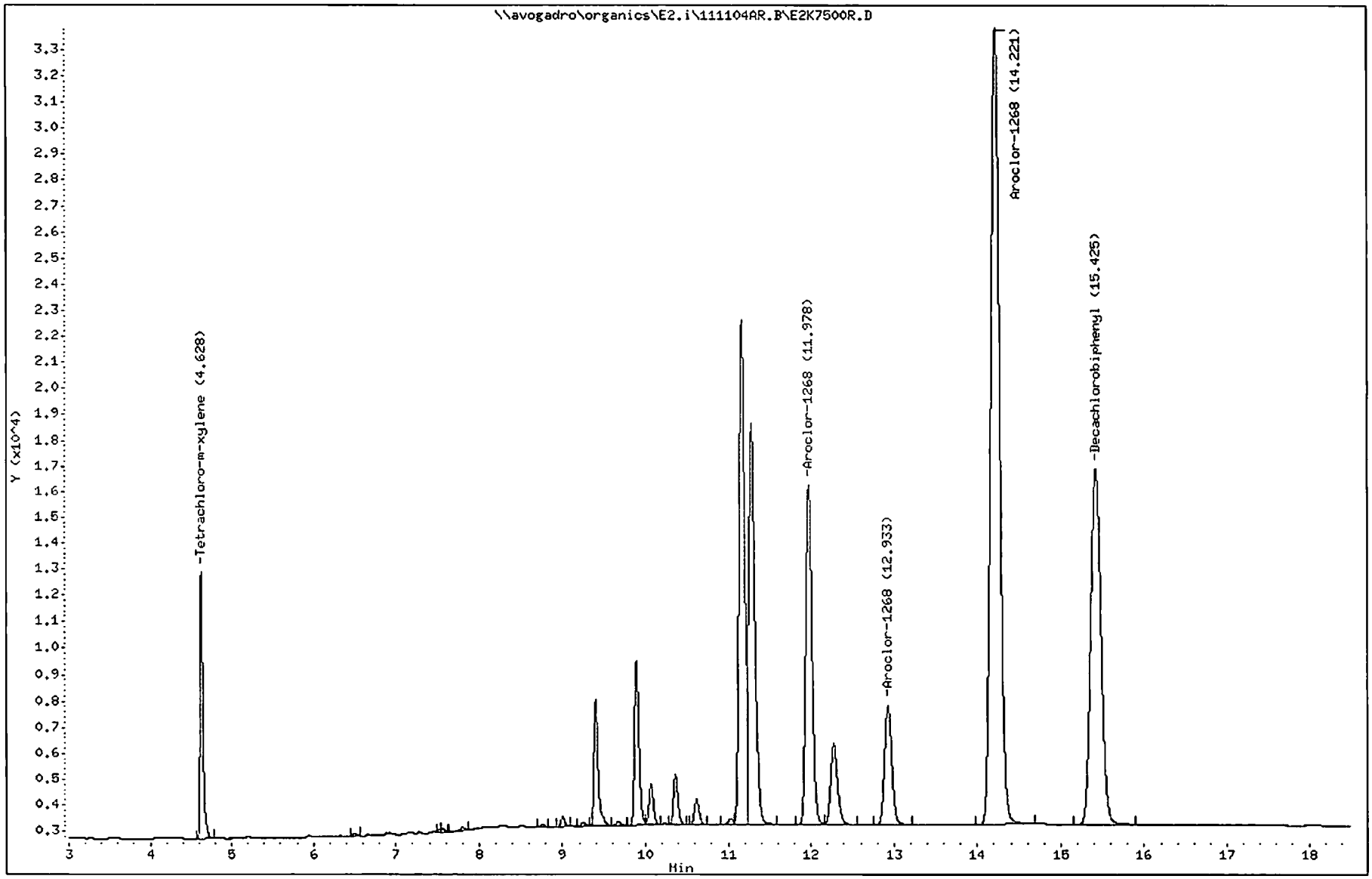
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT	AMOUNTS ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.628	4.627	0.001	245715	0.02000	0.020		(a)
9 Aroclor-1268					CAS #: 11100-14-4		
11.978	11.978	0.000	689463	0.40000	0.40	80.00- 120.00	100.00(a)
12.932	12.932	0.000	271831	0.40000	0.40	19.43- 59.43	39.43
14.221	14.221	0.000	2255813	0.40000	0.40	307.18- 347.18	327.18
Average of Peak Amounts =				0.40000			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.424	15.423	0.001	1169692	0.04000	0.060		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7500R.D
Date : 05-NOV-2011 02:36
Client ID: AR12683J2 Instrument: E2.i
Sample Info: AR12683J2,AR12683J2,,ar1268.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPestII Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7501F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7501F.D
Lab Smp Id: AR16601J2 Client Smp ID: AR16601J2
Inj Date : 05-NOV-2011 02:57
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR16601J2,AR16601J2,,ar1660.sub,,
Misc Info : 1,1,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 23 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

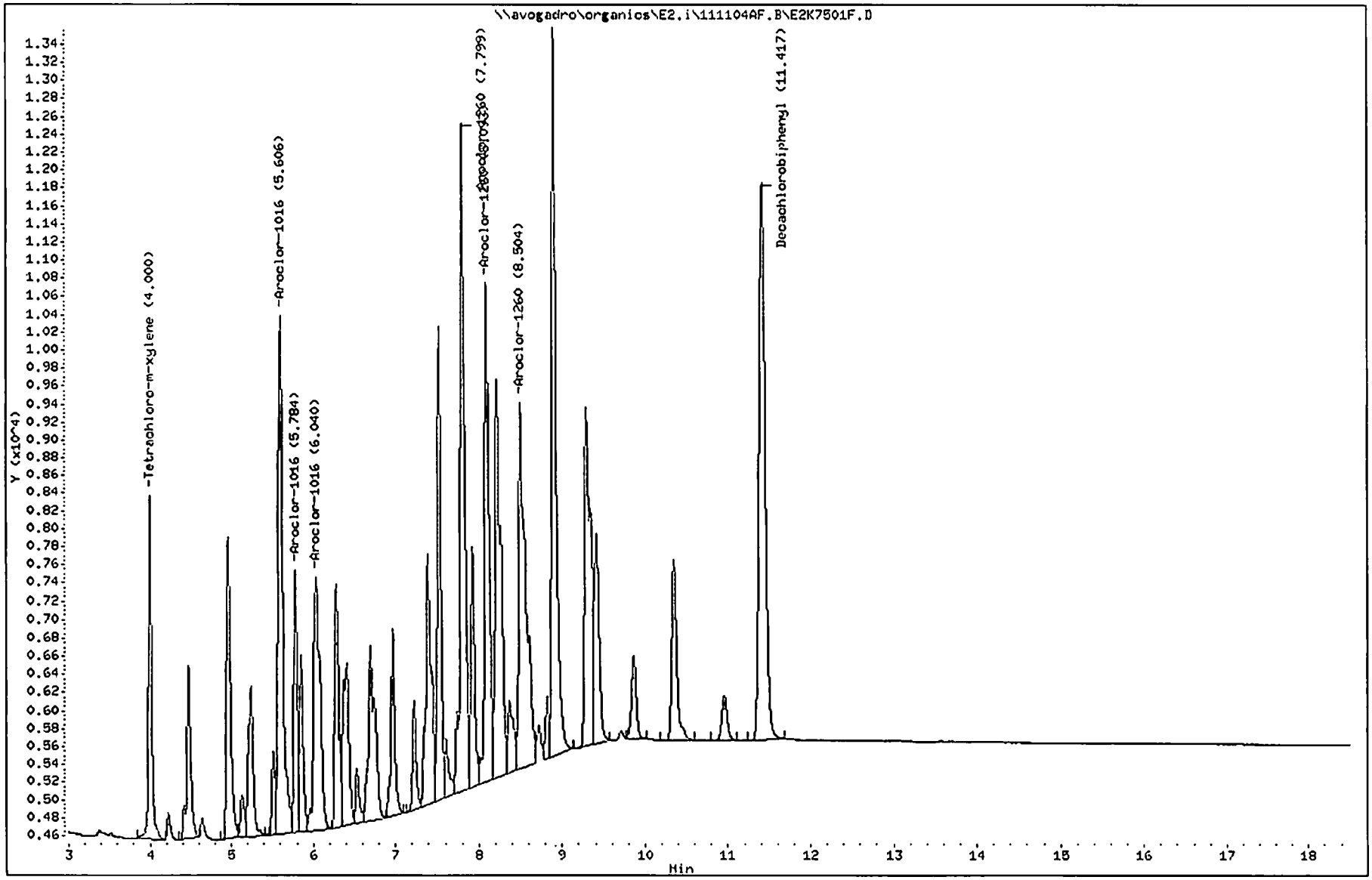
			AMOUNTS				
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.000	3.999	0.001	102428	0.00500	0.0049		(a)
5 Aroclor-1016					CAS #: 12674-11-2		
5.605	5.604	0.001	235267	0.10000	0.11	80.00- 120.00	100.00(a)
5.783	5.781	0.002	89052	0.10000	0.11	17.54- 57.54	37.85
6.039	6.039	0.000	158937	0.10000	0.12	47.65- 87.65	67.56
		Average of Peak Amounts =			0.11333		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.417	11.417	0.000	315771	0.01000	0.011		(a)
9 Aroclor-1260					CAS #: 11096-82-5		
7.799	7.797	0.002	284403	0.10000	0.12	80.00- 120.00	100.00(a)
8.093	8.091	0.002	212667	0.10000	0.11	55.72- 95.72	74.78
8.504	8.502	0.002	235026	0.10000	0.11	71.06- 111.06	82.64
		Average of Peak Amounts =			0.11333		

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7501F.D
Report Date: 07-Nov-2011 13:57

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7501F.D
Date : 05-NOV-2011 02:57
Client ID: AR16601J2
Instrument: E2.i
Sample Info: AR16601J2,AR16601J2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7501R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7501R.D
Lab Smp Id: AR16601J2 Client Smp ID: AR16601J2
Inj Date : 05-NOV-2011 02:57
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR16601J2,AR16601J2,,ar1660.sub,,
Misc Info : 1,1,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 02:57 Cal File: E2K7501R.D
Als bottle: 23 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

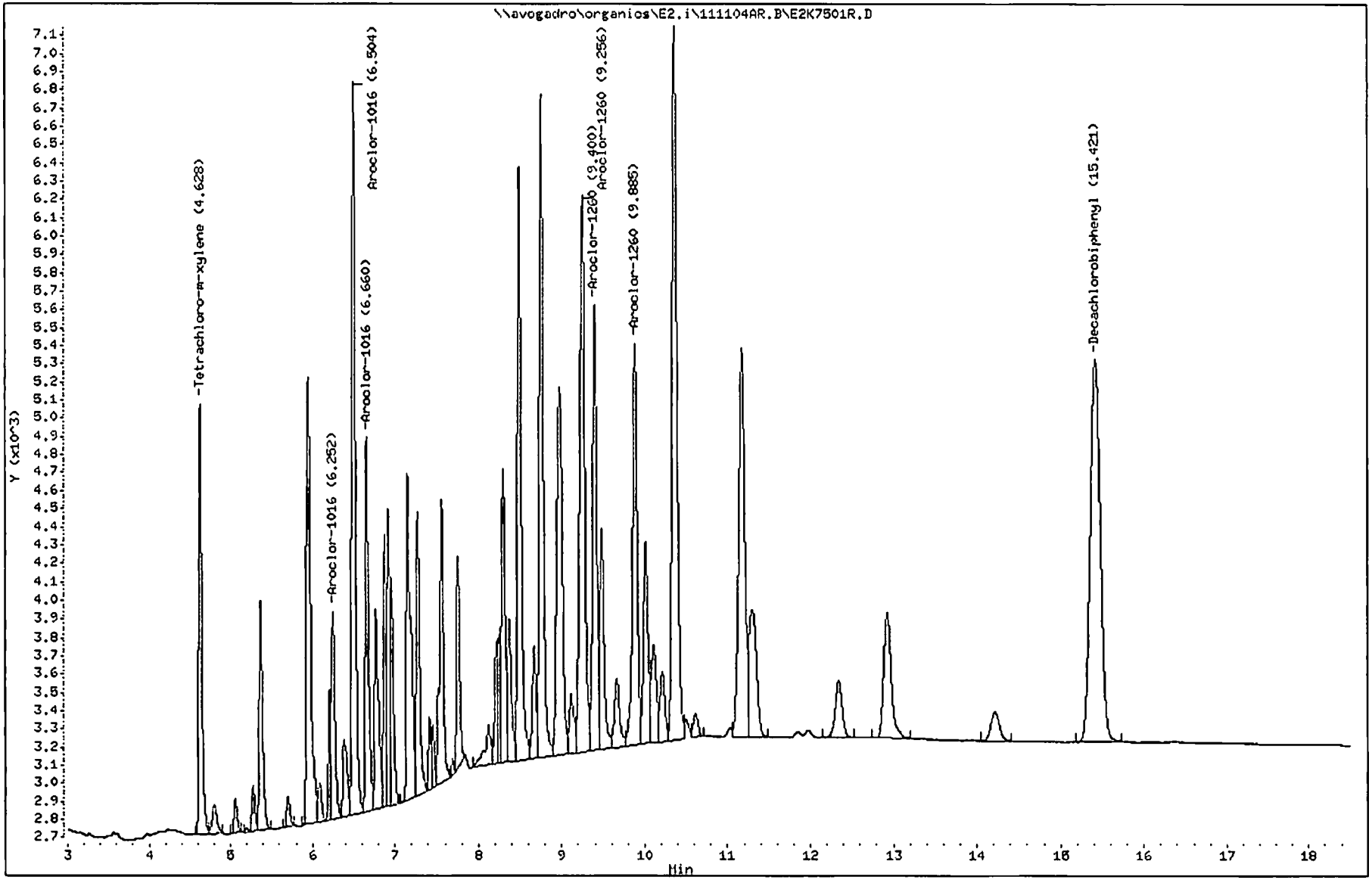
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.627	4.627	0.000	57306	0.00500	0.0046			(a)
6 Aroclor-1016					CAS #: 12674-11-2			
6.252	6.250	0.002	32694	0.10000	0.10	80.00- 120.00	100.00	(a)
6.503	6.503	0.000	122529	0.10000	0.10	366.12- 406.12	374.77	
6.659	6.657	0.002	56322	0.10000	0.10	151.11- 191.11	172.27	
Average of Peak Amounts =				0.10000				
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.421	15.423	-0.002	174967	0.01000	0.0090			(a)
8 Aroclor-1260					CAS #: 11096-82-5			
9.255	9.255	0.000	127310	0.10000	0.10	80.00- 120.00	100.00	(a)
9.399	9.398	0.001	81595	0.10000	0.10	43.24- 83.24	64.09	
9.685	9.683	0.002	84367	0.10000	0.10	46.46- 86.46	66.27	
Average of Peak Amounts =				0.10000				

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7501R.D
Report Date: 07-Nov-2011 13:58

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7501R.D
Date : 05-NOV-2011 02:57
Client ID: AR16601J2
Instrument: E2.i
Sample Info: AR16601J2,AR16601J2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7503F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7503F.D
Lab Smp Id: AR16602J2 Client Smp ID: AR16602J2
Inj Date : 05-NOV-2011 03:39
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR16602J2,AR16602J2,,ar1660.sub,,
Misc Info : 1,2,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 25 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

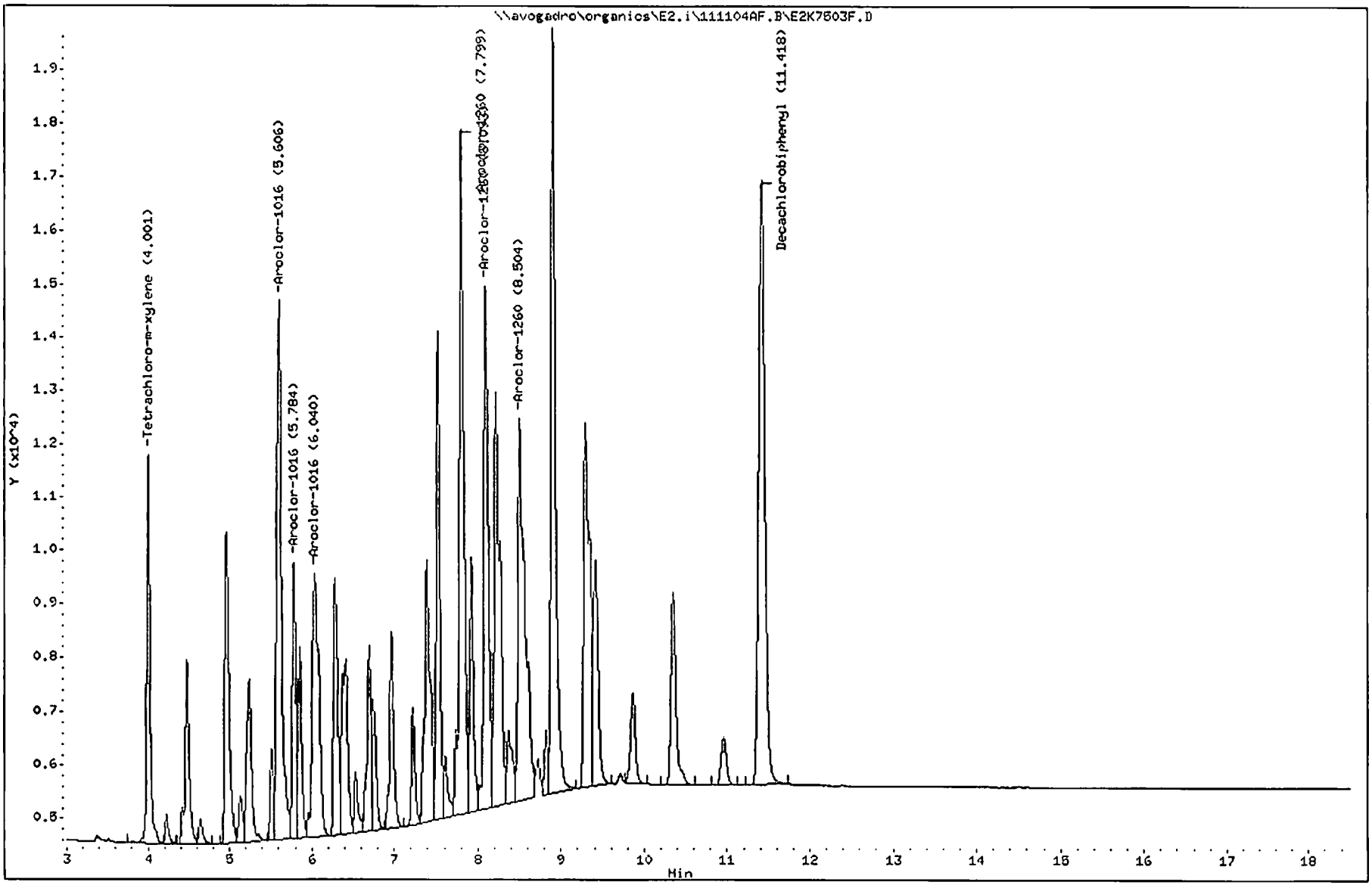
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.001	3.999	0.002	199409	0.01000	0.0096			(a)
5 Aroclor-1016					CAS #: 12674-11-2			
5.606	5.604	0.002	419722	0.20000	0.20	80.00- 120.00	100.00	(a)
5.784	5.781	0.003	157368	0.20000	0.20	17.54- 57.54	37.49	
6.040	6.039	0.001	284130	0.20000	0.21	47.65- 87.65	67.69	
Average of Peak Amounts =					0.20333			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.417	11.417	0.000	589172	0.02000	0.020			(a)
9 Aroclor-1260					CAS #: 11096-82-5			
7.798	7.797	0.001	495344	0.20000	0.21	80.00- 120.00	100.00	(a)
8.093	8.091	0.002	374750	0.20000	0.20	55.72- 95.72	75.65	
8.503	8.502	0.001	415844	0.20000	0.20	71.06- 111.06	83.95	
Average of Peak Amounts =					0.20333			

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7503F.D
Report Date: 07-Nov-2011 13:57

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7503F.D
Date : 05-NOV-2011 03:39
Client ID: AR16602J2
Instrument: E2.i
Sample Info: AR16602J2,AR16602J2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7503R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7503R.D
Lab Smp Id: AR16602J2 Client Smp ID: AR16602J2
Inj Date : 05-NOV-2011 03:39
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR16602J2,AR16602J2,,ar1660.sub,,
Misc Info : 1,2,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 03:39 Cal File: E2K7503R.D
Als bottle: 25 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

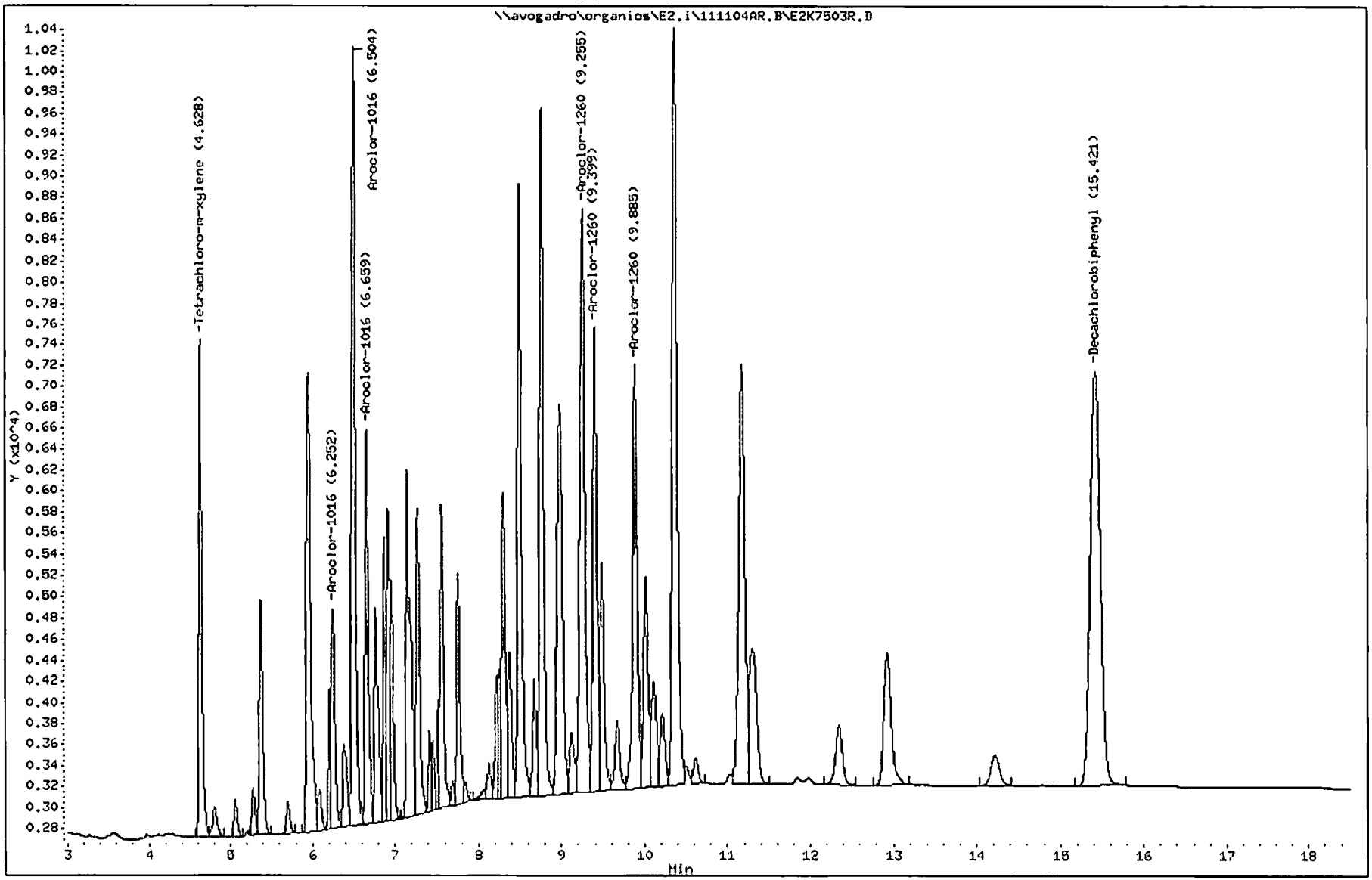
				AMOUNTS CAL-AMT	AMOUNTS ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
S 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.627	4.627	0.000	114915	0.01000	0.0094		(a)
6 Aroclor-1016					CAS #: 12674-11-2		
6.252	6.250	0.002	60598	0.20000	0.19	80.00- 120.00	100.00(a)
6.503	6.503	0.000	225974	0.20000	0.19	366.12- 406.12	372.91
6.659	6.657	0.002	102800	0.20000	0.19	151.11- 191.11	169.64
Average of Peak Amounts =					0.19000		
S 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.420	15.423	-0.003	332667	0.02000	0.017		(a)
8 Aroclor-1260					CAS #: 11096-82-5		
9.255	9.255	0.000	232184	0.20000	0.19	80.00- 120.00	100.00(a)
9.399	9.398	0.001	146870	0.20000	0.19	43.24- 83.24	63.26
9.884	9.883	0.001	152745	0.20000	0.19	46.46- 86.46	65.79
Average of Peak Amounts =					0.19000		

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7503R.D
Report Date: 07-Nov-2011 13:58

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7503R.D
Date : 05-NOV-2011 03:39
Client ID: AR16602J2 Instrument: E2.i
Sample Info: AR16602J2,AR16602J2,,ar1660.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPestII Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7504F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7504F.D
Lab Smp Id: AR16603J2 Client Smp ID: AR16603J2
Inj Date : 05-NOV-2011 04:00
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR16603J2,AR16603J2,,ar1660.sub,,
Misc Info : 1,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 26 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

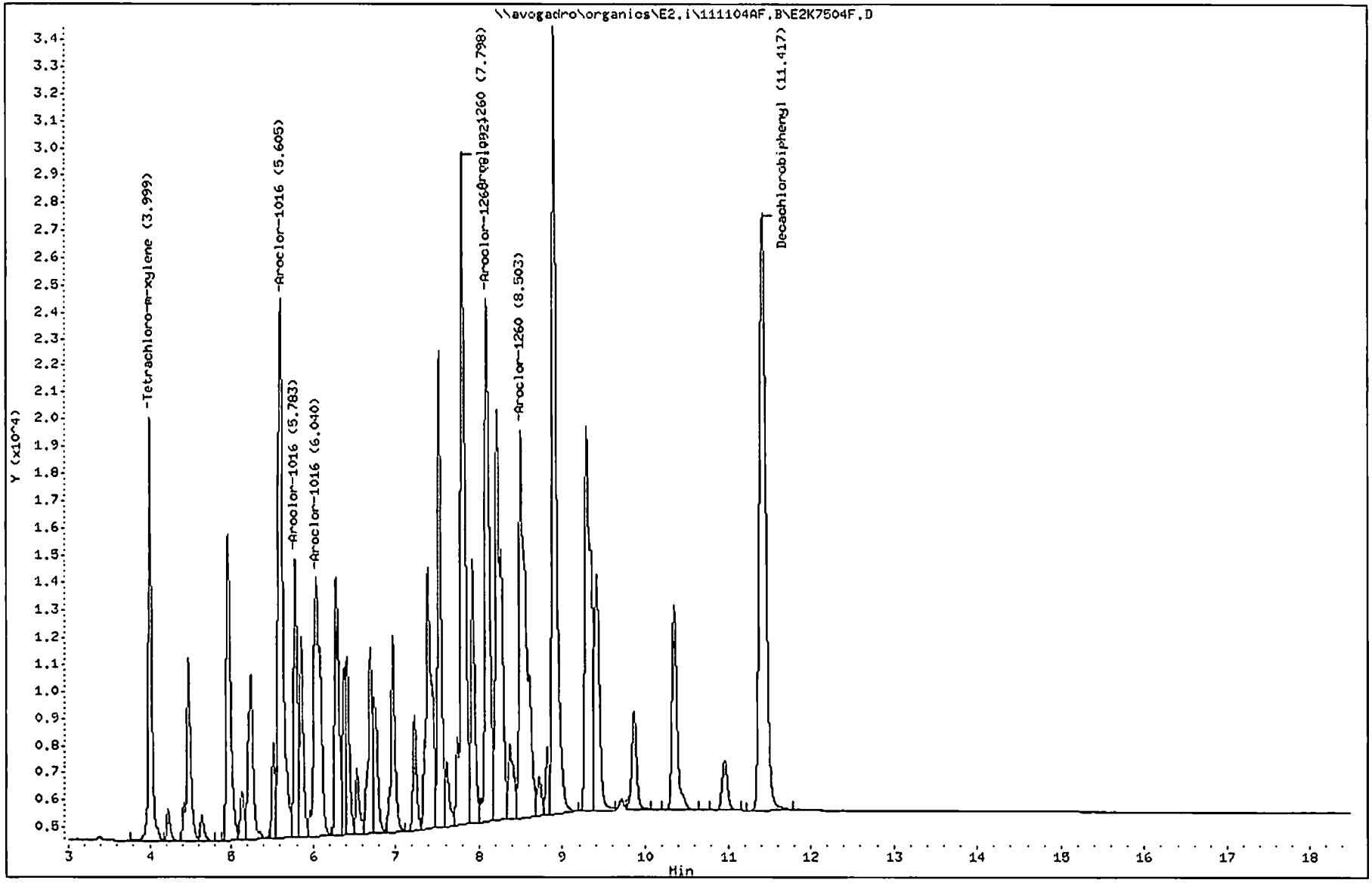
				AMOUNTS				
				CAL-AMT	ON-COL			
	RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
S	1 Tetrachloro-m-xylene					CAS #: 877-09-8		
	3.999	3.999	0.000	421611	0.02000	0.020		(a)
	5 Aroclor-1016					CAS #: 12674-11-2		
	5.604	5.604	0.000	834556	0.40000	0.41	80.00- 120.00	100.00(a)
	5.782	5.781	0.001	318079	0.40000	0.41	17.54- 57.54	38.11
	6.039	6.039	0.000	558297	0.40000	0.40	47.65- 87.65	66.90
	Average of Peak Amounts =					0.40667		
S	11 Decachlorobiphenyl					CAS #: 2051-24-3		
	11.417	11.417	0.000	1180562	0.04000	0.041		(a)
	9 Aroclor-1260					CAS #: 11096-82-5		
	7.797	7.797	0.000	965883	0.40000	0.40	80.00- 120.00	100.00(a)
	8.092	8.091	0.001	747740	0.40000	0.40	55.72- 95.72	77.42
	8.503	8.502	0.001	834844	0.40000	0.40	71.06- 111.06	86.43
	Average of Peak Amounts =					0.40000		

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7504F.D
Report Date: 07-Nov-2011 13:57

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7504F.D
Date : 05-NOV-2011 04:00
Client ID: AR16603J2 Instrument: E2.i
Sample Info: AR16603J2,AR16603J2,,ar1660.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPest Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7504R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7504R.D
Lab Smp Id: AR16603J2 Client Smp ID: AR16603J2
Inj Date : 05-NOV-2011 04:00
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR16603J2,AR16603J2,,ar1660.sub,,
Misc Info : 1,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:00 Cal File: E2K7504R.D
Als bottle: 26 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

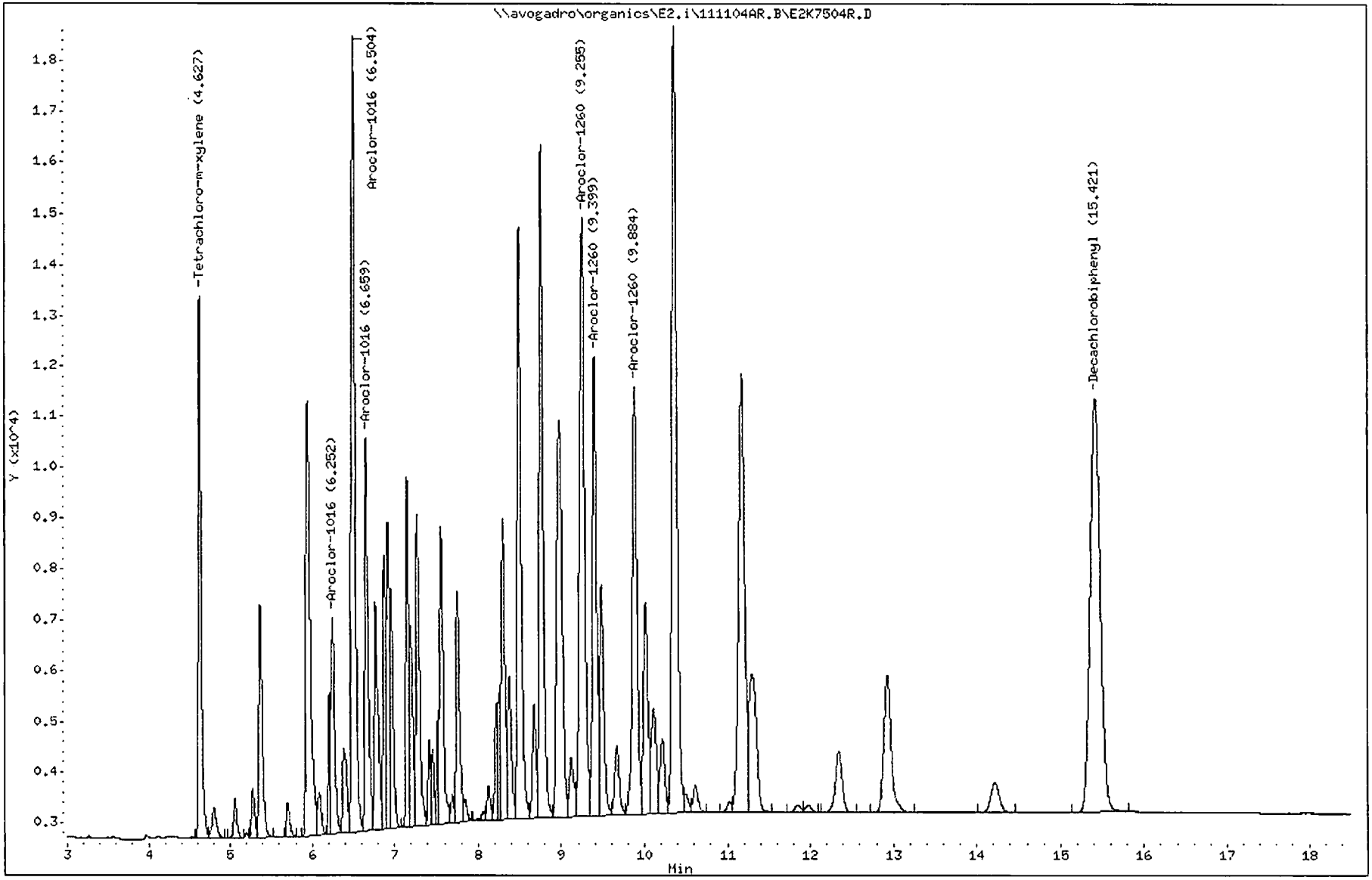
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.627	4.627	0.000	253512	0.02000	0.020			(a)
6 Aroclor-1016					CAS #: 12674-11-2			
6.251	6.250	0.001	124251	0.40000	0.40	80.00- 120.00		100.00(a)
6.503	6.503	0.000	482002	0.40000	0.41	366.12- 406.12		387.92
6.659	6.657	0.002	212965	0.40000	0.40	151.11- 191.11		171.40
Average of Peak Amounts =					0.40333			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.421	15.423	-0.002	690348	0.04000	0.041			(a)
8 Aroclor-1260					CAS #: 11096-82-5			
9.254	9.255	-0.001	495556	0.40000	0.40	80.00- 120.00		100.00(a)
9.398	9.398	0.000	301864	0.40000	0.39	43.24- 83.24		60.91
9.883	9.883	0.000	318729	0.40000	0.40	46.46- 86.46		64.32
Average of Peak Amounts =					0.39667			

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7504R.D
Report Date: 07-Nov-2011 13:58

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7504R.D
Date : 05-NOV-2011 04:00
Client ID: AR16603J2
Instrument: E2.i
Sample Info: AR16603J2,AR16603J2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7505F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7505F.D
Lab Smp Id: AR16604J2 Client Smp ID: AR16604J2
Inj Date : 05-NOV-2011 04:21
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR16604J2,AR16604J2,,ar1660.sub,,
Misc Info : 1,4,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 27 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

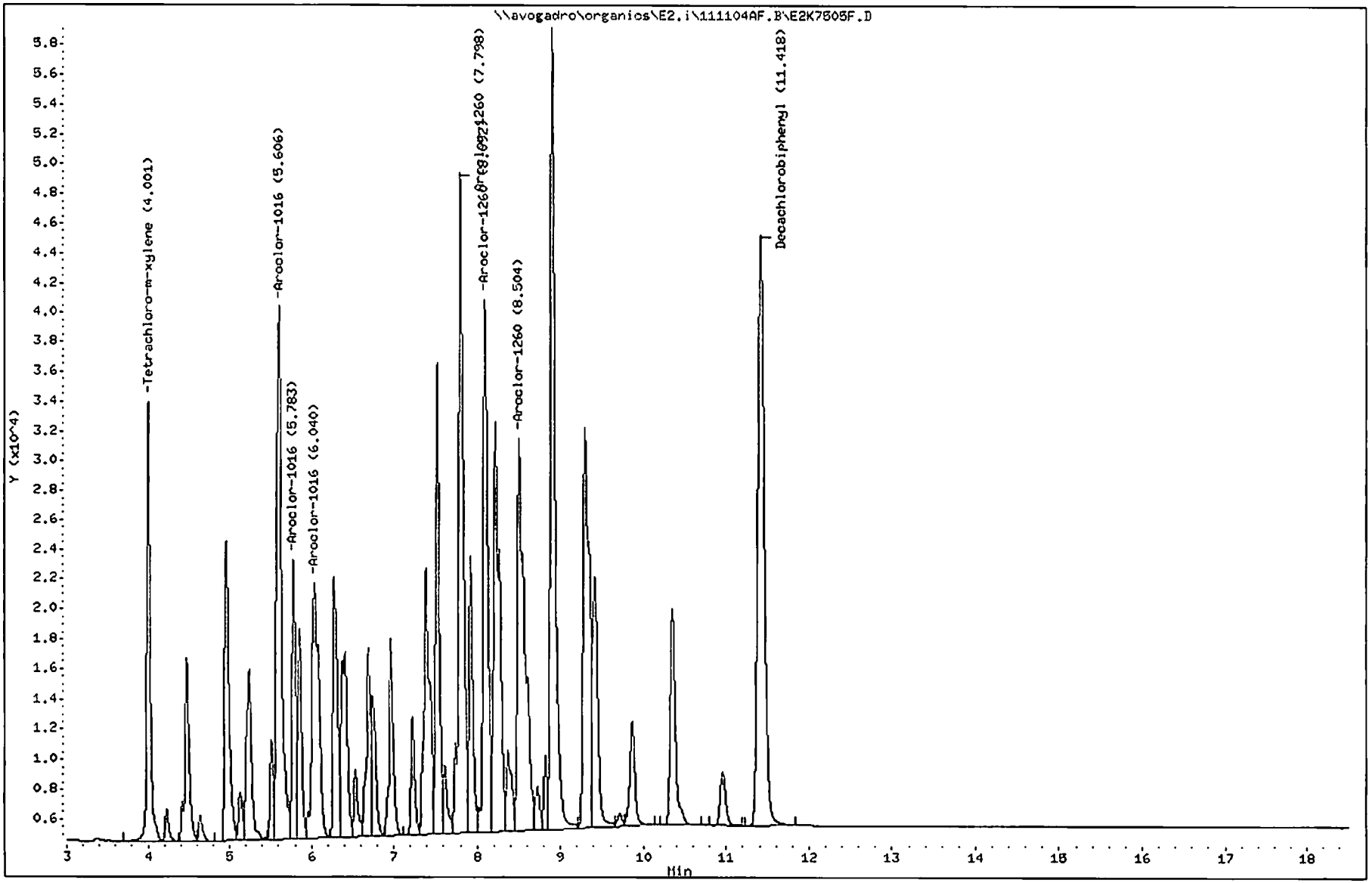
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.000	3.999	0.001	848285	0.04000	0.041			(a)
5 Aroclor-1016					CAS #: 12674-11-2			
5.605	5.604	0.001	1543175	0.80000	0.75	80.00- 120.00	100.00	(a)
5.783	5.781	0.002	580219	0.80000	0.75	17.54- 57.54	37.60	
6.040	6.039	0.001	1033094	0.80000	0.75	47.65- 87.65	66.95	
Average of Peak Amounts =					0.75000			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.418	11.417	0.001	2189957	0.08000	0.076			
9 Aroclor-1260					CAS #: 11096-82-5			
7.798	7.797	0.001	1764604	0.80000	0.74	80.00- 120.00	100.00	(a)
8.092	8.091	0.001	1418164	0.80000	0.76	55.72- 95.72	80.37	
8.503	8.502	0.001	1587192	0.80000	0.77	71.06- 111.06	89.95	
Average of Peak Amounts =					0.75667			

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7505F.D
Report Date: 07-Nov-2011 13:57

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7505F.D
Date : 05-NOV-2011 04:21
Client ID: AR16604J2
Instrument: E2.i
Sample Info: AR16604J2,AR16604J2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7505R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7505R.D
Lab Smp Id: AR16604J2 Client Smp ID: AR16604J2
Inj Date : 05-NOV-2011 04:21
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR16604J2,AR16604J2,,ar1660.sub,,
Misc Info : 1,4,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:21 Cal File: E2K7505R.D
Als bottle: 27 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

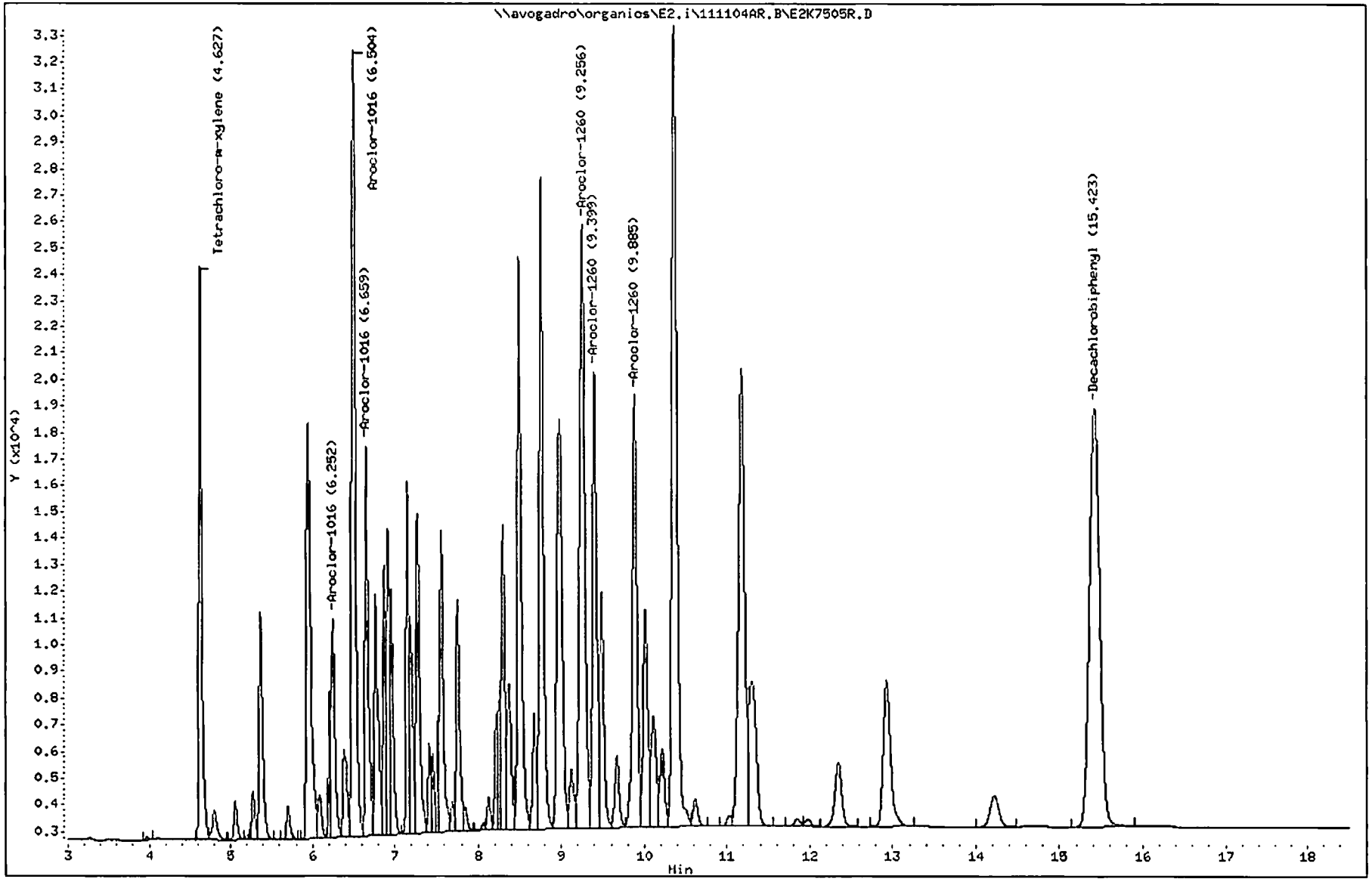
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.627	4.627	0.000	531891	0.04000	0.043			(a)
6 Aroclor-1016					CAS #: 12674-11-2			
6.251	6.250	0.001	242167	0.80000	0.78	80.00- 120.00	100.00	(a)
6.503	6.503	0.000	938414	0.80000	0.79	366.12- 406.12	387.51	
6.658	6.657	0.001	411018	0.80000	0.77	151.11- 191.11	169.72	
Average of Peak Amounts =					0.78000			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.423	15.423	0.000	1347683	0.08000	0.080			
8 Aroclor-1260					CAS #: 11096-82-5			
9.256	9.255	0.001	977213	0.80000	0.80	80.00- 120.00	100.00	(a)
9.399	9.398	0.001	579075	0.80000	0.76	43.24- 83.24	59.26	
9.884	9.883	0.001	625336	0.80000	0.78	46.46- 86.46	63.99	
Average of Peak Amounts =					0.78000			

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7505R.D
Report Date: 07-Nov-2011 13:58

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7505R.D
Date : 05-NOV-2011 04:21
Client ID: AR16604J2
Instrument: E2.i
Sample Info: AR16604J2,AR16604J2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7506F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

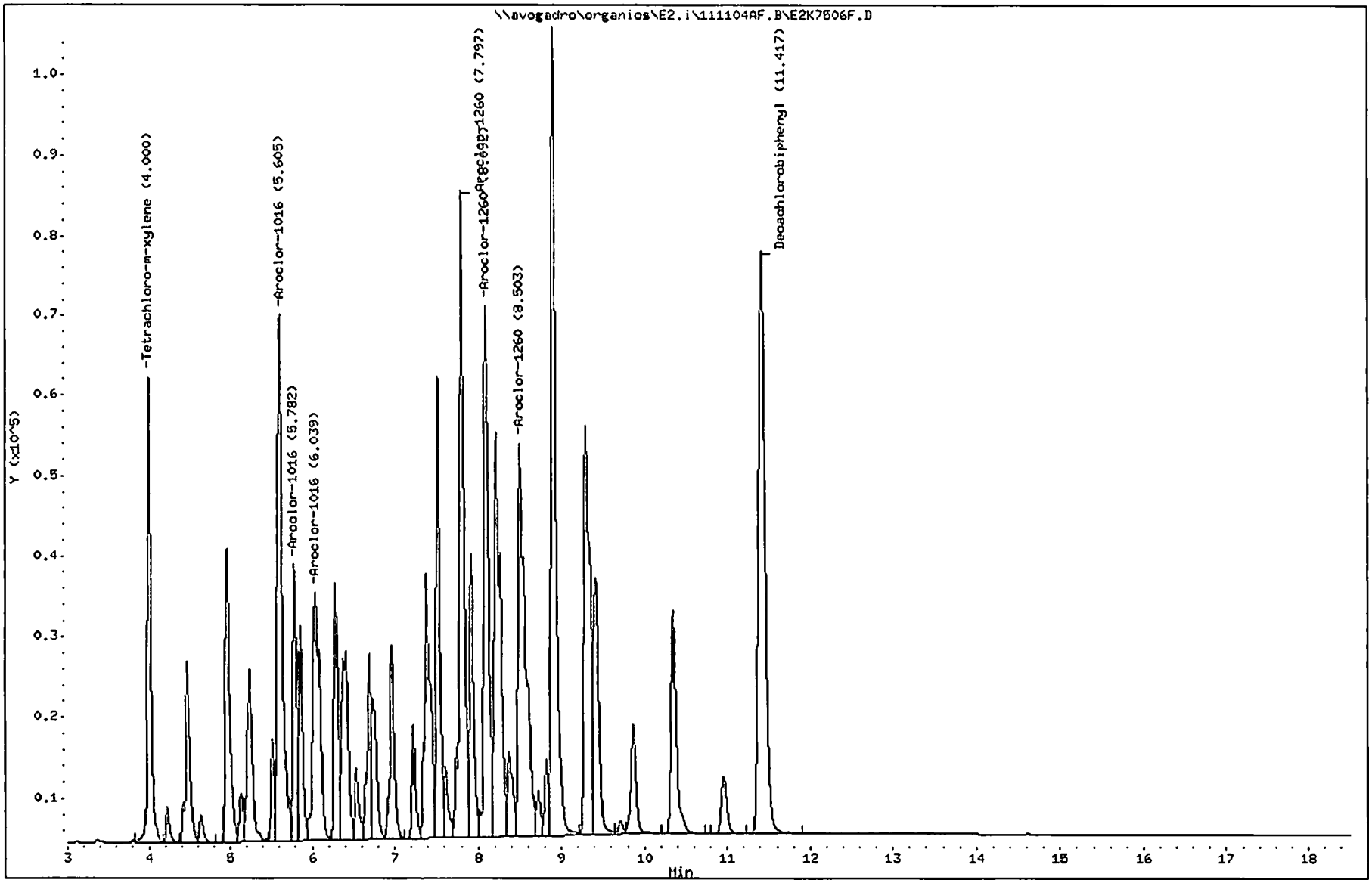
Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7506F.D
Lab Smp Id: AR16605J2 Client Smp ID: AR16605J2
Inj Date : 05-NOV-2011 04:42
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR16605J2,AR16605J2,,ar1660.sub,,
Misc Info : 1,5,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 28 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
3.999	3.999	0.000	1689747	0.08000	0.081		
5 Aroclor-1016					CAS #: 12674-11-2		
5.604	5.604	0.000	2852373	1.60000	1.4	80.00- 120.00	100.00
5.781	5.781	0.000	1085974	1.60000	1.4	17.54- 57.54	38.07
6.039	6.039	0.000	1894179	1.60000	1.4	47.65- 87.65	66.41
Average of Peak Amounts =					1.40000		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.417	11.417	0.000	4066471	0.16000	0.14		
9 Aroclor-1260					CAS #: 11096-82-5		
7.797	7.797	0.000	3208332	1.60000	1.3	80.00- 120.00	100.00
8.091	8.091	0.000	2633194	1.60000	1.4	55.72- 95.72	82.07
8.502	8.502	0.000	2966158	1.60000	1.4	71.06- 111.06	92.45
Average of Peak Amounts =					1.36667		

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7506F.D
Date : 05-NOV-2011 04:42
Client ID: AR16605J2
Instrument: E2.i
Sample Info: AR16605J2,AR16605J2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7506R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

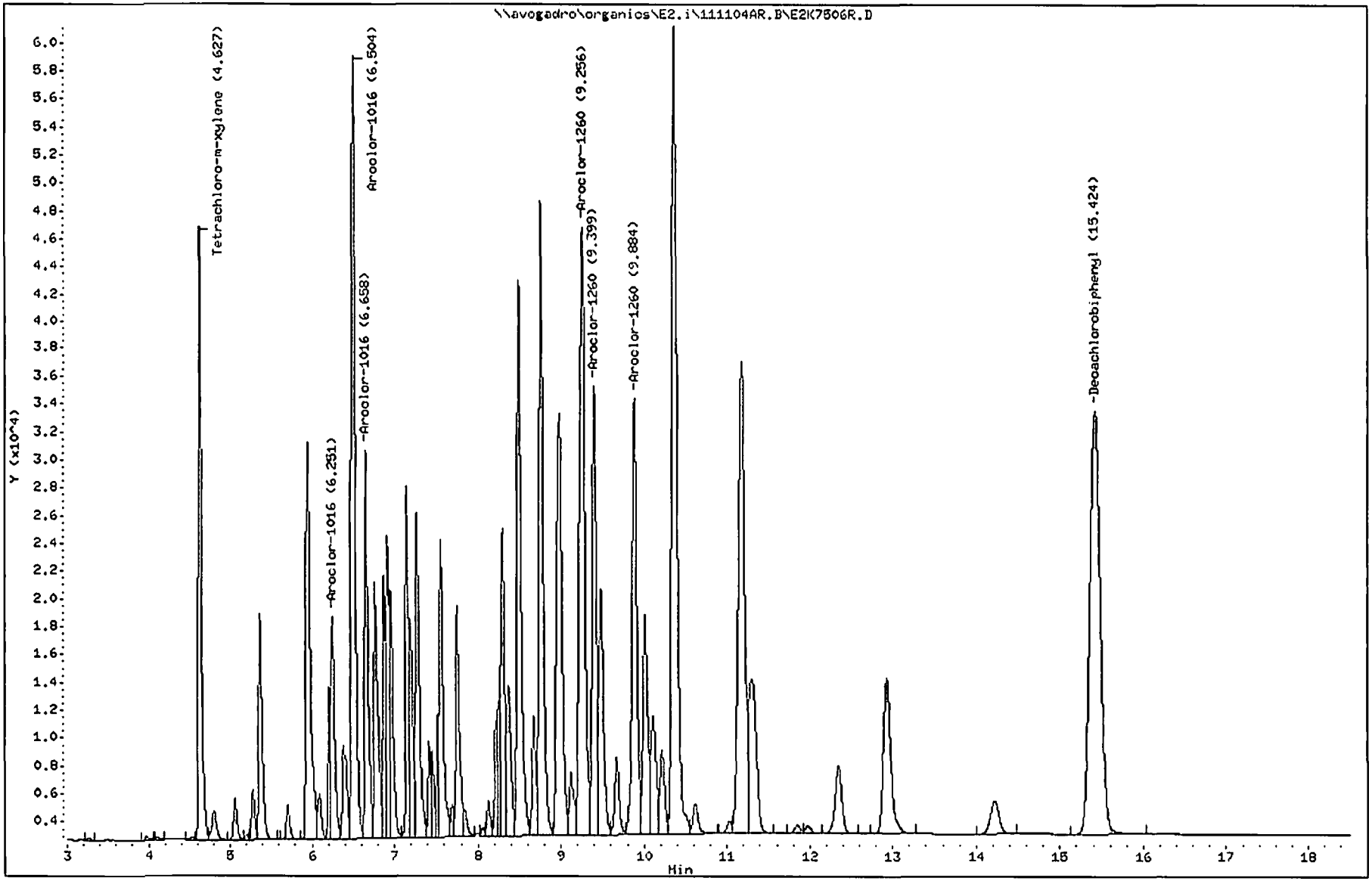
Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7506R.D
Lab Smp Id: AR16605J2 Client Smp ID: AR16605J2
Inj Date : 05-NOV-2011 04:42
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR16605J2,AR16605J2,,ar1660.sub,,
Misc Info : 1,5,,1
Comment :
Method : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 28 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.627	4.627	0.000	1117025	0.08000	0.089			
6 Aroclor-1016						CAS #: 12674-11-2		
6.250	6.250	0.000	472871	1.60000	1.5	80.00- 120.00		100.00
6.503	6.503	0.000	1835221	1.60000	1.6	366.12- 406.12		388.10
6.657	6.657	0.000	801318	1.60000	1.5	151.11- 191.11		169.46
Average of Peak Amounts =					1.53333			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.423	15.423	0.000	2643398	0.16000	0.16			
8 Aroclor-1260						CAS #: 11096-82-5		
9.255	9.255	0.000	1927115	1.60000	1.6	80.00- 120.00		100.00
9.398	9.398	0.000	1106371	1.60000	1.5	43.24- 83.24		57.41
9.883	9.883	0.000	1231272	1.60000	1.6	46.46- 86.46		63.89
Average of Peak Amounts =					1.56667			

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7506R.D
Date : 05-NOV-2011 04:42
Client ID: AR16605J2
Instrument: E2.i
Sample Info: AR16605J2,AR16605J2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111107F.B\E2K7566F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111107F.B\E2K7566F.D
Lab Smp Id: AR16603JD Client Smp ID: AR16603JD
Inj Date : 07-NOV-2011 21:12
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR16603JD,AR16603JD,,ar1660.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

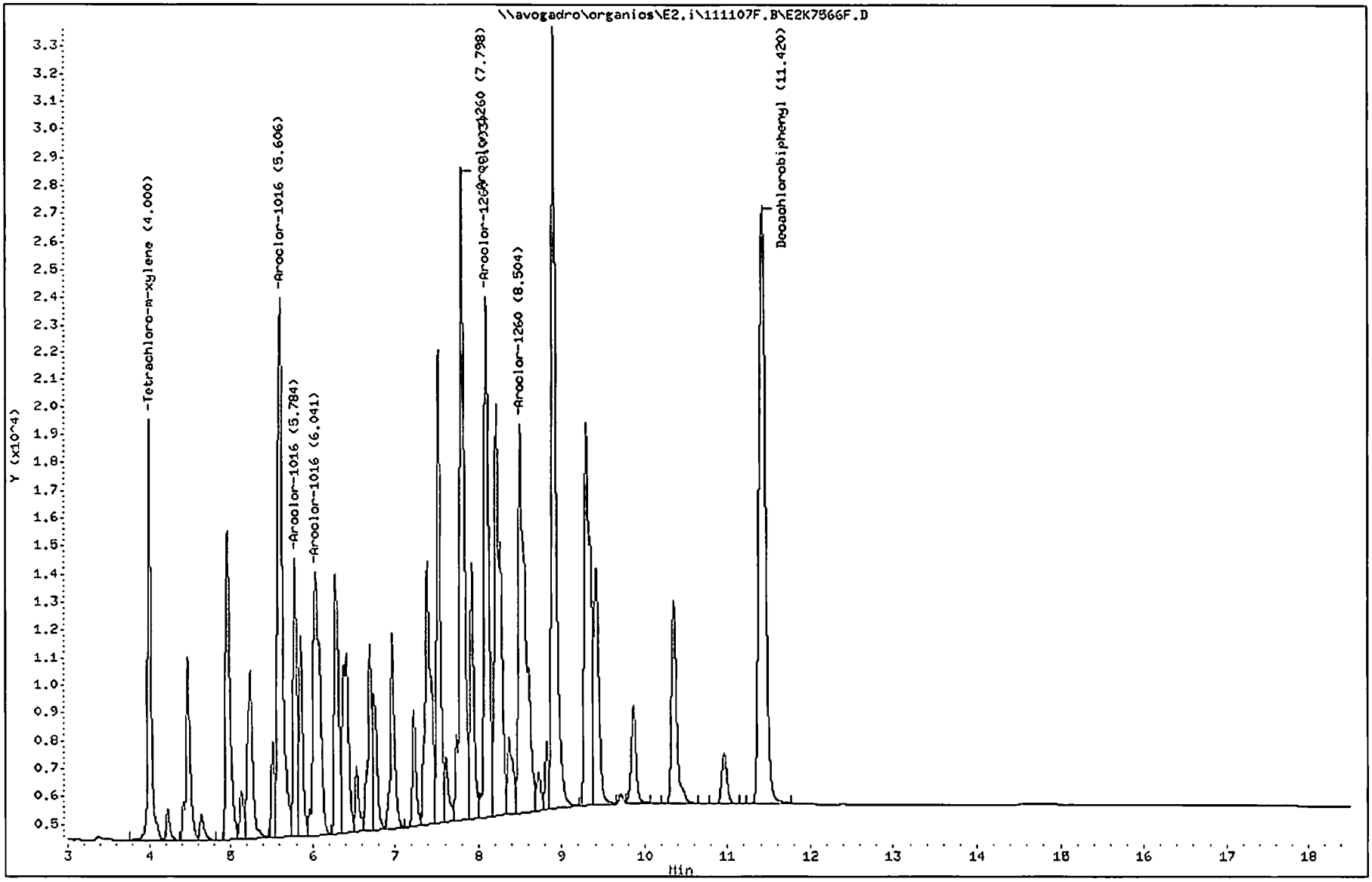
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.000	3.999	0.001	424744	0.02000	0.020			(a)
5 Aroclor-1016					CAS #: 12674-11-2			
5.606	5.604	0.002	826170	0.40000	0.40	80.00- 120.00	100.00	(a)
5.783	5.781	0.002	309648	0.40000	0.40	17.38- 57.38	37.48	
6.040	6.039	0.001	557437	0.40000	0.40	46.93- 86.93	67.47	
Average of Peak Amounts =					0.40000			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.420	11.417	0.003	1159251	0.04000	0.040			(a)
9 Aroclor-1260					CAS #: 11096-82-5			
7.798	7.797	0.001	930485	0.40000	0.39	80.00- 120.00	100.00	(a)
8.093	8.091	0.002	733428	0.40000	0.39	58.48- 98.48	78.82	
8.504	8.502	0.002	831237	0.40000	0.40	68.67- 108.67	89.33	
Average of Peak Amounts =					0.39333			

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7566F.D
Report Date: 08-Nov-2011 11:42

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7566F.D
Date : 07-NOV-2011 21:12
Client ID: AR16603JD
Instrument: E2.i
Sample Info: AR16603JD,AR16603JD,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7566R.D
Report Date: 08-Nov-2011 11:43

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111107R.B\E2K7566R.D
Lab Smp Id: AR16603JD Client Smp ID: AR16603JD
Inj Date : 07-NOV-2011 21:12
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR16603JD,AR16603JD,,ar1660.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

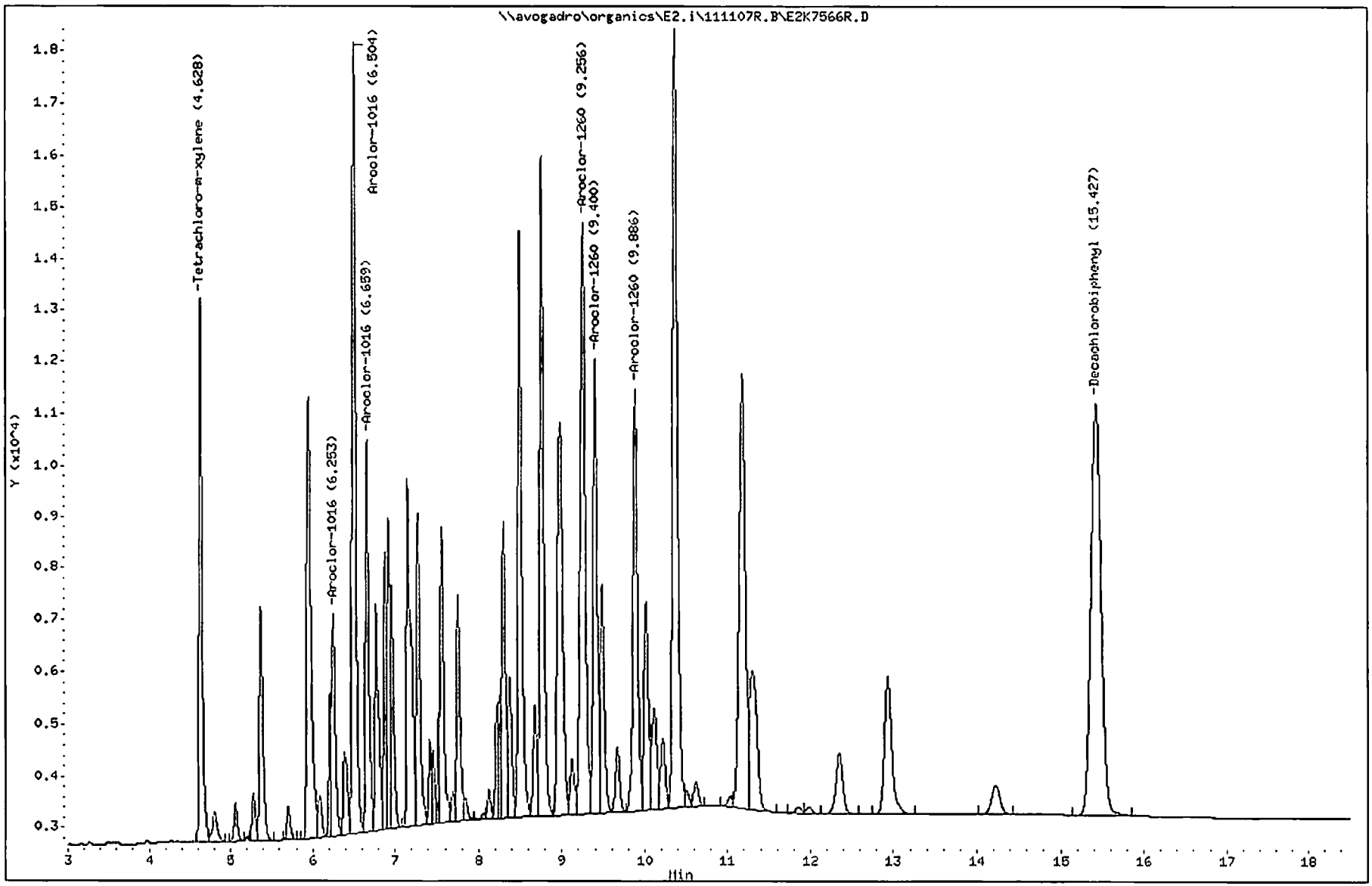
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.628	4.627	0.001	256925	0.02000	0.020			(a)
6 Aroclor-1016					CAS #: 12674-11-2			
6.252	6.250	0.002	124954	0.40000	0.41	80.00- 120.00	100.00	(a)
6.503	6.503	0.000	471984	0.40000	0.40	361.18- 401.18	377.72	
6.659	6.657	0.002	209435	0.40000	0.40	148.73- 188.73	167.61	
Average of Peak Amounts =				0.40333				
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.427	15.423	0.004	670355	0.04000	0.040			(a)
8 Aroclor-1260					CAS #: 11096-82-5			
9.255	9.255	0.000	476468	0.40000	0.39	80.00- 120.00	100.00	(a)
9.400	9.398	0.002	291455	0.40000	0.39	41.04- 81.04	61.17	
9.885	9.883	0.002	304672	0.40000	0.38	44.30- 84.30	63.94	
Average of Peak Amounts =				0.38667				

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7566R.D
Report Date: 08-Nov-2011 11:43

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7566R.D
Date : 07-NOV-2011 21:12
Client ID: AR16603JD
Instrument: E2.i
Sample Info: AR16603JD,AR16603JD,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111107F.B\E2K7600F.D
Report Date: 08-Nov-2011 14:43

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111107F.B\E2K7600F.D
Lab Smp Id: AR16603DJ Client Smp ID: AR16603DJ
Inj Date : 08-NOV-2011 09:05
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR16603DJ,AR16603DJ,,ar1660.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 14:41 E2.i Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

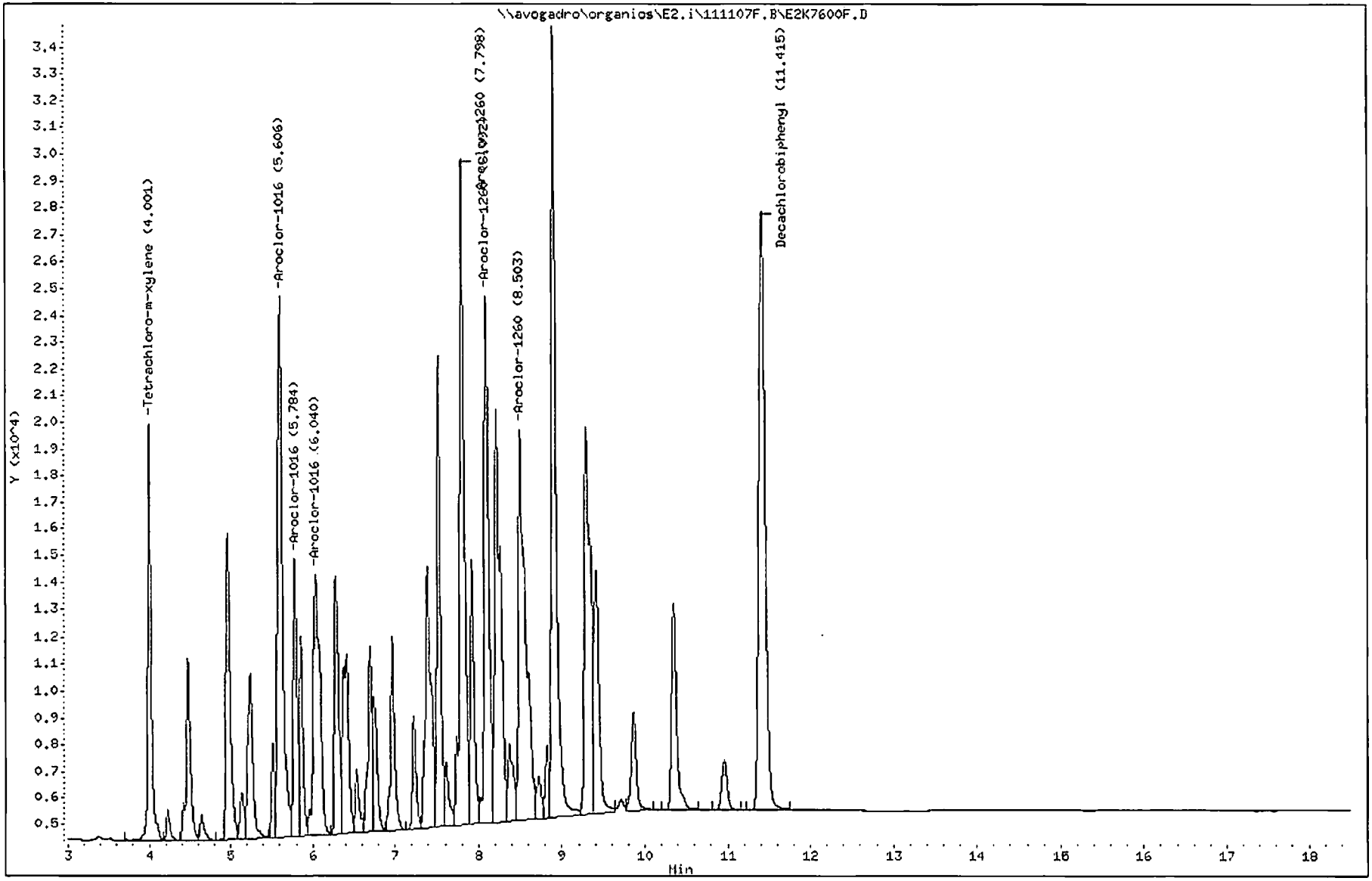
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.000	3.999	0.001	439578	0.02000	0.021			(a)
5 Aroclor-1016					CAS #: 12674-11-2			
5.606	5.604	0.002	858379	0.40000	0.42	80.00- 120.00	100.00	(a)
5.783	5.781	0.002	320830	0.40000	0.41	17.38- 57.38	37.38	
6.040	6.039	0.001	574545	0.40000	0.42	46.93- 86.93	66.93	
Average of Peak Amounts =					0.41667			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.415	11.417	-0.002	1196426	0.04000	0.042			(a)
9 Aroclor-1260					CAS #: 11096-82-5			
7.797	7.797	0.000	987793	0.40000	0.41	80.00- 120.00	100.00	(a)
8.092	8.091	0.001	775189	0.40000	0.42	58.48- 98.48	78.48	
8.502	8.502	0.000	875909	0.40000	0.42	68.67- 108.67	88.67	
Average of Peak Amounts =					0.41667			

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7600F.D
Report Date: 08-Nov-2011 14:43

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7600F.D
Date : 08-NOV-2011 09:05
Client ID: AR16603DJ
Instrument: E2.i
Sample Info: AR16603DJ,AR16603DJ,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7600R.D
Report Date: 08-Nov-2011 14:43

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111107R.B\E2K7600R.D
Lab Smp Id: AR16603DJ Client Smp ID: AR16603DJ
Inj Date : 08-NOV-2011 09:05
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR16603DJ,AR16603DJ,,ar1660.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 14:42 E2.i Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

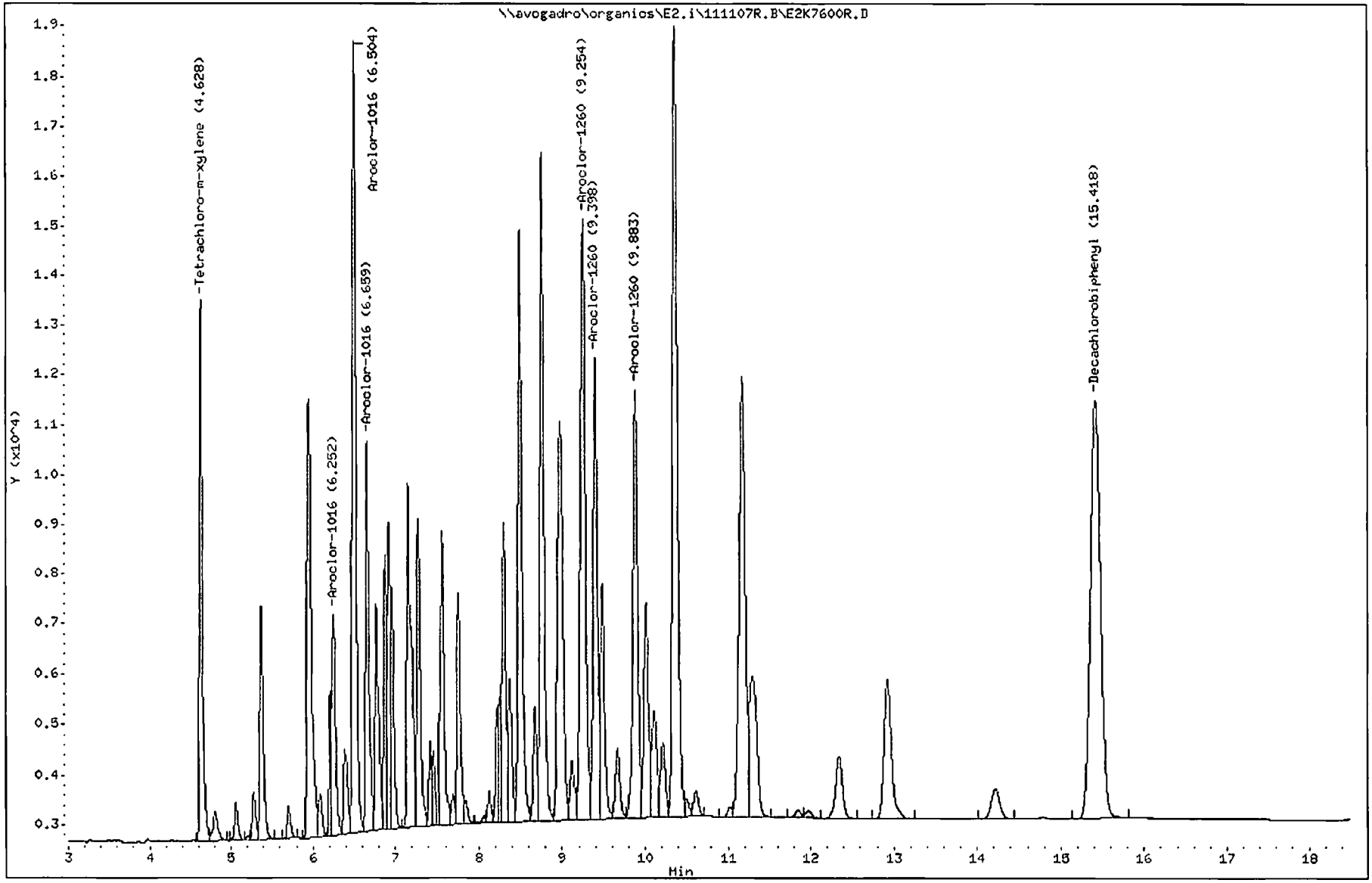
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.628	4.627	0.001	264059	0.02000	0.021			(a)
6 Aroclor-1016					CAS #: 12674-11-2			
6.252	6.250	0.002	128229	0.40000	0.42	80.00- 120.00		100.00(a)
6.504	6.503	0.001	488789	0.40000	0.42	361.18- 401.18		381.18
6.659	6.657	0.002	216362	0.40000	0.41	148.73- 188.73		168.73
Average of Peak Amounts =					0.41667			
8 Aroclor-1260					CAS #: 11096-82-5			
9.254	9.255	-0.001	504933	0.40000	0.41	80.00- 120.00		100.00(a)
9.398	9.398	0.000	308205	0.40000	0.41	41.04- 81.04		61.04
9.883	9.883	0.000	324653	0.40000	0.41	44.30- 84.30		64.30
Average of Peak Amounts =					0.41000			

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7600R.D
Date : 08-NOV-2011 09:05
Client ID: AR16603DJ
Instrument: E2.i
Sample Info: AR16603DJ,AR16603DJ,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111107F.B\E2K7607F.D
Report Date: 08-Nov-2011 14:43

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111107F.B\E2K7607F.D
Lab Smp Id: AR16603JE Client Smp ID: AR16603JE
Inj Date : 08-NOV-2011 13:05
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR16603JE,AR16603JE,,ar1660.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 14:41 E2.i Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

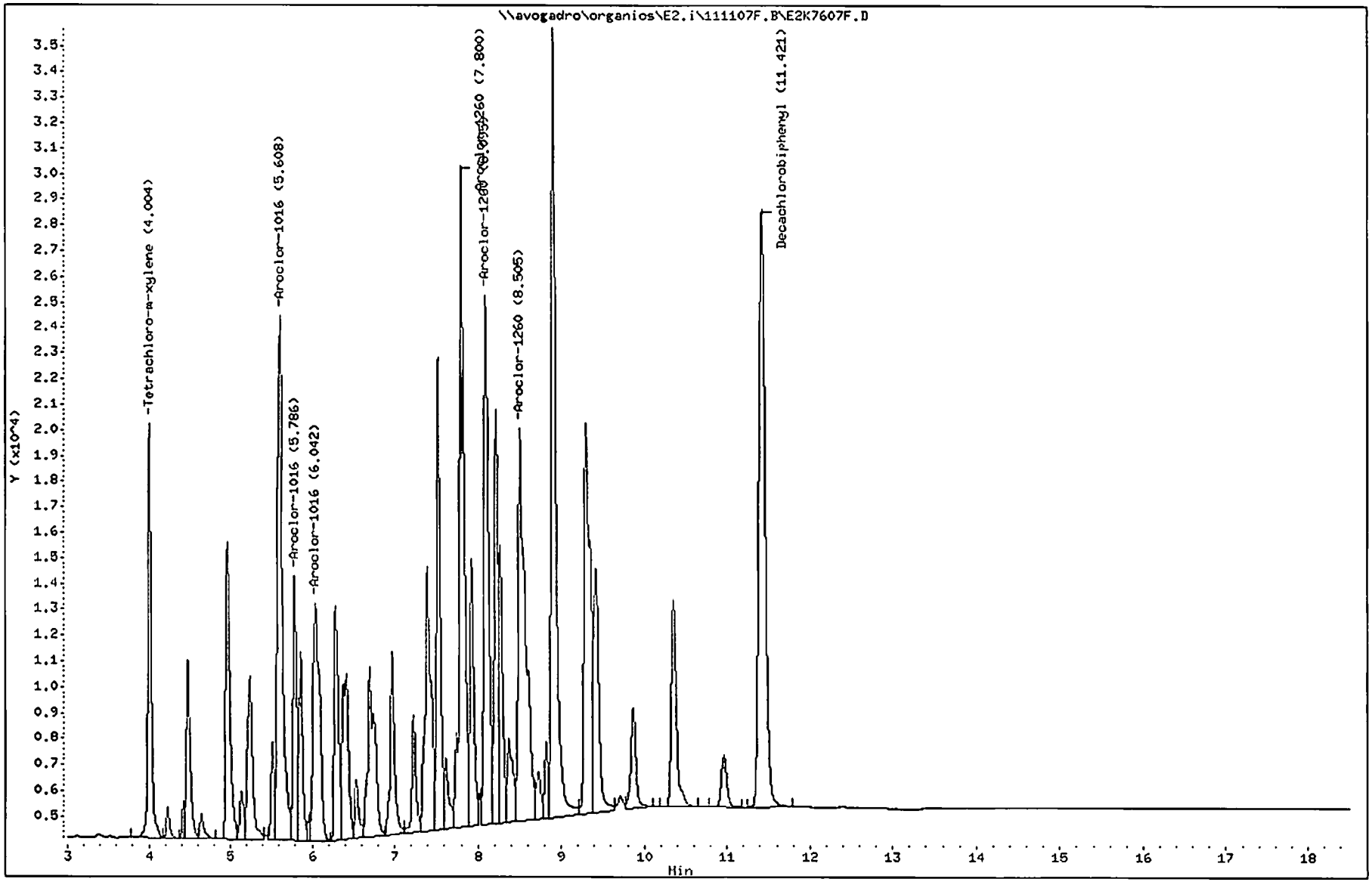
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.003	3.999	0.004	441884	0.02000	0.021			(a)
5 Aroclor-1016					CAS #: 12674-11-2			
5.608	5.604	0.004	867878	0.40000	0.42	80.00- 120.00	100.00	(a)
5.785	5.781	0.004	319231	0.40000	0.41	17.38- 57.38	36.78	
6.042	6.039	0.003	517430	0.40000	0.38	46.93- 86.93	59.62	
Average of Peak Amounts =				0.40333				
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.420	11.417	0.003	1247120	0.04000	0.044			(a)
9 Aroclor-1260					CAS #: 11096-82-5			
7.799	7.797	0.002	1031645	0.40000	0.43	80.00- 120.00	100.00	(a)
8.094	8.091	0.003	795456	0.40000	0.43	58.48- 98.48	77.11	
8.505	8.502	0.003	922190	0.40000	0.44	68.67- 108.67	89.39	
Average of Peak Amounts =				0.43333				

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7607F.D
Report Date: 08-Nov-2011 14:43

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7607F.D
Date : 08-NOV-2011 13:05
Client ID: AR16603JE
Instrument: E2.i
Sample Info: AR16603JE,AR16603JE,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7607R.D
Report Date: 08-Nov-2011 14:44

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111107R.B\E2K7607R.D
Lab Smp Id: AR16603JE Client Smp ID: AR16603JE
Inj Date : 08-NOV-2011 13:05
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AR16603JE,AR16603JE,,ar1660.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 14:42 E2.i Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

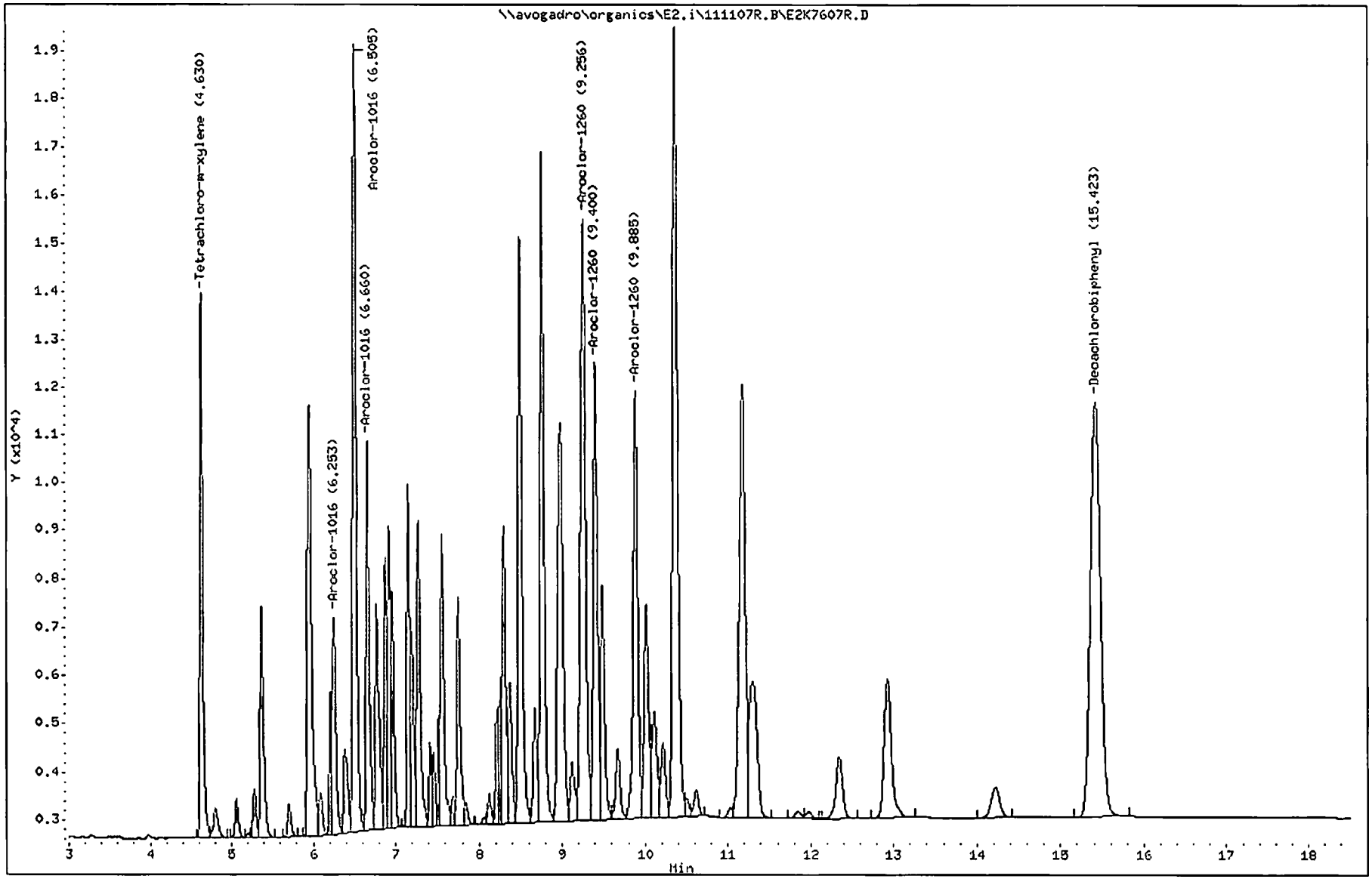
				AMOUNTS CAL-AMT	AMOUNTS ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.629	4.627	0.002	269913	0.02000	0.021		(a)
6 Aroclor-1016					CAS #: 12674-11-2		
6.253	6.250	0.003	129914	0.40000	0.42	80.00- 120.00	100.00(a)
6.504	6.503	0.001	501067	0.40000	0.43	361.18- 401.18	385.69
6.659	6.657	0.002	222172	0.40000	0.42	148.73- 188.73	171.01
Average of Peak Amounts =					0.42333		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.423	15.423	0.000	731154	0.04000	0.043		(a)
8 Aroclor-1260					CAS #: 11096-82-5		
9.255	9.255	0.000	524091	0.40000	0.43	80.00- 120.00	100.00(a)
9.399	9.398	0.001	318633	0.40000	0.43	41.04- 81.04	60.80
9.885	9.883	0.002	335494	0.40000	0.42	44.30- 84.30	64.01
Average of Peak Amounts =					0.42667		

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7607R.D
Report Date: 08-Nov-2011 14:44

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7607R.D
Date : 08-NOV-2011 13:05
Client ID: AR16603JE
Instrument: E2.i
Sample Info: AR16603JE,AR16603JE,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ABLK2F

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-62776

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E2K7575F.D/E2K7575R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7575F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

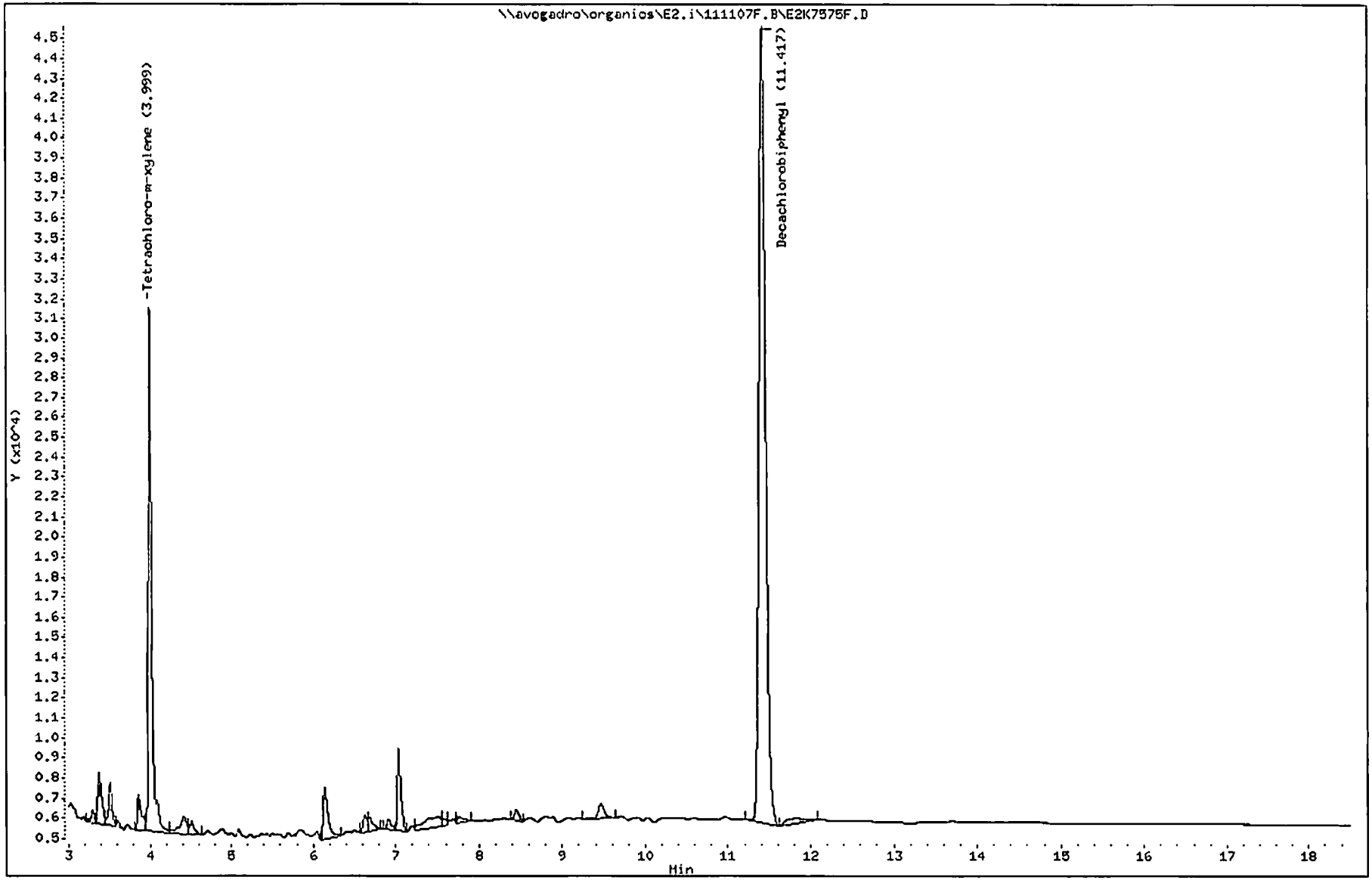
Data file : \\avogadro\organics\E2.i\111107F.B\E2K7575F.D
Lab Smp Id: MB-62776 Client Smp ID: ABLK2F
Inj Date : 08-NOV-2011 00:21
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : MB-62776,ABLK2F,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 17 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
3.999	3.999	0.000	737852	0.03553	12		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.417	11.417	0.000	2202654	0.07683	26		

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7575F.D
Date : 08-NOV-2011 00:21
Client ID: ABLK2F
Instrument: E2.i
Sample Info: MB-62776,ABLK2F,62776,somaro.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7575R.D
Report Date: 08-Nov-2011 11:43

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

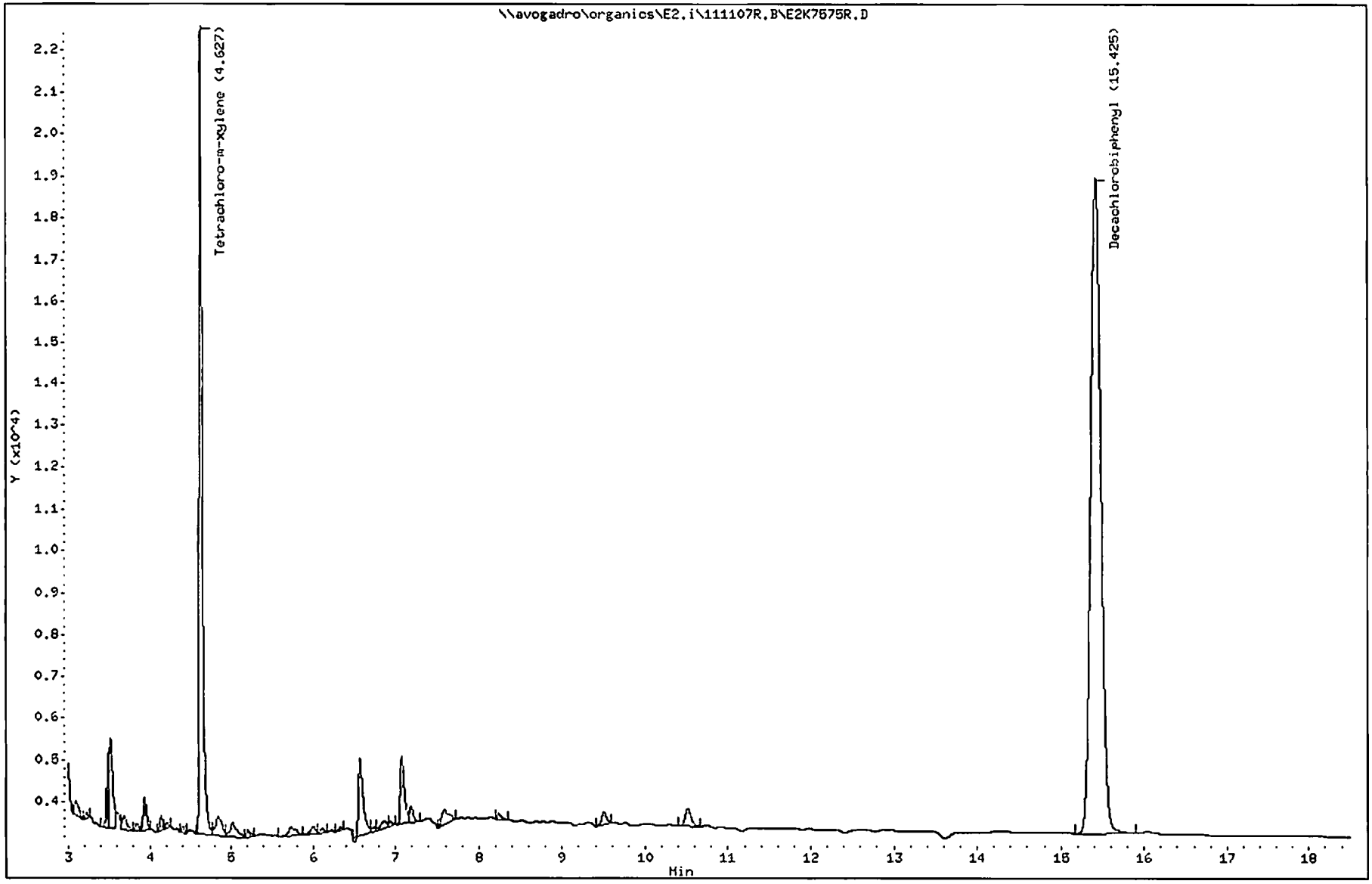
Data file : \\avogadro\organics\E2.i\111107R.B\E2K7575R.D
Lab Smp Id: MB-62776 Client Smp ID: ABLK2F
Inj Date : 08-NOV-2011 00:21
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : MB-62776,ABLK2F,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 17 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
s 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.627	4.627	0.000	477506	0.03796	13		
s 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.425	15.423	0.002	1341468	0.07914	26		

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7575R.D
Date : 08-NOV-2011 00:21
Client ID: ABLK2F
Instrument: E2.i
Sample Info: MB-62776,ABLK2F,62776,somaro.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

1638197

EPA SAMPLE NO.

AIBLKDJ(1)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: AIBLKDJ

Sample wt/vol: (g/mL) ML Lab File ID: E2K7599F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) Date Extracted:

Concentrated Extract Volume: (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U
37324-23-5	Aroclor-1262	1.0	U
11100-14-4	Aroclor-1268	1.0	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

1638224

EPA SAMPLE NO.

AIBLKDJ(2)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: AIBLKDJ

Sample wt/vol: (g/mL) ML Lab File ID: E2K7599R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) Date Extracted:

Concentrated Extract Volume: (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U
37324-23-5	Aroclor-1262	1.0	U
11100-14-4	Aroclor-1268	1.0	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7599F.D
Report Date: 08-Nov-2011 14:43

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111107F.B\E2K7599F.D
Lab Smp Id: AIBLKDJ Client Smp ID: AILBKDJ
Inj Date : 08-NOV-2011 08:44
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AIBLKDJ,AILBKDJ,,AIBLK.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 14:41 E2.i Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 99 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: AIBLK.sub
Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

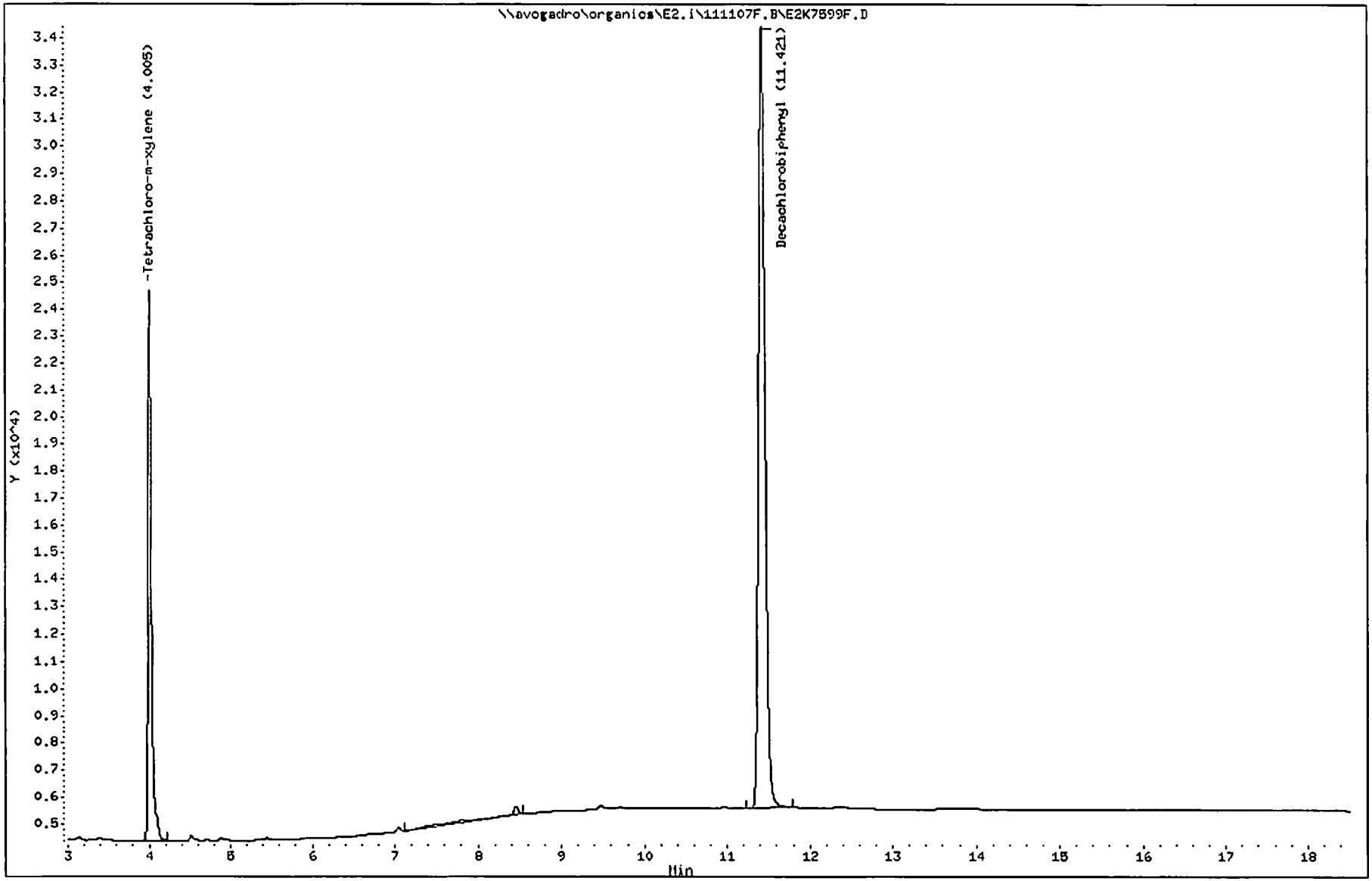
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.005	3.999	0.006	553591	0.02000	0.027			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.420	11.417	0.003	1571138	0.04000	0.055			

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7599F.D
Date : 08-NOV-2011 08:44
Client ID: AILBKDJ
Instrument: E2.i
Sample Info: AIBLKDJ,AILBKDJ,,AIBLK.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7599R.D
Report Date: 08-Nov-2011 14:43

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111107R.B\E2K7599R.D
Lab Smp Id: AIBLKDJ Client Smp ID: AILBKDJ
Inj Date : 08-NOV-2011 08:44
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AIBLKDJ,AILBKDJ,,AIBLK.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 14:42 E2.i Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 99 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: AIBLK.sub
Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

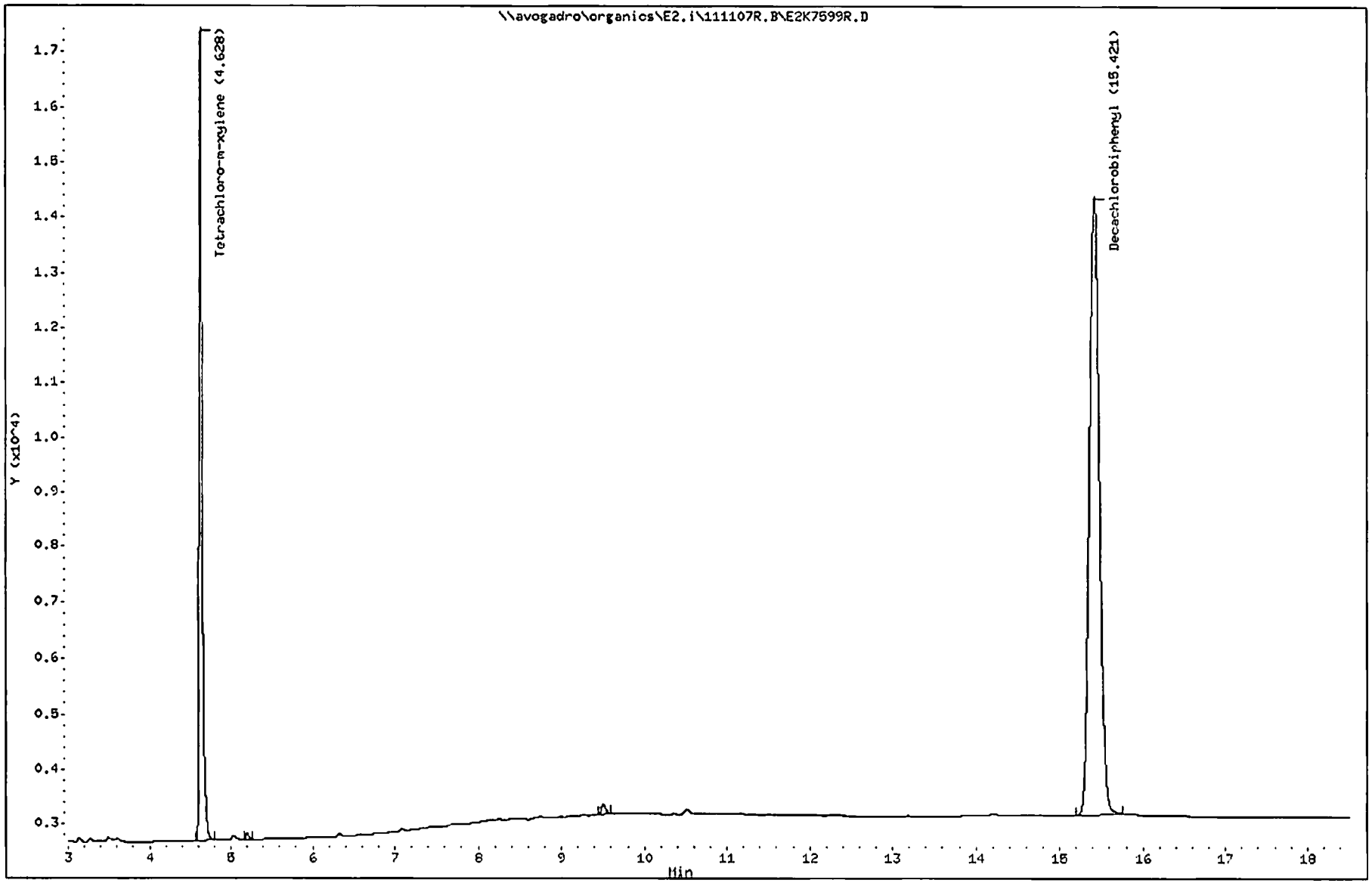
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

			AMOUNTS				
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
S 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.628	4.627	0.001	363405	0.02000	0.029		(a)
S 11 Decachlorobiphenyl						CAS #: 2051-24-3	
15.421	15.423	-0.002	939217	0.04000	0.055		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7599R.D
Date : 08-NOV-2011 08:44
Client ID: AILBKDJ
Instrument: E2.i
Sample Info: AIBLKDJ,AILBKDJ,,AIBLK.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

1637678

EPA SAMPLE NO.

AIBLKJD(1)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: AIBLKJD

Sample wt/vol: (g/mL) ML Lab File ID: E2K7565F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) Date Extracted:

Concentrated Extract Volume: (uL) Date Analyzed: 11/07/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U
37324-23-5	Aroclor-1262	1.0	U
11100-14-4	Aroclor-1268	1.0	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

1637741

EPA SAMPLE NO.

AIBLKJD(2)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: AIBLKJD

Sample wt/vol: (g/mL) ML Lab File ID: E2K7565R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) Date Extracted:

Concentrated Extract Volume: (uL) Date Analyzed: 11/07/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U
37324-23-5	Aroclor-1262	1.0	U
11100-14-4	Aroclor-1268	1.0	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7565F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111107F.B\E2K7565F.D
Lab Smp Id: AIBLKJD Client Smp ID: AILBKJD
Inj Date : 07-NOV-2011 20:51
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AIBLKJD,AILBKJD,,AIBLK.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 99 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: AIBLK.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

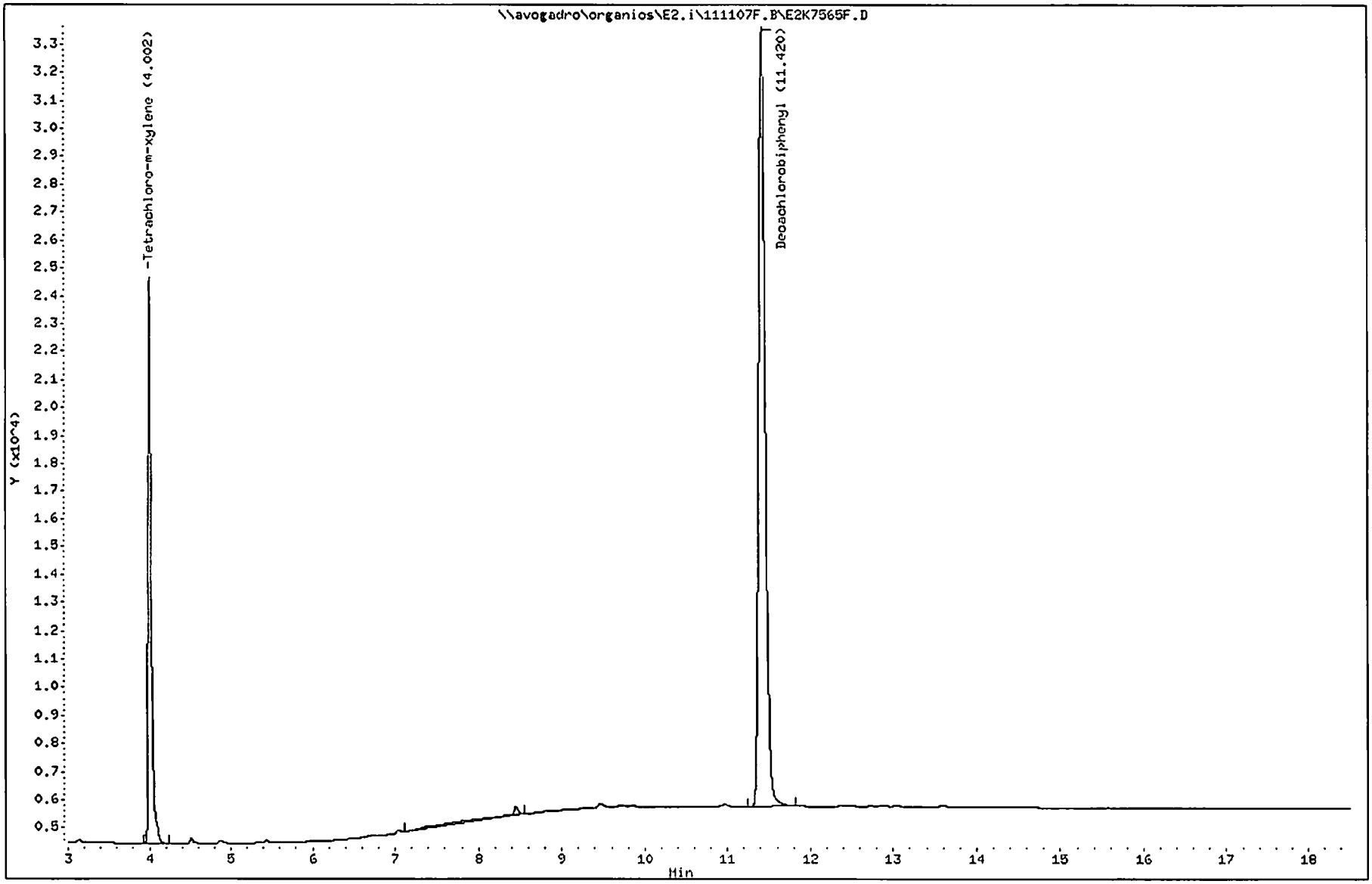
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
	RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1	Tetrachloro-m-xylene					CAS #: 877-09-8		
	4.001	3.999	0.002	535485	0.02000	0.026		(a)
$ 11	Decachlorobiphenyl					CAS #: 2051-24-3		
	11.419	11.417	0.002	1520608	0.04000	0.053		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7565F.D
Date : 07-NOV-2011 20:51
Client ID: AILBKJD
Instrument: E2.i
Sample Info: AIBLKJD,AILBKJD,,AIBLK.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7565R.D
Report Date: 08-Nov-2011 11:43

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111107R.B\E2K7565R.D
Lab Smp Id: AIBLKJD Client Smp ID: AILBKJD
Inj Date : 07-NOV-2011 20:51
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AIBLKJD,AILBKJD,,AIBLK.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 99 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: AIBLK.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

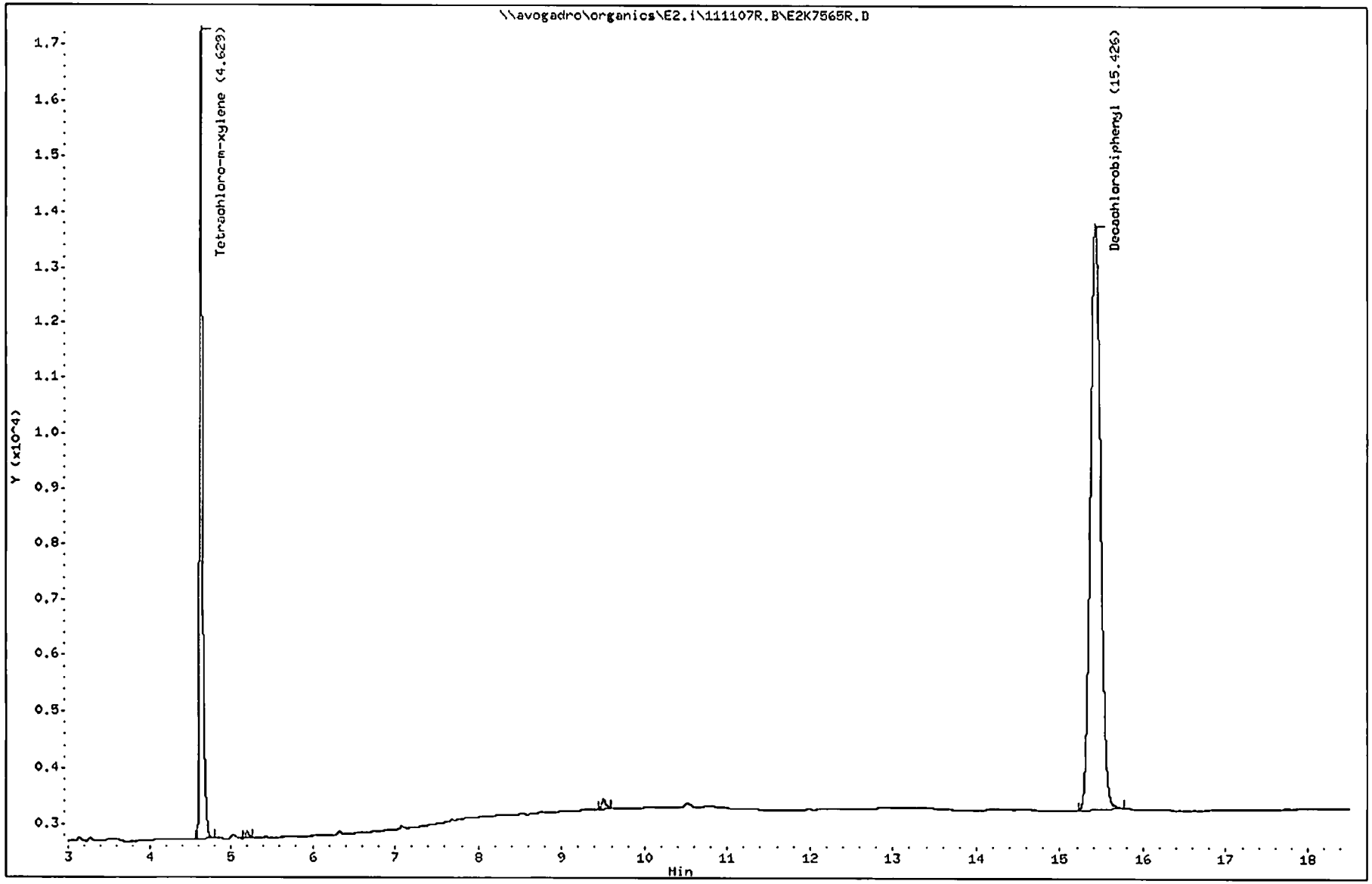
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

			AMOUNTS				
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.628	4.627	0.001	353743	0.02000	0.028		(a)
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.425	15.423	0.002	893689	0.04000	0.053		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7565R.D
Date : 07-NOV-2011 20:51
Client ID: AILBKJD
Instrument: E2.i
Sample Info: AIBLKJD,AILBKJD,,AIBLK.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

1638207

EPA SAMPLE NO.

AIBLKJE(1)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: AIBLKJE

Sample wt/vol: (g/mL) ML Lab File ID: E2K7606F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) Date Extracted:

Concentrated Extract Volume: (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U
37324-23-5	Aroclor-1262	1.0	U
11100-14-4	Aroclor-1268	1.0	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

1638241

EPA SAMPLE NO.

AIBLKJE(2)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: AIBLKJE

Sample wt/vol: (g/mL) ML Lab File ID: E2K7606R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) Date Extracted:

Concentrated Extract Volume: (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

Acid Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U
37324-23-5	Aroclor-1262	1.0	U
11100-14-4	Aroclor-1268	1.0	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7606F.D
Report Date: 08-Nov-2011 14:43

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111107F.B\E2K7606F.D
Lab Smp Id: AIBLKJE Client Smp ID: AILBKJE
Inj Date : 08-NOV-2011 12:45
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AIBLKJE,AILBKJE,,AIBLK.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 14:41 E2.i Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 99 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: AIBLK.sub
Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

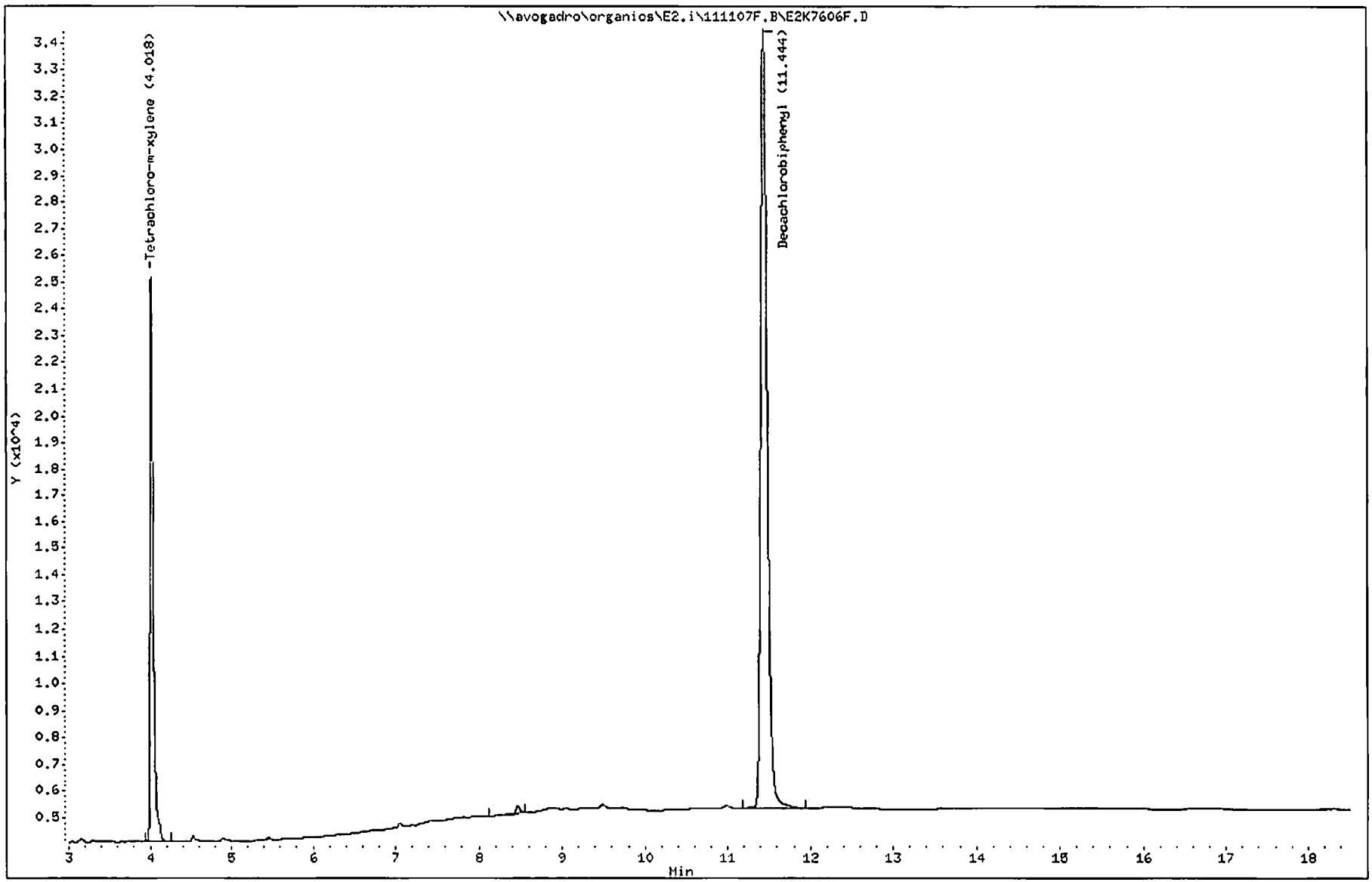
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

			AMOUNTS				
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.017	3.999	0.018	555946	0.02000	0.027		(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
11.444	11.417	0.027	1609925	0.04000	0.056		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7606F.D
Date : 08-NOV-2011 12:45
Client ID: AILBKJE
Instrument: E2.i
Sample Info: AIBLKJE,AILBKJE,,AIBLK.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7606R.D
Report Date: 08-Nov-2011 14:44

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111107R.B\E2K7606R.D
Lab Smp Id: AIBLKJE Client Smp ID: AILBKJE
Inj Date : 08-NOV-2011 12:45
Operator : DL SRC: DL Inst ID: E2.i
Smp Info : AIBLKJE,AILBKJE,,AIBLK.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 14:42 E2.i Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 99 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: AIBLK.sub
Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

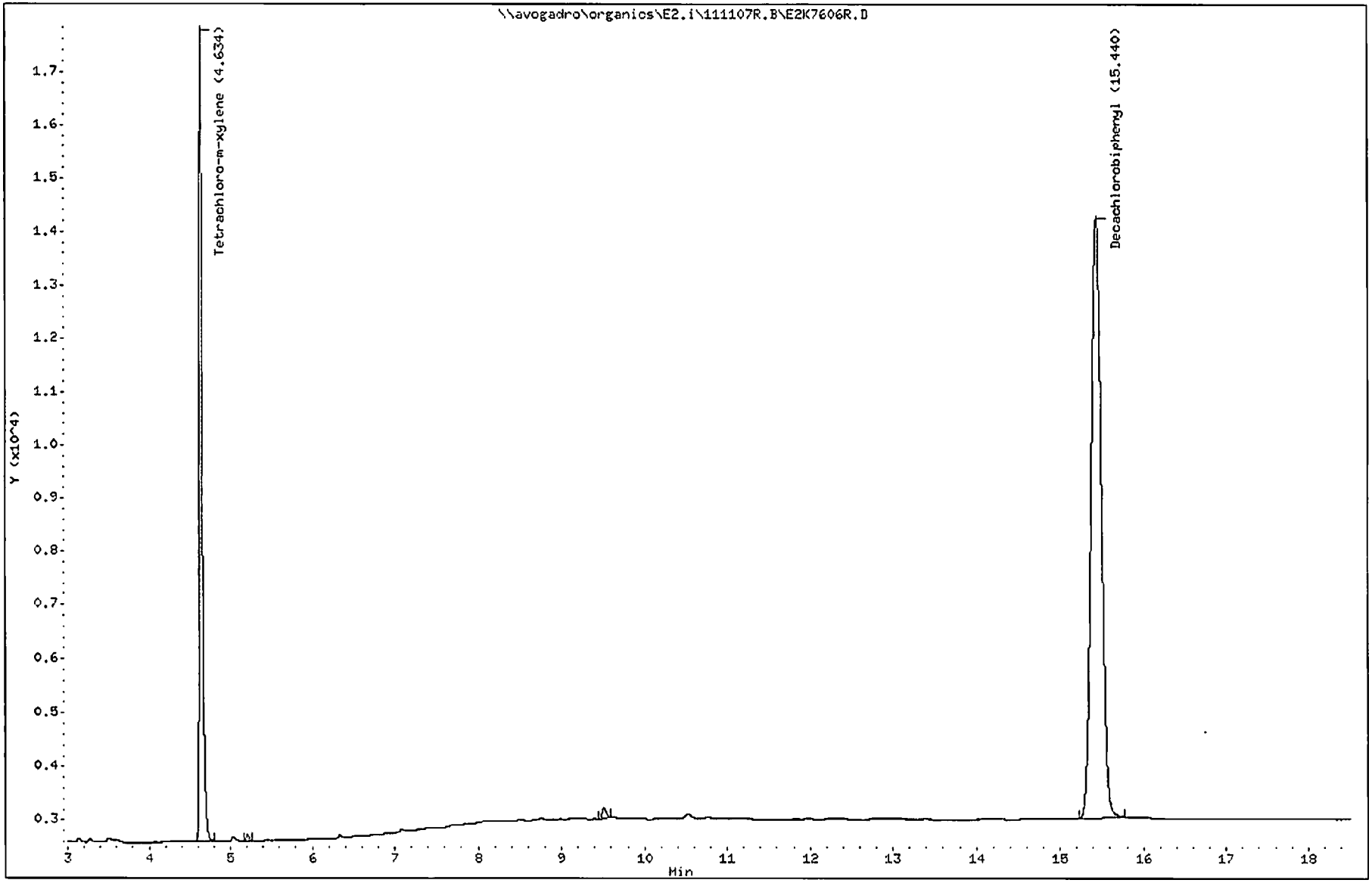
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

			AMOUNTS				
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.634	4.627	0.007	369685	0.02000	0.029		(a)
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.440	15.423	0.017	948794	0.04000	0.056		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7606R.D
Date : 08-NOV-2011 12:45
Client ID: AILBKJE
Instrument: E2.i
Sample Info: AIBLKJE,AILBKJE,,AIBLK.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q0MS(1)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-01BMS

Sample wt/vol: 30 (g/mL) G Lab File ID: E2K7578F.D

% Moisture: 15 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.2 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	94	
11104-28-2	Aroclor-1221	39	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	39	U
11096-82-5	Aroclor-1260	110	
37324-23-5	Aroclor-1262	39	U
11100-14-4	Aroclor-1268	39	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q0MS(2)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-01BMS

Sample wt/vol: 30 (g/mL) G Lab File ID: E2K7578R.D

% Moisture: 15 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.2 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	94	
11104-28-2	Aroclor-1221	39	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	39	U
11096-82-5	Aroclor-1260	110	
37324-23-5	Aroclor-1262	39	U
11100-14-4	Aroclor-1268	39	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7578F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111107F.B\E2K7578F.D
Lab Smp Id: K2198-01BMS Client Smp ID: H30Q0MS
Inj Date : 08-NOV-2011 01:23
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-01BMS,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 20 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
S 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.000	3.999	0.001	579050	0.02788	9.3		
5 Aroclor-1016					CAS #: 12674-11-2		
5.606	5.604	0.002	512185	0.24986	83	80.00- 120.00	100.00(H)
5.783	5.781	0.002	183305	0.23643	79	17.38- 57.38	35.79
6.040	6.039	0.001	319259	0.23199	77	46.93- 86.93	62.33
Average of Peak Concentrations =					80		
9 Aroclor-1260					CAS #: 11096-82-5		
7.798	7.797	0.001	661818	0.27699	92	80.00- 120.00	100.00
8.093	8.091	0.002	540896	0.29117	97	58.48- 98.48	81.73
8.502	8.502	0.000	509934	0.24624	82	68.67- 108.67	77.05
Average of Peak Concentrations =					90		
S 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.418	11.417	0.001	1892003	0.06600	22		

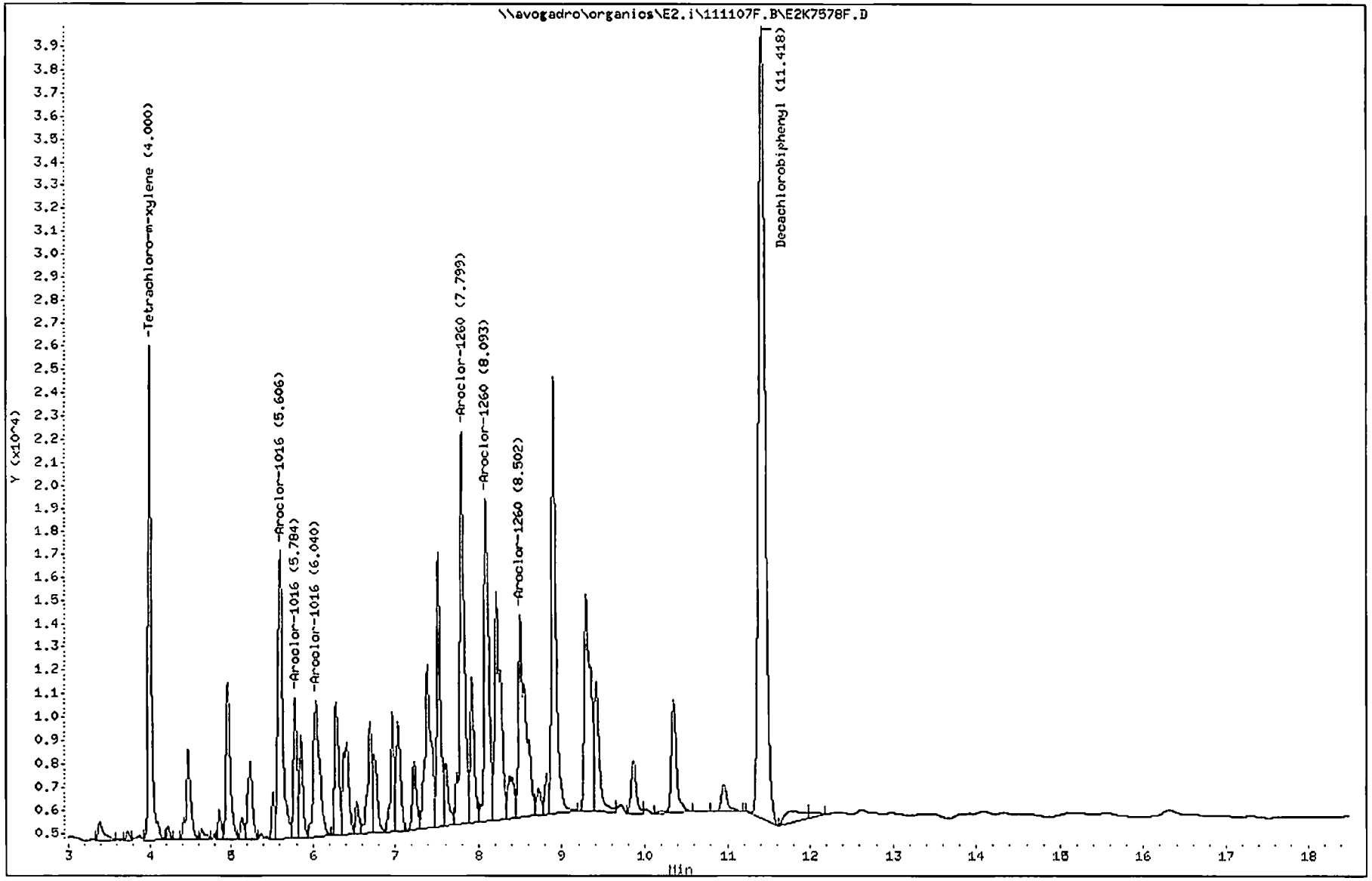
Data File: \\avogadro\organics\E2.i\111107F.B\E2K7578F.D
Report Date: 08-Nov-2011 11:42

QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7578F.D
Date : 08-NOV-2011 01:23
Client ID: H30Q0HS
Sample Info: K2198-01BHS,,62776,somaro.sub,,
Volume Injected (uL): 1.0
Column phase: CLPPest

Instrument: E2.i
Operator: DL SRC: LIMS
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7578R.D
Report Date: 08-Nov-2011 11:43

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

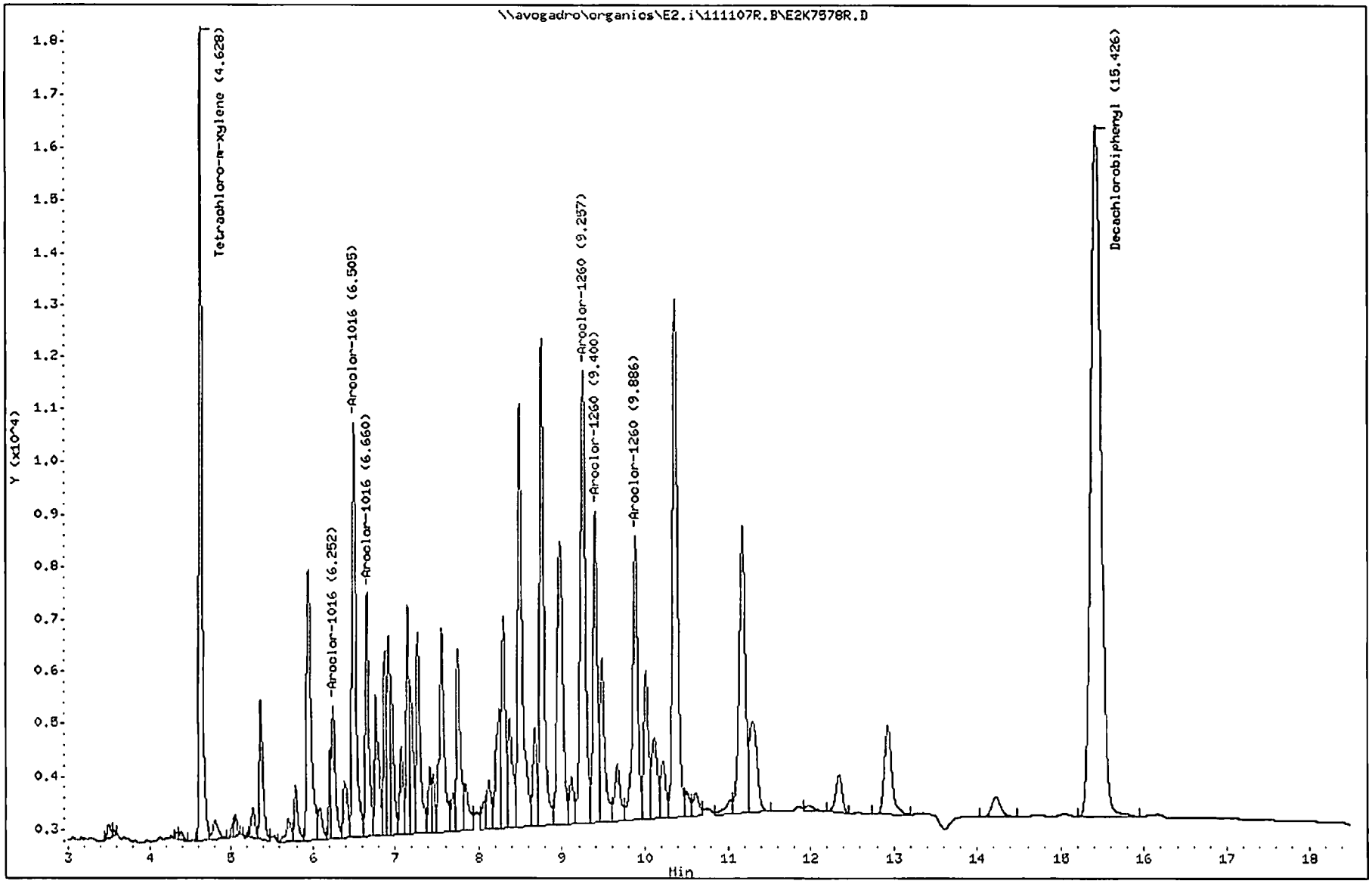
Data file : \\avogadro\organics\E2.i\111107R.B\E2K7578R.D
Lab Smp Id: K2198-01BMS Client Smp ID: H30Q0MS
Inj Date : 08-NOV-2011 01:23
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-01BMS,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 20 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.627	4.627	0.000	377758	0.03003	10		
6 Aroclor-1016					CAS #: 12674-11-2		
6.252	6.250	0.002	76721	0.24929	83	80.00- 120.00	100.00
6.505	6.503	0.002	255619	0.21736	72	361.18- 401.18	333.18
6.659	6.657	0.002	133142	0.25368	84	148.73- 188.73	173.54
	Average of Peak Concentrations =				80		
8 Aroclor-1260					CAS #: 11096-82-5		
9.257	9.255	0.002	364964	0.29921	100	80.00- 120.00	100.00
9.400	9.398	0.002	205956	0.27680	92	41.04- 81.04	56.43
9.885	9.883	0.002	226574	0.28641	95	44.30- 84.30	62.08
	Average of Peak Concentrations =				96		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.426	15.423	0.003	1130624	0.06670	22		

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7578R.D
Date : 08-NOV-2011 01:23
Client ID: H30Q0MS
Instrument: E2.i
Sample Info: K2198-01BMS,,62776,somaro.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q0MSD(1)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-01BMSD

Sample wt/vol: 30 (g/mL) G Lab File ID: E2K7579F.D

% Moisture: 15 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.2 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	82	
11104-28-2	Aroclor-1221	39	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	39	U
11096-82-5	Aroclor-1260	95	
37324-23-5	Aroclor-1262	39	U
11100-14-4	Aroclor-1268	39	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q0MSD(2)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-01BMSD

Sample wt/vol: 30 (g/mL) G Lab File ID: E2K7579R.D

% Moisture: 15 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.2 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	76	
11104-28-2	Aroclor-1221	39	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	39	U
11096-82-5	Aroclor-1260	93	
37324-23-5	Aroclor-1262	39	U
11100-14-4	Aroclor-1268	39	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7579F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

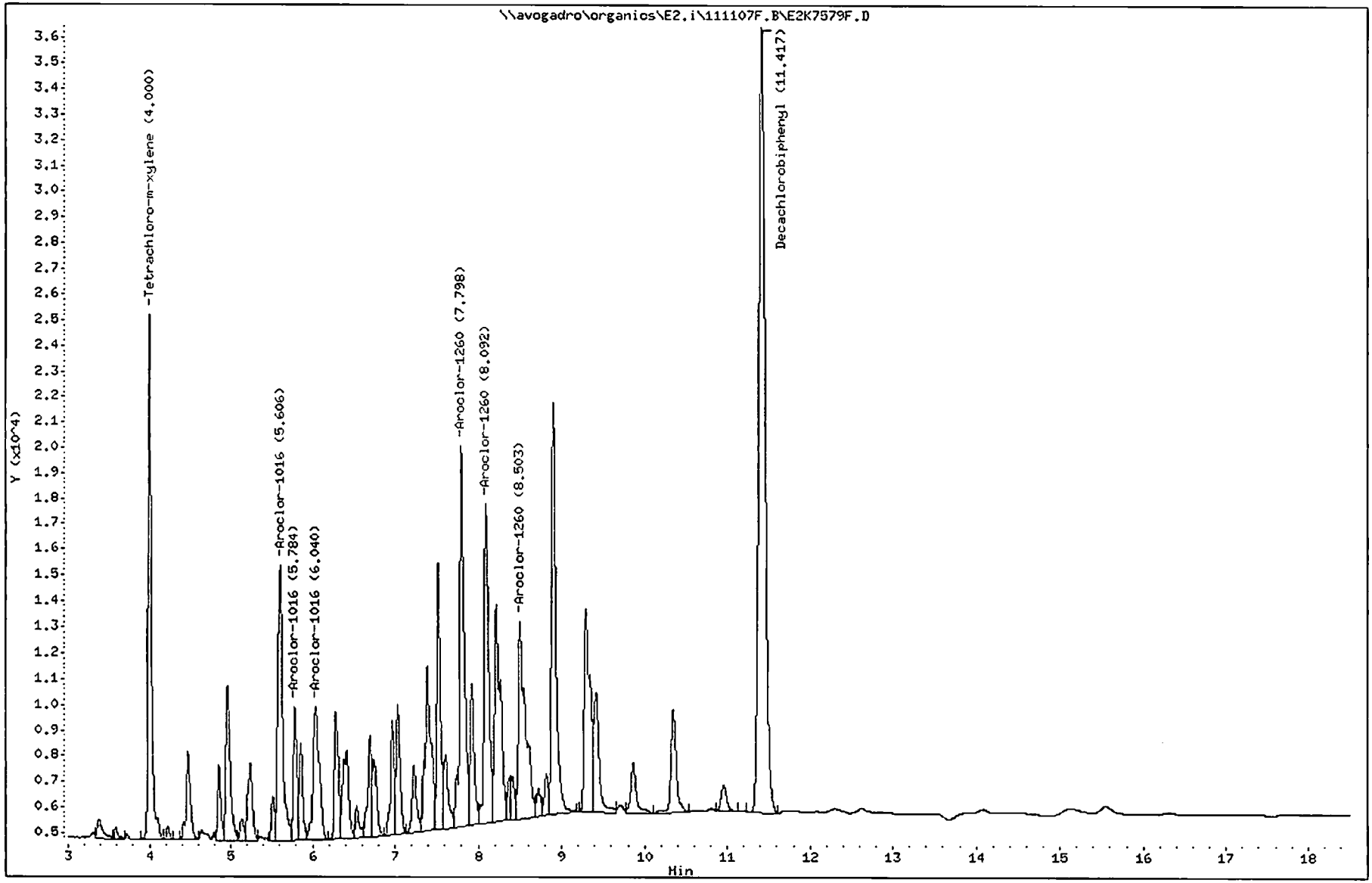
Data file : \\avogadro\organics\E2.i\111107F.B\E2K7579F.D
Lab Smp Id: K2198-01BMSD Client Smp ID: H30Q0MSD
Inj Date : 08-NOV-2011 01:44
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-01BMSD,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 21 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.000	3.999	0.001	566437	0.02728	9.1		
5 Aroclor-1016					CAS #: 12674-11-2		
5.605	5.604	0.001	446663	0.21790	73	80.00- 120.00	100.00
5.783	5.781	0.002	161565	0.20839	69	17.38- 57.38	36.17
6.040	6.039	0.001	281180	0.20432	68	46.93- 86.93	62.95
		Average of Peak Concentrations =			70		
9 Aroclor-1260					CAS #: 11096-82-5		
7.796	7.797	0.001	586986	0.24567	82	80.00- 120.00	100.00
8.092	8.091	0.001	432972	0.25999	87	58.48- 98.48	82.28
8.502	8.502	0.000	455878	0.22014	73	68.67- 108.67	77.66
		Average of Peak Concentrations =			81		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.416	11.417	-0.001	1656107	0.05777	19		

Data File: \\avogadro\organios\E2.i\111107F.B\E2K7579F.D
Date : 08-NOV-2011 01:44
Client ID: H30Q0MSD
Instrument: E2.i
Sample Info: K2198-01BMSD,,62776,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7579R.D
Report Date: 08-Nov-2011 11:43

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111107R.B\E2K7579R.D
Lab Smp Id: K2198-01BMSD Client Smp ID: H30Q0MSD
Inj Date : 08-NOV-2011 01:44
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-01BMSD,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 21 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

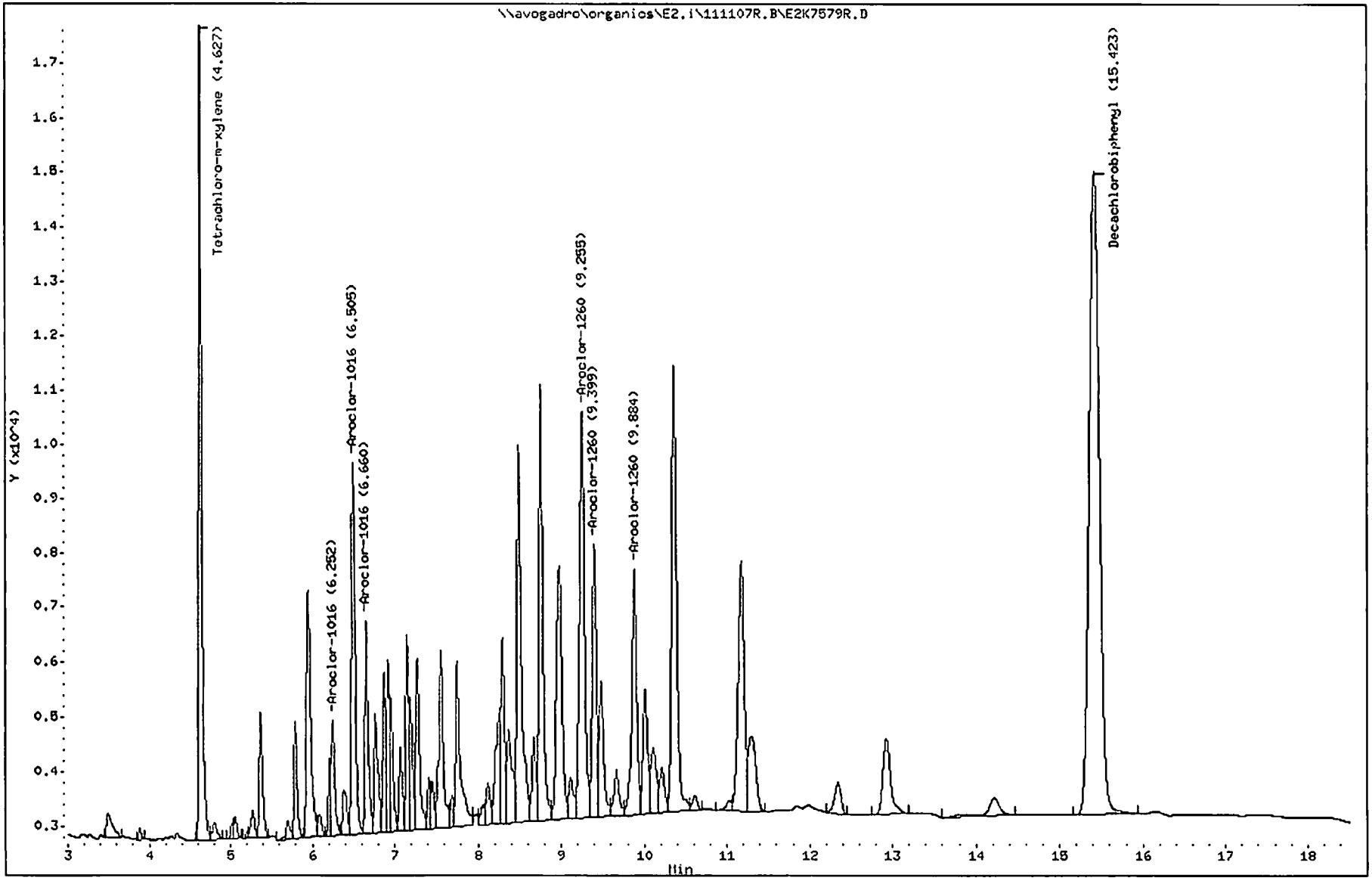
Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.627	4.627	0.000	367073	0.02918	9.7		
6 Aroclor-1016					CAS #: 12674-11-2		
6.252	6.250	0.002	62008	0.20148	67	80.00- 120.00	100.00
6.504	6.503	0.001	209446	0.17809	59	361.18- 401.18	337.77
6.659	6.657	0.002	108011	0.20580	68	148.73- 188.73	174.19
Average of Peak Concentrations =					65		
8 Aroclor-1260					CAS #: 11096-82-5		
9.255	9.255	0.000	312880	0.25651	86	80.00- 120.00	100.00
9.399	9.398	0.001	169535	0.22785	76	41.04- 81.04	54.19
9.884	9.883	0.001	182815	0.23109	77	44.30- 84.30	58.43
Average of Peak Concentrations =					79		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.422	15.423	-0.001	1004663	0.05927	20		

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7579R.D
Date : 08-NOV-2011 01:44
Client ID: H30Q0HSD
Sample Info: K2198-01EHSD,,62776,somaro.sub,,
Volume Injected (uL): 1.0
Column phase: CLPPestII

Instrument: E2.i
Operator: DL SRC: LIMS
Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ALCS2F(1)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-62776

Sample wt/vol: 30 (g/mL) G Lab File ID: E2K7576F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	26	J
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	41	P
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ALCS2F(2)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-62776

Sample wt/vol: 30 (g/mL) G Lab File ID: E2K7576R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	24	J
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	32	PJ
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7576F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111107F.B\E2K7576F.D
Lab Smp Id: LCS-62776 Client Smp ID: ALCS2F
Inj Date : 08-NOV-2011 00:41
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : LCS-62776,ALCS2F,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 18 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

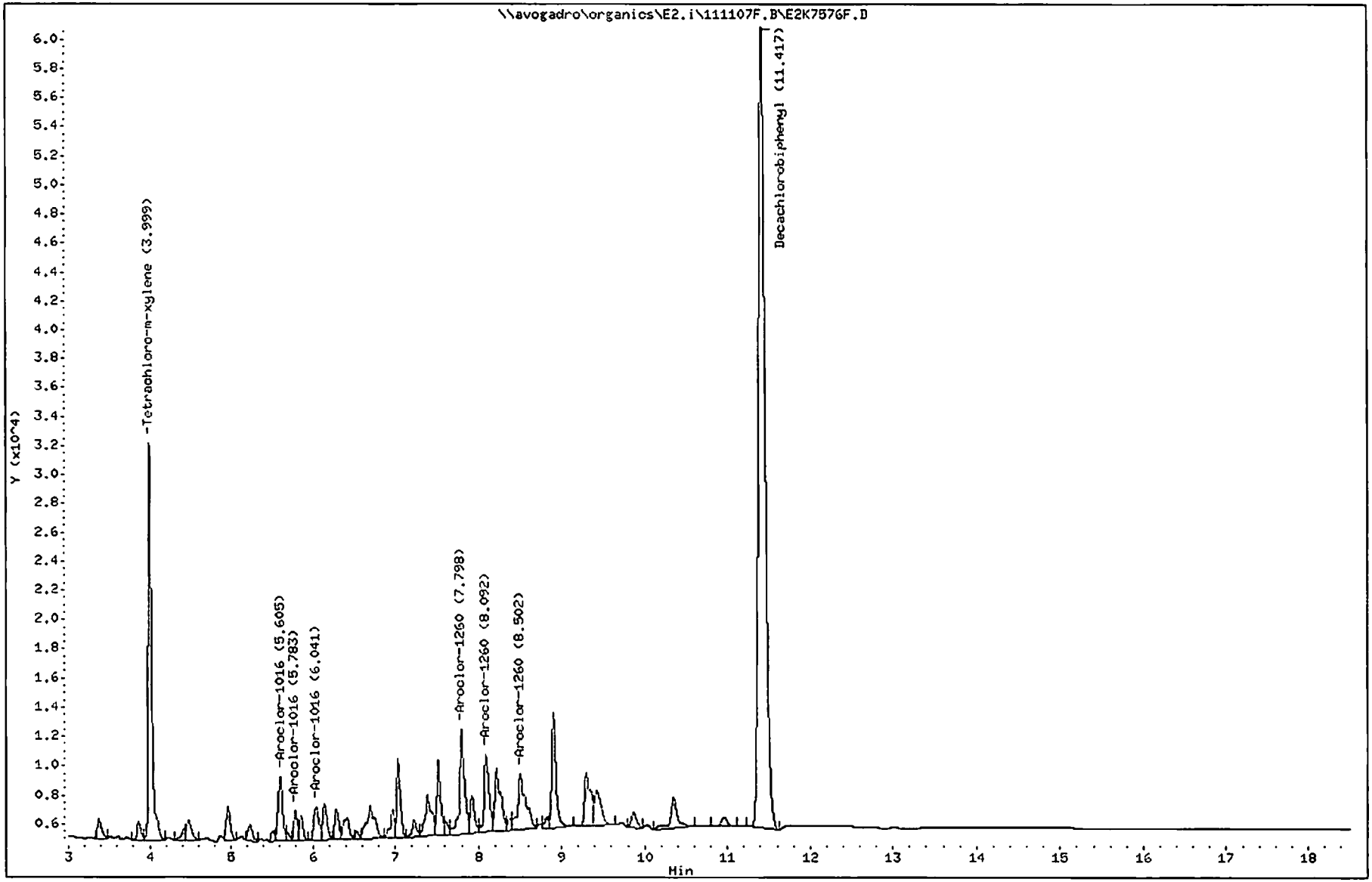
				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
3.999	3.999	0.000	769349	0.03705	12		
5 Aroclor-1016					CAS #: 12674-11-2		
5.605	5.604	0.001	166843	0.08139	27	80.00- 120.00	100.00(a)
5.783	5.781	0.002	62742	0.08092	27	17.38- 57.38	37.61
6.040	6.039	0.001	97968	0.07119	24	46.93- 86.93	58.72
Average of Peak Concentrations =					26		
9 Aroclor-1260					CAS #: 11096-82-5		
7.798	7.797	0.001	302781	0.12672	42	80.00- 120.00	100.00
8.092	8.091	0.001	214899	0.11568	38	58.48- 98.48	70.98
8.501	8.502	-0.001	259699	0.12540	42	68.67- 108.67	85.77
Average of Peak Concentrations =					41		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.416	11.417	-0.001	3072665	0.10718	36		

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7576F.D
Report Date: 08-Nov-2011 11:42

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7576F.D
Date : 08-NOV-2011 00:41
Client ID: ALCS2F
Instrument: E2.i
Sample Info: LCS-62776,ALCS2F,62776,somaro.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7576R.D
Report Date: 08-Nov-2011 11:43

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111107R.B\E2K7576R.D
Lab Smp Id: LCS-62776 Client Smp ID: ALCS2F
Inj Date : 08-NOV-2011 00:41
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : LCS-62776,ALCS2F,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 18 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

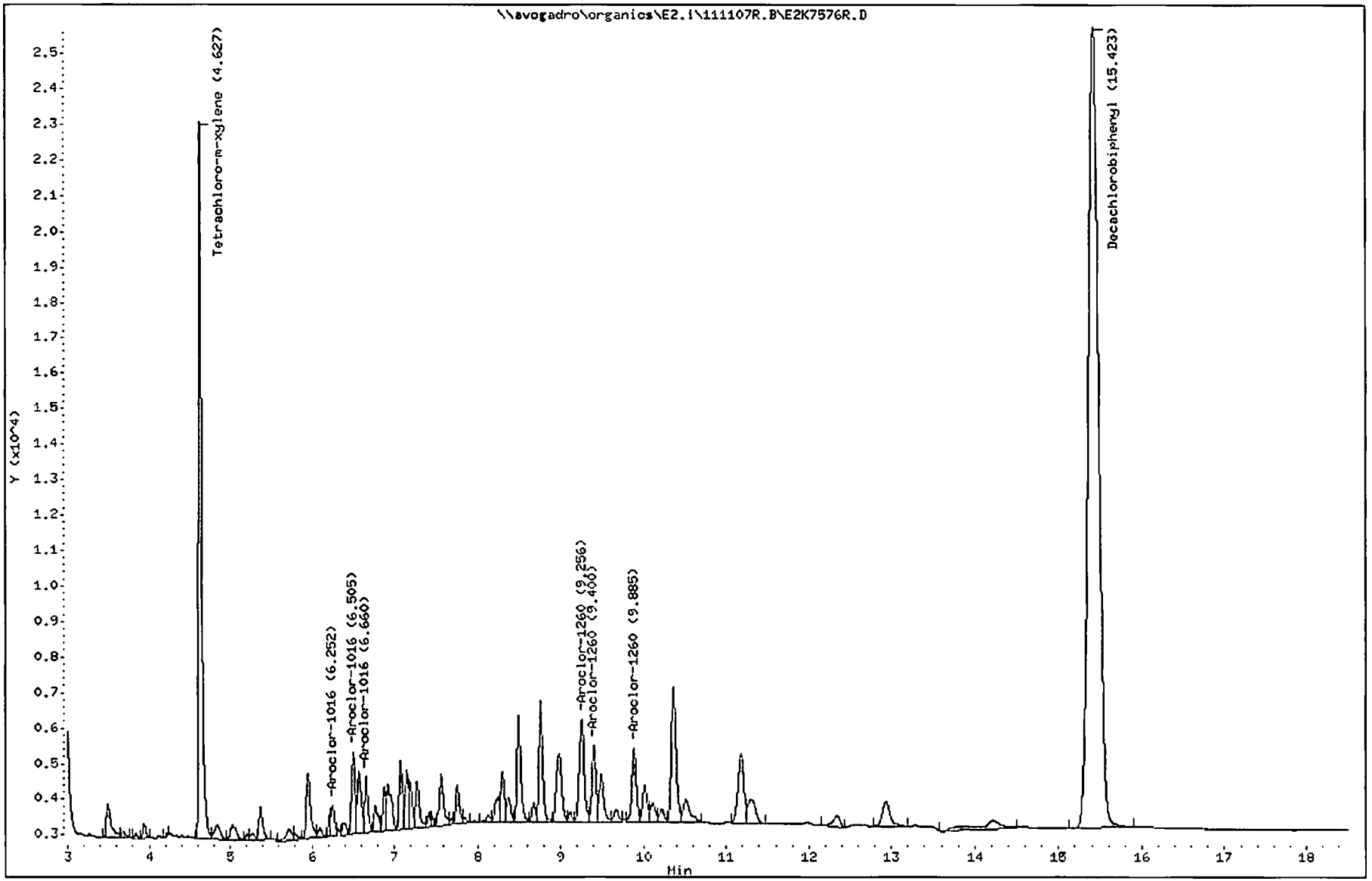
RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.627	4.627	0.000	507276	0.04033	13		
6 Aroclor-1016					CAS #: 12674-11-2		
6.251	6.250	0.001	24536	0.07972	26	80.00- 120.00	100.00(a)
6.505	6.503	0.002	63699	0.05416	18	361.18- 401.18	259.61
6.659	6.657	0.002	44888	0.08553	28	148.73- 188.73	182.95
Average of Peak Concentrations =					24		
8 Aroclor-1260					CAS #: 11096-82-5		
9.255	9.255	0.000	118922	0.09750	32	80.00- 120.00	100.00(a)
9.399	9.398	0.001	71726	0.09640	32	41.04- 81.04	60.31
9.884	9.883	0.001	76529	0.09674	32	44.30- 84.30	64.35
Average of Peak Concentrations =					32		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.423	15.423	0.000	1937645	0.11431	38		

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7576R.D
Report Date: 08-Nov-2011 11:43

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7576R.D
Date : 08-NOV-2011 00:41
Client ID: ALCS2F
Instrument: E2.i
Sample Info: LCS-62776,ALCS2F,62776,somaro.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division: Volatile Organics Low/Medium Level Soil Extraction Log

Date	Lab ID		Analysis	Initial Wt. (g)	Final Wt. (g)	Sample Wt. (g)	Extraction Volume (mL)	Sample Type	Solvent&Lot# by/Date*	Comments/ Time of Encore transfer	Analyst
10/28/11	K2151	03A	8260-L	NA	NA	5.3	5.0	E	DI H2O		VEB
		04A				5.0					
		05A				5.4					
		06A				5.4					
		07A				5.4					
		08A				5.1					
		09A				5.2					
		10A				5.2					
		11A	8260-L			5.5			DI H2O		
		12A	8260-M			5.8			MEOH 51145		
		13A	8260-L			5.0			VPB 10/28/11 ~~EAL~~ DI H2O		
10/28/11	K2151	14A	8260-M	NA	NA	5.3	5.0	E	MEOH 51145		VEB
10/28/11	K2198	-01C1	SOM	26.76	31.78	5.0		D		9:15 PM	WL
		-01C2		26.81	31.74	4.9				16	
10/28/11	K2198	-01C3	SOM	26.54	31.42	4.9	5.0	D		9:17 PM	WL

*=Date added, if different than Rec. date

Sample Type: A. MeOH Pre-preserved; B. DI H2O/Freeze; C. NaHSO4 Pre-preserved; D. Encore; E. Unpreserved Jars

1225

Spectrum Analytical, Inc. RI Division: Volatile Organics Low/Medium Level Soil Extraction Log

Date	Lab ID		Analysis	Initial Wt. (g)	Final Wt. (g)	Sample Wt. (g)	Extraction Volume (mL)	Sample Type	Solvent&Lot# by/Date*	Comments/ Time of Encore transfer	Analyst
10/28/11	K2198	-02C1	5.0M	26.71	31.80	5.1	5.0	D		9:18 PM	
		-02C2		26.56	31.77	5.2				19	
		-02C3		26.75	31.79	5.0				20	
		-03C1		26.81	31.75	4.9				21	
		-03C2		26.64	31.80	5.2				22	
		-03C3		26.75	31.68	4.9				23	
		-04C1		26.54	31.74	5.2				24	
		-04C2		26.66	31.65	5.0				25	
		-04C3		26.74	31.54	4.8				26	
		-05C1		26.68	31.75	5.1				27	
		-05C2		26.80	31.46	4.7				28	
		-05C3		26.75	31.81	5.1				29	
		-06C1		26.79	31.76	5.0				30	
		-06C2		26.77	31.55	4.8				31	
10/28/11	K2198	-06C3	5.0M	26.80	31.72	4.9	5.0	D		9:32 PM	

*=Date added, if different than Rec. date

Sample Type: A. MeOH Pre-preserved; B. DI H2O/Freeze; C. NaHSO4 Pre-preserved; D. Encore; E. Unpreserved Jars

1226

Spectrum Analytical, Inc. RI Division: Volatile Organics Low/Medium Level Soil Extraction Log

Date	Lab ID		Analysis	Initial Wt. (g)	Final Wt. (g)	Sample Wt. (g)	Extraction Volume (mL)	Sample Type	Solvent&Lot# by/Date*	Comments/ Time of Encore transfer	Analyst
10/28/11	K2198	07C1	JDM	26.79	31.72	5.0	5.0	D		9:35 PM	ML
		07C2		26.77	31.81	5.1				36	
		07C3		26.78	31.91	5.1				37	
		08C1		26.58	31.84	5.2				38	
		08C2		26.80	31.82	5.0				39	
		08C3		26.51	31.85	5.3				40	
		09C1		26.84	31.79	5.0				41	
		09C2		27.11	31.95	4.8				42	
		09C3		26.71	31.78	5.0				43	
		10C1		26.83	31.58	4.8				44	
		10C2		26.80	31.79	5.0				45	
		10C3		26.85	31.78	5.0				46	
		11C1		26.89	31.84	5.0				47	
		11C2		26.79	31.59	4.8				48	
10/28/11	K2198	11C3	JDM	26.72	31.88	5.1	5.0	D		9:49 PM	ML

*=Date added, if different than Rec. date

Sample Type: A. MeOH Pre-preserved; B. DI H2O/Freeze; C. NaHSO4 Pre-preserved; D. Encore; E. Unpreserved Jars

1227

Spectrum Analytical, Inc. RI Division: Volatile Organics Low/Medium Level Soil Extraction Log

Date	Lab ID		Analysis	Initial Wt. (g)	Final Wt. (g)	Sample Wt. (g)	Extraction Volume (mL)	Sample Type	Solvent&Lot# by/Date*	Comments/ Time of Encore transfer	Analyst
10/28/4	K2198	-12C1	SOM	26.89	31.88	5.0	5.0	D		9:50 PM	ae
		-12C2		26.79	31.89	5.1				51	
		-12C3		26.75	31.75	5.0				52	
		-13C1		26.77	31.68	5.0				53	
		-13C2		26.79	31.91	5.1				54	
		-13C3		26.80	31.75	5.0				55	
		-14C1		26.51	31.72	5.2				56	
		-14C2		26.84	31.86	5.0				57	
		-14C3		26.80	31.79	5.0				58	
		-15C1		26.83	31.88	5.0				9:59	
		-15C2		26.72	31.85	5.1				10:00	
		-15C3		26.75	31.59	4.8				01	
		-16C1		26.85	31.91	5.0				02	
		-16C2		26.91	31.68	4.8				03	
10/29/4	K2198	-16C3	SOM	26.78	31.59	4.8	5.0	D		10:05 PM	ae

*=Date added, if different than Rec. date

Sample Type: A. MeOH Pre-preserved; B. DI H2O/Freeze; C. NaHSO4 Pre-preserved; D. Encore; E. Unpreserved Jars

1228

Reviewed By: 11-3-4

Spectrum Analytical, Inc. RI Division: Volatile Organics Low/Medium Level Soil Extraction Log

Date	Lab ID		Analysis	Initial Wt. (g)	Final Wt. (g)	Sample Wt. (g)	Extraction Volume (mL)	Sample Type	Solvent&Lot# by/Date*	Comments/ Time of Encore transfer	Analyst
10/28/11	K2198	17C1	5oM	26.59	31.88	5.3	5.0	D		10:06 PM	ME
		17CL		26.71	31.83	5.1				07	
		17C3		26.78	31.78	5.0				08	
		18C1		26.85	31.73	4.9				09	
		18CL		26.79	31.68	4.9				10	
		18C3		26.84	31.64	4.8				11	
		19C1		26.79	31.60	4.8				12	
		19CL		26.80	31.66	4.9				13	
		19C3		26.66	31.72	5.1				14	
		20C1		26.74	31.78	5.0				15	
		20CL		26.82	31.84	5.0				16	
	K2198	20C3		26.90	31.90	5.0				17	
	K2198	01C4		26.98	31.96	5.0				18	
		01C5		26.93	31.80	4.9				19	
10/28/11	K2198	01C6	5oM	26.89	31.64	4.8	5.0	D		10:20 PM	ME

*=Date added, if different than Rec. date

Sample Type: A. MeOH Pre-preserved; B. DI H2O/Freeze; C. NaHSO4 Pre-preserved; D. Encore; E. Unpreserved Jars

1229

Logbook ID: 90 0189-10/11 22 Reviewed By: 10-31-11

Prep Start Date: 11/7/2011 9:30:00 A
Prep End Date: 11/9/2011 5:12:00 P
Prep Batch ID: 62764
Prep Code: SOM01.0_SVOA_LOW_S_PR
Technician: Antonio AP Cardoso
Prep Type: SONC/SW3550B
Prep Factor Units: mL / g

QC Matrix: NASO4
QC Matrix Lot: 106147
Solvent (1): MECL2
Solvent (1) Lot: DE 980
Solvent (3): N/A
Solvent (3) Lot: N/A
Solvent (5): N/A
Solvent (5) Lot: N/A
Clean Up (1): N/A
Clean Up (1) Lot: N/A
Clean Up (3): N/A
Clean Up (1) Lot: N/A

Filter?: FILTER
Filter Lot: FC003284
Solvent (2): ACE
Solvent (2) Lot: 108096
Solvent (4): N/A
Solvent (4) Lot: N/A
Solvent (6): N/A
Solvent (6) Lot: N/A
Clean Up (2): N/A
Clean Up (2) Lot: N/A
Clean Up (4): N/A
Clean Up (4) Lot: N/A

Start Time: N/A
End Time: N/A
Cycles/Hour 0
Sonicator Tuned? Yes
Bath Temp1 (C): 87
Therm ID1: 88

Mitkem Sample ID	Client Samp ID	M	Initial (mL/g)	Final (mL)	Surrogate Spike ID	Surr (mL)	LCS/D MS/D Spike ID	Spike (mL)	A* Init	W* Init	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11	pH <2	CNCNTR Unit
MB-62764	BatchQC		30	10	OSW110822B	1			APC	TM			11/08/11	JMV	R7		☐	☐	KD 1
CLEAN UP (MB-62764): GPC3_111109B/jvales																			
K2198-01A	H30Q0	S	30.3	10	OSW110822B	1			APC	TM	11/16/11	01	11/08/11	JMV	R7		☐	☐	KD 1
CLEAN UP (K2198-01A): GPC3_111109B/jvales																			
K2198-01AMS	H30Q0	S	30.1	10	OSW110822B	1	OSW110916A	1	APC	TM	11/16/11	01	11/08/11	JMV	R7		☐	☐	KD 1
CLEAN UP (K2198-01AMS): GPC3_111109B/jvales																			
K2198-01AMSD	H30Q0	S	30.4	10	OSW110822B	1	OSW110916A	1	APC	TM	11/16/11	01	11/08/11	JMV	R7		☐	☐	KD 1
CLEAN UP (K2198-01AMSD): GPC3_111109B/jvales																			
K2198-02A	H30Q1	S	30.3	10	OSW110822B	1			APC	TM	11/16/11	01	11/08/11	JMV	R7		☐	☐	KD 1
CLEAN UP (K2198-02A): GPC3_111109B/jvales																			
K2198-03A	H30Q2	S	30.1	10	OSW110822B	1			APC	TM	11/16/11	01	11/08/11	JMV	R7		☐	☐	KD 1
CLEAN UP (K2198-03A): GPC3_111109B/jvales																			
K2198-04A	H30Q3	S	30.5	10	OSW110822B	1			APC	TM	11/16/11	01	11/08/11	JMV	R7		☐	☐	KD 1
CLEAN UP (K2198-04A): GPC3_111109B/jvales																			
K2198-05A	H30Q4	S	30.1	10	OSW110822B	1			APC	TM	11/16/11	01	11/08/11	JMV	R7		☐	☐	KD 1
CLEAN UP (K2198-05A): GPC3_111109B/jvales																			
K2198-06A	H30Q6	S	30.3	10	OSW110822B	1			APC	TM	11/16/11	01	11/08/11	JMV	R7		☐	☐	KD 1
CLEAN UP (K2198-06A): GPC3_111109B/jvales																			
K2198-07A	H30Q8	S	30	10	OSW110822B	1			APC	TM	11/16/11	01	11/08/11	JMV	R7		☐	☐	KD 1
CLEAN UP (K2198-07A): GPC3_111109B/jvales																			
K2198-08A	H30Q9	S	30.5	10	OSW110822B	1			APC	TM	11/16/11	01	11/08/11	JMV	R7		☐	☐	KD 1
CLEAN UP (K2198-08A): GPC3_111109B/jvales																			
K2198-09A	H30R0	S	30.2	10	OSW110822B	1			APC	TM	11/16/11	01	11/08/11	JMV	R7		☐	☐	KD 1
CLEAN UP (K2198-09A): GPC3_111109B/jvales																			
K2198-10A	H30R1	S	30.1	10	OSW110822B	1			APC	TM	11/16/11	01	11/08/11	JMV	R7		☐	☐	KD 1
CLEAN UP (K2198-10A): GPC3_111109B/jvales																			
K2198-11A	H30S4	S	30.5	10	OSW110822B	1			APC	TM	11/16/11	01	11/08/11	JMV	R7		☐	☐	KD 1
CLEAN UP (K2198-11A): GPC3_111109B/jvales																			
K2198-12A	H30S5	S	30.4	10	OSW110822B	1			APC	TM	11/16/11	01	11/08/11	JMV	R7		☐	☐	KD 1
CLEAN UP (K2198-12A): GPC3_111109B/jvales																			
K2198-13A	H30S8	S	30.4	10	OSW110822B	1			APC	TM	11/16/11	01	11/08/11	JMV	R7		☐	☐	KD 1
CLEAN UP (K2198-13A): GPC3_111109B/jvales																			

1230

Logbook ID: 50.0147-11/11

JV 11/9/11

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division PREP BATCH REPOR

Prep Start Date: 11/7/2011 9:30:00 A
Prep End Date: 11/9/2011 5:12:00 P
Prep Batch ID: 62764
Prep Code: SOM01.0_SVOA_LOW_S_PR
Technician: Antonio AP Cardoso
Prep Type: SONC/SW3550B
Prep Factor Units: mL / g

QC Matrix: NASO4
QC Matrix Lot: 105147
Solvent (1): MECL2
Solvent (1) Lot: DE 980
Solvent (3): N/A
Solvent (3) Lot: N/A
Solvent (5): N/A
Solvent (5) Lot: N/A
Clean Up (1): N/A
Clean Up (1) Lot: N/A
Clean Up (3): N/A
Clean Up (1) Lot: N/A

Filter?: FILTER
Filter Lot: FC003284
Solvent (2): ACE
Solvent (2) Lot: 108096
Solvent (4): N/A
Solvent (4) Lot: N/A
Solvent (6): N/A
Solvent (6) Lot: N/A
Clean Up (2): N/A
Clean Up (2) Lot: N/A
Clean Up (4): N/A
Clean Up (4) Lot: N/A

Start Time: N/A
End Time: N/A
Cycles/Hour 0
Sonicator Tuned? Yes
Bath Temp1 (C): 87
Therm ID1: 88

Mitkem Sample ID	Client Samp ID	M	Initial (mL/g)	Final (mL)	Surrogate Spike ID	Surr (mL)	LCS/D MS/D Spike ID	Spike (mL)	A* Init	W* Init	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11	pH <2	CNCNTR Unit
K2198-14A	H30S9	S	30.5	10	OSW110822B	1			APC	TM	11/16/11	01	11/08/11	JMV	R7		☐	☐	KD 1
	CLEAN UP (K2198-14A): GPC3_111109B/jvales																		
K2198-15A	H30T0	S	30.2	10	OSW110822B	1			APC	TM	11/16/11	01	11/08/11	JMV	R7		☐	☐	KD 1
	CLEAN UP (K2198-15A): GPC3_111109B/jvales																		
K2198-16A	H30T1	S	30.5	10	OSW110822B	1			APC	TM	11/16/11	01	11/08/11	JMV	R7		☐	☐	KD 1
	CLEAN UP (K2198-16A): GPC3_111109B/jvales																		
K2198-17A	H30T2	S	30.2	10	OSW110822B	1			APC	TM	11/16/11	01	11/08/11	JMV	R7		☐	☐	KD 1
	CLEAN UP (K2198-17A): GPC3_111109B/jvales																		
K2198-18A	H30T3	S	30.4	10	OSW110822B	1			APC	TM	11/16/11	01	11/08/11	JMV	R7		☐	☐	KD 1
	CLEAN UP (K2198-18A): GPC3_111109B/jvales																		
K2198-19A	H30T4	S	30.4	10	OSW110822B	1			APC	TM	11/16/11	01	11/08/11	JMV	R7		☐	☐	KD 1
	CLEAN UP (K2198-19A): GPC3_111109B/jvales																		
K2198-20A	H30T5	S	30	10	OSW110822B	1			APC	TM	11/16/11	01	11/08/11	JMV	R7		☐	☐	KD 1
	CLEAN UP (K2198-20A): GPC3_111109B/jvales																		

Jonathan M Vales 11/09/2011
Analyst Reviewed Date

Timothy McDaniel 11/09/2011
Manager Reviewed Date

Comments:

*A = Analyst (Spiked) *W = Witnessed (Spike) *T = Transferred

JV 11/9/11

Logbook ID: 50.0147-11/11

1231

Prep Start Date: 11/6/2011 11:00:00
Prep End Date: 11/6/2011 12:45:00 Prep Code: SOM01.0_ARO_S_PR Prep Type: SONC/SW3550B Prep Factor Units: mL / g
Prep Batch ID: 62776 Technician: Courtney J Anderson

QC Matrix: NASO4 Solvent (1): MECL2 Solvent (3): HEXANE Solvent (5): N/A Clean Up (1): N/A Clean Up (3): N/A
QC Matrix Lot: 106147 Solvent (1) Lot: DE 980 Solvent (3) Lot: DA 782 Solvent (5) Lot: N/A Clean Up (1) Lot: N/A Clean Up (1) Lot: N/A

Filter?: FILTER Solvent (2): ACE Solvent (4): N/A Solvent (6): N/A Clean Up (2): N/A Clean Up (4): N/A
Filter Lot: FC003284 Solvent (2) Lot: 108096 Solvent (4) Lot: N/A Solvent (6) Lot: N/A Clean Up (2) Lot: N/A Clean Up (4) Lot: N/A

Start Time: N/A Cycles/Hour 0 Sonicator Tuned?Yes Bath Temp1 (C): N/A Therm ID1: N/A
End Time: N/A

Mitkem Sample ID	Client Samp ID	M	Initial (mL/g)	Final (mL)	Surrogate Spike ID	Surr (mL)	LCS/D MS/D Spike ID	Spike (mL)	A* Init	W* Init	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11	pH <2	CNCNTR Unit
MB-62776	BatchQC		30	10	OPW110822B	1			CJA	JBW			11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (MB-62776): ACID_111106A/canderson, CU_111106A/canderson																			
LCS-62776	BatchQC		30	10	OPW110822B	1	OPW110928A	1	CJA	JBW			11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (LCS-62776): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-01B	H30Q0	S	30.5	10	OPW110822B	1			CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-01B): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-01BMS	H30Q0	S	30	10	OPW110822B	1	OPW111005A	1	CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-01BMS): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-01BMSD	H30Q0	S	30	10	OPW110822B	1	OPW111005A	1	CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-01BMSD): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-02B	H30Q1	S	30	10	OPW110822B	1			CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-02B): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-03B	H30Q2	S	30.4	10	OPW110822B	1			CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-03B): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-04B	H30Q3	S	30	10	OPW110822B	1			CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-04B): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-05B	H30Q4	S	30	10	OPW110822B	1			CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-05B): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-06B	H30Q6	S	30	10	OPW110822B	1			CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-06B): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-07B	H30Q8	S	30.5	10	OPW110822B	1			CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-07B): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-08B	H30Q9	S	30	10	OPW110822B	1			CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-08B): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-09B	H30R0	S	30.7	10	OPW110822B	1			CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-09B): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-10B	H30R1	S	30	10	OPW110822B	1			CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-10B): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-11B	H30S4	S	30.1	10	OPW110822B	1			CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-11B): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-12B	H30S5	S	30.1	10	OPW110822B	1			CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-12B): ACID_111106A/canderson, CU_111106A/canderson																			

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Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division PREP BATCH REPORT

Prep Start Date: 11/6/2011 11:00:00
Prep End Date: 11/6/2011 12:45:00 Prep Code: SOM01.0_ARO_S_PR Prep Type: SONC/SW3550B Prep Factor Units: mL / g
Prep Batch ID: 62776 Technician: Courtney J Anderson

QC Matrix: NASO4	Solvent (1): MECL2	Solvent (3): HEXANE	Solvent (5): N/A	Clean Up (1): N/A	Clean Up (3): N/A
QC Matrix Lot: 106147	Solvent (1) Lot: DE 980	Solvent (3) Lot: DA 782	Solvent (5) Lot: N/A	Clean Up (1) Lot: N/A	Clean Up (1) Lot: N/A
Filter?: FILTER	Solvent (2): ACE	Solvent (4): N/A	Solvent (6): N/A	Clean Up (2): N/A	Clean Up (4): N/A
Filter Lot: FC003284	Solvent (2) Lot: 108096	Solvent (4) Lot: N/A	Solvent (6) Lot: N/A	Clean Up (2) Lot: N/A	Clean Up (4) Lot: N/A
	Start Time: N/A End Time: N/A	Cycles/Hour 0	Sonicator Tuned? Yes	Bath Temp1 (C): N/A	Therm ID1: N/A

Mitkem Sample ID	Client Samp ID	M	Initial (mL/g)	Final (mL)	Surrogate Spike ID	Surr (mL)	LCS/D MS/D Spike ID	Spike (mL)	A* Init	W* Init	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11	pH <2	CNCNTR Unit
K2198-13B	H30S8	S	30.1	10	OPW110822B	1			CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-13B): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-14B	H30S9	S	30	10	OPW110822B	1			CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-14B): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-15B	H30T0	S	30.5	10	OPW110822B	1			CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-15B): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-16B	H30T1	S	30	10	OPW110822B	1			CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-16B): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-17B	H30T2	S	30.9	10	OPW110822B	1			CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-17B): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-18B	H30T3	S	30.3	10	OPW110822B	1			CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-18B): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-19B	H30T4	S	30	10	OPW110822B	1			CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-19B): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-20B	H30T5	S	30.1	10	OPW110822B	1			CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-20B): ACID_111106A/canderson, CU_111106A/canderson																			

Courtney J Anderson 11/06/2011 Courtney J Anderson 11/06/2011
Analyst Reviewed Date Manager Reviewed Date

Comments:

11/6/11

1233

Logbook ID: 50.0149-10/11

Percent Moisture and Percent Solids Report

Lab Sample ID	Client Sample ID	Analyzed	Percent Moisture	Percent Solids	Validated
K2198-01A	H30Q0	11/13/2011	14.696	85.304	Yes
K2198-02A	H30Q1	11/13/2011	22.373	77.627	Yes
K2198-03A	H30Q2	11/13/2011	15.548	84.452	Yes
K2198-04A	H30Q3	11/13/2011	18.924	81.076	Yes
K2198-05A	H30Q4	11/13/2011	15.972	84.028	Yes
K2198-06A	H30Q6	11/13/2011	47.961	52.039	Yes
K2198-07A	H30Q8	11/13/2011	70.051	29.949	Yes
K2198-08A	H30Q9	11/13/2011	62.273	37.727	Yes
K2198-09A	H30R0	11/13/2011	74.138	25.862	Yes
K2198-10A	H30R1	11/13/2011	54.033	45.967	Yes
K2198-11A	H30S4	11/13/2011	38.159	61.841	Yes
K2198-12A	H30S5	11/13/2011	14.479	85.521	Yes
K2198-13A	H30S8	11/13/2011	32.893	67.107	Yes
K2198-14A	H30S9	11/13/2011	34.003	65.997	Yes
K2198-15A	H30T0	11/13/2011	27.572	72.428	Yes
K2198-16A	H30T1	11/13/2011	9.600	90.400	Yes
K2198-17A	H30T2	11/13/2011	23.910	76.090	Yes
K2198-18A	H30T3	11/13/2011	21.887	78.113	Yes
K2198-19A	H30T4	11/13/2011	20.064	79.936	Yes
K2198-20A	H30T5	11/13/2011	23.849	76.151	Yes

Mitkem Laboratories % Moisture and % Solids Logbook

Date In:	11/13/2011 17:10	Temperature In (°C):		105	Analyst(s):	11/13/2011	11/14/2011	
Date Out:	11/14/2011 10:35	Temperature Out (°C):		105				Reviewer:
Mitkem Sample ID	Tare Mass (g)	Wet Wt	Wet Wt (g) Tared	Dry Wt (g)	Dry Wt (g) Tared	% Moisture	% Solids	11/15/2011
K2375-03A	1.02	6.26	5.24	5.54	4.52	13.7	86.3	
K2375-04A	1.02	10.13	9.11	8.97	7.95	12.7	87.3	
K2375-05A	1.01	6.03	5.02	5.48	4.47	11.0	89.0	
K2375-06A	1.04	7.37	6.33	6.53	5.49	13.3	86.7	
K2198-01A	1.04	7.30	6.26	6.38	5.34	14.7	85.3	
K2198-01ADUP	1.03	6.83	5.80	5.96	4.93	15.0	85.0	
K2198-02A	1.04	6.94	5.90	5.62	4.58	22.4	77.6	
K2198-03A	1.03	6.69	5.66	5.81	4.78	15.5	84.5	
K2198-04A	1.04	6.80	5.76	5.71	4.67	18.9	81.1	
K2198-05A	1.04	8.24	7.20	7.09	6.05	16.0	84.0	
K2198-06A	1.06	6.21	5.15	3.74	2.68	48.0	52.0	
K2198-07A	1.05	6.96	5.91	2.82	1.77	70.1	29.9	
K2198-08A	1.03	7.63	6.60	3.52	2.49	62.3	37.7	
K2198-09A	1.03	6.25	5.22	2.38	1.35	74.1	25.9	
K2198-10A	1.03	8.84	7.81	4.62	3.59	54.0	46.0	
K2198-11A	1.04	9.95	8.91	6.55	5.51	38.2	61.8	
K2198-12A	1.05	6.23	5.18	5.48	4.43	14.5	85.5	
K2198-13A	1.02	7.83	6.81	5.59	4.57	32.9	67.1	
K2198-14A	1.01	7.48	6.47	5.28	4.27	34.0	66.0	
K2198-15A	1.04	10.76	9.72	8.08	7.04	27.6	72.4	
K2198-16A	1.00	8.50	7.50	7.78	6.78	9.6	90.4	
K2198-17A	1.04	8.61	7.57	6.80	5.76	23.9	76.1	
K2198-18A	1.03	6.33	5.30	5.17	4.14	21.9	78.1	
K2198-19A	1.00	7.28	6.28	6.02	5.02	20.1	79.9	
K2198-20A	1.02	7.10	6.08	5.65	4.63	23.8	76.2	
K2198-20ADUP	1.02	6.75	5.73	5.32	4.30	25.0	75.0	
K2347-01A	1.05	7.44	6.39	6.88	5.83	8.8	91.2	
K2347-02A	1.00	6.48	5.48	6.02	5.02	8.4	91.6	
K2187-01A	1.05	6.92	5.87	4.25	3.20	45.5	54.5	
K2187-02A	1.02	9.45	8.43	4.43	3.41	59.5	40.5	
K2187-03A	1.00	8.17	7.17	4.17	3.17	55.8	44.2	
K2187-04A	1.06	9.62	8.56	4.42	3.36	60.7	39.3	
K2187-04ADUP	1.05	8.58	7.53	4.06	3.01	60.0	40.0	

% Solid = 100(Dry Mass Tared/Wet Mass Tared)

Logbook Number: 110.0038

% Moisture = 100 - % Solid

Location: \\Avogadro\public\Lims\PMoist\2011\11\111113A_PMOIST.xls

Spectrum Analytical, Inc. RI Division — pH Determination Logbook

Analyst: KP — pH Meter ID: WC-02

Date: 11/9/11

Sample ID		Sample wt (g)	Water vol (ml)	pH Reading	Buffer IDs	Comments
PH 4.00		N/A	N/A	4.15	IWP110907D	9:30
PH 7.00		N/A	N/A	7.08	IWP110618E	
PH 10.00		N/A	N/A	10.06	IWP110618I	
K2198	01A	20.02	20	8.21		
	01A DUP	20.34		8.18		
	02A	20.39		7.53		
	03A	20.12		7.67		
	04A	20.09		7.34		
	05A	20.17		8.87		
	06A	20.27		9.09		
	07A	20.21		9.06		
↓	08A	20.05	↓	8.47		
K2198	09A	20.42	20	9.04		
PH 7.00		N/A	N/A	7.01	IWP110618E	
K2198	10A	20.16	20	8.47		
	11A	20.13		7.78		
	12A	20.48		7.49		
	13A	20.07		7.34		
	14A	20.17		7.26		
	15A	20.32		7.00		
	16A	20.38		7.10		
	17A	20.34		7.27		
↓	18A	20.14	↓	7.27		
K2198	19A	20.18	20	7.95		

pH LCS (Buffer 7.00) Acceptance Criteria 7.00 ±0.05 S.U.

Calibration Check Criteria:
pH Buffer: 4.00±0.05 S.U.
10.00+0.05 S.U.
7.00+0.05 S.U.

Frequency: at least every 10 samples

Logbook ID: 30.0210 - 09/11

Data Entry to LIMS [signature] 11/09/11

Level 1 Review by KP

Level 2 QA Review [signature] 11/9/11

Spectrum Analytical, Inc. RI Division — pH Determination Logbook

Analyst: KP — pH Meter ID: WC-02

Date: 11/9/11

Sample ID		Sample wt (g)	Water vol (ml)	pH Reading	Buffer IDs	Comments
PH 7.00		N/A	N/A	7.02	IWP110618E	
K2198	20A	20.44	20	8.24		
PH 7.00		N/A	N/A	7.01	IWP110618E	10:05

KP 11/9/11

pH LCS (Buffer 7.00) Acceptance Criteria 7.00 ±0.05 S.U.

Calibration Check Criteria:
pH Buffer: 4.00±0.05 S.U.
10.00+0.05 S.U.
7.00+0.05 S.U.

Frequency: at least every 10 samples

Logbook ID: 30.0210 - 09/11

Level 1 Review by KP

Data Entry to LIMS JMH 11/9/11

Level 2 QA Review EL 11/9/11

SAMPLE TABLE:

Pos	Desig	Description	Type	Inj	Meth name	V(uL)	Done?	Start	Finish
1	GPC3111103-SB	sample	sample	1	SVOC	5000	Y	16:57:38, 11/03/11	17:
2	K2094-01A	sample	sample	1	SVOC	5000	Y	17:44:59, 11/03/11	18:
3	K2094-01AMS	sample	sample	1	SVOC	5000	Y	18:32:19, 11/03/11	19:
4	K2094-01AMSD	sample	sample	1	SVOC	5000	Y	19:19:40, 11/03/11	20:
5	K2094-02A	sample	sample	1	SVOC	5000	Y	20:07:03, 11/03/11	20:
6	K2094-03A	sample	sample	1	SVOC	5000	Y	20:54:24, 11/03/11	21:
7	K2094-04A	sample	sample	1	SVOC	5000	Y	21:41:45, 11/03/11	22:
8	K2094-05A	sample	sample	1	SVOC	5000	Y	22:29:08, 11/03/11	23:
9	K2094-06A	sample	sample	1	SVOC	5000	Y	23:16:30, 11/03/11	00:
10	K2094-07A	sample	sample	1	SVOC	5000	Y	00:03:52, 11/04/11	00:
11	K2094-08A	sample	sample	1	SVOC	5000	Y	00:51:15, 11/04/11	01:
12	K2094-09A	sample	sample	1	SVOC	5000	Y	01:38:38, 11/04/11	02:
13	K2094-10A	sample	sample	1	SVOC	5000	Y	02:26:02, 11/04/11	03:
14	K2094-11A	sample	sample	1	SVOC	5000	Y	03:13:26, 11/04/11	04:
15	K2094-12A	sample	sample	1	SVOC	5000	Y	04:00:49, 11/04/11	04:
16	K2094-13A	sample	sample	1	SVOC	5000	Y	04:48:13, 11/04/11	05:
17	DCM	sample	sample	1	SVOC	5000	Y	05:35:37, 11/04/11	06:
18	MB-62482	sample	sample	1	SVOC	5000	Y	06:23:04, 11/04/11	07:

SAMPLE TABLE:

Pos	Desig	Description	Type	Inj	Meth name	V(uL)	Done?	Start	Finish
1	GPC3111108-SB	sample	sample	1	SVOC	5000	Y	16:18:47, 11/08/11	17:
2	K2198-01A	sample	sample	1	SVOC	5000	Y	17:06:37, 11/08/11	17:
3	K2198-01AMS	sample	sample	1	SVOC	5000	Y	17:54:29, 11/08/11	18:
4	K2198-01AMSD	sample	sample	1	SVOC	5000	Y	18:42:21, 11/08/11	19:
5	K2198-02A	sample	sample	1	SVOC	5000	Y	19:30:12, 11/08/11	20:
6	K2198-03A	sample	sample	1	SVOC	5000	Y	20:18:05, 11/08/11	21:
7	K2198-04A	sample	sample	1	SVOC	5000	Y	21:05:56, 11/08/11	21:
8	K2198-05A	sample	sample	1	SVOC	5000	Y	21:53:53, 11/08/11	22:
9	K2198-06A	sample	sample	1	SVOC	5000	Y	22:41:43, 11/08/11	23:
10	K2198-07A	sample	sample	1	SVOC	5000	Y	23:29:36, 11/08/11	00:
11	K2198-08A	sample	sample	1	SVOC	5000	Y	00:17:27, 11/09/11	01:
12	K2198-09A	sample	sample	1	SVOC	5000	Y	01:05:17, 11/09/11	01:
13	K2198-10A	sample	sample	1	SVOC	5000	Y	01:53:08, 11/09/11	02:
14	K2198-11A	sample	sample	1	SVOC	5000	Y	02:41:00, 11/09/11	03:
15	K1298-12A	sample	sample	1	SVOC	5000	Y	03:28:53, 11/09/11	04:
16	K2198-13A	sample	sample	1	SVOC	5000	Y	04:16:46, 11/09/11	05:
17	K2198-14A	sample	sample	1	SVOC	5000	Y	05:04:39, 11/09/11	05:
18	K2198-15A	sample	sample	1	SVOC	5000	Y	05:52:31, 11/09/11	06:
19	K2198-16A	sample	sample	1	SVOC	5000	Y	06:40:24, 11/09/11	07:
20	K2198-17A	sample	sample	1	SVOC	5000	Y	07:28:18, 11/09/11	08:
21	K2198-18A	sample	sample	1	SVOC	5000	Y	08:16:09, 11/09/11	09:
22	K2198-19A	sample	sample	1	SVOC	5000	Y	09:04:01, 11/09/11	09:
23	K2198-20A	sample	sample	1	SVOC	5000	Y	09:51:52, 11/09/11	10:
24	DCM	sample	sample	1	SVOC	5000	Y	10:39:45, 11/09/11	11:
25	MB-62764	sample	sample	1	SVOC	5000	Y	11:27:39, 11/09/11	12:

[redacted] INJECTION LOG [redacted] VOLATILES LABORATORY

METHOD:	CAL ID:	ANALYST:
INITIAL CAL:	IS/SS ID:	ARCHIVE:
COMMENTS:	ICV ID:	

AS #	FILE	MITKEM ID	CLIENT ID	SAMPLE SIZE	DIL	COMMENTS	IS	SS	pH

Spectrum Analytical, Inc. RI Division V5 Injection Log
Volatiles Laboratory

METHOD: SOM_1.5 ANALYST: WL
ICAL DATE: 10/4/11

BATCH: 111004A.B

Start: 04-OCT-11 16:43
End: 04-OCT-11 19:04

Comments:

Standards: IS-VW110918A ___ uL
PAC-VW110918B ___ uL
STD-VW110918C ___ uL
_____ ___ uL

Reviewed By: [signature] Manual Integration: NA MI Review: WL

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS DFB	CBZ	DCB	SURROGATES OLC-SOM A	B	C	D	E	F	G	H	I	J	K	L	M	N	DILN	FLG	COMMENTS	pH
V5N1310	16:43	BFB5N	BFB5N		AQ																			1		OK	
V5N1311	17:11	VSTD0505N	VSTD0505N		SL		100	100	100															1		OK	
V5N1312	17:39	VSTD0055N	VSTD0055N		SL		106	110	104															1		OK	
V5N1313	18:08	VSTD2005N	VSTD2005N		SL		104	111	111															1		OK	
V5N1314	18:36	VSTD1005N	VSTD1005N		SL		110	112	110															1		OK	
V5N1315	19:04	VSTD0105N	VSTD0105N		SL		104	110	118															1		OK	

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
T - Sample was injected outside of the 12 hour sequence
D - Surrogates are diluted

WL 10/11/11

[redacted] INSTRUMENT [redacted] Spectrum Analytical, Inc. Div [redacted]

INJECTION LOG

VOLATILES LABORATORY

METHOD: CAL ID: ANALYST:

Spectrum Analytical, Inc. RI Division V5 Injection Log
Volatiles Laboratory

METHOD: SVM.L-5 ANALYST: WL BATCH: 111106.B Start: 06-NOV-11 22:49
ICAL DATE: 10/4/11 End: 07-NOV-11 09:45

Comments:

Standards: IS-VW111022A ___ uL
PML4W111022B ___ uL
STD-VW111022C ___ uL
_____ ___ uL

Reviewed By: [signature] Manual Integration: NA MI Review: WL

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS DFB	CBZ	DCB	SURROGATES OLC-SOM A	B	C	D	E	F	G	H	I	J	K	L	M	N	DILN	FLG	COMMENTS	pH
V5N2700	22:49	BFBJ5	BFBJ5		AQ																			1		OK	
V5N2701	23:16	VSTD050J5	VSTD050J5		SL		100	100	100															1		OK	
V5N2702	23:44	MB-62569	VBLKJ5	62569	SL		128	134	130															1		OK	
V5N2703	00:11	K2198-02C	H30Q1	62569	SL	1	116	124	111															1		OK	
V5N2704	00:38	K2198-03C	H30Q2	62569	SL	1	124	135	115															1		OK	
V5N2705	01:03	K2198-04C	H30Q3	62569	SL	1	100	112	103															1		OK	
V5N2706	01:30	K2198-05C	H30Q4	62569	SL	1	106	121	120															1		OK	
V5N2707	01:58	K2198-06C	H30Q6	62569	SL	1	96	116	111															1		OK	
V5N2708	02:25	K2198-07C	H30Q8	62569	SL	1	99	107	113															1		OK	
V5N2709	02:56	K2198-08C	H30Q9	62569	SL	1	113	116	96	*														1		OK	
V5N2710	03:21	K2198-09C	H30R0	62569	SL	1	78	94	104		*													1		OK	
V5N2711	03:50	K2198-10C	H30R1	62569	SL	1	136	131	100															1		OK	
V5N2712	04:17	K2198-11C	H30S4	62569	SL	1	121	114	86															1		OK	
V5N2713	04:45	K2198-12C	H30S5	62569	SL	1	117	121	94															1		OK	
V5N2714	05:12	K2198-13C	H30S8	62569	SL	1	100	112	94															1		OK	
V5N2715	05:39	K2198-14C	H30S9	62569	SL	1	101	114	100															1		OK	
V5N2716	06:07	K2198-15C	H30T0	62569	SL	1	93	102	81															1		OK	
V5N2717	06:34	K2198-16C	H30T1	62569	SL	1	118	140	140															1		OK	
V5N2718	07:02	K2198-17C	H30T2	62569	SL	1	116	127	122															1		OK	
V5N2719	07:29	K2198-18C	H30T3	62569	SL	1	116	133	126															1		OK	
V5N2720	07:56	K2198-19C	H30T4	62569	SL	1	133	159	150															1		OK	
V5N2721	08:23	K2198-20C	H30T5	62569	SL	1	127	142	127															1		OK	
V5N2722	08:50	K2199-02C	H30T6	62569	SL	1	124	138	122															1		OK	
V5N2723	09:17	K2199-03C	H30T7	62569	SL	1	125	142	131															1		OK	
V5N2724	09:45	VSTD050K5	VSTD050K5		SL		100	100	100															1		OK	

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
T - Sample was injected outside of the 12 hour sequence
D - Surrogates are diluted

WL 11/8/11

[redacted] INST[redacted]IEN[redacted] Spe[redacted]o An[redacted]al, In[redacted]Div [redacted]

INJECTION LOG

VOLATILES LABORATORY

METHOD: _____ CAL ID: ANALYST:

Spectrum Analytical, Inc. RI Division V5 Injection Log
Volatiles Laboratory

METHOD: SOM-L.5 ANALYST: WL BATCH: 111107.B Start: 07-NOV-11 09:45
ICAL DATE: 10/4/11 End: 07-NOV-11 21:33

Comments:

Standards: IT-VW111022A ___ uL
AMI-VW111022B ___ uL
ITO-VW111022C ___ uL
_____ ___ uL

Reviewed By: [signature] Manual Integration: NA MI Review: WL

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MI	BN	INTERNAL STDS DFB	CBZ	DCB	SURROGATES OLC-SOM A	B	C	D	E	F	G	H	I	J	K	L	M	N	DILN	FLG	COMMENTS	pH
V5N2724	09:45	VSTD050K5	VSTD050K5		SL		100	100	100															1		OK	
V5N2725	10:12	MB-62780	VBLKK5	62780	SL		134	125	111															1		OK	
V5N2726	10:39	K2268-01D	H2TM8	62780	SL	1	126	117	106															1		OK	
V5N2726A	11:07	K2199-09B	H30R6	62780	SL	1	125	109	81															1		OK	
V5N2727	11:35	K2198-01C	H30Q0	62780	SL	1	137	112	80															1		OK	
V5N2728	12:02	K2268-01DMS	H2TM8MS	62780	SL	2	122	104	86						*									1		OK	
V5N2729	12:29	K2268-01DMSD	H2TM8MSD	62780	SL	3	137	120	105															1		OK	
V5N2730	12:57	K2198-01CMS	H30Q0MS	62780	SL	2	124	109	90						*									1		OK	
V5N2731	13:24	K2198-01CMSD	H30Q0MSD	62780	SL	3	131	115	94															1		OK	
V5N2732	13:51	K2199-12B	H30S0	62780	SL	1	113	82	54							*								1		OK	
V5N2733	14:18	K2199-12BMS	H30S0MS	62780	SL	2	109	85	58															1		OK	
V5N2734	14:45	K2199-12BMSD	H30S0MSD	62780	SL	3	117	93	65															1		OK	
V5N2735	15:13	K2199-04B	H30Q5	62780	SL	1	128	99	66															1		OK	
V5N2736	15:40	K2199-05B	H30Q7	62780	SL	1	143	117	80															1		OK	
V5N2737	16:07	K2199-06B	H30R2	62780	SL	1	143	134	111						*								*	1		OK	
V5N2738	16:34	K2199-07B	H30R3	62780	SL	1	144	118	90															1		OK	
V5N2739	17:01	K2199-08B	H30R4	62780	SL	1	116	78	52							*	*							1		OK	
V5N2740	17:28	VHBLK5K	VHBLK5K	62780	SL		125	90	65															1		OK (K2268)	
V5N2741	17:55	K2199-10B	H30R7	62780	SL	1	116	92	65															1		OK	
V5N2742	18:22	K2199-11B	H30R8	62780	SL	1	133	103	80															1		OK	
V5N2743	18:50	K2199-13B	H30S1	62780	SL	1	161	143	121															1		OK	
V5N2744	19:17	K2199-14B	H30S2	62780	SL	1	131	100	64							*								1		OK	
V5N2745	19:44	K2199-15B	H30S3	62780	SL	1	155	122	92															1		OK	
V5N2746	20:11	K2199-16B	H30S6	62780	SL	1	149	107	67							*	*							1		OK	
V5N2747	20:38	K2199-17B	H30T8	62780	SL	1	146	104	59							*	*							1		OK	
V5N2748	21:05	VHBLKK5	VHBLKK5	62780	SL		156	152	146															1		OK (K2198) (K2199)	
V5N2749	21:33	VSTD050L5	VSTD050L5		SL		100	100	100															1		OK	

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
T - Sample was injected outside of the 12 hour sequence
D - Surrogates are diluted

WL 11/9/11

1242

Logbook ID 90.0199-09/11

Logbook ID: 70.0168- 09/11

Instrument S2
Injection Log

Spectrum Analytical, Inc. RI Div
SemiVolatiles Laboratory

Spectrum Analytical, Inc. RI Division S2 Injection Log
Semivolatiles Laboratory

METHOD: SOM01.4 ANALYST: MNS
ICAL DATE: 10/25/11 EMV: 2801

BATCH: 111025.B

Start: 25-OCT-11 09:32
End: 25-OCT-11 16:41

Internal Standard: SI111019A
Comments:

Reviewed By: 10/26/11 BM

Manual Integration: MNS 10/26

MI Review: 10/26/11 BM

Inlet Maintenance By: MNS
Liner : Cleaned
Column : Clipped
Inlet Seal: Changed
Septum : New

Tune: SW110727A
C1: SW111019A
C2: SW111019B
C3: SW111019C
C4: SW111019D
C5: SW111619E

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	INTERNAL STANDARDS DCB	NPT	ANT	PHN	CRY	PRY	SURROGATES OLC-SOM A	B	C	D	E	F	G	H	I	J	K	L	M	M	O	P	DILN	FLG	COMMENTS
S2H5052	09:32	DFTPP2W	DFTPP2W		AQ																							1		OK
S2H5053C	11:35	SSTD0202W	SSTD0202W		AQ	100	100	100	100	100	100																	1		OK C3 OCCV
S2H5054	11:58	SSTD0052W	SSTD0052W		AQ	76	77	75	81	81	77																	1		C1
S2H5055	12:21	SSTD0802W	SSTD0802W		AQ	62	67	63	64	38*	27*																	1		C5
S2H5056	12:44	SSTD0102W	SSTD0102W		AQ	113	107	100	97	96	98																	1		C2
S2H5057	13:07	SSTD0402W	SSTD0402W		AQ	75	78	82	83	83	71																	1		C4
S2H5059	14:28	MB-62327	SBLK2X	62327	SL	56	51	50*	44*	39*	40*																	1		No MNS
S2H5060	14:51	K2072-16AMS	E0ZS5MS	62360	SL	69	66	62	58	57	63																	1		OK
S2H5061	15:13	MB-62327	SBLK2X	62327	SL	63	66	64	59	59	56																	1		OK
S2H5062	15:35	K2072-16AMSD	E0ZS5MSD	62360	SL	86	87	82	74	64	67																	1		OK MI_81
S2H5063	15:57	K2072-07A	E0ZR6	62327	SL	82	82	71	68	66	75																	1		OC MI_81
S2H5064	16:19	K2072-12A	E0ZS1	62327	SL	82	79	67	67	68	72																	1		OK
S2H5065	16:41	SSTD0202Y	SSTD0202Y		AQ	100	100	100	100	100	100																	1		OK FCCV

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
T - Sample was injected outside of the 12 hour sequence
D - Surrogates are diluted

Ferrule

MNS 10/26/11

1243

Logbook ID: 70.0168- 09/11

Instrument S2
Injection Log

Spectrum Analytical, Inc. RI Div
SemiVolatiles Laboratory

Spectrum Analytical, Inc. RI Division S2 Injection Log
Semivolatiles Laboratory

METHOD: 8270LOW ANALYST: WS BATCH: 111110.B Start: 10-NOV-11 09:18
ICAL DATE: 10/25/11 EMV: 2711 End: 10-NOV-11 18:26

Tune: SW110727A

Internal Standard: SI111018A
Comments: CB SW111019C

Inlet Maintenance By: WS
Liner : Changed
Column : Clipped
Inlet Seal: Cleaned
Septum : New

Reviewed By: 11/11/11 BM Manual Integration: WS 11/11/11 MI Review: 11/11/11 BM

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	INTERNAL STANDARDS DCB	NPT	ANT	PHN	CRY	PRY	SURROGATES OLC-SOM A	B	C	D	E	F	G	H	I	J	K	L	M	M	O	P	DILN	FLG	COMMENTS
S2H5247	09:18	DFTPP2X	DFTPP2X		AQ																							1		ok
S2H5248	09:31	SSTD0202X	SSTD0202X		AQ	100	100	100	100	100	100																	1		ok ccv
S2H5249	09:57	MB-62764	SBLK2X	62764	SL	132	126	123	131	126	128																	1		ok
S2H5250	10:23	K2198-01A	H30Q0	62764	SL	128	114	122	131	116	113																	1		ok
S2H5251	10:44	K2198-01AMS	H30Q0MS	62764	SL	113	97	103	111	94	85																	1		ok
S2H5252	11:05	K2198-01AMSD	H30Q0MSD	62764	SL	151	142	151	166	155	147															*		1		ok
S2H5253	11:26	K2198-02A	H30Q1	62764	SL	150	139	144	163	151	142															*		1		ok
S2H5254	11:47	K2198-03A	H30Q2	62764	SL	128	122	130	147	136	132																	1		ok
S2H5255	12:08	K2198-04A	H30Q3	62764	SL	208*	189	195	251*	282*	269*															*		1		low mw
S2H5256	12:29	K2198-05A	H30Q4	62764	SL	128	122	132	138	133	129															*	*	1		ok
S2H5257	12:50	K2198-06A	H30Q6	62764	SL	167	160	169	174	144	154															*	*	1		ok
S2H5258	13:11	K2198-07A	H30Q8	62764	SL	133	136	140	148	130	119															*	*	1		ok
S2H5259	13:32	K2198-08A	H30Q9	62764	SL	105	89	73	78	77	78															*	*	1		ok
S2H5260	13:53	K2198-09A	H30R0	62764	SL	137	129	103	99	83	74															*	*	1		ok
S2H5261	14:14	K2198-10A	H30R1	62764	SL	185	172	126	97	88	67															*	*	1		ok
S2H5262	14:35	K2198-11A	H30S4	62764	SL	149	161	156	127	75	69																	1		ok
S2H5263	14:56	K2198-12A	H30S5	62764	SL	147	155	154	134	104	102																	1		ok
S2H5264	15:17	K2198-13A	H30S8	62764	SL	145	153	152	142	120	110																	1		ok
S2H5265	15:38	K2198-14A	H30S9	62764	SL	158	168	166	164	146	130													*		*	*	1		ok
S2H5266	15:59	K2198-15A	H30T0	62764	SL	154	152	149	144	119	112									*		*				*	*	1		ok
S2H5267	16:20	K2198-16A	H30T1	62764	SL	136	139	139	134	109	105																	1		ok
S2H5268	16:41	K2198-17A	H30T2	62764	SL	139	145	160	169	134	119															*	*	1		ok
S2H5269	17:01	K2198-18A	H30T3	62764	SL	144	146	137	130	115	113																	1		ok MI_83
S2H5270	17:23	K2198-19A	H30T4	62764	SL	184	202*	207*	204*	177	157																	1		low MI_83
S2H5271	17:44	K2198-20A	H30T5	62764	SL	142	137	137	133	121	107															*	*	1		ok MI_83
S2H5272	18:05	K2198-04A	H30Q3	62764	SL	105	105	105	102	81	76																	1		ok MI_83
S2H5273	18:26	SSTD0202Y	SSTD0202Y		AQ	100	100	100	100	100	100																	1		ok MI_81_82_83_84 ccv
S2H5274	19:30	GPC3111108-SB			AQ	153	147	145	145	131	128	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1		ok

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
T - Sample was injected outside of the 12 hour sequence
D - Surrogates are diluted

WS 11/11/11

Logbook ID: 70.0168- 09/11

Instrument S2
Injection Log

Spectrum Analytical, Inc. RI Div
SemiVolatiles Laboratory

Spectrum Analytical, Inc. RI Division S2 Injection Log
Semivolatiles Laboratory

METHOD: SBLCOV
ICAL DATE: 10/25/11

ANALYST: MS
EMV: 27/6

BATCH: 111111.B

Start: 11-NOV-11 08:43
End: 11-NOV-11 17:36

Tune: SW110727A

Internal Standard: S1111 9&A
Comments:

C3' SW11019C

Inlet Maintenance By: N/A
Liner :
Column :
Inlet Seal:
Septum :

Reviewed By: 11/14/11 BM

Manual Integration: MS 11/13/11

MI Review: 11/14/11 BM

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	INTERNAL STANDARDS DCB	NPT	ANT	PHN	CRY	PRY	SURROGATES OLC-SOM A	B	C	D	E	F	G	H	I	J	K	L	M	M	O	P	DILN	FLG	COMMENTS
S2H5275	08:43	DFTPP2Z	DFTPP2Z		AQ																							1		OK
S2H5276	09:01	SSTD0202Z	SSTD0202Z		AQ	100	100	100	100	100	100																	1		OK OCCV
S2H5277	09:38	K2198-19A	H30T4	62764	SL	136	146	138	130	123	100																	1		OK
S2H5278	09:59	SSTD0202A	SSTD0202A		AQ	100	100	100	100	100	100																	1		OK XCV
S2H5279	13:17	MB-62798	SBLK2A	62798	SL	172	188	207*	177	131	1*	*	*	*		*	*	*		*	*	*	*		*	*	*	1		Send Aliquot
S2H5280	13:38	K2199-02A	H30T6	62798	SL	140	137	131	119	104	100									*			*			*	*	1		OK
S2H5281	13:59	K2272-03A	E0055	62875	SL	106	109	97	79	64	67		*		*	*												1		
S2H5282	14:20	K2272-02A	E0054	62875	SL	128	128	113	92	70	71	*	*	*	*	*												1		> to extract
S2H5283	14:41	K2272-01A	E0053	62875	SL	120	98	83	65	66	63					*												1	E	MI_66_65_71_73_81_82 to extract
S2H5284	15:29	MB-62798	SBLK2A	62798	SL	154	143	142	129	112	121						*											1		Rerun
S2H5285	15:50	MB-62875	SBLK2B	62875	AQ	131	139	124	110	95	94	*	*	*	*	*												1		to extract SIM extract
S2H5286	16:11	K2199-03A	H30T7	62798	SL	104	109	102	103	116	107												*			*	*	1		OK MI_81
S2H5287	16:33	MB-62798	SBLK2A	62798	SL	114	119	115	111	123	122																	1		OK
S2H5288B	17:36	SSTD0202B	SSTD0202B		AQ	100	100	100	100	100	100																	1		OK MI_48 FCCV

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
T - Sample was injected outside of the 12 hour sequence
D - Surrogates are diluted

MMS 11/13/11

1245

Logbook ID: 70.0168- 09/11

Instrument S2
Injection Log

Spectrum Analytical, Inc. RI Div
SemiVolatiles Laboratory

Spectrum Analytical, Inc. RI Division S2 Injection Log
Semivolatiles Laboratory

METHOD: 5030Low ANALYST: MS BATCH: 111114.B Start: 14-NOV-11 16:22
ICAL DATE: 10/25/11 EMV: 2716 End: 14-NOV-11 18:23

Tune: SW110727A

Internal Standard: SI 111018A
Comments:

L3: SW111019C

Inlet Maintenance By: MS
Liner : Cleaned
Column : Clipped
Inlet Seal: Cleaned
Septum : New

Reviewed By: 11/15/11 BM Manual Integration: N/A MI Review: N/A

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	INTERNAL STANDARDS DCB	NPT	ANT	PHN	CRY	PRY	SURROGATES OLC-SOM A	B	C	D	E	F	G	H	I	J	K	L	M	M	O	P	DILN	FLG	COMMENTS
S2H5289	16:22	DFTPP2C	DFTPP2C		AQ																							1		OK
S2H5290	16:35	SSTD0202C	SSTD0202C		AQ	100	100	100	100	100	100																	1		OK CCV
S2H5291	16:58	MB-62876	SBLK2C	62876	SL	117	111	113	118	119	110																	1		OK
S2H5292	17:19	K2198-04A	H30Q3	62764	SL	109	99	89	96	99	90																	1		OK
S2H5293	17:40	K2272-01ADL	E0053DL	62876	SL	131	131	115	95	58	57	D			D													50	E	Dil 1:2
S2H5294	18:02	K2272-01ADL	E0053DL	62876	SL	144	152	137	131	85	68	D	D	D	D	D												100	E	Rerun 3X
S2H5295	18:23	SSTD0202D	SSTD0202D		AQ	100	100	100	100	100	100																	1		OK CCV

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
T - Sample was injected outside of the 12 hour sequence
D - Surrogates are diluted

Clipped Column	
Ferrule	

MS 11/15/11

1246

Spectrum Analytical, Inc. RI Division - PEST/PCB RUN LOGBOOK: INSTRUMENT E2

Spectrum Analytical, Inc. RI Division E2 Injection Log
GC Semivolatiles Laboratory

METHOD: AR20
ICAL DATE: 10/25/11
ANALYST: [illegible]

START BATCH: 111104AF.B
END BATCH: 111104AF.B

Start: 04-NOV-11 18:57
End: 05-NOV-11 15:09

STDs. Page 69

Comments:

Inlet Maintenance By:
Liner : yes
Column :
Inlet Seal: —
Septum : —

Reviewed By: [illegible] 11/7/11
Manual Integration: MA
MI Review: MA

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	SURROGATES FRONT TCMX	FRONT DCB	REAR TCMX	REAR DCB	DILN	FLAGS F	FLAGS R	ANALYST CHECK F	ANALYST CHECK R	COMMENTS
E2K7478F/R	18:57	AIBLKJA	AIBLKJA		AQ	0*	0*	0*	0*	1			✓		PW110524AC
E2K7479F/R	19:17	AR12213J2	AR12213J2		AQ					1			✓		PW110524A
E2K7480F/R	19:38	AR12323J2	AR12323J2		AQ					1			✓		PW110721A
E2K7481F/R	19:59	AR12421J2	AR12421J2		AQ					1			✓		PW110524O
E2K7482F/R	20:20	AR12426J2	AR12426J2		AQ					1			✓		P
E2K7483F/R	20:41	AR12422J2	AR12422J2		AQ					1			✓		W
E2K7484F/R	21:01	AR12423J2	AR12423J2		AQ					1			✓		M
E2K7485F/R	21:22	AR12424J2	AR12424J2		AQ					1			✓		L
E2K7486F/R	21:43	AR12425J2	AR12425J2		AQ					1			✓		R
E2K7487F/R	22:04	AR12481J2	AR12481J2		AQ					1			✓		Y
E2K7488F/R	22:25	AR12486J2	AR12486J2		AQ					1			✓		V
E2K7489F/R	22:46	AR12482J2	AR12482J2		AQ					1			✓		T
E2K7490F/R	23:07	AR12483J2	AR12483J2		AQ					1			✓		S
E2K7491F/R	23:28	AR12484J2	AR12484J2		AQ					1			✓		K
E2K7492F/R	23:49	AR12485J2	AR12485J2		AQ					1			✓		Q
E2K7493F/R	00:10	AR12541J2	AR12541J2		AQ					1			✓		AA
E2K7494F/R	00:31	AR12546J2	AR12546J2		AQ					1			✓		AB
E2K7495F/R	00:52	AR12542J2	AR12542J2		AQ					1			✓		Z
E2K7496F/R	01:13	AR12543J2	AR12543J2		AQ					1			✓		Y
E2K7497F/R	01:34	AR12544J2	AR12544J2		AQ					1			✓		X
E2K7498F/R	01:54	AR12545J2	AR12545J2		AQ					1			✓		W
E2K7499F/R	02:15	AR12623J2	AR12623J2		AQ					1			✓		C
E2K7500F/R	02:36	AR12683J2	AR12683J2		AQ					1			✓		D
E2K7501F/R	02:57	AR16601J2	AR16601J2		AQ					1			✓		I
E2K7502F/R	03:18	AR16606J2	AR16606J2		AQ					1			✓		J
E2K7503F/R	03:39	AR16602J2	AR16602J2		AQ					1			✓		H
E2K7504F/R	04:00	AR16603J2	AR16603J2		AQ					1			✓		PW110524G

E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
* - Surrogate is outside of control limits
D - Surrogate is diluted

Logbook ID 60.0176-08/11

[illegible] 10/7/11

1247

Spectrum Analytical, Inc. RI Division - PEST/PCB RUN LOGBOOK: INSTRUMENT E2

Spectrum Analytical, Inc. RI Division E2 Injection Log
GC Semivolatiles Laboratory

METHOD: Arb
ICAL DATE: 10/25/11
ANALYST: [illegible]

START BATCH: 111104AF.B
END BATCH: 111104AF.B

Start: 04-NOV-11 18:57
End: 05-NOV-11 15:09

STDs Page 69

Inlet Maintenance By:
Liner : yes
Column : —
Inlet Seal: —
Septum : —

Comments:

Reviewed By: [illegible] 11/7/11
Manual Integration: [illegible] 10/7/11
MI Review: [illegible] 11/7/11

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	SURROGATES FRONT TCMX	FRONT DCB	REAR TCMX	REAR DCB	DILN	FLAGS F	FLAGS R	ANALYST CHECK F	ANALYST CHECK R	COMMENTS
E2K7505F/R	04:21	AR16604J2	AR16604J2		AQ					1			✓		PW110524F
E2K7506F/R	04:42	AR16605J2	AR16605J2		AQ					1			✓		PW110524E
E2K7507F/R	05:03	AR1660ICV2J	AR1660ICV2J		AQ					1			✓		PW110501A
E2K7508F/R	05:24	AIBLKJA	AILBKJA		AQ					1			✓		
E2K7509F/R	05:44	AR16603JA	AR16603JA		AQ					1			✓	✓	
E2K7510F/R	06:05	AR12423JA	AR12423JA		AQ					1			✓	✓	
E2K7511F/R	06:26	AR12483JA	AR12483JA		AQ					1			✓	✓	
E2K7512F/R	06:47	AR12543JA	AR12543JA		AQ					1			✓	✓	
E2K7513F/R	07:08	K2227-01ADL	E5N03DL	62665	SL	86	143	82	114	2			✓		48
E2K7514F/R	07:28	K2227-01ADL	E5N03DL	62665	SL	0D	0D	0D	0D	20			✓		48
E2K7515F/R	07:49	K2227-02ADL	E5N04DL	62665	SL	81	113	77	93	10			~~48~~ ✓		MI R11 48
E2K7516F/R	08:10	MB-62542	ABLK2D	62542	SL	78	86	91	99	1			✓		
E2K7517F/R	08:31	LCS-62542	ALCS2D	62542	SL	76	79	86	94	1			✓		
E2K7518F/R	08:52	K2088-01ADL	C0037DL	62542	SL	71	80	76	75	5			✓		54
E2K7519F/R	09:13	K2088-02ADL	C0038DL	62542	SL	0D	0D	0D	0D	20	E	E	✓		54 } need 40/400 DL
E2K7520F/R	09:34	K2088-02ADL	C0038DL	62542	SL	0D	0D	0D	0D	200			✓		RR 54
E2K7521F/R	09:55	K2088-03A	C0039	62542	SL	66	110	67	276*	1	E	E	✓		54 needs DL
E2K7522F/R	10:16	K2088-04A	C0040	62542	SL	66	128	72	112	1			✓		RR DL 2X OK
E2K7523F/R	10:37	K2088-05A	C0041	62542	SL	67	86	73	245*	1			✓		RR DL 2X OK
E2K7524F/R	10:58	K2088-06A	C0042	62542	SL	68	81	75	91	1			+		RR
E2K7525F/R	11:19	K2088-06AMS	C0042MS	62542	SL	0*	0*	0*	58	1	R	R	+		RR
E2K7526F/R	11:40	K2088-06AMSD	C0042MSD	62542	SL	68	70	75	72	1			✓		
E2K7527F/R	12:01	K2088-07A	C0043	62542	SL	73	73	81	83	1			✓		54
E2K7528F/R	12:22	K2088-08A	C0044	62542	SL	95	89	99	104	1			✓		54
E2K7529F/R	12:42	K2088-09A DL	C0045 DL	62542	SL	68	224D	73	207D	5			✓		54
E2K7530F/R	13:03	K2088-10A	C0046	62542	SL	66	116	77	74	1			✓		RR OK
E2K7531F/R	13:24	K2088-11A	C0047	62542	SL	62	97	69	69	1			✓		RR OK

E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
* - Surrogate is outside of control limits
D - Surrogate is diluted

[illegible] 10/7/11

Logbook ID 60.0176-08/11

1248

Spectrum Analytical, Inc. RI Division - PEST/PCB RUN LOGBOOK: INSTRUMENT E2

Spectrum Analytical, Inc. RI Division E2 Injection Log
GC Semivolatiles Laboratory

METHOD: ANO
ICAL DATE: 10/25/11
ANALYST: [illegible]

START BATCH: 111104AF.B
END BATCH: 111104AF.B

Start: 04-NOV-11 18:57
End: 05-NOV-11 15:09

Comments: STDs Page 69

Inlet Maintenance By:
Liner : yes
Column : —
Inlet Seal: —
Septum : —

Reviewed By: _____ Manual Integration: W/A MI Review: _____

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	SURROGATES FRONT TCMX	SURROGATES FRONT DCB	SURROGATES REAR TCMX	SURROGATES REAR DCB	DILN	FLAGS F	FLAGS R	ANALYST CHECK F	ANALYST CHECK R	COMMENTS
E2K7532F/R	13:45	AIBLKJB	AILBKJB		AQ					1			✓		
E2K7533F/R	14:06	AR16603JB	AR16603JB		AQ					1			✓	✓	
E2K7534F/R	14:27	AR12423JB	AR12423JB		AQ					1			✓	✓	ok closing
E2K7535F/R	14:48	AR12483JB	AR12483JB		AQ					1			✓	✓	
E2K7536F/R	15:09	AR12543JB	AR12543JB		AQ					1			✓	✓	

E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
* - Surrogate is outside of control limits
D - Surrogate is diluted

[illegible]
10/7/11

Standard ID's

Comments

Reviewed _____

Logbook ID 60.0176-08/11

1249

Spectrum Analytical, Inc. RI Division - PEST/PCB RUN LOGBOOK: INSTRUMENT E2

Spectrum Analytical, Inc. RI Division E2 Injection Log
GC Semivolatiles Laboratory

METHOD: ARO ANALYST: CMO
ICAL DATE: 10/25/11

START BATCH: 111107F.B Start: 07-NOV-11 08:46
END BATCH: 111107F.B End: 08-NOV-11 07:40

Comments: STDs Page 69

Inlet Maintenance By:
Liner :
Column :
Inlet Seal: b
Septum :

Reviewed By: 11/8/11 Manual Integration: AM MI Review: AM

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	SURROGATES FRONT TCMX	FRONT DCB	REAR TCMX	REAR DCB	DILN	FLAGS F	FLAGS R	ANALYST CHECK F	ANALYST CHECK R	COMMENTS
E2K7537F/R	08:46	AIBLKJC	AILBKJC		AQ					1					
E2K7538F/R	09:07	AR16603JC	AR16603JC		AQ					1					
E2K7539F/R	09:27	AIBLKJC	AILBKJC		AQ					1					
E2K7540F/R	09:48	AR16603JC	AR16603JC		AQ					1					
E2K7541F/R	10:09	AR12423JC	AR12423JC		AQ					1					not used
E2K7542F/R	10:30	AR12483JC	AR12483JC		AQ					1					
E2K7543F/R	10:51	AR12543JC	AR12543JC		AQ					1					
E2K7544F/R	11:36	AIBLKJC	AILBKJC		AQ					1			✓		
E2K7545F/R	11:57	AR16603JC	AR16603JC		AQ					1			✓	✓	
E2K7546F/R	12:18	AR12423JC	AR12423JC		AQ					1			✓	✓	
E2K7547F/R	12:38	AR12483JC	AR12483JC		AQ					1			✓	✓	
E2K7548F/R	12:59	AR12543JC	AR12543JC		AQ					1			✓	✓	
E2K7549F/R	15:17	K2088-02A	C0038	62542	SL	0D	0D	0D	0D	40			✓		54
E2K7550F/R	15:38	AIBLKJC	AILBKJC		AQ					1					
E2K7551F/R	15:59	AIBLKJC	AILBKJC		AQ					1					
E2K7552F/R	16:19	K2088-02ADL	C0038DL	62542	SL	0D	0D	0D	0D	400			✓		54
E2K7553F/R	16:40	AIBLKJC	AILBKJC		AQ					1					
E2K7554F/R	17:01	K2088-03ADL	C0039DL	62542	SL	60	78	58	94	10			✓		54
E2K7555F/R	17:22	AIBLKJC	AILBKJC		AQ					1					
E2K7556F/R	17:43	K2088-04ADL	C0040DL	62542	SL	55	64	56	94	2			✓		54
E2K7557F/R	18:04	AIBLKJC	AILBKJC		AQ					1					
E2K7558F/R	18:25	K2088-05ADL	C0041DL	62542	SL	64	70	66	125	2			✓		54
E2K7559F/R	18:46	AIBLKJC	AILBKJC		AQ					1					
E2K7560F/R	19:07	K2088-06A	C0042	62542	SL	60	57	55	70	1			✓		54
E2K7561F/R	19:27	AIBLKJC	AILBKJC		AQ					1					
E2K7562F/R	19:48	K2088-06AMS	C0042MS	62542	SL	65	67	72	73	1			✓		54 11/8/11
E2K7563F/R	20:09	AIBLKJC	AILBKJC		AQ					1					

E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
* - Surrogate is outside of control limits
D - Surrogate is diluted

CMO 11/8/11

Spectrum Analytical, Inc. RI Division - PEST/PCB RUN LOGBOOK: INSTRUMENT E2

Spectrum Analytical, Inc. RI Division E2 Injection Log
GC SemiVoldtiles Laboratory

METHOD: 8270
ICAL DATE: 10/25/11
ANALYST: [signature]

START BATCH: 111107F.B
END BATCH: 111107F.B

Start: 07-NOV-11 08:46
End: 08-NOV-11 07:40

Comments: STDs Page 69

Inlet Maintenance By:
Liner :
Column : 6
Inlet Seal:
Septum :

Reviewed By: [signature] 11/8/11
Manual Integration: NA
MI Review: NA

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	SURROGATES FRONT TCMX	FRONT DCB	REAR TCMX	REAR DCB	DILN	FLAGS F	FLAGS R	ANALYST CHECK F	ANALYST CHECK R	COMMENTS
E2K7564F/R	20:30	AIBLKJC	AILBKJC		AQ					1					
E2K7565F/R	20:51	AIBLKJD	AILBKJD		AQ					1					
E2K7566F/R	21:12	AR16603JD	AR16603JD		AQ					1					
E2K7567F/R	21:33	AR12423JD	AR12423JD		AQ					1					
E2K7568F/R	21:54	AR12483JD	AR12483JD		AQ					1					
E2K7569F/R	22:15	AR12543JD	AR12543JD		AQ					1					
E2K7570F/R	22:36	MB-62766	ABLK2E	62766	SL	73	78	83	82	1					
E2K7571F/R	22:57	LCS-62766	ALCS2E	62766	SL	63	69	71	72	1					
E2K7572F/R	23:18	K2268-01C	H2TM8	62766	SL	62	65	58	68	1					
E2K7573F/R	23:39	K2268-01CMS	H2TM8MS	62766	SL	56	61	60	61	1					
E2K7574F/R	00:00	K2268-01CMSD	H2TM8MSD	62766	SL	66	69	72	71	1					
E2K7575F/R	00:21	MB-62776	ABLK2F	62776	SL	59	64	63	66	1					
E2K7576F/R	00:41	LCS-62776	ALCS2F	62776	SL	62	89	67	95	1					
E2K7577F/R	01:02	K2198-01B	H30Q0	62776	SL	46	52	49	52	1					
E2K7578F/R	01:23	K2198-01BMS	H30Q0MS	62776	SL	46	55	50	56	1					
E2K7579F/R	01:44	K2198-01BMSD	H30Q0MSD	62776	SL	45	48	49	49	1					
E2K7580F/R	02:05	K2198-02B	H30Q1	62776	SL	42	43	44	42	1					
E2K7581F/R	02:26	K2198-03B	H30Q2	62776	SL	56	56	61	56	1					
E2K7582F/R	02:47	K2198-04B	H30Q3	62776	SL	0*	0*	0*	0*	1					Re-Run mis-inject.
E2K7583F/R	03:08	K2198-05B	H30Q4	62776	SL	29*	48	30*	47	1					
E2K7584F/R	03:29	K2198-06B	H30Q6	62776	SL	26*	42	28*	50	1					
E2K7585F/R	03:50	K2198-07B	H30Q8	62776	SL	61	73	65	74	1					
E2K7586F/R	04:11	K2198-08B	H30Q9	62776	SL	64	58	63	63	1					
E2K7587F/R	04:32	K2198-09B	H30R0	62776	SL	43	68	46	66	1					
E2K7588F/R	04:53	K2198-10B	H30R1	62776	SL	56	47	61	50	1					
E2K7589F/R	05:13	K2198-11B	H30S4	62776	SL	40	40	42	41	1					
E2K7590F/R	05:34	K2198-12B	H30S5	62776	SL	52	46	56	48	1					

E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
* - Surrogate is outside of control limits
D - Surrogate is diluted

Spectrum Analytical, Inc. RI Division - PEST/PCB RUN LOGBOOK: INSTRUMENT E2

Spectrum Analytical, Inc. RI Division E2 Injection Log
GC Semivolatiles Laboratory

METHOD: ARO ANALYST: Ceno
ICAL DATE: 10/25/11

START BATCH: 111107F.B Start: 08-NOV-11 05:55
END BATCH: 111107F.B End: 08-NOV-11 13:05

Comments: STDs Page 69

Inlet Maintenance By:
Liner :
Column :
Inlet Seal: 6
Septum :

Reviewed By: 11/9/11 Manual Integration: NA MI Review: NA

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	SURROGATES FRONT TCMX	SURROGATES FRONT DCB	SURROGATES REAR TCMX	SURROGATES REAR DCB	DILN	FLAGS F	FLAGS R	ANALYST CHECK F	ANALYST CHECK R	COMMENTS
E2K7591F/R	05:55	K2198-13B	H30S8	62776	SL	53	55	57	55	1			✓		
E2K7592F/R	06:16	K2198-14B	H30S9	62776	SL	54	57	58	58	1			✓		
E2K7593F/R	06:37	K2198-15B	H30T0	62776	SL	69	73	76	76	1			✓		
E2K7594F/R	06:58	K2198-16B	H30T1	62776	SL	63	68	70	70	1			✓		
E2K7595F/R	07:19	K2198-17B	H30T2	62776	SL	0*	0*	0*	0*	1			✓		Re-Run mis-inject
E2K7596F/R	07:40	K2198-18B	H30T3	62776	SL	56	73	61	70	1			✓		
E2K7597F/R	08:01	K2198-19B	H30T4	62776	SL	59	64	64	66	1			✓		
E2K7598F/R	08:22	K2198-20B	H30T5	62776	SL	67	72	74	75	1			✓		
E2K7599F/R	08:44	AIBLKDJ	AILBKDJ		AQ					1			✓		
E2K7600F/R	09:05	AR16603DJ	AR16603DJ		AQ					1			✓	✓	
E2K7601F/R	09:26	AR12423DJ	AR12423DJ		AQ					1			✓	✓	
E2K7602F/R	09:46	AR12483DJ	AR12483DJ		AQ					1			✓	✓	
E2K7603F/R	10:07	AR12543DJ	AR12543DJ		AQ					1			✓	✓	
E2K7604F/R	10:47	K2198-04B	H30Q3	62776	SL	51	54	55	54	1			✓		
E2K7605F/R	11:08	K2198-17B	H30T2	62776	SL	52	59	57	60	1			✓		
E2K7606F/R	12:45	AIBLKJE	AILBKJE		AQ					1			✓	✓	
E2K7607F/R	13:05	AR16603JE	AR16603JE		AQ					1			✓	✓	

B - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
* - Surrogate is outside of control limits
D - Surrogate is diluted

11/8/11

Reviewed

Spectrum Analytical, Inc. RI Division : VOLATILE SAMPLES RECEIVING LOGBOOK

VOA Log-In Date	Workorder	Client ID	Sample Numbers	Relinquished by:	Received by:	Pres. Used	F/R	Returned to R1
10/28/11	K2194	~~Sevenson~~ ~~EPA~~ CAW 10/28/11	01-03	CAW	AED	H	R9	
	K2195	CDM	01, 03, 04-06 SN 10/31/11			H	R9	
	~~K2196~~	~~CDM~~	~~01-06~~ SN 10/31/11			H	R9	
	K2185	EPA	01			OS	R10	
	K2190	~~PhotoFab~~	01			H	R10	
	K2191	ERM	01-02			H	R10	
	K2192	AECom	01, 03, 05-07, 09-15			OS	R10	
	K2192	AECom	04, 08			H	R10	
	K2195	EPA	01-04			H	R10	
10/28/11	K2151	ERM	02-03 04-14	CAW		US	R10	
10/28/11	K2199 K2198	EPA	02-03 01-20	CAW		OS	F4	
10/28/11	K2200	EPA	01-18, 19	CAW		T	R4	
10-29-11	K2203	Sevenson	01 & 02	DRM		H	R10	
10-29-11	K2201	CDM	01-07	DRM	AED	H	R10	

Logbook ID 90.0191-07/11

Reviewed By: [illegible] 11/1/11

"Preservative Used" Key				
UA = Unpreserved Aqueous	H = HCL	A = Air	M = MeOH	E = Encore
US = Unpreserved Soil	N = $NaHSO_4$		F = Freeze	T = Trace, HCL

Client: EPAINV

Work Order: K2198 **Profile Name:** SOM_VIII_21

MATRIX **Soil**

Samp #	Bottle	Test	Status	Received	Date
01A	001	PMoist	In	LOGIN: esmith	10/28/2011 4:27:00 PM
01A	001	PMoist	Out	Edward J Smith	11/13/2011 3:33:34 PM
01A	001	PMoist	In	Edward J Smith	11/13/2011 3:50:37 PM
01A	001	SOM01.X_PH	In	LOGIN: esmith	10/28/2011 4:27:00 PM
01A	001	SOM01.X_PH	Out	Ken Pierce	11/9/2011 7:56:58 AM
01A	001	SOM01.X_PH	In	Ken Pierce	11/9/2011 8:45:24 AM
01A	001	SOM1.2_SVOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
01A	001	SOM1.2_SVOA_LOW_S	Out	Courtney J Anderson	11/6/2011 9:19:58 AM
01A	001	SOM1.2_SVOA_LOW_S	In	Courtney J Anderson	11/6/2011 9:37:37 AM
01A	001	SOM1.2_SVOA_LOW_S	Out	Antonio AP Cardoso	11/7/2011 8:22:01 AM
01A	001	SOM1.2_SVOA_LOW_S	In	Antonio AP Cardoso	11/7/2011 11:06:52 AM
01B	001	SOM01.2_ARO_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
01B	001	SOM01.2_ARO_S	Out	Courtney J Anderson	11/6/2011 9:38:21 AM
01B	001	SOM01.2_ARO_S	In	Courtney J Anderson	11/6/2011 1:18:24 PM
01C	001	SOM1.2_VOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
01C	001	SOM1.2_VOA_MED_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
02A	001	PMoist	In	LOGIN: esmith	10/28/2011 4:27:00 PM
02A	001	PMoist	Out	Edward J Smith	11/13/2011 3:33:34 PM
02A	001	PMoist	In	Edward J Smith	11/13/2011 3:50:37 PM
02A	001	SOM01.X_PH	In	LOGIN: esmith	10/28/2011 4:27:00 PM
02A	001	SOM01.X_PH	Out	Ken Pierce	11/9/2011 7:56:58 AM
02A	001	SOM01.X_PH	In	Ken Pierce	11/9/2011 8:45:24 AM
02A	001	SOM1.2_SVOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
02A	001	SOM1.2_SVOA_LOW_S	Out	Courtney J Anderson	11/6/2011 9:19:58 AM
02A	001	SOM1.2_SVOA_LOW_S	In	Courtney J Anderson	11/6/2011 9:37:37 AM
02A	001	SOM1.2_SVOA_LOW_S	Out	Antonio AP Cardoso	11/7/2011 8:22:01 AM
02A	001	SOM1.2_SVOA_LOW_S	In	Antonio AP Cardoso	11/7/2011 11:06:52 AM
02B	001	SOM01.2_ARO_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
02B	001	SOM01.2_ARO_S	Out	Courtney J Anderson	11/6/2011 9:38:21 AM
02B	001	SOM01.2_ARO_S	In	Courtney J Anderson	11/6/2011 1:18:24 PM
02C	001	SOM1.2_VOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
02C	001	SOM1.2_VOA_MED_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM

Client: EPAINV

Work Order: K2198 **Profile Name:** SOM_VIII_21

MATRIX **Soil**

Samp #	Bottle	Test	Status	Received	Date
03A	001	PMoist	In	LOGIN: esmith	10/28/2011 4:27:00 PM
03A	001	PMoist	Out	Edward J Smith	11/13/2011 3:33:34 PM
03A	001	PMoist	In	Edward J Smith	11/13/2011 3:50:37 PM
03A	001	SOM01.X_PH	In	LOGIN: esmith	10/28/2011 4:27:00 PM
03A	001	SOM01.X_PH	Out	Ken Pierce	11/9/2011 7:56:58 AM
03A	001	SOM01.X_PH	In	Ken Pierce	11/9/2011 8:45:24 AM
03A	001	SOM1.2_SVOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
03A	001	SOM1.2_SVOA_LOW_S	Out	Courtney J Anderson	11/6/2011 9:19:58 AM
03A	001	SOM1.2_SVOA_LOW_S	In	Courtney J Anderson	11/6/2011 9:37:37 AM
03A	001	SOM1.2_SVOA_LOW_S	Out	Antonio AP Cardoso	11/7/2011 8:22:01 AM
03A	001	SOM1.2_SVOA_LOW_S	In	Antonio AP Cardoso	11/7/2011 11:06:52 AM
03B	001	SOM01.2_ARO_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
03B	001	SOM01.2_ARO_S	Out	Courtney J Anderson	11/6/2011 9:38:21 AM
03B	001	SOM01.2_ARO_S	In	Courtney J Anderson	11/6/2011 1:18:24 PM
03C	001	SOM1.2_VOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
03C	001	SOM1.2_VOA_MED_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
04A	001	PMoist	In	LOGIN: esmith	10/28/2011 4:27:00 PM
04A	001	PMoist	Out	Edward J Smith	11/13/2011 3:33:34 PM
04A	001	PMoist	In	Edward J Smith	11/13/2011 3:50:37 PM
04A	001	SOM01.X_PH	In	LOGIN: esmith	10/28/2011 4:27:00 PM
04A	001	SOM01.X_PH	Out	Ken Pierce	11/9/2011 7:56:58 AM
04A	001	SOM01.X_PH	In	Ken Pierce	11/9/2011 8:45:24 AM
04A	001	SOM1.2_SVOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
04A	001	SOM1.2_SVOA_LOW_S	Out	Courtney J Anderson	11/6/2011 9:19:58 AM
04A	001	SOM1.2_SVOA_LOW_S	In	Courtney J Anderson	11/6/2011 9:37:37 AM
04A	001	SOM1.2_SVOA_LOW_S	Out	Antonio AP Cardoso	11/7/2011 8:22:01 AM
04A	001	SOM1.2_SVOA_LOW_S	In	Antonio AP Cardoso	11/7/2011 11:06:52 AM
04B	001	SOM01.2_ARO_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
04B	001	SOM01.2_ARO_S	Out	Courtney J Anderson	11/6/2011 9:38:21 AM
04B	001	SOM01.2_ARO_S	In	Courtney J Anderson	11/6/2011 1:18:24 PM
04C	001	SOM1.2_VOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
04C	001	SOM1.2_VOA_MED_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM

Client: EPAINV

Work Order: K2198 **Profile Name:** SOM_VIII_21

MATRIX **Soil**

Samp #	Bottle	Test	Status	Received	Date
05A	001	PMoist	In	LOGIN: esmith	10/28/2011 4:27:00 PM
05A	001	PMoist	Out	Edward J Smith	11/13/2011 3:33:34 PM
05A	001	PMoist	In	Edward J Smith	11/13/2011 3:50:37 PM
05A	001	SOM01.X_PH	In	LOGIN: esmith	10/28/2011 4:27:00 PM
05A	001	SOM01.X_PH	Out	Ken Pierce	11/9/2011 7:56:58 AM
05A	001	SOM01.X_PH	In	Ken Pierce	11/9/2011 8:45:24 AM
05A	001	SOM1.2_SVOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
05A	001	SOM1.2_SVOA_LOW_S	Out	Courtney J Anderson	11/6/2011 9:19:58 AM
05A	001	SOM1.2_SVOA_LOW_S	In	Courtney J Anderson	11/6/2011 9:37:37 AM
05A	001	SOM1.2_SVOA_LOW_S	Out	Antonio AP Cardoso	11/7/2011 8:22:01 AM
05A	001	SOM1.2_SVOA_LOW_S	In	Antonio AP Cardoso	11/7/2011 11:06:52 AM
05B	001	SOM01.2_ARO_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
05B	001	SOM01.2_ARO_S	Out	Courtney J Anderson	11/6/2011 9:38:21 AM
05B	001	SOM01.2_ARO_S	In	Courtney J Anderson	11/6/2011 1:18:24 PM
05C	001	SOM1.2_VOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
05C	001	SOM1.2_VOA_MED_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
06A	001	PMoist	In	LOGIN: esmith	10/28/2011 4:27:00 PM
06A	001	PMoist	Out	Edward J Smith	11/13/2011 3:33:34 PM
06A	001	PMoist	In	Edward J Smith	11/13/2011 3:50:37 PM
06A	001	SOM01.X_PH	In	LOGIN: esmith	10/28/2011 4:27:00 PM
06A	001	SOM01.X_PH	Out	Ken Pierce	11/9/2011 7:56:58 AM
06A	001	SOM01.X_PH	In	Ken Pierce	11/9/2011 8:45:24 AM
06A	001	SOM1.2_SVOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
06A	001	SOM1.2_SVOA_LOW_S	Out	Courtney J Anderson	11/6/2011 9:19:58 AM
06A	001	SOM1.2_SVOA_LOW_S	In	Courtney J Anderson	11/6/2011 9:37:37 AM
06A	001	SOM1.2_SVOA_LOW_S	Out	Antonio AP Cardoso	11/7/2011 8:22:01 AM
06A	001	SOM1.2_SVOA_LOW_S	In	Antonio AP Cardoso	11/7/2011 11:06:52 AM
06B	001	SOM01.2_ARO_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
06B	001	SOM01.2_ARO_S	Out	Courtney J Anderson	11/6/2011 9:38:21 AM
06B	001	SOM01.2_ARO_S	In	Courtney J Anderson	11/6/2011 1:18:24 PM
06C	001	SOM1.2_VOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
06C	001	SOM1.2_VOA_MED_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM

Client: EPAINV

Work Order: K2198 **Profile Name:** SOM_VIII_21

MATRIX **Soil**

Samp #	Bottle	Test	Status	Received	Date
07A	001	PMoist	In	LOGIN: esmith	10/28/2011 4:27:00 PM
07A	001	PMoist	Out	Edward J Smith	11/13/2011 3:33:34 PM
07A	001	PMoist	In	Edward J Smith	11/13/2011 3:50:37 PM
07A	001	SOM01.X_PH	In	LOGIN: esmith	10/28/2011 4:27:00 PM
07A	001	SOM01.X_PH	Out	Ken Pierce	11/9/2011 7:56:58 AM
07A	001	SOM01.X_PH	In	Ken Pierce	11/9/2011 8:45:24 AM
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07A	001	SOM1.2_SVOA_LOW_S	In	Courtney J Anderson	11/6/2011 9:37:37 AM
07A	001	SOM1.2_SVOA_LOW_S	Out	Antonio AP Cardoso	11/7/2011 8:22:01 AM
07A	001	SOM1.2_SVOA_LOW_S	In	Antonio AP Cardoso	11/7/2011 11:06:52 AM
07B	001	SOM01.2_ARO_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
07B	001	SOM01.2_ARO_S	Out	Courtney J Anderson	11/6/2011 9:38:21 AM
07B	001	SOM01.2_ARO_S	In	Courtney J Anderson	11/6/2011 1:18:24 PM
07C	001	SOM1.2_VOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
07C	001	SOM1.2_VOA_MED_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
08A	001	PMoist	In	LOGIN: esmith	10/28/2011 4:27:00 PM
08A	001	PMoist	Out	Edward J Smith	11/13/2011 3:33:34 PM
08A	001	PMoist	In	Edward J Smith	11/13/2011 3:50:37 PM
08A	001	SOM01.X_PH	In	LOGIN: esmith	10/28/2011 4:27:00 PM
08A	001	SOM01.X_PH	Out	Ken Pierce	11/9/2011 7:56:58 AM
08A	001	SOM01.X_PH	In	Ken Pierce	11/9/2011 8:45:24 AM
08A	001	SOM1.2_SVOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
08A	001	SOM1.2_SVOA_LOW_S	Out	Courtney J Anderson	11/6/2011 9:19:58 AM
08A	001	SOM1.2_SVOA_LOW_S	In	Courtney J Anderson	11/6/2011 9:37:37 AM
08A	001	SOM1.2_SVOA_LOW_S	Out	Antonio AP Cardoso	11/7/2011 8:22:01 AM
08A	001	SOM1.2_SVOA_LOW_S	In	Antonio AP Cardoso	11/7/2011 11:06:52 AM
08B	001	SOM01.2_ARO_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
08B	001	SOM01.2_ARO_S	Out	Courtney J Anderson	11/6/2011 9:38:21 AM
08B	001	SOM01.2_ARO_S	In	Courtney J Anderson	11/6/2011 1:18:24 PM
08C	001	SOM1.2_VOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
08C	001	SOM1.2_VOA_MED_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM

Client: EPAINV

Work Order: K2198 **Profile Name:** SOM_VIII_21

MATRIX **Soil**

Samp #	Bottle	Test	Status	Received	Date
09A	001	PMoist	In	LOGIN: esmith	10/28/2011 4:27:00 PM
09A	001	PMoist	Out	Edward J Smith	11/13/2011 3:33:34 PM
09A	001	PMoist	In	Edward J Smith	11/13/2011 3:50:37 PM
09A	001	SOM01.X_PH	In	LOGIN: esmith	10/28/2011 4:27:00 PM
09A	001	SOM01.X_PH	Out	Ken Pierce	11/9/2011 7:56:58 AM
09A	001	SOM01.X_PH	In	Ken Pierce	11/9/2011 8:45:24 AM
09A	001	SOM1.2_SVOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
09A	001	SOM1.2_SVOA_LOW_S	Out	Courtney J Anderson	11/6/2011 9:19:58 AM
09A	001	SOM1.2_SVOA_LOW_S	In	Courtney J Anderson	11/6/2011 9:37:37 AM
09A	001	SOM1.2_SVOA_LOW_S	Out	Antonio AP Cardoso	11/7/2011 8:22:01 AM
09A	001	SOM1.2_SVOA_LOW_S	In	Antonio AP Cardoso	11/7/2011 11:06:52 AM
09B	001	SOM01.2_ARO_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
09B	001	SOM01.2_ARO_S	Out	Courtney J Anderson	11/6/2011 9:38:21 AM
09B	001	SOM01.2_ARO_S	In	Courtney J Anderson	11/6/2011 1:18:24 PM
09C	001	SOM1.2_VOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
09C	001	SOM1.2_VOA_MED_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
10A	001	PMoist	In	LOGIN: esmith	10/28/2011 4:27:00 PM
10A	001	PMoist	Out	Edward J Smith	11/13/2011 3:33:34 PM
10A	001	PMoist	In	Edward J Smith	11/13/2011 3:50:37 PM
10A	001	SOM01.X_PH	In	LOGIN: esmith	10/28/2011 4:27:00 PM
10A	001	SOM01.X_PH	Out	Ken Pierce	11/9/2011 7:56:58 AM
10A	001	SOM01.X_PH	In	Ken Pierce	11/9/2011 8:45:24 AM
10A	001	SOM1.2_SVOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
10A	001	SOM1.2_SVOA_LOW_S	Out	Courtney J Anderson	11/6/2011 9:19:58 AM
10A	001	SOM1.2_SVOA_LOW_S	In	Courtney J Anderson	11/6/2011 9:37:37 AM
10A	001	SOM1.2_SVOA_LOW_S	Out	Antonio AP Cardoso	11/7/2011 8:22:01 AM
10A	001	SOM1.2_SVOA_LOW_S	In	Antonio AP Cardoso	11/7/2011 11:06:52 AM
10B	001	SOM01.2_ARO_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
10B	001	SOM01.2_ARO_S	Out	Courtney J Anderson	11/6/2011 9:38:21 AM
10B	001	SOM01.2_ARO_S	In	Courtney J Anderson	11/6/2011 1:18:24 PM
10C	001	SOM1.2_VOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
10C	001	SOM1.2_VOA_MED_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM

Client: EPAINV

Work Order: K2198 **Profile Name:** SOM_VIII_21

MATRIX **Soil**

Samp #	Bottle	Test	Status	Received	Date
11A	001	PMoist	In	LOGIN: esmith	10/28/2011 4:27:00 PM
11A	001	PMoist	Out	Edward J Smith	11/13/2011 3:33:34 PM
11A	001	PMoist	In	Edward J Smith	11/13/2011 3:50:37 PM
11A	001	SOM01.X_PH	In	LOGIN: esmith	10/28/2011 4:27:00 PM
11A	001	SOM01.X_PH	Out	Ken Pierce	11/9/2011 7:56:58 AM
11A	001	SOM01.X_PH	In	Ken Pierce	11/9/2011 8:45:24 AM
11A	001	SOM1.2_SVOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
11A	001	SOM1.2_SVOA_LOW_S	Out	Courtney J Anderson	11/6/2011 9:19:58 AM
11A	001	SOM1.2_SVOA_LOW_S	In	Courtney J Anderson	11/6/2011 9:37:37 AM
11A	001	SOM1.2_SVOA_LOW_S	Out	Antonio AP Cardoso	11/7/2011 8:22:01 AM
11A	001	SOM1.2_SVOA_LOW_S	In	Antonio AP Cardoso	11/7/2011 11:06:52 AM
11B	001	SOM01.2_ARO_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
11B	001	SOM01.2_ARO_S	Out	Courtney J Anderson	11/6/2011 9:38:21 AM
11B	001	SOM01.2_ARO_S	In	Courtney J Anderson	11/6/2011 1:18:24 PM
11C	001	SOM1.2_VOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
11C	001	SOM1.2_VOA_MED_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
12A	001	PMoist	In	LOGIN: esmith	10/28/2011 4:27:00 PM
12A	001	PMoist	Out	Edward J Smith	11/13/2011 3:33:34 PM
12A	001	PMoist	In	Edward J Smith	11/13/2011 3:50:37 PM
12A	001	SOM01.X_PH	In	LOGIN: esmith	10/28/2011 4:27:00 PM
12A	001	SOM01.X_PH	Out	Ken Pierce	11/9/2011 7:56:58 AM
12A	001	SOM01.X_PH	In	Ken Pierce	11/9/2011 8:45:24 AM
12A	001	SOM1.2_SVOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
12A	001	SOM1.2_SVOA_LOW_S	Out	Courtney J Anderson	11/6/2011 9:19:58 AM
12A	001	SOM1.2_SVOA_LOW_S	In	Courtney J Anderson	11/6/2011 9:37:37 AM
12A	001	SOM1.2_SVOA_LOW_S	Out	Antonio AP Cardoso	11/7/2011 8:22:01 AM
12A	001	SOM1.2_SVOA_LOW_S	In	Antonio AP Cardoso	11/7/2011 11:06:52 AM
12B	001	SOM01.2_ARO_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
12B	001	SOM01.2_ARO_S	Out	Courtney J Anderson	11/6/2011 9:38:21 AM
12B	001	SOM01.2_ARO_S	In	Courtney J Anderson	11/6/2011 1:18:24 PM
12C	001	SOM1.2_VOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
12C	001	SOM1.2_VOA_MED_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM

Client: EPAINV

Work Order: K2198 **Profile Name:** SOM_VIII_21

MATRIX **Soil**

Samp #	Bottle	Test	Status	Received	Date
13A	001	PMoist	In	LOGIN: esmith	10/28/2011 4:27:00 PM
13A	001	PMoist	Out	Edward J Smith	11/13/2011 3:33:34 PM
13A	001	PMoist	In	Edward J Smith	11/13/2011 3:50:37 PM
13A	001	SOM01.X_PH	In	LOGIN: esmith	10/28/2011 4:27:00 PM
13A	001	SOM01.X_PH	Out	Ken Pierce	11/9/2011 7:56:58 AM
13A	001	SOM01.X_PH	In	Ken Pierce	11/9/2011 8:45:24 AM
13A	001	SOM1.2_SVOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
13A	001	SOM1.2_SVOA_LOW_S	Out	Courtney J Anderson	11/6/2011 9:19:58 AM
13A	001	SOM1.2_SVOA_LOW_S	In	Courtney J Anderson	11/6/2011 9:37:37 AM
13A	001	SOM1.2_SVOA_LOW_S	Out	Antonio AP Cardoso	11/7/2011 8:22:01 AM
13A	001	SOM1.2_SVOA_LOW_S	In	Antonio AP Cardoso	11/7/2011 11:06:52 AM
13B	001	SOM01.2_ARO_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
13B	001	SOM01.2_ARO_S	Out	Courtney J Anderson	11/6/2011 9:38:21 AM
13B	001	SOM01.2_ARO_S	In	Courtney J Anderson	11/6/2011 1:18:24 PM
13C	001	SOM1.2_VOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
13C	001	SOM1.2_VOA_MED_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
14A	001	PMoist	In	LOGIN: esmith	10/28/2011 4:27:00 PM
14A	001	PMoist	Out	Edward J Smith	11/13/2011 3:33:34 PM
14A	001	PMoist	In	Edward J Smith	11/13/2011 3:50:37 PM
14A	001	SOM01.X_PH	In	LOGIN: esmith	10/28/2011 4:27:00 PM
14A	001	SOM01.X_PH	Out	Ken Pierce	11/9/2011 7:56:58 AM
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14B	001	SOM01.2_ARO_S	Out	Courtney J Anderson	11/6/2011 9:38:21 AM
14B	001	SOM01.2_ARO_S	In	Courtney J Anderson	11/6/2011 1:18:24 PM
14C	001	SOM1.2_VOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
14C	001	SOM1.2_VOA_MED_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM

Client: EPAINV

Work Order: K2198 **Profile Name:** SOM_VIII_21

MATRIX **Soil**

Samp #	Bottle	Test	Status	Received	Date
15A	001	PMoist	In	LOGIN: esmith	10/28/2011 4:27:00 PM
15A	001	PMoist	Out	Edward J Smith	11/13/2011 3:33:34 PM
15A	001	PMoist	In	Edward J Smith	11/13/2011 3:50:37 PM
15A	001	SOM01.X_PH	In	LOGIN: esmith	10/28/2011 4:27:00 PM
15A	001	SOM01.X_PH	Out	Ken Pierce	11/9/2011 7:56:58 AM
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15C	001	SOM1.2_VOA_MED_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
16A	001	PMoist	In	LOGIN: esmith	10/28/2011 4:27:00 PM
16A	001	PMoist	Out	Edward J Smith	11/13/2011 3:33:34 PM
16A	001	PMoist	In	Edward J Smith	11/13/2011 3:50:37 PM
16A	001	SOM01.X_PH	In	LOGIN: esmith	10/28/2011 4:27:00 PM
16A	001	SOM01.X_PH	Out	Ken Pierce	11/9/2011 7:56:58 AM
16A	001	SOM01.X_PH	In	Ken Pierce	11/9/2011 8:45:24 AM
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16A	001	SOM1.2_SVOA_LOW_S	In	Courtney J Anderson	11/6/2011 9:37:37 AM
16A	001	SOM1.2_SVOA_LOW_S	Out	Antonio AP Cardoso	11/7/2011 8:22:01 AM
16A	001	SOM1.2_SVOA_LOW_S	In	Antonio AP Cardoso	11/7/2011 11:06:52 AM
16B	001	SOM01.2_ARO_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
16B	001	SOM01.2_ARO_S	Out	Courtney J Anderson	11/6/2011 9:38:21 AM
16B	001	SOM01.2_ARO_S	In	Courtney J Anderson	11/6/2011 1:18:24 PM
16C	001	SOM1.2_VOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
16C	001	SOM1.2_VOA_MED_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM

Client: EPAINV

Work Order: K2198 **Profile Name:** SOM_VIII_21

MATRIX **Soil**

Samp #	Bottle	Test	Status	Received	Date
17A	001	PMoist	In	LOGIN: esmith	10/28/2011 4:27:00 PM
17A	001	PMoist	Out	Edward J Smith	11/13/2011 3:33:34 PM
17A	001	PMoist	In	Edward J Smith	11/13/2011 3:50:37 PM
17A	001	SOM01.X_PH	In	LOGIN: esmith	10/28/2011 4:27:00 PM
17A	001	SOM01.X_PH	Out	Ken Pierce	11/9/2011 7:56:58 AM
17A	001	SOM01.X_PH	In	Ken Pierce	11/9/2011 8:45:24 AM
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17A	001	SOM1.2_SVOA_LOW_S	In	Courtney J Anderson	11/6/2011 9:37:37 AM
17A	001	SOM1.2_SVOA_LOW_S	Out	Antonio AP Cardoso	11/7/2011 8:22:01 AM
17A	001	SOM1.2_SVOA_LOW_S	In	Antonio AP Cardoso	11/7/2011 11:06:52 AM
17B	001	SOM01.2_ARO_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
17B	001	SOM01.2_ARO_S	Out	Courtney J Anderson	11/6/2011 9:38:21 AM
17B	001	SOM01.2_ARO_S	In	Courtney J Anderson	11/6/2011 1:18:24 PM
17C	001	SOM1.2_VOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
17C	001	SOM1.2_VOA_MED_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
18A	001	PMoist	In	LOGIN: esmith	10/28/2011 4:27:00 PM
18A	001	PMoist	Out	Edward J Smith	11/13/2011 3:33:34 PM
18A	001	PMoist	In	Edward J Smith	11/13/2011 3:50:37 PM
18A	001	SOM01.X_PH	In	LOGIN: esmith	10/28/2011 4:27:00 PM
18A	001	SOM01.X_PH	Out	Ken Pierce	11/9/2011 7:56:58 AM
18A	001	SOM01.X_PH	In	Ken Pierce	11/9/2011 8:45:24 AM
18A	001	SOM1.2_SVOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
18A	001	SOM1.2_SVOA_LOW_S	Out	Courtney J Anderson	11/6/2011 9:19:58 AM
18A	001	SOM1.2_SVOA_LOW_S	In	Courtney J Anderson	11/6/2011 9:37:37 AM
18A	001	SOM1.2_SVOA_LOW_S	Out	Antonio AP Cardoso	11/7/2011 8:22:01 AM
18A	001	SOM1.2_SVOA_LOW_S	In	Antonio AP Cardoso	11/7/2011 11:06:52 AM
18B	001	SOM01.2_ARO_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
18B	001	SOM01.2_ARO_S	Out	Courtney J Anderson	11/6/2011 9:38:21 AM
18B	001	SOM01.2_ARO_S	In	Courtney J Anderson	11/6/2011 1:18:24 PM
18C	001	SOM1.2_VOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
18C	001	SOM1.2_VOA_MED_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM

Client: EPAINV

Work Order: K2198 **Profile Name:** SOM_VIII_21

MATRIX **Soil**

Samp #	Bottle	Test	Status	Received	Date
19A	001	PMoist	In	LOGIN: esmith	10/28/2011 4:27:00 PM
19A	001	PMoist	Out	Edward J Smith	11/13/2011 3:33:34 PM
19A	001	PMoist	In	Edward J Smith	11/13/2011 3:50:37 PM
19A	001	SOM01.X_PH	In	LOGIN: esmith	10/28/2011 4:27:00 PM
19A	001	SOM01.X_PH	Out	Ken Pierce	11/9/2011 7:56:58 AM
19A	001	SOM01.X_PH	In	Ken Pierce	11/9/2011 8:45:24 AM
19A	001	SOM1.2_SVOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
19A	001	SOM1.2_SVOA_LOW_S	Out	Courtney J Anderson	11/6/2011 9:19:58 AM
19A	001	SOM1.2_SVOA_LOW_S	In	Courtney J Anderson	11/6/2011 9:37:37 AM
19A	001	SOM1.2_SVOA_LOW_S	Out	Antonio AP Cardoso	11/7/2011 8:22:01 AM
19A	001	SOM1.2_SVOA_LOW_S	In	Antonio AP Cardoso	11/7/2011 11:06:52 AM
19B	001	SOM01.2_ARO_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
19B	001	SOM01.2_ARO_S	Out	Courtney J Anderson	11/6/2011 9:38:21 AM
19B	001	SOM01.2_ARO_S	In	Courtney J Anderson	11/6/2011 1:18:24 PM
19C	001	SOM1.2_VOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
19C	001	SOM1.2_VOA_MED_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
20A	001	PMoist	In	LOGIN: esmith	10/28/2011 4:27:00 PM
20A	001	PMoist	Out	Edward J Smith	11/13/2011 3:33:34 PM
20A	001	PMoist	In	Edward J Smith	11/13/2011 3:50:37 PM
20A	001	SOM01.X_PH	In	LOGIN: esmith	10/28/2011 4:27:00 PM
20A	001	SOM01.X_PH	Out	Ken Pierce	11/9/2011 7:56:58 AM
20A	001	SOM01.X_PH	In	Ken Pierce	11/9/2011 8:45:24 AM
20A	001	SOM1.2_SVOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
20A	001	SOM1.2_SVOA_LOW_S	Out	Courtney J Anderson	11/6/2011 9:19:58 AM
20A	001	SOM1.2_SVOA_LOW_S	In	Courtney J Anderson	11/6/2011 9:37:37 AM
20A	001	SOM1.2_SVOA_LOW_S	Out	Antonio AP Cardoso	11/7/2011 8:22:01 AM
20A	001	SOM1.2_SVOA_LOW_S	In	Antonio AP Cardoso	11/7/2011 11:06:52 AM
20B	001	SOM01.2_ARO_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
20B	001	SOM01.2_ARO_S	Out	Courtney J Anderson	11/6/2011 9:38:21 AM
20B	001	SOM01.2_ARO_S	In	Courtney J Anderson	11/6/2011 1:18:24 PM
20C	001	SOM1.2_VOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
20C	001	SOM1.2_VOA_MED_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM

STD ID	Analyte(s)	Prep Date	Exp Date	Final Conc	Conc Units	Fin Vol	Solvent	Sol Lot	Prep By	Val By
VP090908C	BFB	09/08/09	06/30/12	2000	µg/mL	1 mL	MeOH		AM	YD
VP100208F	KETONES	02/08/10	09/01/12	5000	µg/mL	1 mL			WL	
VP100507D	SOM LCS	05/07/10	02/01/14	2500	µg/mL	1 mL	MeOH		WL	YD
VP100604C	SOM IS	06/04/10	11/01/14	2500	µg/mL	1 mL			WL	
VP101115A	502.2 CALIBRATION MIX	11/15/10	05/30/17	2000	µg/mL	1 mL	MeOH		SMZ	YD
VP110115A	1,4-DIOXANE-D8	01/15/11	01/15/16	neat					WL	
VP110115B	2-BUTANONE-D5	01/15/11	01/15/16	neat					WL	YD
VP110115C	2-HEXANONE-D5	01/15/11	01/15/16	neat					WL	YD
VP110210A	SOM DMC GAS	02/10/11	05/08/13	2000	µg/mL	1 mL			WL	
VP110210C	SOM DMC NONGAS	02/10/11	05/08/13	2000	µg/mL	1 mL			WL	
VP110215A	SOM STD	02/15/11	06/01/13	2000	µg/mL	1 mL	MeOH		WL	YD
VP110721A	1,4-Dioxane Neat	07/21/11	01/31/15	neat		mL			WL	
VW110817D	SOM DMCB STOCK	08/17/11	02/17/12	5000	µg/mL	4 mL			WL	

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
VP110115B	2-BUTANONE-D5	neat		20	mg
VP110115C	2-HEXANONE-D5	neat		20	mg

VW110817E	1,4-DIOXANE D8 STOCK	08/17/11	02/17/12	20000	µg/mL	4 mL			WL	

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
VP110115A	1,4-DIOXANE-D8	neat		80	mg

VW110817F	1,4-DIOXANE STOCK	08/17/11	02/17/12	20000	µg/mL	4 mL			WL	

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
VP110721A	1,4-Dioxane Neat	neat		80	mg

VW110911A	SOM BFB	09/11/11	03/10/12	25	µg/mL	4 mL	MeOH	51145	WL	

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
VP090908C	BFB	2000	µg/mL	50	µL

VW110918A	SOM IS	09/18/11	10/17/11	100	µg/mL	4 mL	MeOH	51145	WL	

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
VP100604C	SOM IS	2500	µg/mL	0.16	mL

VW110918B	SOM DMC	09/18/11	10/17/11	100 - 2000	µg/mL	4 mL	MeOH	51145	WL	

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
VP110210A	SOM DMC GAS	2000	µg/mL	0.2	mL
VP110210C	SOM DMC NONGAS	2000	µg/mL	0.2	mL
VW110817D	SOM DMCB STOCK	5000	µg/mL	0.16	mL
VW110817E	1,4-DIOXANE D8 STOCK	20000	µg/mL	0.4	mL

STD ID	Analyte(s)	Prep Date	Exp Date	Final Conc	Conc Units	Fin Vol	Solvent	Sol Lot	Prep By	Val By
VW110918C	SOM STD	09/18/11	10/17/11	100 - 2000	µg/mL	4 mL	MeOH	51145	WL	

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
VP100208F	KETONES	5000	µg/mL	0.16	mL
VP101115A	502.2 CALIBRATION MIX	2000	µg/mL	0.2	mL
VP110215A	SOM STD	2000	µg/mL	0.2	mL
VW110817F	1,4-DIOXANE STOCK	20000	µg/mL	0.4	mL

VW111022A	SOM IS	10/22/11	01/20/12	100	µg/mL	4 mL			WL	

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
VP100604C	SOM IS	2500	µg/mL	0.16	mL

VW111022B	SOM DMC	10/22/11	01/20/12	100 - 2000	µg/mL	4 mL			WL	

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
VP110210A	SOM DMC GAS	2000	µg/mL	0.2	mL
VP110210C	SOM DMC NONGAS	2000	µg/mL	0.2	mL
VW110817D	SOM DMCB STOCK	5000	µg/mL	0.16	mL
VW110817E	1,4-DIOXANE D8 STOCK	20000	µg/mL	0.4	mL

VW111022C	SOM STD	10/22/11	01/20/12	100 - 2000	µg/mL	4 mL			WL	

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
VP100208F	KETONES	5000	µg/mL	0.16	mL
VP101115A	502.2 CALIBRATION MIX	2000	µg/mL	0.2	mL
VP110215A	SOM STD	2000	µg/mL	0.2	mL
VW110817F	1,4-DIOXANE STOCK	20000	µg/mL	0.4	mL

VW111022D	SOM LCS	10/22/11	01/20/12	100	µg/mL	1 mL			WL	

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
VP100507D	SOM LCS	2500	µg/mL	0.04	mL

STD ID	Analyte(s)	Prep Date	Exp Date	Final Conc	Conc Units	Fin Vol	Solvent	Sol Lot	Prep By	Val By
SP061226C	2,3,4,6-Tetrachlorophenol	12/26/06	06/30/14	1000	µg/mL	1 mL				
SP080617A	Pentachlorobenzene	06/17/08	06/17/13	neat					SGW	YD
SP081008I	BENZALDEHYDE	02/06/09	02/06/14	neat					BM	YD
SP091020E	CLP04.1 Phenols Calibration Mix	10/20/09	05/01/15	2000 - 4000	µg/mL	1 mL	MeCL2		BM	BM
SP100308A	CHRYSENE-D12	03/08/10	03/08/15	neat					MMS	YD
SP100308B	1,4-DICHLOROBENZENE-D4	03/08/10	03/08/15	neat					MMS	BM
SP100308C	ACENAPHTHENE-D10	03/08/10	03/08/15	neat					MMS	YD
SP100308E	PERYLENE-D12	03/08/10	03/08/15	neat					MMS	YD
SP100308F	PHENANTHRENE-D10	03/08/10	03/08/15	neat					MMS	BM
SP100721I	Naphthalene-D8	07/21/10	07/21/15	neat		mL			TM	BM
SP100910E	ATRAZINE	09/10/10	02/28/14	1000	µg/mL	mL	ACE		MMS	BM
SP101202A	3,3'-Dichlorobenzidine	12/02/10	09/30/14	5000	µg/mL	mL	MeOH		MMS	BM
SP110107D	ACENAPHTHENE-D10	01/07/11	01/07/16	neat					MMS	BM
SP110119A	CLP SVOA TUNING STANDARD (DF	01/19/11	07/20/12	1000	µg/mL	mL			MMS	MMS
IC101202A	PYRIDINE	02/22/11	12/31/15	neat					MMS	YD
SI110222A	PYRIDINE INTERMEDIATE	02/22/11	02/22/12	5000	µg/mL	5 mL	MeCL2	DD325	MMS	YD

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
C101202A	PYRIDINE	neat		0.025	g

SI110222B	PENTACHLOROBENZENE INTERME	02/22/11	02/22/12	5000	µg/mL	5 mL	MeCL2	DD325	MMS	BM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
SP080617A	Pentachlorobenzene	neat		0.025	g

SI110224A	SVOA INTERNAL STANDARD	02/24/11	02/24/12	2000	µg/mL	100 mL	MeCL2	DD325	MMS	BM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
SP100308A	CHRYSENE-D12	neat		0.2	g
SP100308B	1,4-DICHLOROBENZENE-D4	neat		0.2	g
SP100308C	ACENAPHTHENE-D10	neat		0.2	g
SP100308E	PERYLENE-D12	neat		0.2	g
SP100308F	PHENANTHRENE-D10	neat		0.2	g
SP100721I	Naphthalene-D8	neat		0.2	g

SP110304C	CAPROLACTAM STANDARD	03/04/11	11/30/12	2000	µg/mL	mL	MeCL2		MMS	BM
SP110304H	NAPHTHALENE-D8	03/04/11	03/04/16	1	µg/mL				MMS	BM
SP110304I	CHRYSENE-D12	03/04/11	03/04/16	1	µg/mL				MMS	BM
SP110505D	CLP SVOA DMC STOCK SOLUTION	05/05/11	12/15/16	2000	µg/mL	1 mL	MeCL2		MMS	BM
SP110505G	B/N MATRIX SPIKE MIX	05/05/11	03/31/14	5000	µg/mL	1 mL	MeOH		MMS	BM

STD ID	Analyte(s)	Prep Date	Exp Date	Final Conc	Conc Units	Fin Vol	Solvent	Sol Lot	Prep By	Val By
SP110505I	ACID MATRIX SPIKE MIX	05/05/11	06/30/13	7500	µg/mL	1 mL	MeOH		MMS	BM
SP110512A	CLP 04.1 B/N MEGAMIX A	05/12/11	11/30/12	1000	µg/mL	1 mL	MeCL2		MMS	BM
SP110518B	1,2,3,4-TETRACHLOROBENZENE	05/18/11	08/31/13	1000	µg/mL	1 mL	HEX		MMS	BM
SP110607E	PERYLENE-D12	06/07/11	06/07/16	1	µg/mL	1			MMS	BM
SP110617A	FLOURANTHENE-D10	06/17/11	11/20/19	200	µg/mL	1 mL	ISOO		MMS	BM
SP110617B	2-METHYLNAPHTHALENE-D10	06/17/11	06/18/20	200	µg/mL	1 mL	ISOO		MMS	BM
SP110719B	1,2,4,5-TETRACHLOROBENZENE	07/19/11	07/31/13	1000	µg/mL	1 mL	ACN		MMS	CLM
SI110727A	DFTPP INTERMEDIATE	07/27/11	07/20/12	50	µg/mL	10 mL	MeCL2	DD852	MMS	CLM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
SP110119A	CLP SVOA TUNING STANDARD (DFT	1000	µg/mL	500	µL

SW110727A	SOM DFTPP	07/27/11	07/20/12	25	µg/mL	0.5 mL	MeCL2	DD852	MMS	BM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
SI110727A	DFTPP INTERMEDIATE	50	µg/mL	250	µL

SP110804A	CLP SVOA DMC STOCK SOLUTION	08/04/11	11/25/13	2000	µg/mL	8 mL	MeCL2		MMS	BM
SI110818A	SVOA INTERNAL STANDARD	08/18/11	08/18/12	2000	µg/mL	100 mL	MeCL2	DE502	MMS	MMS

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
SP100308B	1,4-DICHLOROBENZENE-D4	neat		0.2	g
SP100308F	PHENANTHRENE-D10	neat		0.2	g
SP110107D	ACENAPHTHENE-D10	neat		0.2	g
SP110304H	NAPHTHALENE-D8	1	µg/mL	0.2	g
SP110304I	CHRYSENE-D12	1	µg/mL	0.2	g
SP110607E	PERYLENE-D12	1	µg/mL	0.2	g

OSW110822B	SOM LOW/SIM SURROGATE	08/22/11	08/22/12	0.4 - 40	µg/mL	500 mL	MeOH	107164	MMS	MMS

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
SP110617A	FLOURANTHENE-D10	200	µg/mL	1	mL
SP110617B	2-METHYLNAPHTHALENE-D10	200	µg/mL	1	mL
SP110804A	CLP SVOA DMC STOCK SOLUTION	2000	µg/mL	10	mL

STD ID	Analyte(s)	Prep Date	Exp Date	Final Conc	Conc Units	Fin Vol	Solvent	Sol Lot	Prep By	Val By
SI110914A	SOM LOW INTERMEDIATE	09/14/11	02/22/12	100 - 200	µg/mL	4 mL	MeCL2	DE575	MMS	BM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added		Amt Added Units		
SI110222A	PYRIDINE INTERMEDIATE			5000	µg/mL	80	µL			
SI110222B	PENTACHLOROBENZENE INTERME DIATE			5000	µg/mL	80	µL			
SP061226C	2,3,4,6-Tetrachlorophenol			1000	µg/mL	400	µL			
SP091020E	CLP04.1 Phenols Calibration Mix			2000 - 4000	µg/mL	200	µL			
SP100910E	ATRAZINE			1000	µg/mL	400	µL			
SP101202A	3,3'-Dichlorobenzidine			5000	µg/mL	80	µL			
SP110304C	CAPROLACTAM STANDARD			2000	µg/mL	200	µL			
SP110505D	CLP SVOA DMC STOCK SOLUTION			2000	µg/mL	200	µL			
SP110512A	CLP 04.1 B/N MEGAMIX A			1000	µg/mL	400	µL			
SP110518B	1,2,3,4-TETRACHLOROBENZENE			1000	µg/mL	400	µL			
SP110719B	1,2,4,5-TETRACHLOROBENZENE			1000	µg/mL	400	µL			
OSW110916A	SOM LOW MS	09/16/11	09/16/12	40 - 40.00005	µg/mL	50 mL	MeCL2	DE575	MMS	BM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added		Amt Added Units		
SP110505G	B/N MATRIX SPIKE MIX			5000	µg/mL	400	µL			
SP110505I	ACID MATRIX SPIKE MIX			7500	µg/mL	266.7	µL			
SI111013A	BENZALDEHYDE INTERMEDIATE	10/13/11	10/13/12	2000	µg/mL	50 mL	MeCL2	DE575	MMS	
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added		Amt Added Units		
SP081008I	BENZALDEHYDE			neat		0.1	g			
SW111019B	SOM L2	10/18/11	02/22/12	10 - 20	µg/mL	0.5 mL	MeCL2	DE575	MMS	BM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added		Amt Added Units		
SI110818A	SVOA INTERNAL STANDARD			2000	µg/mL	5	µL			
SI110914A	SOM LOW INTERMEDIATE			100 - 200	µg/mL	50	µL			
SI111013A	BENZALDEHYDE INTERMEDIATE			2000	µg/mL	2.5	µL			
SW111019A	SOM L1	10/19/11	02/22/12	5 - 20	µg/mL	0.5 mL	MeCL2	DE575	MMS	BM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added		Amt Added Units		
SI110818A	SVOA INTERNAL STANDARD			2000	µg/mL	5	µL			
SI110914A	SOM LOW INTERMEDIATE			100 - 200	µg/mL	25	µL			
SI111013A	BENZALDEHYDE INTERMEDIATE			2000	µg/mL	1.25	µL			

STD ID	Analyte(s)	Prep Date	Exp Date	Final Conc	Conc Units	Fin Vol	Solvent	Sol Lot	Prep By	Val By
SW111019C	SOM L3	10/19/11	02/22/12	20 - 40	µg/mL	0.5 mL	MeCL2	DE575	MMS	BM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
SI110818A	SVOA INTERNAL STANDARD	2000	µg/mL	5	µL
SI110914A	SOM LOW INTERMEDIATE	100 - 200	µg/mL	100	µL
SI111013A	BENZALDEHYDE INTERMEDIATE	2000	µg/mL	5	µL

STD ID	Analyte(s)	Prep Date	Exp Date	Final Conc	Conc Units	Fin Vol	Solvent	Sol Lot	Prep By	Val By
SW111019D	SOM L4	10/19/11	02/22/12	20 - 80	µg/mL	0.5 mL	MeCL2	DE575	MMS	BM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
SI110818A	SVOA INTERNAL STANDARD	2000	µg/mL	5	µL
SI110914A	SOM LOW INTERMEDIATE	100 - 200	µg/mL	200	µL
SI111013A	BENZALDEHYDE INTERMEDIATE	2000	µg/mL	10	µL

STD ID	Analyte(s)	Prep Date	Exp Date	Final Conc	Conc Units	Fin Vol	Solvent	Sol Lot	Prep By	Val By
SW111019E	SOM L5	10/19/11	02/22/12	20 - 160	µg/mL	0.5 mL	MeCL2	DE575	MMS	BM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
SI110818A	SVOA INTERNAL STANDARD	2000	µg/mL	5	µL
SI110914A	SOM LOW INTERMEDIATE	100 - 200	µg/mL	400	µL
SI111013A	BENZALDEHYDE INTERMEDIATE	2000	µg/mL	20	µL

STD ID	Analyte(s)	Prep Date	Exp Date	Final Conc	Conc Units	Fin Vol	Solvent	Sol Lot	Prep By	Val By
PP080711C	AR 1221	07/11/08	12/31/14	1000	µg/mL	1 mL	HEX		SMZ	CLM
PP100105C	1268	01/05/10	05/31/15	1000	µg/mL	1 mL	HEX		KB	CLM
PP100601B	ARO 1016/1260	06/01/10	08/01/16	1000	µg/mL	1 mL	HEX		DJL	CLM
PP100730A	ARO 1254	07/30/10	07/01/16	1000	µg/mL	1 mL	HEX		CJT	CLM
PP100730B	ARO 1242	07/30/10	07/01/16	1000	µg/mL	1 mL	HEX		CJT	CLM
PP100730C	ARP 1662	07/30/10	07/01/16	1000	µg/mL	1 mL	HEX		CJT	CLM
PP101203B	TCX MIX	12/03/10	05/01/17	200	µg/mL	1 mL	ACE		DJL	CLM
PP101203D	ARO1248	12/03/10	02/01/17	1000	µg/mL	1 mL	HEX		DJL	CLM
PP101203E	ARO 1232	12/03/10	04/01/17	1000	µg/mL	1 mL	HEX		DJL	CLM
PP110505D	DCB MIX	05/05/11	02/01/15	200	µg/mL	1 mL	ACE		DJL	CLM
PI110524A	ARO 1660 PI	05/24/11	11/24/11	10	µg/mL	100 mL	HEX	DD460	CJT	CLM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
PP100601B	ARO 1016/1260	1000	µg/mL	1	Ml

PI110524B	ARO 1242 PI	05/24/11	11/24/11	10	µg/mL	100 mL	HEX	DD460	CJT	SBL

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
PP100730B	ARO 1242	1000	µg/mL	1	Ml

PI110524C	ARO 1248 PI	05/24/11	11/24/11	10	µg/mL	100 mL	HEX	DD460	CJT	CLM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
PP101203D	ARO1248	1000	µg/mL	1	Ml

PI110524D	ARO 1254 PI	05/24/11	11/24/11	10	µg/mL	100 mL	HEX	DD460	CJT	CLM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
PP100730A	ARO 1254	1000	µg/mL	1	Ml

PI110524E	ARO 1221 PI	05/24/11	11/24/11	20	µg/mL	50 mL	HEX	DD460	CJT	CLM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
PP080711C	AR 1221	1000	µg/mL	1	Ml

PI110524F	ARO 1232 PI	05/24/11	11/24/11	20	µg/mL	50 mL	HEX	DD460	CJT	CLM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
PP101203E	ARO 1232	1000	µg/mL	1	Ml

PI110524G	ARO 1268 PI	05/24/11	11/24/11	20	µg/mL	50 mL	HEX	DD460	CJT	CLM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
PP100105C	1268	1000	µg/mL	1	Ml

PI110524H	ARO 1262 PI	05/24/11	11/24/11	20	µg/mL	50 mL	HEX	DD460	CJT	CLM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
PP100730C	ARP 1662	1000	µg/mL	1	Ml

STD ID	Analyte(s)	Prep Date	Exp Date	Final Conc	Conc Units	Fin Vol	Solvent	Sol Lot	Prep By	Val By
PI110524I	SOM SURR PI	05/24/11	11/24/11	2 - 4	µg/mL	100 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added	Amt Added Units			
PP101203B	TCX MIX			200	µg/mL	1	Ml			
PP110505D	DCB MIX			200	µg/mL	2	mL			
PW110524A	AR 1221 L3	05/24/11	11/24/11	0.02 - 0.4	µg/mL	100 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added	Amt Added Units			
PI110524E	ARO 1221 PI			20	µg/mL	2	Ml			
PI110524I	SOM SURR PI			2 - 4	µg/mL	1	mL			
PW110524AA	AR 1254 L1	05/24/11	11/24/11	0.005 - 0.1	µg/mL	50 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added	Amt Added Units			
PI110524D	ARO 1254 PI			10	µg/mL	0.5	Ml			
PI110524I	SOM SURR PI			2 - 4	µg/mL	0.125	mL			
PW110524AC	SOM PIBLK	05/24/11	11/24/11	0.02 - 0.04	µg/mL	200 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added	Amt Added Units			
PI110524I	SOM SURR PI			2 - 4	µg/mL	2	mL			
PW110524B	AR 1232 L3	05/24/11	11/24/11	0.02 - 0.4	µg/mL	100 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added	Amt Added Units			
PI110524F	ARO 1232 PI			20	µg/mL	2	mL			
PI110524I	SOM SURR PI			2 - 4	µg/mL	1	mL			
PW110524C	AR 1262 L3	05/24/11	11/24/11	0.02 - 0.4	µg/mL	100 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added	Amt Added Units			
PI110524H	ARO 1262 PI			20	µg/mL	2	Ml			
PI110524I	SOM SURR PI			2 - 4	µg/mL	1	mL			
PW110524D	ar 1268 l3	05/24/11	11/24/11	0.02 - 0.4	µg/mL	100 mL	HEX	dd460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added	Amt Added Units			
PI110524G	ARO 1268 PI			20	µg/mL	2	mL			
PI110524I	SOM SURR PI			2 - 4	µg/mL	1	mL			
PW110524E	AR 1660 L5	05/24/11	11/24/11	0.08 - 1.6	µg/mL	50 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added	Amt Added Units			
PI110524A	ARO 1660 PI			10	µg/mL	8	Ml			
PI110524I	SOM SURR PI			2 - 4	µg/mL	2	mL			

STD ID	Analyte(s)	Prep Date	Exp Date	Final Conc	Conc Units	Fin Vol	Solvent	Sol Lot	Prep By	Val By
PW110524F	AR 1660 L4	05/24/11	11/24/11	0.04 - 0.8	µg/mL	50 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added	Amt Added Units			
PI110524A	ARO 1660 PI			10	µg/mL	4	Ml			
PI110524I	SOM SURR PI			2 - 4	µg/mL	1	mL			
PW110524G	AR 1660 L3	05/24/11	11/24/11	0.02 - 0.4	µg/mL	200 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added	Amt Added Units			
PI110524A	ARO 1660 PI			10	µg/mL	8	Ml			
PI110524I	SOM SURR PI			2 - 4	µg/mL	2	mL			
PW110524H	AR 1660 L2	05/24/11	11/24/11	0.01 - 0.2	µg/mL	50 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added	Amt Added Units			
PI110524A	ARO 1660 PI			10	µg/mL	1	Ml			
PI110524I	SOM SURR PI			2 - 4	µg/mL	0.25	mL			
PW110524I	AR 1660 L1	05/24/11	11/24/11	0.005 - 0.1	µg/mL	50 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added	Amt Added Units			
PI110524A	ARO 1660 PI			10	µg/mL	0.5	Ml			
PI110524I	SOM SURR PI			2 - 4	µg/mL	0.125	mL			
PW110524K	AR 1242 L5	05/24/11	11/24/11	0.08 - 1.6	µg/mL	50 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added	Amt Added Units			
PI110524B	ARO 1242 PI			10	µg/mL	8	Ml			
PI110524I	SOM SURR PI			2 - 4	µg/mL	2	mL			
PW110524L	AR 1242 L4	05/24/11	11/24/11	0.04 - 0.8	µg/mL	50 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added	Amt Added Units			
PI110524B	ARO 1242 PI			10	µg/mL	4	Ml			
PI110524I	SOM SURR PI			2 - 4	µg/mL	1	mL			
PW110524M	AR 1242 L3	05/24/11	11/24/11	0.02 - 0.4	µg/mL	200 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added	Amt Added Units			
PI110524B	ARO 1242 PI			10	µg/mL	8	Ml			
PI110524I	SOM SURR PI			2 - 4	µg/mL	2	mL			
PW110524N	AR 1242 L2	05/24/11	11/24/11	0.01 - 0.2	µg/mL	50 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added	Amt Added Units			
PI110524B	ARO 1242 PI			10	µg/mL	1	Ml			
PI110524I	SOM SURR PI			2 - 4	µg/mL	0.25	mL			

STD ID	Analyte(s)	Prep Date	Exp Date	Final Conc	Conc Units	Fin Vol	Solvent	Sol Lot	Prep By	Val By
PW110524O	AR 1242 L1	05/24/11	11/24/11	0.005 - 0.1	µg/mL	50 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added	Amt Added Units			
PI110524B	ARO 1242 PI			10	µg/mL	0.5	Ml			
PI110524I	SOM SURR PI			2 - 4	µg/mL	0.125	mL			
PW110524Q	AR 1248 L5	05/24/11	11/24/11	0.08 - 1.6	µg/mL	50 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added	Amt Added Units			
PI110524C	ARO 1248 PI			10	µg/mL	8	Ml			
PI110524I	SOM SURR PI			2 - 4	µg/mL	2	mL			
PW110524R	AR 1248 L4	05/24/11	11/24/11	0.04 - 0.8	µg/mL	50 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added	Amt Added Units			
PI110524C	ARO 1248 PI			10	µg/mL	4	Ml			
PI110524I	SOM SURR PI			2 - 4	µg/mL	1	mL			
PW110524S	AR 1248 L3	05/24/11	11/24/11	0.02 - 0.4	µg/mL	200 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added	Amt Added Units			
PI110524C	ARO 1248 PI			10	µg/mL	8	Ml			
PI110524I	SOM SURR PI			2 - 4	µg/mL	2	mL			
PW110524T	AR 1248 L2	05/24/11	11/24/11	0.01 - 0.2	µg/mL	50 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added	Amt Added Units			
PI110524C	ARO 1248 PI			10	µg/mL	1	Ml			
PI110524I	SOM SURR PI			2 - 4	µg/mL	0.25	mL			
PW110524U	AR 1248 L1	05/24/11	11/24/11	0.005 - 0.1	µg/mL	50 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added	Amt Added Units			
PI110524C	ARO 1248 PI			10	µg/mL	0.5	Ml			
PI110524I	SOM SURR PI			2 - 4	µg/mL	0.125	mL			
PW110524W	AR 1254 L5	05/24/11	11/24/11	0.08 - 1.6	µg/mL	50 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added	Amt Added Units			
PI110524D	ARO 1254 PI			10	µg/mL	8	Ml			
PI110524I	SOM SURR PI			2 - 4	µg/mL	2	mL			
PW110524X	AR 1254 L4	05/24/11	11/24/11	0.04 - 0.8	µg/mL	50 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added	Amt Added Units			
PI110524D	ARO 1254 PI			10	µg/mL	4	Ml			
PI110524I	SOM SURR PI			2 - 4	µg/mL	1	mL			

STD ID	Analyte(s)	Prep Date	Exp Date	Final Conc	Conc Units	Fin Vol	Solvent	Sol Lot	Prep By	Val By
PW110524Y	AR 1254 L3	05/24/11	11/24/11	0.02 - 0.4	µg/mL	200 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added	Amt Added Units			
PI110524D	ARO 1254 PI			10	µg/mL	8	Ml			
PI110524I	SOM SURR PI			2 - 4	µg/mL	2	mL			
PW110524Z	AR 1254 L2	05/24/11	11/24/11	0.01 - 0.2	µg/mL	50 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added	Amt Added Units			
PI110524D	ARO 1254 PI			10	µg/mL	1	Ml			
PI110524I	SOM SURR PI			2 - 4	µg/mL	0.25	mL			
PI110601A	SOM SURR PI	06/01/11	12/01/11	2 - 4	µg/mL	100 mL	HEX	DD640	DJL	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added	Amt Added Units			
PP101203B	TCX MIX			200	µg/mL	1	mL			
PP110505D	DCB MIX			200	µg/mL	2	mL			
PP110608C	TCX MIX	06/08/11	05/31/17	200	µg/mL	1 mL	ACE		DJL	CLM
PP110726A	16/60 mix	07/26/11	03/01/18	1000	µg/mL	1 mL	HEX		GMA	
PP110804C	Decachlorobiphenyl Mix	08/04/11	02/01/15	200	µg/mL	1 mL	ACE		GMA	CLM
OPW110822B	P/P SURROGATES	08/22/11	02/22/12	0.6 - 1.2	µg/mL	1000 mL	ACE	096250	GMA	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added	Amt Added Units			
PP110608C	TCX MIX			200	µg/mL	3	Ml			
PP110804C	Decachlorobiphenyl Mix			200	µg/mL	6	mL			
OPW110928A	SOM ARO LCS	09/28/11	11/24/11	1	µg/mL	50 mL	ACE	096250	GMA	DM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added	Amt Added Units			
PI110524A	ARO 1660 PI			10	µg/mL	5	Ml			
OPW111005A	PCB LCS/MS SPIKE	10/05/11	01/03/12	4	µg/mL	250 mL	ACE	096250	GMA	DJL
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added	Amt Added Units			
PP110726A	16/60 mix			1000	µg/mL	1	Ml			
PW111113A	1268 L5	11/13/11	11/24/11	0.08 - 1.6	µg/mL	10 mL	HEX	DA782	GMA	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added	Amt Added Units			
PI110524G	ARO 1268 PI			20	µg/mL	0.8	mL			
PI110601A	SOM SURR PI			2 - 4	µg/mL	0.4	mL			
PW111113B	1268 L4	11/13/11	11/24/11	0.04 - 0.8	µg/mL	10 mL	HEX	DA782	GMA	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added	Amt Added Units			
PI110524G	ARO 1268 PI			20	µg/mL	0.4	mL			
PI110601A	SOM SURR PI			2 - 4	µg/mL	0.2	mL			

STD ID	Analyte(s)	Prep Date	Exp Date	Final Conc	Conc Units	Fin Vol	Solvent	Sol Lot	Prep By	Val By
PW111113C	1268 L3	11/13/11	11/24/11	0.02 - 0.4	µg/mL	10 mL	HEX	DA782	GMA	CLM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
PI110524G	ARO 1268 PI	20	µg/mL	0.2	mL
PI110601A	SOM SURR PI	2 - 4	µg/mL	0.1	mL

PW111113D	1268 L2	11/13/11	11/24/11	0.01 - 0.2	µg/mL	10 mL	HEX	DA782	GMA	CLM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
PI110524G	ARO 1268 PI	20	µg/mL	0.1	mL
PI110601A	SOM SURR PI	2 - 4	µg/mL	0.05	mL

PW111113E	1268 L1	11/13/11	11/24/11	0.005 - 0.1	µg/mL	10 mL	HEX	DA782	GMA	CLM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
PI110524G	ARO 1268 PI	20	µg/mL	0.05	mL
PI110601A	SOM SURR PI	2 - 4	µg/mL	0.025	mL

FedEx Express **NEW Package US Airbill**

FedEx Tracking Number **8768 2874 0622**

Form ID No. **0200**

FedEx Retrieval Copy

fedex.com 1.800.GoFedEx 1.800.463.3339

1 From

Date 10/27/11 Sender's FedEx Account Number 1942-5093-2

Sender's Name Jeh Patterson Phone 720 810-0792

Company URS Operating Services

Address 1099 18th St, ste 710 Dept./Floor/Suite/Room

City Denver State CO ZIP 80202

2 Your Internal Billing Reference 36549158.00002

3 To

Recipient's Name Downe Smart Phone 401 732-3400

Company Spectrum Analytical, Inc

Address 175 Metro Center Blvd Dept./Floor/Suite/Room

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City Warwick State RI ZIP 02886

01 ☐ HOLD Weekday FedEx location address REQUIRED. NOT available for FedEx First Overnight.

31 ☐ HOLD Saturday FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

8768 2874 0622

4 Express Package Service * To most locations.

NOTE: Service order has changed. Please select carefully.

Packages up to 150 lbs. For packages over 150 lbs., use the new FedEx Express Freight US Airbill.

Next Business Day

06 ☐ FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

01 ☐ FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

05 ☑ FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

49 ☐ NEW FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.

03 ☐ FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

20 ☐ FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

06 ☐ FedEx Envelope* 02 ☐ FedEx Pak* 03 ☐ FedEx Box 04 ☐ FedEx Tube 01 ☑ Other

6 Special Handling and Delivery Signature Options

03 ☐ **SATURDAY DELIVERY**

☐ No Signature Required — Package may be left without obtaining a signature for delivery

10 ☐ Direct Signature — Someone at recipient's address may sign for delivery. Fee applies.

34 ☐ Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. Fee applies.

Does this shipment contain dangerous goods?

One box must be checked.

☑ No 04 ☐ Yes — As per attached Shipper's Declaration. ☐ Yes — Shipper's Declaration not required. 06 ☐ Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box. ☐ Cargo Aircraft Only

7 Payment *Bill to:*

Enter FedEx Acct. No. or Credit Card No. below. Obtain recip Acct. No. ☐

1 ☑ Sender Acct. No. in Section 1 will be billed. 2 ☐ Recipient 3 ☐ Third Party 4 ☐ Credit Card 5 ☐ Cash/Check

[redacted]

Total Packages 4 Total Weight 244 lbs. Credit Card Auth.

*Your liability is limited to $100 unless you declare a higher value. See the current FedEx Service Guide for details.

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fedex.com 1.800.GoFedEx 1.800.463.3339

Case 41926
SDG H30Q0

1 of 1

FedEx Express USA Airbill

8418 2969 6944

0200 Form I.D. No.

FedEx Retrieval Copy

1 From

Date 10/28/11

Sender's FedEx Account Number

Sender's Name Snehal Mehta Phone 908 789-2100

Company Chemtech

Address 284 Sheffield St

Dept./Floor/Suite/Room

City Mountainside State NJ ZIP 07092

2 Your Internal Billing Reference 36549158.00000

3 To

Recipient's Name Spectrum Analytical/Agnes Huntley Phone 401 782-3010

Company DBA: MITKEM Laboratories (MITKEM)

Address 175 Metro Center Boulevard

To "HOLD" at FedEx location, print FedEx address here. We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address

Dept./Floor/Suite/Room

City Warwick State RI ZIP 02886

8418 2969 6944

Agnes R. Huntley 10/28/11

4a Express Package Service — Packages up to 150 lbs. Delivery commitment may be later in some areas.

1 [X] FedEx Priority Overnight — Next business morning
5 [ ] FedEx Standard Overnight — Next business afternoon
6 [ ] FedEx First Overnight — Earliest next business morning delivery to select locations
3 [ ] FedEx 2Day — Second business day
20 [ ] FedEx Express Saver — Third business day
FedEx Envelope rate not available. Minimum charge: One-pound rate

4b Express Freight Service — Packages over 150 lbs. Delivery commitment may be later in some areas.

7 [ ] FedEx 1Day Freight* — Next business day
8 [ ] FedEx 2Day Freight — Second business day
83 [ ] FedEx 3Day Freight — Third business day
* Call for Confirmation

5 Packaging — * Declared value limit $500

6 [ ] FedEx Envelope*
2 [ ] FedEx Pak* — Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak
1 [ ] Other

6 Special Handling — Include FedEx address in Section 3

3 [ ] SATURDAY Delivery — Available only for FedEx Priority Overnight and FedEx 2Day to select ZIP codes
1 [ ] HOLD Weekday at FedEx Location — Not available for FedEx First Overnight
31 [ ] HOLD Saturday at FedEx Location — Available only for FedEx Priority Overnight and FedEx 2Day to select locations

Does this shipment contain dangerous goods? One box must be checked.

[X] No
4 [ ] Yes — As per attached Shipper's Declaration
[ ] Yes — Shipper's Declaration not required
6 [ ] Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous Goods (including Dry Ice) cannot be shipped in FedEx packaging.
[ ] Cargo Aircraft Only

7 Payment Bill to: — Enter FedEx Acct. No. or Credit Card No. below. [ ] Obtain Recip. Acct. No.

1 [ ] Sender — Acct. No. in Section 1 will be billed
2 [ ] Recipient
3 [ ] Third Party
4 [X] Credit Card
5 [ ] Cash/Check

FedEx Acct. No. or Credit Card No. 1492-5992-2 Exp. Date

Total Packages	Total Weight	Total Charges
5	210	Credit Card Auth.

†Our liability is limited to $100 unless you declare a higher value. See the FedEx Service Guide for details.

8 Release Signature — Sign to authorize delivery without obtaining signature.

By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims.

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Case 41926
SDG H30Q0

1121

Contract Laboratory Program

Sample Delivery Group (SDG)

Cover Sheet

SDG Number H30Q0

Laboratory Name	Mitkem Laboratories	Lab Code	MITKEM
Contract No.	EP-W-11-033	Case No.	41926
Analysis Price	$430	SDG Turnaround	21 days

EPA Sample Numbers in SDG (Listed in Numerical Order)

01) H30Q0	08) H30Q6	15) H30S8	22) H30T5
02) H30Q0MS	09) H30Q8	16) H30S9	
03) H30Q0MSD	10) H30Q9	17) H30T0	
04) H30Q1	11) H30R0	18) H30T1	
05) H30Q2	12) H30R1	19) H30T2	
06) H30Q3	13) H30S4	20) H30T3	
07) H30Q4	14) H30S5	21) H30T4	

First Sample in SDG	Last Sample in SDG
H30Q0	H30T5
First Sample Receipt Date	**Last Sample Receipt Date**
10/28/2011	10/28/2011

Note: There are a maximum of 20 field samples [excluding Performance Evaluation (PE) samples in an SDG. Attach the TR/COC Records to this form in alphanumeric order (the order listed above on this form).

Signature Agnes R Huntley Date 11/02/2011

SDG H30Q0

USEPA
DateShipped: 10/27/2011
CarrierName: FedEx
AirbillNo:

CHAIN OF CUSTODY RECORD
Site #: 41926
Contact Name: Jeff Miller
Contact Phone: 720-219-7891

No: 8-102711-105926-0003
Cooler #:
Lab: Spectrum Analytical
Lab Phone: 401-732-3400

Lab #	CLP Sample #	Analyses	Matrix	Collected	Sample Time	Preservative	MS/MSD
	H30Q0	Volatiles (VOAs)	Soil	10/26/2011	09:05		
	H30Q0	Semivolatiles (SVOAs)/PCBs	Soil	10/26/2011	09:05		
	H30Q1	Volatiles (VOAs)	Soil	10/25/2011	14:47		
	H30Q1	Semivolatiles (SVOAs)/PCBs	Soil	10/25/2011	14:47		
	H30Q2	Volatiles (VOAs)	Soil	10/25/2011	15:15		
	H30Q2	Semivolatiles (SVOAs)/PCBs	Soil	10/25/2011	15:15		
	H30Q3	Volatiles (VOAs)	Soil	10/25/2011	15:40		
	H30Q3	Semivolatiles (SVOAs)/PCBs	Soil	10/25/2011	15:40		
	H30Q4	Volatiles (VOAs)	Soil	10/25/2011	17:10		
	H30Q4	Semivolatiles (SVOAs)/PCBs	Soil	10/25/2011	17:10		
	H30Q6	Volatiles (VOAs)	Soil	10/25/2011	16:50		
	H30Q6	Semivolatiles (SVOAs)/PCBs	Soil	10/25/2011	16:50		
	H30Q8	Volatiles (VOAs)	Soil	10/26/2011	13:00		
	H30Q8	Semivolatiles (SVOAs)/PCBs	Soil	10/26/2011	13:00		
	H30Q9	Volatiles (VOAs)	Soil	10/26/2011	13:45		
	H30Q9	Semivolatiles (SVOAs)/PCBs	Soil	10/26/2011	13:45		
	H30R0	Volatiles (VOAs)	Soil	10/26/2011	17:05		
	H30R0	Semivolatiles (SVOAs)/PCBs	Soil	10/26/2011	17:05		
	H30R1	Volatiles (VOAs)	Soil	10/26/2011	16:30		
	H30R1	Semivolatiles (SVOAs)/PCBs	Soil	10/26/2011	16:30		

Special Instructions: Results to jeff.miller@urscorp.com, amy.k.gray@urscorp.com

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	Jen Pothum	10/27/11	FedEx	10/27/11	1400		FedEx	10-28-11	Daniel Nelson	10-28-11	9:00

6.5°C 9.0°C 9.5°C 10.0°C 9.5°C

SDG H30000

USEPA
DateShipped: 10/27/2011
CarrierName: FedEx
AirbillNo:

CHAIN OF CUSTODY RECORD
Site #: 41926
Contact Name: Jeff Miller
Contact Phone: 720-219-7891

No: 8-102711-105926-0003
Cooler #:
Lab: Spectrum Analytical
Lab Phone: 401-732-3400

Lab #	CLP Sample #	Analyses	Matrix	Collected	Sample Time	Preservative	MS/MSD
	H30S4	Volatiles (VOAs)	Soil	10/25/2011	09:55		
	H30S4	Semivolatiles (SVOAs)/PCBs	Soil	10/25/2011	09:55		
	H30S5	Volatiles (VOAs)	Soil	10/25/2011	10:36		
	H30S5	Semivolatiles (SVOAs)/PCBs	Soil	10/25/2011	10:36		
	H30S7	Volatiles (VOAs)	Surface Water	10/26/2011	10:30	HCl	
	H30S8	Volatiles (VOAs)	Sediment	10/24/2011	14:00		
	H30S9	Volatiles (VOAs)	Sediment	10/24/2011	15:25		
	H30T0	Volatiles (VOAs)	Sediment	10/24/2011	16:11		
	H30T1	Volatiles (VOAs)	Sediment	10/24/2011	15:22		
	H30T2	Volatiles (VOAs)	Sediment	10/24/2011	16:45		
	H30T3	Volatiles (VOAs)	Sediment	10/24/2011	17:30		
	H30T4	Volatiles (VOAs)	Sediment	10/24/2011	17:45		
← SDG-Final Sample	H30T5	Volatiles (VOAs)	Sediment	10/25/2011	10:15		
	H30T6	Volatiles (VOAs)	Sediment	10/25/2011	11:35		
	H30T7	Volatiles (VOAs)	Sediment	10/25/2011	12:40		
	H30T9	Volatiles (VOAs)	Surface Water	10/24/2011	14:00	HCl	
	H30W0	Volatiles (VOAs)	Surface Water	10/24/2011	15:25	HCl	
	H30W1	Volatiles (VOAs)	Surface Water	10/24/2011	16:11	HCl	
	H30W2	Volatiles (VOAs)	Surface Water	10/24/2011	15:22	HCl	
	H30W3	Volatiles (VOAs)	Surface Water	10/24/2011	16:45	HCl	

Special Instructions: Results to jeff.miller@urscorp.com, amy.k.gray@urscorp.com

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	Jen Petrun	10/27/11	FedEx	10/27/11	1400		FedEx	10-28-11	Spectrum	10-28-11	9:00

6.5°C 9.0°C 9.5°C 10.0°C 9.5°C

V 8.0

USEPA
DateShipped: 10/26/2011
CarrierName: FedEx
AirbillNo:

CHAIN OF CUSTODY RECORD
Site #: 41926
Contact Name: Jeff Miller
Contact Phone: 720-219-7891

No: 8-102611-105817-0002
Cooler #:
Lab: ChemTech Consulting Group
Lab Phone: 908-789-8900

Lab #	CLP Sample #	Analyses	Matrix	Collected	Sample Time	Preservative	MS/MSD
	H30S8	Semivolatiles (SVOAs)/PCBs	Sediment	10/24/2011	14:00		
	H30S9	Semivolatiles (SVOAs)/PCBs	Sediment	10/24/2011	15:25		
	H30T0	Semivolatiles (SVOAs)/PCBs	Sediment	10/24/2011	16:11		
	H30T1	Semivolatiles (SVOAs)/PCBs	Sediment	10/24/2011	15:22		
	H30T2	Semivolatiles (SVOAs)/PCBs	Sediment	10/24/2011	16:45		
	H30T3	Semivolatiles (SVOAs)/PCBs	Sediment	10/24/2011	17:30		
	H30T4	Semivolatiles (SVOAs)/PCBs	Sediment	10/24/2011	17:45		
← SDG-Final Sample	H30T5	Semivolatiles (SVOAs)/PCBs	Sediment	10/25/2011	10:15		
	H30T6	Semivolatiles (SVOAs)/PCBs	Sediment	10/25/2011	11:35		
	H30T7	Semivolatiles (SVOAs)/PCBs	Sediment	10/25/2011	12:40		
	H30T9	Semivolatiles (SVOAs)	Surface Water	10/24/2011	14:00		
	H30T9	Aroclors	Surface Water	10/24/2011	14:00		
	H30W0	Semivolatiles (SVOAs)	Surface Water	10/24/2011	15:25		
	H30W0	Aroclors	Surface Water	10/24/2011	15:25		
	H30W1	Semivolatiles (SVOAs)	Surface Water	10/24/2011	16:11		
	H30W1	Aroclors	Surface Water	10/24/2011	16:11		
	H30W2	Semivolatiles (SVOAs)	Surface Water	10/24/2011	15:22		
	H30W2	Aroclors	Surface Water	10/24/2011	15:22		
	H30W3	Semivolatiles (SVOAs)	Surface Water	10/24/2011	16:45		
	H30W3	Aroclors	Surface Water	10/24/2011	16:45		

Temp: 4°C

Special Instructions: Results to jeff.miller@urs.com, amy.k.gray@urs.com

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
		10/26/11	FedEx	10/26/11	1300					10/27/11	9:15
										10-28-11	9:00

9.0°C 9.0°C 9.5°C 8.0°C 8.5°C

281

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: K2198

Client ID: EPAINV
Project: SOM Region VIII 21day TAT
WO Name: SOM Region VIII 21day TAT
Location: SOM_VIII_21.
Comments: N/A

Case: 41926
SDG: H30Q0
PO: EP-W-11-033

HC Due: 11/16/11
Fax Due:
Fax Report: ☐

Report Level: CLP_REPORT
Special Program:
EDD: SOM_SEDD

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
K2198-01A	H30Q0	10/26/2011 09:05	10/28/2011	Soil	PMoist	/					I1
K2198-01A	H30Q0	10/26/2011 09:05	10/28/2011	Soil	SOM01.X_PH	/			Y		I1
K2198-01A	H30Q0	10/26/2011 09:05	10/28/2011	Soil	SOM1.2_SVOA_LOW_S	/			Y		I1
K2198-01B	H30Q0	10/26/2011 09:05	10/28/2011	Soil	SOM01.2_ARO_S	/			Y		I1
K2198-01C	H30Q0	10/26/2011 09:05	10/28/2011	Soil	SOM1.2_VOA_LOW_S	/			Y		VOA
K2198-01C	H30Q0	10/26/2011 09:05	10/28/2011	Soil	SOM1.2_VOA_MED_S	/		Y	Y		VOA
K2198-02A	H30Q1	10/26/2011 14:47	10/28/2011	Soil	PMoist	/					I1
K2198-02A	H30Q1	10/26/2011 14:47	10/28/2011	Soil	SOM01.X_PH	/					I1
K2198-02A	H30Q1	10/26/2011 14:47	10/28/2011	Soil	SOM1.2_SVOA_LOW_S	/					I1
K2198-02B	H30Q1	10/26/2011 14:47	10/28/2011	Soil	SOM01.2_ARO_S	/					I1
K2198-02C	H30Q1	10/26/2011 14:47	10/28/2011	Soil	SOM1.2_VOA_LOW_S	/					VOA
K2198-02C	H30Q1	10/26/2011 14:47	10/28/2011	Soil	SOM1.2_VOA_MED_S	/		Y			VOA
K2198-03A	H30Q2	10/25/2011 15:15	10/28/2011	Soil	PMoist	/					I1
K2198-03A	H30Q2	10/25/2011 15:15	10/28/2011	Soil	SOM01.X_PH	/					I1
K2198-03A	H30Q2	10/25/2011 15:15	10/28/2011	Soil	SOM1.2_SVOA_LOW_S	/					I1
K2198-03B	H30Q2	10/25/2011 15:15	10/28/2011	Soil	SOM01.2_ARO_S	/					I1
K2198-03C	H30Q2	10/25/2011 15:15	10/28/2011	Soil	SOM1.2_VOA_LOW_S	/					VOA
K2198-03C	H30Q2	10/25/2011 15:15	10/28/2011	Soil	SOM1.2_VOA_MED_S	/		Y			VOA
K2198-04A	H30Q3	10/25/2011 15:40	10/28/2011	Soil	PMoist	/					I1
K2198-04A	H30Q3	10/25/2011 15:40	10/28/2011	Soil	SOM01.X_PH	/					I1
K2198-04A	H30Q3	10/25/2011 15:40	10/28/2011	Soil	SOM1.2_SVOA_LOW_S	/					I1

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: K2198

Client ID: EPAINV
Project: SOM Region VIII 21day TAT
WO Name: SOM Region VIII 21day TAT
Location: SOM_VIII_21,
Comments: N/A

Case: 41926
SDG: H30Q0
PO: EP-W-11-033

HC Due: 11/16/11
Fax Due:
Fax Report: ☐

Report Level: CLP_REPORT
Special Program:
EDD: SOM_SEDD

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
K2198-04B	H30Q3	10/25/2011 15:40	10/28/2011	Soil	SOM01.2_ARO_S	/					I1
K2198-04C	H30Q3	10/25/2011 15:40	10/28/2011	Soil	SOM1.2_VOA_LOW_S	/					VOA
K2198-04C	H30Q3	10/25/2011 15:40	10/28/2011	Soil	SOM1.2_VOA_MED_S	/		Y			VOA
K2198-05A	H30Q4	10/25/2011 17:10	10/28/2011	Soil	PMoist	/					I1
K2198-05A	H30Q4	10/25/2011 17:10	10/28/2011	Soil	SOM01.X_PH	/					I1
K2198-05A	H30Q4	10/25/2011 17:10	10/28/2011	Soil	SOM1.2_SVOA_LOW_S	/					I1
K2198-05B	H30Q4	10/25/2011 17:10	10/28/2011	Soil	SOM01.2_ARO_S	/					I1
K2198-05C	H30Q4	10/25/2011 17:10	10/28/2011	Soil	SOM1.2_VOA_LOW_S	/					VOA
K2198-05C	H30Q4	10/25/2011 17:10	10/28/2011	Soil	SOM1.2_VOA_MED_S	/		Y			VOA
K2198-06A	H30Q6	10/25/2011 16:50	10/28/2011	Soil	PMoist	/					I1
K2198-06A	H30Q6	10/25/2011 16:50	10/28/2011	Soil	SOM01.X_PH	/					I1
K2198-06A	H30Q6	10/25/2011 16:50	10/28/2011	Soil	SOM1.2_SVOA_LOW_S	/					I1
K2198-06B	H30Q6	10/25/2011 16:50	10/28/2011	Soil	SOM01.2_ARO_S	/					I1
K2198-06C	H30Q6	10/25/2011 16:50	10/28/2011	Soil	SOM1.2_VOA_LOW_S	/					VOA
K2198-06C	H30Q6	10/25/2011 16:50	10/28/2011	Soil	SOM1.2_VOA_MED_S	/		Y			VOA
K2198-07A	H30Q8	10/26/2011 13:00	10/28/2011	Soil	PMoist	/					I1
K2198-07A	H30Q8	10/26/2011 13:00	10/28/2011	Soil	SOM01.X_PH	/					I1
K2198-07A	H30Q8	10/26/2011 13:00	10/28/2011	Soil	SOM1.2_SVOA_LOW_S	/					I1
K2198-07B	H30Q8	10/26/2011 13:00	10/28/2011	Soil	SOM01.2_ARO_S	/					I1
K2198-07C	H30Q8	10/26/2011 13:00	10/28/2011	Soil	SOM1.2_VOA_LOW_S	/					VOA
K2198-07C	H30Q8	10/26/2011 13:00	10/28/2011	Soil	SOM1.2_VOA_MED_S	/		Y			VOA

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: K2198

Client ID: EPAINV
Project: SOM Region VIII 21day TAT
WO Name: SOM Region VIII 21day TAT
Location: SOM_VIII_21,
Comments: N/A

Case: 41926
SDG: H30Q0
PO: EP-W-11-033

HC Due: 11/16/11
Fax Due:
Fax Report: ☐

Report Level: CLP_REPORT
Special Program:
EDD: SOM_SEDD

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
K2198-08A	H30Q9	10/26/2011 13:45	10/28/2011	Soil	PMoist	/					I1
K2198-08A	H30Q9	10/26/2011 13:45	10/28/2011	Soil	SOM01.X_PH	/					I1
K2198-08A	H30Q9	10/26/2011 13:45	10/28/2011	Soil	SOM1.2_SVOA_LOW_S	/					I1
K2198-08B	H30Q9	10/26/2011 13:45	10/28/2011	Soil	SOM01.2_ARO_S	/					I1
K2198-08C	H30Q9	10/26/2011 13:45	10/28/2011	Soil	SOM1.2_VOA_LOW_S	/					VOA
K2198-08C	H30Q9	10/26/2011 13:45	10/28/2011	Soil	SOM1.2_VOA_MED_S	/		Y			VOA
K2198-09A	H30R0	10/26/2011 17:05	10/28/2011	Soil	PMoist	/					I1
K2198-09A	H30R0	10/26/2011 17:05	10/28/2011	Soil	SOM01.X_PH	/					I1
K2198-09A	H30R0	10/26/2011 17:05	10/28/2011	Soil	SOM1.2_SVOA_LOW_S	/					I1
K2198-09B	H30R0	10/26/2011 17:05	10/28/2011	Soil	SOM01.2_ARO_S	/					I1
K2198-09C	H30R0	10/26/2011 17:05	10/28/2011	Soil	SOM1.2_VOA_LOW_S	/					VOA
K2198-09C	H30R0	10/26/2011 17:05	10/28/2011	Soil	SOM1.2_VOA_MED_S	/		Y			VOA
K2198-10A	H30R1	10/26/2011 16:30	10/28/2011	Soil	PMoist	/					I1
K2198-10A	H30R1	10/26/2011 16:30	10/28/2011	Soil	SOM01.X_PH	/					I1
K2198-10A	H30R1	10/26/2011 16:30	10/28/2011	Soil	SOM1.2_SVOA_LOW_S	/					I1
K2198-10B	H30R1	10/26/2011 16:30	10/28/2011	Soil	SOM01.2_ARO_S	/					I1
K2198-10C	H30R1	10/26/2011 16:30	10/28/2011	Soil	SOM1.2_VOA_LOW_S	/					VOA
K2198-10C	H30R1	10/26/2011 16:30	10/28/2011	Soil	SOM1.2_VOA_MED_S	/		Y			VOA
K2198-11A	H30S4	10/25/2011 09:55	10/28/2011	Soil	PMoist	/					I1
K2198-11A	H30S4	10/25/2011 09:55	10/28/2011	Soil	SOM01.X_PH	/					I1
K2198-11A	H30S4	10/25/2011 09:55	10/28/2011	Soil	SOM1.2_SVOA_LOW_S	/					I1

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: K2198

Client ID: EPAINV
Project: SOM Region VIII 21day TAT
WO Name: SOM Region VIII 21day TAT
Location: SOM_VIII_21.
Comments: N/A

Case: 41926
SDG: H30Q0
PO: EP-W-11-033

HC Due: 11/16/11
Fax Due:
Fax Report: ☐

Report Level: CLP_REPORT
Special Program:
EDD: SOM_SEDD

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
K2198-11B	H30S4	10/25/2011 09:55	10/28/2011	Soil	SOM01.2_ARO_S	/					I1
K2198-11C	H30S4	10/25/2011 09:55	10/28/2011	Soil	SOM1.2_VOA_LOW_S	/					VOA
K2198-11C	H30S4	10/25/2011 09:55	10/28/2011	Soil	SOM1.2_VOA_MED_S	/		Y			VOA
K2198-12A	H30S5	10/25/2011 10:36	10/28/2011	Soil	PMoist	/					I1
K2198-12A	H30S5	10/25/2011 10:36	10/28/2011	Soil	SOM01.X_PH	/					I1
K2198-12A	H30S5	10/25/2011 10:36	10/28/2011	Soil	SOM1.2_SVOA_LOW_S	/					I1
K2198-12B	H30S5	10/25/2011 10:36	10/28/2011	Soil	SOM01.2_ARO_S	/					I1
K2198-12C	H30S5	10/25/2011 10:36	10/28/2011	Soil	SOM1.2_VOA_LOW_S	/					VOA
K2198-12C	H30S5	10/25/2011 10:36	10/28/2011	Soil	SOM1.2_VOA_MED_S	/		Y			VOA
K2198-13A	H30S8	10/24/2011 14:00	10/28/2011	Soil	PMoist	/					I1
K2198-13A	H30S8	10/24/2011 14:00	10/28/2011	Soil	SOM01.X_PH	/					I1
K2198-13A	H30S8	10/24/2011 14:00	10/28/2011	Soil	SOM1.2_SVOA_LOW_S	/					I1
K2198-13B	H30S8	10/24/2011 14:00	10/28/2011	Soil	SOM01.2_ARO_S	/					I1
K2198-13C	H30S8	10/24/2011 14:00	10/28/2011	Soil	SOM1.2_VOA_LOW_S	/					VOA
K2198-13C	H30S8	10/24/2011 14:00	10/28/2011	Soil	SOM1.2_VOA_MED_S	/		Y			VOA
K2198-14A	H30S9	10/24/2011 15:25	10/28/2011	Soil	PMoist	/					I1
K2198-14A	H30S9	10/24/2011 15:25	10/28/2011	Soil	SOM01.X_PH	/					I1
K2198-14A	H30S9	10/24/2011 15:25	10/28/2011	Soil	SOM1.2_SVOA_LOW_S	/					I1
K2198-14B	H30S9	10/24/2011 15:25	10/28/2011	Soil	SOM01.2_ARO_S	/					I1
K2198-14C	H30S9	10/24/2011 15:25	10/28/2011	Soil	SOM1.2_VOA_LOW_S	/					VOA
K2198-14C	H30S9	10/24/2011 15:25	10/28/2011	Soil	SOM1.2_VOA_MED_S	/		Y			VOA

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: K2198

Client ID: EPAINV
Project: SOM Region VIII 21day TAT
WO Name: SOM Region VIII 21day TAT
Location: SOM_VIII_21,
Comments: N/A

Case: 41926
SDG: H30Q0
PO: EP-W-11-033

HC Due: 11/16/11
Fax Due:
Fax Report: ☐

Report Level: CLP_REPORT
Special Program:
EDD: SOM_SEDD

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
K2198-15A	H30T0	10/24/2011 16:11	10/28/2011	Soil	PMoist	/					I1
K2198-15A	H30T0	10/24/2011 16:11	10/28/2011	Soil	SOM01.X_PH	/					I1
K2198-15A	H30T0	10/24/2011 16:11	10/28/2011	Soil	SOM1.2_SVOA_LOW_S	/					I1
K2198-15B	H30T0	10/24/2011 16:11	10/28/2011	Soil	SOM01.2_ARO_S	/					I1
K2198-15C	H30T0	10/24/2011 16:11	10/28/2011	Soil	SOM1.2_VOA_LOW_S	/					VOA
K2198-15C	H30T0	10/24/2011 16:11	10/28/2011	Soil	SOM1.2_VOA_MED_S	/		Y			VOA
K2198-16A	H30T1	10/24/2011 15:22	10/28/2011	Soil	PMoist	/					I1
K2198-16A	H30T1	10/24/2011 15:22	10/28/2011	Soil	SOM01.X_PH	/					I1
K2198-16A	H30T1	10/24/2011 15:22	10/28/2011	Soil	SOM1.2_SVOA_LOW_S	/					I1
K2198-16B	H30T1	10/24/2011 15:22	10/28/2011	Soil	SOM01.2_ARO_S	/					I1
K2198-16C	H30T1	10/24/2011 15:22	10/28/2011	Soil	SOM1.2_VOA_LOW_S	/					VOA
K2198-16C	H30T1	10/24/2011 15:22	10/28/2011	Soil	SOM1.2_VOA_MED_S	/		Y			VOA
K2198-17A	H30T2	10/24/2011 16:45	10/28/2011	Soil	PMoist	/					I1
K2198-17A	H30T2	10/24/2011 16:45	10/28/2011	Soil	SOM01.X_PH	/					I1
K2198-17A	H30T2	10/24/2011 16:45	10/28/2011	Soil	SOM1.2_SVOA_LOW_S	/					I1
K2198-17B	H30T2	10/24/2011 16:45	10/28/2011	Soil	SOM01.2_ARO_S	/					I1
K2198-17C	H30T2	10/24/2011 16:45	10/28/2011	Soil	SOM1.2_VOA_LOW_S	/					VOA
K2198-17C	H30T2	10/24/2011 16:45	10/28/2011	Soil	SOM1.2_VOA_MED_S	/		Y			VOA
K2198-18A	H30T3	10/24/2011 17:30	10/28/2011	Soil	PMoist	/					I1
K2198-18A	H30T3	10/24/2011 17:30	10/28/2011	Soil	SOM01.X_PH	/					I1
K2198-18A	H30T3	10/24/2011 17:30	10/28/2011	Soil	SOM1.2_SVOA_LOW_S	/					I1

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: K2198

Client ID: EPAINV
Project: SOM Region VIII 21day TAT
WO Name: SOM Region VIII 21day TAT
Location: SOM_VIII_21,
Comments: N/A

Case: 41926
SDG: H30Q0
PO: EP-W-11-033

HC Due: 11/16/11
Fax Due:
Fax Report: ☐

Report Level: CLP_REPORT
Special Program:
EDD: SOM_SEDD

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
K2198-18B	H30T3	10/24/2011 17:30	10/28/2011	Soil	SOM01.2_ARO_S	/					I1
K2198-18C	H30T3	10/24/2011 17:30	10/28/2011	Soil	SOM1.2_VOA_LOW_S	/					VOA
K2198-18C	H30T3	10/24/2011 17:30	10/28/2011	Soil	SOM1.2_VOA_MED_S	/		Y			VOA
K2198-19A	H30T4	10/24/2011 17:45	10/28/2011	Soil	PMoist	/					I1
K2198-19A	H30T4	10/24/2011 17:45	10/28/2011	Soil	SOM01.X_PH	/					I1
K2198-19A	H30T4	10/24/2011 17:45	10/28/2011	Soil	SOM1.2_SVOA_LOW_S	/					I1
K2198-19B	H30T4	10/24/2011 17:45	10/28/2011	Soil	SOM01.2_ARO_S	/					I1
K2198-19C	H30T4	10/24/2011 17:45	10/28/2011	Soil	SOM1.2_VOA_LOW_S	/					VOA
K2198-19C	H30T4	10/24/2011 17:45	10/28/2011	Soil	SOM1.2_VOA_MED_S	/		Y			VOA
K2198-20A	H30T5	10/25/2011 10:15	10/28/2011	Soil	PMoist	/			Y		I1
K2198-20A	H30T5	10/25/2011 10:15	10/28/2011	Soil	SOM01.X_PH	/					I1
K2198-20A	H30T5	10/25/2011 10:15	10/28/2011	Soil	SOM1.2_SVOA_LOW_S	/					I1
K2198-20B	H30T5	10/25/2011 10:15	10/28/2011	Soil	SOM01.2_ARO_S	/					I1
K2198-20C	H30T5	10/25/2011 10:15	10/28/2011	Soil	SOM1.2_VOA_LOW_S	/					VOA
K2198-20C	H30T5	10/25/2011 10:15	10/28/2011	Soil	SOM1.2_VOA_MED_S	/		Y			VOA

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

SAMPLE LOG-IN SHEET

FORM DC-1

Lab Name Mitkem Laboratories	Page 01 of 01
Received By (Print Name) Daniel McKenna	Log-in Date 10/28/2011
Received By (Signature) Daniel McKenna	
Case Number 41926	Sample Delivery Group No. H30Q0 / Mod. Ref. No. —

Remarks: (1/2) Please see associated sample/extract transfer logbook pages submitted with this data package.

1. Custody Seal(s)	Present / Absent*
	Intact / Broken
2. Custody Seal Nos.	N/A
3. Traffic Reports/ Chain of Custody Records (TR/COCs) or Packing Lists	Present / Absent*
4. Airbill	AirBill / Sticker
	Present / Absent*
5. Airbill No.	FedEx 8768 2874 0622
6. Sample Tags	Present / Absent*
Sample Tag Numbers	Listed / Not Listed on Chain-of-Custody
7. Sample Condition	Intact / Broken*/ Leaking
8. Cooler Temperature Indicator Bottle	Present / Absent
9. Cooler Temperature	6.5 °C
10. Does information on TR/COCs and sample tags agree?	Yes / No*
11. Date Received at Laboratory	10/28/2011
12. Time Received	09:00

EPA Sample #	Corresponding: Sample Tag #	Corresponding: Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
H30Q0	N/A	K2198-01	Good
H30Q1	N/A	K2198-02	
H30Q2	N/A	K2198-03	
H30Q3	N/A	K2198-04	
H30Q4	N/A	K2198-05	
H30Q6	N/A	K2198-06	
H30Q8	N/A	K2198-07	
H30Q9	N/A	K2198-08	
H30R0	N/A	K2198-09	
H30R1	N/A	K2198-10	
H30S4	N/A	K2198-11	
H30S5	N/A	K2198-12	
H30S8	N/A	K2198-13	
H30S9	N/A	K2198-14	
H30T0	N/A	K2198-15	
H30T1	N/A	K2198-16	
H30T2	N/A	K2198-17	
H30T3	N/A	K2198-18	
H30T4	N/A	K2198-19	
H30T5	N/A	K2198-20	Good

Sample Transfer

Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area # VOA Lab	Area # R1
By DRM	By DRM
On 10/28/11	On 10/28/11

* Contact SMO and attach record of resolution

Reviewed By	Logbook No.
Date 10/28/11	Logbook Page No. /

SAMPLE LOG-IN SHEET

FORM DC-1

Lab Name Mitkem Laboratories	Page 01 of 01
Received By (Print Name) Daniel McKenna	Log-in Date 10/28/2011
Received By (Signature) Daniel McKenna	
Case Number 41926	Sample Delivery Group No. H30Q0
	Mod. Ref. No. —

Remarks: (1/2) Please see associated sample/extract transfer logbook pages submitted with this data package.

1. Custody Seal(s)	Present / Absent*
	Intact / Broken
2. Custody Seal Nos.	N/A
3. Traffic Reports/ Chain of Custody Records (TR/COCs) or Packing Lists	Present / Absent*
4. Airbill	AirBill / Sticker
	Present / Absent*
5. Airbill No.	FedEx 8768 2875 0622
6. Sample Tags	Present / Absent*
Sample Tag Numbers	Listed / Not Listed on Chain-of-Custody
7. Sample Condition	Intact / Broken*/ Leaking
8. Cooler Temperature Indicator Bottle	Present / Absent
9. Cooler Temperature	9.0 °C
10. Does information on TR/COCs and sample tags agree?	Yes / No*
11. Date Received at Laboratory	10/28/2011
12. Time Received	09:00

Corresponding			Remarks: Condition of Sample Shipment, etc.
EPA Sample #	Sample Tag #	Assigned Lab #	
H30R1	N/A	K2198-10	Good
H30S4	N/A	K2198-11	Good
H30S5	N/A	K2198-12	Good

Sample Transfer

Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area # /	Area # R1
By /	By DRM
On /	On 10/28/11

* Contact SMO and attach record of resolution

Reviewed By ARA	Logbook No.
Date 10/28/11	Logbook Page No. /

SAMPLE LOG-IN SHEET

FORM DC-1

Lab Name Mitkem Laboratories	Page 01 of 01
Received By (Print Name) Daniel McKenna	Log-in Date 10/28/2011
Received By (Signature) Daniel McKenna	
Case Number 41926	Sample Delivery Group No. H30Q0 / Mod. Ref. No. —

Remarks: (1/2) Please see associated sample/extract transfer logbook pages submitted with this data package.

1. Custody Seal(s)	Present / Absent*
	Intact / Broken
2. Custody Seal Nos.	N/A
3. Traffic Reports/ Chain of Custody Records (TR/COCs) or Packing Lists	Present / Absent*
4. Airbill	AirBill / Sticker
	Present / Absent*
5. Airbill No.	FedEx 8418 2969 6944
6. Sample Tags	Present / Absent*
Sample Tag Numbers	Listed / Not Listed on Chain-of-Custody
7. Sample Condition	Intact / Broken*/ Leaking
8. Cooler Temperature Indicator Bottle	Present / Absent
9. Cooler Temperature	8.5 °C
10. Does information on TR/COCs and sample tags agree?	Yes / No*
11. Date Received at Laboratory	10/28/2011
12. Time Received	09:00

EPA Sample #	Corresponding: Sample Tag #	Corresponding: Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
H30S8	N/A	K2198-13	Good
H30S9	N/A	K2198-14	Good
H30T0	N/A	K2198-15	Good

Sample Transfer

Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area #	Area # RI
By /	By DRM
On	On 10/28/11

* Contact SMO and attach record of resolution

Reviewed By ALA	Logbook No. /
Date 10/28/11	Logbook Page No.

SAMPLE LOG-IN SHEET

FORM DC-1

Lab Name Mitkem Laboratories	Page 01 of 01
Received By (Print Name) Daniel McKenna	Log-in Date 10/28/2011
Received By (Signature) Daniel McKenna	
Case Number 41926	Sample Delivery Group No. H30Q0
	Mod. Ref. No. —

Remarks: (1/2) Please see associated sample/extract transfer logbook pages submitted with this data package.

1. Custody Seal(s)	Present / Absent*
	Intact / Broken
2. Custody Seal Nos.	N/A
3. Traffic Reports/ Chain of Custody Records (TR/COCs) or Packing Lists	Present / Absent*
4. Airbill	AirBill / Sticker
	Present / Absent*
5. Airbill No.	FedEx 8418 2969 6944
6. Sample Tags	Present / Absent*
Sample Tag Numbers	Listed / Not Listed on Chain-of-Custody
7. Sample Condition	Intact / Broken*/ Leaking
8. Cooler Temperature Indicator Bottle	Present / Absent
9. Cooler Temperature	9.0 °C
10. Does information on TR/COCs and sample tags agree?	Yes / No*
11. Date Received at Laboratory	10/28/2011
12. Time Received	09:00

EPA Sample #	Corresponding: Sample Tag #	Corresponding: Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
H30T2	N/A	K2198-17	Good
H30T3	N/A	K2198-18	Good
H30T4	N/A	K2198-19	Good

Sample Transfer

Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area # /	Area # R1
By /	By DRM
On /	On 10/28/11

* Contact SMO and attach record of resolution

Reviewed By AQA	Logbook No.
Date 10/28/11	Logbook Page No. /

SAMPLE LOG-IN SHEET

FORM DC-1

Lab Name Mitkem Laboratories	Page 01 of 01
Received By (Print Name) Daniel McKenna	Log-in Date 10/28/2011
Received By (Signature) Daniel McKenna	
Case Number 41926	Sample Delivery Group No. H30Q0
	Mod. Ref. No. —

Remarks: (1/2) Please see associated sample/extract transfer logbook pages submitted with this data package.

1. Custody Seal(s)	Present / Absent*
	Intact / Broken
2. Custody Seal Nos.	N/A
3. Traffic Reports/ Chain of Custody Records (TR/COCs) or Packing Lists	Present / Absent*
4. Airbill	AirBill / Sticker
	Present / Absent*
5. Airbill No.	FedEx 8418 2969 6944
6. Sample Tags	Present / Absent*
Sample Tag Numbers	Listed / Not Listed on Chain-of-Custody
7. Sample Condition	Intact / Broken*/ Leaking
8. Cooler Temperature Indicator Bottle	Present / Absent
9. Cooler Temperature	8.0 °C
10. Does information on TR/COCs and sample tags agree?	Yes / No*
11. Date Received at Laboratory	10/28/2011
12. Time Received	09:00

Corresponding			Remarks: Condition of Sample Shipment, etc.
EPA Sample #	Sample Tag #	Assigned Lab #	
H30T1	N/A	K2198-16	Good
H30T5	N/A	K2198-20	Good

Sample Transfer

Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area # /	Area # R1
By /	By DRM
On /	On 10/28/11

* Contact SMO and attach record of resolution

Reviewed By	Logbook No.
Date 10/28/11	Logbook Page No. /

Agnes Huntley [Warwick]

From: Mroz, Ryan [rmroz@fedcsc.com] **Sent:** Wed 11/2/2011 11:34 AM
To: Agnes Huntley [Warwick]; Dawne Smart [Warwick]; Spectrum Analytical -- RI
Cc: Donald Goodrich
Subject: Region 08 | Case 41926 | Lab MITKEM | Issue Multiple | FINAL
Attachments:

Agnes,

Summary Start

-Laboratory problems-

Issue 1: The TR/COC lists the matrices as soil and sediment; however, the laboratory was only scheduled with samples under the soil matrix. The lab would like to confirm if they only need to perform laboratory QC on either the soil or sediment matrix per SDG (for reporting purposes the matrix for all samples would be soil as scheduled).

Resolution 1: Per Region 8, the lab shall report all sediment samples as soil samples, and perform laboratory QC on only one matrix per SDG. The lab shall note the issue in the SDG Narrative and proceed with analysis.

-Sample shipped in incorrect containers-

Issue 2: The laboratory received VOA samples in unpreserved 4 oz jars.

Resolution 2: In accordance with previous direction from Region 8, the laboratory will follow the same procedure as described for the field core/storage containers (e.g., EnCoreTM or equivalent) and note the issue in the SDG Narrative.

Summary End

Let me know if you have any additional questions.

Thanks,

Please note: To waive any defect(s) associated with this issue, please contact your PO.

Ryan Mroz

Environmental Coordinator - Regions 5 & 8

CSC

15000 Conference Center Drive Chantilly, VA 20151

Civil Division | phone: 703.818.4568 | fax: 703.818.4602 | rmroz@fedcsc.com | www.csc.com

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-----Original Message-----
From: Goodrich.Donald@epamail.epa.gov [mailto:Goodrich.Donald@epamail.epa.gov]
Sent: Wednesday, November 02, 2011 11:27 AM
To: Mroz, Ryan
Subject: RE: Region 08 | Case 41926 | Lab MITKEM | Issue Multiple

yes

Don Goodrich

EPA Region 8 Environmental Scientist

Ecosystem Protection and Remediation, Program Support

office: 303-312-6687

cell: 303-905-4024

-----Original Message-----
From: Mroz, Ryan
Sent: Wednesday, November 02, 2011 11:21 AM
To: 'Goodrich.Donald@epamail.epa.gov'

Cc: Kent_Alexander@URSCorp.com
Subject: RE: Region 08 | Case 41926 | Lab MITKEM | Issue Multiple

Don,

For reporting purposes, can all "sediment" samples be reported as "soils?"

Thanks,

Ryan Mroz

Environmental Coordinator - Regions 5 & 8

CSC

15000 Conference Center Drive Chantilly, VA 20151

Civil Division | phone: 703.818.4568 | fax: 703.818.4602 | rmroz@fedcsc.com | www.csc.com

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-----Original Message-----
From: Goodrich.Donald@epamail.epa.gov [mailto:Goodrich.Donald@epamail.epa.gov]
Sent: Wednesday, November 02, 2011 11:19 AM
To: Mroz, Ryan
Cc: Kent_Alexander@URSCorp.com
Subject: Re: Region 08 | Case 41926 | Lab MITKEM | Issue Multiple

Ryan, the laboratory can perform QC on either the soil or sediment per

the SDG.

Thanks,

Don

Don Goodrich

EPA Region 8 Environmental Scientist

Ecosystem Protection and Remediation, Program Support

office: 303-312-6687

cell: 303-905-4024

From: Mroz, Ryan
Sent: Wednesday, November 02, 2011 10:52 AM
To: 'Goodrich.Donald@epamail.epa.gov'
Cc: 'Kent_Alexander@URSCorp.com'
Subject: Region 08 | Case 41926 | Lab MITKEM | Issue Multiple

Don,

MITKEM is reporting the following Issues with Case 41926. Issue 2 can be resolved with a standard answer. Please advise the laboratory how to proceed on Issue 1.

-Laboratory problems-

Issue 1: The TR/COC lists the matrices as soil and sediment; however, the laboratory was only scheduled with samples under the soil matrix. The lab would like to confirm if they only need to perform laboratory QC on either the soil or sediment matrix per SDG (for reporting purposes the matrix for all samples would be soil as scheduled).

-Sample shipped in incorrect containers-

Issue 2: The laboratory received VOA samples in unpreserved 4 oz jars.

Resolution 2: In accordance with previous direction from Region 8, the laboratory will follow the same procedure as described for the field core/storage containers (e.g., EnCoreTM or equivalent) and note the issue in the SDG Narrative.

Ryan Mroz

Environmental Coordinator - Regions 5 & 8

CSC

15000 Conference Center Drive Chantilly, VA 20151

Civil Division | phone: 703.818.4568 | fax: 703.818.4602 | rmroz@fedcsc.com | www.csc.com

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From: Spectrum Analytical -- RI [mailto:mitkemlabs@yahoo.com]
Sent: Wednesday, November 02, 2011 10:41 AM
To: Mroz, Ryan
Subject: Case 41926

Hi Ryan,

Scheduling notes lab QC is required for the soil samples for VOA, SVOA and ARO. The TR/COC lists soils and sediments. Is the laboratory to perform lab QC on the samples listed as soil and lab QC for the sediment samples?

The soil samples for VOA for this case were received as 4oz unpreserved jars. The VOA soils should have been received as pre-preserved or in a closed system (Encores). The laboratory treated these samples as if they were Encores and "extruded" them into unpreserved VOA vials and frozed until time of analysis.

Thank you,

Agnes

Report Date:
17-Nov-11 15:43

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Computer Science Corporation
15000 Conference Center Drive
Chantilly, VA 20151-3808

Work Order: K2198
SDG No: H30Q0
Case No: 41926

Attn: Nazy Abousaeedi

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
K2198-01	H30Q0	Soil	26-Oct-11 09:05	28-Oct-11 09:00
K2198-02	H30Q1	Soil	25-Oct-11 14:47	28-Oct-11 09:00
K2198-02	H30Q1	Soil	26-Oct-11 14:47	28-Oct-11 09:00
K2198-03	H30Q2	Soil	25-Oct-11 15:15	28-Oct-11 09:00
K2198-04	H30Q3	Soil	25-Oct-11 15:40	28-Oct-11 09:00
K2198-05	H30Q4	Soil	25-Oct-11 17:10	28-Oct-11 09:00
K2198-06	H30Q6	Soil	25-Oct-11 16:50	28-Oct-11 09:00
K2198-07	H30Q8	Soil	26-Oct-11 13:00	28-Oct-11 09:00
K2198-08	H30Q9	Soil	26-Oct-11 13:45	28-Oct-11 09:00
K2198-09	H30R0	Soil	26-Oct-11 17:05	28-Oct-11 09:00
K2198-10	H30R1	Soil	26-Oct-11 16:30	28-Oct-11 09:00
K2198-11	H30S4	Soil	25-Oct-11 09:55	28-Oct-11 09:00
K2198-12	H30S5	Soil	25-Oct-11 10:36	28-Oct-11 09:00
K2198-13	H30S8	Soil	24-Oct-11 14:00	28-Oct-11 09:00
K2198-14	H30S9	Soil	24-Oct-11 15:25	28-Oct-11 09:00
K2198-15	H30T0	Soil	24-Oct-11 16:11	28-Oct-11 09:00
K2198-16	H30T1	Soil	24-Oct-11 15:22	28-Oct-11 09:00
K2198-17	H30T2	Soil	24-Oct-11 16:45	28-Oct-11 09:00
K2198-18	H30T3	Soil	24-Oct-11 17:30	28-Oct-11 09:00
K2198-19	H30T4	Soil	24-Oct-11 17:45	28-Oct-11 09:00
K2198-20	H30T5	Soil	25-Oct-11 10:15	28-Oct-11 09:00

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Mitkem Laboratories.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and is certified by several States, as well as USEPA and US Department of Defense. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.mitkem.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Pennsylvania	68-00520
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

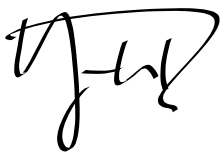
NELAP ACCREDITED TNI LABORATORY

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

DoD ELAP

Authorized by:



Yihai Ding
Laboratory Director

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET
FORM DC-2

LABORATORY NAME: Mitkem Laboratories
CITY/STATE: Warwick, RI
CASE NO.: 41926 SDG NO.: H30Q0
SDG NOs. TO FOLLOW: —
MOD. REF. NO.: —
CONTRACT NO.: EP-W-11-033
SOW NO.: SOM01.2

All documents delivered in the Complete SDG File (CSF) must be original documents where possible.

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK USEPA
1. **Inventory Sheet** (Form DC-2) (Do not number)	1	14	✓	
2. **SDG Case Narrative**	15	18	✓	
3. **SDG Cover Sheet/Traffic Report**			✓	
4. **Trace Volatiles Data**				
a. QC Summary				
Deuterated Monitoring Compound Recovery (Form II VOA-1 and VOA-2)	N/A	N/A	N/A	
Matrix Spike/Matrix Spike Duplicate Recovery (Form III VOA) (if requested by USEPA Region)				
Method Blank Summary (Form IV VOA)				
GC/MS Instrument Performance Check (Form V VOA)				
Internal Standard Area and RT Summary (Form VIII VOA)				
b. Sample Data				
TCL Results - Organics Analysis Data Sheet (Form I VOA-1 and VOA-2)				
Tentatively Identified Compounds (Form I VOA-TIC)				
Reconstructed total ion chromatograms (RIC) for each sample				
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds identified				
Quantitation reports				
Mass Spectra of all reported TICs with three best library matches				
c. Standards Data (All Instruments)				
Initial Calibration Data (Form VI VOA-1, VOA-2, VOA-3)				
RICs and Quantitation Reports for all Standards				
Continuing Calibration Data (Form VII VOA-1, VOA-2, VOA-3)				
RICs and Quantitation Reports for all Standards				
d. Raw/Quality Control (QC) Data				
BFB				
Blank Data	N/A	N/A	N/A	

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET
FORM DC-2 (CON'T)

CASE NO. 41926	SDG NO. H30Q0	SDG NOS. TO FOLLOW —
—	—	MOD. REF. NO. —

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK USEPA
Matrix Spike/Matrix Spike Duplicate Data (if requested by USEPA Region)	N/A	N/A	N/A	
e. Trace SIM Data (Place at the end of the Trace Volatiles Section)	N/A	N/A	N/A	
[Form I VOA-SIM; Form II VOA-SIM1 and VOA-SIM2; Form IV-VOA-SIM; Form VI VOA-SIM; Form VII VOA-SIM; Form VIII VOA-SIM; and all raw data for QC, Samples, and Standards.]				
5. **Low/Med Volatiles Data**				
a. QC Summary				
Deuterated Monitoring Compound Recovery (Form II VOA-1, VOA-2, VOA-3, VOA-4)	19	20	✓	
Matrix Spike/Matrix Spike Duplicate Recovery (Form III VOA-1 and VOA-2) (if requested by USEPA Region)	21	21	✓	
Method Blank Summary (Form IV VOA)	22	23	✓	
GC/MS Instrument Performance Check (Form V VOA)	24	26	✓	
Internal Standard Area and RT Summary (Form VIII VOA)	27	29	✓	
b. Sample Data	30	199		
TCL Results - Organics Analysis Data Sheet (Form I VOA-1 and VOA-2)			✓	
Tentatively Identified Compounds (Form I VOA-TIC)			✓	
Reconstructed total ion chromatograms (RIC) for each sample			✓	
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds identified			✓	
Quantitation reports			✓	
Mass Spectra of all reported TICs with three best library matches			✓	
c. Standards Data (All Instruments)	200	234		
Initial Calibration Data (Form VI VOA-1, VOA-2, VOA-3)			✓	
RICs and Quantitation Reports for all Standards			✓	
Continuing Calibration Data (Form VII VOA-1, VOA-2, VOA-3)			✓	
RICs and Quantitation Reports for all Standards			✓	
d. Raw/Quality Control (QC) Data				
BFB	207	244	✓	
Blank Data	243	265	✓	

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET
FORM DC-2 (CON'T)

CASE NO. 41926 SDG NO. H30Q0 SDG NOS. TO FOLLOW —

— — MOD. REF. NO. —

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK USEPA
Martix Spike/Matrix Spike Duplicate Data (if requested by USEPA Region)	266	275	✓	
6. Semivolatiles Data				
a. QC Summary				
Deuterated Monitoring Compound Recovery (Form II SV-1, SV-2, SV-3, SV-4)	276	277	✓	
Matrix Spike/Matrix Spike Duplicate Recovery Summary (Form III SV-1 and SV-2) (if requested by USEPA Region)	278	278	✓	
Method Blank Summary (Form IV SV)	279	279	✓	
GC/MS Instrument Performance Check (Form V SV)	280	281	✓	
Internal Standard Area and RT Summary (Form VIII SV-1 and SV-2)	285	292	✓	
b. Sample Data	293	808		
TCL Results - Organics Analysis Data Sheet (Form I SV-1 and SV-2)			✓	
Tentatively Identified Compounds (Form I SV-TIC)			✓	
Reconstructed total ion chromatograms (RICs) for each sample			✓	
For each sample:	293	808		
Raw Spectra and background-subtracted mass spectra of target compounds			✓	
Quantitation reports			✓	
Mass Spectra of TICs with three best library matches			✓	
GPC chromatograms (if GPC is required)			✓	
c. Standards Data (All Instruments)	807	873		
Initial Calibration Data (Form VI SV-1, SV-2, SV-3)			✓	
RICs and Quantitation Reports for all Standards			✓	
Continuing Calibration Data (Form VII SV-1, SV-2, SV-3)			✓	
RICs and Quantitation Reports for all Standards			✓	
d. Raw QC Data				
DFTPP	874	896	✓	
Blank Data	897	910	✓	
MS/MSD Data (if requested by USEPA Region)	911	922	✓	
e. Raw GPC Data	923	932	✓	

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET
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CASE NO. 41926 SDG NO. H30Q0 SDG NOS. TO FOLLOW —

— — MOD. REF. NO. —

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK USEPA
f. Semivolatile SIM Data [Form I SV-SIM; Form II SV-SIM1 and SV-SIM2; Form III SV-SIM1 and SV-SIM2 (if required); Form IV SV-SIM; Form VI SV-SIM; Form VII SV-SIM; Form VIII SV-SIM1 and SV-SIM2; and all raw data for QC, Samples, and Standards.]	N/A	N/A	N/A	
7. Pesticides Data				
a. QC Summary				
Surrogate Recovery Summary (Form II PEST-1 and PEST-2)	N/A	N/A	N/A	
Matrix Spike/Matrix Spike Duplicate Recovery Summary (Form III PEST-1 and PEST-2)				
Laboratory Control Sample Recovery (Form III PEST-3 and PEST-4)				
Method Blank Summary (Form IV PEST)				
b. Sample Data	N/A	N/A		
TCL Results - Organics Analysis Data Sheet (Form I PEST)				
Chromatograms (Primary Column)				
Chromatograms from second GC column confirmation				
GC Integration report or data system printout				
Manual work sheets				
For pesticides by GC/MS				
Copies of raw spectra and copies of background-subtracted mass spectra of target compounds (samples & standards)				
c. Standards Data	N/A	N/A		
Initial Calibration of Single Component Analytes (Form VI PEST-1 and PEST-2)				
Toxaphene Initial Calibration (Form VI PEST-3 and PEST-4)				
Analyte Resolution Summary (Form VI PEST-5, per column)				
Performance Evaluation Mixture (Form VI PEST-6)				
Individual Standard Mixture A (Form VI PEST-7)				
Individual Standard Mixture B (Form VI PEST-8)				
Individual Standard Mixture C (Form VI PEST-9 and PEST-10)				
Calibration Verification Summary (Form VII PEST-1)				
Calibration Verification Summary (Form VII PEST-2)				
Calibration Verification Summary (Form VII PEST-3)			N/A	

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET
FORM DC-2 (CON'T)

CASE NO. 41926 SDG NO. H30Q0 SDG NOS. TO FOLLOW —

— — MOD. REF. NO. —

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK USEPA
Calibration Verification Summary (Form VII PEST-4)			N/A	
Analytical Sequence (Form VIII PEST)				
Florisil Cartridge Check (Form IX PEST-1)				
Pesticide GPC Calibration (Form IX PEST-2)				
Identification Summary for Single Component Analytes (Form X PEST-1)				
Identification Summary for Toxaphene (Form X PEST-2)				
Chromatograms and data system printouts A printout of Retention Times and corresponding peak areas or peak heights				
d. Raw QC Data				
Blank Data	N/A	N/A		
Matrix Spike/Matrix Spike Duplicate Data				
Laboratory Control Sample Data				
e. Raw GPC Data	✓	✓	✓	
f. Raw Florisil Data	N/A	N/A	N/A	
8. **Aroclor Data**				
a. QC Summary				
Surrogate Recovery Summary (Form II ARO-1 and ARO-2)	933	933	✓	
Matrix Spike/Matrix Spike Duplicate Summary (Form III ARO-1 and ARO-2)	934	935	✓	
Laboratory Control Sample Recovery (Form III ARO-3 and ARO-4)	936	936	✓	
Method Blank Summary (Form IV ARO)	937	938	✓	
b. Sample Data	939	1038		
TCL Results - Organics Analysis Data Sheet (Form I ARO)			✓	
Chromatograms (Primary Column)			✓	
Chromatograms from second GC column confirmation			✓	
GC Integration report or data system printout			✓	
Manual work sheets			✓	
For Aroclors by GC/MS				
Copies of raw spectra and copies of background-subtracted mass spectra of target compounds (samples & standards)			N/A	

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET
FORM DC-2 (CON'T)

CASE NO. 41926 SDG NO. H30Q0 SDG NOS. TO FOLLOW —

— — MOD. REF. NO. —

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK USEPA
c. Standards Data	1031	1180		
Aroclors Initial Calibration (Form VI ARO-1, ARO-2, and ARO-3)			✓	
Calibration Verification Summary (Form VII ARO-1)			✓	
Analytical Sequence (Form VIII ARO)			✓	
Identification Summary for Multicomponent Analytes (Form X ARO)			✓	
Chromatograms and data system printouts A printout of Retention Times and corresponding peak areas or peak heights			✓	
d. Raw QC Data				
Blank Data	1181	1203	✓	
Matrix Spike/Matrix Spike Duplicate Data	1204	1216	✓	
Laboratory Control Sample (LCS) Data	1217	1224	✓	
e. Raw GPC Data (if performed)	N/A	N/A	N/A	
9. **Miscellaneous Data**				
Original preparation and analysis forms or copies of preparation and analysis logbook pages	1225	1252	✓	
Internal sample and sample extract transfer chain-of-custody records	1253	1260	✓	
Screening records	N/A	N/A	N/A	
All instrument output, including strip charts from screening activities (describe or list)				
Primary, Intermediate and Working Standard Logbook Pages	1264	1275	✓	
—	N/A	N/A	N/A	
10. **EPA Shipping/Receiving Documents**				
Airbills (No. of shipments 2)	1276	1277	✓	
Chain of Custody Records	1278	1281	✓	
Sample Tags (in a plastic bag, if present)			N/A	
Sample Log-in Sheet (Lab & DC-1)	1282	1292	✓	
Miscellaneous Shipping/Receiving Records (describe or list)				
PE Instructions	N/A	N/A	N/A	
—	N/A	N/A	N/A	

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET
FORM DC-2 (CON'T)

CASE NO. 41926 SDG NO. H30Q0 SDG NOS. TO FOLLOW —

— — MOD. REF. NO. —

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK USEPA
11. **Internal Lab Sample Transfer Records and Tracking Sheets** (describe or list)				
/	N/A	N/A	N/A	
	N/A	N/A	N/A	
12. **Other Records** (describe or list)				
Telephone Communication Log	N/A	N/A	N/A	
E-mail(s)	1273	1278	✓	
—	N/A	N/A	N/A	
13. **Comments**				
/				

Completed by: (CLP Lab) Jennifer Evenson (Signature) Jennifer Evenson/Data Review Specialist (Printed Name/Title) 11/17/11 (Date)

Verified by: (CLP Lab) Agnes R Huntley (Signature) Agnes Huntley/CLP Project Manager (Printed Name/Title) 11/17/11 (Date)

Audited by: (USEPA) (Signature) (Printed Name/Title) (Date)

Spectrum Analytical, Inc., featuring Hanibal Technology Rhode Island Division submits the enclosed data package in response to USEPA Case # 41926 and SDG# H30Q0. Analyses were performed for twenty soil samples that were received on October 28, 2011.

The analyses were performed under USEPA Contract # EP-W-11-033.

Please note that five sample-shipping coolers were received on October 28. The temperature of the coolers was measured at 6.5°C, 9.0°C, 8.5°C, 9.0°C and 8.0°C.

The following samples are submitted in this data package:

Client ID	Lab ID	Analysis
H30Q0	K2198-01A	S
H30Q0MS	K2198-01AMS	S
H30Q0MSD	K2198-01AMSD	S
H30Q0	K2198-01B	A
H30Q0MS	K2198-01BMS	A
H30Q0MSD	K2198-01BMSD	A
H30Q0	K2198-01C	V
H30Q0MS	K2198-01CMS	V
H30Q0MSD	K2198-01CMSD	V
H30Q1	K2198-02A	S
H30Q1	K2198-02B	A
H30Q1	K2198-02C	V
H30Q2	K2198-03A	S
H30Q2	K2198-03B	A
H30Q2	K2198-03C	V
H30Q3	K2198-04A	S
H30Q3	K2198-04B	A
H30Q3	K2198-04C	V
H30Q4	K2198-05A	S
H30Q4	K2198-05B	A
H30Q4	K2198-05C	V
H30Q6	K2198-06A	S
H30Q6	K2198-06B	A
H30Q6	K2198-06C	V
H30Q8	K2198-07A	S
H30Q8	K2198-07B	A
H30Q8	K2198-07C	V
H30Q9	K2198-08A	S
H30Q9	K2198-08B	A
H30Q9	K2198-08C	V
H30R0	K2198-09A	S
H30R0	K2198-09B	A

H30R0	K2198-09C	V		
H30R1	K2198-10A		S	
H30R1	K2198-10B			A
H30R1	K2198-10C	V		
H30S4	K2198-11A		S	
H30S4	K2198-11B			A
H30S4	K2198-11C	V		
H30S5	K2198-12A		S	
H30S5	K2198-12B			A
H30S5	K2198-12C	V		
H30S8	K2198-13A		S	
H30S8	K2198-13B			A
H30S8	K2198-13C	V		
H30S9	K2198-14A		S	
H30S9	K2198-14B			A
H30S9	K2198-14C	V		
H30T0	K2198-15A		S	
H30T0	K2198-15B			A
H30T0	K2198-15C	V		
H30T1	K2198-16A		S	
H30T1	K2198-16B			A
H30T1	K2198-16C	V		
H30T2	K2198-17A		S	
H30T2	K2198-17B			A
H30T2	K2198-17C	V		
H30T3	K2198-18A		S	
H30T3	K2198-18B			A
H30T3	K2198-18C	V		
H30T4	K2198-19A		S	
H30T4	K2198-19B			A
H30T4	K2198-19C	V		
H30T5	K2198-20A		S	
H30T5	K2198-20B			A
H30T5	K2198-20C	V		

V = Low/Medium Volatiles
S = Semivolatiles
A = Aroclors

The analyses were performed using USEPA CLP Multi-Media, Multi-Concentration (SOM01.2) protocols. The analyses were performed with strict adherence to the SOW with the following exceptions and observations:

SAMPLE RECEIPT:

The TR/COC lists the matrices as soil and sediment; however, the laboratory was only scheduled with samples under the soil matrix. The lab would like to confirm if they only need to perform laboratory QC on either the soil or sediment matrix per SDG (for reporting purposes the matrix for all samples would be soil as scheduled). Per Region 8, the lab shall report all sediment samples as soil samples, and perform laboratory QC on only one matrix per SDG. The lab shall note the issue in the SDG Narrative and proceed with analysis. The laboratory performed laboratory QC on sample H30Q0 for VOA, SVOA and Aroclors.

The laboratory received VOA samples in unpreserved 4 oz jars. In accordance with previous direction from Region 8, the laboratory will follow the same procedure as described for the field core/storage containers (e.g., EnCoreTM or equivalent) and note the issue in the SDG Narrative.

Sample tags were not received with the samples. In accordance with previous direction from Region 8, the laboratory will note the issue in the SDG Narrative, and proceed with the analysis of the sample. The Resolution will be applied to all samples received for this Case.

Low/Medium Volatile Analysis:

I. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

II. METHODS

Samples were analyzed following procedures in laboratory test code: EPA CLP SOM 1.2 VOC

The following equation was used to calculate the concentration of target analytes for low-level soil samples:

$$\text{Concentration } (\mu\text{g/Kg}) = \frac{(\text{Amt})(\text{DF})(\text{UF})(5)}{\left(\frac{Ws * (100 - M)}{100}\right)}$$

where: Amt = on-column amount on raw data
DF = Dilution factor
UF = ng unit correction factor
Ws = Weight of sample extracted (g)
M = %moisture (not decanted)

The following equation was used to calculate the Amt in the previous equations:

$$Amt = \frac{(A_x)(IS)}{(A_{is})(RRF)}$$

where: A_x = area of the characteristic ion for the compound to be measured
A_{is} = area of the characteristic ion for the associated internal standard
IS = concentration of internal standard in ug/L
RRF = relative response factor

III. PREPARATION

Soil Samples were prepared following procedures in laboratory test code: SW5035

IV. INSTRUMENTATION

The following instrumentation was used:
Instrument Code: V5
Instrument Type: GCMS-VOA
Description: HP6890 / HP6890
Manufacturer: Hewlett-Packard
Model: 6890 / 6890

Trap used for instrument V5: OI Analytical #10 trap containing 8 cm each of Tenax, silica gel and carbon molecular sieve.

GC column used: 30 m x 0.25 mm id (1.4 um film thickness) DB-624 capillary column.

V. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

Secondary ion 65 was used in the quantitation of 1,1-dichloroethene-d2 instead of primary ion 63 due to the interference with target compound 1,1-dichloroethene in the calibration standards.

B. Blanks:

All method blanks were within the acceptance criteria.

C. DMC Recoveries:

DMC recoveries were within the QC limits with the exception of the following:

H30Q0MS: recovery is below criteria for 1,2-Dichloroethane-d4 at 78% with criteria of (79-122).

H30Q9: recovery is below criteria for Vinyl chloride-d3 at 65% with criteria of (68-122).

H30R0: recovery is below criteria for Chloroethane-d5 at 56% with criteria of (61-130).

D. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

Duplicate matrix spikes were performed on sample H30Q0.

Spike recoveries were within the advisory QC limits.

Replicate RPDs were within the advisory QC limits.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

F. Dilutions:

No sample in this SDG required analysis at dilution.

G. Samples:

cis-1,3-Dichloropropene-d4 was detected in method blanks and in samples. The volatile organic deuterated monitoring compound spike solution contains both the cis- and trans-1,3-dichloropropene isomers. cis-1,3-Dichloropropene-d4 is not a dueterated monitoring compound for SOM01.2, while the trans isomer is. The cis isomer is considered a laboratory artifact, and is not reported as a tentatively identified compound.

Alkanes were determined as part of tentatively identified compounds. The alkanes are reported on the Alkane Narrative Report following the SDG Narrative.

No other unusual observations were made for the analysis.

H. Manual Integration

No manual integrations were performed on any sample or standard.

Semivolatile Analysis:

I. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

II. METHODS

Samples were analyzed following procedures in laboratory test code: EPA CLP SOM 1.2 BNA

The following equation was used to calculate the concentration of target analytes for soil samples:

$$\text{Concentration } (\mu\text{g/Kg}) = (\text{Amt})(\text{DF})(\text{Uf})\left(\frac{V_t}{V_i}\right)\left(\frac{1}{\text{Ws}}\right)\left(\frac{100}{(100-m)}\right)$$

where: Amt = on-column amount on raw data
DF = Dilution factor
UF = ng unit correction factor
Ws = Weight of sample extracted (g)
M = %moisture (not decanted)

The following equation was used to calculate the Amt in the previous equations:

$$Amt = \frac{(A_x)(IS)}{(A_{is})(RRF)}$$

where: A_x = area of the characteristic ion for the compound to be measured
A_{is} = area of the characteristic ion for the associated internal standard
IS = concentration of internal standard in ug/L
RRF = relative response factor

III. PREPARATION

Soil Samples were prepared following procedures in laboratory test code: SW3550B

IV. INSTRUMENTATION

The following instrumentation was used to perform
Instrument Code: S2
Instrument Type: GCMS-SEMI
Description: HP5890 II / HP5972
Manufacturer: Hewlett-Packard
Model: 5890 / 5972

GC Column used: 30 m X 0.25 mm ID [0.25 um thickness] Rxi-5sil MS capillary column.

V. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

Ion 71 was used instead of ion 99 for phenol-d5. Ion 71 was used instead of ion 99 as phenol-d5 closely elutes with bis (2-chloroethyl) ether-d8, which also uses ion 99 for quantitation. This causes the recovery of phenol-d5 to be higher. These two compounds have co-eluted in the high level calibration standard.

B. Blanks:

All method blanks were within the SOW criteria.

C. DMC Recoveries:

DMC recoveries were within the QC limits with the following exceptions:

H30Q0MSD: recovery is below criteria for Pyrene-d10 at 47% with criteria of (51-120).

H30Q1: recovery is below criteria for Pyrene-d10 at 49% with criteria of (51-120).

H30Q4: recovery is below criteria for Benzo(a)pyrene-d12 at 30% with criteria of (43-111) and Pyrene-d10 at 47% with criteria of (51-120).

H30Q6: recovery is below criteria for Benzo(a)pyrene-d12 at 31% with criteria of (43-111) and Pyrene-d10 at 48% with criteria of (51-120).

H30Q8: recovery is below criteria for Benzo(a)pyrene-d12 at 39% with criteria of (43-111) and Pyrene-d10 at 50% with criteria of (51-120).

H30Q9: recovery is below criteria for Pyrene-d10 at 39% with criteria of (51-120).

H30R0: recovery is below criteria for Benzo(a)pyrene-d12 at 32% with criteria of (43-111) and Pyrene-d10 at 42% with criteria of (51-120).

H30R1: recovery is below criteria for Benzo(a)pyrene-d12 at 37% with criteria of (43-111) and Pyrene-d10 at 47% with criteria of (51-120).

H30S9: recovery is below criteria for Benzo(a)pyrene-d12 at 39% with criteria of (43-111), Fluorene-d10 at 40% with criteria of (40-108) and Pyrene-d10 at 47% with criteria of (51-120).

H30T0: recovery is below criteria for Benzo(a)pyrene-d12 at 35% with criteria of (43-111), Dimethylphthalate-d6 at 40% with criteria of (43-111), Fluorene-d10 at 35% with criteria of (40-108) and Pyrene-d10 at 40% with criteria of (51-120).

H30T2: recovery is below criteria for Benzo(a)pyrene-d12 at 40% with criteria of (43-111) and Pyrene-d10 at 51% with criteria of (51-120).

H30T5: recovery is below criteria for Benzo(a)pyrene-d12 at 42% with criteria of (43-111) and Pyrene-d10 at 51% with criteria of (51-120).

D. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

Duplicate matrix spikes were performed on sample H30Q0.

Spike recoveries were within the advisory QC limits with the exception of the following:

H30Q0MSD: recovery is below criteria for Pyrene at 32% with criteria of (35-142).

Replicate RPDs were within the advisory QC limits.

E Internal Standards:

Internal standard area counts were within QC criteria.

F. Dilutions:

No sample in this SDG required analysis at dilution.

G. Samples:

Alkanes were determined as part of tentatively identified compounds. The alkanes are reported on the Alkane Narrative Report following the SDG Narrative.

No other unusual observations were made for the analysis.

H. Manual Integration:

Where needed, manual integrations were performed to improve data quality. The corrections were reviewed and associated hardcopies generated and reported as required. Manual integrations are coded to provide the data reviewer justification for such action. The codes are labeled on the ion chromatogram signal (GC/MS signal) and chromatogram for GC based analysis as follows:

· M1 peak tailing or fronting
· M2 peak co-elution
· M3 rising or falling baseline
· M4 retention time shift
· M5 miscellaneous - under this category, the justification is explained
· M6 software did not integrate peak
· M7 partial peak integration

Manual integration was performed on the following:

H30T3: Benzo(a)pyrene-d12 due to M6
H30T5: Benzo(a)pyrene-d12 due to M6
STD0202Y: Benzo(a)pyrene, Benzo(a)pyrene-d12, Benzo(b)fluoranthene, Benzo(k)fluoranthene due to M6

Aroclor Analysis:

I. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

II. METHODS

Samples were analyzed following procedures in laboratory test code: EPA CLP

SOM 1.2 ARO

The following equation was used to calculate the concentration of target analytes for soil samples:

$$\text{Concentration (ug/Kg)} = (\text{Amt})(\text{DF})(\text{Uf})\left(\frac{\text{Vt}}{(\text{Vi} * \text{WS} * \left(\frac{100 - \text{m}}{100}\right)}\right)$$

where: Amt = CAL - AMT on raw data
DF = Dilution factor
UF = ng unit correction factor
WS = Weight of sample extracted (g)
Vt = Volume of final extract (uL)
Vi = Volume injected (uL)
M = %moisture (not decanted)

III. PREPARATION

Soil Samples were prepared following procedures in laboratory test code: SW3550B

IV. INSTRUMENTATION

The following instrumentation was used to perform
Instrument Code: E2
Instrument Type: GC-ECD
Description: HP5890 II +
Manufacturer: Hewlett-Packard
Model: 5890

GC Columns used:
CLPPest: 30 m X 0.53 mm ID [0.50 um thickness] capillary column and
CLPPestII: 30 m X 0.53 mm ID [0.42 um thickness] capillary column

V. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate percent recoveries were within the QC limits with the following exceptions:

H30Q4: recovery is below criteria for Tetrachloro-m-xylene on rear column at 30% with criteria of (30-150) and Tetrachloro-m-xylene on front column at 29% with criteria of (30-150).

H30Q6: recovery is below criteria for Tetrachloro-m-xylene on rear column at 28% with criteria of (30-150) and Tetrachloro-m-xylene on front column at 26% with criteria of (30-150).

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control sample were within the QC limits.

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

Duplicate matrix spikes were performed on sample H30Q0.

Spike recoveries were within the advisory QC limits.

Replicate RPDs were within the advisory QC limits with the exception of Aroclor-1016 on the rear column.

E. Dilutions:

No sample in this SDG required analysis at dilution.

F. Samples:

No other unusual observations were made for the analysis.

G. Manual Integration:

No manual integrations were performed on any sample or standard.

All of the submittals to the region are originals other than logbook pages. Photocopies of logbook pages are included, with the originals maintained on file at the laboratory. Tunes, calibration verifications and initial calibrations that are shared among several cases are photocopies indicating the location of the originals.

I certify that this Sample Data Package is in compliance with the terms and condition of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy Sample Data Package and in the electronic data deliverable has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Agnes R Huntley

Agnes Huntley
CLP Project Manager
11/17/11

ALKANE NARRATIVE REPORT

Report Date: 11/16/2011

SDG: H30Q0

Client Sample ID: H30R1 Lab Sample ID: K2198-10C File ID: V5N2711.D

Compound	RT	Est. Conc.	Q
Cyclic Alkane	10.402	22	J

ALKANE NARRATIVE REPORT
Report Date: 11/17/2011
SDG: H30Q0

Client Sample ID: H30Q2 Lab Sample ID: K2198-03A File ID: S2H5254.D

Compound	RT	Est. Conc.	Q
Cyclic Alkane	9.549	100	J

Client Sample ID: H30Q6 Lab Sample ID: K2198-06A File ID: S2H5257.D

Compound	RT	Est. Conc.	Q
Straight-chain Alkane	4.208	170	J
Branched Alkane	5.14	130	J
Straight-chain Alkane	5.28	480	J
Straight-chain Alkane	5.752	210	J

Client Sample ID: H30R1 Lab Sample ID: K2198-10A File ID: S2H5261.D

Compound	RT	Est. Conc.	Q
Straight-chain Alkane	3.567	560	J
Cyclic Alkane	10.13	4300	J

Client Sample ID: H30S4 Lab Sample ID: K2198-11A File ID: S2H5262.D

Compound	RT	Est. Conc.	Q
Branched Alkane	7.009	510	J

Client Sample ID: H30T0 Lab Sample ID: K2198-15A File ID: S2H5266.D

Compound	RT	Est. Conc.	Q
Straight-chain Alkane	10.76	770	J

Contract Laboratory Program

Sample Delivery Group (SDG)

Cover Sheet

SDG Number H30Q0

Laboratory Name	Mitkem Laboratories	Lab Code	MITKEM
Contract No.	EP-W-11-033	Case No.	41926
Analysis Price	$430	SDG Turnaround	21 days

EPA Sample Numbers in SDG (Listed in Numerical Order)

01) H30Q0	08) H30Q6	15) H30S8	22) H30T5
02) H30Q0MS	09) H30Q8	16) H30S9	
03) H30Q0MSD	10) H30Q9	17) H30T0	
04) H30Q1	11) H30R0	18) H30T1	
05) H30Q2	12) H30R1	19) H30T2	
06) H30Q3	13) H30S4	20) H30T3	
07) H30Q4	14) H30S5	21) H30T4	

First Sample in SDG	Last Sample in SDG
H30Q0	H30T5
First Sample Receipt Date	**Last Sample Receipt Date**
10/28/2011	10/28/2011

Note: There are a maximum of 20 field samples [excluding Performance Evaluation (PE) samples in an SDG. Attach the TR/COC Records to this form in alphanumeric order (the order listed above on this form).

Signature Agnes R Huntley Date 11/02/2011

SDG H30Q0

USEPA
DateShipped: 10/27/2011
CarrierName: FedEx
AirbillNo:

CHAIN OF CUSTODY RECORD
Site #: 41926
Contact Name: Jeff Miller
Contact Phone: 720-219-7891

No: 8-102711-105926-0003
Cooler #:
Lab: Spectrum Analytical
Lab Phone: 401-732-3400

Lab #	CLP Sample #	Analyses	Matrix	Collected	Sample Time	Preservative	MS/MSD
	H30Q0	Volatiles (VOAs)	Soil	10/26/2011	09:05		
	H30Q0	Semivolatiles (SVOAs)/PCBs	Soil	10/26/2011	09:05		
	H30Q1	Volatiles (VOAs)	Soil	10/25/2011	14:47		
	H30Q1	Semivolatiles (SVOAs)/PCBs	Soil	10/25/2011	14:47		
	H30Q2	Volatiles (VOAs)	Soil	10/25/2011	15:15		
	H30Q2	Semivolatiles (SVOAs)/PCBs	Soil	10/25/2011	15:15		
	H30Q3	Volatiles (VOAs)	Soil	10/25/2011	15:40		
	H30Q3	Semivolatiles (SVOAs)/PCBs	Soil	10/25/2011	15:40		
	H30Q4	Volatiles (VOAs)	Soil	10/25/2011	17:10		
	H30Q4	Semivolatiles (SVOAs)/PCBs	Soil	10/25/2011	17:10		
	H30Q6	Volatiles (VOAs)	Soil	10/25/2011	16:50		
	H30Q6	Semivolatiles (SVOAs)/PCBs	Soil	10/25/2011	16:50		
	H30Q8	Volatiles (VOAs)	Soil	10/26/2011	13:00		
	H30Q8	Semivolatiles (SVOAs)/PCBs	Soil	10/26/2011	13:00		
	H30Q9	Volatiles (VOAs)	Soil	10/26/2011	13:45		
	H30Q9	Semivolatiles (SVOAs)/PCBs	Soil	10/26/2011	13:45		
	H30R0	Volatiles (VOAs)	Soil	10/26/2011	17:05		
	H30R0	Semivolatiles (SVOAs)/PCBs	Soil	10/26/2011	17:05		
	H30R1	Volatiles (VOAs)	Soil	10/26/2011	16:30		
	H30R1	Semivolatiles (SVOAs)/PCBs	Soil	10/26/2011	16:30		

Special Instructions: Results to jeff.miller@urscorp.com, amy.k.gray@urscorp.com

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	Jen Petrun	10/27/11	FedEx	10/27/11	1400		FEDEX	10-28-11	Danielle Nelson	10-28-11	9:00

6.5°C 9.0°C 9.5°C 10.0°C 9.5°C

SDG H3000

USEPA
DateShipped: 10/27/2011
CarrierName: FedEx
AirbillNo:

CHAIN OF CUSTODY RECORD
Site #: 41926
Contact Name: Jeff Miller
Contact Phone: 720-219-7891

No: 8-102711-105926-0003
Cooler #:
Lab: Spectrum Analytical
Lab Phone: 401-732-3400

Lab #	CLP Sample #	Analyses	Matrix	Collected	Sample Time	Preservative	MS/MSD
	H30S4	Volatiles (VOAs)	Soil	10/25/2011	09:55		
	H30S4	Semivolatiles (SVOAs)/PCBs	Soil	10/25/2011	09:55		
	H30S5	Volatiles (VOAs)	Soil	10/25/2011	10:36		
	H30S5	Semivolatiles (SVOAs)/PCBs	Soil	10/25/2011	10:36		
	H30S7	Volatiles (VOAs)	Surface Water	10/26/2011	10:30	HCl	
	H30S8	Volatiles (VOAs)	Sediment	10/24/2011	14:00		
	H30S9	Volatiles (VOAs)	Sediment	10/24/2011	15:25		
	H30T0	Volatiles (VOAs)	Sediment	10/24/2011	16:11		
	H30T1	Volatiles (VOAs)	Sediment	10/24/2011	15:22		
	H30T2	Volatiles (VOAs)	Sediment	10/24/2011	16:45		
	H30T3	Volatiles (VOAs)	Sediment	10/24/2011	17:30		
	H30T4	Volatiles (VOAs)	Sediment	10/24/2011	17:45		
← SDG - Final Sample	H30T5	Volatiles (VOAs)	Sediment	10/25/2011	10:15		
	H30T6	Volatiles (VOAs)	Sediment	10/25/2011	11:35		
	H30T7	Volatiles (VOAs)	Sediment	10/25/2011	12:40		
	H30T9	Volatiles (VOAs)	Surface Water	10/24/2011	14:00	HCl	
	H30W0	Volatiles (VOAs)	Surface Water	10/24/2011	15:25	HCl	
	H30W1	Volatiles (VOAs)	Surface Water	10/24/2011	16:11	HCl	
	H30W2	Volatiles (VOAs)	Surface Water	10/24/2011	15:22	HCl	
	H30W3	Volatiles (VOAs)	Surface Water	10/24/2011	16:45	HCl	

Special Instructions: Results to jeff.miller@urscorp.com, amy.k.gray@urscorp.com

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	Jen Peterson	10/27/11	FedEx	10/27/11	1400		FedEx	10-28-11	Zamarron	10-28-11	9:00

6.5°C 9.0°C 9.5°C 10.0°C 9.5°C

USEPA
DateShipped: 10/26/2011
CarrierName: FedEx
AirbillNo:

CHAIN OF CUSTODY RECORD
Site #: 41926
Contact Name: Jeff Miller
Contact Phone: 720-219-7891

No: 8-102611-105817-0002
Cooler #:
Lab: ChemTech Consulting Group
Lab Phone: 908-789-8900

Lab #	CLP Sample #	Analyses	Matrix	Collected	Sample Time	Preservative	MS/MSD
	H30S8	Semivolatiles (SVOAs)/PCBs	Sediment	10/24/2011	14:00		
	H30S9	Semivolatiles (SVOAs)/PCBs	Sediment	10/24/2011	15:25		
	H30T0	Semivolatiles (SVOAs)/PCBs	Sediment	10/24/2011	16:11		
	H30T1	Semivolatiles (SVOAs)/PCBs	Sediment	10/24/2011	15:22		
	H30T2	Semivolatiles (SVOAs)/PCBs	Sediment	10/24/2011	16:45		
	H30T3	Semivolatiles (SVOAs)/PCBs	Sediment	10/24/2011	17:30		
	H30T4	Semivolatiles (SVOAs)/PCBs	Sediment	10/24/2011	17:45		
SDG-Final Sample ←	H30T5	Semivolatiles (SVOAs)/PCBs	Sediment	10/25/2011	10:15		
	H30T6	Semivolatiles (SVOAs)/PCBs	Sediment	10/25/2011	11:35		
	H30T7	Semivolatiles (SVOAs)/PCBs	Sediment	10/25/2011	12:40		
	H30T9	Semivolatiles (SVOAs)	Surface Water	10/24/2011	14:00		
	H30T9	Aroclors	Surface Water	10/24/2011	14:00		
	H30W0	Semivolatiles (SVOAs)	Surface Water	10/24/2011	15:25		
	H30W0	Aroclors	Surface Water	10/24/2011	15:25		
	H30W1	Semivolatiles (SVOAs)	Surface Water	10/24/2011	16:11		
	H30W1	Aroclors	Surface Water	10/24/2011	16:11		
	H30W2	Semivolatiles (SVOAs)	Surface Water	10/24/2011	15:22		
	H30W2	Aroclors	Surface Water	10/24/2011	15:22		
	H30W3	Semivolatiles (SVOAs)	Surface Water	10/24/2011	16:45		
	H30W3	Aroclors	Surface Water	10/24/2011	16:45		

Temp: 4°C

Special Instructions: Results to jeff.miller@urs.com, amy.k.gray@urs.com

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
		10/26/11	FedEx	10/26/11	1300					10/27/11	9:15
									Daniel Mann	10-28-11	9:00

9.0°C 9.0°C 9.5°C 8.0°C 8.5°C

2C - FORM II VOA-3

SOIL VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Level: (LOW/MED) LOW

	EPA SAMPLE NO.	VDMC1 (VCL)	#	VDMC2 (CLA)	#	VDMC3 (DCE)	#	VDMC4 (BUT)	#	VDMC5 (CLF)	#	VDMC6 (DCA)	#	VDMC7 (BEN)	#
01	VBLKJ5	75		85		92		69		86		81		101	
02	H30Q1	83		96		95		80		96		90		107	
03	H30Q2	82		93		94		83		93		93		102	
04	H30Q3	76		82		90		71		89		82		97	
05	H30Q4	77		84		91		82		89		85		94	
06	H30Q6	81		86		91		91		93		93		92	
07	H30Q8	75		83		87		89		88		90		100	
08	H30Q9	65	*	91		83		108		98		94		111	
09	H30R0	82		56	*	83		99		93		99		94	
10	H30R1	79		99		95		105		95		97		115	
11	H30S4	88		102		103		63		98		108		120	
12	H30S5	83		94		92		66		99		100		109	
13	H30S8	79		92		91		64		93		98		99	
14	H30S9	81		91		91		74		96		97		99	
15	H30T0	77		94		89		73		93		96		105	
16	H30T1	77		87		83		94		93		99		94	
17	H30T2	74		88		88		72		93		95		98	
18	H30T3	74		85		85		87		88		92		93	
19	H30T4	77		86		81		83		95		100		92	
20	H30T5	78		88		87		84		93		100		98	
21	VBLKK5	73		83		82		85		91		86		93	
22	H30Q0	83		91		95		64		92		84		109	
23	H30Q0MS	77		84		97		66		87		78	*	98	
24	H30Q0MSD	75		80		89		74		87		80		98	
25	VHBLKK5	81		95		86		103		95		103		90	

		QC LIMITS
VDMC1	(VCL) = Vinyl chloride-d3	(68-122)
VDMC2	(CLA) = Chloroethane-d5	(61-130)
VDMC3	(DCE) = 1,1-Dichloroethene-d2	(45-132)
VDMC4	(BUT) = 2-Butanone-d5	(20-182)
VDMC5	(CLF) = Chloroform-d	(72-123)
VDMC6	(DCA) = 1,2-Dichloroethane-d4	(79-122)
VDMC7	(BEN) = Benzene-d6	(80-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

2D - FORM II VOA-4

SOIL VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Level: (LOW/MED) LOW

	EPA SAMPLE NO.	VDMC8 (DPA) #	VDMC9 (TOL) #	VDMC10 (TDP) #	VDMC11 (HEX) #	VDMC12 (DXE) #	VDMC13 (TCA) #	VDMC14 (DCZ) #	TOT OUT
01	VBLKJ5	92	98	93	61	68	81	88	0
02	H30Q1	99	99	99	61	81	93	83	0
03	H30Q2	96	94	97	64	90	89	93	0
04	H30Q3	86	96	85	46	61	69	83	0
05	H30Q4	86	92	94	73	75	85	89	0
06	H30Q6	84	90	93	74	89	89	91	0
07	H30Q8	89	96	106	75	87	95	91	0
08	H30Q9	111	96	88	99	95	95	97	1
09	H30R0	85	90	96	82	120	94	90	1
10	H30R1	107	98	75	105	97	86	101	0
11	H30S4	114	103	110	70	121	98	99	0
12	H30S5	104	99	102	61	102	95	94	0
13	H30S8	95	92	90	50	92	94	91	0
14	H30S9	91	93	91	57	90	95	90	0
15	H30T0	98	96	95	67	97	97	97	0
16	H30T1	87	90	97	78	81	89	88	0
17	H30T2	93	94	96	66	97	97	92	0
18	H30T3	91	90	93	70	90	90	94	0
19	H30T4	90	90	96	64	94	91	98	0
20	H30T5	93	94	101	73	104	98	93	0
21	VBLKK5	87	91	89	71	77	83	86	0
22	H30Q0	96	103	88	47	75	78	95	0
23	H30Q0MS	85	94	84	57	71	72	88	1
24	H30Q0MSD	89	96	93	61	70	81	94	0
25	VHBLKK5	87	88	98	85	107	98	91	0

		QC LIMITS
VDMC8	(DPA) = 1,2-Dichloropropane-d6	(74-124)
VDMC9	(TOL) = Toluene-d8	(78-121)
VDMC10	(TDP) = trans-1,3-Dichloropropene-d4	(72-130)
VDMC11	(HEX) = 2-Hexanone-d5	(17-184)
VDMC12	(DXE) = 1,4-Dioxane-d8	(50-150)
VDMC13	(TCA) = 1,1,2,2-Tetrachloroethane-d2	(56-161)
VDMC14	(DCZ) = 1,2-Dichlorobenzene-d4	(70-131)

Column to be used to flag recovery values

* Values outside of contract required QC limits

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

3B - FORM III VOA-2

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix Spike - EPA Sample No.: H30Q0 Level: (LOW/MED) LOW

COMPOUND	SPIKE ADDED (µg/Kg)	SAMPLE CONCENTRATION (µg/Kg)	MS CONCENTRATION (µg/Kg)	MS %REC	#	QC. LIMITS REC.
1,1-Dichloroethene	59.8104	0.0000	54.2597	91		59-172
Benzene	59.8104	0.0000	65.2559	109		66-142
Trichloroethene	59.8104	0.0000	68.2069	114		62-137
Toluene	59.8104	0.0000	66.0050	110		59-139
Chlorobenzene	59.8104	0.0000	64.2765	107		60-133

COMPOUND	SPIKE ADDED (µg/Kg)	MSD CONCENTRATION (µg/Kg)	MSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	59.8104	51.7858	87		5		0-22	59-172
Benzene	59.8104	63.8533	107		2		0-21	66-142
Trichloroethene	59.8104	68.3385	114		0		0-24	62-137
Toluene	59.8104	64.9351	109		2		0-21	59-139
Chlorobenzene	59.8104	65.4319	109		2		0-21	60-133

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
VBLKJ5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Lab File ID: V5N2702.D Lab Sample ID: MB-62569

Instrument ID: V5

Matrix: (SOIL/SED/WATER) SOIL Date Analyzed: 11/06/2011

Level: (TRACE or LOW/MED) LOW Time Analyzed: 23:44

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	H30Q1	K2198-02C	V5N2703.D	0:11
02	H30Q2	K2198-03C	V5N2704.D	0:38
03	H30Q3	K2198-04C	V5N2705.D	1:03
04	H30Q4	K2198-05C	V5N2706.D	1:30
05	H30Q6	K2198-06C	V5N2707.D	1:58
06	H30Q8	K2198-07C	V5N2708.D	2:25
07	H30Q9	K2198-08C	V5N2709.D	2:56
08	H30R0	K2198-09C	V5N2710.D	3:21
09	H30R1	K2198-10C	V5N2711.D	3:50
10	H30S4	K2198-11C	V5N2712.D	4:17
11	H30S5	K2198-12C	V5N2713.D	4:45
12	H30S8	K2198-13C	V5N2714.D	5:12
13	H30S9	K2198-14C	V5N2715.D	5:39
14	H30T0	K2198-15C	V5N2716.D	6:07
15	H30T1	K2198-16C	V5N2717.D	6:34
16	H30T2	K2198-17C	V5N2718.D	7:02
17	H30T3	K2198-18C	V5N2719.D	7:29
18	H30T4	K2198-19C	V5N2720.D	7:56
19	H30T5	K2198-20C	V5N2721.D	8:23

COMMENTS:

4A - FORM IV VOA

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKK5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Lab File ID: V5N2725.D Lab Sample ID: MB-62780

Instrument ID: V5

Matrix: (SOIL/SED/WATER) SOIL Date Analyzed: 11/07/2011

Level: (TRACE or LOW/MED) LOW Time Analyzed: 10:12

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	H30Q0	K2198-01C	V5N2727.D	11:35
02	H30Q0MS	K2198-01CMS	V5N2730.D	12:57
03	H30Q0MSD	K2198-01CMSD	V5N2731.D	13:24
04	VHBLKK5	VHBLKK5	V5N2748.D	21:05

COMMENTS:

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.
BFB5N

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Lab File ID: V5N1310.D BFB Injection Date: 10/04/2011

Instrument ID: V5 BFB Injection Time: 16:43

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.2
75	30.0 - 80.0% of mass 95	42.4
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 -120% of mass 95	78.7
175	5.0 - 9.0% of mass 174	6.5 (8.2)1
176	95.0 - 101% of mass 174	78.4 (99.6)1
177	5.0 - 9.0% of mass 176	4.8 (6.2)2

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0505N	VSTD0505N	V5N1311.D	10/04/2011	17:11
02	VSTD0055N	VSTD0055N	V5N1312.D	10/04/2011	17:39
03	VSTD2005N	VSTD2005N	V5N1313.D	10/04/2011	18:08
04	VSTD1005N	VSTD1005N	V5N1314.D	10/04/2011	18:36
05	VSTD0105N	VSTD0105N	V5N1315.D	10/04/2011	19:04

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.
BFBJ5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Lab File ID: V5N2700.D BFB Injection Date: 11/06/2011

Instrument ID: V5 BFB Injection Time: 22:49

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	23.6
75	30.0 - 80.0% of mass 95	43.8
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.4
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 -120% of mass 95	70.9
175	5.0 - 9.0% of mass 174	5.8 (8.2)1
176	95.0 - 101% of mass 174	70.1 (98.8)1
177	5.0 - 9.0% of mass 176	4.6 (6.6)2

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050J5	VSTD050J5	V5N2701.D	11/06/2011	23:16
02	VBLKJ5	MB-62569	V5N2702.D	11/06/2011	23:44
03	H30Q1	K2198-02C	V5N2703.D	11/07/2011	0:11
04	H30Q2	K2198-03C	V5N2704.D	11/07/2011	0:38
05	H30Q3	K2198-04C	V5N2705.D	11/07/2011	1:03
06	H30Q4	K2198-05C	V5N2706.D	11/07/2011	1:30
07	H30Q6	K2198-06C	V5N2707.D	11/07/2011	1:58
08	H30Q8	K2198-07C	V5N2708.D	11/07/2011	2:25
09	H30Q9	K2198-08C	V5N2709.D	11/07/2011	2:56
10	H30R0	K2198-09C	V5N2710.D	11/07/2011	3:21
11	H30R1	K2198-10C	V5N2711.D	11/07/2011	3:50
12	H30S4	K2198-11C	V5N2712.D	11/07/2011	4:17
13	H30S5	K2198-12C	V5N2713.D	11/07/2011	4:45
14	H30S8	K2198-13C	V5N2714.D	11/07/2011	5:12
15	H30S9	K2198-14C	V5N2715.D	11/07/2011	5:39
16	H30T0	K2198-15C	V5N2716.D	11/07/2011	6:07
17	H30T1	K2198-16C	V5N2717.D	11/07/2011	6:34
18	H30T2	K2198-17C	V5N2718.D	11/07/2011	7:02
19	H30T3	K2198-18C	V5N2719.D	11/07/2011	7:29
20	H30T4	K2198-19C	V5N2720.D	11/07/2011	7:56
21	H30T5	K2198-20C	V5N2721.D	11/07/2011	8:23
22	VSTD050K5	VSTD050K5	V5N2724.D	11/07/2011	9:45

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.
BFBJ5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Lab File ID: V5N2700.D BFB Injection Date: 11/06/2011

Instrument ID: V5 BFB Injection Time: 22:49

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	23.6
75	30.0 - 80.0% of mass 95	43.8
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.4
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 -120% of mass 95	70.9
175	5.0 - 9.0% of mass 174	5.8 (8.2)1
176	95.0 - 101% of mass 174	70.1 (98.8)1
177	5.0 - 9.0% of mass 176	4.6 (6.6)2

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

23	VBLKK5	MB-62780	V5N2725.D	11/07/2011	10:12
24	H30Q0	K2198-01C	V5N2727.D	11/07/2011	11:35
25	H30Q0MS	K2198-01CMS	V5N2730.D	11/07/2011	12:57
26	H30Q0MSD	K2198-01CMSD	V5N2731.D	11/07/2011	13:24
27	VHBLKK5	VHBLKK5	V5N2748.D	11/07/2011	21:05
28	VSTD050L5	VSTD050L5	V5N2749.D	11/07/2011	21:33

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 10/04/2011 10/04/2011

EPA Sample No.(VSTD#####): VSTD050J5 Date Analyzed: 11/06/2011

Lab File ID (Standard): V5N2701.D Time Analyzed: 23:16

Instrument ID: V5 Heated Purge: (Y/N) Y

		IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD	184155		9.427		270116		6.315		70335		12.168	
	UPPER LIMIT	368310		9.927		540232		6.815		140670		12.668	
	LOWER LIMIT	92078		8.927		135058		5.815		35168		11.668	
	EPA SAMPLE NO.												
01	VBLKJ5	246579		9.426		345444		6.325		91770		12.178	
02	H30Q1	228645		9.431		314640		6.318		78192		12.183	
03	H30Q2	248975		9.426		334304		6.326		81162		12.179	
04	H30Q3	206930		9.432		270166		6.320		72601		12.184	
05	H30Q4	223360		9.432		286528		6.320		84345		12.184	
06	H30Q6	213567		9.432		258467		6.320		77980		12.184	
07	H30Q8	197116		9.438		267759		6.326		79374		12.179	
08	H30Q9	214478		9.431		305403		6.319		67636		12.172	
09	H30R0	173263		9.432		211841		6.320		73058		12.185	
10	H30R1	241286		9.427		367259		6.314		70417		12.179	
11	H30S4	209317		9.432		325970		6.319		60318		12.184	
12	H30S5	222415		9.431		317220		6.319		66365		12.183	
13	H30S8	206207		9.438		270582		6.325		66131		12.178	
14	H30S9	210510		9.426		273184		6.326		70381		12.179	
15	H30T0	187656		9.430		252514		6.318		56870		12.183	

IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4
AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area
AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area
RT UPPER LIMIT = +0.50 (Low-Medium Volatiles) and +0.33 (Trace Volatiles) minutes of internal standard RT
RT LOWER LIMIT = -0.50 (Low-Medium Volatiles) and -0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 10/04/2011 10/04/2011

EPA Sample No.(VSTD#####): VSTD050J5 Date Analyzed: 11/06/2011

Lab File ID (Standard): V5N2701.D Time Analyzed: 23:16

Instrument ID: V5 Heated Purge: (Y/N) Y

		IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD	184155		9.427		270116		6.315		70335		12.168	
	UPPER LIMIT	368310		9.927		540232		6.815		140670		12.668	
	LOWER LIMIT	92078		8.927		135058		5.815		35168		11.668	
	EPA SAMPLE NO.												
16	H30T1	258330		9.432		319828		6.320		98463		12.173	
17	H30T2	233621		9.426		313371		6.325		85544		12.178	
18	H30T3	244216		9.428		312087		6.316		88290		12.181	
19	H30T4	293596		9.427		360347		6.326		105745		12.179	
20	H30T5	262168		9.427		342017		6.315		89318		12.179	

IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4
AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area
AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area
RT UPPER LIMIT = +0.50 (Low-Medium Volatiles) and +0.33 (Trace Volatiles) minutes of internal standard RT
RT LOWER LIMIT = -0.50 (Low-Medium Volatiles) and -0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 10/04/2011 10/04/2011

EPA Sample No.(VSTD#####): VSTD050K5 Date Analyzed: 11/07/2011

Lab File ID (Standard): V5N2724.D Time Analyzed: 9:45

Instrument ID: V5 Heated Purge: (Y/N) Y

		IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD	206756		9.432		242917		6.319		87745		12.172	
	UPPER LIMIT	413512		9.932		485834		6.819		175490		12.672	
	LOWER LIMIT	103378		8.932		121459		5.819		43873		11.672	
	EPA SAMPLE NO.												
01	VBLKK5	257526		9.427		325591		6.326		97710		12.179	
02	H30Q0	232444		9.429		332991		6.317		70455		12.181	
03	H30Q0MS	225651		9.426		300837		6.314		78733		12.179	
04	H30Q0MSD	237777		9.431		319097		6.318		82248		12.183	
05	VHBLKK5	313909		9.426		378911		6.314		127972		12.178	

IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4
AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area
AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area
RT UPPER LIMIT = +0.50 (Low-Medium Volatiles) and +0.33 (Trace Volatiles) minutes of internal standard RT
RT LOWER LIMIT = -0.50 (Low-Medium Volatiles) and -0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q0

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-01C

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N2727.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 15 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
75-71-8	Dichlorodifluoromethane	5.9	U
74-87-3	Chloromethane	5.9	U
75-01-4	Vinyl chloride	5.9	U
74-83-9	Bromomethane	5.9	U
75-00-3	Chloroethane	5.9	U
75-69-4	Trichlorofluoromethane	5.9	U
75-35-4	1,1-Dichloroethene	5.9	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.9	U
67-64-1	Acetone	12	U
75-15-0	Carbon disulfide	5.9	U
79-20-9	Methyl acetate	5.9	U
75-09-2	Methylene chloride	5.9	U
156-60-5	trans-1,2-Dichloroethene	5.9	U
1634-04-4	Methyl tert-butyl ether	5.9	U
75-34-3	1,1-Dichloroethane	5.9	U
156-59-2	cis-1,2-Dichloroethene	5.9	U
78-93-3	2-Butanone	12	U
74-97-5	Bromochloromethane	5.9	U
67-66-3	Chloroform	5.9	U
71-55-6	1,1,1-Trichloroethane	5.9	U
110-82-7	Cyclohexane	5.9	U
56-23-5	Carbon tetrachloride	5.9	U
71-43-2	Benzene	5.9	U
107-06-2	1,2-Dichloroethane	5.9	U
123-91-1	1,4-Dioxane	120	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

SOM01.2 (6/2007)

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q0

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-01C

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N2727.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 15 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
79-01-6	Trichloroethene	5.9	U
108-87-2	Methylcyclohexane	5.9	U
78-87-5	1,2-Dichloropropane	5.9	U
75-27-4	Bromodichloromethane	5.9	U
10061-01-5	cis-1,3-Dichloropropene	5.9	U
108-10-1	4-Methyl-2-pentanone	12	U
108-88-3	Toluene	5.9	U
10061-02-6	trans-1,3-Dichloropropene	5.9	U
79-00-5	1,1,2-Trichloroethane	5.9	U
127-18-4	Tetrachloroethene	5.9	U
591-78-6	2-Hexanone	12	U
124-48-1	Dibromochloromethane	5.9	U
106-93-4	1,2-Dibromoethane	5.9	U
108-90-7	Chlorobenzene	5.9	U
100-41-4	Ethylbenzene	5.9	U
179601-23-1	m,p-Xylene	5.9	U
95-47-6	o-Xylene	5.9	U
100-42-5	Styrene	5.9	U
75-25-2	Bromoform	5.9	U
98-82-8	Isopropylbenzene	5.9	U
79-34-5	1,1,2,2-Tetrachloroethane	5.9	U
541-73-1	1,3-Dichlorobenzene	5.9	U
106-46-7	1,4-Dichlorobenzene	5.9	U
95-50-1	1,2-Dichlorobenzene	5.9	U
96-12-8	1,2-Dibromo-3-chloropropane	5.9	U
120-82-1	1,2,4-Trichlorobenzene	5.9	U
87-61-6	1,2,3-Trichlorobenzene	5.9	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30Q0

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-01C

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N2727.D

Level: (TRACE or LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 15 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E96679[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111107.B\V5N2727.D
Report Date: 09-Nov-2011 08:00

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111107.B\V5N2727.D
Lab Smp Id: K2198-01C Client Smp ID: H30Q0
Inj Date : 07-NOV-2011 11:35
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-01C,,62780
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111107.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 18:06 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$	79 Vinyl Chloride-d3	65	2.147	2.168	(0.340)	131789	41.5647	42
$	80 Chloroethane-d5	69	2.577	2.597	(0.408)	92950	45.3211	45(Q)
$	81 1,1-Dichloroethene-d2	65	3.355	3.364	(0.531)	31270	47.5488	48(Q)
$	82 2-Butanone-d5	46	5.074	5.071	(0.803)	56311	63.6808	64
$	83 Chloroform-d	84	5.376	5.385	(0.851)	175312	46.1501	46(Q)
$	23 1,2-Dichloroethane-d4	65	5.887	5.896	(0.932)	86369	42.1236	42(Q)
$	84 Benzene-d6	84	5.910	5.907	(0.627)	336899	54.7364	55
*	26 1,4-Difluorobenzene	114	6.316	6.325	(1.000)	332991	50.0000	
$	85 1,2-Dichloropropane-d6	67	6.723	6.732	(0.713)	121557	47.7894	48
$	94 1,4-Dioxane-d8	96	6.920	6.917	(1.096)	14648	750.584	750
$	33 Toluene-d8	98	7.838	7.835	(0.831)	293426	51.6427	52
$	86 trans-1,3-Dichloropropene-d4	79	8.128	8.114	(0.862)	84460	44.1019	44
$	87 2-Hexanone-d5	63	8.592	8.578	(0.911)	22850	46.6933	47
*	42 Chlorobenzene-d5	117	9.429	9.426	(1.000)	232444	50.0000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.938	10.924	(1.160)	65216	39.1722	39
*	78 1,4-Dichlorobenzene-d4	152	12.181	12.167	(1.000)	70455	50.0000	
$	90 1,2-Dichlorobenzene-d4	152	12.634	12.631	(1.037)	62657	47.6045	48(Q)

Data File: \\avogadro\organics\V5.I\111107.B\V5N2727.D
Report Date: 09-Nov-2011 08:00

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111107.B\V5N2727.D
Report Date: 09-Nov-2011 08:00

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111107.B\V5N2727.D
Lab Smp Id: K2198-01C Client Smp ID: H30Q0
Inj Date : 07-NOV-2011 11:35
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-01C,,62780
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111107.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 18:06 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

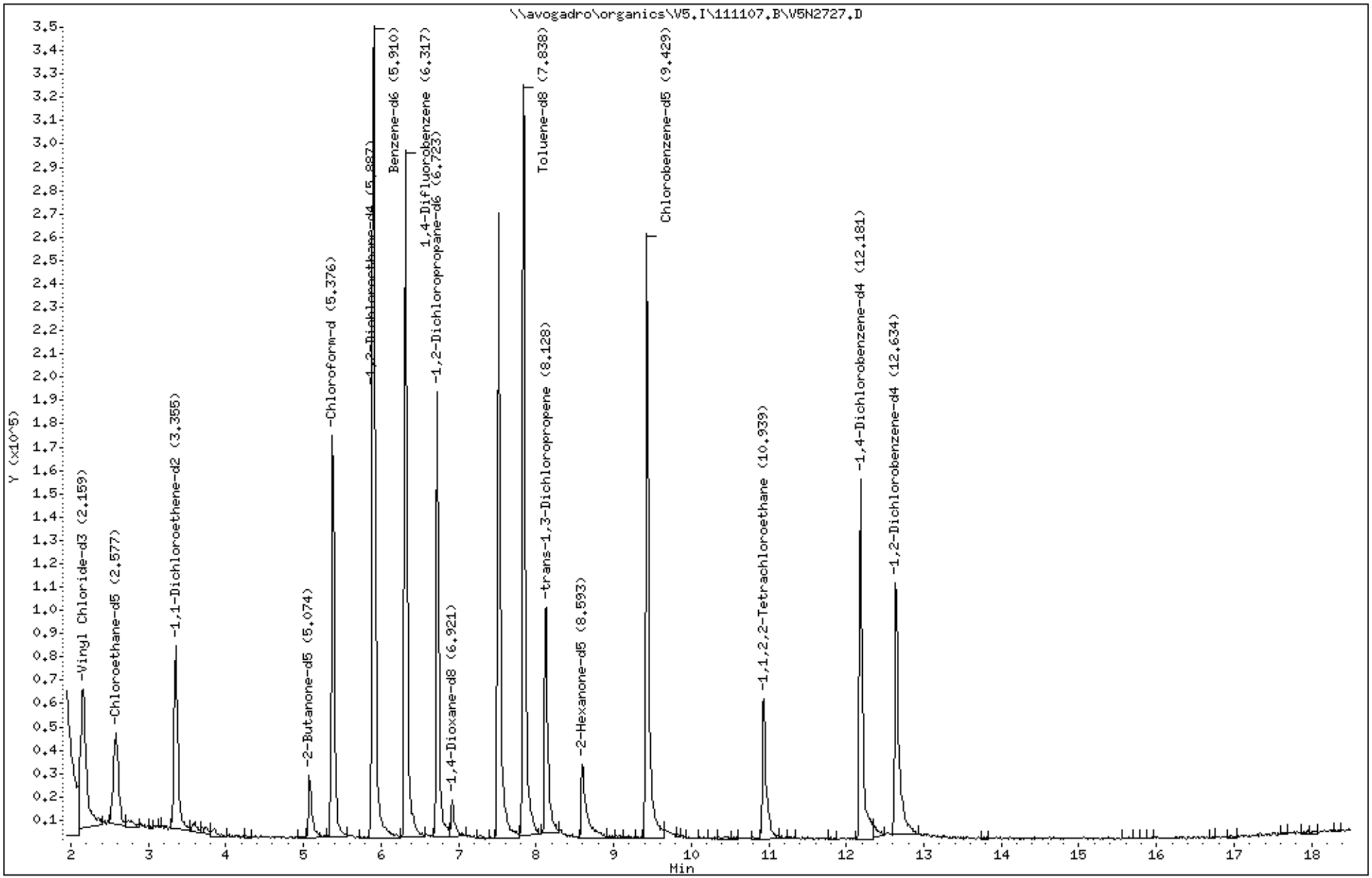
- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111107.B\V5N2727.D
Date : 07-NOV-2011 11:35
Client ID: H30Q0
Sample Info: 5G,K2198-01C,,62780

Instrument: V5.i

Operator: SRC: LIMS
Column diameter: 0.25

Column phase: DB-624



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-02C

Sample wt/vol: 5.10 (g/mL) G Lab File ID: V5N2703.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 22 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
75-71-8	Dichlorodifluoromethane	6.3	U
74-87-3	Chloromethane	6.3	U
75-01-4	Vinyl chloride	6.3	U
74-83-9	Bromomethane	6.3	U
75-00-3	Chloroethane	6.3	U
75-69-4	Trichlorofluoromethane	6.3	U
75-35-4	1,1-Dichloroethene	6.3	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	6.3	U
67-64-1	Acetone	13	U
75-15-0	Carbon disulfide	6.3	U
79-20-9	Methyl acetate	6.3	U
75-09-2	Methylene chloride	6.3	U
156-60-5	trans-1,2-Dichloroethene	6.3	U
1634-04-4	Methyl tert-butyl ether	6.3	U
75-34-3	1,1-Dichloroethane	6.3	U
156-59-2	cis-1,2-Dichloroethene	6.3	U
78-93-3	2-Butanone	13	U
74-97-5	Bromochloromethane	6.3	U
67-66-3	Chloroform	6.3	U
71-55-6	1,1,1-Trichloroethane	6.3	U
110-82-7	Cyclohexane	6.3	U
56-23-5	Carbon tetrachloride	6.3	U
71-43-2	Benzene	6.3	U
107-06-2	1,2-Dichloroethane	6.3	U
123-91-1	1,4-Dioxane	130	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-02C

Sample wt/vol: 5.10 (g/mL) G Lab File ID: V5N2703.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 22 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
79-01-6	Trichloroethene	6.3	U
108-87-2	Methylcyclohexane	6.3	U
78-87-5	1,2-Dichloropropane	6.3	U
75-27-4	Bromodichloromethane	6.3	U
10061-01-5	cis-1,3-Dichloropropene	6.3	U
108-10-1	4-Methyl-2-pentanone	13	U
108-88-3	Toluene	6.3	U
10061-02-6	trans-1,3-Dichloropropene	6.3	U
79-00-5	1,1,2-Trichloroethane	6.3	U
127-18-4	Tetrachloroethene	6.3	U
591-78-6	2-Hexanone	13	U
124-48-1	Dibromochloromethane	6.3	U
106-93-4	1,2-Dibromoethane	6.3	U
108-90-7	Chlorobenzene	6.3	U
100-41-4	Ethylbenzene	6.3	U
179601-23-1	m,p-Xylene	6.3	U
95-47-6	o-Xylene	6.3	U
100-42-5	Styrene	6.3	U
75-25-2	Bromoform	6.3	U
98-82-8	Isopropylbenzene	6.3	U
79-34-5	1,1,2,2-Tetrachloroethane	6.3	U
541-73-1	1,3-Dichlorobenzene	6.3	U
106-46-7	1,4-Dichlorobenzene	6.3	U
95-50-1	1,2-Dichlorobenzene	6.3	U
96-12-8	1,2-Dibromo-3-chloropropane	6.3	U
120-82-1	1,2,4-Trichlorobenzene	6.3	U
87-61-6	1,2,3-Trichlorobenzene	6.3	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30Q1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-02C

Sample wt/vol: 5.10 (g/mL) G Lab File ID: V5N2703.D

Level: (TRACE or LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 22 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E96679[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2703.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111106.B\V5N2703.D
Lab Smp Id: K2198-02C Client Smp ID: H30Q1
Inj Date : 07-NOV-2011 00:11
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-02C,,62569
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 35
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.100	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$	79 Vinyl Chloride-d3	65	2.160	2.173	(0.342)	124269	41.4789	41
$	80 Chloroethane-d5	69	2.590	2.603	(0.410)	93130	48.0573	47(Q)
$	81 1,1-Dichloroethene-d2	65	3.357	3.369	(0.531)	29557	47.5653	47(Q)
$	82 2-Butanone-d5	46	5.075	5.076	(0.803)	66823	79.9761	78
$	83 Chloroform-d	84	5.377	5.390	(0.851)	173110	48.2283	47(Q)
$	23 1,2-Dichloroethane-d4	65	5.888	5.901	(0.932)	87493	45.1606	44(Q)
$	84 Benzene-d6	84	5.911	5.912	(0.627)	324448	53.5893	53
*	26 1,4-Difluorobenzene	114	6.318	6.319	(1.000)	314640	50.0000	
$	85 1,2-Dichloropropane-d6	67	6.724	6.725	(0.713)	124332	49.6925	49
$	94 1,4-Dioxane-d8	96	6.922	6.911	(1.096)	14873	806.563	790
$	33 Toluene-d8	98	7.839	7.840	(0.831)	275581	49.3079	48
$	86 trans-1,3-Dichloropropene-d4	79	8.118	8.119	(0.861)	93170	49.4583	48
$	87 2-Hexanone-d5	63	8.594	8.572	(0.911)	29400	61.0762	60
*	42 Chlorobenzene-d5	117	9.430	9.431	(1.000)	228645	50.0000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.928	10.929	(1.159)	75786	46.2774	45
*	78 1,4-Dichlorobenzene-d4	152	12.182	12.172	(1.000)	78192	50.0000	
$	90 1,2-Dichlorobenzene-d4	152	12.635	12.625	(1.037)	60979	41.7454	41(Q)

Data File: \\avogadro\organics\V5.I\111106.B\V5N2703.D
Report Date: 09-Nov-2011 07:59

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2703.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

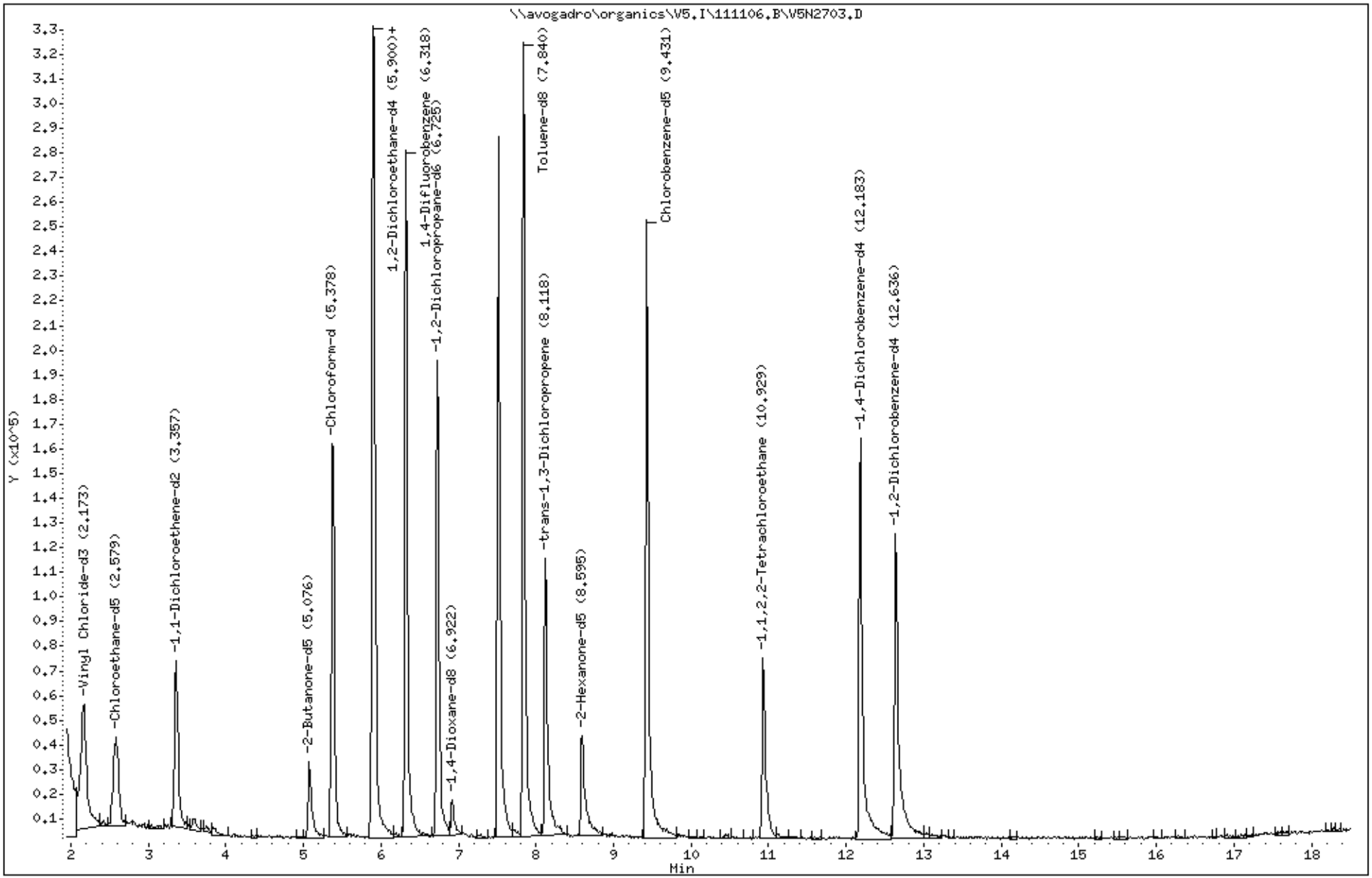
Data file : \\avogadro\organics\V5.I\111106.B\V5N2703.D
Lab Smp Id: K2198-02C Client Smp ID: H30Q1
Inj Date : 07-NOV-2011 00:11
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-02C,,62569
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 35
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111106.B\V5N2703.D
Date : 07-NOV-2011 00:11
Client ID: H30Q1
Sample Info: 5G,K2198-02C,,62569

Instrument: V5.i

Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q2

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-03C

Sample wt/vol: 4.90 (g/mL) G Lab File ID: V5N2704.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 16 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
75-71-8	Dichlorodifluoromethane	6.0	U
74-87-3	Chloromethane	6.0	U
75-01-4	Vinyl chloride	6.0	U
74-83-9	Bromomethane	6.0	U
75-00-3	Chloroethane	6.0	U
75-69-4	Trichlorofluoromethane	6.0	U
75-35-4	1,1-Dichloroethene	6.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	6.0	U
67-64-1	Acetone	12	U
75-15-0	Carbon disulfide	6.0	U
79-20-9	Methyl acetate	6.0	U
75-09-2	Methylene chloride	6.0	U
156-60-5	trans-1,2-Dichloroethene	6.0	U
1634-04-4	Methyl tert-butyl ether	6.0	U
75-34-3	1,1-Dichloroethane	6.0	U
156-59-2	cis-1,2-Dichloroethene	6.0	U
78-93-3	2-Butanone	12	U
74-97-5	Bromochloromethane	6.0	U
67-66-3	Chloroform	6.0	U
71-55-6	1,1,1-Trichloroethane	6.0	U
110-82-7	Cyclohexane	6.0	U
56-23-5	Carbon tetrachloride	6.0	U
71-43-2	Benzene	6.0	U
107-06-2	1,2-Dichloroethane	6.0	U
123-91-1	1,4-Dioxane	120	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q2

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-03C

Sample wt/vol: 4.90 (g/mL) G Lab File ID: V5N2704.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 16 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
79-01-6	Trichloroethene	6.0	U
108-87-2	Methylcyclohexane	6.0	U
78-87-5	1,2-Dichloropropane	6.0	U
75-27-4	Bromodichloromethane	6.0	U
10061-01-5	cis-1,3-Dichloropropene	6.0	U
108-10-1	4-Methyl-2-pentanone	12	U
108-88-3	Toluene	6.0	U
10061-02-6	trans-1,3-Dichloropropene	6.0	U
79-00-5	1,1,2-Trichloroethane	6.0	U
127-18-4	Tetrachloroethene	6.0	U
591-78-6	2-Hexanone	12	U
124-48-1	Dibromochloromethane	6.0	U
106-93-4	1,2-Dibromoethane	6.0	U
108-90-7	Chlorobenzene	6.0	U
100-41-4	Ethylbenzene	6.0	U
179601-23-1	m,p-Xylene	6.0	U
95-47-6	o-Xylene	6.0	U
100-42-5	Styrene	6.0	U
75-25-2	Bromoform	6.0	U
98-82-8	Isopropylbenzene	6.0	U
79-34-5	1,1,2,2-Tetrachloroethane	6.0	U
541-73-1	1,3-Dichlorobenzene	6.0	U
106-46-7	1,4-Dichlorobenzene	6.0	U
95-50-1	1,2-Dichlorobenzene	6.0	U
96-12-8	1,2-Dibromo-3-chloropropane	6.0	U
120-82-1	1,2,4-Trichlorobenzene	6.0	U
87-61-6	1,2,3-Trichlorobenzene	6.0	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30Q2

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-03C

Sample wt/vol: 4.90 (g/mL) G Lab File ID: V5N2704.D

Level: (TRACE or LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 16 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E96679[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2704.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111106.B\V5N2704.D
Lab Smp Id: K2198-03C Client Smp ID: H30Q2
Inj Date : 07-NOV-2011 00:38
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-03C,,62569
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 36
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	4.900	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$	79 Vinyl Chloride-d3	65	2.168	2.173	(0.343)	130028	40.8482	42
$	80 Chloroethane-d5	69	2.586	2.603	(0.409)	96038	46.6429	48(Q)
$	81 1,1-Dichloroethene-d2	65	3.364	3.369	(0.532)	30978	46.9198	48(Q)
$	82 2-Butanone-d5	46	5.071	5.076	(0.802)	73767	83.0938	85
$	83 Chloroform-d	84	5.385	5.390	(0.851)	177084	46.4335	47(Q)
$	23 1,2-Dichloroethane-d4	65	5.896	5.901	(0.932)	95766	46.5232	47(Q)
$	84 Benzene-d6	84	5.907	5.912	(0.627)	334975	50.8102	52
*	26 1,4-Difluorobenzene	114	6.325	6.319	(1.000)	334304	50.0000	
$	85 1,2-Dichloropropane-d6	67	6.732	6.725	(0.714)	130981	48.0754	49
$	94 1,4-Dioxane-d8	96	6.918	6.911	(1.094)	17697	903.258	920
$	33 Toluene-d8	98	7.847	7.840	(0.832)	284731	46.7851	48
$	86 trans-1,3-Dichloropropene-d4	79	8.125	8.119	(0.862)	99364	48.4393	49
$	87 2-Hexanone-d5	63	8.590	8.572	(0.911)	33305	63.5389	65(Q)
*	42 Chlorobenzene-d5	117	9.426	9.431	(1.000)	248975	50.0000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.936	10.929	(1.160)	79119	44.3677	45
*	78 1,4-Dichlorobenzene-d4	152	12.178	12.172	(1.000)	81162	50.0000	
$	90 1,2-Dichlorobenzene-d4	152	12.631	12.625	(1.037)	70811	46.7023	48(Q)

Data File: \\avogadro\organics\V5.I\111106.B\V5N2704.D
Report Date: 09-Nov-2011 07:59

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2704.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111106.B\V5N2704.D
Lab Smp Id: K2198-03C Client Smp ID: H30Q2
Inj Date : 07-NOV-2011 00:38
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-03C,,62569
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 36
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

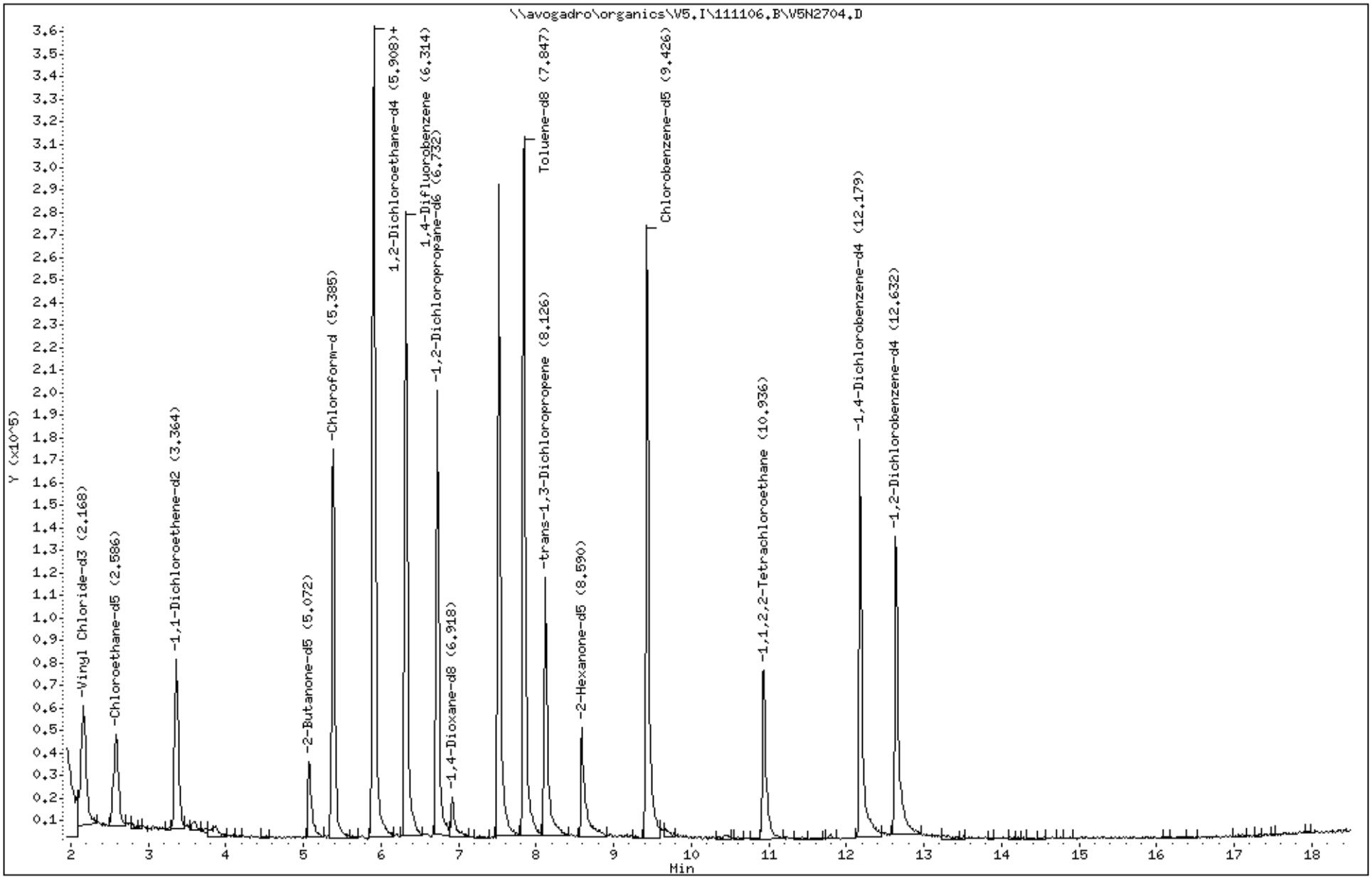
- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111106.B\V5N2704.D
Date : 07-NOV-2011 00:38
Client ID: H30Q2
Sample Info: 5G,K2198-03C,,62569

Instrument: V5.i

Operator: SRC: LIMS
Column diameter: 0.25

Column phase: DB-624



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q3

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-04C

Sample wt/vol: 5.20 (g/mL) G Lab File ID: V5N2705.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 19 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
75-71-8	Dichlorodifluoromethane	5.9	U
74-87-3	Chloromethane	5.9	U
75-01-4	Vinyl chloride	5.9	U
74-83-9	Bromomethane	5.9	U
75-00-3	Chloroethane	5.9	U
75-69-4	Trichlorofluoromethane	5.9	U
75-35-4	1,1-Dichloroethene	5.9	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.9	U
67-64-1	Acetone	12	U
75-15-0	Carbon disulfide	5.9	U
79-20-9	Methyl acetate	5.9	U
75-09-2	Methylene chloride	5.9	U
156-60-5	trans-1,2-Dichloroethene	5.9	U
1634-04-4	Methyl tert-butyl ether	5.9	U
75-34-3	1,1-Dichloroethane	5.9	U
156-59-2	cis-1,2-Dichloroethene	5.9	U
78-93-3	2-Butanone	12	U
74-97-5	Bromochloromethane	5.9	U
67-66-3	Chloroform	5.9	U
71-55-6	1,1,1-Trichloroethane	5.9	U
110-82-7	Cyclohexane	5.9	U
56-23-5	Carbon tetrachloride	5.9	U
71-43-2	Benzene	5.9	U
107-06-2	1,2-Dichloroethane	5.9	U
123-91-1	1,4-Dioxane	120	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

SOM01.2 (6/2007)

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q3

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-04C

Sample wt/vol: 5.20 (g/mL) G Lab File ID: V5N2705.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 19 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
79-01-6	Trichloroethene	5.9	U
108-87-2	Methylcyclohexane	5.9	U
78-87-5	1,2-Dichloropropane	5.9	U
75-27-4	Bromodichloromethane	5.9	U
10061-01-5	cis-1,3-Dichloropropene	5.9	U
108-10-1	4-Methyl-2-pentanone	12	U
108-88-3	Toluene	5.9	U
10061-02-6	trans-1,3-Dichloropropene	5.9	U
79-00-5	1,1,2-Trichloroethane	5.9	U
127-18-4	Tetrachloroethene	5.9	U
591-78-6	2-Hexanone	12	U
124-48-1	Dibromochloromethane	5.9	U
106-93-4	1,2-Dibromoethane	5.9	U
108-90-7	Chlorobenzene	5.9	U
100-41-4	Ethylbenzene	5.9	U
179601-23-1	m,p-Xylene	5.9	U
95-47-6	o-Xylene	5.9	U
100-42-5	Styrene	5.9	U
75-25-2	Bromoform	5.9	U
98-82-8	Isopropylbenzene	5.9	U
79-34-5	1,1,2,2-Tetrachloroethane	5.9	U
541-73-1	1,3-Dichlorobenzene	5.9	U
106-46-7	1,4-Dichlorobenzene	5.9	U
95-50-1	1,2-Dichlorobenzene	5.9	U
96-12-8	1,2-Dibromo-3-chloropropane	5.9	U
120-82-1	1,2,4-Trichlorobenzene	5.9	U
87-61-6	1,2,3-Trichlorobenzene	5.9	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30Q3

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-04C

Sample wt/vol: 5.20 (g/mL) G Lab File ID: V5N2705.D

Level: (TRACE or LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 19 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E96679[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2705.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111106.B\V5N2705.D
Lab Smp Id: K2198-04C Client Smp ID: H30Q3
Inj Date : 07-NOV-2011 01:03
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-04C,,62569
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.200	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$ 79 Vinyl Chloride-d3	65	2.150	2.173	(0.340)	97224	37.7938	36
$ 80 Chloroethane-d5	69	2.580	2.603	(0.408)	67845	40.7729	39
$ 81 1,1-Dichloroethene-d2	65	3.358	3.369	(0.531)	24138	45.2392	43(Q)
$ 82 2-Butanone-d5	46	5.077	5.076	(0.803)	50791	70.7952	68
$ 83 Chloroform-d	84	5.379	5.390	(0.851)	136896	44.4174	43(Q)
$ 23 1,2-Dichloroethane-d4	65	5.890	5.901	(0.932)	68192	40.9923	39
$ 84 Benzene-d6	84	5.913	5.912	(0.627)	265153	48.3913	47
* 26 1,4-Difluorobenzene	114	6.319	6.319	(1.000)	270166	50.0000	
$ 85 1,2-Dichloropropane-d6	67	6.726	6.725	(0.713)	97747	43.1668	42
$ 94 1,4-Dioxane-d8	96	6.923	6.911	(1.096)	9721	613.951	590
$ 33 Toluene-d8	98	7.841	7.840	(0.831)	243359	48.1119	46
$ 86 trans-1,3-Dichloropropene-d4	79	8.119	8.119	(0.861)	72335	42.4277	41
$ 87 2-Hexanone-d5	63	8.607	8.572	(0.913)	20086	46.1059	44(Q)
* 42 Chlorobenzene-d5	117	9.432	9.431	(1.000)	206930	50.0000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.930	10.929	(1.159)	51146	34.5088	33
* 78 1,4-Dichlorobenzene-d4	152	12.184	12.172	(1.000)	72601	50.0000	
$ 90 1,2-Dichlorobenzene-d4	152	12.637	12.625	(1.037)	56054	41.3290	40(Q)

Data File: \\avogadro\organics\V5.I\111106.B\V5N2705.D
Report Date: 09-Nov-2011 07:59

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2705.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

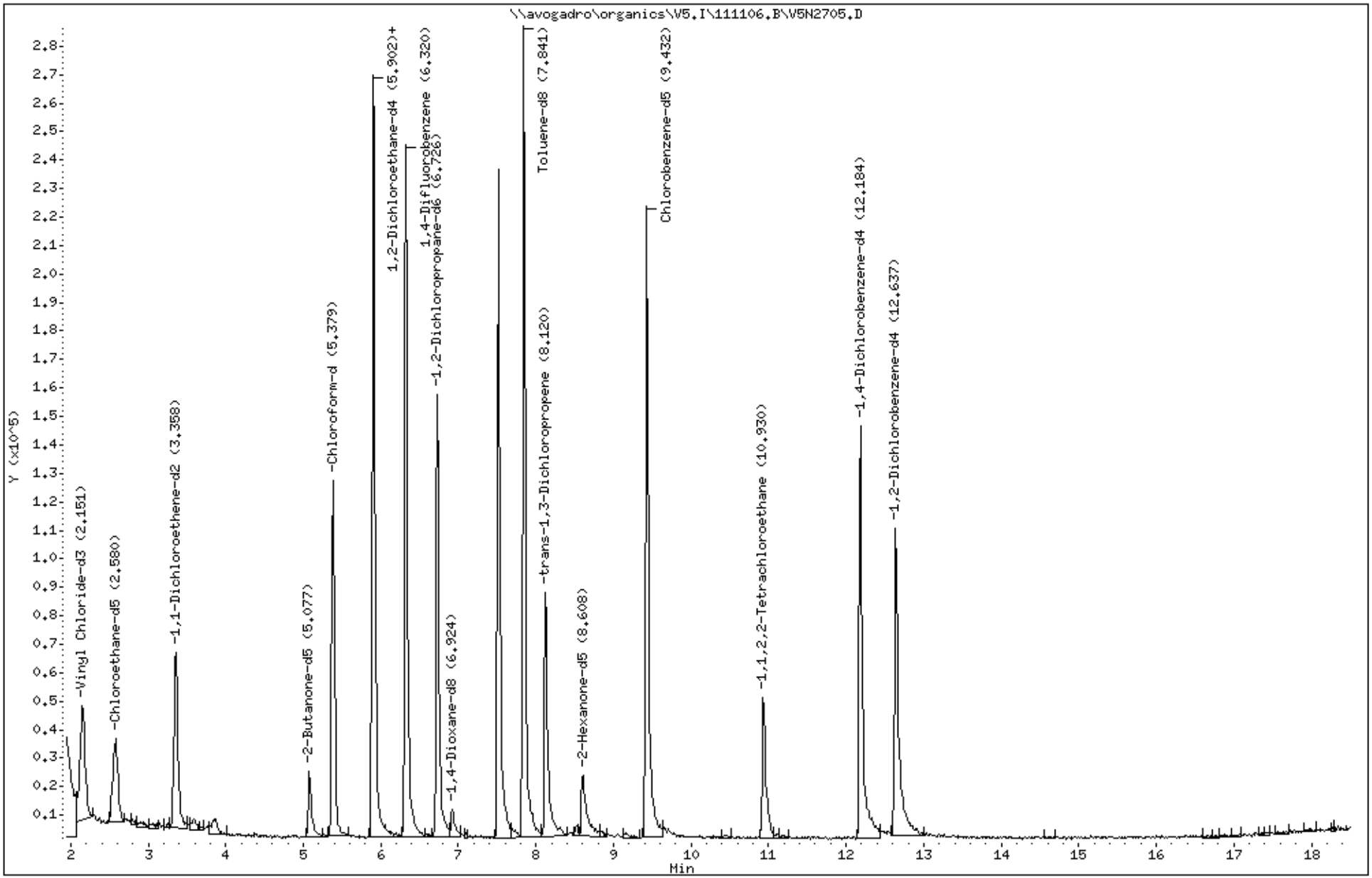
Data file : \\avogadro\organics\V5.I\111106.B\V5N2705.D
Lab Smp Id: K2198-04C Client Smp ID: H30Q3
Inj Date : 07-NOV-2011 01:03
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-04C,,62569
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111106.B\V5N2705.D
Date : 07-NOV-2011 01:03
Client ID: H30Q3
Sample Info: 5G,K2198-04C,,62569

Instrument: V5.i

Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-05C

Sample wt/vol: 5.10 (g/mL) G Lab File ID: V5N2706.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 16 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
75-71-8	Dichlorodifluoromethane	5.8	U
74-87-3	Chloromethane	5.8	U
75-01-4	Vinyl chloride	5.8	U
74-83-9	Bromomethane	5.8	U
75-00-3	Chloroethane	5.8	U
75-69-4	Trichlorofluoromethane	5.8	U
75-35-4	1,1-Dichloroethene	5.8	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.8	U
67-64-1	Acetone	12	U
75-15-0	Carbon disulfide	5.8	U
79-20-9	Methyl acetate	5.8	U
75-09-2	Methylene chloride	5.8	U
156-60-5	trans-1,2-Dichloroethene	5.8	U
1634-04-4	Methyl tert-butyl ether	5.8	U
75-34-3	1,1-Dichloroethane	5.8	U
156-59-2	cis-1,2-Dichloroethene	5.8	U
78-93-3	2-Butanone	12	U
74-97-5	Bromochloromethane	5.8	U
67-66-3	Chloroform	5.8	U
71-55-6	1,1,1-Trichloroethane	5.8	U
110-82-7	Cyclohexane	5.8	U
56-23-5	Carbon tetrachloride	5.8	U
71-43-2	Benzene	5.8	U
107-06-2	1,2-Dichloroethane	5.8	U
123-91-1	1,4-Dioxane	120	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-05C

Sample wt/vol: 5.10 (g/mL) G Lab File ID: V5N2706.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 16 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
79-01-6	Trichloroethene	5.8	U
108-87-2	Methylcyclohexane	5.8	U
78-87-5	1,2-Dichloropropane	5.8	U
75-27-4	Bromodichloromethane	5.8	U
10061-01-5	cis-1,3-Dichloropropene	5.8	U
108-10-1	4-Methyl-2-pentanone	12	U
108-88-3	Toluene	5.8	U
10061-02-6	trans-1,3-Dichloropropene	5.8	U
79-00-5	1,1,2-Trichloroethane	5.8	U
127-18-4	Tetrachloroethene	5.8	U
591-78-6	2-Hexanone	12	U
124-48-1	Dibromochloromethane	5.8	U
106-93-4	1,2-Dibromoethane	5.8	U
108-90-7	Chlorobenzene	5.8	U
100-41-4	Ethylbenzene	5.8	U
179601-23-1	m,p-Xylene	5.8	U
95-47-6	o-Xylene	5.8	U
100-42-5	Styrene	5.8	U
75-25-2	Bromoform	5.8	U
98-82-8	Isopropylbenzene	5.8	U
79-34-5	1,1,2,2-Tetrachloroethane	5.8	U
541-73-1	1,3-Dichlorobenzene	5.8	U
106-46-7	1,4-Dichlorobenzene	5.8	U
95-50-1	1,2-Dichlorobenzene	5.8	U
96-12-8	1,2-Dibromo-3-chloropropane	5.8	U
120-82-1	1,2,4-Trichlorobenzene	5.8	U
87-61-6	1,2,3-Trichlorobenzene	5.8	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30Q4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-05C

Sample wt/vol: 5.10 (g/mL) G Lab File ID: V5N2706.D

Level: (TRACE or LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 16 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E96679[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2706.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111106.B\V5N2706.D
Lab Smp Id: K2198-05C Client Smp ID: H30Q4
Inj Date : 07-NOV-2011 01:30
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-05C,,62569
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.100	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$	79 Vinyl Chloride-d3	65	2.162	2.173	(0.342)	104370	38.2549	38
$	80 Chloroethane-d5	69	2.591	2.603	(0.410)	74070	41.9720	41(Q)
$	81 1,1-Dichloroethene-d2	65	3.358	3.369	(0.531)	25627	45.2871	44(Q)
$	82 2-Butanone-d5	46	5.077	5.076	(0.803)	62669	82.3633	81
$	83 Chloroform-d	84	5.390	5.390	(0.853)	146125	44.7045	44(Q)
$	23 1,2-Dichloroethane-d4	65	5.901	5.901	(0.934)	75119	42.5778	42(Q)
$	84 Benzene-d6	84	5.913	5.912	(0.627)	276715	46.7866	46
*	26 1,4-Difluorobenzene	114	6.319	6.319	(1.000)	286528	50.0000	
$	85 1,2-Dichloropropane-d6	67	6.726	6.725	(0.713)	105392	43.1193	42
$	94 1,4-Dioxane-d8	96	6.923	6.911	(1.096)	12603	750.517	740
$	33 Toluene-d8	98	7.841	7.840	(0.831)	250867	45.9480	45
$	86 trans-1,3-Dichloropropene-d4	79	8.119	8.119	(0.861)	86187	46.8340	46
$	87 2-Hexanone-d5	63	8.584	8.572	(0.910)	34347	73.0415	72(Q)
*	42 Chlorobenzene-d5	117	9.432	9.431	(1.000)	223360	50.0000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.930	10.929	(1.159)	67922	42.4568	42
*	78 1,4-Dichlorobenzene-d4	152	12.184	12.172	(1.000)	84345	50.0000	
$	90 1,2-Dichlorobenzene-d4	152	12.637	12.625	(1.037)	70132	44.5089	44(Q)

Data File: \\avogadro\organics\V5.I\111106.B\V5N2706.D
Report Date: 09-Nov-2011 07:59

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2706.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111106.B\V5N2706.D
Lab Smp Id: K2198-05C Client Smp ID: H30Q4
Inj Date : 07-NOV-2011 01:30
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-05C,,62569
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

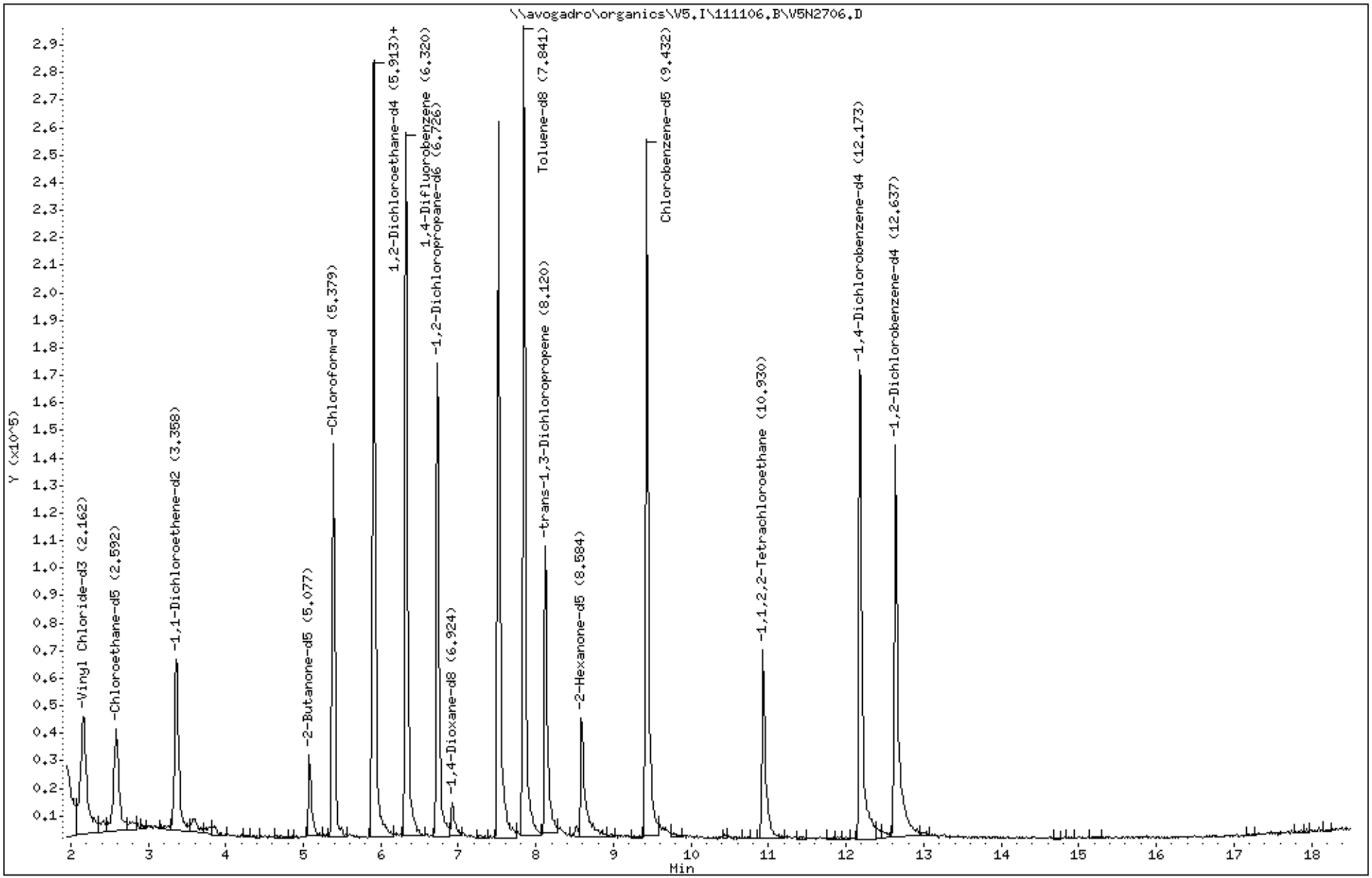
- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111106.B\V5N2706.D
Date : 07-NOV-2011 01:30
Client ID: H30Q4
Sample Info: 5G,K2198-05C,,62569

Instrument: V5.i

Operator: SRC: LIMS
Column diameter: 0.25

Column phase: DB-624



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q6

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-06C

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N2707.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 48 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
75-71-8	Dichlorodifluoromethane	9.6	U
74-87-3	Chloromethane	9.6	U
75-01-4	Vinyl chloride	9.6	U
74-83-9	Bromomethane	9.6	U
75-00-3	Chloroethane	9.6	U
75-69-4	Trichlorofluoromethane	9.6	U
75-35-4	1,1-Dichloroethene	9.6	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	9.6	U
67-64-1	Acetone	19	U
75-15-0	Carbon disulfide	9.6	U
79-20-9	Methyl acetate	9.6	U
75-09-2	Methylene chloride	9.6	U
156-60-5	trans-1,2-Dichloroethene	9.6	U
1634-04-4	Methyl tert-butyl ether	9.6	U
75-34-3	1,1-Dichloroethane	9.6	U
156-59-2	cis-1,2-Dichloroethene	9.6	U
78-93-3	2-Butanone	19	U
74-97-5	Bromochloromethane	9.6	U
67-66-3	Chloroform	9.6	U
71-55-6	1,1,1-Trichloroethane	9.6	U
110-82-7	Cyclohexane	9.6	U
56-23-5	Carbon tetrachloride	9.6	U
71-43-2	Benzene	9.6	U
107-06-2	1,2-Dichloroethane	9.6	U
123-91-1	1,4-Dioxane	190	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q6

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-06C

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N2707.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 48 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
79-01-6	Trichloroethene	9.6	U
108-87-2	Methylcyclohexane	9.6	U
78-87-5	1,2-Dichloropropane	9.6	U
75-27-4	Bromodichloromethane	9.6	U
10061-01-5	cis-1,3-Dichloropropene	9.6	U
108-10-1	4-Methyl-2-pentanone	19	U
108-88-3	Toluene	9.6	U
10061-02-6	trans-1,3-Dichloropropene	9.6	U
79-00-5	1,1,2-Trichloroethane	9.6	U
127-18-4	Tetrachloroethene	9.6	U
591-78-6	2-Hexanone	19	U
124-48-1	Dibromochloromethane	9.6	U
106-93-4	1,2-Dibromoethane	9.6	U
108-90-7	Chlorobenzene	9.6	U
100-41-4	Ethylbenzene	9.6	U
179601-23-1	m,p-Xylene	9.6	U
95-47-6	o-Xylene	9.6	U
100-42-5	Styrene	9.6	U
75-25-2	Bromoform	9.6	U
98-82-8	Isopropylbenzene	9.6	U
79-34-5	1,1,2,2-Tetrachloroethane	9.6	U
541-73-1	1,3-Dichlorobenzene	9.6	U
106-46-7	1,4-Dichlorobenzene	9.6	U
95-50-1	1,2-Dichlorobenzene	9.6	U
96-12-8	1,2-Dibromo-3-chloropropane	9.6	U
120-82-1	1,2,4-Trichlorobenzene	9.6	U
87-61-6	1,2,3-Trichlorobenzene	9.6	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30Q6

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-06C

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N2707.D

Level: (TRACE or LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 48 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E96679[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2707.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111106.B\V5N2707.D
Lab Smp Id: K2198-06C Client Smp ID: H30Q6
Inj Date : 07-NOV-2011 01:58
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-06C,,62569
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$ 79 Vinyl Chloride-d3	65	2.162	2.173	(0.342)	100176	40.7039	41
$ 80 Chloroethane-d5	69	2.592	2.603	(0.410)	68731	43.1749	43(Q)
$ 81 1,1-Dichloroethene-d2	65	3.358	3.369	(0.531)	23277	45.6001	46(Q)
$ 82 2-Butanone-d5	46	5.077	5.076	(0.803)	62758	91.4349	91
$ 83 Chloroform-d	84	5.390	5.390	(0.853)	137071	46.4873	46(Q)
$ 23 1,2-Dichloroethane-d4	65	5.901	5.901	(0.934)	73897	46.4325	46
$ 84 Benzene-d6	84	5.913	5.912	(0.627)	260926	46.1400	46
* 26 1,4-Difluorobenzene	114	6.319	6.319	(1.000)	258467	50.0000	
$ 85 1,2-Dichloropropane-d6	67	6.726	6.725	(0.713)	97970	41.9207	42
$ 94 1,4-Dioxane-d8	96	6.923	6.911	(1.096)	13463	888.772	890
$ 33 Toluene-d8	98	7.841	7.840	(0.831)	235896	45.1871	45
$ 86 trans-1,3-Dichloropropene-d4	79	8.119	8.119	(0.861)	81873	46.5298	47
$ 87 2-Hexanone-d5	63	8.584	8.572	(0.910)	33404	74.2935	74(Q)
* 42 Chlorobenzene-d5	117	9.432	9.431	(1.000)	213567	50.0000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.930	10.929	(1.159)	68245	44.6147	45
* 78 1,4-Dichlorobenzene-d4	152	12.184	12.172	(1.000)	77980	50.0000	
$ 90 1,2-Dichlorobenzene-d4	152	12.637	12.625	(1.037)	66124	45.3906	45(Q)

Data File: \\avogadro\organics\V5.I\111106.B\V5N2707.D
Report Date: 09-Nov-2011 07:59

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2707.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

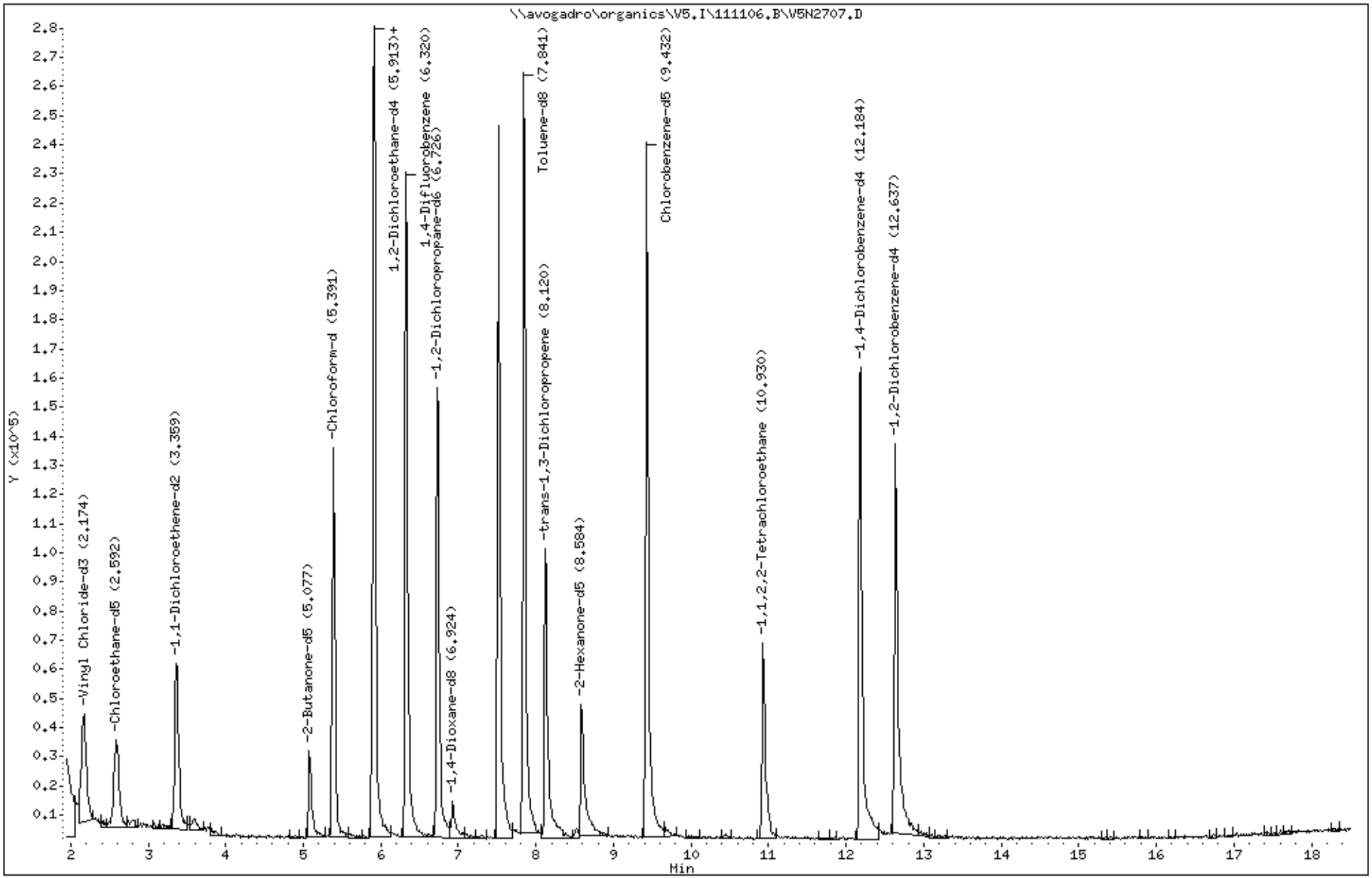
Data file : \\avogadro\organics\V5.I\111106.B\V5N2707.D
Lab Smp Id: K2198-06C Client Smp ID: H30Q6
Inj Date : 07-NOV-2011 01:58
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-06C,,62569
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111106.B\V5N2707.D
Date : 07-NOV-2011 01:58
Client ID: H30Q6
Sample Info: 5G,K2198-06C,,62569

Instrument: V5.i

Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q8

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-07C

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N2708.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 70 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
75-71-8	Dichlorodifluoromethane	17	U
74-87-3	Chloromethane	17	U
75-01-4	Vinyl chloride	17	U
74-83-9	Bromomethane	17	U
75-00-3	Chloroethane	17	U
75-69-4	Trichlorofluoromethane	17	U
75-35-4	1,1-Dichloroethene	17	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	17	U
67-64-1	Acetone	33	U
75-15-0	Carbon disulfide	17	U
79-20-9	Methyl acetate	17	U
75-09-2	Methylene chloride	17	U
156-60-5	trans-1,2-Dichloroethene	17	U
1634-04-4	Methyl tert-butyl ether	17	U
75-34-3	1,1-Dichloroethane	17	U
156-59-2	cis-1,2-Dichloroethene	17	U
78-93-3	2-Butanone	33	U
74-97-5	Bromochloromethane	17	U
67-66-3	Chloroform	17	U
71-55-6	1,1,1-Trichloroethane	17	U
110-82-7	Cyclohexane	17	U
56-23-5	Carbon tetrachloride	17	U
71-43-2	Benzene	17	U
107-06-2	1,2-Dichloroethane	17	U
123-91-1	1,4-Dioxane	330	U

Report 1,4-Dioxane for Low-Medium VOA analysis only SOM01.2 (6/2007)

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q8

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-07C

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N2708.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 70 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
79-01-6	Trichloroethene	17	U
108-87-2	Methylcyclohexane	17	U
78-87-5	1,2-Dichloropropane	17	U
75-27-4	Bromodichloromethane	17	U
10061-01-5	cis-1,3-Dichloropropene	17	U
108-10-1	4-Methyl-2-pentanone	33	U
108-88-3	Toluene	17	U
10061-02-6	trans-1,3-Dichloropropene	17	U
79-00-5	1,1,2-Trichloroethane	17	U
127-18-4	Tetrachloroethene	17	U
591-78-6	2-Hexanone	33	U
124-48-1	Dibromochloromethane	17	U
106-93-4	1,2-Dibromoethane	17	U
108-90-7	Chlorobenzene	17	U
100-41-4	Ethylbenzene	17	U
179601-23-1	m,p-Xylene	17	U
95-47-6	o-Xylene	17	U
100-42-5	Styrene	17	U
75-25-2	Bromoform	17	U
98-82-8	Isopropylbenzene	17	U
79-34-5	1,1,2,2-Tetrachloroethane	17	U
541-73-1	1,3-Dichlorobenzene	17	U
106-46-7	1,4-Dichlorobenzene	17	U
95-50-1	1,2-Dichlorobenzene	17	U
96-12-8	1,2-Dibromo-3-chloropropane	17	U
120-82-1	1,2,4-Trichlorobenzene	17	U
87-61-6	1,2,3-Trichlorobenzene	17	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30Q8

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-07C

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N2708.D

Level: (TRACE or LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 70 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E96679[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2708.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111106.B\V5N2708.D
Lab Smp Id: K2198-07C Client Smp ID: H30Q8
Inj Date : 07-NOV-2011 02:25
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-07C,,62569
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$	79 Vinyl Chloride-d3	65	2.156	2.173	(0.341)	95939	37.6295	38
$	80 Chloroethane-d5	69	2.586	2.603	(0.409)	68634	41.6178	42(Q)
$	81 1,1-Dichloroethene-d2	65	3.352	3.369	(0.530)	23027	43.5449	44(Q)
$	82 2-Butanone-d5	46	5.071	5.076	(0.802)	63336	89.0747	89
$	83 Chloroform-d	84	5.385	5.390	(0.851)	134232	43.9446	44(Q)
$	23 1,2-Dichloroethane-d4	65	5.896	5.901	(0.932)	73920	44.8351	45
$	84 Benzene-d6	84	5.907	5.912	(0.626)	260411	49.8921	50
*	26 1,4-Difluorobenzene	114	6.325	6.319	(1.000)	267759	50.0000	
$	85 1,2-Dichloropropane-d6	67	6.732	6.725	(0.713)	95906	44.4625	44
$	94 1,4-Dioxane-d8	96	6.918	6.911	(1.094)	13657	870.292	870
$	33 Toluene-d8	98	7.847	7.840	(0.831)	230374	47.8124	48
$	86 trans-1,3-Dichloropropene-d4	79	8.125	8.119	(0.861)	86288	53.1316	53
$	87 2-Hexanone-d5	63	8.590	8.572	(0.910)	30956	74.5949	75(Q)
*	42 Chlorobenzene-d5	117	9.438	9.431	(1.000)	197116	50.0000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.936	10.929	(1.159)	67377	47.7234	48
*	78 1,4-Dichlorobenzene-d4	152	12.178	12.172	(1.000)	79374	50.0000	
$	90 1,2-Dichlorobenzene-d4	152	12.643	12.625	(1.038)	67340	45.4135	45(Q)

Data File: \\avogadro\organics\V5.I\111106.B\V5N2708.D
Report Date: 09-Nov-2011 07:59

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2708.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

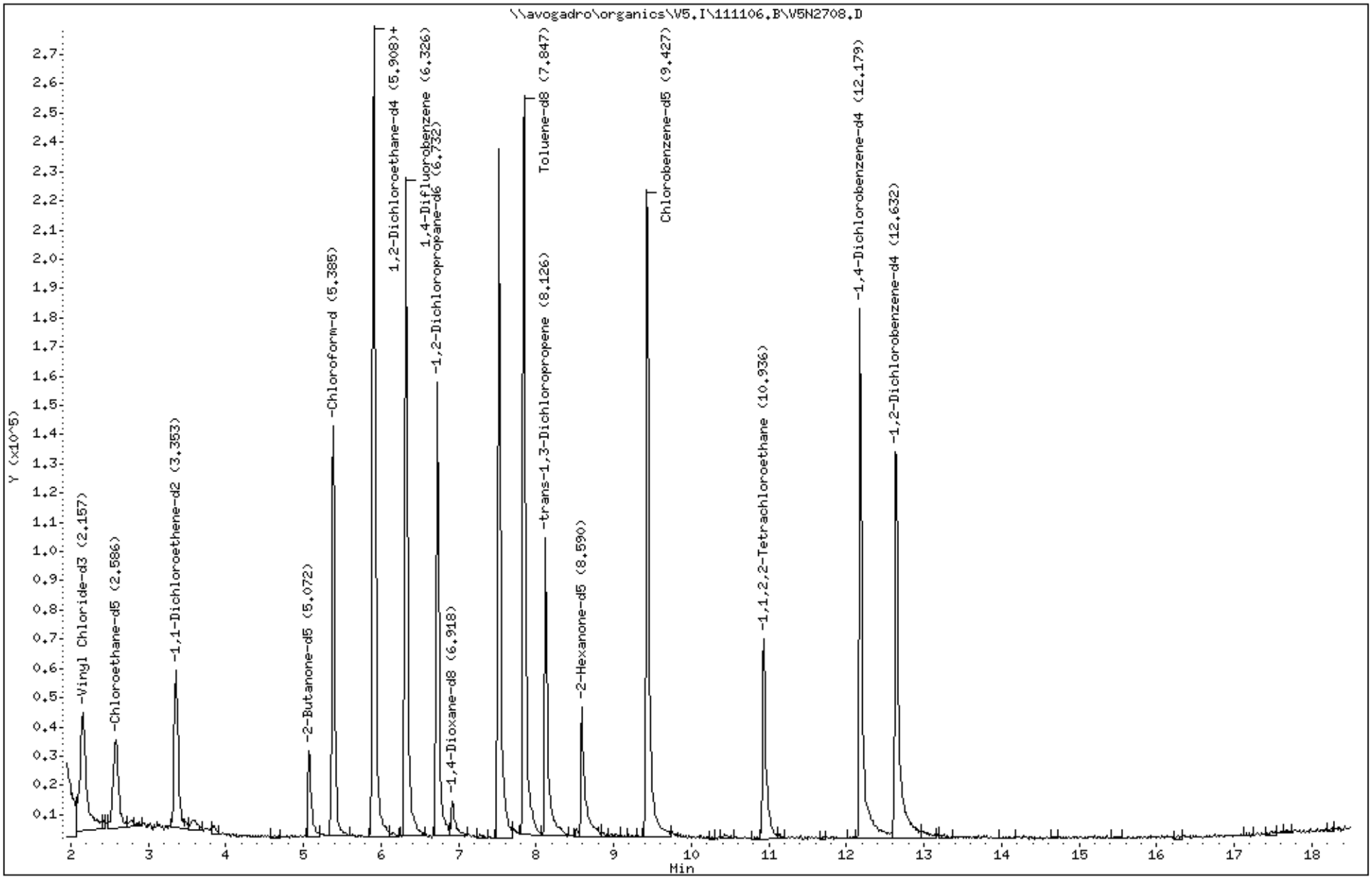
Data file : \\avogadro\organics\V5.I\111106.B\V5N2708.D
Lab Smp Id: K2198-07C Client Smp ID: H30Q8
Inj Date : 07-NOV-2011 02:25
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-07C,,62569
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111106.B\V5N2708.D
Date : 07-NOV-2011 02:25
Client ID: H30Q8
Sample Info: 5G,K2198-07C,,62569

Instrument: V5.i

Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q9

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-08C

Sample wt/vol: 5.20 (g/mL) G Lab File ID: V5N2709.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 62 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
75-71-8	Dichlorodifluoromethane	13	U
74-87-3	Chloromethane	13	U
75-01-4	Vinyl chloride	13	U
74-83-9	Bromomethane	13	U
75-00-3	Chloroethane	13	U
75-69-4	Trichlorofluoromethane	13	U
75-35-4	1,1-Dichloroethene	13	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	13	U
67-64-1	Acetone	100	
75-15-0	Carbon disulfide	13	U
79-20-9	Methyl acetate	13	U
75-09-2	Methylene chloride	13	U
156-60-5	trans-1,2-Dichloroethene	13	U
1634-04-4	Methyl tert-butyl ether	13	U
75-34-3	1,1-Dichloroethane	13	U
156-59-2	cis-1,2-Dichloroethene	13	U
78-93-3	2-Butanone	25	U
74-97-5	Bromochloromethane	13	U
67-66-3	Chloroform	13	U
71-55-6	1,1,1-Trichloroethane	13	U
110-82-7	Cyclohexane	13	U
56-23-5	Carbon tetrachloride	13	U
71-43-2	Benzene	13	U
107-06-2	1,2-Dichloroethane	13	U
123-91-1	1,4-Dioxane	250	U

Report 1,4-Dioxane for Low-Medium VOA analysis only SOM01.2 (6/2007)

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q9

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-08C

Sample wt/vol: 5.20 (g/mL) G Lab File ID: V5N2709.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 62 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
79-01-6	Trichloroethene	13	U
108-87-2	Methylcyclohexane	13	U
78-87-5	1,2-Dichloropropane	13	U
75-27-4	Bromodichloromethane	13	U
10061-01-5	cis-1,3-Dichloropropene	13	U
108-10-1	4-Methyl-2-pentanone	25	U
108-88-3	Toluene	13	U
10061-02-6	trans-1,3-Dichloropropene	13	U
79-00-5	1,1,2-Trichloroethane	13	U
127-18-4	Tetrachloroethene	13	U
591-78-6	2-Hexanone	25	U
124-48-1	Dibromochloromethane	13	U
106-93-4	1,2-Dibromoethane	13	U
108-90-7	Chlorobenzene	13	U
100-41-4	Ethylbenzene	13	U
179601-23-1	m,p-Xylene	13	U
95-47-6	o-Xylene	13	U
100-42-5	Styrene	13	U
75-25-2	Bromoform	13	U
98-82-8	Isopropylbenzene	13	U
79-34-5	1,1,2,2-Tetrachloroethane	13	U
541-73-1	1,3-Dichlorobenzene	13	U
106-46-7	1,4-Dichlorobenzene	13	U
95-50-1	1,2-Dichlorobenzene	13	U
96-12-8	1,2-Dibromo-3-chloropropane	13	U
120-82-1	1,2,4-Trichlorobenzene	13	U
87-61-6	1,2,3-Trichlorobenzene	13	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30Q9

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-08C

Sample wt/vol: 5.20 (g/mL) G Lab File ID: V5N2709.D

Level: (TRACE or LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 62 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG Purge Volume: 10.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	7785-70-8	1R-.alpha.-Pinene	10.570	83	NJ
02	79-92-5	Camphene	10.906	140	NJ
03		Unknown-01	11.301	15	J
04	5256-65-5	Cyclohexene, 3-methyl-6-(1-m	11.382	150	NJ
05	13466-78-9	3-Carene	11.766	530	NJ
06		Unknown-02	12.068	58	J
07	527-84-4	Benzene, 1-methyl-2-(1-methy	12.126	1400	NJ
08	7787-20-4	Bicyclo[2.2.1]heptan-2-one,	13.542	14	NJ
09	464-48-2	Bicyclo[2.2.1]heptan-2-one,	14.495	56	NJ
10	475-20-7	1,4-Methanoazulene, decahydr	17.224	14	NJ
	E96679[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2709.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111106.B\V5N2709.D
Lab Smp Id: K2198-08C Client Smp ID: H30Q9
Inj Date : 07-NOV-2011 02:56
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-08C,,62569
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 41
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.200	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$ 79 Vinyl Chloride-d3	65	2.173	2.173	(0.344)	94091	32.3558	31(R)
$ 80 Chloroethane-d5	69	2.591	2.603	(0.410)	85443	45.4242	44
$ 81 1,1-Dichloroethene-d2	65	3.357	3.369	(0.531)	25042	41.5183	40(Q)
9 Acetone	43	3.450	3.450	(0.546)	22696	40.7895	39
$ 82 2-Butanone-d5	46	5.076	5.076	(0.803)	87929	108.419	100
$ 83 Chloroform-d	84	5.378	5.390	(0.851)	169985	48.7900	47(Q)
$ 23 1,2-Dichloroethane-d4	65	5.889	5.901	(0.932)	88730	47.1843	45(Q)
$ 84 Benzene-d6	84	5.912	5.912	(0.627)	315080	55.4795	53
* 26 1,4-Difluorobenzene	114	6.319	6.319	(1.000)	305403	50.0000	
$ 85 1,2-Dichloropropane-d6	67	6.725	6.725	(0.713)	129872	55.3354	53
$ 94 1,4-Dioxane-d8	96	6.923	6.911	(1.096)	17008	950.241	910
$ 33 Toluene-d8	98	7.840	7.840	(0.831)	250818	47.8415	46
$ 86 trans-1,3-Dichloropropene-d4	79	8.119	8.119	(0.861)	77529	43.8739	42
$ 87 2-Hexanone-d5	63	8.583	8.572	(0.910)	44505	98.5627	95(Q)
* 42 Chlorobenzene-d5	117	9.431	9.431	(1.000)	214478	50.0000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.929	10.929	(1.159)	73099	47.5850	46
* 78 1,4-Dichlorobenzene-d4	152	12.172	12.172	(1.000)	67636	50.0000	(Q)
$ 90 1,2-Dichlorobenzene-d4	152	12.636	12.625	(1.038)	61170	48.4118	47(Q)

Data File: \\avogadro\organics\V5.I\111106.B\V5N2709.D
Report Date: 09-Nov-2011 07:59

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2709.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111106.B\V5N2709.D
Lab Smp Id: K2198-08C Client Smp ID: H30Q9
Inj Date : 07-NOV-2011 02:56
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-08C,,62569
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 41
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.200	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 42 Chlorobenzene-d5	9.431	635016	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
1R-.alpha.-Pinene				CAS #: 7785-70-8			
10.570	412366	32.4689405	31	96	NIST2002.L	15163	42
Camphene				CAS #: 79-92-5			
10.906	697437	54.9148365	53	98	NIST2002.L	15135	42
Unknown				CAS #:			
11.301	74710	5.88252940	5.7	0		0	42
Cyclohexene, 3-methyl-6-(1-methylethyl)-				CAS #: 5256-65-5			
11.382	753963	59.3656557	57	96	NIST2002.L	16375	42
3-Carene				CAS #: 13466-78-9			
11.766	2657561	209.251380	200	97	NIST2002.L	15125	42

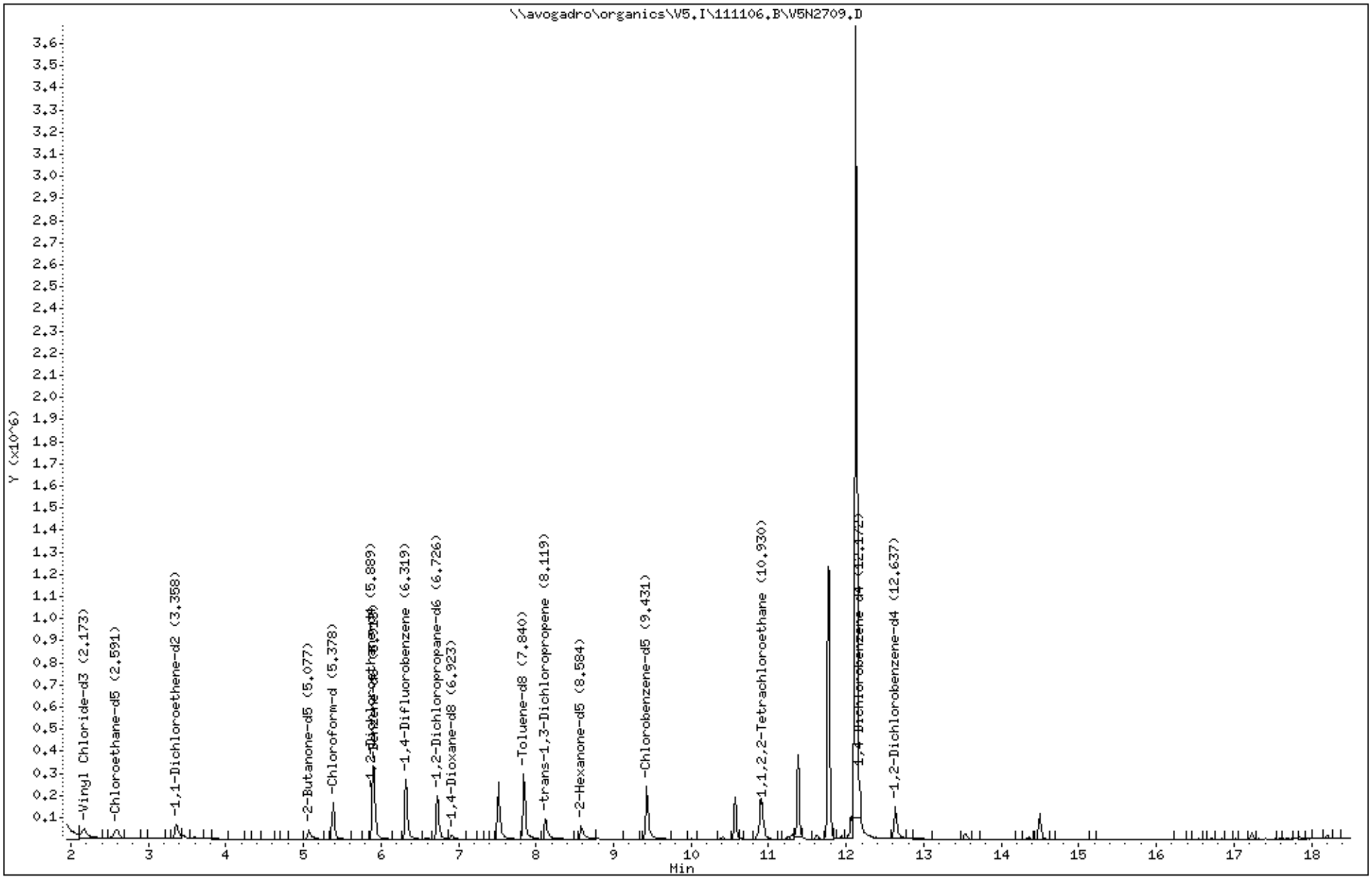
Data File: \\avogadro\organics\V5.I\111106.B\V5N2709.D
Report Date: 09-Nov-2011 07:59

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
12.068	288063	22.6815685	22	0		0	42
Benzene, 1-methyl-2-(1-methylethyl)-					CAS #: 527-84-4		
12.126	6968981	548.724452	530	96	NIST2002.L	14395	42
Bicyclo[2.2.1]heptan-2-one, 1,3,3-trimet					CAS #: 7787-20-4		
13.542	71724	5.64742374	5.4	93	NIST2002.L	24201	42
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet					CAS #: 464-48-2		
14.495	280264	22.0674795	21	98	NIST2002.L	24208	42
1,4-Methanoazulene, decahydro-4,8,8-trim					CAS #: 475-20-7		
17.224	69120	5.44236064	5.2	99	NIST2002.L	58865	42

Data File: \\avogadro\organics\V5.I\111106.B\V5N2709.D
Date : 07-NOV-2011 02:56
Client ID: H30Q9
Sample Info: 5G,K2198-08C,,62569

Instrument: V5.i

Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111106.B\V5N2709.D

Date : 07-NOV-2011 02:56

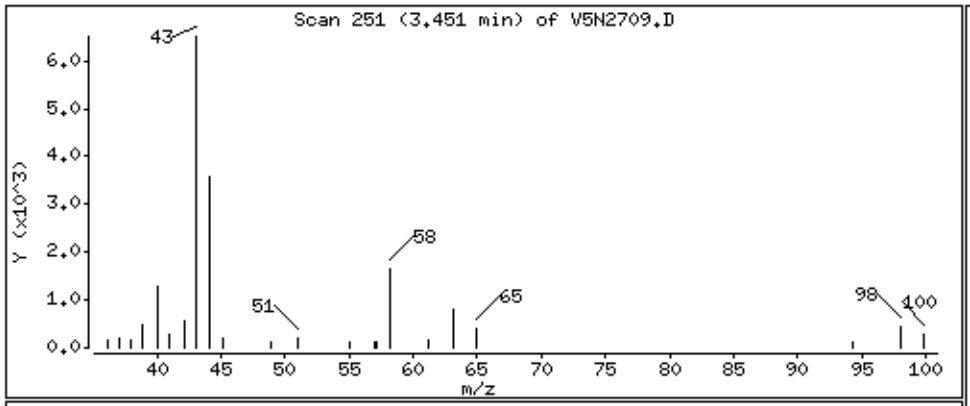
Client ID: H30Q9 Instrument: V5.i

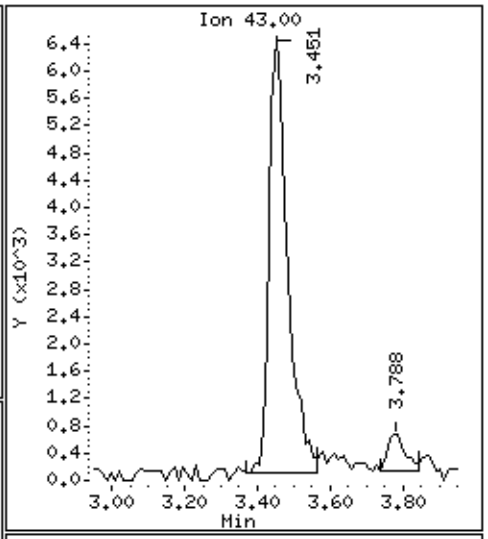
Sample Info: 5G,K2198-08C,,62569

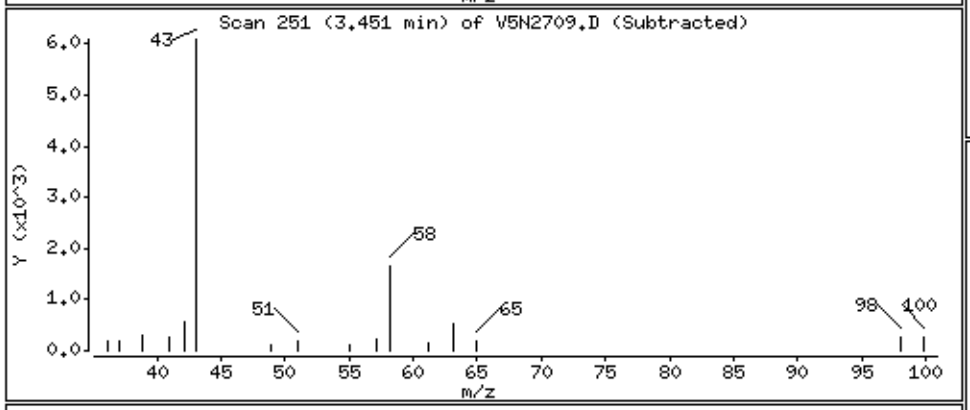
Operator: SRC: LIMS

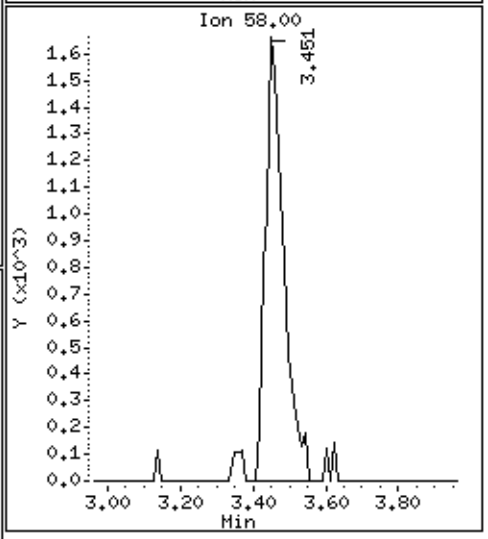
Column phase: DB-624 Column diameter: 0.25

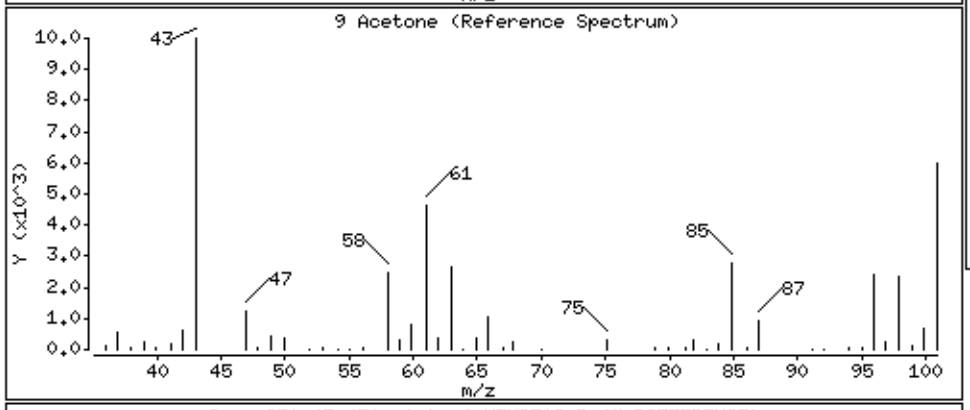
9 Acetone Concentration: 39 ug/Kg

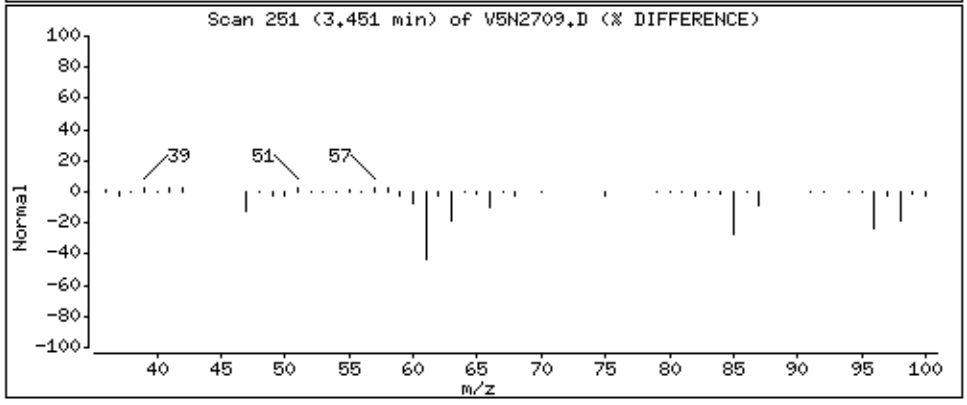












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Date : 07-NOV-2011 02:56

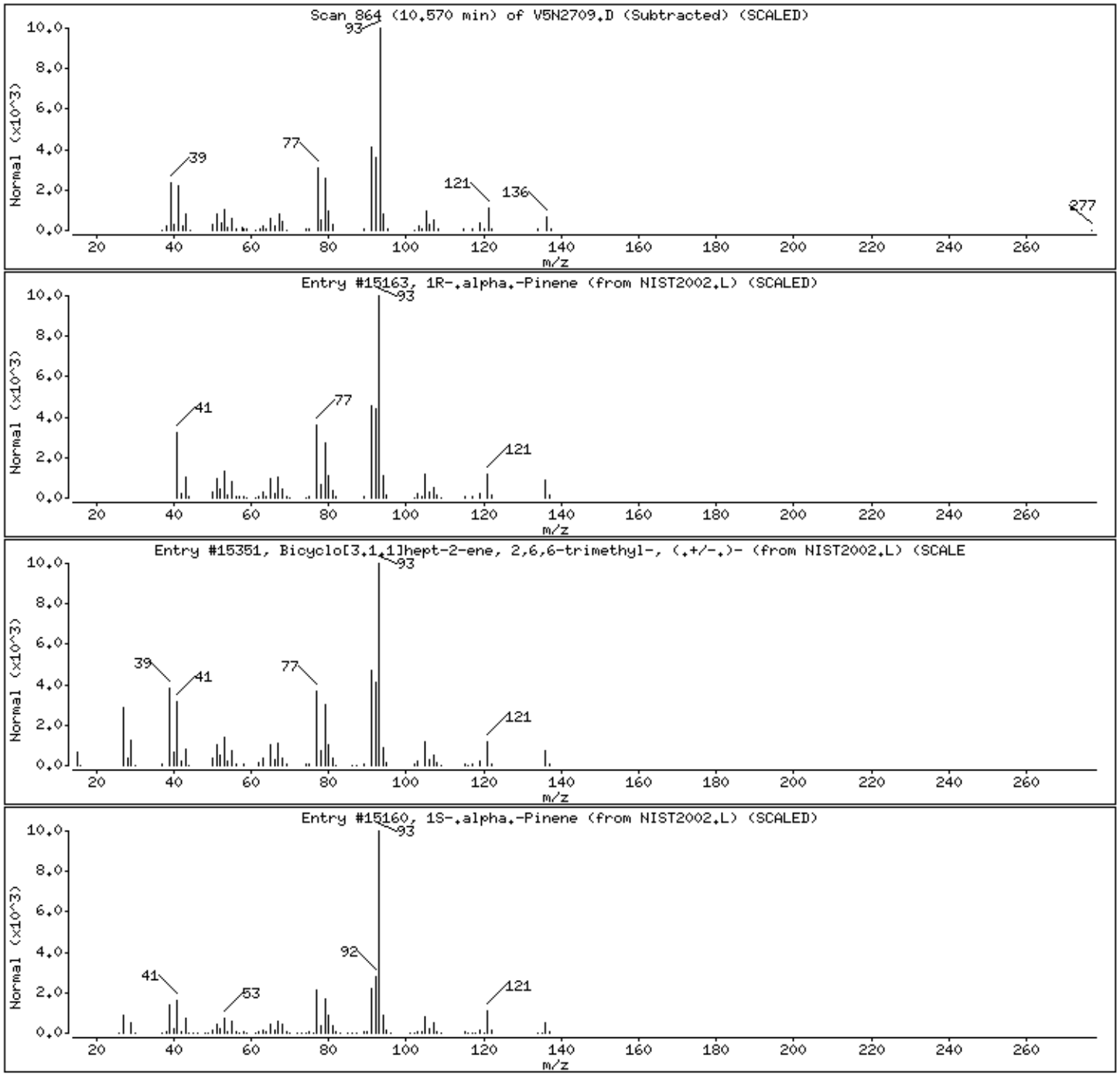
Client ID: H30Q9 Instrument: V5.i

Sample Info: 5G,K2198-08C,,62569

Operator: SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1R-.alpha.-Pinene	7785-70-8	NIST2002.L	15163	96	C10H16	136
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethy	2437-95-8	NIST2002.L	15351	95	C10H16	136
1S-.alpha.-Pinene	7785-26-4	NIST2002.L	15160	91	C10H16	136



Data File: \\avogadro\organics\V5.I\111106.B\V5N2709.D

Date : 07-NOV-2011 02:56

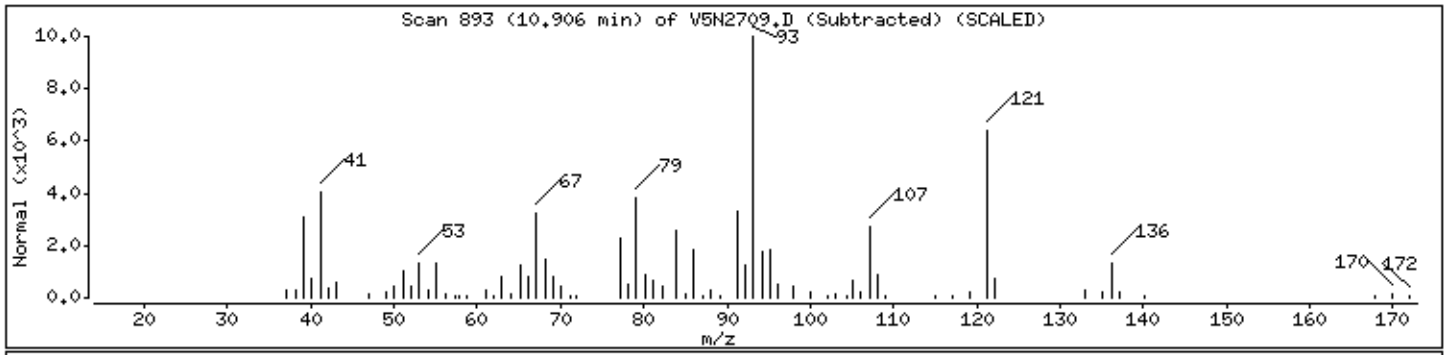
Client ID: H30Q9 Instrument: V5.i

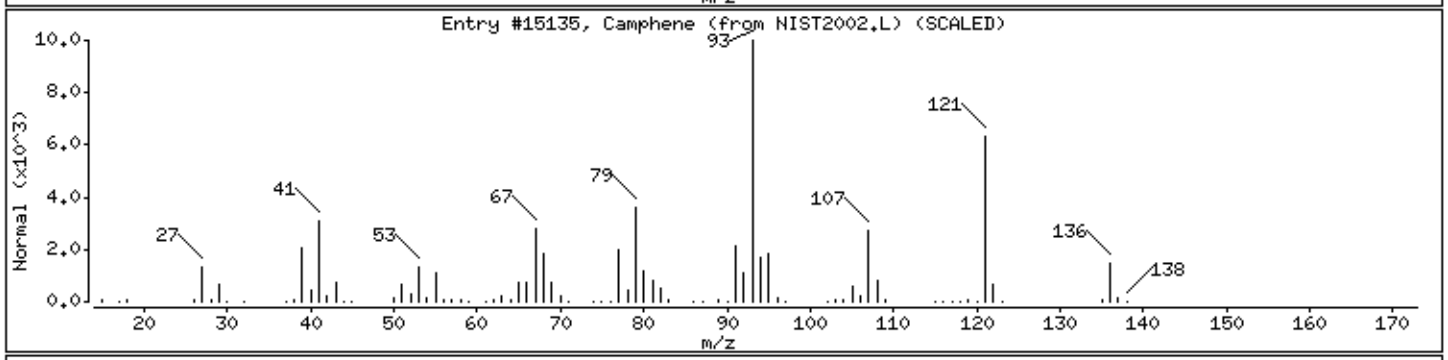
Sample Info: 5G,K2198-08C,,62569

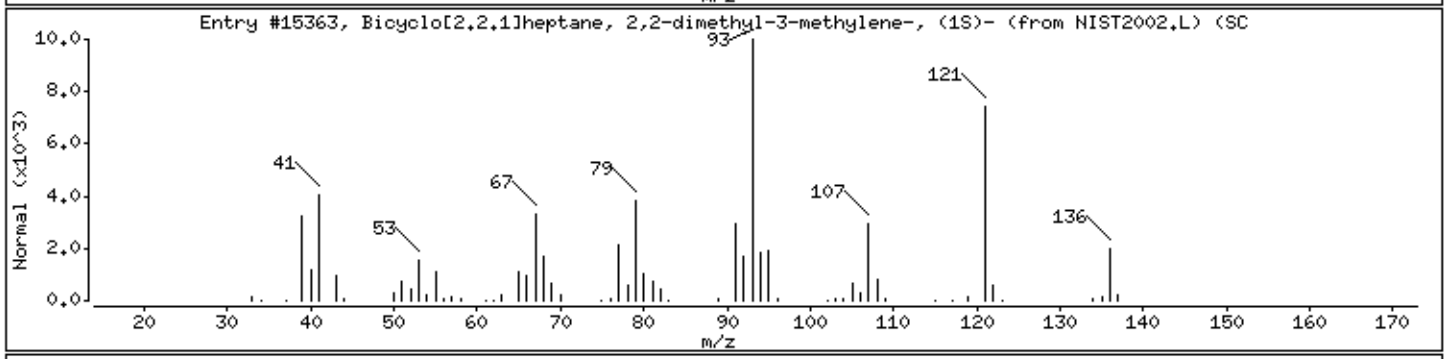
Operator: SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Camphene	79-92-5	NIST2002.L	15135	98	C10H16	136
Bicyclo[2.2.1]heptane, 2,2-dimethyl-3-me	5794-04-7	NIST2002.L	15363	95	C10H16	136







Data File: \\avogadro\organics\V5.I\111106.B\V5N2709.D

Date : 07-NOV-2011 02:56

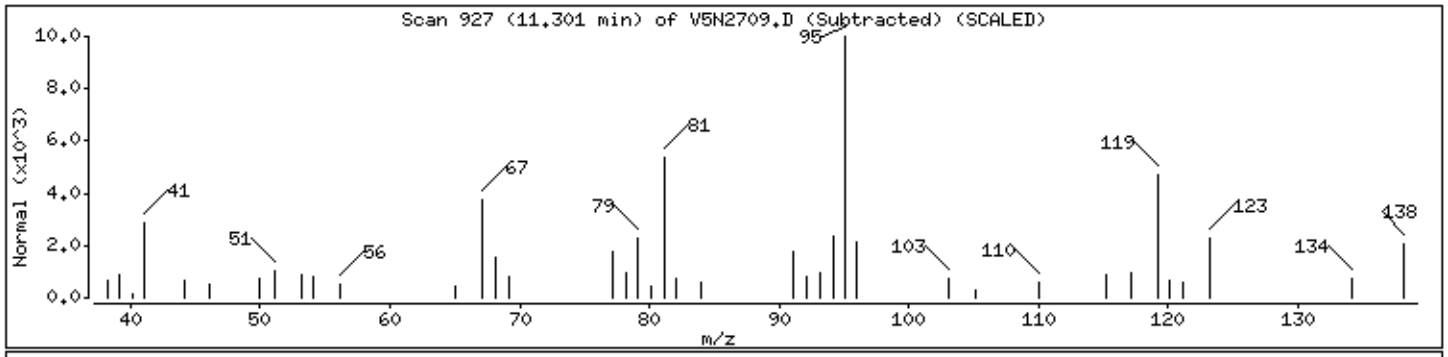
Client ID: H30Q9 Instrument: V5.i

Sample Info: 5G,K2198-08C,,62569

Operator: SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\avogadro\organics\V5.I\111106.B\V5N2709.D

Date : 07-NOV-2011 02:56

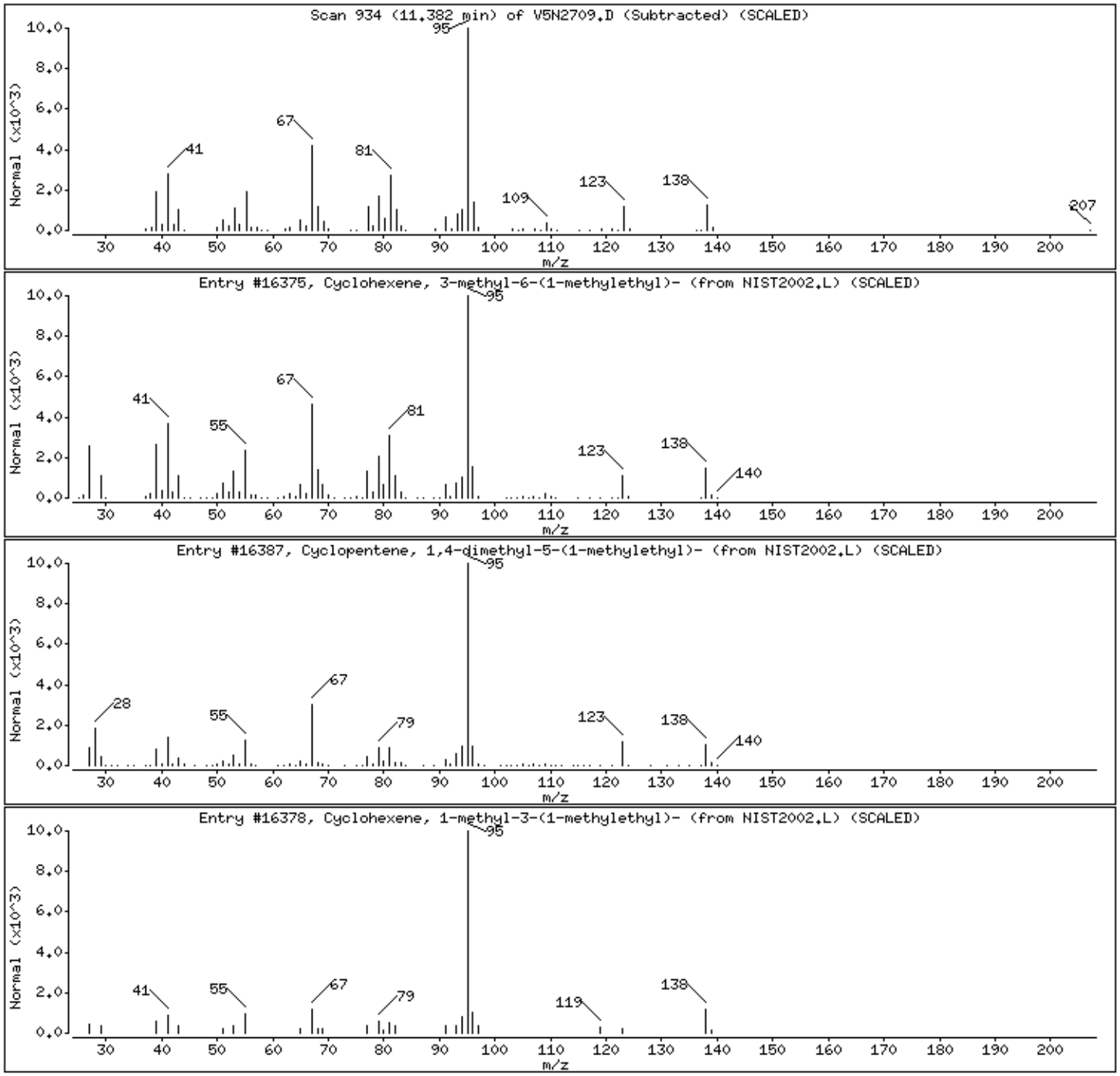
Client ID: H30Q9 Instrument: V5.i

Sample Info: 5G,K2198-08C,,62569

Operator: SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclohexene, 3-methyl-6-(1-methylethyl)-	5256-65-5	NIST2002.L	16375	96	C10H18	138
Cyclopentene, 1,4-dimethyl-5-(1-methylet	61142-33-4	NIST2002.L	16387	90	C10H18	138
Cyclohexene, 1-methyl-3-(1-methylethyl)-	13828-31-4	NIST2002.L	16378	90	C10H18	138



Data File: \\avogadro\organics\V5.I\111106.B\V5N2709.D

Date : 07-NOV-2011 02:56

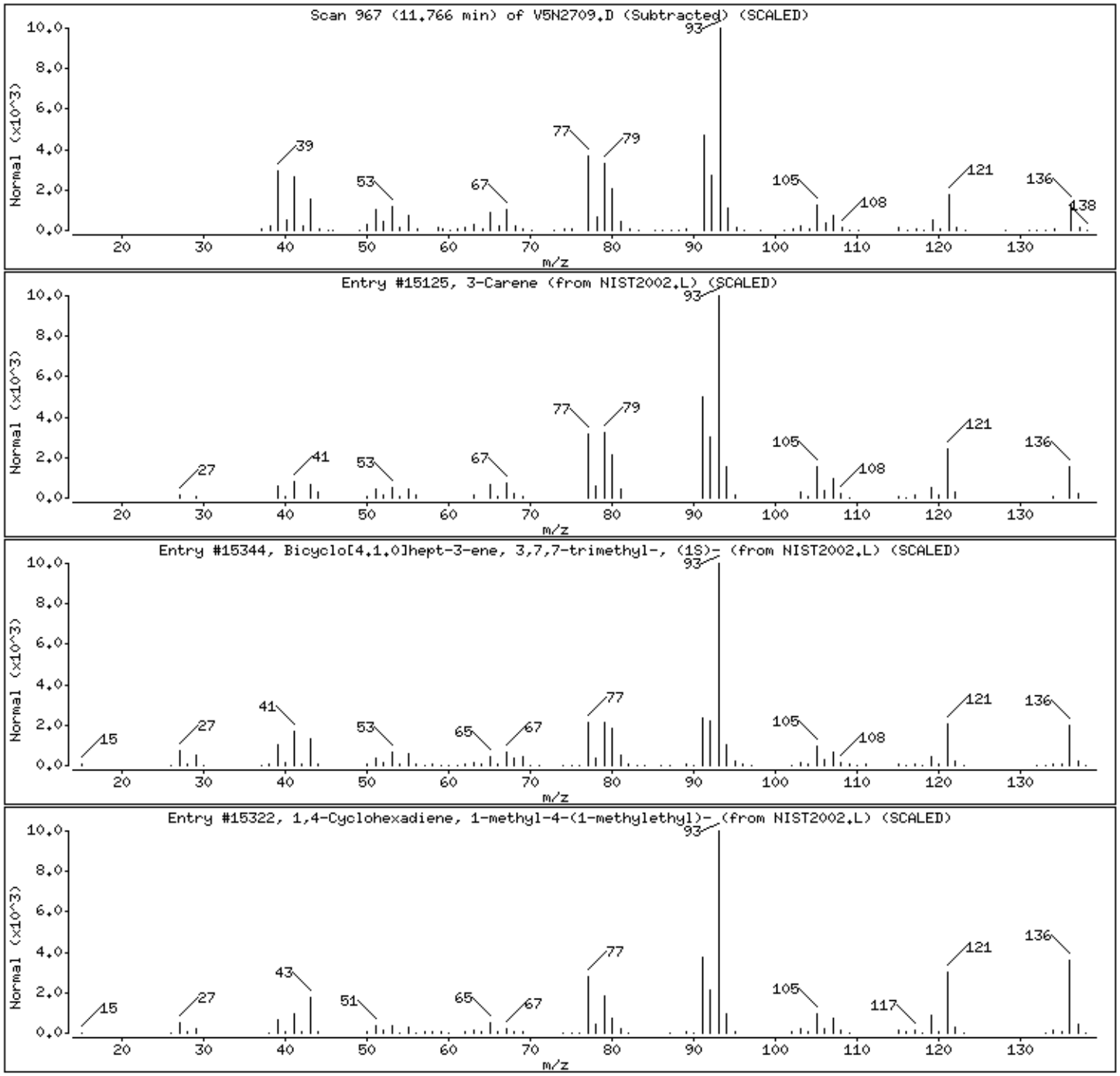
Client ID: H30Q9 Instrument: V5.i

Sample Info: 5G,K2198-08C,,62569

Operator: SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
3-Carene	13466-78-9	NIST2002.L	15125	97	C10H16	136
Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	498-15-7	NIST2002.L	15344	96	C10H16	136
1,4-Cyclohexadiene, 1-methyl-4-(1-methyl	99-85-4	NIST2002.L	15322	94	C10H16	136



Data File: \\avogadro\organics\V5.I\111106.B\V5N2709.D

Date : 07-NOV-2011 02:56

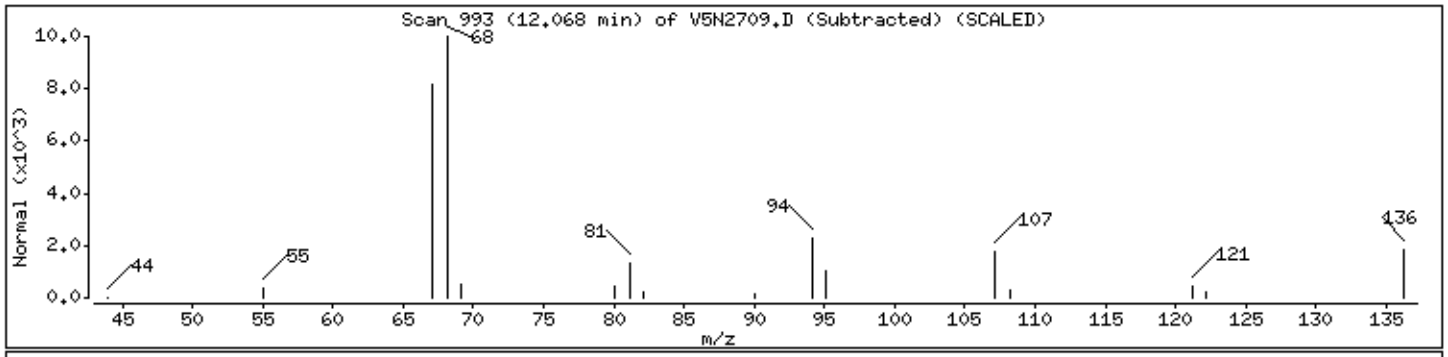
Client ID: H30Q9 Instrument: V5.i

Sample Info: 5G,K2198-08C,,62569

Operator: SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 07-NOV-2011 02:56

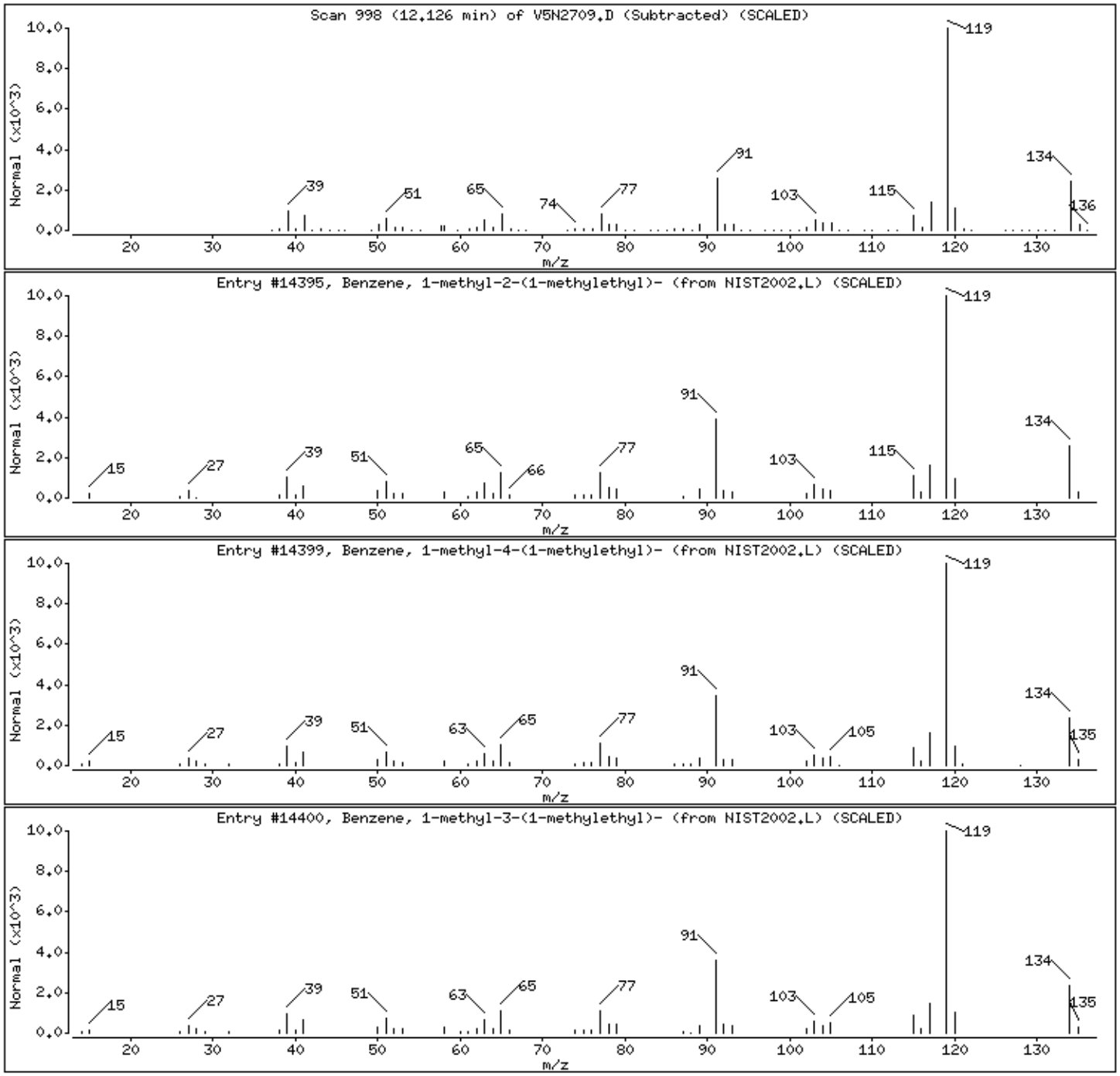
Client ID: H30Q9 Instrument: V5.i

Sample Info: 5G,K2198-08C,,62569

Operator: SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1-methyl-2-(1-methylethyl)-	527-84-4	NIST2002.L	14395	96	C10H14	134
Benzene, 1-methyl-4-(1-methylethyl)-	99-87-6	NIST2002.L	14399	96	C10H14	134
Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	NIST2002.L	14400	95	C10H14	134



Data File: \\avogadro\organics\V5.I\111106.B\V5N2709.D

Date : 07-NOV-2011 02:56

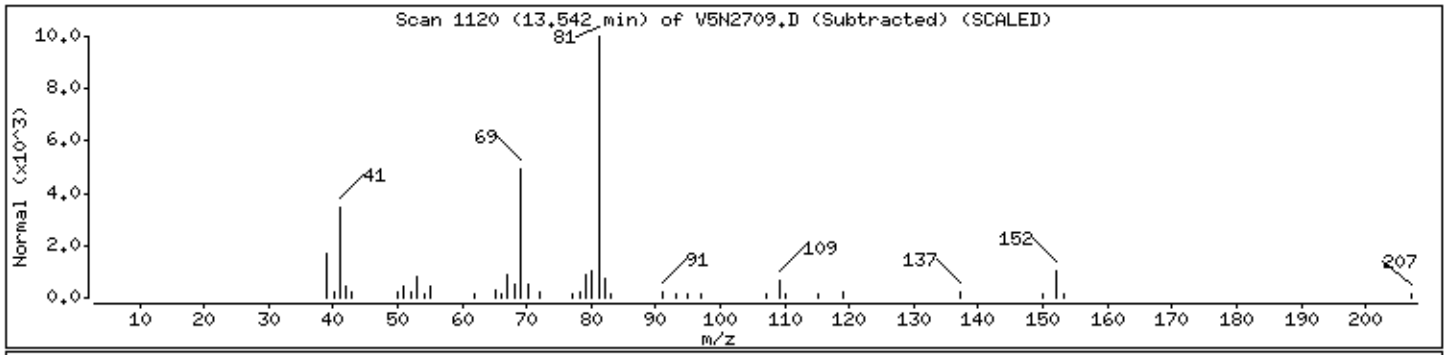
Client ID: H30Q9 Instrument: V5.i

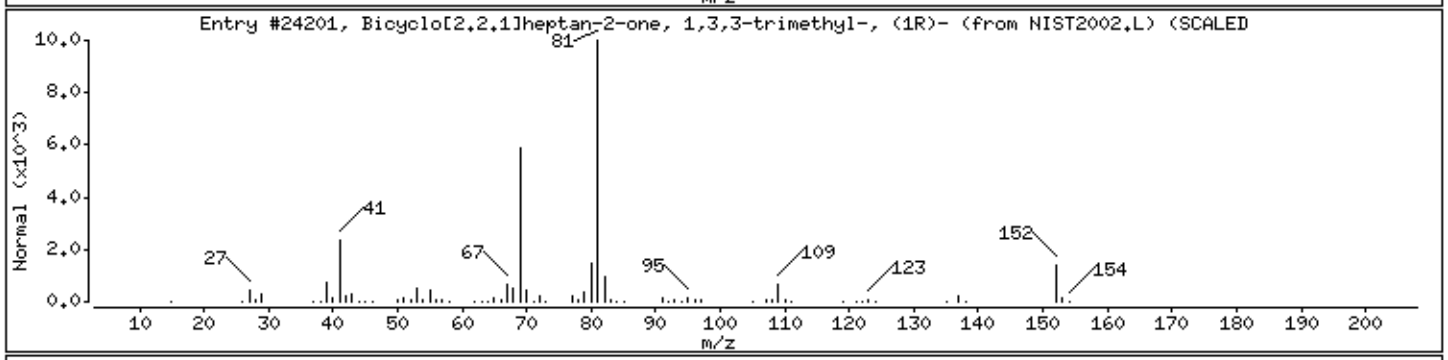
Sample Info: 5G,K2198-08C,,62569

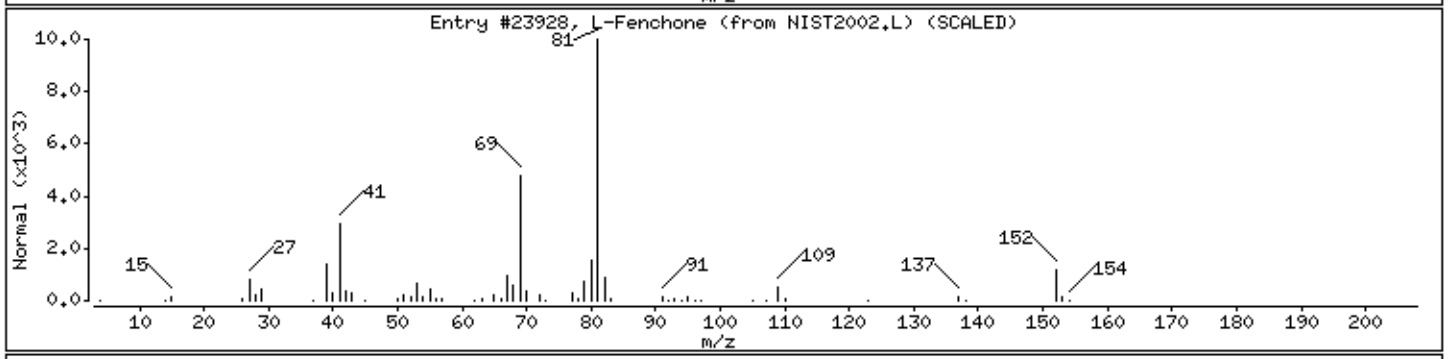
Operator: SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[2.2.1]heptan-2-one, 1,3,3-trimet	7787-20-4	NIST2002.L	24201	93	C10H16O	152
L-Fenchone	126-21-6	NIST2002.L	23928	90	C10H16O	152







Data File: \\avogadro\organics\V5.I\111106.B\V5N2709.D

Date : 07-NOV-2011 02:56

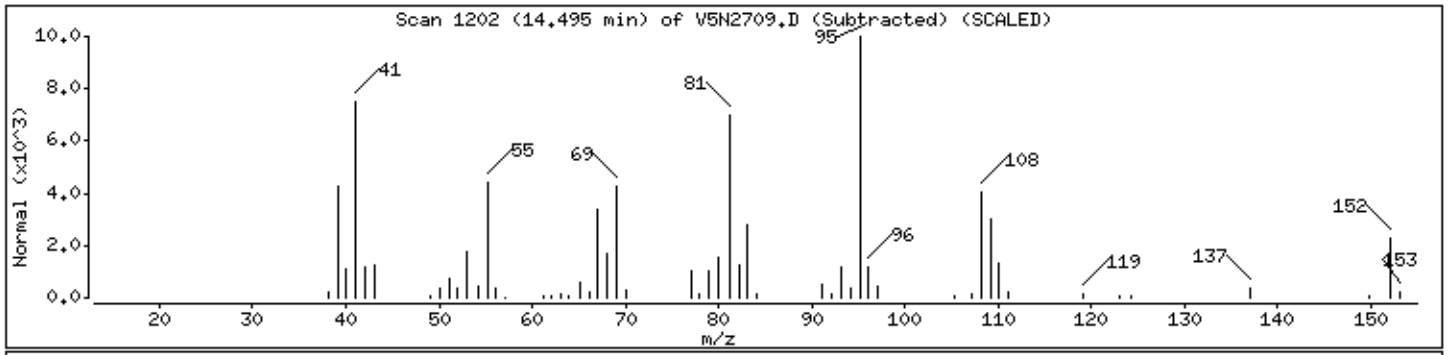
Client ID: H30Q9 Instrument: V5.i

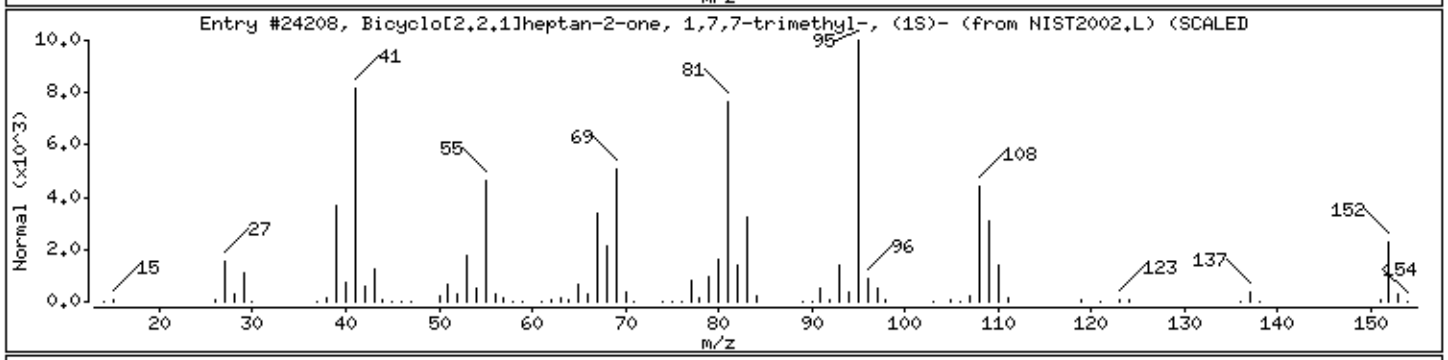
Sample Info: 5G,K2198-08C,,62569

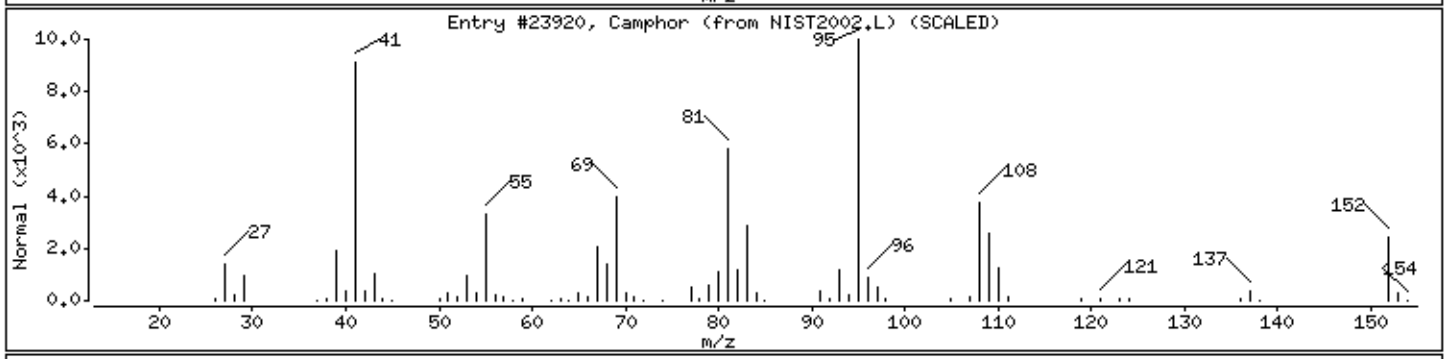
Operator: SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet	464-48-2	NIST2002.L	24208	98	C10H16O	152
Camphor	76-22-2	NIST2002.L	23920	97	C10H16O	152







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Date : 07-NOV-2011 02:56

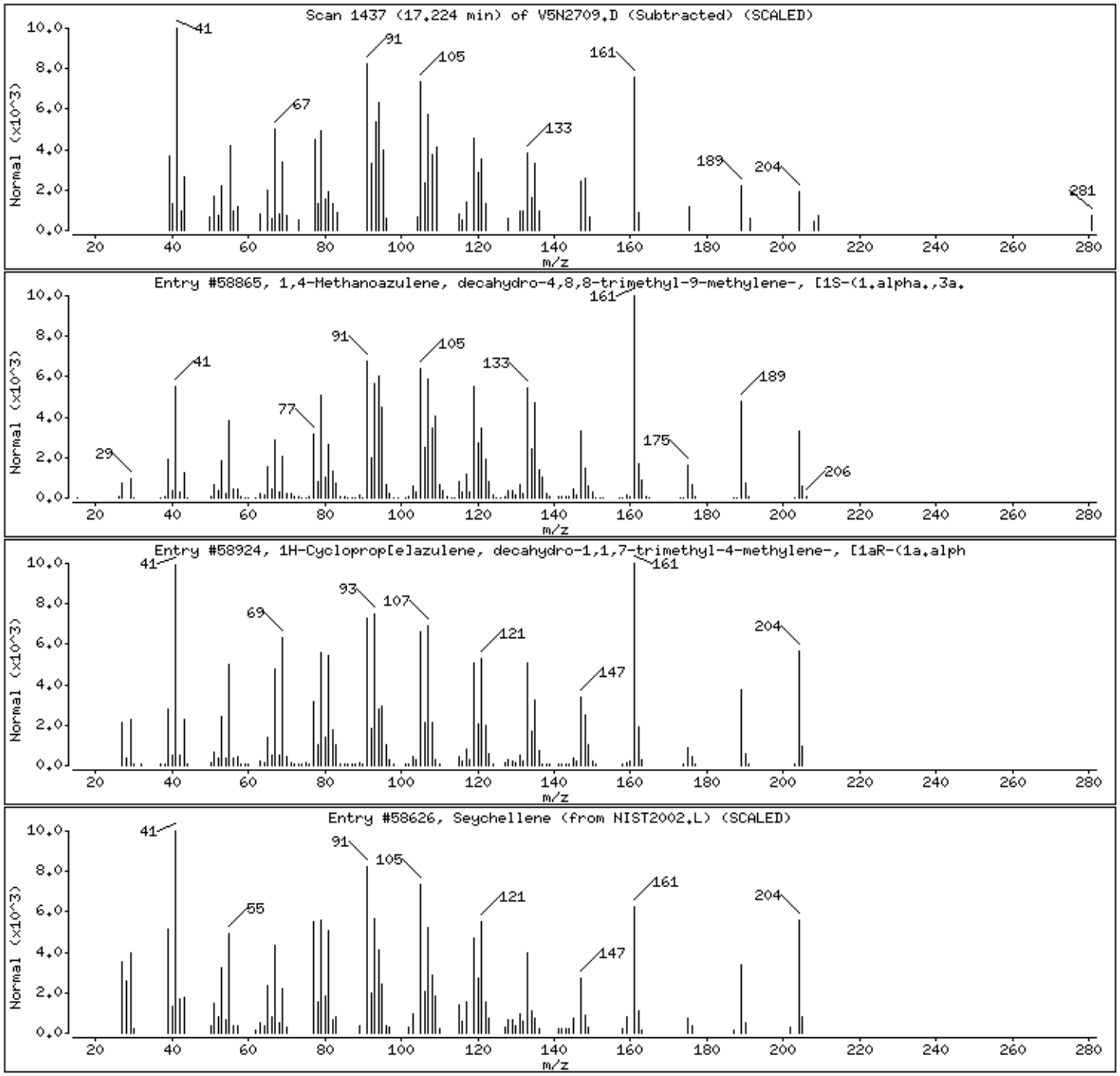
Client ID: H30Q9 Instrument: V5.i

Sample Info: 5G,K2198-08C,,62569

Operator: SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST2002.L	58865	99	C15H24	204
1H-Cycloprop[e]azulene, decahydro-1,1,7-	489-39-4	NIST2002.L	58924	93	C15H24	204
Seychellene	20085-93-2	NIST2002.L	58626	90	C15H24	204



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30R0

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-09C

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N2710.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 74 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
75-71-8	Dichlorodifluoromethane	19	U
74-87-3	Chloromethane	19	U
75-01-4	Vinyl chloride	19	U
74-83-9	Bromomethane	19	U
75-00-3	Chloroethane	19	U
75-69-4	Trichlorofluoromethane	19	U
75-35-4	1,1-Dichloroethene	19	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	19	U
67-64-1	Acetone	39	U
75-15-0	Carbon disulfide	19	U
79-20-9	Methyl acetate	19	U
75-09-2	Methylene chloride	19	U
156-60-5	trans-1,2-Dichloroethene	19	U
1634-04-4	Methyl tert-butyl ether	19	U
75-34-3	1,1-Dichloroethane	19	U
156-59-2	cis-1,2-Dichloroethene	19	U
78-93-3	2-Butanone	39	U
74-97-5	Bromochloromethane	19	U
67-66-3	Chloroform	19	U
71-55-6	1,1,1-Trichloroethane	19	U
110-82-7	Cyclohexane	19	U
56-23-5	Carbon tetrachloride	19	U
71-43-2	Benzene	19	U
107-06-2	1,2-Dichloroethane	19	U
123-91-1	1,4-Dioxane	390	U

Report 1,4-Dioxane for Low-Medium VOA analysis only SOM01.2 (6/2007)

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30R0

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-09C

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N2710.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 74 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
79-01-6	Trichloroethene	19	U
108-87-2	Methylcyclohexane	19	U
78-87-5	1,2-Dichloropropane	19	U
75-27-4	Bromodichloromethane	19	U
10061-01-5	cis-1,3-Dichloropropene	19	U
108-10-1	4-Methyl-2-pentanone	39	U
108-88-3	Toluene	19	U
10061-02-6	trans-1,3-Dichloropropene	19	U
79-00-5	1,1,2-Trichloroethane	19	U
127-18-4	Tetrachloroethene	19	U
591-78-6	2-Hexanone	39	U
124-48-1	Dibromochloromethane	19	U
106-93-4	1,2-Dibromoethane	19	U
108-90-7	Chlorobenzene	19	U
100-41-4	Ethylbenzene	19	U
179601-23-1	m,p-Xylene	19	U
95-47-6	o-Xylene	19	U
100-42-5	Styrene	19	U
75-25-2	Bromoform	19	U
98-82-8	Isopropylbenzene	19	U
79-34-5	1,1,2,2-Tetrachloroethane	19	U
541-73-1	1,3-Dichlorobenzene	19	U
106-46-7	1,4-Dichlorobenzene	19	U
95-50-1	1,2-Dichlorobenzene	19	U
96-12-8	1,2-Dibromo-3-chloropropane	19	U
120-82-1	1,2,4-Trichlorobenzene	19	U
87-61-6	1,2,3-Trichlorobenzene	19	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30R0

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-09C

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N2710.D

Level: (TRACE or LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 74 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E96679[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2710.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111106.B\V5N2710.D
Lab Smp Id: K2198-09C Client Smp ID: H30R0
Inj Date : 07-NOV-2011 03:21
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-09C,,62569
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$	79 Vinyl Chloride-d3	65	2.150	2.173	(0.340)	82750	41.0238	41
$	80 Chloroethane-d5	69	2.534	2.603	(0.401)	36312	27.8307	28(R)
$	81 1,1-Dichloroethene-d2	65	3.323	3.369	(0.526)	17262	41.2596	41(Q)
$	82 2-Butanone-d5	46	5.065	5.076	(0.802)	55818	99.2230	99
$	83 Chloroform-d	84	5.379	5.390	(0.851)	111932	46.3167	46(Q)
$	23 1,2-Dichloroethane-d4	65	5.890	5.901	(0.932)	64434	49.3975	49(Q)
$	84 Benzene-d6	84	5.901	5.912	(0.626)	216586	47.2084	47
*	26 1,4-Difluorobenzene	114	6.320	6.319	(1.000)	211841	50.0000	
$	85 1,2-Dichloropropane-d6	67	6.726	6.725	(0.713)	80715	42.5714	43
$	94 1,4-Dioxane-d8	96	6.923	6.911	(1.096)	14861	1196.99	1200
$	33 Toluene-d8	98	7.841	7.840	(0.831)	190793	45.0490	45
$	86 trans-1,3-Dichloropropene-d4	79	8.120	8.119	(0.861)	68357	47.8853	48
$	87 2-Hexanone-d5	63	8.584	8.572	(0.910)	29765	81.5993	82(Q)
*	42 Chlorobenzene-d5	117	9.432	9.431	(1.000)	173263	50.0000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.930	10.929	(1.159)	58043	46.7720	47
*	78 1,4-Dichlorobenzene-d4	152	12.184	12.172	(1.000)	73058	50.0000	
$	90 1,2-Dichlorobenzene-d4	152	12.637	12.625	(1.037)	61118	44.7808	45(Q)

Data File: \\avogadro\organics\V5.I\111106.B\V5N2710.D
Report Date: 09-Nov-2011 07:59

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2710.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111106.B\V5N2710.D
Lab Smp Id: K2198-09C Client Smp ID: H30R0
Inj Date : 07-NOV-2011 03:21
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-09C,,62569
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

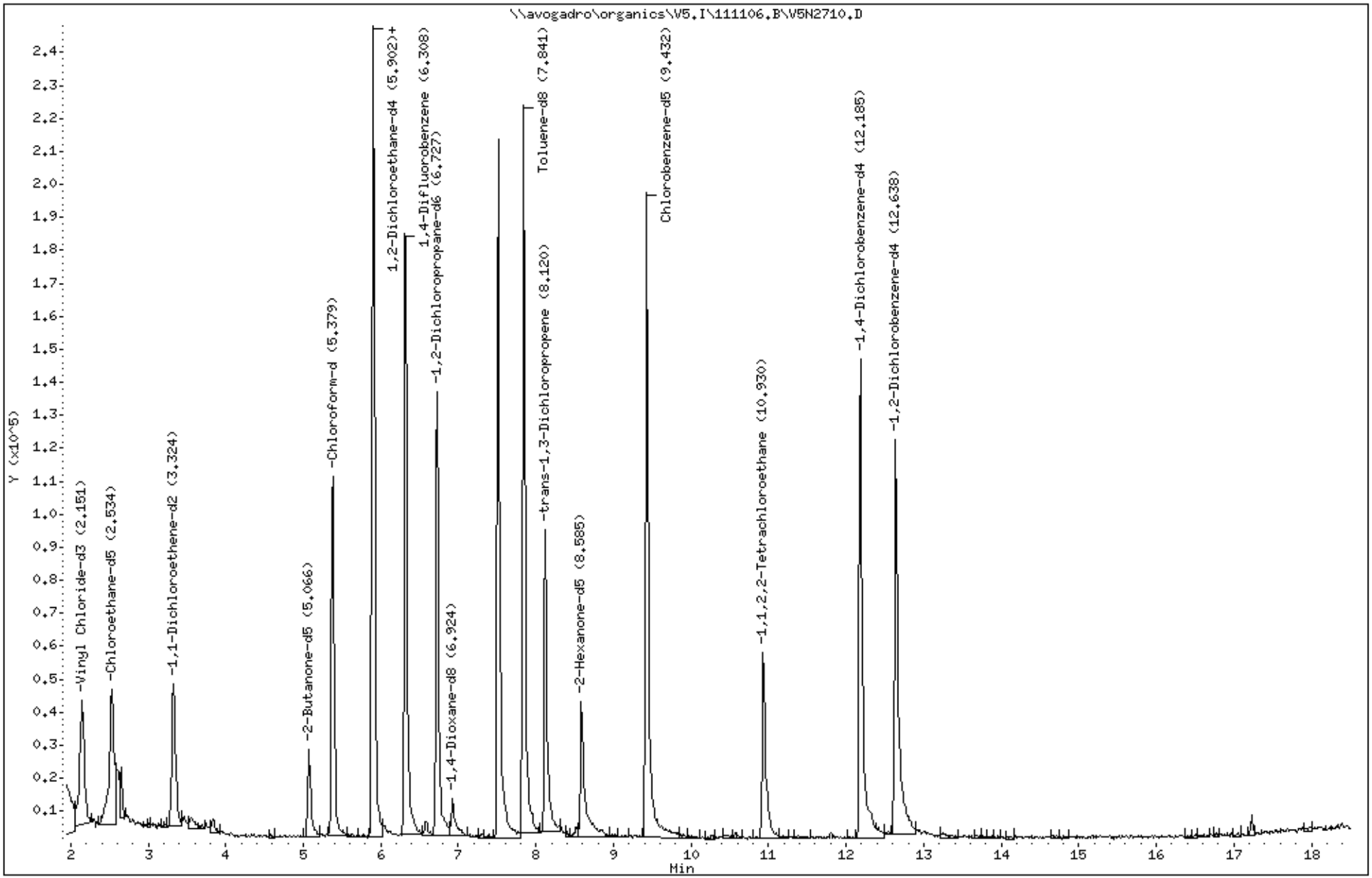
- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111106.B\V5N2710.D
Date : 07-NOV-2011 03:21
Client ID: H30R0
Sample Info: 5G,K2198-09C,,62569

Instrument: V5.i

Operator: SRC: LIMS
Column diameter: 0.25

Column phase: DB-624



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30R1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-10C

Sample wt/vol: 4.80 (g/mL) G Lab File ID: V5N2711.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 54 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
75-71-8	Dichlorodifluoromethane	11	U
74-87-3	Chloromethane	11	U
75-01-4	Vinyl chloride	11	U
74-83-9	Bromomethane	11	U
75-00-3	Chloroethane	11	U
75-69-4	Trichlorofluoromethane	11	U
75-35-4	1,1-Dichloroethene	11	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	11	U
67-64-1	Acetone	110	
75-15-0	Carbon disulfide	11	U
79-20-9	Methyl acetate	11	U
75-09-2	Methylene chloride	11	U
156-60-5	trans-1,2-Dichloroethene	11	U
1634-04-4	Methyl tert-butyl ether	11	U
75-34-3	1,1-Dichloroethane	11	U
156-59-2	cis-1,2-Dichloroethene	11	U
78-93-3	2-Butanone	23	U
74-97-5	Bromochloromethane	11	U
67-66-3	Chloroform	11	U
71-55-6	1,1,1-Trichloroethane	11	U
110-82-7	Cyclohexane	11	U
56-23-5	Carbon tetrachloride	11	U
71-43-2	Benzene	11	U
107-06-2	1,2-Dichloroethane	11	U
123-91-1	1,4-Dioxane	230	U

Report 1,4-Dioxane for Low-Medium VOA analysis only SOM01.2 (6/2007)

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30R1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-10C

Sample wt/vol: 4.80 (g/mL) G Lab File ID: V5N2711.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 54 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
79-01-6	Trichloroethene	11	U
108-87-2	Methylcyclohexane	11	U
78-87-5	1,2-Dichloropropane	11	U
75-27-4	Bromodichloromethane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
108-10-1	4-Methyl-2-pentanone	23	U
108-88-3	Toluene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
79-00-5	1,1,2-Trichloroethane	11	U
127-18-4	Tetrachloroethene	11	U
591-78-6	2-Hexanone	23	U
124-48-1	Dibromochloromethane	11	U
106-93-4	1,2-Dibromoethane	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
179601-23-1	m,p-Xylene	11	U
95-47-6	o-Xylene	11	U
100-42-5	Styrene	11	U
75-25-2	Bromoform	11	U
98-82-8	Isopropylbenzene	10	J
79-34-5	1,1,2,2-Tetrachloroethane	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
96-12-8	1,2-Dibromo-3-chloropropane	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U
87-61-6	1,2,3-Trichlorobenzene	11	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30R1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-10C

Sample wt/vol: 4.80 (g/mL) G Lab File ID: V5N2711.D

Level: (TRACE or LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 54 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG Purge Volume: 10.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	79-92-5	Camphene	10.902	300	NJ
02		Unknown-01	11.238	12	J
03	5256-65-5	Cyclohexene, 3-methyl-6-(1-m	11.296	15	NJ
04	5256-65-5	Cyclohexene, 3-methyl-6-(1-m	11.389	430	NJ
05	13466-78-9	3-Carene	11.773	340	NJ
06	5502-88-5	Cyclohexene, 1-methyl-4-(1-m	11.935	20	NJ
07	138-86-3	Limonene	12.063	98	NJ
08	99-87-6	Benzene, 1-methyl-4-(1-methy	12.144	4700	NJ
09	126-21-6	L-Fenchone	13.538	22	NJ
10		Unknown-02	14.339	20	J
11	464-49-3	Bicyclo[2.2.1]heptan-2-one,	14.502	81	NJ
	E96679€ [1]	Total Alkanes	N/A	22	J

[1] EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2711.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111106.B\V5N2711.D
Lab Smp Id: K2198-10C Client Smp ID: H30R1
Inj Date : 07-NOV-2011 03:50
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-10C,,62569
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 43
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	4.800	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$ 79 Vinyl Chloride-d3	65	2.168	2.173	(0.343)	137703	39.3776	41
$ 80 Chloroethane-d5	69	2.586	2.603	(0.410)	112147	49.5792	52(Q)
$ 81 1,1-Dichloroethene-d2	65	3.364	3.369	(0.533)	34608	47.7143	50(Q)
9 Acetone	43	3.445	3.450	(0.546)	32545	48.6389	51
$ 82 2-Butanone-d5	46	5.071	5.076	(0.803)	102489	105.088	110
$ 83 Chloroform-d	84	5.385	5.390	(0.853)	199081	47.5172	49(Q)
$ 23 1,2-Dichloroethane-d4	65	5.896	5.901	(0.934)	110208	48.7350	51(Q)
$ 84 Benzene-d6	84	5.907	5.912	(0.627)	366830	57.4152	60
* 26 1,4-Difluorobenzene	114	6.314	6.319	(1.000)	367259	50.0000	
$ 85 1,2-Dichloropropane-d6	67	6.732	6.725	(0.714)	141496	53.5898	56
$ 94 1,4-Dioxane-d8	96	6.918	6.911	(1.096)	20973	974.410	1000
$ 33 Toluene-d8	98	7.847	7.840	(0.832)	288371	48.8931	51
$ 86 trans-1,3-Dichloropropene-d4	79	8.126	8.119	(0.862)	74581	37.5164	39
$ 87 2-Hexanone-d5	63	8.578	8.572	(0.910)	53347	105.018	110(Q)
* 42 Chlorobenzene-d5	117	9.426	9.431	(1.000)	241286	50.0000	
49 Isopropylbenzene	105	10.564	10.604	(1.121)	34860	4.59405	4.8(Q)
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.924	10.929	(1.159)	73981	42.8085	45
* 78 1,4-Dichlorobenzene-d4	152	12.179	12.172	(1.000)	70417	50.0000	(Q)
$ 90 1,2-Dichlorobenzene-d4	152	12.631	12.625	(1.037)	66217	50.3364	52(Q)

Data File: \\avogadro\organics\V5.I\111106.B\V5N2711.D
Report Date: 09-Nov-2011 07:59

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2711.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111106.B\V5N2711.D
Lab Smp Id: K2198-10C Client Smp ID: H30R1
Inj Date : 07-NOV-2011 03:50
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-10C,,62569
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 43
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	4.800	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 42 Chlorobenzene-d5	9.427	700413	50.000

	CONCENTRATIONS				QUANT			
	RT	AREA	ON-COL(ug/L)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Cyclic Alkane						CAS #:		
	10.402	138303	9.87296392	10	0		0	42
Camphene						CAS #: 79-92-5		
	10.902	1833017	130.852458	140	98	NIST2002.L	15134	42
Unknown						CAS #:		
	11.238	75064	5.35852488	5.6	0		0	42
Cyclohexene, 3-methyl-6-(1-methylethyl)-						CAS #: 5256-65-5		
	11.296	92526	6.60512028	6.9	91	NIST2002.L	16383	42
Cyclohexene, 3-methyl-6-(1-methylethyl)-						CAS #: 5256-65-5		
	11.389	2674645	190.933295	200	96	NIST2002.L	16375	42

Data File: \\avogadro\organics\V5.I\111106.B\V5N2711.D
Report Date: 09-Nov-2011 07:59

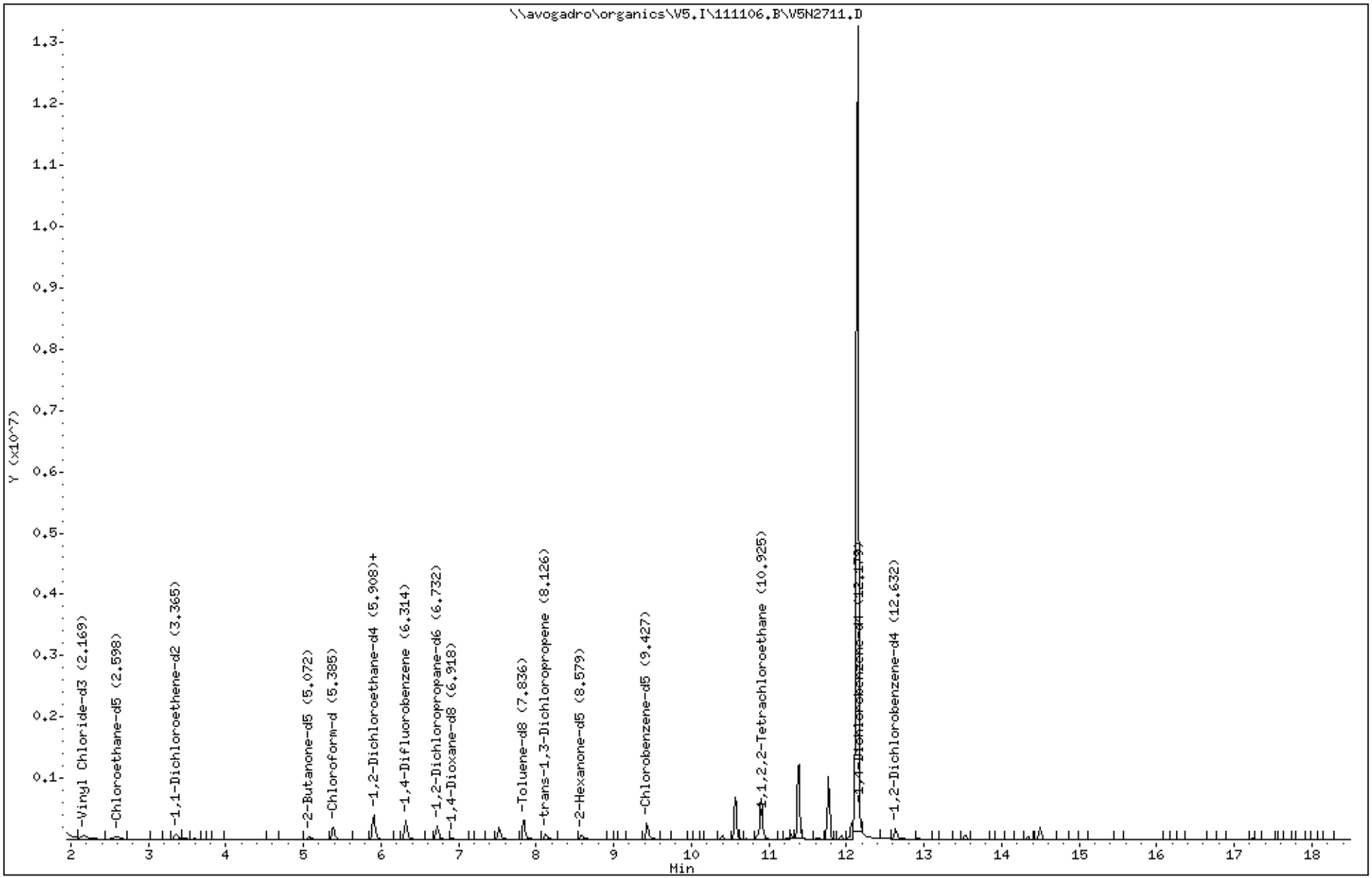
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
3-Carene					CAS #: 13466-78-9		
11.773	2095773	149.609694	160	97	NIST2002.L	15125	42
Cyclohexene, 1-methyl-4-(1-methylethyl)-					CAS #: 5502-88-5		
11.935	125229	8.93964022	9.3	96	NIST2002.L	16376	42
Limonene					CAS #: 138-86-3		
12.063	607236	43.3484240	45	91	NIST2002.L	15128	42
Benzene, 1-methyl-4-(1-methylethyl)-					CAS #: 99-87-6		
12.144	29133310	2079.72214	2200	97	NIST2002.L	14399	42
L-Fenchone					CAS #: 126-21-6		
13.538	137525	9.81743808	10	94	NIST2002.L	23928	42
Unknown					CAS #:		
14.339	122931	8.77556609	9.1	0		0	42
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet					CAS #: 464-49-3		
14.502	499568	35.6623809	37	97	NIST2002.L	24211	42

Data File: \\avogadro\organics\V5.I\111106.B\V5N2711.D
Date : 07-NOV-2011 03:50
Client ID: H30R1
Sample Info: 5G,K2198-10C,,62569

Instrument: V5.i

Operator: SRC: LIMS

Column phase: DB-624
Column diameter: 0.25



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Date : 07-NOV-2011 03:50

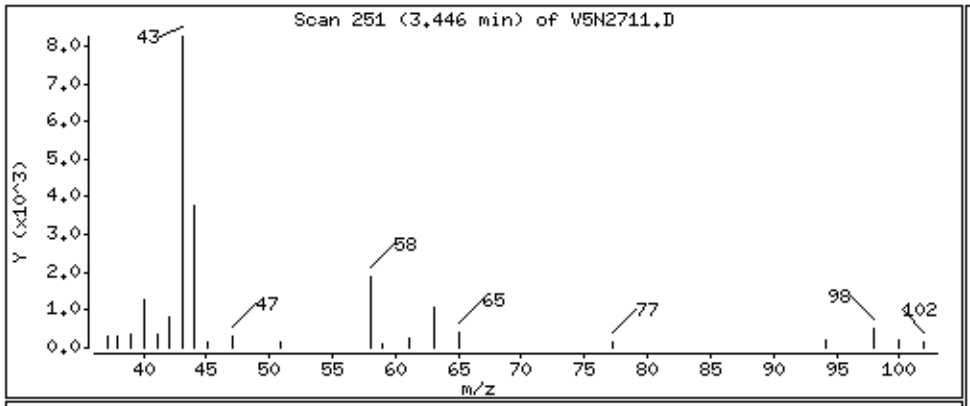
Client ID: H30R1 Instrument: V5.i

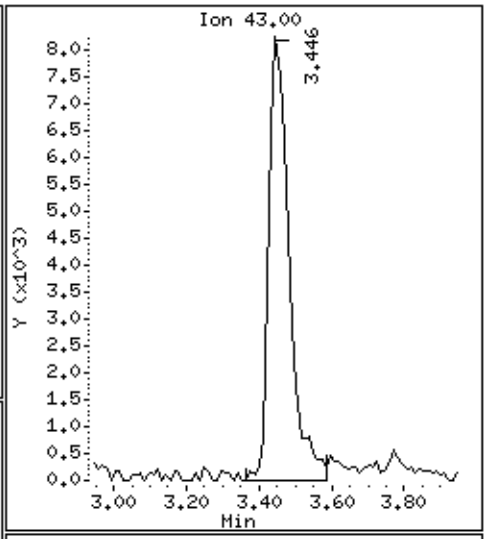
Sample Info: 5G,K2198-10C,,62569

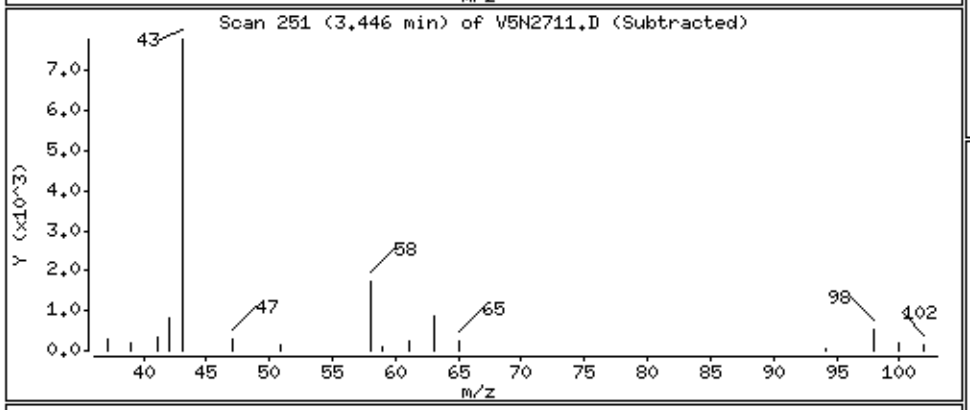
Operator: SRC: LIMS

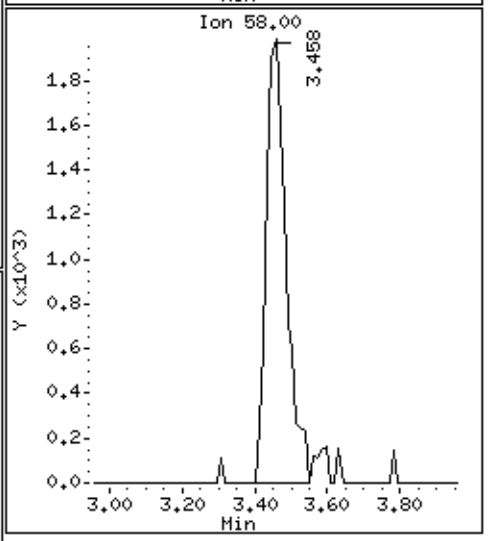
Column phase: DB-624 Column diameter: 0.25

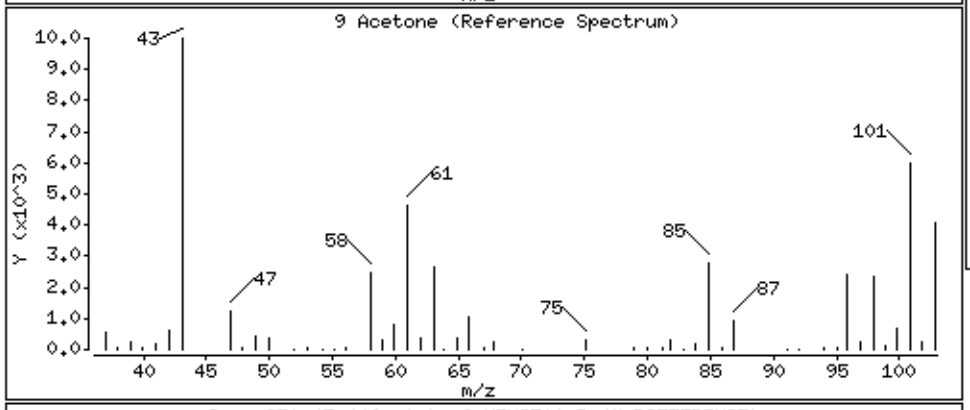
9 Acetone Concentration: 51 ug/Kg

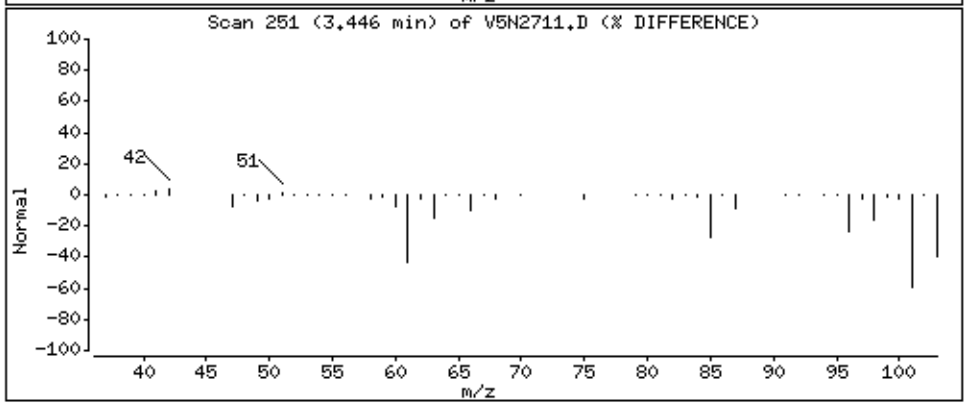












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Date : 07-NOV-2011 03:50

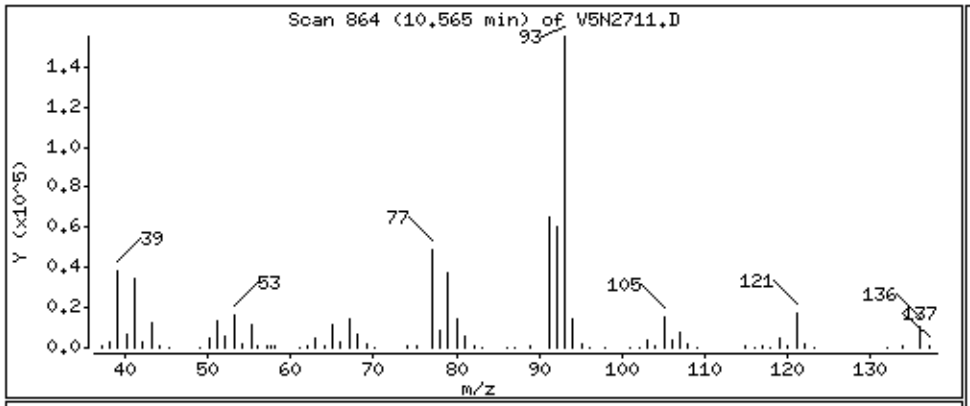
Client ID: H30R1 Instrument: V5.i

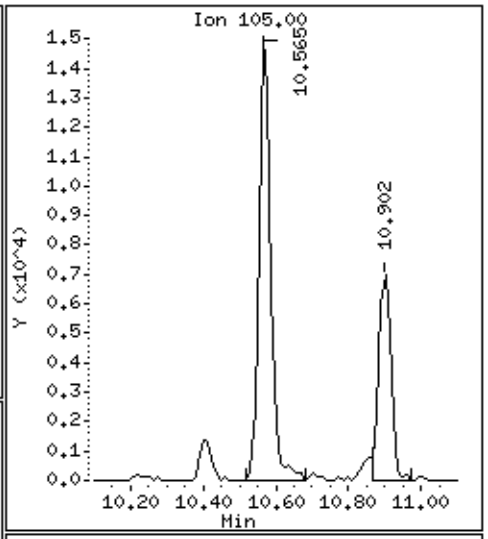
Sample Info: 5G,K2198-10C,,62569

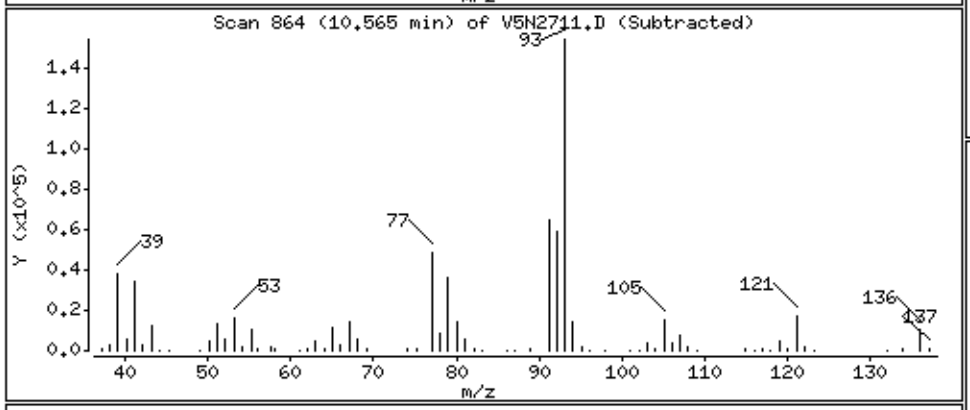
Operator: SRC: LIMS

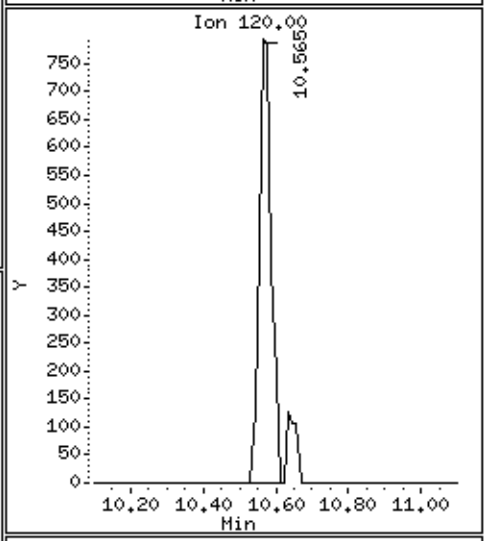
Column phase: DB-624 Column diameter: 0.25

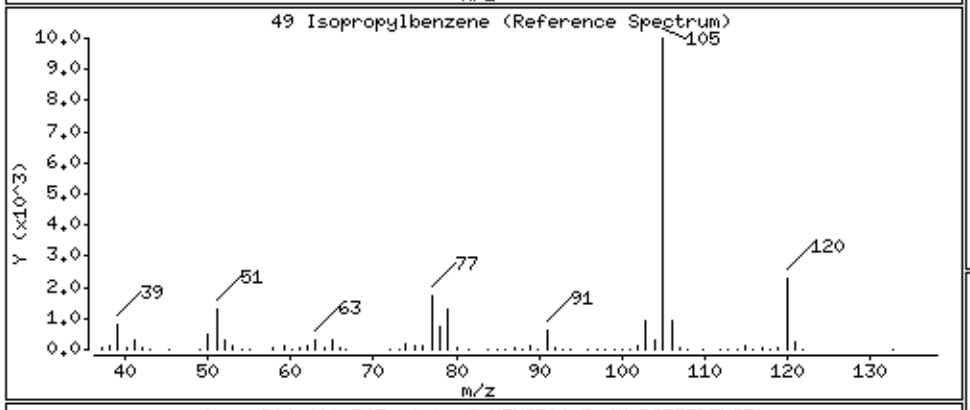
49 Isopropylbenzene Concentration: 4.8 ug/Kg

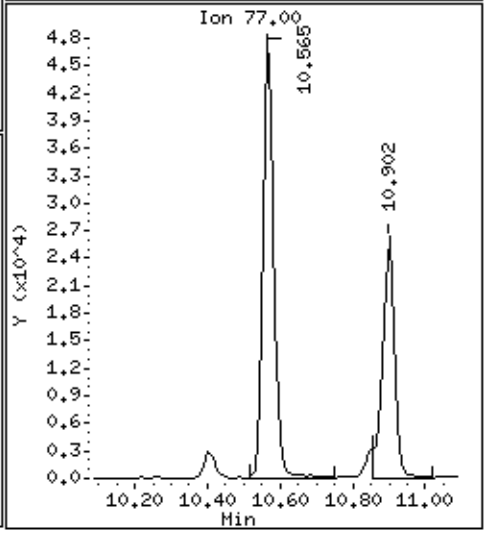


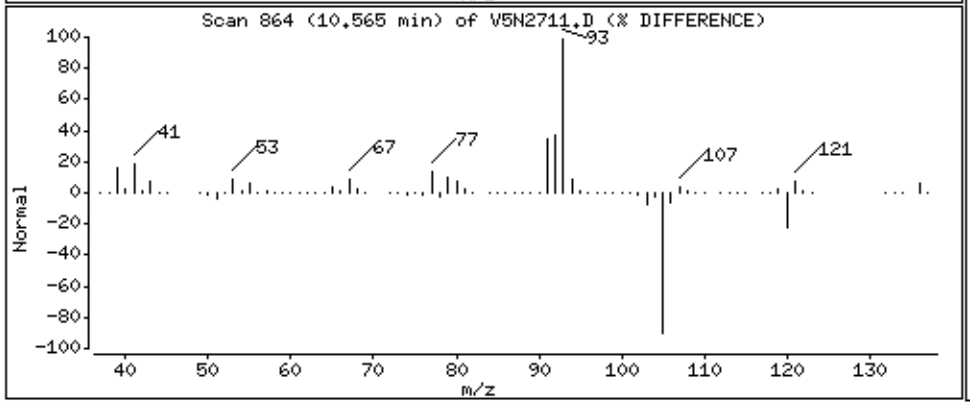












Data File: \\avogadro\organics\V5.I\111106.B\V5N2711.D

Date : 07-NOV-2011 03:50

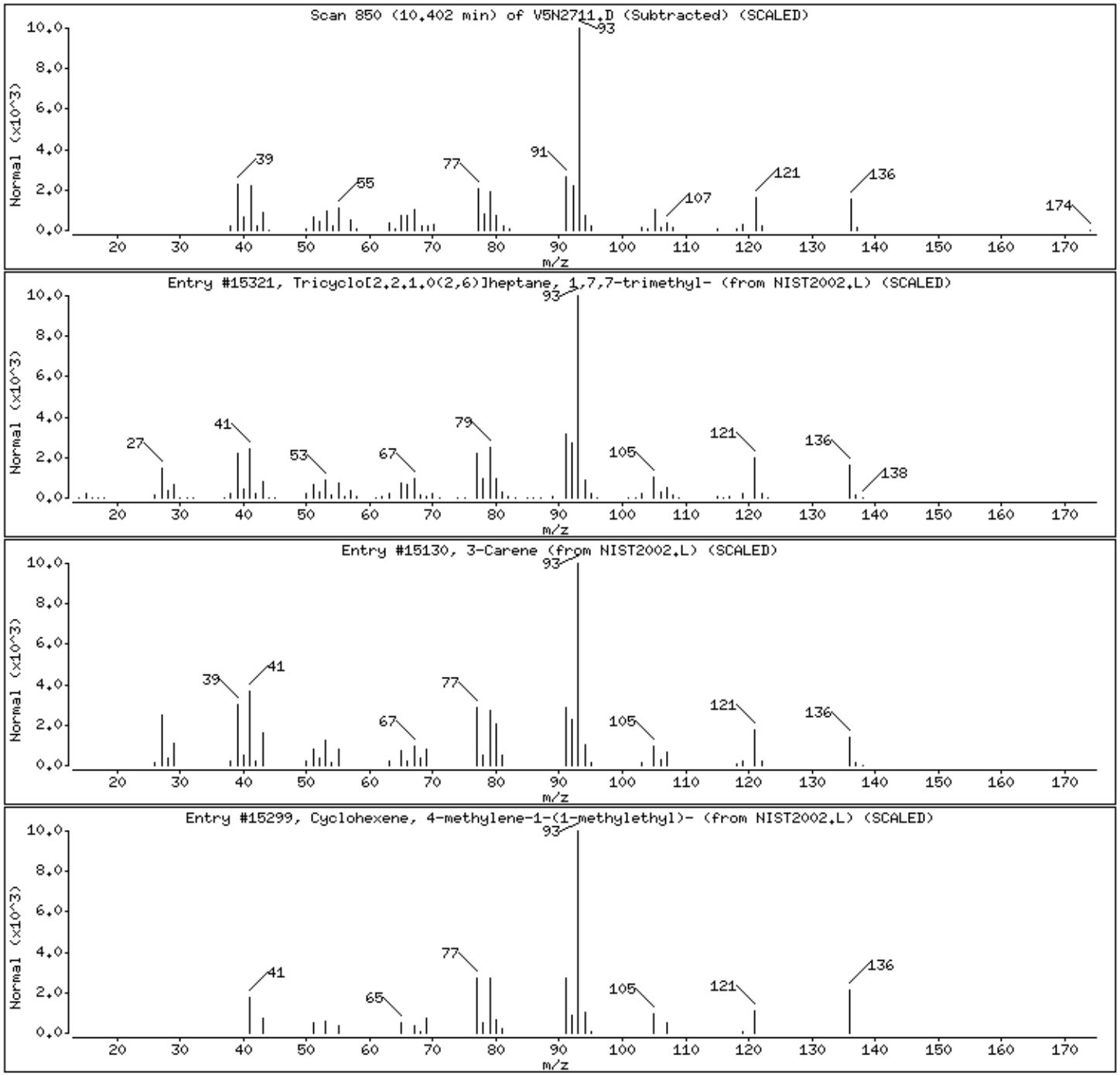
Client ID: H30R1 Instrument: V5.i

Sample Info: 5G,K2198-10C,,62569

Operator: SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclic Alkane						
Tricyclo[2.2.1.0(2,6)]heptane, 1,7,7-tri	508-32-7	NIST2002.L	15321	96	C10H16	136
3-Carene	13466-78-9	NIST2002.L	15130	91	C10H16	136
Cyclohexene, 4-methylene-1-(1-methylethy	99-84-3	NIST2002.L	15299	90	C10H16	136



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Date : 07-NOV-2011 03:50

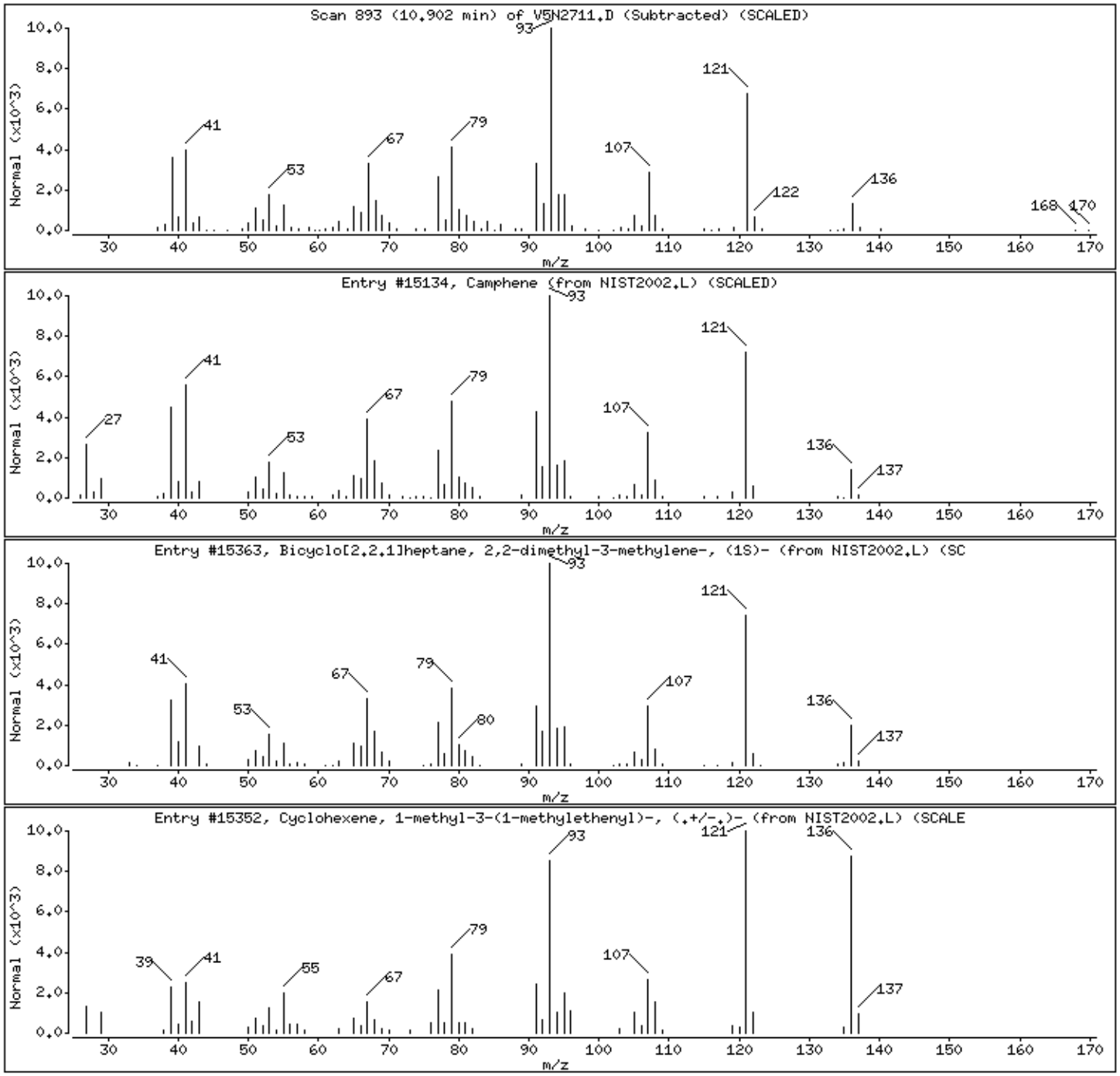
Client ID: H30R1 Instrument: V5.i

Sample Info: 5G,K2198-10C,,62569

Operator: SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Camphene	79-92-5	NIST2002.L	15134	98	C10H16	136
Bicyclo[2.2.1]heptane, 2,2-dimethyl-3-me	5794-04-7	NIST2002.L	15363	95	C10H16	136
Cyclohexene, 1-methyl-3-(1-methylethenyl	499-03-6	NIST2002.L	15352	86	C10H16	136



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Date : 07-NOV-2011 03:50

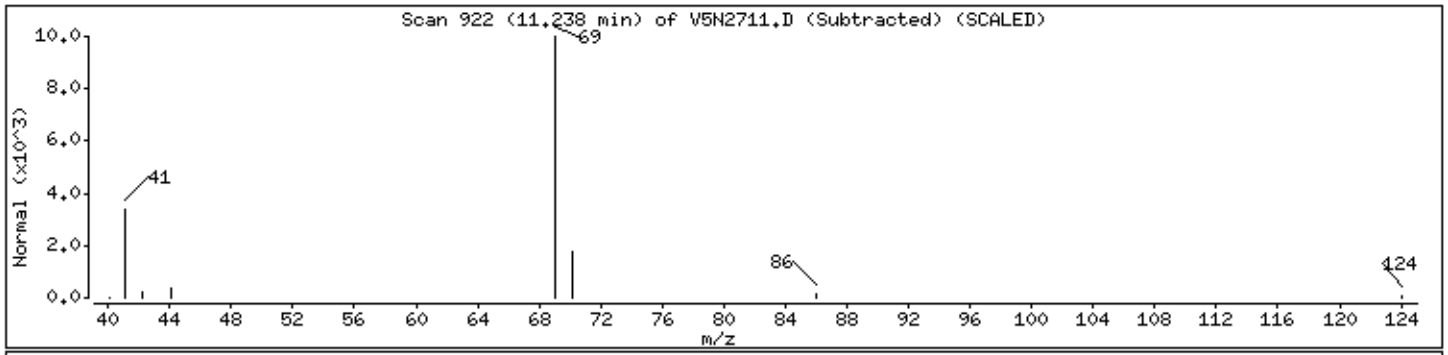
Client ID: H30R1 Instrument: V5.i

Sample Info: 5G,K2198-10C,,62569

Operator: SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Unknown			0	0		0



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Date : 07-NOV-2011 03:50

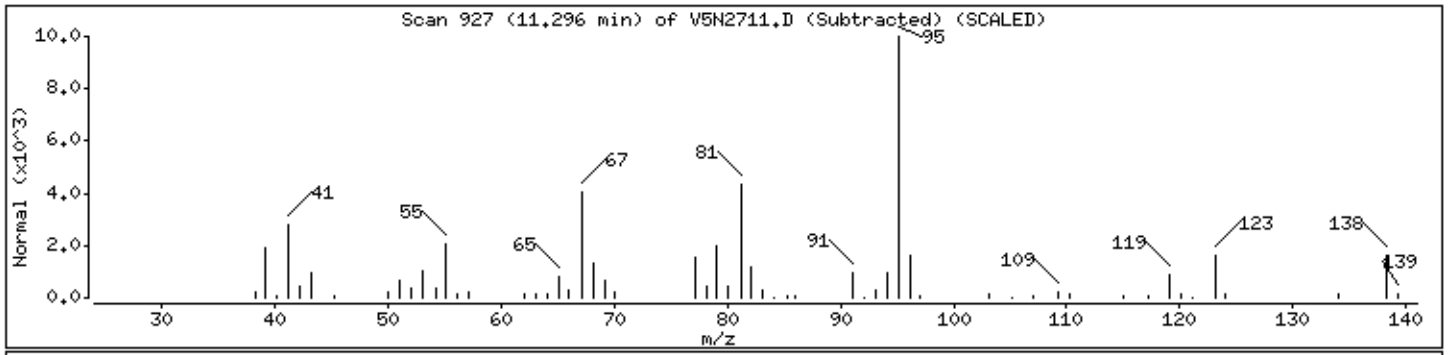
Client ID: H30R1 Instrument: V5.i

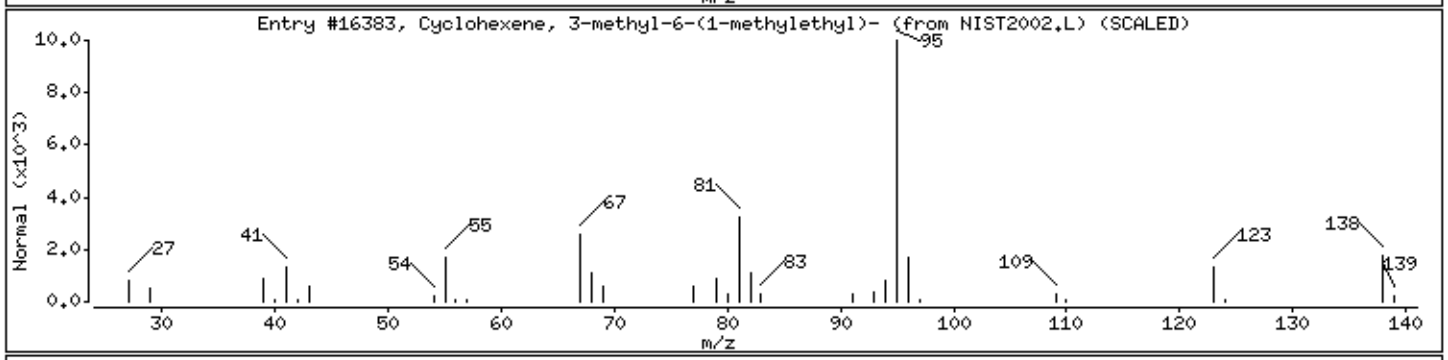
Sample Info: 5G,K2198-10C,,62569

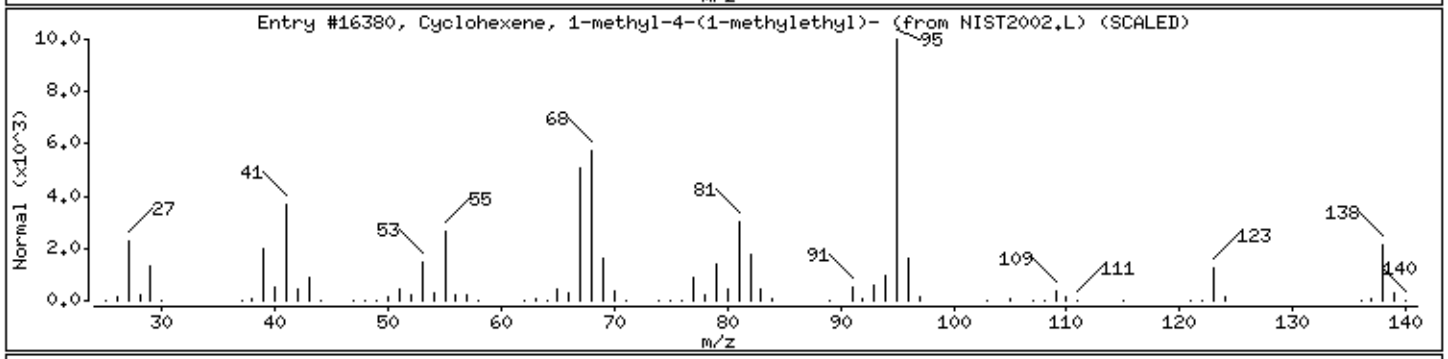
Operator: SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclohexene, 3-methyl-6-(1-methylethyl)-	5256-65-5	NIST2002.L	16383	91	C10H18	138
Cyclohexene, 1-methyl-4-(1-methylethyl)-	5502-88-5	NIST2002.L	16380	91	C10H18	138







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Date : 07-NOV-2011 03:50

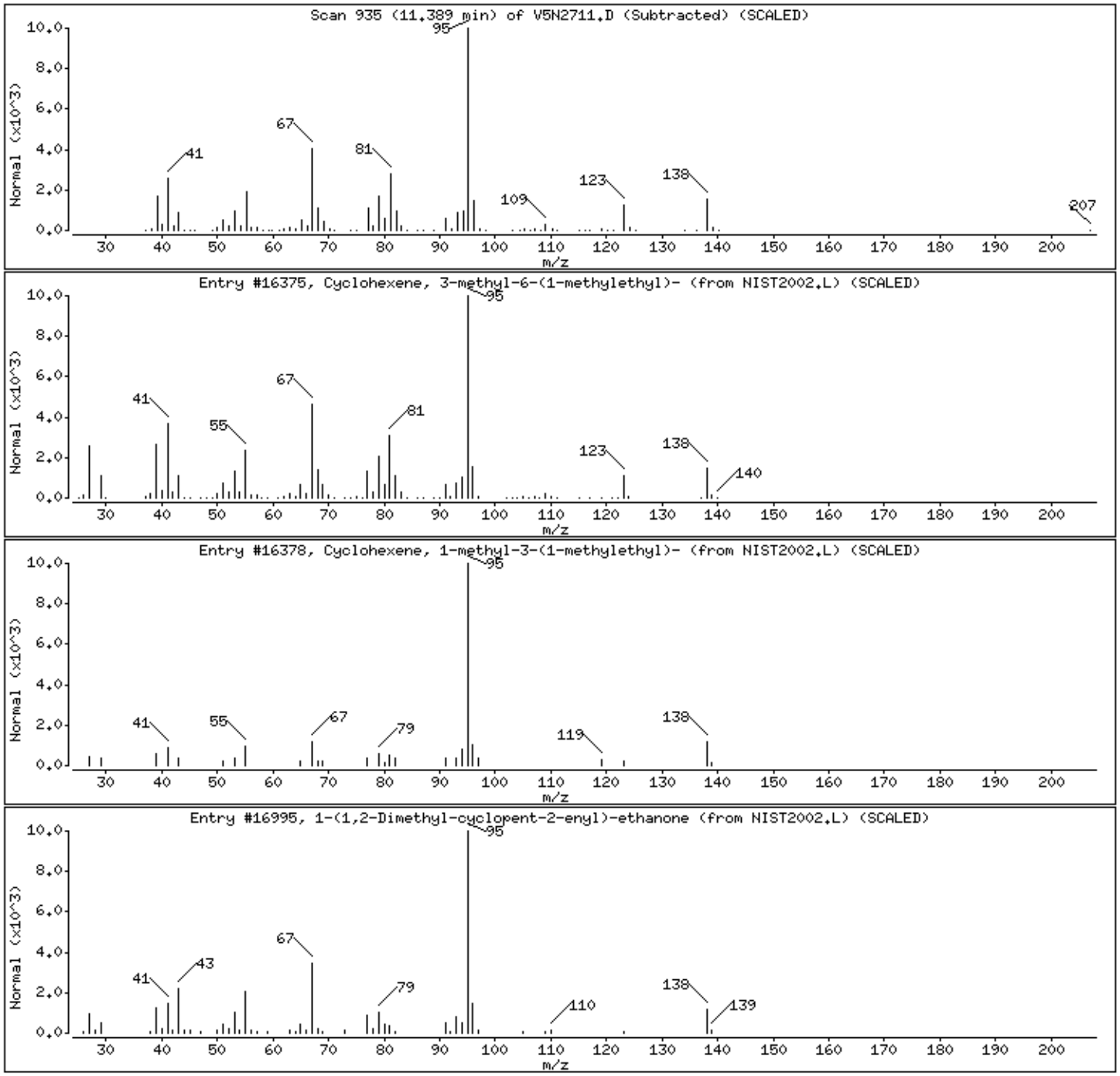
Client ID: H30R1 Instrument: V5.i

Sample Info: 5G,K2198-10C,,62569

Operator: SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclohexene, 3-methyl-6-(1-methylethyl)-	5256-65-5	NIST2002.L	16375	96	C10H18	138
Cyclohexene, 1-methyl-3-(1-methylethyl)-	13828-31-4	NIST2002.L	16378	90	C10H18	138
1-(1,2-Dimethyl-cyclopent-2-enyl)-ethano	70987-82-5	NIST2002.L	16995	87	C9H140	138



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Date : 07-NOV-2011 03:50

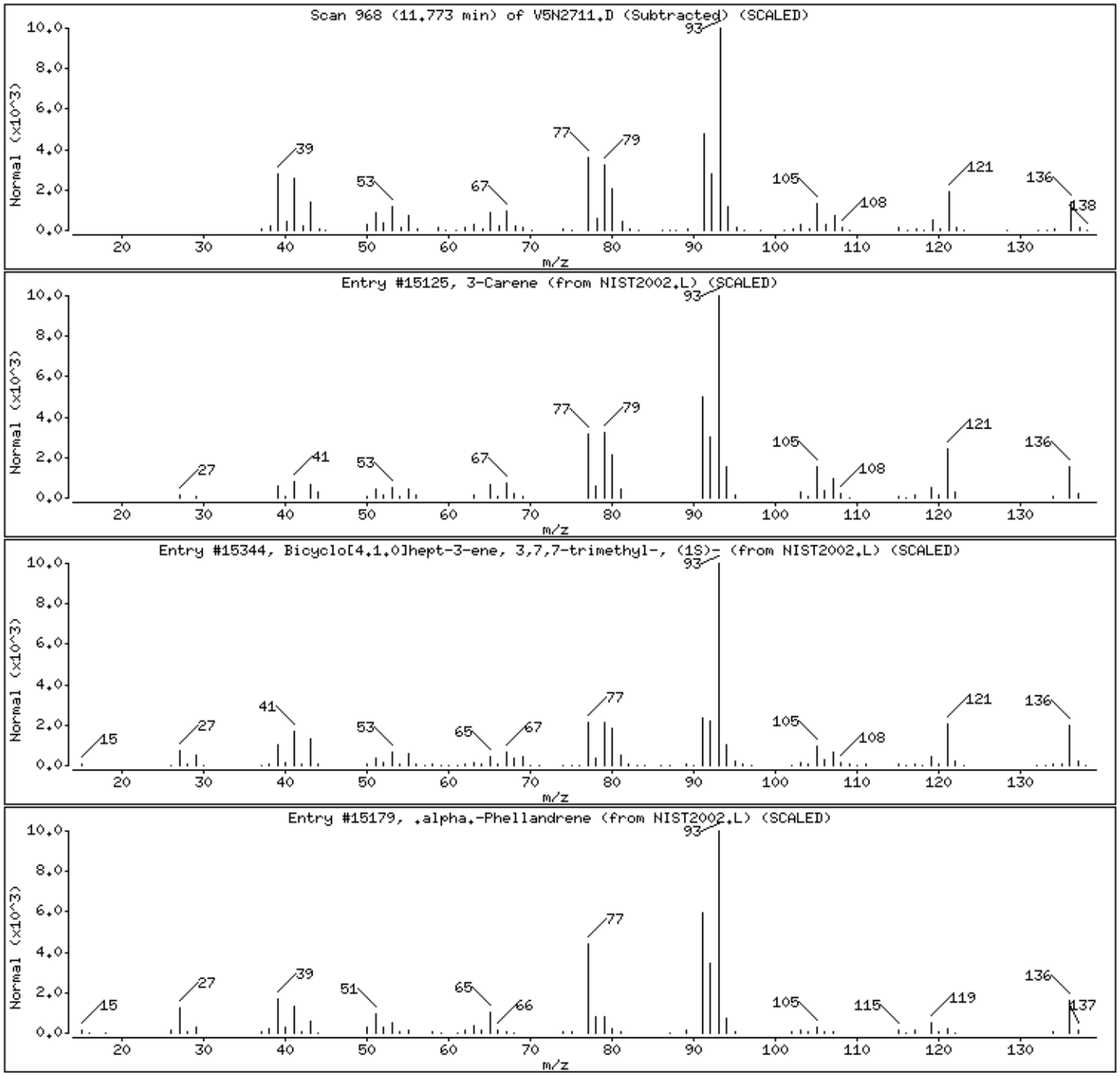
Client ID: H30R1 Instrument: V5.i

Sample Info: 5G,K2198-10C,,62569

Operator: SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
3-Carene	13466-78-9	NIST2002.L	15125	97	C10H16	136
Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	498-15-7	NIST2002.L	15344	96	C10H16	136
.alpha.-Phellandrene	99-83-2	NIST2002.L	15179	94	C10H16	136



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Date : 07-NOV-2011 03:50

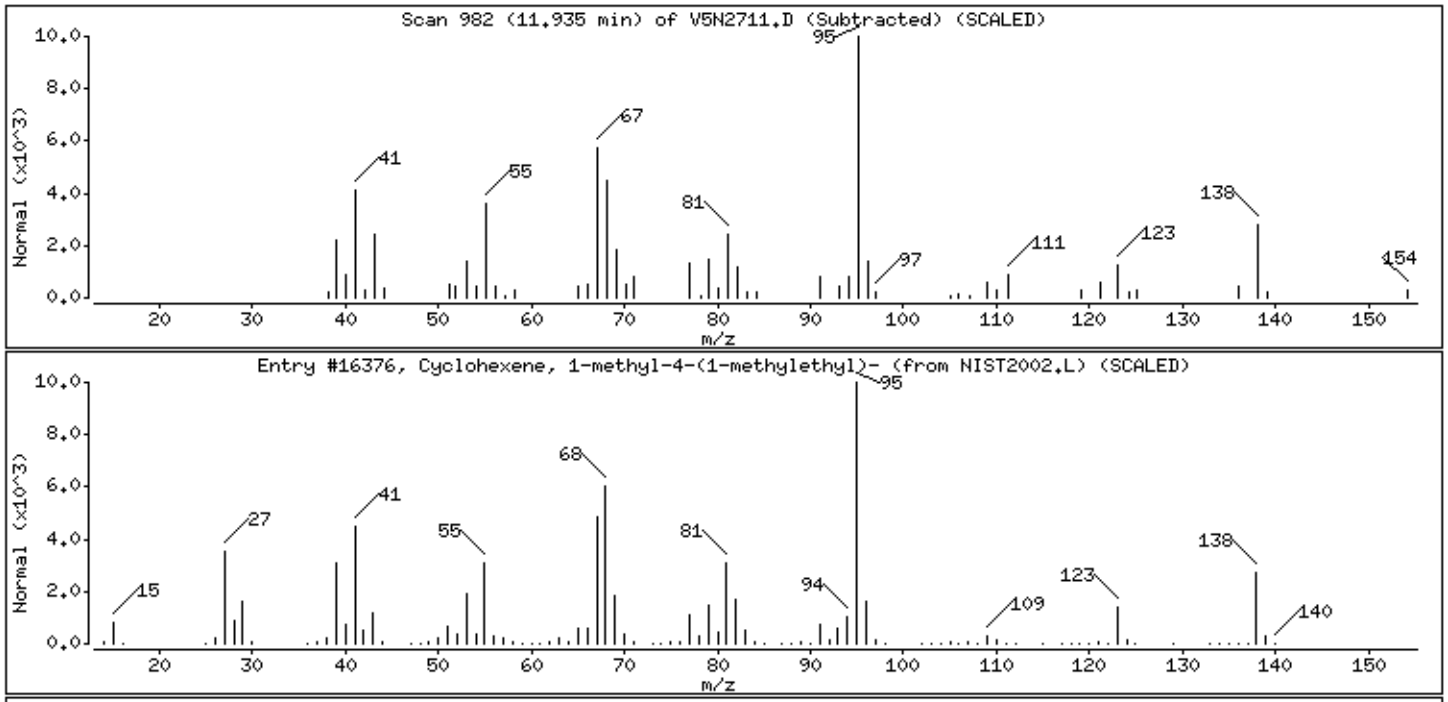
Client ID: H30R1 Instrument: V5.i

Sample Info: 5G,K2198-10C,,62569

Operator: SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclohexene, 1-methyl-4-(1-methylethyl)-	5502-88-5	NIST2002.L	16376	96	C10H18	138



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Date : 07-NOV-2011 03:50

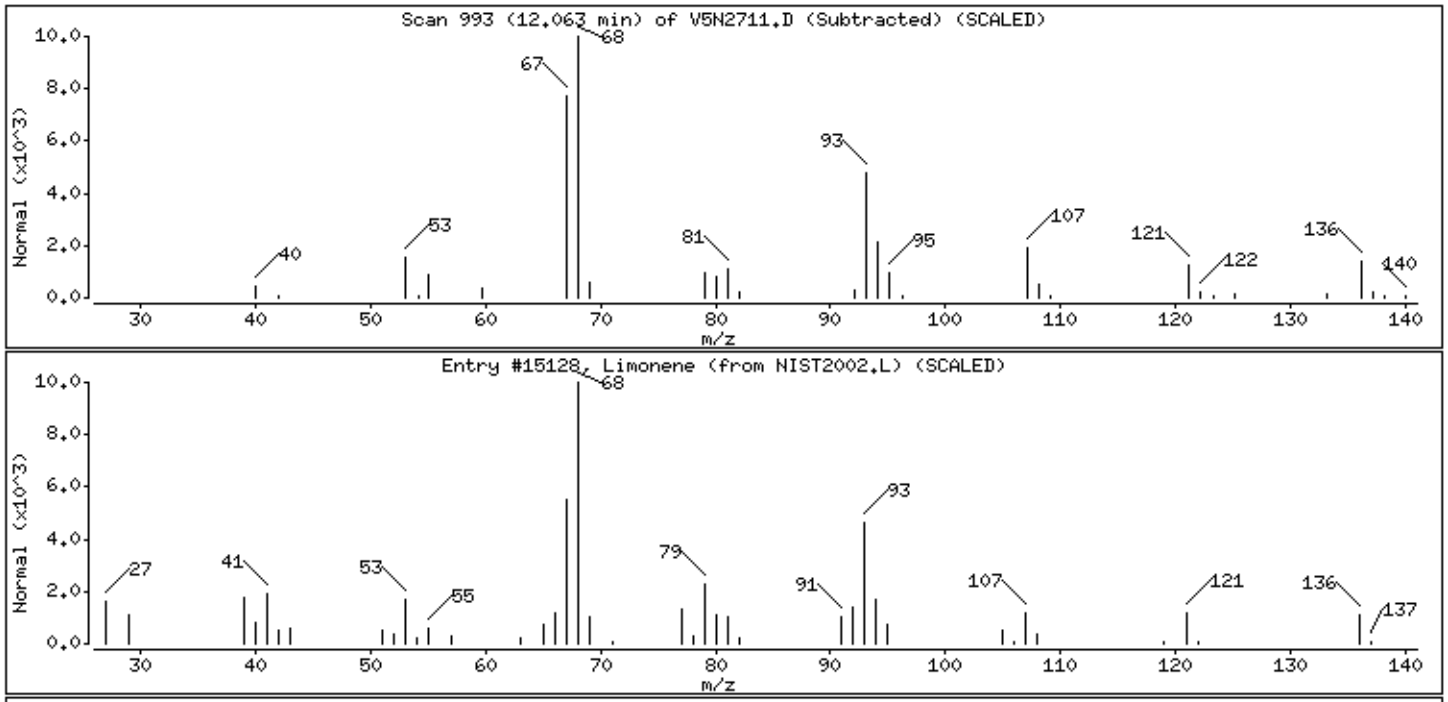
Client ID: H30R1 Instrument: V5.i

Sample Info: 5G,K2198-10C,,62569

Operator: SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Limonene	138-86-3	NIST2002.L	15128	91	C10H16	136



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Date : 07-NOV-2011 03:50

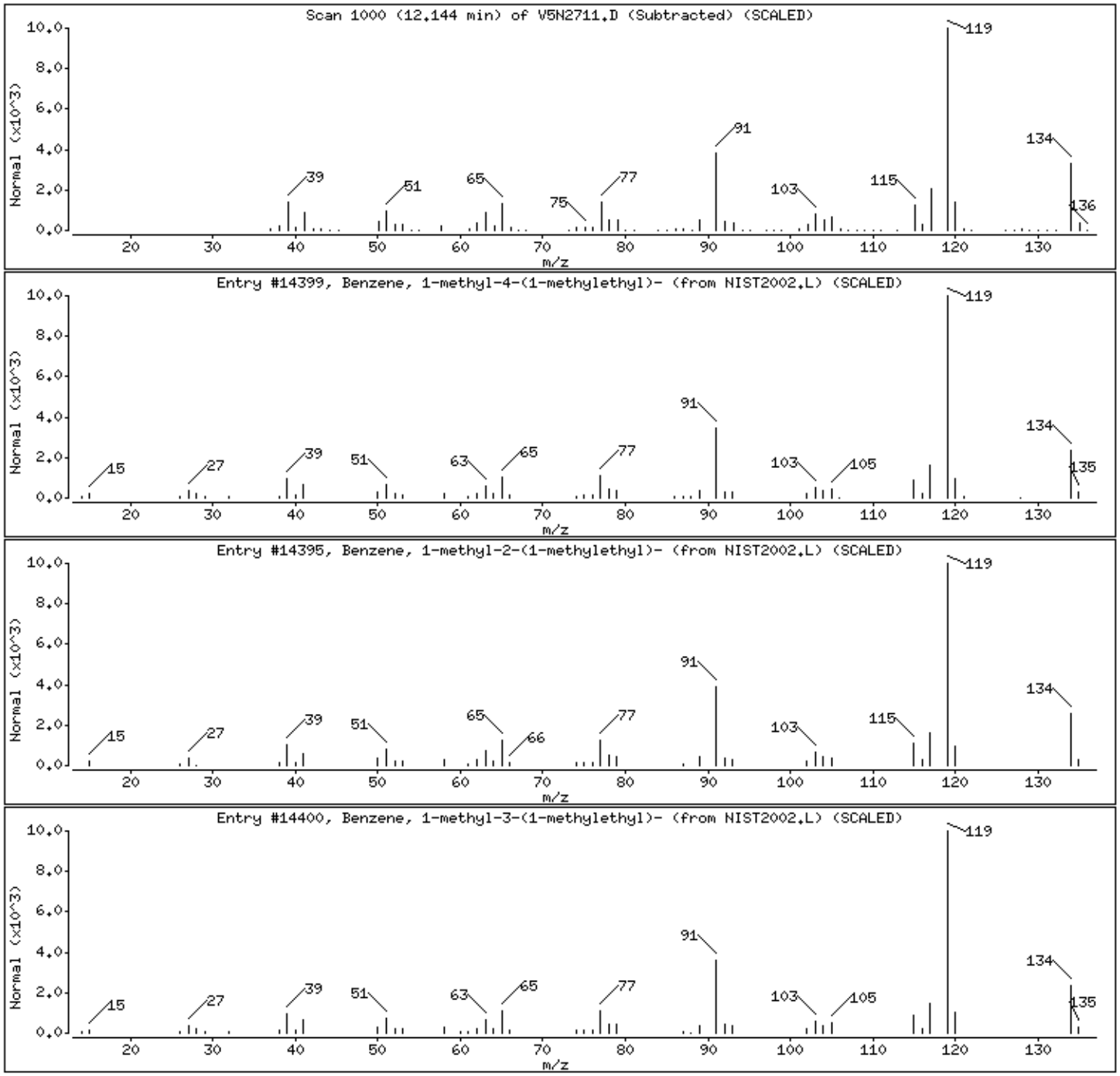
Client ID: H30R1 Instrument: V5.i

Sample Info: 5G,K2198-10C,,62569

Operator: SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1-methyl-4-(1-methylethyl)-	99-87-6	NIST2002.L	14399	97	C10H14	134
Benzene, 1-methyl-2-(1-methylethyl)-	527-84-4	NIST2002.L	14395	96	C10H14	134
Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	NIST2002.L	14400	96	C10H14	134



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Date : 07-NOV-2011 03:50

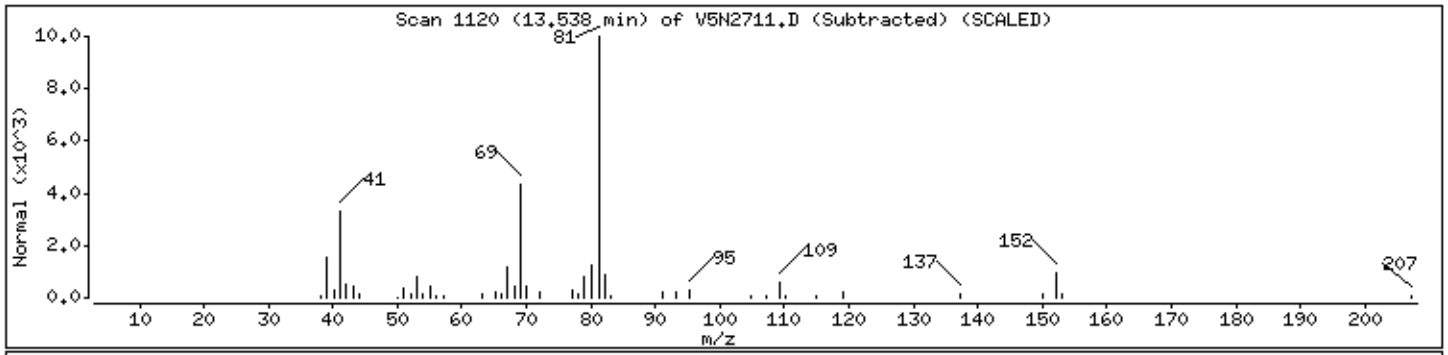
Client ID: H30R1 Instrument: V5.i

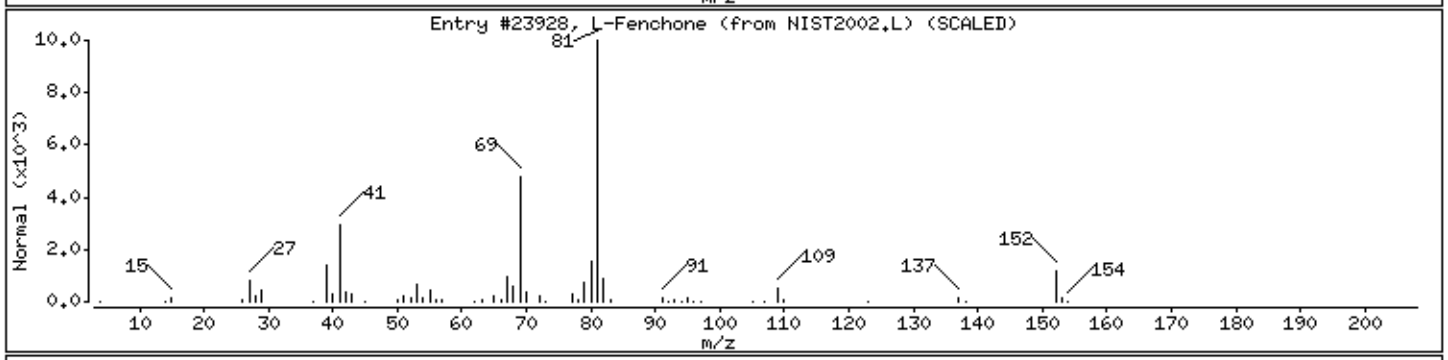
Sample Info: 5G,K2198-10C,,62569

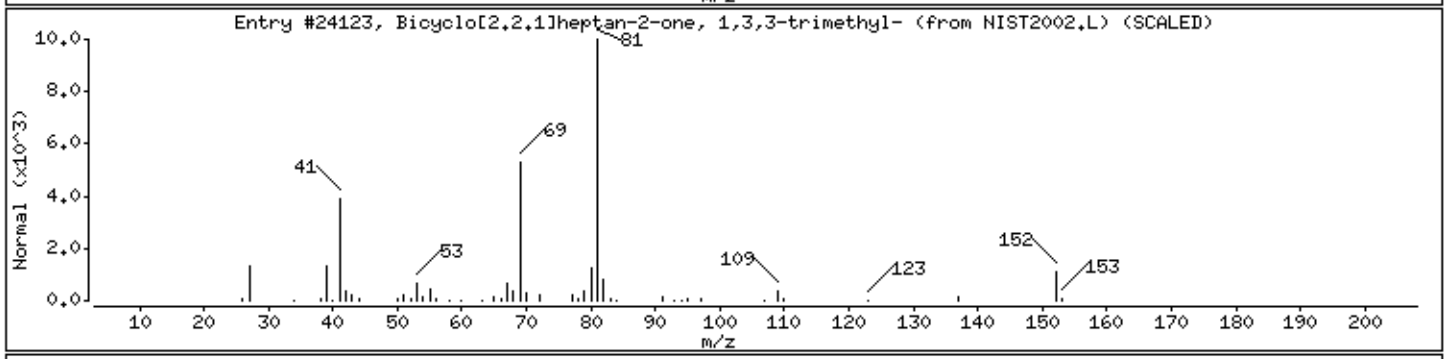
Operator: SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
L-Fenchone	126-21-6	NIST2002.L	23928	94	C10H16O	152
Bicyclo[2.2.1]heptan-2-one, 1,3,3-trimet	1195-79-5	NIST2002.L	24123	91	C10H16O	152







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Date : 07-NOV-2011 03:50

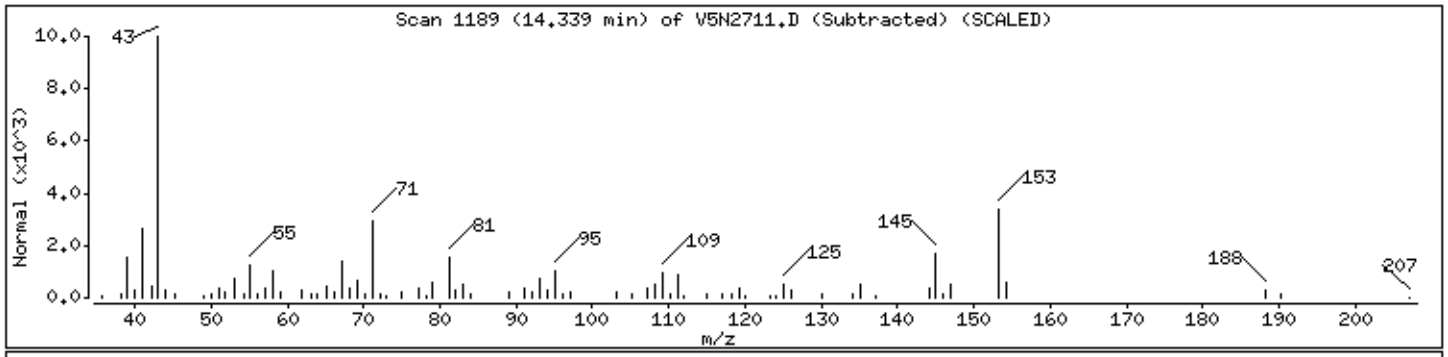
Client ID: H30R1 Instrument: V5.i

Sample Info: 5G,K2198-10C,,62569

Operator: SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Unknown			0	0		0



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Date : 07-NOV-2011 03:50

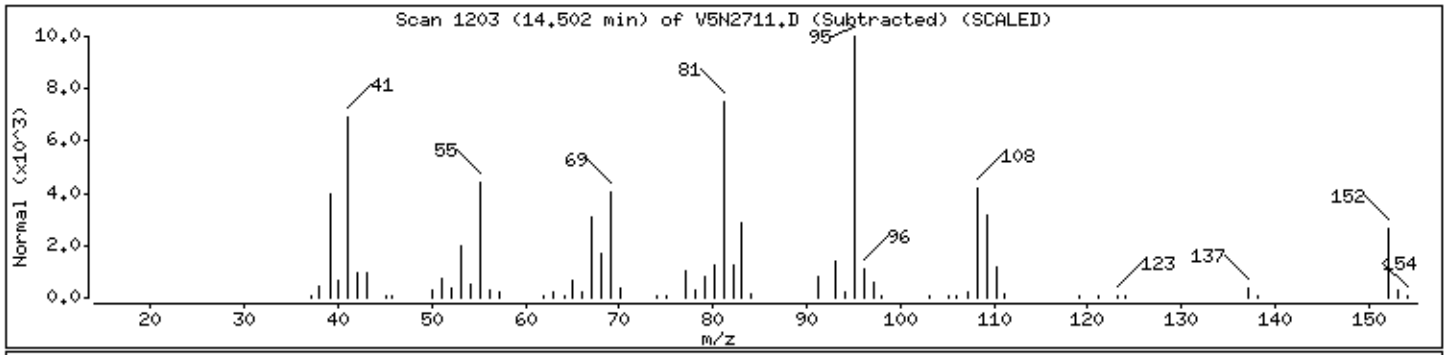
Client ID: H30R1 Instrument: V5.i

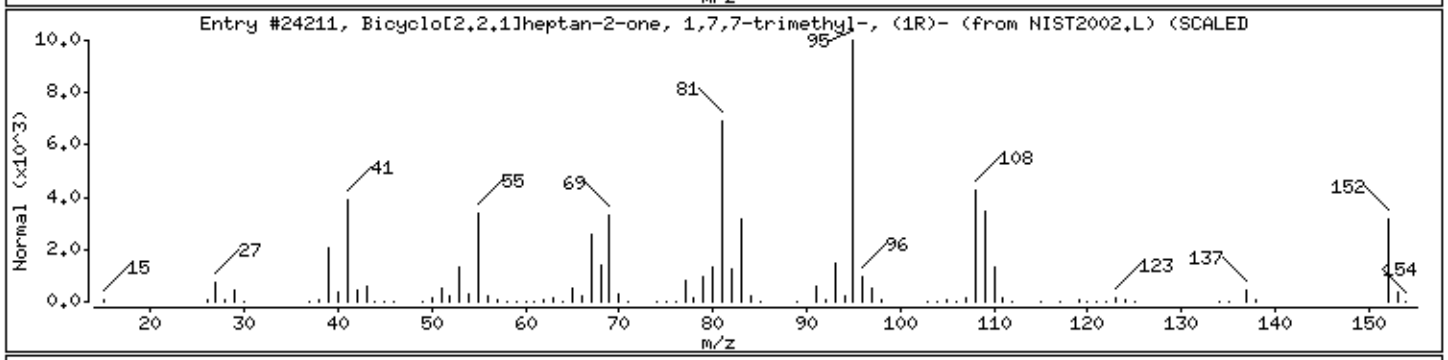
Sample Info: 5G,K2198-10C,,62569

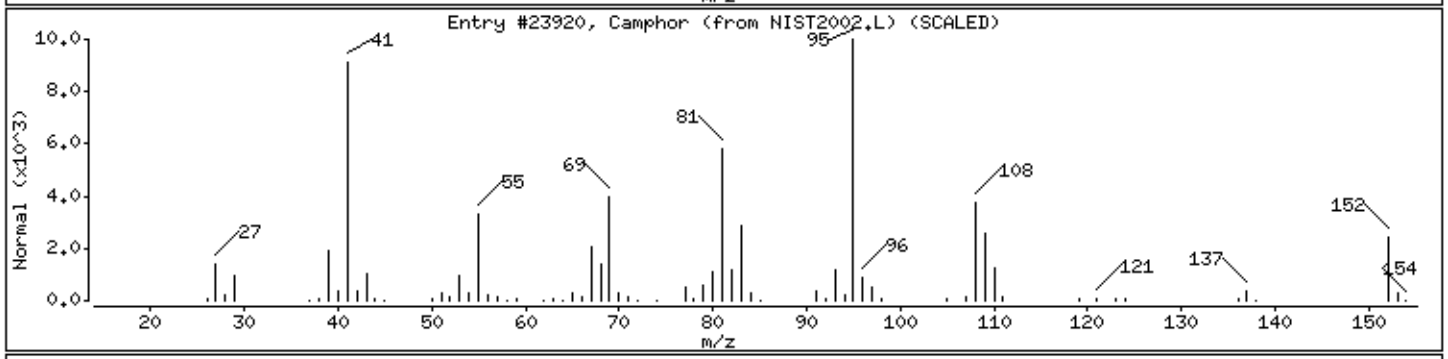
Operator: SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet	464-49-3	NIST2002.L	24211	97	C10H16O	152
Camphor	76-22-2	NIST2002.L	23920	97	C10H16O	152







1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30S4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-11C

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N2712.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 38 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
75-71-8	Dichlorodifluoromethane	8.1	U
74-87-3	Chloromethane	8.1	U
75-01-4	Vinyl chloride	8.1	U
74-83-9	Bromomethane	8.1	U
75-00-3	Chloroethane	8.1	U
75-69-4	Trichlorofluoromethane	8.1	U
75-35-4	1,1-Dichloroethene	8.1	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	8.1	U
67-64-1	Acetone	16	U
75-15-0	Carbon disulfide	8.1	U
79-20-9	Methyl acetate	8.1	U
75-09-2	Methylene chloride	8.1	U
156-60-5	trans-1,2-Dichloroethene	8.1	U
1634-04-4	Methyl tert-butyl ether	8.1	U
75-34-3	1,1-Dichloroethane	8.1	U
156-59-2	cis-1,2-Dichloroethene	8.1	U
78-93-3	2-Butanone	16	U
74-97-5	Bromochloromethane	8.1	U
67-66-3	Chloroform	8.1	U
71-55-6	1,1,1-Trichloroethane	8.1	U
110-82-7	Cyclohexane	8.1	U
56-23-5	Carbon tetrachloride	8.1	U
71-43-2	Benzene	8.1	U
107-06-2	1,2-Dichloroethane	8.1	U
123-91-1	1,4-Dioxane	160	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30S4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-11C

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N2712.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 38 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
79-01-6	Trichloroethene	8.1	U
108-87-2	Methylcyclohexane	8.1	U
78-87-5	1,2-Dichloropropane	8.1	U
75-27-4	Bromodichloromethane	8.1	U
10061-01-5	cis-1,3-Dichloropropene	8.1	U
108-10-1	4-Methyl-2-pentanone	16	U
108-88-3	Toluene	8.1	U
10061-02-6	trans-1,3-Dichloropropene	8.1	U
79-00-5	1,1,2-Trichloroethane	8.1	U
127-18-4	Tetrachloroethene	8.1	U
591-78-6	2-Hexanone	16	U
124-48-1	Dibromochloromethane	8.1	U
106-93-4	1,2-Dibromoethane	8.1	U
108-90-7	Chlorobenzene	8.1	U
100-41-4	Ethylbenzene	8.1	U
179601-23-1	m,p-Xylene	8.1	U
95-47-6	o-Xylene	8.1	U
100-42-5	Styrene	8.1	U
75-25-2	Bromoform	8.1	U
98-82-8	Isopropylbenzene	8.1	U
79-34-5	1,1,2,2-Tetrachloroethane	8.1	U
541-73-1	1,3-Dichlorobenzene	8.1	U
106-46-7	1,4-Dichlorobenzene	8.1	U
95-50-1	1,2-Dichlorobenzene	8.1	U
96-12-8	1,2-Dibromo-3-chloropropane	8.1	U
120-82-1	1,2,4-Trichlorobenzene	8.1	U
87-61-6	1,2,3-Trichlorobenzene	8.1	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30S4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-11C

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N2712.D

Level: (TRACE or LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 38 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG Purge Volume: 10.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	1195-79-5	Bicyclo[2.2.1]heptan-2-one,	13.531	10	NJ
02	464-48-2	Bicyclo[2.2.1]heptan-2-one,	14.495	110	NJ
	E96679[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2712.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111106.B\V5N2712.D
Lab Smp Id: K2198-11C Client Smp ID: H30S4
Inj Date : 07-NOV-2011 04:17
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-11C,,62569
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 44
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$ 79 Vinyl Chloride-d3	65	2.161	2.173	(0.342)	137162	44.1910	44
$ 80 Chloroethane-d5	69	2.591	2.603	(0.410)	102461	51.0346	51(Q)
$ 81 1,1-Dichloroethene-d2	65	3.357	3.369	(0.531)	33159	51.5072	52(Q)
$ 82 2-Butanone-d5	46	5.076	5.076	(0.803)	54148	62.5537	63
$ 83 Chloroform-d	84	5.378	5.390	(0.851)	181334	48.7635	49(Q)
$ 23 1,2-Dichloroethane-d4	65	5.889	5.901	(0.932)	108493	54.0535	54
$ 84 Benzene-d6	84	5.912	5.912	(0.627)	333524	60.1751	60
* 26 1,4-Difluorobenzene	114	6.319	6.319	(1.000)	325970	50.0000	
$ 85 1,2-Dichloropropane-d6	67	6.725	6.725	(0.713)	130690	57.0569	57
$ 94 1,4-Dioxane-d8	96	6.911	6.911	(1.094)	23060	1207.08	1200
$ 33 Toluene-d8	98	7.840	7.840	(0.831)	263146	51.4305	51
$ 86 trans-1,3-Dichloropropene-d4	79	8.119	8.119	(0.861)	95003	55.0881	55
$ 87 2-Hexanone-d5	63	8.595	8.572	(0.911)	30779	69.8452	70(Q)
* 42 Chlorobenzene-d5	117	9.431	9.431	(1.000)	209317	50.0000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.929	10.929	(1.159)	73641	49.1198	49
* 78 1,4-Dichlorobenzene-d4	152	12.183	12.172	(1.000)	60318	50.0000	
$ 90 1,2-Dichlorobenzene-d4	152	12.636	12.625	(1.037)	55519	49.2703	49(Q)

Data File: \\avogadro\organics\V5.I\111106.B\V5N2712.D
Report Date: 09-Nov-2011 07:59

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2712.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111106.B\V5N2712.D
Lab Smp Id: K2198-11C Client Smp ID: H30S4
Inj Date : 07-NOV-2011 04:17
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-11C,,62569
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 44
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

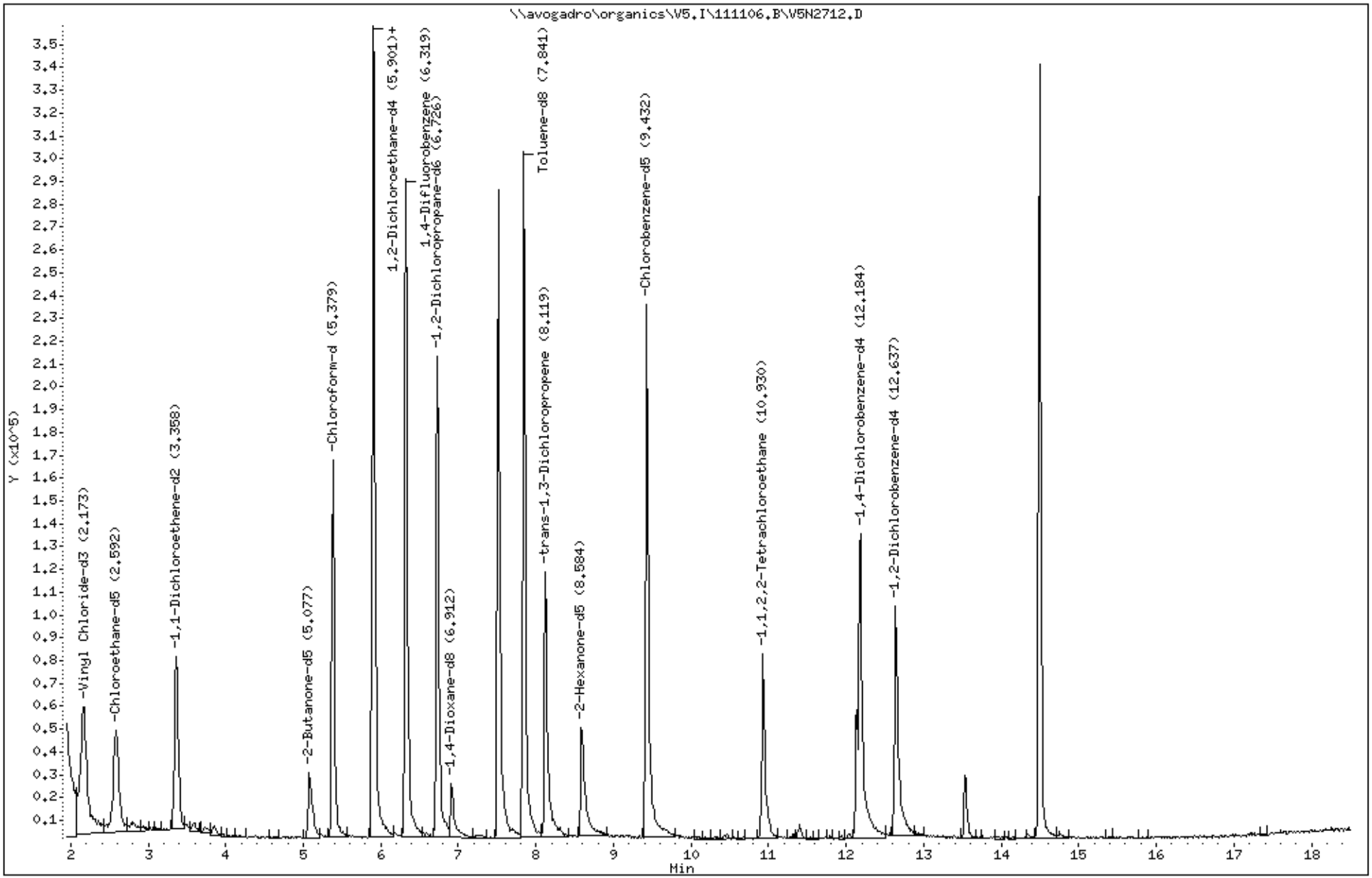
ISTD	RT	AREA	AMOUNT
* 78 1,4-Dichlorobenzene-d4	12.184	581834	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Bicyclo[2.2.1]heptan-2-one, 1,3,3-trimet				CAS #: 1195-79-5			
13.531	72437	6.22490260	6.2	91	NIST2002.L	24121	78
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet				CAS #: 464-48-2			
14.495	779422	66.9797348	67	98	NIST2002.L	24208	78

Data File: \\avogadro\organics\V5.I\111106.B\V5N2712.D
Date : 07-NOV-2011 04:17
Client ID: H30S4
Sample Info: 5G,K2198-11C,,62569

Instrument: V5.i

Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111106.B\V5N2712.D

Date : 07-NOV-2011 04:17

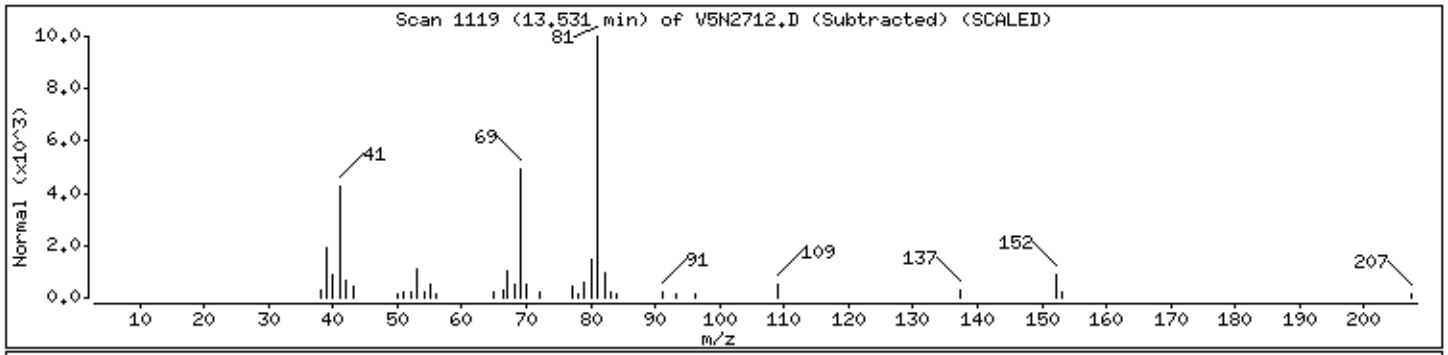
Client ID: H30S4 Instrument: V5.i

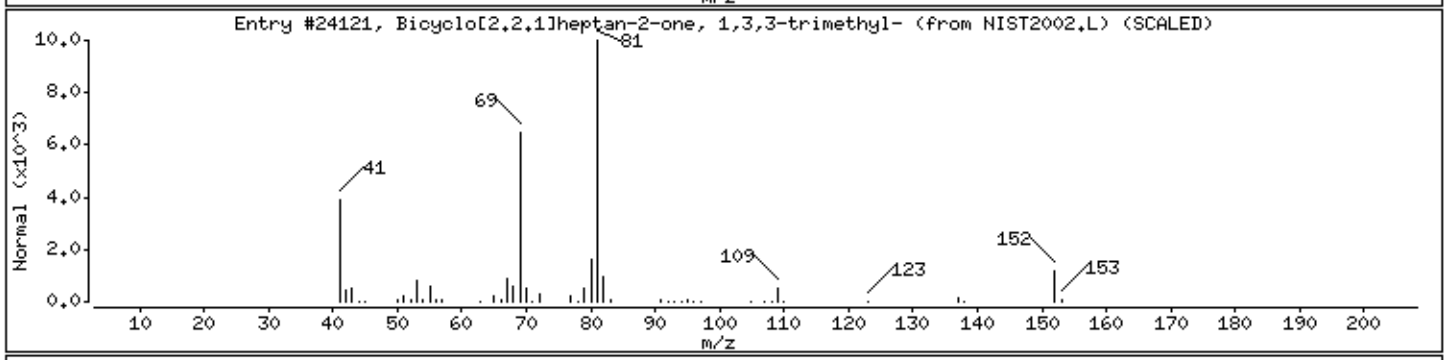
Sample Info: 5G,K2198-11C,,62569

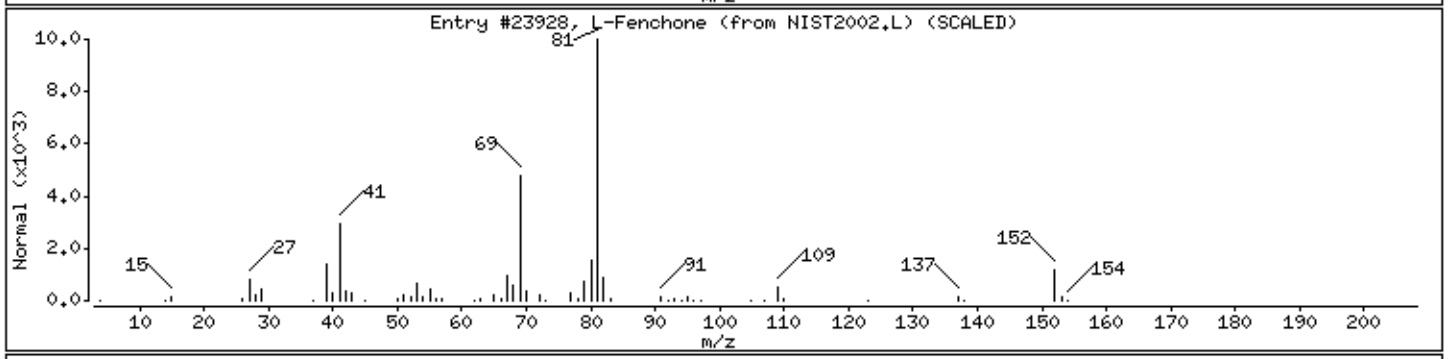
Operator: SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[2.2.1]heptan-2-one, 1,3,3-trimet	1195-79-5	NIST2002.L	24121	91	C10H16O	152
L-Fenchone	126-21-6	NIST2002.L	23928	90	C10H16O	152







Data File: \\avogadro\organics\V5.I\111106.B\V5N2712.D

Date : 07-NOV-2011 04:17

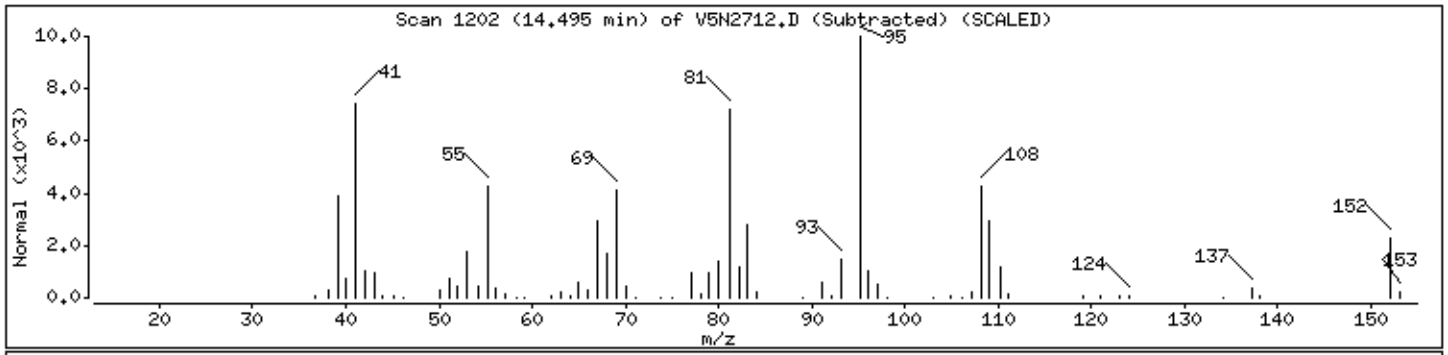
Client ID: H30S4 Instrument: V5.i

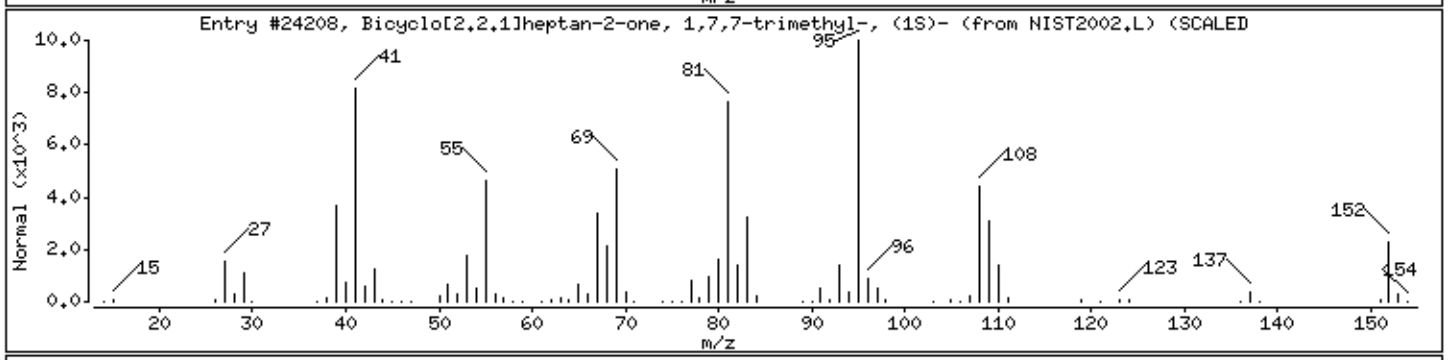
Sample Info: 5G,K2198-11C,,62569

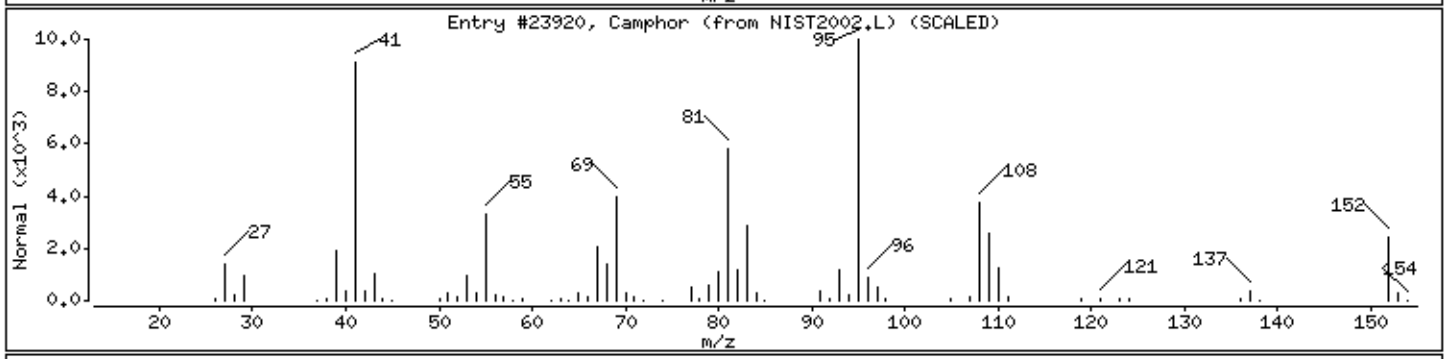
Operator: SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet	464-48-2	NIST2002.L	24208	98	C10H16O	152
Camphor	76-22-2	NIST2002.L	23920	98	C10H16O	152







1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30S5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-12C

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N2713.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 14 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
75-71-8	Dichlorodifluoromethane	5.8	U
74-87-3	Chloromethane	5.8	U
75-01-4	Vinyl chloride	5.8	U
74-83-9	Bromomethane	5.8	U
75-00-3	Chloroethane	5.8	U
75-69-4	Trichlorofluoromethane	5.8	U
75-35-4	1,1-Dichloroethene	5.8	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.8	U
67-64-1	Acetone	12	U
75-15-0	Carbon disulfide	5.8	U
79-20-9	Methyl acetate	5.8	U
75-09-2	Methylene chloride	5.8	U
156-60-5	trans-1,2-Dichloroethene	5.8	U
1634-04-4	Methyl tert-butyl ether	5.8	U
75-34-3	1,1-Dichloroethane	5.8	U
156-59-2	cis-1,2-Dichloroethene	5.8	U
78-93-3	2-Butanone	12	U
74-97-5	Bromochloromethane	5.8	U
67-66-3	Chloroform	5.8	U
71-55-6	1,1,1-Trichloroethane	5.8	U
110-82-7	Cyclohexane	5.8	U
56-23-5	Carbon tetrachloride	5.8	U
71-43-2	Benzene	5.8	U
107-06-2	1,2-Dichloroethane	5.8	U
123-91-1	1,4-Dioxane	120	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30S5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-12C

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N2713.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 14 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
79-01-6	Trichloroethene	5.8	U
108-87-2	Methylcyclohexane	5.8	U
78-87-5	1,2-Dichloropropane	5.8	U
75-27-4	Bromodichloromethane	5.8	U
10061-01-5	cis-1,3-Dichloropropene	5.8	U
108-10-1	4-Methyl-2-pentanone	12	U
108-88-3	Toluene	5.8	U
10061-02-6	trans-1,3-Dichloropropene	5.8	U
79-00-5	1,1,2-Trichloroethane	5.8	U
127-18-4	Tetrachloroethene	5.8	U
591-78-6	2-Hexanone	12	U
124-48-1	Dibromochloromethane	5.8	U
106-93-4	1,2-Dibromoethane	5.8	U
108-90-7	Chlorobenzene	5.8	U
100-41-4	Ethylbenzene	5.8	U
179601-23-1	m,p-Xylene	5.8	U
95-47-6	o-Xylene	5.8	U
100-42-5	Styrene	5.8	U
75-25-2	Bromoform	5.8	U
98-82-8	Isopropylbenzene	5.8	U
79-34-5	1,1,2,2-Tetrachloroethane	5.8	U
541-73-1	1,3-Dichlorobenzene	5.8	U
106-46-7	1,4-Dichlorobenzene	5.8	U
95-50-1	1,2-Dichlorobenzene	5.8	U
96-12-8	1,2-Dibromo-3-chloropropane	5.8	U
120-82-1	1,2,4-Trichlorobenzene	5.8	U
87-61-6	1,2,3-Trichlorobenzene	5.8	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30S5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-12C

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N2713.D

Level: (TRACE or LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 14 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG Purge Volume: 10.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	76-22-2	Camphor	14.506	19	NJ
	E96679[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2713.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111106.B\V5N2713.D
Lab Smp Id: K2198-12C Client Smp ID: H30S5
Inj Date : 07-NOV-2011 04:45
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-12C,,62569
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 45
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$ 79 Vinyl Chloride-d3	65	2.161	2.173	(0.342)	125409	41.5189	42
$ 80 Chloroethane-d5	69	2.590	2.603	(0.410)	92025	47.1009	47(Q)
$ 81 1,1-Dichloroethene-d2	65	3.357	3.369	(0.531)	28935	46.1856	46(Q)
$ 82 2-Butanone-d5	46	5.076	5.076	(0.803)	55559	65.9541	66
$ 83 Chloroform-d	84	5.378	5.390	(0.851)	179419	49.5794	50(Q)
$ 23 1,2-Dichloroethane-d4	65	5.889	5.901	(0.932)	97354	49.8418	50(Q)
$ 84 Benzene-d6	84	5.912	5.912	(0.627)	320702	54.4543	54
* 26 1,4-Difluorobenzene	114	6.318	6.319	(1.000)	317220	50.0000	
$ 85 1,2-Dichloropropane-d6	67	6.725	6.725	(0.713)	126173	51.8409	52
$ 94 1,4-Dioxane-d8	96	6.910	6.911	(1.094)	18969	1020.32	1000
$ 33 Toluene-d8	98	7.840	7.840	(0.831)	269106	49.4980	49
$ 86 trans-1,3-Dichloropropene-d4	79	8.118	8.119	(0.861)	93894	51.2387	51
$ 87 2-Hexanone-d5	63	8.583	8.572	(0.910)	28580	61.0358	61
* 42 Chlorobenzene-d5	117	9.431	9.431	(1.000)	222415	50.0000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.929	10.929	(1.159)	75433	47.3521	47
* 78 1,4-Dichlorobenzene-d4	152	12.183	12.172	(1.000)	66365	50.0000	
$ 90 1,2-Dichlorobenzene-d4	152	12.636	12.625	(1.037)	58174	46.9224	47(Q)

Data File: \\avogadro\organics\V5.I\111106.B\V5N2713.D
Report Date: 09-Nov-2011 07:59

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2713.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111106.B\V5N2713.D
Lab Smp Id: K2198-12C Client Smp ID: H30S5
Inj Date : 07-NOV-2011 04:45
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-12C,,62569
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 45
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

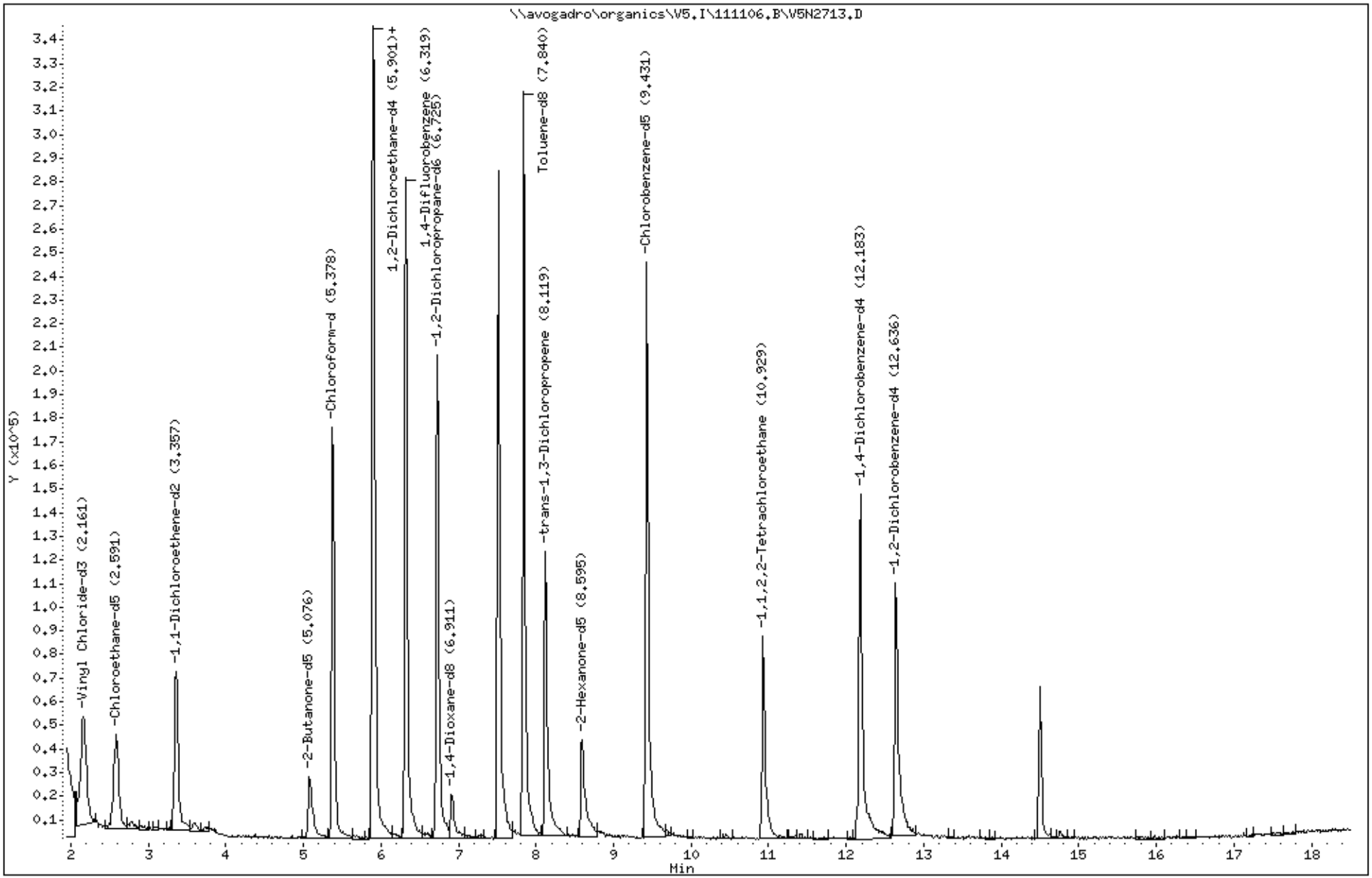
ISTD	RT	AREA	AMOUNT
* 78 1,4-Dichlorobenzene-d4	12.183	504812	50.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Camphor				CAS #: 76-22-2			
14.506	162638	16.1087211	16	87	NIST2002.L	23920	78

Data File: \\avogadro\organics\V5.I\111106.B\V5N2713.D
Date : 07-NOV-2011 04:45
Client ID: H30S5
Sample Info: 5G,K2198-12C,,62569

Instrument: V5.i

Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111106.B\V5N2713.D

Date : 07-NOV-2011 04:45

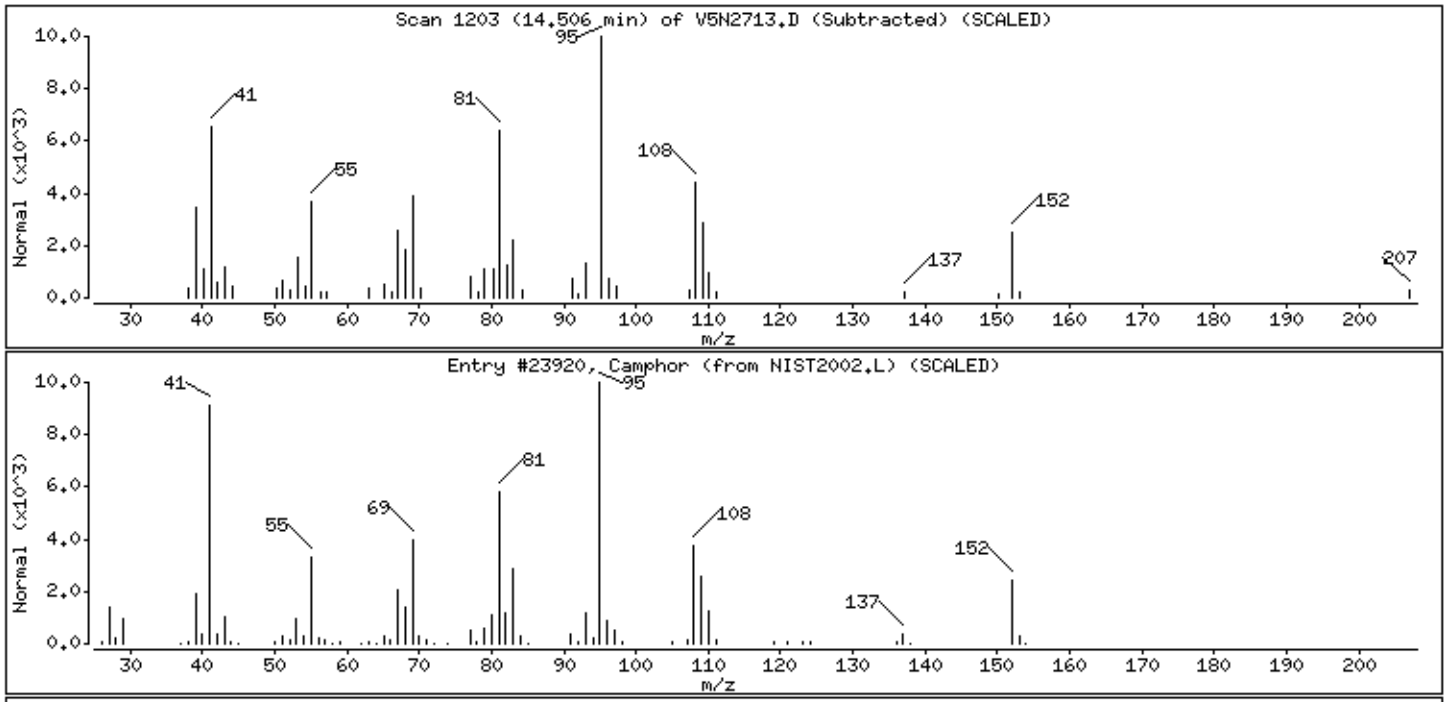
Client ID: H30S5 Instrument: V5.i

Sample Info: 5G,K2198-12C,,62569

Operator: SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Camphor	76-22-2	NIST2002.L	23920	87	C10H16O	152



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30S8

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-13C

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N2714.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 33 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
75-71-8	Dichlorodifluoromethane	7.5	U
74-87-3	Chloromethane	7.5	U
75-01-4	Vinyl chloride	7.5	U
74-83-9	Bromomethane	7.5	U
75-00-3	Chloroethane	7.5	U
75-69-4	Trichlorofluoromethane	7.5	U
75-35-4	1,1-Dichloroethene	7.5	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	7.5	U
67-64-1	Acetone	15	U
75-15-0	Carbon disulfide	7.5	U
79-20-9	Methyl acetate	7.5	U
75-09-2	Methylene chloride	7.5	U
156-60-5	trans-1,2-Dichloroethene	7.5	U
1634-04-4	Methyl tert-butyl ether	7.5	U
75-34-3	1,1-Dichloroethane	7.5	U
156-59-2	cis-1,2-Dichloroethene	7.5	U
78-93-3	2-Butanone	15	U
74-97-5	Bromochloromethane	7.5	U
67-66-3	Chloroform	7.5	U
71-55-6	1,1,1-Trichloroethane	7.5	U
110-82-7	Cyclohexane	7.5	U
56-23-5	Carbon tetrachloride	7.5	U
71-43-2	Benzene	7.5	U
107-06-2	1,2-Dichloroethane	7.5	U
123-91-1	1,4-Dioxane	150	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30S8

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-13C

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N2714.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 33 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
79-01-6	Trichloroethene	7.5	U
108-87-2	Methylcyclohexane	7.5	U
78-87-5	1,2-Dichloropropane	7.5	U
75-27-4	Bromodichloromethane	7.5	U
10061-01-5	cis-1,3-Dichloropropene	7.5	U
108-10-1	4-Methyl-2-pentanone	15	U
108-88-3	Toluene	7.5	U
10061-02-6	trans-1,3-Dichloropropene	7.5	U
79-00-5	1,1,2-Trichloroethane	7.5	U
127-18-4	Tetrachloroethene	7.5	U
591-78-6	2-Hexanone	15	U
124-48-1	Dibromochloromethane	7.5	U
106-93-4	1,2-Dibromoethane	7.5	U
108-90-7	Chlorobenzene	7.5	U
100-41-4	Ethylbenzene	7.5	U
179601-23-1	m,p-Xylene	7.5	U
95-47-6	o-Xylene	7.5	U
100-42-5	Styrene	7.5	U
75-25-2	Bromoform	7.5	U
98-82-8	Isopropylbenzene	7.5	U
79-34-5	1,1,2,2-Tetrachloroethane	7.5	U
541-73-1	1,3-Dichlorobenzene	7.5	U
106-46-7	1,4-Dichlorobenzene	7.5	U
95-50-1	1,2-Dichlorobenzene	7.5	U
96-12-8	1,2-Dibromo-3-chloropropane	7.5	U
120-82-1	1,2,4-Trichlorobenzene	7.5	U
87-61-6	1,2,3-Trichlorobenzene	7.5	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30S8

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-13C

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N2714.D

Level: (TRACE or LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 33 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E96679[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2714.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111106.B\V5N2714.D
Lab Smp Id: K2198-13C Client Smp ID: H30S8
Inj Date : 07-NOV-2011 05:12
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-13C,,62569
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 46
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$	79 Vinyl Chloride-d3	65	2.167	2.173	(0.343)	101553	39.4159	39
$	80 Chloroethane-d5	69	2.597	2.603	(0.411)	76475	45.8886	46(Q)
$	81 1,1-Dichloroethene-d2	65	3.364	3.369	(0.532)	24262	45.4017	45(Q)
$	82 2-Butanone-d5	46	5.082	5.076	(0.804)	46145	64.2205	64
$	83 Chloroform-d	84	5.384	5.390	(0.851)	143661	46.5408	47(Q)
$	23 1,2-Dichloroethane-d4	65	5.895	5.901	(0.932)	81233	48.7566	49(Q)
$	84 Benzene-d6	84	5.907	5.912	(0.626)	269816	49.4150	49
*	26 1,4-Difluorobenzene	114	6.325	6.319	(1.000)	270582	50.0000	
$	85 1,2-Dichloropropane-d6	67	6.731	6.725	(0.713)	106799	47.3297	47
$	94 1,4-Dioxane-d8	96	6.917	6.911	(1.094)	14650	923.831	920
$	33 Toluene-d8	98	7.846	7.840	(0.831)	232902	46.2060	46
$	86 trans-1,3-Dichloropropene-d4	79	8.125	8.119	(0.861)	76235	44.8720	45
$	87 2-Hexanone-d5	63	8.601	8.572	(0.911)	21909	50.4668	50(Q)
*	42 Chlorobenzene-d5	117	9.437	9.431	(1.000)	206207	50.0000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.935	10.929	(1.159)	69506	47.0609	47
*	78 1,4-Dichlorobenzene-d4	152	12.178	12.172	(1.000)	66131	50.0000	
$	90 1,2-Dichlorobenzene-d4	152	12.642	12.625	(1.038)	56215	45.5027	46(Q)

Data File: \\avogadro\organics\V5.I\111106.B\V5N2714.D
Report Date: 09-Nov-2011 07:59

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2714.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

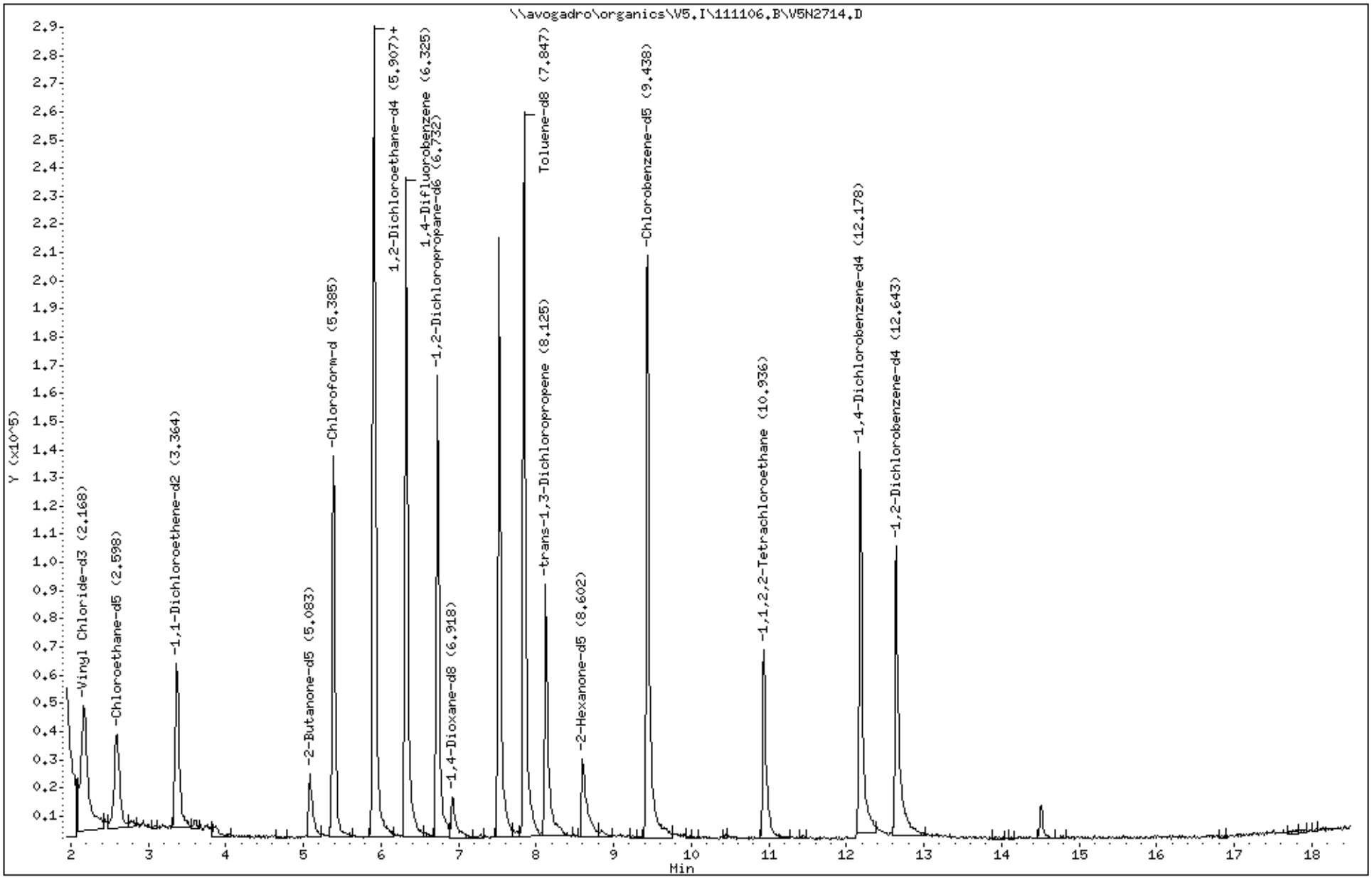
Data file : \\avogadro\organics\V5.I\111106.B\V5N2714.D
Lab Smp Id: K2198-13C Client Smp ID: H30S8
Inj Date : 07-NOV-2011 05:12
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-13C,,62569
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 46
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111106.B\V5N2714.D
Date : 07-NOV-2011 05:12
Client ID: H30S8
Sample Info: 5G,K2198-13C,,62569

Instrument: V5.i

Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30S9

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-14C

Sample wt/vol: 5.20 (g/mL) G Lab File ID: V5N2715.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 34 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
75-71-8	Dichlorodifluoromethane	7.3	U
74-87-3	Chloromethane	7.3	U
75-01-4	Vinyl chloride	7.3	U
74-83-9	Bromomethane	7.3	U
75-00-3	Chloroethane	7.3	U
75-69-4	Trichlorofluoromethane	7.3	U
75-35-4	1,1-Dichloroethene	7.3	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	7.3	U
67-64-1	Acetone	15	U
75-15-0	Carbon disulfide	7.3	U
79-20-9	Methyl acetate	7.3	U
75-09-2	Methylene chloride	7.3	U
156-60-5	trans-1,2-Dichloroethene	7.3	U
1634-04-4	Methyl tert-butyl ether	7.3	U
75-34-3	1,1-Dichloroethane	7.3	U
156-59-2	cis-1,2-Dichloroethene	7.3	U
78-93-3	2-Butanone	15	U
74-97-5	Bromochloromethane	7.3	U
67-66-3	Chloroform	7.3	U
71-55-6	1,1,1-Trichloroethane	7.3	U
110-82-7	Cyclohexane	7.3	U
56-23-5	Carbon tetrachloride	7.3	U
71-43-2	Benzene	7.3	U
107-06-2	1,2-Dichloroethane	7.3	U
123-91-1	1,4-Dioxane	150	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30S9

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-14C

Sample wt/vol: 5.20 (g/mL) G Lab File ID: V5N2715.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 34 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
79-01-6	Trichloroethene	7.3	U
108-87-2	Methylcyclohexane	7.3	U
78-87-5	1,2-Dichloropropane	7.3	U
75-27-4	Bromodichloromethane	7.3	U
10061-01-5	cis-1,3-Dichloropropene	7.3	U
108-10-1	4-Methyl-2-pentanone	15	U
108-88-3	Toluene	7.3	U
10061-02-6	trans-1,3-Dichloropropene	7.3	U
79-00-5	1,1,2-Trichloroethane	7.3	U
127-18-4	Tetrachloroethene	7.3	U
591-78-6	2-Hexanone	15	U
124-48-1	Dibromochloromethane	7.3	U
106-93-4	1,2-Dibromoethane	7.3	U
108-90-7	Chlorobenzene	7.3	U
100-41-4	Ethylbenzene	7.3	U
179601-23-1	m,p-Xylene	7.3	U
95-47-6	o-Xylene	7.3	U
100-42-5	Styrene	7.3	U
75-25-2	Bromoform	7.3	U
98-82-8	Isopropylbenzene	7.3	U
79-34-5	1,1,2,2-Tetrachloroethane	7.3	U
541-73-1	1,3-Dichlorobenzene	7.3	U
106-46-7	1,4-Dichlorobenzene	7.3	U
95-50-1	1,2-Dichlorobenzene	7.3	U
96-12-8	1,2-Dibromo-3-chloropropane	7.3	U
120-82-1	1,2,4-Trichlorobenzene	7.3	U
87-61-6	1,2,3-Trichlorobenzene	7.3	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30S9

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-14C

Sample wt/vol: 5.20 (g/mL) G Lab File ID: V5N2715.D

Level: (TRACE or LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 34 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E96679[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2715.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111106.B\V5N2715.D
Lab Smp Id: K2198-14C Client Smp ID: H30S9
Inj Date : 07-NOV-2011 05:39
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-14C,,62569
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 47
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.200	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$ 79 Vinyl Chloride-d3	65	2.168	2.173	(0.343)	104979	40.3576	39
$ 80 Chloroethane-d5	69	2.586	2.603	(0.409)	76851	45.6750	44(Q)
$ 81 1,1-Dichloroethene-d2	65	3.364	3.369	(0.532)	24623	45.6383	44(Q)
$ 82 2-Butanone-d5	46	5.083	5.076	(0.804)	53591	73.8728	71
$ 83 Chloroform-d	84	5.385	5.390	(0.851)	150175	48.1877	46(Q)
$ 23 1,2-Dichloroethane-d4	65	5.896	5.901	(0.932)	81357	48.3660	47(Q)
$ 84 Benzene-d6	84	5.907	5.912	(0.627)	277108	49.7131	48
* 26 1,4-Difluorobenzene	114	6.325	6.319	(1.000)	273184	50.0000	
$ 85 1,2-Dichloropropane-d6	67	6.732	6.725	(0.714)	104287	45.2718	44
$ 94 1,4-Dioxane-d8	96	6.929	6.911	(1.095)	14426	901.040	870
$ 33 Toluene-d8	98	7.847	7.840	(0.832)	240416	46.7218	45
$ 86 trans-1,3-Dichloropropene-d4	79	8.125	8.119	(0.862)	78569	45.3005	44
$ 87 2-Hexanone-d5	63	8.590	8.572	(0.911)	25433	57.3867	55
* 42 Chlorobenzene-d5	117	9.426	9.431	(1.000)	210510	50.0000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.936	10.929	(1.160)	71637	47.5123	46
* 78 1,4-Dichlorobenzene-d4	152	12.178	12.172	(1.000)	70381	50.0000	
$ 90 1,2-Dichlorobenzene-d4	152	12.643	12.625	(1.038)	59460	45.2231	43(Q)

Data File: \\avogadro\organics\V5.I\111106.B\V5N2715.D
Report Date: 09-Nov-2011 07:59

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2715.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

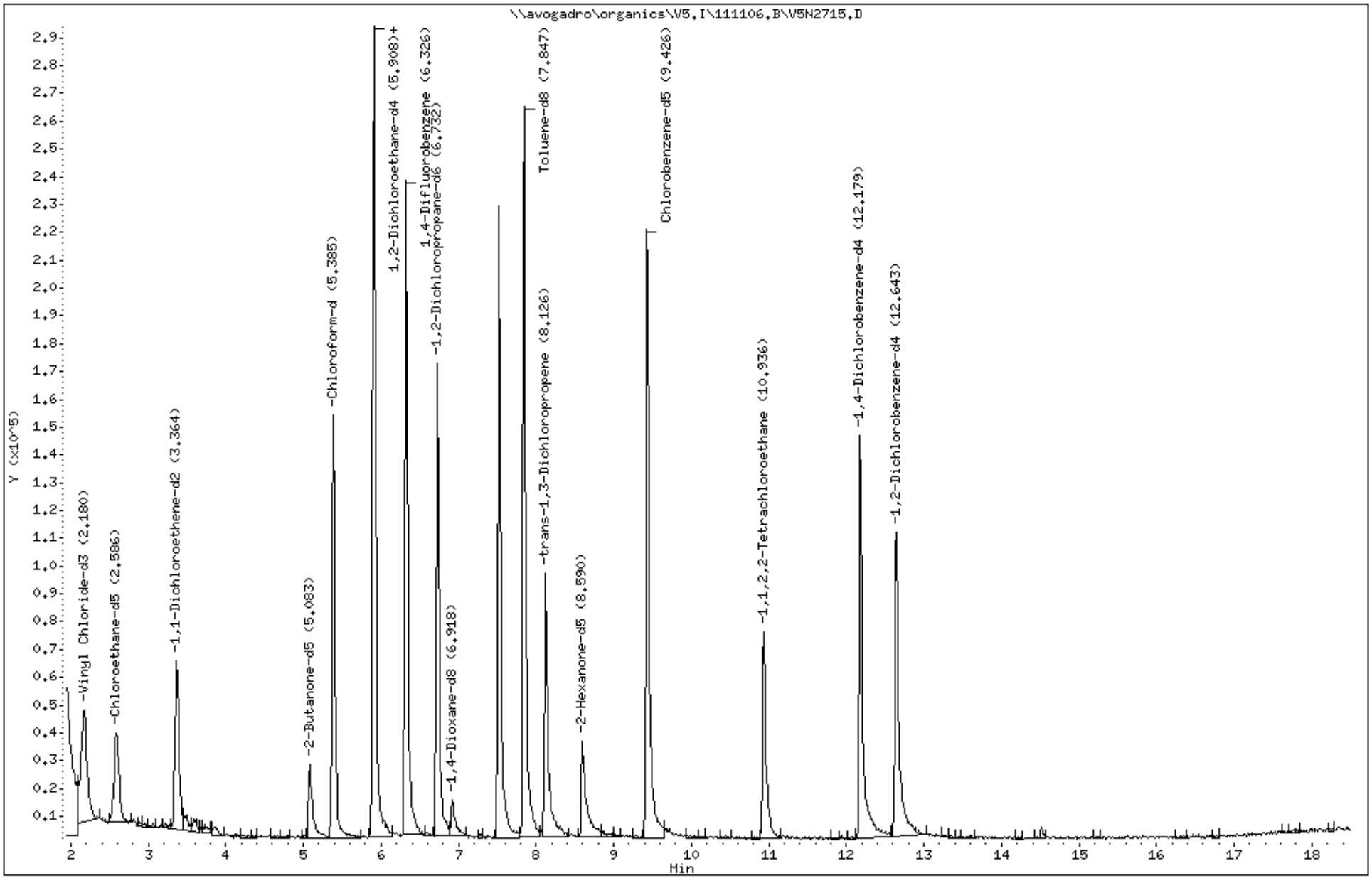
Data file : \\avogadro\organics\V5.I\111106.B\V5N2715.D
Lab Smp Id: K2198-14C Client Smp ID: H30S9
Inj Date : 07-NOV-2011 05:39
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-14C,,62569
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 47
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111106.B\V5N2715.D
Date : 07-NOV-2011 05:39
Client ID: H30S9
Sample Info: 5G,K2198-14C,,62569

Instrument: V5.i

Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T0

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-15C

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N2716.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 28 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
75-71-8	Dichlorodifluoromethane	6.9	U
74-87-3	Chloromethane	6.9	U
75-01-4	Vinyl chloride	6.9	U
74-83-9	Bromomethane	6.9	U
75-00-3	Chloroethane	6.9	U
75-69-4	Trichlorofluoromethane	6.9	U
75-35-4	1,1-Dichloroethene	6.9	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	6.9	U
67-64-1	Acetone	14	U
75-15-0	Carbon disulfide	6.9	U
79-20-9	Methyl acetate	6.9	U
75-09-2	Methylene chloride	6.9	U
156-60-5	trans-1,2-Dichloroethene	6.9	U
1634-04-4	Methyl tert-butyl ether	6.9	U
75-34-3	1,1-Dichloroethane	6.9	U
156-59-2	cis-1,2-Dichloroethene	6.9	U
78-93-3	2-Butanone	14	U
74-97-5	Bromochloromethane	6.9	U
67-66-3	Chloroform	6.9	U
71-55-6	1,1,1-Trichloroethane	6.9	U
110-82-7	Cyclohexane	6.9	U
56-23-5	Carbon tetrachloride	6.9	U
71-43-2	Benzene	6.9	U
107-06-2	1,2-Dichloroethane	6.9	U
123-91-1	1,4-Dioxane	140	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

SOM01.2 (6/2007)

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T0

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-15C

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N2716.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 28 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
79-01-6	Trichloroethene	6.9	U
108-87-2	Methylcyclohexane	6.9	U
78-87-5	1,2-Dichloropropane	6.9	U
75-27-4	Bromodichloromethane	6.9	U
10061-01-5	cis-1,3-Dichloropropene	6.9	U
108-10-1	4-Methyl-2-pentanone	14	U
108-88-3	Toluene	6.9	U
10061-02-6	trans-1,3-Dichloropropene	6.9	U
79-00-5	1,1,2-Trichloroethane	6.9	U
127-18-4	Tetrachloroethene	6.9	U
591-78-6	2-Hexanone	14	U
124-48-1	Dibromochloromethane	6.9	U
106-93-4	1,2-Dibromoethane	6.9	U
108-90-7	Chlorobenzene	6.9	U
100-41-4	Ethylbenzene	6.9	U
179601-23-1	m,p-Xylene	6.9	U
95-47-6	o-Xylene	6.9	U
100-42-5	Styrene	6.9	U
75-25-2	Bromoform	6.9	U
98-82-8	Isopropylbenzene	6.9	U
79-34-5	1,1,2,2-Tetrachloroethane	6.9	U
541-73-1	1,3-Dichlorobenzene	6.9	U
106-46-7	1,4-Dichlorobenzene	6.9	U
95-50-1	1,2-Dichlorobenzene	6.9	U
96-12-8	1,2-Dibromo-3-chloropropane	6.9	U
120-82-1	1,2,4-Trichlorobenzene	6.9	U
87-61-6	1,2,3-Trichlorobenzene	6.9	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30T0

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-15C

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N2716.D

Level: (TRACE or LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 28 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E96679[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2716.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111106.B\V5N2716.D
Lab Smp Id: K2198-15C Client Smp ID: H30T0
Inj Date : 07-NOV-2011 06:07
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-15C,,62569
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 48
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$	79 Vinyl Chloride-d3	65	2.160	2.173	(0.342)	92408	38.4328	38
$	80 Chloroethane-d5	69	2.578	2.603	(0.408)	72922	46.8875	47
$	81 1,1-Dichloroethene-d2	65	3.356	3.369	(0.531)	22091	44.2970	44(Q)
$	82 2-Butanone-d5	46	5.075	5.076	(0.803)	49284	73.4968	73
$	83 Chloroform-d	84	5.377	5.390	(0.851)	134173	46.5772	47(Q)
$	23 1,2-Dichloroethane-d4	65	5.888	5.901	(0.932)	74675	48.0275	48(Q)
$	84 Benzene-d6	84	5.911	5.912	(0.627)	260557	52.4366	52
*	26 1,4-Difluorobenzene	114	6.317	6.319	(1.000)	252514	50.0000	
$	85 1,2-Dichloropropane-d6	67	6.724	6.725	(0.713)	100204	48.7969	49
$	94 1,4-Dioxane-d8	96	6.921	6.911	(1.096)	14325	967.972	970
$	33 Toluene-d8	98	7.839	7.840	(0.831)	219573	47.8680	48
$	86 trans-1,3-Dichloropropene-d4	79	8.129	8.119	(0.862)	73229	47.3637	47
$	87 2-Hexanone-d5	63	8.594	8.572	(0.911)	26328	66.6410	67(Q)
*	42 Chlorobenzene-d5	117	9.430	9.431	(1.000)	187656	50.0000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.928	10.929	(1.159)	65351	48.6219	49
*	78 1,4-Dichlorobenzene-d4	152	12.182	12.172	(1.000)	56870	50.0000	
$	90 1,2-Dichlorobenzene-d4	152	12.647	12.625	(1.038)	51343	48.3268	48(Q)

Data File: \\avogadro\organics\V5.I\111106.B\V5N2716.D
Report Date: 09-Nov-2011 07:59

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2716.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

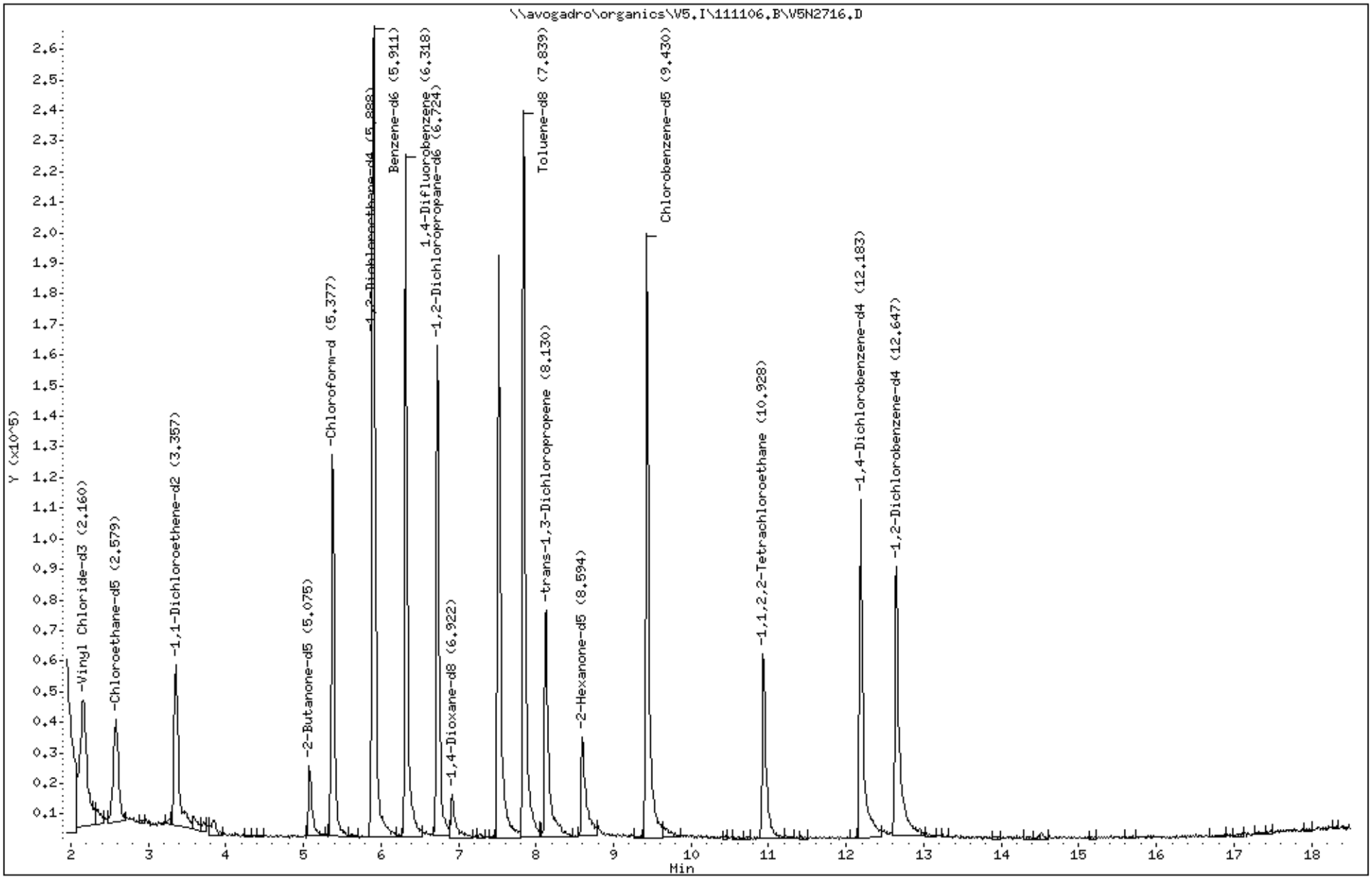
Data file : \\avogadro\organics\V5.I\111106.B\V5N2716.D
Lab Smp Id: K2198-15C Client Smp ID: H30T0
Inj Date : 07-NOV-2011 06:07
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-15C,,62569
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 48
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111106.B\V5N2716.D
Date : 07-NOV-2011 06:07
Client ID: H30T0
Sample Info: 5G,K2198-15C,,62569

Instrument: V5.i

Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-16C

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N2717.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 9.6 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
75-71-8	Dichlorodifluoromethane	5.5	U
74-87-3	Chloromethane	5.5	U
75-01-4	Vinyl chloride	5.5	U
74-83-9	Bromomethane	5.5	U
75-00-3	Chloroethane	5.5	U
75-69-4	Trichlorofluoromethane	5.5	U
75-35-4	1,1-Dichloroethene	5.5	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.5	U
67-64-1	Acetone	11	U
75-15-0	Carbon disulfide	5.5	U
79-20-9	Methyl acetate	5.5	U
75-09-2	Methylene chloride	5.5	U
156-60-5	trans-1,2-Dichloroethene	5.5	U
1634-04-4	Methyl tert-butyl ether	5.5	U
75-34-3	1,1-Dichloroethane	5.5	U
156-59-2	cis-1,2-Dichloroethene	5.5	U
78-93-3	2-Butanone	11	U
74-97-5	Bromochloromethane	5.5	U
67-66-3	Chloroform	5.5	U
71-55-6	1,1,1-Trichloroethane	5.5	U
110-82-7	Cyclohexane	5.5	U
56-23-5	Carbon tetrachloride	5.5	U
71-43-2	Benzene	5.5	U
107-06-2	1,2-Dichloroethane	5.5	U
123-91-1	1,4-Dioxane	110	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-16C

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N2717.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 9.6 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
79-01-6	Trichloroethene	5.5	U
108-87-2	Methylcyclohexane	5.5	U
78-87-5	1,2-Dichloropropane	5.5	U
75-27-4	Bromodichloromethane	5.5	U
10061-01-5	cis-1,3-Dichloropropene	5.5	U
108-10-1	4-Methyl-2-pentanone	11	U
108-88-3	Toluene	5.5	U
10061-02-6	trans-1,3-Dichloropropene	5.5	U
79-00-5	1,1,2-Trichloroethane	5.5	U
127-18-4	Tetrachloroethene	5.5	U
591-78-6	2-Hexanone	11	U
124-48-1	Dibromochloromethane	5.5	U
106-93-4	1,2-Dibromoethane	5.5	U
108-90-7	Chlorobenzene	5.5	U
100-41-4	Ethylbenzene	5.5	U
179601-23-1	m,p-Xylene	5.5	U
95-47-6	o-Xylene	5.5	U
100-42-5	Styrene	5.5	U
75-25-2	Bromoform	5.5	U
98-82-8	Isopropylbenzene	5.5	U
79-34-5	1,1,2,2-Tetrachloroethane	5.5	U
541-73-1	1,3-Dichlorobenzene	5.5	U
106-46-7	1,4-Dichlorobenzene	5.5	U
95-50-1	1,2-Dichlorobenzene	5.5	U
96-12-8	1,2-Dibromo-3-chloropropane	5.5	U
120-82-1	1,2,4-Trichlorobenzene	5.5	U
87-61-6	1,2,3-Trichlorobenzene	5.5	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30T1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-16C

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N2717.D

Level: (TRACE or LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 9.6 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E96679[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2717.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111106.B\V5N2717.D
Lab Smp Id: K2198-16C Client Smp ID: H30T1
Inj Date : 07-NOV-2011 06:34
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-16C,,62569
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 49
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$ 79 Vinyl Chloride-d3	65	2.173	2.173	(0.344)	117737	38.6611	39
$ 80 Chloroethane-d5	69	2.591	2.603	(0.410)	85320	43.3130	43(Q)
$ 81 1,1-Dichloroethene-d2	65	3.358	3.369	(0.531)	26118	41.3492	41(Q)
$ 82 2-Butanone-d5	46	5.076	5.076	(0.803)	79742	93.8898	94
$ 83 Chloroform-d	84	5.390	5.390	(0.853)	169109	46.3494	46(Q)
$ 23 1,2-Dichloroethane-d4	65	5.901	5.901	(0.934)	97546	49.5328	50
$ 84 Benzene-d6	84	5.913	5.912	(0.627)	322143	47.0943	47
* 26 1,4-Difluorobenzene	114	6.319	6.319	(1.000)	319828	50.0000	
$ 85 1,2-Dichloropropane-d6	67	6.726	6.725	(0.713)	123122	43.5543	44
$ 94 1,4-Dioxane-d8	96	6.923	6.911	(1.096)	15166	809.111	810
$ 33 Toluene-d8	98	7.840	7.840	(0.831)	284613	45.0722	45
$ 86 trans-1,3-Dichloropropene-d4	79	8.119	8.119	(0.861)	102956	48.3728	48
$ 87 2-Hexanone-d5	63	8.584	8.572	(0.910)	42324	77.8212	78(Q)
* 42 Chlorobenzene-d5	117	9.431	9.431	(1.000)	258330	50.0000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.929	10.929	(1.159)	82203	44.4278	44
* 78 1,4-Dichlorobenzene-d4	152	12.172	12.172	(1.000)	98463	50.0000	
$ 90 1,2-Dichlorobenzene-d4	152	12.637	12.625	(1.038)	81103	44.0914	44(Q)

Data File: \\avogadro\organics\V5.I\111106.B\V5N2717.D
Report Date: 09-Nov-2011 07:59

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2717.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

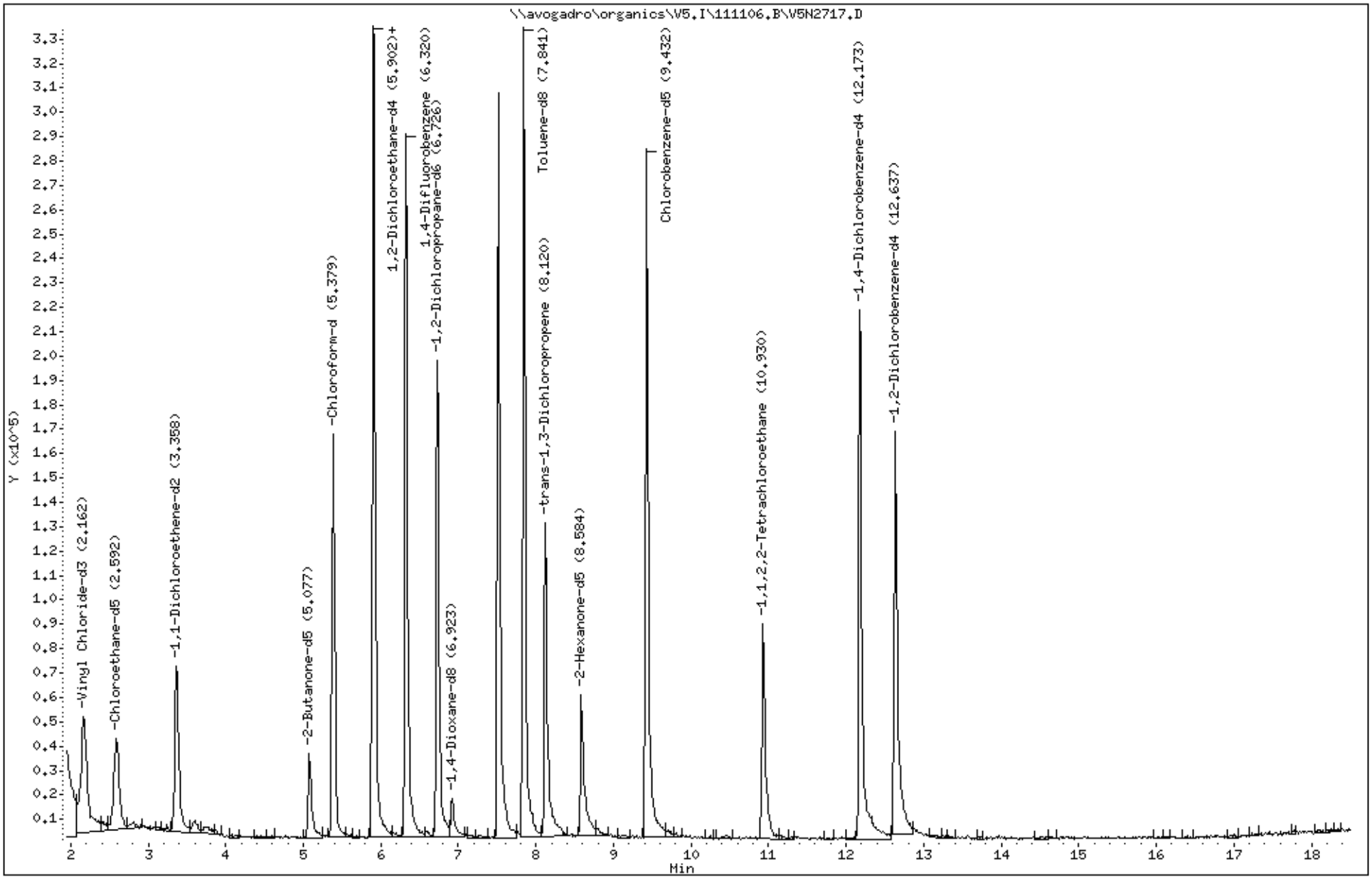
Data file : \\avogadro\organics\V5.I\111106.B\V5N2717.D
Lab Smp Id: K2198-16C Client Smp ID: H30T1
Inj Date : 07-NOV-2011 06:34
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-16C,,62569
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 49
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111106.B\V5N2717.D
Date : 07-NOV-2011 06:34
Client ID: H30T1
Sample Info: 5G,K2198-16C,,62569

Instrument: V5.i

Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T2

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-17C

Sample wt/vol: 5.30 (g/mL) G Lab File ID: V5N2718.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 24 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
75-71-8	Dichlorodifluoromethane	6.2	U
74-87-3	Chloromethane	6.2	U
75-01-4	Vinyl chloride	6.2	U
74-83-9	Bromomethane	6.2	U
75-00-3	Chloroethane	6.2	U
75-69-4	Trichlorofluoromethane	6.2	U
75-35-4	1,1-Dichloroethene	6.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	6.2	U
67-64-1	Acetone	12	U
75-15-0	Carbon disulfide	6.2	U
79-20-9	Methyl acetate	6.2	U
75-09-2	Methylene chloride	6.2	U
156-60-5	trans-1,2-Dichloroethene	6.2	U
1634-04-4	Methyl tert-butyl ether	6.2	U
75-34-3	1,1-Dichloroethane	6.2	U
156-59-2	cis-1,2-Dichloroethene	6.2	U
78-93-3	2-Butanone	12	U
74-97-5	Bromochloromethane	6.2	U
67-66-3	Chloroform	6.2	U
71-55-6	1,1,1-Trichloroethane	6.2	U
110-82-7	Cyclohexane	6.2	U
56-23-5	Carbon tetrachloride	6.2	U
71-43-2	Benzene	6.2	U
107-06-2	1,2-Dichloroethane	6.2	U
123-91-1	1,4-Dioxane	120	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

SOM01.2 (6/2007)

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T2

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-17C

Sample wt/vol: 5.30 (g/mL) G Lab File ID: V5N2718.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 24 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
79-01-6	Trichloroethene	6.2	U
108-87-2	Methylcyclohexane	6.2	U
78-87-5	1,2-Dichloropropane	6.2	U
75-27-4	Bromodichloromethane	6.2	U
10061-01-5	cis-1,3-Dichloropropene	6.2	U
108-10-1	4-Methyl-2-pentanone	12	U
108-88-3	Toluene	6.2	U
10061-02-6	trans-1,3-Dichloropropene	6.2	U
79-00-5	1,1,2-Trichloroethane	6.2	U
127-18-4	Tetrachloroethene	6.2	U
591-78-6	2-Hexanone	12	U
124-48-1	Dibromochloromethane	6.2	U
106-93-4	1,2-Dibromoethane	6.2	U
108-90-7	Chlorobenzene	6.2	U
100-41-4	Ethylbenzene	6.2	U
179601-23-1	m,p-Xylene	6.2	U
95-47-6	o-Xylene	6.2	U
100-42-5	Styrene	6.2	U
75-25-2	Bromoform	6.2	U
98-82-8	Isopropylbenzene	6.2	U
79-34-5	1,1,2,2-Tetrachloroethane	6.2	U
541-73-1	1,3-Dichlorobenzene	6.2	U
106-46-7	1,4-Dichlorobenzene	6.2	U
95-50-1	1,2-Dichlorobenzene	6.2	U
96-12-8	1,2-Dibromo-3-chloropropane	6.2	U
120-82-1	1,2,4-Trichlorobenzene	6.2	U
87-61-6	1,2,3-Trichlorobenzene	6.2	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30T2

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-17C

Sample wt/vol: 5.30 (g/mL) G Lab File ID: V5N2718.D

Level: (TRACE or LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 24 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E96679[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2718.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111106.B\V5N2718.D
Lab Smp Id: K2198-17C Client Smp ID: H30T2
Inj Date : 07-NOV-2011 07:02
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-17C,,62569
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 50
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.300	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$	79 Vinyl Chloride-d3	65	2.167	2.173	(0.343)	109664	36.7522	35
$	80 Chloroethane-d5	69	2.585	2.603	(0.409)	85304	44.1972	42(Q)
$	81 1,1-Dichloroethene-d2	65	3.363	3.369	(0.532)	27211	43.9673	41(Q)
$	82 2-Butanone-d5	46	5.082	5.076	(0.804)	59724	71.7692	68
$	83 Chloroform-d	84	5.384	5.390	(0.851)	166071	46.4546	44(Q)
$	23 1,2-Dichloroethane-d4	65	5.895	5.901	(0.932)	92104	47.7331	45
$	84 Benzene-d6	84	5.906	5.912	(0.627)	303070	48.9920	46
*	26 1,4-Difluorobenzene	114	6.324	6.319	(1.000)	313371	50.0000	
$	85 1,2-Dichloropropane-d6	67	6.731	6.725	(0.714)	118405	46.3157	44
$	94 1,4-Dioxane-d8	96	6.928	6.911	(1.095)	17800	969.203	910
$	33 Toluene-d8	98	7.846	7.840	(0.832)	269271	47.1527	44
$	86 trans-1,3-Dichloropropene-d4	79	8.124	8.119	(0.862)	92057	47.8266	45
$	87 2-Hexanone-d5	63	8.589	8.572	(0.911)	32538	66.1554	62(Q)
*	42 Chlorobenzene-d5	117	9.425	9.431	(1.000)	233621	50.0000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.935	10.929	(1.160)	81008	48.4125	46
*	78 1,4-Dichlorobenzene-d4	152	12.177	12.172	(1.000)	85544	50.0000	
$	90 1,2-Dichlorobenzene-d4	152	12.642	12.625	(1.038)	73225	45.8205	43(Q)

Data File: \\avogadro\organics\V5.I\111106.B\V5N2718.D
Report Date: 09-Nov-2011 07:59

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2718.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

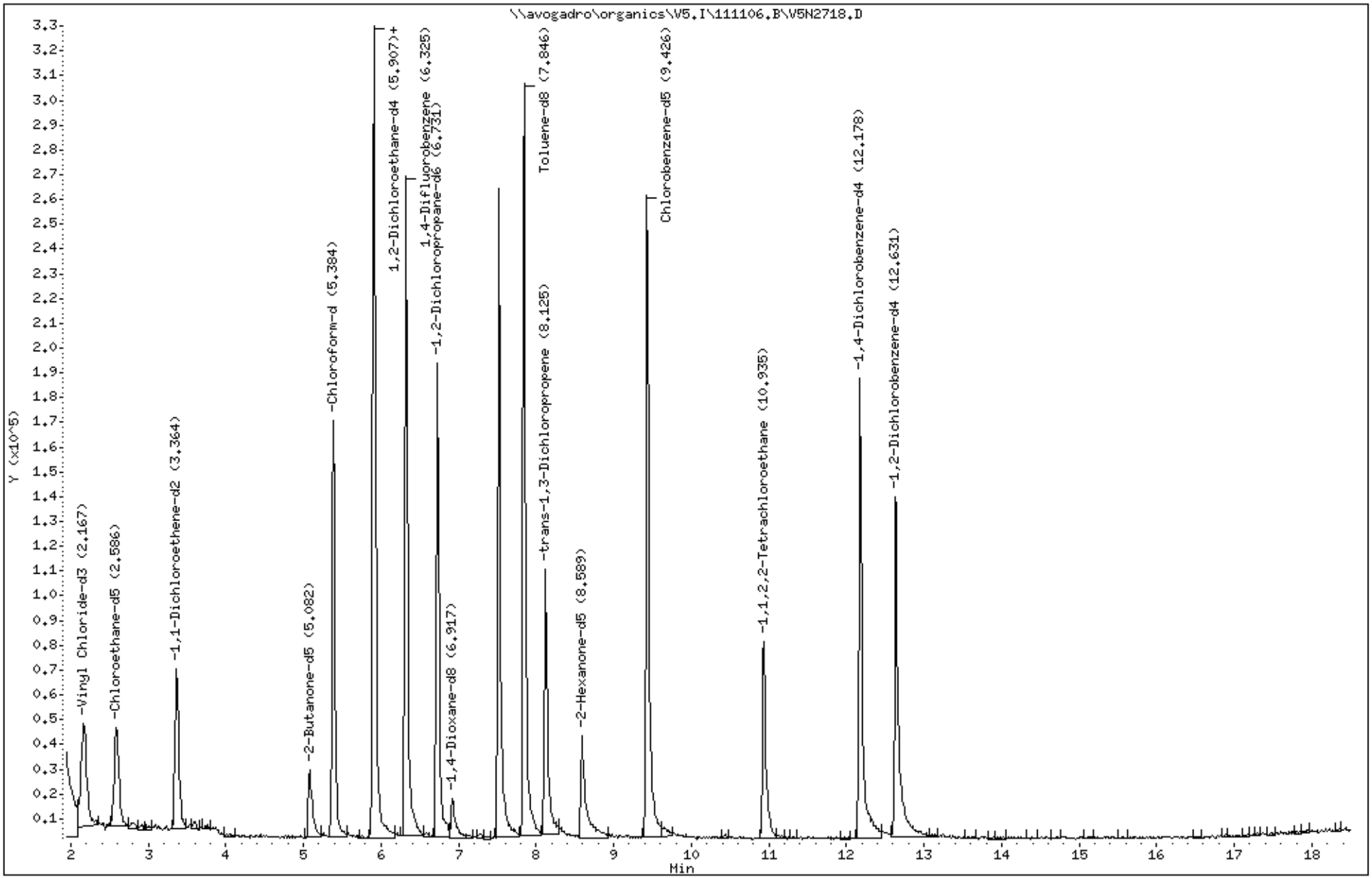
Data file : \\avogadro\organics\V5.I\111106.B\V5N2718.D
Lab Smp Id: K2198-17C Client Smp ID: H30T2
Inj Date : 07-NOV-2011 07:02
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-17C,,62569
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 50
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111106.B\V5N2718.D
Date : 07-NOV-2011 07:02
Client ID: H30T2
Sample Info: 5G,K2198-17C,,62569

Instrument: V5.i

Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T3

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-18C

Sample wt/vol: 4.90 (g/mL) G Lab File ID: V5N2719.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 22 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
75-71-8	Dichlorodifluoromethane	6.5	U
74-87-3	Chloromethane	6.5	U
75-01-4	Vinyl chloride	6.5	U
74-83-9	Bromomethane	6.5	U
75-00-3	Chloroethane	6.5	U
75-69-4	Trichlorofluoromethane	6.5	U
75-35-4	1,1-Dichloroethene	6.5	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	6.5	U
67-64-1	Acetone	13	U
75-15-0	Carbon disulfide	6.5	U
79-20-9	Methyl acetate	6.5	U
75-09-2	Methylene chloride	6.5	U
156-60-5	trans-1,2-Dichloroethene	6.5	U
1634-04-4	Methyl tert-butyl ether	6.5	U
75-34-3	1,1-Dichloroethane	6.5	U
156-59-2	cis-1,2-Dichloroethene	6.5	U
78-93-3	2-Butanone	13	U
74-97-5	Bromochloromethane	6.5	U
67-66-3	Chloroform	6.5	U
71-55-6	1,1,1-Trichloroethane	6.5	U
110-82-7	Cyclohexane	6.5	U
56-23-5	Carbon tetrachloride	6.5	U
71-43-2	Benzene	6.5	U
107-06-2	1,2-Dichloroethane	6.5	U
123-91-1	1,4-Dioxane	130	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T3

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-18C

Sample wt/vol: 4.90 (g/mL) G Lab File ID: V5N2719.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 22 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
79-01-6	Trichloroethene	6.5	U
108-87-2	Methylcyclohexane	6.5	U
78-87-5	1,2-Dichloropropane	6.5	U
75-27-4	Bromodichloromethane	6.5	U
10061-01-5	cis-1,3-Dichloropropene	6.5	U
108-10-1	4-Methyl-2-pentanone	13	U
108-88-3	Toluene	6.5	U
10061-02-6	trans-1,3-Dichloropropene	6.5	U
79-00-5	1,1,2-Trichloroethane	6.5	U
127-18-4	Tetrachloroethene	6.5	U
591-78-6	2-Hexanone	13	U
124-48-1	Dibromochloromethane	6.5	U
106-93-4	1,2-Dibromoethane	6.5	U
108-90-7	Chlorobenzene	6.5	U
100-41-4	Ethylbenzene	6.5	U
179601-23-1	m,p-Xylene	6.5	U
95-47-6	o-Xylene	6.5	U
100-42-5	Styrene	6.5	U
75-25-2	Bromoform	6.5	U
98-82-8	Isopropylbenzene	6.5	U
79-34-5	1,1,2,2-Tetrachloroethane	6.5	U
541-73-1	1,3-Dichlorobenzene	6.5	U
106-46-7	1,4-Dichlorobenzene	6.5	U
95-50-1	1,2-Dichlorobenzene	6.5	U
96-12-8	1,2-Dibromo-3-chloropropane	6.5	U
120-82-1	1,2,4-Trichlorobenzene	6.5	U
87-61-6	1,2,3-Trichlorobenzene	6.5	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30T3

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-18C

Sample wt/vol: 4.90 (g/mL) G Lab File ID: V5N2719.D

Level: (TRACE or LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 22 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E96679[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2719.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111106.B\V5N2719.D
Lab Smp Id: K2198-18C Client Smp ID: H30T3
Inj Date : 07-NOV-2011 07:29
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-18C,,62569
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 51
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	4.900	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$ 79 Vinyl Chloride-d3	65	2.158	2.173	(0.342)	109588	36.8778	38
$ 80 Chloroethane-d5	69	2.588	2.603	(0.410)	81249	42.2694	43(Q)
$ 81 1,1-Dichloroethene-d2	65	3.354	3.369	(0.531)	26201	42.5095	43(Q)
$ 82 2-Butanone-d5	46	5.073	5.076	(0.803)	71782	86.6139	88
$ 83 Chloroform-d	84	5.387	5.390	(0.853)	156586	43.9816	45(Q)
$ 23 1,2-Dichloroethane-d4	65	5.898	5.901	(0.934)	88138	45.8657	47(Q)
$ 84 Benzene-d6	84	5.909	5.912	(0.627)	300235	46.4282	47
* 26 1,4-Difluorobenzene	114	6.316	6.319	(1.000)	312087	50.0000	
$ 85 1,2-Dichloropropane-d6	67	6.722	6.725	(0.713)	121279	45.3818	46
$ 94 1,4-Dioxane-d8	96	6.919	6.911	(1.096)	16469	900.420	920
$ 33 Toluene-d8	98	7.837	7.840	(0.831)	267672	44.8391	46
$ 86 trans-1,3-Dichloropropene-d4	79	8.116	8.119	(0.861)	93344	46.3913	47
$ 87 2-Hexanone-d5	63	8.592	8.572	(0.911)	35986	69.9916	71(Q)
* 42 Chlorobenzene-d5	117	9.428	9.431	(1.000)	244216	50.0000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.926	10.929	(1.159)	78574	44.9207	46
* 78 1,4-Dichlorobenzene-d4	152	12.180	12.172	(1.000)	88290	50.0000	
$ 90 1,2-Dichlorobenzene-d4	152	12.633	12.625	(1.037)	77849	47.1989	48

Data File: \\avogadro\organics\V5.I\111106.B\V5N2719.D
Report Date: 09-Nov-2011 07:59

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2719.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

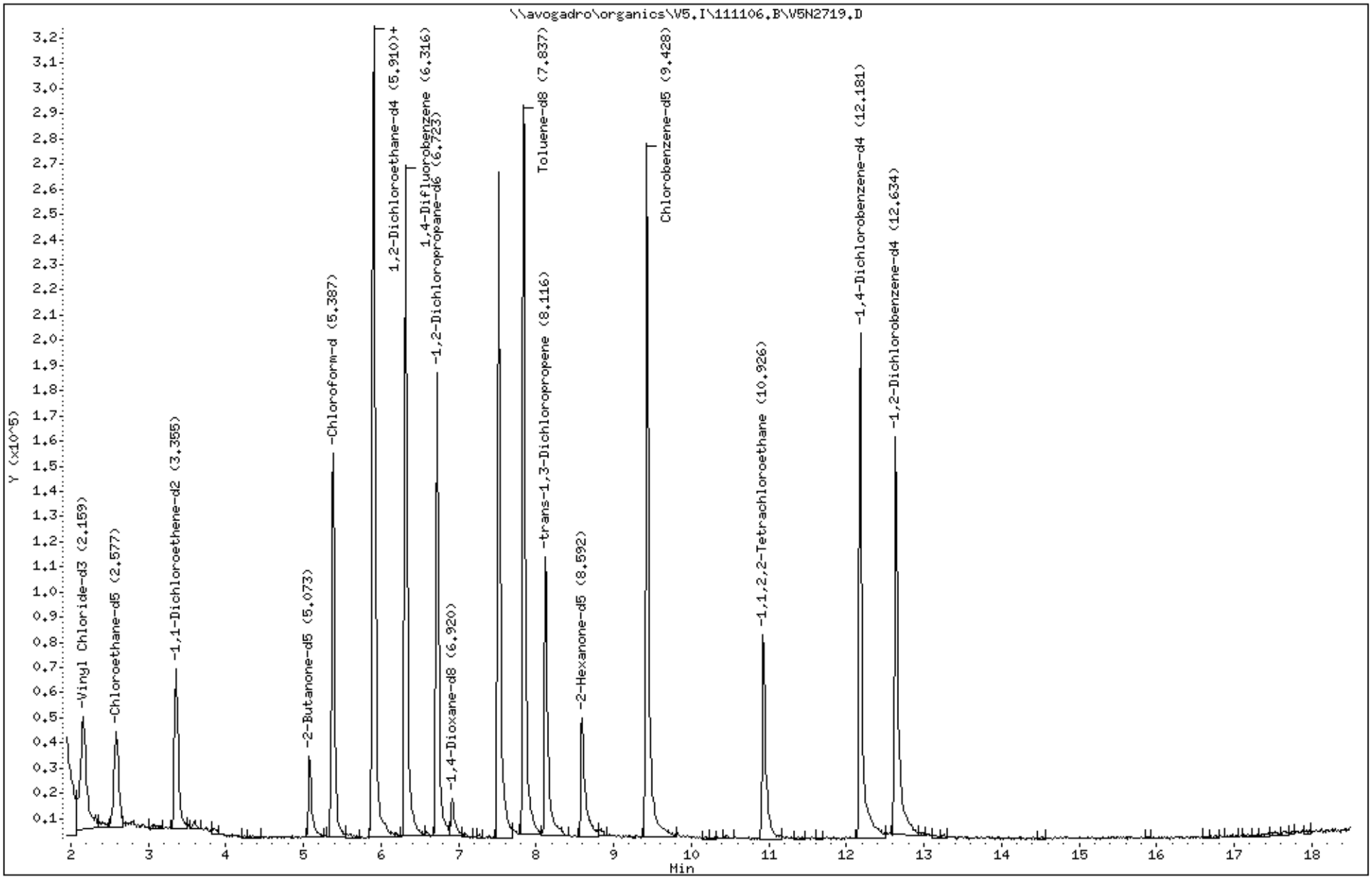
Data file : \\avogadro\organics\V5.I\111106.B\V5N2719.D
Lab Smp Id: K2198-18C Client Smp ID: H30T3
Inj Date : 07-NOV-2011 07:29
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-18C,,62569
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 51
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111106.B\V5N2719.D
Date : 07-NOV-2011 07:29
Client ID: H30T3
Sample Info: 5G,K2198-18C,,62569

Instrument: V5.i

Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-19C

Sample wt/vol: 4.80 (g/mL) G Lab File ID: V5N2720.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 20 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
75-71-8	Dichlorodifluoromethane	6.5	U
74-87-3	Chloromethane	6.5	U
75-01-4	Vinyl chloride	6.5	U
74-83-9	Bromomethane	6.5	U
75-00-3	Chloroethane	6.5	U
75-69-4	Trichlorofluoromethane	6.5	U
75-35-4	1,1-Dichloroethene	6.5	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	6.5	U
67-64-1	Acetone	13	U
75-15-0	Carbon disulfide	6.5	U
79-20-9	Methyl acetate	6.5	U
75-09-2	Methylene chloride	6.5	U
156-60-5	trans-1,2-Dichloroethene	6.5	U
1634-04-4	Methyl tert-butyl ether	6.5	U
75-34-3	1,1-Dichloroethane	6.5	U
156-59-2	cis-1,2-Dichloroethene	6.5	U
78-93-3	2-Butanone	13	U
74-97-5	Bromochloromethane	6.5	U
67-66-3	Chloroform	6.5	U
71-55-6	1,1,1-Trichloroethane	6.5	U
110-82-7	Cyclohexane	6.5	U
56-23-5	Carbon tetrachloride	6.5	U
71-43-2	Benzene	6.5	U
107-06-2	1,2-Dichloroethane	6.5	U
123-91-1	1,4-Dioxane	130	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

SOM01.2 (6/2007)

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-19C

Sample wt/vol: 4.80 (g/mL) G Lab File ID: V5N2720.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 20 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
79-01-6	Trichloroethene	6.5	U
108-87-2	Methylcyclohexane	6.5	U
78-87-5	1,2-Dichloropropane	6.5	U
75-27-4	Bromodichloromethane	6.5	U
10061-01-5	cis-1,3-Dichloropropene	6.5	U
108-10-1	4-Methyl-2-pentanone	13	U
108-88-3	Toluene	6.5	U
10061-02-6	trans-1,3-Dichloropropene	6.5	U
79-00-5	1,1,2-Trichloroethane	6.5	U
127-18-4	Tetrachloroethene	6.5	U
591-78-6	2-Hexanone	13	U
124-48-1	Dibromochloromethane	6.5	U
106-93-4	1,2-Dibromoethane	6.5	U
108-90-7	Chlorobenzene	6.5	U
100-41-4	Ethylbenzene	6.5	U
179601-23-1	m,p-Xylene	6.5	U
95-47-6	o-Xylene	6.5	U
100-42-5	Styrene	6.5	U
75-25-2	Bromoform	6.5	U
98-82-8	Isopropylbenzene	6.5	U
79-34-5	1,1,2,2-Tetrachloroethane	6.5	U
541-73-1	1,3-Dichlorobenzene	6.5	U
106-46-7	1,4-Dichlorobenzene	6.5	U
95-50-1	1,2-Dichlorobenzene	6.5	U
96-12-8	1,2-Dibromo-3-chloropropane	6.5	U
120-82-1	1,2,4-Trichlorobenzene	6.5	U
87-61-6	1,2,3-Trichlorobenzene	6.5	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30T4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-19C

Sample wt/vol: 4.80 (g/mL) G Lab File ID: V5N2720.D

Level: (TRACE or LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 20 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E96679[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2720.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111106.B\V5N2720.D
Lab Smp Id: K2198-19C Client Smp ID: H30T4
Inj Date : 07-NOV-2011 07:56
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-19C,,62569
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 52
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	4.800	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$ 79 Vinyl Chloride-d3	65	2.157	2.173	(0.341)	132554	38.6322	40
$ 80 Chloroethane-d5	69	2.586	2.603	(0.409)	95489	43.0246	45(Q)
$ 81 1,1-Dichloroethene-d2	65	3.353	3.369	(0.530)	28874	40.5723	42(Q)
$ 82 2-Butanone-d5	46	5.071	5.076	(0.802)	79714	83.3032	87
$ 83 Chloroform-d	84	5.385	5.390	(0.851)	194322	47.2710	49(Q)
$ 23 1,2-Dichloroethane-d4	65	5.896	5.901	(0.932)	111327	50.1741	52(Q)
$ 84 Benzene-d6	84	5.908	5.912	(0.627)	358371	46.0975	48
* 26 1,4-Difluorobenzene	114	6.326	6.319	(1.000)	360347	50.0000	
$ 85 1,2-Dichloropropane-d6	67	6.732	6.725	(0.714)	144280	44.9082	47
$ 94 1,4-Dioxane-d8	96	6.918	6.911	(1.094)	19867	940.730	980
$ 33 Toluene-d8	98	7.835	7.840	(0.831)	322921	44.9961	47
$ 86 trans-1,3-Dichloropropene-d4	79	8.114	8.119	(0.861)	116428	48.1318	50
$ 87 2-Hexanone-d5	63	8.579	8.572	(0.910)	39607	64.0779	67
* 42 Chlorobenzene-d5	117	9.426	9.431	(1.000)	293596	50.0000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.924	10.929	(1.159)	96113	45.7061	48
* 78 1,4-Dichlorobenzene-d4	152	12.179	12.172	(1.000)	105745	50.0000	
$ 90 1,2-Dichlorobenzene-d4	152	12.632	12.625	(1.037)	96744	48.9728	51

Data File: \\avogadro\organics\V5.I\111106.B\V5N2720.D
Report Date: 09-Nov-2011 07:59

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2720.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111106.B\V5N2720.D
Lab Smp Id: K2198-19C Client Smp ID: H30T4
Inj Date : 07-NOV-2011 07:56
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-19C,,62569
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 52
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

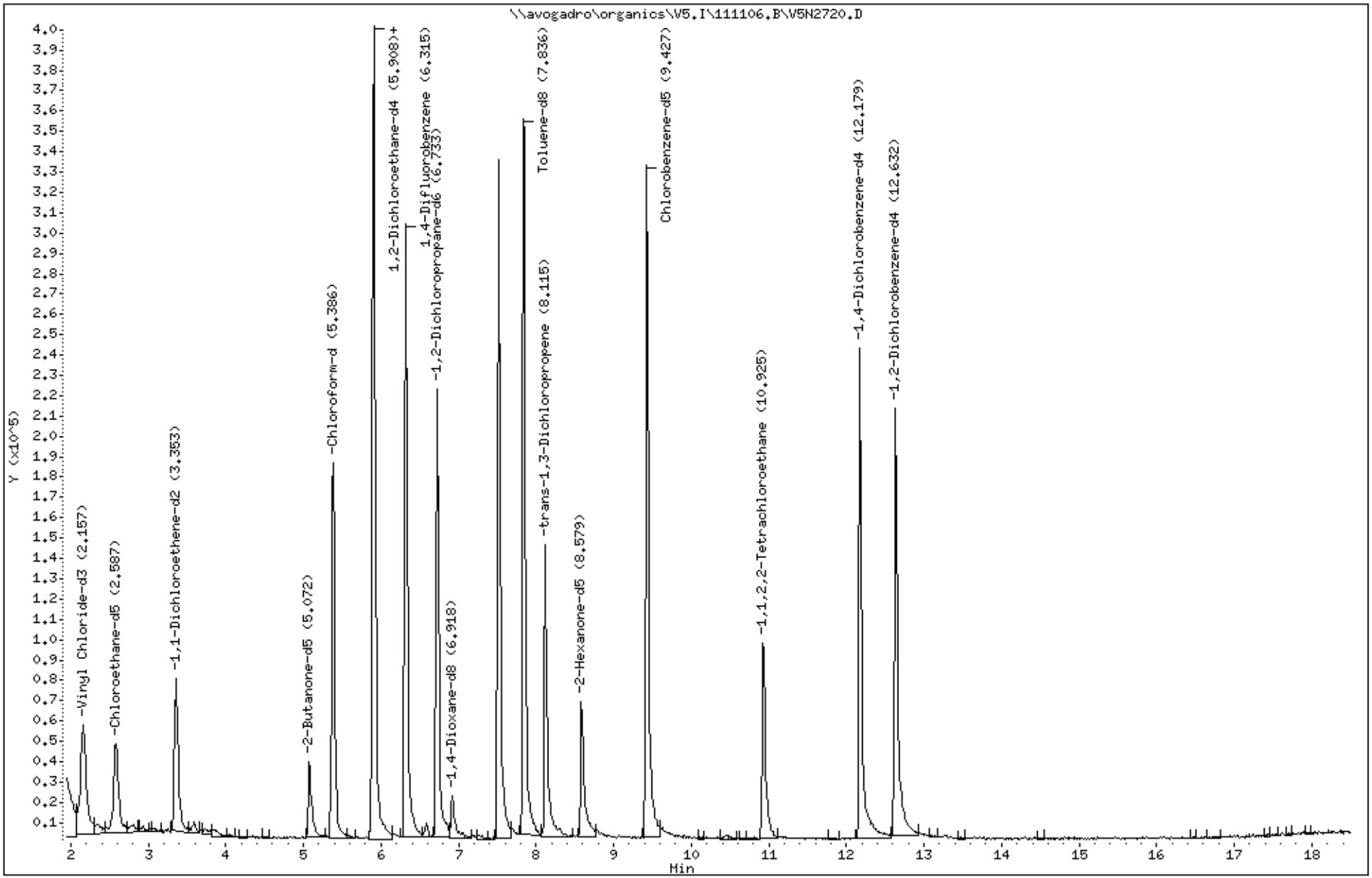
- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111106.B\V5N2720.D
Date : 07-NOV-2011 07:56
Client ID: H30T4
Sample Info: 5G,K2198-19C,,62569

Instrument: V5.i

Operator: SRC: LIMS
Column diameter: 0.25

Column phase: DB-624



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-20C

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N2721.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 24 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
75-71-8	Dichlorodifluoromethane	6.6	U
74-87-3	Chloromethane	6.6	U
75-01-4	Vinyl chloride	6.6	U
74-83-9	Bromomethane	6.6	U
75-00-3	Chloroethane	6.6	U
75-69-4	Trichlorofluoromethane	6.6	U
75-35-4	1,1-Dichloroethene	6.6	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	6.6	U
67-64-1	Acetone	13	U
75-15-0	Carbon disulfide	6.6	U
79-20-9	Methyl acetate	6.6	U
75-09-2	Methylene chloride	6.6	U
156-60-5	trans-1,2-Dichloroethene	6.6	U
1634-04-4	Methyl tert-butyl ether	6.6	U
75-34-3	1,1-Dichloroethane	6.6	U
156-59-2	cis-1,2-Dichloroethene	6.6	U
78-93-3	2-Butanone	13	U
74-97-5	Bromochloromethane	6.6	U
67-66-3	Chloroform	6.6	U
71-55-6	1,1,1-Trichloroethane	6.6	U
110-82-7	Cyclohexane	6.6	U
56-23-5	Carbon tetrachloride	6.6	U
71-43-2	Benzene	6.6	U
107-06-2	1,2-Dichloroethane	6.6	U
123-91-1	1,4-Dioxane	130	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-20C

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N2721.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 24 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
79-01-6	Trichloroethene	6.6	U
108-87-2	Methylcyclohexane	6.6	U
78-87-5	1,2-Dichloropropane	6.6	U
75-27-4	Bromodichloromethane	6.6	U
10061-01-5	cis-1,3-Dichloropropene	6.6	U
108-10-1	4-Methyl-2-pentanone	13	U
108-88-3	Toluene	6.6	U
10061-02-6	trans-1,3-Dichloropropene	6.6	U
79-00-5	1,1,2-Trichloroethane	6.6	U
127-18-4	Tetrachloroethene	6.6	U
591-78-6	2-Hexanone	13	U
124-48-1	Dibromochloromethane	6.6	U
106-93-4	1,2-Dibromoethane	6.6	U
108-90-7	Chlorobenzene	6.6	U
100-41-4	Ethylbenzene	6.6	U
179601-23-1	m,p-Xylene	6.6	U
95-47-6	o-Xylene	6.6	U
100-42-5	Styrene	6.6	U
75-25-2	Bromoform	6.6	U
98-82-8	Isopropylbenzene	6.6	U
79-34-5	1,1,2,2-Tetrachloroethane	6.6	U
541-73-1	1,3-Dichlorobenzene	6.6	U
106-46-7	1,4-Dichlorobenzene	6.6	U
95-50-1	1,2-Dichlorobenzene	6.6	U
96-12-8	1,2-Dibromo-3-chloropropane	6.6	U
120-82-1	1,2,4-Trichlorobenzene	6.6	U
87-61-6	1,2,3-Trichlorobenzene	6.6	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30T5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-20C

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N2721.D

Level: (TRACE or LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 24 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E96679[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2721.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111106.B\V5N2721.D
Lab Smp Id: K2198-20C Client Smp ID: H30T5
Inj Date : 07-NOV-2011 08:23
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-20C,,62569
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 53
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$	79 Vinyl Chloride-d3	65	2.168	2.173	(0.343)	127515	39.1554	39
$	80 Chloroethane-d5	69	2.586	2.603	(0.410)	93092	44.1925	44
$	81 1,1-Dichloroethene-d2	65	3.353	3.369	(0.531)	29284	43.3538	43(Q)
$	82 2-Butanone-d5	46	5.072	5.076	(0.803)	76188	83.8855	84
$	83 Chloroform-d	84	5.385	5.390	(0.853)	182033	46.6548	47(Q)
$	23 1,2-Dichloroethane-d4	65	5.896	5.901	(0.934)	105621	50.1537	50(Q)
$	84 Benzene-d6	84	5.908	5.912	(0.627)	340782	49.0898	49
*	26 1,4-Difluorobenzene	114	6.314	6.319	(1.000)	342017	50.0000	
$	85 1,2-Dichloropropane-d6	67	6.721	6.725	(0.713)	134067	46.7318	47
$	94 1,4-Dioxane-d8	96	6.918	6.911	(1.096)	20932	1044.28	1000
$	33 Toluene-d8	98	7.835	7.840	(0.831)	300010	46.8150	47
$	86 trans-1,3-Dichloropropene-d4	79	8.114	8.119	(0.861)	108872	50.4036	50
$	87 2-Hexanone-d5	63	8.579	8.572	(0.910)	40492	73.3628	73(Q)
*	42 Chlorobenzene-d5	117	9.426	9.431	(1.000)	262168	50.0000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.925	10.929	(1.159)	91589	48.7759	49
*	78 1,4-Dichlorobenzene-d4	152	12.179	12.172	(1.000)	89318	50.0000	
$	90 1,2-Dichlorobenzene-d4	152	12.632	12.625	(1.037)	77602	46.5076	47(Q)

Data File: \\avogadro\organics\V5.I\111106.B\V5N2721.D
Report Date: 09-Nov-2011 07:59

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2721.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

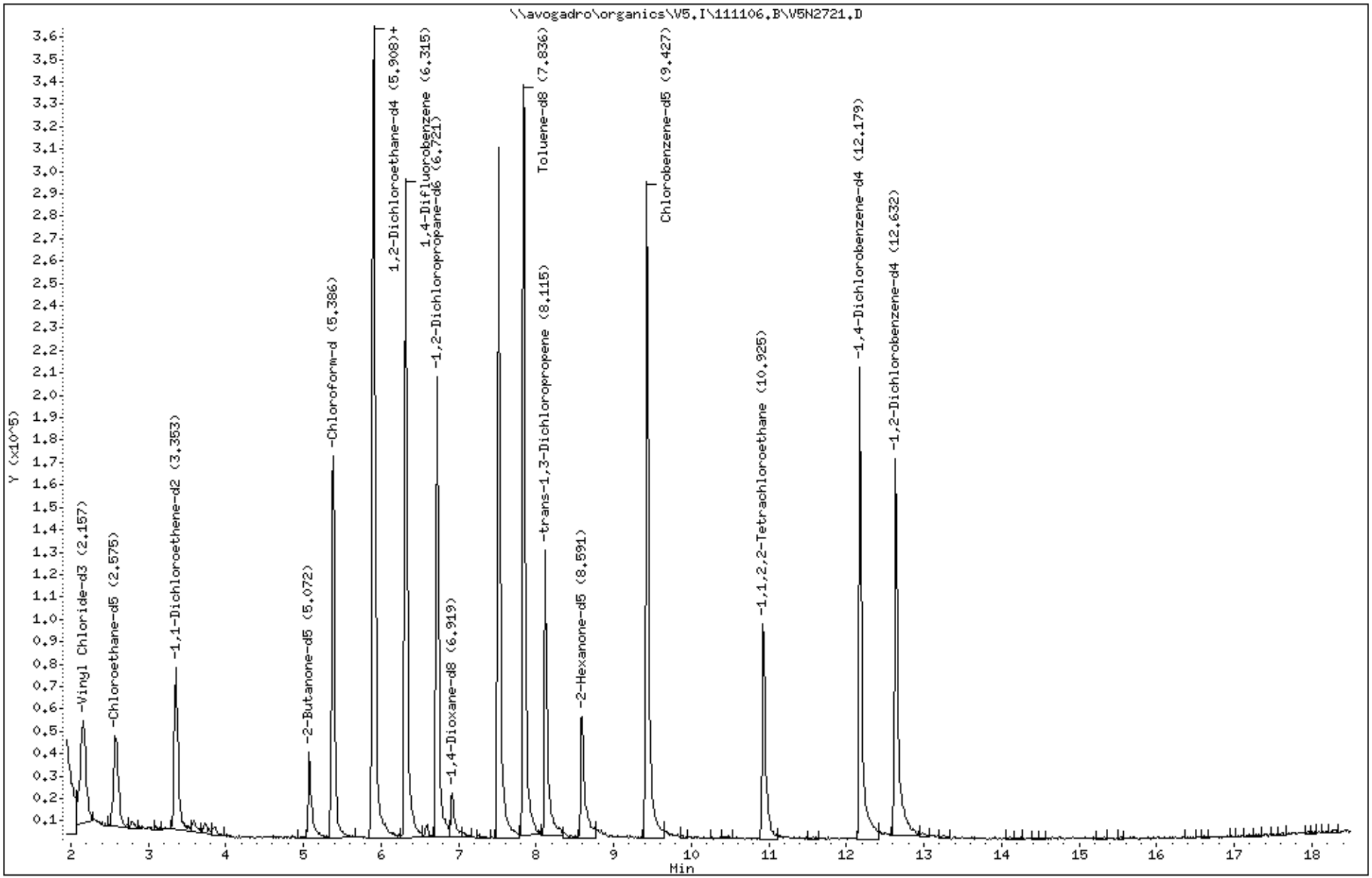
Data file : \\avogadro\organics\V5.I\111106.B\V5N2721.D
Lab Smp Id: K2198-20C Client Smp ID: H30T5
Inj Date : 07-NOV-2011 08:23
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-20C,,62569
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 53
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111106.B\V5N2721.D
Date : 07-NOV-2011 08:23
Client ID: H30T5
Sample Info: 5G,K2198-20C,,62569

Instrument: V5.i

Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



6A - FORM VI VOA-1

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: V5 Calibration Date(s): 10/04/2011 10/04/2011

Heated Purge: (Y/N) Y Calibration Time(s): 17:11 19:04

Purge Volume: 10.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: RRF005 = V5N1312.D RRF010 = V5N1315.D

RRF050 = V5N1311.D RRF100 = V5N1314.D RRF200 = V5N1313.D

COMPOUND	RRF005	RRF010	RRF050	RRF100	RRF200	$\overline{RRF}$	%RSD
Dichlorodifluoromethane	0.574	0.603	0.504	0.558	0.541	0.556	6.7
Chloromethane	0.810	0.842	0.730	0.768	0.734	0.777	6.3
Vinyl chloride	0.602	0.589	0.513	0.547	0.521	0.554	7.2
Bromomethane	0.391	0.388	0.322	0.346	0.320	0.353	9.8
Chloroethane	0.325	0.301	0.264	0.274	0.256	0.284	10.0
Trichlorofluoromethane	0.660	0.636	0.581	0.650	0.614	0.628	5.0
1,1-Dichloroethene	0.356	0.368	0.339	0.359	0.343	0.353	3.4
1,1,2-Trichloro-1,2,2-trifluoroethane	0.456	0.437	0.389	0.424	0.400	0.421	6.5
Acetone	0.130	0.106	0.073	0.075	0.072	0.091	28.5
Carbon disulfide	1.709	1.628	1.315	1.422	1.344	1.484	11.8
Methyl acetate	0.268	0.279	0.223	0.227	0.193	0.238	14.8
Methylene chloride	0.419	0.422	0.361	0.379	0.358	0.388	8.0
trans-1,2-Dichloroethene	0.381	0.387	0.357	0.372	0.356	0.370	3.8
Methyl tert-butyl ether	0.720	0.828	0.649	0.652	0.607	0.691	12.5
1,1-Dichloroethane	0.712	0.733	0.647	0.694	0.658	0.689	5.2
cis-1,2-Dichloroethene	0.369	0.394	0.348	0.364	0.342	0.363	5.6
2-Butanone	0.137	0.157	0.127	0.130	0.115	0.133	11.6
Bromochloromethane	0.191	0.197	0.165	0.174	0.166	0.179	8.1
Chloroform	0.774	0.711	0.581	0.582	0.537	0.637	15.8
1,1,1-Trichloroethane	0.598	0.609	0.584	0.601	0.547	0.588	4.2
Cyclohexane	0.858	0.832	0.788	0.818	0.742	0.808	5.5
Carbon tetrachloride	0.564	0.544	0.547	0.570	0.512	0.547	4.2
Benzene	1.526	1.559	1.417	1.429	1.316	1.449	6.7
1,2-Dichloroethane	0.384	0.407	0.323	0.343	0.338	0.359	9.8
1,4-Dioxane	0.002	0.003	0.002	0.003	0.003	0.003	10.4
Trichloroethene	0.409	0.422	0.428	0.442	0.402	0.420	3.8
Methylcyclohexane	0.740	0.766	0.708	0.761	0.714	0.738	3.6

6B - FORM VI VOA-2

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: V5 Calibration Date(s): 10/04/2011 10/04/2011

Heated Purge: (Y/N) Y Calibration Time(s): 17:11 19:04

Purge Volume: 10.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: RRF005 = V5N1312.D RRF010 = V5N1315.D

RRF050 = V5N1311.D RRF100 = V5N1314.D RRF200 = V5N1313.D

COMPOUND	RRF005	RRF010	RRF050	RRF100	RRF200	$\overline{RRF}$	%RSD
1,2-Dichloropropane	0.476	0.463	0.444	0.429	0.389	0.440	7.6
Bromodichloromethane	0.481	0.518	0.499	0.499	0.459	0.491	4.5
cis-1,3-Dichloropropene	0.582	0.647	0.584	0.577	0.535	0.585	6.9
4-Methyl-2-pentanone	0.485	0.473	0.333	0.356	0.294	0.388	22.1
Toluene	1.449	1.563	1.410	1.452	1.284	1.432	7.0
trans-1,3-Dichloropropene	0.484	0.504	0.455	0.450	0.417	0.462	7.2
1,1,2-Trichloroethane	0.300	0.320	0.284	0.283	0.253	0.288	8.5
Tetrachloroethene	0.317	0.298	0.307	0.324	0.293	0.308	4.2
2-Hexanone	0.404	0.431	0.201	0.262	0.192	0.298	37.9
Dibromochloromethane	0.411	0.390	0.365	0.380	0.355	0.380	5.8
1,2-Dibromoethane	0.319	0.306	0.308	0.313	0.297	0.309	2.6
Chlorobenzene	0.971	1.046	0.964	1.008	0.932	0.984	4.5
Ethylbenzene	1.531	1.601	1.544	1.578	1.437	1.538	4.1
m,p-Xylene	0.616	0.696	0.644	0.660	0.605	0.644	5.6
o-Xylene	0.636	0.637	0.598	0.621	0.588	0.616	3.6
Styrene	1.010	1.025	0.995	1.041	0.977	1.010	2.5
Bromoform	0.494	0.542	0.519	0.532	0.474	0.512	5.5
Isopropylbenzene	1.575	1.604	1.581	1.628	1.474	1.572	3.7
1,1,2,2-Tetrachloroethane	0.351	0.402	0.332	0.329	0.292	0.341	11.8
1,3-Dichlorobenzene	1.336	1.456	1.468	1.558	1.440	1.452	5.5
1,4-Dichlorobenzene	1.894	1.820	1.613	1.662	1.498	1.697	9.4
1,2-Dichlorobenzene	1.486	1.560	1.372	1.410	1.305	1.427	7.0
1,2-Dibromo-3-chloropropane	0.105	0.096	0.099	0.106	0.098	0.101	4.3
1,2,4-Trichlorobenzene	1.017	1.287	0.966	1.064	1.014	1.070	11.8
1,2,3-Trichlorobenzene	0.916	1.217	0.824	0.907	0.813	0.935	17.6

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: V5 Calibration Date(s): 10/04/2011 10/04/2011

Heated Purge: (Y/N) Y Calibration Time(s): 17:11 19:04

Purge Volume: 10.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: RRF005 = V5N1312.D RRF010 = V5N1315.D

RRF050 = V5N1311.D RRF100 = V5N1314.D RRF200 = V5N1313.D

COMPOUND	RRF005	RRF010	RRF050	RRF100	RRF200	$\overline{RRF}$	%RSD
Vinyl chloride-d3	0.510	0.524	0.450	0.435	0.462	0.476	8.2
Chloroethane-d5	0.305	0.334	0.314	0.289	0.299	0.308	5.5
1,1-Dichloroethene-d2	0.111	0.092	0.096	0.095	0.100	0.099	7.4
2-Butanone-d5	0.132	0.155	0.131	0.125	0.122	0.133	9.8
Chloroform-d	0.585	0.606	0.573	0.542	0.547	0.570	4.7
1,2-Dichloroethane-d4	0.364	0.353	0.284	0.282	0.256	0.308	15.6
Benzene-d6	1.345	1.432	1.359	1.249	1.235	1.324	6.2
1,2-Dichloropropane-d6	0.563	0.583	0.555	0.527	0.508	0.547	5.4
Toluene-d8	1.256	1.288	1.253	1.175	1.139	1.222	5.1
trans-1,3-Dichloropropene-d4	0.386	0.454	0.423	0.412	0.385	0.412	6.9
2-Hexanone-d5	0.099	0.146	0.093	0.102	0.086	0.105	22.7
1,4-Dioxane-d8	0.003	0.003	0.003	0.003	0.003	0.003	6.8
1,1,2,2-Tetrachloroethane-d2	0.351	0.430	0.363	0.341	0.306	0.358	12.7
1,2-Dichlorobenzene-d4	0.973	1.044	0.915	0.880	0.859	0.934	8.0

Data File: \\avogadro\organics\V5.I\111004A.B\V5N1311.D
Report Date: 13-Oct-2011 08:46

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111004A.B\V5N1311.D
Lab Smp Id: VSTD0505N Client Smp ID: VSTD0505N
Inj Date : 04-OCT-2011 17:11
Operator : SRC: Inst ID: V5.i
Smp Info : 5G,VSTD0505N,VSTD0505N
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111004A.B\V5_SOM_S.m
Meth Date : 12-Oct-2011 14:03 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:11 Cal File: V5N1311.D
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.906	1.894	(0.301)	299975	50.0000	45
2	Chloromethane	50	2.045	2.045	(0.323)	434369	50.0000	47
$ 79	Vinyl Chloride-d3	65	2.184	2.173	(0.345)	267768	50.0000	47
3	Vinyl Chloride	62	2.184	2.184	(0.345)	305183	50.0000	46
4	Bromomethane	94	2.533	2.509	(0.400)	191561	50.0000	46
$ 80	Chloroethane-d5	69	2.603	2.579	(0.411)	186785	50.0000	51
5	Chloroethane	64	2.626	2.614	(0.415)	157360	50.0000	47
6	Trichlorofluoromethane	101	2.893	2.904	(0.457)	345935	50.0000	46
$ 81	1,1-Dichloroethene-d2	65	3.369	3.369	(0.532)	57374	50.0000	49(Q)
7	1,1-Dichloroethene	96	3.381	3.380	(0.534)	202080	50.0000	48
8	1,1,2-Trichloro-1,2,2-trifluo	101	3.427	3.415	(0.541)	231466	50.0000	46
9	Acetone	43	3.462	3.450	(0.547)	86530	100.000	80
10	Carbon Disulfide	76	3.601	3.624	(0.569)	783033	50.0000	44
11	Methyl Acetate	43	3.775	3.764	(0.596)	132570	50.0000	47
12	Methylene Chloride	84	3.868	3.868	(0.611)	214752	50.0000	46
13	trans-1,2-Dichloroethene	96	4.124	4.124	(0.651)	212294	50.0000	48
14	Methyl tert-Butyl Ether	73	4.147	4.135	(0.655)	386323	50.0000	47
15	1,1-Dichloroethane	63	4.542	4.530	(0.718)	385424	50.0000	47
$ 82	2-Butanone-d5	46	5.076	5.064	(0.802)	155603	100.000	98
17	cis-1,2-Dichloroethene	96	5.111	5.099	(0.807)	207212	50.0000	48
16	2-Butanone	43	5.134	5.122	(0.811)	150755	100.000	95

Data File: \\avogadro\organics\V5.I\111004A.B\V5N1311.D
Report Date: 13-Oct-2011 08:46

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	18	Bromochloromethane	128	5.343	5.331	(0.844)	98217	50.0000	46
$	83	Chloroform-d	84	5.390	5.389	(0.851)	340968	50.0000	50
	19	Chloroform	83	5.413	5.401	(0.855)	345949	50.0000	46
	20	1,1,1-Trichloroethane	97	5.599	5.587	(0.594)	274755	50.0000	50
	21	Cyclohexane	56	5.645	5.645	(0.599)	370484	50.0000	49
	22	Carbon Tetrachloride	117	5.761	5.749	(0.611)	257413	50.0000	50
$	23	1,2-Dichloroethane-d4	65	5.901	5.900	(0.932)	168991	50.0000	46
$	84	Benzene-d6	84	5.924	5.912	(0.628)	639092	50.0000	51
	25	Benzene	78	5.959	5.959	(0.632)	666384	50.0000	49
	24	1,2-Dichloroethane	62	5.982	5.970	(0.945)	192340	50.0000	45
*	26	1,4-Difluorobenzene	114	6.330	6.319	(1.000)	595316	50.0000	
	27	Trichloroethene	95	6.597	6.586	(0.700)	201361	50.0000	51
$	85	1,2-Dichloropropane-d6	67	6.737	6.737	(0.714)	260951	50.0000	51
	28	Methylcyclohexane	83	6.783	6.783	(0.719)	332791	50.0000	48
	29	1,2-Dichloropropane	63	6.830	6.818	(0.724)	208689	50.0000	50
$	94	1,4-Dioxane-d8	96	6.923	6.911	(1.094)	35285	1000.00	1000
	93	1,4-Dioxane	88	6.981	6.969	(1.103)	27387	1000.00	870
	30	Bromodichloromethane	83	7.097	7.097	(0.753)	234761	50.0000	51
	31	cis-1,3-Dichloropropene	75	7.561	7.561	(0.802)	274880	50.0000	50
	32	4-Methyl-2-Pentanone	43	7.736	7.724	(0.820)	313590	100.000	86
$	33	Toluene-d8	98	7.852	7.840	(0.833)	589525	50.0000	51
	34	Toluene	91	7.921	7.909	(0.840)	663306	50.0000	49
$	86	trans-1,3-Dichloropropene-d4	79	8.119	8.119	(0.861)	198900	50.0000	51
	35	trans-1,3-Dichloropropene	75	8.154	8.153	(0.865)	213829	50.0000	49
	36	1,1,2-Trichloroethane	97	8.351	8.351	(0.885)	133364	50.0000	49
	37	Tetrachloroethene	164	8.502	8.502	(0.901)	144333	50.0000	50
$	87	2-Hexanone-d5	63	8.583	8.571	(0.910)	87637	100.000	88(Q)
	38	2-Hexanone	43	8.630	8.618	(0.915)	188779	100.000	67
	39	Dibromochloromethane	129	8.792	8.780	(0.932)	171460	50.0000	48
	40	1,2-Dibromoethane	107	8.920	8.920	(0.946)	145099	50.0000	50
*	42	Chlorobenzene-d5	117	9.431	9.431	(1.000)	470363	50.0000	
	43	Chlorobenzene	112	9.466	9.466	(1.004)	453579	50.0000	49
	44	Ethylbenzene	91	9.582	9.582	(1.016)	726171	50.0000	50
	45	m,p-Xylene	106	9.721	9.710	(1.031)	302904	50.0000	50
	46	o-Xylene	106	10.174	10.174	(1.079)	281051	50.0000	49
	47	Styrene	104	10.198	10.186	(1.081)	468215	50.0000	49
	48	Bromoform	173	10.418	10.418	(0.856)	104737	50.0000	51
	49	Isopropylbenzene	105	10.604	10.604	(1.124)	743678	50.0000	50
$	89	1,1,2,2-Tetrachloroethane-d2	84	10.929	10.929	(1.159)	170812	50.0000	51
	51	1,1,2,2-Tetrachloroethane	83	10.964	10.952	(1.163)	156245	50.0000	49
M	41	Xylene (total)	106				583955	50.0000	99
	52	1,3-Dichlorobenzene	146	12.102	12.090	(0.994)	296215	50.0000	51
*	78	1,4-Dichlorobenzene-d4	152	12.172	12.171	(1.000)	201784	50.0000	(Q)
	53	1,4-Dichlorobenzene	146	12.207	12.206	(1.003)	325459	50.0000	48
$	90	1,2-Dichlorobenzene-d4	152	12.636	12.636	(1.038)	184545	50.0000	49(Q)
	54	1,2-Dichlorobenzene	146	12.659	12.659	(1.040)	276829	50.0000	48
	55	1,2-Dibromo-3-chloropropane	75	13.647	13.635	(1.121)	19926	50.0000	49(Q)
	56	1,2,4-Trichlorobenzene	180	14.645	14.633	(1.203)	194923	50.0000	45
	77	1,2,3-Trichlorobenzene	180	15.249	15.237	(1.253)	166182	50.0000	44

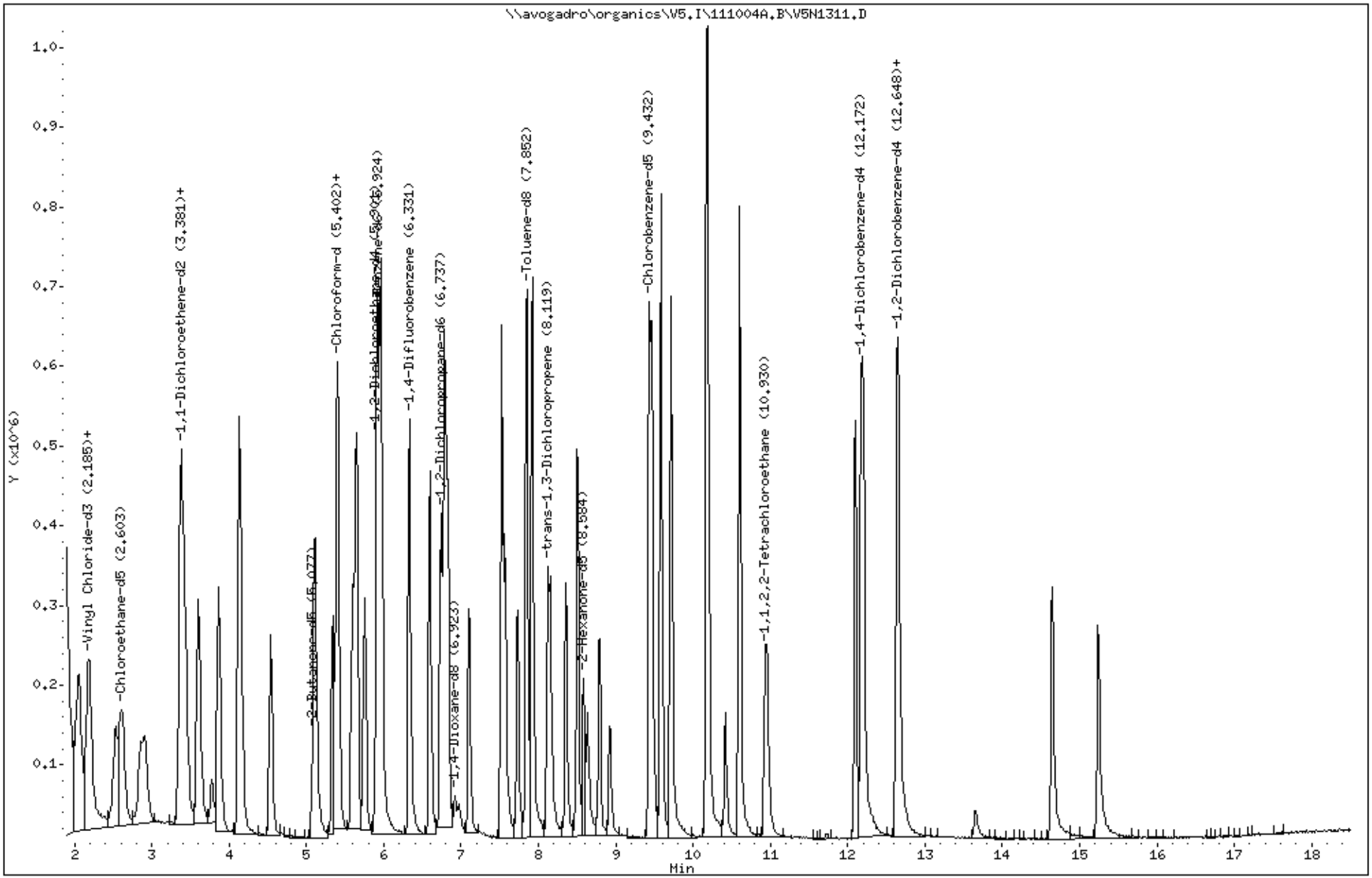
QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111004A.B\V5N1311.D
Date : 04-OCT-2011 17:11
Client ID: VSTD0505N
Sample Info: 5G,VSTD0505N,VSTD0505N

Instrument: V5.i

Operator: SRC:
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111004A.B\V5N1312.D
Report Date: 13-Oct-2011 08:46

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111004A.B\V5N1312.D
Lab Smp Id: VSTD0055N Client Smp ID: VSTD0055N
Inj Date : 04-OCT-2011 17:39
Operator : SRC: Inst ID: V5.i
Smp Info : 5G,VSTD0055N,VSTD0055N
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111004A.B\V5_SOM_S.m
Meth Date : 12-Oct-2011 14:03 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.893	1.894	(0.299)	36197	5.00000	5.2
2	Chloromethane	50	2.033	2.045	(0.321)	51024	5.00000	5.2
$ 79	Vinyl Chloride-d3	65	2.172	2.173	(0.343)	32120	5.00000	5.4
3	Vinyl Chloride	62	2.172	2.184	(0.343)	37959	5.00000	5.4
4	Bromomethane	94	2.521	2.509	(0.398)	24654	5.00000	5.5
$ 80	Chloroethane-d5	69	2.579	2.579	(0.407)	19191	5.00000	4.9
5	Chloroethane	64	2.625	2.614	(0.415)	20461	5.00000	5.7
6	Trichlorofluoromethane	101	2.881	2.904	(0.455)	41607	5.00000	5.3
$ 81	1,1-Dichloroethene-d2	65	3.368	3.369	(0.532)	6979	5.00000	5.6
7	1,1-Dichloroethene	96	3.380	3.380	(0.534)	22419	5.00000	5.0
8	1,1,2-Trichloro-1,2,2-trifluo	101	3.415	3.415	(0.540)	28754	5.00000	5.4
9	Acetone	43	3.461	3.450	(0.547)	16347	10.0000	14
10	Carbon Disulfide	76	3.601	3.624	(0.569)	107730	5.00000	5.8
11	Methyl Acetate	43	3.775	3.764	(0.596)	16894	5.00000	5.6
12	Methylene Chloride	84	3.868	3.868	(0.611)	26401	5.00000	5.4
13	trans-1,2-Dichloroethene	96	4.135	4.124	(0.653)	24020	5.00000	5.1
14	Methyl tert-Butyl Ether	73	4.146	4.135	(0.655)	45347	5.00000	5.2
15	1,1-Dichloroethane	63	4.541	4.530	(0.717)	44867	5.00000	5.2
$ 82	2-Butanone-d5	46	5.099	5.064	(0.806)	16595	10.0000	9.9
17	cis-1,2-Dichloroethene	96	5.110	5.099	(0.807)	23279	5.00000	5.1
16	2-Butanone	43	5.157	5.122	(0.815)	17304	10.0000	10

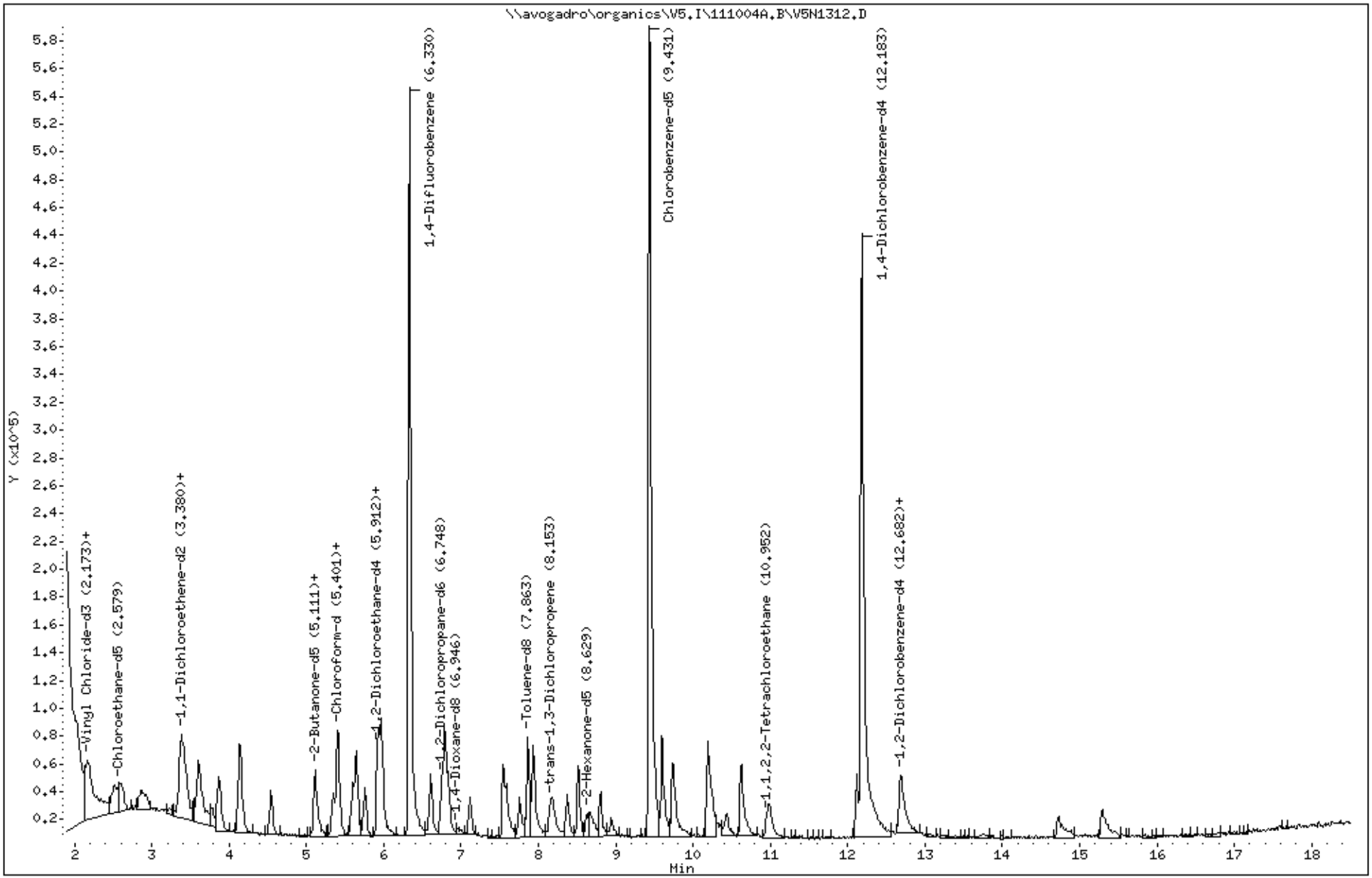
Data File: \\avogadro\organics\V5.I\111004A.B\V5N1312.D
Report Date: 13-Oct-2011 08:46

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	18 Bromochloromethane	128	5.343	5.331	(0.844)	12019	5.00000	5.3
$	83 Chloroform-d	84	5.401	5.389	(0.853)	36847	5.00000	5.1
	19 Chloroform	83	5.412	5.401	(0.855)	48773	5.00000	6.1
	20 1,1,1-Trichloroethane	97	5.598	5.587	(0.594)	30822	5.00000	5.1
	21 Cyclohexane	56	5.644	5.645	(0.599)	44246	5.00000	5.3
	22 Carbon Tetrachloride	117	5.761	5.749	(0.611)	29090	5.00000	5.2
$	23 1,2-Dichloroethane-d4	65	5.912	5.900	(0.934)	22942	5.00000	5.9
$	84 Benzene-d6	84	5.923	5.912	(0.628)	69349	5.00000	5.1
	25 Benzene	78	5.958	5.959	(0.632)	78698	5.00000	5.3
	24 1,2-Dichloroethane	62	5.993	5.970	(0.947)	24202	5.00000	5.3
*	26 1,4-Difluorobenzene	114	6.330	6.319	(1.000)	630230	50.0000	
	27 Trichloroethene	95	6.597	6.586	(0.700)	21074	5.00000	4.9
$	85 1,2-Dichloropropane-d6	67	6.748	6.737	(0.716)	29052	5.00000	5.1
	28 Methylcyclohexane	83	6.794	6.783	(0.720)	38156	5.00000	5.0
	29 1,2-Dichloropropane	63	6.841	6.818	(0.725)	24541	5.00000	5.4(T)
$	94 1,4-Dioxane-d8	96	6.945	6.911	(1.097)	3380	100.000	92
	93 1,4-Dioxane	88	6.992	6.969	(1.105)	3066	100.000	92
	30 Bromodichloromethane	83	7.108	7.097	(0.754)	24794	5.00000	4.9
	31 cis-1,3-Dichloropropene	75	7.584	7.561	(0.804)	29997	5.00000	5.0
	32 4-Methyl-2-Pentanone	43	7.758	7.724	(0.823)	50051	10.0000	12
$	33 Toluene-d8	98	7.863	7.840	(0.834)	64764	5.00000	5.1
	34 Toluene	91	7.932	7.909	(0.841)	74708	5.00000	5.1
$	86 trans-1,3-Dichloropropene-d4	79	8.153	8.119	(0.865)	19882	5.00000	4.7
	35 trans-1,3-Dichloropropene	75	8.188	8.153	(0.868)	24965	5.00000	5.2
	36 1,1,2-Trichloroethane	97	8.374	8.351	(0.888)	15474	5.00000	5.2
	37 Tetrachloroethene	164	8.513	8.502	(0.903)	16370	5.00000	5.2
$	87 2-Hexanone-d5	63	8.629	8.571	(0.915)	10167	10.0000	9.4
	38 2-Hexanone	43	8.675	8.618	(0.920)	41648	10.0000	14
	39 Dibromochloromethane	129	8.803	8.780	(0.934)	21204	5.00000	5.4
	40 1,2-Dibromoethane	107	8.943	8.920	(0.948)	16435	5.00000	5.2(T)
*	42 Chlorobenzene-d5	117	9.430	9.431	(1.000)	515605	50.0000	
	43 Chlorobenzene	112	9.477	9.466	(1.005)	50063	5.00000	4.9
	44 Ethylbenzene	91	9.593	9.582	(1.017)	78946	5.00000	5.0
	45 m,p-Xylene	106	9.732	9.710	(1.032)	31762	5.00000	4.8
	46 o-Xylene	106	10.197	10.174	(1.081)	32775	5.00000	5.2
	47 Styrene	104	10.232	10.186	(1.085)	52095	5.00000	5.0
	48 Bromoform	173	10.441	10.418	(0.857)	10408	5.00000	4.8
	49 Isopropylbenzene	105	10.615	10.604	(1.126)	81194	5.00000	5.0
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.952	10.929	(1.161)	18102	5.00000	4.9
	51 1,1,2,2-Tetrachloroethane	83	10.986	10.952	(1.165)	18111	5.00000	5.1
M	41 Xylene (total)	106				64537	5.00000	9.9
	52 1,3-Dichlorobenzene	146	12.125	12.090	(0.995)	28119	5.00000	4.6
*	78 1,4-Dichlorobenzene-d4	152	12.183	12.171	(1.000)	210499	50.0000	
	53 1,4-Dichlorobenzene	146	12.217	12.206	(1.003)	39863	5.00000	5.6
$	90 1,2-Dichlorobenzene-d4	152	12.670	12.636	(1.040)	20472	5.00000	5.2
	54 1,2-Dichlorobenzene	146	12.694	12.659	(1.042)	31289	5.00000	5.2
	55 1,2-Dibromo-3-chloropropane	75	13.739	13.635	(1.128)	2204	5.00000	5.2
	56 1,2,4-Trichlorobenzene	180	14.726	14.633	(1.209)	21399	5.00000	4.8
	77 1,2,3-Trichlorobenzene	180	15.295	15.237	(1.255)	19274	5.00000	4.9

QC Flag Legend

T - Target compound detected outside RT window.

Data File: \\avogadro\organics\V5.I\111004A.B\V5N1312.D
Date : 04-OCT-2011 17:39
Client ID: VSTD0055N
Instrument: V5.i
Sample Info: 5G,VSTD0055N,VSTD0055N
Operator: SRC:
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111004A.B\V5N1313.D
Report Date: 13-Oct-2011 08:46

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111004A.B\V5N1313.D
Lab Smp Id: VSTD2005N Client Smp ID: VSTD2005N
Inj Date : 04-OCT-2011 18:08
Operator : SRC: Inst ID: V5.i
Smp Info : 5G,VSTD2005N,VSTD2005N
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111004A.B\V5_SOM_S.m
Meth Date : 12-Oct-2011 14:03 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 18:08 Cal File: V5N1313.D
Als bottle: 3 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	1 Dichlorodifluoromethane	85	1.901	1.894	(0.301)	1343426	200.000	190
	2 Chloromethane	50	2.063	2.045	(0.326)	1824569	200.000	190
$	79 Vinyl Chloride-d3	65	2.191	2.173	(0.346)	1147112	200.000	190
	3 Vinyl Chloride	62	2.191	2.184	(0.346)	1294391	200.000	190
	4 Bromomethane	94	2.528	2.509	(0.400)	795475	200.000	180
$	80 Chloroethane-d5	69	2.597	2.579	(0.411)	742004	200.000	190
	5 Chloroethane	64	2.632	2.614	(0.416)	636553	200.000	180
	6 Trichlorofluoromethane	101	2.899	2.904	(0.458)	1525878	200.000	200
$	81 1,1-Dichloroethene-d2	65	3.364	3.369	(0.532)	248182	200.000	200(AQ)
	7 1,1-Dichloroethene	96	3.376	3.380	(0.534)	851918	200.000	190
	8 1,1,2-Trichloro-1,2,2-trifluo	101	3.422	3.415	(0.541)	993154	200.000	190
	9 Acetone	43	3.457	3.450	(0.547)	356628	400.000	320
	10 Carbon Disulfide	76	3.596	3.624	(0.569)	3340344	200.000	180
	11 Methyl Acetate	43	3.770	3.764	(0.596)	479665	200.000	160
	12 Methylene Chloride	84	3.863	3.868	(0.611)	890442	200.000	180
	13 trans-1,2-Dichloroethene	96	4.130	4.124	(0.653)	884014	200.000	190
	14 Methyl tert-Butyl Ether	73	4.154	4.135	(0.657)	1507962	200.000	180
	15 1,1-Dichloroethane	63	4.537	4.530	(0.717)	1635232	200.000	190
$	82 2-Butanone-d5	46	5.071	5.064	(0.802)	604238	400.000	370(A)
	17 cis-1,2-Dichloroethene	96	5.106	5.099	(0.807)	849810	200.000	190
	16 2-Butanone	43	5.129	5.122	(0.811)	573614	400.000	350

Data File: \\avogadro\organics\V5.I\111004A.B\V5N1313.D
Report Date: 13-Oct-2011 08:46

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	18	Bromochloromethane	128	5.338	5.331	(0.844)	411918	200.000	190
$	83	Chloroform-d	84	5.396	5.389	(0.853)	1358505	200.000	190
	19	Chloroform	83	5.408	5.401	(0.855)	1334401	200.000	170
	20	1,1,1-Trichloroethane	97	5.594	5.587	(0.593)	1142742	200.000	190
	21	Cyclohexane	56	5.652	5.645	(0.599)	1549507	200.000	180
	22	Carbon Tetrachloride	117	5.756	5.749	(0.610)	1068680	200.000	190
$	23	1,2-Dichloroethane-d4	65	5.907	5.900	(0.934)	635355	200.000	170(Q)
$	84	Benzene-d6	84	5.919	5.912	(0.627)	2579655	200.000	190
	25	Benzene	78	5.954	5.959	(0.631)	2747364	200.000	180
	24	1,2-Dichloroethane	62	5.977	5.970	(0.945)	839565	200.000	190
*	26	1,4-Difluorobenzene	114	6.325	6.319	(1.000)	621323	50.0000	(Q)
	27	Trichloroethene	95	6.592	6.586	(0.699)	838695	200.000	190
$	85	1,2-Dichloropropane-d6	67	6.732	6.737	(0.713)	1059996	200.000	190
	28	Methylcyclohexane	83	6.790	6.783	(0.719)	1490171	200.000	190
	29	1,2-Dichloropropane	63	6.825	6.818	(0.723)	813077	200.000	180
$	94	1,4-Dioxane-d8	96	6.918	6.911	(1.094)	141245	4000.00	3900
	93	1,4-Dioxane	88	6.976	6.969	(1.103)	133337	4000.00	4100(A)
	30	Bromodichloromethane	83	7.103	7.097	(0.753)	958079	200.000	190
	31	cis-1,3-Dichloropropene	75	7.556	7.561	(0.801)	1116719	200.000	180
	32	4-Methyl-2-Pentanone	43	7.730	7.724	(0.819)	1226367	400.000	300
$	33	Toluene-d8	98	7.847	7.840	(0.831)	2378240	200.000	190
	34	Toluene	91	7.916	7.909	(0.839)	2681639	200.000	180
$	86	trans-1,3-Dichloropropene-d4	79	8.114	8.119	(0.860)	804849	200.000	190
	35	trans-1,3-Dichloropropene	75	8.149	8.153	(0.863)	871784	200.000	180
	36	1,1,2-Trichloroethane	97	8.346	8.351	(0.884)	528524	200.000	180
	37	Tetrachloroethene	164	8.509	8.502	(0.902)	612133	200.000	190
$	87	2-Hexanone-d5	63	8.567	8.571	(0.908)	358673	400.000	330(AQ)
	38	2-Hexanone	43	8.625	8.618	(0.914)	802445	400.000	260
	39	Dibromochloromethane	129	8.787	8.780	(0.931)	740552	200.000	190
	40	1,2-Dibromoethane	107	8.927	8.920	(0.946)	620668	200.000	190
*	42	Chlorobenzene-d5	117	9.438	9.431	(1.000)	522035	50.0000	
	43	Chlorobenzene	112	9.461	9.466	(1.002)	1945144	200.000	190
	44	Ethylbenzene	91	9.577	9.582	(1.015)	3001198	200.000	190
	45	m,p-Xylene	106	9.716	9.710	(1.030)	1263400	200.000	190(Q)
	46	o-Xylene	106	10.169	10.174	(1.078)	1227588	200.000	190
	47	Styrene	104	10.192	10.186	(1.080)	2041110	200.000	190
	48	Bromoform	173	10.413	10.418	(0.855)	424205	200.000	180
	49	Isopropylbenzene	105	10.599	10.604	(1.123)	3078586	200.000	190
$	89	1,1,2,2-Tetrachloroethane-d2	84	10.924	10.929	(1.157)	638790	200.000	170
	51	1,1,2,2-Tetrachloroethane	83	10.959	10.952	(1.161)	609250	200.000	170
M	41	Xylene (total)	106				2490988	200.000	380
	52	1,3-Dichlorobenzene	146	12.097	12.090	(0.993)	1288932	200.000	200
*	78	1,4-Dichlorobenzene-d4	152	12.178	12.171	(1.000)	223743	50.0000	(Q)
	53	1,4-Dichlorobenzene	146	12.201	12.206	(1.002)	1340796	200.000	180
$	90	1,2-Dichlorobenzene-d4	152	12.631	12.636	(1.037)	769017	200.000	180(Q)
	54	1,2-Dichlorobenzene	146	12.654	12.659	(1.039)	1168263	200.000	180
	55	1,2-Dibromo-3-chloropropane	75	13.618	13.635	(1.118)	87768	200.000	190(Q)
	56	1,2,4-Trichlorobenzene	180	14.629	14.633	(1.201)	907483	200.000	190
	77	1,2,3-Trichlorobenzene	180	15.232	15.237	(1.251)	727794	200.000	170

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\avogadro\organics\V5.I\111004A.B\V5N1313.D
Report Date: 13-Oct-2011 08:46

QC Flag Legend

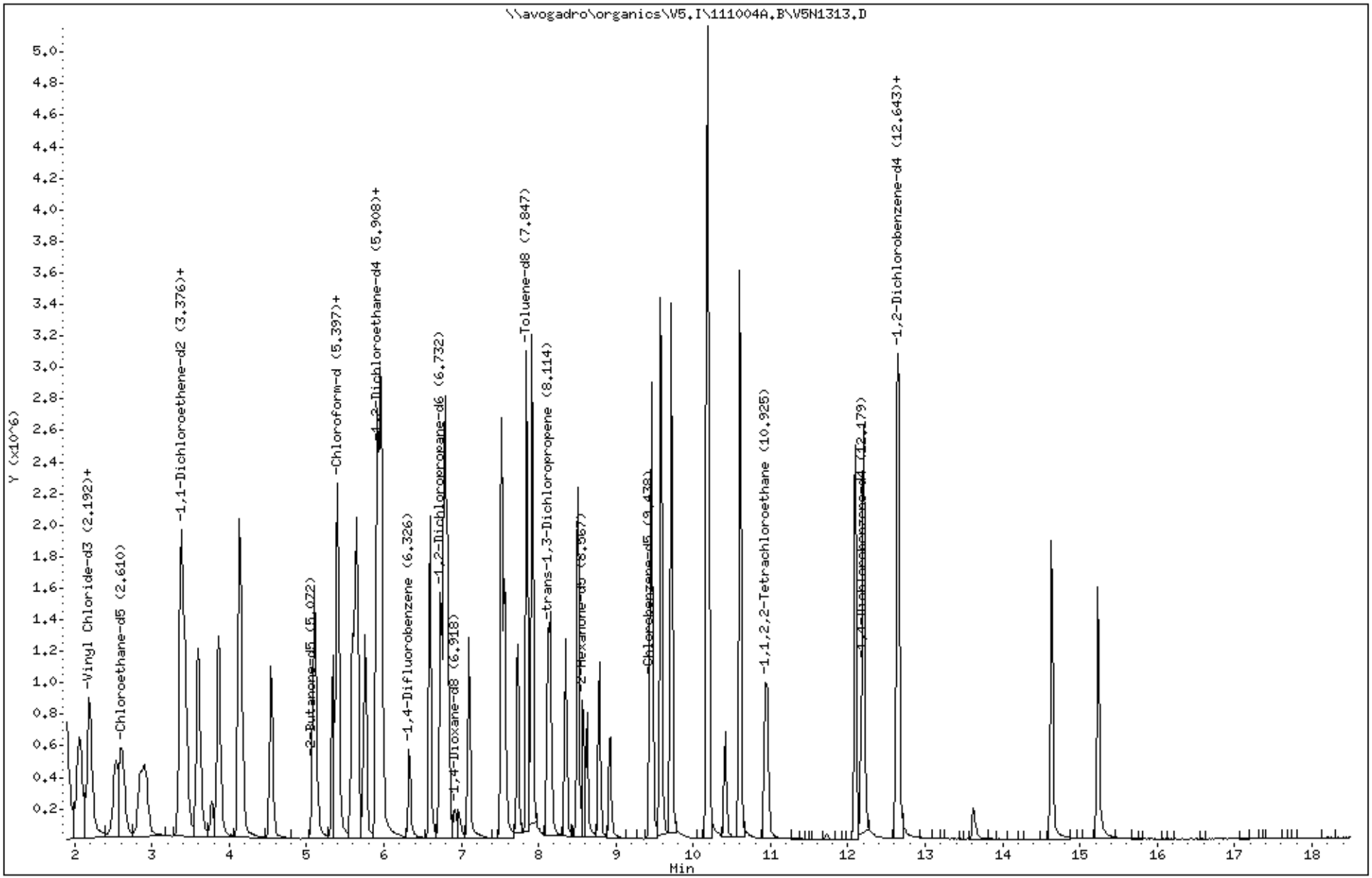
Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111004A.B\V5N1313.D
Date : 04-OCT-2011 18:08
Client ID: VSTD2005N
Sample Info: 5G,VSTD2005N,VSTD2005N

Instrument: V5.i

Operator: SRC:

Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111004A.B\V5N1314.D
Report Date: 13-Oct-2011 08:46

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111004A.B\V5N1314.D
Lab Smp Id: VSTD1005N Client Smp ID: VSTD1005N
Inj Date : 04-OCT-2011 18:36
Operator : SRC: Inst ID: V5.i
Smp Info : 5G,VSTD1005N,VSTD1005N
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111004A.B\V5_SOM_S.m
Meth Date : 12-Oct-2011 14:03 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 18:36 Cal File: V5N1314.D
Als bottle: 4 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	1 Dichlorodifluoromethane	85	1.899	1.894	(0.300)	728784	100.000	100
	2 Chloromethane	50	2.062	2.045	(0.326)	1003007	100.000	99
$	79 Vinyl Chloride-d3	65	2.189	2.173	(0.346)	568073	100.000	91
	3 Vinyl Chloride	62	2.201	2.184	(0.348)	714303	100.000	99
	4 Bromomethane	94	2.526	2.509	(0.400)	451411	100.000	98
$	80 Chloroethane-d5	69	2.608	2.579	(0.412)	377714	100.000	94
	5 Chloroethane	64	2.631	2.614	(0.416)	357829	100.000	96
	6 Trichlorofluoromethane	101	2.898	2.904	(0.458)	848320	100.000	100
$	81 1,1-Dichloroethene-d2	65	3.362	3.369	(0.532)	123584	100.000	96(Q)
	7 1,1-Dichloroethene	96	3.386	3.380	(0.535)	469268	100.000	100
	8 1,1,2-Trichloro-1,2,2-trifluo	101	3.420	3.415	(0.541)	553328	100.000	100
	9 Acetone	43	3.455	3.450	(0.546)	195948	200.000	160
	10 Carbon Disulfide	76	3.595	3.624	(0.568)	1855878	100.000	96
	11 Methyl Acetate	43	3.780	3.764	(0.598)	296102	100.000	95
	12 Methylene Chloride	84	3.862	3.868	(0.611)	495236	100.000	98
	13 trans-1,2-Dichloroethene	96	4.129	4.124	(0.653)	485064	100.000	100
	14 Methyl tert-Butyl Ether	73	4.152	4.135	(0.657)	851590	100.000	94
	15 1,1-Dichloroethane	63	4.535	4.530	(0.717)	905667	100.000	100
$	82 2-Butanone-d5	46	5.081	5.064	(0.804)	326499	200.000	190
	17 cis-1,2-Dichloroethene	96	5.104	5.099	(0.807)	475064	100.000	100
	16 2-Butanone	43	5.139	5.122	(0.813)	338185	200.000	190

Data File: \\avogadro\organics\V5.I\111004A.B\V5N1314.D
Report Date: 13-Oct-2011 08:46

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	18	Bromochloromethane	128	5.337	5.331	(0.844)	227764	100.000	98
$	83	Chloroform-d	84	5.395	5.389	(0.853)	707472	100.000	95
	19	Chloroform	83	5.406	5.401	(0.855)	760072	100.000	91
	20	1,1,1-Trichloroethane	97	5.592	5.587	(0.593)	630512	100.000	100
	21	Cyclohexane	56	5.650	5.645	(0.599)	858283	100.000	100
	22	Carbon Tetrachloride	117	5.755	5.749	(0.610)	598441	100.000	100
$	23	1,2-Dichloroethane-d4	65	5.906	5.900	(0.934)	368626	100.000	92
$	84	Benzene-d6	84	5.917	5.912	(0.627)	1310448	100.000	94
	25	Benzene	78	5.964	5.959	(0.632)	1499243	100.000	99
	24	1,2-Dichloroethane	62	5.975	5.970	(0.945)	447146	100.000	95
*	26	1,4-Difluorobenzene	114	6.324	6.319	(1.000)	652703	50.0000	
	27	Trichloroethene	95	6.591	6.586	(0.698)	463947	100.000	110
$	85	1,2-Dichloropropane-d6	67	6.730	6.737	(0.713)	553125	100.000	96
	28	Methylcyclohexane	83	6.788	6.783	(0.719)	798598	100.000	100
	29	1,2-Dichloropropane	63	6.823	6.818	(0.723)	449976	100.000	97
$	94	1,4-Dioxane-d8	96	6.916	6.911	(1.094)	76779	2000.00	2000
	93	1,4-Dioxane	88	6.974	6.969	(1.103)	76182	2000.00	2200
	30	Bromodichloromethane	83	7.102	7.097	(0.753)	523580	100.000	100
	31	cis-1,3-Dichloropropene	75	7.566	7.561	(0.802)	604881	100.000	99
	32	4-Methyl-2-Pentanone	43	7.729	7.724	(0.819)	747658	200.000	180
$	33	Toluene-d8	98	7.845	7.840	(0.831)	1232529	100.000	96
	34	Toluene	91	7.915	7.909	(0.839)	1523032	100.000	100
$	86	trans-1,3-Dichloropropene-d4	79	8.112	8.119	(0.860)	432349	100.000	100
	35	trans-1,3-Dichloropropene	75	8.147	8.153	(0.863)	472368	100.000	97
	36	1,1,2-Trichloroethane	97	8.356	8.351	(0.886)	296720	100.000	98
	37	Tetrachloroethene	164	8.507	8.502	(0.902)	339876	100.000	110
$	87	2-Hexanone-d5	63	8.577	8.571	(0.909)	214463	200.000	190(Q)
	38	2-Hexanone	43	8.623	8.618	(0.914)	548711	200.000	180
	39	Dibromochloromethane	129	8.786	8.780	(0.931)	398804	100.000	100
	40	1,2-Dibromoethane	107	8.925	8.920	(0.946)	328624	100.000	100
*	42	Chlorobenzene-d5	117	9.436	9.431	(1.000)	524573	50.0000	
	43	Chlorobenzene	112	9.471	9.466	(1.004)	1057636	100.000	100
	44	Ethylbenzene	91	9.575	9.582	(1.015)	1655269	100.000	100
	45	m,p-Xylene	106	9.715	9.710	(1.030)	692375	100.000	100
	46	o-Xylene	106	10.179	10.174	(1.079)	651511	100.000	100
	47	Styrene	104	10.191	10.186	(1.080)	1092374	100.000	100
	48	Bromoform	173	10.412	10.418	(0.855)	236922	100.000	100
	49	Isopropylbenzene	105	10.597	10.604	(1.123)	1707553	100.000	100
$	89	1,1,2,2-Tetrachloroethane-d2	84	10.934	10.929	(1.159)	357598	100.000	95
	51	1,1,2,2-Tetrachloroethane	83	10.957	10.952	(1.161)	345482	100.000	96
M	41	Xylene (total)	106				1343886	100.000	200
	52	1,3-Dichlorobenzene	146	12.095	12.090	(0.993)	693303	100.000	110
*	78	1,4-Dichlorobenzene-d4	152	12.177	12.171	(1.000)	222487	50.0000	(Q)
	53	1,4-Dichlorobenzene	146	12.200	12.206	(1.002)	739355	100.000	98
$	90	1,2-Dichlorobenzene-d4	152	12.630	12.636	(1.037)	391450	100.000	94(Q)
	54	1,2-Dichlorobenzene	146	12.653	12.659	(1.039)	627402	100.000	99
	55	1,2-Dibromo-3-chloropropane	75	13.628	13.635	(1.119)	47093	100.000	110(Q)
	56	1,2,4-Trichlorobenzene	180	14.639	14.633	(1.202)	473479	100.000	99
	77	1,2,3-Trichlorobenzene	180	15.243	15.237	(1.252)	403637	100.000	97

QC Flag Legend

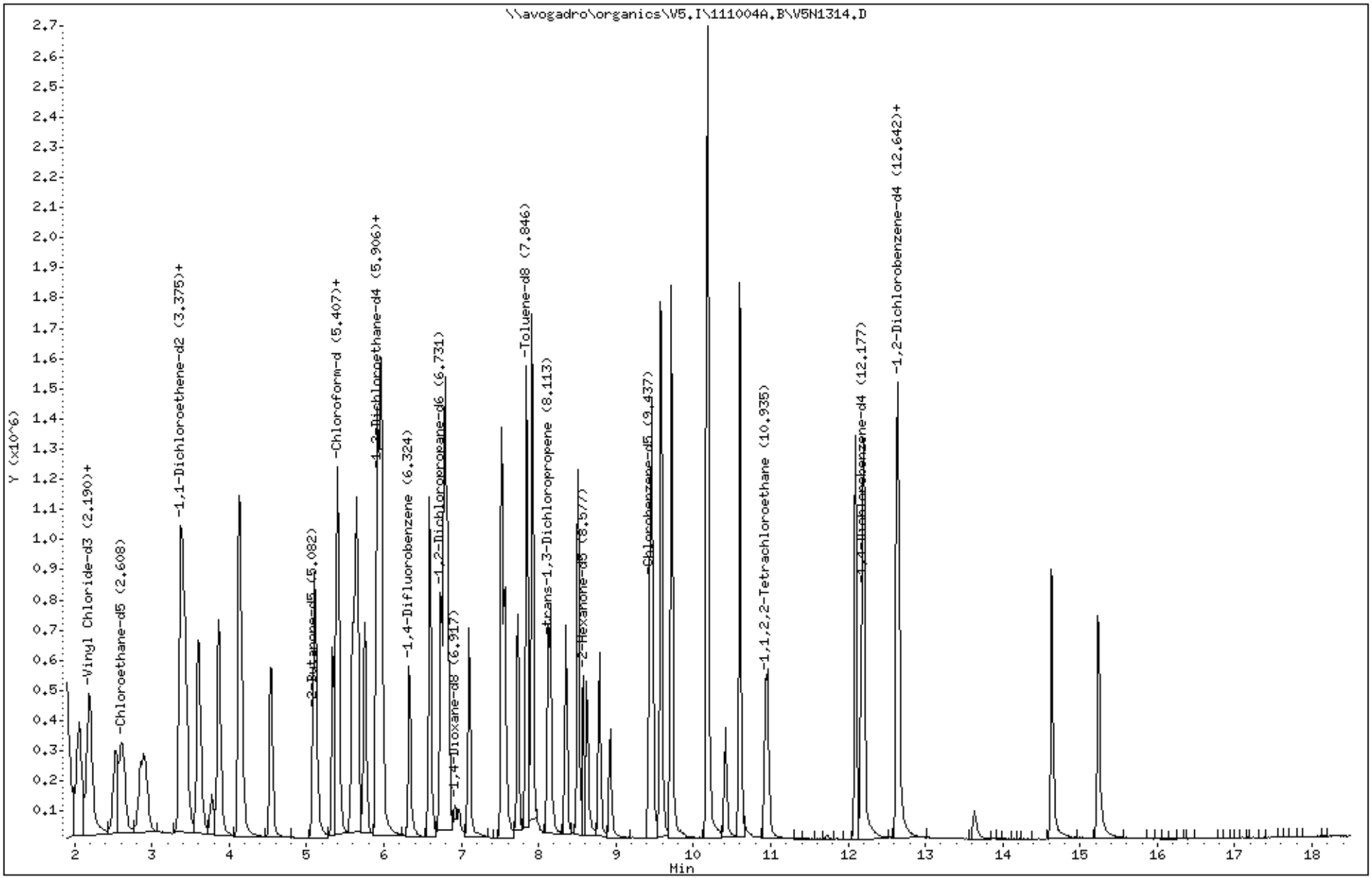
Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111004A.B\V5N1314.D
Date : 04-OCT-2011 18:36
Client ID: VSTD1005N
Sample Info: 5G,VSTD1005N,VSTD1005N

Instrument: V5.i

Operator: SRC:

Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111004A.B\V5N1315.D
Report Date: 13-Oct-2011 08:46

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111004A.B\V5N1315.D
Lab Smp Id: VSTD0105N Client Smp ID: VSTD0105N
Inj Date : 04-OCT-2011 19:04
Operator : SRC: Inst ID: V5.i
Smp Info : 5G,VSTD0105N,VSTD0105N
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111004A.B\V5_SOM_S.m
Meth Date : 12-Oct-2011 14:03 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 19:04 Cal File: V5N1315.D
Als bottle: 5 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.888	1.894	(0.299)	74376	10.0000	11
2	Chloromethane	50	2.039	2.045	(0.322)	103887	10.0000	11
$ 79	Vinyl Chloride-d3	65	2.167	2.173	(0.343)	64656	10.0000	11
3	Vinyl Chloride	62	2.190	2.184	(0.346)	72601	10.0000	11
4	Bromomethane	94	2.503	2.509	(0.396)	47886	10.0000	11
$ 80	Chloroethane-d5	69	2.585	2.579	(0.409)	41140	10.0000	11
5	Chloroethane	64	2.620	2.614	(0.414)	37177	10.0000	11
6	Trichlorofluoromethane	101	2.898	2.904	(0.458)	78439	10.0000	10
$ 81	1,1-Dichloroethene-d2	65	3.363	3.369	(0.532)	11357	10.0000	9.3(Q)
7	1,1-Dichloroethene	96	3.386	3.380	(0.535)	45407	10.0000	10
8	1,1,2-Trichloro-1,2,2-trifluo	101	3.421	3.415	(0.541)	53896	10.0000	10
9	Acetone	43	3.456	3.450	(0.546)	26221	20.0000	23
10	Carbon Disulfide	76	3.607	3.624	(0.570)	200799	10.0000	11
11	Methyl Acetate	43	3.781	3.764	(0.598)	34388	10.0000	12
12	Methylene Chloride	84	3.862	3.868	(0.611)	52059	10.0000	11
13	trans-1,2-Dichloroethene	96	4.129	4.124	(0.653)	47743	10.0000	10
14	Methyl tert-Butyl Ether	73	4.141	4.135	(0.655)	102149	10.0000	12
15	1,1-Dichloroethane	63	4.547	4.530	(0.719)	90414	10.0000	11
$ 82	2-Butanone-d5	46	5.093	5.064	(0.805)	38209	20.0000	23
17	cis-1,2-Dichloroethene	96	5.105	5.099	(0.807)	48573	10.0000	11
16	2-Butanone	43	5.151	5.122	(0.815)	38694	20.0000	24

Data File: \\avogadro\organics\V5.I\111004A.B\V5N1315.D
Report Date: 13-Oct-2011 08:46

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	18	Bromochloromethane	128	5.349	5.331	(0.846)	24272	10.0000	11(Q)
$	83	Chloroform-d	84	5.395	5.389	(0.853)	74732	10.0000	11
	19	Chloroform	83	5.407	5.401	(0.855)	87623	10.0000	11
	20	1,1,1-Trichloroethane	97	5.593	5.587	(0.593)	62850	10.0000	10
	21	Cyclohexane	56	5.639	5.645	(0.598)	85810	10.0000	10
	22	Carbon Tetrachloride	117	5.755	5.749	(0.610)	56074	10.0000	9.9
$	23	1,2-Dichloroethane-d4	65	5.906	5.900	(0.934)	43586	10.0000	11
$	84	Benzene-d6	84	5.918	5.912	(0.627)	147654	10.0000	11
	25	Benzene	78	5.964	5.959	(0.632)	160771	10.0000	11
	24	1,2-Dichloroethane	62	5.987	5.970	(0.947)	50225	10.0000	11
*	26	1,4-Difluorobenzene	114	6.324	6.319	(1.000)	616605	50.0000	
	27	Trichloroethene	95	6.603	6.586	(0.700)	43479	10.0000	10
$	85	1,2-Dichloropropane-d6	67	6.742	6.737	(0.715)	60090	10.0000	11
	28	Methylcyclohexane	83	6.789	6.783	(0.719)	79022	10.0000	10
	29	1,2-Dichloropropane	63	6.835	6.818	(0.724)	47705	10.0000	11
$	94	1,4-Dioxane-d8	96	6.940	6.911	(1.097)	7952	200.000	220
	93	1,4-Dioxane	88	6.986	6.969	(1.105)	7144	200.000	220(Q)
	30	Bromodichloromethane	83	7.102	7.097	(0.753)	53397	10.0000	11
	31	cis-1,3-Dichloropropene	75	7.578	7.561	(0.803)	66749	10.0000	11
	32	4-Methyl-2-Pentanone	43	7.741	7.724	(0.820)	97538	20.0000	24
$	33	Toluene-d8	98	7.857	7.840	(0.833)	132824	10.0000	11
	34	Toluene	91	7.927	7.909	(0.840)	161215	10.0000	11
$	86	trans-1,3-Dichloropropene-d4	79	8.136	8.119	(0.862)	46798	10.0000	11
	35	trans-1,3-Dichloropropene	75	8.171	8.153	(0.866)	51950	10.0000	11
	36	1,1,2-Trichloroethane	97	8.368	8.351	(0.887)	32978	10.0000	11
	37	Tetrachloroethene	164	8.519	8.502	(0.903)	30767	10.0000	9.7
$	87	2-Hexanone-d5	63	8.600	8.571	(0.911)	30215	20.0000	28(Q)
	38	2-Hexanone	43	8.647	8.618	(0.916)	88909	20.0000	29
	39	Dibromochloromethane	129	8.798	8.780	(0.932)	40272	10.0000	10
	40	1,2-Dibromoethane	107	8.937	8.920	(0.947)	31528	10.0000	9.9
*	42	Chlorobenzene-d5	117	9.436	9.431	(1.000)	515681	50.0000	
	43	Chlorobenzene	112	9.471	9.466	(1.004)	107912	10.0000	11
	44	Ethylbenzene	91	9.587	9.582	(1.016)	165158	10.0000	10
	45	m,p-Xylene	106	9.727	9.710	(1.031)	71767	10.0000	11
	46	o-Xylene	106	10.180	10.174	(1.079)	65673	10.0000	10
	47	Styrene	104	10.215	10.186	(1.082)	105666	10.0000	10
	48	Bromoform	173	10.435	10.418	(0.857)	25771	10.0000	11
	49	Isopropylbenzene	105	10.609	10.604	(1.124)	165474	10.0000	10
$	89	1,1,2,2-Tetrachloroethane-d2	84	10.946	10.929	(1.160)	44308	10.0000	12
	51	1,1,2,2-Tetrachloroethane	83	10.969	10.952	(1.162)	41450	10.0000	12
M	41	Xylene (total)	106				137440	10.0000	21
	52	1,3-Dichlorobenzene	146	12.107	12.090	(0.994)	69184	10.0000	10
*	78	1,4-Dichlorobenzene-d4	152	12.177	12.171	(1.000)	237594	50.0000	
	53	1,4-Dichlorobenzene	146	12.212	12.206	(1.003)	86467	10.0000	11
$	90	1,2-Dichlorobenzene-d4	152	12.653	12.636	(1.039)	49622	10.0000	11(Q)
	54	1,2-Dichlorobenzene	146	12.677	12.659	(1.041)	74148	10.0000	11
	55	1,2-Dibromo-3-chloropropane	75	13.687	13.635	(1.124)	4565	10.0000	9.5(Q)
	56	1,2,4-Trichlorobenzene	180	14.674	14.633	(1.205)	61165	10.0000	12
	77	1,2,3-Trichlorobenzene	180	15.266	15.237	(1.254)	57838	10.0000	13

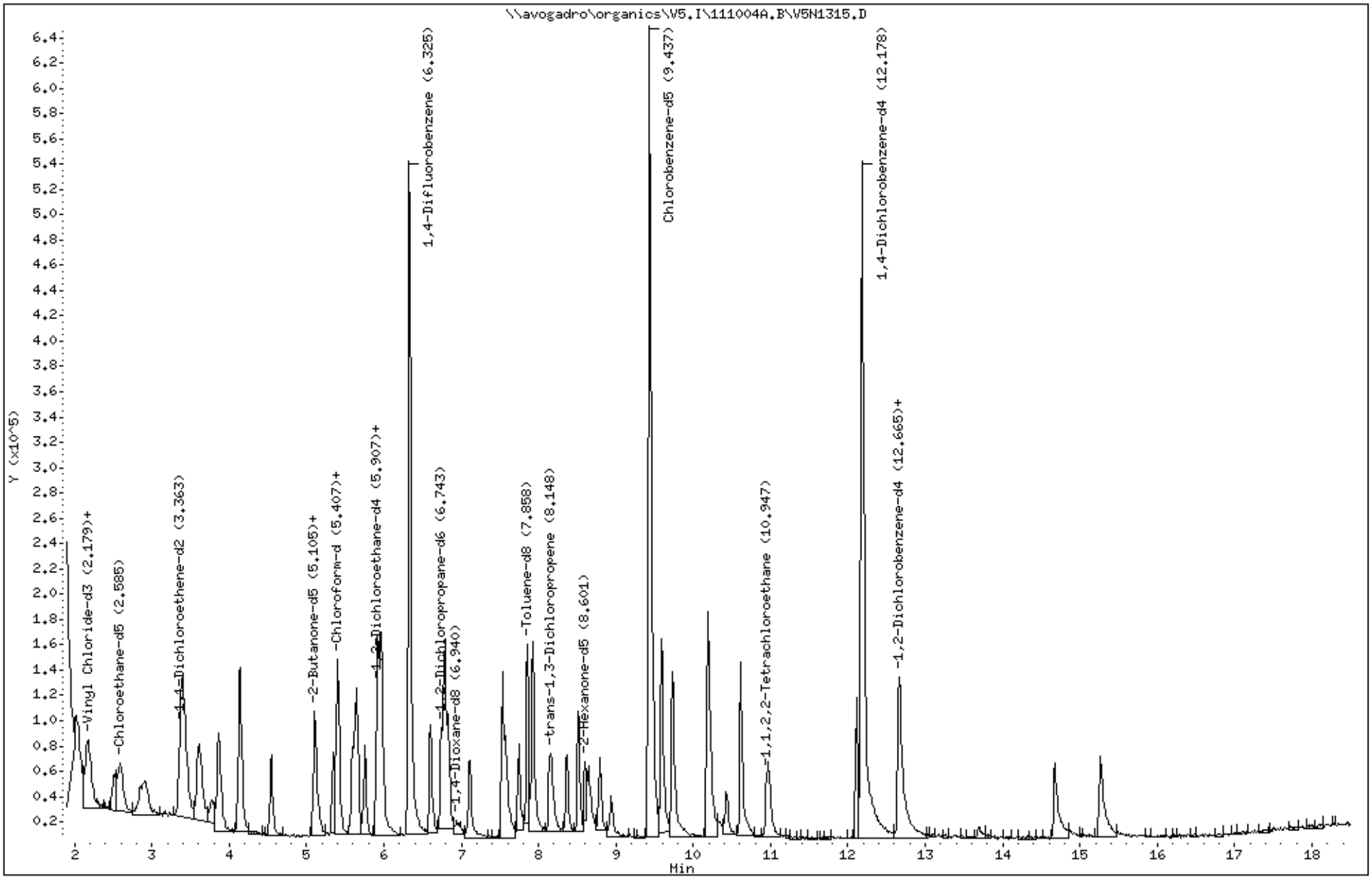
QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111004A.B\V5N1315.D
Date : 04-OCT-2011 19:04
Client ID: VSTD0105N
Sample Info: 5G,VSTD0105N,VSTD0105N

Instrument: V5.i

Operator: SRC:
Column phase: DB-624
Column diameter: 0.25



7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: V5 Calibration Date: 11/06/2011 Time: 23:16

Lab File ID: V5N2701.D Init. Calib. Date(s): 10/04/2011 10/04/2011

EPA Sample No.(VSTD#####) VSTD050J5 Init. Calib. Time(s): 17:11 19:04

Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 10.0 (mL)

COMPOUND	$\overline{\text{RRF}}$	RRF050	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.556	0.425	0.010	-23.7	40.0
Chloromethane	0.777	0.660	0.010	-15.0	40.0
Vinyl chloride	0.554	0.493	0.100	-11.1	25.0
Bromomethane	0.353	0.281	0.100	-20.5	25.0
Chloroethane	0.284	0.264	0.010	-7.2	40.0
Trichlorofluoromethane	0.628	0.571	0.010	-9.0	40.0
1,1-Dichloroethene	0.353	0.327	0.100	-7.3	25.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.421	0.333	0.010	-20.9	40.0
Acetone	0.091	0.064	0.010	-29.5	40.0
Carbon disulfide	1.484	1.287	0.010	-13.2	40.0
Methyl acetate	0.238	0.153	0.010	-35.8	40.0
Methylene chloride	0.388	0.315	0.010	-18.8	40.0
trans-1,2-Dichloroethene	0.370	0.360	0.010	-2.9	40.0
Methyl tert-butyl ether	0.691	0.512	0.010	-25.9	40.0
1,1-Dichloroethane	0.689	0.672	0.200	-2.4	25.0
cis-1,2-Dichloroethene	0.363	0.342	0.010	-5.8	40.0
2-Butanone	0.133	0.094	0.010	-29.5	40.0
Bromochloromethane	0.179	0.151	0.050	-15.2	25.0
Chloroform	0.637	0.539	0.200	-15.4	25.0
1,1,1-Trichloroethane	0.588	0.712	0.100	21.1	25.0
Cyclohexane	0.808	0.942	0.010	16.6	40.0
Carbon tetrachloride	0.547	0.682	0.100	24.6	25.0
Benzene	1.449	1.653	0.400	14.0	25.0
1,2-Dichloroethane	0.359	0.327	0.100	-9.0	25.0
1,4-Dioxane	0.003	0.002	0.005	-41.7	50.0
Trichloroethene	0.420	0.519	0.300	23.5	25.0
Methylcyclohexane	0.738	0.813	0.010	10.3	40.0

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: V5 Calibration Date: 11/06/2011 Time: 23:16

Lab File ID: V5N2701.D Init. Calib. Date(s): 10/04/2011 10/04/2011

EPA Sample No.(VSTD#####) VSTD050J5 Init. Calib. Time(s): 17:11 19:04

Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 10.0 (mL)

COMPOUND	$\overline{RRF}$	RRF050	MIN RRF	%D	MAX %D
1,2-Dichloropropane	0.440	0.500	0.010	13.6	40.0
Bromodichloromethane	0.491	0.522	0.200	6.3	25.0
cis-1,3-Dichloropropene	0.585	0.617	0.200	5.4	25.0
4-Methyl-2-pentanone	0.388	0.269	0.010	-30.8	40.0
Toluene	1.432	1.642	0.400	14.7	25.0
trans-1,3-Dichloropropene	0.462	0.464	0.100	0.4	25.0
1,1,2-Trichloroethane	0.288	0.275	0.100	-4.6	25.0
Tetrachloroethene	0.308	0.366	0.100	18.7	25.0
2-Hexanone	0.298	0.180	0.010	-39.7	40.0
Dibromochloromethane	0.380	0.378	0.100	-0.5	25.0
1,2-Dibromoethane	0.309	0.302	0.010	-2.1	40.0
Chlorobenzene	0.984	1.112	0.500	13.0	25.0
Ethylbenzene	1.538	1.766	0.100	14.8	25.0
m,p-Xylene	0.644	0.711	0.300	10.5	25.0
o-Xylene	0.616	0.650	0.300	5.6	25.0
Styrene	1.010	1.079	0.300	6.9	25.0
Bromoform	0.512	0.524	0.050	2.2	25.0
Isopropylbenzene	1.572	1.782	0.010	13.3	40.0
1,1,2,2-Tetrachloroethane	0.341	0.294	0.300	-13.9	25.0
1,3-Dichlorobenzene	1.452	1.596	0.600	9.9	25.0
1,4-Dichlorobenzene	1.697	1.783	0.500	5.0	25.0
1,2-Dichlorobenzene	1.427	1.465	0.400	2.7	25.0
1,2-Dibromo-3-chloropropane	0.101	0.084	0.010	-16.3	40.0
1,2,4-Trichlorobenzene	1.070	0.880	0.200	-17.7	25.0
1,2,3-Trichlorobenzene	0.935	0.728	0.200	-22.2	25.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: V5 Calibration Date: 11/06/2011 Time: 23:16

Lab File ID: V5N2701.D Init. Calib. Date(s): 10/04/2011 10/04/2011

EPA Sample No.(VSTD#####) VSTD050J5 Init. Calib. Time(s): 17:11 19:04

Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 10.0 (mL)

COMPOUND	$\overline{RRF}$	RRF050	MIN RRF	%D	MAX %D
Vinyl chloride-d3	0.476	0.413	0.010	-13.3	25.0
Chloroethane-d5	0.308	0.296	0.010	-3.9	40.0
1,1-Dichloroethene-d2	0.099	0.100	0.010	1.3	25.0
2-Butanone-d5	0.133	0.095	0.010	-28.5	40.0
Chloroform-d	0.570	0.527	0.010	-7.6	25.0
1,2-Dichloroethane-d4	0.308	0.261	0.010	-15.2	25.0
Benzene-d6	1.324	1.520	0.010	14.8	25.0
1,2-Dichloropropane-d6	0.547	0.580	0.010	5.9	40.0
Toluene-d8	1.222	1.383	0.010	13.1	25.0
trans-1,3-Dichloropropene-d4	0.412	0.439	0.010	6.6	25.0
2-Hexanone-d5	0.105	0.070	0.010	-33.3	40.0
1,4-Dioxane-d8	0.003	0.002	0.005	-34.7	50.0
1,1,2,2-Tetrachloroethane-d2	0.358	0.305	0.010	-14.9	25.0
1,2-Dichlorobenzene-d4	0.934	0.966	0.010	3.4	25.0

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: V5 Calibration Date: 11/07/2011 Time: 9:45

Lab File ID: V5N2724.D Init. Calib. Date(s): 10/04/2011 10/04/2011

EPA Sample No.(VSTD#####) VSTD050K5 Init. Calib. Time(s): 17:11 19:04

Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 10.0 (mL)

COMPOUND	$\overline{RRF}$	RRF050	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.556	0.423	0.010	-23.8	40.0
Chloromethane	0.777	0.717	0.010	-7.8	40.0
Vinyl chloride	0.554	0.482	0.100	-13.1	25.0
Bromomethane	0.353	0.311	0.100	-12.1	25.0
Chloroethane	0.284	0.251	0.010	-11.8	40.0
Trichlorofluoromethane	0.628	0.526	0.010	-16.2	40.0
1,1-Dichloroethene	0.353	0.294	0.100	-16.7	25.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.421	0.309	0.010	-26.7	40.0
Acetone	0.091	0.093	0.010	1.9	40.0
Carbon disulfide	1.484	1.218	0.010	-17.9	40.0
Methyl acetate	0.238	0.262	0.010	10.2	40.0
Methylene chloride	0.388	0.382	0.010	-1.4	40.0
trans-1,2-Dichloroethene	0.370	0.356	0.010	-3.9	40.0
Methyl tert-butyl ether	0.691	0.788	0.010	14.0	40.0
1,1-Dichloroethane	0.689	0.704	0.200	2.2	25.0
cis-1,2-Dichloroethene	0.363	0.389	0.010	6.9	40.0
2-Butanone	0.133	0.167	0.010	25.4	40.0
Bromochloromethane	0.179	0.204	0.050	14.2	25.0
Chloroform	0.637	0.631	0.200	-1.0	25.0
1,1,1-Trichloroethane	0.588	0.558	0.100	-5.0	25.0
Cyclohexane	0.808	0.685	0.010	-15.2	40.0
Carbon tetrachloride	0.547	0.510	0.100	-6.9	25.0
Benzene	1.449	1.396	0.400	-3.6	25.0
1,2-Dichloroethane	0.359	0.429	0.100	19.4	25.0
1,4-Dioxane	0.003	0.003	0.005	23.9	50.0
Trichloroethene	0.420	0.396	0.300	-5.8	25.0
Methylcyclohexane	0.738	0.559	0.010	-24.3	40.0

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: V5 Calibration Date: 11/07/2011 Time: 9:45

Lab File ID: V5N2724.D Init. Calib. Date(s): 10/04/2011 10/04/2011

EPA Sample No.(VSTD#####) VSTD050K5 Init. Calib. Time(s): 17:11 19:04

Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 10.0 (mL)

COMPOUND	$\overline{RRF}$	RRF050	MIN RRF	%D	MAX %D
1,2-Dichloropropane	0.440	0.475	0.010	7.9	40.0
Bromodichloromethane	0.491	0.522	0.200	6.3	25.0
cis-1,3-Dichloropropene	0.585	0.639	0.200	9.2	25.0
4-Methyl-2-pentanone	0.388	0.410	0.010	5.6	40.0
Toluene	1.432	1.391	0.400	-2.8	25.0
trans-1,3-Dichloropropene	0.462	0.502	0.100	8.6	25.0
1,1,2-Trichloroethane	0.288	0.324	0.100	12.7	25.0
Tetrachloroethene	0.308	0.281	0.100	-8.6	25.0
2-Hexanone	0.298	0.238	0.010	-20.0	40.0
Dibromochloromethane	0.380	0.423	0.100	11.3	25.0
1,2-Dibromoethane	0.309	0.365	0.010	18.3	40.0
Chlorobenzene	0.984	1.018	0.500	3.5	25.0
Ethylbenzene	1.538	1.475	0.100	-4.1	25.0
m,p-Xylene	0.644	0.605	0.300	-6.1	25.0
o-Xylene	0.616	0.590	0.300	-4.2	25.0
Styrene	1.010	1.009	0.300	-0.1	25.0
Bromoform	0.512	0.584	0.050	14.0	25.0
Isopropylbenzene	1.572	1.499	0.010	-4.7	40.0
1,1,2,2-Tetrachloroethane	0.341	0.398	0.300	16.5	25.0
1,3-Dichlorobenzene	1.452	1.542	0.600	6.2	25.0
1,4-Dichlorobenzene	1.697	1.628	0.500	-4.1	25.0
1,2-Dichlorobenzene	1.427	1.518	0.400	6.4	25.0
1,2-Dibromo-3-chloropropane	0.101	0.127	0.010	26.6	40.0
1,2,4-Trichlorobenzene	1.070	0.987	0.200	-7.7	25.0
1,2,3-Trichlorobenzene	0.935	0.917	0.200	-2.0	25.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: V5 Calibration Date: 11/07/2011 Time: 9:45

Lab File ID: V5N2724.D Init. Calib. Date(s): 10/04/2011 10/04/2011

EPA Sample No.(VSTD#####) VSTD050K5 Init. Calib. Time(s): 17:11 19:04

Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 10.0 (mL)

COMPOUND	$\overline{RRF}$	RRF050	MIN RRF	%D	MAX %D
Vinyl chloride-d3	0.476	0.409	0.010	-14.1	25.0
Chloroethane-d5	0.308	0.290	0.010	-5.7	40.0
1,1-Dichloroethene-d2	0.099	0.090	0.010	-8.7	25.0
2-Butanone-d5	0.133	0.162	0.010	21.9	40.0
Chloroform-d	0.570	0.601	0.010	5.4	25.0
1,2-Dichloroethane-d4	0.308	0.372	0.010	20.9	25.0
Benzene-d6	1.324	1.291	0.010	-2.5	25.0
1,2-Dichloropropane-d6	0.547	0.559	0.010	2.1	40.0
Toluene-d8	1.222	1.173	0.010	-4.0	25.0
trans-1,3-Dichloropropene-d4	0.412	0.449	0.010	9.0	25.0
2-Hexanone-d5	0.105	0.115	0.010	9.3	40.0
1,4-Dioxane-d8	0.003	0.003	0.005	17.3	50.0
1,1,2,2-Tetrachloroethane-d2	0.358	0.412	0.010	15.0	25.0
1,2-Dichlorobenzene-d4	0.934	0.927	0.010	-0.8	25.0

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: V5 Calibration Date: 11/07/2011 Time: 21:33

Lab File ID: V5N2749.D Init. Calib. Date(s): 10/04/2011 10/04/2011

EPA Sample No.(VSTD#####) VSTD050L5 Init. Calib. Time(s): 17:11 19:04

Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 10.0 (mL)

COMPOUND	$\overline{RRF}$	RRF050	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.556	0.422	0.010	-24.1	50.0
Chloromethane	0.777	0.679	0.010	-12.6	50.0
Vinyl chloride	0.554	0.496	0.010	-10.6	50.0
Bromomethane	0.353	0.300	0.010	-15.2	50.0
Chloroethane	0.284	0.252	0.010	-11.4	50.0
Trichlorofluoromethane	0.628	0.587	0.010	-6.6	50.0
1,1-Dichloroethene	0.353	0.341	0.010	-3.4	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.421	0.336	0.010	-20.1	50.0
Acetone	0.091	0.068	0.010	-25.0	50.0
Carbon disulfide	1.484	1.349	0.010	-9.1	50.0
Methyl acetate	0.238	0.182	0.010	-23.4	50.0
Methylene chloride	0.388	0.343	0.010	-11.5	50.0
trans-1,2-Dichloroethene	0.370	0.373	0.010	0.7	50.0
Methyl tert-butyl ether	0.691	0.600	0.010	-13.2	50.0
1,1-Dichloroethane	0.689	0.687	0.010	-0.3	50.0
cis-1,2-Dichloroethene	0.363	0.356	0.010	-1.9	50.0
2-Butanone	0.133	0.114	0.010	-14.1	50.0
Bromochloromethane	0.179	0.160	0.010	-10.7	50.0
Chloroform	0.637	0.570	0.010	-10.4	50.0
1,1,1-Trichloroethane	0.588	0.633	0.010	7.6	50.0
Cyclohexane	0.808	0.840	0.010	4.0	50.0
Carbon tetrachloride	0.547	0.610	0.010	11.4	50.0
Benzene	1.449	1.512	0.010	4.3	50.0
1,2-Dichloroethane	0.359	0.343	0.010	-4.5	50.0
1,4-Dioxane	0.003	0.002	0.005	-18.6	50.0
Trichloroethene	0.420	0.471	0.010	11.9	50.0
Methylcyclohexane	0.738	0.691	0.010	-6.4	50.0

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: V5 Calibration Date: 11/07/2011 Time: 21:33

Lab File ID: V5N2749.D Init. Calib. Date(s): 10/04/2011 10/04/2011

EPA Sample No.(VSTD#####) VSTD050L5 Init. Calib. Time(s): 17:11 19:04

Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 10.0 (mL)

COMPOUND	$\overline{RRF}$	RRF050	MIN RRF	%D	MAX %D
1,2-Dichloropropane	0.440	0.466	0.010	5.9	50.0
Bromodichloromethane	0.491	0.529	0.010	7.8	50.0
cis-1,3-Dichloropropene	0.585	0.586	0.010	0.2	50.0
4-Methyl-2-pentanone	0.388	0.308	0.010	-20.7	50.0
Toluene	1.432	1.508	0.010	5.3	50.0
trans-1,3-Dichloropropene	0.462	0.432	0.010	-6.4	50.0
1,1,2-Trichloroethane	0.288	0.263	0.010	-8.5	50.0
Tetrachloroethene	0.308	0.332	0.010	7.9	50.0
2-Hexanone	0.298	0.195	0.010	-34.7	50.0
Dibromochloromethane	0.380	0.373	0.010	-1.8	50.0
1,2-Dibromoethane	0.309	0.296	0.010	-4.1	50.0
Chlorobenzene	0.984	1.021	0.010	3.7	50.0
Ethylbenzene	1.538	1.645	0.010	6.9	50.0
m,p-Xylene	0.644	0.666	0.010	3.4	50.0
o-Xylene	0.616	0.596	0.010	-3.2	50.0
Styrene	1.010	1.007	0.010	-0.3	50.0
Bromoform	0.512	0.531	0.010	3.6	50.0
Isopropylbenzene	1.572	1.648	0.010	4.8	50.0
1,1,2,2-Tetrachloroethane	0.341	0.297	0.010	-13.1	50.0
1,3-Dichlorobenzene	1.452	1.595	0.010	9.9	50.0
1,4-Dichlorobenzene	1.697	1.710	0.010	0.7	50.0
1,2-Dichlorobenzene	1.427	1.462	0.010	2.4	50.0
1,2-Dibromo-3-chloropropane	0.101	0.094	0.010	-6.3	50.0
1,2,4-Trichlorobenzene	1.070	0.894	0.010	-16.4	50.0
1,2,3-Trichlorobenzene	0.935	0.715	0.010	-23.5	50.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: V5 Calibration Date: 11/07/2011 Time: 21:33

Lab File ID: V5N2749.D Init. Calib. Date(s): 10/04/2011 10/04/2011

EPA Sample No.(VSTD#####) VSTD050L5 Init. Calib. Time(s): 17:11 19:04

Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 10.0 (mL)

COMPOUND	$\overline{RRF}$	RRF050	MIN RRF	%D	MAX %D
Vinyl chloride-d3	0.476	0.413	0.010	-13.4	50.0
Chloroethane-d5	0.308	0.300	0.010	-2.6	50.0
1,1-Dichloroethene-d2	0.099	0.107	0.010	8.0	50.0
2-Butanone-d5	0.133	0.106	0.010	-20.5	50.0
Chloroform-d	0.570	0.554	0.010	-2.9	50.0
1,2-Dichloroethane-d4	0.308	0.289	0.010	-6.2	50.0
Benzene-d6	1.324	1.398	0.010	5.6	50.0
1,2-Dichloropropane-d6	0.547	0.551	0.010	0.6	50.0
Toluene-d8	1.222	1.305	0.010	6.7	50.0
trans-1,3-Dichloropropene-d4	0.412	0.383	0.010	-7.0	50.0
2-Hexanone-d5	0.105	0.083	0.010	-21.0	50.0
1,4-Dioxane-d8	0.003	0.002	0.005	-17.4	50.0
1,1,2,2-Tetrachloroethane-d2	0.358	0.318	0.010	-11.2	50.0
1,2-Dichlorobenzene-d4	0.934	0.930	0.010	-0.5	50.0

Data File: \\avogadro\organics\V5.I\111106.B\V5N2701.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111106.B\V5N2701.D
Lab Smp Id: VSTD050J5 Client Smp ID: VSTD050J5
Inj Date : 06-NOV-2011 23:16
Operator : SRC: Inst ID: V5.i
Smp Info : 5G,VSTD050J5,VSTD050J5
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 33 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.878	1.906	(0.298)	114672	50.0000	38
2	Chloromethane	50	2.029	2.045	(0.321)	178296	50.0000	42
$ 79	Vinyl Chloride-d3	65	2.157	2.173	(0.342)	111444	50.0000	43
3	Vinyl Chloride	62	2.169	2.185	(0.344)	133112	50.0000	44
4	Bromomethane	94	2.506	2.521	(0.397)	75899	50.0000	40
$ 80	Chloroethane-d5	69	2.575	2.603	(0.408)	79954	50.0000	48
5	Chloroethane	64	2.610	2.626	(0.413)	71259	50.0000	46
6	Trichlorofluoromethane	101	2.842	2.893	(0.450)	154344	50.0000	45
$ 81	1,1-Dichloroethene-d2	65	3.353	3.369	(0.531)	27014	50.0000	51
7	1,1-Dichloroethene	96	3.365	3.381	(0.533)	88453	50.0000	46
8	1,1,2-Trichloro-1,2,2-trifluo	101	3.411	3.427	(0.540)	89933	50.0000	40
9	Acetone	43	3.435	3.450	(0.544)	34703	100.000	71
10	Carbon Disulfide	76	3.586	3.601	(0.568)	347696	50.0000	43
11	Methyl Acetate	43	3.760	3.776	(0.595)	41224	50.0000	32
12	Methylene Chloride	84	3.853	3.857	(0.610)	85107	50.0000	41
13	trans-1,2-Dichloroethene	96	4.120	4.124	(0.652)	97131	50.0000	49
14	Methyl tert-Butyl Ether	73	4.131	4.147	(0.654)	138415	50.0000	37
15	1,1-Dichloroethane	63	4.526	4.530	(0.717)	181588	50.0000	49
$ 82	2-Butanone-d5	46	5.072	5.076	(0.803)	51305	100.000	72
17	cis-1,2-Dichloroethene	96	5.095	5.099	(0.807)	92450	50.0000	47
16	2-Butanone	43	5.130	5.134	(0.812)	50717	100.000	71

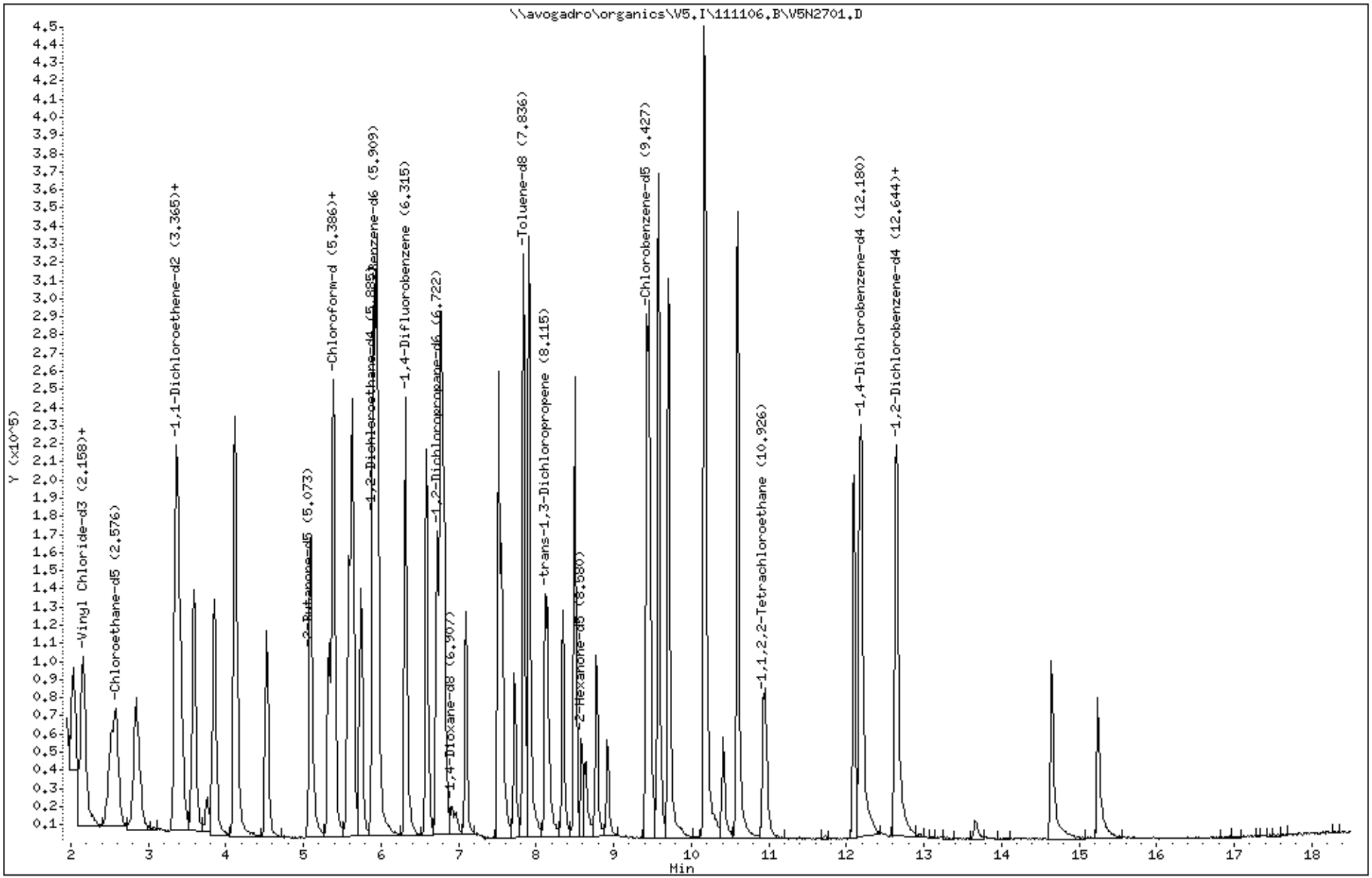
Data File: \\avogadro\organics\V5.I\111106.B\V5N2701.D
Report Date: 09-Nov-2011 07:59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	18 Bromochloromethane	128	5.328	5.332	(0.844)	40877	50.0000	42
$	83 Chloroform-d	84	5.374	5.390	(0.851)	142305	50.0000	46
	19 Chloroform	83	5.397	5.401	(0.855)	145615	50.0000	42
	20 1,1,1-Trichloroethane	97	5.583	5.587	(0.592)	131139	50.0000	61
	21 Cyclohexane	56	5.630	5.645	(0.597)	173398	50.0000	58
	22 Carbon Tetrachloride	117	5.746	5.750	(0.610)	125666	50.0000	62
$	23 1,2-Dichloroethane-d4	65	5.885	5.901	(0.932)	70542	50.0000	42
$	84 Benzene-d6	84	5.908	5.912	(0.627)	279888	50.0000	57
	25 Benzene	78	5.943	5.947	(0.630)	304319	50.0000	57
	24 1,2-Dichloroethane	62	5.966	5.970	(0.945)	88202	50.0000	45
*	26 1,4-Difluorobenzene	114	6.315	6.319	(1.000)	270116	50.0000	
	27 Trichloroethene	95	6.582	6.586	(0.698)	95661	50.0000	62
$	85 1,2-Dichloropropane-d6	67	6.721	6.725	(0.713)	106728	50.0000	53
	28 Methylcyclohexane	83	6.768	6.783	(0.718)	149798	50.0000	55
	29 1,2-Dichloropropane	63	6.814	6.818	(0.723)	92068	50.0000	57
$	94 1,4-Dioxane-d8	96	6.919	6.911	(1.096)	10331	1000.00	650
	93 1,4-Dioxane	88	6.977	6.969	(1.105)	8340	1000.00	580
	30 Bromodichloromethane	83	7.093	7.097	(0.752)	96120	50.0000	53
	31 cis-1,3-Dichloropropene	75	7.557	7.561	(0.802)	113541	50.0000	53
	32 4-Methyl-2-Pentanone	43	7.720	7.724	(0.819)	99031	100.000	69
$	33 Toluene-d8	98	7.836	7.840	(0.831)	254625	50.0000	57
	34 Toluene	91	7.906	7.910	(0.839)	302351	50.0000	57
$	86 trans-1,3-Dichloropropene-d4	79	8.115	8.119	(0.861)	80870	50.0000	53
	35 trans-1,3-Dichloropropene	75	8.150	8.142	(0.864)	85456	50.0000	50
	36 1,1,2-Trichloroethane	97	8.347	8.351	(0.885)	50560	50.0000	48
	37 Tetrachloroethene	164	8.498	8.502	(0.901)	67330	50.0000	59
$	87 2-Hexanone-d5	63	8.579	8.572	(0.910)	25854	100.000	67(Q)
	38 2-Hexanone	43	8.637	8.630	(0.916)	66161	100.000	60
	39 Dibromochloromethane	129	8.777	8.781	(0.931)	69664	50.0000	50
	40 1,2-Dibromoethane	107	8.916	8.920	(0.946)	55665	50.0000	49
*	42 Chlorobenzene-d5	117	9.427	9.431	(1.000)	184155	50.0000	
	43 Chlorobenzene	112	9.462	9.466	(1.004)	204789	50.0000	56
	44 Ethylbenzene	91	9.578	9.582	(1.016)	325191	50.0000	57
	45 m,p-Xylene	106	9.706	9.710	(1.030)	131025	50.0000	55
	46 o-Xylene	106	10.170	10.174	(1.079)	119741	50.0000	53
	47 Styrene	104	10.182	10.186	(1.080)	198701	50.0000	53
	48 Bromoform	173	10.414	10.418	(0.856)	36823	50.0000	51
	49 Isopropylbenzene	105	10.600	10.604	(1.124)	328095	50.0000	57
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.925	10.929	(1.159)	56154	50.0000	43
	51 1,1,2,2-Tetrachloroethane	83	10.960	10.952	(1.163)	54124	50.0000	43
	52 1,3-Dichlorobenzene	146	12.098	12.091	(0.994)	112235	50.0000	55
*	78 1,4-Dichlorobenzene-d4	152	12.168	12.172	(1.000)	70335	50.0000	
	53 1,4-Dichlorobenzene	146	12.203	12.195	(1.003)	125374	50.0000	53
$	90 1,2-Dichlorobenzene-d4	152	12.632	12.625	(1.038)	67931	50.0000	52(Q)
	54 1,2-Dichlorobenzene	146	12.655	12.648	(1.040)	103072	50.0000	51
	55 1,2-Dibromo-3-chloropropane	75	13.654	13.647	(1.122)	5928	50.0000	42(Q)
	56 1,2,4-Trichlorobenzene	180	14.641	14.645	(1.203)	61909	50.0000	41
	77 1,2,3-Trichlorobenzene	180	15.245	15.238	(1.253)	51202	50.0000	39

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2701.D
Date : 06-NOV-2011 23:16
Client ID: VSTD050J5
Instrument: V5.i
Sample Info: 5G,VSTD050J5,VSTD050J5
Operator: SRC:
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111106.B\V5N2724.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111106.B\V5N2724.D
Lab Smp Id: VSTD050K5 Client Smp ID: VSTD050K5
Inj Date : 07-NOV-2011 09:45
Operator : SRC: Inst ID: V5.i
Smp Info : 5G,VSTD050K5,VSTD050K5
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 56 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.906	1.906	(0.302)	102874	50.0000	38
2	Chloromethane	50	2.045	2.045	(0.324)	174053	50.0000	46
$ 79	Vinyl Chloride-d3	65	2.173	2.173	(0.344)	99401	50.0000	43
3	Vinyl Chloride	62	2.185	2.185	(0.346)	117034	50.0000	43
4	Bromomethane	94	2.521	2.521	(0.399)	75502	50.0000	44
$ 80	Chloroethane-d5	69	2.603	2.603	(0.412)	70555	50.0000	47
5	Chloroethane	64	2.626	2.626	(0.416)	60900	50.0000	44
6	Trichlorofluoromethane	101	2.893	2.893	(0.458)	127879	50.0000	42
$ 81	1,1-Dichloroethene-d2	65	3.369	3.369	(0.533)	21896	50.0000	46
7	1,1-Dichloroethene	96	3.381	3.381	(0.535)	71444	50.0000	42
8	1,1,2-Trichloro-1,2,2-trifluo	101	3.427	3.427	(0.542)	75025	50.0000	37
9	Acetone	43	3.450	3.450	(0.546)	45119	100.000	100
10	Carbon Disulfide	76	3.601	3.601	(0.570)	295780	50.0000	41
11	Methyl Acetate	43	3.776	3.776	(0.598)	63691	50.0000	55
12	Methylene Chloride	84	3.857	3.857	(0.610)	92912	50.0000	49
13	trans-1,2-Dichloroethene	96	4.124	4.124	(0.653)	86481	50.0000	48
14	Methyl tert-Butyl Ether	73	4.147	4.147	(0.656)	191385	50.0000	57
15	1,1-Dichloroethane	63	4.530	4.530	(0.717)	171091	50.0000	51
$ 82	2-Butanone-d5	46	5.076	5.076	(0.803)	78641	100.000	120
17	cis-1,2-Dichloroethene	96	5.099	5.099	(0.807)	94411	50.0000	53
16	2-Butanone	43	5.134	5.134	(0.813)	81109	100.000	130

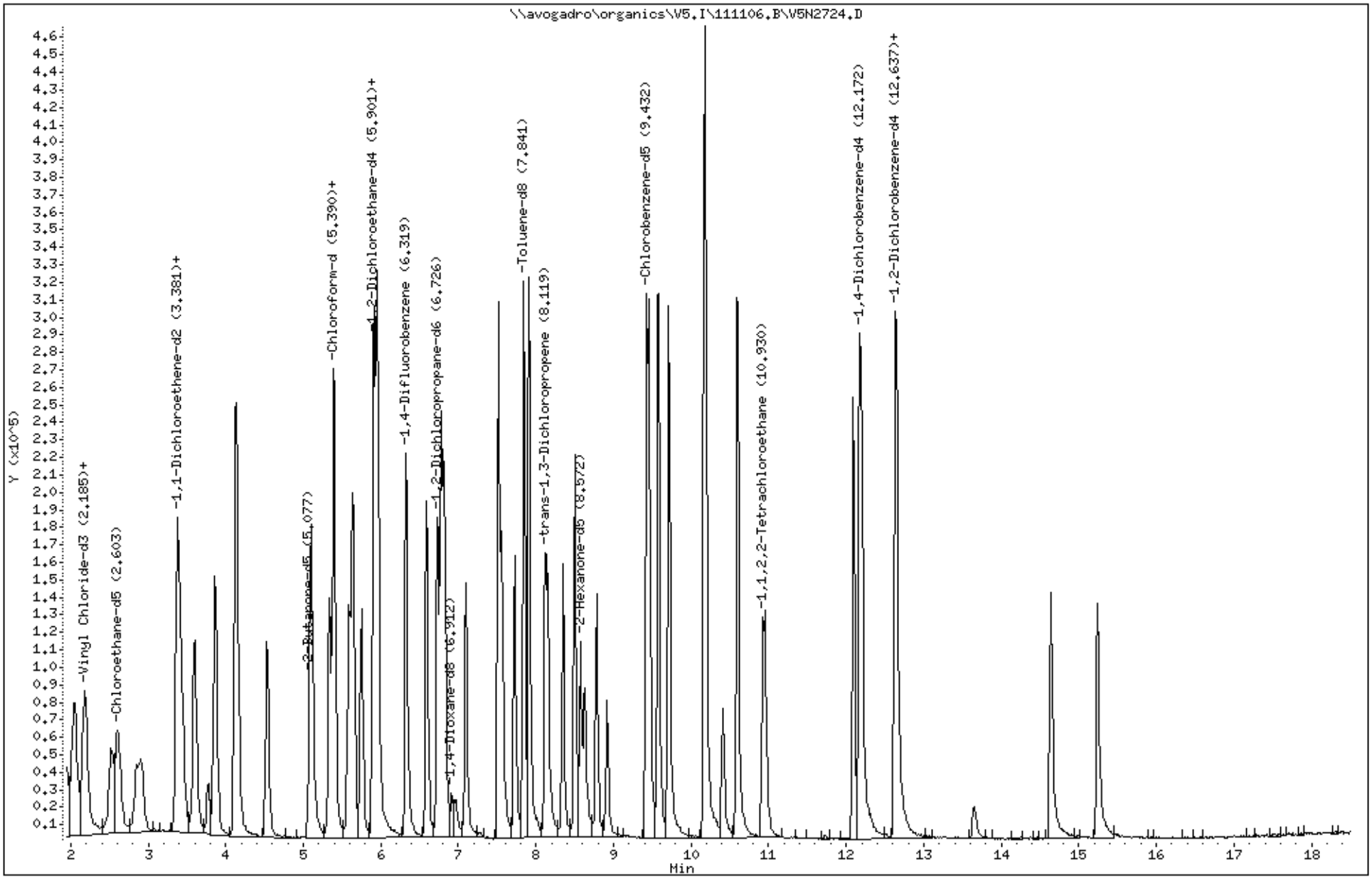
Data File: \\avogadro\organics\V5.I\111106.B\V5N2724.D
Report Date: 09-Nov-2011 07:59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	18 Bromochloromethane	128	5.332	5.332	(0.844)	49524	50.0000	57
$	83 Chloroform-d	84	5.390	5.390	(0.853)	146006	50.0000	53
	19 Chloroform	83	5.401	5.401	(0.855)	153167	50.0000	49
	20 1,1,1-Trichloroethane	97	5.587	5.587	(0.592)	115419	50.0000	47
	21 Cyclohexane	56	5.645	5.645	(0.599)	141541	50.0000	42
	22 Carbon Tetrachloride	117	5.750	5.750	(0.610)	105434	50.0000	47
$	23 1,2-Dichloroethane-d4	65	5.901	5.901	(0.934)	90430	50.0000	60
$	84 Benzene-d6	84	5.912	5.912	(0.627)	266938	50.0000	49
	25 Benzene	78	5.947	5.947	(0.631)	288732	50.0000	48
	24 1,2-Dichloroethane	62	5.970	5.970	(0.945)	104099	50.0000	60
*	26 1,4-Difluorobenzene	114	6.319	6.319	(1.000)	242917	50.0000	
	27 Trichloroethene	95	6.586	6.586	(0.698)	81875	50.0000	47
$	85 1,2-Dichloropropane-d6	67	6.725	6.725	(0.713)	115548	50.0000	51
	28 Methylcyclohexane	83	6.783	6.783	(0.719)	115486	50.0000	38
	29 1,2-Dichloropropane	63	6.818	6.818	(0.723)	98159	50.0000	54
$	94 1,4-Dioxane-d8	96	6.911	6.911	(1.094)	16703	1000.00	1200
	93 1,4-Dioxane	88	6.969	6.969	(1.103)	15922	1000.00	1200
	30 Bromodichloromethane	83	7.097	7.097	(0.753)	107971	50.0000	53
	31 cis-1,3-Dichloropropene	75	7.561	7.561	(0.802)	132053	50.0000	55
	32 4-Methyl-2-Pentanone	43	7.724	7.724	(0.819)	169608	100.000	110
$	33 Toluene-d8	98	7.840	7.840	(0.831)	242499	50.0000	48
	34 Toluene	91	7.910	7.910	(0.839)	287608	50.0000	49
$	86 trans-1,3-Dichloropropene-d4	79	8.119	8.119	(0.861)	92862	50.0000	55
	35 trans-1,3-Dichloropropene	75	8.142	8.142	(0.863)	103783	50.0000	54
	36 1,1,2-Trichloroethane	97	8.351	8.351	(0.885)	67052	50.0000	56
	37 Tetrachloroethene	164	8.502	8.502	(0.901)	58186	50.0000	46
$	87 2-Hexanone-d5	63	8.572	8.572	(0.909)	47563	100.000	110(Q)
	38 2-Hexanone	43	8.630	8.630	(0.915)	98586	100.000	80
	39 Dibromochloromethane	129	8.781	8.781	(0.931)	87511	50.0000	56
	40 1,2-Dibromoethane	107	8.920	8.920	(0.946)	75489	50.0000	59
*	42 Chlorobenzene-d5	117	9.431	9.431	(1.000)	206756	50.0000	
	43 Chlorobenzene	112	9.466	9.466	(1.004)	210578	50.0000	52
	44 Ethylbenzene	91	9.582	9.582	(1.016)	304904	50.0000	48
	45 m,p-Xylene	106	9.710	9.710	(1.030)	125107	50.0000	47
	46 o-Xylene	106	10.174	10.174	(1.079)	122005	50.0000	48
	47 Styrene	104	10.186	10.186	(1.080)	208578	50.0000	50
	48 Bromoform	173	10.418	10.418	(0.856)	51255	50.0000	57
	49 Isopropylbenzene	105	10.604	10.604	(1.124)	309947	50.0000	48
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.929	10.929	(1.159)	85142	50.0000	57
	51 1,1,2,2-Tetrachloroethane	83	10.952	10.952	(1.161)	82213	50.0000	58
	52 1,3-Dichlorobenzene	146	12.091	12.091	(0.993)	135322	50.0000	53
*	78 1,4-Dichlorobenzene-d4	152	12.172	12.172	(1.000)	87745	50.0000	(Q)
	53 1,4-Dichlorobenzene	146	12.195	12.195	(1.002)	142846	50.0000	48
$	90 1,2-Dichlorobenzene-d4	152	12.625	12.625	(1.037)	81325	50.0000	50(Q)
	54 1,2-Dichlorobenzene	146	12.648	12.648	(1.039)	133212	50.0000	53
	55 1,2-Dibromo-3-chloropropane	75	13.647	13.647	(1.121)	11185	50.0000	63(Q)
	56 1,2,4-Trichlorobenzene	180	14.645	14.645	(1.203)	86635	50.0000	46
	77 1,2,3-Trichlorobenzene	180	15.238	15.238	(1.252)	80421	50.0000	49

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2724.D
Date : 07-NOV-2011 09:45
Client ID: VSTD050K5
Instrument: V5.i
Sample Info: 5G,VSTD050K5,VSTD050K5
Operator: SRC:
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111107.B\V5N2749.D
Report Date: 09-Nov-2011 08:01

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111107.B\V5N2749.D
Lab Smp Id: VSTD050L5 Client Smp ID: VSTD050L5
Inj Date : 07-NOV-2011 21:33
Operator : SRC: Inst ID: V5.i
Smp Info : 5G,VSTD050L5,VSTD050L5
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111107.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 18:06 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 25 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	1 Dichlorodifluoromethane	85	1.901	1.901	(0.301)	154767	50.0000	38
	2 Chloromethane	50	2.040	2.040	(0.323)	249104	50.0000	44
$	79 Vinyl Chloride-d3	65	2.168	2.168	(0.343)	151276	50.0000	43
	3 Vinyl Chloride	62	2.179	2.179	(0.345)	181752	50.0000	45
	4 Bromomethane	94	2.516	2.516	(0.398)	109899	50.0000	42
$	80 Chloroethane-d5	69	2.597	2.597	(0.411)	110012	50.0000	49
	5 Chloroethane	64	2.621	2.621	(0.414)	92311	50.0000	44
	6 Trichlorofluoromethane	101	2.853	2.853	(0.451)	215180	50.0000	47
$	81 1,1-Dichloroethene-d2	65	3.364	3.364	(0.532)	39109	50.0000	54
	7 1,1-Dichloroethene	96	3.376	3.376	(0.534)	125063	50.0000	48
	8 1,1,2-Trichloro-1,2,2-trifluo	101	3.410	3.410	(0.539)	123314	50.0000	40
	9 Acetone	43	3.445	3.445	(0.545)	50132	100.000	75
	10 Carbon Disulfide	76	3.596	3.596	(0.569)	494716	50.0000	45
	11 Methyl Acetate	43	3.770	3.770	(0.596)	66795	50.0000	38
	12 Methylene Chloride	84	3.852	3.852	(0.609)	125934	50.0000	44
	13 trans-1,2-Dichloroethene	96	4.119	4.119	(0.651)	136775	50.0000	50
	14 Methyl tert-Butyl Ether	73	4.142	4.142	(0.655)	220031	50.0000	43
	15 1,1-Dichloroethane	63	4.537	4.537	(0.717)	251943	50.0000	50
$	82 2-Butanone-d5	46	5.071	5.071	(0.802)	77405	100.000	79
	17 cis-1,2-Dichloroethene	96	5.094	5.094	(0.805)	130691	50.0000	49
	16 2-Butanone	43	5.129	5.129	(0.811)	83881	100.000	86

Data File: \\avogadro\organics\V5.I\111107.B\V5N2749.D
Report Date: 09-Nov-2011 08:01

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	18 Bromochloromethane	128	5.338	5.338	(0.844)	58494	50.0000	45(Q)
$	83 Chloroform-d	84	5.385	5.385	(0.851)	203088	50.0000	49
	19 Chloroform	83	5.396	5.396	(0.853)	209191	50.0000	45
	20 1,1,1-Trichloroethane	97	5.582	5.582	(0.592)	172361	50.0000	54
	21 Cyclohexane	56	5.640	5.640	(0.598)	228783	50.0000	52
	22 Carbon Tetrachloride	117	5.745	5.745	(0.609)	166122	50.0000	56
$	23 1,2-Dichloroethane-d4	65	5.896	5.896	(0.932)	105883	50.0000	47
$	84 Benzene-d6	84	5.907	5.907	(0.627)	381057	50.0000	53
	25 Benzene	78	5.942	5.942	(0.630)	411885	50.0000	52
	24 1,2-Dichloroethane	62	5.965	5.965	(0.943)	125664	50.0000	48
*	26 1,4-Difluorobenzene	114	6.325	6.325	(1.000)	366711	50.0000	
	27 Trichloroethene	95	6.581	6.581	(0.698)	128255	50.0000	56
$	85 1,2-Dichloropropane-d6	67	6.732	6.732	(0.714)	150039	50.0000	50
	28 Methylcyclohexane	83	6.778	6.778	(0.719)	188187	50.0000	47
	29 1,2-Dichloropropane	63	6.813	6.813	(0.723)	127032	50.0000	53
$	94 1,4-Dioxane-d8	96	6.917	6.917	(1.094)	17753	1000.00	830
	93 1,4-Dioxane	88	6.976	6.976	(1.103)	15802	1000.00	810
	30 Bromodichloromethane	83	7.092	7.092	(0.752)	144275	50.0000	54
	31 cis-1,3-Dichloropropene	75	7.556	7.556	(0.802)	159702	50.0000	50
	32 4-Methyl-2-Pentanone	43	7.719	7.719	(0.819)	167770	100.000	79
$	33 Toluene-d8	98	7.835	7.835	(0.831)	355504	50.0000	53
	34 Toluene	91	7.916	7.916	(0.840)	410942	50.0000	53
$	86 trans-1,3-Dichloropropene-d4	79	8.114	8.114	(0.861)	104389	50.0000	46
	35 trans-1,3-Dichloropropene	75	8.148	8.148	(0.864)	117786	50.0000	47
	36 1,1,2-Trichloroethane	97	8.346	8.346	(0.885)	71777	50.0000	46
	37 Tetrachloroethene	164	8.497	8.497	(0.901)	90576	50.0000	54
$	87 2-Hexanone-d5	63	8.578	8.578	(0.910)	45313	100.000	79(Q)
	38 2-Hexanone	43	8.625	8.625	(0.915)	106007	100.000	65
	39 Dibromochloromethane	129	8.776	8.776	(0.931)	101726	50.0000	49
	40 1,2-Dibromoethane	107	8.915	8.915	(0.946)	80656	50.0000	48
*	42 Chlorobenzene-d5	117	9.426	9.426	(1.000)	272488	50.0000	
	43 Chlorobenzene	112	9.461	9.461	(1.004)	278208	50.0000	52
	44 Ethylbenzene	91	9.577	9.577	(1.016)	448168	50.0000	53
	45 m,p-Xylene	106	9.705	9.705	(1.030)	181566	50.0000	52
	46 o-Xylene	106	10.169	10.169	(1.079)	162452	50.0000	48
	47 Styrene	104	10.192	10.192	(1.081)	274326	50.0000	50
	48 Bromoform	173	10.413	10.413	(0.856)	53715	50.0000	52
	49 Isopropylbenzene	105	10.599	10.599	(1.124)	448962	50.0000	52
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.924	10.924	(1.159)	86619	50.0000	44
	51 1,1,2,2-Tetrachloroethane	83	10.959	10.959	(1.163)	80854	50.0000	43
	52 1,3-Dichlorobenzene	146	12.097	12.097	(0.994)	161333	50.0000	55
*	78 1,4-Dichlorobenzene-d4	152	12.167	12.167	(1.000)	101156	50.0000	(Q)
	53 1,4-Dichlorobenzene	146	12.201	12.201	(1.003)	172931	50.0000	50
$	90 1,2-Dichlorobenzene-d4	152	12.631	12.631	(1.038)	94034	50.0000	50(Q)
	54 1,2-Dichlorobenzene	146	12.654	12.654	(1.040)	147862	50.0000	51
	55 1,2-Dibromo-3-chloropropane	75	13.653	13.653	(1.122)	9541	50.0000	47(Q)
	56 1,2,4-Trichlorobenzene	180	14.640	14.640	(1.203)	90420	50.0000	42
	77 1,2,3-Trichlorobenzene	180	15.244	15.244	(1.253)	72373	50.0000	38

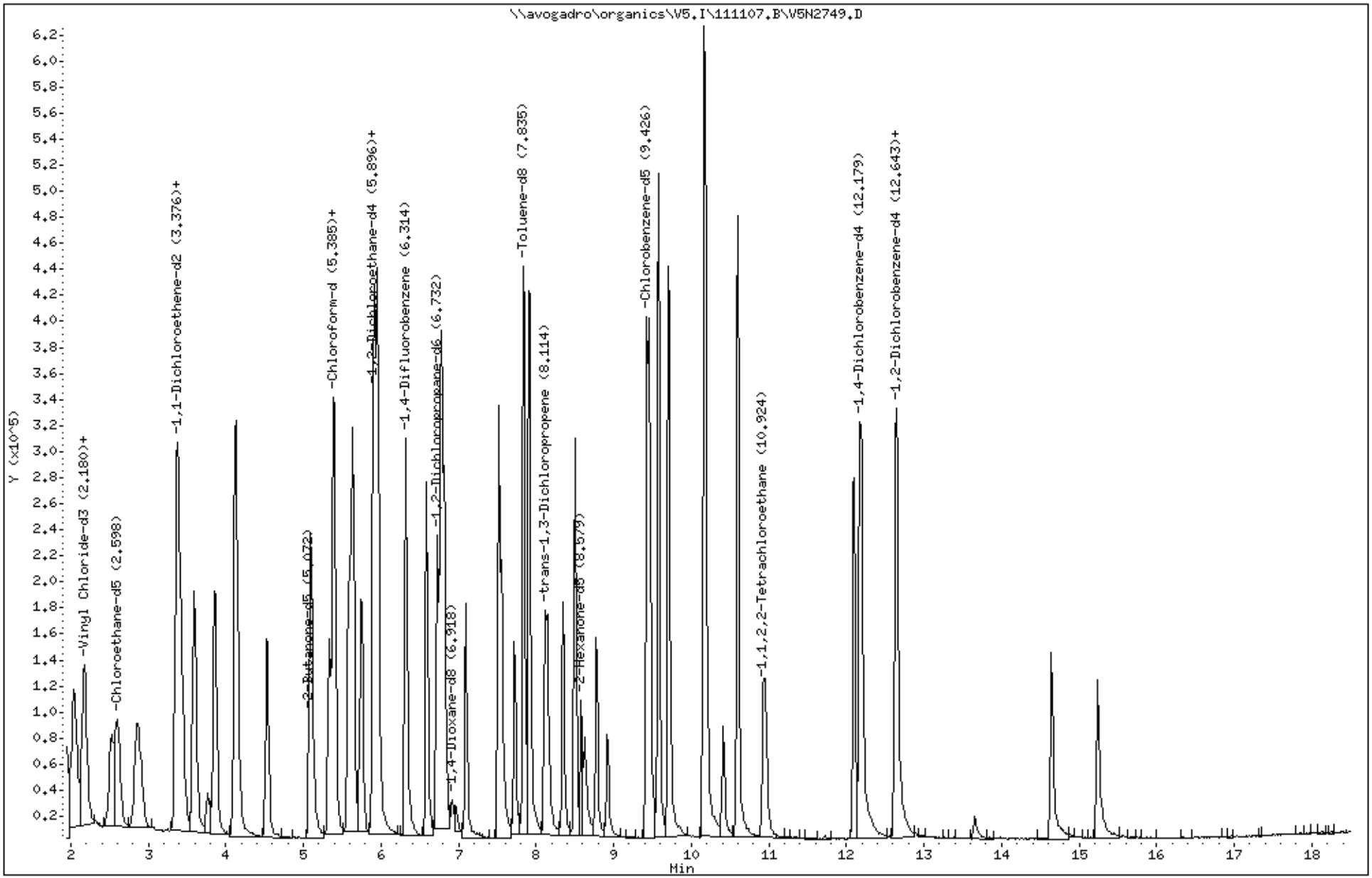
QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111107.B\V5N2749.D
Date : 07-NOV-2011 21:33
Client ID: VSTD050L5
Sample Info: 5G,VSTD050L5,VSTD050L5

Instrument: V5.i

Operator: SRC:
Column phase: DB-624
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\V5.I\111004A.B\V5N1310.D
Lab Smp Id: BFB5N Client Smp ID: BFB5N
Inj Date : 04-OCT-2011 16:43
Operator : SRC: Inst ID: V5.i
Smp Info : 2UL,BFB5N,BFB5N
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111004A.B\V5_BFB_SOM.m
Meth Date : 11-Jul-2011 15:17 wluo Quant Type: ISTD
Cal Date : 25-JAN-2006 16:13 Cal File: V5G4422.D
Als bottle: 2 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET103

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
VI	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

RT	EXP RT	REL RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
10.797	11.000	(0.000)	95	75968			0.00- 100.00	100.00
10.797	11.000	(0.000)	50	16098			15.00- 40.00	21.19
10.797	11.000	(0.000)	75	32176			30.00- 80.00	42.35
10.797	11.000	(0.000)	96	4954			5.00- 9.00	6.52
10.797	11.000	(0.000)	173	0	0.0	0.0	0.00- 2.00	0.00
10.797	11.000	(0.000)	174	59816			50.00- 120.00	78.74
10.797	11.000	(0.000)	175	4930			5.00- 9.00	8.24
10.797	11.000	(0.000)	176	59568			95.00- 101.00	99.59
10.797	11.000	(0.000)	177	3678			5.00- 9.00	6.17

Data File: \\avogadro\organics\V5.I\111004A.B\V5N1310.D

Date : 04-OCT-2011 16:43

Client ID: BFB5N

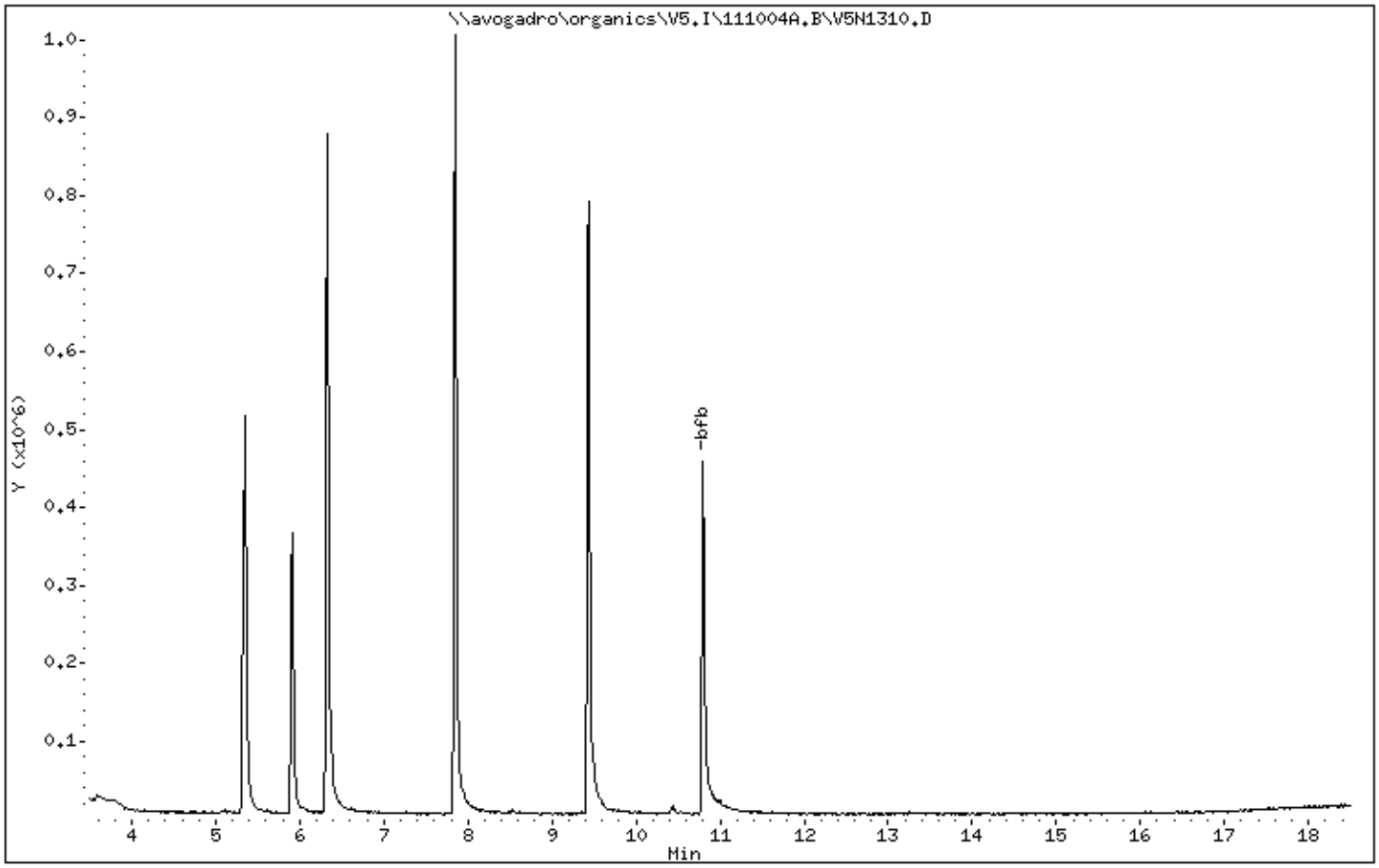
Instrument: V5.i

Sample Info: 2UL,BFB5N,BFB5N

Operator: SRC:

Column phase: DB-624

Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111004A.B\V5N1310.D

Date : 04-OCT-2011 16:43

Client ID: BFB5N

Instrument: V5.i

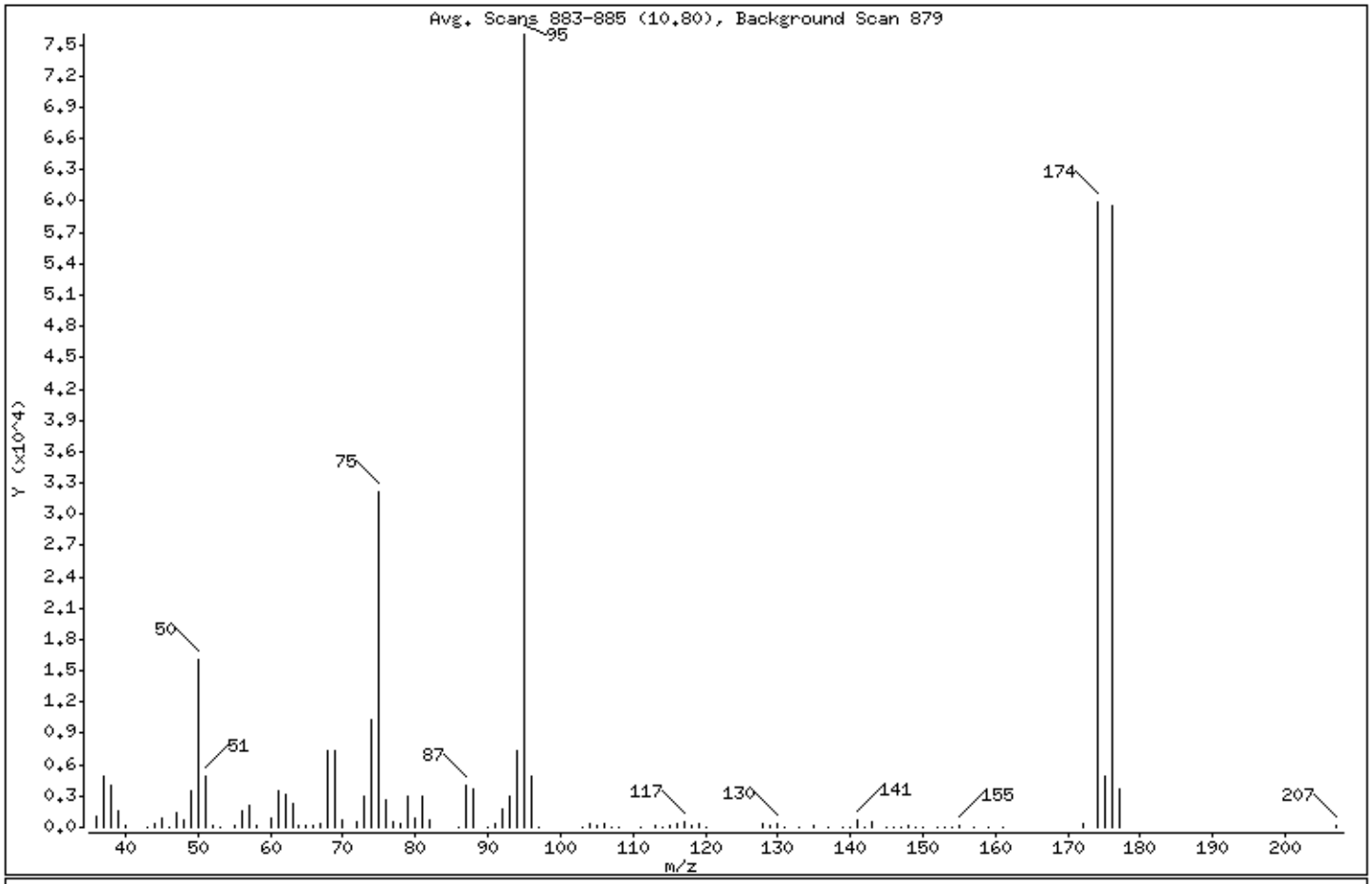
Sample Info: 2UL,BFB5N,BFB5N

Operator: SRC:

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	21.19
75	30.00 - 80.00% of mass 95	42.35
96	5.00 - 9.00% of mass 95	6.52
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 120.00% of mass 95	78.74
175	5.00 - 9.00% of mass 174	6.49 (8.24)
176	95.00 - 101.00% of mass 174	78.41 (99.59)
177	5.00 - 9.00% of mass 176	4.84 (6.17)

Date : 04-OCT-2011 16:43

Client ID: BFB5N Instrument: V5.i

Sample Info: 2UL,BFB5N,BFB5N

Operator: SRC:

Column phase: DB-624 Column diameter: 0.25

Data File: V5N1310.D
Spectrum: Avg. Scans 883-885 (10.80), Background Scan 879
Location of Maximum: 95.00
Number of points: 99

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1118	65.00	199	95.00	75968	139.00	44
37.00	4891	66.00	106	96.00	4954	140.00	43
38.00	4070	67.00	361	97.00	56	141.00	693
39.00	1502	68.00	7415	103.00	46	142.00	77
40.00	92	69.00	7270	104.00	346	143.00	552
43.00	49	70.00	668	105.00	156	145.00	42
44.00	425	72.00	458	106.00	289	146.00	41
45.00	858	73.00	2908	107.00	87	147.00	35
46.00	39	74.00	10337	108.00	38	148.00	214
47.00	1361	75.00	32176	111.00	40	149.00	35
48.00	658	76.00	2687	113.00	100	150.00	41
49.00	3460	77.00	527	114.00	43	152.00	34
50.00	16098	78.00	281	115.00	105	153.00	36
51.00	4835	79.00	2919	116.00	313	154.00	48
52.00	219	80.00	863	117.00	474	155.00	173
53.00	51	81.00	2986	118.00	242	157.00	51
55.00	236	82.00	747	119.00	418	159.00	39
56.00	1517	86.00	43	120.00	35	161.00	57
57.00	2048	87.00	4008	128.00	275	172.00	327
58.00	154	88.00	3736	129.00	129	174.00	59816
60.00	882	90.00	47	130.00	280	175.00	4930
61.00	3470	91.00	343	131.00	53	176.00	59568
62.00	3135	92.00	1701	133.00	37	177.00	3678
63.00	2329	93.00	2901	135.00	118	207.00	126
64.00	218	94.00	7415	137.00	71		

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\V5.I\111106.B\V5N2700.D
Lab Smp Id: BFBJ5 Client Smp ID: BFBJ5
Inj Date : 06-NOV-2011 22:49
Operator : SRC: Inst ID: V5.i
Smp Info : 2UL,BFBJ5,BFBJ5
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111106.B\V5_BFB_SOM.m
Meth Date : 11-Jul-2011 15:17 wluo Quant Type: ISTD
Cal Date : 25-JAN-2006 16:13 Cal File: V5G4422.D
Als bottle: 2 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET103

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
VI	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

RT	EXP RT	REL RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
10.783	11.000	(0.000)	95	46176			0.00- 100.00	100.00
10.783	11.000	(0.000)	50	10919			15.00- 40.00	23.65
10.783	11.000	(0.000)	75	20224			30.00- 80.00	43.80
10.783	11.000	(0.000)	96	2965			5.00- 9.00	6.42
10.783	11.000	(0.000)	173	0	0.0	0.0	0.00- 2.00	0.00
10.783	11.000	(0.000)	174	32744			50.00- 120.00	70.91
10.783	11.000	(0.000)	175	2684			5.00- 9.00	8.20
10.783	11.000	(0.000)	176	32352			95.00- 101.00	98.80
10.783	11.000	(0.000)	177	2144			5.00- 9.00	6.63

Data File: \\avogadro\organics\V5.I\111106.B\V5N2700.D

Date : 06-NOV-2011 22:49

Client ID: BFBJ5

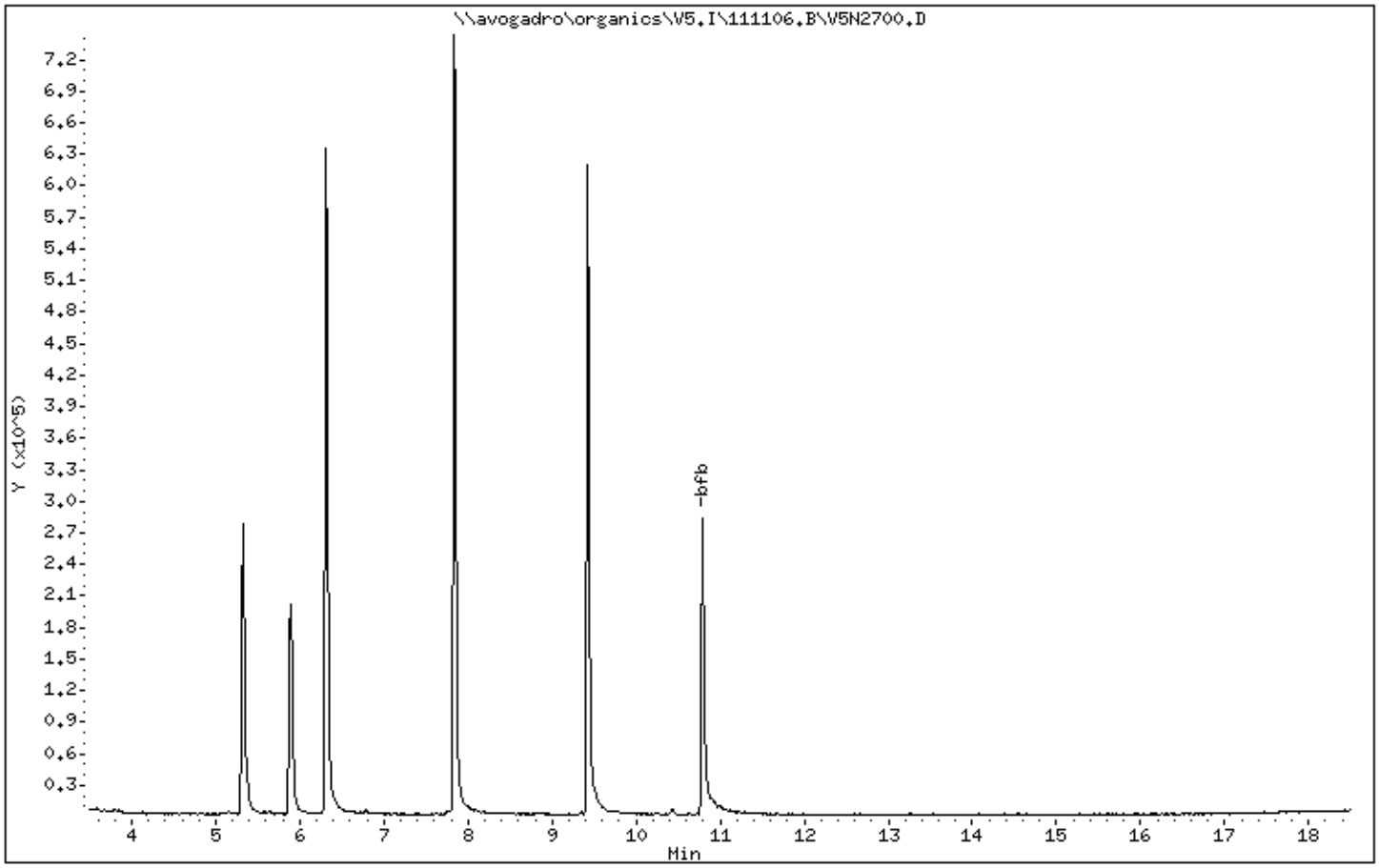
Instrument: V5.i

Sample Info: 2UL,BFBJ5,BFBJ5

Operator: SRC:

Column phase: DB-624

Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111106.B\V5N2700.D

Date : 06-NOV-2011 22:49

Client ID: BFBJ5

Instrument: V5.i

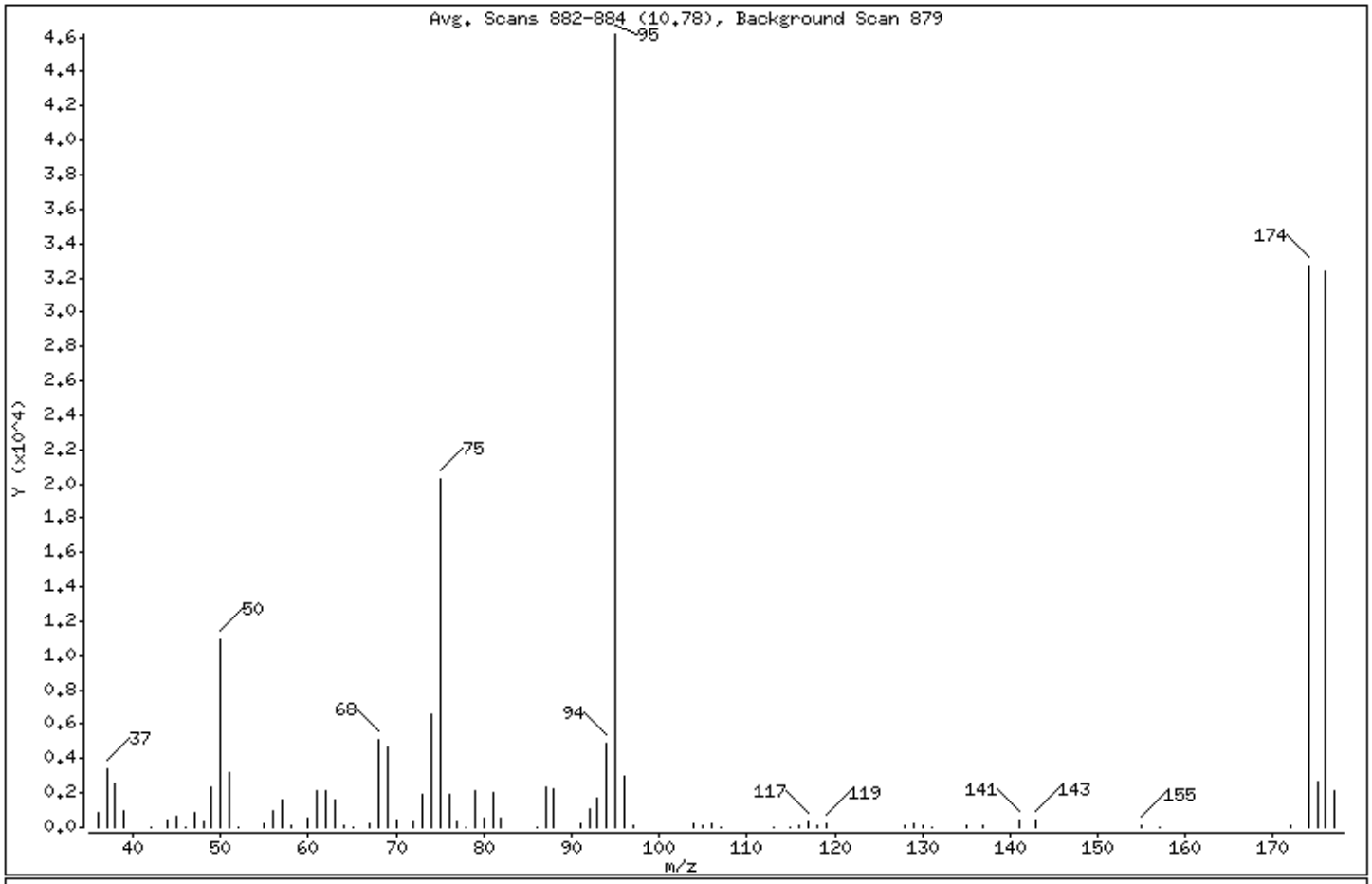
Sample Info: 2UL,BFBJ5,BFBJ5

Operator: SRC:

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	23.65
75	30.00 - 80.00% of mass 95	43.80
96	5.00 - 9.00% of mass 95	6.42
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 120.00% of mass 95	70.91
175	5.00 - 9.00% of mass 174	5.81 (8.20)
176	95.00 - 101.00% of mass 174	70.06 (98.80)
177	5.00 - 9.00% of mass 176	4.64 (6.63)

Date : 06-NOV-2011 22:49

Client ID: BFBJ5 Instrument: V5.i

Sample Info: 2UL,BFBJ5,BFBJ5

Operator: SRC:

Column phase: DB-624 Column diameter: 0.25

Data File: V5N2700.D
Spectrum: Avg. Scans 882-884 (10.78), Background Scan 879
Location of Maximum: 95.00
Number of points: 74

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	797	61.00	2147	82.00	580	118.00	144
37.00	3412	62.00	2154	86.00	46	119.00	253
38.00	2513	63.00	1546	87.00	2295	128.00	103
39.00	965	64.00	128	88.00	2199	129.00	172
42.00	36	65.00	38	91.00	199	130.00	70
44.00	422	67.00	183	92.00	1082	131.00	38
45.00	665	68.00	5072	93.00	1710	135.00	56
46.00	40	69.00	4706	94.00	4868	137.00	85
47.00	856	70.00	396	95.00	46176	141.00	465
48.00	348	72.00	278	96.00	2965	143.00	451
49.00	2330	73.00	1866	97.00	91	155.00	138
50.00	10919	74.00	6594	104.00	220	157.00	44
51.00	3185	75.00	20224	105.00	66	172.00	118
52.00	9	76.00	1876	106.00	239	174.00	32744
55.00	204	77.00	344	107.00	44	175.00	2684
56.00	976	78.00	51	113.00	33	176.00	32352
57.00	1627	79.00	2123	115.00	35	177.00	2144
58.00	73	80.00	508	116.00	122		
60.00	540	81.00	2049	117.00	316		

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKJ5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-62569

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N2702.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 11/06/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5.0	U
79-20-9	Methyl acetate	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
110-82-7	Cyclohexane	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
123-91-1	1,4-Dioxane	100	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKJ5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-62569

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N2702.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 11/06/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
79-01-6	Trichloroethene	5.0	U
108-87-2	Methylcyclohexane	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKJ5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-62569

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N2702.D

Level: (TRACE or LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 11/06/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E96679[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2702.D
Report Date: 09-Nov-2011 07:59

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111106.B\V5N2702.D
Lab Smp Id: MB-62569 Client Smp ID: VBLKJ5
Inj Date : 06-NOV-2011 23:44
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,MB-62569,VBLKJ5,62569
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 34 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$ 79 Vinyl Chloride-d3	65	2.167	2.173	(0.343)	123768	37.6278	38
$ 80 Chloroethane-d5	69	2.585	2.603	(0.409)	90381	42.4799	42(Q)
$ 81 1,1-Dichloroethene-d2	65	3.352	3.369	(0.530)	31303	45.8831	46(Q)
$ 82 2-Butanone-d5	46	5.070	5.076	(0.802)	63006	68.6835	69
$ 83 Chloroform-d	84	5.384	5.390	(0.851)	168490	42.7553	43(Q)
$ 23 1,2-Dichloroethane-d4	65	5.895	5.901	(0.932)	86071	40.4650	40(Q)
$ 84 Benzene-d6	84	5.907	5.912	(0.627)	329726	50.5000	51
* 26 1,4-Difluorobenzene	114	6.325	6.319	(1.000)	345444	50.0000	
$ 85 1,2-Dichloropropane-d6	67	6.731	6.725	(0.714)	124268	46.0546	46
$ 94 1,4-Dioxane-d8	96	6.917	6.911	(1.094)	13685	675.960	680
$ 33 Toluene-d8	98	7.846	7.840	(0.832)	294589	48.8752	49
$ 86 trans-1,3-Dichloropropene-d4	79	8.125	8.119	(0.862)	94652	46.5906	47
$ 87 2-Hexanone-d5	63	8.589	8.572	(0.911)	31801	61.2592	61(Q)
* 42 Chlorobenzene-d5	117	9.425	9.431	(1.000)	246579	50.0000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.935	10.929	(1.160)	71522	40.4972	40
* 78 1,4-Dichlorobenzene-d4	152	12.178	12.172	(1.000)	91770	50.0000	
$ 90 1,2-Dichlorobenzene-d4	152	12.630	12.625	(1.037)	75409	43.9858	44(Q)

Data File: \\avogadro\organics\V5.I\111106.B\V5N2702.D
Report Date: 09-Nov-2011 07:59

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111106.B\V5N2702.D
Report Date: 09-Nov-2011 07:59

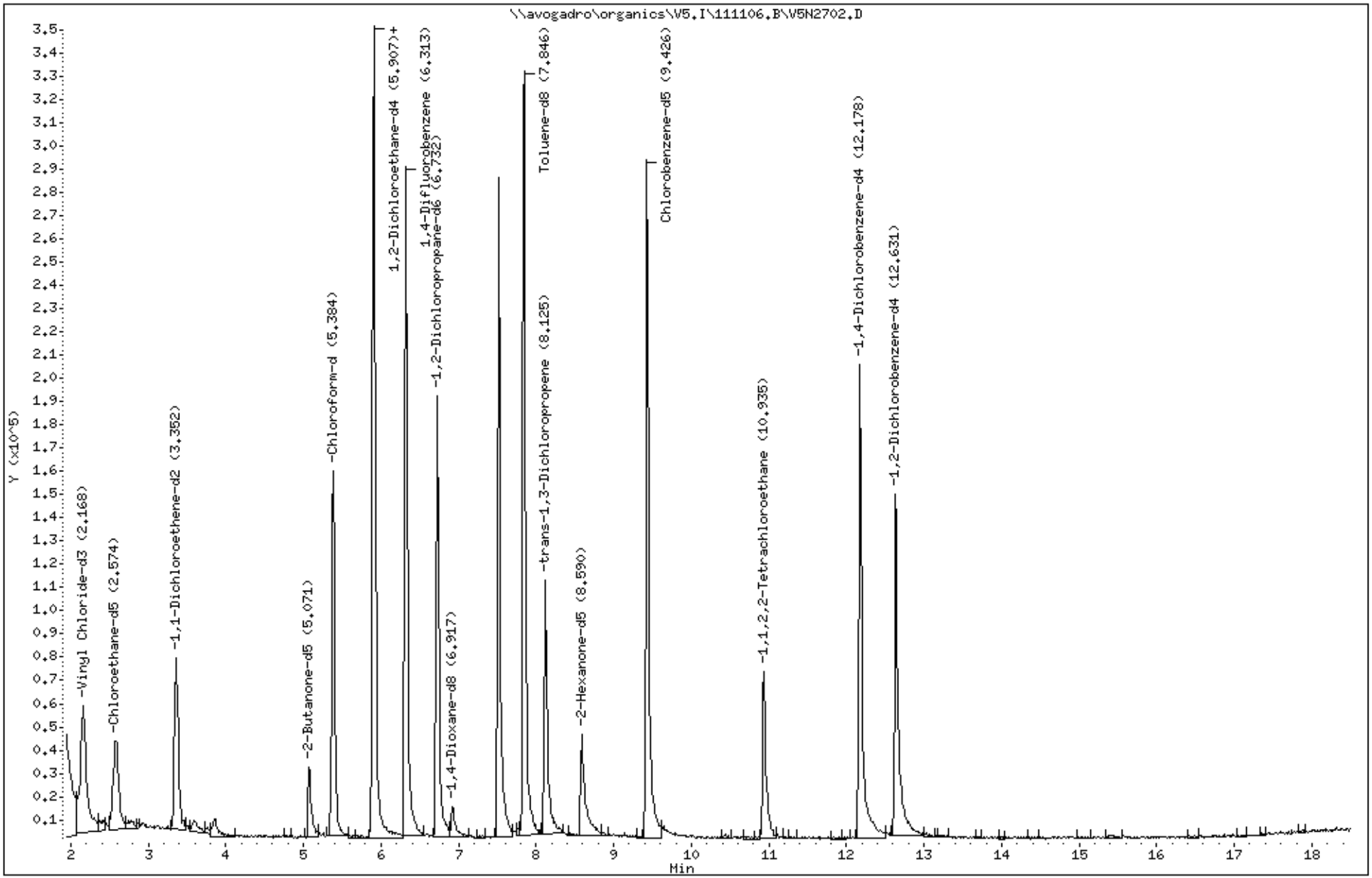
Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111106.B\V5N2702.D
Lab Smp Id: MB-62569 Client Smp ID: VBLKJ5
Inj Date : 06-NOV-2011 23:44
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,MB-62569,VBLKJ5,62569
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111106.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 16:40 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 34 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111106.B\V5N2702.D
Date : 06-NOV-2011 23:44
Client ID: VBLKJ5
Instrument: V5.i
Sample Info: 5G,MB-62569,VBLKJ5,62569
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKK5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-62780

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N2725.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5.0	U
79-20-9	Methyl acetate	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
110-82-7	Cyclohexane	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
123-91-1	1,4-Dioxane	100	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKK5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-62780

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N2725.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
79-01-6	Trichloroethene	5.0	U
108-87-2	Methylcyclohexane	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKK5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-62780

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N2725.D

Level: (TRACE or LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E96679[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111107.B\V5N2725.D
Report Date: 09-Nov-2011 08:00

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111107.B\V5N2725.D
Lab Smp Id: MB-62780 Client Smp ID: VBLKK5
Inj Date : 07-NOV-2011 10:12
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,MB-62780,VBLKK5,62780
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111107.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 18:06 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$ 79 Vinyl Chloride-d3	65	2.168	2.168	(0.343)	113629	36.6517	37
$ 80 Chloroethane-d5	69	2.598	2.597	(0.411)	83712	41.7445	42(Q)
$ 81 1,1-Dichloroethene-d2	65	3.364	3.364	(0.532)	26484	41.1865	41(Q)
$ 82 2-Butanone-d5	46	5.071	5.071	(0.802)	73317	84.7969	85
$ 83 Chloroform-d	84	5.385	5.385	(0.851)	168411	45.3411	45(Q)
$ 23 1,2-Dichloroethane-d4	65	5.896	5.896	(0.932)	86018	42.9059	43(Q)
$ 84 Benzene-d6	84	5.908	5.907	(0.627)	317191	46.5151	47
* 26 1,4-Difluorobenzene	114	6.326	6.325	(1.000)	325591	50.0000	
$ 85 1,2-Dichloropropane-d6	67	6.732	6.732	(0.714)	123220	43.7250	44
$ 94 1,4-Dioxane-d8	96	6.918	6.917	(1.094)	14715	771.155	770
$ 33 Toluene-d8	98	7.847	7.835	(0.832)	287060	45.6016	46
$ 86 trans-1,3-Dichloropropene-d4	79	8.126	8.114	(0.862)	93921	44.2656	44
$ 87 2-Hexanone-d5	63	8.590	8.578	(0.911)	38746	71.4648	71(Q)
* 42 Chlorobenzene-d5	117	9.426	9.426	(1.000)	257526	50.0000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.936	10.924	(1.160)	76261	41.3450	41
* 78 1,4-Dichlorobenzene-d4	152	12.179	12.167	(1.000)	97710	50.0000	
$ 90 1,2-Dichlorobenzene-d4	152	12.632	12.631	(1.037)	78488	42.9986	43(Q)

Data File: \\avogadro\organics\V5.I\111107.B\V5N2725.D
Report Date: 09-Nov-2011 08:00

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111107.B\V5N2725.D
Report Date: 09-Nov-2011 08:00

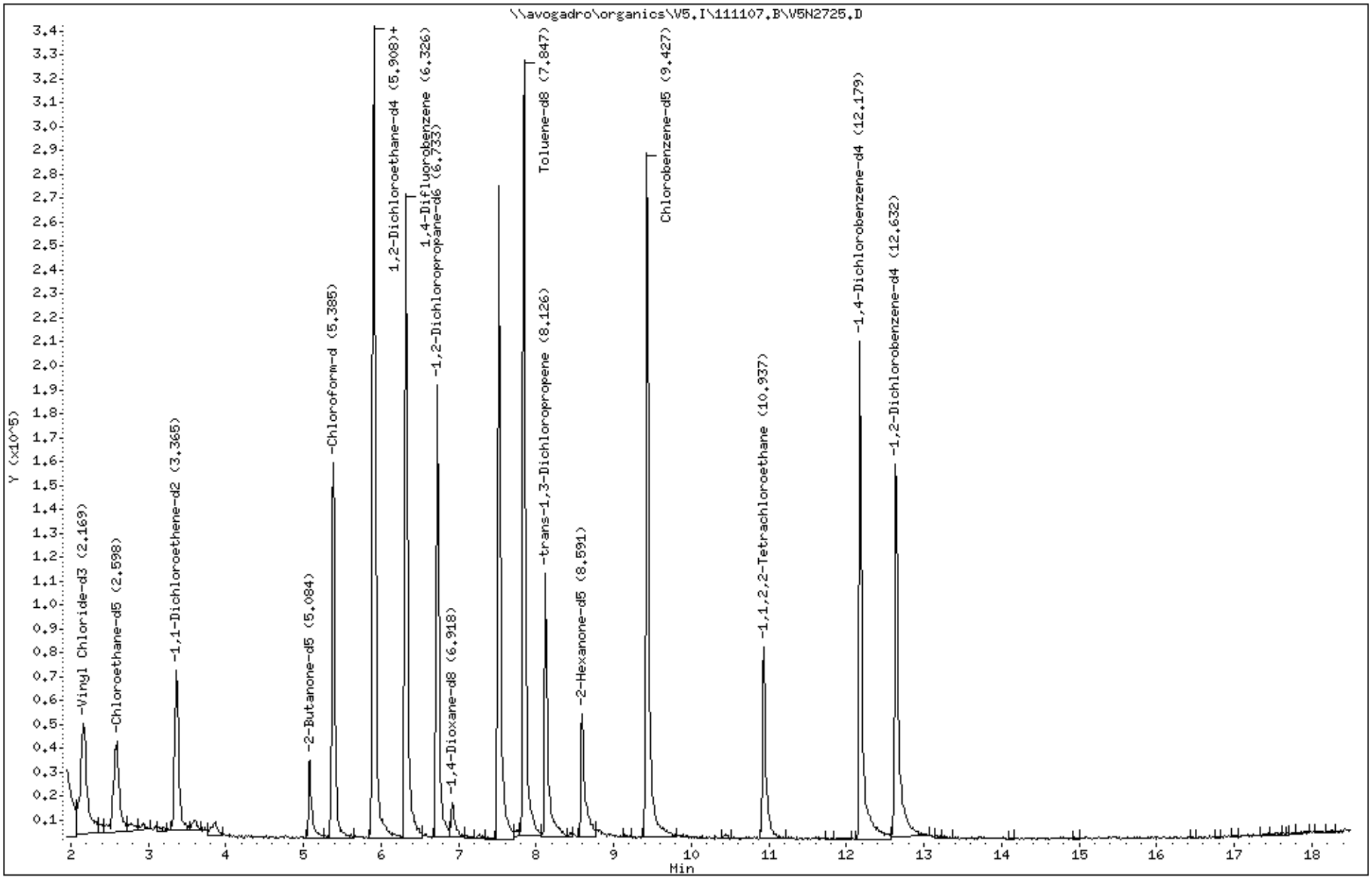
Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111107.B\V5N2725.D
Lab Smp Id: MB-62780 Client Smp ID: VBLKK5
Inj Date : 07-NOV-2011 10:12
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,MB-62780,VBLKK5,62780
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111107.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 18:06 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111107.B\V5N2725.D
Date : 07-NOV-2011 10:12
Client ID: VBLKK5
Instrument: V5.i
Sample Info: 5G,MB-62780,VBLKK5,62780
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VHBLKK5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: VHBLKK5

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N2748.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5.0	U
79-20-9	Methyl acetate	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
110-82-7	Cyclohexane	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
123-91-1	1,4-Dioxane	100	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VHBLKK5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: VHBLKK5

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N2748.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
79-01-6	Trichloroethene	5.0	U
108-87-2	Methylcyclohexane	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VHBLKK5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: VHBLKK5

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5N2748.D

Level: (TRACE or LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG Purge Volume: 10.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E96679€ [1]	Total Alkanes	N/A		

[1] EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111107.B\V5N2748.D
Report Date: 09-Nov-2011 08:01

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111107.B\V5N2748.D
Lab Smp Id: VHBLKK5 Client Smp ID: VHBLKK5
Inj Date : 07-NOV-2011 21:05
Operator : SRC: Inst ID: V5.i
Smp Info : 5G,VHBLKK5,VHBLKK5,62780
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111107.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 18:06 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$ 79 Vinyl Chloride-d3	65	2.167	2.168	(0.343)	146259	40.5381	41
$ 80 Chloroethane-d5	69	2.585	2.597	(0.410)	111078	47.5965	48(Q)
$ 81 1,1-Dichloroethene-d2	65	3.352	3.364	(0.531)	32118	42.9196	43(Q)
$ 82 2-Butanone-d5	46	5.071	5.071	(0.803)	104139	103.496	100
$ 83 Chloroform-d	84	5.384	5.385	(0.853)	204857	47.3922	47(Q)
$ 23 1,2-Dichloroethane-d4	65	5.895	5.896	(0.934)	120510	51.6519	52
$ 84 Benzene-d6	84	5.907	5.907	(0.627)	375861	45.2187	45
* 26 1,4-Difluorobenzene	114	6.313	6.325	(1.000)	378911	50.0000	
$ 85 1,2-Dichloropropane-d6	67	6.731	6.732	(0.714)	149665	43.5699	44
$ 94 1,4-Dioxane-d8	96	6.917	6.917	(1.096)	23797	1071.61	1100
$ 33 Toluene-d8	98	7.846	7.835	(0.832)	338289	44.0872	44
$ 86 trans-1,3-Dichloropropene-d4	79	8.113	8.114	(0.861)	126578	48.9417	49
$ 87 2-Hexanone-d5	63	8.578	8.578	(0.910)	55892	84.5731	85(Q)
* 42 Chlorobenzene-d5	117	9.425	9.426	(1.000)	313909	50.0000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.924	10.924	(1.159)	109872	48.8680	49
* 78 1,4-Dichlorobenzene-d4	152	12.178	12.167	(1.000)	127972	50.0000	
$ 90 1,2-Dichlorobenzene-d4	152	12.631	12.631	(1.037)	108580	45.4177	45(Q)

Data File: \\avogadro\organics\V5.I\111107.B\V5N2748.D
Report Date: 09-Nov-2011 08:01

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111107.B\V5N2748.D
Report Date: 09-Nov-2011 08:01

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

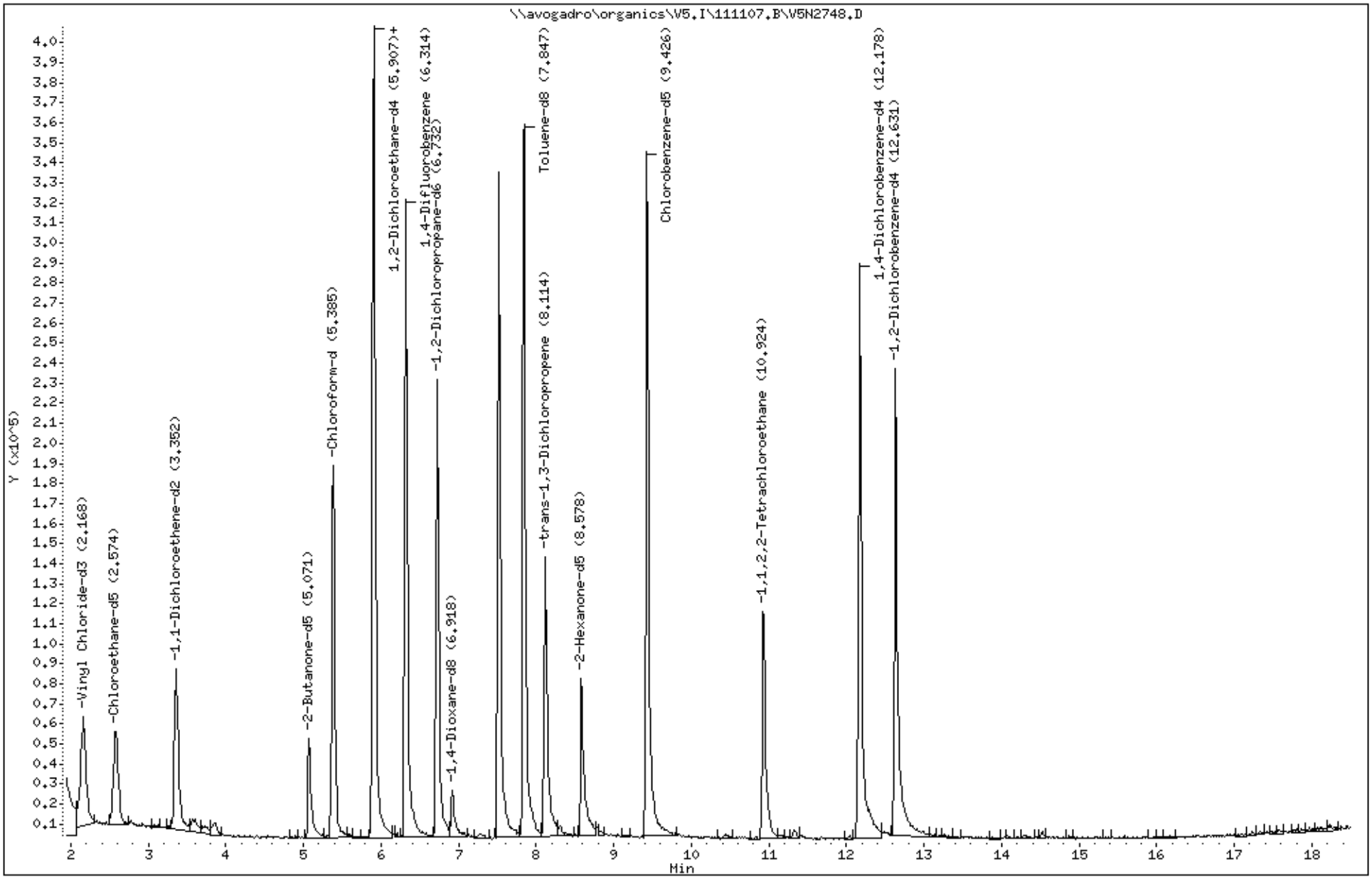
Data file : \\avogadro\organics\V5.I\111107.B\V5N2748.D
Lab Smp Id: VHBLKK5 Client Smp ID: VHBLKK5
Inj Date : 07-NOV-2011 21:05
Operator : SRC: Inst ID: V5.i
Smp Info : 5G,VHBLKK5,VHBLKK5,62780
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111107.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 18:06 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111107.B\V5N2748.D
Date : 07-NOV-2011 21:05
Client ID: VHBLKK5
Sample Info: 5G,VHBLKK5,VHBLKK5,62780

Instrument: V5.i

Operator: SRC:
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q0MS

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-01CMS

Sample wt/vol: 4.90 (g/mL) G Lab File ID: V5N2730.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 15 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
75-71-8	Dichlorodifluoromethane	6.0	U
74-87-3	Chloromethane	6.0	U
75-01-4	Vinyl chloride	6.0	U
74-83-9	Bromomethane	6.0	U
75-00-3	Chloroethane	6.0	U
75-69-4	Trichlorofluoromethane	6.0	U
75-35-4	1,1-Dichloroethene	54	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	6.0	U
67-64-1	Acetone	12	U
75-15-0	Carbon disulfide	6.0	U
79-20-9	Methyl acetate	6.0	U
75-09-2	Methylene chloride	6.0	U
156-60-5	trans-1,2-Dichloroethene	6.0	U
1634-04-4	Methyl tert-butyl ether	6.0	U
75-34-3	1,1-Dichloroethane	6.0	U
156-59-2	cis-1,2-Dichloroethene	6.0	U
78-93-3	2-Butanone	12	U
74-97-5	Bromochloromethane	6.0	U
67-66-3	Chloroform	6.0	U
71-55-6	1,1,1-Trichloroethane	6.0	U
110-82-7	Cyclohexane	6.0	U
56-23-5	Carbon tetrachloride	6.0	U
71-43-2	Benzene	65	
107-06-2	1,2-Dichloroethane	6.0	U
123-91-1	1,4-Dioxane	120	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q0MS

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-01CMS

Sample wt/vol: 4.90 (g/mL) G Lab File ID: V5N2730.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 15 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
79-01-6	Trichloroethene	68	
108-87-2	Methylcyclohexane	6.0	U
78-87-5	1,2-Dichloropropane	6.0	U
75-27-4	Bromodichloromethane	6.0	U
10061-01-5	cis-1,3-Dichloropropene	6.0	U
108-10-1	4-Methyl-2-pentanone	12	U
108-88-3	Toluene	66	
10061-02-6	trans-1,3-Dichloropropene	6.0	U
79-00-5	1,1,2-Trichloroethane	6.0	U
127-18-4	Tetrachloroethene	6.0	U
591-78-6	2-Hexanone	12	U
124-48-1	Dibromochloromethane	6.0	U
106-93-4	1,2-Dibromoethane	6.0	U
108-90-7	Chlorobenzene	64	
100-41-4	Ethylbenzene	6.0	U
179601-23-1	m,p-Xylene	6.0	U
95-47-6	o-Xylene	6.0	U
100-42-5	Styrene	6.0	U
75-25-2	Bromoform	6.0	U
98-82-8	Isopropylbenzene	6.0	U
79-34-5	1,1,2,2-Tetrachloroethane	6.0	U
541-73-1	1,3-Dichlorobenzene	6.0	U
106-46-7	1,4-Dichlorobenzene	6.0	U
95-50-1	1,2-Dichlorobenzene	6.0	U
96-12-8	1,2-Dibromo-3-chloropropane	6.0	U
120-82-1	1,2,4-Trichlorobenzene	6.0	U
87-61-6	1,2,3-Trichlorobenzene	6.0	U

Data File: \\avogadro\organics\V5.I\111107.B\V5N2730.D
Report Date: 09-Nov-2011 08:00

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111107.B\V5N2730.D
Lab Smp Id: K2198-01CMS Client Smp ID: H30Q0MS
Inj Date : 07-NOV-2011 12:57
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-01CMS,,62780
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111107.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 18:06 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 7 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	4.900	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.156	2.168	(0.342)	110006	50.0000	38
$ 80 Chloroethane-d5	69	2.574	2.597	(0.408)	77853	50.0000	42
$ 81 1,1-Dichloroethene-d2	65	3.352	3.364	(0.531)	28758	50.0000	48
7 1,1-Dichloroethene	96	3.364	3.376	(0.533)	96375	50.0000	45
$ 82 2-Butanone-d5	46	5.071	5.071	(0.803)	53109	100.000	66
$ 83 Chloroform-d	84	5.385	5.385	(0.853)	149520	50.0000	44(Q)
$ 23 1,2-Dichloroethane-d4	65	5.896	5.896	(0.934)	72303	50.0000	39
$ 84 Benzene-d6	84	5.907	5.907	(0.627)	292289	50.0000	49
25 Benzene	78	5.942	5.942	(0.630)	356816	50.0000	55
* 26 1,4-Difluorobenzene	114	6.314	6.325	(1.000)	300837	50.0000	
27 Trichloroethene	95	6.581	6.581	(0.698)	108194	50.0000	57
$ 85 1,2-Dichloropropane-d6	67	6.732	6.732	(0.714)	104969	50.0000	43
$ 94 1,4-Dioxane-d8	96	6.929	6.917	(1.097)	12564	1000.00	710
$ 33 Toluene-d8	98	7.847	7.835	(0.832)	259624	50.0000	47
34 Toluene	91	7.916	7.916	(0.840)	356508	50.0000	55
$ 86 trans-1,3-Dichloropropene-d4	79	8.125	8.114	(0.862)	77921	50.0000	42
$ 87 2-Hexanone-d5	63	8.590	8.578	(0.911)	27213	100.000	57(Q)
* 42 Chlorobenzene-d5	117	9.426	9.426	(1.000)	225651	50.0000	
43 Chlorobenzene	112	9.461	9.461	(1.004)	238678	50.0000	54
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.936	10.924	(1.160)	58175	50.0000	36
* 78 1,4-Dichlorobenzene-d4	152	12.178	12.167	(1.000)	78733	50.0000	

Data File: \\avogadro\organics\V5.I\111107.B\V5N2730.D
Report Date: 09-Nov-2011 08:00

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
$ 90 1,2-Dichlorobenzene-d4	152	12.643	12.631	(1.038)	64398	50.0000	44

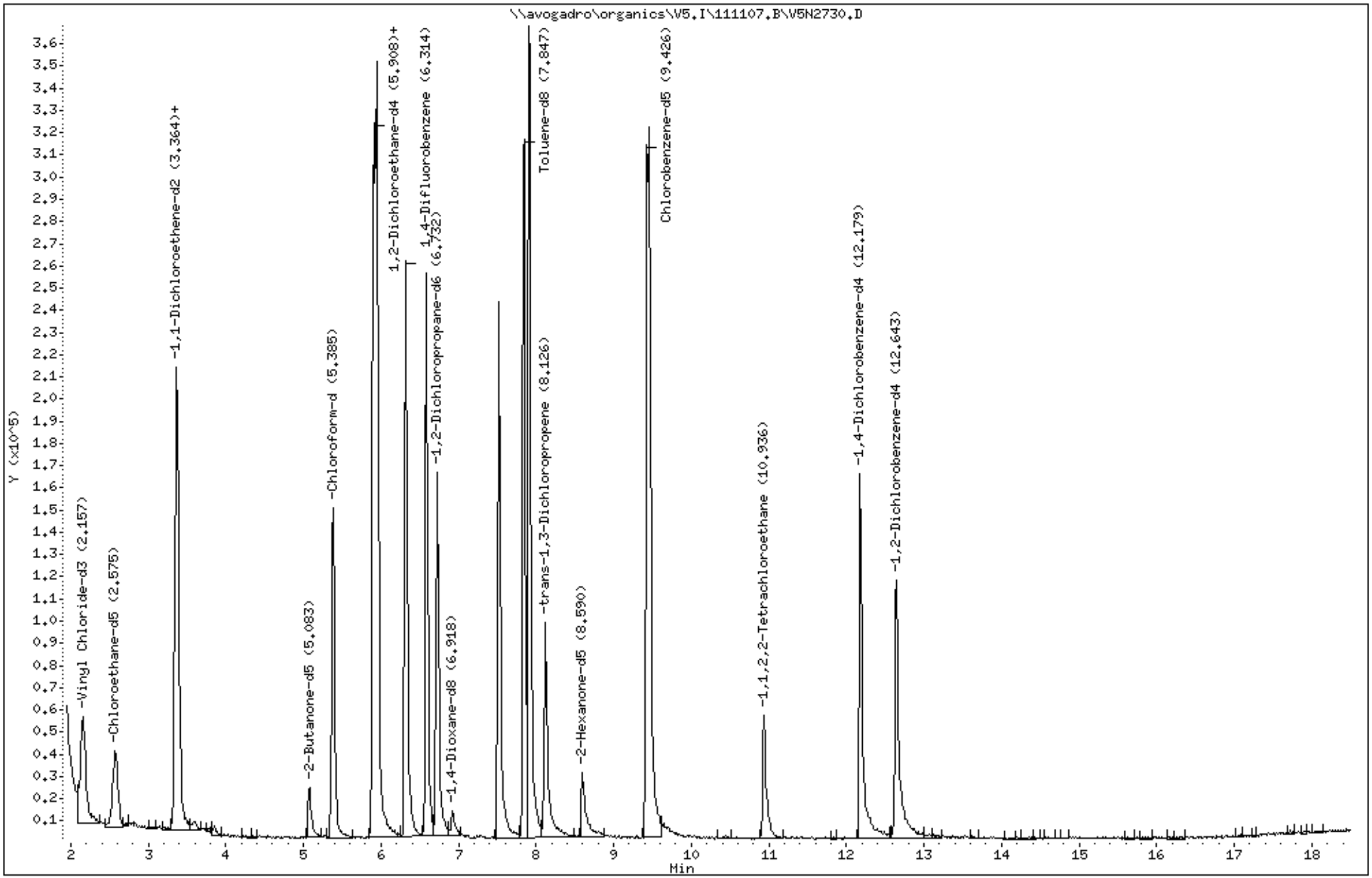
QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111107.B\V5N2730.D
Date : 07-NOV-2011 12:57
Client ID: H30Q0MS
Sample Info: 5G,K2198-01CMS,,62780

Instrument: V5.i

Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q0MSD

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-01CMSD

Sample wt/vol: 4.90 (g/mL) G Lab File ID: V5N2731.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 15 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
75-71-8	Dichlorodifluoromethane	6.0	U
74-87-3	Chloromethane	6.0	U
75-01-4	Vinyl chloride	6.0	U
74-83-9	Bromomethane	6.0	U
75-00-3	Chloroethane	6.0	U
75-69-4	Trichlorofluoromethane	6.0	U
75-35-4	1,1-Dichloroethene	52	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	6.0	U
67-64-1	Acetone	12	U
75-15-0	Carbon disulfide	6.0	U
79-20-9	Methyl acetate	6.0	U
75-09-2	Methylene chloride	6.0	U
156-60-5	trans-1,2-Dichloroethene	6.0	U
1634-04-4	Methyl tert-butyl ether	6.0	U
75-34-3	1,1-Dichloroethane	6.0	U
156-59-2	cis-1,2-Dichloroethene	6.0	U
78-93-3	2-Butanone	12	U
74-97-5	Bromochloromethane	6.0	U
67-66-3	Chloroform	6.0	U
71-55-6	1,1,1-Trichloroethane	6.0	U
110-82-7	Cyclohexane	6.0	U
56-23-5	Carbon tetrachloride	6.0	U
71-43-2	Benzene	64	
107-06-2	1,2-Dichloroethane	6.0	U
123-91-1	1,4-Dioxane	120	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q0MSD

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-01CMSD

Sample wt/vol: 4.90 (g/mL) G Lab File ID: V5N2731.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/28/2011

% Moisture: not dec. 15 Date Analyzed: 11/07/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
79-01-6	Trichloroethene	68	
108-87-2	Methylcyclohexane	6.0	U
78-87-5	1,2-Dichloropropane	6.0	U
75-27-4	Bromodichloromethane	6.0	U
10061-01-5	cis-1,3-Dichloropropene	6.0	U
108-10-1	4-Methyl-2-pentanone	12	U
108-88-3	Toluene	65	
10061-02-6	trans-1,3-Dichloropropene	6.0	U
79-00-5	1,1,2-Trichloroethane	6.0	U
127-18-4	Tetrachloroethene	6.0	U
591-78-6	2-Hexanone	12	U
124-48-1	Dibromochloromethane	6.0	U
106-93-4	1,2-Dibromoethane	6.0	U
108-90-7	Chlorobenzene	65	
100-41-4	Ethylbenzene	6.0	U
179601-23-1	m,p-Xylene	6.0	U
95-47-6	o-Xylene	6.0	U
100-42-5	Styrene	6.0	U
75-25-2	Bromoform	6.0	U
98-82-8	Isopropylbenzene	6.0	U
79-34-5	1,1,2,2-Tetrachloroethane	6.0	U
541-73-1	1,3-Dichlorobenzene	6.0	U
106-46-7	1,4-Dichlorobenzene	6.0	U
95-50-1	1,2-Dichlorobenzene	6.0	U
96-12-8	1,2-Dibromo-3-chloropropane	6.0	U
120-82-1	1,2,4-Trichlorobenzene	6.0	U
87-61-6	1,2,3-Trichlorobenzene	6.0	U

Data File: \\avogadro\organics\V5.I\111107.B\V5N2731.D
Report Date: 09-Nov-2011 08:00

Spectrum Analytical, Inc. RI Division

SOM01.0 - Low/Med Volatiles

Data file : \\avogadro\organics\V5.I\111107.B\V5N2731.D
Lab Smp Id: K2198-01CMSD Client Smp ID: H30Q0MSD
Inj Date : 07-NOV-2011 13:24
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5G,K2198-01CMSD,,62780
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111107.B\V5_SOM_S.m
Meth Date : 08-Nov-2011 18:06 V5.i Quant Type: ISTD
Cal Date : 04-OCT-2011 17:39 Cal File: V5N1312.D
Als bottle: 8 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	4.900	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.160	2.168	(0.342)	114233	50.0000	38
$ 80 Chloroethane-d5	69	2.578	2.597	(0.408)	78952	50.0000	40(Q)
$ 81 1,1-Dichloroethene-d2	65	3.357	3.364	(0.531)	28075	50.0000	45
7 1,1-Dichloroethene	96	3.368	3.376	(0.533)	97564	50.0000	43
$ 82 2-Butanone-d5	46	5.075	5.071	(0.803)	62670	100.000	74
$ 83 Chloroform-d	84	5.377	5.385	(0.851)	157632	50.0000	43(Q)
$ 23 1,2-Dichloroethane-d4	65	5.888	5.896	(0.932)	78217	50.0000	40
$ 84 Benzene-d6	84	5.911	5.907	(0.627)	309344	50.0000	49
25 Benzene	78	5.946	5.942	(0.631)	367909	50.0000	53
* 26 1,4-Difluorobenzene	114	6.318	6.325	(1.000)	319097	50.0000	
27 Trichloroethene	95	6.585	6.581	(0.698)	114228	50.0000	57
$ 85 1,2-Dichloropropane-d6	67	6.724	6.732	(0.713)	115219	50.0000	44
$ 94 1,4-Dioxane-d8	96	6.922	6.917	(1.096)	13069	1000.00	700
$ 33 Toluene-d8	98	7.839	7.835	(0.831)	279628	50.0000	48
34 Toluene	91	7.909	7.916	(0.839)	369577	50.0000	54
$ 86 trans-1,3-Dichloropropene-d4	79	8.118	8.114	(0.861)	90893	50.0000	46
$ 87 2-Hexanone-d5	63	8.582	8.578	(0.910)	30380	100.000	61(Q)
* 42 Chlorobenzene-d5	117	9.430	9.426	(1.000)	237777	50.0000	
43 Chlorobenzene	112	9.465	9.461	(1.004)	256025	50.0000	55
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.928	10.924	(1.159)	68958	50.0000	40
* 78 1,4-Dichlorobenzene-d4	152	12.183	12.167	(1.000)	82248	50.0000	(Q)

Data File: \\avogadro\organics\V5.I\111107.B\V5N2731.D
Report Date: 09-Nov-2011 08:00

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
$ 90 1,2-Dichlorobenzene-d4	152	12.635	12.631	(1.037)	72193	50.0000	47(Q)

QC Flag Legend

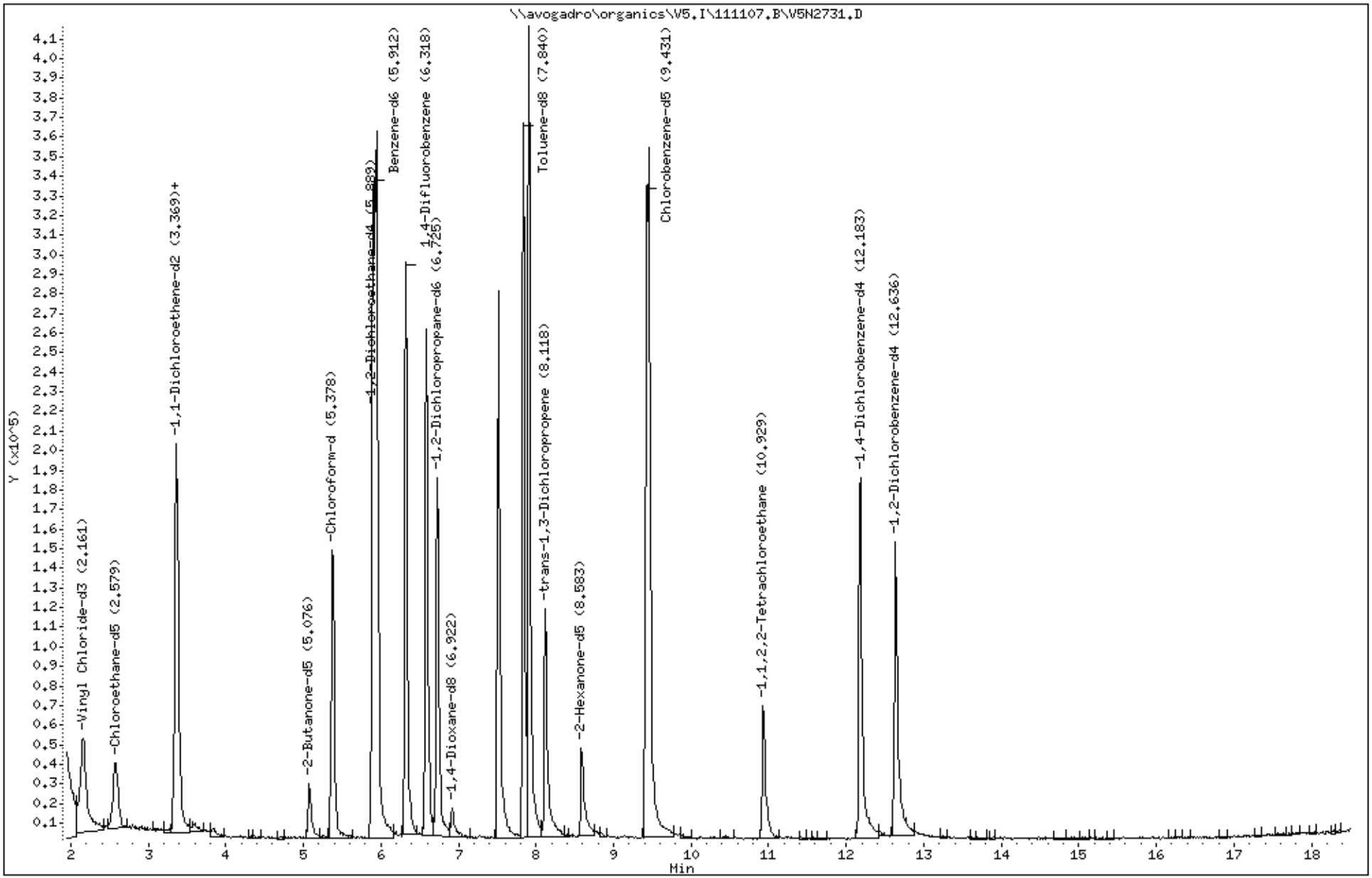
Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111107.B\V5N2731.D
Date : 07-NOV-2011 13:24
Client ID: H30Q0MSD
Sample Info: 5G,K2198-01CMSD,,62780

Instrument: V5.i

Operator: SRC: LIMS
Column diameter: 0.25

Column phase: DB-624



2J - FORM II SV-3

SOIL SEMIVOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Level: (LOW/MED) LOW

	EPA SAMPLE NO.	SDMC1 (PHL) #	SDMC2 (BCE) #	SDMC3 (2CP) #	SDMC4 (4MP) #	SDMC5 (NBZ) #	SDMC6 (2NP) #	SDMC7 (DCP) #	SDMC8 (4CA) #
01	SBLK2X	65	60	68	66	63	69	73	48
02	H30Q0	47	46	49	48	51	55	59	26
03	H30Q0MS	48	44	49	51	49	56	63	29
04	H30Q0MSD	47	39	44	52	46	51	55	14
05	H30Q1	47	44	50	53	49	55	62	12
06	H30Q2	53	46	51	54	50	56	64	25
07	H30Q4	49	44	50	50	44	52	57	28
08	H30Q6	50	44	47	49	46	51	56	14
09	H30Q8	54	50	53	54	46	53	58	10
10	H30Q9	41	39	46	41	45	53	53	6
11	H30R0	43	40	47	47	46	50	54	10
12	H30R1	41	34	44	48	41	47	47	5
13	H30S4	46	38	49	54	40	51	53	6
14	H30S5	46	41	51	59	49	51	55	12
15	H30S8	43	40	49	51	42	49	49	15
16	H30S9	39	33	42	46	41	40	43	9
17	H30T0	30	27	34	38	32	34	36	5
18	H30T1	47	43	52	51	48	54	54	24
19	H30T2	41	36	45	46	40	48	49	8
20	H30T3	41	35	44	47	42	45	45	7
21	H30T5	38	34	43	46	42	44	48	12
22	H30T4	47	44	50	46	46	47	49	14
23	H30Q3	48	44	51	52	45	54	61	17

		QC LIMITS
SDMC1	(PHL) = Phenol-d5	(17-103)
SDMC2	(BCE) = Bis(2-chloroethyl)ether-d8	(12-98)
SDMC3	(2CP) = 2-Chlorophenol-d4	(13-101)
SDMC4	(4MP) = 4-Methylphenol-d8	(8-100)
SDMC5	(NBZ) = Nitrobenzene-d5	(16-103)
SDMC6	(2NP) = 2-Nitrophenol-d4	(16-104)
SDMC7	(DCP) = 2,4-Dichlorophenol-d3	(23-104)
SDMC8	(4CA) = 4-Chloroaniline-d4	(1-145)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D DMC diluted out

2K - FORM II SV-4

SOIL SEMIVOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Level: (LOW/MED) LOW

	EPA SAMPLE NO.	SDMC9 (DMP) #	SDMC10 (ACY) #	SDMC11 (4NP) #	SDMC12 (FLR) #	SDMC13 (NMP) #	SDMC14 (ANC) #	SDMC15 (PYR) #	SDMC16 (BAP) #	TOT OUT
01	SBLK2X	74	67	79	67	58	63	69	65	0
02	H30Q0	53	44	42	49	41	47	54	47	0
03	H30Q0MS	50	44	53	49	43	48	54	48	0
04	H30Q0MSD	45	40	52	45	42	44	47 *	46	1
05	H30Q1	49	43	52	46	45	45	49 *	46	1
06	H30Q2	49	45	56	48	49	48	54	46	0
07	H30Q4	50	44	54	46	42	44	47 *	30 *	2
08	H30Q6	53	44	52	49	42	46	48 *	31 *	2
09	H30Q8	51	44	48	49	44	45	50 *	39 *	2
10	H30Q9	49	46	59	45	48	46	39 *	50	1
11	H30R0	46	44	52	42	46	43	42 *	32 *	2
12	H30R1	51	47	53	44	52	46	47 *	37 *	2
13	H30S4	51	47	51	44	41	44	59	44	0
14	H30S5	60	52	57	52	55	54	65	52	0
15	H30S8	56	45	53	48	50	46	54	48	0
16	H30S9	49	39	50	40 *	45	40	47 *	39 *	3
17	H30T0	40 *	35	37	35 *	35	34	40 *	35 *	4
18	H30T1	56	50	56	50	46	47	60	50	0
19	H30T2	45	40	52	43	38	39	51 *	40 *	2
20	H30T3	52	43	50	45	46	45	53	43	0
21	H30T5	51	42	46	42	46	43	51 *	42 *	2
22	H30T4	53	45	39	44	42	45	58	46	0
23	H30Q3	57	45	60	47	53	45	58	47	0

		QC LIMITS
SDMC9	(DMP) = Dimethylphthalate-d6	(43-111)
SDMC10	(ACY) = Acenaphthylene-d8	(20-97)
SDMC11	(4NP) = 4-Nitrophenol-d4	(16-166)
SDMC12	(FLR) = Fluorene-d10	(40-108)
SDMC13	(NMP) = 4,6-Dinitro-2-methylphenol-d2	(1-121)
SDMC14	(ANC) = Anthracene-d10	(22-98)
SDMC15	(PYR) = Pyrene-d10	(51-120)
SDMC16	(BAP) = Benzo(a)pyrene-d12	(43-111)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D DMC diluted out

3D - FORM III SV-2

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix Spike - EPA Sample No.: H30Q0

COMPOUND	SPIKE ADDED (µg/Kg)	SAMPLE CONCENTRATION (µg/Kg)	MS CONCENTRATION (µg/Kg)	MS %REC	#	QC. LIMITS REC.
Phenol	1557.8530	0.0000	781.2677	50		26-90
2-Chlorophenol	1557.8530	0.0000	741.0851	48		25-102
N-Nitroso-di-n-propylamine	1557.8530	0.0000	771.5571	50		41-126
4-Chloro-3-methylphenol	1557.8530	0.0000	1014.4920	65		26-103
Acenaphthene	1557.8530	0.0000	771.6985	50		31-137
4-Nitrophenol	1557.8530	0.0000	906.6189	58		11-114
2,4-Dinitrotoluene	1557.8530	0.0000	801.7713	51		28-89
Pentachlorophenol	1557.8530	0.0000	954.0575	61		17-109
Pyrene	1557.8530	0.0000	610.5268	39		35-142

COMPOUND	SPIKE ADDED (µg/Kg)	MSD CONCENTRATION (µg/Kg)	MSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Phenol	1542.4795	718.3022	47		7		0-35	26-90
2-Chlorophenol	1542.4795	676.9792	44		8		0-50	25-102
N-Nitroso-di-n-propylamine	1542.4795	655.3772	42		15		0-38	41-126
4-Chloro-3-methylphenol	1542.4795	871.7778	57		14		0-33	26-103
Acenaphthene	1542.4795	644.2259	42		17		0-19	31-137
4-Nitrophenol	1542.4795	757.7935	49		17		0-50	11-114
2,4-Dinitrotoluene	1542.4795	717.6828	47		10		0-47	28-89
Pentachlorophenol	1542.4795	845.0883	55		11		0-47	17-109
Pyrene	1542.4795	489.8701	32	*	21		0-36	35-142

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 9 outside limits

Spike Recovery: 1 out of 18 outside limits

COMMENTS:

4C - FORM IV SV
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
SBLK2X

Lab Name: MITKEM LABORATORIES | Contract: EP-W-11-033

Lab Code: MITKEM | Case No.: 41926 | Mod. Ref No.: | SDG No.: H30Q0

Lab File ID: S2H5249.D | Lab Sample ID: MB-62764

Instrument ID: S2 | Date Extracted: 11/07/2011

Matrix: (SOIL/SED/WATER) SOIL | Date Analyzed: 11/10/2011

Level: (LOW/MED) LOW | Time Analyzed: 9:57

Extraction: (Type) SONC | GPC Cleanup: (Y/N) Y

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	H30Q0	K2198-01A	S2H5250.D	11/10/2011
02	H30Q0MS	K2198-01AMS	S2H5251.D	11/10/2011
03	H30Q0MSD	K2198-01AMSD	S2H5252.D	11/10/2011
04	H30Q1	K2198-02A	S2H5253.D	11/10/2011
05	H30Q2	K2198-03A	S2H5254.D	11/10/2011
06	H30Q4	K2198-05A	S2H5256.D	11/10/2011
07	H30Q6	K2198-06A	S2H5257.D	11/10/2011
08	H30Q8	K2198-07A	S2H5258.D	11/10/2011
09	H30Q9	K2198-08A	S2H5259.D	11/10/2011
10	H30R0	K2198-09A	S2H5260.D	11/10/2011
11	H30R1	K2198-10A	S2H5261.D	11/10/2011
12	H30S4	K2198-11A	S2H5262.D	11/10/2011
13	H30S5	K2198-12A	S2H5263.D	11/10/2011
14	H30S8	K2198-13A	S2H5264.D	11/10/2011
15	H30S9	K2198-14A	S2H5265.D	11/10/2011
16	H30T0	K2198-15A	S2H5266.D	11/10/2011
17	H30T1	K2198-16A	S2H5267.D	11/10/2011
18	H30T2	K2198-17A	S2H5268.D	11/10/2011
19	H30T3	K2198-18A	S2H5269.D	11/10/2011
20	H30T5	K2198-20A	S2H5271.D	11/10/2011
21	H30T4	K2198-19A	S2H5277.D	11/11/2011
22	H30Q3	K2198-04A	S2H5292.D	11/14/2011

COMMENTS:

5B - FORM V SV

SEMIVOLATILE ORGANIC INSTRUMENT

PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPINE (DFTPP)

EPA SAMPLE NO.

DFTPP2W

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Lab File ID: S2H5052.D DFTPP Injection Date: 10/25/2011

Instrument ID: S2 DFTPP Injection Time: 9:32

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	61.0
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	83.7
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	10.0 - 80.0% of mass 198	47.1
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.8
275	10.0 - 60.0% of mass 198	15.3
365	Greater than 1.0% of mass 198	1.5
441	Present, but less than mass 443	9.2
442	50.0 - 100% of mass 198	52.5
443	15.0 - 24.0% of mass 442	10.1 (19.2)2

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD0202W	SSTD0202W	S2H5053C.D	10/25/2011	11:35
02	SSTD0052W	SSTD0052W	S2H5054.D	10/25/2011	11:58
03	SSTD0802W	SSTD0802W	S2H5055.D	10/25/2011	12:21
04	SSTD0102W	SSTD0102W	S2H5056.D	10/25/2011	12:44
05	SSTD0402W	SSTD0402W	S2H5057.D	10/25/2011	13:07

5B - FORM V SV
SEMIVOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPINE (DFTPP)

EPA SAMPLE NO.
DFTPP2X

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Lab File ID: S2H5247.D DFTPP Injection Date: 11/10/2011

Instrument ID: S2 DFTPP Injection Time: 9:18

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	52.7
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	71.1
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	10.0 - 80.0% of mass 198	46.0
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.0
275	10.0 - 60.0% of mass 198	15.5
365	Greater than 1.0% of mass 198	1.7
441	Present, but less than mass 443	9.7
442	50.0 - 100% of mass 198	53.8
443	15.0 - 24.0% of mass 442	10.5 (19.6)2

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD0202X	SSTD0202X	S2H5248.D	11/10/2011	9:31
02	SBLK2X	MB-62764	S2H5249.D	11/10/2011	9:57
03	H30Q0	K2198-01A	S2H5250.D	11/10/2011	10:23
04	H30Q0MS	K2198-01AMS	S2H5251.D	11/10/2011	10:44
05	H30Q0MSD	K2198-01AMSD	S2H5252.D	11/10/2011	11:05
06	H30Q1	K2198-02A	S2H5253.D	11/10/2011	11:26
07	H30Q2	K2198-03A	S2H5254.D	11/10/2011	11:47
08	H30Q4	K2198-05A	S2H5256.D	11/10/2011	12:29
09	H30Q6	K2198-06A	S2H5257.D	11/10/2011	12:50
10	H30Q8	K2198-07A	S2H5258.D	11/10/2011	13:11
11	H30Q9	K2198-08A	S2H5259.D	11/10/2011	13:32
12	H30R0	K2198-09A	S2H5260.D	11/10/2011	13:53
13	H30R1	K2198-10A	S2H5261.D	11/10/2011	14:14
14	H30S4	K2198-11A	S2H5262.D	11/10/2011	14:35
15	H30S5	K2198-12A	S2H5263.D	11/10/2011	14:56
16	H30S8	K2198-13A	S2H5264.D	11/10/2011	15:17
17	H30S9	K2198-14A	S2H5265.D	11/10/2011	15:38
18	H30T0	K2198-15A	S2H5266.D	11/10/2011	15:59
19	H30T1	K2198-16A	S2H5267.D	11/10/2011	16:20

5B - FORM V SV
SEMIVOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPINE (DFTPP)

EPA SAMPLE NO.
DFTPP2X

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Lab File ID: S2H5247.D DFTPP Injection Date: 11/10/2011

Instrument ID: S2 DFTPP Injection Time: 9:18

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	52.7
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	71.1
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	10.0 - 80.0% of mass 198	46.0
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.0
275	10.0 - 60.0% of mass 198	15.5
365	Greater than 1.0% of mass 198	1.7
441	Present, but less than mass 443	9.7
442	50.0 - 100% of mass 198	53.8
443	15.0 - 24.0% of mass 442	10.5 (19.6)2

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
20	H30T2	K2198-17A	S2H5268.D	11/10/2011	16:41
21	H30T3	K2198-18A	S2H5269.D	11/10/2011	17:01
22	H30T5	K2198-20A	S2H5271.D	11/10/2011	17:44
23	SSTD0202Y	SSTD0202Y	S2H5273.D	11/10/2011	18:26

5B - FORM V SV
SEMIVOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPINE (DFTPP)

EPA SAMPLE NO.
DFTPP2Z

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Lab File ID: S2H5275.D DFTPP Injection Date: 11/11/2011

Instrument ID: S2 DFTPP Injection Time: 8:43

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	50.2
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	66.8
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	10.0 - 80.0% of mass 198	43.6
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 60.0% of mass 198	15.5
365	Greater than 1.0% of mass 198	1.7
441	Present, but less than mass 443	9.4
442	50.0 - 100% of mass 198	52.3
443	15.0 - 24.0% of mass 442	10.2 (19.5)2

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD0202Z	SSTD0202Z	S2H5276.D	11/11/2011	9:01
02	H30T4	K2198-19A	S2H5277.D	11/11/2011	9:38
03	SSTD0202A	SSTD0202A	S2H5278.D	11/11/2011	9:59

5B - FORM V SV
SEMIVOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPINE (DFTPP)

EPA SAMPLE NO.
DFTPP2C

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Lab File ID: S2H5289.D DFTPP Injection Date: 11/14/2011

Instrument ID: S2 DFTPP Injection Time: 16:22

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	63.3
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	82.7
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	10.0 - 80.0% of mass 198	49.2
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 60.0% of mass 198	15.4
365	Greater than 1.0% of mass 198	1.6
441	Present, but less than mass 443	10.0
442	50.0 - 100% of mass 198	56.2
443	15.0 - 24.0% of mass 442	10.9 (19.5)2

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD0202C	SSTD0202C	S2H5290.D	11/14/2011	16:35
02	H30Q3	K2198-04A	S2H5292.D	11/14/2011	17:19
03	SSTD0202D	SSTD0202D	S2H5295.D	11/14/2011	18:23

8C - FORM VIII SV-1

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202X Date Analyzed: 11/10/2011

Lab File ID (Standard): S2H5248.D Time Analyzed: 9:31

Instrument ID: S2

		IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
	12 HOUR STD	81169		3.685		241890		4.746		192480		6.205	
	UPPER LIMIT	162338		4.185		483780		5.246		384960		6.705	
	LOWER LIMIT	40585		3.185		120945		4.246		96240		5.705	
	EPA SAMPLE NO.												
01	SBLK2X	106927		3.692		304913		4.754		237533		6.212	
02	H30Q0	103736		3.684		276677		4.756		235470		6.214	
03	H30Q0MS	91840		3.692		235761		4.754		198281		6.212	
04	H30Q0MSD	122184		3.683		342681		4.755		289861		6.213	
05	H30Q1	122116		3.683		336655		4.755		277157		6.214	
06	H30Q2	103710		3.683		295457		4.756		250023		6.214	
07	H30Q4	103723		3.693		295150		4.755		254295		6.213	
08	H30Q6	135586		3.693		387125		4.754		324890		6.213	
09	H30Q8	107688		3.694		329178		4.756		269569		6.214	
10	H30Q9	84890		3.696		215371		4.758		140868		6.216	
11	H30R0	111018		3.697		313194		4.758		198015		6.217	
12	H30R1	150432		3.696		416641		4.757		242709		6.216	
13	H30S4	121237		3.695		388838		4.757		300290		6.215	
14	H30S5	119709		3.693		375281		4.754		295722		6.213	
15	H30S8	117360		3.694		370407		4.755		292501		6.214	

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8D - FORM VIII SV-2

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

EPA Sample No.(SSTD020##) SSTD0202X Date Analyzed: 11/10/2011

Lab File ID (Standard): S2H5248.D Time Analyzed: 9:31

Instrument ID: S2 GC Column: Rxi-5sil MS ID: 0.25 (mm)

		IS4 (PHN) AREA	#	RT	#	IS5 (CRY) AREA	#	RT	#	IS6 (PRY) AREA	#	RT	#
	12 HOUR STD	336767		7.438		260346		9.669		189730		10.966	
	UPPER LIMIT	673534		7.938		520692		10.169		379460		11.466	
	LOWER LIMIT	168384		6.938		130173		9.169		94865		10.466	
	EPA SAMPLE NO.												
01	SBLK2X	441541		7.435		328906		9.698		242896		11.017	
02	H30Q0	440222		7.437		300719		9.678		213994		10.986	
03	H30Q0MS	372929		7.435		245548		9.655		160951		10.941	
04	H30Q0MSD	557836		7.436		403738		9.645		279063		10.921	
05	H30Q1	549310		7.436		393200		9.656		268495		10.932	
06	H30Q2	495820		7.437		354148		9.646		250588		10.911	
07	H30Q4	463350		7.436		345936		9.634		245498		10.899	
08	H30Q6	585066		7.435		375322		9.644		291994		10.920	
09	H30Q8	499573		7.437		339161		9.646		225942		10.911	
10	H30Q9	264045		7.439		201300		9.648		147616		10.924	
11	H30R0	333538		7.439		216064		9.648		140048		10.914	
12	H30R1	328220		7.438		228882		9.658		127057		10.934	
13	H30S4	426710		7.437		194916		9.657		130650		10.944	
14	H30S5	452388		7.435		270891		9.666		194093		10.942	
15	H30S8	478485		7.436		312428		9.699		209596		11.018	

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12
AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8C - FORM VIII SV-1

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202X Date Analyzed: 11/10/2011

Lab File ID (Standard): S2H5248.D Time Analyzed: 9:31

Instrument ID: S2

		IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
	12 HOUR STD	81169		3.685		241890		4.746		192480		6.205	
	UPPER LIMIT	162338		4.185		483780		5.246		384960		6.705	
	LOWER LIMIT	40585		3.185		120945		4.246		96240		5.705	
	EPA SAMPLE NO.												
16	H30S9	127894		3.693		406966		4.754		318703		6.213	
17	H30T0	125306		3.693		368702		4.754		286792		6.213	
18	H30T1	110696		3.695		335776		4.757		267194		6.215	
19	H30T2	112569		3.696		351001		4.758		307639		6.217	
20	H30T3	117198		3.693		352621		4.755		264072		6.213	
21	H30T5	115492		3.693		330737		4.754		262825		6.213	

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8D - FORM VIII SV-2

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

EPA Sample No.(SSTD020##) SSTD0202X Date Analyzed: 11/10/2011

Lab File ID (Standard): S2H5248.D Time Analyzed: 9:31

Instrument ID: S2 GC Column: Rxi-5sil MS ID: 0.25 (mm)

		IS4 (PHN) AREA	#	RT	#	IS5 (CRY) AREA	#	RT	#	IS6 (PRY) AREA	#	RT	#
	12 HOUR STD	336767		7.438		260346		9.669		189730		10.966	
	UPPER LIMIT	673534		7.938		520692		10.169		379460		11.466	
	LOWER LIMIT	168384		6.938		130173		9.169		94865		10.466	
	EPA SAMPLE NO.												
16	H30S9	551660		7.435		380220		9.698		246045		11.006	
17	H30T0	483453		7.435		309100		9.676		213018		10.985	
18	H30T1	451626		7.438		283522		9.700		199890		11.019	
19	H30T2	570138		7.439		349288		9.680		226153		10.989	
20	H30T3	436431		7.436		299096		9.688		214703		10.996	
21	H30T5	446585		7.435		314998		9.655		203321		10.920	

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12
AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8C - FORM VIII SV-1

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202Z Date Analyzed: 11/11/2011

Lab File ID (Standard): S2H5276.D Time Analyzed: 9:01

Instrument ID: S2

		IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
	12 HOUR STD	69137		3.693		191263		4.766		159791		6.224	
	UPPER LIMIT	138274		4.193		382526		5.266		319582		6.724	
	LOWER LIMIT	34569		3.193		95632		4.266		79896		5.724	
	EPA SAMPLE NO.												
01	H30T4	94080		3.704		279602		4.765		220127		6.224	

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8D - FORM VIII SV-2

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

EPA Sample No.(SSTD020##) SSTD0202Z Date Analyzed: 11/11/2011

Lab File ID (Standard): S2H5276.D Time Analyzed: 9:01

Instrument ID: S2 GC Column: Rxi-5sil MS ID: 0.25 (mm)

		IS4 (PHN) AREA	#	RT	#	IS5 (CRY) AREA	#	RT	#	IS6 (PRY) AREA	#	RT	#
	12 HOUR STD	278381		7.447		188206		9.709		150875		11.039	
	UPPER LIMIT	556762		7.947		376412		10.209		301750		11.539	
	LOWER LIMIT	139191		6.947		94103		9.209		75438		10.539	
	EPA SAMPLE NO.												
01	H30T4	362746		7.446		230835		9.752		150151		11.103	

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12
AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8C - FORM VIII SV-1

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202C Date Analyzed: 11/14/2011

Lab File ID (Standard): S2H5290.D Time Analyzed: 16:35

Instrument ID: S2

		IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
	12 HOUR STD	91340		3.611		299945		4.684		279595		6.142	
	UPPER LIMIT	182680		4.111		599890		5.184		559190		6.642	
	LOWER LIMIT	45670		3.111		149973		4.184		139798		5.642	
	EPA SAMPLE NO.												
01	H30Q3	99111		3.612		297218		4.673		249500		6.142	

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8D - FORM VIII SV-2

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

EPA Sample No.(SSTD020##) SSTD0202C Date Analyzed: 11/14/2011

Lab File ID (Standard): S2H5290.D Time Analyzed: 16:35

Instrument ID: S2 GC Column: Rxi-5sil MS ID: 0.25 (mm)

		IS4 (PHN) AREA	#	RT	#	IS5 (CRY) AREA	#	RT	#	IS6 (PRY) AREA	#	RT	#
	12 HOUR STD	516565		7.365		343656		9.606		203023		10.893	
	UPPER LIMIT	1033130		7.865		687312		10.106		406046		11.393	
	LOWER LIMIT	258283		6.865		171828		9.106		101512		10.393	
	EPA SAMPLE NO.												
01	H30Q3	493686		7.354		341539		9.585		182383		10.850	

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12
AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q0

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-01A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: S2H5250.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 15 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: 8.2 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
100-52-7	Benzaldehyde	200	U
108-95-2	Phenol	200	U
111-44-4	Bis(2-chloroethyl)ether	200	U
95-57-8	2-Chlorophenol	200	U
95-48-7	2-Methylphenol	200	U
108-60-1	2,2´-Oxybis(1-chloropropane)	200	U
98-86-2	Acetophenone	200	U
106-44-5	4-Methylphenol	200	U
621-64-7	N-Nitroso-di-n-propylamine	200	U
67-72-1	Hexachloroethane	200	U
98-95-3	Nitrobenzene	200	U
78-59-1	Isophorone	200	U
88-75-5	2-Nitrophenol	200	U
105-67-9	2,4-Dimethylphenol	200	U
111-91-1	Bis(2-chloroethoxy)methane	200	U
120-83-2	2,4-Dichlorophenol	200	U
91-20-3	Naphthalene	200	U
106-47-8	4-Chloroaniline	200	U
87-68-3	Hexachlorobutadiene	200	U
105-60-2	Caprolactam	200	U
59-50-7	4-Chloro-3-methylphenol	200	U
91-57-6	2-Methylnaphthalene	200	U
77-47-4	Hexachlorocyclopentadiene	200	U
88-06-2	2,4,6-Trichlorophenol	200	U
95-95-4	2,4,5-Trichlorophenol	200	U
92-52-4	1,1´-Biphenyl	200	U
91-58-7	2-Chloronaphthalene	200	U
88-74-4	2-Nitroaniline	380	U
131-11-3	Dimethylphthalate	200	U
606-20-2	2,6-Dinitrotoluene	200	U
208-96-8	Acenaphthylene	200	U
99-09-2	3-Nitroaniline	380	U
83-32-9	Acenaphthene	200	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q0

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-01A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: S2H5250.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 15 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: 8.2 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
51-28-5	2,4-Dinitrophenol	380	U
100-02-7	4-Nitrophenol	380	U
132-64-9	Dibenzofuran	200	U
121-14-2	2,4-Dinitrotoluene	200	U
84-66-2	Diethylphthalate	200	U
86-73-7	Fluorene	200	U
7005-72-3	4-Chlorophenyl-phenylether	200	U
100-01-6	4-Nitroaniline	380	U
534-52-1	4,6-Dinitro-2-methylphenol	380	U
86-30-6	N-Nitrosodiphenylamine (1)	200	U
95-94-3	1,2,4,5-Tetrachlorobenzene	200	U
101-55-3	4-Bromophenyl-phenylether	200	U
118-74-1	Hexachlorobenzene	200	U
1912-24-9	Atrazine	200	U
87-86-5	Pentachlorophenol	380	U
85-01-8	Phenanthrene	200	U
120-12-7	Anthracene	200	U
86-74-8	Carbazole	200	U
84-74-2	Di-n-butylphthalate	61	J
206-44-0	Fluoranthene	200	U
129-00-0	Pyrene	200	U
85-68-7	Butylbenzylphthalate	200	U
91-94-1	3,3´-Dichlorobenzidine	200	U
56-55-3	Benzo(a)anthracene	200	U
218-01-9	Chrysene	200	U
117-81-7	Bis(2-ethylhexyl)phthalate	81	J
117-84-0	Di-n-octylphthalate	200	U
205-99-2	Benzo(b)fluoranthene	200	U
207-08-9	Benzo(k)fluoranthene	200	U
50-32-8	Benzo(a)pyrene	200	U
193-39-5	Indeno(1,2,3-cd)pyrene	200	U
53-70-3	Dibenzo(a,h)anthracene	200	U
191-24-2	Benzo(g,h,i)perylene	200	U
58-90-2	2,3,4,6-Tetrachlorophenol	200	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30Q0

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-01A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: S2H5250.D

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 15 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: 8.2 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.986	200	J
02	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.488	300	BNJ
03		Unknown-02	4.692	210	J
04		Unknown-03	5.206	260	J
05		Unknown-04	5.303	87	J
06		Unknown-05	7.598	84	J
07		Unknown-06	7.909	110	J
08		Unknown-07	9.206	95	J
09	506-52-5	1-Hexacosanol	9.581	90	NJ
10	301-02-0	9-Octadecenamide, (Z)-	10.429	300	NJ
11		Unknown-08	10.772	400	J
12		Unknown-09	11.480	180	J
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5250.D
Report Date: 11-Nov-2011 13:32

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5250.D
Lab Smp Id: K2198-01A Client Smp ID: H30Q0
Inj Date : 10-NOV-2011 10:23
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-01A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.300	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
$	2 Phenol-d5	71	3.383	3.373	(0.918)	121759	37.2735	620
$	4 bis(2-Chloroethyl)ether-d8	67	3.426	3.427	(0.930)	163951	36.4227	600
$	6 2-Chlorophenol-d4	132	3.501	3.491	(0.951)	111566	39.4806	650
*	8 1,4-Dichlorobenzene-d4	152	3.683	3.684	(1.000)	103736	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.005	4.006	(1.087)	169786	38.3380	630
$	16 Nitrobenzene-d5	128	4.144	4.145	(0.871)	58397	40.5288	670
$	19 2-Nitrophenol-d4	143	4.423	4.424	(0.930)	70592	44.3798	730
$	23 2,4-Dichlorophenol-d3	165	4.627	4.628	(0.973)	137234	47.2615	780
*	25 Naphthalene-d8	136	4.755	4.746	(1.000)	276677	40.0000	
$	27 4-Chloroaniline-d4	131	4.809	4.810	(1.011)	53646	20.8072	340(Q)
$	40 Dimethylphthalate-d6	166	5.978	5.968	(0.962)	366056	42.2805	700
$	43 Acenaphthylene-d8	160	6.085	6.076	(0.979)	394754	35.0629	580
*	46 Acenaphthene-d10	164	6.214	6.204	(1.000)	235470	40.0000	
$	49 4-Nitrophenol-d4	143	6.321	6.312	(1.017)	42161	33.7910	560(Q)
$	54 Fluorene-d10	176	6.643	6.633	(1.069)	310466	39.0386	640
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.696	6.698	(0.901)	55737	32.4459	540
*	65 Phenanthrene-d10	188	7.436	7.438	(1.000)	440222	40.0000	
$	67 Anthracene-d10	188	7.479	7.480	(1.006)	468305	37.2407	610
	70 Di-n-butylphthalate	149	7.930	7.931	(1.066)	34606	3.17196	52(a)

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5250.D
Report Date: 11-Nov-2011 13:32

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)
$	72 Pyrene-d10	212	8.616	8.606	(0.890)	409746	43.2525	710
*	77 Chrysene-d12	240	9.678	9.668	(1.000)	300719	40.0000	(Q)
	79 bis(2-Ethylhexyl)phthalate	149	9.710	9.700	(1.003)	19245	4.21255	70(a)
$	83 Benzo(a)pyrene-d12	264	10.900	10.891	(0.992)	198609	37.8224	620
*	85 Perylene-d12	264	10.986	10.966	(1.000)	213994	40.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5250.D
Report Date: 11-Nov-2011 13:32

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5250.D
Lab Smp Id: K2198-01A Client Smp ID: H30Q0
Inj Date : 10-NOV-2011 10:23
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-01A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.300	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

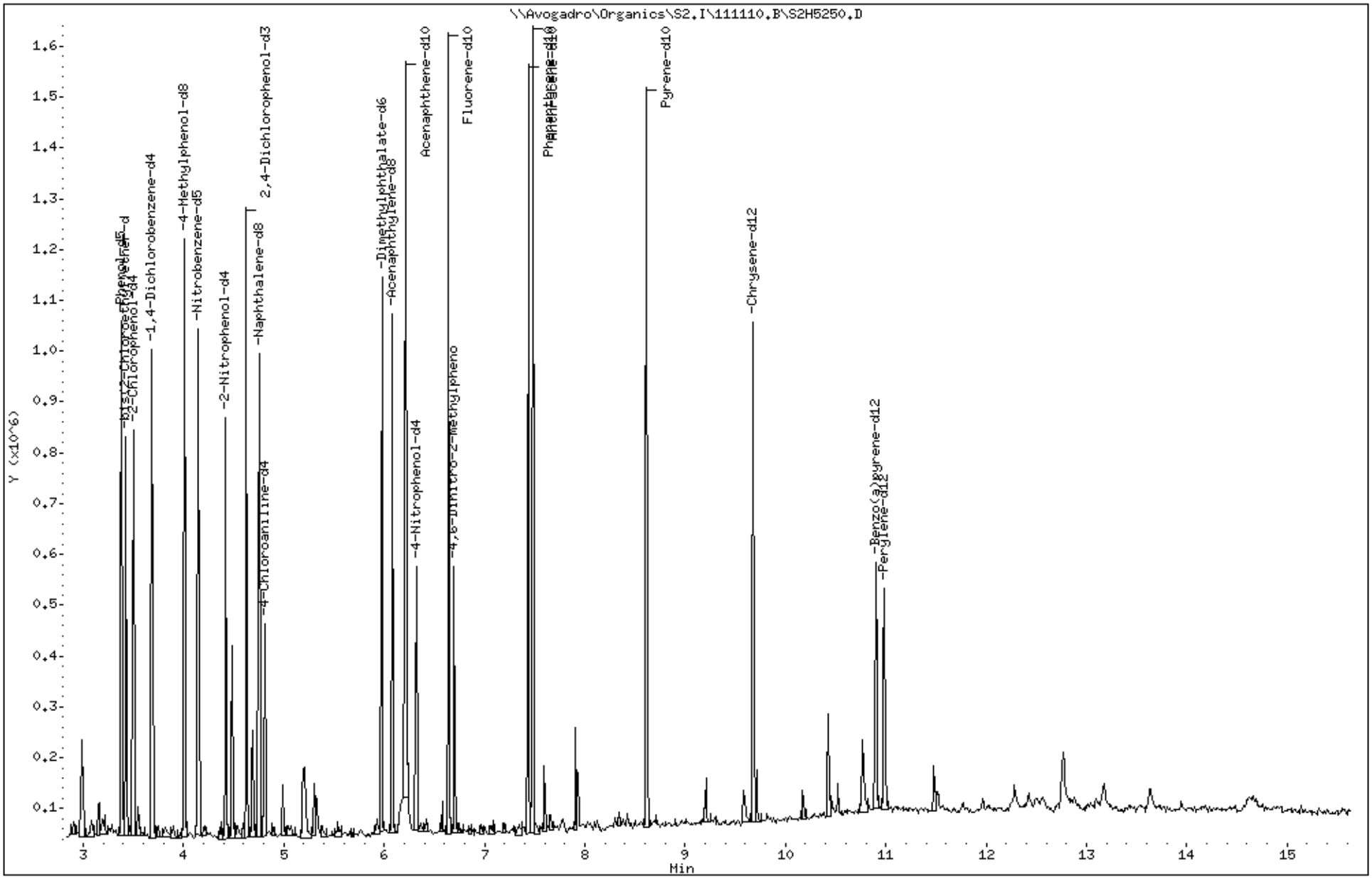
	ISTD	RT	AREA	AMOUNT
* 8	1,4-Dichlorobenzene-d4	3.684	936099	40.000
* 25	Naphthalene-d8	4.756	959078	40.000
* 65	Phenanthrene-d10	7.437	1194537	40.000
* 77	Chrysene-d12	9.678	842869	40.000
* 85	Perylene-d12	10.986	536715	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
2.986	239056	10.2149662	170	0		0	8
2(3H)-Furanone, dihydro-4-hydroxy-					CAS #: 5469-16-9		
4.488	376974	15.7223614	260	90	NIST2002.L	4145	25

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5250.D
Report Date: 11-Nov-2011 13:32

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.692	255360	10.6502355	180	0		0	25
Unknown				CAS #:			
5.206	317706	13.2504818	220	0		0	25
Unknown				CAS #:			
5.303	107269	4.47385248	74	0		0	25
Unknown				CAS #:			
7.598	129585	4.33924097	72	0		0	65
Unknown				CAS #:			
7.909	166955	5.59062583	92	0		0	65
Unknown				CAS #:			
9.206	103887	4.93017599	81	0		0	77
1-Hexacosanol				CAS #: 506-52-5			
9.581	98075	4.65436132	77	91	NIST2002.L	152037	77
9-Octadecenamide, (Z)-				CAS #: 301-02-0			
10.429	204644	15.2516016	250	91	NIST2002.L	106877	85
Unknown				CAS #:			
10.772	280004	20.8679744	340	0		0	85
Unknown				CAS #:			
11.480	123072	9.17223333	150	0		0	85

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5250.D
Date : 10-NOV-2011 10:23
Client ID: H30Q0
Instrument: S2.i
Sample Info: K2198-01A,,62764,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



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Date : 10-NOV-2011 10:23

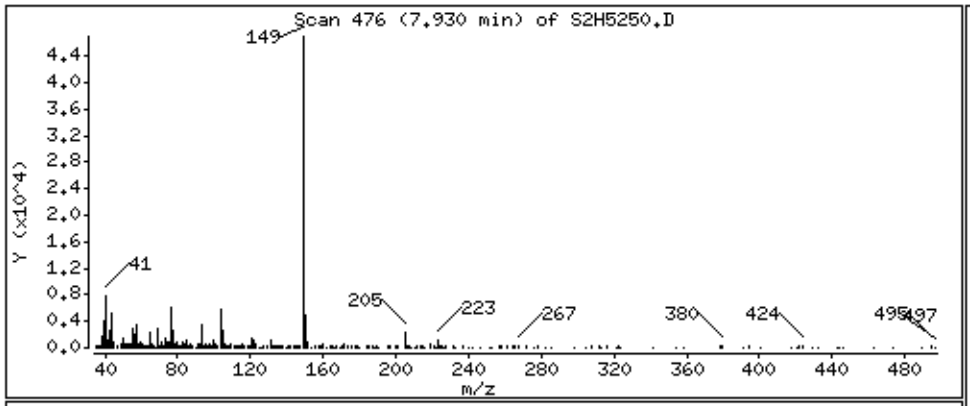
Client ID: H30Q0 Instrument: S2.i

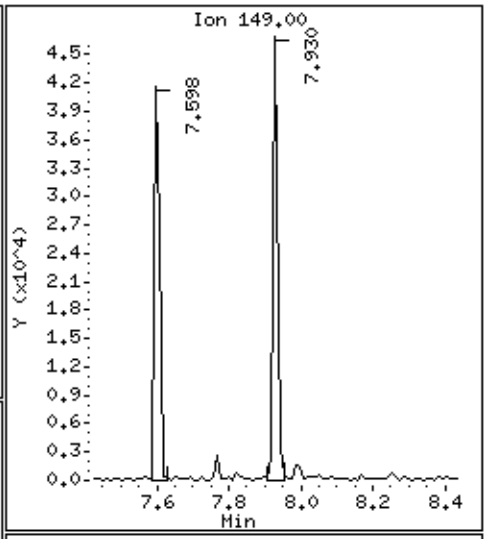
Sample Info: K2198-01A,,62764,,

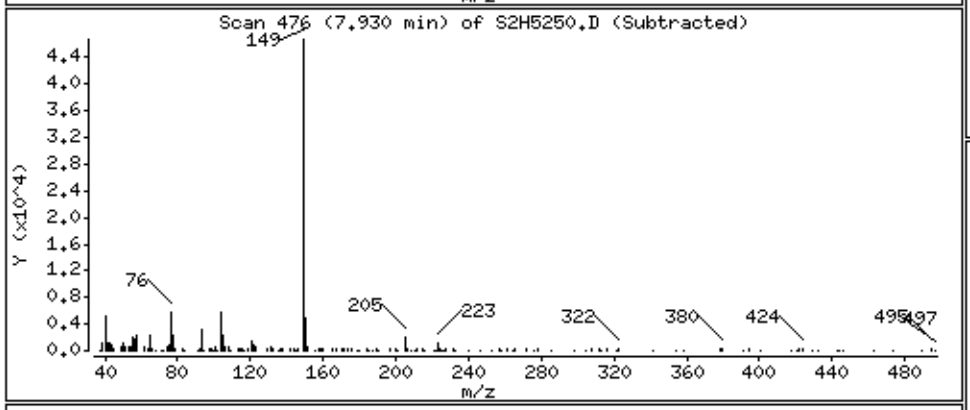
Volume Injected (uL): 2.0 Operator: SRC: LIMS

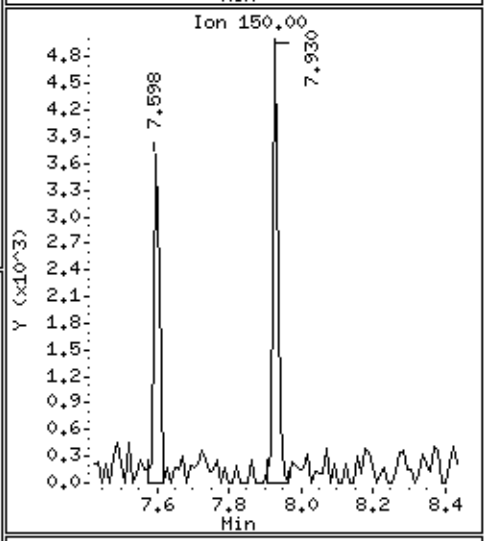
Column phase: RXI-5SILMS Column diameter: 0.25

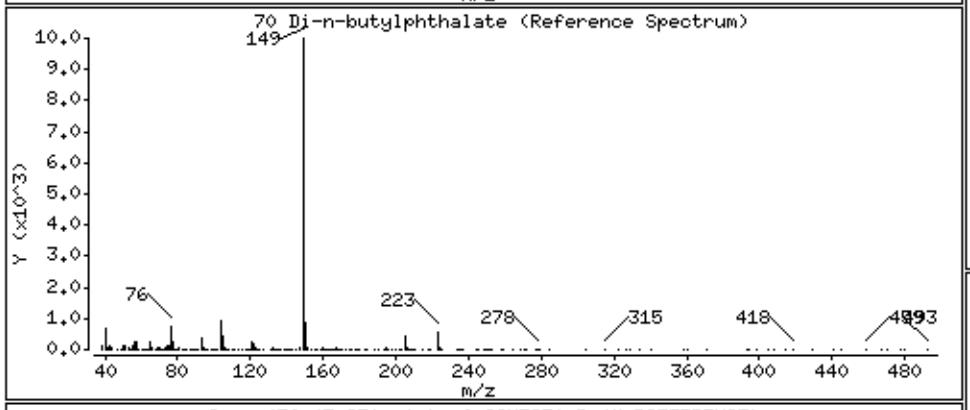
70 Di-n-butylphthalate Concentration: 52 ug/Kg

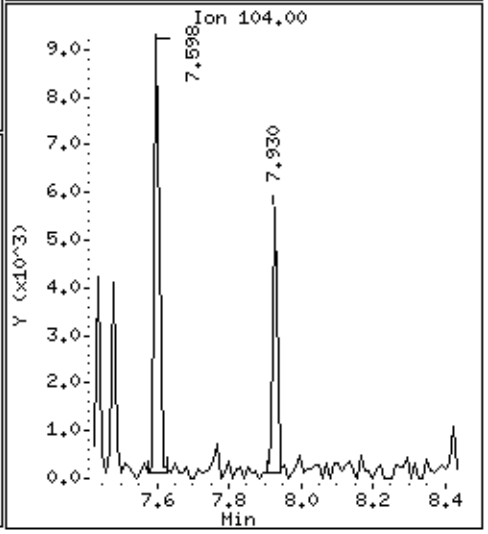


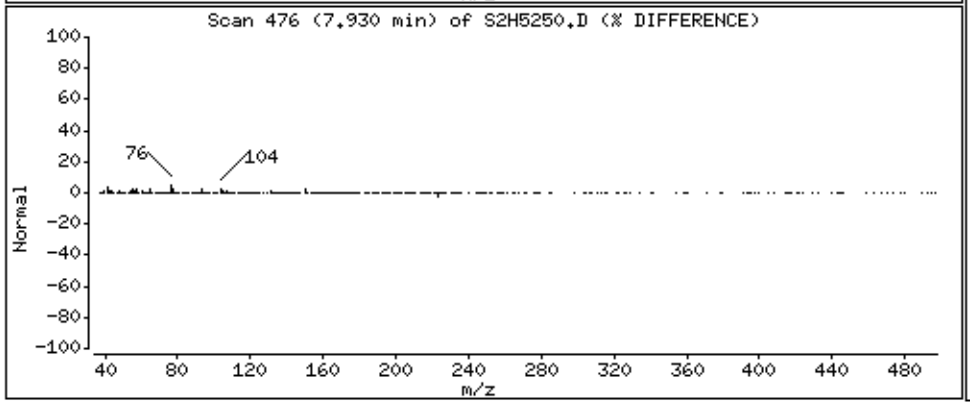












Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5250.D

Date : 10-NOV-2011 10:23

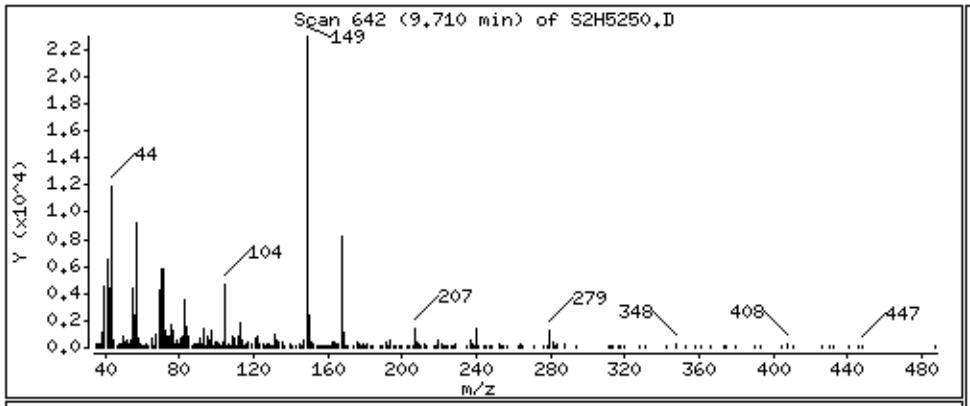
Client ID: H30Q0 Instrument: S2.i

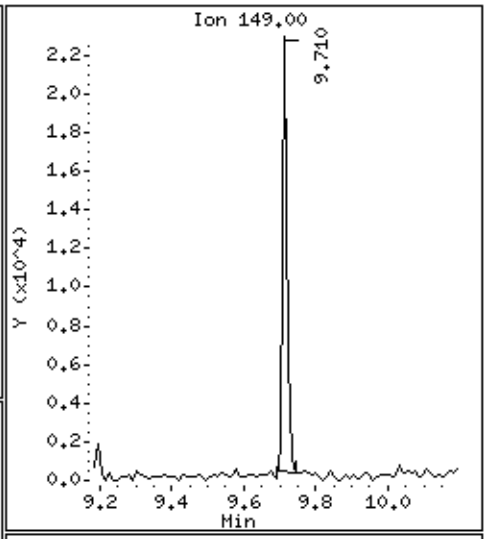
Sample Info: K2198-01A,,62764,,

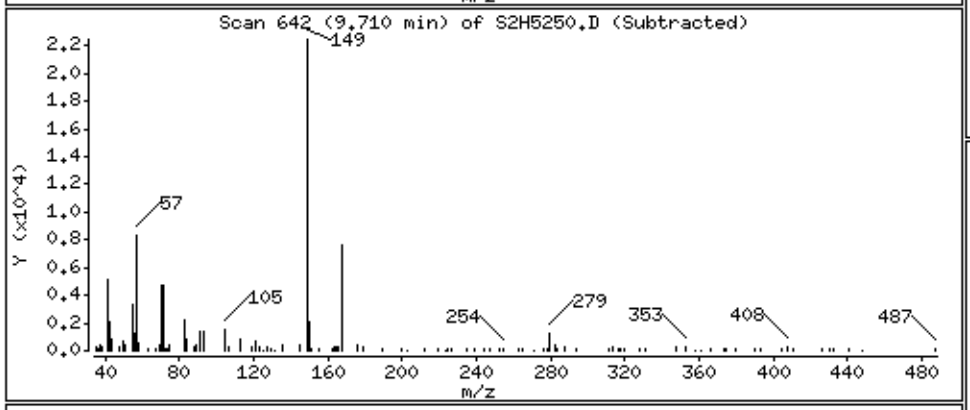
Volume Injected (uL): 2.0 Operator: SRC: LIMS

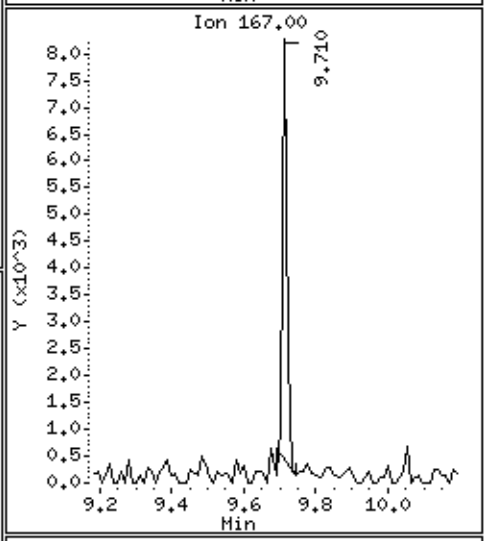
Column phase: RXI-5SILMS Column diameter: 0.25

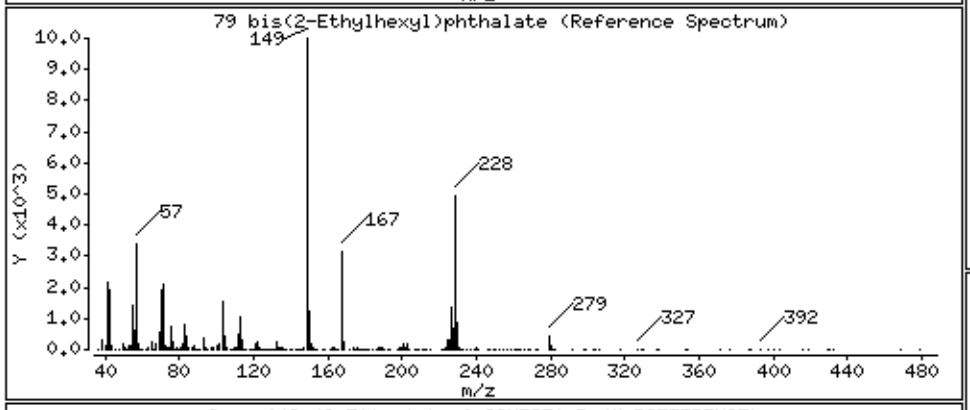
79 bis(2-Ethylhexyl)phthalate Concentration: 70 ug/Kg

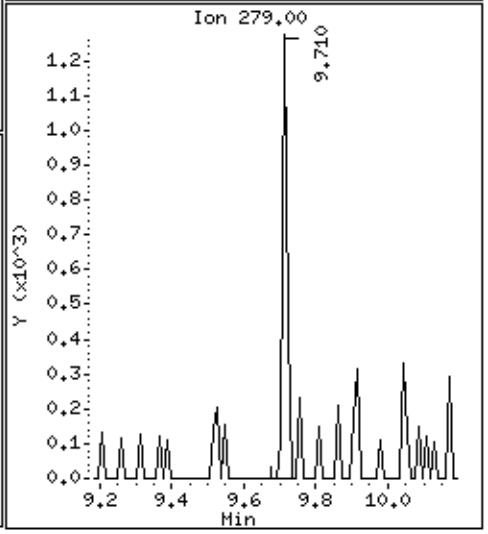


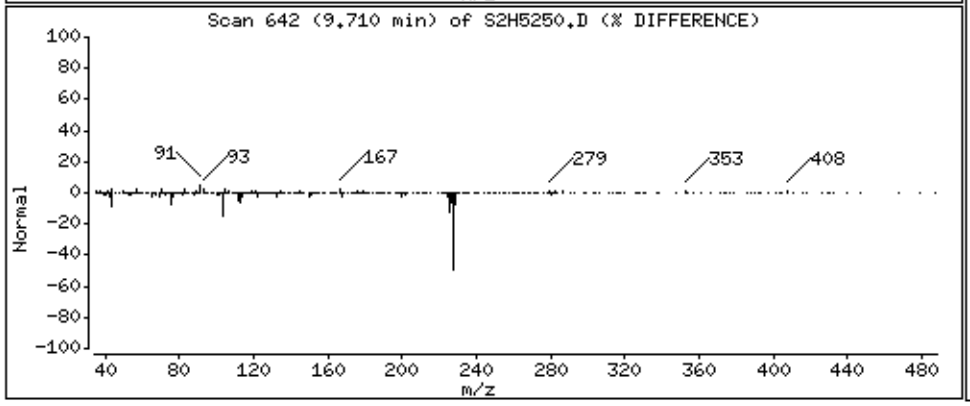












Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5250.D

Date : 10-NOV-2011 10:23

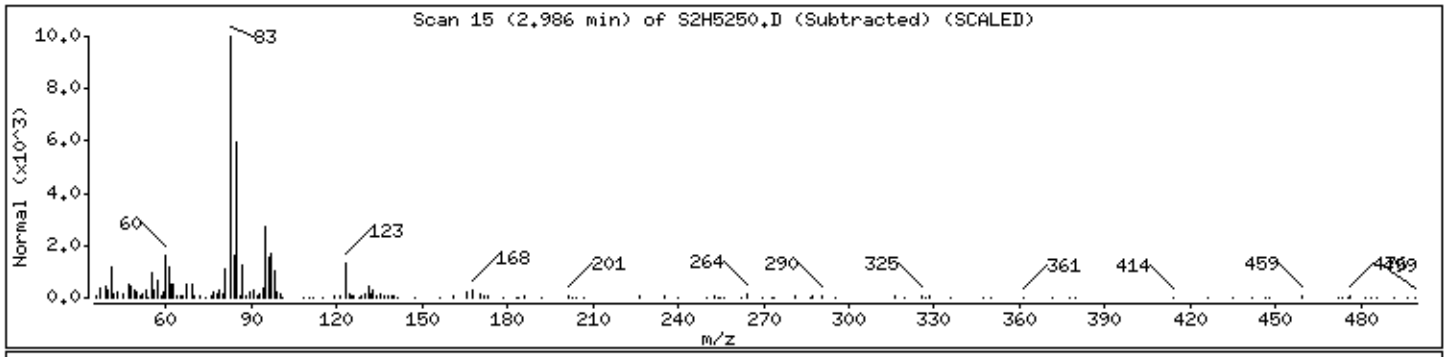
Client ID: H30Q0 Instrument: S2.i

Sample Info: K2198-01A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5250.D

Date : 10-NOV-2011 10:23

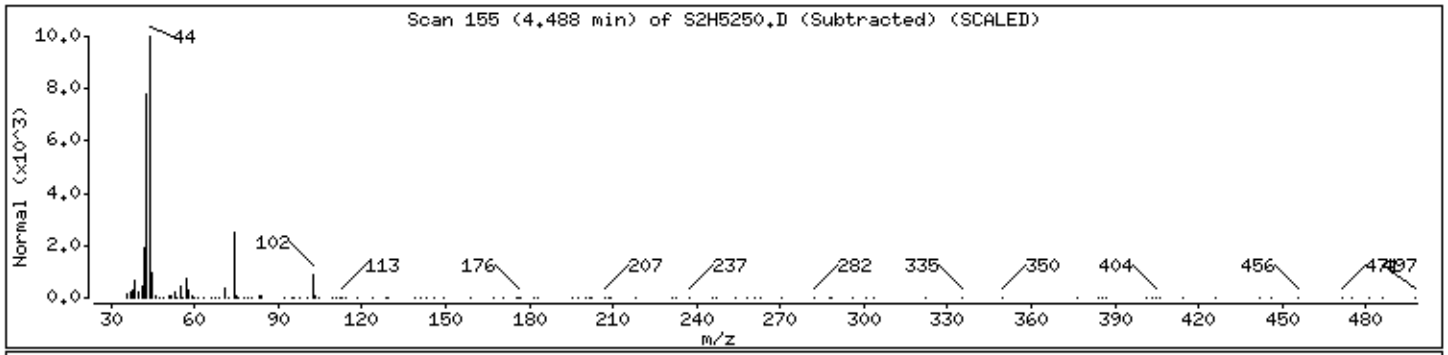
Client ID: H30Q0 Instrument: S2.i

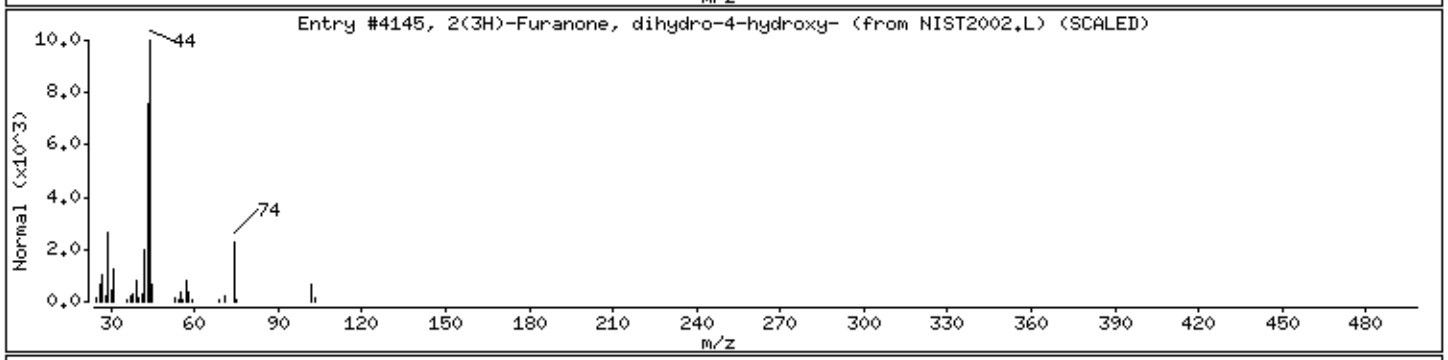
Sample Info: K2198-01A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2(3H)-Furanone, dihydro-4-hydroxy-	5469-16-9	NIST2002.L	4145	90	C4H6O3	102





Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5250.D

Date : 10-NOV-2011 10:23

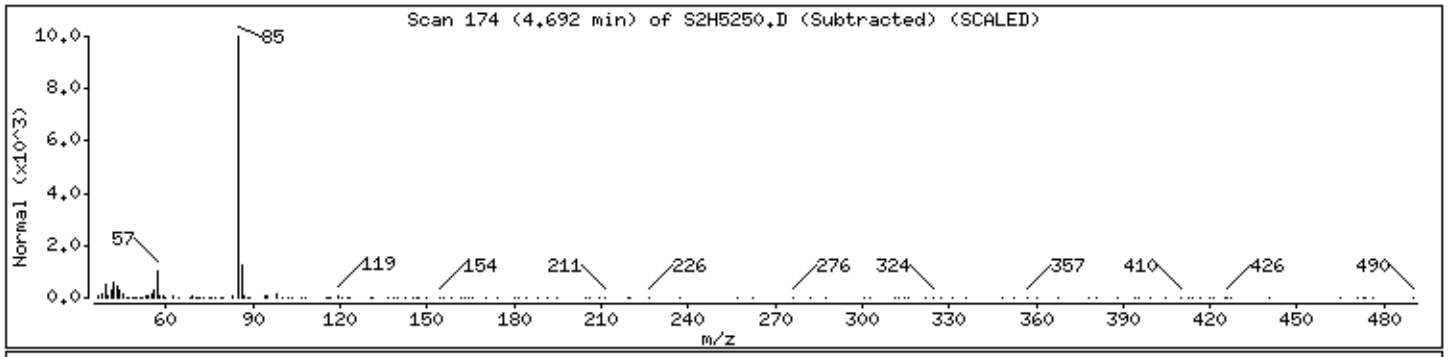
Client ID: H30Q0 Instrument: S2.i

Sample Info: K2198-01A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5250.D

Date : 10-NOV-2011 10:23

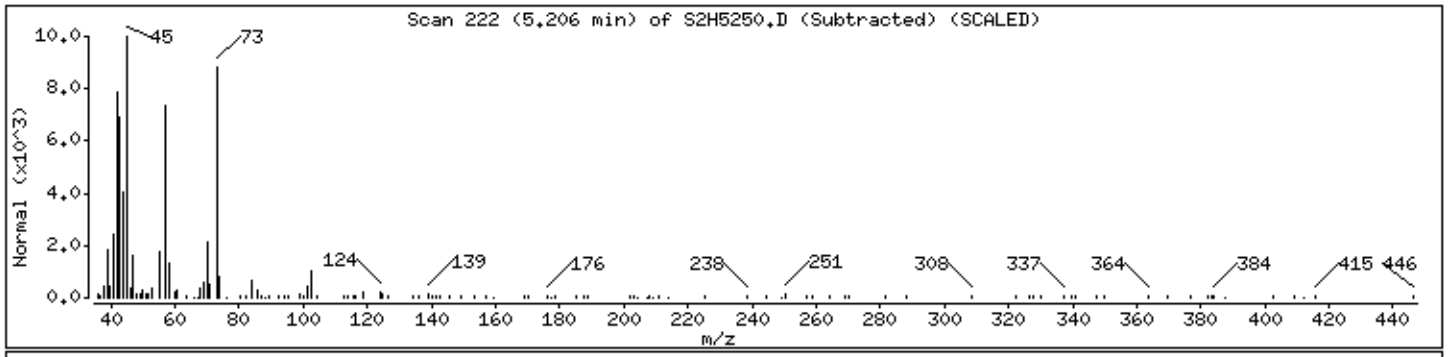
Client ID: H30Q0 Instrument: S2.i

Sample Info: K2198-01A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5250.D

Date : 10-NOV-2011 10:23

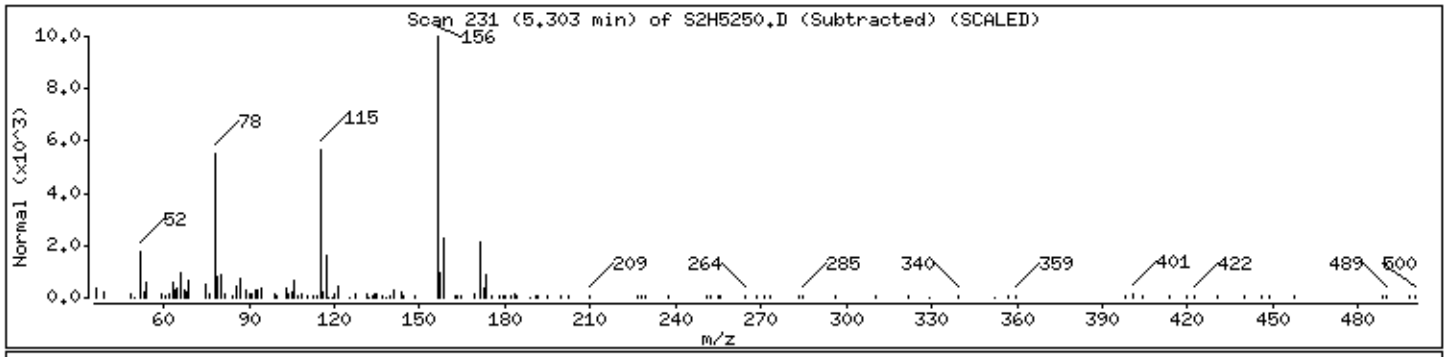
Client ID: H30Q0 Instrument: S2.i

Sample Info: K2198-01A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5250.D

Date : 10-NOV-2011 10:23

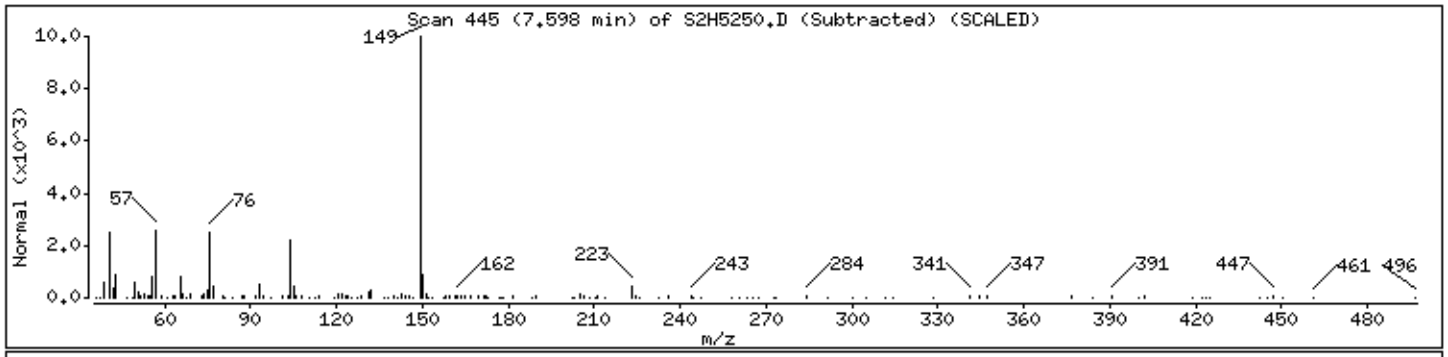
Client ID: H30Q0 Instrument: S2.i

Sample Info: K2198-01A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5250.D

Date : 10-NOV-2011 10:23

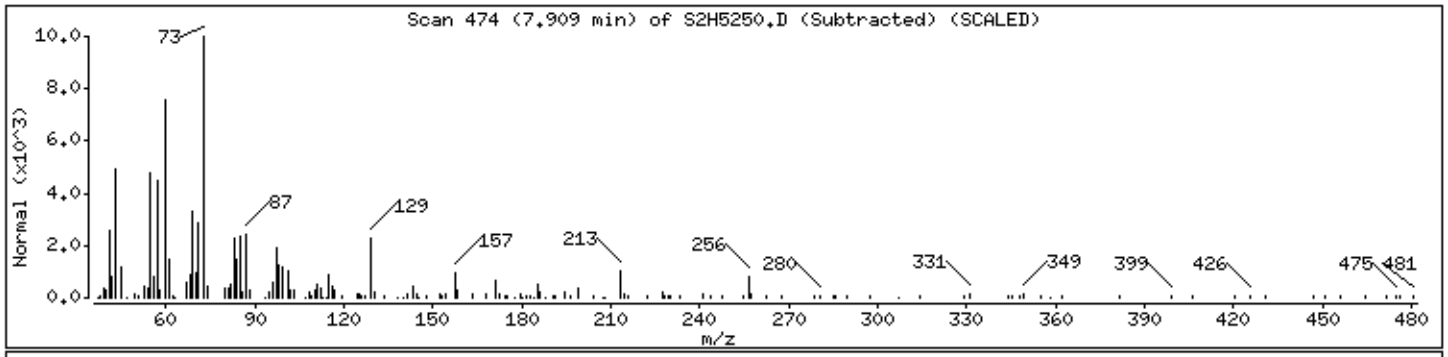
Client ID: H30Q0 Instrument: S2.i

Sample Info: K2198-01A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5250.D

Date : 10-NOV-2011 10:23

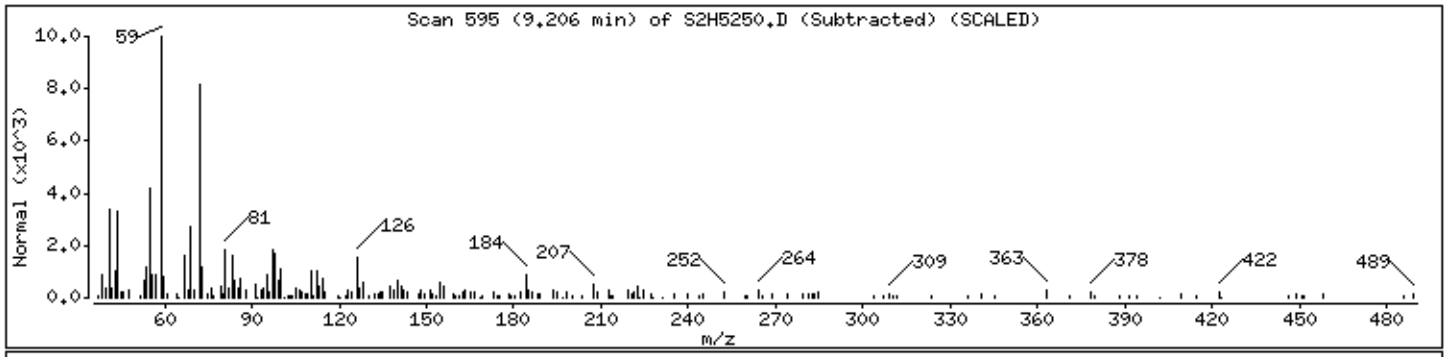
Client ID: H30Q0 Instrument: S2.i

Sample Info: K2198-01A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5250.D

Date : 10-NOV-2011 10:23

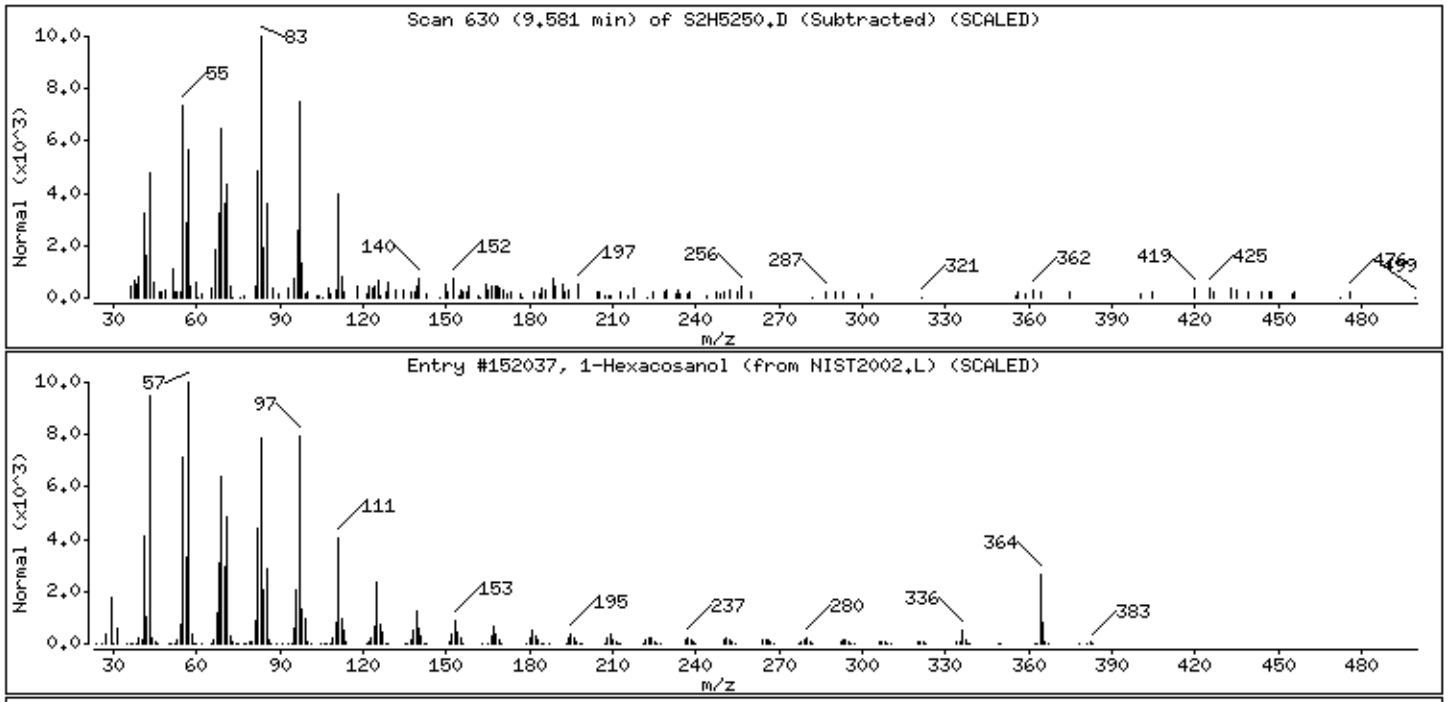
Client ID: H30Q0 Instrument: S2.i

Sample Info: K2198-01A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Hexacosanol	506-52-5	NIST2002.L	152037	91	C26H54O	382



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5250.D

Date : 10-NOV-2011 10:23

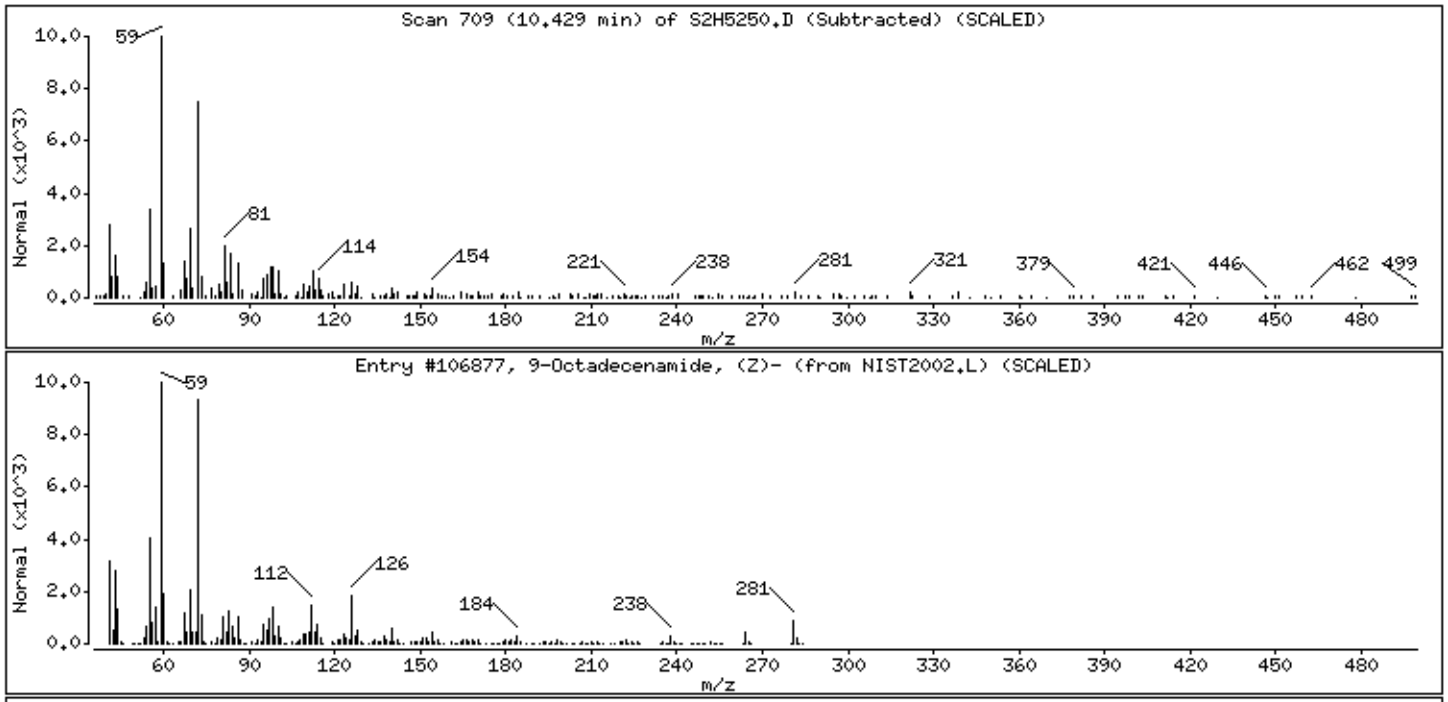
Client ID: H30Q0 Instrument: S2.i

Sample Info: K2198-01A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST2002.L	106877	91	C18H35NO	281



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5250.D

Date : 10-NOV-2011 10:23

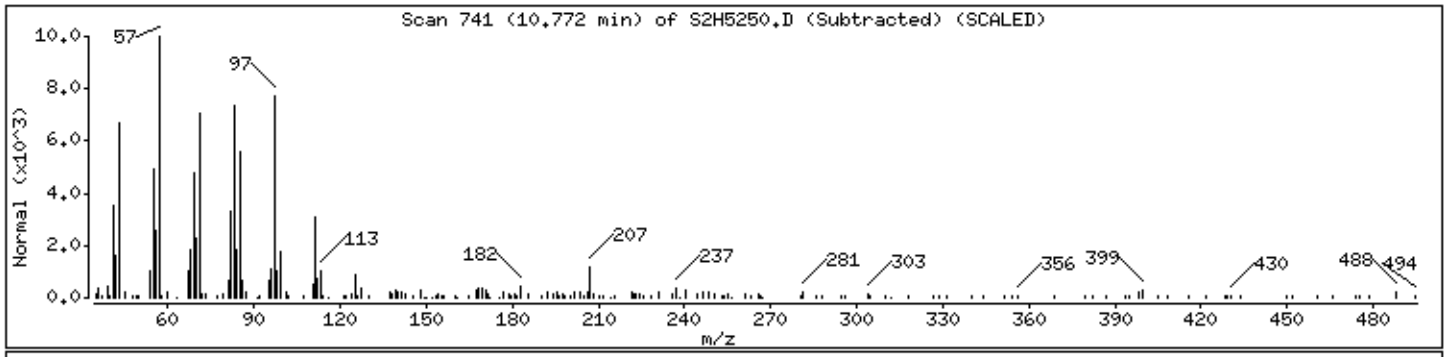
Client ID: H30Q0 Instrument: S2.i

Sample Info: K2198-01A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5250.D

Date : 10-NOV-2011 10:23

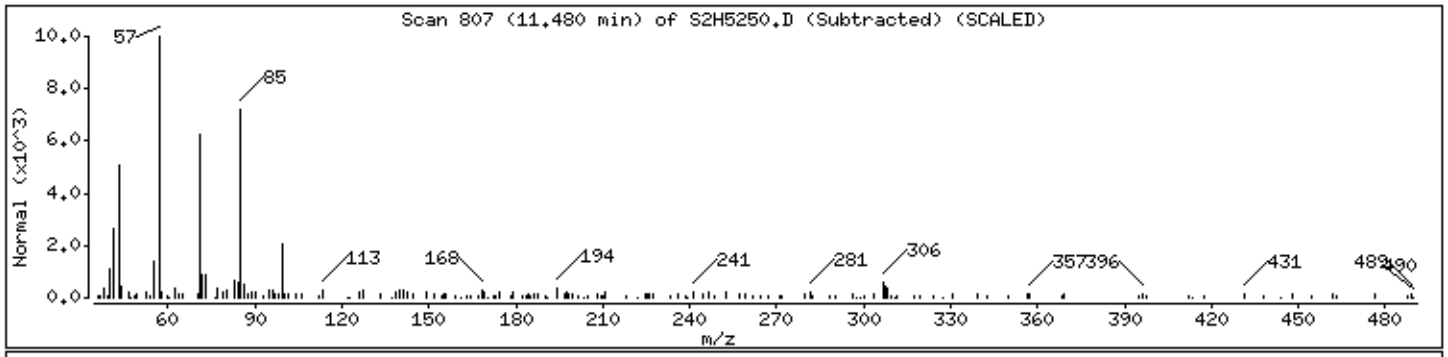
Client ID: H30Q0 Instrument: S2.i

Sample Info: K2198-01A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-02A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: S2H5253.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 22 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: 7.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
100-52-7	Benzaldehyde	220	U
108-95-2	Phenol	220	U
111-44-4	Bis(2-chloroethyl)ether	220	U
95-57-8	2-Chlorophenol	220	U
95-48-7	2-Methylphenol	220	U
108-60-1	2,2´-Oxybis(1-chloropropane)	220	U
98-86-2	Acetophenone	220	U
106-44-5	4-Methylphenol	220	U
621-64-7	N-Nitroso-di-n-propylamine	220	U
67-72-1	Hexachloroethane	220	U
98-95-3	Nitrobenzene	220	U
78-59-1	Isophorone	220	U
88-75-5	2-Nitrophenol	220	U
105-67-9	2,4-Dimethylphenol	220	U
111-91-1	Bis(2-chloroethoxy)methane	220	U
120-83-2	2,4-Dichlorophenol	220	U
91-20-3	Naphthalene	220	U
106-47-8	4-Chloroaniline	220	U
87-68-3	Hexachlorobutadiene	220	U
105-60-2	Caprolactam	220	U
59-50-7	4-Chloro-3-methylphenol	220	U
91-57-6	2-Methylnaphthalene	220	U
77-47-4	Hexachlorocyclopentadiene	220	U
88-06-2	2,4,6-Trichlorophenol	220	U
95-95-4	2,4,5-Trichlorophenol	220	U
92-52-4	1,1´-Biphenyl	220	U
91-58-7	2-Chloronaphthalene	220	U
88-74-4	2-Nitroaniline	420	U
131-11-3	Dimethylphthalate	220	U
606-20-2	2,6-Dinitrotoluene	220	U
208-96-8	Acenaphthylene	220	U
99-09-2	3-Nitroaniline	420	U
83-32-9	Acenaphthene	220	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-02A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: S2H5253.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 22 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: 7.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
51-28-5	2,4-Dinitrophenol	420	U
100-02-7	4-Nitrophenol	420	U
132-64-9	Dibenzofuran	220	U
121-14-2	2,4-Dinitrotoluene	220	U
84-66-2	Diethylphthalate	220	U
86-73-7	Fluorene	220	U
7005-72-3	4-Chlorophenyl-phenylether	220	U
100-01-6	4-Nitroaniline	420	U
534-52-1	4,6-Dinitro-2-methylphenol	420	U
86-30-6	N-Nitrosodiphenylamine (1)	220	U
95-94-3	1,2,4,5-Tetrachlorobenzene	220	U
101-55-3	4-Bromophenyl-phenylether	220	U
118-74-1	Hexachlorobenzene	220	U
1912-24-9	Atrazine	220	U
87-86-5	Pentachlorophenol	420	U
85-01-8	Phenanthrene	220	U
120-12-7	Anthracene	220	U
86-74-8	Carbazole	220	U
84-74-2	Di-n-butylphthalate	43	J
206-44-0	Fluoranthene	220	U
129-00-0	Pyrene	220	U
85-68-7	Butylbenzylphthalate	220	U
91-94-1	3,3´-Dichlorobenzidine	220	U
56-55-3	Benzo(a)anthracene	220	U
218-01-9	Chrysene	220	U
117-81-7	Bis(2-ethylhexyl)phthalate	220	U
117-84-0	Di-n-octylphthalate	220	U
205-99-2	Benzo(b)fluoranthene	220	U
207-08-9	Benzo(k)fluoranthene	220	U
50-32-8	Benzo(a)pyrene	220	U
193-39-5	Indeno(1,2,3-cd)pyrene	220	U
53-70-3	Dibenzo(a,h)anthracene	220	U
191-24-2	Benzo(g,h,i)perylene	220	U
58-90-2	2,3,4,6-Tetrachlorophenol	220	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30Q1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-02A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: S2H5253.D

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 22 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: 7.5 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.986	240	J
02		Unknown-02	3.147	96	J
03	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.487	410	BNJ
04		Unknown-03	4.680	290	J
05		Unknown-04	5.216	350	J
06		Unknown-05	5.302	120	J
07		Unknown-06	6.182	180	J
08		Unknown-07	7.597	110	J
09	544-63-8	Tetradecanoic acid	7.908	190	NJ
10	301-02-0	9-Octadecenamide, (Z)-	9.184	150	NJ
11		Unknown-08	9.559	120	J
12		Unknown-09	10.139	110	J
13	301-02-0	9-Octadecenamide, (Z)-	10.374	550	NJ
14	7683-64-9	Squalene	10.471	140	NJ
15		Unknown-10	10.707	400	J
	E96679€ [2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5253.D
Report Date: 11-Nov-2011 13:32

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5253.D
Lab Smp Id: K2198-02A Client Smp ID: H30Q1
Inj Date : 10-NOV-2011 11:26
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-02A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.300	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
$	2 Phenol-d5	71	3.382	3.373	(0.918)	144407	37.5530	620
$	4 bis(2-Chloroethyl)ether-d8	67	3.425	3.427	(0.930)	185451	34.9980	580
$	6 2-Chlorophenol-d4	132	3.500	3.491	(0.950)	133984	40.2775	660
*	8 1,4-Dichlorobenzene-d4	152	3.682	3.684	(1.000)	122116	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.004	4.006	(1.087)	221754	42.5359	700
$	16 Nitrobenzene-d5	128	4.144	4.145	(0.871)	69268	39.5088	650
$	19 2-Nitrophenol-d4	143	4.422	4.424	(0.930)	85860	44.3618	730
$	23 2,4-Dichlorophenol-d3	165	4.626	4.628	(0.973)	174864	49.4919	820
*	25 Naphthalene-d8	136	4.755	4.746	(1.000)	336655	40.0000	
$	27 4-Chloroaniline-d4	131	4.808	4.810	(1.011)	30927	9.85828	160(aQ)
$	40 Dimethylphthalate-d6	166	5.967	5.968	(0.960)	397320	38.9891	640
$	43 Acenaphthylene-d8	160	6.074	6.076	(0.978)	458280	34.5829	570
*	46 Acenaphthene-d10	164	6.213	6.204	(1.000)	277157	40.0000	
$	49 4-Nitrophenol-d4	143	6.320	6.312	(1.017)	61573	41.9266	690
$	54 Fluorene-d10	176	6.642	6.633	(1.069)	346855	37.0542	610
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.696	6.698	(0.900)	77969	36.3741	600
*	65 Phenanthrene-d10	188	7.436	7.438	(1.000)	549310	40.0000	
$	67 Anthracene-d10	188	7.479	7.480	(1.006)	566389	36.0960	600
	70 Di-n-butylphthalate	149	7.929	7.931	(1.066)	27403	2.01293	33(a)

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5253.D
Report Date: 11-Nov-2011 13:32

		QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ug/Kg)
$	72 Pyrene-d10	212	8.605	8.606	(0.891)	485295	39.1787	650(R)
*	77 Chrysene-d12	240	9.655	9.668	(1.000)	393200	40.0000	(Q)
$	83 Benzo(a)pyrene-d12	264	10.857	10.891	(0.993)	241085	36.5920	600
*	85 Perylene-d12	264	10.932	10.966	(1.000)	268495	40.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5253.D
Report Date: 11-Nov-2011 13:32

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5253.D
Lab Smp Id: K2198-02A Client Smp ID: H30Q1
Inj Date : 10-NOV-2011 11:26
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-02A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.300	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

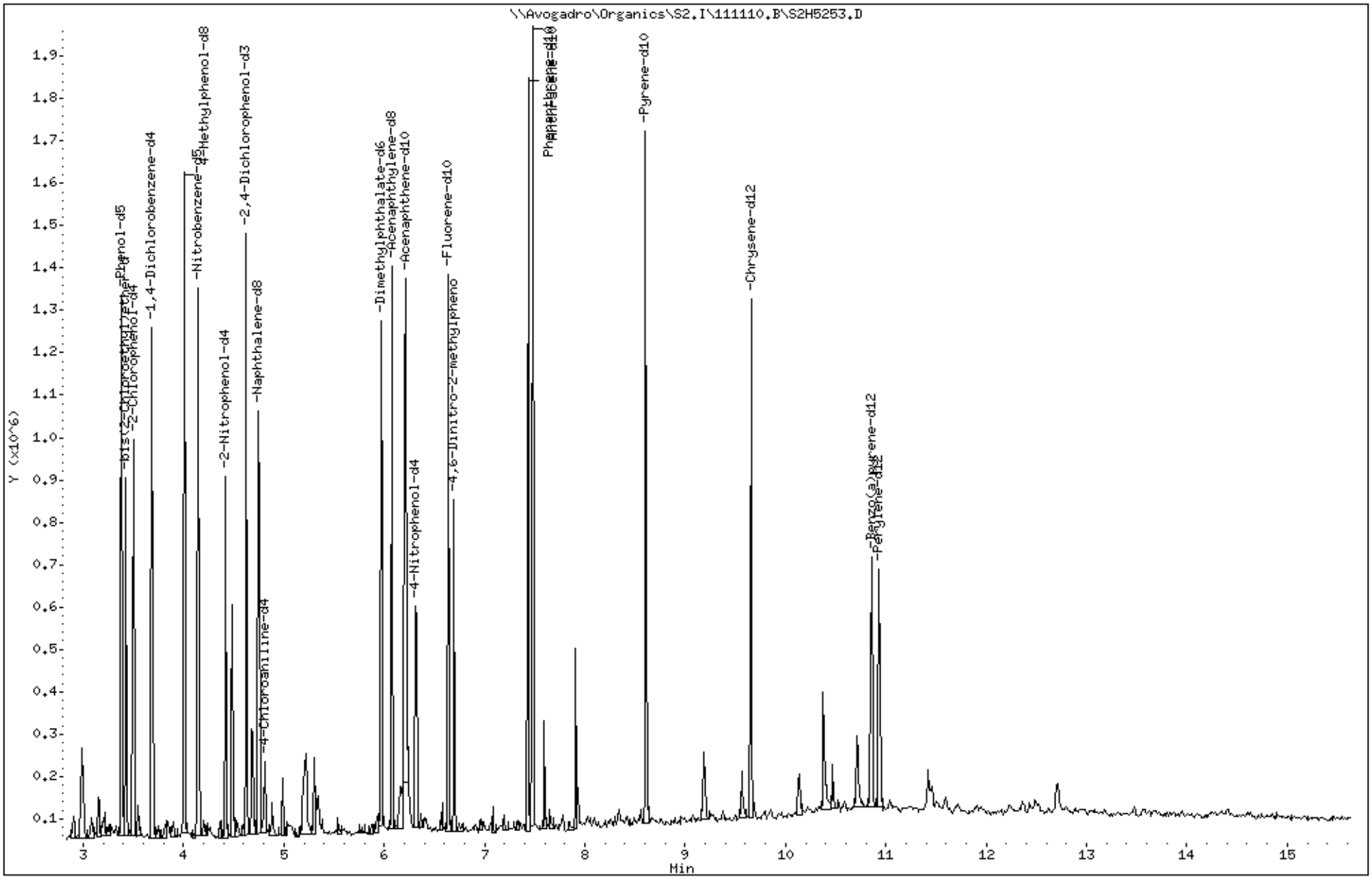
ISTD		RT	AREA	AMOUNT
* 8	1,4-Dichlorobenzene-d4	3.683	1110303	40.000
* 25	Naphthalene-d8	4.755	1162217	40.000
* 46	Acenaphthene-d10	6.214	1456671	40.000
* 65	Phenanthrene-d10	7.436	1525751	40.000
* 77	Chrysene-d12	9.656	1122278	40.000
* 85	Perylene-d12	10.932	651410	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.986	314949	11.3464286	190	0	0		8

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5253.D
Report Date: 11-Nov-2011 13:32

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
3.147	125569	4.52378625	75	0		0	8
2(3H)-Furanone, dihydro-4-hydroxy-				CAS #: 5469-16-9			
4.487	557479	19.1867515	320	90	NIST2002.L	4145	25
Unknown				CAS #:			
4.680	393348	13.5378522	220	0		0	25
Unknown				CAS #:			
5.216	475311	16.3587743	270	0		0	25
Unknown				CAS #:			
5.302	157194	5.41014132	89	0		0	25
Unknown				CAS #:			
6.182	301481	8.27863041	140	0		0	46
Unknown				CAS #:			
7.597	193876	5.08277343	84	0		0	65
Tetradecanoic acid				CAS #: 544-63-8			
7.908	342512	8.97949398	150	93	NIST2002.L	75071	65
9-Octadecenamide, (Z)-				CAS #: 301-02-0			
9.184	199583	7.11350055	120	87	NIST2002.L	106877	77
Unknown				CAS #:			
9.559	158277	5.64126492	93	0		0	77
Unknown				CAS #:			
10.139	140338	5.00189237	83	0		0	77
9-Octadecenamide, (Z)-				CAS #: 301-02-0			
10.374	418937	25.7249191	420	87	NIST2002.L	106877	85
Squalene				CAS #: 7683-64-9			
10.471	111069	6.82023131	110	87	NIST2002.L	158503	85
Unknown				CAS #:			
10.707	309848	19.0262590	310	0		0	85

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5253.D
Date : 10-NOV-2011 11:26
Client ID: H30Q1
Instrument: S2.i
Sample Info: K2198-02A,,62764,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5253.D

Date : 10-NOV-2011 11:26

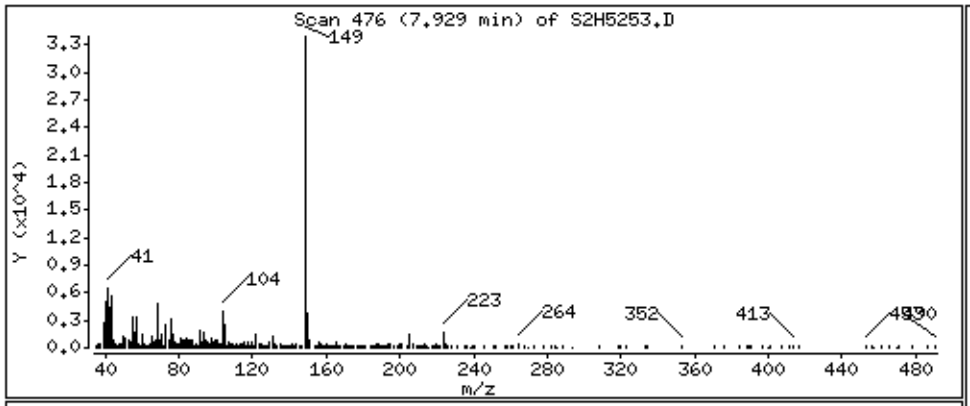
Client ID: H30Q1 Instrument: S2.i

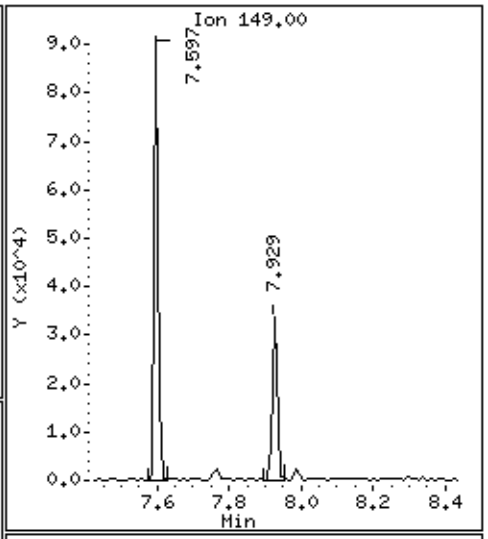
Sample Info: K2198-02A,,62764,,

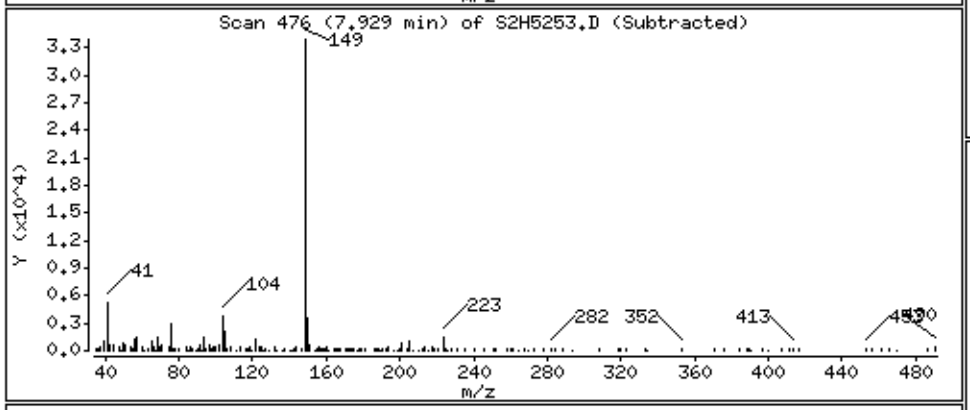
Volume Injected (uL): 2.0 Operator: SRC: LIMS

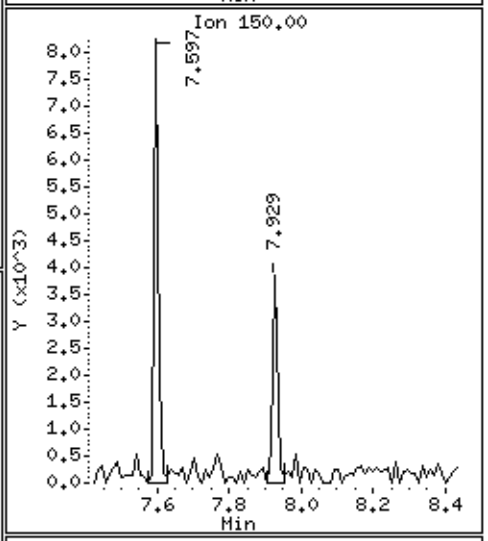
Column phase: RXI-5SILMS Column diameter: 0.25

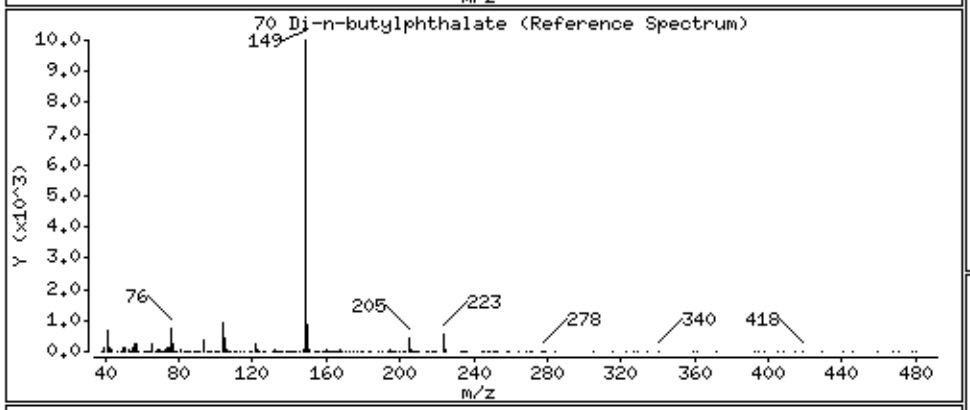
70 Di-n-butylphthalate Concentration: 33 ug/Kg

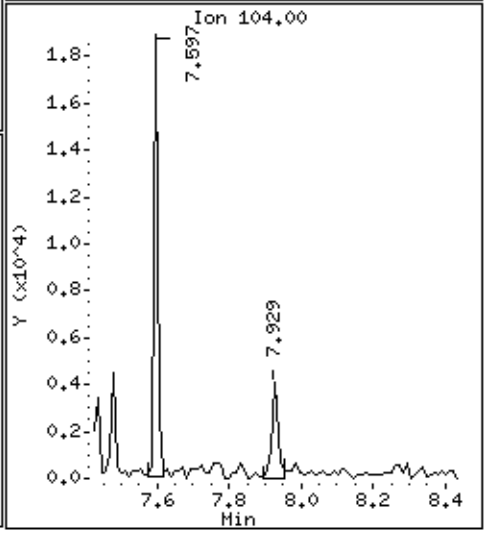


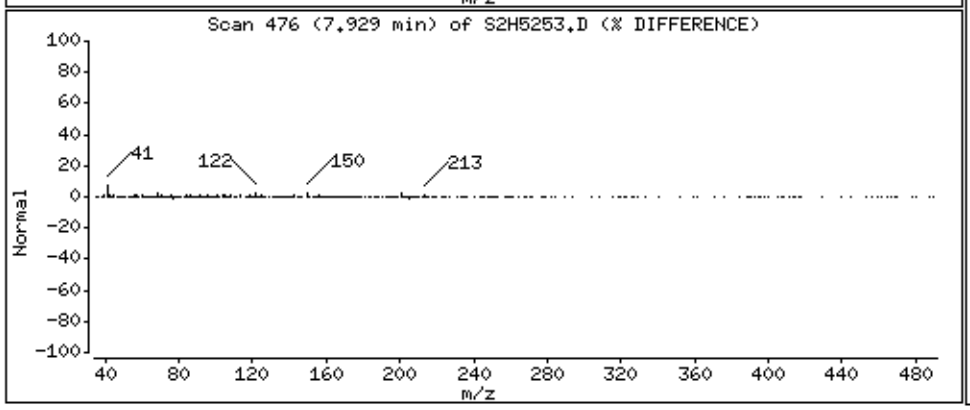












Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5253.D

Date : 10-NOV-2011 11:26

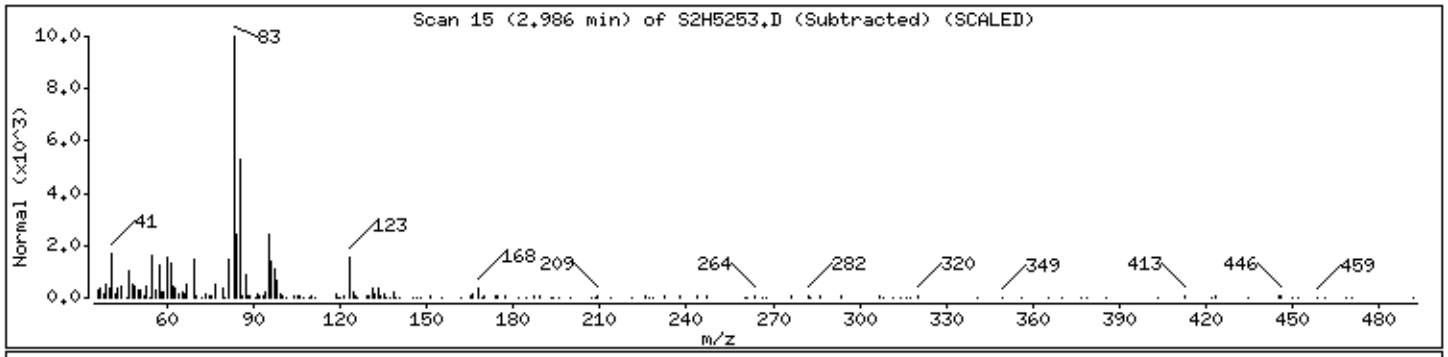
Client ID: H30Q1 Instrument: S2.i

Sample Info: K2198-02A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5253.D

Date : 10-NOV-2011 11:26

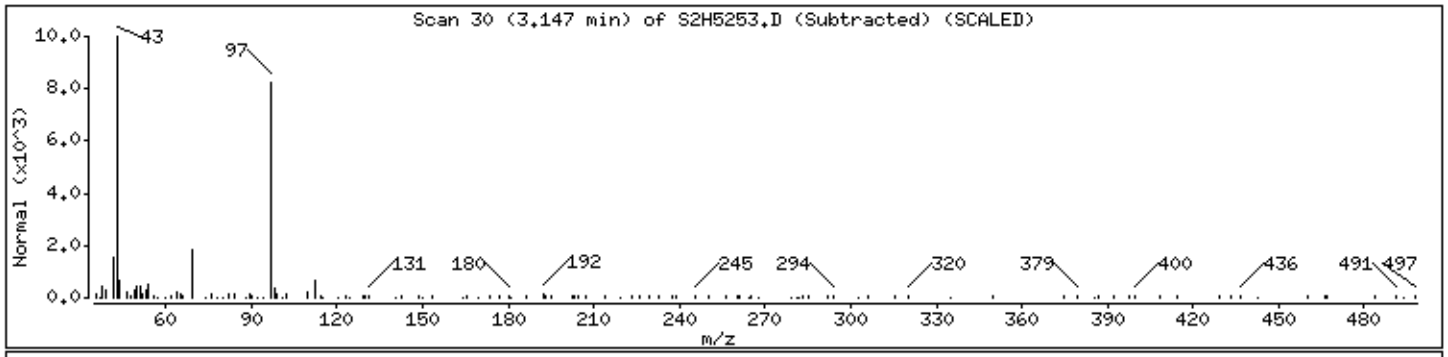
Client ID: H30Q1 Instrument: S2.i

Sample Info: K2198-02A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5253.D

Date : 10-NOV-2011 11:26

Client ID: H30Q1 Instrument: S2.i

Sample Info: K2198-02A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
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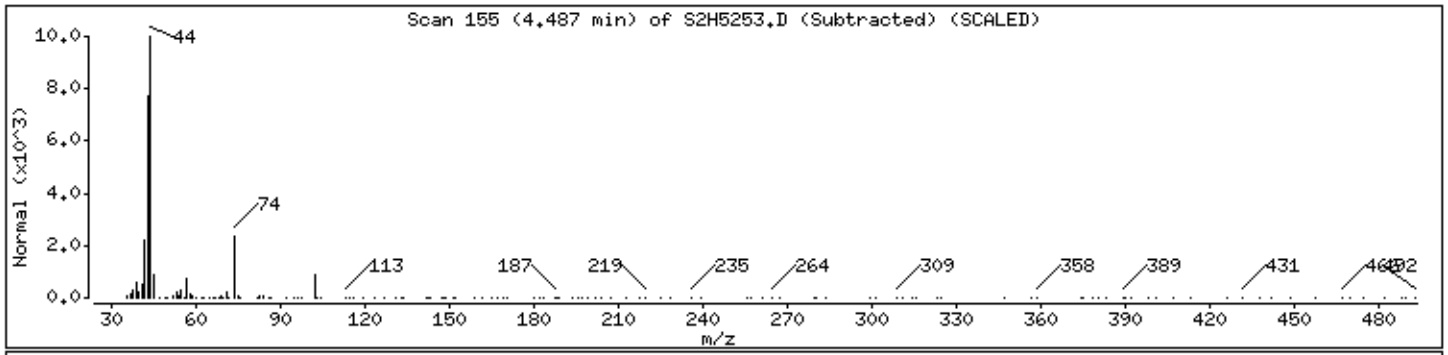
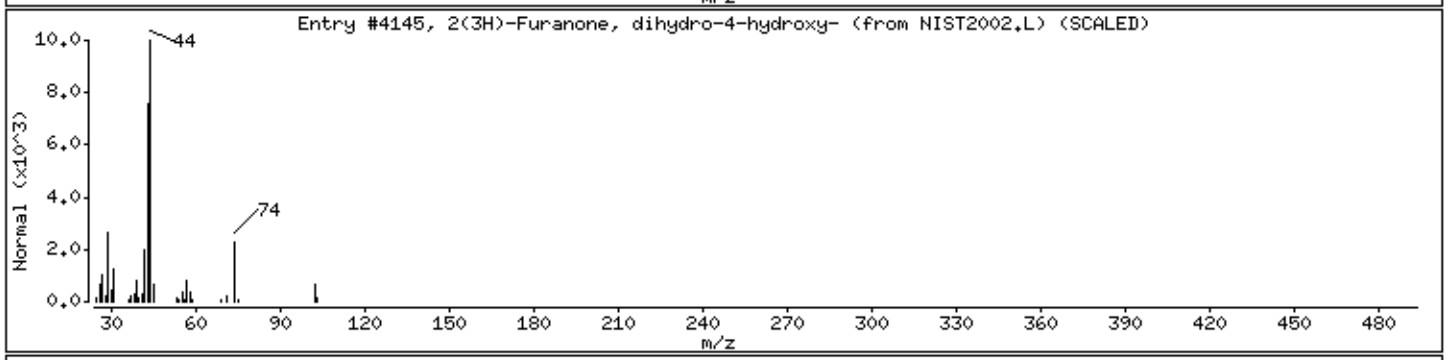




Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5253.D

Date : 10-NOV-2011 11:26

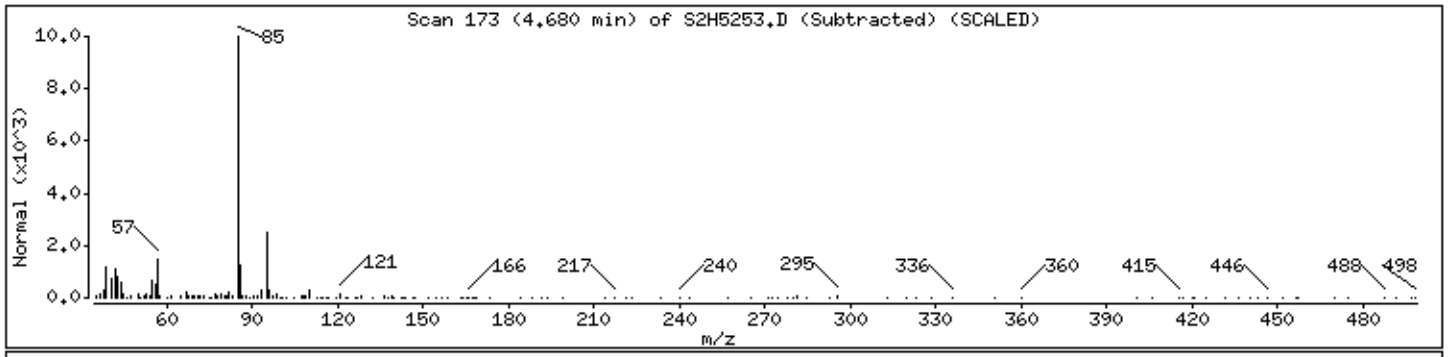
Client ID: H30Q1 Instrument: S2.i

Sample Info: K2198-02A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5253.D

Date : 10-NOV-2011 11:26

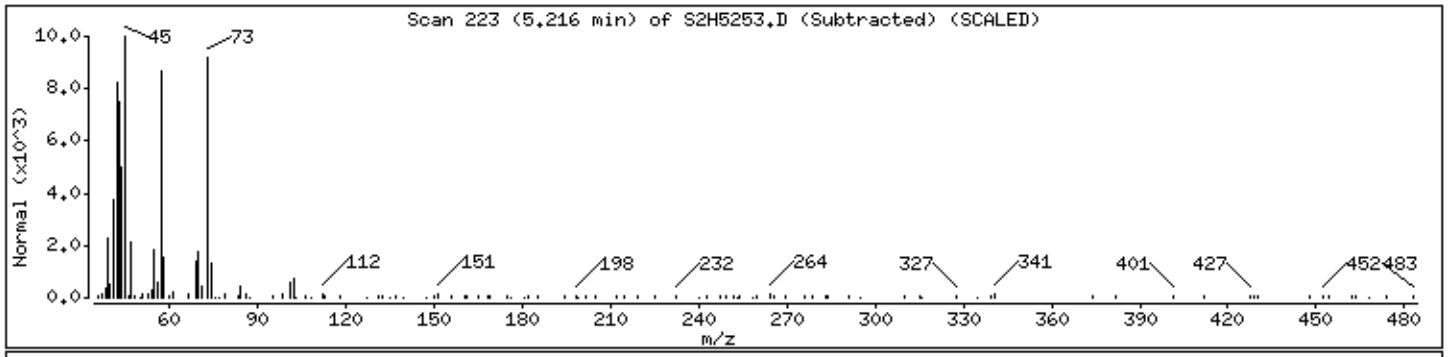
Client ID: H30Q1 Instrument: S2.i

Sample Info: K2198-02A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5253.D

Date : 10-NOV-2011 11:26

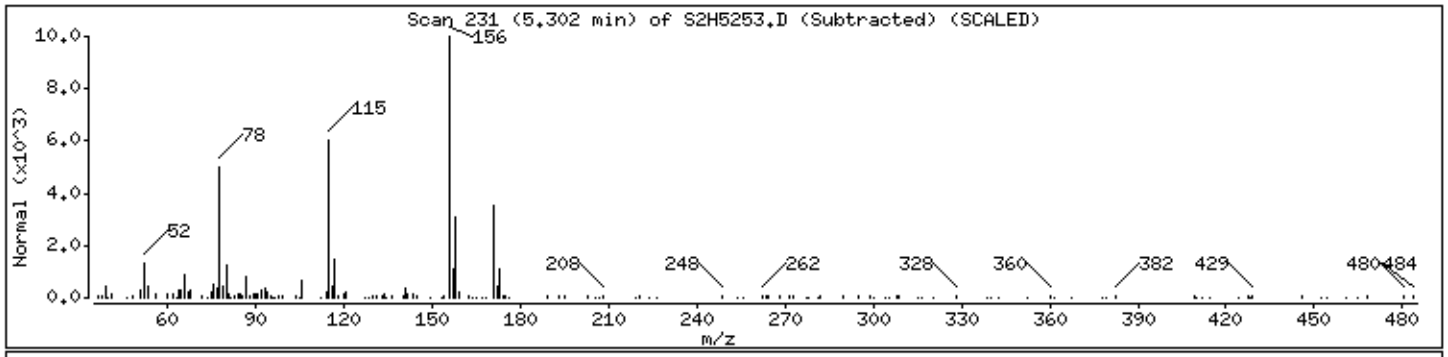
Client ID: H30Q1 Instrument: S2.i

Sample Info: K2198-02A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5253.D

Date : 10-NOV-2011 11:26

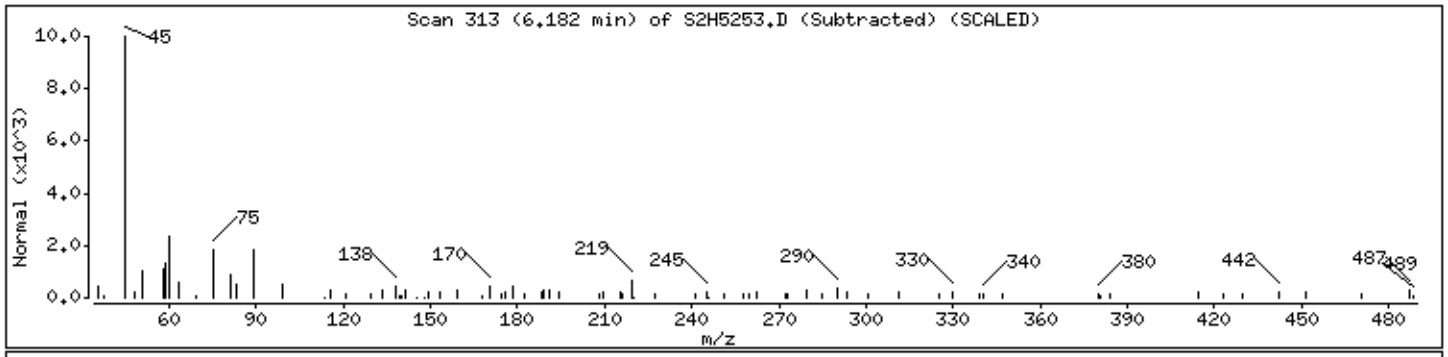
Client ID: H30Q1 Instrument: S2.i

Sample Info: K2198-02A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5253.D

Date : 10-NOV-2011 11:26

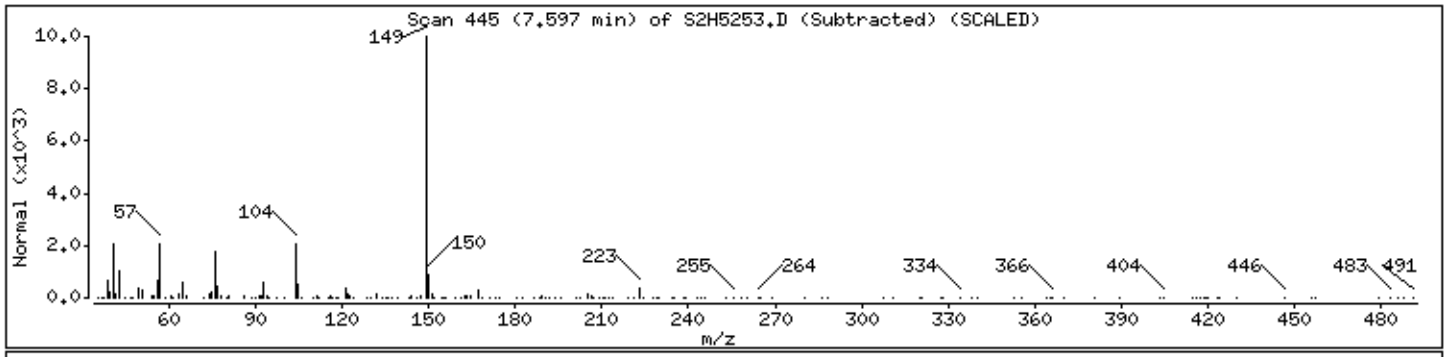
Client ID: H30Q1 Instrument: S2.i

Sample Info: K2198-02A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5253.D

Date : 10-NOV-2011 11:26

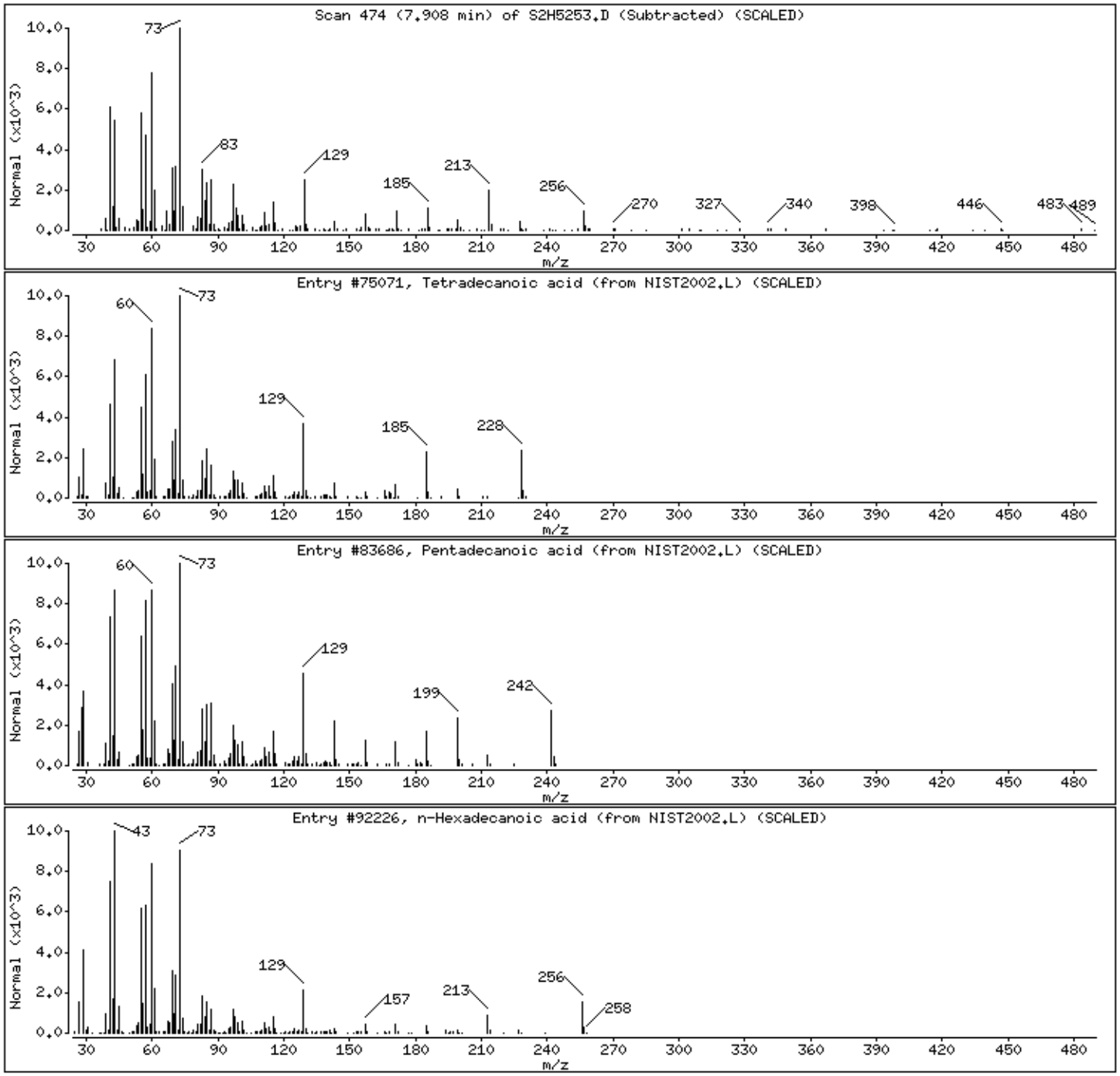
Client ID: H30Q1 Instrument: S2.i

Sample Info: K2198-02A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Tetradecanoic acid	544-63-8	NIST2002.L	75071	93	C14H28O2	228
Pentadecanoic acid	1002-84-2	NIST2002.L	83686	93	C15H30O2	242
n-Hexadecanoic acid	57-10-3	NIST2002.L	92226	90	C16H32O2	256



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5253.D

Date : 10-NOV-2011 11:26

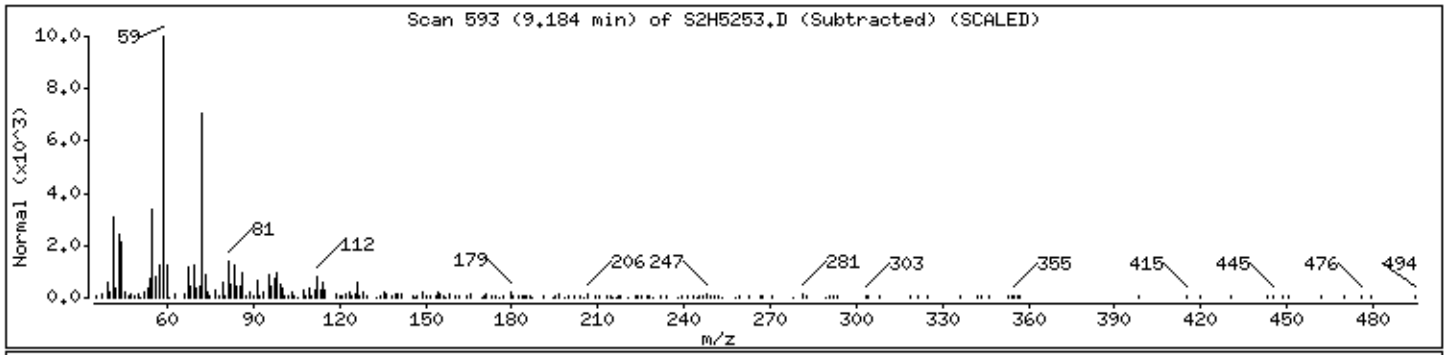
Client ID: H30Q1 Instrument: S2.i

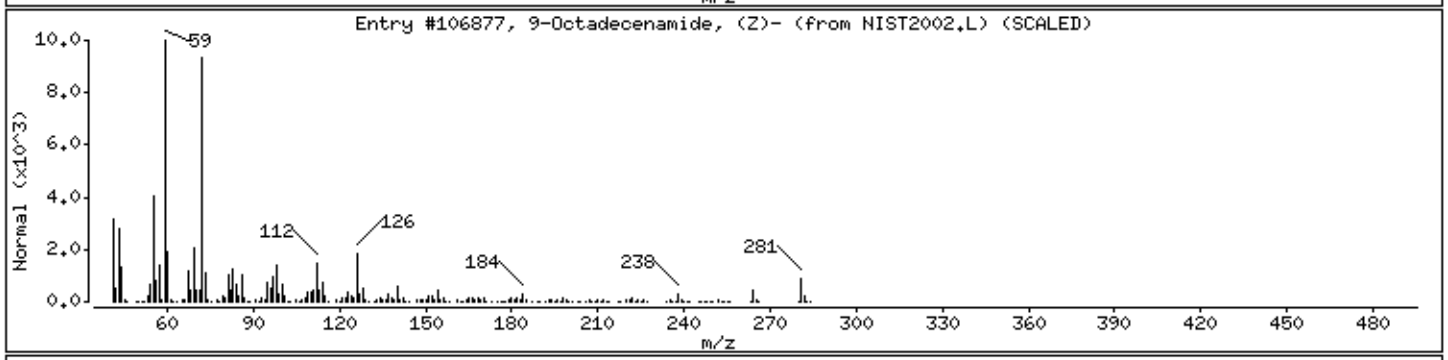
Sample Info: K2198-02A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST2002.L	106877	87	C18H35NO	281





Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5253.D

Date : 10-NOV-2011 11:26

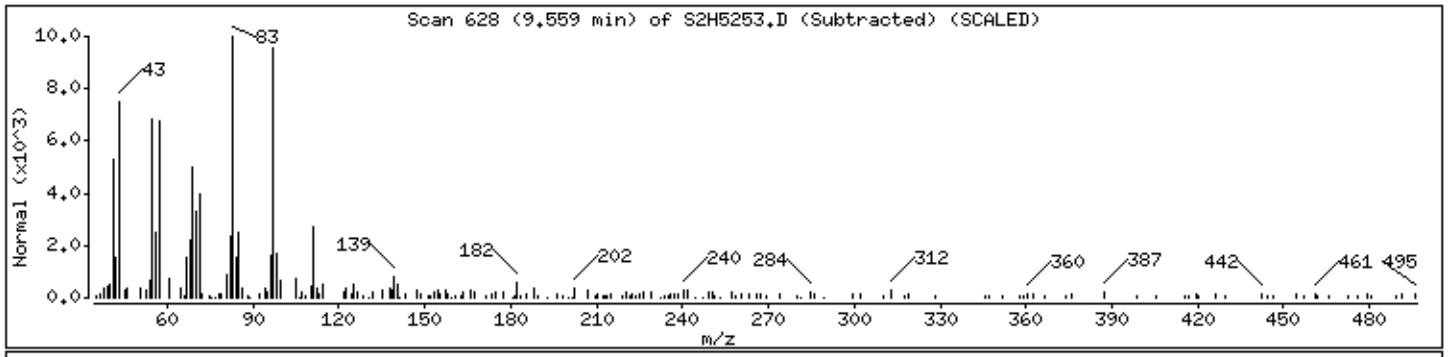
Client ID: H30Q1 Instrument: S2.i

Sample Info: K2198-02A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5253.D

Date : 10-NOV-2011 11:26

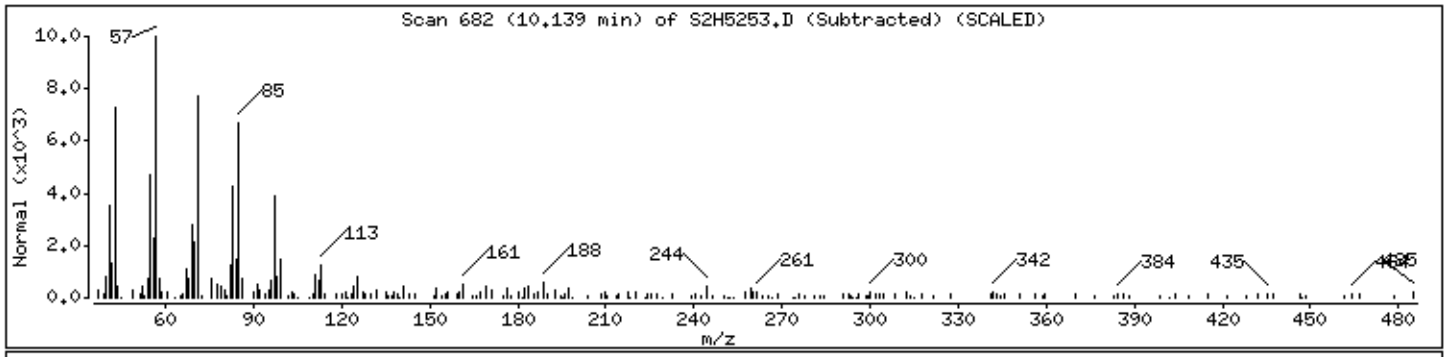
Client ID: H30Q1 Instrument: S2.i

Sample Info: K2198-02A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5253.D

Date : 10-NOV-2011 11:26

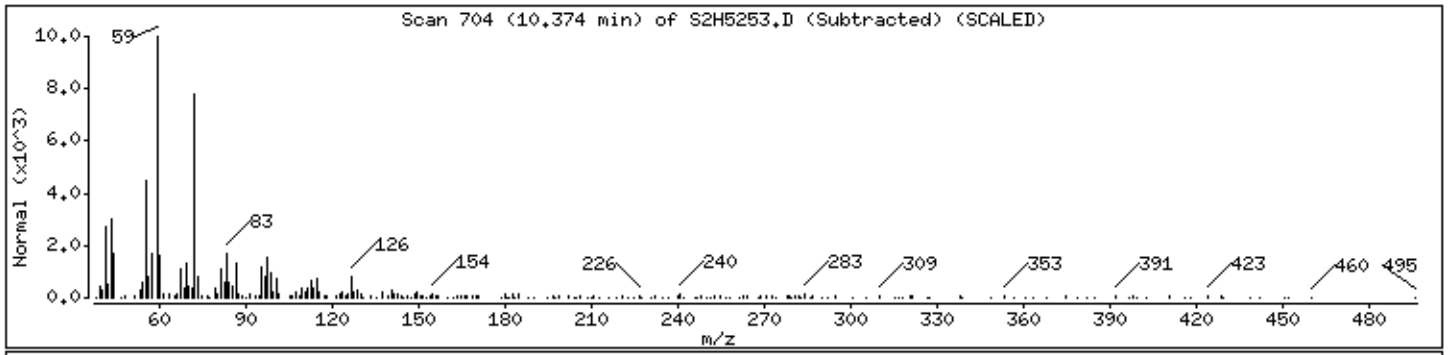
Client ID: H30Q1 Instrument: S2.i

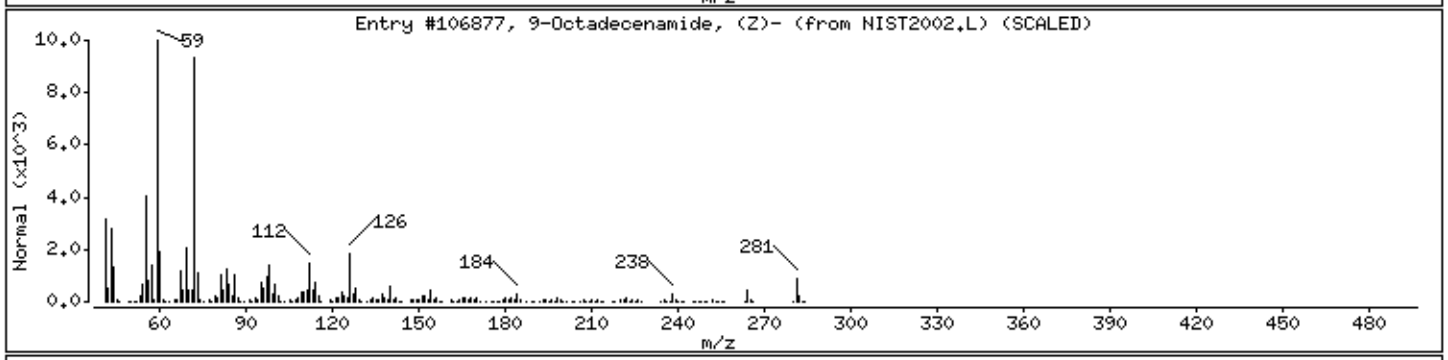
Sample Info: K2198-02A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST2002.L	106877	87	C18H35NO	281





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Date : 10-NOV-2011 11:26

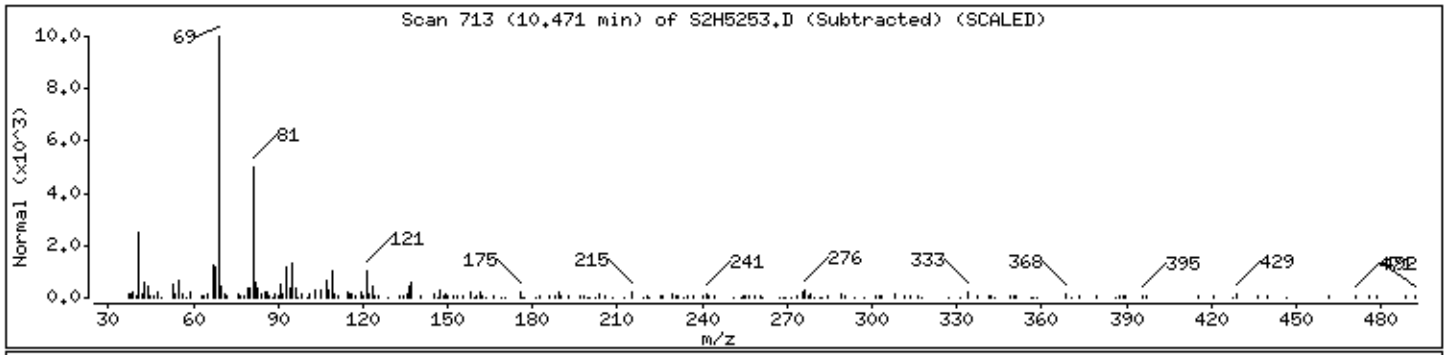
Client ID: H30Q1 Instrument: S2.i

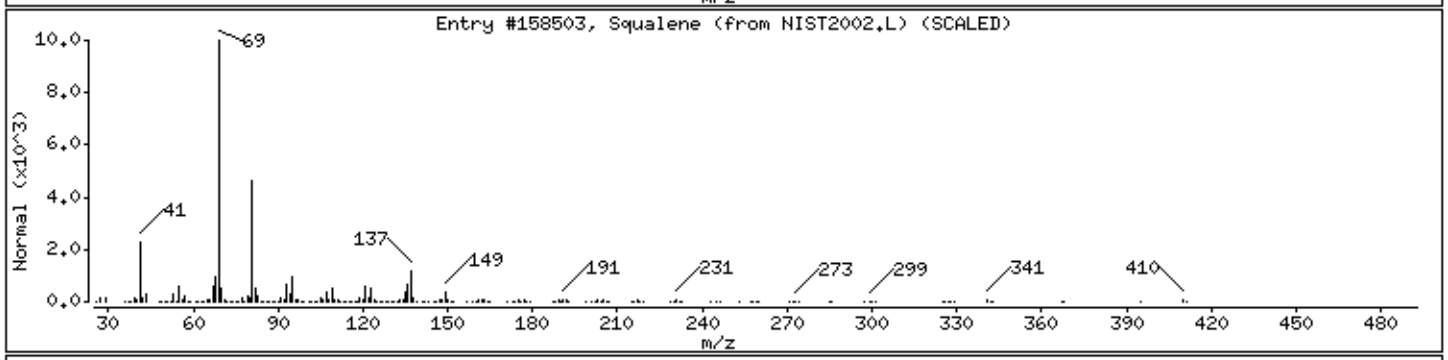
Sample Info: K2198-02A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Squalene	7683-64-9	NIST2002.L	158503	87	C30H50	410





Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5253.D

Date : 10-NOV-2011 11:26

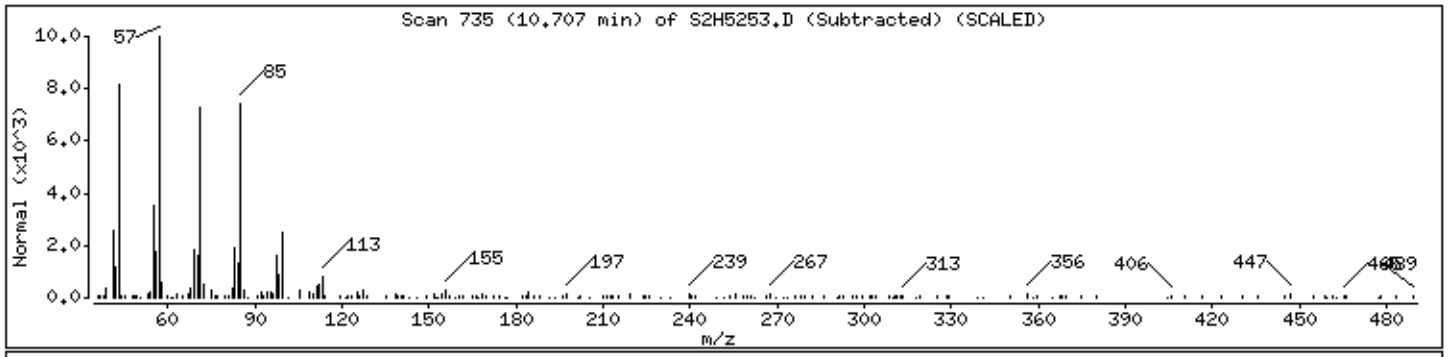
Client ID: H30Q1 Instrument: S2.i

Sample Info: K2198-02A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q2

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-03A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: S2H5254.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 16 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: 7.7 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
100-52-7	Benzaldehyde	200	U
108-95-2	Phenol	200	U
111-44-4	Bis(2-chloroethyl)ether	200	U
95-57-8	2-Chlorophenol	200	U
95-48-7	2-Methylphenol	200	U
108-60-1	2,2´-Oxybis(1-chloropropane)	200	U
98-86-2	Acetophenone	200	U
106-44-5	4-Methylphenol	200	U
621-64-7	N-Nitroso-di-n-propylamine	200	U
67-72-1	Hexachloroethane	200	U
98-95-3	Nitrobenzene	200	U
78-59-1	Isophorone	200	U
88-75-5	2-Nitrophenol	200	U
105-67-9	2,4-Dimethylphenol	200	U
111-91-1	Bis(2-chloroethoxy)methane	200	U
120-83-2	2,4-Dichlorophenol	200	U
91-20-3	Naphthalene	200	U
106-47-8	4-Chloroaniline	200	U
87-68-3	Hexachlorobutadiene	200	U
105-60-2	Caprolactam	200	U
59-50-7	4-Chloro-3-methylphenol	200	U
91-57-6	2-Methylnaphthalene	200	U
77-47-4	Hexachlorocyclopentadiene	200	U
88-06-2	2,4,6-Trichlorophenol	200	U
95-95-4	2,4,5-Trichlorophenol	200	U
92-52-4	1,1´-Biphenyl	200	U
91-58-7	2-Chloronaphthalene	200	U
88-74-4	2-Nitroaniline	390	U
131-11-3	Dimethylphthalate	200	U
606-20-2	2,6-Dinitrotoluene	200	U
208-96-8	Acenaphthylene	200	U
99-09-2	3-Nitroaniline	390	U
83-32-9	Acenaphthene	200	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q2

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-03A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: S2H5254.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 16 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: 7.7 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
51-28-5	2,4-Dinitrophenol	390	U
100-02-7	4-Nitrophenol	390	U
132-64-9	Dibenzofuran	200	U
121-14-2	2,4-Dinitrotoluene	200	U
84-66-2	Diethylphthalate	200	U
86-73-7	Fluorene	200	U
7005-72-3	4-Chlorophenyl-phenylether	200	U
100-01-6	4-Nitroaniline	390	U
534-52-1	4,6-Dinitro-2-methylphenol	390	U
86-30-6	N-Nitrosodiphenylamine (1)	200	U
95-94-3	1,2,4,5-Tetrachlorobenzene	200	U
101-55-3	4-Bromophenyl-phenylether	200	U
118-74-1	Hexachlorobenzene	200	U
1912-24-9	Atrazine	200	U
87-86-5	Pentachlorophenol	390	U
85-01-8	Phenanthrene	200	U
120-12-7	Anthracene	200	U
86-74-8	Carbazole	200	U
84-74-2	Di-n-butylphthalate	45	J
206-44-0	Fluoranthene	200	U
129-00-0	Pyrene	200	U
85-68-7	Butylbenzylphthalate	200	U
91-94-1	3,3´-Dichlorobenzidine	200	U
56-55-3	Benzo(a)anthracene	200	U
218-01-9	Chrysene	200	U
117-81-7	Bis(2-ethylhexyl)phthalate	200	U
117-84-0	Di-n-octylphthalate	200	U
205-99-2	Benzo(b)fluoranthene	200	U
207-08-9	Benzo(k)fluoranthene	200	U
50-32-8	Benzo(a)pyrene	200	U
193-39-5	Indeno(1,2,3-cd)pyrene	200	U
53-70-3	Dibenzo(a,h)anthracene	200	U
191-24-2	Benzo(g,h,i)perylene	200	U
58-90-2	2,3,4,6-Tetrachlorophenol	200	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30Q2

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-03A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: S2H5254.D

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 16 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: 7.7 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.986	160	J
02	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.488	370	BNJ
03		Unknown-02	4.681	250	J
04		Unknown-03	5.217	350	J
05		Unknown-04	5.303	180	J
06		Unknown-05	7.597	100	J
07		Unknown-06	7.908	150	J
08	301-02-0	9-Octadecenamide, (Z)-	9.184	110	NJ
09		Unknown-07	10.353	390	J
10	55282-11-6	Heneicosane, 11-(1-ethylprop	10.686	260	NJ
	E96679[2]	Total Alkanes	N/A	100	J

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5254.D
Report Date: 11-Nov-2011 13:32

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5254.D
Lab Smp Id: K2198-03A Client Smp ID: H30Q2
Inj Date : 10-NOV-2011 11:47
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-03A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.100	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
$	2 Phenol-d5	71	3.383	3.373	(0.918)	138634	42.4500	710
$	4 bis(2-Chloroethyl)ether-d8	67	3.425	3.427	(0.930)	164164	36.4791	610
$	6 2-Chlorophenol-d4	132	3.500	3.491	(0.951)	115607	40.9209	680
*	8 1,4-Dichlorobenzene-d4	152	3.683	3.684	(1.000)	103710	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.005	4.006	(1.087)	190833	43.1012	720
$	16 Nitrobenzene-d5	128	4.144	4.145	(0.871)	61961	40.2690	670(Q)
$	19 2-Nitrophenol-d4	143	4.423	4.424	(0.930)	76286	44.9111	750(Q)
$	23 2,4-Dichlorophenol-d3	165	4.626	4.628	(0.973)	158584	51.1427	850
*	25 Naphthalene-d8	136	4.755	4.746	(1.000)	295457	40.0000	
$	27 4-Chloroaniline-d4	131	4.809	4.810	(1.011)	54878	19.9321	330(Q)
$	40 Dimethylphthalate-d6	166	5.967	5.968	(0.960)	362258	39.4064	650
$	43 Acenaphthylene-d8	160	6.074	6.076	(0.978)	426841	35.7061	590
*	46 Acenaphthene-d10	164	6.214	6.204	(1.000)	250023	40.0000	
$	49 4-Nitrophenol-d4	143	6.321	6.312	(1.017)	59441	44.8675	750
$	54 Fluorene-d10	176	6.642	6.633	(1.069)	326881	38.7102	640
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.696	6.698	(0.901)	75155	38.8438	650
*	65 Phenanthrene-d10	188	7.436	7.438	(1.000)	495820	40.0000	
$	67 Anthracene-d10	188	7.479	7.480	(1.006)	541161	38.2088	630
	70 Di-n-butylphthalate	149	7.929	7.931	(1.066)	28139	2.28998	38(a)

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5254.D
Report Date: 11-Nov-2011 13:32

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)
$ 72 Pyrene-d10	212	8.605	8.606	(0.892)	481215	43.1332	720
* 77 Chrysene-d12	240	9.645	9.668	(1.000)	354148	40.0000	(Q)
$ 83 Benzo(a)pyrene-d12	264	10.835	10.891	(0.993)	224806	36.5595	610(H)
* 85 Perylene-d12	264	10.910	10.966	(1.000)	250588	40.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5254.D
Report Date: 11-Nov-2011 13:32

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5254.D
Lab Smp Id: K2198-03A Client Smp ID: H30Q2
Inj Date : 10-NOV-2011 11:47
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-03A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.100	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

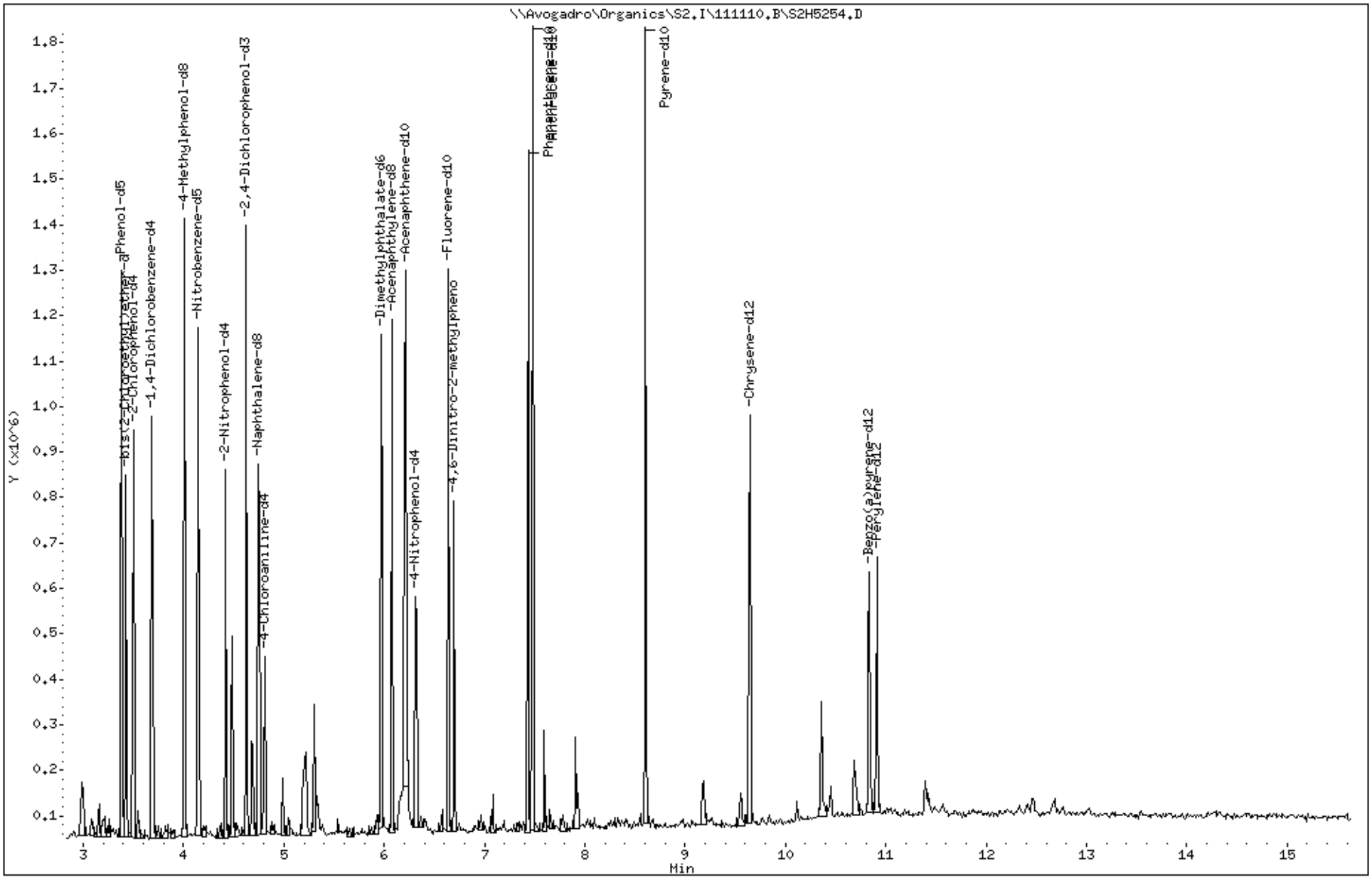
ISTD	RT	AREA	AMOUNT
* 8 1,4-Dichlorobenzene-d4	3.683	931569	40.000
* 25 Naphthalene-d8	4.756	998471	40.000
* 65 Phenanthrene-d10	7.437	1371213	40.000
* 77 Chrysene-d12	9.646	999462	40.000
* 85 Perylene-d12	10.911	620565	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
2.986	186076	7.98977110	130	0		0	8
2(3H)-Furanone, dihydro-4-hydroxy-					CAS #: 5469-16-9		
4.488	466496	18.6884097	310	90	NIST2002.L	4145	25

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5254.D
Report Date: 11-Nov-2011 13:32

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.681	315558	12.6416458	210	0		0	25
Unknown				CAS #:			
5.217	440600	17.6509752	290	0		0	25
Unknown				CAS #:			
5.303	222872	8.92852750	150	0		0	25
Unknown				CAS #:			
7.597	175903	5.13129906	85	0		0	65
Unknown				CAS #:			
7.908	262084	7.64531305	130	0		0	65
9-Octadecenamide, (Z)-				CAS #: 301-02-0			
9.184	144871	5.79796140	96	93	NIST2002.L	106877	77
Cyclic Alkane				CAS #:			
9.549	127341	5.09637619	85	0		0	77
Unknown				CAS #:			
10.353	304283	19.6132741	330	0		0	85
Heneicosane, 11-(1-ethylpropyl)-				CAS #: 55282-11-6			
10.686	207973	13.4054115	220	86	NIST2002.L	147105	85

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5254.D
Date : 10-NOV-2011 11:47
Client ID: H30Q2
Instrument: S2.i
Sample Info: K2198-03A,,62764,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5254.D

Date : 10-NOV-2011 11:47

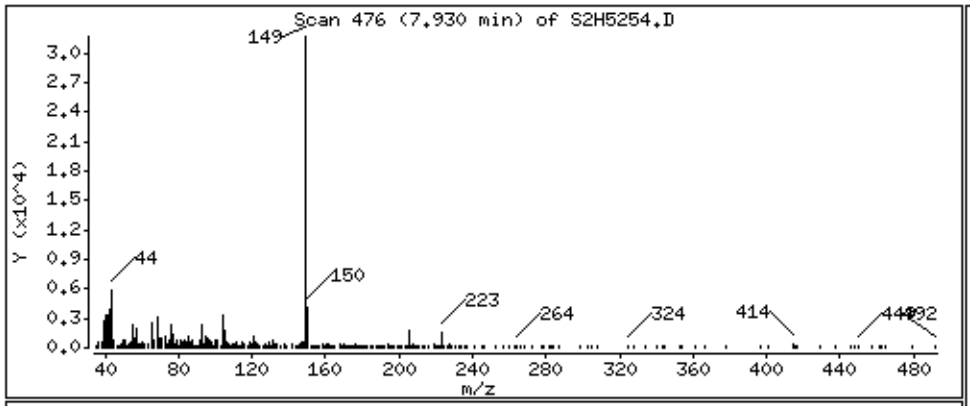
Client ID: H30Q2 Instrument: S2.i

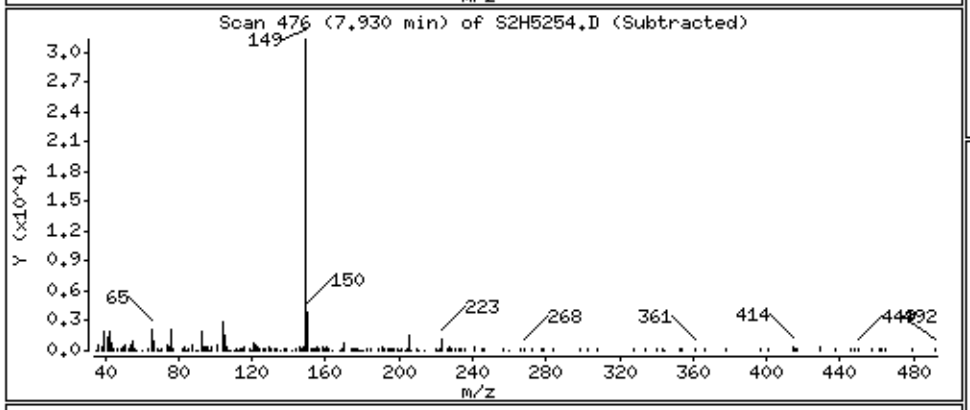
Sample Info: K2198-03A,,62764,,

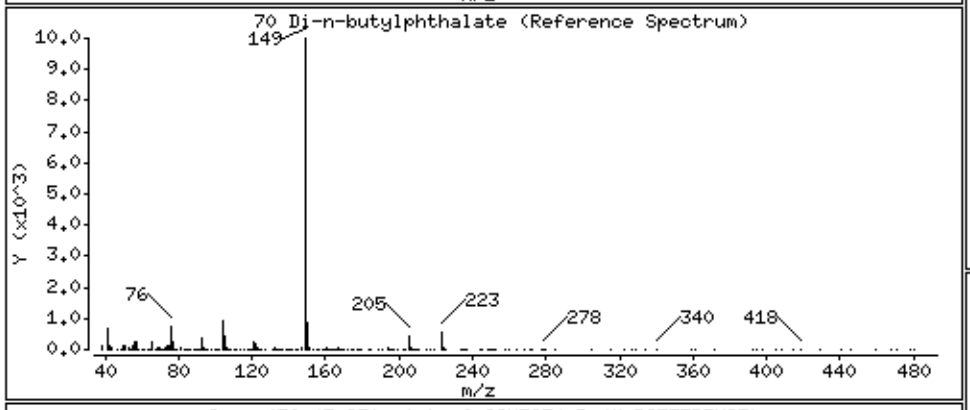
Volume Injected (uL): 2.0 Operator: SRC: LIMS

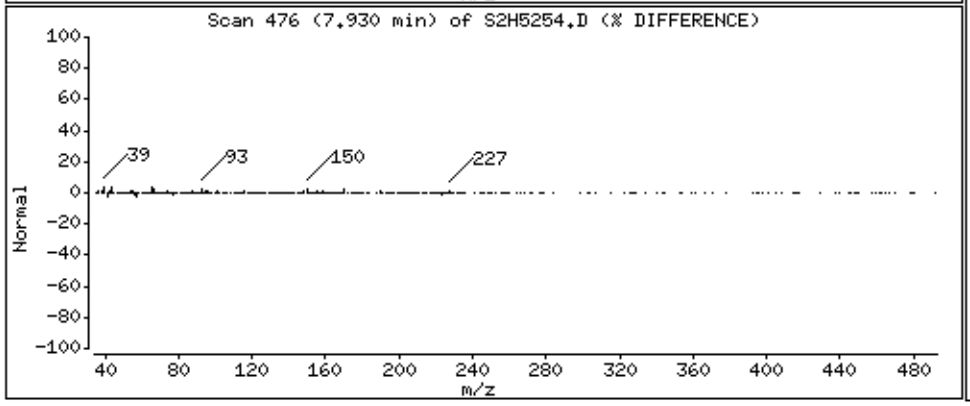
Column phase: RXI-5SILMS Column diameter: 0.25

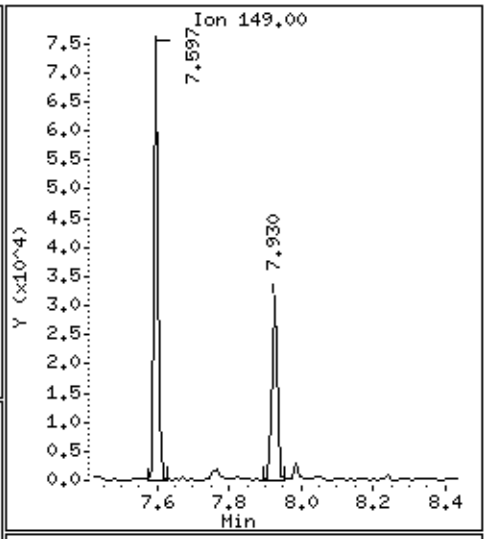
70 Di-n-butylphthalate Concentration: 38 ug/Kg

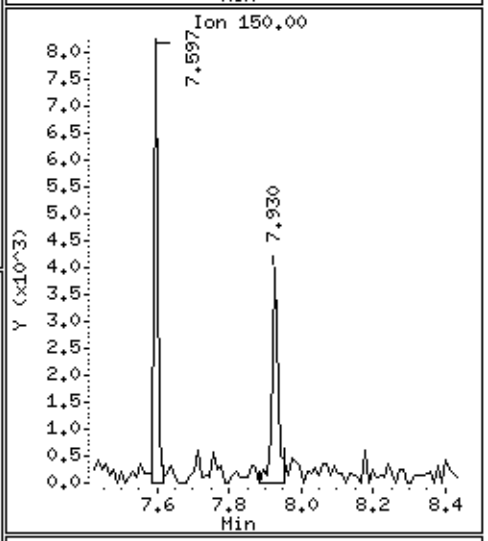


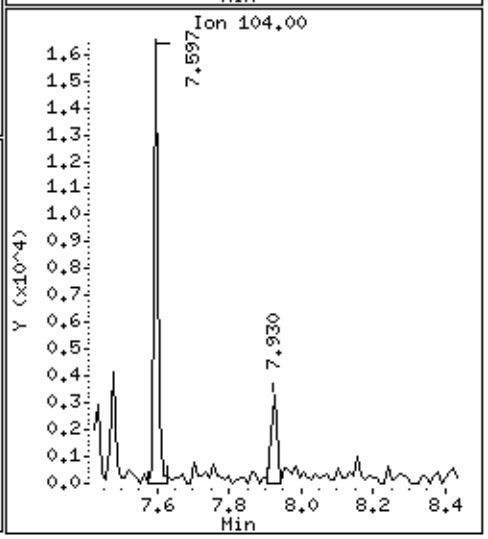












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Date : 10-NOV-2011 11:47

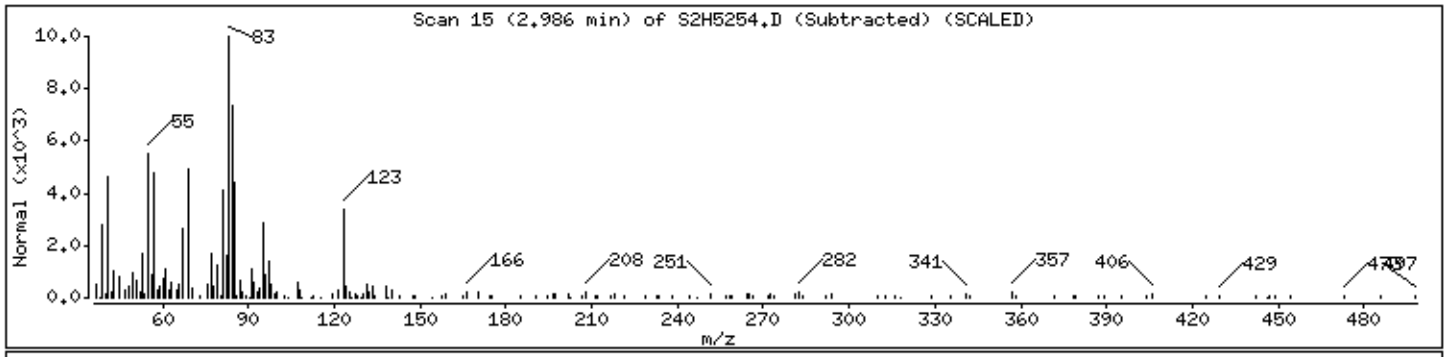
Client ID: H30Q2 Instrument: S2.i

Sample Info: K2198-03A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 11:47

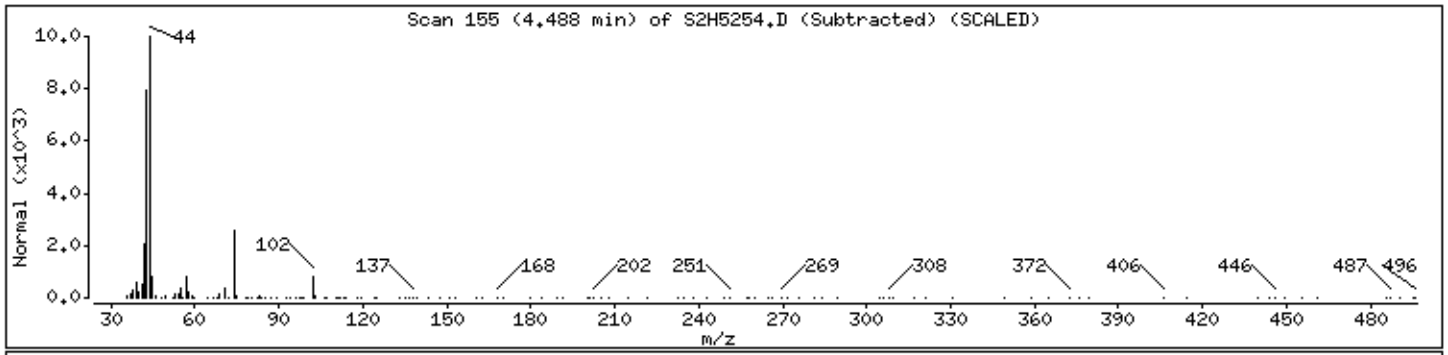
Client ID: H30Q2 Instrument: S2.i

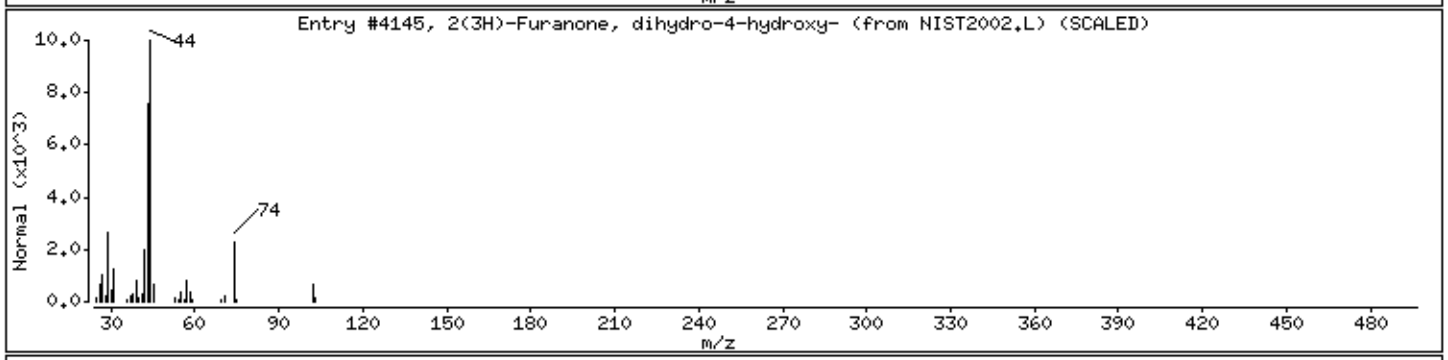
Sample Info: K2198-03A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2(3H)-Furanone, dihydro-4-hydroxy-	5469-16-9	NIST2002.L	4145	90	C4H6O3	102





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Date : 10-NOV-2011 11:47

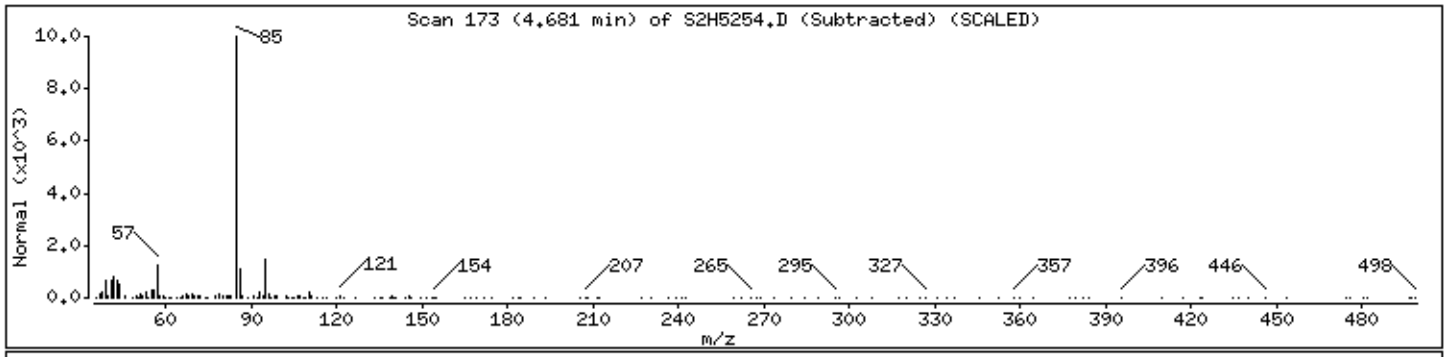
Client ID: H30Q2 Instrument: S2.i

Sample Info: K2198-03A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 11:47

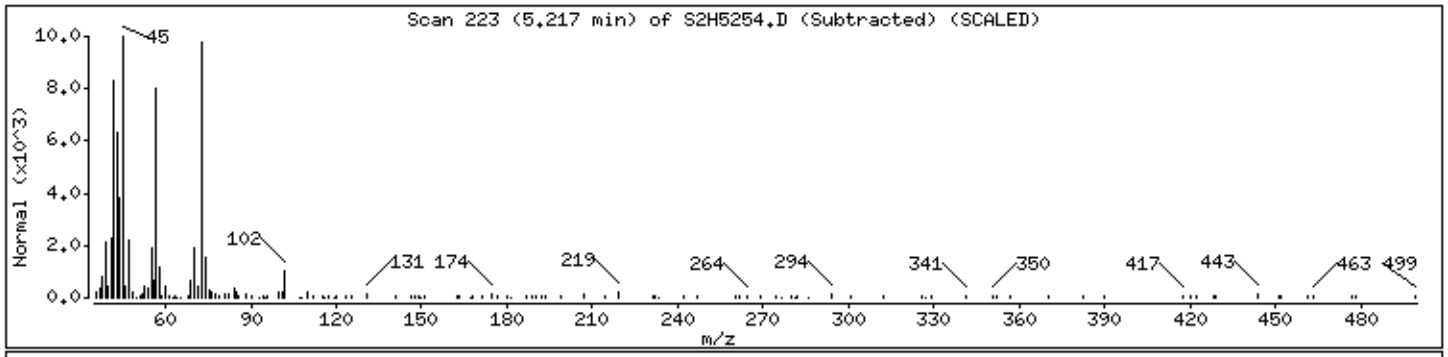
Client ID: H30Q2 Instrument: S2.i

Sample Info: K2198-03A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 11:47

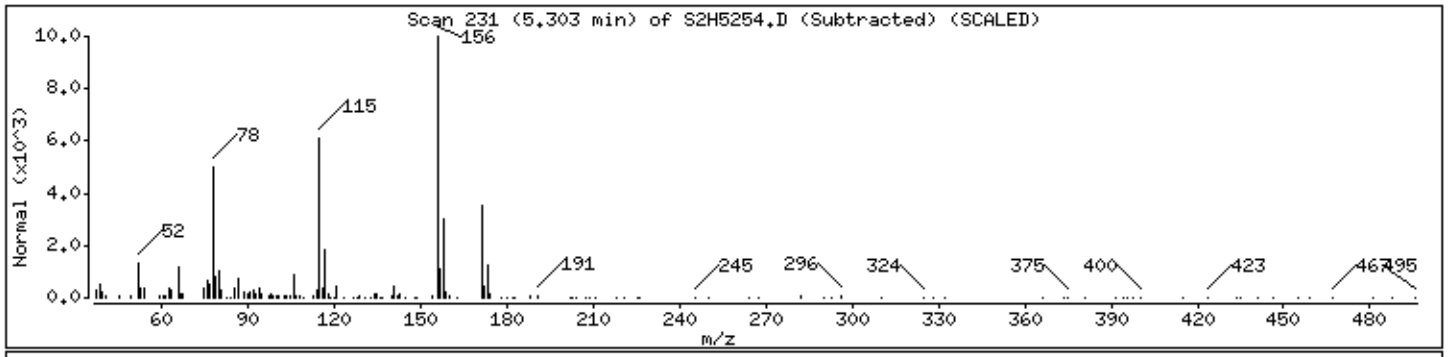
Client ID: H30Q2 Instrument: S2.i

Sample Info: K2198-03A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 11:47

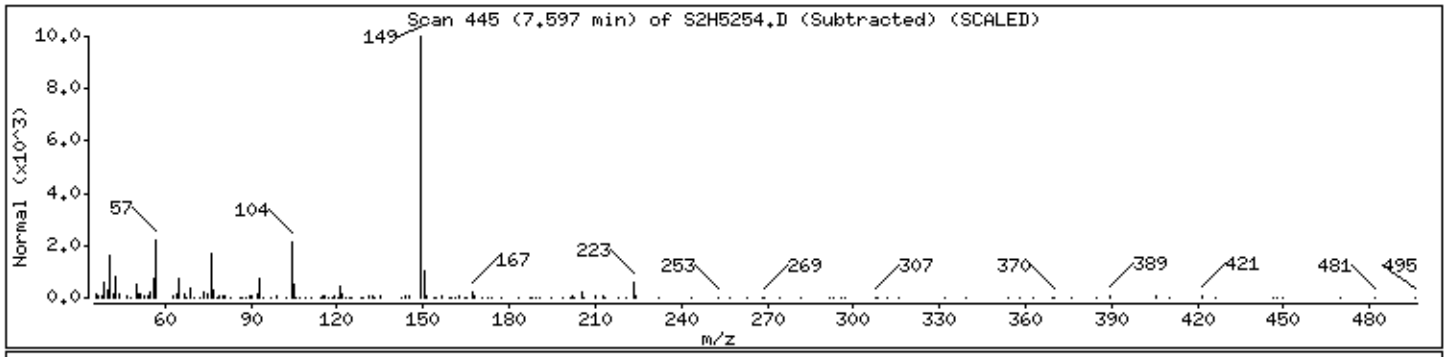
Client ID: H30Q2 Instrument: S2.i

Sample Info: K2198-03A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5254.D

Date : 10-NOV-2011 11:47

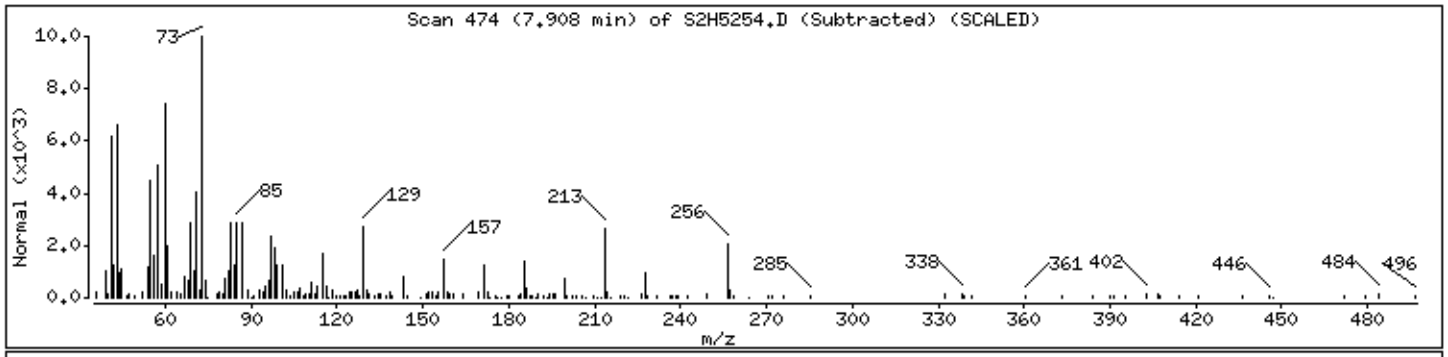
Client ID: H30Q2 Instrument: S2.i

Sample Info: K2198-03A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5254.D

Date : 10-NOV-2011 11:47

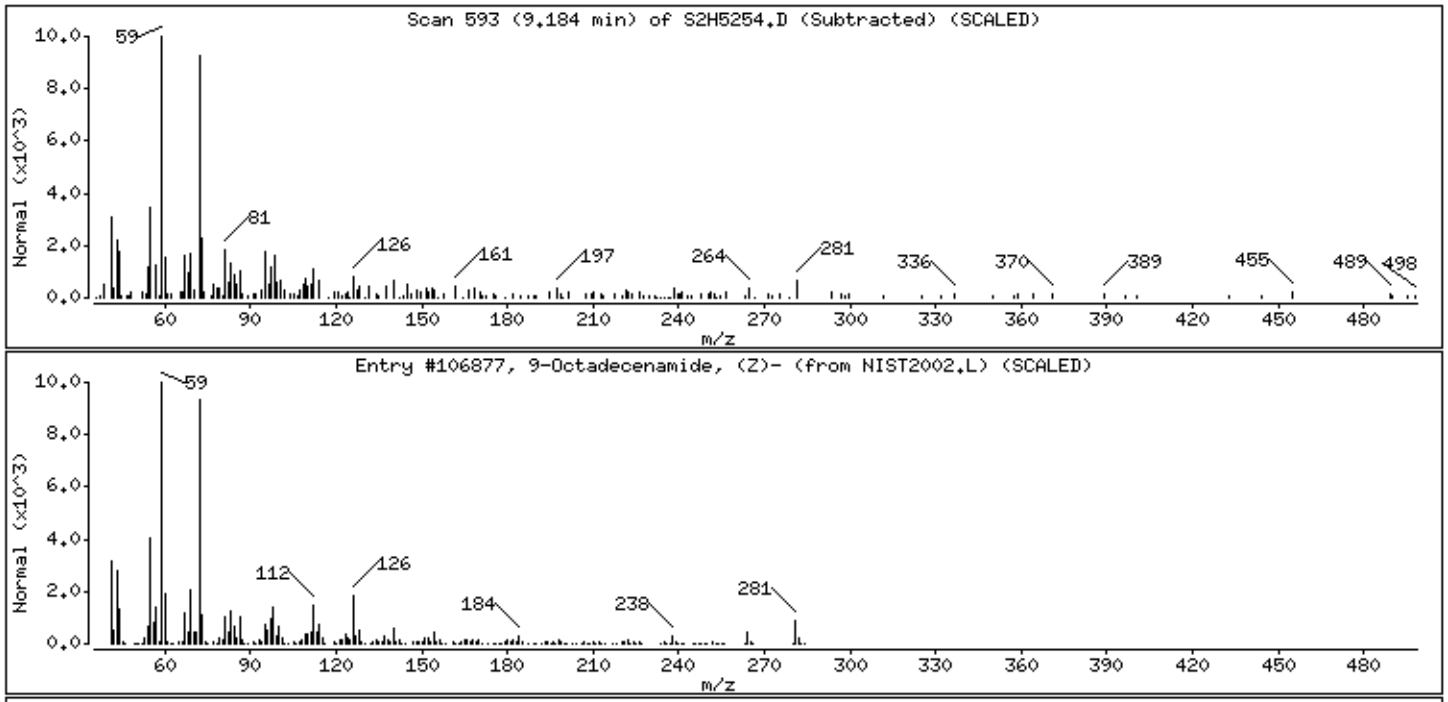
Client ID: H30Q2 Instrument: S2.i

Sample Info: K2198-03A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST2002.L	106877	93	C18H35NO	281



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5254.D

Date : 10-NOV-2011 11:47

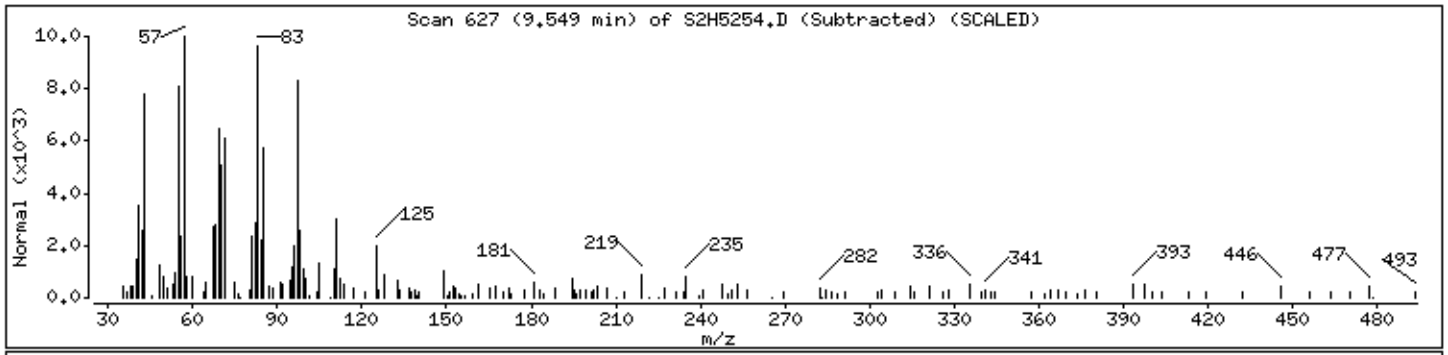
Client ID: H30Q2 Instrument: S2.i

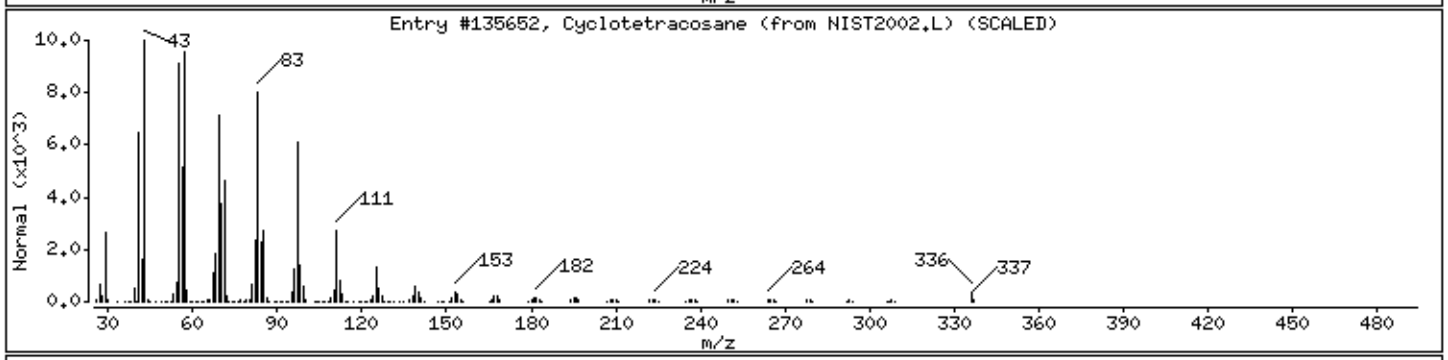
Sample Info: K2198-03A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclic Alkane						
Cyclotetracosane	297-03-0	NIST2002.L	135652	89	C24H48	336





Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5254.D

Date : 10-NOV-2011 11:47

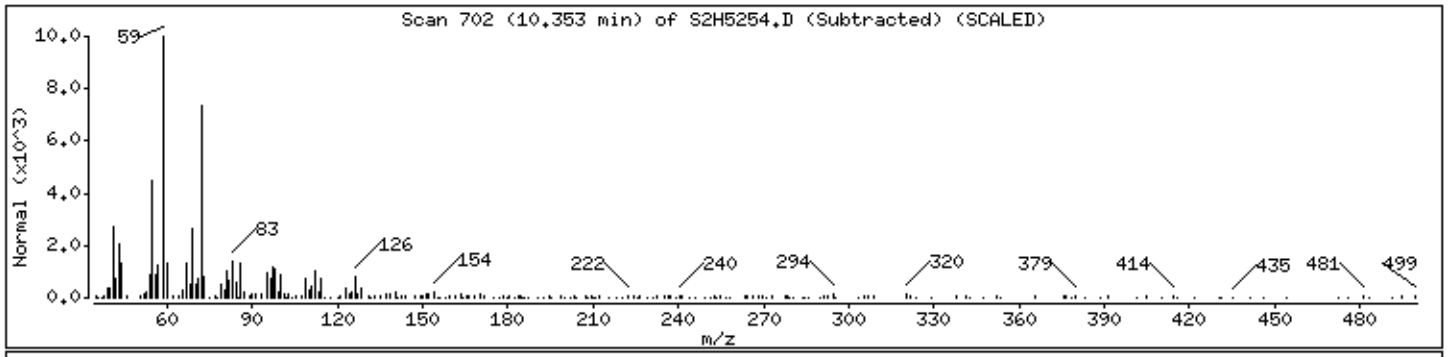
Client ID: H30Q2 Instrument: S2.i

Sample Info: K2198-03A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5254.D

Date : 10-NOV-2011 11:47

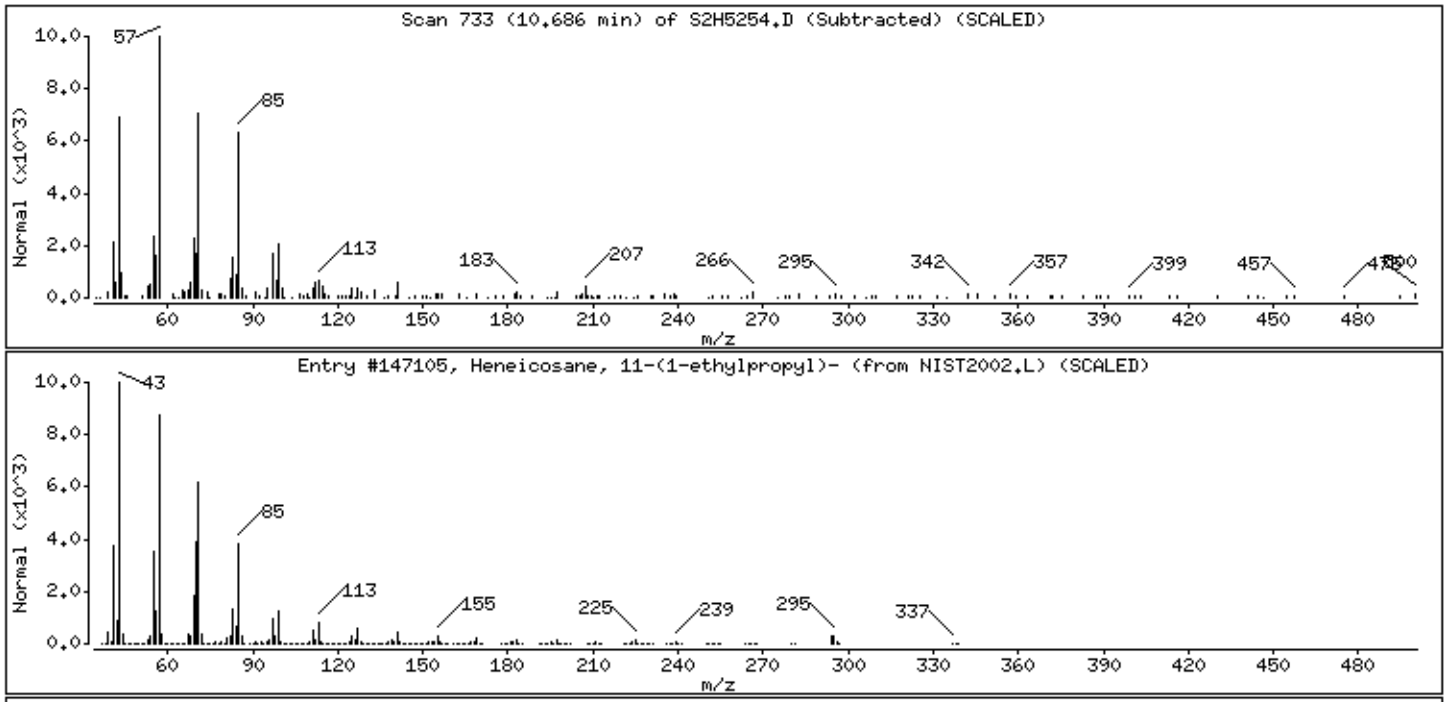
Client ID: H30Q2 Instrument: S2.i

Sample Info: K2198-03A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Heneicosane, 11-(1-ethylpropyl)-	55282-11-6	NIST2002.L	147105	86	C26H54	366



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q3

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-04A

Sample wt/vol: 30.5 (g/mL) G Lab File ID: S2H5292.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 19 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/14/2011

GPC Cleanup:(Y/N) Y pH: 7.3 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
100-52-7	Benzaldehyde	210	U
108-95-2	Phenol	210	U
111-44-4	Bis(2-chloroethyl)ether	210	U
95-57-8	2-Chlorophenol	210	U
95-48-7	2-Methylphenol	210	U
108-60-1	2,2´-Oxybis(1-chloropropane)	210	U
98-86-2	Acetophenone	210	U
106-44-5	4-Methylphenol	210	U
621-64-7	N-Nitroso-di-n-propylamine	210	U
67-72-1	Hexachloroethane	210	U
98-95-3	Nitrobenzene	210	U
78-59-1	Isophorone	210	U
88-75-5	2-Nitrophenol	210	U
105-67-9	2,4-Dimethylphenol	210	U
111-91-1	Bis(2-chloroethoxy)methane	210	U
120-83-2	2,4-Dichlorophenol	210	U
91-20-3	Naphthalene	210	U
106-47-8	4-Chloroaniline	210	U
87-68-3	Hexachlorobutadiene	210	U
105-60-2	Caprolactam	210	U
59-50-7	4-Chloro-3-methylphenol	210	U
91-57-6	2-Methylnaphthalene	210	U
77-47-4	Hexachlorocyclopentadiene	210	U
88-06-2	2,4,6-Trichlorophenol	210	U
95-95-4	2,4,5-Trichlorophenol	210	U
92-52-4	1,1´-Biphenyl	210	U
91-58-7	2-Chloronaphthalene	210	U
88-74-4	2-Nitroaniline	400	U
131-11-3	Dimethylphthalate	210	U
606-20-2	2,6-Dinitrotoluene	210	U
208-96-8	Acenaphthylene	210	U
99-09-2	3-Nitroaniline	400	U
83-32-9	Acenaphthene	210	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q3

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-04A

Sample wt/vol: 30.5 (g/mL) G Lab File ID: S2H5292.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 19 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/14/2011

GPC Cleanup:(Y/N) Y pH: 7.3 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
51-28-5	2,4-Dinitrophenol	400	U
100-02-7	4-Nitrophenol	400	U
132-64-9	Dibenzofuran	210	U
121-14-2	2,4-Dinitrotoluene	210	U
84-66-2	Diethylphthalate	210	U
86-73-7	Fluorene	210	U
7005-72-3	4-Chlorophenyl-phenylether	210	U
100-01-6	4-Nitroaniline	400	U
534-52-1	4,6-Dinitro-2-methylphenol	400	U
86-30-6	N-Nitrosodiphenylamine (1)	210	U
95-94-3	1,2,4,5-Tetrachlorobenzene	210	U
101-55-3	4-Bromophenyl-phenylether	210	U
118-74-1	Hexachlorobenzene	210	U
1912-24-9	Atrazine	210	U
87-86-5	Pentachlorophenol	400	U
85-01-8	Phenanthrene	210	U
120-12-7	Anthracene	210	U
86-74-8	Carbazole	210	U
84-74-2	Di-n-butylphthalate	45	J
206-44-0	Fluoranthene	210	U
129-00-0	Pyrene	210	U
85-68-7	Butylbenzylphthalate	210	U
91-94-1	3,3´-Dichlorobenzidine	210	U
56-55-3	Benzo(a)anthracene	210	U
218-01-9	Chrysene	210	U
117-81-7	Bis(2-ethylhexyl)phthalate	210	U
117-84-0	Di-n-octylphthalate	210	U
205-99-2	Benzo(b)fluoranthene	210	U
207-08-9	Benzo(k)fluoranthene	210	U
50-32-8	Benzo(a)pyrene	210	U
193-39-5	Indeno(1,2,3-cd)pyrene	210	U
53-70-3	Dibenzo(a,h)anthracene	210	U
191-24-2	Benzo(g,h,i)perylene	210	U
58-90-2	2,3,4,6-Tetrachlorophenol	210	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30Q3

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-04A

Sample wt/vol: 30.5 (g/mL) G Lab File ID: S2H5292.D

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 19 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/14/2011

GPC Cleanup: (Y/N) Y pH: 7.3 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.915	110	J
02		Unknown-02	3.076	100	J
03	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.416	370	BNJ
04		Unknown-03	4.620	270	J
05		Unknown-04	4.974	87	J
06		Unknown-05	5.145	350	J
07		Unknown-06	5.231	110	J
08		Unknown-07	6.100	420	J
09		Unknown-08	7.526	100	J
10	57-10-3	n-Hexadecanoic acid	7.837	180	NJ
11		Unknown-09	9.124	110	J
12		Unknown-10	9.499	110	J
13		Unknown-11	10.314	350	J
14		Unknown-12	10.410	130	J
15		Unknown-13	10.646	410	J
16		Unknown-14	11.322	200	J
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111114.B\S2H5292.D
Report Date: 15-Nov-2011 10:25

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111114.B\S2H5292.D
Lab Smp Id: K2198-04A Client Smp ID: H30Q3
Inj Date : 14-NOV-2011 17:19
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-04A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111114.B\S2_SOM.m
Meth Date : 15-Nov-2011 10:25 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.500	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
$	2 Phenol-d5	71	3.311	3.311	(0.917)	119609	38.3240	630
$	4 bis(2-Chloroethyl)ether-d8	67	3.354	3.354	(0.929)	152788	35.5267	580
$	6 2-Chlorophenol-d4	132	3.429	3.429	(0.950)	110677	40.9937	670
*	8 1,4-Dichlorobenzene-d4	152	3.611	3.611	(1.000)	99111	40.0000	(Q)
$	11 4-Methylphenol-d8	113	3.944	3.943	(1.092)	175450	41.4656	680
$	16 Nitrobenzene-d5	128	4.072	4.072	(0.872)	56134	36.2658	590(Q)
$	19 2-Nitrophenol-d4	143	4.351	4.351	(0.931)	74369	43.5231	710
$	23 2,4-Dichlorophenol-d3	165	4.555	4.555	(0.975)	151929	48.7062	800
*	25 Naphthalene-d8	136	4.673	4.683	(1.000)	297218	40.0000	
$	27 4-Chloroaniline-d4	131	4.737	4.737	(1.014)	37373	13.4937	220(Q)
$	40 Dimethylphthalate-d6	166	5.906	5.906	(0.962)	418327	45.6009	750
$	43 Acenaphthylene-d8	160	6.003	6.013	(0.977)	433714	36.3571	600
*	46 Acenaphthene-d10	164	6.142	6.142	(1.000)	249500	40.0000	
$	49 4-Nitrophenol-d4	143	6.249	6.249	(1.017)	63232	47.8291	780
$	54 Fluorene-d10	176	6.560	6.571	(1.068)	317607	37.6907	620
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.625	6.624	(0.901)	82019	42.5747	700(Q)
*	65 Phenanthrene-d10	188	7.354	7.364	(1.000)	493686	40.0000	
$	67 Anthracene-d10	188	7.407	7.407	(1.007)	510119	36.1728	590
	70 Di-n-butylphthalate	149	7.858	7.857	(1.069)	27396	2.23916	37(a)

Data File: \\Avogadro\Organics\S2.I\111114.B\S2H5292.D
Report Date: 15-Nov-2011 10:25

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)
$ 72 Pyrene-d10	212	8.533	8.533	(0.890)	497380	46.2280	760
* 77 Chrysene-d12	240	9.584	9.605	(1.000)	341539	40.0000	(Q)
$ 83 Benzo(a)pyrene-d12	264	10.764	10.806	(0.988)	168036	37.5466	620(H)
* 85 Perylene-d12	264	10.850	10.892	(1.000)	182383	40.0000	(H)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\S2.I\111114.B\S2H5292.D
Report Date: 15-Nov-2011 10:25

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111114.B\S2H5292.D
Lab Smp Id: K2198-04A Client Smp ID: H30Q3
Inj Date : 14-NOV-2011 17:19
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-04A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111114.B\S2_SOM.m
Meth Date : 15-Nov-2011 10:25 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.500	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

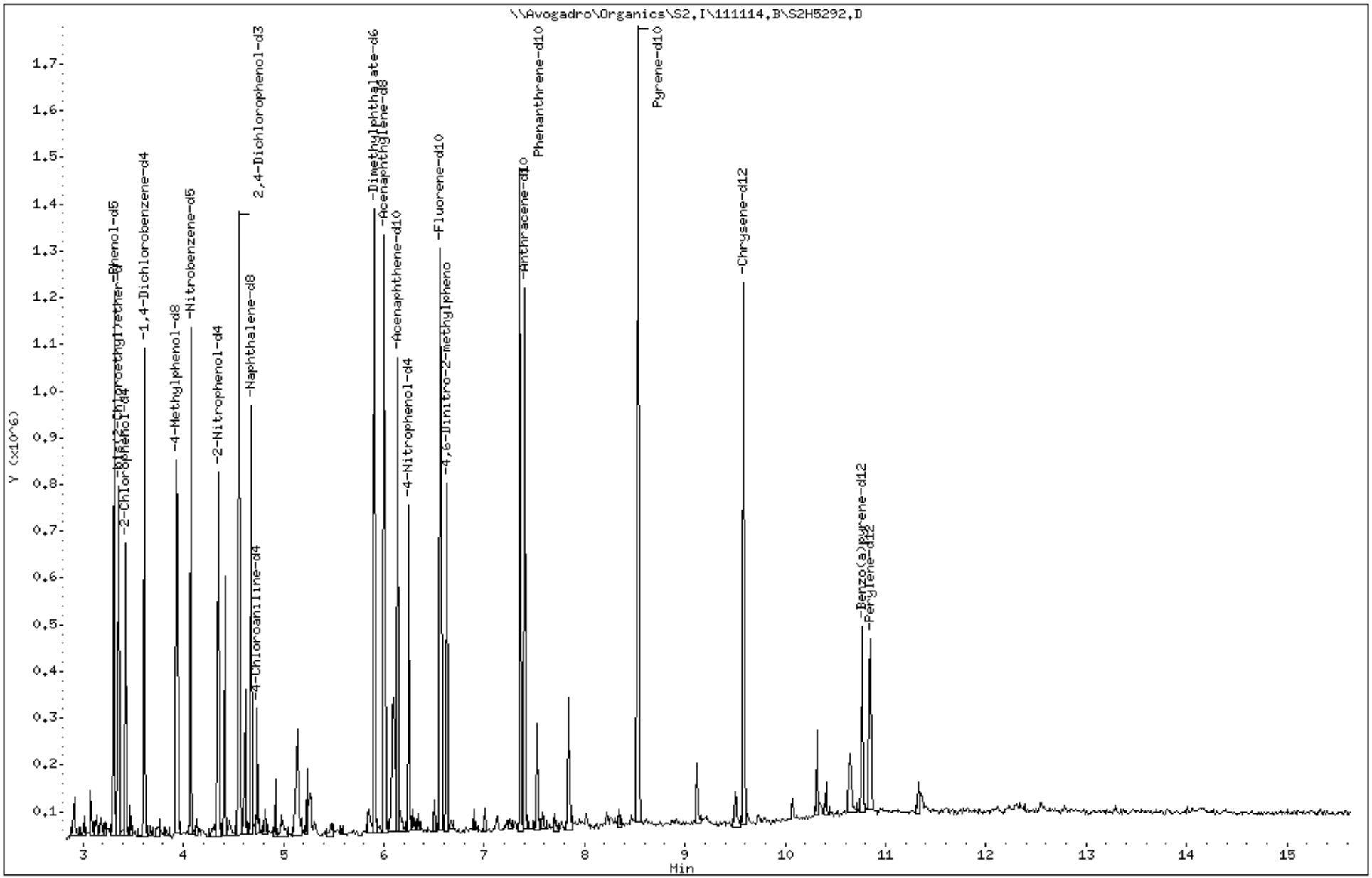
	ISTD	RT	AREA	AMOUNT
* 8	1,4-Dichlorobenzene-d4	3.612	881797	40.000
* 25	Naphthalene-d8	4.673	997044	40.000
* 46	Acenaphthene-d10	6.142	1292274	40.000
* 65	Phenanthrene-d10	7.354	1409146	40.000
* 77	Chrysene-d12	9.585	969148	40.000
* 85	Perylene-d12	10.850	458407	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.915	124657	5.65468116	93	0	0		8

Data File: \\Avogadro\Organics\S2.I\111114.B\S2H5292.D
Report Date: 15-Nov-2011 10:25

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
3.076	110476	5.01140242	82	0		0	8
2(3H)-Furanone, dihydro-4-hydroxy-				CAS #: 5469-16-9			
4.416	456612	18.3186094	300	86	NIST2002.L	4145	25
Unknown				CAS #:			
4.620	328816	13.1916221	220	0		0	25
Unknown				CAS #:			
4.974	107213	4.30123260	71	0		0	25
Unknown				CAS #:			
5.145	434456	17.4297752	290	0		0	25
Unknown				CAS #:			
5.231	130275	5.22644572	86	0		0	25
Unknown				CAS #:			
6.100	678766	21.0099714	340	0		0	46
Unknown				CAS #:			
7.526	174398	4.95046104	81	0		0	65
n-Hexadecanoic acid				CAS #: 57-10-3			
7.837	310828	8.82314878	140	96	NIST2002.L	92227	65
Unknown				CAS #:			
9.124	131797	5.43970950	89	0		0	77
Unknown				CAS #:			
9.499	136418	5.63042000	92	0		0	77
Unknown				CAS #:			
10.314	195541	17.0626212	280	0		0	85
Unknown				CAS #:			
10.410	73391	6.40399795	100	0		0	85
Unknown				CAS #:			
10.646	234487	20.4610211	340	0		0	85
Unknown				CAS #:			
11.322	111837	9.75876926	160	0		0	85

Data File: \\Avogadro\Organics\S2.I\111114.B\S2H5292.D
Date : 14-NOV-2011 17:19
Client ID: H30Q3
Instrument: S2.i
Sample Info: K2198-04A,,62764,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



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Date : 14-NOV-2011 17:19

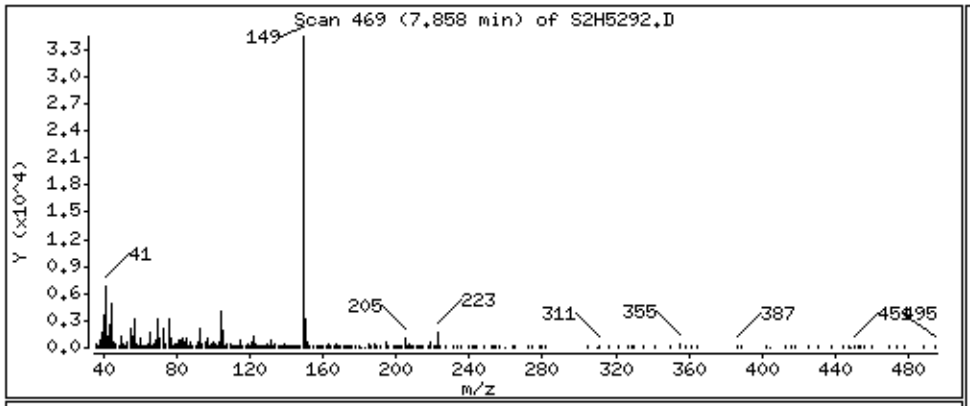
Client ID: H30Q3 Instrument: S2.i

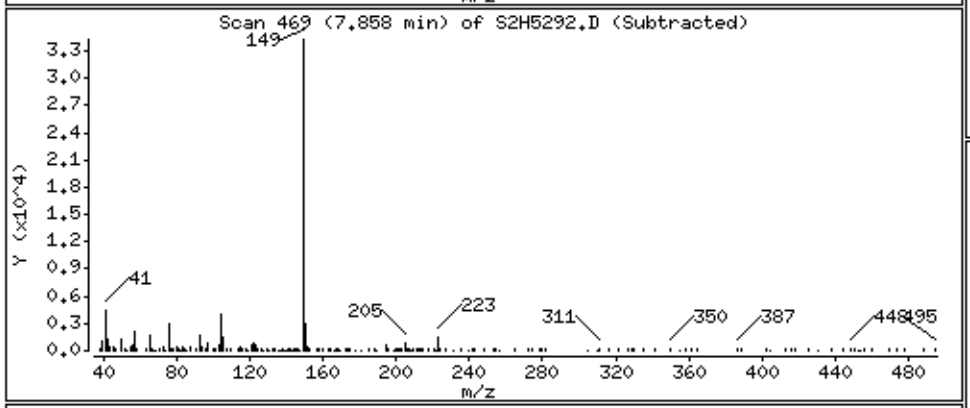
Sample Info: K2198-04A,,62764,,

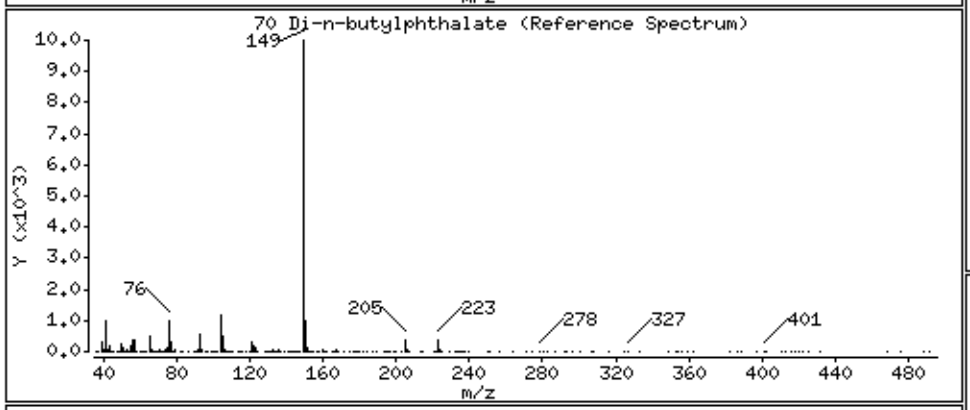
Volume Injected (uL): 2.0 Operator: SRC: LIMS

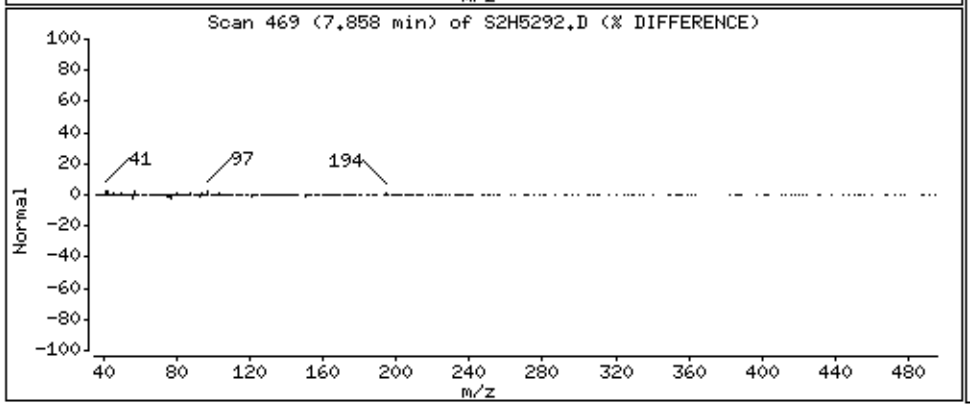
Column phase: RXI-5SILMS Column diameter: 0.25

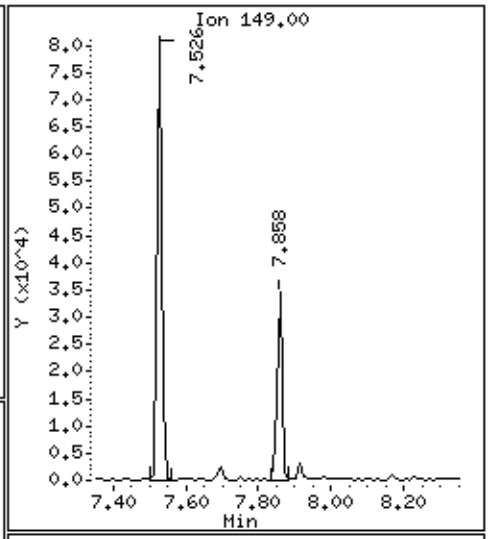
70 Di-n-butylphthalate Concentration: 37 ug/Kg

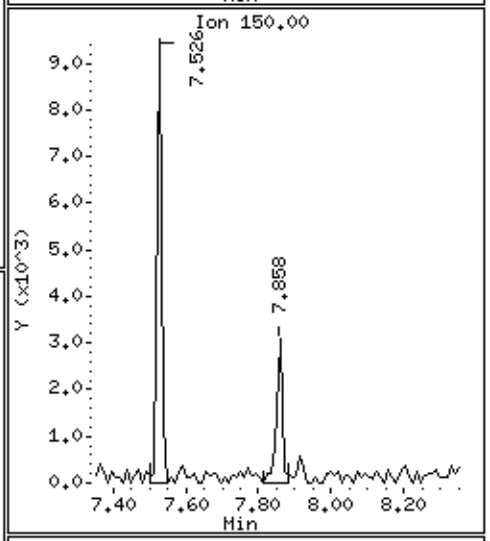


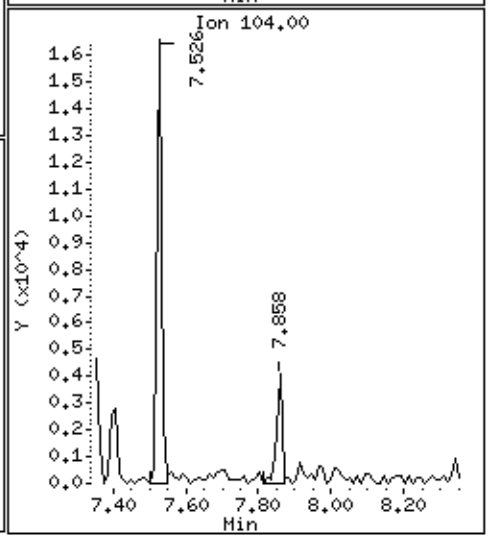












Data File: \\Avogadro\Organics\S2.I\111114.B\S2H5292.D

Date : 14-NOV-2011 17:19

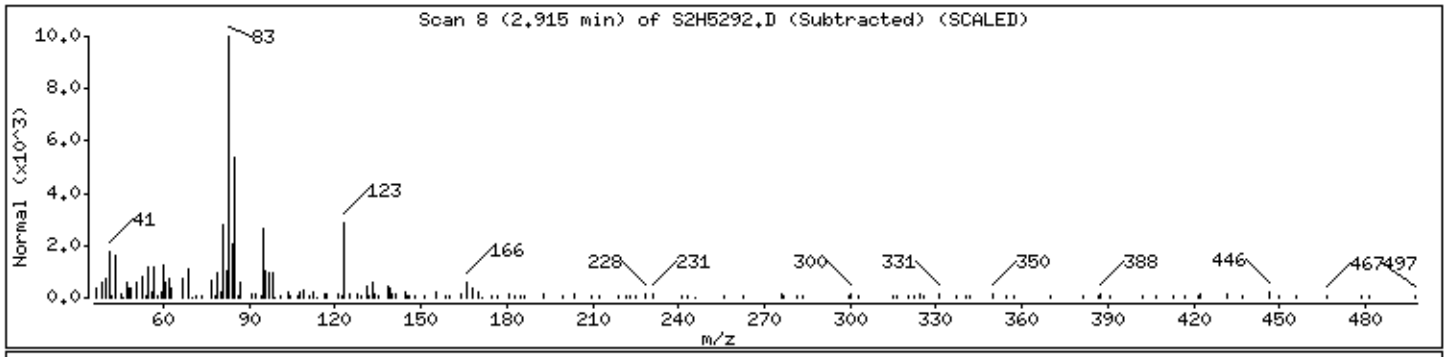
Client ID: H30Q3 Instrument: S2.i

Sample Info: K2198-04A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111114.B\S2H5292.D

Date : 14-NOV-2011 17:19

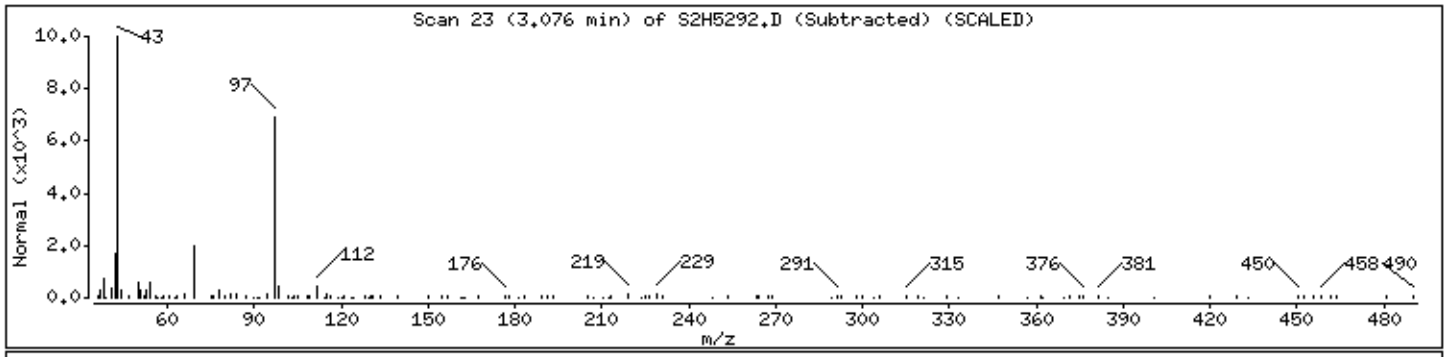
Client ID: H30Q3 Instrument: S2.i

Sample Info: K2198-04A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111114.B\S2H5292.D

Date : 14-NOV-2011 17:19

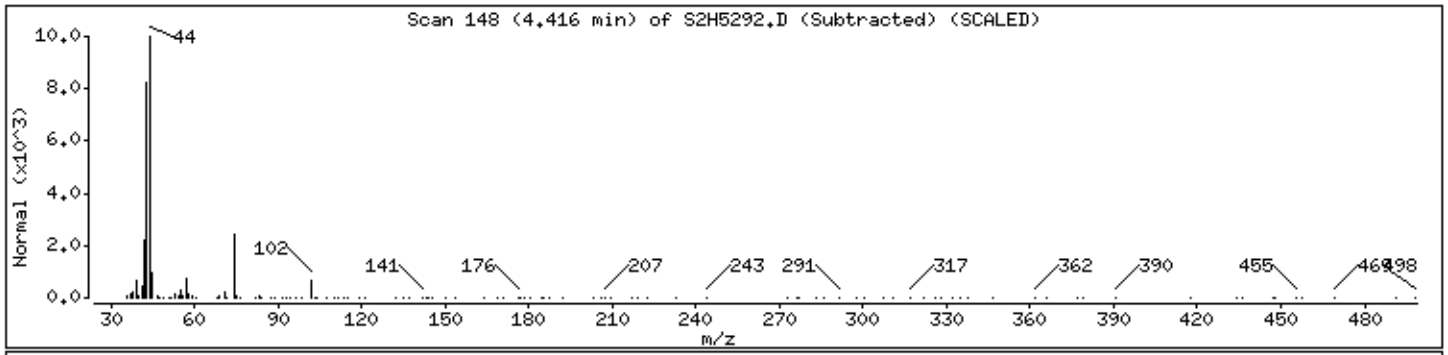
Client ID: H30Q3 Instrument: S2.i

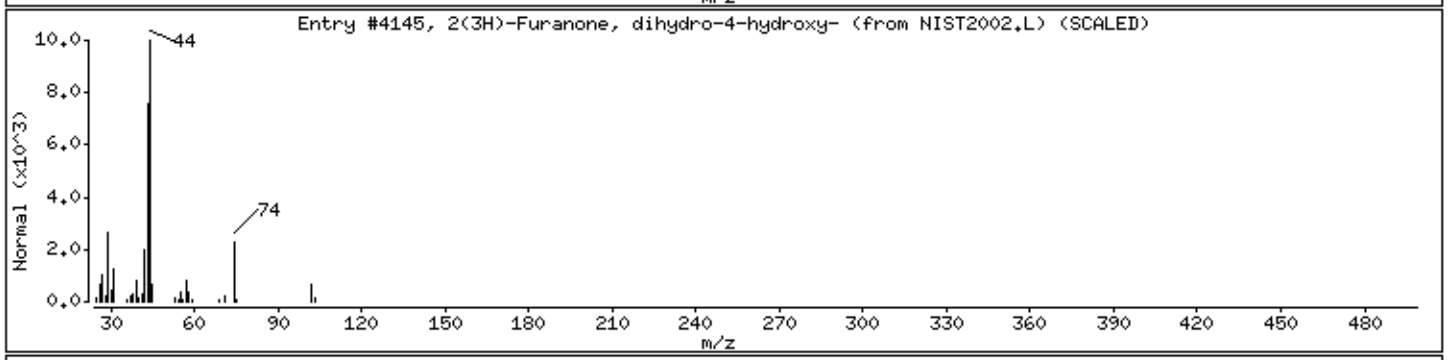
Sample Info: K2198-04A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2(3H)-Furanone, dihydro-4-hydroxy-	5469-16-9	NIST2002.L	4145	86	C4H6O3	102





Data File: \\Avogadro\Organics\S2.I\111114.B\S2H5292.D

Date : 14-NOV-2011 17:19

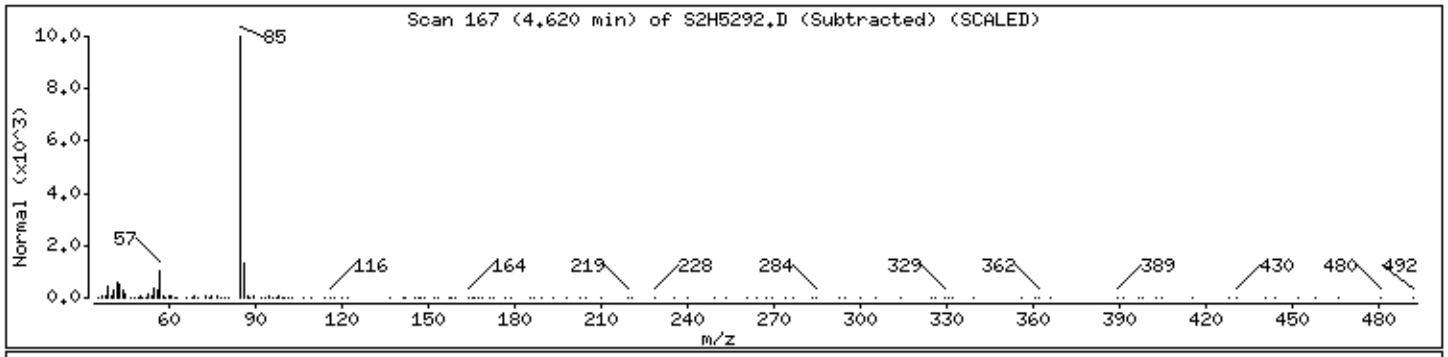
Client ID: H30Q3 Instrument: S2.i

Sample Info: K2198-04A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111114.B\S2H5292.D

Date : 14-NOV-2011 17:19

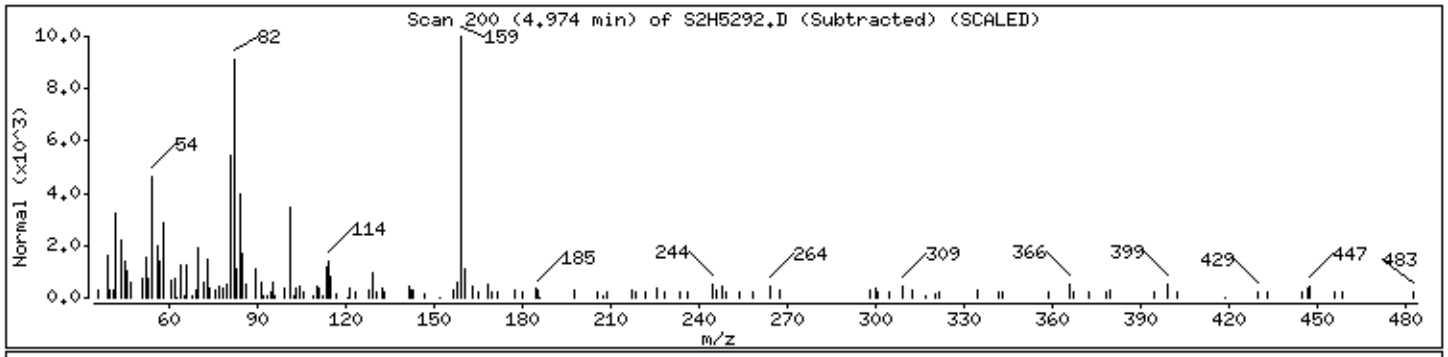
Client ID: H30Q3 Instrument: S2.i

Sample Info: K2198-04A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111114.B\S2H5292.D

Date : 14-NOV-2011 17:19

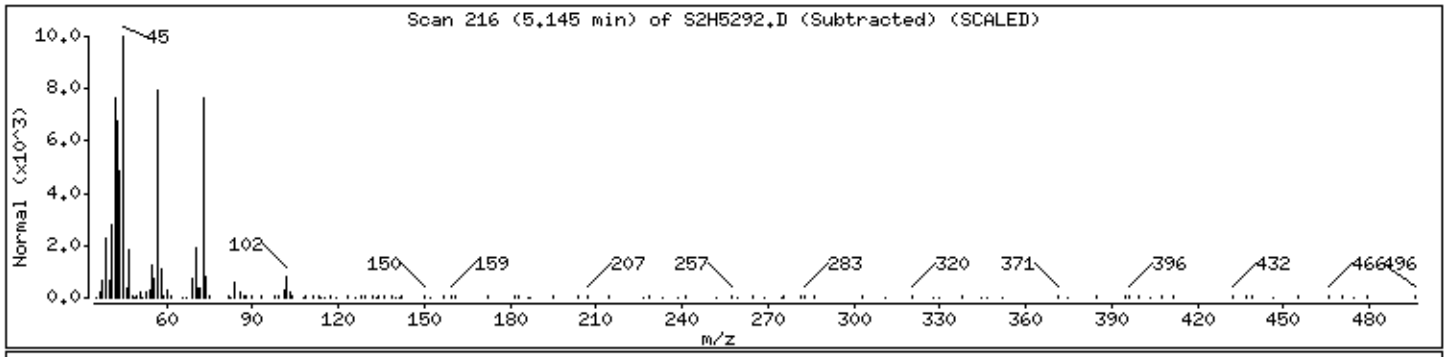
Client ID: H30Q3 Instrument: S2.i

Sample Info: K2198-04A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111114.B\S2H5292.D

Date : 14-NOV-2011 17:19

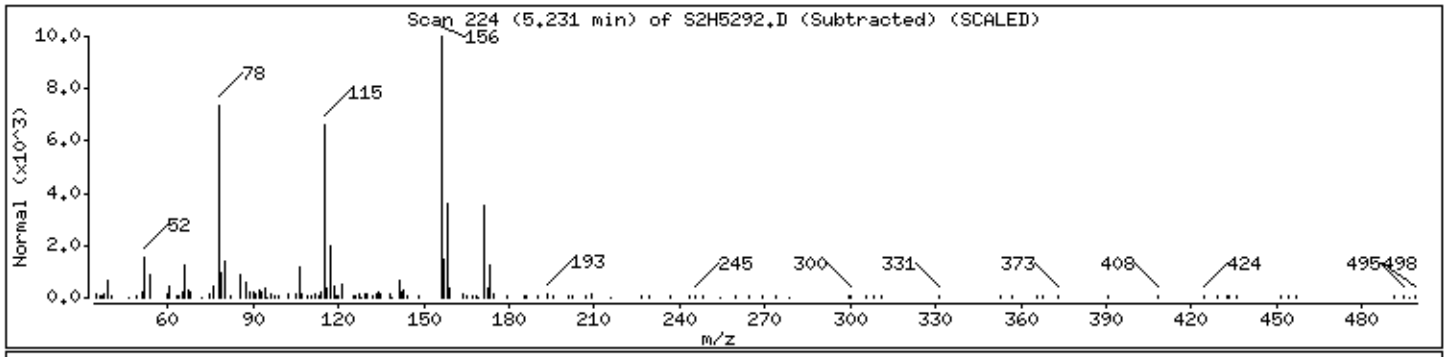
Client ID: H30Q3 Instrument: S2.i

Sample Info: K2198-04A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111114.B\S2H5292.D

Date : 14-NOV-2011 17:19

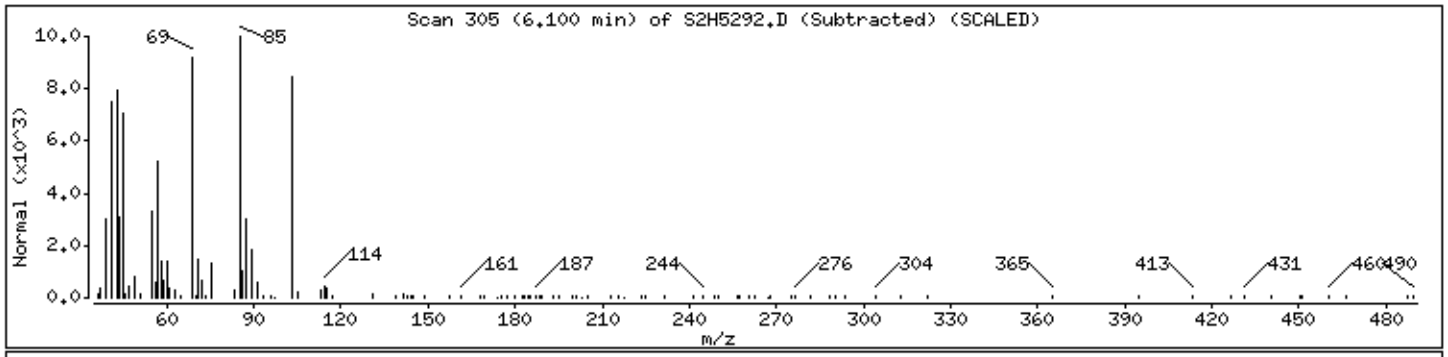
Client ID: H30Q3 Instrument: S2.i

Sample Info: K2198-04A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 14-NOV-2011 17:19

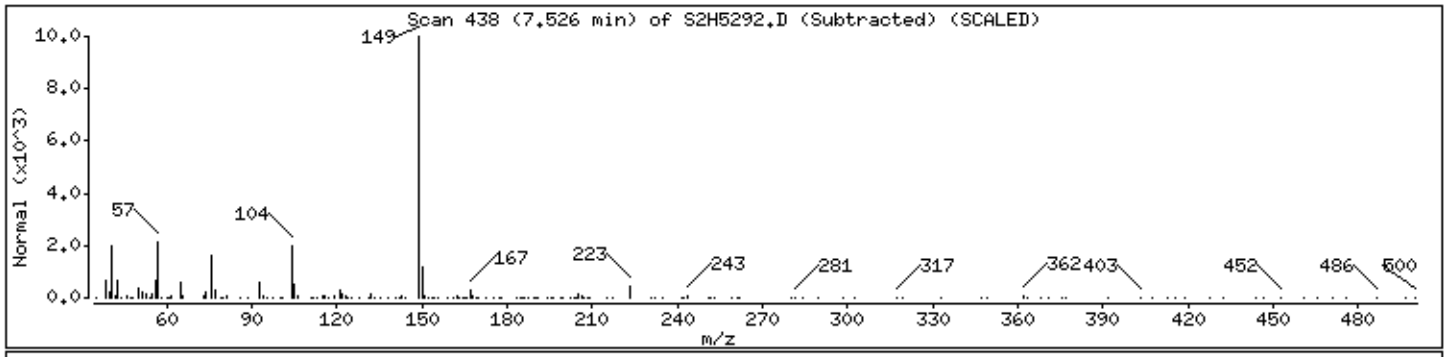
Client ID: H30Q3 Instrument: S2.i

Sample Info: K2198-04A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111114.B\S2H5292.D

Date : 14-NOV-2011 17:19

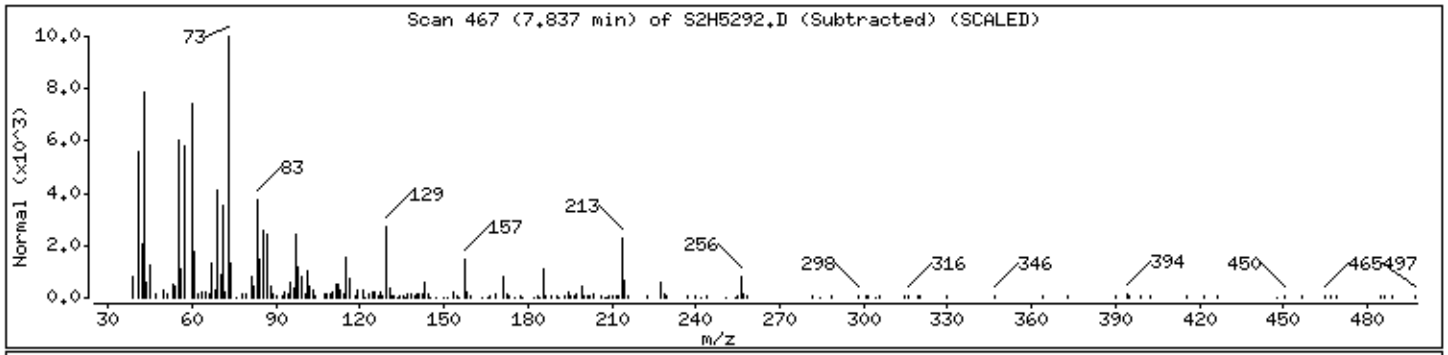
Client ID: H30Q3 Instrument: S2.i

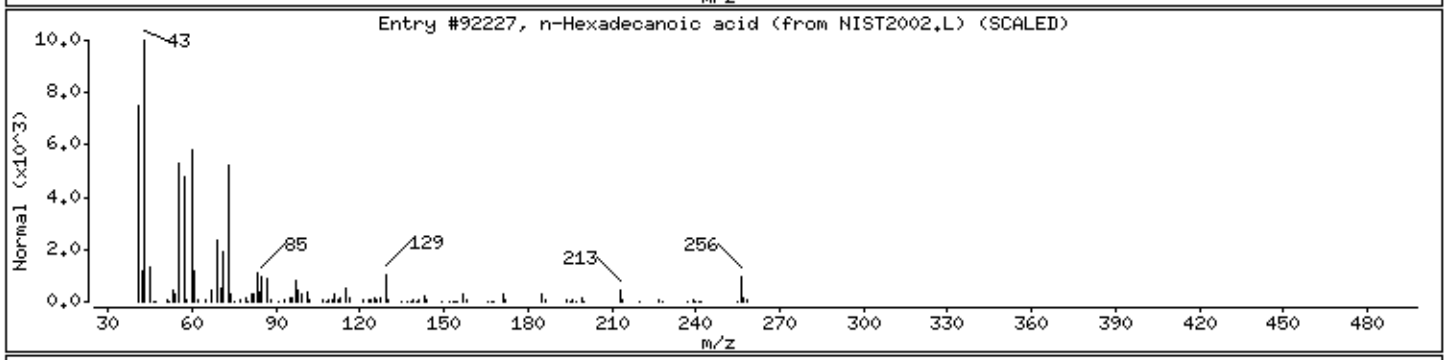
Sample Info: K2198-04A,,62764,,

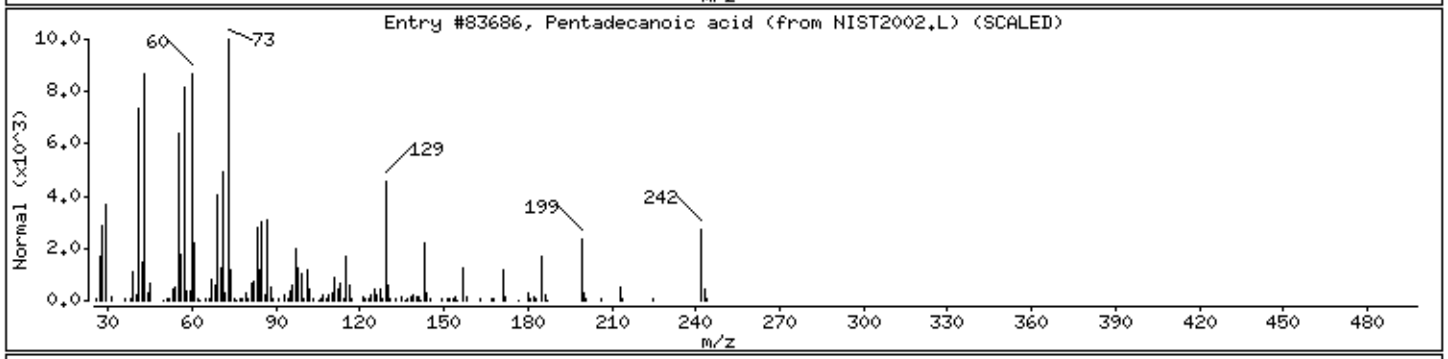
Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
n-Hexadecanoic acid	57-10-3	NIST2002.L	92227	96	C16H32O2	256
Pentadecanoic acid	1002-84-2	NIST2002.L	83686	89	C15H30O2	242







Data File: \\Avogadro\Organics\S2.I\111114.B\S2H5292.D

Date : 14-NOV-2011 17:19

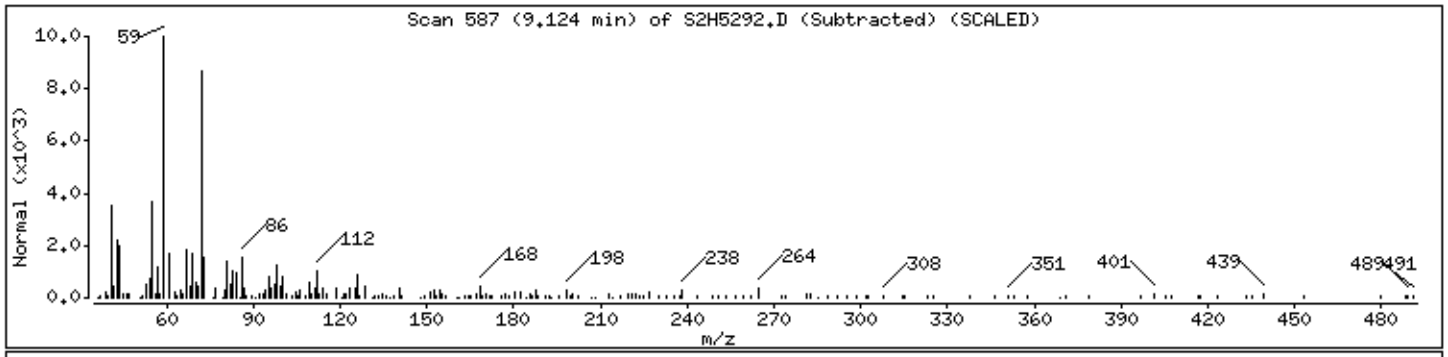
Client ID: H30Q3 Instrument: S2.i

Sample Info: K2198-04A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111114.B\S2H5292.D

Date : 14-NOV-2011 17:19

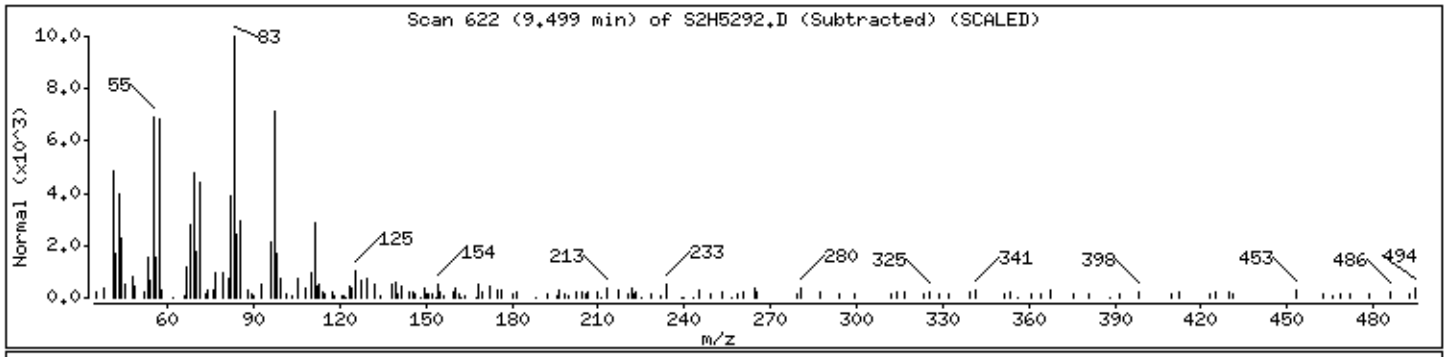
Client ID: H30Q3 Instrument: S2.i

Sample Info: K2198-04A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111114.B\S2H5292.D

Date : 14-NOV-2011 17:19

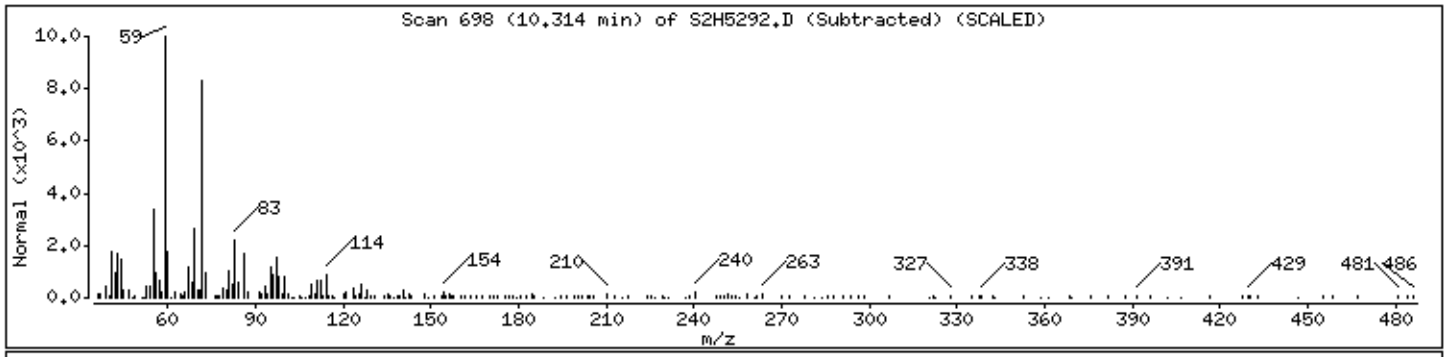
Client ID: H30Q3 Instrument: S2.i

Sample Info: K2198-04A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111114.B\S2H5292.D

Date : 14-NOV-2011 17:19

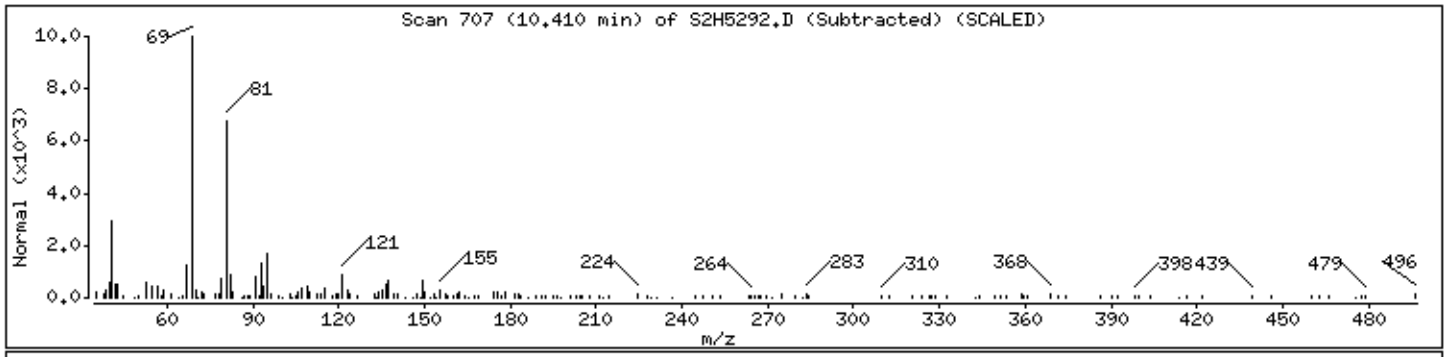
Client ID: H30Q3 Instrument: S2.i

Sample Info: K2198-04A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111114.B\S2H5292.D

Date : 14-NOV-2011 17:19

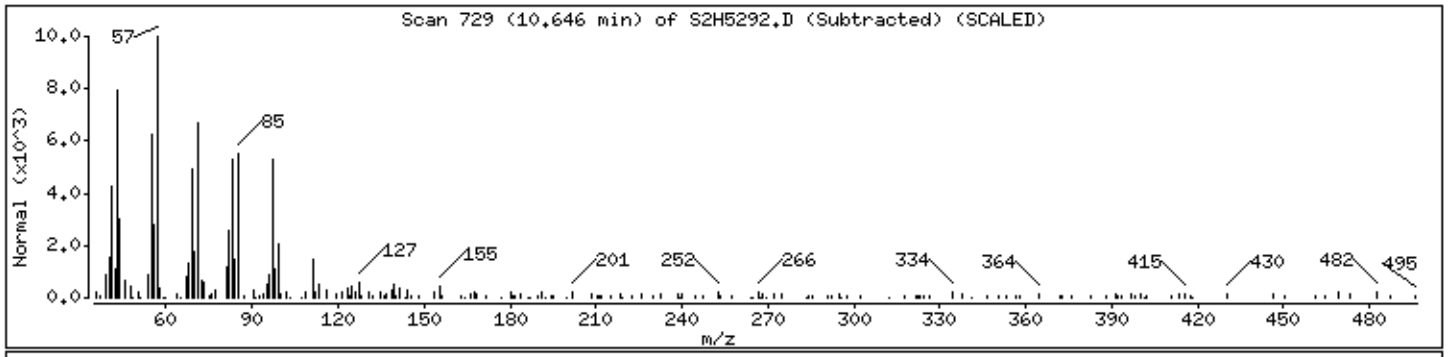
Client ID: H30Q3 Instrument: S2.i

Sample Info: K2198-04A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111114.B\S2H5292.D

Date : 14-NOV-2011 17:19

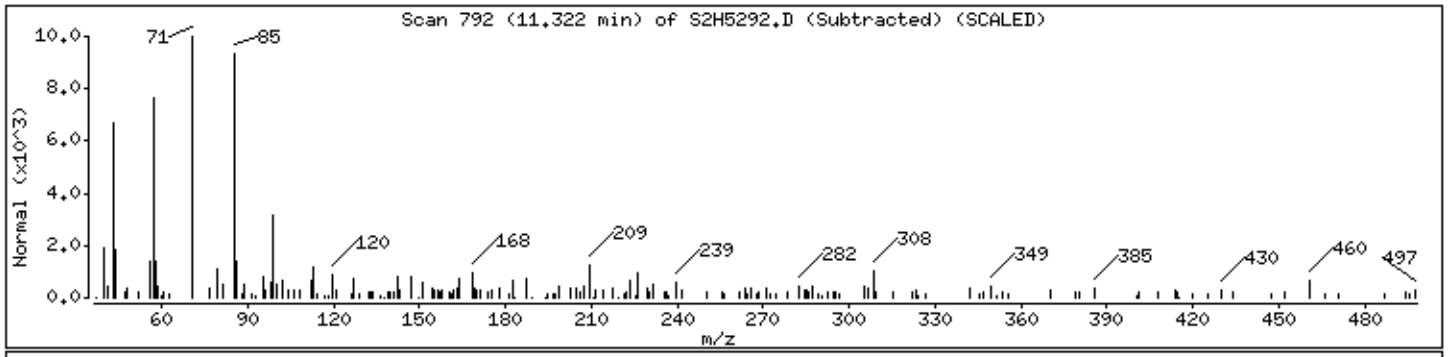
Client ID: H30Q3 Instrument: S2.i

Sample Info: K2198-04A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-05A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: S2H5256.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 16 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: 8.9 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
100-52-7	Benzaldehyde	200	U
108-95-2	Phenol	200	U
111-44-4	Bis(2-chloroethyl)ether	200	U
95-57-8	2-Chlorophenol	200	U
95-48-7	2-Methylphenol	200	U
108-60-1	2,2´-Oxybis(1-chloropropane)	200	U
98-86-2	Acetophenone	200	U
106-44-5	4-Methylphenol	200	U
621-64-7	N-Nitroso-di-n-propylamine	200	U
67-72-1	Hexachloroethane	200	U
98-95-3	Nitrobenzene	200	U
78-59-1	Isophorone	200	U
88-75-5	2-Nitrophenol	200	U
105-67-9	2,4-Dimethylphenol	200	U
111-91-1	Bis(2-chloroethoxy)methane	200	U
120-83-2	2,4-Dichlorophenol	200	U
91-20-3	Naphthalene	50	J
106-47-8	4-Chloroaniline	200	U
87-68-3	Hexachlorobutadiene	200	U
105-60-2	Caprolactam	200	U
59-50-7	4-Chloro-3-methylphenol	200	U
91-57-6	2-Methylnaphthalene	200	U
77-47-4	Hexachlorocyclopentadiene	200	U
88-06-2	2,4,6-Trichlorophenol	200	U
95-95-4	2,4,5-Trichlorophenol	200	U
92-52-4	1,1´-Biphenyl	200	U
91-58-7	2-Chloronaphthalene	200	U
88-74-4	2-Nitroaniline	390	U
131-11-3	Dimethylphthalate	200	U
606-20-2	2,6-Dinitrotoluene	200	U
208-96-8	Acenaphthylene	200	U
99-09-2	3-Nitroaniline	390	U
83-32-9	Acenaphthene	200	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-05A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: S2H5256.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 16 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: 8.9 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
51-28-5	2,4-Dinitrophenol	390	U
100-02-7	4-Nitrophenol	390	U
132-64-9	Dibenzofuran	200	U
121-14-2	2,4-Dinitrotoluene	200	U
84-66-2	Diethylphthalate	200	U
86-73-7	Fluorene	200	U
7005-72-3	4-Chlorophenyl-phenylether	200	U
100-01-6	4-Nitroaniline	390	U
534-52-1	4,6-Dinitro-2-methylphenol	390	U
86-30-6	N-Nitrosodiphenylamine (1)	200	U
95-94-3	1,2,4,5-Tetrachlorobenzene	200	U
101-55-3	4-Bromophenyl-phenylether	200	U
118-74-1	Hexachlorobenzene	200	U
1912-24-9	Atrazine	200	U
87-86-5	Pentachlorophenol	390	U
85-01-8	Phenanthrene	200	U
120-12-7	Anthracene	200	U
86-74-8	Carbazole	200	U
84-74-2	Di-n-butylphthalate	200	U
206-44-0	Fluoranthene	200	U
129-00-0	Pyrene	200	U
85-68-7	Butylbenzylphthalate	200	U
91-94-1	3,3´-Dichlorobenzidine	200	U
56-55-3	Benzo(a)anthracene	200	U
218-01-9	Chrysene	200	U
117-81-7	Bis(2-ethylhexyl)phthalate	200	U
117-84-0	Di-n-octylphthalate	200	U
205-99-2	Benzo(b)fluoranthene	200	U
207-08-9	Benzo(k)fluoranthene	200	U
50-32-8	Benzo(a)pyrene	200	U
193-39-5	Indeno(1,2,3-cd)pyrene	200	U
53-70-3	Dibenzo(a,h)anthracene	200	U
191-24-2	Benzo(g,h,i)perylene	200	U
58-90-2	2,3,4,6-Tetrachlorophenol	200	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30Q4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-05A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: S2H5256.D

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 16 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: 8.9 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.985	140	J
02	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.487	270	BNJ
03	1000194-17-0	5-Hydroxymethyldihydrofuran-	4.690	200	NJ
04		Unknown-02	5.205	250	J
05		Unknown-03	5.302	100	J
06		Unknown-04	7.596	83	J
07	1002-84-2	Pentadecanoic acid	7.907	190	NJ
08		Unknown-05	9.183	190	J
09		Unknown-06	9.548	120	J
10		Unknown-07	10.342	330	J
11		Unknown-08	10.438	140	J
12		Unknown-09	10.674	230	J
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5256.D
Report Date: 11-Nov-2011 13:32

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5256.D
Lab Smp Id: K2198-05A Client Smp ID: H30Q4
Inj Date : 10-NOV-2011 12:29
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-05A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.100	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
$	2 Phenol-d5	71	3.382	3.373	(0.916)	127874	39.1504	650
$	4 bis(2-Chloroethyl)ether-d8	67	3.424	3.427	(0.927)	158737	35.2688	590
$	6 2-Chlorophenol-d4	132	3.499	3.491	(0.948)	112232	39.7213	660
*	8 1,4-Dichlorobenzene-d4	152	3.693	3.684	(1.000)	103723	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.003	4.006	(1.084)	178160	40.2339	670
$	16 Nitrobenzene-d5	128	4.143	4.145	(0.871)	54354	35.3619	590(Q)
$	19 2-Nitrophenol-d4	143	4.422	4.424	(0.930)	69997	41.2515	690
$	23 2,4-Dichlorophenol-d3	165	4.625	4.628	(0.973)	142311	45.9425	760
*	25 Naphthalene-d8	136	4.754	4.746	(1.000)	295150	40.0000	
	26 Naphthalene	128	4.765	4.767	(1.002)	19217	2.52972	42(a)
$	27 4-Chloroaniline-d4	131	4.808	4.810	(1.011)	61891	22.5026	370(Q)
$	40 Dimethylphthalate-d6	166	5.977	5.968	(0.962)	375949	40.2086	670
$	43 Acenaphthylene-d8	160	6.084	6.076	(0.979)	423519	34.8331	580
*	46 Acenaphthene-d10	164	6.213	6.204	(1.000)	254295	40.0000	
$	49 4-Nitrophenol-d4	143	6.320	6.312	(1.017)	58535	43.4413	720
$	54 Fluorene-d10	176	6.641	6.633	(1.069)	317658	36.9860	610
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.695	6.698	(0.900)	61027	33.7521	560
*	65 Phenanthrene-d10	188	7.435	7.438	(1.000)	463350	40.0000	
$	67 Anthracene-d10	188	7.478	7.480	(1.006)	465524	35.1718	580

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5256.D
Report Date: 11-Nov-2011 13:32

		QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ug/Kg)
$	72 Pyrene-d10	212	8.604	8.606	(0.893)	408254	37.4621	620(R)
*	77 Chrysene-d12	240	9.633	9.668	(1.000)	345936	40.0000	(Q)
$	83 Benzo(a)pyrene-d12	264	10.824	10.891	(0.993)	145460	24.1461	400(RH)
*	85 Perylene-d12	264	10.899	10.966	(1.000)	245498	40.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5256.D
Report Date: 11-Nov-2011 13:32

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5256.D
Lab Smp Id: K2198-05A Client Smp ID: H30Q4
Inj Date : 10-NOV-2011 12:29
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-05A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.100	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

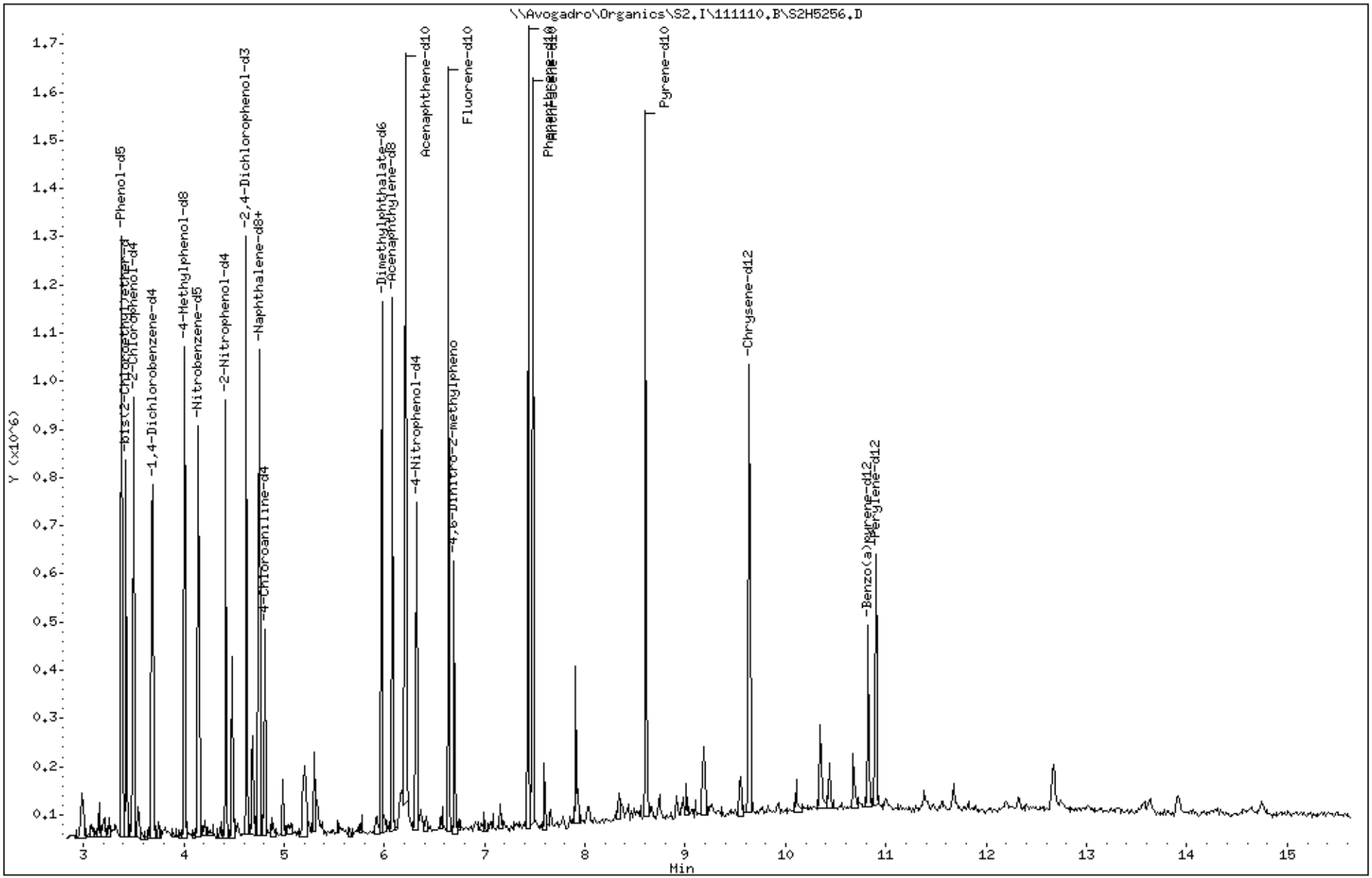
ISTD	RT	AREA	AMOUNT
* 8 1,4-Dichlorobenzene-d4	3.693	931454	40.000
* 25 Naphthalene-d8	4.755	1085601	40.000
* 65 Phenanthrene-d10	7.436	1343732	40.000
* 77 Chrysene-d12	9.634	982696	40.000
* 85 Perylene-d12	10.899	590658	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
2.985	161416	6.93176888	120	0		0	8
2(3H)-Furanone, dihydro-4-hydroxy-					CAS #: 5469-16-9		
4.487	367838	13.5533234	230	90	NIST2002.L	4145	25

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5256.D
Report Date: 11-Nov-2011 13:32

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
5-Hydroxymethyldihydrofuran-2-one				CAS #: 1000194-17-0			
4.690	270931	9.98271783	170	86	NIST2002.L	7821	25
Unknown				CAS #:			
5.205	349478	12.8768507	210	0		0	25
Unknown				CAS #:			
5.302	142258	5.24162058	87	0		0	25
Unknown				CAS #:			
7.596	141018	4.19781194	70	0		0	65
Pentadecanoic acid				CAS #: 1002-84-2			
7.907	331071	9.85526562	160	87	NIST2002.L	83686	65
Unknown				CAS #:			
9.183	232902	9.48013823	160	0		0	77
Unknown				CAS #:			
9.548	144303	5.87375770	98	0		0	77
Unknown				CAS #:			
10.342	249290	16.8821548	280	0		0	85
Unknown				CAS #:			
10.438	106419	7.20679036	120	0		0	85
Unknown				CAS #:			
10.674	169841	11.5017813	190	0		0	85

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5256.D
Date : 10-NOV-2011 12:29
Client ID: H30Q4
Instrument: S2.i
Sample Info: K2198-05A,,62764,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5256.D

Date : 10-NOV-2011 12:29

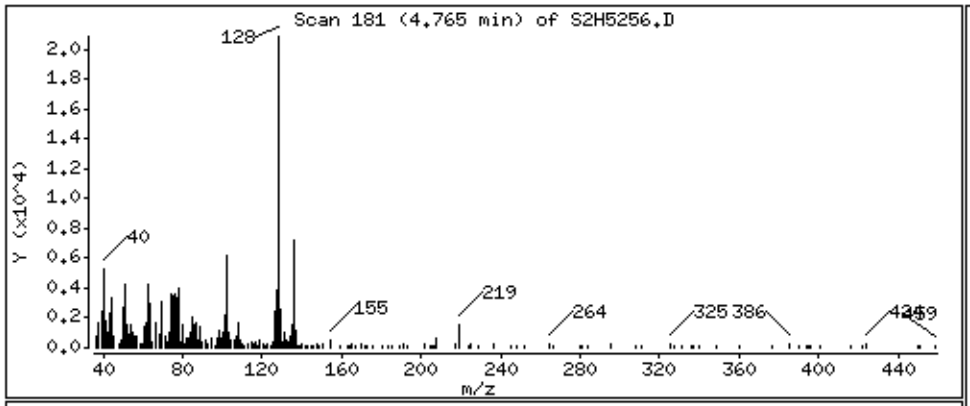
Client ID: H30Q4 Instrument: S2.i

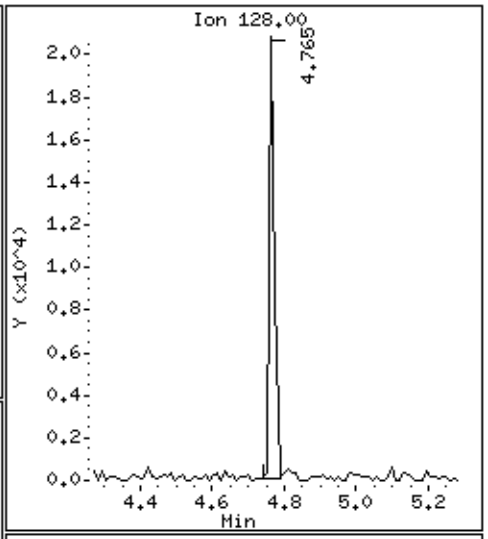
Sample Info: K2198-05A,,62764,,

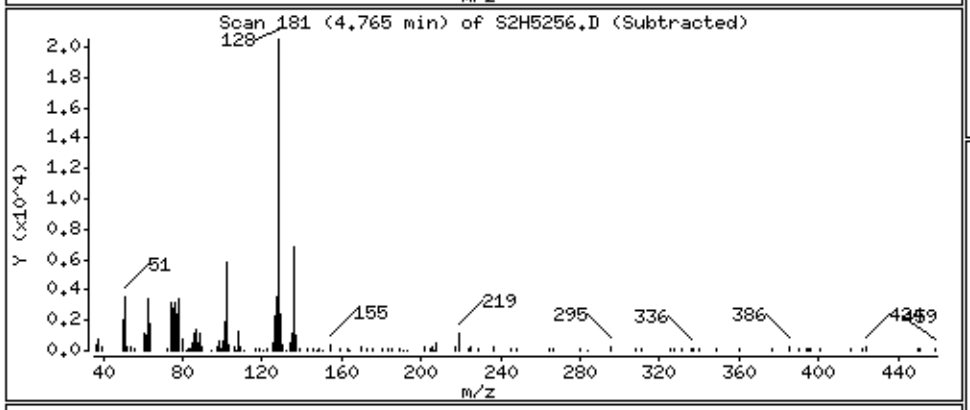
Volume Injected (uL): 2.0 Operator: SRC: LIMS

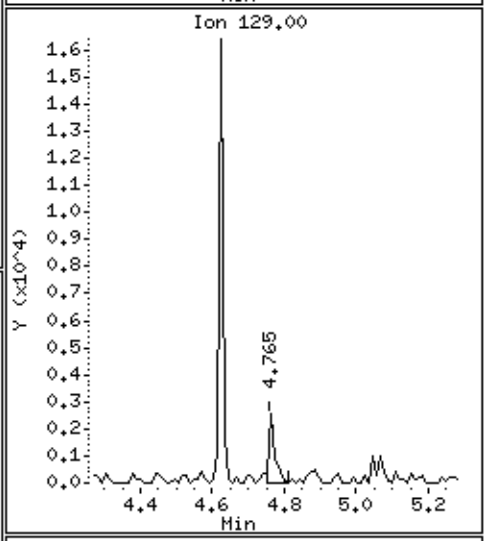
Column phase: RXI-5SILMS Column diameter: 0.25

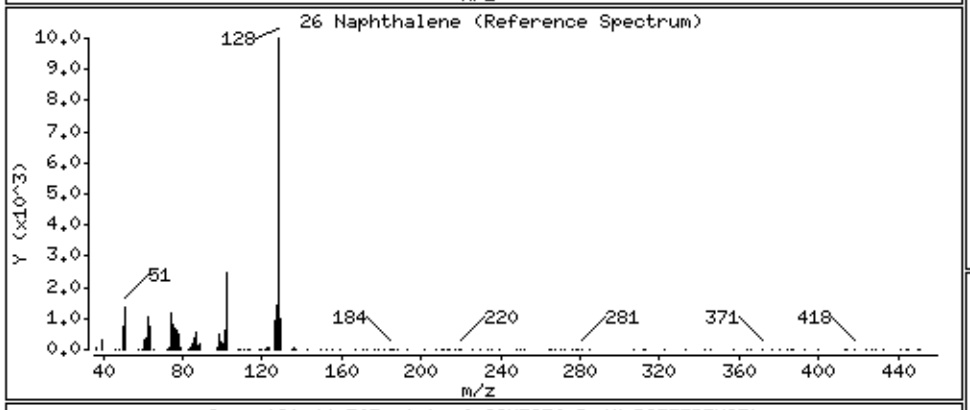
26 Naphthalene Concentration: 42 ug/Kg

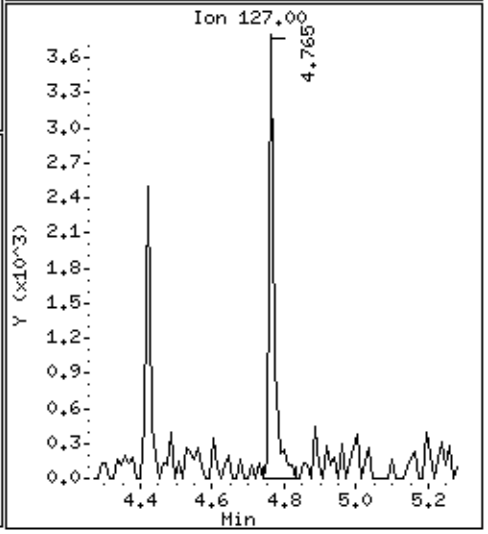


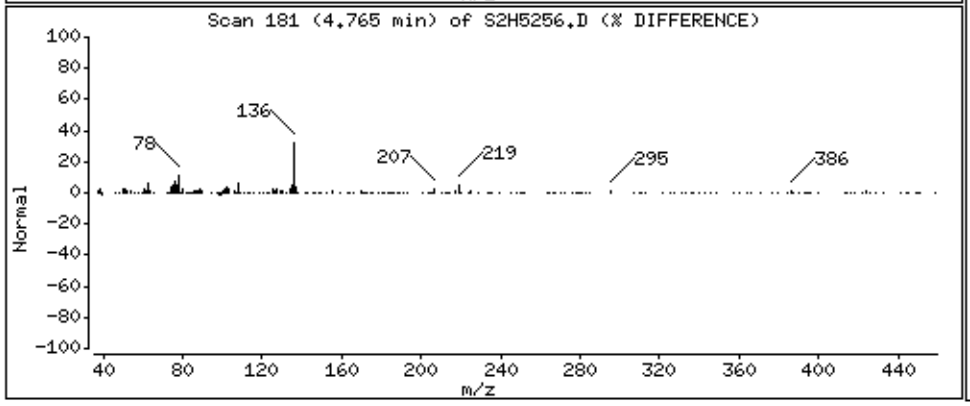












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Date : 10-NOV-2011 12:29

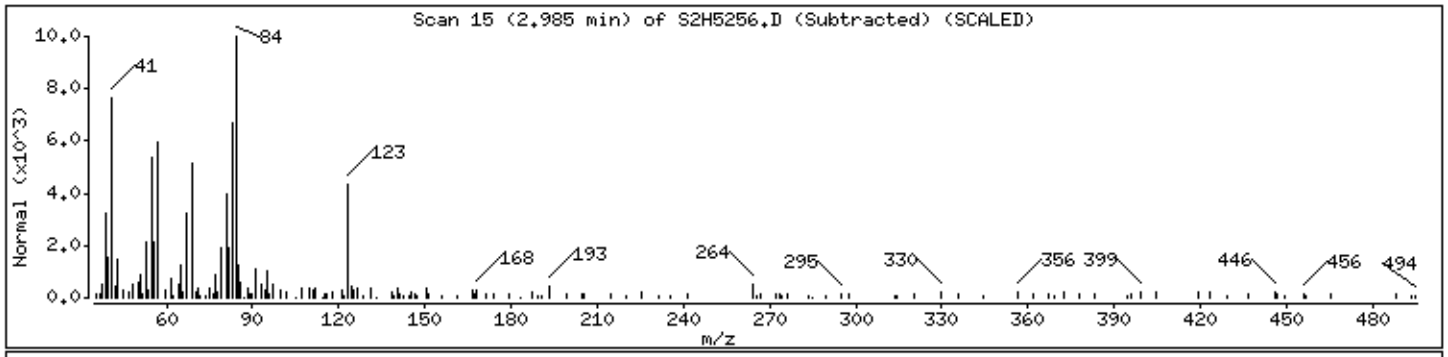
Client ID: H30Q4 Instrument: S2.i

Sample Info: K2198-05A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5256.D

Date : 10-NOV-2011 12:29

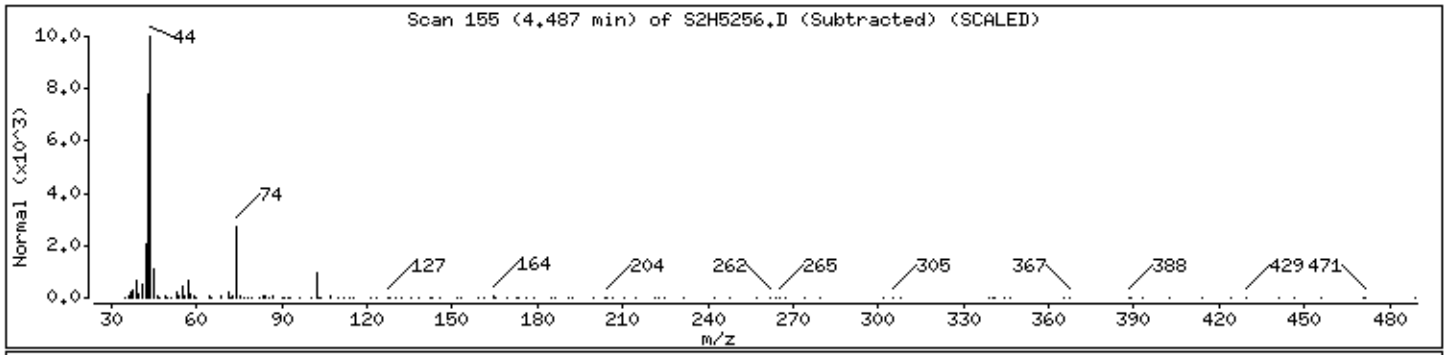
Client ID: H30Q4 Instrument: S2.i

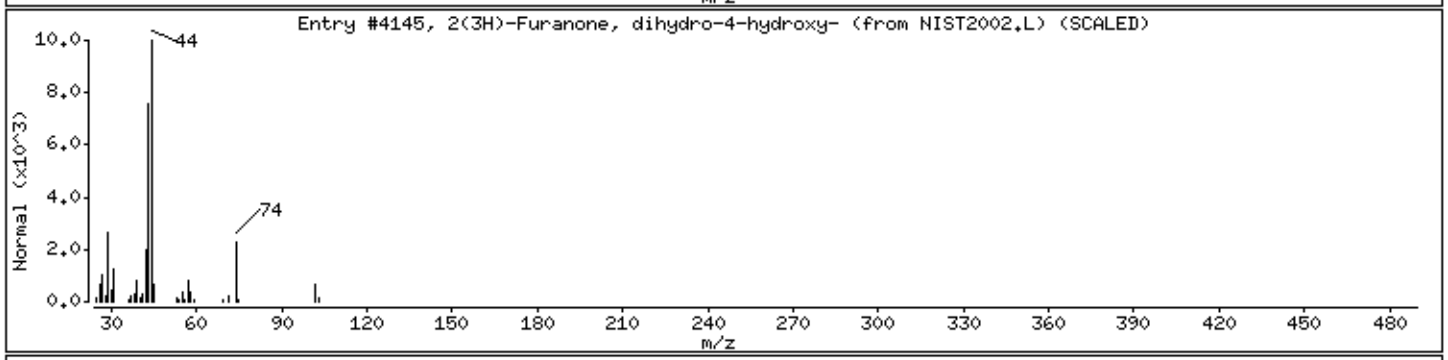
Sample Info: K2198-05A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2(3H)-Furanone, dihydro-4-hydroxy-	5469-16-9	NIST2002.L	4145	90	C4H6O3	102





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Date : 10-NOV-2011 12:29

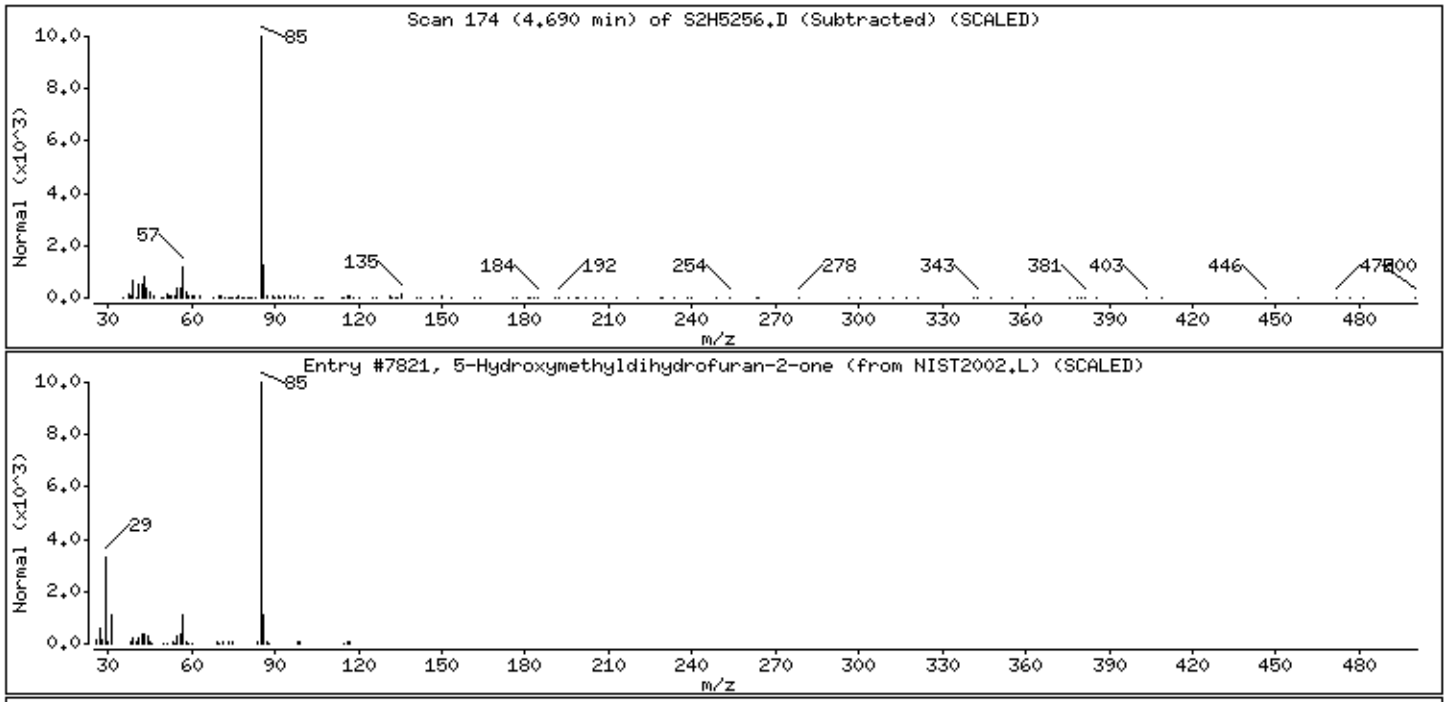
Client ID: H30Q4 Instrument: S2.i

Sample Info: K2198-05A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
5-Hydroxymethyldihydrofuran-2-one	1000194-17-0	NIST2002.L	7821	86	C5H8O3	116



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5256.D

Date : 10-NOV-2011 12:29

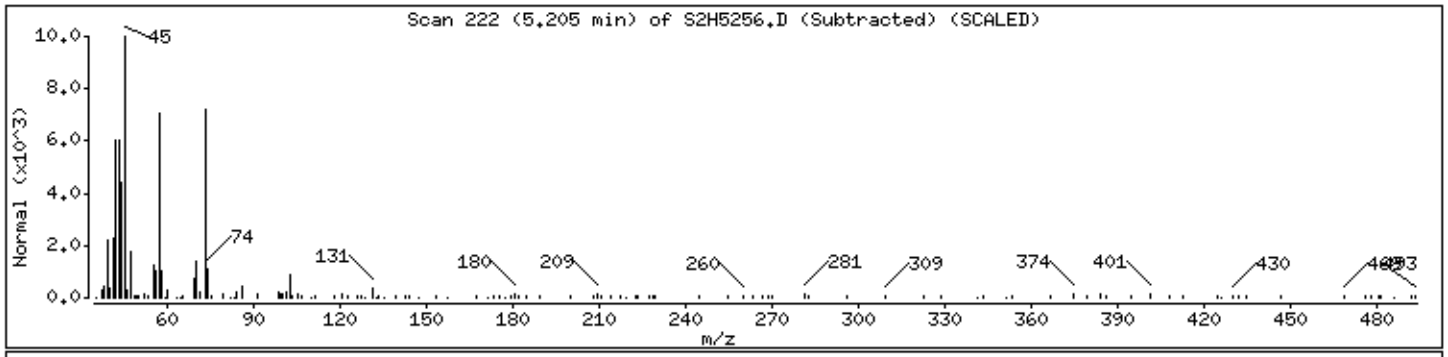
Client ID: H30Q4 Instrument: S2.i

Sample Info: K2198-05A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5256.D

Date : 10-NOV-2011 12:29

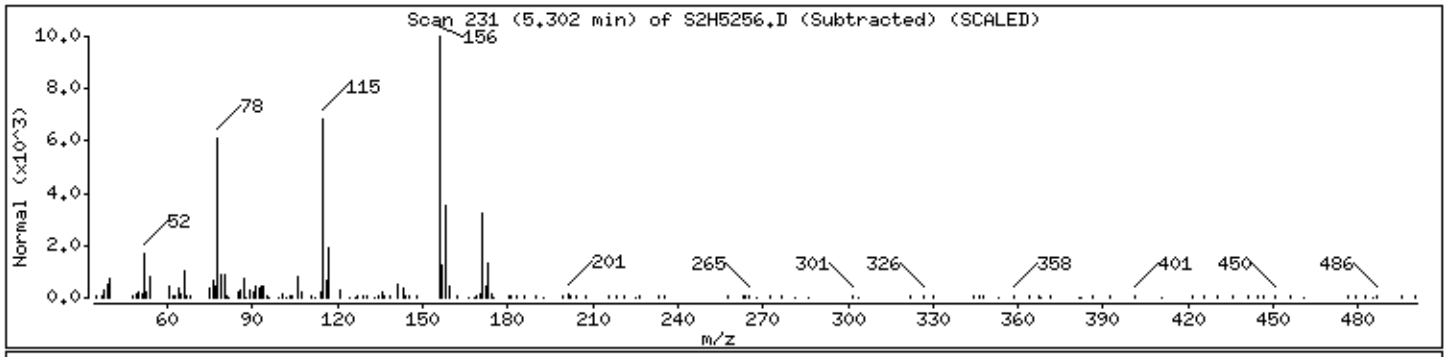
Client ID: H30Q4 Instrument: S2.i

Sample Info: K2198-05A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5256.D

Date : 10-NOV-2011 12:29

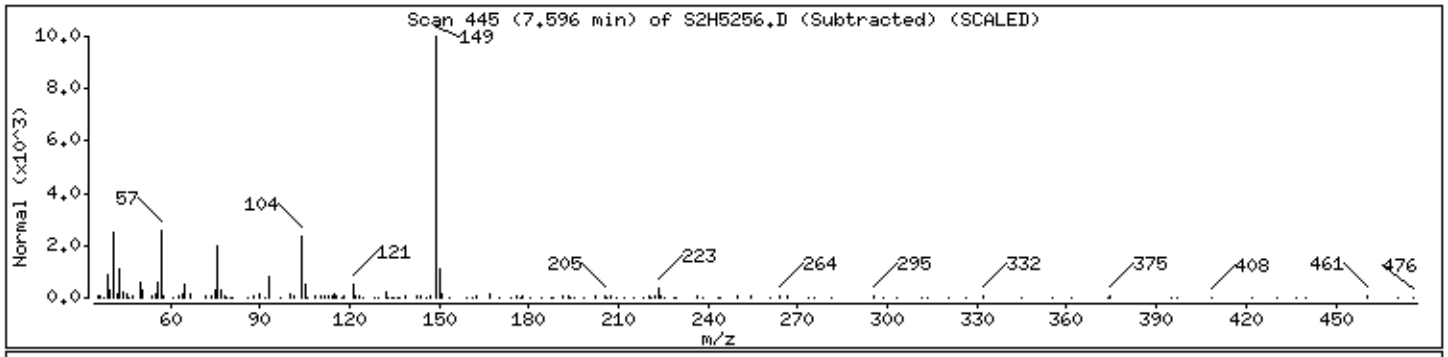
Client ID: H30Q4 Instrument: S2.i

Sample Info: K2198-05A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5256.D

Date : 10-NOV-2011 12:29

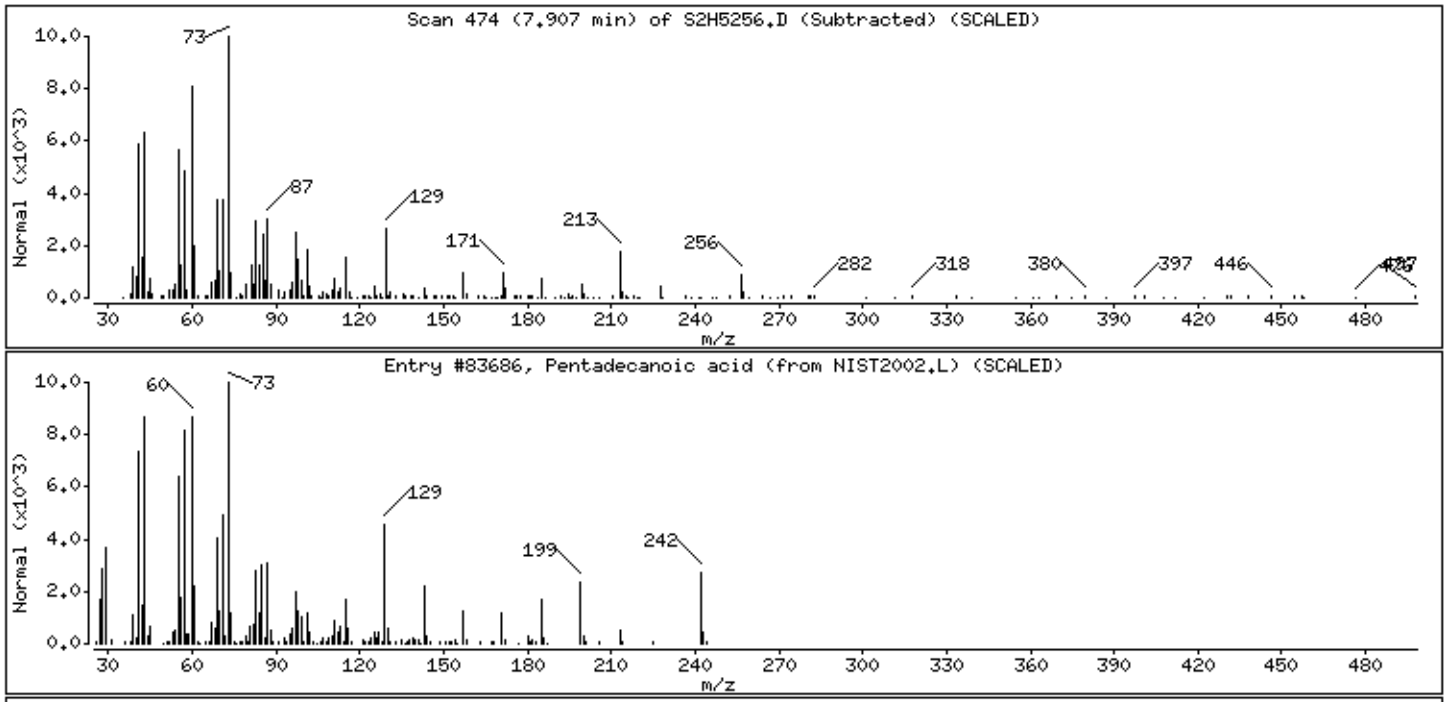
Client ID: H30Q4 Instrument: S2.i

Sample Info: K2198-05A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Pentadecanoic acid	1002-84-2	NIST2002.L	83686	87	C15H30O2	242



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5256.D

Date : 10-NOV-2011 12:29

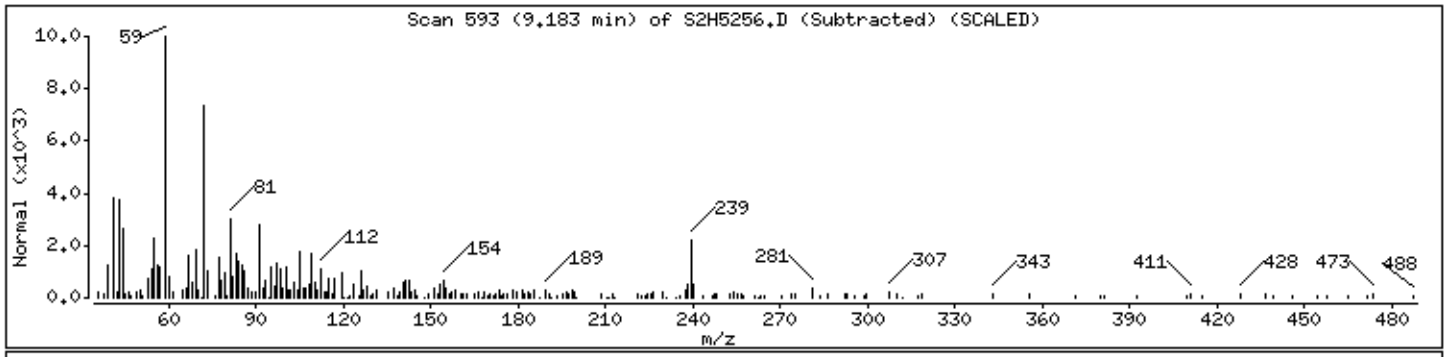
Client ID: H30Q4 Instrument: S2.i

Sample Info: K2198-05A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5256.D

Date : 10-NOV-2011 12:29

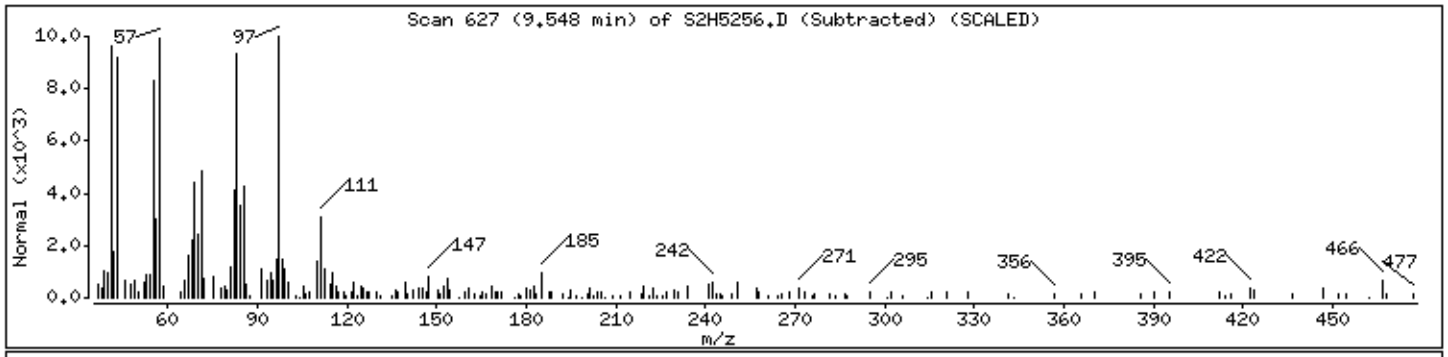
Client ID: H30Q4 Instrument: S2.i

Sample Info: K2198-05A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5256.D

Date : 10-NOV-2011 12:29

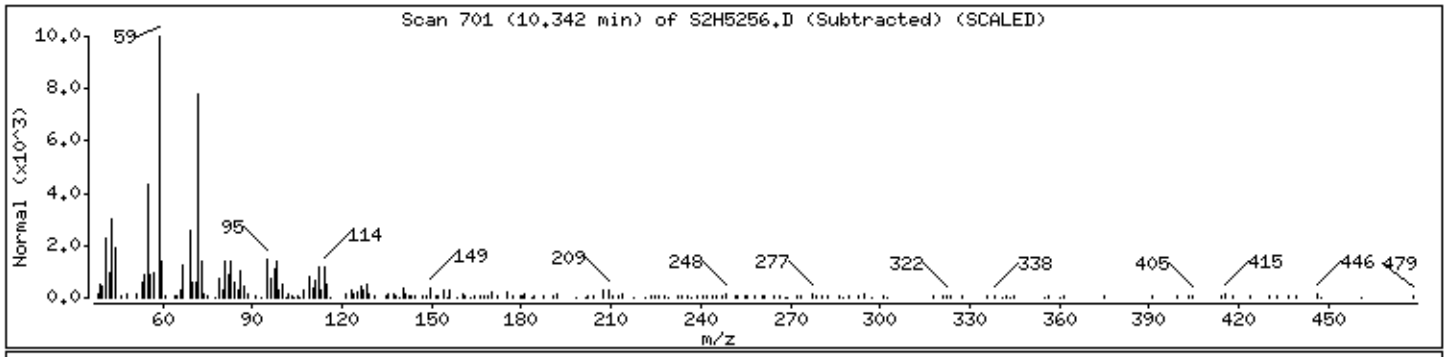
Client ID: H30Q4 Instrument: S2.i

Sample Info: K2198-05A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5256.D

Date : 10-NOV-2011 12:29

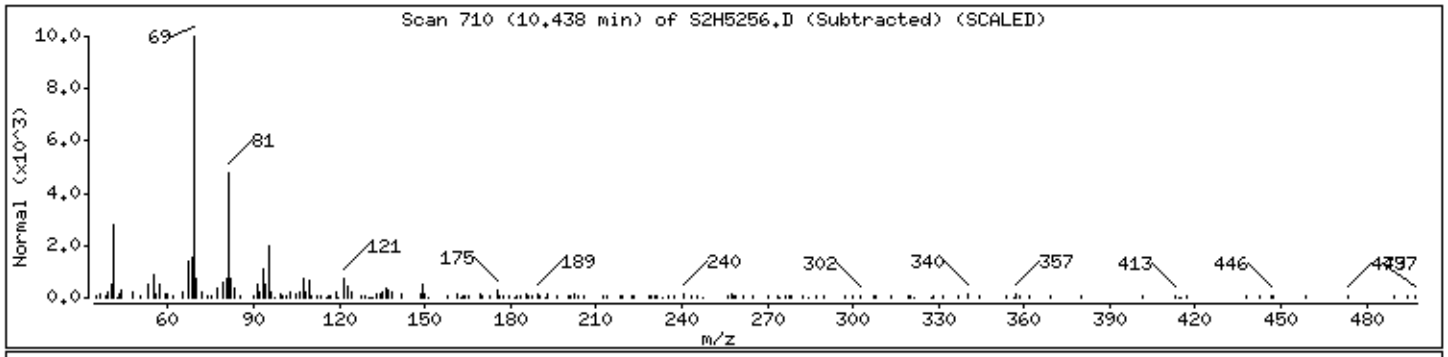
Client ID: H30Q4 Instrument: S2.i

Sample Info: K2198-05A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5256.D

Date : 10-NOV-2011 12:29

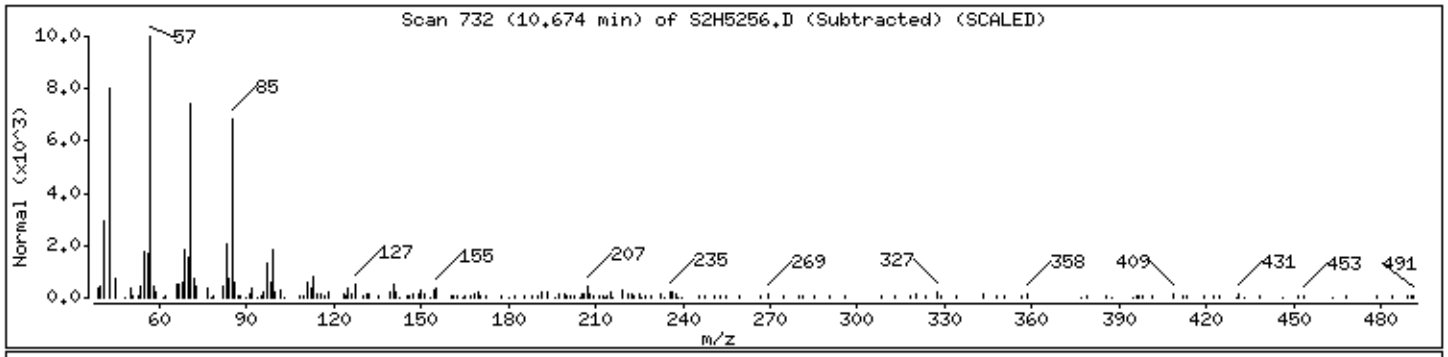
Client ID: H30Q4 Instrument: S2.i

Sample Info: K2198-05A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q6

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-06A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: S2H5257.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 48 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: 9.1 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
100-52-7	Benzaldehyde	320	U
108-95-2	Phenol	320	U
111-44-4	Bis(2-chloroethyl)ether	320	U
95-57-8	2-Chlorophenol	320	U
95-48-7	2-Methylphenol	320	U
108-60-1	2,2´-Oxybis(1-chloropropane)	320	U
98-86-2	Acetophenone	320	U
106-44-5	4-Methylphenol	320	U
621-64-7	N-Nitroso-di-n-propylamine	320	U
67-72-1	Hexachloroethane	320	U
98-95-3	Nitrobenzene	320	U
78-59-1	Isophorone	320	U
88-75-5	2-Nitrophenol	320	U
105-67-9	2,4-Dimethylphenol	320	U
111-91-1	Bis(2-chloroethoxy)methane	320	U
120-83-2	2,4-Dichlorophenol	320	U
91-20-3	Naphthalene	210	J
106-47-8	4-Chloroaniline	320	U
87-68-3	Hexachlorobutadiene	320	U
105-60-2	Caprolactam	320	U
59-50-7	4-Chloro-3-methylphenol	320	U
91-57-6	2-Methylnaphthalene	320	U
77-47-4	Hexachlorocyclopentadiene	320	U
88-06-2	2,4,6-Trichlorophenol	320	U
95-95-4	2,4,5-Trichlorophenol	320	U
92-52-4	1,1´-Biphenyl	320	U
91-58-7	2-Chloronaphthalene	320	U
88-74-4	2-Nitroaniline	630	U
131-11-3	Dimethylphthalate	320	U
606-20-2	2,6-Dinitrotoluene	320	U
208-96-8	Acenaphthylene	320	U
99-09-2	3-Nitroaniline	630	U
83-32-9	Acenaphthene	320	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q6

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-06A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: S2H5257.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 48 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: 9.1 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
51-28-5	2,4-Dinitrophenol	630	U
100-02-7	4-Nitrophenol	630	U
132-64-9	Dibenzofuran	320	U
121-14-2	2,4-Dinitrotoluene	320	U
84-66-2	Diethylphthalate	320	U
86-73-7	Fluorene	320	U
7005-72-3	4-Chlorophenyl-phenylether	320	U
100-01-6	4-Nitroaniline	630	U
534-52-1	4,6-Dinitro-2-methylphenol	630	U
86-30-6	N-Nitrosodiphenylamine (1)	320	U
95-94-3	1,2,4,5-Tetrachlorobenzene	320	U
101-55-3	4-Bromophenyl-phenylether	320	U
118-74-1	Hexachlorobenzene	320	U
1912-24-9	Atrazine	320	U
87-86-5	Pentachlorophenol	630	U
85-01-8	Phenanthrene	320	U
120-12-7	Anthracene	320	U
86-74-8	Carbazole	320	U
84-74-2	Di-n-butylphthalate	320	U
206-44-0	Fluoranthene	320	U
129-00-0	Pyrene	320	U
85-68-7	Butylbenzylphthalate	320	U
91-94-1	3,3´-Dichlorobenzidine	320	U
56-55-3	Benzo(a)anthracene	320	U
218-01-9	Chrysene	320	U
117-81-7	Bis(2-ethylhexyl)phthalate	320	U
117-84-0	Di-n-octylphthalate	320	U
205-99-2	Benzo(b)fluoranthene	320	U
207-08-9	Benzo(k)fluoranthene	320	U
50-32-8	Benzo(a)pyrene	320	U
193-39-5	Indeno(1,2,3-cd)pyrene	320	U
53-70-3	Dibenzo(a,h)anthracene	320	U
191-24-2	Benzo(g,h,i)perylene	320	U
58-90-2	2,3,4,6-Tetrachlorophenol	320	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30Q6

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-06A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: S2H5257.D

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 48 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: 9.1 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	3.114	140	J
02	3338-55-4	1,3,6-Octatriene, 3,7-dimeth	3.661	250	NJ
03	28634-89-1	Bicyclo[3.1.0]hex-2-ene, 4-m	3.811	170	NJ
04		Unknown-02	4.486	280	J
05		Unknown-03	4.679	300	J
06		Unknown-04	6.170	150	J
07		Unknown-05	6.427	160	J
08		Unknown-06	7.854	190	J
09		Unknown-07	7.907	970	J
10		Unknown-08	8.036	480	J
11		Unknown-09	8.207	270	J
12		Unknown-10	8.358	770	J
13		Unknown-11	8.465	880	J
14		Unknown-12	8.497	1400	J
15		Unknown-13	8.647	1000	J
16		Unknown-14	8.744	3300	J
17		Unknown-15	8.862	690	J
18		Unknown-16	8.926	2000	J
19	112-92-5	1-Octadecanol	8.958	710	NJ
20		Unknown-17	9.012	4100	J
21		Unknown-18	9.194	3300	J
22		Unknown-19	9.548	4400	J
23		Unknown-20	10.127	3800	J
24		Unknown-21	10.363	570	J
25		Unknown-22	11.489	960	J
26	1000214-17-4	5-Cholestene-3-ol, 24-methyl	12.218	2200	NJ
27		Unknown-23	12.615	980	J
28	83-47-6	.gamma.-Sitosterol	12.701	15000	NJ
29		Unknown-24	12.786	3500	J
	E96679[2]	Total Alkanes	N/A	980	J

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5257.D
Report Date: 16-Nov-2011 19:03

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5257.D
Lab Smp Id: K2198-06A Client Smp ID: H30Q6
Inj Date : 10-NOV-2011 12:50
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-06A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 16-Nov-2011 19:02 bmaczewska Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET101

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.300	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ug/Kg)
$	2	Phenol-d5	71	3.381	3.393	(0.916)	170909	40.0294	660
$	4	bis(2-Chloroethyl)ether-d8	67	3.424	3.435	(0.927)	207844	35.3272	580
$	6	2-Chlorophenol-d4	132	3.499	3.511	(0.948)	139336	37.7251	620
*	8	1,4-Dichlorobenzene-d4	152	3.692	3.693	(1.000)	135586	40.0000	(Q)
$	11	4-Methylphenol-d8	113	4.003	4.015	(1.084)	225448	38.9483	640
$	16	Nitrobenzene-d5	128	4.143	4.154	(0.871)	73939	36.6749	610
$	19	2-Nitrophenol-d4	143	4.421	4.433	(0.930)	91136	40.9489	680
$	23	2,4-Dichlorophenol-d3	165	4.625	4.637	(0.973)	180837	44.5097	730
*	25	Naphthalene-d8	136	4.754	4.754	(1.000)	387125	40.0000	
	26	Naphthalene	128	4.765	4.776	(1.002)	64450	6.46846	110(a)
$	27	4-Chloroaniline-d4	131	4.808	4.819	(1.011)	41065	11.3833	190(Q)
$	40	Dimethylphthalate-d6	166	5.976	5.977	(0.962)	505364	42.3054	700
$	43	Acenaphthylene-d8	160	6.084	6.084	(0.979)	547104	35.2201	580
*	46	Acenaphthene-d10	164	6.212	6.213	(1.000)	324890	40.0000	
$	49	4-Nitrophenol-d4	143	6.320	6.320	(1.017)	71750	41.6784	690(Q)
$	54	Fluorene-d10	176	6.641	6.642	(1.069)	430316	39.2163	650
$	58	4,6-Dinitro-2-methylphenol-d2	200	6.695	6.706	(0.900)	76354	33.4437	550
*	65	Phenanthrene-d10	188	7.435	7.435	(1.000)	585066	40.0000	
$	67	Anthracene-d10	188	7.478	7.489	(1.006)	612750	36.6640	610

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5257.D
Report Date: 16-Nov-2011 19:03

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
$ 72 Pyrene-d10	212	8.604	8.615	(0.892)	452834	38.2994	630(R)
* 77 Chrysene-d12	240	9.644	9.655	(1.000)	375322	40.0000	(Q)
$ 83 Benzo(a)pyrene-d12	264	10.834	10.867	(0.992)	177229	24.7351	410(RH)
* 85 Perylene-d12	264	10.920	10.942	(1.000)	291994	40.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5257.D
Report Date: 16-Nov-2011 19:03

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5257.D
Lab Smp Id: K2198-06A Client Smp ID: H30Q6
Inj Date : 10-NOV-2011 12:50
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-06A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 16-Nov-2011 19:02 bmaczewska Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET101

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.300	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	ISTD	RT	AREA	AMOUNT
* 8	1,4-Dichlorobenzene-d4	3.693	1198474	40.000
* 25	Naphthalene-d8	4.754	2160001	40.000
* 46	Acenaphthene-d10	6.213	1929512	40.000
* 65	Phenanthrene-d10	7.435	1786841	40.000
* 77	Chrysene-d12	9.644	1084865	40.000
* 85	Perylene-d12	10.920	806661	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
3.114	134753	4.49749937	74	0	0	8	

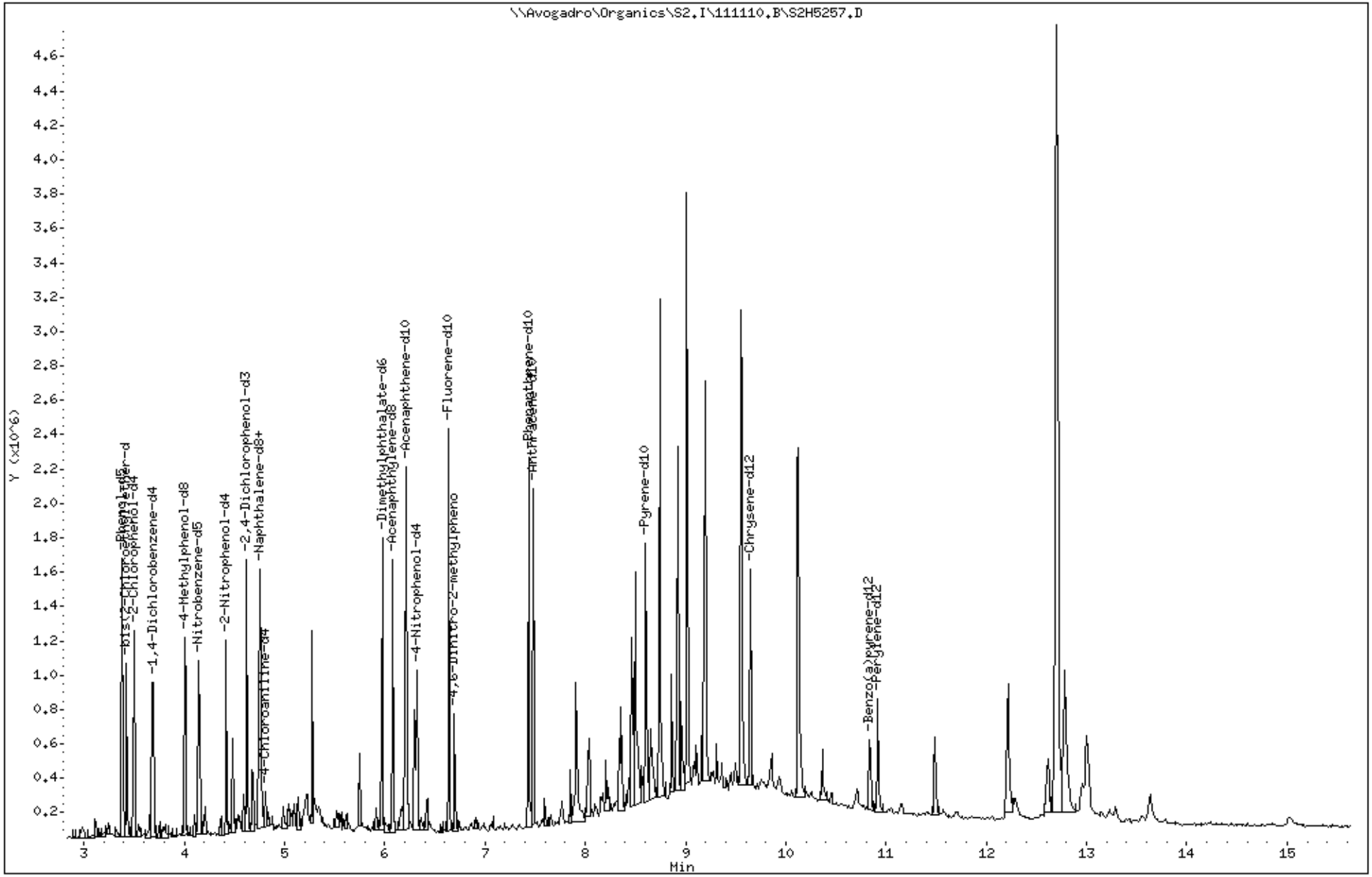
Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5257.D
Report Date: 16-Nov-2011 19:03

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
1,3,6-Octatriene, 3,7-dimethyl-, (Z)-					CAS #: 3338-55-4		
3.661	231854	7.73829682	130	86	NIST2002.L	15256	8
Bicyclo[3.1.0]hex-2-ene, 4-methyl-1-(1-m					CAS #: 28634-89-1		
3.811	160112	5.34385578	88	91	NIST2002.L	15349	8
Straight-chain Alkane					CAS #:		
4.208	160817	5.36740042	89	0		0	8
Unknown					CAS #:		
4.486	475576	8.80695921	150	0		0	25
Unknown					CAS #:		
4.679	516720	9.56888656	160	0		0	25
Branched Alkane					CAS #:		
5.140	216956	4.01770160	66	0		0	25
Straight-chain Alkane					CAS #:		
5.280	810664	15.0122810	250	0		0	25
Straight-chain Alkane					CAS #:		
5.752	318908	6.61116277	110	0		0	46
Unknown					CAS #:		
6.170	232155	4.81272530	79	0		0	46
Unknown					CAS #:		
6.427	238087	4.93570042	81	0		0	46
Unknown					CAS #:		
7.854	267074	5.97868468	99	0		0	65
Unknown					CAS #:		
7.907	1363799	30.5298155	500	0		0	65
Unknown					CAS #:		
8.036	683005	15.2896637	250	0		0	65
Unknown					CAS #:		
8.207	382097	8.55357905	140	0		0	65
Unknown					CAS #:		
8.358	1078077	24.1337006	400	0		0	65
Unknown					CAS #:		
8.465	1236997	27.6912424	460	0		0	65
Unknown					CAS #:		
8.497	1939145	43.4094419	720	0		0	65
Unknown					CAS #:		
8.647	888649	32.7653233	540	0		0	77

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5257.D
Report Date: 16-Nov-2011 19:03

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
8.744	2809891	103.603321	1700	0		0	77
Unknown				CAS #:			
8.862	586855	21.6379086	360	0		0	77
Unknown				CAS #:			
8.926	1694419	62.4748124	1000	0		0	77
1-Octadecanol				CAS #: 112-92-5			
8.958	608939	22.4521530	370	87	NIST2002.L	100813	77
Unknown				CAS #:			
9.012	3489896	128.675748	2100	0		0	77
Unknown				CAS #:			
9.194	2785100	102.689279	1700	0		0	77
Unknown				CAS #:			
9.548	3748669	138.216960	2300	0		0	77
Unknown				CAS #:			
10.127	3224673	118.896730	2000	0		0	77
Unknown				CAS #:			
10.363	360520	17.8771358	300	0		0	85
Unknown				CAS #:			
11.489	611896	30.3421332	500	0		0	85
5-Cholestene-3-ol, 24-methyl-				CAS #: 1000214-17-4			
12.218	1430470	70.9328041	1200	90	NIST2002.L	156601	85
Unknown				CAS #:			
12.615	626382	31.0604609	510	0		0	85
.gamma.-Sitosterol				CAS #: 83-47-6			
12.701	9666274	479.322214	7900	96	NIST2002.L	159285	85
Unknown				CAS #:			
12.786	2252371	111.688503	1800	0		0	85

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5257.D
Date : 10-NOV-2011 12:50
Client ID: H30Q6
Instrument: S2.i
Sample Info: K2198-06A,,62764,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5257.D

Date : 10-NOV-2011 12:50

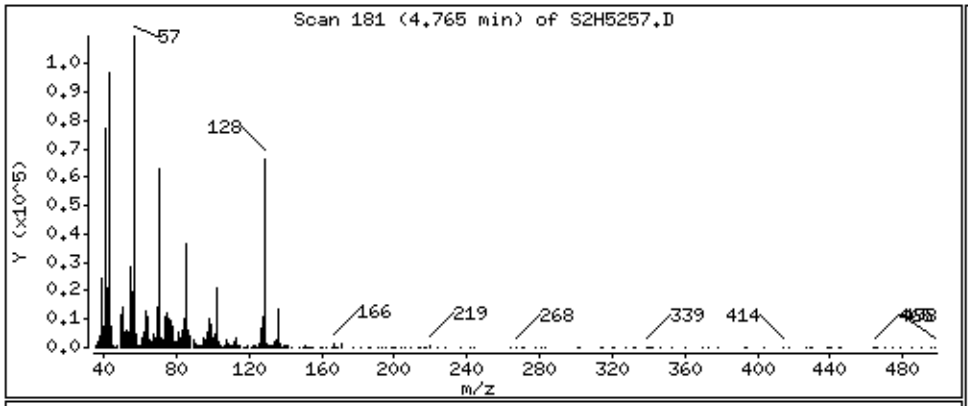
Client ID: H30Q6 Instrument: S2.i

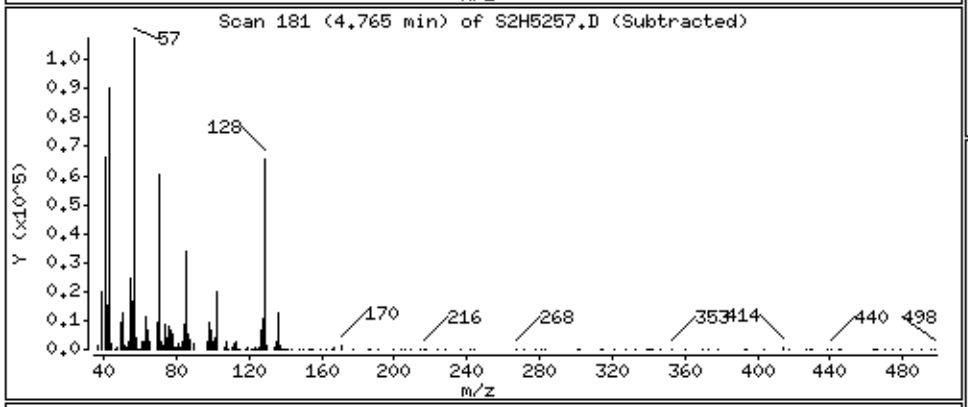
Sample Info: K2198-06A,,62764,,

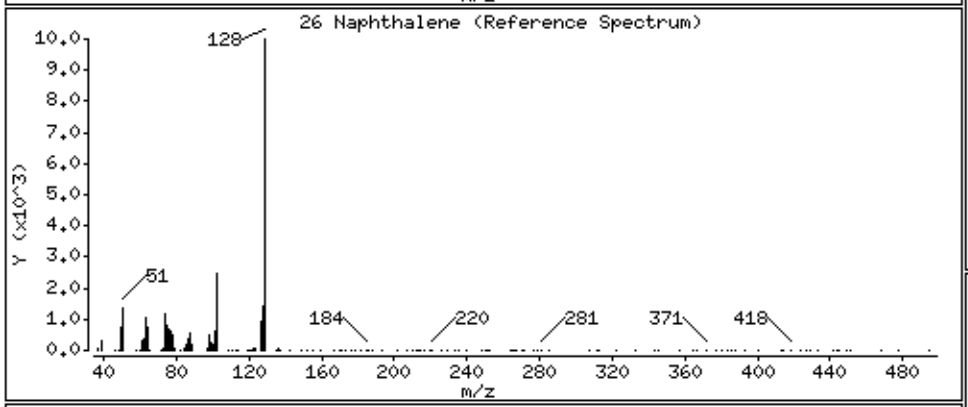
Volume Injected (uL): 2.0 Operator: SRC: LIMS

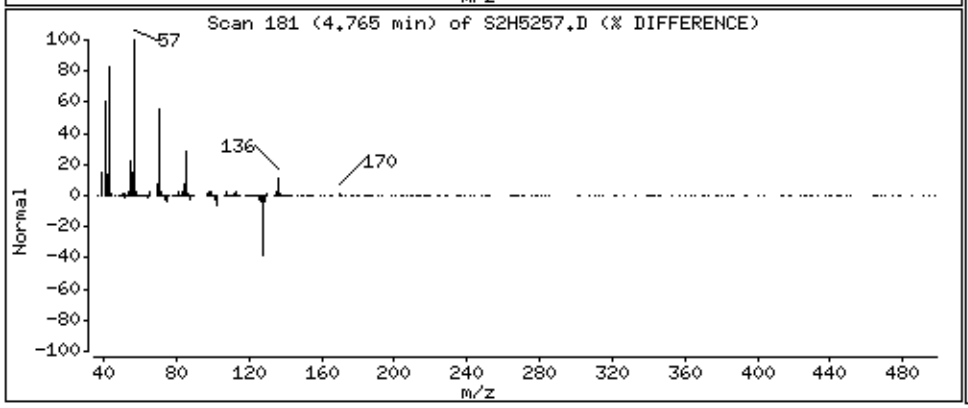
Column phase: RXI-5SILMS Column diameter: 0.25

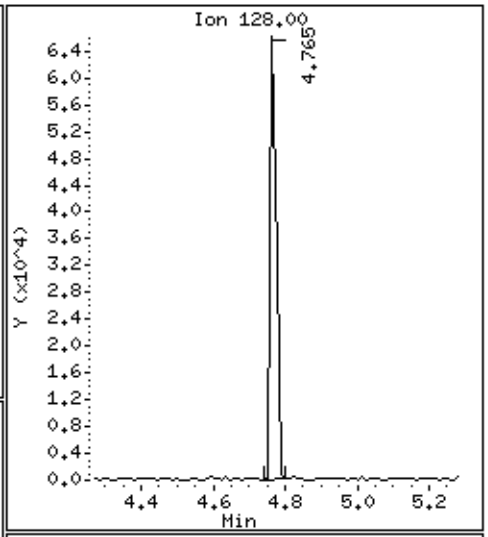
26 Naphthalene Concentration: 110 ug/Kg

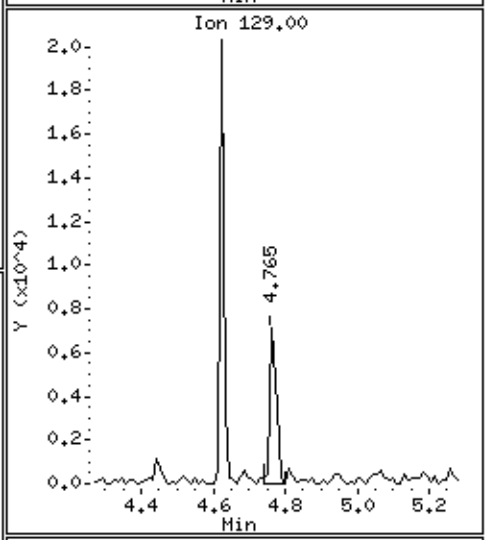


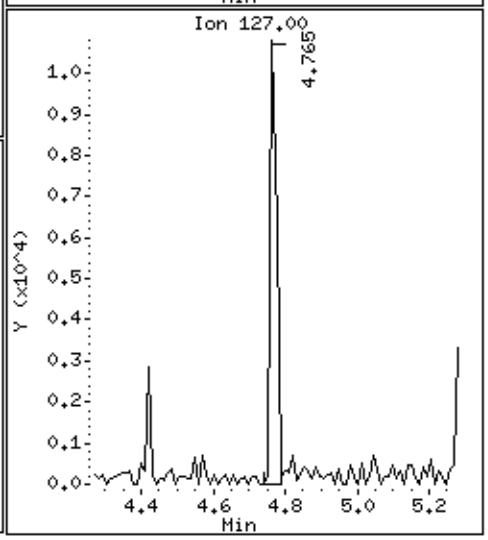












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Date : 10-NOV-2011 12:50

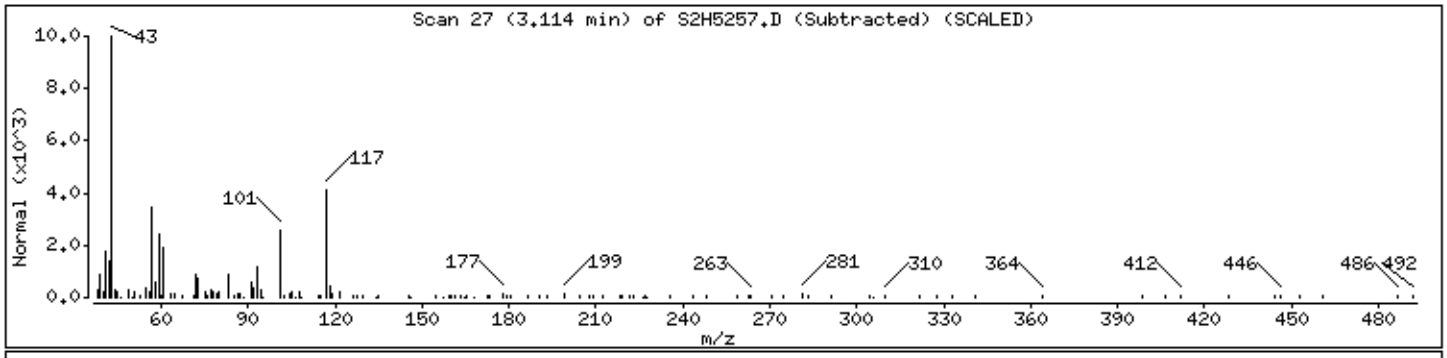
Client ID: H30Q6 Instrument: S2.i

Sample Info: K2198-06A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 12:50

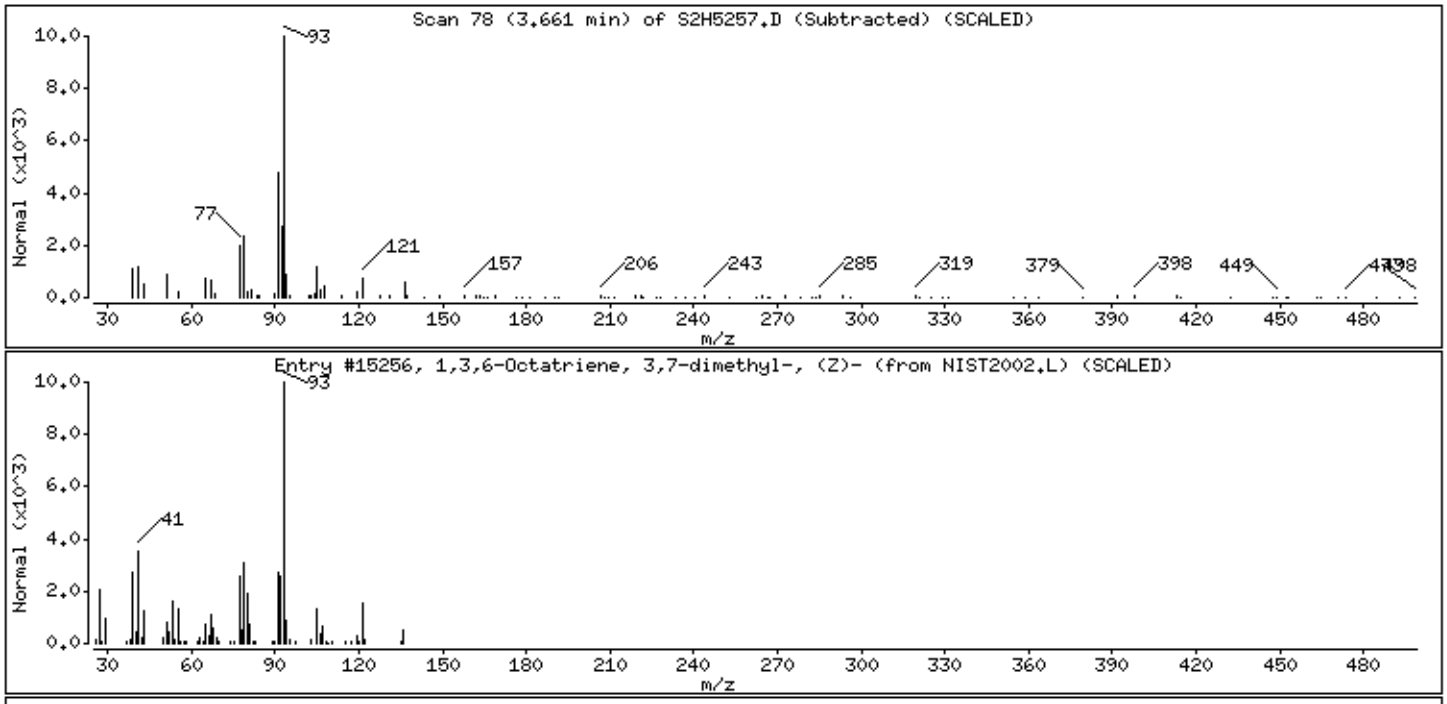
Client ID: H30Q6 Instrument: S2.i

Sample Info: K2198-06A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,3,6-Octatriene, 3,7-dimethyl-, (Z)-	3338-55-4	NIST2002.L	15256	86	C10H16	136



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Date : 10-NOV-2011 12:50

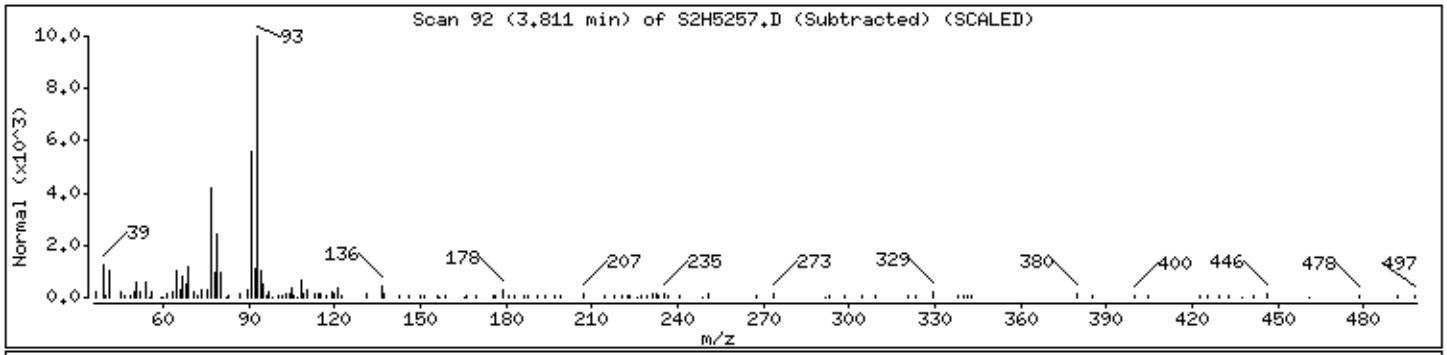
Client ID: H30Q6 Instrument: S2.i

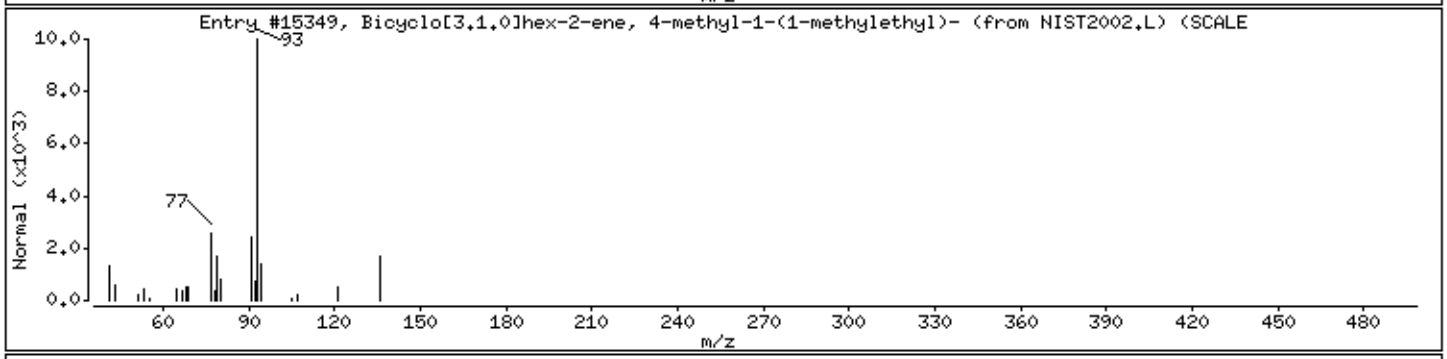
Sample Info: K2198-06A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[3.1.0]hex-2-ene, 4-methyl-1-(1-m	28634-89-1	NIST2002.L	15349	91	C10H16	136





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Date : 10-NOV-2011 12:50

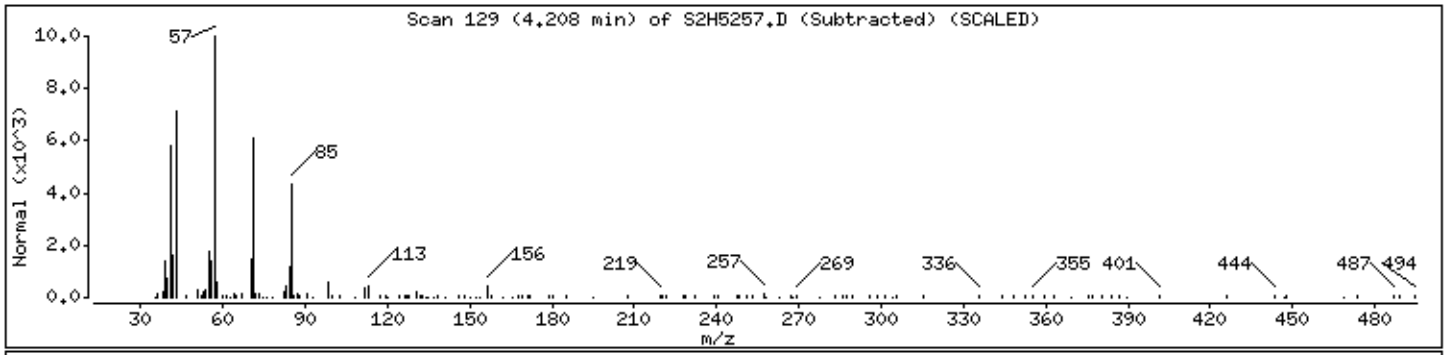
Client ID: H30Q6 Instrument: S2.i

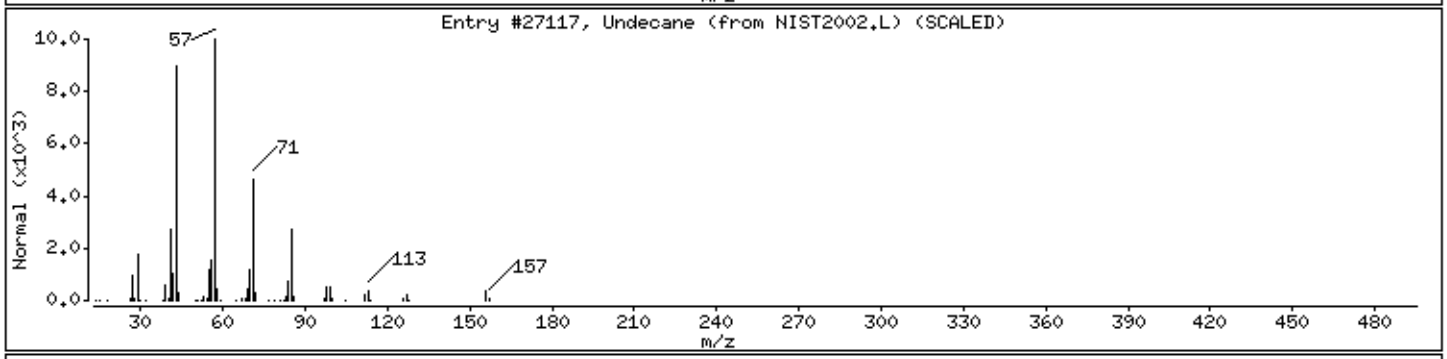
Sample Info: K2198-06A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Straight-chain Alkane						
Undecane	1120-21-4	NIST2002.L	27117	87	C11H24	156





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Date : 10-NOV-2011 12:50

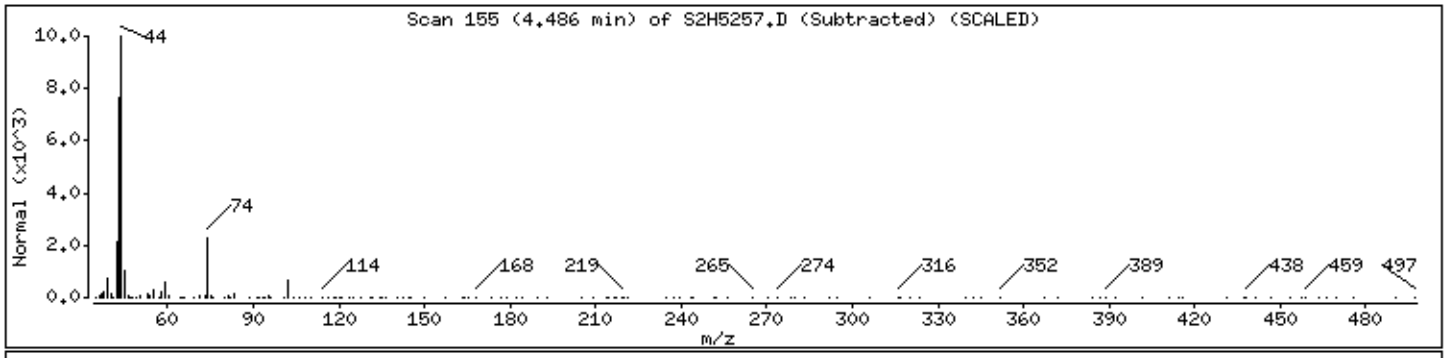
Client ID: H30Q6 Instrument: S2.i

Sample Info: K2198-06A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 12:50

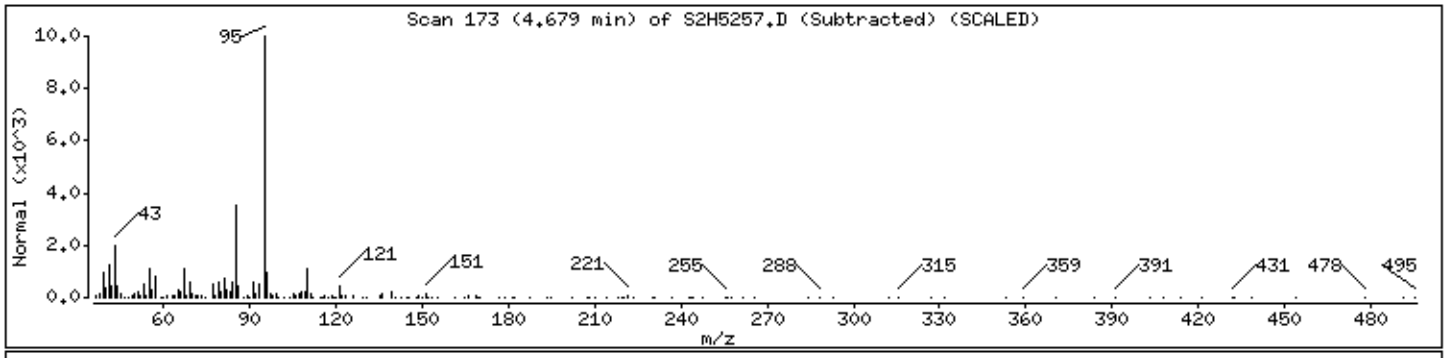
Client ID: H30Q6 Instrument: S2.i

Sample Info: K2198-06A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 12:50

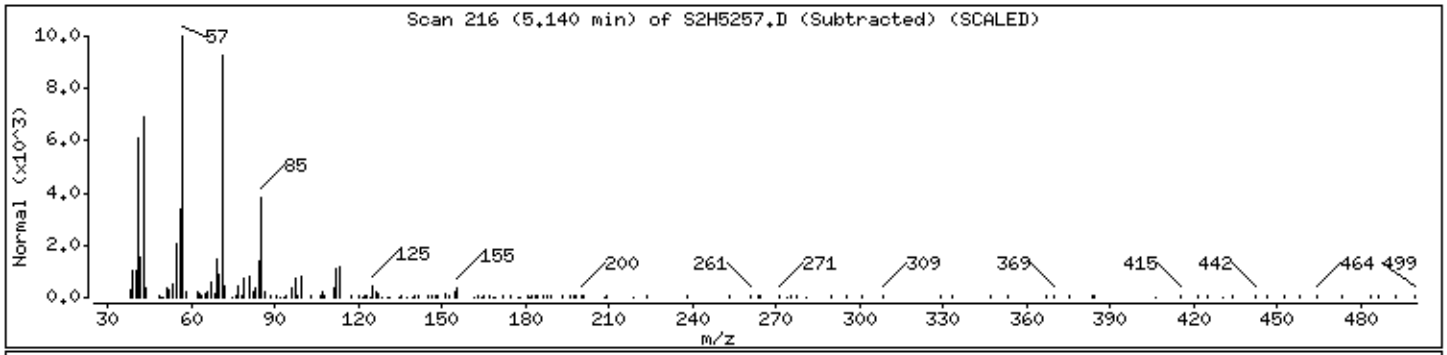
Client ID: H30Q6 Instrument: S2.i

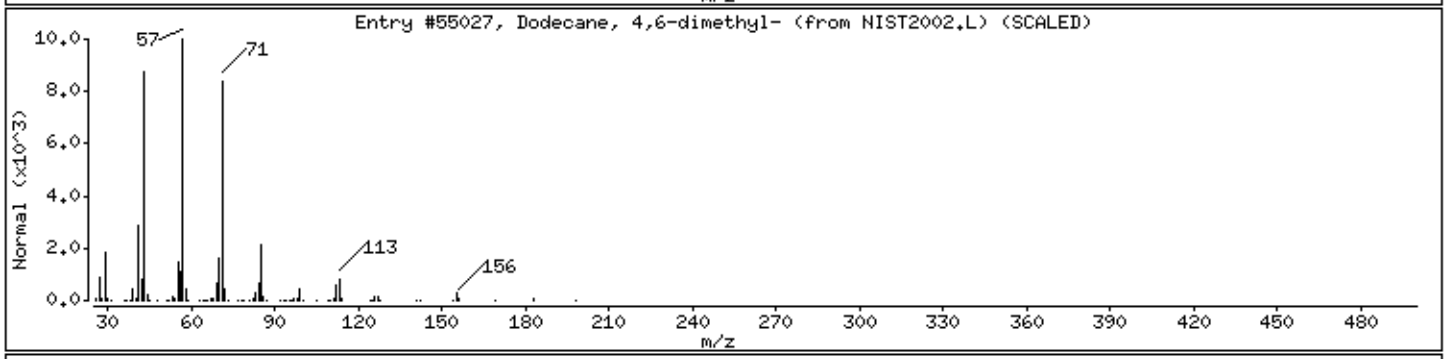
Sample Info: K2198-06A,,62764,,

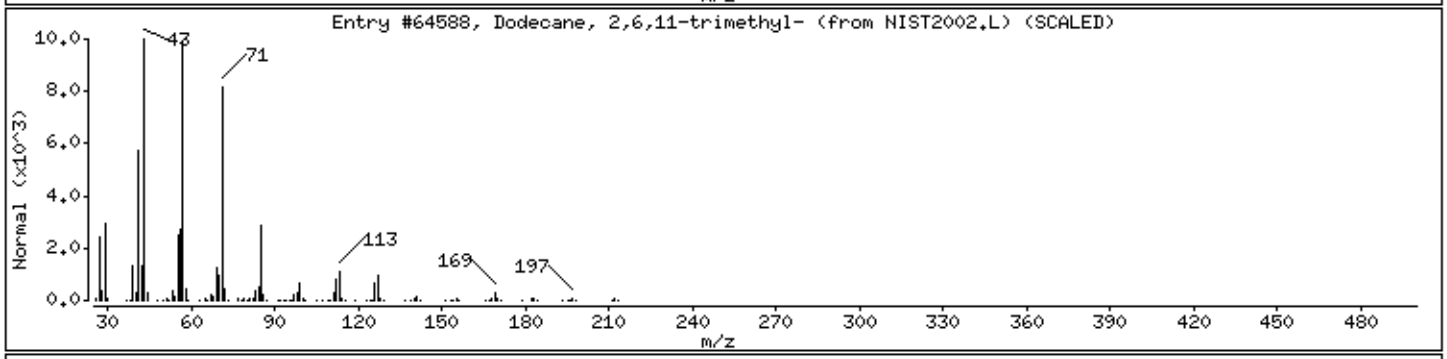
Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Branched Alkane						
Dodecane, 4,6-dimethyl-	61141-72-8	NIST2002.L	55027	90	C14H30	198
Dodecane, 2,6,11-trimethyl-	31295-56-4	NIST2002.L	64588	86	C15H32	212







Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5257.D

Date : 10-NOV-2011 12:50

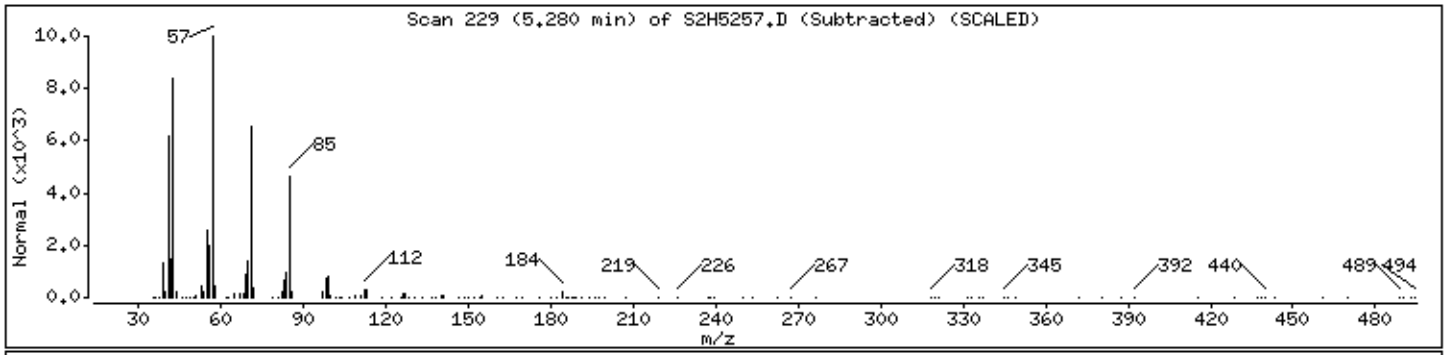
Client ID: H30Q6 Instrument: S2.i

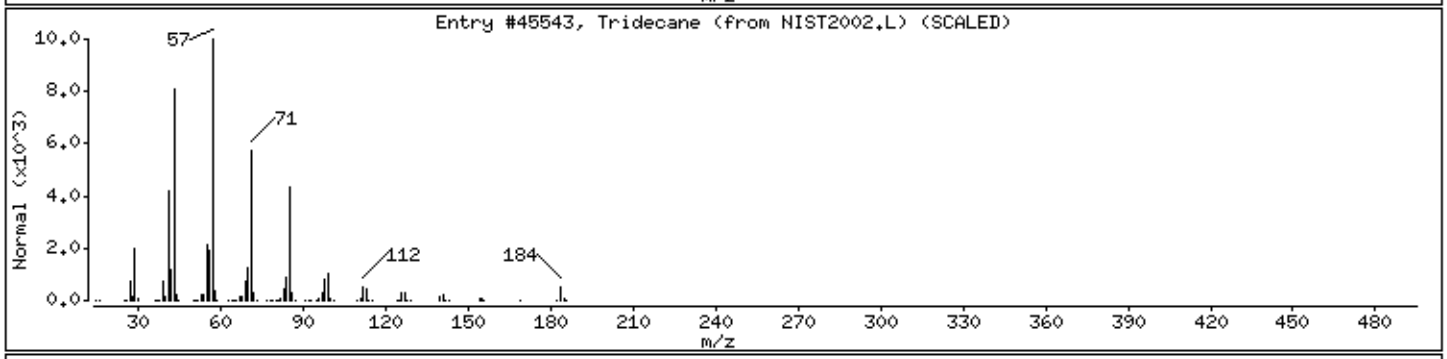
Sample Info: K2198-06A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Straight-chain Alkane						
Tridecane	629-50-5	NIST2002.L	45543	91	C13H28	184





Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5257.D

Date : 10-NOV-2011 12:50

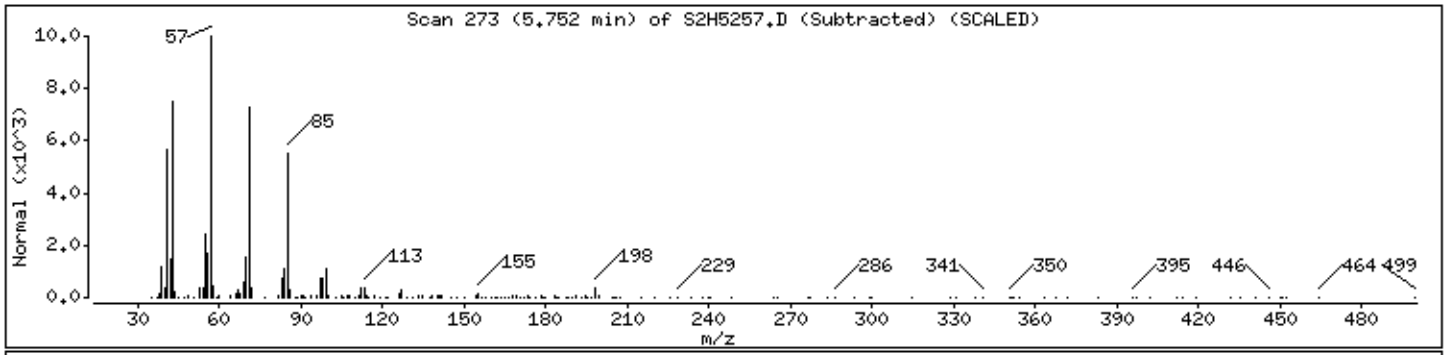
Client ID: H30Q6 Instrument: S2.i

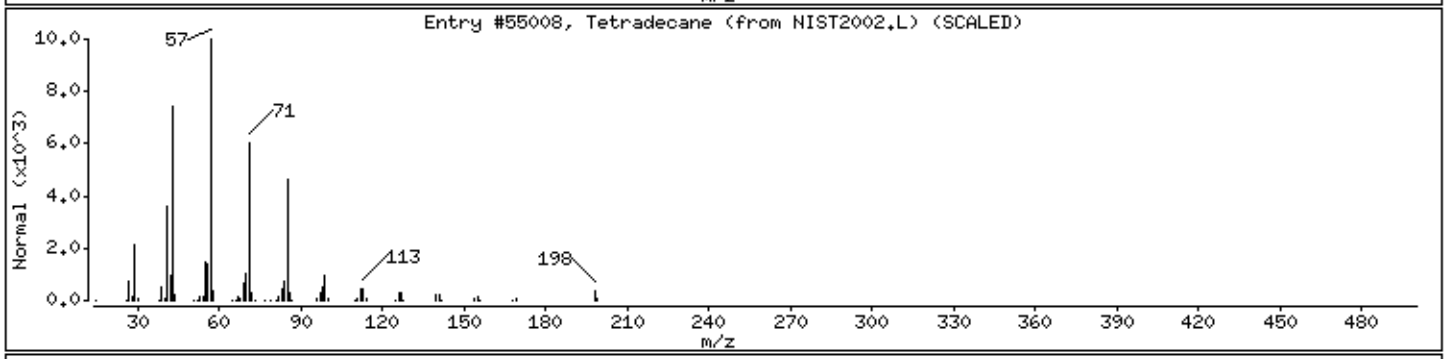
Sample Info: K2198-06A,,62764,,

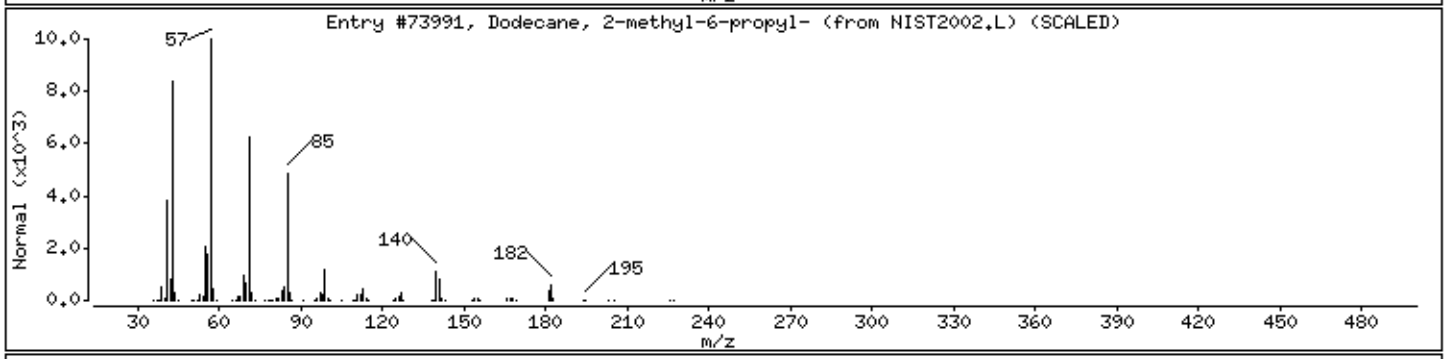
Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Straight-chain Alkane						
Tetradecane	629-59-4	NIST2002.L	55008	95	C14H30	198
Dodecane, 2-methyl-6-propyl-	55045-08-4	NIST2002.L	73991	90	C16H34	226







Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5257.D

Date : 10-NOV-2011 12:50

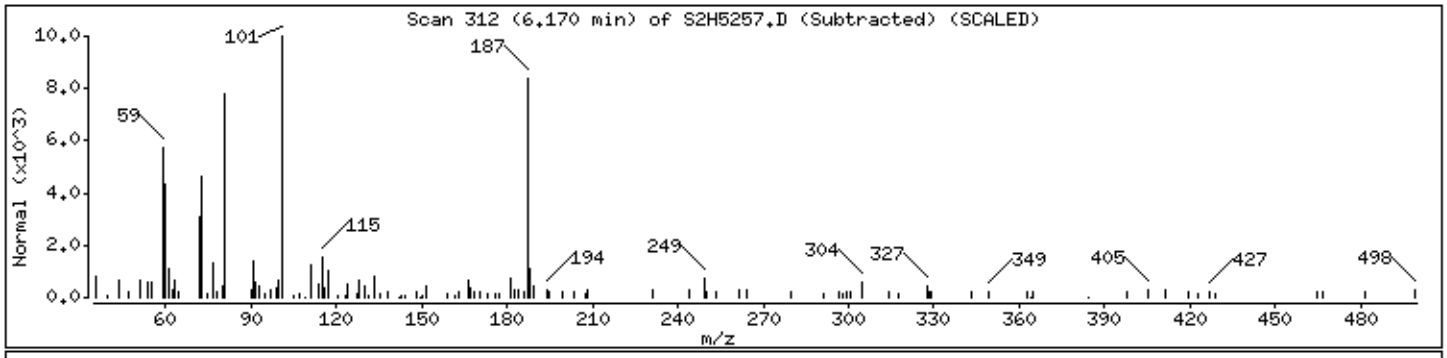
Client ID: H30Q6 Instrument: S2.i

Sample Info: K2198-06A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5257.D

Date : 10-NOV-2011 12:50

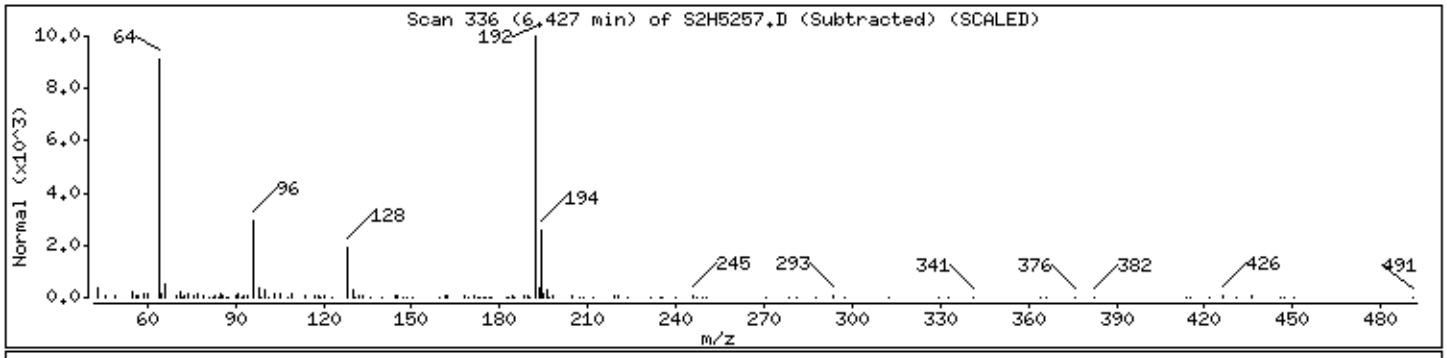
Client ID: H30Q6 Instrument: S2.i

Sample Info: K2198-06A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5257.D

Date : 10-NOV-2011 12:50

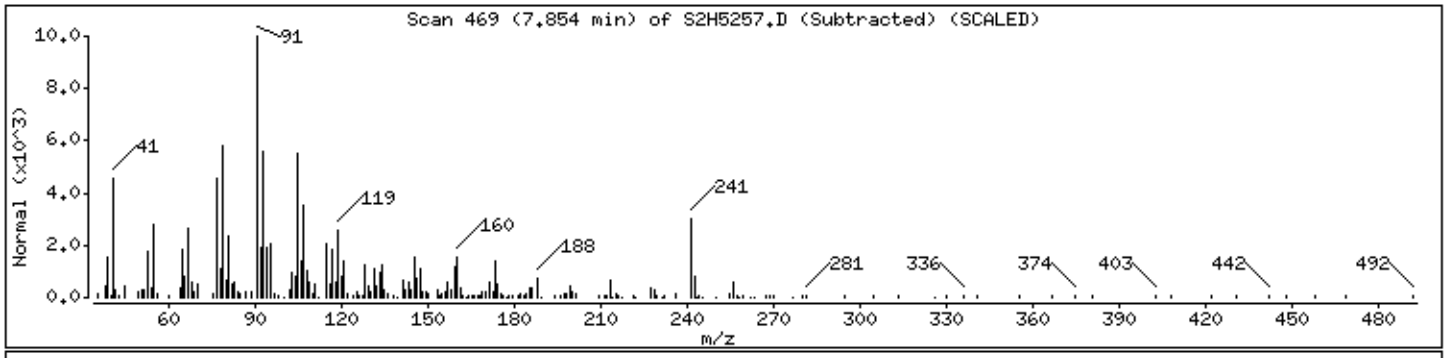
Client ID: H30Q6 Instrument: S2.i

Sample Info: K2198-06A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5257.D

Date : 10-NOV-2011 12:50

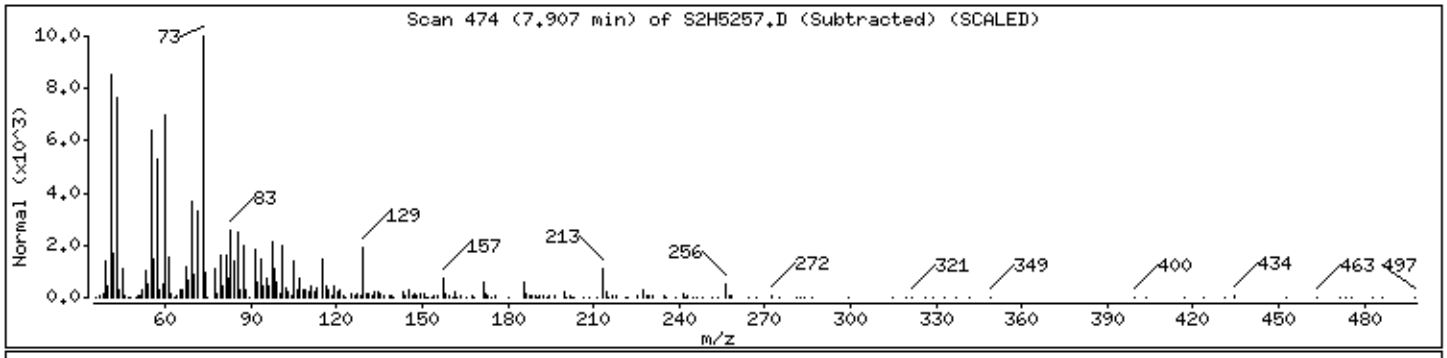
Client ID: H30Q6 Instrument: S2.i

Sample Info: K2198-06A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5257.D

Date : 10-NOV-2011 12:50

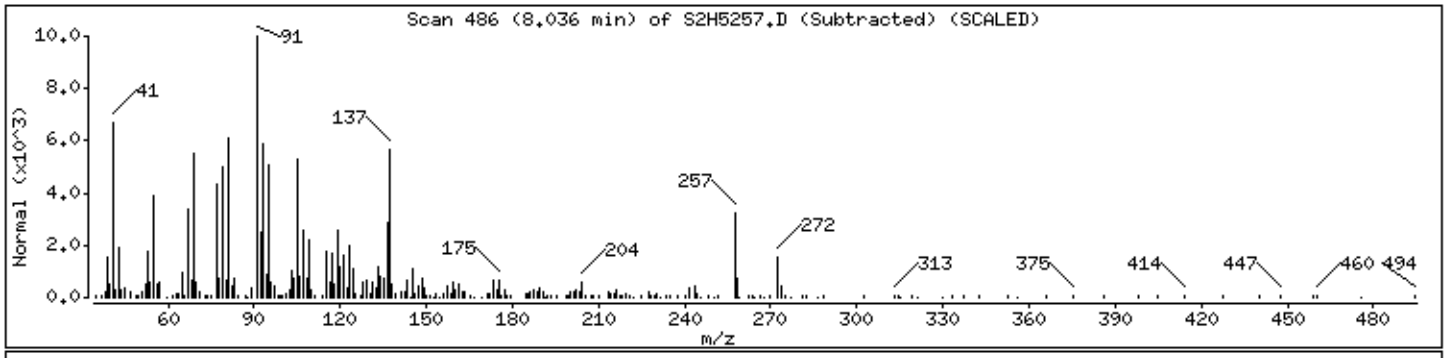
Client ID: H30Q6 Instrument: S2.i

Sample Info: K2198-06A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5257.D

Date : 10-NOV-2011 12:50

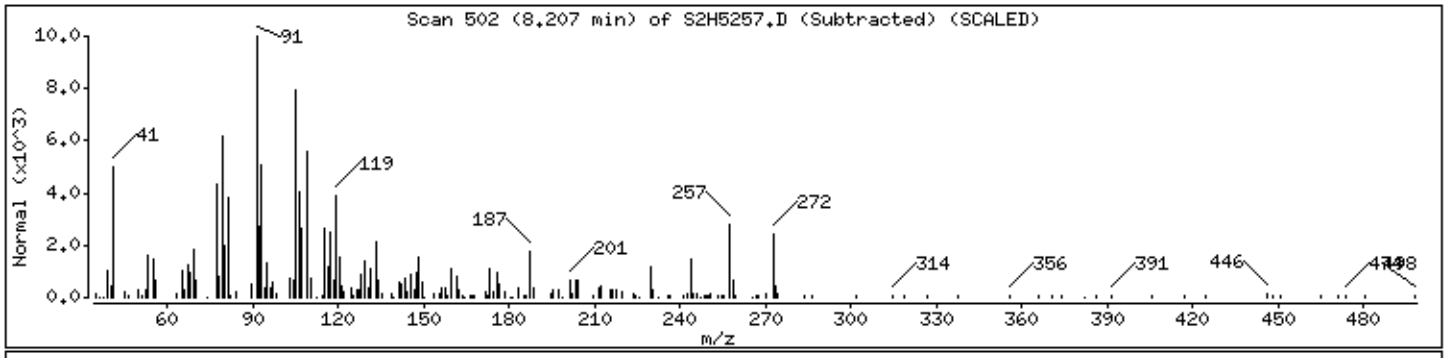
Client ID: H30Q6 Instrument: S2.i

Sample Info: K2198-06A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5257.D

Date : 10-NOV-2011 12:50

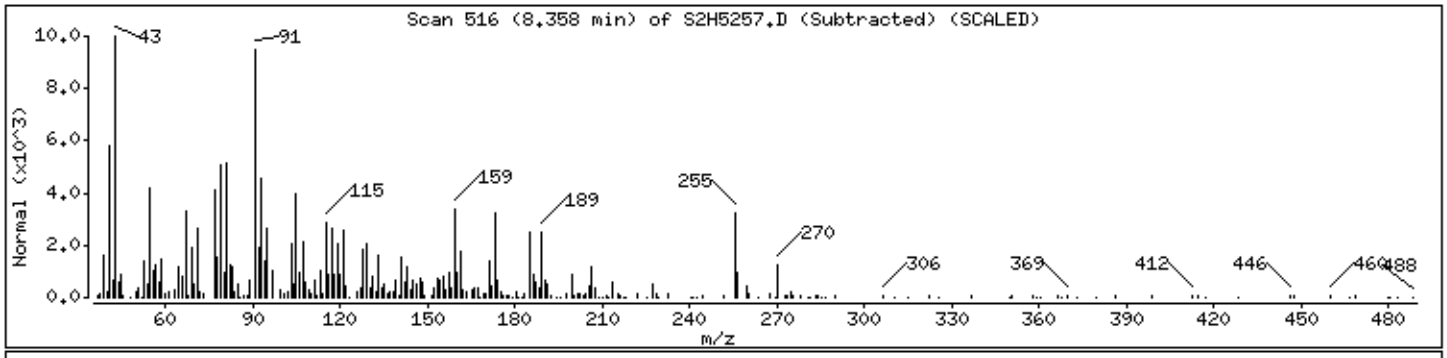
Client ID: H30Q6 Instrument: S2.i

Sample Info: K2198-06A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5257.D

Date : 10-NOV-2011 12:50

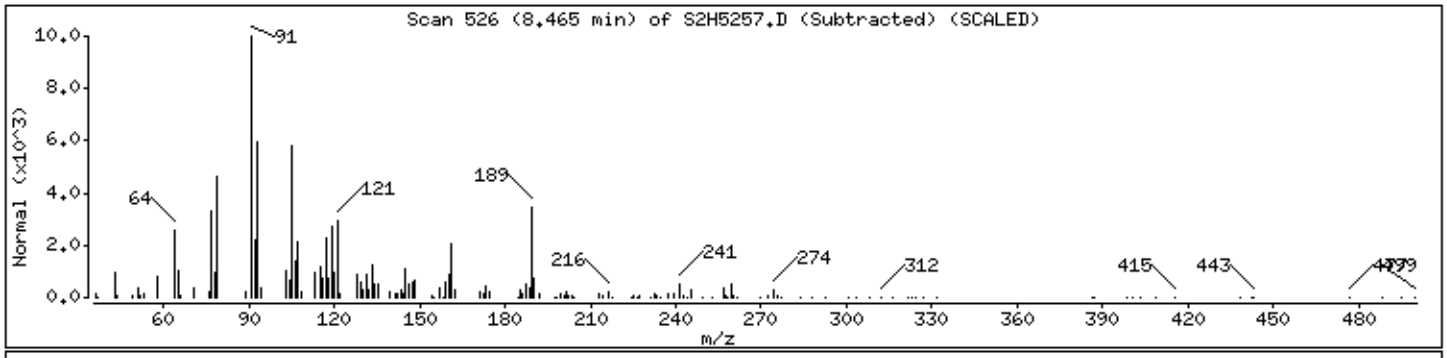
Client ID: H30Q6 Instrument: S2.i

Sample Info: K2198-06A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5257.D

Date : 10-NOV-2011 12:50

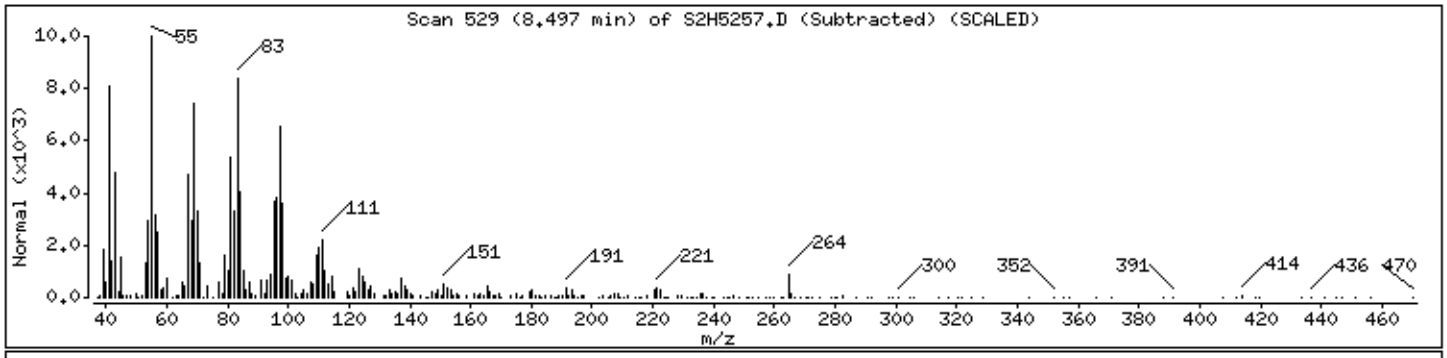
Client ID: H30Q6 Instrument: S2.i

Sample Info: K2198-06A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5257.D

Date : 10-NOV-2011 12:50

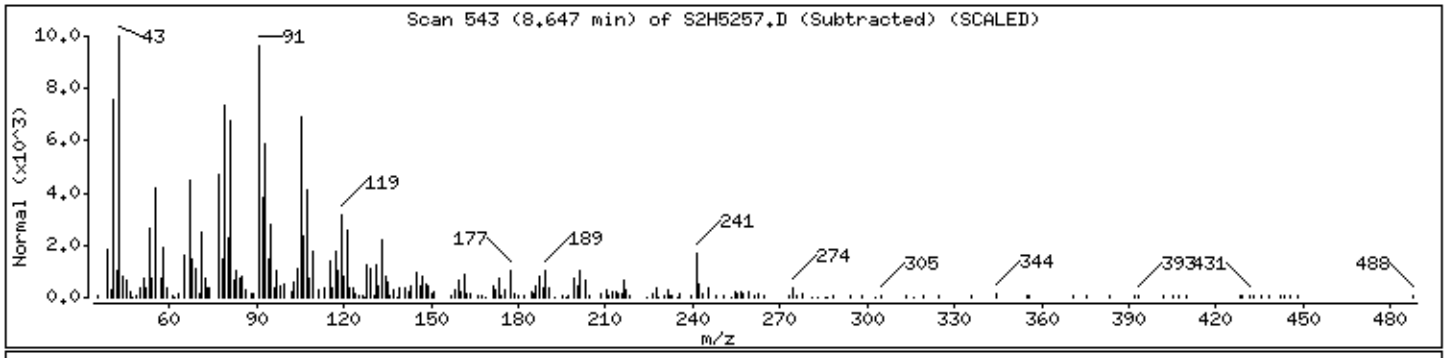
Client ID: H30Q6 Instrument: S2.i

Sample Info: K2198-06A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5257.D

Date : 10-NOV-2011 12:50

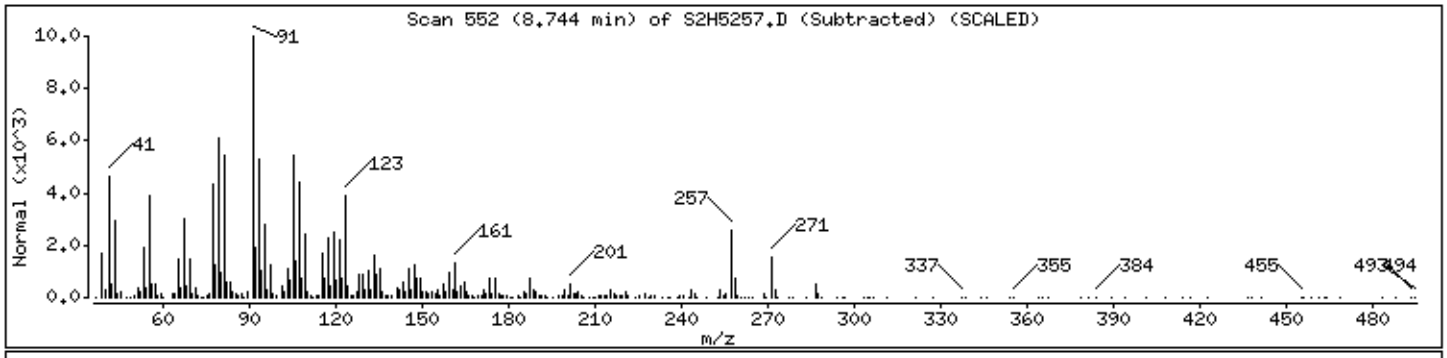
Client ID: H30Q6 Instrument: S2.i

Sample Info: K2198-06A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5257.D

Date : 10-NOV-2011 12:50

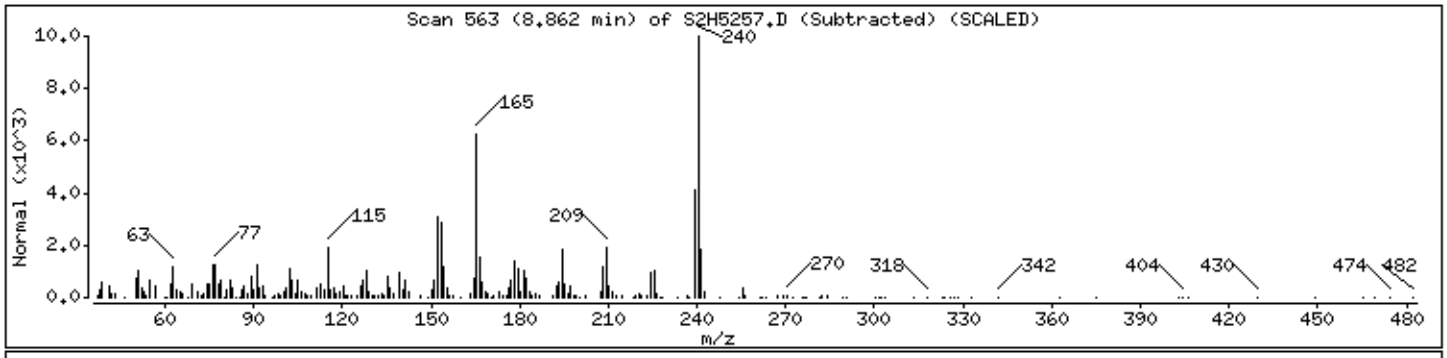
Client ID: H30Q6 Instrument: S2.i

Sample Info: K2198-06A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5257.D

Date : 10-NOV-2011 12:50

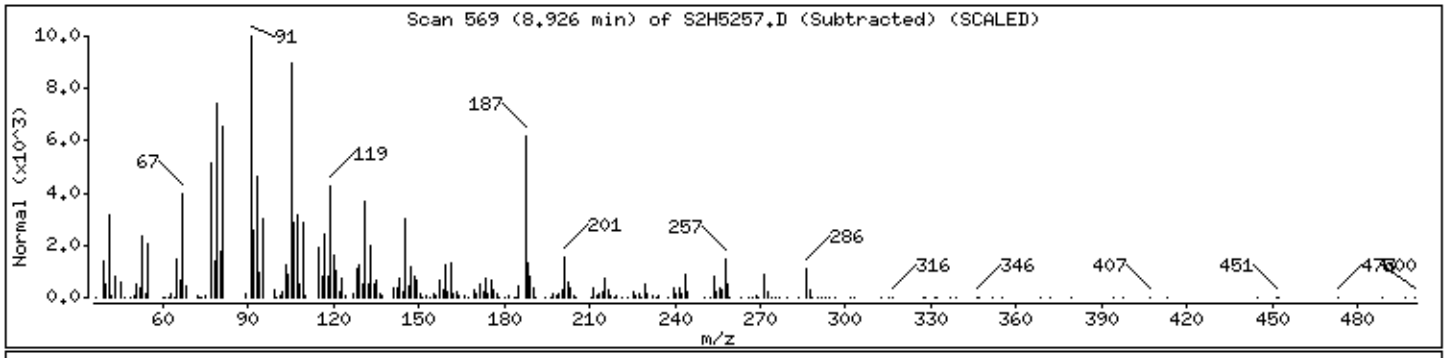
Client ID: H30Q6 Instrument: S2.i

Sample Info: K2198-06A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5257.D

Date : 10-NOV-2011 12:50

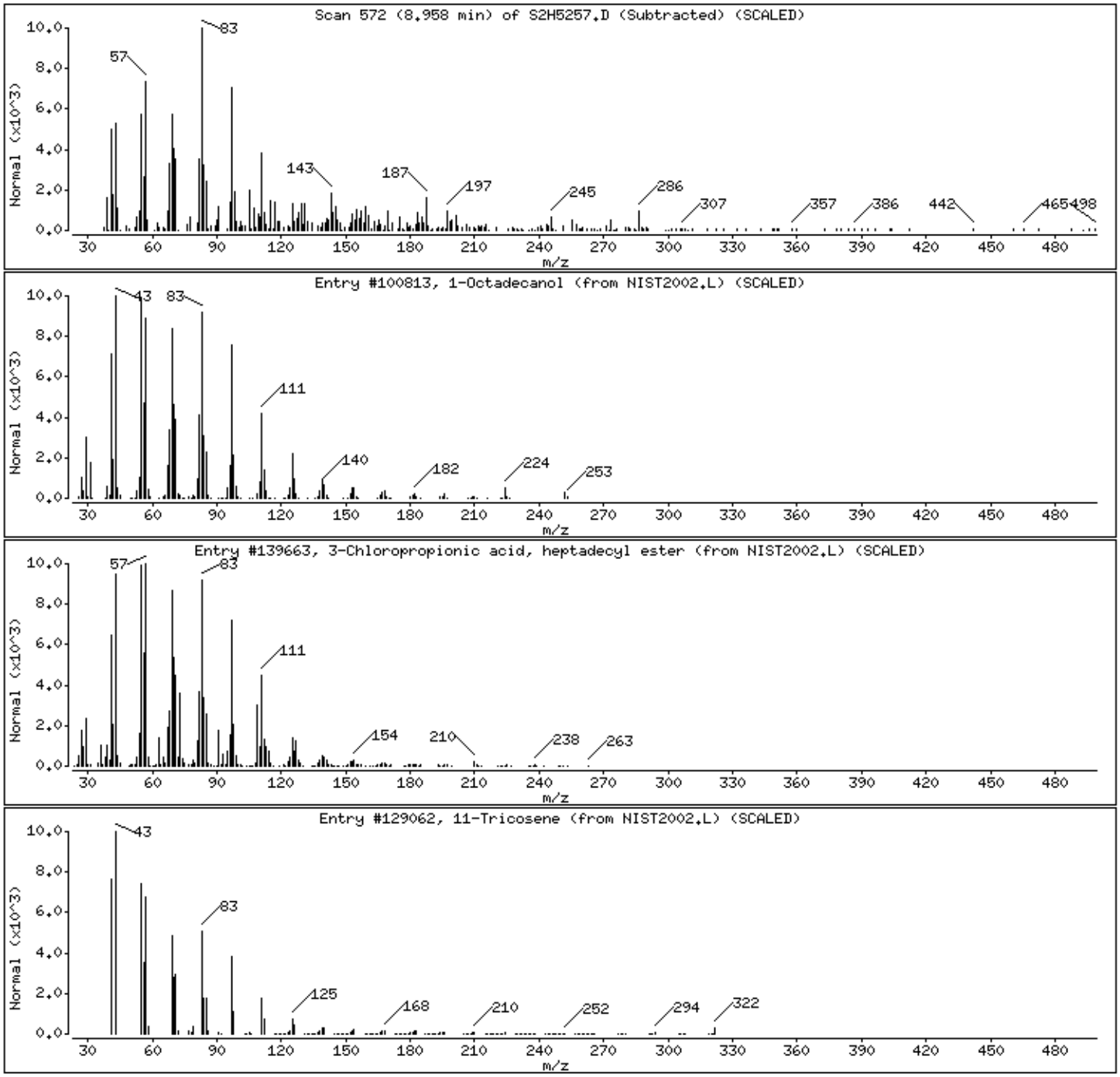
Client ID: H30Q6 Instrument: S2.i

Sample Info: K2198-06A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Octadecanol	112-92-5	NIST2002.L	100813	87	C18H38O	270
3-Chloropropionic acid, heptadecyl ester	1000283-05-1	NIST2002.L	139663	87	C20H39ClO2	346
11-Tricosene	52078-56-5	NIST2002.L	129062	86	C23H46	322



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5257.D

Date : 10-NOV-2011 12:50

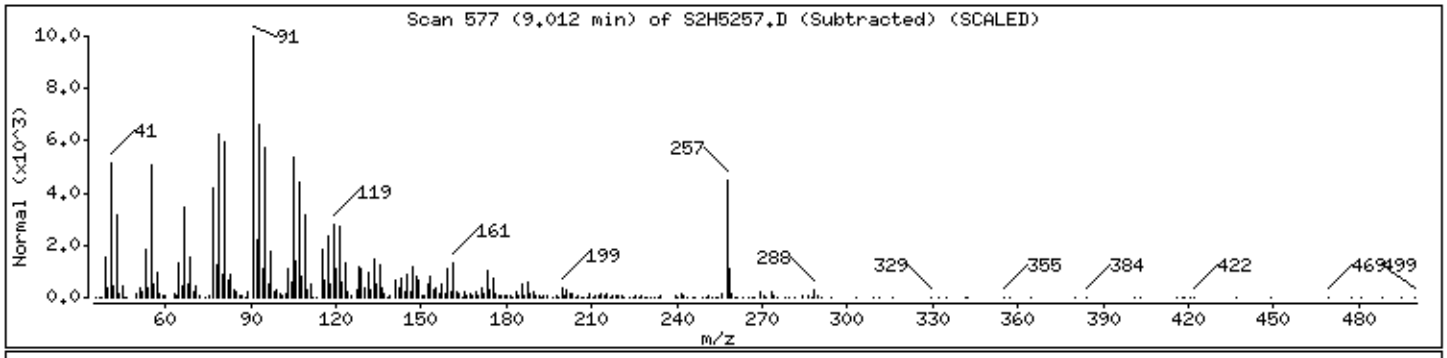
Client ID: H30Q6 Instrument: S2.i

Sample Info: K2198-06A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5257.D

Date : 10-NOV-2011 12:50

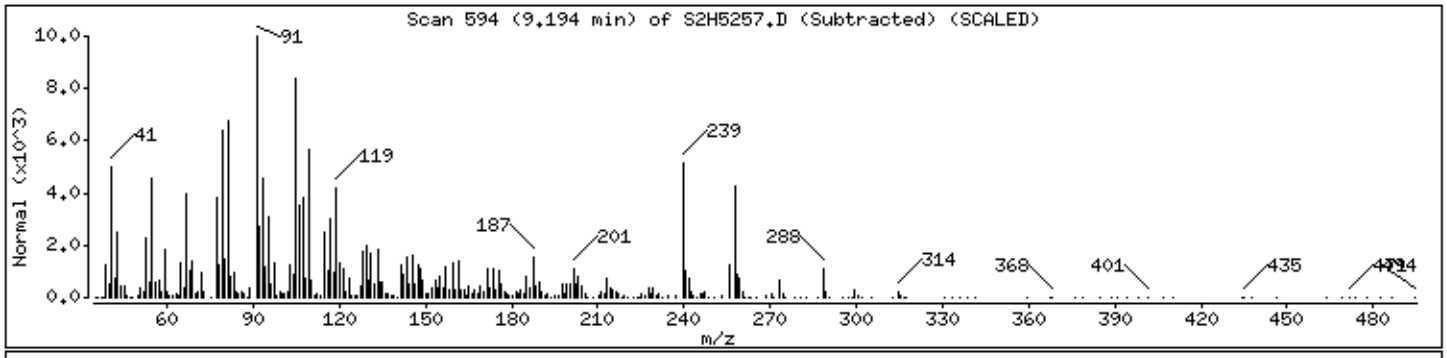
Client ID: H30Q6 Instrument: S2.i

Sample Info: K2198-06A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5257.D

Date : 10-NOV-2011 12:50

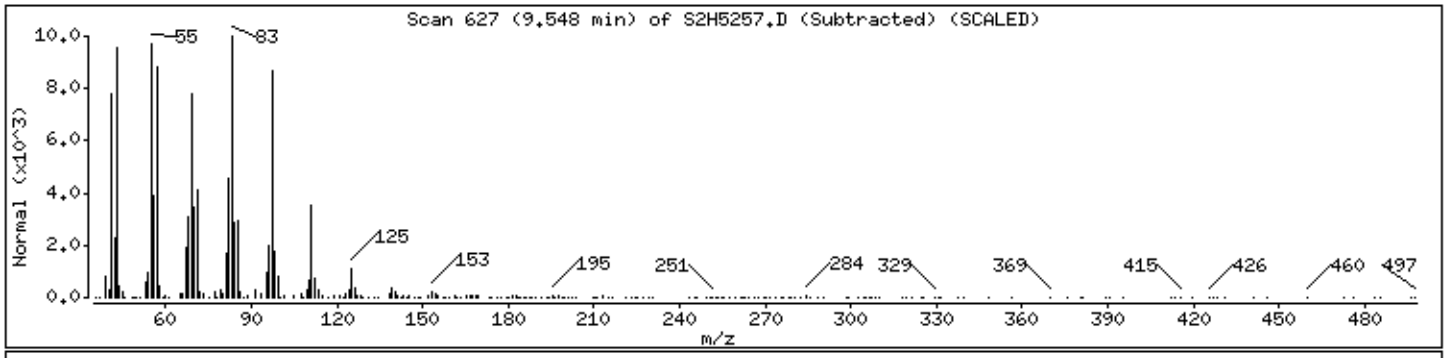
Client ID: H30Q6 Instrument: S2.i

Sample Info: K2198-06A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5257.D

Date : 10-NOV-2011 12:50

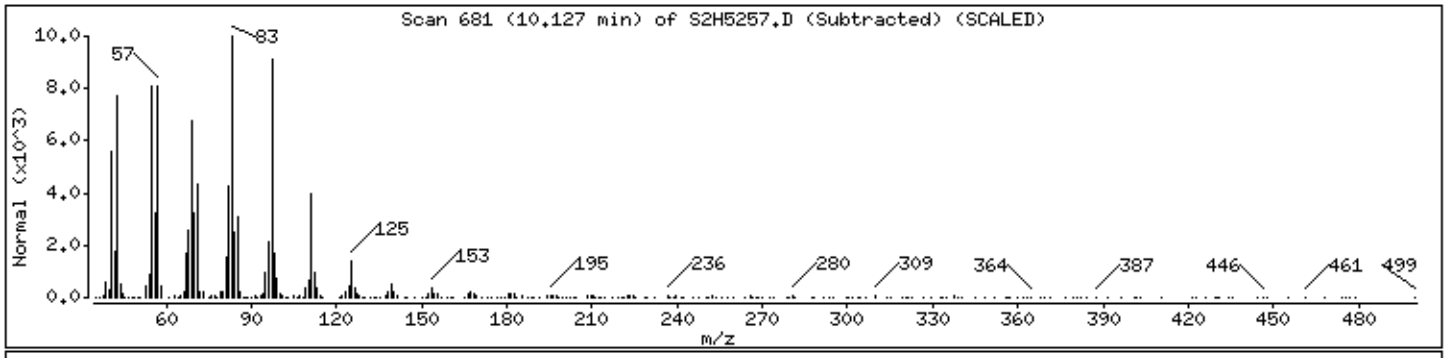
Client ID: H30Q6 Instrument: S2.i

Sample Info: K2198-06A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5257.D

Date : 10-NOV-2011 12:50

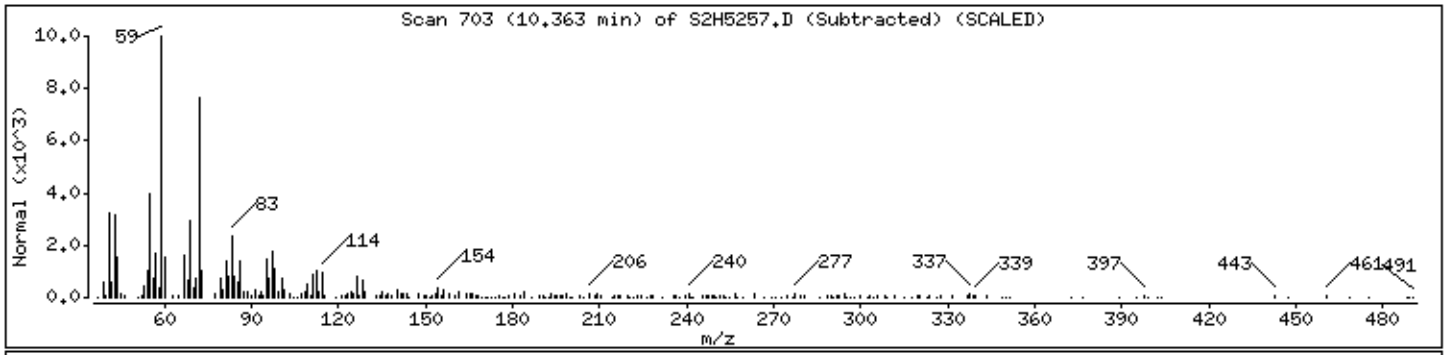
Client ID: H30Q6 Instrument: S2.i

Sample Info: K2198-06A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5257.D

Date : 10-NOV-2011 12:50

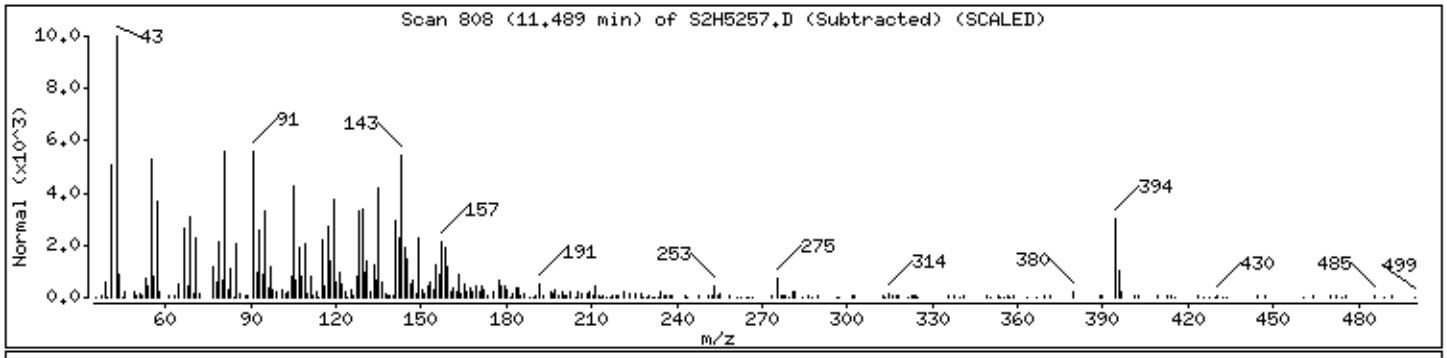
Client ID: H30Q6 Instrument: S2.i

Sample Info: K2198-06A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5257.D

Date : 10-NOV-2011 12:50

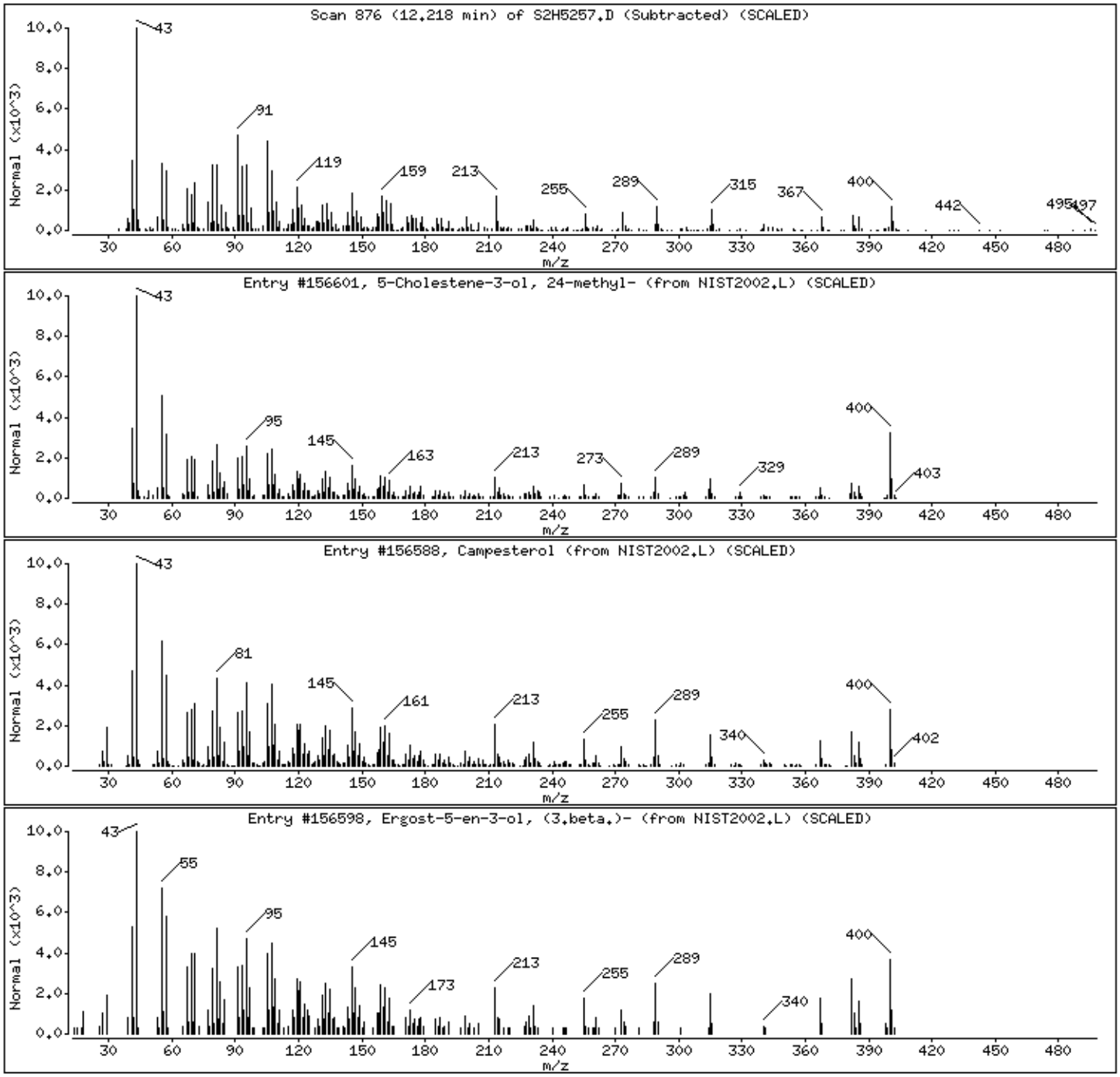
Client ID: H30Q6 Instrument: S2.i

Sample Info: K2198-06A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
5-Cholestene-3-ol, 24-methyl-	1000214-17-4	NIST2002.L	156601	90	C28H480	400
Campesterol	474-62-4	NIST2002.L	156588	89	C28H480	400
Ergost-5-en-3-ol, (3.beta.)-	4651-51-8	NIST2002.L	156598	86	C28H480	400



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5257.D

Date : 10-NOV-2011 12:50

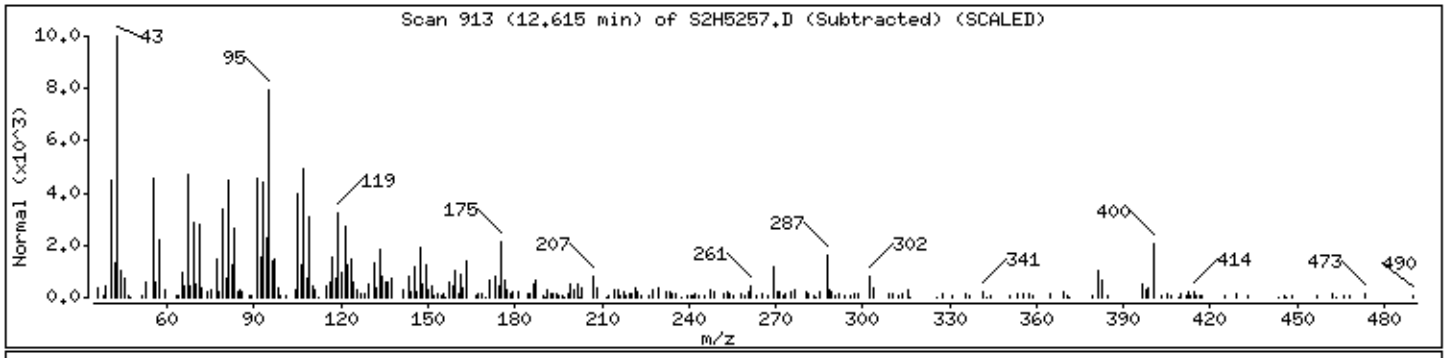
Client ID: H30Q6 Instrument: S2.i

Sample Info: K2198-06A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5257.D

Date : 10-NOV-2011 12:50

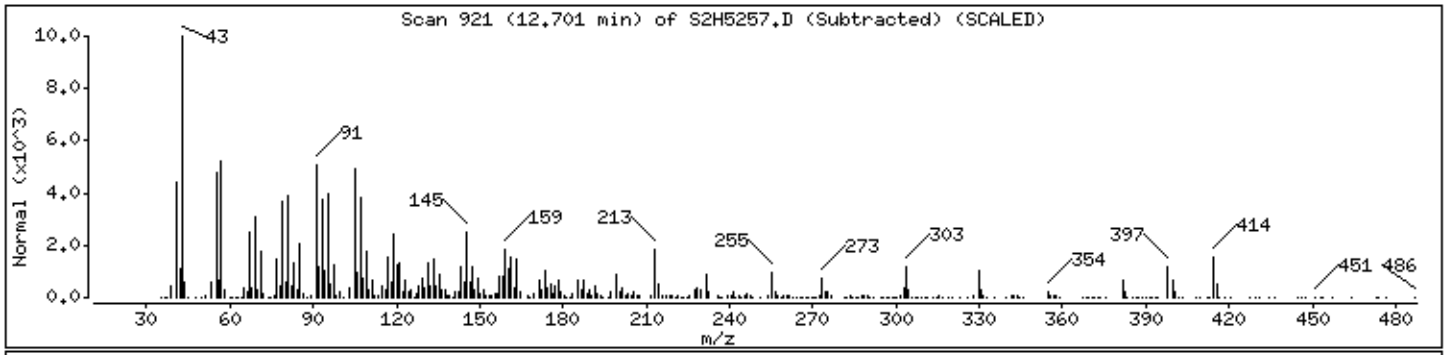
Client ID: H30Q6 Instrument: S2.i

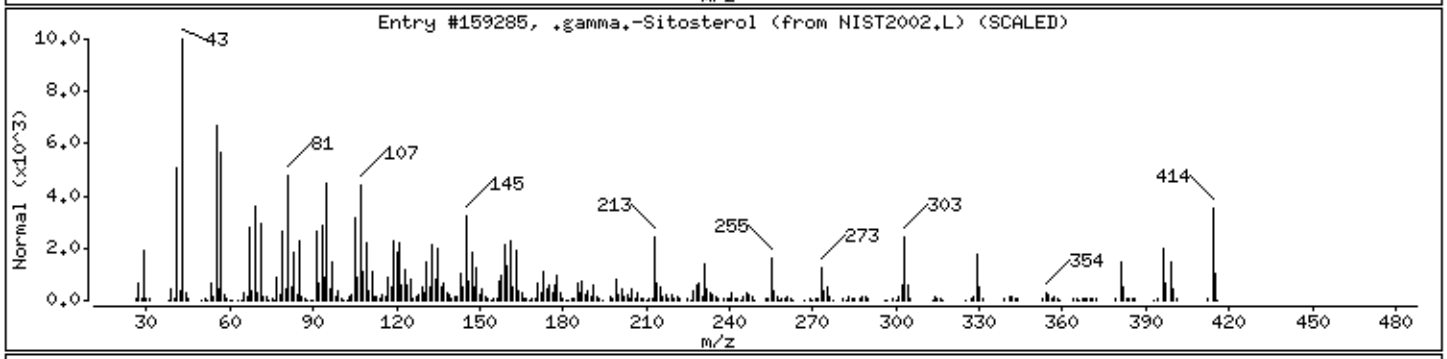
Sample Info: K2198-06A,,62764,,

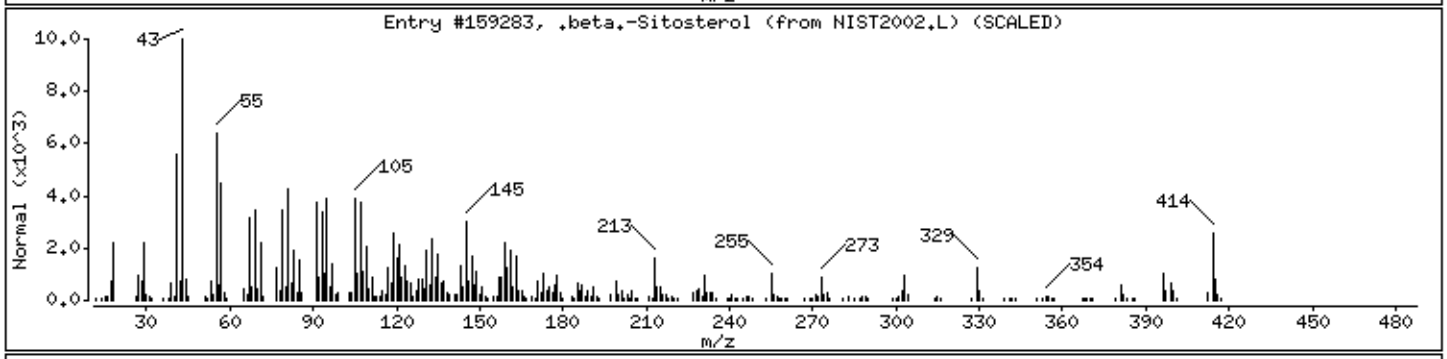
Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.gamma.-Sitosterol	83-47-6	NIST2002.L	159285	96	C29H500	414
.beta.-Sitosterol	83-46-5	NIST2002.L	159283	89	C29H500	414







Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5257.D

Date : 10-NOV-2011 12:50

Client ID: H30Q6 Instrument: S2.i

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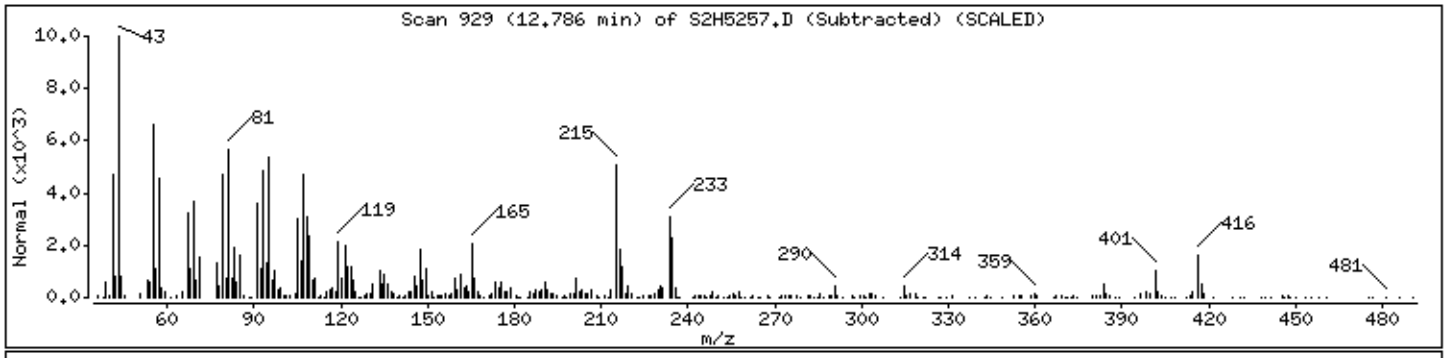
Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q8

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-07A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: S2H5258.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 70 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: 9.1 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
100-52-7	Benzaldehyde	120	J
108-95-2	Phenol	570	U
111-44-4	Bis(2-chloroethyl)ether	570	U
95-57-8	2-Chlorophenol	570	U
95-48-7	2-Methylphenol	570	U
108-60-1	2,2´-Oxybis(1-chloropropane)	570	U
98-86-2	Acetophenone	570	U
106-44-5	4-Methylphenol	570	U
621-64-7	N-Nitroso-di-n-propylamine	570	U
67-72-1	Hexachloroethane	570	U
98-95-3	Nitrobenzene	570	U
78-59-1	Isophorone	570	U
88-75-5	2-Nitrophenol	570	U
105-67-9	2,4-Dimethylphenol	570	U
111-91-1	Bis(2-chloroethoxy)methane	570	U
120-83-2	2,4-Dichlorophenol	570	U
91-20-3	Naphthalene	200	J
106-47-8	4-Chloroaniline	570	U
87-68-3	Hexachlorobutadiene	570	U
105-60-2	Caprolactam	570	U
59-50-7	4-Chloro-3-methylphenol	570	U
91-57-6	2-Methylnaphthalene	570	U
77-47-4	Hexachlorocyclopentadiene	570	U
88-06-2	2,4,6-Trichlorophenol	570	U
95-95-4	2,4,5-Trichlorophenol	570	U
92-52-4	1,1´-Biphenyl	570	U
91-58-7	2-Chloronaphthalene	570	U
88-74-4	2-Nitroaniline	1100	U
131-11-3	Dimethylphthalate	570	U
606-20-2	2,6-Dinitrotoluene	570	U
208-96-8	Acenaphthylene	570	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	570	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q8

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-07A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: S2H5258.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 70 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: 9.1 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
51-28-5	2,4-Dinitrophenol	1100	U
100-02-7	4-Nitrophenol	1100	U
132-64-9	Dibenzofuran	570	U
121-14-2	2,4-Dinitrotoluene	570	U
84-66-2	Diethylphthalate	570	U
86-73-7	Fluorene	570	U
7005-72-3	4-Chlorophenyl-phenylether	570	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	570	U
95-94-3	1,2,4,5-Tetrachlorobenzene	570	U
101-55-3	4-Bromophenyl-phenylether	570	U
118-74-1	Hexachlorobenzene	570	U
1912-24-9	Atrazine	570	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	570	U
120-12-7	Anthracene	570	U
86-74-8	Carbazole	570	U
84-74-2	Di-n-butylphthalate	570	U
206-44-0	Fluoranthene	570	U
129-00-0	Pyrene	570	U
85-68-7	Butylbenzylphthalate	570	U
91-94-1	3,3´-Dichlorobenzidine	570	U
56-55-3	Benzo(a)anthracene	570	U
218-01-9	Chrysene	570	U
117-81-7	Bis(2-ethylhexyl)phthalate	570	U
117-84-0	Di-n-octylphthalate	570	U
205-99-2	Benzo(b)fluoranthene	570	U
207-08-9	Benzo(k)fluoranthene	570	U
50-32-8	Benzo(a)pyrene	570	U
193-39-5	Indeno(1,2,3-cd)pyrene	570	U
53-70-3	Dibenzo(a,h)anthracene	570	U
191-24-2	Benzo(g,h,i)perylene	570	U
58-90-2	2,3,4,6-Tetrachlorophenol	570	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30Q8

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-07A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: S2H5258.D

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 70 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: 9.1 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.997	410	J
02		Unknown-02	3.158	280	J
03	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.488	730	BNJ
04		Unknown-03	4.691	500	J
05		Unknown-04	5.206	580	J
06		Unknown-05	7.598	230	J
07	57-10-3	n-Hexadecanoic acid	7.909	610	NJ
08		Unknown-06	9.185	610	J
09	112-84-5	13-Docosenamide, (Z)-	10.354	1100	NJ
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5258.D
Report Date: 11-Nov-2011 13:33

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5258.D
Lab Smp Id: K2198-07A Client Smp ID: H30Q8
Inj Date : 10-NOV-2011 13:11
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-07A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
	1 Benzaldehyde	77	3.318	3.320	(0.898)	11362	2.14898	36(a)
$	2 Phenol-d5	71	3.383	3.373	(0.916)	147440	43.4787	720
$	4 bis(2-Chloroethyl)ether-d8	67	3.426	3.427	(0.927)	186645	39.9426	670
$	6 2-Chlorophenol-d4	132	3.501	3.491	(0.948)	123488	42.0958	700
*	8 1,4-Dichlorobenzene-d4	152	3.694	3.684	(1.000)	107688	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.005	4.006	(1.084)	199330	43.3573	720
$	16 Nitrobenzene-d5	128	4.155	4.145	(0.874)	63305	36.9278	620
$	19 2-Nitrophenol-d4	143	4.423	4.424	(0.930)	80733	42.6603	710
$	23 2,4-Dichlorophenol-d3	165	4.627	4.628	(0.973)	160063	46.3318	770
*	25 Naphthalene-d8	136	4.755	4.746	(1.000)	329178	40.0000	
	26 Naphthalene	128	4.766	4.767	(1.002)	31118	3.67291	61(a)
$	27 4-Chloroaniline-d4	131	4.809	4.810	(1.011)	25641	8.35896	140(aQ)
$	40 Dimethylphthalate-d6	166	5.978	5.968	(0.962)	406204	40.9829	680
$	43 Acenaphthylene-d8	160	6.085	6.076	(0.979)	450894	34.9833	580
*	46 Acenaphthene-d10	164	6.214	6.204	(1.000)	269569	40.0000	
$	49 4-Nitrophenol-d4	143	6.321	6.312	(1.017)	55211	38.6528	640
$	54 Fluorene-d10	176	6.643	6.633	(1.069)	353341	38.8096	650
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.696	6.698	(0.901)	68320	35.0459	580
*	65 Phenanthrene-d10	188	7.436	7.438	(1.000)	499573	40.0000	

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5258.D
Report Date: 11-Nov-2011 13:33

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)
$ 67 Anthracene-d10	188	7.479	7.480	(1.006)	519216	36.3840	610
$ 72 Pyrene-d10	212	8.605	8.606	(0.892)	426404	39.9092	670(R)
* 77 Chrysene-d12	240	9.645	9.668	(1.000)	339161	40.0000	(Q)
$ 83 Benzo(a)pyrene-d12	264	10.836	10.891	(0.993)	171840	30.9941	520(RH)
* 85 Perylene-d12	264	10.911	10.966	(1.000)	225942	40.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5258.D
Report Date: 11-Nov-2011 13:33

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5258.D
Lab Smp Id: K2198-07A Client Smp ID: H30Q8
Inj Date : 10-NOV-2011 13:11
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-07A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

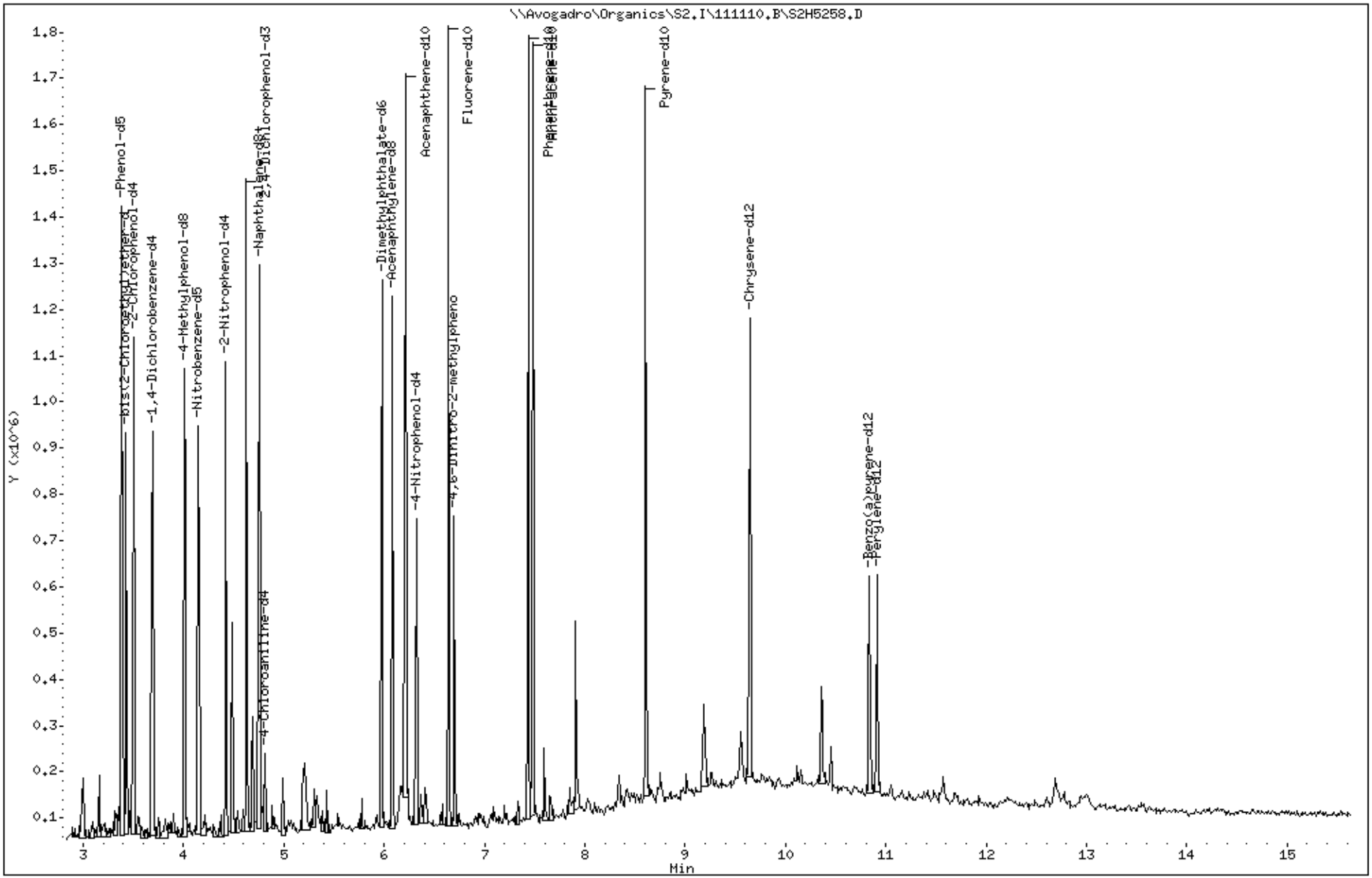
ISTD	RT	AREA	AMOUNT
* 8 1,4-Dichlorobenzene-d4	3.694	973983	40.000
* 25 Naphthalene-d8	4.756	1218643	40.000
* 65 Phenanthrene-d10	7.437	1344081	40.000
* 77 Chrysene-d12	9.646	911251	40.000
* 85 Perylene-d12	10.911	558126	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.997	178697	7.33880009	120	0	0		8
Unknown				CAS #:			
3.158	124612	5.11764224	85	0	0		8

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5258.D
Report Date: 11-Nov-2011 13:33

RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
2(3H)-Furanone, dihydro-4-hydroxy-					CAS #: 5469-16-9		
4.488	401366	13.1741804	220	86	NIST2002.L	4145	25
Unknown					CAS #:		
4.691	271048	8.89669624	150	0		0	25
Unknown					CAS #:		
5.206	319601	10.4903990	170	0		0	25
Unknown					CAS #:		
7.598	140832	4.19117309	70	0		0	65
n-Hexadecanoic acid					CAS #: 57-10-3		
7.909	369746	11.0036899	180	95	NIST2002.L	92227	65
Unknown					CAS #:		
9.185	248099	10.8904649	180	0		0	77
13-Docosenamide, (Z)-					CAS #: 112-84-5		
10.354	281860	20.2004610	340	87	NIST2002.L	135944	85

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5258.D
Date : 10-NOV-2011 13:11
Client ID: H30Q8
Instrument: S2.i
Sample Info: K2198-07A,,62764,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



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Date : 10-NOV-2011 13:11

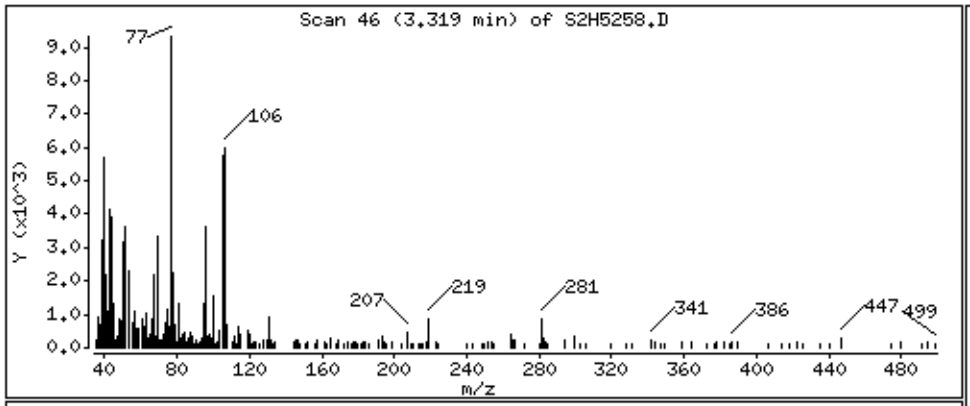
Client ID: H30Q8 Instrument: S2.i

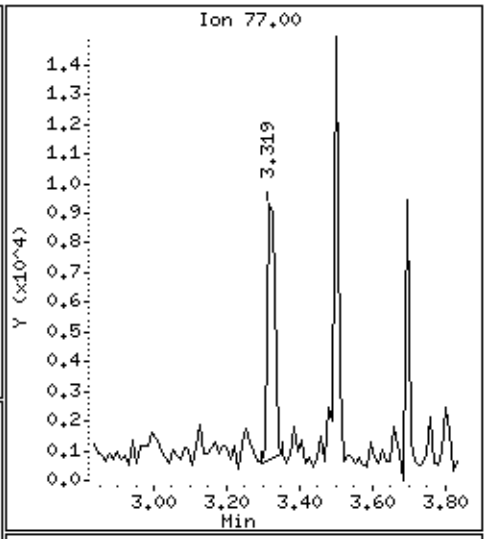
Sample Info: K2198-07A,,62764,,

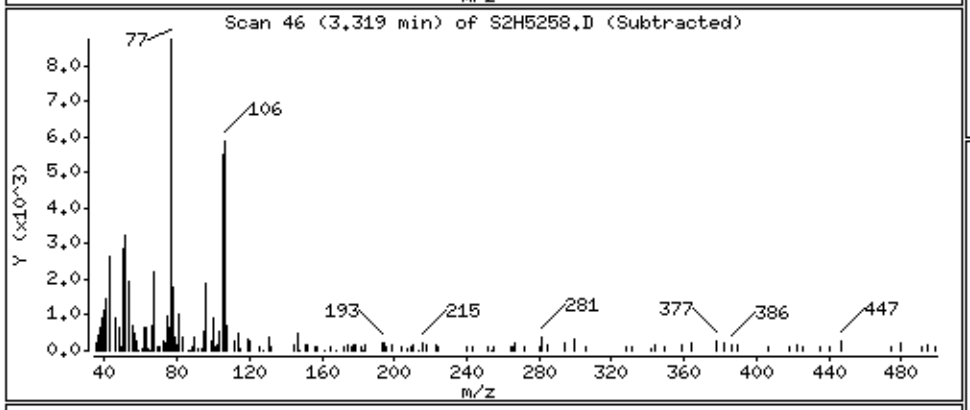
Volume Injected (uL): 2.0 Operator: SRC: LIMS

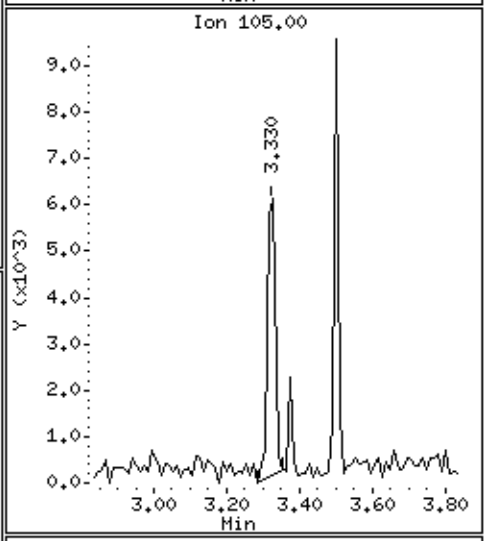
Column phase: RXI-5SILMS Column diameter: 0.25

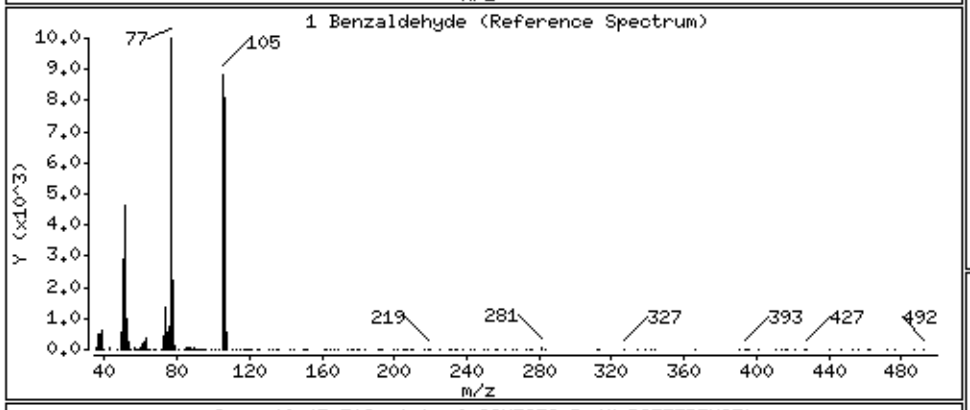
1 Benzaldehyde Concentration: 36 ug/Kg

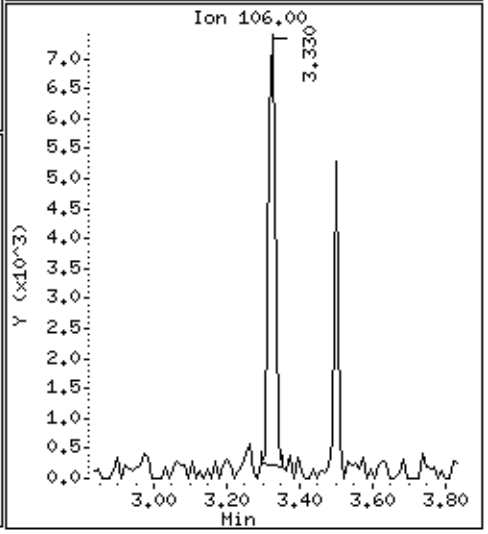


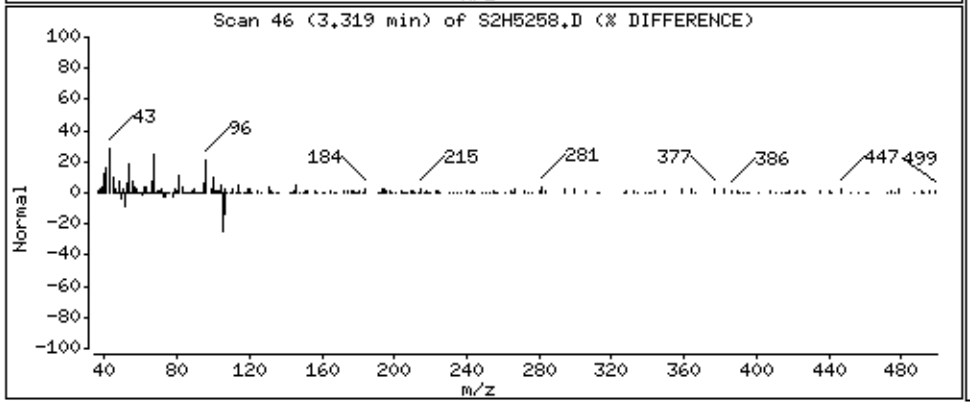












Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5258.D

Date : 10-NOV-2011 13:11

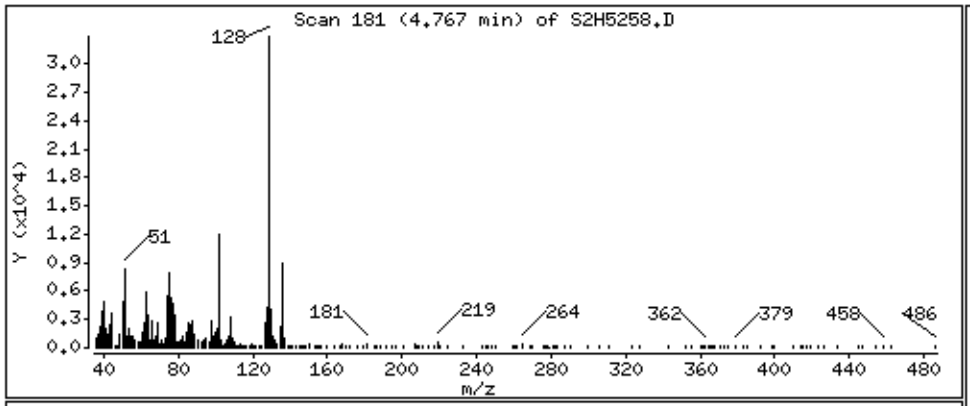
Client ID: H30Q8 Instrument: S2.i

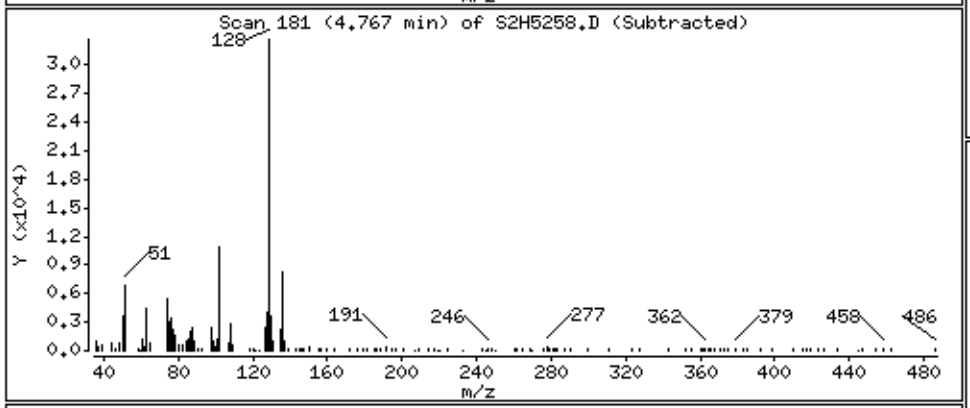
Sample Info: K2198-07A,,62764,,

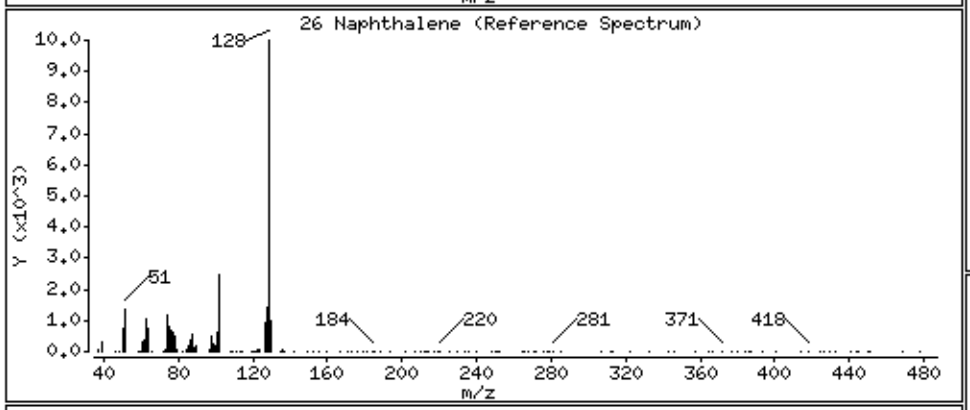
Volume Injected (uL): 2.0 Operator: SRC: LIMS

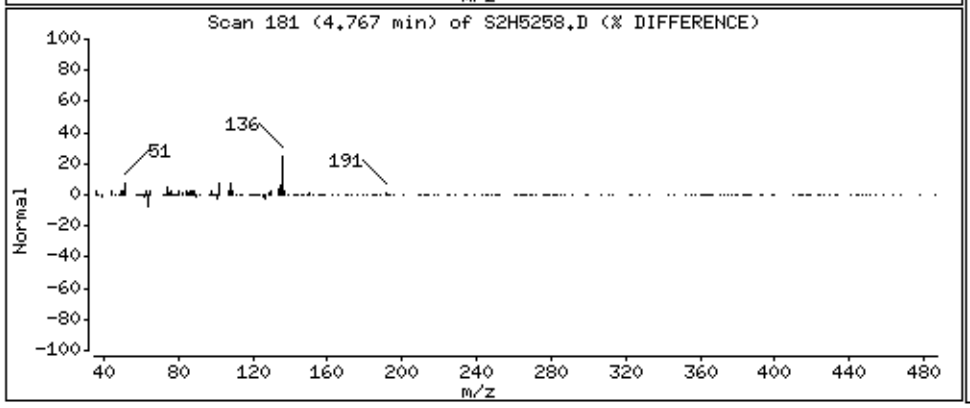
Column phase: RXI-5SILMS Column diameter: 0.25

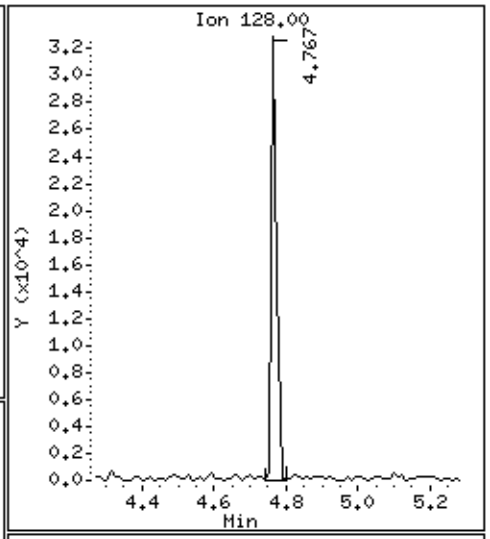
26 Naphthalene Concentration: 61 ug/Kg

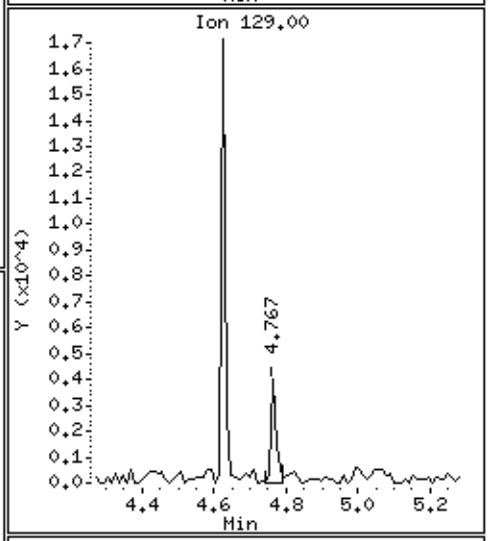


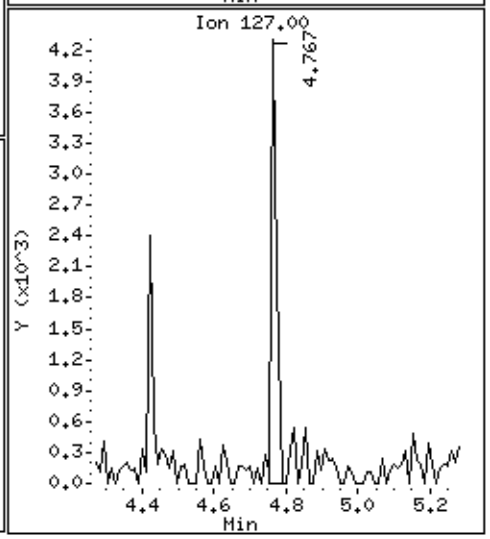












Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5258.D

Date : 10-NOV-2011 13:11

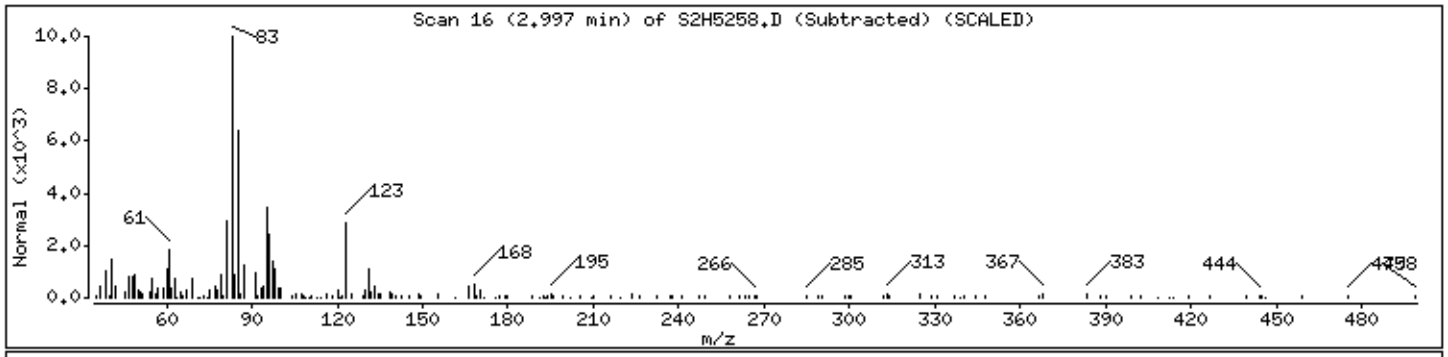
Client ID: H30Q8 Instrument: S2.i

Sample Info: K2198-07A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 13:11

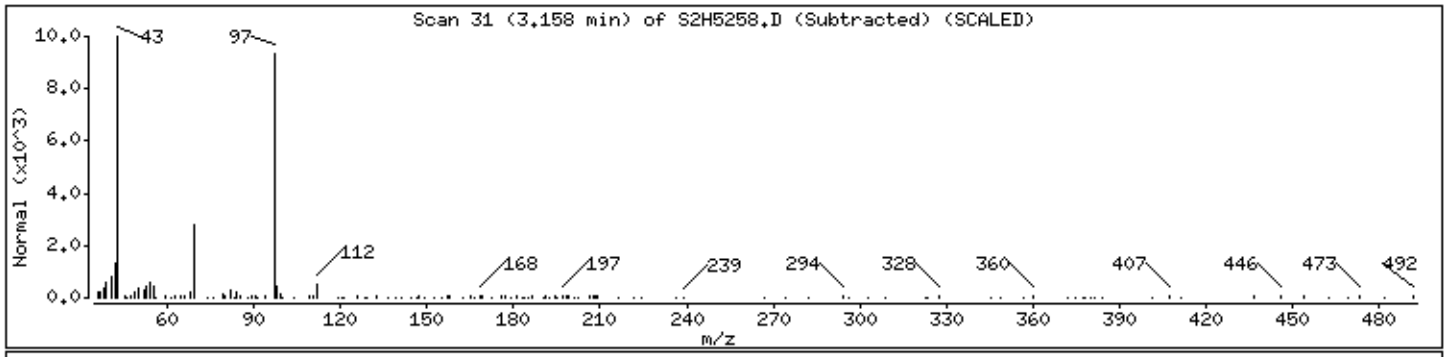
Client ID: H30Q8 Instrument: S2.i

Sample Info: K2198-07A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5258.D

Date : 10-NOV-2011 13:11

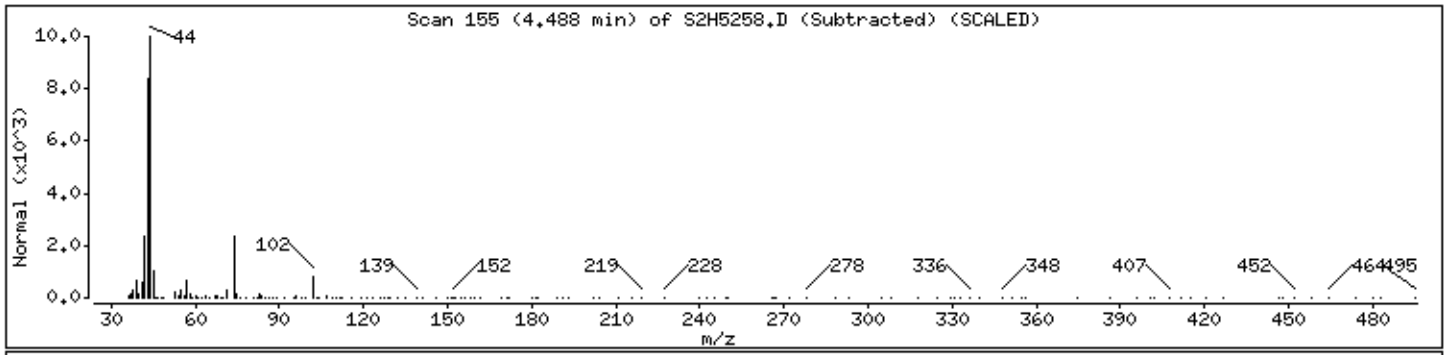
Client ID: H30Q8 Instrument: S2.i

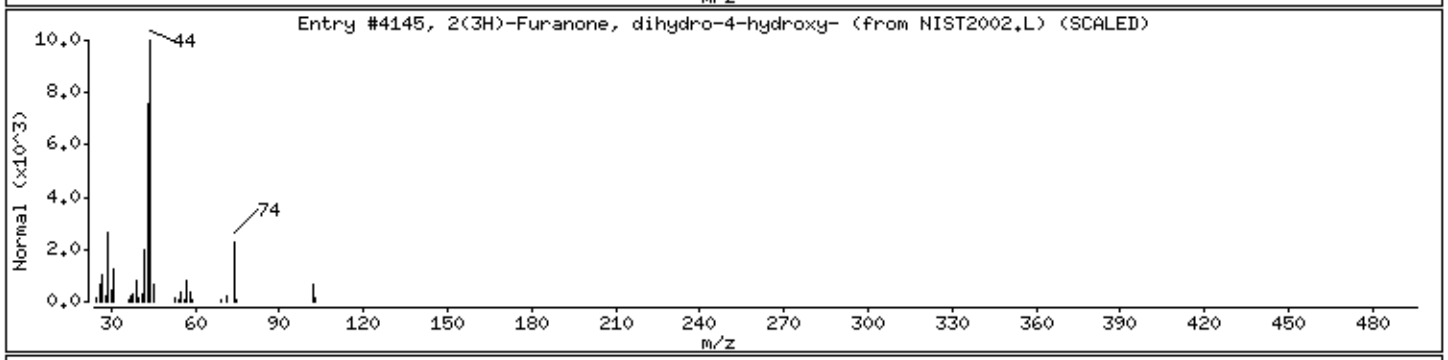
Sample Info: K2198-07A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2(3H)-Furanone, dihydro-4-hydroxy-	5469-16-9	NIST2002.L	4145	86	C4H6O3	102





Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5258.D

Date : 10-NOV-2011 13:11

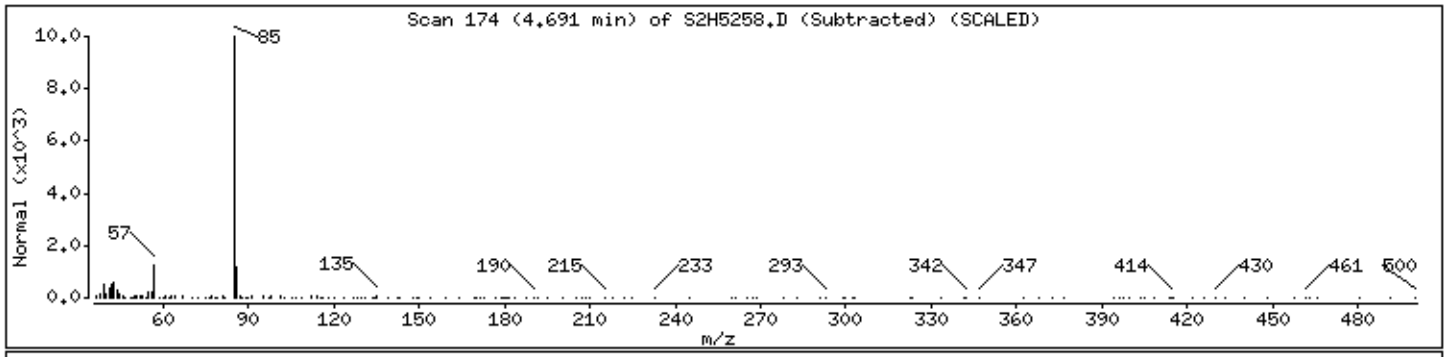
Client ID: H30Q8 Instrument: S2.i

Sample Info: K2198-07A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 13:11

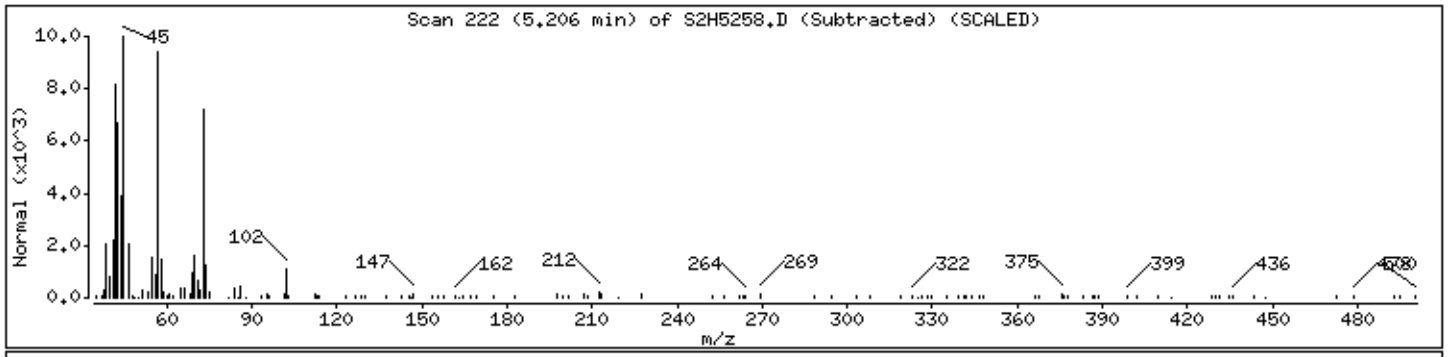
Client ID: H30Q8 Instrument: S2.i

Sample Info: K2198-07A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5258.D

Date : 10-NOV-2011 13:11

Client ID: H30Q8 Instrument: S2.i

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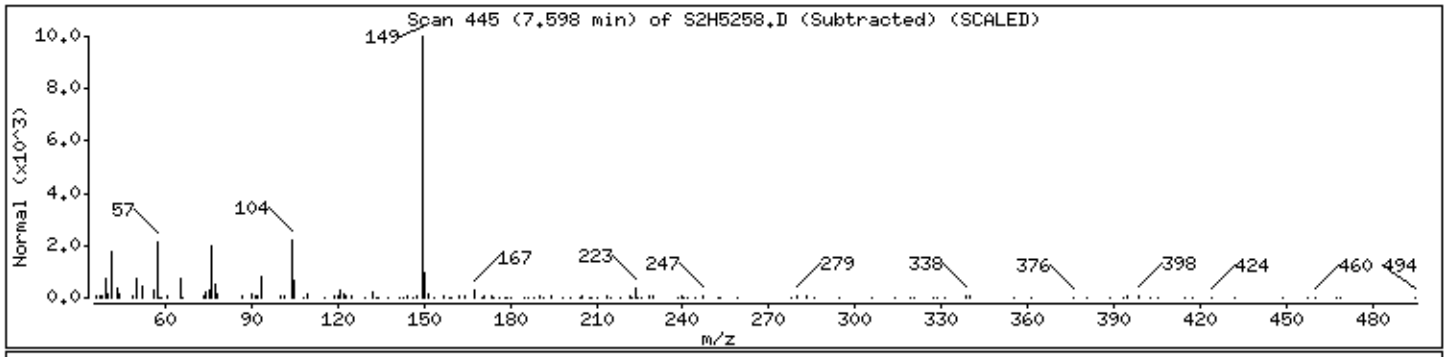
Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5258.D

Date : 10-NOV-2011 13:11

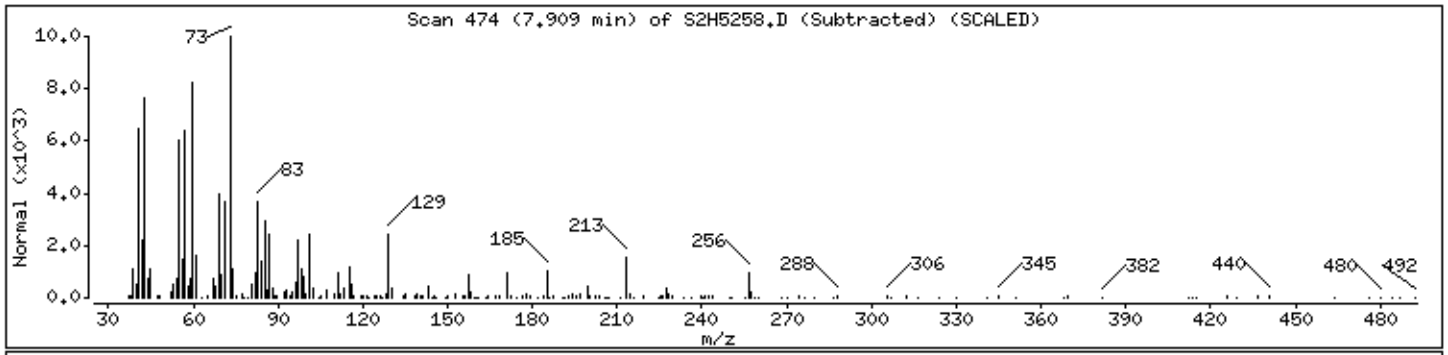
Client ID: H30Q8 Instrument: S2.i

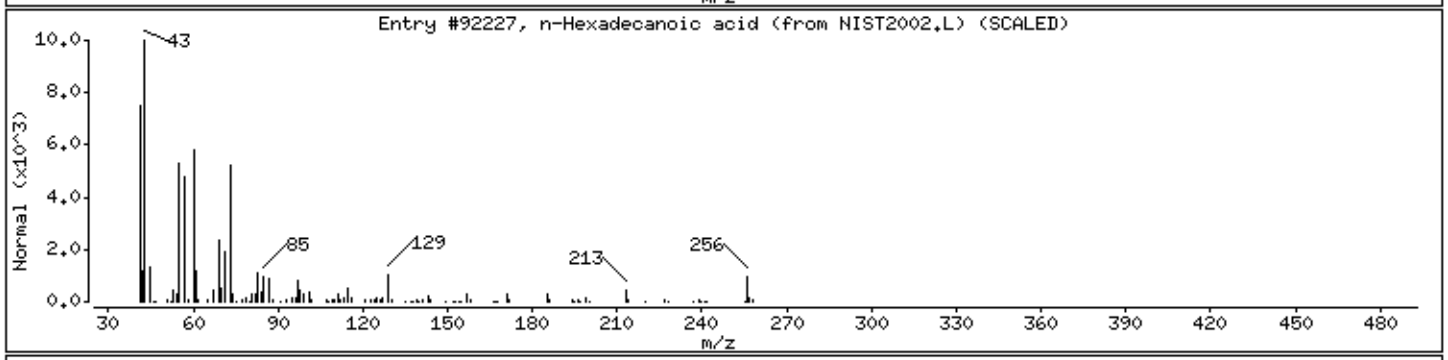
Sample Info: K2198-07A,,62764,,

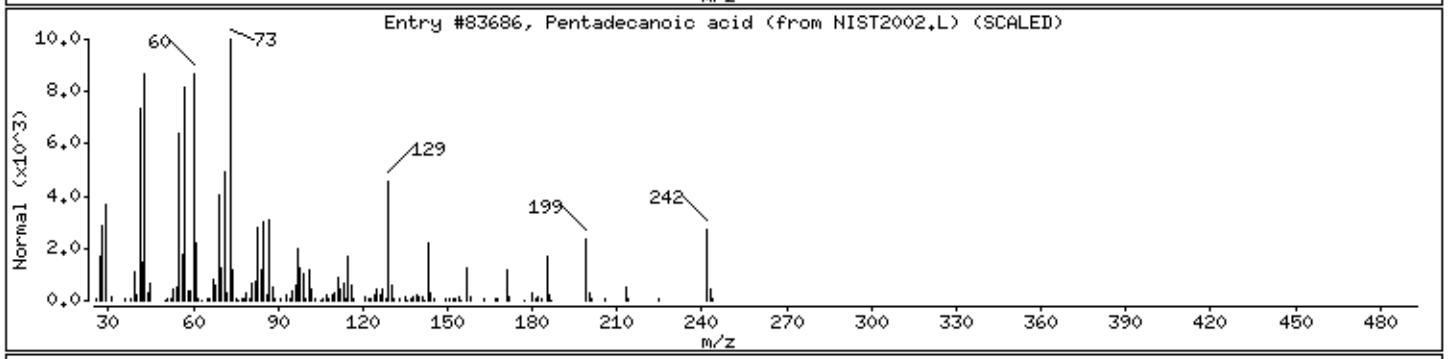
Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
n-Hexadecanoic acid	57-10-3	NIST2002.L	92227	95	C16H32O2	256
Pentadecanoic acid	1002-84-2	NIST2002.L	83686	93	C15H30O2	242







Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5258.D

Date : 10-NOV-2011 13:11

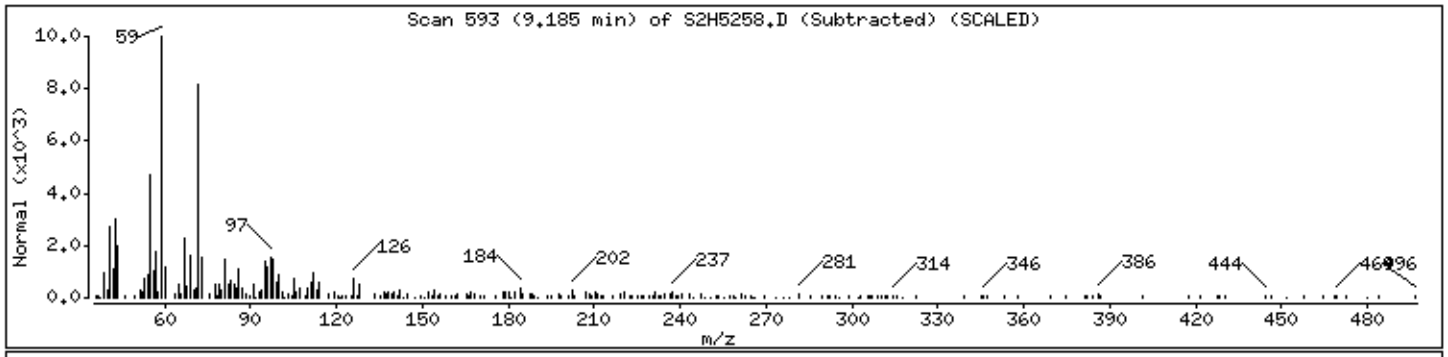
Client ID: H30Q8 Instrument: S2.i

Sample Info: K2198-07A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5258.D

Date : 10-NOV-2011 13:11

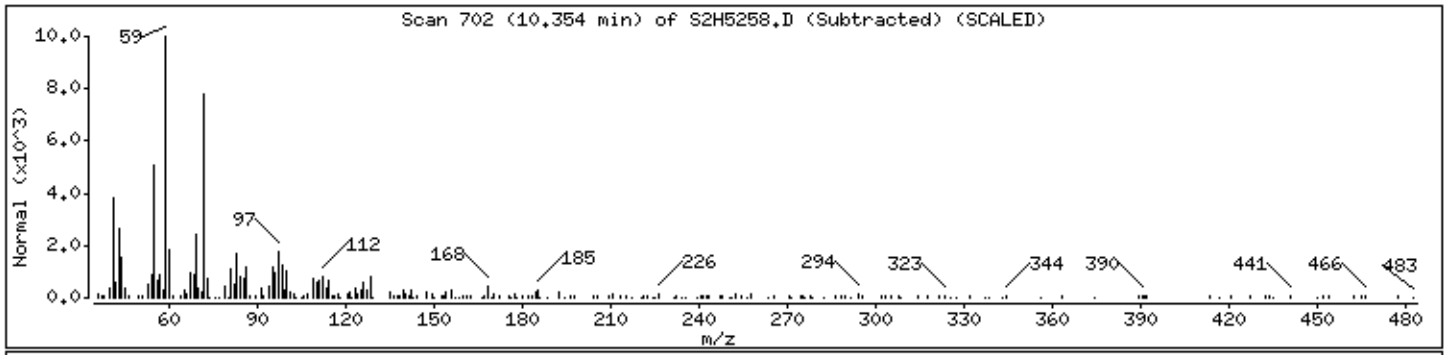
Client ID: H30Q8 Instrument: S2.i

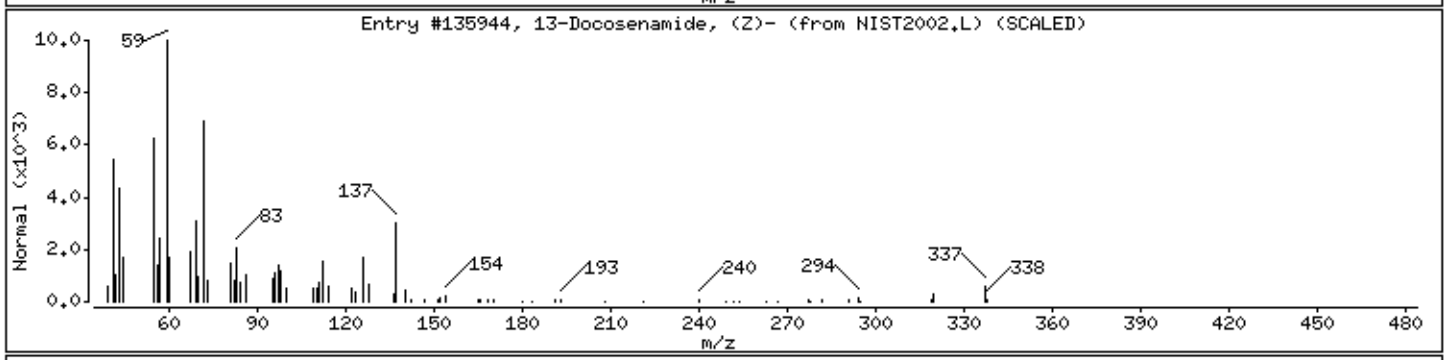
Sample Info: K2198-07A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
13-Docosenamide, (Z)-	112-84-5	NIST2002.L	135944	87	C22H43NO	337





1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q9

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-08A

Sample wt/vol: 30.5 (g/mL) G Lab File ID: S2H5259.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 62 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: 8.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
100-52-7	Benzaldehyde	440	U
108-95-2	Phenol	440	U
111-44-4	Bis(2-chloroethyl)ether	440	U
95-57-8	2-Chlorophenol	440	U
95-48-7	2-Methylphenol	440	U
108-60-1	2,2´-Oxybis(1-chloropropane)	440	U
98-86-2	Acetophenone	440	U
106-44-5	4-Methylphenol	600	
621-64-7	N-Nitroso-di-n-propylamine	440	U
67-72-1	Hexachloroethane	440	U
98-95-3	Nitrobenzene	440	U
78-59-1	Isophorone	440	U
88-75-5	2-Nitrophenol	440	U
105-67-9	2,4-Dimethylphenol	440	U
111-91-1	Bis(2-chloroethoxy)methane	440	U
120-83-2	2,4-Dichlorophenol	440	U
91-20-3	Naphthalene	110	J
106-47-8	4-Chloroaniline	440	U
87-68-3	Hexachlorobutadiene	440	U
105-60-2	Caprolactam	440	U
59-50-7	4-Chloro-3-methylphenol	440	U
91-57-6	2-Methylnaphthalene	440	U
77-47-4	Hexachlorocyclopentadiene	440	U
88-06-2	2,4,6-Trichlorophenol	440	U
95-95-4	2,4,5-Trichlorophenol	440	U
92-52-4	1,1´-Biphenyl	440	U
91-58-7	2-Chloronaphthalene	440	U
88-74-4	2-Nitroaniline	860	U
131-11-3	Dimethylphthalate	440	U
606-20-2	2,6-Dinitrotoluene	440	U
208-96-8	Acenaphthylene	440	U
99-09-2	3-Nitroaniline	860	U
83-32-9	Acenaphthene	440	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q9

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-08A

Sample wt/vol: 30.5 (g/mL) G Lab File ID: S2H5259.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 62 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: 8.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
51-28-5	2,4-Dinitrophenol	860	U
100-02-7	4-Nitrophenol	860	U
132-64-9	Dibenzofuran	440	U
121-14-2	2,4-Dinitrotoluene	440	U
84-66-2	Diethylphthalate	440	U
86-73-7	Fluorene	440	U
7005-72-3	4-Chlorophenyl-phenylether	440	U
100-01-6	4-Nitroaniline	860	U
534-52-1	4,6-Dinitro-2-methylphenol	860	U
86-30-6	N-Nitrosodiphenylamine (1)	440	U
95-94-3	1,2,4,5-Tetrachlorobenzene	440	U
101-55-3	4-Bromophenyl-phenylether	440	U
118-74-1	Hexachlorobenzene	440	U
1912-24-9	Atrazine	440	U
87-86-5	Pentachlorophenol	860	U
85-01-8	Phenanthrene	120	J
120-12-7	Anthracene	440	U
86-74-8	Carbazole	440	U
84-74-2	Di-n-butylphthalate	740	
206-44-0	Fluoranthene	93	J
129-00-0	Pyrene	110	J
85-68-7	Butylbenzylphthalate	440	U
91-94-1	3,3´-Dichlorobenzidine	440	U
56-55-3	Benzo(a)anthracene	440	U
218-01-9	Chrysene	440	U
117-81-7	Bis(2-ethylhexyl)phthalate	440	U
117-84-0	Di-n-octylphthalate	440	U
205-99-2	Benzo(b)fluoranthene	440	U
207-08-9	Benzo(k)fluoranthene	440	U
50-32-8	Benzo(a)pyrene	440	U
193-39-5	Indeno(1,2,3-cd)pyrene	440	U
53-70-3	Dibenzo(a,h)anthracene	440	U
191-24-2	Benzo(g,h,i)perylene	440	U
58-90-2	2,3,4,6-Tetrachlorophenol	440	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30Q9

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-08A

Sample wt/vol: 30.5 (g/mL) G Lab File ID: S2H5259.D

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 62 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: 8.5 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	7785-70-8	1R-.alpha.-Pinene	3.128	9100	NJ
02		Unknown-01	3.256	4000	J
03		Unknown-02	3.342	1900	J
04	127-91-3	.beta.-Pinene	3.460	2700	NJ
05	13466-78-9	3-Carene	3.664	64000	NJ
06	99-87-6	Benzene, 1-methyl-4-(1-methy	3.761	48000	NJ
07	464-49-3	Bicyclo[2.2.1]heptan-2-one,	4.543	33000	NJ
08		Unknown-03	4.683	2600	J
09		Unknown-04	5.562	1800	J
10	5989-08-2	Tricyclo[5.4.0.0(2,8)]undec-	5.616	2200	NJ
11		Unknown-05	5.916	8400	J
12	483-75-0	Naphthalene, 1,2,4a,5,6,8a-h	6.163	3700	NJ
13	31983-22-9	Naphthalene, 1,2,4a,5,6,8a-h	6.259	3800	NJ
14		Unknown-06	6.420	1900	J
15	544-63-8	Tetradecanoic acid	7.213	5300	NJ
16		Unknown-07	8.039	9800	J
17		Unknown-08	8.071	9500	J
18		Unknown-09	8.168	13000	J
19		Unknown-10	8.211	6700	J
20	1000197-14-1	4b,8-Dimethyl-2-isopropylphe	8.243	71000	NJ
21		Unknown-11	8.479	9000	J
22		Unknown-12	8.532	28000	J
23		Unknown-13	8.575	13000	J
24		Unknown-14	8.650	14000	J
25		Unknown-15	9.101	11000	J
26		Unknown-16	9.144	28000	J
27	1000251-96-9	Tetrahydroabietic acid	9.508	50000	NJ
28	474-62-4	Campesterol	12.232	19000	NJ
29		Unknown-17	12.629	7900	J
30	83-47-6	.gamma.-Sitosterol	12.725	68000	NJ
	E96679[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5259.D
Report Date: 11-Nov-2011 13:34

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5259.D
Lab Smp Id: K2198-08A Client Smp ID: H30Q9
Inj Date : 10-NOV-2011 13:32
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-08A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.500	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
$	2 Phenol-d5	71	3.385	3.373	(0.916)	88170	32.9832	540
$	4 bis(2-Chloroethyl)ether-d8	67	3.428	3.427	(0.927)	115674	31.4027	510
$	6 2-Chlorophenol-d4	132	3.503	3.491	(0.948)	84906	36.7167	600(Q)
*	8 1,4-Dichlorobenzene-d4	152	3.696	3.684	(1.000)	84890	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.007	4.006	(1.084)	118961	32.8250	540
	12 4-Methylphenol	108	4.028	4.027	(1.090)	57344	13.9101	230
$	16 Nitrobenzene-d5	128	4.146	4.145	(0.872)	40790	36.3675	600
$	19 2-Nitrophenol-d4	143	4.425	4.424	(0.930)	52821	42.6602	700
$	23 2,4-Dichlorophenol-d3	165	4.629	4.628	(0.973)	95278	42.1526	690
*	25 Naphthalene-d8	136	4.757	4.746	(1.000)	215371	40.0000	
	26 Naphthalene	128	4.768	4.767	(1.002)	13583	2.45040	40(a)
$	27 4-Chloroaniline-d4	131	4.811	4.810	(1.011)	9378	4.67274	77(aQ)
$	40 Dimethylphthalate-d6	166	5.980	5.968	(0.962)	204555	39.4935	650
$	43 Acenaphthylene-d8	160	6.087	6.076	(0.979)	246464	36.5930	600
*	46 Acenaphthene-d10	164	6.216	6.204	(1.000)	140868	40.0000	
$	49 4-Nitrophenol-d4	143	6.323	6.312	(1.017)	35089	47.0093	770(Q)
$	54 Fluorene-d10	176	6.645	6.633	(1.069)	172259	36.2064	590
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.698	6.698	(0.901)	39171	38.0167	620
*	65 Phenanthrene-d10	188	7.438	7.438	(1.000)	264045	40.0000	

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5259.D
Report Date: 11-Nov-2011 13:34

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)
	66 Phenanthrene	178	7.460	7.448	(1.003)	20279	2.73587	45(aQ)
$	67 Anthracene-d10	188	7.481	7.480	(1.006)	274973	36.4564	600
	70 Di-n-butylphthalate	149	7.921	7.931	(1.065)	110938	16.9531	280
	71 Fluoranthene	202	8.435	8.435	(1.134)	16307	2.13749	35(aQ)
$	72 Pyrene-d10	212	8.607	8.606	(0.892)	195984	30.9054	510(QR)
	73 Pyrene	202	8.629	8.628	(0.894)	21179	2.62293	43(a)
*	77 Chrysene-d12	240	9.647	9.668	(1.000)	201300	40.0000	(Q)
$	83 Benzo(a)pyrene-d12	264	10.923	10.891	(0.993)	146309	40.3915	660(H)
*	85 Perylene-d12	264	10.923	10.966	(1.000)	147616	40.0000	(H)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5259.D
Report Date: 11-Nov-2011 13:34

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5259.D
Lab Smp Id: K2198-08A Client Smp ID: H30Q9
Inj Date : 10-NOV-2011 13:32
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-08A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.500	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 25 Naphthalene-d8	4.758	962561	40.000
* 46 Acenaphthene-d10	6.216	953800	40.000
* 65 Phenanthrene-d10	7.439	901438	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
1R-.alpha.-Pinene				CAS #: 7785-70-8			
3.128	5048335	209.787487	3400	96	NIST2002.L	15163	25
Unknown				CAS #:			
3.256	2235969	92.9174148	1500	0		0	25
Unknown				CAS #:			
3.342	1033310	42.9400151	700	0		0	25

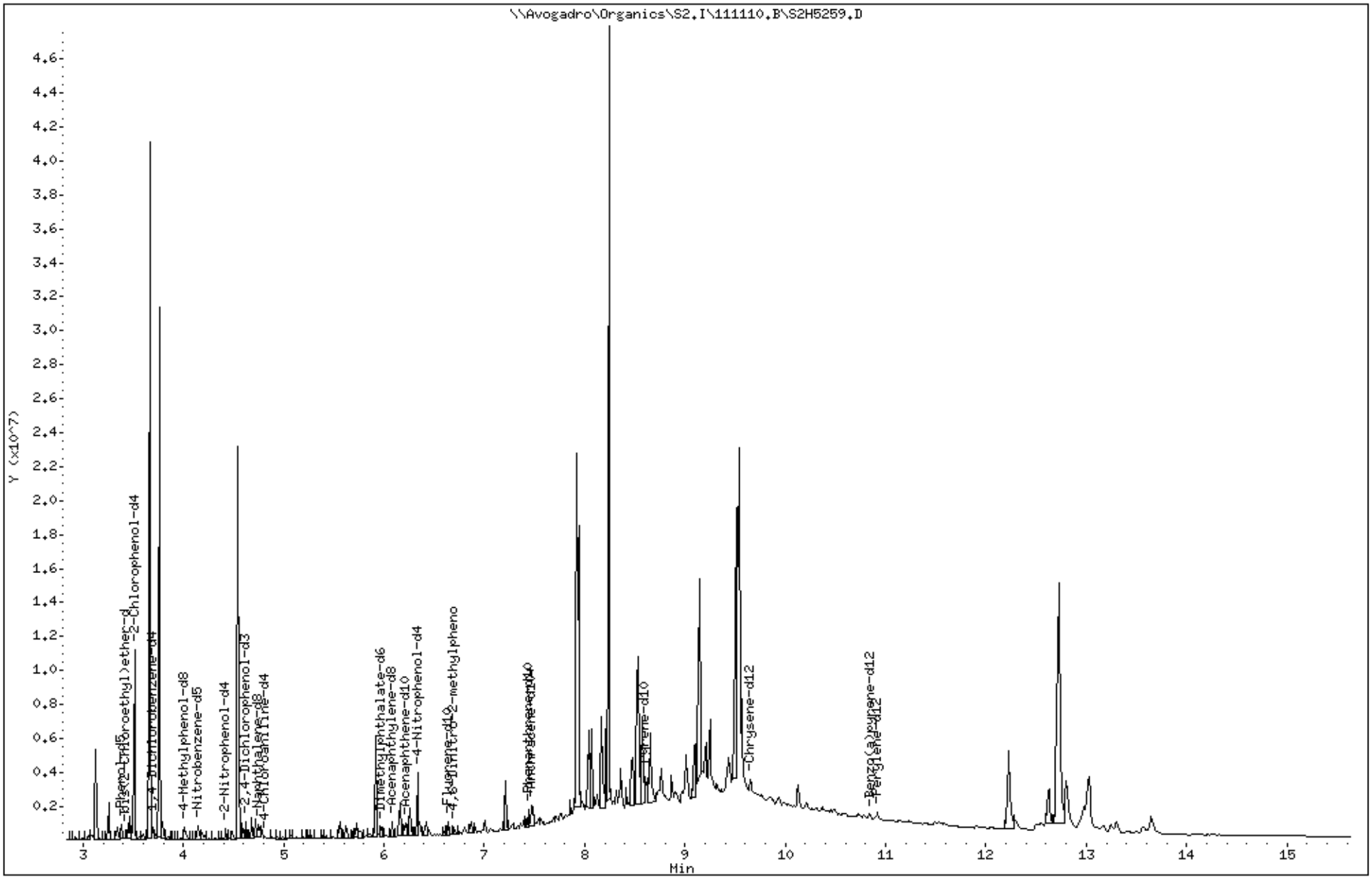
Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5259.D
Report Date: 11-Nov-2011 13:34

RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
.beta.-Pinene					CAS #: 127-91-3		
3.460	1502806	62.4502848	1000	91	NIST2002.L	15146	25
3-Carene					CAS #: 13466-78-9		
3.664	35559669	1477.70958	24000	87	NIST2002.L	15125	25
Benzene, 1-methyl-4-(1-methylethyl)-					CAS #: 99-87-6		
3.761	26328091	1094.08422	18000	91	NIST2002.L	14399	25
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet					CAS #: 464-49-3		
4.543	18405135	764.839635	13000	95	NIST2002.L	24211	25
Unknown					CAS #:		
4.683	1430127	59.4300356	970	0		0	25
Unknown					CAS #:		
5.562	1009414	42.3322615	690	0		0	46
Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6					CAS #: 5989-08-2		
5.616	1211059	50.7887783	830	96	NIST2002.L	58740	46
Unknown					CAS #:		
5.916	4629741	194.159694	3200	0		0	46
Naphthalene, 1,2,4a,5,6,8a-hexahydro-4,7					CAS #: 483-75-0		
6.163	2044185	85.7279800	1400	97	NIST2002.L	58790	46
Naphthalene, 1,2,4a,5,6,8a-hexahydro-4,7					CAS #: 31983-22-9		
6.259	2081221	87.2811495	1400	93	NIST2002.L	58850	46
Unknown					CAS #:		
6.420	1031217	43.2466446	710	0		0	46
Tetradecanoic acid					CAS #: 544-63-8		
7.213	2737973	121.493491	2000	96	NIST2002.L	75070	65
Unknown					CAS #:		
8.039	5107945	226.657465	3700	0		0	65
Unknown					CAS #:		
8.071	4941290	219.262404	3600	0		0	65
Unknown					CAS #:		
8.168	6635158	294.425283	4800	0		0	65
Unknown					CAS #:		
8.211	3456314	153.368798	2500	0		0	65
4b,8-Dimethyl-2-isopropylphenanthrene, 4					CAS #: 1000197-14-1		
8.243	36689902	1628.05981	27000	94	NIST2002.L	92361	65
Unknown					CAS #:		
8.479	4683591	207.827401	3400	0		0	65

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5259.D
Report Date: 11-Nov-2011 13:34

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
8.532	14524314	644.494831	11000	0		0	65
Unknown				CAS #:			
8.575	6776987	300.718737	4900	0		0	65
Unknown				CAS #:			
8.650	7304233	324.114489	5300	0		0	65
Unknown				CAS #:			
9.101	5809180	257.773713	4200	0		0	65
Unknown				CAS #:			
9.144	14451352	641.257265	11000	0		0	65
Tetrahydroabietic acid				CAS #: 1000251-96-9			
9.508	25719358	1141.25828	19000	93	NIST2002.L	120878	65
Campesterol				CAS #: 474-62-4			
12.232	9805600	435.108910	7100	94	NIST2002.L	156588	65
Unknown				CAS #:			
12.629	4117602	182.712475	3000	0		0	65
.gamma.-Sitosterol				CAS #: 83-47-6			
12.725	35348429	1568.53395	26000	96	NIST2002.L	159285	65

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5259.D
Date : 10-NOV-2011 13:32
Client ID: H30Q9
Instrument: S2.i
Sample Info: K2198-08A,,62764,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5259.D

Date : 10-NOV-2011 13:32

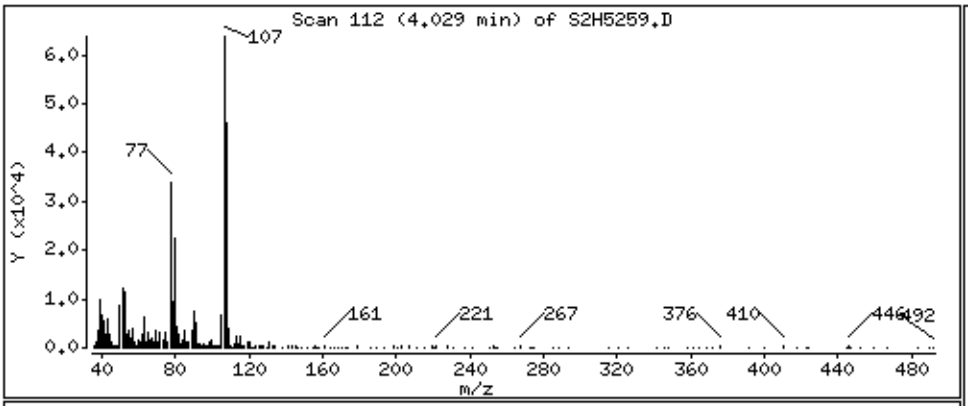
Client ID: H30Q9 Instrument: S2.i

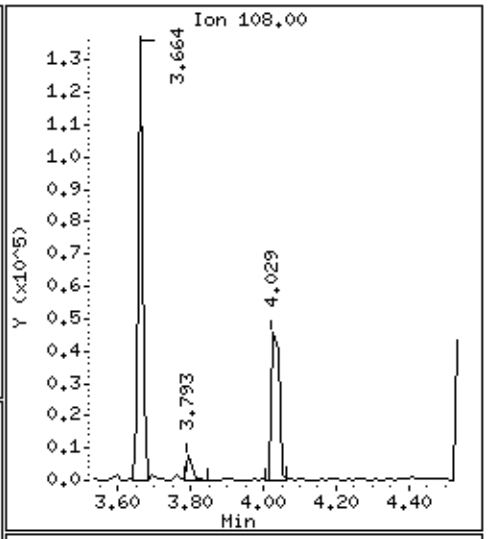
Sample Info: K2198-08A,,62764,,

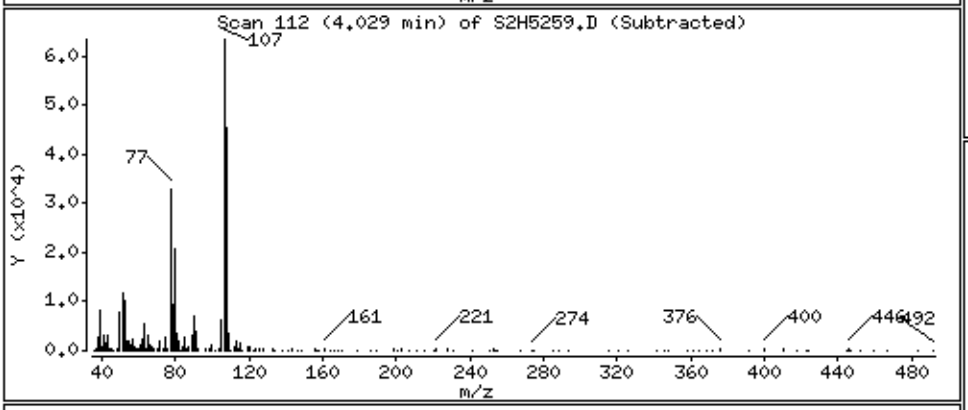
Volume Injected (uL): 2.0 Operator: SRC: LIMS

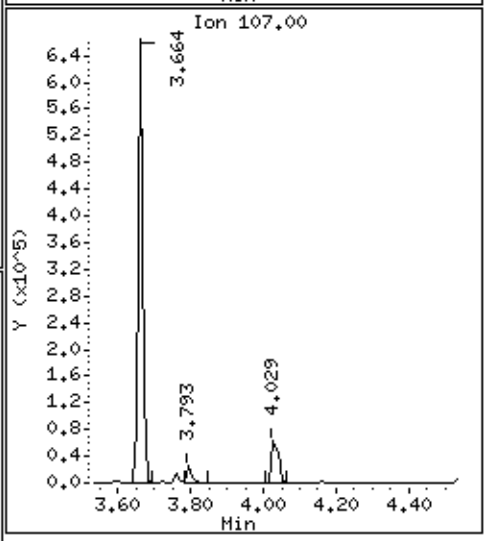
Column phase: RXI-5SILMS Column diameter: 0.25

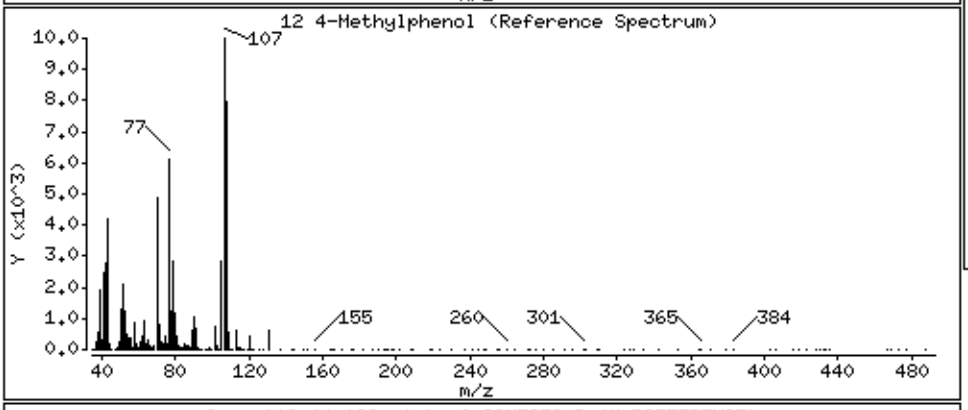
12 4-Methylphenol Concentration: 230 ug/Kg

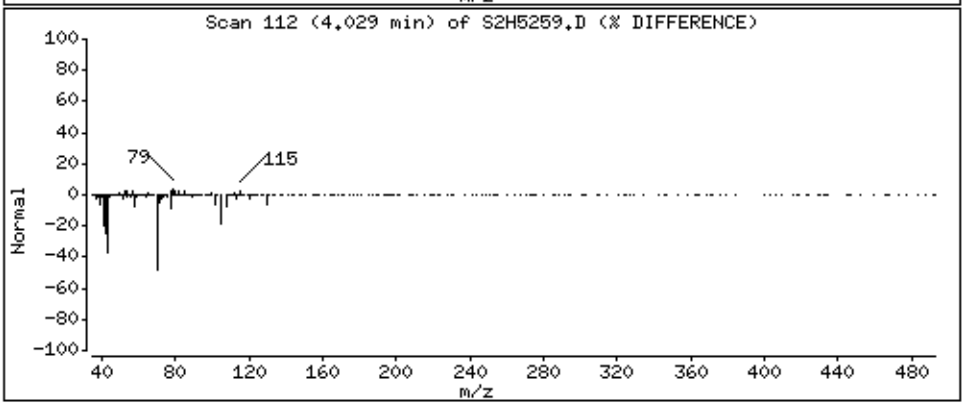












Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5259.D

Date : 10-NOV-2011 13:32

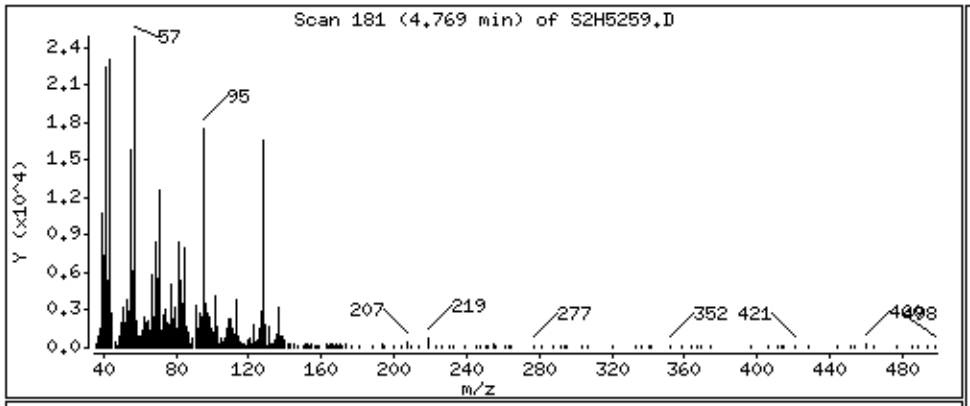
Client ID: H30Q9 Instrument: S2.i

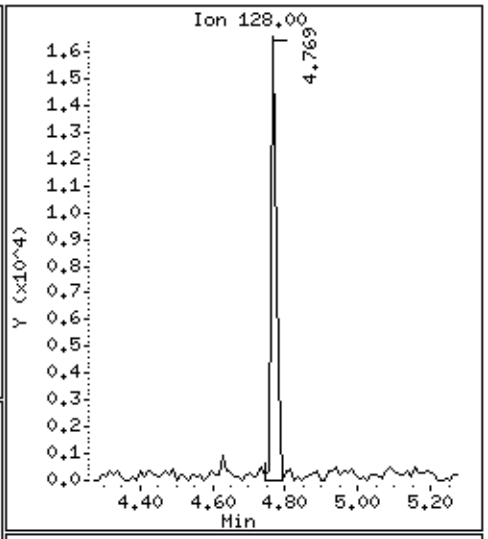
Sample Info: K2198-08A,,62764,,

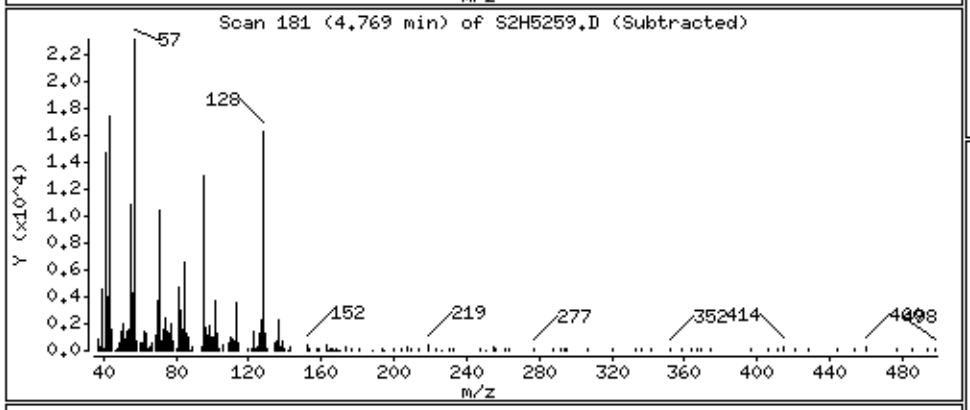
Volume Injected (uL): 2.0 Operator: SRC: LIMS

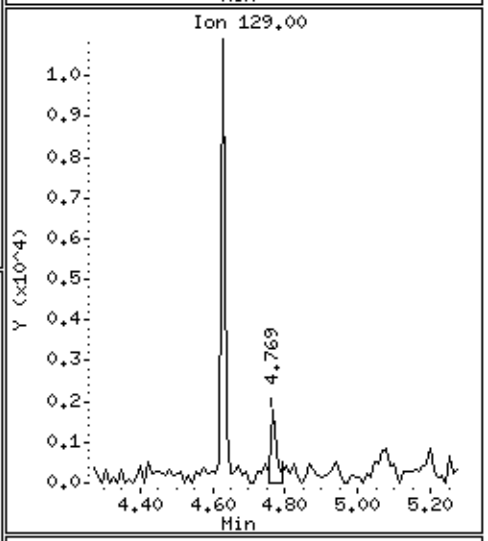
Column phase: RXI-5SILMS Column diameter: 0.25

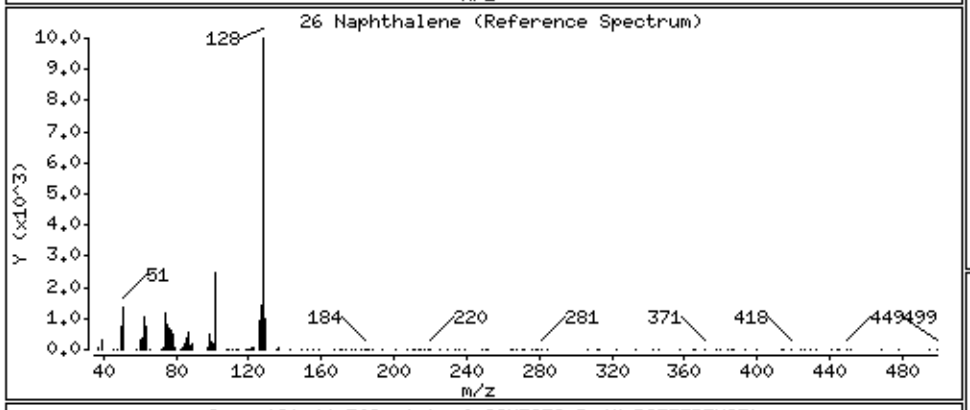
26 Naphthalene Concentration: 40 ug/Kg

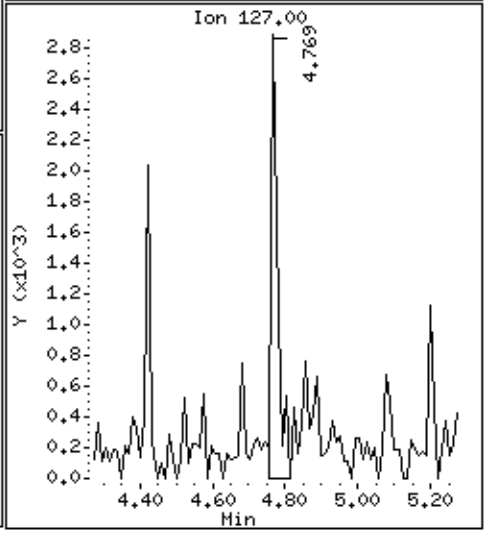


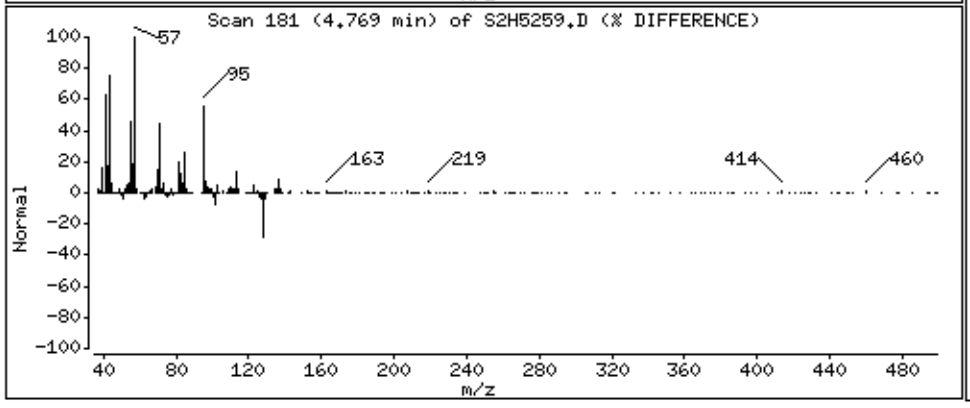












Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5259.D

Date : 10-NOV-2011 13:32

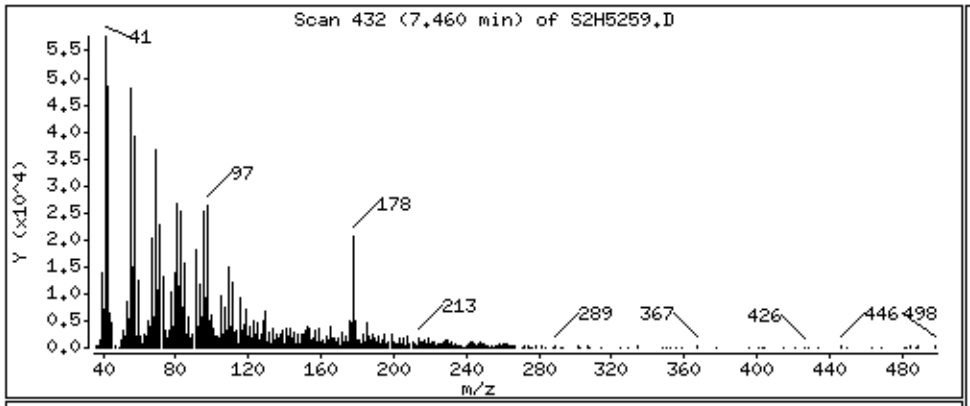
Client ID: H30Q9 Instrument: S2.i

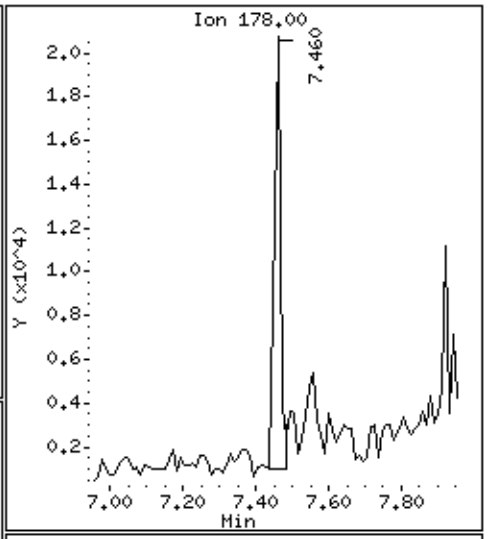
Sample Info: K2198-08A,,62764,,

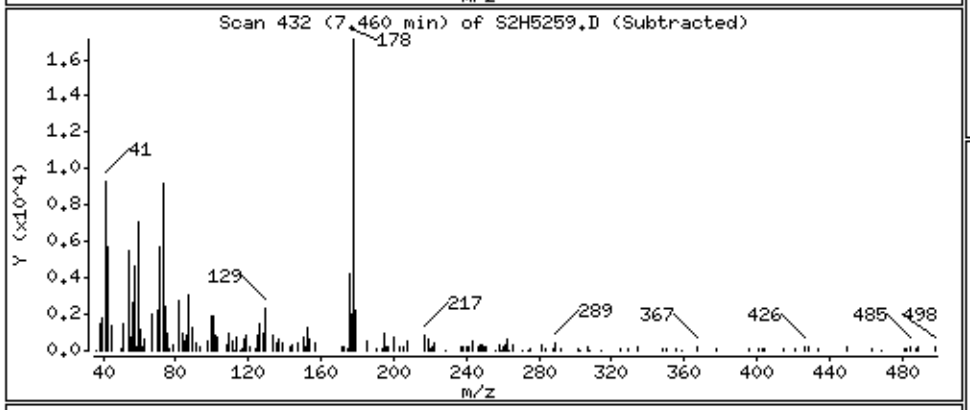
Volume Injected (uL): 2.0 Operator: SRC: LIMS

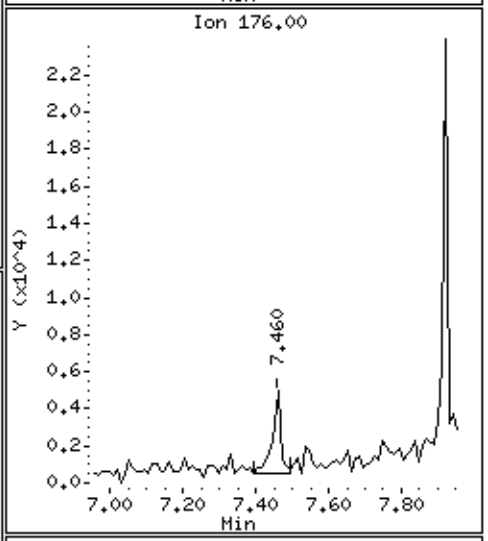
Column phase: RXI-5SILMS Column diameter: 0.25

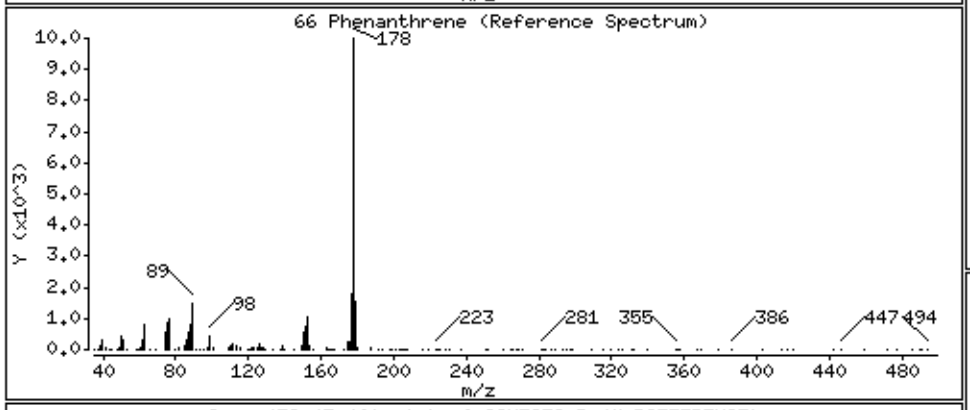
66 Phenanthrene Concentration: 45 ug/Kg

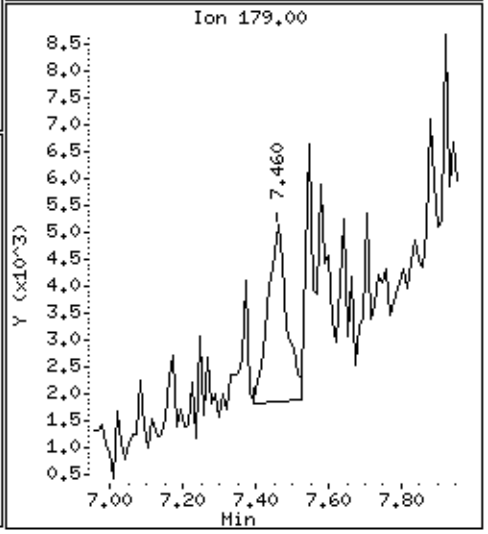


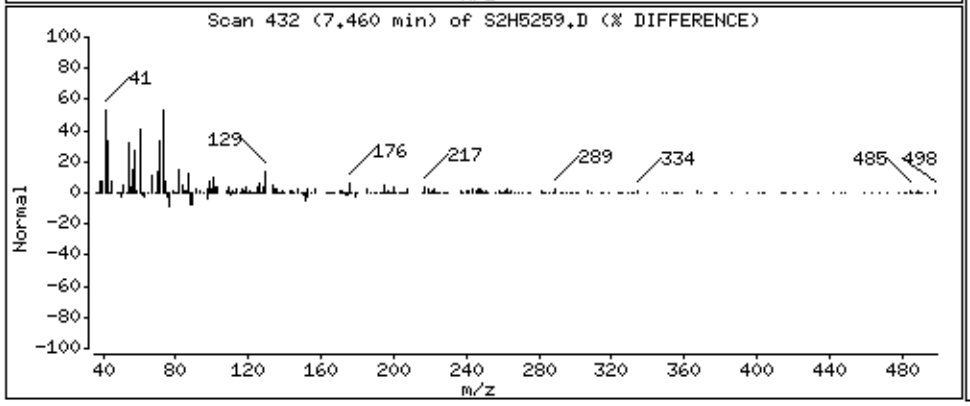












Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5259.D

Date : 10-NOV-2011 13:32

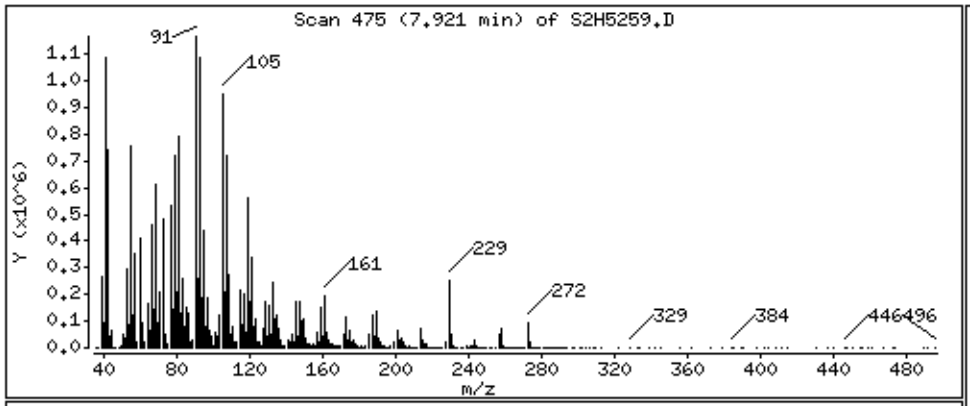
Client ID: H30Q9 Instrument: S2.i

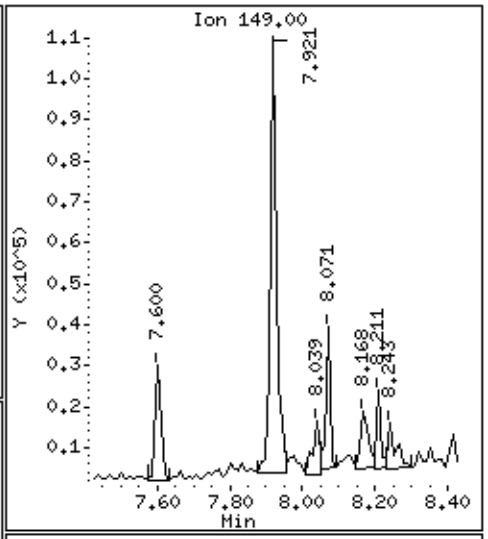
Sample Info: K2198-08A,,62764,,

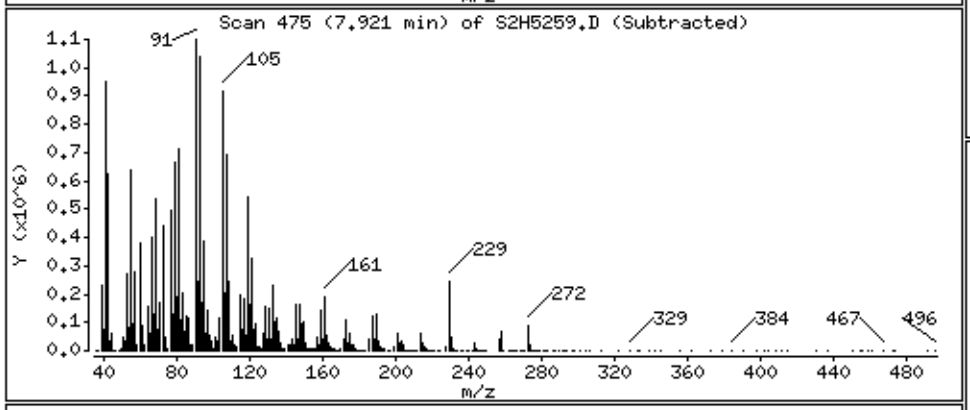
Volume Injected (uL): 2.0 Operator: SRC: LIMS

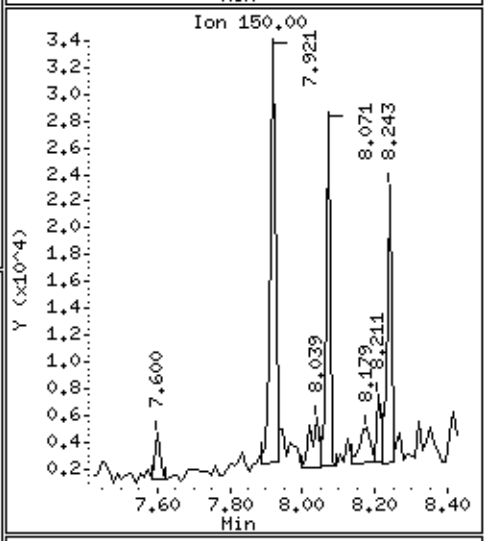
Column phase: RXI-5SILMS Column diameter: 0.25

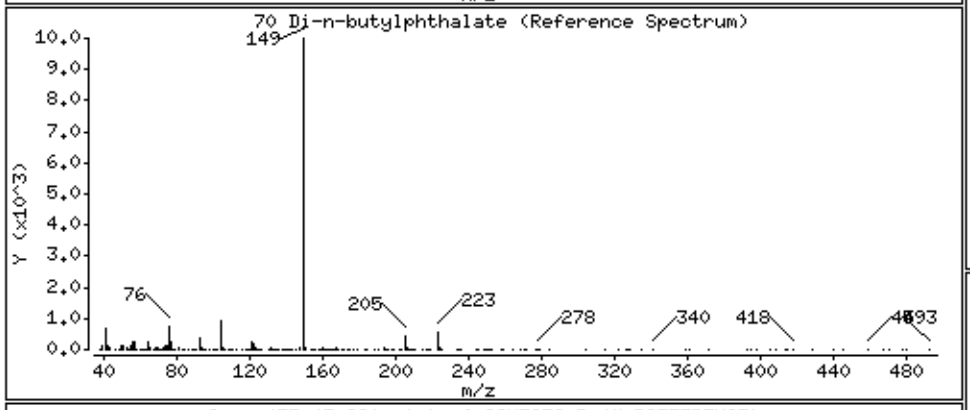
70 Di-n-butylphthalate Concentration: 280 ug/Kg

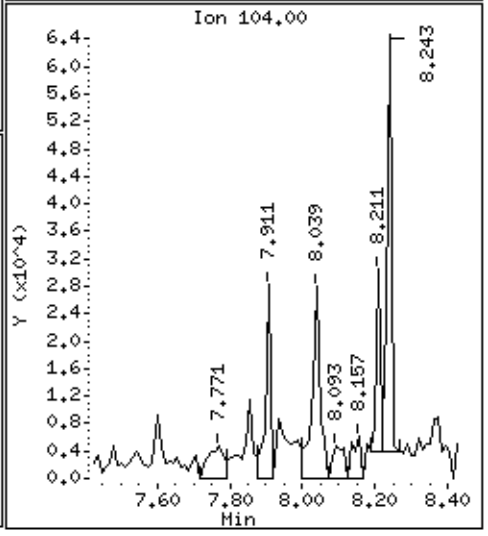


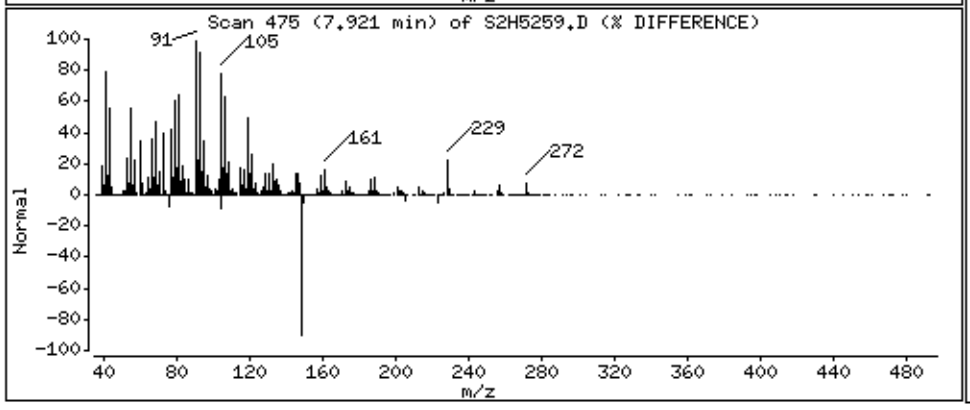












Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5259.D

Date : 10-NOV-2011 13:32

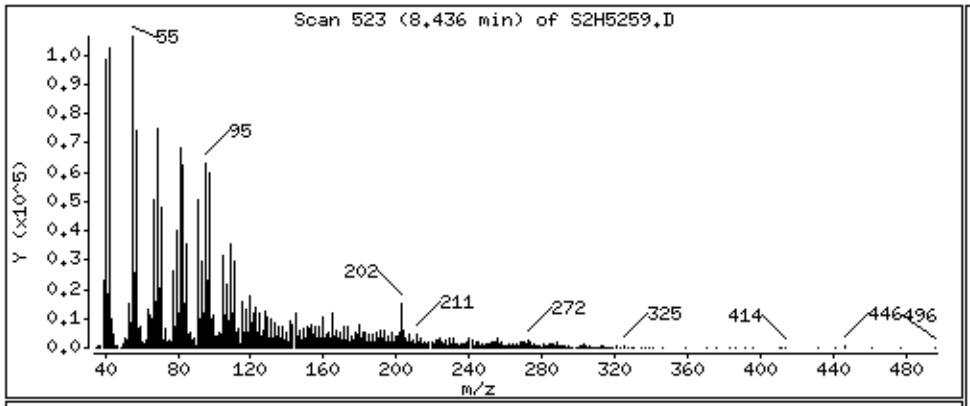
Client ID: H30Q9 Instrument: S2.i

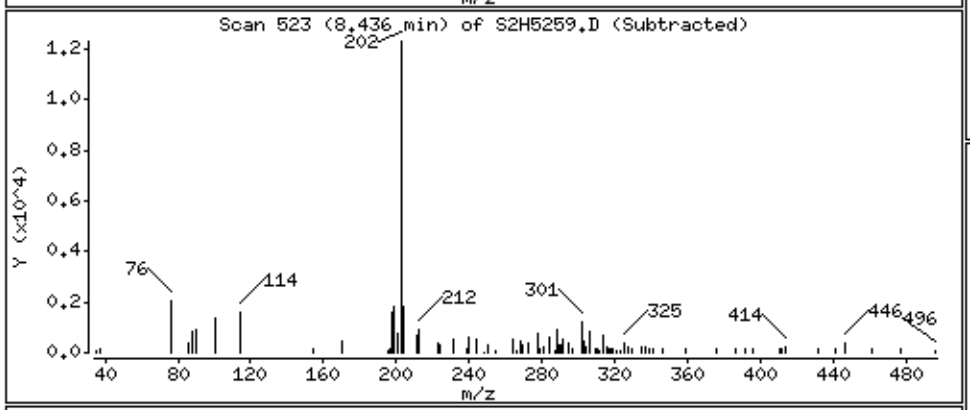
Sample Info: K2198-08A,,62764,,

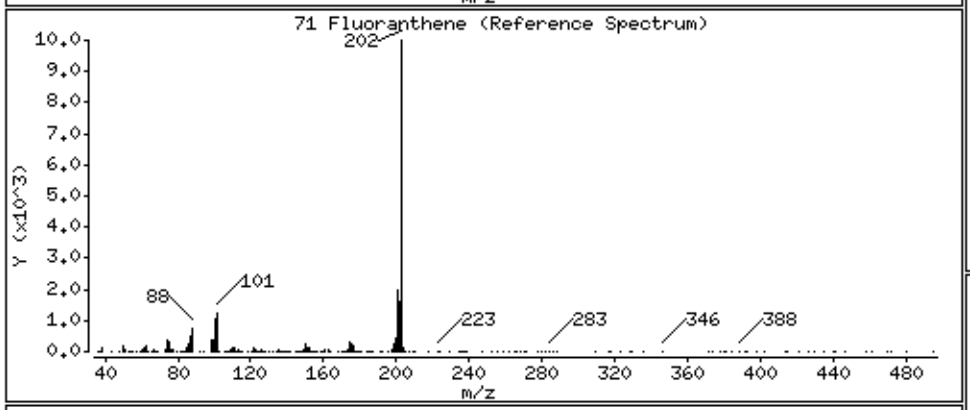
Volume Injected (uL): 2.0 Operator: SRC: LIMS

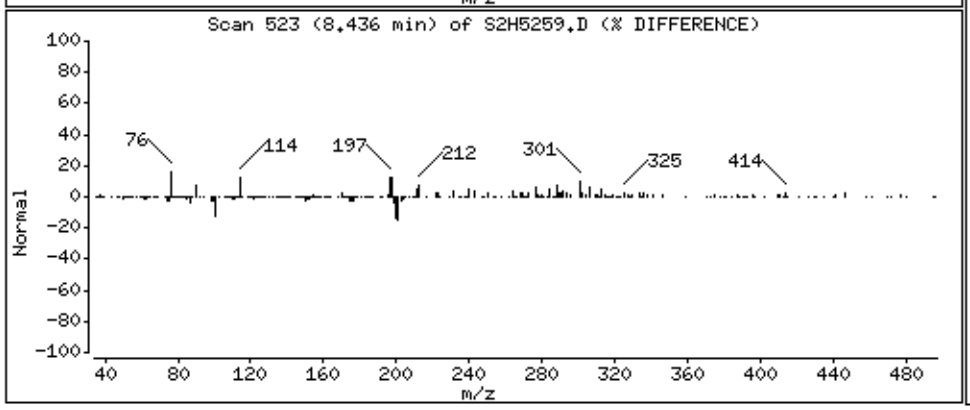
Column phase: RXI-5SILMS Column diameter: 0.25

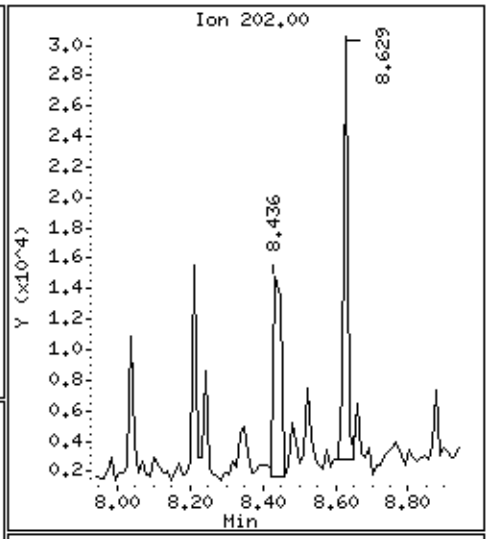
71 Fluoranthene Concentration: 35 ug/Kg

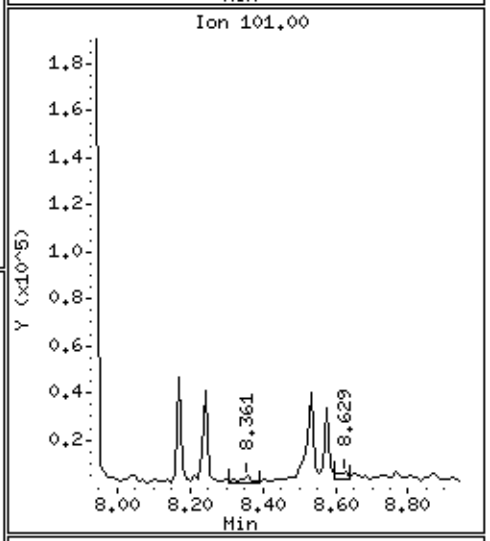


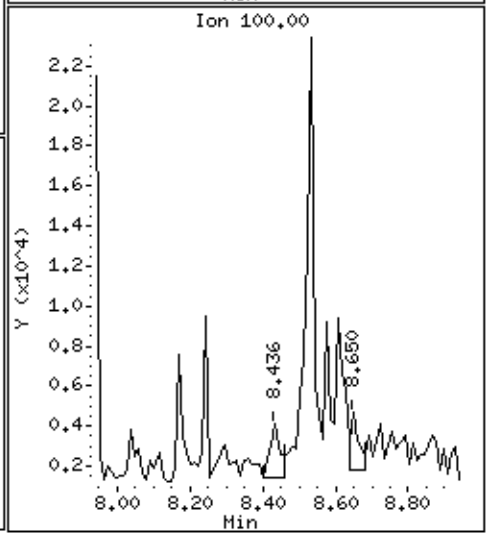












Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5259.D

Date : 10-NOV-2011 13:32

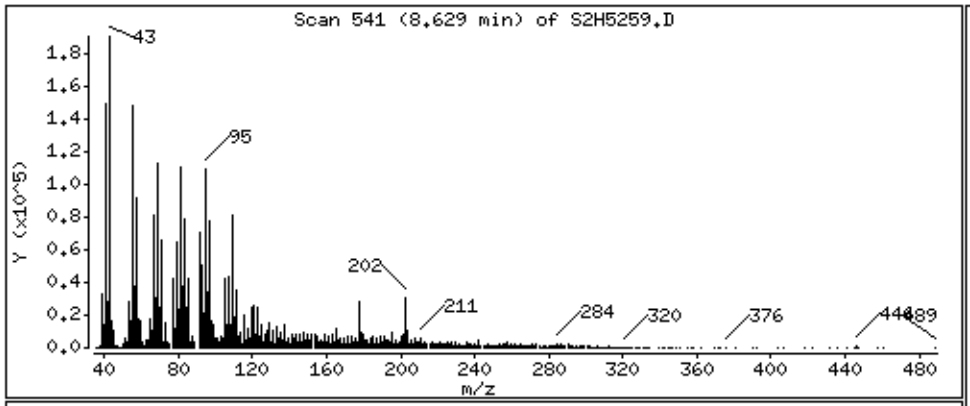
Client ID: H30Q9 Instrument: S2.i

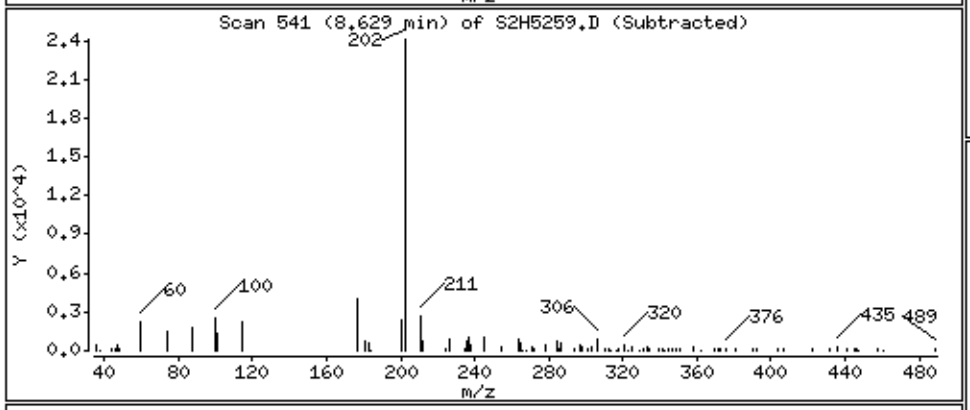
Sample Info: K2198-08A,,62764,,

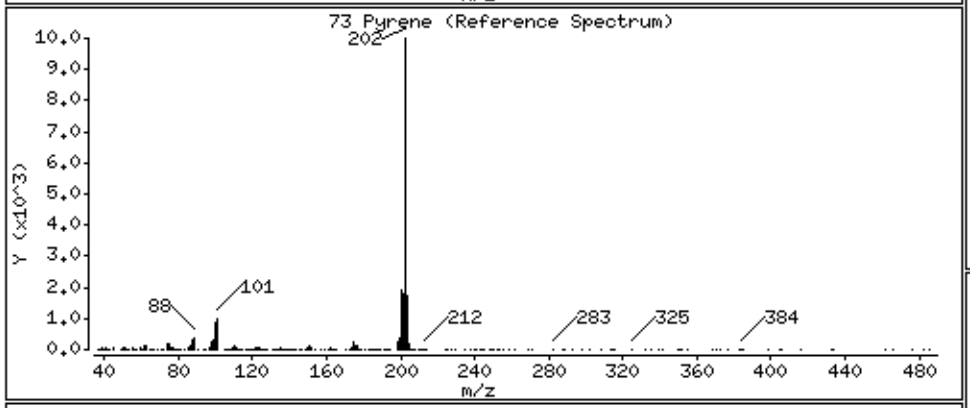
Volume Injected (uL): 2.0 Operator: SRC: LIMS

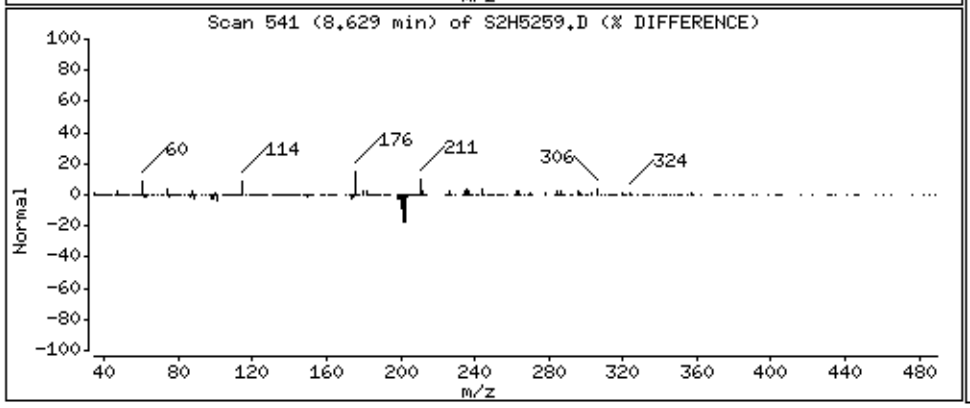
Column phase: RXI-5SILMS Column diameter: 0.25

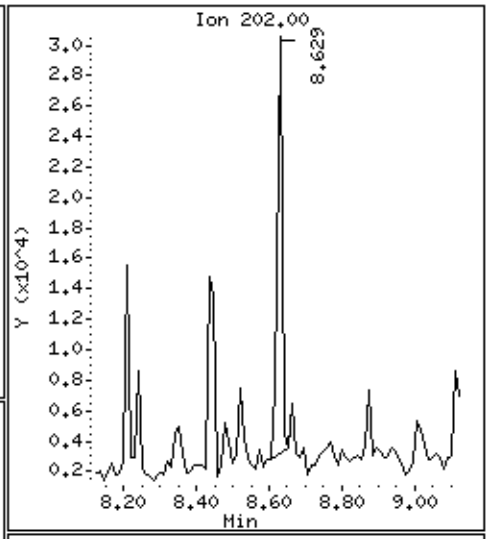
73 Pyrene Concentration: 43 ug/Kg

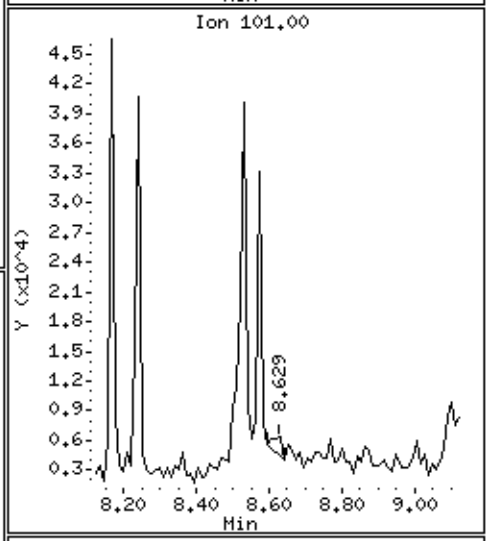


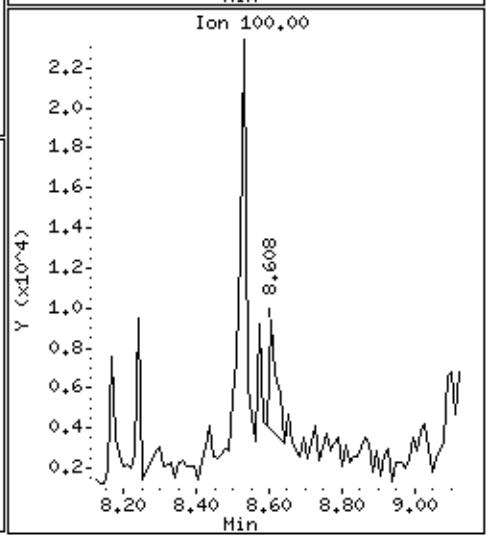












Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5259.D

Date : 10-NOV-2011 13:32

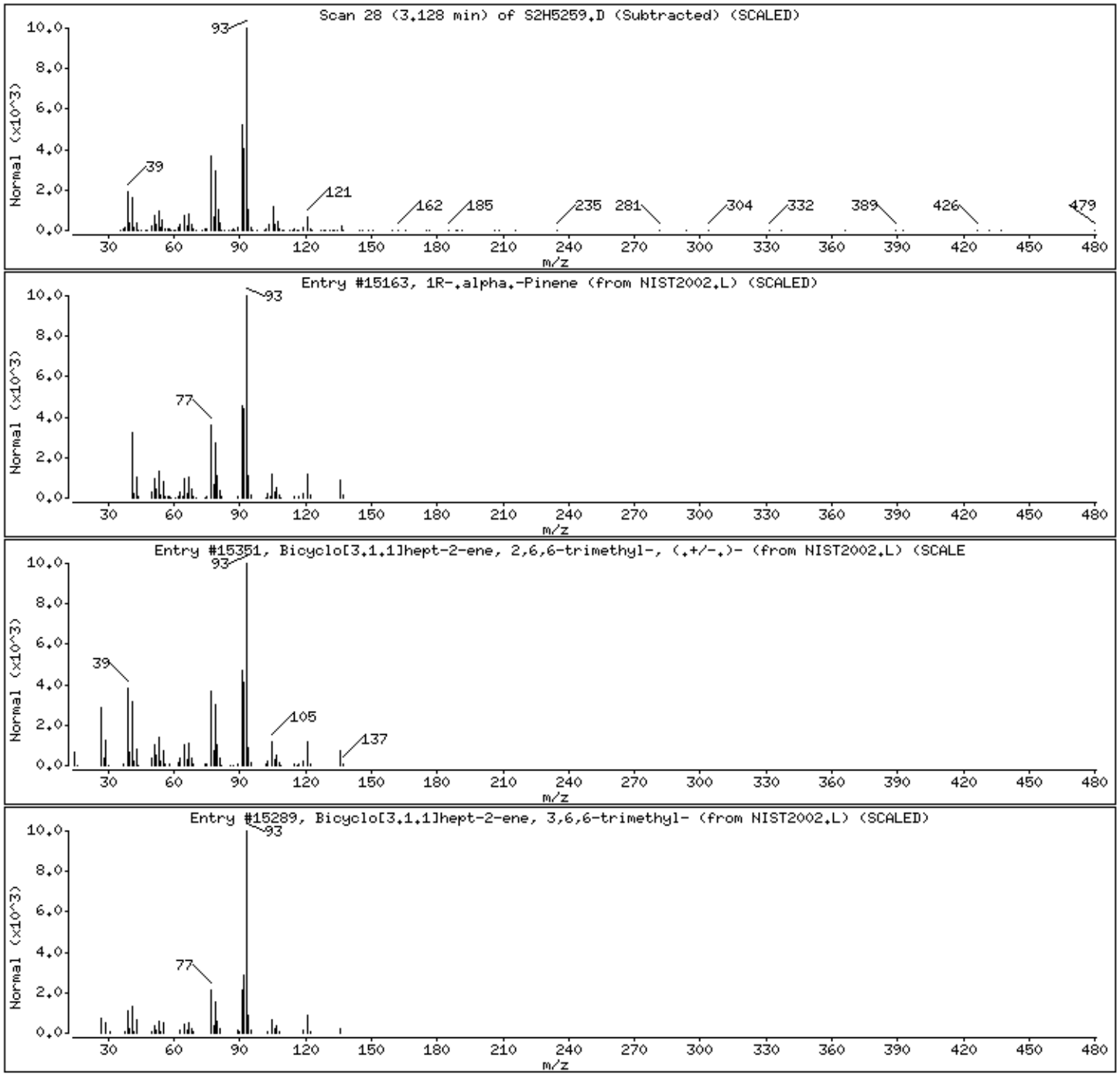
Client ID: H30Q9 Instrument: S2.i

Sample Info: K2198-08A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1R-.alpha.-Pinene	7785-70-8	NIST2002.L	15163	96	C10H16	136
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethy	2437-95-8	NIST2002.L	15351	94	C10H16	136
Bicyclo[3.1.1]hept-2-ene, 3,6,6-trimethy	4889-83-2	NIST2002.L	15289	91	C10H16	136



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5259.D

Date : 10-NOV-2011 13:32

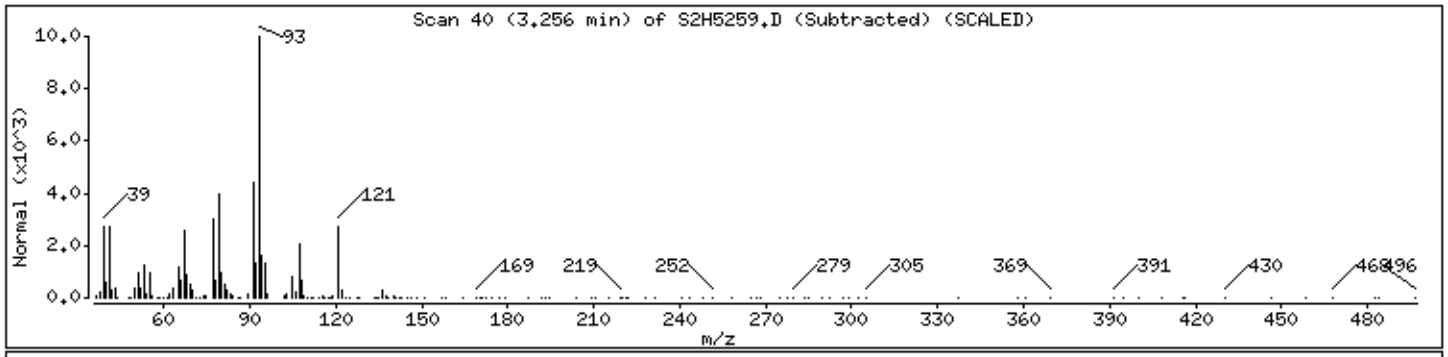
Client ID: H30Q9 Instrument: S2.i

Sample Info: K2198-08A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5259.D

Date : 10-NOV-2011 13:32

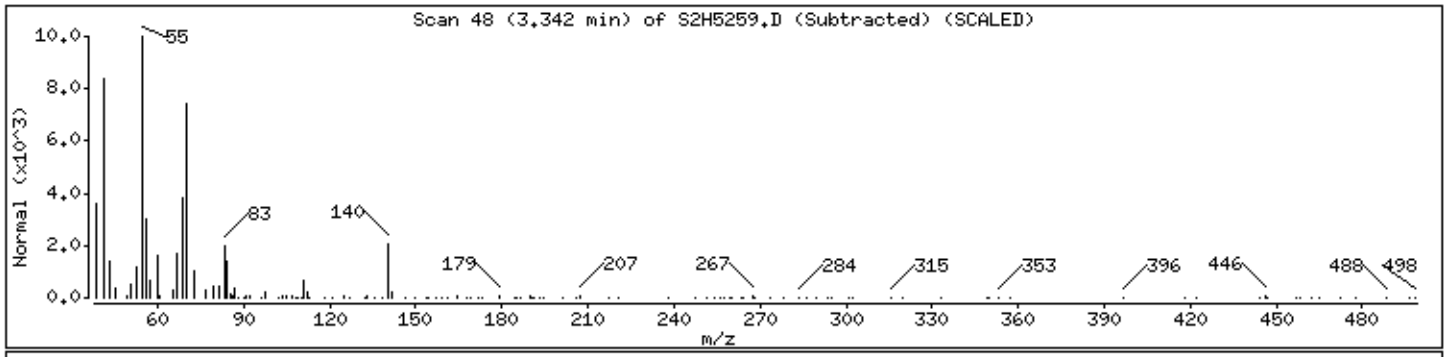
Client ID: H30Q9 Instrument: S2.i

Sample Info: K2198-08A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5259.D

Date : 10-NOV-2011 13:32

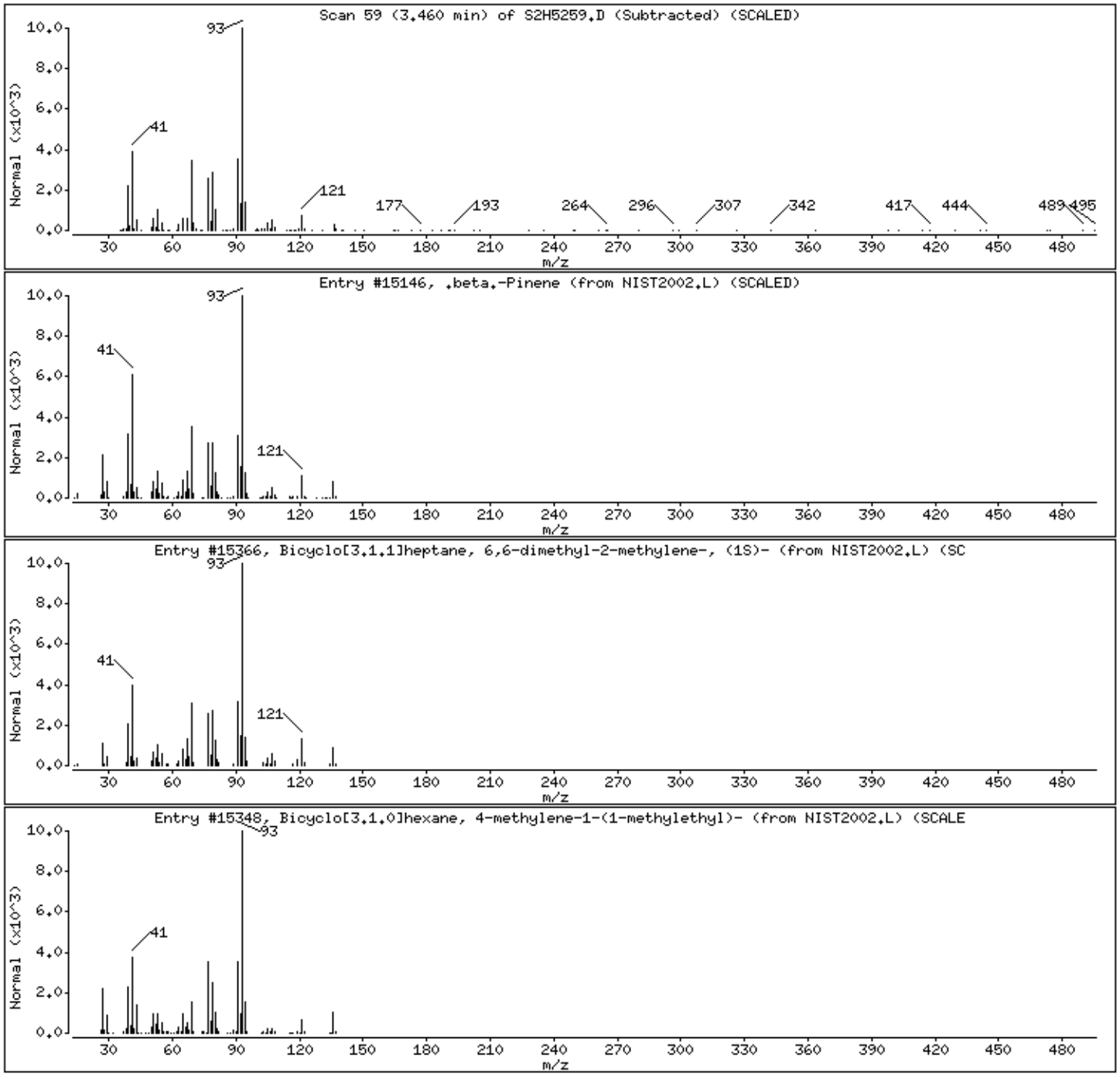
Client ID: H30Q9 Instrument: S2.i

Sample Info: K2198-08A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.beta.-Pinene	127-91-3	NIST2002.L	15146	91	C10H16	136
Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me	18172-67-3	NIST2002.L	15366	91	C10H16	136
Bicyclo[3.1.0]hexane, 4-methylene-1-(1-m	3387-41-5	NIST2002.L	15348	86	C10H16	136



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5259.D

Date : 10-NOV-2011 13:32

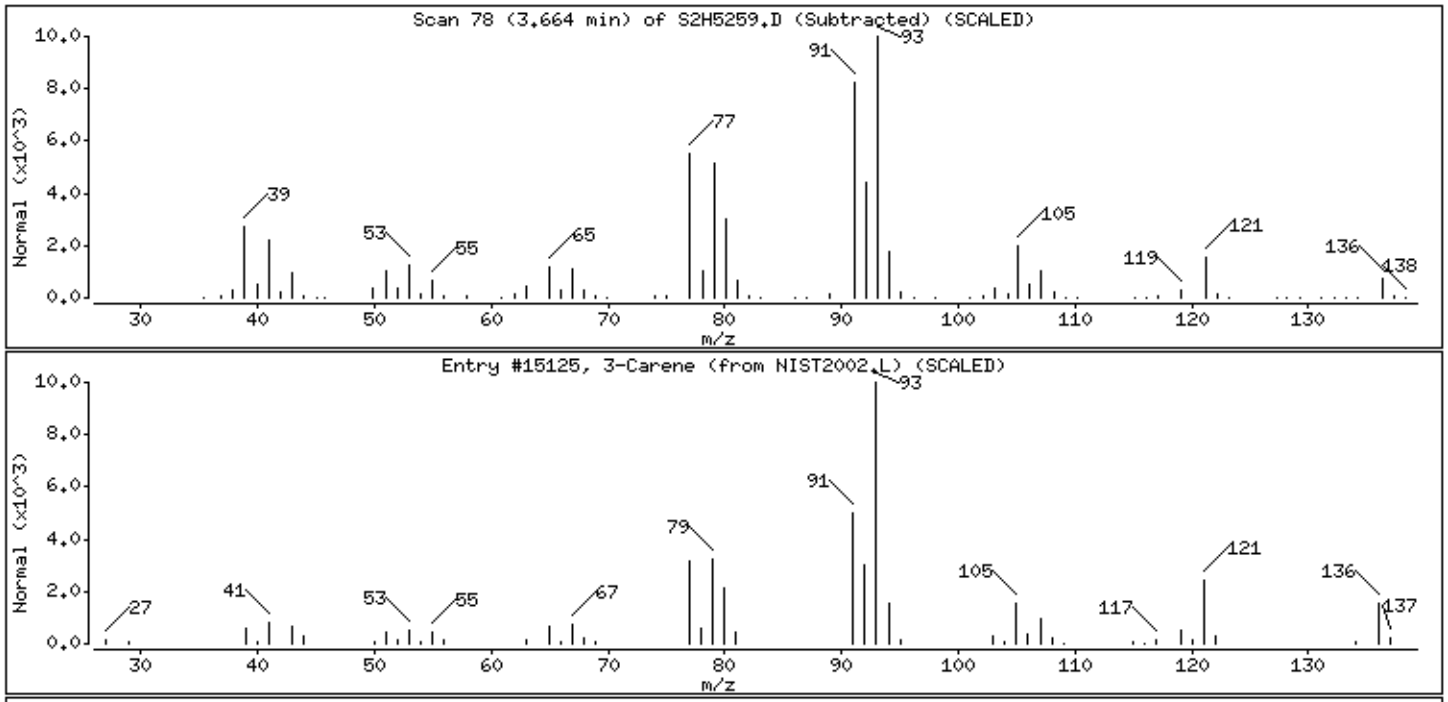
Client ID: H30Q9 Instrument: S2.i

Sample Info: K2198-08A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
3-Carene	13466-78-9	NIST2002.L	15125	87	C10H16	136



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5259.D

Date : 10-NOV-2011 13:32

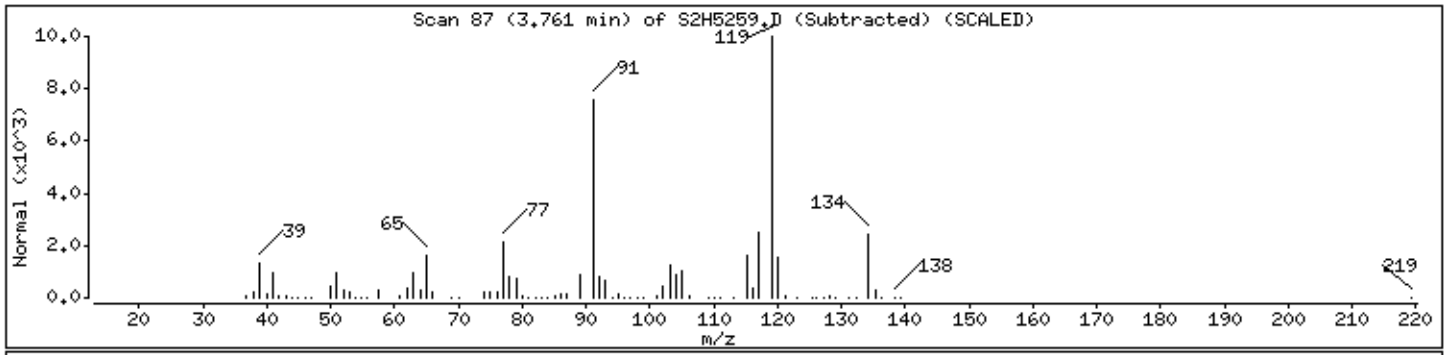
Client ID: H30Q9 Instrument: S2.i

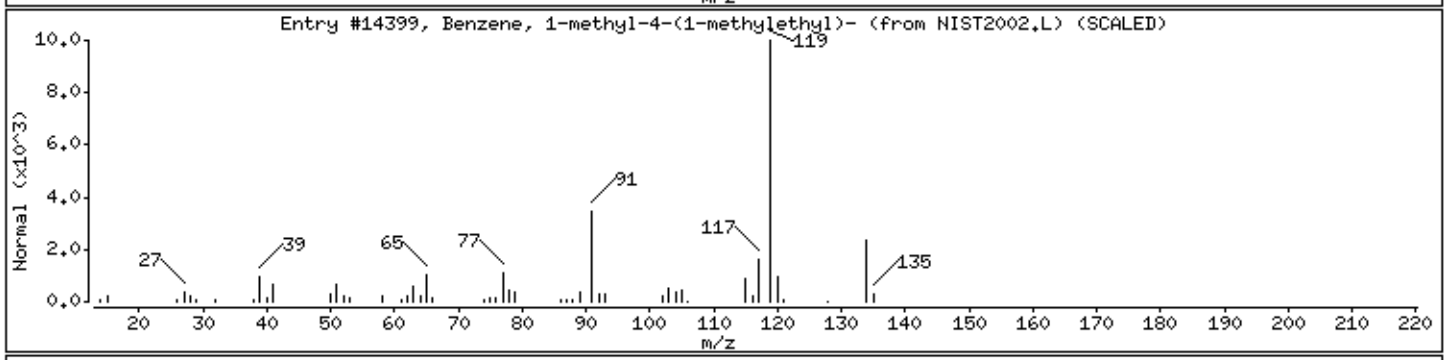
Sample Info: K2198-08A,,62764,,

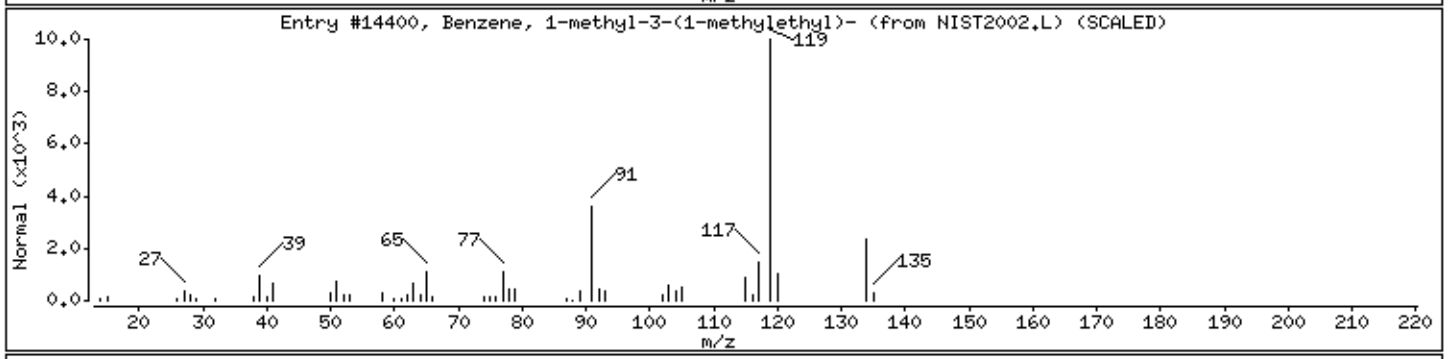
Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1-methyl-4-(1-methylethyl)-	99-87-6	NIST2002.L	14399	91	C10H14	134
Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	NIST2002.L	14400	87	C10H14	134







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Date : 10-NOV-2011 13:32

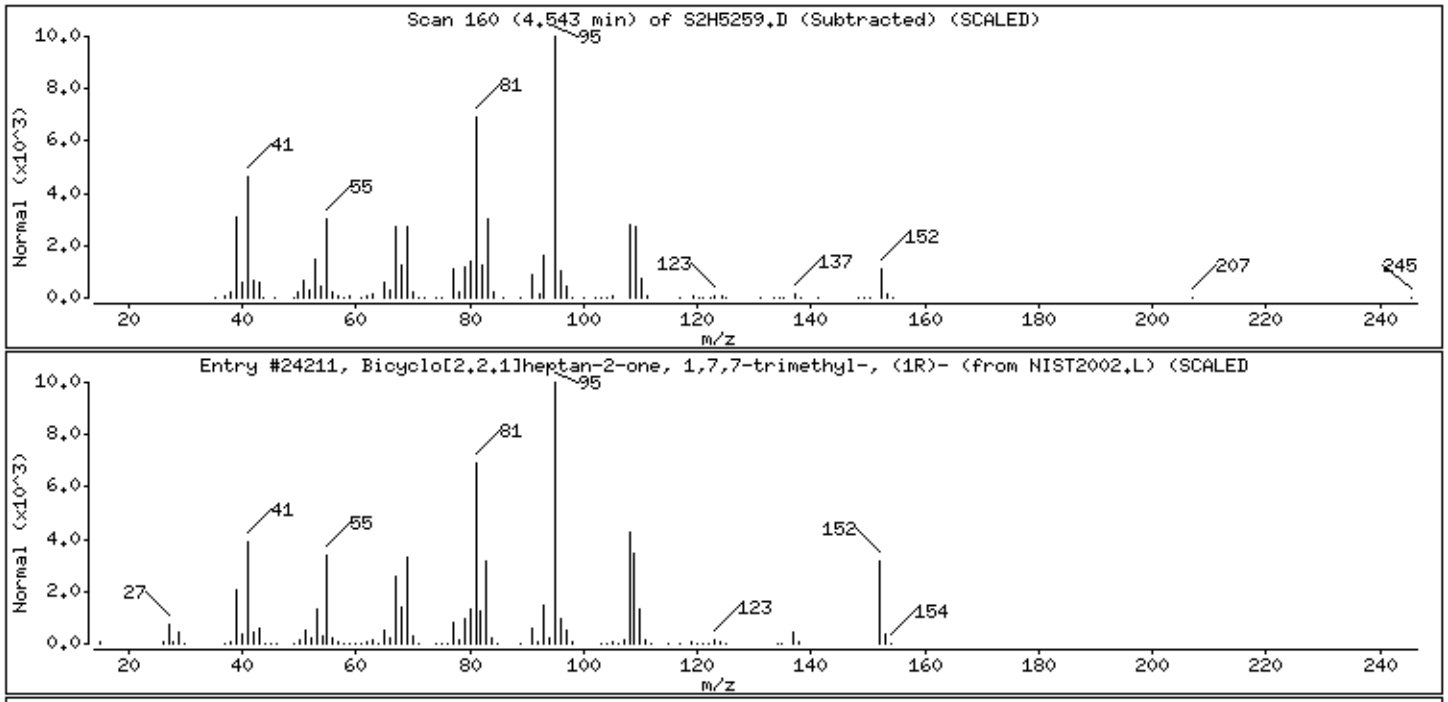
Client ID: H30Q9 Instrument: S2.i

Sample Info: K2198-08A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet	464-49-3	NIST2002.L	24211	95	C10H16O	152



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Date : 10-NOV-2011 13:32

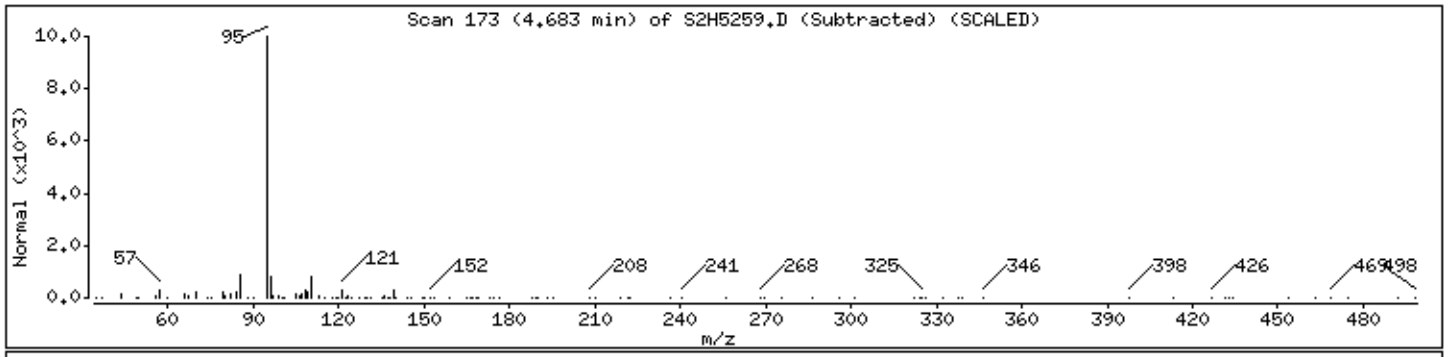
Client ID: H30Q9 Instrument: S2.i

Sample Info: K2198-08A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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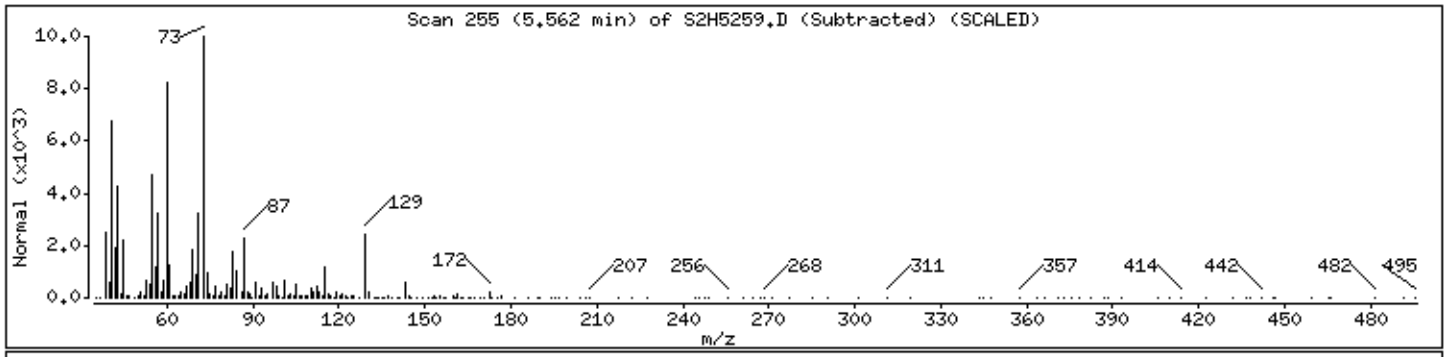
Client ID: H30Q9 Instrument: S2.i

Sample Info: K2198-08A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 13:32

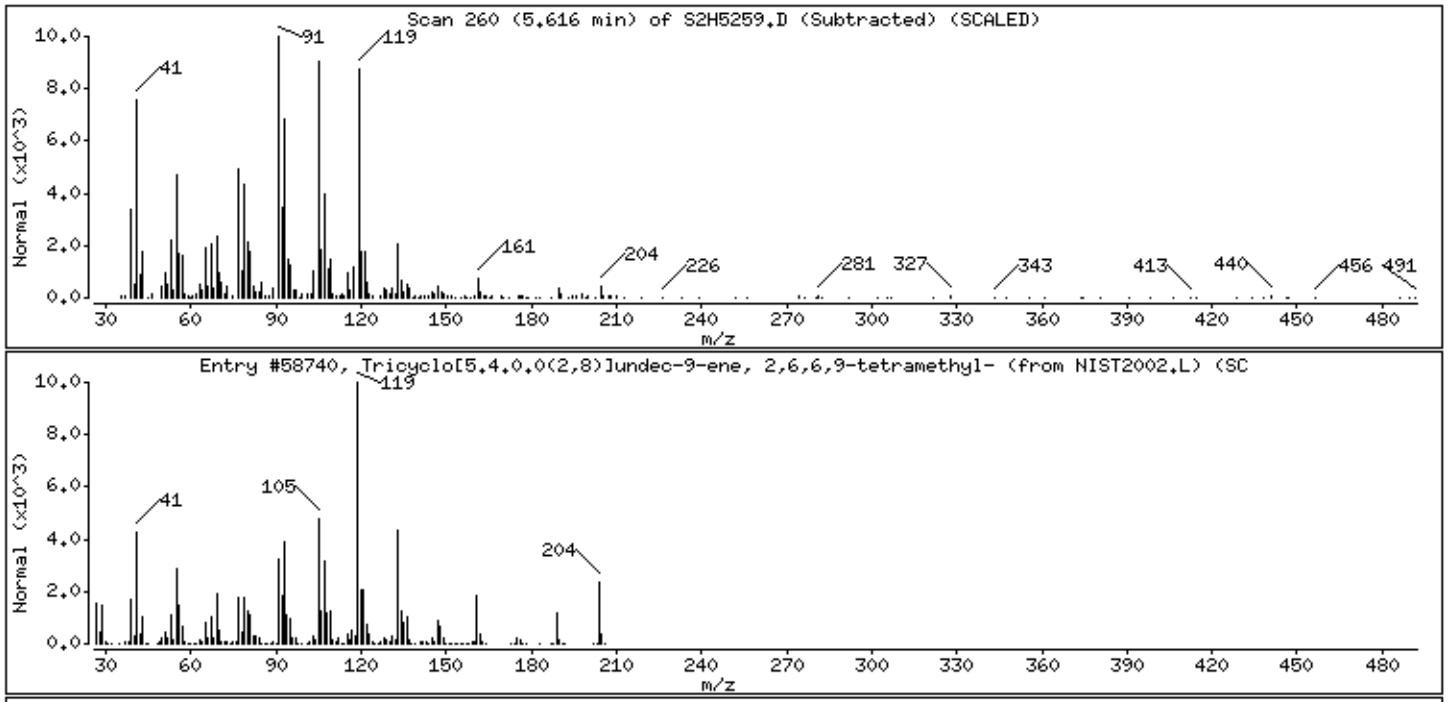
Client ID: H30Q9 Instrument: S2.i

Sample Info: K2198-08A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6	5989-08-2	NIST2002.L	58740	96	C15H24	204



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Date : 10-NOV-2011 13:32

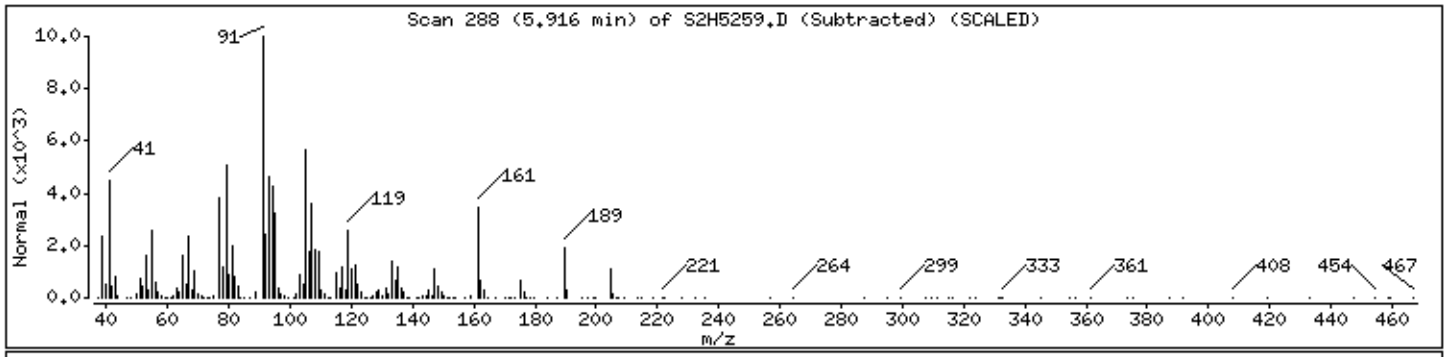
Client ID: H30Q9 Instrument: S2.i

Sample Info: K2198-08A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 13:32

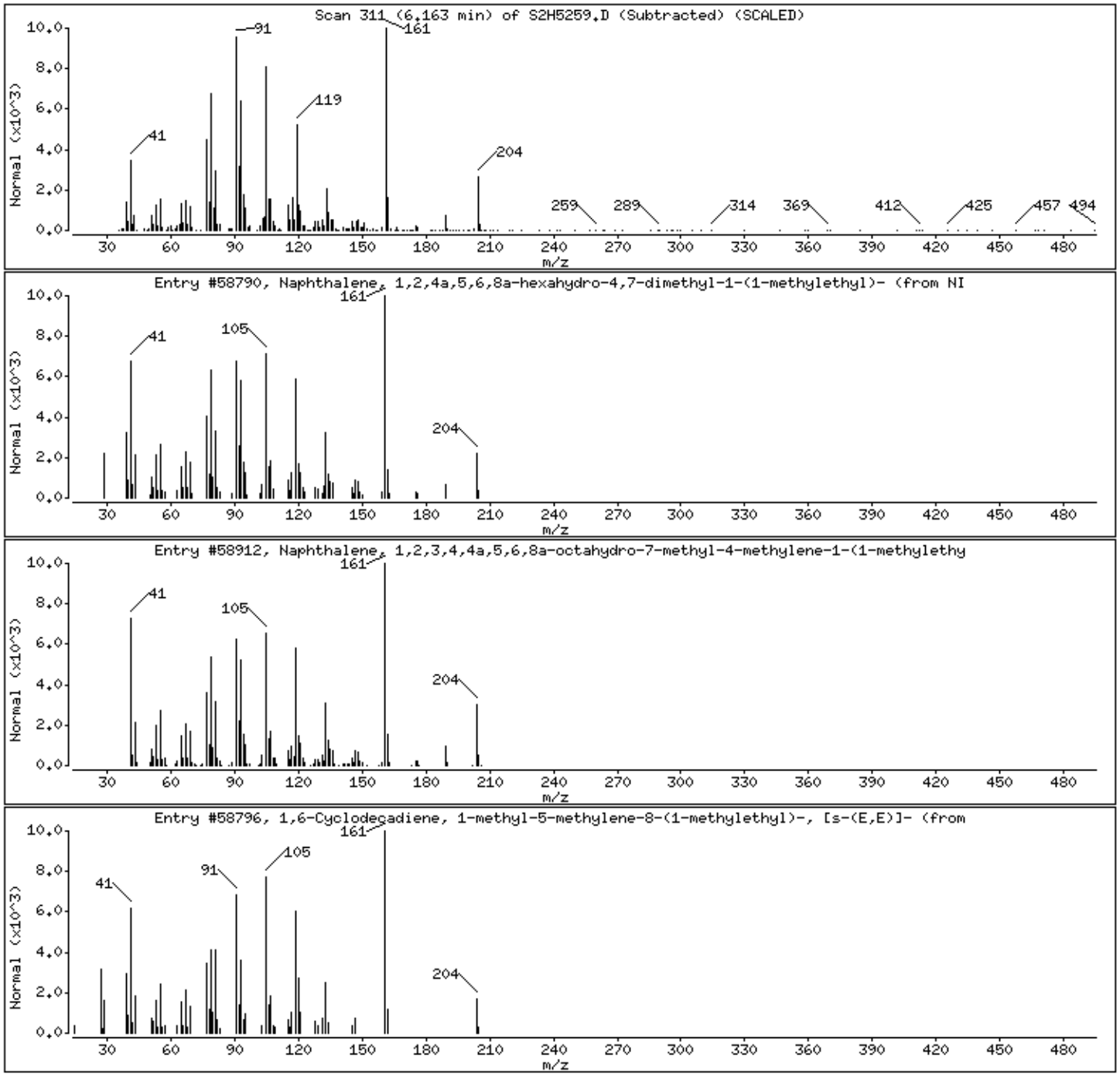
Client ID: H30Q9 Instrument: S2.i

Sample Info: K2198-08A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Naphthalene, 1,2,4a,5,6,8a-hexahydro-4,7	483-75-0	NIST2002.L	58790	97	C15H24	204
Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro	30021-74-0	NIST2002.L	58912	93	C15H24	204
1,6-Cyclodecadiene, 1-methyl-5-methylene	23986-74-5	NIST2002.L	58796	93	C15H24	204



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Date : 10-NOV-2011 13:32

Client ID: H30Q9 Instrument: S2.i

Sample Info: K2198-08A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
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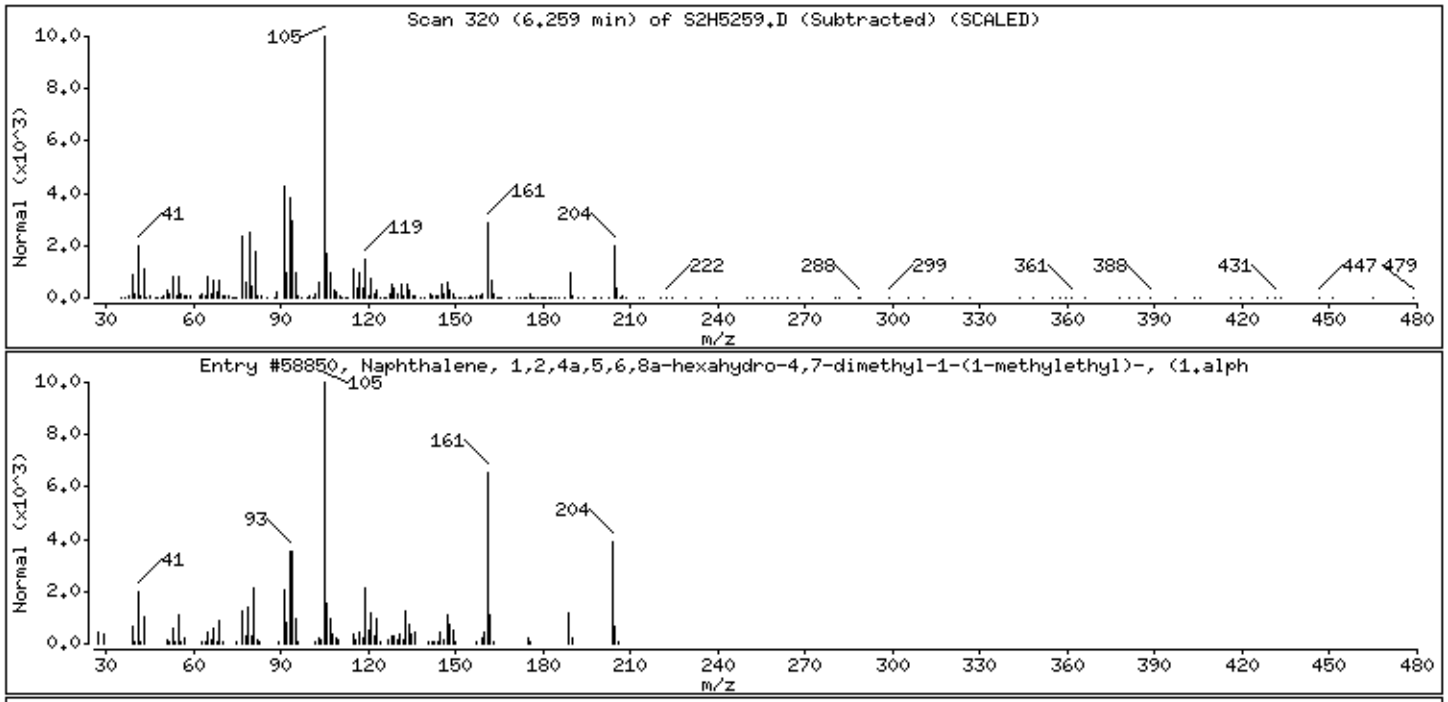

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Date : 10-NOV-2011 13:32

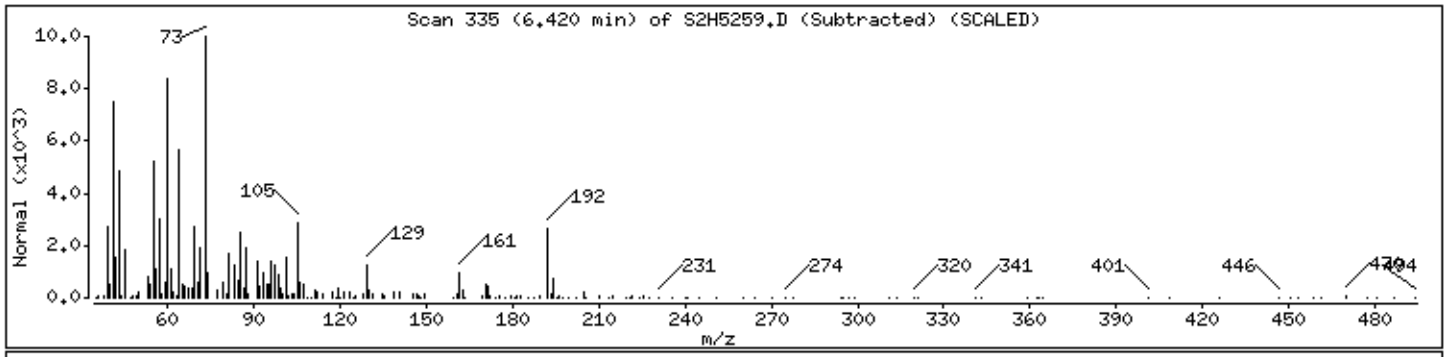
Client ID: H30Q9 Instrument: S2.i

Sample Info: K2198-08A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 13:32

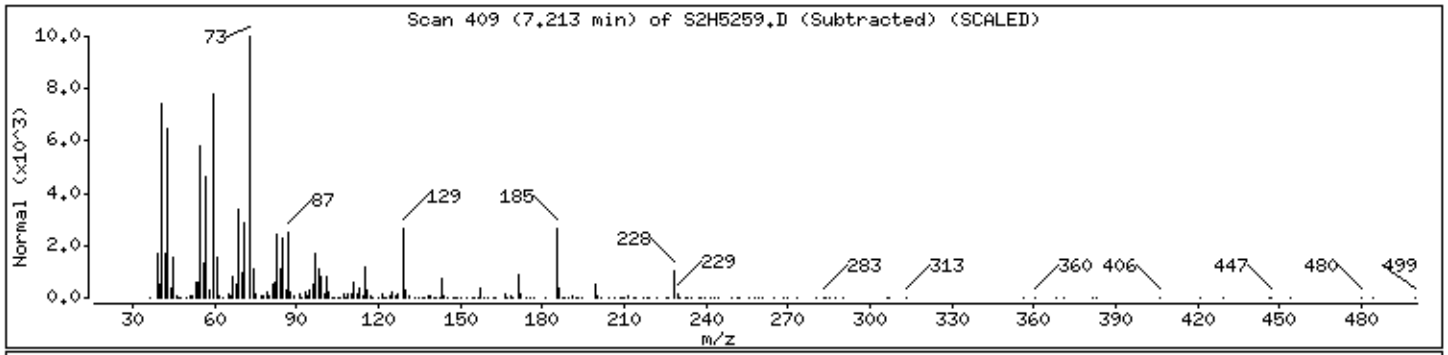
Client ID: H30Q9 Instrument: S2.i

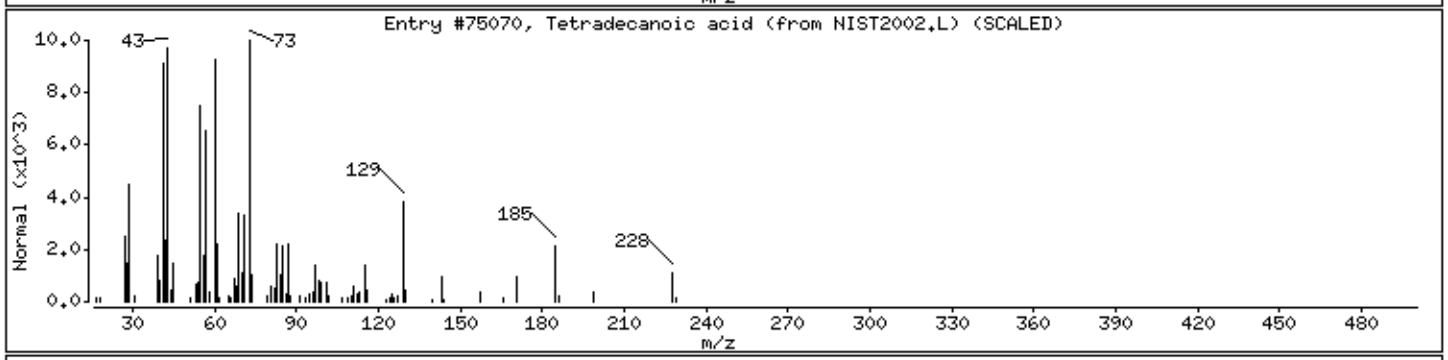
Sample Info: K2198-08A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Tetradecanoic acid	544-63-8	NIST2002.L	75070	96	C14H28O2	228





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Date : 10-NOV-2011 13:32

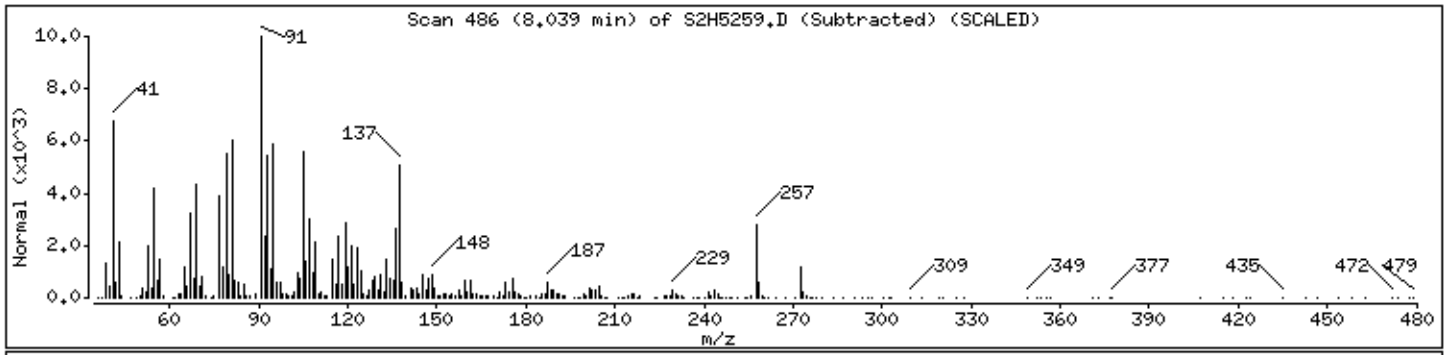
Client ID: H30Q9 Instrument: S2.i

Sample Info: K2198-08A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 13:32

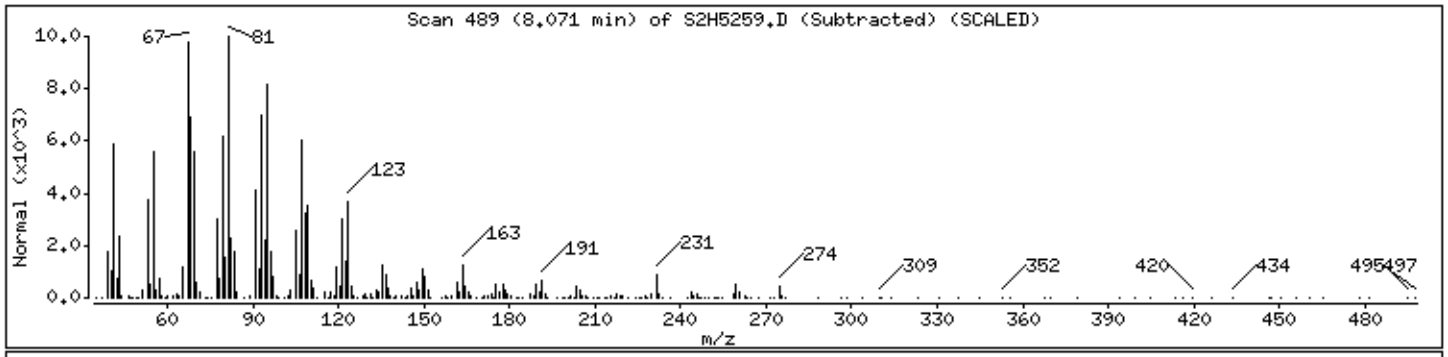
Client ID: H30Q9 Instrument: S2.i

Sample Info: K2198-08A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 13:32

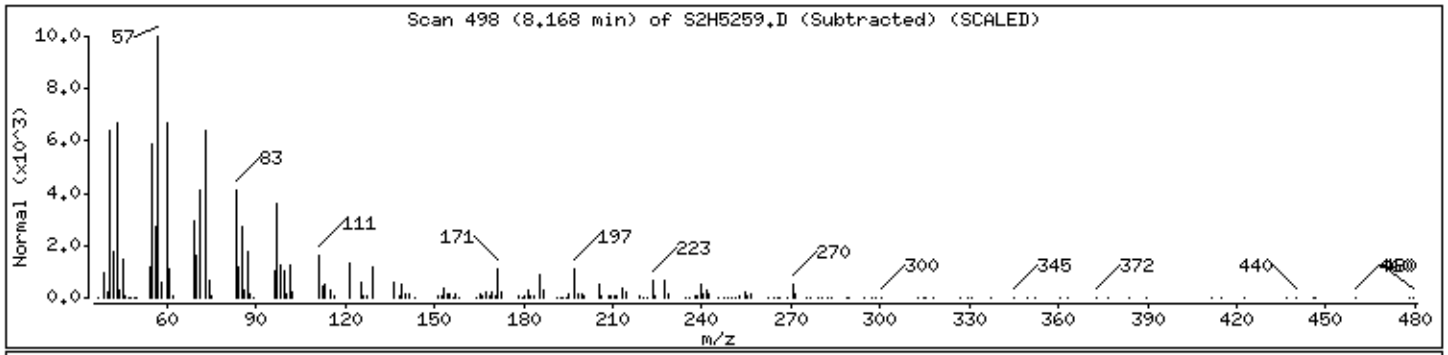
Client ID: H30Q9 Instrument: S2.i

Sample Info: K2198-08A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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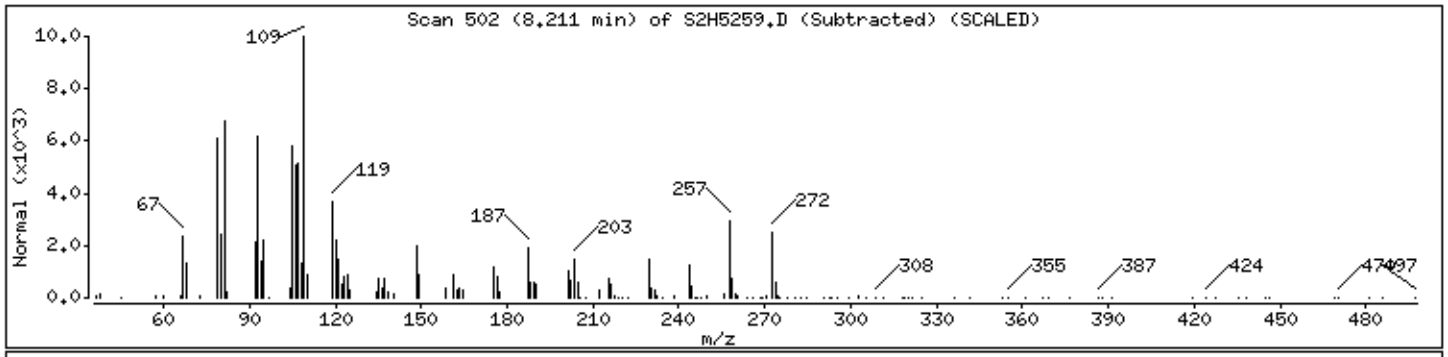
Sample Info: K2198-08A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 13:32

Client ID: H30Q9 Instrument: S2.i

Sample Info: K2198-08A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
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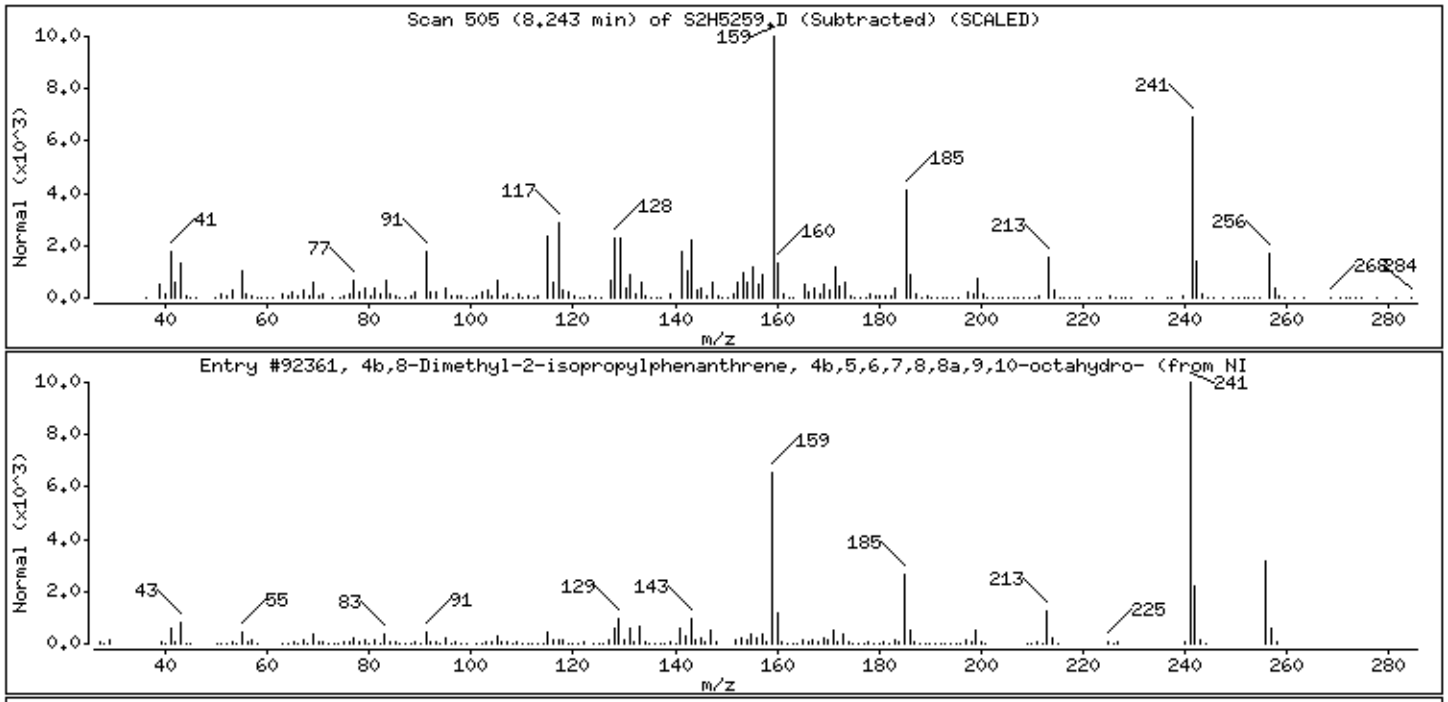

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Date : 10-NOV-2011 13:32

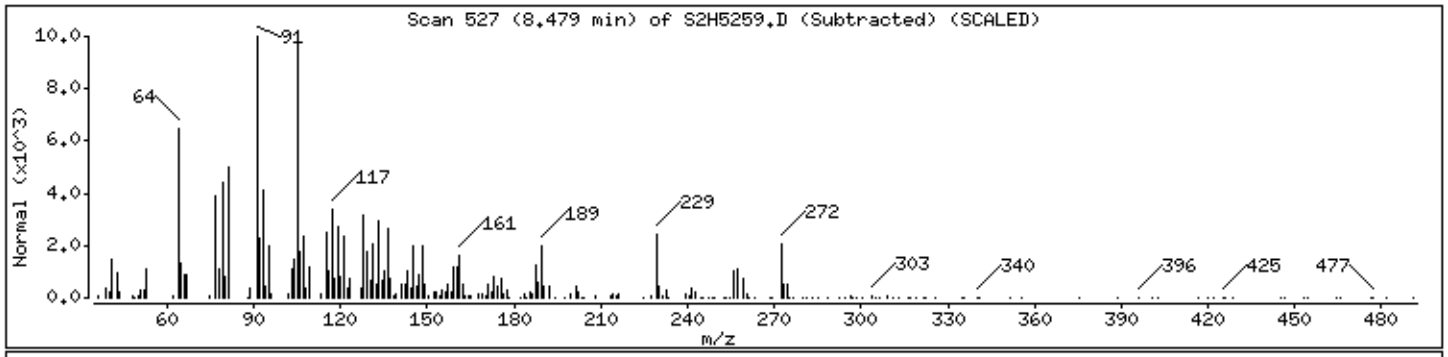
Client ID: H30Q9 Instrument: S2.i

Sample Info: K2198-08A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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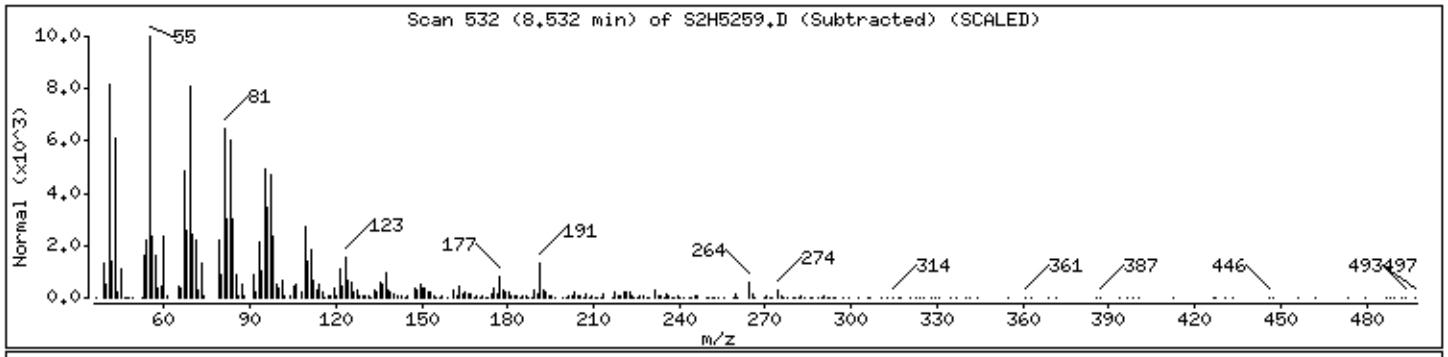
Client ID: H30Q9 Instrument: S2.i

Sample Info: K2198-08A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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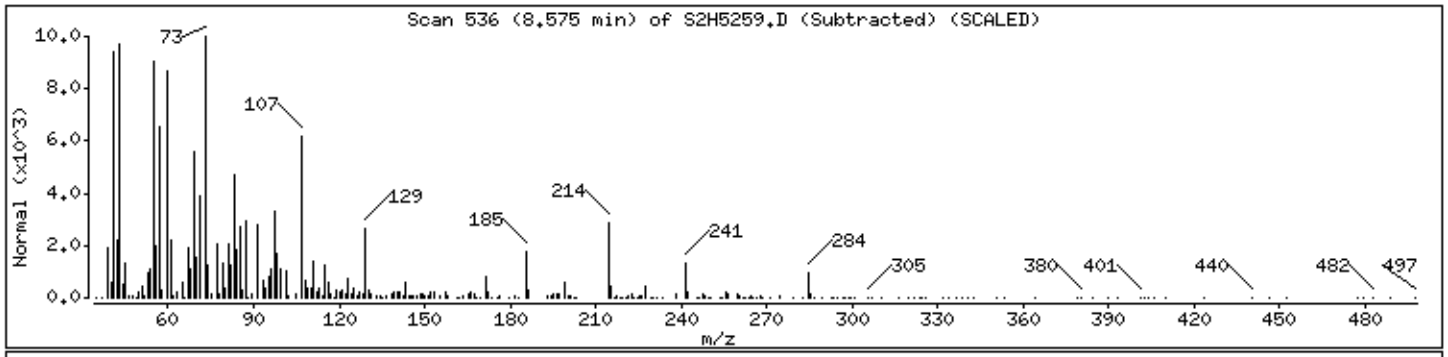
Client ID: H30Q9 Instrument: S2.i

Sample Info: K2198-08A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 13:32

Client ID: H30Q9 Instrument: S2.i

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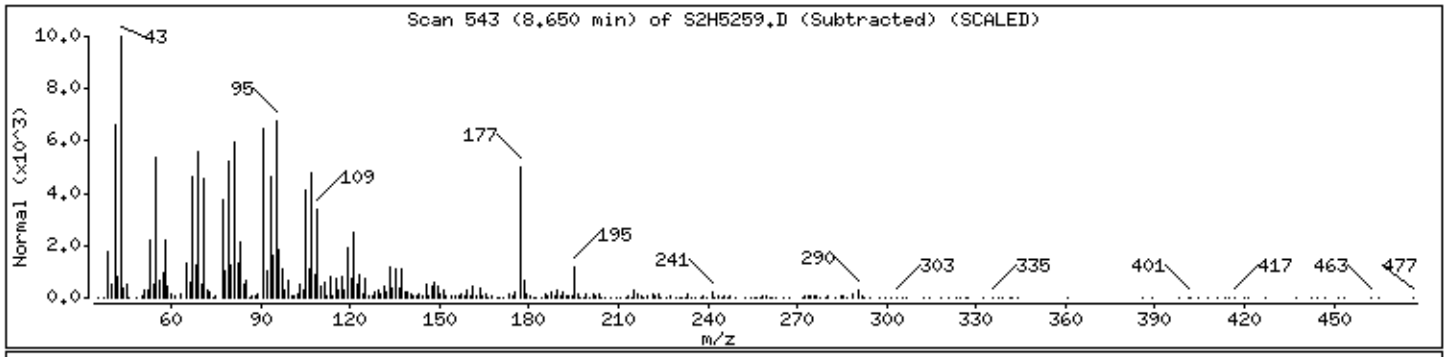
Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Client ID: H30Q9 Instrument: S2.i

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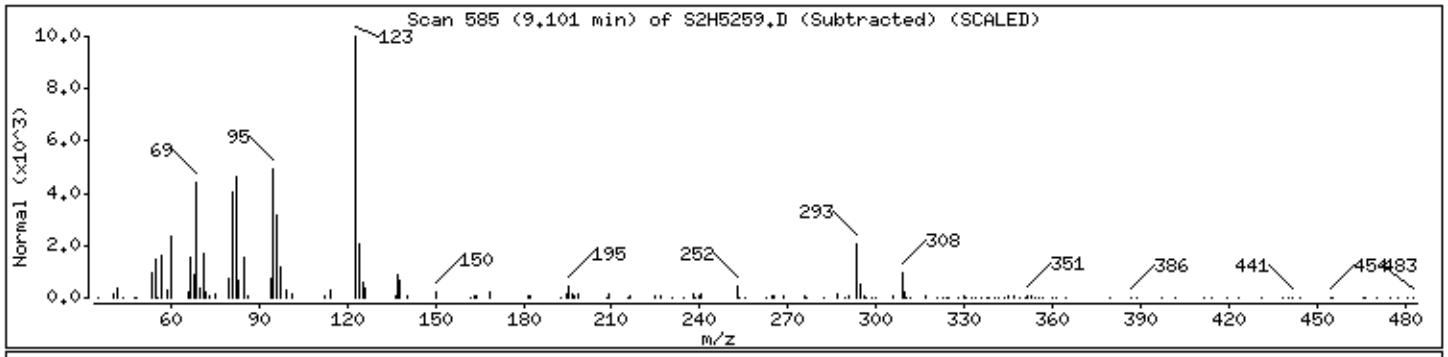
Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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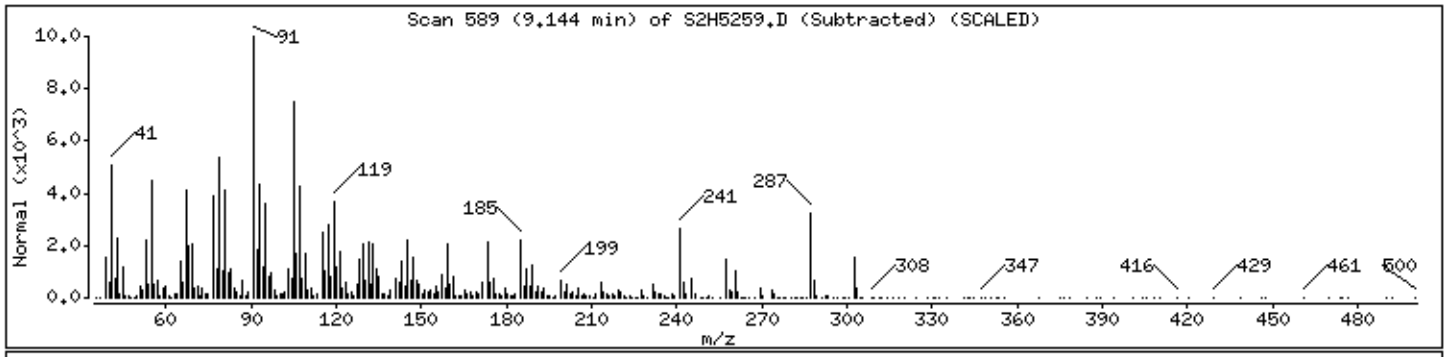
Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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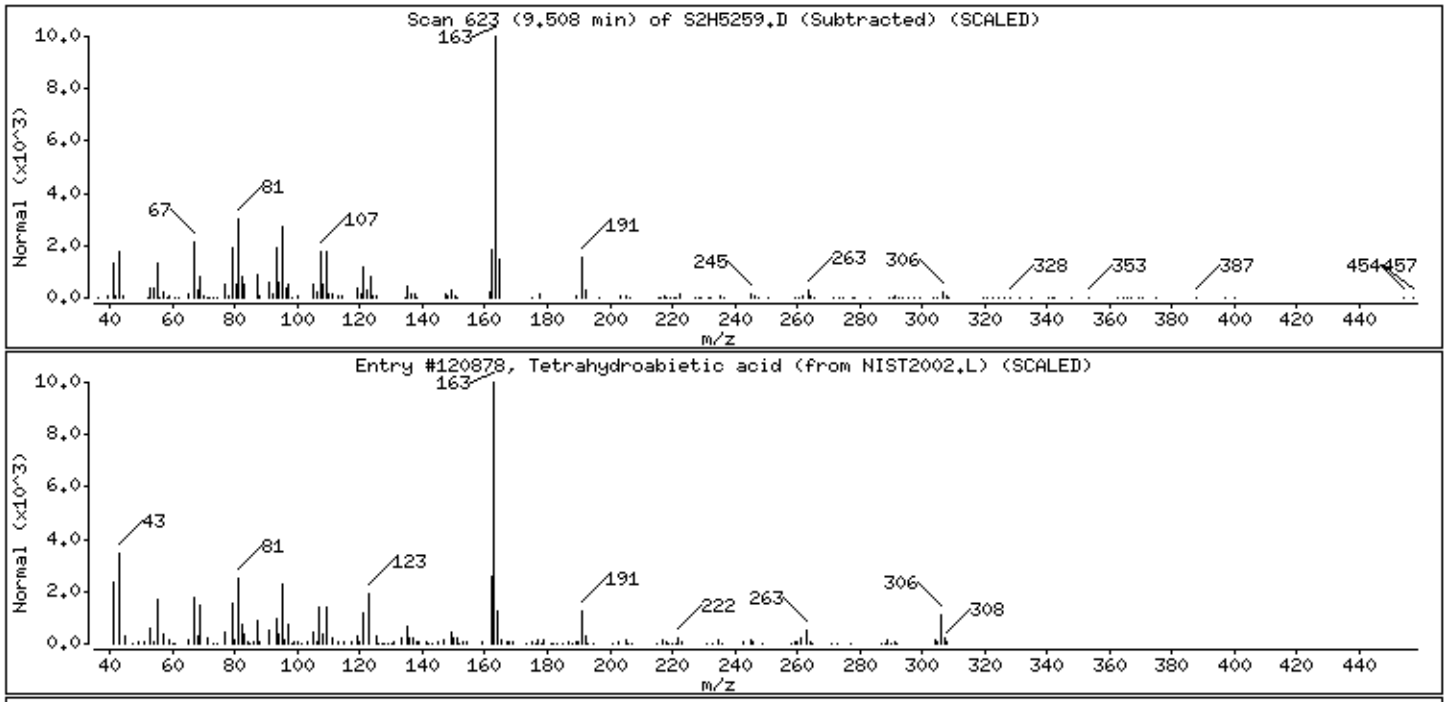
Client ID: H30Q9 Instrument: S2.i

Sample Info: K2198-08A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Tetrahydroabietic acid	1000251-96-9	NIST2002.L	120878	93	C20H34O2	306



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Date : 10-NOV-2011 13:32

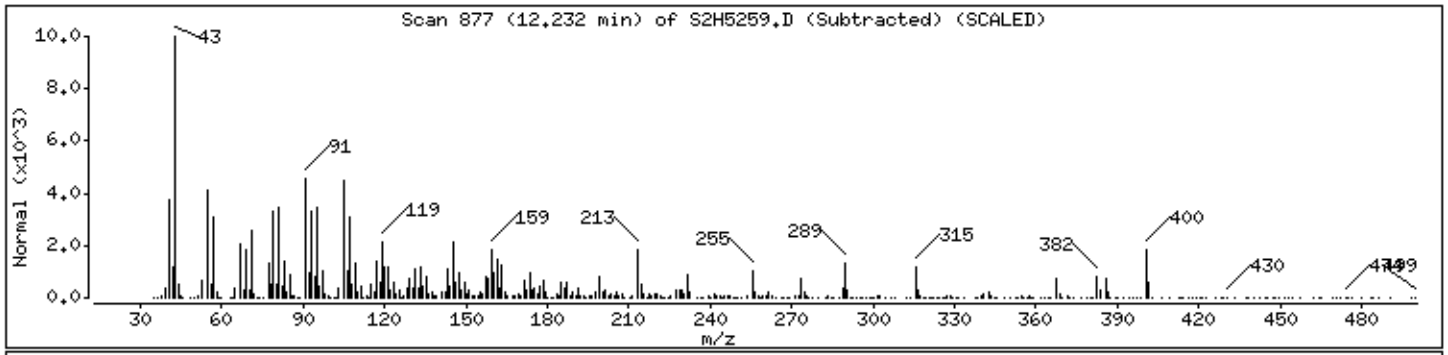
Client ID: H30Q9 Instrument: S2.i

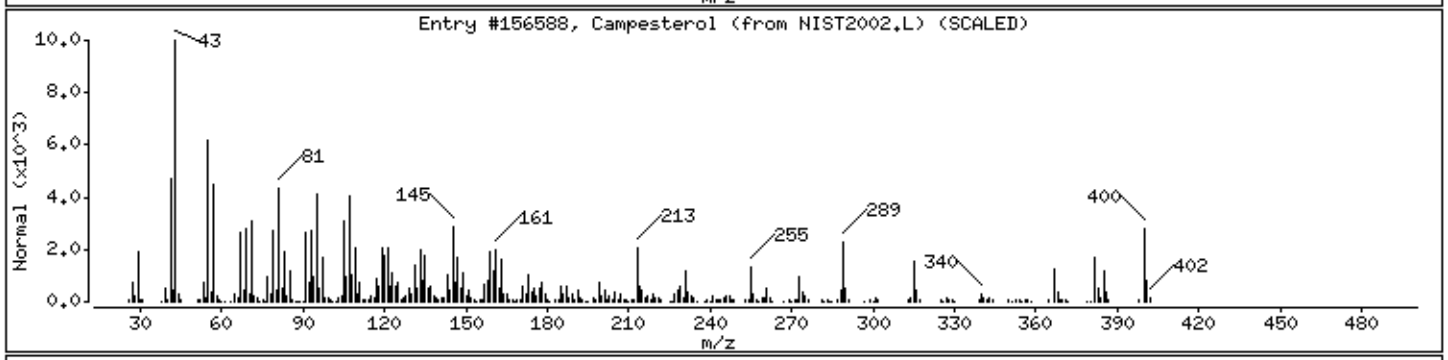
Sample Info: K2198-08A,,62764,,

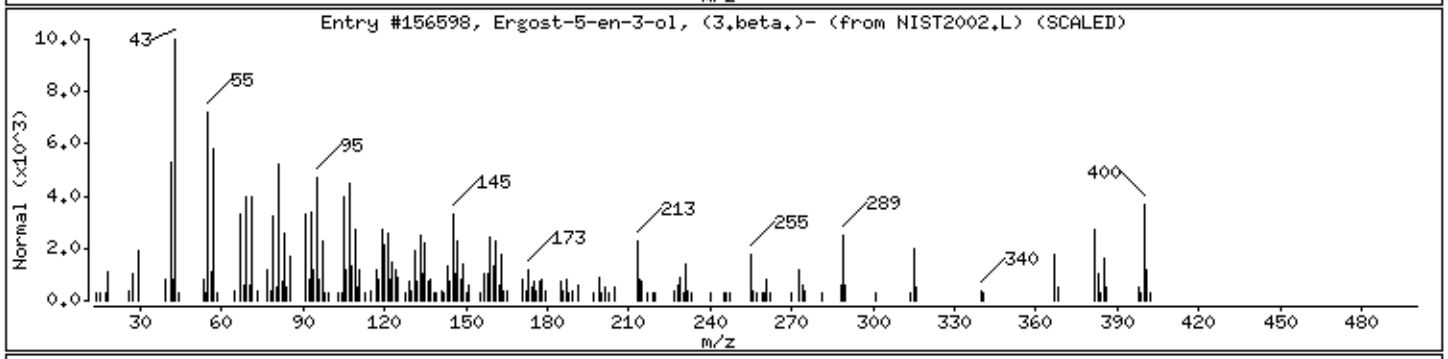
Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Campesterol	474-62-4	NIST2002.L	156588	94	C28H48O	400
Ergost-5-en-3-ol, (3.beta.)-	4651-51-8	NIST2002.L	156598	90	C28H48O	400







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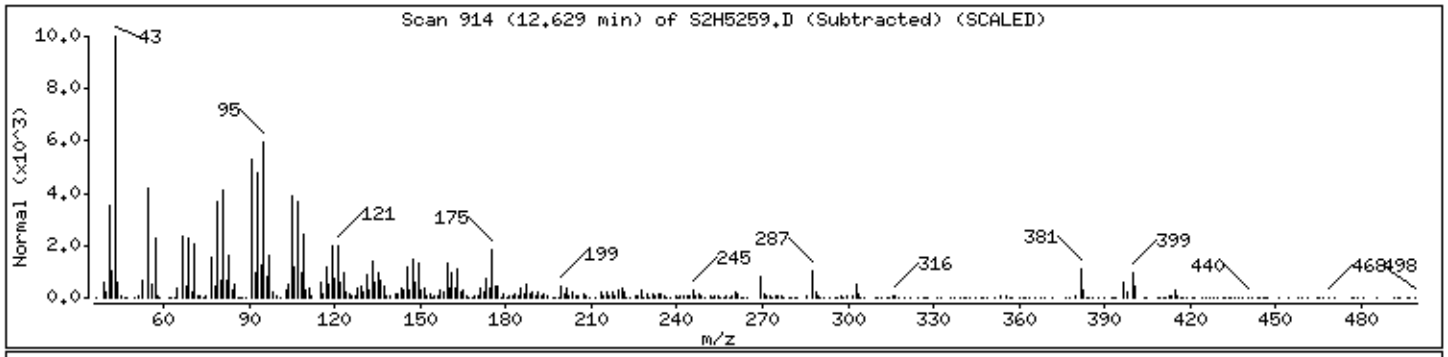
Client ID: H30Q9 Instrument: S2.i

Sample Info: K2198-08A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 13:32

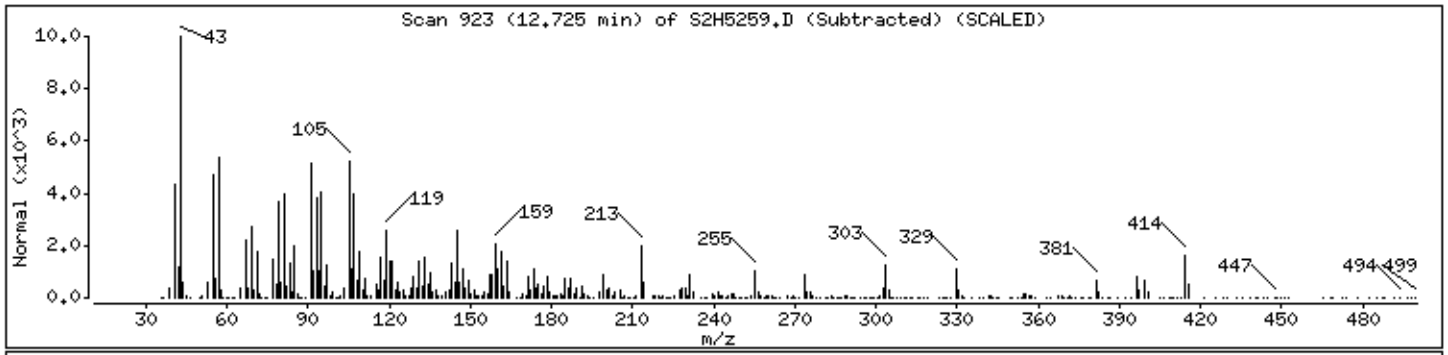
Client ID: H30Q9 Instrument: S2.i

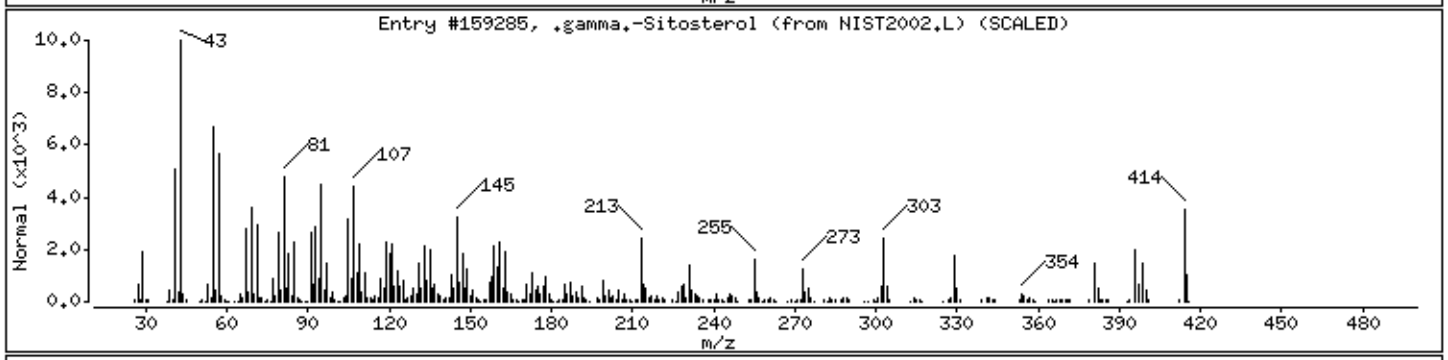
Sample Info: K2198-08A,,62764,,

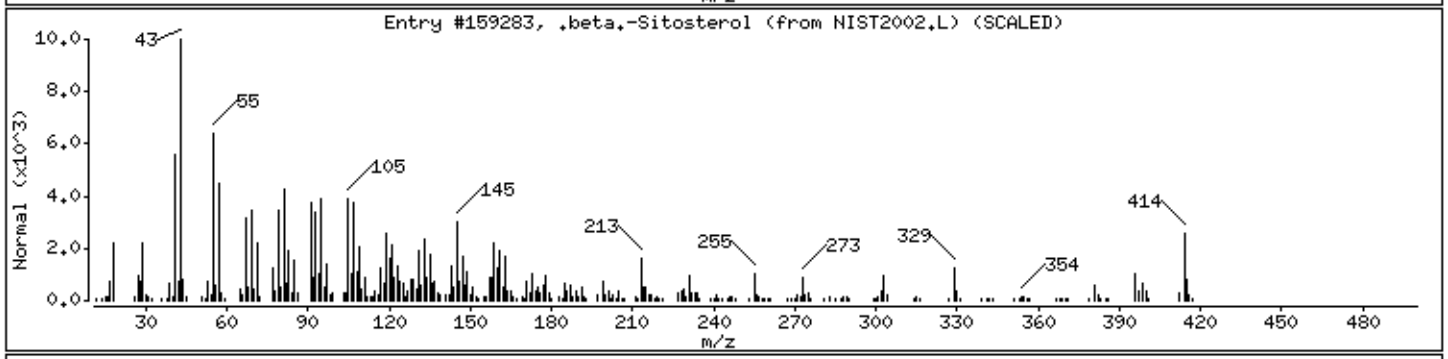
Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.gamma.-Sitosterol	83-47-6	NIST2002.L	159285	96	C29H50O	414
.beta.-Sitosterol	83-46-5	NIST2002.L	159283	90	C29H50O	414







1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30R0

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-09A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: S2H5260.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 74 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: 9.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
100-52-7	Benzaldehyde	650	U
108-95-2	Phenol	650	U
111-44-4	Bis(2-chloroethyl)ether	650	U
95-57-8	2-Chlorophenol	650	U
95-48-7	2-Methylphenol	650	U
108-60-1	2,2´-Oxybis(1-chloropropane)	650	U
98-86-2	Acetophenone	650	U
106-44-5	4-Methylphenol	210	J
621-64-7	N-Nitroso-di-n-propylamine	650	U
67-72-1	Hexachloroethane	650	U
98-95-3	Nitrobenzene	650	U
78-59-1	Isophorone	650	U
88-75-5	2-Nitrophenol	650	U
105-67-9	2,4-Dimethylphenol	650	U
111-91-1	Bis(2-chloroethoxy)methane	650	U
120-83-2	2,4-Dichlorophenol	650	U
91-20-3	Naphthalene	650	U
106-47-8	4-Chloroaniline	650	U
87-68-3	Hexachlorobutadiene	650	U
105-60-2	Caprolactam	650	U
59-50-7	4-Chloro-3-methylphenol	650	U
91-57-6	2-Methylnaphthalene	650	U
77-47-4	Hexachlorocyclopentadiene	650	U
88-06-2	2,4,6-Trichlorophenol	650	U
95-95-4	2,4,5-Trichlorophenol	650	U
92-52-4	1,1´-Biphenyl	650	U
91-58-7	2-Chloronaphthalene	650	U
88-74-4	2-Nitroaniline	1300	U
131-11-3	Dimethylphthalate	650	U
606-20-2	2,6-Dinitrotoluene	650	U
208-96-8	Acenaphthylene	650	U
99-09-2	3-Nitroaniline	1300	U
83-32-9	Acenaphthene	650	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30R0

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-09A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: S2H5260.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 74 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: 9.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
51-28-5	2,4-Dinitrophenol	1300	U
100-02-7	4-Nitrophenol	1300	U
132-64-9	Dibenzofuran	650	U
121-14-2	2,4-Dinitrotoluene	650	U
84-66-2	Diethylphthalate	650	U
86-73-7	Fluorene	650	U
7005-72-3	4-Chlorophenyl-phenylether	650	U
100-01-6	4-Nitroaniline	1300	U
534-52-1	4,6-Dinitro-2-methylphenol	1300	U
86-30-6	N-Nitrosodiphenylamine (1)	650	U
95-94-3	1,2,4,5-Tetrachlorobenzene	650	U
101-55-3	4-Bromophenyl-phenylether	650	U
118-74-1	Hexachlorobenzene	650	U
1912-24-9	Atrazine	650	U
87-86-5	Pentachlorophenol	1300	U
85-01-8	Phenanthrene	650	U
120-12-7	Anthracene	650	U
86-74-8	Carbazole	650	U
84-74-2	Di-n-butylphthalate	750	
206-44-0	Fluoranthene	650	U
129-00-0	Pyrene	650	U
85-68-7	Butylbenzylphthalate	650	U
91-94-1	3,3´-Dichlorobenzidine	650	U
56-55-3	Benzo(a)anthracene	650	U
218-01-9	Chrysene	650	U
117-81-7	Bis(2-ethylhexyl)phthalate	650	U
117-84-0	Di-n-octylphthalate	650	U
205-99-2	Benzo(b)fluoranthene	650	U
207-08-9	Benzo(k)fluoranthene	650	U
50-32-8	Benzo(a)pyrene	650	U
193-39-5	Indeno(1,2,3-cd)pyrene	650	U
53-70-3	Dibenzo(a,h)anthracene	650	U
191-24-2	Benzo(g,h,i)perylene	650	U
58-90-2	2,3,4,6-Tetrachlorophenol	650	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30R0

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-09A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: S2H5260.D

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 74 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: 9.0 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	3.129	750	J
02		Unknown-02	3.257	3900	J
03		Unknown-03	3.472	2100	J
04		Unknown-04	3.557	1900	J
05		Unknown-05	3.600	1200	J
06	68998-21-0	Cyclopropane, 1,1-dimethyl-2	3.665	4900	NJ
07		Unknown-06	3.729	820	J
08		Unknown-07	3.772	190000	J
09		Unknown-08	4.490	1300	J
10	21368-68-3	Bicyclo[2.2.1]heptan-2-one,	4.544	24000	NJ
11		Unknown-09	4.683	1000	J
12	5989-08-2	Tricyclo[5.4.0.0(2,8)]undec-	5.616	2800	NJ
13		Unknown-10	5.691	670	J
14	3856-25-5	Copaene	5.724	1800	NJ
15		Unknown-11	5.852	1400	J
16		Unknown-12	5.917	14000	J
17		Unknown-13	5.949	1000	J
18	13744-15-5	1H-Cyclopenta[1,3]cyclopropa	6.163	5200	NJ
19	31983-22-9	Naphthalene, 1,2,4a,5,6,8a-h	6.260	5600	NJ
20		Unknown-14	8.040	14000	J
21		Unknown-15	8.072	22000	J
22		Unknown-16	8.211	7600	J
23		Unknown-17	8.522	12000	J
24	1000251-96-9	Tetrahydroabietic acid	9.488	16000	NJ
25	1740-19-8	1-Phenanthrenecarboxylic aci	9.520	35000	NJ
26	506-52-5	1-Hexacosanol	9.552	27000	NJ
27		Unknown-18	10.120	13000	J
28	474-62-4	Campesterol	12.211	20000	NJ
29		Unknown-19	12.608	11000	J
30	83-46-5	.beta.-Sitosterol	12.715	84000	NJ
	E96679[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5260.D
Report Date: 11-Nov-2011 13:35

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5260.D
Lab Smp Id: K2198-09A Client Smp ID: H30R0
Inj Date : 10-NOV-2011 13:53
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-09A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.200	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
$	2 Phenol-d5	71	3.385	3.373	(0.916)	121302	34.6979	570
$	4 bis(2-Chloroethyl)ether-d8	67	3.428	3.427	(0.927)	152438	31.6437	520
$	6 2-Chlorophenol-d4	132	3.503	3.491	(0.948)	113781	37.6234	620(Q)
*	8 1,4-Dichlorobenzene-d4	152	3.696	3.684	(1.000)	111018	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.007	4.006	(1.084)	180073	37.9937	630
	12 4-Methylphenol	108	4.029	4.027	(1.090)	17290	3.20702	53(a)
$	16 Nitrobenzene-d5	128	4.147	4.145	(0.872)	60011	36.7929	610(Q)
$	19 2-Nitrophenol-d4	143	4.426	4.424	(0.930)	71635	39.7846	660
$	23 2,4-Dichlorophenol-d3	165	4.629	4.628	(0.973)	142742	43.4267	720
*	25 Naphthalene-d8	136	4.758	4.746	(1.000)	313194	40.0000	
$	27 4-Chloroaniline-d4	131	4.812	4.810	(1.011)	24249	8.30862	140(aQ)
$	40 Dimethylphthalate-d6	166	5.970	5.968	(0.960)	270615	37.1691	620
$	43 Acenaphthylene-d8	160	6.077	6.076	(0.978)	333718	35.2483	580
*	46 Acenaphthene-d10	164	6.216	6.204	(1.000)	198015	40.0000	
$	49 4-Nitrophenol-d4	143	6.324	6.312	(1.017)	43973	41.9096	690(Q)
$	54 Fluorene-d10	176	6.645	6.633	(1.069)	223562	33.4284	550
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.699	6.698	(0.901)	48036	36.9071	610
*	65 Phenanthrene-d10	188	7.439	7.438	(1.000)	333538	40.0000	
$	67 Anthracene-d10	188	7.482	7.480	(1.006)	331533	34.7971	580

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5260.D
Report Date: 11-Nov-2011 13:35

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)
	70 Di-n-butylphthalate	149	7.921	7.931	(1.065)	96461	11.6696	190
$	72 Pyrene-d10	212	8.608	8.606	(0.892)	227158	33.3736	550(QR)
*	77 Chrysene-d12	240	9.648	9.668	(1.000)	216064	40.0000	(Q)
$	83 Benzo(a)pyrene-d12	264	10.828	10.891	(0.992)	88369	25.7143	430(RH)
*	85 Perylene-d12	264	10.913	10.966	(1.000)	140048	40.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5260.D
Report Date: 11-Nov-2011 13:35

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5260.D
Lab Smp Id: K2198-09A Client Smp ID: H30R0
Inj Date : 10-NOV-2011 13:53
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-09A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.200	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 8 1,4-Dichlorobenzene-d4	3.697	865054	40.000
* 25 Naphthalene-d8	4.759	1350877	40.000
* 46 Acenaphthene-d10	6.217	925790	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
3.129	253160	11.7060762	190	0	0		8
Unknown				CAS #:			
3.257	1331320	61.5600103	1000	0	0		8
Unknown				CAS #:			
3.472	704867	32.5929416	540	0	0		8

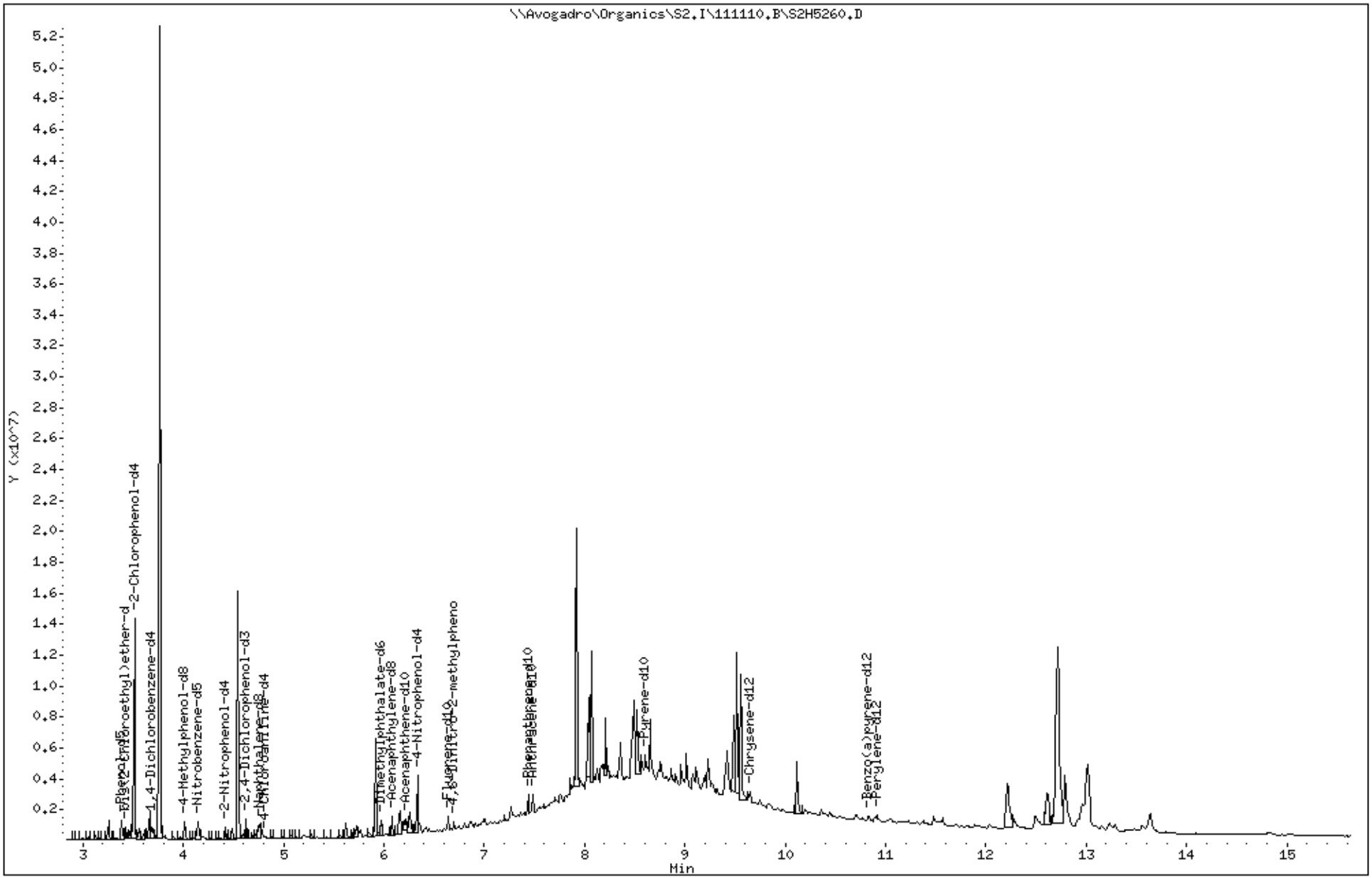
Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5260.D
Report Date: 11-Nov-2011 13:35

RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
3.557	625053	28.9023390	480	0		0	8
Unknown					CAS #:		
3.600	409694	18.9441971	310	0		0	8
Cyclopropane, 1,1-dimethyl-2-(3-methyl-1					CAS #: 68998-21-0		
3.665	1667324	77.0967876	1300	91	NIST2002.L	15361	8
Unknown					CAS #:		
3.729	278435	12.8747736	210	0		0	8
Unknown					CAS #:		
3.772	65450923	3026.44004	50000	0		0	8
Unknown					CAS #:		
4.490	687597	20.3600184	340	0		0	25
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet					CAS #: 21368-68-3		
4.544	12611900	373.443288	6200	94	NIST2002.L	24227	25
Unknown					CAS #:		
4.683	538808	15.9543041	260	0		0	25
Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6					CAS #: 5989-08-2		
5.616	1015633	43.8817469	730	92	NIST2002.L	58744	46
Unknown					CAS #:		
5.691	241150	10.4192186	170	0		0	46
Copaene					CAS #: 3856-25-5		
5.724	641823	27.7308257	460	91	NIST2002.L	58614	46
Unknown					CAS #:		
5.852	499005	21.5601553	360	0		0	46
Unknown					CAS #:		
5.917	4948030	213.786165	3500	0		0	46
Unknown					CAS #:		
5.949	376723	16.2768093	270	0		0	46
1H-Cyclopenta[1,3]cyclopropa[1,2]benzene					CAS #: 13744-15-5		
6.163	1874611	80.9950232	1300	93	NIST2002.L	58949	46
Naphthalene, 1,2,4a,5,6,8a-hexahydro-4,7					CAS #: 31983-22-9		
6.260	2012917	86.9707460	1400	96	NIST2002.L	58851	46
Unknown					CAS #:		
8.040	4962267	214.401263	3500	0		0	46
Unknown					CAS #:		
8.072	7945117	343.279238	5700	0		0	46

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5260.D
Report Date: 11-Nov-2011 13:35

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
8.211	2734270	118.137715	2000	0		0	46
Unknown					CAS #:		
8.522	4179785	180.593099	3000	0		0	46
Tetrahydroabietic acid					CAS #: 1000251-96-9		
9.488	5909759	255.338921	4200	89	NIST2002.L	120878	46
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1740-19-8		
9.520	12526506	541.224190	9000	91	NIST2002.L	117819	46
1-Hexacosanol					CAS #: 506-52-5		
9.552	9817679	424.185748	7000	87	NIST2002.L	152038	46
Unknown					CAS #:		
10.120	4728038	204.281119	3400	0		0	46
Campesterol					CAS #: 474-62-4		
12.211	7085657	306.145124	5100	93	NIST2002.L	156588	46
Unknown					CAS #:		
12.608	4049025	174.943473	2900	0		0	46
.beta.-Sitosterol					CAS #: 83-46-5		
12.715	30283281	1308.42898	22000	93	NIST2002.L	159282	46

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5260.D
Date : 10-NOV-2011 13:53
Client ID: H30R0
Instrument: S2.i
Sample Info: K2198-09A,,62764,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5260.D

Date : 10-NOV-2011 13:53

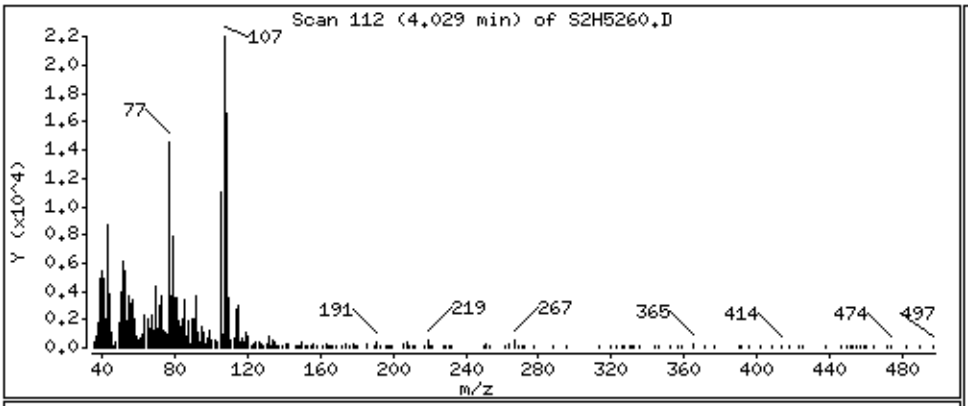
Client ID: H30R0 Instrument: S2.i

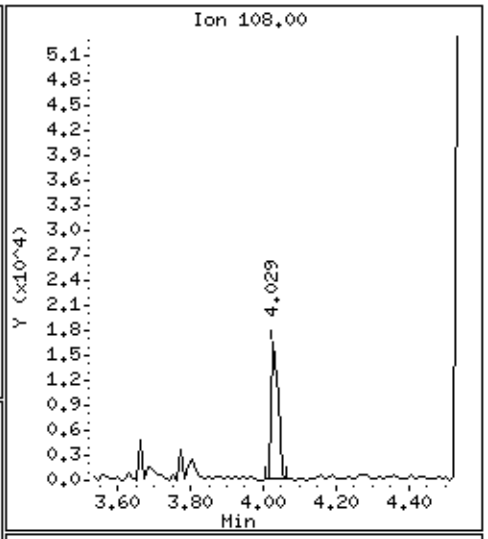
Sample Info: K2198-09A,,62764,,

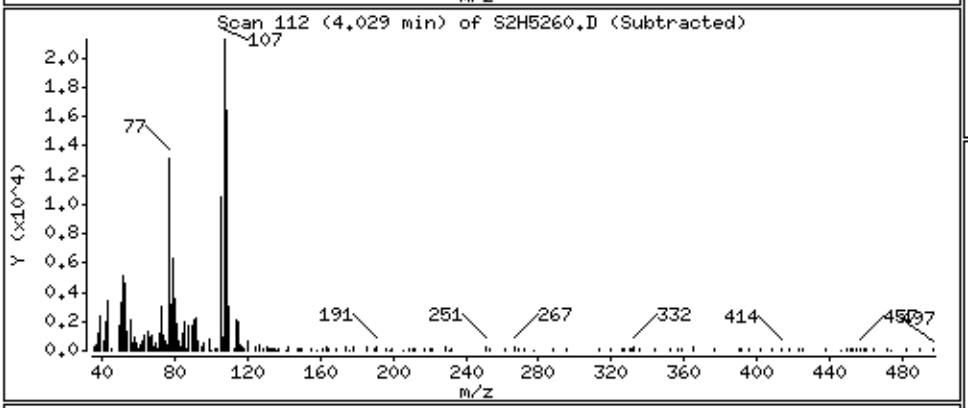
Volume Injected (uL): 2.0 Operator: SRC: LIMS

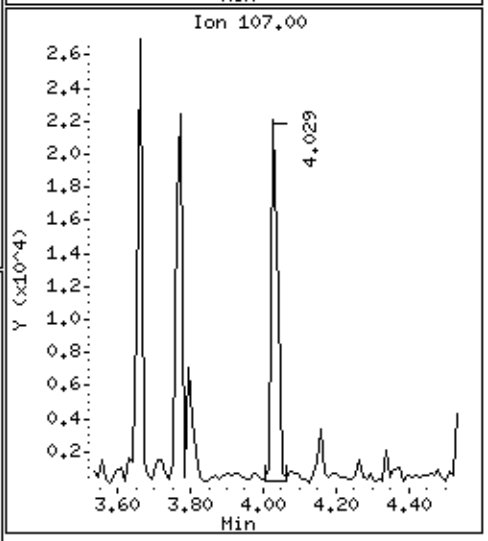
Column phase: RXI-5SILMS Column diameter: 0.25

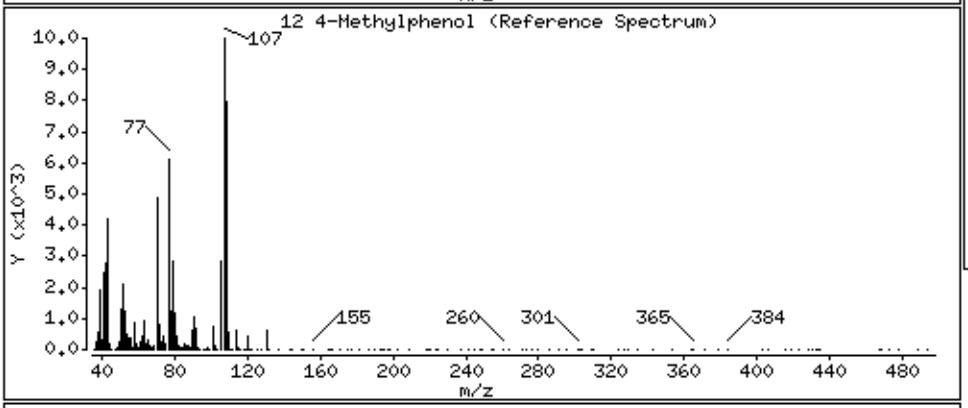
12 4-Methylphenol Concentration: 53 ug/Kg

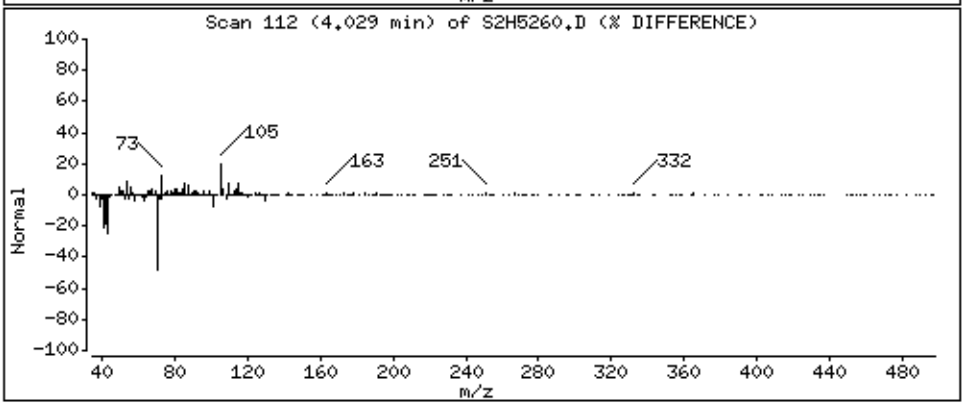












Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5260.D

Date : 10-NOV-2011 13:53

Client ID: H30R0

Instrument: S2.i

Sample Info: K2198-09A,,62764,,

Volume Injected (uL): 2.0

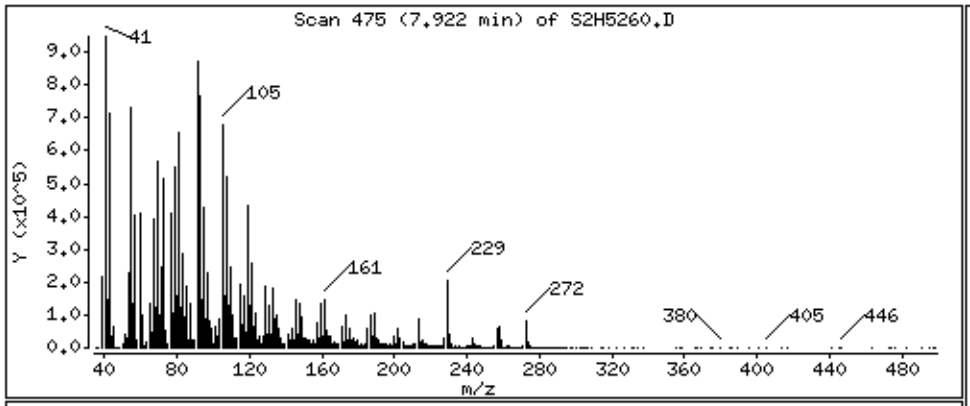
Operator: SRC: LIMS

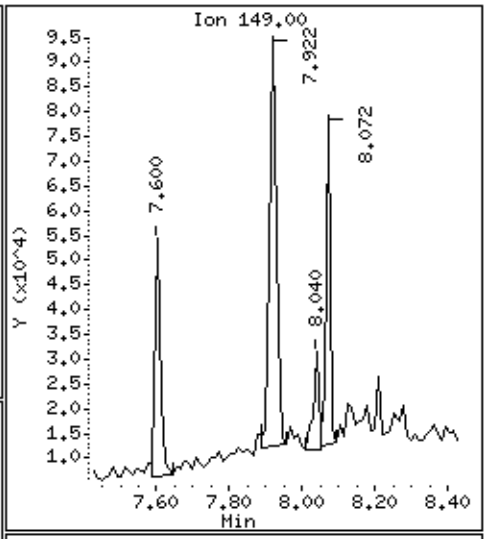
Column phase: RXI-5SILMS

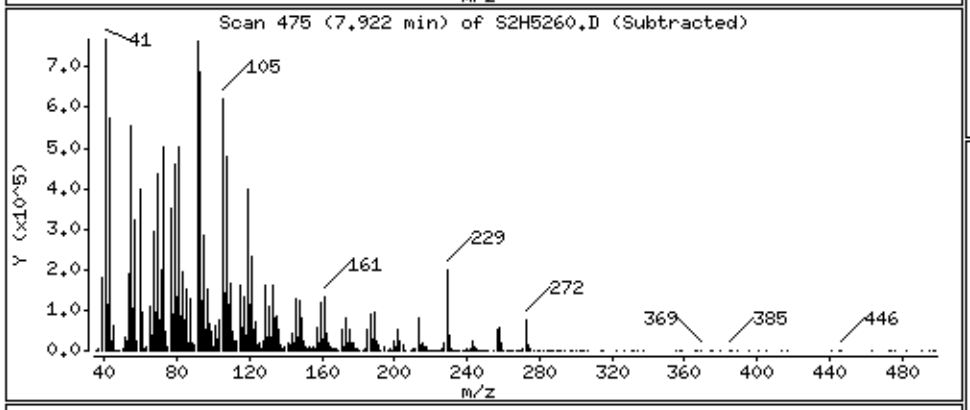
Column diameter: 0.25

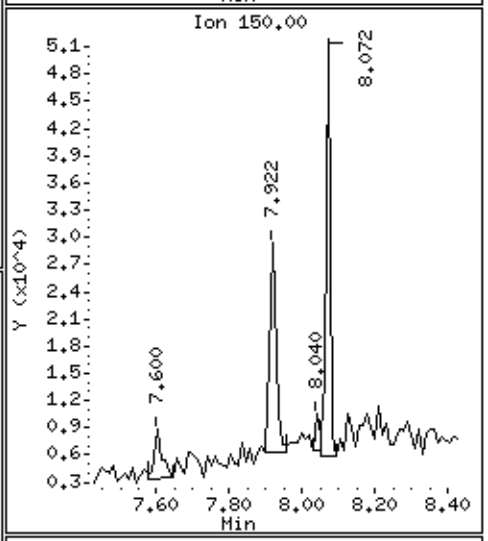
70 Di-n-butylphthalate

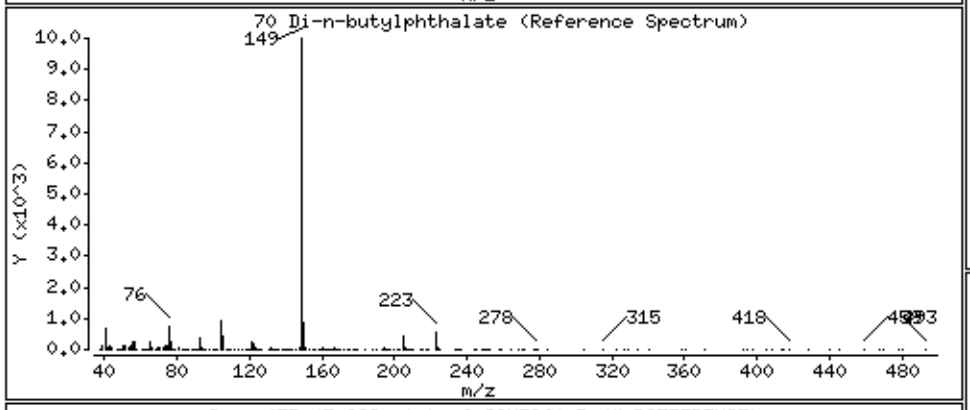
Concentration: 190 ug/Kg

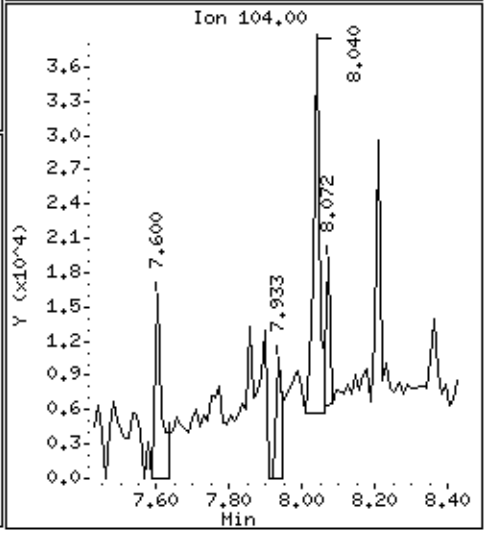


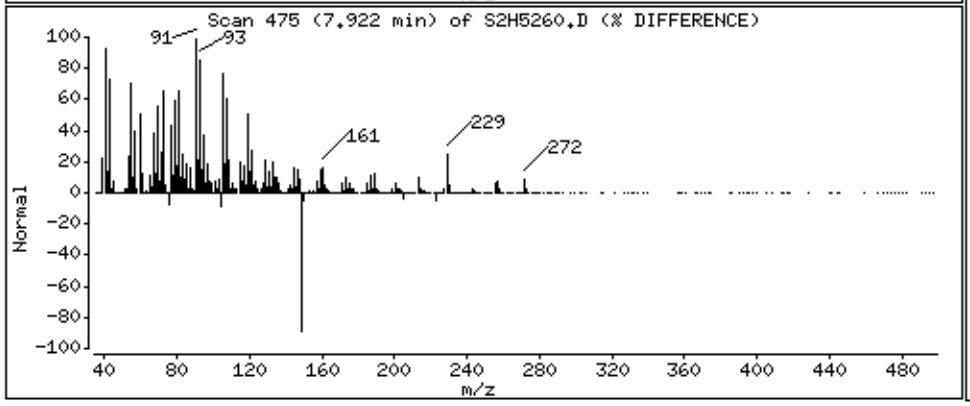












Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5260.D

Date : 10-NOV-2011 13:53

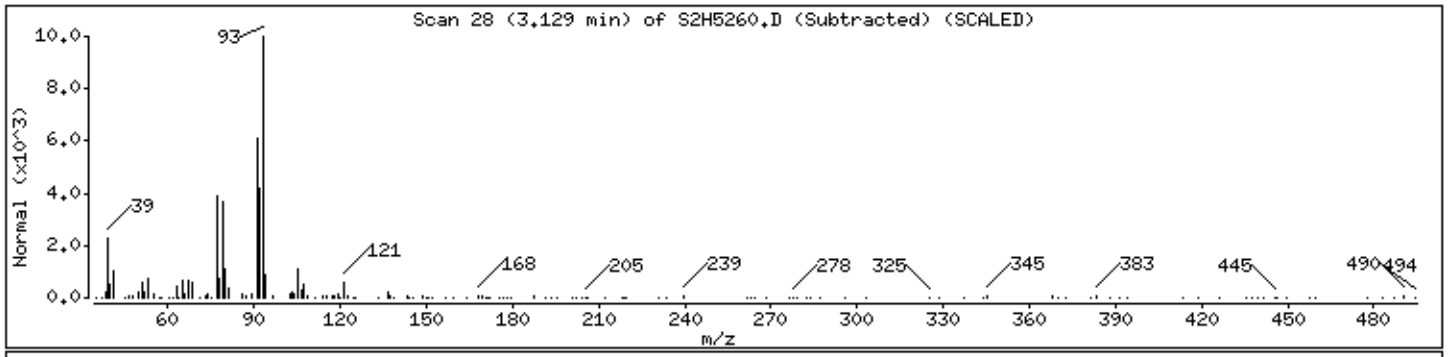
Client ID: H30R0 Instrument: S2.i

Sample Info: K2198-09A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 13:53

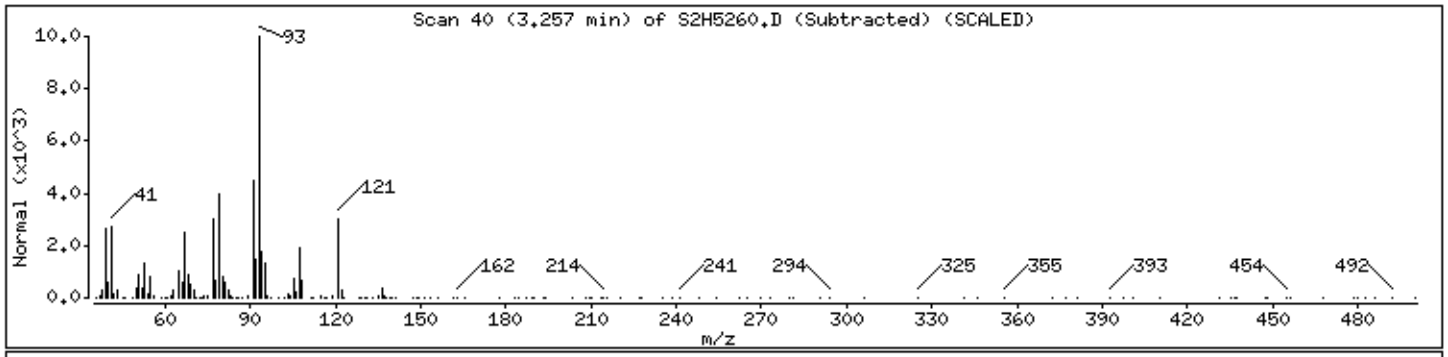
Client ID: H30R0 Instrument: S2.i

Sample Info: K2198-09A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 13:53

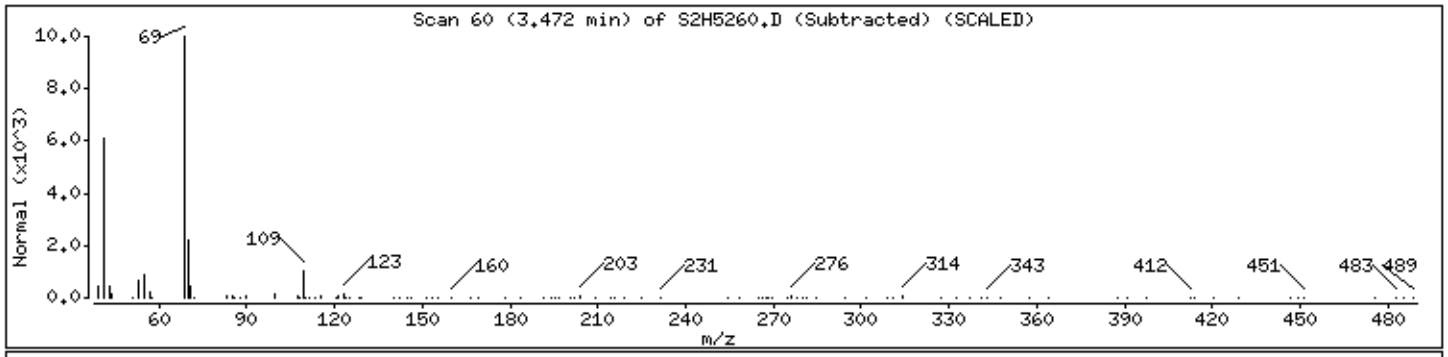
Client ID: H30R0 Instrument: S2.i

Sample Info: K2198-09A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 13:53

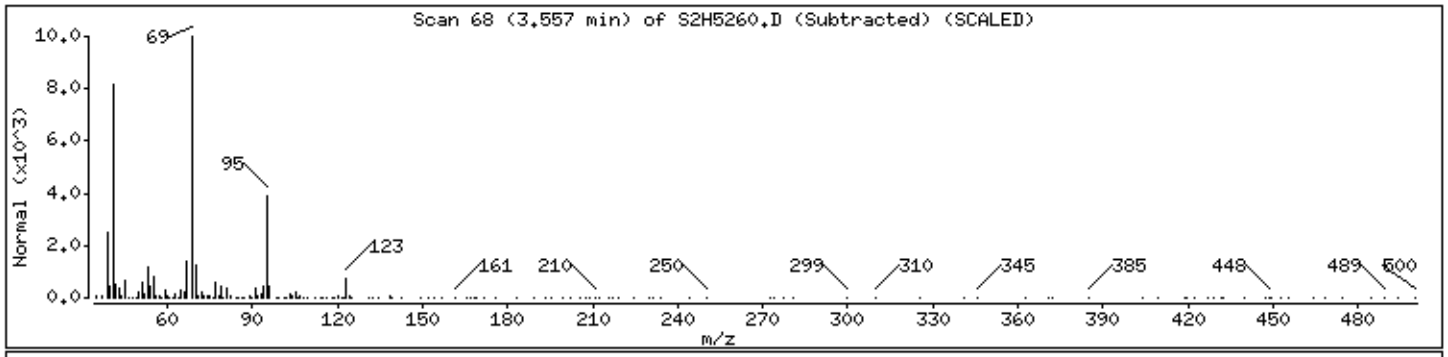
Client ID: H30R0 Instrument: S2.i

Sample Info: K2198-09A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 13:53

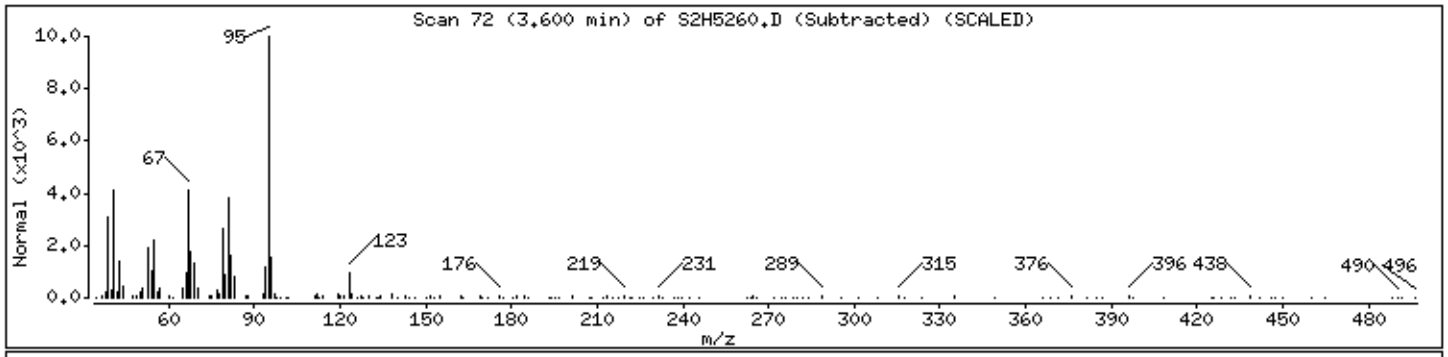
Client ID: H30R0 Instrument: S2.i

Sample Info: K2198-09A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5260.D

Date : 10-NOV-2011 13:53

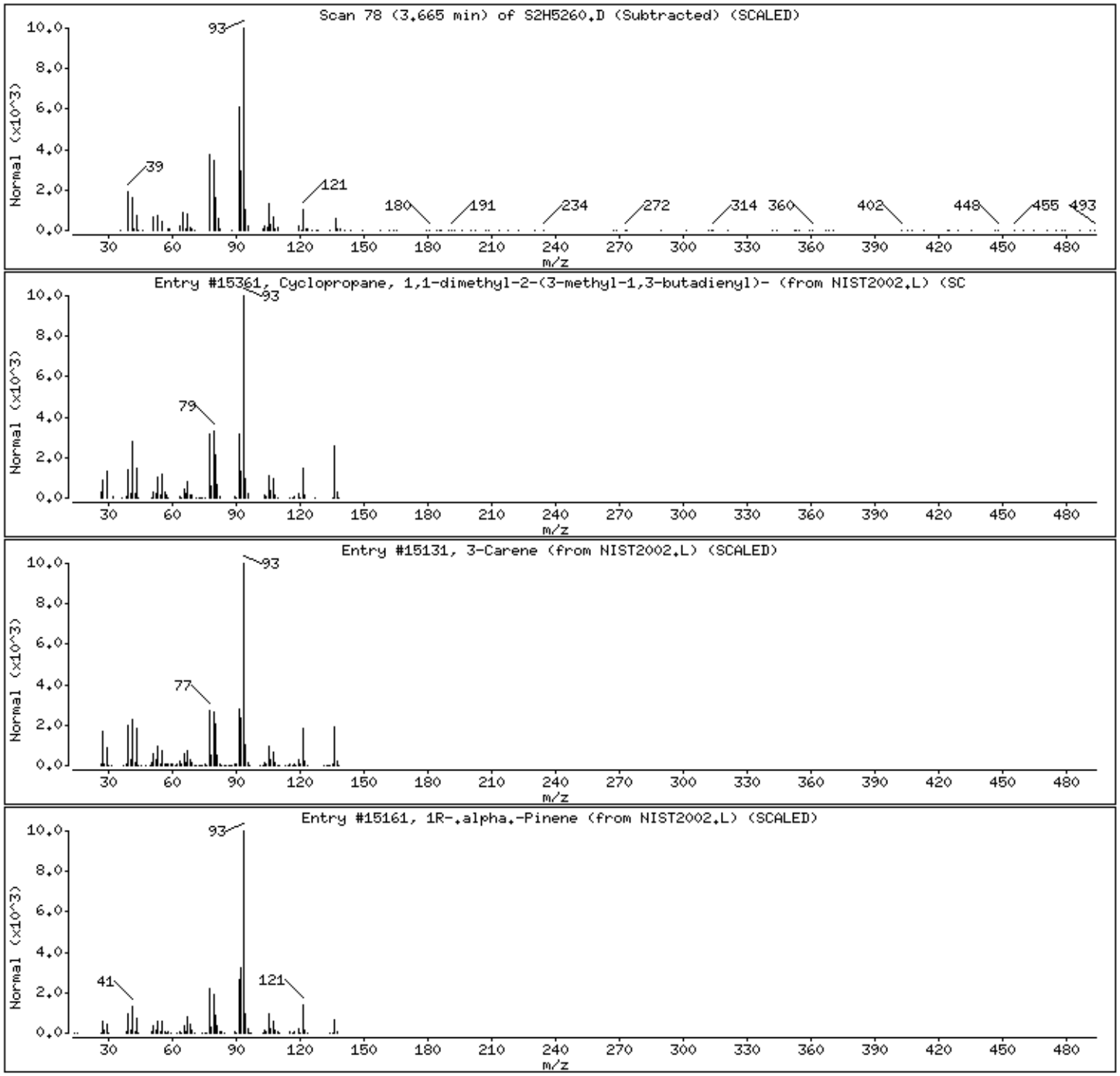
Client ID: H30R0 Instrument: S2.i

Sample Info: K2198-09A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclopropane, 1,1-dimethyl-2-(3-methyl-1	68998-21-0	NIST2002.L	15361	91	C10H16	136
3-Carene	13466-78-9	NIST2002.L	15131	91	C10H16	136
1R-.alpha.-Pinene	7785-70-8	NIST2002.L	15161	91	C10H16	136



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5260.D

Date : 10-NOV-2011 13:53

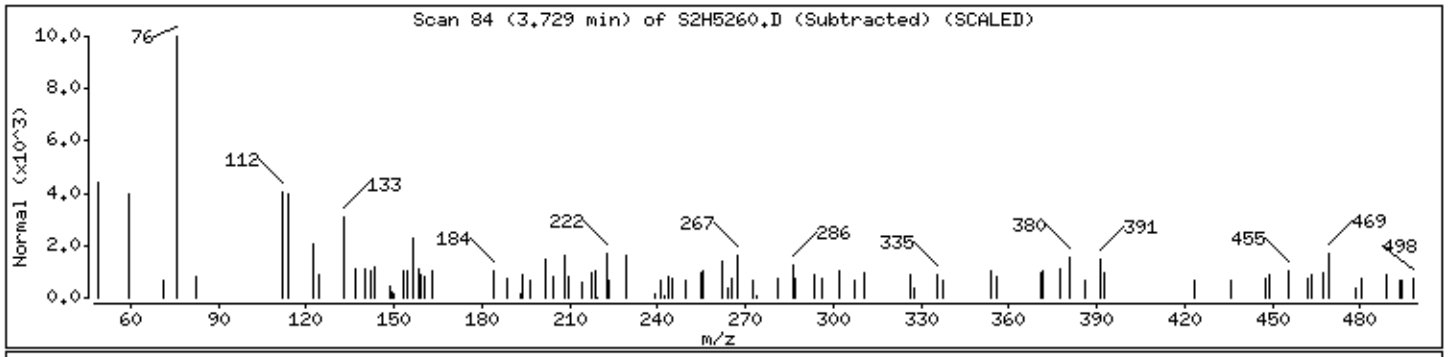
Client ID: H30R0 Instrument: S2.i

Sample Info: K2198-09A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 13:53

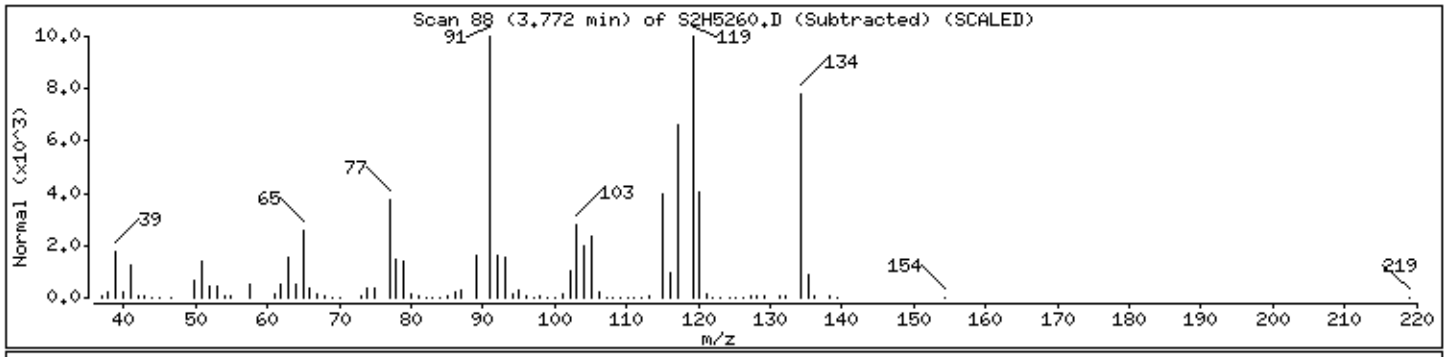
Client ID: H30R0 Instrument: S2.i

Sample Info: K2198-09A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5260.D

Date : 10-NOV-2011 13:53

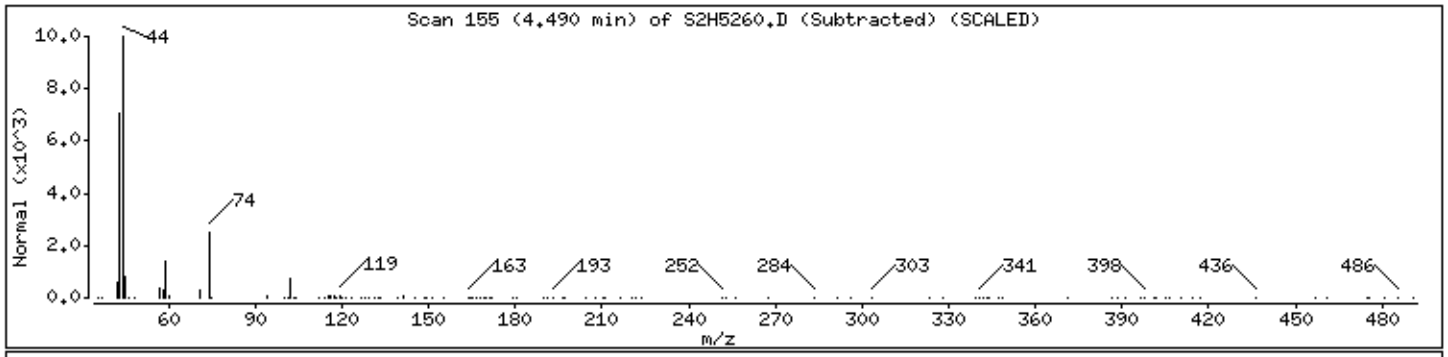
Client ID: H30R0 Instrument: S2.i

Sample Info: K2198-09A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 13:53

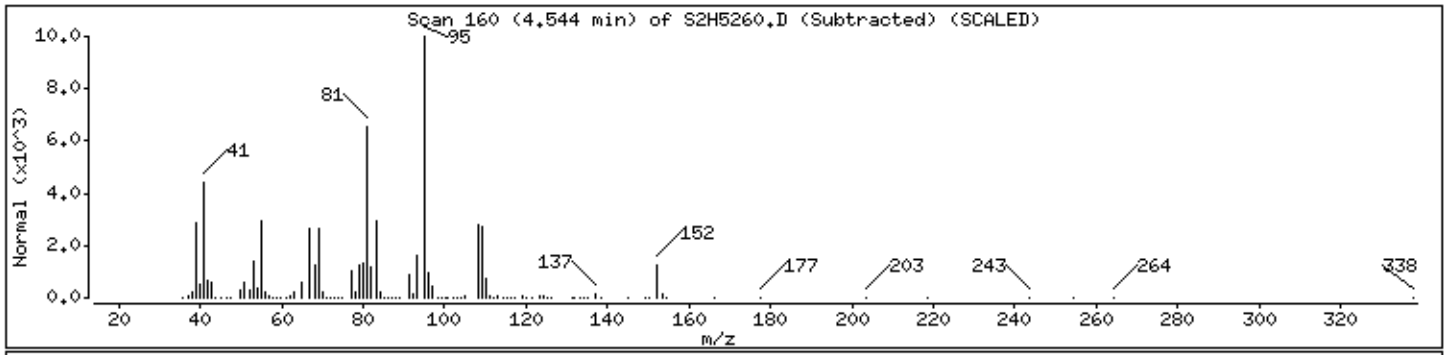
Client ID: H30R0 Instrument: S2.i

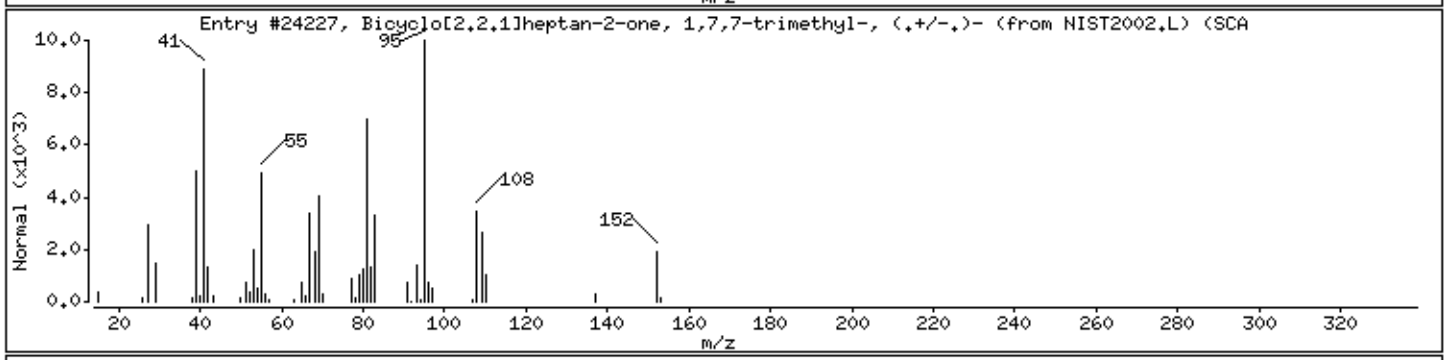
Sample Info: K2198-09A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet	21368-68-3	NIST2002.L	24227	94	C10H16O	152





Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5260.D

Date : 10-NOV-2011 13:53

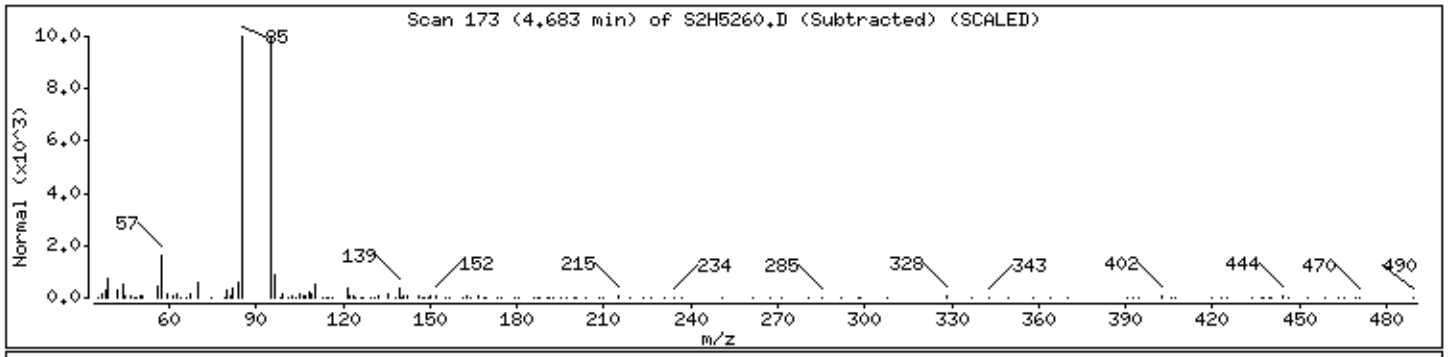
Client ID: H30R0 Instrument: S2.i

Sample Info: K2198-09A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 13:53

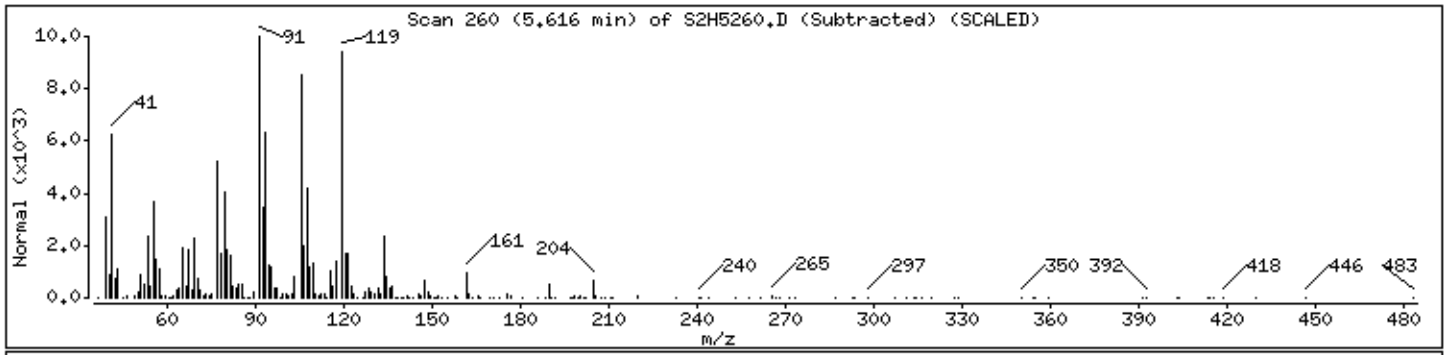
Client ID: H30R0 Instrument: S2.i

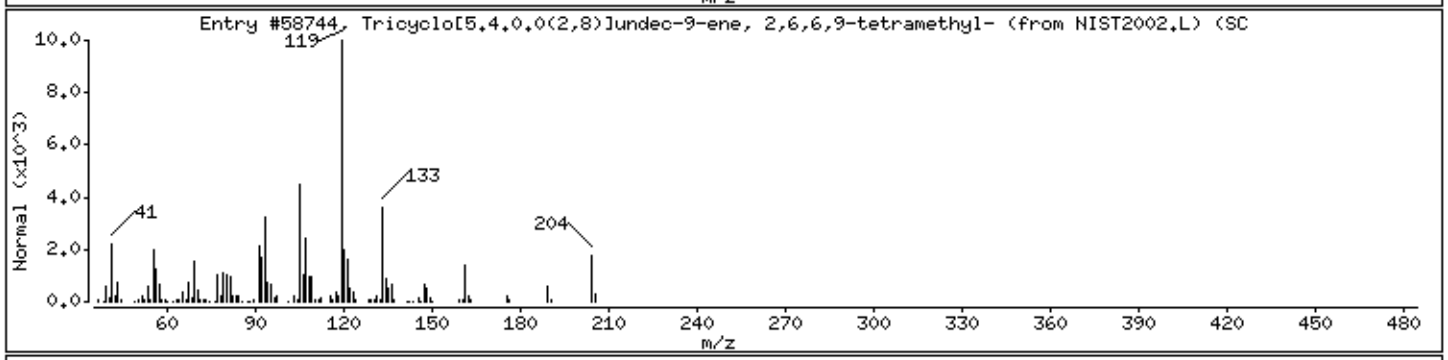
Sample Info: K2198-09A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6	5989-08-2	NIST2002.L	58744	92	C15H24	204





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Date : 10-NOV-2011 13:53

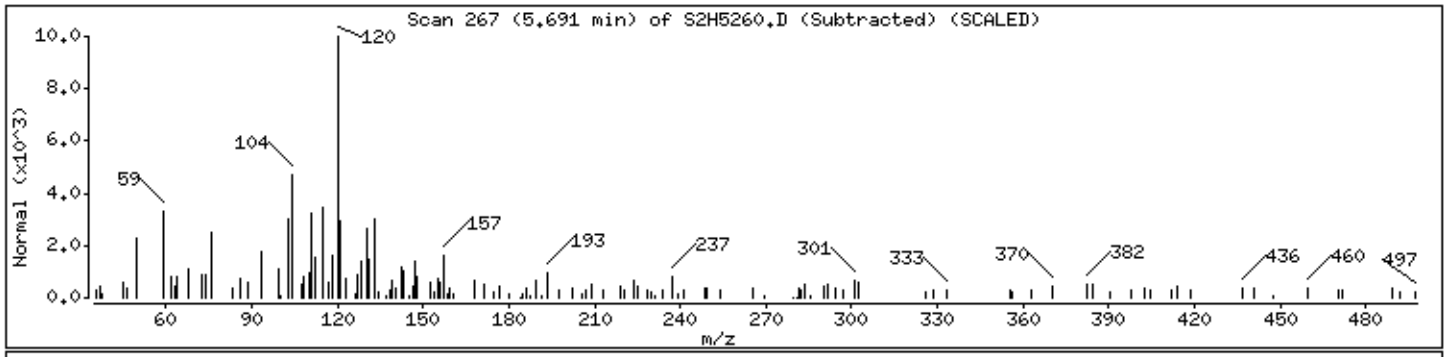
Client ID: H30R0 Instrument: S2.i

Sample Info: K2198-09A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 13:53

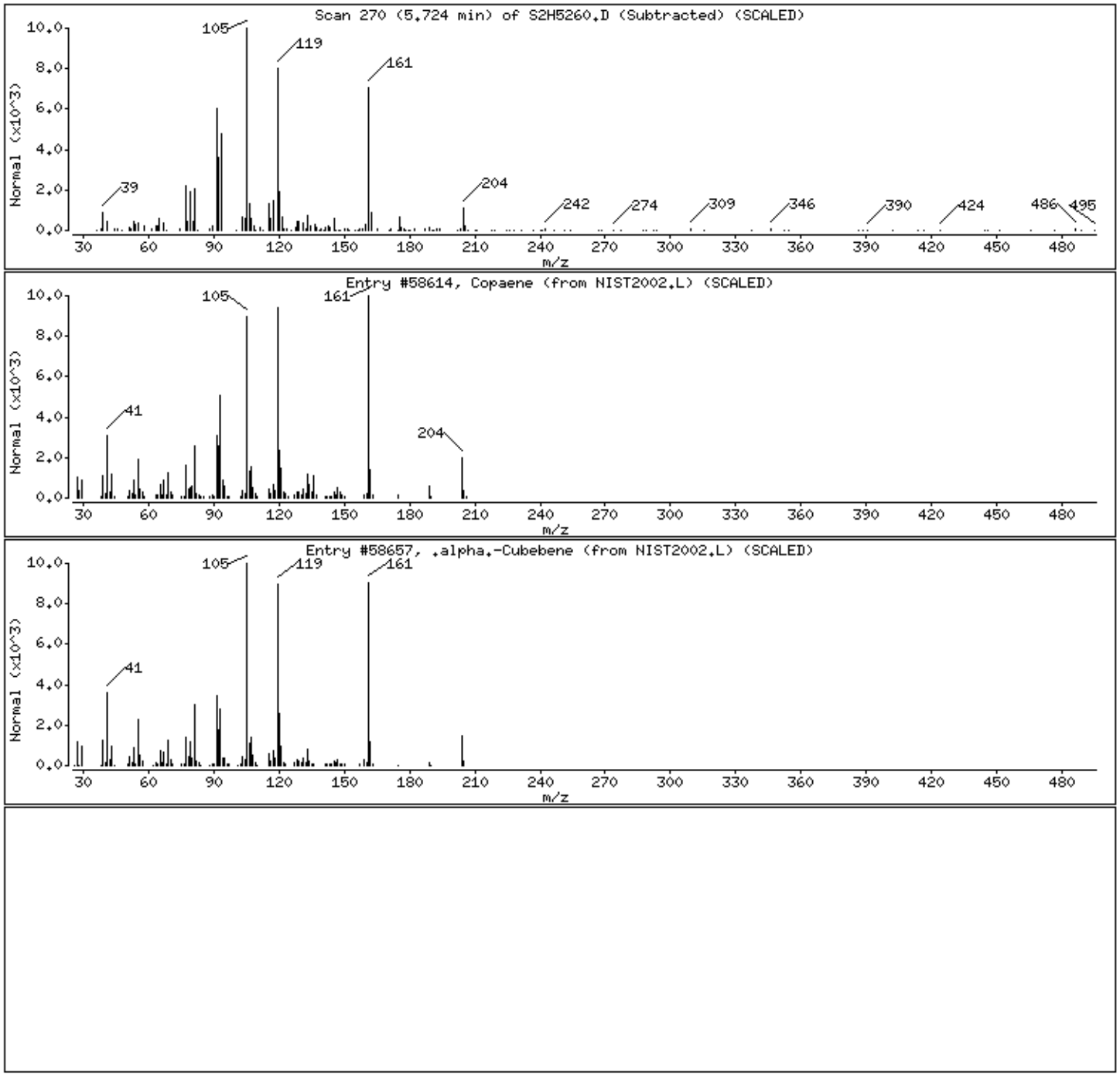
Client ID: H30R0 Instrument: S2.i

Sample Info: K2198-09A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Copaene	3856-25-5	NIST2002.L	58614	91	C15H24	204
.alpha.-Cubebene	17699-14-8	NIST2002.L	58657	91	C15H24	204



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Date : 10-NOV-2011 13:53

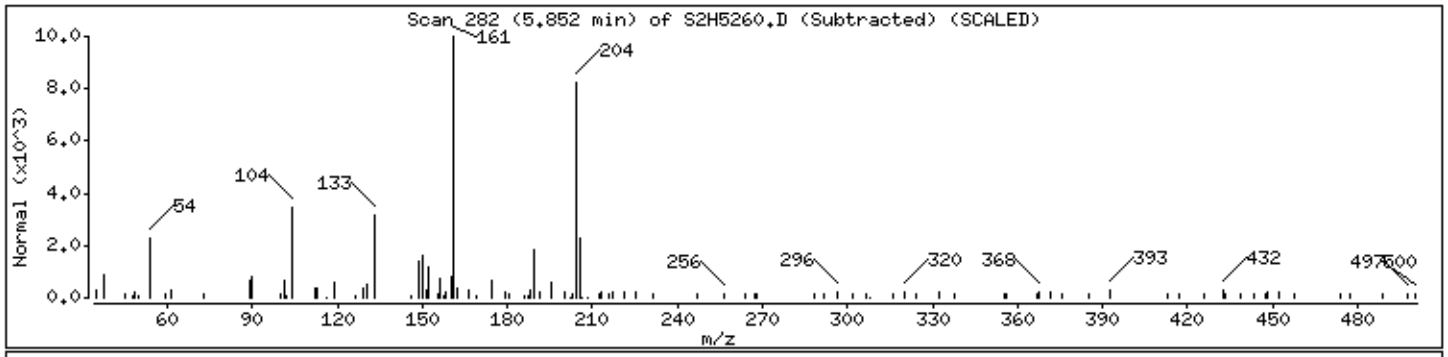
Client ID: H30R0 Instrument: S2.i

Sample Info: K2198-09A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 13:53

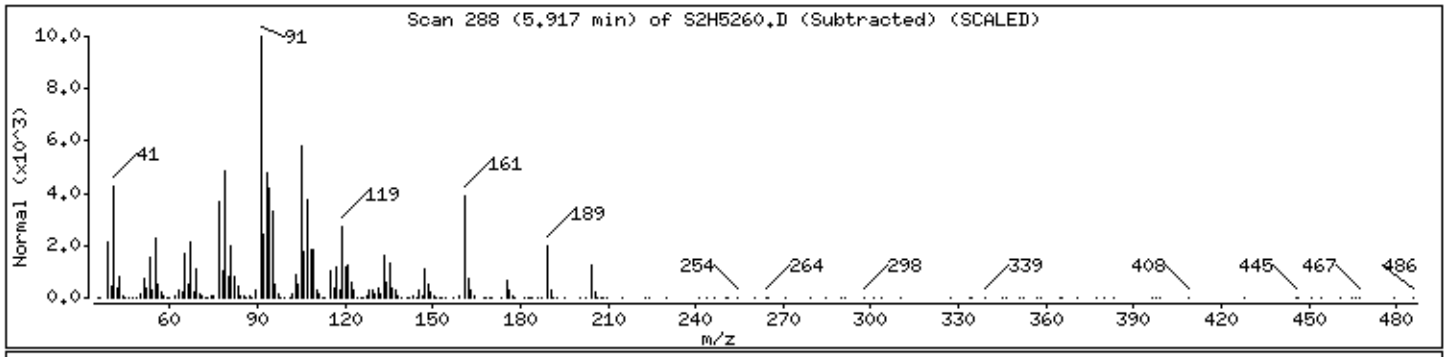
Client ID: H30R0 Instrument: S2.i

Sample Info: K2198-09A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5260.D

Date : 10-NOV-2011 13:53

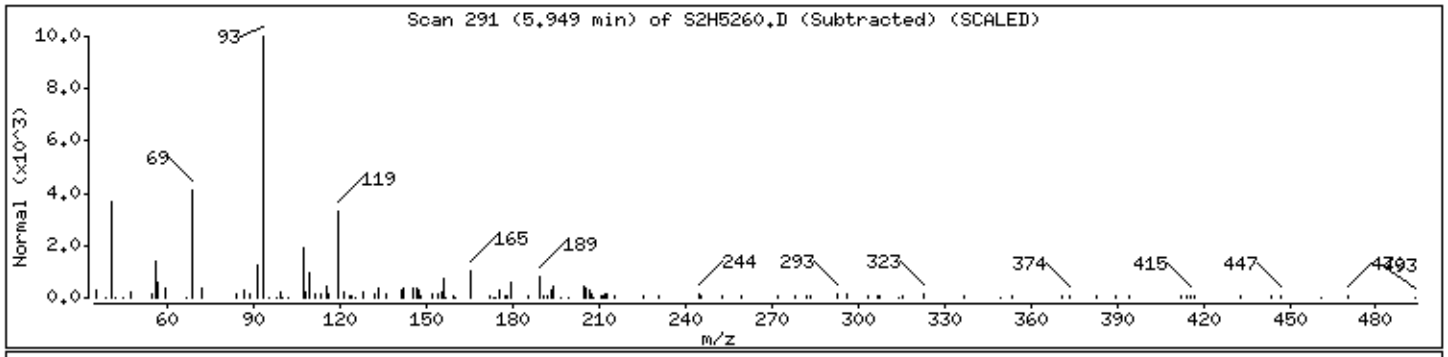
Client ID: H30R0 Instrument: S2.i

Sample Info: K2198-09A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 13:53

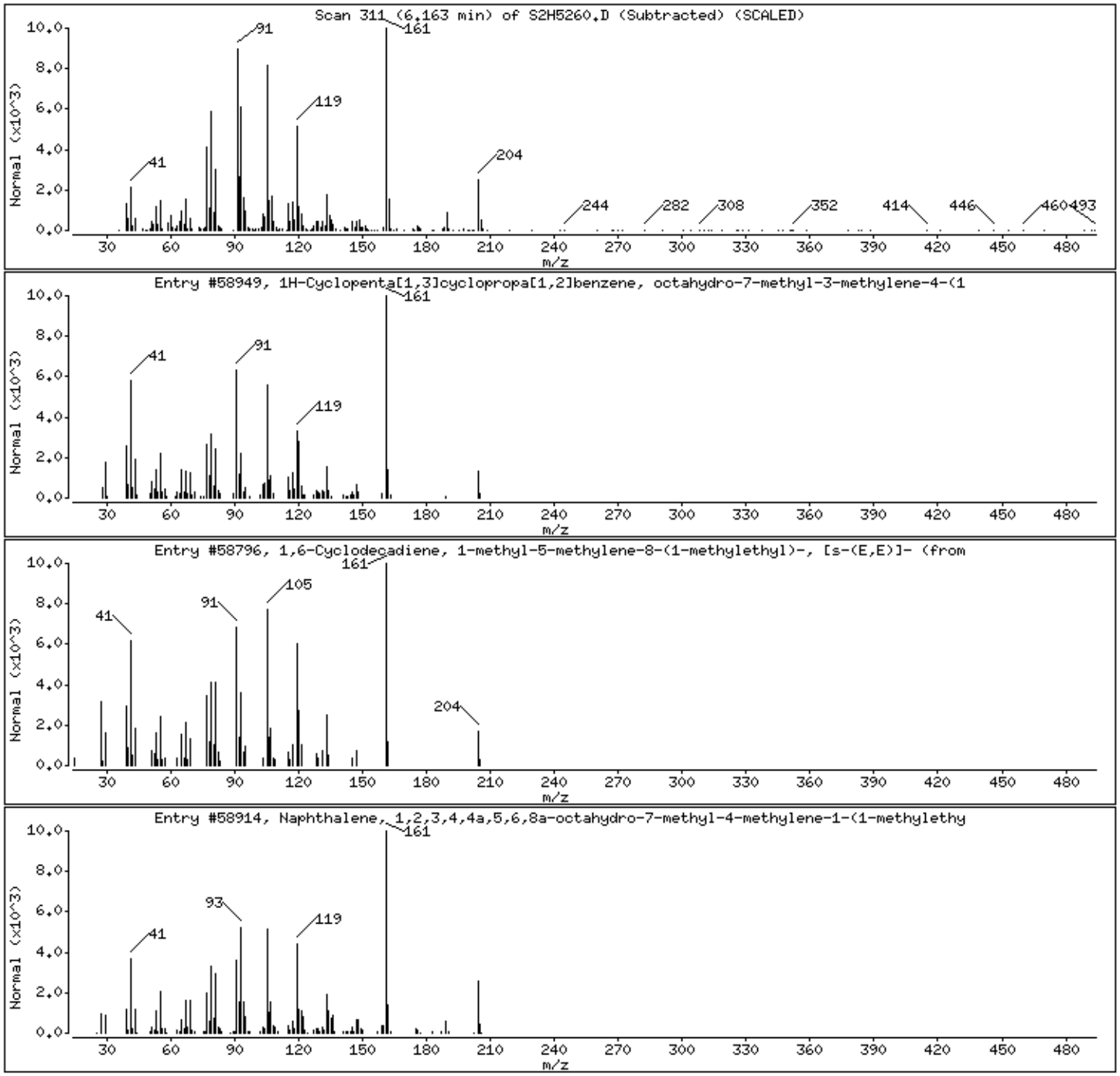
Client ID: H30R0 Instrument: S2.i

Sample Info: K2198-09A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1H-Cyclopenta[1,3]cyclopropa[1,2]benzene	13744-15-5	NIST2002.L	58949	93	C15H24	204
1,6-Cyclodecadiene, 1-methyl-5-methylene	23986-74-5	NIST2002.L	58796	90	C15H24	204
Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro	30021-74-0	NIST2002.L	58914	90	C15H24	204



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5260.D

Date : 10-NOV-2011 13:53

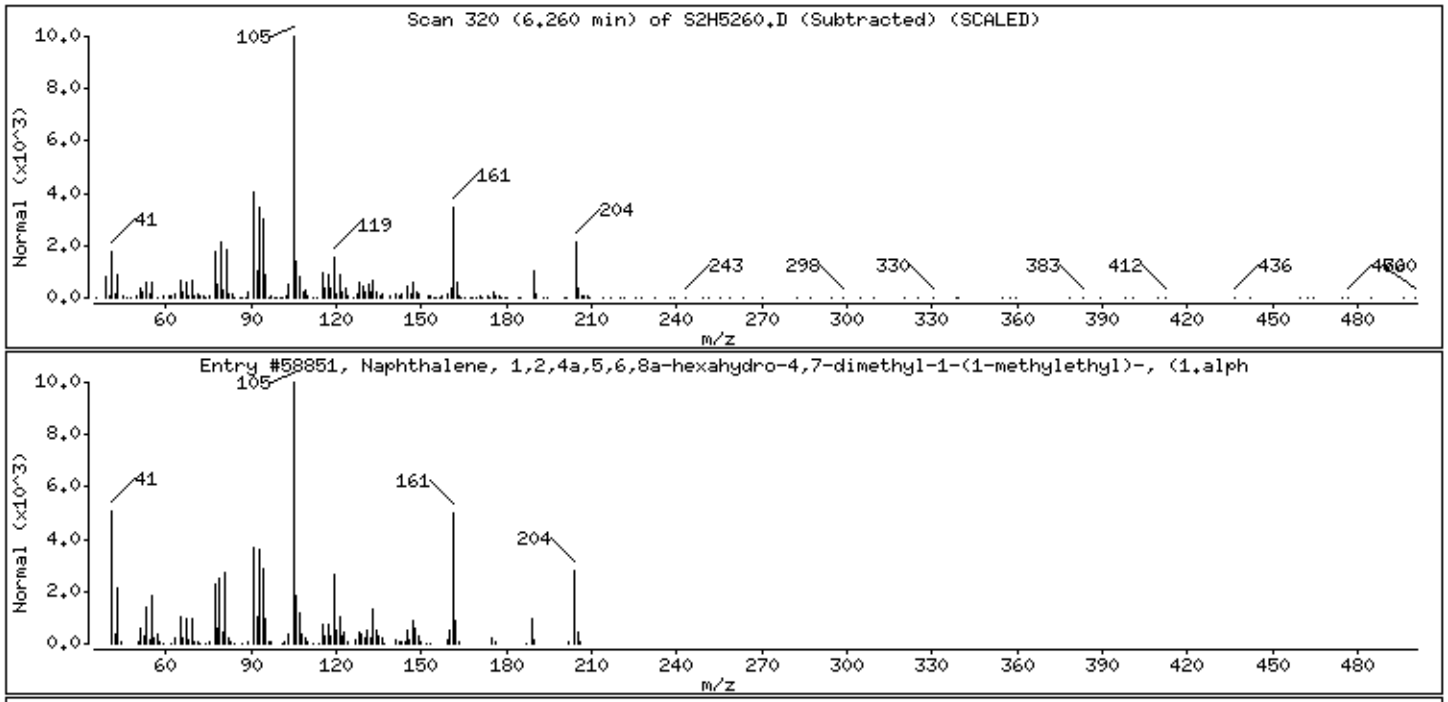
Client ID: H30R0 Instrument: S2.i

Sample Info: K2198-09A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Naphthalene, 1,2,4a,5,6,8a-hexahydro-4,7	31983-22-9	NIST2002.L	58851	96	C15H24	204



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5260.D

Date : 10-NOV-2011 13:53

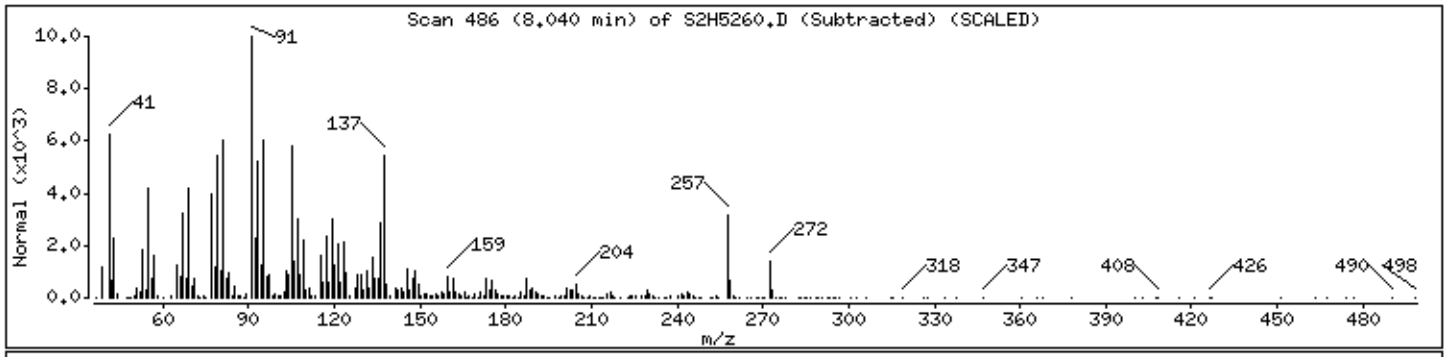
Client ID: H30R0 Instrument: S2.i

Sample Info: K2198-09A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5260.D

Date : 10-NOV-2011 13:53

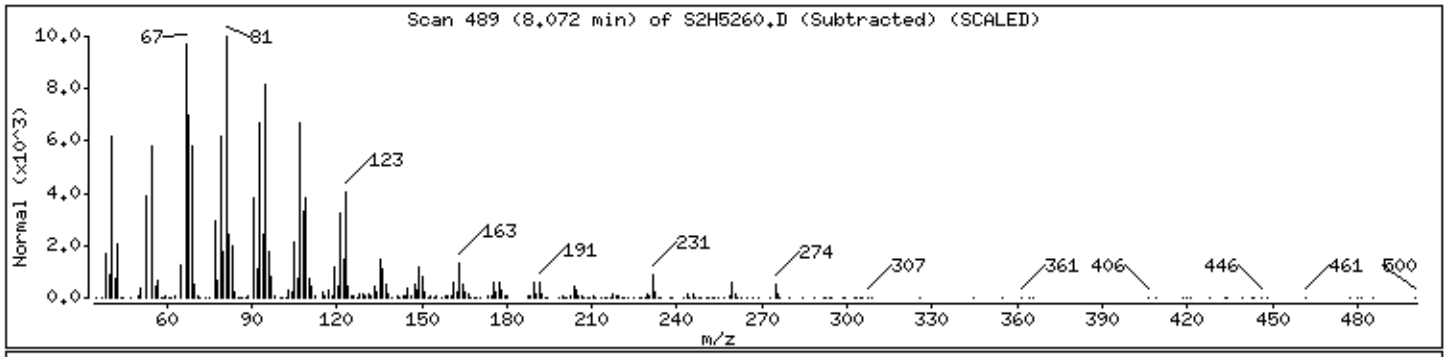
Client ID: H30R0 Instrument: S2.i

Sample Info: K2198-09A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5260.D

Date : 10-NOV-2011 13:53

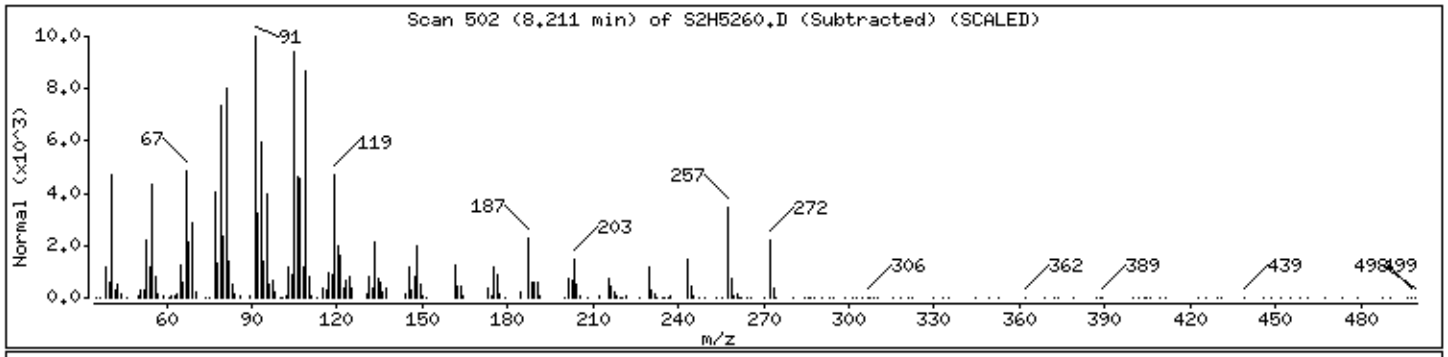
Client ID: H30R0 Instrument: S2.i

Sample Info: K2198-09A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 13:53

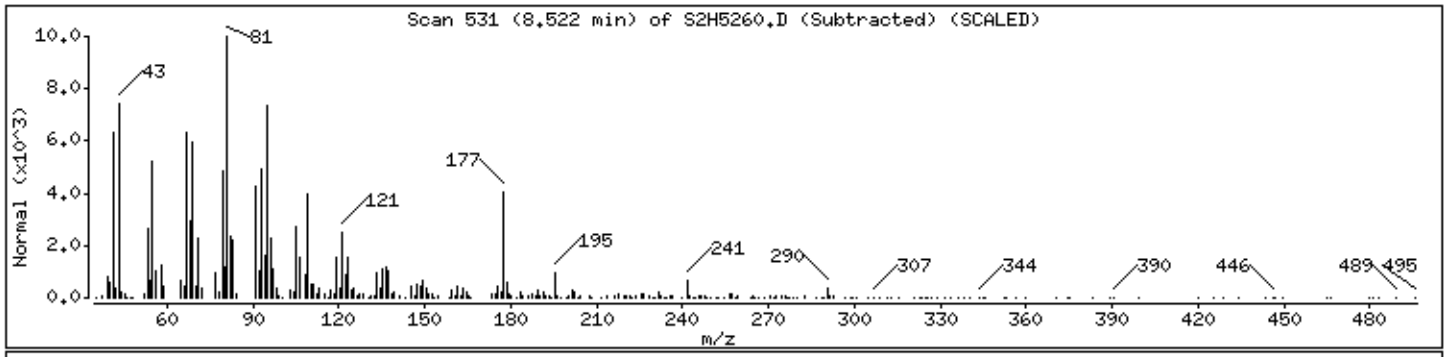
Client ID: H30R0 Instrument: S2.i

Sample Info: K2198-09A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5260.D

Date : 10-NOV-2011 13:53

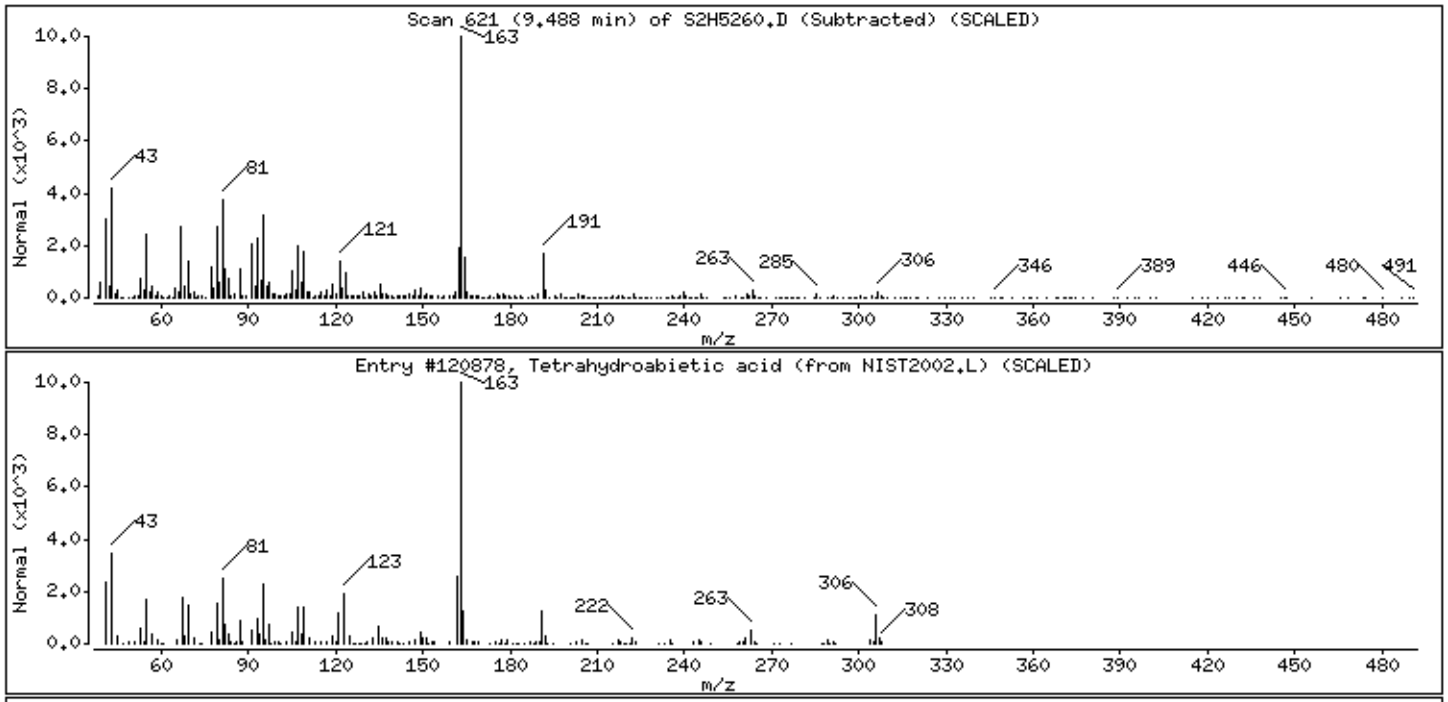
Client ID: H30R0 Instrument: S2.i

Sample Info: K2198-09A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Tetrahydroabietic acid	1000251-96-9	NIST2002.L	120878	89	C20H34O2	306



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5260.D

Date : 10-NOV-2011 13:53

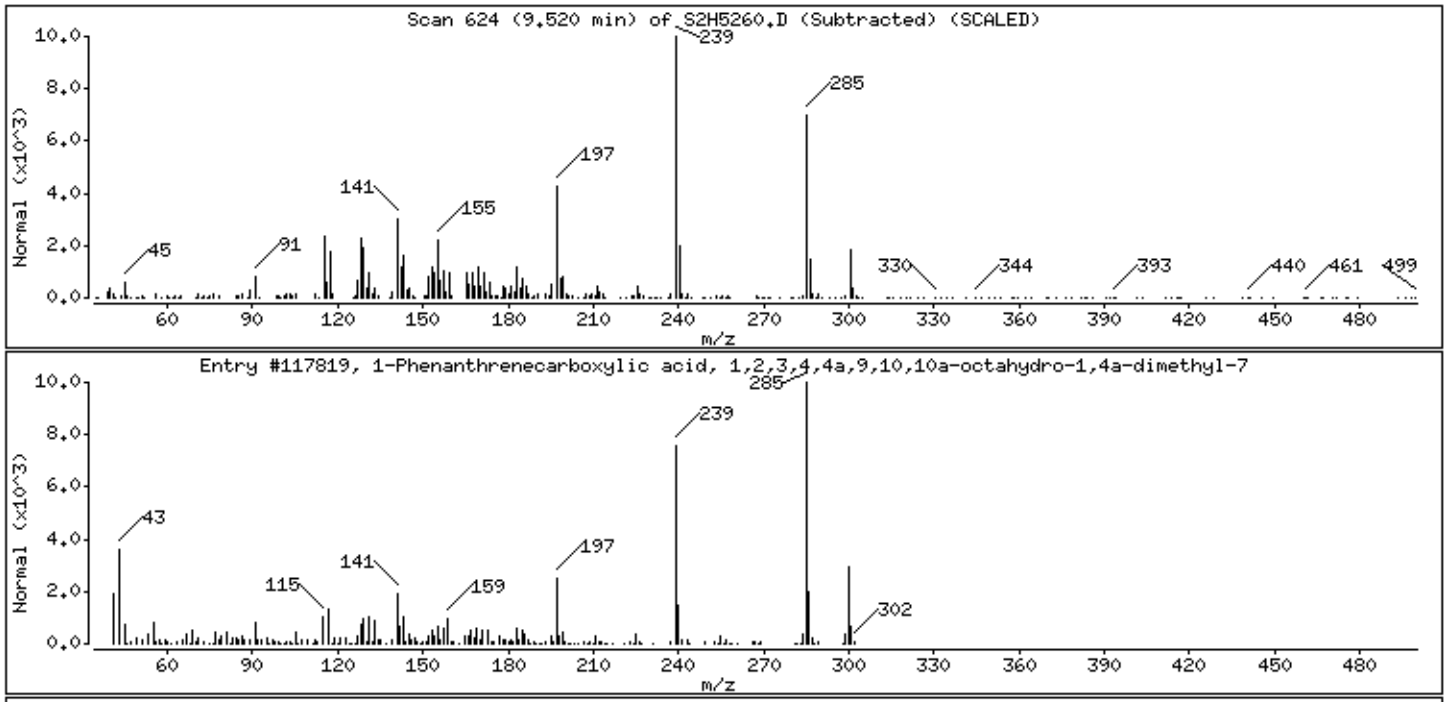
Client ID: H30R0 Instrument: S2.i

Sample Info: K2198-09A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST2002.L	117819	91	C20H28O2	300



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Date : 10-NOV-2011 13:53

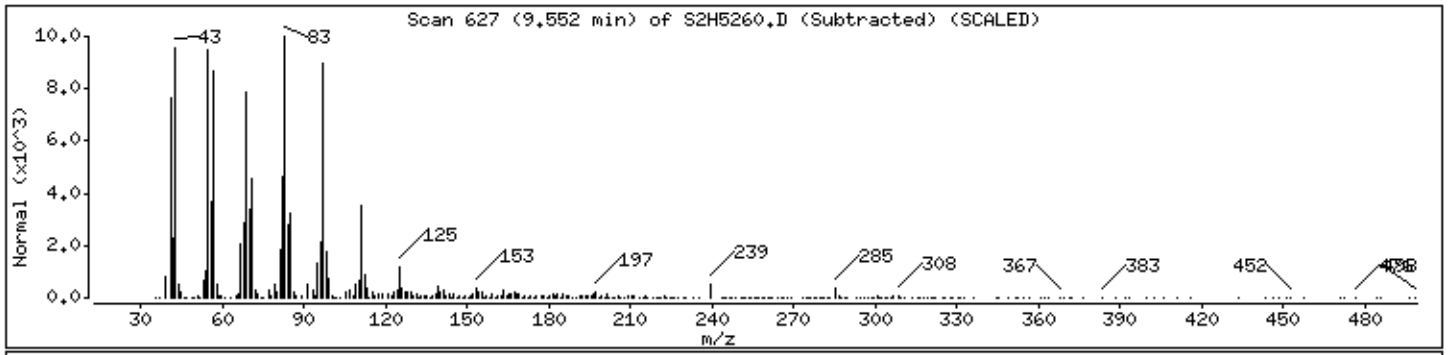
Client ID: H30R0 Instrument: S2.i

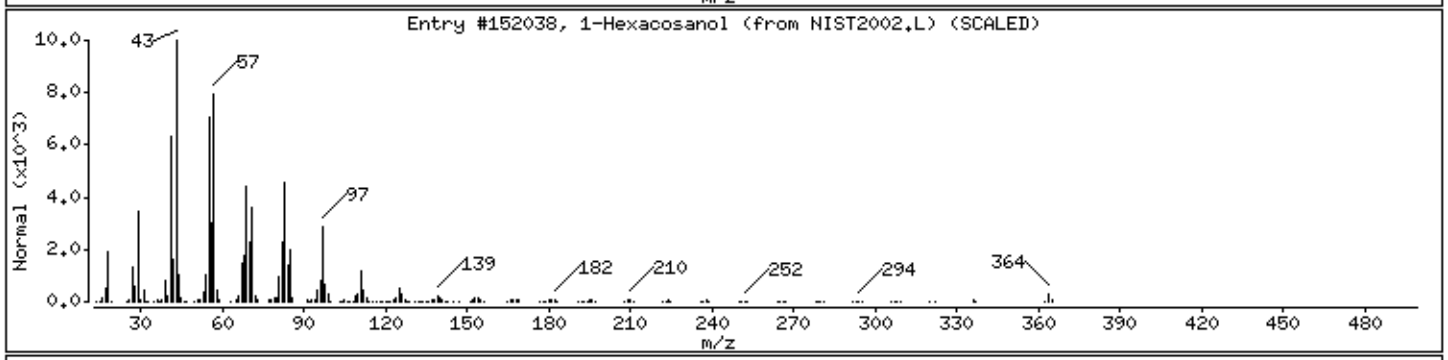
Sample Info: K2198-09A,,62764,,

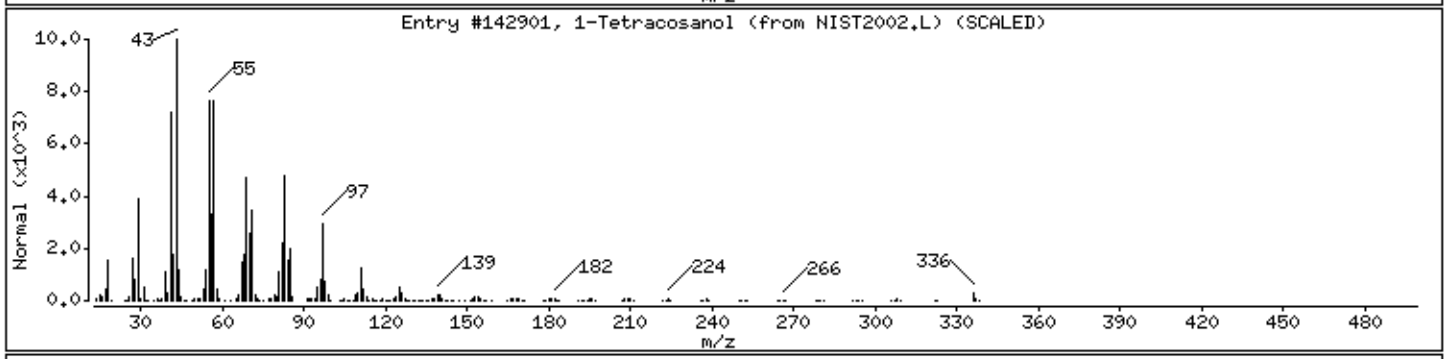
Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Hexacosanol	506-52-5	NIST2002.L	152038	87	C26H540	382
1-Tetracosanol	506-51-4	NIST2002.L	142901	87	C24H500	354







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Date : 10-NOV-2011 13:53

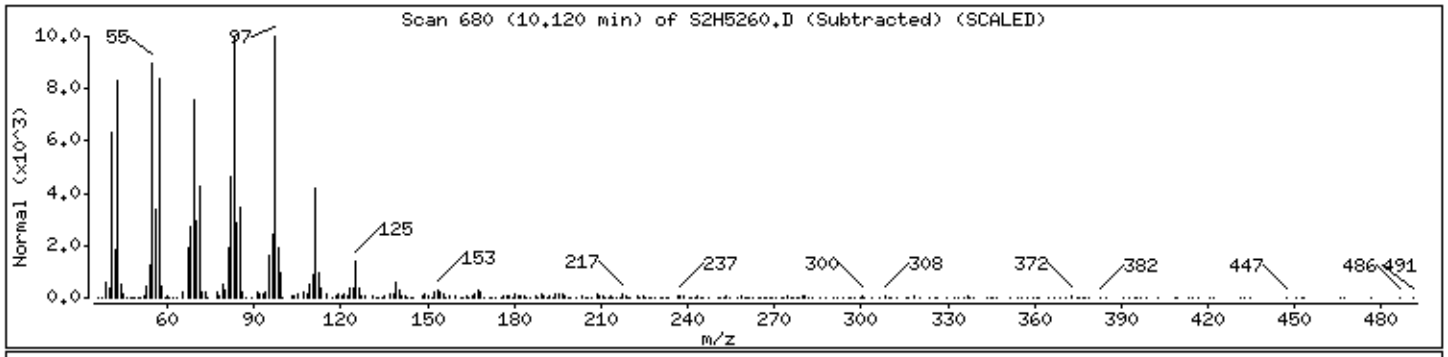
Client ID: H30R0 Instrument: S2.i

Sample Info: K2198-09A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 13:53

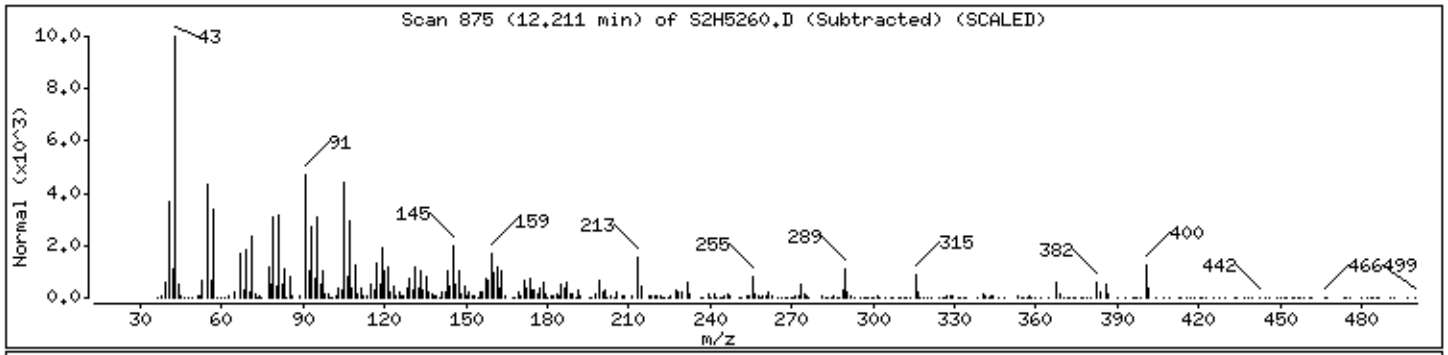
Client ID: H30R0 Instrument: S2.i

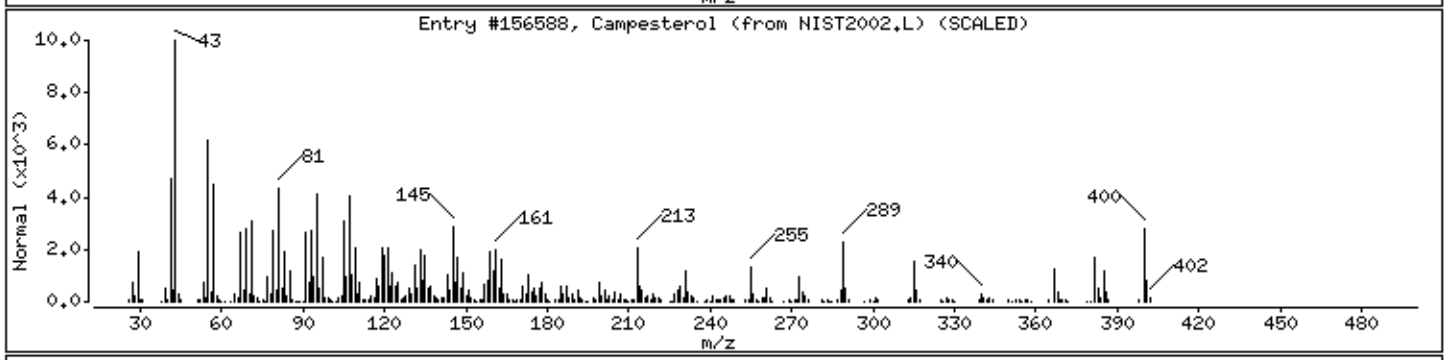
Sample Info: K2198-09A,,62764,,

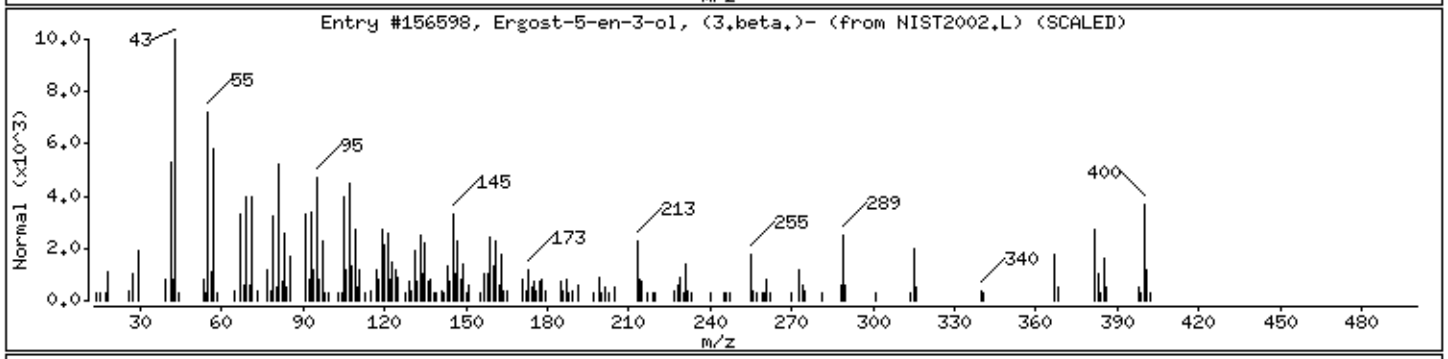
Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Campesterol	474-62-4	NIST2002.L	156588	93	C28H48O	400
Ergost-5-en-3-ol, (3.beta.)-	4651-51-8	NIST2002.L	156598	86	C28H48O	400







Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5260.D

Date : 10-NOV-2011 13:53

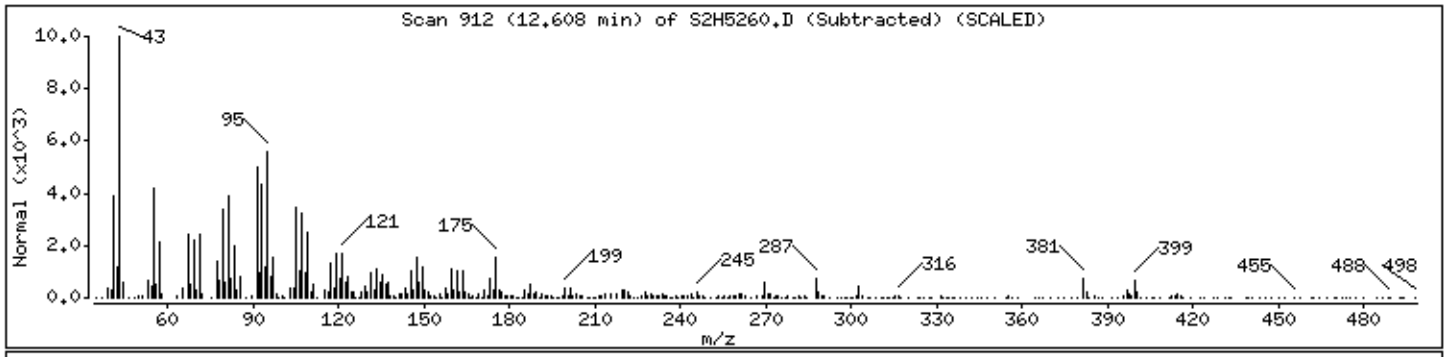
Client ID: H30R0 Instrument: S2.i

Sample Info: K2198-09A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5260.D

Date : 10-NOV-2011 13:53

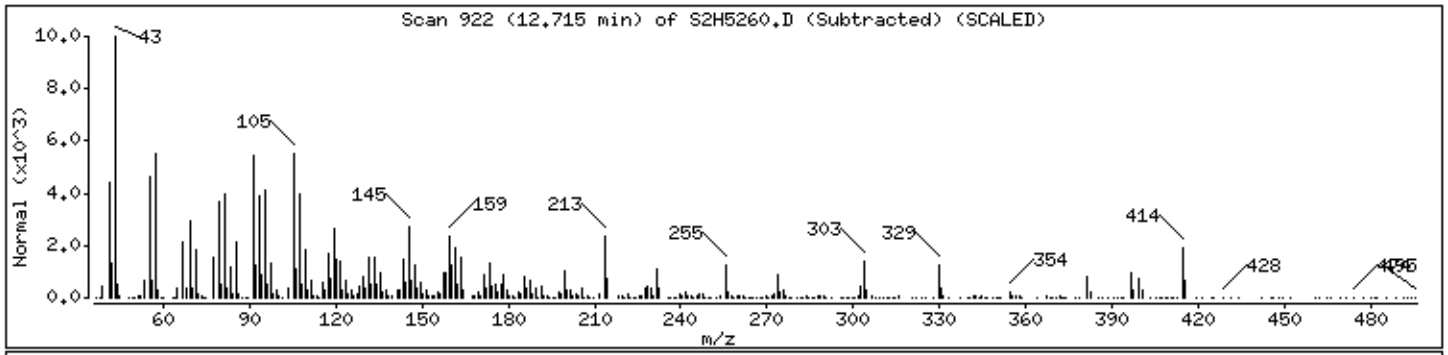
Client ID: H30R0 Instrument: S2.i

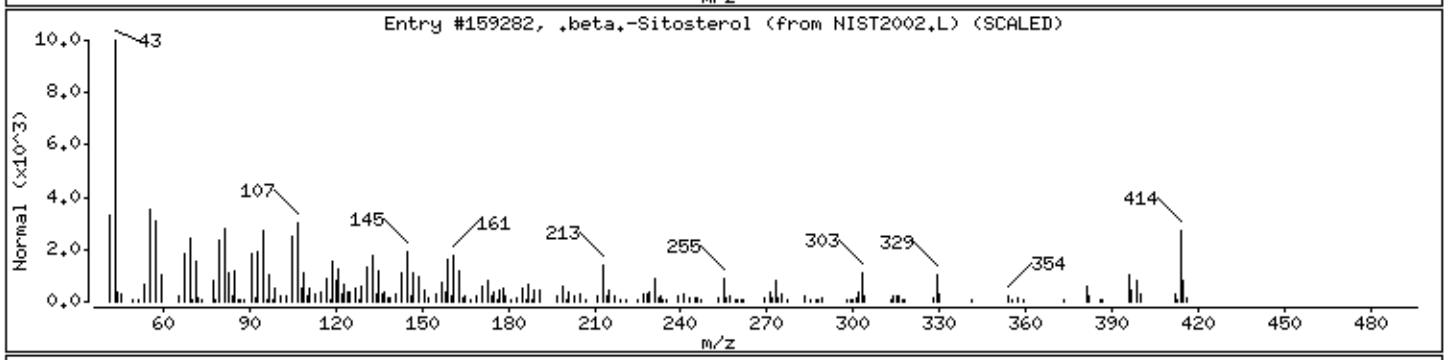
Sample Info: K2198-09A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.beta.-Sitosterol	83-46-5	NIST2002.L	159282	93	C29H50O	414





1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30R1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-10A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: S2H5261.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 54 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: 8.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
100-52-7	Benzaldehyde	370	U
108-95-2	Phenol	370	U
111-44-4	Bis(2-chloroethyl)ether	370	U
95-57-8	2-Chlorophenol	370	U
95-48-7	2-Methylphenol	370	U
108-60-1	2,2´-Oxybis(1-chloropropane)	370	U
98-86-2	Acetophenone	370	U
106-44-5	4-Methylphenol	790	
621-64-7	N-Nitroso-di-n-propylamine	370	U
67-72-1	Hexachloroethane	370	U
98-95-3	Nitrobenzene	370	U
78-59-1	Isophorone	370	U
88-75-5	2-Nitrophenol	370	U
105-67-9	2,4-Dimethylphenol	370	U
111-91-1	Bis(2-chloroethoxy)methane	370	U
120-83-2	2,4-Dichlorophenol	370	U
91-20-3	Naphthalene	110	J
106-47-8	4-Chloroaniline	370	U
87-68-3	Hexachlorobutadiene	370	U
105-60-2	Caprolactam	370	U
59-50-7	4-Chloro-3-methylphenol	370	U
91-57-6	2-Methylnaphthalene	370	U
77-47-4	Hexachlorocyclopentadiene	370	U
88-06-2	2,4,6-Trichlorophenol	370	U
95-95-4	2,4,5-Trichlorophenol	370	U
92-52-4	1,1´-Biphenyl	370	U
91-58-7	2-Chloronaphthalene	370	U
88-74-4	2-Nitroaniline	720	U
131-11-3	Dimethylphthalate	370	U
606-20-2	2,6-Dinitrotoluene	370	U
208-96-8	Acenaphthylene	77	J
99-09-2	3-Nitroaniline	720	U
83-32-9	Acenaphthene	370	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30R1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-10A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: S2H5261.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 54 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: 8.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
51-28-5	2,4-Dinitrophenol	720	U
100-02-7	4-Nitrophenol	720	U
132-64-9	Dibenzofuran	370	U
121-14-2	2,4-Dinitrotoluene	370	U
84-66-2	Diethylphthalate	370	U
86-73-7	Fluorene	370	U
7005-72-3	4-Chlorophenyl-phenylether	370	U
100-01-6	4-Nitroaniline	720	U
534-52-1	4,6-Dinitro-2-methylphenol	720	U
86-30-6	N-Nitrosodiphenylamine (1)	370	U
95-94-3	1,2,4,5-Tetrachlorobenzene	370	U
101-55-3	4-Bromophenyl-phenylether	370	U
118-74-1	Hexachlorobenzene	370	U
1912-24-9	Atrazine	370	U
87-86-5	Pentachlorophenol	720	U
85-01-8	Phenanthrene	230	J
120-12-7	Anthracene	370	U
86-74-8	Carbazole	370	U
84-74-2	Di-n-butylphthalate	1400	
206-44-0	Fluoranthene	120	J
129-00-0	Pyrene	160	J
85-68-7	Butylbenzylphthalate	370	U
91-94-1	3,3´-Dichlorobenzidine	370	U
56-55-3	Benzo(a)anthracene	370	U
218-01-9	Chrysene	370	U
117-81-7	Bis(2-ethylhexyl)phthalate	370	U
117-84-0	Di-n-octylphthalate	370	U
205-99-2	Benzo(b)fluoranthene	370	U
207-08-9	Benzo(k)fluoranthene	370	U
50-32-8	Benzo(a)pyrene	370	U
193-39-5	Indeno(1,2,3-cd)pyrene	370	U
53-70-3	Dibenzo(a,h)anthracene	370	U
191-24-2	Benzo(g,h,i)perylene	370	U
58-90-2	2,3,4,6-Tetrachlorophenol	370	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30R1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-10A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: S2H5261.D

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 54 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: 8.5 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	7785-70-8	1R-.alpha.-Pinene	3.127	4700	NJ
02		Unknown-01	3.256	1700	J
03		Unknown-02	3.460	2700	J
04	68998-21-0	Cyclopropane, 1,1-dimethyl-2	3.664	11000	NJ
05		Unknown-03	3.771	92000	J
06	138-86-3	Limonene	3.803	2600	NJ
07	1195-79-5	Bicyclo[2.2.1]heptan-2-one,	4.189	1000	NJ
08	464-48-2	Bicyclo[2.2.1]heptan-2-one,	4.554	33000	NJ
09		Unknown-04	4.597	2000	J
10		Unknown-05	4.682	11000	J
11	562-74-3	3-Cyclohexen-1-ol, 4-methyl-	4.715	4700	NJ
12		Unknown-06	4.790	12000	J
13	5989-08-2	Tricyclo[5.4.0.0(2,8)]undec-	5.615	1100	NJ
14		Unknown-07	5.755	800	J
15	3853-83-6	1H-Benzocycloheptene, 2,4a,5	5.916	4600	NJ
16	30021-74-0	Naphthalene, 1,2,3,4,4a,5,6,	6.162	2500	NJ
17	10208-80-7	.alpha.-Muurolene	6.259	2800	NJ
18		Unknown-08	6.430	1100	J
19	544-63-8	Tetradecanoic acid	7.224	5600	NJ
20	57-10-3	n-Hexadecanoic acid	7.964	44000	NJ
21		Unknown-09	8.039	8000	J
22		Unknown-10	8.253	120000	J
23		Unknown-11	8.543	24000	J
24		Unknown-12	8.661	14000	J
25		Unknown-13	9.025	12000	J
26		Unknown-14	9.165	17000	J
27		Unknown-15	9.261	11000	J
28	474-62-4	Campesterol	12.232	12000	NJ
29		Unknown-16	12.629	5000	J
30	83-46-5	.beta.-Sitosterol	12.746	41000	NJ
	E96679[2]	Total Alkanes	N/A	4900	J

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5261.D
Report Date: 11-Nov-2011 13:35

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5261.D
Lab Smp Id: K2198-10A Client Smp ID: H30R1
Inj Date : 10-NOV-2011 14:14
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-10A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.100	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
$	2 Phenol-d5	71	3.384	3.373	(0.916)	154603	32.6367	540
$	4 bis(2-Chloroethyl)ether-d8	67	3.427	3.427	(0.927)	178931	27.4115	460
$	6 2-Chlorophenol-d4	132	3.502	3.491	(0.948)	145374	35.4755	590(Q)
*	8 1,4-Dichlorobenzene-d4	152	3.695	3.684	(1.000)	150432	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.017	4.006	(1.087)	247782	38.5821	640
	12 4-Methylphenol	108	4.038	4.027	(1.093)	159021	21.7678	360
$	16 Nitrobenzene-d5	128	4.156	4.145	(0.874)	70858	32.6568	540
$	19 2-Nitrophenol-d4	143	4.424	4.424	(0.930)	90714	37.8718	630
$	23 2,4-Dichlorophenol-d3	165	4.639	4.628	(0.975)	164516	37.6240	620
*	25 Naphthalene-d8	136	4.757	4.746	(1.000)	416641	40.0000	
	26 Naphthalene	128	4.768	4.767	(1.002)	32774	3.05631	51(a)
$	27 4-Chloroaniline-d4	131	4.811	4.810	(1.011)	15535	4.00127	66(aQ)
$	40 Dimethylphthalate-d6	166	5.979	5.968	(0.962)	366915	41.1157	680
$	43 Acenaphthylene-d8	160	6.087	6.076	(0.979)	433298	37.3386	620
	44 Acenaphthylene	152	6.097	6.086	(0.981)	22582	2.13699	35(aH)
*	46 Acenaphthene-d10	164	6.215	6.204	(1.000)	242709	40.0000	
$	49 4-Nitrophenol-d4	143	6.323	6.312	(1.017)	54349	42.2602	700(Q)
$	54 Fluorene-d10	176	6.644	6.633	(1.069)	290084	35.3878	590
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.698	6.698	(0.901)	53436	41.7212	690

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5261.D
Report Date: 11-Nov-2011 13:35

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)
*	65 Phenanthrene-d10	188	7.438	7.438	(1.000)	328220	40.0000	
	66 Phenanthrene	178	7.459	7.448	(1.003)	58734	6.37459	110(a)
$	67 Anthracene-d10	188	7.481	7.480	(1.006)	346388	36.9453	610
	70 Di-n-butylphthalate	149	7.920	7.931	(1.065)	311380	38.2802	640
	71 Fluoranthene	202	8.446	8.435	(1.136)	30588	3.22548	54(a)
$	72 Pyrene-d10	212	8.617	8.606	(0.892)	268932	37.2982	620(QRH)
	73 Pyrene	202	8.628	8.628	(0.893)	41902	4.56402	76(aH)
*	77 Chrysene-d12	240	9.658	9.668	(1.000)	228882	40.0000	(Q)
$	83 Benzo(a)pyrene-d12	264	10.848	10.891	(0.992)	92075	29.5322	490(R)
*	85 Perylene-d12	264	10.934	10.966	(1.000)	127057	40.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5261.D
Report Date: 11-Nov-2011 13:35

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5261.D
Lab Smp Id: K2198-10A Client Smp ID: H30R1
Inj Date : 10-NOV-2011 14:14
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-10A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.100	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 8 1,4-Dichlorobenzene-d4	3.696	1337892	40.000
* 25 Naphthalene-d8	4.757	1744220	40.000
* 46 Acenaphthene-d10	6.216	2014669	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
1R-.alpha.-Pinene					CAS #: 7785-70-8		
3.127	4342874	129.842247	2200	95	NIST2002.L	15163	8
Unknown					CAS #:		
3.256	1579435	47.2216002	780	0		0	8
Unknown					CAS #:		
3.460	2492671	74.5252957	1200	0		0	8

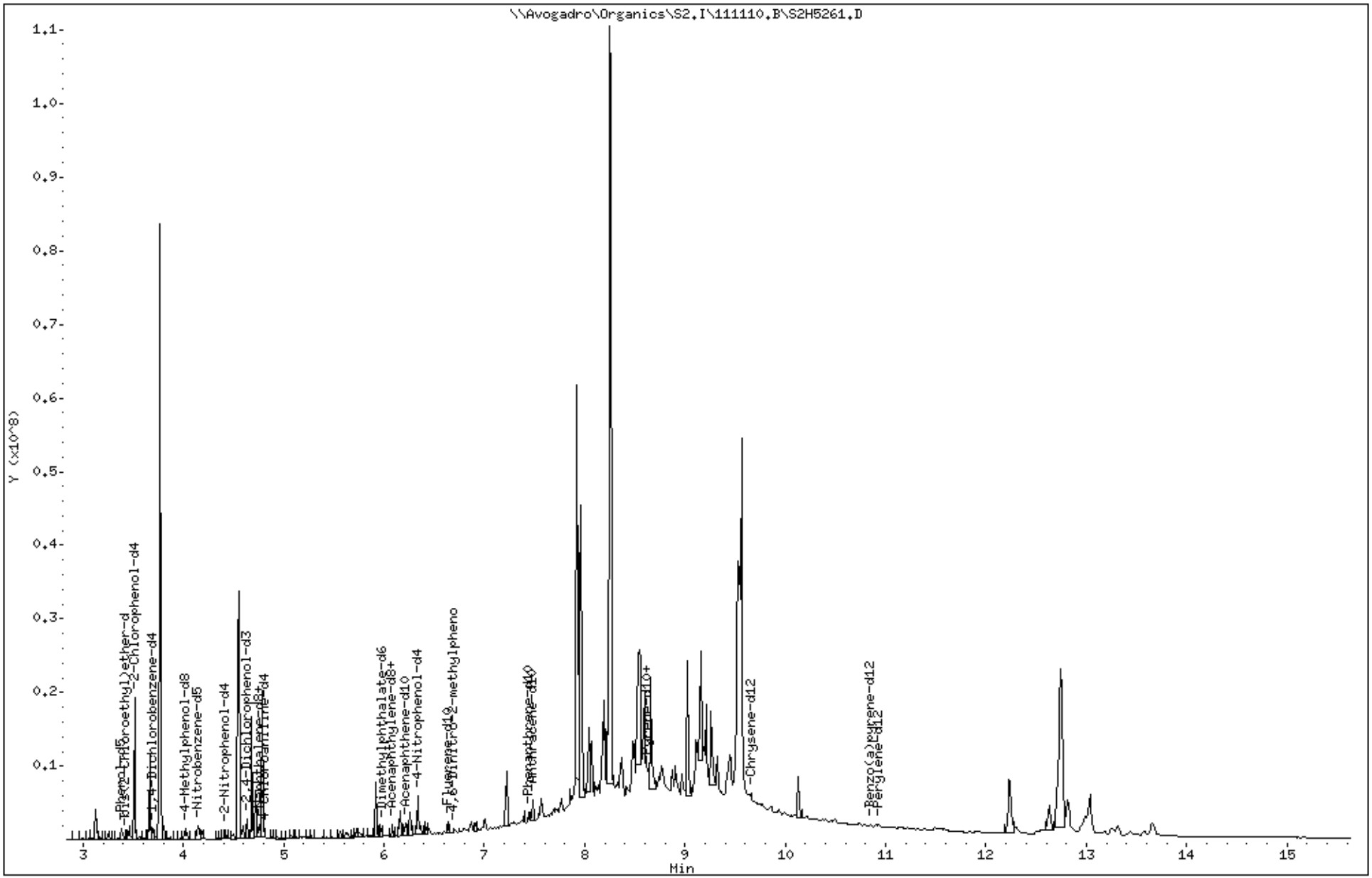
Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5261.D
Report Date: 11-Nov-2011 13:35

RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Straight-chain Alkane					CAS #:		
3.567	520816	15.5712250	260	0	0	0	8
Cyclopropane, 1,1-dimethyl-2-(3-methyl-1					CAS #: 68998-21-0		
3.664	9961672	297.831790	4900	94	NIST2002.L	15361	8
Unknown					CAS #:		
3.771	85447870	2554.70091	42000	0	0	0	8
Limonene					CAS #: 138-86-3		
3.803	2375959	71.0358897	1200	95	NIST2002.L	15128	8
Bicyclo[2.2.1]heptan-2-one, 1,3,3-trimet					CAS #: 1195-79-5		
4.189	941417	28.1462804	470	91	NIST2002.L	24122	8
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet					CAS #: 464-48-2		
4.554	39698686	910.405380	15000	95	NIST2002.L	24202	25
Unknown					CAS #:		
4.597	2393844	54.8977415	910	0	0	0	25
Unknown					CAS #:		
4.682	13026680	298.739352	5000	0	0	0	25
3-Cyclohexen-1-ol, 4-methyl-1-(1-methyle					CAS #: 562-74-3		
4.715	5686151	130.399836	2200	87	NIST2002.L	25652	25
Unknown					CAS #:		
4.790	14854492	340.656364	5700	0	0	0	25
Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6					CAS #: 5989-08-2		
5.615	1566967	31.1111476	520	91	NIST2002.L	58740	46
Unknown					CAS #:		
5.755	1119317	22.2233356	370	0	0	0	46
1H-Benzocycloheptene, 2,4a,5,6,7,8,9,9a-					CAS #: 3853-83-6		
5.916	6375387	126.579336	2100	90	NIST2002.L	58840	46
Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro					CAS #: 30021-74-0		
6.162	3458410	68.6645760	1100	95	NIST2002.L	58912	46
.alpha.-Muurolene					CAS #: 10208-80-7		
6.259	3951363	78.4518543	1300	93	NIST2002.L	58663	46
Unknown					CAS #:		
6.430	1554367	30.8609821	510	0	0	0	46
Tetradecanoic acid					CAS #: 544-63-8		
7.224	7850006	155.856972	2600	96	NIST2002.L	75070	46
n-Hexadecanoic acid					CAS #: 57-10-3		
7.964	60989429	1210.90712	20000	95	NIST2002.L	92226	46

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5261.D
Report Date: 11-Nov-2011 13:35

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
8.039	11155557	221.486636	3700	0		0	46
Unknown				CAS #:			
8.253	1.676e+008	3327.80434	55000	0		0	46
Unknown				CAS #:			
8.543	33176007	658.688948	11000	0		0	46
Unknown				CAS #:			
8.661	18962956	376.497673	6300	0		0	46
Unknown				CAS #:			
9.025	17317206	343.822337	5700	0		0	46
Unknown				CAS #:			
9.165	23569404	467.955829	7800	0		0	46
Unknown				CAS #:			
9.261	15164400	301.079714	5000	0		0	46
Cyclic Alkane				CAS #:			
10.130	6058339	120.284544	2000	0		0	46
Campesterol				CAS #: 474-62-4			
12.232	16258550	322.803377	5400	93	NIST2002.L	156588	46
Unknown				CAS #:			
12.629	7009762	139.174454	2300	0		0	46
.beta.-Sitosterol				CAS #: 83-46-5			
12.746	56839179	1128.50649	19000	87	NIST2002.L	159283	46

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5261.D
Date : 10-NOV-2011 14:14
Client ID: H30R1
Instrument: S2.i
Sample Info: K2198-10A,,62764,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5261.D

Date : 10-NOV-2011 14:14

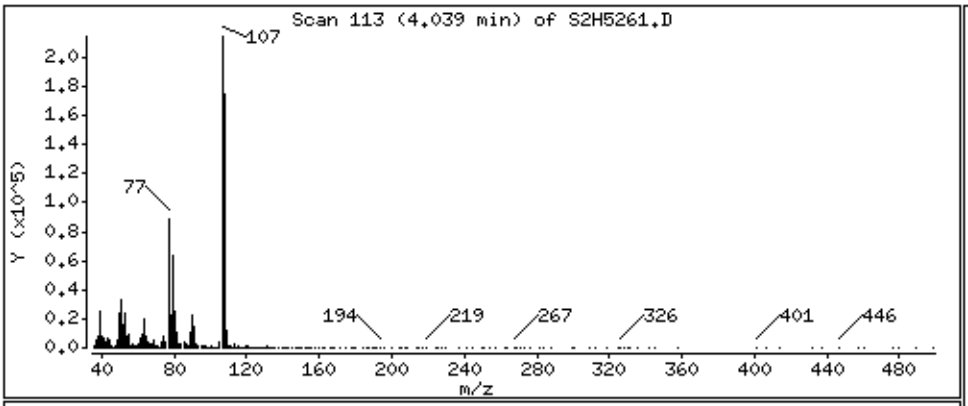
Client ID: H30R1 Instrument: S2.i

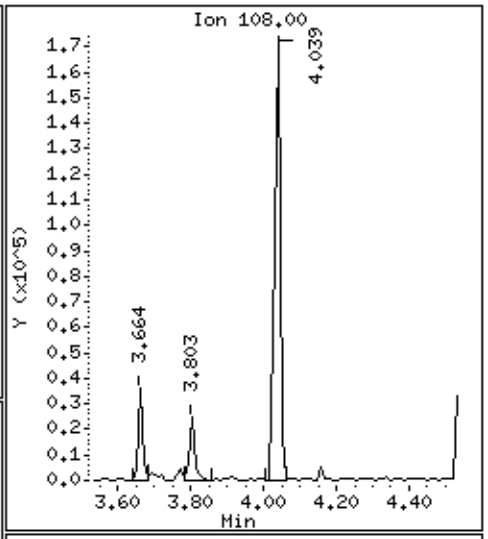
Sample Info: K2198-10A,,62764,,

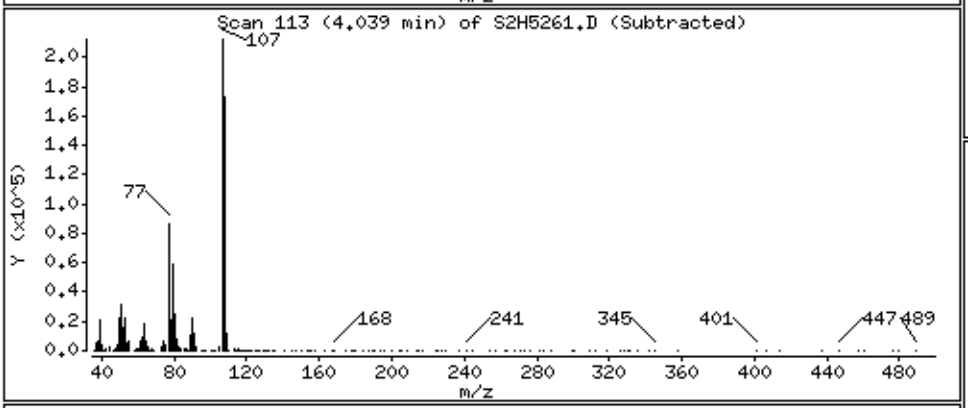
Volume Injected (uL): 2.0 Operator: SRC: LIMS

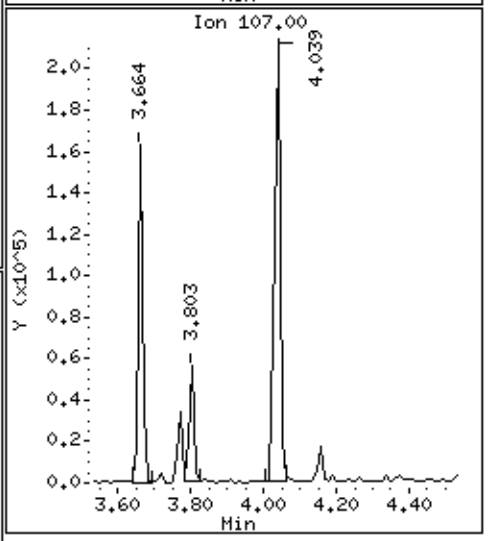
Column phase: RXI-5SILMS Column diameter: 0.25

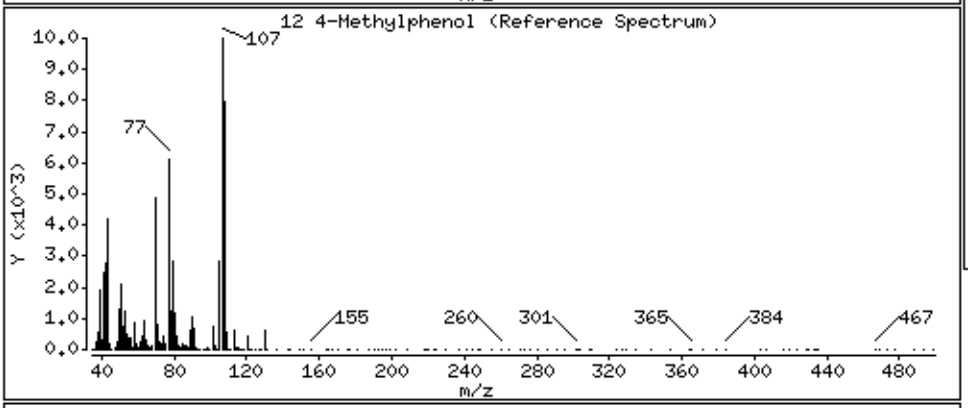
12 4-Methylphenol Concentration: 360 ug/Kg

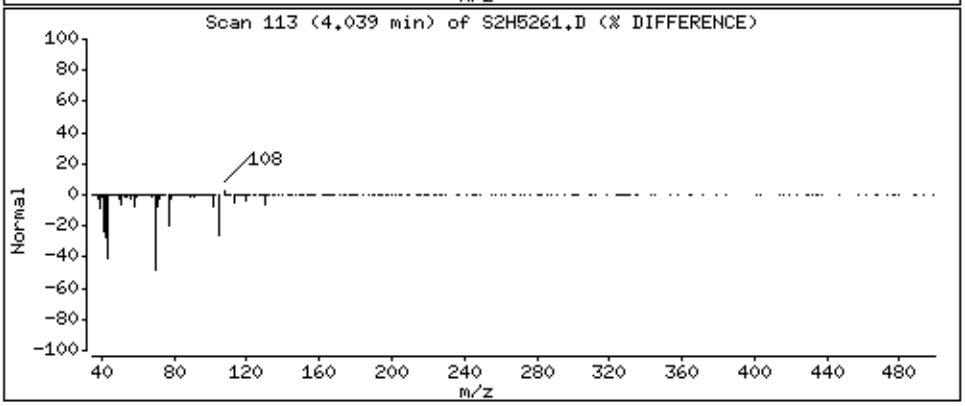












Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5261.D

Date : 10-NOV-2011 14:14

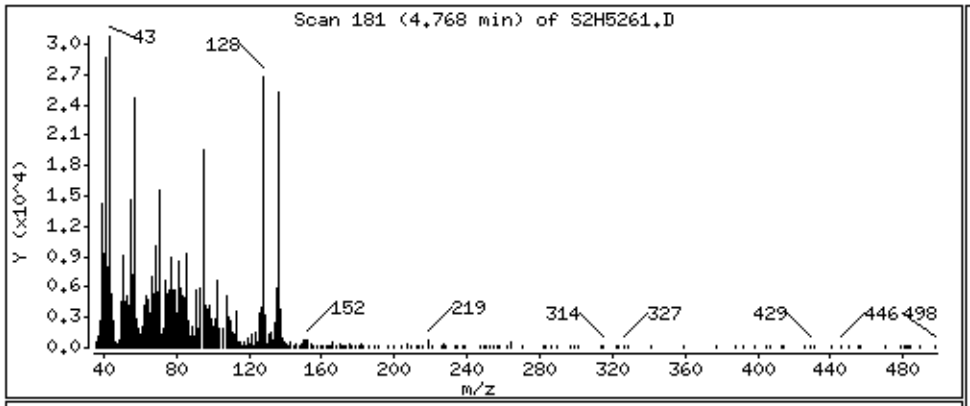
Client ID: H30R1 Instrument: S2.i

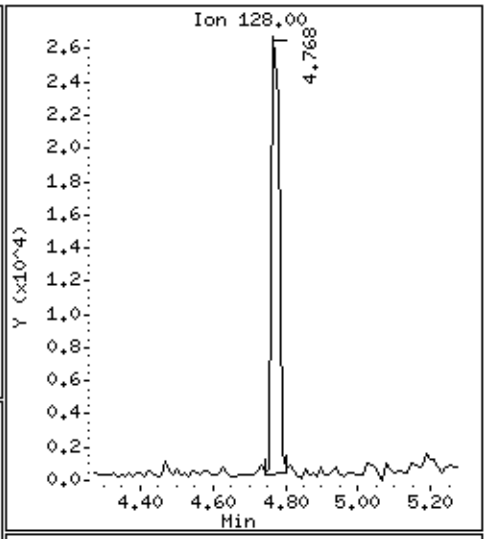
Sample Info: K2198-10A,,62764,,

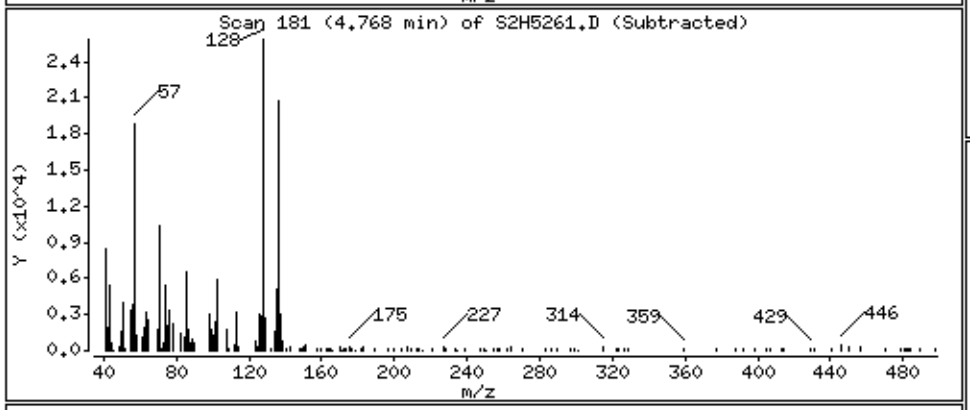
Volume Injected (uL): 2.0 Operator: SRC: LIMS

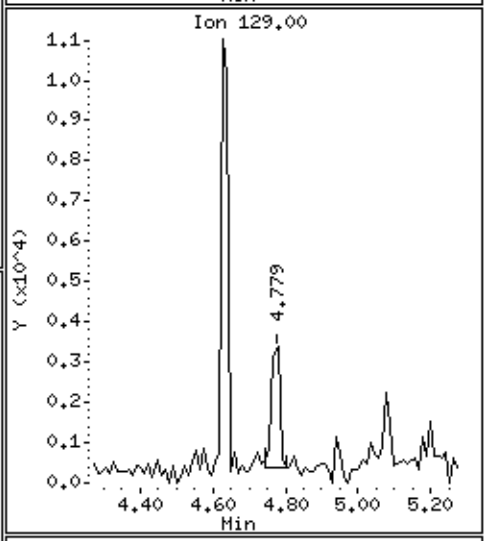
Column phase: RXI-5SILMS Column diameter: 0.25

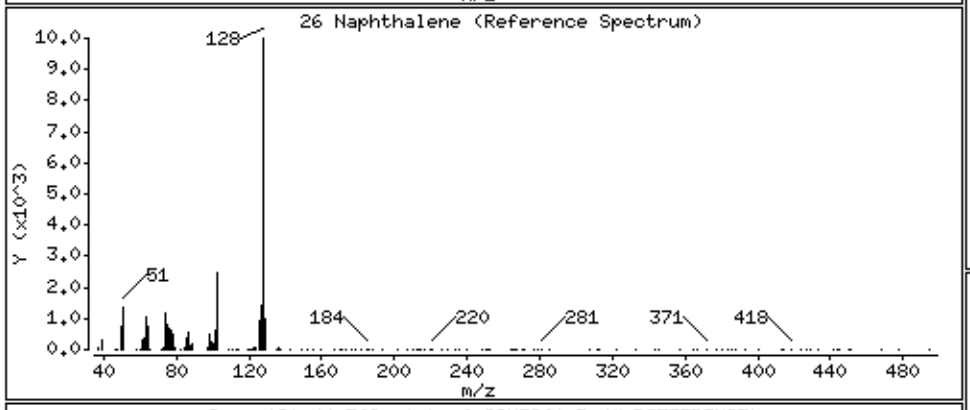
26 Naphthalene Concentration: 51 ug/Kg

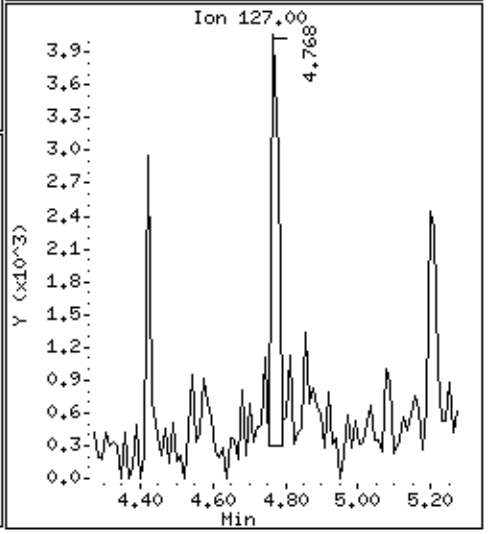


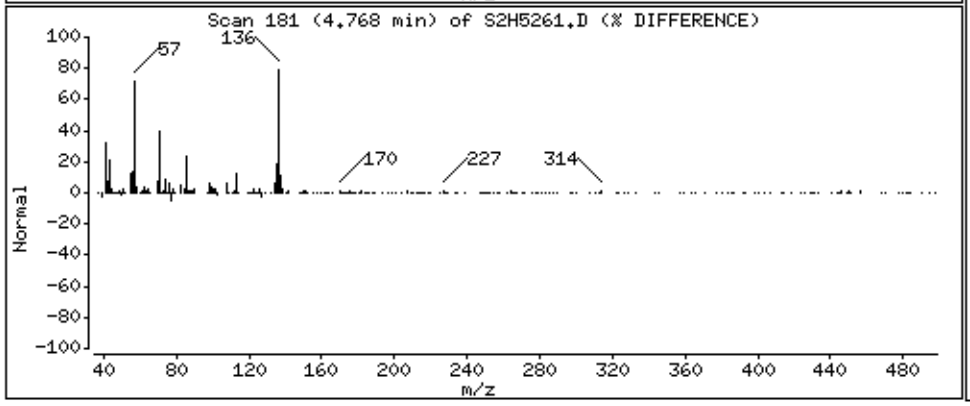












Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5261.D

Date : 10-NOV-2011 14:14

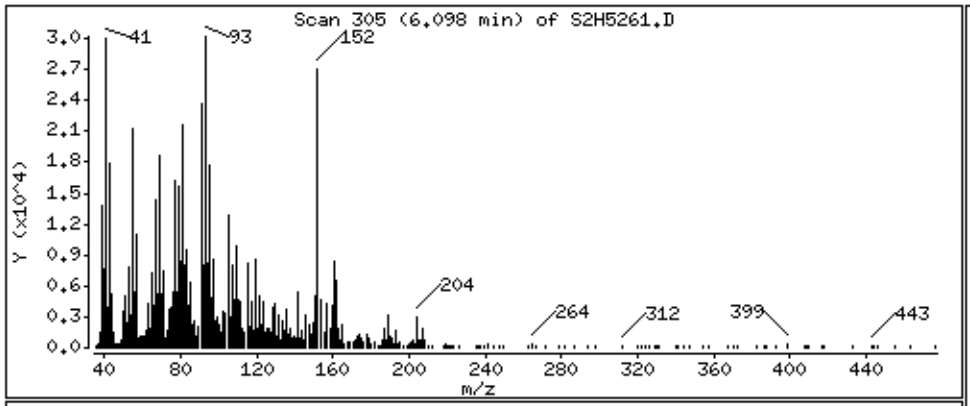
Client ID: H30R1 Instrument: S2.i

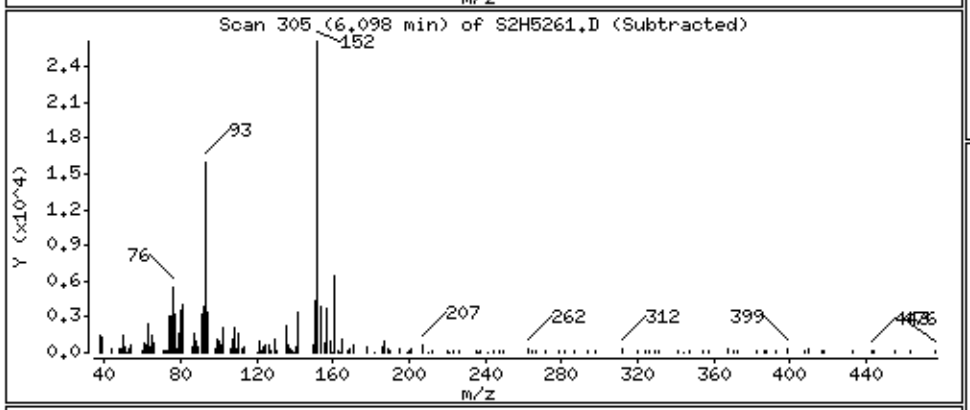
Sample Info: K2198-10A,,62764,,

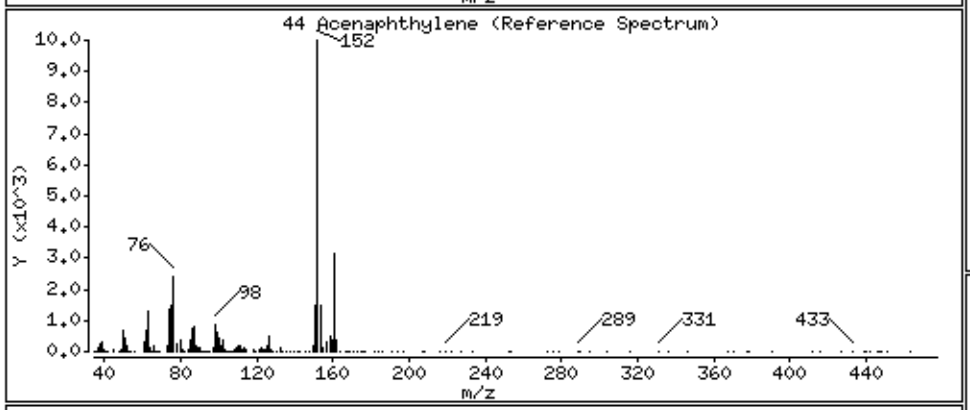
Volume Injected (uL): 2.0 Operator: SRC: LIMS

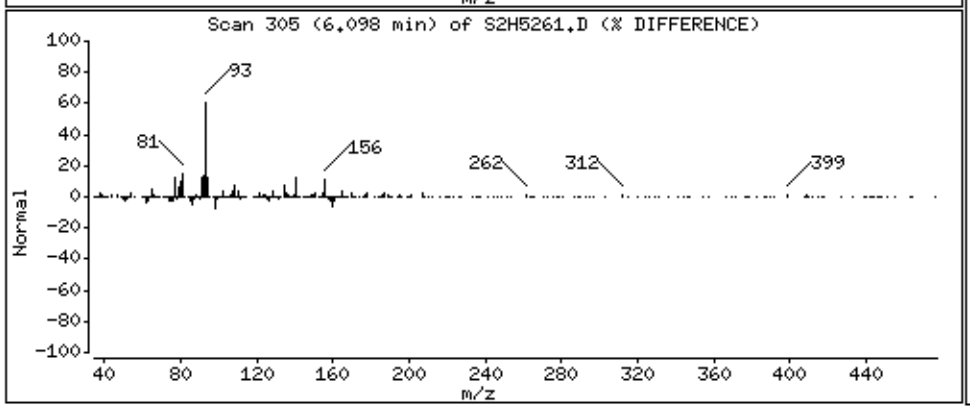
Column phase: RXI-5SILMS Column diameter: 0.25

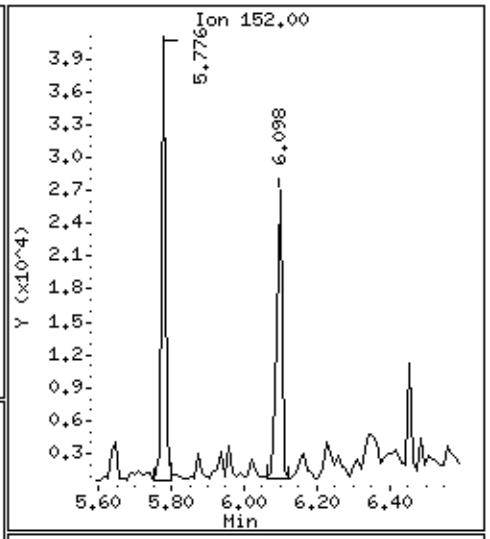
44 Acenaphthylene Concentration: 35 ug/Kg

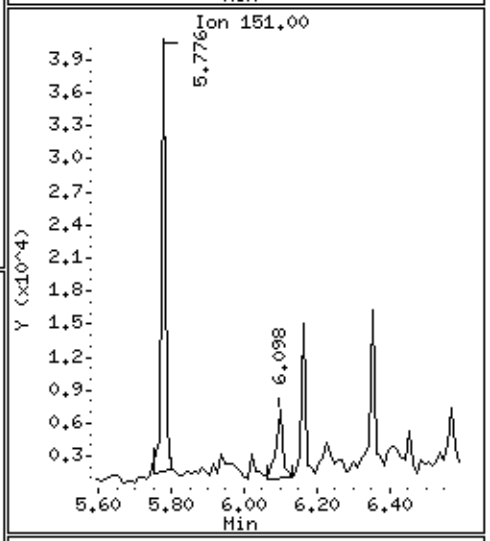


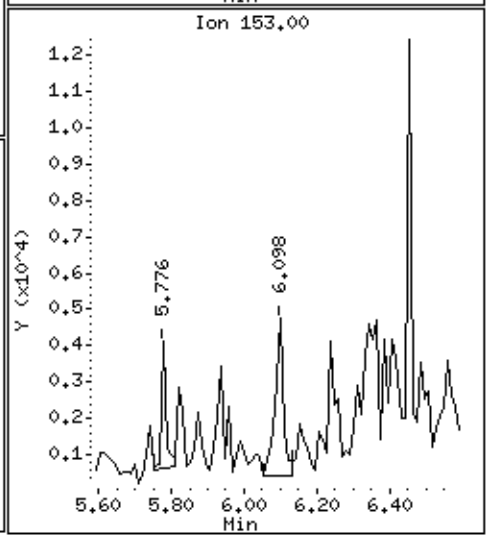












Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5261.D

Date : 10-NOV-2011 14:14

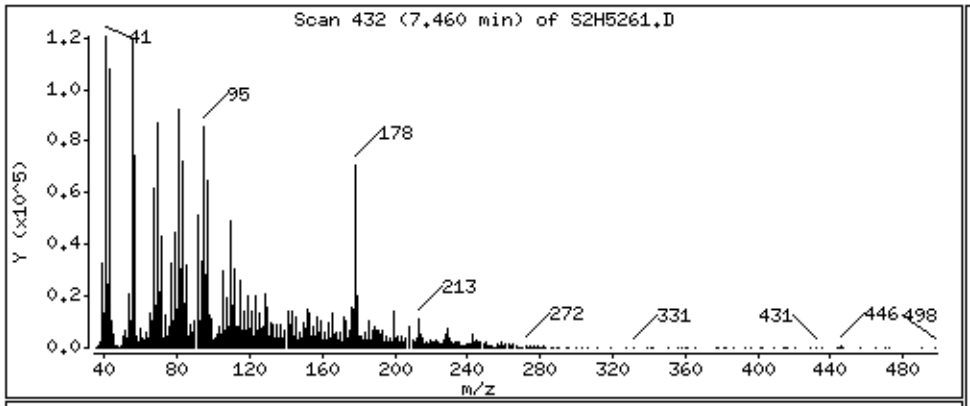
Client ID: H30R1 Instrument: S2.i

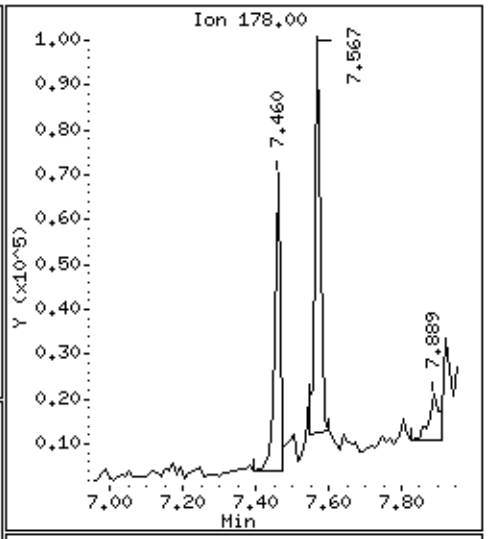
Sample Info: K2198-10A,,62764,,

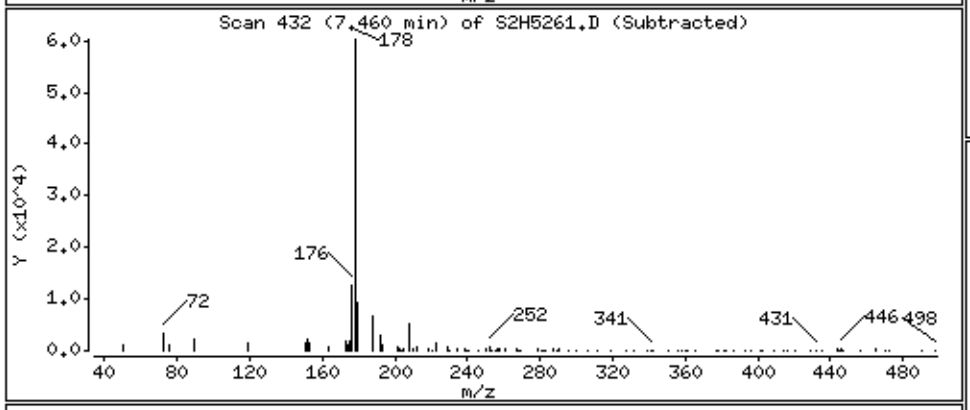
Volume Injected (uL): 2.0 Operator: SRC: LIMS

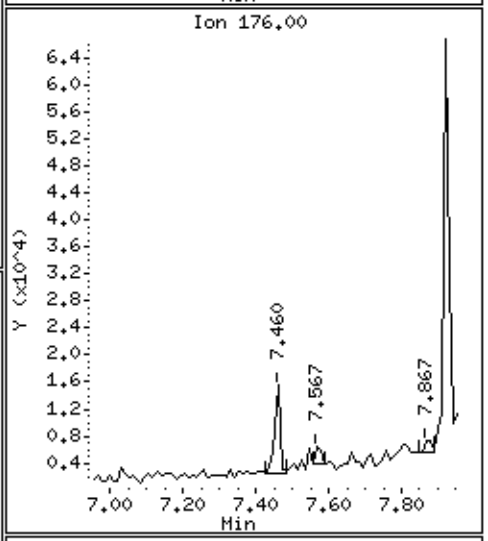
Column phase: RXI-5SILMS Column diameter: 0.25

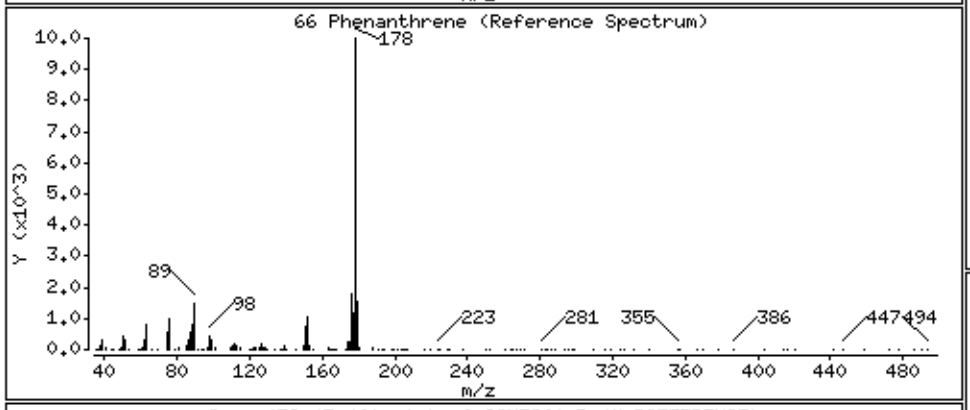
66 Phenanthrene Concentration: 110 ug/Kg

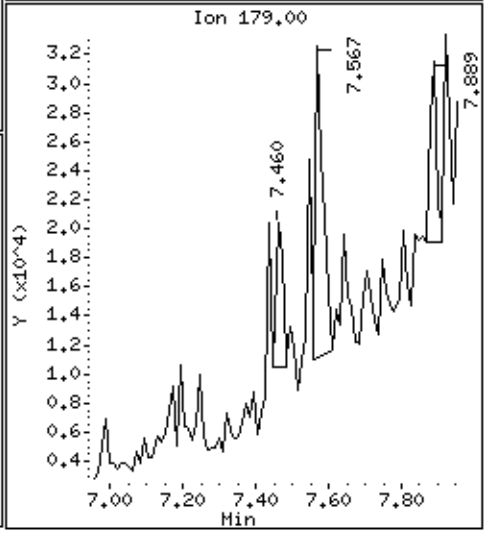


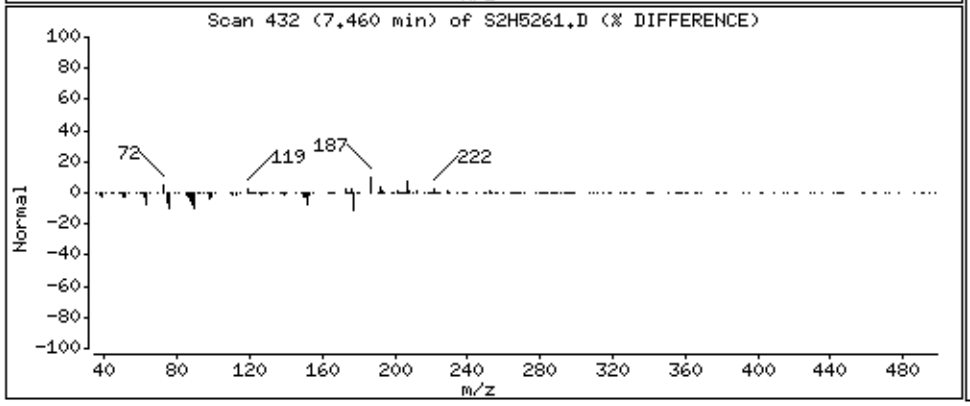












Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5261.D

Date : 10-NOV-2011 14:14

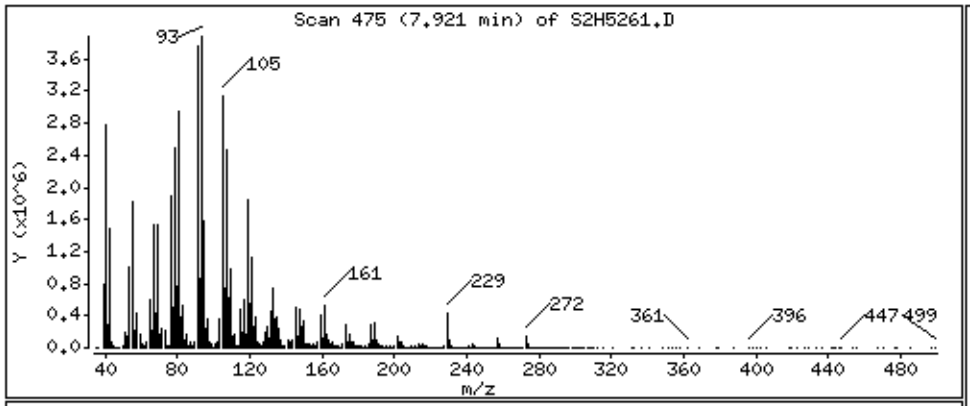
Client ID: H30R1 Instrument: S2.i

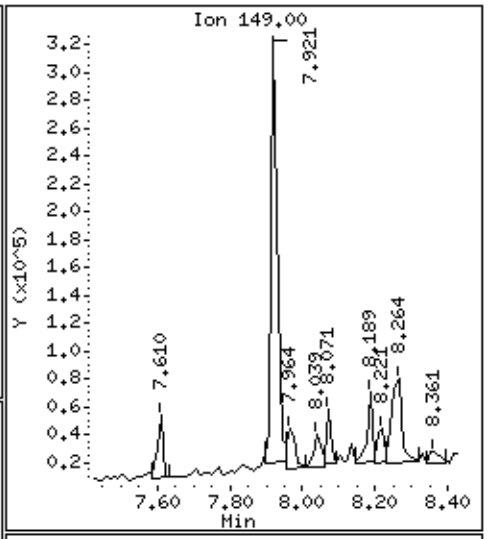
Sample Info: K2198-10A,,62764,,

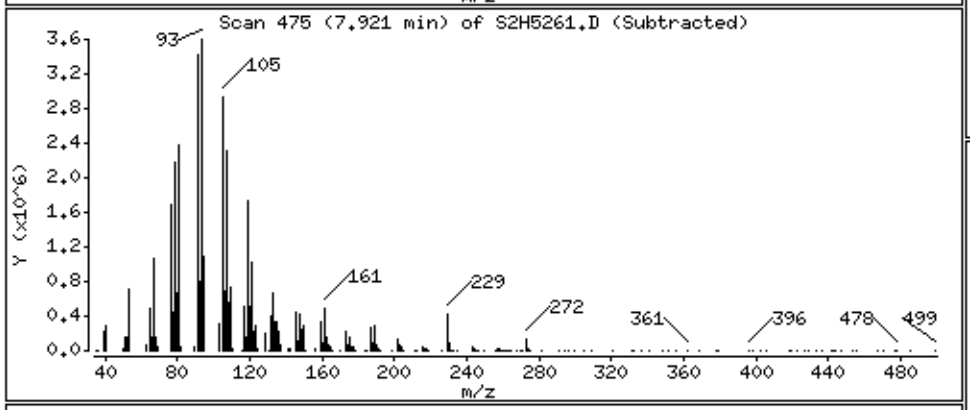
Volume Injected (uL): 2.0 Operator: SRC: LIMS

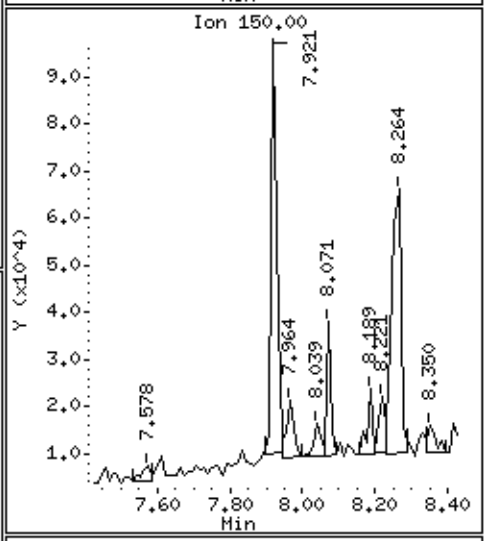
Column phase: RXI-5SILMS Column diameter: 0.25

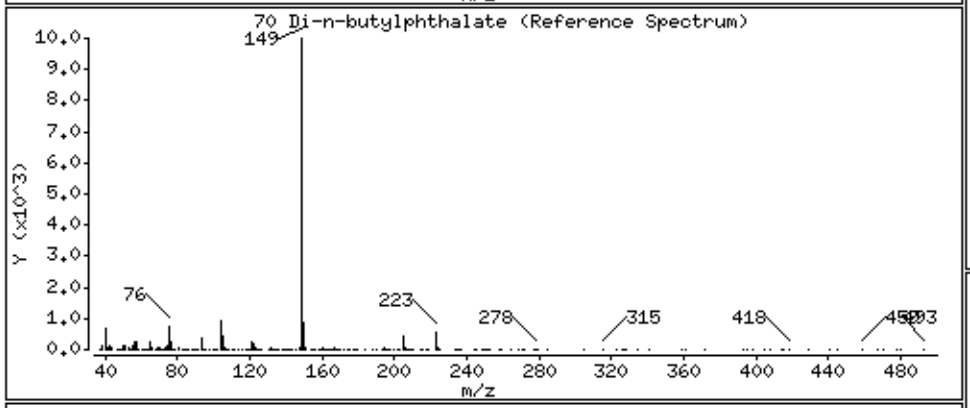
70 Di-n-butylphthalate Concentration: 640 ug/Kg

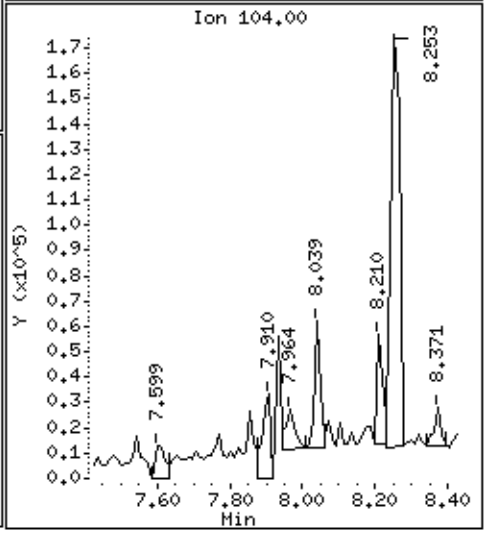


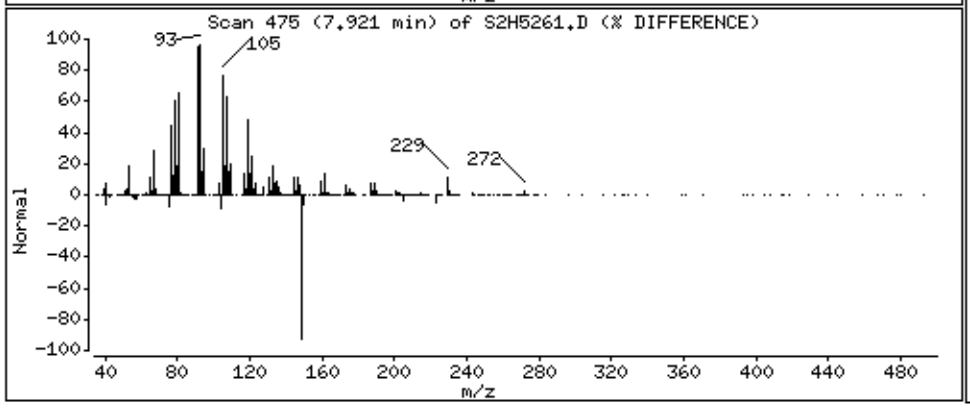












Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5261.D

Date : 10-NOV-2011 14:14

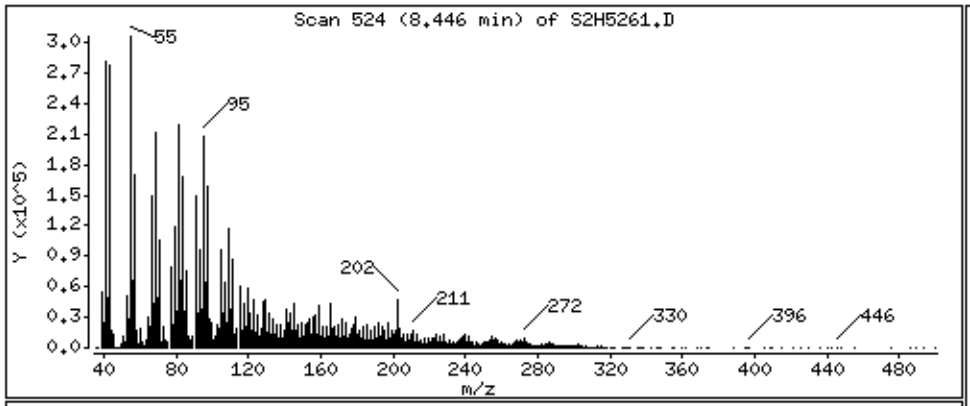
Client ID: H30R1 Instrument: S2.i

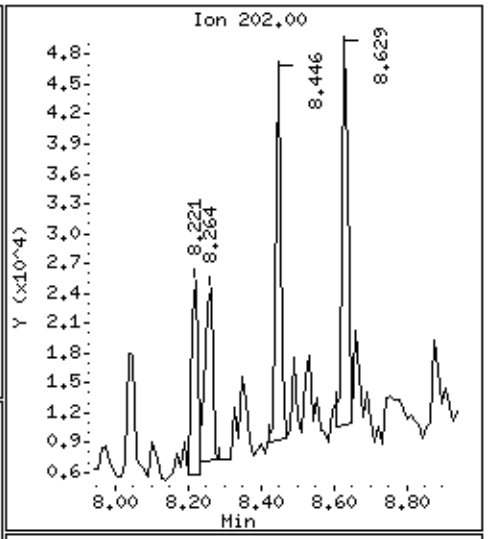
Sample Info: K2198-10A,,62764,,

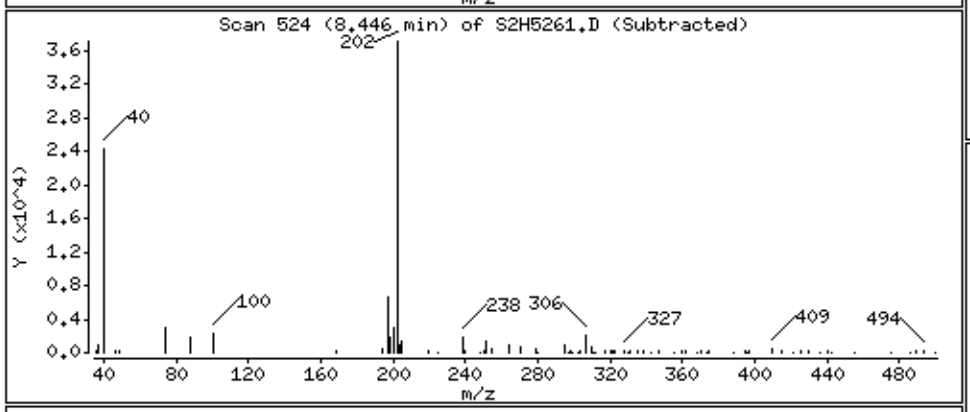
Volume Injected (uL): 2.0 Operator: SRC: LIMS

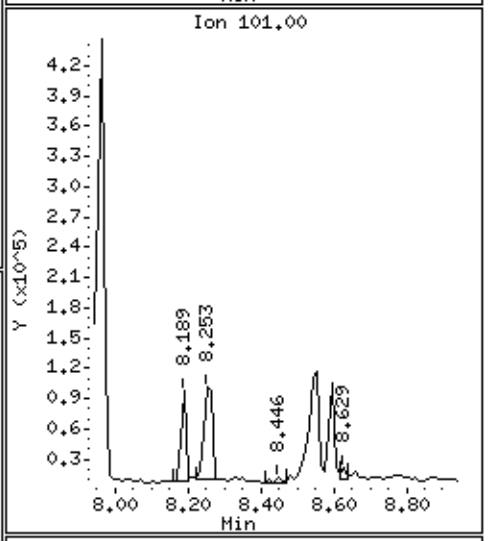
Column phase: RXI-5SILMS Column diameter: 0.25

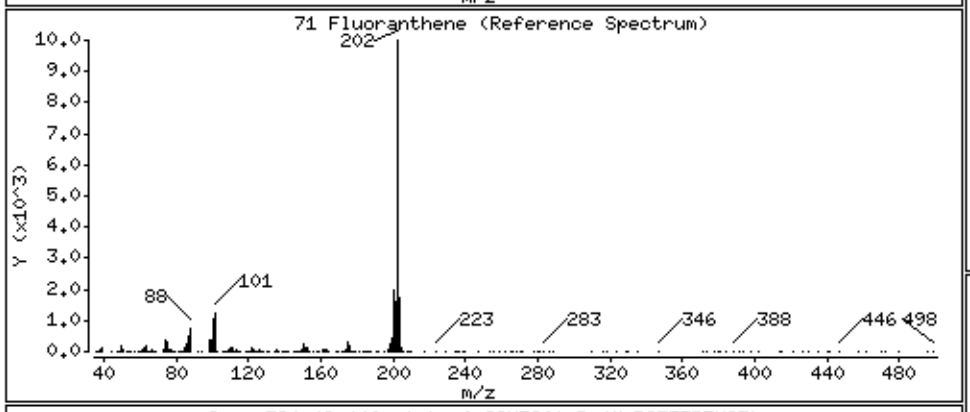
71 Fluoranthene Concentration: 54 ug/Kg

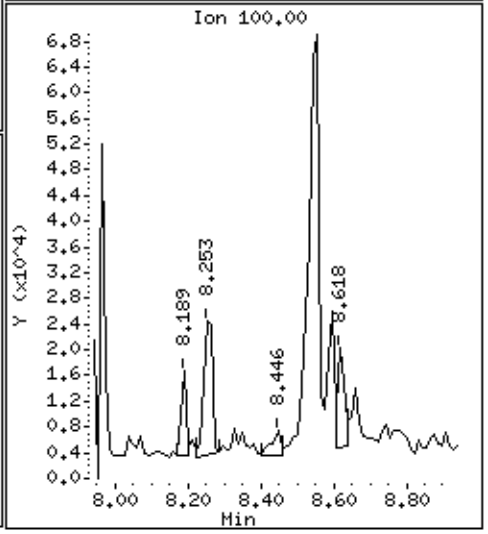


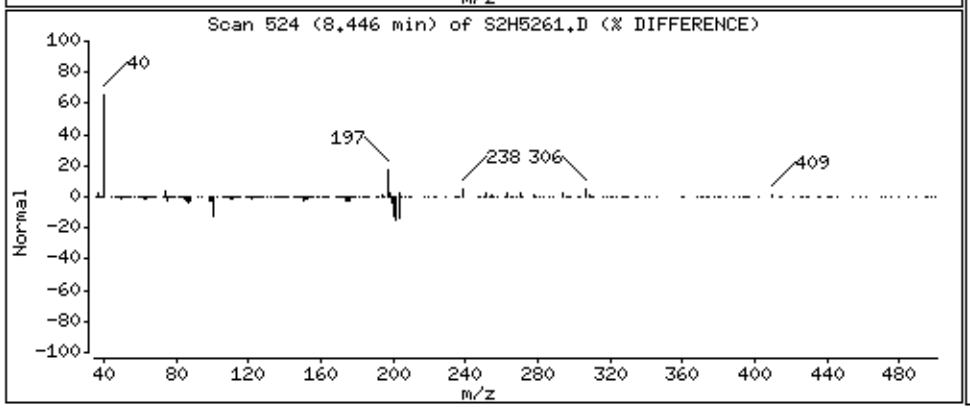












Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5261.D

Date : 10-NOV-2011 14:14

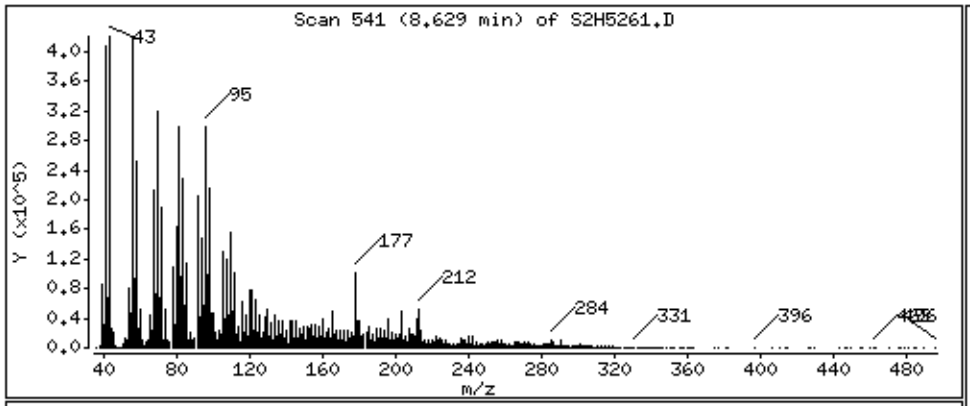
Client ID: H30R1 Instrument: S2.i

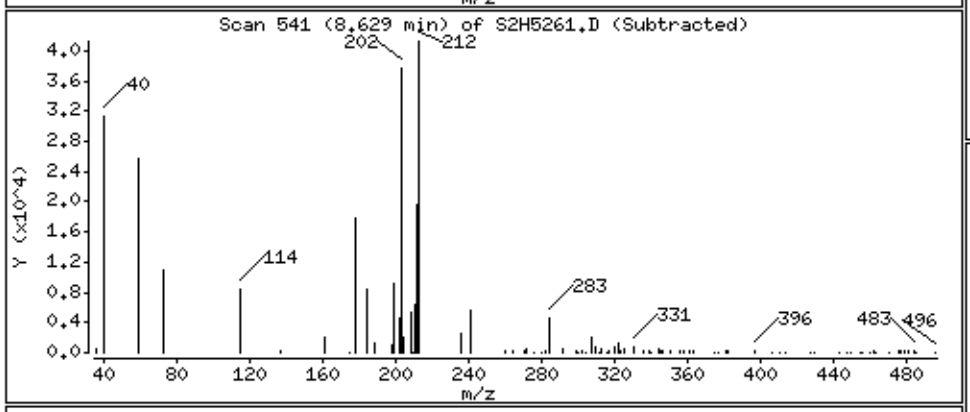
Sample Info: K2198-10A,,62764,,

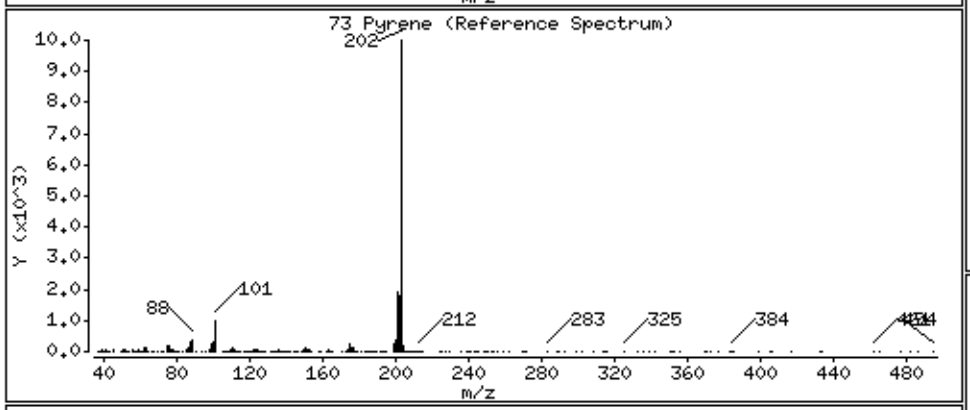
Volume Injected (uL): 2.0 Operator: SRC: LIMS

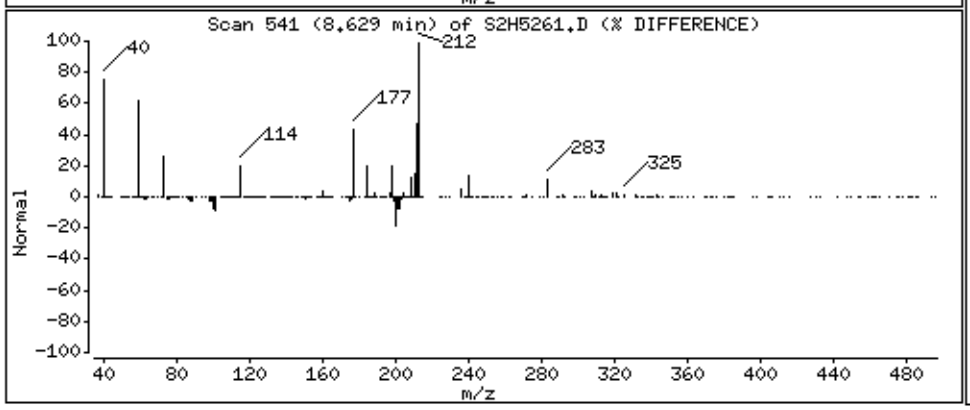
Column phase: RXI-5SILMS Column diameter: 0.25

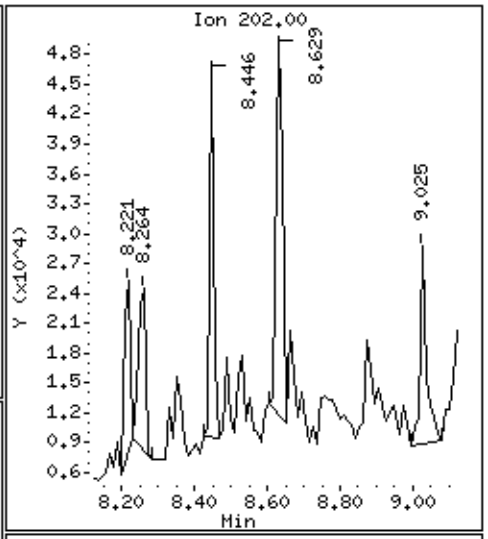
73 Pyrene Concentration: 76 ug/Kg

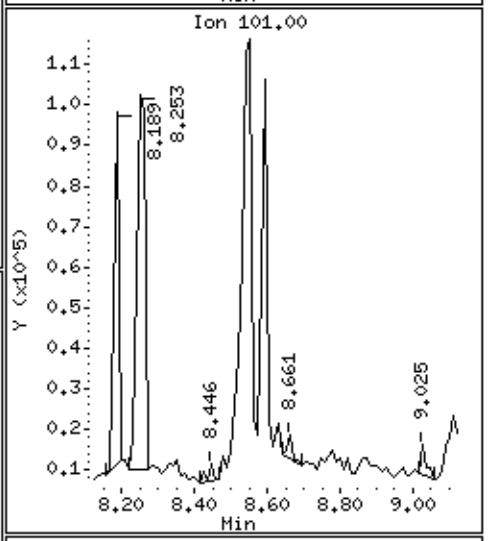


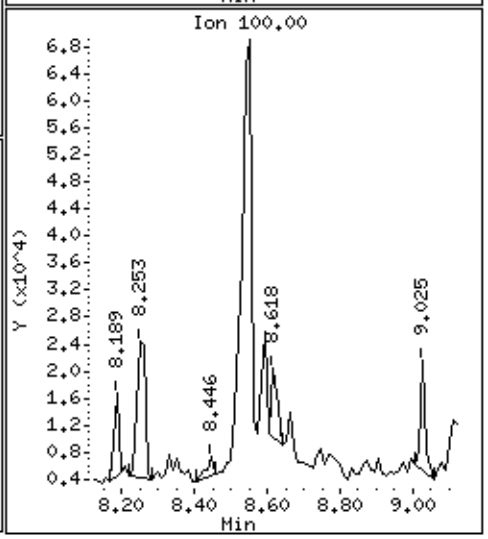












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Date : 10-NOV-2011 14:14

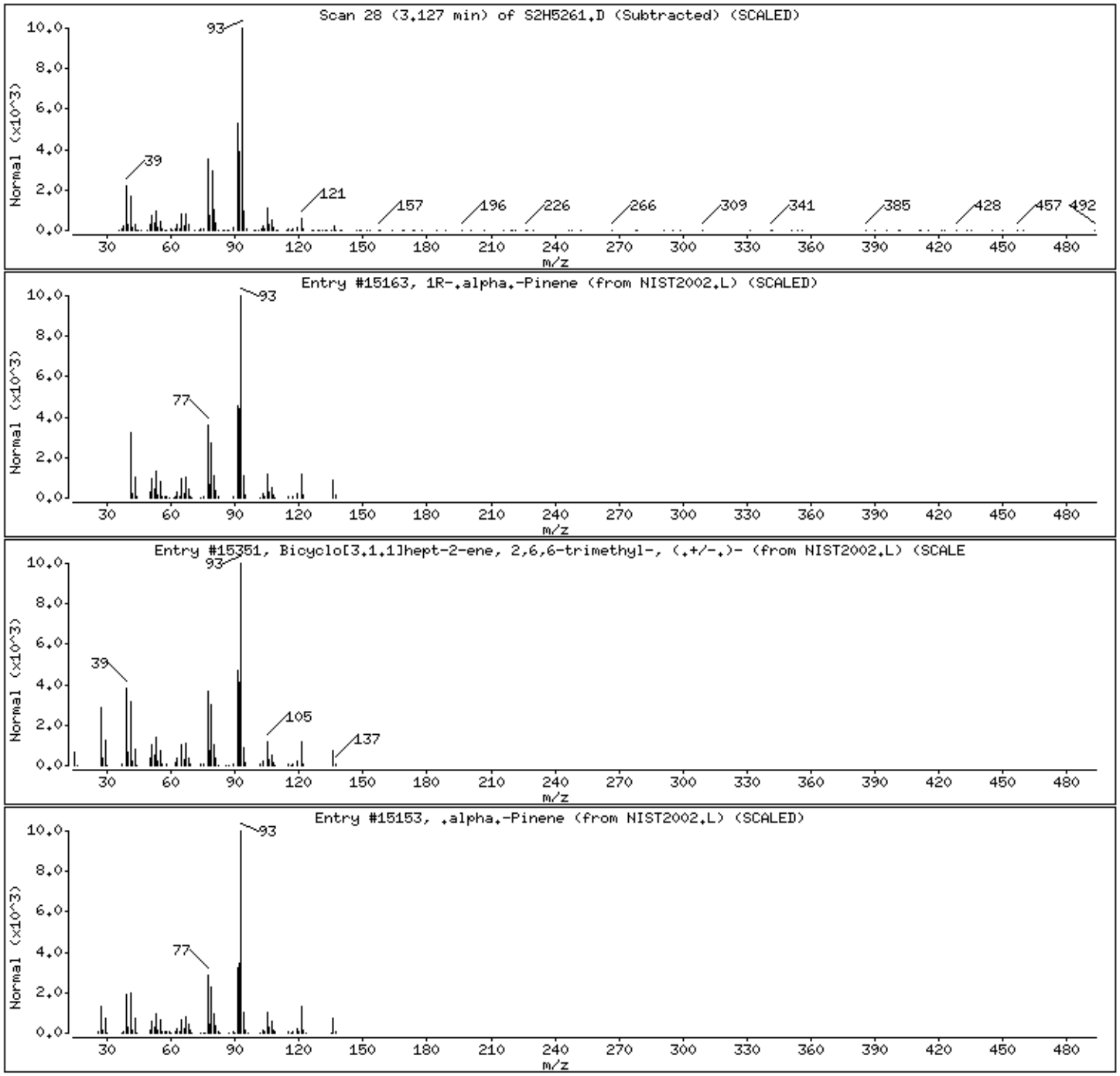
Client ID: H30R1 Instrument: S2.i

Sample Info: K2198-10A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1R-.alpha.-Pinene	7785-70-8	NIST2002.L	15163	95	C10H16	136
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethy	2437-95-8	NIST2002.L	15351	91	C10H16	136
.alpha.-Pinene	80-56-8	NIST2002.L	15153	90	C10H16	136



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Date : 10-NOV-2011 14:14

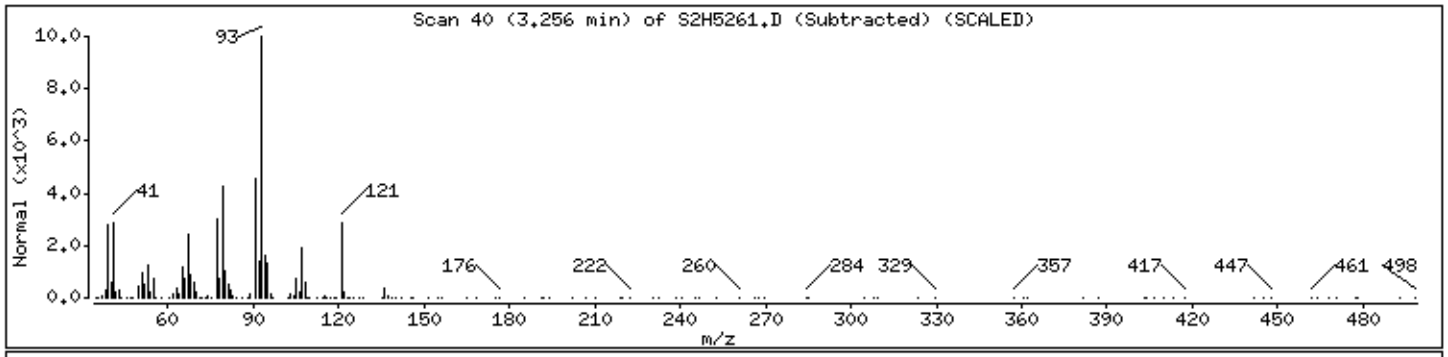
Client ID: H30R1 Instrument: S2.i

Sample Info: K2198-10A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 14:14

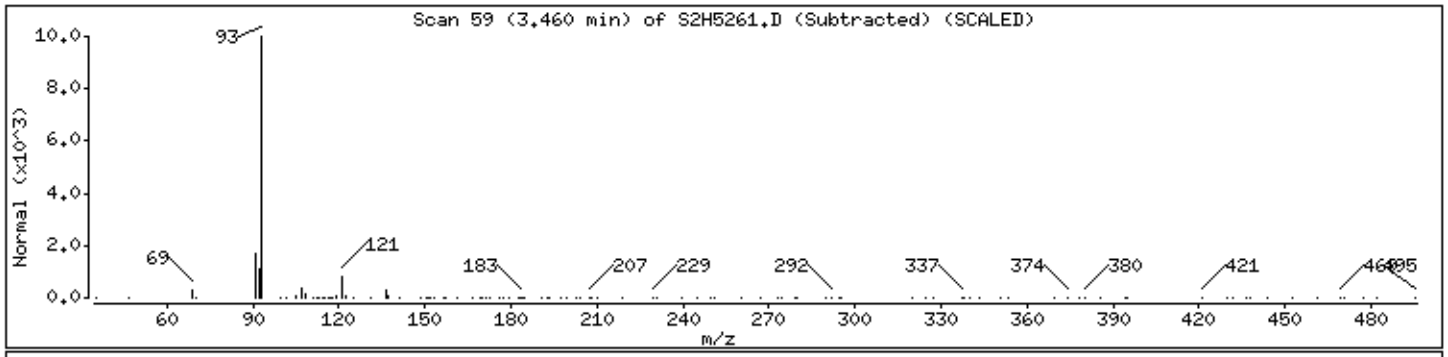
Client ID: H30R1 Instrument: S2.i

Sample Info: K2198-10A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 14:14

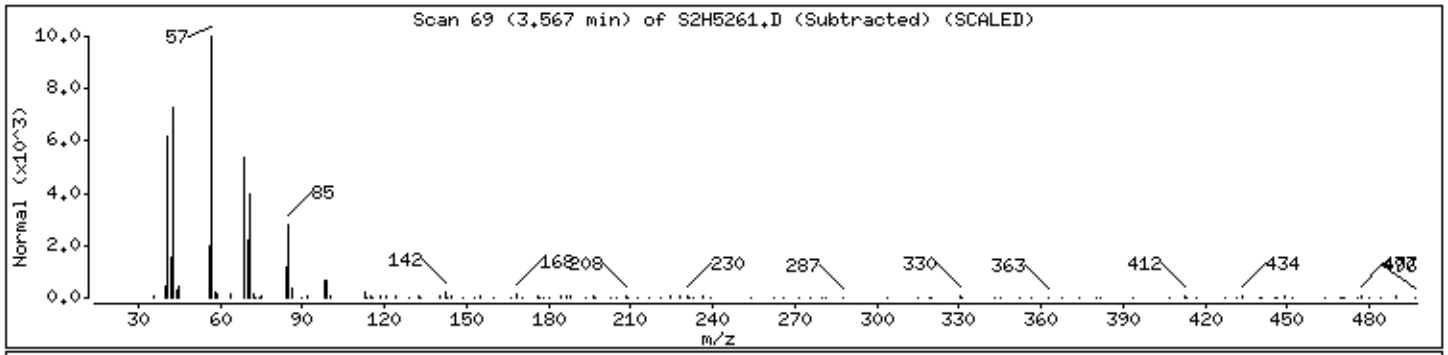
Client ID: H30R1 Instrument: S2.i

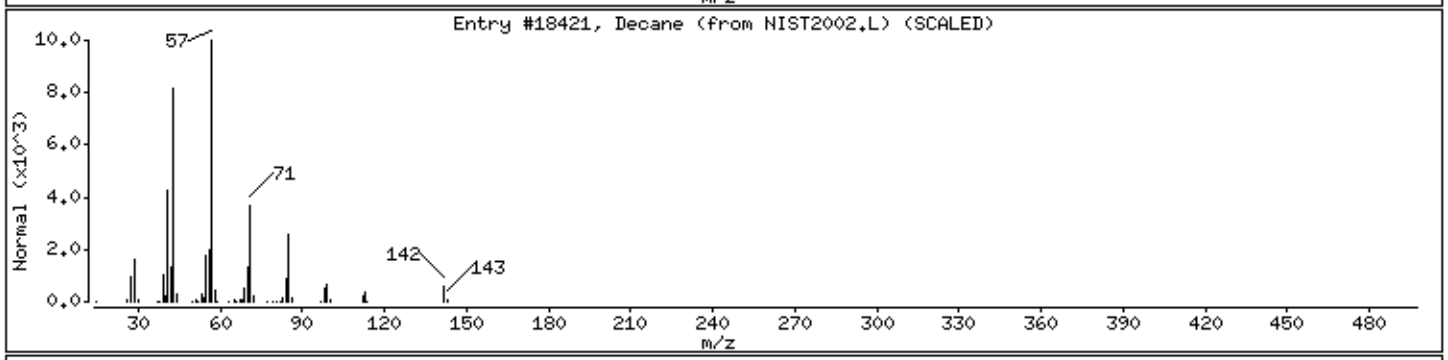
Sample Info: K2198-10A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Straight-chain Alkane						
Decane	124-18-5	NIST2002.L	18421	87	C10H22	142





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Date : 10-NOV-2011 14:14

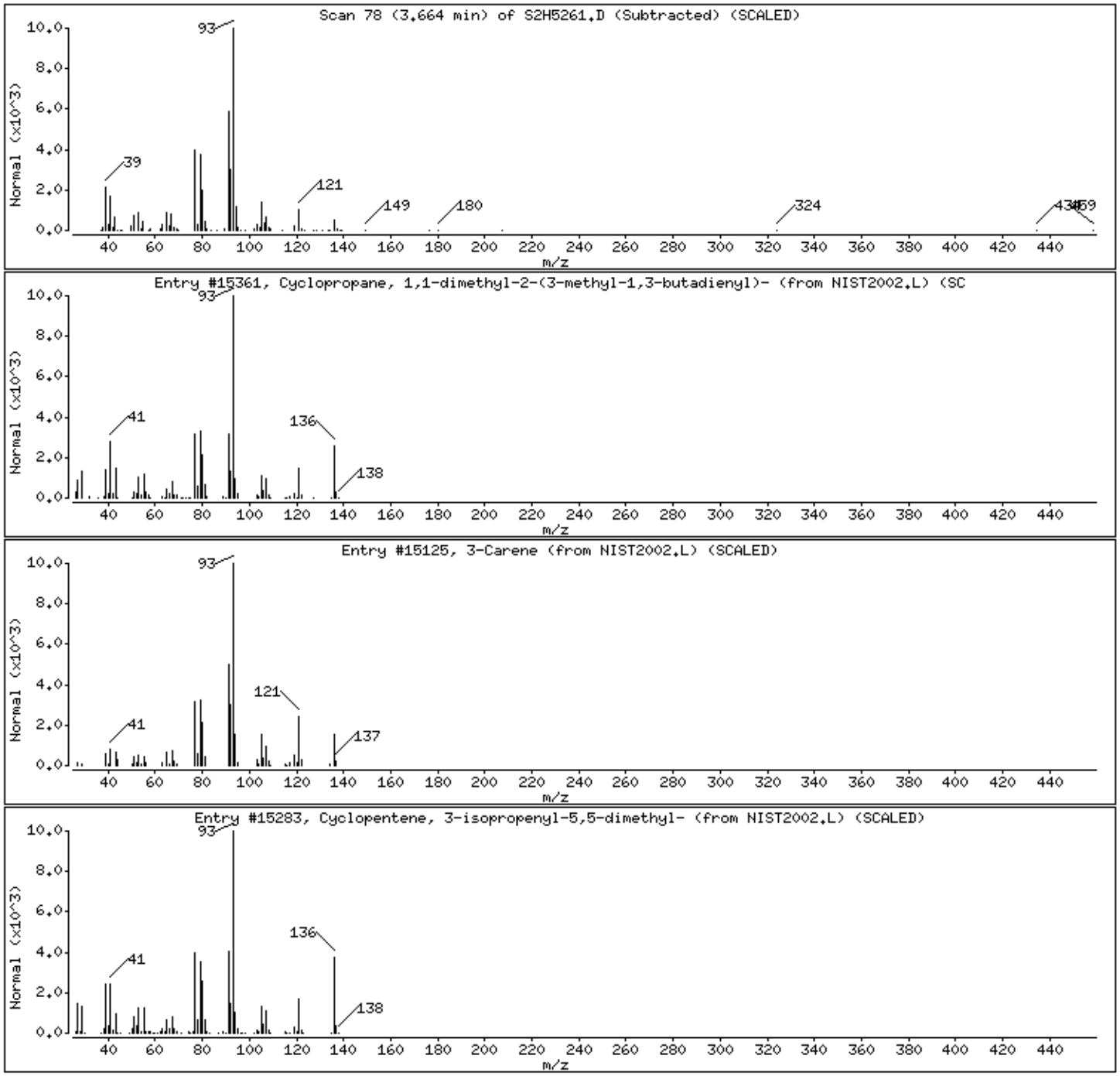
Client ID: H30R1 Instrument: S2.i

Sample Info: K2198-10A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclopropane, 1,1-dimethyl-2-(3-methyl-1	68998-21-0	NIST2002.L	15361	94	C10H16	136
3-Carene	13466-78-9	NIST2002.L	15125	94	C10H16	136
Cyclopentene, 3-isopropenyl-5,5-dimethyl	1000162-25-4	NIST2002.L	15283	91	C10H16	136



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Date : 10-NOV-2011 14:14

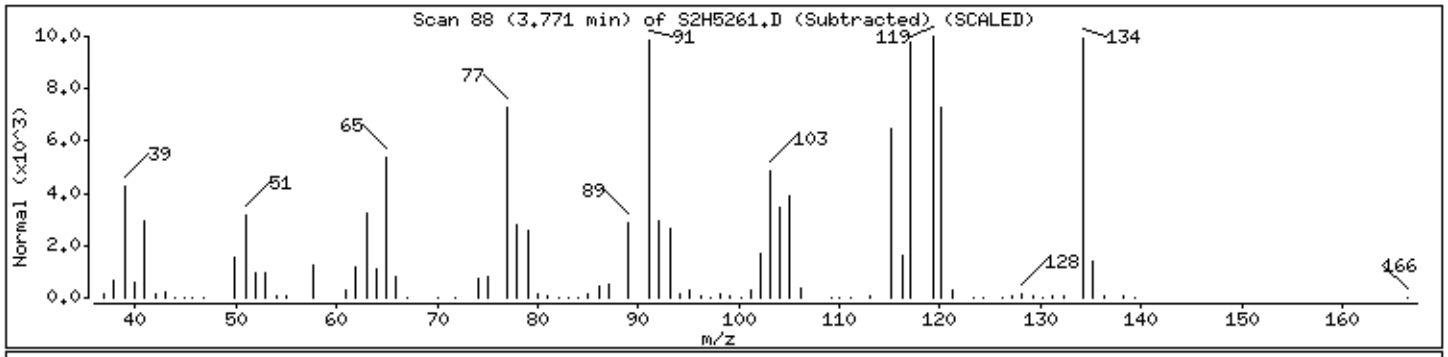
Client ID: H30R1 Instrument: S2.i

Sample Info: K2198-10A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 14:14

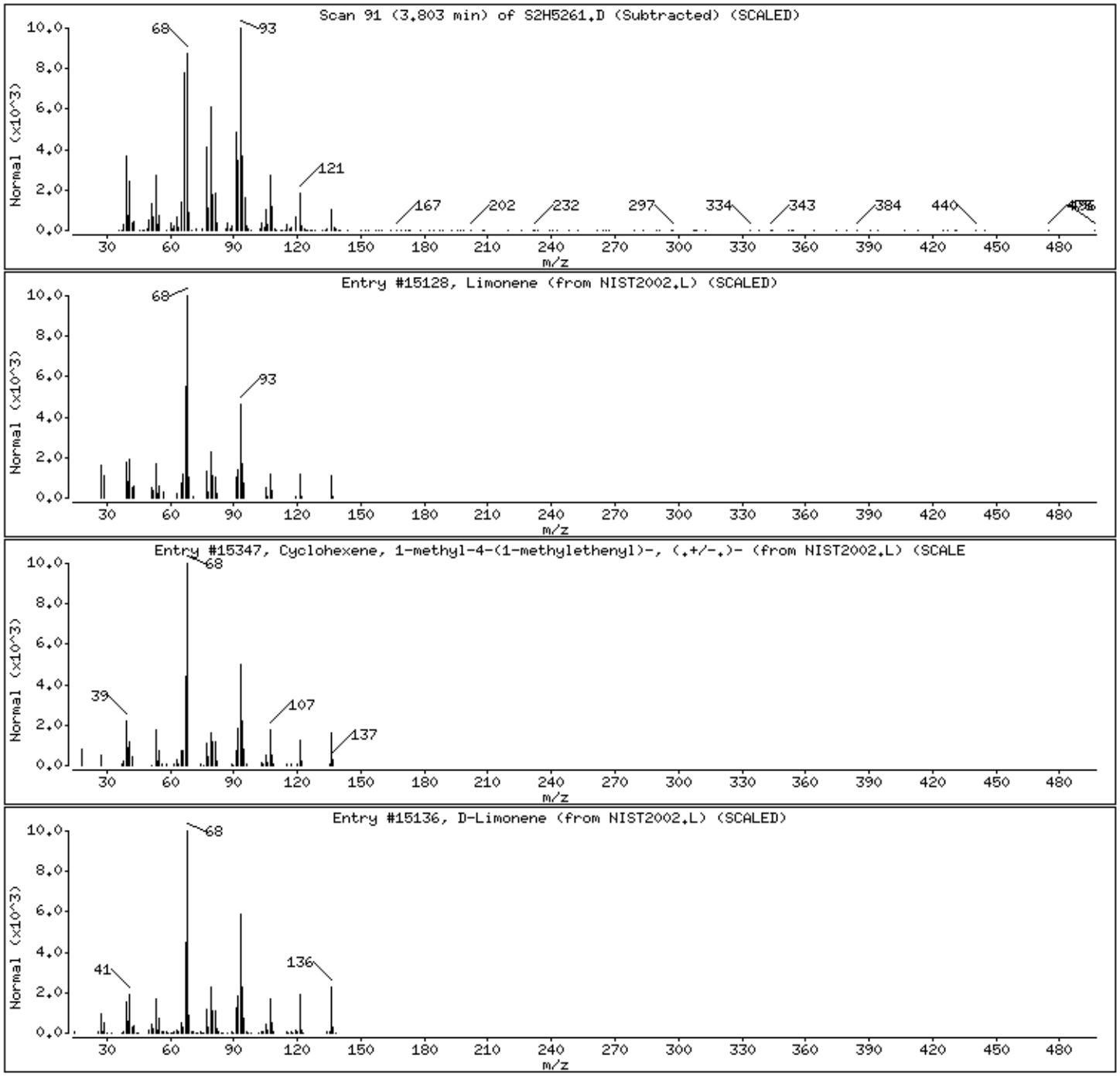
Client ID: H30R1 Instrument: S2.i

Sample Info: K2198-10A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Limonene	138-86-3	NIST2002.L	15128	95	C10H16	136
Cyclohexene, 1-methyl-4-(1-methylethenyl	7705-14-8	NIST2002.L	15347	94	C10H16	136
D-Limonene	5989-27-5	NIST2002.L	15136	92	C10H16	136



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5261.D

Date : 10-NOV-2011 14:14

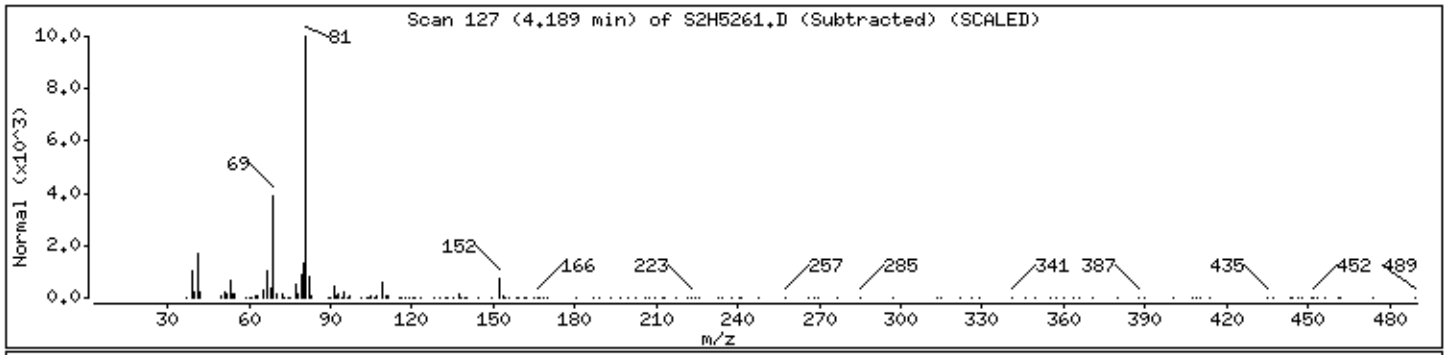
Client ID: H30R1 Instrument: S2.i

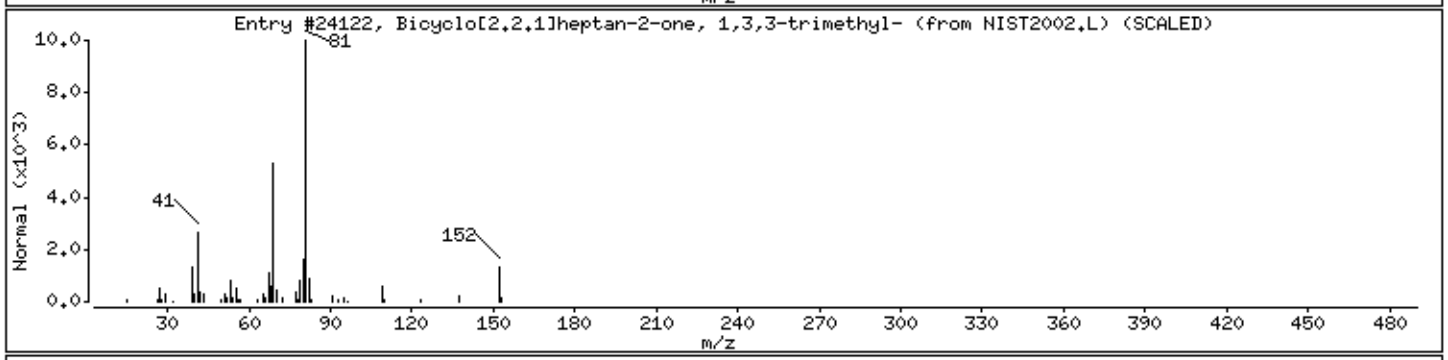
Sample Info: K2198-10A,,62764,,

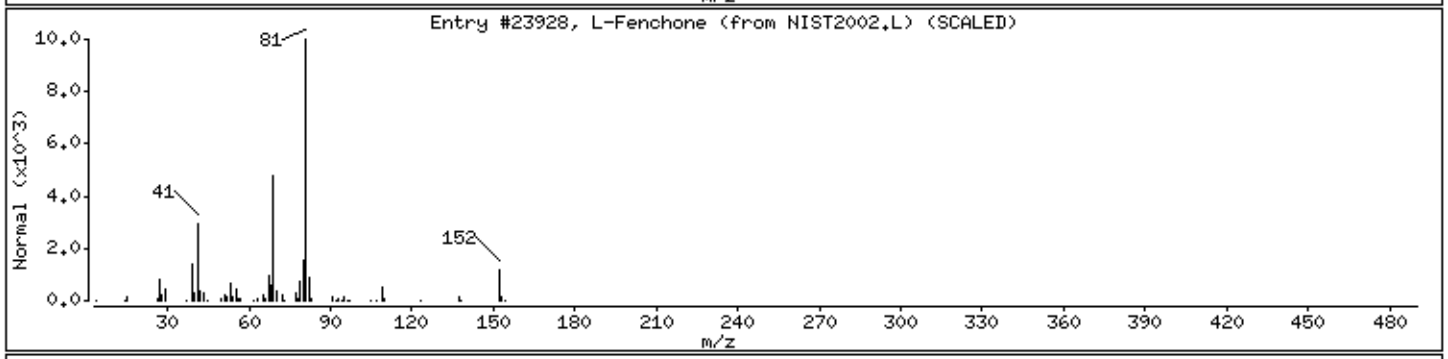
Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[2.2.1]heptan-2-one, 1,3,3-trimet	1195-79-5	NIST2002.L	24122	91	C10H16O	152
L-Fenchone	126-21-6	NIST2002.L	23928	91	C10H16O	152







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Date : 10-NOV-2011 14:14

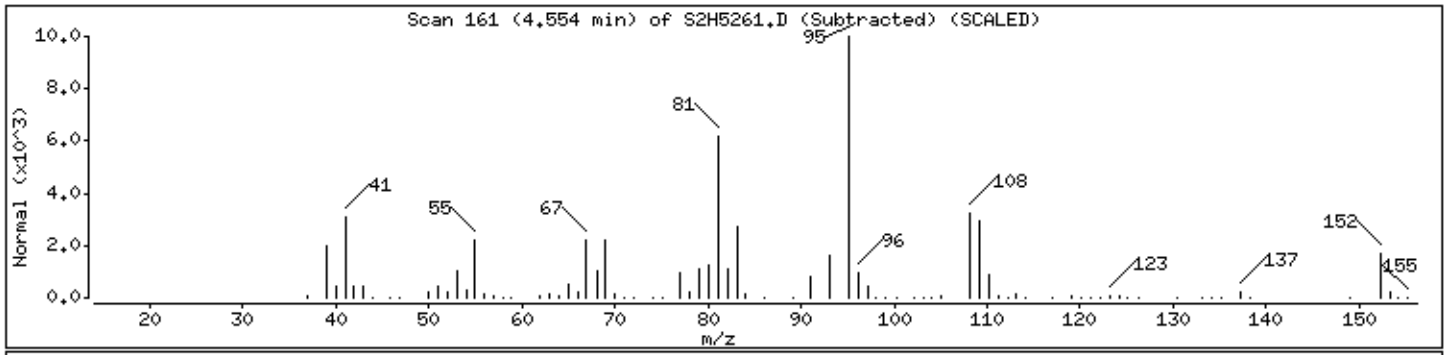
Client ID: H30R1 Instrument: S2.i

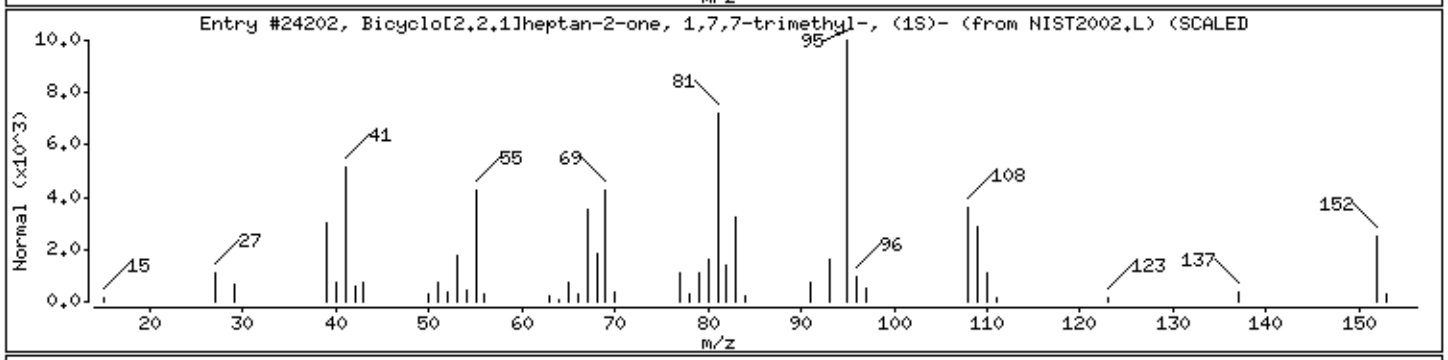
Sample Info: K2198-10A,,62764,,

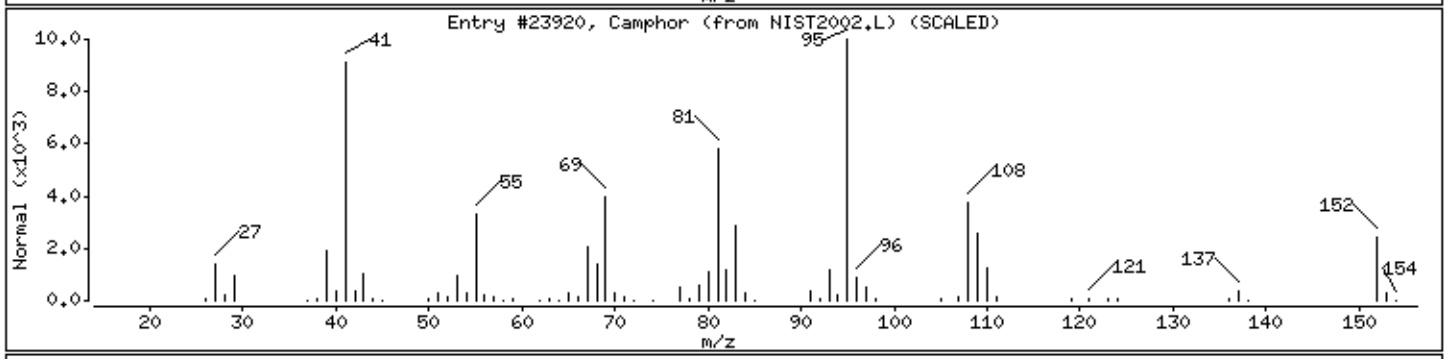
Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet	464-48-2	NIST2002.L	24202	95	C10H16O	152
Camphor	76-22-2	NIST2002.L	23920	90	C10H16O	152







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Date : 10-NOV-2011 14:14

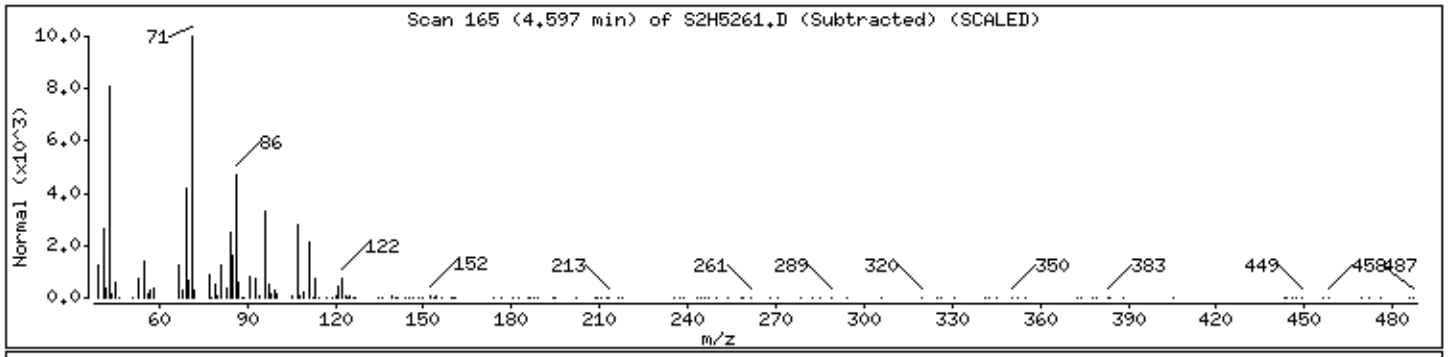
Client ID: H30R1 Instrument: S2.i

Sample Info: K2198-10A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 14:14

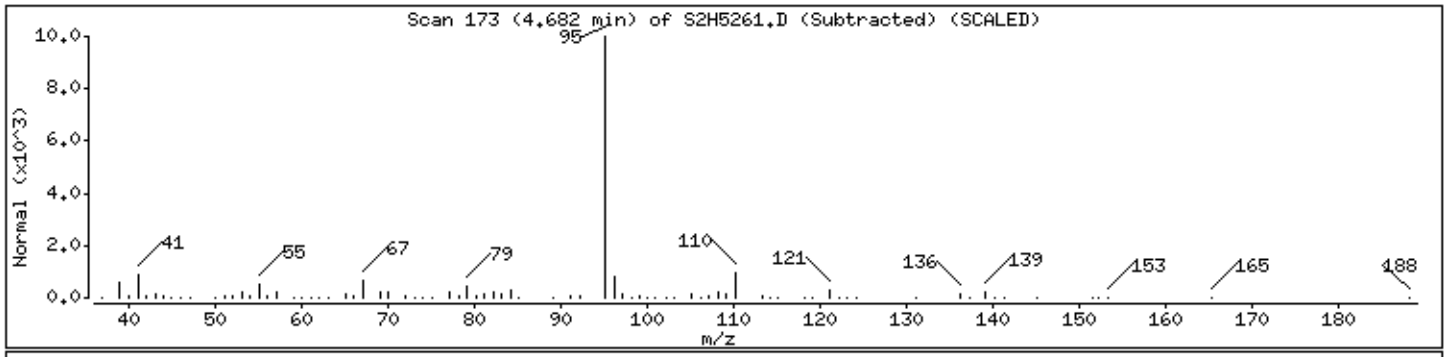
Client ID: H30R1 Instrument: S2.i

Sample Info: K2198-10A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 14:14

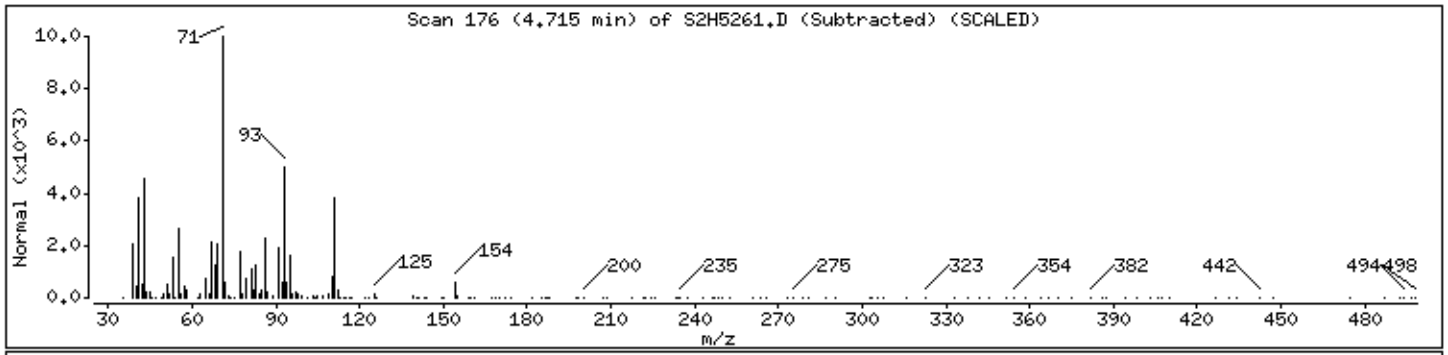
Client ID: H30R1 Instrument: S2.i

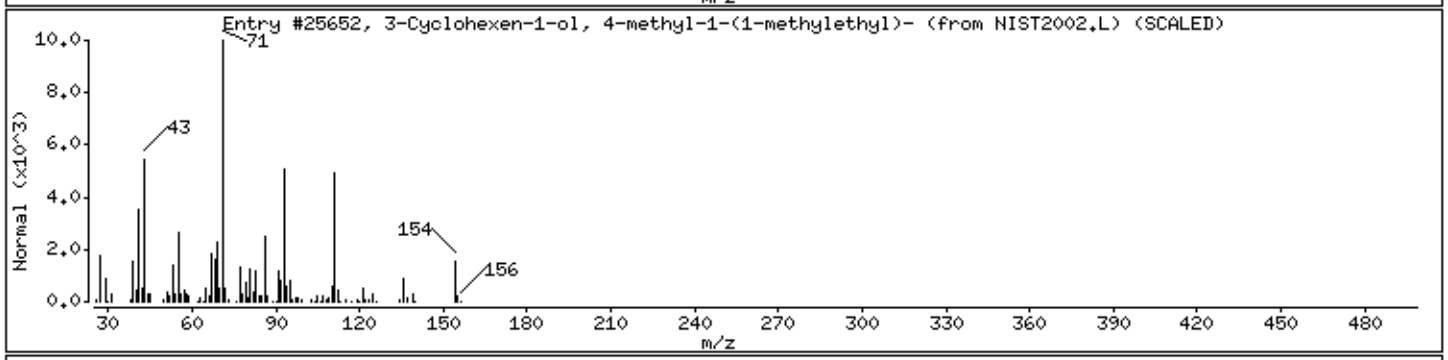
Sample Info: K2198-10A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
3-Cyclohexen-1-ol, 4-methyl-1-(1-methyle	562-74-3	NIST2002.L	25652	87	C10H18O	154





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Date : 10-NOV-2011 14:14

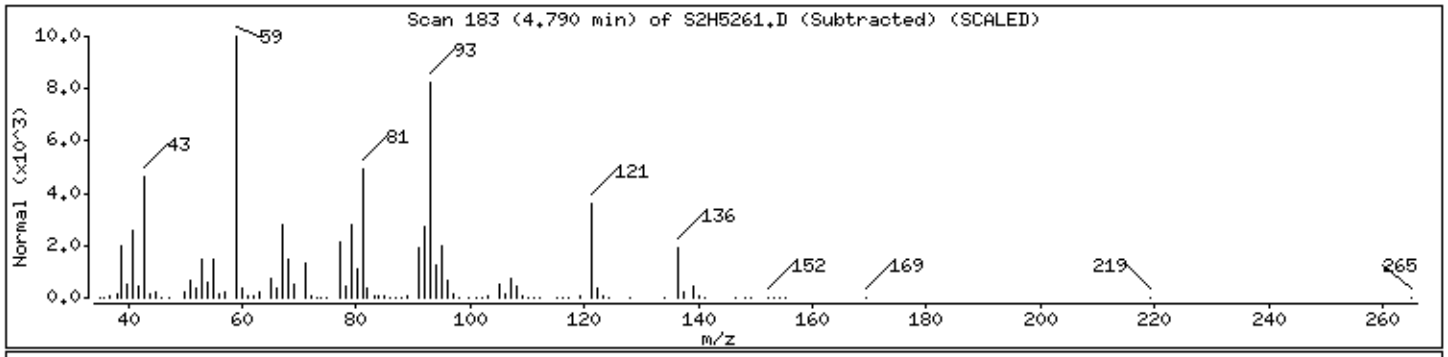
Client ID: H30R1 Instrument: S2.i

Sample Info: K2198-10A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 14:14

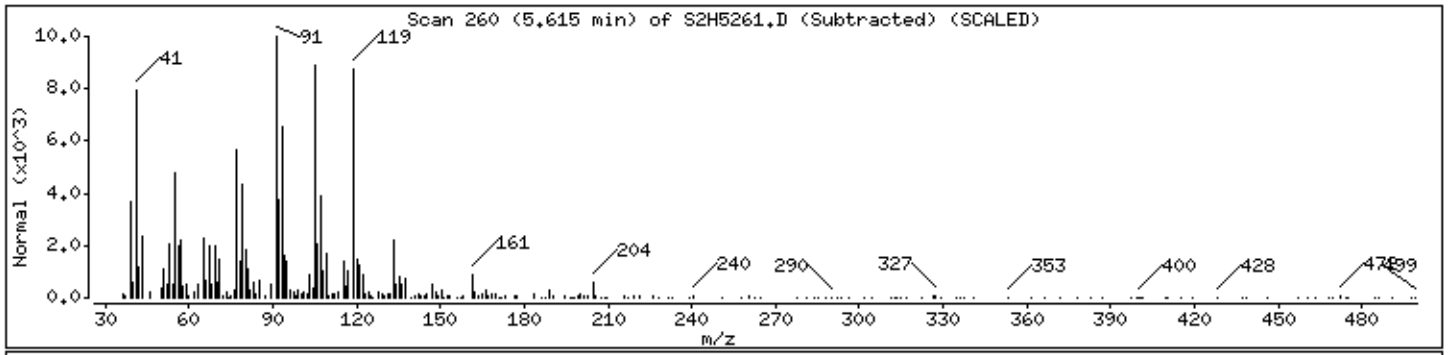
Client ID: H30R1 Instrument: S2.i

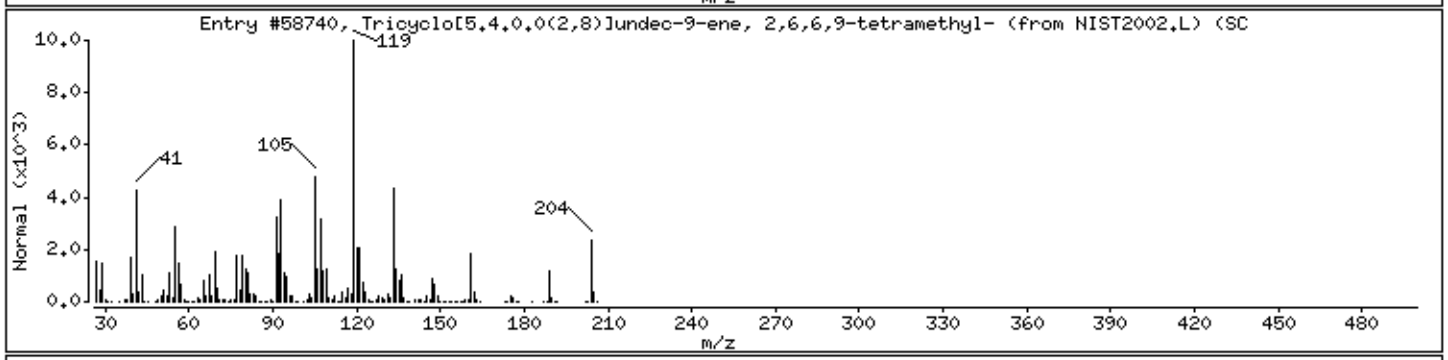
Sample Info: K2198-10A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6	5989-08-2	NIST2002.L	58740	91	C15H24	204





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Date : 10-NOV-2011 14:14

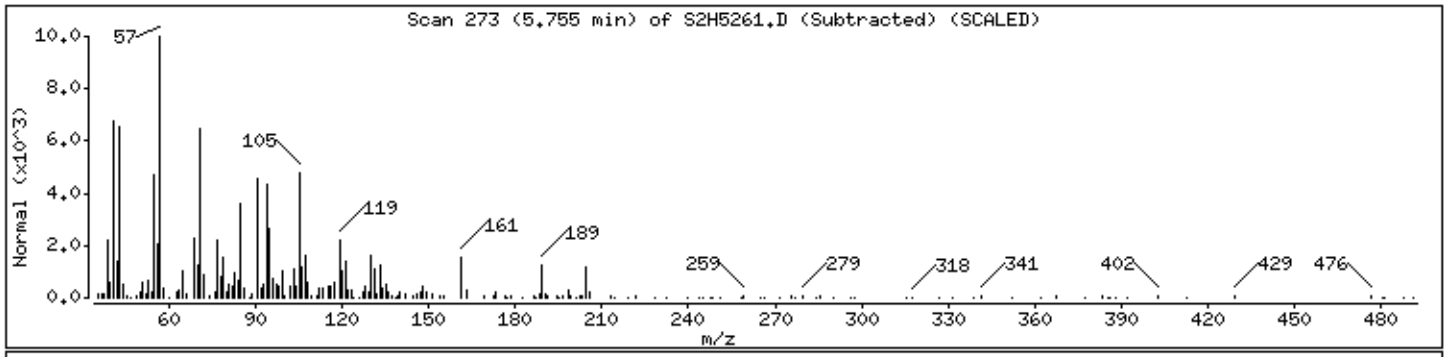
Client ID: H30R1 Instrument: S2.i

Sample Info: K2198-10A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 14:14

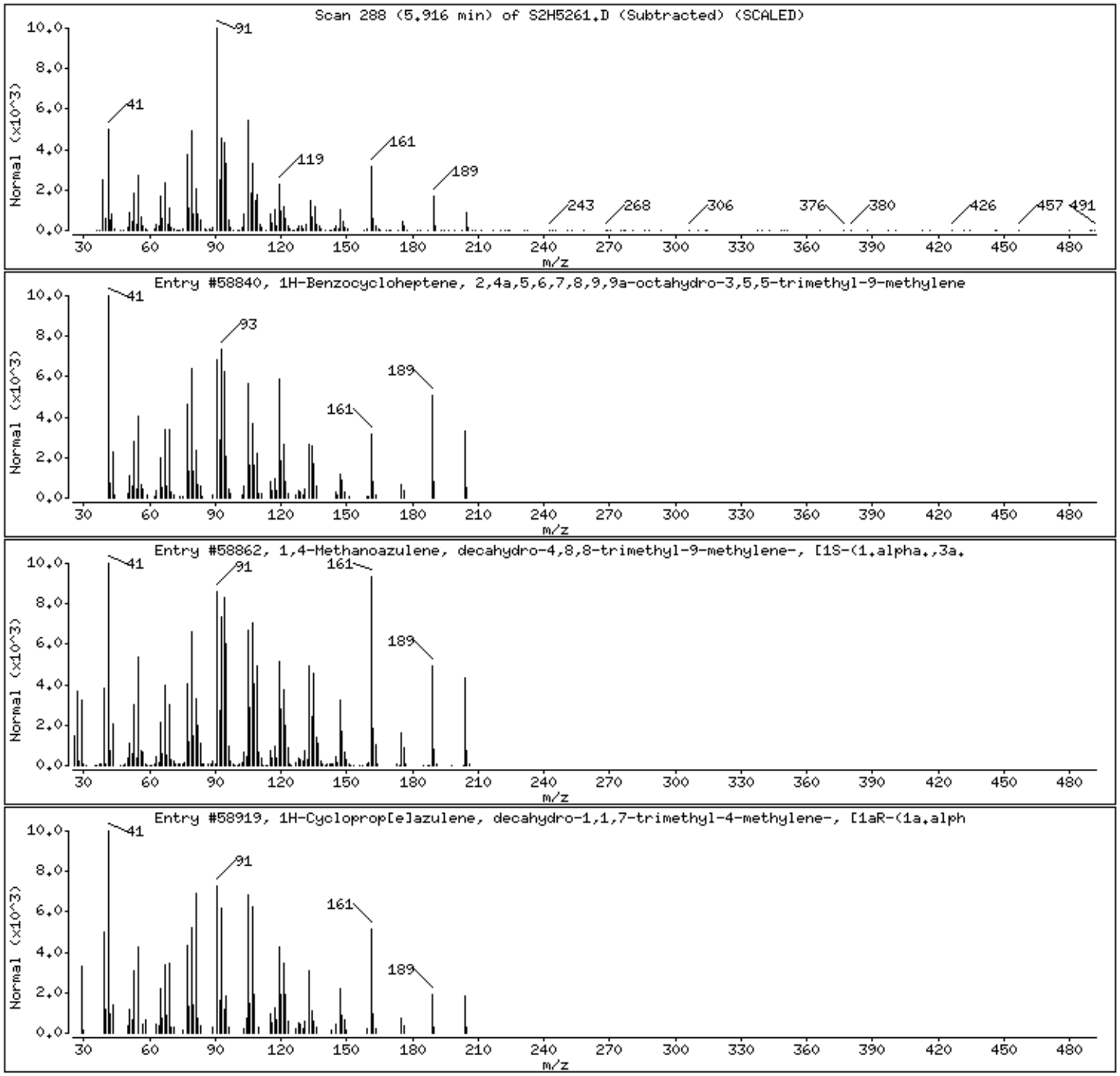
Client ID: H30R1 Instrument: S2.i

Sample Info: K2198-10A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1H-Benzocycloheptene, 2,4a,5,6,7,8,9,9a-	3853-83-6	NIST2002.L	58840	90	C15H24	204
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST2002.L	58862	86	C15H24	204
1H-Cycloprop[e]azulene, decahydro-1,1,7-	25246-27-9	NIST2002.L	58919	86	C15H24	204



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Date : 10-NOV-2011 14:14

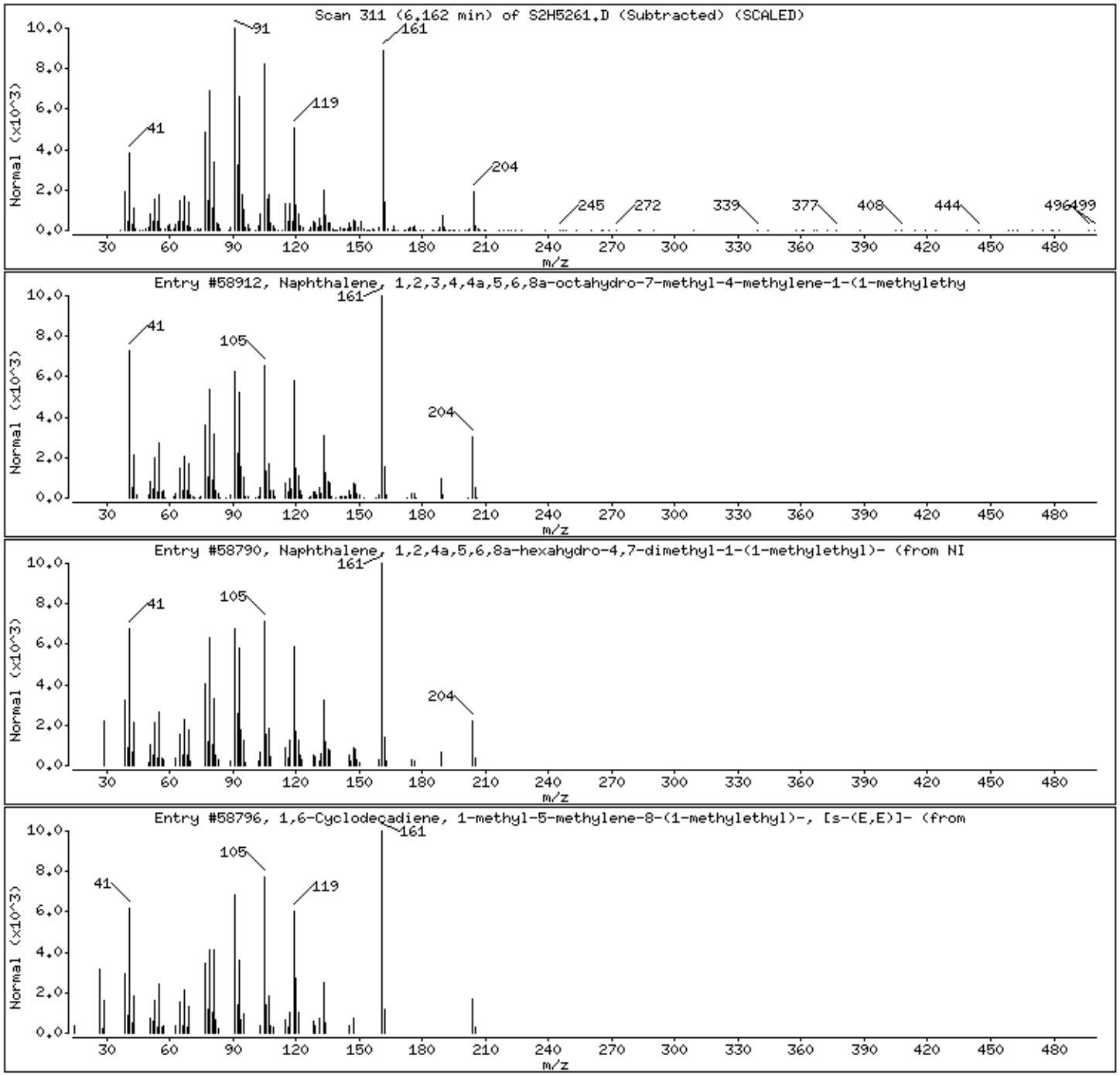
Client ID: H30R1 Instrument: S2.i

Sample Info: K2198-10A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro	30021-74-0	NIST2002.L	58912	95	C15H24	204
Naphthalene, 1,2,4a,5,6,8a-hexahydro-4,7	483-75-0	NIST2002.L	58790	95	C15H24	204
1,6-Cyclodecadiene, 1-methyl-5-methylene	23986-74-5	NIST2002.L	58796	93	C15H24	204



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Date : 10-NOV-2011 14:14

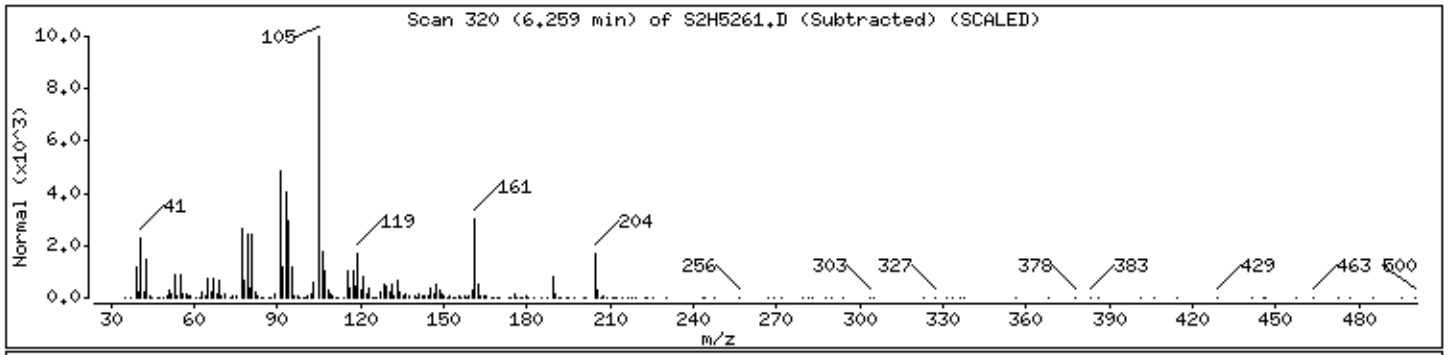
Client ID: H30R1 Instrument: S2.i

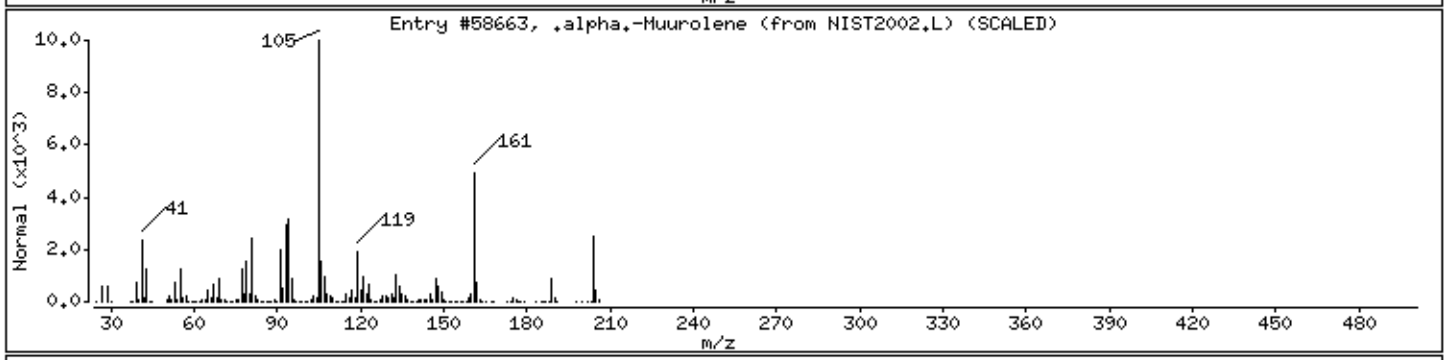
Sample Info: K2198-10A,,62764,,

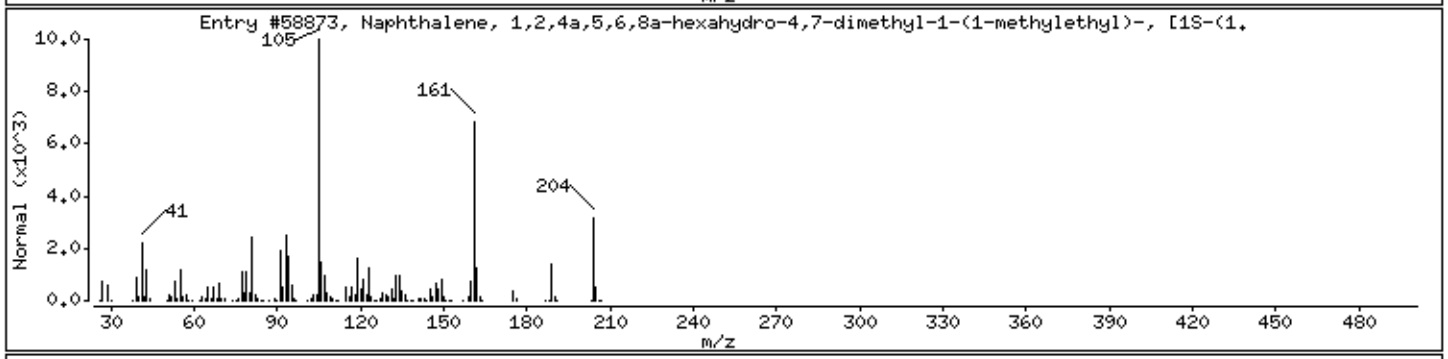
Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.alpha.-Muurolene	10208-80-7	NIST2002.L	58663	93	C15H24	204
Naphthalene, 1,2,4a,5,6,8a-hexahydro-4,7	24406-05-1	NIST2002.L	58873	91	C15H24	204







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Date : 10-NOV-2011 14:14

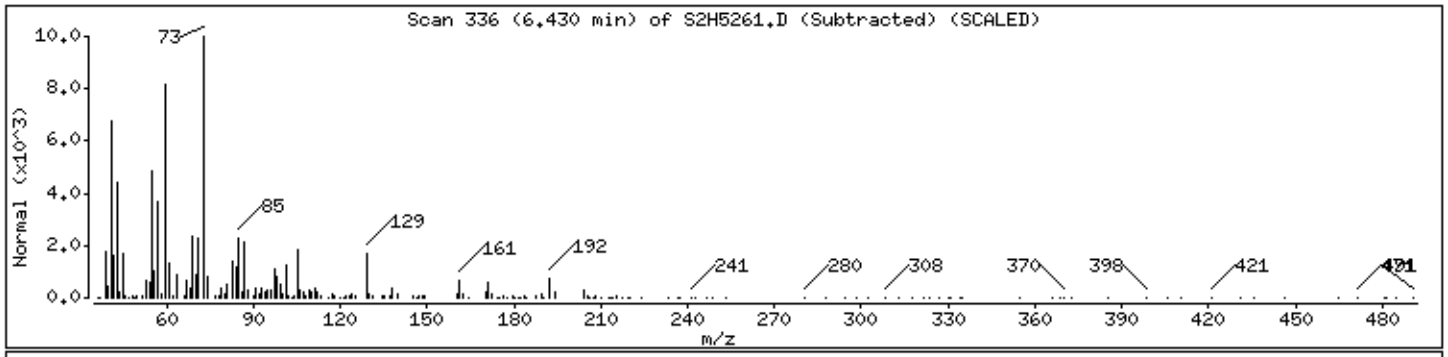
Client ID: H30R1 Instrument: S2.i

Sample Info: K2198-10A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5261.D

Date : 10-NOV-2011 14:14

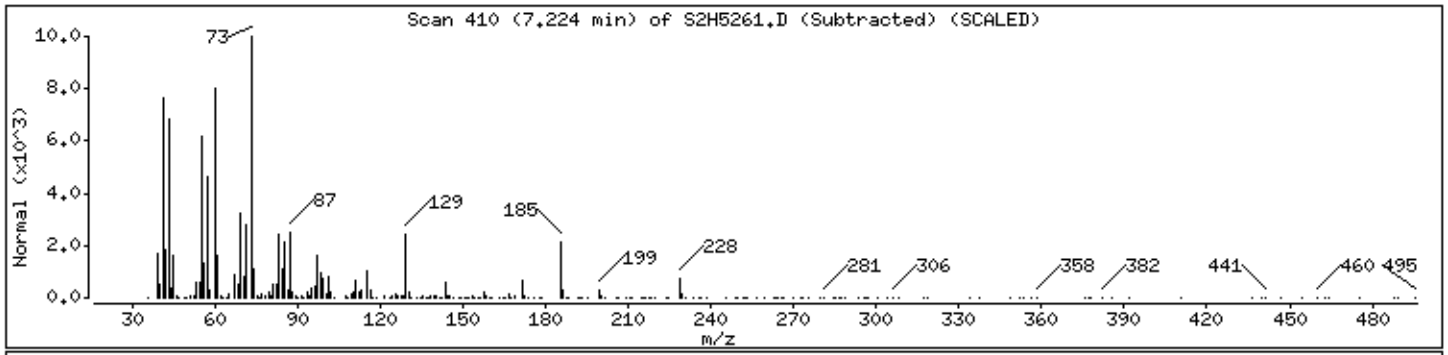
Client ID: H30R1 Instrument: S2.i

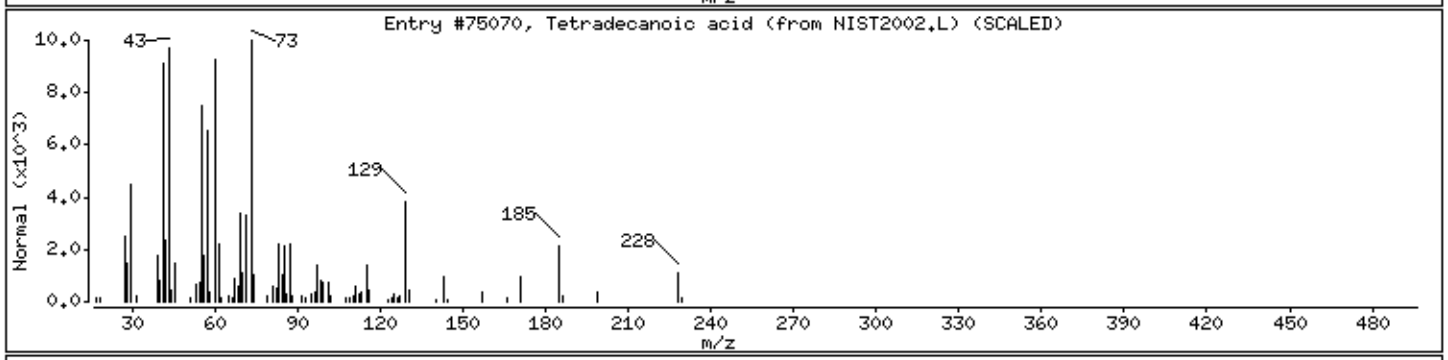
Sample Info: K2198-10A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Tetradecanoic acid	544-63-8	NIST2002.L	75070	96	C14H28O2	228





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Date : 10-NOV-2011 14:14

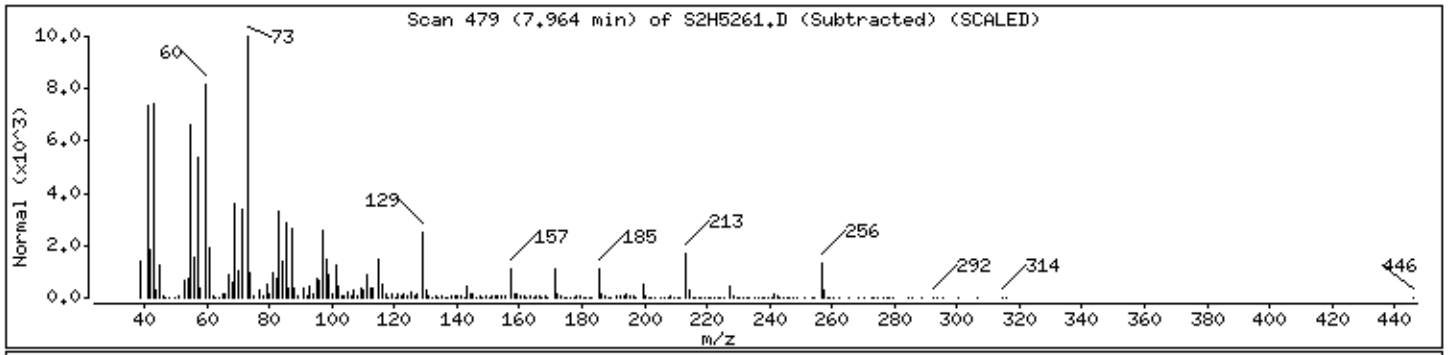
Client ID: H30R1 Instrument: S2.i

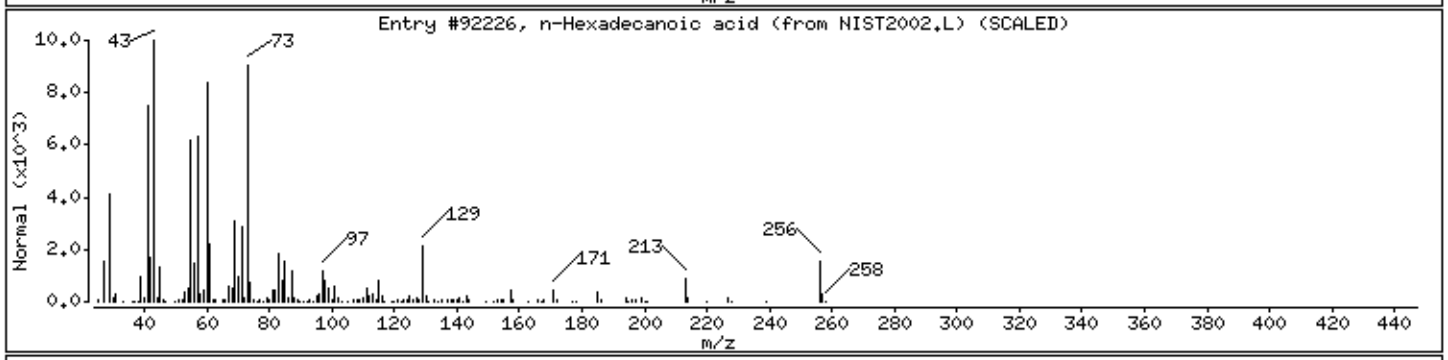
Sample Info: K2198-10A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
n-Hexadecanoic acid	57-10-3	NIST2002.L	92226	95	C16H32O2	256





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Date : 10-NOV-2011 14:14

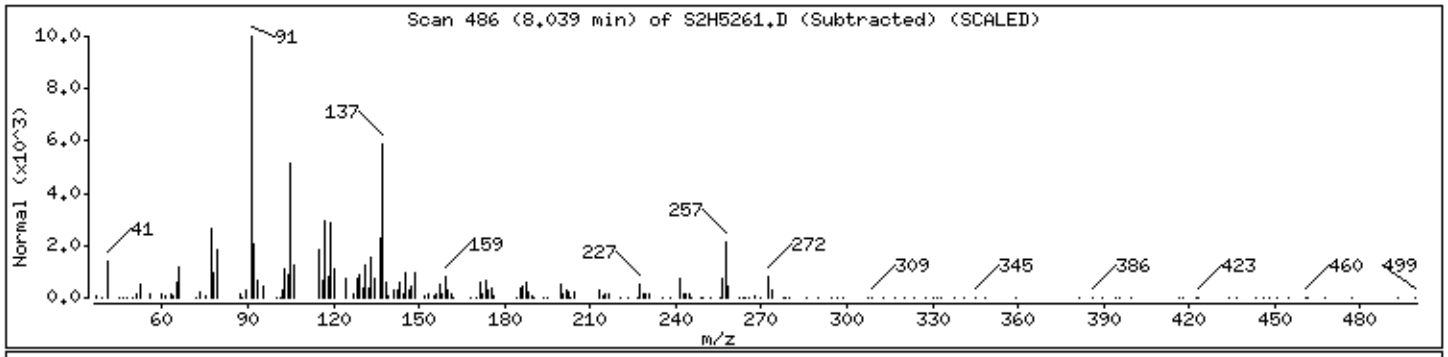
Client ID: H30R1 Instrument: S2.i

Sample Info: K2198-10A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 14:14

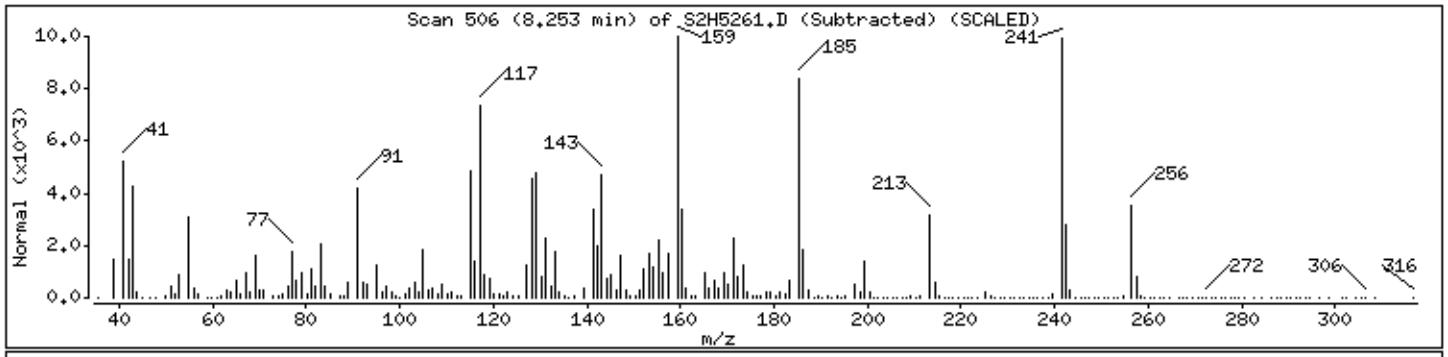
Client ID: H30R1 Instrument: S2.i

Sample Info: K2198-10A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 14:14

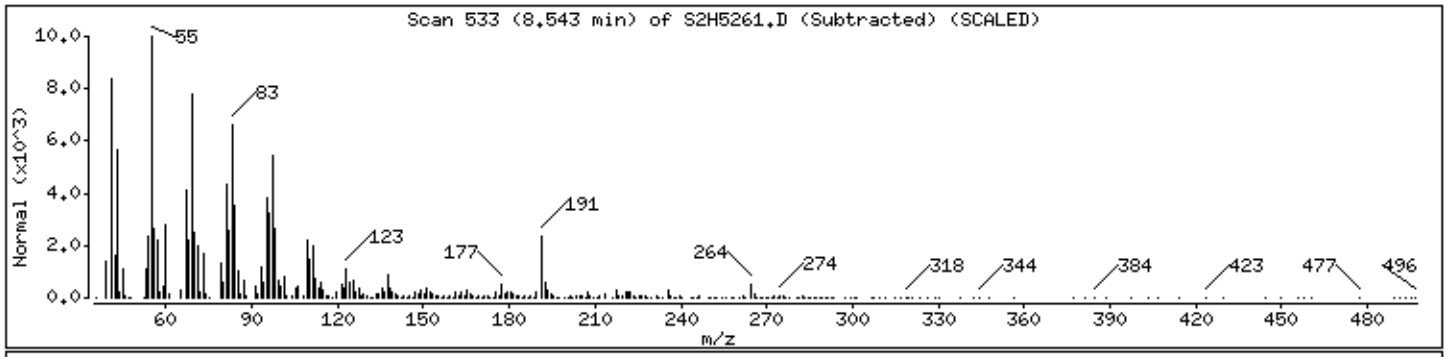
Client ID: H30R1 Instrument: S2.i

Sample Info: K2198-10A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 14:14

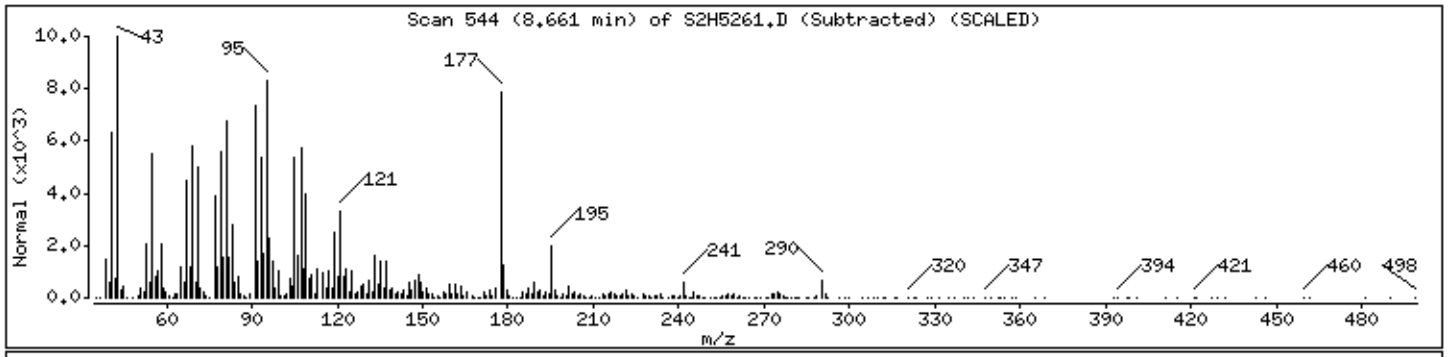
Client ID: H30R1 Instrument: S2.i

Sample Info: K2198-10A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 14:14

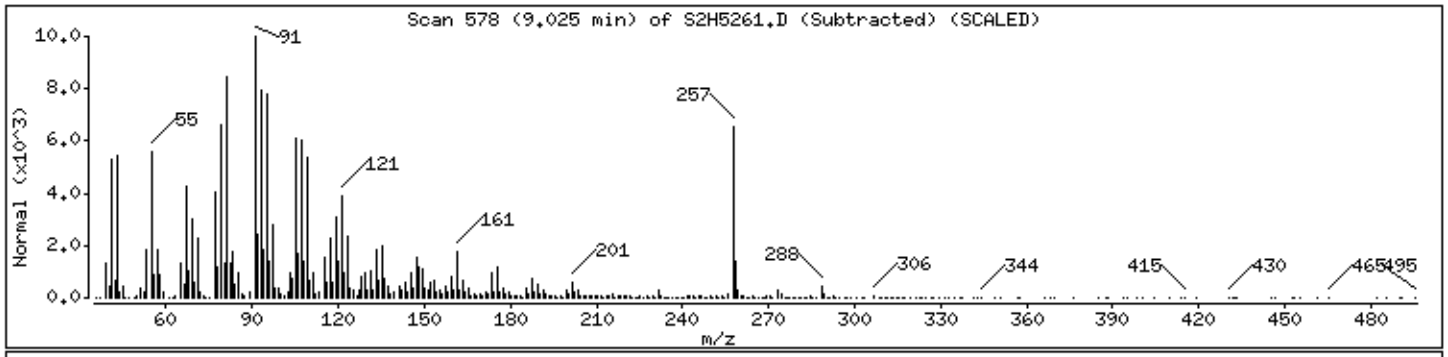
Client ID: H30R1 Instrument: S2.i

Sample Info: K2198-10A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5261.D

Date : 10-NOV-2011 14:14

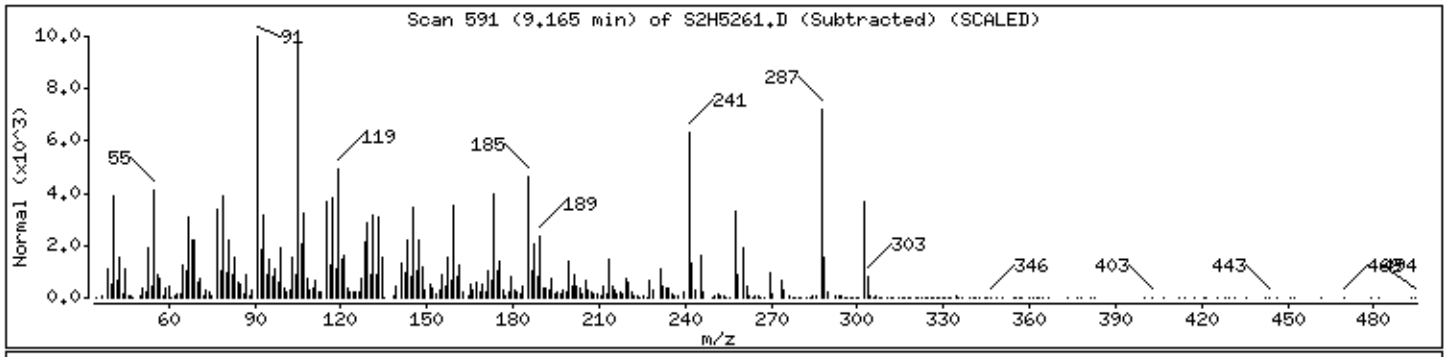
Client ID: H30R1 Instrument: S2.i

Sample Info: K2198-10A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 14:14

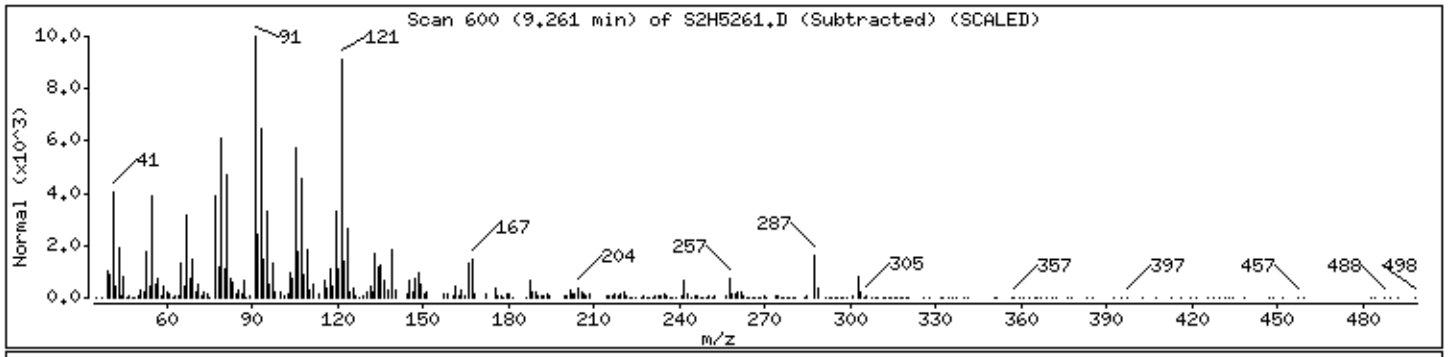
Client ID: H30R1 Instrument: S2.i

Sample Info: K2198-10A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 14:14

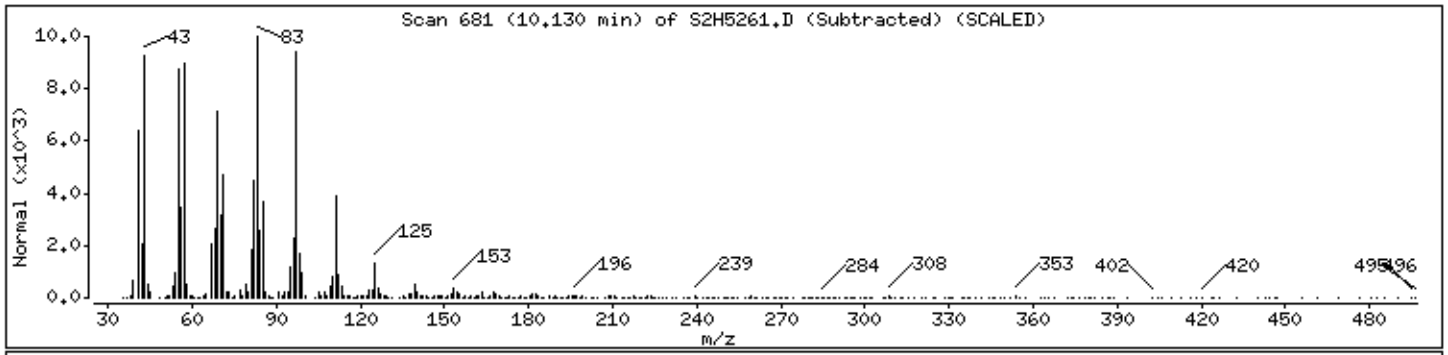
Client ID: H30R1 Instrument: S2.i

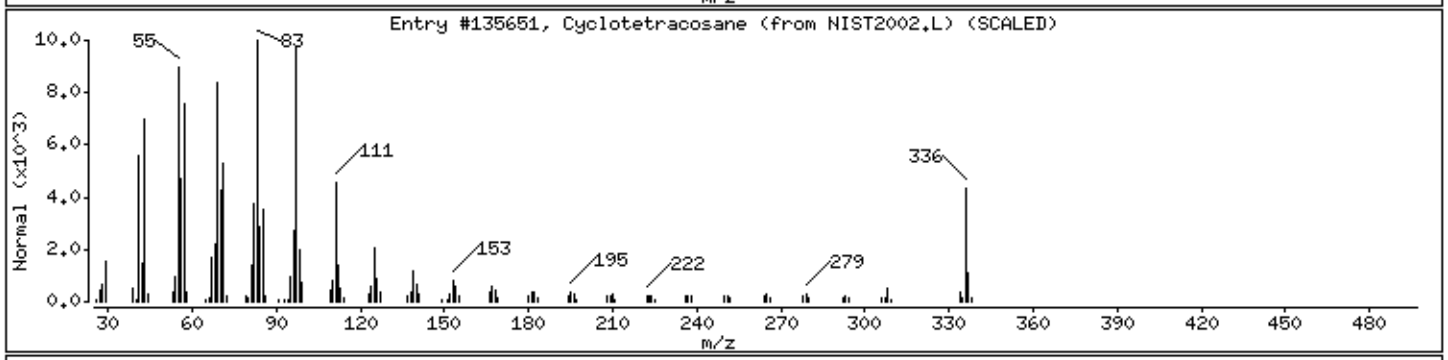
Sample Info: K2198-10A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclic Alkane						
Cyclotetracosane	297-03-0	NIST2002.L	135651	91	C24H48	336





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Date : 10-NOV-2011 14:14

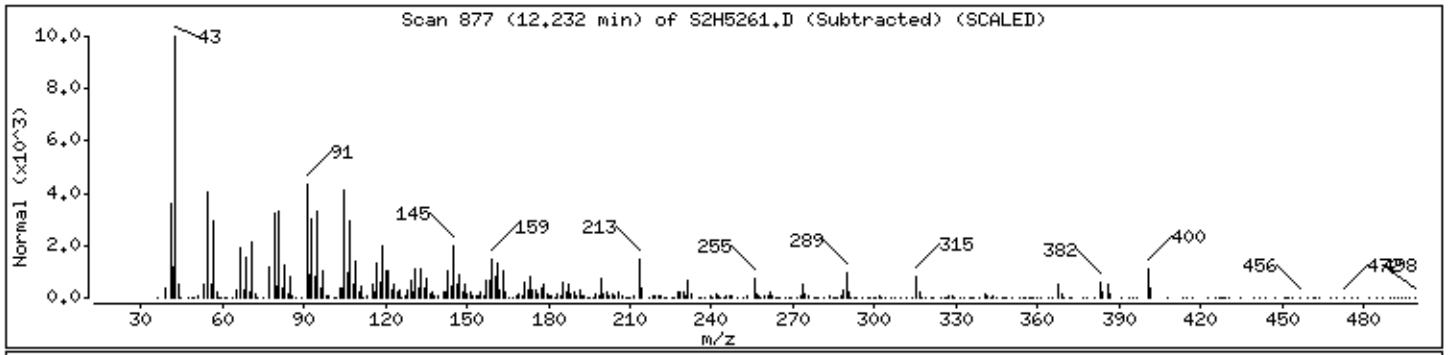
Client ID: H30R1 Instrument: S2.i

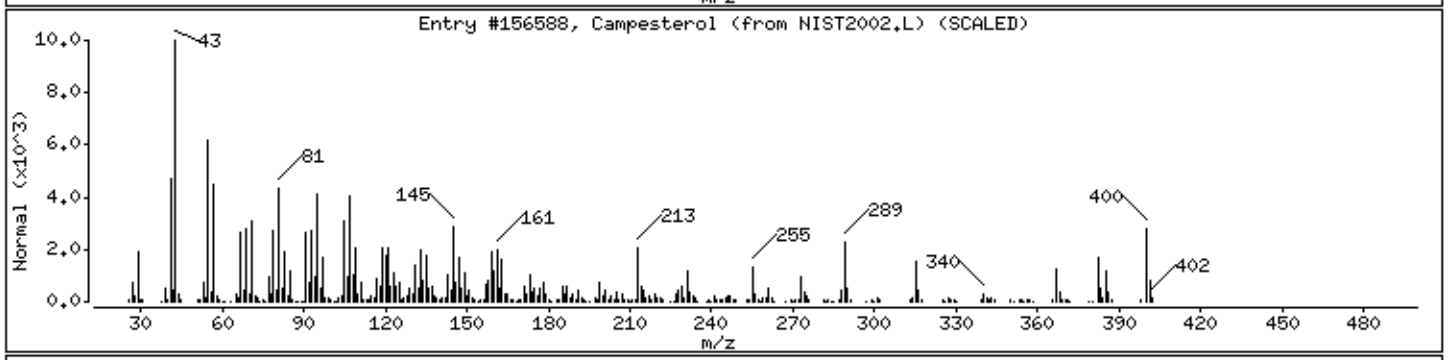
Sample Info: K2198-10A,,62764,,

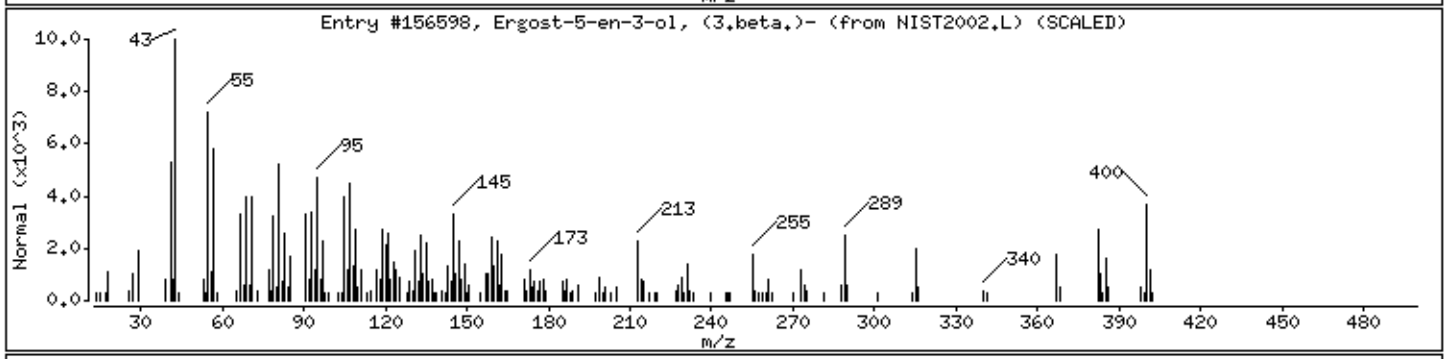
Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Campesterol	474-62-4	NIST2002.L	156588	93	C28H48O	400
Ergost-5-en-3-ol, (3.beta.)-	4651-51-8	NIST2002.L	156598	86	C28H48O	400







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Date : 10-NOV-2011 14:14

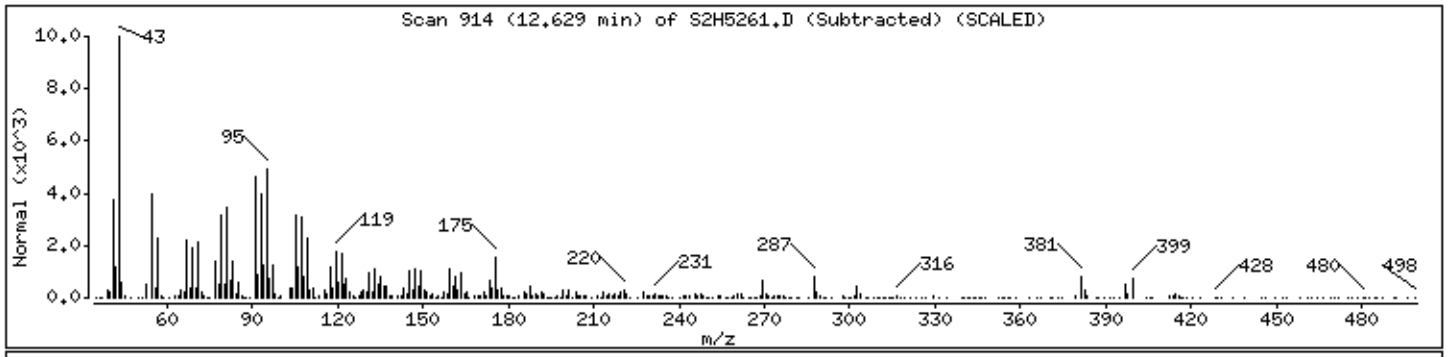
Client ID: H30R1 Instrument: S2.i

Sample Info: K2198-10A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 14:14

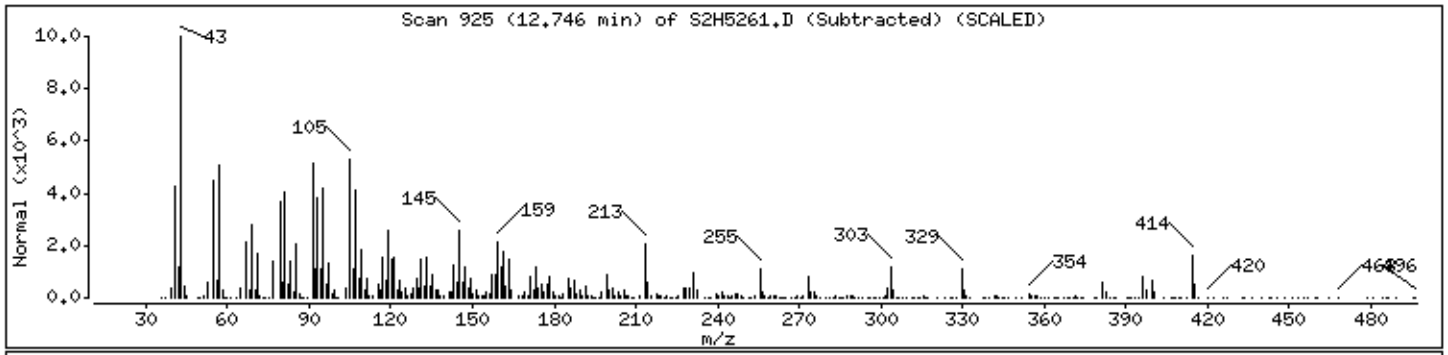
Client ID: H30R1 Instrument: S2.i

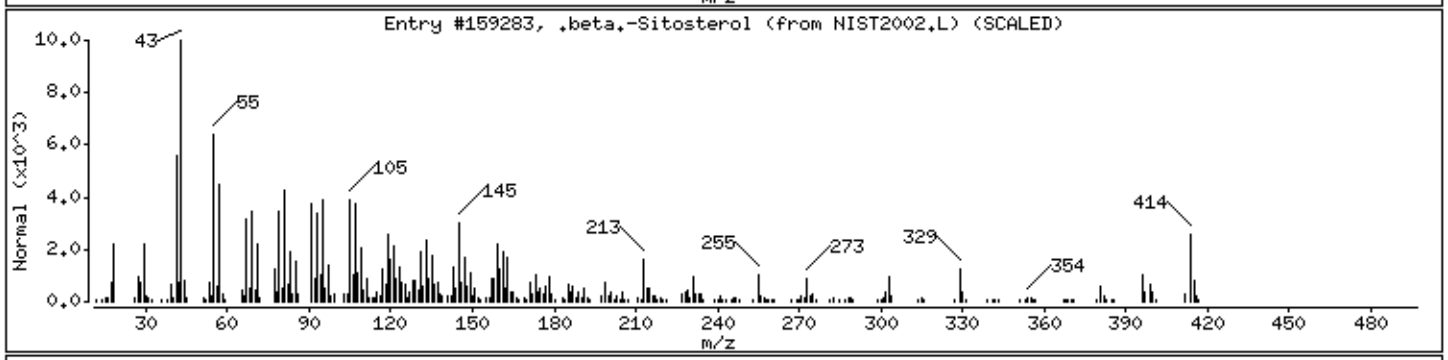
Sample Info: K2198-10A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.beta.-Sitosterol	83-46-5	NIST2002.L	159283	87	C29H50O	414





1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30S4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-11A

Sample wt/vol: 30.5 (g/mL) G Lab File ID: S2H5262.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 38 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: 7.8 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
100-52-7	Benzaldehyde	270	U
108-95-2	Phenol	270	U
111-44-4	Bis(2-chloroethyl)ether	270	U
95-57-8	2-Chlorophenol	270	U
95-48-7	2-Methylphenol	270	U
108-60-1	2,2´-Oxybis(1-chloropropane)	270	U
98-86-2	Acetophenone	270	U
106-44-5	4-Methylphenol	270	U
621-64-7	N-Nitroso-di-n-propylamine	270	U
67-72-1	Hexachloroethane	270	U
98-95-3	Nitrobenzene	270	U
78-59-1	Isophorone	270	U
88-75-5	2-Nitrophenol	270	U
105-67-9	2,4-Dimethylphenol	270	U
111-91-1	Bis(2-chloroethoxy)methane	270	U
120-83-2	2,4-Dichlorophenol	270	U
91-20-3	Naphthalene	270	U
106-47-8	4-Chloroaniline	270	U
87-68-3	Hexachlorobutadiene	270	U
105-60-2	Caprolactam	270	U
59-50-7	4-Chloro-3-methylphenol	270	U
91-57-6	2-Methylnaphthalene	270	U
77-47-4	Hexachlorocyclopentadiene	270	U
88-06-2	2,4,6-Trichlorophenol	270	U
95-95-4	2,4,5-Trichlorophenol	270	U
92-52-4	1,1´-Biphenyl	270	U
91-58-7	2-Chloronaphthalene	270	U
88-74-4	2-Nitroaniline	520	U
131-11-3	Dimethylphthalate	270	U
606-20-2	2,6-Dinitrotoluene	270	U
208-96-8	Acenaphthylene	270	U
99-09-2	3-Nitroaniline	520	U
83-32-9	Acenaphthene	270	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30S4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-11A

Sample wt/vol: 30.5 (g/mL) G Lab File ID: S2H5262.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 38 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: 7.8 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
51-28-5	2,4-Dinitrophenol	520	U
100-02-7	4-Nitrophenol	520	U
132-64-9	Dibenzofuran	270	U
121-14-2	2,4-Dinitrotoluene	270	U
84-66-2	Diethylphthalate	270	U
86-73-7	Fluorene	270	U
7005-72-3	4-Chlorophenyl-phenylether	270	U
100-01-6	4-Nitroaniline	520	U
534-52-1	4,6-Dinitro-2-methylphenol	520	U
86-30-6	N-Nitrosodiphenylamine (1)	270	U
95-94-3	1,2,4,5-Tetrachlorobenzene	270	U
101-55-3	4-Bromophenyl-phenylether	270	U
118-74-1	Hexachlorobenzene	270	U
1912-24-9	Atrazine	270	U
87-86-5	Pentachlorophenol	520	U
85-01-8	Phenanthrene	270	U
120-12-7	Anthracene	270	U
86-74-8	Carbazole	270	U
84-74-2	Di-n-butylphthalate	76	J
206-44-0	Fluoranthene	270	U
129-00-0	Pyrene	270	U
85-68-7	Butylbenzylphthalate	270	U
91-94-1	3,3´-Dichlorobenzidine	270	U
56-55-3	Benzo(a)anthracene	270	U
218-01-9	Chrysene	270	U
117-81-7	Bis(2-ethylhexyl)phthalate	270	U
117-84-0	Di-n-octylphthalate	270	U
205-99-2	Benzo(b)fluoranthene	270	U
207-08-9	Benzo(k)fluoranthene	270	U
50-32-8	Benzo(a)pyrene	270	U
193-39-5	Indeno(1,2,3-cd)pyrene	270	U
53-70-3	Dibenzo(a,h)anthracene	270	U
191-24-2	Benzo(g,h,i)perylene	270	U
58-90-2	2,3,4,6-Tetrachlorophenol	270	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30S4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-11A

Sample wt/vol: 30.5 (g/mL) G Lab File ID: S2H5262.D

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 38 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: 7.8 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.998	190	J
02	111-90-0	Ethanol, 2-(2-ethoxyethoxy)-	3.556	340	NJ
03	535-77-3	Benzene, 1-methyl-3-(1-methy	3.759	320	NJ
04	555-10-2	.beta.-Phellandrene	3.813	300	NJ
05		Unknown-02	4.488	290	J
06	21368-68-3	Bicyclo[2.2.1]heptan-2-one,	4.542	160	NJ
07		Unknown-03	4.681	300	J
08		Unknown-04	5.207	290	J
09		Unknown-05	5.915	200	J
10		Unknown-06	6.161	180	J
11		Unknown-07	8.038	1500	J
12	1000100-12-3	5,6.beta.-Cyclo-.beta.-homo-	12.242	3200	NJ
13		Unknown-08	12.531	2500	J
14		Unknown-09	12.649	2600	J
15	83-47-6	.gamma.-Sitosterol	12.746	18000	NJ
16		Unknown-10	13.604	4400	J
	E96679([2]	Total Alkanes	N/A	510	J

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5262.D
Report Date: 11-Nov-2011 13:36

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5262.D
Lab Smp Id: K2198-11A Client Smp ID: H30S4
Inj Date : 10-NOV-2011 14:35
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-11A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.500	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
$	2 Phenol-d5	71	3.383	3.373	(0.916)	139097	36.4344	600
$	4 bis(2-Chloroethyl)ether-d8	67	3.426	3.427	(0.927)	158052	30.0436	490
$	6 2-Chlorophenol-d4	132	3.501	3.491	(0.948)	128227	38.8263	640
*	8 1,4-Dichlorobenzene-d4	152	3.694	3.684	(1.000)	121237	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.016	4.006	(1.087)	221664	42.8269	700
$	16 Nitrobenzene-d5	128	4.156	4.145	(0.874)	64647	31.9247	520
$	19 2-Nitrophenol-d4	143	4.424	4.424	(0.930)	90955	40.6875	670
$	23 2,4-Dichlorophenol-d3	165	4.627	4.628	(0.973)	173905	42.6150	700
*	25 Naphthalene-d8	136	4.756	4.746	(1.000)	388838	40.0000	
$	27 4-Chloroaniline-d4	131	4.810	4.810	(1.011)	16429	4.53410	74(aQ)
$	40 Dimethylphthalate-d6	166	5.979	5.968	(0.962)	452269	40.9623	670
$	43 Acenaphthylene-d8	160	6.086	6.076	(0.979)	535153	37.2730	610
*	46 Acenaphthene-d10	164	6.214	6.204	(1.000)	300290	40.0000	
$	49 4-Nitrophenol-d4	143	6.322	6.312	(1.017)	64656	40.6344	670(Q)
$	54 Fluorene-d10	176	6.643	6.633	(1.069)	359291	35.4259	580
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.708	6.698	(0.902)	55271	33.1935	540
*	65 Phenanthrene-d10	188	7.437	7.438	(1.000)	426710	40.0000	
$	67 Anthracene-d10	188	7.480	7.480	(1.006)	431233	35.3786	580
	70 Di-n-butylphthalate	149	7.930	7.931	(1.066)	30194	2.85520	47(aQ)

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5262.D
Report Date: 11-Nov-2011 13:36

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)
$ 72 Pyrene-d10	212	8.617	8.606	(0.892)	290083	47.2424	770
* 77 Chrysene-d12	240	9.657	9.668	(1.000)	194916	40.0000	(Q)
$ 83 Benzo(a)pyrene-d12	264	10.858	10.891	(0.992)	113900	35.5277	580
* 85 Perylene-d12	264	10.944	10.966	(1.000)	130650	40.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5262.D
Report Date: 11-Nov-2011 13:36

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5262.D
Lab Smp Id: K2198-11A Client Smp ID: H30S4
Inj Date : 10-NOV-2011 14:35
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-11A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.500	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

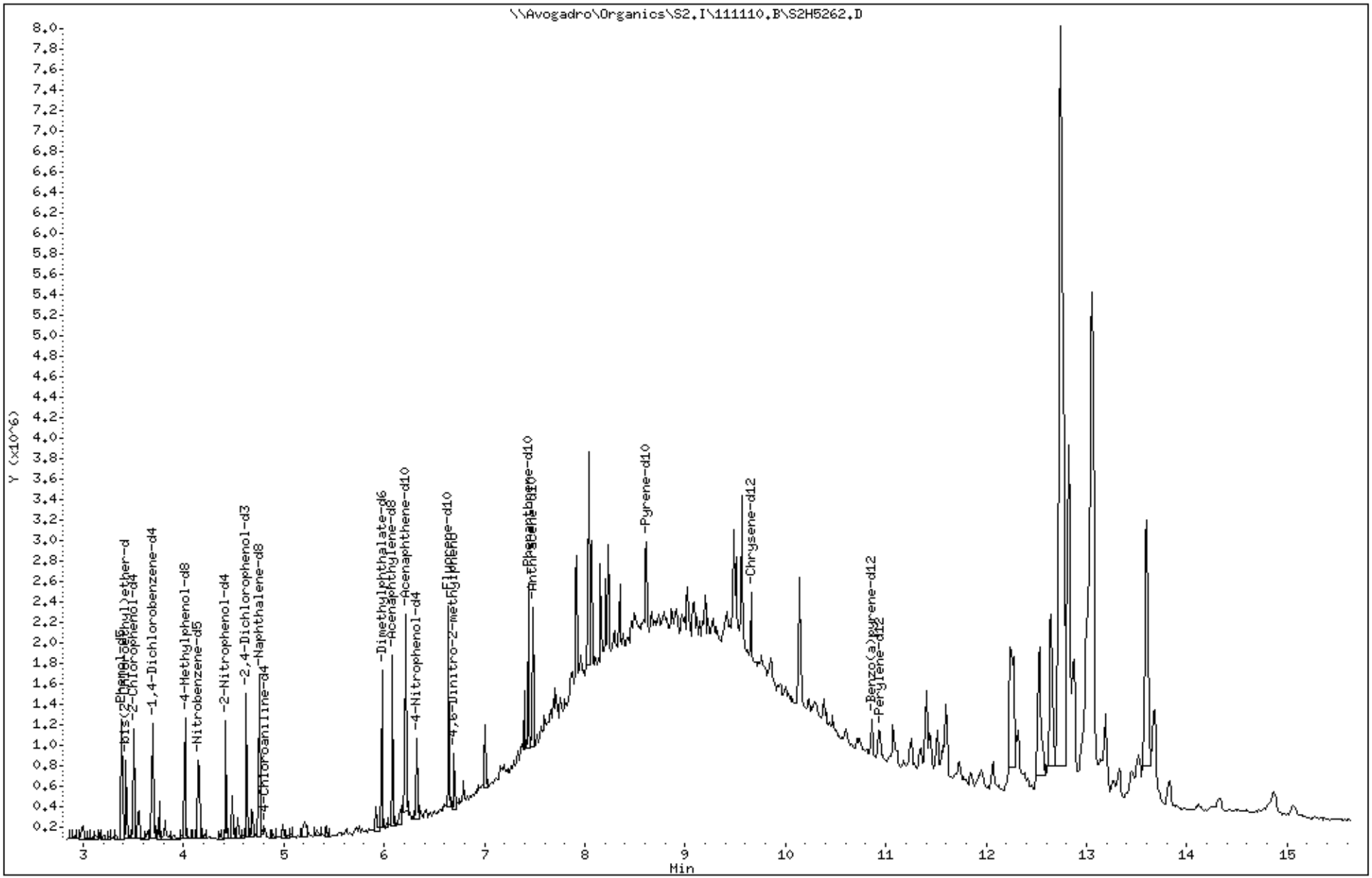
ISTD	RT	AREA	AMOUNT
* 8 1,4-Dichlorobenzene-d4	3.695	1110635	40.000
* 25 Naphthalene-d8	4.757	1301245	40.000
* 46 Acenaphthene-d10	6.215	1482232	40.000
* 65 Phenanthrene-d10	7.437	1249610	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.998	202887	7.30704025	120	0		0	8
Ethanol, 2-(2-ethoxyethoxy)-				CAS #: 111-90-0			
3.556	351837	12.6715689	210	86	NIST2002.L	14590	8

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5262.D
Report Date: 11-Nov-2011 13:36

RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Benzene, 1-methyl-3-(1-methylethyl)-					CAS #: 535-77-3		
3.759	331119	11.9253967	200	93	NIST2002.L	14400	8
.beta.-Phellandrene					CAS #: 555-10-2		
3.813	309371	11.1421087	180	86	NIST2002.L	15176	8
Unknown					CAS #:		
4.488	357959	11.0035791	180	0		0	25
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet					CAS #: 21368-68-3		
4.542	197674	6.07646881	100	91	NIST2002.L	24227	25
Unknown					CAS #:		
4.682	368601	11.3307219	190	0		0	25
Unknown					CAS #:		
5.207	349865	10.7547639	180	0		0	25
Unknown					CAS #:		
5.915	277769	7.49596960	120	0		0	46
Unknown					CAS #:		
6.161	246691	6.65727214	110	0		0	46
Branched Alkane					CAS #:		
7.009	597351	19.1211933	310	0		0	65
Unknown					CAS #:		
8.038	1769430	56.6394213	930	0		0	65
5,6.beta.-Cyclo-.beta.-homo-5.beta.-chol					CAS #: 1000100-12-3		
12.242	3787478	121.237113	2000	90	NIST2002.L	156119	65
Unknown					CAS #:		
12.531	2957711	94.6763009	1600	0		0	65
Unknown					CAS #:		
12.649	3026488	96.8778415	1600	0		0	65
.gamma.-Sitosterol					CAS #: 83-47-6		
12.746	21773310	696.963341	11000	91	NIST2002.L	159285	65
Unknown					CAS #:		
13.604	5232300	167.485846	2700	0		0	65

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5262.D
Date : 10-NOV-2011 14:35
Client ID: H30S4
Instrument: S2.i
Sample Info: K2198-11A,,62764,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5262.D

Date : 10-NOV-2011 14:35

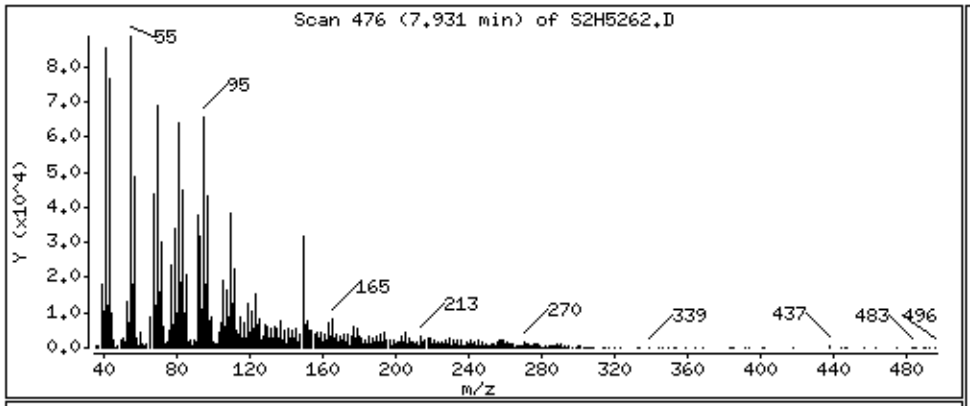
Client ID: H30S4 Instrument: S2.i

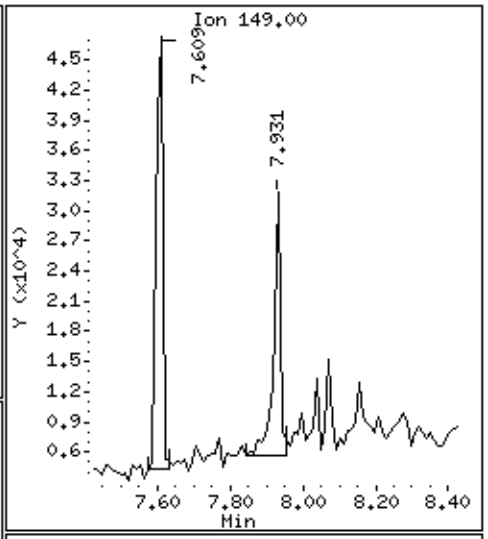
Sample Info: K2198-11A,,62764,,

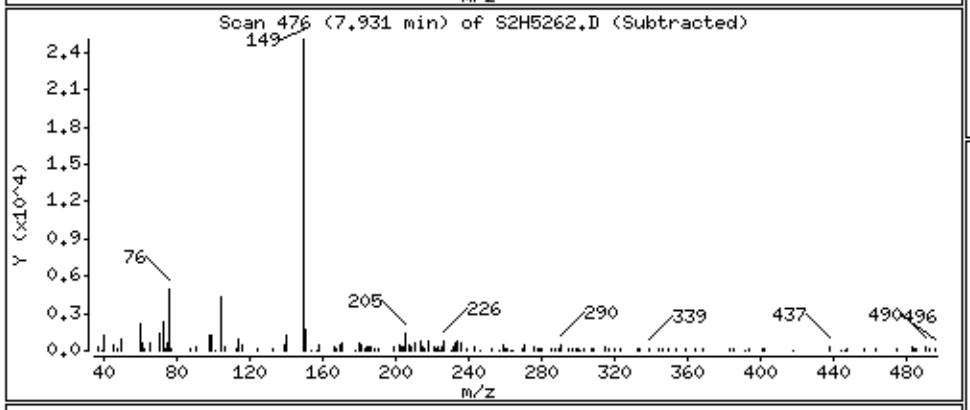
Volume Injected (uL): 2.0 Operator: SRC: LIMS

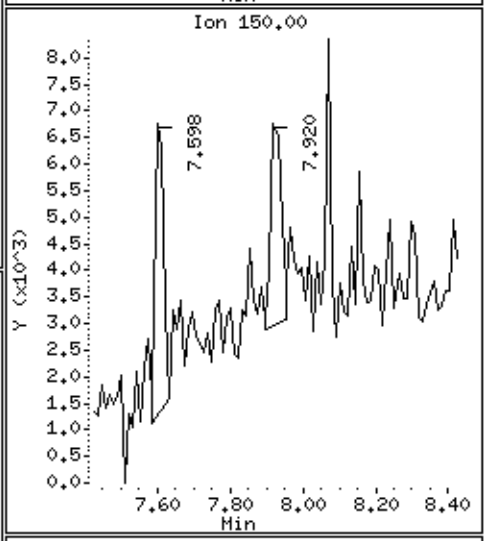
Column phase: RXI-5SILMS Column diameter: 0.25

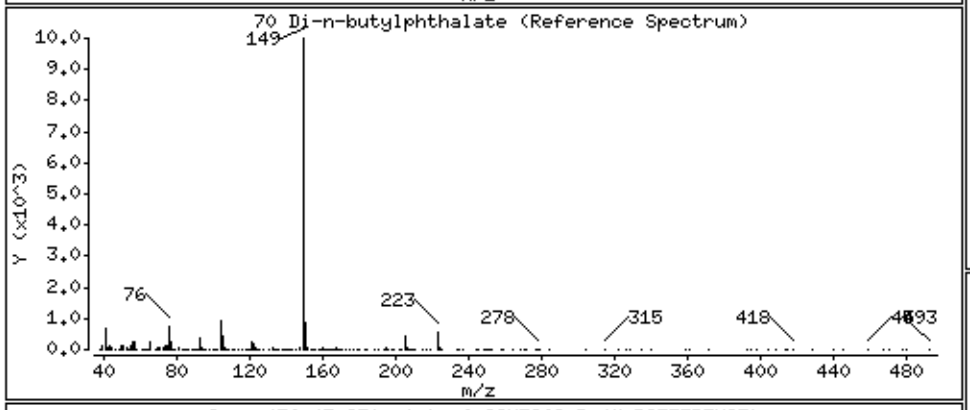
70 Di-n-butylphthalate Concentration: 47 ug/Kg

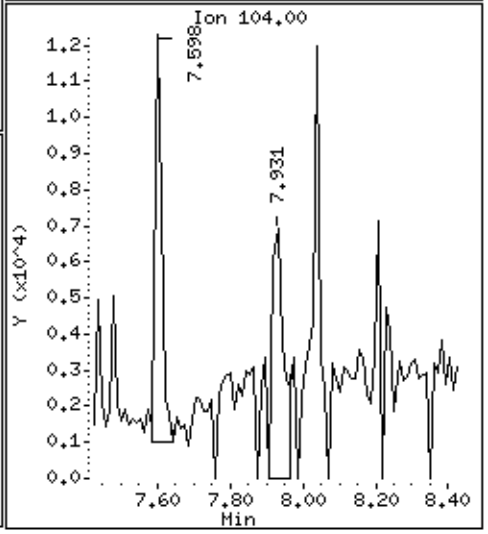


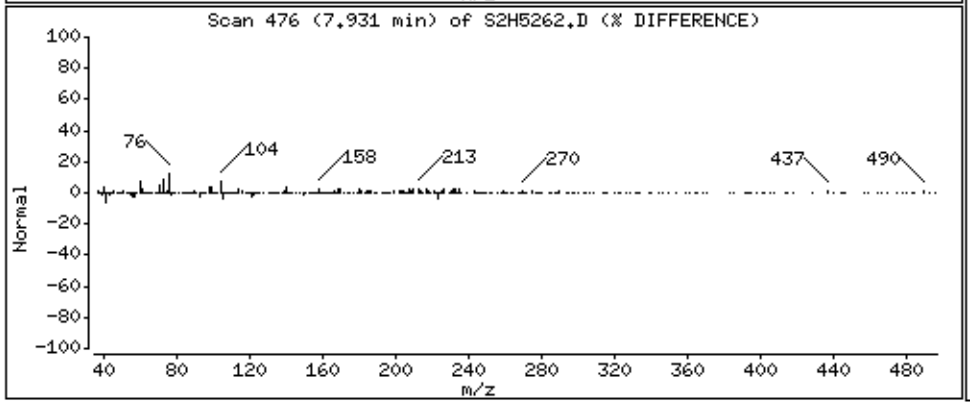












Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5262.D

Date : 10-NOV-2011 14:35

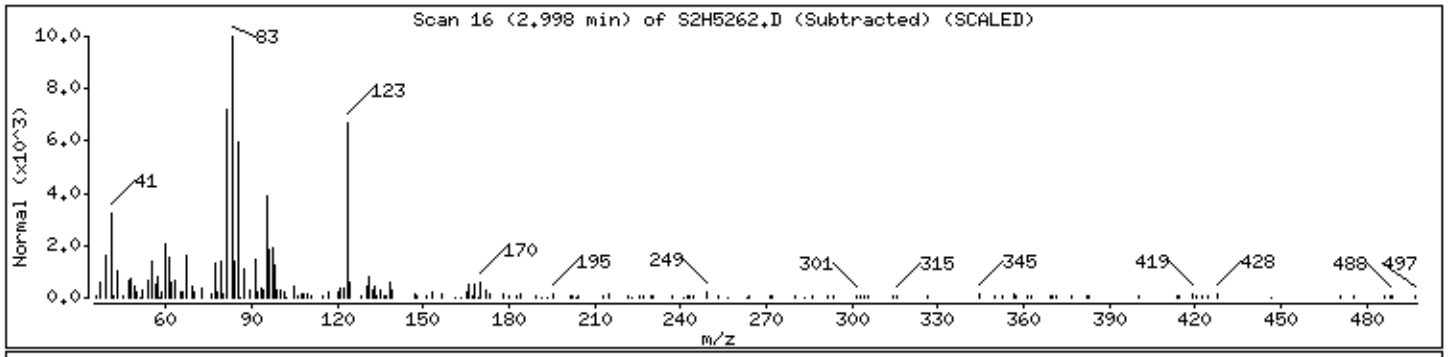
Client ID: H30S4 Instrument: S2.i

Sample Info: K2198-11A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 14:35

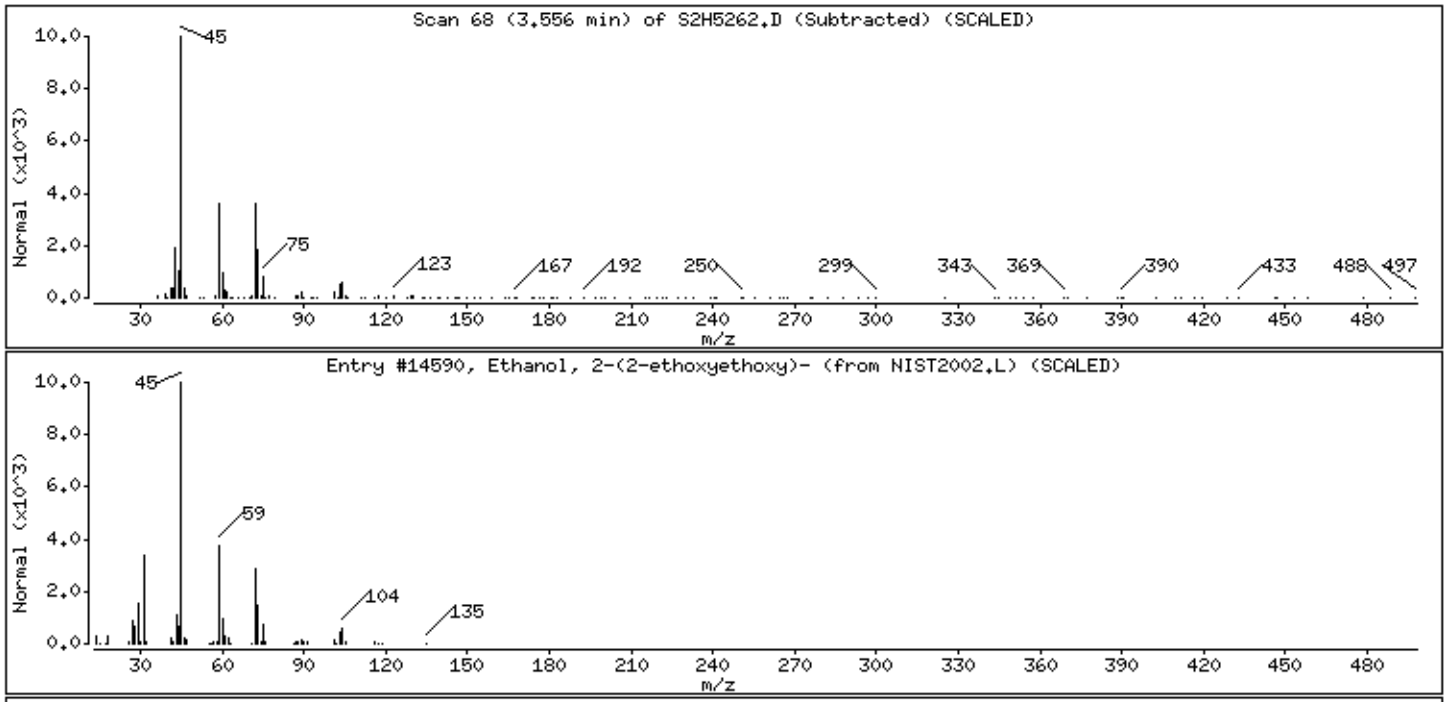
Client ID: H30S4 Instrument: S2.i

Sample Info: K2198-11A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethanol, 2-(2-ethoxyethoxy)-	111-90-0	NIST2002.L	14590	86	C6H14O3	134



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Date : 10-NOV-2011 14:35

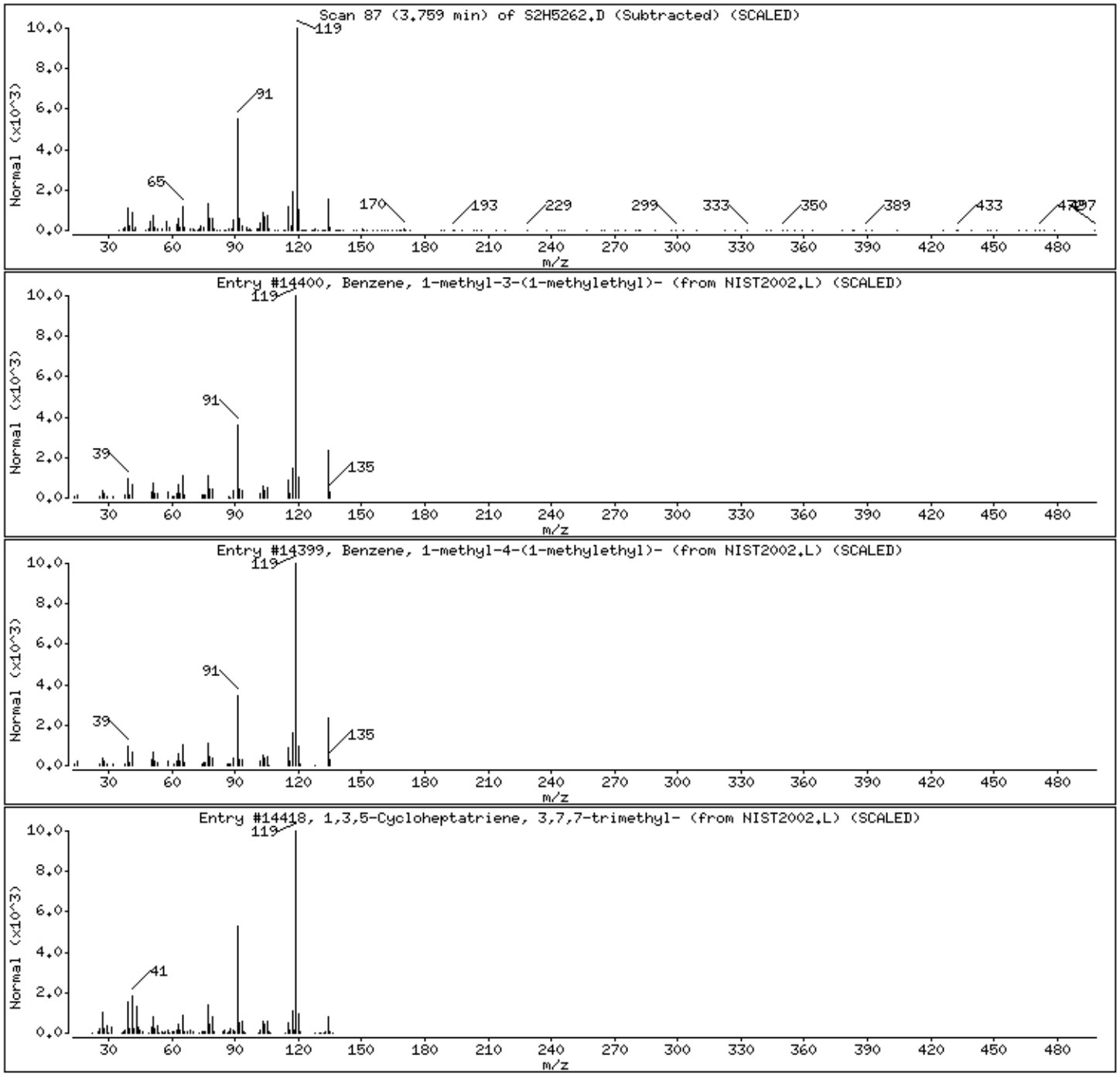
Client ID: H30S4 Instrument: S2.i

Sample Info: K2198-11A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	NIST2002.L	14400	93	C10H14	134
Benzene, 1-methyl-4-(1-methylethyl)-	99-87-6	NIST2002.L	14399	93	C10H14	134
1,3,5-Cycloheptatriene, 3,7,7-trimethyl-	3479-89-8	NIST2002.L	14418	91	C10H14	134



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Date : 10-NOV-2011 14:35

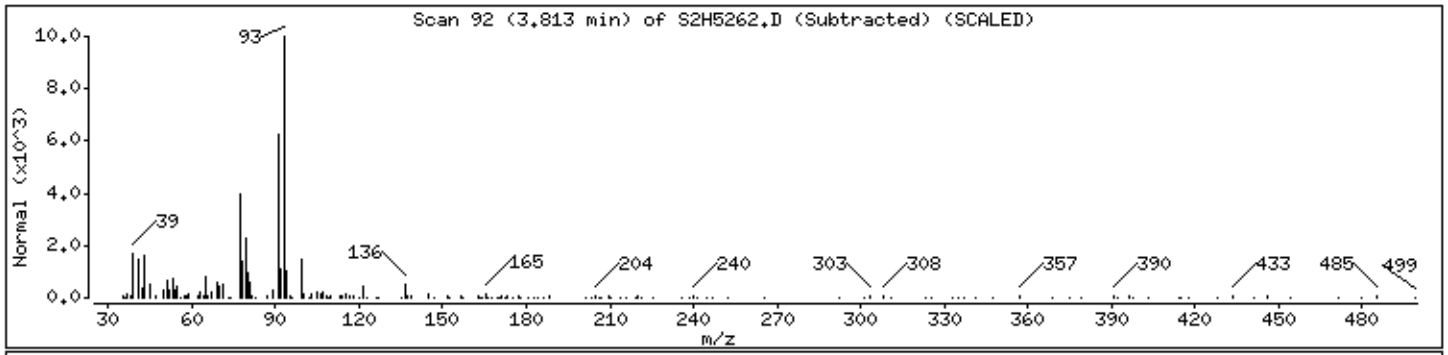
Client ID: H30S4 Instrument: S2.i

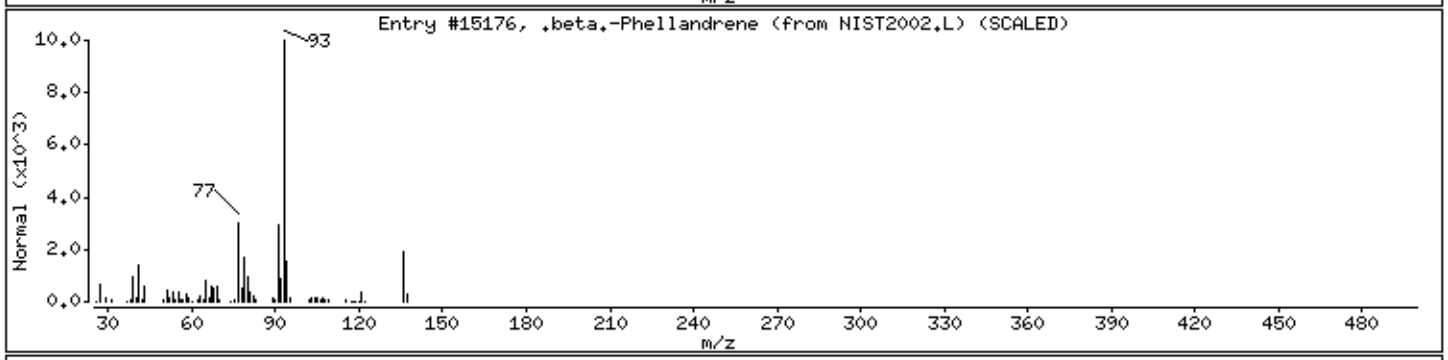
Sample Info: K2198-11A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.beta.-Phellandrene	555-10-2	NIST2002.L	15176	86	C10H16	136





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Date : 10-NOV-2011 14:35

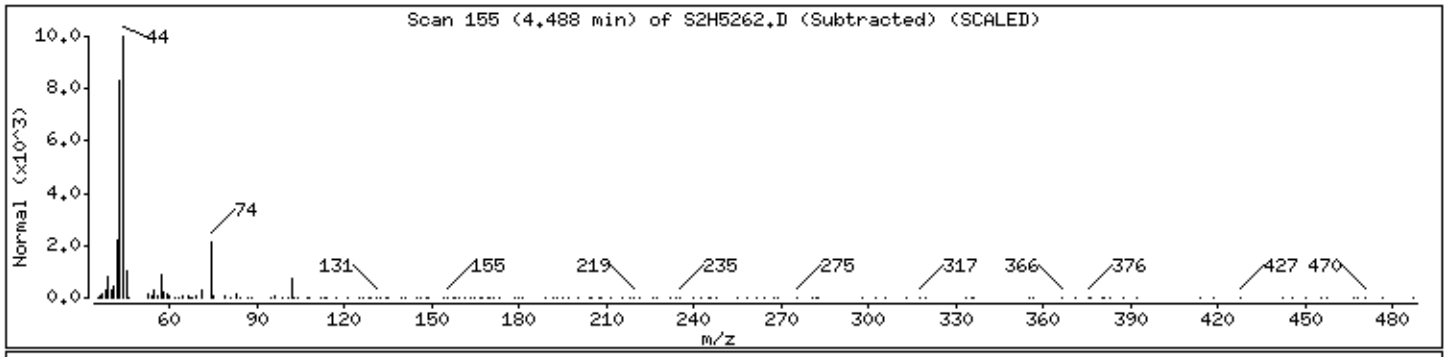
Client ID: H30S4 Instrument: S2.i

Sample Info: K2198-11A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 14:35

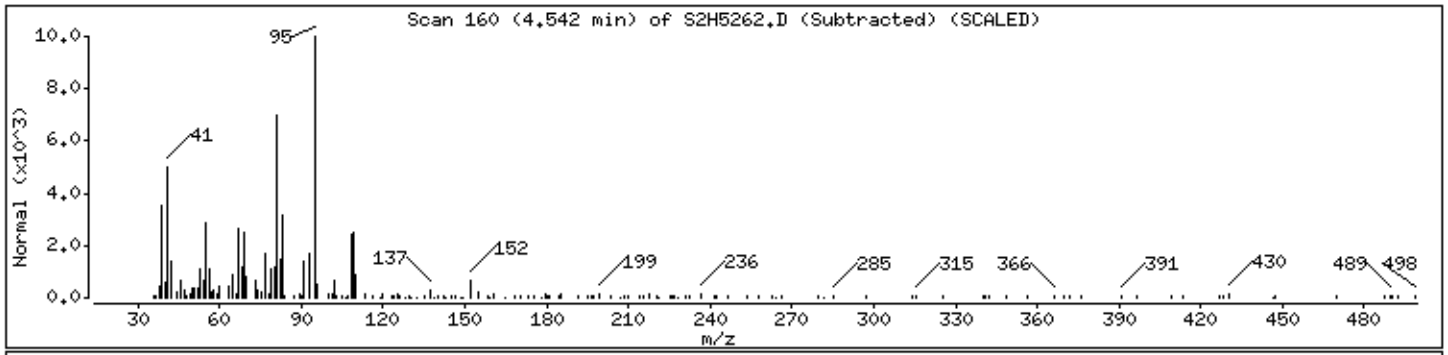
Client ID: H30S4 Instrument: S2.i

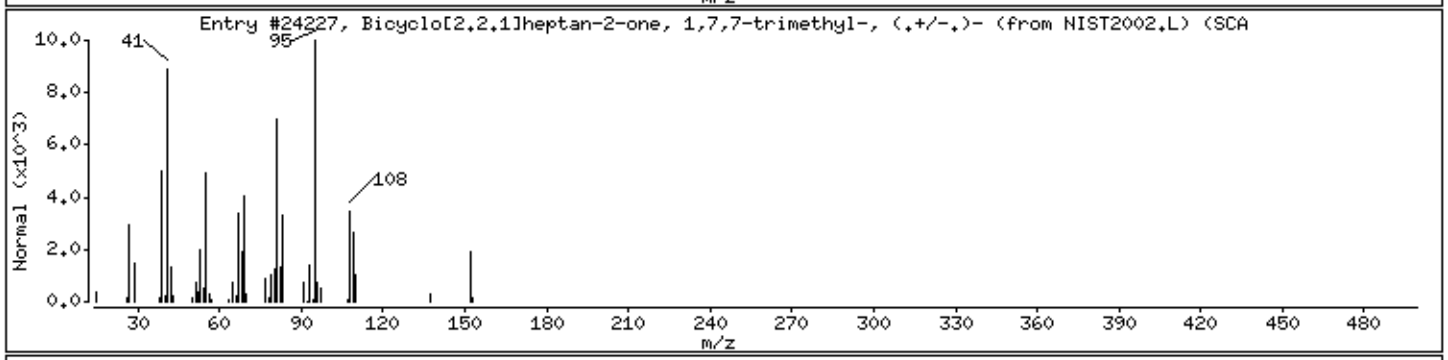
Sample Info: K2198-11A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet	21368-68-3	NIST2002.L	24227	91	C10H16O	152





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Date : 10-NOV-2011 14:35

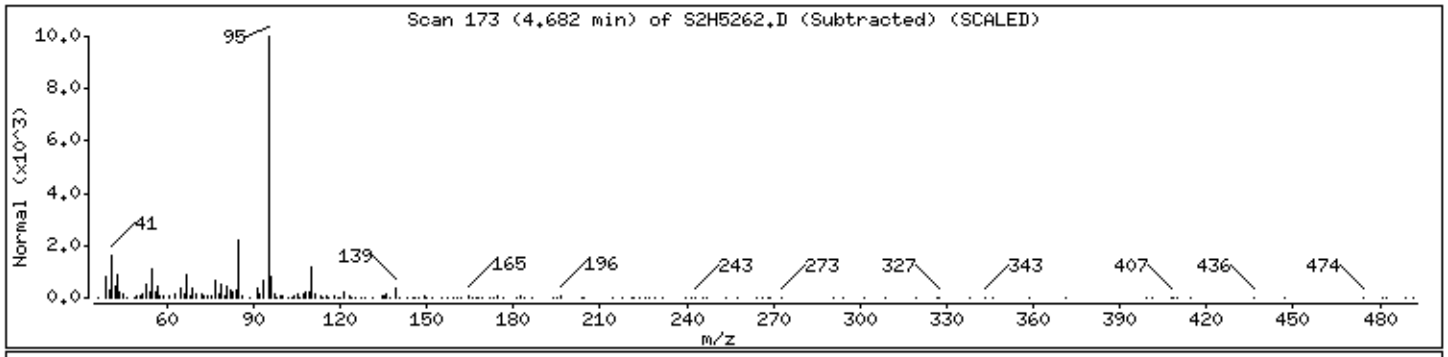
Client ID: H30S4 Instrument: S2.i

Sample Info: K2198-11A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5262.D

Date : 10-NOV-2011 14:35

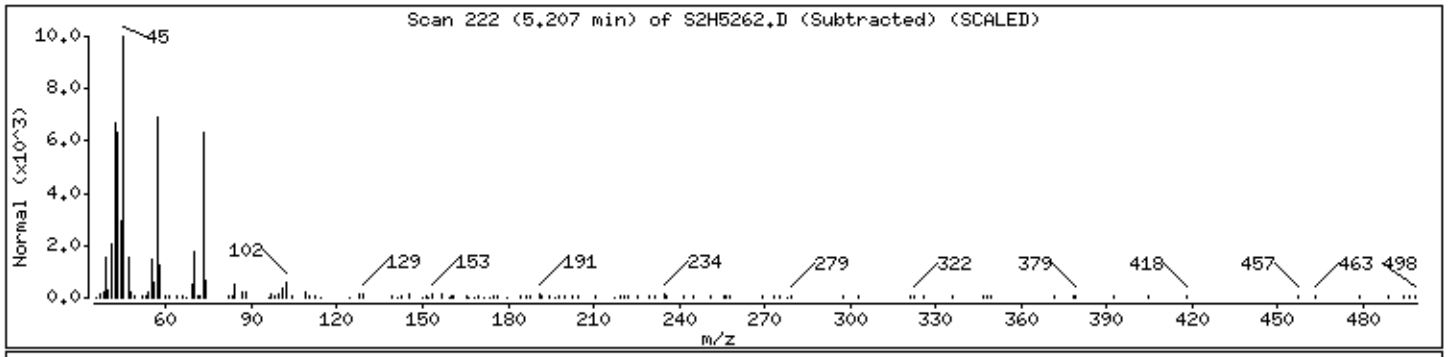
Client ID: H30S4 Instrument: S2.i

Sample Info: K2198-11A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 14:35

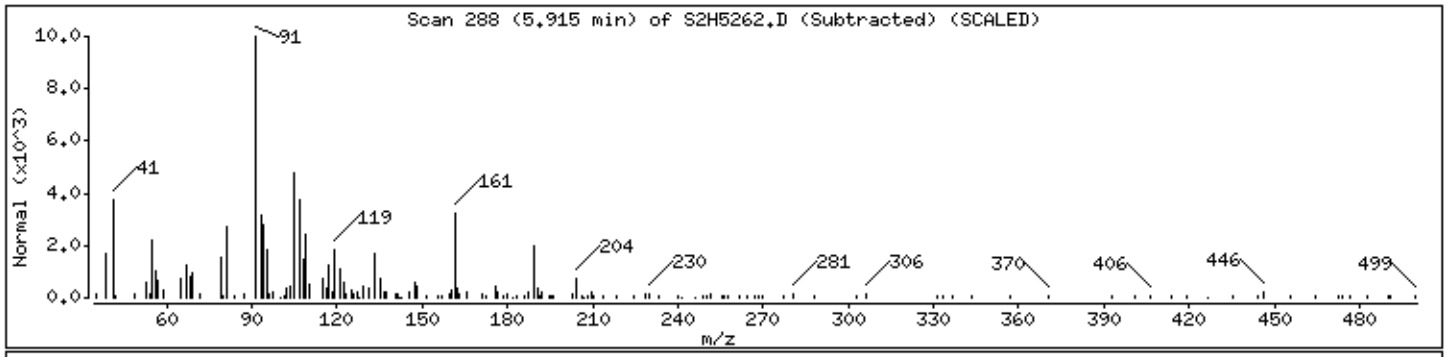
Client ID: H30S4 Instrument: S2.i

Sample Info: K2198-11A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5262.D

Date : 10-NOV-2011 14:35

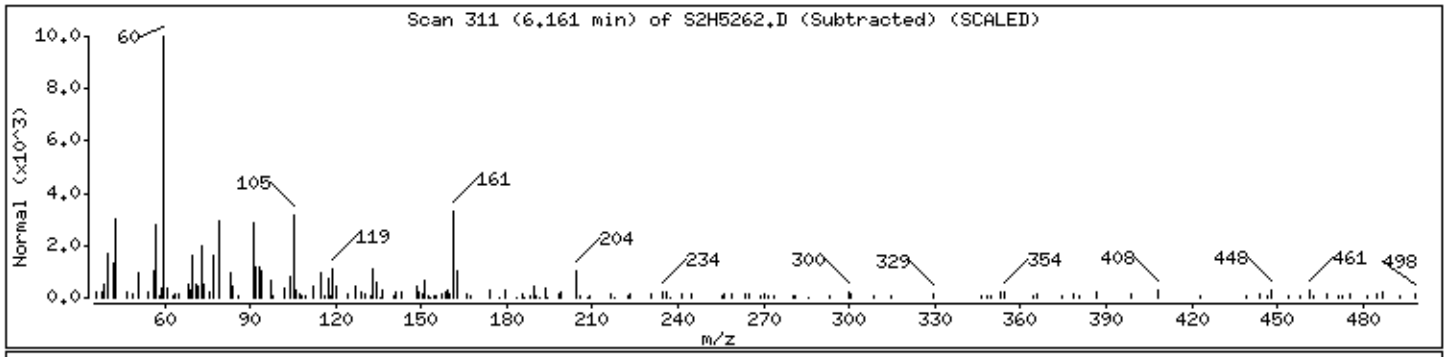
Client ID: H30S4 Instrument: S2.i

Sample Info: K2198-11A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5262.D

Date : 10-NOV-2011 14:35

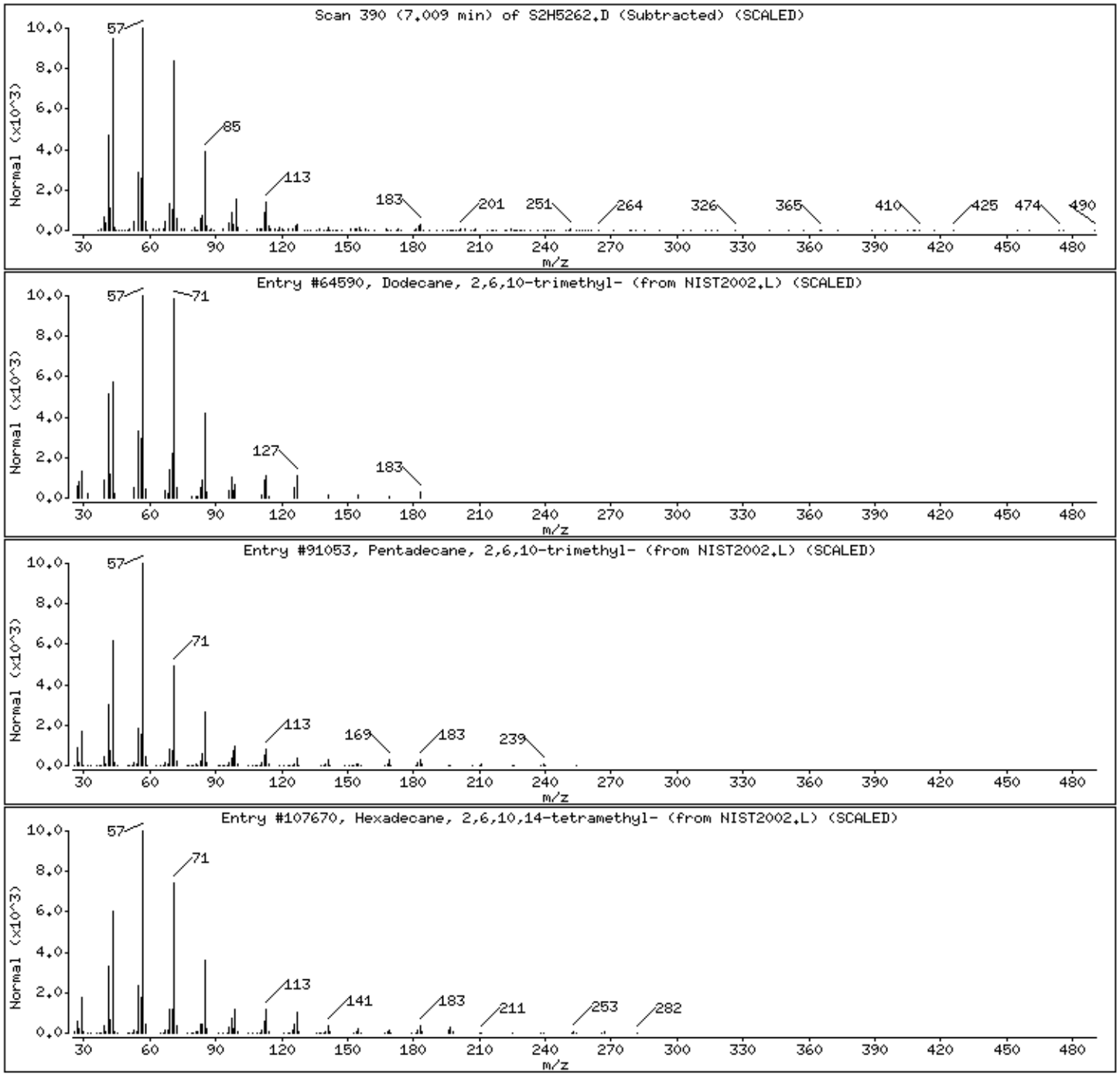
Client ID: H30S4 Instrument: S2.i

Sample Info: K2198-11A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Branched Alkane						
Dodecane, 2,6,10-trimethyl-	3891-98-3	NIST2002.L	64590	91	C15H32	212
Pentadecane, 2,6,10-trimethyl-	3892-00-0	NIST2002.L	91053	87	C18H38	254
Hexadecane, 2,6,10,14-tetramethyl-	638-36-8	NIST2002.L	107670	86	C20H42	282



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5262.D

Date : 10-NOV-2011 14:35

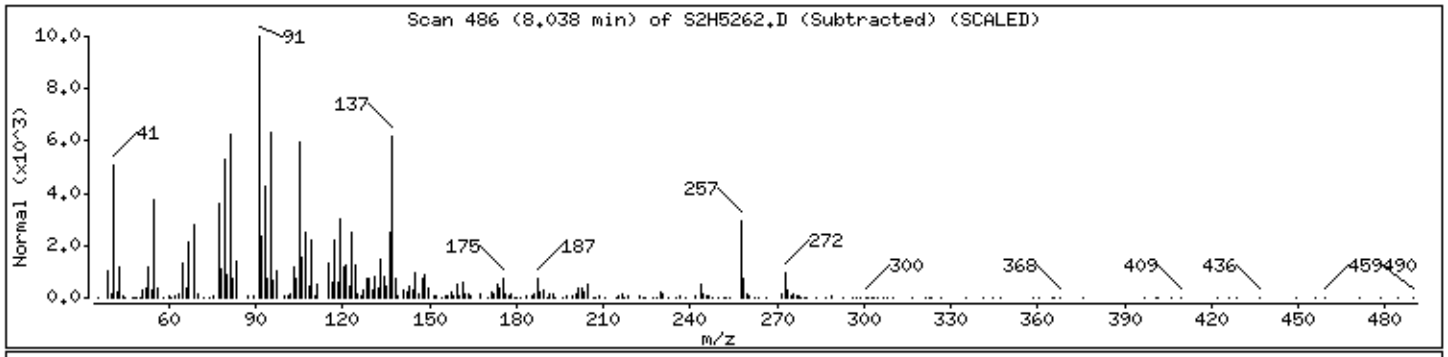
Client ID: H30S4 Instrument: S2.i

Sample Info: K2198-11A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 14:35

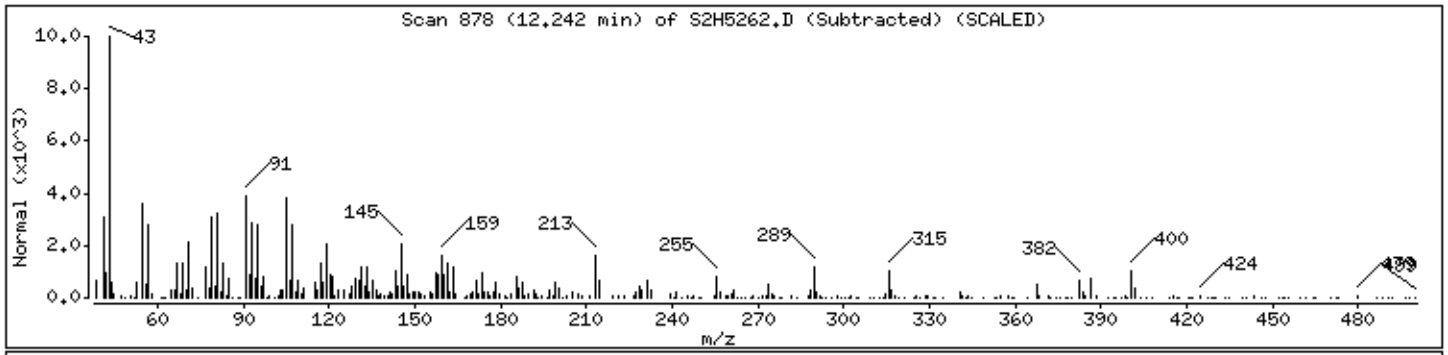
Client ID: H30S4 Instrument: S2.i

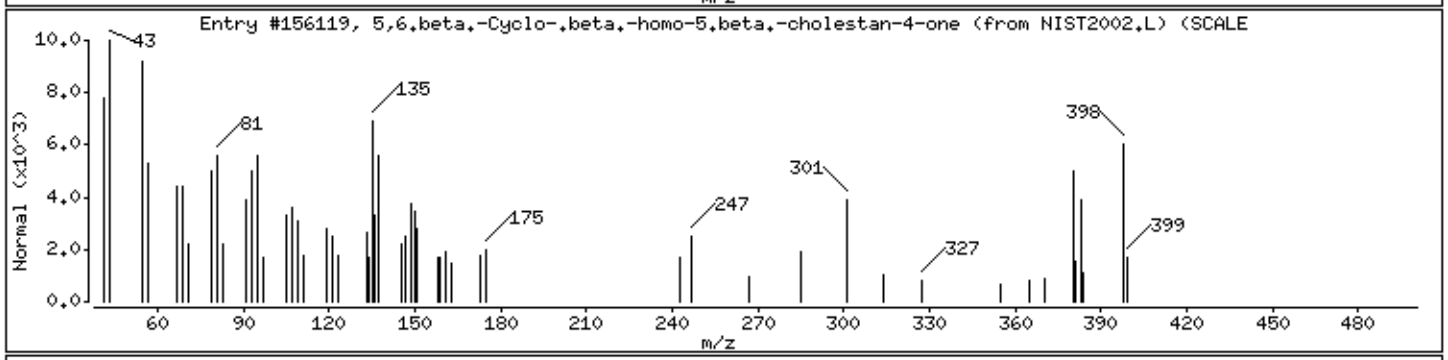
Sample Info: K2198-11A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
5,6.beta.-Cyclo-.beta.-homo-5.beta.-chol	1000100-12-3	NIST2002.L	156119	90	C28H460	398





Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5262.D

Date : 10-NOV-2011 14:35

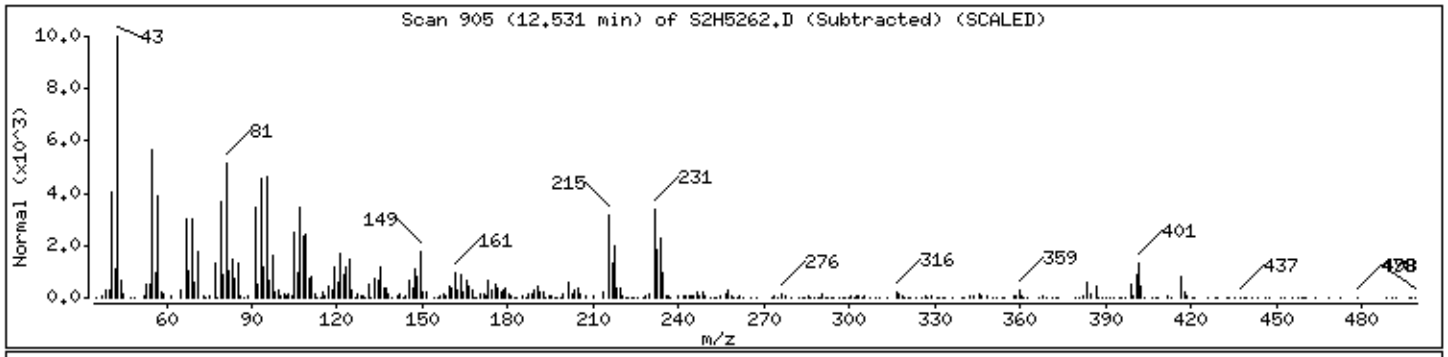
Client ID: H30S4 Instrument: S2.i

Sample Info: K2198-11A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5262.D

Date : 10-NOV-2011 14:35

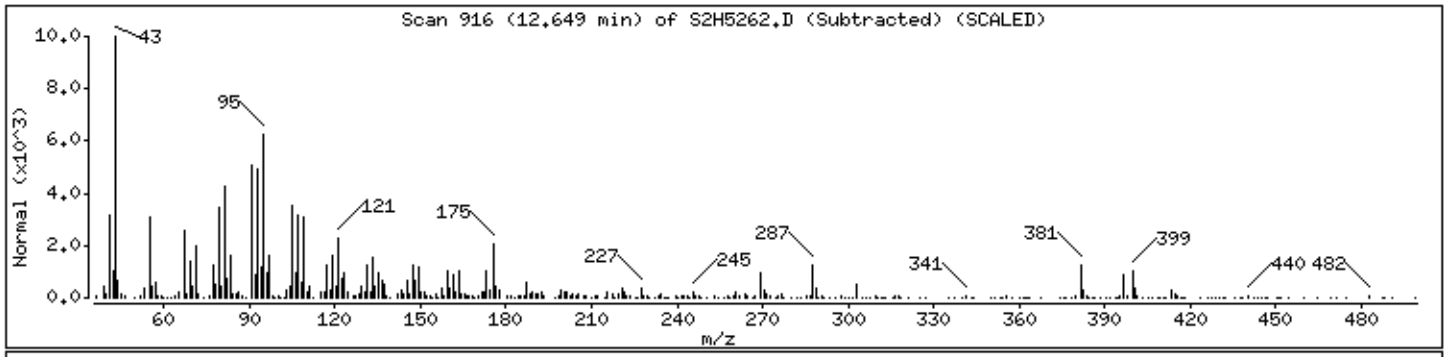
Client ID: H30S4 Instrument: S2.i

Sample Info: K2198-11A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5262.D

Date : 10-NOV-2011 14:35

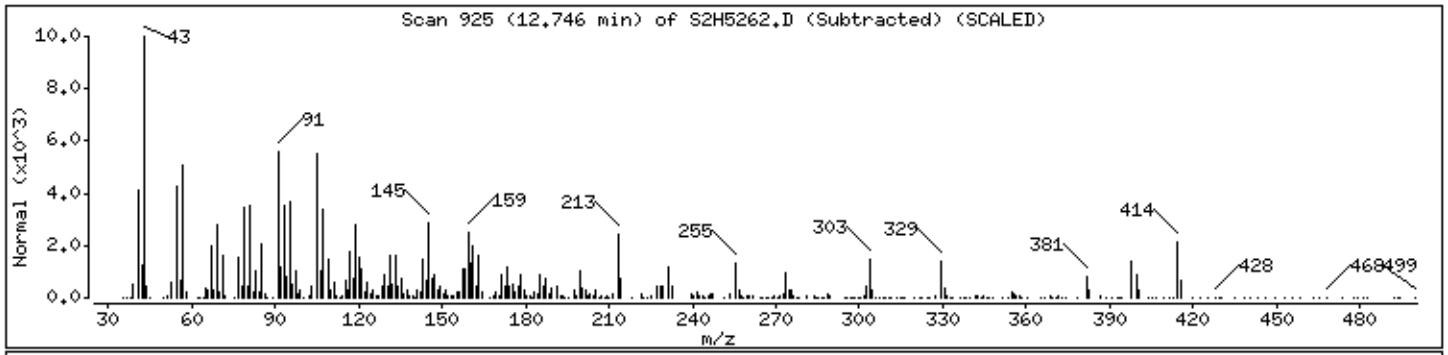
Client ID: H30S4 Instrument: S2.i

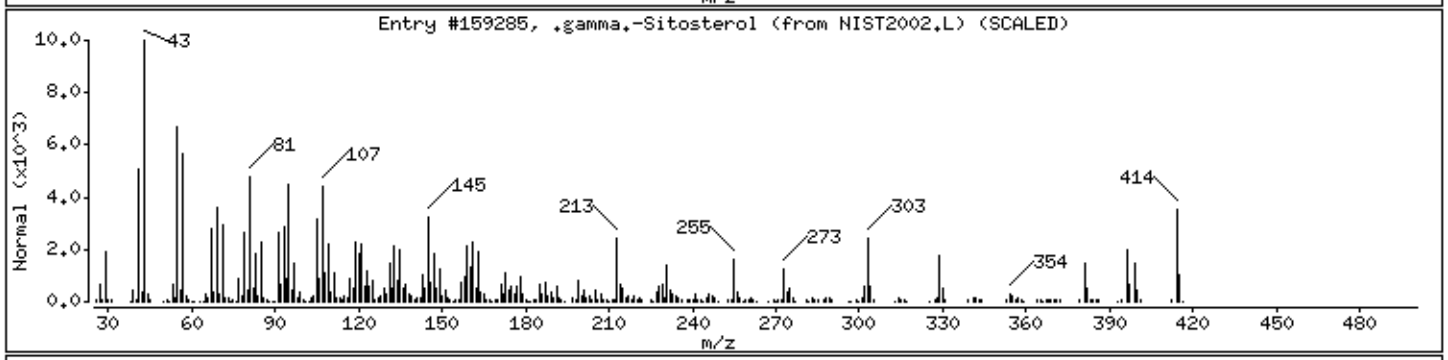
Sample Info: K2198-11A,,62764,,

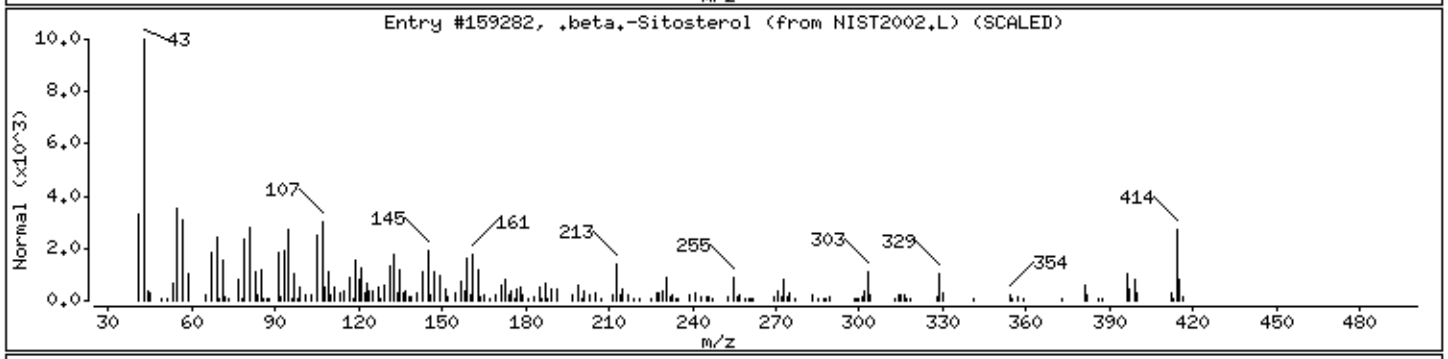
Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.gamma.-Sitosterol	83-47-6	NIST2002.L	159285	91	C29H50O	414
.beta.-Sitosterol	83-46-5	NIST2002.L	159282	86	C29H50O	414







Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5262.D

Date : 10-NOV-2011 14:35

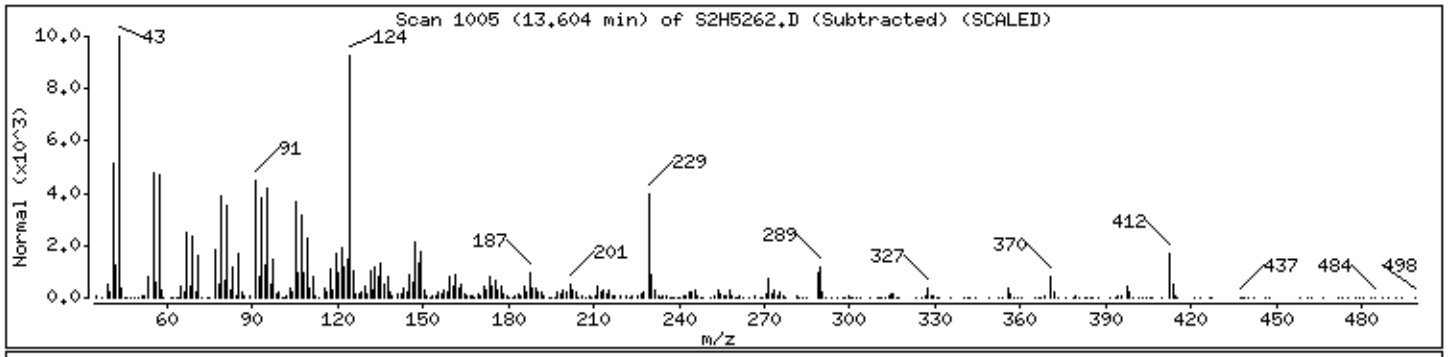
Client ID: H30S4 Instrument: S2.i

Sample Info: K2198-11A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30S5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-12A

Sample wt/vol: 30.4 (g/mL) G Lab File ID: S2H5263.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 14 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: 7.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
100-52-7	Benzaldehyde	200	U
108-95-2	Phenol	200	U
111-44-4	Bis(2-chloroethyl)ether	200	U
95-57-8	2-Chlorophenol	200	U
95-48-7	2-Methylphenol	200	U
108-60-1	2,2´-Oxybis(1-chloropropane)	200	U
98-86-2	Acetophenone	200	U
106-44-5	4-Methylphenol	200	U
621-64-7	N-Nitroso-di-n-propylamine	200	U
67-72-1	Hexachloroethane	200	U
98-95-3	Nitrobenzene	200	U
78-59-1	Isophorone	200	U
88-75-5	2-Nitrophenol	200	U
105-67-9	2,4-Dimethylphenol	200	U
111-91-1	Bis(2-chloroethoxy)methane	200	U
120-83-2	2,4-Dichlorophenol	200	U
91-20-3	Naphthalene	200	U
106-47-8	4-Chloroaniline	200	U
87-68-3	Hexachlorobutadiene	200	U
105-60-2	Caprolactam	200	U
59-50-7	4-Chloro-3-methylphenol	200	U
91-57-6	2-Methylnaphthalene	200	U
77-47-4	Hexachlorocyclopentadiene	200	U
88-06-2	2,4,6-Trichlorophenol	200	U
95-95-4	2,4,5-Trichlorophenol	200	U
92-52-4	1,1´-Biphenyl	200	U
91-58-7	2-Chloronaphthalene	200	U
88-74-4	2-Nitroaniline	380	U
131-11-3	Dimethylphthalate	200	U
606-20-2	2,6-Dinitrotoluene	200	U
208-96-8	Acenaphthylene	200	U
99-09-2	3-Nitroaniline	380	U
83-32-9	Acenaphthene	200	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30S5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-12A

Sample wt/vol: 30.4 (g/mL) G Lab File ID: S2H5263.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 14 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: 7.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
51-28-5	2,4-Dinitrophenol	380	U
100-02-7	4-Nitrophenol	380	U
132-64-9	Dibenzofuran	200	U
121-14-2	2,4-Dinitrotoluene	200	U
84-66-2	Diethylphthalate	200	U
86-73-7	Fluorene	200	U
7005-72-3	4-Chlorophenyl-phenylether	200	U
100-01-6	4-Nitroaniline	380	U
534-52-1	4,6-Dinitro-2-methylphenol	380	U
86-30-6	N-Nitrosodiphenylamine (1)	200	U
95-94-3	1,2,4,5-Tetrachlorobenzene	200	U
101-55-3	4-Bromophenyl-phenylether	200	U
118-74-1	Hexachlorobenzene	200	U
1912-24-9	Atrazine	200	U
87-86-5	Pentachlorophenol	380	U
85-01-8	Phenanthrene	200	U
120-12-7	Anthracene	200	U
86-74-8	Carbazole	200	U
84-74-2	Di-n-butylphthalate	200	U
206-44-0	Fluoranthene	200	U
129-00-0	Pyrene	200	U
85-68-7	Butylbenzylphthalate	200	U
91-94-1	3,3´-Dichlorobenzidine	200	U
56-55-3	Benzo(a)anthracene	200	U
218-01-9	Chrysene	200	U
117-81-7	Bis(2-ethylhexyl)phthalate	200	U
117-84-0	Di-n-octylphthalate	200	U
205-99-2	Benzo(b)fluoranthene	200	U
207-08-9	Benzo(k)fluoranthene	200	U
50-32-8	Benzo(a)pyrene	200	U
193-39-5	Indeno(1,2,3-cd)pyrene	200	U
53-70-3	Dibenzo(a,h)anthracene	200	U
191-24-2	Benzo(g,h,i)perylene	200	U
58-90-2	2,3,4,6-Tetrachlorophenol	200	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30S5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-12A

Sample wt/vol: 30.4 (g/mL) G Lab File ID: S2H5263.D

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 14 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: 7.5 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.996	240	J
02		Unknown-02	3.157	92	J
03		Unknown-03	3.221	77	J
04		Unknown-04	3.811	79	J
05	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.486	270	BNJ
06		Unknown-05	4.690	210	J
07		Unknown-06	5.216	250	J
08		Unknown-07	5.344	140	J
09	6971-40-0	17-Pentatriacontene	9.569	1200	NJ
10	2136-70-1	Ethanol, 2-(tetradecyloxy)-	10.138	1300	NJ
11	474-62-4	Campesterol	12.250	2200	NJ
12		Unknown-08	12.647	1500	J
13	83-46-5	.beta.-Sitosterol	12.733	11000	NJ
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5263.D
Report Date: 11-Nov-2011 13:36

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5263.D
Lab Smp Id: K2198-12A Client Smp ID: H30S5
Inj Date : 10-NOV-2011 14:56
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-12A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.400	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
$	2 Phenol-d5	71	3.381	3.373	(0.916)	139022	36.8795	610
$	4 bis(2-Chloroethyl)ether-d8	67	3.424	3.427	(0.927)	168819	32.4999	530
$	6 2-Chlorophenol-d4	132	3.499	3.491	(0.948)	133907	41.0637	680
*	8 1,4-Dichlorobenzene-d4	152	3.692	3.684	(1.000)	119709	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.014	4.006	(1.087)	241481	47.2512	780
$	16 Nitrobenzene-d5	128	4.153	4.145	(0.874)	75930	38.8511	640(Q)
$	19 2-Nitrophenol-d4	143	4.421	4.424	(0.930)	88047	40.8095	670
$	23 2,4-Dichlorophenol-d3	165	4.636	4.628	(0.975)	172097	43.6954	720
*	25 Naphthalene-d8	136	4.754	4.746	(1.000)	375281	40.0000	
$	27 4-Chloroaniline-d4	131	4.808	4.810	(1.011)	33520	9.58508	160(aQ)
$	40 Dimethylphthalate-d6	166	5.976	5.968	(0.962)	522692	48.0718	790
$	43 Acenaphthylene-d8	160	6.084	6.076	(0.979)	588819	41.6442	680
*	46 Acenaphthene-d10	164	6.212	6.204	(1.000)	295722	40.0000	
$	49 4-Nitrophenol-d4	143	6.320	6.312	(1.017)	70829	45.2015	740
$	54 Fluorene-d10	176	6.641	6.633	(1.069)	411704	41.2208	680
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.706	6.698	(0.902)	77662	43.9932	720(Q)
*	65 Phenanthrene-d10	188	7.435	7.438	(1.000)	452388	40.0000	
$	67 Anthracene-d10	188	7.488	7.480	(1.007)	556303	43.0488	710
$	72 Pyrene-d10	212	8.614	8.606	(0.891)	442311	51.8311	850

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5263.D
Report Date: 11-Nov-2011 13:36

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)	
*	77 Chrysene-d12	240	9.665	9.668	(1.000)	270891	40.0000		(Q)
	79 bis(2-Ethylhexyl)phthalate	149	9.687	9.700	(1.002)	10272	2.49602	41	(a)
$	83 Benzo(a)pyrene-d12	264	10.866	10.891	(0.993)	199284	41.8422	690	
*	85 Perylene-d12	264	10.941	10.966	(1.000)	194093	40.0000		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5263.D
Report Date: 11-Nov-2011 13:36

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5263.D
Lab Smp Id: K2198-12A Client Smp ID: H30S5
Inj Date : 10-NOV-2011 14:56
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-12A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.400	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

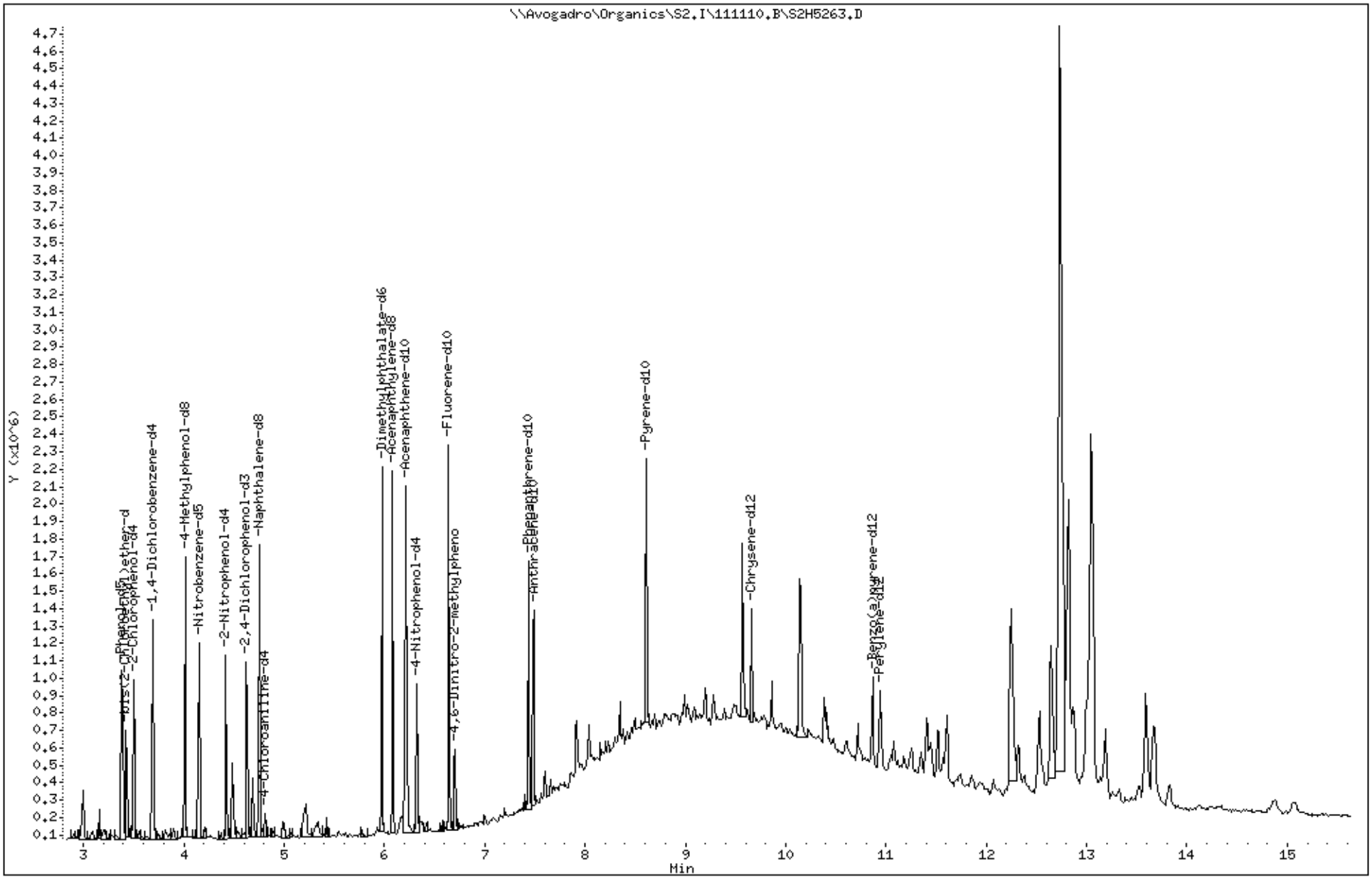
ISTD		RT	AREA	AMOUNT
* 8	1,4-Dichlorobenzene-d4	3.693	1067090	40.000
* 25	Naphthalene-d8	4.754	1278579	40.000
* 77	Chrysene-d12	9.666	796262	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.996	337538	12.6526545	210	0	0		8
Unknown				CAS #:			
3.157	127873	4.79333203	79	0	0		8
Unknown				CAS #:			
3.221	107255	4.02045269	66	0	0		8

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5263.D
Report Date: 11-Nov-2011 13:36

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
3.811	109644	4.11002098	68	0		0	8
2(3H)-Furanone, dihydro-4-hydroxy-					CAS #: 5469-16-9		
4.486	446226	13.9600415	230	90	NIST2002.L	4145	25
Unknown					CAS #:		
4.690	355532	11.1227123	180	0		0	25
Unknown					CAS #:		
5.216	422654	13.2226080	220	0		0	25
Unknown					CAS #:		
5.344	238254	7.45370840	120	0		0	25
17-Pentatriacontene					CAS #: 6971-40-0		
9.569	1245425	62.5635958	1000	90	NIST2002.L	168066	77
Ethanol, 2-(tetradecyloxy)-					CAS #: 2136-70-1		
10.138	1394351	70.0448413	1200	95	NIST2002.L	93396	77
Campesterol					CAS #: 474-62-4		
12.250	2272100	114.138309	1900	95	NIST2002.L	156588	77
Unknown					CAS #:		
12.647	1526574	76.6870262	1300	0		0	77
.beta.-Sitosterol					CAS #: 83-46-5		
12.733	10911725	548.147430	9000	95	NIST2002.L	159283	77

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5263.D
Date : 10-NOV-2011 14:56
Client ID: H30S5
Instrument: S2.i
Sample Info: K2198-12A,,62764,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5263.D

Date : 10-NOV-2011 14:56

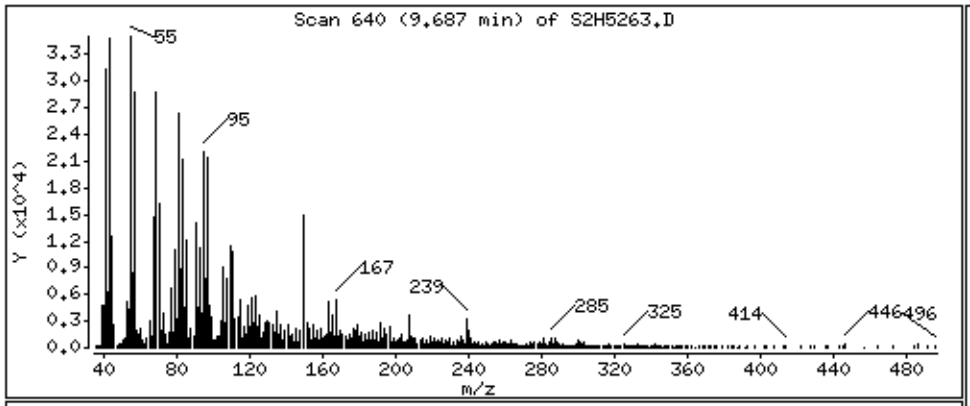
Client ID: H30S5 Instrument: S2.i

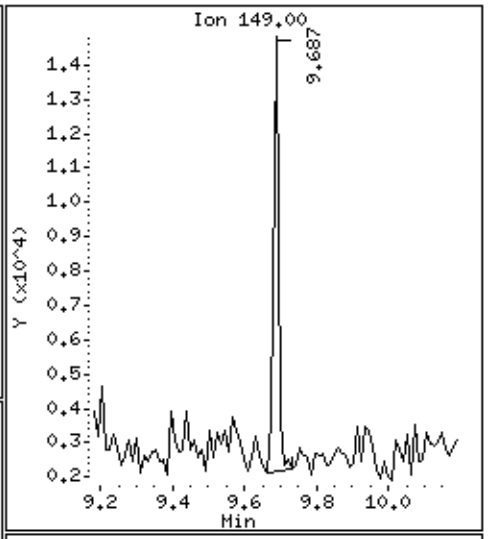
Sample Info: K2198-12A,,62764,,

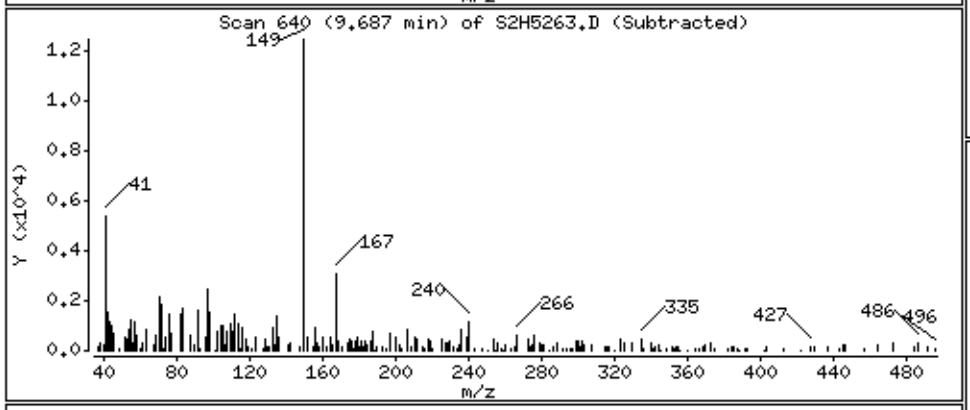
Volume Injected (uL): 2.0 Operator: SRC: LIMS

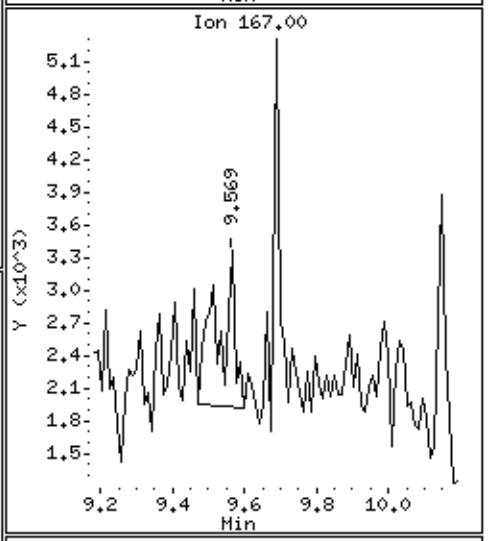
Column phase: RXI-5SILMS Column diameter: 0.25

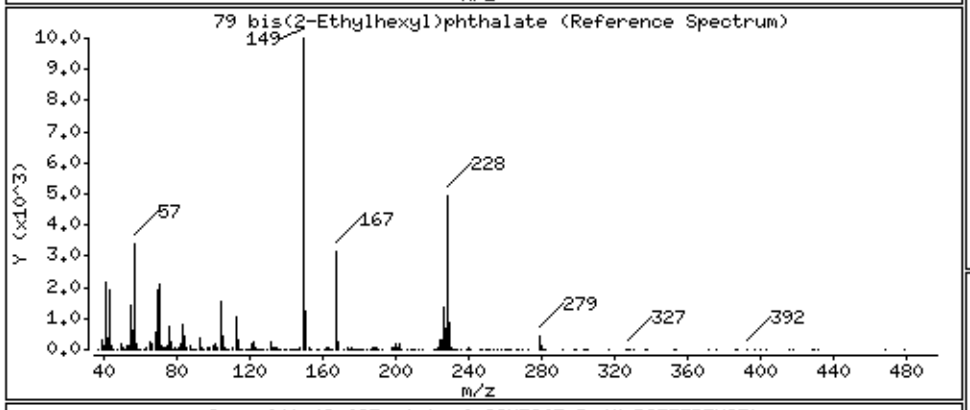
79 bis(2-Ethylhexyl)phthalate Concentration: 41 ug/Kg

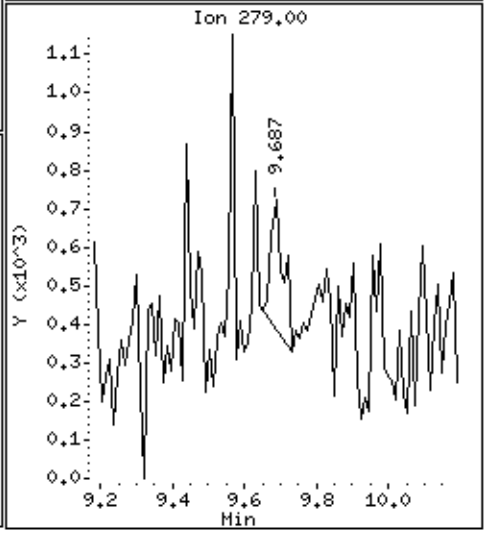


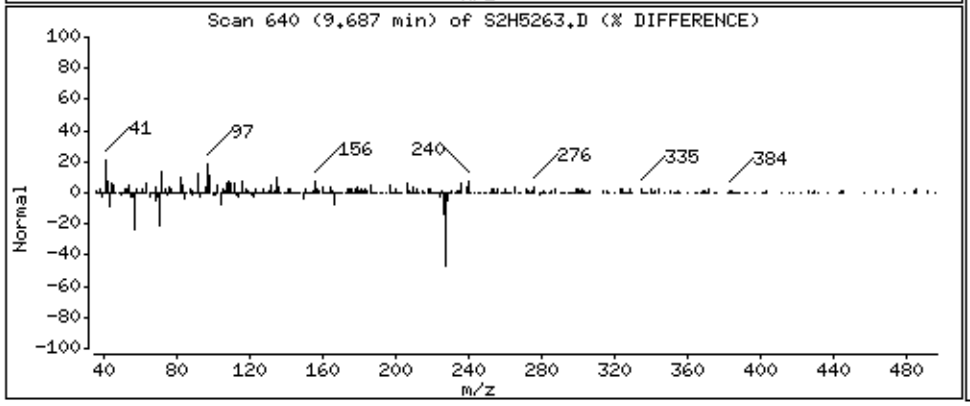












Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5263.D

Date : 10-NOV-2011 14:56

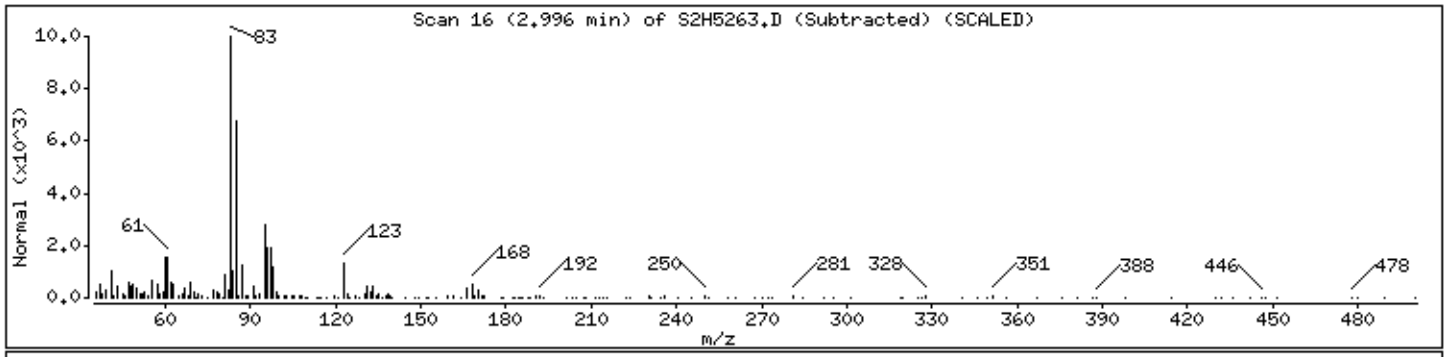
Client ID: H30S5 Instrument: S2.i

Sample Info: K2198-12A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5263.D

Date : 10-NOV-2011 14:56

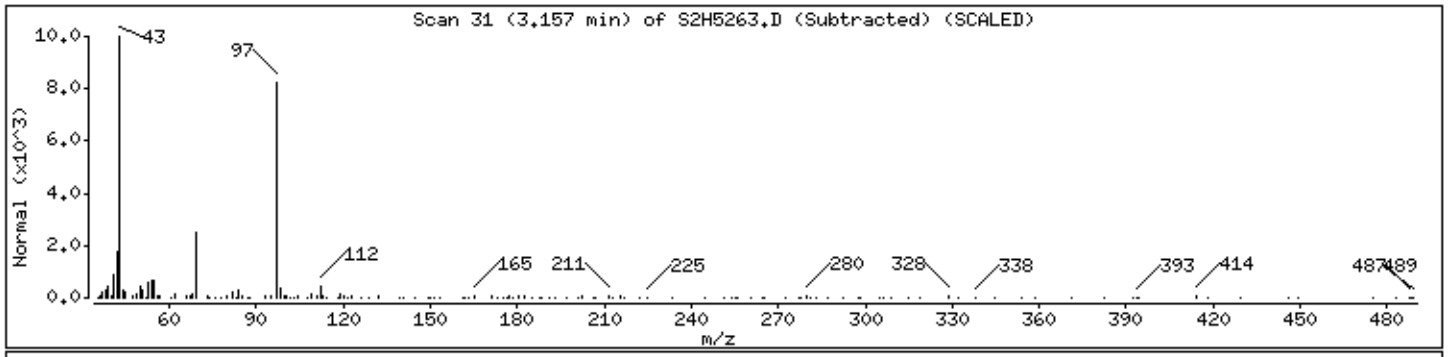
Client ID: H30S5 Instrument: S2.i

Sample Info: K2198-12A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5263.D

Date : 10-NOV-2011 14:56

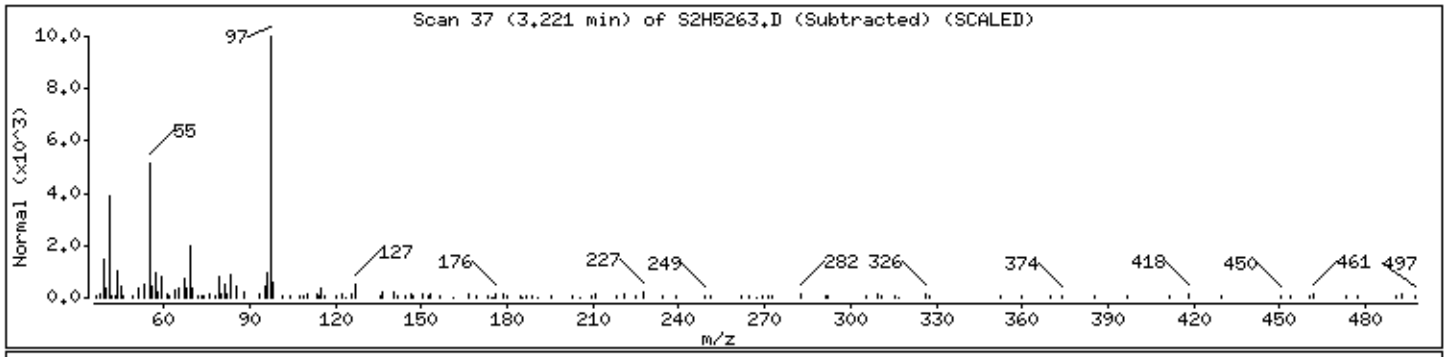
Client ID: H30S5 Instrument: S2.i

Sample Info: K2198-12A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5263.D

Date : 10-NOV-2011 14:56

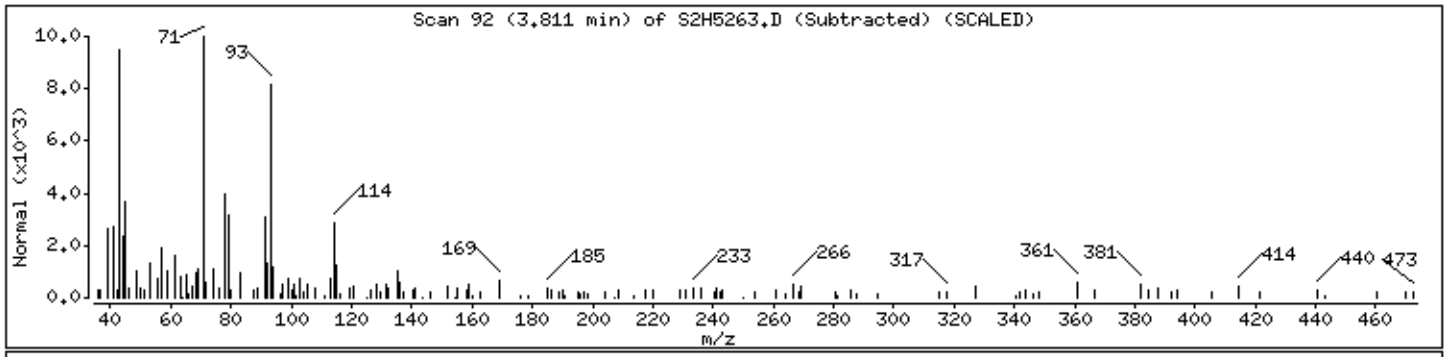
Client ID: H30S5 Instrument: S2.i

Sample Info: K2198-12A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5263.D

Date : 10-NOV-2011 14:56

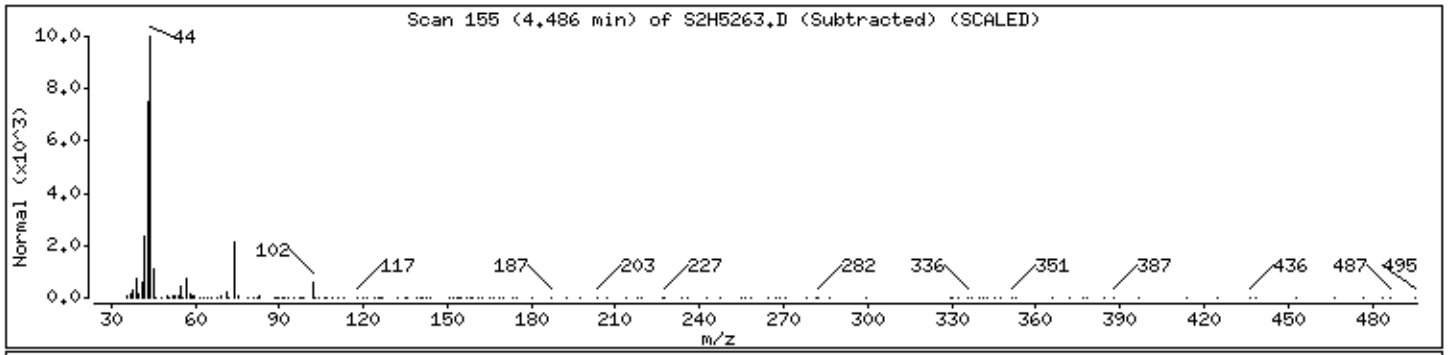
Client ID: H30S5 Instrument: S2.i

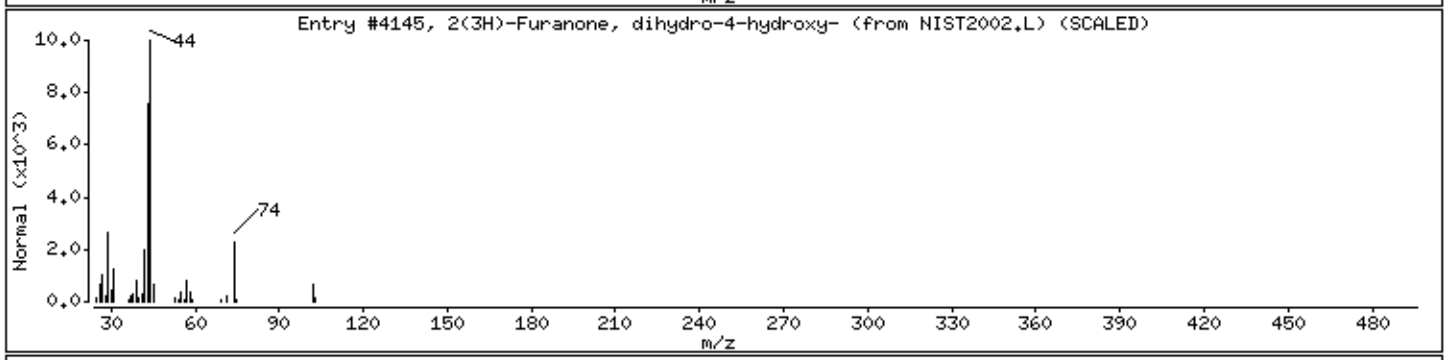
Sample Info: K2198-12A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2(3H)-Furanone, dihydro-4-hydroxy-	5469-16-9	NIST2002.L	4145	90	C4H6O3	102





Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5263.D

Date : 10-NOV-2011 14:56

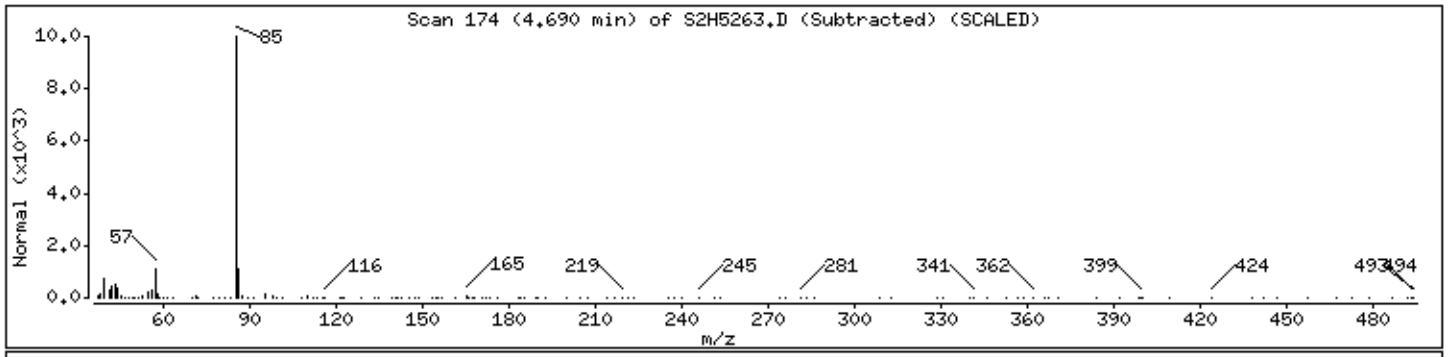
Client ID: H30S5 Instrument: S2.i

Sample Info: K2198-12A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5263.D

Date : 10-NOV-2011 14:56

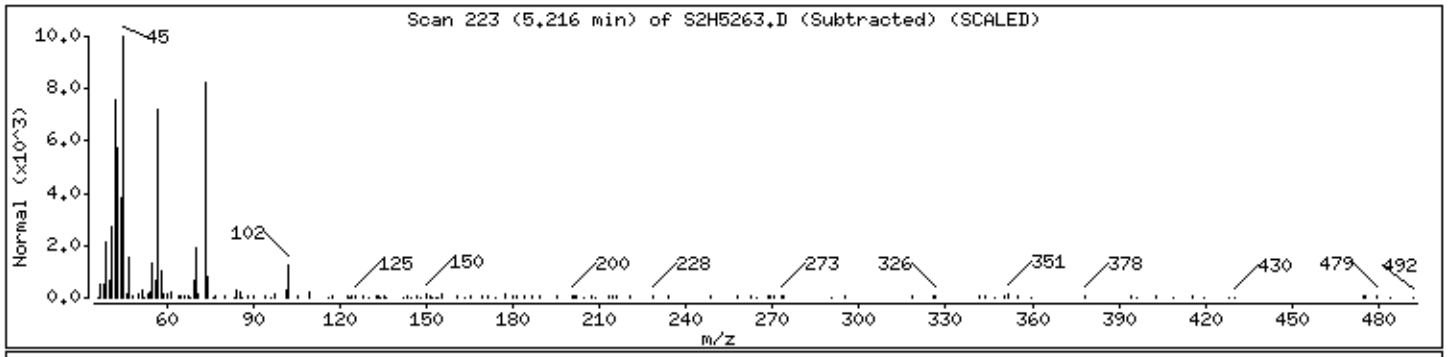
Client ID: H30S5 Instrument: S2.i

Sample Info: K2198-12A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5263.D

Date : 10-NOV-2011 14:56

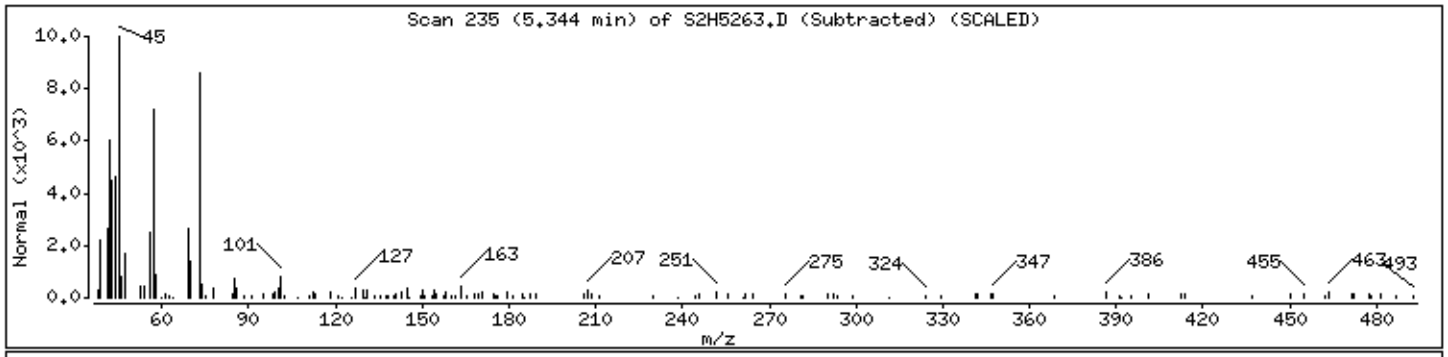
Client ID: H30S5 Instrument: S2.i

Sample Info: K2198-12A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5263.D

Date : 10-NOV-2011 14:56

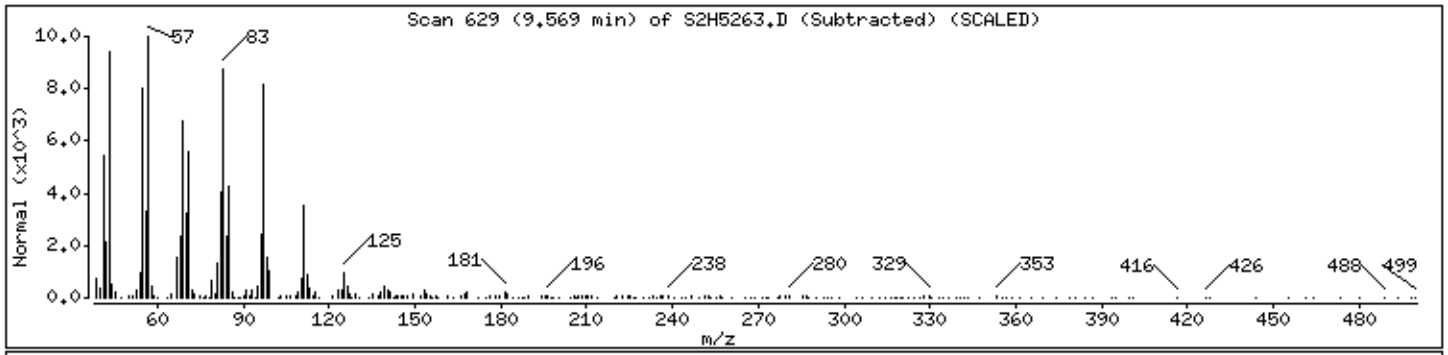
Client ID: H30S5 Instrument: S2.i

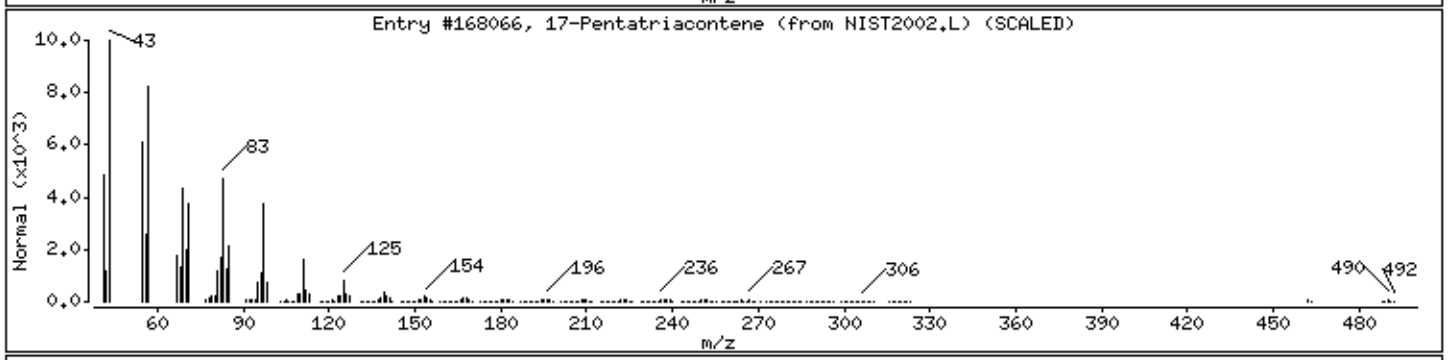
Sample Info: K2198-12A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
17-Pentatriacontene	6971-40-0	NIST2002.L	168066	90	C35H70	491





Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5263.D

Date : 10-NOV-2011 14:56

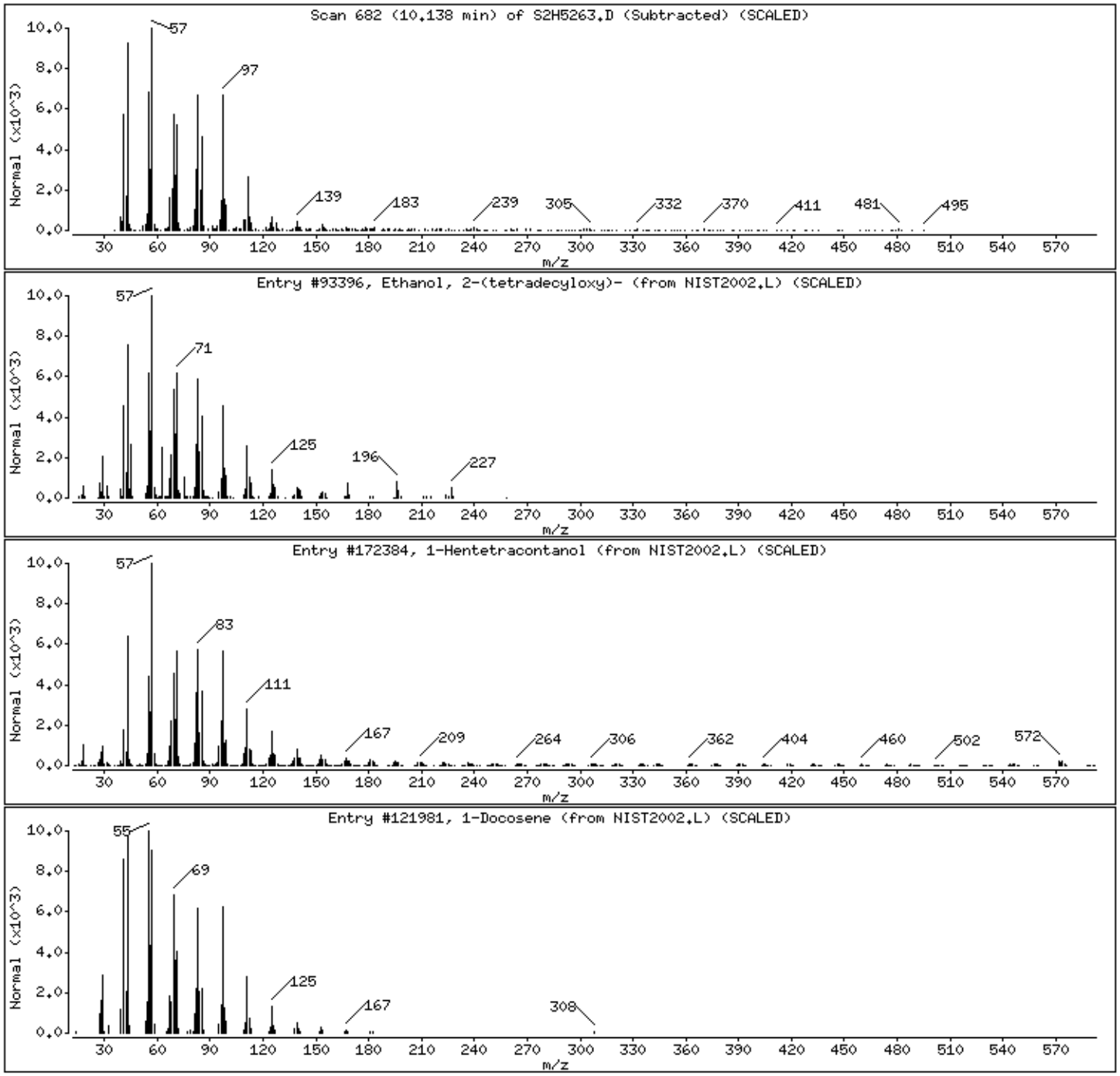
Client ID: H30S5 Instrument: S2.i

Sample Info: K2198-12A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethanol, 2-(tetradecyloxy)-	2136-70-1	NIST2002.L	93396	95	C16H34O2	258
1-Hentetracontanol	40710-42-7	NIST2002.L	172384	91	C41H84O	593
1-Docosene	1599-67-3	NIST2002.L	121981	86	C22H44	308



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5263.D

Date : 10-NOV-2011 14:56

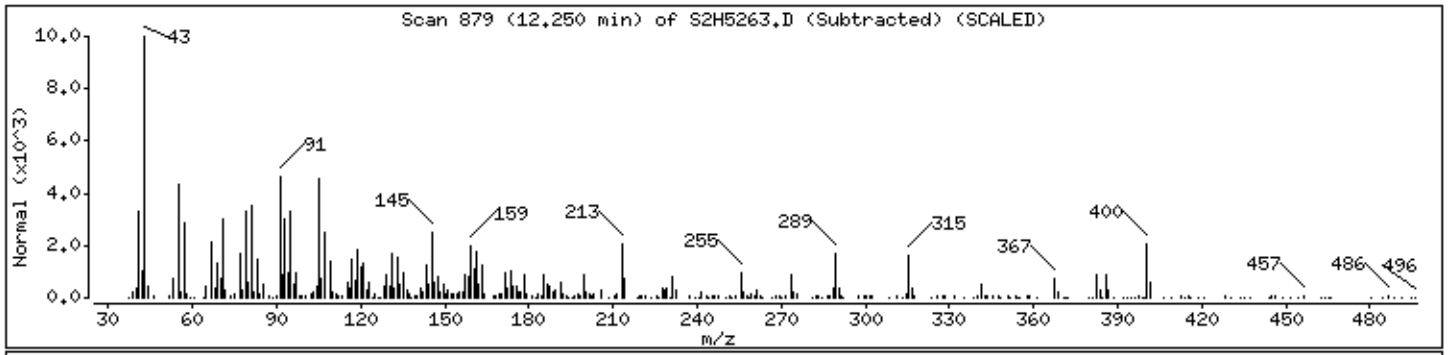
Client ID: H30S5 Instrument: S2.i

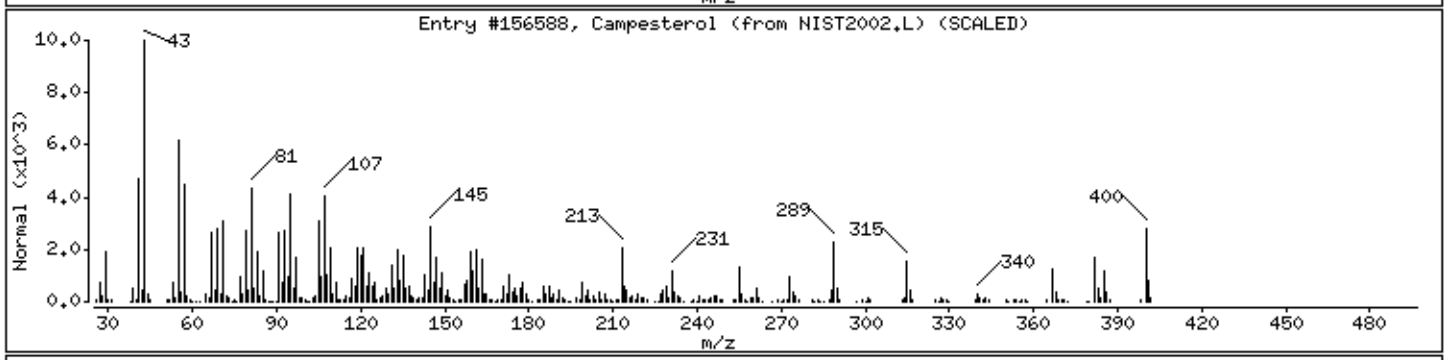
Sample Info: K2198-12A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Campesterol	474-62-4	NIST2002.L	156588	95	C28H48O	400





Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5263.D

Date : 10-NOV-2011 14:56

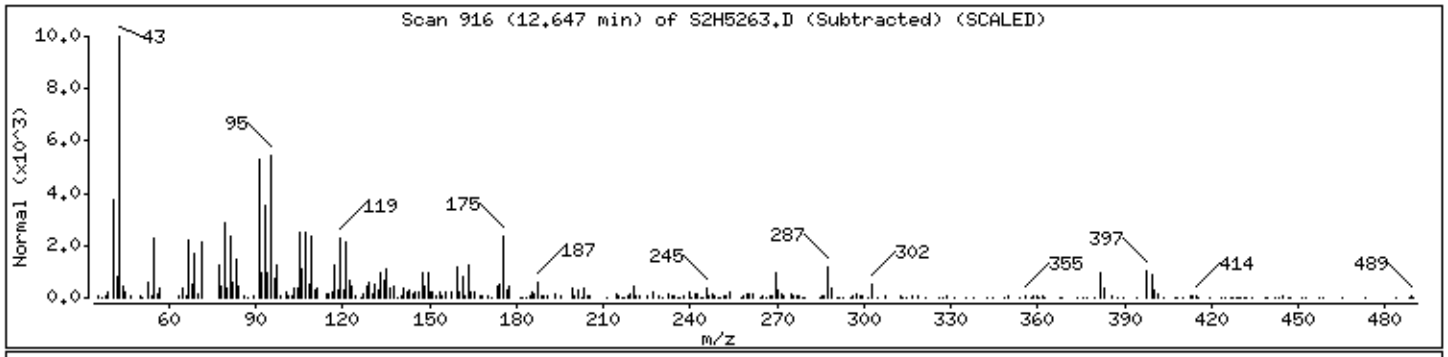
Client ID: H30S5 Instrument: S2.i

Sample Info: K2198-12A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5263.D

Date : 10-NOV-2011 14:56

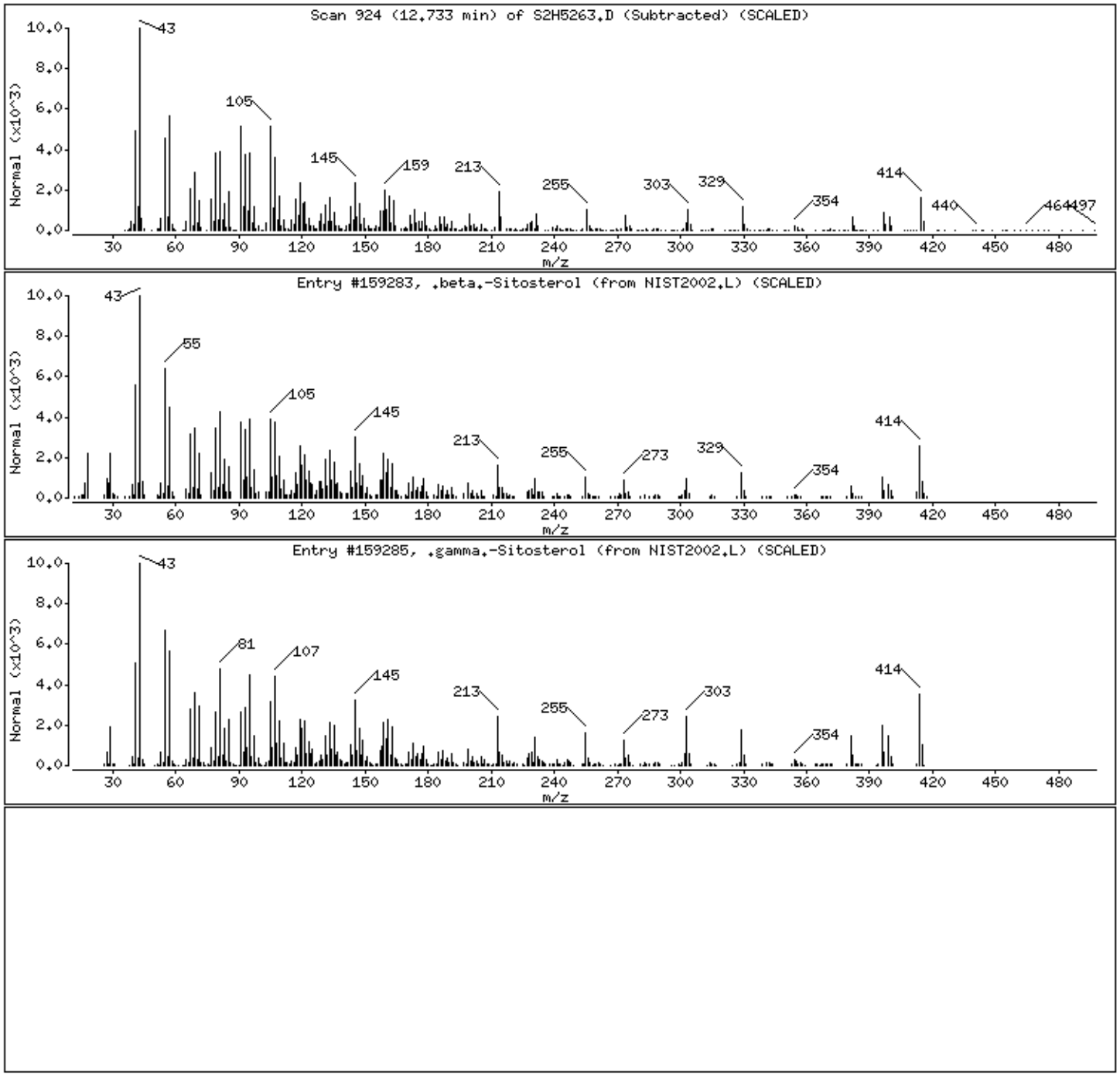
Client ID: H30S5 Instrument: S2.i

Sample Info: K2198-12A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.beta.-Sitosterol	83-46-5	NIST2002.L	159283	95	C29H50O	414
.gamma.-Sitosterol	83-47-6	NIST2002.L	159285	95	C29H50O	414



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30S8

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-13A

Sample wt/vol: 30.4 (g/mL) G Lab File ID: S2H5264.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 33 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: 7.3 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
100-52-7	Benzaldehyde	250	U
108-95-2	Phenol	250	U
111-44-4	Bis(2-chloroethyl)ether	250	U
95-57-8	2-Chlorophenol	250	U
95-48-7	2-Methylphenol	250	U
108-60-1	2,2´-Oxybis(1-chloropropane)	250	U
98-86-2	Acetophenone	250	U
106-44-5	4-Methylphenol	250	U
621-64-7	N-Nitroso-di-n-propylamine	250	U
67-72-1	Hexachloroethane	250	U
98-95-3	Nitrobenzene	250	U
78-59-1	Isophorone	250	U
88-75-5	2-Nitrophenol	250	U
105-67-9	2,4-Dimethylphenol	250	U
111-91-1	Bis(2-chloroethoxy)methane	250	U
120-83-2	2,4-Dichlorophenol	250	U
91-20-3	Naphthalene	250	U
106-47-8	4-Chloroaniline	250	U
87-68-3	Hexachlorobutadiene	250	U
105-60-2	Caprolactam	250	U
59-50-7	4-Chloro-3-methylphenol	250	U
91-57-6	2-Methylnaphthalene	250	U
77-47-4	Hexachlorocyclopentadiene	250	U
88-06-2	2,4,6-Trichlorophenol	250	U
95-95-4	2,4,5-Trichlorophenol	250	U
92-52-4	1,1´-Biphenyl	250	U
91-58-7	2-Chloronaphthalene	250	U
88-74-4	2-Nitroaniline	490	U
131-11-3	Dimethylphthalate	250	U
606-20-2	2,6-Dinitrotoluene	250	U
208-96-8	Acenaphthylene	250	U
99-09-2	3-Nitroaniline	490	U
83-32-9	Acenaphthene	250	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30S8

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-13A

Sample wt/vol: 30.4 (g/mL) G Lab File ID: S2H5264.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 33 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: 7.3 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
51-28-5	2,4-Dinitrophenol	490	U
100-02-7	4-Nitrophenol	490	U
132-64-9	Dibenzofuran	250	U
121-14-2	2,4-Dinitrotoluene	250	U
84-66-2	Diethylphthalate	250	U
86-73-7	Fluorene	250	U
7005-72-3	4-Chlorophenyl-phenylether	250	U
100-01-6	4-Nitroaniline	490	U
534-52-1	4,6-Dinitro-2-methylphenol	490	U
86-30-6	N-Nitrosodiphenylamine (1)	250	U
95-94-3	1,2,4,5-Tetrachlorobenzene	250	U
101-55-3	4-Bromophenyl-phenylether	250	U
118-74-1	Hexachlorobenzene	250	U
1912-24-9	Atrazine	250	U
87-86-5	Pentachlorophenol	490	U
85-01-8	Phenanthrene	250	U
120-12-7	Anthracene	250	U
86-74-8	Carbazole	250	U
84-74-2	Di-n-butylphthalate	250	U
206-44-0	Fluoranthene	250	U
129-00-0	Pyrene	250	U
85-68-7	Butylbenzylphthalate	250	U
91-94-1	3,3´-Dichlorobenzidine	250	U
56-55-3	Benzo(a)anthracene	250	U
218-01-9	Chrysene	250	U
117-81-7	Bis(2-ethylhexyl)phthalate	250	U
117-84-0	Di-n-octylphthalate	250	U
205-99-2	Benzo(b)fluoranthene	250	U
207-08-9	Benzo(k)fluoranthene	250	U
50-32-8	Benzo(a)pyrene	250	U
193-39-5	Indeno(1,2,3-cd)pyrene	250	U
53-70-3	Dibenzo(a,h)anthracene	250	U
191-24-2	Benzo(g,h,i)perylene	250	U
58-90-2	2,3,4,6-Tetrachlorophenol	250	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30S8

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-13A

Sample wt/vol: 30.4 (g/mL) G Lab File ID: S2H5264.D

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 33 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: 7.3 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.997	110	J
02		Unknown-02	3.158	110	J
03	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.487	320	BNJ
04		Unknown-03	4.691	240	J
05		Unknown-04	5.206	330	J
06		Unknown-05	5.335	160	J
07	57-10-3	n-Hexadecanoic acid	7.908	260	NJ
08		Unknown-06	9.216	280	J
09	1599-67-3	1-Docosene	9.603	330	NJ
10		Unknown-07	10.203	280	J
11		Unknown-08	10.460	390	J
	E96679[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5264.D
Report Date: 11-Nov-2011 13:36

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5264.D
Lab Smp Id: K2198-13A Client Smp ID: H30S8
Inj Date : 10-NOV-2011 15:17
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-13A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.400	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
$	2 Phenol-d5	71	3.382	3.373	(0.916)	128130	34.6704	570
$	4 bis(2-Chloroethyl)ether-d8	67	3.425	3.427	(0.927)	161660	31.7446	520
$	6 2-Chlorophenol-d4	132	3.500	3.491	(0.948)	125370	39.2153	640
*	8 1,4-Dichlorobenzene-d4	152	3.693	3.684	(1.000)	117360	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.015	4.006	(1.087)	205776	41.0706	680
$	16 Nitrobenzene-d5	128	4.154	4.145	(0.874)	65435	33.9217	560
$	19 2-Nitrophenol-d4	143	4.423	4.424	(0.930)	83860	39.3803	650
$	23 2,4-Dichlorophenol-d3	165	4.626	4.628	(0.973)	153115	39.3874	650
*	25 Naphthalene-d8	136	4.755	4.746	(1.000)	370407	40.0000	
$	27 4-Chloroaniline-d4	131	4.809	4.810	(1.011)	42668	12.3615	200(Q)
$	40 Dimethylphthalate-d6	166	5.977	5.968	(0.962)	477684	44.4162	730
$	43 Acenaphthylene-d8	160	6.085	6.076	(0.979)	501590	35.8656	590
*	46 Acenaphthene-d10	164	6.213	6.204	(1.000)	292501	40.0000	
$	49 4-Nitrophenol-d4	143	6.321	6.312	(1.017)	65240	42.0932	690
$	54 Fluorene-d10	176	6.642	6.633	(1.069)	377384	38.2007	630
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.707	6.698	(0.902)	74104	39.6882	650
*	65 Phenanthrene-d10	188	7.436	7.438	(1.000)	478485	40.0000	
$	67 Anthracene-d10	188	7.479	7.480	(1.006)	497818	36.4220	600
$	72 Pyrene-d10	212	8.615	8.606	(0.888)	426760	43.3602	710

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5264.D
Report Date: 11-Nov-2011 13:36

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)	
* 77 Chrysene-d12	240	9.699	9.668	(1.000)	312428	40.0000		(Q)
$ 83 Benzo(a)pyrene-d12	264	10.932	10.891	(1.000)	196559	38.2175	630	
* 85 Perylene-d12	264	11.018	10.966	(1.000)	209596	40.0000		(H)

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5264.D
Report Date: 11-Nov-2011 13:36

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5264.D
Lab Smp Id: K2198-13A Client Smp ID: H30S8
Inj Date : 10-NOV-2011 15:17
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-13A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.400	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

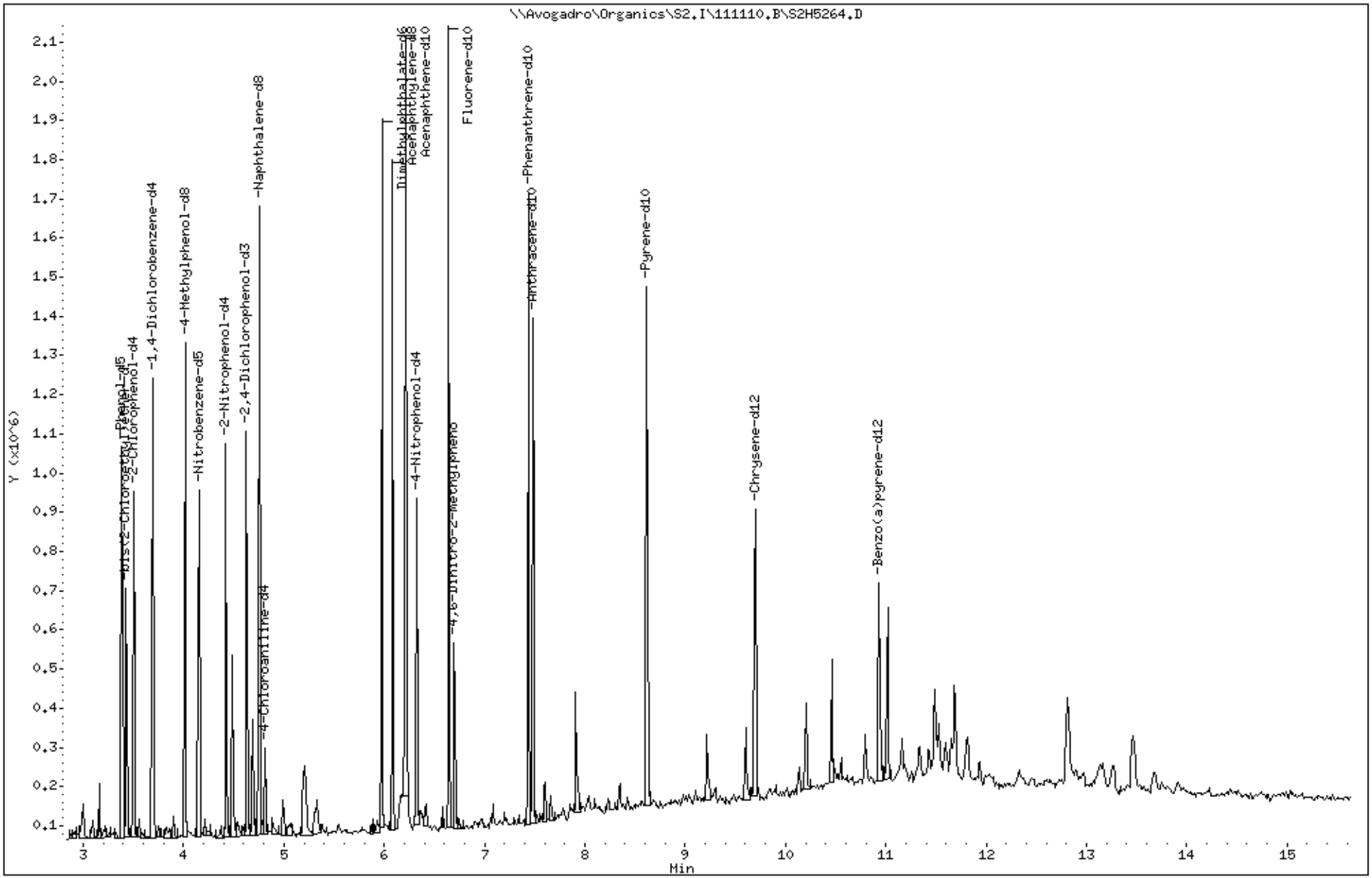
ISTD	RT	AREA	AMOUNT
* 8 1,4-Dichlorobenzene-d4	3.694	1033152	40.000
* 25 Naphthalene-d8	4.756	1235534	40.000
* 65 Phenanthrene-d10	7.436	1331285	40.000
* 77 Chrysene-d12	9.699	861997	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.997	119682	4.63365930	76	0	0		8
Unknown				CAS #:			
3.158	114670	4.43960835	73	0	0		8

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5264.D
Report Date: 11-Nov-2011 13:36

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
2(3H)-Furanone, dihydro-4-hydroxy-					CAS #: 5469-16-9		
4.487	401659	13.0035799	210	90	NIST2002.L	4145	25
Unknown					CAS #:		
4.691	300856	9.74010370	160	0		0	25
Unknown					CAS #:		
5.206	416215	13.4748295	220	0		0	25
Unknown					CAS #:		
5.335	205191	6.64299892	110	0		0	25
n-Hexadecanoic acid					CAS #: 57-10-3		
7.908	351765	10.5691729	170	94	NIST2002.L	92227	65
Unknown					CAS #:		
9.216	242089	11.2338425	180	0		0	77
1-Docosene					CAS #: 1599-67-3		
9.603	286274	13.2842026	220	93	NIST2002.L	121981	77
Unknown					CAS #:		
10.203	250220	11.6111945	190	0		0	77
Unknown					CAS #:		
10.460	338518	15.7085254	260	0		0	77

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5264.D
Date : 10-NOV-2011 15:17
Client ID: H30S8
Instrument: S2.i
Sample Info: K2198-13A,,62764,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



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Date : 10-NOV-2011 15:17

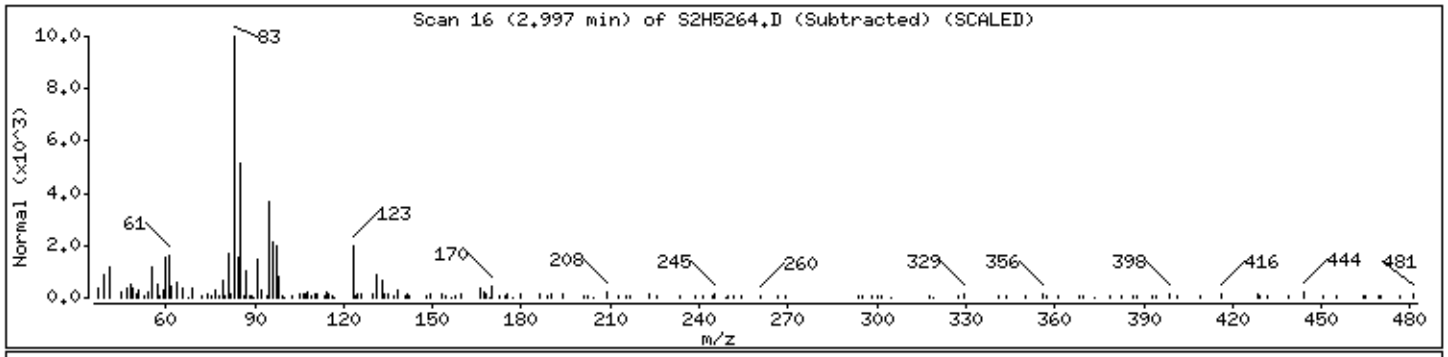
Client ID: H30S8 Instrument: S2.i

Sample Info: K2198-13A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5264.D

Date : 10-NOV-2011 15:17

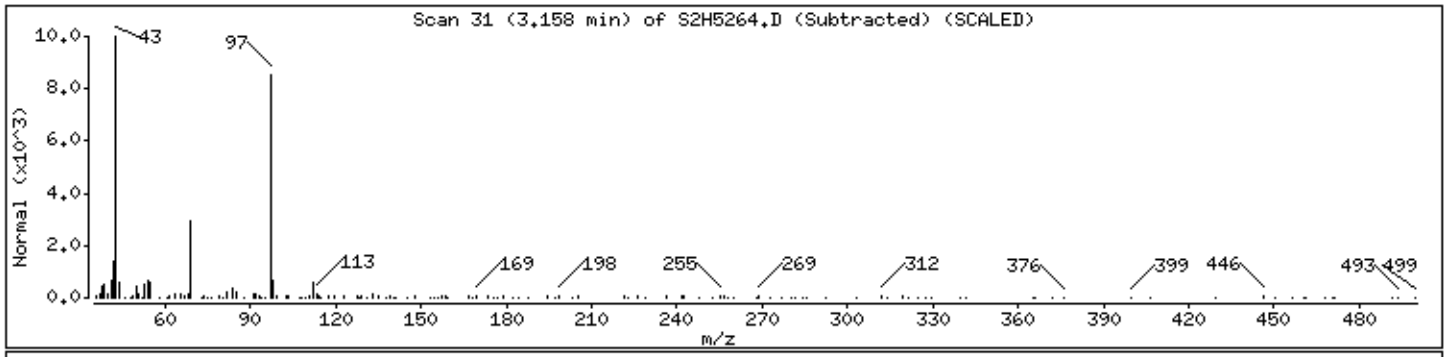
Client ID: H30S8 Instrument: S2.i

Sample Info: K2198-13A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 15:17

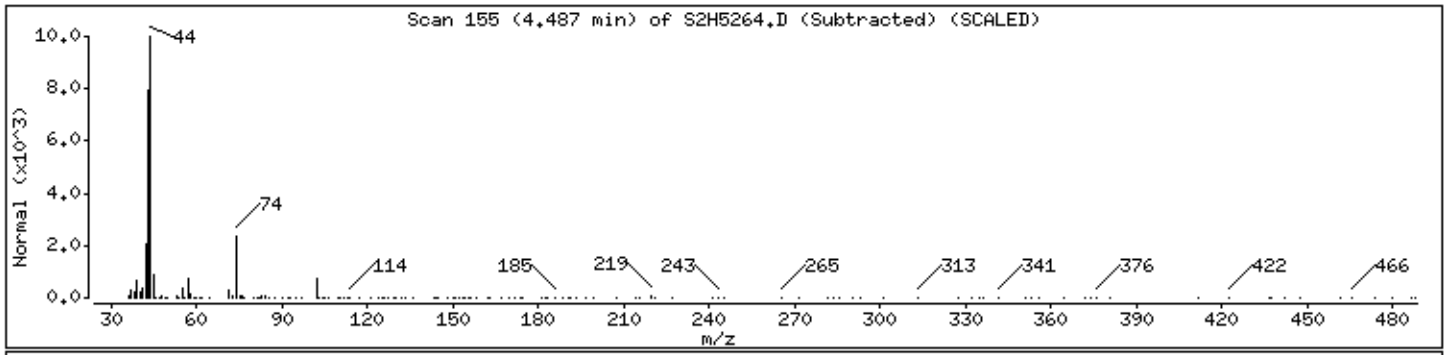
Client ID: H30S8 Instrument: S2.i

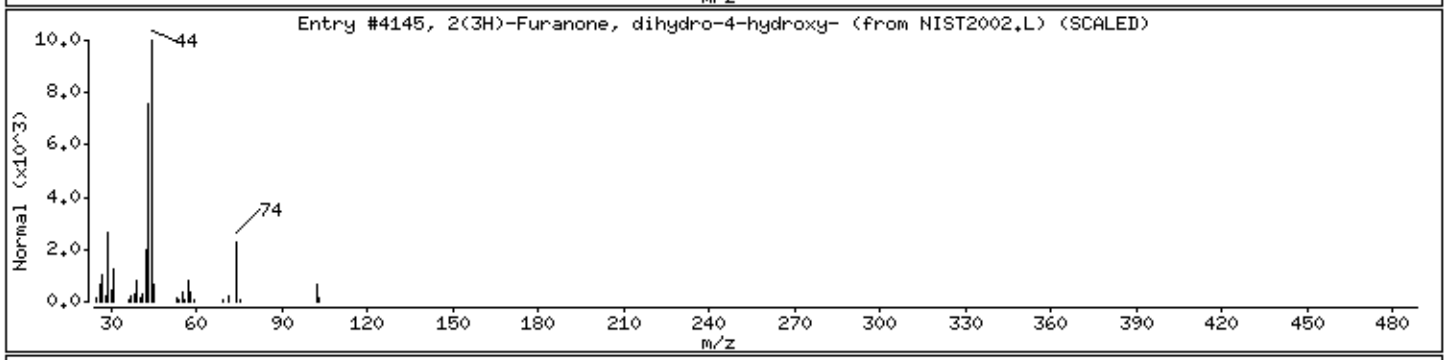
Sample Info: K2198-13A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2(3H)-Furanone, dihydro-4-hydroxy-	5469-16-9	NIST2002.L	4145	90	C4H6O3	102





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Date : 10-NOV-2011 15:17

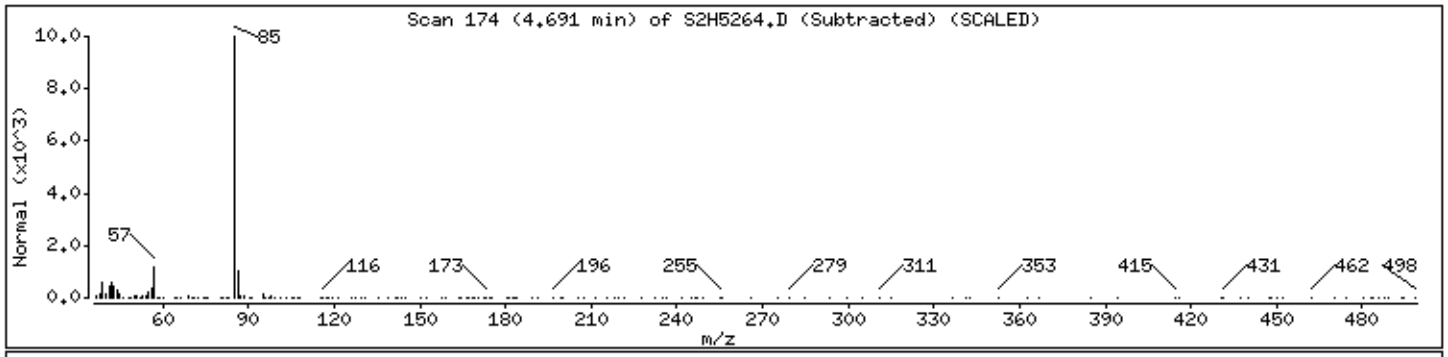
Client ID: H30S8 Instrument: S2.i

Sample Info: K2198-13A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 15:17

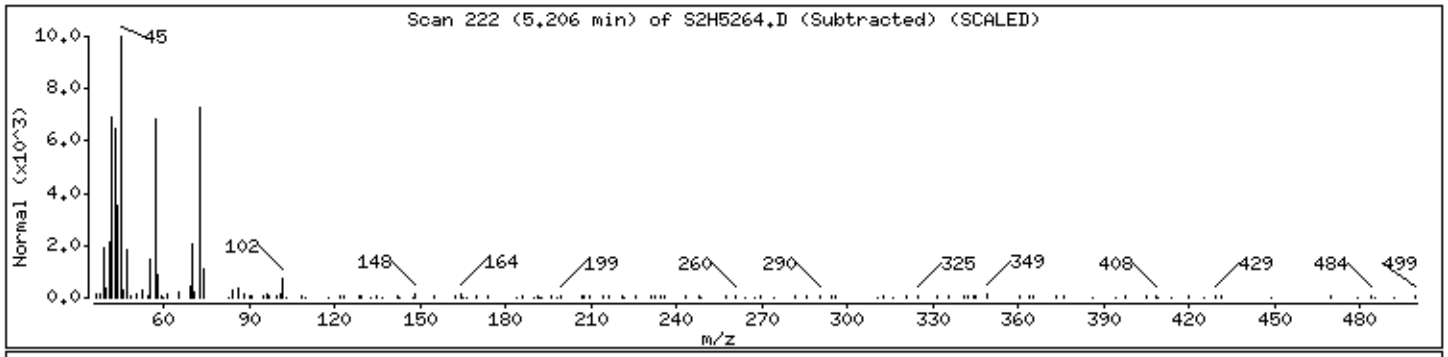
Client ID: H30S8 Instrument: S2.i

Sample Info: K2198-13A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5264.D

Date : 10-NOV-2011 15:17

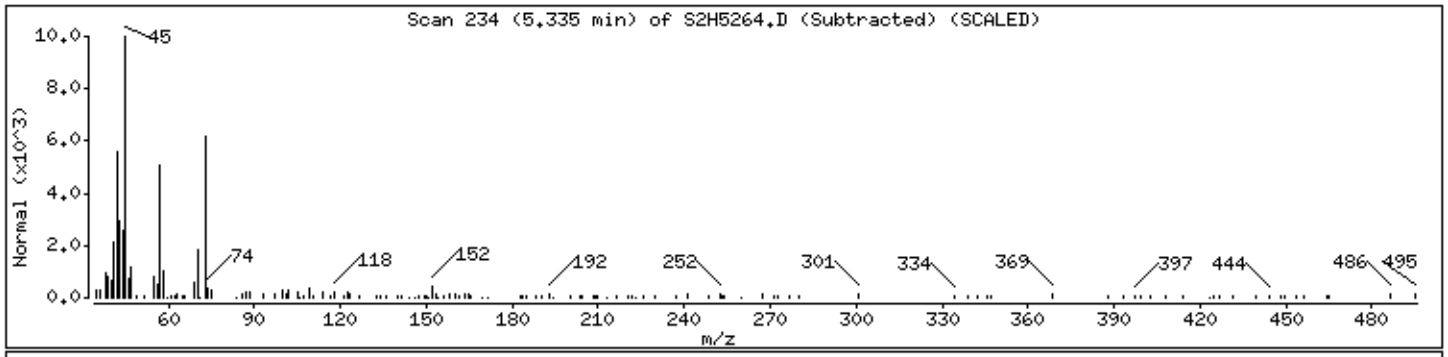
Client ID: H30S8 Instrument: S2.i

Sample Info: K2198-13A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5264.D

Date : 10-NOV-2011 15:17

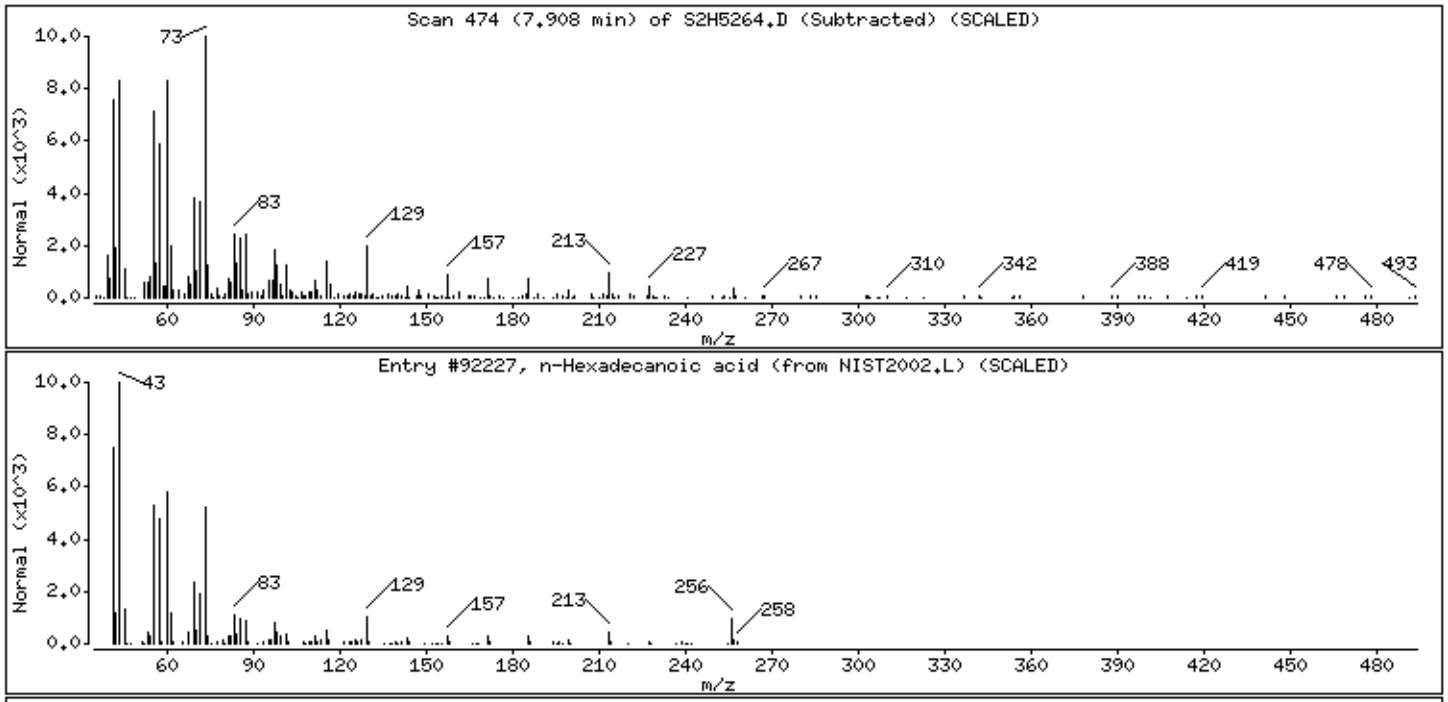
Client ID: H30S8 Instrument: S2.i

Sample Info: K2198-13A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
n-Hexadecanoic acid	57-10-3	NIST2002.L	92227	94	C16H32O2	256



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5264.D

Date : 10-NOV-2011 15:17

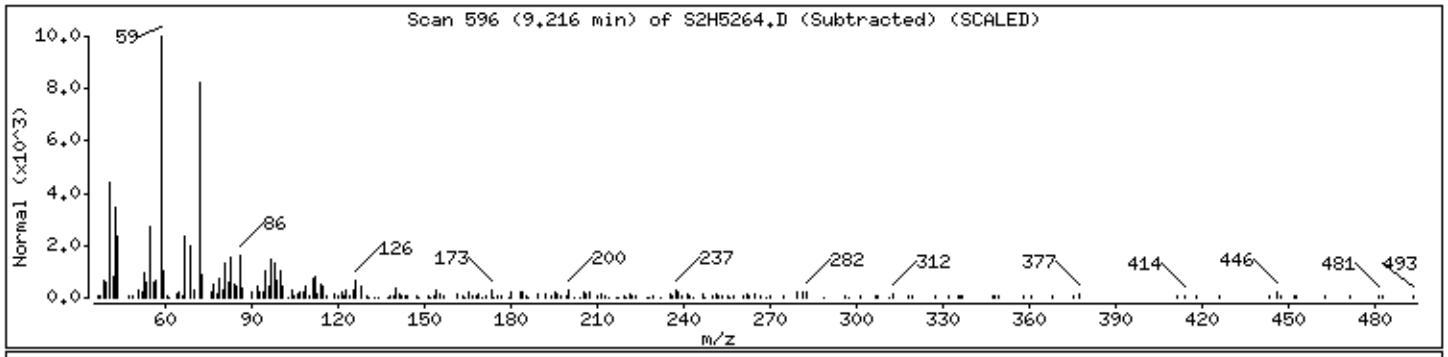
Client ID: H30S8 Instrument: S2.i

Sample Info: K2198-13A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5264.D

Date : 10-NOV-2011 15:17

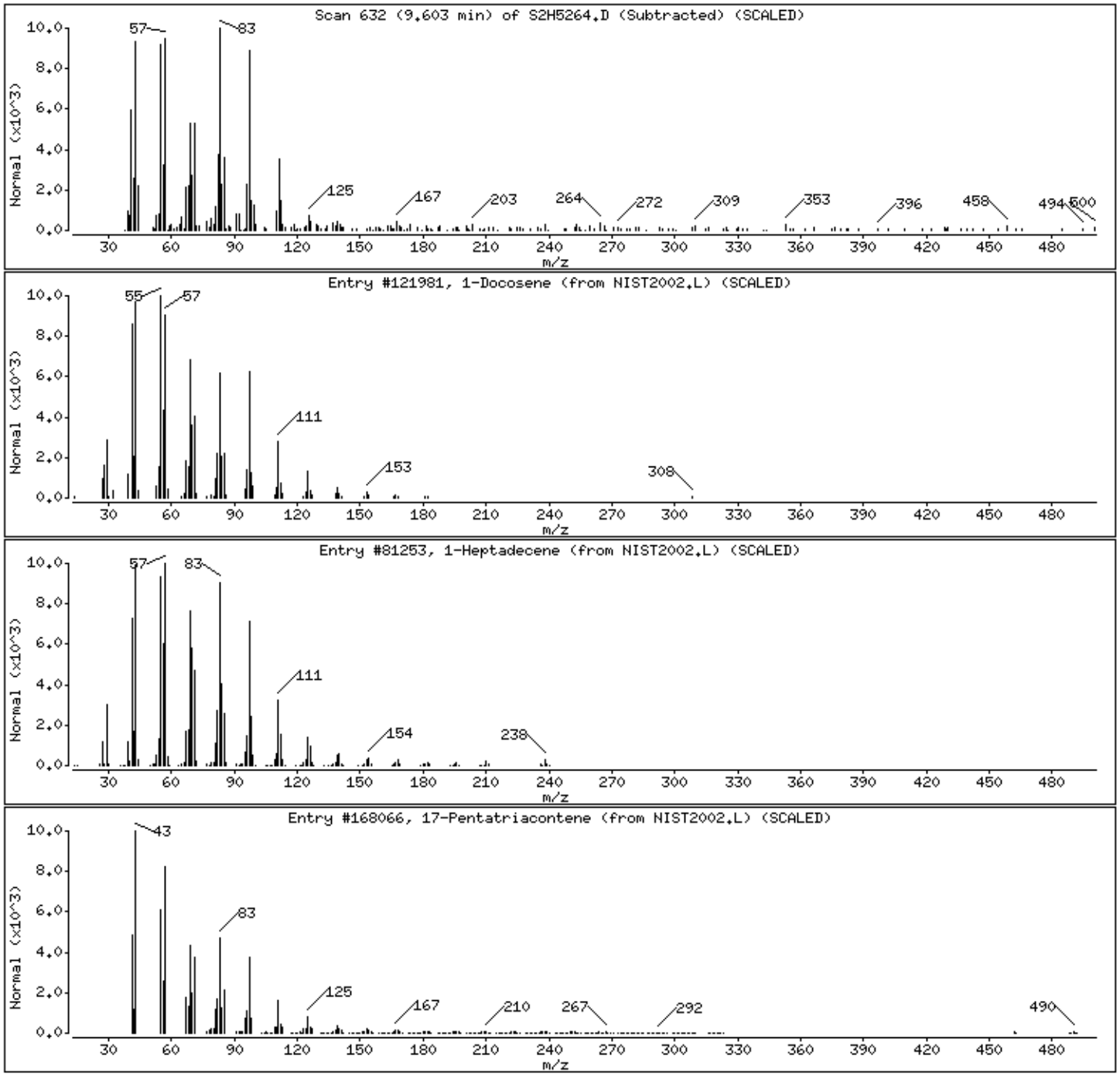
Client ID: H30S8 Instrument: S2.i

Sample Info: K2198-13A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Docosene	1599-67-3	NIST2002.L	121981	93	C22H44	308
1-Heptadecene	6765-39-5	NIST2002.L	81253	91	C17H34	238
17-Pentatriacontene	6971-40-0	NIST2002.L	168066	90	C35H70	491



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5264.D

Date : 10-NOV-2011 15:17

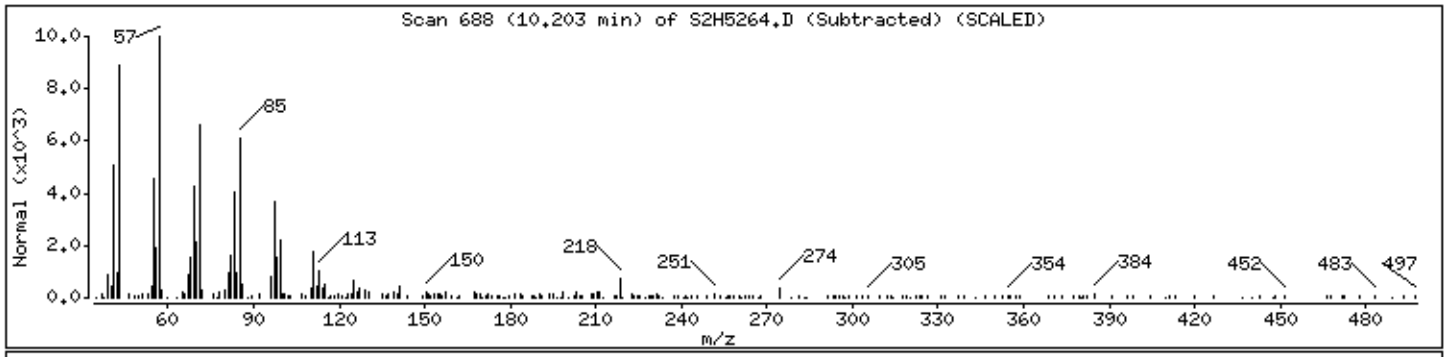
Client ID: H30S8 Instrument: S2.i

Sample Info: K2198-13A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5264.D

Date : 10-NOV-2011 15:17

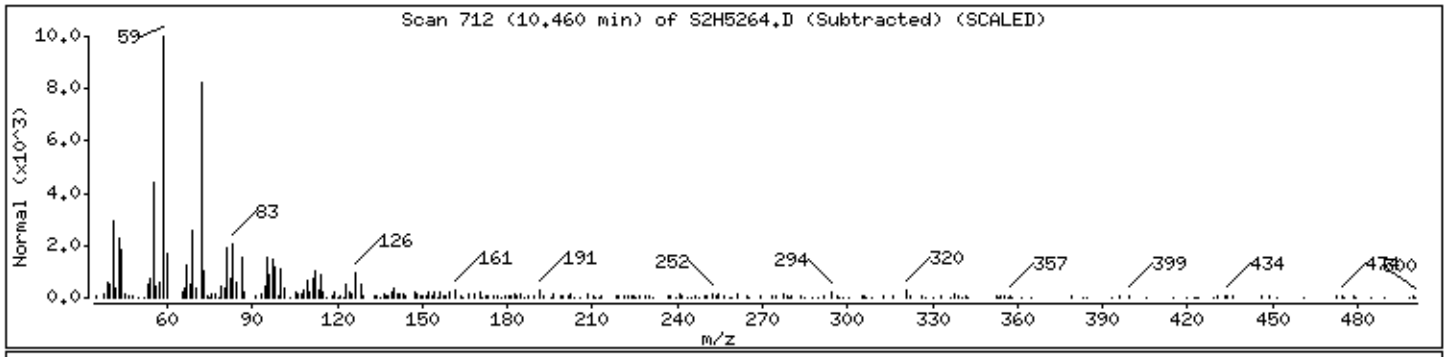
Client ID: H30S8 Instrument: S2.i

Sample Info: K2198-13A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30S9

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-14A

Sample wt/vol: 30.5 (g/mL) G Lab File ID: S2H5265.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 34 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: 7.3 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
100-52-7	Benzaldehyde	250	U
108-95-2	Phenol	250	U
111-44-4	Bis(2-chloroethyl)ether	250	U
95-57-8	2-Chlorophenol	250	U
95-48-7	2-Methylphenol	250	U
108-60-1	2,2´-Oxybis(1-chloropropane)	250	U
98-86-2	Acetophenone	250	U
106-44-5	4-Methylphenol	250	U
621-64-7	N-Nitroso-di-n-propylamine	250	U
67-72-1	Hexachloroethane	250	U
98-95-3	Nitrobenzene	250	U
78-59-1	Isophorone	250	U
88-75-5	2-Nitrophenol	250	U
105-67-9	2,4-Dimethylphenol	250	U
111-91-1	Bis(2-chloroethoxy)methane	250	U
120-83-2	2,4-Dichlorophenol	250	U
91-20-3	Naphthalene	250	U
106-47-8	4-Chloroaniline	250	U
87-68-3	Hexachlorobutadiene	250	U
105-60-2	Caprolactam	250	U
59-50-7	4-Chloro-3-methylphenol	250	U
91-57-6	2-Methylnaphthalene	250	U
77-47-4	Hexachlorocyclopentadiene	250	U
88-06-2	2,4,6-Trichlorophenol	250	U
95-95-4	2,4,5-Trichlorophenol	250	U
92-52-4	1,1´-Biphenyl	250	U
91-58-7	2-Chloronaphthalene	250	U
88-74-4	2-Nitroaniline	490	U
131-11-3	Dimethylphthalate	250	U
606-20-2	2,6-Dinitrotoluene	250	U
208-96-8	Acenaphthylene	250	U
99-09-2	3-Nitroaniline	490	U
83-32-9	Acenaphthene	250	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30S9

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-14A

Sample wt/vol: 30.5 (g/mL) G Lab File ID: S2H5265.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 34 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: 7.3 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
51-28-5	2,4-Dinitrophenol	490	U
100-02-7	4-Nitrophenol	490	U
132-64-9	Dibenzofuran	250	U
121-14-2	2,4-Dinitrotoluene	250	U
84-66-2	Diethylphthalate	250	U
86-73-7	Fluorene	250	U
7005-72-3	4-Chlorophenyl-phenylether	250	U
100-01-6	4-Nitroaniline	490	U
534-52-1	4,6-Dinitro-2-methylphenol	490	U
86-30-6	N-Nitrosodiphenylamine (1)	250	U
95-94-3	1,2,4,5-Tetrachlorobenzene	250	U
101-55-3	4-Bromophenyl-phenylether	250	U
118-74-1	Hexachlorobenzene	250	U
1912-24-9	Atrazine	250	U
87-86-5	Pentachlorophenol	490	U
85-01-8	Phenanthrene	250	U
120-12-7	Anthracene	250	U
86-74-8	Carbazole	250	U
84-74-2	Di-n-butylphthalate	250	U
206-44-0	Fluoranthene	250	U
129-00-0	Pyrene	250	U
85-68-7	Butylbenzylphthalate	250	U
91-94-1	3,3´-Dichlorobenzidine	250	U
56-55-3	Benzo(a)anthracene	250	U
218-01-9	Chrysene	250	U
117-81-7	Bis(2-ethylhexyl)phthalate	250	U
117-84-0	Di-n-octylphthalate	250	U
205-99-2	Benzo(b)fluoranthene	250	U
207-08-9	Benzo(k)fluoranthene	250	U
50-32-8	Benzo(a)pyrene	250	U
193-39-5	Indeno(1,2,3-cd)pyrene	250	U
53-70-3	Dibenzo(a,h)anthracene	250	U
191-24-2	Benzo(g,h,i)perylene	250	U
58-90-2	2,3,4,6-Tetrachlorophenol	250	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30S9

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-14A

Sample wt/vol: 30.5 (g/mL) G Lab File ID: S2H5265.D

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 34 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: 7.3 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.996	180	J
02		Unknown-02	3.156	110	J
03	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.486	320	BNJ
04		Unknown-03	4.690	260	J
05		Unknown-04	5.215	350	J
06		Unknown-05	5.344	140	J
07	57-10-3	n-Hexadecanoic acid	7.907	220	NJ
08		Unknown-06	9.215	240	J
09		Unknown-07	9.601	200	J
10	301-02-0	9-Octadecenamide, (Z)-	10.448	410	NJ
	E96679[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5265.D
Report Date: 11-Nov-2011 13:36

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5265.D
Lab Smp Id: K2198-14A Client Smp ID: H30S9
Inj Date : 10-NOV-2011 15:38
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-14A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.500	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
$	2 Phenol-d5	71	3.381	3.373	(0.916)	126502	31.4106	510
$	4 bis(2-Chloroethyl)ether-d8	67	3.424	3.427	(0.927)	146772	26.4472	430
$	6 2-Chlorophenol-d4	132	3.510	3.491	(0.951)	117323	33.6756	550
*	8 1,4-Dichlorobenzene-d4	152	3.692	3.684	(1.000)	127894	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.014	4.006	(1.087)	201115	36.8342	600
$	16 Nitrobenzene-d5	128	4.153	4.145	(0.874)	68833	32.4777	530(Q)
$	19 2-Nitrophenol-d4	143	4.421	4.424	(0.930)	75259	32.1665	530
$	23 2,4-Dichlorophenol-d3	165	4.636	4.628	(0.975)	145421	34.0477	560
*	25 Naphthalene-d8	136	4.754	4.746	(1.000)	406966	40.0000	
$	27 4-Chloroaniline-d4	131	4.818	4.810	(1.014)	26482	6.98298	110(aQ)
$	40 Dimethylphthalate-d6	166	5.976	5.968	(0.962)	458735	39.1475	640
$	43 Acenaphthylene-d8	160	6.084	6.076	(0.979)	474611	31.1464	510
*	46 Acenaphthene-d10	164	6.212	6.204	(1.000)	318703	40.0000	
$	49 4-Nitrophenol-d4	143	6.319	6.312	(1.017)	67026	39.6901	650
$	54 Fluorene-d10	176	6.641	6.633	(1.069)	343107	31.8756	520(R)
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.705	6.698	(0.902)	76974	35.7570	590(Q)
*	65 Phenanthrene-d10	188	7.435	7.438	(1.000)	551660	40.0000	
$	67 Anthracene-d10	188	7.488	7.480	(1.007)	503120	31.9272	520
$	72 Pyrene-d10	212	8.625	8.606	(0.889)	446063	37.2408	610(R)

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5265.D
Report Date: 11-Nov-2011 13:36

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)
* 77 Chrysene-d12	240	9.697	9.668	(1.000)	380220	40.0000	(Q)
$ 83 Benzo(a)pyrene-d12	264	10.931	10.891	(1.000)	190420	31.5392	520(R)
* 85 Perylene-d12	264	11.006	10.966	(1.000)	246045	40.0000	(H)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5265.D
Report Date: 11-Nov-2011 13:36

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5265.D
Lab Smp Id: K2198-14A Client Smp ID: H30S9
Inj Date : 10-NOV-2011 15:38
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-14A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.500	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

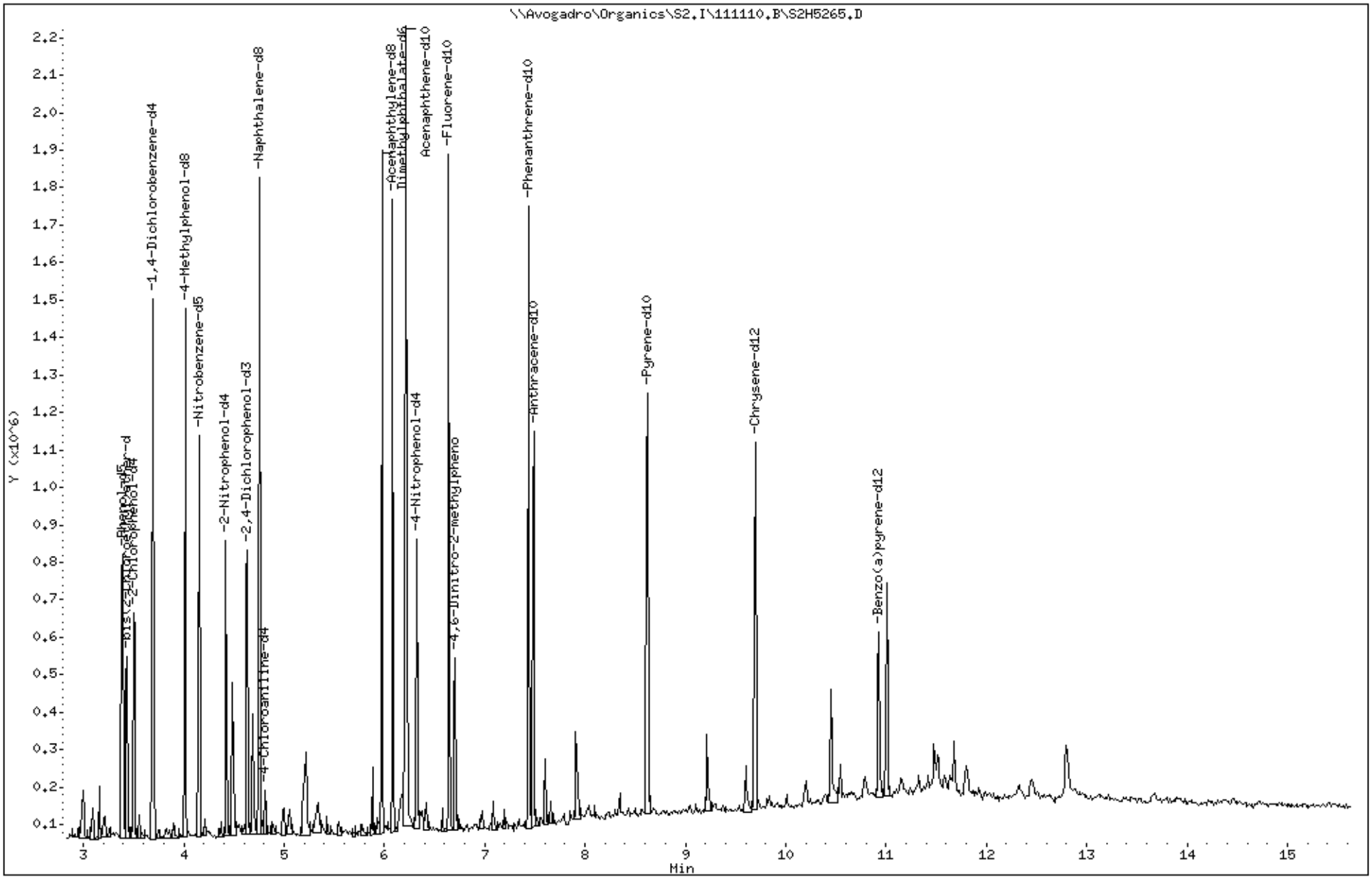
ISTD	RT	AREA	AMOUNT
* 8 1,4-Dichlorobenzene-d4	3.693	1160111	40.000
* 25 Naphthalene-d8	4.754	1335250	40.000
* 65 Phenanthrene-d10	7.435	1603769	40.000
* 77 Chrysene-d12	9.698	1064140	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.996	210180	7.24688583	120	0	0		8
Unknown				CAS #:			
3.156	125337	4.32154409	71	0	0		8

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5265.D
Report Date: 11-Nov-2011 13:36

RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
2(3H)-Furanone, dihydro-4-hydroxy-					CAS #: 5469-16-9		
4.486	433076	12.9736170	210	90	NIST2002.L	4145	25
Unknown					CAS #:		
4.690	343704	10.2963283	170	0		0	25
Unknown					CAS #:		
5.215	472902	14.1666907	230	0		0	25
Unknown					CAS #:		
5.344	193819	5.80623115	95	0		0	25
n-Hexadecanoic acid					CAS #: 57-10-3		
7.907	358389	8.93866658	150	93	NIST2002.L	92227	65
Unknown					CAS #:		
9.215	260366	9.78690115	160	0		0	77
Unknown					CAS #:		
9.601	213598	8.02893708	130	0		0	77
9-Octadecenamide, (Z)-					CAS #: 301-02-0		
10.448	443307	16.6634948	270	90	NIST2002.L	106877	77

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5265.D
Date : 10-NOV-2011 15:38
Client ID: H30S9
Instrument: S2.i
Sample Info: K2198-14A,,62764,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5265.D

Date : 10-NOV-2011 15:38

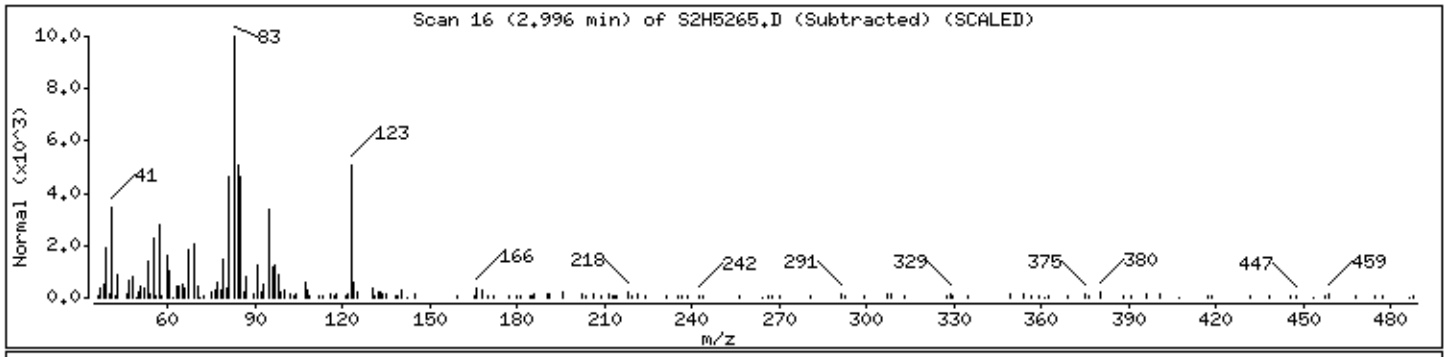
Client ID: H3089 Instrument: S2.i

Sample Info: K2198-14A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 15:38

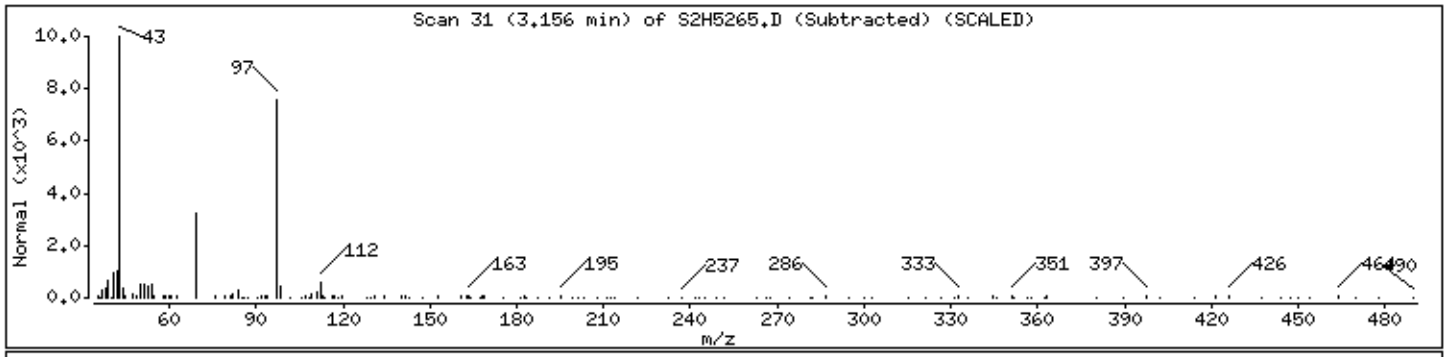
Client ID: H3089 Instrument: S2.i

Sample Info: K2198-14A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 15:38

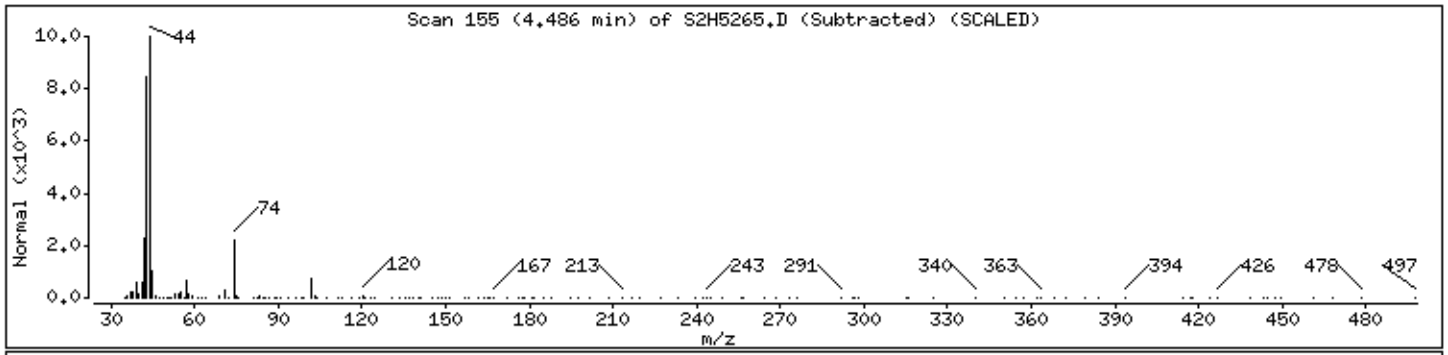
Client ID: H3089 Instrument: S2.i

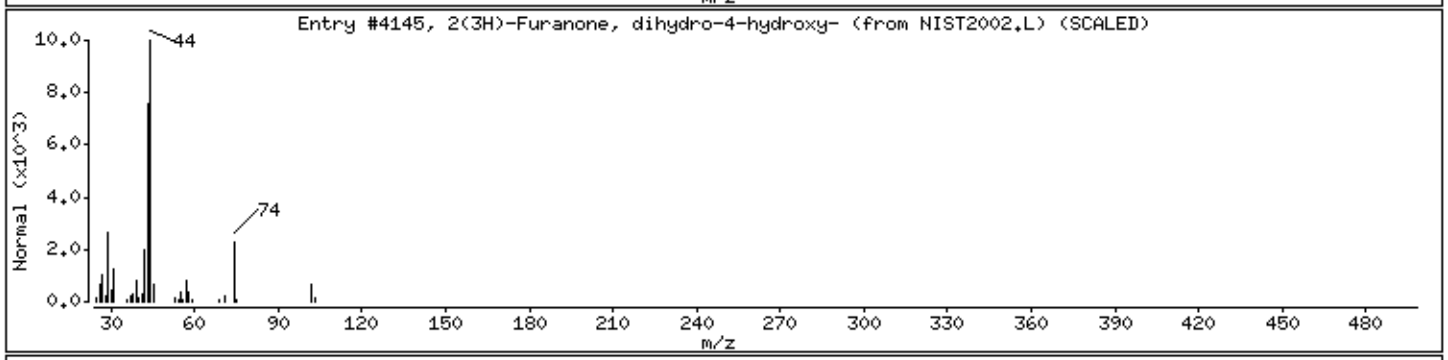
Sample Info: K2198-14A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2(3H)-Furanone, dihydro-4-hydroxy-	5469-16-9	NIST2002.L	4145	90	C4H6O3	102





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Date : 10-NOV-2011 15:38

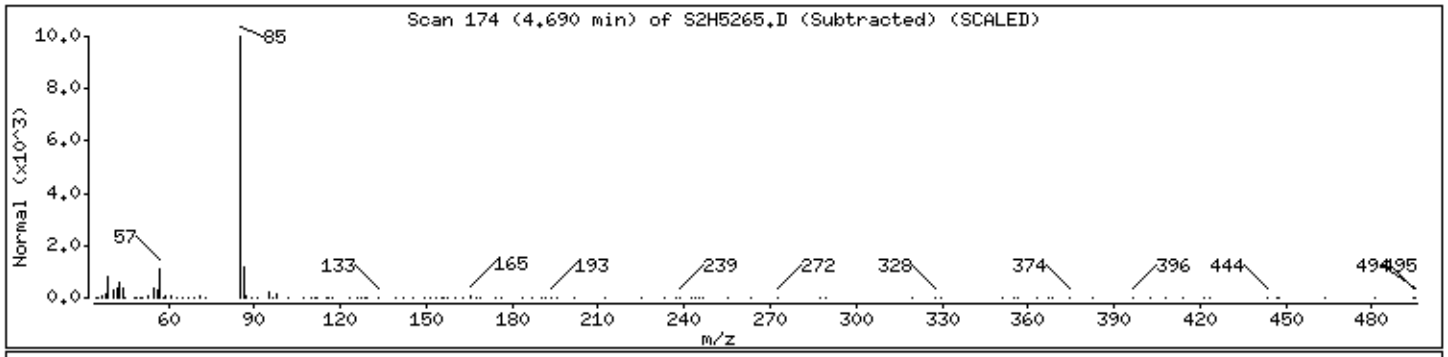
Client ID: H3089 Instrument: S2.i

Sample Info: K2198-14A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 15:38

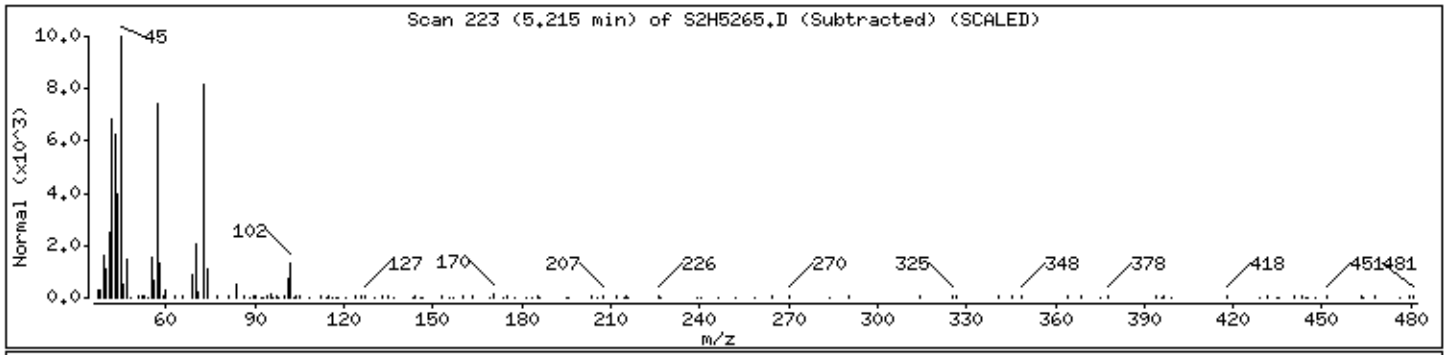
Client ID: H30S9 Instrument: S2.i

Sample Info: K2198-14A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 15:38

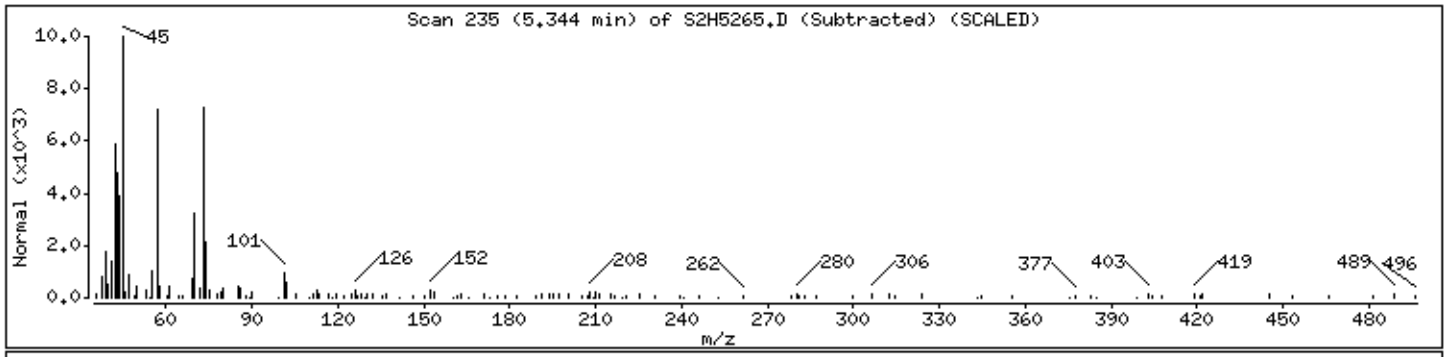
Client ID: H30S9 Instrument: S2.i

Sample Info: K2198-14A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 15:38

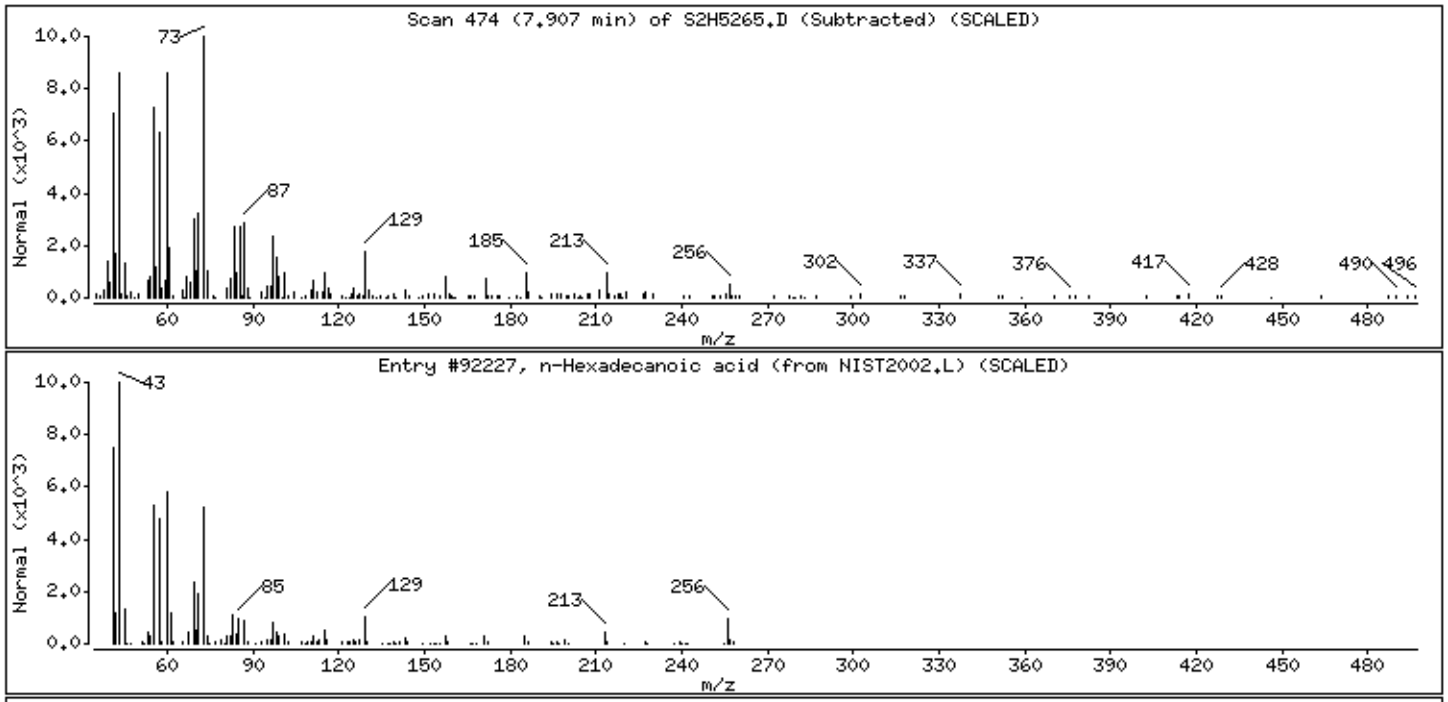
Client ID: H30S9 Instrument: S2.i

Sample Info: K2198-14A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
n-Hexadecanoic acid	57-10-3	NIST2002.L	92227	93	C16H32O2	256



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Date : 10-NOV-2011 15:38

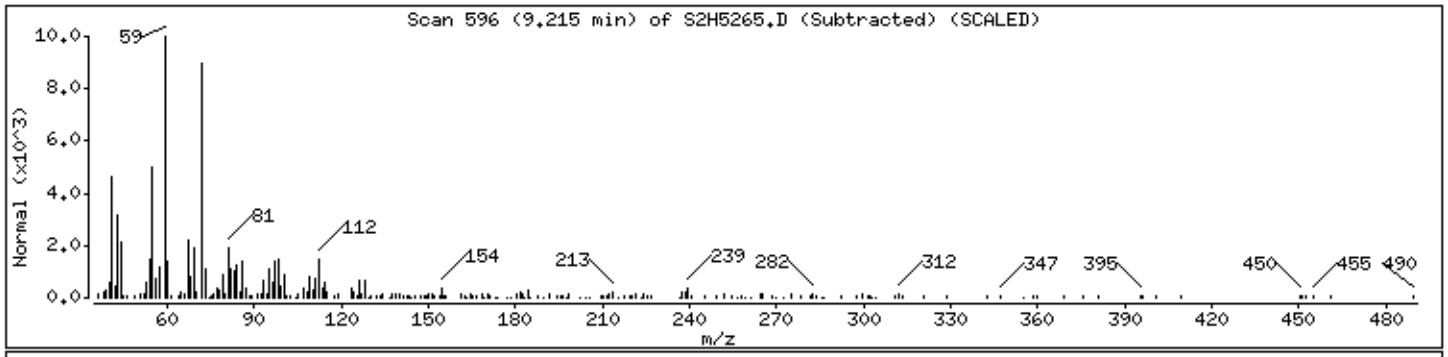
Client ID: H3089 Instrument: S2.i

Sample Info: K2198-14A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5265.D

Date : 10-NOV-2011 15:38

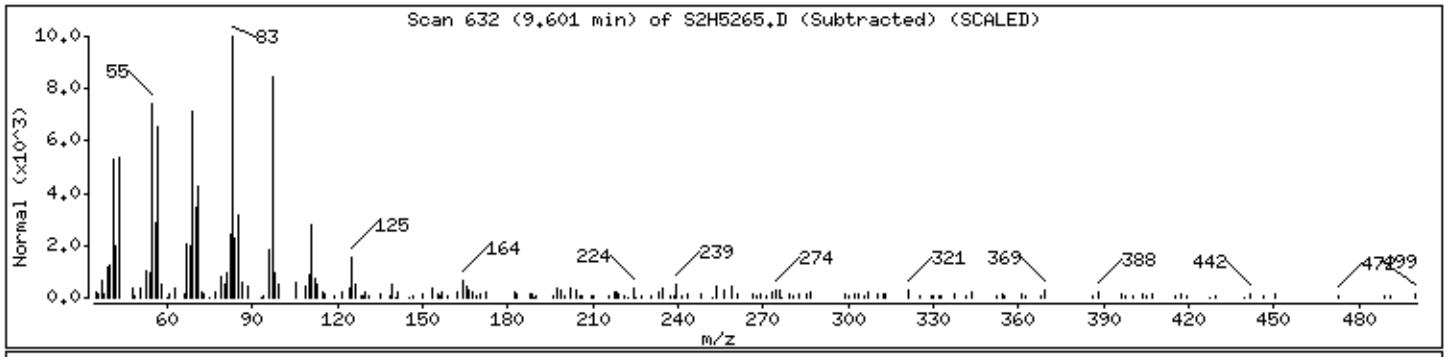
Client ID: H3089 Instrument: S2.i

Sample Info: K2198-14A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 15:38

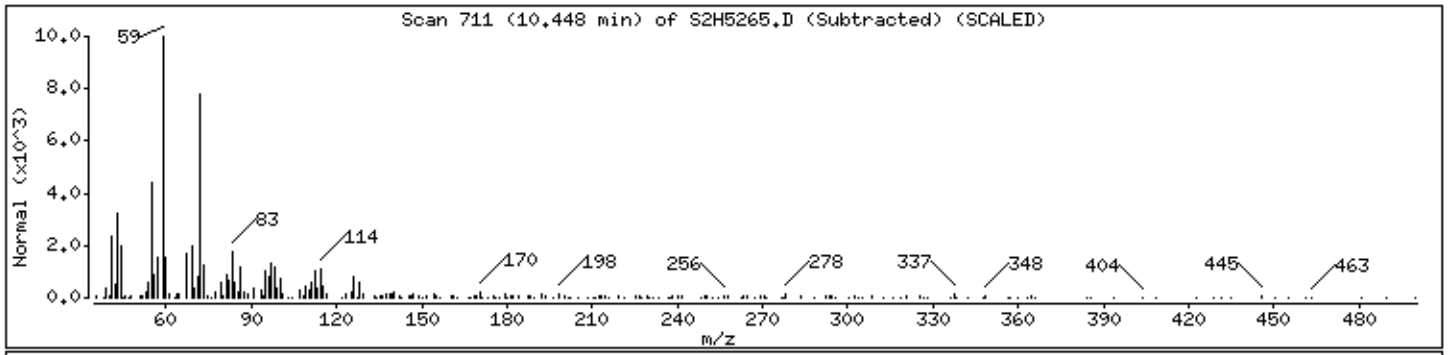
Client ID: H3089 Instrument: S2.i

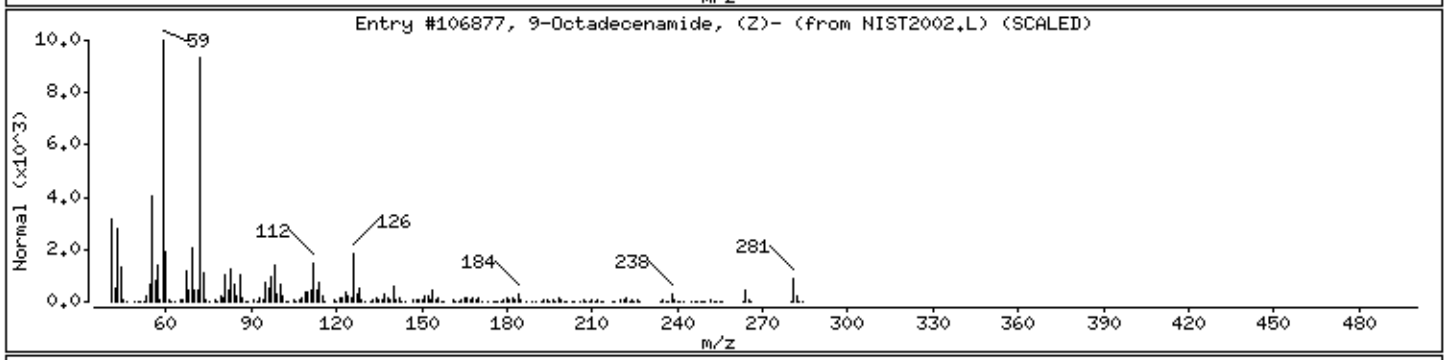
Sample Info: K2198-14A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST2002.L	106877	90	C18H35NO	281





1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T0

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-15A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: S2H5266.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 28 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: 7.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
100-52-7	Benzaldehyde	230	U
108-95-2	Phenol	230	U
111-44-4	Bis(2-chloroethyl)ether	230	U
95-57-8	2-Chlorophenol	230	U
95-48-7	2-Methylphenol	230	U
108-60-1	2,2´-Oxybis(1-chloropropane)	230	U
98-86-2	Acetophenone	230	U
106-44-5	4-Methylphenol	230	U
621-64-7	N-Nitroso-di-n-propylamine	230	U
67-72-1	Hexachloroethane	230	U
98-95-3	Nitrobenzene	230	U
78-59-1	Isophorone	230	U
88-75-5	2-Nitrophenol	230	U
105-67-9	2,4-Dimethylphenol	230	U
111-91-1	Bis(2-chloroethoxy)methane	230	U
120-83-2	2,4-Dichlorophenol	230	U
91-20-3	Naphthalene	230	U
106-47-8	4-Chloroaniline	230	U
87-68-3	Hexachlorobutadiene	230	U
105-60-2	Caprolactam	230	U
59-50-7	4-Chloro-3-methylphenol	230	U
91-57-6	2-Methylnaphthalene	230	U
77-47-4	Hexachlorocyclopentadiene	230	U
88-06-2	2,4,6-Trichlorophenol	230	U
95-95-4	2,4,5-Trichlorophenol	230	U
92-52-4	1,1´-Biphenyl	230	U
91-58-7	2-Chloronaphthalene	230	U
88-74-4	2-Nitroaniline	450	U
131-11-3	Dimethylphthalate	230	U
606-20-2	2,6-Dinitrotoluene	230	U
208-96-8	Acenaphthylene	230	U
99-09-2	3-Nitroaniline	450	U
83-32-9	Acenaphthene	230	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T0

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-15A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: S2H5266.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 28 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: 7.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
51-28-5	2,4-Dinitrophenol	450	U
100-02-7	4-Nitrophenol	450	U
132-64-9	Dibenzofuran	230	U
121-14-2	2,4-Dinitrotoluene	230	U
84-66-2	Diethylphthalate	230	U
86-73-7	Fluorene	230	U
7005-72-3	4-Chlorophenyl-phenylether	230	U
100-01-6	4-Nitroaniline	450	U
534-52-1	4,6-Dinitro-2-methylphenol	450	U
86-30-6	N-Nitrosodiphenylamine (1)	230	U
95-94-3	1,2,4,5-Tetrachlorobenzene	230	U
101-55-3	4-Bromophenyl-phenylether	230	U
118-74-1	Hexachlorobenzene	230	U
1912-24-9	Atrazine	230	U
87-86-5	Pentachlorophenol	450	U
85-01-8	Phenanthrene	230	U
120-12-7	Anthracene	230	U
86-74-8	Carbazole	230	U
84-74-2	Di-n-butylphthalate	230	U
206-44-0	Fluoranthene	230	U
129-00-0	Pyrene	230	U
85-68-7	Butylbenzylphthalate	230	U
91-94-1	3,3´-Dichlorobenzidine	230	U
56-55-3	Benzo(a)anthracene	230	U
218-01-9	Chrysene	230	U
117-81-7	Bis(2-ethylhexyl)phthalate	230	U
117-84-0	Di-n-octylphthalate	230	U
205-99-2	Benzo(b)fluoranthene	230	U
207-08-9	Benzo(k)fluoranthene	230	U
50-32-8	Benzo(a)pyrene	230	U
193-39-5	Indeno(1,2,3-cd)pyrene	230	U
53-70-3	Dibenzo(a,h)anthracene	230	U
191-24-2	Benzo(g,h,i)perylene	230	U
58-90-2	2,3,4,6-Tetrachlorophenol	230	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30T0

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-15A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: S2H5266.D

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 28 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.996	240	J
02	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.486	290	BNJ
03	32780-06-6	(S)-(+)-2',3'-Dideoxyribonol	4.690	250	NJ
04		Unknown-02	5.215	340	J
05		Unknown-03	5.344	150	J
06		Unknown-04	7.607	110	J
07	57-10-3	n-Hexadecanoic acid	7.907	260	NJ
08		Unknown-05	9.205	190	J
09		Unknown-06	9.591	250	J
10		Unknown-07	10.170	230	J
11		Unknown-08	10.427	610	J
12	83-47-6	.gamma.-Sitosterol	12.776	1300	NJ
	E96679[2]	Total Alkanes	N/A	770	J

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5266.D
Report Date: 11-Nov-2011 13:36

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5266.D
Lab Smp Id: K2198-15A Client Smp ID: H30T0
Inj Date : 10-NOV-2011 15:59
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-15A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.200	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
$	2 Phenol-d5	71	3.381	3.373	(0.916)	93356	23.6591	390(Q)
$	4 bis(2-Chloroethyl)ether-d8	67	3.424	3.427	(0.927)	117853	21.6748	360
$	6 2-Chlorophenol-d4	132	3.510	3.491	(0.951)	92206	27.0128	450
*	8 1,4-Dichlorobenzene-d4	152	3.692	3.684	(1.000)	125306	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.014	4.006	(1.087)	164693	30.7865	510
$	16 Nitrobenzene-d5	128	4.153	4.145	(0.874)	49175	25.6103	420
$	19 2-Nitrophenol-d4	143	4.421	4.424	(0.930)	57118	26.9464	450
$	23 2,4-Dichlorophenol-d3	165	4.636	4.628	(0.975)	112340	29.0320	480
*	25 Naphthalene-d8	136	4.754	4.746	(1.000)	368702	40.0000	
$	27 4-Chloroaniline-d4	131	4.807	4.810	(1.011)	13662	3.97637	66(aQ)
$	40 Dimethylphthalate-d6	166	5.976	5.968	(0.962)	340064	32.2494	530(R)
$	43 Acenaphthylene-d8	160	6.084	6.076	(0.979)	378993	27.6389	460
*	46 Acenaphthene-d10	164	6.212	6.204	(1.000)	286792	40.0000	
$	49 4-Nitrophenol-d4	143	6.320	6.312	(1.017)	45380	29.8623	490(Q)
$	54 Fluorene-d10	176	6.641	6.633	(1.069)	271479	28.0275	460(R)
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.706	6.698	(0.902)	53304	28.2549	470(Q)
*	65 Phenanthrene-d10	188	7.435	7.438	(1.000)	483453	40.0000	
$	67 Anthracene-d10	188	7.488	7.480	(1.007)	377068	27.3040	450
$	72 Pyrene-d10	212	8.614	8.606	(0.890)	314302	32.2779	530(R)

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5266.D
Report Date: 11-Nov-2011 13:36

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)
* 77 Chrysene-d12	240	9.676	9.668	(1.000)	309100	40.0000	(Q)
$ 83 Benzo(a)pyrene-d12	264	10.898	10.891	(0.992)	147655	28.2478	470(R)
* 85 Perylene-d12	264	10.984	10.966	(1.000)	213018	40.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5266.D
Report Date: 11-Nov-2011 13:36

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5266.D
Lab Smp Id: K2198-15A Client Smp ID: H30T0
Inj Date : 10-NOV-2011 15:59
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-15A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.200	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

ISTD		RT	AREA	AMOUNT
* 8	1,4-Dichlorobenzene-d4	3.693	1089420	40.000
* 25	Naphthalene-d8	4.754	1216520	40.000
* 65	Phenanthrene-d10	7.435	1376922	40.000
* 77	Chrysene-d12	9.676	864425	40.000
* 85	Perylene-d12	10.985	559103	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
2.996	287079	10.5406090	170	0		0	8
2(3H)-Furanone, dihydro-4-hydroxy-					CAS #: 5469-16-9		
4.486	391511	12.8731531	210	90	NIST2002.L	4145	25

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5266.D
Report Date: 11-Nov-2011 13:36

RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
(S)-(+)-2',3'-Dideoxyribonolactone					CAS #: 32780-06-6		
4.690	332499	10.9327776	180	86	NIST2002.L	7822	25
Unknown					CAS #:		
5.215	447587	14.7169463	240	0		0	25
Unknown					CAS #:		
5.344	195173	6.41741113	110	0		0	25
Unknown					CAS #:		
7.607	163644	4.75389779	79	0		0	65
n-Hexadecanoic acid					CAS #: 57-10-3		
7.907	388622	11.2895927	190	93	NIST2002.L	92226	65
Unknown					CAS #:		
9.205	175205	8.10736710	130	0		0	77
Unknown					CAS #:		
9.591	235643	10.9040267	180	0		0	77
Unknown					CAS #:		
10.170	219239	10.1449694	170	0		0	77
Unknown					CAS #:		
10.427	370128	26.4801323	440	0		0	85
Straight-chain Alkane					CAS #:		
10.760	473625	33.8845595	560	0		0	85
.gamma.-Sitosterol					CAS #: 83-47-6		
12.776	817035	58.4532162	970	99	NIST2002.L	159285	85

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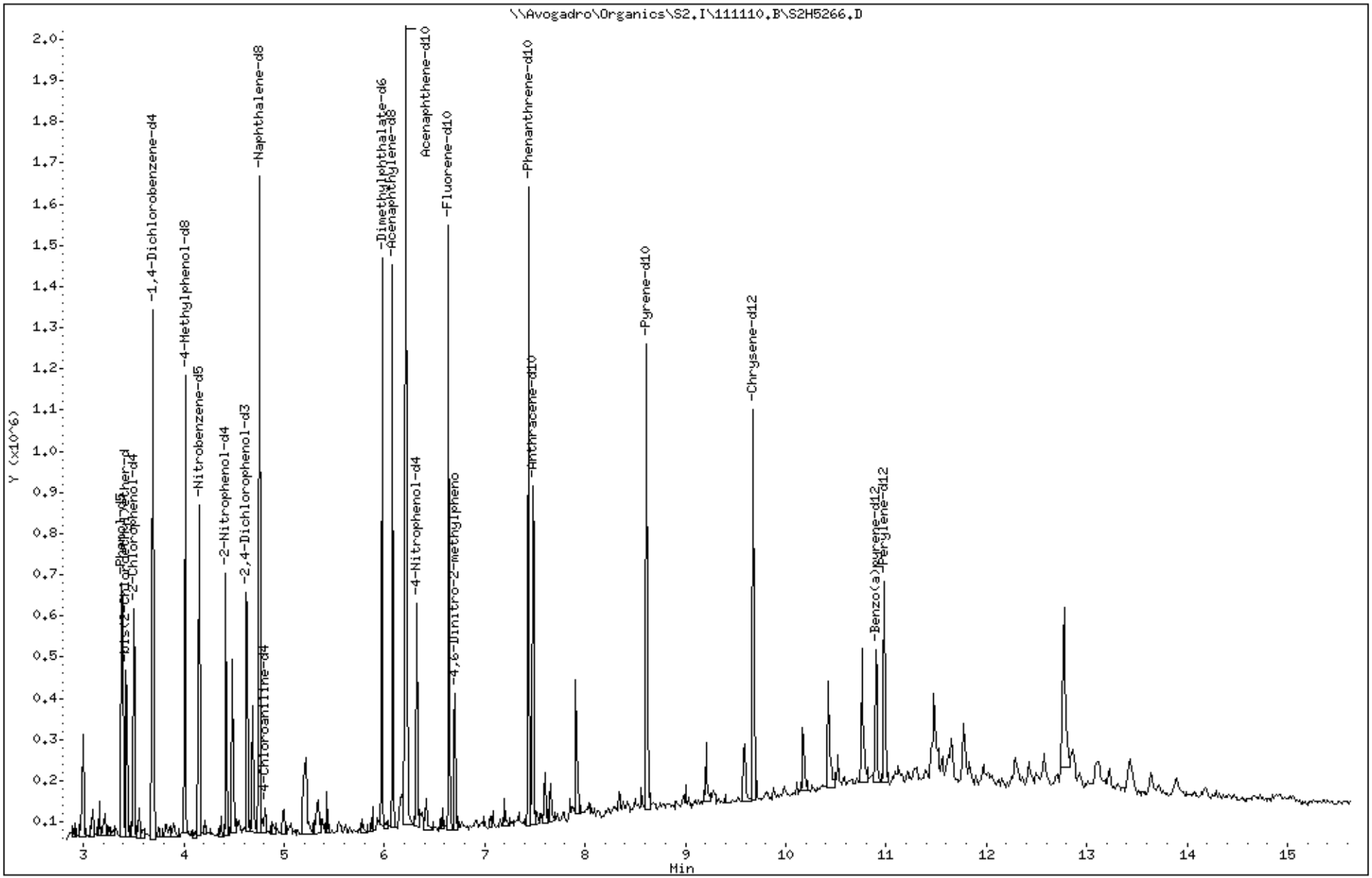
Date : 10-NOV-2011 15:59
Client ID: H30T0
Instrument: S2.i
Sample Info: K2198-15A,,62764,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5266.D

Date : 10-NOV-2011 15:59

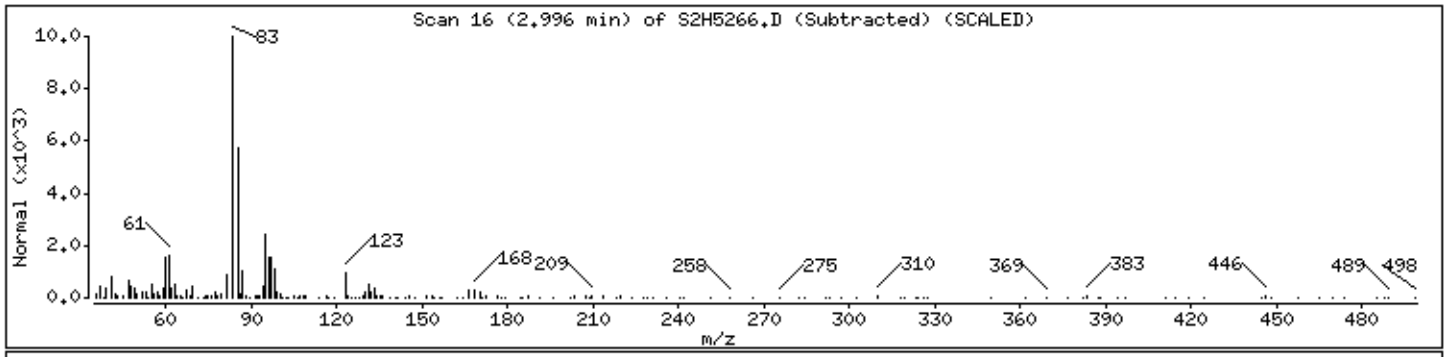
Client ID: H30T0 Instrument: S2.i

Sample Info: K2198-15A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 15:59

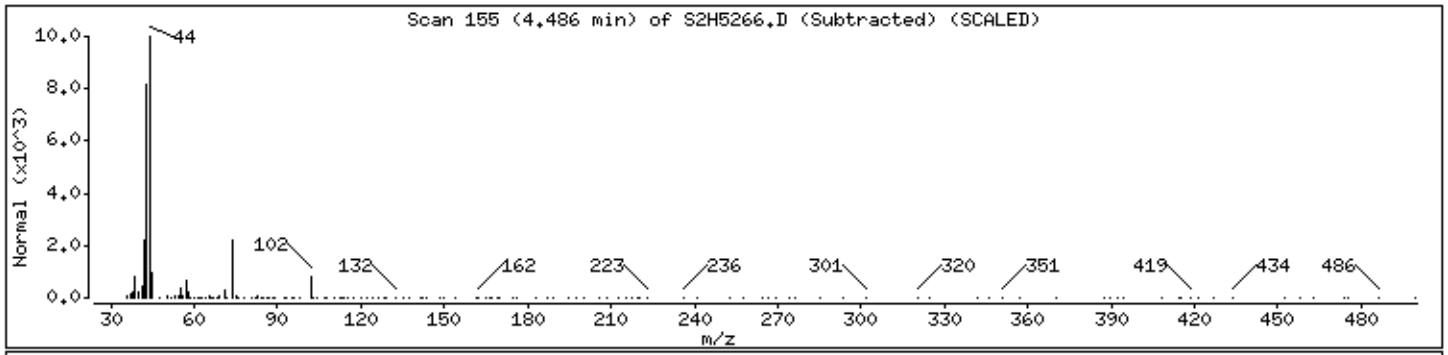
Client ID: H30T0 Instrument: S2.i

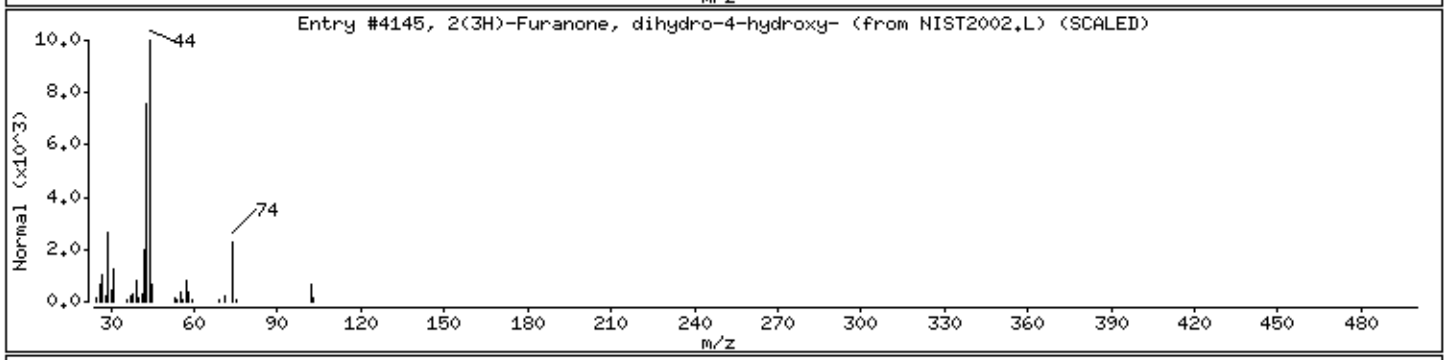
Sample Info: K2198-15A,,62764,,

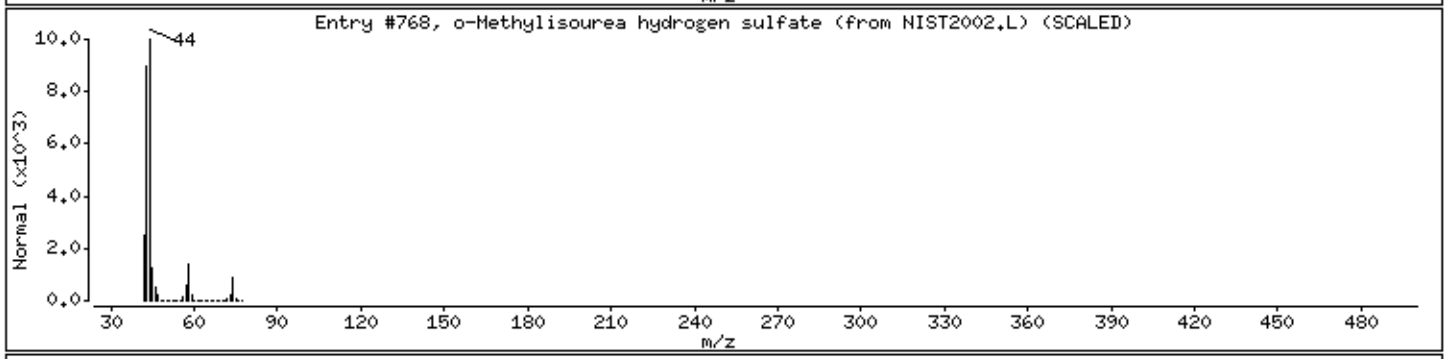
Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2(3H)-Furanone, dihydro-4-hydroxy-	5469-16-9	NIST2002.L	4145	90	C4H6O3	102
o-Methylisourea hydrogen sulfate	29427-58-5	NIST2002.L	768	86	C2H6N2O	74







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Date : 10-NOV-2011 15:59

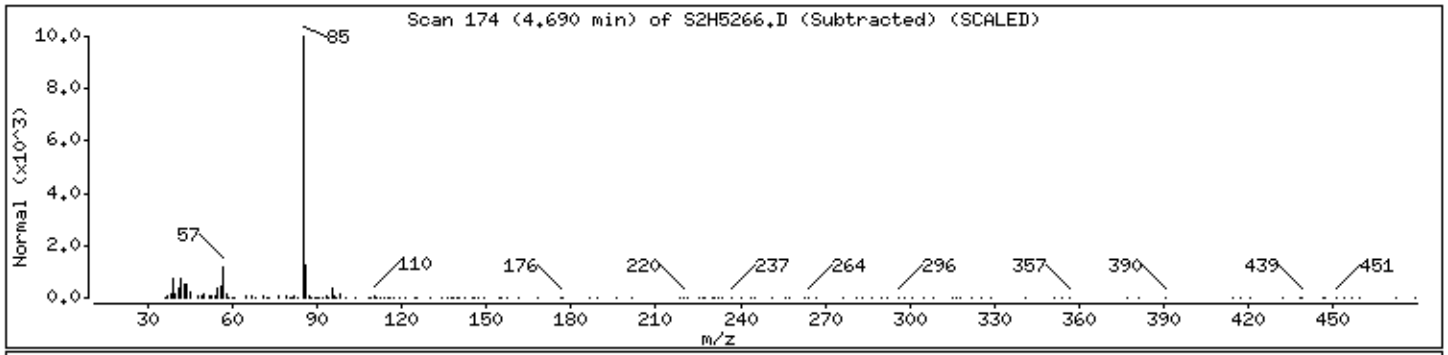
Client ID: H30T0 Instrument: S2.i

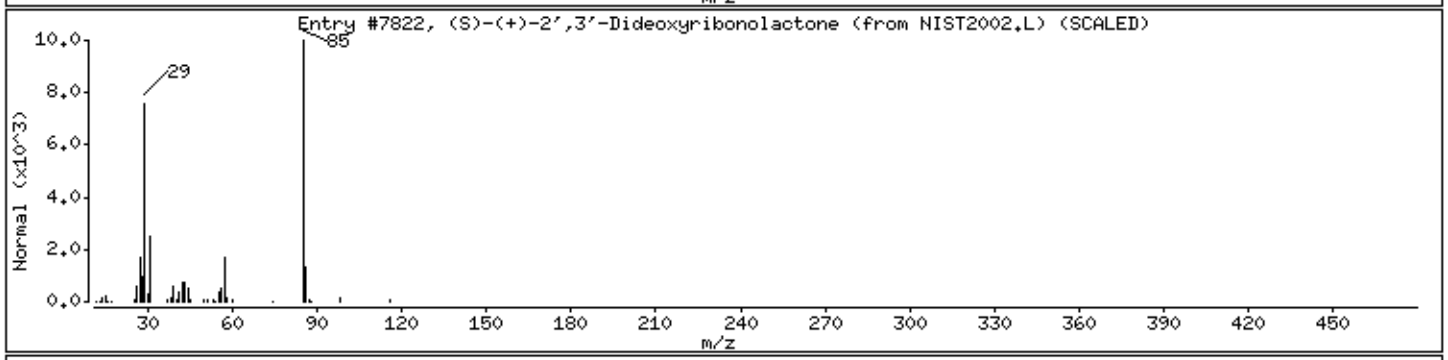
Sample Info: K2198-15A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
(S)-(+)-2',3'-Dideoxyribonolactone	32780-06-6	NIST2002.L	7822	86	C5H8O3	116





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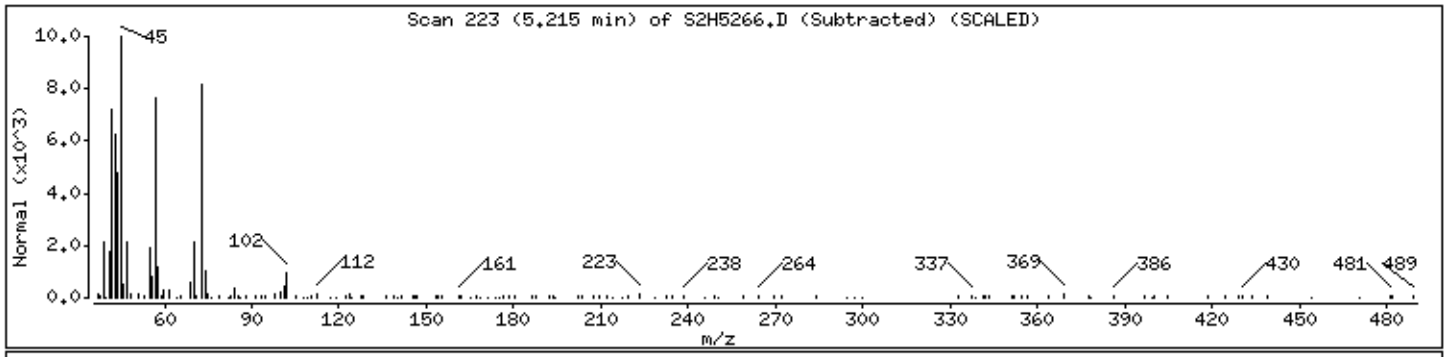
Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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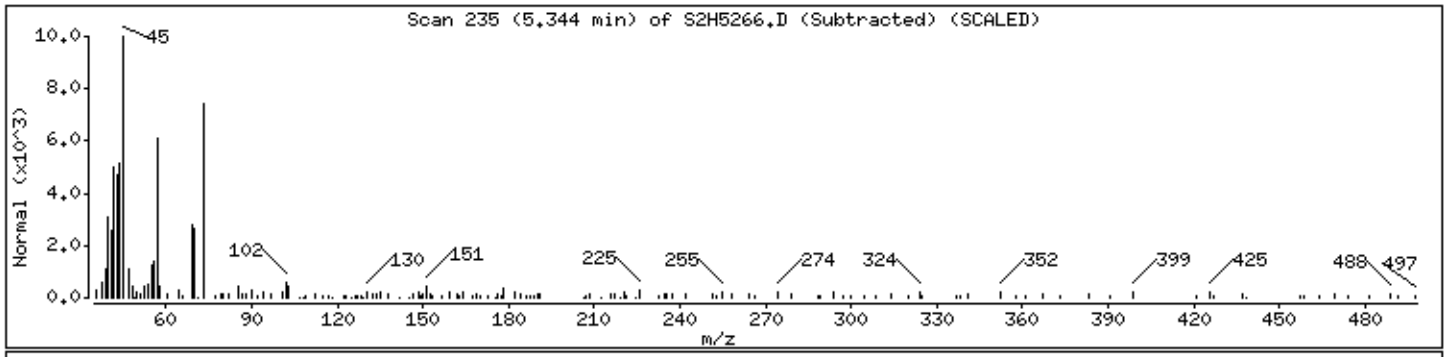
Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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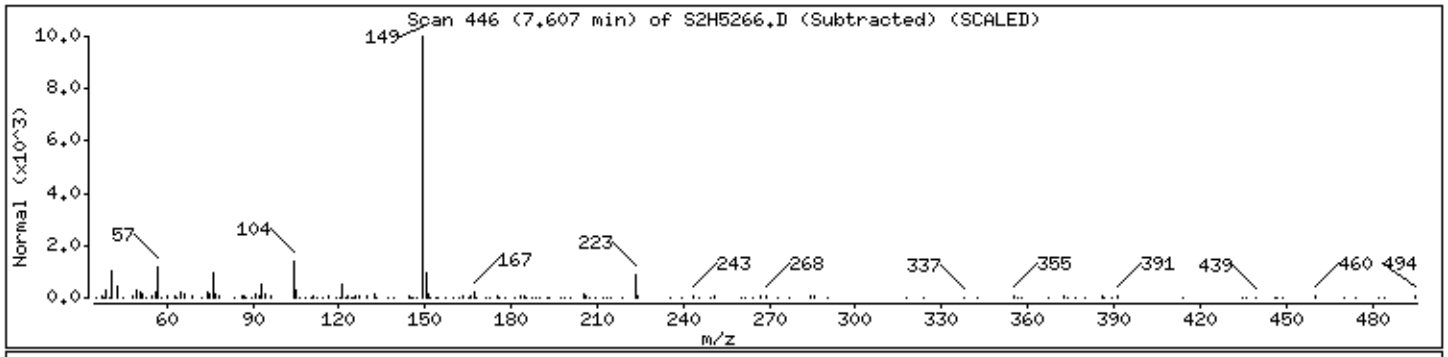
Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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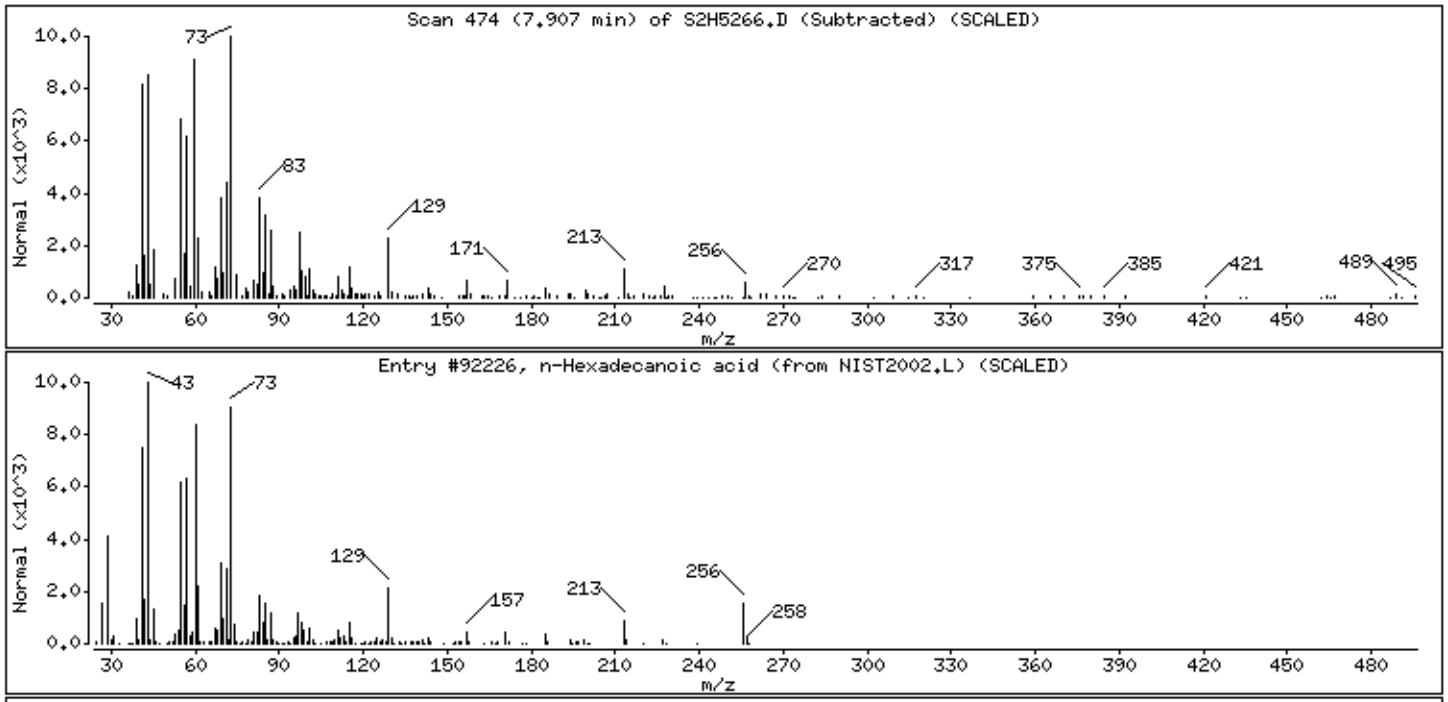
Sample Info: K2198-15A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
n-Hexadecanoic acid	57-10-3	NIST2002.L	92226	93	C16H32O2	256



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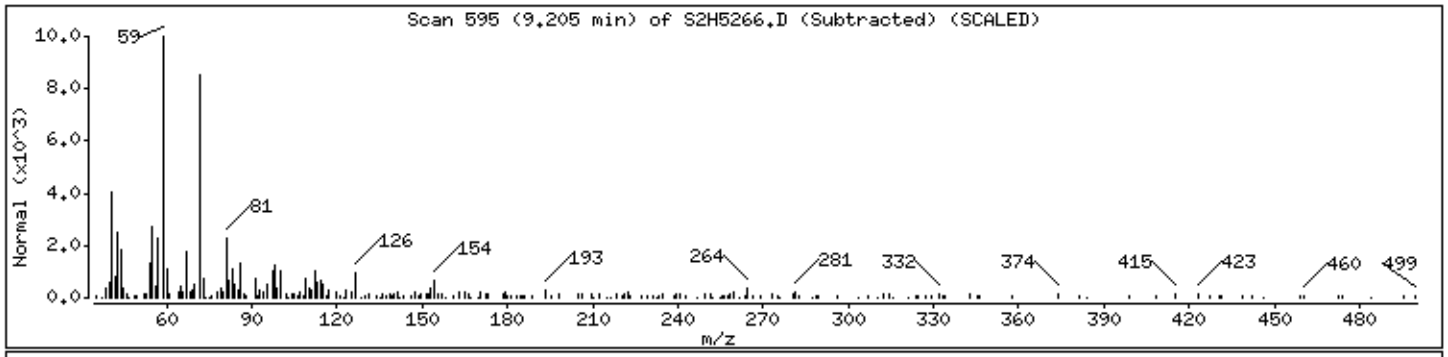
Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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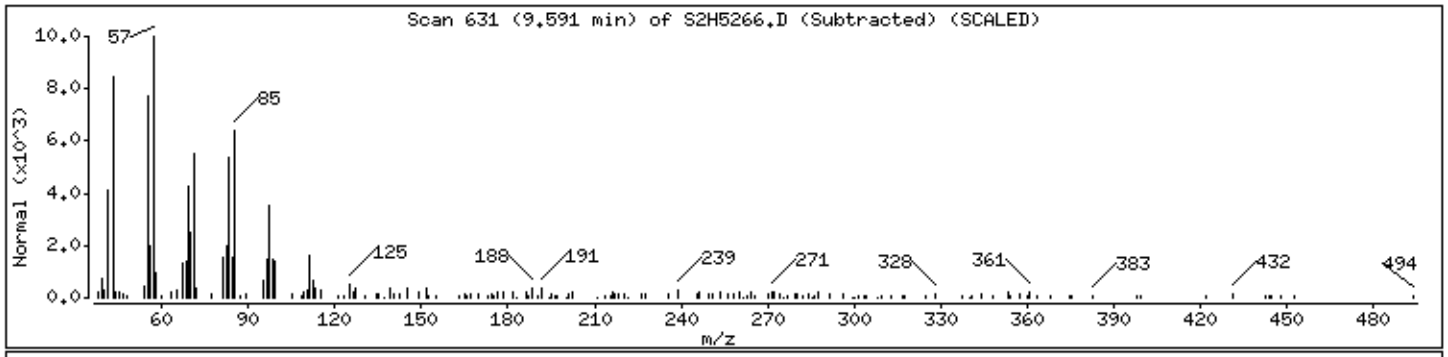
Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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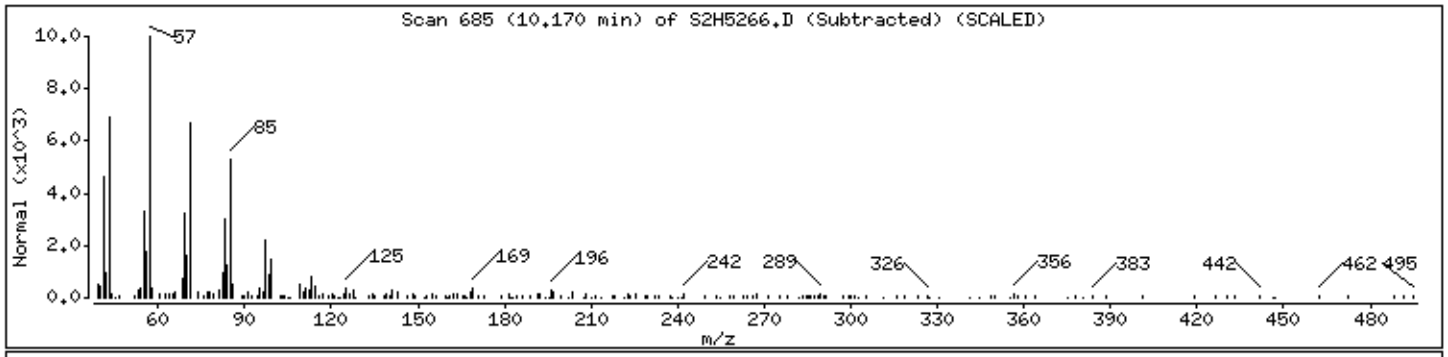
Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Volume Injected (uL): 2.0 Operator: SRC: LIMS

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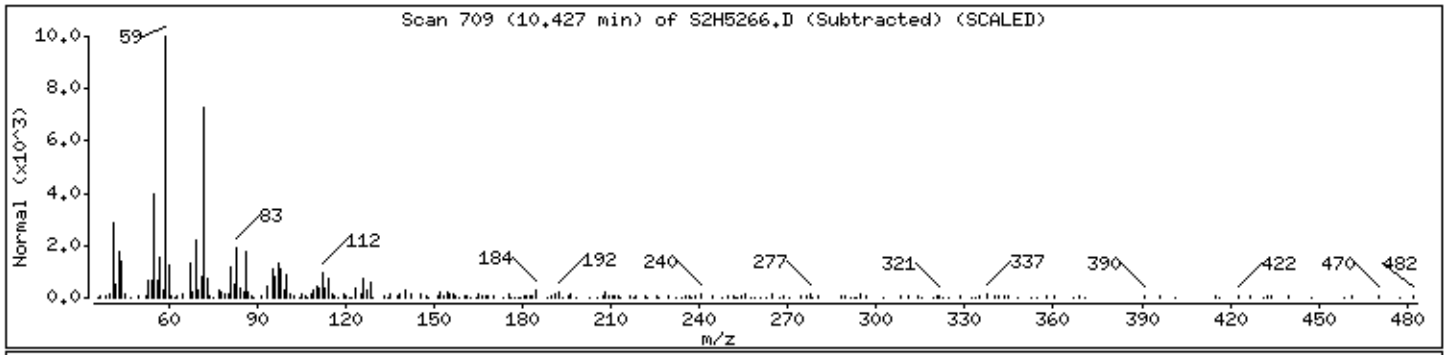
Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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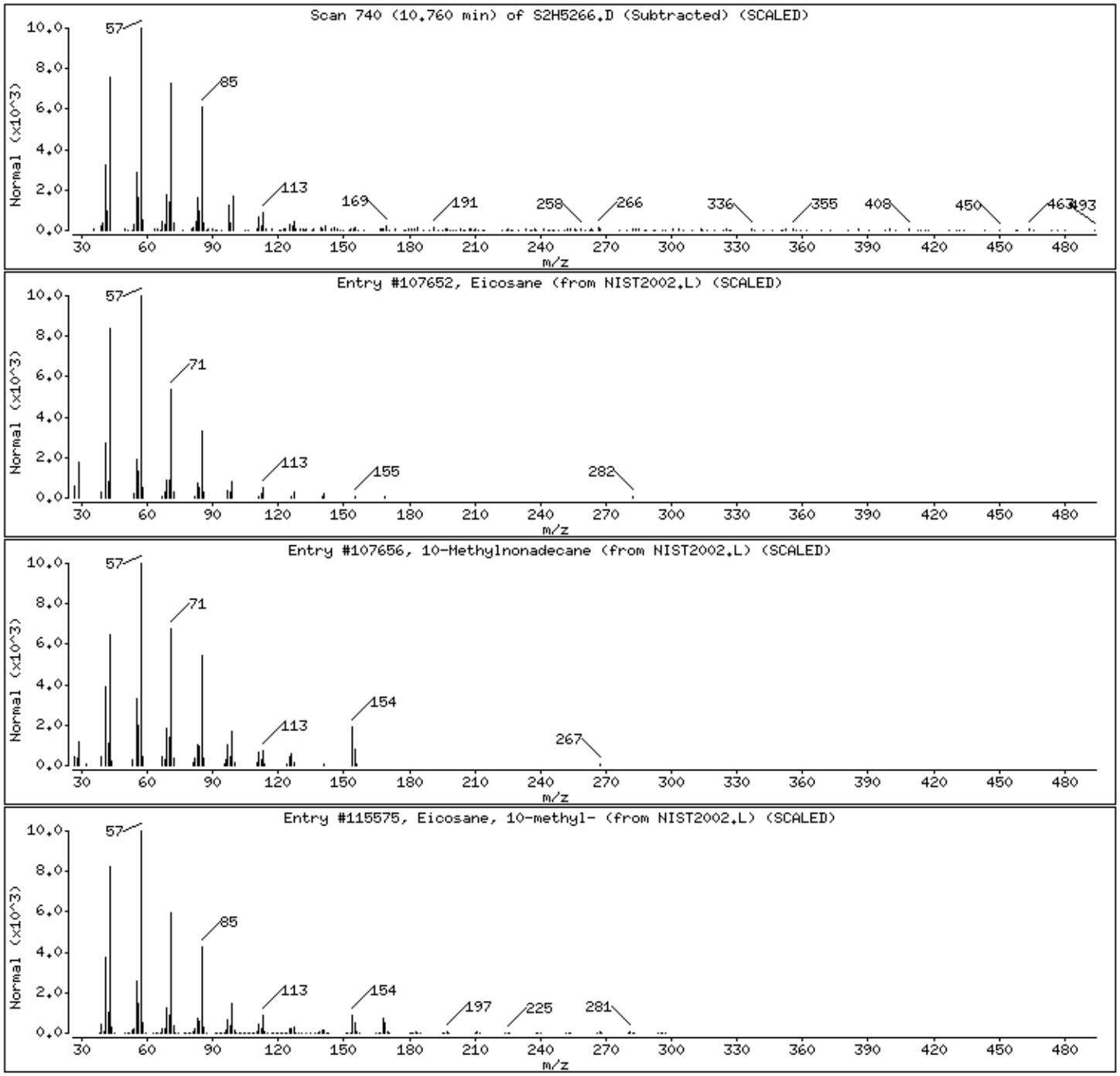
Client ID: H30T0 Instrument: S2.i

Sample Info: K2198-15A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Straight-chain Alkane						
Eicosane	112-95-8	NIST2002.L	107652	95	C20H42	282
10-Methylnonadecane	56862-62-5	NIST2002.L	107656	91	C20H42	282
Eicosane, 10-methyl-	54833-23-7	NIST2002.L	115575	90	C21H44	296



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Date : 10-NOV-2011 15:59

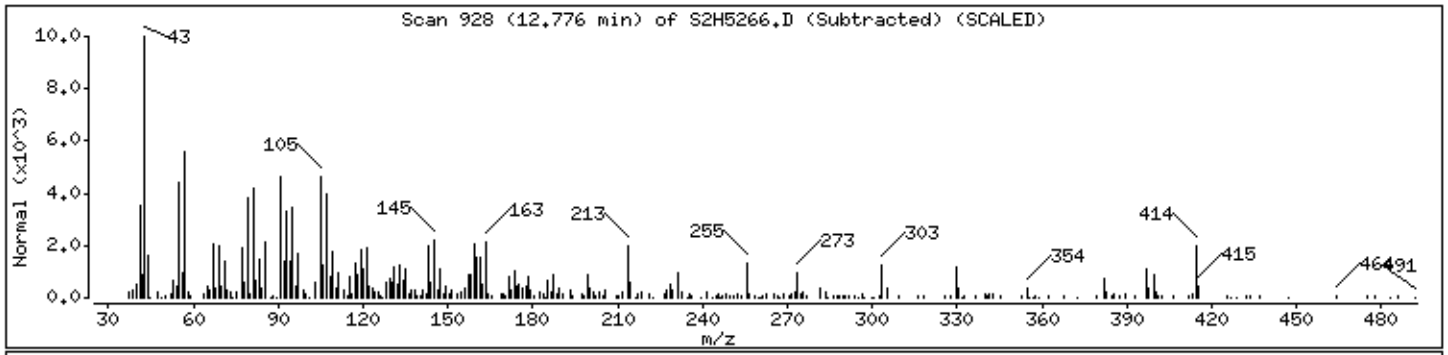
Client ID: H30T0 Instrument: S2.i

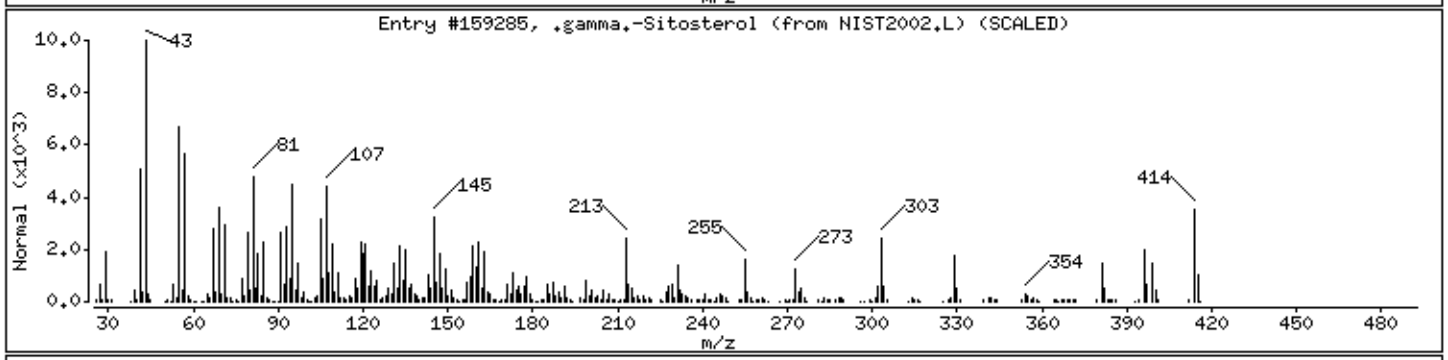
Sample Info: K2198-15A,,62764,,

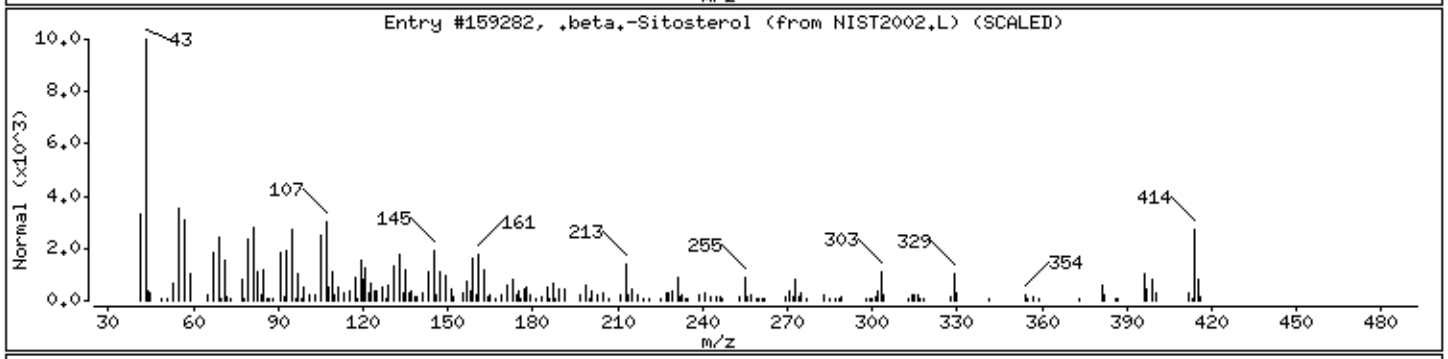
Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.gamma.-Sitosterol	83-47-6	NIST2002.L	159285	99	C29H50O	414
.beta.-Sitosterol	83-46-5	NIST2002.L	159282	86	C29H50O	414







1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-16A

Sample wt/vol: 30.5 (g/mL) G Lab File ID: S2H5267.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 9.6 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: 7.1 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
100-52-7	Benzaldehyde	180	U
108-95-2	Phenol	180	U
111-44-4	Bis(2-chloroethyl)ether	180	U
95-57-8	2-Chlorophenol	180	U
95-48-7	2-Methylphenol	180	U
108-60-1	2,2´-Oxybis(1-chloropropane)	180	U
98-86-2	Acetophenone	180	U
106-44-5	4-Methylphenol	180	U
621-64-7	N-Nitroso-di-n-propylamine	180	U
67-72-1	Hexachloroethane	180	U
98-95-3	Nitrobenzene	180	U
78-59-1	Isophorone	180	U
88-75-5	2-Nitrophenol	180	U
105-67-9	2,4-Dimethylphenol	180	U
111-91-1	Bis(2-chloroethoxy)methane	180	U
120-83-2	2,4-Dichlorophenol	180	U
91-20-3	Naphthalene	180	U
106-47-8	4-Chloroaniline	180	U
87-68-3	Hexachlorobutadiene	180	U
105-60-2	Caprolactam	180	U
59-50-7	4-Chloro-3-methylphenol	180	U
91-57-6	2-Methylnaphthalene	180	U
77-47-4	Hexachlorocyclopentadiene	180	U
88-06-2	2,4,6-Trichlorophenol	180	U
95-95-4	2,4,5-Trichlorophenol	180	U
92-52-4	1,1´-Biphenyl	180	U
91-58-7	2-Chloronaphthalene	180	U
88-74-4	2-Nitroaniline	360	U
131-11-3	Dimethylphthalate	180	U
606-20-2	2,6-Dinitrotoluene	180	U
208-96-8	Acenaphthylene	180	U
99-09-2	3-Nitroaniline	360	U
83-32-9	Acenaphthene	180	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-16A

Sample wt/vol: 30.5 (g/mL) G Lab File ID: S2H5267.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 9.6 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: 7.1 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
51-28-5	2,4-Dinitrophenol	360	U
100-02-7	4-Nitrophenol	360	U
132-64-9	Dibenzofuran	180	U
121-14-2	2,4-Dinitrotoluene	180	U
84-66-2	Diethylphthalate	180	U
86-73-7	Fluorene	180	U
7005-72-3	4-Chlorophenyl-phenylether	180	U
100-01-6	4-Nitroaniline	360	U
534-52-1	4,6-Dinitro-2-methylphenol	360	U
86-30-6	N-Nitrosodiphenylamine (1)	180	U
95-94-3	1,2,4,5-Tetrachlorobenzene	180	U
101-55-3	4-Bromophenyl-phenylether	180	U
118-74-1	Hexachlorobenzene	180	U
1912-24-9	Atrazine	180	U
87-86-5	Pentachlorophenol	360	U
85-01-8	Phenanthrene	180	U
120-12-7	Anthracene	180	U
86-74-8	Carbazole	180	U
84-74-2	Di-n-butylphthalate	40	J
206-44-0	Fluoranthene	180	U
129-00-0	Pyrene	180	U
85-68-7	Butylbenzylphthalate	180	U
91-94-1	3,3´-Dichlorobenzidine	180	U
56-55-3	Benzo(a)anthracene	180	U
218-01-9	Chrysene	180	U
117-81-7	Bis(2-ethylhexyl)phthalate	180	U
117-84-0	Di-n-octylphthalate	180	U
205-99-2	Benzo(b)fluoranthene	180	U
207-08-9	Benzo(k)fluoranthene	180	U
50-32-8	Benzo(a)pyrene	180	U
193-39-5	Indeno(1,2,3-cd)pyrene	180	U
53-70-3	Dibenzo(a,h)anthracene	180	U
191-24-2	Benzo(g,h,i)perylene	180	U
58-90-2	2,3,4,6-Tetrachlorophenol	180	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30T1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-16A

Sample wt/vol: 30.5 (g/mL) G Lab File ID: S2H5267.D

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 9.6 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: 7.1 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.988	130	J
02	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.489	290	BNJ
03	1000194-17-0	5-Hydroxymethyldihydrofuran-	4.693	230	NJ
04		Unknown-02	5.218	290	J
05		Unknown-03	5.304	200	J
06		Unknown-04	7.084	78	J
07		Unknown-05	7.599	110	J
08	57-10-3	n-Hexadecanoic acid	7.910	200	NJ
09		Unknown-06	9.218	170	J
10		Unknown-07	10.462	300	J
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5267.D
Report Date: 11-Nov-2011 13:37

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5267.D
Lab Smp Id: K2198-16A Client Smp ID: H30T1
Inj Date : 10-NOV-2011 16:20
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-16A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.500	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
$	2 Phenol-d5	71	3.384	3.373	(0.916)	131738	37.7927	620
$	4 bis(2-Chloroethyl)ether-d8	67	3.427	3.427	(0.927)	164018	34.1465	560
$	6 2-Chlorophenol-d4	132	3.502	3.491	(0.948)	125275	41.5446	680
*	8 1,4-Dichlorobenzene-d4	152	3.695	3.684	(1.000)	110696	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.016	4.006	(1.087)	193847	41.0189	670
$	16 Nitrobenzene-d5	128	4.156	4.145	(0.874)	67244	38.4548	630(Q)
$	19 2-Nitrophenol-d4	143	4.424	4.424	(0.930)	83562	43.2875	710
$	23 2,4-Dichlorophenol-d3	165	4.628	4.628	(0.973)	152762	43.3495	710
*	25 Naphthalene-d8	136	4.756	4.746	(1.000)	335776	40.0000	
$	27 4-Chloroaniline-d4	131	4.810	4.810	(1.011)	59416	18.9890	310(Q)
$	40 Dimethylphthalate-d6	166	5.979	5.968	(0.962)	443319	45.1251	740
$	43 Acenaphthylene-d8	160	6.086	6.076	(0.979)	509310	39.8669	650
*	46 Acenaphthene-d10	164	6.215	6.204	(1.000)	267194	40.0000	
$	49 4-Nitrophenol-d4	143	6.322	6.312	(1.017)	63630	44.9429	740
$	54 Fluorene-d10	176	6.644	6.633	(1.069)	363245	40.2521	660
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.708	6.698	(0.902)	64260	36.4628	600
*	65 Phenanthrene-d10	188	7.437	7.438	(1.000)	451626	40.0000	
$	67 Anthracene-d10	188	7.480	7.480	(1.006)	486547	37.7144	620
	70 Di-n-butylphthalate	149	7.931	7.931	(1.066)	24445	2.18403	36(a)

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5267.D
Report Date: 11-Nov-2011 13:37

		QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
$	72 Pyrene-d10	212	8.617	8.606	(0.888)	425433	47.6323	780
*	77 Chrysene-d12	240	9.700	9.668	(1.000)	283522	40.0000	(Q)
	79 bis(2-Ethylhexyl)phthalate	149	9.732	9.700	(1.003)	8918	2.07047	34(a)
$	83 Benzo(a)pyrene-d12	264	10.944	10.891	(1.000)	198051	40.3774	660
*	85 Perylene-d12	264	11.019	10.966	(1.000)	199890	40.0000	(H)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5267.D
Report Date: 11-Nov-2011 13:37

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5267.D
Lab Smp Id: K2198-16A Client Smp ID: H30T1
Inj Date : 10-NOV-2011 16:20
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-16A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.500	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

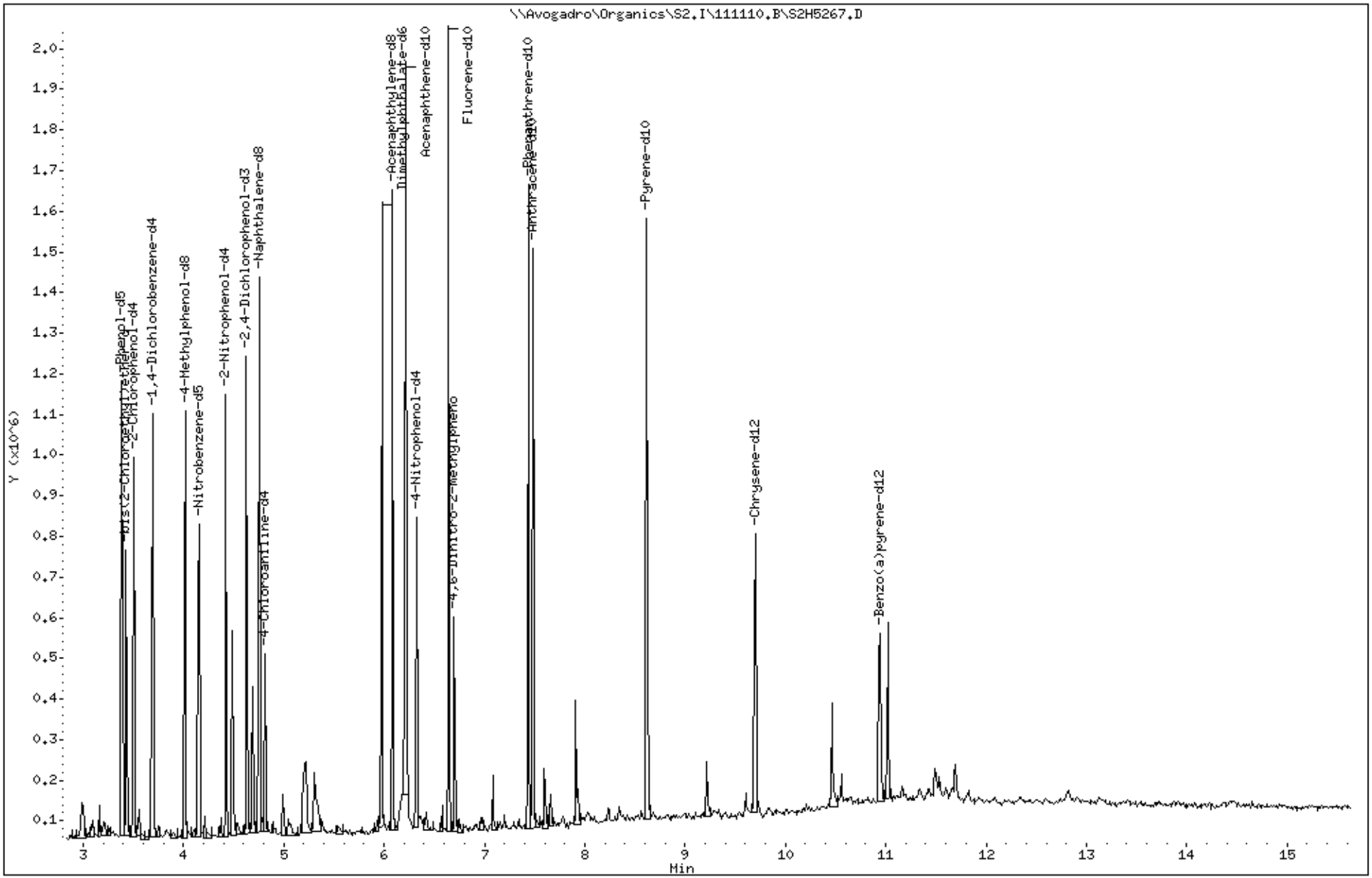
ISTD		RT	AREA	AMOUNT
* 8	1,4-Dichlorobenzene-d4	3.695	948338	40.000
* 25	Naphthalene-d8	4.757	1097690	40.000
* 65	Phenanthrene-d10	7.438	1231272	40.000
* 77	Chrysene-d12	9.700	791676	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.988	176154	7.43002904	120	0		0	8
2(3H)-Furanone, dihydro-4-hydroxy-				CAS #: 5469-16-9			
4.489	437932	15.9583091	260	90	NIST2002.L	4145	25

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5267.D
Report Date: 11-Nov-2011 13:37

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
5-Hydroxymethyldihydrofuran-2-one					CAS #: 1000194-17-0		
4.693	353342	12.8758394	210	86	NIST2002.L	7821	25
Unknown					CAS #:		
5.218	437747	15.9515461	260	0		0	25
Unknown					CAS #:		
5.304	300976	10.9676069	180	0		0	25
Unknown					CAS #:		
7.084	131955	4.28678016	70	0		0	65
Unknown					CAS #:		
7.599	180760	5.87229729	96	0		0	65
n-Hexadecanoic acid					CAS #: 57-10-3		
7.910	333107	10.8215435	180	96	NIST2002.L	92227	65
Unknown					CAS #:		
9.218	186125	9.40408393	150	0		0	77
Unknown					CAS #:		
10.462	328361	16.5906921	270	0		0	77

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5267.D
Date : 10-NOV-2011 16:20
Client ID: H30T1
Instrument: S2.i
Sample Info: K2198-16A,,62764,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



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Date : 10-NOV-2011 16:20

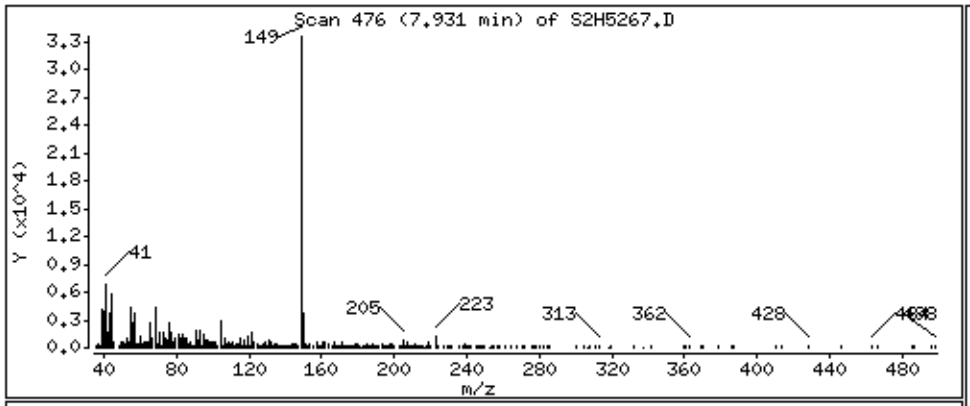
Client ID: H30T1 Instrument: S2.i

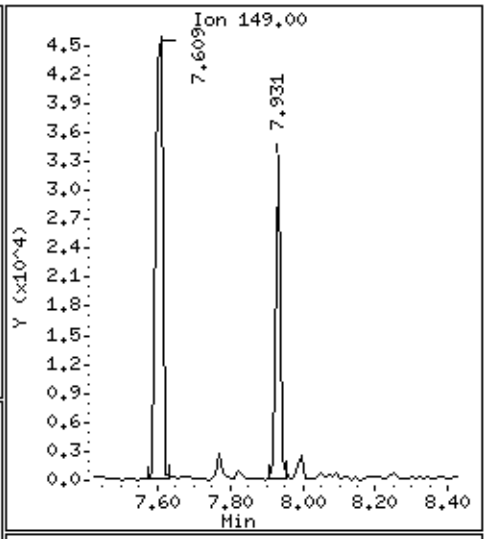
Sample Info: K2198-16A,,62764,,

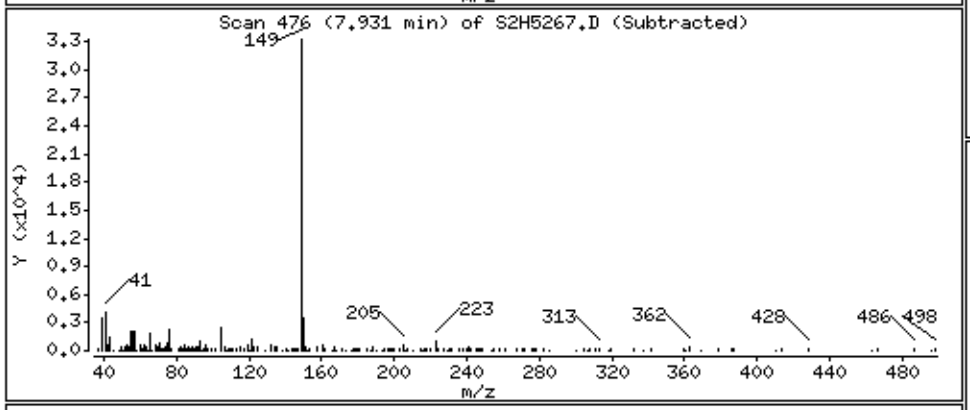
Volume Injected (uL): 2.0 Operator: SRC: LIMS

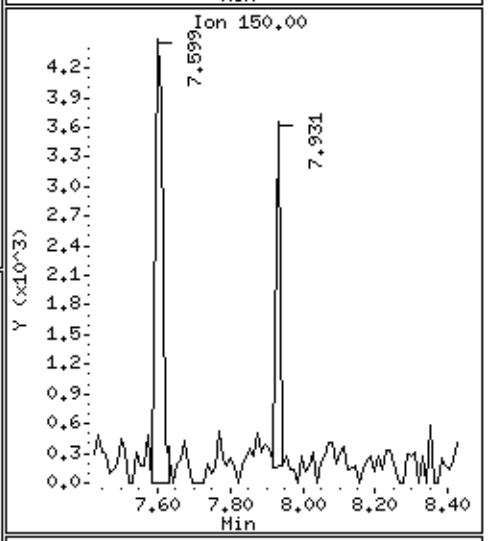
Column phase: RXI-5SILMS Column diameter: 0.25

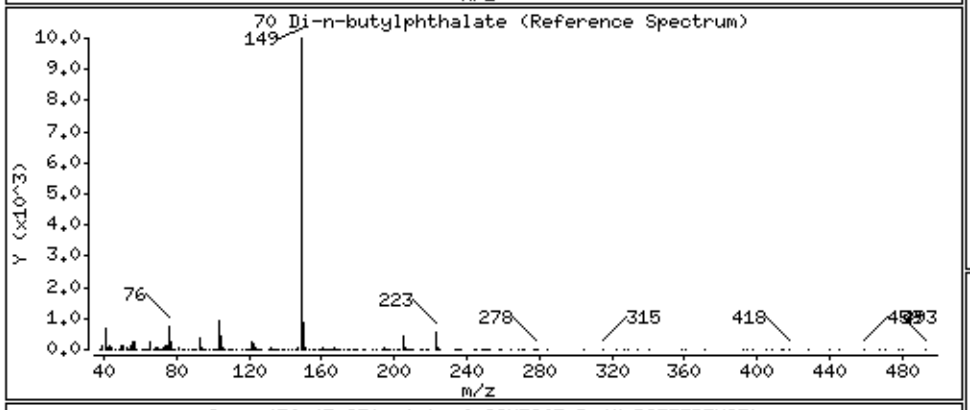
70 Di-n-butylphthalate Concentration: 36 ug/Kg

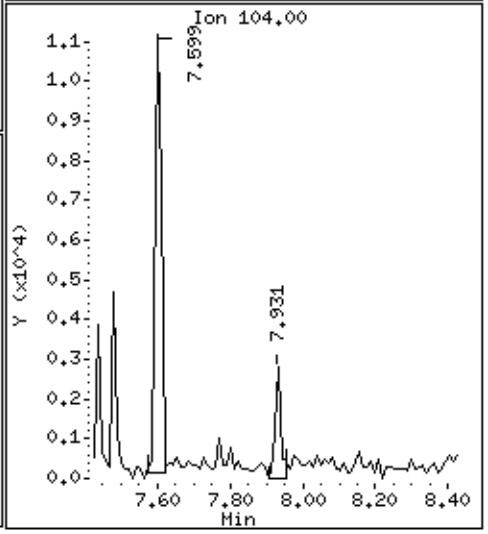


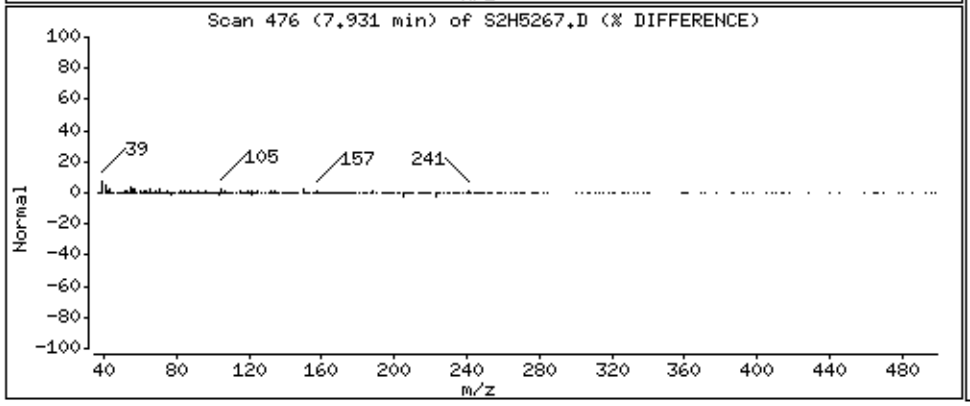












Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5267.D

Date : 10-NOV-2011 16:20

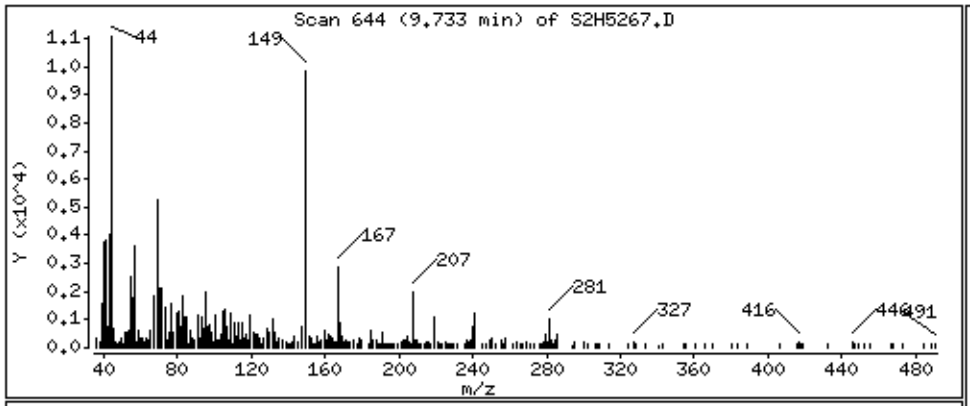
Client ID: H30T1 Instrument: S2.i

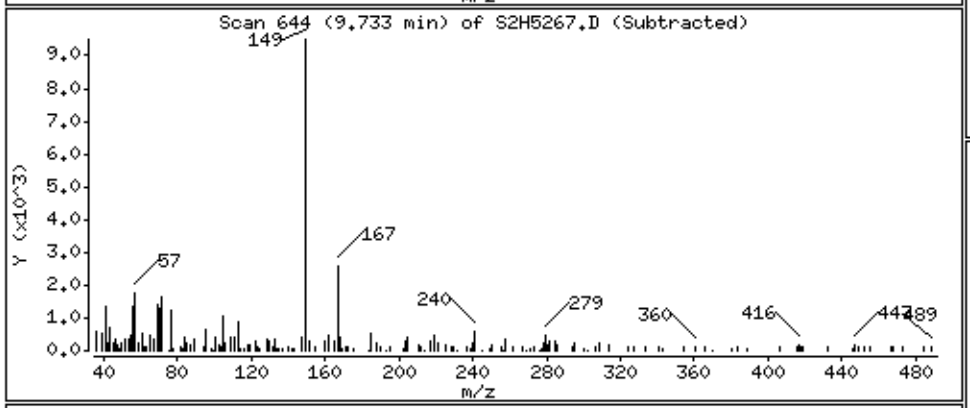
Sample Info: K2198-16A,,62764,,

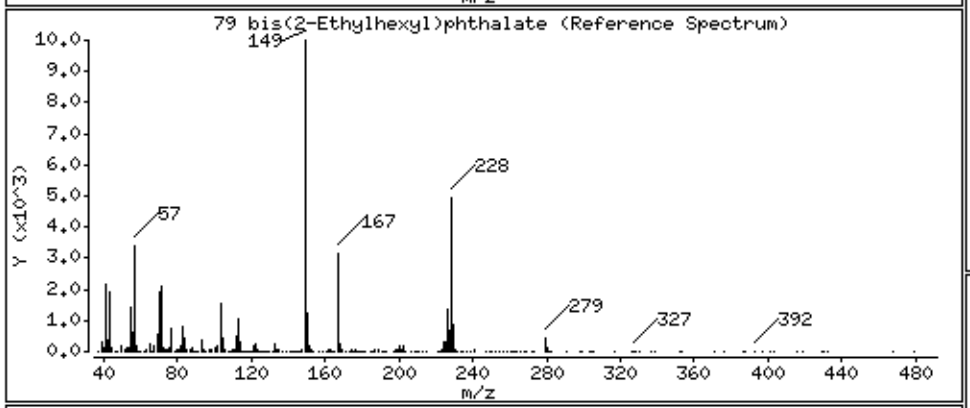
Volume Injected (uL): 2.0 Operator: SRC: LIMS

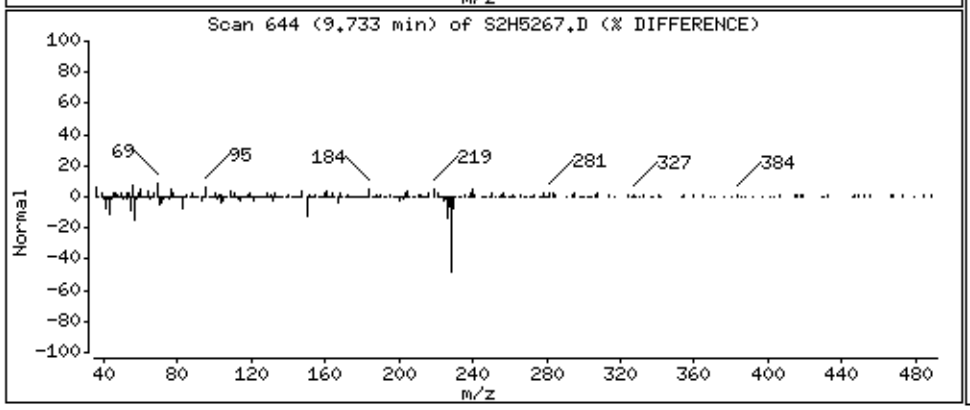
Column phase: RXI-5SILMS Column diameter: 0.25

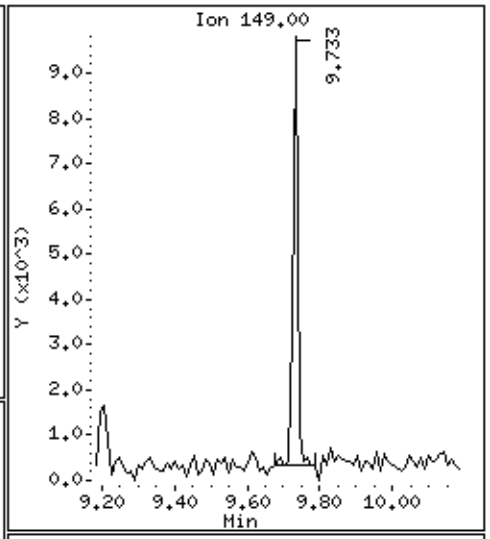
79 bis(2-Ethylhexyl)phthalate Concentration: 34 ug/Kg

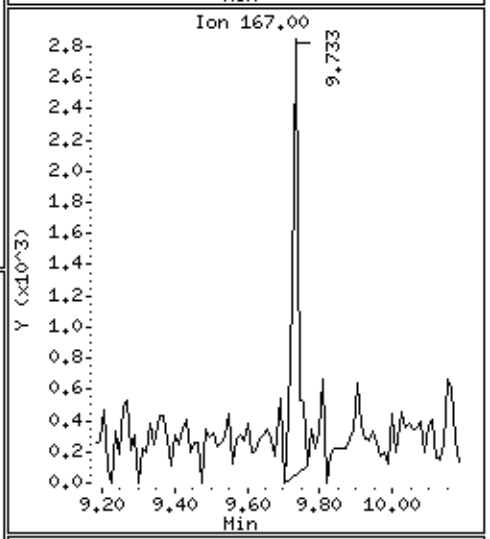


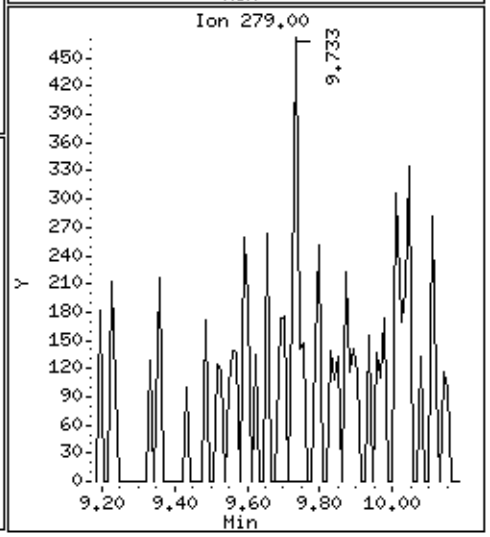












Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5267.D

Date : 10-NOV-2011 16:20

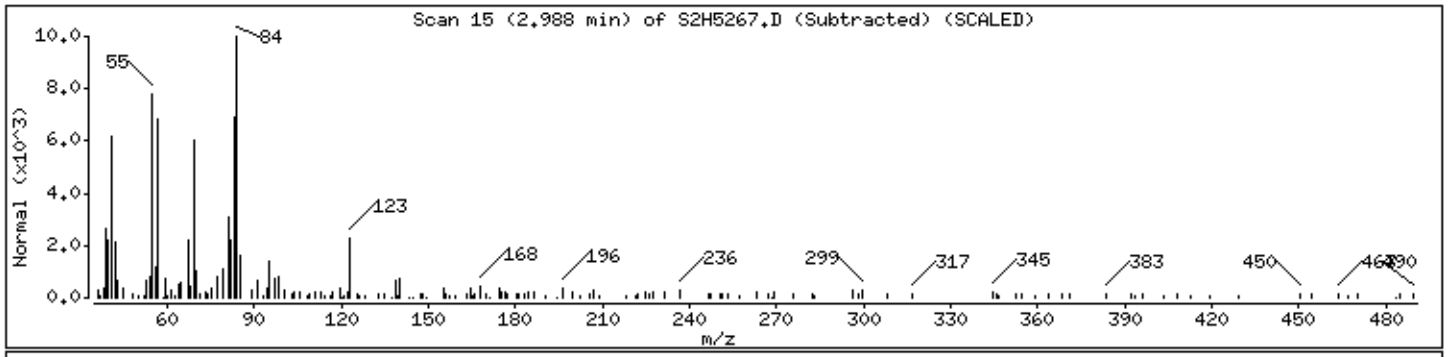
Client ID: H30T1 Instrument: S2.i

Sample Info: K2198-16A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5267.D

Date : 10-NOV-2011 16:20

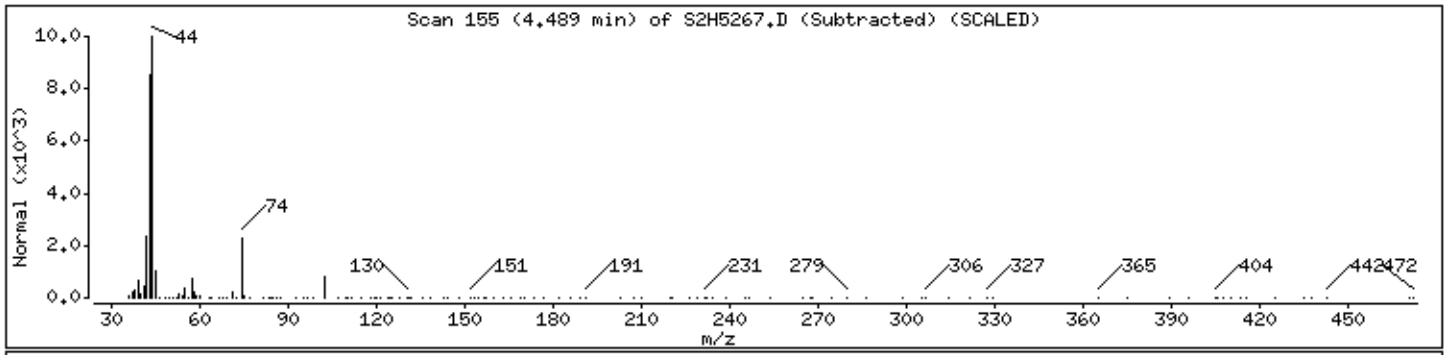
Client ID: H30T1 Instrument: S2.i

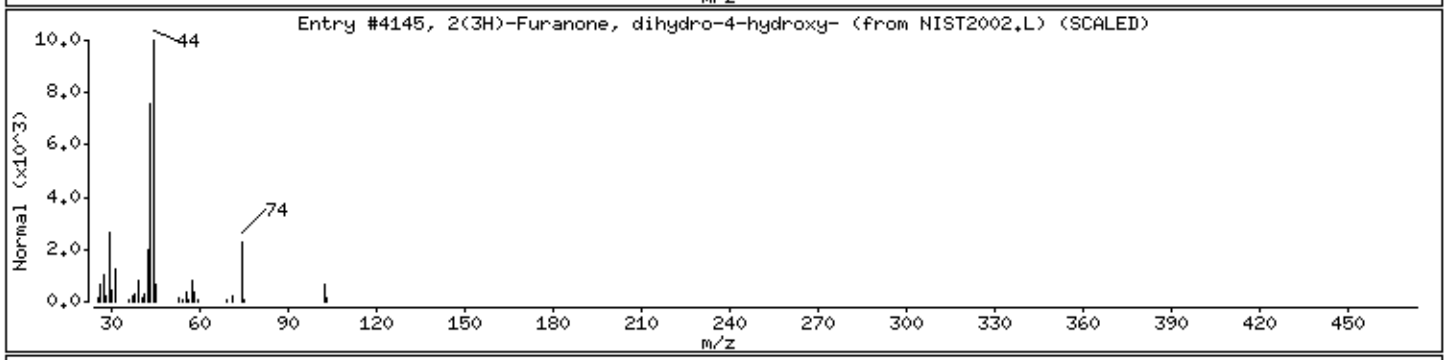
Sample Info: K2198-16A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2(3H)-Furanone, dihydro-4-hydroxy-	5469-16-9	NIST2002.L	4145	90	C4H6O3	102





Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5267.D

Date : 10-NOV-2011 16:20

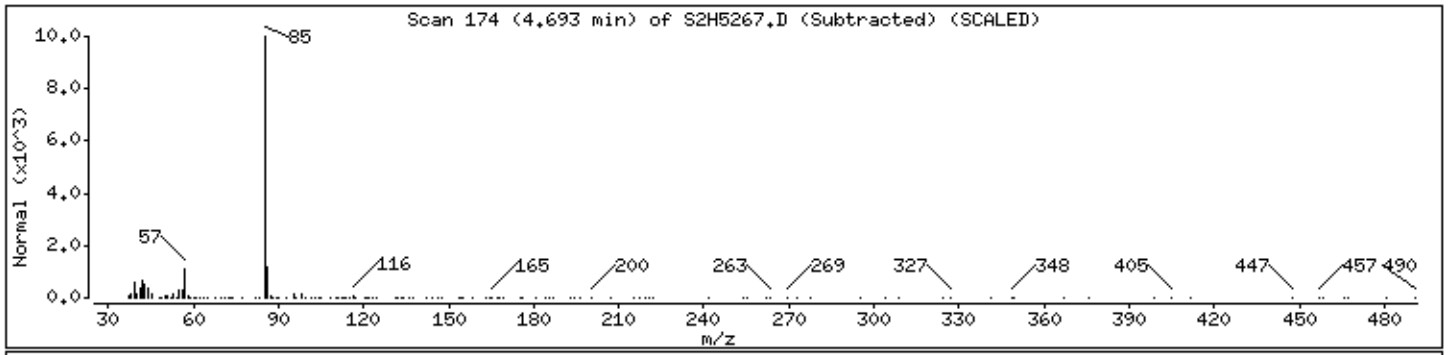
Client ID: H30T1 Instrument: S2.i

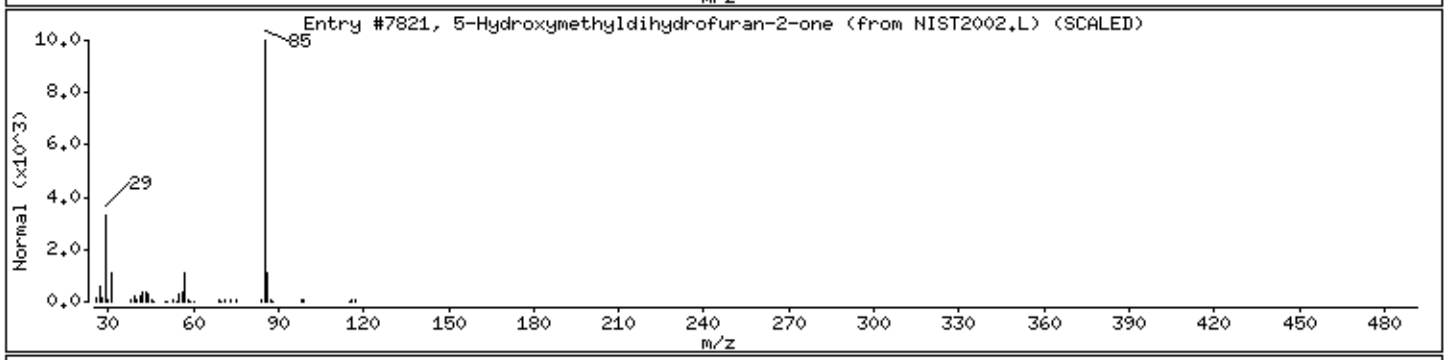
Sample Info: K2198-16A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
5-Hydroxymethyldihydrofuran-2-one	1000194-17-0	NIST2002.L	7821	86	C5H8O3	116





Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5267.D

Date : 10-NOV-2011 16:20

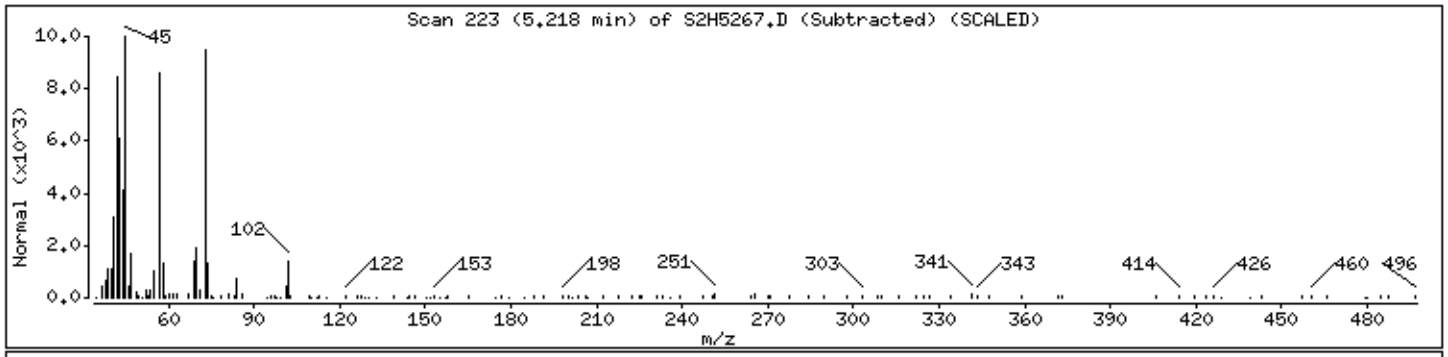
Client ID: H30T1 Instrument: S2.i

Sample Info: K2198-16A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5267.D

Date : 10-NOV-2011 16:20

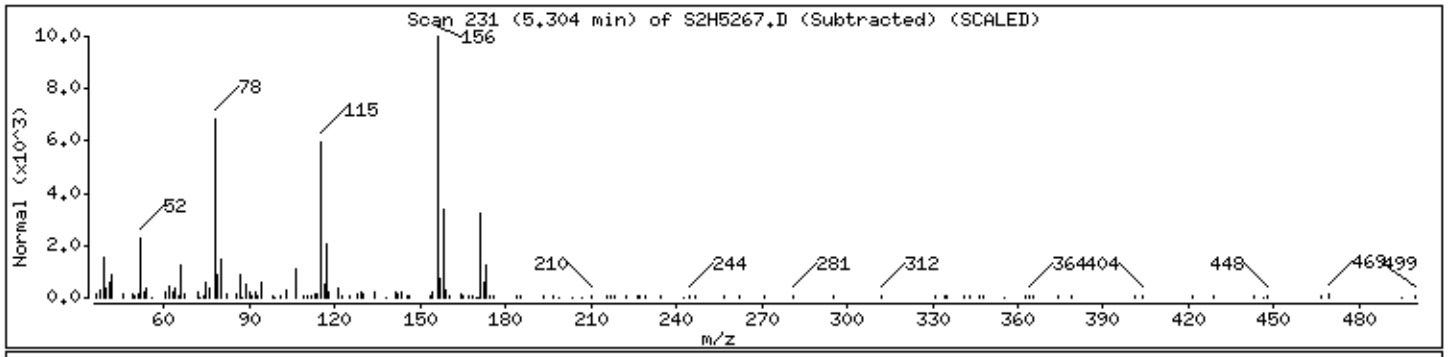
Client ID: H30T1 Instrument: S2.i

Sample Info: K2198-16A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5267.D

Date : 10-NOV-2011 16:20

Client ID: H30T1 Instrument: S2.i

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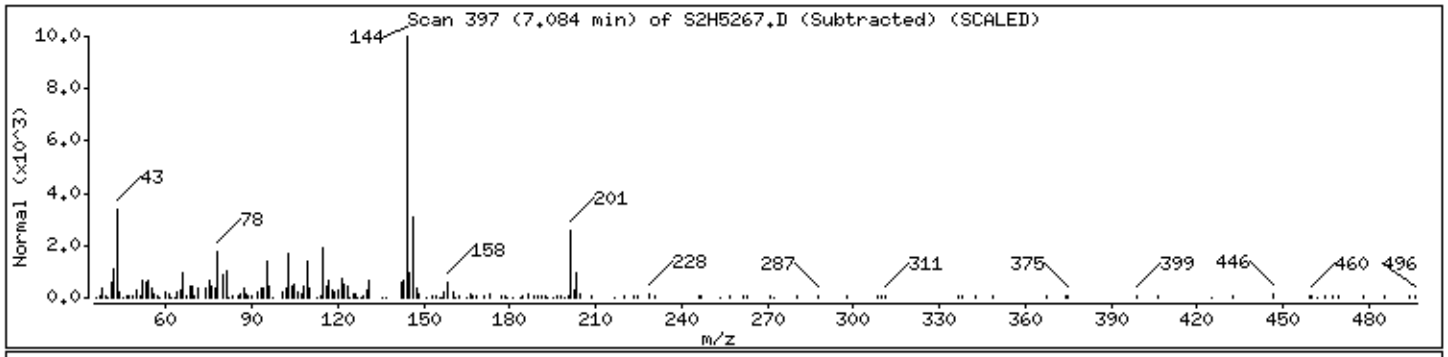
Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5267.D

Date : 10-NOV-2011 16:20

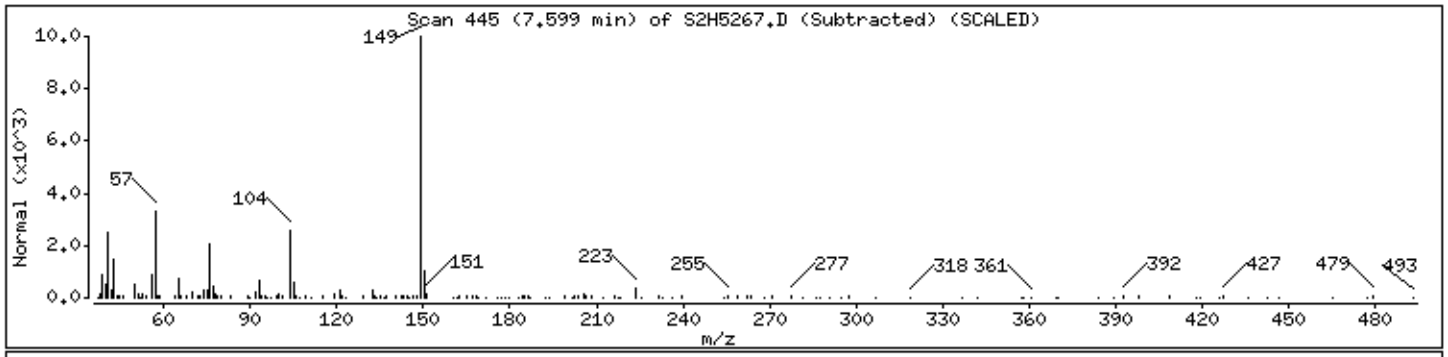
Client ID: H30T1 Instrument: S2.i

Sample Info: K2198-16A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5267.D

Date : 10-NOV-2011 16:20

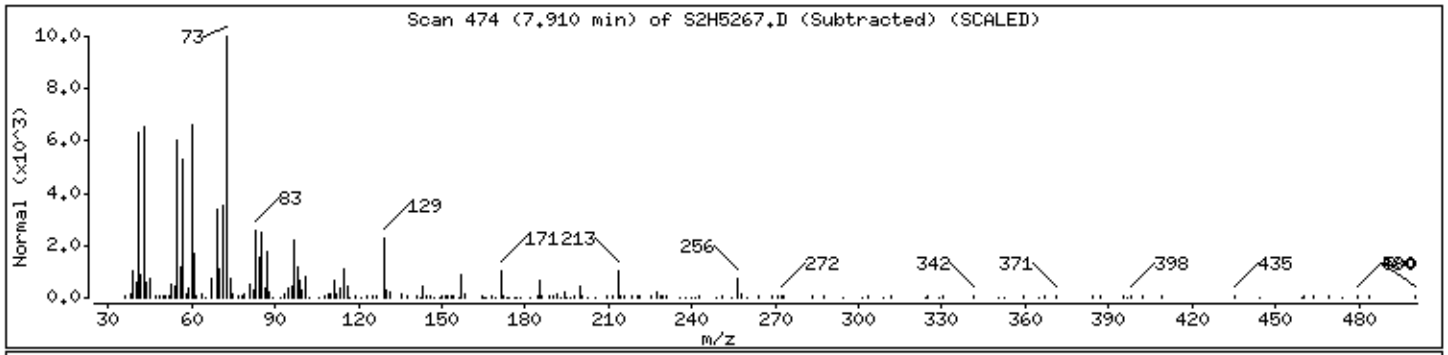
Client ID: H30T1 Instrument: S2.i

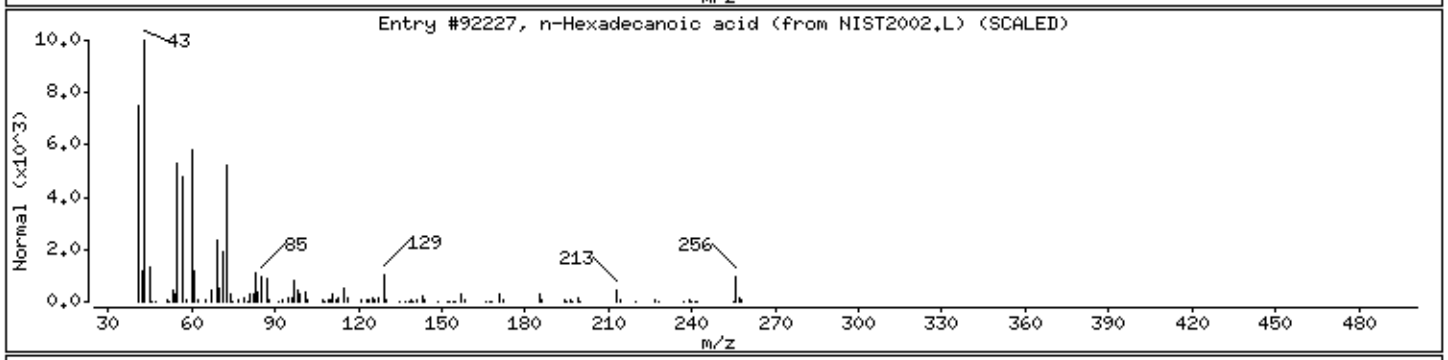
Sample Info: K2198-16A,,62764,,

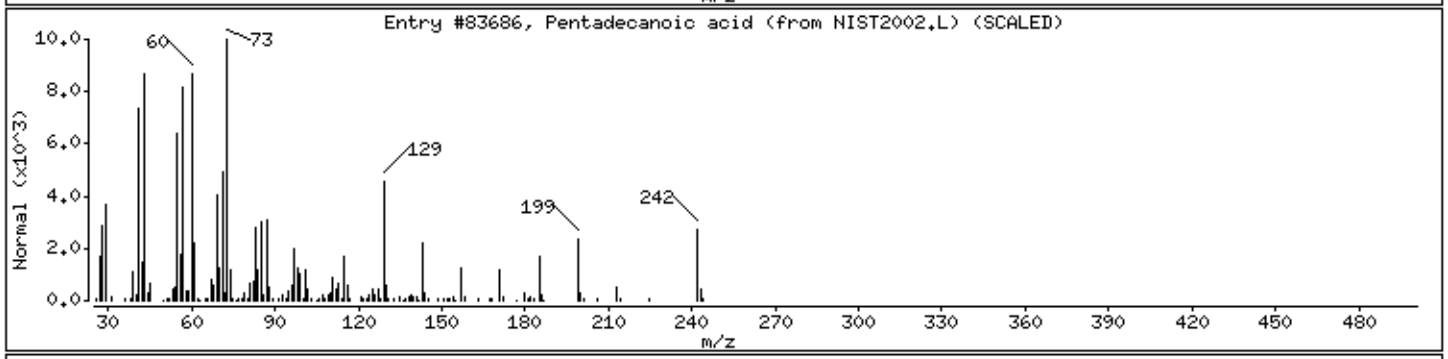
Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
n-Hexadecanoic acid	57-10-3	NIST2002.L	92227	96	C16H32O2	256
Pentadecanoic acid	1002-84-2	NIST2002.L	83686	86	C15H30O2	242







Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5267.D

Date : 10-NOV-2011 16:20

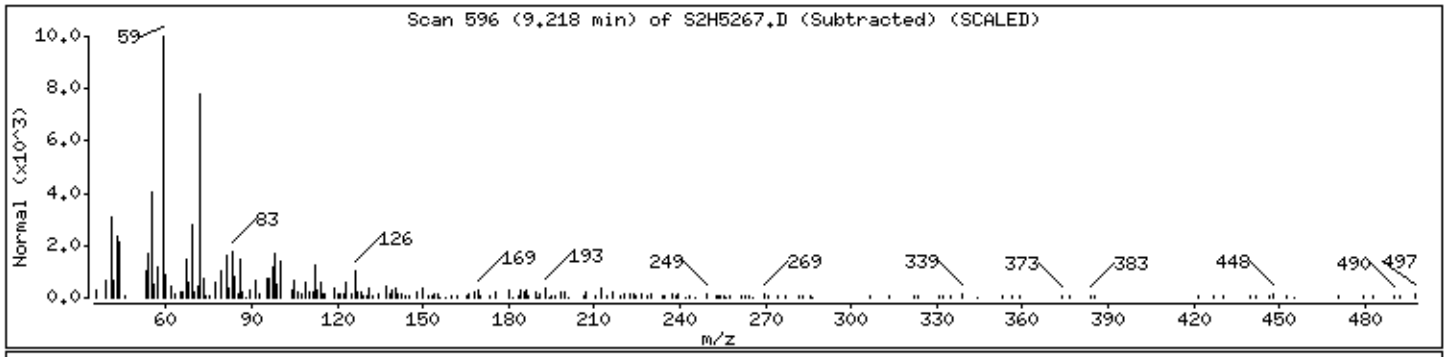
Client ID: H30T1 Instrument: S2.i

Sample Info: K2198-16A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5267.D

Date : 10-NOV-2011 16:20

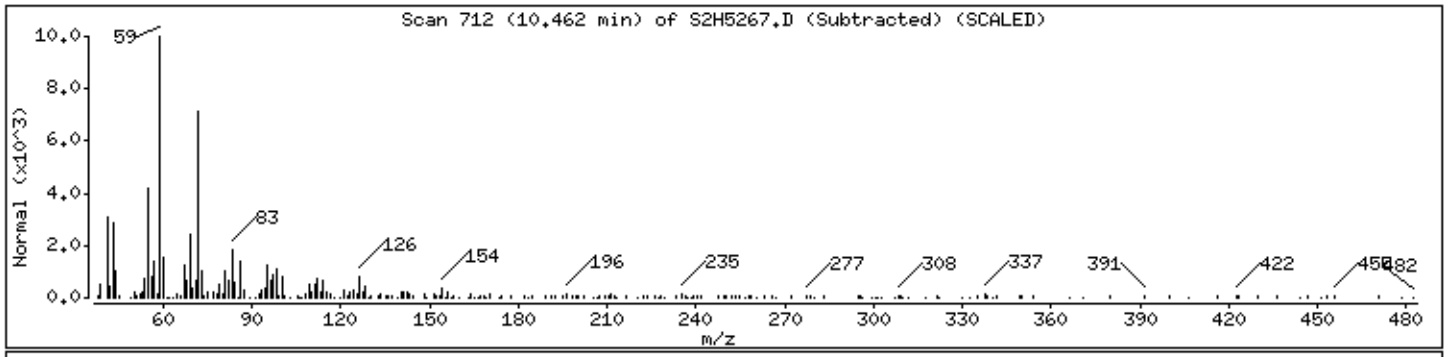
Client ID: H30T1 Instrument: S2.i

Sample Info: K2198-16A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T2

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-17A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: S2H5268.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 24 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: 7.3 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
100-52-7	Benzaldehyde	220	U
108-95-2	Phenol	220	U
111-44-4	Bis(2-chloroethyl)ether	220	U
95-57-8	2-Chlorophenol	220	U
95-48-7	2-Methylphenol	220	U
108-60-1	2,2´-Oxybis(1-chloropropane)	220	U
98-86-2	Acetophenone	220	U
106-44-5	4-Methylphenol	220	U
621-64-7	N-Nitroso-di-n-propylamine	220	U
67-72-1	Hexachloroethane	220	U
98-95-3	Nitrobenzene	220	U
78-59-1	Isophorone	220	U
88-75-5	2-Nitrophenol	220	U
105-67-9	2,4-Dimethylphenol	220	U
111-91-1	Bis(2-chloroethoxy)methane	220	U
120-83-2	2,4-Dichlorophenol	220	U
91-20-3	Naphthalene	220	U
106-47-8	4-Chloroaniline	220	U
87-68-3	Hexachlorobutadiene	220	U
105-60-2	Caprolactam	220	U
59-50-7	4-Chloro-3-methylphenol	220	U
91-57-6	2-Methylnaphthalene	220	U
77-47-4	Hexachlorocyclopentadiene	220	U
88-06-2	2,4,6-Trichlorophenol	220	U
95-95-4	2,4,5-Trichlorophenol	220	U
92-52-4	1,1´-Biphenyl	220	U
91-58-7	2-Chloronaphthalene	220	U
88-74-4	2-Nitroaniline	430	U
131-11-3	Dimethylphthalate	220	U
606-20-2	2,6-Dinitrotoluene	220	U
208-96-8	Acenaphthylene	220	U
99-09-2	3-Nitroaniline	430	U
83-32-9	Acenaphthene	220	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T2

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-17A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: S2H5268.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 24 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: 7.3 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
51-28-5	2,4-Dinitrophenol	430	U
100-02-7	4-Nitrophenol	430	U
132-64-9	Dibenzofuran	220	U
121-14-2	2,4-Dinitrotoluene	220	U
84-66-2	Diethylphthalate	220	U
86-73-7	Fluorene	220	U
7005-72-3	4-Chlorophenyl-phenylether	220	U
100-01-6	4-Nitroaniline	430	U
534-52-1	4,6-Dinitro-2-methylphenol	430	U
86-30-6	N-Nitrosodiphenylamine (1)	220	U
95-94-3	1,2,4,5-Tetrachlorobenzene	220	U
101-55-3	4-Bromophenyl-phenylether	220	U
118-74-1	Hexachlorobenzene	220	U
1912-24-9	Atrazine	220	U
87-86-5	Pentachlorophenol	430	U
85-01-8	Phenanthrene	220	U
120-12-7	Anthracene	220	U
86-74-8	Carbazole	220	U
84-74-2	Di-n-butylphthalate	220	U
206-44-0	Fluoranthene	220	U
129-00-0	Pyrene	220	U
85-68-7	Butylbenzylphthalate	220	U
91-94-1	3,3´-Dichlorobenzidine	220	U
56-55-3	Benzo(a)anthracene	220	U
218-01-9	Chrysene	220	U
117-81-7	Bis(2-ethylhexyl)phthalate	220	U
117-84-0	Di-n-octylphthalate	220	U
205-99-2	Benzo(b)fluoranthene	220	U
207-08-9	Benzo(k)fluoranthene	220	U
50-32-8	Benzo(a)pyrene	220	U
193-39-5	Indeno(1,2,3-cd)pyrene	220	U
53-70-3	Dibenzo(a,h)anthracene	220	U
191-24-2	Benzo(g,h,i)perylene	220	U
58-90-2	2,3,4,6-Tetrachlorophenol	220	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30T2

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-17A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: S2H5268.D

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 24 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: 7.3 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.999	170	J
02	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.490	310	BNJ
03		Unknown-02	4.694	240	J
04		Unknown-03	4.994	88	J
05		Unknown-04	5.208	310	J
06		Unknown-05	5.337	160	J
07		Unknown-06	7.600	90	J
08	57-10-3	n-Hexadecanoic acid	7.911	290	NJ
09		Unknown-07	9.208	200	J
10	57-87-4	Ergosterol	9.594	260	NJ
11		Unknown-08	10.184	230	J
12	301-02-0	9-Octadecenamide, (Z)-	10.431	630	NJ
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5268.D
Report Date: 11-Nov-2011 13:37

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5268.D
Lab Smp Id: K2198-17A Client Smp ID: H30T2
Inj Date : 10-NOV-2011 16:41
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-17A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.200	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
$	2 Phenol-d5	71	3.385	3.373	(0.916)	117457	33.1351	550
$	4 bis(2-Chloroethyl)ether-d8	67	3.428	3.427	(0.927)	139745	28.6091	470
$	6 2-Chlorophenol-d4	132	3.503	3.491	(0.948)	110115	35.9095	590
*	8 1,4-Dichlorobenzene-d4	152	3.696	3.684	(1.000)	112569	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.018	4.006	(1.087)	177561	36.9475	610
$	16 Nitrobenzene-d5	128	4.157	4.145	(0.874)	59083	32.3222	540
$	19 2-Nitrophenol-d4	143	4.425	4.424	(0.930)	77248	38.2809	630
$	23 2,4-Dichlorophenol-d3	165	4.629	4.628	(0.973)	143564	38.9723	650
*	25 Naphthalene-d8	136	4.758	4.746	(1.000)	351001	40.0000	
$	27 4-Chloroaniline-d4	131	4.811	4.810	(1.011)	21810	6.66800	110(aQ)
$	40 Dimethylphthalate-d6	166	5.980	5.968	(0.962)	404124	35.7274	590
$	43 Acenaphthylene-d8	160	6.087	6.076	(0.979)	467200	31.7628	530
*	46 Acenaphthene-d10	164	6.216	6.204	(1.000)	307639	40.0000	
$	49 4-Nitrophenol-d4	143	6.323	6.312	(1.017)	67936	41.6758	690
$	54 Fluorene-d10	176	6.645	6.633	(1.069)	354347	34.1038	560
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.699	6.698	(0.901)	67899	30.5191	510
*	65 Phenanthrene-d10	188	7.439	7.438	(1.000)	570138	40.0000	
$	67 Anthracene-d10	188	7.481	7.480	(1.006)	508675	31.2336	520
$	72 Pyrene-d10	212	8.618	8.606	(0.890)	447260	40.6475	670(R)

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5268.D
Report Date: 11-Nov-2011 13:37

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)	
* 77 Chrysene-d12	240	9.680	9.668	(1.000)	349288	40.0000		(Q)
$ 83 Benzo(a)pyrene-d12	264	10.913	10.891	(0.993)	176894	31.8759	530	(R)
* 85 Perylene-d12	264	10.988	10.966	(1.000)	226153	40.0000		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5268.D
Report Date: 11-Nov-2011 13:37

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5268.D
Lab Smp Id: K2198-17A Client Smp ID: H30T2
Inj Date : 10-NOV-2011 16:41
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-17A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.200	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

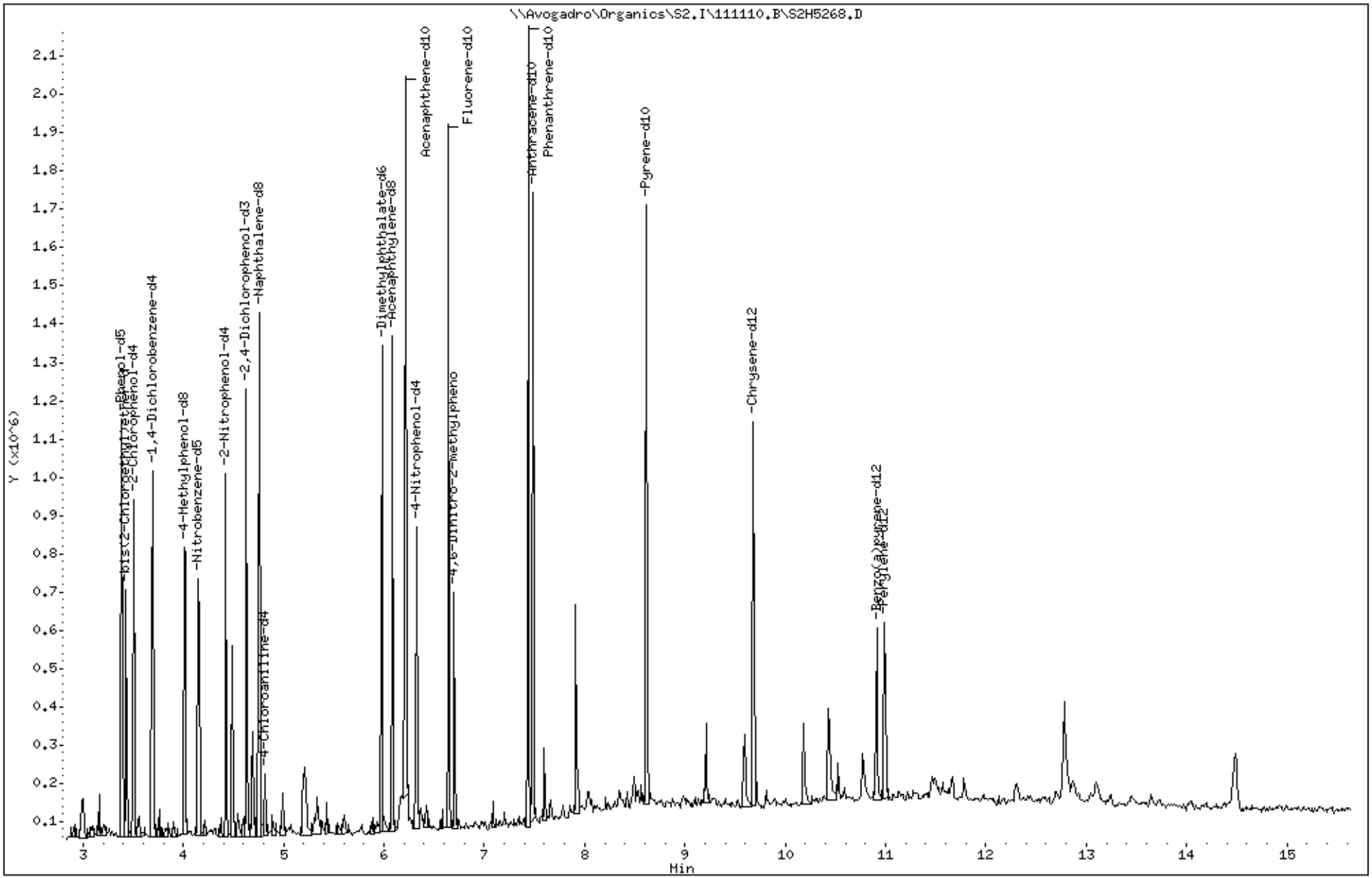
ISTD	RT	AREA	AMOUNT
* 8 1,4-Dichlorobenzene-d4	3.696	998600	40.000
* 25 Naphthalene-d8	4.758	1213153	40.000
* 65 Phenanthrene-d10	7.439	1636343	40.000
* 77 Chrysene-d12	9.680	985147	40.000
* 85 Perylene-d12	10.989	560674	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
2.999	191156	7.65693599	130	0		0	8
2(3H)-Furanone, dihydro-4-hydroxy-					CAS #: 5469-16-9		
4.490	428251	14.1202743	230	90	NIST2002.L	4145	25

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5268.D
Report Date: 11-Nov-2011 13:37

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.694	332878	10.9756223	180	0		0	25
Unknown				CAS #:			
4.994	122344	4.03393201	67	0		0	25
Unknown				CAS #:			
5.208	436961	14.4074455	240	0		0	25
Unknown				CAS #:			
5.337	229279	7.55976745	130	0		0	25
Unknown				CAS #:			
7.600	170072	4.15736817	69	0		0	65
n-Hexadecanoic acid				CAS #: 57-10-3			
7.911	539140	13.1791310	220	93	NIST2002.L	92227	65
Unknown				CAS #:			
9.208	227505	9.23739503	150	0		0	77
Ergosterol				CAS #: 57-87-4			
9.594	293661	11.9235241	200	90	NIST2002.L	155624	77
Unknown				CAS #:			
10.184	260455	10.5752564	180	0		0	77
9-Octadecenamide, (Z)-				CAS #: 301-02-0			
10.431	407472	29.0701205	480	90	NIST2002.L	106874	85

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5268.D
Date : 10-NOV-2011 16:41
Client ID: H30T2
Instrument: S2.i
Sample Info: K2198-17A,,62764,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



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Date : 10-NOV-2011 16:41

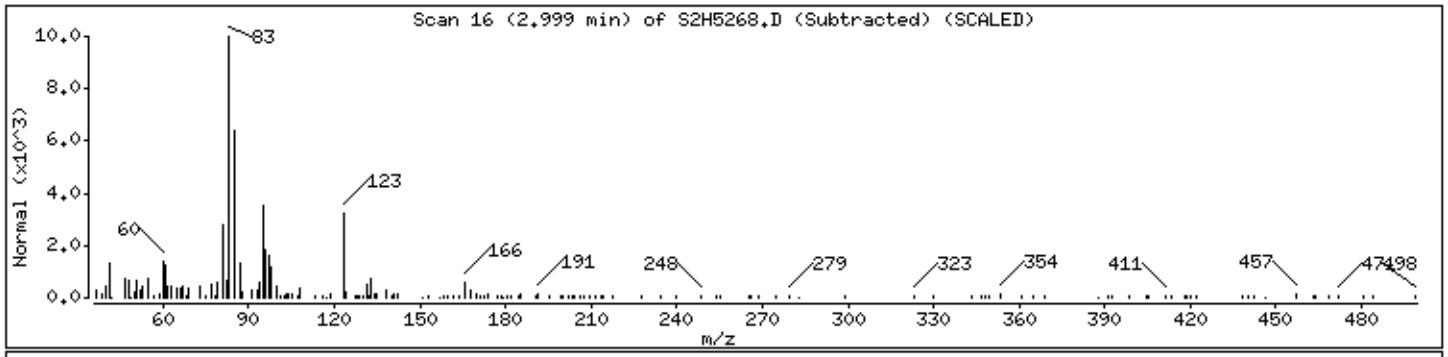
Client ID: H30T2 Instrument: S2.i

Sample Info: K2198-17A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 16:41

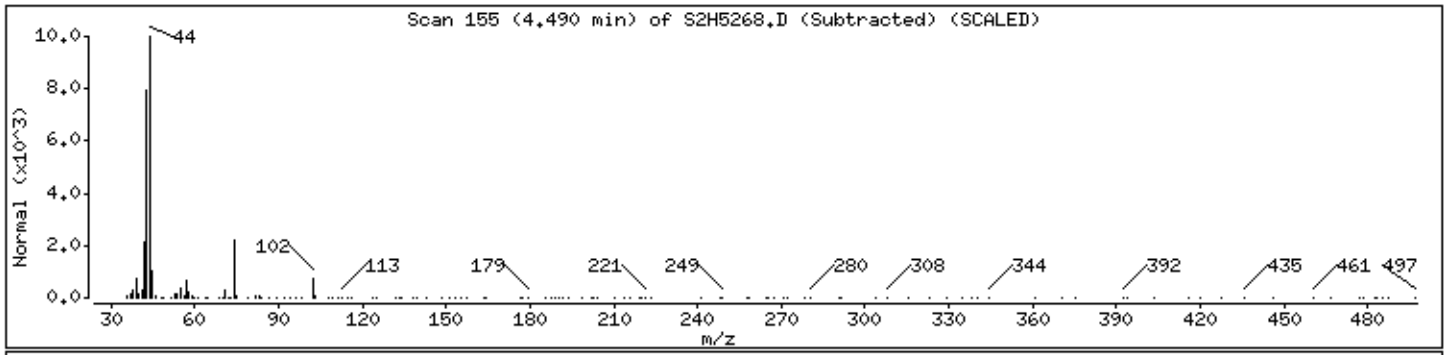
Client ID: H30T2 Instrument: S2.i

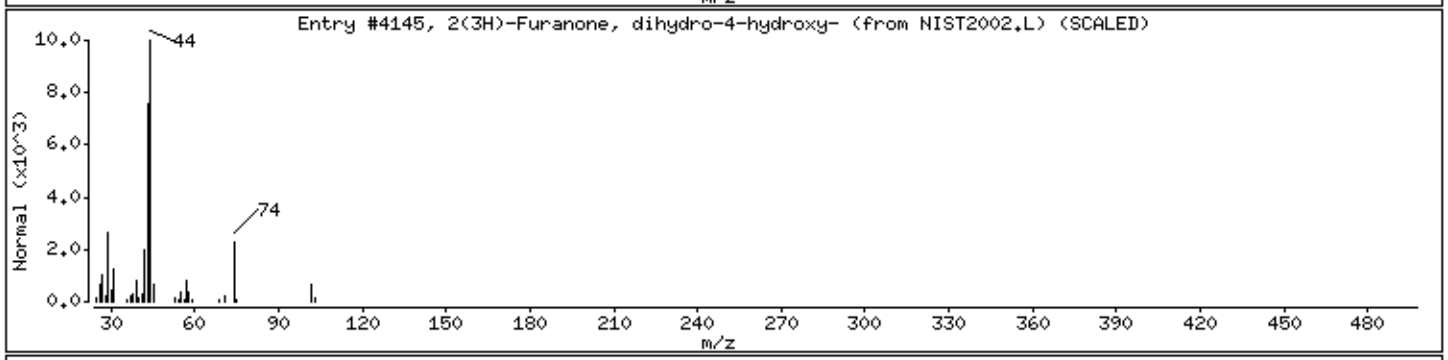
Sample Info: K2198-17A,,62764,,

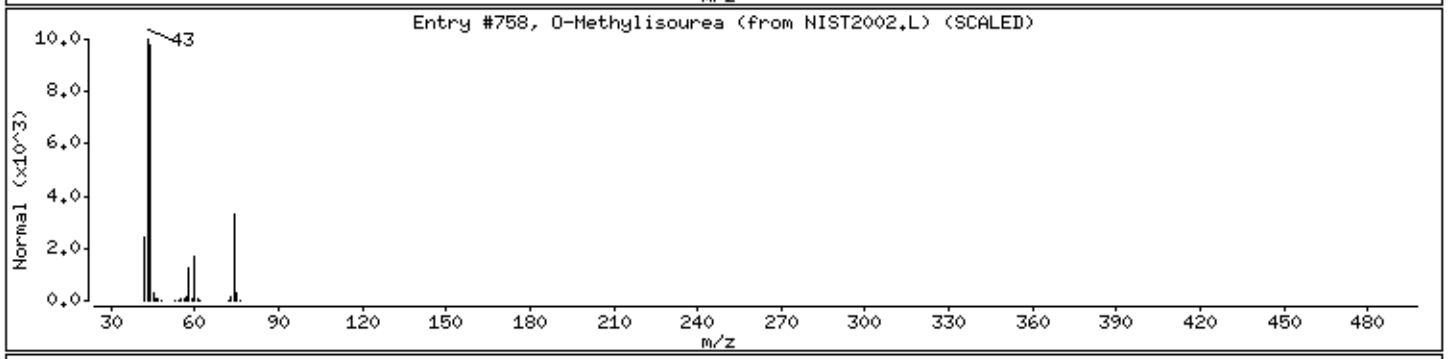
Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2(3H)-Furanone, dihydro-4-hydroxy-	5469-16-9	NIST2002.L	4145	90	C4H6O3	102
O-Methylisourea	2440-60-0	NIST2002.L	758	86	C2H6N2O	74







Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5268.D

Date : 10-NOV-2011 16:41

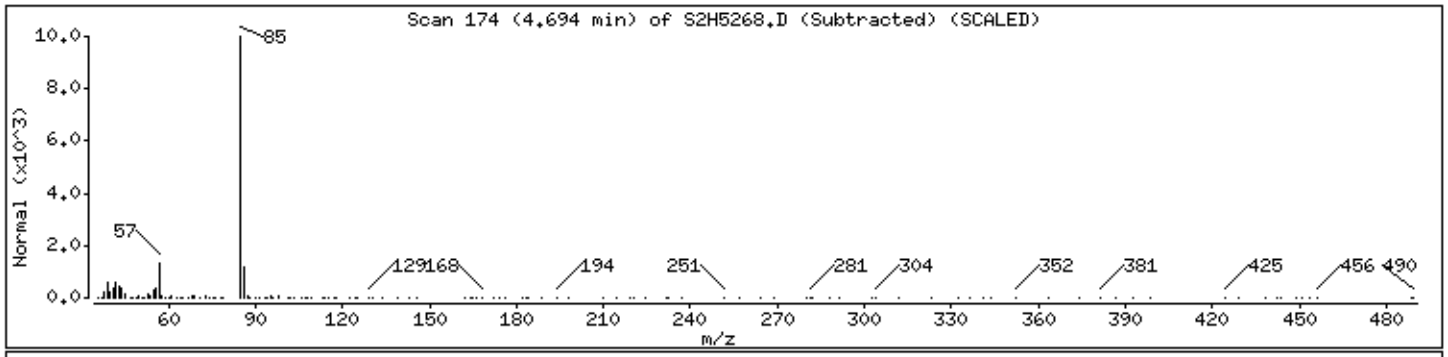
Client ID: H30T2 Instrument: S2.i

Sample Info: K2198-17A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5268.D

Date : 10-NOV-2011 16:41

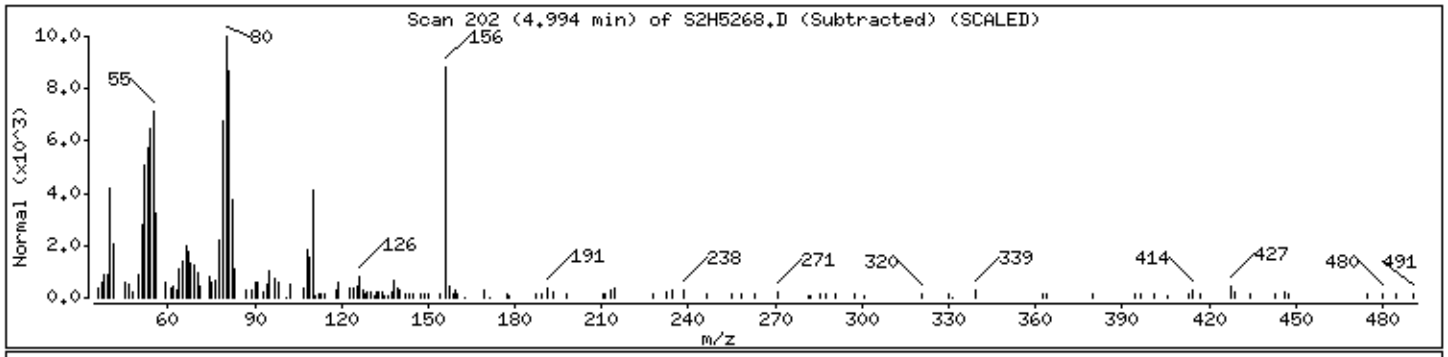
Client ID: H30T2 Instrument: S2.i

Sample Info: K2198-17A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5268.D

Date : 10-NOV-2011 16:41

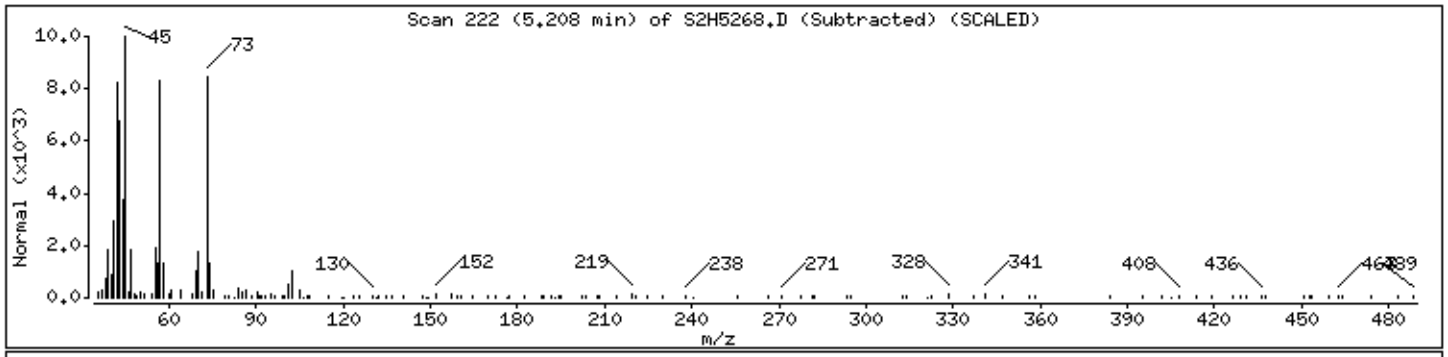
Client ID: H30T2 Instrument: S2.i

Sample Info: K2198-17A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5268.D

Date : 10-NOV-2011 16:41

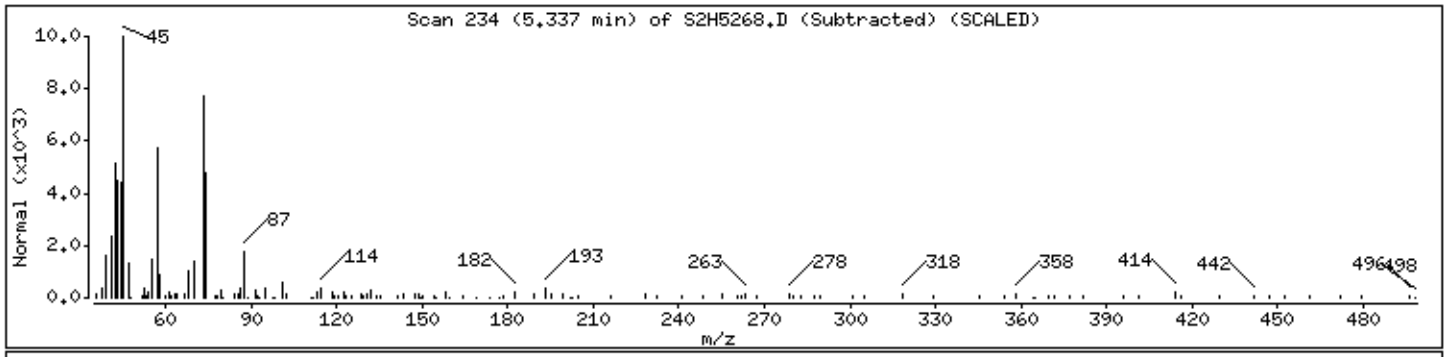
Client ID: H30T2 Instrument: S2.i

Sample Info: K2198-17A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5268.D

Date : 10-NOV-2011 16:41

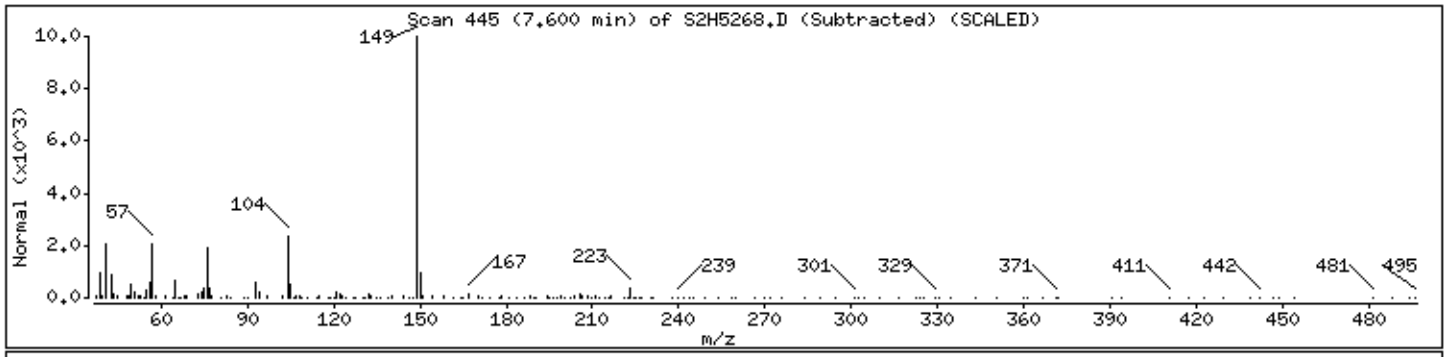
Client ID: H30T2 Instrument: S2.i

Sample Info: K2198-17A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5268.D

Date : 10-NOV-2011 16:41

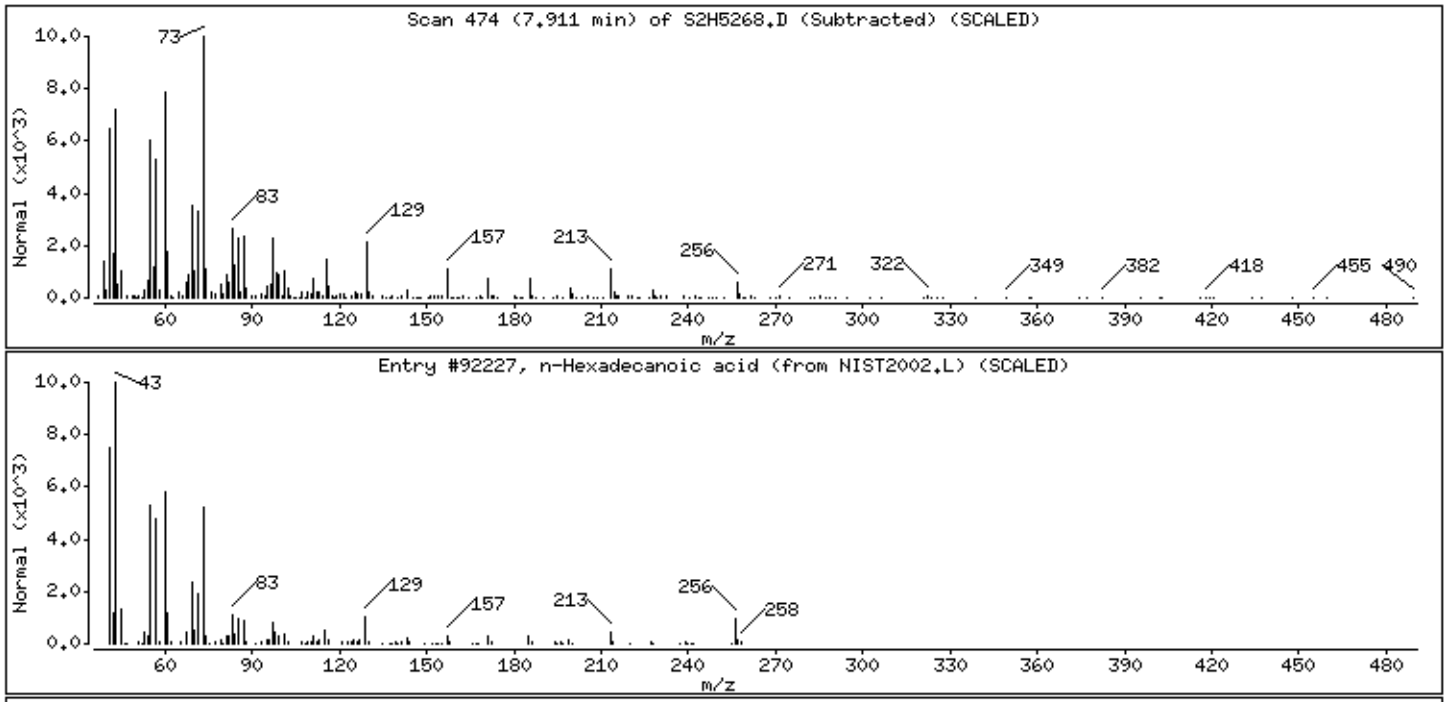
Client ID: H30T2 Instrument: S2.i

Sample Info: K2198-17A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
n-Hexadecanoic acid	57-10-3	NIST2002.L	92227	93	C16H32O2	256



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5268.D

Date : 10-NOV-2011 16:41

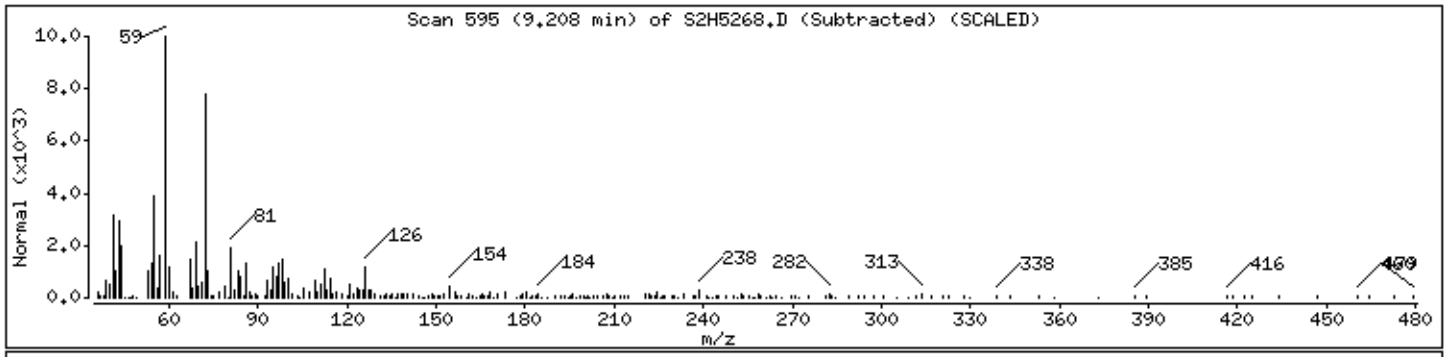
Client ID: H30T2 Instrument: S2.i

Sample Info: K2198-17A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 16:41

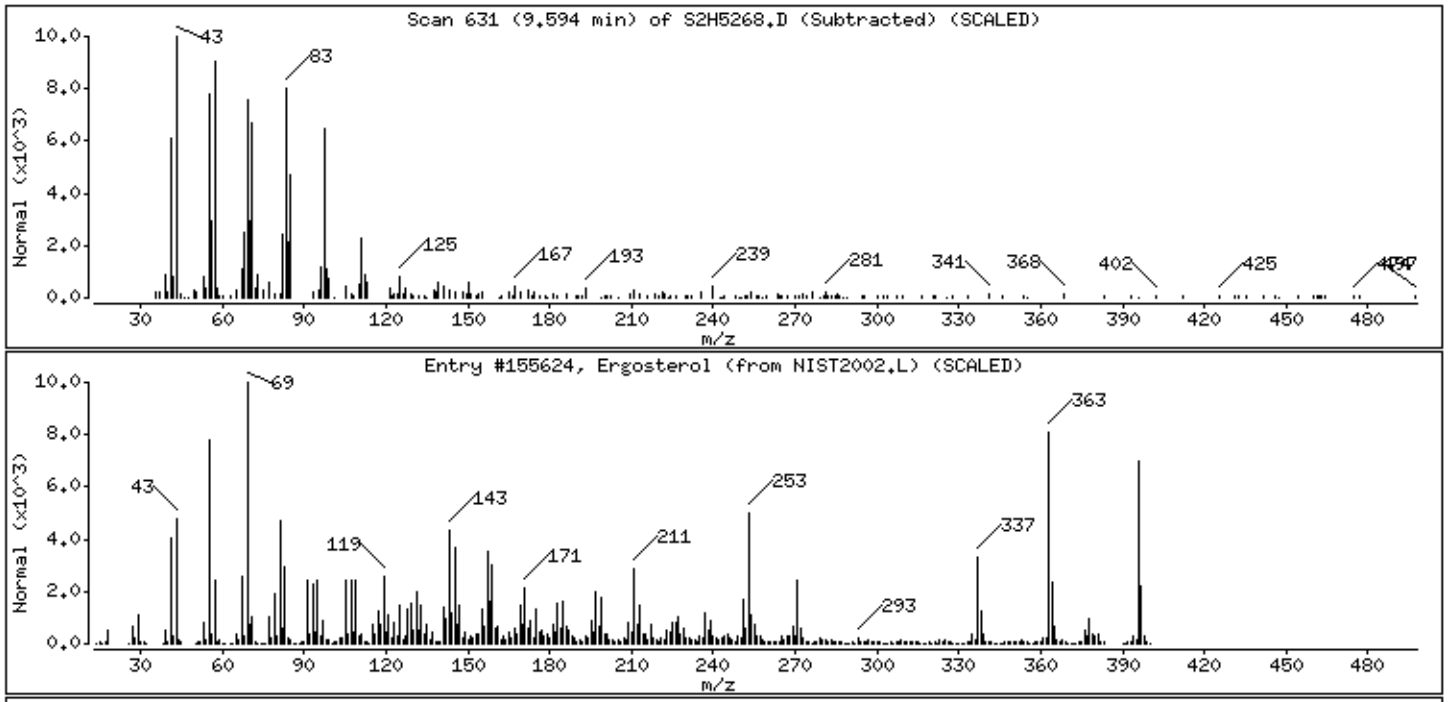
Client ID: H30T2 Instrument: S2.i

Sample Info: K2198-17A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ergosterol	57-87-4	NIST2002.L	155624	90	C28H44O	396



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5268.D

Date : 10-NOV-2011 16:41

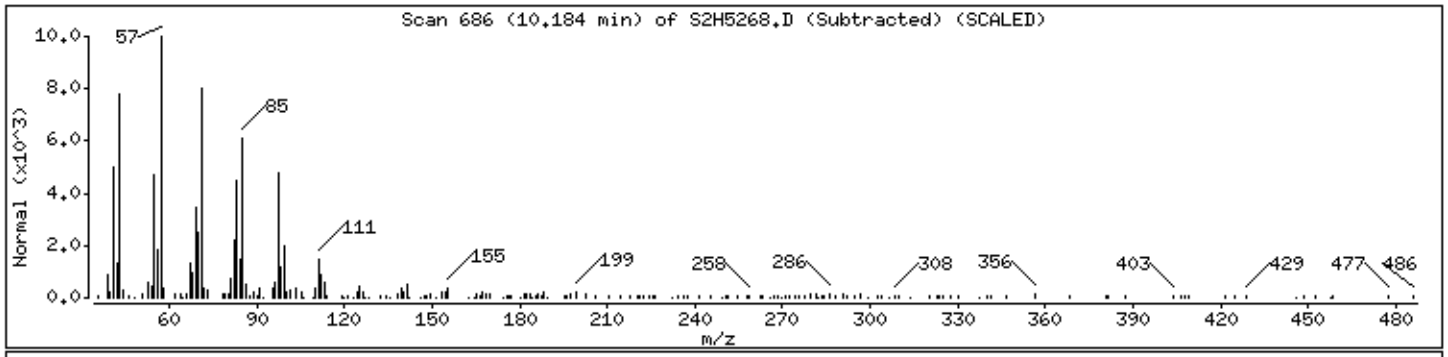
Client ID: H30T2 Instrument: S2.i

Sample Info: K2198-17A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 16:41

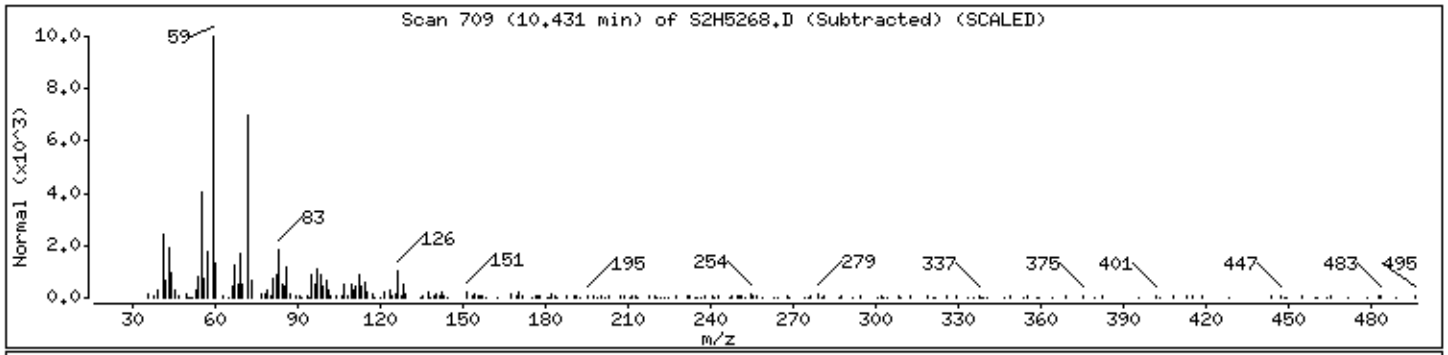
Client ID: H30T2 Instrument: S2.i

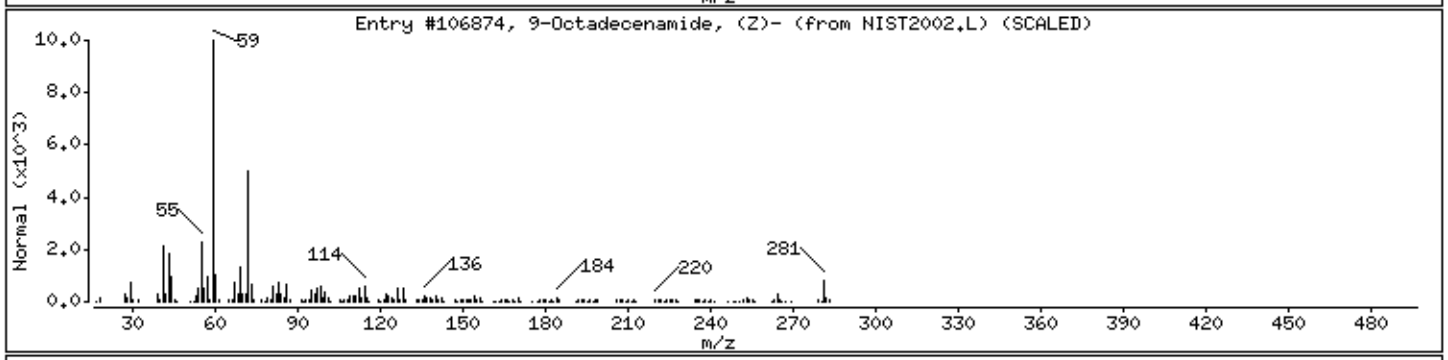
Sample Info: K2198-17A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST2002.L	106874	90	C18H35NO	281





1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T3

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-18A

Sample wt/vol: 30.4 (g/mL) G Lab File ID: S2H5269.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 22 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: 7.3 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
100-52-7	Benzaldehyde	210	U
108-95-2	Phenol	210	U
111-44-4	Bis(2-chloroethyl)ether	210	U
95-57-8	2-Chlorophenol	210	U
95-48-7	2-Methylphenol	210	U
108-60-1	2,2´-Oxybis(1-chloropropane)	210	U
98-86-2	Acetophenone	210	U
106-44-5	4-Methylphenol	210	U
621-64-7	N-Nitroso-di-n-propylamine	210	U
67-72-1	Hexachloroethane	210	U
98-95-3	Nitrobenzene	210	U
78-59-1	Isophorone	210	U
88-75-5	2-Nitrophenol	210	U
105-67-9	2,4-Dimethylphenol	210	U
111-91-1	Bis(2-chloroethoxy)methane	210	U
120-83-2	2,4-Dichlorophenol	210	U
91-20-3	Naphthalene	210	U
106-47-8	4-Chloroaniline	210	U
87-68-3	Hexachlorobutadiene	210	U
105-60-2	Caprolactam	210	U
59-50-7	4-Chloro-3-methylphenol	210	U
91-57-6	2-Methylnaphthalene	210	U
77-47-4	Hexachlorocyclopentadiene	210	U
88-06-2	2,4,6-Trichlorophenol	210	U
95-95-4	2,4,5-Trichlorophenol	210	U
92-52-4	1,1´-Biphenyl	210	U
91-58-7	2-Chloronaphthalene	210	U
88-74-4	2-Nitroaniline	420	U
131-11-3	Dimethylphthalate	210	U
606-20-2	2,6-Dinitrotoluene	210	U
208-96-8	Acenaphthylene	210	U
99-09-2	3-Nitroaniline	420	U
83-32-9	Acenaphthene	210	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T3

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-18A

Sample wt/vol: 30.4 (g/mL) G Lab File ID: S2H5269.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 22 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: 7.3 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
51-28-5	2,4-Dinitrophenol	420	U
100-02-7	4-Nitrophenol	420	U
132-64-9	Dibenzofuran	210	U
121-14-2	2,4-Dinitrotoluene	210	U
84-66-2	Diethylphthalate	210	U
86-73-7	Fluorene	210	U
7005-72-3	4-Chlorophenyl-phenylether	210	U
100-01-6	4-Nitroaniline	420	U
534-52-1	4,6-Dinitro-2-methylphenol	420	U
86-30-6	N-Nitrosodiphenylamine (1)	210	U
95-94-3	1,2,4,5-Tetrachlorobenzene	210	U
101-55-3	4-Bromophenyl-phenylether	210	U
118-74-1	Hexachlorobenzene	210	U
1912-24-9	Atrazine	210	U
87-86-5	Pentachlorophenol	420	U
85-01-8	Phenanthrene	210	U
120-12-7	Anthracene	210	U
86-74-8	Carbazole	210	U
84-74-2	Di-n-butylphthalate	44	J
206-44-0	Fluoranthene	210	U
129-00-0	Pyrene	210	U
85-68-7	Butylbenzylphthalate	210	U
91-94-1	3,3´-Dichlorobenzidine	210	U
56-55-3	Benzo(a)anthracene	210	U
218-01-9	Chrysene	210	U
117-81-7	Bis(2-ethylhexyl)phthalate	210	U
117-84-0	Di-n-octylphthalate	210	U
205-99-2	Benzo(b)fluoranthene	210	U
207-08-9	Benzo(k)fluoranthene	210	U
50-32-8	Benzo(a)pyrene	210	U
193-39-5	Indeno(1,2,3-cd)pyrene	210	U
53-70-3	Dibenzo(a,h)anthracene	210	U
191-24-2	Benzo(g,h,i)perylene	210	U
58-90-2	2,3,4,6-Tetrachlorophenol	210	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30T3

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-18A

Sample wt/vol: 30.4 (g/mL) G Lab File ID: S2H5269.D

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 22 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: 7.3 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.996	160	J
02		Unknown-02	3.157	120	J
03	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.487	280	BNJ
04		Unknown-03	4.691	210	J
05		Unknown-04	5.205	260	J
06		Unknown-05	5.334	110	J
07		Unknown-06	5.431	100	J
08		Unknown-07	7.608	110	J
09	57-10-3	n-Hexadecanoic acid	7.908	250	NJ
10	1000197-14-1	4b,8-Dimethyl-2-isopropylphe	8.240	150	NJ
11		Unknown-08	9.205	200	J
12		Unknown-09	9.591	140	J
13		Unknown-10	10.439	560	J
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5269.D
Report Date: 11-Nov-2011 13:37

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5269.D
Lab Smp Id: K2198-18A Client Smp ID: H30T3
Inj Date : 10-NOV-2011 17:01
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-18A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.400	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
$	2 Phenol-d5	71	3.382	3.373	(0.916)	120135	32.5520	540
$	4 bis(2-Chloroethyl)ether-d8	67	3.425	3.427	(0.927)	144007	28.3172	470
$	6 2-Chlorophenol-d4	132	3.500	3.491	(0.948)	111976	35.0741	580
*	8 1,4-Dichlorobenzene-d4	152	3.693	3.684	(1.000)	117198	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.015	4.006	(1.087)	188310	37.6365	620
$	16 Nitrobenzene-d5	128	4.154	4.145	(0.874)	61144	33.2960	550
$	19 2-Nitrophenol-d4	143	4.422	4.424	(0.930)	72273	35.6509	590
$	23 2,4-Dichlorophenol-d3	165	4.637	4.628	(0.975)	133536	36.0835	590
*	25 Naphthalene-d8	136	4.755	4.746	(1.000)	352621	40.0000	
$	27 4-Chloroaniline-d4	131	4.808	4.810	(1.011)	17160	5.22225	86(aQ)
$	40 Dimethylphthalate-d6	166	5.977	5.968	(0.962)	405266	41.7394	690
$	43 Acenaphthylene-d8	160	6.084	6.076	(0.979)	437950	34.6864	570
*	46 Acenaphthene-d10	164	6.213	6.204	(1.000)	264072	40.0000	
$	49 4-Nitrophenol-d4	143	6.320	6.312	(1.017)	55580	39.7211	650
$	54 Fluorene-d10	176	6.642	6.633	(1.069)	320370	35.9207	590
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.706	6.698	(0.902)	62539	36.7217	600(Q)
*	65 Phenanthrene-d10	188	7.435	7.438	(1.000)	436431	40.0000	
$	67 Anthracene-d10	188	7.489	7.480	(1.007)	447946	35.9312	590
	70 Di-n-butylphthalate	149	7.929	7.931	(1.066)	22827	2.11048	35(aH)

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5269.D
Report Date: 11-Nov-2011 13:37

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)	
$ 72 Pyrene-d10	212	8.615	8.606	(0.889)	402128	42.6787	700	
* 77 Chrysene-d12	240	9.687	9.668	(1.000)	299096	40.0000	(Q)	
$ 83 Benzo(a)pyrene-d12	264	10.910	10.891	(0.992)	181413	34.4336	570(M)M6 MMS 11/11	
* 85 Perylene-d12	264	10.996	10.966	(1.000)	214703	40.0000		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5269.D
Report Date: 11-Nov-2011 13:37

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5269.D
Lab Smp Id: K2198-18A Client Smp ID: H30T3
Inj Date : 10-NOV-2011 17:01
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-18A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.400	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

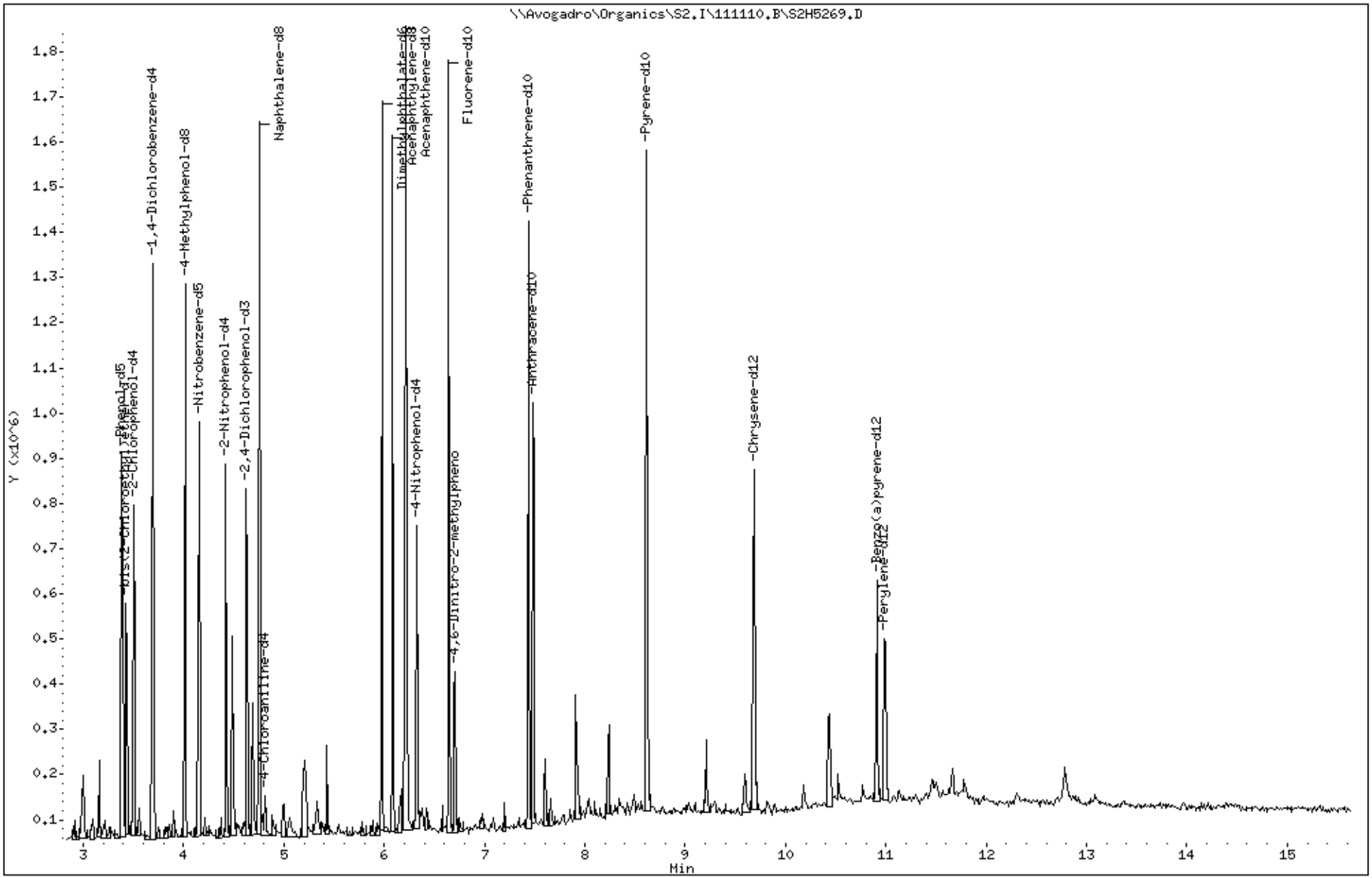
ISTD		RT	AREA	AMOUNT
* 8	1,4-Dichlorobenzene-d4	3.693	1049092	40.000
* 25	Naphthalene-d8	4.755	1190563	40.000
* 65	Phenanthrene-d10	7.436	1242041	40.000
* 77	Chrysene-d12	9.688	847851	40.000
* 85	Perylene-d12	10.996	509724	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
2.996	198883	7.58305113	120	0	0		8
Unknown					CAS #:		
3.157	144576	5.51243581	91	0	0		8

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5269.D
Report Date: 11-Nov-2011 13:37

RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
2(3H)-Furanone, dihydro-4-hydroxy-					CAS #: 5469-16-9		
4.487	389677	13.0921940	220	90	NIST2002.L	4145	25
Unknown					CAS #:		
4.691	298917	10.0428713	170	0		0	25
Unknown					CAS #:		
5.205	362096	12.1655261	200	0		0	25
Unknown					CAS #:		
5.334	159829	5.36985750	88	0		0	25
Unknown					CAS #:		
5.431	148173	4.97824521	82	0		0	25
Unknown					CAS #:		
7.608	163234	5.25696141	86	0		0	65
n-Hexadecanoic acid					CAS #: 57-10-3		
7.908	370960	11.9467975	200	94	NIST2002.L	92227	65
4b,8-Dimethyl-2-isopropylphenanthrene, 4					CAS #: 1000197-14-1		
8.240	227996	7.34262588	120	93	NIST2002.L	92361	65
Unknown					CAS #:		
9.205	202054	9.53250330	160	0		0	77
Unknown					CAS #:		
9.591	138558	6.53689348	110	0		0	77
Unknown					CAS #:		
10.439	338719	26.5805479	440	0		0	85

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5269.D
Date : 10-NOV-2011 17:01
Client ID: H30T3
Instrument: S2.i
Sample Info: K2198-18A,,62764,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5269.D

Date : 10-NOV-2011 17:01

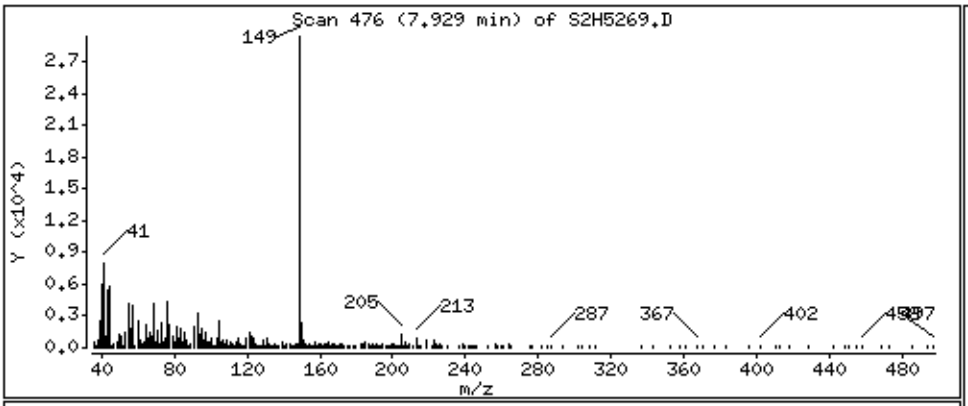
Client ID: H30T3 Instrument: S2.i

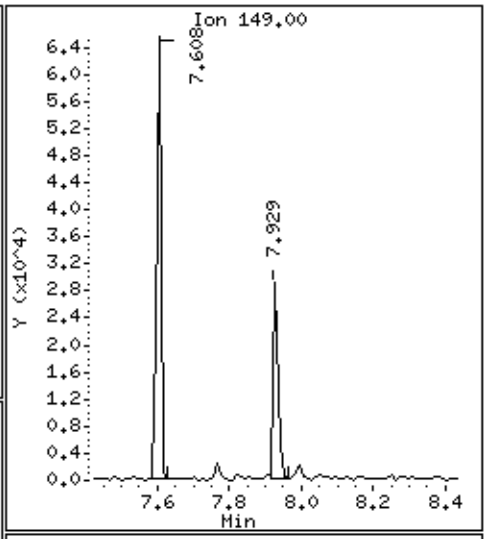
Sample Info: K2198-18A,,62764,,

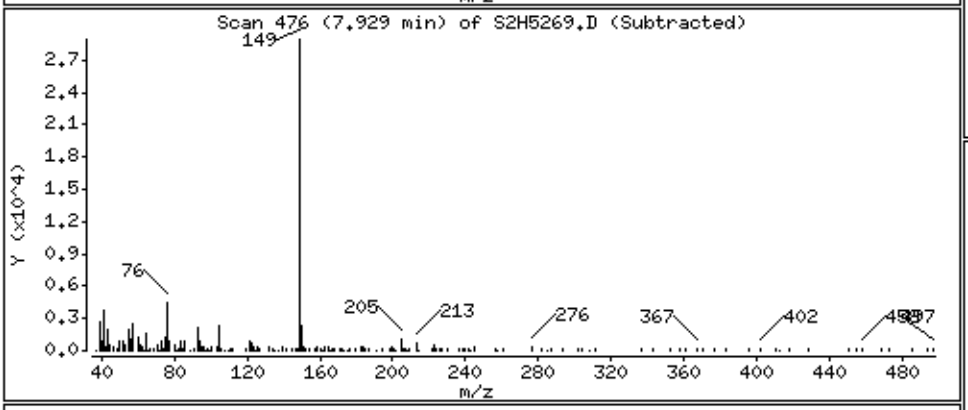
Volume Injected (uL): 2.0 Operator: SRC: LIMS

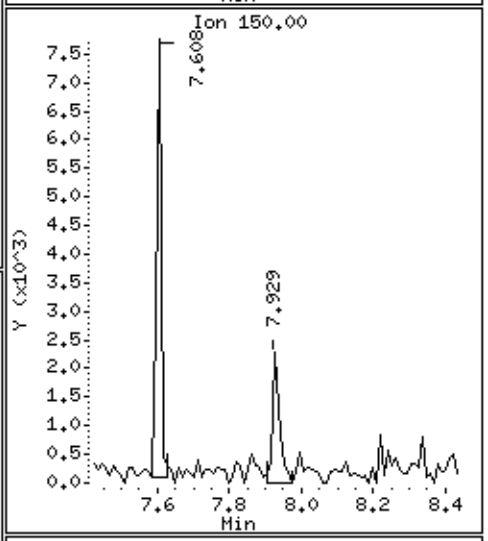
Column phase: RXI-5SILMS Column diameter: 0.25

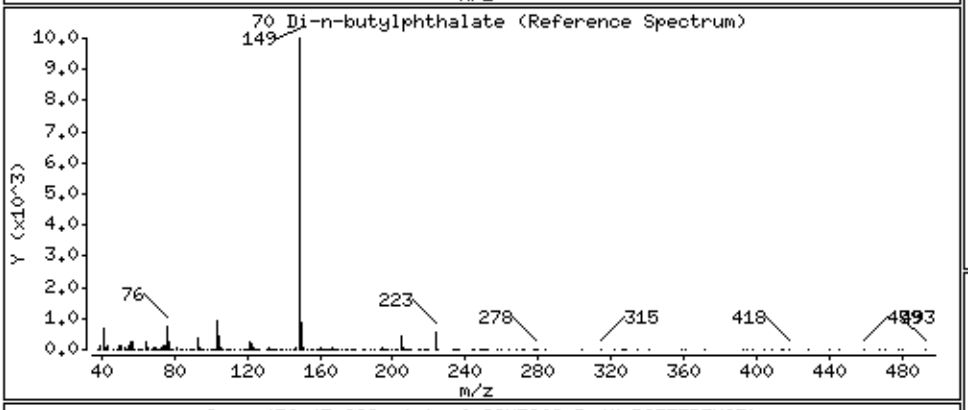
70 Di-n-butylphthalate Concentration: 35 ug/Kg

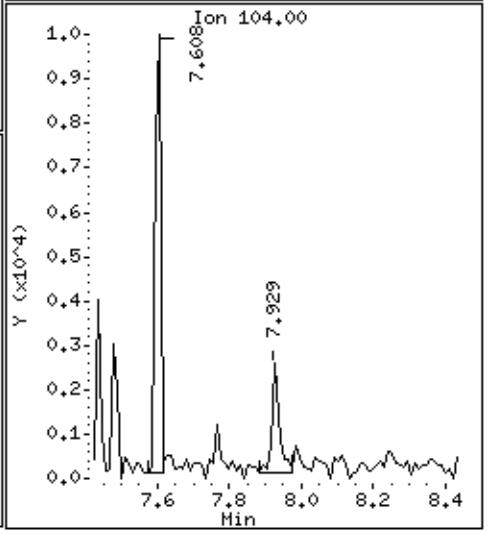


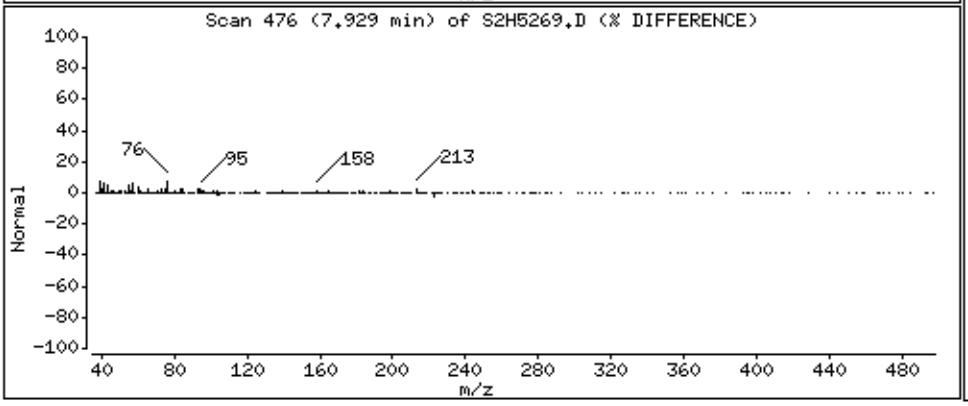












Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5269.D

Date : 10-NOV-2011 17:01

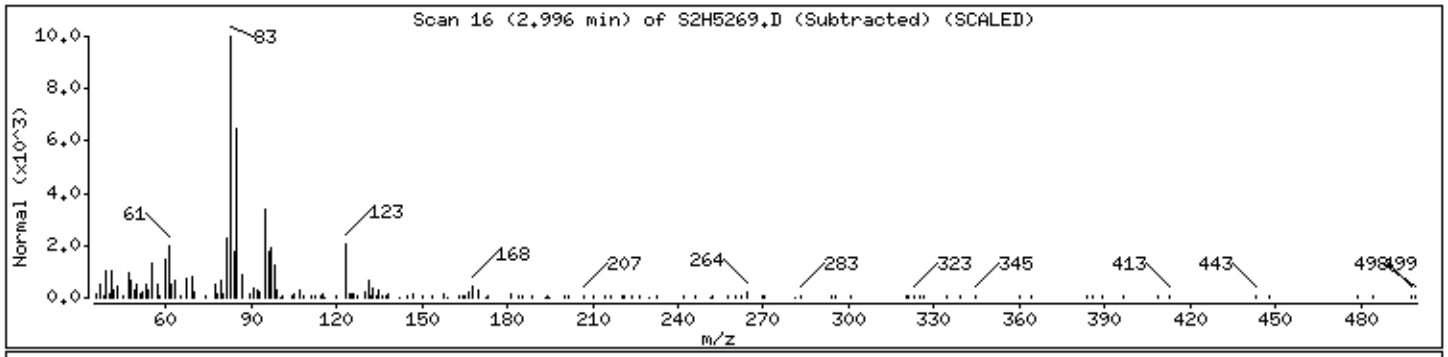
Client ID: H30T3 Instrument: S2.i

Sample Info: K2198-18A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 17:01

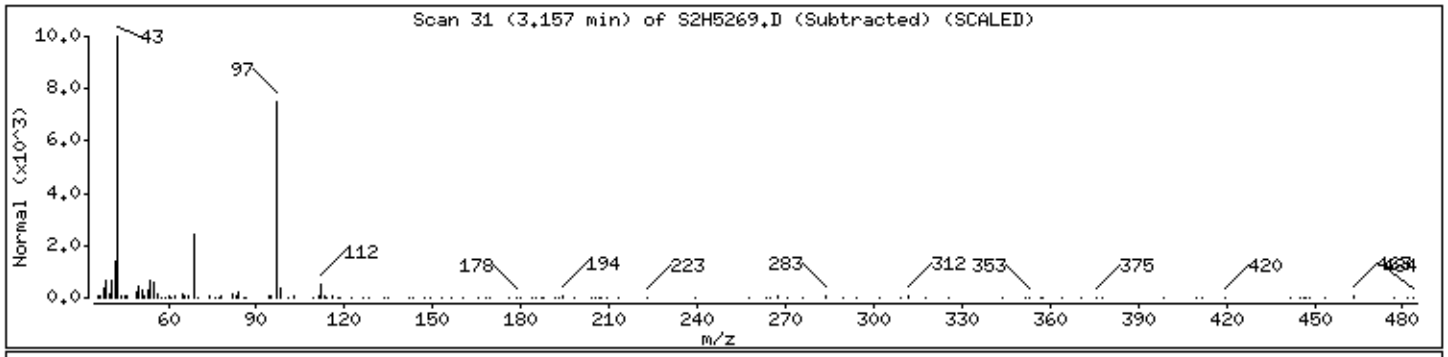
Client ID: H30T3 Instrument: S2.i

Sample Info: K2198-18A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 17:01

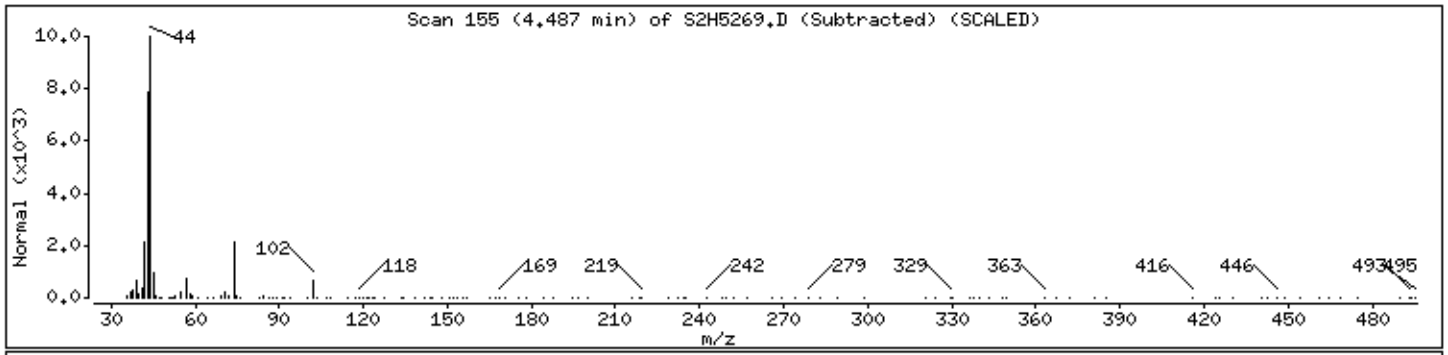
Client ID: H30T3 Instrument: S2.i

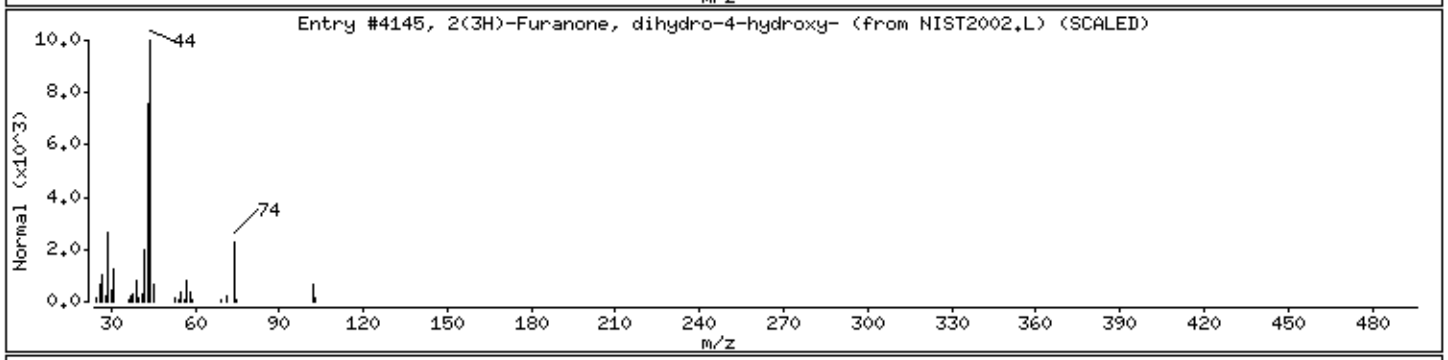
Sample Info: K2198-18A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2(3H)-Furanone, dihydro-4-hydroxy-	5469-16-9	NIST2002.L	4145	90	C4H6O3	102





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Date : 10-NOV-2011 17:01

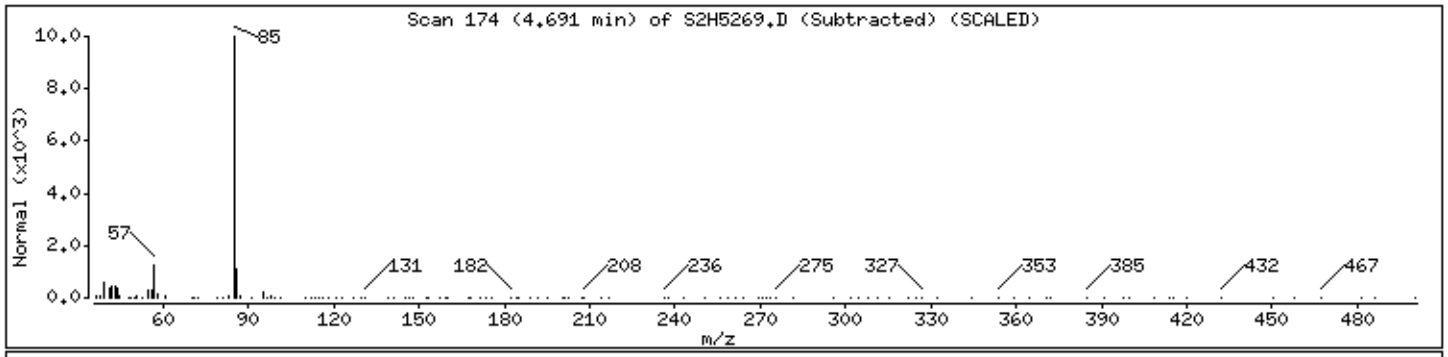
Client ID: H30T3 Instrument: S2.i

Sample Info: K2198-18A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 17:01

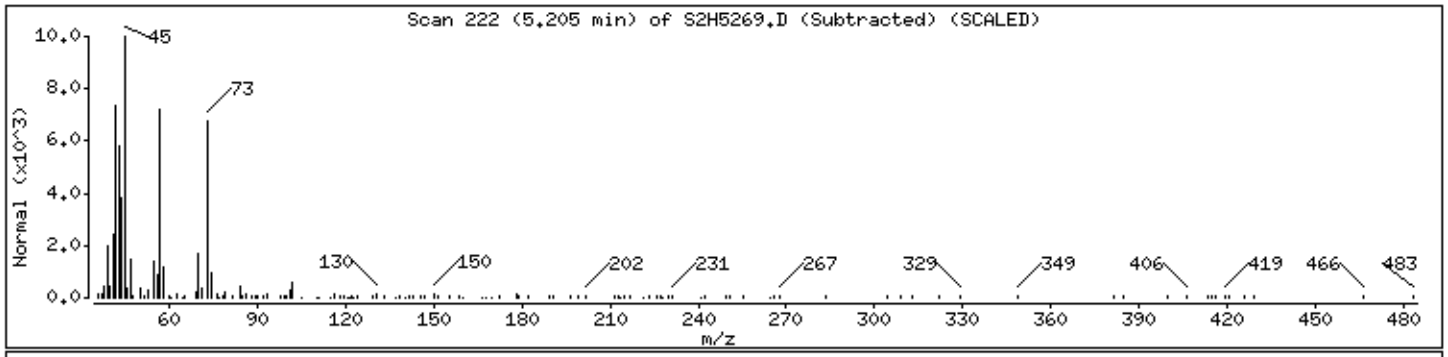
Client ID: H30T3 Instrument: S2.i

Sample Info: K2198-18A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 17:01

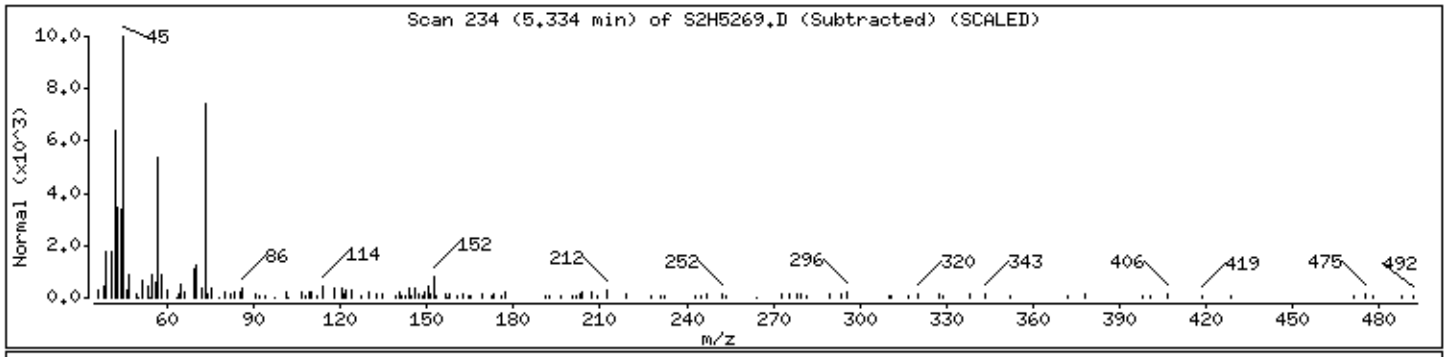
Client ID: H30T3 Instrument: S2.i

Sample Info: K2198-18A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5269.D

Date : 10-NOV-2011 17:01

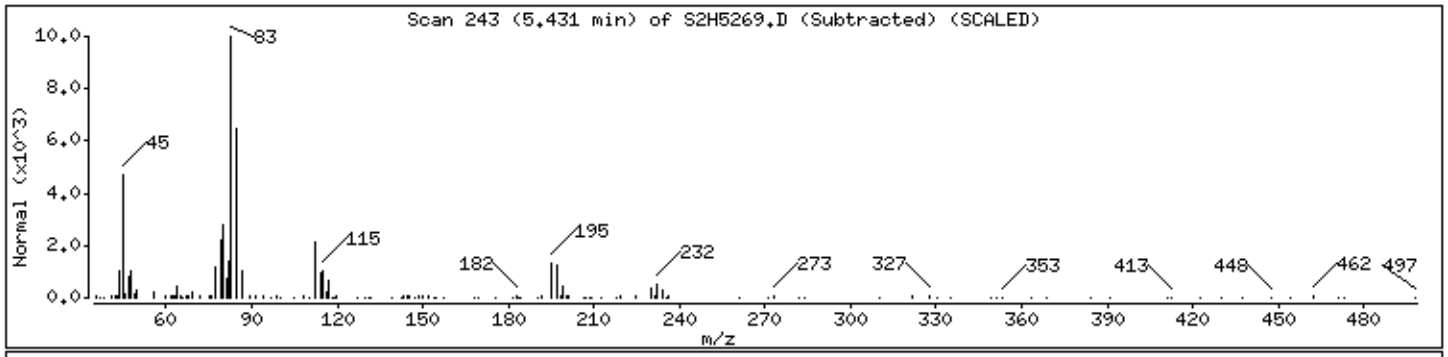
Client ID: H30T3 Instrument: S2.i

Sample Info: K2198-18A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5269.D

Date : 10-NOV-2011 17:01

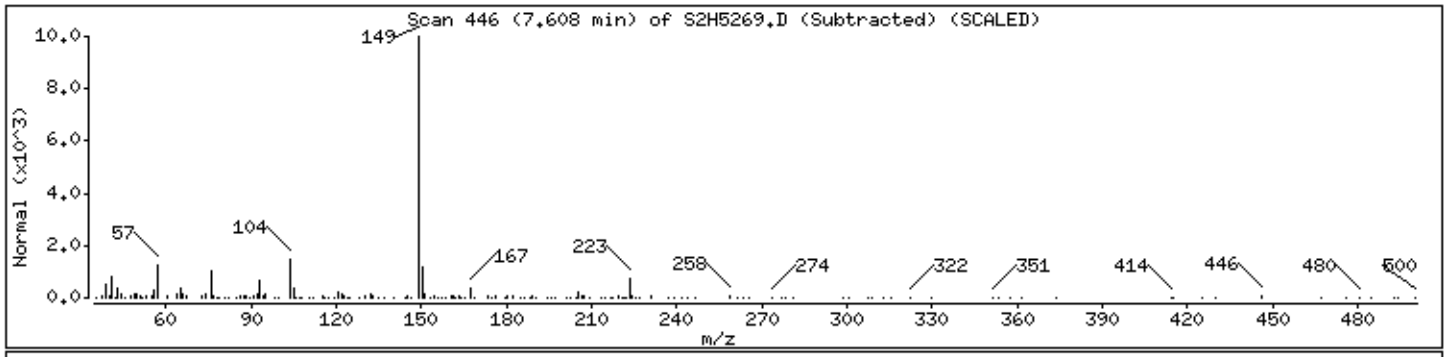
Client ID: H30T3 Instrument: S2.i

Sample Info: K2198-18A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 17:01

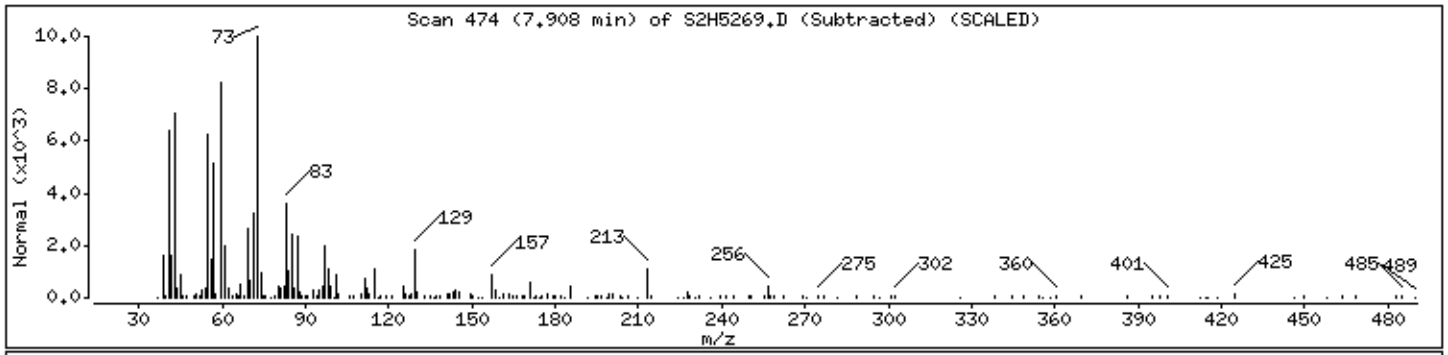
Client ID: H30T3 Instrument: S2.i

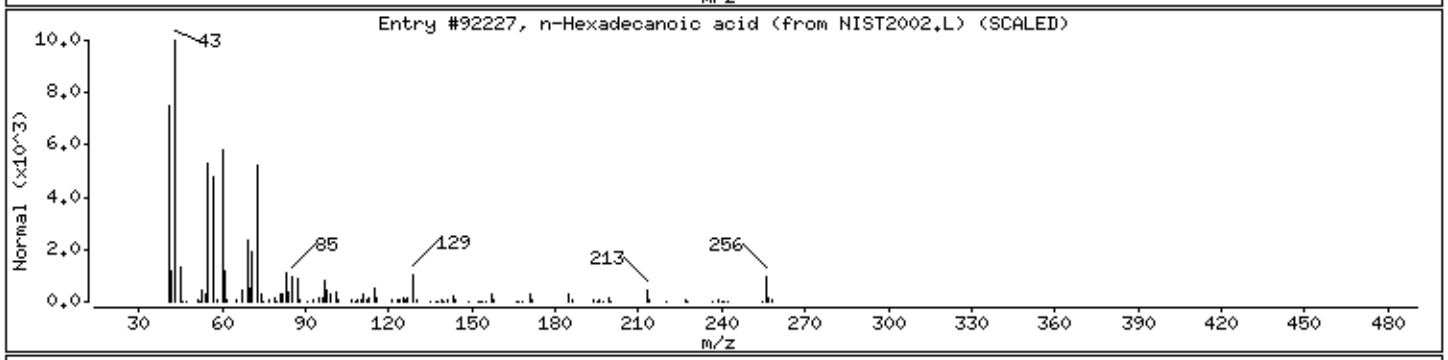
Sample Info: K2198-18A,,62764,,

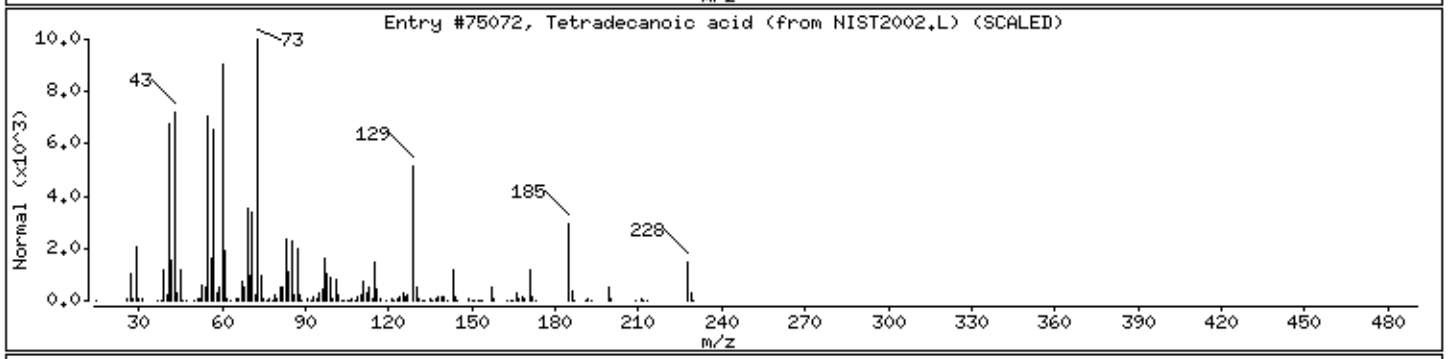
Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
n-Hexadecanoic acid	57-10-3	NIST2002.L	92227	94	C16H32O2	256
Tetradecanoic acid	544-63-8	NIST2002.L	75072	86	C14H28O2	228







Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5269.D

Date : 10-NOV-2011 17:01

Client ID: H30T3 Instrument: S2.i

Sample Info: K2198-18A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
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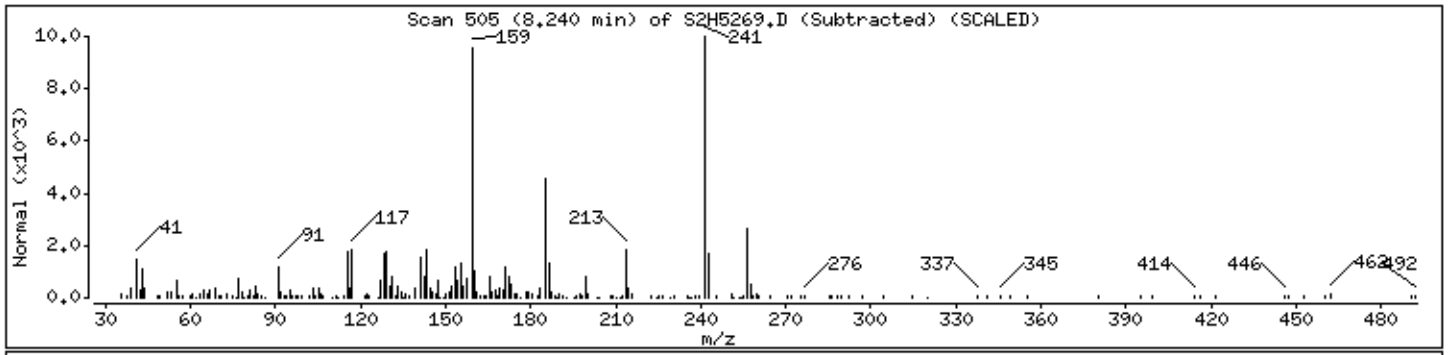
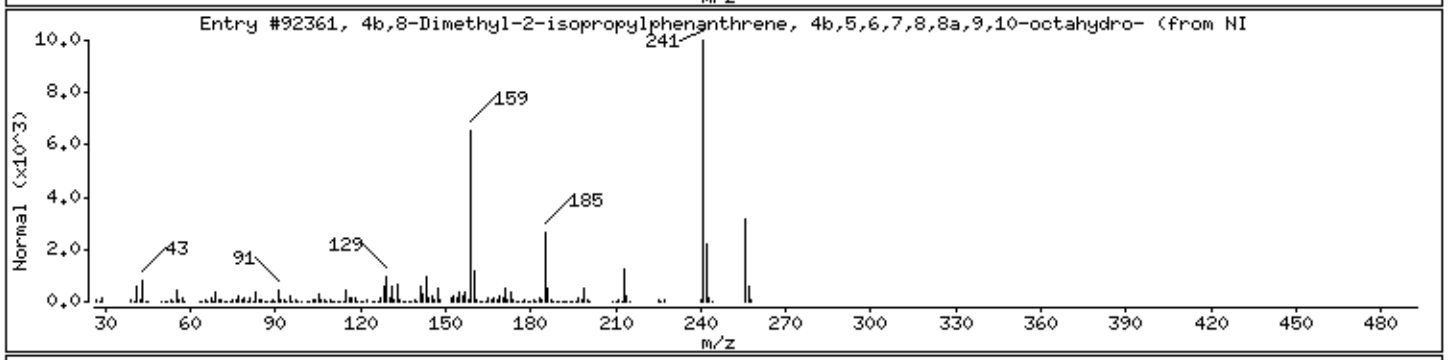




Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5269.D

Date : 10-NOV-2011 17:01

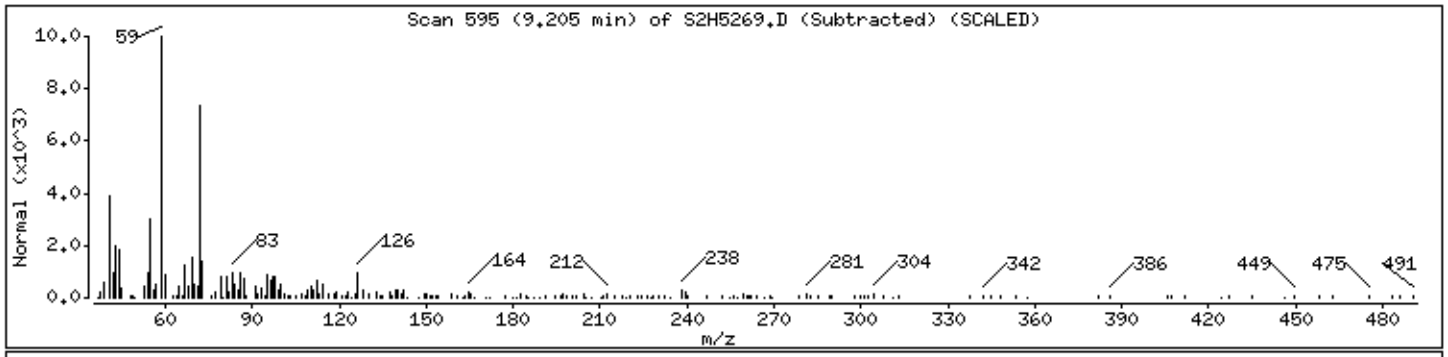
Client ID: H30T3 Instrument: S2.i

Sample Info: K2198-18A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5269.D

Date : 10-NOV-2011 17:01

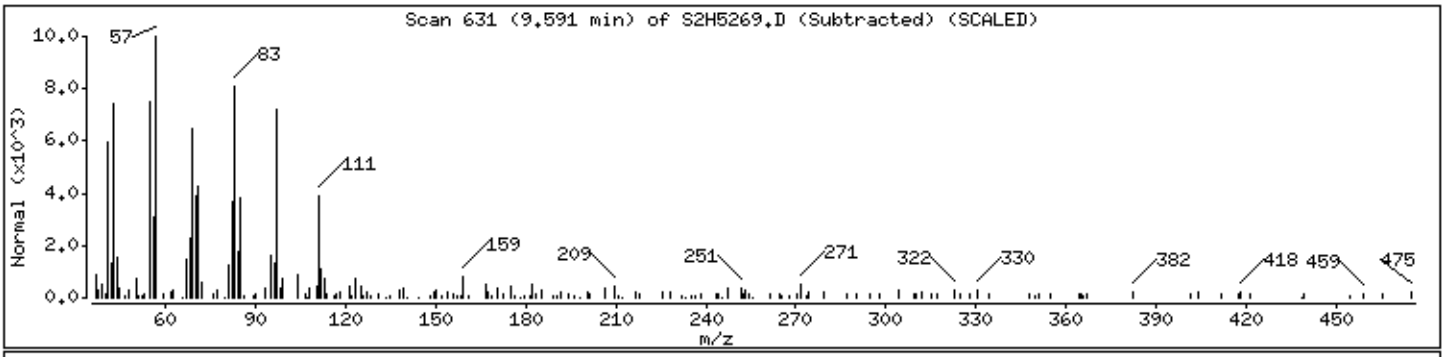
Client ID: H30T3 Instrument: S2.i

Sample Info: K2198-18A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5269.D

Date : 10-NOV-2011 17:01

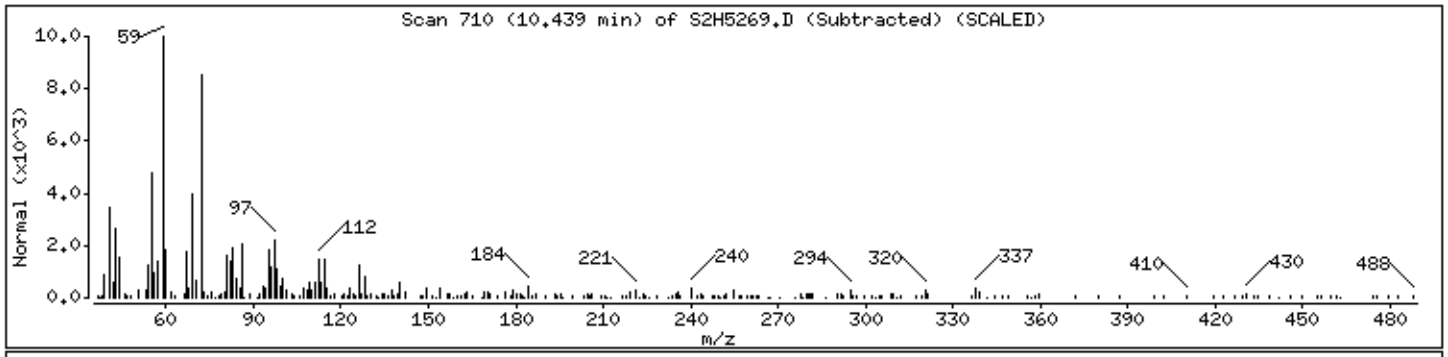
Client ID: H30T3 Instrument: S2.i

Sample Info: K2198-18A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-19A

Sample wt/vol: 30.4 (g/mL) G Lab File ID: S2H5277.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 20 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/11/2011

GPC Cleanup:(Y/N) Y pH: 8.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
100-52-7	Benzaldehyde	210	U
108-95-2	Phenol	210	U
111-44-4	Bis(2-chloroethyl)ether	210	U
95-57-8	2-Chlorophenol	210	U
95-48-7	2-Methylphenol	210	U
108-60-1	2,2´-Oxybis(1-chloropropane)	210	U
98-86-2	Acetophenone	210	U
106-44-5	4-Methylphenol	210	U
621-64-7	N-Nitroso-di-n-propylamine	210	U
67-72-1	Hexachloroethane	210	U
98-95-3	Nitrobenzene	210	U
78-59-1	Isophorone	210	U
88-75-5	2-Nitrophenol	210	U
105-67-9	2,4-Dimethylphenol	210	U
111-91-1	Bis(2-chloroethoxy)methane	210	U
120-83-2	2,4-Dichlorophenol	210	U
91-20-3	Naphthalene	210	U
106-47-8	4-Chloroaniline	210	U
87-68-3	Hexachlorobutadiene	210	U
105-60-2	Caprolactam	210	U
59-50-7	4-Chloro-3-methylphenol	210	U
91-57-6	2-Methylnaphthalene	210	U
77-47-4	Hexachlorocyclopentadiene	210	U
88-06-2	2,4,6-Trichlorophenol	210	U
95-95-4	2,4,5-Trichlorophenol	210	U
92-52-4	1,1´-Biphenyl	210	U
91-58-7	2-Chloronaphthalene	210	U
88-74-4	2-Nitroaniline	410	U
131-11-3	Dimethylphthalate	210	U
606-20-2	2,6-Dinitrotoluene	210	U
208-96-8	Acenaphthylene	210	U
99-09-2	3-Nitroaniline	410	U
83-32-9	Acenaphthene	210	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-19A

Sample wt/vol: 30.4 (g/mL) G Lab File ID: S2H5277.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 20 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/11/2011

GPC Cleanup:(Y/N) Y pH: 8.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
51-28-5	2,4-Dinitrophenol	410	U
100-02-7	4-Nitrophenol	410	U
132-64-9	Dibenzofuran	210	U
121-14-2	2,4-Dinitrotoluene	210	U
84-66-2	Diethylphthalate	210	U
86-73-7	Fluorene	210	U
7005-72-3	4-Chlorophenyl-phenylether	210	U
100-01-6	4-Nitroaniline	410	U
534-52-1	4,6-Dinitro-2-methylphenol	410	U
86-30-6	N-Nitrosodiphenylamine (1)	210	U
95-94-3	1,2,4,5-Tetrachlorobenzene	210	U
101-55-3	4-Bromophenyl-phenylether	210	U
118-74-1	Hexachlorobenzene	210	U
1912-24-9	Atrazine	210	U
87-86-5	Pentachlorophenol	410	U
85-01-8	Phenanthrene	210	U
120-12-7	Anthracene	210	U
86-74-8	Carbazole	210	U
84-74-2	Di-n-butylphthalate	210	U
206-44-0	Fluoranthene	210	U
129-00-0	Pyrene	210	U
85-68-7	Butylbenzylphthalate	210	U
91-94-1	3,3´-Dichlorobenzidine	210	U
56-55-3	Benzo(a)anthracene	210	U
218-01-9	Chrysene	210	U
117-81-7	Bis(2-ethylhexyl)phthalate	210	U
117-84-0	Di-n-octylphthalate	210	U
205-99-2	Benzo(b)fluoranthene	210	U
207-08-9	Benzo(k)fluoranthene	210	U
50-32-8	Benzo(a)pyrene	210	U
193-39-5	Indeno(1,2,3-cd)pyrene	210	U
53-70-3	Dibenzo(a,h)anthracene	210	U
191-24-2	Benzo(g,h,i)perylene	210	U
58-90-2	2,3,4,6-Tetrachlorophenol	210	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30T4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-19A

Sample wt/vol: 30.4 (g/mL) G Lab File ID: S2H5277.D

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 20 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/11/2011

GPC Cleanup: (Y/N) Y pH: 8.0 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.996	100	J
02		Unknown-02	3.168	110	J
03	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.497	260	BNJ
04		Unknown-03	4.701	240	J
05		Unknown-04	5.216	250	J
06		Unknown-05	5.344	130	J
07		Unknown-06	7.618	100	J
08		Unknown-07	7.929	150	J
09	301-02-0	9-Octadecenamide, (Z)-	9.259	160	NJ
10		Unknown-08	9.666	130	J
11		Unknown-09	10.545	220	J
	E96679[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5277.D
Report Date: 14-Nov-2011 14:27

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111111.B\S2H5277.D
Lab Smp Id: K2198-19A Client Smp ID: H30T4
Inj Date : 11-NOV-2011 09:38
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-19A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111111.B\S2_SOM.m
Meth Date : 14-Nov-2011 14:27 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.400	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
$	2 Phenol-d5	71	3.392	3.393	(0.916)	111638	37.6828	620
$	4 bis(2-Chloroethyl)ether-d8	67	3.435	3.436	(0.928)	144254	35.3360	580
$	6 2-Chlorophenol-d4	132	3.510	3.511	(0.948)	102014	39.8056	650
*	8 1,4-Dichlorobenzene-d4	152	3.703	3.693	(1.000)	94080	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.025	4.015	(1.087)	146268	36.4174	600
$	16 Nitrobenzene-d5	128	4.164	4.154	(0.874)	53932	37.0385	610(Q)
$	19 2-Nitrophenol-d4	143	4.432	4.433	(0.930)	60860	37.8612	620
$	23 2,4-Dichlorophenol-d3	165	4.636	4.637	(0.973)	116011	39.5346	650
*	25 Naphthalene-d8	136	4.765	4.765	(1.000)	279602	40.0000	
$	27 4-Chloroaniline-d4	131	4.818	4.819	(1.011)	29030	11.1418	180(Q)
$	40 Dimethylphthalate-d6	166	5.987	5.988	(0.962)	345470	42.6840	700
$	43 Acenaphthylene-d8	160	6.095	6.095	(0.979)	376113	35.7357	590
*	46 Acenaphthene-d10	164	6.223	6.224	(1.000)	220127	40.0000	
$	49 4-Nitrophenol-d4	143	6.330	6.331	(1.017)	36467	31.2646	510
$	54 Fluorene-d10	176	6.652	6.653	(1.069)	263727	35.4729	580
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.717	6.706	(0.902)	47807	33.7736	560(Q)
*	65 Phenanthrene-d10	188	7.446	7.446	(1.000)	362746	40.0000	
$	67 Anthracene-d10	188	7.499	7.489	(1.007)	371716	35.8732	590
$	72 Pyrene-d10	212	8.647	8.626	(0.887)	334773	46.0369	760

Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5277.D
Report Date: 14-Nov-2011 14:27

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)	
* 77 Chrysene-d12	240	9.751	9.709	(1.000)	230835	40.0000		(Q)
$ 83 Benzo(a)pyrene-d12	264	11.017	10.964	(1.000)	134486	36.5007	600	
* 85 Perylene-d12	264	11.102	11.039	(1.000)	150151	40.0000		(H)

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5277.D
Report Date: 14-Nov-2011 14:27

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111111.B\S2H5277.D
Lab Smp Id: K2198-19A Client Smp ID: H30T4
Inj Date : 11-NOV-2011 09:38
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-19A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111111.B\S2_SOM.m
Meth Date : 14-Nov-2011 14:27 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.400	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

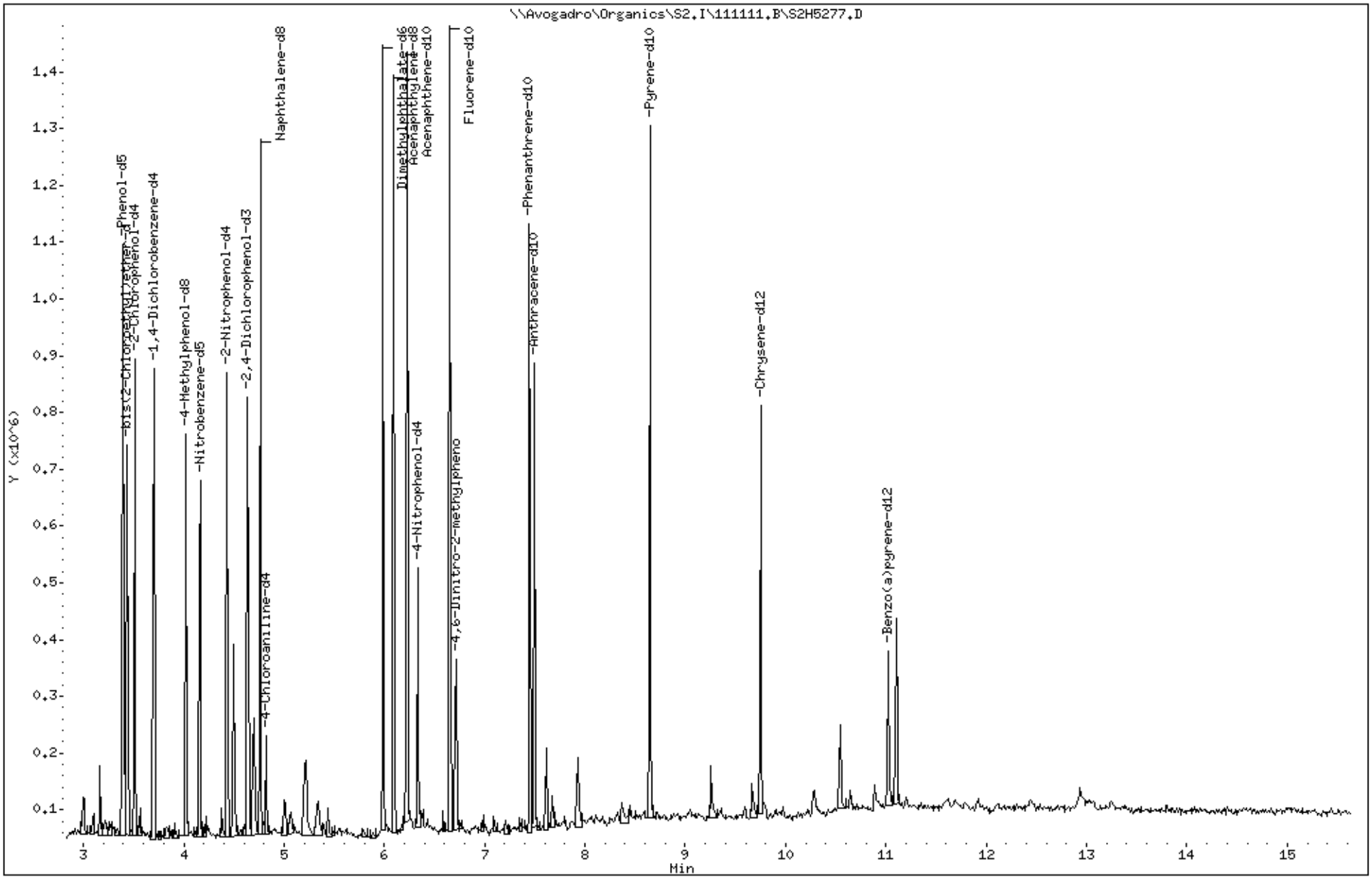
ISTD		RT	AREA	AMOUNT
* 8	1,4-Dichlorobenzene-d4	3.704	838879	40.000
* 25	Naphthalene-d8	4.765	938169	40.000
* 65	Phenanthrene-d10	7.446	1035739	40.000
* 77	Chrysene-d12	9.752	631258	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.996	104038	4.96080733	82	0	0		8
Unknown				CAS #:			
3.168	115746	5.51906490	91	0	0		8

Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5277.D
Report Date: 14-Nov-2011 14:27

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
2(3H)-Furanone, dihydro-4-hydroxy-					CAS #: 5469-16-9		
4.497	299832	12.7837124	210	90	NIST2002.L	4145	25
Unknown					CAS #:		
4.701	276067	11.7704471	190	0		0	25
Unknown					CAS #:		
5.216	288796	12.3131529	200	0		0	25
Unknown					CAS #:		
5.344	144834	6.17516674	100	0		0	25
Unknown					CAS #:		
7.618	131586	5.08182004	84	0		0	65
Unknown					CAS #:		
7.929	187920	7.25741065	120	0		0	65
9-Octadecenamide, (Z)-					CAS #: 301-02-0		
9.259	121642	7.70792322	130	93	NIST2002.L	106874	77
Unknown					CAS #:		
9.666	101144	6.40906912	110	0		0	77
Unknown					CAS #:		
10.545	170785	10.8218477	180	0		0	77

Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5277.D
Date : 11-NOV-2011 09:38
Client ID: H30T4
Instrument: S2.i
Sample Info: K2198-19A,,62764,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5277.D

Date : 11-NOV-2011 09:38

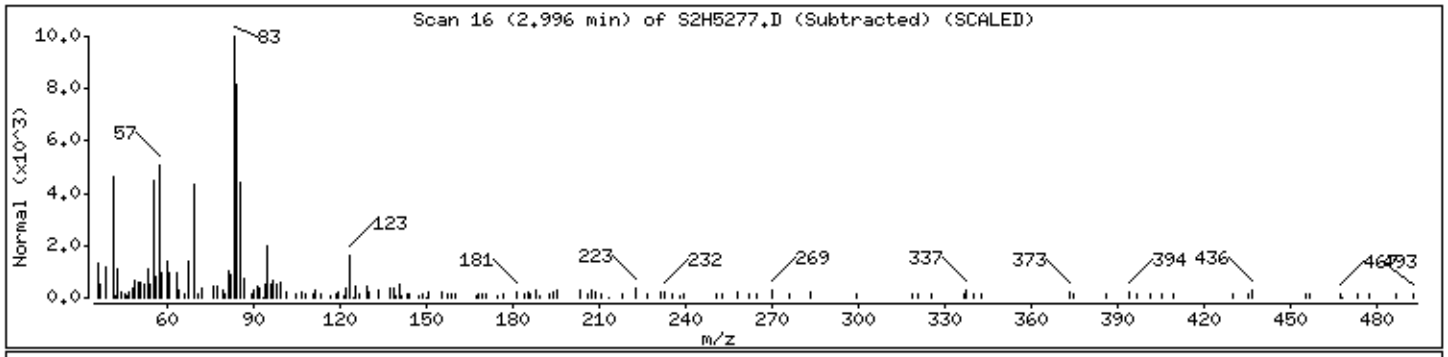
Client ID: H30T4 Instrument: S2.i

Sample Info: K2198-19A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5277.D

Date : 11-NOV-2011 09:38

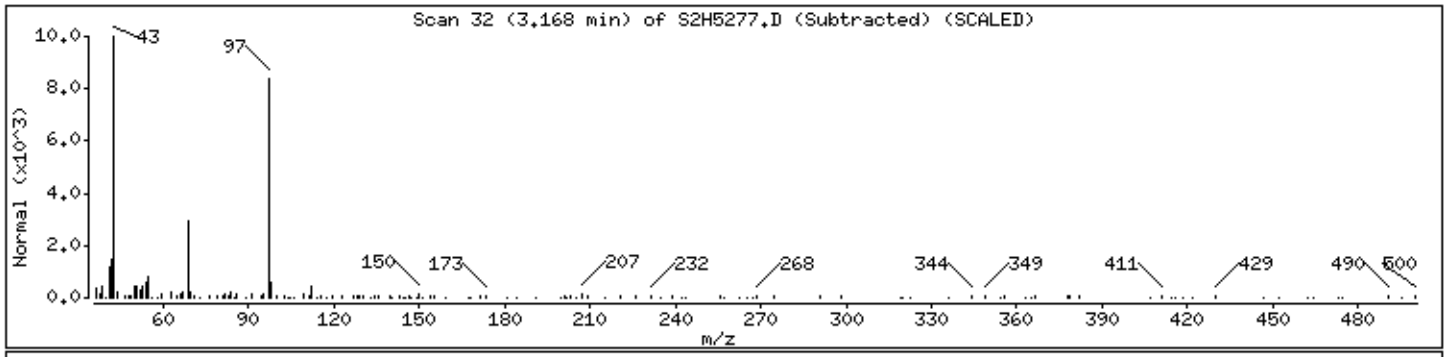
Client ID: H30T4 Instrument: S2.i

Sample Info: K2198-19A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5277.D

Date : 11-NOV-2011 09:38

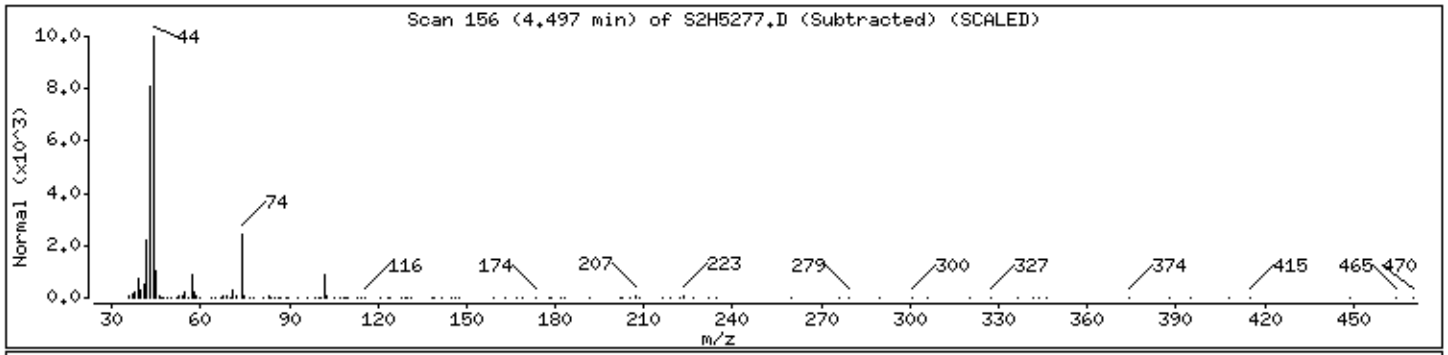
Client ID: H30T4 Instrument: S2.i

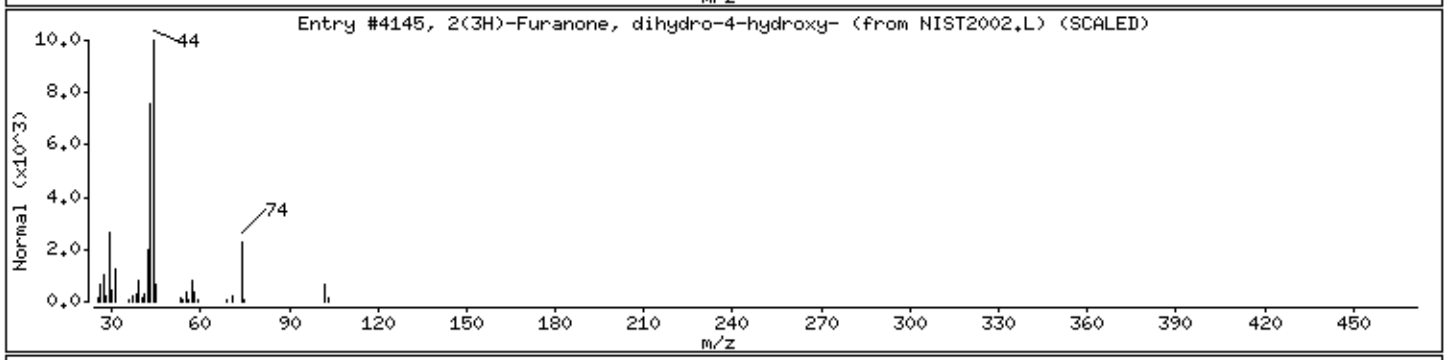
Sample Info: K2198-19A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2(3H)-Furanone, dihydro-4-hydroxy-	5469-16-9	NIST2002.L	4145	90	C4H6O3	102





Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5277.D

Date : 11-NOV-2011 09:38

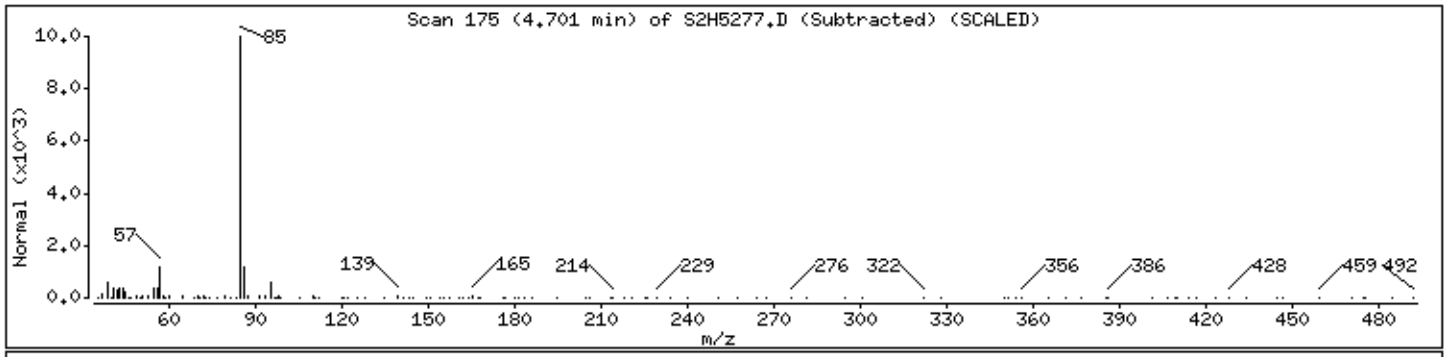
Client ID: H30T4 Instrument: S2.i

Sample Info: K2198-19A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 11-NOV-2011 09:38

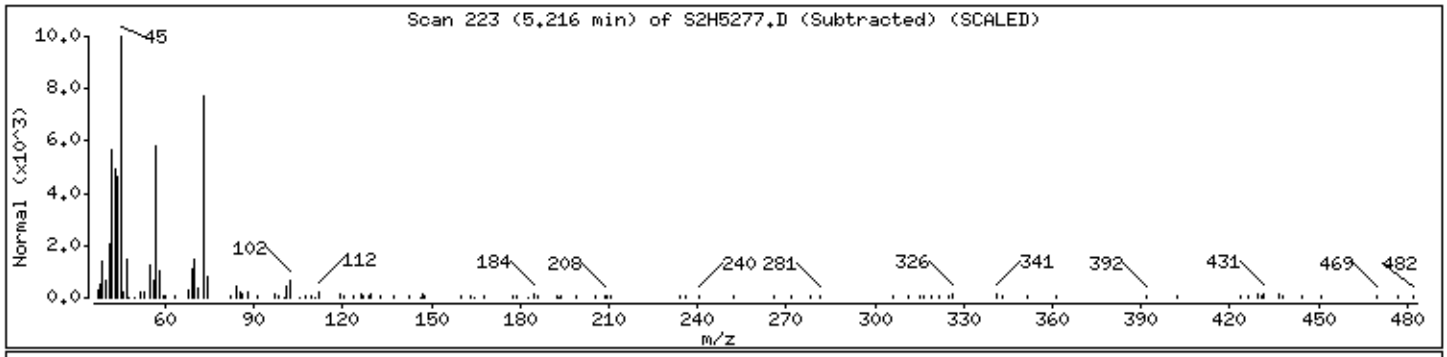
Client ID: H30T4 Instrument: S2.i

Sample Info: K2198-19A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5277.D

Date : 11-NOV-2011 09:38

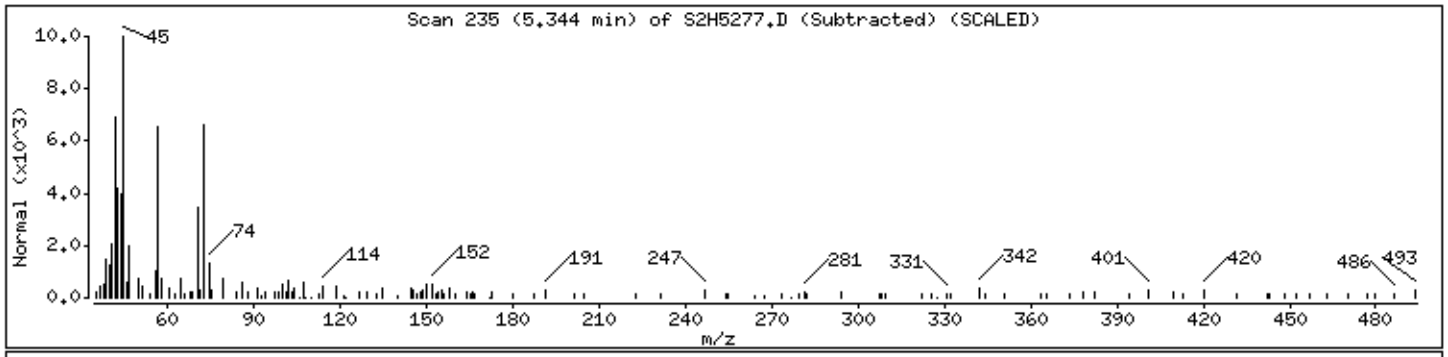
Client ID: H30T4 Instrument: S2.i

Sample Info: K2198-19A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5277.D

Date : 11-NOV-2011 09:38

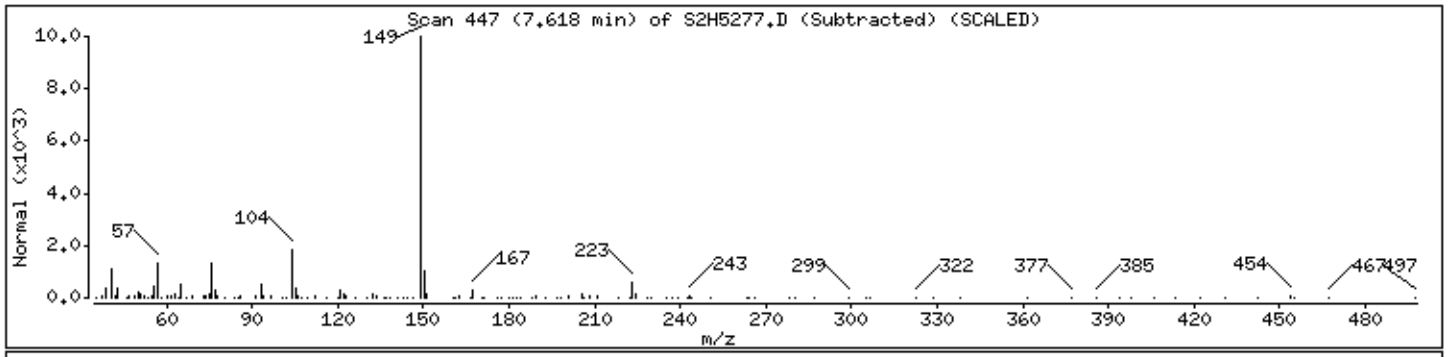
Client ID: H30T4 Instrument: S2.i

Sample Info: K2198-19A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5277.D

Date : 11-NOV-2011 09:38

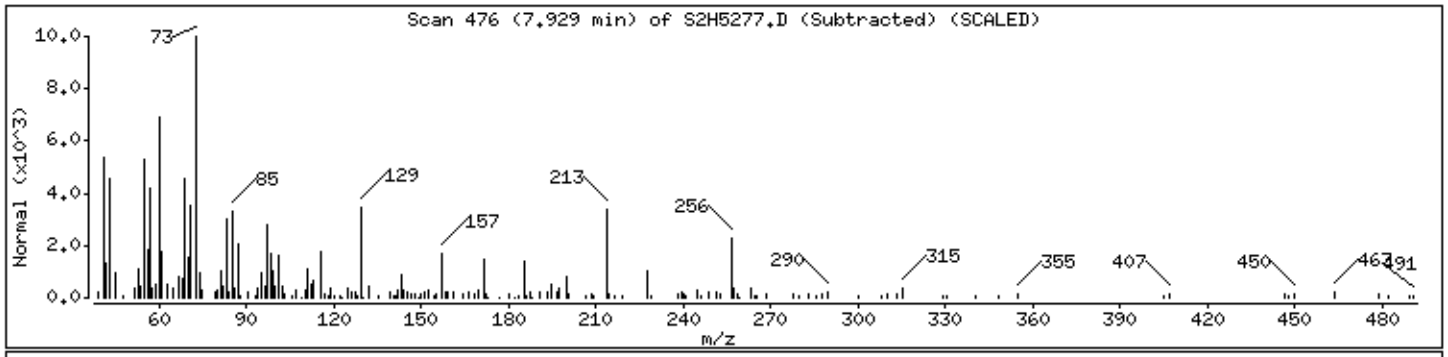
Client ID: H30T4 Instrument: S2.i

Sample Info: K2198-19A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5277.D

Date : 11-NOV-2011 09:38

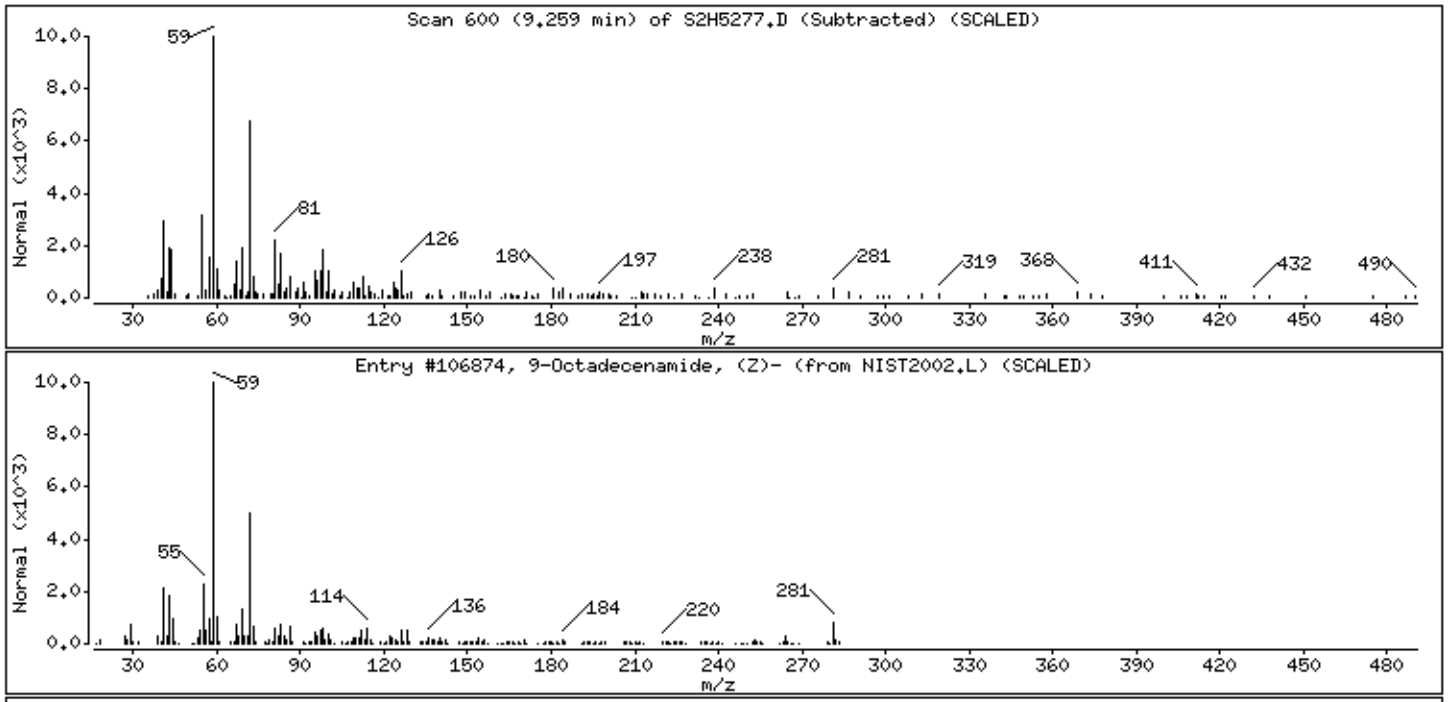
Client ID: H30T4 Instrument: S2.i

Sample Info: K2198-19A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST2002.L	106874	93	C18H35NO	281



Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5277.D

Date : 11-NOV-2011 09:38

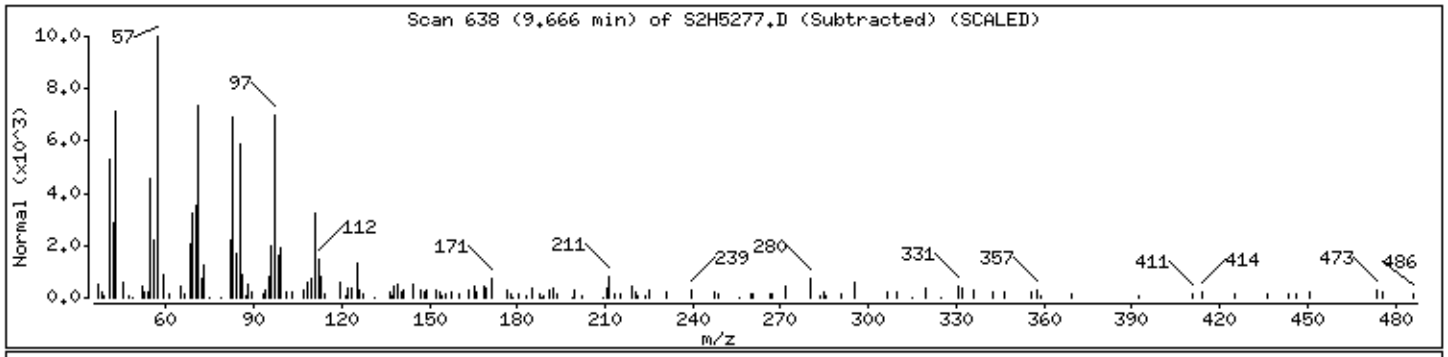
Client ID: H30T4 Instrument: S2.i

Sample Info: K2198-19A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5277.D

Date : 11-NOV-2011 09:38

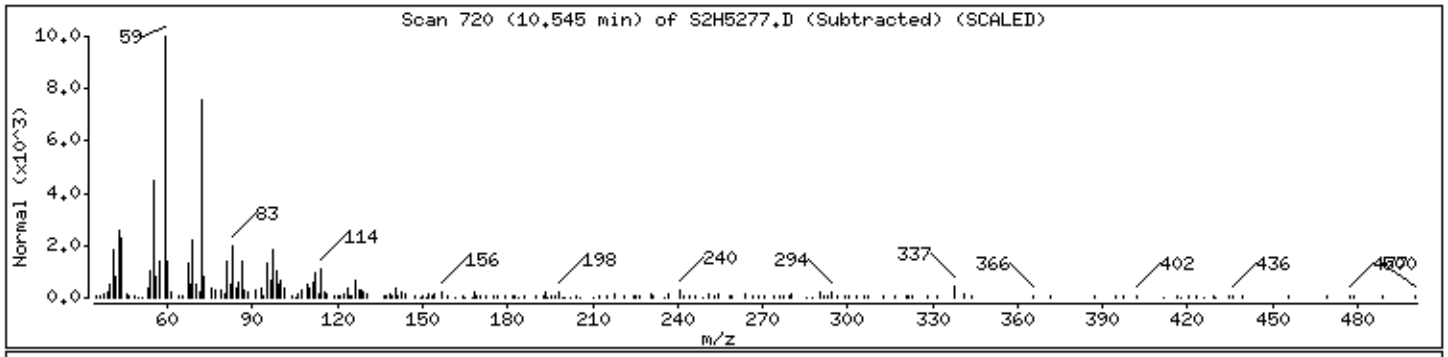
Client ID: H30T4 Instrument: S2.i

Sample Info: K2198-19A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-20A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: S2H5271.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 24 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: 8.2 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
100-52-7	Benzaldehyde	220	U
108-95-2	Phenol	220	U
111-44-4	Bis(2-chloroethyl)ether	220	U
95-57-8	2-Chlorophenol	220	U
95-48-7	2-Methylphenol	220	U
108-60-1	2,2´-Oxybis(1-chloropropane)	220	U
98-86-2	Acetophenone	220	U
106-44-5	4-Methylphenol	220	U
621-64-7	N-Nitroso-di-n-propylamine	220	U
67-72-1	Hexachloroethane	220	U
98-95-3	Nitrobenzene	220	U
78-59-1	Isophorone	220	U
88-75-5	2-Nitrophenol	220	U
105-67-9	2,4-Dimethylphenol	220	U
111-91-1	Bis(2-chloroethoxy)methane	220	U
120-83-2	2,4-Dichlorophenol	220	U
91-20-3	Naphthalene	220	U
106-47-8	4-Chloroaniline	220	U
87-68-3	Hexachlorobutadiene	220	U
105-60-2	Caprolactam	220	U
59-50-7	4-Chloro-3-methylphenol	220	U
91-57-6	2-Methylnaphthalene	220	U
77-47-4	Hexachlorocyclopentadiene	220	U
88-06-2	2,4,6-Trichlorophenol	220	U
95-95-4	2,4,5-Trichlorophenol	220	U
92-52-4	1,1´-Biphenyl	220	U
91-58-7	2-Chloronaphthalene	220	U
88-74-4	2-Nitroaniline	430	U
131-11-3	Dimethylphthalate	220	U
606-20-2	2,6-Dinitrotoluene	220	U
208-96-8	Acenaphthylene	220	U
99-09-2	3-Nitroaniline	430	U
83-32-9	Acenaphthene	220	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-20A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: S2H5271.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 24 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: 8.2 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
51-28-5	2,4-Dinitrophenol	430	U
100-02-7	4-Nitrophenol	430	U
132-64-9	Dibenzofuran	220	U
121-14-2	2,4-Dinitrotoluene	220	U
84-66-2	Diethylphthalate	220	U
86-73-7	Fluorene	220	U
7005-72-3	4-Chlorophenyl-phenylether	220	U
100-01-6	4-Nitroaniline	430	U
534-52-1	4,6-Dinitro-2-methylphenol	430	U
86-30-6	N-Nitrosodiphenylamine (1)	220	U
95-94-3	1,2,4,5-Tetrachlorobenzene	220	U
101-55-3	4-Bromophenyl-phenylether	220	U
118-74-1	Hexachlorobenzene	220	U
1912-24-9	Atrazine	220	U
87-86-5	Pentachlorophenol	430	U
85-01-8	Phenanthrene	220	U
120-12-7	Anthracene	220	U
86-74-8	Carbazole	220	U
84-74-2	Di-n-butylphthalate	52	J
206-44-0	Fluoranthene	220	U
129-00-0	Pyrene	220	U
85-68-7	Butylbenzylphthalate	220	U
91-94-1	3,3´-Dichlorobenzidine	220	U
56-55-3	Benzo(a)anthracene	220	U
218-01-9	Chrysene	220	U
117-81-7	Bis(2-ethylhexyl)phthalate	220	U
117-84-0	Di-n-octylphthalate	220	U
205-99-2	Benzo(b)fluoranthene	220	U
207-08-9	Benzo(k)fluoranthene	220	U
50-32-8	Benzo(a)pyrene	220	U
193-39-5	Indeno(1,2,3-cd)pyrene	220	U
53-70-3	Dibenzo(a,h)anthracene	220	U
191-24-2	Benzo(g,h,i)perylene	220	U
58-90-2	2,3,4,6-Tetrachlorophenol	220	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30T5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-20A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: S2H5271.D

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 24 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: 8.2 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.996	92	J
02		Unknown-02	3.157	88	J
03	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.486	340	BNJ
04		Unknown-03	4.690	260	J
05		Unknown-04	5.215	370	J
06		Unknown-05	7.607	130	J
07	57-10-3	n-Hexadecanoic acid	7.907	220	NJ
08		Unknown-06	9.183	210	J
09	930-02-9	Octadecane, 1-(ethenyloxy)-	9.559	180	NJ
10		Unknown-07	10.127	160	J
11		Unknown-08	10.363	590	J
12		Unknown-09	10.695	280	J
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5271.D
Report Date: 11-Nov-2011 13:37

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5271.D
Lab Smp Id: K2198-20A Client Smp ID: H30T5
Inj Date : 10-NOV-2011 17:44
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-20A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)
$ 2 Phenol-d5	71	3.392	3.373	(0.919)	109434	30.0905	500
$ 4 bis(2-Chloroethyl)ether-d8	67	3.435	3.427	(0.930)	137354	27.4079	460
$ 6 2-Chlorophenol-d4	132	3.510	3.491	(0.951)	108159	34.3789	570
* 8 1,4-Dichlorobenzene-d4	152	3.692	3.684	(1.000)	115492	40.0000	(Q)
$ 11 4-Methylphenol-d8	113	4.014	4.006	(1.087)	183384	37.1934	620
$ 16 Nitrobenzene-d5	128	4.153	4.145	(0.874)	58488	33.9571	570
$ 19 2-Nitrophenol-d4	143	4.432	4.424	(0.932)	66401	34.9217	580
$ 23 2,4-Dichlorophenol-d3	165	4.636	4.628	(0.975)	134032	38.6140	640
* 25 Naphthalene-d8	136	4.754	4.746	(1.000)	330737	40.0000	
$ 27 4-Chloroaniline-d4	131	4.818	4.810	(1.014)	29337	9.51878	160(aQ)
$ 40 Dimethylphthalate-d6	166	5.976	5.968	(0.962)	392564	40.6230	680
$ 43 Acenaphthylene-d8	160	6.084	6.076	(0.979)	420561	33.4672	560
* 46 Acenaphthene-d10	164	6.212	6.204	(1.000)	262825	40.0000	
$ 49 4-Nitrophenol-d4	143	6.320	6.312	(1.017)	51595	37.0481	620
$ 54 Fluorene-d10	176	6.641	6.633	(1.069)	300385	33.8397	560
$ 58 4,6-Dinitro-2-methylphenol-d2	200	6.706	6.698	(0.902)	63605	36.4985	610(Q)
* 65 Phenanthrene-d10	188	7.435	7.438	(1.000)	446585	40.0000	
$ 67 Anthracene-d10	188	7.488	7.480	(1.007)	438319	34.3595	570
70 Di-n-butylphthalate	149	7.928	7.931	(1.066)	26539	2.39789	40(a)

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5271.D
Report Date: 11-Nov-2011 13:37

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)	
$	72 Pyrene-d10	212	8.614	8.606	(0.892)	402249	40.5363	680(R)	
*	77 Chrysene-d12	240	9.655	9.668	(1.000)	314998	40.0000	(Q)	
$	83 Benzo(a)pyrene-d12	264	10.845	10.891	(0.993)	167179	33.5082	560(RM)M6 MMS 11/11	
*	85 Perylene-d12	264	10.920	10.966	(1.000)	203321	40.0000		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5271.D
Report Date: 11-Nov-2011 13:37

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5271.D
Lab Smp Id: K2198-20A Client Smp ID: H30T5
Inj Date : 10-NOV-2011 17:44
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-20A,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

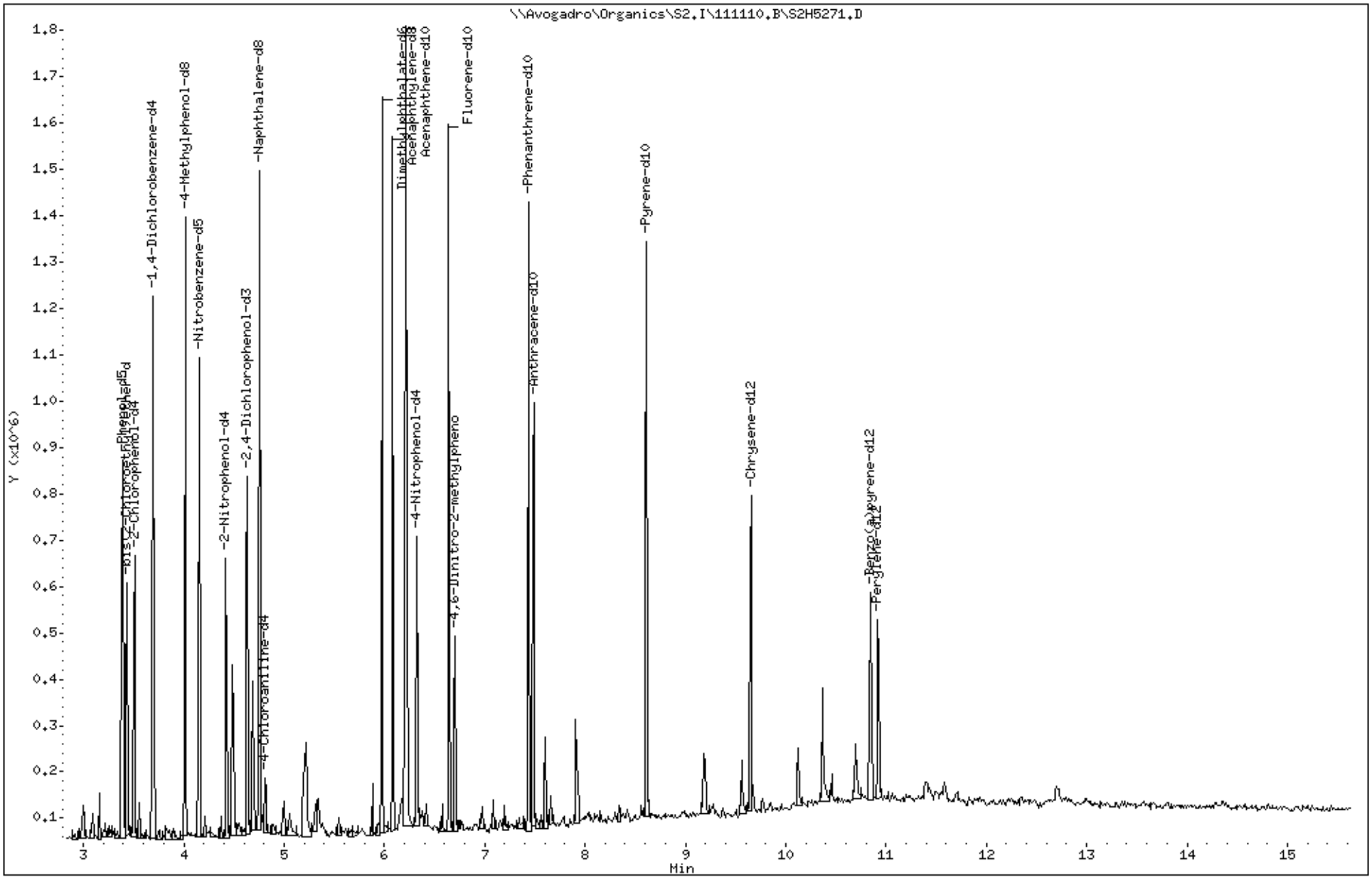
ISTD		RT	AREA	AMOUNT
* 8	1,4-Dichlorobenzene-d4	3.693	969247	40.000
* 25	Naphthalene-d8	4.754	1097560	40.000
* 65	Phenanthrene-d10	7.435	1294483	40.000
* 77	Chrysene-d12	9.655	826225	40.000
* 85	Perylene-d12	10.920	501797	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.996	101853	4.20336558	70	0	0		8
Unknown				CAS #:			
3.157	97636	4.02934737	67	0	0		8

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5271.D
Report Date: 11-Nov-2011 13:37

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
2(3H)-Furanone, dihydro-4-hydroxy-				CAS #: 5469-16-9			
4.486	424222	15.4605448	260	90	NIST2002.L	4145	25
Unknown				CAS #:			
4.690	327396	11.9317660	200	0		0	25
Unknown				CAS #:			
5.215	463838	16.9043267	280	0		0	25
Unknown				CAS #:			
7.607	198016	6.11876486	100	0		0	65
n-Hexadecanoic acid				CAS #: 57-10-3			
7.907	327703	10.1261398	170	95	NIST2002.L	92227	65
Unknown				CAS #:			
9.183	202413	9.79940816	160	0		0	77
Octadecane, 1-(ethenyloxy)-				CAS #: 930-02-9			
9.559	165440	8.00941657	130	91	NIST2002.L	115549	77
Unknown				CAS #:			
10.127	149316	7.22881476	120	0		0	77
Unknown				CAS #:			
10.363	340043	27.1060054	450	0		0	85
Unknown				CAS #:			
10.695	158637	12.6455292	210	0		0	85

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5271.D
Date : 10-NOV-2011 17:44
Client ID: H30T5
Instrument: S2.i
Sample Info: K2198-20A,,62764,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5271.D

Date : 10-NOV-2011 17:44

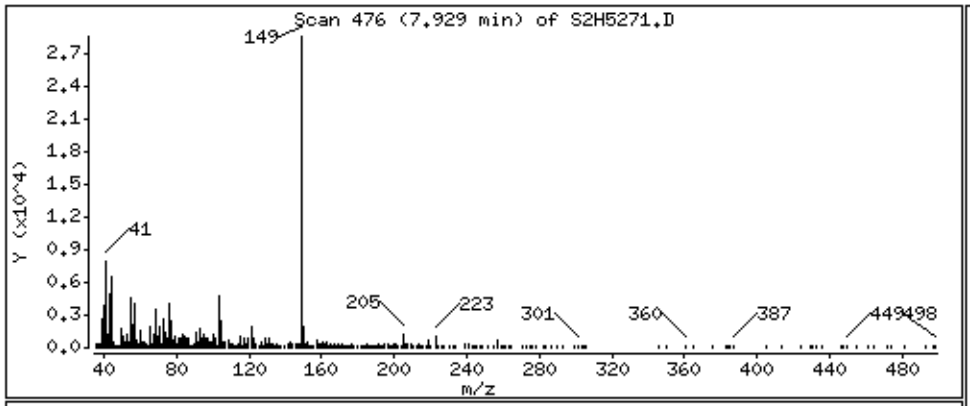
Client ID: H30T5 Instrument: S2.i

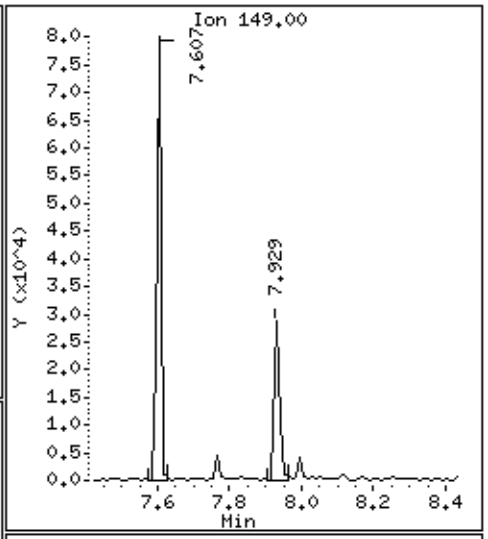
Sample Info: K2198-20A,,62764,,

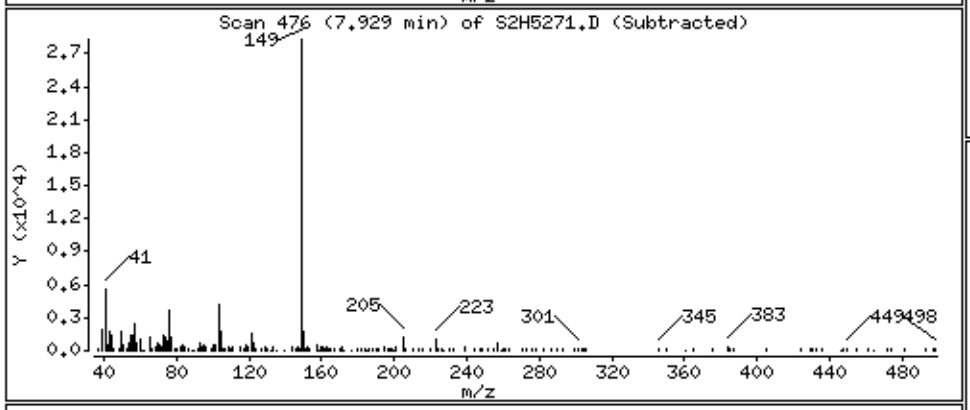
Volume Injected (uL): 2.0 Operator: SRC: LIMS

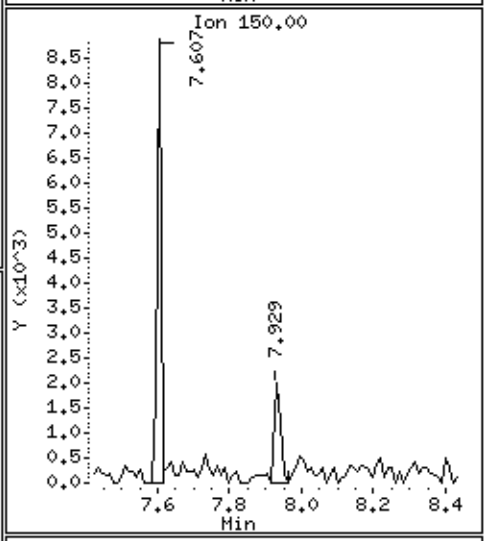
Column phase: RXI-5SILMS Column diameter: 0.25

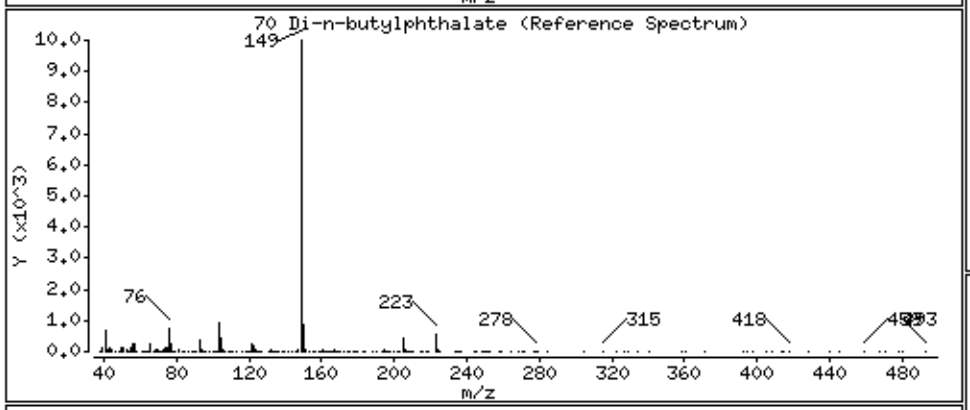
70 Di-n-butylphthalate Concentration: 40 ug/Kg

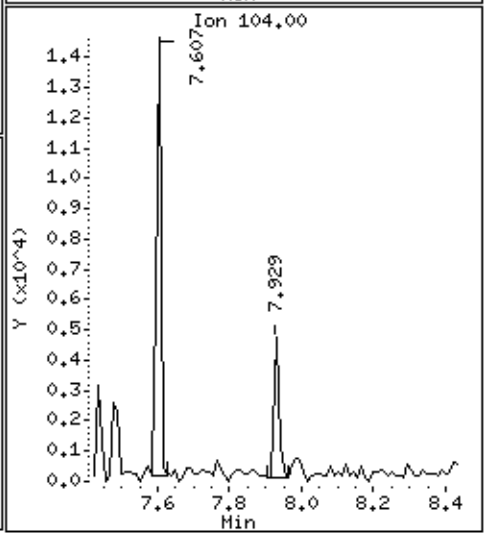


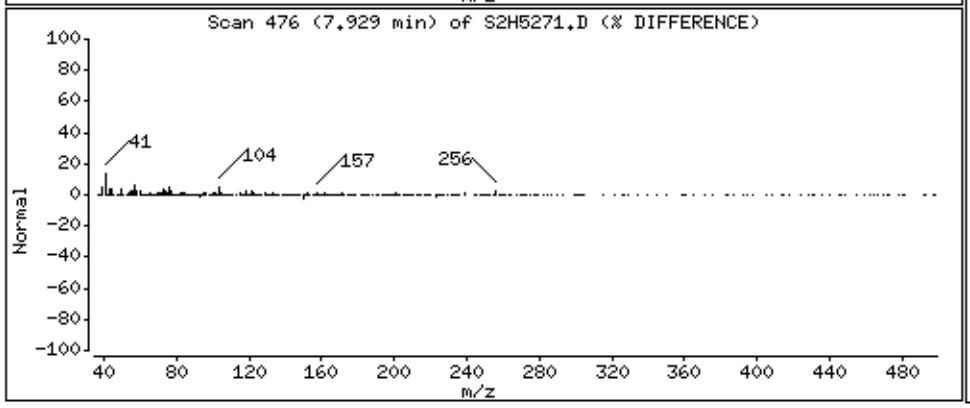












Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5271.D

Date : 10-NOV-2011 17:44

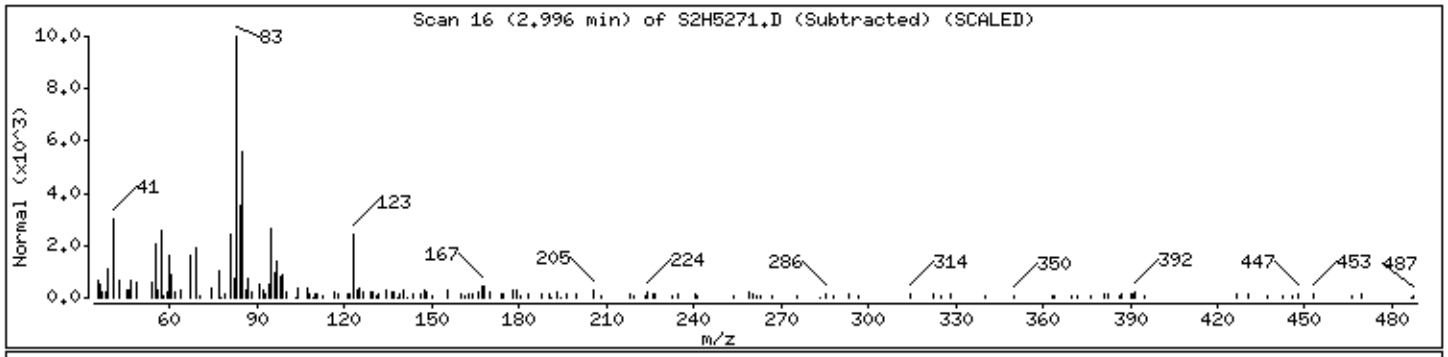
Client ID: H30T5 Instrument: S2.i

Sample Info: K2198-20A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 17:44

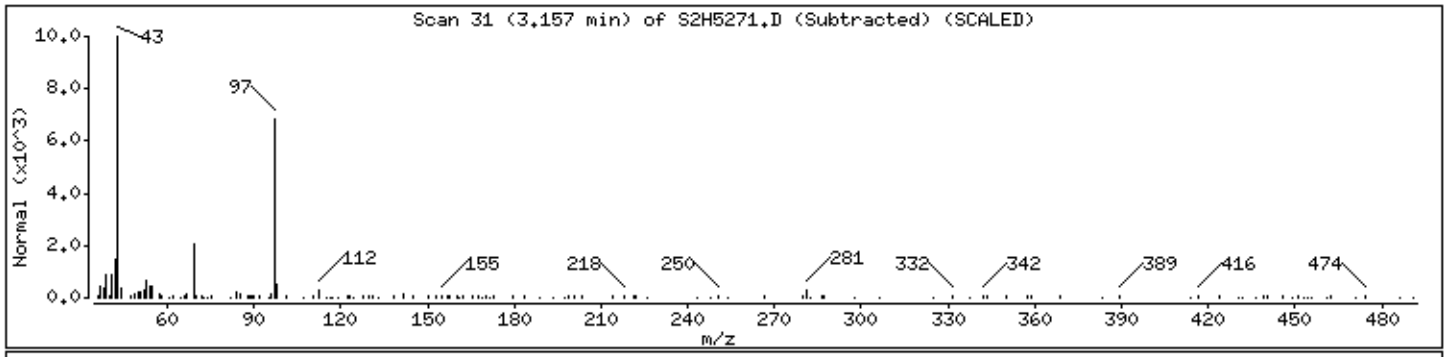
Client ID: H30T5 Instrument: S2.i

Sample Info: K2198-20A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 17:44

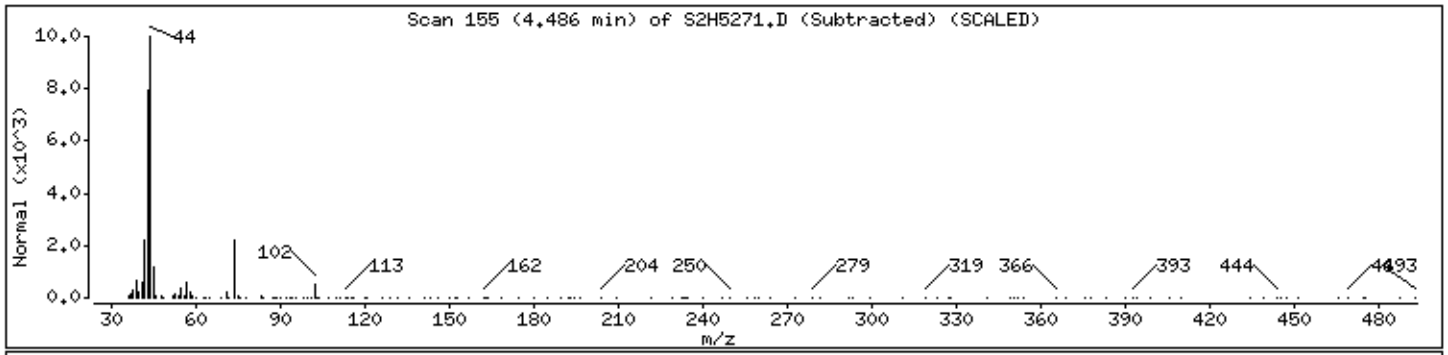
Client ID: H30T5 Instrument: S2.i

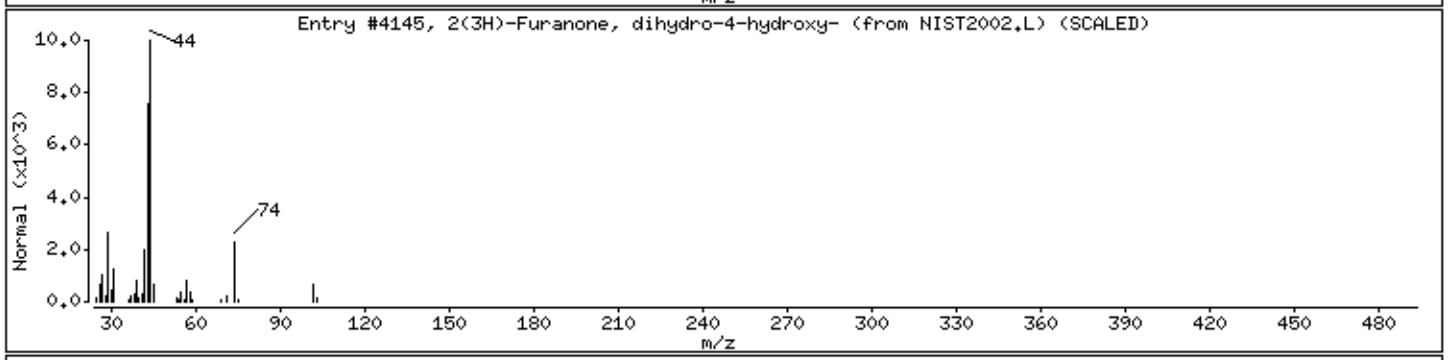
Sample Info: K2198-20A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2(3H)-Furanone, dihydro-4-hydroxy-	5469-16-9	NIST2002.L	4145	90	C4H6O3	102





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Date : 10-NOV-2011 17:44

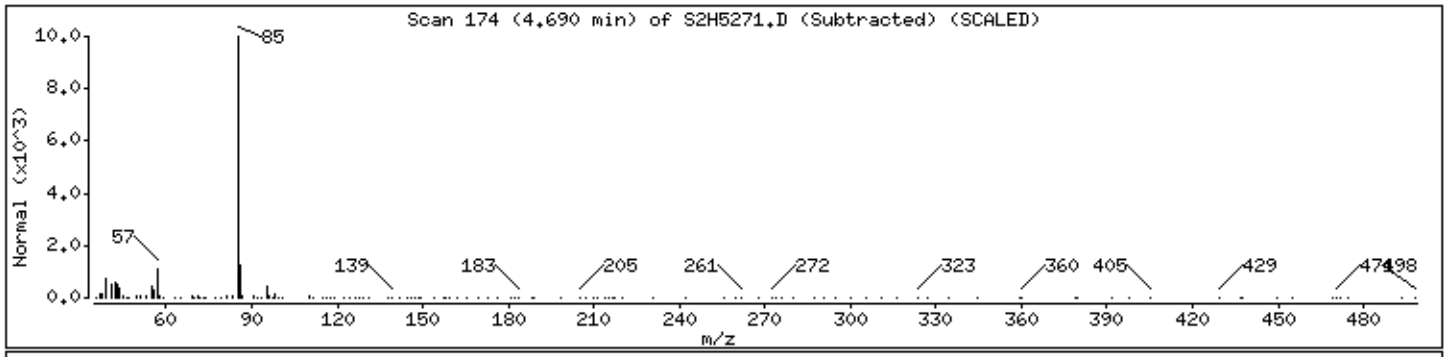
Client ID: H30T5 Instrument: S2.i

Sample Info: K2198-20A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5271.D

Date : 10-NOV-2011 17:44

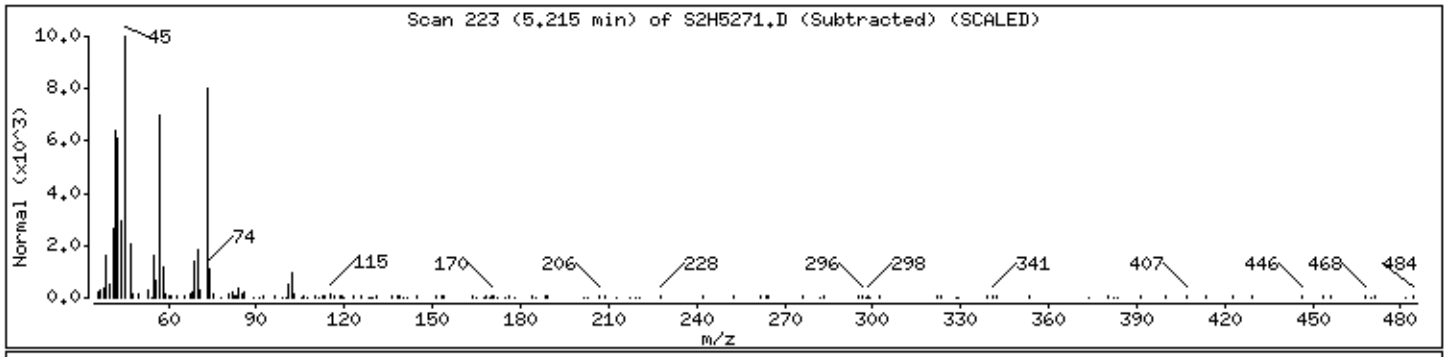
Client ID: H30T5 Instrument: S2.i

Sample Info: K2198-20A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 17:44

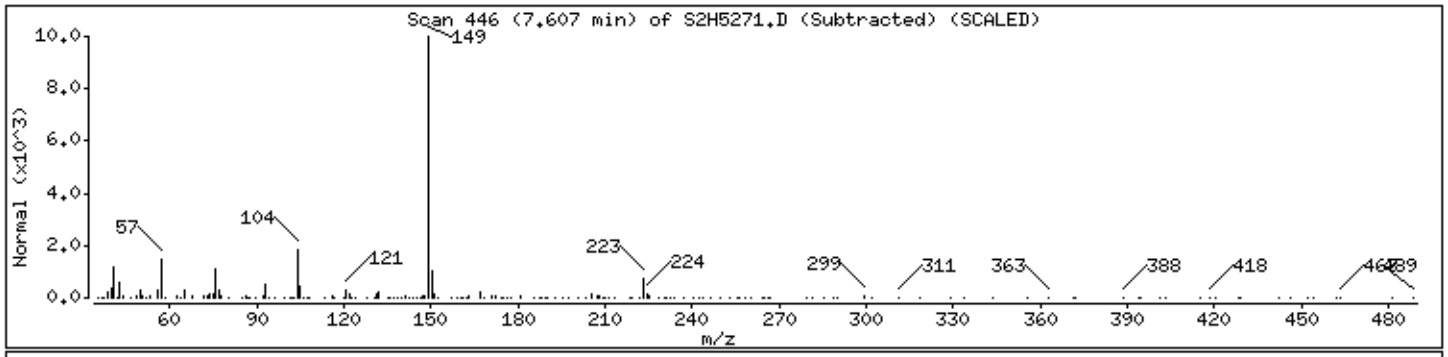
Client ID: H30T5 Instrument: S2.i

Sample Info: K2198-20A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 17:44

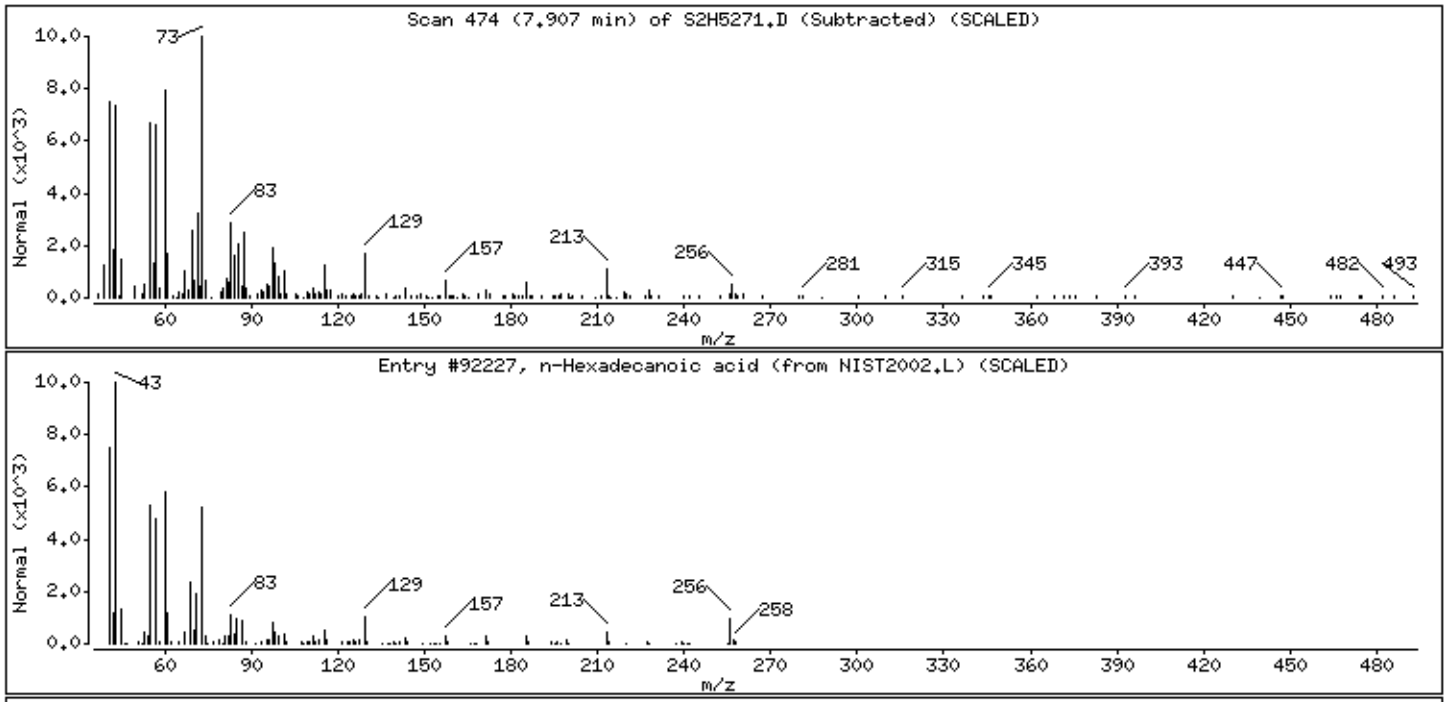
Client ID: H30T5 Instrument: S2.i

Sample Info: K2198-20A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
n-Hexadecanoic acid	57-10-3	NIST2002.L	92227	95	C16H32O2	256



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5271.D

Date : 10-NOV-2011 17:44

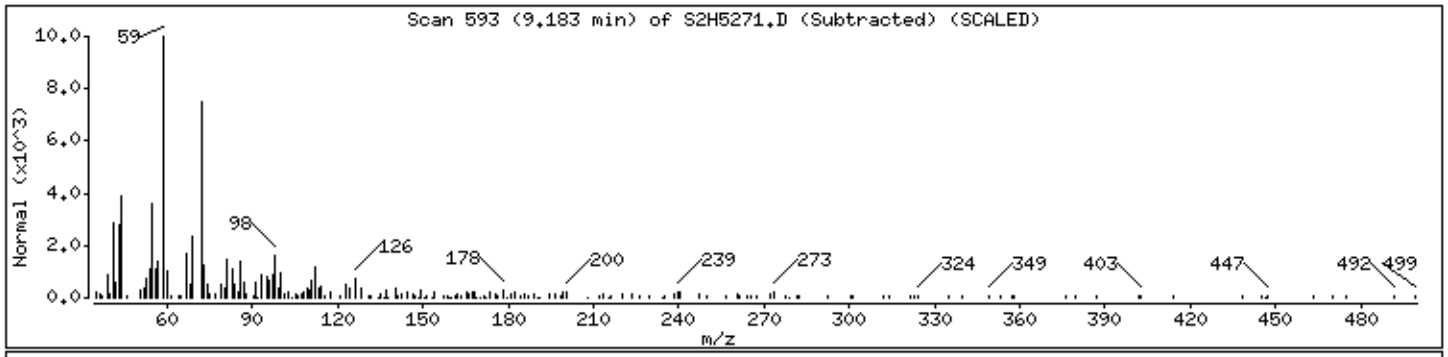
Client ID: H30T5 Instrument: S2.i

Sample Info: K2198-20A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 17:44

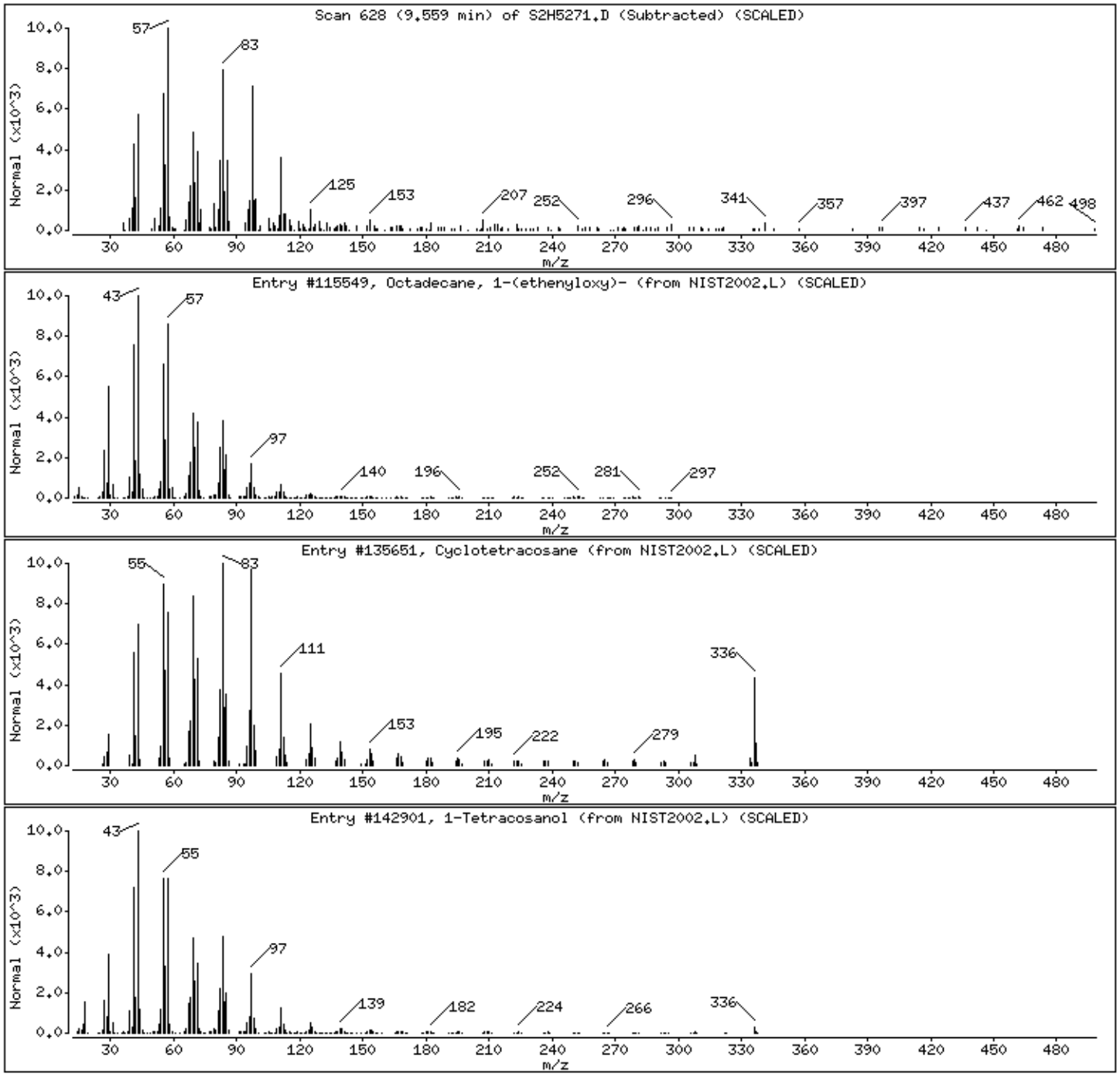
Client ID: H30T5 Instrument: S2.i

Sample Info: K2198-20A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Octadecane, 1-(ethenyloxy)-	930-02-9	NIST2002.L	115549	91	C20H40O	296
Cyclotetracosane	297-03-0	NIST2002.L	135651	91	C24H48	336
1-Tetracosanol	506-51-4	NIST2002.L	142901	90	C24H50O	354



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Date : 10-NOV-2011 17:44

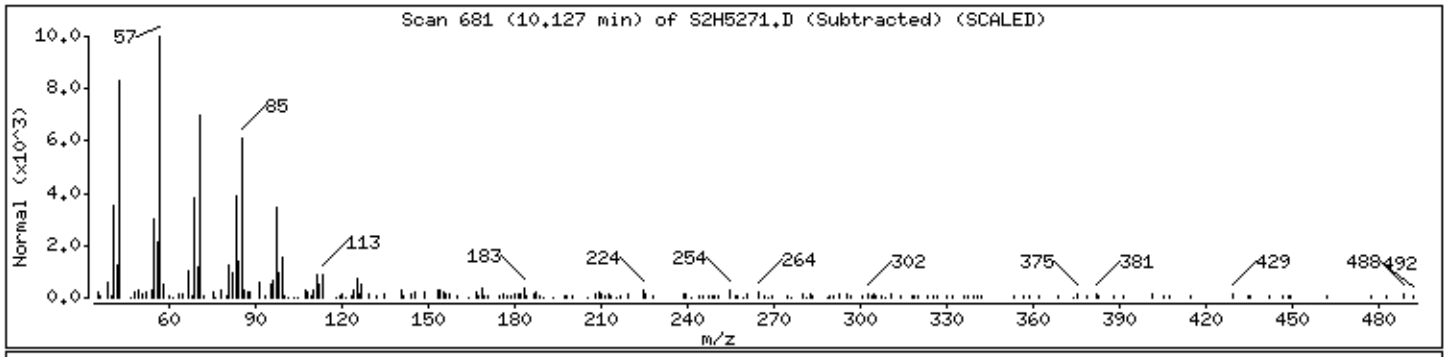
Client ID: H30T5 Instrument: S2.i

Sample Info: K2198-20A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 10-NOV-2011 17:44

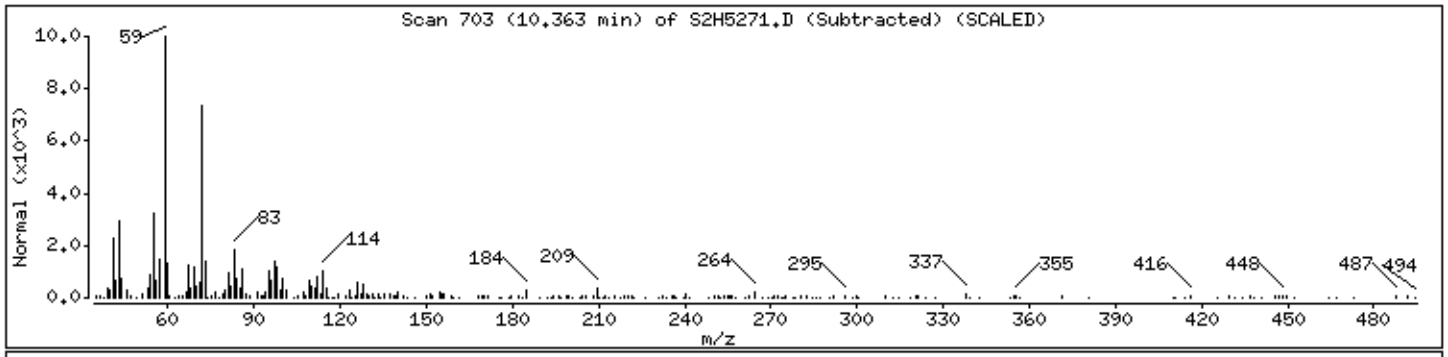
Client ID: H30T5 Instrument: S2.i

Sample Info: K2198-20A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5271.D

Date : 10-NOV-2011 17:44

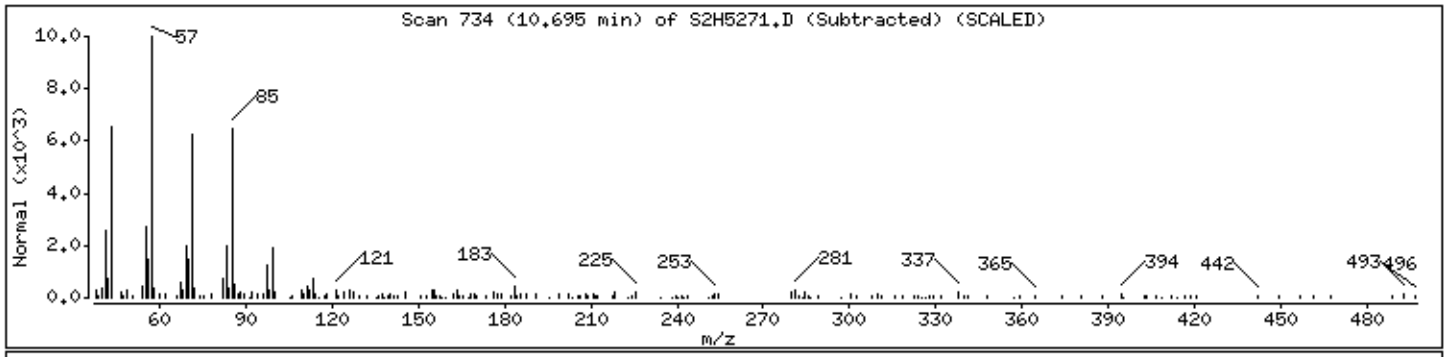
Client ID: H30T5 Instrument: S2.i

Sample Info: K2198-20A,,62764,,

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



6E - FORM VI SV-1

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date(s): 10/25/2011 10/25/2011

Calibration Time(s): 11:35 13:07

LAB FILE ID: RRF005 = S2H5054.D RRF010 = S2H5056.D

RRF020 = S2H5053C.D RRF040 = S2H5057.D RRF080 = S2H5055.D

COMPOUND	RRF005	RRF010	RRF020	RRF040	RRF080	$\overline{RRF}$	%RSD
Benzaldehyde	2.238	2.088	1.996	1.799	1.697	1.964	11.1
Phenol	3.264	3.126	3.243	3.654	3.986	3.455	10.4
Bis(2-chloroethyl)ether	2.496	2.382	2.380	2.659	2.778	2.539	6.9
2-Chlorophenol	1.116	1.069	1.027	1.148	1.244	1.121	7.4
2-Methylphenol	1.812	1.713	1.823	1.969	2.165	1.896	9.3
2,2´-Oxybis(1-chloropropane)	2.580	2.510	2.457	2.602	2.681	2.566	3.3
Acetophenone	3.194	3.056	3.031	3.339	3.732	3.271	8.7
4-Methylphenol	1.714	1.624	1.887	2.101	2.386	1.942	15.8
N-Nitroso-di-n-propylamine	1.539	1.455	1.517	1.645	1.742	1.580	7.2
Hexachloroethane	0.886	0.841	0.848	0.887	0.897	0.872	2.9
Nitrobenzene	1.014	1.004	1.032	1.102	1.065	1.043	3.9
Isophorone	1.766	1.706	1.680	1.877	1.878	1.782	5.2
2-Nitrophenol	0.230	0.228	0.209	0.234	0.228	0.226	4.4
2,4-Dimethylphenol	0.741	0.729	0.788	0.833	0.834	0.785	6.3
Bis(2-chloroethoxy)methane	0.926	0.963	0.980	1.050	1.041	0.992	5.3
2,4-Dichlorophenol	0.373	0.359	0.373	0.412	0.415	0.386	6.6
Naphthalene	1.004	1.023	1.032	1.025	1.064	1.030	2.1
4-Chloroaniline	0.394	0.412	0.382	0.436	0.440	0.413	6.1
Hexachlorobutadiene	0.285	0.303	0.268	0.292	0.287	0.287	4.4
Caprolactam	0.134	0.143	0.147	0.174	0.171	0.154	11.5
4-Chloro-3-methylphenol	0.596	0.532	0.618	0.680	0.701	0.625	10.8
2-Methylnaphthalene	0.705	0.674	0.679	0.725	0.737	0.704	4.0
Hexachlorocyclopentadiene	0.374	0.460	0.429	0.492	0.495	0.450	11.1
2,4,6-Trichlorophenol	0.486	0.549	0.410	0.458	0.566	0.494	13.0
2,4,5-Trichlorophenol	0.470	0.494	0.471	0.518	0.588	0.508	9.6
1,1´-Biphenyl	1.420	1.359	1.411	1.420	1.462	1.414	2.6
2-Chloronaphthalene	1.260	1.314	1.169	1.190	1.383	1.263	7.0
2-Nitroaniline		0.582	0.578	0.592	0.673	0.606	7.4
Dimethylphthalate	1.378	1.275	1.397	1.410	1.392	1.370	4.0
2,6-Dinitrotoluene	0.342	0.329	0.303	0.341	0.378	0.339	8.0
Acenaphthylene	1.744	1.679	1.703	1.746	1.836	1.742	3.4
3-Nitroaniline		0.212	0.210	0.237	0.238	0.224	6.7
Acenaphthene	1.160	1.139	1.003	1.097	1.239	1.128	7.7
2,4-Dinitrophenol		0.105	0.115	0.185	0.215	0.155	34.7
4-Nitrophenol		0.345	0.386	0.437	0.472	0.410	13.7
Dibenzofuran	1.717	1.689	1.524	1.633	1.721	1.657	5.0

6F - FORM VI SV-2

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date(s): 10/25/2011 10/25/2011

Calibration Time(s): 11:35 13:07

LAB FILE ID: RRF005 = S2H5054.D RRF010 = S2H5056.D

RRF020 = S2H5053C.D RRF040 = S2H5057.D RRF080 = S2H5055.D

COMPOUND	RRF005	RRF010	RRF020	RRF040	RRF080	$\overline{RRF}$	%RSD
2,4-Dinitrotoluene	0.416	0.417	0.419	0.438	0.462	0.430	4.6
Diethylphthalate	1.448	1.297	1.115	1.284	1.294	1.288	9.2
Fluorene	1.349	1.262	1.269	1.409	1.472	1.352	6.7
4-Chlorophenyl-phenylether	0.756	0.694	0.685	0.725	0.736	0.719	4.1
4-Nitroaniline		0.258	0.243	0.253	0.232	0.246	4.6
4,6-Dinitro-2-methylphenol		0.117	0.151	0.165	0.177	0.152	17.1
N-Nitrosodiphenylamine (1)	0.603	0.627	0.561	0.609	0.650	0.610	5.4
1,2,4,5-Tetrachlorobenzene	1.521	1.696	1.412	1.604	1.816	1.610	9.7
4-Bromophenyl-phenylether	0.224	0.221	0.199	0.214	0.225	0.217	4.9
Hexachlorobenzene	0.244	0.236	0.210	0.228	0.235	0.231	5.4
Atrazine	0.210	0.216	0.207	0.247	0.220	0.220	7.2
Pentachlorophenol		0.087	0.098	0.134	0.131	0.113	20.8
Phenanthrene	1.175	1.105	1.029	1.137	1.168	1.123	5.3
Anthracene	1.137	1.140	1.057	1.171	1.204	1.142	4.8
Carbazole	0.906	0.931	0.863	0.968	0.947	0.923	4.4
Di-n-butylphthalate	0.920	1.030	1.044	1.064	0.899	0.991	7.7
Fluoranthene	1.199	1.151	1.112	1.254	1.062	1.156	6.4
Pyrene	1.452	1.426	1.456	1.572	2.116	1.604	18.2
Butylbenzylphthalate	0.418	0.467	0.490	0.527	0.581	0.497	12.4
3,3´-Dichlorobenzidine	0.256	0.297	0.310	0.332	0.289	0.297	9.5
Benzo(a)anthracene	1.259	1.159	1.085	1.205	1.227	1.187	5.7
Chrysene	1.034	1.048	1.058	1.050	1.044	1.047	0.8
Bis(2-ethylhexyl)phthalate	0.568	0.598	0.596	0.628	0.647	0.608	5.0
Di-n-octylphthalate	1.199	1.313	1.343	1.605	1.819	1.456	17.3
Benzo(b)fluoranthene	1.201	1.200	1.227	1.487	1.375	1.298	9.9
Benzo(k)fluoranthene	1.609	1.468	1.328	1.479	1.620	1.501	8.0
Benzo(a)pyrene	1.137	1.104	1.073	1.224	1.163	1.140	5.1
Indeno(1,2,3-cd)pyrene	0.895	0.903	0.825	0.907	0.863	0.878	3.9
Dibenzo(a,h)anthracene	0.740	0.743	0.670	0.760	0.704	0.723	5.0
Benzo(g,h,i)perylene	0.734	0.778	0.666	0.760	0.681	0.724	6.7
2,3,4,6-Tetrachlorophenol	0.350	0.314	0.316	0.373	0.389	0.348	9.6

(1) Cannot be separated from Diphenylamine

6G - FORM VI SV-3

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date(s): 10/25/2011 10/25/2011

Calibration Time(s): 11:35 13:07

LAB FILE ID: RRF005 = S2H5054.D RRF010 = S2H5056.D

RRF020 = S2H5053C.D RRF040 = S2H5057.D RRF080 = S2H5055.D

COMPOUND	RRF005	RRF010	RRF020	RRF040	RRF080	$\overline{RRF}$	%RSD
Phenol-d5	1.119	1.199	1.190	1.325	1.463	1.260	10.8
Bis(2-chloroethyl)ether-d8	1.729	1.678	1.652	1.774	1.846	1.736	4.5
2-Chlorophenol-d4	1.053	1.045	1.043	1.088	1.219	1.090	6.8
4-Methylphenol-d8	1.514	1.507	1.637	1.859	2.021	1.708	13.2
Nitrobenzene-d5	0.232	0.204	0.190	0.205	0.212	0.208	7.4
2-Nitrophenol-d4	0.214	0.212	0.229	0.250	0.244	0.230	7.4
2,4-Dichlorophenol-d3	0.378	0.399	0.417	0.448	0.457	0.420	7.9
4-Chloroaniline-d4	0.397	0.370	0.330	0.395	0.371	0.373	7.2
Dimethylphthalate-d6	1.405	1.403	1.441	1.557	1.548	1.471	5.2
Acenaphthylene-d8	1.920	1.918	1.803	1.882	2.039	1.913	4.5
4-Nitrophenol-d4		0.181	0.200	0.229	0.239	0.212	12.6
Fluorene-d10	1.387	1.332	1.283	1.356	1.397	1.351	3.4
4,6-Dinitro-2-methylphenol-d2		0.132	0.142	0.167	0.184	0.156	15.1
Anthracene-d10	1.157	1.104	1.133	1.182	1.137	1.143	2.5
Pyrene-d10	1.190	1.152	1.087	1.171	1.700	1.260	19.8
Benzo(a)pyrene-d12	0.972	0.972	0.944	1.039	0.980	0.982	3.6

Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5053C.D
Report Date: 26-Oct-2011 09:59

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111025.B\S2H5053C.D
Lab Smp Id: SSTD0202W Client Smp ID: SSTD0202W
Inj Date : 25-OCT-2011 11:35
Operator : SRC: Inst ID: S2.i
Smp Info : SSTD0202W,SSTD0202W
Misc Info : 2,3
Comment   :
Method   : \\Avogadro\Organics\S2.I\111025.B\S2_SOM.m
Meth Date : 26-Oct-2011 09:59 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * (Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vi	2.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	1 Benzaldehyde	77	3.712	3.712	(0.911)	212664	40.0000	41
$	2 Phenol-d5	71	3.754	3.754	(0.921)	126811	40.0000	38
	3 Phenol	94	3.765	3.765	(0.924)	345410	40.0000	38
$	4 bis(2-Chloroethyl)ether-d8	67	3.797	3.797	(0.932)	175972	40.0000	38
	5 bis(2-Chloroethyl)ether	93	3.840	3.840	(0.942)	253570	40.0000	38
$	6 2-Chlorophenol-d4	132	3.883	3.883	(0.953)	111135	40.0000	38
	7 2-Chlorophenol	128	3.894	3.894	(0.955)	109408	40.0000	37
*	8 1,4-Dichlorobenzene-d4	152	4.076	4.076	(1.000)	106521	40.0000	(Q)
	9 2-Methylphenol	108	4.269	4.269	(1.047)	194214	40.0000	38
	10 2,2'-oxybis(1-Chloropropane)	45	4.291	4.291	(1.053)	261761	40.0000	38
$	11 4-Methylphenol-d8	113	4.376	4.376	(1.074)	174423	40.0000	38
	13 Acetophenone	105	4.398	4.398	(1.079)	322879	40.0000	37
	14 N-Nitroso-di-n-propylamine	70	4.398	4.398	(1.079)	161634	40.0000	38(Q)
	12 4-Methylphenol	108	4.398	4.398	(1.079)	201003	40.0000	39
	15 Hexachloroethane	117	4.505	4.505	(1.105)	90337	40.0000	39(Q)
$	16 Nitrobenzene-d5	128	4.527	4.527	(0.881)	57076	40.0000	36
	17 Nitrobenzene	77	4.548	4.548	(0.885)	310502	40.0000	40
	18 Isophorone	82	4.741	4.741	(0.923)	505668	40.0000	38
$	19 2-Nitrophenol-d4	143	4.805	4.805	(0.935)	68900	40.0000	40
	20 2-Nitrophenol	139	4.816	4.816	(0.937)	62769	40.0000	37
	21 2,4-Dimethylphenol	107	4.848	4.848	(0.944)	237161	40.0000	40(Q)

Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5053C.D
Report Date: 26-Oct-2011 09:59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
22	bis(2-Chloroethoxy)methane	93	4.923	4.923	(0.958)	294797	40.0000	40
$ 23	2,4-Dichlorophenol-d3	165	5.009	5.009	(0.975)	125497	40.0000	40
24	2,4-Dichlorophenol	162	5.020	5.020	(0.977)	112143	40.0000	39
* 25	Naphthalene-d8	136	5.138	5.138	(1.000)	300917	40.0000	
26	Naphthalene	128	5.159	5.159	(1.004)	310657	40.0000	40
$ 27	4-Chloroaniline-d4	131	5.191	5.191	(1.010)	99425	40.0000	35(Q)
28	4-Chloroaniline	127	5.191	5.191	(1.010)	115019	40.0000	37
29	Hexachlorobutadiene	225	5.267	5.267	(1.025)	80580	40.0000	37
30	Caprolactam	113	5.460	5.460	(1.063)	44349	40.0000	38
31	4-Chloro-3-methylphenol	107	5.599	5.599	(1.090)	186082	40.0000	40
32	2-Methylnaphthalene	142	5.738	5.738	(1.117)	204355	40.0000	39
33	Hexachlorocyclopentadiene	237	5.878	5.878	(0.890)	88898	40.0000	38(Q)
34	1,2,4,5-Tetrachlorobenzene	216	5.878	5.878	(0.890)	292425	40.0000	35
35	2,4,6-Trichlorophenol	196	5.974	5.974	(0.904)	84990	40.0000	33
36	2,4,5-Trichlorophenol	196	5.996	5.996	(0.907)	97633	40.0000	37
37	1,1'-Biphenyl	154	6.124	6.124	(0.927)	292109	40.0000	40
38	2-Chloronaphthalene	162	6.146	6.146	(0.930)	242079	40.0000	37
39	2-Nitroaniline	65	6.221	6.221	(0.942)	119689	40.0000	38
$ 40	Dimethylphthalate-d6	166	6.350	6.350	(0.961)	298307	40.0000	39
41	Dimethylphthalate	163	6.371	6.371	(0.964)	289261	40.0000	41
42	2,6-Dinitrotoluene	165	6.414	6.414	(0.971)	62729	40.0000	36
$ 43	Acenaphthylene-d8	160	6.478	6.478	(0.981)	373422	40.0000	38
44	Acenaphthylene	152	6.489	6.489	(0.982)	352578	40.0000	39
45	3-Nitroaniline	138	6.553	6.553	(0.992)	43524	40.0000	37(Q)
* 46	Acenaphthene-d10	164	6.607	6.607	(1.000)	207073	40.0000	
47	Acenaphthene	153	6.628	6.628	(1.003)	207719	40.0000	36
48	2,4-Dinitrophenol	184	6.639	6.639	(1.005)	23834	40.0000	30(Q)
52	Dibenzofuran	168	6.779	6.779	(1.026)	315518	40.0000	37
$ 49	4-Nitrophenol-d4	143	6.682	6.682	(1.011)	41327	40.0000	38(Q)
50	4-Nitrophenol	109	6.693	6.693	(1.013)	79876	40.0000	38
51	2,4-Dinitrotoluene	165	6.757	6.757	(1.023)	86741	40.0000	39(Q)
118	2,3,4,6-Tetrachlorophenol	232	6.875	6.875	(1.041)	65445	40.0000	36
53	Diethylphthalate	149	6.950	6.950	(1.052)	230831	40.0000	35
$ 54	Fluorene-d10	176	7.036	7.036	(1.065)	265573	40.0000	38
56	Fluorene	166	7.057	7.057	(1.068)	262738	40.0000	38
55	4-Chlorophenyl-phenylether	204	7.057	7.057	(1.068)	141928	40.0000	38
57	4-Nitroaniline	138	7.068	7.068	(1.070)	50246	40.0000	39(Q)
$ 58	4,6-Dinitro-2-methylphenol-d2	200	7.090	7.090	(0.904)	50456	40.0000	36(Q)
59	4,6-Dinitro-2-methylphenol	198	7.090	7.090	(0.904)	53526	40.0000	40(Q)
60	N-Nitrosodiphenylamine	169	7.154	7.154	(0.912)	198880	40.0000	37
61	4-Bromophenyl-phenylether	248	7.465	7.465	(0.952)	70715	40.0000	37
62	Hexachlorobenzene	284	7.529	7.529	(0.960)	74606	40.0000	37
63	Atrazine	200	7.583	7.583	(0.967)	73499	40.0000	38
64	Pentachlorophenol	266	7.679	7.679	(0.979)	34766	40.0000	35
* 65	Phenanthrene-d10	188	7.840	7.840	(1.000)	354560	40.0000	
66	Phenanthrene	178	7.862	7.862	(1.003)	364758	40.0000	37
$ 67	Anthracene-d10	188	7.883	7.883	(1.005)	401646	40.0000	40
68	Anthracene	178	7.894	7.894	(1.007)	374852	40.0000	37
117	Carbazole	167	8.022	8.022	(1.023)	305887	40.0000	37
70	Di-n-butylphthalate	149	8.312	8.312	(1.060)	370152	40.0000	42
71	Fluoranthene	202	8.859	8.859	(1.130)	394426	40.0000	39
$ 72	Pyrene-d10	212	9.041	9.041	(0.890)	309917	40.0000	35
73	Pyrene	202	9.063	9.063	(0.892)	414941	40.0000	36
74	Butylbenzylphthalate	149	9.620	9.620	(0.947)	139765	40.0000	40

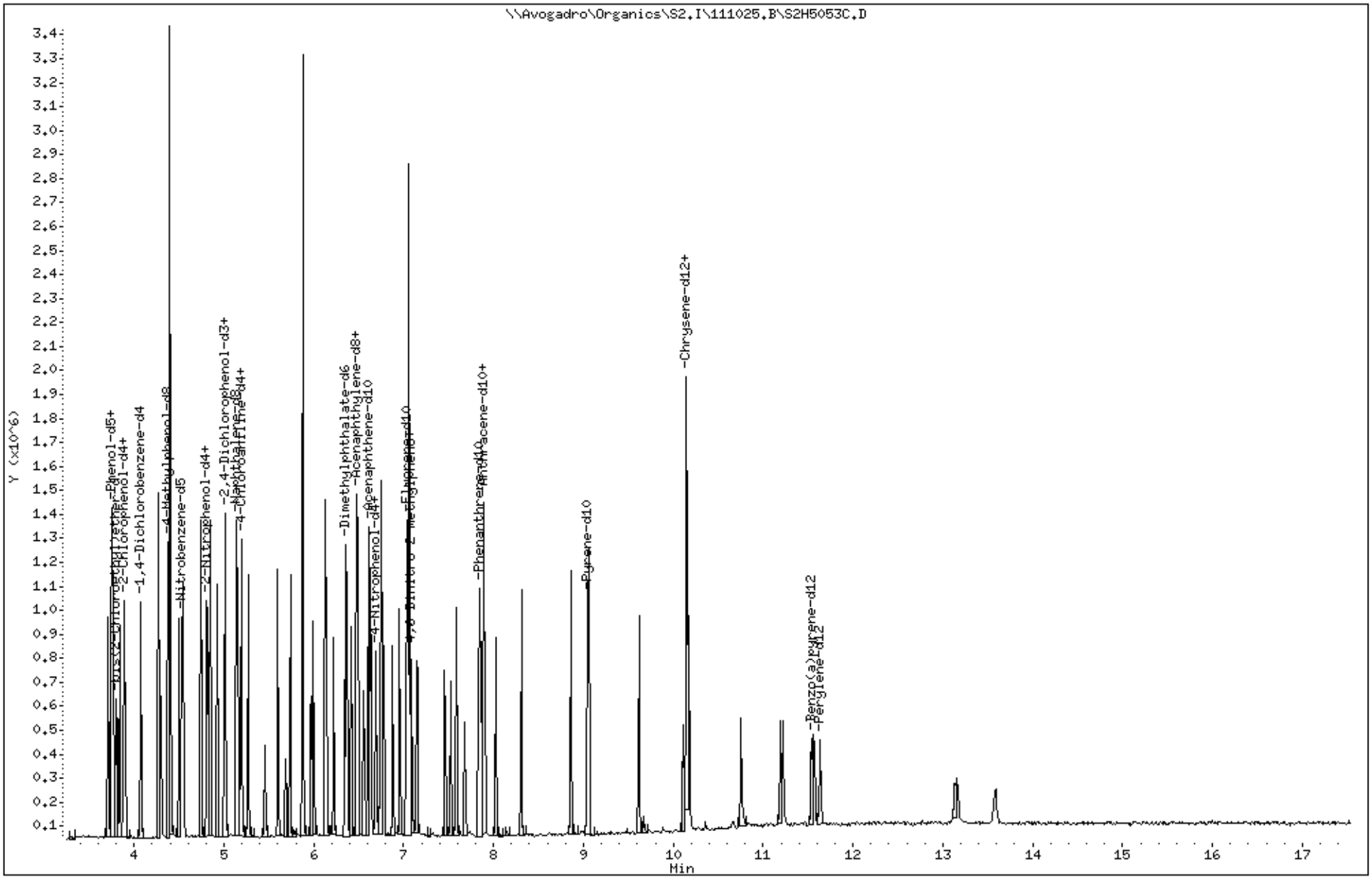
Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5053C.D
Report Date: 26-Oct-2011 09:59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	
	75 3,3'-Dichlorobenzidine	252	10.114	10.114	(0.996)	88348	40.0000	42	
	76 Benzo(a)anthracene	228	10.146	10.146	(0.999)	309195	40.0000	37	
*	77 Chrysene-d12	240	10.156	10.156	(1.000)	285011	40.0000		(Q)
	78 Chrysene	228	10.178	10.178	(1.002)	301594	40.0000	40	
	79 bis(2-Ethylhexyl)phthalate	149	10.146	10.146	(0.999)	169935	40.0000	39	
	80 Di-n-octylphthalate	149	10.757	10.757	(0.924)	252614	40.0000	37	
	81 Benzo(b)fluoranthene	252	11.197	11.197	(0.962)	230677	40.0000	38	
	82 Benzo(k)fluoranthene	252	11.218	11.218	(0.964)	249777	40.0000	35	
$	83 Benzo(a)pyrene-d12	264	11.540	11.540	(0.992)	177567	40.0000	38	
	84 Benzo(a)pyrene	252	11.572	11.572	(0.994)	201749	40.0000	38	
*	85 Perylene-d12	264	11.636	11.636	(1.000)	188055	40.0000		
	86 Indeno(1,2,3-cd)pyrene	276	13.127	13.127	(1.128)	155216	40.0000	38	
	87 Dibenzo(a,h)anthracene	278	13.159	13.159	(1.131)	126027	40.0000	37	
	88 Benzo(g,h,i)perylene	276	13.588	13.588	(1.168)	125220	40.0000	37	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5053C.D
Date : 25-OCT-2011 11:35
Client ID: SSTD0202W
Instrument: S2.i
Sample Info: SSTD0202W,SSTD0202W
Volume Injected (uL): 2.0
Operator: SRC:
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5054.D
Report Date: 26-Oct-2011 09:59

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111025.B\S2H5054.D
Lab Smp Id: SSTD0052W Client Smp ID: SSTD0052W
Inj Date : 25-OCT-2011 11:58
Operator : SRC: Inst ID: S2.i
Smp Info : SSTD0052W,SSTD0052W
Misc Info : 1,1
Comment   :
Method   : \\Avogadro\Organics\S2.I\111025.B\S2_SOM.m
Meth Date : 26-Oct-2011 09:59 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * (Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vi	2.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	1 Benzaldehyde	77	3.701	3.712	(0.908)	45515	10.0000	11
$	2 Phenol-d5	71	3.744	3.754	(0.918)	22760	10.0000	8.9(Q)
	3 Phenol	94	3.755	3.765	(0.921)	66381	10.0000	9.4
$	4 bis(2-Chloroethyl)ether-d8	67	3.798	3.797	(0.932)	35163	10.0000	10
	5 bis(2-Chloroethyl)ether	93	3.841	3.840	(0.942)	50765	10.0000	9.8
$	6 2-Chlorophenol-d4	132	3.884	3.883	(0.953)	21416	10.0000	9.7
	7 2-Chlorophenol	128	3.894	3.894	(0.955)	22691	10.0000	10
*	8 1,4-Dichlorobenzene-d4	152	4.077	4.076	(1.000)	81345	40.0000	(Q)
	9 2-Methylphenol	108	4.270	4.269	(1.047)	36849	10.0000	9.6
	10 2,2'-oxybis(1-Chloropropane)	45	4.291	4.291	(1.053)	52469	10.0000	10
$	11 4-Methylphenol-d8	113	4.366	4.376	(1.071)	30786	10.0000	8.9
	13 Acetophenone	105	4.398	4.398	(1.079)	64947	10.0000	9.8
	14 N-Nitroso-di-n-propylamine	70	4.398	4.398	(1.079)	31300	10.0000	9.7(Q)
	12 4-Methylphenol	108	4.388	4.398	(1.076)	34863	10.0000	8.8
	15 Hexachloroethane	117	4.495	4.505	(1.103)	18023	10.0000	10(Q)
$	16 Nitrobenzene-d5	128	4.527	4.527	(0.881)	13404	10.0000	11(Q)
	17 Nitrobenzene	77	4.549	4.548	(0.885)	58616	10.0000	9.7
	18 Isophorone	82	4.742	4.741	(0.923)	102107	10.0000	9.9
$	19 2-Nitrophenol-d4	143	4.806	4.805	(0.935)	12398	10.0000	9.3(Q)
	20 2-Nitrophenol	139	4.817	4.816	(0.937)	13281	10.0000	10(Q)
	21 2,4-Dimethylphenol	107	4.849	4.848	(0.944)	42871	10.0000	9.4(Q)

Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5054.D
Report Date: 26-Oct-2011 09:59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	22 bis(2-Chloroethoxy)methane	93	4.924	4.923	(0.958)	53562	10.0000	9.3
$	23 2,4-Dichlorophenol-d3	165	4.999	5.009	(0.973)	21850	10.0000	9.0
	24 2,4-Dichlorophenol	162	5.010	5.020	(0.975)	21540	10.0000	9.6
*	25 Naphthalene-d8	136	5.138	5.138	(1.000)	231295	40.0000	
	26 Naphthalene	128	5.149	5.159	(1.002)	58053	10.0000	9.8
$	27 4-Chloroaniline-d4	131	5.181	5.191	(1.008)	22939	10.0000	11(Q)
	28 4-Chloroaniline	127	5.192	5.191	(1.010)	22811	10.0000	9.6
	29 Hexachlorobutadiene	225	5.267	5.267	(1.025)	16469	10.0000	9.9
	30 Caprolactam	113	5.449	5.460	(1.061)	7762	10.0000	8.7(Q)
	31 4-Chloro-3-methylphenol	107	5.599	5.599	(1.090)	34445	10.0000	9.5
	32 2-Methylnaphthalene	142	5.728	5.738	(1.115)	40737	10.0000	10
	33 Hexachlorocyclopentadiene	237	5.878	5.878	(0.891)	14600	10.0000	8.3(Q)
	34 1,2,4,5-Tetrachlorobenzene	216	5.878	5.878	(0.891)	59367	10.0000	9.5
	35 2,4,6-Trichlorophenol	196	5.964	5.974	(0.904)	18971	10.0000	9.8
	36 2,4,5-Trichlorophenol	196	5.996	5.996	(0.909)	18342	10.0000	9.3(a)
	37 1,1'-Biphenyl	154	6.114	6.124	(0.927)	55394	10.0000	10
	38 2-Chloronaphthalene	162	6.136	6.146	(0.930)	49179	10.0000	10
	39 2-Nitroaniline	65	6.211	6.221	(0.941)	24626	10.0000	10
$	40 Dimethylphthalate-d6	166	6.350	6.350	(0.963)	54840	10.0000	9.6
	41 Dimethylphthalate	163	6.361	6.371	(0.964)	53763	10.0000	10
	42 2,6-Dinitrotoluene	165	6.414	6.414	(0.972)	13354	10.0000	10
$	43 Acenaphthylene-d8	160	6.468	6.478	(0.980)	74903	10.0000	10
	44 Acenaphthylene	152	6.479	6.489	(0.982)	68062	10.0000	10
	45 3-Nitroaniline	138	6.554	6.553	(0.993)	10623	10.0000	12(Q)
*	46 Acenaphthene-d10	164	6.597	6.607	(1.000)	156075	40.0000	
	47 Acenaphthene	153	6.629	6.628	(1.005)	45256	10.0000	10
	48 2,4-Dinitrophenol	184	6.640	6.639	(1.007)	3291	10.0000	5.4(aQ)
	52 Dibenzofuran	168	6.768	6.779	(1.026)	67008	10.0000	10
$	49 4-Nitrophenol-d4	143	6.682	6.682	(1.013)	7212	10.0000	8.7
	50 4-Nitrophenol	109	6.682	6.693	(1.013)	13820	10.0000	8.6(a)
	51 2,4-Dinitrotoluene	165	6.747	6.757	(1.023)	16234	10.0000	9.7(Q)
	118 2,3,4,6-Tetrachlorophenol	232	6.876	6.875	(1.042)	13651	10.0000	10
	53 Diethylphthalate	149	6.951	6.950	(1.054)	56488	10.0000	11
$	54 Fluorene-d10	176	7.026	7.036	(1.065)	54133	10.0000	10
	56 Fluorene	166	7.058	7.057	(1.070)	52647	10.0000	10
	55 4-Chlorophenyl-phenylether	204	7.047	7.057	(1.068)	29496	10.0000	11
	57 4-Nitroaniline	138	7.058	7.068	(1.070)	9393	10.0000	9.8(aQ)
$	58 4,6-Dinitro-2-methylphenol-d2	200	7.079	7.090	(0.904)	7797	10.0000	7.0(Q)
	59 4,6-Dinitro-2-methylphenol	198	7.090	7.090	(0.906)	6910	10.0000	6.3(aQ)
	60 N-Nitrosodiphenylamine	169	7.144	7.154	(0.912)	43144	10.0000	9.9
	61 4-Bromophenyl-phenylether	248	7.455	7.465	(0.952)	16040	10.0000	10
	62 Hexachlorobenzene	284	7.519	7.529	(0.960)	17444	10.0000	11
	63 Atrazine	200	7.583	7.583	(0.969)	15010	10.0000	9.5
	64 Pentachlorophenol	266	7.680	7.679	(0.981)	5841	10.0000	7.2(a)
*	65 Phenanthrene-d10	188	7.830	7.840	(1.000)	286359	40.0000	
	66 Phenanthrene	178	7.851	7.862	(1.003)	84149	10.0000	10
$	67 Anthracene-d10	188	7.884	7.883	(1.007)	82836	10.0000	10
	68 Anthracene	178	7.894	7.894	(1.008)	81407	10.0000	10
	117 Carbazole	167	8.023	8.022	(1.025)	64840	10.0000	9.8
	70 Di-n-butylphthalate	149	8.312	8.312	(1.062)	65846	10.0000	9.3
	71 Fluoranthene	202	8.859	8.859	(1.131)	85860	10.0000	10
$	72 Pyrene-d10	212	9.042	9.041	(0.890)	68402	10.0000	9.4
	73 Pyrene	202	9.063	9.063	(0.892)	83460	10.0000	9.1
	74 Butylbenzylphthalate	149	9.621	9.620	(0.947)	24001	10.0000	8.4

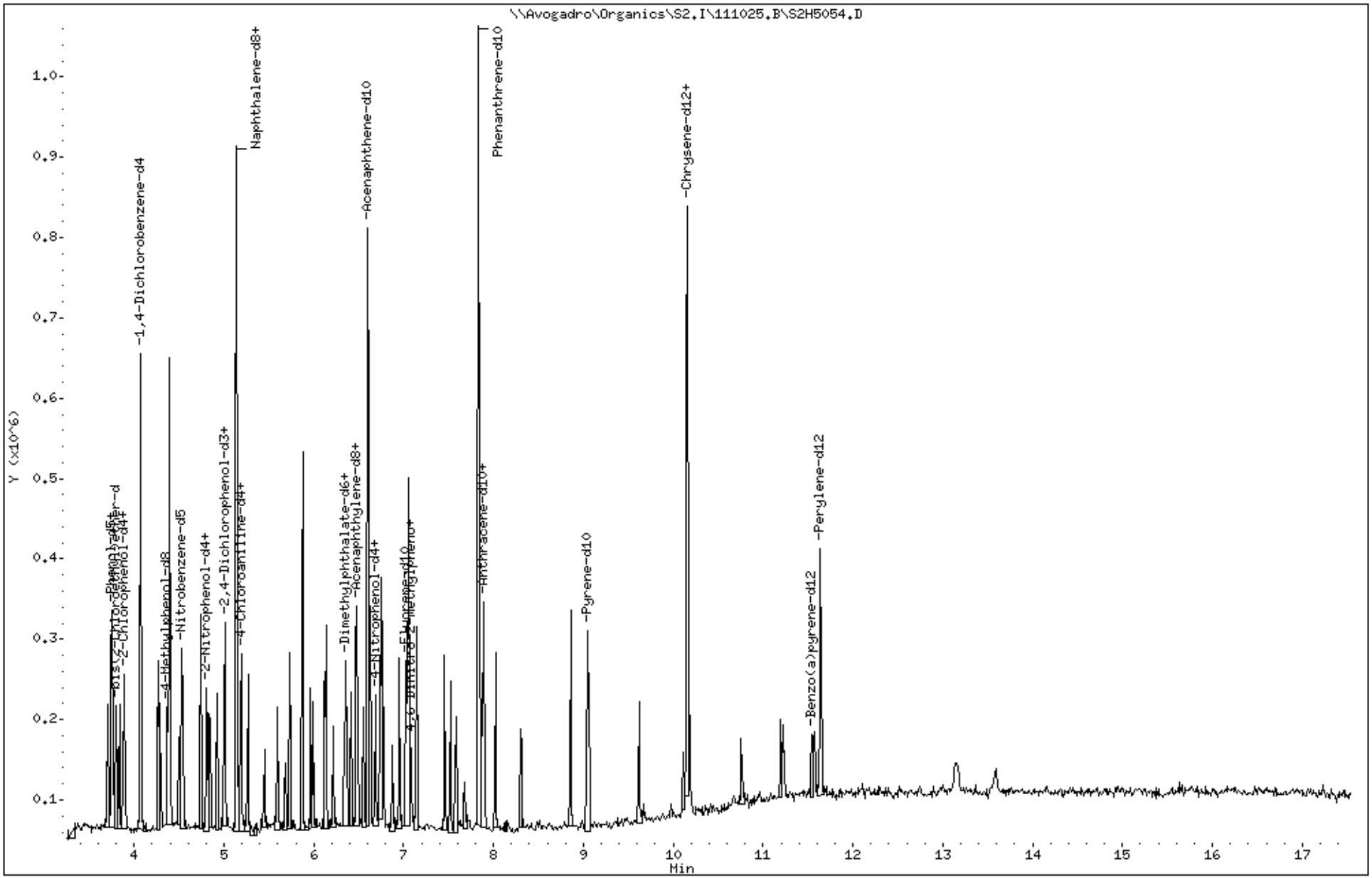
Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5054.D
Report Date: 26-Oct-2011 09:59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
75	3,3'-Dichlorobenzidine	252	10.114	10.114	(0.996)	14684	10.0000	8.6
76	Benzo(a)anthracene	228	10.146	10.146	(0.999)	72341	10.0000	11
* 77	Chrysene-d12	240	10.157	10.156	(1.000)	229879	40.0000	(Q)
78	Chrysene	228	10.178	10.178	(1.002)	59445	10.0000	9.9
79	bis(2-Ethylhexyl)phthalate	149	10.157	10.146	(1.000)	32662	10.0000	9.4
80	Di-n-octylphthalate	149	10.757	10.757	(0.924)	43628	10.0000	8.2
81	Benzo(b)fluoranthene	252	11.197	11.197	(0.962)	43681	10.0000	9.3
82	Benzo(k)fluoranthene	252	11.229	11.218	(0.965)	58547	10.0000	11
$ 83	Benzo(a)pyrene-d12	264	11.540	11.540	(0.992)	35368	10.0000	9.9
84	Benzo(a)pyrene	252	11.572	11.572	(0.994)	41382	10.0000	10
* 85	Perylene-d12	264	11.637	11.636	(1.000)	145535	40.0000	
86	Indeno(1,2,3-cd)pyrene	276	13.138	13.127	(1.129)	32547	10.0000	10
87	Dibenzo(a,h)anthracene	278	13.160	13.159	(1.131)	26928	10.0000	10
88	Benzo(g,h,i)perylene	276	13.588	13.588	(1.168)	26705	10.0000	10

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5054.D
Date : 25-OCT-2011 11:58
Client ID: SSTD0052W
Instrument: S2.i
Sample Info: SSTD0052W,SSTD0052W
Volume Injected (uL): 2.0
Operator: SRC:
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5055.D
Report Date: 26-Oct-2011 09:59

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111025.B\S2H5055.D
Lab Smp Id: SSTD0802W Client Smp ID: SSTD0802W
Inj Date : 25-OCT-2011 12:21
Operator : SRC: Inst ID: S2.i
Smp Info : SSTD0802W,SSTD0802W
Misc Info : 1,5
Comment   :
Method   : \\Avogadro\Organics\S2.I\111025.B\S2_SOM.m
Meth Date : 26-Oct-2011 09:59 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 3 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * (Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vi	2.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	1 Benzaldehyde	77	3.704	3.712	(0.910)	451731	160.000	140
$	2 Phenol-d5	71	3.747	3.754	(0.921)	389542	160.000	190(A)
	3 Phenol	94	3.768	3.765	(0.926)	1061024	160.000	180(A)
$	4 bis(2-Chloroethyl)ether-d8	67	3.800	3.797	(0.934)	491270	160.000	170(A)
	5 bis(2-Chloroethyl)ether	93	3.843	3.840	(0.945)	739408	160.000	180(A)
$	6 2-Chlorophenol-d4	132	3.886	3.883	(0.955)	324350	160.000	180(A)
	7 2-Chlorophenol	128	3.897	3.894	(0.958)	331093	160.000	180(A)
*	8 1,4-Dichlorobenzene-d4	152	4.069	4.076	(1.000)	66544	40.0000	(Q)
	9 2-Methylphenol	108	4.272	4.269	(1.050)	576248	160.000	180(A)
	10 2,2'-oxybis(1-Chloropropane)	45	4.294	4.291	(1.055)	713521	160.000	170(A)
$	11 4-Methylphenol-d8	113	4.379	4.376	(1.076)	538063	160.000	190(A)
	13 Acetophenone	105	4.401	4.398	(1.082)	993466	160.000	180(A)
	14 N-Nitroso-di-n-propylamine	70	4.401	4.398	(1.082)	463610	160.000	180(AQ)
	12 4-Methylphenol	108	4.401	4.398	(1.082)	634982	160.000	200(A)
	15 Hexachloroethane	117	4.497	4.505	(1.105)	238653	160.000	160(AQ)
$	16 Nitrobenzene-d5	128	4.530	4.527	(0.881)	171606	160.000	160(A)
	17 Nitrobenzene	77	4.551	4.548	(0.885)	864223	160.000	160(A)
	18 Isophorone	82	4.744	4.741	(0.923)	1523694	160.000	170(A)
$	19 2-Nitrophenol-d4	143	4.808	4.805	(0.935)	198212	160.000	170(A)
	20 2-Nitrophenol	139	4.819	4.816	(0.937)	184702	160.000	160(A)
	21 2,4-Dimethylphenol	107	4.851	4.848	(0.944)	676917	160.000	170(AQ)

Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5055.D
Report Date: 26-Oct-2011 09:59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	22 bis(2-Chloroethoxy)methane	93	4.926	4.923	(0.958)	844250	160.000	170(A)
$	23 2,4-Dichlorophenol-d3	165	5.012	5.009	(0.975)	370810	160.000	170(A)
	24 2,4-Dichlorophenol	162	5.012	5.020	(0.975)	336936	160.000	170(A)
*	25 Naphthalene-d8	136	5.141	5.138	(1.000)	202795	40.0000	
	26 Naphthalene	128	5.152	5.159	(1.002)	862863	160.000	170(A)
$	27 4-Chloroaniline-d4	131	5.184	5.191	(1.008)	301135	160.000	160(Q)
	28 4-Chloroaniline	127	5.194	5.191	(1.010)	356828	160.000	170(A)
	29 Hexachlorobutadiene	225	5.270	5.267	(1.025)	232801	160.000	160(A)
	30 Caprolactam	113	5.463	5.460	(1.063)	139061	160.000	180(A)
	31 4-Chloro-3-methylphenol	107	5.602	5.599	(1.090)	568462	160.000	180(A)
	32 2-Methylnaphthalene	142	5.731	5.738	(1.115)	598179	160.000	170(A)
	33 Hexachlorocyclopentadiene	237	5.881	5.878	(0.891)	259779	160.000	180(AQ)
	34 1,2,4,5-Tetrachlorobenzene	216	5.881	5.878	(0.891)	954196	160.000	180(A)
	35 2,4,6-Trichlorophenol	196	5.967	5.974	(0.904)	297313	160.000	180(A)
	36 2,4,5-Trichlorophenol	196	5.999	5.996	(0.909)	308771	160.000	190(A)
	37 1,1'-Biphenyl	154	6.117	6.124	(0.927)	767912	160.000	170(A)
	38 2-Chloronaphthalene	162	6.138	6.146	(0.930)	726576	160.000	180(A)
	39 2-Nitroaniline	65	6.213	6.221	(0.942)	353321	160.000	180(A)
$	40 Dimethylphthalate-d6	166	6.353	6.350	(0.963)	813301	160.000	170(A)
	41 Dimethylphthalate	163	6.374	6.371	(0.966)	731022	160.000	160(A)
	42 2,6-Dinitrotoluene	165	6.417	6.414	(0.972)	198638	160.000	180(A)
$	43 Acenaphthylene-d8	160	6.471	6.478	(0.981)	1071404	160.000	170(A)
	44 Acenaphthylene	152	6.481	6.489	(0.982)	964311	160.000	170(A)
	45 3-Nitroaniline	138	6.556	6.553	(0.994)	124790	160.000	170(A)
*	46 Acenaphthene-d10	164	6.599	6.607	(1.000)	131332	40.0000	
	47 Acenaphthene	153	6.631	6.628	(1.005)	650871	160.000	180(A)
	48 2,4-Dinitrophenol	184	6.642	6.639	(1.007)	113177	160.000	220(AQ)
	52 Dibenzofuran	168	6.771	6.779	(1.026)	904327	160.000	170(A)
$	49 4-Nitrophenol-d4	143	6.685	6.682	(1.013)	125573	160.000	180(A)
	50 4-Nitrophenol	109	6.696	6.693	(1.015)	247914	160.000	180(A)
	51 2,4-Dinitrotoluene	165	6.749	6.757	(1.023)	242541	160.000	170(AQ)
	118 2,3,4,6-Tetrachlorophenol	232	6.878	6.875	(1.042)	204288	160.000	180(A)
	53 Diethylphthalate	149	6.953	6.950	(1.054)	679754	160.000	160(A)
$	54 Fluorene-d10	176	7.039	7.036	(1.067)	733898	160.000	170(A)
	56 Fluorene	166	7.060	7.057	(1.070)	773517	160.000	170(A)
	55 4-Chlorophenyl-phenylether	204	7.050	7.057	(1.068)	386824	160.000	160(A)
	57 4-Nitroaniline	138	7.060	7.068	(1.070)	122002	160.000	150(Q)
$	58 4,6-Dinitro-2-methylphenol-d2	200	7.082	7.090	(0.904)	166098	160.000	190(A)
	59 4,6-Dinitro-2-methylphenol	198	7.093	7.090	(0.906)	160228	160.000	190(AQ)
	60 N-Nitrosodiphenylamine	169	7.146	7.154	(0.912)	587468	160.000	170(A)
	61 4-Bromophenyl-phenylether	248	7.457	7.465	(0.952)	203259	160.000	170(A)
	62 Hexachlorobenzene	284	7.522	7.529	(0.960)	212255	160.000	160(A)
	63 Atrazine	200	7.586	7.583	(0.969)	198672	160.000	160
	64 Pentachlorophenol	266	7.682	7.679	(0.981)	118477	160.000	190(A)
*	65 Phenanthrene-d10	188	7.832	7.840	(1.000)	226084	40.0000	
	66 Phenanthrene	178	7.854	7.862	(1.003)	1056637	160.000	170(A)
$	67 Anthracene-d10	188	7.886	7.883	(1.007)	1028619	160.000	160
	68 Anthracene	178	7.897	7.894	(1.008)	1088821	160.000	170(A)
	117 Carbazole	167	8.026	8.022	(1.025)	856417	160.000	160(A)
	70 Di-n-butylphthalate	149	8.304	8.312	(1.060)	813103	160.000	150
	71 Fluoranthene	202	8.862	8.859	(1.131)	960445	160.000	150
$	72 Pyrene-d10	212	9.044	9.041	(0.892)	745046	160.000	220(A)
	73 Pyrene	202	9.055	9.063	(0.893)	927058	160.000	210(A)
	74 Butylbenzylphthalate	149	9.613	9.620	(0.948)	254386	160.000	190(A)

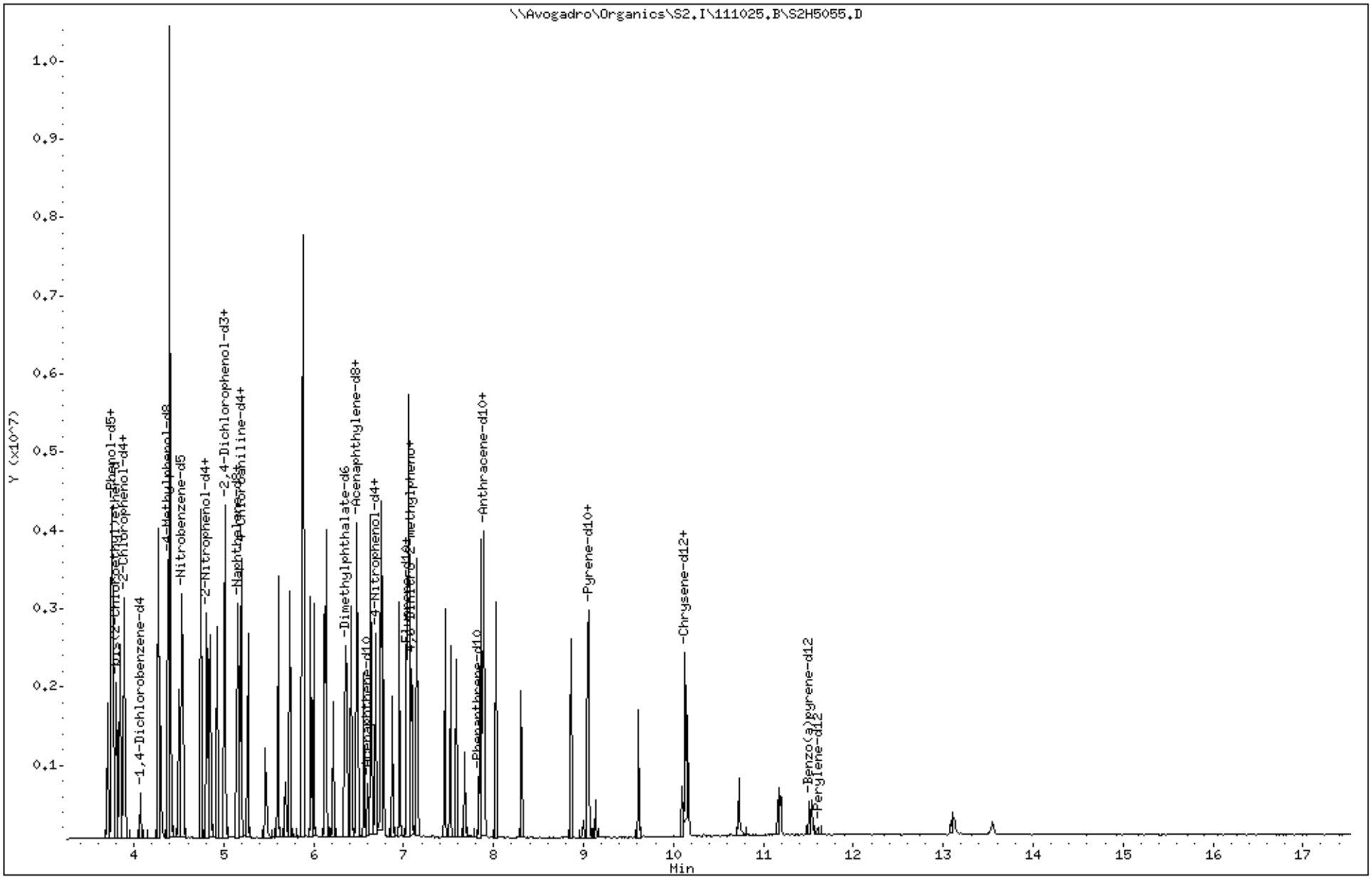
Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5055.D
Report Date: 26-Oct-2011 09:59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
75	3,3'-Dichlorobenzidine	252	10.095	10.114	(0.996)	126489	160.000	160
76	Benzo(a)anthracene	228	10.127	10.146	(0.999)	537512	160.000	170(A)
* 77	Chrysene-d12	240	10.138	10.156	(1.000)	109544	40.0000	(Q)
78	Chrysene	228	10.159	10.178	(1.002)	457251	160.000	160
79	bis(2-Ethylhexyl)phthalate	149	10.138	10.146	(1.000)	283596	160.000	170(A)
80	Di-n-octylphthalate	149	10.728	10.757	(0.924)	371034	160.000	200(A)
81	Benzo(b)fluoranthene	252	11.168	11.197	(0.962)	280439	160.000	170(A)
82	Benzo(k)fluoranthene	252	11.200	11.218	(0.965)	330277	160.000	170(A)
$ 83	Benzo(a)pyrene-d12	264	11.511	11.540	(0.992)	199793	160.000	160
84	Benzo(a)pyrene	252	11.543	11.572	(0.994)	237127	160.000	160(A)
* 85	Perylene-d12	264	11.607	11.636	(1.000)	50981	40.0000	
86	Indeno(1,2,3-cd)pyrene	276	13.098	13.127	(1.128)	176065	160.000	160
87	Dibenzo(a,h)anthracene	278	13.130	13.159	(1.131)	143627	160.000	160
88	Benzo(g,h,i)perylene	276	13.548	13.588	(1.167)	138852	160.000	150

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5055.D
Date : 25-OCT-2011 12:21
Client ID: SSTD0802W
Instrument: S2.i
Sample Info: SSTD0802W,SSTD0802W
Volume Injected (uL): 2.0
Operator: SRC:
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5056.D
Report Date: 26-Oct-2011 09:59

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111025.B\S2H5056.D
Lab Smp Id: SSTD0102W Client Smp ID: SSTD0102W
Inj Date : 25-OCT-2011 12:44
Operator : SRC: Inst ID: S2.i
Smp Info : SSTD0102W,SSTD0102W
Misc Info : 1,2
Comment   :
Method   : \\Avogadro\Organics\S2.I\111025.B\S2_SOM.m
Meth Date : 26-Oct-2011 09:59 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * (Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vi	2.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	1 Benzaldehyde	77	3.703	3.712	(0.908)	125412	20.0000	21
$	2 Phenol-d5	71	3.746	3.754	(0.919)	72033	20.0000	19
	3 Phenol	94	3.757	3.765	(0.921)	187725	20.0000	18
$	4 bis(2-Chloroethyl)ether-d8	67	3.800	3.797	(0.932)	100785	20.0000	19
	5 bis(2-Chloroethyl)ether	93	3.843	3.840	(0.942)	143038	20.0000	19
$	6 2-Chlorophenol-d4	132	3.885	3.883	(0.953)	62775	20.0000	19
	7 2-Chlorophenol	128	3.896	3.894	(0.955)	64198	20.0000	19
*	8 1,4-Dichlorobenzene-d4	152	4.078	4.076	(1.000)	120111	40.0000	(Q)
	9 2-Methylphenol	108	4.271	4.269	(1.047)	102895	20.0000	18
	10 2,2'-oxybis(1-Chloropropane)	45	4.293	4.291	(1.053)	150766	20.0000	20
$	11 4-Methylphenol-d8	113	4.368	4.376	(1.071)	90503	20.0000	18
	13 Acetophenone	105	4.400	4.398	(1.079)	183559	20.0000	19
	14 N-Nitroso-di-n-propylamine	70	4.400	4.398	(1.079)	87385	20.0000	18(Q)
	12 4-Methylphenol	108	4.389	4.398	(1.076)	97545	20.0000	17
	15 Hexachloroethane	117	4.497	4.505	(1.103)	50482	20.0000	19(Q)
$	16 Nitrobenzene-d5	128	4.529	4.527	(0.881)	32853	20.0000	20
	17 Nitrobenzene	77	4.540	4.548	(0.883)	161880	20.0000	19
	18 Isophorone	82	4.743	4.741	(0.923)	275053	20.0000	19
$	19 2-Nitrophenol-d4	143	4.808	4.805	(0.935)	34189	20.0000	18
	20 2-Nitrophenol	139	4.818	4.816	(0.937)	36775	20.0000	20
	21 2,4-Dimethylphenol	107	4.851	4.848	(0.944)	117444	20.0000	19(Q)

Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5056.D
Report Date: 26-Oct-2011 09:59

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
	22 bis(2-Chloroethoxy)methane	93	4.926	4.923	(0.958)	155215	20.0000	19
$	23 2,4-Dichlorophenol-d3	165	5.001	5.009	(0.973)	64330	20.0000	19
	24 2,4-Dichlorophenol	162	5.011	5.020	(0.975)	57855	20.0000	19
*	25 Naphthalene-d8	136	5.140	5.138	(1.000)	322412	40.0000	
	26 Naphthalene	128	5.151	5.159	(1.002)	164907	20.0000	20
$	27 4-Chloroaniline-d4	131	5.183	5.191	(1.008)	59697	20.0000	20(Q)
	28 4-Chloroaniline	127	5.194	5.191	(1.010)	66465	20.0000	20
	29 Hexachlorobutadiene	225	5.269	5.267	(1.025)	48784	20.0000	21
	30 Caprolactam	113	5.451	5.460	(1.060)	22983	20.0000	19
	31 4-Chloro-3-methylphenol	107	5.601	5.599	(1.090)	85751	20.0000	17
	32 2-Methylnaphthalene	142	5.730	5.738	(1.115)	108595	20.0000	19
	33 Hexachlorocyclopentadiene	237	5.880	5.878	(0.891)	47469	20.0000	20(Q)
	34 1,2,4,5-Tetrachlorobenzene	216	5.880	5.878	(0.891)	175138	20.0000	21
	35 2,4,6-Trichlorophenol	196	5.966	5.974	(0.904)	56712	20.0000	22
	36 2,4,5-Trichlorophenol	196	5.998	5.996	(0.909)	50977	20.0000	19(a)
	37 1,1'-Biphenyl	154	6.127	6.124	(0.928)	140310	20.0000	19
	38 2-Chloronaphthalene	162	6.137	6.146	(0.930)	135707	20.0000	21
	39 2-Nitroaniline	65	6.212	6.221	(0.941)	60092	20.0000	19
$	40 Dimethylphthalate-d6	166	6.352	6.350	(0.963)	144862	20.0000	19
	41 Dimethylphthalate	163	6.363	6.371	(0.964)	131624	20.0000	19
	42 2,6-Dinitrotoluene	165	6.416	6.414	(0.972)	33942	20.0000	19
$	43 Acenaphthylene-d8	160	6.470	6.478	(0.980)	198044	20.0000	20
	44 Acenaphthylene	152	6.481	6.489	(0.982)	173387	20.0000	19
	45 3-Nitroaniline	138	6.556	6.553	(0.993)	21927	20.0000	19
*	46 Acenaphthene-d10	164	6.599	6.607	(1.000)	206539	40.0000	
	47 Acenaphthene	153	6.631	6.628	(1.005)	117622	20.0000	20
	48 2,4-Dinitrophenol	184	6.641	6.639	(1.007)	10809	20.0000	13(Q)
	52 Dibenzofuran	168	6.770	6.779	(1.026)	174468	20.0000	20
$	49 4-Nitrophenol-d4	143	6.684	6.682	(1.013)	18648	20.0000	17
	50 4-Nitrophenol	109	6.684	6.693	(1.013)	35589	20.0000	17
	51 2,4-Dinitrotoluene	165	6.749	6.757	(1.023)	43019	20.0000	19(Q)
	118 2,3,4,6-Tetrachlorophenol	232	6.877	6.875	(1.042)	32406	20.0000	18
	53 Diethylphthalate	149	6.952	6.950	(1.054)	133920	20.0000	20
$	54 Fluorene-d10	176	7.027	7.036	(1.065)	137530	20.0000	20
	56 Fluorene	166	7.060	7.057	(1.070)	130330	20.0000	19
	55 4-Chlorophenyl-phenylether	204	7.049	7.057	(1.068)	71631	20.0000	19
	57 4-Nitroaniline	138	7.060	7.068	(1.070)	26593	20.0000	21(Q)
$	58 4,6-Dinitro-2-methylphenol-d2	200	7.081	7.090	(0.904)	22647	20.0000	17
	59 4,6-Dinitro-2-methylphenol	198	7.092	7.090	(0.906)	20088	20.0000	15(aQ)
	60 N-Nitrosodiphenylamine	169	7.145	7.154	(0.912)	107883	20.0000	21
	61 4-Bromophenyl-phenylether	248	7.456	7.465	(0.952)	38077	20.0000	20
	62 Hexachlorobenzene	284	7.521	7.529	(0.960)	40531	20.0000	20
	63 Atrazine	200	7.585	7.583	(0.969)	37213	20.0000	20
	64 Pentachlorophenol	266	7.682	7.679	(0.981)	15010	20.0000	16
*	65 Phenanthrene-d10	188	7.832	7.840	(1.000)	343880	40.0000	
	66 Phenanthrene	178	7.853	7.862	(1.003)	190037	20.0000	20
$	67 Anthracene-d10	188	7.885	7.883	(1.007)	189817	20.0000	19
	68 Anthracene	178	7.896	7.894	(1.008)	195947	20.0000	20
	117 Carbazole	167	8.025	8.022	(1.025)	160106	20.0000	20
	70 Di-n-butylphthalate	149	8.304	8.312	(1.060)	177045	20.0000	21
	71 Fluoranthene	202	8.850	8.859	(1.130)	197940	20.0000	20
$	72 Pyrene-d10	212	9.033	9.041	(0.893)	157501	20.0000	18(H)
	73 Pyrene	202	9.043	9.063	(0.894)	195088	20.0000	18
	74 Butylbenzylphthalate	149	9.590	9.620	(0.948)	63891	20.0000	19

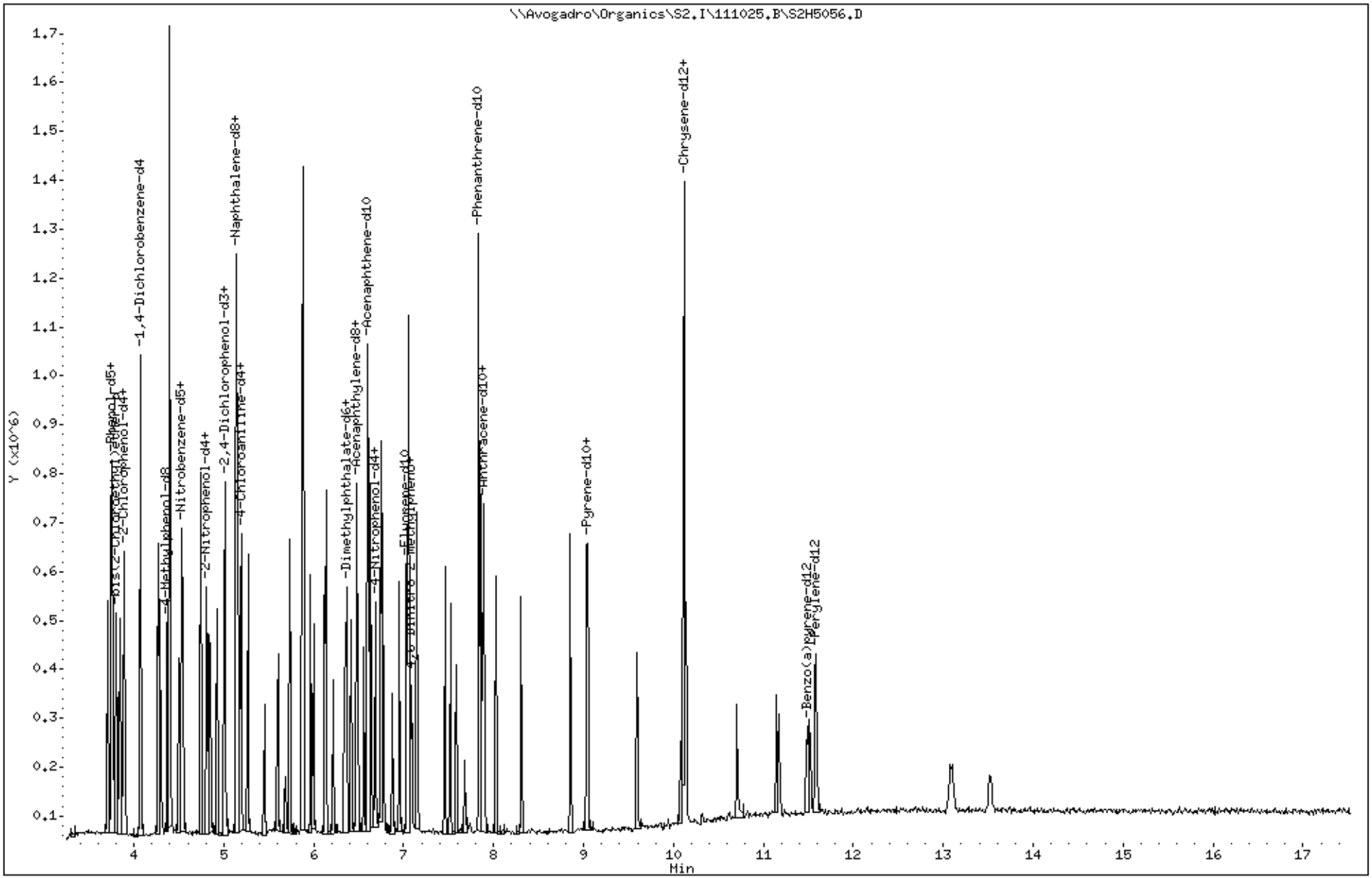
Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5056.D
Report Date: 26-Oct-2011 09:59

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
	75	3,3'-Dichlorobenzidine	252	10.073	10.114	(0.996)	40595	20.0000	20
	76	Benzo(a)anthracene	228	10.105	10.146	(0.999)	158537	20.0000	20
*	77	Chrysene-d12	240	10.116	10.156	(1.000)	273540	40.0000	(Q)
	78	Chrysene	228	10.137	10.178	(1.002)	143301	20.0000	20
	79	bis(2-Ethylhexyl)phthalate	149	10.116	10.146	(1.000)	81805	20.0000	20
	80	Di-n-octylphthalate	149	10.706	10.757	(0.924)	120856	20.0000	18
	81	Benzo(b)fluoranthene	252	11.145	11.197	(0.962)	110449	20.0000	18
	82	Benzo(k)fluoranthene	252	11.177	11.218	(0.965)	135076	20.0000	20
$	83	Benzo(a)pyrene-d12	264	11.488	11.540	(0.992)	89501	20.0000	20
	84	Benzo(a)pyrene	252	11.510	11.572	(0.994)	101587	20.0000	19
*	85	Perylene-d12	264	11.585	11.636	(1.000)	184086	40.0000	
	86	Indeno(1,2,3-cd)pyrene	276	13.076	13.127	(1.129)	83072	20.0000	21
	87	Dibenzo(a,h)anthracene	278	13.097	13.159	(1.131)	68344	20.0000	21
	88	Benzo(g,h,i)perylene	276	13.526	13.588	(1.168)	71594	20.0000	21

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5056.D
Date : 25-OCT-2011 12:44
Client ID: SSTD0102W
Instrument: S2.i
Sample Info: SSTD0102W,SSTD0102W
Volume Injected (uL): 2.0
Operator: SRC:
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5057.D
Report Date: 26-Oct-2011 09:59

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111025.B\S2H5057.D
Lab Smp Id: SSTD0402W Client Smp ID: SSTD0402W
Inj Date : 25-OCT-2011 13:07
Operator : SRC: Inst ID: S2.i
Smp Info : SSTD0402W,SSTD0402W
Misc Info : 1,4
Comment   :
Method   : \\Avogadro\Organics\S2.I\111025.B\S2_SOM.m
Meth Date : 26-Oct-2011 09:59 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 5 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * (Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vi	2.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	1 Benzaldehyde	77	3.712	3.712	(0.911)	288681	80.0000	73
$	2 Phenol-d5	71	3.754	3.754	(0.921)	212629	80.0000	84
	3 Phenol	94	3.765	3.765	(0.924)	586212	80.0000	85
$	4 bis(2-Chloroethyl)ether-d8	67	3.797	3.797	(0.932)	284521	80.0000	82
	5 bis(2-Chloroethyl)ether	93	3.840	3.840	(0.942)	426615	80.0000	84
$	6 2-Chlorophenol-d4	132	3.883	3.883	(0.953)	174526	80.0000	80
	7 2-Chlorophenol	128	3.894	3.894	(0.955)	184166	80.0000	82
*	8 1,4-Dichlorobenzene-d4	152	4.076	4.076	(1.000)	80213	40.0000	(Q)
	9 2-Methylphenol	108	4.269	4.269	(1.047)	315832	80.0000	83
	10 2,2'-oxybis(1-Chloropropane)	45	4.291	4.291	(1.053)	417484	80.0000	81
$	11 4-Methylphenol-d8	113	4.376	4.376	(1.074)	298167	80.0000	87
	13 Acetophenone	105	4.398	4.398	(1.079)	535739	80.0000	82
	14 N-Nitroso-di-n-propylamine	70	4.398	4.398	(1.079)	263946	80.0000	83(Q)
	12 4-Methylphenol	108	4.398	4.398	(1.079)	337112	80.0000	87
	15 Hexachloroethane	117	4.505	4.505	(1.105)	142345	80.0000	81(Q)
$	16 Nitrobenzene-d5	128	4.527	4.527	(0.881)	96319	80.0000	79(Q)
	17 Nitrobenzene	77	4.548	4.548	(0.885)	518558	80.0000	85
	18 Isophorone	82	4.741	4.741	(0.923)	882963	80.0000	84
$	19 2-Nitrophenol-d4	143	4.805	4.805	(0.935)	117618	80.0000	87
	20 2-Nitrophenol	139	4.816	4.816	(0.937)	110164	80.0000	83
	21 2,4-Dimethylphenol	107	4.848	4.848	(0.944)	391699	80.0000	85(Q)

Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5057.D
Report Date: 26-Oct-2011 09:59

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
	22 bis(2-Chloroethoxy)methane	93	4.923	4.923	(0.958)	494082	80.0000	85
$	23 2,4-Dichlorophenol-d3	165	5.009	5.009	(0.975)	210720	80.0000	85
	24 2,4-Dichlorophenol	162	5.020	5.020	(0.977)	193773	80.0000	85
*	25 Naphthalene-d8	136	5.138	5.138	(1.000)	235234	40.0000	
	26 Naphthalene	128	5.159	5.159	(1.004)	482017	80.0000	80
$	27 4-Chloroaniline-d4	131	5.191	5.191	(1.010)	185866	80.0000	85(Q)
	28 4-Chloroaniline	127	5.191	5.191	(1.010)	205320	80.0000	85
	29 Hexachlorobutadiene	225	5.266	5.267	(1.025)	137369	80.0000	81
	30 Caprolactam	113	5.459	5.460	(1.063)	81646	80.0000	90
	31 4-Chloro-3-methylphenol	107	5.599	5.599	(1.090)	319912	80.0000	87
	32 2-Methylnaphthalene	142	5.738	5.738	(1.117)	341151	80.0000	82
	33 Hexachlorocyclopentadiene	237	5.878	5.878	(0.890)	166402	80.0000	88(Q)
	34 1,2,4,5-Tetrachlorobenzene	216	5.878	5.878	(0.890)	542388	80.0000	80
	35 2,4,6-Trichlorophenol	196	5.963	5.974	(0.903)	154742	80.0000	74
	36 2,4,5-Trichlorophenol	196	5.996	5.996	(0.907)	175026	80.0000	82
	37 1,1'-Biphenyl	154	6.124	6.124	(0.927)	480034	80.0000	80
	38 2-Chloronaphthalene	162	6.135	6.146	(0.929)	402180	80.0000	75
	39 2-Nitroaniline	65	6.221	6.221	(0.942)	200029	80.0000	78
$	40 Dimethylphthalate-d6	166	6.350	6.350	(0.961)	526305	80.0000	85
	41 Dimethylphthalate	163	6.371	6.371	(0.964)	476639	80.0000	82
	42 2,6-Dinitrotoluene	165	6.414	6.414	(0.971)	115289	80.0000	81
$	43 Acenaphthylene-d8	160	6.478	6.478	(0.981)	636418	80.0000	79
	44 Acenaphthylene	152	6.489	6.489	(0.982)	590360	80.0000	80
	45 3-Nitroaniline	138	6.553	6.553	(0.992)	80117	80.0000	85
*	46 Acenaphthene-d10	164	6.607	6.607	(1.000)	169053	40.0000	
	47 Acenaphthene	153	6.628	6.628	(1.003)	370943	80.0000	78
	48 2,4-Dinitrophenol	184	6.639	6.639	(1.005)	62664	80.0000	96(Q)
	52 Dibenzofuran	168	6.768	6.779	(1.024)	551983	80.0000	79
$	49 4-Nitrophenol-d4	143	6.682	6.682	(1.011)	77295	80.0000	86
	50 4-Nitrophenol	109	6.693	6.693	(1.013)	147800	80.0000	85
	51 2,4-Dinitrotoluene	165	6.746	6.757	(1.021)	147926	80.0000	81(Q)
	118 2,3,4,6-Tetrachlorophenol	232	6.875	6.875	(1.041)	126259	80.0000	86
	53 Diethylphthalate	149	6.950	6.950	(1.052)	434279	80.0000	80
$	54 Fluorene-d10	176	7.036	7.036	(1.065)	458533	80.0000	80
	56 Fluorene	166	7.057	7.057	(1.068)	476393	80.0000	83
	55 4-Chlorophenyl-phenylether	204	7.057	7.057	(1.068)	245071	80.0000	81
	57 4-Nitroaniline	138	7.057	7.068	(1.068)	85579	80.0000	82
$	58 4,6-Dinitro-2-methylphenol-d2	200	7.079	7.090	(0.904)	97757	80.0000	85(Q)
	59 4,6-Dinitro-2-methylphenol	198	7.089	7.090	(0.906)	96645	80.0000	86(Q)
	60 N-Nitrosodiphenylamine	169	7.143	7.154	(0.912)	357175	80.0000	80
	61 4-Bromophenyl-phenylether	248	7.454	7.465	(0.952)	125318	80.0000	79
	62 Hexachlorobenzene	284	7.518	7.529	(0.960)	133889	80.0000	79
	63 Atrazine	200	7.583	7.583	(0.969)	144690	80.0000	90
	64 Pentachlorophenol	266	7.679	7.679	(0.981)	78593	80.0000	95
*	65 Phenanthrene-d10	188	7.829	7.840	(1.000)	293271	40.0000	
	66 Phenanthrene	178	7.851	7.862	(1.003)	666621	80.0000	81
$	67 Anthracene-d10	188	7.883	7.883	(1.007)	693154	80.0000	83
	68 Anthracene	178	7.894	7.894	(1.008)	686895	80.0000	82
	117 Carbazole	167	8.022	8.022	(1.025)	567776	80.0000	84
	70 Di-n-butylphthalate	149	8.301	8.312	(1.060)	624097	80.0000	86
	71 Fluoranthene	202	8.848	8.859	(1.130)	735264	80.0000	87
$	72 Pyrene-d10	212	9.020	9.041	(0.888)	551098	80.0000	74
	73 Pyrene	202	9.041	9.063	(0.890)	739941	80.0000	78
	74 Butylbenzylphthalate	149	9.577	9.620	(0.943)	248048	80.0000	85

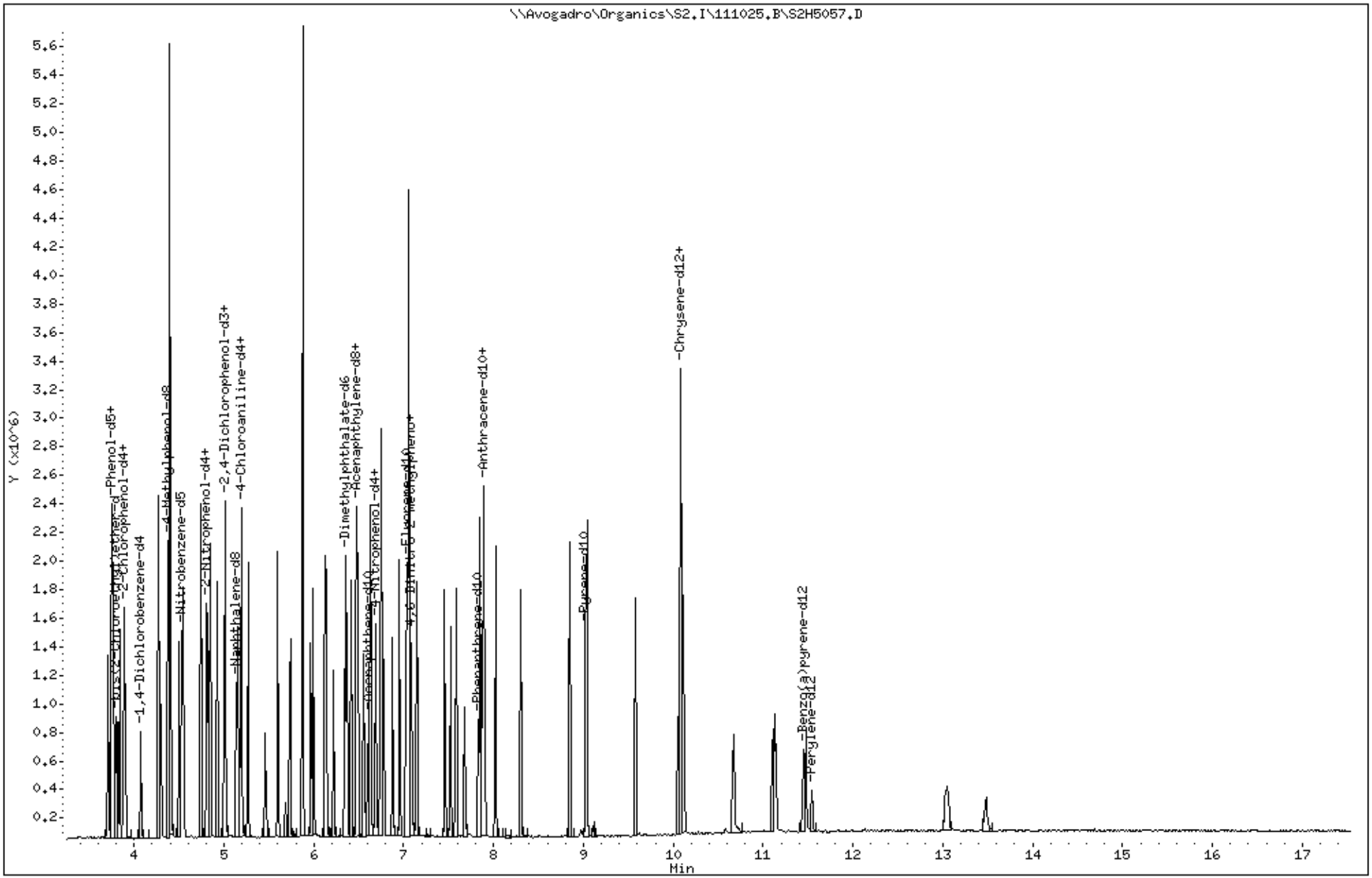
Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5057.D
Report Date: 26-Oct-2011 09:59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	75 3,3'-Dichlorobenzidine	252	10.049	10.114	(0.989)	156205	80.0000	90
	76 Benzo(a)anthracene	228	10.081	10.146	(0.993)	567091	80.0000	81(H)
*	77 Chrysene-d12	240	10.092	10.156	(1.000)	235322	40.0000	(QH)
	78 Chrysene	228	10.114	10.178	(0.996)	494156	80.0000	80(H)
	79 bis(2-Ethylhexyl)phthalate	149	10.081	10.146	(0.993)	295783	80.0000	83
	80 Di-n-octylphthalate	149	10.671	10.757	(0.925)	431178	80.0000	88
	81 Benzo(b)fluoranthene	252	11.111	11.197	(0.963)	399407	80.0000	92
	82 Benzo(k)fluoranthene	252	11.132	11.218	(0.965)	397379	80.0000	79
$	83 Benzo(a)pyrene-d12	264	11.443	11.540	(0.992)	279187	80.0000	85
	84 Benzo(a)pyrene	252	11.475	11.572	(0.994)	328830	80.0000	86
*	85 Perylene-d12	264	11.540	11.636	(1.000)	134320	40.0000	
	86 Indeno(1,2,3-cd)pyrene	276	13.030	13.127	(1.129)	243524	80.0000	83
	87 Dibenzo(a,h)anthracene	278	13.052	13.159	(1.131)	204038	80.0000	84
	88 Benzo(g,h,i)perylene	276	13.481	13.588	(1.168)	204085	80.0000	84

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5057.D
Date : 25-OCT-2011 13:07
Client ID: SSTD0402W
Instrument: S2.i
Sample Info: SSTD0402W,SSTD0402W
Volume Injected (uL): 2.0
Operator: SRC:
Column phase: RXI-5SILMS
Column diameter: 0.25



7E - FORM VII SV-1

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date: 11/10/2011 Time: 9:31

Lab File ID: S2H5248.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202X Init. Calib. Time(s): 11:35 13:07

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{\text{RRF}}$	RRF020	MIN RRF	%D	MAX %D
Benzaldehyde	1.964	1.871	0.010	-4.7	40.0
Phenol	3.455	3.207	0.800	-7.2	25.0
Bis(2-chloroethyl)ether	2.539	2.322	0.700	-8.5	25.0
2-Chlorophenol	1.121	1.125	0.800	0.4	25.0
2-Methylphenol	1.896	1.998	0.700	5.4	25.0
2,2´-Oxybis(1-chloropropane)	2.566	2.328	0.010	-9.3	40.0
Acetophenone	3.271	3.333	0.010	1.9	40.0
4-Methylphenol	1.942	2.158	0.600	11.1	25.0
N-Nitroso-di-n-propylamine	1.580	1.678	0.500	6.3	25.0
Hexachloroethane	0.872	0.871	0.300	-0.1	25.0
Nitrobenzene	1.043	0.954	0.200	-8.5	25.0
Isophorone	1.782	1.862	0.400	4.5	25.0
2-Nitrophenol	0.226	0.209	0.100	-7.3	25.0
2,4-Dimethylphenol	0.785	0.762	0.200	-2.9	25.0
Bis(2-chloroethoxy)methane	0.992	1.029	0.300	3.7	25.0
2,4-Dichlorophenol	0.386	0.400	0.200	3.6	25.0
Naphthalene	1.030	1.074	0.700	4.3	25.0
4-Chloroaniline	0.413	0.450	0.010	8.9	40.0
Hexachlorobutadiene	0.287	0.317	0.010	10.5	40.0
Caprolactam	0.154	0.182	0.010	18.2	40.0
4-Chloro-3-methylphenol	0.625	0.744	0.200	19.0	25.0
2-Methylnaphthalene	0.704	0.858	0.400	21.8	25.0
Hexachlorocyclopentadiene	0.450	0.395	0.010	-12.2	40.0
2,4,6-Trichlorophenol	0.494	0.527	0.200	6.6	25.0
2,4,5-Trichlorophenol	0.508	0.522	0.200	2.8	25.0
1,1´-Biphenyl	1.414	1.414	0.010	0.0	40.0
2-Chloronaphthalene	1.263	1.113	0.800	-11.9	25.0
2-Nitroaniline	0.606	0.555	0.010	-8.5	25.0
Dimethylphthalate	1.370	1.528	0.010	11.5	40.0
2,6-Dinitrotoluene	0.339	0.360	0.200	6.2	25.0
Acenaphthylene	1.742	1.619	0.900	-7.0	25.0
3-Nitroaniline	0.224	0.232	0.010	3.6	40.0
Acenaphthene	1.128	1.130	0.900	0.2	25.0

7F - FORM VII SV-2

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date: 11/10/2011 Time: 9:31

Lab File ID: S2H5248.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202X Init. Calib. Time(s): 11:35 13:07

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
2,4-Dinitrophenol	0.155	0.153	0.010	-1.5	40.0
4-Nitrophenol	0.410	0.402	0.010	-1.9	40.0
Dibenzofuran	1.657	1.600	0.800	-3.4	25.0
2,4-Dinitrotoluene	0.430	0.454	0.200	5.4	25.0
Diethylphthalate	1.288	1.194	0.010	-7.2	40.0
Fluorene	1.352	1.352	0.900	0.0	25.0
4-Chlorophenyl-phenylether	0.719	0.802	0.400	11.5	25.0
4-Nitroaniline	0.246	0.250	0.010	1.6	40.0
4,6-Dinitro-2-methylphenol	0.152	0.125	0.010	-17.8	40.0
N-Nitrosodiphenylamine [1]	0.610	0.674	0.010	10.4	40.0
1,2,4,5-Tetrachlorobenzene	1.610	1.338	0.010	-16.9	40.0
4-Bromophenyl-phenylether	0.217	0.204	0.100	-5.9	25.0
Hexachlorobenzene	0.231	0.214	0.100	-7.0	25.0
Atrazine	0.220	0.197	0.010	-10.4	40.0
Pentachlorophenol	0.113	0.100	0.050	-11.3	25.0
Phenanthrene	1.123	1.026	0.700	-8.7	25.0
Anthracene	1.142	1.057	0.700	-7.5	25.0
Carbazole	0.923	0.935	0.010	1.3	40.0
Di-n-butylphthalate	0.991	0.930	0.010	-6.2	40.0
Fluoranthene	1.156	1.175	0.600	1.7	25.0
Pyrene	1.604	1.479	0.600	-7.8	25.0
Butylbenzylphthalate	0.497	0.509	0.010	2.5	40.0
3,3´-Dichlorobenzidine	0.297	0.311	0.010	5.0	40.0
Benzo(a)anthracene	1.187	1.077	0.800	-9.3	25.0
Chrysene	1.047	1.008	0.700	-3.7	25.0
Bis(2-ethylhexyl)phthalate	0.608	0.663	0.010	9.1	40.0
Di-n-octylphthalate	1.456	0.890	0.010	-38.9	40.0
Benzo(b)fluoranthene	1.298	1.497	0.700	15.4	25.0
Benzo(k)fluoranthene	1.501	1.154	0.700	-23.1	25.0
Benzo(a)pyrene	1.140	1.013	0.700	-11.1	25.0
Indeno(1,2,3-cd)pyrene	0.878	0.825	0.500	-6.0	25.0
Dibenzo(a,h)anthracene	0.723	0.701	0.400	-3.1	25.0
Benzo(g,h,i)perylene	0.724	0.699	0.500	-3.4	25.0
2,3,4,6-Tetrachlorophenol	0.348	0.337	0.100	-3.4	25.0

(1) Cannot be separated from Diphenylamine

7G - FORM VII SV-3

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date: 11/10/2011 Time: 9:31

Lab File ID: S2H5248.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202X Init. Calib. Time(s): 11:35 13:07

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{\text{RRF}}$	RRF020	MIN RRF	%D	MAX %D
Phenol-d5	1.260	1.214	0.010	-3.6	25.0
Bis(2-chloroethyl)ether-d8	1.736	1.514	0.010	-12.8	25.0
2-Chlorophenol-d4	1.090	1.055	0.010	-3.2	25.0
4-Methylphenol-d8	1.708	1.950	0.010	14.2	25.0
Nitrobenzene-d5	0.208	0.217	0.010	4.0	40.0
2-Nitrophenol-d4	0.230	0.227	0.010	-1.3	25.0
2,4-Dichlorophenol-d3	0.420	0.456	0.010	8.6	25.0
4-Chloroaniline-d4	0.373	0.411	0.010	10.1	40.0
Dimethylphthalate-d6	1.471	1.461	0.010	-0.6	40.0
Acenaphthylene-d8	1.913	1.840	0.010	-3.8	25.0
4-Nitrophenol-d4	0.212	0.207	0.010	-2.5	40.0
Fluorene-d10	1.351	1.274	0.010	-5.7	25.0
4,6-Dinitro-2-methylphenol-d2	0.156	0.156	0.010	-0.2	25.0
Anthracene-d10	1.143	1.111	0.010	-2.7	25.0
Pyrene-d10	1.260	1.127	0.010	-10.6	25.0
Benzo(a)pyrene-d12	0.982	0.846	0.010	-13.8	25.0

7E - FORM VII SV-1
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date: 11/10/2011 Time: 18:26

Lab File ID: S2H5273.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202Y Init. Calib. Time(s): 11:35 13:07

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{\text{RRF}}$	RRF020	MIN RRF	%D	MAX %D
Benzaldehyde	1.964	1.724	0.010	-12.2	50.0
Phenol	3.455	3.047	0.010	-11.8	50.0
Bis(2-chloroethyl)ether	2.539	2.080	0.010	-18.1	50.0
2-Chlorophenol	1.121	1.048	0.010	-6.4	50.0
2-Methylphenol	1.896	1.798	0.010	-5.2	50.0
2,2´-Oxybis(1-chloropropane)	2.566	1.972	0.010	-23.2	50.0
Acetophenone	3.271	3.075	0.010	-6.0	50.0
4-Methylphenol	1.942	1.860	0.010	-4.2	50.0
N-Nitroso-di-n-propylamine	1.580	1.416	0.010	-10.4	50.0
Hexachloroethane	0.872	0.804	0.010	-7.8	50.0
Nitrobenzene	1.043	0.830	0.010	-20.5	50.0
Isophorone	1.782	1.678	0.010	-5.8	50.0
2-Nitrophenol	0.226	0.191	0.010	-15.3	50.0
2,4-Dimethylphenol	0.785	0.684	0.010	-12.9	50.0
Bis(2-chloroethoxy)methane	0.992	0.906	0.010	-8.7	50.0
2,4-Dichlorophenol	0.386	0.373	0.010	-3.4	50.0
Naphthalene	1.030	1.025	0.010	-0.4	50.0
4-Chloroaniline	0.413	0.411	0.010	-0.6	50.0
Hexachlorobutadiene	0.287	0.333	0.010	16.2	50.0
Caprolactam	0.154	0.148	0.010	-4.0	50.0
4-Chloro-3-methylphenol	0.625	0.647	0.010	3.5	50.0
2-Methylnaphthalene	0.704	0.748	0.010	6.3	50.0
Hexachlorocyclopentadiene	0.450	0.338	0.010	-24.9	50.0
2,4,6-Trichlorophenol	0.494	0.548	0.010	10.9	50.0
2,4,5-Trichlorophenol	0.508	0.529	0.010	4.2	50.0
1,1´-Biphenyl	1.414	1.359	0.010	-3.9	50.0
2-Chloronaphthalene	1.263	1.121	0.010	-11.3	50.0
2-Nitroaniline	0.606	0.482	0.010	-20.4	50.0
Dimethylphthalate	1.370	1.569	0.010	14.5	50.0
2,6-Dinitrotoluene	0.339	0.362	0.010	7.0	50.0
Acenaphthylene	1.742	1.662	0.010	-4.6	50.0
3-Nitroaniline	0.224	0.212	0.010	-5.5	50.0
Acenaphthene	1.128	1.039	0.010	-7.9	50.0

7F - FORM VII SV-2

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date: 11/10/2011 Time: 18:26

Lab File ID: S2H5273.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202Y Init. Calib. Time(s): 11:35 13:07

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
2,4-Dinitrophenol	0.155	0.113	0.010	-26.9	50.0
4-Nitrophenol	0.410	0.351	0.010	-14.3	50.0
Dibenzofuran	1.657	1.630	0.010	-1.6	50.0
2,4-Dinitrotoluene	0.430	0.440	0.010	2.2	50.0
Diethylphthalate	1.288	1.122	0.010	-12.9	50.0
Fluorene	1.352	1.225	0.010	-9.4	50.0
4-Chlorophenyl-phenylether	0.719	0.833	0.010	15.8	50.0
4-Nitroaniline	0.246	0.199	0.010	-19.4	50.0
4,6-Dinitro-2-methylphenol	0.152	0.124	0.010	-18.7	50.0
N-Nitrosodiphenylamine [1]	0.610	0.659	0.010	8.0	50.0
1,2,4,5-Tetrachlorobenzene	1.610	1.376	0.010	-14.5	50.0
4-Bromophenyl-phenylether	0.217	0.212	0.010	-2.0	50.0
Hexachlorobenzene	0.231	0.235	0.010	1.7	50.0
Atrazine	0.220	0.226	0.010	2.6	50.0
Pentachlorophenol	0.113	0.088	0.010	-21.4	50.0
Phenanthrene	1.123	1.057	0.010	-5.9	50.0
Anthracene	1.142	1.104	0.010	-3.3	50.0
Carbazole	0.923	0.804	0.010	-12.9	50.0
Di-n-butylphthalate	0.991	0.977	0.010	-1.4	50.0
Fluoranthene	1.156	1.081	0.010	-6.4	50.0
Pyrene	1.604	1.539	0.010	-4.1	50.0
Butylbenzylphthalate	0.497	0.516	0.010	3.9	50.0
3,3´-Dichlorobenzidine	0.297	0.269	0.010	-9.1	50.0
Benzo(a)anthracene	1.187	1.049	0.010	-11.6	50.0
Chrysene	1.047	0.956	0.010	-8.7	50.0
Bis(2-ethylhexyl)phthalate	0.608	0.725	0.010	19.3	50.0
Di-n-octylphthalate	1.456	0.973	0.010	-33.1	50.0
Benzo(b)fluoranthene	1.298	1.084	0.010	-16.4	50.0
Benzo(k)fluoranthene	1.501	1.380	0.010	-8.0	50.0
Benzo(a)pyrene	1.140	0.982	0.010	-13.9	50.0
Indeno(1,2,3-cd)pyrene	0.878	0.863	0.010	-1.8	50.0
Dibenzo(a,h)anthracene	0.723	0.720	0.010	-0.4	50.0
Benzo(g,h,i)perylene	0.724	0.779	0.010	7.6	50.0
2,3,4,6-Tetrachlorophenol	0.348	0.331	0.010	-4.9	50.0

(1) Cannot be separated from Diphenylamine

7G - FORM VII SV-3

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date: 11/10/2011 Time: 18:26

Lab File ID: S2H5273.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202Y Init. Calib. Time(s): 11:35 13:07

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{\text{RRF}}$	RRF020	MIN RRF	%D	MAX %D
Phenol-d5	1.260	1.036	0.010	-17.7	50.0
Bis(2-chloroethyl)ether-d8	1.736	1.384	0.010	-20.3	50.0
2-Chlorophenol-d4	1.090	1.002	0.010	-8.0	50.0
4-Methylphenol-d8	1.708	1.856	0.010	8.7	50.0
Nitrobenzene-d5	0.208	0.192	0.010	-8.0	50.0
2-Nitrophenol-d4	0.230	0.208	0.010	-9.6	50.0
2,4-Dichlorophenol-d3	0.420	0.439	0.010	4.5	50.0
4-Chloroaniline-d4	0.373	0.370	0.010	-0.6	50.0
Dimethylphthalate-d6	1.471	1.595	0.010	8.4	50.0
Acenaphthylene-d8	1.913	1.922	0.010	0.5	50.0
4-Nitrophenol-d4	0.212	0.150	0.010	-29.1	50.0
Fluorene-d10	1.351	1.289	0.010	-4.6	50.0
4,6-Dinitro-2-methylphenol-d2	0.156	0.140	0.010	-10.6	50.0
Anthracene-d10	1.143	1.078	0.010	-5.6	50.0
Pyrene-d10	1.260	1.262	0.010	0.1	50.0
Benzo(a)pyrene-d12	0.982	0.858	0.010	-12.5	50.0

7E - FORM VII SV-1

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date: 11/11/2011 Time: 9:01

Lab File ID: S2H5276.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202Z Init. Calib. Time(s): 11:35 13:07

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{\text{RRF}}$	RRF020	MIN RRF	%D	MAX %D
Benzaldehyde	1.964	1.896	0.010	-3.5	40.0
Phenol	3.455	3.239	0.800	-6.2	25.0
Bis(2-chloroethyl)ether	2.539	2.238	0.700	-11.9	25.0
2-Chlorophenol	1.121	1.028	0.800	-8.3	25.0
2-Methylphenol	1.896	1.810	0.700	-4.6	25.0
2,2´-Oxybis(1-chloropropane)	2.566	2.193	0.010	-14.5	40.0
Acetophenone	3.271	2.989	0.010	-8.6	40.0
4-Methylphenol	1.942	1.903	0.600	-2.0	25.0
N-Nitroso-di-n-propylamine	1.580	1.593	0.500	0.9	25.0
Hexachloroethane	0.872	0.863	0.300	-1.1	25.0
Nitrobenzene	1.043	0.987	0.200	-5.4	25.0
Isophorone	1.782	1.721	0.400	-3.4	25.0
2-Nitrophenol	0.226	0.236	0.100	4.5	25.0
2,4-Dimethylphenol	0.785	0.817	0.200	4.0	25.0
Bis(2-chloroethoxy)methane	0.992	1.091	0.300	10.0	25.0
2,4-Dichlorophenol	0.386	0.449	0.200	16.2	25.0
Naphthalene	1.030	1.092	0.700	6.0	25.0
4-Chloroaniline	0.413	0.466	0.010	12.8	40.0
Hexachlorobutadiene	0.287	0.339	0.010	18.1	40.0
Caprolactam	0.154	0.162	0.010	5.1	40.0
4-Chloro-3-methylphenol	0.625	0.648	0.200	3.7	25.0
2-Methylnaphthalene	0.704	0.794	0.400	12.7	25.0
Hexachlorocyclopentadiene	0.450	0.297	0.010	-34.0	40.0
2,4,6-Trichlorophenol	0.494	0.390	0.200	-21.0	25.0
2,4,5-Trichlorophenol	0.508	0.432	0.200	-14.9	25.0
1,1´-Biphenyl	1.414	1.200	0.010	-15.1	40.0
2-Chloronaphthalene	1.263	1.144	0.800	-9.4	25.0
2-Nitroaniline	0.606	0.495	0.010	-18.3	25.0
Dimethylphthalate	1.370	1.274	0.010	-7.0	40.0
2,6-Dinitrotoluene	0.339	0.321	0.200	-5.1	25.0
Acenaphthylene	1.742	1.598	0.900	-8.3	25.0
3-Nitroaniline	0.224	0.204	0.010	-9.0	40.0
Acenaphthene	1.128	1.030	0.900	-8.6	25.0

7F - FORM VII SV-2

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date: 11/11/2011 Time: 9:01

Lab File ID: S2H5276.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202Z Init. Calib. Time(s): 11:35 13:07

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
2,4-Dinitrophenol	0.155	0.115	0.010	-25.9	40.0
4-Nitrophenol	0.410	0.351	0.010	-14.4	40.0
Dibenzofuran	1.657	1.466	0.800	-11.5	25.0
2,4-Dinitrotoluene	0.430	0.392	0.200	-9.0	25.0
Diethylphthalate	1.288	1.237	0.010	-3.9	40.0
Fluorene	1.352	1.237	0.900	-8.5	25.0
4-Chlorophenyl-phenylether	0.719	0.710	0.400	-1.3	25.0
4-Nitroaniline	0.246	0.208	0.010	-15.7	40.0
4,6-Dinitro-2-methylphenol	0.152	0.114	0.010	-25.0	40.0
N-Nitrosodiphenylamine [1]	0.610	0.565	0.010	-7.4	40.0
1,2,4,5-Tetrachlorobenzene	1.610	1.352	0.010	-16.0	40.0
4-Bromophenyl-phenylether	0.217	0.217	0.100	-0.1	25.0
Hexachlorobenzene	0.231	0.216	0.100	-6.4	25.0
Atrazine	0.220	0.214	0.010	-2.7	40.0
Pentachlorophenol	0.113	0.079	0.050	-29.8	25.0
Phenanthrene	1.123	0.991	0.700	-11.8	25.0
Anthracene	1.142	0.934	0.700	-18.2	25.0
Carbazole	0.923	0.789	0.010	-14.5	40.0
Di-n-butylphthalate	0.991	1.041	0.010	5.0	40.0
Fluoranthene	1.156	1.061	0.600	-8.2	25.0
Pyrene	1.604	1.627	0.600	1.4	25.0
Butylbenzylphthalate	0.497	0.566	0.010	14.0	40.0
3,3´-Dichlorobenzidine	0.297	0.327	0.010	10.3	40.0
Benzo(a)anthracene	1.187	1.066	0.800	-10.2	25.0
Chrysene	1.047	0.991	0.700	-5.3	25.0
Bis(2-ethylhexyl)phthalate	0.608	0.732	0.010	20.4	40.0
Di-n-octylphthalate	1.456	1.492	0.010	2.5	40.0
Benzo(b)fluoranthene	1.298	1.268	0.700	-2.3	25.0
Benzo(k)fluoranthene	1.501	1.198	0.700	-20.2	25.0
Benzo(a)pyrene	1.140	1.034	0.700	-9.3	25.0
Indeno(1,2,3-cd)pyrene	0.878	0.934	0.500	6.3	25.0
Dibenzo(a,h)anthracene	0.723	0.747	0.400	3.3	25.0
Benzo(g,h,i)perylene	0.724	0.791	0.500	9.3	25.0
2,3,4,6-Tetrachlorophenol	0.348	0.294	0.100	-15.6	25.0

(1) Cannot be separated from Diphenylamine

7G - FORM VII SV-3

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date: 11/11/2011 Time: 9:01

Lab File ID: S2H5276.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202Z Init. Calib. Time(s): 11:35 13:07

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{\text{RRF}}$	RRF020	MIN RRF	%D	MAX %D
Phenol-d5	1.260	1.136	0.010	-9.8	25.0
Bis(2-chloroethyl)ether-d8	1.736	1.552	0.010	-10.6	25.0
2-Chlorophenol-d4	1.090	1.073	0.010	-1.5	25.0
4-Methylphenol-d8	1.708	1.855	0.010	8.6	25.0
Nitrobenzene-d5	0.208	0.215	0.010	3.0	40.0
2-Nitrophenol-d4	0.230	0.250	0.010	8.8	25.0
2,4-Dichlorophenol-d3	0.420	0.495	0.010	17.8	25.0
4-Chloroaniline-d4	0.373	0.475	0.010	27.4	40.0
Dimethylphthalate-d6	1.471	1.335	0.010	-9.2	40.0
Acenaphthylene-d8	1.913	1.672	0.010	-12.6	25.0
4-Nitrophenol-d4	0.212	0.132	0.010	-37.7	40.0
Fluorene-d10	1.351	1.317	0.010	-2.5	25.0
4,6-Dinitro-2-methylphenol-d2	0.156	0.114	0.010	-26.9	25.0
Anthracene-d10	1.143	1.056	0.010	-7.6	25.0
Pyrene-d10	1.260	1.199	0.010	-4.9	25.0
Benzo(a)pyrene-d12	0.982	0.852	0.010	-13.2	25.0

7E - FORM VII SV-1

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date: 11/11/2011 Time: 9:59

Lab File ID: S2H5278.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202A Init. Calib. Time(s): 11:35 13:07

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{\text{RRF}}$	RRF020	MIN RRF	%D	MAX %D
Benzaldehyde	1.964	1.823	0.010	-7.1	40.0
Phenol	3.455	3.091	0.800	-10.5	25.0
Bis(2-chloroethyl)ether	2.539	2.192	0.700	-13.7	25.0
2-Chlorophenol	1.121	1.100	0.800	-1.9	25.0
2-Methylphenol	1.896	1.778	0.700	-6.3	25.0
2,2´-Oxybis(1-chloropropane)	2.566	2.101	0.010	-18.1	40.0
Acetophenone	3.271	3.010	0.010	-8.0	40.0
4-Methylphenol	1.942	1.970	0.600	1.4	25.0
N-Nitroso-di-n-propylamine	1.580	1.634	0.500	3.4	25.0
Hexachloroethane	0.872	0.866	0.300	-0.7	25.0
Nitrobenzene	1.043	0.920	0.200	-11.8	25.0
Isophorone	1.782	1.653	0.400	-7.2	25.0
2-Nitrophenol	0.226	0.227	0.100	0.6	25.0
2,4-Dimethylphenol	0.785	0.809	0.200	3.1	25.0
Bis(2-chloroethoxy)methane	0.992	1.026	0.300	3.5	25.0
2,4-Dichlorophenol	0.386	0.394	0.200	2.1	25.0
Naphthalene	1.030	1.115	0.700	8.3	25.0
4-Chloroaniline	0.413	0.433	0.010	4.7	40.0
Hexachlorobutadiene	0.287	0.331	0.010	15.5	40.0
Caprolactam	0.154	0.158	0.010	2.7	40.0
4-Chloro-3-methylphenol	0.625	0.698	0.200	11.6	25.0
2-Methylnaphthalene	0.704	0.812	0.400	15.4	25.0
Hexachlorocyclopentadiene	0.450	0.314	0.010	-30.2	40.0
2,4,6-Trichlorophenol	0.494	0.436	0.200	-11.7	25.0
2,4,5-Trichlorophenol	0.508	0.520	0.200	2.2	25.0
1,1´-Biphenyl	1.414	1.281	0.010	-9.4	40.0
2-Chloronaphthalene	1.263	1.108	0.800	-12.3	25.0
2-Nitroaniline	0.606	0.513	0.010	-15.3	25.0
Dimethylphthalate	1.370	1.408	0.010	2.8	40.0
2,6-Dinitrotoluene	0.339	0.329	0.200	-3.0	25.0
Acenaphthylene	1.742	1.571	0.900	-9.8	25.0
3-Nitroaniline	0.224	0.222	0.010	-0.8	40.0
Acenaphthene	1.128	1.139	0.900	1.0	25.0

7F - FORM VII SV-2

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date: 11/11/2011 Time: 9:59

Lab File ID: S2H5278.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202A Init. Calib. Time(s): 11:35 13:07

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
2,4-Dinitrophenol	0.155	0.121	0.010	-22.0	40.0
4-Nitrophenol	0.410	0.353	0.010	-13.9	40.0
Dibenzofuran	1.657	1.539	0.800	-7.1	25.0
2,4-Dinitrotoluene	0.430	0.427	0.200	-0.8	25.0
Diethylphthalate	1.288	1.329	0.010	3.2	40.0
Fluorene	1.352	1.375	0.900	1.7	25.0
4-Chlorophenyl-phenylether	0.719	0.797	0.400	10.8	25.0
4-Nitroaniline	0.246	0.234	0.010	-4.9	40.0
4,6-Dinitro-2-methylphenol	0.152	0.111	0.010	-27.2	40.0
N-Nitrosodiphenylamine [1]	0.610	0.568	0.010	-6.8	40.0
1,2,4,5-Tetrachlorobenzene	1.610	1.340	0.010	-16.8	40.0
4-Bromophenyl-phenylether	0.217	0.199	0.100	-8.2	25.0
Hexachlorobenzene	0.231	0.219	0.100	-4.9	25.0
Atrazine	0.220	0.196	0.010	-11.0	40.0
Pentachlorophenol	0.113	0.087	0.050	-23.0	25.0
Phenanthrene	1.123	0.948	0.700	-15.6	25.0
Anthracene	1.142	0.931	0.700	-18.5	25.0
Carbazole	0.923	0.791	0.010	-14.3	40.0
Di-n-butylphthalate	0.991	0.903	0.010	-8.9	40.0
Fluoranthene	1.156	1.041	0.600	-10.0	25.0
Pyrene	1.604	1.433	0.600	-10.7	25.0
Butylbenzylphthalate	0.497	0.495	0.010	-0.4	40.0
3,3´-Dichlorobenzidine	0.297	0.312	0.010	5.2	40.0
Benzo(a)anthracene	1.187	1.145	0.800	-3.5	25.0
Chrysene	1.047	0.971	0.700	-7.2	25.0
Bis(2-ethylhexyl)phthalate	0.608	0.661	0.010	8.8	40.0
Di-n-octylphthalate	1.456	1.511	0.010	3.8	40.0
Benzo(b)fluoranthene	1.298	1.444	0.700	11.2	25.0
Benzo(k)fluoranthene	1.501	1.206	0.700	-19.6	25.0
Benzo(a)pyrene	1.140	1.016	0.700	-10.9	25.0
Indeno(1,2,3-cd)pyrene	0.878	0.985	0.500	12.1	25.0
Dibenzo(a,h)anthracene	0.723	0.812	0.400	12.3	25.0
Benzo(g,h,i)perylene	0.724	0.829	0.500	14.5	25.0
2,3,4,6-Tetrachlorophenol	0.348	0.292	0.100	-16.3	25.0

(1) Cannot be separated from Diphenylamine

7G - FORM VII SV-3

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date: 11/11/2011 Time: 9:59

Lab File ID: S2H5278.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202A Init. Calib. Time(s): 11:35 13:07

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{\text{RRF}}$	RRF020	MIN RRF	%D	MAX %D
Phenol-d5	1.260	1.168	0.010	-7.3	25.0
Bis(2-chloroethyl)ether-d8	1.736	1.533	0.010	-11.7	25.0
2-Chlorophenol-d4	1.090	1.035	0.010	-5.0	25.0
4-Methylphenol-d8	1.708	1.884	0.010	10.3	25.0
Nitrobenzene-d5	0.208	0.203	0.010	-2.4	40.0
2-Nitrophenol-d4	0.230	0.229	0.010	-0.5	25.0
2,4-Dichlorophenol-d3	0.420	0.508	0.010	20.9	25.0
4-Chloroaniline-d4	0.373	0.394	0.010	5.8	40.0
Dimethylphthalate-d6	1.471	1.454	0.010	-1.2	40.0
Acenaphthylene-d8	1.913	1.781	0.010	-6.9	25.0
4-Nitrophenol-d4	0.212	0.150	0.010	-29.4	40.0
Fluorene-d10	1.351	1.329	0.010	-1.6	25.0
4,6-Dinitro-2-methylphenol-d2	0.156	0.133	0.010	-14.7	25.0
Anthracene-d10	1.143	1.057	0.010	-7.5	25.0
Pyrene-d10	1.260	1.087	0.010	-13.7	25.0
Benzo(a)pyrene-d12	0.982	0.845	0.010	-13.9	25.0

7E - FORM VII SV-1
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date: 11/14/2011 Time: 16:35

Lab File ID: S2H5290.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202C Init. Calib. Time(s): 11:35 13:07

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
Benzaldehyde	1.964	1.963	0.010	-0.1	40.0
Phenol	3.455	3.698	0.800	7.0	25.0
Bis(2-chloroethyl)ether	2.539	2.369	0.700	-6.7	25.0
2-Chlorophenol	1.121	1.178	0.800	5.1	25.0
2-Methylphenol	1.896	1.982	0.700	4.5	25.0
2,2´-Oxybis(1-chloropropane)	2.566	2.509	0.010	-2.2	40.0
Acetophenone	3.271	3.660	0.010	11.9	40.0
4-Methylphenol	1.942	2.209	0.600	13.7	25.0
N-Nitroso-di-n-propylamine	1.580	2.104	0.500	33.2	25.0
Hexachloroethane	0.872	0.910	0.300	4.4	25.0
Nitrobenzene	1.043	0.970	0.200	-7.0	25.0
Isophorone	1.782	1.835	0.400	3.0	25.0
2-Nitrophenol	0.226	0.247	0.100	9.4	25.0
2,4-Dimethylphenol	0.785	0.753	0.200	-4.1	25.0
Bis(2-chloroethoxy)methane	0.992	0.994	0.300	0.2	25.0
2,4-Dichlorophenol	0.386	0.468	0.200	21.2	25.0
Naphthalene	1.030	1.125	0.700	9.3	25.0
4-Chloroaniline	0.413	0.511	0.010	23.7	40.0
Hexachlorobutadiene	0.287	0.278	0.010	-3.0	40.0
Caprolactam	0.154	0.214	0.010	39.3	40.0
4-Chloro-3-methylphenol	0.625	0.792	0.200	26.6	25.0
2-Methylnaphthalene	0.704	0.827	0.400	17.5	25.0
Hexachlorocyclopentadiene	0.450	0.370	0.010	-17.7	40.0
2,4,6-Trichlorophenol	0.494	0.462	0.200	-6.5	25.0
2,4,5-Trichlorophenol	0.508	0.456	0.200	-10.2	25.0
1,1´-Biphenyl	1.414	1.252	0.010	-11.5	40.0
2-Chloronaphthalene	1.263	1.128	0.800	-10.7	25.0
2-Nitroaniline	0.606	0.556	0.010	-8.3	25.0
Dimethylphthalate	1.370	1.485	0.010	8.4	40.0
2,6-Dinitrotoluene	0.339	0.362	0.200	7.0	25.0
Acenaphthylene	1.742	1.613	0.900	-7.4	25.0
3-Nitroaniline	0.224	0.242	0.010	7.9	40.0
Acenaphthene	1.128	1.067	0.900	-5.3	25.0

7F - FORM VII SV-2

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date: 11/14/2011 Time: 16:35

Lab File ID: S2H5290.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202C Init. Calib. Time(s): 11:35 13:07

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
2,4-Dinitrophenol	0.155	0.161	0.010	4.0	40.0
4-Nitrophenol	0.410	0.412	0.010	0.5	40.0
Dibenzofuran	1.657	1.541	0.800	-7.0	25.0
2,4-Dinitrotoluene	0.430	0.458	0.200	6.5	25.0
Diethylphthalate	1.288	1.336	0.010	3.8	40.0
Fluorene	1.352	1.421	0.900	5.1	25.0
4-Chlorophenyl-phenylether	0.719	0.721	0.400	0.2	25.0
4-Nitroaniline	0.246	0.237	0.010	-3.7	40.0
4,6-Dinitro-2-methylphenol	0.152	0.150	0.010	-1.9	40.0
N-Nitrosodiphenylamine [1]	0.610	0.592	0.010	-2.9	40.0
1,2,4,5-Tetrachlorobenzene	1.610	1.356	0.010	-15.8	40.0
4-Bromophenyl-phenylether	0.217	0.206	0.100	-5.0	25.0
Hexachlorobenzene	0.231	0.200	0.100	-13.2	25.0
Atrazine	0.220	0.243	0.010	10.5	40.0
Pentachlorophenol	0.113	0.106	0.050	-6.3	25.0
Phenanthrene	1.123	1.004	0.700	-10.6	25.0
Anthracene	1.142	1.076	0.700	-5.7	25.0
Carbazole	0.923	0.910	0.010	-1.4	40.0
Di-n-butylphthalate	0.991	1.131	0.010	14.1	40.0
Fluoranthene	1.156	1.142	0.600	-1.2	25.0
Pyrene	1.604	1.740	0.600	8.4	25.0
Butylbenzylphthalate	0.497	0.610	0.010	22.9	40.0
3,3´-Dichlorobenzidine	0.297	0.330	0.010	11.4	40.0
Benzo(a)anthracene	1.187	1.097	0.800	-7.6	25.0
Chrysene	1.047	0.985	0.700	-5.9	25.0
Bis(2-ethylhexyl)phthalate	0.608	0.731	0.010	20.4	40.0
Di-n-octylphthalate	1.456	1.910	0.010	31.2	40.0
Benzo(b)fluoranthene	1.298	1.390	0.700	7.1	25.0
Benzo(k)fluoranthene	1.501	1.343	0.700	-10.5	25.0
Benzo(a)pyrene	1.140	1.070	0.700	-6.2	25.0
Indeno(1,2,3-cd)pyrene	0.878	0.907	0.500	3.3	25.0
Dibenzo(a,h)anthracene	0.723	0.749	0.400	3.6	25.0
Benzo(g,h,i)perylene	0.724	0.743	0.500	2.7	25.0
2,3,4,6-Tetrachlorophenol	0.348	0.333	0.100	-4.4	25.0

(1) Cannot be separated from Diphenylamine

7G - FORM VII SV-3

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date: 11/14/2011 Time: 16:35

Lab File ID: S2H5290.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202C Init. Calib. Time(s): 11:35 13:07

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
Phenol-d5	1.260	1.331	0.010	5.7	25.0
Bis(2-chloroethyl)ether-d8	1.736	1.663	0.010	-4.2	25.0
2-Chlorophenol-d4	1.090	1.168	0.010	7.2	25.0
4-Methylphenol-d8	1.708	2.233	0.010	30.8	25.0
Nitrobenzene-d5	0.208	0.206	0.010	-1.2	40.0
2-Nitrophenol-d4	0.230	0.262	0.010	13.7	25.0
2,4-Dichlorophenol-d3	0.420	0.514	0.010	22.4	25.0
4-Chloroaniline-d4	0.373	0.458	0.010	23.0	40.0
Dimethylphthalate-d6	1.471	1.641	0.010	11.6	40.0
Acenaphthylene-d8	1.913	1.748	0.010	-8.6	25.0
4-Nitrophenol-d4	0.212	0.242	0.010	14.3	40.0
Fluorene-d10	1.351	1.298	0.010	-4.0	25.0
4,6-Dinitro-2-methylphenol-d2	0.156	0.148	0.010	-4.9	25.0
Anthracene-d10	1.143	1.134	0.010	-0.7	25.0
Pyrene-d10	1.260	1.275	0.010	1.2	25.0
Benzo(a)pyrene-d12	0.982	0.936	0.010	-4.7	25.0

7E - FORM VII SV-1

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date: 11/14/2011 Time: 18:23

Lab File ID: S2H5295.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202D Init. Calib. Time(s): 11:35 13:07

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{\text{RRF}}$	RRF020	MIN RRF	%D	MAX %D
Benzaldehyde	1.964	1.936	0.010	-1.4	50.0
Phenol	3.455	3.417	0.010	-1.1	50.0
Bis(2-chloroethyl)ether	2.539	2.582	0.010	1.7	50.0
2-Chlorophenol	1.121	1.144	0.010	2.1	50.0
2-Methylphenol	1.896	2.144	0.010	13.0	50.0
2,2´-Oxybis(1-chloropropane)	2.566	2.418	0.010	-5.8	50.0
Acetophenone	3.271	3.856	0.010	17.9	50.0
4-Methylphenol	1.942	2.495	0.010	28.5	50.0
N-Nitroso-di-n-propylamine	1.580	1.913	0.010	21.1	50.0
Hexachloroethane	0.872	0.873	0.010	0.2	50.0
Nitrobenzene	1.043	0.871	0.010	-16.5	50.0
Isophorone	1.782	1.821	0.010	2.2	50.0
2-Nitrophenol	0.226	0.212	0.010	-6.3	50.0
2,4-Dimethylphenol	0.785	0.726	0.010	-7.6	50.0
Bis(2-chloroethoxy)methane	0.992	0.943	0.010	-4.9	50.0
2,4-Dichlorophenol	0.386	0.393	0.010	1.7	50.0
Naphthalene	1.030	0.894	0.010	-13.2	50.0
4-Chloroaniline	0.413	0.470	0.010	13.9	50.0
Hexachlorobutadiene	0.287	0.265	0.010	-7.7	50.0
Caprolactam	0.154	0.204	0.010	32.7	50.0
4-Chloro-3-methylphenol	0.625	0.763	0.010	22.1	50.0
2-Methylnaphthalene	0.704	0.757	0.010	7.6	50.0
Hexachlorocyclopentadiene	0.450	0.347	0.010	-22.9	50.0
2,4,6-Trichlorophenol	0.494	0.433	0.010	-12.4	50.0
2,4,5-Trichlorophenol	0.508	0.496	0.010	-2.4	50.0
1,1´-Biphenyl	1.414	1.263	0.010	-10.7	50.0
2-Chloronaphthalene	1.263	1.067	0.010	-15.5	50.0
2-Nitroaniline	0.606	0.526	0.010	-13.1	50.0
Dimethylphthalate	1.370	1.455	0.010	6.2	50.0
2,6-Dinitrotoluene	0.339	0.351	0.010	3.7	50.0
Acenaphthylene	1.742	1.619	0.010	-7.0	50.0
3-Nitroaniline	0.224	0.237	0.010	5.7	50.0
Acenaphthene	1.128	0.878	0.010	-22.1	50.0

7F - FORM VII SV-2

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date: 11/14/2011 Time: 18:23

Lab File ID: S2H5295.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202D Init. Calib. Time(s): 11:35 13:07

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
2,4-Dinitrophenol	0.155	0.159	0.010	2.7	50.0
4-Nitrophenol	0.410	0.438	0.010	6.8	50.0
Dibenzofuran	1.657	1.555	0.010	-6.2	50.0
2,4-Dinitrotoluene	0.430	0.483	0.010	12.4	50.0
Diethylphthalate	1.288	1.172	0.010	-9.0	50.0
Fluorene	1.352	1.320	0.010	-2.4	50.0
4-Chlorophenyl-phenylether	0.719	0.693	0.010	-3.7	50.0
4-Nitroaniline	0.246	0.245	0.010	-0.6	50.0
4,6-Dinitro-2-methylphenol	0.152	0.125	0.010	-18.1	50.0
N-Nitrosodiphenylamine [1]	0.610	0.489	0.010	-19.8	50.0
1,2,4,5-Tetrachlorobenzene	1.610	1.235	0.010	-23.3	50.0
4-Bromophenyl-phenylether	0.217	0.211	0.010	-2.5	50.0
Hexachlorobenzene	0.231	0.213	0.010	-7.6	50.0
Atrazine	0.220	0.230	0.010	4.6	50.0
Pentachlorophenol	0.113	0.105	0.010	-6.3	50.0
Phenanthrene	1.123	0.980	0.010	-12.7	50.0
Anthracene	1.142	0.945	0.010	-17.2	50.0
Carbazole	0.923	0.914	0.010	-1.0	50.0
Di-n-butylphthalate	0.991	1.089	0.010	9.9	50.0
Fluoranthene	1.156	1.188	0.010	2.8	50.0
Pyrene	1.604	1.619	0.010	0.9	50.0
Butylbenzylphthalate	0.497	0.589	0.010	18.7	50.0
3,3´-Dichlorobenzidine	0.297	0.341	0.010	14.9	50.0
Benzo(a)anthracene	1.187	1.088	0.010	-8.3	50.0
Chrysene	1.047	0.972	0.010	-7.1	50.0
Bis(2-ethylhexyl)phthalate	0.608	0.743	0.010	22.3	50.0
Di-n-octylphthalate	1.456	2.087	0.010	43.4	50.0
Benzo(b)fluoranthene	1.298	1.294	0.010	-0.3	50.0
Benzo(k)fluoranthene	1.501	1.577	0.010	5.1	50.0
Benzo(a)pyrene	1.140	1.061	0.010	-7.0	50.0
Indeno(1,2,3-cd)pyrene	0.878	0.748	0.010	-14.9	50.0
Dibenzo(a,h)anthracene	0.723	0.654	0.010	-9.6	50.0
Benzo(g,h,i)perylene	0.724	0.592	0.010	-18.2	50.0
2,3,4,6-Tetrachlorophenol	0.348	0.354	0.010	1.7	50.0

(1) Cannot be separated from Diphenylamine

7G - FORM VII SV-3

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: S2 Calibration Date: 11/14/2011 Time: 18:23

Lab File ID: S2H5295.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202D Init. Calib. Time(s): 11:35 13:07

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{\text{RRF}}$	RRF020	MIN RRF	%D	MAX %D
Phenol-d5	1.260	1.296	0.010	2.9	50.0
Bis(2-chloroethyl)ether-d8	1.736	1.633	0.010	-5.9	50.0
2-Chlorophenol-d4	1.090	1.145	0.010	5.1	50.0
4-Methylphenol-d8	1.708	2.403	0.010	40.7	50.0
Nitrobenzene-d5	0.208	0.189	0.010	-9.2	50.0
2-Nitrophenol-d4	0.230	0.226	0.010	-1.9	50.0
2,4-Dichlorophenol-d3	0.420	0.441	0.010	5.1	50.0
4-Chloroaniline-d4	0.373	0.396	0.010	6.3	50.0
Dimethylphthalate-d6	1.471	1.451	0.010	-1.3	50.0
Acenaphthylene-d8	1.913	1.696	0.010	-11.3	50.0
4-Nitrophenol-d4	0.212	0.223	0.010	5.4	50.0
Fluorene-d10	1.351	1.345	0.010	-0.5	50.0
4,6-Dinitro-2-methylphenol-d2	0.156	0.144	0.010	-7.6	50.0
Anthracene-d10	1.143	1.117	0.010	-2.2	50.0
Pyrene-d10	1.260	1.394	0.010	10.6	50.0
Benzo(a)pyrene-d12	0.982	0.892	0.010	-9.1	50.0

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5248.D
Report Date: 11-Nov-2011 13:31

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5248.D
Lab Smp Id: SSTD0202X Client Smp ID: SSTD0202X
Inj Date : 10-NOV-2011 09:31
Operator : SRC: Inst ID: S2.i
Smp Info : SSTD0202X,SSTD0202X
Misc Info : 2,3
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * (Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vi	2.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	1 Benzaldehyde	77	3.320	3.320	(0.901)	151837	40.0000	38
$	2 Phenol-d5	71	3.373	3.373	(0.916)	98558	40.0000	39
	3 Phenol	94	3.384	3.384	(0.919)	260270	40.0000	37
$	4 bis(2-Chloroethyl)ether-d8	67	3.427	3.427	(0.930)	122865	40.0000	35
	5 bis(2-Chloroethyl)ether	93	3.459	3.459	(0.939)	188483	40.0000	37
$	6 2-Chlorophenol-d4	132	3.491	3.491	(0.948)	85606	40.0000	39
	7 2-Chlorophenol	128	3.513	3.513	(0.953)	91329	40.0000	40
*	8 1,4-Dichlorobenzene-d4	152	3.684	3.684	(1.000)	81169	40.0000	(Q)
	9 2-Methylphenol	108	3.899	3.899	(1.058)	162205	40.0000	42
	10 2,2'-oxybis(1-Chloropropane)	45	3.920	3.920	(1.064)	188950	40.0000	36(Q)
$	11 4-Methylphenol-d8	113	4.006	4.006	(1.087)	158281	40.0000	46
	13 Acetophenone	105	4.017	4.017	(1.090)	270534	40.0000	41
	14 N-Nitroso-di-n-propylamine	70	4.027	4.027	(1.093)	136241	40.0000	43(Q)
	12 4-Methylphenol	108	4.027	4.027	(1.093)	175187	40.0000	44
	15 Hexachloroethane	117	4.113	4.113	(1.116)	70677	40.0000	40(Q)
$	16 Nitrobenzene-d5	128	4.145	4.145	(0.873)	52408	40.0000	42(Q)
	17 Nitrobenzene	77	4.156	4.156	(0.876)	230880	40.0000	37
	18 Isophorone	82	4.360	4.360	(0.919)	450289	40.0000	42
$	19 2-Nitrophenol-d4	143	4.424	4.424	(0.932)	54922	40.0000	39
	20 2-Nitrophenol	139	4.435	4.435	(0.934)	50611	40.0000	37
	21 2,4-Dimethylphenol	107	4.478	4.478	(0.944)	184402	40.0000	39(Q)

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5248.D
Report Date: 11-Nov-2011 13:31

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	22 bis(2-Chloroethoxy)methane	93	4.553	4.553	(0.959)	248922	40.0000	41
$	23 2,4-Dichlorophenol-d3	165	4.628	4.628	(0.975)	110297	40.0000	43
	24 2,4-Dichlorophenol	162	4.639	4.639	(0.977)	96777	40.0000	41
*	25 Naphthalene-d8	136	4.746	4.746	(1.000)	241890	40.0000	
	26 Naphthalene	128	4.767	4.767	(1.004)	259859	40.0000	42
$	27 4-Chloroaniline-d4	131	4.810	4.810	(1.014)	99309	40.0000	44(Q)
	28 4-Chloroaniline	127	4.810	4.810	(1.014)	108795	40.0000	44
	29 Hexachlorobutadiene	225	4.885	4.885	(1.029)	76689	40.0000	44
	30 Caprolactam	113	5.078	5.078	(1.070)	43984	40.0000	47
	31 4-Chloro-3-methylphenol	107	5.228	5.228	(1.102)	180040	40.0000	48
	32 2-Methylnaphthalene	142	5.346	5.346	(1.127)	207465	40.0000	49
	33 Hexachlorocyclopentadiene	237	5.486	5.486	(0.884)	76055	40.0000	35(Q)
	34 1,2,4,5-Tetrachlorobenzene	216	5.486	5.486	(0.884)	257507	40.0000	33
	35 2,4,6-Trichlorophenol	196	5.582	5.582	(0.900)	101351	40.0000	43
	36 2,4,5-Trichlorophenol	196	5.615	5.615	(0.905)	100500	40.0000	41
	37 1,1'-Biphenyl	154	5.732	5.732	(0.924)	272093	40.0000	40
	38 2-Chloronaphthalene	162	5.743	5.743	(0.926)	214175	40.0000	35
	39 2-Nitroaniline	65	5.829	5.829	(0.940)	106783	40.0000	37
$	40 Dimethylphthalate-d6	166	5.968	5.968	(0.962)	281291	40.0000	40
	41 Dimethylphthalate	163	5.990	5.990	(0.965)	294018	40.0000	45
	42 2,6-Dinitrotoluene	165	6.033	6.033	(0.972)	69198	40.0000	42
$	43 Acenaphthylene-d8	160	6.076	6.076	(0.979)	354147	40.0000	38
	44 Acenaphthylene	152	6.086	6.086	(0.981)	311706	40.0000	37
	45 3-Nitroaniline	138	6.172	6.172	(0.995)	44734	40.0000	41(Q)
*	46 Acenaphthene-d10	164	6.204	6.204	(1.000)	192480	40.0000	
	47 Acenaphthene	153	6.236	6.236	(1.005)	217417	40.0000	40
	48 2,4-Dinitrophenol	184	6.258	6.258	(1.009)	29420	40.0000	39(Q)
	52 Dibenzofuran	168	6.376	6.376	(1.028)	307980	40.0000	39
$	49 4-Nitrophenol-d4	143	6.312	6.312	(1.017)	39793	40.0000	39(Q)
	50 4-Nitrophenol	109	6.322	6.322	(1.019)	77387	40.0000	39
	51 2,4-Dinitrotoluene	165	6.365	6.365	(1.026)	87293	40.0000	42(Q)
	118 2,3,4,6-Tetrachlorophenol	232	6.483	6.483	(1.045)	64789	40.0000	39
	53 Diethylphthalate	149	6.580	6.580	(1.060)	229868	40.0000	37
$	54 Fluorene-d10	176	6.633	6.633	(1.069)	245305	40.0000	38
	56 Fluorene	166	6.665	6.665	(1.074)	260277	40.0000	40
	55 4-Chlorophenyl-phenylether	204	6.665	6.665	(1.074)	154405	40.0000	45
	57 4-Nitroaniline	138	6.676	6.676	(1.076)	48182	40.0000	41(Q)
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.698	6.698	(0.901)	52485	40.0000	40
	59 4,6-Dinitro-2-methylphenol	198	6.708	6.708	(0.902)	42176	40.0000	33(Q)
	60 N-Nitrosodiphenylamine	169	6.762	6.762	(0.909)	226823	40.0000	44
	61 4-Bromophenyl-phenylether	248	7.073	7.073	(0.951)	68682	40.0000	38
	62 Hexachlorobenzene	284	7.127	7.127	(0.958)	72182	40.0000	37
	63 Atrazine	200	7.202	7.202	(0.968)	66389	40.0000	36
	64 Pentachlorophenol	266	7.287	7.287	(0.980)	33629	40.0000	35
*	65 Phenanthrene-d10	188	7.438	7.438	(1.000)	336767	40.0000	
	66 Phenanthrene	178	7.448	7.448	(1.001)	345394	40.0000	37
$	67 Anthracene-d10	188	7.480	7.480	(1.006)	374242	40.0000	39
	68 Anthracene	178	7.491	7.491	(1.007)	355846	40.0000	37
	117 Carbazole	167	7.631	7.631	(1.026)	314719	40.0000	41
	70 Di-n-butylphthalate	149	7.931	7.931	(1.066)	313180	40.0000	38
	71 Fluoranthene	202	8.435	8.435	(1.134)	395710	40.0000	41
$	72 Pyrene-d10	212	8.606	8.606	(0.890)	293406	40.0000	36
	73 Pyrene	202	8.628	8.628	(0.892)	384954	40.0000	37
	74 Butylbenzylphthalate	149	9.185	9.185	(0.950)	132544	40.0000	41

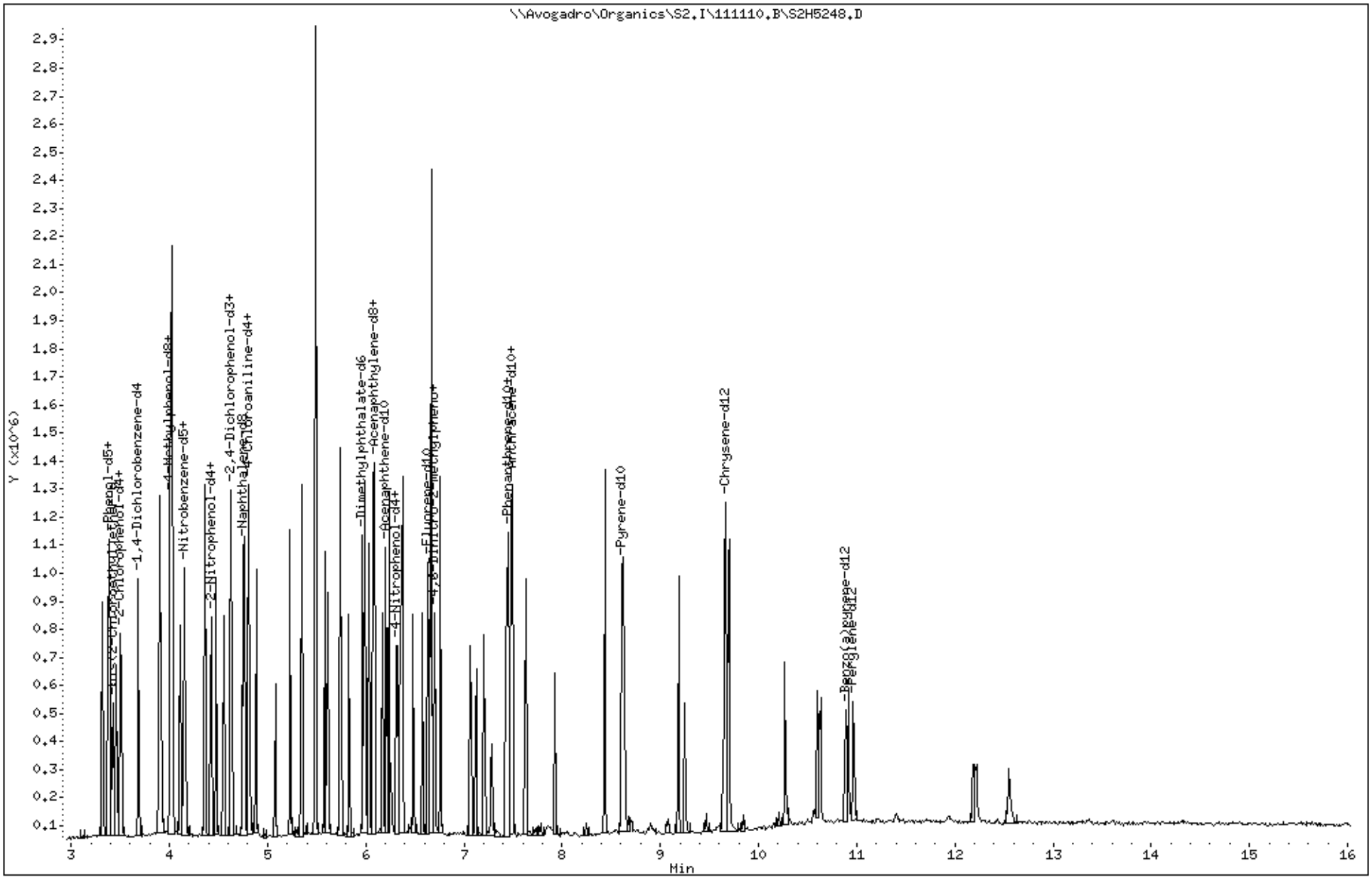
Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5248.D
Report Date: 11-Nov-2011 13:31

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	75 3,3'-Dichlorobenzidine	252	9.647	9.647	(0.998)	81084	40.0000	42
	76 Benzo(a)anthracene	228	9.657	9.657	(0.999)	280303	40.0000	36
*	77 Chrysene-d12	240	9.668	9.668	(1.000)	260346	40.0000	(Q)
	78 Chrysene	228	9.689	9.689	(1.002)	262365	40.0000	39
	79 bis(2-Ethylhexyl)phthalate	149	9.700	9.700	(1.003)	172633	40.0000	44
	80 Di-n-octylphthalate	149	9.700	9.700	(0.885)	168791	40.0000	24
	81 Benzo(b)fluoranthene	252	10.601	10.601	(0.967)	284057	40.0000	46
	82 Benzo(k)fluoranthene	252	10.633	10.633	(0.970)	218970	40.0000	31(Q)
$	83 Benzo(a)pyrene-d12	264	10.891	10.891	(0.993)	160563	40.0000	34
	84 Benzo(a)pyrene	252	10.912	10.912	(0.995)	192253	40.0000	36(Q)
*	85 Perylene-d12	264	10.966	10.966	(1.000)	189730	40.0000	
	86 Indeno(1,2,3-cd)pyrene	276	12.188	12.188	(1.111)	156608	40.0000	38
	87 Dibenzo(a,h)anthracene	278	12.220	12.220	(1.114)	133037	40.0000	39
	88 Benzo(g,h,i)perylene	276	12.553	12.553	(1.145)	132591	40.0000	39

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5248.D
Date : 10-NOV-2011 09:31
Client ID: SSTD0202X
Instrument: S2.i
Sample Info: SSTD0202X,SSTD0202X
Volume Injected (uL): 2.0
Operator: SRC:
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5273.D
Report Date: 15-Nov-2011 14:34

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5273.D
Lab Smp Id: SSTD0202Y Client Smp ID: SSTD0202Y
Inj Date : 10-NOV-2011 18:26
Operator : SRC: Inst ID: S2.i
Smp Info : SSTD0202Y,SSTD0202Y
Misc Info : 2,3
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 15-Nov-2011 14:34 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * (Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vi	2.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
	1 Benzaldehyde	77	3.328	3.328	(0.901)	120262	40.0000	35
$	2 Phenol-d5	71	3.393	3.393	(0.919)	72287	40.0000	33
	3 Phenol	94	3.403	3.403	(0.922)	212534	40.0000	35
$	4 bis(2-Chloroethyl)ether-d8	67	3.435	3.435	(0.930)	96530	40.0000	32
	5 bis(2-Chloroethyl)ether	93	3.468	3.468	(0.939)	145117	40.0000	33
$	6 2-Chlorophenol-d4	132	3.511	3.511	(0.951)	69898	40.0000	37
	7 2-Chlorophenol	128	3.521	3.521	(0.954)	73135	40.0000	37
*	8 1,4-Dichlorobenzene-d4	152	3.693	3.693	(1.000)	69753	40.0000	(Q)
	9 2-Methylphenol	108	3.907	3.907	(1.058)	125447	40.0000	38
	10 2,2'-oxybis(1-Chloropropane)	45	3.929	3.929	(1.064)	137527	40.0000	31
$	11 4-Methylphenol-d8	113	4.015	4.015	(1.087)	129438	40.0000	43
	13 Acetophenone	105	4.025	4.025	(1.090)	214502	40.0000	38
	14 N-Nitroso-di-n-propylamine	70	4.036	4.036	(1.093)	98751	40.0000	36(Q)
	12 4-Methylphenol	108	4.036	4.036	(1.093)	129768	40.0000	38
	15 Hexachloroethane	117	4.122	4.122	(1.116)	56069	40.0000	37(Q)
$	16 Nitrobenzene-d5	128	4.154	4.154	(0.874)	39366	40.0000	37
	17 Nitrobenzene	77	4.165	4.165	(0.876)	170489	40.0000	32
	18 Isophorone	82	4.368	4.368	(0.919)	344804	40.0000	38
$	19 2-Nitrophenol-d4	143	4.433	4.433	(0.932)	42722	40.0000	36
	20 2-Nitrophenol	139	4.443	4.443	(0.935)	39268	40.0000	34
	21 2,4-Dimethylphenol	107	4.486	4.486	(0.944)	140529	40.0000	35(Q)

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5273.D
Report Date: 15-Nov-2011 14:34

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
	22 bis(2-Chloroethoxy)methane	93	4.561	4.561	(0.959)	186105	40.0000	37
$	23 2,4-Dichlorophenol-d3	165	4.637	4.637	(0.975)	90165	40.0000	42
	24 2,4-Dichlorophenol	162	4.647	4.647	(0.977)	76656	40.0000	39
*	25 Naphthalene-d8	136	4.754	4.754	(1.000)	205471	40.0000	
	26 Naphthalene	128	4.776	4.776	(1.004)	210616	40.0000	40
$	27 4-Chloroaniline-d4	131	4.819	4.819	(1.014)	76105	40.0000	40(Q)
	28 4-Chloroaniline	127	4.819	4.819	(1.014)	84372	40.0000	40
	29 Hexachlorobutadiene	225	4.894	4.894	(1.029)	68482	40.0000	46
	30 Caprolactam	113	5.087	5.087	(1.070)	30328	40.0000	38
	31 4-Chloro-3-methylphenol	107	5.237	5.237	(1.101)	132942	40.0000	41
	32 2-Methylnaphthalene	142	5.355	5.355	(1.126)	153770	40.0000	43
	33 Hexachlorocyclopentadiene	237	5.494	5.494	(0.884)	52876	40.0000	30(Q)
	34 1,2,4,5-Tetrachlorobenzene	216	5.494	5.494	(0.884)	215418	40.0000	34
	35 2,4,6-Trichlorophenol	196	5.591	5.591	(0.900)	85740	40.0000	44
	36 2,4,5-Trichlorophenol	196	5.623	5.623	(0.905)	82882	40.0000	42
	37 1,1'-Biphenyl	154	5.741	5.741	(0.924)	212758	40.0000	38
	38 2-Chloronaphthalene	162	5.752	5.752	(0.926)	175452	40.0000	35
	39 2-Nitroaniline	65	5.838	5.838	(0.940)	75508	40.0000	32
$	40 Dimethylphthalate-d6	166	5.977	5.977	(0.962)	249692	40.0000	43
	41 Dimethylphthalate	163	5.998	5.998	(0.965)	245681	40.0000	46
	42 2,6-Dinitrotoluene	165	6.041	6.041	(0.972)	56715	40.0000	43
$	43 Acenaphthylene-d8	160	6.084	6.084	(0.979)	300893	40.0000	40
	44 Acenaphthylene	152	6.095	6.095	(0.981)	260154	40.0000	38
	45 3-Nitroaniline	138	6.181	6.181	(0.995)	33179	40.0000	38
*	46 Acenaphthene-d10	164	6.213	6.213	(1.000)	156570	40.0000	
	47 Acenaphthene	153	6.245	6.245	(1.005)	162599	40.0000	37
	48 2,4-Dinitrophenol	184	6.266	6.266	(1.009)	17759	40.0000	29
	52 Dibenzofuran	168	6.384	6.384	(1.028)	255261	40.0000	39
$	49 4-Nitrophenol-d4	143	6.320	6.320	(1.017)	23529	40.0000	28
	50 4-Nitrophenol	109	6.331	6.331	(1.019)	55003	40.0000	34
	51 2,4-Dinitrotoluene	165	6.374	6.374	(1.026)	68844	40.0000	41(Q)
	118 2,3,4,6-Tetrachlorophenol	232	6.492	6.492	(1.045)	51901	40.0000	38
	53 Diethylphthalate	149	6.577	6.577	(1.059)	175607	40.0000	35
$	54 Fluorene-d10	176	6.642	6.642	(1.069)	201788	40.0000	38
	56 Fluorene	166	6.674	6.674	(1.074)	191823	40.0000	36
	55 4-Chlorophenyl-phenylether	204	6.674	6.674	(1.074)	130443	40.0000	46
	57 4-Nitroaniline	138	6.685	6.685	(1.076)	31105	40.0000	32
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.706	6.706	(0.902)	37525	40.0000	36
	59 4,6-Dinitro-2-methylphenol	198	6.706	6.706	(0.902)	33313	40.0000	33(Q)
	60 N-Nitrosodiphenylamine	169	6.771	6.771	(0.911)	177111	40.0000	43
	61 4-Bromophenyl-phenylether	248	7.071	7.071	(0.951)	57071	40.0000	39
	62 Hexachlorobenzene	284	7.135	7.135	(0.960)	63026	40.0000	41
	63 Atrazine	200	7.210	7.210	(0.970)	60648	40.0000	41
	64 Pentachlorophenol	266	7.296	7.296	(0.981)	23780	40.0000	31
*	65 Phenanthrene-d10	188	7.435	7.435	(1.000)	268766	40.0000	
	66 Phenanthrene	178	7.457	7.457	(1.003)	283975	40.0000	38
$	67 Anthracene-d10	188	7.489	7.489	(1.007)	289838	40.0000	38
	68 Anthracene	178	7.500	7.500	(1.009)	296743	40.0000	39
	117 Carbazole	167	7.639	7.639	(1.027)	216117	40.0000	35
	70 Di-n-butylphthalate	149	7.929	7.929	(1.066)	262597	40.0000	39
	71 Fluoranthene	202	8.443	8.443	(1.136)	290641	40.0000	37
$	72 Pyrene-d10	212	8.615	8.615	(0.892)	242449	40.0000	40
	73 Pyrene	202	8.626	8.626	(0.893)	295732	40.0000	38
	74 Butylbenzylphthalate	149	9.183	9.183	(0.951)	99104	40.0000	42

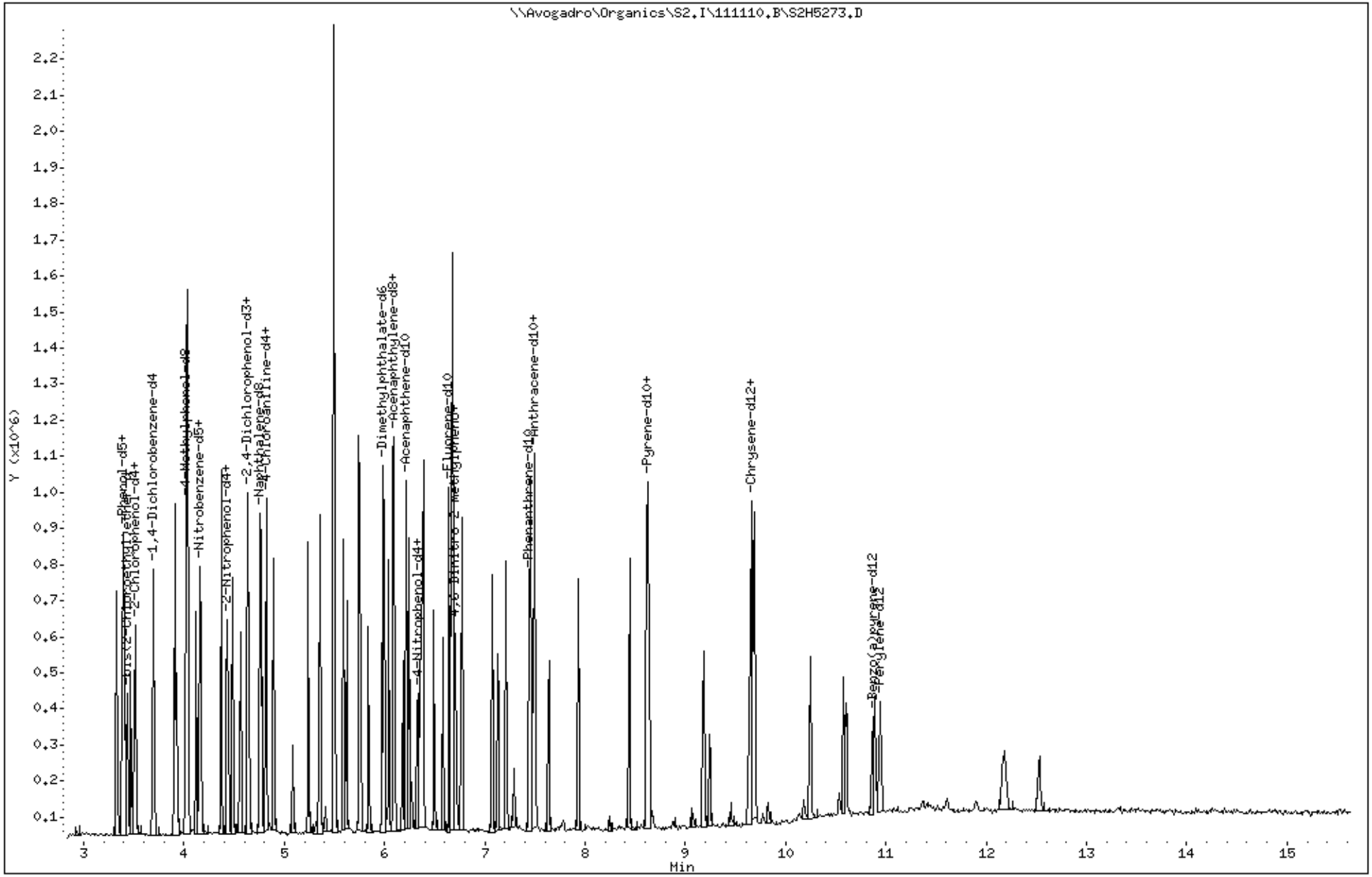
Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5273.D
Report Date: 15-Nov-2011 14:34

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)	
	75 3,3'-Dichlorobenzidine	252	9.634	9.634	(0.998)	51787	40.0000	36	
	76 Benzo(a)anthracene	228	9.644	9.644	(0.999)	201558	40.0000	35	
*	77 Chrysene-d12	240	9.655	9.655	(1.000)	192161	40.0000	(Q)	
	78 Chrysene	228	9.677	9.677	(1.002)	183656	40.0000	37	
	79 bis(2-Ethylhexyl)phthalate	149	9.687	9.687	(1.003)	139345	40.0000	48	
	80 Di-n-octylphthalate	149	9.687	9.687	(0.885)	136928	40.0000	27(H)	
	81 Benzo(b)fluoranthene	252	10.577	10.577	(0.967)	152544	40.0000	33(M)M6 MMS 11/15	
	82 Benzo(k)fluoranthene	252	10.599	10.599	(0.969)	194156	40.0000	37(M)M6 MMS 11/15	
$	83 Benzo(a)pyrene-d12	264	10.867	10.867	(0.993)	120760	40.0000	35(M)M6 MMS 11/15	
	84 Benzo(a)pyrene	252	10.888	10.888	(0.995)	138118	40.0000	34(M)M6 MMS 11/15	
*	85 Perylene-d12	264	10.942	10.942	(1.000)	140676	40.0000		
	86 Indeno(1,2,3-cd)pyrene	276	12.164	12.164	(1.112)	121388	40.0000	39	
	87 Dibenzo(a,h)anthracene	278	12.186	12.186	(1.114)	101327	40.0000	40	
	88 Benzo(g,h,i)perylene	276	12.529	12.529	(1.145)	109519	40.0000	43	

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5273.D
Date : 10-NOV-2011 18:26
Client ID: SSTD0202Y
Instrument: S2.i
Sample Info: SSTD0202Y,SSTD0202Y
Volume Injected (uL): 2.0
Operator: SRC:
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5276.D
Report Date: 14-Nov-2011 14:27

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111111.B\S2H5276.D
Lab Smp Id: SSTD0202Z Client Smp ID: SSTD0202Z
Inj Date : 11-NOV-2011 09:01
Operator : SRC: Inst ID: S2.i
Smp Info : SSTD0202Z,SSTD0202Z
Misc Info : 2,3
Comment   :
Method   : \\Avogadro\Organics\S2.I\111111.B\S2_SOM.m
Meth Date : 14-Nov-2011 14:27 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * (Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vi	2.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	1 Benzaldehyde	77	3.328	3.328	(0.901)	131069	40.0000	39
$	2 Phenol-d5	71	3.393	3.393	(0.919)	78537	40.0000	36
	3 Phenol	94	3.403	3.403	(0.922)	223969	40.0000	38
$	4 bis(2-Chloroethyl)ether-d8	67	3.436	3.436	(0.930)	107284	40.0000	36
	5 bis(2-Chloroethyl)ether	93	3.468	3.468	(0.939)	154697	40.0000	35
$	6 2-Chlorophenol-d4	132	3.511	3.511	(0.951)	74205	40.0000	39
	7 2-Chlorophenol	128	3.521	3.521	(0.954)	71059	40.0000	37
*	8 1,4-Dichlorobenzene-d4	152	3.693	3.693	(1.000)	69137	40.0000	(Q)
	9 2-Methylphenol	108	3.907	3.907	(1.058)	125108	40.0000	38
	10 2,2'-oxybis(1-Chloropropane)	45	3.929	3.929	(1.064)	151636	40.0000	34
$	11 4-Methylphenol-d8	113	4.015	4.015	(1.087)	128232	40.0000	43
	13 Acetophenone	105	4.036	4.036	(1.093)	206665	40.0000	37
	14 N-Nitroso-di-n-propylamine	70	4.036	4.036	(1.093)	110166	40.0000	40(Q)
	12 4-Methylphenol	108	4.036	4.036	(1.093)	131594	40.0000	39
	15 Hexachloroethane	117	4.122	4.122	(1.116)	59632	40.0000	40(Q)
$	16 Nitrobenzene-d5	128	4.154	4.154	(0.872)	41052	40.0000	41(Q)
	17 Nitrobenzene	77	4.176	4.176	(0.876)	188794	40.0000	38
	18 Isophorone	82	4.369	4.369	(0.917)	329259	40.0000	39
$	19 2-Nitrophenol-d4	143	4.433	4.433	(0.930)	47853	40.0000	44
	20 2-Nitrophenol	139	4.444	4.444	(0.932)	45093	40.0000	42
	21 2,4-Dimethylphenol	107	4.487	4.487	(0.941)	156223	40.0000	42(Q)

Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5276.D
Report Date: 14-Nov-2011 14:27

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	22 bis(2-Chloroethoxy)methane	93	4.562	4.562	(0.957)	208611	40.0000	44
$	23 2,4-Dichlorophenol-d3	165	4.637	4.637	(0.973)	94624	40.0000	47
	24 2,4-Dichlorophenol	162	4.647	4.647	(0.975)	85810	40.0000	46
*	25 Naphthalene-d8	136	4.765	4.765	(1.000)	191263	40.0000	
	26 Naphthalene	128	4.776	4.776	(1.002)	208782	40.0000	42
$	27 4-Chloroaniline-d4	131	4.819	4.819	(1.011)	90843	40.0000	51(Q)
	28 4-Chloroaniline	127	4.830	4.830	(1.013)	89124	40.0000	45
	29 Hexachlorobutadiene	225	4.894	4.894	(1.027)	64792	40.0000	47
	30 Caprolactam	113	5.087	5.087	(1.068)	30923	40.0000	42
	31 4-Chloro-3-methylphenol	107	5.237	5.237	(1.099)	124013	40.0000	41
	32 2-Methylnaphthalene	142	5.355	5.355	(1.124)	151779	40.0000	45
	33 Hexachlorocyclopentadiene	237	5.505	5.505	(0.885)	47457	40.0000	26(Q)
	34 1,2,4,5-Tetrachlorobenzene	216	5.505	5.505	(0.885)	216022	40.0000	34
	35 2,4,6-Trichlorophenol	196	5.602	5.602	(0.900)	62342	40.0000	32
	36 2,4,5-Trichlorophenol	196	5.623	5.623	(0.904)	69108	40.0000	34
	37 1,1'-Biphenyl	154	5.752	5.752	(0.924)	191778	40.0000	34
	38 2-Chloronaphthalene	162	5.763	5.763	(0.926)	182814	40.0000	36
	39 2-Nitroaniline	65	5.848	5.848	(0.940)	79144	40.0000	33
$	40 Dimethylphthalate-d6	166	5.988	5.988	(0.962)	213294	40.0000	36
	41 Dimethylphthalate	163	5.999	5.999	(0.964)	203632	40.0000	37
	42 2,6-Dinitrotoluene	165	6.041	6.041	(0.971)	51328	40.0000	38
$	43 Acenaphthylene-d8	160	6.095	6.095	(0.979)	267240	40.0000	35
	44 Acenaphthylene	152	6.106	6.106	(0.981)	255321	40.0000	37
	45 3-Nitroaniline	138	6.181	6.181	(0.993)	32626	40.0000	36
*	46 Acenaphthene-d10	164	6.224	6.224	(1.000)	159791	40.0000	
	47 Acenaphthene	153	6.245	6.245	(1.003)	164634	40.0000	37
	48 2,4-Dinitrophenol	184	6.277	6.277	(1.009)	18369	40.0000	30(Q)
	52 Dibenzofuran	168	6.395	6.395	(1.028)	234254	40.0000	35
$	49 4-Nitrophenol-d4	143	6.331	6.331	(1.017)	21115	40.0000	25
	50 4-Nitrophenol	109	6.331	6.331	(1.017)	56088	40.0000	34
	51 2,4-Dinitrotoluene	165	6.385	6.385	(1.026)	62576	40.0000	36(Q)
	118 2,3,4,6-Tetrachlorophenol	232	6.503	6.503	(1.045)	47001	40.0000	34
	53 Diethylphthalate	149	6.588	6.588	(1.059)	197692	40.0000	38
$	54 Fluorene-d10	176	6.653	6.653	(1.069)	210370	40.0000	39
	56 Fluorene	166	6.674	6.674	(1.072)	197626	40.0000	37
	55 4-Chlorophenyl-phenylether	204	6.674	6.674	(1.072)	113382	40.0000	39
	57 4-Nitroaniline	138	6.685	6.685	(1.074)	33205	40.0000	34(Q)
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.706	6.706	(0.901)	31777	40.0000	29
	59 4,6-Dinitro-2-methylphenol	198	6.717	6.717	(0.902)	31824	40.0000	30(Q)
	60 N-Nitrosodiphenylamine	169	6.771	6.771	(0.909)	157290	40.0000	37
	61 4-Bromophenyl-phenylether	248	7.082	7.082	(0.951)	60283	40.0000	40
	62 Hexachlorobenzene	284	7.135	7.135	(0.958)	60067	40.0000	37
	63 Atrazine	200	7.221	7.221	(0.970)	59603	40.0000	39
	64 Pentachlorophenol	266	7.296	7.296	(0.980)	21990	40.0000	28
*	65 Phenanthrene-d10	188	7.446	7.446	(1.000)	278381	40.0000	
	66 Phenanthrene	178	7.468	7.468	(1.003)	275777	40.0000	35
$	67 Anthracene-d10	188	7.489	7.489	(1.006)	293932	40.0000	37
	68 Anthracene	178	7.511	7.511	(1.009)	260147	40.0000	33
	117 Carbazole	167	7.639	7.639	(1.026)	219629	40.0000	34
	70 Di-n-butylphthalate	149	7.940	7.940	(1.066)	289837	40.0000	42
	71 Fluoranthene	202	8.454	8.454	(1.135)	295436	40.0000	37
$	72 Pyrene-d10	212	8.626	8.626	(0.888)	225617	40.0000	38
	73 Pyrene	202	8.647	8.647	(0.891)	306213	40.0000	41
	74 Butylbenzylphthalate	149	9.216	9.216	(0.949)	106519	40.0000	46

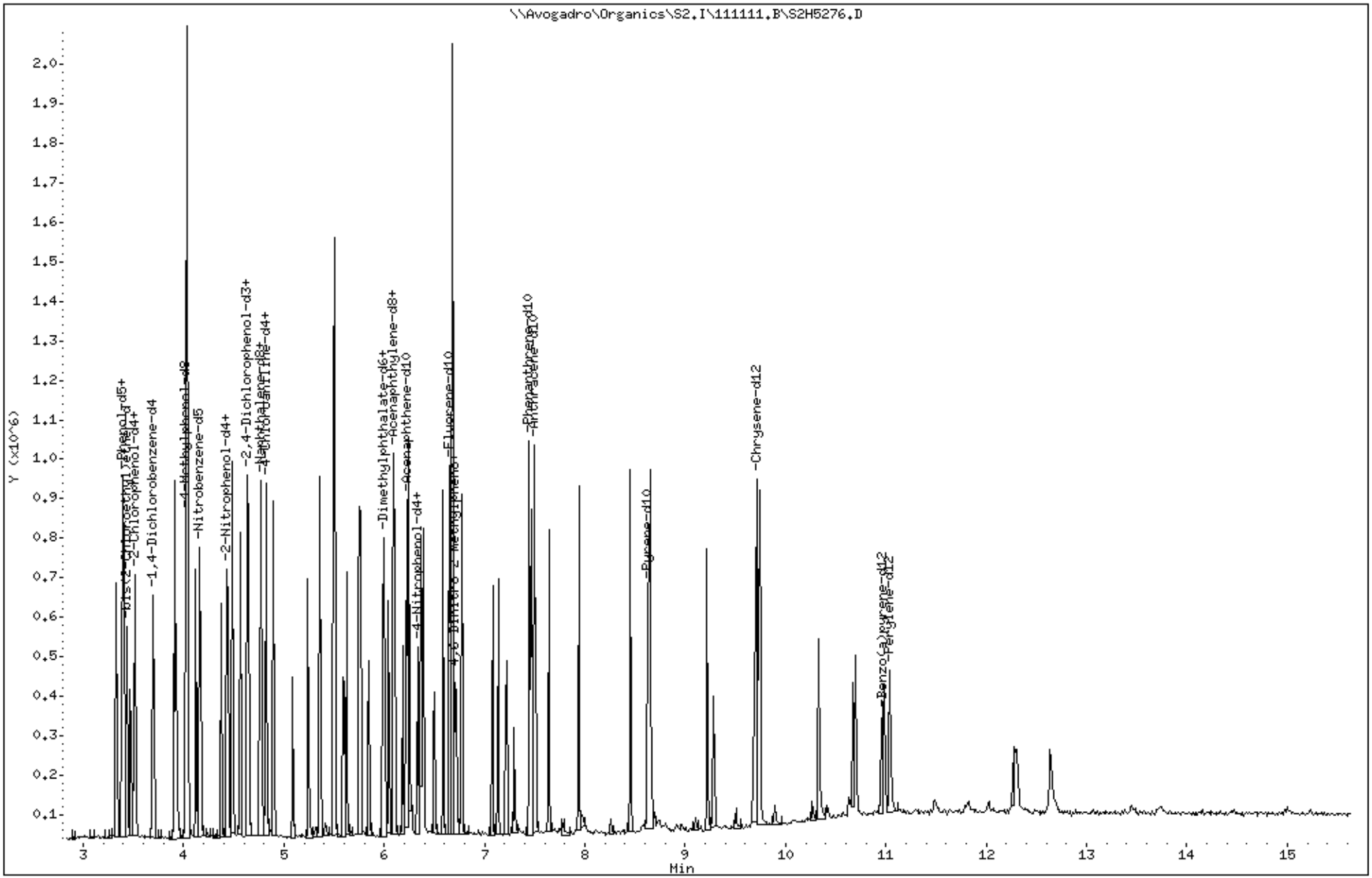
Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5276.D
Report Date: 14-Nov-2011 14:27

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	75 3,3'-Dichlorobenzidine	252	9.687	9.687	(0.998)	61546	40.0000	44
	76 Benzo(a)anthracene	228	9.698	9.698	(0.999)	200593	40.0000	36
*	77 Chrysene-d12	240	9.709	9.709	(1.000)	188206	40.0000	(Q)
	78 Chrysene	228	9.741	9.741	(1.003)	186515	40.0000	38
	79 bis(2-Ethylhexyl)phthalate	149	9.741	9.741	(1.003)	137747	40.0000	48
	80 Di-n-octylphthalate	149	10.331	10.331	(0.936)	225057	40.0000	41
	81 Benzo(b)fluoranthene	252	10.674	10.674	(0.967)	191352	40.0000	39
	82 Benzo(k)fluoranthene	252	10.695	10.695	(0.969)	180747	40.0000	32
$	83 Benzo(a)pyrene-d12	264	10.964	10.964	(0.993)	128501	40.0000	35
	84 Benzo(a)pyrene	252	10.985	10.985	(0.995)	155979	40.0000	36
*	85 Perylene-d12	264	11.039	11.039	(1.000)	150875	40.0000	
	86 Indeno(1,2,3-cd)pyrene	276	12.272	12.272	(1.112)	140934	40.0000	43
	87 Dibenzo(a,h)anthracene	278	12.304	12.304	(1.115)	112760	40.0000	41
	88 Benzo(g,h,i)perylene	276	12.636	12.636	(1.145)	119293	40.0000	44

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5276.D
Date : 11-NOV-2011 09:01
Client ID: SSTD0202Z
Instrument: S2.i
Sample Info: SSTD0202Z,SSTD0202Z
Volume Injected (uL): 2.0
Operator: SRC:
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5278.D
Report Date: 14-Nov-2011 14:27

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111111.B\S2H5278.D
Lab Smp Id: SSTD0202A Client Smp ID: SSTD0202A
Inj Date : 11-NOV-2011 09:59
Operator : SRC: Inst ID: S2.i
Smp Info : SSTD0202A,SSTD0202A
Misc Info : 2,3
Comment   :
Method   : \\Avogadro\Organics\S2.I\111111.B\S2_SOM.m
Meth Date : 14-Nov-2011 14:27 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * (Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vi	2.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	1 Benzaldehyde	77	3.328	3.328	(0.901)	146181	40.0000	37
$	2 Phenol-d5	71	3.392	3.392	(0.919)	93633	40.0000	37
	3 Phenol	94	3.403	3.403	(0.922)	247778	40.0000	36
$	4 bis(2-Chloroethyl)ether-d8	67	3.435	3.435	(0.930)	122879	40.0000	35
	5 bis(2-Chloroethyl)ether	93	3.467	3.467	(0.939)	175708	40.0000	35
$	6 2-Chlorophenol-d4	132	3.510	3.510	(0.951)	83008	40.0000	38
	7 2-Chlorophenol	128	3.521	3.521	(0.954)	88165	40.0000	39
*	8 1,4-Dichlorobenzene-d4	152	3.693	3.693	(1.000)	80166	40.0000	(Q)
	9 2-Methylphenol	108	3.907	3.907	(1.058)	142507	40.0000	37
	10 2,2'-oxybis(1-Chloropropane)	45	3.929	3.929	(1.064)	168461	40.0000	33
$	11 4-Methylphenol-d8	113	4.014	4.014	(1.087)	151040	40.0000	44
	13 Acetophenone	105	4.025	4.025	(1.090)	241319	40.0000	37
	14 N-Nitroso-di-n-propylamine	70	4.036	4.036	(1.093)	130984	40.0000	41(Q)
	12 4-Methylphenol	108	4.036	4.036	(1.093)	157967	40.0000	41
	15 Hexachloroethane	117	4.122	4.122	(1.116)	69431	40.0000	40(Q)
$	16 Nitrobenzene-d5	128	4.154	4.154	(0.874)	47147	40.0000	39
	17 Nitrobenzene	77	4.175	4.175	(0.878)	213286	40.0000	35
	18 Isophorone	82	4.368	4.368	(0.919)	383203	40.0000	37
$	19 2-Nitrophenol-d4	143	4.433	4.433	(0.932)	53048	40.0000	40
	20 2-Nitrophenol	139	4.443	4.443	(0.935)	52641	40.0000	40
	21 2,4-Dimethylphenol	107	4.486	4.486	(0.944)	187622	40.0000	41(Q)

Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5278.D
Report Date: 14-Nov-2011 14:27

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	22 bis(2-Chloroethoxy)methane	93	4.561	4.561	(0.959)	237919	40.0000	41
$	23 2,4-Dichlorophenol-d3	165	4.636	4.636	(0.975)	117671	40.0000	48
	24 2,4-Dichlorophenol	162	4.647	4.647	(0.977)	91416	40.0000	41
*	25 Naphthalene-d8	136	4.754	4.754	(1.000)	231786	40.0000	
	26 Naphthalene	128	4.776	4.776	(1.004)	258463	40.0000	43
$	27 4-Chloroaniline-d4	131	4.819	4.819	(1.014)	91368	40.0000	42(Q)
	28 4-Chloroaniline	127	4.829	4.829	(1.016)	100265	40.0000	42
	29 Hexachlorobutadiene	225	4.894	4.894	(1.029)	76795	40.0000	46
	30 Caprolactam	113	5.087	5.087	(1.070)	36603	40.0000	41
	31 4-Chloro-3-methylphenol	107	5.237	5.237	(1.101)	161822	40.0000	45
	32 2-Methylnaphthalene	142	5.355	5.355	(1.126)	188314	40.0000	46
	33 Hexachlorocyclopentadiene	237	5.494	5.494	(0.883)	59637	40.0000	28(Q)
	34 1,2,4,5-Tetrachlorobenzene	216	5.505	5.505	(0.885)	254494	40.0000	33
	35 2,4,6-Trichlorophenol	196	5.591	5.591	(0.898)	82858	40.0000	35
	36 2,4,5-Trichlorophenol	196	5.623	5.623	(0.904)	98659	40.0000	41
	37 1,1'-Biphenyl	154	5.741	5.741	(0.922)	243236	40.0000	36
	38 2-Chloronaphthalene	162	5.762	5.762	(0.926)	210349	40.0000	35
	39 2-Nitroaniline	65	5.837	5.837	(0.938)	97433	40.0000	34
$	40 Dimethylphthalate-d6	166	5.977	5.977	(0.960)	276046	40.0000	40
	41 Dimethylphthalate	163	5.998	5.998	(0.964)	267421	40.0000	41
	42 2,6-Dinitrotoluene	165	6.041	6.041	(0.971)	62385	40.0000	39
$	43 Acenaphthylene-d8	160	6.084	6.084	(0.978)	338164	40.0000	37
	44 Acenaphthylene	152	6.105	6.105	(0.981)	298354	40.0000	36
	45 3-Nitroaniline	138	6.181	6.181	(0.993)	42224	40.0000	40
*	46 Acenaphthene-d10	164	6.223	6.223	(1.000)	189897	40.0000	
	47 Acenaphthene	153	6.245	6.245	(1.003)	216240	40.0000	40
	48 2,4-Dinitrophenol	184	6.266	6.266	(1.007)	22991	40.0000	31
	52 Dibenzofuran	168	6.384	6.384	(1.026)	292252	40.0000	37
$	49 4-Nitrophenol-d4	143	6.331	6.331	(1.017)	28399	40.0000	28(Q)
	50 4-Nitrophenol	109	6.331	6.331	(1.017)	67038	40.0000	34
	51 2,4-Dinitrotoluene	165	6.374	6.374	(1.024)	81047	40.0000	40(Q)
	118 2,3,4,6-Tetrachlorophenol	232	6.502	6.502	(1.045)	55386	40.0000	33
	53 Diethylphthalate	149	6.588	6.588	(1.059)	252294	40.0000	41
$	54 Fluorene-d10	176	6.652	6.652	(1.069)	252410	40.0000	39
	56 Fluorene	166	6.674	6.674	(1.072)	261079	40.0000	41
	55 4-Chlorophenyl-phenylether	204	6.674	6.674	(1.072)	151387	40.0000	44
	57 4-Nitroaniline	138	6.685	6.685	(1.074)	44489	40.0000	38
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.706	6.706	(0.901)	49725	40.0000	34
	59 4,6-Dinitro-2-methylphenol	198	6.717	6.717	(0.902)	41437	40.0000	29(Q)
	60 N-Nitrosodiphenylamine	169	6.770	6.770	(0.909)	212251	40.0000	37
	61 4-Bromophenyl-phenylether	248	7.081	7.081	(0.951)	74295	40.0000	37
	62 Hexachlorobenzene	284	7.135	7.135	(0.958)	81911	40.0000	38
	63 Atrazine	200	7.221	7.221	(0.970)	73155	40.0000	36
	64 Pentachlorophenol	266	7.296	7.296	(0.980)	32394	40.0000	31
*	65 Phenanthrene-d10	188	7.446	7.446	(1.000)	373560	40.0000	
	66 Phenanthrene	178	7.467	7.467	(1.003)	354106	40.0000	34
$	67 Anthracene-d10	188	7.489	7.489	(1.006)	395027	40.0000	37
	68 Anthracene	178	7.500	7.500	(1.007)	347619	40.0000	33
	117 Carbazole	167	7.639	7.639	(1.026)	295300	40.0000	34
	70 Di-n-butylphthalate	149	7.939	7.939	(1.066)	337217	40.0000	36
	71 Fluoranthene	202	8.443	8.443	(1.134)	388724	40.0000	36
$	72 Pyrene-d10	212	8.626	8.626	(0.890)	307061	40.0000	35
	73 Pyrene	202	8.636	8.636	(0.892)	404789	40.0000	36
	74 Butylbenzylphthalate	149	9.194	9.194	(0.949)	139690	40.0000	40

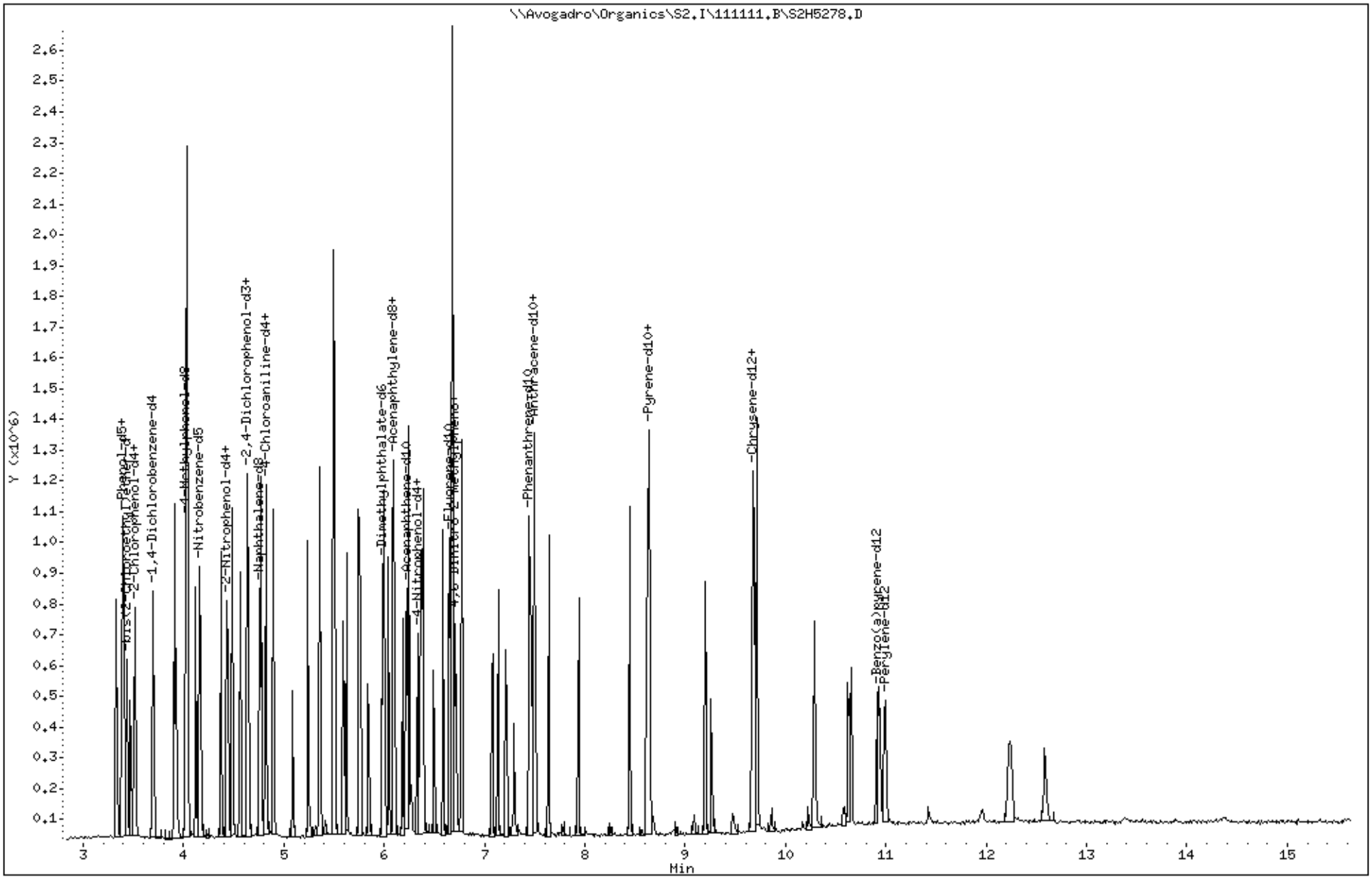
Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5278.D
Report Date: 14-Nov-2011 14:27

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	
	75 3,3'-Dichlorobenzidine	252	9.655	9.655	(0.997)	88100	40.0000	42	
	76 Benzo(a)anthracene	228	9.676	9.676	(0.999)	323370	40.0000	39	
*	77 Chrysene-d12	240	9.687	9.687	(1.000)	282412	40.0000		(Q)
	78 Chrysene	228	9.709	9.709	(1.002)	274200	40.0000	37	
	79 bis(2-Ethylhexyl)phthalate	149	9.719	9.719	(1.003)	186668	40.0000	44	
	80 Di-n-octylphthalate	149	10.288	10.288	(0.936)	314227	40.0000	42	
	81 Benzo(b)fluoranthene	252	10.620	10.620	(0.966)	300307	40.0000	44	
	82 Benzo(k)fluoranthene	252	10.652	10.652	(0.969)	250839	40.0000	32	
$	83 Benzo(a)pyrene-d12	264	10.910	10.910	(0.992)	175826	40.0000	34	
	84 Benzo(a)pyrene	252	10.931	10.931	(0.994)	211224	40.0000	36	
*	85 Perylene-d12	264	10.995	10.995	(1.000)	207993	40.0000		
	86 Indeno(1,2,3-cd)pyrene	276	12.218	12.218	(1.111)	204870	40.0000	45	
	87 Dibenzo(a,h)anthracene	278	12.250	12.250	(1.114)	168938	40.0000	45	
	88 Benzo(g,h,i)perylene	276	12.583	12.583	(1.144)	172363	40.0000	46	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5278.D
Date : 11-NOV-2011 09:59
Client ID: SSTD0202A
Instrument: S2.i
Sample Info: SSTD0202A,SSTD0202A
Volume Injected (uL): 2.0
Operator: SRC:
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111114.B\S2H5290.D
Report Date: 15-Nov-2011 10:25

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111114.B\S2H5290.D
Lab Smp Id: SSTD0202C Client Smp ID: SSTD0202C
Inj Date : 14-NOV-2011 16:35
Operator : SRC: Inst ID: S2.i
Smp Info : SSTD0202C,SSTD0202C
Misc Info : 2,3
Comment   :
Method   : \\Avogadro\Organics\S2.I\111114.B\S2_SOM.m
Meth Date : 15-Nov-2011 10:25 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * (Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vi	2.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	1 Benzaldehyde	77	3.246	3.246	(0.899)	179269	40.0000	40
$	2 Phenol-d5	71	3.311	3.311	(0.917)	121585	40.0000	42
	3 Phenol	94	3.321	3.321	(0.920)	337732	40.0000	43
$	4 bis(2-Chloroethyl)ether-d8	67	3.354	3.354	(0.929)	151889	40.0000	38
	5 bis(2-Chloroethyl)ether	93	3.396	3.396	(0.941)	216344	40.0000	37
$	6 2-Chlorophenol-d4	132	3.429	3.429	(0.950)	106715	40.0000	43
	7 2-Chlorophenol	128	3.439	3.439	(0.952)	107559	40.0000	42
*	8 1,4-Dichlorobenzene-d4	152	3.611	3.611	(1.000)	91340	40.0000	(Q)
	9 2-Methylphenol	108	3.836	3.836	(1.062)	181028	40.0000	42
	10 2,2'-oxybis(1-Chloropropane)	45	3.847	3.847	(1.065)	229130	40.0000	39
$	11 4-Methylphenol-d8	113	3.943	3.943	(1.092)	203964	40.0000	52
	13 Acetophenone	105	3.954	3.954	(1.095)	334265	40.0000	45
	14 N-Nitroso-di-n-propylamine	70	3.954	3.954	(1.095)	192153	40.0000	53(Q)
	12 4-Methylphenol	108	3.965	3.965	(1.098)	201797	40.0000	45
	15 Hexachloroethane	117	4.040	4.040	(1.119)	83112	40.0000	42(Q)
$	16 Nitrobenzene-d5	128	4.072	4.072	(0.869)	61746	40.0000	40
	17 Nitrobenzene	77	4.094	4.094	(0.874)	291032	40.0000	37
	18 Isophorone	82	4.297	4.297	(0.918)	550263	40.0000	41
$	19 2-Nitrophenol-d4	143	4.351	4.351	(0.929)	78459	40.0000	45
	20 2-Nitrophenol	139	4.362	4.362	(0.931)	74024	40.0000	44
	21 2,4-Dimethylphenol	107	4.404	4.404	(0.940)	225712	40.0000	38(Q)

Data File: \\Avogadro\Organics\S2.I\111114.B\S2H5290.D
Report Date: 15-Nov-2011 10:25

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
22	bis(2-Chloroethoxy)methane	93	4.480	4.480	(0.956)	298138	40.0000	40
$ 23	2,4-Dichlorophenol-d3	165	4.555	4.555	(0.973)	154120	40.0000	49
24	2,4-Dichlorophenol	162	4.565	4.565	(0.975)	140402	40.0000	48
* 25	Naphthalene-d8	136	4.683	4.683	(1.000)	299945	40.0000	
26	Naphthalene	128	4.694	4.694	(1.002)	337424	40.0000	44
$ 27	4-Chloroaniline-d4	131	4.737	4.737	(1.011)	137519	40.0000	49(Q)
28	4-Chloroaniline	127	4.748	4.748	(1.014)	153236	40.0000	49
29	Hexachlorobutadiene	225	4.812	4.812	(1.027)	83424	40.0000	39
30	Caprolactam	113	5.016	5.016	(1.071)	64273	40.0000	56
31	4-Chloro-3-methylphenol	107	5.166	5.166	(1.103)	237428	40.0000	51
32	2-Methylnaphthalene	142	5.273	5.273	(1.126)	248034	40.0000	47
33	Hexachlorocyclopentadiene	237	5.423	5.423	(0.883)	103479	40.0000	33(Q)
34	1,2,4,5-Tetrachlorobenzene	216	5.423	5.423	(0.883)	379178	40.0000	34
35	2,4,6-Trichlorophenol	196	5.520	5.520	(0.899)	129084	40.0000	37
36	2,4,5-Trichlorophenol	196	5.541	5.541	(0.902)	127565	40.0000	36
37	1,1'-Biphenyl	154	5.670	5.670	(0.923)	349970	40.0000	35
38	2-Chloronaphthalene	162	5.681	5.681	(0.925)	315382	40.0000	36
39	2-Nitroaniline	65	5.766	5.766	(0.939)	155440	40.0000	37
$ 40	Dimethylphthalate-d6	166	5.906	5.906	(0.962)	458789	40.0000	45
41	Dimethylphthalate	163	5.927	5.927	(0.965)	415193	40.0000	43
42	2,6-Dinitrotoluene	165	5.970	5.970	(0.972)	101261	40.0000	43
$ 43	Acenaphthylene-d8	160	6.013	6.013	(0.979)	488682	40.0000	37
44	Acenaphthylene	152	6.024	6.024	(0.981)	450928	40.0000	37
45	3-Nitroaniline	138	6.099	6.099	(0.993)	67625	40.0000	43
* 46	Acenaphthene-d10	164	6.142	6.142	(1.000)	279595	40.0000	
47	Acenaphthene	153	6.163	6.163	(1.003)	298440	40.0000	38
48	2,4-Dinitrophenol	184	6.195	6.195	(1.009)	45120	40.0000	42(Q)
52	Dibenzofuran	168	6.313	6.313	(1.028)	430729	40.0000	37
$ 49	4-Nitrophenol-d4	143	6.249	6.249	(1.017)	67741	40.0000	46
50	4-Nitrophenol	109	6.260	6.260	(1.019)	115161	40.0000	40
51	2,4-Dinitrotoluene	165	6.303	6.303	(1.026)	128038	40.0000	43(Q)
118	2,3,4,6-Tetrachlorophenol	232	6.421	6.421	(1.045)	93083	40.0000	38
53	Diethylphthalate	149	6.506	6.506	(1.059)	373547	40.0000	42
$ 54	Fluorene-d10	176	6.571	6.571	(1.070)	362784	40.0000	38
56	Fluorene	166	6.592	6.592	(1.073)	397314	40.0000	42
55	4-Chlorophenyl-phenylether	204	6.592	6.592	(1.073)	201589	40.0000	40
57	4-Nitroaniline	138	6.603	6.603	(1.075)	66331	40.0000	39
$ 58	4,6-Dinitro-2-methylphenol-d2	200	6.624	6.624	(0.900)	76646	40.0000	38(Q)
59	4,6-Dinitro-2-methylphenol	198	6.635	6.635	(0.901)	77275	40.0000	39(Q)
60	N-Nitrosodiphenylamine	169	6.689	6.689	(0.908)	305889	40.0000	39
61	4-Bromophenyl-phenylether	248	7.000	7.000	(0.950)	106286	40.0000	38
62	Hexachlorobenzene	284	7.053	7.053	(0.958)	103390	40.0000	35
63	Atrazine	200	7.139	7.139	(0.969)	125604	40.0000	44
64	Pentachlorophenol	266	7.214	7.214	(0.980)	54500	40.0000	37
* 65	Phenanthrene-d10	188	7.364	7.364	(1.000)	516565	40.0000	
66	Phenanthrene	178	7.375	7.375	(1.001)	518572	40.0000	36
$ 67	Anthracene-d10	188	7.407	7.407	(1.006)	585923	40.0000	40
68	Anthracene	178	7.418	7.418	(1.007)	555913	40.0000	38
117	Carbazole	167	7.557	7.557	(1.026)	470246	40.0000	39
70	Di-n-butylphthalate	149	7.857	7.857	(1.067)	584045	40.0000	46
71	Fluoranthene	202	8.361	8.361	(1.135)	590006	40.0000	40
$ 72	Pyrene-d10	212	8.533	8.533	(0.888)	438099	40.0000	40
73	Pyrene	202	8.555	8.555	(0.891)	597954	40.0000	43
74	Butylbenzylphthalate	149	9.123	9.123	(0.950)	209641	40.0000	49

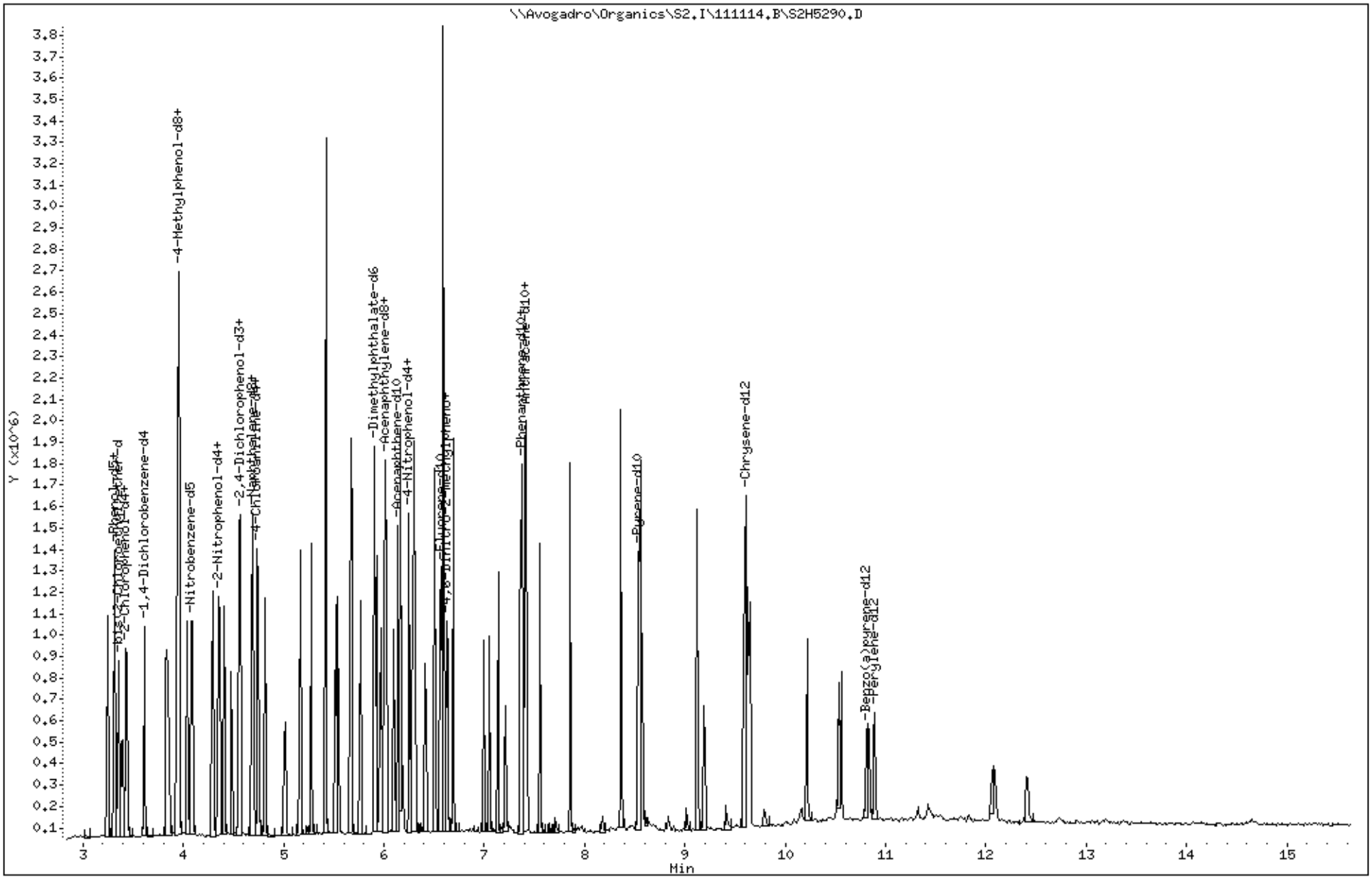
Data File: \\Avogadro\Organics\S2.I\111114.B\S2H5290.D
Report Date: 15-Nov-2011 10:25

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	
	75 3,3'-Dichlorobenzidine	252	9.584	9.584	(0.998)	113513	40.0000	45	
	76 Benzo(a)anthracene	228	9.595	9.595	(0.999)	376950	40.0000	37	
*	77 Chrysene-d12	240	9.605	9.605	(1.000)	343656	40.0000		(Q)
	78 Chrysene	228	9.627	9.627	(1.002)	338373	40.0000	38	
	79 bis(2-Ethylhexyl)phthalate	149	9.648	9.648	(1.004)	251349	40.0000	48	
	80 Di-n-octylphthalate	149	10.217	10.217	(0.938)	387858	40.0000	52	
	81 Benzo(b)fluoranthene	252	10.538	10.538	(0.968)	282250	40.0000	43	
	82 Benzo(k)fluoranthene	252	10.560	10.560	(0.969)	272586	40.0000	36	
$	83 Benzo(a)pyrene-d12	264	10.806	10.806	(0.992)	189942	40.0000	38	
	84 Benzo(a)pyrene	252	10.839	10.839	(0.995)	217143	40.0000	38	
*	85 Perylene-d12	264	10.892	10.892	(1.000)	203023	40.0000		
	86 Indeno(1,2,3-cd)pyrene	276	12.061	12.061	(1.107)	184224	40.0000	41	
	87 Dibenzo(a,h)anthracene	278	12.093	12.093	(1.110)	152125	40.0000	41	
	88 Benzo(g,h,i)perylene	276	12.415	12.415	(1.140)	150891	40.0000	41	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S2.I\111114.B\S2H5290.D
Date : 14-NOV-2011 16:35
Client ID: SSTD0202C
Instrument: S2.i
Sample Info: SSTD0202C,SSTD0202C
Volume Injected (uL): 2.0
Operator: SRC:
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111114.B\S2H5295.D
Report Date: 15-Nov-2011 10:25

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111114.B\S2H5295.D
Lab Smp Id: SSTD0202D Client Smp ID: SSTD0202D
Inj Date : 14-NOV-2011 18:23
Operator : SRC: Inst ID: S2.i
Smp Info : SSTD0202D,SSTD0202D
Misc Info : 2,3
Comment   :
Method   : \\Avogadro\Organics\S2.I\111114.B\S2_SOM.m
Meth Date : 15-Nov-2011 10:25 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * (Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vi	2.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	1 Benzaldehyde	77	3.243	3.243	(0.896)	233244	40.0000	39
$	2 Phenol-d5	71	3.307	3.307	(0.914)	156205	40.0000	41
	3 Phenol	94	3.318	3.318	(0.917)	411758	40.0000	40
$	4 bis(2-Chloroethyl)ether-d8	67	3.350	3.350	(0.926)	196755	40.0000	38
	5 bis(2-Chloroethyl)ether	93	3.393	3.393	(0.938)	311159	40.0000	41
$	6 2-Chlorophenol-d4	132	3.425	3.425	(0.947)	137971	40.0000	42
	7 2-Chlorophenol	128	3.436	3.436	(0.950)	137842	40.0000	41
*	8 1,4-Dichlorobenzene-d4	152	3.618	3.618	(1.000)	120504	40.0000	(Q)
	9 2-Methylphenol	108	3.833	3.833	(1.059)	258312	40.0000	45
	10 2,2'-oxybis(1-Chloropropane)	45	3.844	3.844	(1.062)	291435	40.0000	38
$	11 4-Methylphenol-d8	113	3.940	3.940	(1.089)	289528	40.0000	56
	13 Acetophenone	105	3.951	3.951	(1.092)	464699	40.0000	47
	14 N-Nitroso-di-n-propylamine	70	3.961	3.961	(1.095)	230487	40.0000	48(Q)
	12 4-Methylphenol	108	3.961	3.961	(1.095)	300678	40.0000	51
	15 Hexachloroethane	117	4.037	4.037	(1.116)	105229	40.0000	40(Q)
$	16 Nitrobenzene-d5	128	4.079	4.079	(0.872)	83502	40.0000	36
	17 Nitrobenzene	77	4.090	4.090	(0.874)	384372	40.0000	33
	18 Isophorone	82	4.294	4.294	(0.918)	803582	40.0000	41
$	19 2-Nitrophenol-d4	143	4.348	4.348	(0.929)	99620	40.0000	39
	20 2-Nitrophenol	139	4.358	4.358	(0.931)	93357	40.0000	37
	21 2,4-Dimethylphenol	107	4.412	4.412	(0.943)	320287	40.0000	37(Q)

Data File: \\Avogadro\Organics\S2.I\111114.B\S2H5295.D
Report Date: 15-Nov-2011 10:25

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	22 bis(2-Chloroethoxy)methane	93	4.487	4.487	(0.959)	416240	40.0000	38
$	23 2,4-Dichlorophenol-d3	165	4.562	4.562	(0.975)	194781	40.0000	42
	24 2,4-Dichlorophenol	162	4.562	4.562	(0.975)	173311	40.0000	41
*	25 Naphthalene-d8	136	4.680	4.680	(1.000)	441374	40.0000	
	26 Naphthalene	128	4.691	4.691	(1.002)	394625	40.0000	35
$	27 4-Chloroaniline-d4	131	4.734	4.734	(1.011)	174942	40.0000	43(Q)
	28 4-Chloroaniline	127	4.744	4.744	(1.014)	207569	40.0000	46
	29 Hexachlorobutadiene	225	4.819	4.819	(1.030)	116913	40.0000	37
	30 Caprolactam	113	5.012	5.012	(1.071)	90074	40.0000	53
	31 4-Chloro-3-methylphenol	107	5.162	5.162	(1.103)	336983	40.0000	49
	32 2-Methylnaphthalene	142	5.280	5.280	(1.128)	334192	40.0000	43
	33 Hexachlorocyclopentadiene	237	5.420	5.420	(0.883)	148804	40.0000	31(Q)
	34 1,2,4,5-Tetrachlorobenzene	216	5.420	5.420	(0.883)	529800	40.0000	31
	35 2,4,6-Trichlorophenol	196	5.516	5.516	(0.899)	185493	40.0000	35
	36 2,4,5-Trichlorophenol	196	5.549	5.549	(0.904)	212732	40.0000	39
	37 1,1'-Biphenyl	154	5.667	5.667	(0.923)	541497	40.0000	36
	38 2-Chloronaphthalene	162	5.677	5.677	(0.925)	457564	40.0000	34
	39 2-Nitroaniline	65	5.763	5.763	(0.939)	225702	40.0000	35
$	40 Dimethylphthalate-d6	166	5.902	5.902	(0.962)	622353	40.0000	39
	41 Dimethylphthalate	163	5.924	5.924	(0.965)	624115	40.0000	42
	42 2,6-Dinitrotoluene	165	5.967	5.967	(0.972)	150535	40.0000	41
$	43 Acenaphthylene-d8	160	6.010	6.010	(0.979)	727380	40.0000	35
	44 Acenaphthylene	152	6.020	6.020	(0.981)	694368	40.0000	37
	45 3-Nitroaniline	138	6.106	6.106	(0.995)	101610	40.0000	42
*	46 Acenaphthene-d10	164	6.138	6.138	(1.000)	428821	40.0000	
	47 Acenaphthene	153	6.160	6.160	(1.003)	376660	40.0000	31
	48 2,4-Dinitrophenol	184	6.192	6.192	(1.009)	68354	40.0000	41(Q)
	52 Dibenzofuran	168	6.310	6.310	(1.028)	666706	40.0000	38
$	49 4-Nitrophenol-d4	143	6.246	6.246	(1.017)	95841	40.0000	42
	50 4-Nitrophenol	109	6.256	6.256	(1.019)	187782	40.0000	43
	51 2,4-Dinitrotoluene	165	6.299	6.299	(1.026)	207257	40.0000	45(Q)
	118 2,3,4,6-Tetrachlorophenol	232	6.417	6.417	(1.045)	151967	40.0000	41
	53 Diethylphthalate	149	6.514	6.514	(1.061)	502560	40.0000	36
$	54 Fluorene-d10	176	6.567	6.567	(1.070)	576711	40.0000	40
	56 Fluorene	166	6.589	6.589	(1.073)	565966	40.0000	39
	55 4-Chlorophenyl-phenylether	204	6.599	6.599	(1.075)	297003	40.0000	39
	57 4-Nitroaniline	138	6.610	6.610	(1.077)	104998	40.0000	40
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.632	6.632	(0.901)	125325	40.0000	37(Q)
	59 4,6-Dinitro-2-methylphenol	198	6.632	6.632	(0.901)	108530	40.0000	33(Q)
	60 N-Nitrosodiphenylamine	169	6.696	6.696	(0.910)	425254	40.0000	32
	61 4-Bromophenyl-phenylether	248	6.996	6.996	(0.950)	183642	40.0000	39
	62 Hexachlorobenzene	284	7.050	7.050	(0.958)	185080	40.0000	37
	63 Atrazine	200	7.136	7.136	(0.969)	199863	40.0000	42
	64 Pentachlorophenol	266	7.211	7.211	(0.980)	91662	40.0000	37
*	65 Phenanthrene-d10	188	7.361	7.361	(1.000)	868857	40.0000	
	66 Phenanthrene	178	7.382	7.382	(1.003)	851433	40.0000	35
$	67 Anthracene-d10	188	7.404	7.404	(1.006)	970464	40.0000	39
	68 Anthracene	178	7.414	7.414	(1.007)	821405	40.0000	33
	117 Carbazole	167	7.554	7.554	(1.026)	793946	40.0000	40
	70 Di-n-butylphthalate	149	7.854	7.854	(1.067)	946329	40.0000	44
	71 Fluoranthene	202	8.358	8.358	(1.135)	1032566	40.0000	41
$	72 Pyrene-d10	212	8.530	8.530	(0.891)	784089	40.0000	44
	73 Pyrene	202	8.540	8.540	(0.892)	911044	40.0000	40
	74 Butylbenzylphthalate	149	9.098	9.098	(0.951)	331455	40.0000	47

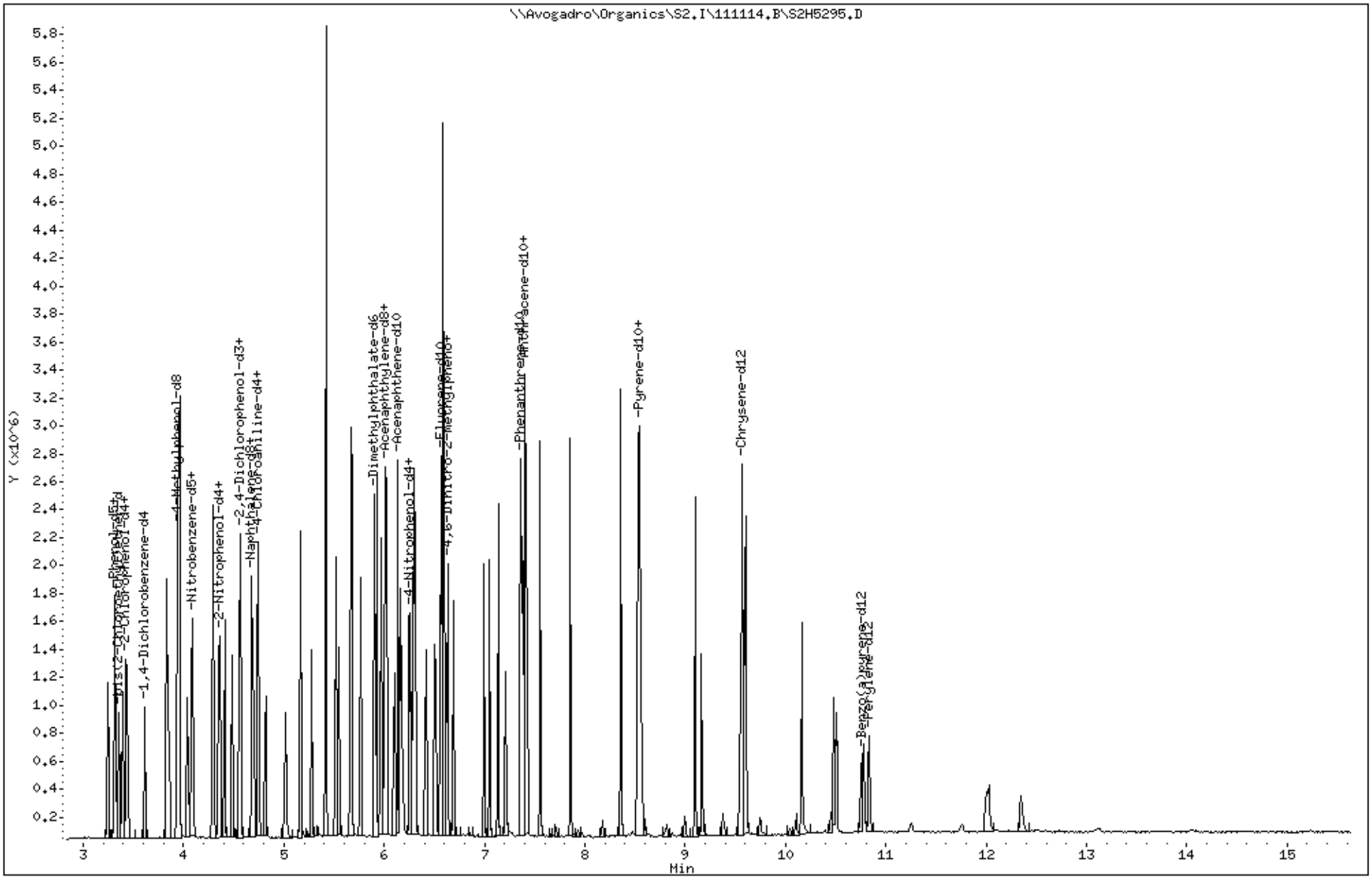
Data File: \\Avogadro\Organics\S2.I\111114.B\S2H5295.D
Report Date: 15-Nov-2011 10:25

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	75 3,3'-Dichlorobenzidine	252	9.548	9.548	(0.998)	191703	40.0000	46
	76 Benzo(a)anthracene	228	9.559	9.559	(0.999)	612192	40.0000	37
*	77 Chrysene-d12	240	9.570	9.570	(1.000)	562566	40.0000	(Q)
	78 Chrysene	228	9.591	9.591	(1.002)	546916	40.0000	37
	79 bis(2-Ethylhexyl)phthalate	149	9.602	9.602	(1.003)	417954	40.0000	49
	80 Di-n-octylphthalate	149	10.160	10.160	(0.938)	595819	40.0000	57
	81 Benzo(b)fluoranthene	252	10.481	10.481	(0.967)	369340	40.0000	40
	82 Benzo(k)fluoranthene	252	10.503	10.503	(0.969)	450019	40.0000	42
$	83 Benzo(a)pyrene-d12	264	10.760	10.760	(0.993)	254673	40.0000	36
	84 Benzo(a)pyrene	252	10.782	10.782	(0.995)	302822	40.0000	37
*	85 Perylene-d12	264	10.835	10.835	(1.000)	285438	40.0000	
	86 Indeno(1,2,3-cd)pyrene	276	12.004	12.004	(1.108)	213397	40.0000	34
	87 Dibenzo(a,h)anthracene	278	12.026	12.026	(1.110)	186645	40.0000	36
	88 Benzo(g,h,i)perylene	276	12.347	12.347	(1.140)	169031	40.0000	33

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S2.I\111114.B\S2H5295.D
Date : 14-NOV-2011 18:23
Client ID: SSTD0202D
Instrument: S2.i
Sample Info: SSTD0202D,SSTD0202D
Volume Injected (uL): 2.0
Operator: SRC:
Column phase: RXI-5SILMS
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\Avogadro\Organics\S2.I\111025.B\S2H5052.D
Lab Smp Id: DFTPP2W Client Smp ID: DFTPP2W
Inj Date : 25-OCT-2011 09:32
Operator : SRC: Inst ID: S2.i
Smp Info : DFTPP2W,DFTPP2W
Misc Info : 3,3
Comment :
Method : \\Avogadro\Organics\S2.I\111025.B\S2_dftppSOM.m
Meth Date : 19-Oct-2011 10:51 mscarpaci Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 100 QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf * Vf/Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 dftpp						CAS #: 5074-71-5		
5.674	6.035	-0.361	198	237696			0.00- 100.00	100.00
5.674	6.035	-0.361	51	145024			10.00- 80.00	61.01
5.674	6.035	-0.361	68	0	0.0	0.0	0.00- 2.00	0.00
5.674	6.035	-0.361	69	199040			0.00- 0.00	83.74
5.674	6.035	-0.361	70	0	0.0	0.0	0.00- 2.00	0.00
5.674	6.035	-0.361	127	111936			10.00- 80.00	47.09
5.674	6.035	-0.361	197	0	0.0	0.0	0.00- 2.00	0.00
5.674	6.035	-0.361	199	16123			5.00- 9.00	6.78
5.674	6.035	-0.361	275	36352			10.00- 60.00	15.29
5.674	6.035	-0.361	365	3657			1.00- 0.00	1.54
5.674	6.035	-0.361	441	21896			0.01- 99.99	91.26
5.674	6.035	-0.361	442	124880			50.00- 100.00	52.54
5.674	6.035	-0.361	443	23992			15.00- 24.00	19.21

Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5052.D

Date : 25-OCT-2011 09:32

Client ID: DFTPP2W

Instrument: S2.i

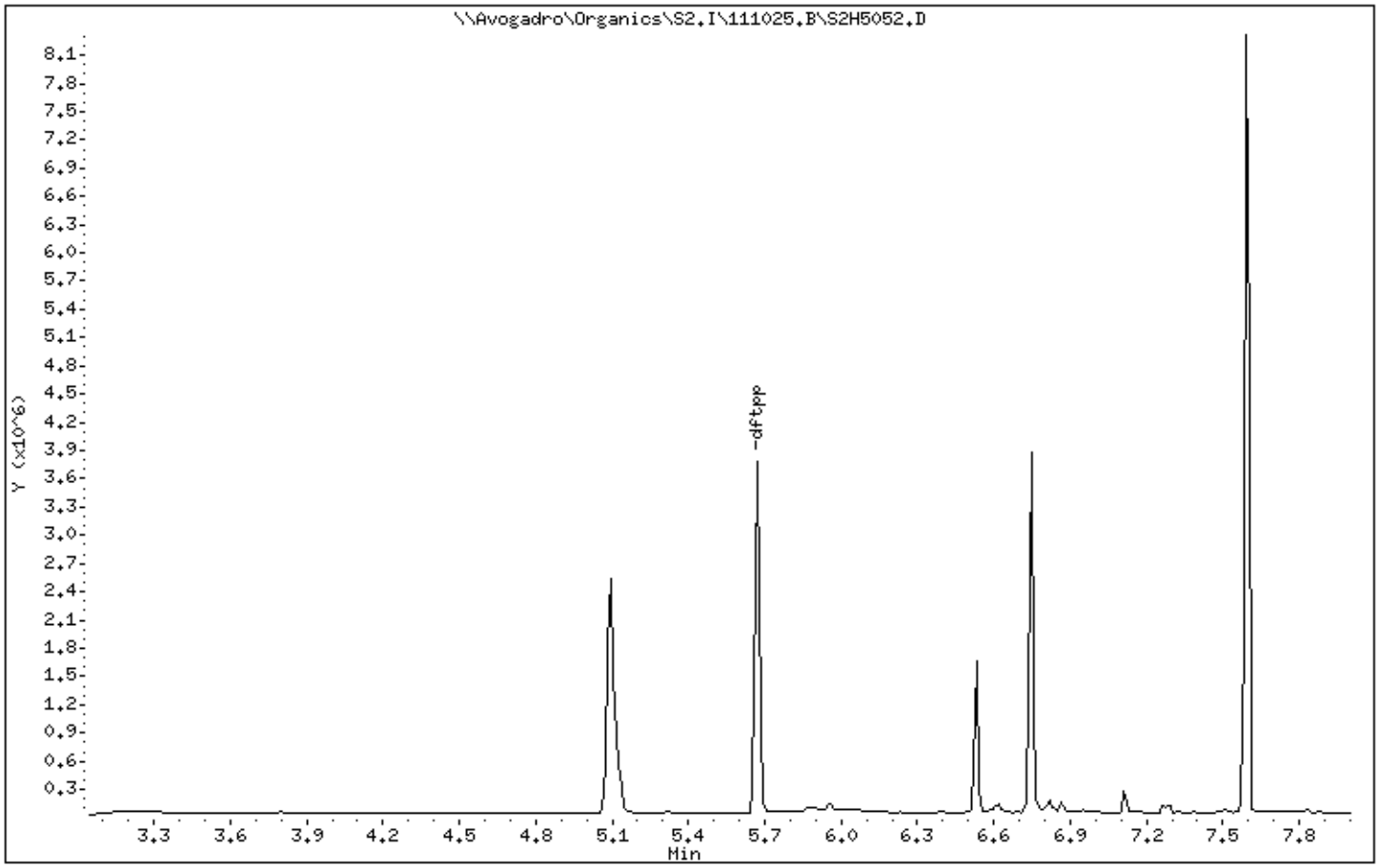
Sample Info: DFTPP2W,DFTPP2W

Volume Injected (uL): 2.0

Operator: SRC:

Column phase: RXi-5SILMS

Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5052.D

Date : 25-OCT-2011 09:32

Client ID: DFTPP2W

Instrument: S2.i

Sample Info: DFTPP2W,DFTPP2W

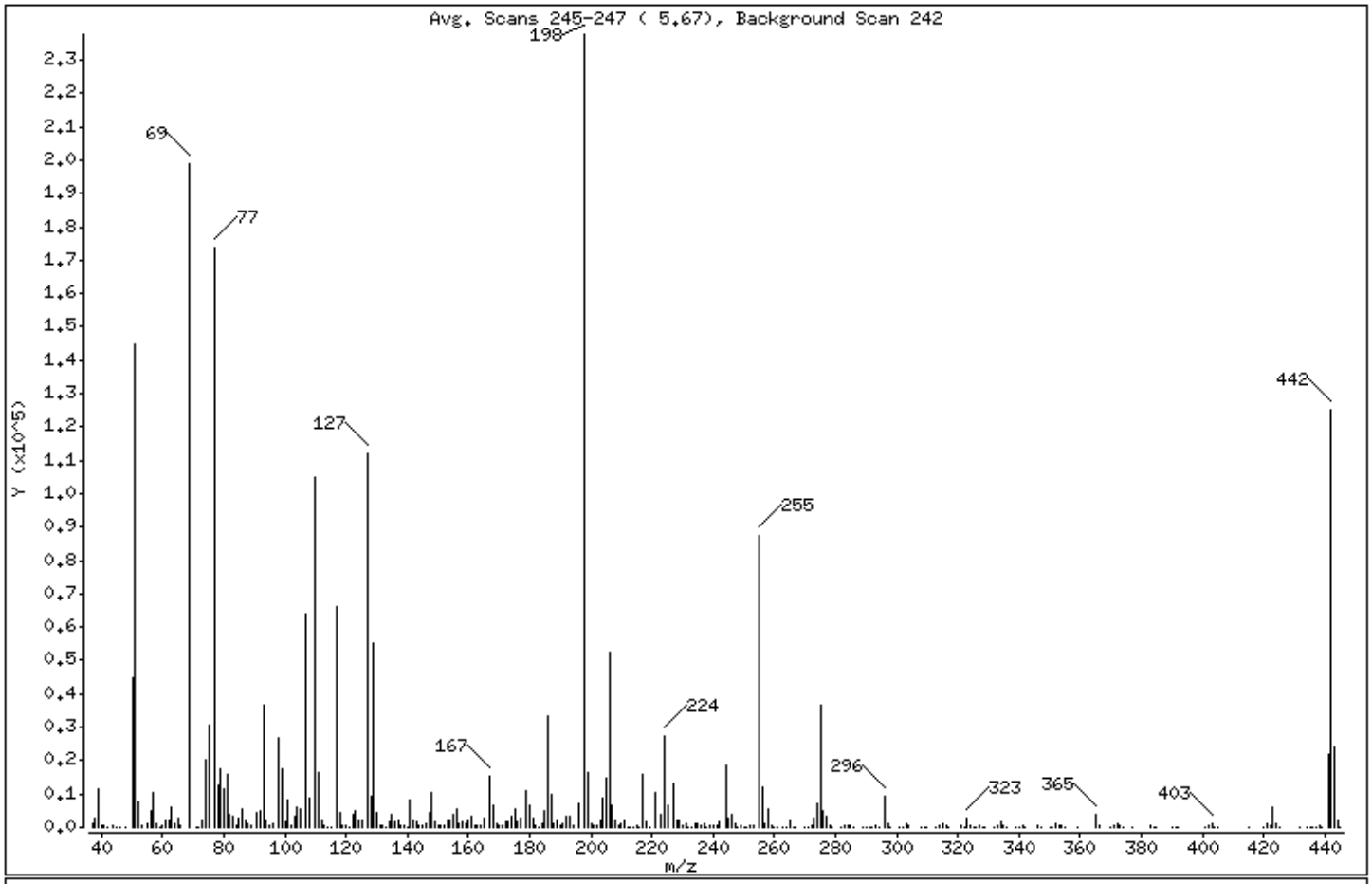
Volume Injected (uL): 2.0

Operator: SRC:

Column phase: RXi-5SILMS

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	61.01
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	83.74
70	Less than 2.00% of mass 69	0.00 (0.00)
127	10.00 - 80.00% of mass 198	47.09
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.78
275	10.00 - 60.00% of mass 198	15.29
365	Greater than 1.00% of mass 198	1.54
441	Present, but less than mass 443	9.21
442	50.00 - 100.00% of mass 198	52.54
443	15.00 - 24.00% of mass 442	10.09 (19.21)

Date : 25-OCT-2011 09:32

Client ID: DFTPP2W Instrument: S2.i

Sample Info: DFTPP2W,DFTPP2W

Volume Injected (uL): 2.0 Operator: SRC:

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S2H5052.D
Spectrum: Avg. Scans 245-247 (5.67), Background Scan 242
Location of Maximum: 198.00
Number of points: 308

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	887	129.00	55200	211.00	2362	304.00	325
38.00	2682	130.00	4483	212.00	249	308.00	115
39.00	11719	131.00	688	213.00	204	309.00	150
40.00	670	132.00	462	214.00	54	310.00	214
41.00	474	133.00	266	215.00	751	313.00	76
42.00	44	134.00	1630	216.00	214	314.00	451
44.00	751	135.00	4058	217.00	15846	315.00	1039
45.00	234	136.00	1797	218.00	1851	316.00	552
46.00	13	137.00	2009	219.00	177	317.00	85
48.00	258	138.00	395	221.00	10424	321.00	313
50.00	44544	139.00	300	223.00	3644	322.00	130
51.00	145024	140.00	182	224.00	27192	323.00	2631
52.00	7590	141.00	7964	225.00	6722	324.00	519
53.00	381	142.00	2409	227.00	13254	325.00	37
55.00	1128	143.00	1757	228.00	2001	326.00	98
56.00	4760	144.00	504	229.00	2299	327.00	634
57.00	10599	145.00	371	230.00	331	328.00	257
58.00	1020	146.00	1300	231.00	1171	329.00	49
59.00	161	147.00	4174	232.00	184	332.00	229
60.00	329	148.00	10447	233.00	240	333.00	319
61.00	1915	149.00	1650	234.00	824	334.00	1692
62.00	2253	150.00	478	235.00	916	335.00	429
63.00	5846	151.00	736	236.00	602	336.00	79
64.00	821	152.00	575	237.00	822	339.00	49
65.00	2558	153.00	2419	238.00	198	340.00	37
66.00	563	154.00	2046	239.00	394	341.00	290
69.00	199040	155.00	4043	240.00	393	342.00	77
71.00	245	156.00	5410	241.00	656	346.00	590
72.00	208	157.00	887	242.00	1412	347.00	111
73.00	2001	158.00	1385	244.00	18744	350.00	110
74.00	20192	159.00	1170	245.00	2688	351.00	46
75.00	30352	160.00	2326	246.00	3874	352.00	849
77.00	174016	161.00	3402	247.00	881	353.00	585
78.00	12544	162.00	728	248.00	240	354.00	692
79.00	17224	163.00	287	249.00	609	355.00	166

Date : 25-OCT-2011 09:32

Client ID: DFTPP2W Instrument: S2.i

Sample Info: DFTPP2W,DFTPP2W

Volume Injected (uL): 2.0 Operator: SRC:

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S2H5052.D
Spectrum: Avg. Scans 245-247 (5.67), Background Scan 242
Location of Maximum: 198.00
Number of points: 308

m/z	Y	m/z	Y	m/z	Y	m/z	Y
80.00	11731	164.00	338	250.00	191	359.00	53
81.00	15941	165.00	2925	251.00	247	365.00	3657
82.00	3577	167.00	15178	252.00	277	366.00	483
83.00	3265	168.00	6390	253.00	665	370.00	76
84.00	392	169.00	1228	255.00	87624	371.00	292
85.00	2597	170.00	748	256.00	12126	372.00	1311
86.00	5634	171.00	687	257.00	1136	373.00	408
87.00	2359	172.00	1391	258.00	5533	374.00	39
88.00	938	173.00	1693	259.00	811	377.00	35
89.00	466	174.00	3059	260.00	115	383.00	340
91.00	4110	175.00	5272	261.00	156	384.00	123
92.00	4915	176.00	1474	263.00	34	385.00	44
93.00	36536	177.00	2827	264.00	20	390.00	160
94.00	2070	179.00	10743	265.00	2216	391.00	95
95.00	414	180.00	6612	266.00	251	392.00	76
96.00	1266	181.00	2975	267.00	33	401.00	76
98.00	26712	182.00	563	270.00	175	402.00	578
99.00	17696	183.00	219	271.00	208	403.00	938
100.00	1505	184.00	1034	272.00	325	404.00	257
101.00	8423	185.00	4935	273.00	2525	405.00	42
102.00	455	186.00	33544	274.00	7031	415.00	38
103.00	3136	187.00	9632	275.00	36352	420.00	35
104.00	5860	188.00	998	276.00	5041	421.00	836
105.00	5248	189.00	2373	277.00	3128	422.00	577
107.00	63784	190.00	553	278.00	567	423.00	6131
108.00	8919	191.00	1015	279.00	59	424.00	1267
110.00	105016	192.00	3252	282.00	36	425.00	58
111.00	16381	193.00	3405	283.00	413	432.00	36
112.00	2021	194.00	680	284.00	279	434.00	107
113.00	640	196.00	7359	285.00	598	435.00	65
114.00	45	198.00	237696	286.00	126	436.00	164
115.00	111	199.00	16123	289.00	175	437.00	252
117.00	66072	200.00	1299	290.00	85	438.00	342
118.00	4481	201.00	293	291.00	34	439.00	241
119.00	473	202.00	776	292.00	139	441.00	21896

Date : 25-OCT-2011 09:32

Client ID: DFTPP2W Instrument: S2.i

Sample Info: DFTPP2W,DFTPP2W

Volume Injected (uL): 2.0 Operator: SRC:

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S2H5052.D
Spectrum: Avg. Scans 245-247 (5.67), Background Scan 242
Location of Maximum: 198.00
Number of points: 308

m/z	Y	m/z	Y	m/z	Y	m/z	Y
120.00	702	203.00	1974	293.00	630	442.00	124880
121.00	106	204.00	8596	294.00	211	443.00	23992
122.00	3904	205.00	14687	296.00	9424	444.00	2149
123.00	5097	206.00	52392	297.00	1327	445.00	154
124.00	2427	207.00	6769	298.00	51		
125.00	1989	208.00	2114	301.00	80		
127.00	111936	209.00	770	302.00	203		
128.00	9377	210.00	914	303.00	1040		

Spectrum Analytical, Inc. RI Division

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5247.D
Lab Smp Id: DFTPP2X Client Smp ID: DFTPP2X
Inj Date : 10-NOV-2011 09:18
Operator : SRC: Inst ID: S2.i
Smp Info : DFTPP2X,DFTPP2X
Misc Info : 3,3
Comment :
Method : \\Avogadro\Organics\S2.I\111110.B\S2_dftppSOM.m
Meth Date : 28-Oct-2011 11:08 mscarpaci Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 100 QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf * Vf/Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume (uL)
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
1 dftpp							CAS #: 5074-71-5	
5.251	5.552	-0.301	198	314624			0.00- 100.00	100.00
5.251	5.552	-0.301	51	165760			10.00- 80.00	52.69
5.251	5.552	-0.301	68	0	0.0	0.0	0.00- 2.00	0.00
5.251	5.552	-0.301	69	223552			0.00- 0.00	71.05
5.251	5.552	-0.301	70	0	0.0	0.0	0.00- 2.00	0.00
5.251	5.552	-0.301	127	144576			10.00- 80.00	45.95
5.251	5.552	-0.301	197	0	0.0	0.0	0.00- 2.00	0.00
5.251	5.552	-0.301	199	21888			5.00- 9.00	6.96
5.251	5.552	-0.301	275	48688			10.00- 60.00	15.47
5.251	5.552	-0.301	365	5200			1.00- 0.00	1.65
5.251	5.552	-0.301	441	30432			0.01- 99.99	91.86
5.251	5.552	-0.301	442	169344			50.00- 100.00	53.82
5.251	5.552	-0.301	443	33128			15.00- 24.00	19.56

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5247.D

Date : 10-NOV-2011 09:18

Client ID: DFTPP2X

Instrument: S2.i

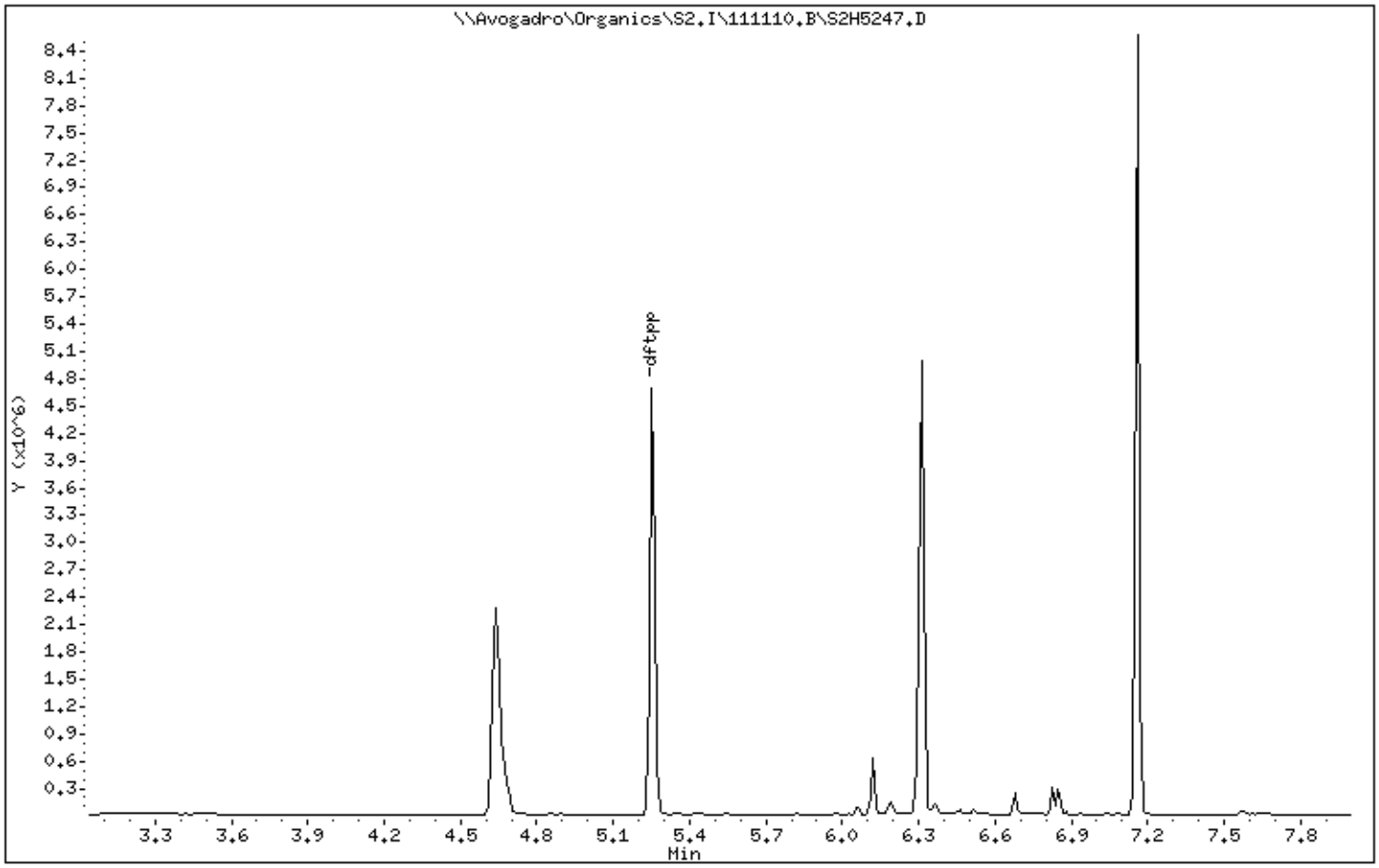
Sample Info: DFTPP2X,DFTPP2X

Volume Injected (uL): 2.0

Operator: SRC:

Column phase: RXi-5SILMS

Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5247.D

Date : 10-NOV-2011 09:18

Client ID: DFTPP2X

Instrument: S2.i

Sample Info: DFTPP2X,DFTPP2X

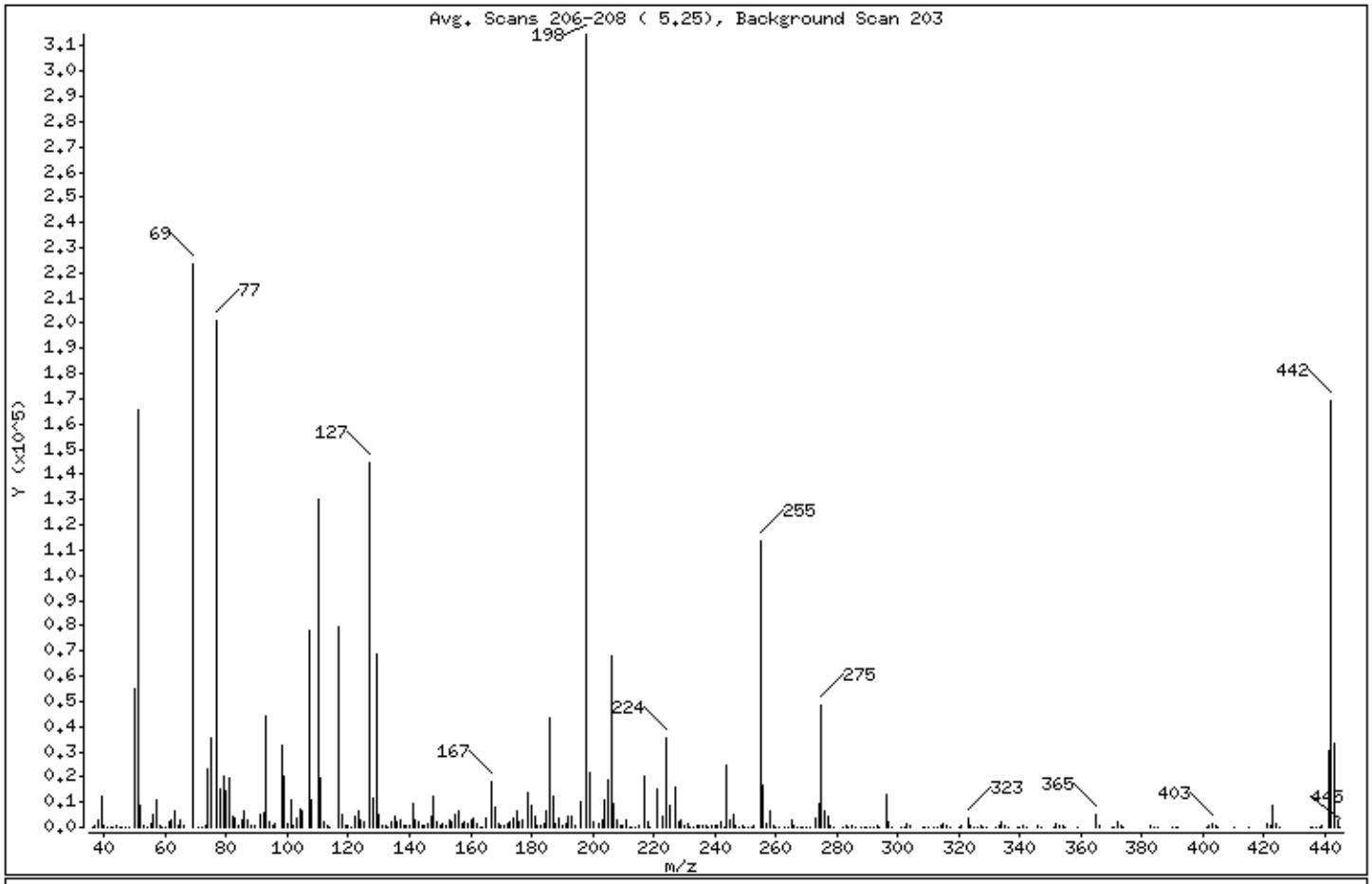
Volume Injected (uL): 2.0

Operator: SRC:

Column phase: RXi-5SILMS

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	52.69
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	71.05
70	Less than 2.00% of mass 69	0.00 (0.00)
127	10.00 - 80.00% of mass 198	45.95
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.96
275	10.00 - 60.00% of mass 198	15.47
365	Greater than 1.00% of mass 198	1.65
441	Present, but less than mass 443	9.67
442	50.00 - 100.00% of mass 198	53.82
443	15.00 - 24.00% of mass 442	10.53 (19.56)

Date : 10-NOV-2011 09:18

Client ID: DFTPP2X Instrument: S2.i

Sample Info: DFTPP2X,DFTPP2X

Volume Injected (uL): 2.0 Operator: SRC:

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S2H5247.D
Spectrum: Avg. Scans 206-208 (5.25), Background Scan 203
Location of Maximum: 198.00
Number of points: 309

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	103	125.00	2488	209.00	901	298.00	124
37.00	1016	127.00	144576	210.00	702	301.00	175
38.00	3058	128.00	11924	211.00	3010	302.00	239
39.00	12355	129.00	68424	212.00	69	303.00	1519
40.00	410	130.00	5379	213.00	164	304.00	375
41.00	310	131.00	1028	214.00	107	308.00	179
42.00	1	132.00	608	215.00	861	309.00	127
43.00	192	133.00	265	217.00	19912	310.00	163
44.00	535	134.00	1991	218.00	2352	312.00	50
45.00	349	135.00	4448	219.00	247	313.00	167
46.00	154	136.00	2053	221.00	14858	314.00	641
47.00	74	137.00	2792	223.00	4083	315.00	1261
48.00	208	138.00	573	224.00	35144	316.00	748
50.00	54648	139.00	523	225.00	8563	317.00	129
51.00	165760	140.00	474	227.00	15606	320.00	34
52.00	8991	141.00	9321	228.00	2292	321.00	373
53.00	439	142.00	2961	229.00	2882	323.00	3660
54.00	77	143.00	1858	230.00	434	324.00	724
55.00	1225	144.00	590	231.00	1265	325.00	33
56.00	5419	145.00	396	232.00	216	326.00	59
57.00	10732	146.00	1794	233.00	285	327.00	605
58.00	611	147.00	4378	234.00	953	328.00	358
59.00	198	148.00	12263	235.00	959	329.00	57
60.00	34	149.00	2150	236.00	811	332.00	334
61.00	2216	150.00	621	237.00	1064	333.00	428
62.00	2769	151.00	1151	238.00	142	334.00	2370
63.00	6301	152.00	487	239.00	605	335.00	586
64.00	1042	153.00	2986	240.00	459	336.00	51
65.00	2594	154.00	2374	241.00	843	339.00	94
66.00	524	155.00	4762	242.00	1859	340.00	96
69.00	223552	156.00	6617	243.00	222	341.00	423
71.00	239	157.00	1173	244.00	24280	342.00	91
72.00	75	158.00	1855	245.00	3250	346.00	786
73.00	910	159.00	1367	246.00	5268	347.00	147
74.00	23288	160.00	2832	247.00	906	351.00	114

Date : 10-NOV-2011 09:18

Client ID: DFTPP2X Instrument: S2.i

Sample Info: DFTPP2X,DFTPP2X

Volume Injected (uL): 2.0 Operator: SRC:

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S2H5247.D
Spectrum: Avg. Scans 206-208 (5.25), Background Scan 203
Location of Maximum: 198.00
Number of points: 309

m/z	Y	m/z	Y	m/z	Y	m/z	Y
75.00	35416	161.00	3971	248.00	277	352.00	1127
77.00	201088	162.00	1092	249.00	831	353.00	855
78.00	15064	163.00	295	250.00	204	354.00	997
79.00	20192	164.00	228	251.00	210	355.00	232
80.00	14449	165.00	3393	252.00	281	359.00	90
81.00	19296	167.00	18184	253.00	632	365.00	5200
82.00	4356	168.00	8227	255.00	113728	366.00	625
83.00	3791	169.00	1434	256.00	16920	370.00	144
84.00	384	170.00	767	257.00	1465	371.00	348
85.00	3227	171.00	787	258.00	6848	372.00	1945
86.00	6378	172.00	1580	259.00	1056	373.00	478
87.00	2624	173.00	2044	260.00	225	374.00	86
88.00	895	174.00	3660	261.00	249	383.00	584
89.00	642	175.00	6373	263.00	93	384.00	182
91.00	4991	176.00	1896	264.00	313	385.00	41
92.00	5912	177.00	3199	265.00	2736	390.00	265
93.00	44376	179.00	13450	266.00	493	391.00	206
94.00	2514	180.00	8331	267.00	41	392.00	164
95.00	388	181.00	4036	268.00	84	401.00	176
96.00	1401	182.00	761	269.00	35	402.00	822
98.00	32832	183.00	431	270.00	193	403.00	1225
99.00	20192	184.00	1162	271.00	307	404.00	440
100.00	1676	185.00	6444	273.00	3644	405.00	52
101.00	10655	186.00	43168	274.00	9576	410.00	34
102.00	726	187.00	12526	275.00	48688	415.00	91
103.00	3921	188.00	1331	276.00	6645	421.00	1132
104.00	7352	189.00	3385	277.00	4031	422.00	407
105.00	6778	190.00	555	278.00	705	423.00	8422
107.00	77848	191.00	1512	279.00	181	424.00	1714
108.00	10782	192.00	4275	282.00	121	425.00	161
110.00	130000	193.00	4011	283.00	495	435.00	115
111.00	19408	194.00	866	284.00	350	436.00	102
112.00	2406	196.00	10148	285.00	623	437.00	61
113.00	1077	198.00	314624	286.00	115	438.00	232
114.00	257	199.00	21888	288.00	85	439.00	466

Date : 10-NOV-2011 09:18

Client ID: DFTPP2X Instrument: S2.i

Sample Info: DFTPP2X,DFTPP2X

Volume Injected (uL): 2.0 Operator: SRC:

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S2H5247.D
Spectrum: Avg. Scans 206-208 (5.25), Background Scan 203
Location of Maximum: 198.00
Number of points: 309

m/z	Y	m/z	Y	m/z	Y	m/z	Y
117.00	79920	200.00	1828	289.00	180	441.00	30432
118.00	5199	202.00	1616	290.00	138	442.00	169344
119.00	487	203.00	2547	291.00	92	443.00	33128
120.00	697	204.00	10693	292.00	175	444.00	2997
121.00	92	205.00	18624	293.00	854	445.00	218
122.00	4649	206.00	67968	294.00	240		
123.00	6183	207.00	9095	296.00	13001		
124.00	3053	208.00	2615	297.00	1825		

Spectrum Analytical, Inc. RI Division

Data file : \\Avogadro\Organics\S2.I\111111.B\S2H5275.D
Lab Smp Id: DFTPP2Z Client Smp ID: DFTPP2Z
Inj Date : 11-NOV-2011 08:43
Operator : SRC: Inst ID: S2.i
Smp Info : DFTPP2Z,DFTPP2Z
Misc Info : 3,3
Comment :
Method : \\Avogadro\Organics\S2.I\111111.B\S2_dftppSOM.m
Meth Date : 28-Oct-2011 11:08 mscarpaci Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 100 QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf * Vf/Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume (uL)
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
1 dftpp							CAS #: 5074-71-5	
5.283	5.552	-0.269	198	332416			0.00- 100.00	100.00
5.283	5.552	-0.269	51	166912			10.00- 80.00	50.21
5.283	5.552	-0.269	68	0	0.0	0.0	0.00- 2.00	0.00
5.283	5.552	-0.269	69	222016			0.00- 0.00	66.79
5.283	5.552	-0.269	70	0	0.0	0.0	0.00- 2.00	0.00
5.283	5.552	-0.269	127	144896			10.00- 80.00	43.59
5.283	5.552	-0.269	197	0	0.0	0.0	0.00- 2.00	0.00
5.283	5.552	-0.269	199	22832			5.00- 9.00	6.87
5.283	5.552	-0.269	275	51648			10.00- 60.00	15.54
5.283	5.552	-0.269	365	5512			1.00- 0.00	1.66
5.283	5.552	-0.269	441	31176			0.01- 99.99	92.04
5.283	5.552	-0.269	442	173696			50.00- 100.00	52.25
5.283	5.552	-0.269	443	33872			15.00- 24.00	19.50

Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5275.D

Date : 11-NOV-2011 08:43

Client ID: DFTPP2Z

Instrument: S2.i

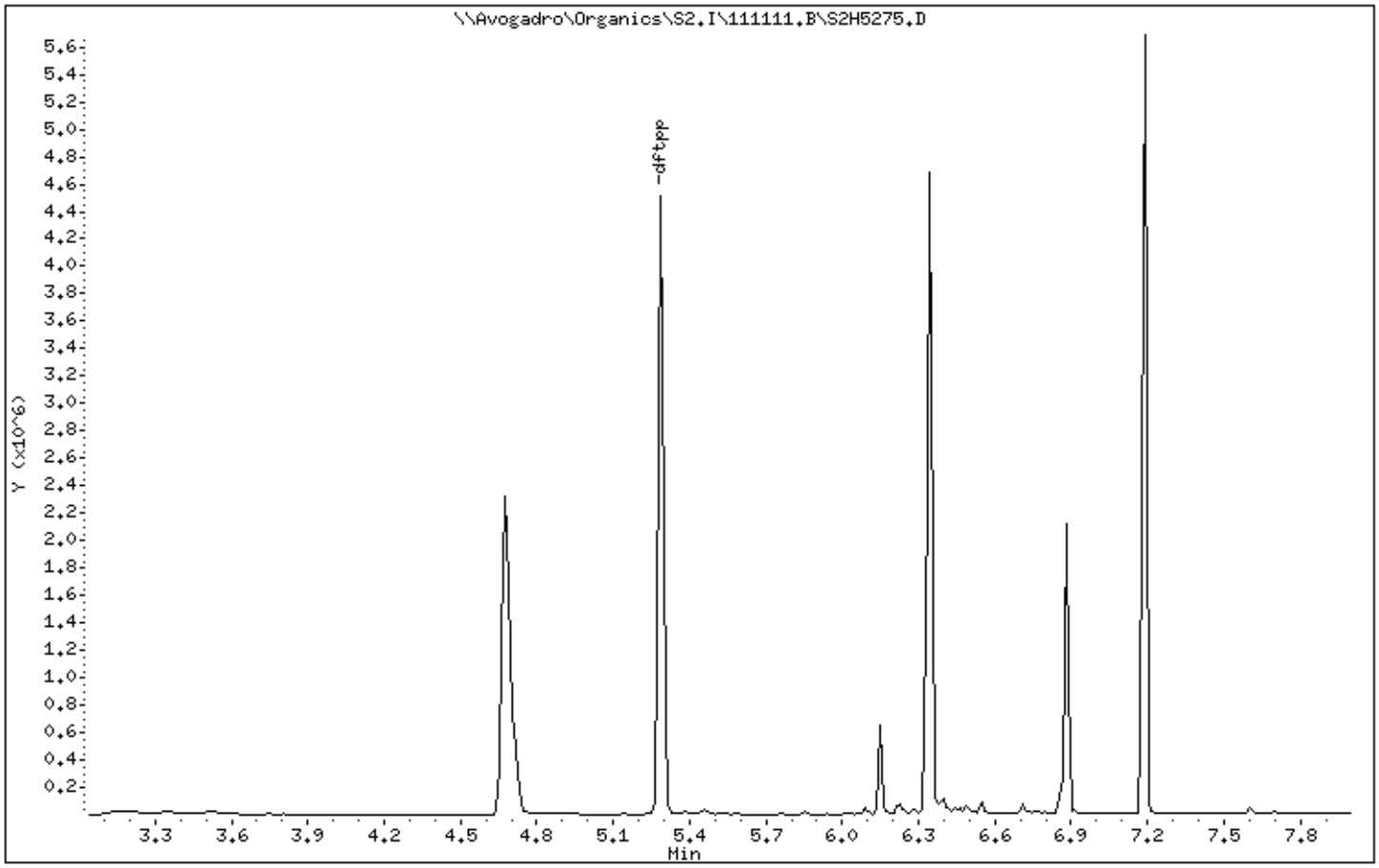
Sample Info: DFTPP2Z,DFTPP2Z

Volume Injected (uL): 2.0

Operator: SRC:

Column phase: RXi-5SILMS

Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111111.B\S2H5275.D

Date : 11-NOV-2011 08:43

Client ID: DFTPP2Z

Instrument: S2.i

Sample Info: DFTPP2Z,DFTPP2Z

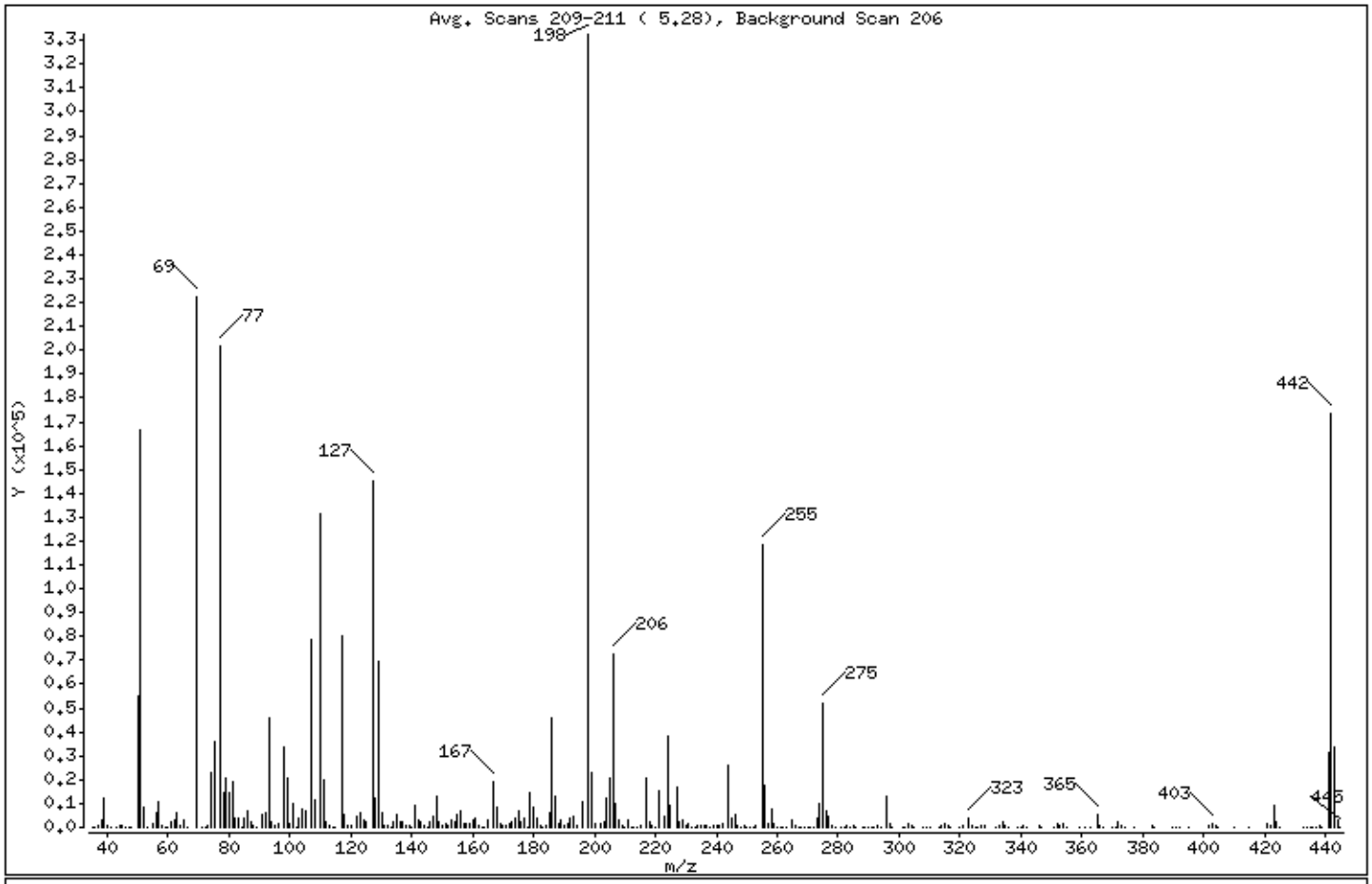
Volume Injected (uL): 2.0

Operator: SRC:

Column phase: RXi-5SILMS

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	50.21
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	66.79
70	Less than 2.00% of mass 69	0.00 (0.00)
127	10.00 - 80.00% of mass 198	43.59
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.87
275	10.00 - 60.00% of mass 198	15.54
365	Greater than 1.00% of mass 198	1.66
441	Present, but less than mass 443	9.38
442	50.00 - 100.00% of mass 198	52.25
443	15.00 - 24.00% of mass 442	10.19 (19.50)

Date : 11-NOV-2011 08:43

Client ID: DFTPP2Z Instrument: S2.i

Sample Info: DFTPP2Z,DFTPP2Z

Volume Injected (uL): 2.0 Operator: SRC:

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S2H5275.D
Spectrum: Avg. Scans 209-211 (5.28), Background Scan 206
Location of Maximum: 198.00
Number of points: 315

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	197	128.00	12319	211.00	3057	301.00	128
36.00	83	129.00	69728	212.00	61	302.00	346
37.00	1003	130.00	5875	213.00	220	303.00	1597
38.00	3012	131.00	1113	214.00	44	304.00	426
39.00	12552	132.00	725	215.00	819	305.00	33
40.00	1089	133.00	202	217.00	20544	308.00	177
41.00	141	134.00	2084	218.00	2441	309.00	92
43.00	68	135.00	5022	219.00	439	310.00	228
44.00	636	136.00	1935	220.00	62	313.00	39
45.00	401	137.00	2403	221.00	15288	314.00	682
46.00	91	138.00	746	223.00	4713	315.00	1362
47.00	86	139.00	535	224.00	37912	316.00	744
48.00	103	140.00	188	225.00	9360	317.00	164
50.00	54760	141.00	9260	227.00	17056	320.00	43
51.00	166912	142.00	2865	228.00	2491	321.00	495
52.00	8697	143.00	2194	229.00	3145	323.00	3938
53.00	354	144.00	462	230.00	470	324.00	744
55.00	1223	145.00	197	231.00	1270	325.00	53
56.00	5871	146.00	2047	232.00	306	326.00	34
57.00	10984	147.00	4622	233.00	277	327.00	788
58.00	558	148.00	13235	234.00	1123	328.00	423
59.00	111	149.00	2133	235.00	1029	332.00	323
60.00	16	150.00	576	236.00	530	333.00	539
61.00	2448	151.00	1258	237.00	1017	334.00	2393
62.00	2881	152.00	652	238.00	24	335.00	717
63.00	6444	153.00	2865	239.00	628	336.00	76
64.00	910	154.00	2169	240.00	537	339.00	60
65.00	2927	155.00	5090	241.00	986	340.00	55
66.00	298	156.00	7152	242.00	1902	341.00	455
69.00	222016	157.00	1378	244.00	26160	342.00	129
71.00	298	158.00	1710	245.00	3788	346.00	850
72.00	137	159.00	1472	246.00	5198	347.00	154
73.00	588	160.00	2833	247.00	1137	351.00	70
74.00	23160	161.00	4167	248.00	287	352.00	1290
75.00	35888	162.00	1074	249.00	814	353.00	845

Date : 11-NOV-2011 08:43

Client ID: DFTPP2Z Instrument: S2.i

Sample Info: DFTPP2Z,DFTPP2Z

Volume Injected (uL): 2.0 Operator: SRC:

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S2H5275.D
Spectrum: Avg. Scans 209-211 (5.28), Background Scan 206
Location of Maximum: 198.00
Number of points: 315

m/z	Y	m/z	Y	m/z	Y	m/z	Y
77.00	201664	163.00	362	250.00	139	354.00	1186
78.00	14700	164.00	309	251.00	252	355.00	212
79.00	20792	165.00	3306	252.00	314	359.00	74
80.00	14530	167.00	19128	253.00	801	361.00	40
81.00	18744	168.00	8248	255.00	118568	363.00	37
82.00	4085	169.00	1405	256.00	17624	365.00	5512
83.00	3686	170.00	712	257.00	1467	366.00	900
84.00	110	171.00	913	258.00	7598	367.00	41
85.00	3570	172.00	1790	259.00	1244	370.00	42
86.00	6682	173.00	2119	260.00	255	371.00	321
87.00	2551	174.00	3616	261.00	272	372.00	2060
88.00	863	175.00	6569	262.00	41	373.00	556
89.00	303	176.00	2021	263.00	50	374.00	46
91.00	5080	177.00	3582	265.00	2935	377.00	89
92.00	5943	178.00	158	266.00	426	383.00	594
93.00	45584	179.00	14224	267.00	36	384.00	158
94.00	2529	180.00	8613	268.00	159	390.00	294
95.00	489	181.00	3973	269.00	39	391.00	203
96.00	1255	182.00	622	270.00	239	392.00	128
98.00	33680	183.00	346	271.00	312	395.00	57
99.00	20312	184.00	717	272.00	277	402.00	902
100.00	1858	185.00	5894	273.00	3758	403.00	1167
101.00	9944	186.00	45664	274.00	10267	404.00	395
102.00	219	187.00	12892	275.00	51648	405.00	51
103.00	3724	188.00	1430	276.00	7068	410.00	44
104.00	7760	189.00	3332	277.00	4275	415.00	37
105.00	6555	190.00	588	278.00	715	421.00	1221
107.00	78408	191.00	1431	279.00	144	422.00	900
108.00	11441	192.00	3961	281.00	40	423.00	8871
110.00	131072	193.00	4309	282.00	131	424.00	1931
111.00	19792	194.00	939	283.00	488	425.00	171
112.00	2630	196.00	10562	284.00	307	433.00	37
113.00	878	198.00	332416	285.00	754	434.00	38
114.00	347	199.00	22832	286.00	110	435.00	73
115.00	154	200.00	1824	288.00	35	436.00	132

Date : 11-NOV-2011 08:43

Client ID: DFTPP2Z Instrument: S2.i

Sample Info: DFTPP2Z,DFTPP2Z

Volume Injected (uL): 2.0 Operator: SRC:

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S2H5275.D
Spectrum: Avg. Scans 209-211 (5.28), Background Scan 206
Location of Maximum: 198.00
Number of points: 315

m/z	Y	m/z	Y	m/z	Y	m/z	Y
117.00	80360	202.00	1730	289.00	225	437.00	144
118.00	5444	203.00	2418	290.00	155	438.00	493
119.00	751	204.00	11933	291.00	2	439.00	234
120.00	796	205.00	20336	292.00	89	441.00	31176
122.00	4634	206.00	72680	293.00	888	442.00	173696
123.00	6036	207.00	9992	294.00	224	443.00	33872
124.00	3158	208.00	2769	296.00	13266	444.00	3083
125.00	2670	209.00	919	297.00	1901	445.00	174
127.00	144896	210.00	188	298.00	143		

Spectrum Analytical, Inc. RI Division

Data file : \\Avogadro\Organics\S2.I\111114.B\S2H5289.D
Lab Smp Id: DFTPP2C Client Smp ID: DFTPP2C
Inj Date : 14-NOV-2011 16:22
Operator : SRC: Inst ID: S2.i
Smp Info : DFTPP2C,DFTPP2C
Misc Info : 3,3
Comment :
Method : \\Avogadro\Organics\S2.I\111114.B\S2_dftppSOM.m
Meth Date : 28-Oct-2011 11:08 mscarpaci Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 100 QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf * Vf/Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 dftpp						CAS #: 5074-71-5		
5.177	5.552	-0.375	198	79264			0.00- 100.00	100.00
5.177	5.552	-0.375	51	50184			10.00- 80.00	63.31
5.177	5.552	-0.375	68	0	0.0	0.0	0.00- 2.00	0.00
5.177	5.552	-0.375	69	65536			0.00- 0.00	82.68
5.177	5.552	-0.375	70	0	0.0	0.0	0.00- 2.00	0.00
5.177	5.552	-0.375	127	38968			10.00- 80.00	49.16
5.177	5.552	-0.375	197	0	0.0	0.0	0.00- 2.00	0.00
5.177	5.552	-0.375	199	5479			5.00- 9.00	6.91
5.177	5.552	-0.375	275	12239			10.00- 60.00	15.44
5.177	5.552	-0.375	365	1249			1.00- 0.00	1.58
5.177	5.552	-0.375	441	7923			0.01- 99.99	91.34
5.177	5.552	-0.375	442	44568			50.00- 100.00	56.23
5.177	5.552	-0.375	443	8674			15.00- 24.00	19.46

Data File: \\Avogadro\Organics\S2.I\111114.B\S2H5289.D

Date : 14-NOV-2011 16:22

Client ID: DFTPP2C

Instrument: S2.i

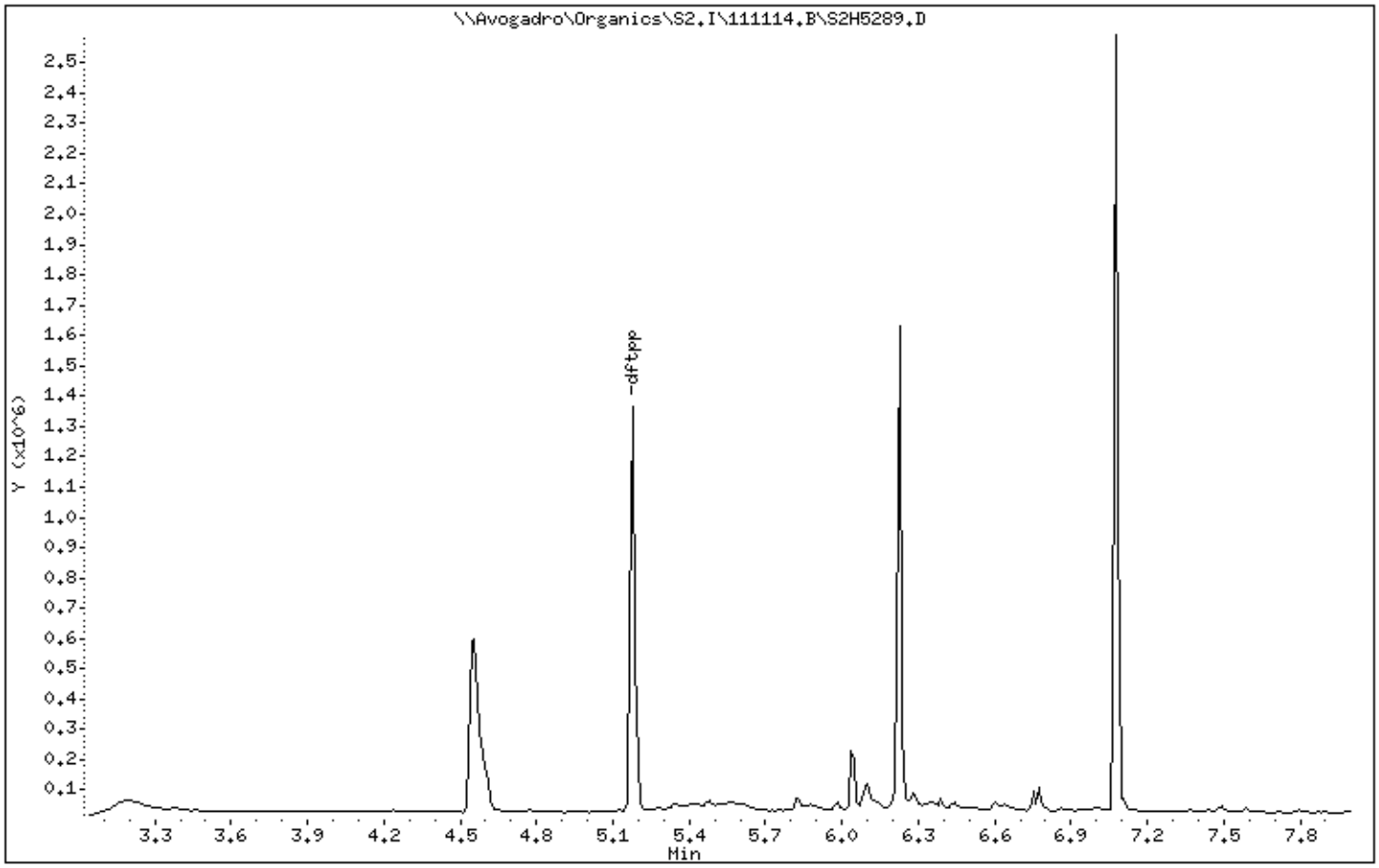
Sample Info: DFTPP2C,DFTPP2C

Volume Injected (uL): 2.0

Operator: SRC:

Column phase: RXi-5SILMS

Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111114.B\S2H5289.D

Date : 14-NOV-2011 16:22

Client ID: DFTPP2C

Instrument: S2.i

Sample Info: DFTPP2C,DFTPP2C

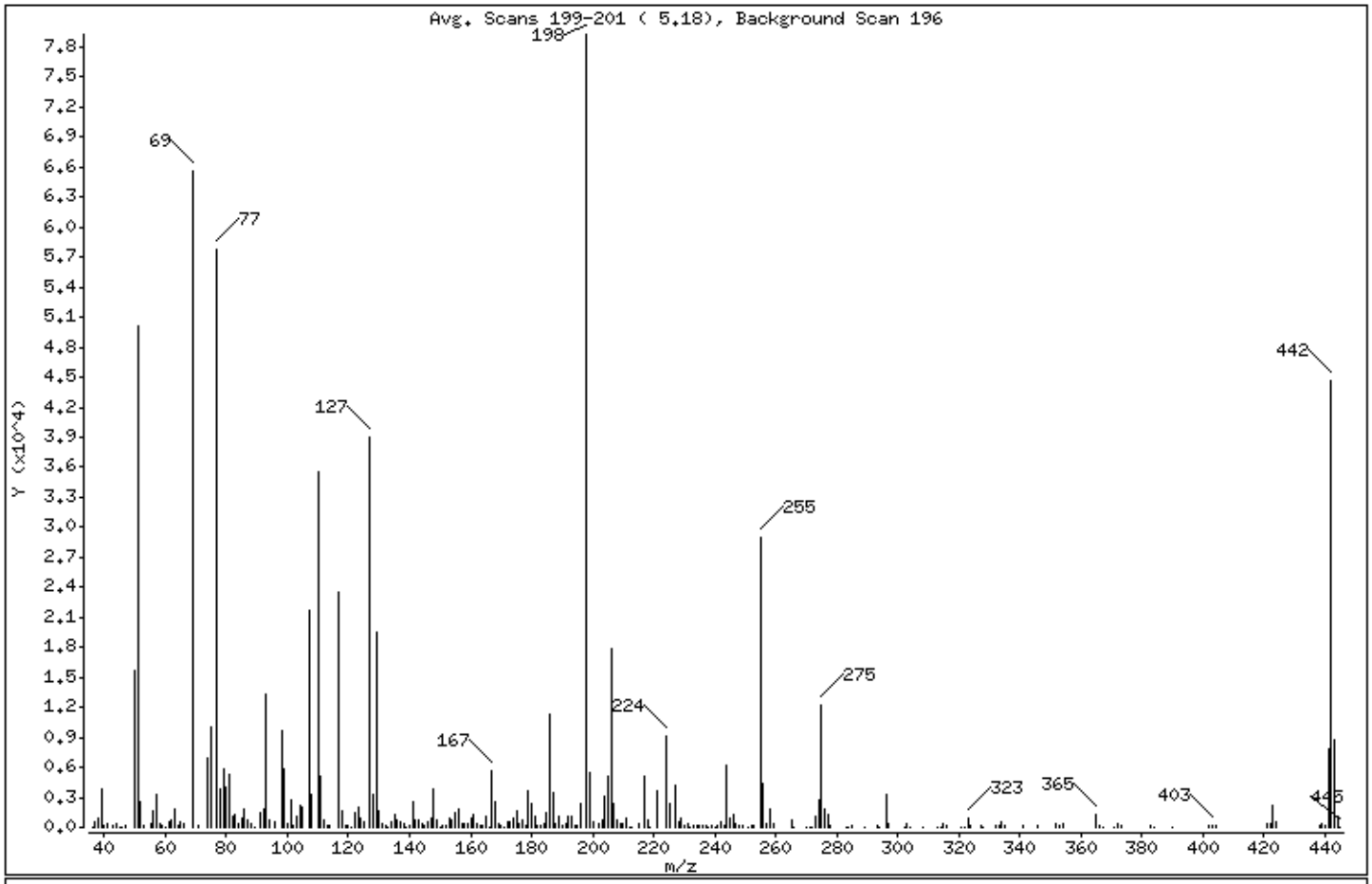
Volume Injected (uL): 2.0

Operator: SRC:

Column phase: RXi-5SILMS

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	63.31
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	82.68
70	Less than 2.00% of mass 69	0.00 (0.00)
127	10.00 - 80.00% of mass 198	49.16
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.91
275	10.00 - 60.00% of mass 198	15.44
365	Greater than 1.00% of mass 198	1.58
441	Present, but less than mass 443	10.00
442	50.00 - 100.00% of mass 198	56.23
443	15.00 - 24.00% of mass 442	10.94 (19.46)

Date : 14-NOV-2011 16:22

Client ID: DFTPP2C Instrument: S2.i

Sample Info: DFTPP2C,DFTPP2C

Volume Injected (uL): 2.0 Operator: SRC:

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S2H5289.D
Spectrum: Avg. Scans 199-201 (5.18), Background Scan 196
Location of Maximum: 198.00
Number of points: 262

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	4	119.00	191	186.00	11297	270.00	36
37.00	526	120.00	270	187.00	3438	271.00	45
38.00	931	121.00	51	188.00	355	272.00	46
39.00	3858	122.00	1518	189.00	1022	273.00	1004
40.00	104	123.00	1969	190.00	184	274.00	2657
41.00	315	124.00	962	191.00	407	275.00	12239
43.00	268	125.00	597	192.00	1055	276.00	1781
44.00	419	127.00	38968	193.00	1121	277.00	1230
45.00	27	128.00	3270	194.00	248	278.00	123
46.00	80	129.00	19432	195.00	135	283.00	83
47.00	150	130.00	1610	196.00	2294	284.00	85
50.00	15711	131.00	340	198.00	79264	285.00	213
51.00	50184	132.00	192	199.00	5479	289.00	35
52.00	2625	133.00	23	200.00	484	293.00	193
53.00	129	134.00	581	202.00	359	294.00	39
55.00	281	135.00	1277	203.00	771	296.00	3351
56.00	1713	136.00	679	204.00	3034	297.00	420
57.00	3322	137.00	632	205.00	5193	302.00	70
58.00	377	138.00	315	206.00	17928	303.00	351
59.00	127	139.00	53	207.00	2396	304.00	63
60.00	84	140.00	183	208.00	727	308.00	41
61.00	556	141.00	2509	209.00	284	313.00	38
62.00	692	142.00	805	210.00	414	314.00	85
63.00	1777	143.00	659	211.00	893	315.00	294
64.00	263	144.00	280	212.00	43	316.00	217
65.00	505	145.00	160	213.00	82	321.00	86
66.00	311	146.00	557	215.00	281	322.00	40
69.00	65536	147.00	922	217.00	5160	323.00	972
71.00	157	148.00	3803	218.00	696	324.00	153
74.00	6894	149.00	783	219.00	5	327.00	177
75.00	10093	150.00	78	221.00	3575	328.00	65
77.00	57832	151.00	202	224.00	9119	332.00	98
78.00	3834	152.00	169	225.00	2321	333.00	175
79.00	5920	153.00	969	227.00	4217	334.00	594
80.00	4069	154.00	815	228.00	575	335.00	142

Date : 14-NOV-2011 16:22

Client ID: DFTPP2C Instrument: S2.i

Sample Info: DFTPP2C,DFTPP2C

Volume Injected (uL): 2.0 Operator: SRC:

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S2H5289.D
Spectrum: Avg. Scans 199-201 (5.18), Background Scan 196
Location of Maximum: 198.00
Number of points: 262

m/z	Y	m/z	Y	m/z	Y	m/z	Y
81.00	5268	155.00	1470	229.00	887	341.00	122
82.00	1129	156.00	1871	230.00	109	346.00	197
83.00	1200	157.00	418	231.00	357	352.00	313
84.00	275	158.00	438	232.00	83	353.00	129
85.00	982	159.00	448	233.00	102	354.00	316
86.00	1744	160.00	861	234.00	251	365.00	1249
87.00	714	161.00	1217	235.00	256	366.00	153
88.00	323	162.00	318	236.00	231	367.00	38
89.00	59	163.00	205	237.00	224	371.00	74
91.00	1372	164.00	105	238.00	47	372.00	451
92.00	1748	165.00	1003	239.00	143	373.00	153
93.00	13282	166.00	75	240.00	78	383.00	199
94.00	725	167.00	5574	241.00	223	384.00	49
96.00	489	168.00	2523	242.00	504	390.00	48
98.00	9742	169.00	419	243.00	109	402.00	176
99.00	5810	170.00	210	244.00	6208	403.00	262
100.00	452	171.00	80	245.00	859	404.00	130
101.00	2705	172.00	536	246.00	1316	421.00	330
102.00	155	173.00	623	247.00	292	422.00	305
103.00	1168	174.00	948	248.00	97	423.00	2275
104.00	2211	175.00	1671	249.00	219	424.00	553
105.00	1914	176.00	427	251.00	76	438.00	92
107.00	21608	177.00	737	252.00	118	439.00	288
108.00	3237	178.00	246	253.00	215	440.00	106
110.00	35472	179.00	3680	255.00	29016	441.00	7923
111.00	5136	180.00	2359	256.00	4436	442.00	44568
112.00	767	181.00	1152	257.00	411	443.00	8674
113.00	242	182.00	124	258.00	1830	444.00	828
114.00	201	183.00	146	259.00	307	445.00	68
117.00	23464	184.00	333	265.00	701		
118.00	1683	185.00	1387	266.00	73		

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK2X

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-62764

Sample wt/vol: 30.0 (g/mL) G Lab File ID: S2H5249.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
100-52-7	Benzaldehyde	170	U
108-95-2	Phenol	170	U
111-44-4	Bis(2-chloroethyl)ether	170	U
95-57-8	2-Chlorophenol	170	U
95-48-7	2-Methylphenol	170	U
108-60-1	2,2´-Oxybis(1-chloropropane)	170	U
98-86-2	Acetophenone	170	U
106-44-5	4-Methylphenol	170	U
621-64-7	N-Nitroso-di-n-propylamine	170	U
67-72-1	Hexachloroethane	170	U
98-95-3	Nitrobenzene	170	U
78-59-1	Isophorone	170	U
88-75-5	2-Nitrophenol	170	U
105-67-9	2,4-Dimethylphenol	170	U
111-91-1	Bis(2-chloroethoxy)methane	170	U
120-83-2	2,4-Dichlorophenol	170	U
91-20-3	Naphthalene	170	U
106-47-8	4-Chloroaniline	170	U
87-68-3	Hexachlorobutadiene	170	U
105-60-2	Caprolactam	170	U
59-50-7	4-Chloro-3-methylphenol	170	U
91-57-6	2-Methylnaphthalene	170	U
77-47-4	Hexachlorocyclopentadiene	170	U
88-06-2	2,4,6-Trichlorophenol	170	U
95-95-4	2,4,5-Trichlorophenol	170	U
92-52-4	1,1´-Biphenyl	170	U
91-58-7	2-Chloronaphthalene	170	U
88-74-4	2-Nitroaniline	330	U
131-11-3	Dimethylphthalate	170	U
606-20-2	2,6-Dinitrotoluene	170	U
208-96-8	Acenaphthylene	170	U
99-09-2	3-Nitroaniline	330	U
83-32-9	Acenaphthene	170	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK2X

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-62764

Sample wt/vol: 30.0 (g/mL) G Lab File ID: S2H5249.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
51-28-5	2,4-Dinitrophenol	330	U
100-02-7	4-Nitrophenol	330	U
132-64-9	Dibenzofuran	170	U
121-14-2	2,4-Dinitrotoluene	170	U
84-66-2	Diethylphthalate	170	U
86-73-7	Fluorene	170	U
7005-72-3	4-Chlorophenyl-phenylether	170	U
100-01-6	4-Nitroaniline	330	U
534-52-1	4,6-Dinitro-2-methylphenol	330	U
86-30-6	N-Nitrosodiphenylamine (1)	170	U
95-94-3	1,2,4,5-Tetrachlorobenzene	170	U
101-55-3	4-Bromophenyl-phenylether	170	U
118-74-1	Hexachlorobenzene	170	U
1912-24-9	Atrazine	170	U
87-86-5	Pentachlorophenol	330	U
85-01-8	Phenanthrene	170	U
120-12-7	Anthracene	170	U
86-74-8	Carbazole	170	U
84-74-2	Di-n-butylphthalate	170	U
206-44-0	Fluoranthene	170	U
129-00-0	Pyrene	170	U
85-68-7	Butylbenzylphthalate	170	U
91-94-1	3,3´-Dichlorobenzidine	170	U
56-55-3	Benzo(a)anthracene	170	U
218-01-9	Chrysene	170	U
117-81-7	Bis(2-ethylhexyl)phthalate	170	U
117-84-0	Di-n-octylphthalate	170	U
205-99-2	Benzo(b)fluoranthene	170	U
207-08-9	Benzo(k)fluoranthene	170	U
50-32-8	Benzo(a)pyrene	170	U
193-39-5	Indeno(1,2,3-cd)pyrene	170	U
53-70-3	Dibenzo(a,h)anthracene	170	U
191-24-2	Benzo(g,h,i)perylene	170	U
58-90-2	2,3,4,6-Tetrachlorophenol	170	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK2X

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-62764

Sample wt/vol: 30.0 (g/mL) G Lab File ID: S2H5249.D

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup: (Y/N) Y pH: Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	3.210	79	J
02	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.486	150	NJ
03		Unknown-02	4.690	86	J
04		Unknown-03	4.990	71	J
05		Unknown-04	5.194	150	J
06		Unknown-05	5.301	210	J
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5249.D
Report Date: 11-Nov-2011 13:31

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5249.D
Lab Smp Id: MB-62764 Client Smp ID: SBLK2X
Inj Date : 10-NOV-2011 09:57
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : MB-62764,SBLK2X,62764
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 2 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
$	2 Phenol-d5	71	3.381	3.373	(0.916)	174582	51.8490	860
$	4 bis(2-Chloroethyl)ether-d8	67	3.424	3.427	(0.927)	223679	48.2087	800
$	6 2-Chlorophenol-d4	132	3.499	3.491	(0.948)	157661	54.1276	900
*	8 1,4-Dichlorobenzene-d4	152	3.692	3.684	(1.000)	106927	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.003	4.006	(1.084)	242640	53.1535	890
$	16 Nitrobenzene-d5	128	4.142	4.145	(0.871)	80170	50.4873	840
$	19 2-Nitrophenol-d4	143	4.421	4.424	(0.930)	97462	55.5984	930
$	23 2,4-Dichlorophenol-d3	165	4.625	4.628	(0.973)	187627	58.6325	980
*	25 Naphthalene-d8	136	4.754	4.746	(1.000)	304913	40.0000	
$	27 4-Chloroaniline-d4	131	4.807	4.810	(1.011)	109099	38.3966	640(Q)
$	40 Dimethylphthalate-d6	166	5.976	5.968	(0.962)	519440	59.4757	990
$	43 Acenaphthylene-d8	160	6.083	6.076	(0.979)	609945	53.7061	900
*	46 Acenaphthene-d10	164	6.212	6.204	(1.000)	237533	40.0000	
$	49 4-Nitrophenol-d4	143	6.319	6.312	(1.017)	79114	62.8572	1000
$	54 Fluorene-d10	176	6.641	6.633	(1.069)	433137	53.9904	900
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.705	6.698	(0.902)	79961	46.4082	770(Q)
*	65 Phenanthrene-d10	188	7.434	7.438	(1.000)	441541	40.0000	
$	67 Anthracene-d10	188	7.477	7.480	(1.006)	636477	50.4630	840
$	72 Pyrene-d10	212	8.625	8.606	(0.892)	568507	54.8683	910

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5249.D
Report Date: 11-Nov-2011 13:31

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)	
* 77 Chrysene-d12	240	9.697	9.668	(1.000)	328906	40.0000		(QH)
$ 83 Benzo(a)pyrene-d12	264	10.941	10.891	(1.000)	310599	52.1113	870	
* 85 Perylene-d12	264	11.016	10.966	(1.000)	242896	40.0000		(H)

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5249.D
Report Date: 11-Nov-2011 13:31

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5249.D
Lab Smp Id: MB-62764 Client Smp ID: SBLK2X
Inj Date : 10-NOV-2011 09:57
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : MB-62764,SBLK2X,62764
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 2 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

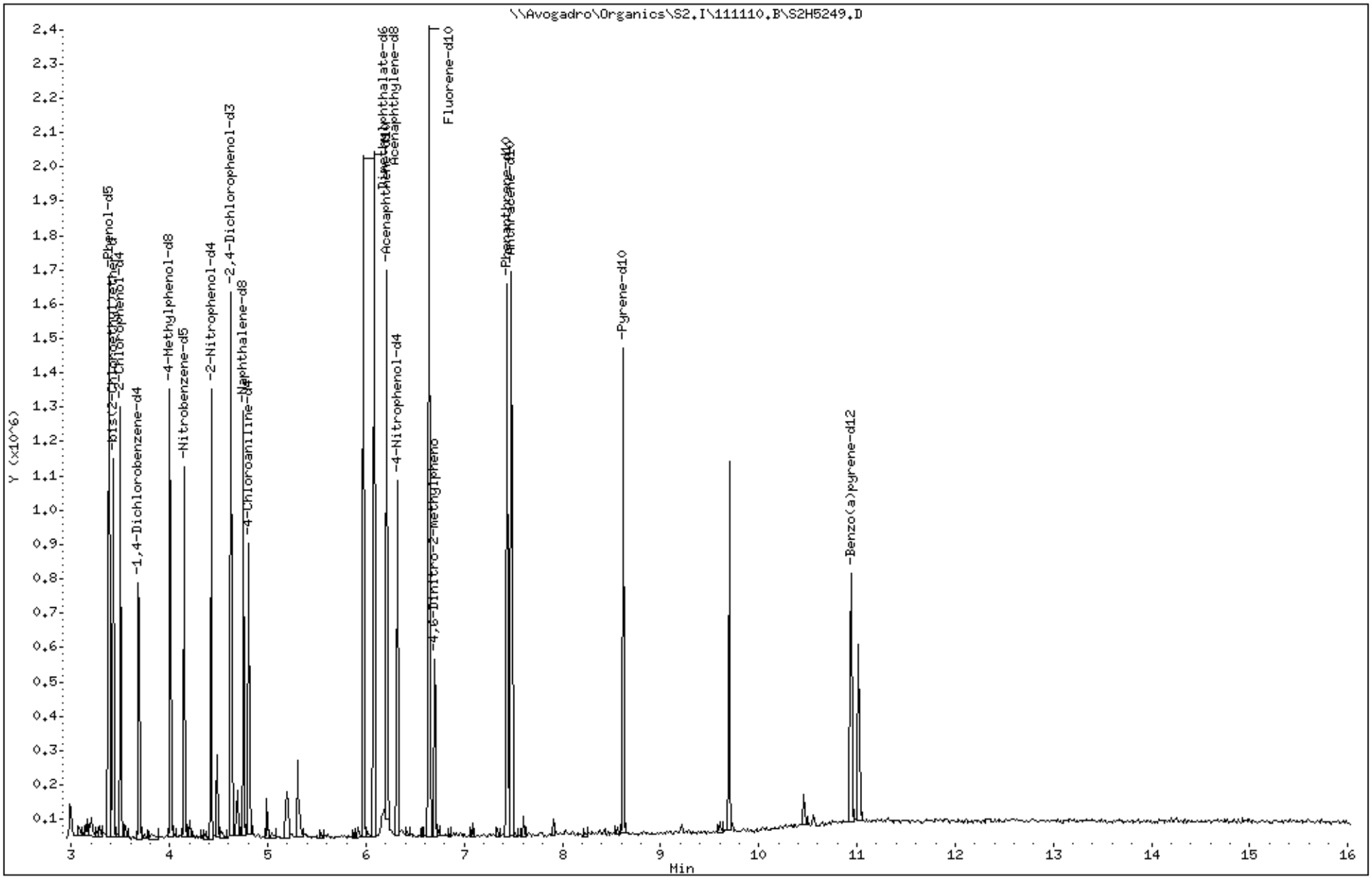
ISTD	RT	AREA	AMOUNT
* 8 1,4-Dichlorobenzene-d4	3.692	943641	40.000
* 25 Naphthalene-d8	4.754	1014118	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
3.210	112009	4.74792427	79	0	0		8
2(3H)-Furanone, dihydro-4-hydroxy-					CAS #: 5469-16-9		
4.486	224623	8.85984911	150	90	NIST2002.L	4145	25
Unknown					CAS #:		
4.690	130787	5.15865513	86	0	0		25
Unknown					CAS #:		
4.990	108063	4.26234215	71	0	0		25

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5249.D
Report Date: 11-Nov-2011 13:31

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
5.194	234660	9.25571488	150	0		0	25
Unknown				CAS #:			
5.301	324700	12.8071791	210	0		0	25

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5249.D
Date : 10-NOV-2011 09:57
Client ID: SBLK2X
Instrument: S2.i
Sample Info: MB-62764,SBLK2X,62764
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5249.D

Date : 10-NOV-2011 09:57

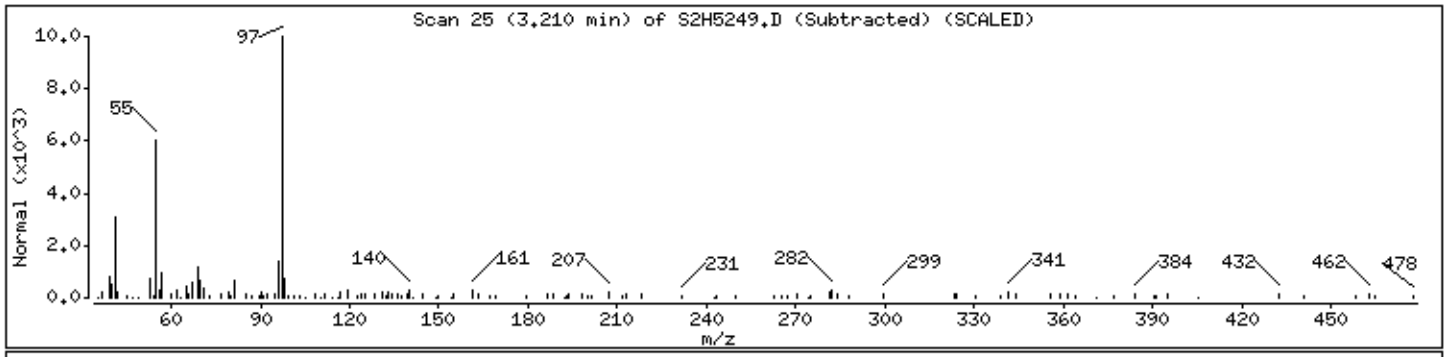
Client ID: SBLK2X Instrument: S2.i

Sample Info: MB-62764,SBLK2X,62764

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5249.D

Date : 10-NOV-2011 09:57

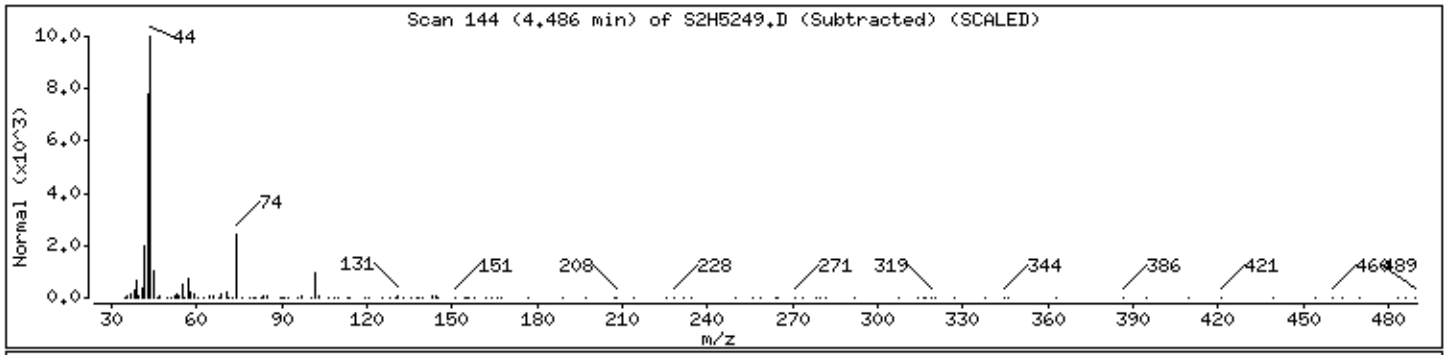
Client ID: SBLK2X Instrument: S2.i

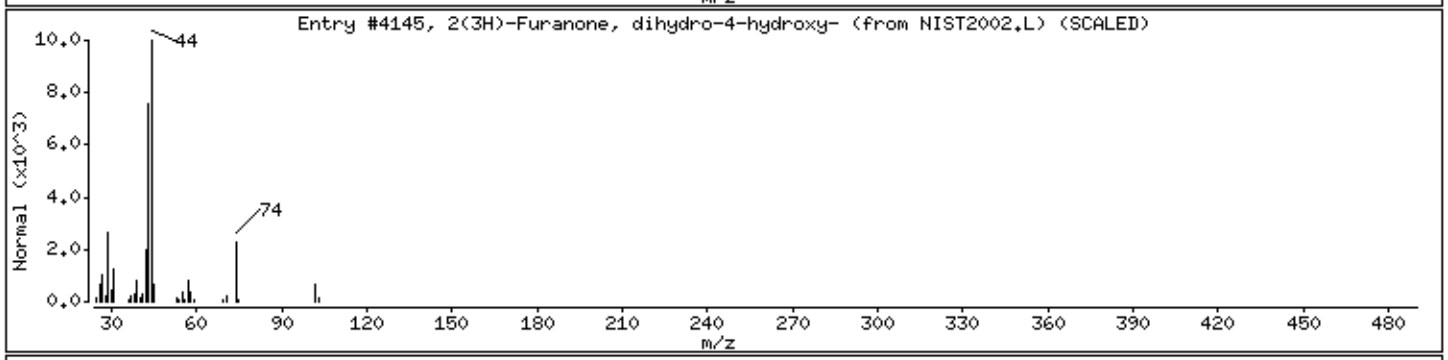
Sample Info: MB-62764,SBLK2X,62764

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2(3H)-Furanone, dihydro-4-hydroxy-	5469-16-9	NIST2002.L	4145	90	C4H6O3	102





Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5249.D

Date : 10-NOV-2011 09:57

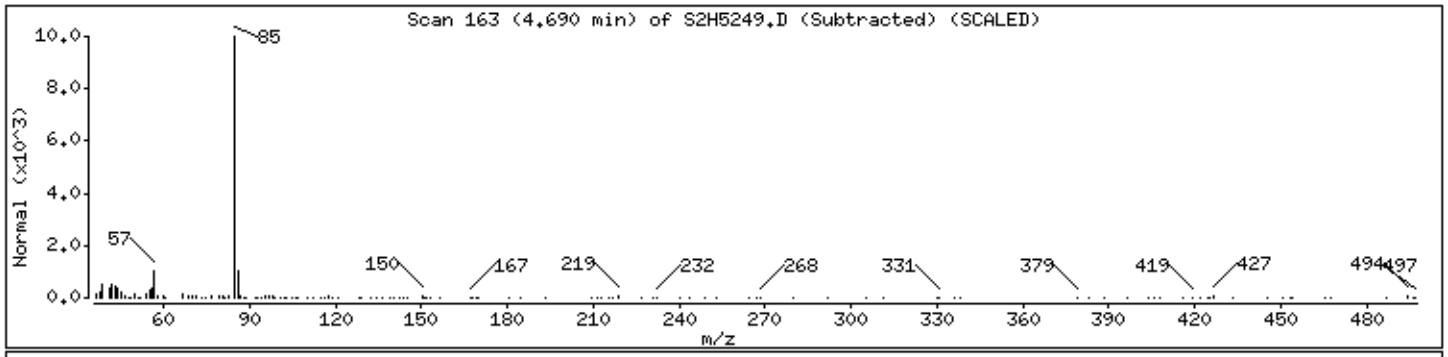
Client ID: SBLK2X Instrument: S2.i

Sample Info: MB-62764,SBLK2X,62764

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5249.D

Date : 10-NOV-2011 09:57

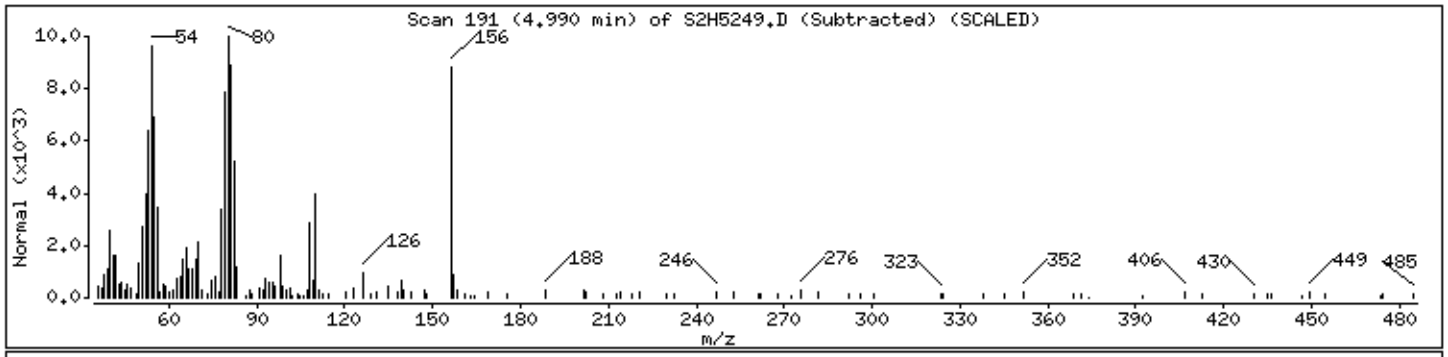
Client ID: SBLK2X Instrument: S2.i

Sample Info: MB-62764,SBLK2X,62764

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5249.D

Date : 10-NOV-2011 09:57

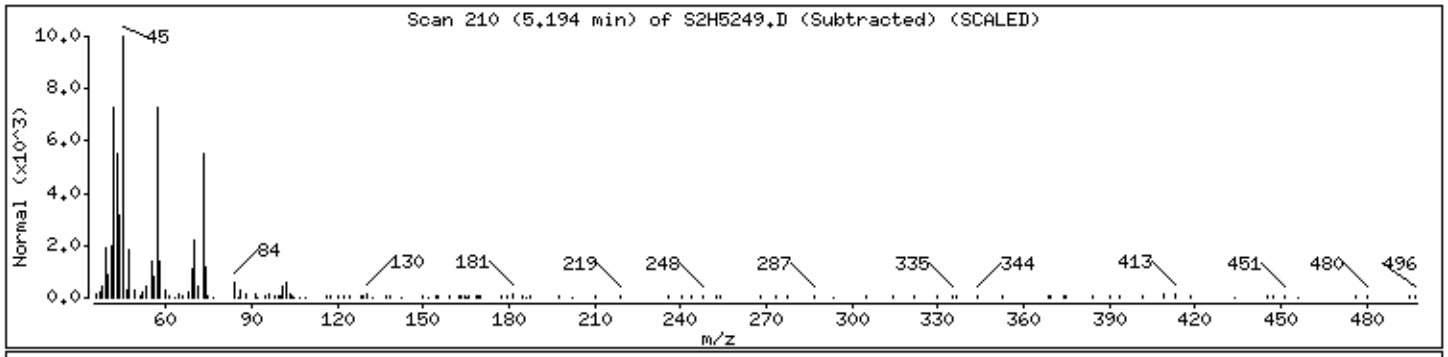
Client ID: SBLK2X Instrument: S2.i

Sample Info: MB-62764,SBLK2X,62764

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5249.D

Date : 10-NOV-2011 09:57

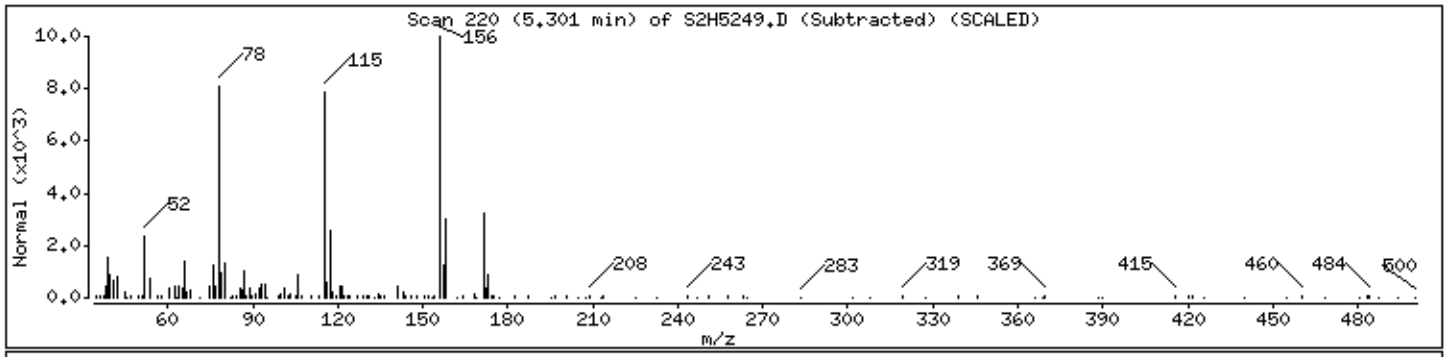
Client ID: SBLK2X Instrument: S2.i

Sample Info: MB-62764,SBLK2X,62764

Volume Injected (uL): 2.0 Operator: SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q0MS

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-01AMS

Sample wt/vol: 30.1 (g/mL) G Lab File ID: S2H5251.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 15 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: 8.2 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
100-52-7	Benzaldehyde	200	U
108-95-2	Phenol	780	
111-44-4	Bis(2-chloroethyl)ether	200	U
95-57-8	2-Chlorophenol	740	
95-48-7	2-Methylphenol	200	U
108-60-1	2,2´-Oxybis(1-chloropropane)	200	U
98-86-2	Acetophenone	200	U
106-44-5	4-Methylphenol	200	U
621-64-7	N-Nitroso-di-n-propylamine	770	
67-72-1	Hexachloroethane	200	U
98-95-3	Nitrobenzene	200	U
78-59-1	Isophorone	200	U
88-75-5	2-Nitrophenol	200	U
105-67-9	2,4-Dimethylphenol	200	U
111-91-1	Bis(2-chloroethoxy)methane	200	U
120-83-2	2,4-Dichlorophenol	200	U
91-20-3	Naphthalene	200	U
106-47-8	4-Chloroaniline	200	U
87-68-3	Hexachlorobutadiene	200	U
105-60-2	Caprolactam	200	U
59-50-7	4-Chloro-3-methylphenol	1000	
91-57-6	2-Methylnaphthalene	200	U
77-47-4	Hexachlorocyclopentadiene	200	U
88-06-2	2,4,6-Trichlorophenol	200	U
95-95-4	2,4,5-Trichlorophenol	200	U
92-52-4	1,1´-Biphenyl	200	U
91-58-7	2-Chloronaphthalene	200	U
88-74-4	2-Nitroaniline	390	U
131-11-3	Dimethylphthalate	200	U
606-20-2	2,6-Dinitrotoluene	200	U
208-96-8	Acenaphthylene	200	U
99-09-2	3-Nitroaniline	390	U
83-32-9	Acenaphthene	770	

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q0MS

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-01AMS

Sample wt/vol: 30.1 (g/mL) G Lab File ID: S2H5251.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 15 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: 8.2 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
51-28-5	2,4-Dinitrophenol	390	U
100-02-7	4-Nitrophenol	910	
132-64-9	Dibenzofuran	200	U
121-14-2	2,4-Dinitrotoluene	800	
84-66-2	Diethylphthalate	200	U
86-73-7	Fluorene	200	U
7005-72-3	4-Chlorophenyl-phenylether	200	U
100-01-6	4-Nitroaniline	390	U
534-52-1	4,6-Dinitro-2-methylphenol	390	U
86-30-6	N-Nitrosodiphenylamine (1)	200	U
95-94-3	1,2,4,5-Tetrachlorobenzene	200	U
101-55-3	4-Bromophenyl-phenylether	200	U
118-74-1	Hexachlorobenzene	200	U
1912-24-9	Atrazine	200	U
87-86-5	Pentachlorophenol	950	
85-01-8	Phenanthrene	200	U
120-12-7	Anthracene	200	U
86-74-8	Carbazole	200	U
84-74-2	Di-n-butylphthalate	52	J
206-44-0	Fluoranthene	200	U
129-00-0	Pyrene	610	
85-68-7	Butylbenzylphthalate	200	U
91-94-1	3,3´-Dichlorobenzidine	200	U
56-55-3	Benzo(a)anthracene	200	U
218-01-9	Chrysene	200	U
117-81-7	Bis(2-ethylhexyl)phthalate	73	J
117-84-0	Di-n-octylphthalate	200	U
205-99-2	Benzo(b)fluoranthene	200	U
207-08-9	Benzo(k)fluoranthene	200	U
50-32-8	Benzo(a)pyrene	200	U
193-39-5	Indeno(1,2,3-cd)pyrene	200	U
53-70-3	Dibenzo(a,h)anthracene	200	U
191-24-2	Benzo(g,h,i)perylene	200	U
58-90-2	2,3,4,6-Tetrachlorophenol	200	U

(1) Cannot be separated from Diphenylamine

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5251.D
Report Date: 11-Nov-2011 13:32

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5251.D
Lab Smp Id: K2198-01AMS Client Smp ID: H30Q0MS
Inj Date : 10-NOV-2011 10:44
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-01AMS,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 4 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.100	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)	
$	2 Phenol-d5	71	3.381	3.373	(0.916)	110453	38.1922	630	
	3 Phenol	94	3.392	3.384	(0.919)	318223	40.1202	670	
$	4 bis(2-Chloroethyl)ether-d8	67	3.424	3.427	(0.927)	140183	35.1763	580	
$	6 2-Chlorophenol-d4	132	3.499	3.491	(0.948)	98246	39.2704	650	
	7 2-Chlorophenol	128	3.510	3.513	(0.951)	97929	38.0567	630	
*	8 1,4-Dichlorobenzene-d4	152	3.692	3.684	(1.000)	91840	40.0000		(Q)
$	11 4-Methylphenol-d8	113	4.003	4.006	(1.084)	159785	40.7531	680	
	14 N-Nitroso-di-n-propylamine	70	4.024	4.027	(1.090)	143709	39.6215	660(Q)	
$	16 Nitrobenzene-d5	128	4.142	4.145	(0.871)	48039	39.1263	650(Q)	
$	19 2-Nitrophenol-d4	143	4.421	4.424	(0.930)	60659	44.7534	740	
$	23 2,4-Dichlorophenol-d3	165	4.625	4.628	(0.973)	123926	50.0852	830	
*	25 Naphthalene-d8	136	4.753	4.746	(1.000)	235761	40.0000		
$	27 4-Chloroaniline-d4	131	4.807	4.810	(1.011)	50202	22.8506	380(Q)	
	31 4-Chloro-3-methylphenol	107	5.225	5.228	(1.099)	192022	52.0969	870	
$	40 Dimethylphthalate-d6	166	5.976	5.968	(0.962)	292504	40.1217	670	
$	43 Acenaphthylene-d8	160	6.083	6.076	(0.979)	334662	35.3006	590	
*	46 Acenaphthene-d10	164	6.212	6.204	(1.000)	198281	40.0000		
	47 Acenaphthene	153	6.233	6.236	(1.003)	221509	39.6288	660	
$	49 4-Nitrophenol-d4	143	6.319	6.312	(1.017)	44892	42.7281	710	

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5251.D
Report Date: 11-Nov-2011 13:32

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
	50	4-Nitrophenol	109	6.319	6.322	(1.017)	94589	46.5573	770
	51	2,4-Dinitrotoluene	165	6.373	6.365	(1.026)	87791	41.1731	680(Q)
$	54	Fluorene-d10	176	6.641	6.633	(1.069)	260377	38.8809	650
$	58	4,6-Dinitro-2-methylphenol-d2	200	6.694	6.698	(0.900)	50367	34.6105	570
	64	Pentachlorophenol	266	7.284	7.287	(0.980)	51428	48.9934	810
*	65	Phenanthrene-d10	188	7.434	7.438	(1.000)	372929	40.0000	
$	67	Anthracene-d10	188	7.477	7.480	(1.006)	410465	38.5311	640
	70	Di-n-butylphthalate	149	7.928	7.931	(1.066)	24484	2.64914	44(a)
$	72	Pyrene-d10	212	8.603	8.606	(0.891)	331986	42.9181	710
	73	Pyrene	202	8.625	8.628	(0.893)	308802	31.3522	520
*	77	Chrysene-d12	240	9.654	9.668	(1.000)	245548	40.0000	(Q)
	79	bis(2-Ethylhexyl)phthalate	149	9.686	9.700	(1.003)	14059	3.76883	63(a)
$	83	Benzo(a)pyrene-d12	264	10.855	10.891	(0.992)	152613	38.6412	640
*	85	Perylene-d12	264	10.941	10.966	(1.000)	160951	40.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5251.D
Report Date: 11-Nov-2011 13:32

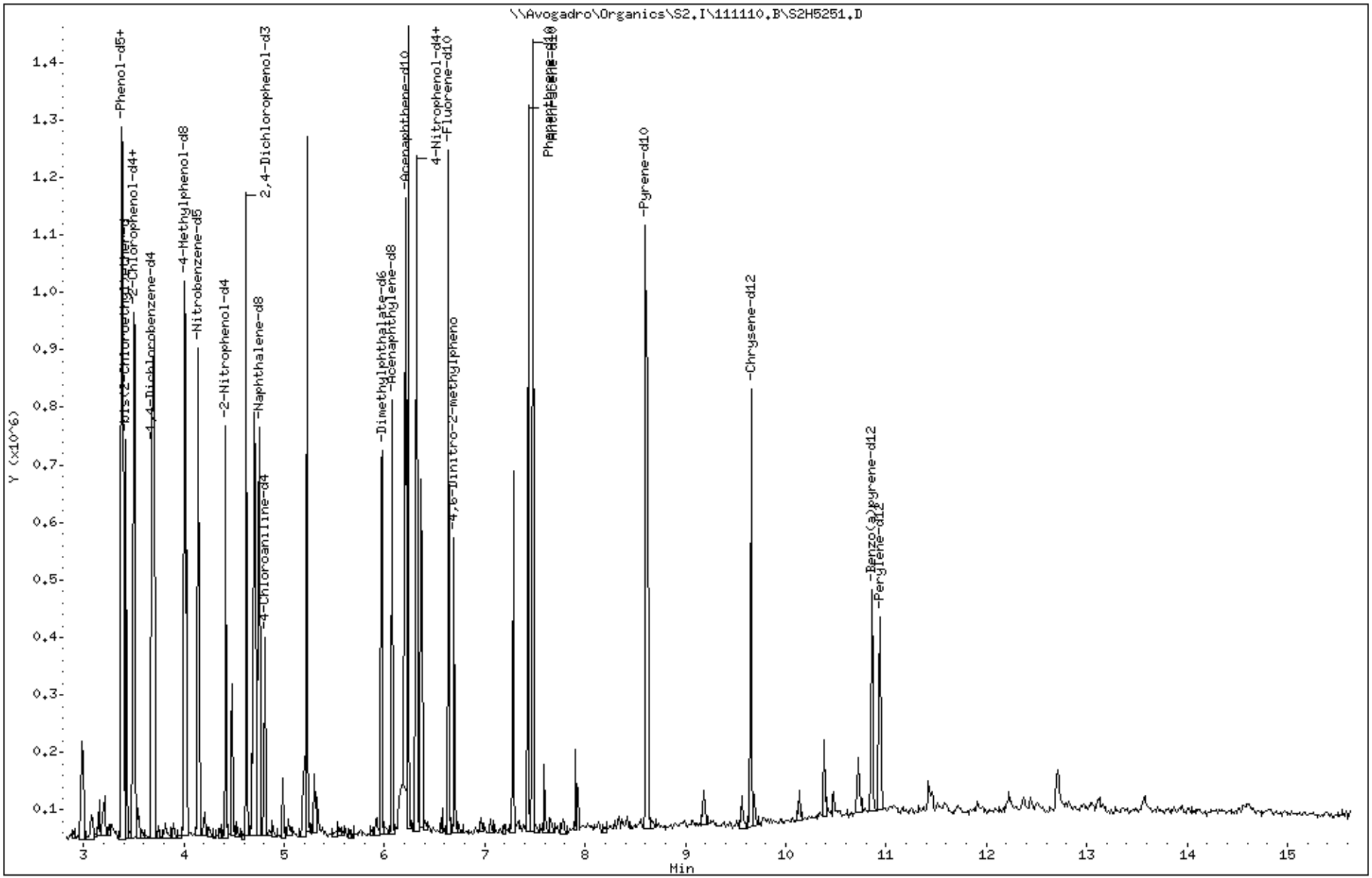
Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5251.D
Lab Smp Id: K2198-01AMS Client Smp ID: H30Q0MS
Inj Date : 10-NOV-2011 10:44
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-01AMS,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 4 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5251.D
Date : 10-NOV-2011 10:44
Client ID: H30Q0MS
Instrument: S2.i
Sample Info: K2198-01AMS,,62764,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q0MSD

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-01AMSD

Sample wt/vol: 30.4 (g/mL) G Lab File ID: S2H5252.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 15 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: 8.2 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
100-52-7	Benzaldehyde	200	U
108-95-2	Phenol	720	
111-44-4	Bis(2-chloroethyl)ether	200	U
95-57-8	2-Chlorophenol	680	
95-48-7	2-Methylphenol	200	U
108-60-1	2,2´-Oxybis(1-chloropropane)	200	U
98-86-2	Acetophenone	200	U
106-44-5	4-Methylphenol	200	U
621-64-7	N-Nitroso-di-n-propylamine	660	
67-72-1	Hexachloroethane	200	U
98-95-3	Nitrobenzene	200	U
78-59-1	Isophorone	200	U
88-75-5	2-Nitrophenol	200	U
105-67-9	2,4-Dimethylphenol	200	U
111-91-1	Bis(2-chloroethoxy)methane	200	U
120-83-2	2,4-Dichlorophenol	200	U
91-20-3	Naphthalene	200	U
106-47-8	4-Chloroaniline	200	U
87-68-3	Hexachlorobutadiene	200	U
105-60-2	Caprolactam	200	U
59-50-7	4-Chloro-3-methylphenol	870	
91-57-6	2-Methylnaphthalene	200	U
77-47-4	Hexachlorocyclopentadiene	200	U
88-06-2	2,4,6-Trichlorophenol	200	U
95-95-4	2,4,5-Trichlorophenol	200	U
92-52-4	1,1´-Biphenyl	200	U
91-58-7	2-Chloronaphthalene	200	U
88-74-4	2-Nitroaniline	380	U
131-11-3	Dimethylphthalate	200	U
606-20-2	2,6-Dinitrotoluene	200	U
208-96-8	Acenaphthylene	200	U
99-09-2	3-Nitroaniline	380	U
83-32-9	Acenaphthene	640	

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q0MSD

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-01AMSD

Sample wt/vol: 30.4 (g/mL) G Lab File ID: S2H5252.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 15 Decanted: (Y/N) N Date Received: 10/28/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/07/2011

Injection Volume: 2.0 (uL) GPC Factor: 2.00 Date Analyzed: 11/10/2011

GPC Cleanup:(Y/N) Y pH: 8.2 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
51-28-5	2,4-Dinitrophenol	380	U
100-02-7	4-Nitrophenol	760	
132-64-9	Dibenzofuran	200	U
121-14-2	2,4-Dinitrotoluene	720	
84-66-2	Diethylphthalate	200	U
86-73-7	Fluorene	200	U
7005-72-3	4-Chlorophenyl-phenylether	200	U
100-01-6	4-Nitroaniline	380	U
534-52-1	4,6-Dinitro-2-methylphenol	380	U
86-30-6	N-Nitrosodiphenylamine (1)	200	U
95-94-3	1,2,4,5-Tetrachlorobenzene	200	U
101-55-3	4-Bromophenyl-phenylether	200	U
118-74-1	Hexachlorobenzene	200	U
1912-24-9	Atrazine	200	U
87-86-5	Pentachlorophenol	850	
85-01-8	Phenanthrene	200	U
120-12-7	Anthracene	200	U
86-74-8	Carbazole	200	U
84-74-2	Di-n-butylphthalate	200	U
206-44-0	Fluoranthene	200	U
129-00-0	Pyrene	490	
85-68-7	Butylbenzylphthalate	200	U
91-94-1	3,3´-Dichlorobenzidine	200	U
56-55-3	Benzo(a)anthracene	200	U
218-01-9	Chrysene	200	U
117-81-7	Bis(2-ethylhexyl)phthalate	200	U
117-84-0	Di-n-octylphthalate	200	U
205-99-2	Benzo(b)fluoranthene	200	U
207-08-9	Benzo(k)fluoranthene	200	U
50-32-8	Benzo(a)pyrene	200	U
193-39-5	Indeno(1,2,3-cd)pyrene	200	U
53-70-3	Dibenzo(a,h)anthracene	200	U
191-24-2	Benzo(g,h,i)perylene	200	U
58-90-2	2,3,4,6-Tetrachlorophenol	200	U

(1) Cannot be separated from Diphenylamine

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5252.D
Report Date: 11-Nov-2011 13:32

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5252.D
Lab Smp Id: K2198-01AMSD Client Smp ID: H30Q0MSD
Inj Date : 10-NOV-2011 11:05
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-01AMSD,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 5 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	GPC correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.400	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
$	2 Phenol-d5	71	3.382	3.373	(0.918)	145339	37.7743	620
	3 Phenol	94	3.393	3.384	(0.921)	393123	37.2544	610
$	4 bis(2-Chloroethyl)ether-d8	67	3.425	3.427	(0.930)	166008	31.3114	510
$	6 2-Chlorophenol-d4	132	3.500	3.491	(0.950)	117068	35.1727	580
	7 2-Chlorophenol	128	3.511	3.513	(0.953)	120201	35.1112	580
*	8 1,4-Dichlorobenzene-d4	152	3.682	3.684	(1.000)	122184	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.004	4.006	(1.087)	215072	41.2312	680
	14 N-Nitroso-di-n-propylamine	70	4.025	4.027	(1.093)	164020	33.9908	560(Q)
$	16 Nitrobenzene-d5	128	4.143	4.145	(0.871)	66283	37.1414	610
$	19 2-Nitrophenol-d4	143	4.422	4.424	(0.930)	80032	40.6235	670
$	23 2,4-Dichlorophenol-d3	165	4.626	4.628	(0.973)	159193	44.2642	730
*	25 Naphthalene-d8	136	4.754	4.746	(1.000)	342681	40.0000	
$	27 4-Chloroaniline-d4	131	4.808	4.810	(1.011)	36100	11.3049	190(Q)
	31 4-Chloro-3-methylphenol	107	5.226	5.228	(1.099)	242233	45.2143	740
$	40 Dimethylphthalate-d6	166	5.977	5.968	(0.962)	384540	36.0811	590
$	43 Acenaphthylene-d8	160	6.084	6.076	(0.979)	441348	31.8455	520
*	46 Acenaphthene-d10	164	6.213	6.204	(1.000)	289861	40.0000	
	47 Acenaphthene	153	6.234	6.236	(1.003)	273022	33.4125	550
$	49 4-Nitrophenol-d4	143	6.320	6.312	(1.017)	63836	41.5625	680

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5252.D
Report Date: 11-Nov-2011 13:32

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
	50	4-Nitrophenol	109	6.320	6.322	(1.017)	116730	39.3026	650
	51	2,4-Dinitrotoluene	165	6.374	6.365	(1.026)	116024	37.2223	610(Q)
$	54	Fluorene-d10	176	6.642	6.633	(1.069)	348956	35.6448	590
$	58	4,6-Dinitro-2-methylphenol-d2	200	6.695	6.698	(0.900)	72875	33.4780	550
	64	Pentachlorophenol	266	7.285	7.287	(0.980)	68820	43.8301	720
*	65	Phenanthrene-d10	188	7.435	7.438	(1.000)	557836	40.0000	
$	67	Anthracene-d10	188	7.478	7.480	(1.006)	560725	35.1888	580
$	72	Pyrene-d10	212	8.604	8.606	(0.892)	482190	37.9119	620(R)
	73	Pyrene	202	8.626	8.628	(0.894)	411459	25.4069	420
*	77	Chrysene-d12	240	9.644	9.668	(1.000)	403738	40.0000	(Q)
	79	bis(2-Ethylhexyl)phthalate	149	9.677	9.700	(1.003)	12553	2.04661	34(a)
$	83	Benzo(a)pyrene-d12	264	10.845	10.891	(0.993)	253510	37.0207	610(H)
*	85	Perylene-d12	264	10.921	10.966	(1.000)	279063	40.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5252.D
Report Date: 11-Nov-2011 13:32

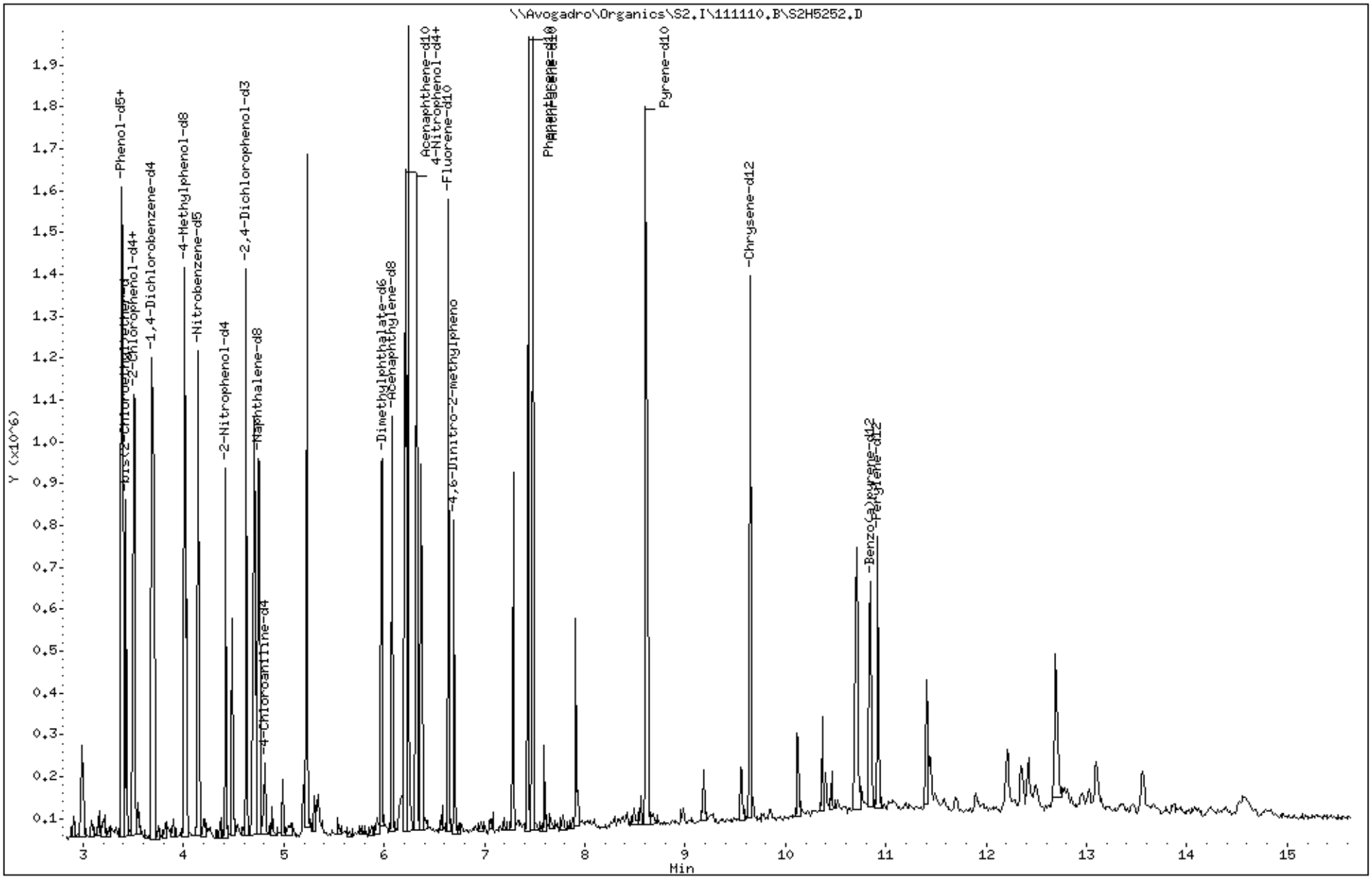
Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111110.B\S2H5252.D
Lab Smp Id: K2198-01AMSD Client Smp ID: H30Q0MSD
Inj Date : 10-NOV-2011 11:05
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2198-01AMSD,,62764,,
Misc Info : ****** CHECK MOISTURE ******
Comment   :
Method   : \\Avogadro\Organics\S2.I\111110.B\S2_SOM.m
Meth Date : 11-Nov-2011 13:31 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 5 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\S2.I\111110.B\S2H5252.D
Date : 10-NOV-2011 11:05
Client ID: H30Q0MSD
Instrument: S2.i
Sample Info: K2198-01AMSD,,62764,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



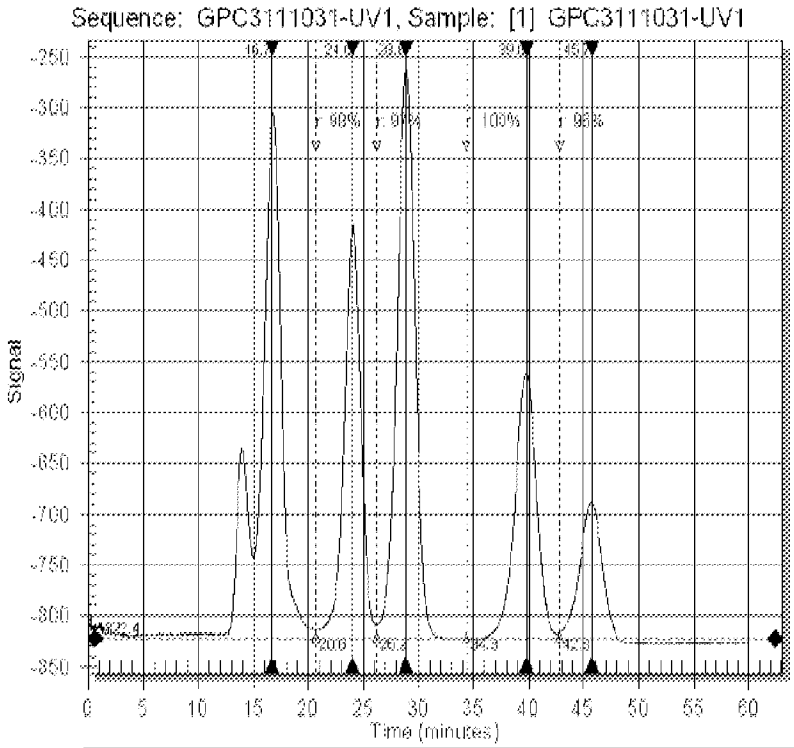
Print Date: 11/1/2011
Print Time: 8:33:18AI

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

olumn Calibration Report

Sample ID: GPC3111031-UV1
Sequence: GPC3111031-UV1
Description: sample
Volume: 5000
Method: EPA_CAL70
Position: 1
Outcome: Sample processed normally

Start Time: 17:43:21, 10/31/11
End Time: 18:47:04, 10/31/11
Column Name: DCMTrad
Description: DCMTrad
Serial #:
Pressure Limit: 350



GPC3111031-UV1

Peak	Sample	Retention Time	Pk Ht	Base	Res.	Tol.	P/F
1	Corn Oil	16.7	-815	-814.7			
2	BEHP	24.0	-815	-814.7	97.9	85.0	P
3	Methoxychlor	28.8	-815	-814.7	97.0	85.0	P
4	Perylene	39.8	-815	-814.7	100.0	85.0	P
5	Sulfur	45.7	-815	-814.7	96.0	90.0	P

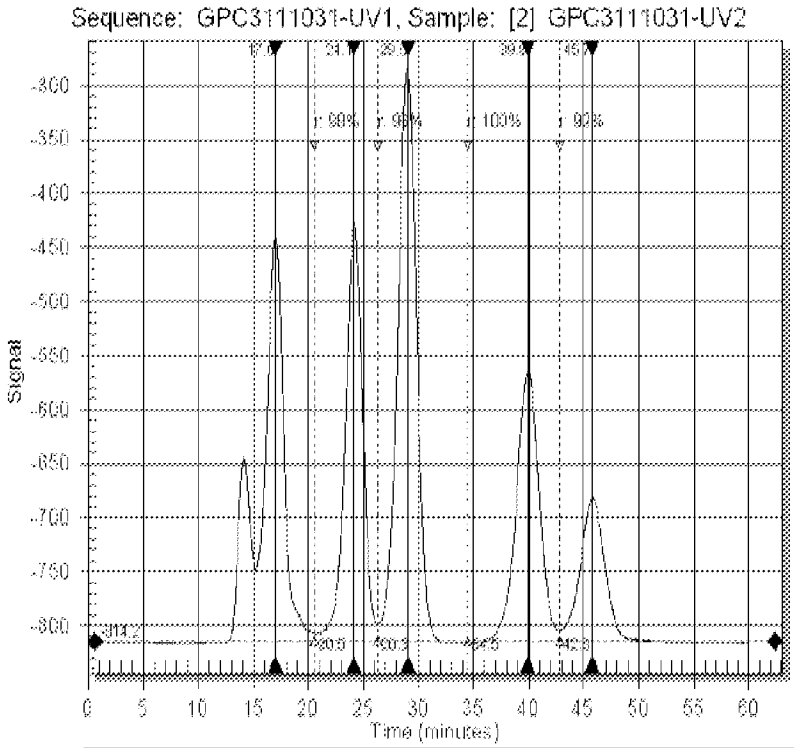
Print Date: 11/1/2011
Print Time: 8:35:58AI

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

olumn Calibration Report

Sample ID: GPC3111031-UV2
Sequence: GPC3111031-UV1
Description: sample
Volume: 5000
Method: EPA_CAL70
Position: 2
Outcome: Sample processed normally

Start Time: 18:47:05, 10/31/11
End Time: 19:50:35, 10/31/11
Column Name: DCMTrad
Description: DCMTrad
Serial #:
Pressure Limit: 350



GPC3111031-UV2

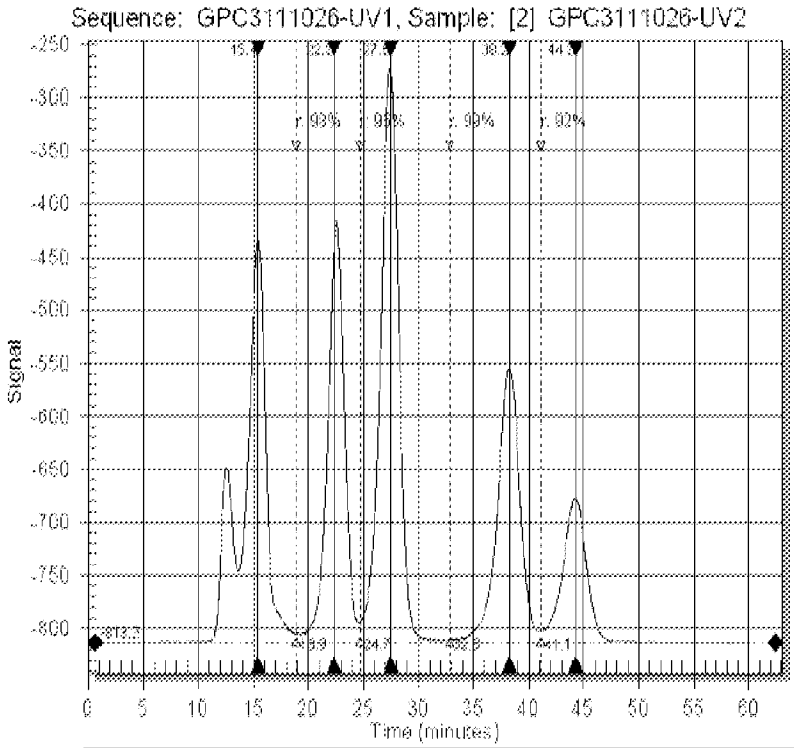
Peak	Sample	Retention Time	Pk Ht	Base	Res.	Tol.	P/F
1	Corn Oil	17.0	-814	-814.2			
2	BEHP	24.1	-814	-814.2	98.1	85.0	P
3	Methoxychlor	29.0	-814	-814.2	95.8	85.0	P
4	Perylene	39.9	-814	-814.2	100.0	85.0	P
5	Sulfur	45.7	-814	-814.2	92.2	90.0	P

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

olumn Calibration Report

Sample ID: GPC3111026-UV2
Sequence: GPC3111026-UV1
Description: sample
Volume: 5000
Method: EPA_CAL70
Position: 2
Outcome: Sample processed normally

Start Time: 14:16:33, 10/26/11
End Time: 15:20:02, 10/26/11
Column Name: DCMTrad
Description: DCMTrad
Serial #:
Pressure Limit: 350



GPC3111026-UV2

Peak	Sample	Retention Time	Pk Ht	Base	Res.	Tol.	P/F
1	Corn Oil	15.4	-813	-813.3			
2	BEHP	22.3	-813	-813.3	97.8	85.0	P
3	Methoxychlor	27.5	-813	-813.3	94.9	85.0	P
4	Perylene	38.2	-813	-813.3	99.1	85.0	P
5	Sulfur	44.3	-813	-813.3	91.7	90.0	P

Data File: \\Avogadro\Organics\S2.I\111108.B\S2H5243.D
Report Date: 09-Nov-2011 11:21

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111108.B\S2H5243.D
Lab Smp Id: SSTD0202W Client Smp ID: SSTD0202W
Inj Date : 08-NOV-2011 15:21
Operator : SRC: Inst ID: S2.i
Smp Info : SSTD0202W,SSTD0202W
Misc Info : 2,3
Comment   :
Method   : \\Avogadro\Organics\S4.I\111108.B\S4_SOM.m
Meth Date : 08-Nov-2011 16:34 mscarpaci Quant Type: ISTD
Cal Date : 31-OCT-2011 16:34 Cal File: S4E8468.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * (Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vi	2.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
	1	Benzaldehyde	77	3.445	3.445	(0.904)	342642	40.0000	86
$	2	Phenol-d5	71	3.498	3.498	(0.918)	200900	40.0000	59
	3	Phenol	94	3.509	3.509	(0.921)	562406	40.0000	82
$	4	bis(2-Chloroethyl)ether-d8	67	3.552	3.552	(0.932)	280823	40.0000	79
	5	bis(2-Chloroethyl)ether	93	3.584	3.584	(0.941)	428846	40.0000	93
$	6	2-Chlorophenol-d4	132	3.627	3.627	(0.952)	181675	40.0000	34
	7	2-Chlorophenol	128	3.638	3.638	(0.955)	189511	40.0000	37
*	8	1,4-Dichlorobenzene-d4	152	3.809	3.809	(1.000)	164010	40.0000	(Q)
	9	2-Methylphenol	108	4.024	4.024	(1.056)	322851	40.0000	68
	10	2,2'-oxybis(1-Chloropropane)	45	4.045	4.045	(1.062)	414600	40.0000	250(A)
$	11	4-Methylphenol-d8	113	4.131	4.131	(1.084)	326002	40.0000	58
	13	Acetophenone	105	4.152	4.152	(1.090)	533031	40.0000	64
	14	N-Nitroso-di-n-propylamine	70	4.152	4.152	(1.090)	310156	40.0000	64(Q)
	12	4-Methylphenol	108	4.024	4.024	(1.056)	323646	40.0000	59
	15	Hexachloroethane	117	4.238	4.238	(1.113)	154533	40.0000	56(Q)
$	16	Nitrobenzene-d5	128	4.281	4.281	(0.877)	94062	40.0000	46
	17	Nitrobenzene	77	4.292	4.292	(0.879)	500070	40.0000	89
	18	Isophorone	82	4.496	4.496	(0.921)	912278	40.0000	97
$	19	2-Nitrophenol-d4	143	4.549	4.549	(0.932)	112608	40.0000	44
	20	2-Nitrophenol	139	4.560	4.560	(0.934)	103319	40.0000	38
	21	2,4-Dimethylphenol	107	4.603	4.603	(0.943)	395981	40.0000	72(Q)

Data File: \\Avogadro\Organics\S2.I\111108.B\S2H5243.D
Report Date: 09-Nov-2011 11:21

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
	22 bis(2-Chloroethoxy)methane	93	4.678	4.678	(0.958)	516603	40.0000	100
$	23 2,4-Dichlorophenol-d3	165	4.753	4.753	(0.974)	212999	40.0000	49
	24 2,4-Dichlorophenol	162	4.764	4.764	(0.976)	197461	40.0000	44
*	25 Naphthalene-d8	136	4.882	4.882	(1.000)	492357	40.0000	
	26 Naphthalene	128	4.903	4.903	(1.004)	499475	40.0000	39
$	27 4-Chloroaniline-d4	131	4.935	4.935	(1.011)	192326	40.0000	43(Q)
	28 4-Chloroaniline	127	4.946	4.946	(1.013)	223104	40.0000	47
	29 Hexachlorobutadiene	225	5.021	5.021	(1.029)	139170	40.0000	36
	30 Caprolactam	113	5.214	5.214	(1.068)	86293	40.0000	58
	31 4-Chloro-3-methylphenol	107	5.364	5.364	(1.099)	283359	40.0000	63
	32 2-Methylnaphthalene	142	5.482	5.482	(1.123)	368006	40.0000	37
	33 Hexachlorocyclopentadiene	237	5.621	5.621	(0.885)	162304	40.0000	47(Q)
	34 1,2,4,5-Tetrachlorobenzene	216	5.621	5.621	(0.885)	496308	40.0000	78
	35 2,4,6-Trichlorophenol	196	5.718	5.718	(0.900)	166261	40.0000	39
	36 2,4,5-Trichlorophenol	196	5.750	5.750	(0.905)	196206	40.0000	40
	37 1,1'-Biphenyl	154	5.868	5.868	(0.924)	477361	40.0000	36
	38 2-Chloronaphthalene	162	5.890	5.890	(0.927)	406366	40.0000	37
	39 2-Nitroaniline	65	5.965	5.965	(0.939)	195734	40.0000	60
$	40 Dimethylphthalate-d6	166	6.104	6.104	(0.961)	542269	40.0000	41
	41 Dimethylphthalate	163	6.126	6.126	(0.965)	533656	40.0000	39
	42 2,6-Dinitrotoluene	165	6.168	6.168	(0.971)	122052	40.0000	38
$	43 Acenaphthylene-d8	160	6.222	6.222	(0.980)	631908	40.0000	38
	44 Acenaphthylene	152	6.233	6.233	(0.981)	585077	40.0000	32
	45 3-Nitroaniline	138	6.308	6.308	(0.993)	77720	40.0000	29
*	46 Acenaphthene-d10	164	6.351	6.351	(1.000)	380415	40.0000	
	47 Acenaphthene	153	6.372	6.372	(1.003)	354774	40.0000	30
	48 2,4-Dinitrophenol	184	6.394	6.394	(1.007)	44431	40.0000	26
	52 Dibenzofuran	168	6.522	6.522	(1.027)	538895	40.0000	34
$	49 4-Nitrophenol-d4	143	6.447	6.447	(1.015)	61096	40.0000	28
	50 4-Nitrophenol	109	6.458	6.458	(1.017)	106362	40.0000	37
	51 2,4-Dinitrotoluene	165	6.501	6.501	(1.024)	145604	40.0000	32(Q)
	118 2,3,4,6-Tetrachlorophenol	232	6.630	6.630	(1.044)	108086	40.0000	29
	53 Diethylphthalate	149	6.715	6.715	(1.057)	420678	40.0000	28
$	54 Fluorene-d10	176	6.780	6.780	(1.068)	484133	40.0000	41
	56 Fluorene	166	6.801	6.801	(1.071)	473981	40.0000	33
	55 4-Chlorophenyl-phenylether	204	6.801	6.801	(1.071)	271279	40.0000	35
	57 4-Nitroaniline	138	6.812	6.812	(1.073)	75468	40.0000	23
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.833	6.833	(0.902)	89450	40.0000	40
	59 4,6-Dinitro-2-methylphenol	198	6.844	6.844	(0.904)	84475	40.0000	34(Q)
	60 N-Nitrosodiphenylamine	169	6.898	6.898	(0.911)	385774	40.0000	44
	61 4-Bromophenyl-phenylether	248	7.209	7.209	(0.952)	143662	40.0000	40
	62 Hexachlorobenzene	284	7.262	7.262	(0.959)	128156	40.0000	34
	63 Atrazine	200	7.337	7.337	(0.969)	133994	40.0000	34
	64 Pentachlorophenol	266	7.423	7.423	(0.980)	63768	40.0000	34
*	65 Phenanthrene-d10	188	7.573	7.573	(1.000)	616967	40.0000	
	66 Phenanthrene	178	7.595	7.595	(1.003)	670652	40.0000	42
$	67 Anthracene-d10	188	7.627	7.627	(1.007)	635339	40.0000	38
	68 Anthracene	178	7.638	7.638	(1.008)	666282	40.0000	41
	117 Carbazole	167	7.766	7.766	(1.025)	482071	40.0000	31
	70 Di-n-butylphthalate	149	8.066	8.066	(1.065)	704745	40.0000	35
	71 Fluoranthene	202	8.592	8.592	(1.135)	649180	40.0000	30
$	72 Pyrene-d10	212	8.774	8.774	(0.887)	498633	40.0000	62
	73 Pyrene	202	8.796	8.796	(0.889)	690124	40.0000	71
	74 Butylbenzylphthalate	149	9.375	9.375	(0.948)	212139	40.0000	45

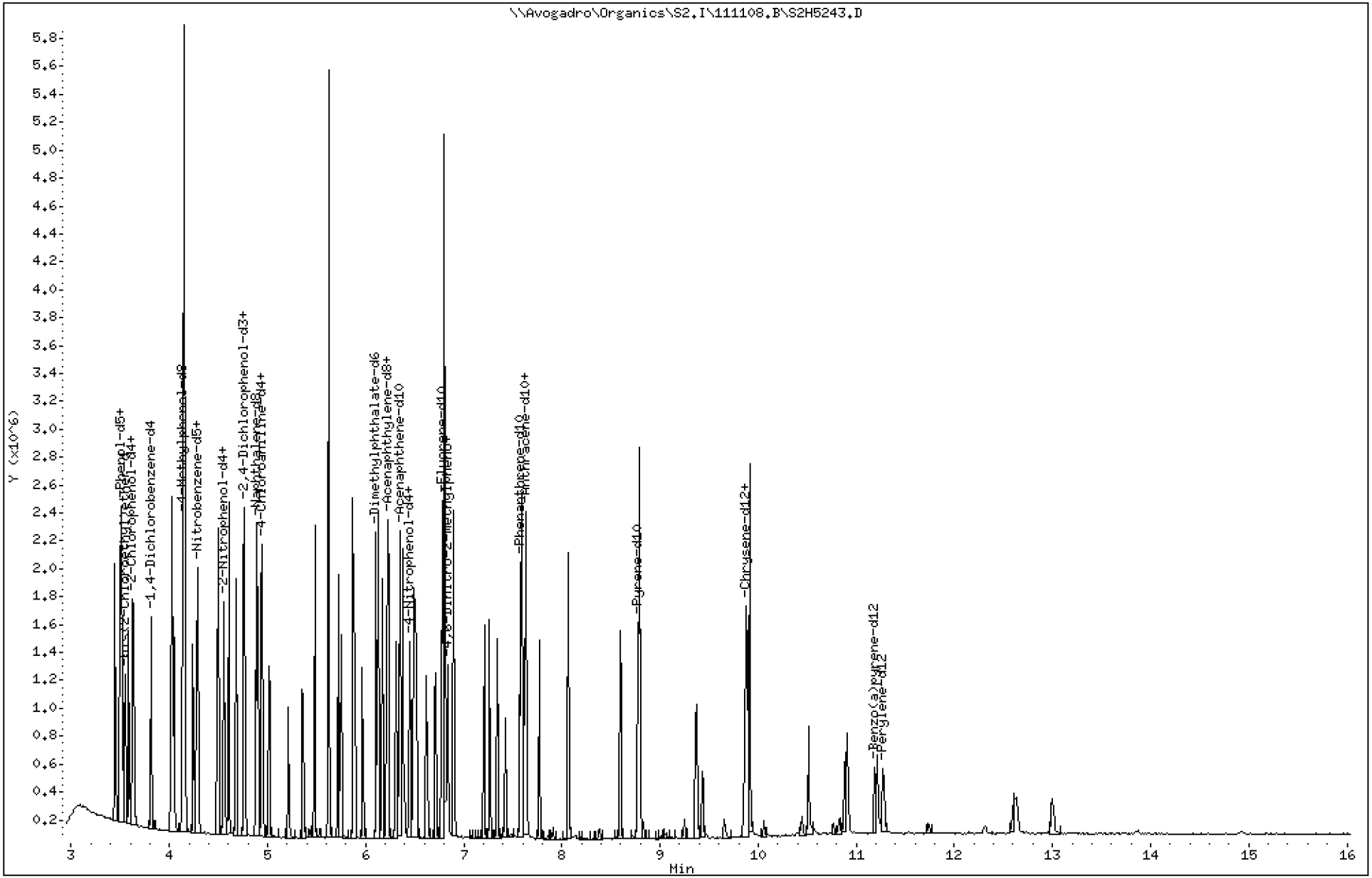
Data File: \\Avogadro\Organics\S2.I\111108.B\S2H5243.D
Report Date: 09-Nov-2011 11:21

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)	
	75 3,3'-Dichlorobenzidine	252	9.857	9.857	(0.997)	118999	40.0000	31	
	76 Benzo(a)anthracene	228	9.879	9.879	(0.999)	443975	40.0000	39	
*	77 Chrysene-d12	240	9.889	9.889	(1.000)	395172	40.0000		(Q)
	78 Chrysene	228	9.911	9.911	(1.002)	388615	40.0000	39	
	79 bis(2-Ethylhexyl)phthalate	149	9.911	9.911	(1.002)	303221	40.0000	46	
	80 Di-n-octylphthalate	149	10.511	10.511	(0.932)	408692	40.0000	53	
	81 Benzo(b)fluoranthene	252	10.887	10.887	(0.966)	323533	40.0000	41	
	82 Benzo(k)fluoranthene	252	10.908	10.908	(0.968)	313796	40.0000	34	
$	83 Benzo(a)pyrene-d12	264	11.187	11.187	(0.992)	226222	40.0000	41	
	84 Benzo(a)pyrene	252	11.219	11.219	(0.995)	265369	40.0000	39	
*	85 Perylene-d12	264	11.273	11.273	(1.000)	250366	40.0000		
	86 Indeno(1,2,3-cd)pyrene	276	12.603	12.603	(1.118)	218532	40.0000	30	
	87 Dibenzo(a,h)anthracene	278	12.635	12.635	(1.121)	170150	40.0000	27	
	88 Benzo(g,h,i)perylene	276	12.999	12.999	(1.153)	181817	40.0000	31	

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S2.I\111108.B\S2H5243.D
Date : 08-NOV-2011 15:21
Client ID: SSTD0202W
Instrument: S2.i
Sample Info: SSTD0202W,SSTD0202W
Volume Injected (uL): 2.0
Operator: SRC:
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111108.B\S2H5244.D
Report Date: 09-Nov-2011 11:21

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111108.B\S2H5244.D
Lab Smp Id: GPC3111103-SB
Inj Date : 08-NOV-2011 15:42
Operator : SRC: Inst ID: S2.i
Smp Info : GPC3111103-SB
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111108.B\S2_SOM.m
Meth Date : 08-Nov-2011 11:01 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 3 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * (Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vi	2.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)	
* 8 1,4-Dichlorobenzene-d4	152	3.812	3.809	(1.000)	218032	40.0000		(Q)
* 25 Naphthalene-d8	136	4.873	4.871	(1.000)	550304	40.0000		
* 46 Acenaphthene-d10	164	6.342	6.340	(1.000)	487000	40.0000		
* 65 Phenanthrene-d10	188	7.565	7.573	(1.000)	822676	40.0000		
* 77 Chrysene-d12	240	9.795	9.803	(1.000)	614386	40.0000		(Q)
* 85 Perylene-d12	264	11.125	11.133	(1.000)	405234	40.0000		

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S2.I\111108.B\S2H5244.D
Report Date: 09-Nov-2011 11:21

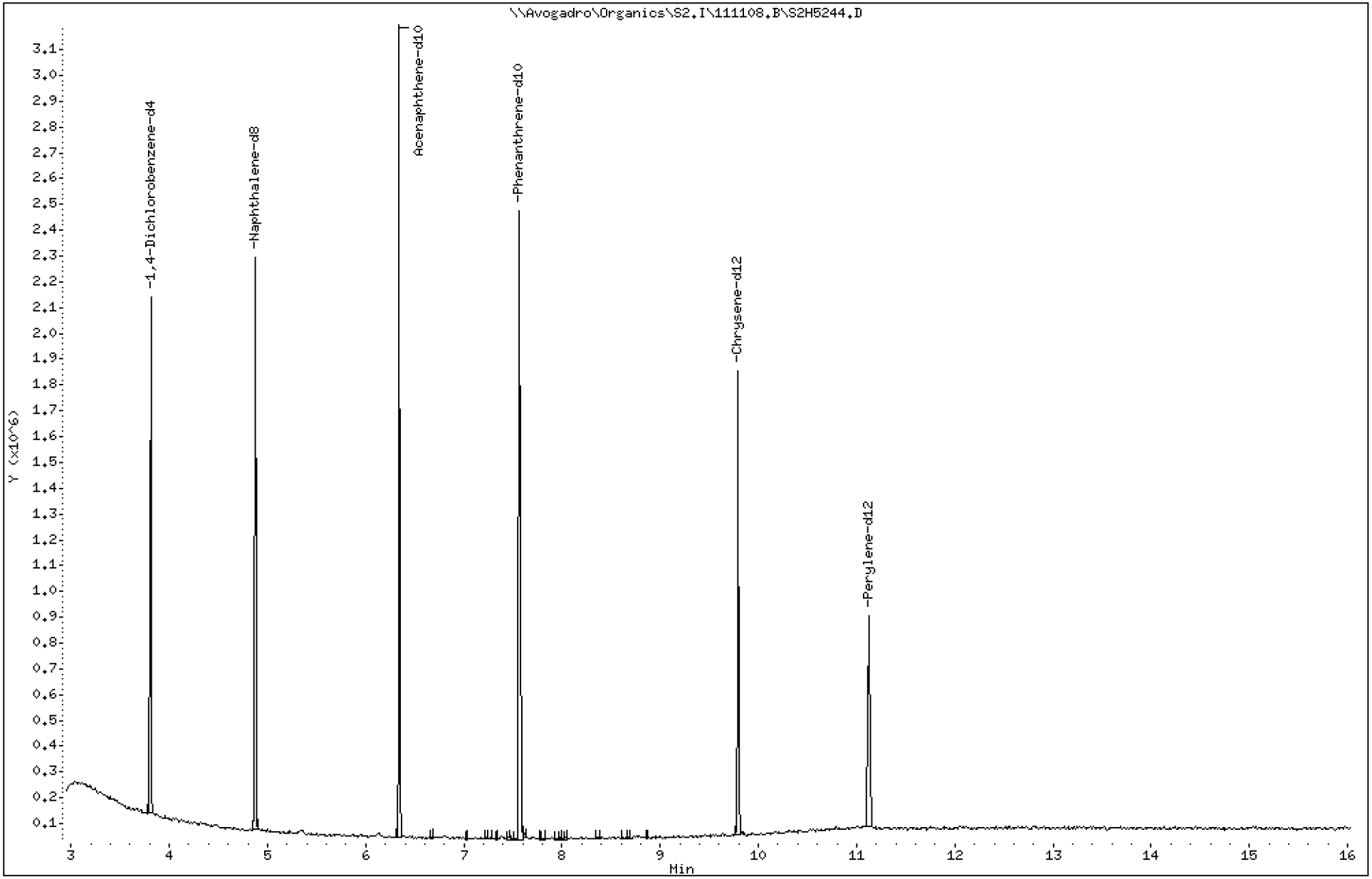
Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111108.B\S2H5244.D
Lab Smp Id: GPC3111103-SB
Inj Date : 08-NOV-2011 15:42
Operator : SRC: Inst ID: S2.i
Smp Info : GPC3111103-SB
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111108.B\S2_SOM.m
Meth Date : 08-Nov-2011 11:01 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 3 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\S2.I\111108.B\S2H5244.D
Date : 08-NOV-2011 15:42
Client ID:
Instrument: S2.i
Sample Info: GPC3111103-SB
Volume Injected (uL): 2.0
Operator: SRC:
Column phase: RXI-5SILMS
Column diameter: 0.25



2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	ABLK2F	59	63	64	66			0
02	ALCS2F	62	67	89	95			0
03	H30Q0	46	49	52	52			0
04	H30Q0MS	46	50	55	56			0
05	H30Q0MSD	45	49	48	49			0
06	H30Q1	42	44	43	42			0
07	H30Q2	56	61	56	56			0
08	H30Q4	29	30	48	47			0
09	H30Q6	26	28	42	50			0
10	H30Q8	61	65	73	74			0
11	H30Q9	64	63	58	63			0
12	H30R0	43	46	68	66			0
13	H30R1	56	61	47	50			0
14	H30S4	40	42	40	41			0
15	H30S5	52	56	46	48			0
16	H30S8	53	57	55	55			0
17	H30S9	54	58	57	58			0
18	H30T0	69	76	73	77			0
19	H30T1	63	70	68	70			0
20	H30T3	56	61	73	71			0
21	H30T4	59	64	64	67			0
22	H30T5	67	74	72	75			0
23	H30Q3	51	55	54	54			0
24	H30T2	52	57	59	60			0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(30-150)
DCB = Decachlorobiphenyl	(30-150)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

3K - FORM III ARO-2

SOIL AROCLOR MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix Spike - EPA Sample No.: H30Q0

Instrument ID: E2 GC Column : CLPPest ID: 0.53 (mm)

COMPOUND	SPIKE ADDED (µg/Kg)	SAMPLE CONCENTRATION (µg/Kg)	MS CONCENTRATION (µg/Kg)	MS %REC	#	QC. LIMITS REC.
AR1016	156.3007	0.0000	93.5581	60		29-135
AR1260	156.3042	0.0000	106.0796	68		29-135

COMPOUND	SPIKE ADDED (µg/Kg)	MSD CONCENTRATION (µg/Kg)	MSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
AR1016	156.3007	82.1382	53		13		0-15	29-135
AR1260	156.3042	94.5386	60		12		0-20	29-135

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 2 outside limits

Spike Recovery: 0 out of 4 outside limits

COMMENTS:

3K - FORM III ARO-2

SOIL AROCLOR MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix Spike - EPA Sample No.: H30Q0

Instrument ID: E2 GC Column : CLPPestII ID: 0.53 (mm)

COMPOUND	SPIKE ADDED (µg/Kg)	SAMPLE CONCENTRATION (µg/Kg)	MS CONCENTRATION (µg/Kg)	MS %REC	#	QC. LIMITS REC.
AR1016	156.3007	0.0000	93.8246	60		29-135
AR1260	156.3042	0.0000	112.3330	72		29-135

COMPOUND	SPIKE ADDED (µg/Kg)	MSD CONCENTRATION (µg/Kg)	MSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
AR1016	156.3007	76.2468	49		21	*	0-15	29-135
AR1260	156.3042	93.1904	60		19		0-20	29-135

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 1 out of 2 outside limits

Spike Recovery: 0 out of 4 outside limits

COMMENTS:

3P - FORM III ARO-4

SOIL AROCLOR LABORATORY CONTROL SAMPLE RECOVERY

EPA SAMPLE NO.

ALCS2F

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Lab Sample ID: LCS-62776 LCS Lot No.:

Date Extracted: 11/06/2011 Date Analyzed (1): 11/08/2011

Instrument ID (1): E2 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC #	QC LIMITS
Aroclor-1016	33.3330	25.9449	78	50-150
Aroclor-1260	33.3330	40.8681	123	50-150

Instrument ID (2): E2 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 11/08/2011

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC #	QC LIMITS
Aroclor-1016	33.3330	24.3793	73	50-150
Aroclor-1260	33.3330	32.2925	97	50-150

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

LCS Recovery: 0 out of 4 outside limits.

COMMENTS:

4F - FORM IV ARO

AROCLOR METHOD BLANK SUMMARY

EPA SAMPLE NO.

ABLK2F

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Lab File ID: E2K7575F.D / E2K7575R.D Lab Sample ID: MB-62776

Matrix: (SOIL/SED/WATER) SOIL Extraction: (Type) SONC Date Extracted: 11/06/2011

Sulfur Cleanup: (Y/N) Y GPC Cleanup:(Y/N) N

Acid Cleanup: (Y/N Y

Date Analyzed (1): 11/08/2011 Date Analyzed (2): 11/08/2011

Time Analyzed (1): 0:21 Time Analyzed (2): 0:21

Instrument ID (1): E2 Instrument ID (2): E2

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED (1)	DATE ANALYZED (2)
01	ALCS2F	LCS-62776	11/08/2011	11/08/2011
02	H30Q0	K2198-01B	11/08/2011	11/08/2011
03	H30Q0MS	K2198-01BMS	11/08/2011	11/08/2011
04	H30Q0MSD	K2198-01BMSD	11/08/2011	11/08/2011
05	H30Q1	K2198-02B	11/08/2011	11/08/2011
06	H30Q2	K2198-03B	11/08/2011	11/08/2011
07	H30Q4	K2198-05B	11/08/2011	11/08/2011
08	H30Q6	K2198-06B	11/08/2011	11/08/2011
09	H30Q8	K2198-07B	11/08/2011	11/08/2011
10	H30Q9	K2198-08B	11/08/2011	11/08/2011
11	H30R0	K2198-09B	11/08/2011	11/08/2011
12	H30R1	K2198-10B	11/08/2011	11/08/2011
13	H30S4	K2198-11B	11/08/2011	11/08/2011
14	H30S5	K2198-12B	11/08/2011	11/08/2011
15	H30S8	K2198-13B	11/08/2011	11/08/2011
16	H30S9	K2198-14B	11/08/2011	11/08/2011
17	H30T0	K2198-15B	11/08/2011	11/08/2011
18	H30T1	K2198-16B	11/08/2011	11/08/2011
19	H30T3	K2198-18B	11/08/2011	11/08/2011
20	H30T4	K2198-19B	11/08/2011	11/08/2011
21	H30T5	K2198-20B	11/08/2011	11/08/2011
22	H30Q3	K2198-04B	11/08/2011	11/08/2011

COMMENTS:

4F - FORM IV ARO

AROCLOR METHOD BLANK SUMMARY

EPA SAMPLE NO.

ABLK2F

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Lab File ID: E2K7575F.D / E2K7575R.D Lab Sample ID: MB-62776

Matrix: (SOIL/SED/WATER) SOIL Extraction: (Type) SONC Date Extracted: 11/06/2011

Sulfur Cleanup: (Y/N) Y GPC Cleanup:(Y/N) N

Acid Cleanup: (Y/N Y

Date Analyzed (1): 11/08/2011 Date Analyzed (2): 11/08/2011

Time Analyzed (1): 0:21 Time Analyzed (2): 0:21

Instrument ID (1): E2 Instrument ID (2): E2

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED (1)	DATE ANALYZED (2)
23	H30T2	K2198-17B	11/08/2011	11/08/2011

COMMENTS:

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q0

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-01B

Sample wt/vol: 30.5 (g/mL) G Lab File ID: E2K7577F.D/E2K7577R.D

% Moisture: 15 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: 8.2 Sulfur Cleanup: (Y/N) Y

Acid Cleanup:(Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	38	U
11096-82-5	Aroclor-1260	38	U
37324-23-5	Aroclor-1262	38	U
11100-14-4	Aroclor-1268	38	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7577F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

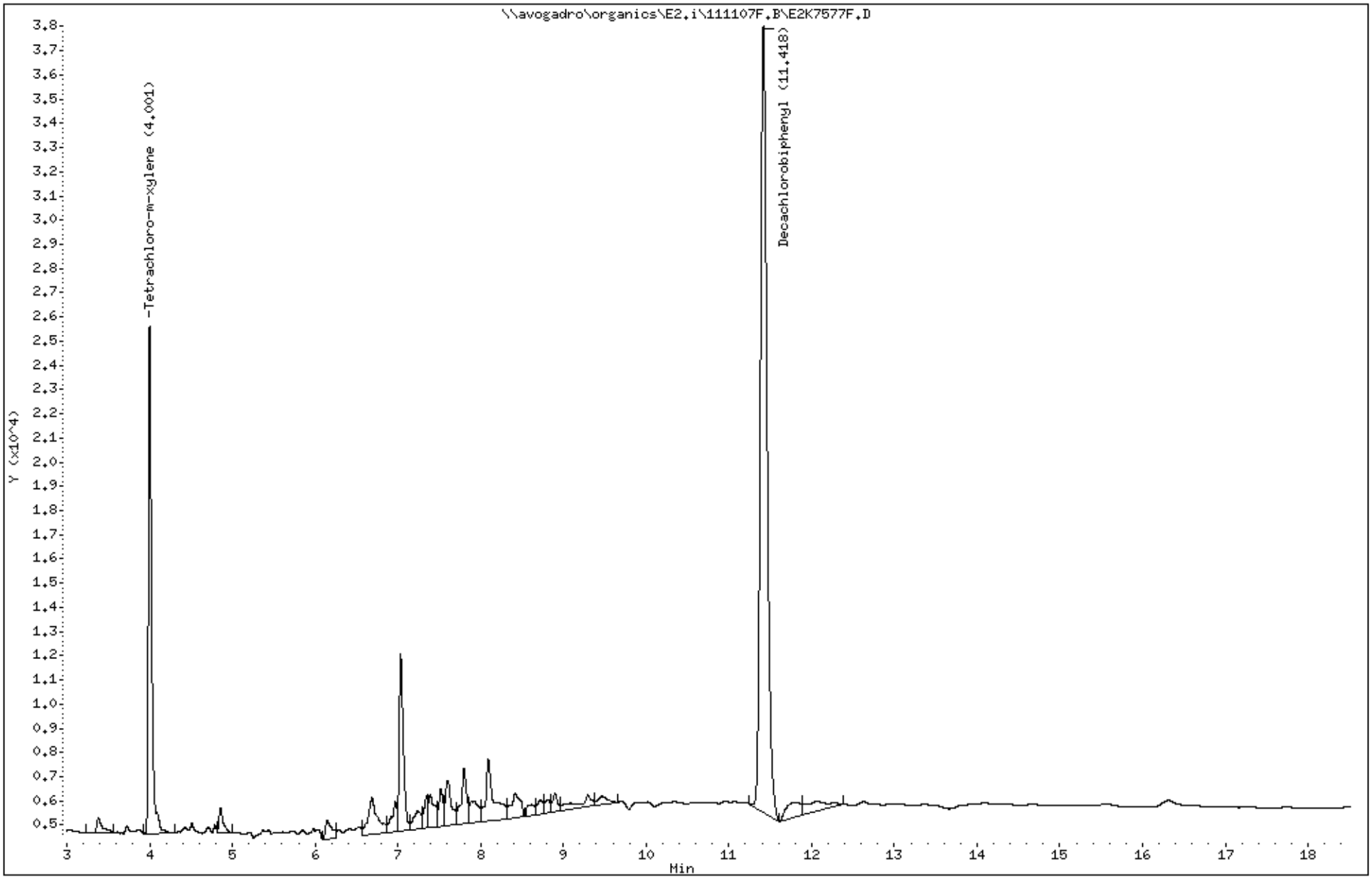
Data file : \\avogadro\organics\E2.i\111107F.B\E2K7577F.D
Lab Smp Id: K2198-01B Client Smp ID: H30Q0
Inj Date : 08-NOV-2011 01:02
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-01B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.500	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.000	3.999	0.001	569209	0.02741	9.0		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
11.417	11.417	0.000	1797200	0.06269	20		

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7577F.D
Date : 08-NOV-2011 01:02
Client ID: H30Q0
Instrument: E2.i
Sample Info: K2198-01B,,62776,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7577R.D
Report Date: 08-Nov-2011 11:43

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

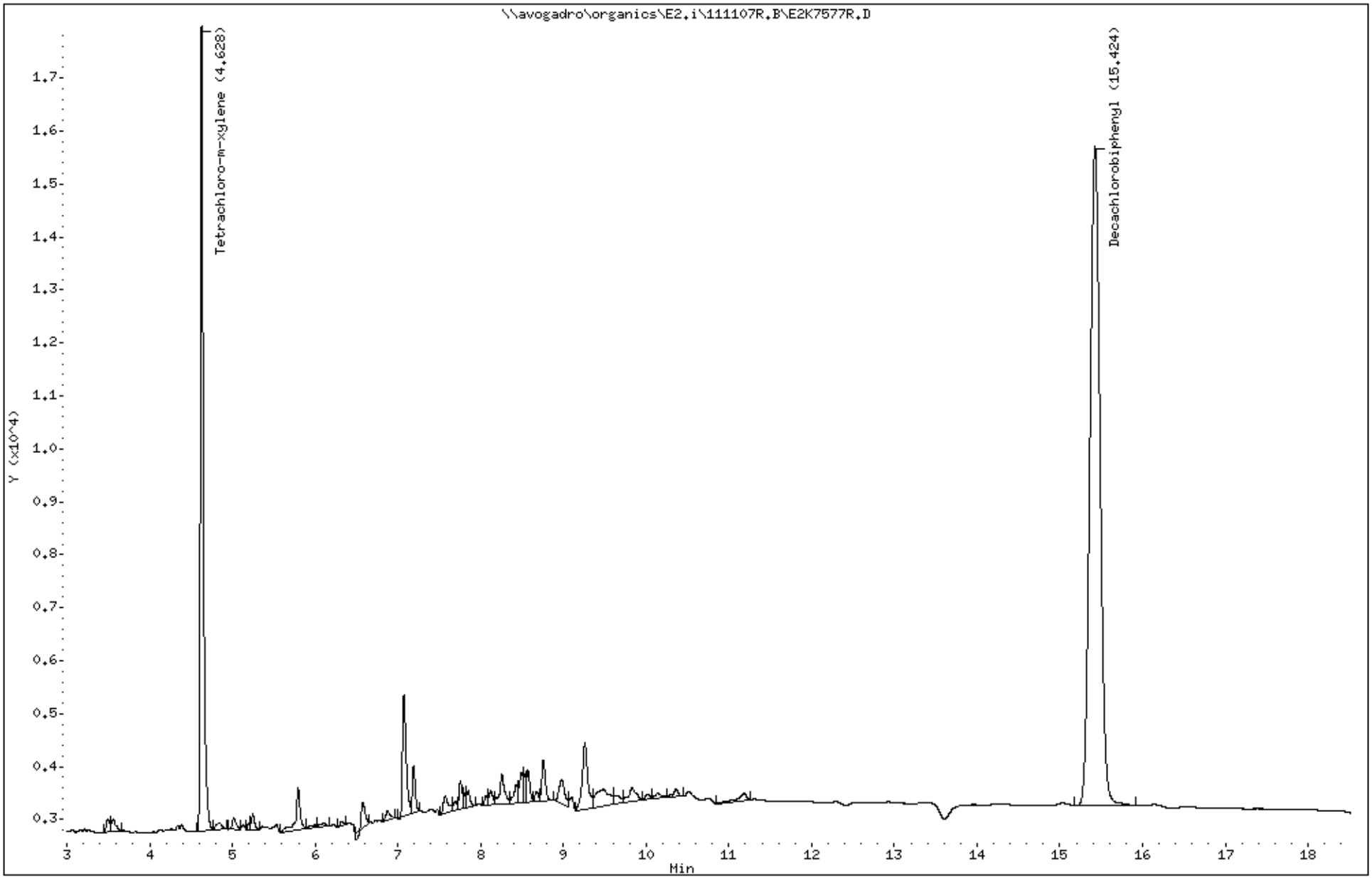
Data file : \\avogadro\organics\E2.i\111107R.B\E2K7577R.D
Lab Smp Id: K2198-01B Client Smp ID: H30Q0
Inj Date : 08-NOV-2011 01:02
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-01B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.500	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.627	4.627	0.000	373154	0.02967	9.7		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
15.424	15.423	0.001	1060617	0.06257	20		

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7577R.D
Date : 08-NOV-2011 01:02
Client ID: H30Q0
Instrument: E2.i
Sample Info: K2198-01B,,62776,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-02B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E2K7580F.D/E2K7580R.D

% Moisture: 22 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: 7.5 Sulfur Cleanup: (Y/N) Y

Acid Cleanup:(Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	43	U
11104-28-2	Aroclor-1221	43	U
11141-16-5	Aroclor-1232	43	U
53469-21-9	Aroclor-1242	43	U
12672-29-6	Aroclor-1248	43	U
11097-69-1	Aroclor-1254	43	U
11096-82-5	Aroclor-1260	43	U
37324-23-5	Aroclor-1262	43	U
11100-14-4	Aroclor-1268	43	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7580F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

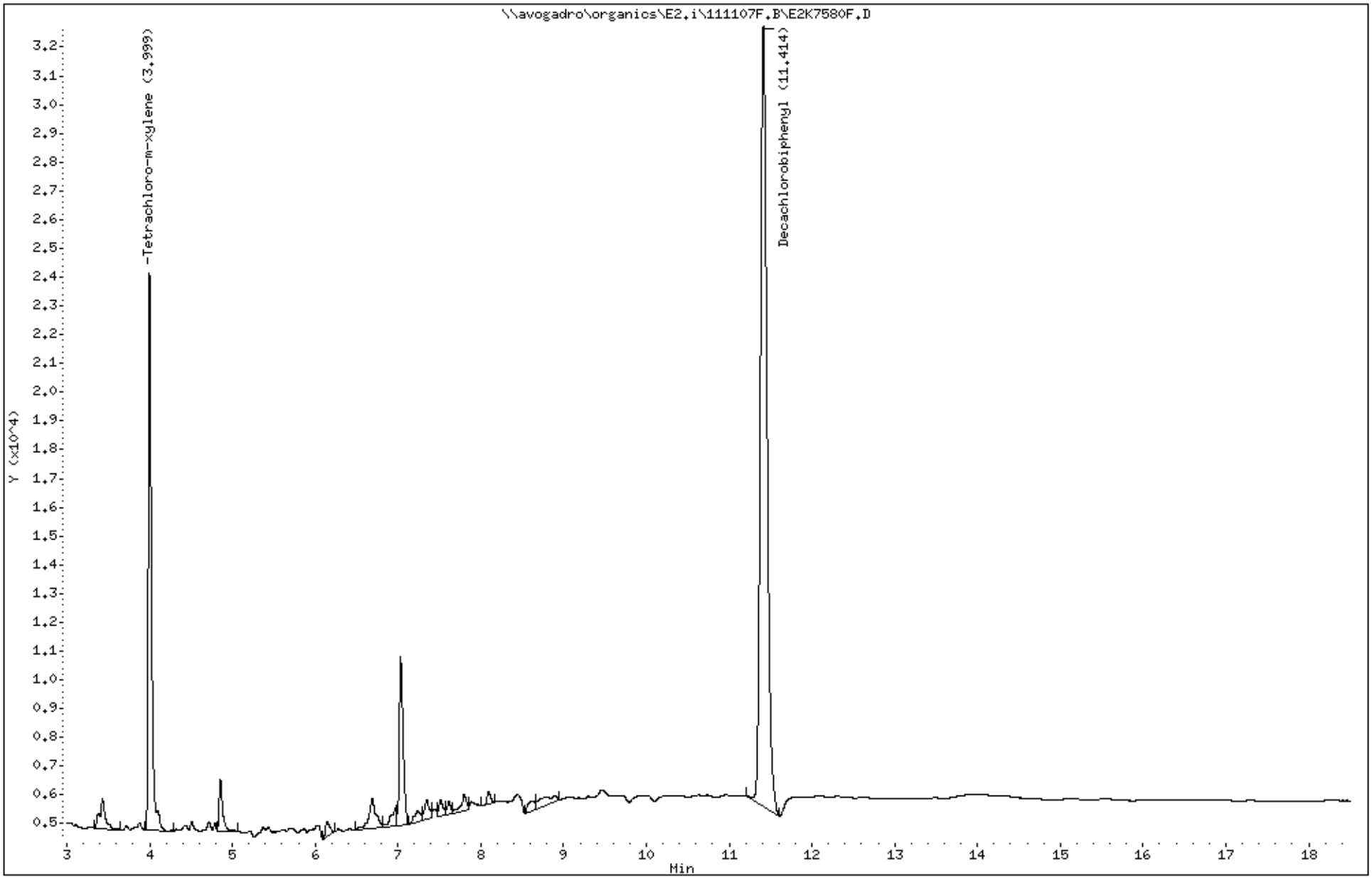
Data file : \\avogadro\organics\E2.i\111107F.B\E2K7580F.D
Lab Smp Id: K2198-02B Client Smp ID: H30Q1
Inj Date : 08-NOV-2011 02:05
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-02B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
3.999	3.999	0.000	517786	0.02493	8.3		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
11.413	11.417	-0.004	1494538	0.05213	17		

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7580F.D
Date : 08-NOV-2011 02:05
Client ID: H30Q1 Instrument: E2.i
Sample Info: K2198-02B,,62776,somaro,sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPest Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7580R.D
Report Date: 08-Nov-2011 11:43

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

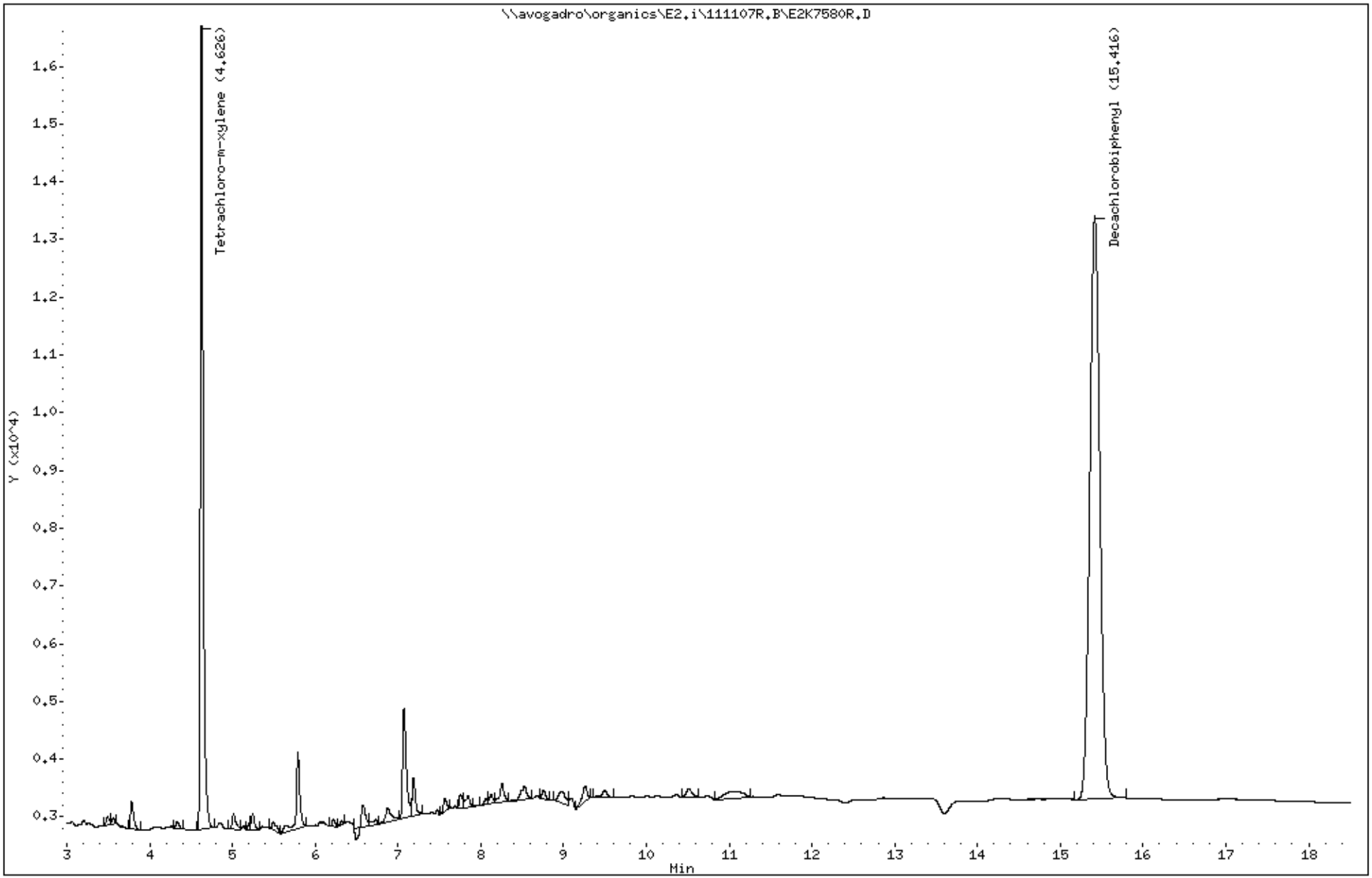
Data file : \\avogadro\organics\E2.i\111107R.B\E2K7580R.D
Lab Smp Id: K2198-02B Client Smp ID: H30Q1
Inj Date : 08-NOV-2011 02:05
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-02B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.625	4.627	-0.002	335435	0.02667	8.9		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
15.416	15.423	-0.007	850974	0.05020	17		

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7580R.D
Date : 08-NOV-2011 02:05
Client ID: H30Q1
Instrument: E2.i
Sample Info: K2198-02B,,62776,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q2

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-03B

Sample wt/vol: 30.4 (g/mL) G Lab File ID: E2K7581F.D/E2K7581R.D

% Moisture: 16 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: 7.7 Sulfur Cleanup: (Y/N) Y

Acid Cleanup:(Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	39	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	39	U
11096-82-5	Aroclor-1260	39	U
37324-23-5	Aroclor-1262	39	U
11100-14-4	Aroclor-1268	39	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7581F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

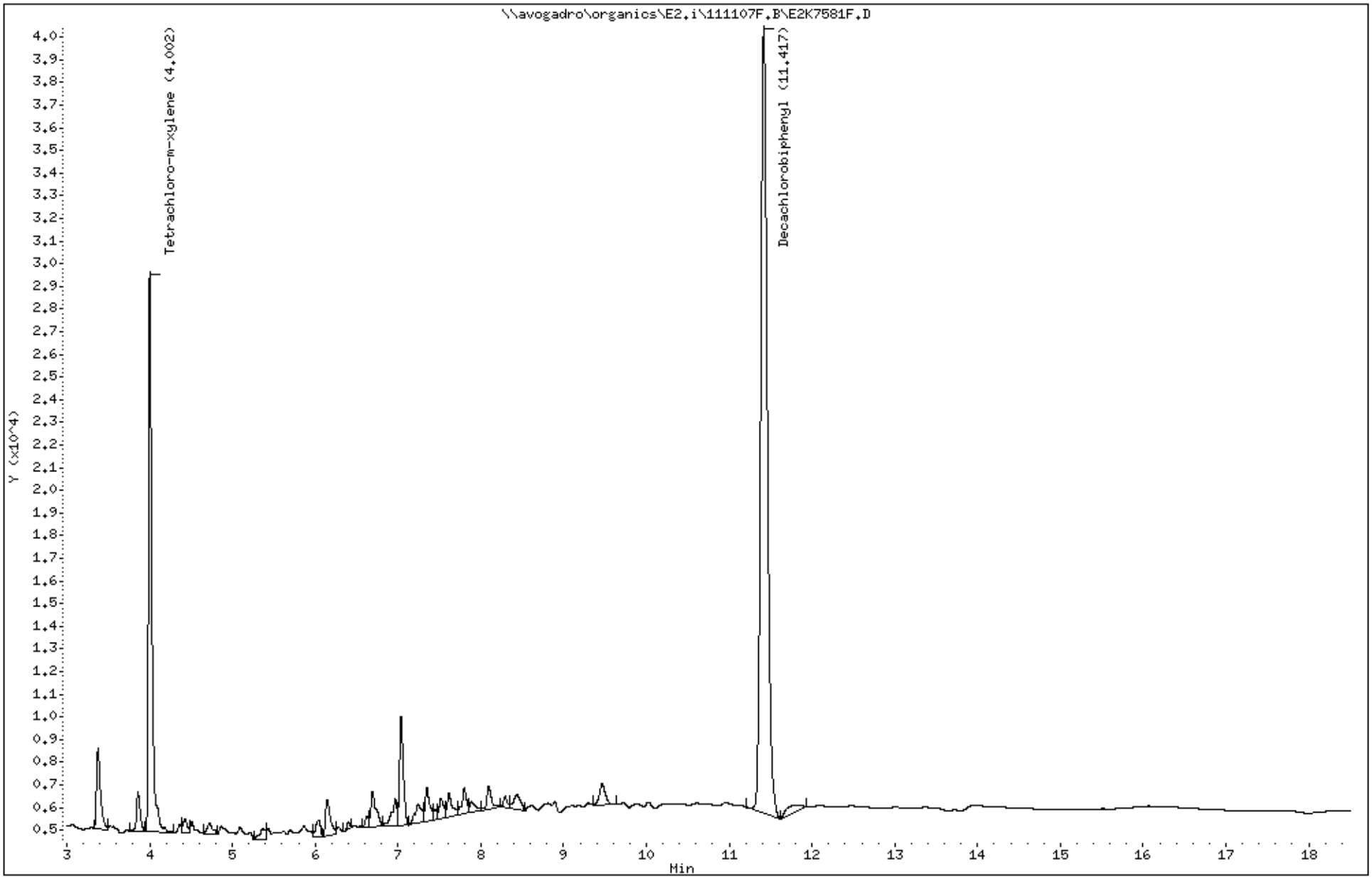
Data file : \\avogadro\organics\E2.i\111107F.B\E2K7581F.D
Lab Smp Id: K2198-03B Client Smp ID: H30Q2
Inj Date : 08-NOV-2011 02:26
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-03B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.400	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.002	3.999	0.003	696231	0.03353		11	
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
11.416	11.417	-0.001	1912296	0.06671		22	

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7581F.D
Date : 08-NOV-2011 02:26
Client ID: H30Q2 Instrument: E2.i
Sample Info: K2198-03B,,62776,somaro,sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPest Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7581R.D
Report Date: 08-Nov-2011 11:44

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

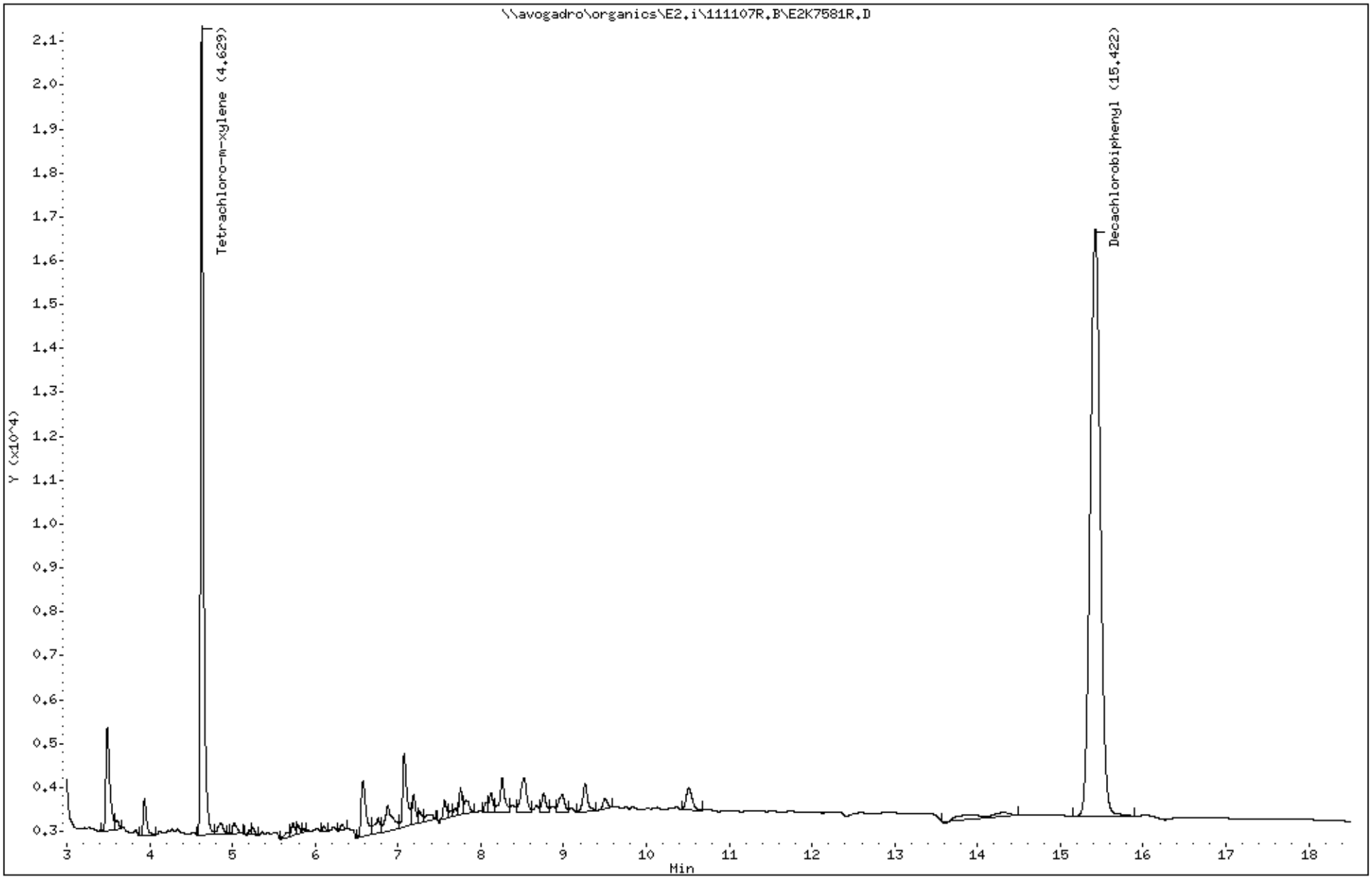
Data file : \\avogadro\organics\E2.i\111107R.B\E2K7581R.D
Lab Smp Id: K2198-03B Client Smp ID: H30Q2
Inj Date : 08-NOV-2011 02:26
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-03B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.400	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.628	4.627	0.001	457645	0.03639		12	
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
15.421	15.423	-0.002	1135429	0.06698		22	

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7581R.D
Date : 08-NOV-2011 02:26
Client ID: H30Q2 Instrument: E2.i
Sample Info: K2198-03B,,62776,somaro,sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPestII Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q3

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-04B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E2K7604F.D/E2K7604R.D

% Moisture: 19 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: 7.3 Sulfur Cleanup: (Y/N) Y

Acid Cleanup:(Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	41	U
11104-28-2	Aroclor-1221	41	U
11141-16-5	Aroclor-1232	41	U
53469-21-9	Aroclor-1242	41	U
12672-29-6	Aroclor-1248	41	U
11097-69-1	Aroclor-1254	41	U
11096-82-5	Aroclor-1260	41	U
37324-23-5	Aroclor-1262	41	U
11100-14-4	Aroclor-1268	41	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7604F.D
Report Date: 08-Nov-2011 14:43

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

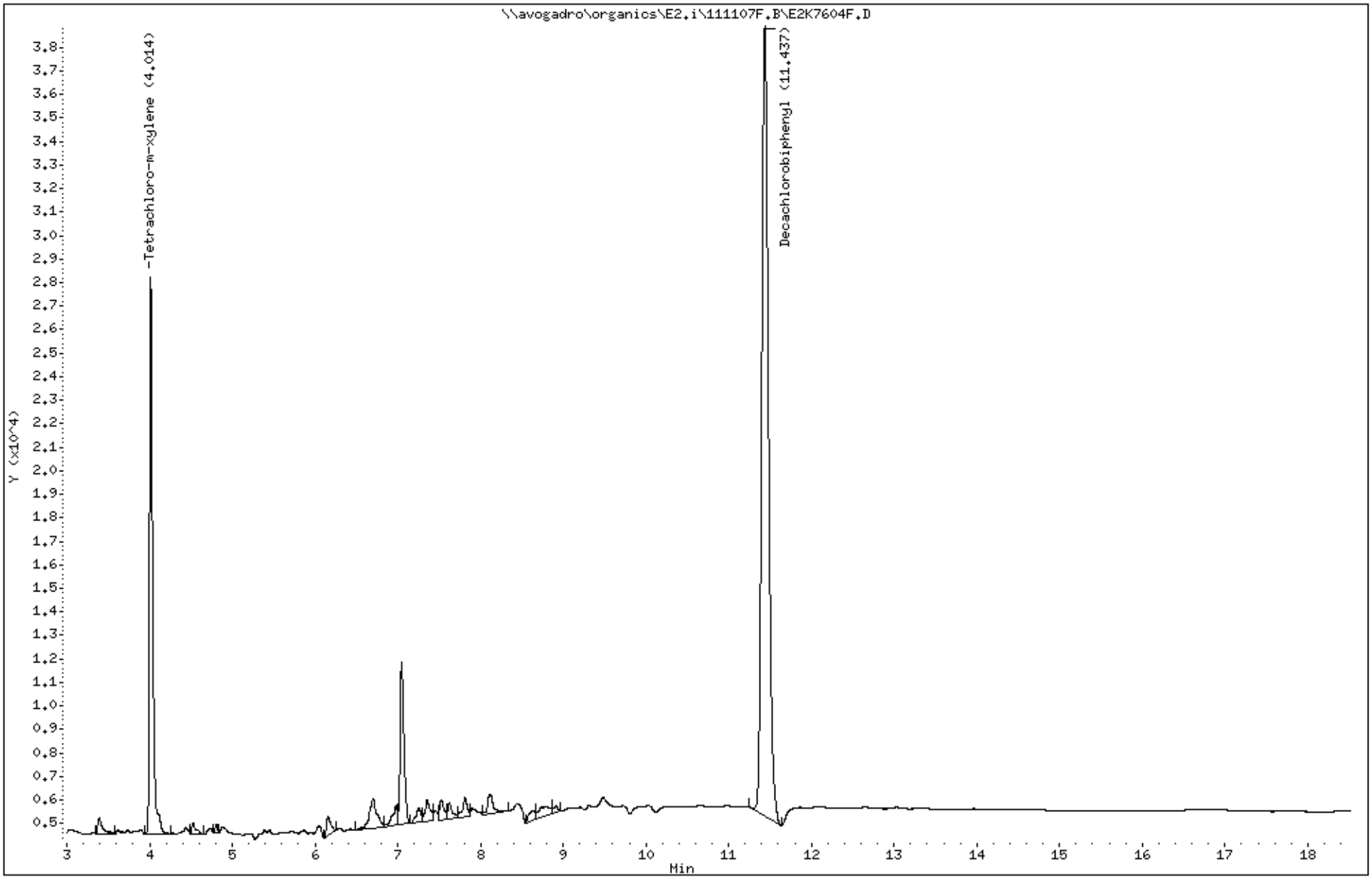
Data file : \\avogadro\organics\E2.i\111107F.B\E2K7604F.D
Lab Smp Id: K2198-04B Client Smp ID: H30Q3
Inj Date : 08-NOV-2011 10:47
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-04B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 14:41 E2.i Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.013	3.999	0.014	634174	0.03054		10	
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
11.437	11.417	0.020	1871456	0.06528		22	

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7604F.D
Date : 08-NOV-2011 10:47
Client ID: H30Q3
Instrument: E2.i
Sample Info: K2198-04B,,62776,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7604R.D
Report Date: 08-Nov-2011 14:44

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

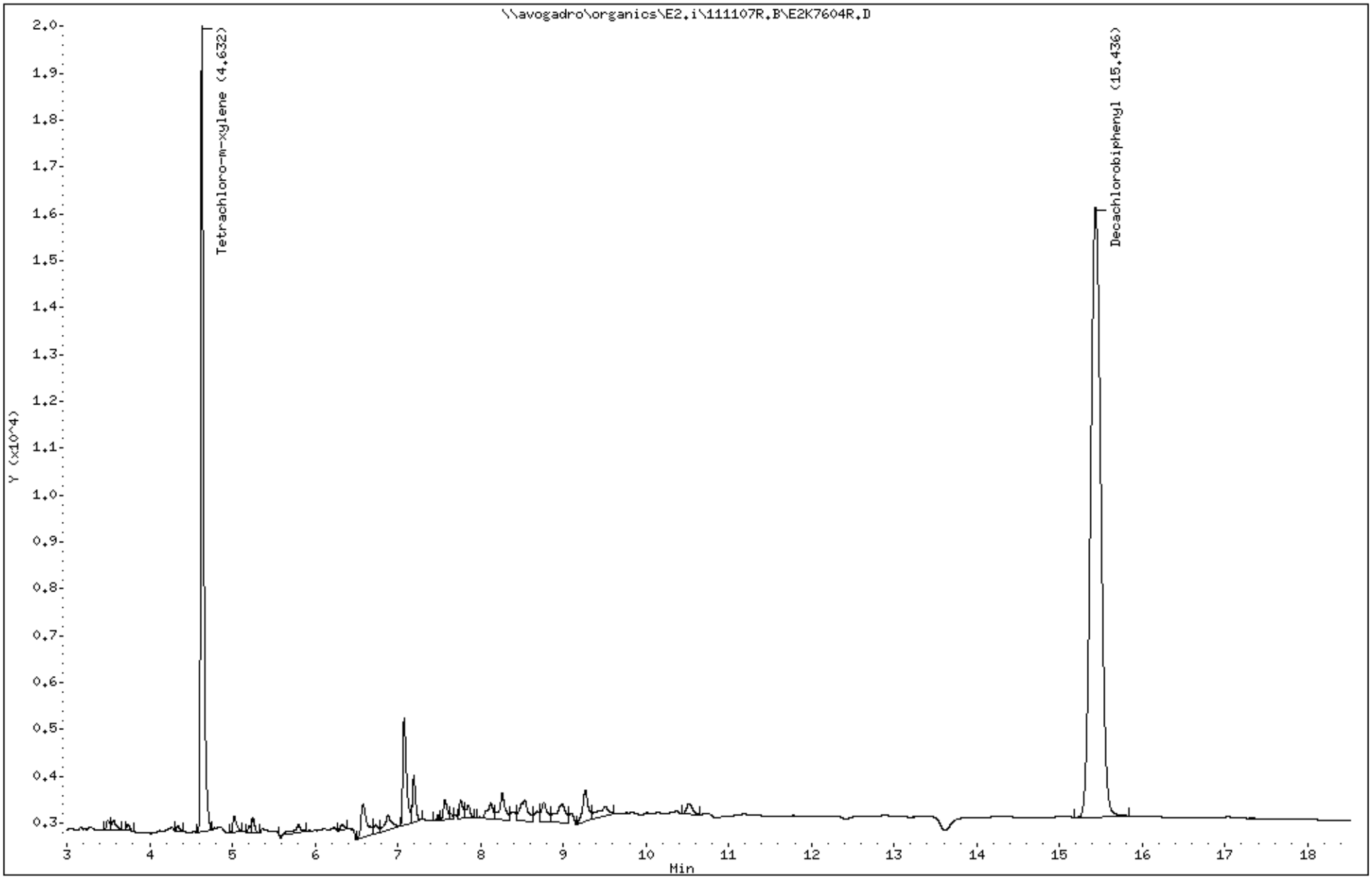
Data file : \\avogadro\organics\E2.i\111107R.B\E2K7604R.D
Lab Smp Id: K2198-04B Client Smp ID: H30Q3
Inj Date : 08-NOV-2011 10:47
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-04B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 14:42 E2.i Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.632	4.627	0.005	414707	0.03297		11	
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
15.436	15.423	0.013	1101566	0.06498		22	

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7604R.D
Date : 08-NOV-2011 10:47
Client ID: H30Q3
Instrument: E2.i
Sample Info: K2198-04B,,62776,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-05B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E2K7583F.D/E2K7583R.D

% Moisture: 16 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: 8.9 Sulfur Cleanup: (Y/N) Y

Acid Cleanup:(Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	39	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	39	U
11096-82-5	Aroclor-1260	39	U
37324-23-5	Aroclor-1262	39	U
11100-14-4	Aroclor-1268	39	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7583F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111107F.B\E2K7583F.D
Lab Smp Id: K2198-05B Client Smp ID: H30Q4
Inj Date : 08-NOV-2011 03:08
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-05B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

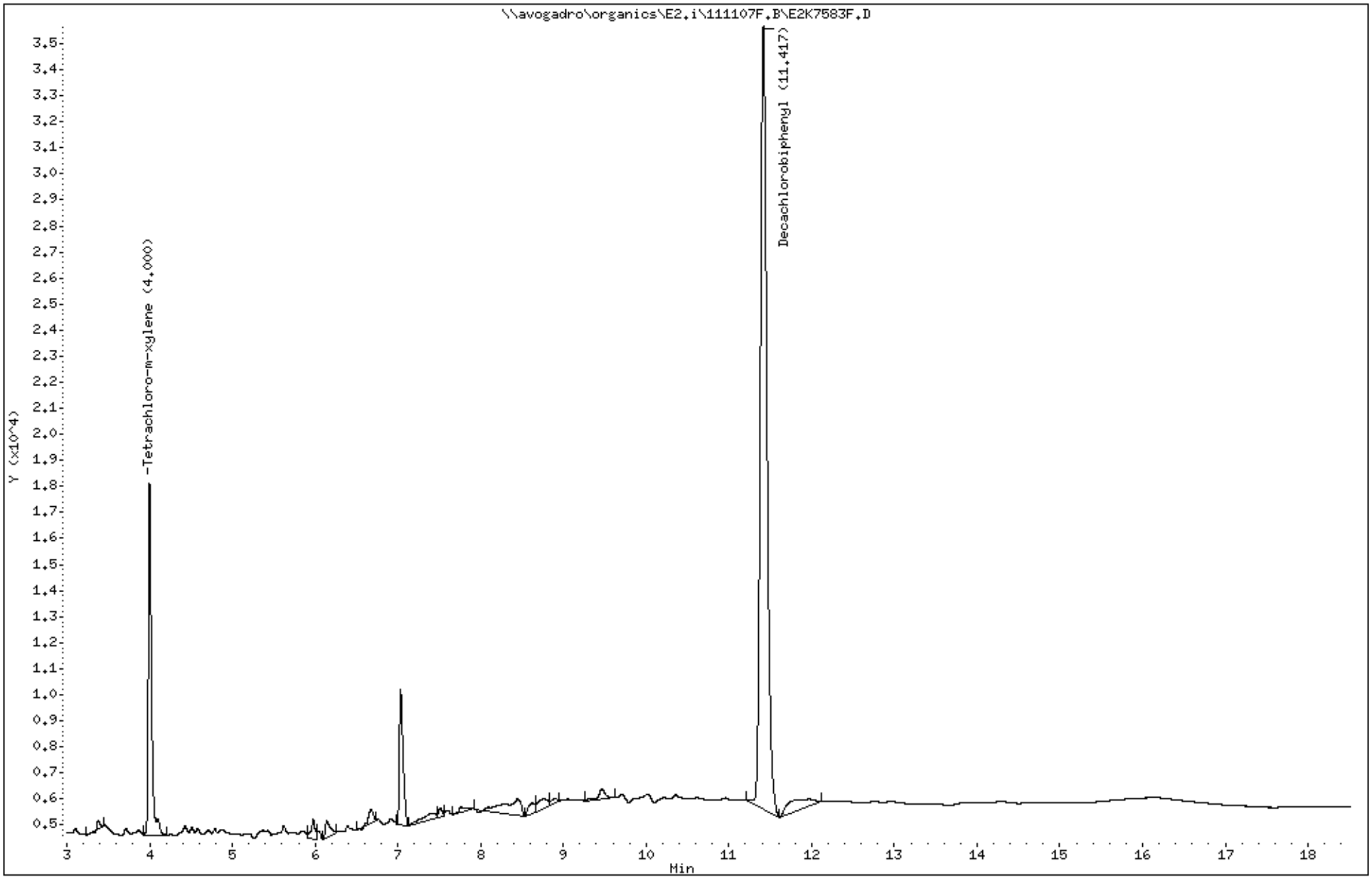
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
3.999	3.999	0.000	365144	0.01758	5.9			(R)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.416	11.417	-0.001	1658710	0.05786	19			

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7583F.D
Date : 08-NOV-2011 03:08
Client ID: H30Q4
Instrument: E2.i
Sample Info: K2198-05B,,62776,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7583R.D
Report Date: 08-Nov-2011 11:44

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111107R.B\E2K7583R.D
Lab Smp Id: K2198-05B Client Smp ID: H30Q4
Inj Date : 08-NOV-2011 03:08
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-05B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

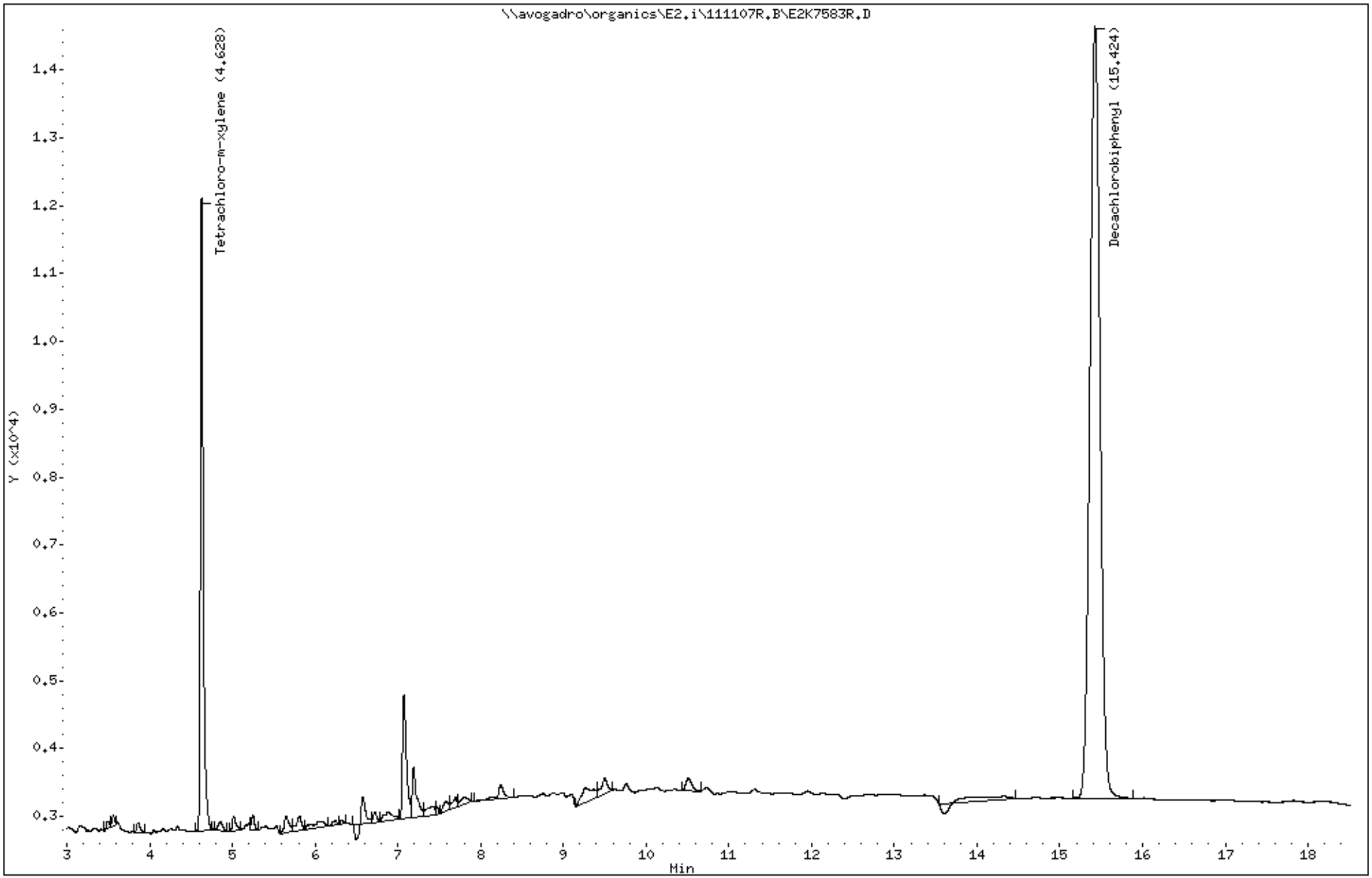
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.628	4.627	0.001	223922	0.01780	5.9			(R)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.424	15.423	0.001	965876	0.05698	19			

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7583R.D
Date : 08-NOV-2011 03:08
Client ID: H30Q4 Instrument: E2.i
Sample Info: K2198-05B,,62776,somaro,sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPestII Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q6

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-06B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E2K7584F.D/E2K7584R.D

% Moisture: 48 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: 9.1 Sulfur Cleanup: (Y/N) Y

Acid Cleanup:(Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	63	U
11104-28-2	Aroclor-1221	63	U
11141-16-5	Aroclor-1232	63	U
53469-21-9	Aroclor-1242	63	U
12672-29-6	Aroclor-1248	63	U
11097-69-1	Aroclor-1254	63	U
11096-82-5	Aroclor-1260	63	U
37324-23-5	Aroclor-1262	63	U
11100-14-4	Aroclor-1268	63	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7584F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111107F.B\E2K7584F.D
Lab Smp Id: K2198-06B Client Smp ID: H30Q6
Inj Date : 08-NOV-2011 03:29
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-06B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 26
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

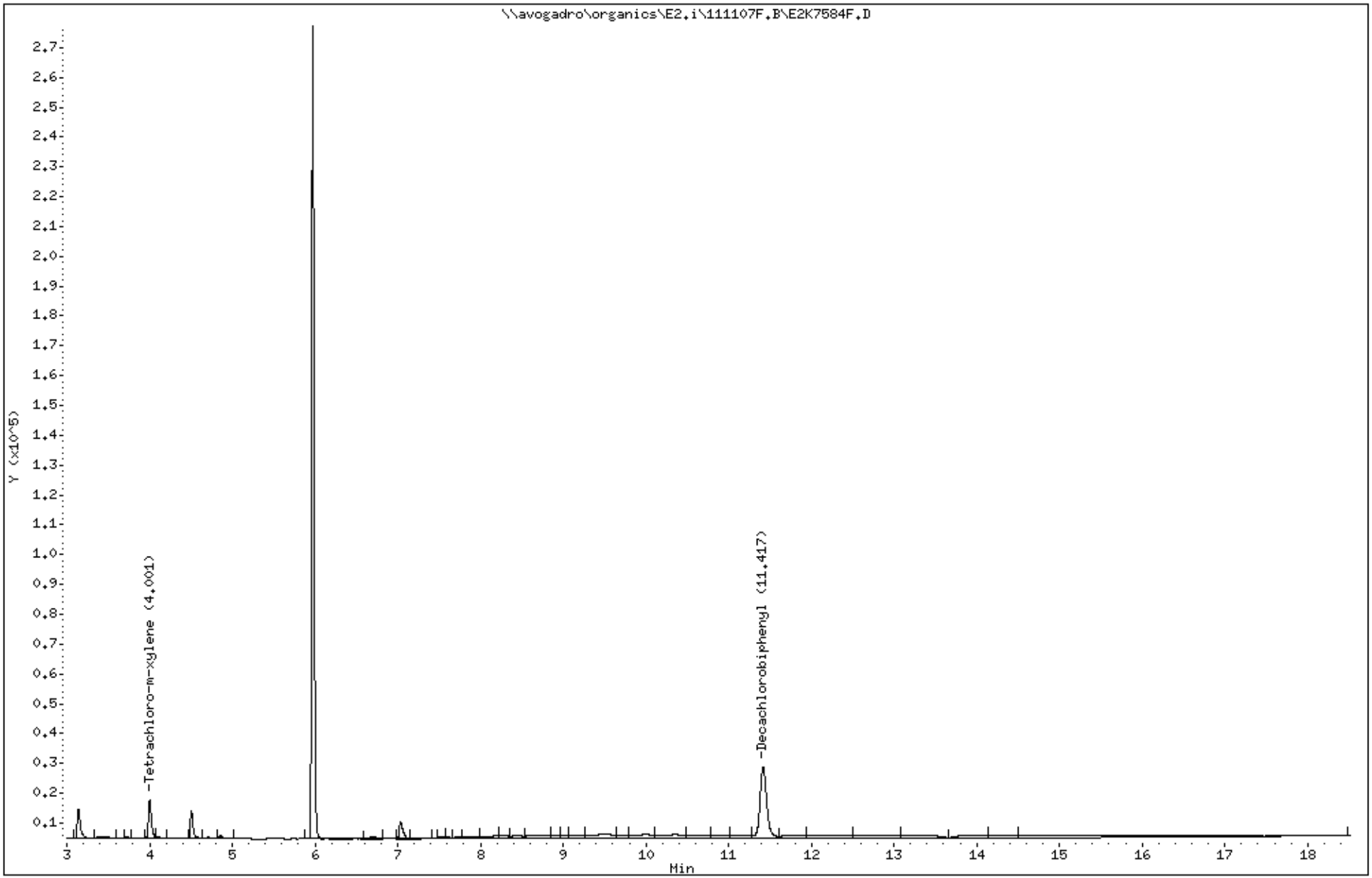
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.001	3.999	0.002	324890	0.01564	5.2			(R)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.417	11.417	0.000	1452031	0.05065	17			

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7584F.D
Date : 08-NOV-2011 03:29
Client ID: H30Q6
Instrument: E2.i
Sample Info: K2198-06B,,62776,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7584R.D
Report Date: 08-Nov-2011 11:44

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111107R.B\E2K7584R.D
Lab Smp Id: K2198-06B Client Smp ID: H30Q6
Inj Date : 08-NOV-2011 03:29
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-06B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 26
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

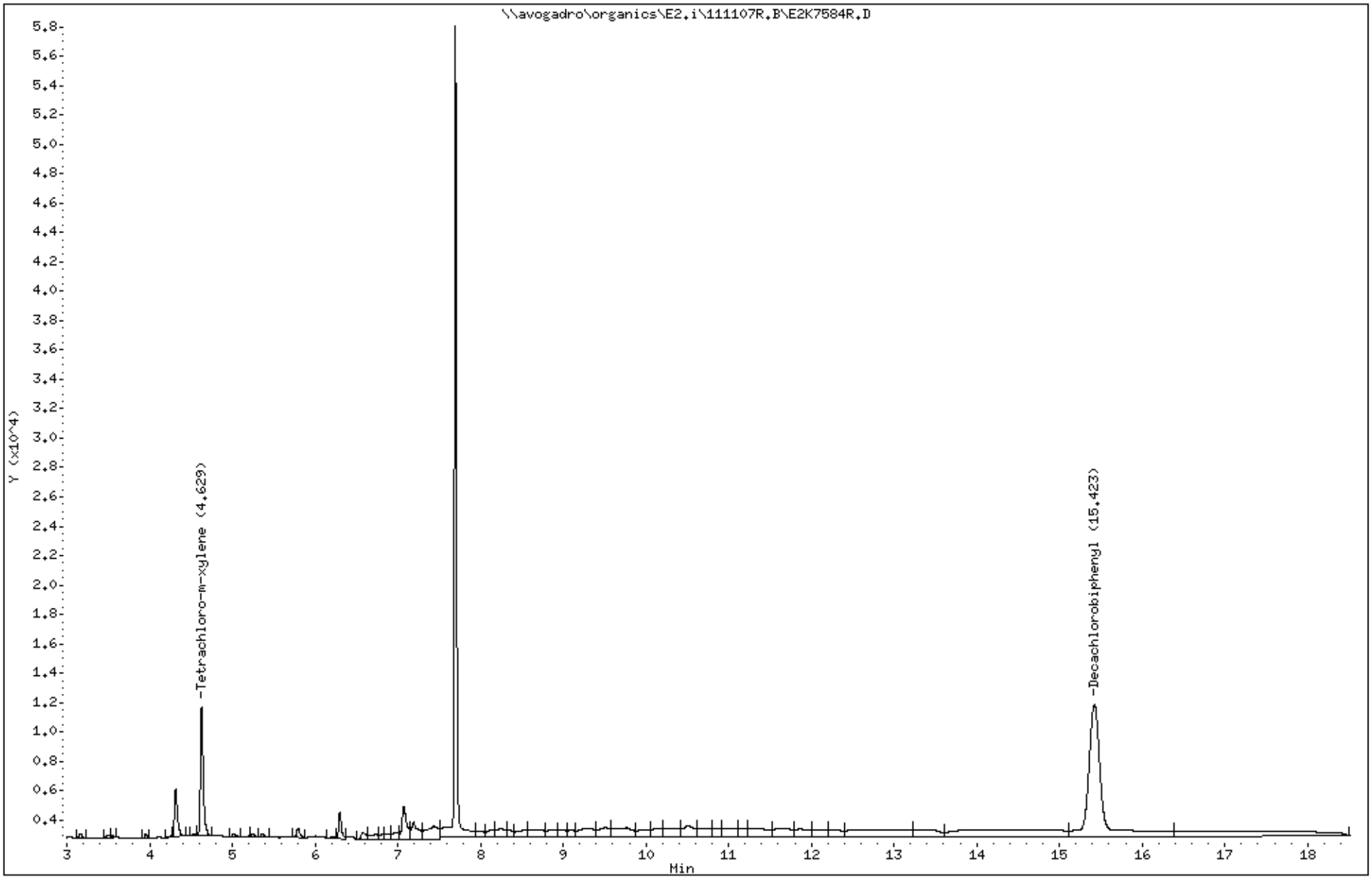
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.628	4.627	0.001	210459	0.01673	5.6			(R)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.422	15.423	-0.001	1014513	0.05985	20			

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7584R.D
Date : 08-NOV-2011 03:29
Client ID: H30Q6
Instrument: E2.i
Sample Info: K2198-06B,,62776,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q8

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-07B

Sample wt/vol: 30.5 (g/mL) G Lab File ID: E2K7585F.D/E2K7585R.D

% Moisture: 70 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: 9.1 Sulfur Cleanup: (Y/N) Y

Acid Cleanup:(Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	110	U
11104-28-2	Aroclor-1221	110	U
11141-16-5	Aroclor-1232	110	U
53469-21-9	Aroclor-1242	110	U
12672-29-6	Aroclor-1248	110	U
11097-69-1	Aroclor-1254	110	U
11096-82-5	Aroclor-1260	110	U
37324-23-5	Aroclor-1262	110	U
11100-14-4	Aroclor-1268	110	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7585F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

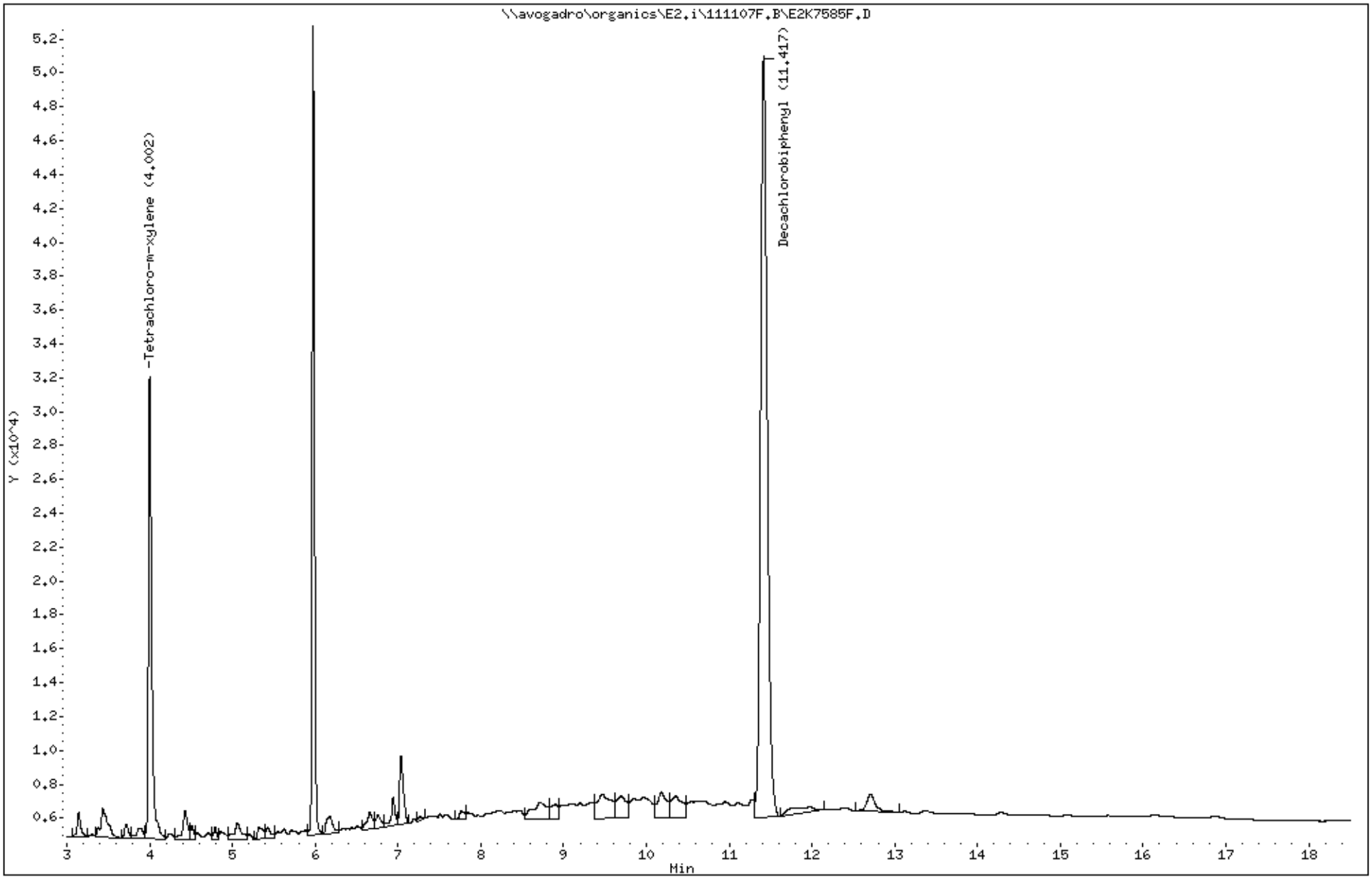
Data file : \\avogadro\organics\E2.i\111107F.B\E2K7585F.D
Lab Smp Id: K2198-07B Client Smp ID: H30Q8
Inj Date : 08-NOV-2011 03:50
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-07B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 27
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.500	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.001	3.999	0.002	755747	0.03639		12	
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
11.416	11.417	-0.001	2510194	0.08756		29	

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7585F.D
Date : 08-NOV-2011 03:50
Client ID: H30Q8
Instrument: E2.i
Sample Info: K2198-07B,,62776,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7585R.D
Report Date: 08-Nov-2011 11:44

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

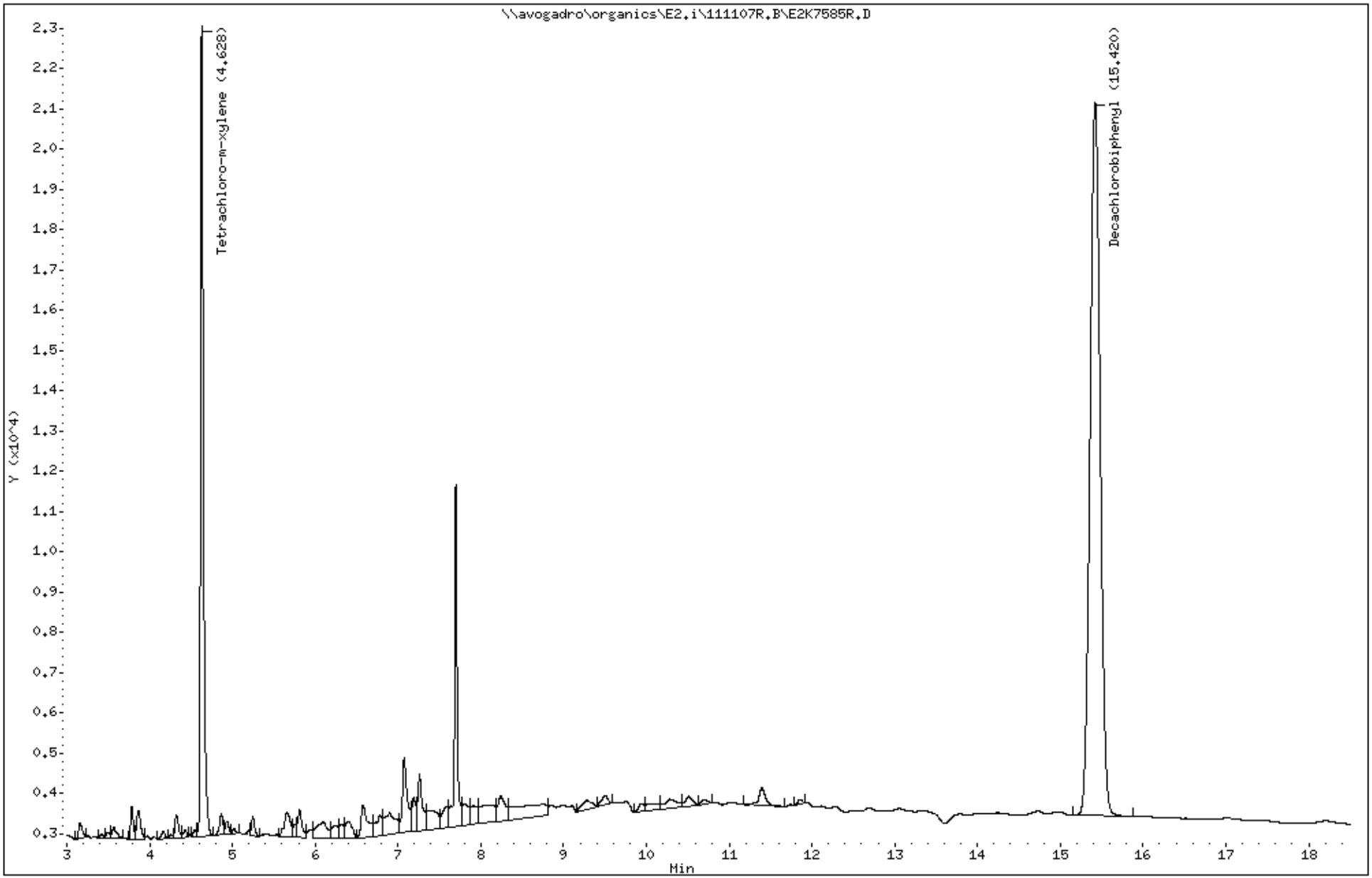
Data file : \\avogadro\organics\E2.i\111107R.B\E2K7585R.D
Lab Smp Id: K2198-07B Client Smp ID: H30Q8
Inj Date : 08-NOV-2011 03:50
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-07B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 27
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.500	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.628	4.627	0.001	491851	0.03911		13	
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
15.420	15.423	-0.003	1510842	0.08913		29	

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7585R.D
Date : 08-NOV-2011 03:50
Client ID: H30Q8
Instrument: E2.i
Sample Info: K2198-07B,,62776,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q9

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-08B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E2K7586F.D/E2K7586R.D

% Moisture: 62 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: 8.5 Sulfur Cleanup: (Y/N) Y

Acid Cleanup:(Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	87	U
11104-28-2	Aroclor-1221	87	U
11141-16-5	Aroclor-1232	87	U
53469-21-9	Aroclor-1242	87	U
12672-29-6	Aroclor-1248	87	U
11097-69-1	Aroclor-1254	87	U
11096-82-5	Aroclor-1260	87	U
37324-23-5	Aroclor-1262	87	U
11100-14-4	Aroclor-1268	87	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7586F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

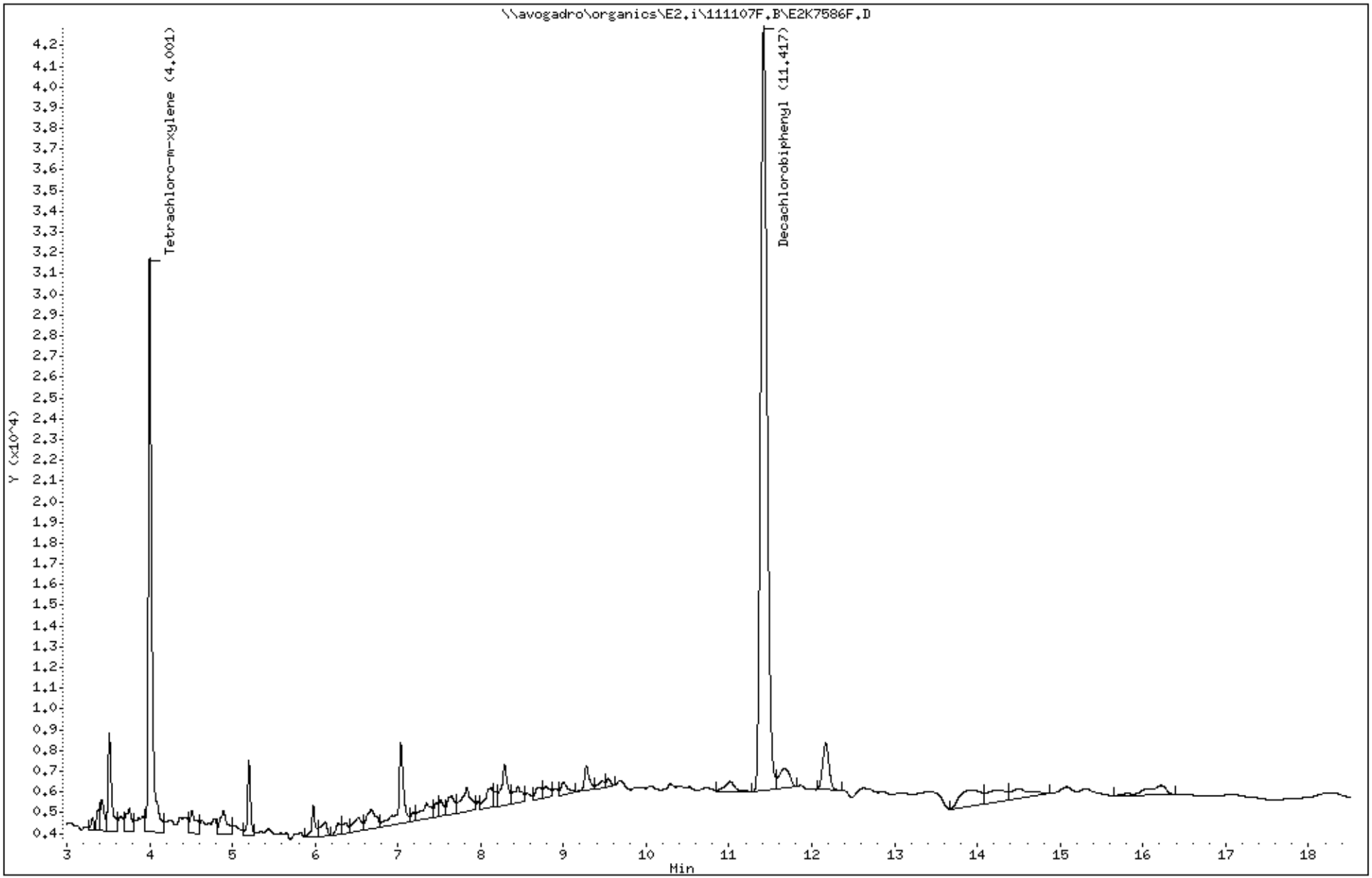
Data file : \\avogadro\organics\E2.i\111107F.B\E2K7586F.D
Lab Smp Id: K2198-08B Client Smp ID: H30Q9
Inj Date : 08-NOV-2011 04:11
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-08B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 28
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.000	3.999	0.001	798211	0.03844		13	
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
11.417	11.417	0.000	2000498	0.06978		23	

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7586F.D
Date : 08-NOV-2011 04:11
Client ID: H30Q9
Instrument: E2.i
Sample Info: K2198-08B,,62776,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7586R.D
Report Date: 08-Nov-2011 11:44

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

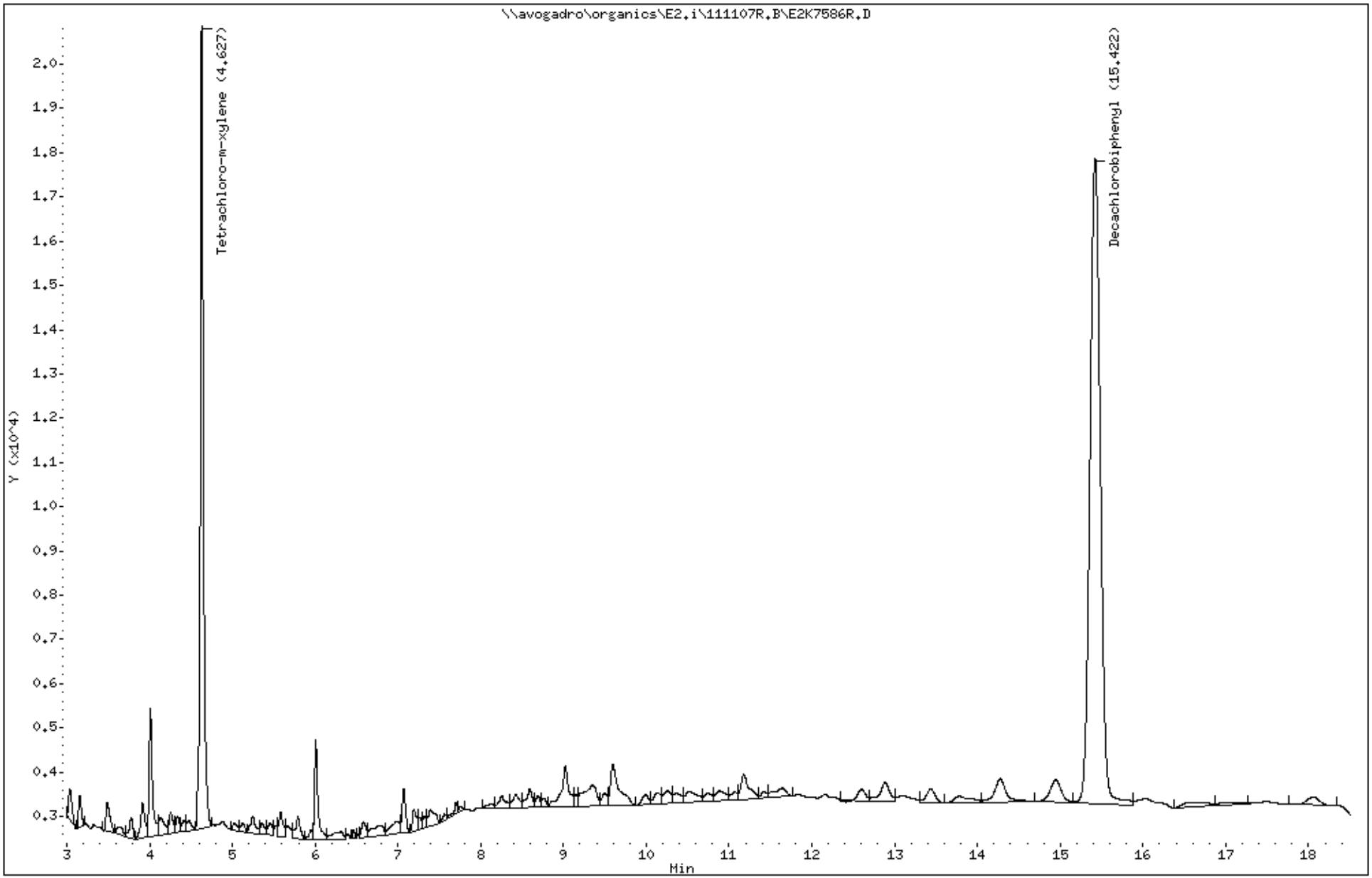
Data file : \\avogadro\organics\E2.i\111107R.B\E2K7586R.D
Lab Smp Id: K2198-08B Client Smp ID: H30Q9
Inj Date : 08-NOV-2011 04:11
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-08B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 28
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.627	4.627	0.000	475156	0.03778		12	
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
15.422	15.423	-0.001	1281555	0.07560		25	

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7586R.D
Date : 08-NOV-2011 04:11
Client ID: H30Q9
Instrument: E2.i
Sample Info: K2198-08B,,62776,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30R0

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-09B

Sample wt/vol: 30.7 (g/mL) G Lab File ID: E2K7587F.D/E2K7587R.D

% Moisture: 74 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: 9.0 Sulfur Cleanup: (Y/N) Y

Acid Cleanup:(Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	120	U
11104-28-2	Aroclor-1221	120	U
11141-16-5	Aroclor-1232	120	U
53469-21-9	Aroclor-1242	120	U
12672-29-6	Aroclor-1248	120	U
11097-69-1	Aroclor-1254	120	U
11096-82-5	Aroclor-1260	120	U
37324-23-5	Aroclor-1262	120	U
11100-14-4	Aroclor-1268	120	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7587F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

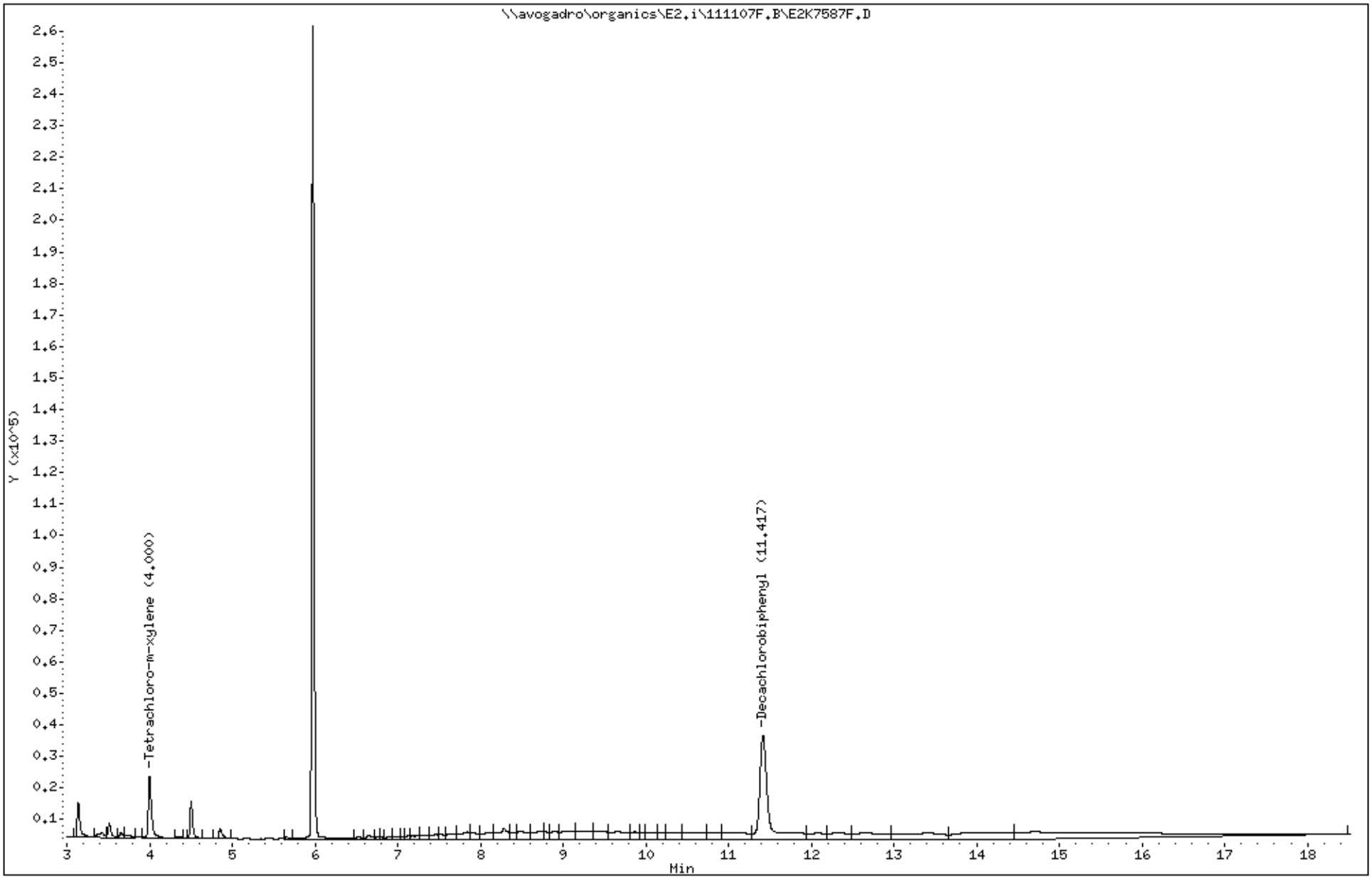
Data file : \\avogadro\organics\E2.i\111107F.B\E2K7587F.D
Lab Smp Id: K2198-09B Client Smp ID: H30R0
Inj Date : 08-NOV-2011 04:32
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-09B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 29
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.700	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.000	3.999	0.001	540999	0.02605	8.5		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
11.417	11.417	0.000	2347682	0.08189	27		

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7587F.D
Date : 08-NOV-2011 04:32
Client ID: H30R0
Instrument: E2.i
Sample Info: K2198-09B,,62776,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7587R.D
Report Date: 08-Nov-2011 11:44

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

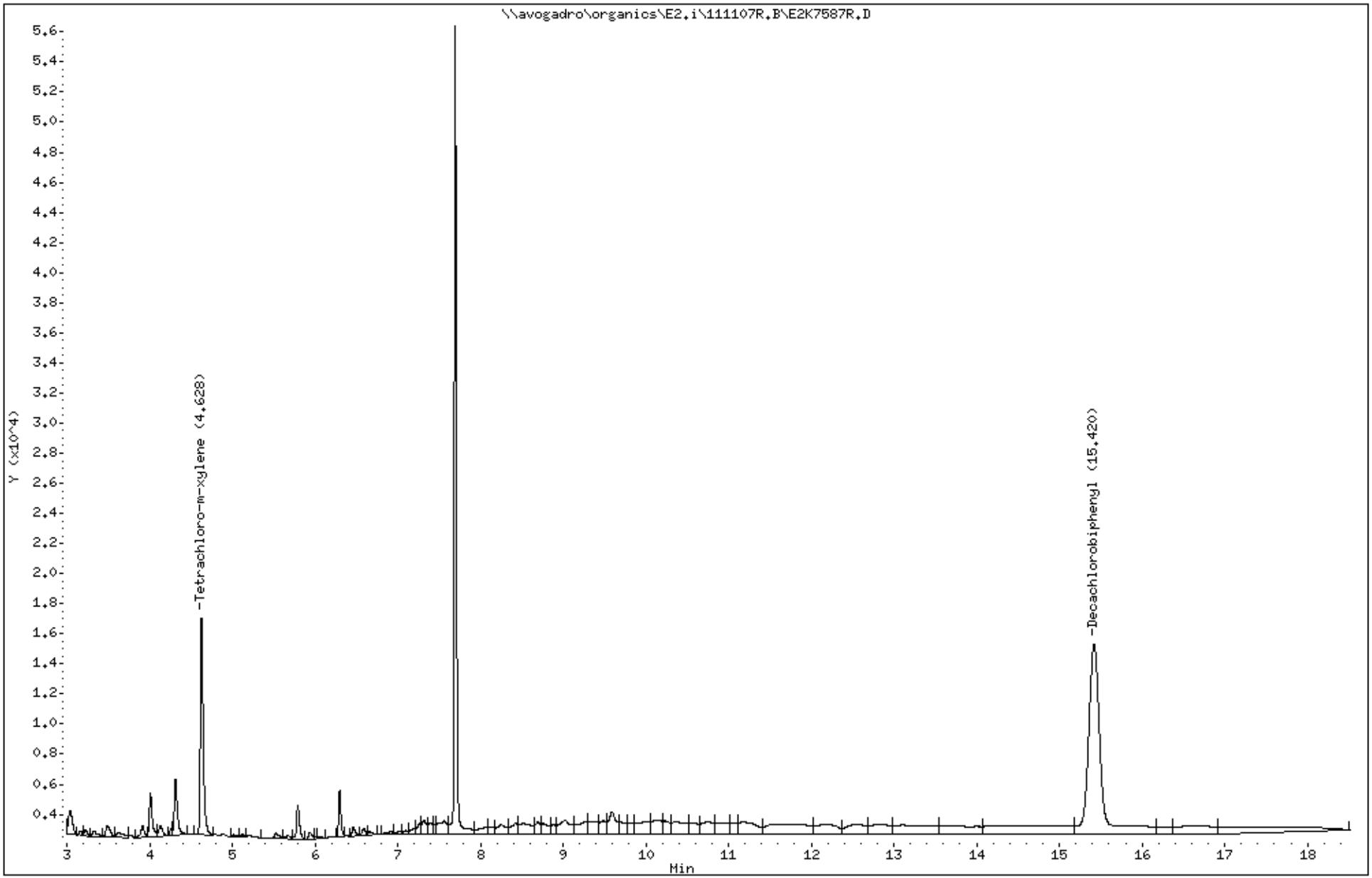
Data file : \\avogadro\organics\E2.i\111107R.B\E2K7587R.D
Lab Smp Id: K2198-09B Client Smp ID: H30R0
Inj Date : 08-NOV-2011 04:32
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-09B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 29
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.700	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.627	4.627	0.000	350120	0.02784		9.1	
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
15.419	15.423	-0.004	1345311	0.07936		26	

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7587R.D
Date : 08-NOV-2011 04:32
Client ID: H30R0
Instrument: E2.i
Sample Info: K2198-09B,,62776,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30R1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-10B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E2K7588F.D/E2K7588R.D

% Moisture: 54 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: 8.5 Sulfur Cleanup: (Y/N) Y

Acid Cleanup:(Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	72	U
11104-28-2	Aroclor-1221	72	U
11141-16-5	Aroclor-1232	72	U
53469-21-9	Aroclor-1242	72	U
12672-29-6	Aroclor-1248	72	U
11097-69-1	Aroclor-1254	72	U
11096-82-5	Aroclor-1260	72	U
37324-23-5	Aroclor-1262	72	U
11100-14-4	Aroclor-1268	72	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7588F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

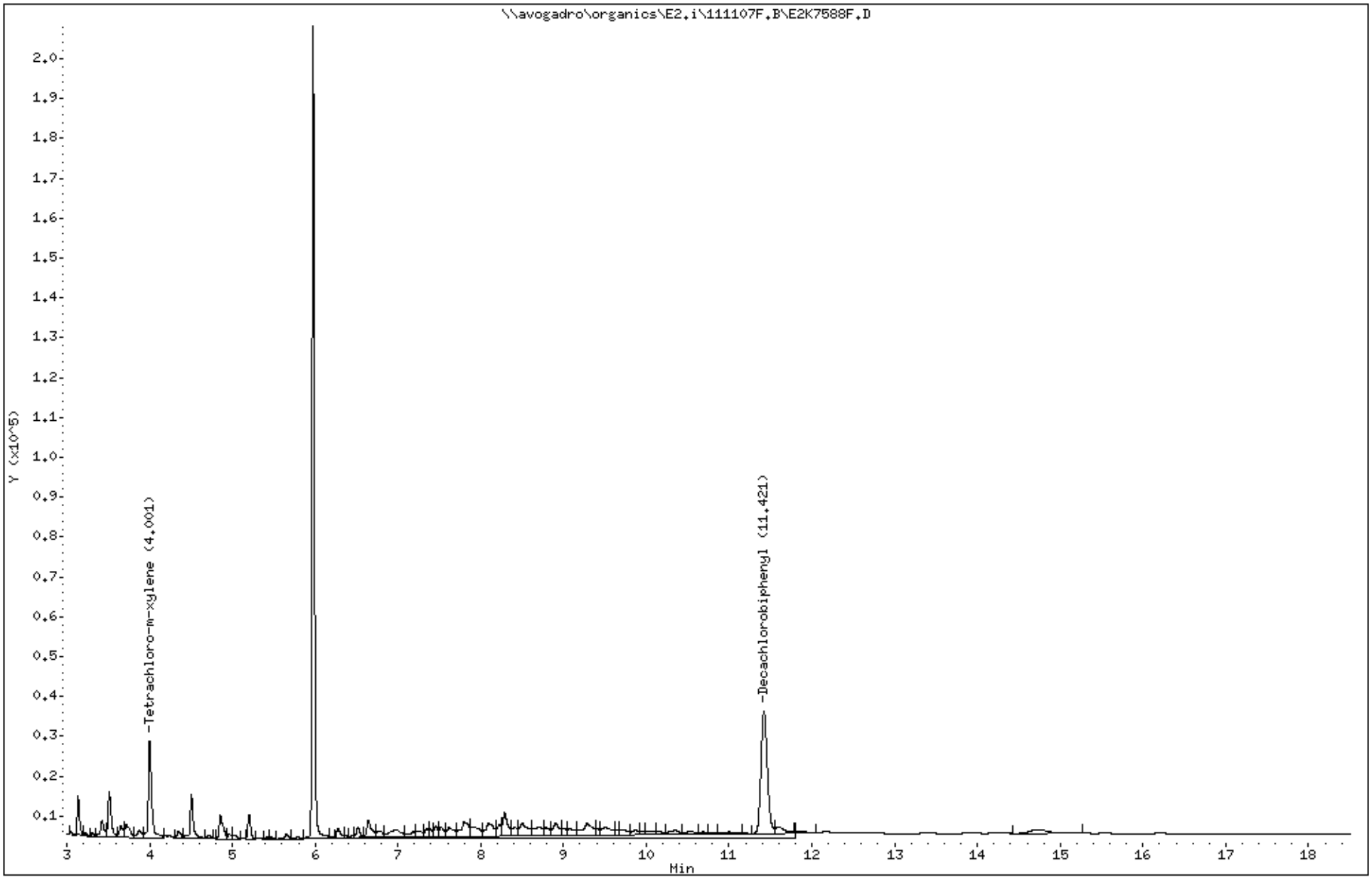
Data file : \\avogadro\organics\E2.i\111107F.B\E2K7588F.D
Lab Smp Id: K2198-10B Client Smp ID: H30R1
Inj Date : 08-NOV-2011 04:53
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-10B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 30
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.001	3.999	0.002	696569	0.03354	11		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.420	11.417	0.003	1633487	0.05698	19		

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7588F.D
Date : 08-NOV-2011 04:53
Client ID: H30R1
Instrument: E2.i
Sample Info: K2198-10B,,62776,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7588R.D
Report Date: 08-Nov-2011 11:44

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

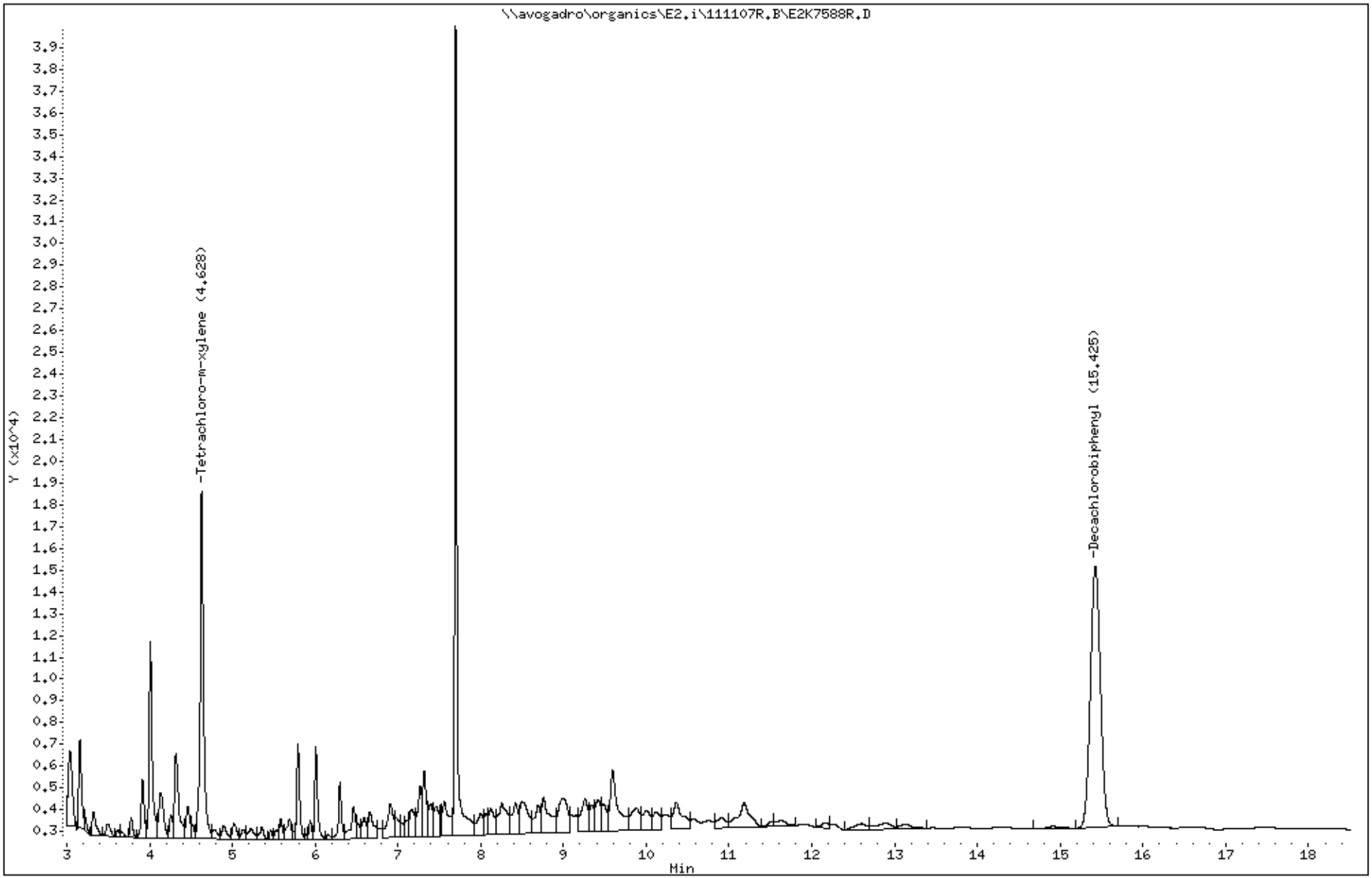
Data file : \\avogadro\organics\E2.i\111107R.B\E2K7588R.D
Lab Smp Id: K2198-10B Client Smp ID: H30R1
Inj Date : 08-NOV-2011 04:53
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-10B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 30
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.627	4.627	0.000	457630	0.03638		12	
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
15.425	15.423	0.002	1009049	0.05953		20	

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7588R.D
Date : 08-NOV-2011 04:53
Client ID: H30R1 Instrument: E2.i
Sample Info: K2198-10B,,62776,somaro,sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPestII Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30S4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-11B

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E2K7589F.D/E2K7589R.D

% Moisture: 38 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: 7.8 Sulfur Cleanup: (Y/N) Y

Acid Cleanup:(Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	53	U
11104-28-2	Aroclor-1221	53	U
11141-16-5	Aroclor-1232	53	U
53469-21-9	Aroclor-1242	53	U
12672-29-6	Aroclor-1248	53	U
11097-69-1	Aroclor-1254	53	U
11096-82-5	Aroclor-1260	53	U
37324-23-5	Aroclor-1262	53	U
11100-14-4	Aroclor-1268	53	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7589F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

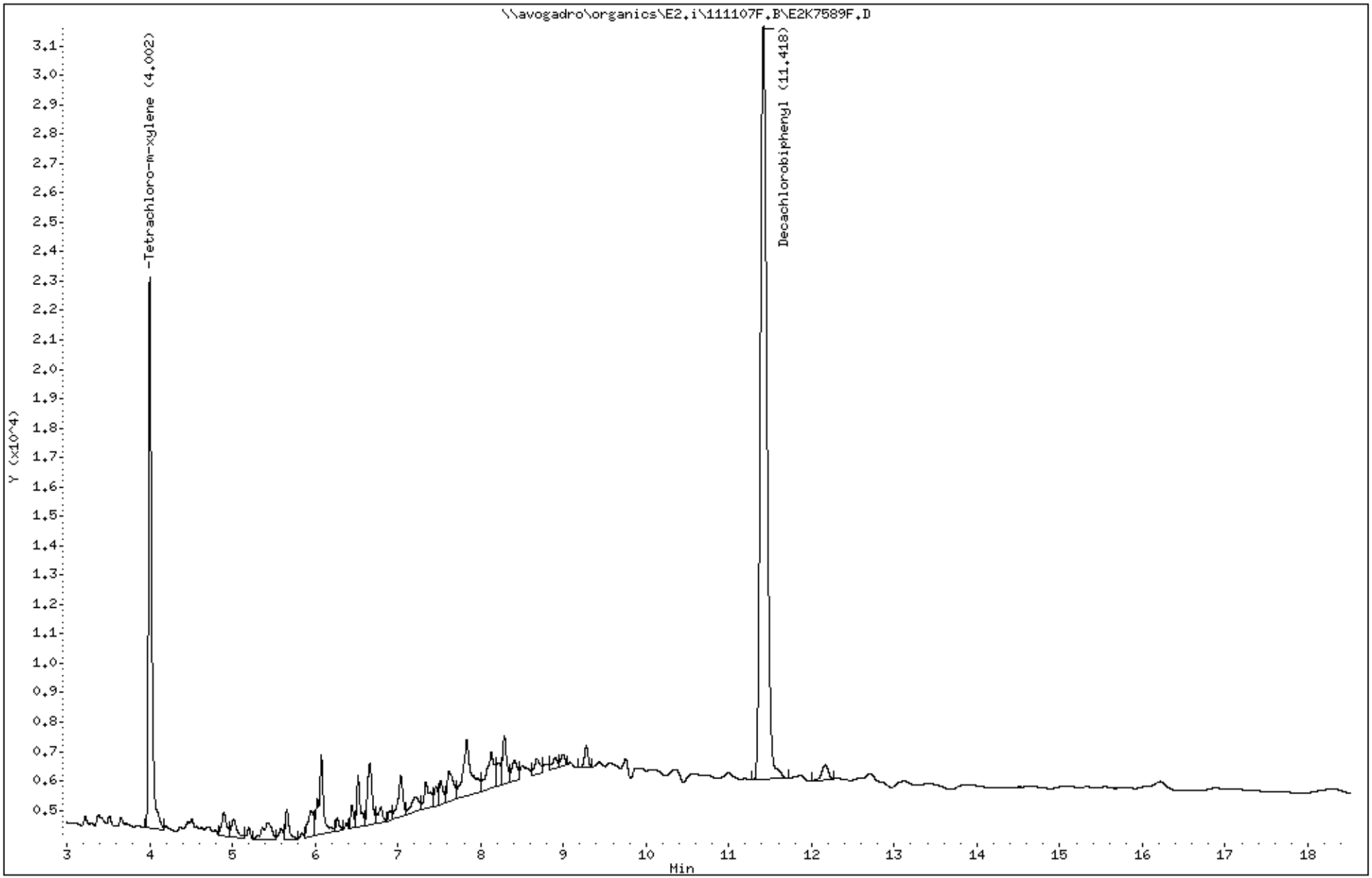
Data file : \\avogadro\organics\E2.i\111107F.B\E2K7589F.D
Lab Smp Id: K2198-11B Client Smp ID: H30S4
Inj Date : 08-NOV-2011 05:13
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-11B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 31
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.100	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.002	3.999	0.003	495793	0.02387	7.9		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
11.417	11.417	0.000	1374208	0.04794	16		

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7589F.D
Date : 08-NOV-2011 05:13
Client ID: H30S4 Instrument: E2.i
Sample Info: K2198-11B,,62776,somaro,sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPest Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7589R.D
Report Date: 08-Nov-2011 11:44

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

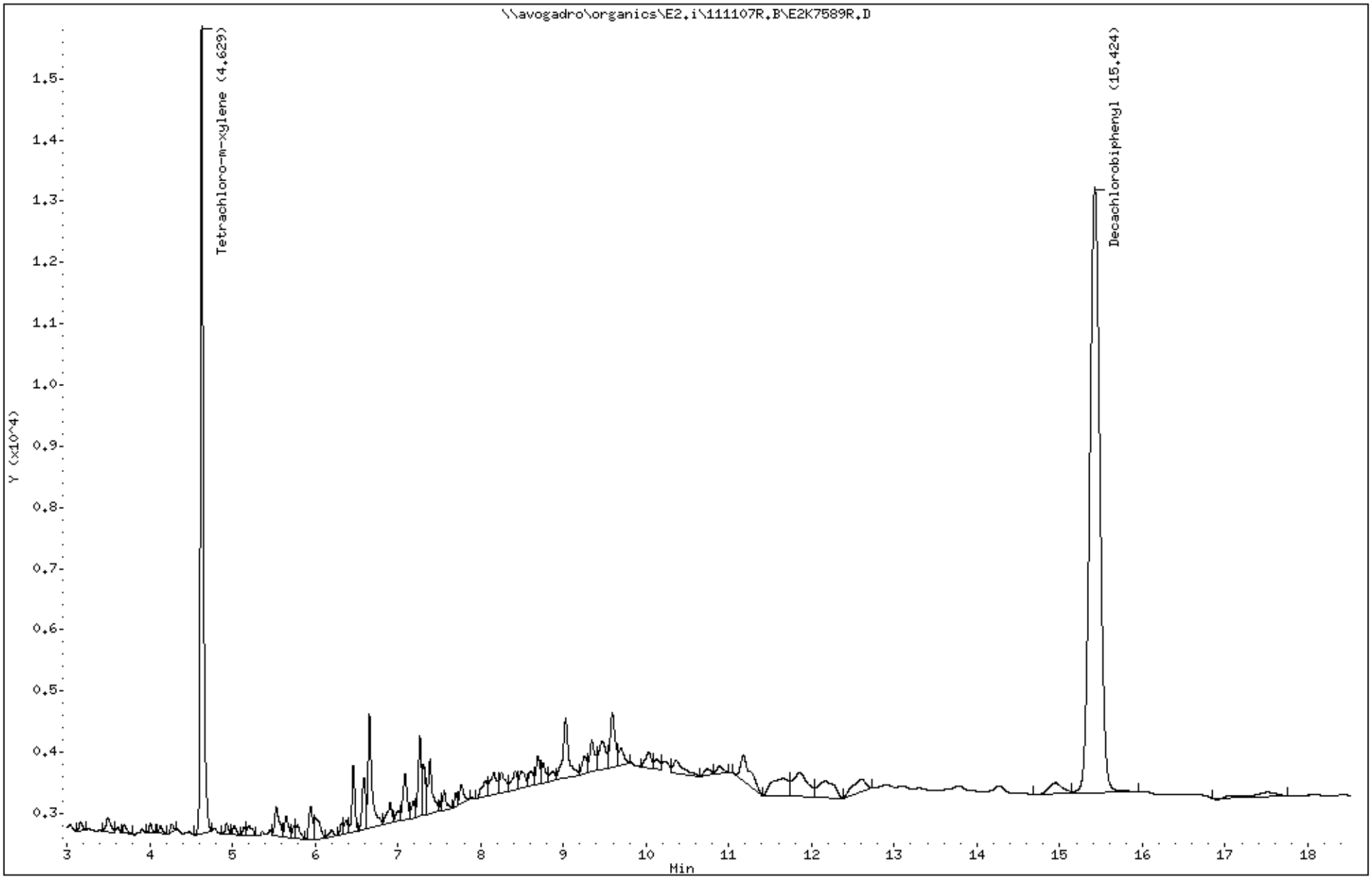
Data file : \\avogadro\organics\E2.i\111107R.B\E2K7589R.D
Lab Smp Id: K2198-11B Client Smp ID: H30S4
Inj Date : 08-NOV-2011 05:13
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-11B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 31
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.100	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.628	4.627	0.001	316418	0.02516	8.4		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
15.423	15.423	0.000	842472	0.04970	16		

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7589R.D
Date : 08-NOV-2011 05:13
Client ID: H30S4 Instrument: E2.i
Sample Info: K2198-11B,,62776,somaro,sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPestII Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30S5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-12B

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E2K7590F.D/E2K7590R.D

% Moisture: 14 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: 7.5 Sulfur Cleanup: (Y/N) Y

Acid Cleanup:(Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	38	U
11096-82-5	Aroclor-1260	38	U
37324-23-5	Aroclor-1262	38	U
11100-14-4	Aroclor-1268	38	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7590F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

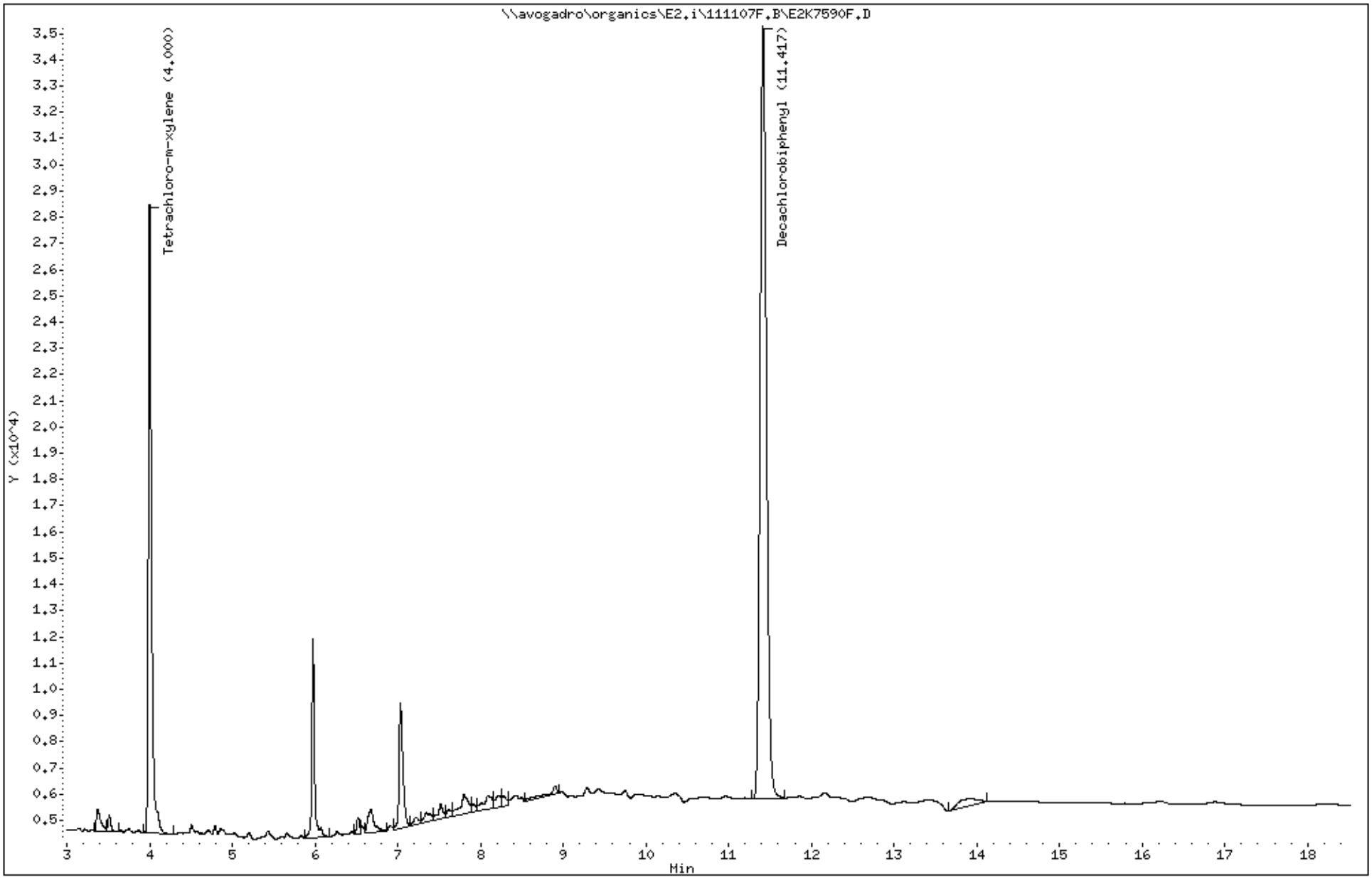
Data file : \\avogadro\organics\E2.i\111107F.B\E2K7590F.D
Lab Smp Id: K2198-12B Client Smp ID: H30S5
Inj Date : 08-NOV-2011 05:34
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-12B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 32
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.100	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
3.999	3.999	0.000	644273	0.03102		10	
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
11.416	11.417	-0.001	1581776	0.05518		18	

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7590F.D
Date : 08-NOV-2011 05:34
Client ID: H30S5
Instrument: E2.i
Sample Info: K2198-12B,,62776,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7590R.D
Report Date: 08-Nov-2011 11:44

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

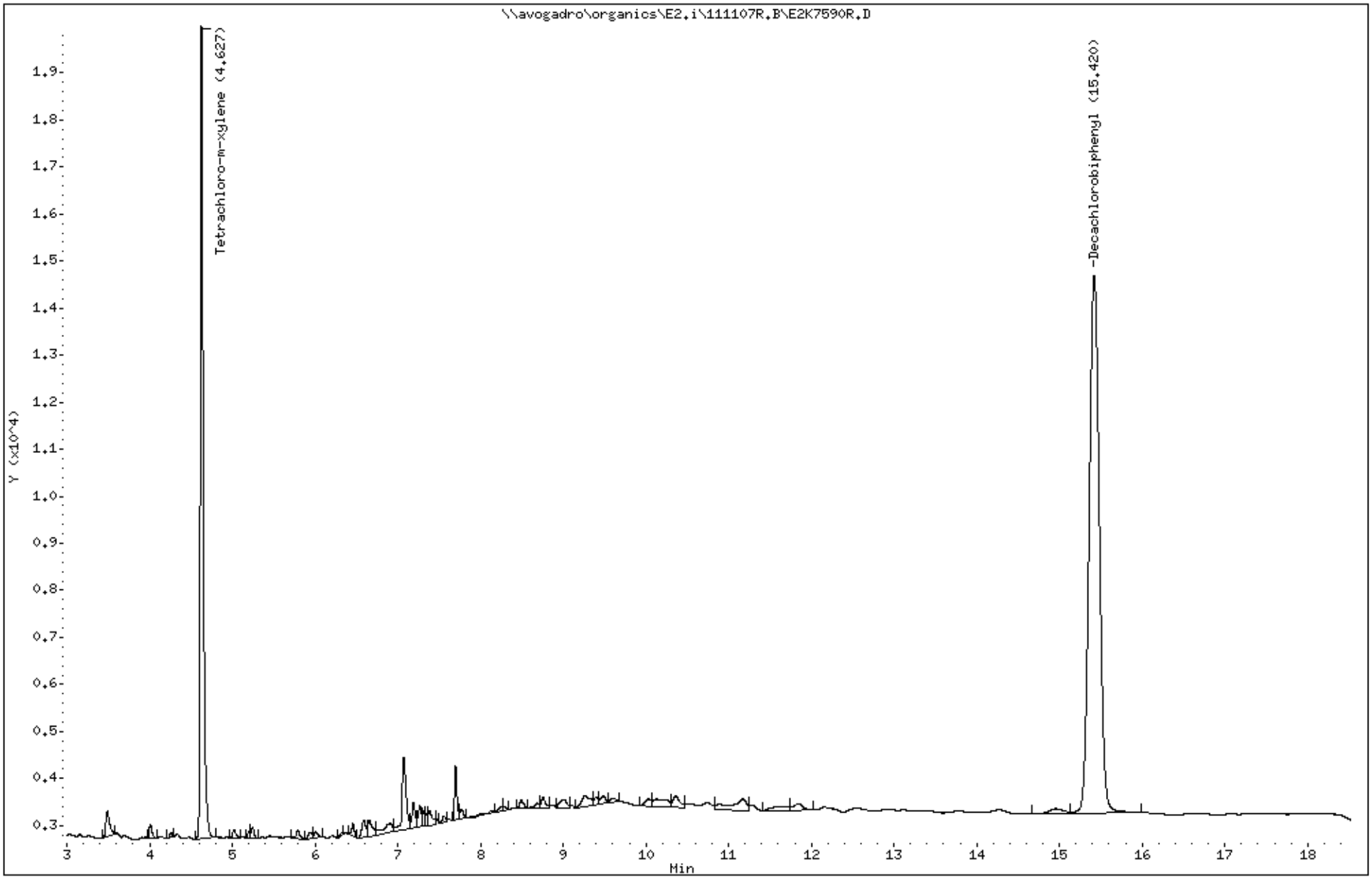
Data file : \\avogadro\organics\E2.i\111107R.B\E2K7590R.D
Lab Smp Id: K2198-12B Client Smp ID: H30S5
Inj Date : 08-NOV-2011 05:34
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-12B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 32
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.100	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.627	4.627	0.000	420169	0.03341		11	
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
15.420	15.423	-0.003	975907	0.05757		19	

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7590R.D
Date : 08-NOV-2011 05:34
Client ID: H30S5
Instrument: E2.i
Sample Info: K2198-12B,,62776,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30S8

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-13B

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E2K7591F.D/E2K7591R.D

% Moisture: 33 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: 7.3 Sulfur Cleanup: (Y/N) Y

Acid Cleanup:(Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	49	U
11104-28-2	Aroclor-1221	49	U
11141-16-5	Aroclor-1232	49	U
53469-21-9	Aroclor-1242	49	U
12672-29-6	Aroclor-1248	49	U
11097-69-1	Aroclor-1254	49	U
11096-82-5	Aroclor-1260	49	U
37324-23-5	Aroclor-1262	49	U
11100-14-4	Aroclor-1268	49	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7591F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

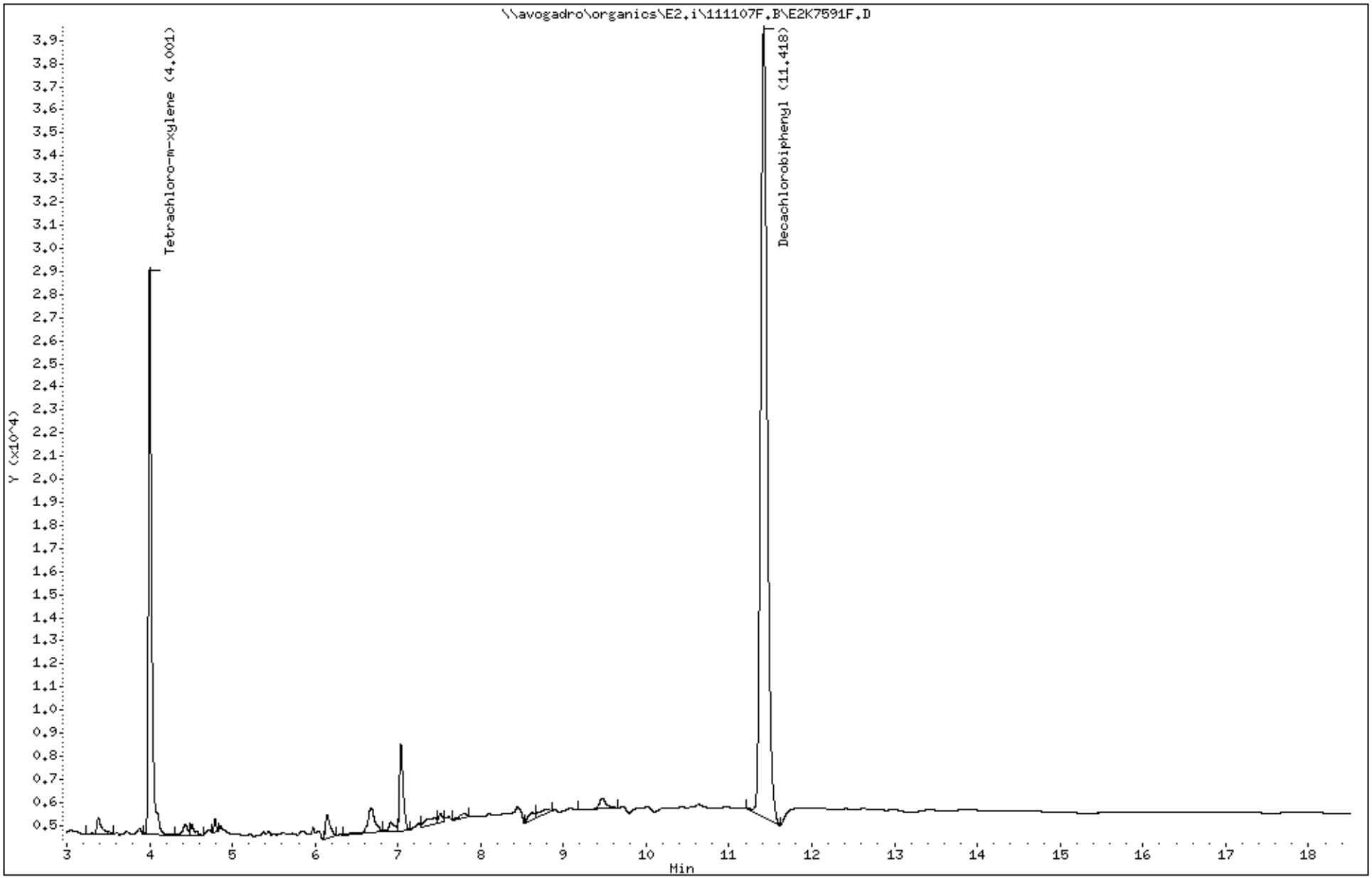
Data file : \\avogadro\organics\E2.i\111107F.B\E2K7591F.D
Lab Smp Id: K2198-13B Client Smp ID: H30S8
Inj Date : 08-NOV-2011 05:55
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-13B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 33
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.100	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.001	3.999	0.002	659803	0.03177		10	
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
11.417	11.417	0.000	1892395	0.06601		22	

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7591F.D
Date : 08-NOV-2011 05:55
Client ID: H30S8 Instrument: E2.i
Sample Info: K2198-13B,,62776,somaro,sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPest Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7591R.D
Report Date: 08-Nov-2011 11:44

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

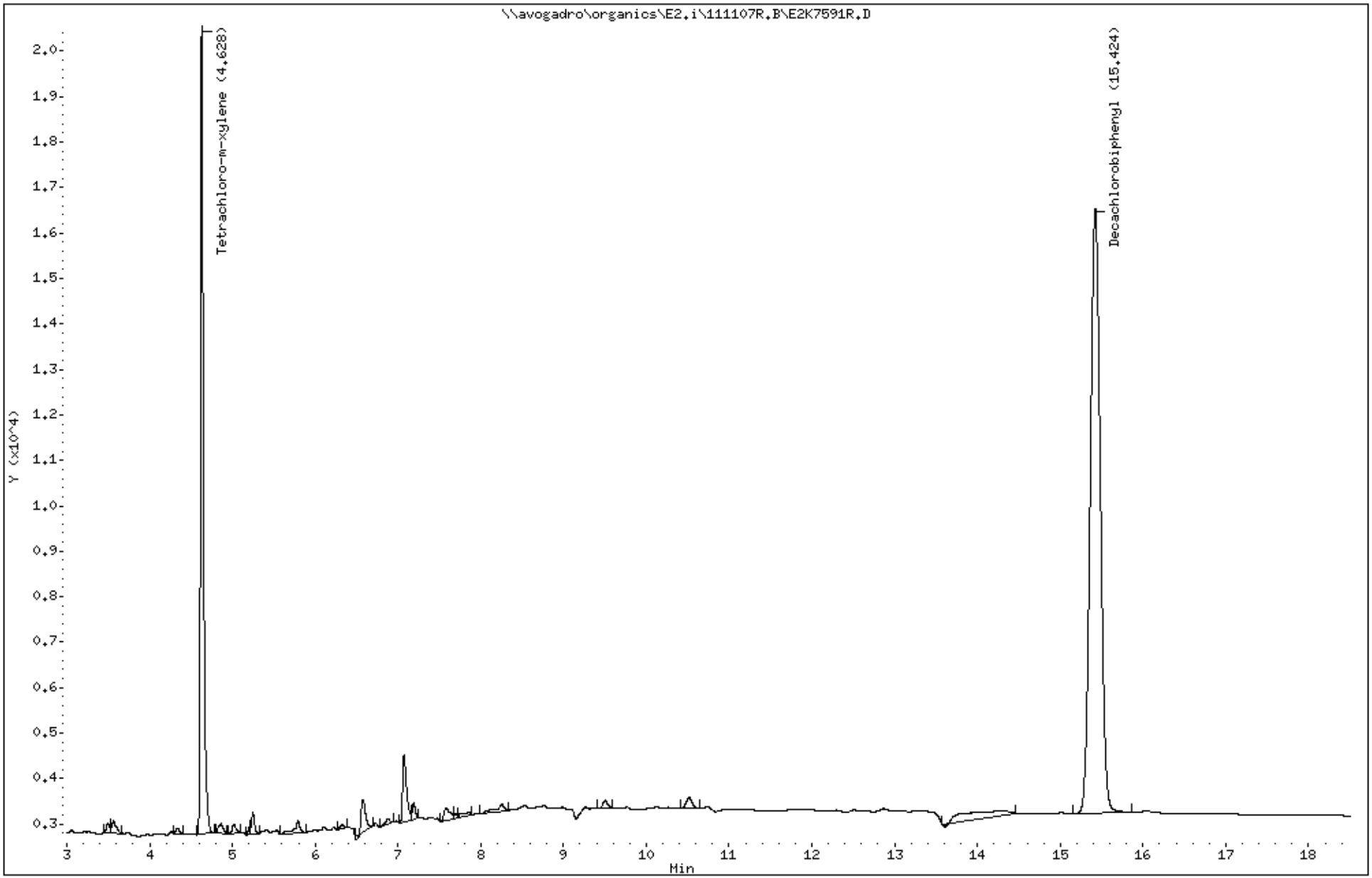
Data file : \\avogadro\organics\E2.i\111107R.B\E2K7591R.D
Lab Smp Id: K2198-13B Client Smp ID: H30S8
Inj Date : 08-NOV-2011 05:55
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-13B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 33
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.100	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.627	4.627	0.000	431934	0.03434		11	
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
15.423	15.423	0.000	1126288	0.06644		22	

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7591R.D
Date : 08-NOV-2011 05:55
Client ID: H30S8 Instrument: E2.i
Sample Info: K2198-13B,,62776,somaro,sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPestII Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30S9

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-14B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E2K7592F.D/E2K7592R.D

% Moisture: 34 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: 7.3 Sulfur Cleanup: (Y/N) Y

Acid Cleanup:(Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	50	U
11104-28-2	Aroclor-1221	50	U
11141-16-5	Aroclor-1232	50	U
53469-21-9	Aroclor-1242	50	U
12672-29-6	Aroclor-1248	50	U
11097-69-1	Aroclor-1254	50	U
11096-82-5	Aroclor-1260	50	U
37324-23-5	Aroclor-1262	50	U
11100-14-4	Aroclor-1268	50	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7592F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

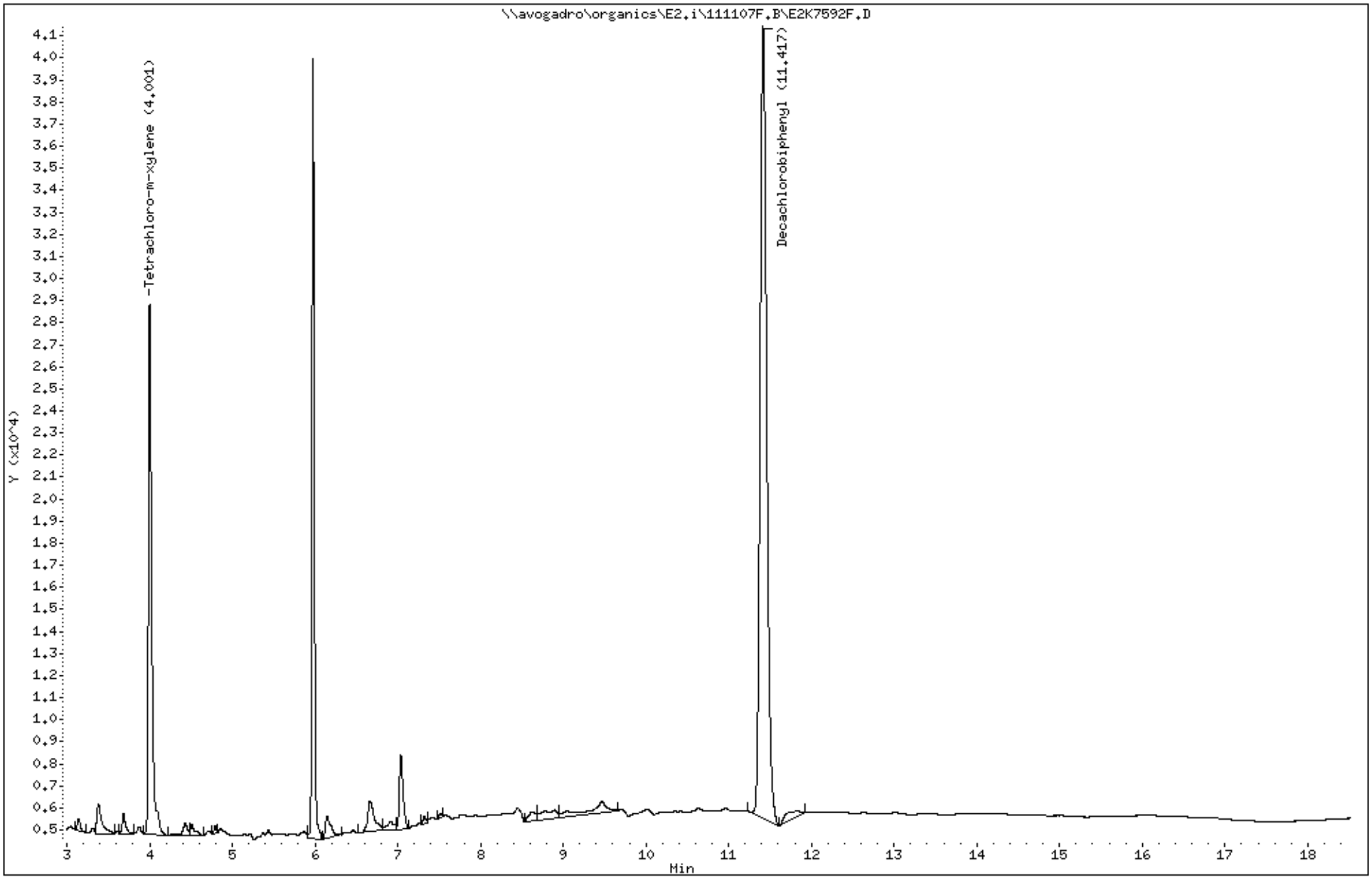
Data file : \\avogadro\organics\E2.i\111107F.B\E2K7592F.D
Lab Smp Id: K2198-14B Client Smp ID: H30S9
Inj Date : 08-NOV-2011 06:16
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-14B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 34
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.001	3.999	0.002	666793	0.03211		11	
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
11.417	11.417	0.000	1973832	0.06885		23	

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7592F.D
Date : 08-NOV-2011 06:16
Client ID: H30S9 Instrument: E2.i
Sample Info: K2198-14B,,62776,somaro,sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPest Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7592R.D
Report Date: 08-Nov-2011 11:44

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

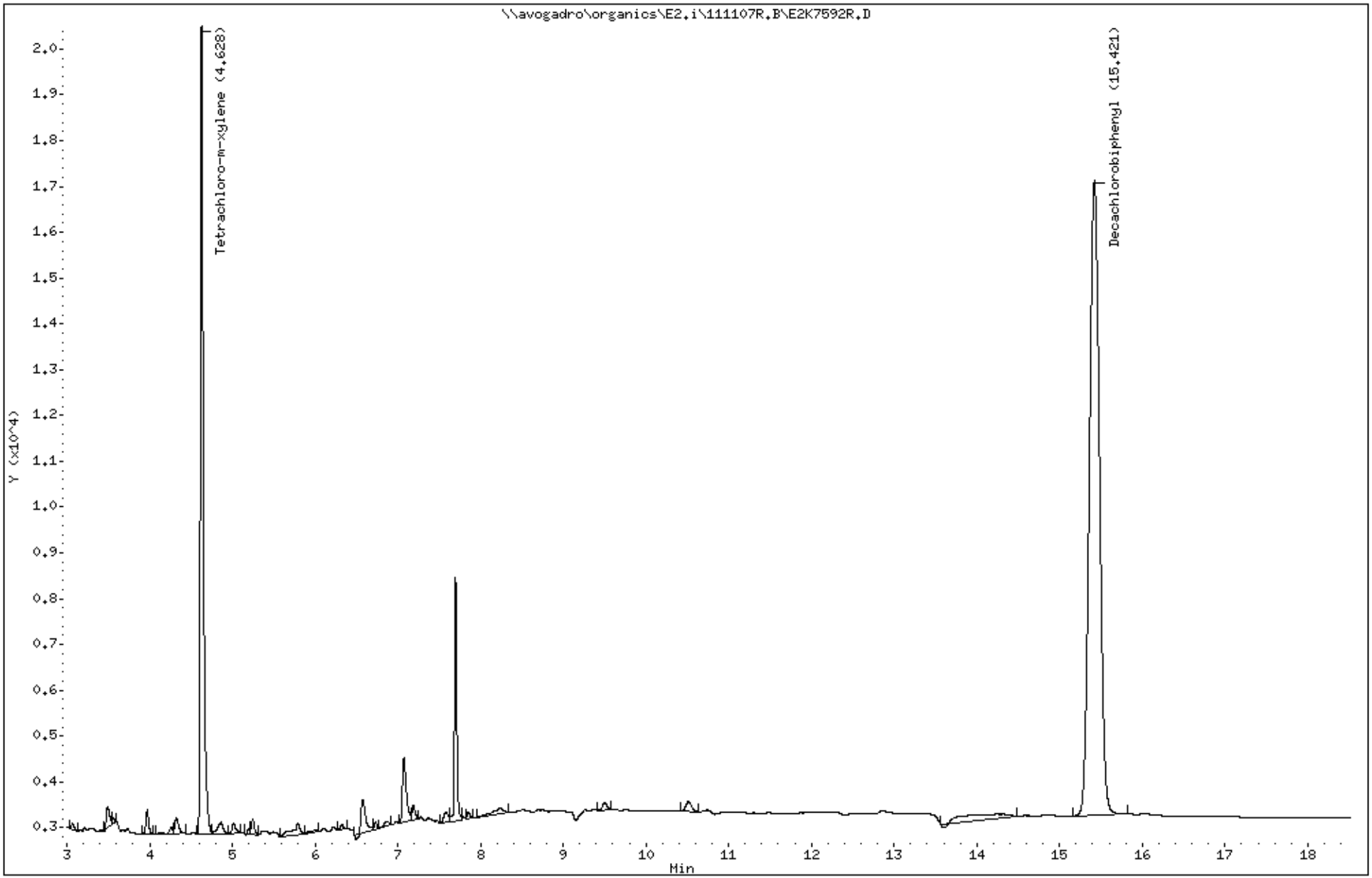
Data file : \\avogadro\organics\E2.i\111107R.B\E2K7592R.D
Lab Smp Id: K2198-14B Client Smp ID: H30S9
Inj Date : 08-NOV-2011 06:16
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-14B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 34
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.627	4.627	0.000	436284	0.03469		12	
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
15.421	15.423	-0.002	1174650	0.06930		23	

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7592R.D
Date : 08-NOV-2011 06:16
Client ID: H30S9 Instrument: E2.i
Sample Info: K2198-14B,,62776,somaro,sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPestII Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T0

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-15B

Sample wt/vol: 30.5 (g/mL) G Lab File ID: E2K7593F.D/E2K7593R.D

% Moisture: 28 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) Y

Acid Cleanup:(Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	45	U
11104-28-2	Aroclor-1221	45	U
11141-16-5	Aroclor-1232	45	U
53469-21-9	Aroclor-1242	45	U
12672-29-6	Aroclor-1248	45	U
11097-69-1	Aroclor-1254	45	U
11096-82-5	Aroclor-1260	45	U
37324-23-5	Aroclor-1262	45	U
11100-14-4	Aroclor-1268	45	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7593F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

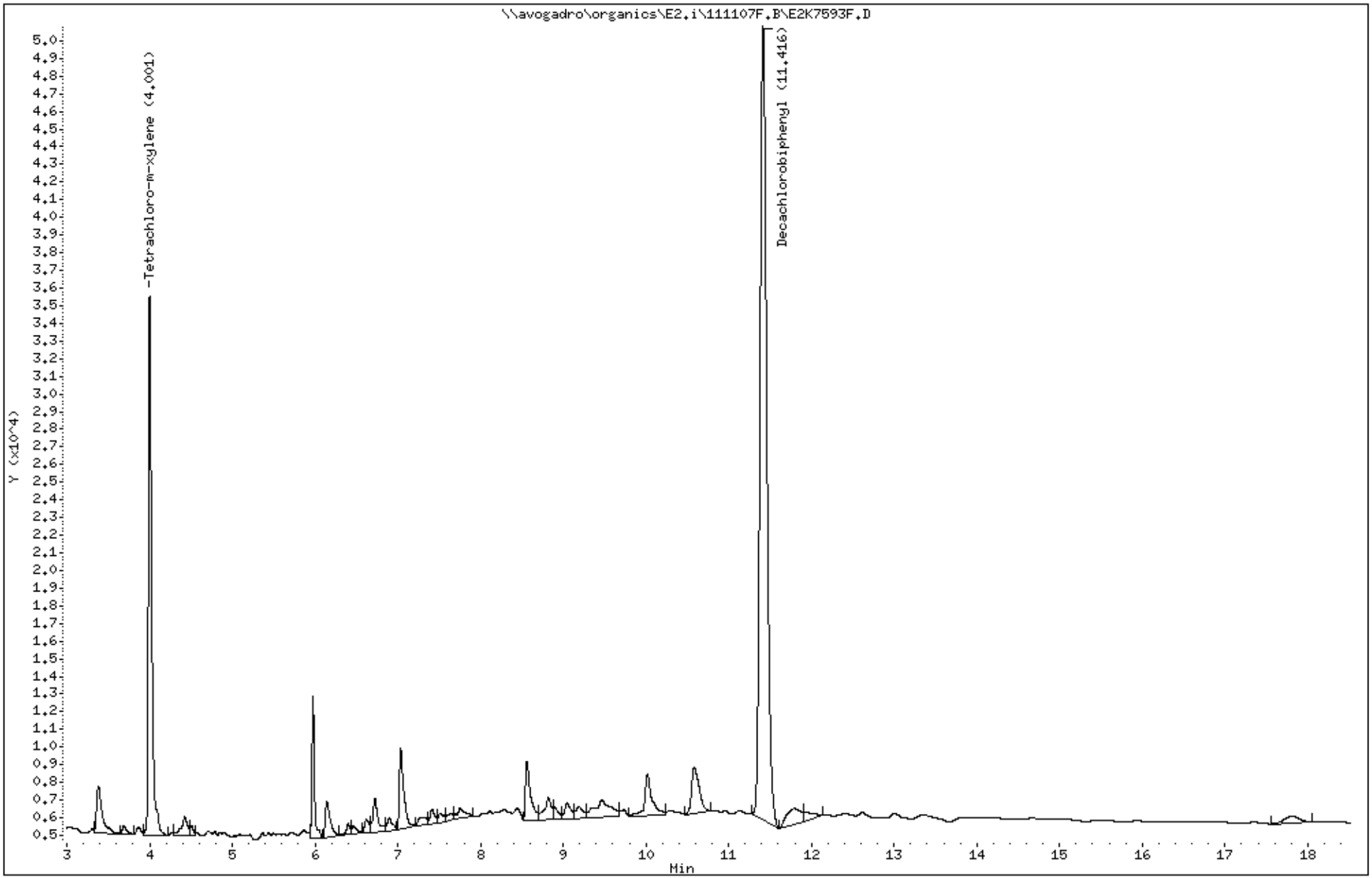
Data file : \\avogadro\organics\E2.i\111107F.B\E2K7593F.D
Lab Smp Id: K2198-15B Client Smp ID: H30T0
Inj Date : 08-NOV-2011 06:37
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-15B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 35
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.500	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.000	3.999	0.001	855731	0.04121		14	
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
11.416	11.417	-0.001	2497938	0.08713		28	

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7593F.D
Date : 08-NOV-2011 06:37
Client ID: H30T0
Instrument: E2.i
Sample Info: K2198-15B,,62776,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7593R.D
Report Date: 08-Nov-2011 11:44

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

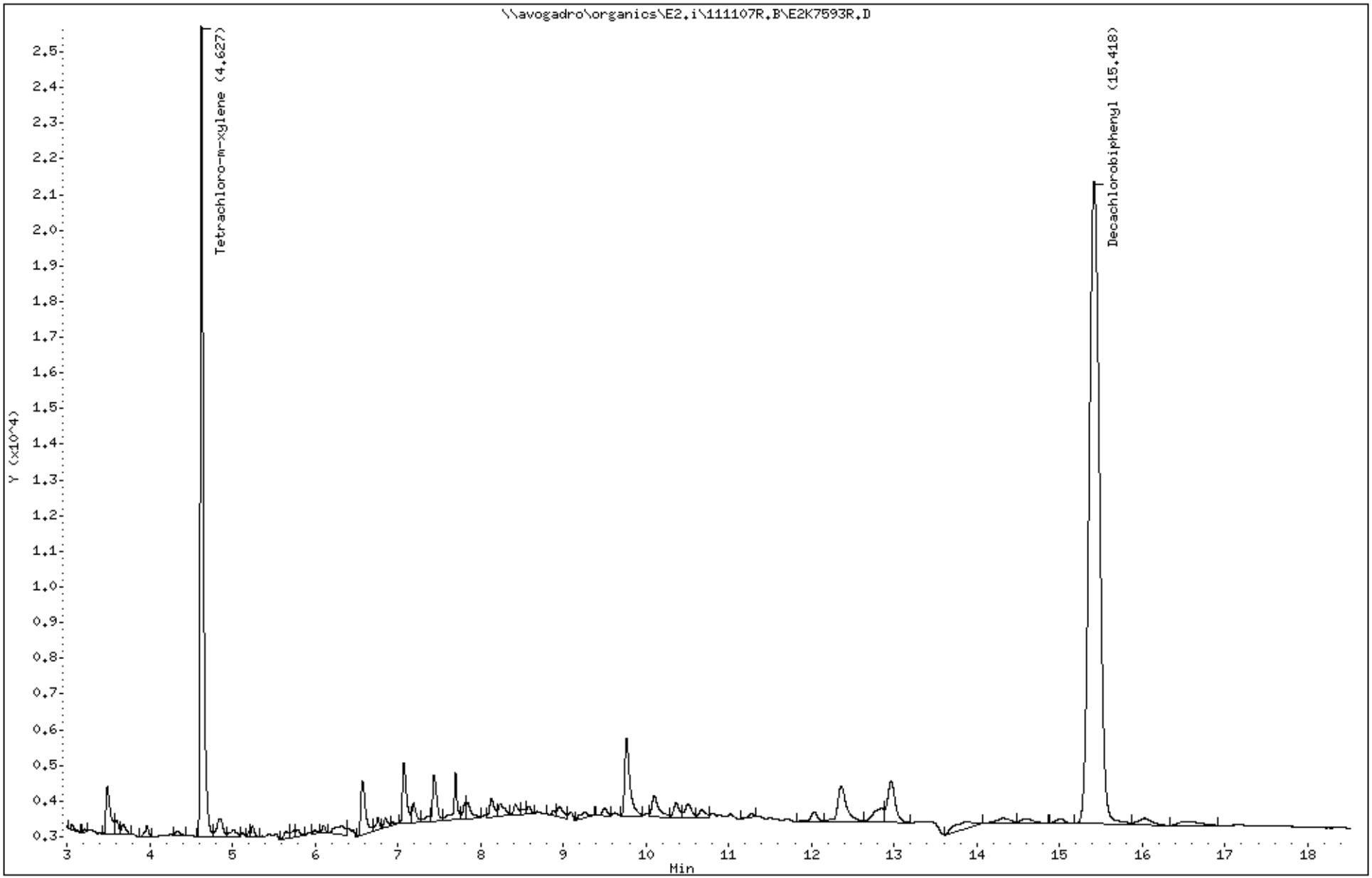
Data file : \\avogadro\organics\E2.i\111107R.B\E2K7593R.D
Lab Smp Id: K2198-15B Client Smp ID: H30T0
Inj Date : 08-NOV-2011 06:37
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-15B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 35
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.500	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.627	4.627	0.000	575217	0.04573		15	
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
15.418	15.423	-0.005	1556532	0.09182		30	

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7593R.D
Date : 08-NOV-2011 06:37
Client ID: H30T0
Instrument: E2.i
Sample Info: K2198-15B,,62776,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-16B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E2K7594F.D/E2K7594R.D

% Moisture: 9.6 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: 7.1 Sulfur Cleanup: (Y/N) Y

Acid Cleanup:(Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	37	U
11104-28-2	Aroclor-1221	37	U
11141-16-5	Aroclor-1232	37	U
53469-21-9	Aroclor-1242	37	U
12672-29-6	Aroclor-1248	37	U
11097-69-1	Aroclor-1254	37	U
11096-82-5	Aroclor-1260	37	U
37324-23-5	Aroclor-1262	37	U
11100-14-4	Aroclor-1268	37	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7594F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

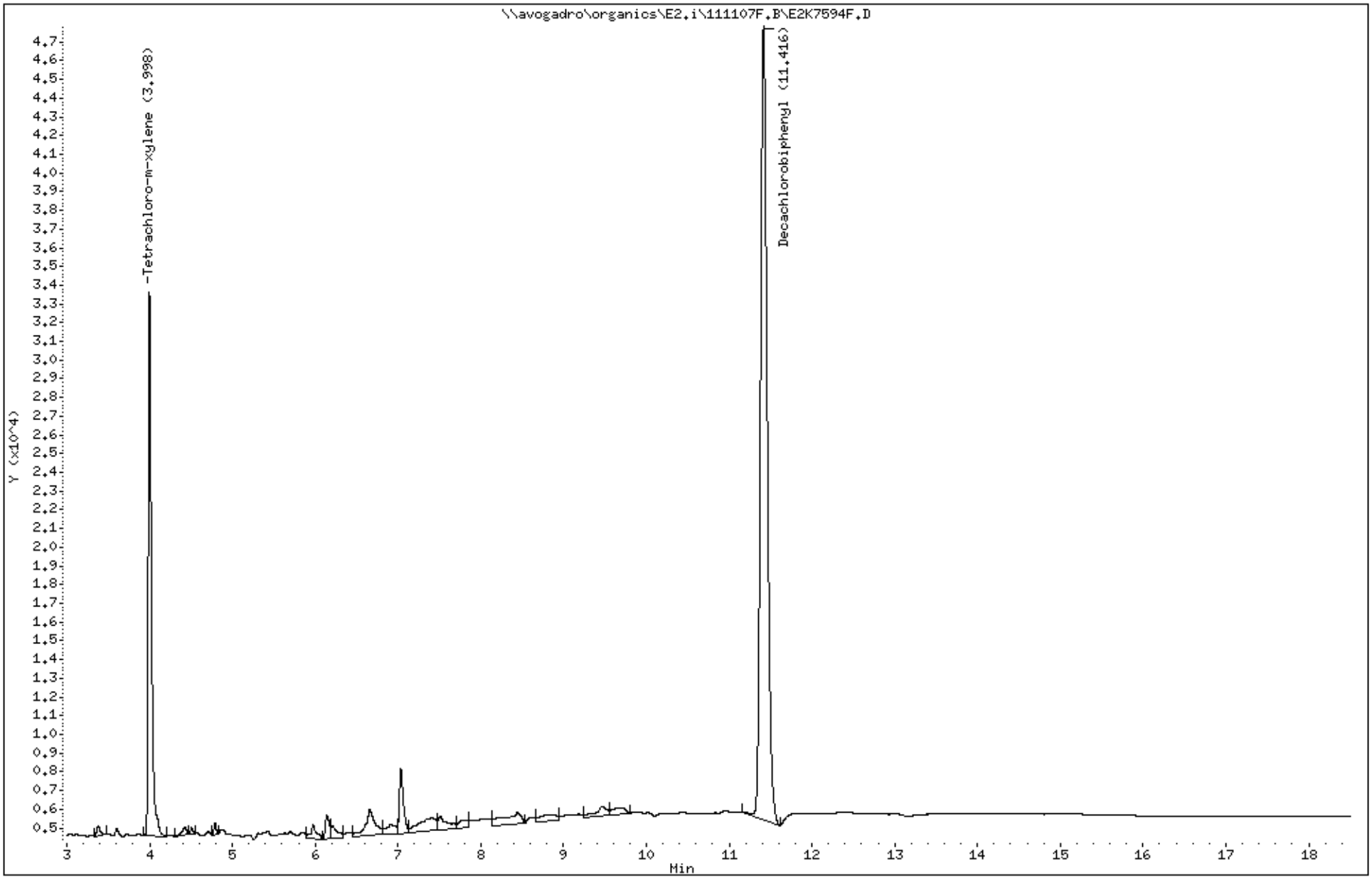
Data file : \\avogadro\organics\E2.i\111107F.B\E2K7594F.D
Lab Smp Id: K2198-16B Client Smp ID: H30T1
Inj Date : 08-NOV-2011 06:58
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-16B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 36
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
3.998	3.999	-0.001	789018	0.03799		13	
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
11.415	11.417	-0.002	2350755	0.08200		27	

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7594F.D
Date : 08-NOV-2011 06:58
Client ID: H30T1 Instrument: E2.i
Sample Info: K2198-16B,,62776,somaro,sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPest Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7594R.D
Report Date: 08-Nov-2011 11:44

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

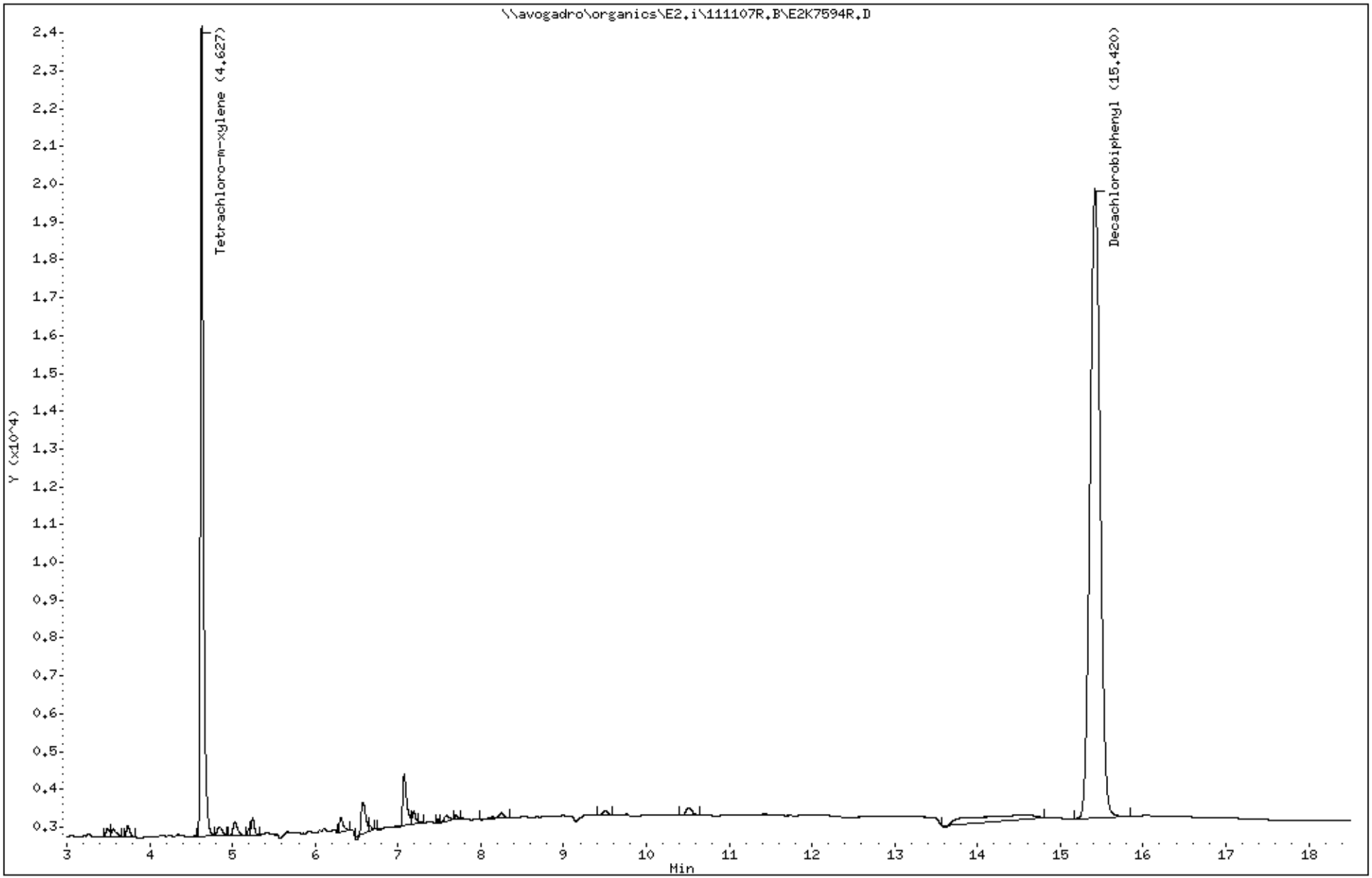
Data file : \\avogadro\organics\E2.i\111107R.B\E2K7594R.D
Lab Smp Id: K2198-16B Client Smp ID: H30T1
Inj Date : 08-NOV-2011 06:58
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-16B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 36
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.626	4.627	-0.001	528450	0.04201		14	
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
15.420	15.423	-0.003	1419066	0.08371		28	

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7594R.D
Date : 08-NOV-2011 06:58
Client ID: H30T1 Instrument: E2.i
Sample Info: K2198-16B,,62776,somaro,sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPestII Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T2

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-17B

Sample wt/vol: 30.9 (g/mL) G Lab File ID: E2K7605F.D/E2K7605R.D

% Moisture: 24 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: 7.3 Sulfur Cleanup: (Y/N) Y

Acid Cleanup:(Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	42	U
11104-28-2	Aroclor-1221	42	U
11141-16-5	Aroclor-1232	42	U
53469-21-9	Aroclor-1242	42	U
12672-29-6	Aroclor-1248	42	U
11097-69-1	Aroclor-1254	42	U
11096-82-5	Aroclor-1260	42	U
37324-23-5	Aroclor-1262	42	U
11100-14-4	Aroclor-1268	42	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7605F.D
Report Date: 08-Nov-2011 14:43

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

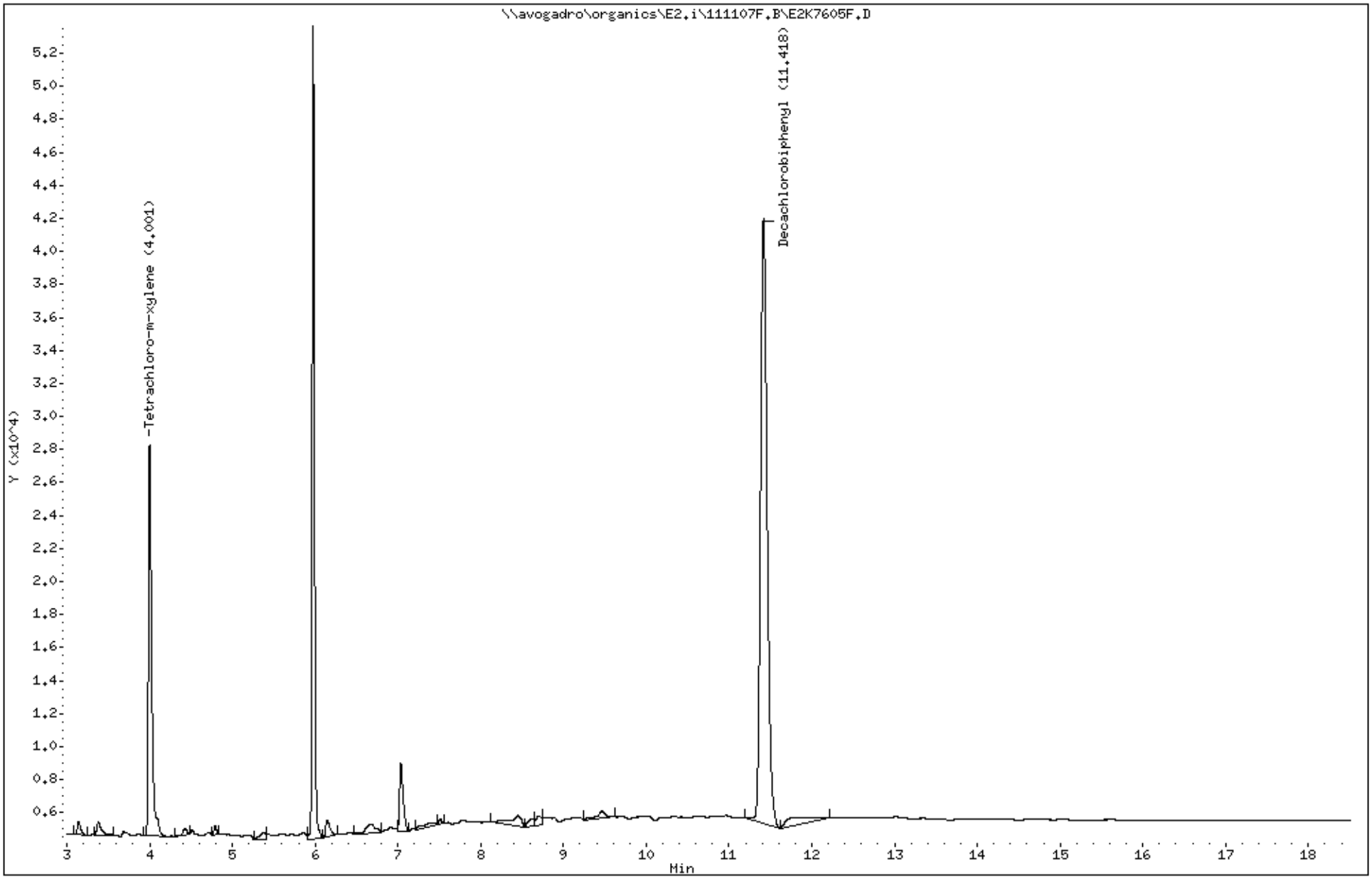
Data file : \\avogadro\organics\E2.i\111107F.B\E2K7605F.D
Lab Smp Id: K2198-17B Client Smp ID: H30T2
Inj Date : 08-NOV-2011 11:08
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-17B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 14:41 E2.i Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.900	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.001	3.999	0.002	652125	0.03140	10		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
11.417	11.417	0.000	2035710	0.07101	23		

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7605F.D
Date : 08-NOV-2011 11:08
Client ID: H30T2 Instrument: E2.i
Sample Info: K2198-17B,,62776,somaro,sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPest Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7605R.D
Report Date: 08-Nov-2011 14:44

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

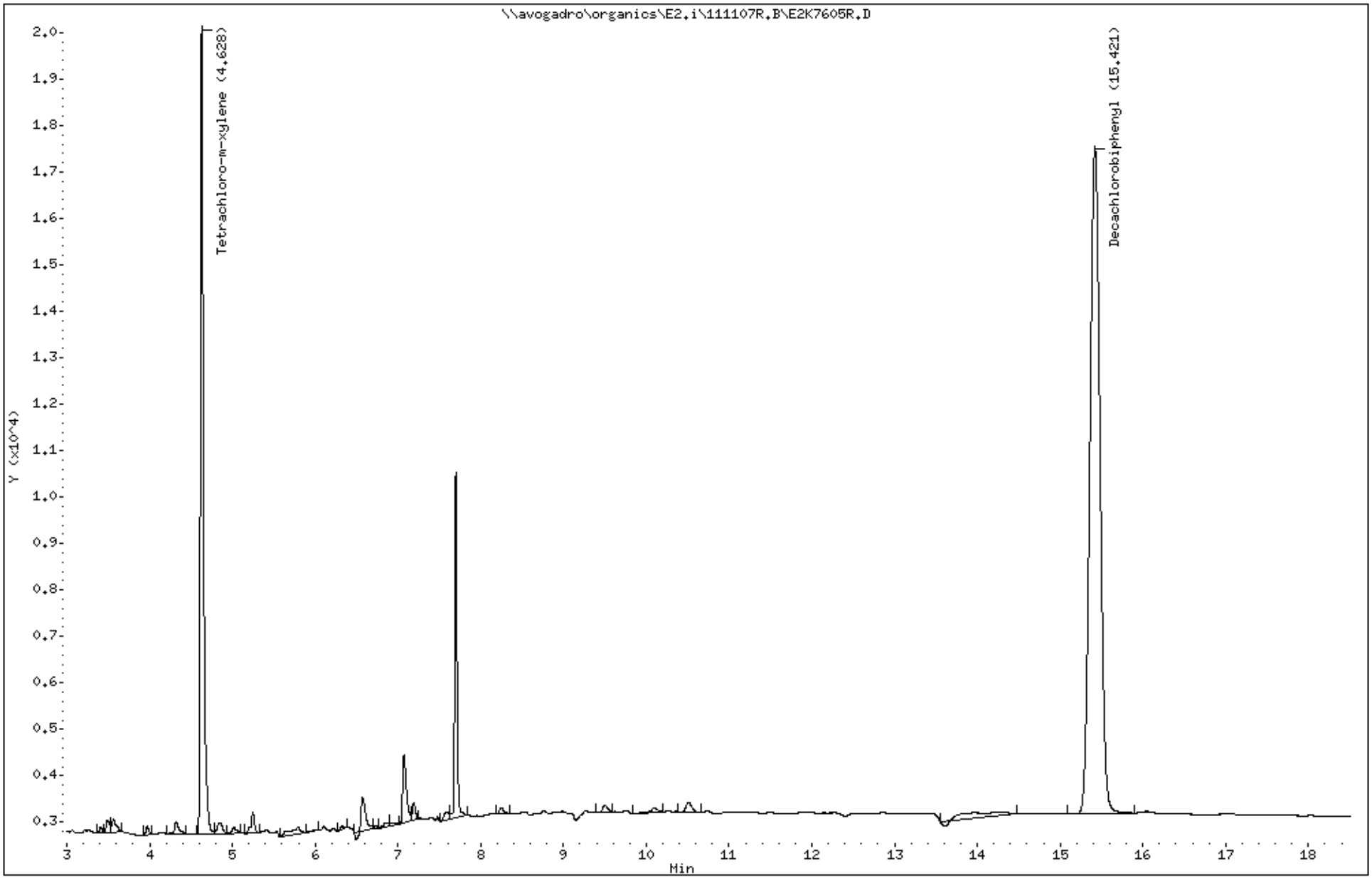
Data file : \\avogadro\organics\E2.i\111107R.B\E2K7605R.D
Lab Smp Id: K2198-17B Client Smp ID: H30T2
Inj Date : 08-NOV-2011 11:08
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-17B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 14:42 E2.i Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.900	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.627	4.627	0.000	432833	0.03441		11	
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
15.421	15.423	-0.002	1220672	0.07201		23	

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7605R.D
Date : 08-NOV-2011 11:08
Client ID: H30T2
Instrument: E2.i
Sample Info: K2198-17B,,62776,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T3

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-18B

Sample wt/vol: 30.3 (g/mL) G Lab File ID: E2K7596F.D/E2K7596R.D

% Moisture: 22 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: 7.3 Sulfur Cleanup: (Y/N) Y

Acid Cleanup:(Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	42	U
11104-28-2	Aroclor-1221	42	U
11141-16-5	Aroclor-1232	42	U
53469-21-9	Aroclor-1242	42	U
12672-29-6	Aroclor-1248	42	U
11097-69-1	Aroclor-1254	42	U
11096-82-5	Aroclor-1260	42	U
37324-23-5	Aroclor-1262	42	U
11100-14-4	Aroclor-1268	42	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7596F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

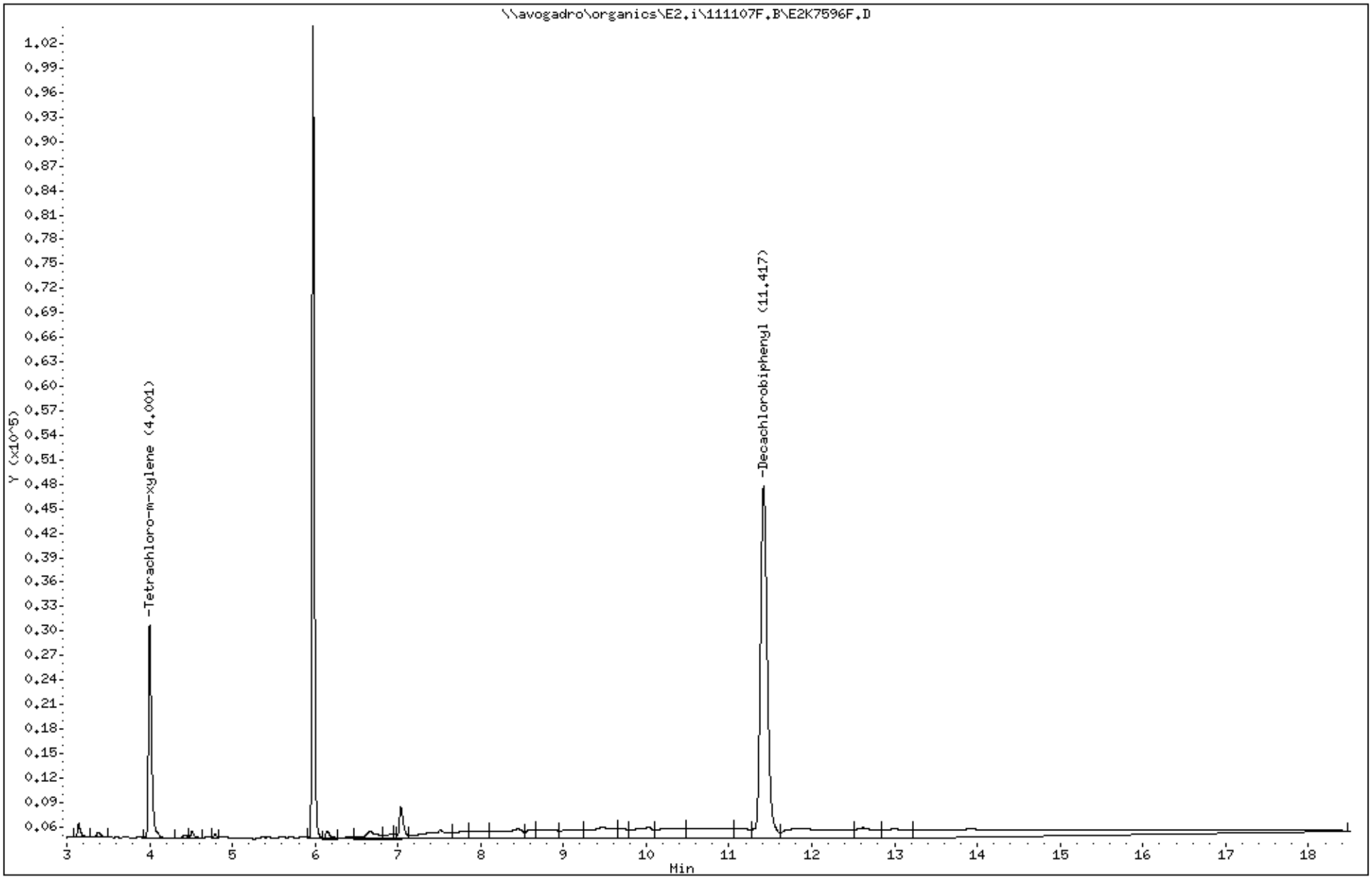
Data file : \\avogadro\organics\E2.i\111107F.B\E2K7596F.D
Lab Smp Id: K2198-18B Client Smp ID: H30T3
Inj Date : 08-NOV-2011 07:40
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-18B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 38
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.300	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.001	3.999	0.002	692252	0.03333		11	
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
11.416	11.417	-0.001	2513689	0.08768		29	

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7596F.D
Date : 08-NOV-2011 07:40
Client ID: H30T3 Instrument: E2.i
Sample Info: K2198-18B,,62776,somaro,sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPest Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7596R.D
Report Date: 08-Nov-2011 11:44

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

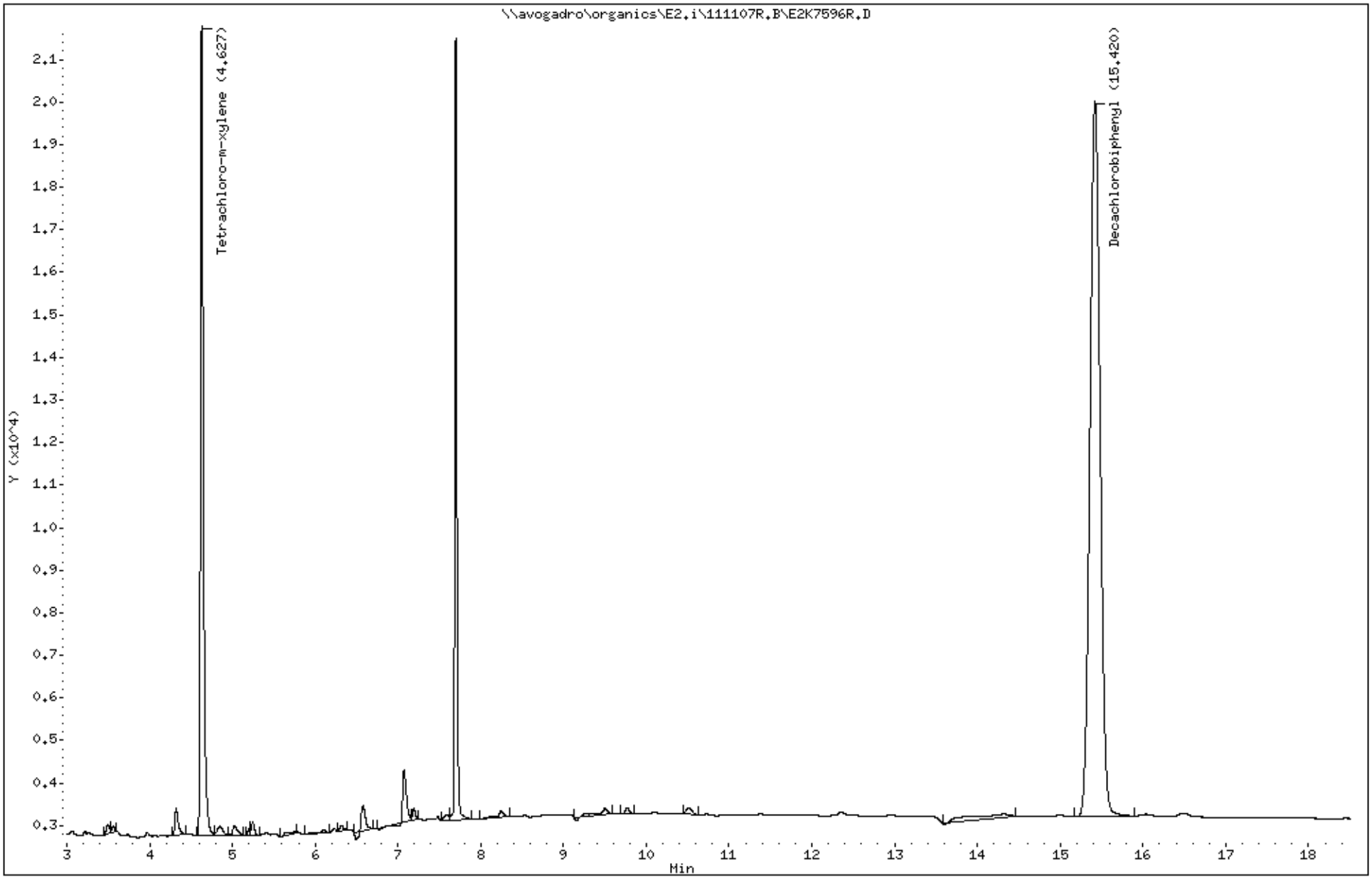
Data file : \\avogadro\organics\E2.i\111107R.B\E2K7596R.D
Lab Smp Id: K2198-18B Client Smp ID: H30T3
Inj Date : 08-NOV-2011 07:40
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-18B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 38
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.300	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.627	4.627	0.000	462475	0.03677		12	
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
15.420	15.423	-0.003	1435360	0.08468		28	

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7596R.D
Date : 08-NOV-2011 07:40
Client ID: H30T3 Instrument: E2.i
Sample Info: K2198-18B,,62776,somaro,sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPestII Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-19B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E2K7597F.D/E2K7597R.D

% Moisture: 20 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: 8.0 Sulfur Cleanup: (Y/N) Y

Acid Cleanup:(Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	41	U
11104-28-2	Aroclor-1221	41	U
11141-16-5	Aroclor-1232	41	U
53469-21-9	Aroclor-1242	41	U
12672-29-6	Aroclor-1248	41	U
11097-69-1	Aroclor-1254	41	U
11096-82-5	Aroclor-1260	41	U
37324-23-5	Aroclor-1262	41	U
11100-14-4	Aroclor-1268	41	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7597F.D
Report Date: 08-Nov-2011 14:43

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

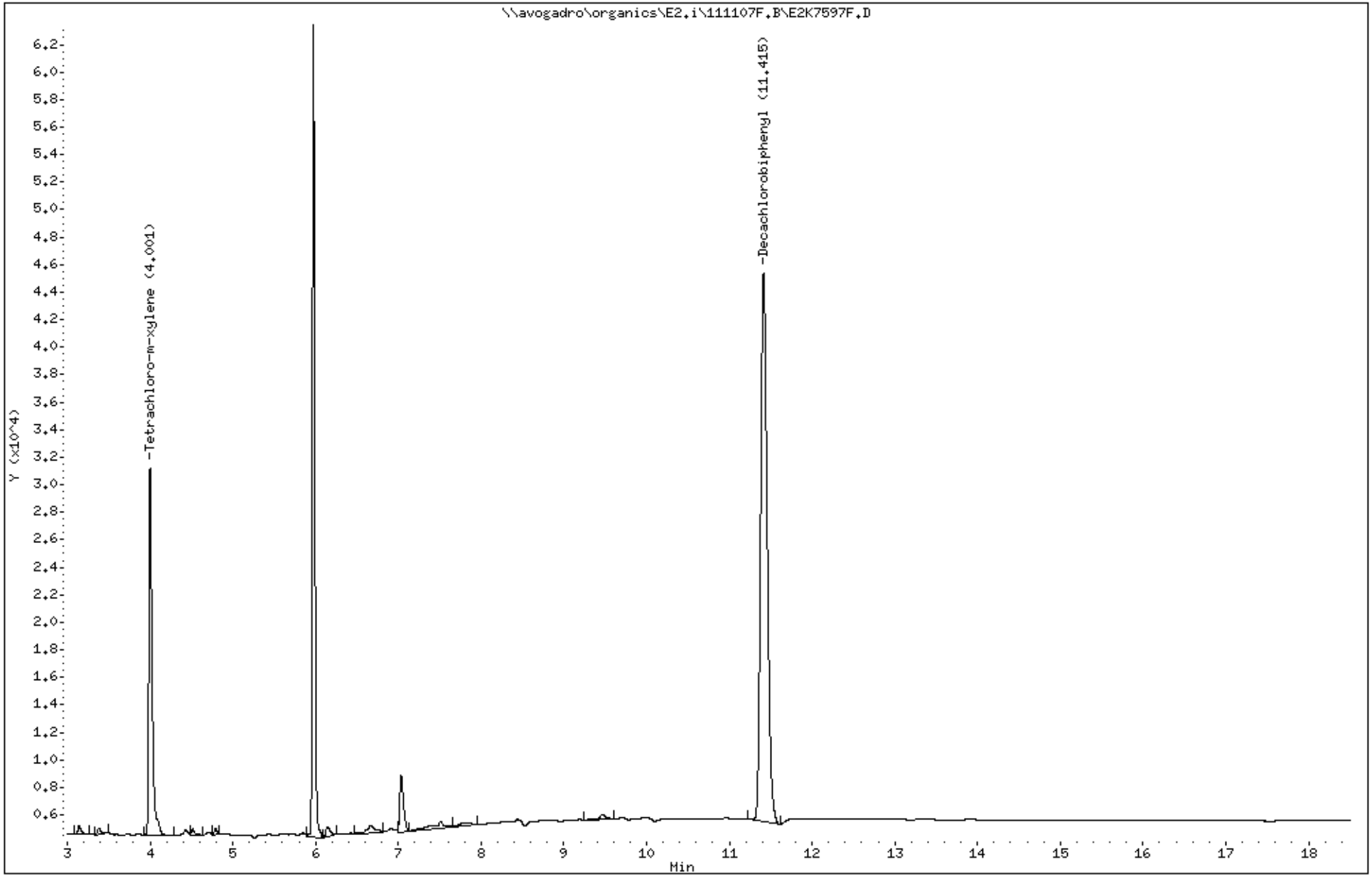
Data file : \\avogadro\organics\E2.i\111107F.B\E2K7597F.D
Lab Smp Id: K2198-19B Client Smp ID: H30T4
Inj Date : 08-NOV-2011 08:01
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-19B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 14:41 E2.i Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 39
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.000	3.999	0.001	732748	0.03528		12	
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
11.415	11.417	-0.002	2197659	0.07666		26	

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7597F.D
Date : 08-NOV-2011 08:01
Client ID: H30T4
Instrument: E2.i
Sample Info: K2198-19B,,62776,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7597R.D
Report Date: 08-Nov-2011 14:43

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

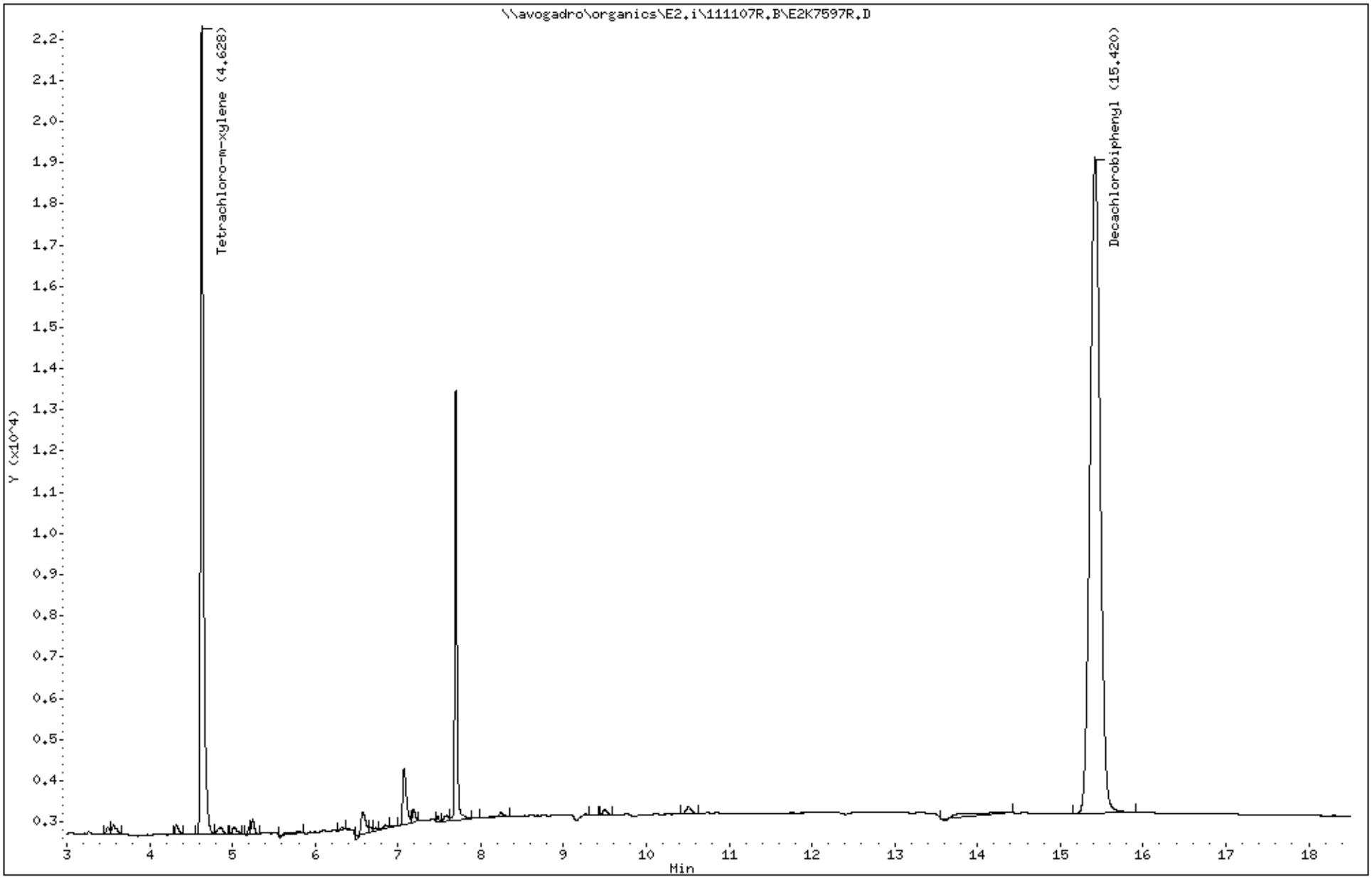
Data file : \\avogadro\organics\E2.i\111107R.B\E2K7597R.D
Lab Smp Id: K2198-19B Client Smp ID: H30T4
Inj Date : 08-NOV-2011 08:01
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-19B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 14:42 E2.i Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 39
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.627	4.627	0.000	486238	0.03866		13	
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
15.420	15.423	-0.003	1352916	0.07981		27	

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7597R.D
Date : 08-NOV-2011 08:01
Client ID: H30T4 Instrument: E2.i
Sample Info: K2198-19B,,62776,somaro,sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPestII Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-20B

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E2K7598F.D/E2K7598R.D

% Moisture: 24 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: 8.2 Sulfur Cleanup: (Y/N) Y

Acid Cleanup:(Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	43	U
11104-28-2	Aroclor-1221	43	U
11141-16-5	Aroclor-1232	43	U
53469-21-9	Aroclor-1242	43	U
12672-29-6	Aroclor-1248	43	U
11097-69-1	Aroclor-1254	43	U
11096-82-5	Aroclor-1260	43	U
37324-23-5	Aroclor-1262	43	U
11100-14-4	Aroclor-1268	43	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7598F.D
Report Date: 09-Nov-2011 15:59

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

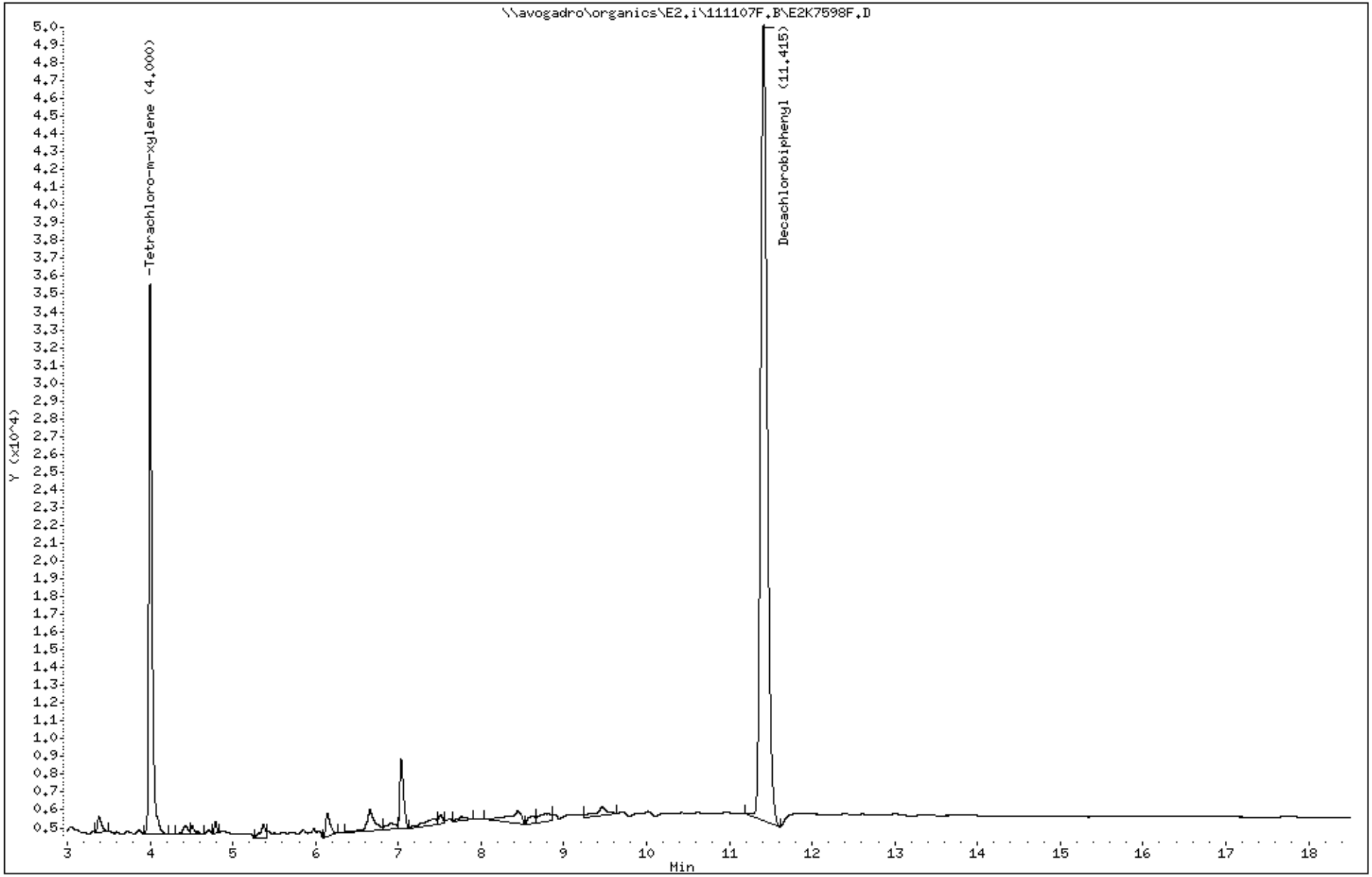
Data file : \\avogadro\organics\E2.i\111107F.B\E2K7598F.D
Lab Smp Id: K2198-20B Client Smp ID: H30T5
Inj Date : 08-NOV-2011 08:22
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : K2198-20B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 16:14 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 40
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.100	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.000	3.999	0.001	832277	0.04008	13		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.414	11.417	-0.003	2481469	0.08656	29		

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7598F.D
Date : 08-NOV-2011 08:22
Client ID: H30T5
Instrument: E2.i
Sample Info: K2198-20B,,62776,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7598R.D
Report Date: 09-Nov-2011 15:59

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

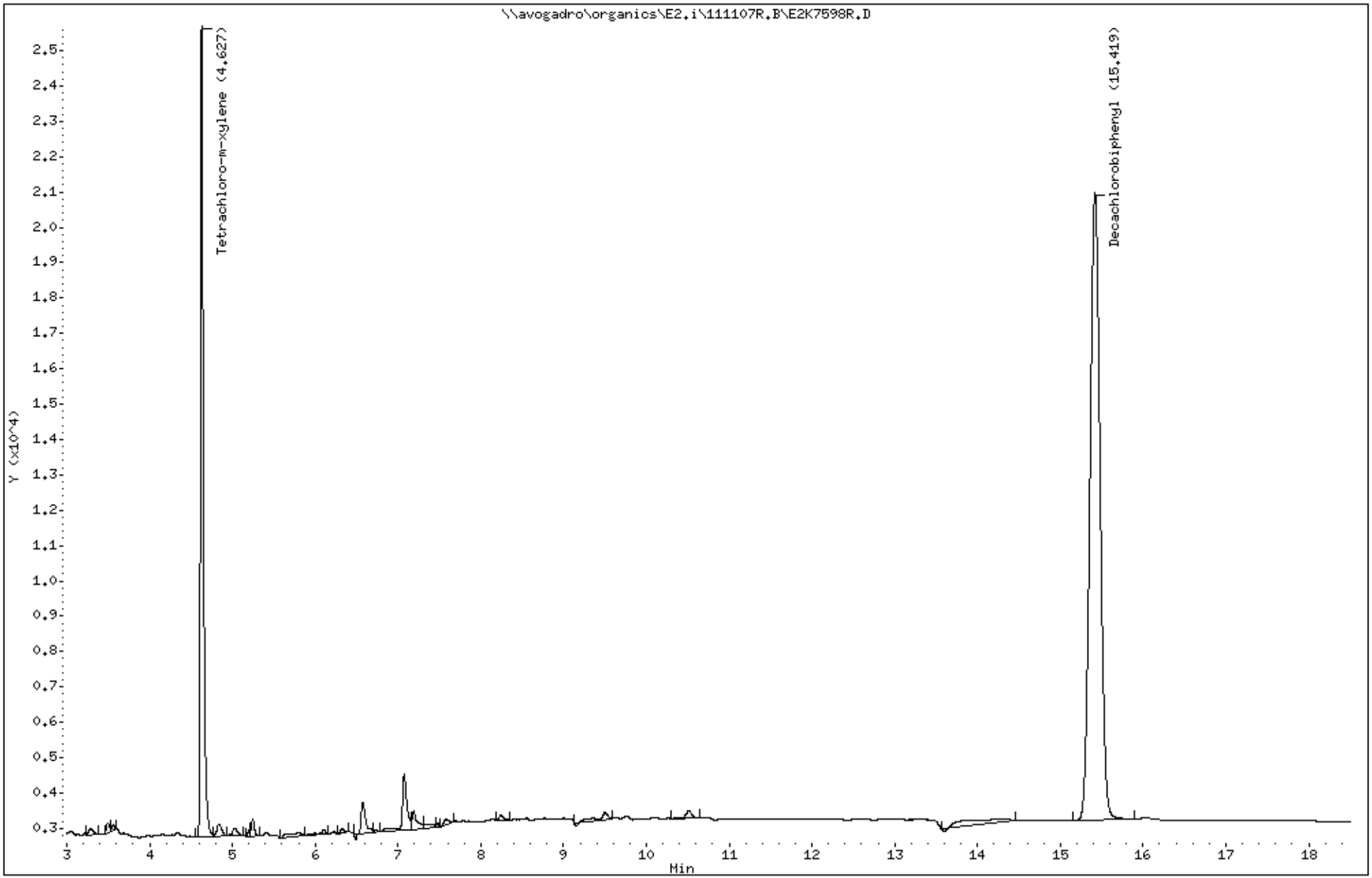
Data file : \\avogadro\organics\E2.i\111107R.B\E2K7598R.D
Lab Smp Id: K2198-20B Client Smp ID: H30T5
Inj Date : 08-NOV-2011 08:22
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-20B,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 16:15 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 40
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.100	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.627	4.627	0.000	559493	0.04448		15	
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
15.418	15.423	-0.005	1518968	0.08961		30	

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7598R.D
Date : 08-NOV-2011 08:22
Client ID: H30T5
Instrument: E2.i
Sample Info: K2198-20B,,62776,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.32



6N - FORM VI ARO-1

AROCLORS INITIAL CALIBRATION (MULTIPOINT)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: E2

Level (x CS1): CS1 1.0 CS2 2.0 CS3 4.0 CS4 8.0 CS5 16.0

GC Column: CLPPest ID: 0.53 (mm) Date(s) Analyzed (1): 11/04/2011 11/05/2011

COMPOUND	PEAK*	RT OF STANDARDS					__	RT WINDOW **	
		CS1	CS2	CS3	CS4	CS5	RT	FROM	TO
AR1016	1	5.606	5.606	5.605	5.606	5.605	5.605	5.535	5.675
	2	5.784	5.784	5.783	5.783	5.782	5.783	5.713	5.853
	3	6.040	6.040	6.040	6.040	6.039	6.040	5.970	6.110
AR1260	1	7.799	7.799	7.798	7.798	7.797	7.798	7.728	7.868
	2	8.093	8.093	8.092	8.092	8.092	8.093	8.023	8.163
	3	8.504	8.504	8.503	8.504	8.503	8.503	8.433	8.573
AR1242	1	5.241	5.241	5.240	5.239	5.238	5.240	5.170	5.310
	2	5.860	5.860	5.859	5.858	5.858	5.859	5.789	5.929
	3	6.416	6.416	6.415	6.414	6.413	6.415	6.345	6.485
AR1248	1	6.281	6.283	6.282	6.282	6.281	6.282	6.212	6.352
	2	6.377	6.378	6.378	6.378	6.377	6.377	6.307	6.447
	3	6.761	6.762	6.763	6.762	6.762	6.762	6.692	6.832
AR1254	1	6.967	6.966	6.964	6.965	6.963	6.965	6.895	7.035
	2	7.348	7.348	7.346	7.347	7.346	7.347	7.277	7.417
	3	7.615	7.615	7.613	7.614	7.612	7.614	7.544	7.684
TCX		4.000	4.001	3.999	4.001	4.000	4.000	3.950	4.050
DCB		11.417	11.418	11.417	11.418	11.417	11.417	11.317	11.517

* At least three peaks for each column are required for identification of Aroclors.

**Retention Time windows are ± 0.07 minutes for each Aroclor peak; 0.05 minutes for tetrachloro-m-xylene; ± 0.10 minutes for decachlorobiphenyl.

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

6N - FORM VI ARO-1

AROCLORS INITIAL CALIBRATION (MULTIPOINT)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: E2

Level (x CS1): CS1 1.0 CS2 2.0 CS3 4.0 CS4 8.0 CS5 16.0

GC Column: CLPPestII ID: 0.53 (mm) Date(s) Analyzed (1): 11/04/2011 11/05/2011

COMPOUND	PEAK*	RT OF STANDARDS					__	RT WINDOW **	
		CS1	CS2	CS3	CS4	CS5	RT	FROM	TO
AR1016	1	6.252	6.252	6.252	6.252	6.251	6.252	6.182	6.322
	2	6.504	6.504	6.504	6.504	6.504	6.504	6.434	6.574
	3	6.660	6.659	6.659	6.659	6.658	6.659	6.589	6.729
AR1260	1	9.256	9.255	9.255	9.256	9.256	9.256	9.186	9.326
	2	9.400	9.399	9.399	9.399	9.399	9.399	9.329	9.469
	3	9.885	9.885	9.884	9.885	9.884	9.884	9.814	9.954
AR1242	1	5.951	5.952	5.950	5.949	5.949	5.950	5.880	6.020
	2	6.252	6.253	6.252	6.251	6.251	6.252	6.182	6.322
	3	6.770	6.771	6.770	6.769	6.769	6.770	6.700	6.840
AR1248	1	7.151	7.151	7.151	7.150	7.149	7.151	7.081	7.221
	2	7.273	7.273	7.273	7.273	7.271	7.272	7.202	7.342
	3	7.457	7.457	7.457	7.457	7.456	7.457	7.387	7.527
AR1254	1	7.755	7.755	7.754	7.753	7.752	7.754	7.684	7.824
	2	8.258	8.258	8.257	8.257	8.255	8.257	8.187	8.327
	3	8.529	8.529	8.529	8.528	8.527	8.528	8.458	8.598
TCX		4.628	4.628	4.627	4.627	4.627	4.628	4.578	4.678
DCB		15.421	15.421	15.421	15.423	15.424	15.422	15.322	15.522

* At least three peaks for each column are required for identification of Aroclors.

**Retention Time windows are ± 0.07 minutes for each Aroclor peak; 0.05 minutes for tetrachloro-m-xylene; ± 0.10 minutes for decachlorobiphenyl.

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

6P - FORM VI ARO-2

AROCLOR INITIAL CALIBRATION (MULTIPOINT)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: E2 Date(s) Analyzed: 11/04/2011 11/05/2011

GC Column: CLPPest ID: 0.53 (mm)

Level (x CS1): CS1 1.0 CS2 2.0 CS3 4.0 CS4 8.0 CS5 16.0

COMPOUND	PEAK [1]	CALIBRATION FACTORS (CFs)					% RSD
		CS1	CS2	CS3	CS4	CS5	
AR1016	1	2352670	2098610	2086390	1928969	1782733	10.4
	2	890520	786840	795198	725274	678734	10.3
	3	1589370	1420650	1395743	1291368	1183862	11.0
AR1260	1	2844030	2476720	2414708	2205755	2005208	13.2
	2	2126670	1873750	1869350	1772705	1645746	9.5
	3	2350260	2079220	2087110	1983990	1853849	8.8
AR1242	1	562830	544365	542323	571053	487556	6.0
	2	447170	426820	427223	458434	401683	5.0
	3	773230	738205	730928	771896	666716	5.9
AR1248	1	1223890	1136335	1080685	1013635	894194	11.7
	2	1048630	997430	987973	968959	891123	5.8
	3	2236250	2322680	2240783	1876371	1650019	14.0
AR1254	1	2611200	2498175	2321008	2091419	1875726	13.1
	2	1740330	1708515	1631425	1495668	1376551	9.6
	3	1422980	1409165	1342780	1213521	1124626	9.9
TCX		20485600	19940900	21080550	21207125	21121838	2.6
DCB		31577100	29458600	29514050	27374463	25415444	8.2

[1]At least three peaks for each column are required for identification of Aroclors.

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

6P - FORM VI ARO-2

AROCLOR INITIAL CALIBRATION (MULTIPOINT)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: E2 Date(s) Analyzed: 11/04/2011 11/05/2011

GC Column: CLPPestII ID: 0.53 (mm)

Level (x CS1): CS1 1.0 CS2 2.0 CS3 4.0 CS4 8.0 CS5 16.0

COMPOUND	PEAK [1]	CALIBRATION FACTORS (CFs)					% RSD
		CS1	CS2	CS3	CS4	CS5	
AR1016	1	326940	302990	310628	302709	295544	3.9
	2	1225290	1129870	1205005	1173018	1147013	3.4
	3	563220	514000	532413	513773	500824	4.6
AR1260	1	1273100	1160920	1238890	1221516	1204447	3.4
	2	815950	734350	754660	723844	691482	6.2
	3	843670	763725	796823	781670	769545	4.0
AR1242	1	734610	685425	665475	679505	570207	9.0
	2	258100	251655	254350	272938	239547	4.7
	3	287310	277210	280933	311851	283469	4.8
AR1248	1	799240	774425	767833	757853	698626	4.9
	2	593960	594525	602585	608309	574827	2.1
	3	301730	297275	299598	301028	284277	2.4
AR1254	1	853070	814230	769410	702884	640330	11.3
	2	1216470	1184505	1154710	1091033	1037933	6.3
	3	1368340	1356155	1319160	1227664	1175775	6.5
TCX		11461200	11491500	12675600	13297275	13962813	8.8
DCB		17496700	16633350	17258700	16846038	16521238	2.4

[1]At least three peaks for each column are required for identification of Aroclors.

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

6Q - FORM VI ARO-3

AROCLOR INITIAL CALIBRATION (SINGLE POINT)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: E2 Date(s) Analyzed: 11/04/2011 11/05/2011

GC Column: CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT (ng)	PEAK [1]	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR
Aroclor-1221	0.4	1	3.36	3.29	3.43	231755
		2	3.84	3.77	3.91	86535
		3	4.23	4.16	4.30	261795
		4				
		5				
Aroclor-1232	0.4	1	4.22	4.15	4.29	177788
		2	4.47	4.40	4.54	719540
		3	4.96	4.89	5.03	506223
		4				
		5				
Aroclor-1262	0.4	1	8.90	8.83	8.97	3087075
		2	9.35	9.28	9.42	1360215
		3	9.87	9.80	9.94	508595
		4				
		5				
Aroclor-1268	0.4	1	9.71	9.64	9.78	2949570
		2	10.35	10.28	10.42	1278423
		3	10.96	10.89	11.03	9297535
		4				
		5				

[1] At least three peaks for each column are required for identification of multicomponent analytes.

6Q - FORM VI ARO-3

AROCLOR INITIAL CALIBRATION (SINGLE POINT)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Instrument ID: E2 Date(s) Analyzed: 11/04/2011 11/05/2011

GC Column: CLPPestII ID: 0.53 (mm)

COMPOUND	AMOUNT (ng)	PEAK [1]	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR
Aroclor-1221	0.4	1	3.97	3.90	4.04	193565
		2	4.49	4.42	4.56	71775
		3	5.06	4.99	5.13	169120
		4				
		5				
Aroclor-1232	0.4	1	5.06	4.99	5.13	115775
		2	5.28	5.21	5.35	96073
		3	5.37	5.30	5.44	397935
		4				
		5				
Aroclor-1262	0.4	1	11.17	11.10	11.24	1313125
		2	11.30	11.23	11.37	786835
		3	12.35	12.28	12.42	262003
		4				
		5				
Aroclor-1268	0.4	1	11.98	11.91	12.05	1723658
		2	12.93	12.86	13.00	679578
		3	14.22	14.15	14.29	5639533
		4				
		5				

[1] At least three peaks for each column are required for identification of multicomponent analytes.

7N - FORM VII ARO

AROCLOR CALIBRATION VERIFICATION SUMMARY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

GC Column: CLPPest ID: 0.53 (mm) Calibration Date(s): 11/04/2011 11/05/2011

EPA Sample No. (AR####3##): AR16603DJ Date Analyzed: 11/08/2011

Lab Sample ID: AR16603DJ Time Analyzed: 9:05

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

AROCLOR COMPOUND	PEAK	RETENTION RT	RT WINDOW FROM	RT WINDOW TO	__ CF	CF	%D
AR1016	1	5.606	5.535	5.675	2049874.375	2145947.5	4.7
	2	5.784	5.713	5.853	775313	802075	3.5
	3	6.040	5.970	6.110	1376198.375	1436362.5	4.4
AR1260	1	7.798	7.728	7.868	2389284	2469482.5	3.4
	2	8.092	8.023	8.163	1857644.25	1937972.5	4.3
	3	8.503	8.433	8.573	2070885.75	2189772.5	5.7
TCX		4.001	3.950	4.050	20767202.5	21978900	5.8
DCB		11.415	11.317	11.517	28667931.25	29910650	4.3

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

7N - FORM VII ARO

AROCLOR CALIBRATION VERIFICATION SUMMARY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

GC Column: CLPPestII ID: 0.53 (mm) Calibration Date(s): 11/04/2011 11/05/2011

EPA Sample No. (AR####3##): AR16603DJ Date Analyzed: 11/08/2011

Lab Sample ID: AR16603DJ Time Analyzed: 9:05

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

AROCLOR COMPOUND	PEAK	RETENTION RT	RT WINDOW FROM	RT WINDOW TO	__ CF	CF	%D
AR1016	1	6.252	6.182	6.322	307762.125	320572.5	4.2
	2	6.504	6.434	6.574	1176039.125	1221972.5	3.9
	3	6.659	6.589	6.729	524845.75	540905	3.1
AR1260	1	9.254	9.186	9.326	1219774.625	1262332.5	3.5
	2	9.398	9.329	9.469	744057.125	770512.5	3.6
	3	9.883	9.814	9.954	791086.5	811632.5	2.6
TCX		4.628	4.578	4.678	12577677.5	13202950	5.0
DCB		15.418	15.322	15.522	16951205	17596150	3.8

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

7N - FORM VII ARO

AROCLOR CALIBRATION VERIFICATION SUMMARY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

GC Column: CLPPest ID: 0.53 (mm) Calibration Date(s): 11/04/2011 11/05/2011

EPA Sample No. (AR####3##): AR16603JD Date Analyzed: 11/07/2011

Lab Sample ID: AR16603JD Time Analyzed: 21:12

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

AROCLOR COMPOUND	PEAK	RETENTION RT	RT WINDOW FROM	RT WINDOW TO	__ CF	CF	%D
AR1016	1	5.606	5.535	5.675	2049874.375	2065425	0.8
	2	5.784	5.713	5.853	775313	774120	-0.2
	3	6.041	5.970	6.110	1376198.375	1393592.5	1.3
AR1260	1	7.798	7.728	7.868	2389284	2326212.5	-2.6
	2	8.093	8.023	8.163	1857644.25	1833570	-1.3
	3	8.504	8.433	8.573	2070885.75	2078092.5	0.3
TCX		4.000	3.950	4.050	20767202.5	21237200	2.3
DCB		11.420	11.317	11.517	28667931.25	28981275	1.1

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

7N - FORM VII ARO

AROCLOR CALIBRATION VERIFICATION SUMMARY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

GC Column: CLPPestII ID: 0.53 (mm) Calibration Date(s): 11/04/2011 11/05/2011

EPA Sample No. (AR####3##): AR16603JD Date Analyzed: 11/07/2011

Lab Sample ID: AR16603JD Time Analyzed: 21:12

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

AROCLOR COMPOUND	PEAK	RETENTION RT	RT WINDOW FROM	RT WINDOW TO	__ CF	CF	%D
AR1016	1	6.253	6.182	6.322	307762.125	312385	1.5
	2	6.504	6.434	6.574	1176039.125	1179960	0.3
	3	6.659	6.589	6.729	524845.75	523587.5	-0.2
AR1260	1	9.256	9.186	9.326	1219774.625	1191170	-2.3
	2	9.400	9.329	9.469	744057.125	728637.5	-2.1
	3	9.886	9.814	9.954	791086.5	761680	-3.7
TCX		4.628	4.578	4.678	12577677.5	12846250	2.1
DCB		15.427	15.322	15.522	16951205	16758875	-1.1

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

7N - FORM VII ARO

AROCLOR CALIBRATION VERIFICATION SUMMARY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

GC Column: CLPPest ID: 0.53 (mm) Calibration Date(s): 11/04/2011 11/05/2011

EPA Sample No. (AR####3##): AR16603JE Date Analyzed: 11/08/2011

Lab Sample ID: AR16603JE Time Analyzed: 13:05

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

AROCLOR COMPOUND	PEAK	RETENTION RT	RT WINDOW FROM	RT WINDOW TO	__ CF	CF	%D
AR1016	1	5.608	5.535	5.675	2049874.375	2169695	5.8
	2	5.786	5.713	5.853	775313	798077.5	2.9
	3	6.042	5.970	6.110	1376198.375	1293575	-6.0
AR1260	1	7.800	7.728	7.868	2389284	2579112.5	7.9
	2	8.095	8.023	8.163	1857644.25	1988640	7.1
	3	8.505	8.433	8.573	2070885.75	2305475	11.3
TCX		4.004	3.950	4.050	20767202.5	22094200	6.4
DCB		11.421	11.317	11.517	28667931.25	31178000	8.8

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

7N - FORM VII ARO

AROCLOR CALIBRATION VERIFICATION SUMMARY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

GC Column: CLPPestII ID: 0.53 (mm) Calibration Date(s): 11/04/2011 11/05/2011

EPA Sample No. (AR####3##): AR16603JE Date Analyzed: 11/08/2011

Lab Sample ID: AR16603JE Time Analyzed: 13:05

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

AROCLOR COMPOUND	PEAK	RETENTION RT	RT WINDOW FROM	RT WINDOW TO	__ CF	CF	%D
AR1016	1	6.253	6.182	6.322	307762.125	324785	5.5
	2	6.505	6.434	6.574	1176039.125	1252667.5	6.5
	3	6.660	6.589	6.729	524845.75	555430	5.8
AR1260	1	9.256	9.186	9.326	1219774.625	1310227.5	7.4
	2	9.400	9.329	9.469	744057.125	796582.5	7.1
	3	9.885	9.814	9.954	791086.5	838735	6.0
TCX		4.630	4.578	4.678	12577677.5	13495650	7.3
DCB		15.423	15.322	15.522	16951205	18278850	7.8

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 11/04/2011 11/05/2011

Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 4.000 DCB: 11.417

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12213J2	E2K7479F.D	11/4/2011	19:17	4.000	11.418
02	AR12323J2	E2K7480F.D	11/4/2011	19:38	4.000	11.419
03	AR12421J2	E2K7481F.D	11/4/2011	19:59	4.002	11.419
04	AR12422J2	E2K7483F.D	11/4/2011	20:41	4.002	11.419
05	AR12423J2	E2K7484F.D	11/4/2011	21:01	3.999	11.418
06	AR12424J2	E2K7485F.D	11/4/2011	21:22	4.000	11.419
07	AR12425J2	E2K7486F.D	11/4/2011	21:43	3.997	11.420
08	AR12481J2	E2K7487F.D	11/4/2011	22:04	3.998	11.417
09	AR12482J2	E2K7489F.D	11/4/2011	22:46	4.002	11.418
10	AR12483J2	E2K7490F.D	11/4/2011	23:07	4.001	11.420
11	AR12484J2	E2K7491F.D	11/4/2011	23:28	4.001	11.420
12	AR12485J2	E2K7492F.D	11/4/2011	23:49	4.001	11.419
13	AR12541J2	E2K7493F.D	11/5/2011	0:10	4.002	11.418
14	AR12542J2	E2K7495F.D	11/5/2011	0:52	4.001	11.420
15	AR12543J2	E2K7496F.D	11/5/2011	1:13	4.000	11.418
16	AR12544J2	E2K7497F.D	11/5/2011	1:34	4.001	11.419
17	AR12545J2	E2K7498F.D	11/5/2011	1:54	4.000	11.418
18	AR12623J2	E2K7499F.D	11/5/2011	2:15	4.001	11.418
19	AR12683J2	E2K7500F.D	11/5/2011	2:36	4.001	11.419
20	AR16601J2	E2K7501F.D	11/5/2011	2:57	4.000	11.417
21	AR16602J2	E2K7503F.D	11/5/2011	3:39	4.001	11.418
22	AR16603J2	E2K7504F.D	11/5/2011	4:00	3.999	11.417
23	AR16604J2	E2K7505F.D	11/5/2011	4:21	4.001	11.418
24	AR16605J2	E2K7506F.D	11/5/2011	4:42	4.000	11.417
25	AIBLKJD	E2K7565F.D	11/7/2011	20:51	4.002	11.420
26	AR16603JD	E2K7566F.D	11/7/2011	21:12	4.000	11.420
27	ZZZZZ	E2K7570F.D	11/7/2011	22:36	4.000	11.420

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 11/04/2011 11/05/2011

Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 4.000 DCB: 11.417

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	ZZZZZ	E2K7571F.D	11/7/2011	22:57	4.001	11.419
29	ZZZZZ	E2K7572F.D	11/7/2011	23:18	4.000	11.419
30	ZZZZZ	E2K7573F.D	11/7/2011	23:39	4.001	11.420
31	ZZZZZ	E2K7574F.D	11/8/2011	0:00	3.999	11.416
32	ABLK2F	E2K7575F.D	11/8/2011	0:21	3.999	11.417
33	ALCS2F	E2K7576F.D	11/8/2011	0:41	3.999	11.417
34	H30Q0	E2K7577F.D	11/8/2011	1:02	4.001	11.418
35	H30Q0MS	E2K7578F.D	11/8/2011	1:23	4.000	11.418
36	H30Q0MSD	E2K7579F.D	11/8/2011	1:44	4.000	11.417
37	H30Q1	E2K7580F.D	11/8/2011	2:05	3.999	11.414
38	H30Q2	E2K7581F.D	11/8/2011	2:26	4.002	11.417
39	ZZZZZ	E2K7582F.D	11/8/2011	2:47	*	*
40	H30Q4	E2K7583F.D	11/8/2011	3:08	4.000	11.417
41	H30Q6	E2K7584F.D	11/8/2011	3:29	4.001	11.417
42	H30Q8	E2K7585F.D	11/8/2011	3:50	4.002	11.417
43	H30Q9	E2K7586F.D	11/8/2011	4:11	4.001	11.417
44	H30R0	E2K7587F.D	11/8/2011	4:32	4.000	11.417
45	H30R1	E2K7588F.D	11/8/2011	4:53	4.001	11.421
46	H30S4	E2K7589F.D	11/8/2011	5:13	4.002	11.418
47	H30S5	E2K7590F.D	11/8/2011	5:34	4.000	11.417
48	H30S8	E2K7591F.D	11/8/2011	5:55	4.001	11.418
49	H30S9	E2K7592F.D	11/8/2011	6:16	4.001	11.417
50	H30T0	E2K7593F.D	11/8/2011	6:37	4.001	11.416
51	H30T1	E2K7594F.D	11/8/2011	6:58	3.998	11.416
52	ZZZZZ	E2K7595F.D	11/8/2011	7:19	*	*
53	H30T3	E2K7596F.D	11/8/2011	7:40	4.001	11.417
54	H30T4	E2K7597F.D	11/8/2011	8:01	4.001	11.415

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO
AROCLOR ANALYTICAL SEQUENCE

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 11/04/2011 11/05/2011

Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

	MEAN SURROGATE RT FROM INITIAL CALIBRATION TCX: 4.000 DCB: 11.417							
	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT	#	DCB RT	#
55	H30T5	E2K7598F.D	11/8/2011	8:22	4.000		11.415	
56	AIBLKDJ	E2K7599F.D	11/8/2011	8:44	4.005		11.421	
57	AR16603DJ	E2K7600F.D	11/8/2011	9:05	4.001		11.415	
58	H30Q3	E2K7604F.D	11/8/2011	10:47	4.014		11.437	
59	H30T2	E2K7605F.D	11/8/2011	11:08	4.001		11.418	
60	AIBLKJE	E2K7606F.D	11/8/2011	12:45	4.018		11.444	
61	AR16603JE	E2K7607F.D	11/8/2011	13:05	4.004		11.421	

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)
DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 11/04/2011 11/05/2011

Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 4.628 DCB: 15.422

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12213J2	E2K7479R.D	11/4/2011	19:17	4.628	15.421
02	AR12323J2	E2K7480R.D	11/4/2011	19:38	4.628	15.423
03	AR12421J2	E2K7481R.D	11/4/2011	19:59	4.628	15.422
04	AR12422J2	E2K7483R.D	11/4/2011	20:41	4.629	15.421
05	AR12423J2	E2K7484R.D	11/4/2011	21:01	4.628	15.422
06	AR12424J2	E2K7485R.D	11/4/2011	21:22	4.627	15.422
07	AR12425J2	E2K7486R.D	11/4/2011	21:43	4.625	15.428
08	AR12481J2	E2K7487R.D	11/4/2011	22:04	4.628	15.421
09	AR12482J2	E2K7489R.D	11/4/2011	22:46	4.629	15.421
10	AR12483J2	E2K7490R.D	11/4/2011	23:07	4.628	15.424
11	AR12484J2	E2K7491R.D	11/4/2011	23:28	4.628	15.426
12	AR12485J2	E2K7492R.D	11/4/2011	23:49	4.627	15.424
13	AR12541J2	E2K7493R.D	11/5/2011	0:10	4.629	15.422
14	AR12542J2	E2K7495R.D	11/5/2011	0:52	4.628	15.423
15	AR12543J2	E2K7496R.D	11/5/2011	1:13	4.628	15.423
16	AR12544J2	E2K7497R.D	11/5/2011	1:34	4.627	15.425
17	AR12545J2	E2K7498R.D	11/5/2011	1:54	4.626	15.425
18	AR12623J2	E2K7499R.D	11/5/2011	2:15	4.628	15.422
19	AR12683J2	E2K7500R.D	11/5/2011	2:36	4.628	15.425
20	AR16601J2	E2K7501R.D	11/5/2011	2:57	4.628	15.421
21	AR16602J2	E2K7503R.D	11/5/2011	3:39	4.628	15.421
22	AR16603J2	E2K7504R.D	11/5/2011	4:00	4.627	15.421
23	AR16604J2	E2K7505R.D	11/5/2011	4:21	4.627	15.423
24	AR16605J2	E2K7506R.D	11/5/2011	4:42	4.627	15.424
25	AIBLKJD	E2K7565R.D	11/7/2011	20:51	4.629	15.426
26	AR16603JD	E2K7566R.D	11/7/2011	21:12	4.628	15.427
27	ZZZZZ	E2K7570R.D	11/7/2011	22:36	4.627	15.426

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 11/04/2011 11/05/2011

Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 4.628 DCB: 15.422

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	ZZZZZ	E2K7571R.D	11/7/2011	22:57	4.628	15.426
29	ZZZZZ	E2K7572R.D	11/7/2011	23:18	4.627	15.426
30	ZZZZZ	E2K7573R.D	11/7/2011	23:39	4.628	15.429
31	ZZZZZ	E2K7574R.D	11/8/2011	0:00	4.627	15.424
32	ABLK2F	E2K7575R.D	11/8/2011	0:21	4.627	15.425
33	ALCS2F	E2K7576R.D	11/8/2011	0:41	4.627	15.423
34	H30Q0	E2K7577R.D	11/8/2011	1:02	4.628	15.424
35	H30Q0MS	E2K7578R.D	11/8/2011	1:23	4.628	15.426
36	H30Q0MSD	E2K7579R.D	11/8/2011	1:44	4.627	15.423
37	H30Q1	E2K7580R.D	11/8/2011	2:05	4.626	15.416
38	H30Q2	E2K7581R.D	11/8/2011	2:26	4.629	15.422
39	ZZZZZ	E2K7582R.D	11/8/2011	2:47	*	*
40	H30Q4	E2K7583R.D	11/8/2011	3:08	4.628	15.424
41	H30Q6	E2K7584R.D	11/8/2011	3:29	4.629	15.423
42	H30Q8	E2K7585R.D	11/8/2011	3:50	4.628	15.420
43	H30Q9	E2K7586R.D	11/8/2011	4:11	4.627	15.422
44	H30R0	E2K7587R.D	11/8/2011	4:32	4.628	15.420
45	H30R1	E2K7588R.D	11/8/2011	4:53	4.628	15.425
46	H30S4	E2K7589R.D	11/8/2011	5:13	4.629	15.424
47	H30S5	E2K7590R.D	11/8/2011	5:34	4.627	15.420
48	H30S8	E2K7591R.D	11/8/2011	5:55	4.628	15.424
49	H30S9	E2K7592R.D	11/8/2011	6:16	4.628	15.421
50	H30T0	E2K7593R.D	11/8/2011	6:37	4.627	15.418
51	H30T1	E2K7594R.D	11/8/2011	6:58	4.627	15.420
52	ZZZZZ	E2K7595R.D	11/8/2011	7:19	*	*
53	H30T3	E2K7596R.D	11/8/2011	7:40	4.627	15.420
54	H30T4	E2K7597R.D	11/8/2011	8:01	4.628	15.420

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO
AROCLOR ANALYTICAL SEQUENCE

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 11/04/2011 11/05/2011

Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

	MEAN SURROGATE RT FROM INITIAL CALIBRATION TCX: 4.628 DCB: 15.422							
	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT	#	DCB RT	#
55	H30T5	E2K7598R.D	11/8/2011	8:22	4.627		15.419	
56	AIBLKDJ	E2K7599R.D	11/8/2011	8:44	4.628		15.421	
57	AR16603DJ	E2K7600R.D	11/8/2011	9:05	4.628		15.418	
58	H30Q3	E2K7604R.D	11/8/2011	10:47	4.632		15.436	
59	H30T2	E2K7605R.D	11/8/2011	11:08	4.628		15.421	
60	AIBLKJE	E2K7606R.D	11/8/2011	12:45	4.634		15.440	
61	AR16603JE	E2K7607R.D	11/8/2011	13:05	4.630		15.423	

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)
DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

10C - FORM X ARO
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.
H30Q0MSD

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Lab Sample ID: K2198-01BMSD Date(s) Analyzed: 11/08/2011 11/08/2011

Instrument ID (1): E2 Instrument ID (2): E2

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (MM)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION PEAK	CONCENTRATION MEAN	%D
Aroclor-1016	1	5.606	5.535	5.675	85.1461		
	2	5.784	5.713	5.853	81.4296		
COLUMN 1	3	6.040	5.970	6.110	79.8390		
	4						
	5					82.138215	
	1	6.252	6.182	6.322	78.7308		
	2	6.505	6.434	6.574	69.5924		
COLUMN 2	3	6.660	6.589	6.729	80.4171		
	4						
	5					76.246752	7.7
Aroclor-1260	1	7.798	7.728	7.868	96.0001		
	2	8.092	8.023	8.163	101.5947		
COLUMN 1	3	8.503	8.433	8.573	86.0210		
	4						
	5					94.538615	
	1	9.255	9.186	9.326	100.2328		
	2	9.399	9.329	9.469	89.0359		
COLUMN 2	3	9.884	9.814	9.954	90.3025		
	4						
	5					93.190394	1.4

At least 3 peaks for each column are required for identification of multicomponent analytes

10C - FORM X ARO
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.
H30Q0MS

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Lab Sample ID: K2198-01BMS Date(s) Analyzed: 11/08/2011 11/08/2011

Instrument ID (1): E2 Instrument ID (2): E2

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (MM)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION PEAK	CONCENTRATION MEAN	%D
Aroclor-1016	1	5.606	5.535	5.675	97.6363		
	2	5.784	5.713	5.853	92.3866		
COLUMN 1	3	6.040	5.970	6.110	90.6513		
	4						
	5					93.558079	
	1	6.252	6.182	6.322	97.4117		
	2	6.505	6.434	6.574	84.9343		
COLUMN 2	3	6.660	6.589	6.729	99.1278		
	4						
	5					93.824574	0.3
Aroclor-1260	1	7.799	7.728	7.868	108.2387		
	2	8.093	8.023	8.163	113.7793		
COLUMN 1	3	8.502	8.433	8.573	96.2210		
	4						
	5					106.079642	
	1	9.257	9.186	9.326	116.9182		
	2	9.400	9.329	9.469	108.1633		
COLUMN 2	3	9.886	9.814	9.954	111.9175		
	4						
	5					112.333016	5.9

At least 3 peaks for each column are required for identification of multicomponent analytes

10C - FORM X ARO
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.
ALCS2F

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Lab Sample ID: LCS-62776 Date(s) Analyzed: 11/08/2011 11/08/2011

Instrument ID (1): E2 Instrument ID (2): E2

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (MM)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION PEAK	CONCENTRATION MEAN	%D
Aroclor-1016	1	5.605	5.535	5.675	27.1306		
	2	5.783	5.713	5.853	26.9749		
COLUMN 1	3	6.041	5.970	6.110	23.7291		
	4						
	5					25.944885	
	1	6.252	6.182	6.322	26.5746		
	2	6.505	6.434	6.574	18.0547		
COLUMN 2	3	6.660	6.589	6.729	28.5087		
	4						
	5					24.379334	6.4
Aroclor-1260	1	7.798	7.728	7.868	42.2415		
	2	8.092	8.023	8.163	38.5612		
COLUMN 1	3	8.502	8.433	8.573	41.8016		
	4						
	5					40.868109	
	1	9.256	9.186	9.326	32.4984		
	2	9.400	9.329	9.469	32.1328		
COLUMN 2	3	9.885	9.814	9.954	32.2464		
	4						
	5					32.292520	26.6

At least 3 peaks for each column are required for identification of multicomponent analytes

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7479F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7479F.D
Lab Smp Id: AR12213J2 Client Smp ID: AR12213J2
Inj Date : 04-NOV-2011 19:17
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12213J2,AR12213J2,,ar1221.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1221.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

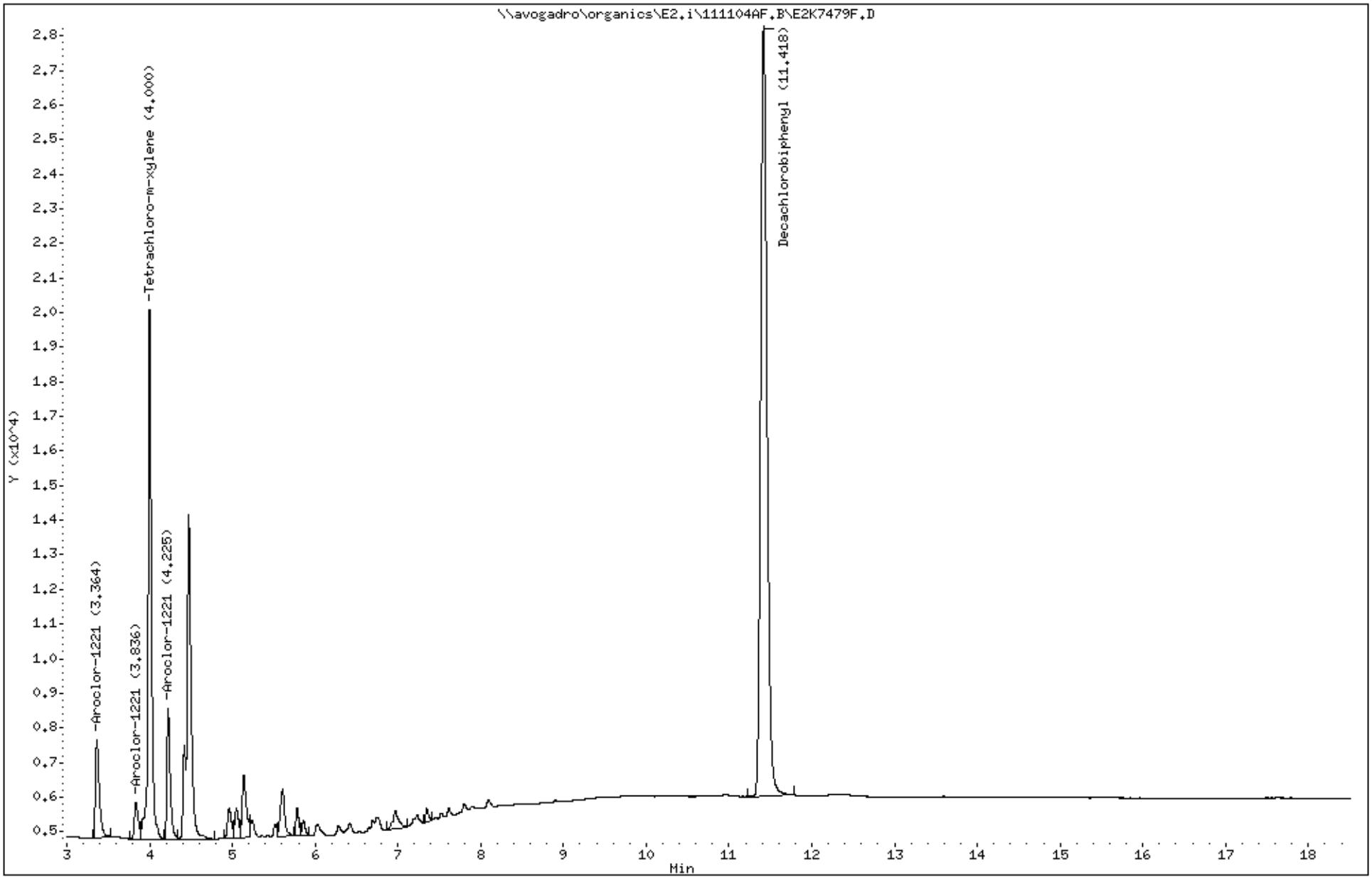
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)		
RT	EXP RT	DLT RT	RESPONSE			TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.000	3.999	0.001	434796	0.02000	0.021		(a)
3 Aroclor-1221					CAS #: 11104-28-2		
3.363	3.363	0.000	92702	0.40000	0.40	80.00- 120.00	100.00(a)
3.835	3.835	0.000	34614	0.40000	0.40	17.34- 57.34	37.34
4.225	4.225	0.000	104718	0.40000	0.40	92.96- 132.96	112.96
Average of Peak Amounts =				0.40000			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.418	11.417	0.001	1188633	0.04000	0.041		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7479F.D
Date : 04-NOV-2011 19:17
Client ID: AR12213J2
Instrument: E2.i
Sample Info: AR12213J2,AR12213J2,,ar1221,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7479R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7479R.D
Lab Smp Id: AR12213J2 Client Smp ID: AR12213J2
Inj Date : 04-NOV-2011 19:17
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12213J2,AR12213J2,,ar1221.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:00 Cal File: E2K7504R.D
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1221.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

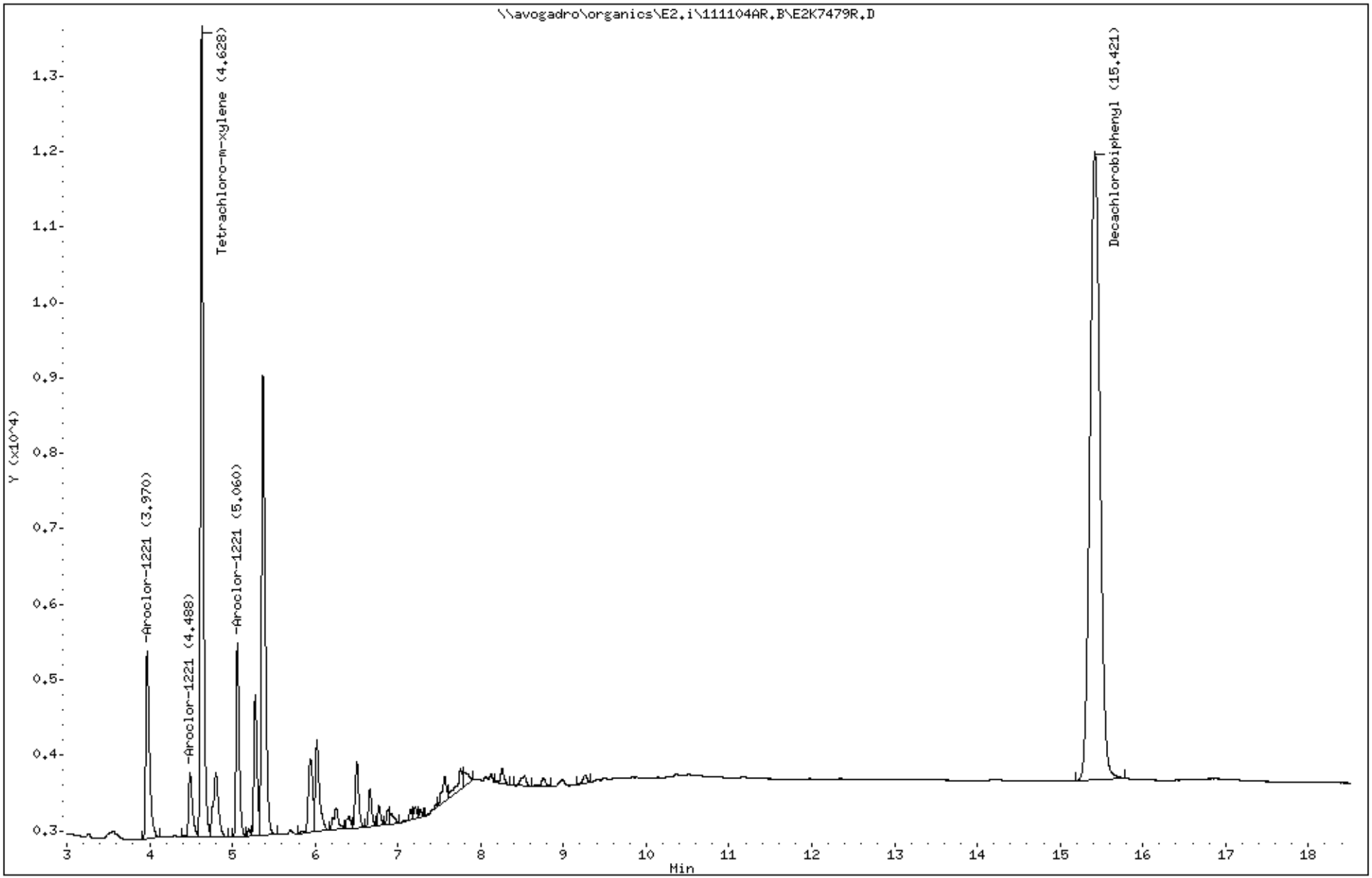
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.628	4.627	0.001	254149	0.02000	0.020			(a)
2 Aroclor-1221						CAS #: 11104-28-2		
3.969	3.969	0.000	77426	0.40000	0.40	80.00- 120.00	100.00	(a)
4.487	4.487	0.000	28710	0.40000	0.40	17.08- 57.08	37.08	
5.060	5.060	0.000	67648	0.40000	0.40	67.37- 107.37	87.37	
Average of Peak Amounts =					0.40000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.420	15.423	-0.003	700038	0.04000	0.040			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7479R.D
Date : 04-NOV-2011 19:17
Client ID: AR12213J2 Instrument: E2.i
Sample Info: AR12213J2,AR12213J2,,ar1221.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPestII Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7480F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7480F.D
Lab Smp Id: AR12323J2 Client Smp ID: AR12323J2
Inj Date : 04-NOV-2011 19:38
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12323J2,AR12323J2,,ar1232.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 2 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1232.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

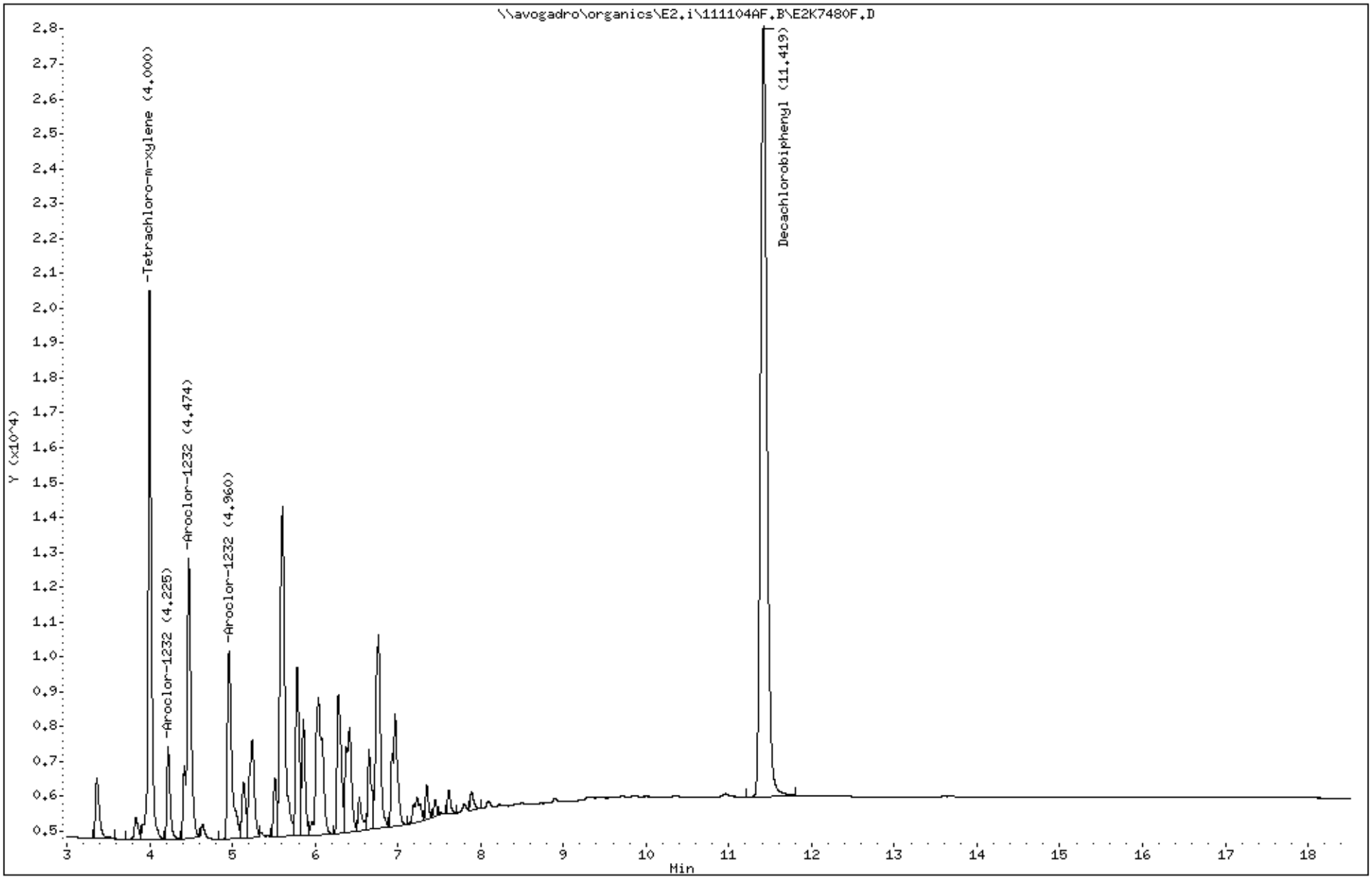
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
3.999	3.999	0.000	428035	0.02000	0.021			(a)
4 Aroclor-1232					CAS #: 11141-16-5			
4.224	4.224	0.000	71115	0.40000	0.40	80.00- 120.00	100.00	(a)
4.473	4.473	0.000	287816	0.40000	0.40	384.72- 424.72	404.72	
4.960	4.960	0.000	202489	0.40000	0.40	264.73- 304.73	284.73	
Average of Peak Amounts =				0.40000				
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.418	11.417	0.001	1185977	0.04000	0.041			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7480F.D
Date : 04-NOV-2011 19:38
Client ID: AR12323J2 Instrument: E2.i
Sample Info: AR12323J2,AR12323J2,,ar1232,sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPest Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7480R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report
Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7480R.D
Lab Smp Id: AR12323J2 Client Smp ID: AR12323J2
Inj Date : 04-NOV-2011 19:38
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12323J2,AR12323J2,,ar1232.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:00 Cal File: E2K7504R.D
Als bottle: 2 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1232.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

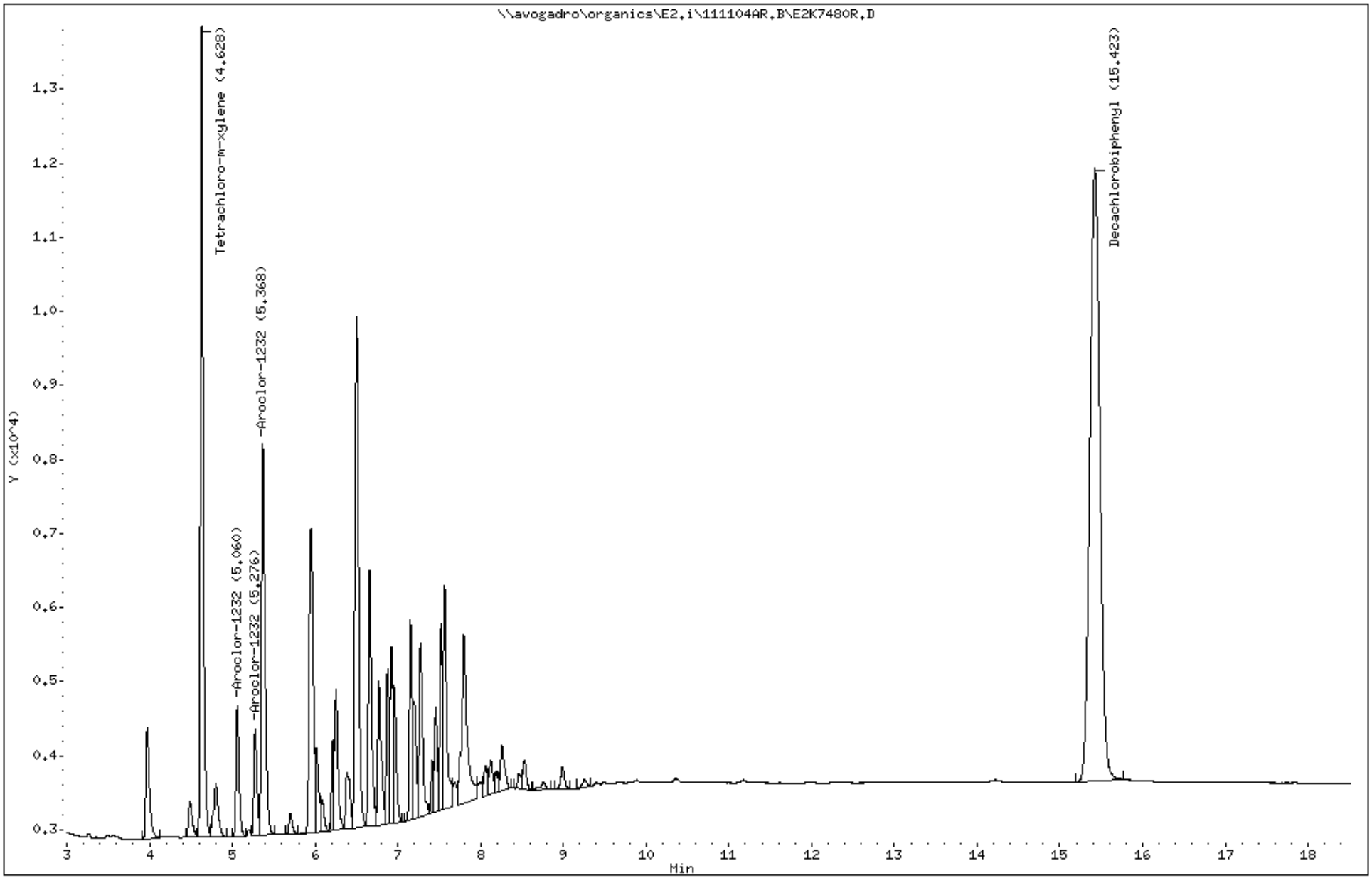
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.627	4.627	0.000	254882	0.02000	0.020			(a)
3 Aroclor-1232					CAS #: 11141-16-5			
5.059	5.059	0.000	46310	0.40000	0.40	80.00- 120.00	100.00	(a)
5.275	5.275	0.000	38429	0.40000	0.40	62.98- 102.98	82.98	
5.368	5.368	0.000	159174	0.40000	0.40	323.71- 363.71	343.71	
Average of Peak Amounts =				0.40000				
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.423	15.423	0.000	697053	0.04000	0.040			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7480R.D
Date : 04-NOV-2011 19:38
Client ID: AR12323J2 Instrument: E2.i
Sample Info: AR12323J2,AR12323J2,,ar1232,sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPestII Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7481F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7481F.D
Lab Smp Id: AR12421J2 Client Smp ID: AR12421J2
Inj Date : 04-NOV-2011 19:59
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12421J2,AR12421J2,,ar1242.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

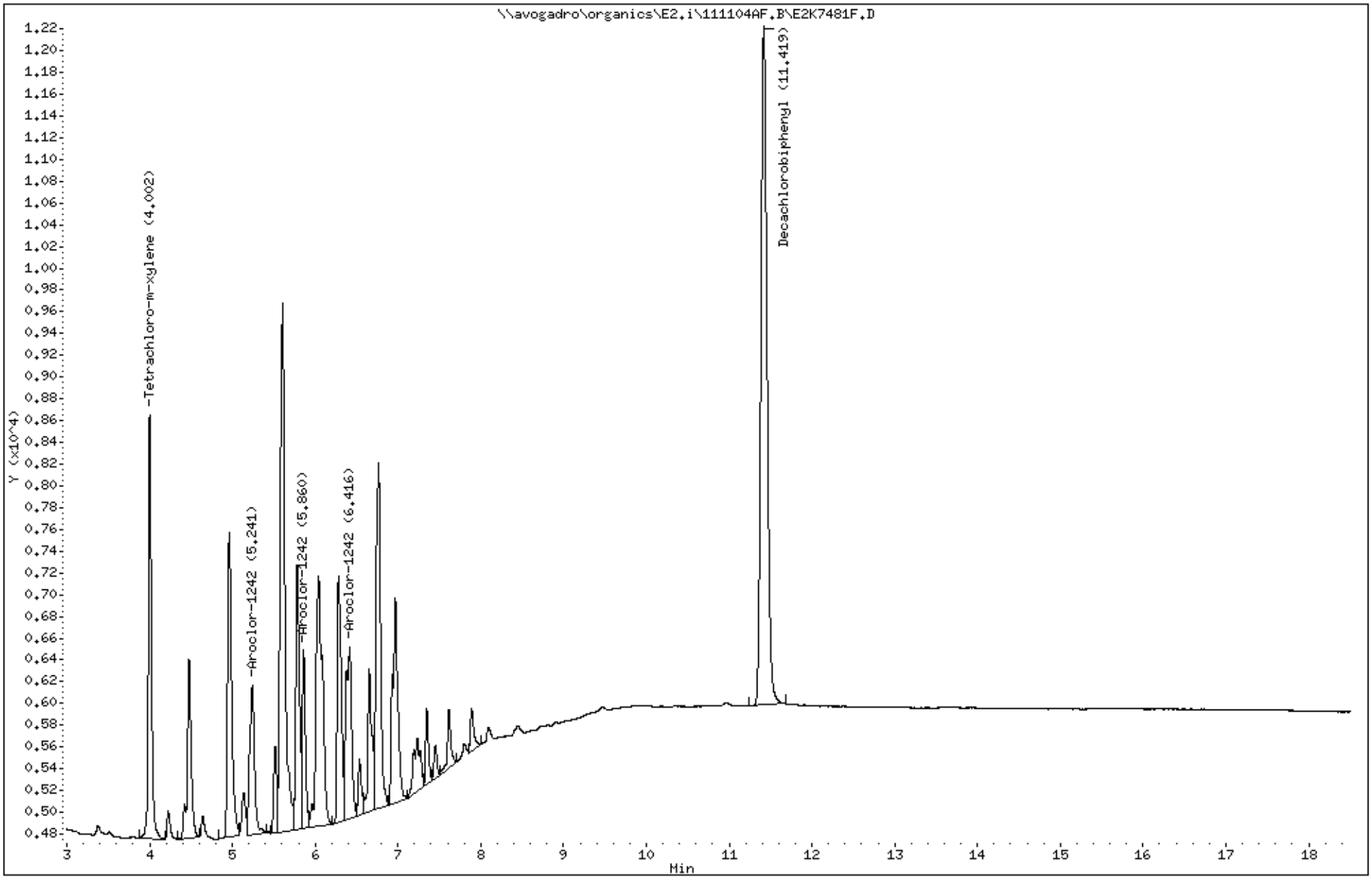
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.001	3.999	0.002	100505	0.00500	0.0048			(a)
6 Aroclor-1242						CAS #: 53469-21-9		
5.241	5.237	0.004	56283	0.10000	0.10	80.00- 120.00	100.00	(a)
5.859	5.858	0.001	44717	0.10000	0.10	62.39- 102.39	79.45	
6.416	6.412	0.004	77323	0.10000	0.10	116.75- 156.75	137.38	
Average of Peak Amounts =					0.10000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.418	11.417	0.001	316615	0.01000	0.011			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7481F.D
Date : 04-NOV-2011 19:59
Client ID: AR12421J2 Instrument: E2.i
Sample Info: AR12421J2,AR12421J2,,ar1242,sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPest Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7481R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7481R.D
Lab Smp Id: AR12421J2 Client Smp ID: AR12421J2
Inj Date : 04-NOV-2011 19:59
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12421J2,AR12421J2,,ar1242.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 04-NOV-2011 19:59 Cal File: E2K7481R.D
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

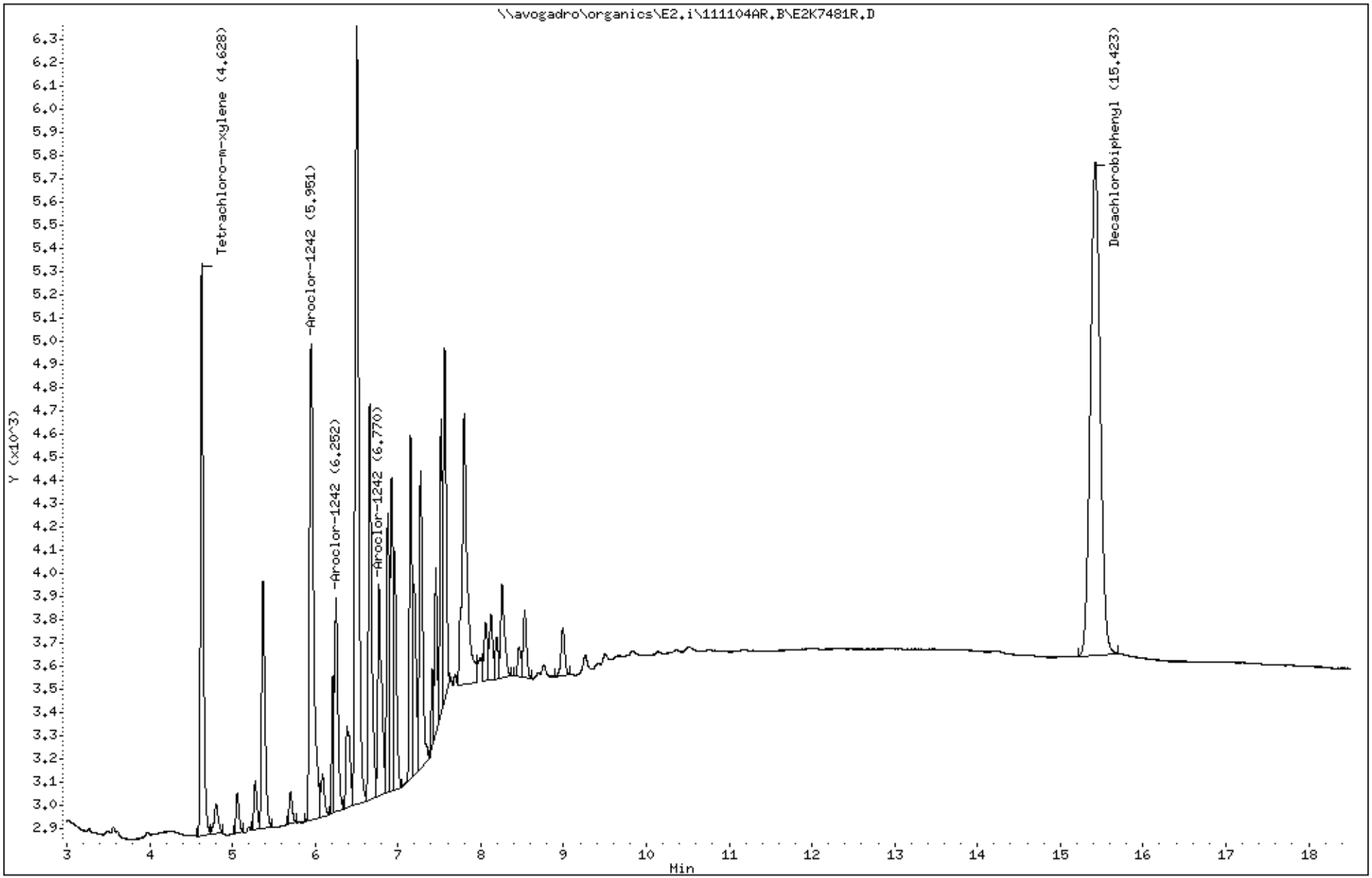
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.628	4.627	0.001	58298	0.00500	0.0048			(a)
4 Aroclor-1242					CAS #: 53469-21-9			
5.951	5.948	0.003	73461	0.10000	0.10	80.00- 120.00	100.00	(a)
6.252	6.250	0.002	25810	0.10000	0.10	22.01- 62.01	35.13	
6.769	6.769	0.000	28731	0.10000	0.10	29.71- 69.71	39.11	
Average of Peak Amounts =					0.10000			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.422	15.423	-0.001	176282	0.01000	0.010			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7481R.D
Date : 04-NOV-2011 19:59
Client ID: AR12421J2 Instrument: E2.i
Sample Info: AR12421J2,AR12421J2,,ar1242,sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPestII Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7483F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7483F.D
Lab Smp Id: AR12422J2 Client Smp ID: AR12422J2
Inj Date : 04-NOV-2011 20:41
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12422J2,AR12422J2,,ar1242.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 5 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

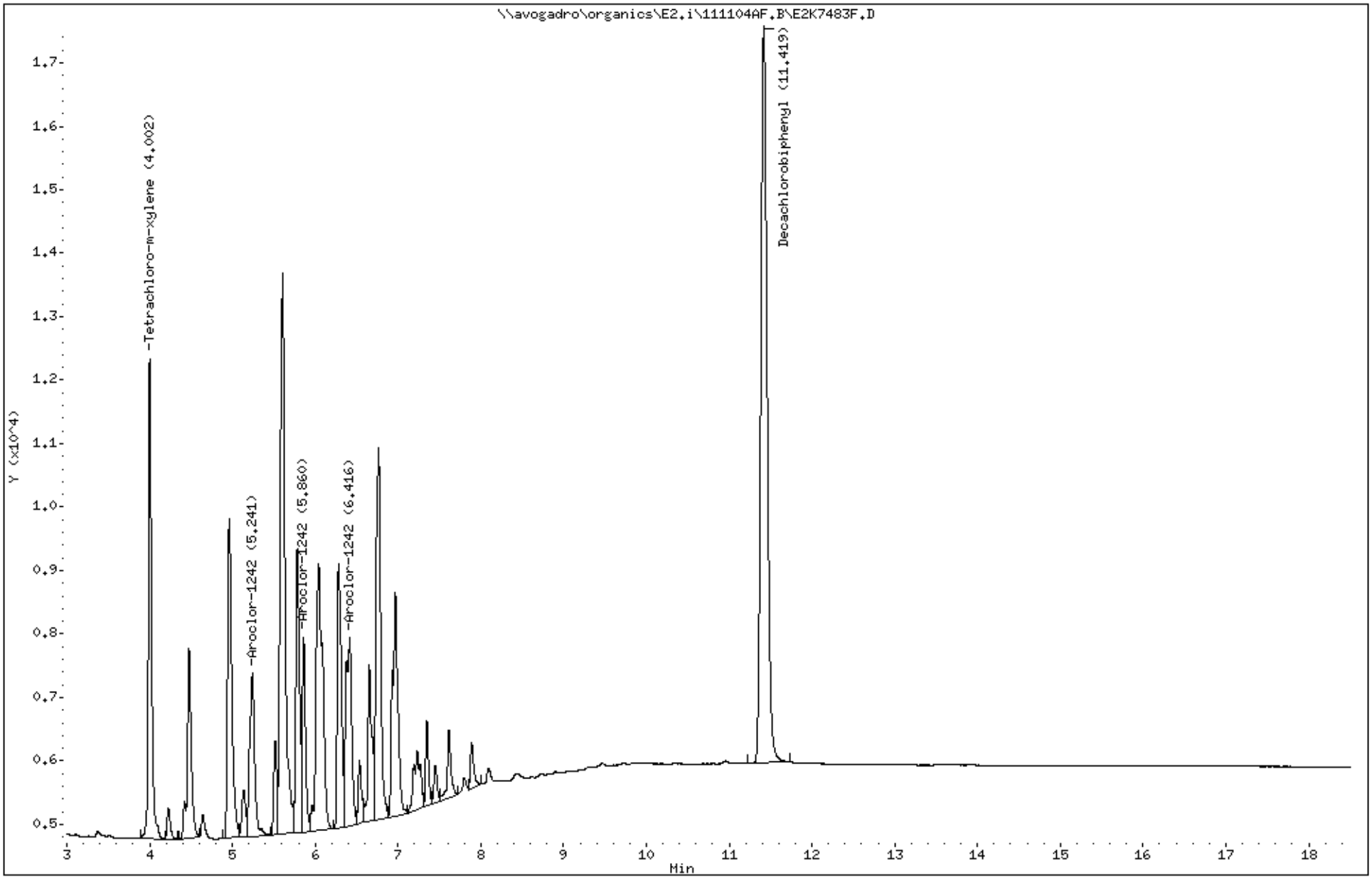
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.001	3.999	0.002	199999	0.01000	0.0096			(a)
6 Aroclor-1242						CAS #: 53469-21-9		
5.241	5.237	0.004	108873	0.20000	0.20	80.00- 120.00	100.00	(a)
5.860	5.858	0.002	85364	0.20000	0.20	62.39- 102.39	78.41	
6.416	6.412	0.004	147641	0.20000	0.20	116.75- 156.75	135.61	
Average of Peak Amounts =				0.20000				
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.418	11.417	0.001	607170	0.02000	0.021			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7483F.D
Date : 04-NOV-2011 20:41
Client ID: AR12422J2
Instrument: E2.i
Sample Info: AR12422J2,AR12422J2,,ar1242,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7483R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7483R.D
Lab Smp Id: AR12422J2 Client Smp ID: AR12422J2
Inj Date : 04-NOV-2011 20:41
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12422J2,AR12422J2,,ar1242.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 04-NOV-2011 20:41 Cal File: E2K7483R.D
Als bottle: 5 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

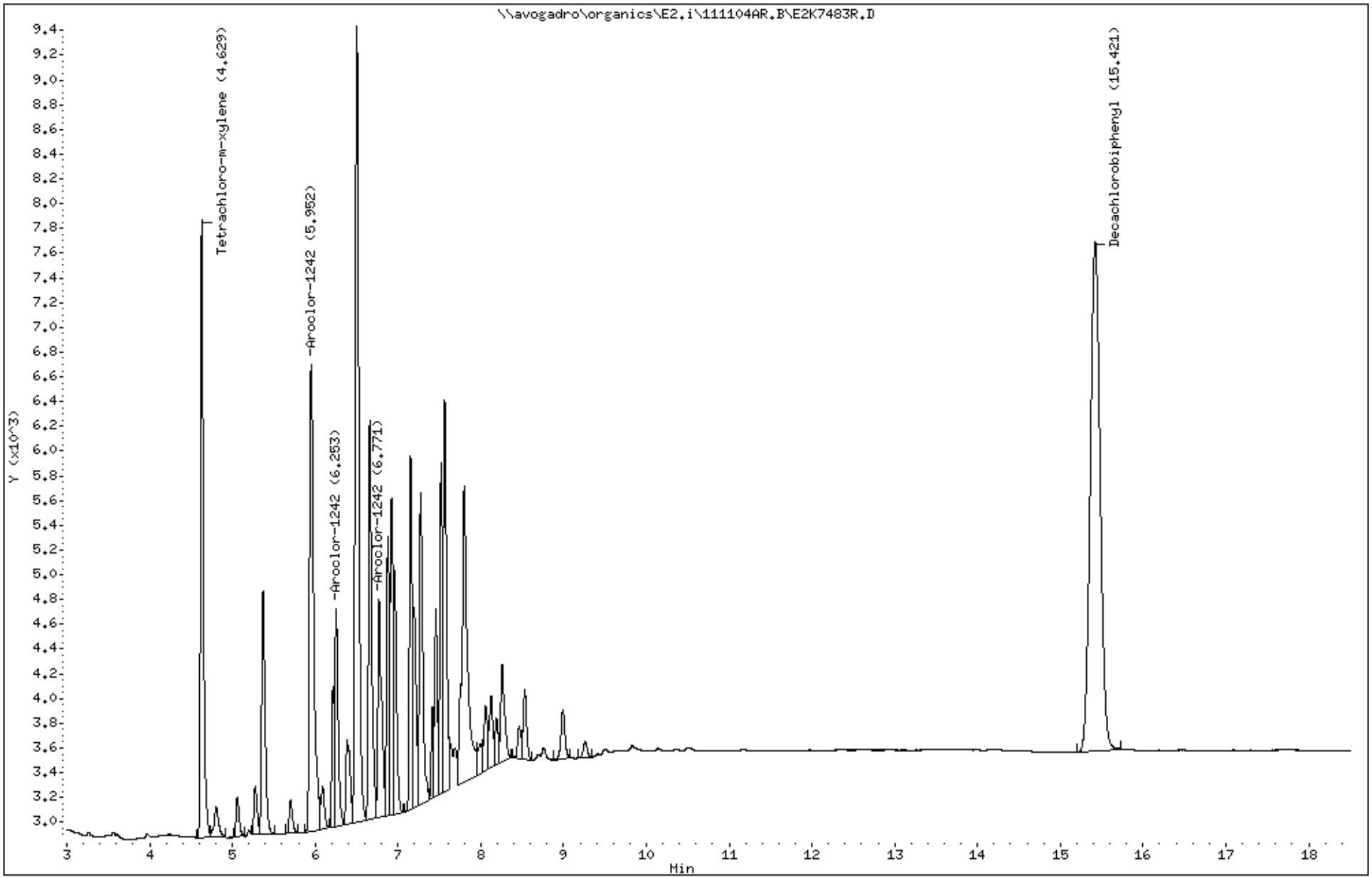
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.628	4.627	0.001	119092	0.01000	0.0098			(a)
4 Aroclor-1242						CAS #: 53469-21-9		
5.951	5.948	0.003	137085	0.20000	0.20	80.00- 120.00	100.00	(a)
6.253	6.250	0.003	50331	0.20000	0.20	22.01- 62.01	36.72	
6.770	6.769	0.001	55442	0.20000	0.20	29.71- 69.71	40.44	
Average of Peak Amounts =				0.20000				
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.421	15.423	-0.002	343043	0.02000	0.020			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7483R.D
Date : 04-NOV-2011 20:41
Client ID: AR12422J2 Instrument: E2.i
Sample Info: AR12422J2,AR12422J2,,ar1242,sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPestII Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7484F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7484F.D
Lab Smp Id: AR12423J2 Client Smp ID: AR12423J2
Inj Date : 04-NOV-2011 21:01
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12423J2,AR12423J2,,ar1242.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 6 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

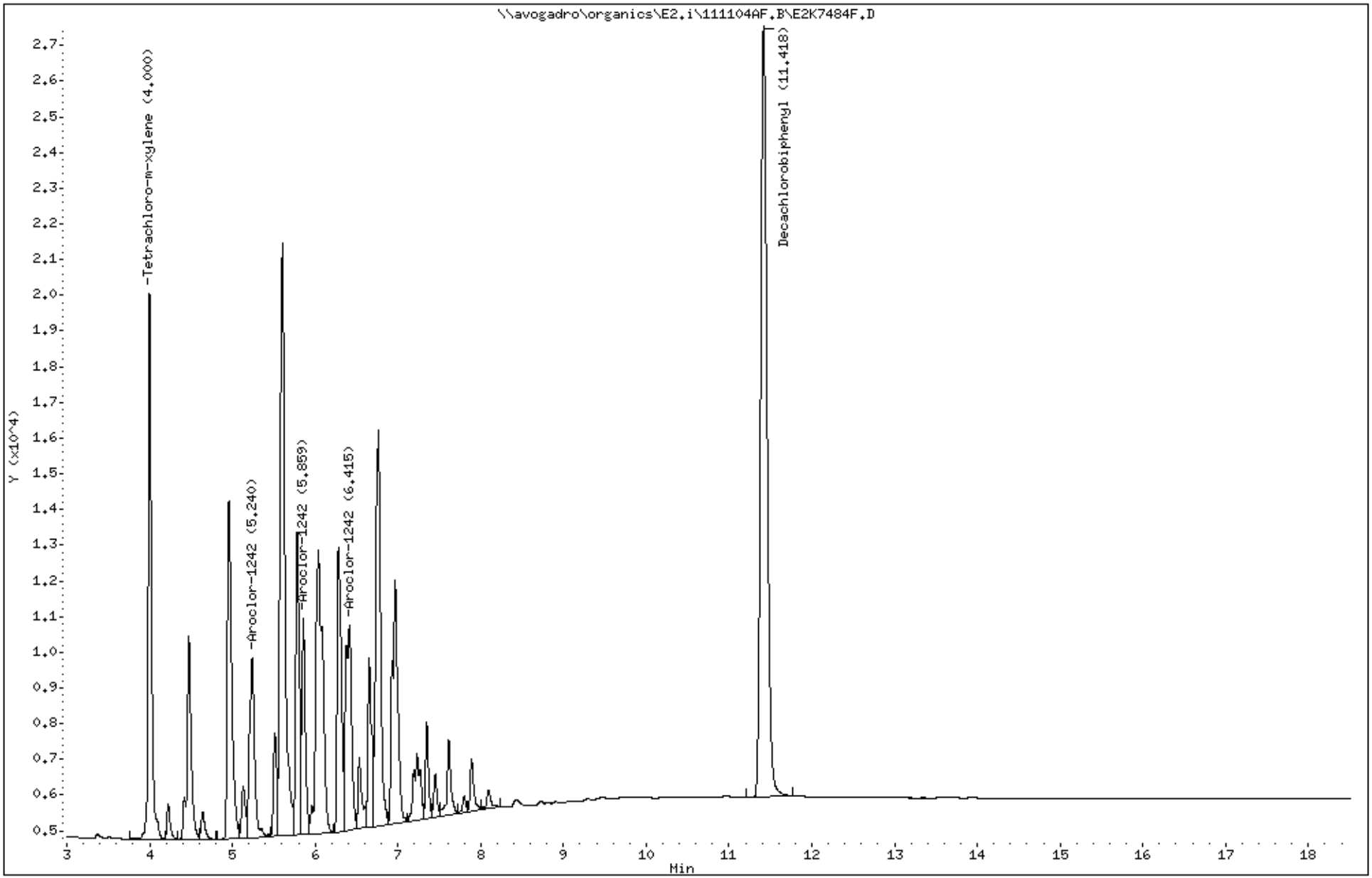
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
3.999	3.999	0.000	416464	0.02000	0.020			(a)
6 Aroclor-1242					CAS #: 53469-21-9			
5.239	5.237	0.002	216929	0.40000	0.40	80.00- 120.00	100.00	(a)
5.858	5.858	0.000	170889	0.40000	0.40	62.39- 102.39	78.78	
6.414	6.412	0.002	292371	0.40000	0.40	116.75- 156.75	134.78	
Average of Peak Amounts =				0.40000				
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.418	11.417	0.001	1153664	0.04000	0.040			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7484F.D
Date : 04-NOV-2011 21:01
Client ID: AR12423J2
Instrument: E2.i
Sample Info: AR12423J2,AR12423J2,,ar1242,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7484R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7484R.D
Lab Smp Id: AR12423J2 Client Smp ID: AR12423J2
Inj Date : 04-NOV-2011 21:01
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12423J2,AR12423J2,,ar1242.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:00 Cal File: E2K7504R.D
Als bottle: 6 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

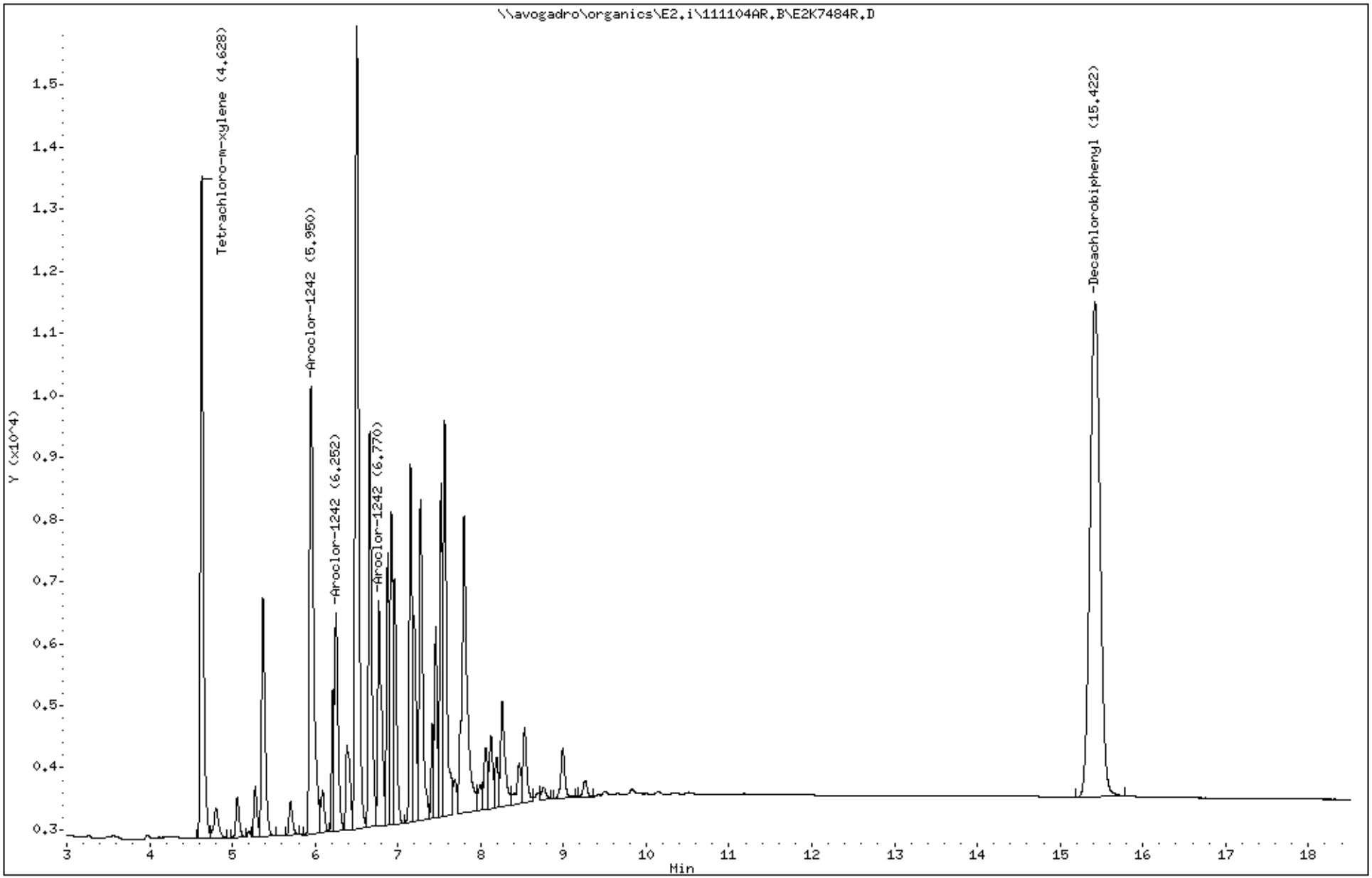
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.627	4.627	0.000	255597	0.02000	0.021			(a)
4 Aroclor-1242					CAS #: 53469-21-9			
5.950	5.948	0.002	266190	0.40000	0.38	80.00- 120.00	100.00	(a)
6.252	6.250	0.002	101740	0.40000	0.40	22.01- 62.01	38.22	
6.770	6.769	0.001	112373	0.40000	0.40	29.71- 69.71	42.22	
Average of Peak Amounts =					0.39333			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.421	15.423	-0.002	675680	0.04000	0.039			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7484R.D
Date : 04-NOV-2011 21:01
Client ID: AR12423J2 Instrument: E2.i
Sample Info: AR12423J2,AR12423J2,,ar1242,sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPestII Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7485F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7485F.D
Lab Smp Id: AR12424J2 Client Smp ID: AR12424J2
Inj Date : 04-NOV-2011 21:22
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12424J2,AR12424J2,,ar1242.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 7 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

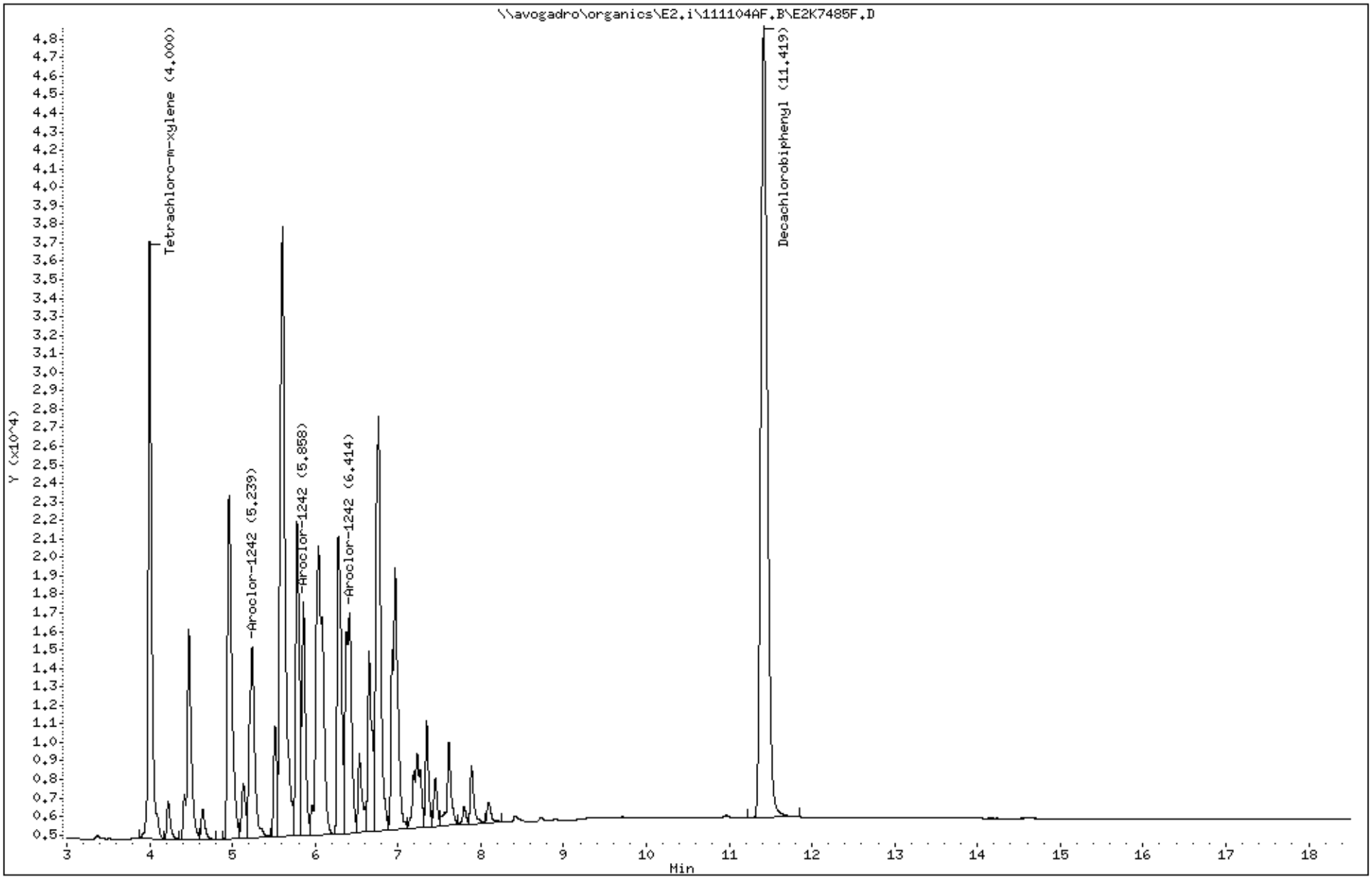
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT	AMOUNTS ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.000	3.999	0.001	915474	0.04000	0.044		(a)
6 Aroclor-1242					CAS #: 53469-21-9		
5.239	5.237	0.002	456842	0.80000	0.84	80.00- 120.00	100.00(a)
5.858	5.858	0.000	366747	0.80000	0.85	62.39- 102.39	80.28
6.413	6.412	0.001	617517	0.80000	0.84	116.75- 156.75	135.17
Average of Peak Amounts =					0.84333		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.418	11.417	0.001	2355215	0.08000	0.082		

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7485F.D
Date : 04-NOV-2011 21:22
Client ID: AR12424J2
Instrument: E2.i
Sample Info: AR12424J2,AR12424J2,,ar1242,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7485R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report
Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7485R.D
Lab Smp Id: AR12424J2 Client Smp ID: AR12424J2
Inj Date : 04-NOV-2011 21:22
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12424J2,AR12424J2,,ar1242.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 04-NOV-2011 21:22 Cal File: E2K7485R.D
Als bottle: 7 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

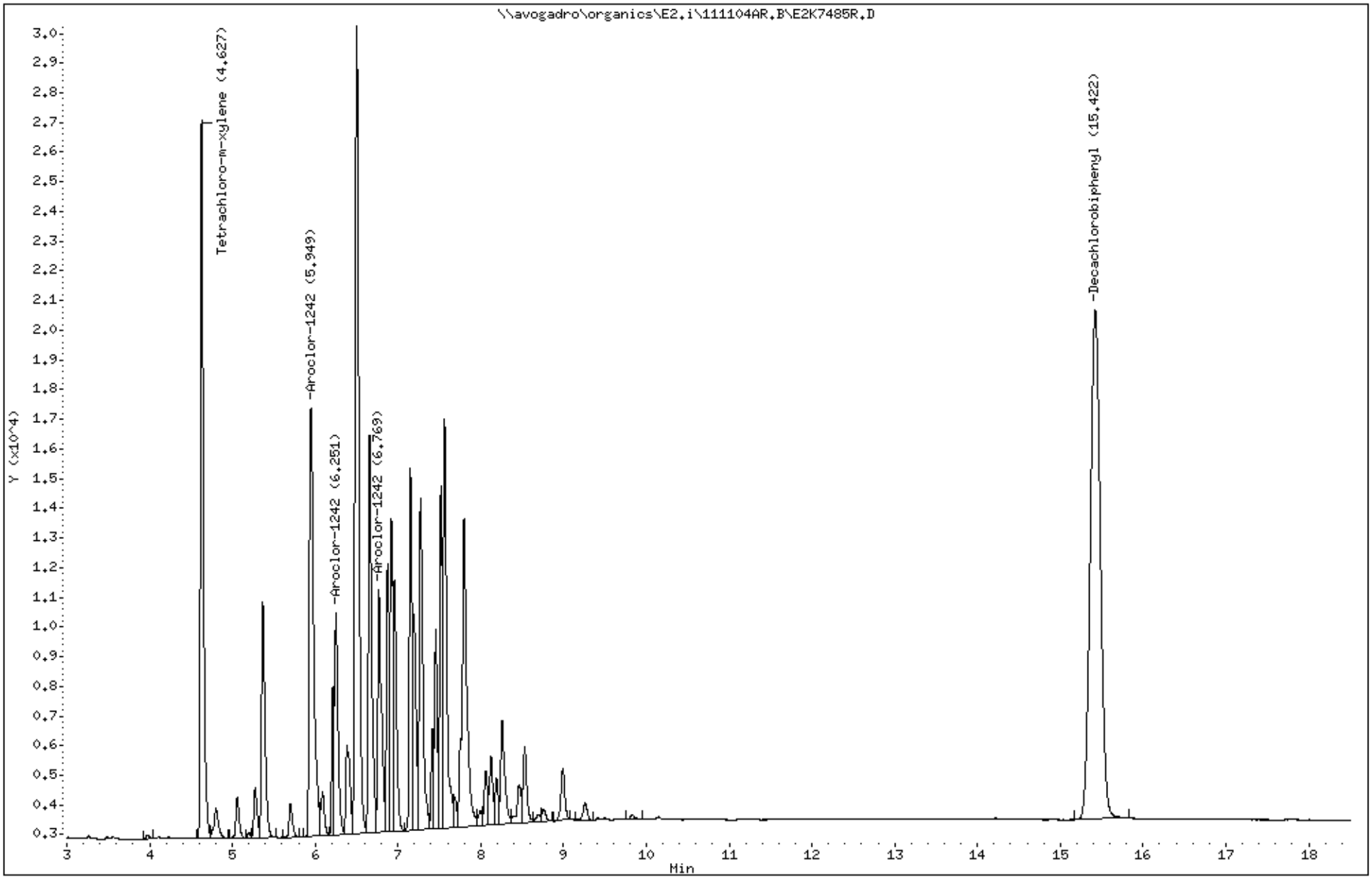
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.627	4.627	0.000	597554	0.04000	0.047			(a)
4 Aroclor-1242						CAS #: 53469-21-9		
5.949	5.948	0.001	543604	0.80000	0.79	80.00- 120.00	100.00	(a)
6.250	6.250	0.000	218350	0.80000	0.84	22.01- 62.01	40.17	
6.769	6.769	0.000	249481	0.80000	0.86	29.71- 69.71	45.89	
Average of Peak Amounts =					0.83000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.422	15.423	-0.001	1458586	0.08000	0.083			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7485R.D
Date : 04-NOV-2011 21:22
Client ID: AR12424J2
Instrument: E2.i
Sample Info: AR12424J2,AR12424J2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7486F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

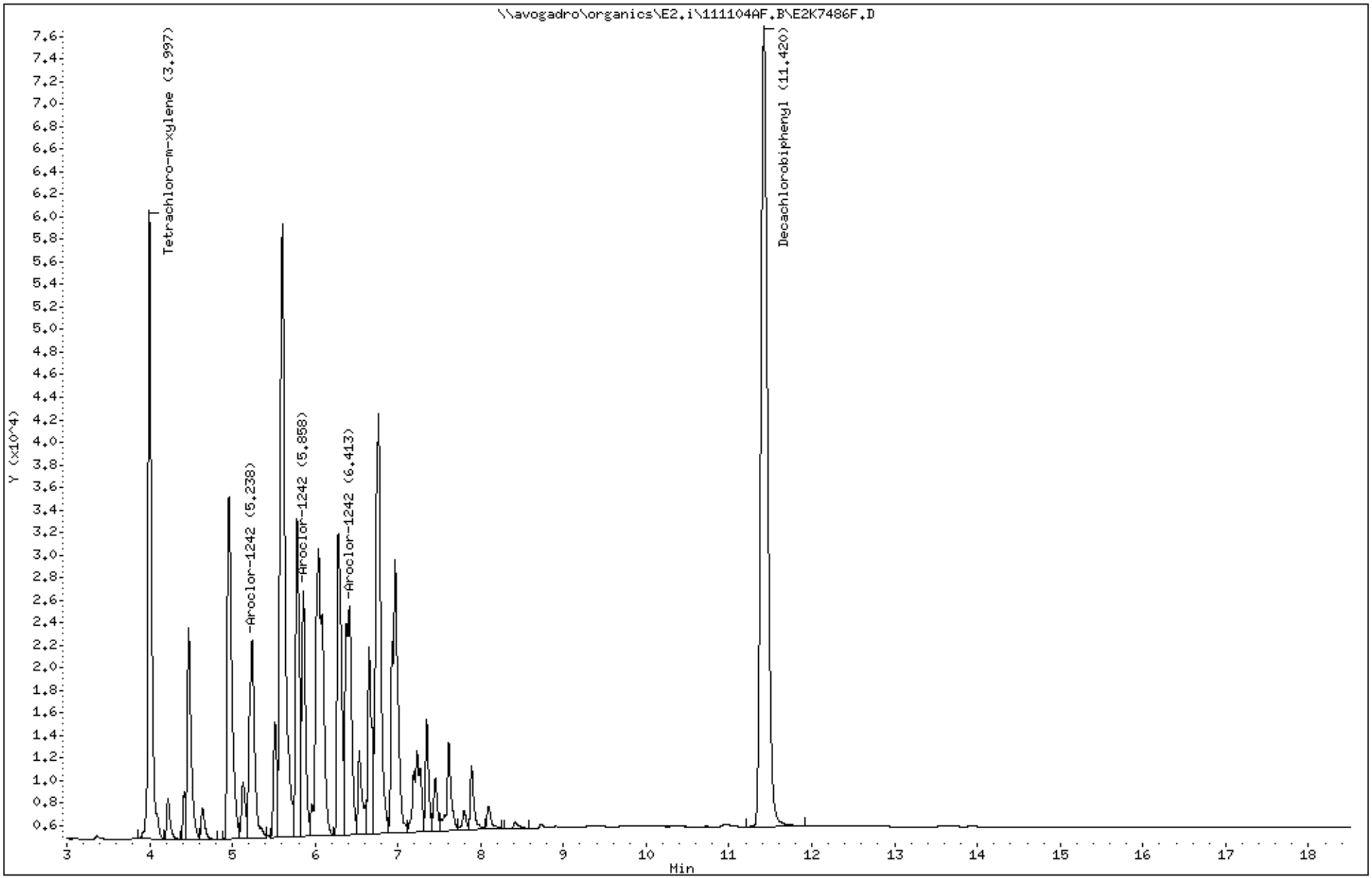
Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7486F.D
Lab Smp Id: AR12425J2 Client Smp ID: AR12425J2
Inj Date : 04-NOV-2011 21:43
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12425J2,AR12425J2,,ar1242.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 8 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
3.997	3.999	-0.002	1619653	0.08000	0.078			
6 Aroclor-1242						CAS #: 53469-21-9		
5.237	5.237	0.000	780090	1.60000	1.4	80.00- 120.00		100.00
5.858	5.858	0.000	642692	1.60000	1.5	62.39- 102.39		82.39
6.412	6.412	0.000	1066746	1.60000	1.4	116.75- 156.75		136.75
Average of Peak Amounts =					1.43333			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.420	11.417	0.003	3965418	0.16000	0.14			

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7486F.D
Date : 04-NOV-2011 21:43
Client ID: AR12425J2 Instrument: E2.i
Sample Info: AR12425J2,AR12425J2,,ar1242,sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPest Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7486R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

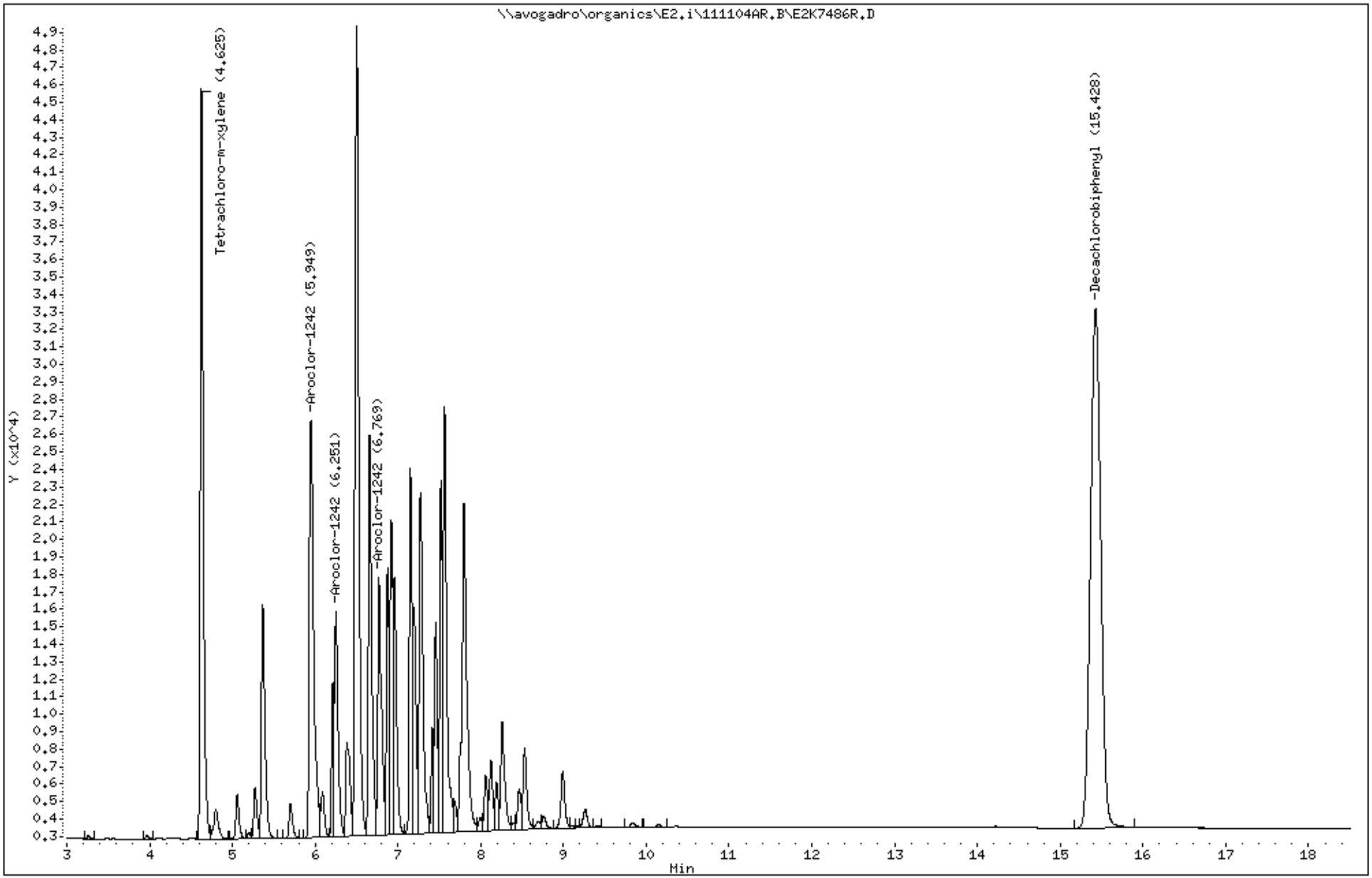
Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7486R.D
Lab Smp Id: AR12425J2 Client Smp ID: AR12425J2
Inj Date : 04-NOV-2011 21:43
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12425J2,AR12425J2,,ar1242.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 04-NOV-2011 21:43 Cal File: E2K7486R.D
Als bottle: 8 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.625	4.627	-0.002	1100411	0.08000	0.084			
4 Aroclor-1242						CAS #: 53469-21-9		
5.948	5.948	0.000	912331	1.60000	1.4	80.00- 120.00		100.00
6.250	6.250	0.000	383275	1.60000	1.5	22.01- 62.01		42.01
6.769	6.769	0.000	453551	1.60000	1.6	29.71- 69.71		49.71
		Average of Peak Amounts =			1.50000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.427	15.423	0.004	2566319	0.16000	0.15			

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7486R.D
Date : 04-NOV-2011 21:43
Client ID: AR12425J2 Instrument: E2.i
Sample Info: AR12425J2,AR12425J2,,ar1242,sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPestII Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7487F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7487F.D
Lab Smp Id: AR12481J2 Client Smp ID: AR12481J2
Inj Date : 04-NOV-2011 22:04
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12481J2,AR12481J2,,ar1248.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 9 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

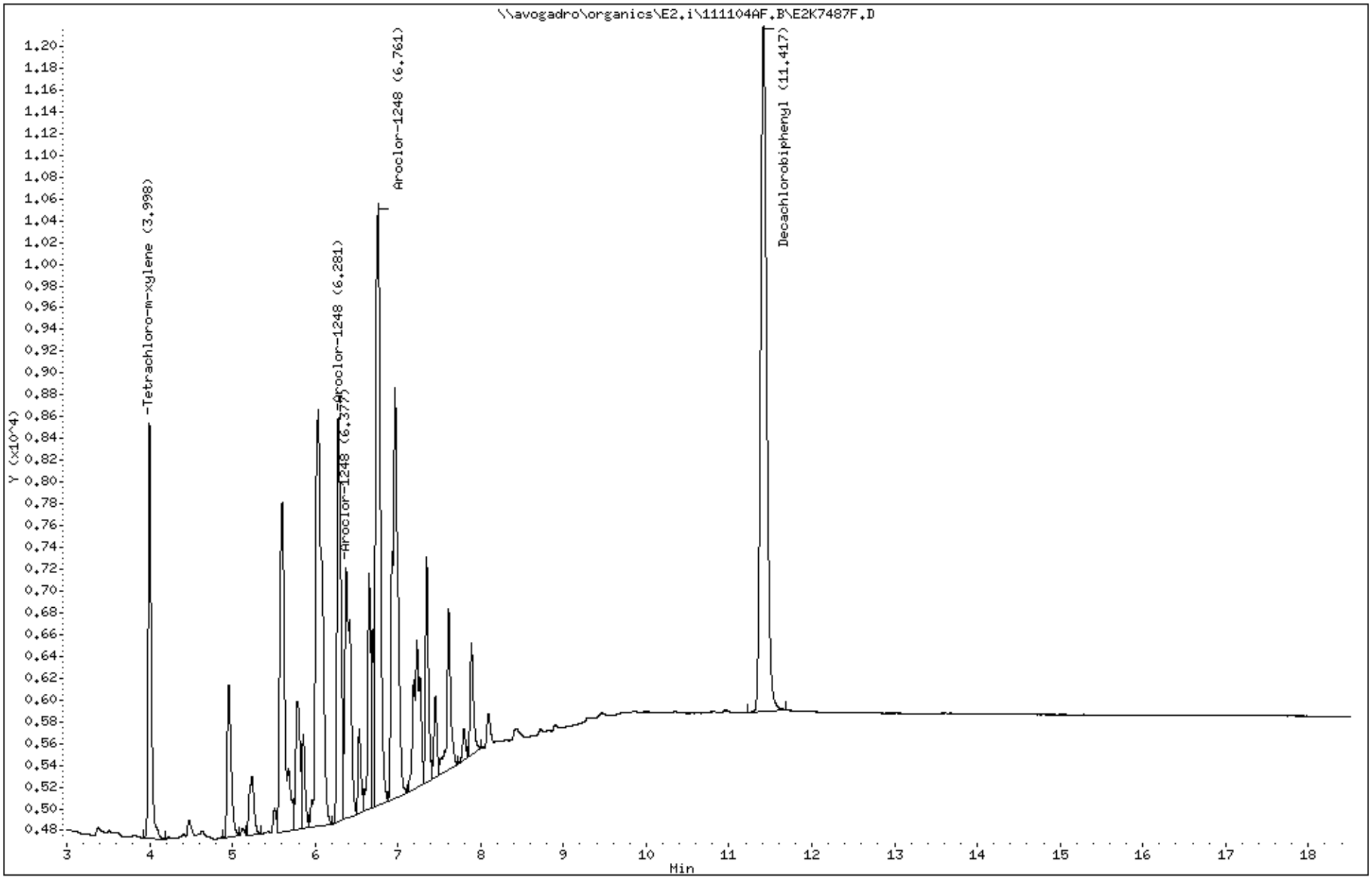
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
3.998	3.999	-0.001	95918	0.00500	0.0046			(a)
7 Aroclor-1248						CAS #: 12672-29-6		
6.280	6.280	0.000	122389	0.10000	0.11	80.00- 120.00	100.00	(a)
6.376	6.376	0.000	104863	0.10000	0.11	79.66- 119.66	85.68	
6.760	6.762	-0.002	223625	0.10000	0.11	164.53- 204.53	182.72	
Average of Peak Amounts =					0.11000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.416	11.417	-0.001	320773	0.01000	0.011			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7487F.D
Date : 04-NOV-2011 22:04
Client ID: AR12481J2
Instrument: E2.i
Sample Info: AR12481J2,AR12481J2,,ar1248,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7487R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7487R.D
Lab Smp Id: AR12481J2 Client Smp ID: AR12481J2
Inj Date : 04-NOV-2011 22:04
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12481J2,AR12481J2,,ar1248.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 04-NOV-2011 22:04 Cal File: E2K7487R.D
Als bottle: 9 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

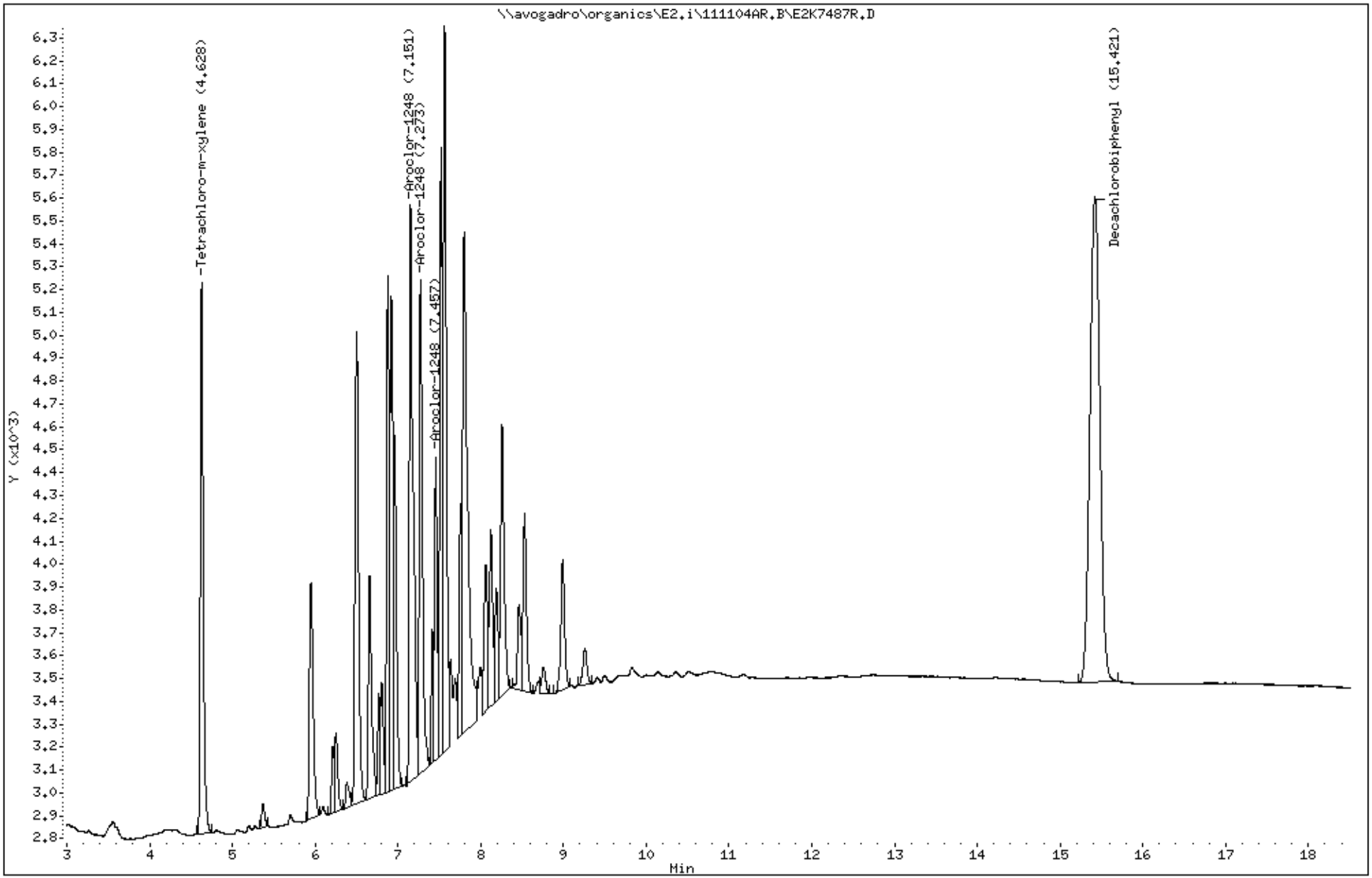
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.627	4.627	0.000	57813	0.00500	0.0044			(a)
5 Aroclor-1248						CAS #: 12672-29-6		
7.151	7.149	0.002	79924	0.10000	0.10	80.00- 120.00	100.00	(a)
7.272	7.271	0.001	59396	0.10000	0.099	62.28- 102.28	74.32	
7.457	7.455	0.002	30173	0.10000	0.10	20.69- 60.69	37.75	
Average of Peak Amounts =					0.09967			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.420	15.423	-0.003	177547	0.01000	0.010			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7487R.D
Date : 04-NOV-2011 22:04
Client ID: AR12481J2
Instrument: E2.i
Sample Info: AR12481J2,AR12481J2,,ar1248,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7489F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7489F.D
Lab Smp Id: AR12482J2 Client Smp ID: AR12482J2
Inj Date : 04-NOV-2011 22:46
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12482J2,AR12482J2,,ar1248.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 11 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

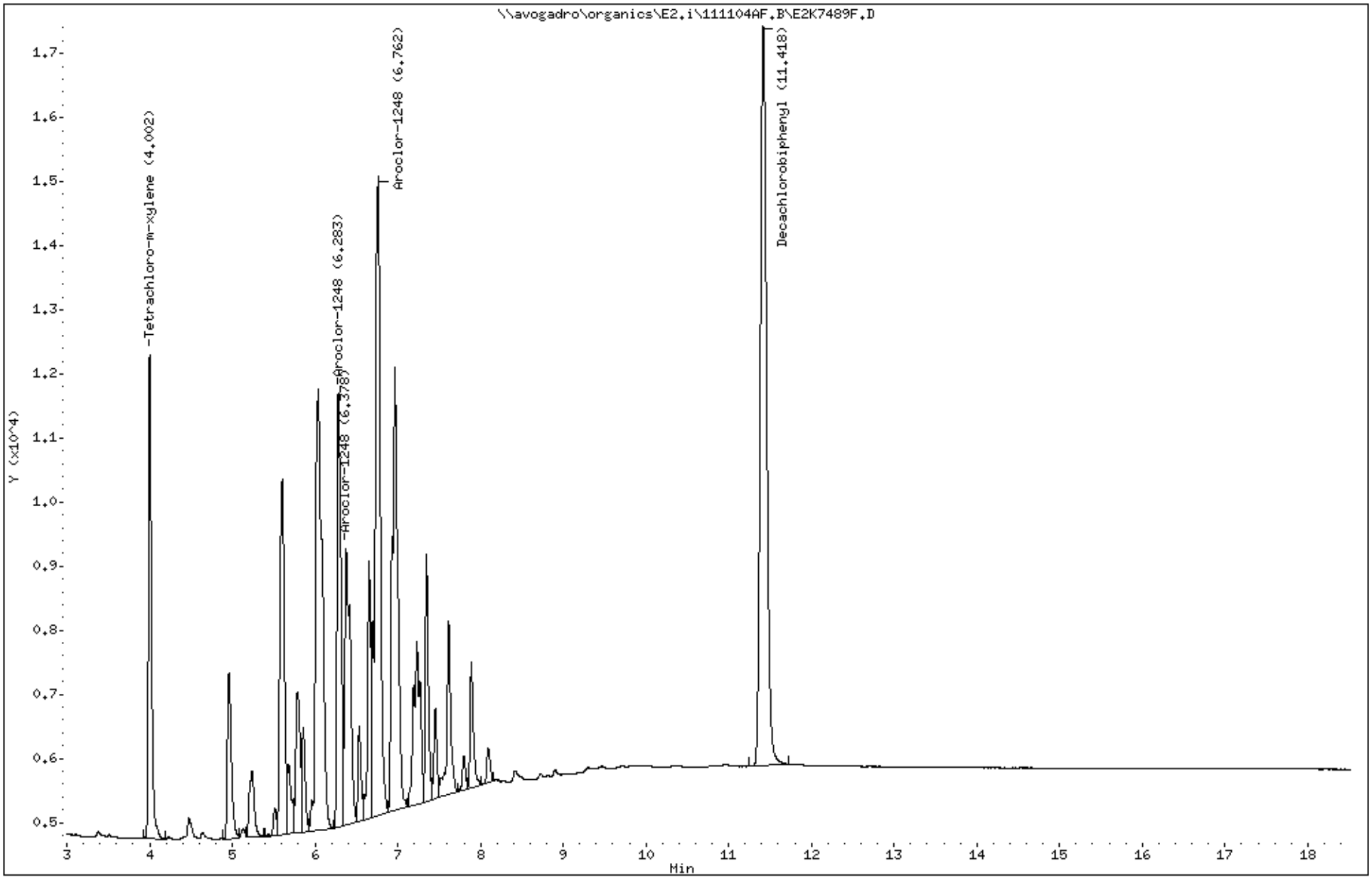
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.001	3.999	0.002	190934	0.01000	0.0092			(a)
7 Aroclor-1248					CAS #: 12672-29-6			
6.282	6.280	0.002	227267	0.20000	0.21	80.00- 120.00	100.00	(a)
6.378	6.376	0.002	199486	0.20000	0.20	79.66- 119.66	87.78	
6.761	6.762	-0.001	464536	0.20000	0.22	164.53- 204.53	204.40	
Average of Peak Amounts =					0.21000			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.418	11.417	0.001	600896	0.02000	0.021			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7489F.D
Date : 04-NOV-2011 22:46
Client ID: AR12482J2
Instrument: E2.i
Sample Info: AR12482J2,AR12482J2,,ar1248,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7489R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7489R.D
Lab Smp Id: AR12482J2 Client Smp ID: AR12482J2
Inj Date : 04-NOV-2011 22:46
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12482J2,AR12482J2,,ar1248.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 04-NOV-2011 22:46 Cal File: E2K7489R.D
Als bottle: 11 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

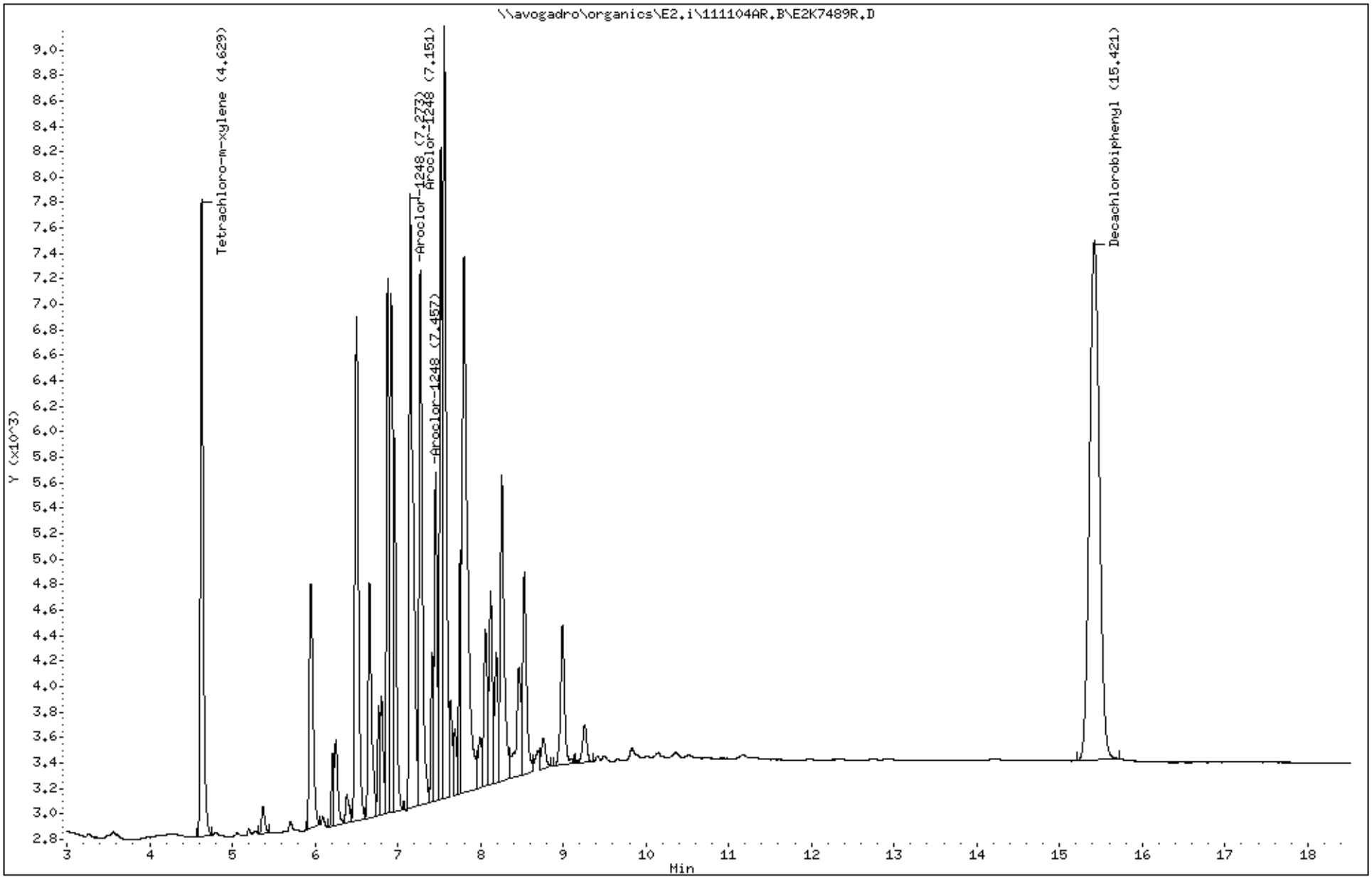
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.628	4.627	0.001	118224	0.01000	0.0091			(a)
5 Aroclor-1248						CAS #: 12672-29-6		
7.151	7.149	0.002	154885	0.20000	0.20	80.00- 120.00	100.00	(a)
7.272	7.271	0.001	118905	0.20000	0.20	62.28- 102.28	76.77	
7.457	7.455	0.002	59455	0.20000	0.20	20.69- 60.69	38.39	
Average of Peak Amounts =				0.20000				
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.421	15.423	-0.002	339380	0.02000	0.020			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7489R.D
Date : 04-NOV-2011 22:46
Client ID: AR12482J2
Instrument: E2.i
Sample Info: AR12482J2,AR12482J2,,ar1248,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7490F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7490F.D
Lab Smp Id: AR12483J2 Client Smp ID: AR12483J2
Inj Date : 04-NOV-2011 23:07
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12483J2,AR12483J2,,ar1248.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 12 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

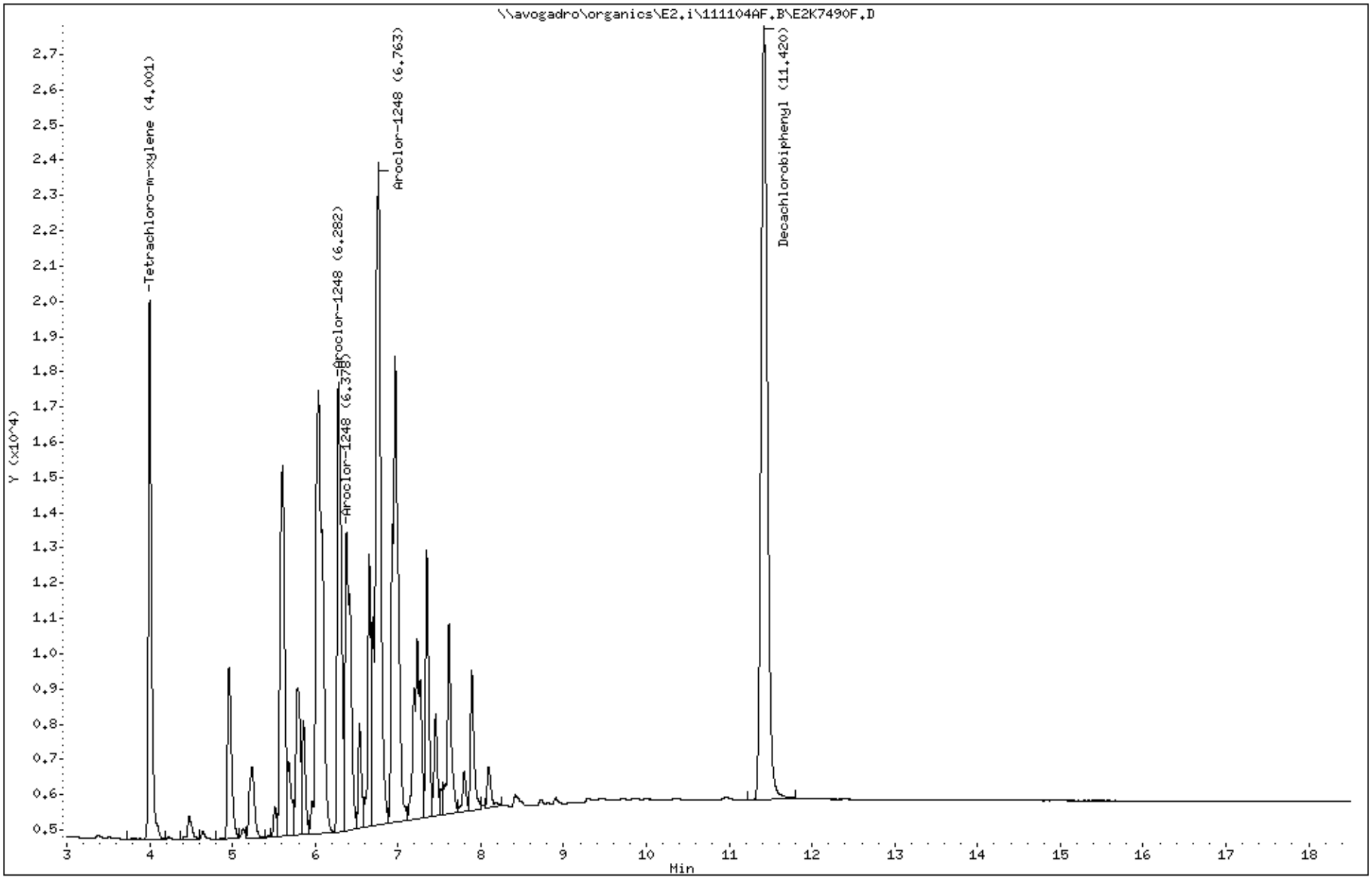
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.001	3.999	0.002	394001	0.02000	0.019			(a)
7 Aroclor-1248					CAS #: 12672-29-6			
6.282	6.280	0.002	432274	0.40000	0.40	80.00- 120.00	100.00	(a)
6.377	6.376	0.001	395189	0.40000	0.40	79.66- 119.66	91.42	
6.762	6.762	0.000	896313	0.40000	0.43	164.53- 204.53	207.35	
Average of Peak Amounts =					0.41000			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.420	11.417	0.003	1175181	0.04000	0.041			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7490F.D
Date : 04-NOV-2011 23:07
Client ID: AR12483J2
Instrument: E2.i
Sample Info: AR12483J2,AR12483J2,,ar1248,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7490R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7490R.D
Lab Smp Id: AR12483J2 Client Smp ID: AR12483J2
Inj Date : 04-NOV-2011 23:07
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12483J2,AR12483J2,,ar1248.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:00 Cal File: E2K7504R.D
Als bottle: 12 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

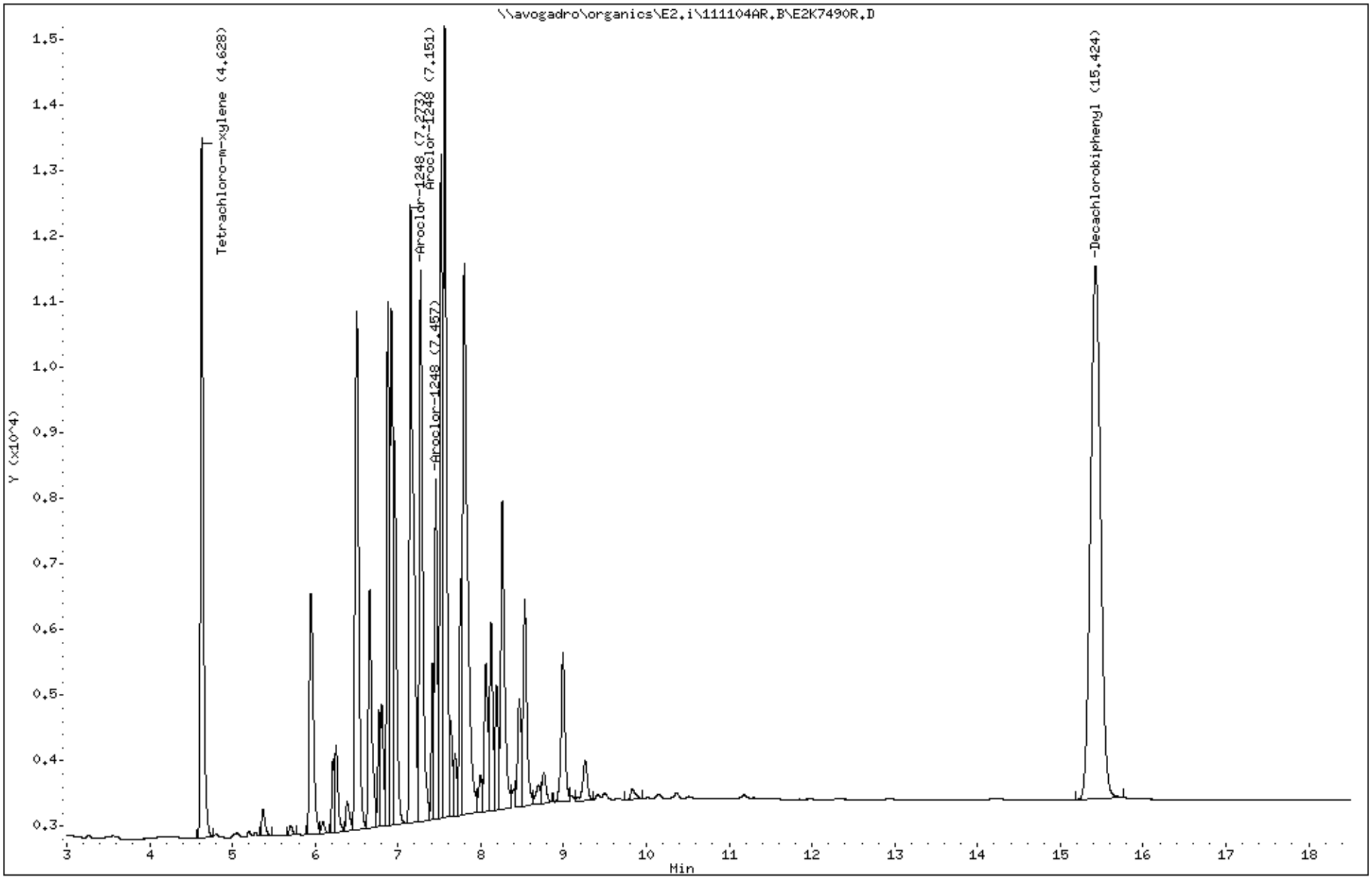
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.628	4.627	0.001	252067	0.02000	0.019			(a)
5 Aroclor-1248					CAS #: 12672-29-6			
7.151	7.149	0.002	307133	0.40000	0.39	80.00- 120.00	100.00	(a)
7.272	7.271	0.001	241034	0.40000	0.40	62.28- 102.28	78.48	
7.457	7.455	0.002	119839	0.40000	0.40	20.69- 60.69	39.02	
Average of Peak Amounts =					0.39667			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.423	15.423	0.000	688747	0.04000	0.040			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7490R.D
Date : 04-NOV-2011 23:07
Client ID: AR12483J2
Instrument: E2.i
Sample Info: AR12483J2,AR12483J2,,ar1248,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7491F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7491F.D
Lab Smp Id: AR12484J2 Client Smp ID: AR12484J2
Inj Date : 04-NOV-2011 23:28
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12484J2,AR12484J2,,ar1248.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 13 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

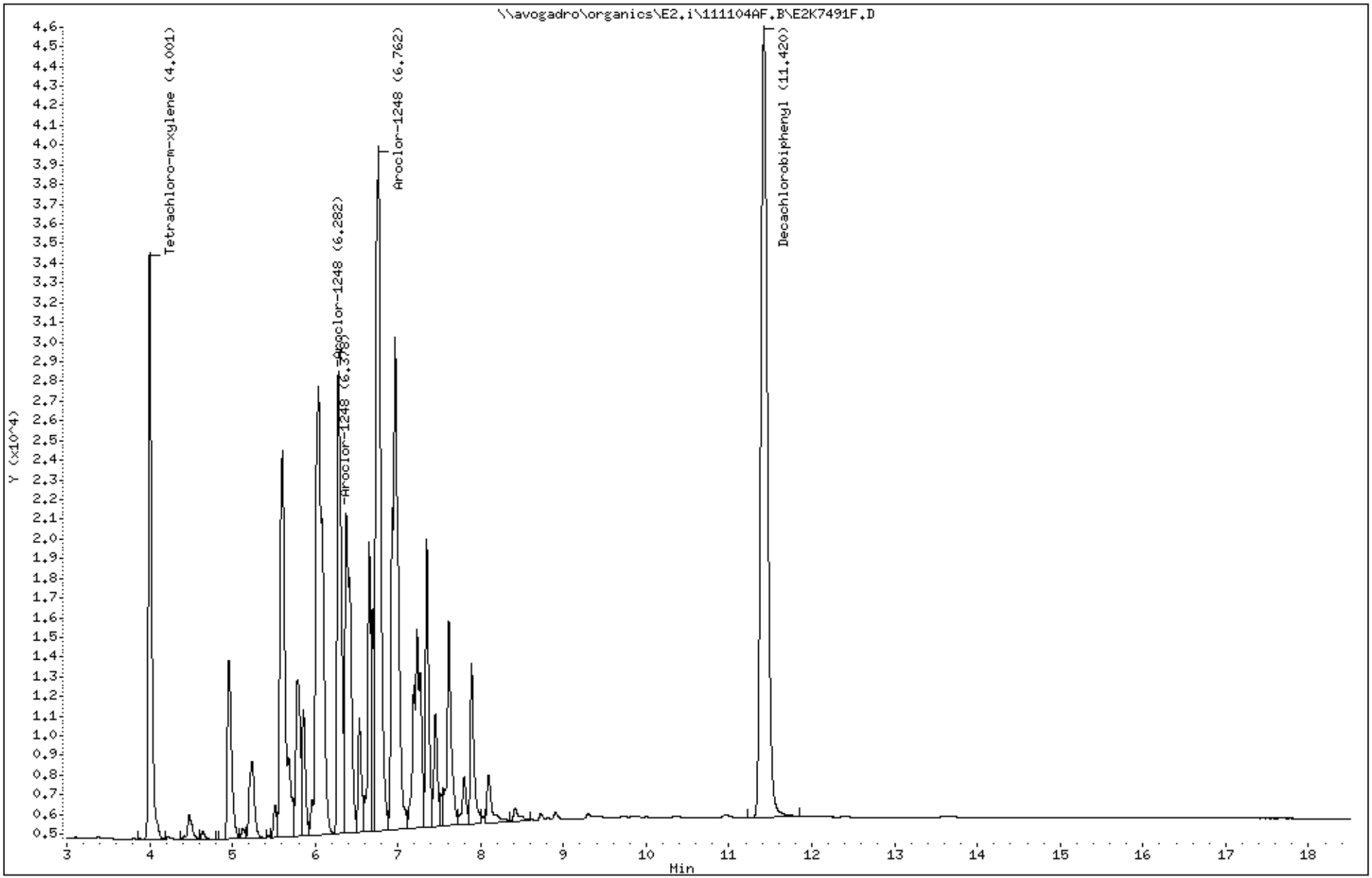
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT	AMOUNTS ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.001	3.999	0.002	796726	0.04000	0.038		(a)
7 Aroclor-1248					CAS #: 12672-29-6		
6.281	6.280	0.001	810908	0.80000	0.76	80.00- 120.00	100.00(a)
6.377	6.376	0.001	775167	0.80000	0.79	79.66- 119.66	95.59
6.762	6.762	0.000	1501097	0.80000	0.73	164.53- 204.53	185.11
Average of Peak Amounts =					0.76000		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.420	11.417	0.003	2210267	0.08000	0.077		

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7491F.D
Date : 04-NOV-2011 23:28
Client ID: AR12484J2
Instrument: E2.i
Sample Info: AR12484J2,AR12484J2,,ar1248,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7491R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7491R.D
Lab Smp Id: AR12484J2 Client Smp ID: AR12484J2
Inj Date : 04-NOV-2011 23:28
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12484J2,AR12484J2,,ar1248.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 04-NOV-2011 23:28 Cal File: E2K7491R.D
Als bottle: 13 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

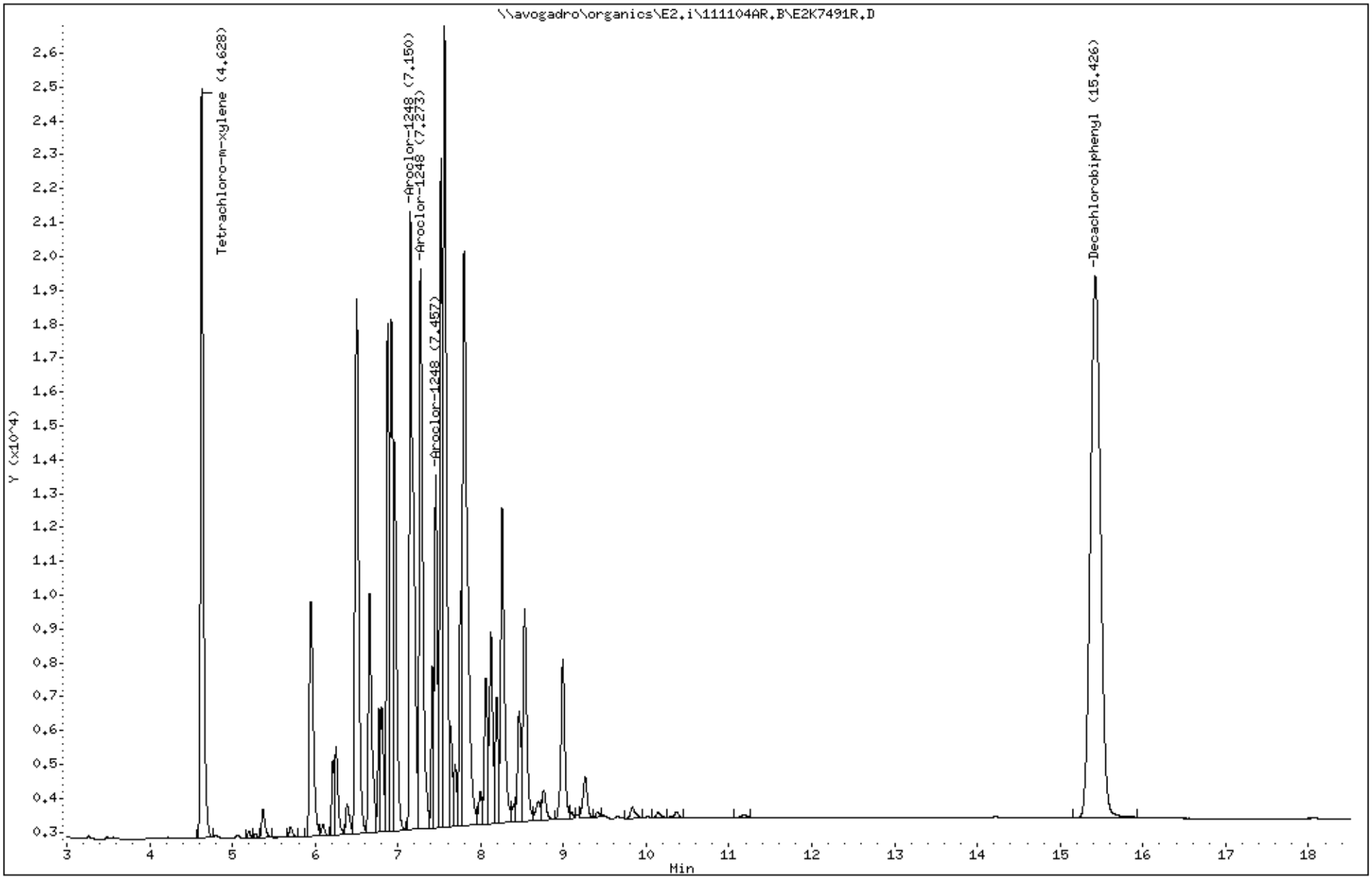
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
RT	EXP RT	DLT RT	RESPONSE					
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.627	4.627	0.000	536251	0.04000	0.042			(a)
5 Aroclor-1248					CAS #: 12672-29-6			
7.150	7.149	0.001	606282	0.80000	0.78	80.00- 120.00	100.00	(a)
7.272	7.271	0.001	486647	0.80000	0.81	62.28- 102.28	80.27	
7.456	7.455	0.001	240822	0.80000	0.80	20.69- 60.69	39.72	
Average of Peak Amounts =					0.79667			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.425	15.423	0.002	1368127	0.08000	0.080			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7491R.D
Date : 04-NOV-2011 23:28
Client ID: AR12484J2
Instrument: E2.i
Sample Info: AR12484J2,AR12484J2,,ar1248,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7492F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

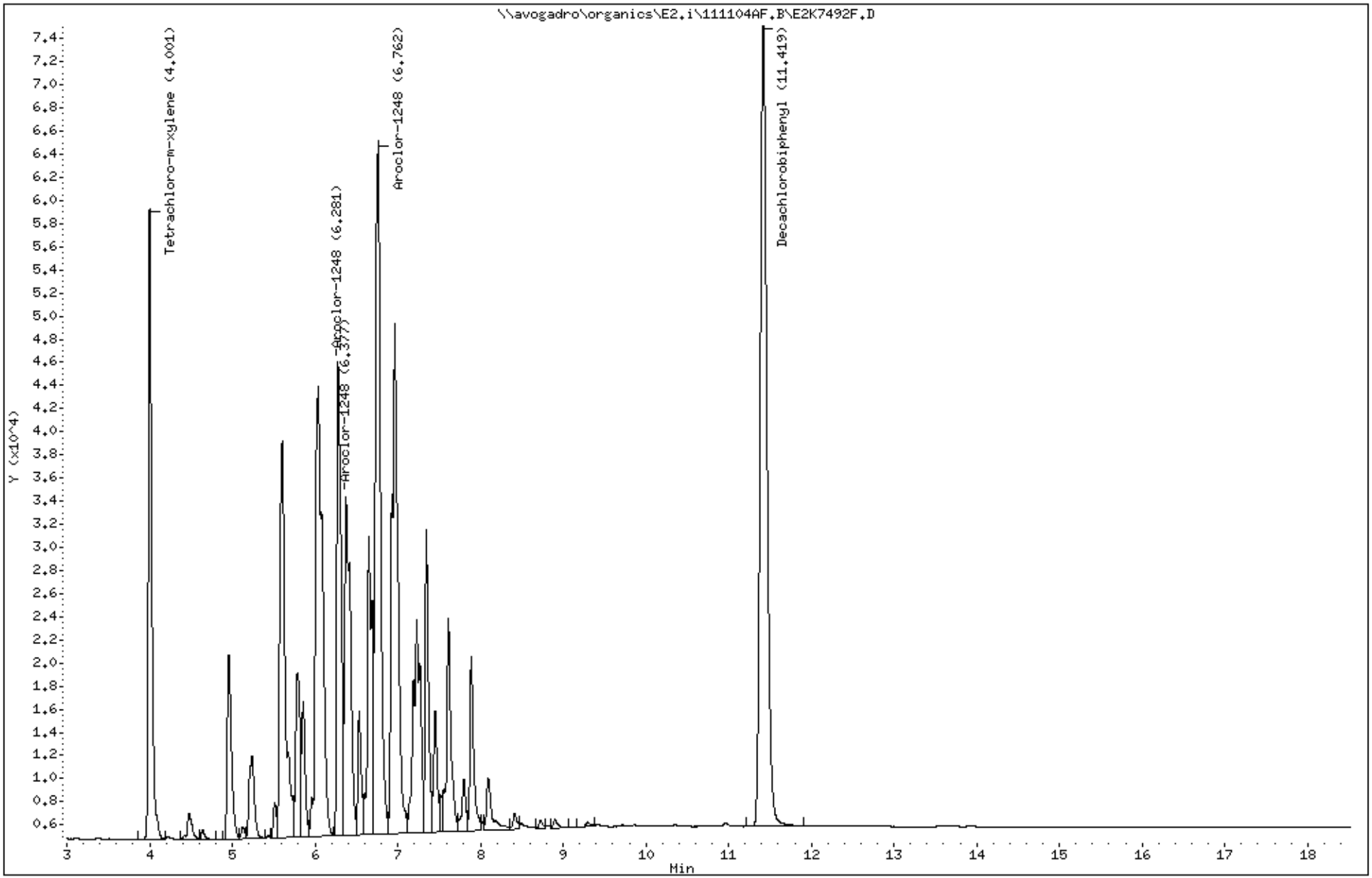
Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7492F.D
Lab Smp Id: AR12485J2 Client Smp ID: AR12485J2
Inj Date : 04-NOV-2011 23:49
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12485J2,AR12485J2,,ar1248.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 14 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.001	3.999	0.002	1512567	0.08000	0.073			
7 Aroclor-1248						CAS #: 12672-29-6		
6.280	6.280	0.000	1430710	1.60000	1.3	80.00- 120.00		100.00
6.376	6.376	0.000	1425796	1.60000	1.4	79.66- 119.66		99.66
6.762	6.762	0.000	2640030	1.60000	1.3	164.53- 204.53		184.53
Average of Peak Amounts =					1.33333			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.419	11.417	0.002	3879165	0.16000	0.14			

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7492F.D
Date : 04-NOV-2011 23:49
Client ID: AR12485J2
Instrument: E2.i
Sample Info: AR12485J2,AR12485J2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7492R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

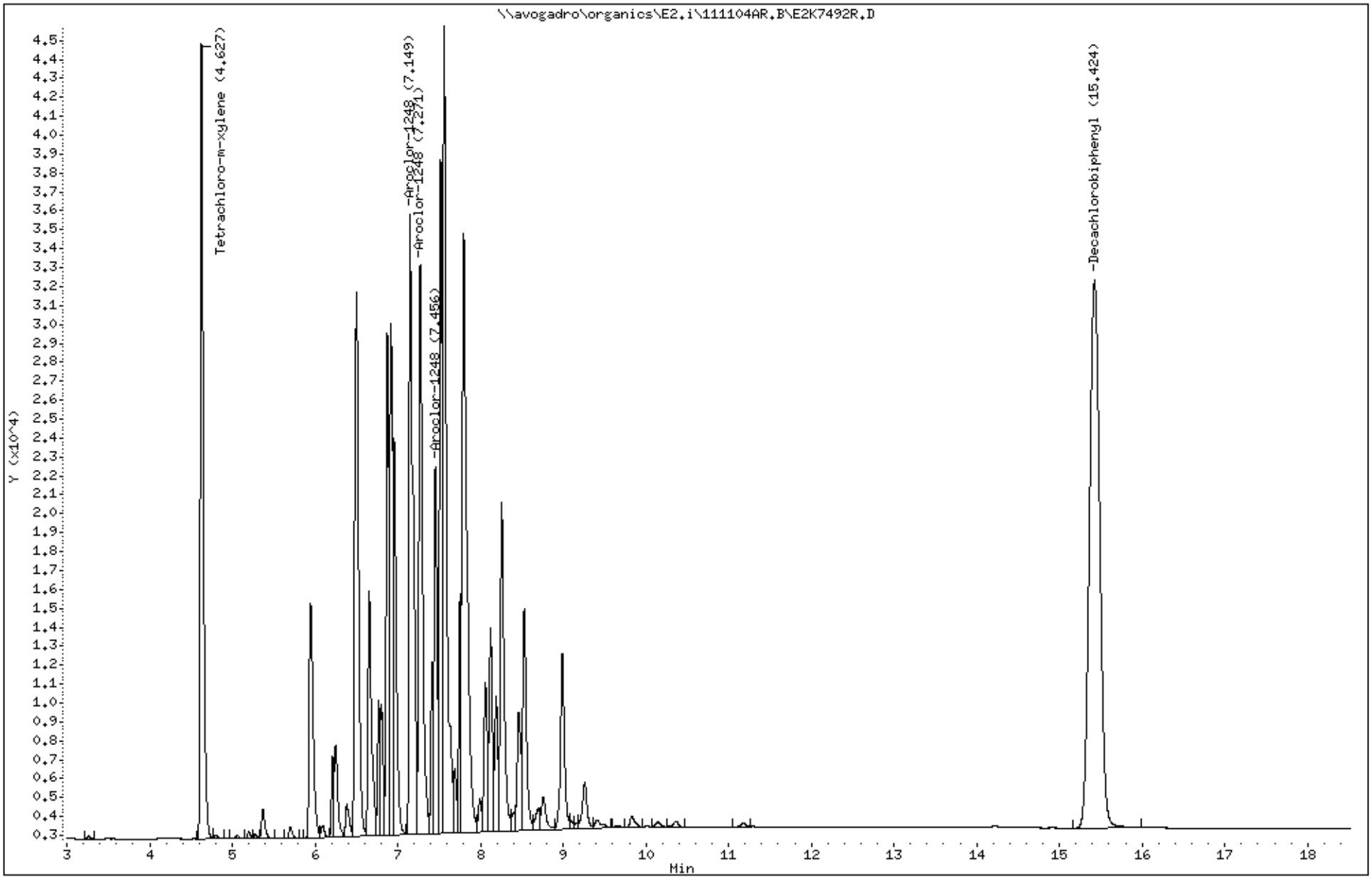
8080/8081PCB Quantitation Report
Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7492R.D
Lab Smp Id: AR12485J2 Client Smp ID: AR12485J2
Inj Date : 04-NOV-2011 23:49
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12485J2,AR12485J2,,ar1248.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 04-NOV-2011 23:49 Cal File: E2K7492R.D
Als bottle: 14 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.627	4.627	0.000	1066659	0.08000	0.085			
5 Aroclor-1248						CAS #: 12672-29-6		
7.149	7.149	0.000	1117802	1.60000	1.5	80.00- 120.00		100.00
7.271	7.271	0.000	919723	1.60000	1.5	62.28- 102.28		82.28
7.455	7.455	0.000	454843	1.60000	1.5	20.69- 60.69		40.69
Average of Peak Amounts =					1.50000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.423	15.423	0.000	2514626	0.16000	0.15			

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7492R.D
Date : 04-NOV-2011 23:49
Client ID: AR12485J2 Instrument: E2.i
Sample Info: AR12485J2,AR12485J2,,ar1248,sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPestII Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7493F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7493F.D
Lab Smp Id: AR12541J2 Client Smp ID: AR12541J2
Inj Date : 05-NOV-2011 00:10
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12541J2,AR12541J2,,ar1254.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 15 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

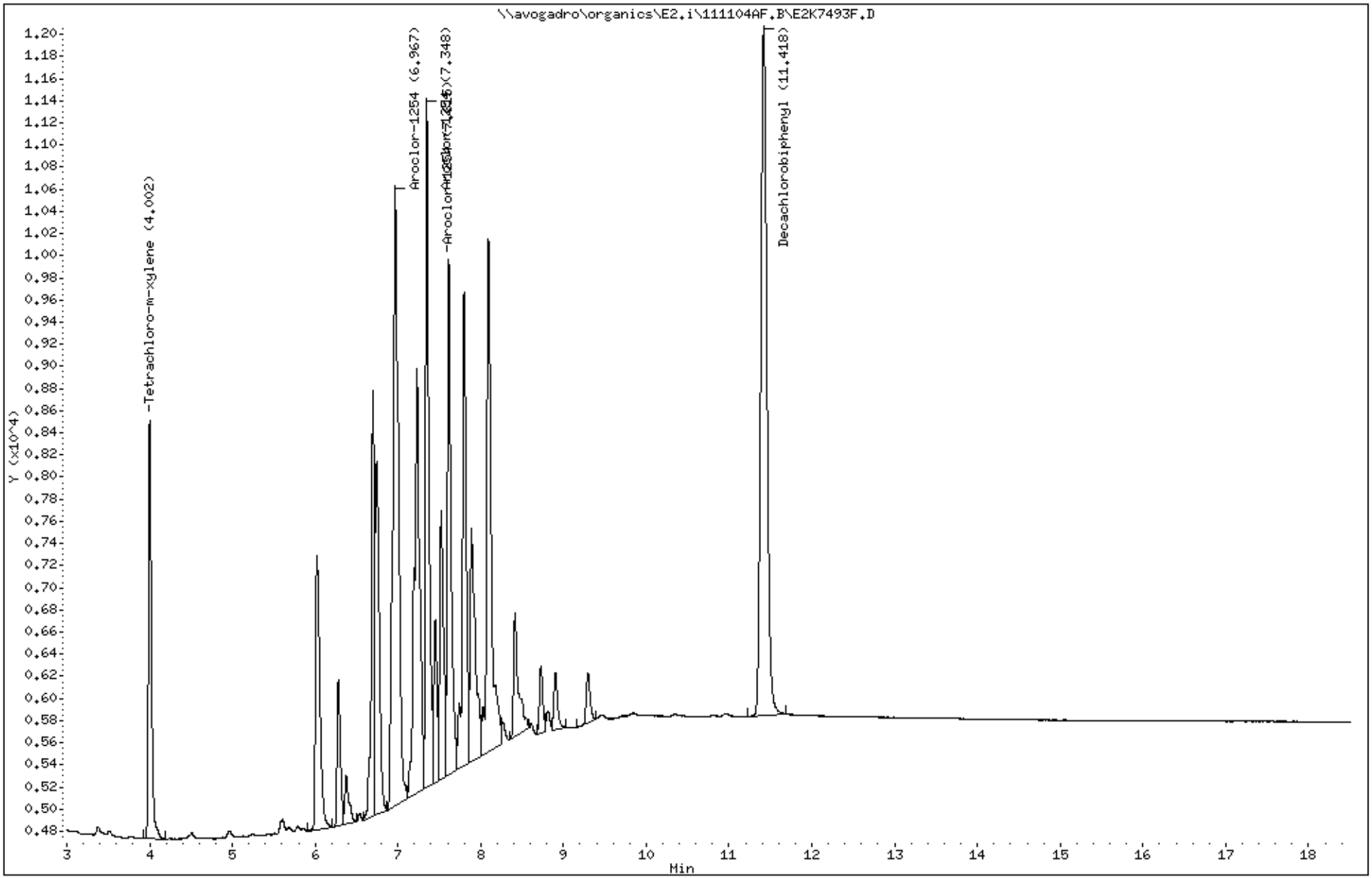
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.001	3.999	0.002	95318	0.00500	0.0046			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.417	11.417	0.000	317163	0.01000	0.011			(a)
8 Aroclor-1254						CAS #: 11097-69-1		
6.966	6.963	0.003	261120	0.10000	0.11	80.00- 120.00	100.00	(a)
7.348	7.345	0.003	174033	0.10000	0.11	53.39- 93.39	66.65	
7.615	7.612	0.003	142298	0.10000	0.11	39.96- 79.96	54.50	
Average of Peak Amounts =					0.11000			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7493F.D
Date : 05-NOV-2011 00:10
Client ID: AR12541J2 Instrument: E2.i
Sample Info: AR12541J2,AR12541J2,,ar1254,sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPest Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7493R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7493R.D
Lab Smp Id: AR12541J2 Client Smp ID: AR12541J2
Inj Date : 05-NOV-2011 00:10
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12541J2,AR12541J2,,ar1254.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 00:10 Cal File: E2K7493R.D
Als bottle: 15 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

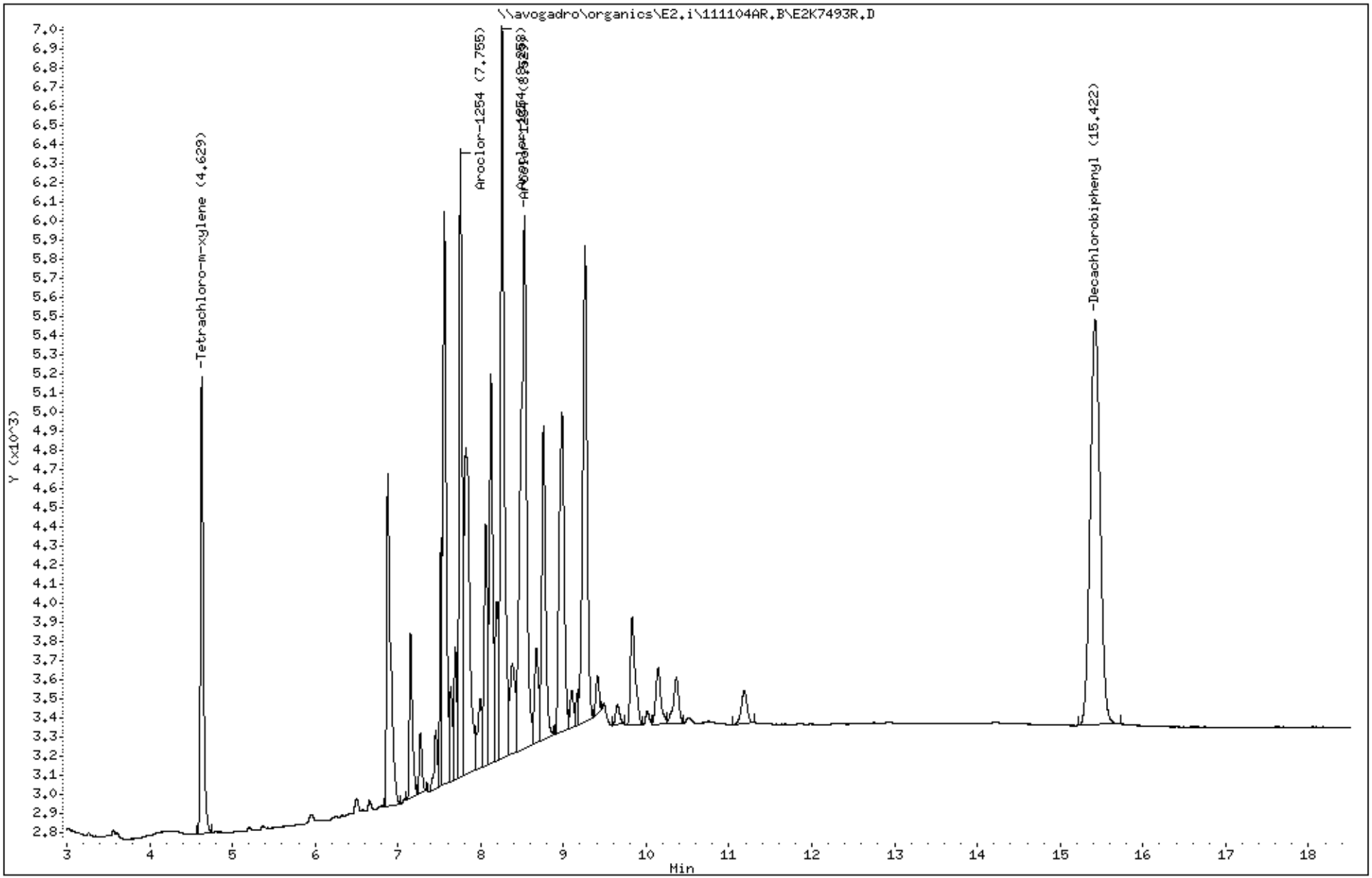
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.628	4.627	0.001	57711	0.00500	0.0046			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.422	15.423	-0.001	176170	0.01000	0.010			(a)
7 Aroclor-1254						CAS #: 11097-69-1		
7.754	7.752	0.002	85307	0.10000	0.10	80.00- 120.00	100.00	(a)
8.257	8.255	0.002	121647	0.10000	0.10	142.09- 182.09	142.60	
8.528	8.527	0.001	136834	0.10000	0.10	163.62- 203.62	160.40	
Average of Peak Amounts =				0.10000				

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7493R.D
Date : 05-NOV-2011 00:10
Client ID: AR12541J2
Instrument: E2.i
Sample Info: AR12541J2,AR12541J2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7495F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7495F.D
Lab Smp Id: AR12542J2 Client Smp ID: AR12542J2
Inj Date : 05-NOV-2011 00:52
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12542J2,AR12542J2,,ar1254.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 17 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

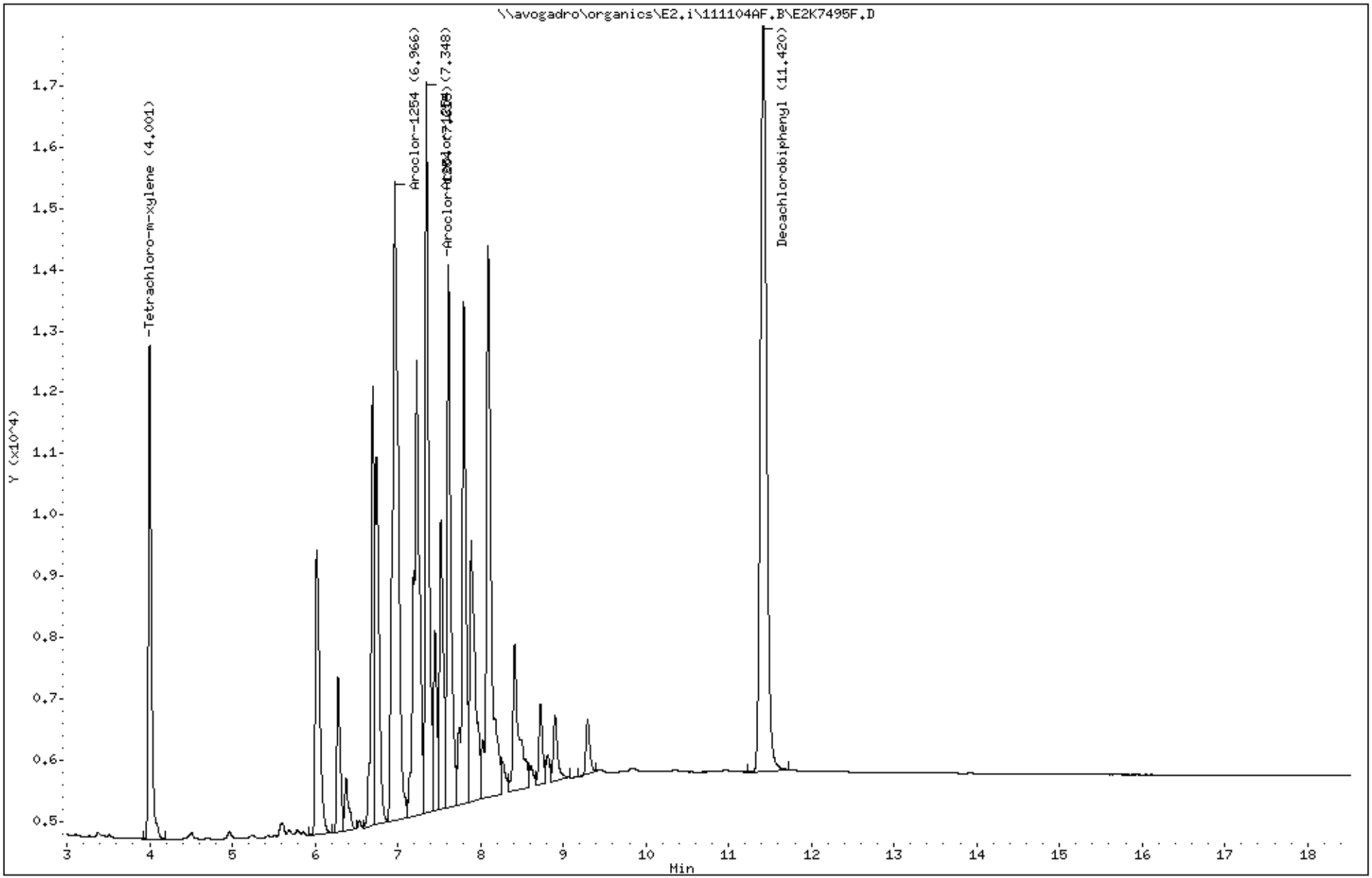
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.000	3.999	0.001	204064	0.01000	0.0098			(a)
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.419	11.417	0.002	638484	0.02000	0.022			(a)
8 Aroclor-1254					CAS #: 11097-69-1			
6.965	6.963	0.002	499635	0.20000	0.22	80.00- 120.00	100.00	(a)
7.347	7.345	0.002	341703	0.20000	0.21	53.39- 93.39	68.39	
7.614	7.612	0.002	281833	0.20000	0.22	39.96- 79.96	56.41	
Average of Peak Amounts =					0.21667			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7495F.D
Date : 05-NOV-2011 00:52
Client ID: AR12542J2
Instrument: E2.i
Sample Info: AR12542J2,AR12542J2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7495R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7495R.D
Lab Smp Id: AR12542J2 Client Smp ID: AR12542J2
Inj Date : 05-NOV-2011 00:52
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12542J2,AR12542J2,,ar1254.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 00:52 Cal File: E2K7495R.D
Als bottle: 17 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

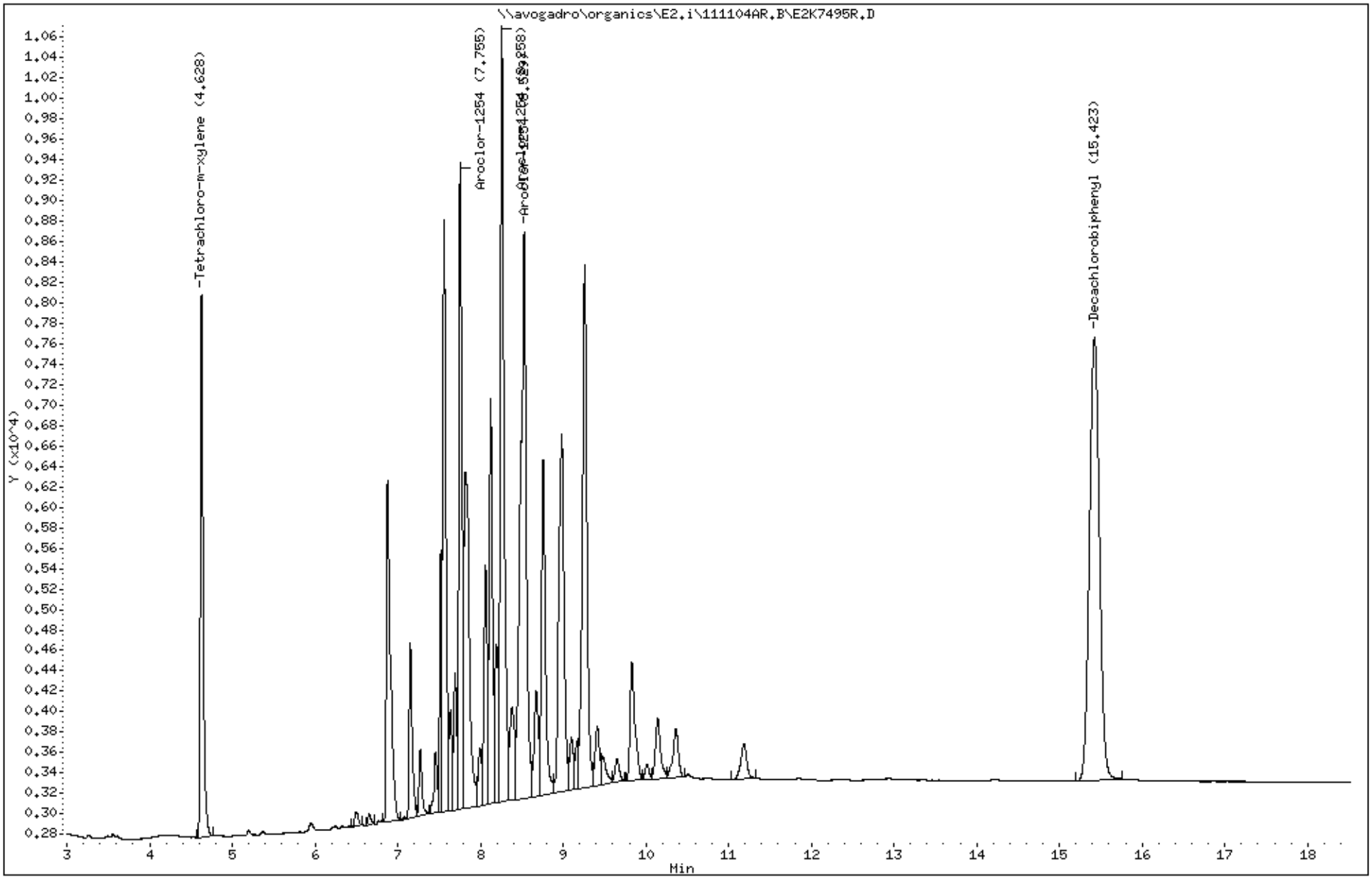
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.627	4.627	0.000	126509	0.01000	0.0100			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.423	15.423	0.000	362203	0.02000	0.021			(a)
7 Aroclor-1254						CAS #: 11097-69-1		
7.754	7.752	0.002	162846	0.20000	0.20	80.00- 120.00	100.00	(a)
8.257	8.255	0.002	236901	0.20000	0.20	142.09- 182.09	145.47	
8.529	8.527	0.002	271231	0.20000	0.20	163.62- 203.62	166.56	
Average of Peak Amounts =				0.20000				

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7495R.D
Date : 05-NOV-2011 00:52
Client ID: AR12542J2
Instrument: E2.i
Sample Info: AR12542J2,AR12542J2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7496F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7496F.D
Lab Smp Id: AR12543J2 Client Smp ID: AR12543J2
Inj Date : 05-NOV-2011 01:13
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12543J2,AR12543J2,,ar1254.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 18 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

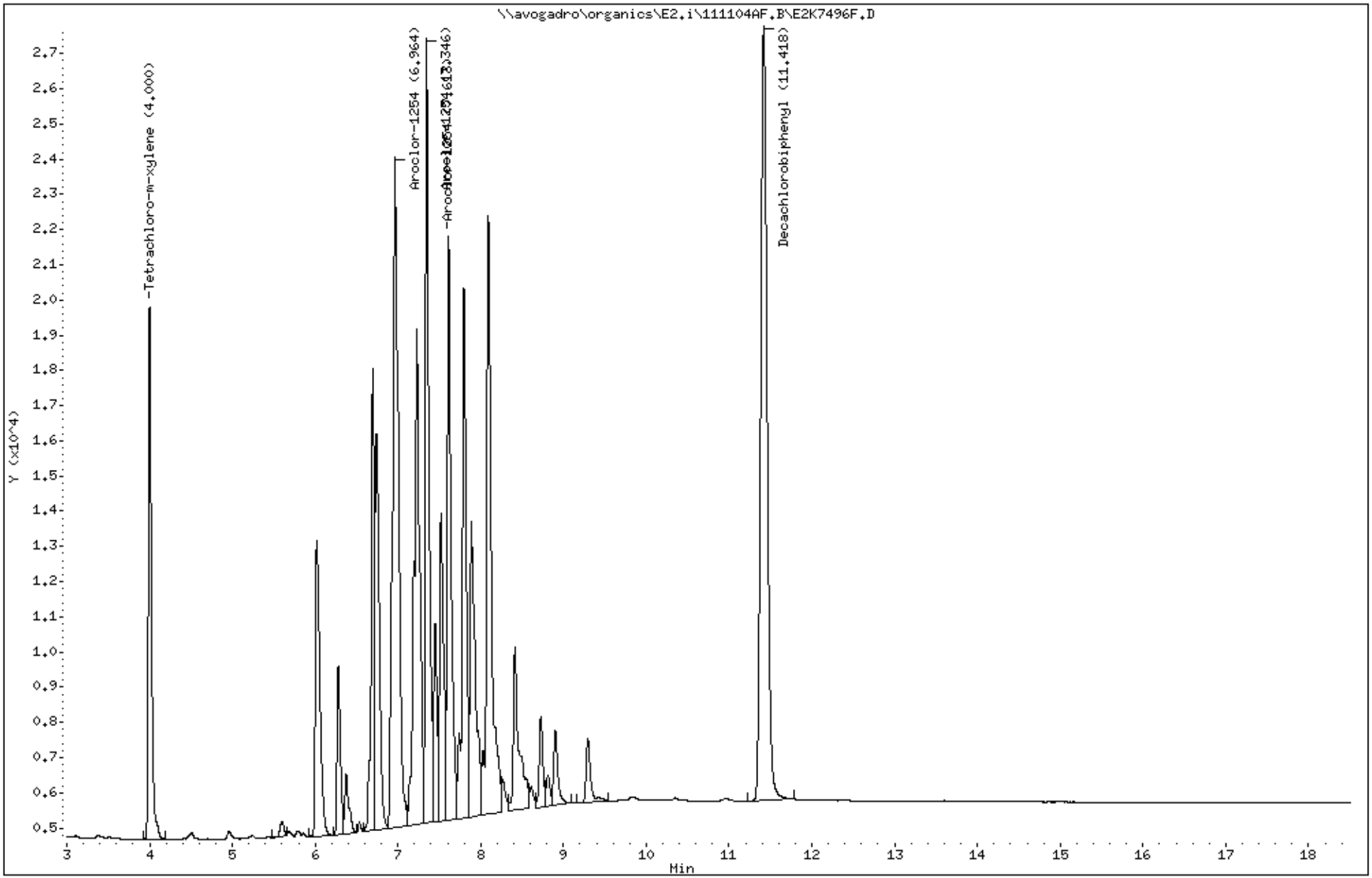
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.000	3.999	0.001	390859	0.02000	0.019			(a)
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.418	11.417	0.001	1181173	0.04000	0.041			(a)
8 Aroclor-1254					CAS #: 11097-69-1			
6.964	6.963	0.001	928403	0.40000	0.41	80.00- 120.00	100.00	(a)
7.346	7.345	0.001	652570	0.40000	0.41	53.39- 93.39	70.29	
7.613	7.612	0.001	537112	0.40000	0.41	39.96- 79.96	57.85	
Average of Peak Amounts =					0.41000			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7496F.D
Date : 05-NOV-2011 01:13
Client ID: AR12543J2
Instrument: E2.i
Sample Info: AR12543J2,AR12543J2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7496R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7496R.D
Lab Smp Id: AR12543J2 Client Smp ID: AR12543J2
Inj Date : 05-NOV-2011 01:13
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12543J2,AR12543J2,,ar1254.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:00 Cal File: E2K7504R.D
Als bottle: 18 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

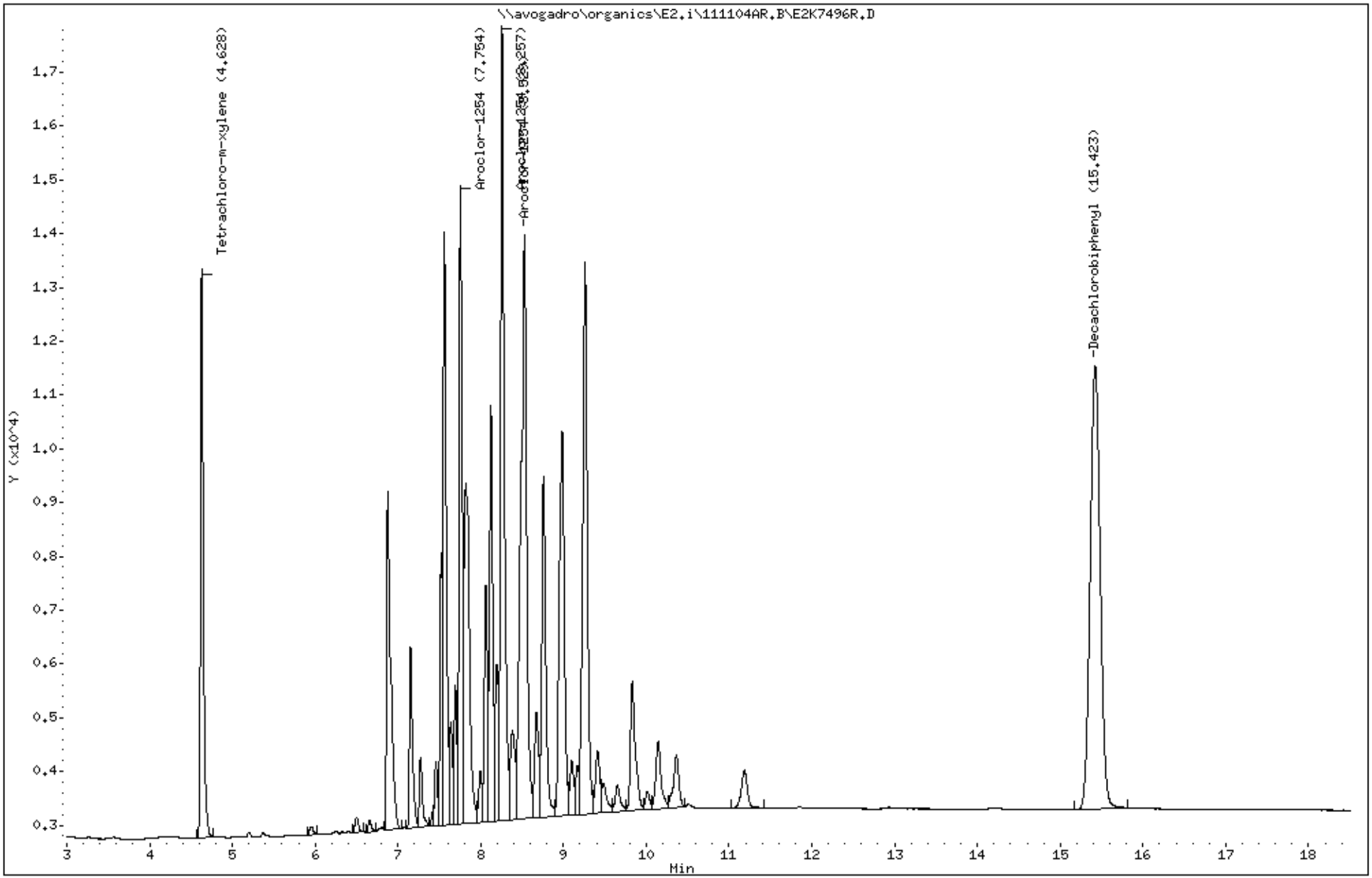
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.628	4.627	0.001	250938	0.02000	0.020			(a)
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.422	15.423	-0.001	693252	0.04000	0.040			(a)
7 Aroclor-1254					CAS #: 11097-69-1			
7.754	7.752	0.002	307764	0.40000	0.38	80.00- 120.00	100.00	(a)
8.257	8.255	0.002	461884	0.40000	0.39	142.09- 182.09	150.08	
8.528	8.527	0.001	527664	0.40000	0.39	163.62- 203.62	171.45	
Average of Peak Amounts =					0.38667			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7496R.D
Date : 05-NOV-2011 01:13
Client ID: AR12543J2 Instrument: E2.i
Sample Info: AR12543J2,AR12543J2,,ar1254.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPestII Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7497F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7497F.D
Lab Smp Id: AR12544J2 Client Smp ID: AR12544J2
Inj Date : 05-NOV-2011 01:34
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12544J2,AR12544J2,,ar1254.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 19 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

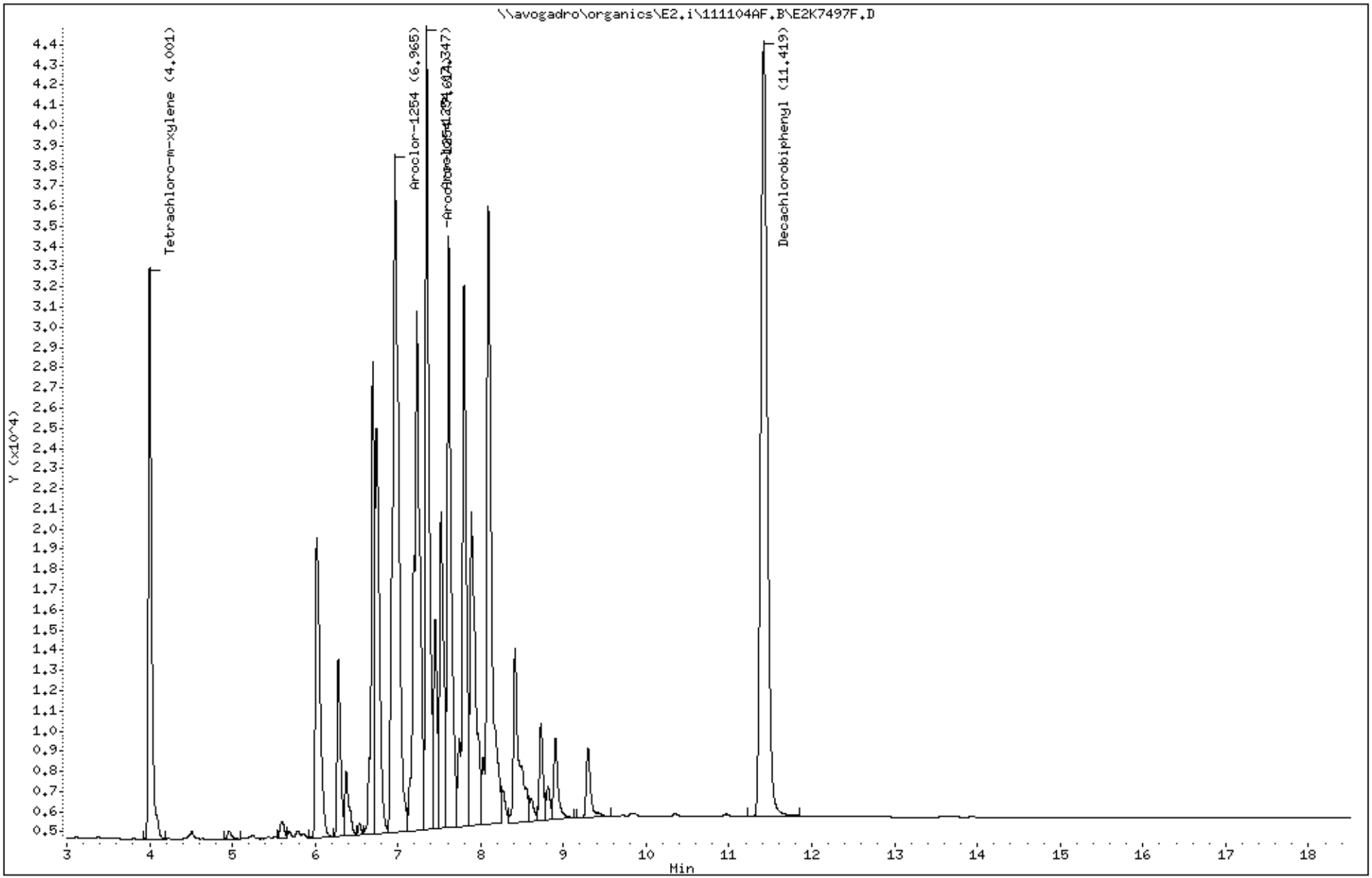
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.000	3.999	0.001	767319	0.04000	0.037			(a)
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.418	11.417	0.001	2115345	0.08000	0.074			
8 Aroclor-1254					CAS #: 11097-69-1			
6.964	6.963	0.001	1673135	0.80000	0.73	80.00- 120.00	100.00(a)	
7.346	7.345	0.001	1196534	0.80000	0.75	53.39- 93.39	71.51	
7.613	7.612	0.001	970817	0.80000	0.74	39.96- 79.96	58.02	
Average of Peak Amounts =					0.74000			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7497F.D
Date : 05-NOV-2011 01:34
Client ID: AR12544J2
Instrument: E2.i
Sample Info: AR12544J2,AR12544J2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7497R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report
Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7497R.D
Lab Smp Id: AR12544J2 Client Smp ID: AR12544J2
Inj Date : 05-NOV-2011 01:34
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12544J2,AR12544J2,,ar1254.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 01:34 Cal File: E2K7497R.D
Als bottle: 19 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

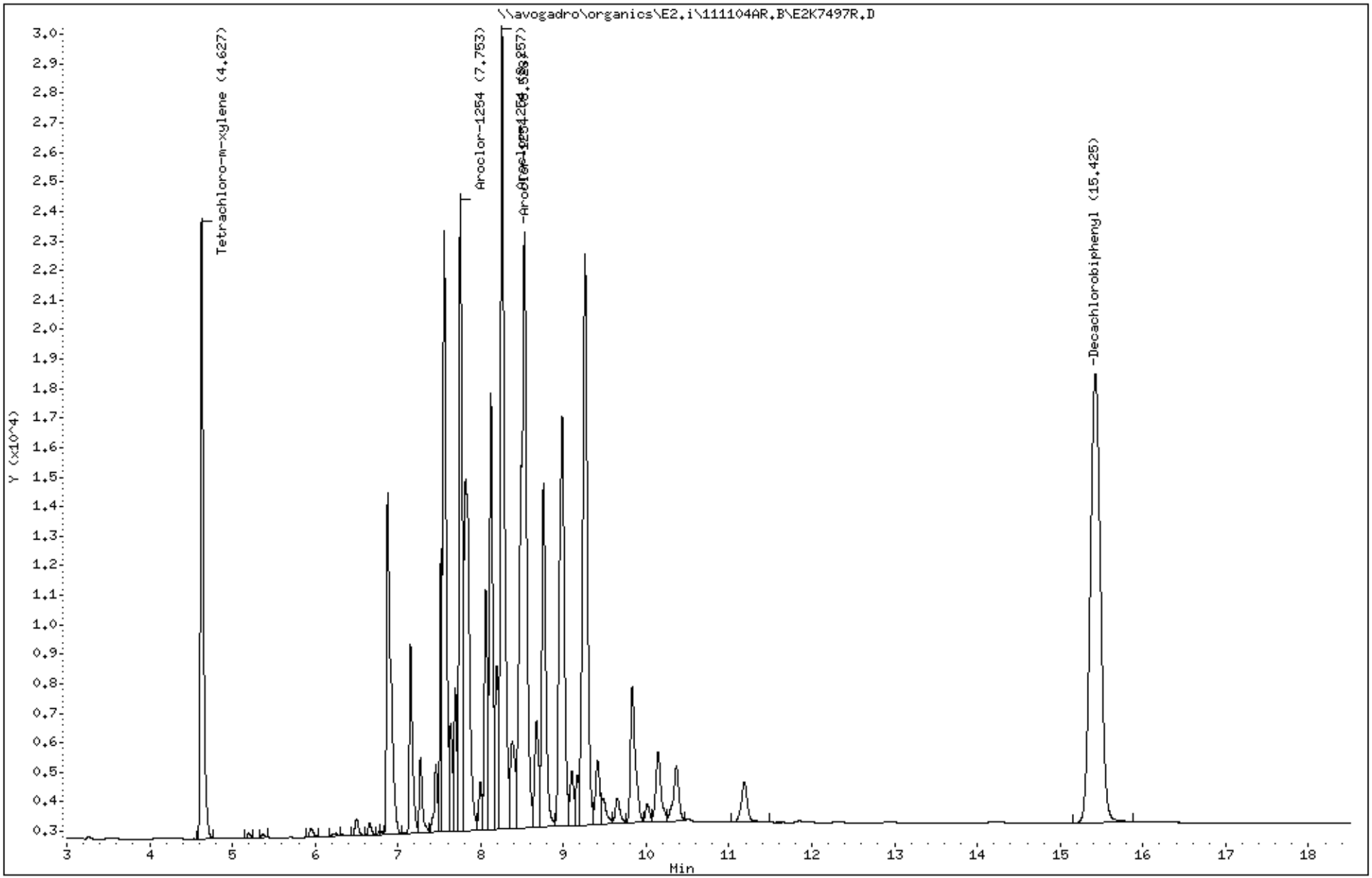
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.627	4.627	0.000	514813	0.04000	0.041			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.424	15.423	0.001	1299597	0.08000	0.076			
7 Aroclor-1254						CAS #: 11097-69-1		
7.753	7.752	0.001	562307	0.80000	0.72	80.00- 120.00	100.00	(a)
8.256	8.255	0.001	872826	0.80000	0.75	142.09- 182.09	155.22	
8.528	8.527	0.001	982131	0.80000	0.74	163.62- 203.62	174.66	
Average of Peak Amounts =					0.73667			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7497R.D
Date : 05-NOV-2011 01:34
Client ID: AR12544J2 Instrument: E2.i
Sample Info: AR12544J2,AR12544J2,,ar1254.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPestII Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7498F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

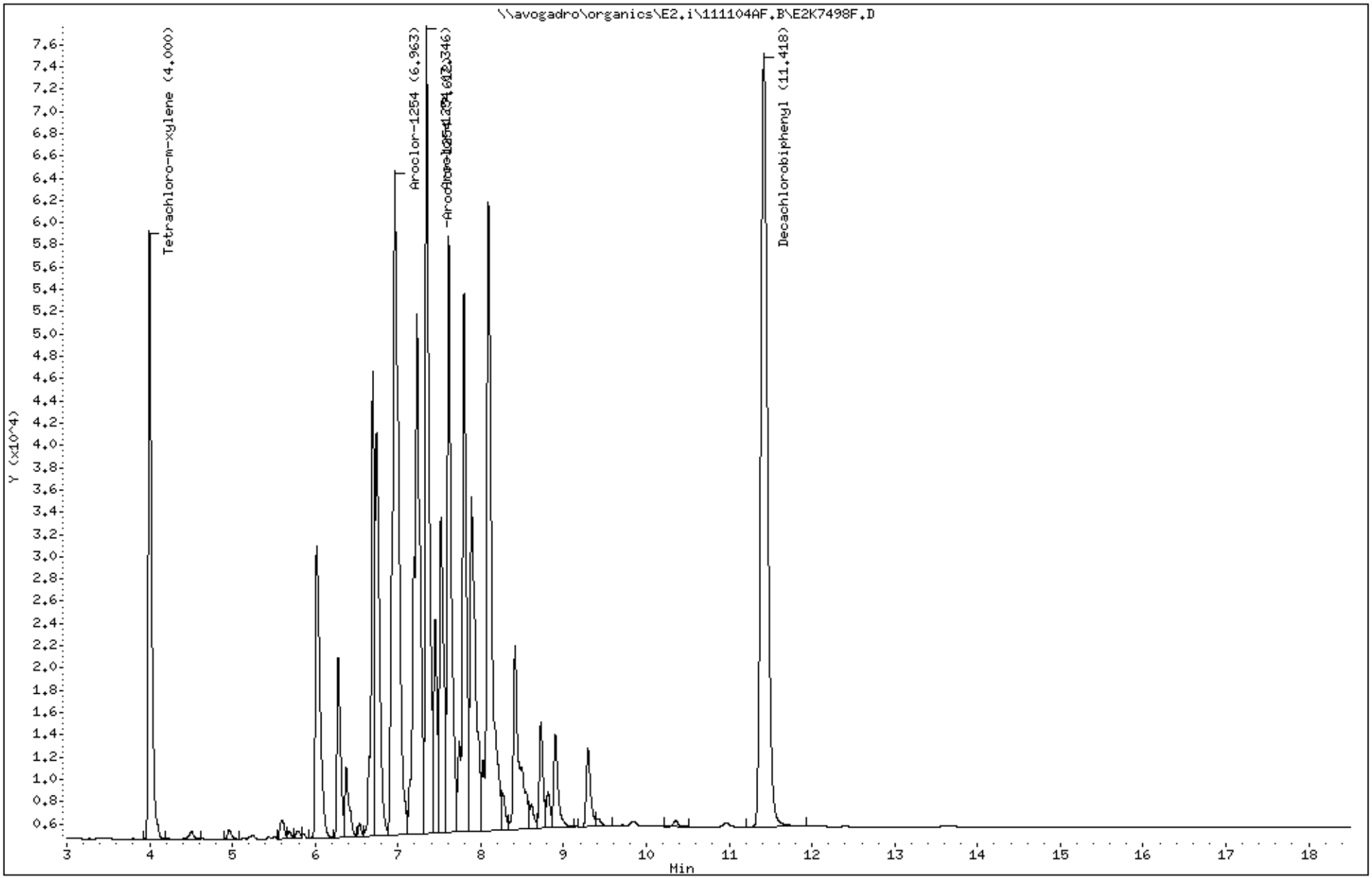
Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7498F.D
Lab Smp Id: AR12545J2 Client Smp ID: AR12545J2
Inj Date : 05-NOV-2011 01:54
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12545J2,AR12545J2,,ar1254.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 20 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
3.999	3.999	0.000	1495567	0.08000	0.072			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.417	11.417	0.000	3892433	0.16000	0.14			
8 Aroclor-1254						CAS #: 11097-69-1		
6.963	6.963	0.000	3001161	1.60000	1.3	80.00- 120.00		100.00
7.345	7.345	0.000	2202482	1.60000	1.4	53.39- 93.39		73.39
7.612	7.612	0.000	1799401	1.60000	1.4	39.96- 79.96		59.96
Average of Peak Amounts =					1.36667			

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7498F.D
Date : 05-NOV-2011 01:54
Client ID: AR12545J2
Instrument: E2.i
Sample Info: AR12545J2,AR12545J2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7498R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

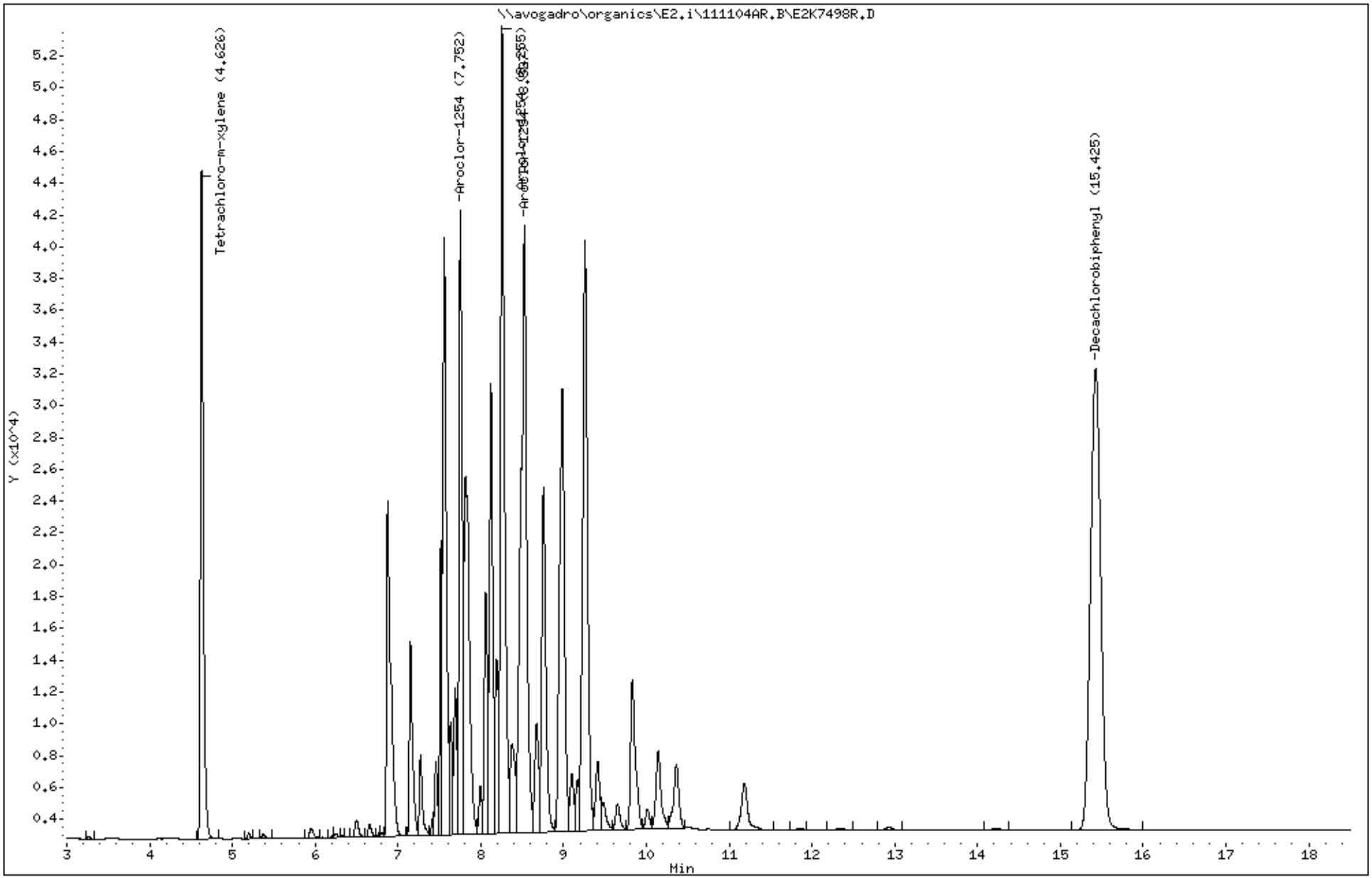
8080/8081PCB Quantitation Report
Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7498R.D
Lab Smp Id: AR12545J2 Client Smp ID: AR12545J2
Inj Date : 05-NOV-2011 01:54
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12545J2,AR12545J2,,ar1254.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 01:54 Cal File: E2K7498R.D
Als bottle: 20 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT	AMOUNTS ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.626	4.627	-0.001	1056264	0.08000	0.084		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.425	15.423	0.002	2521189	0.16000	0.15		
7 Aroclor-1254					CAS #: 11097-69-1		
7.752	7.752	0.000	1024528	1.60000	1.4	80.00- 120.00	100.00
8.255	8.255	0.000	1660693	1.60000	1.5	142.09- 182.09	162.09
8.527	8.527	0.000	1881240	1.60000	1.4	163.62- 203.62	183.62
Average of Peak Amounts =					1.43333		

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7498R.D
Date : 05-NOV-2011 01:54
Client ID: AR12545J2
Instrument: E2.i
Sample Info: AR12545J2,AR12545J2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7499F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7499F.D
Lab Smp Id: AR12623J2 Client Smp ID: AR12623J2
Inj Date : 05-NOV-2011 02:15
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12623J2,AR12623J2,,ar1262.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 21 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1262.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

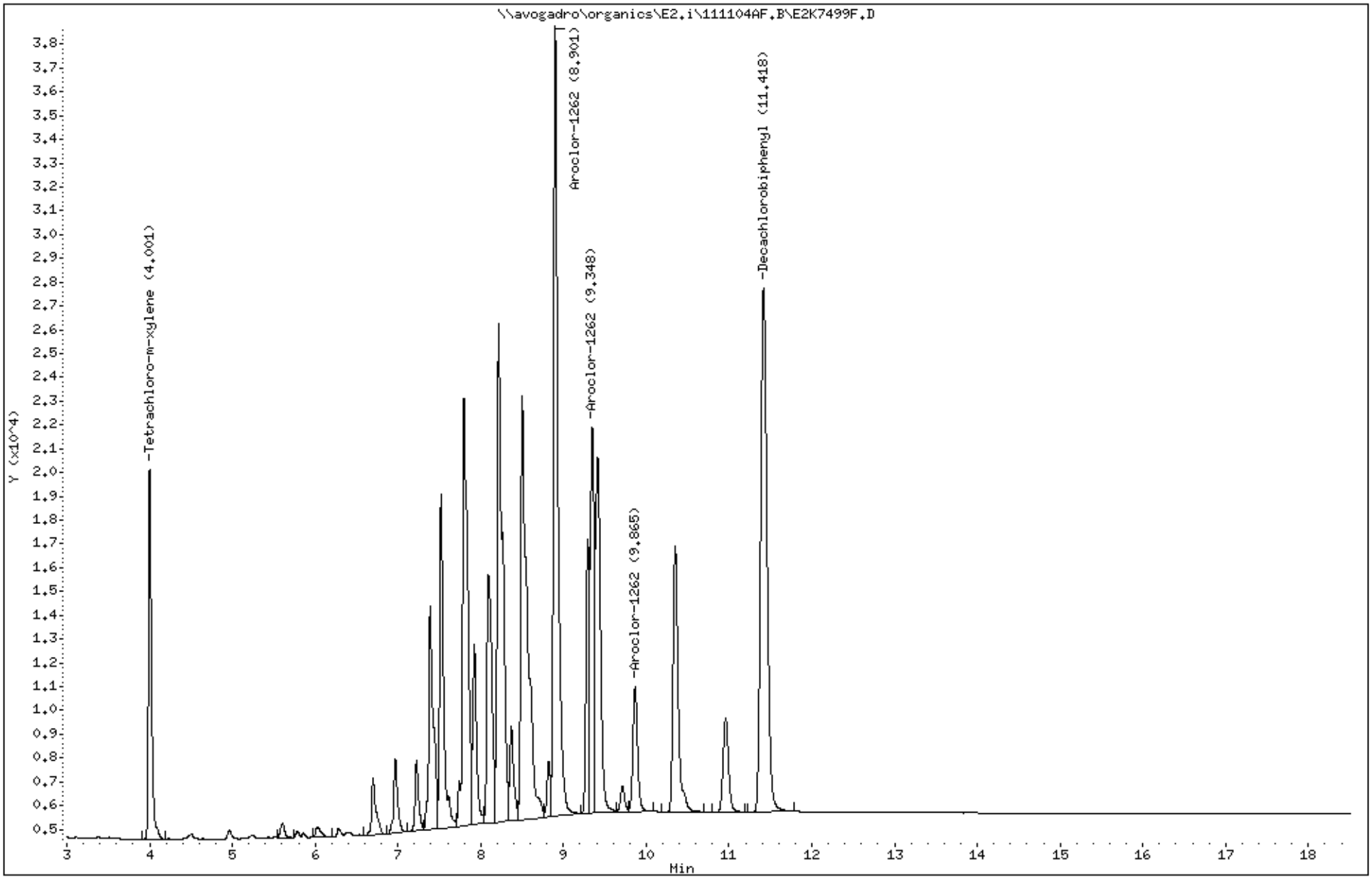
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.001	3.999	0.002	397187	0.02000	0.019			(a)
2 Aroclor-1262						CAS #: 37324-23-5		
8.901	8.901	0.000	1234830	0.40000	0.40	80.00- 120.00	100.00	
9.347	9.347	0.000	544086	0.40000	0.40	24.06- 64.06	44.06	
9.865	9.865	0.000	203438	0.40000	0.40	0.00- 36.47	16.47	
Average of Peak Amounts =					0.40000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.418	11.417	0.001	1180373	0.04000	0.041			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7499F.D
Date : 05-NOV-2011 02:15
Client ID: AR12623J2
Instrument: E2.i
Sample Info: AR12623J2,AR12623J2,,ar1262,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7499R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7499R.D
Lab Smp Id: AR12623J2 Client Smp ID: AR12623J2
Inj Date : 05-NOV-2011 02:15
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12623J2,AR12623J2,,ar1262.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:00 Cal File: E2K7504R.D
Als bottle: 21 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1262.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

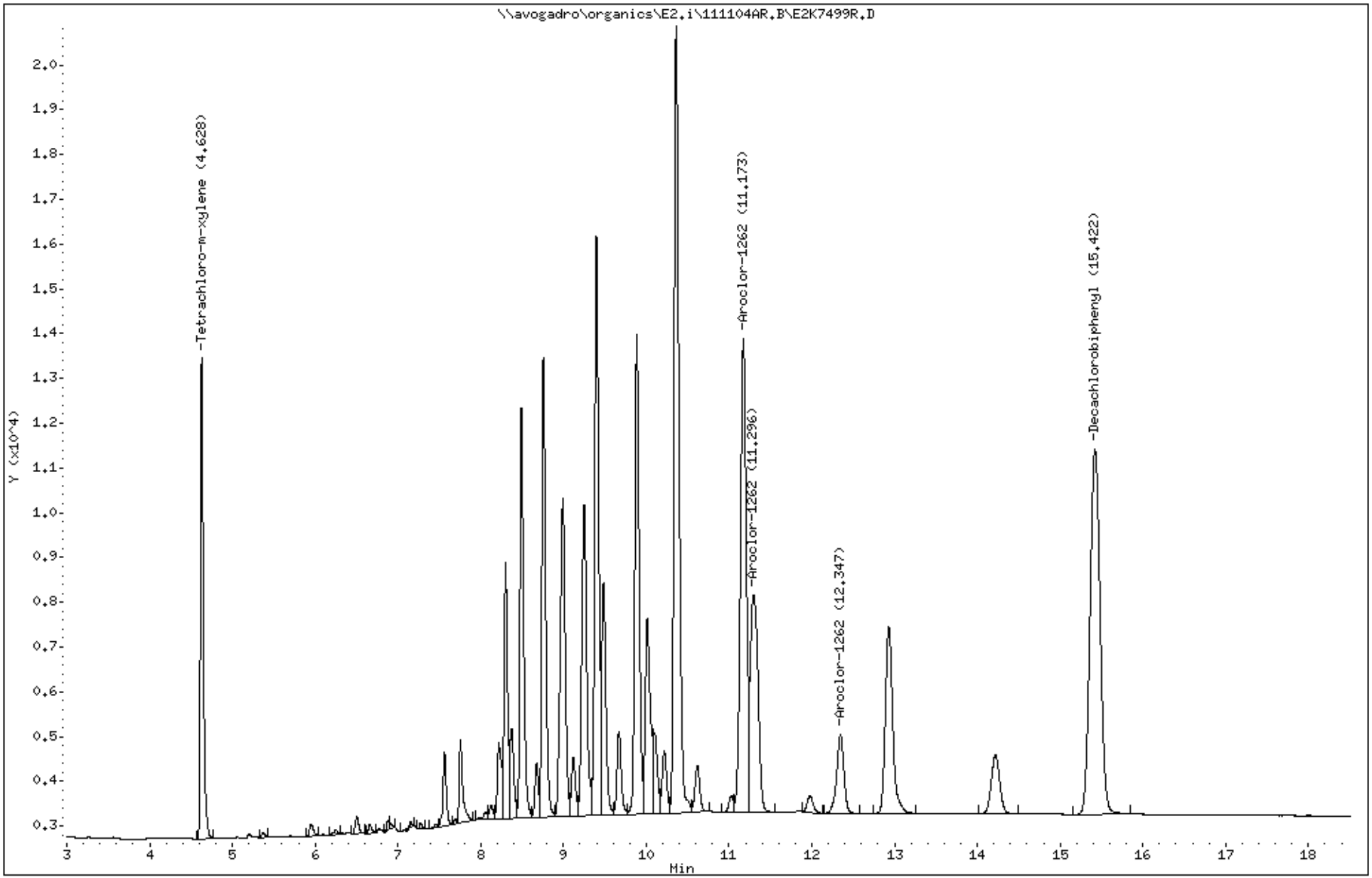
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.628	4.627	0.001	254895	0.02000	0.020			(a)
10 Aroclor-1262						CAS #: 37324-23-5		
11.173	11.173	0.000	525250	0.40000	0.40	80.00- 120.00	100.00	
11.295	11.295	0.000	314734	0.40000	0.40	39.92- 79.92	59.92	
12.346	12.346	0.000	104801	0.40000	0.40	0.00- 39.95	19.95	
Average of Peak Amounts =					0.40000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.421	15.423	-0.002	691352	0.04000	0.041			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7499R.D
Date : 05-NOV-2011 02:15
Client ID: AR12623J2 Instrument: E2.i
Sample Info: AR12623J2,AR12623J2,,ar1262,sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPestII Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7500F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7500F.D
Lab Smp Id: AR12683J2 Client Smp ID: AR12683J2
Inj Date : 05-NOV-2011 02:36
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12683J2,AR12683J2,,ar1268.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 22 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1268.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

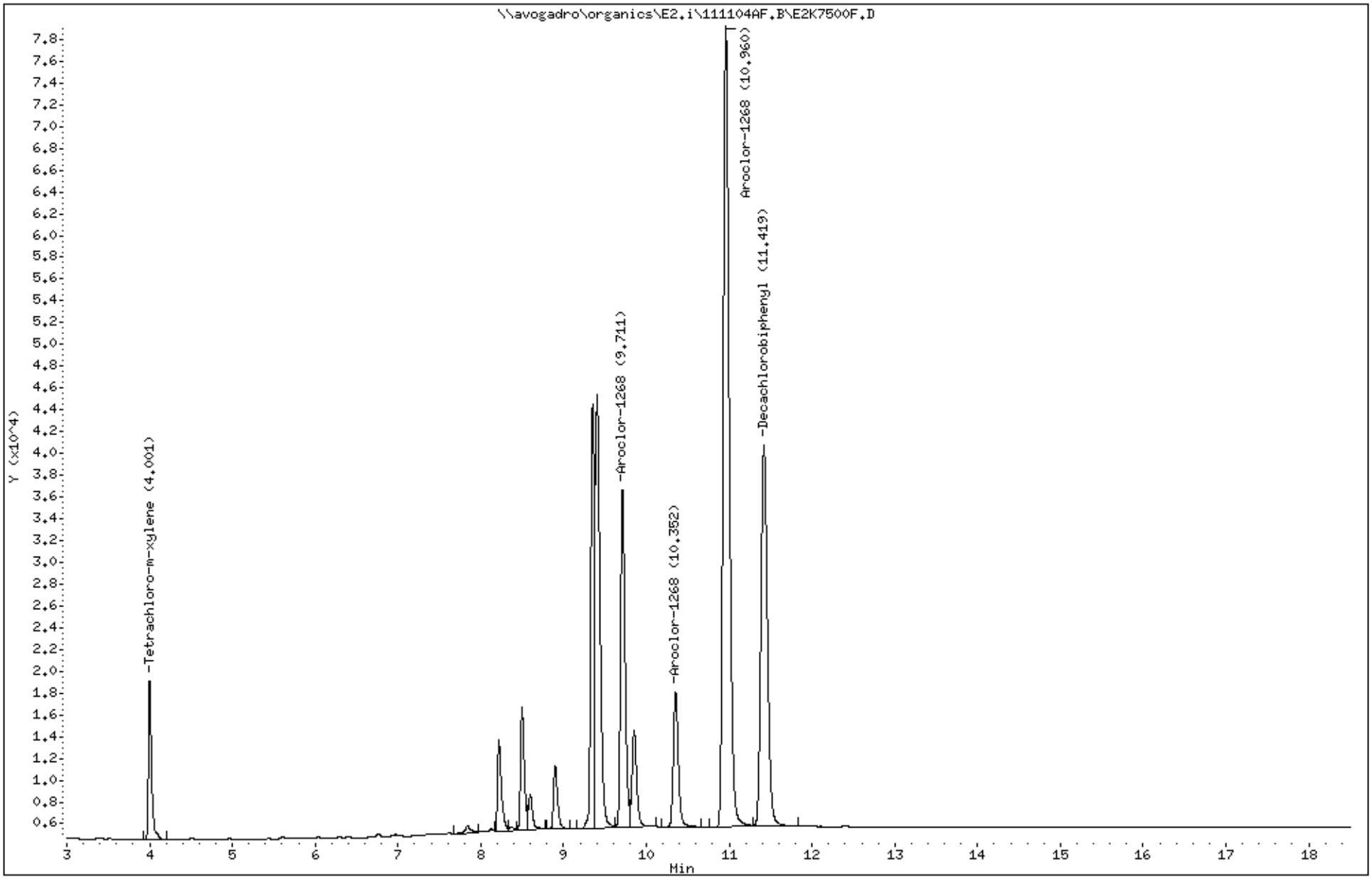
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.001	3.999	0.002	383164	0.02000	0.018			(a)
10 Aroclor-1268						CAS #: 11100-14-4		
9.711	9.711	0.000	1179828	0.40000	0.40	80.00- 120.00	100.00	(a)
10.351	10.351	0.000	511369	0.40000	0.40	23.34- 63.34	43.34	
10.960	10.960	0.000	3719014	0.40000	0.40	295.22- 335.22	315.22	
Average of Peak Amounts =				0.40000				
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.418	11.417	0.001	1924351	0.04000	0.067			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7500F.D
Date : 05-NOV-2011 02:36
Client ID: AR12683J2
Instrument: E2.i
Sample Info: AR12683J2,AR12683J2,,ar1268,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7500R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7500R.D
Lab Smp Id: AR12683J2 Client Smp ID: AR12683J2
Inj Date : 05-NOV-2011 02:36
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12683J2,AR12683J2,,ar1268.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:00 Cal File: E2K7504R.D
Als bottle: 22 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1268.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

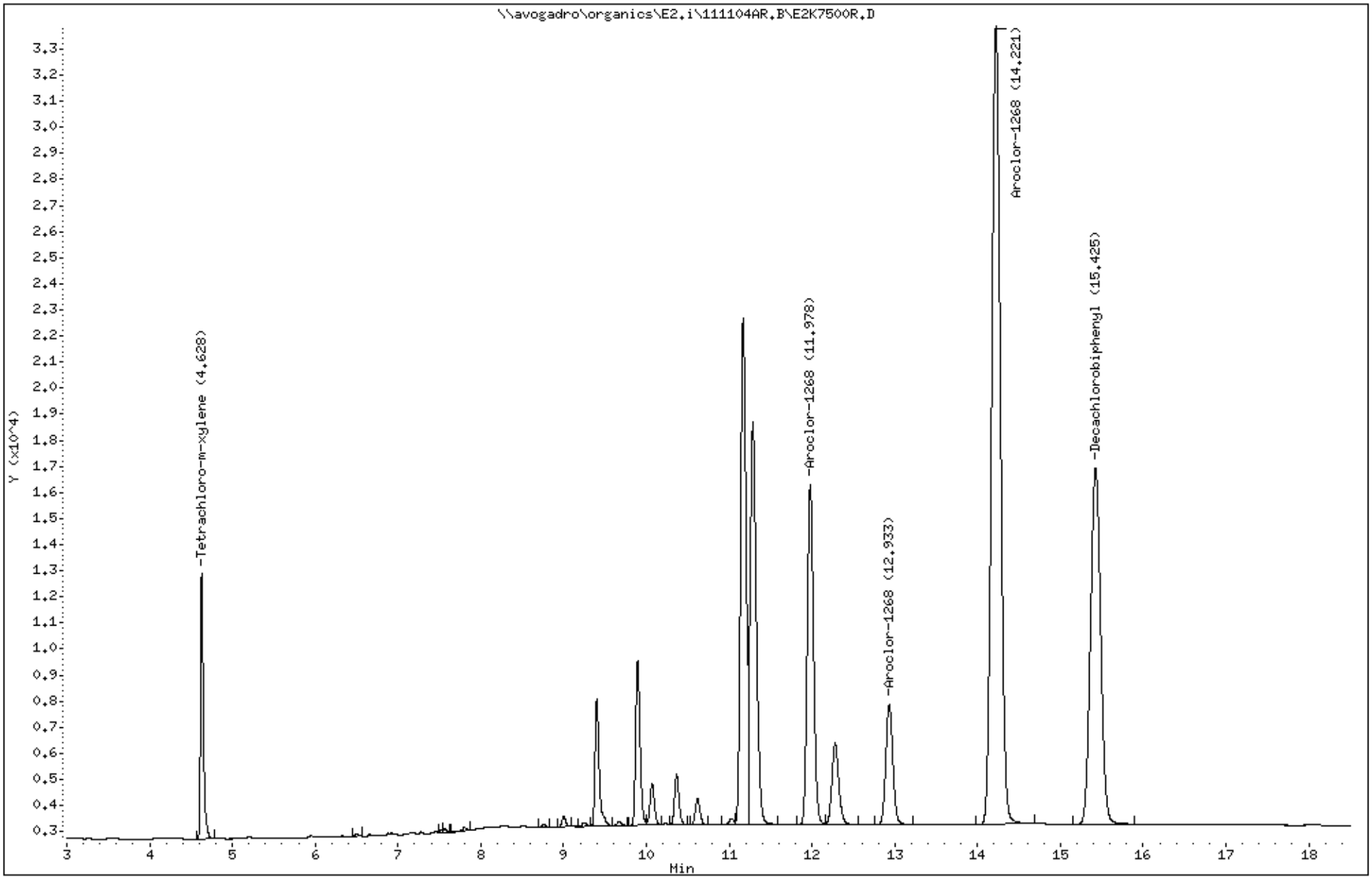
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.628	4.627	0.001	245715	0.02000	0.020			(a)
9 Aroclor-1268						CAS #: 11100-14-4		
11.978	11.978	0.000	689463	0.40000	0.40	80.00- 120.00	100.00	(a)
12.932	12.932	0.000	271831	0.40000	0.40	19.43- 59.43	39.43	
14.221	14.221	0.000	2255813	0.40000	0.40	307.18- 347.18	327.18	
Average of Peak Amounts =				0.40000				
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.424	15.423	0.001	1169692	0.04000	0.060			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7500R.D
Date : 05-NOV-2011 02:36
Client ID: AR12683J2
Instrument: E2.i
Sample Info: AR12683J2,AR12683J2,,ar1268,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7501F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7501F.D
Lab Smp Id: AR16601J2 Client Smp ID: AR16601J2
Inj Date : 05-NOV-2011 02:57
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16601J2,AR16601J2,,ar1660.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 23 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

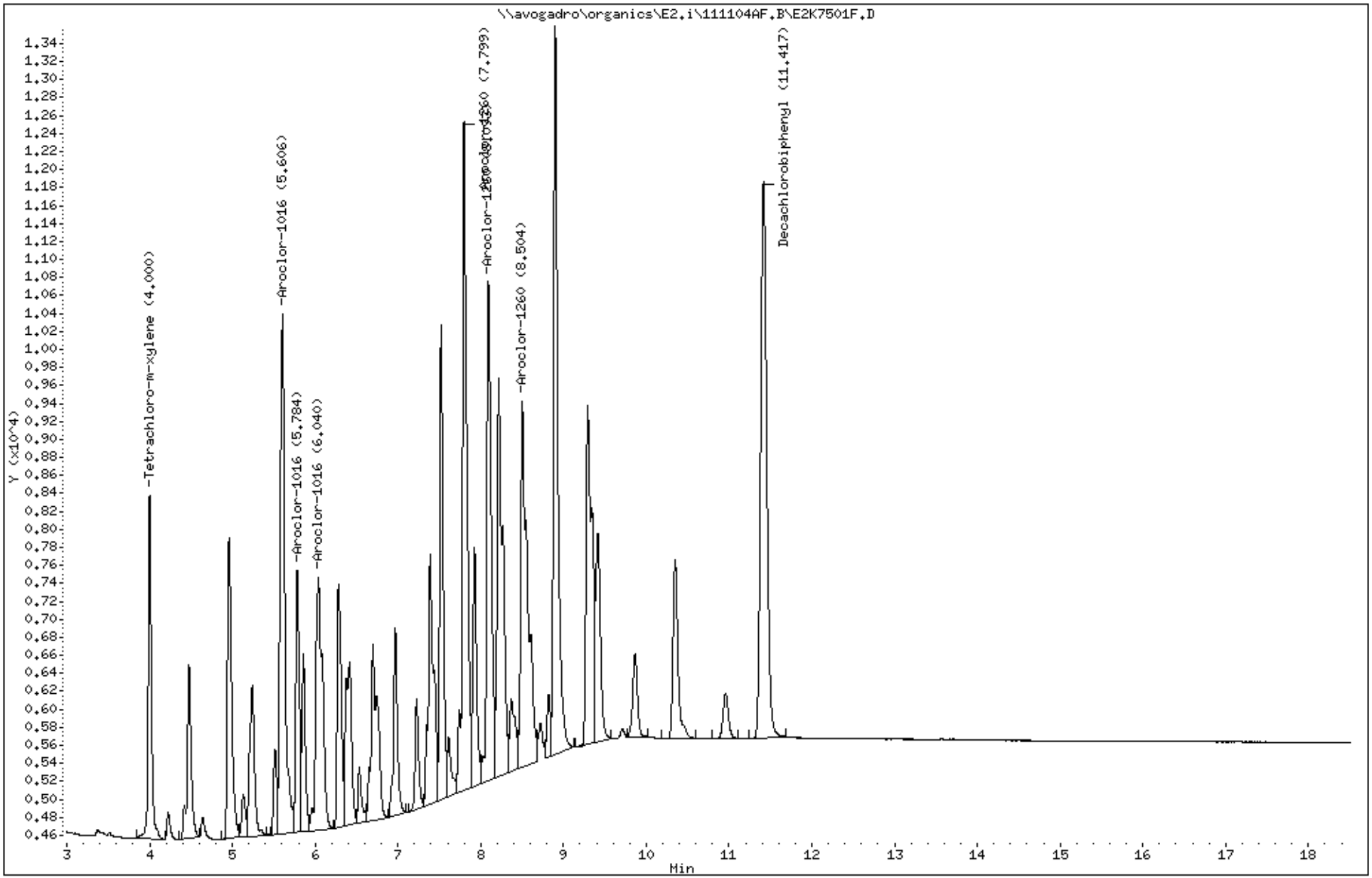
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.000	3.999	0.001	102428	0.00500	0.0049			(a)
5 Aroclor-1016						CAS #: 12674-11-2		
5.605	5.604	0.001	235267	0.10000	0.11	80.00- 120.00	100.00	(a)
5.783	5.781	0.002	89052	0.10000	0.11	17.54- 57.54	37.85	
6.039	6.039	0.000	158937	0.10000	0.12	47.65- 87.65	67.56	
Average of Peak Amounts =					0.11333			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.417	11.417	0.000	315771	0.01000	0.011			(a)
9 Aroclor-1260						CAS #: 11096-82-5		
7.799	7.797	0.002	284403	0.10000	0.12	80.00- 120.00	100.00	(a)
8.093	8.091	0.002	212667	0.10000	0.11	55.72- 95.72	74.78	
8.504	8.502	0.002	235026	0.10000	0.11	71.06- 111.06	82.64	
Average of Peak Amounts =					0.11333			

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7501F.D
Report Date: 07-Nov-2011 13:57

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7501F.D
Date : 05-NOV-2011 02:57
Client ID: AR16601J2
Instrument: E2.i
Sample Info: AR16601J2,AR16601J2,,ar1660,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7501R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7501R.D
Lab Smp Id: AR16601J2 Client Smp ID: AR16601J2
Inj Date : 05-NOV-2011 02:57
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16601J2,AR16601J2,,ar1660.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 02:57 Cal File: E2K7501R.D
Als bottle: 23 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

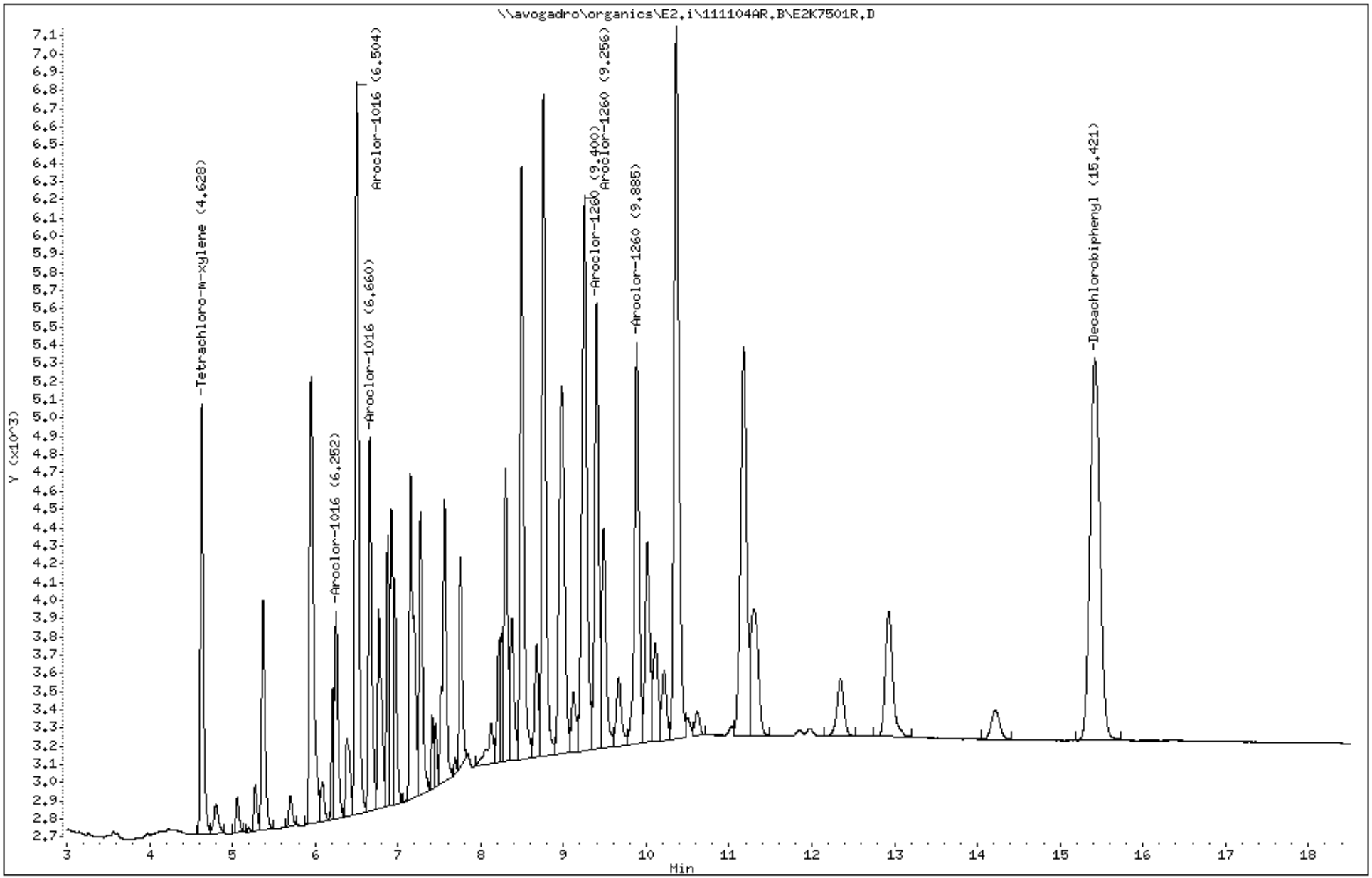
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.627	4.627	0.000	57306	0.00500	0.0046			(a)
6 Aroclor-1016						CAS #: 12674-11-2		
6.252	6.250	0.002	32694	0.10000	0.10	80.00- 120.00	100.00	(a)
6.503	6.503	0.000	122529	0.10000	0.10	366.12- 406.12	374.77	
6.659	6.657	0.002	56322	0.10000	0.10	151.11- 191.11	172.27	
Average of Peak Amounts =					0.10000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.421	15.423	-0.002	174967	0.01000	0.0090			(a)
8 Aroclor-1260						CAS #: 11096-82-5		
9.255	9.255	0.000	127310	0.10000	0.10	80.00- 120.00	100.00	(a)
9.399	9.398	0.001	81595	0.10000	0.10	43.24- 83.24	64.09	
9.885	9.883	0.002	84367	0.10000	0.10	46.46- 86.46	66.27	
Average of Peak Amounts =					0.10000			

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7501R.D
Report Date: 07-Nov-2011 13:58

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7501R.D
Date : 05-NOV-2011 02:57
Client ID: AR16601J2
Instrument: E2.i
Sample Info: AR16601J2,AR16601J2,,ar1660,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7503F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7503F.D
Lab Smp Id: AR16602J2 Client Smp ID: AR16602J2
Inj Date : 05-NOV-2011 03:39
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16602J2,AR16602J2,,ar1660.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 25 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

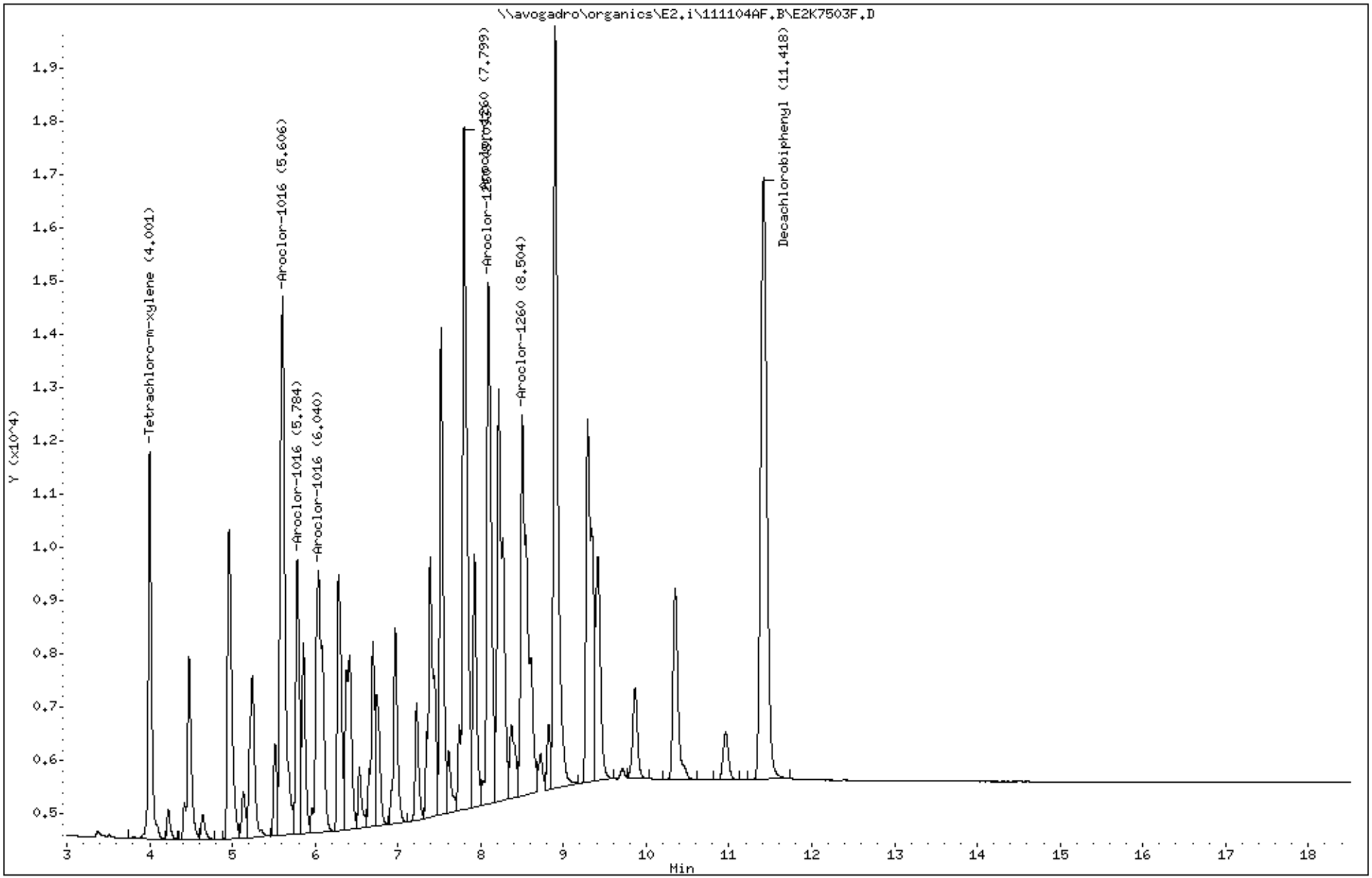
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.001	3.999	0.002	199409	0.01000	0.0096			(a)
5 Aroclor-1016						CAS #: 12674-11-2		
5.606	5.604	0.002	419722	0.20000	0.20	80.00- 120.00	100.00	(a)
5.784	5.781	0.003	157368	0.20000	0.20	17.54- 57.54	37.49	
6.040	6.039	0.001	284130	0.20000	0.21	47.65- 87.65	67.69	
Average of Peak Amounts =					0.20333			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.417	11.417	0.000	589172	0.02000	0.020			(a)
9 Aroclor-1260						CAS #: 11096-82-5		
7.798	7.797	0.001	495344	0.20000	0.21	80.00- 120.00	100.00	(a)
8.093	8.091	0.002	374750	0.20000	0.20	55.72- 95.72	75.65	
8.503	8.502	0.001	415844	0.20000	0.20	71.06- 111.06	83.95	
Average of Peak Amounts =					0.20333			

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7503F.D
Report Date: 07-Nov-2011 13:57

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7503F.D
Date : 05-NOV-2011 03:39
Client ID: AR16602J2
Instrument: E2.i
Sample Info: AR16602J2,AR16602J2,,ar1660,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7503R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7503R.D
Lab Smp Id: AR16602J2 Client Smp ID: AR16602J2
Inj Date : 05-NOV-2011 03:39
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16602J2,AR16602J2,,ar1660.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 03:39 Cal File: E2K7503R.D
Als bottle: 25 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

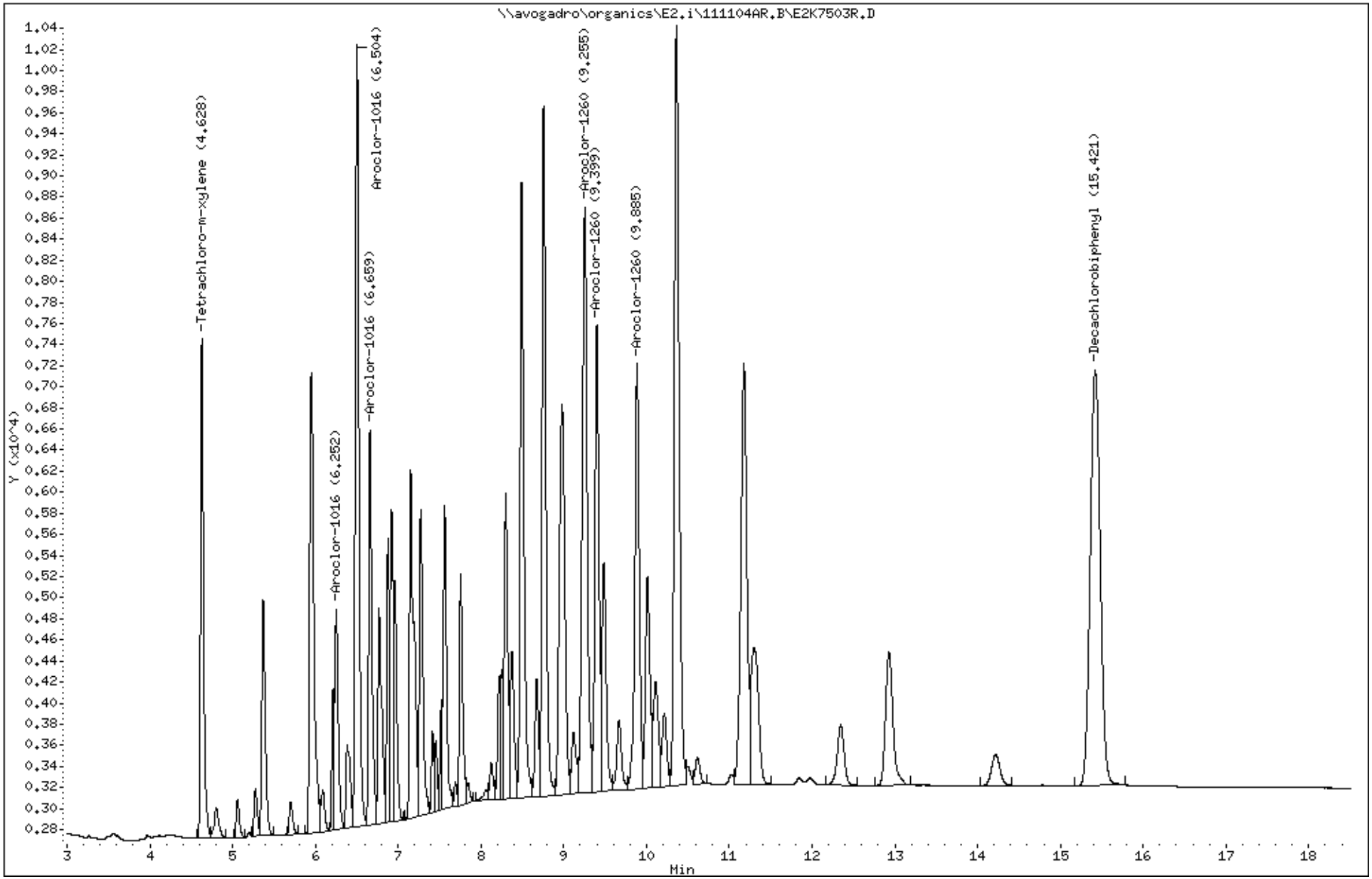
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.627	4.627	0.000	114915	0.01000	0.0094			(a)
6 Aroclor-1016					CAS #: 12674-11-2			
6.252	6.250	0.002	60598	0.20000	0.19	80.00- 120.00	100.00	(a)
6.503	6.503	0.000	225974	0.20000	0.19	366.12- 406.12	372.91	
6.659	6.657	0.002	102800	0.20000	0.19	151.11- 191.11	169.64	
Average of Peak Amounts =				0.19000				
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.420	15.423	-0.003	332667	0.02000	0.017			(a)
8 Aroclor-1260					CAS #: 11096-82-5			
9.255	9.255	0.000	232184	0.20000	0.19	80.00- 120.00	100.00	(a)
9.399	9.398	0.001	146870	0.20000	0.19	43.24- 83.24	63.26	
9.884	9.883	0.001	152745	0.20000	0.19	46.46- 86.46	65.79	
Average of Peak Amounts =				0.19000				

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7503R.D
Report Date: 07-Nov-2011 13:58

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7503R.D
Date : 05-NOV-2011 03:39
Client ID: AR16602J2
Instrument: E2.i
Sample Info: AR16602J2,AR16602J2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7504F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7504F.D
Lab Smp Id: AR16603J2 Client Smp ID: AR16603J2
Inj Date : 05-NOV-2011 04:00
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16603J2,AR16603J2,,ar1660.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 26 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

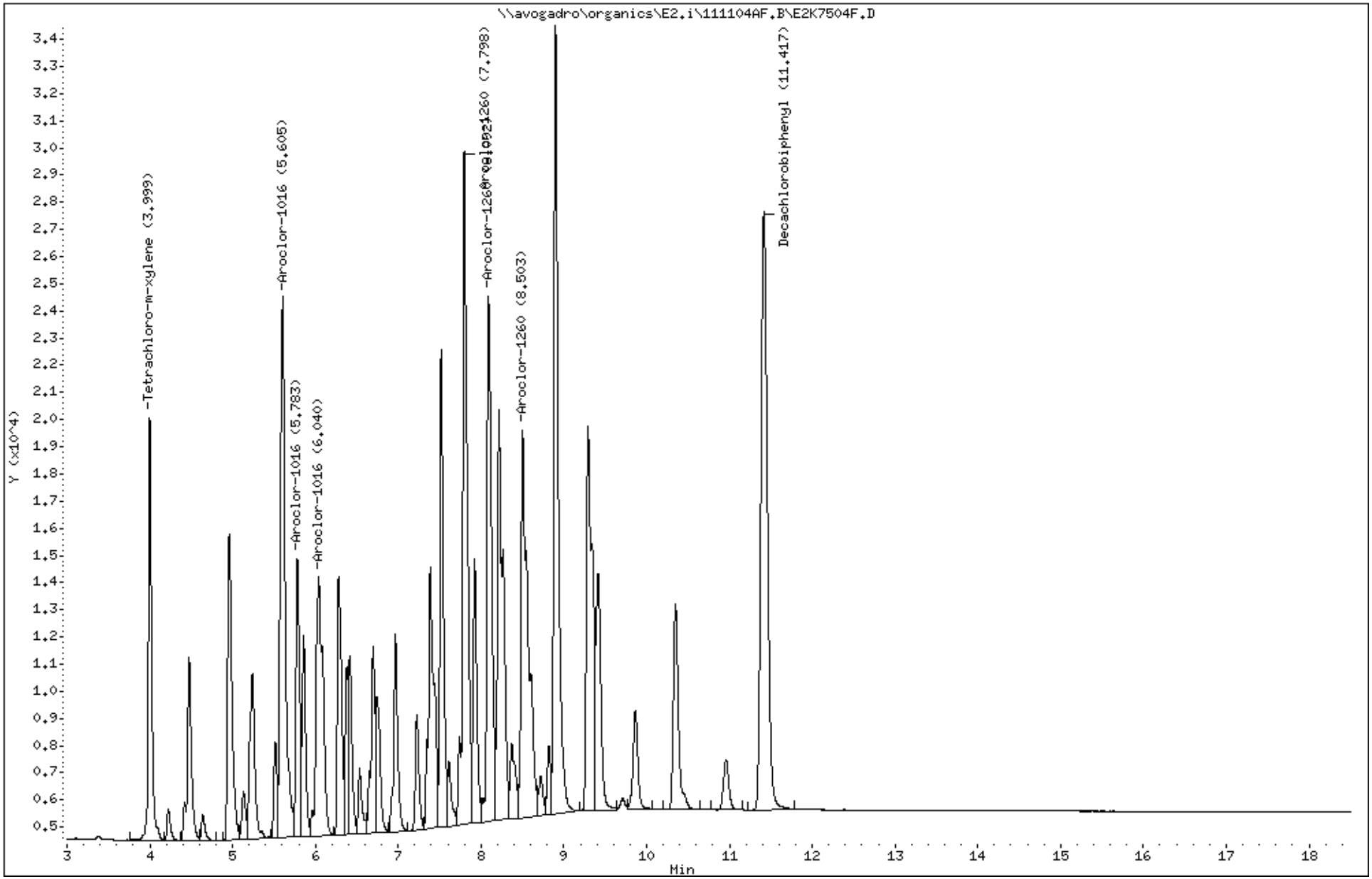
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
3.999	3.999	0.000	421611	0.02000	0.020			(a)
5 Aroclor-1016						CAS #: 12674-11-2		
5.604	5.604	0.000	834556	0.40000	0.41	80.00- 120.00	100.00	(a)
5.782	5.781	0.001	318079	0.40000	0.41	17.54- 57.54	38.11	
6.039	6.039	0.000	558297	0.40000	0.40	47.65- 87.65	66.90	
Average of Peak Amounts =					0.40667			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.417	11.417	0.000	1180562	0.04000	0.041			(a)
9 Aroclor-1260						CAS #: 11096-82-5		
7.797	7.797	0.000	965883	0.40000	0.40	80.00- 120.00	100.00	(a)
8.092	8.091	0.001	747740	0.40000	0.40	55.72- 95.72	77.42	
8.503	8.502	0.001	834844	0.40000	0.40	71.06- 111.06	86.43	
Average of Peak Amounts =					0.40000			

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7504F.D
Report Date: 07-Nov-2011 13:57

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7504F.D
Date : 05-NOV-2011 04:00
Client ID: AR16603J2
Instrument: E2.i
Sample Info: AR16603J2,AR16603J2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7504R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7504R.D
Lab Smp Id: AR16603J2 Client Smp ID: AR16603J2
Inj Date : 05-NOV-2011 04:00
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16603J2,AR16603J2,,ar1660.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:00 Cal File: E2K7504R.D
Als bottle: 26 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

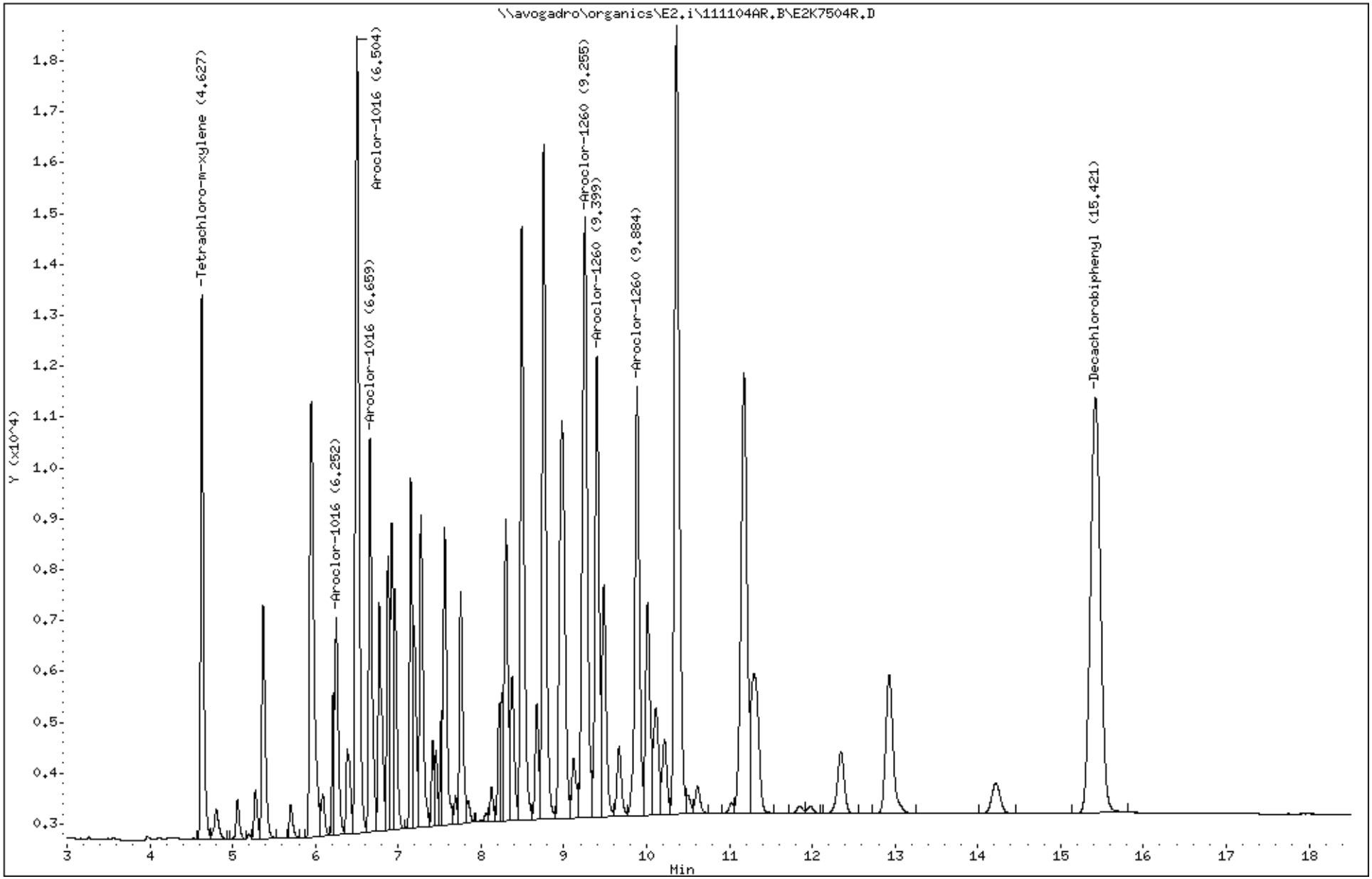
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.627	4.627	0.000	253512	0.02000	0.020			(a)
6 Aroclor-1016					CAS #: 12674-11-2			
6.251	6.250	0.001	124251	0.40000	0.40	80.00- 120.00	100.00	(a)
6.503	6.503	0.000	482002	0.40000	0.41	366.12- 406.12	387.92	
6.659	6.657	0.002	212965	0.40000	0.40	151.11- 191.11	171.40	
Average of Peak Amounts =					0.40333			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.421	15.423	-0.002	690348	0.04000	0.041			(a)
8 Aroclor-1260					CAS #: 11096-82-5			
9.254	9.255	-0.001	495556	0.40000	0.40	80.00- 120.00	100.00	(a)
9.398	9.398	0.000	301864	0.40000	0.39	43.24- 83.24	60.91	
9.883	9.883	0.000	318729	0.40000	0.40	46.46- 86.46	64.32	
Average of Peak Amounts =					0.39667			

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7504R.D
Report Date: 07-Nov-2011 13:58

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7504R.D
Date : 05-NOV-2011 04:00
Client ID: AR16603J2
Instrument: E2.i
Sample Info: AR16603J2,AR16603J2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7505F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7505F.D
Lab Smp Id: AR16604J2 Client Smp ID: AR16604J2
Inj Date : 05-NOV-2011 04:21
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16604J2,AR16604J2,,ar1660.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 27 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

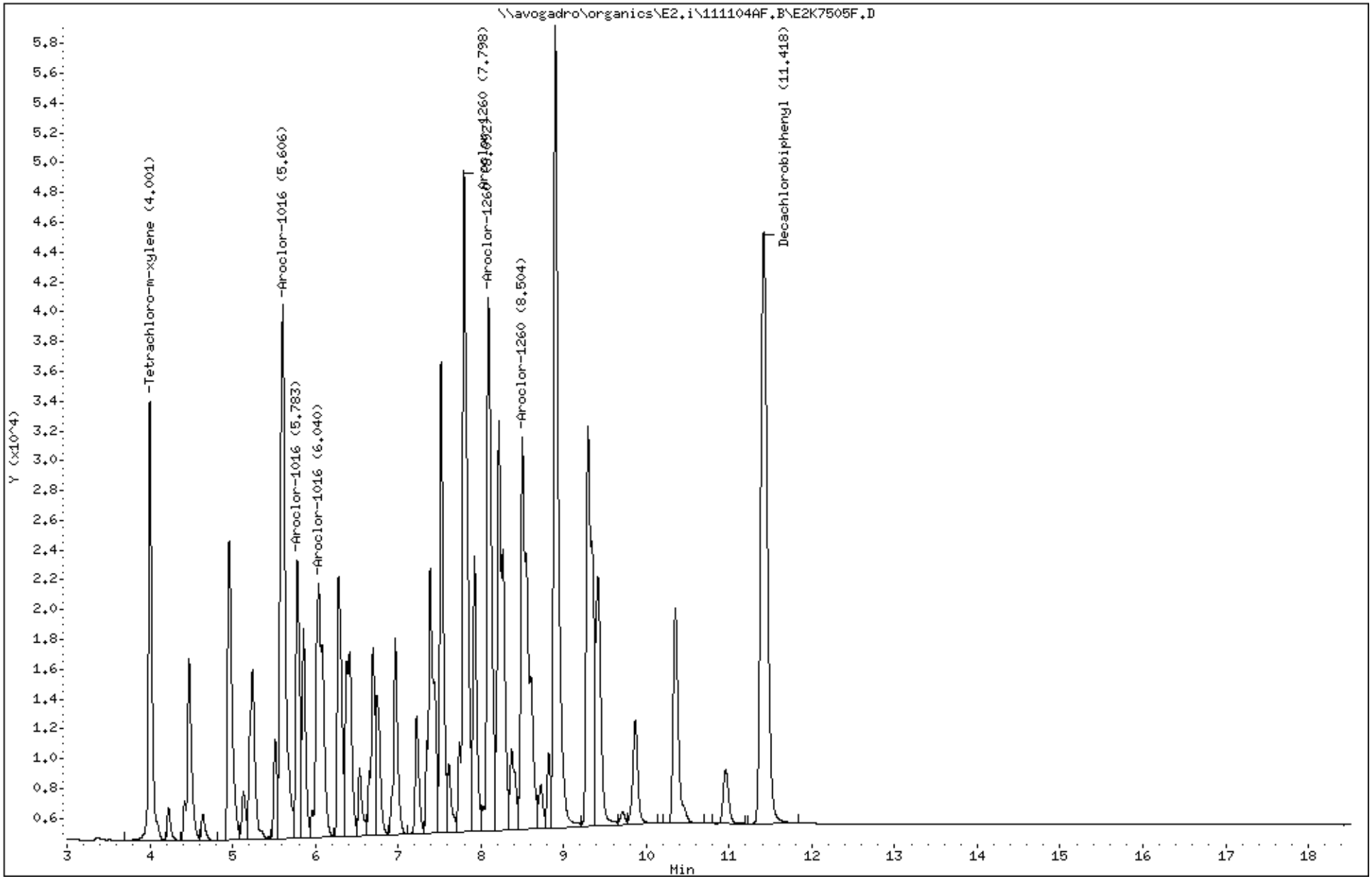
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.000	3.999	0.001	848285	0.04000	0.041			(a)
5 Aroclor-1016						CAS #: 12674-11-2		
5.605	5.604	0.001	1543175	0.80000	0.75	80.00- 120.00	100.00	(a)
5.783	5.781	0.002	580219	0.80000	0.75	17.54- 57.54	37.60	
6.040	6.039	0.001	1033094	0.80000	0.75	47.65- 87.65	66.95	
Average of Peak Amounts =					0.75000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.418	11.417	0.001	2189957	0.08000	0.076			
9 Aroclor-1260						CAS #: 11096-82-5		
7.798	7.797	0.001	1764604	0.80000	0.74	80.00- 120.00	100.00	(a)
8.092	8.091	0.001	1418164	0.80000	0.76	55.72- 95.72	80.37	
8.503	8.502	0.001	1587192	0.80000	0.77	71.06- 111.06	89.95	
Average of Peak Amounts =					0.75667			

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7505F.D
Report Date: 07-Nov-2011 13:57

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7505F.D
Date : 05-NOV-2011 04:21
Client ID: AR16604J2
Instrument: E2.i
Sample Info: AR16604J2,AR16604J2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7505R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7505R.D
Lab Smp Id: AR16604J2 Client Smp ID: AR16604J2
Inj Date : 05-NOV-2011 04:21
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16604J2,AR16604J2,,ar1660.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:21 Cal File: E2K7505R.D
Als bottle: 27 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

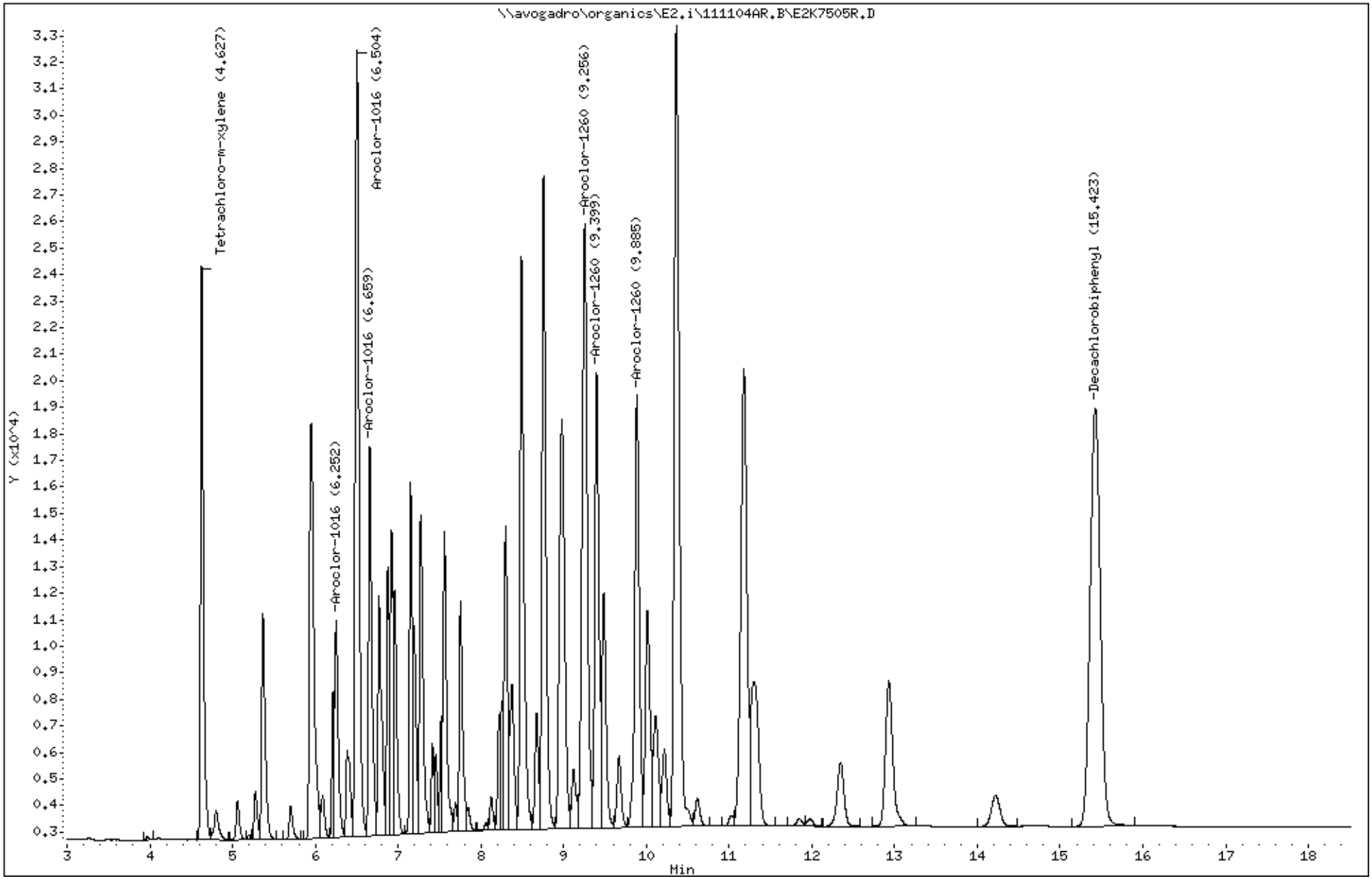
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.627	4.627	0.000	531891	0.04000	0.043			(a)
6 Aroclor-1016					CAS #: 12674-11-2			
6.251	6.250	0.001	242167	0.80000	0.78	80.00- 120.00	100.00	(a)
6.503	6.503	0.000	938414	0.80000	0.79	366.12- 406.12	387.51	
6.658	6.657	0.001	411018	0.80000	0.77	151.11- 191.11	169.72	
Average of Peak Amounts =					0.78000			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.423	15.423	0.000	1347683	0.08000	0.080			
8 Aroclor-1260					CAS #: 11096-82-5			
9.256	9.255	0.001	977213	0.80000	0.80	80.00- 120.00	100.00	(a)
9.399	9.398	0.001	579075	0.80000	0.76	43.24- 83.24	59.26	
9.884	9.883	0.001	625336	0.80000	0.78	46.46- 86.46	63.99	
Average of Peak Amounts =					0.78000			

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7505R.D
Report Date: 07-Nov-2011 13:58

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7505R.D
Date : 05-NOV-2011 04:21
Client ID: AR16604J2
Instrument: E2.i
Sample Info: AR16604J2,AR16604J2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7506F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

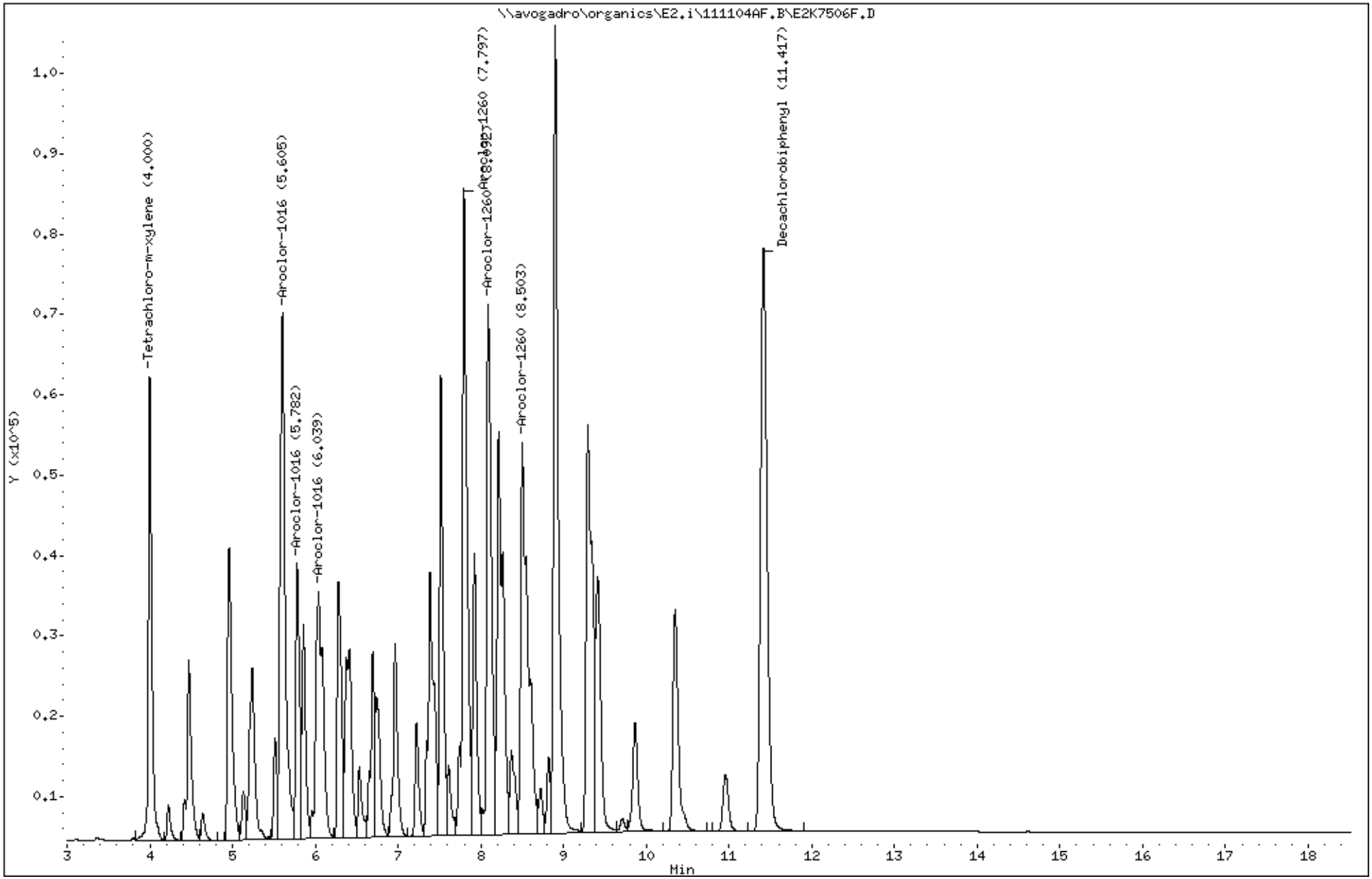
Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7506F.D
Lab Smp Id: AR16605J2 Client Smp ID: AR16605J2
Inj Date : 05-NOV-2011 04:42
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16605J2,AR16605J2,,ar1660.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 28 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT	AMOUNTS ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
3.999	3.999	0.000	1689747	0.08000	0.081		
5 Aroclor-1016					CAS #: 12674-11-2		
5.604	5.604	0.000	2852373	1.60000	1.4	80.00- 120.00	100.00
5.781	5.781	0.000	1085974	1.60000	1.4	17.54- 57.54	38.07
6.039	6.039	0.000	1894179	1.60000	1.4	47.65- 87.65	66.41
Average of Peak Amounts =					1.40000		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.417	11.417	0.000	4066471	0.16000	0.14		
9 Aroclor-1260					CAS #: 11096-82-5		
7.797	7.797	0.000	3208332	1.60000	1.3	80.00- 120.00	100.00
8.091	8.091	0.000	2633194	1.60000	1.4	55.72- 95.72	82.07
8.502	8.502	0.000	2966158	1.60000	1.4	71.06- 111.06	92.45
Average of Peak Amounts =					1.36667		

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7506F.D
Date : 05-NOV-2011 04:42
Client ID: AR16605J2
Instrument: E2.i
Sample Info: AR16605J2,AR16605J2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7506R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

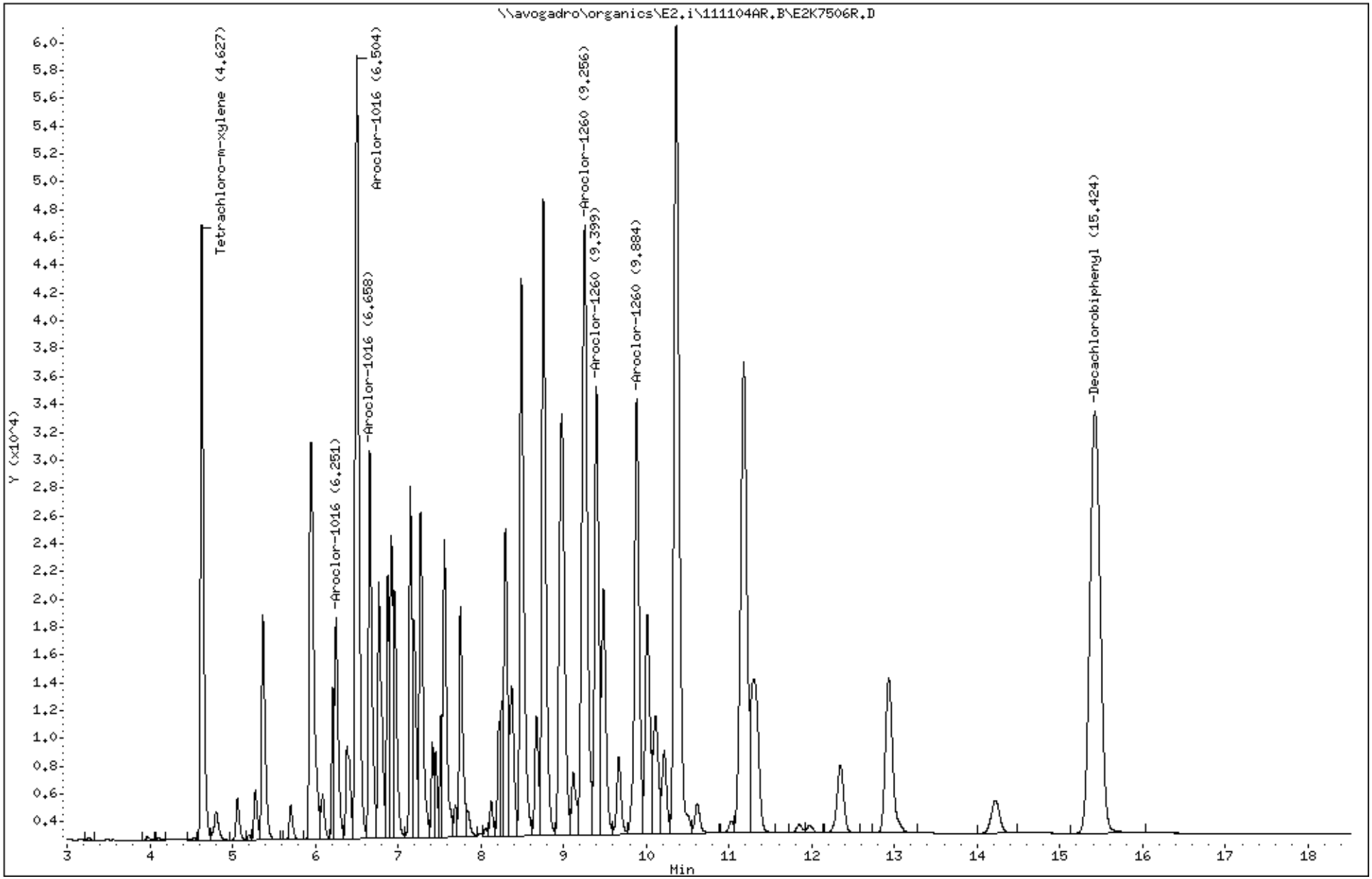
Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7506R.D
Lab Smp Id: AR16605J2 Client Smp ID: AR16605J2
Inj Date : 05-NOV-2011 04:42
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16605J2,AR16605J2,,ar1660.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 28 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.627	4.627	0.000	1117025	0.08000	0.089			
6 Aroclor-1016						CAS #: 12674-11-2		
6.250	6.250	0.000	472871	1.60000	1.5	80.00- 120.00		100.00
6.503	6.503	0.000	1835221	1.60000	1.6	366.12- 406.12		388.10
6.657	6.657	0.000	801318	1.60000	1.5	151.11- 191.11		169.46
Average of Peak Amounts =					1.53333			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.423	15.423	0.000	2643398	0.16000	0.16			
8 Aroclor-1260						CAS #: 11096-82-5		
9.255	9.255	0.000	1927115	1.60000	1.6	80.00- 120.00		100.00
9.398	9.398	0.000	1106371	1.60000	1.5	43.24- 83.24		57.41
9.883	9.883	0.000	1231272	1.60000	1.6	46.46- 86.46		63.89
Average of Peak Amounts =					1.56667			

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7506R.D
Date : 05-NOV-2011 04:42
Client ID: AR16605J2
Instrument: E2.i
Sample Info: AR16605J2,AR16605J2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111107F.B\E2K7566F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111107F.B\E2K7566F.D
Lab Smp Id: AR16603JD Client Smp ID: AR16603JD
Inj Date : 07-NOV-2011 21:12
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16603JD,AR16603JD,,ar1660.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

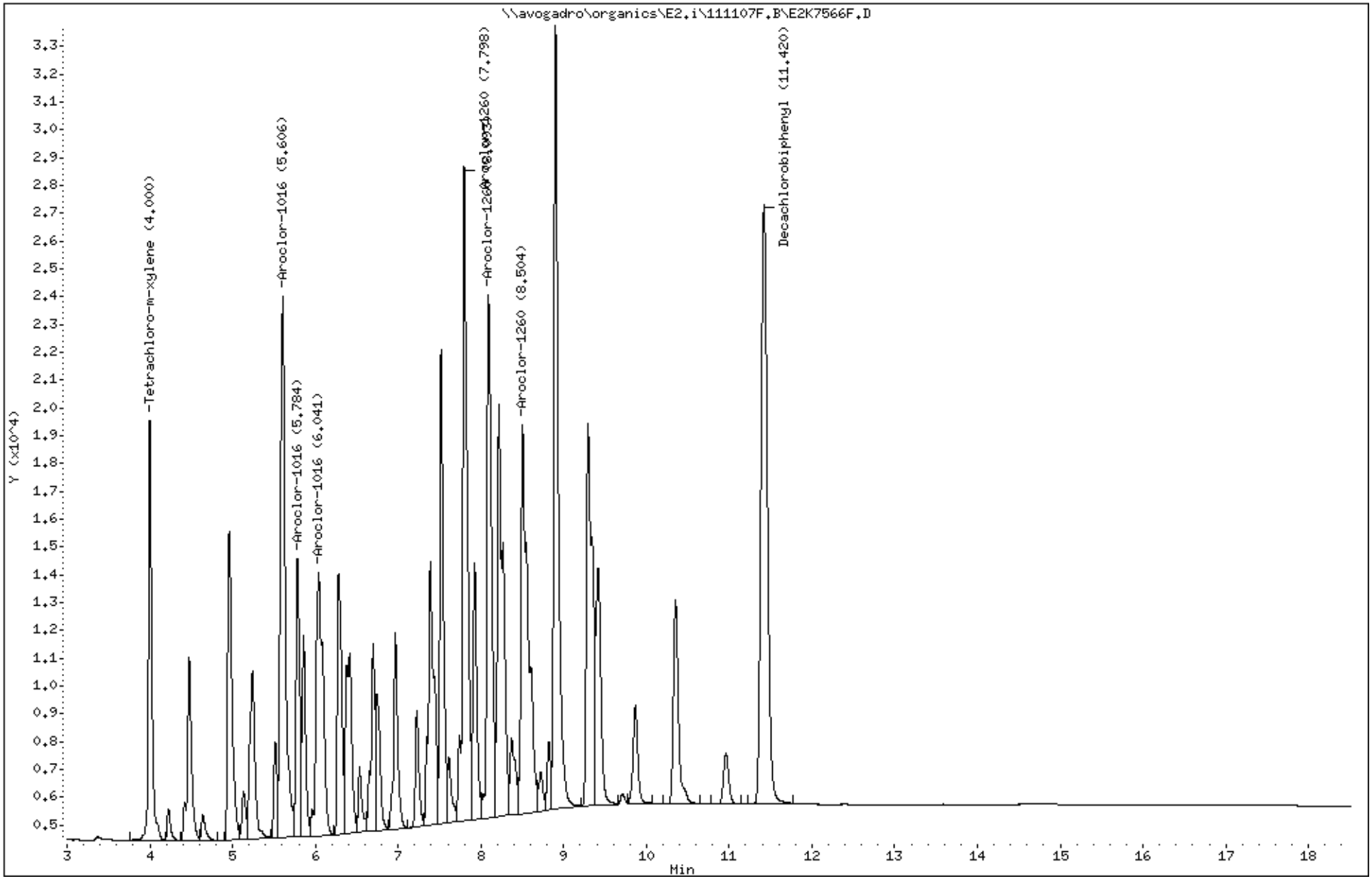
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.000	3.999	0.001	424744	0.02000	0.020			(a)
5 Aroclor-1016						CAS #: 12674-11-2		
5.606	5.604	0.002	826170	0.40000	0.40	80.00- 120.00	100.00	(a)
5.783	5.781	0.002	309648	0.40000	0.40	17.38- 57.38	37.48	
6.040	6.039	0.001	557437	0.40000	0.40	46.93- 86.93	67.47	
Average of Peak Amounts =				0.40000				
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.420	11.417	0.003	1159251	0.04000	0.040			(a)
9 Aroclor-1260						CAS #: 11096-82-5		
7.798	7.797	0.001	930485	0.40000	0.39	80.00- 120.00	100.00	(a)
8.093	8.091	0.002	733428	0.40000	0.39	58.48- 98.48	78.82	
8.504	8.502	0.002	831237	0.40000	0.40	68.67- 108.67	89.33	
Average of Peak Amounts =				0.39333				

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7566F.D
Report Date: 08-Nov-2011 11:42

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7566F.D
Date : 07-NOV-2011 21:12
Client ID: AR16603JD
Instrument: E2.i
Sample Info: AR16603JD,AR16603JD,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7566R.D
Report Date: 08-Nov-2011 11:43

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111107R.B\E2K7566R.D
Lab Smp Id: AR16603JD Client Smp ID: AR16603JD
Inj Date : 07-NOV-2011 21:12
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16603JD,AR16603JD,,ar1660.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

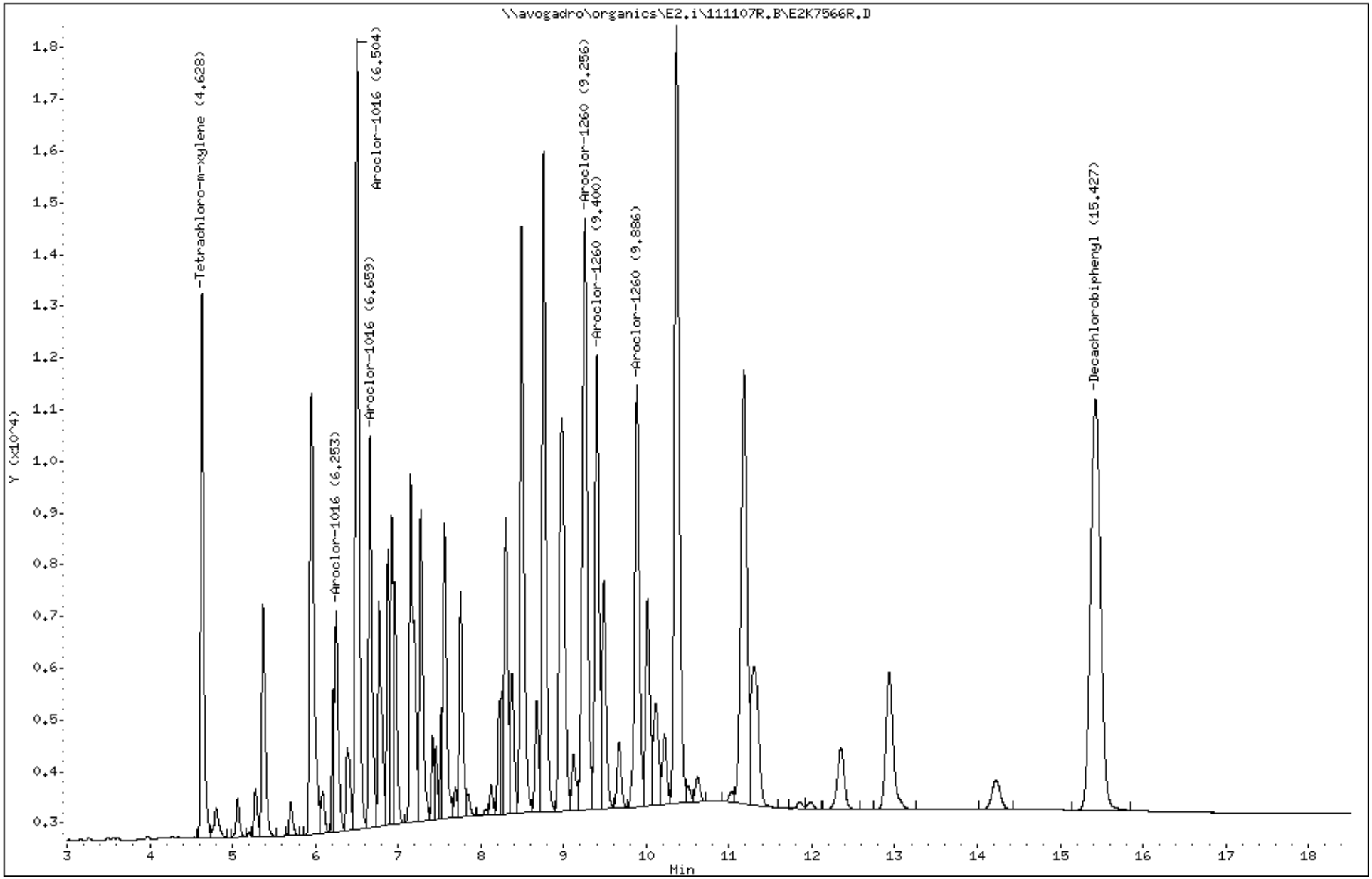
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.628	4.627	0.001	256925	0.02000	0.020			(a)
6 Aroclor-1016						CAS #: 12674-11-2		
6.252	6.250	0.002	124954	0.40000	0.41	80.00- 120.00	100.00	(a)
6.503	6.503	0.000	471984	0.40000	0.40	361.18- 401.18	377.72	
6.659	6.657	0.002	209435	0.40000	0.40	148.73- 188.73	167.61	
Average of Peak Amounts =					0.40333			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.427	15.423	0.004	670355	0.04000	0.040			(a)
8 Aroclor-1260						CAS #: 11096-82-5		
9.255	9.255	0.000	476468	0.40000	0.39	80.00- 120.00	100.00	(a)
9.400	9.398	0.002	291455	0.40000	0.39	41.04- 81.04	61.17	
9.885	9.883	0.002	304672	0.40000	0.38	44.30- 84.30	63.94	
Average of Peak Amounts =					0.38667			

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7566R.D
Report Date: 08-Nov-2011 11:43

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7566R.D
Date : 07-NOV-2011 21:12
Client ID: AR16603JD
Instrument: E2.i
Sample Info: AR16603JD,AR16603JD,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111107F.B\E2K7600F.D
Report Date: 08-Nov-2011 14:43

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111107F.B\E2K7600F.D
Lab Smp Id: AR16603DJ Client Smp ID: AR16603DJ
Inj Date : 08-NOV-2011 09:05
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16603DJ,AR16603DJ,,ar1660.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 14:41 E2.i Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

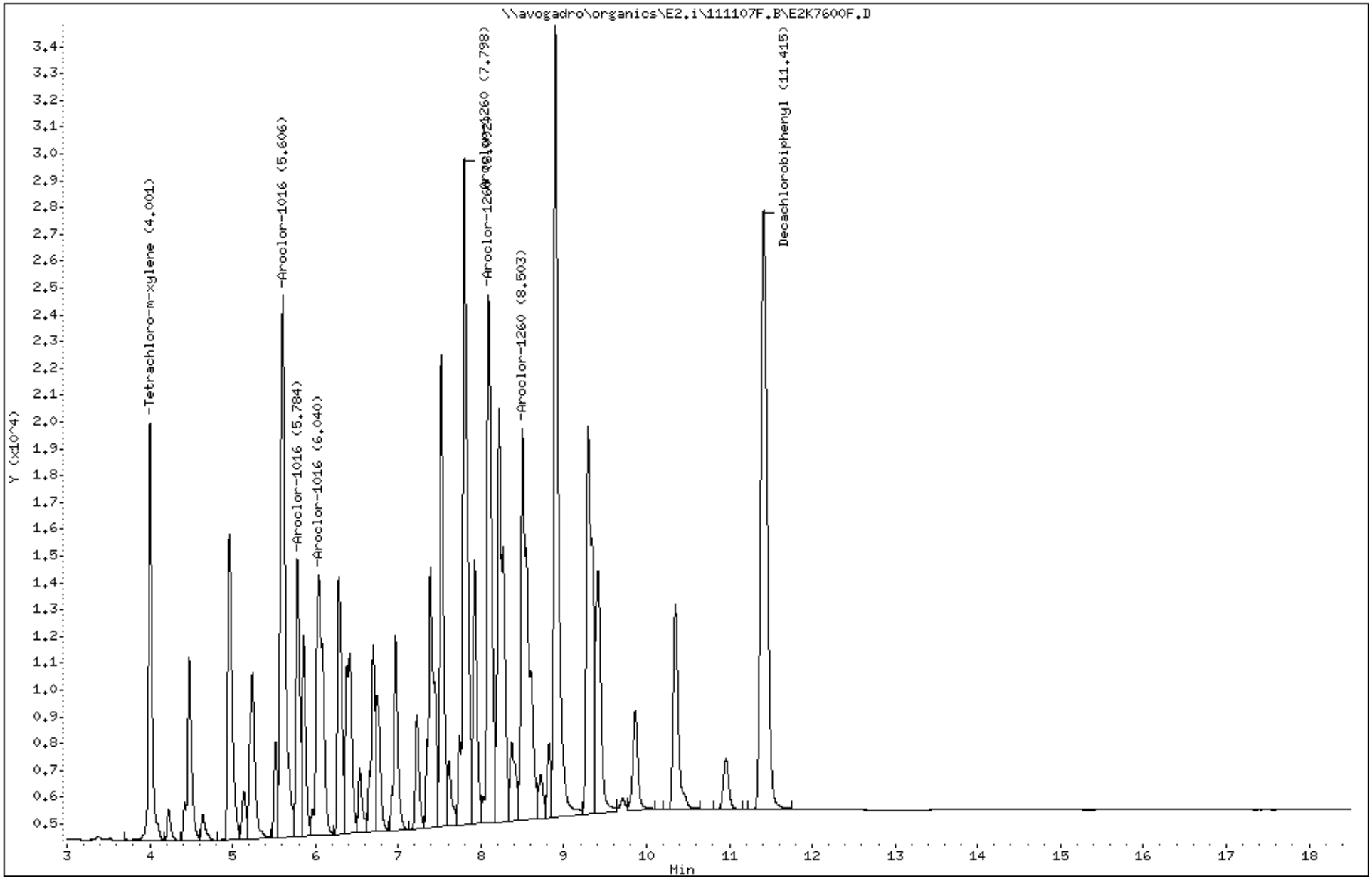
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.000	3.999	0.001	439578	0.02000	0.021			(a)
5 Aroclor-1016					CAS #: 12674-11-2			
5.606	5.604	0.002	858379	0.40000	0.42	80.00- 120.00	100.00	(a)
5.783	5.781	0.002	320830	0.40000	0.41	17.38- 57.38	37.38	
6.040	6.039	0.001	574545	0.40000	0.42	46.93- 86.93	66.93	
Average of Peak Amounts =					0.41667			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.415	11.417	-0.002	1196426	0.04000	0.042			(a)
9 Aroclor-1260					CAS #: 11096-82-5			
7.797	7.797	0.000	987793	0.40000	0.41	80.00- 120.00	100.00	(a)
8.092	8.091	0.001	775189	0.40000	0.42	58.48- 98.48	78.48	
8.502	8.502	0.000	875909	0.40000	0.42	68.67- 108.67	88.67	
Average of Peak Amounts =					0.41667			

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7600F.D
Report Date: 08-Nov-2011 14:43

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7600F.D
Date : 08-NOV-2011 09:05
Client ID: AR16603DJ
Instrument: E2.i
Sample Info: AR16603DJ,AR16603DJ,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7600R.D
Report Date: 08-Nov-2011 14:43

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111107R.B\E2K7600R.D
Lab Smp Id: AR16603DJ Client Smp ID: AR16603DJ
Inj Date : 08-NOV-2011 09:05
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16603DJ,AR16603DJ,,ar1660.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 14:42 E2.i Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

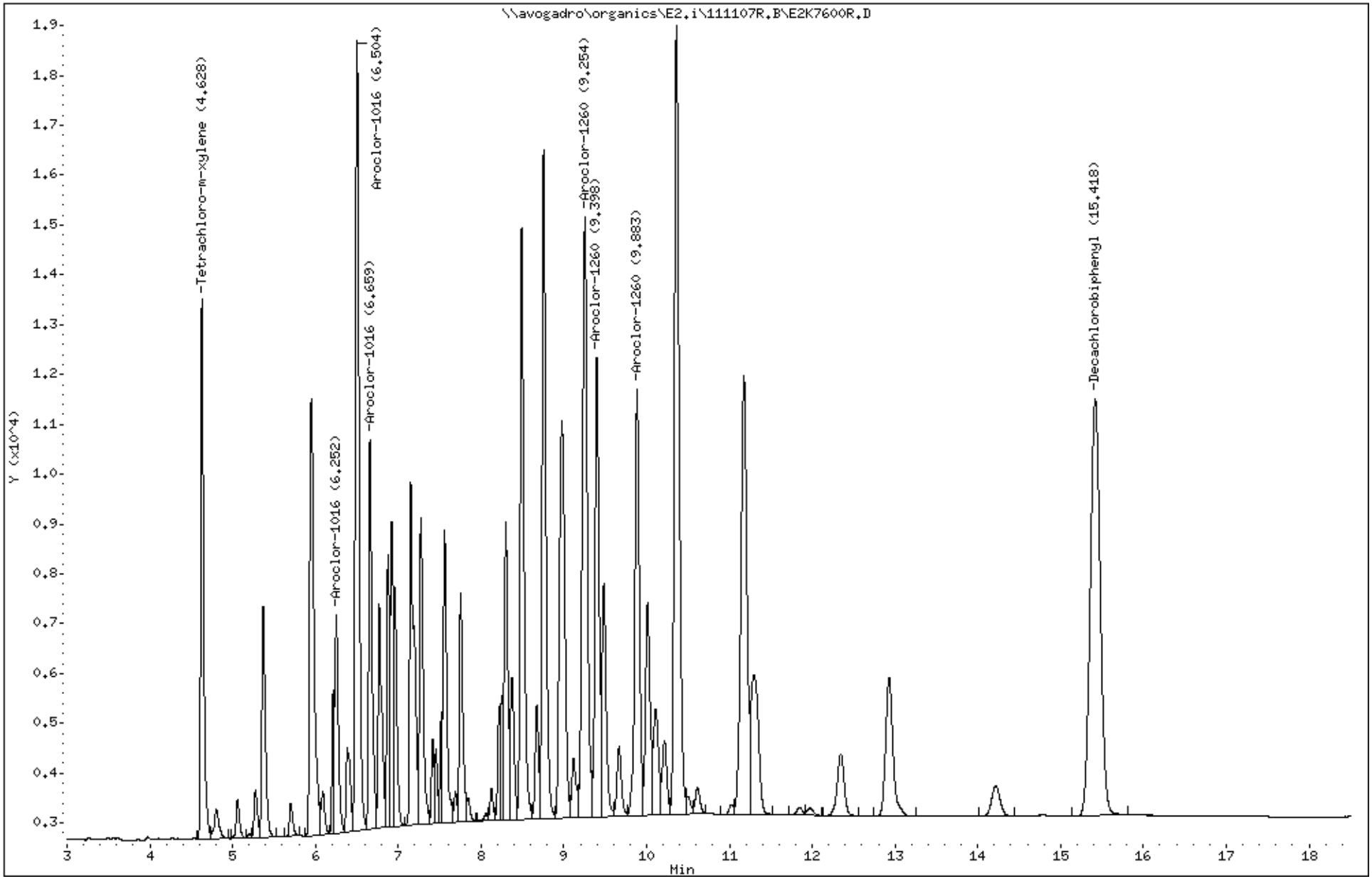
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.628	4.627	0.001	264059	0.02000	0.021			(a)
6 Aroclor-1016					CAS #: 12674-11-2			
6.252	6.250	0.002	128229	0.40000	0.42	80.00- 120.00		100.00(a)
6.504	6.503	0.001	488789	0.40000	0.42	361.18- 401.18		381.18
6.659	6.657	0.002	216362	0.40000	0.41	148.73- 188.73		168.73
Average of Peak Amounts =					0.41667			
8 Aroclor-1260					CAS #: 11096-82-5			
9.254	9.255	-0.001	504933	0.40000	0.41	80.00- 120.00		100.00(a)
9.398	9.398	0.000	308205	0.40000	0.41	41.04- 81.04		61.04
9.883	9.883	0.000	324653	0.40000	0.41	44.30- 84.30		64.30
Average of Peak Amounts =					0.41000			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7600R.D
Date : 08-NOV-2011 09:05
Client ID: AR16603DJ
Instrument: E2.i
Sample Info: AR16603DJ,AR16603DJ,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111107F.B\E2K7607F.D
Report Date: 08-Nov-2011 14:43

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111107F.B\E2K7607F.D
Lab Smp Id: AR16603JE Client Smp ID: AR16603JE
Inj Date : 08-NOV-2011 13:05
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16603JE,AR16603JE,,ar1660.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 14:41 E2.i Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

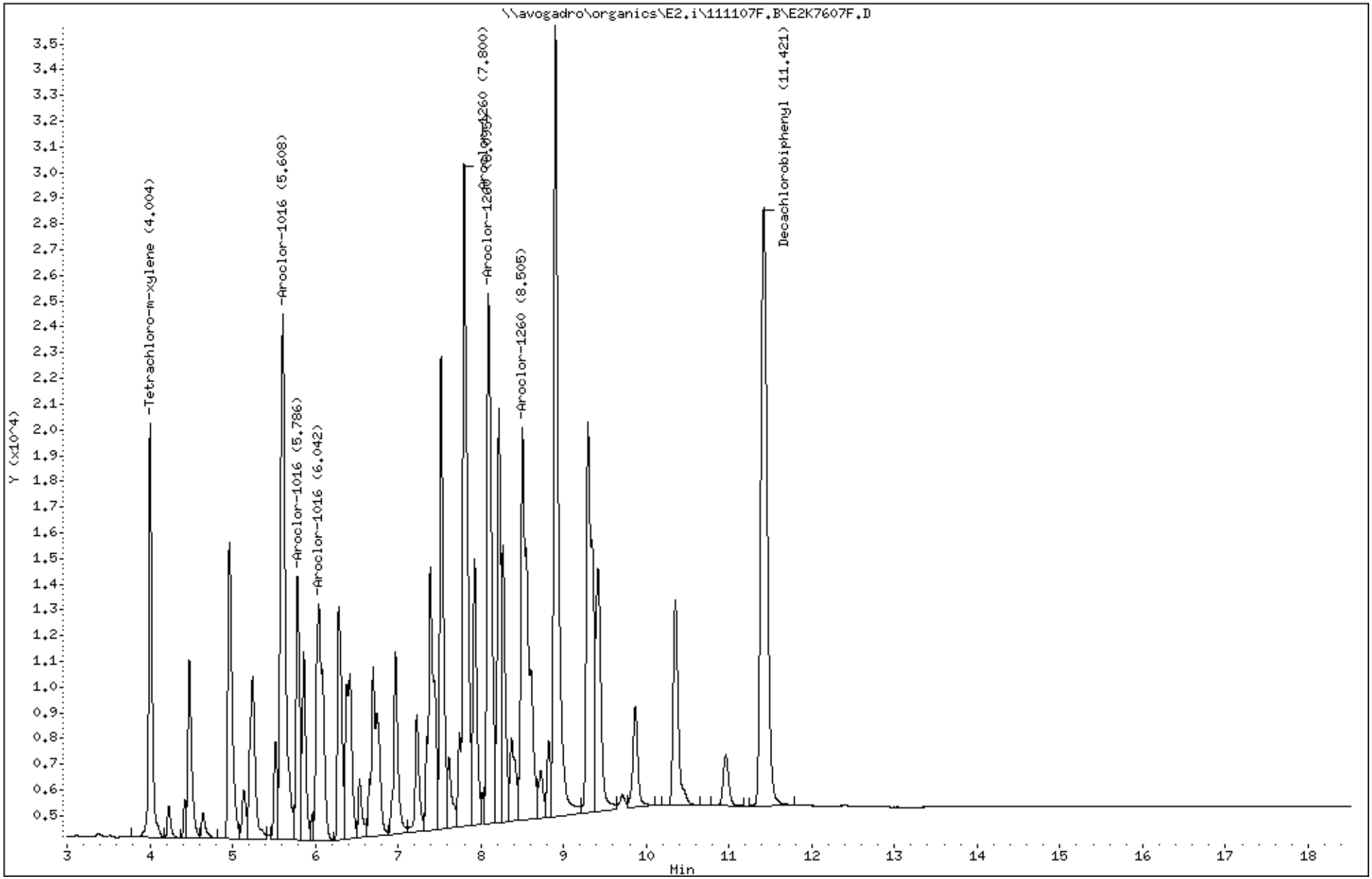
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.003	3.999	0.004	441884	0.02000	0.021			(a)
5 Aroclor-1016						CAS #: 12674-11-2		
5.608	5.604	0.004	867878	0.40000	0.42	80.00- 120.00	100.00	(a)
5.785	5.781	0.004	319231	0.40000	0.41	17.38- 57.38	36.78	
6.042	6.039	0.003	517430	0.40000	0.38	46.93- 86.93	59.62	
Average of Peak Amounts =					0.40333			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.420	11.417	0.003	1247120	0.04000	0.044			(a)
9 Aroclor-1260						CAS #: 11096-82-5		
7.799	7.797	0.002	1031645	0.40000	0.43	80.00- 120.00	100.00	(a)
8.094	8.091	0.003	795456	0.40000	0.43	58.48- 98.48	77.11	
8.505	8.502	0.003	922190	0.40000	0.44	68.67- 108.67	89.39	
Average of Peak Amounts =					0.43333			

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7607F.D
Report Date: 08-Nov-2011 14:43

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7607F.D
Date : 08-NOV-2011 13:05
Client ID: AR16603JE
Instrument: E2.i
Sample Info: AR16603JE,AR16603JE,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7607R.D
Report Date: 08-Nov-2011 14:44

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111107R.B\E2K7607R.D
Lab Smp Id: AR16603JE Client Smp ID: AR16603JE
Inj Date : 08-NOV-2011 13:05
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16603JE,AR16603JE,,ar1660.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 14:42 E2.i Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

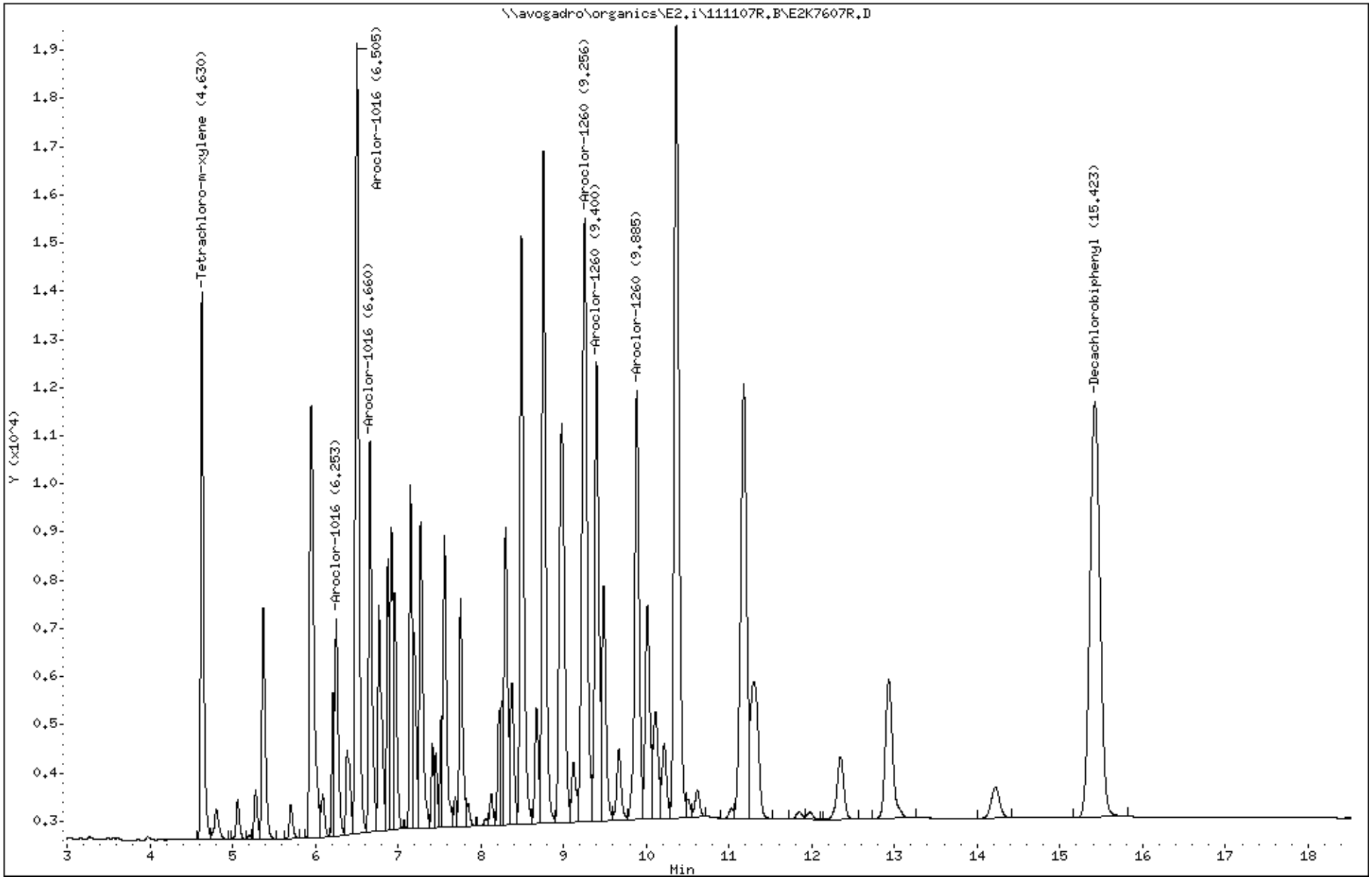
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.629	4.627	0.002	269913	0.02000	0.021			(a)
6 Aroclor-1016					CAS #: 12674-11-2			
6.253	6.250	0.003	129914	0.40000	0.42	80.00- 120.00	100.00	(a)
6.504	6.503	0.001	501067	0.40000	0.43	361.18- 401.18	385.69	
6.659	6.657	0.002	222172	0.40000	0.42	148.73- 188.73	171.01	
Average of Peak Amounts =					0.42333			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.423	15.423	0.000	731154	0.04000	0.043			(a)
8 Aroclor-1260					CAS #: 11096-82-5			
9.255	9.255	0.000	524091	0.40000	0.43	80.00- 120.00	100.00	(a)
9.399	9.398	0.001	318633	0.40000	0.43	41.04- 81.04	60.80	
9.885	9.883	0.002	335494	0.40000	0.42	44.30- 84.30	64.01	
Average of Peak Amounts =					0.42667			

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7607R.D
Report Date: 08-Nov-2011 14:44

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7607R.D
Date : 08-NOV-2011 13:05
Client ID: AR16603JE
Instrument: E2.i
Sample Info: AR16603JE,AR16603JE,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ABLK2F

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-62776

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E2K7575F.D/E2K7575R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup:(Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7575F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

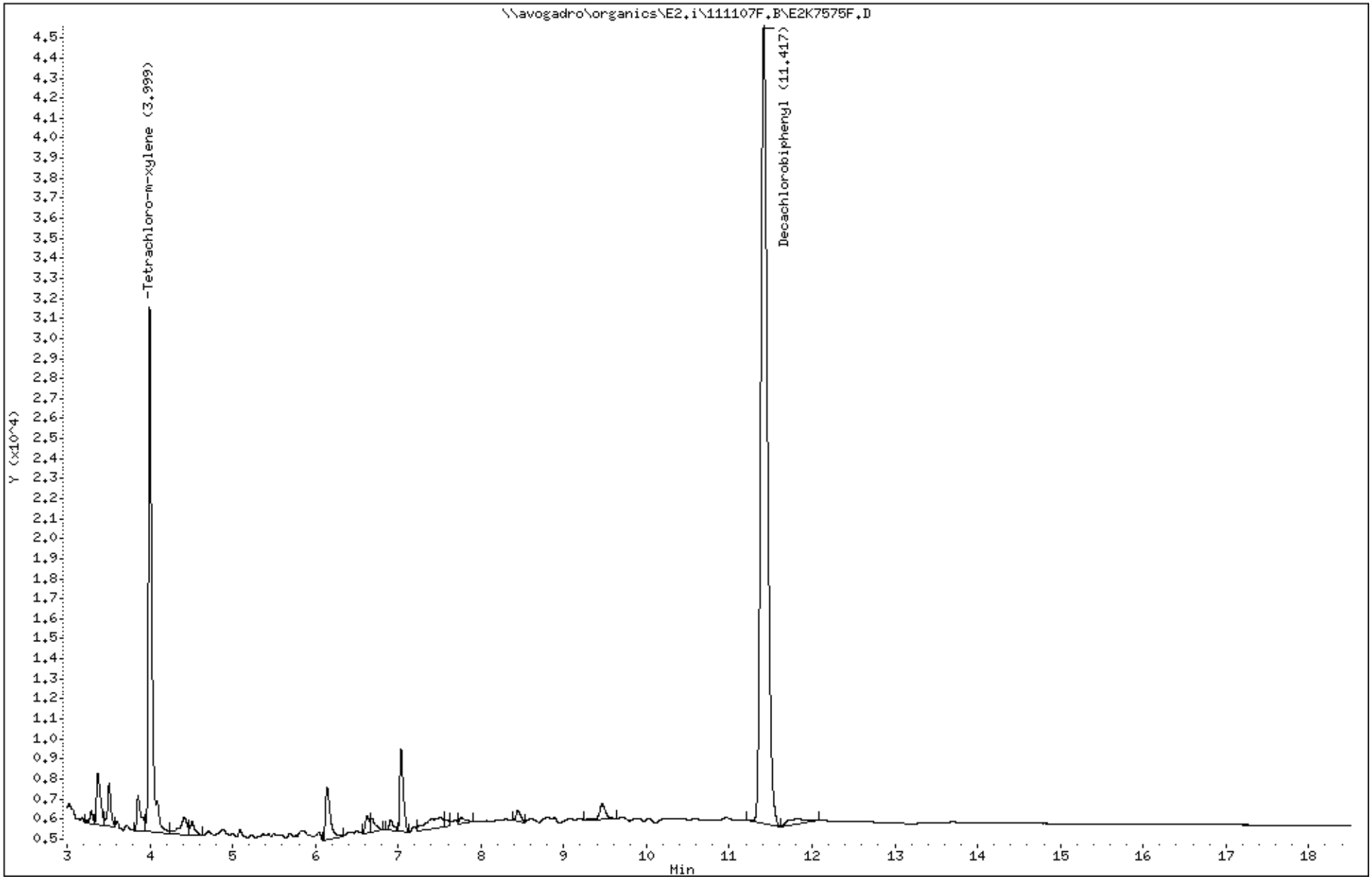
Data file : \\avogadro\organics\E2.i\111107F.B\E2K7575F.D
Lab Smp Id: MB-62776 Client Smp ID: ABLK2F
Inj Date : 08-NOV-2011 00:21
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : MB-62776,ABLK2F,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 17 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
3.999	3.999	0.000	737852	0.03553		12	
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
11.417	11.417	0.000	2202654	0.07683		26	

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7575F.D
Date : 08-NOV-2011 00:21
Client ID: ABLK2F
Instrument: E2.i
Sample Info: MB-62776,ABLK2F,62776,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7575R.D
Report Date: 08-Nov-2011 11:43

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

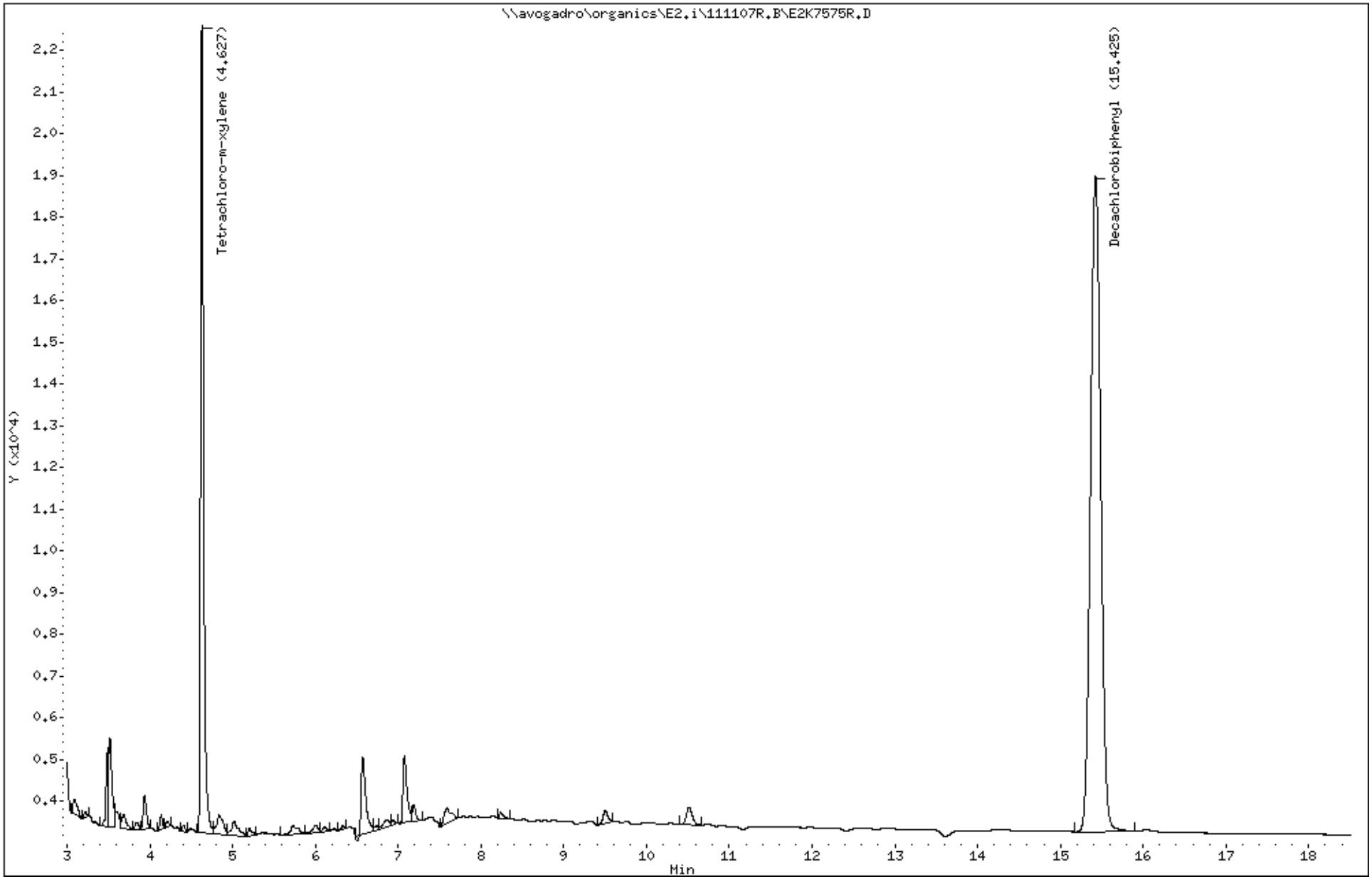
Data file : \\avogadro\organics\E2.i\111107R.B\E2K7575R.D
Lab Smp Id: MB-62776 Client Smp ID: ABLK2F
Inj Date : 08-NOV-2011 00:21
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : MB-62776,ABLK2F,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 17 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS			
				ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.627	4.627	0.000	477506	0.03796		13	
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.425	15.423	0.002	1341468	0.07914		26	

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7575R.D
Date : 08-NOV-2011 00:21
Client ID: ABLK2F
Instrument: E2.i
Sample Info: MB-62776,ABLK2F,62776,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

1638197

EPA SAMPLE NO.

AIBLKDJ(1)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: AIBLKDJ

Sample wt/vol: (g/mL) ML Lab File ID: E2K7599F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) Date Extracted:

Concentrated Extract Volume: (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) N

Acid Cleanup:(Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U
37324-23-5	Aroclor-1262	1.0	U
11100-14-4	Aroclor-1268	1.0	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

1638224

EPA SAMPLE NO.

AIBLKDJ(2)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: AIBLKDJ

Sample wt/vol: (g/mL) ML Lab File ID: E2K7599R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) Date Extracted:

Concentrated Extract Volume: (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) N

Acid Cleanup:(Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U
37324-23-5	Aroclor-1262	1.0	U
11100-14-4	Aroclor-1268	1.0	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7599F.D
Report Date: 08-Nov-2011 14:43

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111107F.B\E2K7599F.D
Lab Smp Id: AIBLKDJ Client Smp ID: AILBKDJ
Inj Date : 08-NOV-2011 08:44
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AIBLKDJ,AILBKDJ,,AIBLK.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 14:41 E2.i Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 99 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: AIBLK.sub
Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

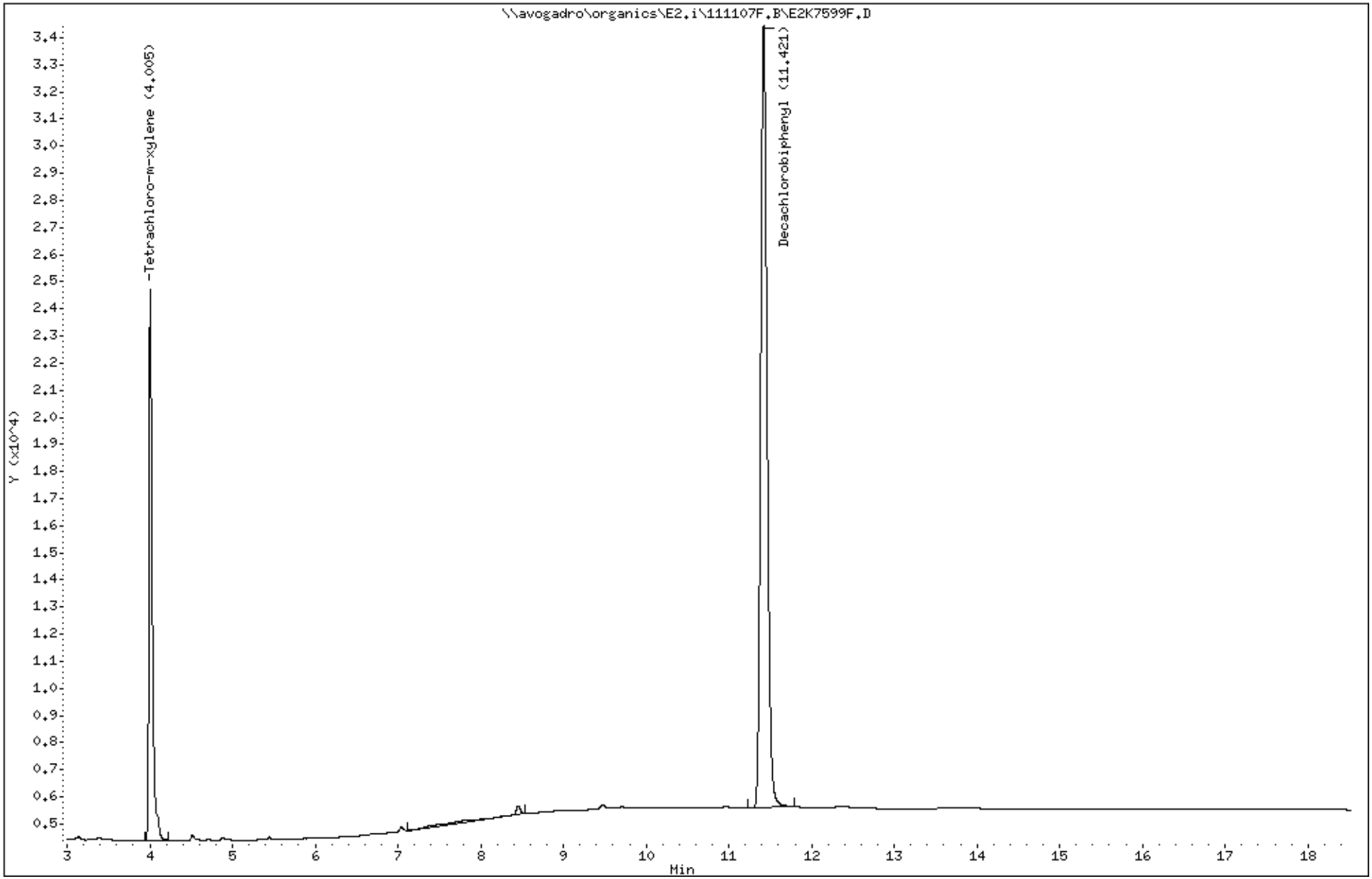
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.005	3.999	0.006	553591	0.02000	0.027			(a)
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.420	11.417	0.003	1571138	0.04000	0.055			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7599F.D
Date : 08-NOV-2011 08:44
Client ID: AILBKDJ
Instrument: E2.i
Sample Info: AIBLKDJ,AILBKDJ,,AIBLK,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7599R.D
Report Date: 08-Nov-2011 14:43

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111107R.B\E2K7599R.D
Lab Smp Id: AIBLKDJ Client Smp ID: AILBKDJ
Inj Date : 08-NOV-2011 08:44
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AIBLKDJ,AILBKDJ,,AIBLK.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 14:42 E2.i Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 99 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: AIBLK.sub
Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

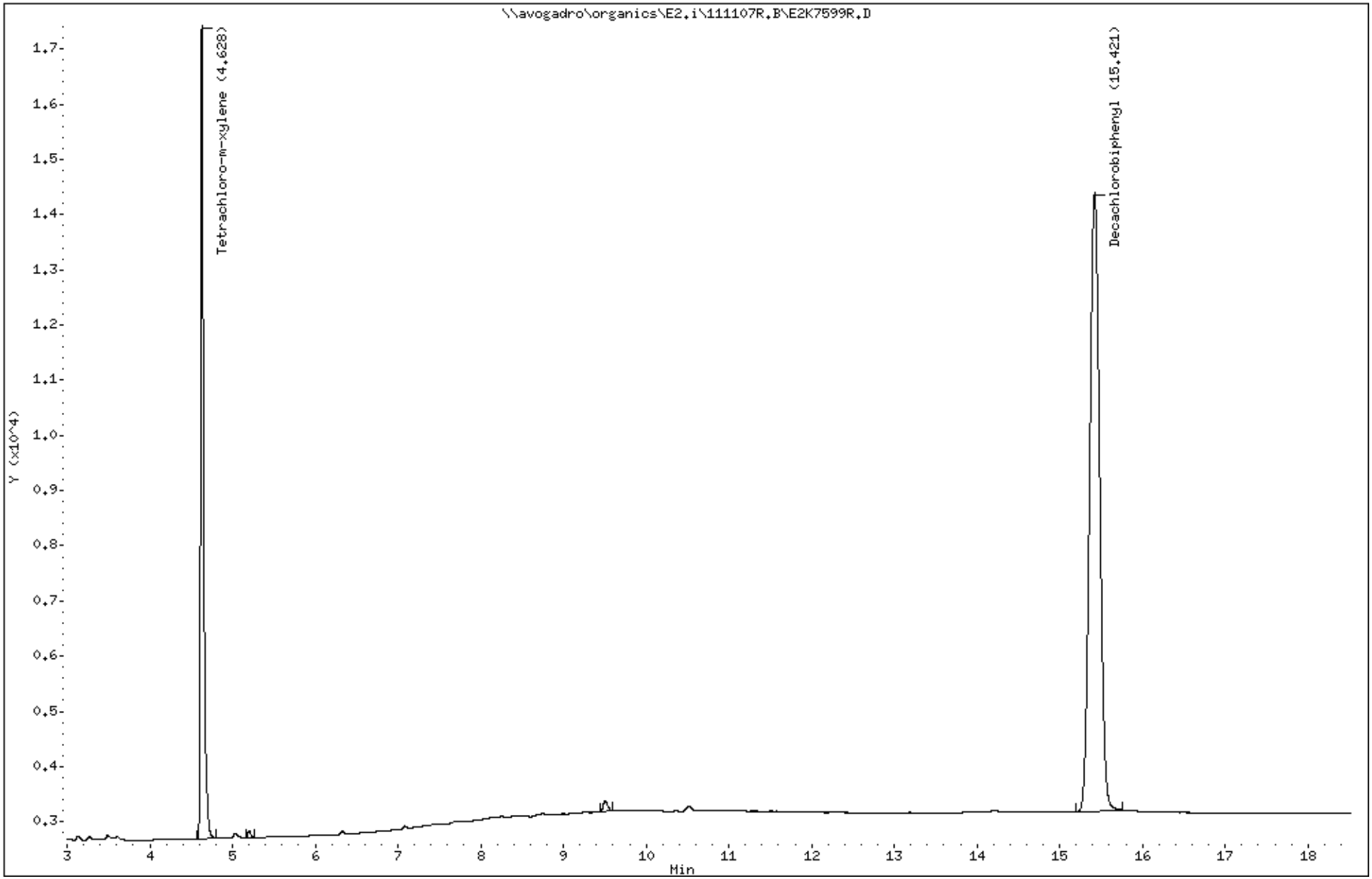
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.628	4.627	0.001	363405	0.02000	0.029			(a)
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.421	15.423	-0.002	939217	0.04000	0.055			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7599R.D
Date : 08-NOV-2011 08:44
Client ID: AILBKDJ
Instrument: E2.i
Sample Info: AIBLKDJ,AILBKDJ,,AIBLK,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

1637678

EPA SAMPLE NO.

AIBLKJD(1)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: AIBLKJD

Sample wt/vol: (g/mL) ML Lab File ID: E2K7565F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) Date Extracted:

Concentrated Extract Volume: (uL) Date Analyzed: 11/07/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) N

Acid Cleanup:(Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U
37324-23-5	Aroclor-1262	1.0	U
11100-14-4	Aroclor-1268	1.0	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

1637741

EPA SAMPLE NO.

AIBLKJD(2)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: AIBLKJD

Sample wt/vol: (g/mL) ML Lab File ID: E2K7565R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) Date Extracted:

Concentrated Extract Volume: (uL) Date Analyzed: 11/07/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) N

Acid Cleanup:(Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U
37324-23-5	Aroclor-1262	1.0	U
11100-14-4	Aroclor-1268	1.0	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7565F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111107F.B\E2K7565F.D
Lab Smp Id: AIBLKJD Client Smp ID: AILBKJD
Inj Date : 07-NOV-2011 20:51
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AIBLKJD,AILBKJD,,AIBLK.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 99 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: AIBLK.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

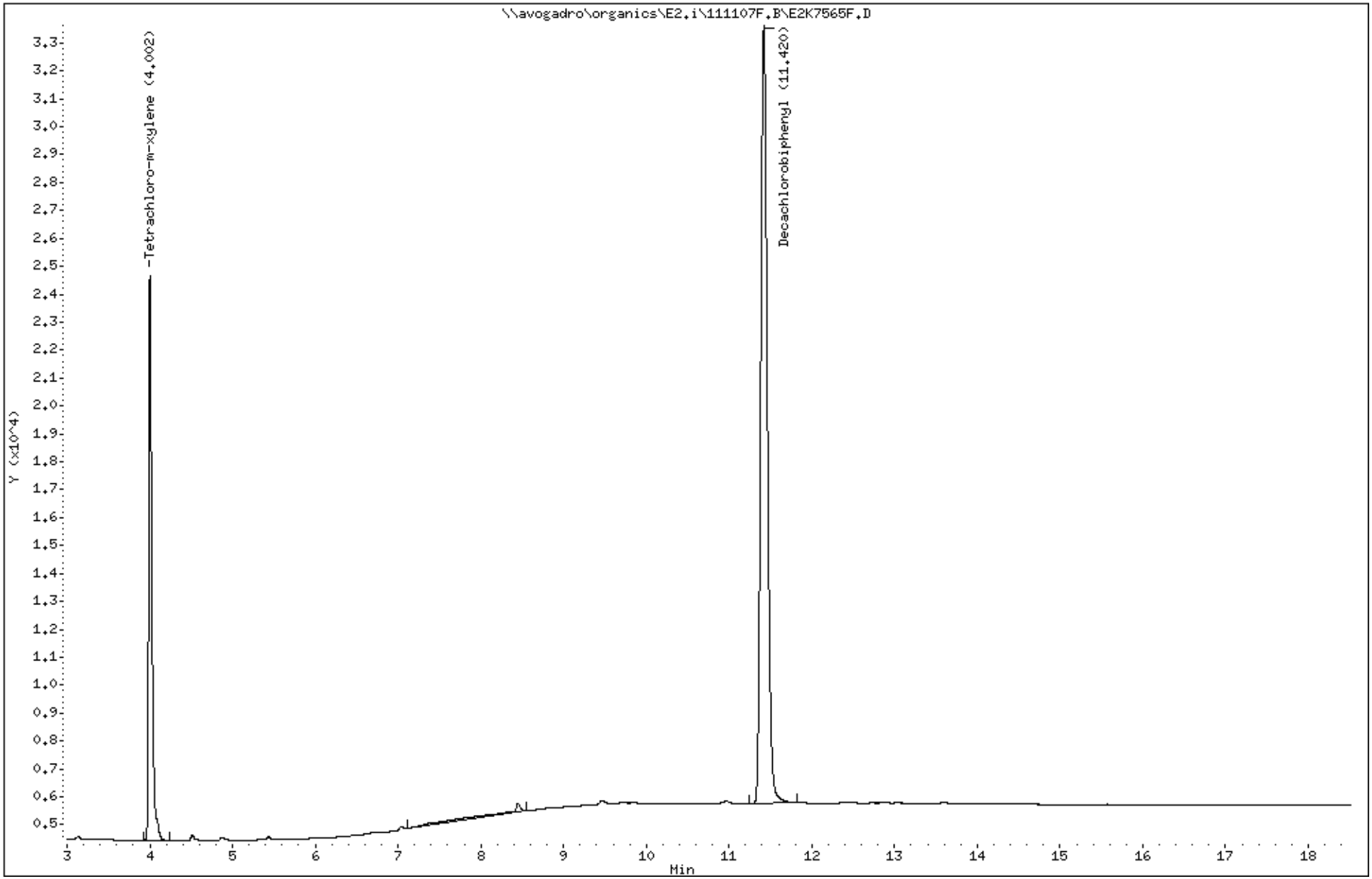
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.001	3.999	0.002	535485	0.02000	0.026		(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
11.419	11.417	0.002	1520608	0.04000	0.053		

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7565F.D
Date : 07-NOV-2011 20:51
Client ID: AILBKJD
Instrument: E2.i
Sample Info: AIBLKJD,AILBKJD,,AIBLK,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7565R.D
Report Date: 08-Nov-2011 11:43

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111107R.B\E2K7565R.D
Lab Smp Id: AIBLKJD Client Smp ID: AILBKJD
Inj Date : 07-NOV-2011 20:51
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AIBLKJD,AILBKJD,,AIBLK.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 99 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: AIBLK.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

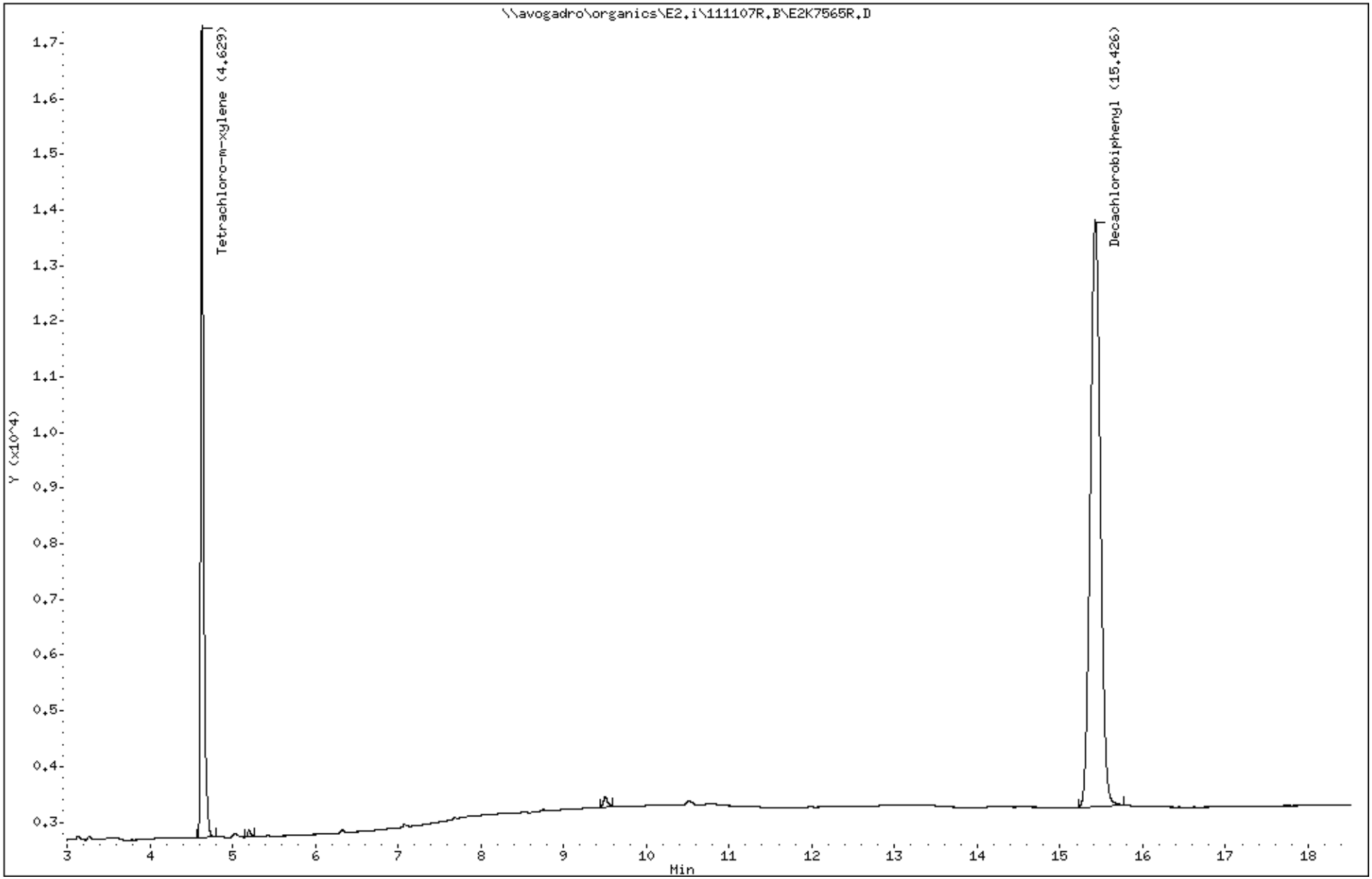
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.628	4.627	0.001	353743	0.02000	0.028			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.425	15.423	0.002	893689	0.04000	0.053			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7565R.D
Date : 07-NOV-2011 20:51
Client ID: AILBKJD
Instrument: E2.i
Sample Info: AIBLKJD,AILBKJD,,AIBLK,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

1638207

EPA SAMPLE NO.

AIBLKJE(1)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: AIBLKJE

Sample wt/vol: (g/mL) ML Lab File ID: E2K7606F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) Date Extracted:

Concentrated Extract Volume: (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) N

Acid Cleanup:(Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U
37324-23-5	Aroclor-1262	1.0	U
11100-14-4	Aroclor-1268	1.0	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

1638241

EPA SAMPLE NO.

AIBLKJE(2)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: AIBLKJE

Sample wt/vol: (g/mL) ML Lab File ID: E2K7606R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) Date Extracted:

Concentrated Extract Volume: (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) N

Acid Cleanup:(Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U
37324-23-5	Aroclor-1262	1.0	U
11100-14-4	Aroclor-1268	1.0	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7606F.D
Report Date: 08-Nov-2011 14:43

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111107F.B\E2K7606F.D
Lab Smp Id: AIBLKJE Client Smp ID: AILBKJE
Inj Date : 08-NOV-2011 12:45
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AIBLKJE,AILBKJE,,AIBLK.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 14:41 E2.i Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 99 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: AIBLK.sub
Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

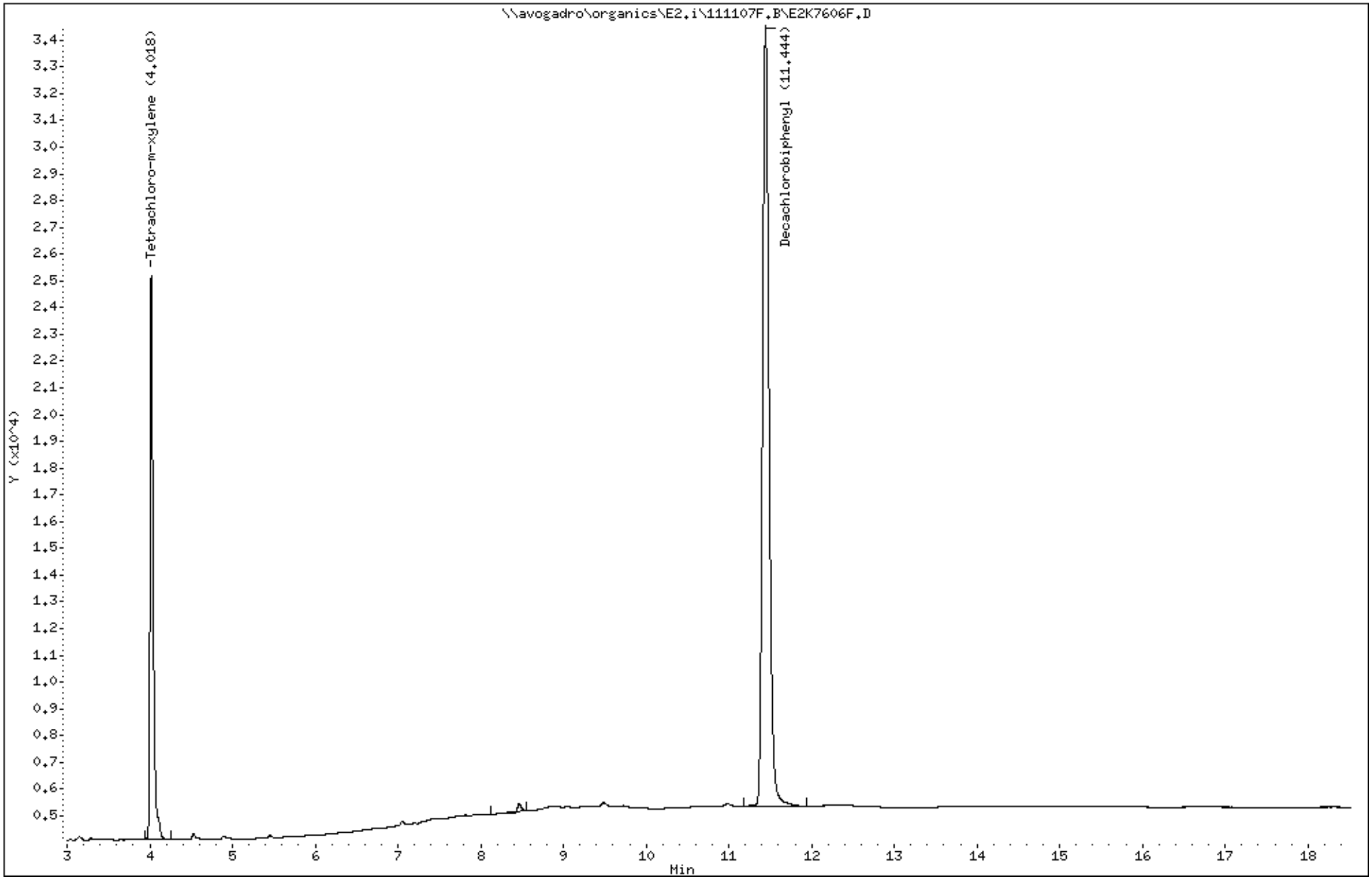
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.017	3.999	0.018	555946	0.02000	0.027		(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
11.444	11.417	0.027	1609925	0.04000	0.056		

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7606F.D
Date : 08-NOV-2011 12:45
Client ID: AILBKJE
Instrument: E2.i
Sample Info: AIBLKJE,AILBKJE,,AIBLK,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7606R.D
Report Date: 08-Nov-2011 14:44

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111107R.B\E2K7606R.D
Lab Smp Id: AIBLKJE Client Smp ID: AILBKJE
Inj Date : 08-NOV-2011 12:45
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AIBLKJE,AILBKJE,,AIBLK.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 14:42 E2.i Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 99 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: AIBLK.sub
Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

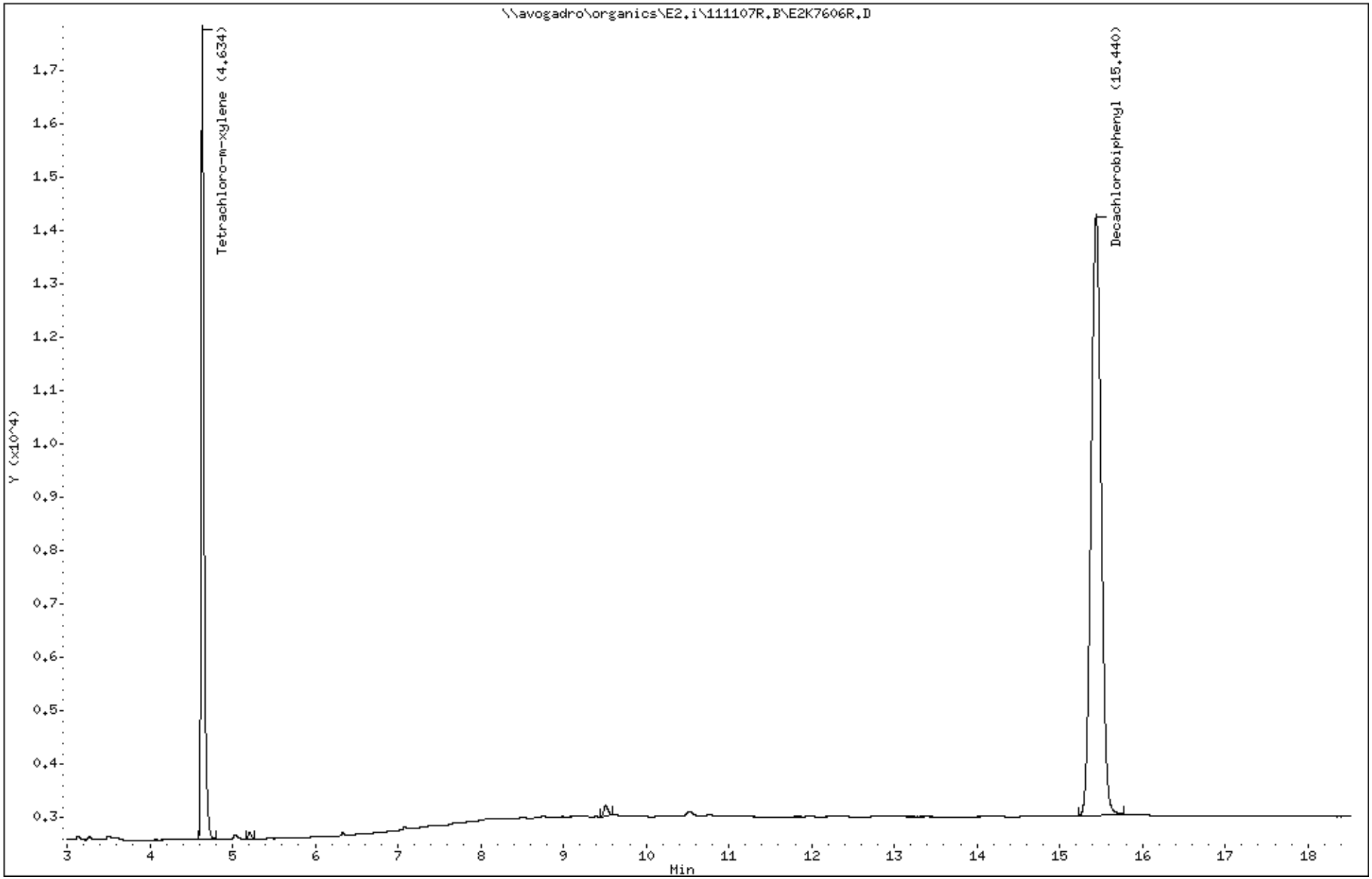
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.634	4.627	0.007	369685	0.02000	0.029			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.440	15.423	0.017	948794	0.04000	0.056			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7606R.D
Date : 08-NOV-2011 12:45
Client ID: AILBKJE
Instrument: E2.i
Sample Info: AIBLKJE,AILBKJE,,AIBLK,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q0MS(1)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-01BMS

Sample wt/vol: 30 (g/mL) G Lab File ID: E2K7578F.D

% Moisture: 15 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: 8.2 Sulfur Cleanup: (Y/N) Y

Acid Cleanup:(Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	94	
11104-28-2	Aroclor-1221	39	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	39	U
11096-82-5	Aroclor-1260	110	
37324-23-5	Aroclor-1262	39	U
11100-14-4	Aroclor-1268	39	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q0MS(2)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-01BMS

Sample wt/vol: 30 (g/mL) G Lab File ID: E2K7578R.D

% Moisture: 15 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: 8.2 Sulfur Cleanup: (Y/N) Y

Acid Cleanup:(Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	94	
11104-28-2	Aroclor-1221	39	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	39	U
11096-82-5	Aroclor-1260	110	
37324-23-5	Aroclor-1262	39	U
11100-14-4	Aroclor-1268	39	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7578F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111107F.B\E2K7578F.D
Lab Smp Id: K2198-01BMS Client Smp ID: H30Q0MS
Inj Date : 08-NOV-2011 01:23
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-01BMS,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 20 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

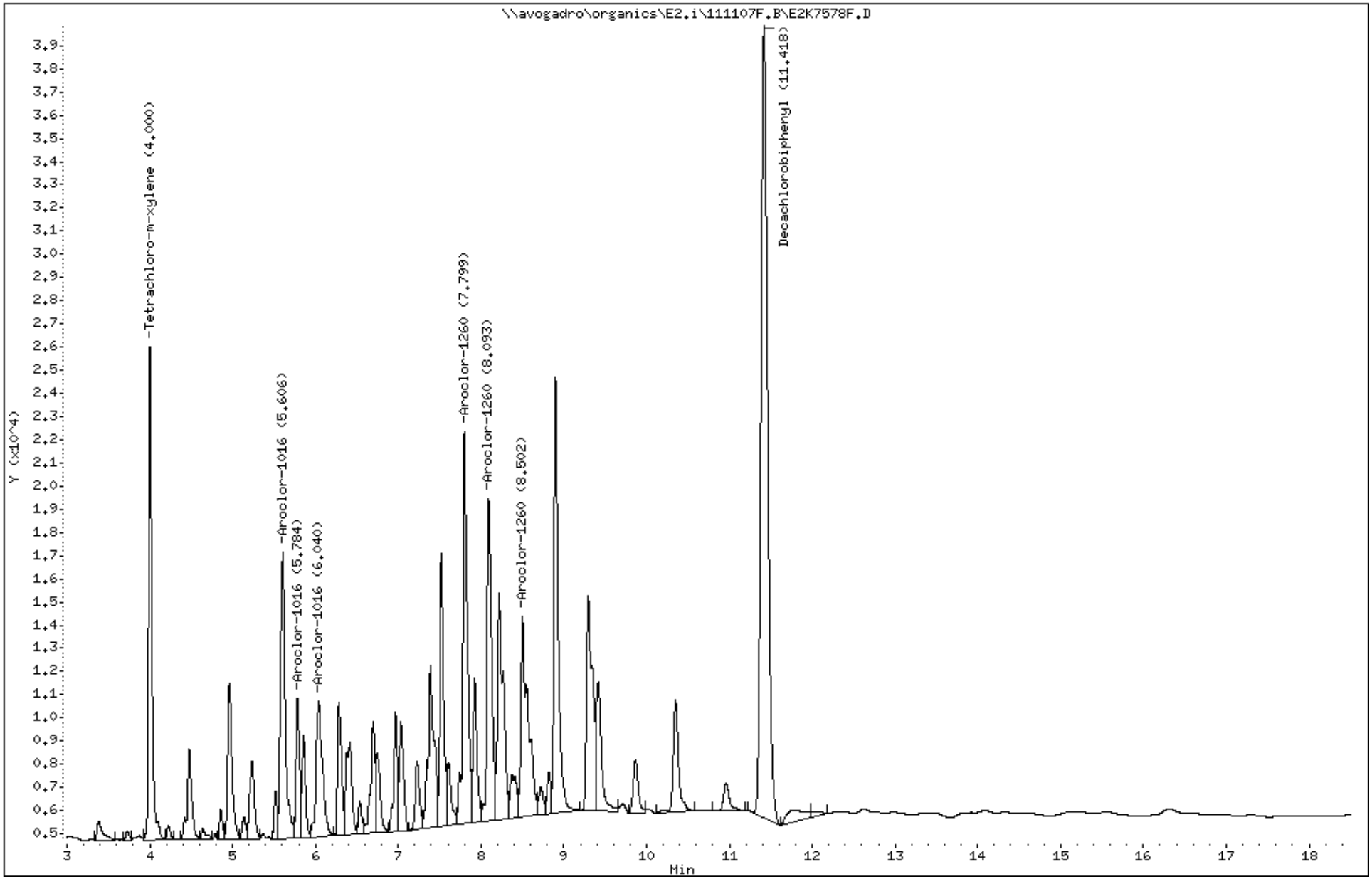
RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.000	3.999	0.001	579050	0.02788	9.3		
5 Aroclor-1016					CAS #: 12674-11-2		
5.606	5.604	0.002	512185	0.24986	83	80.00- 120.00	100.00(H)
5.783	5.781	0.002	183305	0.23643	79	17.38- 57.38	35.79
6.040	6.039	0.001	319259	0.23199	77	46.93- 86.93	62.33
	Average of Peak Concentrations =				80		
9 Aroclor-1260					CAS #: 11096-82-5		
7.798	7.797	0.001	661818	0.27699	92	80.00- 120.00	100.00
8.093	8.091	0.002	540896	0.29117	97	58.48- 98.48	81.73
8.502	8.502	0.000	509934	0.24624	82	68.67- 108.67	77.05
	Average of Peak Concentrations =				90		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.418	11.417	0.001	1892003	0.06600	22		

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7578F.D
Report Date: 08-Nov-2011 11:42

QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7578F.D
Date : 08-NOV-2011 01:23
Client ID: H30Q0MS
Instrument: E2.i
Sample Info: K2198-01BMS,,62776,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7578R.D
Report Date: 08-Nov-2011 11:43

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

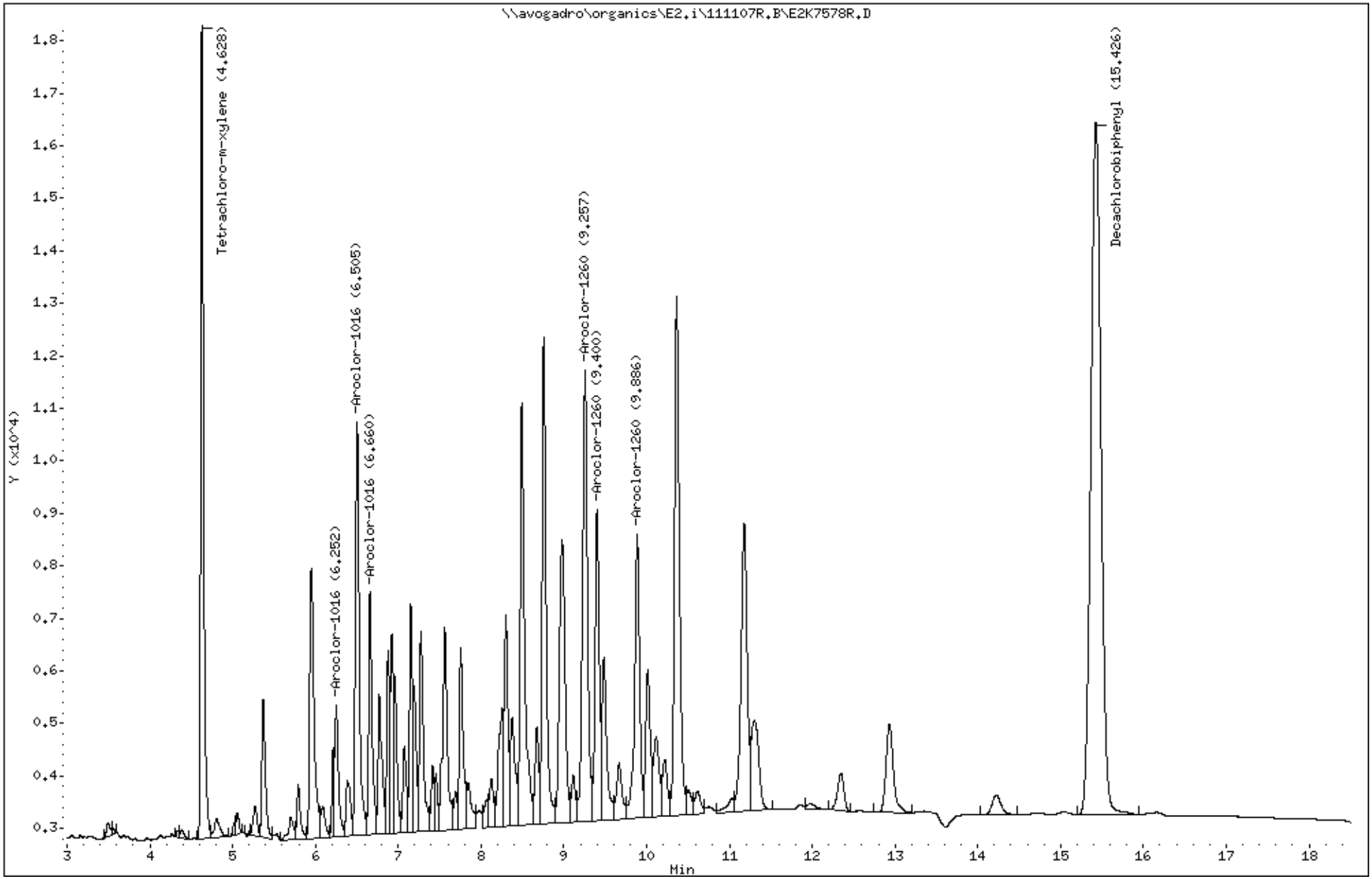
Data file : \\avogadro\organics\E2.i\111107R.B\E2K7578R.D
Lab Smp Id: K2198-01BMS Client Smp ID: H30Q0MS
Inj Date : 08-NOV-2011 01:23
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-01BMS,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 20 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.627	4.627	0.000	377758	0.03003	10		
6 Aroclor-1016					CAS #: 12674-11-2		
6.252	6.250	0.002	76721	0.24929	83	80.00- 120.00	100.00
6.505	6.503	0.002	255619	0.21736	72	361.18- 401.18	333.18
6.659	6.657	0.002	133142	0.25368	84	148.73- 188.73	173.54
	Average of Peak Concentrations =				80		
8 Aroclor-1260					CAS #: 11096-82-5		
9.257	9.255	0.002	364964	0.29921	100	80.00- 120.00	100.00
9.400	9.398	0.002	205956	0.27680	92	41.04- 81.04	56.43
9.885	9.883	0.002	226574	0.28641	95	44.30- 84.30	62.08
	Average of Peak Concentrations =				96		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.426	15.423	0.003	1130624	0.06670	22		

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7578R.D
Date : 08-NOV-2011 01:23
Client ID: H30Q0MS
Instrument: E2.i
Sample Info: K2198-01BMS,,62776,somaro.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q0MSD(1)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-01BMSD

Sample wt/vol: 30 (g/mL) G Lab File ID: E2K7579F.D

% Moisture: 15 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: 8.2 Sulfur Cleanup: (Y/N) Y

Acid Cleanup:(Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	82	
11104-28-2	Aroclor-1221	39	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	39	U
11096-82-5	Aroclor-1260	95	
37324-23-5	Aroclor-1262	39	U
11100-14-4	Aroclor-1268	39	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Q0MSD(2)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: K2198-01BMSD

Sample wt/vol: 30 (g/mL) G Lab File ID: E2K7579R.D

% Moisture: 15 Decanted: (Y/N) N Date Received: 10/28/2011

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: 8.2 Sulfur Cleanup: (Y/N) Y

Acid Cleanup:(Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	76	
11104-28-2	Aroclor-1221	39	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	39	U
11096-82-5	Aroclor-1260	93	
37324-23-5	Aroclor-1262	39	U
11100-14-4	Aroclor-1268	39	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7579F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

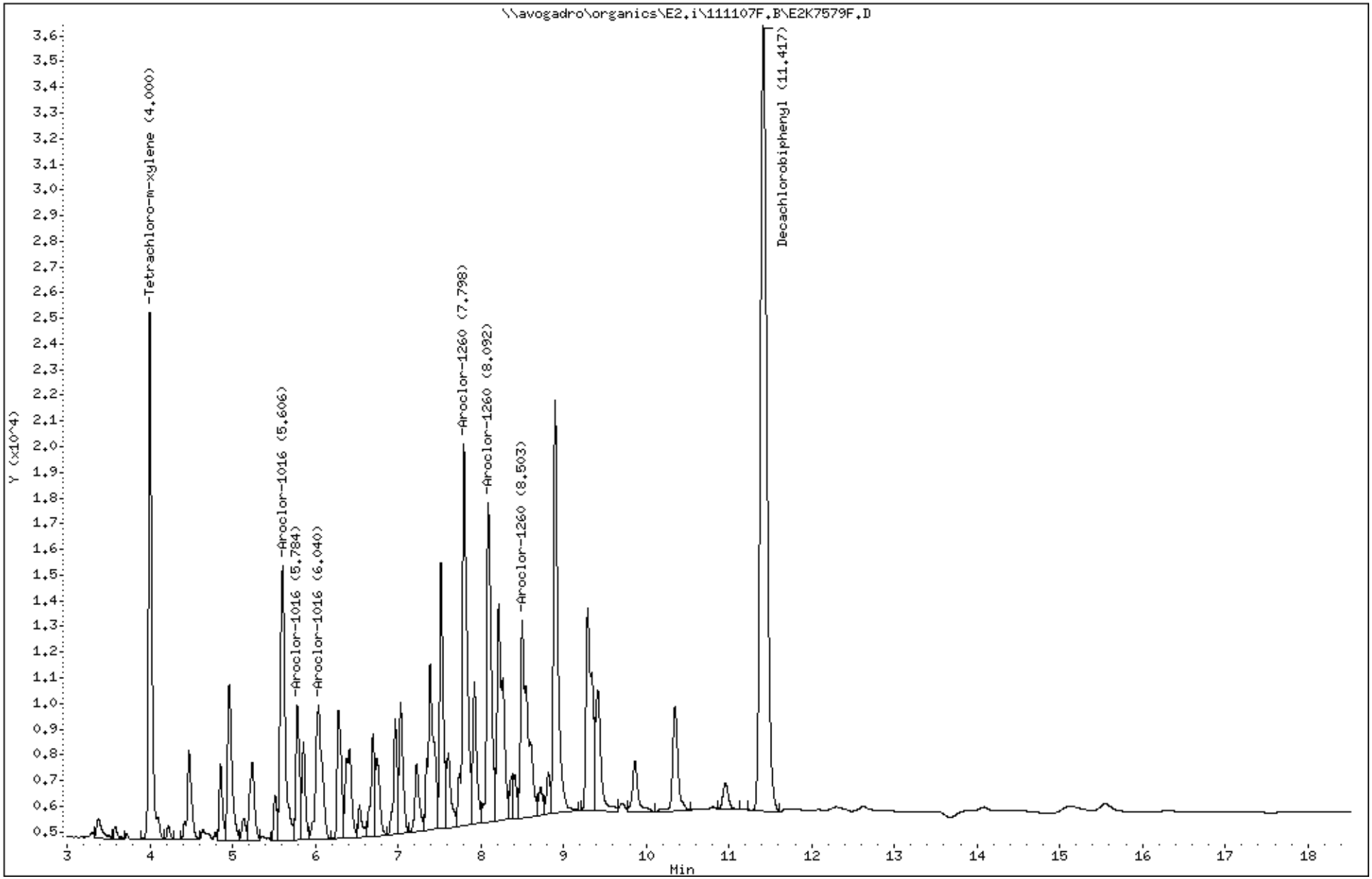
Data file : \\avogadro\organics\E2.i\111107F.B\E2K7579F.D
Lab Smp Id: K2198-01BMSD Client Smp ID: H30Q0MSD
Inj Date : 08-NOV-2011 01:44
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-01BMSD,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 21 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.000	3.999	0.001	566437	0.02728	9.1		
5 Aroclor-1016					CAS #: 12674-11-2		
5.605	5.604	0.001	446663	0.21790	73	80.00- 120.00	100.00
5.783	5.781	0.002	161565	0.20839	69	17.38- 57.38	36.17
6.040	6.039	0.001	281180	0.20432	68	46.93- 86.93	62.95
Average of Peak Concentrations =					70		
9 Aroclor-1260					CAS #: 11096-82-5		
7.798	7.797	0.001	586986	0.24567	82	80.00- 120.00	100.00
8.092	8.091	0.001	482972	0.25999	87	58.48- 98.48	82.28
8.502	8.502	0.000	455878	0.22014	73	68.67- 108.67	77.66
Average of Peak Concentrations =					81		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.416	11.417	-0.001	1656107	0.05777	19		

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7579F.D
Date : 08-NOV-2011 01:44
Client ID: H30Q0MSD
Instrument: E2.i
Sample Info: K2198-01BMSD,,62776,somaro.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7579R.D
Report Date: 08-Nov-2011 11:43

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

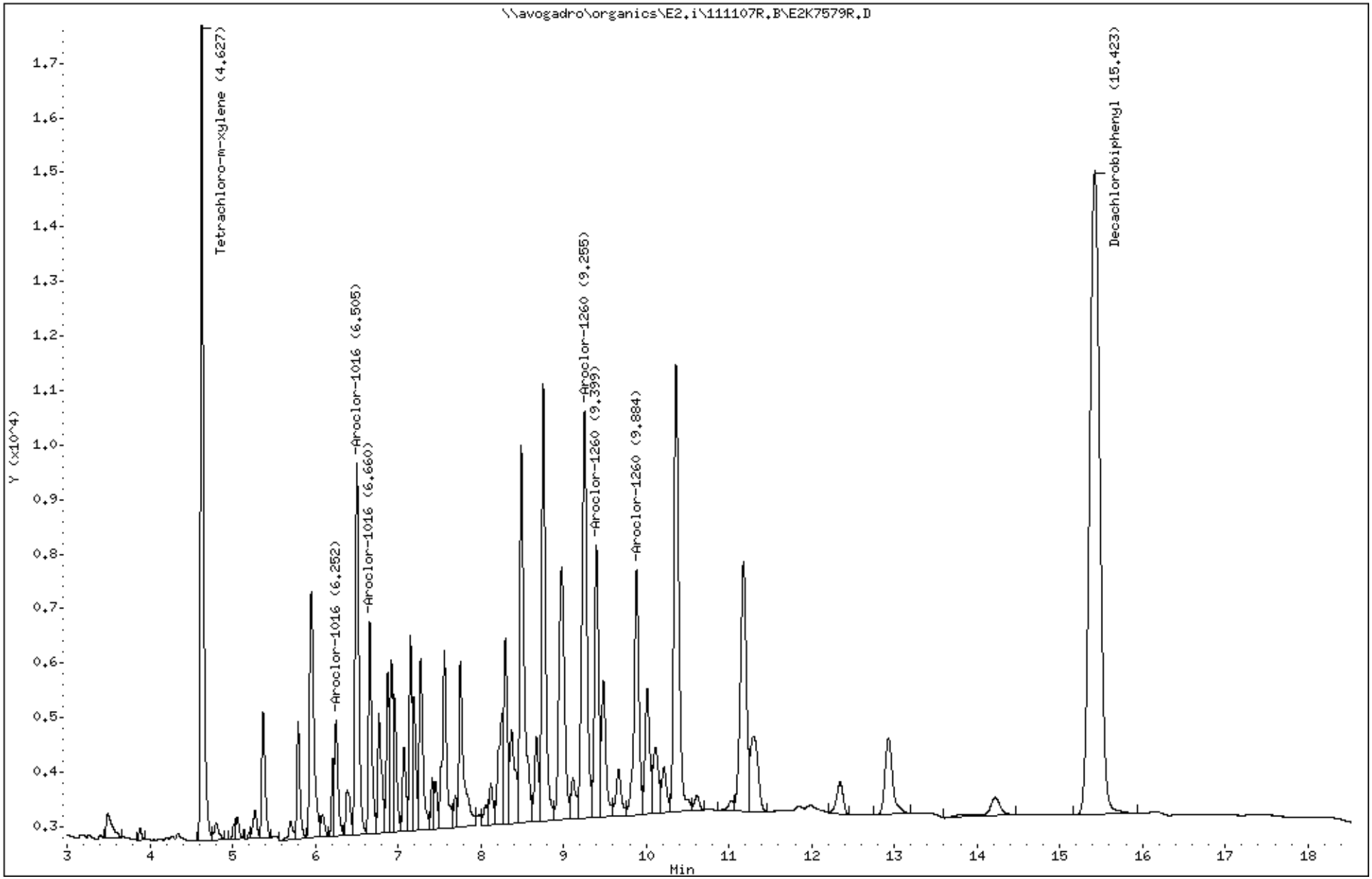
Data file : \\avogadro\organics\E2.i\111107R.B\E2K7579R.D
Lab Smp Id: K2198-01BMSD Client Smp ID: H30Q0MSD
Inj Date : 08-NOV-2011 01:44
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2198-01BMSD,,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 21 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.627	4.627	0.000	367073	0.02918	9.7		
6 Aroclor-1016					CAS #: 12674-11-2		
6.252	6.250	0.002	62008	0.20148	67	80.00- 120.00	100.00
6.504	6.503	0.001	209446	0.17809	59	361.18- 401.18	337.77
6.659	6.657	0.002	108011	0.20580	68	148.73- 188.73	174.19
		Average of Peak Concentrations =			65		
8 Aroclor-1260					CAS #: 11096-82-5		
9.255	9.255	0.000	312880	0.25651	86	80.00- 120.00	100.00
9.399	9.398	0.001	169535	0.22785	76	41.04- 81.04	54.19
9.884	9.883	0.001	182815	0.23109	77	44.30- 84.30	58.43
		Average of Peak Concentrations =			79		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.422	15.423	-0.001	1004663	0.05927	20		

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7579R.D
Date : 08-NOV-2011 01:44
Client ID: H30Q0MSD
Instrument: E2.i
Sample Info: K2198-01BMSD,,62776,somaro.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ALCS2F(1)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-62776

Sample wt/vol: 30 (g/mL) G Lab File ID: E2K7576F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup:(Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	26	J
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	41	P
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ALCS2F(2)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30Q0

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-62776

Sample wt/vol: 30 (g/mL) G Lab File ID: E2K7576R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/06/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/08/2011

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup:(Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/KG	Q
12674-11-2	Aroclor-1016	24	J
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	32	PJ
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7576F.D
Report Date: 08-Nov-2011 11:42

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111107F.B\E2K7576F.D
Lab Smp Id: LCS-62776 Client Smp ID: ALCS2F
Inj Date : 08-NOV-2011 00:41
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : LCS-62776,ALCS2F,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107F.B\E2_ARO_5_F.m
Meth Date : 08-Nov-2011 10:37 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 18 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

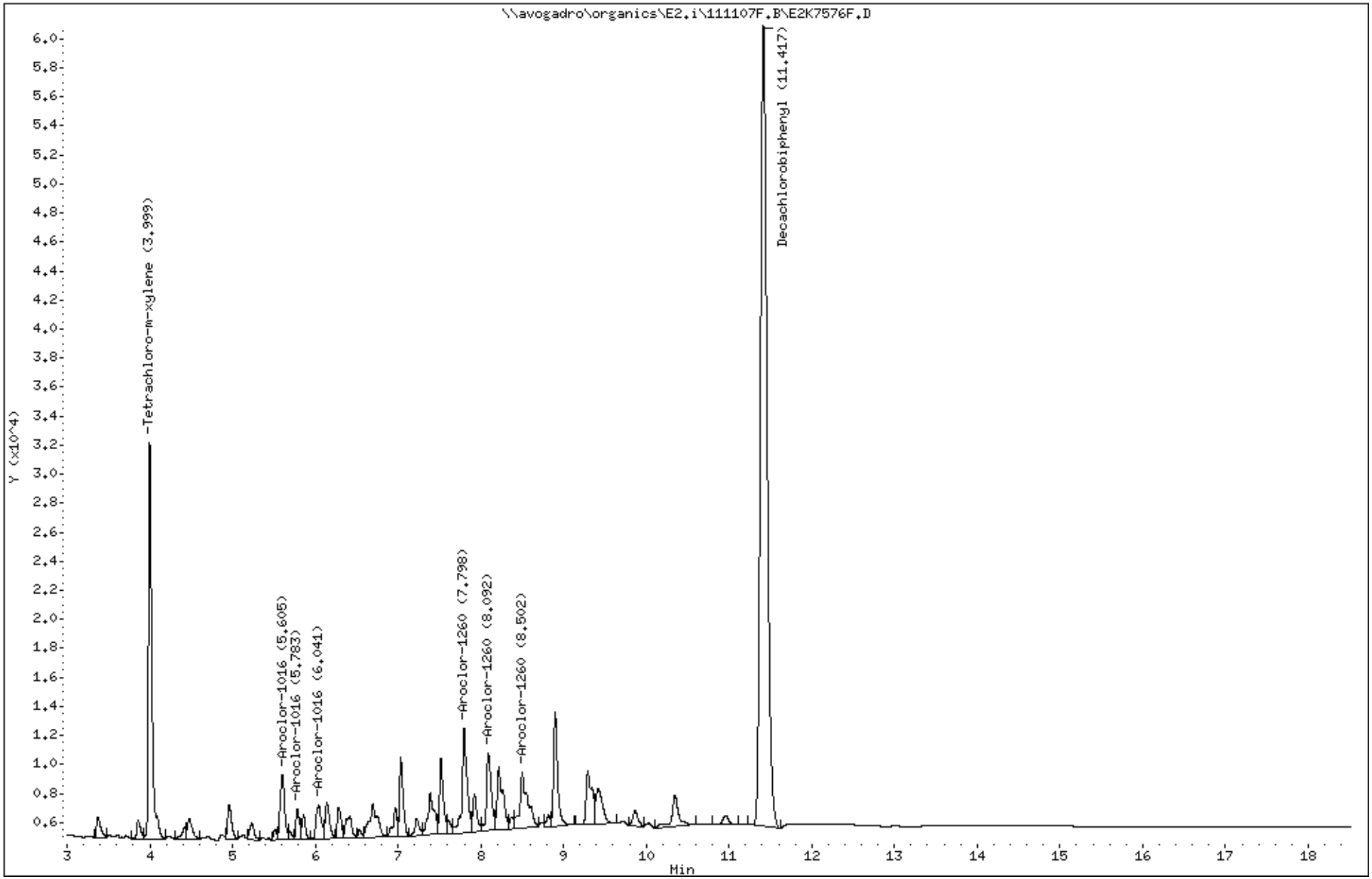
RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
3.999	3.999	0.000	769349	0.03705	12		
5 Aroclor-1016					CAS #: 12674-11-2		
5.605	5.604	0.001	166843	0.08139	27	80.00- 120.00	100.00(a)
5.783	5.781	0.002	62742	0.08092	27	17.38- 57.38	37.61
6.040	6.039	0.001	97968	0.07119	24	46.93- 86.93	58.72
Average of Peak Concentrations =					26		
9 Aroclor-1260					CAS #: 11096-82-5		
7.798	7.797	0.001	302781	0.12672	42	80.00- 120.00	100.00
8.092	8.091	0.001	214899	0.11568	38	58.48- 98.48	70.98
8.501	8.502	-0.001	259699	0.12540	42	68.67- 108.67	85.77
Average of Peak Concentrations =					41		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.416	11.417	-0.001	3072665	0.10718	36		

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7576F.D
Report Date: 08-Nov-2011 11:42

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111107F.B\E2K7576F.D
Date : 08-NOV-2011 00:41
Client ID: ALCS2F
Instrument: E2.i
Sample Info: LCS-62776,ALCS2F,62776,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111107R.B\E2K7576R.D
Report Date: 08-Nov-2011 11:43

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111107R.B\E2K7576R.D
Lab Smp Id: LCS-62776 Client Smp ID: ALCS2F
Inj Date : 08-NOV-2011 00:41
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : LCS-62776,ALCS2F,62776,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111107R.B\E2_ARO_5_R.m
Meth Date : 08-Nov-2011 10:38 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 18 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

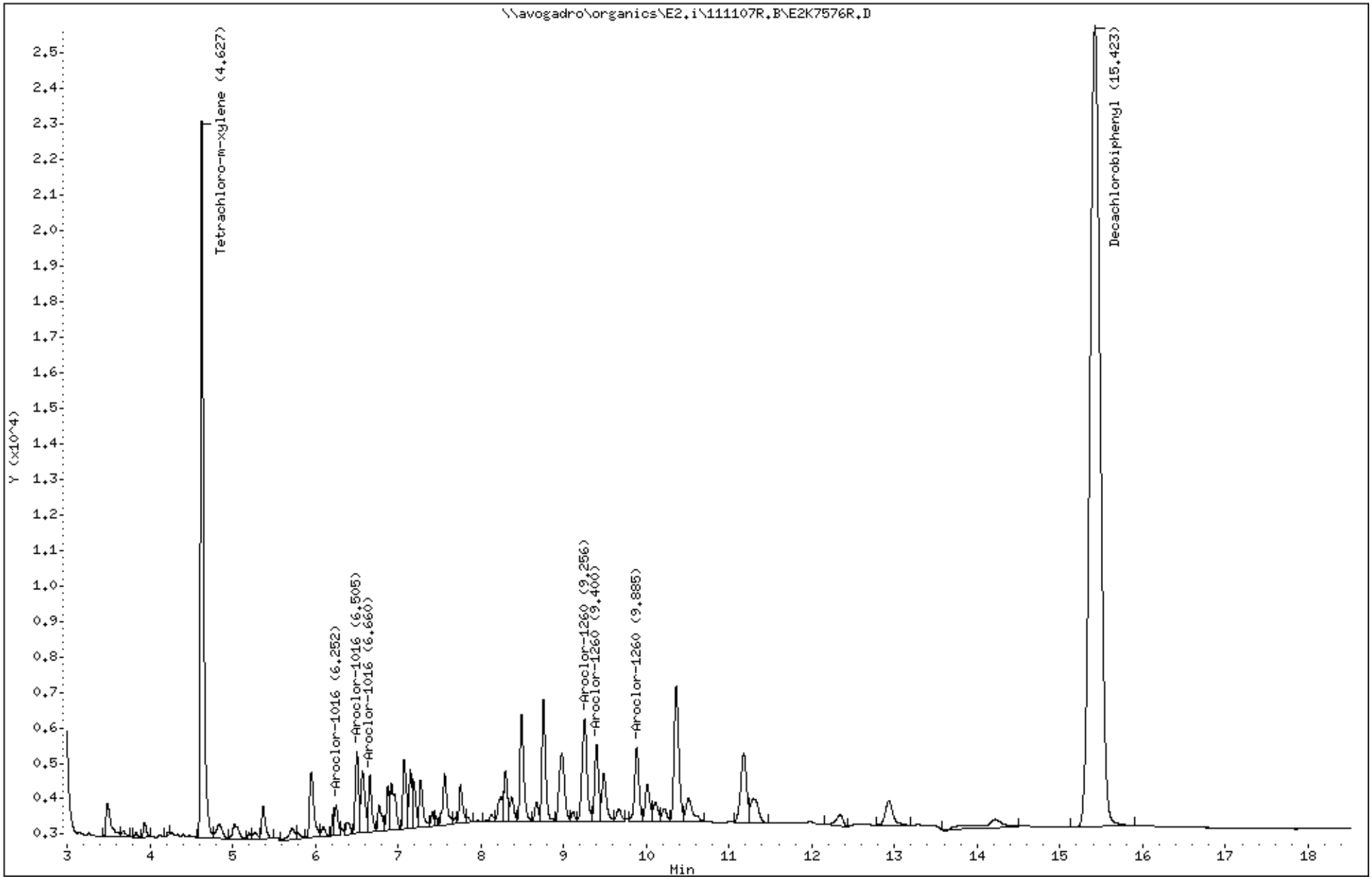
RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.627	4.627	0.000	507276	0.04033	13		
6 Aroclor-1016					CAS #: 12674-11-2		
6.251	6.250	0.001	24536	0.07972	26	80.00- 120.00	100.00(a)
6.505	6.503	0.002	63699	0.05416	18	361.18- 401.18	259.61
6.659	6.657	0.002	44888	0.08553	28	148.73- 188.73	182.95
Average of Peak Concentrations =					24		
8 Aroclor-1260					CAS #: 11096-82-5		
9.255	9.255	0.000	118922	0.09750	32	80.00- 120.00	100.00(a)
9.399	9.398	0.001	71726	0.09640	32	41.04- 81.04	60.31
9.884	9.883	0.001	76529	0.09674	32	44.30- 84.30	64.35
Average of Peak Concentrations =					32		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.423	15.423	0.000	1937645	0.11431	38		

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7576R.D
Report Date: 08-Nov-2011 11:43

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111107R.B\E2K7576R.D
Date : 08-NOV-2011 00:41
Client ID: ALCS2F
Instrument: E2.i
Sample Info: LCS-62776,ALCS2F,62776,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division: Volatile Organics Low/Medium Level Soil Extraction Log

Date	Lab ID		Analysis	Initial Wt. (g)	Final Wt. (g)	Sample Wt. (g)	Extraction Volume (mL)	Sample Type	Solvent&Lot# by/Date*	Comments/ Time of Encore transfer	Analyst
10/28/11	K2151	03A	8260_L	NA	NA	5.3	5.0	E	DI H2O		VEB
		04A				5.0					
		05A				5.4					
		06A				5.4					
		07A				5.4					
		08A				5.1					
		09A				5.2					
		10A				5.2					
		11A	8260_L			5.5			DI H2O		
		12A	8260_M			5.8			MEOH 51145		
		13A	8260_L			5.0			VEB 10/28/11 ~~SDL~~ DI H2O		
10/28/11	K2151	14A	8260_M	NA	NA	5.3	5.0	E	MEOH 51145		VEB
10/28/11	K2198	-01C1	5.0M	26.76	31.78	5.0		D		9:15 PM	
		-01C2		26.81	31.74	4.9				16	
10/28/11	K2198	-01C3	5.0M	26.54	31.42	4.9	5.0	D		9:17 PM	

*=Date added, if different than Rec. date

Sample Type: A. MeOH Pre-preserved; B. DI H2O/Freeze; C. NaHSO4 Pre-preserved; D. Encore; E. Unpreserved Jars

1225

Spectrum Analytical, Inc. RI Division: Volatile Organics Low/Medium Level Soil Extraction Log

Date	Lab ID		Analysis	Initial Wt. (g)	Final Wt. (g)	Sample Wt. (g)	Extraction Volume (mL)	Sample Type	Solvent&Lot# by/Date*	Comments/ Time of Encore transfer	Analyst
10/28/11	K2198	-02C1	SoM	26.71	31.80	5.1	5.0	D		9:18 PM	
		-02CL		26.56	31.77	5.2				19	
		-02C3		26.75	31.79	5.0				20	
		-03C1		26.81	31.75	4.9				21	
		-03CL		26.68	31.80	5.2				22	
		-03C3		26.75	31.68	4.9				23	
		-04C1		26.54	31.74	5.2				24	
		-04CL		26.66	31.65	5.0				25	
		-04C3		26.74	31.54	4.8				26	
		-05C1		26.68	31.75	5.1				27	
		-05CL		26.80	31.46	4.7				28	
		-05C3		26.75	31.81	5.1				29	
		-06C1		26.79	31.76	5.0				30	
		-06CL		26.77	31.55	4.8				31	
10/28/11	K2198	-06C3	SoM	26.80	31.72	4.9	5.0	D		9:32 PM	

*=Date added, if different than Rec. date

Sample Type: A. MeOH Pre-preserved; B. DI H2O/Freeze; C. NaHSO4 Pre-preserved; D. Encore; E. Unpreserved Jars

Spectrum Analytical, Inc. RI Division: Volatile Organics Low/Medium Level Soil Extraction Log

Date	Lab ID		Analysis	Initial Wt. (g)	Final Wt. (g)	Sample Wt. (g)	Extraction Volume (mL)	Sample Type	Solvent&Lot# by/Date*	Comments/ Time of Encore transfer	Analyst
10/28/11	K2198	-07C1	SOM	26.79	31.72	5.0	5.0	D		9:35 PM	mc
		-07C2		26.77	31.81	5.1				36	
		-07C3		26.78	31.91	5.1				37	
		-08C1		26.58	31.84	5.2				38	
		-08C2		26.80	31.82	5.0				39	
		-08C3		26.51	31.85	5.3				40	
		-09C1		26.84	31.79	5.0				41	
		-09C2		27.11	31.95	4.8				42	
		-09C3		26.71	31.78	5.0				43	
		-10C1		26.83	31.58	4.8				44	
		-10C2		26.80	31.79	5.0				45	
		-10C3		26.85	31.78	5.0				46	
		-11C1		26.89	31.84	5.0				47	
		-11C2		26.79	31.59	4.8				48	
10/29/11	K2198	-11C3	SOM	26.72	31.88	5.1	5.0	D		9:49 PM	mc

*=Date added, if different than Rec. date

Sample Type: A. MeOH Pre-preserved; B. DI H2O/Freeze; C. NaHSO4 Pre-preserved; D. Encore; E. Unpreserved Jars

Spectrum Analytical, Inc. RI Division: Volatile Organics Low/Medium Level Soil Extraction Log

Date	Lab ID		Analysis	Initial Wt. (g)	Final Wt. (g)	Sample Wt. (g)	Extraction Volume (mL)	Sample Type	Solvent&Lot# by/Date*	Comments/ Time of Encore transfer	Analyst
10/28/4	K2198	12C1	50M	26.89	31.88	5.0	5.0	D		9:50 PM	AL
		12C2		26.79	31.89	5.1				51	
		12C3		26.75	31.75	5.0				52	
		13C1		26.77	31.68	5.0				53	
		13C2		26.79	31.91	5.1				54	
		13C3		26.80	31.75	5.0				55	
		14C1		26.51	31.72	5.2				56	
		14C2		26.84	31.86	5.0				57	
		14C3		26.80	31.79	5.0				58	
		15C1		26.83	31.88	5.0				9:59	
		15C2		26.72	31.85	5.1				10:00	
		15C3		26.75	31.59	4.8				01	
		16C1		26.85	31.91	5.0				02	
		16C2		26.91	31.68	4.8				03	
10/28/4	K2198	16C3	50M	26.78	31.59	4.8	5.0	D		10:05 PM	AL

*=Date added, if different than Rec. date

Sample Type: A. MeOH Pre-preserved; B. DI H2O/Freeze; C. NaHSO4 Pre-preserved; D. Encore; E. Unpreserved Jars

Reviewed By: [signature]

Spectrum Analytical, Inc. RI Division: Volatile Organics Low/Medium Level Soil Extraction Log

Date	Lab ID		Analysis	Initial Wt. (g)	Final Wt. (g)	Sample Wt. (g)	Extraction Volume (mL)	Sample Type	Solvent&Lot# by/Date*	Comments/ Time of Encore transfer	Analyst
10/28/11	K2198	17C1	5.0M	26.59	31.88	5.3	5.0	D		10:06 PM	ML
		17CL		26.71	31.83	5.1				07	
		17C3		26.78	31.78	5.0				08	
		18C1		26.85	31.73	4.9				09	
		18CL		26.79	31.68	4.9				10	
		18C3		26.84	31.64	4.8				11	
		19C1		26.79	31.60	4.8				12	
		19CL		26.80	31.66	4.9				13	
		19C3		26.66	31.72	5.1				14	
		20C1		26.74	31.78	5.0				15	
		20CL		26.82	31.84	5.0				16	
	K2198	20C3		26.90	31.90	5.0				17	
	K2198	01C4		26.98	31.96	5.0				18	
		01C5		26.93	31.80	4.9				19	
10/28/11	K2198	01C6	5.0M	26.89	31.64	4.8	5.0	D		10:20 PM	ML

*=Date added, if different than Rec. date

Sample Type: A. MeOH Pre-preserved; B. DI H2O/Freeze; C. NaHSO4 Pre-preserved; D. Encore; E. Unpreserved Jars

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Prep Start Date: **11/7/2011 9:30:00 A**
Prep End Date: **11/9/2011 5:12:00 P**
Prep Batch ID: **62764**

Prep Code: **SOM01.0_SVOA_LOW_S_PR**
Technician: **Antonio AP Cardoso**

Prep Type: **SONC/SW3550B**

Prep Factor Units: **mL / g**

QC Matrix: NASO4
QC Matrix Lot: 106147

Solvent (1): MECL2
Solvent (1) Lot: DE 980

Solvent (2): ACE
Solvent (2) Lot: 108096

Solvent (3): N/A
Solvent (3) Lot: N/A

Solvent (4): N/A
Solvent (4) Lot: N/A

Solvent (5): N/A
Solvent (5) Lot: N/A

Solvent (6): N/A
Solvent (6) Lot: N/A

Clean Up (1): N/A
Clean Up (1) Lot: N/A

Clean Up (2): N/A
Clean Up (2) Lot: N/A

Clean Up (3): N/A
Clean Up (1) Lot: N/A

Clean Up (4): N/A
Clean Up (4) Lot: N/A

Filter?: FILTER
Filter Lot: FC003284

Start Time: N/A
End Time: N/A

Cycles/Hour 0

Sonicator Tuned?Yes

Bath Temp1 (C): 87

Therm ID1: 88

Mitkem Sample ID	Client Samp ID	M	Initial (mL/g)	Final (mL)	Surrogate Spike ID	Surr (mL)	LCS/D MS/D Spike ID	Spike (mL)	A* Init	W* Init	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11	pH <2	CNCNTR Unit
									APC	TM			11/08/11	JMV	R7				KD 1
MB-62764	BatchQC		30	10	OSW110822B	1													
	CLEAN UP (MB-62764): GPC3_111109B/jvales								APC	TM	11/16/11	01	11/08/11	JMV	R7				KD 1
K2198-01A	H30Q0	S	30.3	10	OSW110822B	1													
	CLEAN UP (K2198-01A): GPC3_111109B/jvales								APC	TM	11/16/11	01	11/08/11	JMV	R7				KD 1
K2198-01AMS	H30Q0	S	30.1	10	OSW110822B	1	OSW110916A	1											
	CLEAN UP (K2198-01AMS): GPC3_111109B/jvales								APC	TM	11/16/11	01	11/08/11	JMV	R7				KD 1
K2198-01AMSD	H30Q0	S	30.4	10	OSW110822B	1	OSW110916A	1											
	CLEAN UP (K2198-01AMSD): GPC3_111109B/jvales								APC	TM	11/16/11	01	11/08/11	JMV	R7				KD 1
K2198-02A	H30Q1	S	30.3	10	OSW110822B	1													
	CLEAN UP (K2198-02A): GPC3_111109B/jvales								APC	TM	11/16/11	01	11/08/11	JMV	R7				KD 1
K2198-03A	H30Q2	S	30.1	10	OSW110822B	1													
	CLEAN UP (K2198-03A): GPC3_111109B/jvales								APC	TM	11/16/11	01	11/08/11	JMV	R7				KD 1
K2198-04A	H30Q3	S	30.5	10	OSW110822B	1													
	CLEAN UP (K2198-04A): GPC3_111109B/jvales								APC	TM	11/16/11	01	11/08/11	JMV	R7				KD 1
K2198-05A	H30Q4	S	30.1	10	OSW110822B	1													
	CLEAN UP (K2198-05A): GPC3_111109B/jvales								APC	TM	11/16/11	01	11/08/11	JMV	R7				KD 1
K2198-06A	H30Q6	S	30.3	10	OSW110822B	1													
	CLEAN UP (K2198-06A): GPC3_111109B/jvales								APC	TM	11/16/11	01	11/08/11	JMV	R7				KD 1
K2198-07A	H30Q8	S	30	10	OSW110822B	1													
	CLEAN UP (K2198-07A): GPC3_111109B/jvales								APC	TM	11/16/11	01	11/08/11	JMV	R7				KD 1
K2198-08A	H30Q9	S	30.5	10	OSW110822B	1													
	CLEAN UP (K2198-08A): GPC3_111109B/jvales								APC	TM	11/16/11	01	11/08/11	JMV	R7				KD 1
K2198-09A	H30R0	S	30.2	10	OSW110822B	1													
	CLEAN UP (K2198-09A): GPC3_111109B/jvales								APC	TM	11/16/11	01	11/08/11	JMV	R7				KD 1
K2198-10A	H30R1	S	30.1	10	OSW110822B	1													
	CLEAN UP (K2198-10A): GPC3_111109B/jvales								APC	TM	11/16/11	01	11/08/11	JMV	R7				KD 1
K2198-11A	H30S4	S	30.5	10	OSW110822B	1													
	CLEAN UP (K2198-11A): GPC3_111109B/jvales								APC	TM	11/16/11	01	11/08/11	JMV	R7				KD 1
K2198-12A	H30S5	S	30.4	10	OSW110822B	1													
	CLEAN UP (K2198-12A): GPC3_111109B/jvales								APC	TM	11/16/11	01	11/08/11	JMV	R7				KD 1
K2198-13A	H30S8	S	30.4	10	OSW110822B	1													
	CLEAN UP (K2198-13A): GPC3_111109B/jvales																		

JV 11/9/11

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division PREP BATCH REPOR

Prep Start Date: **11/7/2011 9:30:00 A**
Prep End Date: **11/9/2011 5:12:00 P**
Prep Batch ID: **62764**
Prep Code: **SOM01.0_SVOA_LOW_S_PR** Prep Type: **SONC/SW3550B**
Technician: **Antonio AP Cardoso**
Prep Factor Units: **mL / g**

QC Matrix: NASO4
QC Matrix Lot: 106147
Solvent (1): MECL2
Solvent (1) Lot: DE 980
Solvent (3): N/A
Solvent (3) Lot: N/A
Solvent (5): N/A
Solvent (5) Lot: N/A
Clean Up (1): N/A
Clean Up (1) Lot: N/A
Clean Up (3): N/A
Clean Up (1) Lot: N/A

Filter?: FILTER
Filter Lot: FC003284
Solvent (2): ACE
Solvent (2) Lot: 108096
Solvent (4): N/A
Solvent (4) Lot: N/A
Solvent (6): N/A
Solvent (6) Lot: N/A
Clean Up (2): N/A
Clean Up (2) Lot: N/A
Clean Up (4): N/A
Clean Up (4) Lot: N/A

Start Time: N/A
End Time: N/A
Cycles/Hour 0
Sonicator Tuned?Yes
Bath Temp1 (C): 87
Therm ID1: 88

Mitkem Sample ID	Client Samp ID	M	Initial (mL/g)	Final (mL)	Surrogate Spike ID	Surr (mL)	LCS/D MS/D Spike ID	Spike (mL)	A* Init	W* Init	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11	pH <2	CNCNTR Unit
K2198-14A	H30S9	S	30.5	10	OSW110822B	1			APC	TM	11/16/11	01	11/08/11	JMV	R7		☐	☐	KD 1
CLEAN UP (K2198-14A): GPC3_111109B/jvales																			
K2198-15A	H30T0	S	30.2	10	OSW110822B	1			APC	TM	11/16/11	01	11/08/11	JMV	R7		☐	☐	KD 1
CLEAN UP (K2198-15A): GPC3_111109B/jvales																			
K2198-16A	H30T1	S	30.5	10	OSW110822B	1			APC	TM	11/16/11	01	11/08/11	JMV	R7		☐	☐	KD 1
CLEAN UP (K2198-16A): GPC3_111109B/jvales																			
K2198-17A	H30T2	S	30.2	10	OSW110822B	1			APC	TM	11/16/11	01	11/08/11	JMV	R7		☐	☐	KD 1
CLEAN UP (K2198-17A): GPC3_111109B/jvales																			
K2198-18A	H30T3	S	30.4	10	OSW110822B	1			APC	TM	11/16/11	01	11/08/11	JMV	R7		☐	☐	KD 1
CLEAN UP (K2198-18A): GPC3_111109B/jvales																			
K2198-19A	H30T4	S	30.4	10	OSW110822B	1			APC	TM	11/16/11	01	11/08/11	JMV	R7		☐	☐	KD 1
CLEAN UP (K2198-19A): GPC3_111109B/jvales																			
K2198-20A	H30T5	S	30	10	OSW110822B	1			APC	TM	11/16/11	01	11/08/11	JMV	R7		☐	☐	KD 1
CLEAN UP (K2198-20A): GPC3_111109B/jvales																			

Jonathan M Vales 11/09/2011
Analyst Reviewed Date

Timothy McDaniel 11/09/2011
Manager Reviewed Date

Comments:

*A = Analyst (Spiked) *W = Witnessed (Spike) *T = Transferred

JV 11/9/11

Logbook ID: 50.0147-11/11

1231

Prep Start Date: **11/6/2011 11:00:00**
Prep End Date: **11/6/2011 12:45:00** Prep Code: **SOM01.0_ARO_S_PR** Prep Type: **SONC/SW3550B** Prep Factor Units: **mL / g**
Prep Batch ID: **62776** Technician: **Courtney J Anderson**

QC Matrix: NASO4 | Solvent (1): MECL2 | Solvent (3): HEXANE | Solvent (5): N/A | Clean Up (1): N/A | Clean Up (3): N/A
QC Matrix Lot: 106147 | Solvent (1) Lot: DE 980 | Solvent (3) Lot: DA 782 | Solvent (5) Lot: N/A | Clean Up (1) Lot: N/A | Clean Up (1) Lot: N/A

Filter?: FILTER | Solvent (2): ACE | Solvent (4): N/A | Solvent (6): N/A | Clean Up (2): N/A | Clean Up (4): N/A
Filter Lot: FC003284 | Solvent (2) Lot: 108096 | Solvent (4) Lot: N/A | Solvent (6) Lot: N/A | Clean Up (2) Lot: N/A | Clean Up (4) Lot: N/A

Start Time: N/A | Cycles/Hour 0 | Sonicator Tuned? Yes | Bath Temp1 (C): N/A | Therm ID1: N/A
End Time: N/A

Mitkem Sample ID	Client Samp ID	M	Initial (mL/g)	Final (mL)	Surrogate Spike ID	Surr (mL)	LCS/D MS/D Spike ID	Spike (mL)	A* Init	W* Init	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11	pH <2	CNCNTR Unit
MB-62776	BatchQC		30	10	OPW110822B	1			CJA	JBW			11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (MB-62776): ACID_111106A/canderson, CU_111106A/canderson																			
LCS-62776	BatchQC		30	10	OPW110822B	1	OPW110928A	1	CJA	JBW			11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (LCS-62776): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-01B	H30Q0	S	30.5	10	OPW110822B	1			CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-01B): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-01BMS	H30Q0	S	30	10	OPW110822B	1	OPW111005A	1	CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-01BMS): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-01BMSD	H30Q0	S	30	10	OPW110822B	1	OPW111005A	1	CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-01BMSD): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-02B	H30Q1	S	30	10	OPW110822B	1			CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-02B): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-03B	H30Q2	S	30.4	10	OPW110822B	1			CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-03B): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-04B	H30Q3	S	30	10	OPW110822B	1			CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-04B): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-05B	H30Q4	S	30	10	OPW110822B	1			CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-05B): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-06B	H30Q6	S	30	10	OPW110822B	1			CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-06B): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-07B	H30Q8	S	30.5	10	OPW110822B	1			CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-07B): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-08B	H30Q9	S	30	10	OPW110822B	1			CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-08B): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-09B	H30R0	S	30.7	10	OPW110822B	1			CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-09B): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-10B	H30R1	S	30	10	OPW110822B	1			CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-10B): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-11B	H30S4	S	30.1	10	OPW110822B	1			CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-11B): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-12B	H30S5	S	30.1	10	OPW110822B	1			CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-12B): ACID_111106A/canderson, CU_111106A/canderson																			

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Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

PREP BATCH REPORT

Prep Start Date: **11/6/2011 11:00:00**
Prep End Date: **11/6/2011 12:45:00**
Prep Batch ID: **62776**

Prep Code: **SOM01.0_ARO_S_PR**
Technician: **Courtney J Anderson**

Prep Type: **SONC/SW3550B**

Prep Factor Units: **mL / g**

QC Matrix: NASO4
QC Matrix Lot: 106147

Solvent (1): MECL2
Solvent (1) Lot: DE 980

Solvent (3): HEXANE
Solvent (3) Lot: DA 782

Solvent (5): N/A
Solvent (5) Lot: N/A

Clean Up (1): N/A
Clean Up (1) Lot: N/A

Clean Up (3): N/A
Clean Up (1) Lot: N/A

Filter?: FILTER
Filter Lot: FC003284

Solvent (2): ACE
Solvent (2) Lot: 108096

Solvent (4): N/A
Solvent (4) Lot: N/A

Solvent (6): N/A
Solvent (6) Lot: N/A

Clean Up (2): N/A
Clean Up (2) Lot: N/A

Clean Up (4): N/A
Clean Up (4) Lot: N/A

Start Time: N/A
End Time: N/A

Cycles/Hour 0

Sonicator Tuned? Yes

Bath Temp1 (C): N/A

Therm ID1: N/A

Mitkem Sample ID	Client Samp ID	M	Initial (mL/g)	Final (mL)	Surrogate Spike ID	Surr (mL)	LCS/D MS/D Spike ID	Spike (mL)	A* Init	W* Init	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11	pH <2	CNCNTR Unit
K2198-13B	H30S8	S	30.1	10	OPW110822B	1			CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-13B): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-14B	H30S9	S	30	10	OPW110822B	1			CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-14B): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-15B	H30T0	S	30.5	10	OPW110822B	1			CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-15B): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-16B	H30T1	S	30	10	OPW110822B	1			CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-16B): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-17B	H30T2	S	30.9	10	OPW110822B	1			CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-17B): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-18B	H30T3	S	30.3	10	OPW110822B	1			CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-18B): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-19B	H30T4	S	30	10	OPW110822B	1			CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-19B): ACID_111106A/canderson, CU_111106A/canderson																			
K2198-20B	H30T5	S	30.1	10	OPW110822B	1			CJA	JBW	11/16/11	01	11/06/11	CJA	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2198-20B): ACID_111106A/canderson, CU_111106A/canderson																			

Courtney J Anderson — 11/06/2011
Analyst Reviewed — Date

Courtney J Anderson — 11/06/2011
Manager Reviewed — Date

Comments:

11/6/11

1233

Logbook ID: 50.0149-10/11

Percent Moisture and Percent Solids Report

Lab Sample ID	Client Sample ID	Analyzed	Percent Moisture	Percent Solids	Validated
K2198-01A	H30Q0	11/13/2011	14.696	85.304	Yes
K2198-02A	H30Q1	11/13/2011	22.373	77.627	Yes
K2198-03A	H30Q2	11/13/2011	15.548	84.452	Yes
K2198-04A	H30Q3	11/13/2011	18.924	81.076	Yes
K2198-05A	H30Q4	11/13/2011	15.972	84.028	Yes
K2198-06A	H30Q6	11/13/2011	47.961	52.039	Yes
K2198-07A	H30Q8	11/13/2011	70.051	29.949	Yes
K2198-08A	H30Q9	11/13/2011	62.273	37.727	Yes
K2198-09A	H30R0	11/13/2011	74.138	25.862	Yes
K2198-10A	H30R1	11/13/2011	54.033	45.967	Yes
K2198-11A	H30S4	11/13/2011	38.159	61.841	Yes
K2198-12A	H30S5	11/13/2011	14.479	85.521	Yes
K2198-13A	H30S8	11/13/2011	32.893	67.107	Yes
K2198-14A	H30S9	11/13/2011	34.003	65.997	Yes
K2198-15A	H30T0	11/13/2011	27.572	72.428	Yes
K2198-16A	H30T1	11/13/2011	9.600	90.400	Yes
K2198-17A	H30T2	11/13/2011	23.910	76.090	Yes
K2198-18A	H30T3	11/13/2011	21.887	78.113	Yes
K2198-19A	H30T4	11/13/2011	20.064	79.936	Yes
K2198-20A	H30T5	11/13/2011	23.849	76.151	Yes

Mitkem Laboratories % Moisture and % Solids Logbook

Date In:	11/13/2011 17:10	Temperature In (°C):		105	Analyst(s):			
Date Out:	11/14/2011 10:35	Temperature Out (°C):		105		11/13/2011	11/14/2011	Reviewer:
Mitkem Sample ID	Tare Mass (g)	Wet Wt	Wet Wt (g) Tared	Dry Wt (g)	Dry Wt (g) Tared	% Moisture	% Solids	11/15/2011
K2375-03A	1.02	6.26	5.24	5.54	4.52	13.7	86.3	
K2375-04A	1.02	10.13	9.11	8.97	7.95	12.7	87.3	
K2375-05A	1.01	6.03	5.02	5.48	4.47	11.0	89.0	
K2375-06A	1.04	7.37	6.33	6.53	5.49	13.3	86.7	
K2198-01A	1.04	7.30	6.26	6.38	5.34	14.7	85.3	
K2198-01ADUP	1.03	6.83	5.80	5.96	4.93	15.0	85.0	
K2198-02A	1.04	6.94	5.90	5.62	4.58	22.4	77.6	
K2198-03A	1.03	6.69	5.66	5.81	4.78	15.5	84.5	
K2198-04A	1.04	6.80	5.76	5.71	4.67	18.9	81.1	
K2198-05A	1.04	8.24	7.20	7.09	6.05	16.0	84.0	
K2198-06A	1.06	6.21	5.15	3.74	2.68	48.0	52.0	
K2198-07A	1.05	6.96	5.91	2.82	1.77	70.1	29.9	
K2198-08A	1.03	7.63	6.60	3.52	2.49	62.3	37.7	
K2198-09A	1.03	6.25	5.22	2.38	1.35	74.1	25.9	
K2198-10A	1.03	8.84	7.81	4.62	3.59	54.0	46.0	
K2198-11A	1.04	9.95	8.91	6.55	5.51	38.2	61.8	
K2198-12A	1.05	6.23	5.18	5.48	4.43	14.5	85.5	
K2198-13A	1.02	7.83	6.81	5.59	4.57	32.9	67.1	
K2198-14A	1.01	7.48	6.47	5.28	4.27	34.0	66.0	
K2198-15A	1.04	10.76	9.72	8.08	7.04	27.6	72.4	
K2198-16A	1.00	8.50	7.50	7.78	6.78	9.6	90.4	
K2198-17A	1.04	8.61	7.57	6.80	5.76	23.9	76.1	
K2198-18A	1.03	6.33	5.30	5.17	4.14	21.9	78.1	
K2198-19A	1.00	7.28	6.28	6.02	5.02	20.1	79.9	
K2198-20A	1.02	7.10	6.08	5.65	4.63	23.8	76.2	
K2198-20ADUP	1.02	6.75	5.73	5.32	4.30	25.0	75.0	
K2347-01A	1.05	7.44	6.39	6.88	5.83	8.8	91.2	
K2347-02A	1.00	6.48	5.48	6.02	5.02	8.4	91.6	
K2187-01A	1.05	6.92	5.87	4.25	3.20	45.5	54.5	
K2187-02A	1.02	9.45	8.43	4.43	3.41	59.5	40.5	
K2187-03A	1.00	8.17	7.17	4.17	3.17	55.8	44.2	
K2187-04A	1.06	9.62	8.56	4.42	3.36	60.7	39.3	
K2187-04ADUP	1.05	8.58	7.53	4.06	3.01	60.0	40.0	

% Solid = 100(Dry Mass Tared/Wet Mass Tared)

Logbook Number: 110.0038

% Moisture = 100 - % Solid

Location: \\Avogadro\public\Lims\PMoist\2011\11\111113A_PMOIST.xls

Spectrum Analytical, Inc. RI Division **pH Determination Logbook**

Analyst: KP

pH Meter ID: WC-02

Date: 11/9/11

Sample ID		Sample wt (g)	Water vol (ml)	pH Reading	Buffer IDs	Comments
PH 4.00		N/A	N/A	4.15	IWP110907D	9:30
PH 7.00		N/A	N/A	7.08	IWP110618E	
PH 10.00		N/A	N/A	10.06	IWP110618I	
K2198	01A	20.02	20	8.21		
	01A DUP	20.34		8.18		
	02A	20.39		7.53		
	03A	20.12		7.67		
	04A	20.09		7.34		
	05A	20.17		8.87		
	06A	20.27		9.09		
	07A	20.21		9.06		
↓	08A	20.05	↓	8.47		
K2198	09A	20.42	20	9.04		
PH 7.00		N/A	N/A	7.01	IWP110618E	
K2198	10A	20.16	20	8.47		
	11A	20.13		7.78		
	12A	20.48		7.49		
	13A	20.07		7.34		
	14A	20.17		7.26		
	15A	20.32		7.00		
	16A	20.38		7.10		
	17A	20.34		7.27		
↓	18A	20.14	↓	7.27		
K2198	19A	20.18	20	7.95		

pH LCS (Buffer 7.00) Acceptance Criteria 7.00 ±0.05 S.U.

Calibration Check Criteria:
pH Buffer: 4.00±0.05 S.U.
10.00+0.05 S.U.
7.00+0.05 S.U.

Frequency: at least every 10 samples

Logbook ID: 30.0210 - 09/11

Data Entry to LIMS 11/09/11

Level 1 Review by KP

Level 2 QA Review 11/9/11

Spectrum Analytical, Inc. RI Division **pH Determination Logbook**

Analyst: KP **pH Meter ID:** WC-02

Date: 11/9/11

Sample ID		Sample wt (g)	Water vol (ml)	pH Reading	Buffer IDs	Comments
PH 7.00		N/A	N/A	7.02	IWP110618E	
K2198	20A	20.44	20	8.24		
PH 7.00		N/A	N/A	7.01	IWP110618E	10:05

KP 11/9/11

pH LCS (Buffer 7.00) Acceptance Criteria 7.00 ±0.05 S.U.

Calibration Check Criteria:
pH Buffer: 4.00±0.05 S.U.
10.00+0.05 S.U.
7.00+0.05 S.U.

Frequency: at least every 10 samples

Logbook ID: 30.0210 - 09/11

Level 1 Review by KP

Data Entry to LIMS [illegible] 11/9/11

Level 2 QA Review [illegible] 11/9/11

SAMPLE TABLE:

Pos	Desig	Description	Type	Inj	Meth name	V(uL)	Done?	Start	Finish
1	GPC3111103-SB	sample	sample	1	SVOC	5000	Y	16:57:38, 11/03/11	17:
2	K2094-01A	sample	sample	1	SVOC	5000	Y	17:44:59, 11/03/11	18:
3	K2094-01AMS	sample	sample	1	SVOC	5000	Y	18:32:19, 11/03/11	19:
4	K2094-01AMSD	sample	sample	1	SVOC	5000	Y	19:19:40, 11/03/11	20:
5	K2094-02A	sample	sample	1	SVOC	5000	Y	20:07:03, 11/03/11	20:
6	K2094-03A	sample	sample	1	SVOC	5000	Y	20:54:24, 11/03/11	21:
7	K2094-04A	sample	sample	1	SVOC	5000	Y	21:41:45, 11/03/11	22:
8	K2094-05A	sample	sample	1	SVOC	5000	Y	22:29:08, 11/03/11	23:
9	K2094-06A	sample	sample	1	SVOC	5000	Y	23:16:30, 11/03/11	00:
10	K2094-07A	sample	sample	1	SVOC	5000	Y	00:03:52, 11/04/11	00:
11	K2094-08A	sample	sample	1	SVOC	5000	Y	00:51:15, 11/04/11	01:
12	K2094-09A	sample	sample	1	SVOC	5000	Y	01:38:38, 11/04/11	02:
13	K2094-10A	sample	sample	1	SVOC	5000	Y	02:26:02, 11/04/11	03:
14	K2094-11A	sample	sample	1	SVOC	5000	Y	03:13:26, 11/04/11	04:
15	K2094-12A	sample	sample	1	SVOC	5000	Y	04:00:49, 11/04/11	04:
16	K2094-13A	sample	sample	1	SVOC	5000	Y	04:48:13, 11/04/11	05:
17	DCM	sample	sample	1	SVOC	5000	Y	05:35:37, 11/04/11	06:
18	MB-62482	sample	sample	1	SVOC	5000	Y	06:23:04, 11/04/11	07:

SAMPLE TABLE:

Pos	Desig	Description	Type	Inj	Meth name	V(uL)	Done?	Start	Finish
1	GPC3111108-SB	sample	sample	1	SVOC	5000	Y	16:18:47, 11/08/11	17:
2	K2198-01A	sample	sample	1	SVOC	5000	Y	17:06:37, 11/08/11	17:
3	K2198-01AMS	sample	sample	1	SVOC	5000	Y	17:54:29, 11/08/11	18:
4	K2198-01AMSD	sample	sample	1	SVOC	5000	Y	18:42:21, 11/08/11	19:
5	K2198-02A	sample	sample	1	SVOC	5000	Y	19:30:12, 11/08/11	20:
6	K2198-03A	sample	sample	1	SVOC	5000	Y	20:18:05, 11/08/11	21:
7	K2198-04A	sample	sample	1	SVOC	5000	Y	21:05:56, 11/08/11	21:
8	K2198-05A	sample	sample	1	SVOC	5000	Y	21:53:53, 11/08/11	22:
9	K2198-06A	sample	sample	1	SVOC	5000	Y	22:41:43, 11/08/11	23:
10	K2198-07A	sample	sample	1	SVOC	5000	Y	23:29:36, 11/08/11	00:
11	K2198-08A	sample	sample	1	SVOC	5000	Y	00:17:27, 11/09/11	01:
12	K2198-09A	sample	sample	1	SVOC	5000	Y	01:05:17, 11/09/11	01:
13	K2198-10A	sample	sample	1	SVOC	5000	Y	01:53:08, 11/09/11	02:
14	K2198-11A	sample	sample	1	SVOC	5000	Y	02:41:00, 11/09/11	03:
15	K1298-12A	sample	sample	1	SVOC	5000	Y	03:28:53, 11/09/11	04:
16	K2198-13A	sample	sample	1	SVOC	5000	Y	04:16:46, 11/09/11	05:
17	K2198-14A	sample	sample	1	SVOC	5000	Y	05:04:39, 11/09/11	05:
18	K2198-15A	sample	sample	1	SVOC	5000	Y	05:52:31, 11/09/11	06:
19	K2198-16A	sample	sample	1	SVOC	5000	Y	06:40:24, 11/09/11	07:
20	K2198-17A	sample	sample	1	SVOC	5000	Y	07:28:18, 11/09/11	08:
21	K2198-18A	sample	sample	1	SVOC	5000	Y	08:16:09, 11/09/11	09:
22	K2198-19A	sample	sample	1	SVOC	5000	Y	09:04:01, 11/09/11	09:
23	K2198-20A	sample	sample	1	SVOC	5000	Y	09:51:52, 11/09/11	10:
24	DCM	sample	sample	1	SVOC	5000	Y	10:39:45, 11/09/11	11:
25	MB-62764	sample	sample	1	SVOC	5000	Y	11:27:39, 11/09/11	12:

[redacted]INST[redacted]MENT[redacted] Spe[redacted]n Ana[redacted]al, In[redacted] Div [redacted]
INJECTION LOG
VOLATILES LABORATORY

METHOD: CAL ID: ANALYST:
INITIAL CAL: IS/SS ID: ARCHIVE:
COMMENTS: ICV ID:

AS #	FILE	MITKEM ID	CLIENT ID	SAMPLE SIZE	DIL	COMMENTS	IS	SS	pH

Spectrum Analytical, Inc. RI Division V5 Injection Log
Volatiles Laboratory

METHOD: SOM_L.5 ANALYST: WL
ICAL DATE: 10/4/11

BATCH: 111004A.B

Start: 04-OCT-11 16:43
End: 04-OCT-11 19:04

Comments:

Standards: IS-VW110918A ___ uL
BMC-VW110918B ___ uL
STD-VW110918C ___ uL
_____ ___ uL

Reviewed By: [signature] Manual Integration: NA MI Review: WL

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS DFB	CBZ	DCB	SURROGATES OLC-SOM A	B	C	D	E	F	G	H	I	J	K	L	M	N	DILN	FLG	COMMENTS	pH
V5N1310	16:43	BFB5N	BFB5N		AQ																			1		OK	
V5N1311	17:11	VSTD0505N	VSTD0505N		SL		100	100	100															1		OK	
V5N1312	17:39	VSTD0055N	VSTD0055N		SL		106	110	104															1		OK	
V5N1313	18:08	VSTD2005N	VSTD2005N		SL		104	111	111															1		OK	
V5N1314	18:36	VSTD1005N	VSTD1005N		SL		110	112	110															1		OK	
V5N1315	19:04	VSTD0105N	VSTD0105N		SL		104	110	118															1		OK	

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
T - Sample was injected outside of the 12 hour sequence
D - Surrogates are diluted

WL 10/11/11

[redacted] INJECTION LOG

[redacted] VOLATILES LABORATORY

METHOD:

CAL ID:

ANALYST:

Spectrum Analytical, Inc. RI Division V5 Injection Log
Volatiles Laboratory

METHOD: SVM-L-5
ICAL DATE: 10/4/11

ANALYST: WL

BATCH: 111106.B

Start: 06-NOV-11 22:49
End: 07-NOV-11 09:45

Comments:

Standards: IS-VW111022A ____ uL
PMC-VW111022B ____ uL
STD-VW111022C ____ uL
_____ ____ uL

Reviewed By: 11-9-11 Manual Integration: NA MI Review: WL

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS DFB	CBZ	DCB	SURROGATES OLC-SOM A	B	C	D	E	F	G	H	I	J	K	L	M	N	DILN	FLG	COMMENTS	pH
V5N2700	22:49	BFBJ5	BFBJ5		AQ																						
V5N2701	23:16	VSTD050J5	VSTD050J5		SL		100	100	100																1		OK
V5N2702	23:44	MB-62569	VBLKJ5	62569	SL		128	134	130																1		OK
V5N2703	00:11	K2198-02C	H30Q1	62569	SL	1	116	124	111																1		OK
V5N2704	00:38	K2198-03C	H30Q2	62569	SL	1	124	135	115																1		OK
V5N2705	01:03	K2198-04C	H30Q3	62569	SL	1	100	112	103																1		OK
V5N2706	01:30	K2198-05C	H30Q4	62569	SL	1	106	121	120																1		OK
V5N2707	01:58	K2198-06C	H30Q6	62569	SL	1	96	116	111																1		OK
V5N2708	02:25	K2198-07C	H30Q8	62569	SL	1	99	107	113																1		OK
V5N2709	02:56	K2198-08C	H30Q9	62569	SL	1	113	116	96	*															1		OK
V5N2710	03:21	K2198-09C	H30R0	62569	SL	1	78	94	104		*														1		OK
V5N2711	03:50	K2198-10C	H30R1	62569	SL	1	136	131	100																1		OK
V5N2712	04:17	K2198-11C	H30S4	62569	SL	1	121	114	86																1		OK
V5N2713	04:45	K2198-12C	H30S5	62569	SL	1	117	121	94																1		OK
V5N2714	05:12	K2198-13C	H30S8	62569	SL	1	100	112	94																1		OK
V5N2715	05:39	K2198-14C	H30S9	62569	SL	1	101	114	100																1		OK
V5N2716	06:07	K2198-15C	H30T0	62569	SL	1	93	102	81																1		OK
V5N2717	06:34	K2198-16C	H30T1	62569	SL	1	118	140	140																1		OK
V5N2718	07:02	K2198-17C	H30T2	62569	SL	1	116	127	122																1		OK
V5N2719	07:29	K2198-18C	H30T3	62569	SL	1	116	133	126																1		OK
V5N2720	07:56	K2198-19C	H30T4	62569	SL	1	133	159	150																1		OK
V5N2721	08:23	K2198-20C	H30T5	62569	SL	1	127	142	127																1		OK
V5N2722	08:50	K2199-02C	H30T6	62569	SL	1	124	138	122																1		OK
V5N2723	09:17	K2199-03C	H30T7	62569	SL	1	125	142	131																1		OK
V5N2724	09:45	VSTD050K5	VSTD050K5		SL		100	100	100																1		OK

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
T - Sample was injected outside of the 12 hour sequence
D - Surrogates are diluted

WL 11/8/11

1241

METHOD: CAL ID: ANALYST:

Spectrum Analytical, Inc. RI Division V5 Injection Log
Volatiles Laboratory

METHOD: SOM-L-5 ANALYST: WL BATCH: 111107.B Start: 07-NOV-11 09:45
ICAL DATE: 10/4/11 End: 07-NOV-11 21:33

Comments:

Standards: IT-VW111022A ____ uL
ICAL-VW111022B ____ uL
STD-VW111022C ____ uL
_____ ____ uL

Reviewed By: [signature] 11/9/11 Manual Integration: NA MI Review: WL

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS DFB	CBZ	DCB	SURROGATES OLC-SOM A	B	C	D	E	F	G	H	I	J	K	L	M	N	DILN	FLG	COMMENTS	pH
V5N2724	09:45	VSTD050K5	VSTD050K5		SL	__	100	100	100															1		OK	
V5N2725	10:12	MB-62780	VBLKK5	62780	SL	__	134	125	111															1		OK	
V5N2726	10:39	K2268-01D	H2TM8	62780	SL	1	126	117	106															1		OK	
V5N2726A	11:07	K2199-09B	H30R6	62780	SL	1	125	109	81															1		OK	
V5N2727	11:35	K2198-01C	H30Q0	62780	SL	1	137	112	80															1		OK	
V5N2728	12:02	K2268-01DMS	H2TM8MS	62780	SL	2	122	104	86					*										1		OK	
V5N2729	12:29	K2268-01DMSD	H2TM8MSD	62780	SL	3	137	120	105															1		OK	
V5N2730	12:57	K2198-01CMS	H30Q0MS	62780	SL	2	124	109	90					*										1		OK	
V5N2731	13:24	K2198-01CMSD	H30Q0MSD	62780	SL	3	131	115	94															1		OK	
V5N2732	13:51	K2199-12B	H30S0	62780	SL	1	113	82	54						*									1		OK	
V5N2733	14:18	K2199-12BMS	H30S0MS	62780	SL	2	109	85	58															1		OK	
V5N2734	14:45	K2199-12BMSD	H30S0MSD	62780	SL	3	117	93	65															1		OK	
V5N2735	15:13	K2199-04B	H30Q5	62780	SL	1	128	99	66															1		OK	
V5N2736	15:40	K2199-05B	H30Q7	62780	SL	1	143	117	80															1		OK	
V5N2737	16:07	K2199-06B	H30R2	62780	SL	1	143	134	111					*									*	1		OK	
V5N2738	16:34	K2199-07B	H30R3	62780	SL	1	144	118	90															1		OK	
V5N2739	17:01	K2199-08B	H30R4	62780	SL	1	116	78	52							*	*							1		OK	
V5N2740	17:28	VHBLK5K	VHBLK5K	62780	SL	__	125	90	65															1		OK (CK2268)	
V5N2741	17:55	K2199-10B	H30R7	62780	SL	1	116	92	65															1		OK	
V5N2742	18:22	K2199-11B	H30R8	62780	SL	1	133	103	80															1		OK	
V5N2743	18:50	K2199-13B	H30S1	62780	SL	1	161	143	121															1		OK	
V5N2744	19:17	K2199-14B	H30S2	62780	SL	1	131	100	64							*								1		OK	
V5N2745	19:44	K2199-15B	H30S3	62780	SL	1	155	122	92															1		OK	
V5N2746	20:11	K2199-16B	H30S6	62780	SL	1	149	107	67							*	*							1		OK	
V5N2747	20:38	K2199-17B	H30T8	62780	SL	1	146	104	59							*	*							1		OK	
V5N2748	21:05	VHBLKK5	VHBLKK5	62780	SL	__	156	152	146															1		OK (CK2198) (CK2199)	
V5N2749	21:33	VSTD050L5	VSTD050L5		SL	__	100	100	100															1		OK	

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
T - Sample was injected outside of the 12 hour sequence
D - Surrogates are diluted

WL 11/9/11

Logbook ID: 70.0168- 09/11

Instrument S2
Injection Log

Spectrum Analytical, Inc. RI Div
SemiVolatiles Laboratory

Spectrum Analytical, Inc. RI Division S2 Injection Log
Semivolatiles Laboratory

METHOD: SOM1.1SW ANALYST: MMS BATCH: 111025.B Start: 25-OCT-11 09:32
ICAL DATE: 10/25/11 EMV: 2801 End: 25-OCT-11 16:41

Internal Standard: SI111019A
Comments:

Tune: SW110727A
C1: SW111019A
C2: SW111019B
C3: SW111019C
C4: SW111019D
C5: SW111019E

Inlet Maintenance By: MMS
Liner : Cleaned
Column : Clipped
Inlet Seal: Cleaned
Septum : New

Reviewed By: 10/26/11 BM Manual Integration: MMS 10/26/11 MI Review: 10/26/11 BM

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	INTERNAL STANDARDS DCB	NPT	ANT	PHN	CRY	PRY	SURROGATES OLC-SOM A	B	C	D	E	F	G	H	I	J	K	L	M	M	O	P	DILN	FLG	COMMENTS
S2H5052	09:32	DFTPP2W	DFTPP2W		AQ																							1		OK
S2H5053C	11:35	SSTD0202W	SSTD0202W		AQ	100	100	100	100	100	100																	1		OK C3 OCCV
S2H5054	11:58	SSTD0052W	SSTD0052W		AQ	76	77	75	81	81	77																	1		C1
S2H5055	12:21	SSTD0802W	SSTD0802W		AQ	62	67	63	64	38*	27*																	1		C5
S2H5056	12:44	SSTD0102W	SSTD0102W		AQ	113	107	100	97	96	98																	1		C2
S2H5057	13:07	SSTD0402W	SSTD0402W		AQ	75	78	82	83	83	71																	1		C4
S2H5059	14:28	MB-62327	SBLK2X	62327	SL	56	51	50*	44*	39*	40*																	1		No MMS
S2H5060	14:51	K2072-16AMS	E0ZS5MS	62360	SL	69	66	62	58	57	63																	1		OK
S2H5061	15:13	MB-62327	SBLK2X	62327	SL	63	66	64	59	59	56																	1		OK
S2H5062	15:35	K2072-16AMSD	E0ZS5MSD	62360	SL	86	87	82	74	64	67																	1		OK MI_81
S2H5063	15:57	K2072-07A	E0ZR6	62327	SL	82	82	71	68	66	75																	1		OK MI_81
S2H5064	16:19	K2072-12A	E0ZS1	62327	SL	82	79	67	67	68	72																	1		OK
S2H5065	16:41	SSTD0202Y	SSTD0202Y		AQ	100	100	100	100	100	100																	1		OK FCCV

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
T - Sample was injected outside of the 12 hour sequence
D - Surrogates are diluted

Ferrule

MMS 10/26/11

1243

Logbook ID: 70.0168- 09/11

Instrument S2
Injection Log

Spectrum Analytical, Inc. RI Div
SemiVolatiles Laboratory

Spectrum Analytical, Inc. RI Division S2 Injection Log
Semivolatiles Laboratory

METHOD: SOLCOM ANALYST: MS BATCH: 111110.B Start: 10-NOV-11 09:18
ICAL DATE: 10/25/11 EMV: 2716 End: 10-NOV-11 18:26

Tune: SW110727A

Internal Standard: SI111018A
Comments:

L3: SW111019C

Inlet Maintenance By: MS
Liner : Changed
Column : Clipped
Inlet Seal: Cleaned
Septum : New

Reviewed By: 11/11/11 BM Manual Integration: MS 11/11/11 MI Review: 11/11/11 BM

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	INTERNAL STANDARDS DCB	NPT	ANT	PHN	CRY	PRY	SURROGATES OLC-SOM A	B	C	D	E	F	G	H	I	J	K	L	M	O	P	DILN	FLG	COMMENTS
S2H5247	09:18	DFTPP2X	DFTPP2X		AQ																						1		ok
S2H5248	09:31	SSTD0202X	SSTD0202X		AQ	100	100	100	100	100	100																1		ok ccv
S2H5249	09:57	MB-62764	SBLK2X	62764	SL	132	126	123	131	126	128																1		ok
S2H5250	10:23	K2198-01A	H30Q0	62764	SL	128	114	122	131	116	113																1		ok
S2H5251	10:44	K2198-01AMS	H30Q0MS	62764	SL	113	97	103	111	94	85																1		ok
S2H5252	11:05	K2198-01AMSD	H30Q0MSD	62764	SL	151	142	151	166	155	147														*		1		ok
S2H5253	11:26	K2198-02A	H30Q1	62764	SL	150	139	144	163	151	142														*		1		ok
S2H5254	11:47	K2198-03A	H30Q2	62764	SL	128	122	130	147	136	132																1		ok
S2H5255	12:08	K2198-04A	H30Q3	62764	SL	208*	189	195	251*	282*	269*														*		1		low
S2H5256	12:29	K2198-05A	H30Q4	62764	SL	128	122	132	138	133	129														*	*	1		ok
S2H5257	12:50	K2198-06A	H30Q6	62764	SL	167	160	169	174	144	154														*	*	1		ok
S2H5258	13:11	K2198-07A	H30Q8	62764	SL	133	136	140	148	130	119														*	*	1		ok
S2H5259	13:32	K2198-08A	H30Q9	62764	SL	105	89	73	78	77	78														*	*	1		ok
S2H5260	13:53	K2198-09A	H30R0	62764	SL	137	129	103	99	83	74														*	*	1		ok
S2H5261	14:14	K2198-10A	H30R1	62764	SL	185	172	126	97	88	67														*	*	1		ok
S2H5262	14:35	K2198-11A	H30S4	62764	SL	149	161	156	127	75	69																1		ok
S2H5263	14:56	K2198-12A	H30S5	62764	SL	147	155	154	134	104	102																1		ok
S2H5264	15:17	K2198-13A	H30S8	62764	SL	145	153	152	142	120	110																1		ok
S2H5265	15:38	K2198-14A	H30S9	62764	SL	158	168	166	164	146	130												*		*	*	1		ok
S2H5266	15:59	K2198-15A	H30T0	62764	SL	154	152	149	144	119	112									*			*		*	*	1		ok
S2H5267	16:20	K2198-16A	H30T1	62764	SL	136	139	139	134	109	105																1		ok
S2H5268	16:41	K2198-17A	H30T2	62764	SL	139	145	160	169	134	119														*	*	1		ok
S2H5269	17:01	K2198-18A	H30T3	62764	SL	144	146	137	130	115	113																1		ok MI_83
S2H5270	17:23	K2198-19A	H30T4	62764	SL	184	202*	207*	204*	177	157																1		low MI_83
S2H5271	17:44	K2198-20A	H30T5	62764	SL	142	137	137	133	121	107														*	*	1		ok MI_83
S2H5272	18:05	K2198-04A	H30Q3	62764	SL	105	105	105	102	81	76																1		ok MI_83
S2H5273	18:26	SSTD0202Y	SSTD0202Y		AQ	100	100	100	100	100	100																1		ok MI_81_82_83_84 ccv
S2H5274	19:30	GPC3111108-SB			AQ	153	147	145	145	131	128	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1		ok

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
T - Sample was injected outside of the 12 hour sequence
D - Surrogates are diluted

MS 11/11/11

Logbook ID: 70.0168- 09/11

Instrument S2
Injection Log

Spectrum Analytical, Inc. RI Div
SemiVolatiles Laboratory

Spectrum Analytical, Inc. RI Division S2 Injection Log
Semivolatiles Laboratory

METHOD: SBLCOV
ICAL DATE: 10/25/11

ANALYST: MMS
EMV: 2716

BATCH: 111111.B

Start: 11-NOV-11 08:43
End: 11-NOV-11 17:36

Tune: SW110727A

Internal Standard: S1111 98A
Comments:

C3: SW11019C

Inlet Maintenance By: N/A
Liner :
Column :
Inlet Seal:
Septum :

Reviewed By: 11/14/11 BM

Manual Integration: MMS 11/13/11

MI Review: 11/14/11 BM

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	INTERNAL STANDARDS DCB	NPT	ANT	PHN	CRY	PRY	SURROGATES OLC-SOM A	B	C	D	E	F	G	H	I	J	K	L	M	M	O	P	DILN	FLG	COMMENTS
S2H5275	08:43	DFTPP2Z	DFTPP2Z		AQ																							1		OK
S2H5276	09:01	SSTD0202Z	SSTD0202Z		AQ	100	100	100	100	100	100																	1		OK OCCV
S2H5277	09:38	K2198-19A	H30T4	62764	SL	136	146	138	130	123	100																	1		OK
S2H5278	09:59	SSTD0202A	SSTD0202A		AQ	100	100	100	100	100	100																	1		OK OCV
S2H5279	13:17	MB-62798	SBLK2A	62798	SL	172	188	207*	177	131	1*	*	*	*		*	*	*		*	*	*	*		*	*	*	1		Bad Aliquot
S2H5280	13:38	K2199-02A	H30T6	62798	SL	140	137	131	119	104	100									*			*			*	*	1		OK
S2H5281	13:59	K2272-03A	E0055	62875	SL	106	109	97	79	64	67		*		*	*												1		
S2H5282	14:20	K2272-02A	E0054	62875	SL	128	128	113	92	70	71	*	*	*	*	*												1		> lo extract
S2H5283	14:41	K2272-01A	E0053	62875	SL	120	98	83	65	66	63					*												1	E	MI_66_65_71_73_81_82 No extract
S2H5284	15:29	MB-62798	SBLK2A	62798	SL	154	143	142	129	112	121						*											1		Rerun
S2H5285	15:50	MB-62875	SBLK2B	62875	AQ	131	139	124	110	95	94	*	*	*	*	*												1		lo extract SIM extract
S2H5286	16:11	K2199-03A	H30T7	62798	SL	104	109	102	103	116	107												*			*	*	1		OK MI_81
S2H5287	16:33	MB-62798	SBLK2A	62798	SL	114	119	115	111	123	122																	1		OK
S2H5288B	17:36	SSTD0202B	SSTD0202B		AQ	100	100	100	100	100	100																	1		OK MI_48 FCCV

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
T - Sample was injected outside of the 12 hour sequence
D - Surrogates are diluted

Ferrule

MMS 11/13/11

1245

Logbook ID: 70.0168- 09/11

Instrument S2
Injection Log

Spectrum Analytical, Inc. RI Div
SemiVolatiles Laboratory

Spectrum Analytical, Inc. RI Division S2 Injection Log
Semivolatiles Laboratory

METHOD: 8270LOW
ICAL DATE: 10/25/11

ANALYST: MS
EMV: 2716

BATCH: 111114.B

Start: 14-NOV-11 16:22
End: 14-NOV-11 18:23

Tune: SW111021A

Internal Standard: SI 111018A

L3: SW111019C

Comments:

Inlet Maintenance By: MS
Liner : Cleaned
Column : Clipped
Inlet Seal: Cleaned
Septum : New

Reviewed By: 11/15/11 BM

Manual Integration: N/A

MI Review: N/A

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	INTERNAL STANDARDS DCB	NPT	ANT	PHN	CRY	PRY	SURROGATES OLC-SOM A	B	C	D	E	F	G	H	I	J	K	L	M	M	O	P	DILN	FLG	COMMENTS
S2H5289	16:22	DFTPP2C	DFTPP2C		AQ																							1		OK
S2H5290	16:35	SSTD0202C	SSTD0202C		AQ	100	100	100	100	100	100																	1		OK CCV
S2H5291	16:58	MB-62876	SBLK2C	62876	SL	117	111	113	118	119	110																	1		OK
S2H5292	17:19	K2198-04A	H30Q3	62764	SL	109	99	89	96	99	90																	1		OK
S2H5293	17:40	K2272-01ADL	E0053DL	62876	SL	131	131	115	95	58	57	D			D													50	E	Diluted
S2H5294	18:02	K2272-01ADL	E0053DL	62876	SL	144	152	137	131	85	68	D	D	D	D	D												100	E	Non 3X
S2H5295	18:23	SSTD0202D	SSTD0202D		AQ	100	100	100	100	100	100																	1		OK FCV

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
T - Sample was injected outside of the 12 hour sequence
D - Surrogates are diluted

Clipped Column	
Ferrule	

MS 11/15/11

1246

Spectrum Analytical, Inc. RI Division - PEST/PCB RUN LOGBOOK: INSTRUMENT E2

Spectrum Analytical, Inc. RI Division E2 Injection Log
GC Semivolatiles Laboratory

METHOD: 8270
ICAL DATE: 10/25/11

ANALYST: CMO

START BATCH: 111104AF.B
END BATCH: 111104AF.B

Start: 04-NOV-11 18:57
End: 05-NOV-11 15:09

STDs Page 69

Comments:

Inlet Maintenance By:
Liner : yes
Column : —
Inlet Seal: —
Septum : —

Reviewed By: 10/7/11

Manual Integration: NA

MI Review: NA

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	SURROGATES FRONT TCMX	SURROGATES FRONT DCB	SURROGATES REAR TCMX	SURROGATES REAR DCB	DILN	FLAGS F	FLAGS R	ANALYST CHECK F	ANALYST CHECK R	COMMENTS
E2K7478F/R	18:57	AIBLKJA	AIBLKJA		AQ	0*	0*	0*	0*	1			✓		PW110524AC
E2K7479F/R	19:17	AR12213J2	AR12213J2		AQ					1			✓		PC110524A
E2K7480F/R	19:38	AR12323J2	AR12323J2		AQ					1			✓		PW110721A
E2K7481F/R	19:59	AR12421J2	AR12421J2		AQ					1			✓		PW110525A0
E2K7482F/R	20:20	AR12426J2	AR12426J2		AQ					1			✓		P
E2K7483F/R	20:41	AR12422J2	AR12422J2		AQ					1			✓		W
E2K7484F/R	21:01	AR12423J2	AR12423J2		AQ					1			✓		M
E2K7485F/R	21:22	AR12424J2	AR12424J2		AQ					1			✓		U
E2K7486F/R	21:43	AR12425J2	AR12425J2		AQ					1			✓		R
E2K7487F/R	22:04	AR12481J2	AR12481J2		AQ					1			✓		U
E2K7488F/R	22:25	AR12486J2	AR12486J2		AQ					1			✓		V
E2K7489F/R	22:46	AR12482J2	AR12482J2		AQ					1			✓		T
E2K7490F/R	23:07	AR12483J2	AR12483J2		AQ					1			✓		S
E2K7491F/R	23:28	AR12484J2	AR12484J2		AQ					1			✓		L
E2K7492F/R	23:49	AR12485J2	AR12485J2		AQ					1			✓		Q
E2K7493F/R	00:10	AR12541J2	AR12541J2		AQ					1			✓		AA
E2K7494F/R	00:31	AR12546J2	AR12546J2		AQ					1			✓		AB
E2K7495F/R	00:52	AR12542J2	AR12542J2		AQ					1			✓		Z
E2K7496F/R	01:13	AR12543J2	AR12543J2		AQ					1			✓		Y
E2K7497F/R	01:34	AR12544J2	AR12544J2		AQ					1			✓		X
E2K7498F/R	01:54	AR12545J2	AR12545J2		AQ					1			✓		W
E2K7499F/R	02:15	AR12623J2	AR12623J2		AQ					1			✓		C
E2K7500F/R	02:36	AR12683J2	AR12683J2		AQ					1			✓		D
E2K7501F/R	02:57	AR16601J2	AR16601J2		AQ					1			✓		I
E2K7502F/R	03:18	AR16606J2	AR16606J2		AQ					1			✓		J
E2K7503F/R	03:39	AR16602J2	AR16602J2		AQ					1			✓		H
E2K7504F/R	04:00	AR16603J2	AR16603J2		AQ					1			✓		PW110524G

E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
* - Surrogate is outside of control limits
D - Surrogate is diluted

CMO 10/7/11

Spectrum Analytical, Inc. RI Division - PEST/PCB RUN LOGBOOK: INSTRUMENT E2

Spectrum Analytical, Inc. RI Division E2 Injection Log
GC Semivolatiles Laboratory

METHOD: Aro
ICAL DATE: 10/25/11
ANALYST: CWO

START BATCH: 111104AF.B
END BATCH: 111104AF.B

Start: 04-NOV-11 18:57
End: 05-NOV-11 15:09

STDs Page 69

Inlet Maintenance By:
Liner : yes
Column : —
Inlet Seal: —
Septum : —

Comments:

Reviewed By: 11/7/11

Manual Integration: CWO 10/7/11

MI Review: 11/7/11

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	SURROGATES FRONT TCMX	FRONT DCB	REAR TCMX	REAR DCB	DILN	FLAGS F	FLAGS R	ANALYST CHECK F	ANALYST CHECK R	COMMENTS
E2K7505F/R	04:21	AR16604J2	AR16604J2		AQ					1			✓		PW110524F
E2K7506F/R	04:42	AR16605J2	AR16605J2		AQ					1			✓		PW110524E
E2K7507F/R	05:03	AR1660ICV2J	AR1660ICV2J		AQ					1			✓		PW110501M
E2K7508F/R	05:24	AIBLKJA	AILBKJA		AQ					1			✓	✓	
E2K7509F/R	05:44	AR16603JA	AR16603JA		AQ					1			✓	✓	
E2K7510F/R	06:05	AR12423JA	AR12423JA		AQ					1			✓	✓	
E2K7511F/R	06:26	AR12483JA	AR12483JA		AQ					1			✓	✓	
E2K7512F/R	06:47	AR12543JA	AR12543JA		AQ					1			✓	✓	
E2K7513F/R	07:08	K2227-01ADL	E5N03DL	62665	SL	86	143	82	114	2			✓		48
E2K7514F/R	07:28	K2227-01ADL	E5N03DL	62665	SL	0D	0D	0D	0D	20			✓		48
E2K7515F/R	07:49	K2227-02ADL	E5N04DL	62665	SL	81	113	77	93	10			✓		MI R11 48
E2K7516F/R	08:10	MB-62542	ABLK2D	62542	SL	78	86	91	99	1			✓		
E2K7517F/R	08:31	LCS-62542	ALCS2D	62542	SL	76	79	86	94	1			✓		
E2K7518F/R	08:52	K2088-01ADL	C0037DL	62542	SL	71	80	76	75	5			✓		54
E2K7519F/R	09:13	K2088-02ADL	C0038DL	62542	SL	0D	0D	0D	0D	20	E	E	✓		54 } need 40/400 DL
E2K7520F/R	09:34	K2088-02ADL	C0038DL	62542	SL	0D	0D	0D	0D	200			✓		RR 54
E2K7521F/R	09:55	K2088-03A	C0039	62542	SL	66	110	67	276*	1	E	E	✓		54 needs DL
E2K7522F/R	10:16	K2088-04A	C0040	62542	SL	66	128	72	112	1			✓		RR DL 2Y OK
E2K7523F/R	10:37	K2088-05A	C0041	62542	SL	67	86	73	245*	1			✓		RR DL 2Y OK
E2K7524F/R	10:58	K2088-06A	C0042	62542	SL	68	81	75	91	1			+		RR
E2K7525F/R	11:19	K2088-06AMS	C0042MS	62542	SL	0*	0*	0*	58	1	R	R	+		RR
E2K7526F/R	11:40	K2088-06AMSD	C0042MSD	62542	SL	68	70	75	72	1			✓		
E2K7527F/R	12:01	K2088-07A	C0043	62542	SL	73	73	81	83	1			✓		54
E2K7528F/R	12:22	K2088-08A	C0044	62542	SL	95	89	99	104	1			✓		54
E2K7529F/R	12:42	K2088-09A DL	C0045 DL	62542	SL	68	224D	73	207D	5			✓		54
E2K7530F/R	13:03	K2088-10A	C0046	62542	SL	66	116	77	74	1			✓		RR OK
E2K7531F/R	13:24	K2088-11A	C0047	62542	SL	62	97	69	69	1			✓		RR OK

E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
* - Surrogate is outside of control limits
D - Surrogate is diluted

CWO 10/7/11

Spectrum Analytical, Inc. RI Division - PEST/PCB RUN LOGBOOK: INSTRUMENT E2

Spectrum Analytical, Inc. RI Division E2 Injection Log
GC Semivolatiles Laboratory

METHOD: ARO
ICAL DATE: 10/25/11
ANALYST: [illegible]

START BATCH: 111104AF.B
END BATCH: 111104AF.B

Start: 04-NOV-11 18:57
End: 05-NOV-11 15:09

Comments: STDs Page 69

Inlet Maintenance By:
Liner : yes
Column : —
Inlet Seal: —
Septum : —

Reviewed By: _____ Manual Integration: W/A MI Review: _____

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	SURROGATES FRONT TCMX	SURROGATES FRONT DCB	SURROGATES REAR TCMX	SURROGATES REAR DCB	DILN	FLAGS F	FLAGS R	ANALYST CHECK F	ANALYST CHECK R	COMMENTS
E2K7532F/R	13:45	AIBLKJB	AILBKJB		AQ					1			✓		
E2K7533F/R	14:06	AR16603JB	AR16603JB		AQ					1			✓	✓	
E2K7534F/R	14:27	AR12423JB	AR12423JB		AQ					1			✓	✓	ok closing
E2K7535F/R	14:48	AR12483JB	AR12483JB		AQ					1			✓	✓	
E2K7536F/R	15:09	AR12543JB	AR12543JB		AQ					1			✓	✓	

E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
* - Surrogate is outside of control limits
D - Surrogate is diluted

[illegible] 10/7/11

Standard ID's

Comments

Reviewed _____

Logbook ID 60.0176-08/11

Spectrum Analytical, Inc. RI Division - PEST/PCB RUN LOGBOOK: INSTRUMENT E2

Spectrum Analytical, Inc. RI Division E2 Injection Log
GC Semivolatiles Laboratory

METHOD: ARO
ICAL DATE: 10/25/11
ANALYST: CWO

START BATCH: 111107F.B
END BATCH: 111107F.B

Start: 07-NOV-11 08:46
End: 08-NOV-11 07:40

Comments: STDs Page 69

Inlet Maintenance By:
Liner : —
Column : 6
Inlet Seal:
Septum :

Reviewed By: 11/8/11
Manual Integration: NA
MI Review: NA

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	SURROGATES FRONT TCMX	SURROGATES FRONT DCB	SURROGATES REAR TCMX	SURROGATES REAR DCB	DILN	FLAGS F	FLAGS R	ANALYST CHECK F	ANALYST CHECK R	COMMENTS
E2K7537F/R	08:46	AIBLKJC	AILBKJC		AQ					1			—		1
E2K7538F/R	09:07	AR16603JC	AR16603JC		AQ					1			—		
E2K7539F/R	09:27	AIBLKJC	AILBKJC		AQ					1			—		
E2K7540F/R	09:48	AR16603JC	AR16603JC		AQ					1			—		
E2K7541F/R	10:09	AR12423JC	AR12423JC		AQ					1			—		not used
E2K7542F/R	10:30	AR12483JC	AR12483JC		AQ					1			—		
E2K7543F/R	10:51	AR12543JC	AR12543JC		AQ					1			—		1
E2K7544F/R	11:36	AIBLKJC	AILBKJC		AQ					1			✓		
E2K7545F/R	11:57	AR16603JC	AR16603JC		AQ					1			✓	✓	
E2K7546F/R	12:18	AR12423JC	AR12423JC		AQ					1			✓	✓	
E2K7547F/R	12:38	AR12483JC	AR12483JC		AQ					1			✓	✓	
E2K7548F/R	12:59	AR12543JC	AR12543JC		AQ					1			✓	✓	
E2K7549F/R	15:17	K2088-02A	C0038	62542	SL	0D	0D	0D	0D	40			✓		54
E2K7550F/R	15:38	AIBLKJC	AILBKJC		AQ					1			—		
E2K7551F/R	15:59	AIBLKJC	AILBKJC		AQ					1			—		
E2K7552F/R	16:19	K2088-02ADL	C0038DL	62542	SL	0D	0D	0D	0D	400			✓		54
E2K7553F/R	16:40	AIBLKJC	AILBKJC		AQ					1			—		
E2K7554F/R	17:01	K2088-03ADL	C0039DL	62542	SL	60	78	58	94	10			✓		54
E2K7555F/R	17:22	AIBLKJC	AILBKJC		AQ					1			—		
E2K7556F/R	17:43	K2088-04ADL	C0040DL	62542	SL	55	64	56	94	2			✓		54
E2K7557F/R	18:04	AIBLKJC	AILBKJC		AQ					1			—		
E2K7558F/R	18:25	K2088-05ADL	C0041DL	62542	SL	64	70	66	125	2			✓		54
E2K7559F/R	18:46	AIBLKJC	AILBKJC		AQ					1			—		
E2K7560F/R	19:07	K2088-06A	C0042	62542	SL	60	67	65	70	1			✓		54
E2K7561F/R	19:27	AIBLKJC	AILBKJC		AQ					1			—		
E2K7562F/R	19:48	K2088-06AMS	C0042MS	62542	SL	65	67	72	73	1			✓		54 16 60
E2K7563F/R	20:09	AIBLKJC	AILBKJC		AQ					1			—		

E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
* - Surrogate is outside of control limits
D - Surrogate is diluted

CWO 11/8/11

Spectrum Analytical, Inc. RI Division - PEST/PCB RUN LOGBOOK: INSTRUMENT E2

Spectrum Analytical, Inc. RI Division E2 Injection Log
GC Semivolatiles Laboratory

METHOD: PRO
ICAL DATE: 10/25/11
ANALYST: [illegible]

START BATCH: 111107F.B
END BATCH: 111107F.B

Start: 07-NOV-11 08:46
End: 08-NOV-11 07:40

Comments: STDs Page 69

Inlet Maintenance By:
Liner :
Column : 6
Inlet Seal:
Septum :

Reviewed By: [illegible] 11/8/11

Manual Integration: NA

MI Review: NA

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	SURROGATES FRONT TCMX	SURROGATES FRONT DCB	SURROGATES REAR TCMX	SURROGATES REAR DCB	DILN	FLAGS F	FLAGS R	ANALYST CHECK F	ANALYST CHECK R	COMMENTS
E2K7564F/R	20:30	AIBLKJC	AILBKJC		AQ					1			—		
E2K7565F/R	20:51	AIBLKJD	AILBKJD		AQ					1			✓		
E2K7566F/R	21:12	AR16603JD	AR16603JD		AQ					1			✓	✓	
E2K7567F/R	21:33	AR12423JD	AR12423JD		AQ					1			✓	✓	
E2K7568F/R	21:54	AR12483JD	AR12483JD		AQ					1			✓	✓	
E2K7569F/R	22:15	AR12543JD	AR12543JD		AQ					1			✓	✓	
E2K7570F/R	22:36	MB-62766	ABLK2E	62766	SL	73	78	83	82	1			✓		
E2K7571F/R	22:57	LCS-62766	ALCS2E	62766	SL	63	69	71	72	1			✓		
E2K7572F/R	23:18	K2268-01C	H2TM8	62766	SL	62	65	68	68	1			✓		
E2K7573F/R	23:39	K2268-01CMS	H2TM8MS	62766	SL	56	61	60	61	1			✓		
E2K7574F/R	00:00	K2268-01CMSD	H2TM8MSD	62766	SL	66	69	72	71	1			✓		
E2K7575F/R	00:21	MB-62776	ABLK2F	62776	SL	59	64	63	66	1			✓		
E2K7576F/R	00:41	LCS-62776	ALCS2F	62776	SL	62	89	67	95	1			✓		
E2K7577F/R	01:02	K2198-01B	H30Q0	62776	SL	46	52	49	52	1			✓		
E2K7578F/R	01:23	K2198-01BMS	H30Q0MS	62776	SL	46	55	50	56	1			✓		
E2K7579F/R	01:44	K2198-01BMSD	H30Q0MSD	62776	SL	45	48	49	49	1			✓		
E2K7580F/R	02:05	K2198-02B	H30Q1	62776	SL	42	43	44	42	1			✓		
E2K7581F/R	02:26	K2198-03B	H30Q2	62776	SL	56	56	61	56	1			✓		
E2K7582F/R	02:47	K2198-04B	H30Q3	62776	SL	0*	0*	0*	0*	1			—		Re-Run mis-inject
E2K7583F/R	03:08	K2198-05B	H30Q4	62776	SL	29*	48	30*	47	1			✓		
E2K7584F/R	03:29	K2198-06B	H30Q6	62776	SL	26*	42	28*	50	1			✓		
E2K7585F/R	03:50	K2198-07B	H30Q8	62776	SL	61	73	65	74	1			✓		
E2K7586F/R	04:11	K2198-08B	H30Q9	62776	SL	64	58	63	63	1			✓		
E2K7587F/R	04:32	K2198-09B	H30R0	62776	SL	43	68	46	66	1			✓		
E2K7588F/R	04:53	K2198-10B	H30R1	62776	SL	56	47	61	50	1			✓		
E2K7589F/R	05:13	K2198-11B	H30S4	62776	SL	40	40	42	41	1			✓		
E2K7590F/R	05:34	K2198-12B	H30S5	62776	SL	52	46	56	48	1			✓		

E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
* - Surrogate is outside of control limits
D - Surrogate is diluted

Spectrum Analytical, Inc. RI Division - PEST/PCB RUN LOGBOOK: INSTRUMENT E2

Spectrum Analytical, Inc. RI Division E2 Injection Log
GC Semivolatiles Laboratory

METHOD: ARO
ICAL DATE: 10/25/11

ANALYST: Cerro

START BATCH: 111107F.B
END BATCH: 111107F.B

Start: 08-NOV-11 05:55
End: 08-NOV-11 13:05

Comments: STDs Page 69

Inlet Maintenance By:
Liner :
Column :
Inlet Seal:
Septum :

Reviewed By: 6/19/11

Manual Integration: NA

MI Review: NA

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	SURROGATES FRONT TCMX	SURROGATES FRONT DCB	SURROGATES REAR TCMX	SURROGATES REAR DCB	DILN	FLAGS F	FLAGS R	ANALYST CHECK F	ANALYST CHECK R	COMMENTS
E2K7591F/R	05:55	K2198-13B	H30S8	62776	SL	53	55	57	55	1			✓		
E2K7592F/R	06:16	K2198-14B	H30S9	62776	SL	54	57	58	58	1			✓		
E2K7593F/R	06:37	K2198-15B	H30T0	62776	SL	69	73	76	76	1			✓		
E2K7594F/R	06:58	K2198-16B	H30T1	62776	SL	63	68	70	70	1			✓		
E2K7595F/R	07:19	K2198-17B	H30T2	62776	SL	0*	0*	0*	0*	1			—		Re-Run mis-inject
E2K7596F/R	07:40	K2198-18B	H30T3	62776	SL	56	73	61	70	1			✓		
E2K7597F/R	08:01	K2198-19B	H30T4	62776	SL	59	64	64	66	1			✓		
E2K7598F/R	08:22	K2198-20B	H30T5	62776	SL	67	72	74	75	1			✓		
E2K7599F/R	08:44	AILBKDJ	AILBKDJ		AQ					1			✓		
E2K7600F/R	09:05	AR16603DJ	AR16603DJ		AQ					1			✓	✓	
E2K7601F/R	09:26	AR12423DJ	AR12423DJ		AQ					1			✓	✓	
E2K7602F/R	09:46	AR12483DJ	AR12483DJ		AQ					1			✓	✓	
E2K7603F/R	10:07	AR12543DJ	AR12543DJ		AQ					1			✓	✓	
E2K7604F/R	10:47	K2198-04B	H30Q3	62776	SL	51	54	55	54	1			✓		
E2K7605F/R	11:08	K2198-17B	H30T2	62776	SL	52	59	57	60	1			✓		
E2K7606F/R	12:45	AILBKJE	AILBKJE		AQ					1			✓		
E2K7607F/R	13:05	AR16603JE	AR16603JE		AQ					1			✓	✓	

E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
* - Surrogate is outside of control limits
D - Surrogate is diluted

Reviewed 11/18/11

Spectrum Analytical, Inc. RI Division : VOLATILE SAMPLES RECEIVING LOGBOOK

VOA Log-In Date	Workorder	Client ID	Sample Numbers	Relinquished by:	Received by:	Pres. Used	F/R	Returned to R1
10/28/11	K2174	Sevenson ~~CAW~~ CAW 10/28/11	01-03	CAW	AED	H	R9	
	K2175	CDM	01, 03, 04-06 SN 10/31/11			H	R9	
~~K2176~~	~~CDM~~	~~01-06~~ SN 10/31/11				H	R9	
	K2185	EPA	01			OS	R10	
	K2190	PhoenixFab	01			H	R10	
	K2191	ERM	01-02			H	R10	
	K2192	AECom	01, 03, 05-07, 09-15			OS	R10	
	K2193	AECom	04, 08			H	R10	
	K2195	EPA	01-04			H	R10	
10/28/11	K2151	ERM	01-03 04-14	CAW		US	R10	
10/28/11	K2199 K2198	EPA	02-03 01-20	CAW		OS	F4	
10/28/11	K2200	EPA	01-18, 19	CAW		T	R4	
10-29-11	K2203	Sevenson	01 & 02	DRM		H	R10	
10-29-11	K2201	CDM	01-07	DRM	AED	H	R10	

Logbook ID 90.0191-07/11

Reviewed By: WL 11/1/11

"Preservative Used" Key

UA = Unpreserved Aqueous	**H** = HCL	**A** = Air	**M** = MeOH	**E** = Encore
US = Unpreserved Soil	**N** = $NaHSO_4$		**F** = Freeze	**T** = Trace, HCL

Client: EPAINV

Work Order: K2198 **Profile Name:** SOM_VIII_21

MATRIX **Soil**

Samp #	Bottle	Test	Status	Received	Date
01A	001	PMoist	In	LOGIN: esmith	10/28/2011 4:27:00 PM
01A	001	PMoist	Out	Edward J Smith	11/13/2011 3:33:34 PM
01A	001	PMoist	In	Edward J Smith	11/13/2011 3:50:37 PM
01A	001	SOM01.X_PH	In	LOGIN: esmith	10/28/2011 4:27:00 PM
01A	001	SOM01.X_PH	Out	Ken Pierce	11/9/2011 7:56:58 AM
01A	001	SOM01.X_PH	In	Ken Pierce	11/9/2011 8:45:24 AM
01A	001	SOM1.2_SVOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
01A	001	SOM1.2_SVOA_LOW_S	Out	Courtney J Anderson	11/6/2011 9:19:58 AM
01A	001	SOM1.2_SVOA_LOW_S	In	Courtney J Anderson	11/6/2011 9:37:37 AM
01A	001	SOM1.2_SVOA_LOW_S	Out	Antonio AP Cardoso	11/7/2011 8:22:01 AM
01A	001	SOM1.2_SVOA_LOW_S	In	Antonio AP Cardoso	11/7/2011 11:06:52 AM
01B	001	SOM01.2_ARO_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
01B	001	SOM01.2_ARO_S	Out	Courtney J Anderson	11/6/2011 9:38:21 AM
01B	001	SOM01.2_ARO_S	In	Courtney J Anderson	11/6/2011 1:18:24 PM
01C	001	SOM1.2_VOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
01C	001	SOM1.2_VOA_MED_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
02A	001	PMoist	In	LOGIN: esmith	10/28/2011 4:27:00 PM
02A	001	PMoist	Out	Edward J Smith	11/13/2011 3:33:34 PM
02A	001	PMoist	In	Edward J Smith	11/13/2011 3:50:37 PM
02A	001	SOM01.X_PH	In	LOGIN: esmith	10/28/2011 4:27:00 PM
02A	001	SOM01.X_PH	Out	Ken Pierce	11/9/2011 7:56:58 AM
02A	001	SOM01.X_PH	In	Ken Pierce	11/9/2011 8:45:24 AM
02A	001	SOM1.2_SVOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
02A	001	SOM1.2_SVOA_LOW_S	Out	Courtney J Anderson	11/6/2011 9:19:58 AM
02A	001	SOM1.2_SVOA_LOW_S	In	Courtney J Anderson	11/6/2011 9:37:37 AM
02A	001	SOM1.2_SVOA_LOW_S	Out	Antonio AP Cardoso	11/7/2011 8:22:01 AM
02A	001	SOM1.2_SVOA_LOW_S	In	Antonio AP Cardoso	11/7/2011 11:06:52 AM
02B	001	SOM01.2_ARO_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
02B	001	SOM01.2_ARO_S	Out	Courtney J Anderson	11/6/2011 9:38:21 AM
02B	001	SOM01.2_ARO_S	In	Courtney J Anderson	11/6/2011 1:18:24 PM
02C	001	SOM1.2_VOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
02C	001	SOM1.2_VOA_MED_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM

Client: EPAINV

Work Order: K2198 **Profile Name:** SOM_VIII_21

MATRIX **Soil**

Samp #	Bottle	Test	Status	Received	Date
03A	001	PMoist	In	LOGIN: esmith	10/28/2011 4:27:00 PM
03A	001	PMoist	Out	Edward J Smith	11/13/2011 3:33:34 PM
03A	001	PMoist	In	Edward J Smith	11/13/2011 3:50:37 PM
03A	001	SOM01.X_PH	In	LOGIN: esmith	10/28/2011 4:27:00 PM
03A	001	SOM01.X_PH	Out	Ken Pierce	11/9/2011 7:56:58 AM
03A	001	SOM01.X_PH	In	Ken Pierce	11/9/2011 8:45:24 AM
03A	001	SOM1.2_SVOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
03A	001	SOM1.2_SVOA_LOW_S	Out	Courtney J Anderson	11/6/2011 9:19:58 AM
03A	001	SOM1.2_SVOA_LOW_S	In	Courtney J Anderson	11/6/2011 9:37:37 AM
03A	001	SOM1.2_SVOA_LOW_S	Out	Antonio AP Cardoso	11/7/2011 8:22:01 AM
03A	001	SOM1.2_SVOA_LOW_S	In	Antonio AP Cardoso	11/7/2011 11:06:52 AM
03B	001	SOM01.2_ARO_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
03B	001	SOM01.2_ARO_S	Out	Courtney J Anderson	11/6/2011 9:38:21 AM
03B	001	SOM01.2_ARO_S	In	Courtney J Anderson	11/6/2011 1:18:24 PM
03C	001	SOM1.2_VOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
03C	001	SOM1.2_VOA_MED_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
04A	001	PMoist	In	LOGIN: esmith	10/28/2011 4:27:00 PM
04A	001	PMoist	Out	Edward J Smith	11/13/2011 3:33:34 PM
04A	001	PMoist	In	Edward J Smith	11/13/2011 3:50:37 PM
04A	001	SOM01.X_PH	In	LOGIN: esmith	10/28/2011 4:27:00 PM
04A	001	SOM01.X_PH	Out	Ken Pierce	11/9/2011 7:56:58 AM
04A	001	SOM01.X_PH	In	Ken Pierce	11/9/2011 8:45:24 AM
04A	001	SOM1.2_SVOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
04A	001	SOM1.2_SVOA_LOW_S	Out	Courtney J Anderson	11/6/2011 9:19:58 AM
04A	001	SOM1.2_SVOA_LOW_S	In	Courtney J Anderson	11/6/2011 9:37:37 AM
04A	001	SOM1.2_SVOA_LOW_S	Out	Antonio AP Cardoso	11/7/2011 8:22:01 AM
04A	001	SOM1.2_SVOA_LOW_S	In	Antonio AP Cardoso	11/7/2011 11:06:52 AM
04B	001	SOM01.2_ARO_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
04B	001	SOM01.2_ARO_S	Out	Courtney J Anderson	11/6/2011 9:38:21 AM
04B	001	SOM01.2_ARO_S	In	Courtney J Anderson	11/6/2011 1:18:24 PM
04C	001	SOM1.2_VOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
04C	001	SOM1.2_VOA_MED_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM

Client: EPAINV

Work Order: K2198 **Profile Name:** SOM_VIII_21

MATRIX **Soil**

Samp #	Bottle	Test	Status	Received	Date
05A	001	PMoist	In	LOGIN: esmith	10/28/2011 4:27:00 PM
05A	001	PMoist	Out	Edward J Smith	11/13/2011 3:33:34 PM
05A	001	PMoist	In	Edward J Smith	11/13/2011 3:50:37 PM
05A	001	SOM01.X_PH	In	LOGIN: esmith	10/28/2011 4:27:00 PM
05A	001	SOM01.X_PH	Out	Ken Pierce	11/9/2011 7:56:58 AM
05A	001	SOM01.X_PH	In	Ken Pierce	11/9/2011 8:45:24 AM
05A	001	SOM1.2_SVOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
05A	001	SOM1.2_SVOA_LOW_S	Out	Courtney J Anderson	11/6/2011 9:19:58 AM
05A	001	SOM1.2_SVOA_LOW_S	In	Courtney J Anderson	11/6/2011 9:37:37 AM
05A	001	SOM1.2_SVOA_LOW_S	Out	Antonio AP Cardoso	11/7/2011 8:22:01 AM
05A	001	SOM1.2_SVOA_LOW_S	In	Antonio AP Cardoso	11/7/2011 11:06:52 AM
05B	001	SOM01.2_ARO_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
05B	001	SOM01.2_ARO_S	Out	Courtney J Anderson	11/6/2011 9:38:21 AM
05B	001	SOM01.2_ARO_S	In	Courtney J Anderson	11/6/2011 1:18:24 PM
05C	001	SOM1.2_VOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
05C	001	SOM1.2_VOA_MED_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
06A	001	PMoist	In	LOGIN: esmith	10/28/2011 4:27:00 PM
06A	001	PMoist	Out	Edward J Smith	11/13/2011 3:33:34 PM
06A	001	PMoist	In	Edward J Smith	11/13/2011 3:50:37 PM
06A	001	SOM01.X_PH	In	LOGIN: esmith	10/28/2011 4:27:00 PM
06A	001	SOM01.X_PH	Out	Ken Pierce	11/9/2011 7:56:58 AM
06A	001	SOM01.X_PH	In	Ken Pierce	11/9/2011 8:45:24 AM
06A	001	SOM1.2_SVOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
06A	001	SOM1.2_SVOA_LOW_S	Out	Courtney J Anderson	11/6/2011 9:19:58 AM
06A	001	SOM1.2_SVOA_LOW_S	In	Courtney J Anderson	11/6/2011 9:37:37 AM
06A	001	SOM1.2_SVOA_LOW_S	Out	Antonio AP Cardoso	11/7/2011 8:22:01 AM
06A	001	SOM1.2_SVOA_LOW_S	In	Antonio AP Cardoso	11/7/2011 11:06:52 AM
06B	001	SOM01.2_ARO_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
06B	001	SOM01.2_ARO_S	Out	Courtney J Anderson	11/6/2011 9:38:21 AM
06B	001	SOM01.2_ARO_S	In	Courtney J Anderson	11/6/2011 1:18:24 PM
06C	001	SOM1.2_VOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
06C	001	SOM1.2_VOA_MED_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM

Client: EPAINV

Work Order: K2198 **Profile Name:** SOM_VIII_21

MATRIX **Soil**

Samp #	Bottle	Test	Status	Received	Date
07A	001	PMoist	In	LOGIN: esmith	10/28/2011 4:27:00 PM
07A	001	PMoist	Out	Edward J Smith	11/13/2011 3:33:34 PM
07A	001	PMoist	In	Edward J Smith	11/13/2011 3:50:37 PM
07A	001	SOM01.X_PH	In	LOGIN: esmith	10/28/2011 4:27:00 PM
07A	001	SOM01.X_PH	Out	Ken Pierce	11/9/2011 7:56:58 AM
07A	001	SOM01.X_PH	In	Ken Pierce	11/9/2011 8:45:24 AM
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07A	001	SOM1.2_SVOA_LOW_S	Out	Courtney J Anderson	11/6/2011 9:19:58 AM
07A	001	SOM1.2_SVOA_LOW_S	In	Courtney J Anderson	11/6/2011 9:37:37 AM
07A	001	SOM1.2_SVOA_LOW_S	Out	Antonio AP Cardoso	11/7/2011 8:22:01 AM
07A	001	SOM1.2_SVOA_LOW_S	In	Antonio AP Cardoso	11/7/2011 11:06:52 AM
07B	001	SOM01.2_ARO_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
07B	001	SOM01.2_ARO_S	Out	Courtney J Anderson	11/6/2011 9:38:21 AM
07B	001	SOM01.2_ARO_S	In	Courtney J Anderson	11/6/2011 1:18:24 PM
07C	001	SOM1.2_VOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
07C	001	SOM1.2_VOA_MED_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
08A	001	PMoist	In	LOGIN: esmith	10/28/2011 4:27:00 PM
08A	001	PMoist	Out	Edward J Smith	11/13/2011 3:33:34 PM
08A	001	PMoist	In	Edward J Smith	11/13/2011 3:50:37 PM
08A	001	SOM01.X_PH	In	LOGIN: esmith	10/28/2011 4:27:00 PM
08A	001	SOM01.X_PH	Out	Ken Pierce	11/9/2011 7:56:58 AM
08A	001	SOM01.X_PH	In	Ken Pierce	11/9/2011 8:45:24 AM
08A	001	SOM1.2_SVOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
08A	001	SOM1.2_SVOA_LOW_S	Out	Courtney J Anderson	11/6/2011 9:19:58 AM
08A	001	SOM1.2_SVOA_LOW_S	In	Courtney J Anderson	11/6/2011 9:37:37 AM
08A	001	SOM1.2_SVOA_LOW_S	Out	Antonio AP Cardoso	11/7/2011 8:22:01 AM
08A	001	SOM1.2_SVOA_LOW_S	In	Antonio AP Cardoso	11/7/2011 11:06:52 AM
08B	001	SOM01.2_ARO_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
08B	001	SOM01.2_ARO_S	Out	Courtney J Anderson	11/6/2011 9:38:21 AM
08B	001	SOM01.2_ARO_S	In	Courtney J Anderson	11/6/2011 1:18:24 PM
08C	001	SOM1.2_VOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
08C	001	SOM1.2_VOA_MED_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM

Client: EPAINV

Work Order: K2198 **Profile Name:** SOM_VIII_21

MATRIX **Soil**

Samp #	Bottle	Test	Status	Received	Date
09A	001	PMoist	In	LOGIN: esmith	10/28/2011 4:27:00 PM
09A	001	PMoist	Out	Edward J Smith	11/13/2011 3:33:34 PM
09A	001	PMoist	In	Edward J Smith	11/13/2011 3:50:37 PM
09A	001	SOM01.X_PH	In	LOGIN: esmith	10/28/2011 4:27:00 PM
09A	001	SOM01.X_PH	Out	Ken Pierce	11/9/2011 7:56:58 AM
09A	001	SOM01.X_PH	In	Ken Pierce	11/9/2011 8:45:24 AM
09A	001	SOM1.2_SVOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
09A	001	SOM1.2_SVOA_LOW_S	Out	Courtney J Anderson	11/6/2011 9:19:58 AM
09A	001	SOM1.2_SVOA_LOW_S	In	Courtney J Anderson	11/6/2011 9:37:37 AM
09A	001	SOM1.2_SVOA_LOW_S	Out	Antonio AP Cardoso	11/7/2011 8:22:01 AM
09A	001	SOM1.2_SVOA_LOW_S	In	Antonio AP Cardoso	11/7/2011 11:06:52 AM
09B	001	SOM01.2_ARO_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
09B	001	SOM01.2_ARO_S	Out	Courtney J Anderson	11/6/2011 9:38:21 AM
09B	001	SOM01.2_ARO_S	In	Courtney J Anderson	11/6/2011 1:18:24 PM
09C	001	SOM1.2_VOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
09C	001	SOM1.2_VOA_MED_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
10A	001	PMoist	In	LOGIN: esmith	10/28/2011 4:27:00 PM
10A	001	PMoist	Out	Edward J Smith	11/13/2011 3:33:34 PM
10A	001	PMoist	In	Edward J Smith	11/13/2011 3:50:37 PM
10A	001	SOM01.X_PH	In	LOGIN: esmith	10/28/2011 4:27:00 PM
10A	001	SOM01.X_PH	Out	Ken Pierce	11/9/2011 7:56:58 AM
10A	001	SOM01.X_PH	In	Ken Pierce	11/9/2011 8:45:24 AM
10A	001	SOM1.2_SVOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
10A	001	SOM1.2_SVOA_LOW_S	Out	Courtney J Anderson	11/6/2011 9:19:58 AM
10A	001	SOM1.2_SVOA_LOW_S	In	Courtney J Anderson	11/6/2011 9:37:37 AM
10A	001	SOM1.2_SVOA_LOW_S	Out	Antonio AP Cardoso	11/7/2011 8:22:01 AM
10A	001	SOM1.2_SVOA_LOW_S	In	Antonio AP Cardoso	11/7/2011 11:06:52 AM
10B	001	SOM01.2_ARO_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
10B	001	SOM01.2_ARO_S	Out	Courtney J Anderson	11/6/2011 9:38:21 AM
10B	001	SOM01.2_ARO_S	In	Courtney J Anderson	11/6/2011 1:18:24 PM
10C	001	SOM1.2_VOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
10C	001	SOM1.2_VOA_MED_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM

Client: EPAINV

Work Order: K2198 **Profile Name:** SOM_VIII_21

MATRIX **Soil**

Samp #	Bottle	Test	Status	Received	Date
11A	001	PMoist	In	LOGIN: esmith	10/28/2011 4:27:00 PM
11A	001	PMoist	Out	Edward J Smith	11/13/2011 3:33:34 PM
11A	001	PMoist	In	Edward J Smith	11/13/2011 3:50:37 PM
11A	001	SOM01.X_PH	In	LOGIN: esmith	10/28/2011 4:27:00 PM
11A	001	SOM01.X_PH	Out	Ken Pierce	11/9/2011 7:56:58 AM
11A	001	SOM01.X_PH	In	Ken Pierce	11/9/2011 8:45:24 AM
11A	001	SOM1.2_SVOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
11A	001	SOM1.2_SVOA_LOW_S	Out	Courtney J Anderson	11/6/2011 9:19:58 AM
11A	001	SOM1.2_SVOA_LOW_S	In	Courtney J Anderson	11/6/2011 9:37:37 AM
11A	001	SOM1.2_SVOA_LOW_S	Out	Antonio AP Cardoso	11/7/2011 8:22:01 AM
11A	001	SOM1.2_SVOA_LOW_S	In	Antonio AP Cardoso	11/7/2011 11:06:52 AM
11B	001	SOM01.2_ARO_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
11B	001	SOM01.2_ARO_S	Out	Courtney J Anderson	11/6/2011 9:38:21 AM
11B	001	SOM01.2_ARO_S	In	Courtney J Anderson	11/6/2011 1:18:24 PM
11C	001	SOM1.2_VOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
11C	001	SOM1.2_VOA_MED_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
12A	001	PMoist	In	LOGIN: esmith	10/28/2011 4:27:00 PM
12A	001	PMoist	Out	Edward J Smith	11/13/2011 3:33:34 PM
12A	001	PMoist	In	Edward J Smith	11/13/2011 3:50:37 PM
12A	001	SOM01.X_PH	In	LOGIN: esmith	10/28/2011 4:27:00 PM
12A	001	SOM01.X_PH	Out	Ken Pierce	11/9/2011 7:56:58 AM
12A	001	SOM01.X_PH	In	Ken Pierce	11/9/2011 8:45:24 AM
12A	001	SOM1.2_SVOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
12A	001	SOM1.2_SVOA_LOW_S	Out	Courtney J Anderson	11/6/2011 9:19:58 AM
12A	001	SOM1.2_SVOA_LOW_S	In	Courtney J Anderson	11/6/2011 9:37:37 AM
12A	001	SOM1.2_SVOA_LOW_S	Out	Antonio AP Cardoso	11/7/2011 8:22:01 AM
12A	001	SOM1.2_SVOA_LOW_S	In	Antonio AP Cardoso	11/7/2011 11:06:52 AM
12B	001	SOM01.2_ARO_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
12B	001	SOM01.2_ARO_S	Out	Courtney J Anderson	11/6/2011 9:38:21 AM
12B	001	SOM01.2_ARO_S	In	Courtney J Anderson	11/6/2011 1:18:24 PM
12C	001	SOM1.2_VOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
12C	001	SOM1.2_VOA_MED_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM

Client: EPAINV

Work Order: K2198 **Profile Name:** SOM_VIII_21

MATRIX **Soil**

Samp #	Bottle	Test	Status	Received	Date
13A	001	PMoist	In	LOGIN: esmith	10/28/2011 4:27:00 PM
13A	001	PMoist	Out	Edward J Smith	11/13/2011 3:33:34 PM
13A	001	PMoist	In	Edward J Smith	11/13/2011 3:50:37 PM
13A	001	SOM01.X_PH	In	LOGIN: esmith	10/28/2011 4:27:00 PM
13A	001	SOM01.X_PH	Out	Ken Pierce	11/9/2011 7:56:58 AM
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13A	001	SOM1.2_SVOA_LOW_S	Out	Antonio AP Cardoso	11/7/2011 8:22:01 AM
13A	001	SOM1.2_SVOA_LOW_S	In	Antonio AP Cardoso	11/7/2011 11:06:52 AM
13B	001	SOM01.2_ARO_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
13B	001	SOM01.2_ARO_S	Out	Courtney J Anderson	11/6/2011 9:38:21 AM
13B	001	SOM01.2_ARO_S	In	Courtney J Anderson	11/6/2011 1:18:24 PM
13C	001	SOM1.2_VOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
13C	001	SOM1.2_VOA_MED_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
14A	001	PMoist	In	LOGIN: esmith	10/28/2011 4:27:00 PM
14A	001	PMoist	Out	Edward J Smith	11/13/2011 3:33:34 PM
14A	001	PMoist	In	Edward J Smith	11/13/2011 3:50:37 PM
14A	001	SOM01.X_PH	In	LOGIN: esmith	10/28/2011 4:27:00 PM
14A	001	SOM01.X_PH	Out	Ken Pierce	11/9/2011 7:56:58 AM
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14A	001	SOM1.2_SVOA_LOW_S	Out	Antonio AP Cardoso	11/7/2011 8:22:01 AM
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14B	001	SOM01.2_ARO_S	Out	Courtney J Anderson	11/6/2011 9:38:21 AM
14B	001	SOM01.2_ARO_S	In	Courtney J Anderson	11/6/2011 1:18:24 PM
14C	001	SOM1.2_VOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
14C	001	SOM1.2_VOA_MED_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM

Client: EPAINV

Work Order: K2198 **Profile Name:** SOM_VIII_21

MATRIX **Soil**

Samp #	Bottle	Test	Status	Received	Date
15A	001	PMoist	In	LOGIN: esmith	10/28/2011 4:27:00 PM
15A	001	PMoist	Out	Edward J Smith	11/13/2011 3:33:34 PM
15A	001	PMoist	In	Edward J Smith	11/13/2011 3:50:37 PM
15A	001	SOM01.X_PH	In	LOGIN: esmith	10/28/2011 4:27:00 PM
15A	001	SOM01.X_PH	Out	Ken Pierce	11/9/2011 7:56:58 AM
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15A	001	SOM1.2_SVOA_LOW_S	In	Antonio AP Cardoso	11/7/2011 11:06:52 AM
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15C	001	SOM1.2_VOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
15C	001	SOM1.2_VOA_MED_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
16A	001	PMoist	In	LOGIN: esmith	10/28/2011 4:27:00 PM
16A	001	PMoist	Out	Edward J Smith	11/13/2011 3:33:34 PM
16A	001	PMoist	In	Edward J Smith	11/13/2011 3:50:37 PM
16A	001	SOM01.X_PH	In	LOGIN: esmith	10/28/2011 4:27:00 PM
16A	001	SOM01.X_PH	Out	Ken Pierce	11/9/2011 7:56:58 AM
16A	001	SOM01.X_PH	In	Ken Pierce	11/9/2011 8:45:24 AM
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16A	001	SOM1.2_SVOA_LOW_S	In	Courtney J Anderson	11/6/2011 9:37:37 AM
16A	001	SOM1.2_SVOA_LOW_S	Out	Antonio AP Cardoso	11/7/2011 8:22:01 AM
16A	001	SOM1.2_SVOA_LOW_S	In	Antonio AP Cardoso	11/7/2011 11:06:52 AM
16B	001	SOM01.2_ARO_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
16B	001	SOM01.2_ARO_S	Out	Courtney J Anderson	11/6/2011 9:38:21 AM
16B	001	SOM01.2_ARO_S	In	Courtney J Anderson	11/6/2011 1:18:24 PM
16C	001	SOM1.2_VOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
16C	001	SOM1.2_VOA_MED_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM

Client: EPAINV

Work Order: K2198 **Profile Name:** SOM_VIII_21

MATRIX **Soil**

Samp #	Bottle	Test	Status	Received	Date
17A	001	PMoist	In	LOGIN: esmith	10/28/2011 4:27:00 PM
17A	001	PMoist	Out	Edward J Smith	11/13/2011 3:33:34 PM
17A	001	PMoist	In	Edward J Smith	11/13/2011 3:50:37 PM
17A	001	SOM01.X_PH	In	LOGIN: esmith	10/28/2011 4:27:00 PM
17A	001	SOM01.X_PH	Out	Ken Pierce	11/9/2011 7:56:58 AM
17A	001	SOM01.X_PH	In	Ken Pierce	11/9/2011 8:45:24 AM
17A	001	SOM1.2_SVOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
17A	001	SOM1.2_SVOA_LOW_S	Out	Courtney J Anderson	11/6/2011 9:19:58 AM
17A	001	SOM1.2_SVOA_LOW_S	In	Courtney J Anderson	11/6/2011 9:37:37 AM
17A	001	SOM1.2_SVOA_LOW_S	Out	Antonio AP Cardoso	11/7/2011 8:22:01 AM
17A	001	SOM1.2_SVOA_LOW_S	In	Antonio AP Cardoso	11/7/2011 11:06:52 AM
17B	001	SOM01.2_ARO_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
17B	001	SOM01.2_ARO_S	Out	Courtney J Anderson	11/6/2011 9:38:21 AM
17B	001	SOM01.2_ARO_S	In	Courtney J Anderson	11/6/2011 1:18:24 PM
17C	001	SOM1.2_VOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
17C	001	SOM1.2_VOA_MED_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
18A	001	PMoist	In	LOGIN: esmith	10/28/2011 4:27:00 PM
18A	001	PMoist	Out	Edward J Smith	11/13/2011 3:33:34 PM
18A	001	PMoist	In	Edward J Smith	11/13/2011 3:50:37 PM
18A	001	SOM01.X_PH	In	LOGIN: esmith	10/28/2011 4:27:00 PM
18A	001	SOM01.X_PH	Out	Ken Pierce	11/9/2011 7:56:58 AM
18A	001	SOM01.X_PH	In	Ken Pierce	11/9/2011 8:45:24 AM
18A	001	SOM1.2_SVOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
18A	001	SOM1.2_SVOA_LOW_S	Out	Courtney J Anderson	11/6/2011 9:19:58 AM
18A	001	SOM1.2_SVOA_LOW_S	In	Courtney J Anderson	11/6/2011 9:37:37 AM
18A	001	SOM1.2_SVOA_LOW_S	Out	Antonio AP Cardoso	11/7/2011 8:22:01 AM
18A	001	SOM1.2_SVOA_LOW_S	In	Antonio AP Cardoso	11/7/2011 11:06:52 AM
18B	001	SOM01.2_ARO_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
18B	001	SOM01.2_ARO_S	Out	Courtney J Anderson	11/6/2011 9:38:21 AM
18B	001	SOM01.2_ARO_S	In	Courtney J Anderson	11/6/2011 1:18:24 PM
18C	001	SOM1.2_VOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
18C	001	SOM1.2_VOA_MED_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM

Client: EPAINV

Work Order: K2198 **Profile Name:** SOM_VIII_21

MATRIX **Soil**

Samp #	Bottle	Test	Status	Received	Date
19A	001	PMoist	In	LOGIN: esmith	10/28/2011 4:27:00 PM
19A	001	PMoist	Out	Edward J Smith	11/13/2011 3:33:34 PM
19A	001	PMoist	In	Edward J Smith	11/13/2011 3:50:37 PM
19A	001	SOM01.X_PH	In	LOGIN: esmith	10/28/2011 4:27:00 PM
19A	001	SOM01.X_PH	Out	Ken Pierce	11/9/2011 7:56:58 AM
19A	001	SOM01.X_PH	In	Ken Pierce	11/9/2011 8:45:24 AM
19A	001	SOM1.2_SVOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
19A	001	SOM1.2_SVOA_LOW_S	Out	Courtney J Anderson	11/6/2011 9:19:58 AM
19A	001	SOM1.2_SVOA_LOW_S	In	Courtney J Anderson	11/6/2011 9:37:37 AM
19A	001	SOM1.2_SVOA_LOW_S	Out	Antonio AP Cardoso	11/7/2011 8:22:01 AM
19A	001	SOM1.2_SVOA_LOW_S	In	Antonio AP Cardoso	11/7/2011 11:06:52 AM
19B	001	SOM01.2_ARO_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
19B	001	SOM01.2_ARO_S	Out	Courtney J Anderson	11/6/2011 9:38:21 AM
19B	001	SOM01.2_ARO_S	In	Courtney J Anderson	11/6/2011 1:18:24 PM
19C	001	SOM1.2_VOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
19C	001	SOM1.2_VOA_MED_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
20A	001	PMoist	In	LOGIN: esmith	10/28/2011 4:27:00 PM
20A	001	PMoist	Out	Edward J Smith	11/13/2011 3:33:34 PM
20A	001	PMoist	In	Edward J Smith	11/13/2011 3:50:37 PM
20A	001	SOM01.X_PH	In	LOGIN: esmith	10/28/2011 4:27:00 PM
20A	001	SOM01.X_PH	Out	Ken Pierce	11/9/2011 7:56:58 AM
20A	001	SOM01.X_PH	In	Ken Pierce	11/9/2011 8:45:24 AM
20A	001	SOM1.2_SVOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
20A	001	SOM1.2_SVOA_LOW_S	Out	Courtney J Anderson	11/6/2011 9:19:58 AM
20A	001	SOM1.2_SVOA_LOW_S	In	Courtney J Anderson	11/6/2011 9:37:37 AM
20A	001	SOM1.2_SVOA_LOW_S	Out	Antonio AP Cardoso	11/7/2011 8:22:01 AM
20A	001	SOM1.2_SVOA_LOW_S	In	Antonio AP Cardoso	11/7/2011 11:06:52 AM
20B	001	SOM01.2_ARO_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
20B	001	SOM01.2_ARO_S	Out	Courtney J Anderson	11/6/2011 9:38:21 AM
20B	001	SOM01.2_ARO_S	In	Courtney J Anderson	11/6/2011 1:18:24 PM
20C	001	SOM1.2_VOA_LOW_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM
20C	001	SOM1.2_VOA_MED_S	In	LOGIN: esmith	10/28/2011 4:27:00 PM

STD ID	Analyte(s)	Prep Date	Exp Date	Final Conc	Conc Units	Fin Vol	Solvent	Sol Lot	Prep By	Val By
VP090908C	BFB	09/08/09	06/30/12	2000	µg/mL	1 mL	MeOH		AM	YD
VP100208F	KETONES	02/08/10	09/01/12	5000	µg/mL	1 mL			WL	
VP100507D	SOM LCS	05/07/10	02/01/14	2500	µg/mL	1 mL	MeOH		WL	YD
VP100604C	SOM IS	06/04/10	11/01/14	2500	µg/mL	1 mL			WL	
VP101115A	502.2 CALIBRATION MIX	11/15/10	05/30/17	2000	µg/mL	1 mL	MeOH		SMZ	YD
VP110115A	1,4-DIOXANE-D8	01/15/11	01/15/16	neat					WL	
VP110115B	2-BUTANONE-D5	01/15/11	01/15/16	neat					WL	YD
VP110115C	2-HEXANONE-D5	01/15/11	01/15/16	neat					WL	YD
VP110210A	SOM DMC GAS	02/10/11	05/08/13	2000	µg/mL	1 mL			WL	
VP110210C	SOM DMC NONGAS	02/10/11	05/08/13	2000	µg/mL	1 mL			WL	
VP110215A	SOM STD	02/15/11	06/01/13	2000	µg/mL	1 mL	MeOH		WL	YD
VP110721A	1,4-Dioxane Neat	07/21/11	01/31/15	neat		mL			WL	
VW110817D	SOM DMCB STOCK	08/17/11	02/17/12	5000	µg/mL	4 mL			WL	

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
VP110115B	2-BUTANONE-D5	neat		20	mg
VP110115C	2-HEXANONE-D5	neat		20	mg

VW110817E	1,4-DIOXANE D8 STOCK	08/17/11	02/17/12	20000	µg/mL	4 mL			WL	

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
VP110115A	1,4-DIOXANE-D8	neat		80	mg

VW110817F	1,4-DIOXANE STOCK	08/17/11	02/17/12	20000	µg/mL	4 mL			WL	

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
VP110721A	1,4-Dioxane Neat	neat		80	mg

VW110911A	SOM BFB	09/11/11	03/10/12	25	µg/mL	4 mL	MeOH	51145	WL	

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
VP090908C	BFB	2000	µg/mL	50	µL

VW110918A	SOM IS	09/18/11	10/17/11	100	µg/mL	4 mL	MeOH	51145	WL	

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
VP100604C	SOM IS	2500	µg/mL	0.16	mL

VW110918B	SOM DMC	09/18/11	10/17/11	100 - 2000	µg/mL	4 mL	MeOH	51145	WL	

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
VP110210A	SOM DMC GAS	2000	µg/mL	0.2	mL
VP110210C	SOM DMC NONGAS	2000	µg/mL	0.2	mL
VW110817D	SOM DMCB STOCK	5000	µg/mL	0.16	mL
VW110817E	1,4-DIOXANE D8 STOCK	20000	µg/mL	0.4	mL

STD ID	Analyte(s)	Prep Date	Exp Date	Final Conc	Conc Units	Fin Vol	Solvent	Sol Lot	Prep By	Val By
VW110918C	SOM STD	09/18/11	10/17/11	100 - 2000	µg/mL	4 mL	MeOH	51145	WL	

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
VP100208F	KETONES	5000	µg/mL	0.16	mL
VP101115A	502.2 CALIBRATION MIX	2000	µg/mL	0.2	mL
VP110215A	SOM STD	2000	µg/mL	0.2	mL
VW110817F	1,4-DIOXANE STOCK	20000	µg/mL	0.4	mL

VW111022A	SOM IS	10/22/11	01/20/12	100	µg/mL	4 mL			WL	

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
VP100604C	SOM IS	2500	µg/mL	0.16	mL

VW111022B	SOM DMC	10/22/11	01/20/12	100 - 2000	µg/mL	4 mL			WL	

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
VP110210A	SOM DMC GAS	2000	µg/mL	0.2	mL
VP110210C	SOM DMC NONGAS	2000	µg/mL	0.2	mL
VW110817D	SOM DMCB STOCK	5000	µg/mL	0.16	mL
VW110817E	1,4-DIOXANE D8 STOCK	20000	µg/mL	0.4	mL

VW111022C	SOM STD	10/22/11	01/20/12	100 - 2000	µg/mL	4 mL			WL	

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
VP100208F	KETONES	5000	µg/mL	0.16	mL
VP101115A	502.2 CALIBRATION MIX	2000	µg/mL	0.2	mL
VP110215A	SOM STD	2000	µg/mL	0.2	mL
VW110817F	1,4-DIOXANE STOCK	20000	µg/mL	0.4	mL

VW111022D	SOM LCS	10/22/11	01/20/12	100	µg/mL	1 mL			WL	

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
VP100507D	SOM LCS	2500	µg/mL	0.04	mL

STD ID	Analyte(s)	Prep Date	Exp Date	Final Conc	Conc Units	Fin Vol	Solvent	Sol Lot	Prep By	Val By
SP061226C	2,3,4,6-Tetrachlorophenol	12/26/06	06/30/14	1000	µg/mL	1 mL				
SP080617A	Pentachlorobenzene	06/17/08	06/17/13	neat					SGW	YD
SP081008I	BENZALDEHYDE	02/06/09	02/06/14	neat					BM	YD
SP091020E	CLP04.1 Phenols Calibration Mix	10/20/09	05/01/15	2000 - 4000	µg/mL	1 mL	MeCL2		BM	BM
SP100308A	CHRYSENE-D12	03/08/10	03/08/15	neat					MMS	YD
SP100308B	1,4-DICHLOROBENZENE-D4	03/08/10	03/08/15	neat					MMS	BM
SP100308C	ACENAPHTHENE-D10	03/08/10	03/08/15	neat					MMS	YD
SP100308E	PERYLENE-D12	03/08/10	03/08/15	neat					MMS	YD
SP100308F	PHENANTHRENE-D10	03/08/10	03/08/15	neat					MMS	BM
SP100721I	Naphthalene-D8	07/21/10	07/21/15	neat		mL			TM	BM
SP100910E	ATRAZINE	09/10/10	02/28/14	1000	µg/mL	mL	ACE		MMS	BM
SP101202A	3,3'-Dichlorobenzidine	12/02/10	09/30/14	5000	µg/mL	mL	MeOH		MMS	BM
SP110107D	ACENAPHTHENE-D10	01/07/11	01/07/16	neat					MMS	BM
SP110119A	CLP SVOA TUNING STANDARD (DF	01/19/11	07/20/12	1000	µg/mL	mL			MMS	MMS
IC101202A	PYRIDINE	02/22/11	12/31/15	neat					MMS	YD
SI110222A	PYRIDINE INTERMEDIATE	02/22/11	02/22/12	5000	µg/mL	5 mL	MeCL2	DD325	MMS	YD

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
C101202A	PYRIDINE	neat		0.025	g

SI110222B	PENTACHLOROBENZENE INTERME	02/22/11	02/22/12	5000	µg/mL	5 mL	MeCL2	DD325	MMS	BM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
SP080617A	Pentachlorobenzene	neat		0.025	g

SI110224A	SVOA INTERNAL STANDARD	02/24/11	02/24/12	2000	µg/mL	100 mL	MeCL2	DD325	MMS	BM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
SP100308A	CHRYSENE-D12	neat		0.2	g
SP100308B	1,4-DICHLOROBENZENE-D4	neat		0.2	g
SP100308C	ACENAPHTHENE-D10	neat		0.2	g
SP100308E	PERYLENE-D12	neat		0.2	g
SP100308F	PHENANTHRENE-D10	neat		0.2	g
SP100721I	Naphthalene-D8	neat		0.2	g

SP110304C	CAPROLACTAM STANDARD	03/04/11	11/30/12	2000	µg/mL	mL	MeCL2		MMS	BM
SP110304H	NAPHTHALENE-D8	03/04/11	03/04/16	1	µg/mL				MMS	BM
SP110304I	CHRYSENE-D12	03/04/11	03/04/16	1	µg/mL				MMS	BM
SP110505D	CLP SVOA DMC STOCK SOLUTION	05/05/11	12/15/16	2000	µg/mL	1 mL	MeCL2		MMS	BM
SP110505G	B/N MATRIX SPIKE MIX	05/05/11	03/31/14	5000	µg/mL	1 mL	MeOH		MMS	BM

STD ID	Analyte(s)	Prep Date	Exp Date	Final Conc	Conc Units	Fin Vol	Solvent	Sol Lot	Prep By	Val By
SP110505I	ACID MATRIX SPIKE MIX	05/05/11	06/30/13	7500	µg/mL	1 mL	MeOH		MMS	BM
SP110512A	CLP 04.1 B/N MEGAMIX A	05/12/11	11/30/12	1000	µg/mL	1 mL	MeCL2		MMS	BM
SP110518B	1,2,3,4-TETRACHLOROBENZENE	05/18/11	08/31/13	1000	µg/mL	1 mL	HEX		MMS	BM
SP110607E	PERYLENE-D12	06/07/11	06/07/16	1	µg/mL	1			MMS	BM
SP110617A	FLOURANTHENE-D10	06/17/11	11/20/19	200	µg/mL	1 mL	ISOO		MMS	BM
SP110617B	2-METHYLNAPHTHALENE-D10	06/17/11	06/18/20	200	µg/mL	1 mL	ISOO		MMS	BM
SP110719B	1,2,4,5-TETRACHLOROBENZENE	07/19/11	07/31/13	1000	µg/mL	1 mL	ACN		MMS	CLM
SI110727A	DFTPP INTERMEDIATE	07/27/11	07/20/12	50	µg/mL	10 mL	MeCL2	DD852	MMS	CLM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
SP110119A	CLP SVOA TUNING STANDARD (DFT	1000	µg/mL	500	µL

SW110727A	SOM DFTPP	07/27/11	07/20/12	25	µg/mL	0.5 mL	MeCL2	DD852	MMS	BM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
SI110727A	DFTPP INTERMEDIATE	50	µg/mL	250	µL

SP110804A	CLP SVOA DMC STOCK SOLUTION	08/04/11	11/25/13	2000	µg/mL	8 mL	MeCL2		MMS	BM
SI110818A	SVOA INTERNAL STANDARD	08/18/11	08/18/12	2000	µg/mL	100 mL	MeCL2	DE502	MMS	MMS

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
SP100308B	1,4-DICHLOROBENZENE-D4	neat		0.2	g
SP100308F	PHENANTHRENE-D10	neat		0.2	g
SP110107D	ACENAPHTHENE-D10	neat		0.2	g
SP110304H	NAPHTHALENE-D8	1	µg/mL	0.2	g
SP110304I	CHRYSENE-D12	1	µg/mL	0.2	g
SP110607E	PERYLENE-D12	1	µg/mL	0.2	g

OSW110822B	SOM LOW/SIM SURROGATE	08/22/11	08/22/12	0.4 - 40	µg/mL	500 mL	MeOH	107164	MMS	MMS

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
SP110617A	FLOURANTHENE-D10	200	µg/mL	1	mL
SP110617B	2-METHYLNAPHTHALENE-D10	200	µg/mL	1	mL
SP110804A	CLP SVOA DMC STOCK SOLUTION	2000	µg/mL	10	mL

STD ID	Analyte(s)	Prep Date	Exp Date	Final Conc	Conc Units	Fin Vol	Solvent	Sol Lot	Prep By	Val By
SI110914A	SOM LOW INTERMEDIATE	09/14/11	02/22/12	100 - 200	µg/mL	4 mL	MeCL2	DE575	MMS	BM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
SI110222A	PYRIDINE INTERMEDIATE	5000	µg/mL	80	µL
SI110222B	PENTACHLOROBENZENE INTERMEDIATE	5000	µg/mL	80	µL
SP061226C	2,3,4,6-Tetrachlorophenol	1000	µg/mL	400	µL
SP091020E	CLP04.1 Phenols Calibration Mix	2000 - 4000	µg/mL	200	µL
SP100910E	ATRAZINE	1000	µg/mL	400	µL
SP101202A	3,3'-Dichlorobenzidine	5000	µg/mL	80	µL
SP110304C	CAPROLACTAM STANDARD	2000	µg/mL	200	µL
SP110505D	CLP SVOA DMC STOCK SOLUTION	2000	µg/mL	200	µL
SP110512A	CLP 04.1 B/N MEGAMIX A	1000	µg/mL	400	µL
SP110518B	1,2,3,4-TETRACHLOROBENZENE	1000	µg/mL	400	µL
SP110719B	1,2,4,5-TETRACHLOROBENZENE	1000	µg/mL	400	µL

STD ID	Analyte(s)	Prep Date	Exp Date	Final Conc	Conc Units	Fin Vol	Solvent	Sol Lot	Prep By	Val By
OSW110916A	SOM LOW MS	09/16/11	09/16/12	40 - 40.00005	µg/mL	50 mL	MeCL2	DE575	MMS	BM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
SP110505G	B/N MATRIX SPIKE MIX	5000	µg/mL	400	µL
SP110505I	ACID MATRIX SPIKE MIX	7500	µg/mL	266.7	µL

STD ID	Analyte(s)	Prep Date	Exp Date	Final Conc	Conc Units	Fin Vol	Solvent	Sol Lot	Prep By	Val By
SI111013A	BENZALDEHYDE INTERMEDIATE	10/13/11	10/13/12	2000	µg/mL	50 mL	MeCL2	DE575	MMS	

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
SP081008I	BENZALDEHYDE	neat		0.1	g

STD ID	Analyte(s)	Prep Date	Exp Date	Final Conc	Conc Units	Fin Vol	Solvent	Sol Lot	Prep By	Val By
SW111019B	SOM L2	10/18/11	02/22/12	10 - 20	µg/mL	0.5 mL	MeCL2	DE575	MMS	BM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
SI110818A	SVOA INTERNAL STANDARD	2000	µg/mL	5	µL
SI110914A	SOM LOW INTERMEDIATE	100 - 200	µg/mL	50	µL
SI111013A	BENZALDEHYDE INTERMEDIATE	2000	µg/mL	2.5	µL

STD ID	Analyte(s)	Prep Date	Exp Date	Final Conc	Conc Units	Fin Vol	Solvent	Sol Lot	Prep By	Val By
SW111019A	SOM L1	10/19/11	02/22/12	5 - 20	µg/mL	0.5 mL	MeCL2	DE575	MMS	BM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
SI110818A	SVOA INTERNAL STANDARD	2000	µg/mL	5	µL
SI110914A	SOM LOW INTERMEDIATE	100 - 200	µg/mL	25	µL
SI111013A	BENZALDEHYDE INTERMEDIATE	2000	µg/mL	1.25	µL

STD ID	Analyte(s)	Prep Date	Exp Date	Final Conc	Conc Units	Fin Vol	Solvent	Sol Lot	Prep By	Val By
SW111019C	SOM L3	10/19/11	02/22/12	20 - 40	µg/mL	0.5 mL	MeCL2	DE575	MMS	BM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
SI110818A	SVOA INTERNAL STANDARD	2000	µg/mL	5	µL
SI110914A	SOM LOW INTERMEDIATE	100 - 200	µg/mL	100	µL
SI111013A	BENZALDEHYDE INTERMEDIATE	2000	µg/mL	5	µL

STD ID	Analyte(s)	Prep Date	Exp Date	Final Conc	Conc Units	Fin Vol	Solvent	Sol Lot	Prep By	Val By
SW111019D	SOM L4	10/19/11	02/22/12	20 - 80	µg/mL	0.5 mL	MeCL2	DE575	MMS	BM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
SI110818A	SVOA INTERNAL STANDARD	2000	µg/mL	5	µL
SI110914A	SOM LOW INTERMEDIATE	100 - 200	µg/mL	200	µL
SI111013A	BENZALDEHYDE INTERMEDIATE	2000	µg/mL	10	µL

STD ID	Analyte(s)	Prep Date	Exp Date	Final Conc	Conc Units	Fin Vol	Solvent	Sol Lot	Prep By	Val By
SW111019E	SOM L5	10/19/11	02/22/12	20 - 160	µg/mL	0.5 mL	MeCL2	DE575	MMS	BM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
SI110818A	SVOA INTERNAL STANDARD	2000	µg/mL	5	µL
SI110914A	SOM LOW INTERMEDIATE	100 - 200	µg/mL	400	µL
SI111013A	BENZALDEHYDE INTERMEDIATE	2000	µg/mL	20	µL

STD ID	Analyte(s)	Prep Date	Exp Date	Final Conc	Conc Units	Fin Vol	Solvent	Sol Lot	Prep By	Val By
PP080711C	AR 1221	07/11/08	12/31/14	1000	µg/mL	1 mL	HEX		SMZ	CLM
PP100105C	1268	01/05/10	05/31/15	1000	µg/mL	1 mL	HEX		KB	CLM
PP100601B	ARO 1016/1260	06/01/10	08/01/16	1000	µg/mL	1 mL	HEX		DJL	CLM
PP100730A	ARO 1254	07/30/10	07/01/16	1000	µg/mL	1 mL	HEX		CJT	CLM
PP100730B	ARO 1242	07/30/10	07/01/16	1000	µg/mL	1 mL	HEX		CJT	CLM
PP100730C	ARP 1662	07/30/10	07/01/16	1000	µg/mL	1 mL	HEX		CJT	CLM
PP101203B	TCX MIX	12/03/10	05/01/17	200	µg/mL	1 mL	ACE		DJL	CLM
PP101203D	ARO1248	12/03/10	02/01/17	1000	µg/mL	1 mL	HEX		DJL	CLM
PP101203E	ARO 1232	12/03/10	04/01/17	1000	µg/mL	1 mL	HEX		DJL	CLM
PP110505D	DCB MIX	05/05/11	02/01/15	200	µg/mL	1 mL	ACE		DJL	CLM
PI110524A	ARO 1660 PI	05/24/11	11/24/11	10	µg/mL	100 mL	HEX	DD460	CJT	CLM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
PP100601B	ARO 1016/1260	1000	µg/mL	1	Ml

PI110524B	ARO 1242 PI	05/24/11	11/24/11	10	µg/mL	100 mL	HEX	DD460	CJT	SBL

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
PP100730B	ARO 1242	1000	µg/mL	1	Ml

PI110524C	ARO 1248 PI	05/24/11	11/24/11	10	µg/mL	100 mL	HEX	DD460	CJT	CLM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
PP101203D	ARO1248	1000	µg/mL	1	Ml

PI110524D	ARO 1254 PI	05/24/11	11/24/11	10	µg/mL	100 mL	HEX	DD460	CJT	CLM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
PP100730A	ARO 1254	1000	µg/mL	1	Ml

PI110524E	ARO 1221 PI	05/24/11	11/24/11	20	µg/mL	50 mL	HEX	DD460	CJT	CLM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
PP080711C	AR 1221	1000	µg/mL	1	Ml

PI110524F	ARO 1232 PI	05/24/11	11/24/11	20	µg/mL	50 mL	HEX	DD460	CJT	CLM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
PP101203E	ARO 1232	1000	µg/mL	1	Ml

PI110524G	ARO 1268 PI	05/24/11	11/24/11	20	µg/mL	50 mL	HEX	DD460	CJT	CLM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
PP100105C	1268	1000	µg/mL	1	Ml

PI110524H	ARO 1262 PI	05/24/11	11/24/11	20	µg/mL	50 mL	HEX	DD460	CJT	CLM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
PP100730C	ARP 1662	1000	µg/mL	1	Ml

STD ID	Analyte(s)	Prep Date	Exp Date	Final Conc	Conc Units	Fin Vol	Solvent	Sol Lot	Prep By	Val By
PI110524I	SOM SURR PI	05/24/11	11/24/11	2 - 4	µg/mL	100 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added		Amt Added Units		
PP101203B	TCX MIX			200	µg/mL	1		Ml		
PP110505D	DCB MIX			200	µg/mL	2		mL		
PW110524A	AR 1221 L3	05/24/11	11/24/11	0.02 - 0.4	µg/mL	100 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added		Amt Added Units		
PI110524E	ARO 1221 PI			20	µg/mL	2		Ml		
PI110524I	SOM SURR PI			2 - 4	µg/mL	1		mL		
PW110524AA	AR 1254 L1	05/24/11	11/24/11	0.005 - 0.1	µg/mL	50 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added		Amt Added Units		
PI110524D	ARO 1254 PI			10	µg/mL	0.5		Ml		
PI110524I	SOM SURR PI			2 - 4	µg/mL	0.125		mL		
PW110524AC	SOM PIBLK	05/24/11	11/24/11	0.02 - 0.04	µg/mL	200 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added		Amt Added Units		
PI110524I	SOM SURR PI			2 - 4	µg/mL	2		mL		
PW110524B	AR 1232 L3	05/24/11	11/24/11	0.02 - 0.4	µg/mL	100 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added		Amt Added Units		
PI110524F	ARO 1232 PI			20	µg/mL	2		mL		
PI110524I	SOM SURR PI			2 - 4	µg/mL	1		mL		
PW110524C	AR 1262 L3	05/24/11	11/24/11	0.02 - 0.4	µg/mL	100 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added		Amt Added Units		
PI110524H	ARO 1262 PI			20	µg/mL	2		Ml		
PI110524I	SOM SURR PI			2 - 4	µg/mL	1		mL		
PW110524D	ar 1268 l3	05/24/11	11/24/11	0.02 - 0.4	µg/mL	100 mL	HEX	dd460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added		Amt Added Units		
PI110524G	ARO 1268 PI			20	µg/mL	2		mL		
PI110524I	SOM SURR PI			2 - 4	µg/mL	1		mL		
PW110524E	AR 1660 L5	05/24/11	11/24/11	0.08 - 1.6	µg/mL	50 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added		Amt Added Units		
PI110524A	ARO 1660 PI			10	µg/mL	8		Ml		
PI110524I	SOM SURR PI			2 - 4	µg/mL	2		mL		

STD ID	Analyte(s)	Prep Date	Exp Date	Final Conc	Conc Units	Fin Vol	Solvent	Sol Lot	Prep By	Val By
PW110524F	AR 1660 L4	05/24/11	11/24/11	0.04 - 0.8	µg/mL	50 mL	HEX	DD460	CJT	CLM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
PI110524A	ARO 1660 PI	10	µg/mL	4	Ml
PI110524I	SOM SURR PI	2 - 4	µg/mL	1	mL

PW110524G	AR 1660 L3	05/24/11	11/24/11	0.02 - 0.4	µg/mL	200 mL	HEX	DD460	CJT	CLM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
PI110524A	ARO 1660 PI	10	µg/mL	8	Ml
PI110524I	SOM SURR PI	2 - 4	µg/mL	2	mL

PW110524H	AR 1660 L2	05/24/11	11/24/11	0.01 - 0.2	µg/mL	50 mL	HEX	DD460	CJT	CLM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
PI110524A	ARO 1660 PI	10	µg/mL	1	Ml
PI110524I	SOM SURR PI	2 - 4	µg/mL	0.25	mL

PW110524I	AR 1660 L1	05/24/11	11/24/11	0.005 - 0.1	µg/mL	50 mL	HEX	DD460	CJT	CLM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
PI110524A	ARO 1660 PI	10	µg/mL	0.5	Ml
PI110524I	SOM SURR PI	2 - 4	µg/mL	0.125	mL

PW110524K	AR 1242 L5	05/24/11	11/24/11	0.08 - 1.6	µg/mL	50 mL	HEX	DD460	CJT	CLM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
PI110524B	ARO 1242 PI	10	µg/mL	8	Ml
PI110524I	SOM SURR PI	2 - 4	µg/mL	2	mL

PW110524L	AR 1242 L4	05/24/11	11/24/11	0.04 - 0.8	µg/mL	50 mL	HEX	DD460	CJT	CLM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
PI110524B	ARO 1242 PI	10	µg/mL	4	Ml
PI110524I	SOM SURR PI	2 - 4	µg/mL	1	mL

PW110524M	AR 1242 L3	05/24/11	11/24/11	0.02 - 0.4	µg/mL	200 mL	HEX	DD460	CJT	CLM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
PI110524B	ARO 1242 PI	10	µg/mL	8	Ml
PI110524I	SOM SURR PI	2 - 4	µg/mL	2	mL

PW110524N	AR 1242 L2	05/24/11	11/24/11	0.01 - 0.2	µg/mL	50 mL	HEX	DD460	CJT	CLM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
PI110524B	ARO 1242 PI	10	µg/mL	1	Ml
PI110524I	SOM SURR PI	2 - 4	µg/mL	0.25	mL

STD ID	Analyte(s)	Prep Date	Exp Date	Final Conc	Conc Units	Fin Vol	Solvent	Sol Lot	Prep By	Val By
PW110524O	AR 1242 L1	05/24/11	11/24/11	0.005 - 0.1	µg/mL	50 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added		Amt Added Units		
PI110524B	ARO 1242 PI			10	µg/mL	0.5		Ml		
PI110524I	SOM SURR PI			2 - 4	µg/mL	0.125		mL		
PW110524Q	AR 1248 L5	05/24/11	11/24/11	0.08 - 1.6	µg/mL	50 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added		Amt Added Units		
PI110524C	ARO 1248 PI			10	µg/mL	8		Ml		
PI110524I	SOM SURR PI			2 - 4	µg/mL	2		mL		
PW110524R	AR 1248 L4	05/24/11	11/24/11	0.04 - 0.8	µg/mL	50 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added		Amt Added Units		
PI110524C	ARO 1248 PI			10	µg/mL	4		Ml		
PI110524I	SOM SURR PI			2 - 4	µg/mL	1		mL		
PW110524S	AR 1248 L3	05/24/11	11/24/11	0.02 - 0.4	µg/mL	200 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added		Amt Added Units		
PI110524C	ARO 1248 PI			10	µg/mL	8		Ml		
PI110524I	SOM SURR PI			2 - 4	µg/mL	2		mL		
PW110524T	AR 1248 L2	05/24/11	11/24/11	0.01 - 0.2	µg/mL	50 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added		Amt Added Units		
PI110524C	ARO 1248 PI			10	µg/mL	1		Ml		
PI110524I	SOM SURR PI			2 - 4	µg/mL	0.25		mL		
PW110524U	AR 1248 L1	05/24/11	11/24/11	0.005 - 0.1	µg/mL	50 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added		Amt Added Units		
PI110524C	ARO 1248 PI			10	µg/mL	0.5		Ml		
PI110524I	SOM SURR PI			2 - 4	µg/mL	0.125		mL		
PW110524W	AR 1254 L5	05/24/11	11/24/11	0.08 - 1.6	µg/mL	50 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added		Amt Added Units		
PI110524D	ARO 1254 PI			10	µg/mL	8		Ml		
PI110524I	SOM SURR PI			2 - 4	µg/mL	2		mL		
PW110524X	AR 1254 L4	05/24/11	11/24/11	0.04 - 0.8	µg/mL	50 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added		Amt Added Units		
PI110524D	ARO 1254 PI			10	µg/mL	4		Ml		
PI110524I	SOM SURR PI			2 - 4	µg/mL	1		mL		

STD ID	Analyte(s)	Prep Date	Exp Date	Final Conc	Conc Units	Fin Vol	Solvent	Sol Lot	Prep By	Val By
PW110524Y	AR 1254 L3	05/24/11	11/24/11	0.02 - 0.4	µg/mL	200 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added		Amt Added Units		
PI110524D	ARO 1254 PI			10	µg/mL	8		Ml		
PI110524I	SOM SURR PI			2 - 4	µg/mL	2		mL		
PW110524Z	AR 1254 L2	05/24/11	11/24/11	0.01 - 0.2	µg/mL	50 mL	HEX	DD460	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added		Amt Added Units		
PI110524D	ARO 1254 PI			10	µg/mL	1		Ml		
PI110524I	SOM SURR PI			2 - 4	µg/mL	0.25		mL		
PI110601A	SOM SURR PI	06/01/11	12/01/11	2 - 4	µg/mL	100 mL	HEX	DD640	DJL	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added		Amt Added Units		
PP101203B	TCX MIX			200	µg/mL	1		mL		
PP110505D	DCB MIX			200	µg/mL	2		mL		
PP110608C	TCX MIX	06/08/11	05/31/17	200	µg/mL	1 mL	ACE		DJL	CLM
PP110726A	16/60 mix	07/26/11	03/01/18	1000	µg/mL	1 mL	HEX		GMA	
PP110804C	Decachlorobiphenyl Mix	08/04/11	02/01/15	200	µg/mL	1 mL	ACE		GMA	CLM
OPW110822B	P/P SURROGATES	08/22/11	02/22/12	0.6 - 1.2	µg/mL	1000 mL	ACE	096250	GMA	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added		Amt Added Units		
PP110608C	TCX MIX			200	µg/mL	3		Ml		
PP110804C	Decachlorobiphenyl Mix			200	µg/mL	6		mL		
OPW110928A	SOM ARO LCS	09/28/11	11/24/11	1	µg/mL	50 mL	ACE	096250	GMA	DM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added		Amt Added Units		
PI110524A	ARO 1660 PI			10	µg/mL	5		Ml		
OPW111005A	PCB LCS/MS SPIKE	10/05/11	01/03/12	4	µg/mL	250 mL	ACE	096250	GMA	DJL
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added		Amt Added Units		
PP110726A	16/60 mix			1000	µg/mL	1		Ml		
PW111113A	1268 L5	11/13/11	11/24/11	0.08 - 1.6	µg/mL	10 mL	HEX	DA782	GMA	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added		Amt Added Units		
PI110524G	ARO 1268 PI			20	µg/mL	0.8		mL		
PI110601A	SOM SURR PI			2 - 4	µg/mL	0.4		mL		
PW111113B	1268 L4	11/13/11	11/24/11	0.04 - 0.8	µg/mL	10 mL	HEX	DA782	GMA	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added		Amt Added Units		
PI110524G	ARO 1268 PI			20	µg/mL	0.4		mL		
PI110601A	SOM SURR PI			2 - 4	µg/mL	0.2		mL		

STD ID	Analyte(s)	Prep Date	Exp Date	Final Conc	Conc Units	Fin Vol	Solvent	Sol Lot	Prep By	Val By
PW111113C	1268 L3	11/13/11	11/24/11	0.02 - 0.4	µg/mL	10 mL	HEX	DA782	GMA	CLM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
PI110524G	ARO 1268 PI	20	µg/mL	0.2	mL
PI110601A	SOM SURR PI	2 - 4	µg/mL	0.1	mL

PW111113D	1268 L2	11/13/11	11/24/11	0.01 - 0.2	µg/mL	10 mL	HEX	DA782	GMA	CLM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
PI110524G	ARO 1268 PI	20	µg/mL	0.1	mL
PI110601A	SOM SURR PI	2 - 4	µg/mL	0.05	mL

PW111113E	1268 L1	11/13/11	11/24/11	0.005 - 0.1	µg/mL	10 mL	HEX	DA782	GMA	CLM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
PI110524G	ARO 1268 PI	20	µg/mL	0.05	mL
PI110601A	SOM SURR PI	2 - 4	µg/mL	0.025	mL

FedEx Express **NEW Package US Airbill**

FedEx Tracking Number **8768 2874 0622**

Form ID No. **0200**

FedEx Retrieval Copy

1 From

Date 10/27/11 Sender's FedEx Account Number 1942-5093-2

Sender's Name Jeh Petterson Phone 720 810 0992

Company URS Operating Services

Address 1099 18th St ste 710 Dept./Floor/Suite/Room

City Denver State CO ZIP 80202

2 Your Internal Billing Reference 36491558 00000

3 To

Recipient's Name Duane Smart Phone 407 732-3400

Company Spectrum Analytical, Inc.

Address 175 Metro Center Blvd Dept./Floor/Suite/Room

We cannot deliver to P.O. boxes or P.O. ZIP codes.

01 ☐ HOLD Weekday FedEx location address REQUIRED. NOT available for FedEx First Overnight.

Address

Use this line for the HOLD location address or for continuation of your shipping address.

31 ☐ HOLD Saturday FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

City Warwick State RI ZIP 02886

Agnes R Huntley 10/28/11

8768 2874 0622

4 Express Package Service * To most locations.

NOTE: Service order has changed. Please select carefully.

Packages up to 150 lbs.
For packages over 150 lbs., use the new FedEx Express Freight US Airbill.

Next Business Day

06 ☐ FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

01 ☐ FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

05 ☐ FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

49 ☐ NEW FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.

03 ☐ FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

20 ☐ FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

06 ☐ FedEx Envelope* 02 ☐ FedEx Pak* 03 ☐ FedEx Box 04 ☐ FedEx Tube 01 ☐ Other

6 Special Handling and Delivery Signature Options

03 ☐ **SATURDAY DELIVERY**

☐ No Signature Required — Package may be left without obtaining a signature for delivery.

10 ☐ Direct Signature — Someone at recipient's address may sign for delivery. *Fee applies.*

34 ☐ Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. *Fee applies.*

Does this shipment contain dangerous goods?

One box must be checked.

☐ No 04 ☐ Yes As per attached Shipper's Declaration ☐ Yes Shipper's Declaration not required. 06 ☐ Dry Ice Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box. ☐ Cargo Aircraft Only

7 Payment *Bill to:*

Enter FedEx Acct. No. or Credit Card No. below. Obtain recip. Acct. No. ☐

1 ☐ Sender Acct. No. in Section 1 will be billed. 2 ☐ Recipient 3 ☐ Third Party 4 ☐ Credit Card 5 ☐ Cash/Check

[redacted]

Total Packages 1 Total Weight 24.0 lbs. Credit Card Auth.

*Our liability is limited to $100 unless you declare a higher value. See the current FedEx Service Guide for details.

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Case 41926
SDG 113000

1276

FedEx Express USA Airbill

8418 2969 6944

0200 Form I.D. No.

FedEx Retrieval Copy

1 From

Date 10/28/11

Sender's FedEx Account Number

Sender's Name Snehal Mehta Phone 908 789-8100

Company Chemtech

Address 284 Sheffield St

Dept/Floor/Suite/Room

City Mountainside State NJ ZIP 07092

2 Your Internal Billing Reference 36549155.00000

3 To

Recipient's Name Spectrum Analytical/Agnes Huntley Phone 401 781-1200

Company DBA: MITKEM Laboratories (MITKEM)

Address 175 Metro Center Boulevard

To "HOLD" at FedEx location, print FedEx address here. We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address

Dept/Floor/Suite/Room

City Warwick State RI ZIP 02886

8418 2969 6944

Agnes R Huntley 10/28/11

4a Express Package Service — Packages up to 150 lbs. Delivery commitment may be later in some areas.

1 [X] FedEx Priority Overnight — Next business morning
5 [ ] FedEx Standard Overnight — Next business afternoon
6 [ ] FedEx First Overnight — Earliest next business morning delivery to select locations
3 [ ] FedEx 2Day — Second business day
20 [ ] FedEx Express Saver — Third business day
FedEx Envelope rate not available. Minimum charge: One-pound rate

4b Express Freight Service — Packages over 150 lbs. Delivery commitment may be later in some areas.

7 [ ] FedEx 1Day Freight* — Next business day
8 [ ] FedEx 2Day Freight — Second business day
83 [ ] FedEx 3Day Freight — Third business day
* Call for Confirmation:

5 Packaging — * Declared value limit $500

6 [ ] FedEx Envelope*
2 [ ] FedEx Pak* — Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak
1 [ ] Other

6 Special Handling — Include FedEx address in Section 3.

3 [ ] SATURDAY Delivery — Available only for FedEx Priority Overnight and FedEx 2Day to select ZIP codes
1 [ ] HOLD Weekday at FedEx Location — Not available for FedEx First Overnight
31 [ ] HOLD Saturday at FedEx Location — Available only for FedEx Priority Overnight and FedEx 2Day to select locations

Does this shipment contain dangerous goods? One box must be checked.

[X] No
4 [ ] Yes — As per attached Shipper's Declaration
[ ] Yes — Shipper's Declaration not required
6 [ ] Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous Goods (including Dry Ice) cannot be shipped in FedEx packaging. [ ] Cargo Aircraft Only

7 Payment Bill to: — Enter FedEx Acct. No. or Credit Card No. below. [ ] Obtain Recip. Acct. No.

1 [ ] Sender — Acct. No. in Section 1 will be billed.
2 [ ] Recipient
3 [ ] Third Party
4 [X] Credit Card
5 [ ] Cash/Check

FedEx Acct. No. / Credit Card No. 1472-5092-2 Exp. Date

Total Packages	Total Weight	Total Charges
2	210	Credit Card Auth.

†Our liability is limited to $100 unless you declare a higher value. See the FedEx Service Guide for details.

8 Release Signature — Sign to authorize delivery without obtaining signature.

By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims.

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Case 41926
SDG H30Q0

Contract Laboratory Program

Sample Delivery Group (SDG)

Cover Sheet

SDG Number H30Q0

Laboratory Name	Mitkem Laboratories	Lab Code	MITKEM
Contract No.	EP-W-11-033	Case No.	41926
Analysis Price	$430	SDG Turnaround	21 days

EPA Sample Numbers in SDG (Listed in Numerical Order)

01) H30Q0	08) H30Q6	15) H30S8	22) H30T5
02) H30Q0MS	09) H30Q8	16) H30S9	
03) H30Q0MSD	10) H30Q9	17) H30T0	
04) H30Q1	11) H30R0	18) H30T1	
05) H30Q2	12) H30R1	19) H30T2	
06) H30Q3	13) H30S4	20) H30T3	
07) H30Q4	14) H30S5	21) H30T4	

First Sample in SDG	Last Sample in SDG
H30Q0	H30T5

First Sample Receipt Date	Last Sample Receipt Date
10/28/2011	10/28/2011

Note: There are a maximum of 20 field samples [excluding Performance Evaluation (PE) samples in an SDG. Attach the TR/COC Records to this form in alphanumeric order (the order listed above on this form).

Signature Agnes R Huntley Date 11/02/2011

SDG H30Q0

USEPA
DateShipped: 10/27/2011
CarrierName: FedEx
AirbillNo:

CHAIN OF CUSTODY RECORD
Site #: 41926
Contact Name: Jeff Miller
Contact Phone: 720-219-7891

No: 8-102711-105926-0003
Cooler #:
Lab: Spectrum Analytical
Lab Phone: 401-732-3400

Lab #	CLP Sample #	Analyses	Matrix	Collected	Sample Time	Preservative	MS/MSD
	H30Q0	Volatiles (VOAs)	Soil	10/26/2011	09:05		
	H30Q0	Semivolatiles (SVOAs)/PCBs	Soil	10/26/2011	09:05		
	H30Q1	Volatiles (VOAs)	Soil	10/25/2011	14:47		
	H30Q1	Semivolatiles (SVOAs)/PCBs	Soil	10/25/2011	14:47		
	H30Q2	Volatiles (VOAs)	Soil	10/25/2011	15:15		
	H30Q2	Semivolatiles (SVOAs)/PCBs	Soil	10/25/2011	15:15		
	H30Q3	Volatiles (VOAs)	Soil	10/25/2011	15:40		
	H30Q3	Semivolatiles (SVOAs)/PCBs	Soil	10/25/2011	15:40		
	H30Q4	Volatiles (VOAs)	Soil	10/25/2011	17:10		
	H30Q4	Semivolatiles (SVOAs)/PCBs	Soil	10/25/2011	17:10		
	H30Q6	Volatiles (VOAs)	Soil	10/25/2011	16:50		
	H30Q6	Semivolatiles (SVOAs)/PCBs	Soil	10/25/2011	16:50		
	H30Q8	Volatiles (VOAs)	Soil	10/26/2011	13:00		
	H30Q8	Semivolatiles (SVOAs)/PCBs	Soil	10/26/2011	13:00		
	H30Q9	Volatiles (VOAs)	Soil	10/26/2011	13:45		
	H30Q9	Semivolatiles (SVOAs)/PCBs	Soil	10/26/2011	13:45		
	H30R0	Volatiles (VOAs)	Soil	10/26/2011	17:05		
	H30R0	Semivolatiles (SVOAs)/PCBs	Soil	10/26/2011	17:05		
	H30R1	Volatiles (VOAs)	Soil	10/26/2011	16:30		
	H30R1	Semivolatiles (SVOAs)/PCBs	Soil	10/26/2011	16:30		

Special Instructions: Results to jeff.miller@urscorp.com, amy.k.gray@urscorp.com

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	Jen Pelham	10/27/11	FedEx	10/27/11	1400		FEDEX	10-28-11	Danielle Nelson	10-28-11	9:00

6.5°C 9.0°C 9.5°C 10.0°C 9.5°C

SDG H3000

USEPA
DateShipped: 10/27/2011
CarrierName: FedEx
AirbillNo:

CHAIN OF CUSTODY RECORD
Site #: 41926
Contact Name: Jeff Miller
Contact Phone: 720-219-7891

No: 8-102711-105926-0003
Cooler #:
Lab: Spectrum Analytical
Lab Phone: 401-732-3400

Lab #	CLP Sample #	Analyses	Matrix	Collected	Sample Time	Preservative	MS/MSD
	H30S4	Volatiles (VOAs)	Soil	10/25/2011	09:55		
	H30S4	Semivolatiles (SVOAs)/PCBs	Soil	10/25/2011	09:55		
	H30S5	Volatiles (VOAs)	Soil	10/25/2011	10:36		
	H30S5	Semivolatiles (SVOAs)/PCBs	Soil	10/25/2011	10:36		
	H30S7	Volatiles (VOAs)	Surface Water	10/26/2011	10:30	HCl	
	H30S8	Volatiles (VOAs)	Sediment	10/24/2011	14:00		
	H30S9	Volatiles (VOAs)	Sediment	10/24/2011	15:25		
	H30T0	Volatiles (VOAs)	Sediment	10/24/2011	16:11		
	H30T1	Volatiles (VOAs)	Sediment	10/24/2011	15:22		
	H30T2	Volatiles (VOAs)	Sediment	10/24/2011	16:45		
	H30T3	Volatiles (VOAs)	Sediment	10/24/2011	17:30		
	H30T4	Volatiles (VOAs)	Sediment	10/24/2011	17:45		
← SDG - Final Sample	H30T5	Volatiles (VOAs)	Sediment	10/25/2011	10:15		
	H30T6	Volatiles (VOAs)	Sediment	10/25/2011	11:35		
	H30T7	Volatiles (VOAs)	Sediment	10/25/2011	12:40		
	H30T9	Volatiles (VOAs)	Surface Water	10/24/2011	14:00	HCl	
	H30W0	Volatiles (VOAs)	Surface Water	10/24/2011	15:25	HCl	
	H30W1	Volatiles (VOAs)	Surface Water	10/24/2011	16:11	HCl	
	H30W2	Volatiles (VOAs)	Surface Water	10/24/2011	15:22	HCl	
	H30W3	Volatiles (VOAs)	Surface Water	10/24/2011	16:45	HCl	

Special Instructions: Results to jeff.miller@urscorp.com, amy.k.gray@urscorp.com

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	Jen Petrun	10/27/11	FedEx	10/27/11	1400		FedEx	10-28-11	Zamarron	10-28-11	9:00

6.5°C 9.0°C 9.5°C 10.0°C 9.5°C

USEPA
DateShipped: 10/26/2011
CarrierName: FedEx
AirbillNo:

CHAIN OF CUSTODY RECORD
Site #: 41926
Contact Name: Jeff Miller
Contact Phone: 720-219-7891

No: 8-102611-105817-0002
Cooler #:
Lab: ChemTech Consulting Group
Lab Phone: 908-789-8900

Lab #	CLP Sample #	Analyses	Matrix	Collected	Sample Time	Preservative	MS/MSD
	H30S8	Semivolatiles (SVOAs)/PCBs	Sediment	10/24/2011	14:00		
	H30S9	Semivolatiles (SVOAs)/PCBs	Sediment	10/24/2011	15:25		
	H30T0	Semivolatiles (SVOAs)/PCBs	Sediment	10/24/2011	16:11		
	H30T1	Semivolatiles (SVOAs)/PCBs	Sediment	10/24/2011	15:22		
	H30T2	Semivolatiles (SVOAs)/PCBs	Sediment	10/24/2011	16:45		
	H30T3	Semivolatiles (SVOAs)/PCBs	Sediment	10/24/2011	17:30		
	H30T4	Semivolatiles (SVOAs)/PCBs	Sediment	10/24/2011	17:45		
SDG-Final Sample ←	H30T5	Semivolatiles (SVOAs)/PCBs	Sediment	10/25/2011	10:15		
	H30T6	Semivolatiles (SVOAs)/PCBs	Sediment	10/25/2011	11:35		
	H30T7	Semivolatiles (SVOAs)/PCBs	Sediment	10/25/2011	12:40		
	H30T9	Semivolatiles (SVOAs)	Surface Water	10/24/2011	14:00		
	H30T9	Aroclors	Surface Water	10/24/2011	14:00		
	H30W0	Semivolatiles (SVOAs)	Surface Water	10/24/2011	15:25		
	H30W0	Aroclors	Surface Water	10/24/2011	15:25		
	H30W1	Semivolatiles (SVOAs)	Surface Water	10/24/2011	16:11		
	H30W1	Aroclors	Surface Water	10/24/2011	16:11		
	H30W2	Semivolatiles (SVOAs)	Surface Water	10/24/2011	15:22		
	H30W2	Aroclors	Surface Water	10/24/2011	15:22		
	H30W3	Semivolatiles (SVOAs)	Surface Water	10/24/2011	16:45		
	H30W3	Aroclors	Surface Water	10/24/2011	16:45		

Temp: 4°C

Special Instructions: Results to jeff.miller@urs.com, amy.k.gray@urs.com

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
		10/26/11	FedEx	10/26/11	1300					10/27/11	9:15
									Daniel Green	10-28-11	9:00

9.0°C 9.0°C 9.5°C 8.0°C 8.5°C

1281

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: K2198

Client ID: EPAINV
Project: SOM Region VIII 21day TAT
WO Name: SOM Region VIII 21day TAT
Location: SOM_VIII_21,
Comments: N/A

Case: 41926
SDG: H30Q0
PO: EP-W-11-033

HC Due: 11/16/11
Fax Due:
Fax Report: ☐

Report Level: CLP_REPORT
Special Program:
EDD: SOM_SEDD

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
K2198-01A	H30Q0	10/26/2011 09:05	10/28/2011	Soil	PMoist	/					I1
K2198-01A	H30Q0	10/26/2011 09:05	10/28/2011	Soil	SOM01.X_PH	/			Y		I1
K2198-01A	H30Q0	10/26/2011 09:05	10/28/2011	Soil	SOM1.2_SVOA_LOW_S	/			Y		I1
K2198-01B	H30Q0	10/26/2011 09:05	10/28/2011	Soil	SOM01.2_ARO_S	/			Y		I1
K2198-01C	H30Q0	10/26/2011 09:05	10/28/2011	Soil	SOM1.2_VOA_LOW_S	/			Y		VOA
K2198-01C	H30Q0	10/26/2011 09:05	10/28/2011	Soil	SOM1.2_VOA_MED_S	/		Y	Y		VOA
K2198-02A	H30Q1	10/26/2011 14:47	10/28/2011	Soil	PMoist	/					I1
K2198-02A	H30Q1	10/26/2011 14:47	10/28/2011	Soil	SOM01.X_PH	/					I1
K2198-02A	H30Q1	10/26/2011 14:47	10/28/2011	Soil	SOM1.2_SVOA_LOW_S	/					I1
K2198-02B	H30Q1	10/26/2011 14:47	10/28/2011	Soil	SOM01.2_ARO_S	/					I1
K2198-02C	H30Q1	10/26/2011 14:47	10/28/2011	Soil	SOM1.2_VOA_LOW_S	/					VOA
K2198-02C	H30Q1	10/26/2011 14:47	10/28/2011	Soil	SOM1.2_VOA_MED_S	/		Y			VOA
K2198-03A	H30Q2	10/25/2011 15:15	10/28/2011	Soil	PMoist	/					I1
K2198-03A	H30Q2	10/25/2011 15:15	10/28/2011	Soil	SOM01.X_PH	/					I1
K2198-03A	H30Q2	10/25/2011 15:15	10/28/2011	Soil	SOM1.2_SVOA_LOW_S	/					I1
K2198-03B	H30Q2	10/25/2011 15:15	10/28/2011	Soil	SOM01.2_ARO_S	/					I1
K2198-03C	H30Q2	10/25/2011 15:15	10/28/2011	Soil	SOM1.2_VOA_LOW_S	/					VOA
K2198-03C	H30Q2	10/25/2011 15:15	10/28/2011	Soil	SOM1.2_VOA_MED_S	/		Y			VOA
K2198-04A	H30Q3	10/25/2011 15:40	10/28/2011	Soil	PMoist	/					I1
K2198-04A	H30Q3	10/25/2011 15:40	10/28/2011	Soil	SOM01.X_PH	/					I1
K2198-04A	H30Q3	10/25/2011 15:40	10/28/2011	Soil	SOM1.2_SVOA_LOW_S	/					I1

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: K2198

Client ID: EPAINV
Project: SOM Region VIII 21day TAT
WO Name: SOM Region VIII 21day TAT
Location: SOM_VIII_21,
Comments: N/A

Case: 41926
SDG: H30Q0
PO: EP-W-11-033

HC Due: 11/16/11
Fax Due:
Fax Report: ☐

Report Level: CLP_REPORT
Special Program:
EDD: SOM_SEDD

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
K2198-04B	H30Q3	10/25/2011 15:40	10/28/2011	Soil	SOM01.2_ARO_S	/					I1
K2198-04C	H30Q3	10/25/2011 15:40	10/28/2011	Soil	SOM1.2_VOA_LOW_S	/					VOA
K2198-04C	H30Q3	10/25/2011 15:40	10/28/2011	Soil	SOM1.2_VOA_MED_S	/		Y			VOA
K2198-05A	H30Q4	10/25/2011 17:10	10/28/2011	Soil	PMoist	/					I1
K2198-05A	H30Q4	10/25/2011 17:10	10/28/2011	Soil	SOM01.X_PH	/					I1
K2198-05A	H30Q4	10/25/2011 17:10	10/28/2011	Soil	SOM1.2_SVOA_LOW_S	/					I1
K2198-05B	H30Q4	10/25/2011 17:10	10/28/2011	Soil	SOM01.2_ARO_S	/					I1
K2198-05C	H30Q4	10/25/2011 17:10	10/28/2011	Soil	SOM1.2_VOA_LOW_S	/					VOA
K2198-05C	H30Q4	10/25/2011 17:10	10/28/2011	Soil	SOM1.2_VOA_MED_S	/		Y			VOA
K2198-06A	H30Q6	10/25/2011 16:50	10/28/2011	Soil	PMoist	/					I1
K2198-06A	H30Q6	10/25/2011 16:50	10/28/2011	Soil	SOM01.X_PH	/					I1
K2198-06A	H30Q6	10/25/2011 16:50	10/28/2011	Soil	SOM1.2_SVOA_LOW_S	/					I1
K2198-06B	H30Q6	10/25/2011 16:50	10/28/2011	Soil	SOM01.2_ARO_S	/					I1
K2198-06C	H30Q6	10/25/2011 16:50	10/28/2011	Soil	SOM1.2_VOA_LOW_S	/					VOA
K2198-06C	H30Q6	10/25/2011 16:50	10/28/2011	Soil	SOM1.2_VOA_MED_S	/		Y			VOA
K2198-07A	H30Q8	10/26/2011 13:00	10/28/2011	Soil	PMoist	/					I1
K2198-07A	H30Q8	10/26/2011 13:00	10/28/2011	Soil	SOM01.X_PH	/					I1
K2198-07A	H30Q8	10/26/2011 13:00	10/28/2011	Soil	SOM1.2_SVOA_LOW_S	/					I1
K2198-07B	H30Q8	10/26/2011 13:00	10/28/2011	Soil	SOM01.2_ARO_S	/					I1
K2198-07C	H30Q8	10/26/2011 13:00	10/28/2011	Soil	SOM1.2_VOA_LOW_S	/					VOA
K2198-07C	H30Q8	10/26/2011 13:00	10/28/2011	Soil	SOM1.2_VOA_MED_S	/		Y			VOA

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: K2198

Client ID: EPAINV
Project: SOM Region VIII 21day TAT
WO Name: SOM Region VIII 21day TAT
Location: SOM_VIII_21,
Comments: N/A

Case: 41926
SDG: H30Q0
PO: EP-W-11-033

HC Due: 11/16/11
Fax Due:
Fax Report: ☐

Report Level: CLP_REPORT
Special Program:
EDD: SOM_SEDD

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
K2198-08A	H30Q9	10/26/2011 13:45	10/28/2011	Soil	PMoist	/					I1
K2198-08A	H30Q9	10/26/2011 13:45	10/28/2011	Soil	SOM01.X_PH	/					I1
K2198-08A	H30Q9	10/26/2011 13:45	10/28/2011	Soil	SOM1.2_SVOA_LOW_S	/					I1
K2198-08B	H30Q9	10/26/2011 13:45	10/28/2011	Soil	SOM01.2_ARO_S	/					I1
K2198-08C	H30Q9	10/26/2011 13:45	10/28/2011	Soil	SOM1.2_VOA_LOW_S	/					VOA
K2198-08C	H30Q9	10/26/2011 13:45	10/28/2011	Soil	SOM1.2_VOA_MED_S	/		Y			VOA
K2198-09A	H30R0	10/26/2011 17:05	10/28/2011	Soil	PMoist	/					I1
K2198-09A	H30R0	10/26/2011 17:05	10/28/2011	Soil	SOM01.X_PH	/					I1
K2198-09A	H30R0	10/26/2011 17:05	10/28/2011	Soil	SOM1.2_SVOA_LOW_S	/					I1
K2198-09B	H30R0	10/26/2011 17:05	10/28/2011	Soil	SOM01.2_ARO_S	/					I1
K2198-09C	H30R0	10/26/2011 17:05	10/28/2011	Soil	SOM1.2_VOA_LOW_S	/					VOA
K2198-09C	H30R0	10/26/2011 17:05	10/28/2011	Soil	SOM1.2_VOA_MED_S	/		Y			VOA
K2198-10A	H30R1	10/26/2011 16:30	10/28/2011	Soil	PMoist	/					I1
K2198-10A	H30R1	10/26/2011 16:30	10/28/2011	Soil	SOM01.X_PH	/					I1
K2198-10A	H30R1	10/26/2011 16:30	10/28/2011	Soil	SOM1.2_SVOA_LOW_S	/					I1
K2198-10B	H30R1	10/26/2011 16:30	10/28/2011	Soil	SOM01.2_ARO_S	/					I1
K2198-10C	H30R1	10/26/2011 16:30	10/28/2011	Soil	SOM1.2_VOA_LOW_S	/					VOA
K2198-10C	H30R1	10/26/2011 16:30	10/28/2011	Soil	SOM1.2_VOA_MED_S	/		Y			VOA
K2198-11A	H30S4	10/25/2011 09:55	10/28/2011	Soil	PMoist	/					I1
K2198-11A	H30S4	10/25/2011 09:55	10/28/2011	Soil	SOM01.X_PH	/					I1
K2198-11A	H30S4	10/25/2011 09:55	10/28/2011	Soil	SOM1.2_SVOA_LOW_S	/					I1

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: K2198

Client ID: EPAINV
Project: SOM Region VIII 21day TAT
WO Name: SOM Region VIII 21day TAT
Location: SOM_VIII_21,
Comments: N/A

Case: 41926
SDG: H30Q0
PO: EP-W-11-033

HC Due: 11/16/11
Fax Due:
Fax Report: ☐

Report Level: CLP_REPORT
Special Program:
EDD: SOM_SEDD

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
K2198-11B	H30S4	10/25/2011 09:55	10/28/2011	Soil	SOM01.2_ARO_S	/					I1
K2198-11C	H30S4	10/25/2011 09:55	10/28/2011	Soil	SOM1.2_VOA_LOW_S	/					VOA
K2198-11C	H30S4	10/25/2011 09:55	10/28/2011	Soil	SOM1.2_VOA_MED_S	/		Y			VOA
K2198-12A	H30S5	10/25/2011 10:36	10/28/2011	Soil	PMoist	/					I1
K2198-12A	H30S5	10/25/2011 10:36	10/28/2011	Soil	SOM01.X_PH	/					I1
K2198-12A	H30S5	10/25/2011 10:36	10/28/2011	Soil	SOM1.2_SVOA_LOW_S	/					I1
K2198-12B	H30S5	10/25/2011 10:36	10/28/2011	Soil	SOM01.2_ARO_S	/					I1
K2198-12C	H30S5	10/25/2011 10:36	10/28/2011	Soil	SOM1.2_VOA_LOW_S	/					VOA
K2198-12C	H30S5	10/25/2011 10:36	10/28/2011	Soil	SOM1.2_VOA_MED_S	/		Y			VOA
K2198-13A	H30S8	10/24/2011 14:00	10/28/2011	Soil	PMoist	/					I1
K2198-13A	H30S8	10/24/2011 14:00	10/28/2011	Soil	SOM01.X_PH	/					I1
K2198-13A	H30S8	10/24/2011 14:00	10/28/2011	Soil	SOM1.2_SVOA_LOW_S	/					I1
K2198-13B	H30S8	10/24/2011 14:00	10/28/2011	Soil	SOM01.2_ARO_S	/					I1
K2198-13C	H30S8	10/24/2011 14:00	10/28/2011	Soil	SOM1.2_VOA_LOW_S	/					VOA
K2198-13C	H30S8	10/24/2011 14:00	10/28/2011	Soil	SOM1.2_VOA_MED_S	/		Y			VOA
K2198-14A	H30S9	10/24/2011 15:25	10/28/2011	Soil	PMoist	/					I1
K2198-14A	H30S9	10/24/2011 15:25	10/28/2011	Soil	SOM01.X_PH	/					I1
K2198-14A	H30S9	10/24/2011 15:25	10/28/2011	Soil	SOM1.2_SVOA_LOW_S	/					I1
K2198-14B	H30S9	10/24/2011 15:25	10/28/2011	Soil	SOM01.2_ARO_S	/					I1
K2198-14C	H30S9	10/24/2011 15:25	10/28/2011	Soil	SOM1.2_VOA_LOW_S	/					VOA
K2198-14C	H30S9	10/24/2011 15:25	10/28/2011	Soil	SOM1.2_VOA_MED_S	/		Y			VOA

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: K2198

Client ID: EPAINV
Project: SOM Region VIII 21day TAT
WO Name: SOM Region VIII 21day TAT
Location: SOM_VIII_21,
Comments: N/A

Case: 41926
SDG: H30Q0
PO: EP-W-11-033

HC Due: 11/16/11
Fax Due:
Fax Report: ☐

Report Level: CLP_REPORT
Special Program:
EDD: SOM_SEDD

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
K2198-15A	H30T0	10/24/2011 16:11	10/28/2011	Soil	PMoist	/					I1
K2198-15A	H30T0	10/24/2011 16:11	10/28/2011	Soil	SOM01.X_PH	/					I1
K2198-15A	H30T0	10/24/2011 16:11	10/28/2011	Soil	SOM1.2_SVOA_LOW_S	/					I1
K2198-15B	H30T0	10/24/2011 16:11	10/28/2011	Soil	SOM01.2_ARO_S	/					I1
K2198-15C	H30T0	10/24/2011 16:11	10/28/2011	Soil	SOM1.2_VOA_LOW_S	/					VOA
K2198-15C	H30T0	10/24/2011 16:11	10/28/2011	Soil	SOM1.2_VOA_MED_S	/		Y			VOA
K2198-16A	H30T1	10/24/2011 15:22	10/28/2011	Soil	PMoist	/					I1
K2198-16A	H30T1	10/24/2011 15:22	10/28/2011	Soil	SOM01.X_PH	/					I1
K2198-16A	H30T1	10/24/2011 15:22	10/28/2011	Soil	SOM1.2_SVOA_LOW_S	/					I1
K2198-16B	H30T1	10/24/2011 15:22	10/28/2011	Soil	SOM01.2_ARO_S	/					I1
K2198-16C	H30T1	10/24/2011 15:22	10/28/2011	Soil	SOM1.2_VOA_LOW_S	/					VOA
K2198-16C	H30T1	10/24/2011 15:22	10/28/2011	Soil	SOM1.2_VOA_MED_S	/		Y			VOA
K2198-17A	H30T2	10/24/2011 16:45	10/28/2011	Soil	PMoist	/					I1
K2198-17A	H30T2	10/24/2011 16:45	10/28/2011	Soil	SOM01.X_PH	/					I1
K2198-17A	H30T2	10/24/2011 16:45	10/28/2011	Soil	SOM1.2_SVOA_LOW_S	/					I1
K2198-17B	H30T2	10/24/2011 16:45	10/28/2011	Soil	SOM01.2_ARO_S	/					I1
K2198-17C	H30T2	10/24/2011 16:45	10/28/2011	Soil	SOM1.2_VOA_LOW_S	/					VOA
K2198-17C	H30T2	10/24/2011 16:45	10/28/2011	Soil	SOM1.2_VOA_MED_S	/		Y			VOA
K2198-18A	H30T3	10/24/2011 17:30	10/28/2011	Soil	PMoist	/					I1
K2198-18A	H30T3	10/24/2011 17:30	10/28/2011	Soil	SOM01.X_PH	/					I1
K2198-18A	H30T3	10/24/2011 17:30	10/28/2011	Soil	SOM1.2_SVOA_LOW_S	/					I1

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: K2198

Client ID: EPAINV
Project: SOM Region VIII 21day TAT
WO Name: SOM Region VIII 21day TAT
Location: SOM_VIII_21,
Comments: N/A

Case: 41926
SDG: H30Q0
PO: EP-W-11-033

HC Due: 11/16/11
Fax Due:
Fax Report: ☐

Report Level: CLP_REPORT
Special Program:
EDD: SOM_SEDD

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
K2198-18B	H30T3	10/24/2011 17:30	10/28/2011	Soil	SOM01.2_ARO_S	/					I1
K2198-18C	H30T3	10/24/2011 17:30	10/28/2011	Soil	SOM1.2_VOA_LOW_S	/					VOA
K2198-18C	H30T3	10/24/2011 17:30	10/28/2011	Soil	SOM1.2_VOA_MED_S	/		Y			VOA
K2198-19A	H30T4	10/24/2011 17:45	10/28/2011	Soil	PMoist	/					I1
K2198-19A	H30T4	10/24/2011 17:45	10/28/2011	Soil	SOM01.X_PH	/					I1
K2198-19A	H30T4	10/24/2011 17:45	10/28/2011	Soil	SOM1.2_SVOA_LOW_S	/					I1
K2198-19B	H30T4	10/24/2011 17:45	10/28/2011	Soil	SOM01.2_ARO_S	/					I1
K2198-19C	H30T4	10/24/2011 17:45	10/28/2011	Soil	SOM1.2_VOA_LOW_S	/					VOA
K2198-19C	H30T4	10/24/2011 17:45	10/28/2011	Soil	SOM1.2_VOA_MED_S	/		Y			VOA
K2198-20A	H30T5	10/25/2011 10:15	10/28/2011	Soil	PMoist	/			Y		I1
K2198-20A	H30T5	10/25/2011 10:15	10/28/2011	Soil	SOM01.X_PH	/					I1
K2198-20A	H30T5	10/25/2011 10:15	10/28/2011	Soil	SOM1.2_SVOA_LOW_S	/					I1
K2198-20B	H30T5	10/25/2011 10:15	10/28/2011	Soil	SOM01.2_ARO_S	/					I1
K2198-20C	H30T5	10/25/2011 10:15	10/28/2011	Soil	SOM1.2_VOA_LOW_S	/					VOA
K2198-20C	H30T5	10/25/2011 10:15	10/28/2011	Soil	SOM1.2_VOA_MED_S	/		Y			VOA

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

SAMPLE LOG-IN SHEET

FORM DC-1

Lab Name Mitkem Laboratories	Page 01 of 01
Received By (Print Name) Daniel McKenna	Log-in Date 10/28/2011
Received By (Signature) Daniel McKenna	
Case Number 41926	Sample Delivery Group No. H30Q0 / Mod. Ref. No. —

Remarks: (1/2) Please see associated sample/extract transfer logbook pages submitted with this data package.

1. Custody Seal(s) — Present / Absent* — Intact / Broken
2. Custody Seal Nos. N/A
3. Traffic Reports/ Chain of Custody Records (TR/COCs) or Packing Lists — Present / Absent*
4. Airbill — AirBill / Sticker — Present / Absent*
5. Airbill No. FedEx 8768 2874 0622
6. Sample Tags — Present / Absent*
   Sample Tag Numbers — Listed / Not Listed on Chain-of-Custody
7. Sample Condition — Intact / Broken*/ Leaking
8. Cooler Temperature Indicator Bottle — Present / Absent
9. Cooler Temperature: 6.5 °C
10. Does information on TR/COCs and sample tags agree? — Yes / No*
11. Date Received at Laboratory: 10/28/2011
12. Time Received: 09:00

EPA Sample #	Corresponding: Sample Tag #	Corresponding: Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
H30Q0	N/A	K2198-01	Good
H30Q1	N/A	K2198-02	
H30Q2	N/A	K2198-03	
H30Q3	N/A	K2198-04	
H30Q4	N/A	K2198-05	
H30Q6	N/A	K2198-06	
H30Q8	N/A	K2198-07	
H30Q9	N/A	K2198-08	
H30R0	N/A	K2198-09	
H30R1	N/A	K2198-10	
H30S4	N/A	K2198-11	
H30S5	N/A	K2198-12	
H30S8	N/A	K2198-13	
H30S9	N/A	K2198-14	
H30T0	N/A	K2198-15	
H30T1	N/A	K2198-16	
H30T2	N/A	K2198-17	
H30T3	N/A	K2198-18	
H30T4	N/A	K2198-19	
H30T5	N/A	K2198-20	Good

Sample Transfer

Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area # VOA Lab	Area # R1
By DRM	By DRM
On 10/28/11	On 10/28/11

* Contact SMO and attach record of resolution

Reviewed By	Logbook No.
Date 10/28/11	Logbook Page No. /

SAMPLE LOG-IN SHEET

FORM DC-1

Lab Name Mitkem Laboratories	Page 01 of 01
Received By (Print Name) Daniel McKenna	Log-in Date 10/28/2011
Received By (Signature) Daniel McKenna	
Case Number 41926	Sample Delivery Group No. H30Q0
	Mod. Ref. No. —

Remarks: (1/2) Please see associated sample/extract transfer logbook pages submitted with this data package.

1. Custody Seal(s)	Present / Absent*
	Intact / Broken
2. Custody Seal Nos.	N/A
3. Traffic Reports/ Chain of Custody Records (TR/COCs) or Packing Lists	Present / Absent*
4. Airbill	AirBill / Sticker
	Present / Absent*
5. Airbill No.	FedEx 8768 2875 0622
6. Sample Tags	Present / Absent*
Sample Tag Numbers	Listed / Not Listed on Chain-of-Custody
7. Sample Condition	Intact / Broken*/ Leaking
8. Cooler Temperature Indicator Bottle	Present / Absent
9. Cooler Temperature	9.0 °C
10. Does information on TR/COCs and sample tags agree?	Yes / No*
11. Date Received at Laboratory	10/28/2011
12. Time Received	09:00

EPA Sample #	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
H30R1	N/A	K2198-10	Good
H30S4	N/A	K2198-11	Good
H30S5	N/A	K2198-12	Good

Sample Transfer

Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area # /	Area # R1
By /	By DRM
On /	On 10/28/11

* Contact SMO and attach record of resolution

Reviewed By ARA	Logbook No.
Date 10/28/11	Logbook Page No. /

SAMPLE LOG-IN SHEET

FORM DC-1

Lab Name Mitkem Laboratories	Page 01 of 01
Received By (Print Name) Daniel McKenna	Log-in Date 10/28/2011
Received By (Signature) Daniel McKenna	
Case Number 41926	Sample Delivery Group No. H30Q0 / Mod. Ref. No. —

Remarks: (1/2) Please see associated sample/extract transfer logbook pages submitted with this data package.

1. Custody Seal(s)	Present / Absent*
	Intact / Broken
2. Custody Seal Nos.	N/A
3. Traffic Reports/ Chain of Custody Records (TR/COCs) or Packing Lists	Present / Absent*
4. Airbill	AirBill / Sticker
	Present / Absent*
5. Airbill No.	FedEx 8418 2969 6944
6. Sample Tags	Present / Absent*
Sample Tag Numbers	Listed / Not Listed on Chain-of-Custody
7. Sample Condition	Intact / Broken*/ Leaking
8. Cooler Temperature Indicator Bottle	Present / Absent
9. Cooler Temperature	8.5 °C
10. Does information on TR/COCs and sample tags agree?	Yes / No*
11. Date Received at Laboratory	10/28/2011
12. Time Received	09:00

EPA Sample #	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
H30S8	N/A	K2198-13	Good
H30S9	N/A	K2198-14	Good
H30T0	N/A	K2198-15	Good

Sample Transfer

Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area #	Area # RI
By /	By DRM
On	On 10/28/11

* Contact SMO and attach record of resolution

Reviewed By NLA	Logbook No.
Date 10/28/11	Logbook Page No. /

SAMPLE LOG-IN SHEET

FORM DC-1

Lab Name Mitkem Laboratories	Page 01 of 01
Received By (Print Name) Daniel McKenna	Log-in Date 10/28/2011
Received By (Signature) Daniel McKenna	
Case Number 41926	Sample Delivery Group No. H30Q0
	Mod. Ref. No. —

Remarks: (1/2) Please see associated sample/extract transfer logbook pages submitted with this data package.

1. Custody Seal(s) — Present / Absent* — Intact / Broken
2. Custody Seal Nos. N/A
3. Traffic Reports/ Chain of Custody Records (TR/COCs) or Packing Lists — Present / Absent*
4. Airbill — AirBill / Sticker — Present / Absent*
5. Airbill No. FedEx 8418 2969 6944
6. Sample Tags — Present / Absent*
   Sample Tag Numbers — Listed / Not Listed on Chain-of-Custody
7. Sample Condition — Intact / Broken*/ Leaking
8. Cooler Temperature Indicator Bottle — Present / Absent
9. Cooler Temperature: 9.0 °C
10. Does information on TR/COCs and sample tags agree? — Yes / No*
11. Date Received at Laboratory: 10/28/2011
12. Time Received: 09:00

EPA Sample #	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
H30T2	N/A	K2198-17	Good
H30T3	N/A	K2198-18	Good
H30T4	N/A	K2198-19	Good

Sample Transfer

Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area # /	Area # R1
By /	By DRM
On /	On 10/28/11

* Contact SMO and attach record of resolution

Reviewed By AMA	Logbook No. /
Date 10/28/11	Logbook Page No. /

SAMPLE LOG-IN SHEET

FORM DC-1

Lab Name Mitkem Laboratories	Page 01 of 01
Received By (Print Name) Daniel McKenna	Log-in Date 10/28/2011
Received By (Signature) Daniel McKenna	
Case Number 41926	Sample Delivery Group No. H30Q0
	Mod. Ref. No. —

Remarks: (1/2) Please see associated sample/extract transfer logbook pages submitted with this data package.

1. Custody Seal(s)	Present / Absent*
	Intact / Broken
2. Custody Seal Nos.	N/A
3. Traffic Reports/ Chain of Custody Records (TR/COCs) or Packing Lists	Present / Absent*
4. Airbill	AirBill / Sticker
	Present / Absent*
5. Airbill No.	FedEx 8418 2969 6944
6. Sample Tags	Present / Absent*
Sample Tag Numbers	Listed / Not Listed on Chain-of-Custody
7. Sample Condition	Intact / Broken*/ Leaking
8. Cooler Temperature Indicator Bottle	Present / Absent
9. Cooler Temperature	8.0 °C
10. Does information on TR/COCs and sample tags agree?	Yes / No*
11. Date Received at Laboratory	10/28/2011
12. Time Received	09:00

EPA Sample #	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
H30T1	N/A	K2198-16	Good
H30T5	N/A	K2198-20	Good

Sample Transfer

Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area # /	Area # R1
By /	By DRM
On /	On 10/28/11

* Contact SMO and attach record of resolution

Reviewed By	Logbook No.
Date 10/28/11	Logbook Page No. /

Agnes Huntley [Warwick]

From: Mroz, Ryan [rmroz@fedcsc.com] **Sent:** Wed 11/2/2011 11:34 AM
To: Agnes Huntley [Warwick]; Dawne Smart [Warwick]; Spectrum Analytical -- RI
Cc: Donald Goodrich
Subject: Region 08 | Case 41926 | Lab MITKEM | Issue Multiple | FINAL
Attachments:

Agnes,

Summary Start

-Laboratory problems-

Issue 1: The TR/COC lists the matrices as soil and sediment; however, the laboratory was only scheduled with samples under the soil matrix. The lab would like to confirm if they only need to perform laboratory QC on either the soil or sediment matrix per SDG (for reporting purposes the matrix for all samples would be soil as scheduled).

Resolution 1: Per Region 8, the lab shall report all sediment samples as soil samples, and perform laboratory QC on only one matrix per SDG. The lab shall note the issue in the SDG Narrative and proceed with analysis.

-Sample shipped in incorrect containers-

Issue 2: The laboratory received VOA samples in unpreserved 4 oz jars.

Resolution 2: In accordance with previous direction from Region 8, the laboratory will follow the same procedure as described for the field core/storage containers (e.g., EnCoreTM or equivalent) and note the issue in the SDG Narrative.

Summary End

Let me know if you have any additional questions.

Thanks,

Please note: To waive any defect(s) associated with this issue, please contact your PO.

Ryan Mroz

Environmental Coordinator - Regions 5 & 8

CSC

15000 Conference Center Drive Chantilly, VA 20151

Civil Division | phone: 703.818.4568 | fax: 703.818.4602 | rmroz@fedcsc.com | www.csc.com

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-----Original Message-----
From: Goodrich.Donald@epamail.epa.gov [mailto:Goodrich.Donald@epamail.epa.gov]
Sent: Wednesday, November 02, 2011 11:27 AM
To: Mroz, Ryan
Subject: RE: Region 08 | Case 41926 | Lab MITKEM | Issue Multiple

yes

Don Goodrich

EPA Region 8 Environmental Scientist

Ecosystem Protection and Remediation, Program Support

office: 303-312-6687

cell: 303-905-4024

-----Original Message-----
From: Mroz, Ryan
Sent: Wednesday, November 02, 2011 11:21 AM
To: 'Goodrich.Donald@epamail.epa.gov'

Cc: Kent_Alexander@URSCorp.com
Subject: RE: Region 08 | Case 41926 | Lab MITKEM | Issue Multiple

Don,

For reporting purposes, can all "sediment" samples be reported as "soils?"

Thanks,

Ryan Mroz

Environmental Coordinator - Regions 5 & 8

CSC

15000 Conference Center Drive Chantilly, VA 20151

Civil Division | phone: 703.818.4568 | fax: 703.818.4602 | rmroz@fedcsc.com | www.csc.com

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-----Original Message-----
From: Goodrich.Donald@epamail.epa.gov [mailto:Goodrich.Donald@epamail.epa.gov]
Sent: Wednesday, November 02, 2011 11:19 AM
To: Mroz, Ryan
Cc: Kent_Alexander@URSCorp.com
Subject: Re: Region 08 | Case 41926 | Lab MITKEM | Issue Multiple

Ryan, the laboratory can perform QC on either the soil or sediment per

the SDG.

Thanks,

Don

Don Goodrich

EPA Region 8 Environmental Scientist

Ecosystem Protection and Remediation, Program Support

office: 303-312-6687

cell: 303-905-4024

From: Mroz, Ryan
Sent: Wednesday, November 02, 2011 10:52 AM
To: 'Goodrich.Donald@epamail.epa.gov'
Cc: 'Kent_Alexander@URSCorp.com'
Subject: Region 08 | Case 41926 | Lab MITKEM | Issue Multiple

Don,

MITKEM is reporting the following Issues with Case 41926. Issue 2 can be resolved with a standard answer. Please advise the laboratory how to proceed on Issue 1.

-Laboratory problems-

Issue 1: The TR/COC lists the matrices as soil and sediment; however, the laboratory was only scheduled with samples under the soil matrix. The lab would like to confirm if they only need to perform laboratory QC on either the soil or sediment matrix per SDG (for reporting purposes the matrix for all samples would be soil as scheduled).

-Sample shipped in incorrect containers-

Issue 2: The laboratory received VOA samples in unpreserved 4 oz jars.

Resolution 2: In accordance with previous direction from Region 8, the laboratory will follow the same procedure as described for the field core/storage containers (e.g., EnCoreTM or equivalent) and note the issue in the SDG Narrative.

Ryan Mroz

Environmental Coordinator - Regions 5 & 8

CSC

15000 Conference Center Drive Chantilly, VA 20151

Civil Division | phone: 703.818.4568 | fax: 703.818.4602 | rmroz@fedcsc.com | www.csc.com

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From: Spectrum Analytical -- RI [mailto:mitkemlabs@yahoo.com]
Sent: Wednesday, November 02, 2011 10:41 AM
To: Mroz, Ryan
Subject: Case 41926

Hi Ryan,

Scheduling notes lab QC is required for the soil samples for VOA, SVOA and ARO. The TR/COC lists soils and sediments. Is the laboratory to perform lab QC on the samples listed as soil and lab QC for the sediment samples?

The soil samples for VOA for this case were received as 4oz unpreserved jars. The VOA soils should have been received as pre-preserved or in a closed system (Encores). The laboratory treated these samples as if they were Encores and "extruded" them into unpreserved VOA vials and frozed until time of analysis.

Thank you,

Agnes