COMPLETE SAMPLE DELIVERY GROUP FILE (CSF) RECEIPT/TRACKING FORM

1216609 - R8 SDMS

U.S. Environmental Protection Agency
Region 8 Superfund Program
Contract Laboratory Program

Audit Number R8-2011- 227 Site Name: Smuggler Stamp Mill

Date CSF Received: 11.28.2011 Site Manager: Robert Parker

Received By: F. MacDonald Case Number: 41926

Lab. Name: Mitkem Laboratories SDG Number: H3087

Number of Samples/Matrix: 20 Waters

CFS Relinquished By:

Print Name FRANCES MacDonald Date 01/11/12 Signature Frances MacDonald

CSF Received By:

Print Name Rodney Vargas Date 01/11/12 Signature Rodney Vargas

CFS Relinquished By:

Print Name _____ Date _____ Signature _____

CSF Received By:

Print Name _____ Date _____ Signature _____

CSF Relinquished By:

Print Name _____ Date _____ Signature _____

CFS Received By:

Print Name _____ Date _____ Signature _____

CFS Relinquished By:

Print Name _____ Date _____ Signature _____

1.	Custody Seal present, signed, & dated?	Yes X No ___
2.	COC /Traffic Reports present, signed, & dated?	Yes X No ___
3.	Air bill present, signed, & dated?	Yes X No ___
4.	Form DC-1 present?	Yes X No ___
5.	Form DC-2 present?	Yes X No ___
6.	Laboratory documents legible? (complete audit only)	Yes X No ___
7.	Original documents included in CSF? (complete audit only)	Yes X No ___
8.	Raw data present for all analytical fractions?	Yes X No ___
9.	Percent solids form for soils present?	Yes ___ No X
10.	Cover page present?	Yes X No ___
11.	Records of communication present?	Yes X No ___
12.	Form 1's present for all analytical fractions?	Yes X No ___
13.	Electronic data deliverables including CCS Report & Superset Deliverables available in EDM?	Yes X No ___

14. List RPM and contractors who receive or who have access to electronic DAT files in EDM:

D. Dean and K. Alexander URS

15: Comments:

Frances MacDonald Frances MacDonald 11-22-2011

Signature Print Name Date

Report Date:
18-Nov-11 10:01

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

Computer Science Corporation
15000 Conference Center Drive
Chantilly, VA 20151-3808

Work Order: K2200
SDG No: H30S7
Case No: 41926

Attn: Nazy Abousaeedi

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
K2200-01	H30S7	Aqueous	26-Oct-11 10:30	28-Oct-11 09:00
K2200-02	H30T9	Aqueous	24-Oct-11 14:00	28-Oct-11 09:00
K2200-03	H30W0	Aqueous	24-Oct-11 15:25	28-Oct-11 09:00
K2200-04	H30W1	Aqueous	24-Oct-11 16:11	28-Oct-11 09:00
K2200-05	H30W2	Aqueous	24-Oct-11 15:22	28-Oct-11 09:00
K2200-06	H30W3	Aqueous	24-Oct-11 16:45	28-Oct-11 09:00
K2200-07	H30W4	Aqueous	24-Oct-11 17:30	28-Oct-11 09:00
K2200-08	H30W5	Aqueous	24-Oct-11 17:45	28-Oct-11 09:00
K2200-09	H30W6	Aqueous	25-Oct-11 10:15	28-Oct-11 09:00
K2200-10	H30W7	Aqueous	25-Oct-11 11:35	28-Oct-11 09:00
K2200-11	H30W8	Aqueous	25-Oct-11 12:40	28-Oct-11 09:00
K2200-12	H30X0	Aqueous	26-Oct-11 09:30	28-Oct-11 09:00
K2200-13	H30X1	Aqueous	26-Oct-11 10:30	28-Oct-11 09:00
K2200-14	H30Y2	Aqueous	26-Oct-11 10:55	28-Oct-11 09:00
K2200-15	H30Y3	Aqueous	26-Oct-11 12:05	28-Oct-11 09:00
K2200-16	H30Y4	Aqueous	26-Oct-11 15:05	28-Oct-11 09:00
K2200-17	H30Y5	Aqueous	26-Oct-11 17:05	28-Oct-11 09:00
K2200-18	H30Y6	Aqueous	26-Oct-11 18:20	28-Oct-11 09:00
K2200-19	H30Z6	Aqueous	25-Oct-11 16:05	28-Oct-11 09:00
K2200-20	H30X3	Aqueous	27-Oct-11 14:05	29-Oct-11 08:45

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

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.: H30S7
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)				
2. **SDG Case Narrative**	1	11	✓	
3. **SDG Cover Sheet/Traffic Report**	12	18	✓	
4. **Trace Volatiles Data**				
a. QC Summary				
Deuterated Monitoring Compound Recovery (Form II VOA-1 and VOA-2)	19	20	✓	
Matrix Spike/Matrix Spike Duplicate Recovery (Form III VOA) (if requested by USEPA Region)	N/R	N/R	N/A	
Method Blank Summary (Form IV VOA)	21	22	✓	
GC/MS Instrument Performance Check (Form V VOA)	23	25	✓	
Internal Standard Area and RT Summary (Form VIII VOA)	26	28	✓	
b. Sample Data	29	149	✓	
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)	150	202		
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	203	210	✓	
Blank Data	~~27~~ 211	228	✓	

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET
FORM DC-2 (CON'T)

CASE NO. 41926 SDG NO. H30S7 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)	N/A	N/A	N/A	
Matrix Spike/Matrix Spike Duplicate Recovery (Form III VOA-1 and VOA-2) (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. H30S7 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)	N/A	N/A	N/A	
6. Semivolatiles Data				
a. QC Summary				
Deuterated Monitoring Compound Recovery (Form II SV-1, SV-2, SV-3, SV-4)	229	230	✓	
Matrix Spike/Matrix Spike Duplicate Recovery Summary (Form III SV-1 and SV-2) (if requested by USEPA Region)	231	231	✓	
Method Blank Summary (Form IV SV)	232	233	✓	
GC/MS Instrument Performance Check (Form V SV)	234	237	✓	
Internal Standard Area and RT Summary (Form VIII SV-1 and SV-2)	238	243	✓	
b. Sample Data	244	606		
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:	244	606		
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)			N/A	
c. Standards Data (All Instruments)	607	664		
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	665	682	✓	
Blank Data	683	712	✓	
MS/MSD Data (if requested by USEPA Region)	713	724	✓	
e. Raw GPC Data	N/A	N/A	N/A	

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET
FORM DC-2 (CON'T)

CASE NO. 41926 SDG NO. H30S7 SDG NOS. TO FOLLOW —

— — MOD. REF. NO. —

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK USEPA
f. Semivolatile SIM Data	N/A	N/A	N/A	
[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.]				
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. H30S7 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)	725	725	✓	
Matrix Spike/Matrix Spike Duplicate Summary (Form III ARO-1 and ARO-2)	726	727	✓	
Laboratory Control Sample Recovery(Form III ARO-3 and ARO-4)	728	729	✓	
Method Blank Summary (Form IV ARO)	730	731	✓	
b. Sample Data	732	826		
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. H30S7 SDG NOS. TO FOLLOW —

— — MOD. REF. NO. —

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK USEPA
c. Standards Data	827	978		
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	979	1000	✓	
Matrix Spike/Matrix Spike Duplicate Data	1001	1012	✓	
Laboratory Control Sample (LCS) Data	1013	1028	✓	
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	1029	1045	✓	
Internal sample and sample extract transfer chain-of-custody records	1046	1055	✓	
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	1056	1067	✓	
—	N/A	N/A	N/A	
10. EPA Shipping/Receiving Documents				
Airbills (No. of shipments 3)	1068	1070	✓	
Chain of Custody Records	1071	1077	✓	
Sample Tags (in a plastic bag, if present)			N/A	
Sample Log-in Sheet (Lab & DC-1)	1078	1090	✓	
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.	SDG NO.	SDG NOS. TO FOLLOW
41926	H30S7	—
—	—	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)	1091	1103	✓	
—	N/a	N/a	N/A	

13. **Comments**

Completed by: (CLP Lab)	Jennifer Emerson (Signature)	Jennifer Emerson/Data Specialist (Printed Name/Title)	11/18/11 (Date)
Verified by: (CLP Lab)	Agnes R Huntley (Signature)	Agnes Huntley/CLP Project Manager (Printed Name/Title)	11/18/11 (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# H30S7. Analyses were performed for twenty aqueous samples that were received on October 28 and October 29, 2011.

The analyses were performed under USEPA Contract # EP-W-11-033.

Please note that nine sample-shipping coolers were received on October 28. The temperature of the coolers was measured at 6.5°C, 9.0°C, 9.5°C, 8.5°C, 8.0°C, 9.0°C, 9.5°C, 10.0°C and 9.0°C. The temperature of cooler received on October 29 was measured at 9.0°C.

The following samples are submitted in this data package:

Client ID	Lab ID	Analysis	VOA pH
H30S7	K2200-01A	TV	< 2
H30T9	K2200-02A	TV	< 2
H30T9	K2200-02B	S A	
H30W0	K2200-03A	TV	< 2
H30W0	K2200-03B	S A	
H30W1	K2200-04A	TV	< 2
H30W1	K2200-04B	S A	
H30W2	K2200-05A	TV	< 2
H30W2	K2200-05B	S A	
H30W3	K2200-06A	TV	< 2
H30W3	K2200-06B	S A	
H30W4	K2200-07A	TV	< 2
H30W4	K2200-07B	S A	
H30W5	K2200-08A	TV	< 2
H30W5	K2200-08B	S A	
H30W6	K2200-09A	TV	< 2
H30W6	K2200-09B	S A	
H30W7	K2200-10A	TV	< 2
H30W7	K2200-10B	S A	
H30W8	K2200-11A	TV	< 2
H30W8	K2200-11B	S A	
H30X0	K2200-12A	TV	< 2
H30X0	K2200-12B	S A	
H30X1	K2200-13A	TV	< 2
H30X1	K2200-13B	S A	
H30Y2	K2200-14A	TV	< 2
H30Y2	K2200-14B	S A	
H30Y3	K2200-15A	TV	< 2
H30Y3	K2200-15B	S A	
H30Y4	K2200-16A	TV	< 2

H30Y4	K2200-16B	S A	
H30Y5	K2200-17A	TV	< 2
H30Y5	K2200-17B	S A	
H30Y6	K2200-18A	TV	< 2
H30Y6	K2200-18B	S A	
H30Z6	K2200-19A	TV	< 2
H30Z6	K2200-19B	S A	
H30X3	K2200-20A	S A	
H30X3MS	K2200-20AMS	S A	
H30X3MSD	K2200-20AMSD	S A	

TV = Trace 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 analysis as VOA, SVOA, and ARO for water samples; however, per Scheduling this Case requires TVOA, SVOA, and ARO analysis for water samples. In accordance with previous direction from Region 8, the laboratory will note the issue in the SDG Narrative, perform the analyses as indicated on the Scheduling Notification Form, and proceed with the analysis of the samples. The resolution will be applied to all TR/COCs received for this Case that list an incorrect analysis.

Per Scheduling, water samples require laboratory QC required for the TVOA, SVOA, and ARO fractions. However, the laboratory only received three VOA vials for TVOA analysis and four 1L amber bottles for SVOA/ARO analysis. This is insufficient sample volume for laboratory QC for all fractions. The laboratory can perform the analysis and reduced volume laboratory QC for SVOA/ARO with no volume left if re-extraction is necessary. Per Region 8, the laboratory shall perform reduced volume laboratory QC for SVOA/ARO fractions and cancel TVOA laboratory QC for these SDGs. The lab shall note the issue in the SDG Narrative and proceed with analysis.

The laboratory received two of four 1L amber bottles broken for sample H30W2 and one of four 1L amber bottles broken for samples H30T9 (reported by CHEM and transhipped to MITKEM) and H30Y6. The laboratory has sufficient sample volume remaining for SVOA and ARO analysis but may have an issue if re-extraction is required. 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 samples. If re-extraction/reanalysis is necessary, the laboratory will contact the SMO coordinator and wait for a resolution.

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.

Trace 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 TRACE

The following equation was used to calculate the concentration of target analytes for aqueous samples:

$$\text{Concentration } (\mu g/L) = \frac{(\text{Amt})(\text{DF})(\text{UF})(25)}{V_o}$$

where: Amt = on-column amount on raw data
DF = Dilution factor
UF = ng unit correction factor
V_o = Sample volume purged (mL)

The following equation was used to calculate the Amt in the previous equation:

$$Amt = \frac{(A_x)(IS)}{(A_{is})(RRF)}$$

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

Aqueous Samples were prepared following procedures in laboratory test code: SW5030B

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.

D. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

Matrix spike and matrix spike duplicate were canceled due to insufficient sample volume.

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.

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 concentration of target analytes was determined for aqueous samples using the following equation:

$$\text{Concentration (ug/L)} = (\text{Amt})(\text{DF})(\text{Uf})\left(\frac{V_t}{V_i}\right)\left(\frac{1}{V_o}\right)$$

where: Amt = on-column amount on raw data
DF = Dilution Factor

Uf = GPC correction factor
V_t = final extract volume (mL)
V_i = volume injected (mL)
V_o = initial volume of sample extracted (mL)

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

Aqueous Samples were prepared following procedures in laboratory test code: SW3520C

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:

H30W1: recovery is below criteria for Acenaphthylene-d8 at 33% with criteria of (41-107), Anthracene-d10 at 34% with criteria of (44-110), Benzo(a)pyrene-d12 at 30% with criteria of (32-121) and Pyrene-d10 at 47% with criteria of (52-119).

H30Y2: recovery is below criteria for Benzo(a)pyrene-d12 at 23% with criteria of (32-121).

H30Y3: recovery is below criteria for Benzo(a)pyrene-d12 at 20% with criteria of (32-121) and Pyrene-d10 at 48% with criteria of (52-119).

H30Y4: recovery is below criteria for Benzo(a)pyrene-d12 at 17% with criteria of (32-121) and Pyrene-d10 at 41% with criteria of (52-119).

H30Y5: recovery is below criteria for Benzo(a)pyrene-d12 at 15% with criteria of (32-121) and Pyrene-d10 at 34% with criteria of (52-119).

H30Y6: recovery is below criteria for Anthracene-d10 at 44% with criteria of (44-110), Benzo(a)pyrene-d12 at 16% with criteria of (32-121) and Pyrene-d10 at 30% with criteria of (52-119).

H30X3: recovery is below criteria for Benzo(a)pyrene-d12 at 22% with criteria of (32-121).

H30X3MSD: recovery is below criteria for Benzo(a)pyrene-d12 at 26% with criteria of (32-121) and Pyrene-d10 at 42% with criteria of (52-119).

D. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

Duplicate matrix spikes were performed on sample H30X3.

Spike recoveries were within the advisory QC limits with the exception of the following:

H30X3MS: recovery is above criteria for 4-Nitrophenol at 101% with criteria of (10-80)a nd Pentachlorophenol at 129% with criteria of (9-103).

H30X3MSD: recovery is above criteria for 4-Nitrophenol at 110% with criteria of (10-80) and Pentachlorophenol at 121% with criteria of (9-103).

Replicate RPDs were within the advisory QC limits with the exception of Pyrene.

Due to limited sample volume, the matrix spike and matrix spike duplicate were performed at reduced volume. The spike amounts and extract final volume were adjusted accordingly to achieve comparable CRQLs.

E. Internal Standards:

Internal standard area counts were within QC criteria.

F. Dilutions:

No sample in this SDG required analysis at dilution.

G. Samples:

No other unusual observations were made for the analysis.

H. Manual Integration:

No manual integrations were performed on any sample or standard.

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 concentration of target analytes was determined using the following equation for the aqueous samples:

$$\text{Concentration } (\mu g/L) = \frac{(Amt)(DF)(UF)(V_t)}{(V_o * V_i)}$$

where: Amt = Lower value of two Conc
DF = Dilution Factor

UF = Correction Factor
V_t = Volume of final extract (µL)
V_i = Volume of sample injected (µL)
V_o = Volume of sample extracted (mL)

III. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW3510C

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:

H30Y2: recovery is below criteria for Decachlorobiphenyl on rear column at 25% with criteria of (30-150) and Decachlorobiphenyl on front column at 26% with criteria of (30-150).

H30Y3: recovery is below criteria for Decachlorobiphenyl on rear column at 18% with criteria of (30-150) and Decachlorobiphenyl on front column at 19% with criteria of (30-150).

H30Y4: recovery is below criteria for Decachlorobiphenyl on rear column at 20% with criteria of (30-150) and Decachlorobiphenyl on front column at 21% with criteria of (30-150).

H30Y5: recovery is below criteria for Decachlorobiphenyl on rear column at 17% with criteria of (30-150) and Decachlorobiphenyl on front column at 18% with criteria of (30-150).

H30Y6: recovery is below criteria for Decachlorobiphenyl on rear column at 15% with criteria of (30-150) and Decachlorobiphenyl on front column at 16% with criteria of (30-150).

H30X3: recovery is below criteria for Decachlorobiphenyl on rear column at 17% with criteria of (30-150) and Decachlorobiphenyl on front column at 18% with criteria of (30-150).

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

Duplicate matrix spikes were performed on sample H30X3.

Spike recoveries were within the advisory QC limits.

Replicate RPDs were within the advisory QC limits with the exception of Aroclor-1260 on the rear column.

Due to limited sample volume, the matrix spike and matrix spike duplicate were performed at reduced volume. The spike amounts and extract final volume were adjusted accordingly to achieve comparable CRQLs.

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:

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

The following samples were manually integrated:

H30W0: Decachlorobiphenyl due to M6 in the front column
H30W5: Decachlorobiphenyl, Tetrachloro-m-xylene due to M6 in the front column

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
11/18/11

Contract Laboratory Program

Sample Delivery Group (SDG)

Cover Sheet

SDG Number H30S7

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) H30S7	08) H30W5	15) H30X3MS	22) H30Z6
02) H30T9	09) H30W6	16) H30X3MSD	
03) H30W0	10) H30W7	17) H30Y2	
04) H30W1	11) H30W8	18) H30Y3	
05) H30W2	12) H30X0	19) H30Y4	
06) H30W3	13) H30X1	20) H30Y5	
07) H30W4	14) H30X3	21) H30Y6	

First Sample in SDG	Last Sample in SDG
H30S7	H30X3
First Sample Receipt Date	**Last Sample Receipt Date**
10/28/2011	10/29/2011

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 11/07/2011

SDG H3057

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		
	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 Pstrum	10/27/11	FedEx	10/27/11	1400		FEDEX	10-28-11	[illegible]	10-28-11	9:00

COPY

Original Documents Are Included in CSF H3060
Signed: [illegible] **Date:** 10/27/11

6.5°C 9.0°C 9.5°C 10.0°C 9.5°C

SDG 113057

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		
	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
	[signature]	10/26/11	FedEx	10/26/11	1302				[signature]	10/27/11	9:15
									[signature]	10-28-11	9:00

COPY

Original Documents Are Included In CSF 113000
Signed: AMM **Date:** 10/28/11

9.0°C 9.0°C 9.5°C 8.0°C 8.5°C

SDG H3057

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
	H30W4	Semivolatiles (SVOAs)	Surface Water	10/24/2011	17:30		
	H30W4	Aroclors	Surface Water	10/24/2011	17:30		
	H30W5	Semivolatiles (SVOAs)	Surface Water	10/24/2011	17:45		
	H30W5	Aroclors	Surface Water	10/24/2011	17:45		
	H30W6	Semivolatiles (SVOAs)	Surface Water	10/25/2011	10:15		
	H30W6	Aroclors	Surface Water	10/25/2011	10:15		
	H30W7	Semivolatiles (SVOAs)	Surface Water	10/25/2011	11:35		
	H30W7	Aroclors	Surface Water	10/25/2011	11:35		
	H30W8	Semivolatiles (SVOAs)	Surface Water	10/25/2011	12:40		
	H30W8	Aroclors	Surface Water	10/25/2011	12:40		

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
	[signature]	10/26/11	FedEx	10/26/11	1300				[signature]	10/27/11	9:15
									[signature]	10/28/11	9:00

9.0°C 9.0°C 9.5°C 8.0°C 8.5°C

SDG H3057

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
	H30W4	Volatiles (VOAs)	Surface Water	10/24/2011	17:30	HCl	
	H30W5	Volatiles (VOAs)	Surface Water	10/24/2011	17:45	HCl	
	H30W6	Volatiles (VOAs)	Surface Water	10/25/2011	10:15	HCl	
	H30W7	Volatiles (VOAs)	Surface Water	10/25/2011	11:35	HCl	
	H30W8	Volatiles (VOAs)	Surface Water	10/25/2011	12:40	HCl	
	H30X0	Volatiles (VOAs)	Ground Water	10/26/2011	09:30	HCl	
	H30X0	Semivolatiles (SVOAs)	Ground Water	10/26/2011	09:30		
	H30X0	Aroclors	Ground Water	10/26/2011	09:30		
	H30X1	Volatiles (VOAs)	Ground Water	10/26/2011	10:30	HCl	
	H30X1	Semivolatiles (SVOAs)	Ground Water	10/26/2011	10:30		
	H30X1	Aroclors	Ground Water	10/26/2011	10:30		
	H30Y2	Volatiles (VOAs)	Ground Water	10/26/2011	10:55	HCl	
	H30Y2	Semivolatiles (SVOAs)	Ground Water	10/26/2011	10:55		
	H30Y2	Aroclors	Ground Water	10/26/2011	10:55		
	H30Y3	Volatiles (VOAs)	Ground Water	10/26/2011	12:05	HCl	
	H30Y3	Semivolatiles (SVOAs)	Ground Water	10/26/2011	12:05		
	H30Y3	Aroclors	Ground Water	10/26/2011	12:05		
	H30Y4	Volatiles (VOAs)	Ground Water	10/26/2011	15:05	HCl	
	H30Y4	Semivolatiles (SVOAs)	Ground Water	10/26/2011	15:05		
	H30Y4	Aroclors	Ground Water	10/26/2011	15:05		

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
	[signature]	10/27/11	FedEx	10/27/11	1400		FedEx	10-28-11	[signature]	10-28-11	9:00

6.5°C 9.0°C 9.5°C 10.0°C 9.5°C

SDG H30057

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
	H30Y5	Volatiles (VOAs)	Ground Water	10/26/2011	17:05	HCl	
	H30Y5	Semivolatiles (SVOAs)	Ground Water	10/26/2011	17:05		
	H30Y5	Aroclors	Ground Water	10/26/2011	17:05		
	H30Y6	Volatiles (VOAs)	Ground Water	10/26/2011	18:20	HCl	
	H30Y6	Semivolatiles (SVOAs)	Ground Water	10/26/2011	18:20		
	H30Y6	Aroclors	Ground Water	10/26/2011	18:20		
	H30Z6	Volatiles (VOAs)	Ground Water	10/25/2011	16:05	HCl	
	H30Z6	Semivolatiles (SVOAs)	Ground Water	10/25/2011	16:05		
	H30Z6	Aroclors	Ground Water	10/25/2011	16:05		

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	Dennis Mun	10-28-11	7:00

6.5°C 9.0°C 9.5°C 10.0°C 9.5°C

SDG H30S7

USEPA
DateShipped: 10/28/2011
CarrierName: FedEx
AirbillNo:

CHAIN OF CUSTODY RECORD

Site #: 41926
Contact Name: Jeff Miller
Contact Phone: 720-219-7891

No: 8-102811-114448-0006
Cooler #:
Lab: Spectrum Analytical
Lab Phone: 401-732-3400

Lab #	CLP Sample #	Analyses	Matrix	Collected	Sample Time	Preservative	MS/MSD
	H30Q5	Semivolatiles (SVOAs)/PCBs	Soil	10/27/2011	10:10		
	H30Q7	Semivolatiles (SVOAs)/PCBs	Soil	10/27/2011	11:10		
	H30R2	Semivolatiles (SVOAs)/PCBs	Soil	10/27/2011	14:10		
	H30R3	Semivolatiles (SVOAs)/PCBs	Soil	10/27/2011	13:50		
	H30R4	Semivolatiles (SVOAs)/PCBs	Soil	10/27/2011	17:45		
	H30R6	Semivolatiles (SVOAs)/PCBs	Soil	10/27/2011	16:40		
	H30R7	Semivolatiles (SVOAs)/PCBs	Soil	10/27/2011	16:00		
	H30R8	Semivolatiles (SVOAs)/PCBs	Soil	10/27/2011	17:20		
SDG - Final Sample	H30X3	Semivolatiles (SVOAs)	Ground Water	10/27/2011	14:05		
	H30X3	Aroclors	Ground Water	10/27/2011	14:05		
	H30X4	Semivolatiles (SVOAs)	Ground Water	10/27/2011	17:25		
	H30X4	Aroclors	Ground Water	10/27/2011	17:25		
	H30Y7	Semivolatiles (SVOAs)	Ground Water	10/27/2011	10:23		
	H30Y7	Aroclors	Ground Water	10/27/2011	10:23		

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
	[signature]	10/28/11	fedex	10/28/11	1230		FedEx	10-29-11	[signature]	10-29-11	8:45

COPY

Original Documents Are Included in CSF H30T6
Signed: [signature] Date: 10/31/11

9.0°C

2A - FORM II VOA-1

WATER 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.: H30S7

Level: (TRACE or LOW) TRACE

	EPA SAMPLE NO.	VDMC1 (VCL) #	VDMC2 (CLA) #	VDMC3 (DCE) #	VDMC4 (BUT) #	VDMC5 (CLF) #	VDMC6 (DCA) #	VDMC7 (BEN) #
01	VBLK5T	78	81	76	93	92	89	101
02	H30S7	89	90	83	79	90	86	102
03	H30T9	89	88	85	84	93	87	101
04	H30W0	84	84	80	80	91	84	104
05	H30W1	85	88	80	81	93	82	100
06	H30W2	88	88	85	80	93	87	102
07	H30W3	87	88	86	80	90	89	99
08	H30W4	85	87	85	83	91	85	101
09	H30W5	86	87	85	84	92	81	108
10	H30W6	84	88	83	84	95	89	100
11	H30W7	81	86	79	82	91	81	103
12	H30W8	80	85	79	81	90	84	103
13	H30X0	89	91	83	81	93	88	108
14	H30X1	88	92	82	79	93	85	100
15	H30Y2	84	85	82	83	90	79	105
16	H30Y3	81	86	80	84	91	87	106
17	H30Y4	86	87	84	82	92	87	102
18	H30Y5	85	86	77	85	90	88	106
19	H30Y6	81	84	74	79	90	83	102
20	VBLK5W	92	91	83	86	91	82	107
21	H30Z6	85	90	88	80	91	83	102
22	VHBLK5W	94	92	88	91	90	83	104

			QC LIMITS
VDMC1	(VCL)	= Vinyl chloride-d3	(65-131)
VDMC2	(CLA)	= Chloroethane-d5	(71-131)
VDMC3	(DCE)	= 1,1-Dichloroethene-d2	(55-104)
VDMC4	(BUT)	= 2-Butanone-d5	(49-155)
VDMC5	(CLF)	= Chloroform-d	(78-121)
VDMC6	(DCA)	= 1,2-Dichloroethane-d4	(78-129)
VDMC7	(BEN)	= Benzene-d6	(77-124)

Column to be used to flag recovery values

* Values outside of contract required QC limits

2B - FORM II VOA-2

WATER 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.: H30S7

Level: (TRACE or LOW) TRACE

	SAMPLE NO.	VDMC8 (DPA) #	VDMC9 (TOL) #	VDMC10 (TDP) #	VDMC11 (HEX) #	VDMC12 (TCA) #	VDMC13 (DCZ) #	VDMC14 #	TOT OUT
01	VBLK5T	86	97	94	81	78	93		0
02	H30S7	88	95	96	73	78	90		0
03	H30T9	85	94	89	72	74	93		0
04	H30W0	91	101	91	76	81	83		0
05	H30W1	90	99	92	75	77	94		0
06	H30W2	88	98	95	75	79	90		0
07	H30W3	89	99	94	75	80	91		0
08	H30W4	85	97	91	76	80	92		0
09	H30W5	97	103	98	83	83	90		0
10	H30W6	92	99	87	78	79	85		0
11	H30W7	88	101	98	70	81	90		0
12	H30W8	89	100	91	77	81	86		0
13	H30X0	95	105	106	83	80	85		0
14	H30X1	89	98	87	77	78	89		0
15	H30Y2	93	102	97	81	82	92		0
16	H30Y3	94	101	96	77	85	100		0
17	H30Y4	92	100	92	81	79	85		0
18	H30Y5	97	103	94	83	87	92		0
19	H30Y6	92	99	82	80	83	91		0
20	VBLK5W	97	101	99	81	81	90		0
21	H30Z6	89	98	88	78	81	91		0
22	VHBLK5W	88	102	96	82	74	85		0

		QC LIMITS
VDMC8	(DPA) = 1,2-Dichloropropane-d6	(79-124)
VDMC9	(TOL) = Toluene-d8	(77-121)
VDMC10	(TDP) = trans-1,3-Dichloropropene-d4	(73-121)
VDMC11	(HEX) = 2-Hexanone-d5	(28-135)
VDMC12	(TCA) = 1,1,2,2-Tetrachloroethane-d2	(73-125)
VDMC13	(DCZ) = 1,2-Dichlorobenzene-d4	(80-131)

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

4A - FORM IV VOA

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK5T

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Lab File ID: V5N2526A.D Lab Sample ID: MB-62672

Instrument ID: V5

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 11/01/2011

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 7:25

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	H30S7	K2200-01A	V5N2531.D	9:49
02	H30T9	K2200-02A	V5N2532.D	10:17
03	H30W0	K2200-03A	V5N2533.D	10:46
04	H30W1	K2200-04A	V5N2534.D	11:14
05	H30W2	K2200-05A	V5N2535.D	11:43
06	H30W3	K2200-06A	V5N2536.D	12:11
07	H30W4	K2200-07A	V5N2537.D	12:40
08	H30W5	K2200-08A	V5N2538.D	13:08
09	H30W6	K2200-09A	V5N2539.D	13:36
10	H30W7	K2200-10A	V5N2540.D	14:05
11	H30W8	K2200-11A	V5N2541.D	14:33
12	H30X0	K2200-12A	V5N2542.D	15:01
13	H30X1	K2200-13A	V5N2543.D	15:30
14	H30Y2	K2200-14A	V5N2544.D	15:58
15	H30Y3	K2200-15A	V5N2545.D	16:27
16	H30Y4	K2200-16A	V5N2546.D	16:55
17	H30Y5	K2200-17A	V5N2547.D	17:23
18	H30Y6	K2200-18A	V5N2548.D	17:52

COMMENTS:

4A - FORM IV VOA

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK5W

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Lab File ID: V5N2621.D Lab Sample ID: MB-62673

Instrument ID: V5

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 11/02/2011

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 18:16

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	H30Z6	K2200-19A	V5N2622.D	18:46
02	VHBLK5W	VHBLK5W	V5N2642.D	5:06

COMMENTS:

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.
BFBB5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Lab File ID: V5N1679.D BFB Injection Date: 10/15/2011

Instrument ID: V5 BFB Injection Time: 10:58

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.8
75	30.0 - 80.0% of mass 95	42.6
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	0.4 (0.5)1
174	50.0 -120% of mass 95	77.5
175	5.0 - 9.0% of mass 174	4.8 (6.2)1
176	95.0 - 101% of mass 174	76.3 (98.4)1
177	5.0 - 9.0% of mass 176	5.4 (7.1)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	VSTD005B5	VSTD005B5	V5N1680.D	10/15/2011	11:28
02	VSTD0.5B5	VSTD0.5B5	V5N1681.D	10/15/2011	11:57
03	VSTD020B5	VSTD020B5	V5N1682.D	10/15/2011	12:26
04	VSTD010B5	VSTD010B5	V5N1683.D	10/15/2011	12:55
05	VSTD001B5	VSTD001B5	V5N1684.D	10/15/2011	13:24

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.
BFB5T

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Lab File ID: V5N2525.D BFB Injection Date: 11/01/2011

Instrument ID: V5 BFB Injection Time: 6:27

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.4
75	30.0 - 80.0% of mass 95	43.9
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 -120% of mass 95	74.4
175	5.0 - 9.0% of mass 174	5.6 (7.6)1
176	95.0 - 101% of mass 174	72.7 (97.6)1
177	5.0 - 9.0% of mass 176	5.0 (6.9)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	VSTD0055T	VSTD0055T	V5N2526.D	11/01/2011	6:58
02	VBLK5T	MB-62672	V5N2526A.D	11/01/2011	7:25
03	H30S7	K2200-01A	V5N2531.D	11/01/2011	9:49
04	H30T9	K2200-02A	V5N2532.D	11/01/2011	10:17
05	H30W0	K2200-03A	V5N2533.D	11/01/2011	10:46
06	H30W1	K2200-04A	V5N2534.D	11/01/2011	11:14
07	H30W2	K2200-05A	V5N2535.D	11/01/2011	11:43
08	H30W3	K2200-06A	V5N2536.D	11/01/2011	12:11
09	H30W4	K2200-07A	V5N2537.D	11/01/2011	12:40
10	H30W5	K2200-08A	V5N2538.D	11/01/2011	13:08
11	H30W6	K2200-09A	V5N2539.D	11/01/2011	13:36
12	H30W7	K2200-10A	V5N2540.D	11/01/2011	14:05
13	H30W8	K2200-11A	V5N2541.D	11/01/2011	14:33
14	H30X0	K2200-12A	V5N2542.D	11/01/2011	15:01
15	H30X1	K2200-13A	V5N2543.D	11/01/2011	15:30
16	H30Y2	K2200-14A	V5N2544.D	11/01/2011	15:58
17	H30Y3	K2200-15A	V5N2545.D	11/01/2011	16:27
18	H30Y4	K2200-16A	V5N2546.D	11/01/2011	16:55
19	H30Y5	K2200-17A	V5N2547.D	11/01/2011	17:23
20	H30Y6	K2200-18A	V5N2548.D	11/01/2011	17:52
21	VSTD0055U	VSTD0055U	V5N2571.D	11/01/2011	18:25
22	VSTD0055V	VSTD0055V	V5N2595.D	11/02/2011	5:55

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.
BFB5T

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Lab File ID: V5N2525.D BFB Injection Date: 11/01/2011

Instrument ID: V5 BFB Injection Time: 6:27

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.4
75	30.0 - 80.0% of mass 95	43.9
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 -120% of mass 95	74.4
175	5.0 - 9.0% of mass 174	5.6 (7.6)1
176	95.0 - 101% of mass 174	72.7 (97.6)1
177	5.0 - 9.0% of mass 176	5.0 (6.9)2

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

23	VSTD0055W	VSTD0055W	V5N2620.D	11/02/2011	17:48
24	VBLK5W	MB-62673	V5N2621.D	11/02/2011	18:16
25	H30Z6	K2200-19A	V5N2622.D	11/02/2011	18:46
26	VHBLK5W	VHBLK5W	V5N2642.D	11/03/2011	5:06
27	VSTD0055X	VSTD0055X	V5N2643.D	11/03/2011	5:35

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.: H30S7

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 10/15/2011 10/15/2011

EPA Sample No.(VSTD#####): VSTD0055T Date Analyzed: 11/01/2011

Lab File ID (Standard): V5N2526.D Time Analyzed: 6:58

Instrument ID: V5 Heated Purge: (Y/N) N

		IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD	229121		9.431		321823		6.319		99508		12.172	
	UPPER LIMIT	320769		9.761		450552		6.649		139311		12.502	
	LOWER LIMIT	137473		9.101		193094		5.989		59705		11.842	
	EPA SAMPLE NO.												
01	VBLK5T	247420		9.431		338451		6.319		89970		12.184	
02	H30S7	249979		9.437		348111		6.325		91772		12.190	
03	H30T9	258713		9.431		342196		6.319		87606		12.184	
04	H30W0	251018		9.438		358366		6.325		89992		12.190	
05	H30W1	257387		9.432		361912		6.319		89841		12.184	
06	H30W2	259236		9.431		356684		6.319		94733		12.183	
07	H30W3	257795		9.437		356169		6.325		87578		12.189	
08	H30W4	247703		9.437		337426		6.325		87354		12.189	
09	H30W5	237883		9.438		348091		6.326		90864		12.179	
10	H30W6	265041		9.430		365913		6.329		97190		12.182	
11	H30W7	262154		9.437		375587		6.325		94167		12.190	
12	H30W8	256934		9.438		371951		6.325		94798		12.179	
13	H30X0	241056		9.431		357753		6.330		96038		12.183	
14	H30X1	265442		9.432		362142		6.320		96827		12.184	
15	H30Y2	253268		9.427		364892		6.327		90683		12.180	

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.: H30S7

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 10/15/2011 10/15/2011

EPA Sample No.(VSTD#####): VSTD0055T Date Analyzed: 11/01/2011

Lab File ID (Standard): V5N2526.D Time Analyzed: 6:58

Instrument ID: V5 Heated Purge: (Y/N) N

		IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD	229121		9.431		321823		6.319		99508		12.172	
	UPPER LIMIT	320769		9.761		450552		6.649		139311		12.502	
	LOWER LIMIT	137473		9.101		193094		5.989		59705		11.842	
	EPA SAMPLE NO.												
16	H30Y3	245738		9.438		362223		6.325		88912		12.178	
17	H30Y4	253813		9.426		359370		6.326		93968		12.179	
18	H30Y5	246717		9.432		358004		6.320		94389		12.184	
19	H30Y6	263019		9.432		377860		6.319		94001		12.184	

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.: H30S7

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 10/15/2011 10/15/2011

EPA Sample No.(VSTD#####): VSTD0055W Date Analyzed: 11/02/2011

Lab File ID (Standard): V5N2620.D Time Analyzed: 17:48

Instrument ID: V5 Heated Purge: (Y/N) N

		IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD	235932		9.428		345489		6.327		99862		12.169	
	UPPER LIMIT	330305		9.758		483685		6.657		139807		12.499	
	LOWER LIMIT	141559		9.098		207293		5.997		59917		11.839	
	EPA SAMPLE NO.												
01	VBLK5W	235404		9.431		349637		6.319		91389		12.183	
02	H30Z6	258464		9.438		360698		6.325		94525		12.178	
03	VHBLK5W	260840		9.437		369976		6.324		98882		12.189	

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.

H30S7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-01A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2531.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.64	
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30S7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-01A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2531.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30S7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-01A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2531.D

Level: (TRACE or LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

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/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111101.B\V5N2531.D
Report Date: 07-Nov-2011 13:09

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2531.D
Lab Smp Id: K2200-01A Client Smp ID: H30S7
Inj Date : 01-NOV-2011 09:49
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-01A,,62672,
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	79 Vinyl Chloride-d3	65	2.179	2.173	(0.345)	177060	4.45086	4.5
$	80 Chloroethane-d5	69	2.597	2.591	(0.411)	118504	4.51135	4.5
$	81 1,1-Dichloroethene-d2	65	3.375	3.369	(0.534)	37968	4.15084	4.2(Q)
$	82 2-Butanone-d5	46	5.070	5.065	(0.802)	157634	39.7410	40(AQ)
$	83 Chloroform-d	84	5.384	5.378	(0.851)	168350	4.47990	4.5(Q)
	19 Chloroform	83	5.407	5.402	(0.855)	26146	0.64230	0.64
$	23 1,2-Dichloroethane-d4	65	5.895	5.901	(0.932)	63449	4.31807	4.3
$	84 Benzene-d6	84	5.918	5.913	(0.627)	356146	5.08218	5.1
*	26 1,4-Difluorobenzene	114	6.325	6.319	(1.000)	348111	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.731	6.726	(0.713)	109782	4.40045	4.4
$	33 Toluene-d8	98	7.846	7.840	(0.831)	306201	4.74678	4.7
$	86 trans-1,3-Dichloropropene-d4	79	8.125	8.119	(0.861)	67979	4.79481	4.8
$	87 2-Hexanone-d5	63	8.577	8.572	(0.909)	93384	36.5709	37(A)
*	42 Chlorobenzene-d5	117	9.437	9.431	(1.000)	249979	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.947	10.918	(1.160)	38918	3.90549	3.9
*	78 1,4-Dichlorobenzene-d4	152	12.189	12.172	(1.000)	91772	5.00000	
$	90 1,2-Dichlorobenzene-d4	152	12.642	12.625	(1.037)	68119	4.51470	4.5(Q)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\avogadro\organics\V5.I\111101.B\V5N2531.D
Report Date: 07-Nov-2011 13:09

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111101.B\V5N2531.D
Report Date: 07-Nov-2011 13:09

Spectrum Analytical, Inc. RI Division

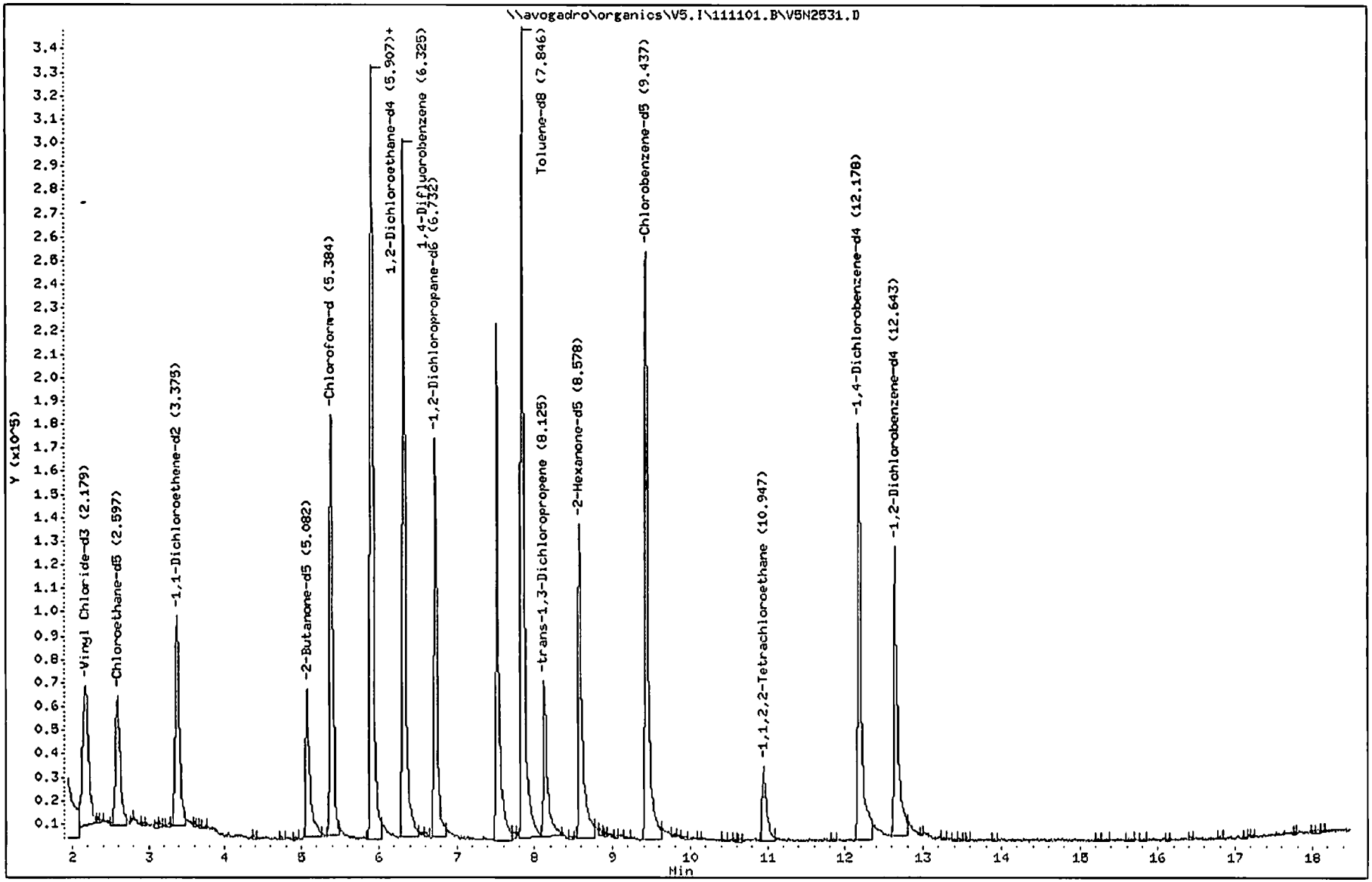
SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2531.D
Lab Smp Id: K2200-01A Client Smp ID: H30S7
Inj Date : 01-NOV-2011 09:49
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-01A,,62672,
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111101.B\V5N2531.D
Date : 01-NOV-2011 09:49
Client ID: H30S7
Sample Info: 25ML,K2200-01A,,62672,
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.I
Operator: SRC: LIMS
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111101.B\V5N2531.D

Date : 01-NOV-2011 09:49

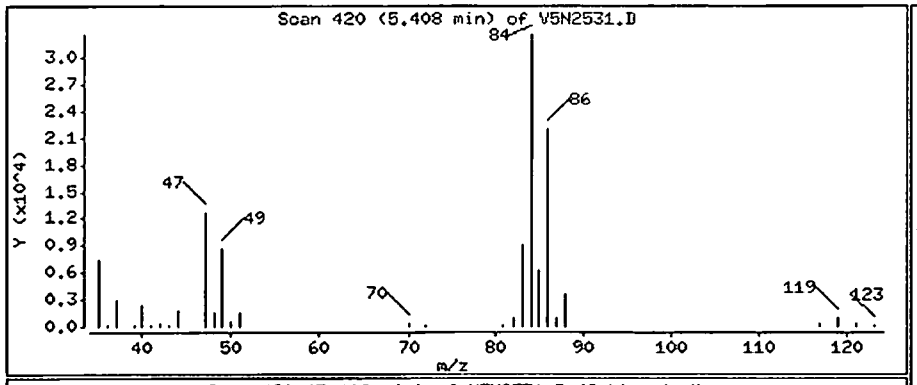
Client ID: H30S7 Instrument: V5.i

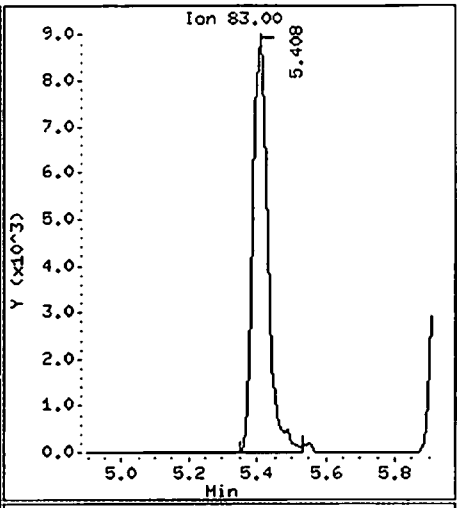
Sample Info: 25ML,K2200-01A,,62672,

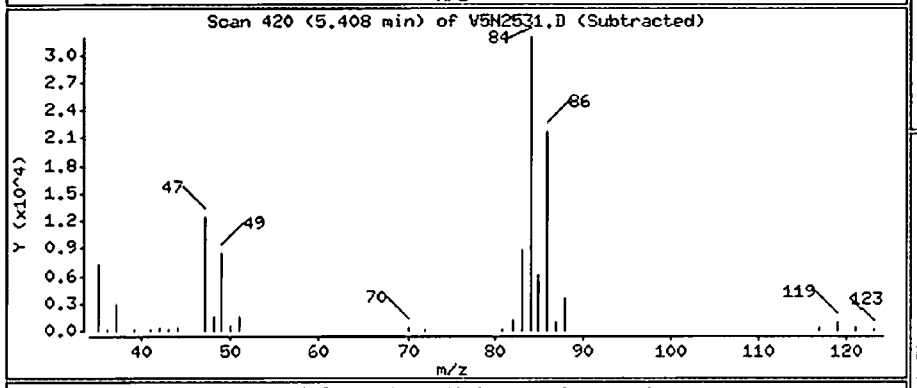
Purge Volume: 25.0 Operator: SRC: LIMS

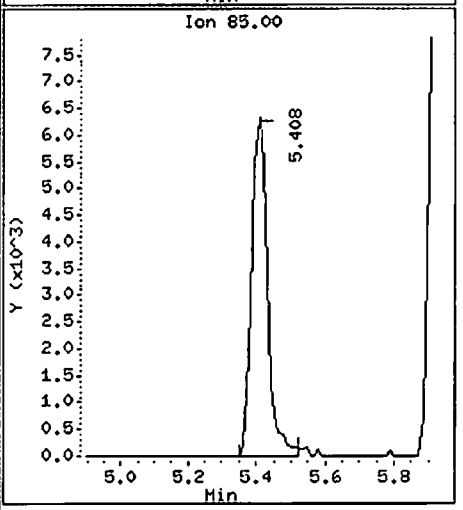
Column phase: DB-624 Column diameter: 0.25

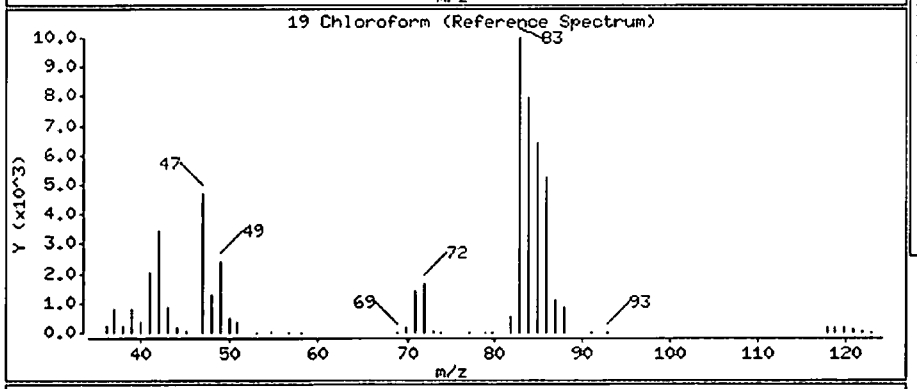
19 Chloroform Concentration: 0.64 ug/L

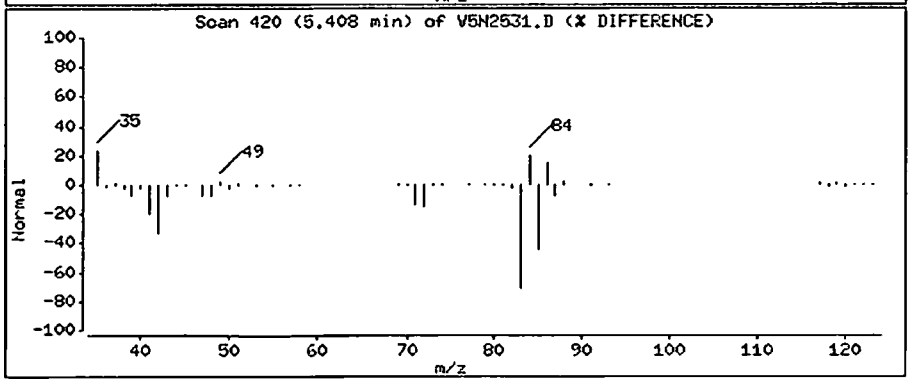












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T9

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-02A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2532.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T9

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-02A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2532.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30T9

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-02A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2532.D

Level: (TRACE or LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

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/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A		

[1] EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111101.B\V5N2532.D
Report Date: 07-Nov-2011 13:09

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2532.D
Lab Smp Id: K2200-02A Client Smp ID: H30T9
Inj Date : 01-NOV-2011 10:17
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-02A,,62672,
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.173	2.173	(0.344)	174587	4.46456	4.5
$ 80 Chloroethane-d5	69	2.591	2.591	(0.410)	113609	4.39976	4.4
$ 81 1,1-Dichloroethene-d2	65	3.369	3.369	(0.533)	38387	4.26919	4.3(Q)
$ 82 2-Butanone-d5	46	5.076	5.065	(0.803)	163511	41.9352	42(AQ)
$ 83 Chloroform-d	84	5.390	5.378	(0.853)	172146	4.66010	4.7(Q)
$ 23 1,2-Dichloroethane-d4	65	5.901	5.901	(0.934)	63152	4.37215	4.4
$ 84 Benzene-d6	84	5.912	5.913	(0.627)	365429	5.03860	5.0
* 26 1,4-Difluorobenzene	114	6.319	6.319	(1.000)	342196	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.725	6.726	(0.713)	109190	4.22897	4.2
$ 33 Toluene-d8	98	7.840	7.840	(0.831)	314182	4.70608	4.7
$ 86 trans-1,3-Dichloropropene-d4	79	8.130	8.119	(0.862)	65385	4.45615	4.5
$ 87 2-Hexanone-d5	63	8.583	8.572	(0.910)	94877	35.9012	36(A)
* 42 Chlorobenzene-d5	117	9.431	9.431	(1.000)	258713	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.952	10.918	(1.161)	38251	3.70897	3.7
* 78 1,4-Dichlorobenzene-d4	152	12.183	12.172	(1.000)	87606	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.648	12.625	(1.038)	66714	4.63185	4.6

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111101.B\V5N2532.D
Report Date: 07-Nov-2011 13:09

Spectrum Analytical, Inc. RI Division

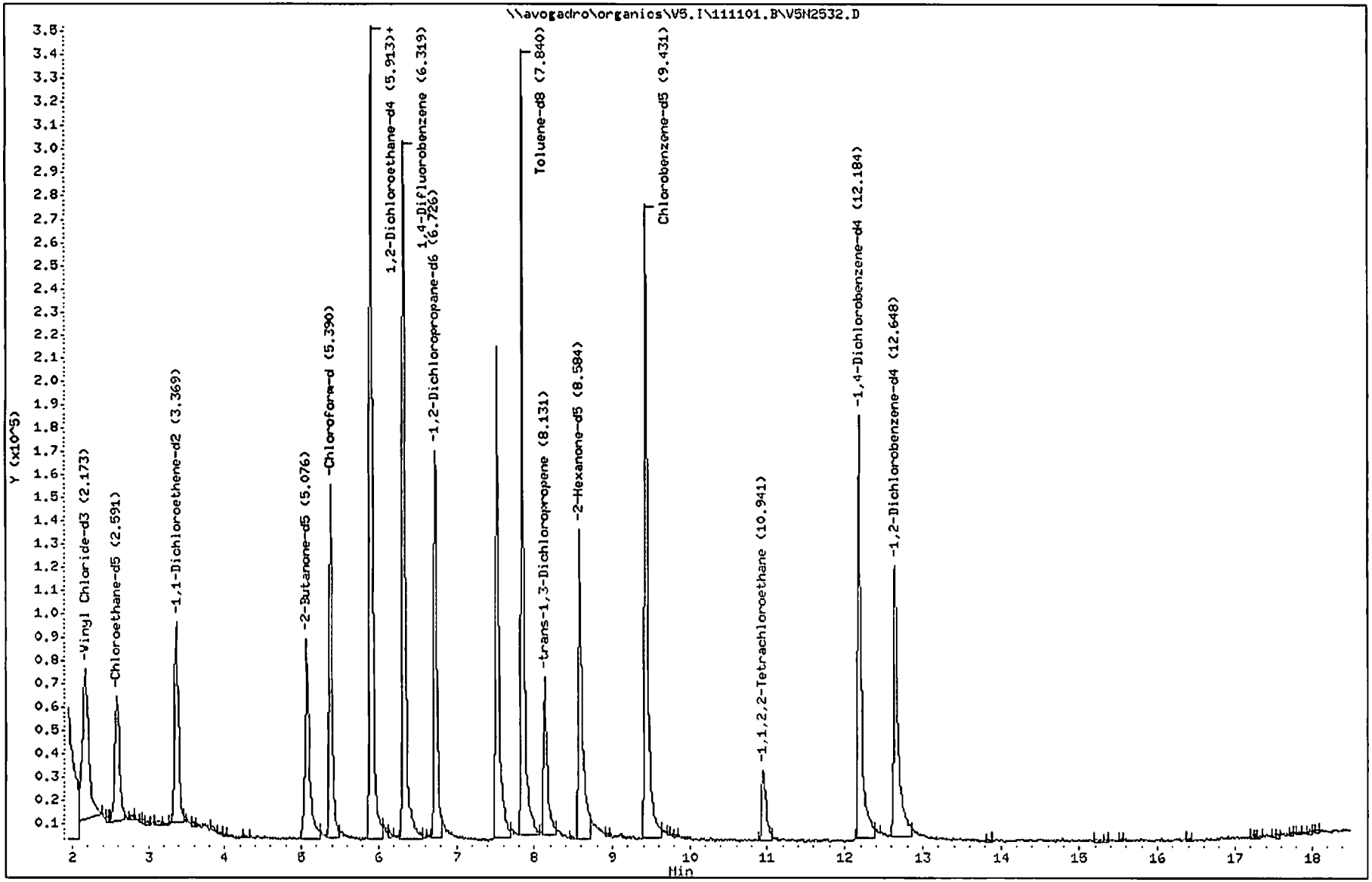
SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2532.D
Lab Smp Id: K2200-02A Client Smp ID: H30T9
Inj Date : 01-NOV-2011 10:17
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-02A,,62672,
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111101.B\V5H2532.D
Date : 01-NOV-2011 10:17
Client ID: H30T9
Sample Info: 25ML,K2200-02A,,62672,
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i
Operator: SRC: LIHS
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30W0

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-03A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2533.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	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.

H30W0

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-03A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2533.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30W0

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-03A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2533.D

Level: (TRACE or LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

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/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111101.B\V5N2533.D
Report Date: 07-Nov-2011 13:09

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2533.D
Lab Smp Id: K2200-03A Client Smp ID: H30W0
Inj Date : 01-NOV-2011 10:46
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-03A,,62672,
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.167	2.173	(0.343)	172359	4.20871	4.2
$ 80 Chloroethane-d5	69	2.585	2.591	(0.409)	113695	4.20442	4.2
$ 81 1,1-Dichloroethene-d2	65	3.363	3.369	(0.532)	37698	4.00339	4.0(Q)
$ 82 2-Butanone-d5	46	5.071	5.065	(0.802)	163903	40.1390	40(AQ)
$ 83 Chloroform-d	84	5.384	5.378	(0.851)	176574	4.56429	4.6(Q)
$ 23 1,2-Dichloroethane-d4	65	5.895	5.901	(0.932)	63446	4.19431	4.2
$ 84 Benzene-d6	84	5.907	5.913	(0.626)	367160	5.21766	5.2
* 26 1,4-Difluorobenzene	114	6.325	6.319	(1.000)	358366	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.731	6.726	(0.713)	113761	4.54107	4.5
$ 33 Toluene-d8	98	7.846	7.840	(0.831)	326472	5.04008	5.0
$ 86 trans-1,3-Dichloropropene-d4	79	8.125	8.119	(0.861)	64834	4.55406	4.6
$ 87 2-Hexanone-d5	63	8.578	8.572	(0.909)	97972	38.2088	38(AQ)
* 42 Chlorobenzene-d5	117	9.437	9.431	(1.000)	251018	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.947	10.918	(1.160)	40660	4.06341	4.1
* 78 1,4-Dichlorobenzene-d4	152	12.189	12.172	(1.000)	89992	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.642	12.625	(1.037)	61593	4.16292	4.2

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111101.B\V5N2533.D
Report Date: 07-Nov-2011 13:09

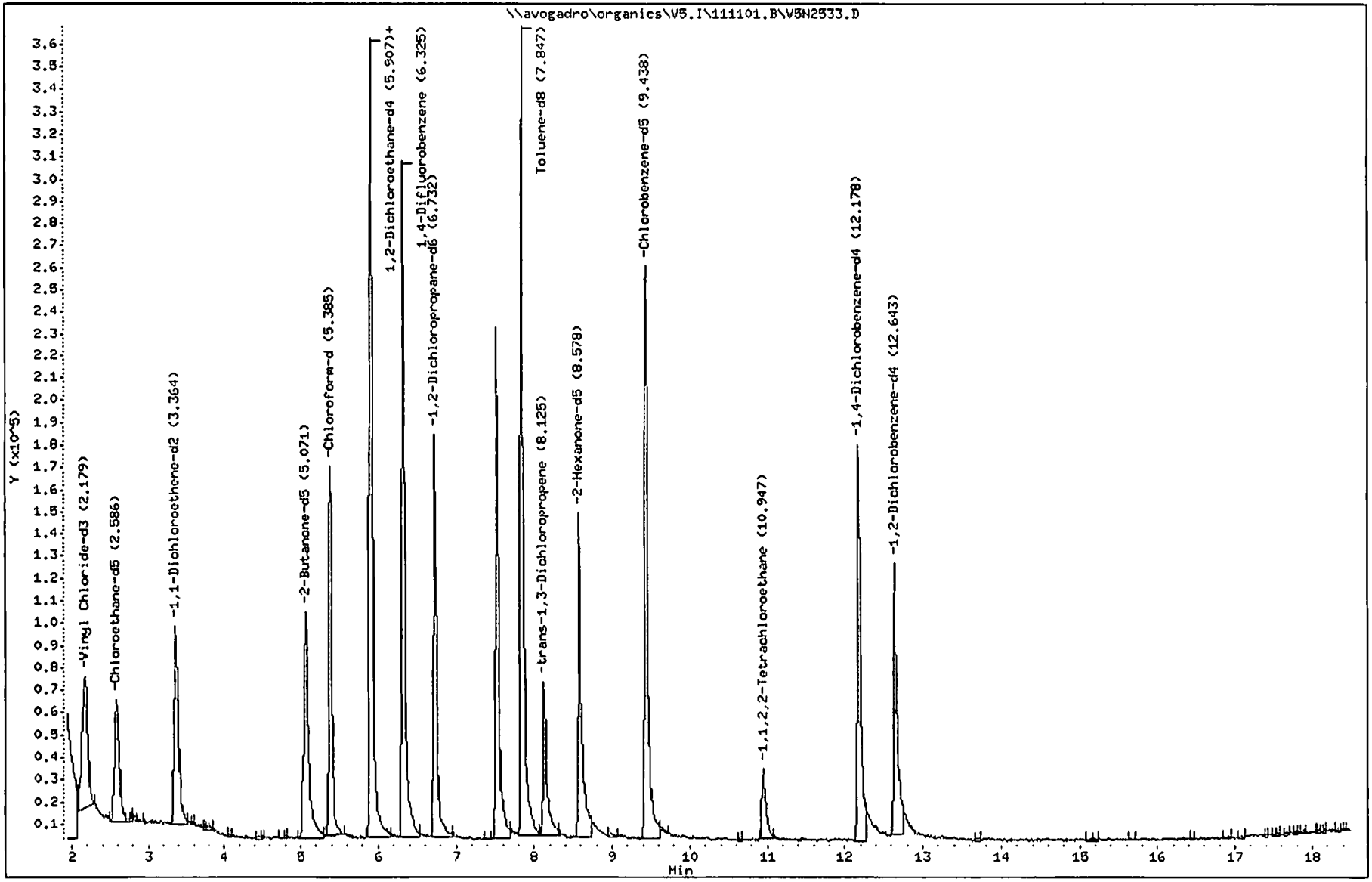
Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file	: \\avogadro\organics\V5.I\111101.B\V5N2533.D		
Lab Smp Id	: K2200-03A	Client Smp ID:	H30W0
Inj Date	: 01-NOV-2011 10:46		
Operator	: SRC: LIMS	Inst ID:	V5.i
Smp Info	: 25ML,K2200-03A,,62672,		
Misc Info	:		
Comment	:		
Method	: \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m		
Meth Date	: 03-Nov-2011 11:40 V5.i	Quant Type:	ISTD
Cal Date	: 15-OCT-2011 13:24	Cal File:	V5N1684.D
Als bottle	: 8		
Dil Factor	: 1.00000		
Integrator	: HP RTE	Compound Sublist:	SOM01.2.sub
Target Version	: 4.14		

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111101.B\V5N2533.D
Date : 01-NOV-2011 10:46
Client ID: H3040
Instrument: V5.I
Sample Info: 25ML,K2200-03A,,62672,
Purge Volume: 25.0
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30W1

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-04A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2534.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	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.

H30W1

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-04A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2534.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30W1

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-04A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2534.D

Level: (TRACE or LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

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/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111101.B\V5N2534.D
Report Date: 07-Nov-2011 13:09

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2534.D
Lab Smp Id: K2200-04A Client Smp ID: H30W1
Inj Date : 01-NOV-2011 11:14
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-04A,,62672,
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.173	2.173	(0.344)	174744	4.22514	4.2
$ 80 Chloroethane-d5	69	2.591	2.591	(0.410)	119864	4.38912	4.4
$ 81 1,1-Dichloroethene-d2	65	3.369	3.369	(0.533)	38216	4.01864	4.0(Q)
$ 82 2-Butanone-d5	46	5.076	5.065	(0.803)	167754	40.6796	41(AQ)
$ 83 Chloroform-d	84	5.390	5.378	(0.853)	182459	4.67020	4.7(Q)
$ 23 1,2-Dichloroethane-d4	65	5.901	5.901	(0.934)	62915	4.11845	4.1(Q)
$ 84 Benzene-d6	84	5.912	5.913	(0.627)	361051	5.00389	5.0
* 26 1,4-Difluorobenzene	114	6.319	6.319	(1.000)	361912	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.725	6.726	(0.713)	115187	4.48422	4.5
$ 33 Toluene-d8	98	7.840	7.840	(0.831)	328378	4.94406	4.9
$ 86 trans-1,3-Dichloropropene-d4	79	8.130	8.119	(0.862)	67233	4.60571	4.6
$ 87 2-Hexanone-d5	63	8.583	8.572	(0.910)	99045	37.6714	38(A)
* 42 Chlorobenzene-d5	117	9.431	9.431	(1.000)	257387	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.941	10.918	(1.160)	39463	3.84620	3.8
* 78 1,4-Dichlorobenzene-d4	152	12.183	12.172	(1.000)	89841	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.648	12.625	(1.038)	69094	4.67775	4.7

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111101.B\V5N2534.D
Report Date: 07-Nov-2011 13:09

Spectrum Analytical, Inc. RI Division

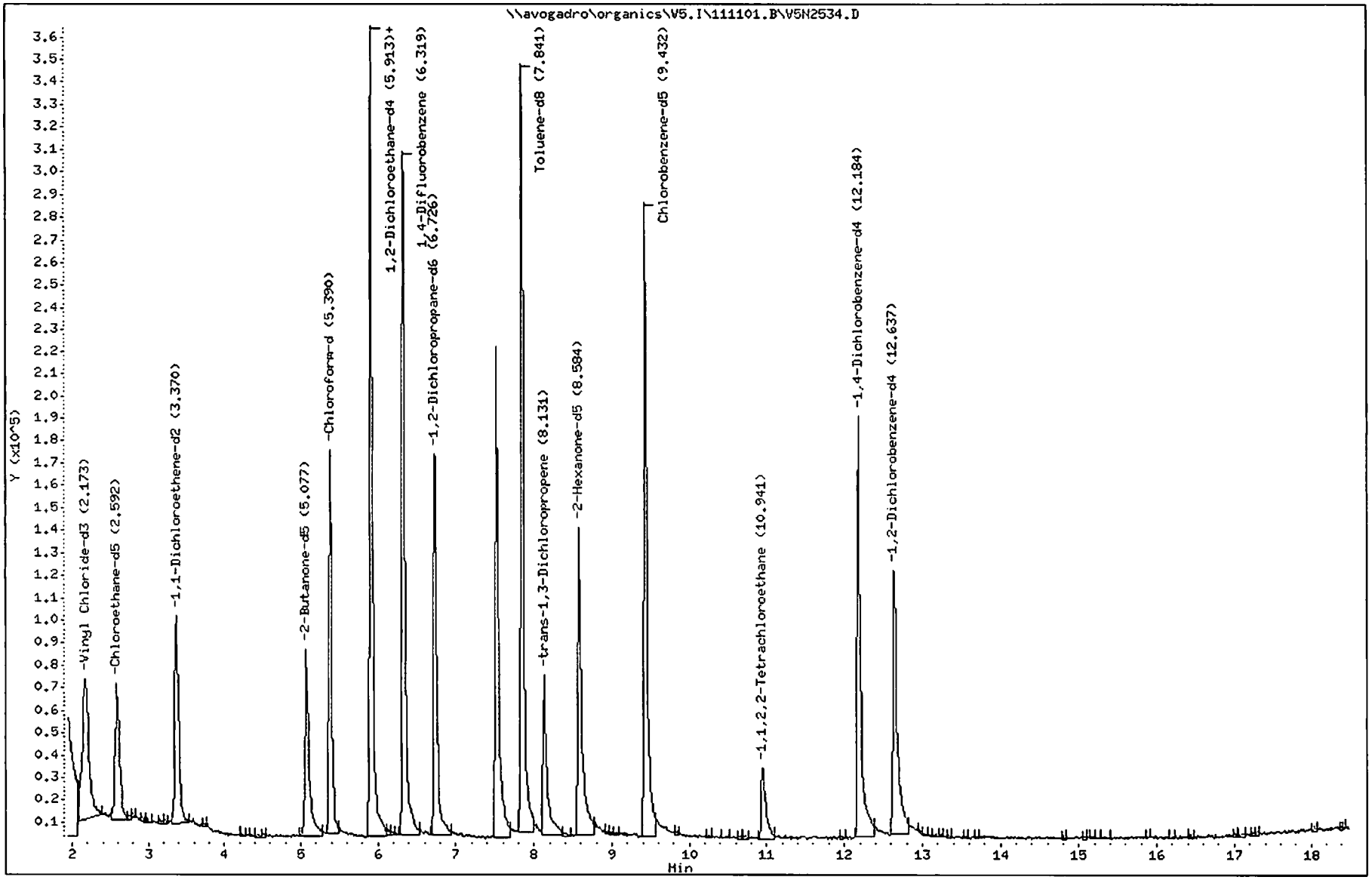
SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2534.D
Lab Smp Id: K2200-04A Client Smp ID: H30W1
Inj Date : 01-NOV-2011 11:14
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-04A,,62672,
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111101.B\V5N2534.D
Date : 01-NOV-2011 11:14
Client ID: H30W1
Sample Info: 25ML,K2200-04A,,62672,
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i
Operator: SRC: LIMS
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30W2

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-05A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2535.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	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.

H30W2

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-05A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2535.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30W2

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-05A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2535.D

Level: (TRACE or LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

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/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A		

[1] EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111101.B\V5N2535.D
Report Date: 07-Nov-2011 13:09

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2535.D
Lab Smp Id: K2200-05A Client Smp ID: H30W2
Inj Date : 01-NOV-2011 11:43
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-05A,,62672,
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.172	2.173	(0.344)	180052	4.41729	4.4
$ 80 Chloroethane-d5	69	2.590	2.591	(0.410)	118104	4.38806	4.4
$ 81 1,1-Dichloroethene-d2	65	3.357	3.369	(0.531)	39829	4.24964	4.2(Q)
$ 82 2-Butanone-d5	46	5.075	5.065	(0.803)	162709	40.0345	40(AQ)
$ 83 Chloroform-d	84	5.389	5.378	(0.853)	178151	4.62677	4.6(Q)
$ 23 1,2-Dichloroethane-d4	65	5.900	5.901	(0.934)	65141	4.32667	4.3
$ 84 Benzene-d6	84	5.912	5.913	(0.627)	371501	5.11199	5.1
* 26 1,4-Difluorobenzene	114	6.318	6.319	(1.000)	356664	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.725	6.726	(0.713)	114121	4.41103	4.4
$ 33 Toluene-d8	98	7.839	7.840	(0.831)	327148	4.89041	4.9
$ 86 trans-1,3-Dichloropropene-d4	79	8.130	8.119	(0.862)	69590	4.73317	4.7
$ 87 2-Hexanone-d5	63	8.583	8.572	(0.910)	99201	37.4617	37(A)
* 42 Chlorobenzene-d5	117	9.430	9.431	(1.000)	259236	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.940	10.918	(1.160)	41060	3.97330	4.0
* 78 1,4-Dichlorobenzene-d4	152	12.183	12.172	(1.000)	94733	5.00000	(Q)
$ 90 1,2-Dichlorobenzene-d4	152	12.647	12.625	(1.038)	70226	4.50887	4.5(Q)

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111101.B\V5N2535.D
Report Date: 07-Nov-2011 13:09

Spectrum Analytical, Inc. RI Division

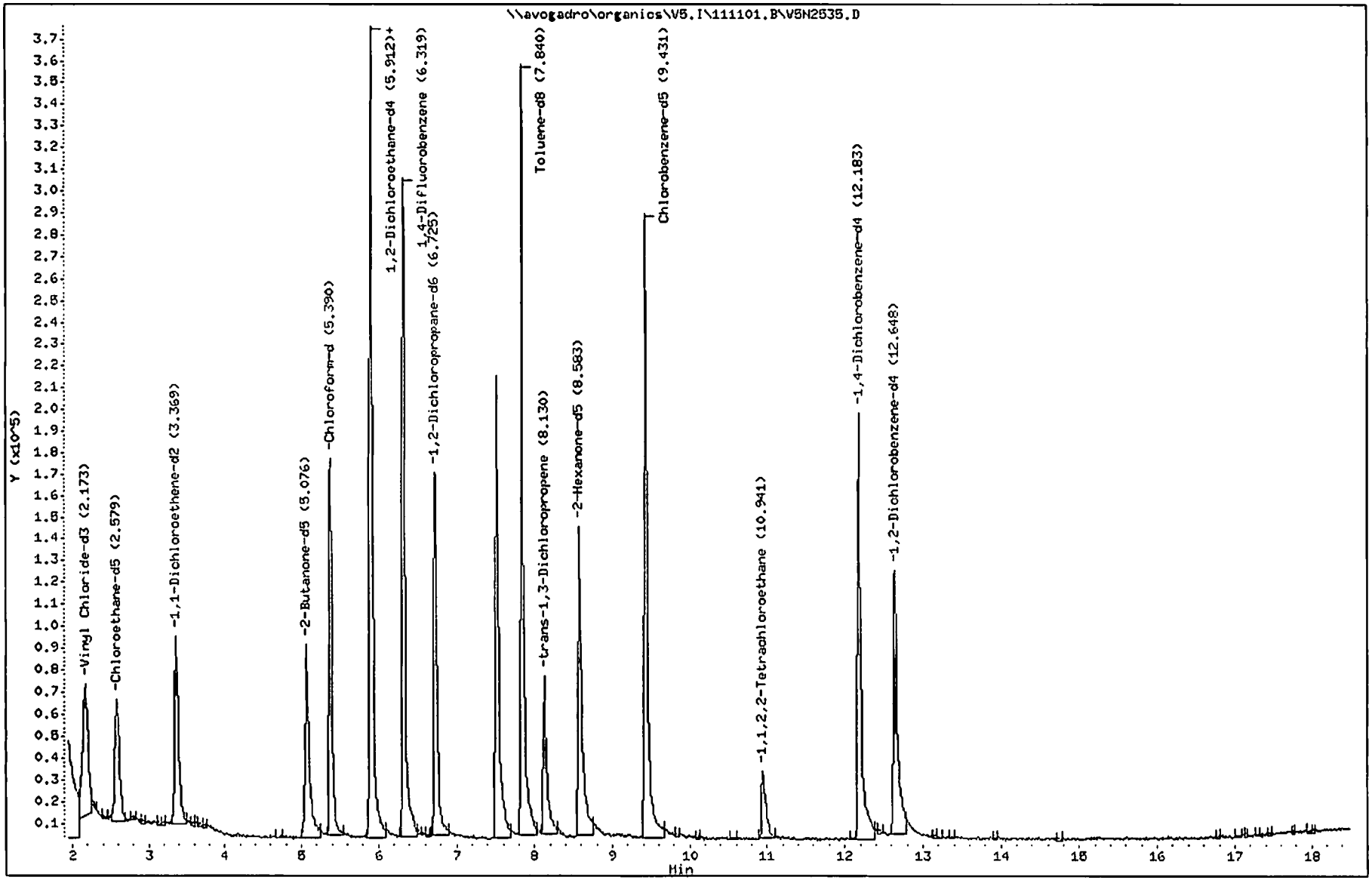
SOM01.0 - Trace Water Volatiles

Data file	: \\avogadro\organics\V5.I\111101.B\V5N2535.D		
Lab Smp Id	: K2200-05A	Client Smp ID	: H30W2
Inj Date	: 01-NOV-2011 11:43		
Operator	: SRC: LIMS	Inst ID	: V5.i
Smp Info	: 25ML,K2200-05A,,62672,		
Misc Info	:		
Comment	:		
Method	: \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m		
Meth Date	: 03-Nov-2011 11:40 V5.i	Quant Type	: ISTD
Cal Date	: 15-OCT-2011 13:24	Cal File	: V5N1684.D
Als bottle	: 10		
Dil Factor	: 1.00000		
Integrator	: HP RTE	Compound Sublist	: SOM01.2.sub
Target Version	: 4.14		

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111101.B\V5N2535.D
Date : 01-NOV-2011 11:43
Client ID: H30W2
Sample Info: 25ML,K2200-05A,,62672,
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.I
Operator: SRC: LIMS
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30W3

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-06A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2536.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	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.

H30W3

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-06A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2536.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30W3

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-06A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2536.D

Level: (TRACE or LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

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/L Purge Volume: 25.0 (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\111101.B\V5N2536.D
Report Date: 07-Nov-2011 13:09

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2536.D
Lab Smp Id: K2200-06A Client Smp ID: H30W3
Inj Date : 01-NOV-2011 12:11
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-06A,,62672,
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.167	2.173	(0.343)	177951	4.37206	4.4
$ 80 Chloroethane-d5	69	2.585	2.591	(0.409)	117609	4.37599	4.4
$ 81 1,1-Dichloroethene-d2	65	3.363	3.369	(0.532)	40294	4.30547	4.3(Q)
$ 82 2-Butanone-d5	46	5.070	5.065	(0.802)	162233	39.9751	40(AQ)
$ 83 Chloroform-d	84	5.383	5.378	(0.851)	173018	4.49996	4.5(Q)
$ 23 1,2-Dichloroethane-d4	65	5.894	5.901	(0.932)	66526	4.42505	4.4
$ 84 Benzene-d6	84	5.906	5.913	(0.626)	357820	4.95126	5.0
* 26 1,4-Difluorobenzene	114	6.324	6.319	(1.000)	356169	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.731	6.726	(0.713)	114088	4.43440	4.4
$ 33 Toluene-d8	98	7.845	7.840	(0.831)	330737	4.97169	5.0
$ 86 trans-1,3-Dichloropropene-d4	79	8.136	8.119	(0.862)	68419	4.67953	4.7
$ 87 2-Hexanone-d5	63	8.577	8.572	(0.909)	99291	37.7052	38(A)
* 42 Chlorobenzene-d5	117	9.436	9.431	(1.000)	257795	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.946	10.918	(1.160)	41122	4.00155	4.0
* 78 1,4-Dichlorobenzene-d4	152	12.189	12.172	(1.000)	87578	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.642	12.625	(1.037)	65547	4.55228	4.6

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111101.B\V5N2536.D
Report Date: 07-Nov-2011 13:09

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

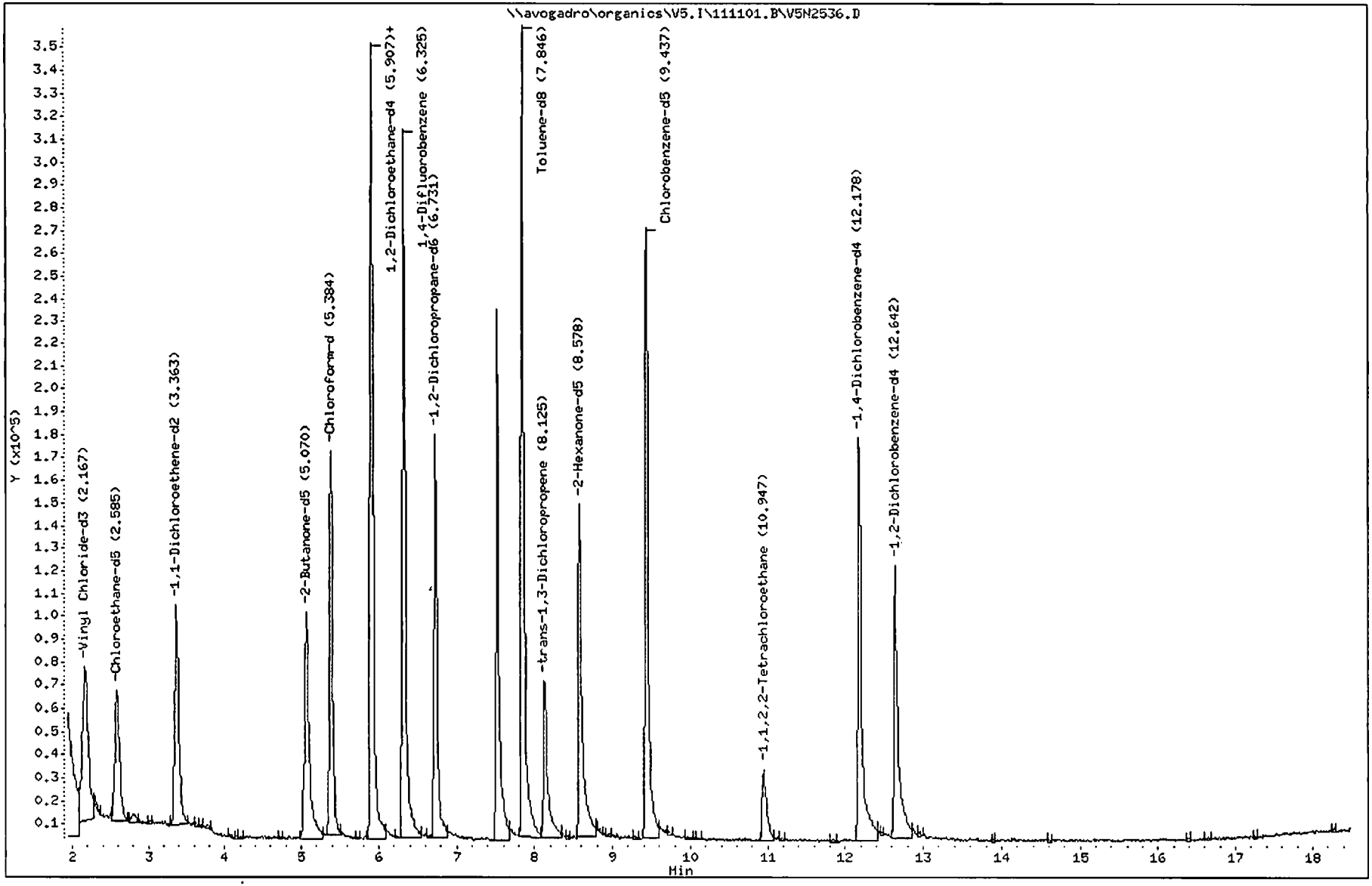
Data file :	\\avogadro\organics\V5.I\111101.B\V5N2536.D		
Lab Smp Id:	K2200-06A	Client Smp ID:	H30W3
Inj Date :	01-NOV-2011 12:11		
Operator :	SRC: LIMS	Inst ID:	V5.i
Smp Info :	25ML,K2200-06A,,62672,		
Misc Info :			
Comment :			
Method :	\\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m		
Meth Date :	03-Nov-2011 11:40 V5.i	Quant Type:	ISTD
Cal Date :	15-OCT-2011 13:24	Cal File:	V5N1684.D
Als bottle:	11		
Dil Factor:	1.00000		
Integrator:	HP RTE	Compound Sublist:	SOM01.2.sub
Target Version:	4.14		

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111101.B\V5N2536.D
Date : 01-NOV-2011 12:11
Client ID: H30W3
Sample Info: 25ML,K2200-06A,,62672,
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: SRC: LIMS
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30W4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-07A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2537.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	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.

H30W4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-07A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2537.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30W4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-07A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2537.D

Level: (TRACE or LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

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/L Purge Volume: 25.0 (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\111101.B\V5N2537.D
Report Date: 07-Nov-2011 13:09

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2537.D
Lab Smp Id: K2200-07A Client Smp ID: H30W4
Inj Date : 01-NOV-2011 12:40
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-07A,,62672,
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.167	2.173	(0.343)	164002	4.25316	4.3
$ 80 Chloroethane-d5	69	2.585	2.591	(0.409)	111097	4.36330	4.4
$ 81 1,1-Dichloroethene-d2	65	3.363	3.369	(0.532)	37541	4.23413	4.2(Q)
$ 82 2-Butanone-d5	46	5.070	5.065	(0.802)	158835	41.3118	41(AQ)
$ 83 Chloroform-d	84	5.384	5.378	(0.851)	165671	4.54822	4.5(Q)
$ 23 1,2-Dichloroethane-d4	65	5.894	5.901	(0.932)	60848	4.27219	4.3(Q)
$ 84 Benzene-d6	84	5.906	5.913	(0.626)	351814	5.06649	5.1
* 26 1,4-Difluorobenzene	114	6.324	6.319	(1.000)	337426	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.731	6.726	(0.713)	104672	4.23418	4.2
$ 33 Toluene-d8	98	7.845	7.840	(0.831)	310014	4.85005	4.9
$ 86 trans-1,3-Dichloropropene-d4	79	8.124	8.119	(0.861)	63928	4.55051	4.6
$ 87 2-Hexanone-d5	63	8.577	8.572	(0.909)	95683	37.8155	38(A)
* 42 Chlorobenzene-d5	117	9.436	9.431	(1.000)	247703	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.946	10.918	(1.160)	39444	3.99464	4.0
* 78 1,4-Dichlorobenzene-d4	152	12.189	12.172	(1.000)	87354	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.642	12.625	(1.037)	65858	4.58561	4.6(Q)

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111101.B\V5N2537.D
Report Date: 07-Nov-2011 13:09

Spectrum Analytical, Inc. RI Division

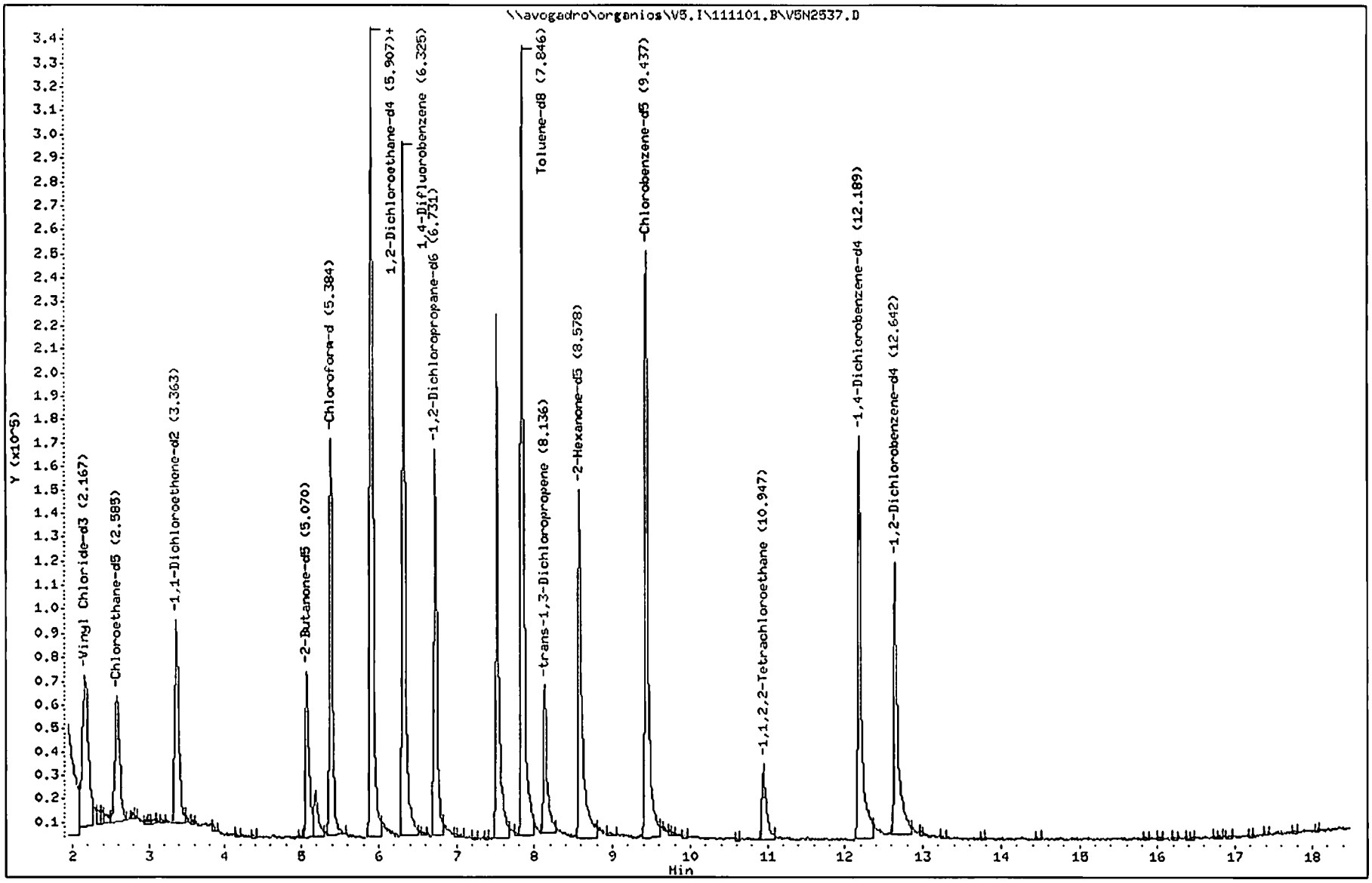
SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2537.D
Lab Smp Id: K2200-07A Client Smp ID: H30W4
Inj Date : 01-NOV-2011 12:40
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-07A,,62672,
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111101.B\V5N2537.D
Date : 01-NOV-2011 12:40
Client ID: H30W4
Sample Info: 25ML,K2200-07A,,62672,
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.I
Operator: SRC: LIMS
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30W5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-08A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2538.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30W5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-08A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2538.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30W5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-08A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2538.D

Level: (TRACE or LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

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/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111101.B\V5N2538.D
Report Date: 07-Nov-2011 13:09

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2538.D
Lab Smp Id: K2200-08A Client Smp ID: H30W5
Inj Date : 01-NOV-2011 13:08
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-08A,,62672,
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.180	2.173	(0.345)	171110	4.30154	4.3
$ 80 Chloroethane-d5	69	2.586	2.591	(0.409)	114304	4.35171	4.4
$ 81 1,1-Dichloroethene-d2	65	3.364	3.369	(0.532)	38928	4.25604	4.3(Q)
$ 82 2-Butanone-d5	46	5.071	5.065	(0.802)	166082	41.8732	42(AQ)
$ 83 Chloroform-d	84	5.385	5.378	(0.851)	172315	4.58568	4.6(Q)
$ 23 1,2-Dichloroethane-d4	65	5.896	5.901	(0.932)	59574	4.05459	4.1(Q)
$ 84 Benzene-d6	84	5.919	5.913	(0.627)	360785	5.41017	5.4
* 26 1,4-Difluorobenzene	114	6.325	6.319	(1.000)	348091	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.732	6.726	(0.713)	115454	4.86312	4.9
$ 33 Toluene-d8	98	7.847	7.840	(0.831)	315386	5.13777	5.1
$ 86 trans-1,3-Dichloropropene-d4	79	8.125	8.119	(0.861)	66169	4.90446	4.9
$ 87 2-Hexanone-d5	63	8.578	8.572	(0.909)	100817	41.4893	41(A)
* 42 Chlorobenzene-d5	117	9.438	9.431	(1.000)	237883	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.947	10.918	(1.160)	39183	4.13202	4.1
* 78 1,4-Dichlorobenzene-d4	152	12.178	12.172	(1.000)	90864	5.00000	(Q)
$ 90 1,2-Dichlorobenzene-d4	152	12.643	12.625	(1.038)	67277	4.50346	4.5(Q)

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111101.B\V5N2538.D
Report Date: 07-Nov-2011 13:09

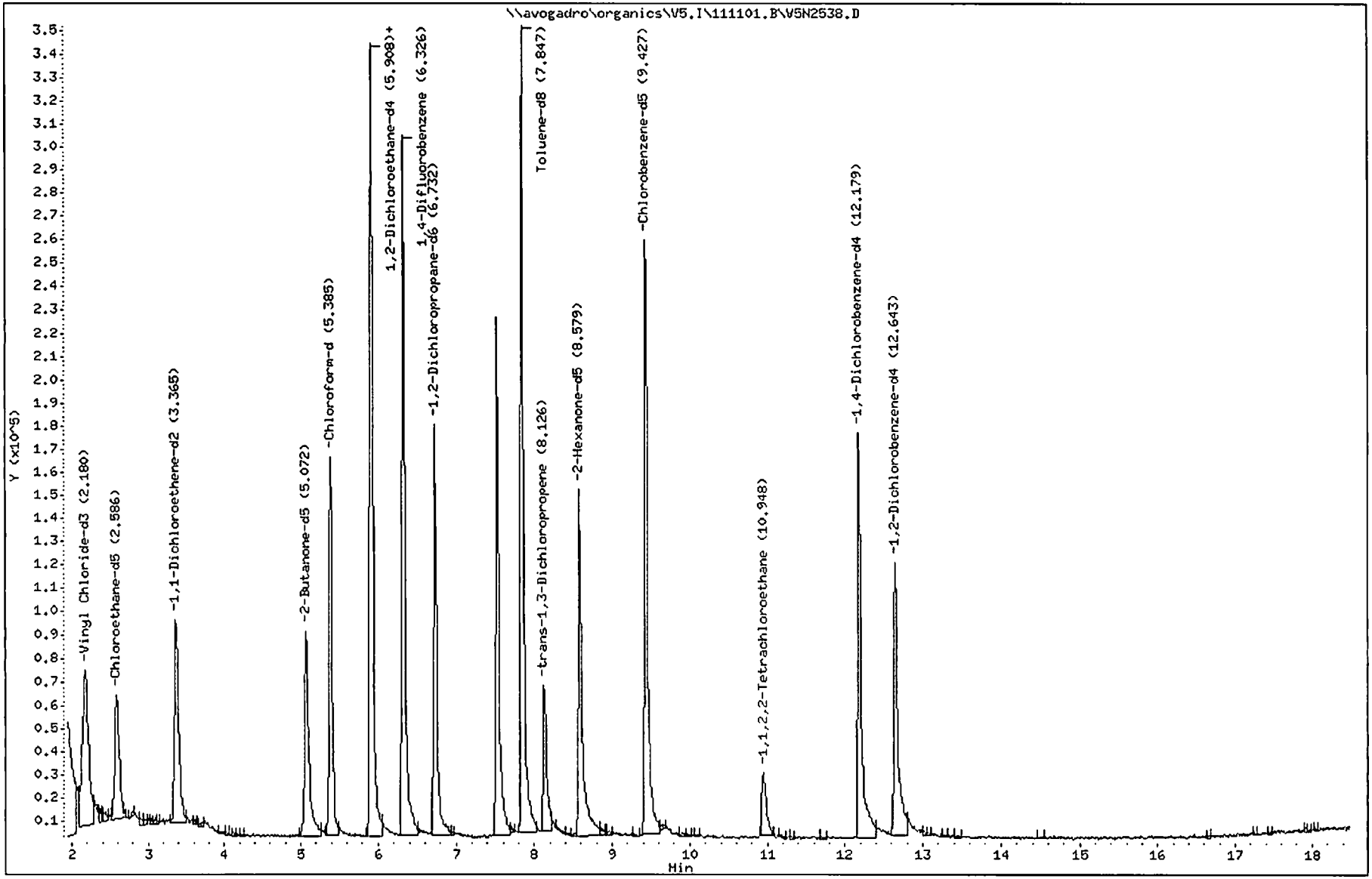
Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2538.D
Lab Smp Id: K2200-08A Client Smp ID: H30W5
Inj Date : 01-NOV-2011 13:08
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-08A,,62672,
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111101.B\V5N2538.D
Date : 01-NOV-2011 13:08
Client ID: H30W5
Instrument: V5.i
Sample Info: 25ML,K2200-08A,,62672,
Purge Volume: 25.0
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30W6

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-09A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2539.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30W6

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-09A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2539.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30W6

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-09A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2539.D

Level: (TRACE or LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

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/L Purge Volume: 25.0 (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\111101.B\V5N2539.D
Report Date: 07-Nov-2011 13:10

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2539.D
Lab Smp Id: K2200-09A Client Smp ID: H30W6
Inj Date : 01-NOV-2011 13:36
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-09A,,62672,
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.183	2.173	(0.345)	176015	4.20933	4.2
$ 80 Chloroethane-d5	69	2.589	2.591	(0.409)	121048	4.38401	4.4
$ 81 1,1-Dichloroethene-d2	65	3.367	3.369	(0.532)	39861	4.14579	4.1(Q)
$ 82 2-Butanone-d5	46	5.074	5.065	(0.802)	174531	41.8602	42(AQ)
$ 83 Chloroform-d	84	5.388	5.378	(0.851)	187246	4.74032	4.7(Q)
$ 23 1,2-Dichloroethane-d4	65	5.899	5.901	(0.932)	69046	4.47037	4.5
$ 84 Benzene-d6	84	5.910	5.913	(0.627)	370758	4.99003	5.0
* 26 1,4-Difluorobenzene	114	6.328	6.319	(1.000)	365913	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.735	6.726	(0.714)	121385	4.58904	4.6
$ 33 Toluene-d8	98	7.850	7.840	(0.833)	340026	4.97159	5.0
$ 86 trans-1,3-Dichloropropene-d4	79	8.128	8.119	(0.862)	65486	4.35648	4.4
$ 87 2-Hexanone-d5	63	8.581	8.572	(0.910)	105681	39.0346	39(A)
* 42 Chlorobenzene-d5	117	9.429	9.431	(1.000)	265041	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.939	10.918	(1.160)	41662	3.94326	3.9
* 78 1,4-Dichlorobenzene-d4	152	12.181	12.172	(1.000)	97190	5.00000	(Q)
$ 90 1,2-Dichlorobenzene-d4	152	12.646	12.625	(1.038)	67826	4.24469	4.2

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111101.B\V5N2539.D
Report Date: 07-Nov-2011 13:10

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

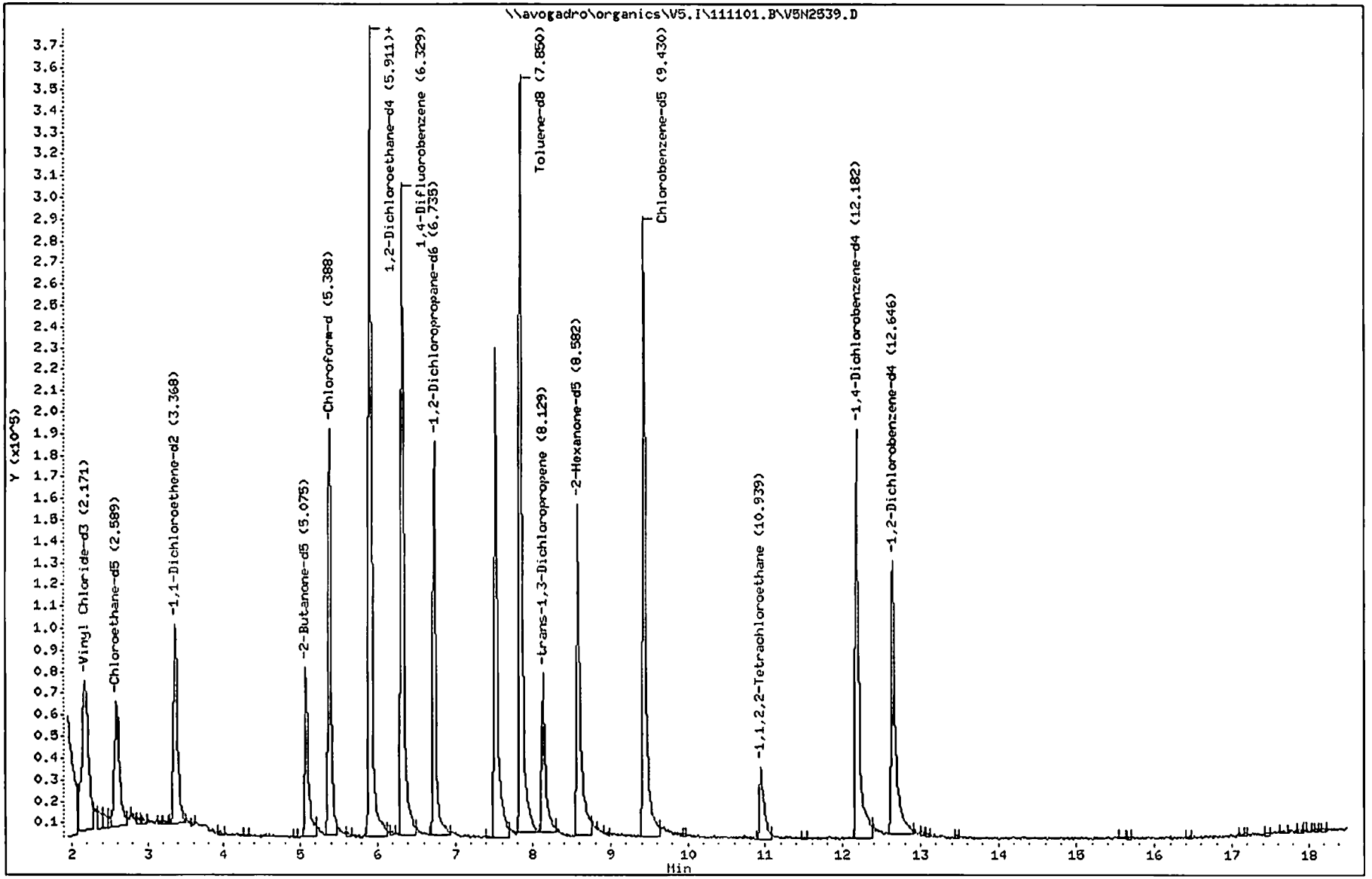
Data file : \\avogadro\organics\V5.I\111101.B\V5N2539.D
Lab Smp Id: K2200-09A Client Smp ID: H30W6
Inj Date : 01-NOV-2011 13:36
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-09A,,62672,
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111101.B\V5N2539.D
Date : 01-NOV-2011 13:36
Client ID: H30W6
Sample Info: 25ML,K2200-09A,,62672,
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: SRC: LIMS
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30W7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-10A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2540.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	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.

H30W7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-10A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2540.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30W7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-10A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2540.D

Level: (TRACE or LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

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/L Purge Volume: 25.0 (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\111101.B\V5N2540.D
Report Date: 07-Nov-2011 13:10

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2540.D
Lab Smp Id: K2200-10A Client Smp ID: H30W7
Inj Date : 01-NOV-2011 14:05
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-10A,,62672,
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.179	2.173	(0.345)	174803	4.07267	4.1
$ 80 Chloroethane-d5	69	2.597	2.591	(0.411)	121716	4.29466	4.3
$ 81 1,1-Dichloroethene-d2	65	3.375	3.369	(0.534)	39060	3.95784	4.0(Q)
$ 82 2-Butanone-d5	46	5.082	5.065	(0.804)	175813	41.0816	41(AQ)
$ 83 Chloroform-d	84	5.384	5.378	(0.851)	185272	4.56954	4.6(Q)
$ 23 1,2-Dichloroethane-d4	65	5.895	5.901	(0.932)	64334	4.05801	4.1(Q)
$ 84 Benzene-d6	84	5.918	5.913	(0.627)	380238	5.17398	5.2
* 26 1,4-Difluorobenzene	114	6.325	6.319	(1.000)	375587	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.731	6.726	(0.713)	115223	4.40405	4.4
$ 33 Toluene-d8	98	7.846	7.840	(0.831)	342285	5.05973	5.1
$ 86 trans-1,3-Dichloropropene-d4	79	8.125	8.119	(0.861)	72550	4.87957	4.9
$ 87 2-Hexanone-d5	63	8.577	8.572	(0.909)	93858	35.0494	35(A)
* 42 Chlorobenzene-d5	117	9.437	9.431	(1.000)	262154	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.947	10.918	(1.160)	42427	4.05989	4.1
* 78 1,4-Dichlorobenzene-d4	152	12.189	12.172	(1.000)	94167	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.642	12.625	(1.037)	69585	4.49457	4.5

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111101.B\V5N2540.D
Report Date: 07-Nov-2011 13:10

Spectrum Analytical, Inc. RI Division

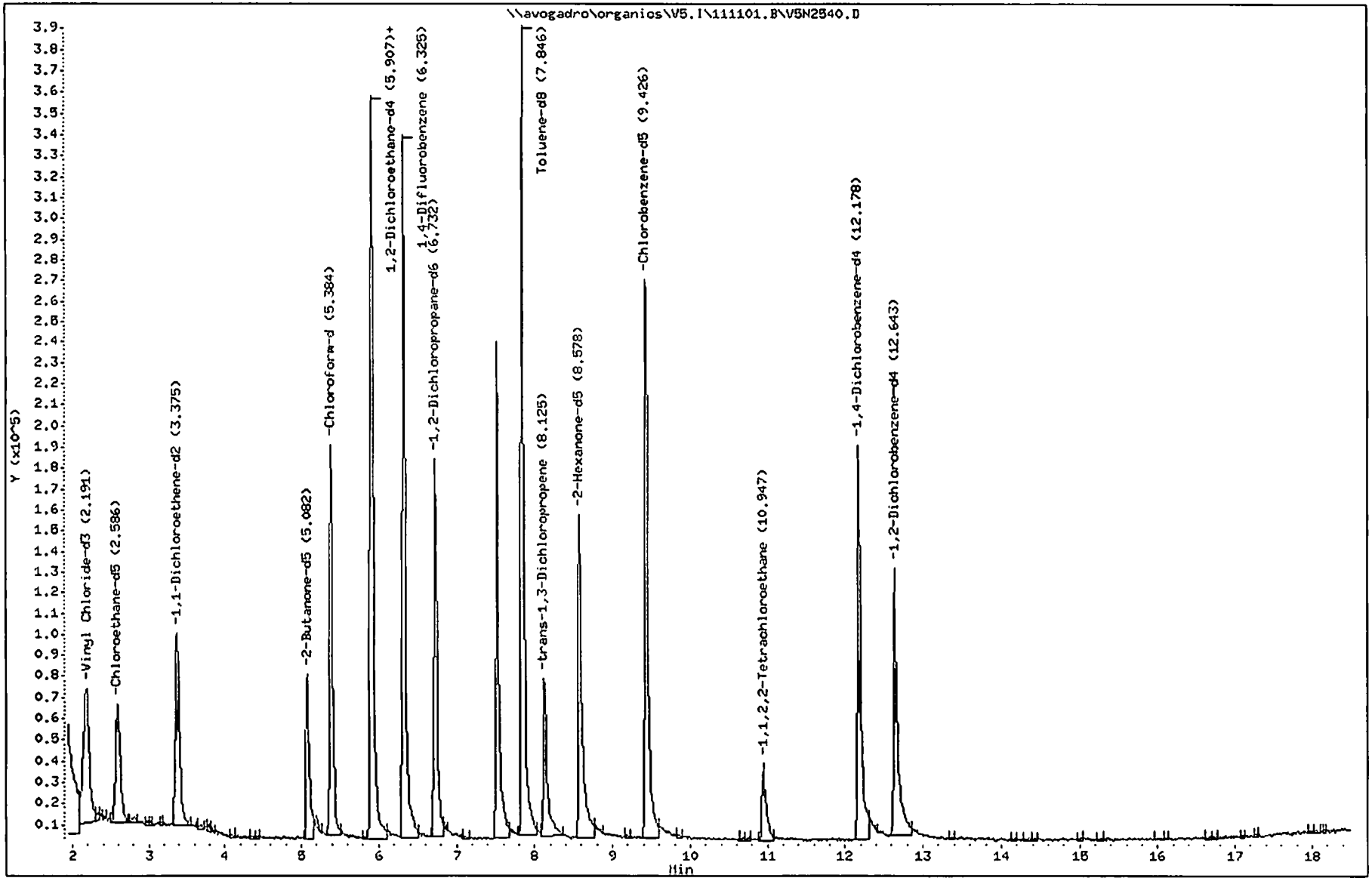
SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2540.D
Lab Smp Id: K2200-10A Client Smp ID: H30W7
Inj Date : 01-NOV-2011 14:05
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-10A,,62672,
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111101.B\V5N2540.D
Date : 01-NOV-2011 14:05
Client ID: H30W7
Sample Info: 25ML,K2200-10A,,62672,
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i
Operator: SRC: LIMS
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.: H30W8

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

Lab Code: MITKEM | Case No.: 41926 | Mod. Ref No.: | SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER | Lab Sample ID: K2200-11A

Sample wt/vol: 25.0 (g/mL) ML | Lab File ID: V5N2541.D

Level: (TRACE/LOW/MED) TRACE | Date Received: 10/28/2011

% Moisture: not dec. | Date Analyzed: 11/01/2011

GC Column: DB-624 | ID: 0.25 (mm) | Dilution Factor: 1.0

Soil Extract Volume: (uL) | Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30W8

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-11A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2541.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30W8

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-11A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2541.D

Level: (TRACE or LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

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/L Purge Volume: 25.0 (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\111101.B\V5N2541.D
Report Date: 07-Nov-2011 13:10

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2541.D
Lab Smp Id: K2200-11A Client Smp ID: H30W8
Inj Date : 01-NOV-2011 14:33
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-11A,,62672,
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.191	2.173	(0.346)	171034	4.02382	4.0
$ 80 Chloroethane-d5	69	2.597	2.591	(0.411)	118744	4.23075	4.2
$ 81 1,1-Dichloroethene-d2	65	3.375	3.369	(0.534)	38611	3.95059	4.0(Q)
$ 82 2-Butanone-d5	46	5.071	5.065	(0.802)	171191	40.3926	40(AQ)
$ 83 Chloroform-d	84	5.384	5.378	(0.851)	181066	4.50946	4.5(Q)
$ 23 1,2-Dichloroethane-d4	65	5.895	5.901	(0.932)	65802	4.19118	4.2
$ 84 Benzene-d6	84	5.919	5.913	(0.627)	371646	5.15981	5.2
* 26 1,4-Difluorobenzene	114	6.325	6.319	(1.000)	371951	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.731	6.726	(0.713)	114695	4.47294	4.5
$ 33 Toluene-d8	98	7.846	7.840	(0.831)	329853	4.97502	5.0
$ 86 trans-1,3-Dichloropropene-d4	79	8.137	8.119	(0.862)	66310	4.55049	4.6
$ 87 2-Hexanone-d5	63	8.578	8.572	(0.909)	101168	38.5468	39(A)
* 42 Chlorobenzene-d5	117	9.437	9.431	(1.000)	256934	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.947	10.918	(1.160)	41642	4.06573	4.1
* 78 1,4-Dichlorobenzene-d4	152	12.178	12.172	(1.000)	94798	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.643	12.625	(1.038)	67022	4.30021	4.3(Q)

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111101.B\V5N2541.D
Report Date: 07-Nov-2011 13:10

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

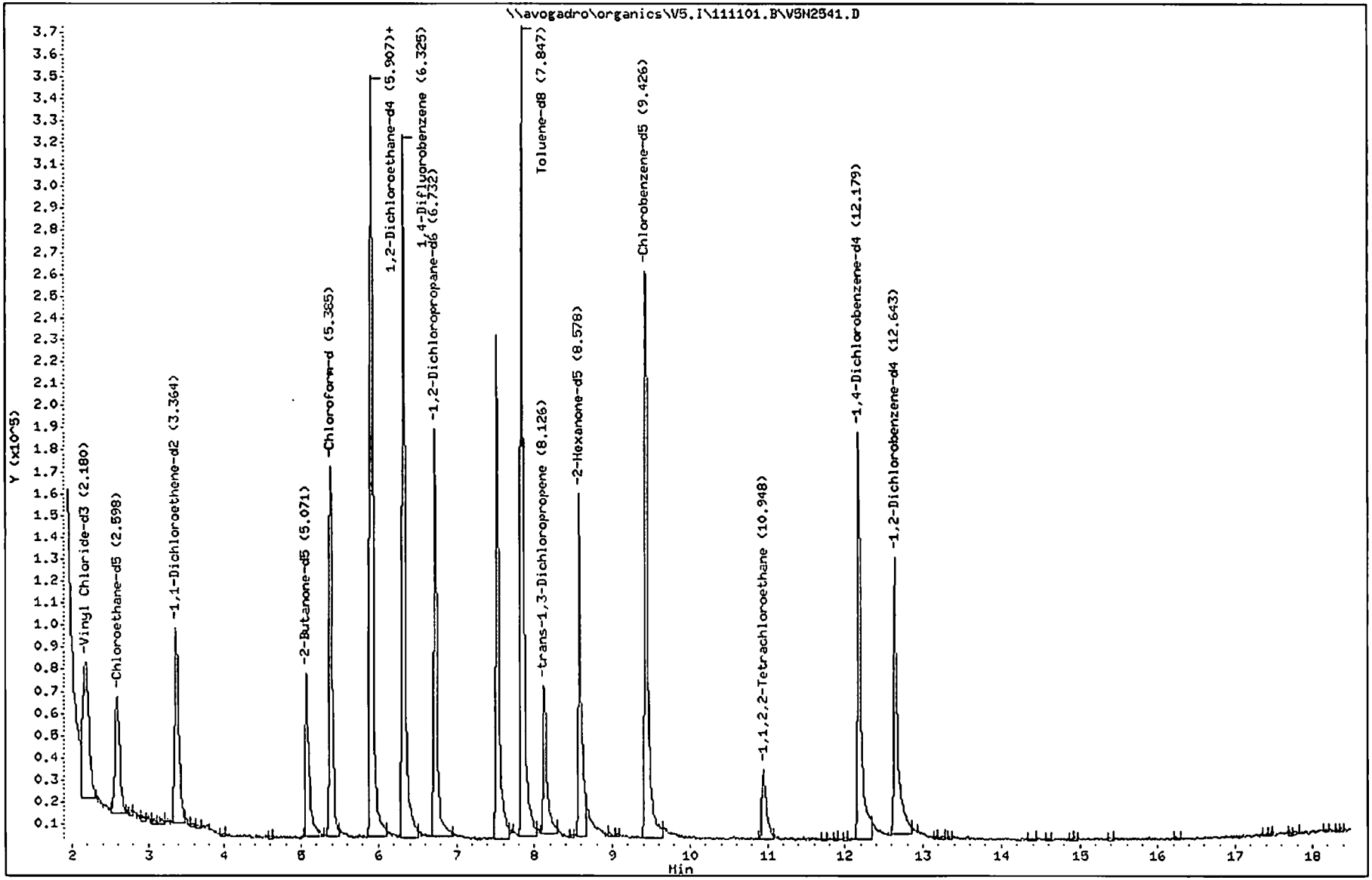
Data file	: \\avogadro\organics\V5.I\111101.B\V5N2541.D		
Lab Smp Id	: K2200-11A	Client Smp ID	: H30W8
Inj Date	: 01-NOV-2011 14:33		
Operator	: SRC: LIMS	Inst ID	: V5.i
Smp Info	: 25ML,K2200-11A,,62672,		
Misc Info	:		
Comment	:		
Method	: \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m		
Meth Date	: 03-Nov-2011 11:40 V5.i	Quant Type	: ISTD
Cal Date	: 15-OCT-2011 13:24	Cal File	: V5N1684.D
Als bottle	: 16		
Dil Factor	: 1.00000		
Integrator	: HP RTE	Compound Sublist	: SOM01.2.sub
Target Version	: 4.14		

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111101.B\V5N2541.D
Date : 01-NOV-2011 14:33
Client ID: H3048
Sample Info: 25ML,K2200-11A,,62672,
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: SRC: LIMS
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30X0

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-12A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2542.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	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.

H30X0

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-12A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2542.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30X0

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-12A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2542.D

Level: (TRACE or LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

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/L Purge Volume: 25.0 (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\111101.B\V5N2542.D
Report Date: 07-Nov-2011 13:10

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2542.D
Lab Smp Id: K2200-12A Client Smp ID: H30X0
Inj Date : 01-NOV-2011 15:01
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-12A,,62672,
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
s 79 Vinyl Chloride-d3	65	2.183	2.173	(0.345)	181865	4.44844	4.4
s 80 Chloroethane-d5	69	2.590	2.591	(0.409)	123277	4.56657	4.6
s 81 1,1-Dichloroethene-d2	65	3.368	3.369	(0.532)	38787	4.12610	4.1(Q)
s 82 2-Butanone-d5	46	5.075	5.065	(0.802)	165079	40.4963	40(AQ)
s 83 Chloroform-d	84	5.389	5.378	(0.851)	179299	4.64267	4.6(Q)
s 23 1,2-Dichloroethane-d4	65	5.900	5.901	(0.932)	66249	4.38711	4.4
s 84 Benzene-d6	84	5.911	5.913	(0.627)	364909	5.39998	5.4
* 26 1,4-Difluorobenzene	114	6.329	6.319	(1.000)	357753	5.00000	
s 85 1,2-Dichloropropane-d6	67	6.736	6.726	(0.714)	114568	4.76228	4.8
s 33 Toluene-d8	98	7.851	7.840	(0.833)	327092	5.25833	5.3
s 86 trans-1,3-Dichloropropene-d4	79	8.129	8.119	(0.862)	72350	5.29201	5.3
s 87 2-Hexanone-d5	63	8.582	8.572	(0.910)	101958	41.4066	41(A)
* 42 Chlorobenzene-d5	117	9.430	9.431	(1.000)	241056	5.00000	
s 89 1,1,2,2-Tetrachloroethane-d2	84	10.940	10.918	(1.160)	38365	3.99251	4.0
* 78 1,4-Dichlorobenzene-d4	152	12.182	12.172	(1.000)	96038	5.00000	
s 90 1,2-Dichlorobenzene-d4	152	12.635	12.625	(1.037)	66853	4.23398	4.2

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111101.B\V5N2542.D
Report Date: 07-Nov-2011 13:10

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

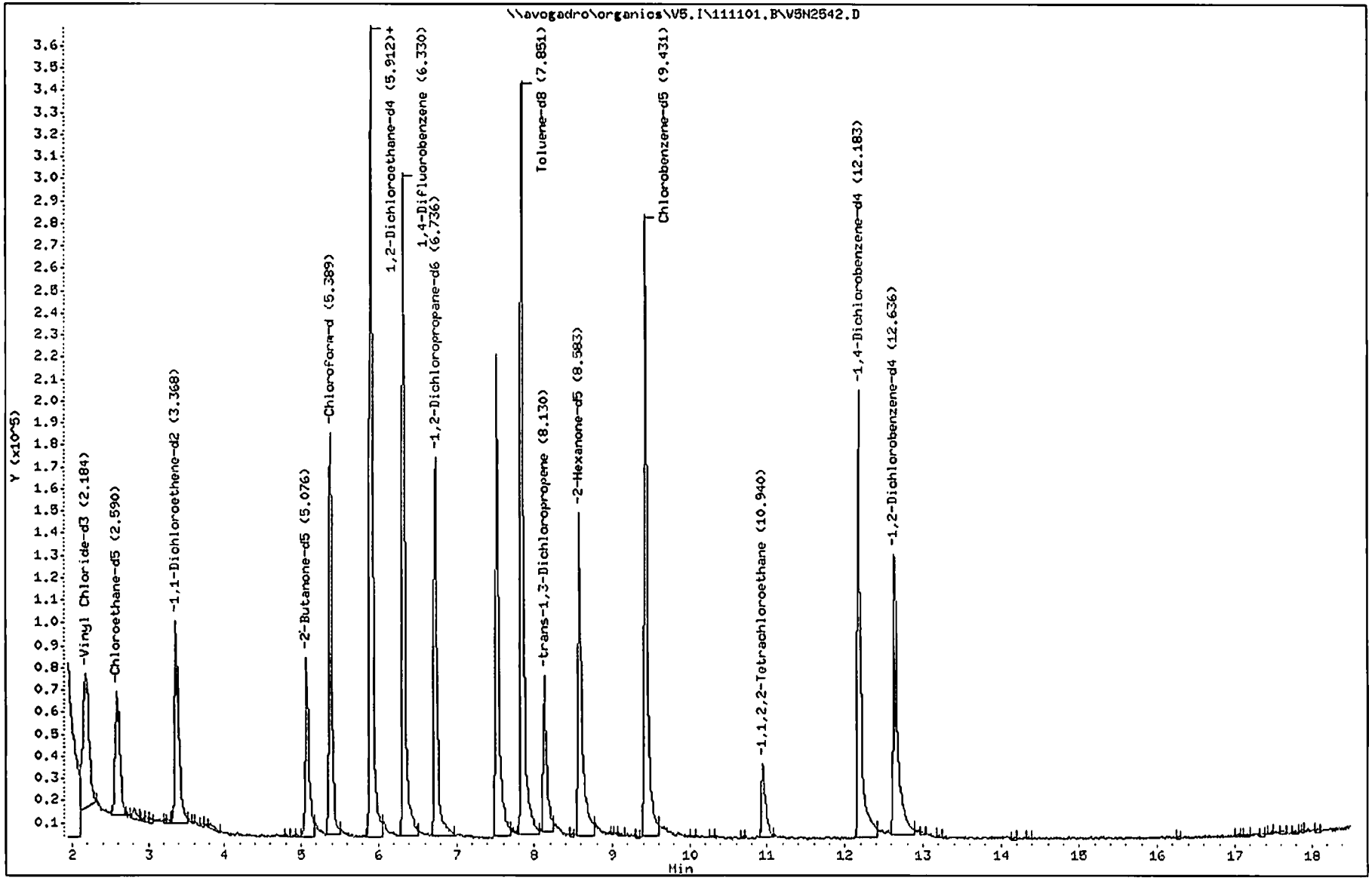
Data file : \\avogadro\organics\V5.I\111101.B\V5N2542.D
Lab Smp Id: K2200-12A Client Smp ID: H30X0
Inj Date : 01-NOV-2011 15:01
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-12A,,62672,
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111101.B\V5N2542.D
Date : 01-NOV-2011 15:01
Client ID: H30X0
Sample Info: 25ML,K2200-12A,,62672,
Purge Volume: 23.0
Column phase: DB-624

Instrument: V5.i

Operator: SRC: LIMS
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30X1

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-13A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2543.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	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.

H30X1

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-13A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2543.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30X1

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-13A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2543.D

Level: (TRACE or LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

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/L Purge Volume: 25.0 (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\111101.B\V5N2543.D
Report Date: 07-Nov-2011 13:10

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2543.D
Lab Smp Id: K2200-13A Client Smp ID: H30X1
Inj Date : 01-NOV-2011 15:30
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-13A,,62672,
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.185	2.173	(0.346)	181487	4.38539	4.4
$ 80 Chloroethane-d5	69	2.592	2.591	(0.410)	125356	4.58731	4.6
$ 81 1,1-Dichloroethene-d2	65	3.370	3.369	(0.533)	39182	4.11760	4.1(Q)
$ 82 2-Butanone-d5	46	5.077	5.065	(0.803)	162682	39.4246	39(AQ)
$ 83 Chloroform-d	84	5.390	5.378	(0.853)	181216	4.63544	4.6(Q)
$ 23 1,2-Dichloroethane-d4	65	5.901	5.901	(0.934)	64992	4.25171	4.3
$ 84 Benzene-d6	84	5.913	5.913	(0.627)	371082	4.98684	5.0
* 26 1,4-Difluorobenzene	114	6.319	6.319	(1.000)	362142	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.726	6.726	(0.713)	117994	4.45410	4.5
$ 33 Toluene-d8	98	7.841	7.840	(0.831)	334194	4.87893	4.9
$ 86 trans-1,3-Dichloropropene-d4	79	8.131	8.119	(0.862)	65784	4.36969	4.4
$ 87 2-Hexanone-d5	63	8.572	8.572	(0.909)	104722	38.6220	39(A)
* 42 Chlorobenzene-d5	117	9.432	9.431	(1.000)	265442	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.941	10.918	(1.160)	41500	3.92199	3.9
* 78 1,4-Dichlorobenzene-d4	152	12.184	12.172	(1.000)	96827	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.637	12.625	(1.037)	70688	4.44038	4.4(Q)

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111101.B\V5N2543.D
Report Date: 07-Nov-2011 13:10

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

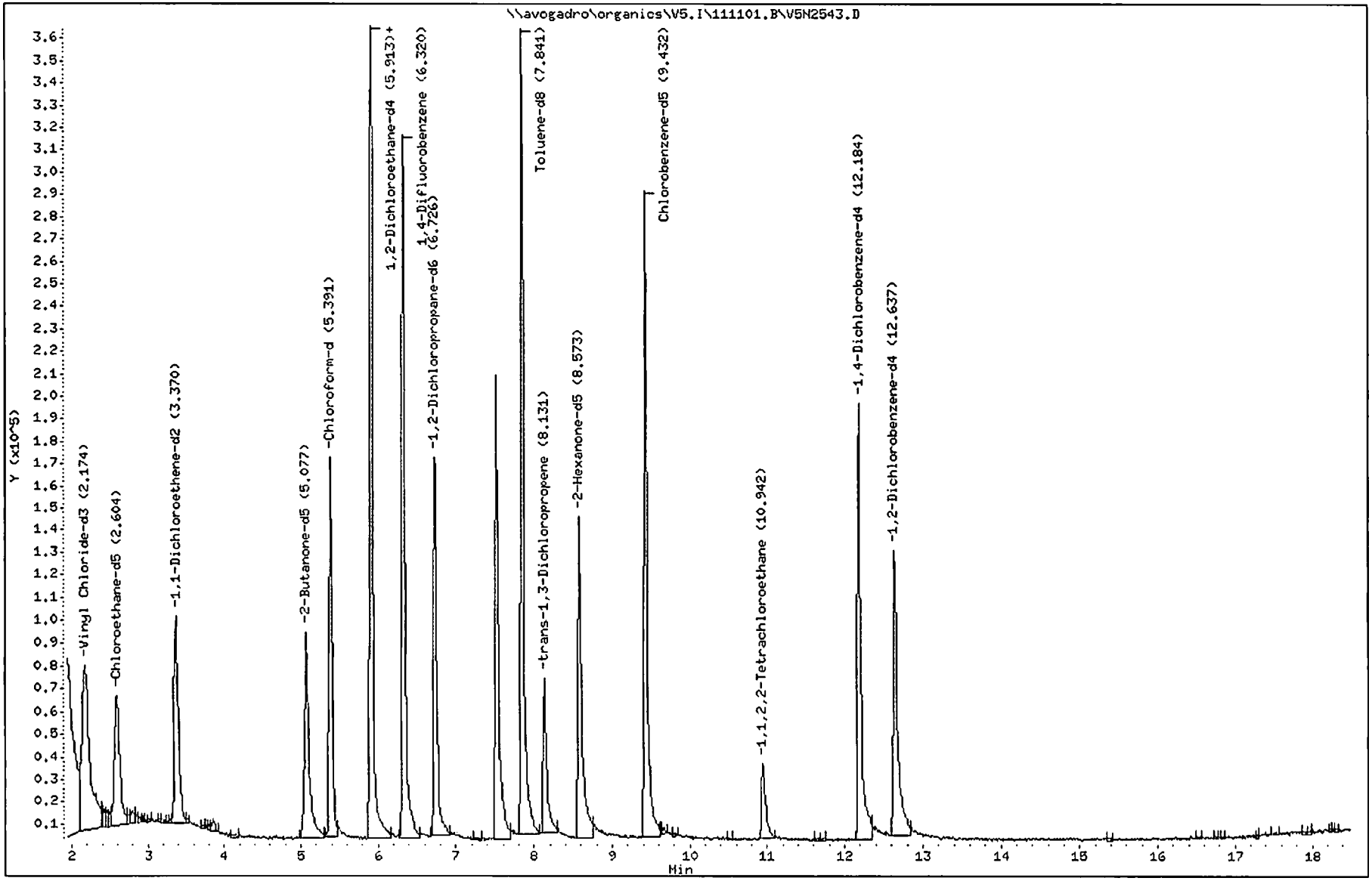
Data file : \\avogadro\organics\V5.I\111101.B\V5N2543.D
Lab Smp Id: K2200-13A Client Smp ID: H30X1
Inj Date : 01-NOV-2011 15:30
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-13A,,62672,
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111101.B\V5N2543.D
Date : 01-NOV-2011 15:30
Client ID: H30X1
Sample Info: 25ML,K2200-13A,,62672,
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: SRC: LIMS
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.: H30Y2

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

Lab Code: MITKEM | Case No.: 41926 | Mod. Ref No.: | SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER | Lab Sample ID: K2200-14A

Sample wt/vol: 25.0 (g/mL) ML | Lab File ID: V5N2544.D

Level: (TRACE/LOW/MED) TRACE | Date Received: 10/28/2011

% Moisture: not dec. | Date Analyzed: 11/01/2011

GC Column: DB-624 | ID: 0.25 (mm) | Dilution Factor: 1.0

Soil Extract Volume: (uL) | Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Y2

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-14A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2544.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30Y2

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-14A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2544.D

Level: (TRACE or LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

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/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A		

[1] EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111101.B\V5N2544.D
Report Date: 07-Nov-2011 13:10

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2544.D
Lab Smp Id: K2200-14A Client Smp ID: H30Y2
Inj Date : 01-NOV-2011 15:58
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-14A,,62672,
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.192	2.173	(0.347)	174848	4.19312	4.2
$ 80 Chloroethane-d5	69	2.587	2.591	(0.409)	117140	4.25434	4.3
$ 81 1,1-Dichloroethene-d2	65	3.365	3.369	(0.532)	39283	4.09710	4.1(Q)
$ 82 2-Butanone-d5	46	5.072	5.065	(0.802)	172867	41.5771	42(AQ)
$ 83 Chloroform-d	84	5.386	5.378	(0.851)	177563	4.50777	4.5(Q)
$ 23 1,2-Dichloroethane-d4	65	5.897	5.901	(0.932)	60823	3.94899	3.9(Q)
$ 84 Benzene-d6	84	5.908	5.913	(0.627)	373122	5.25528	5.3
* 26 1,4-Difluorobenzene	114	6.326	6.319	(1.000)	364892	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.733	6.726	(0.714)	117149	4.63477	4.6
$ 33 Toluene-d8	98	7.848	7.840	(0.332)	331711	5.07546	5.1
$ 86 trans-1,3-Dichloropropene-d4	79	8.126	8.119	(0.862)	69768	4.85709	4.9
$ 87 2-Hexanone-d5	63	8.579	8.572	(0.910)	105149	40.6435	41(A)
* 42 Chlorobenzene-d5	117	9.427	9.431	(1.000)	253268	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.948	10.918	(1.161)	41257	4.08644	4.1
* 78 1,4-Dichlorobenzene-d4	152	12.179	12.172	(1.000)	90683	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.644	12.625	(1.038)	68795	4.61426	4.6(Q)

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111101.B\V5N2544.D
Report Date: 07-Nov-2011 13:10

Spectrum Analytical, Inc. RI Division

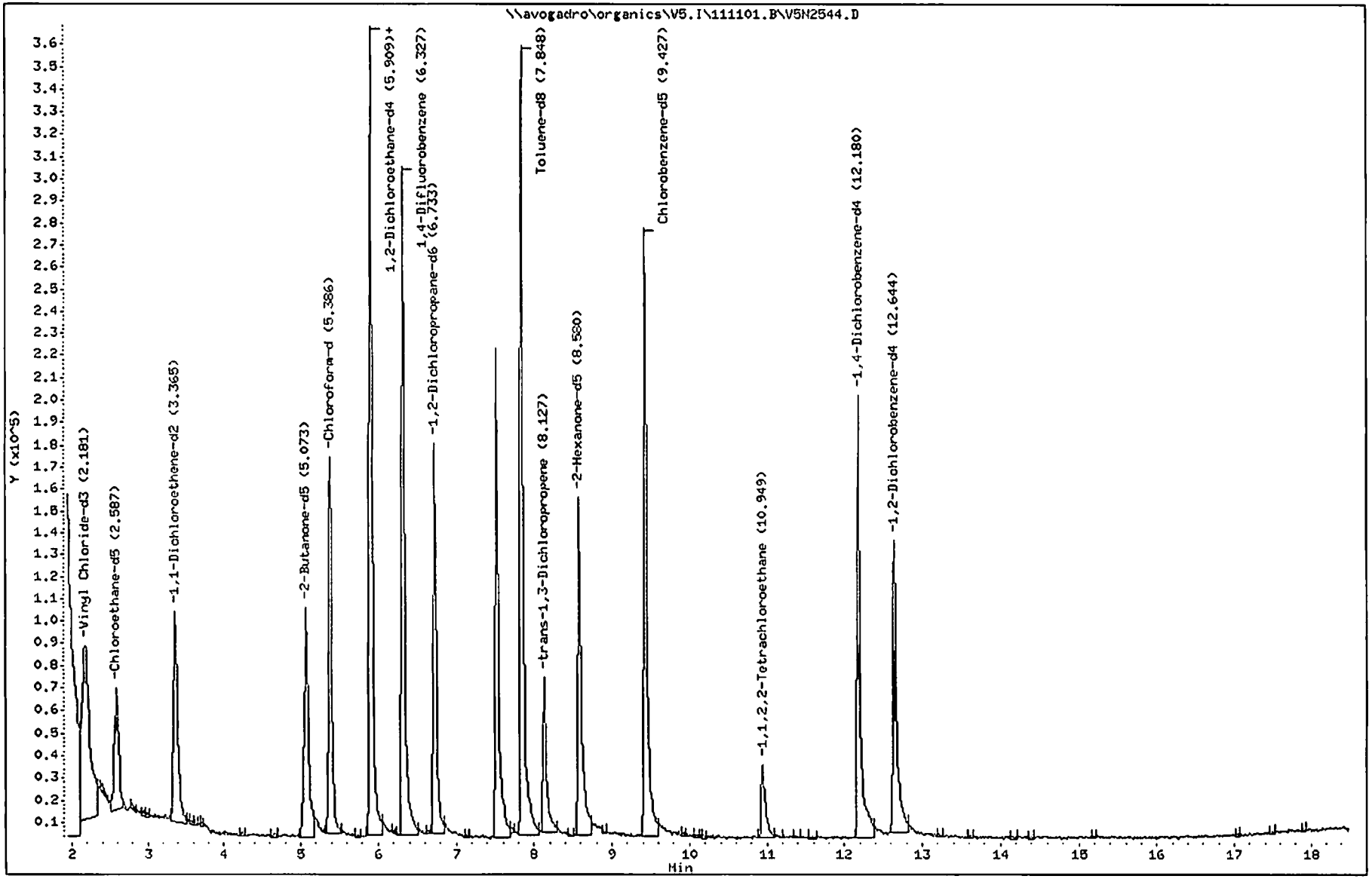
SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2544.D
Lab Smp Id: K2200-14A Client Smp ID: H30Y2
Inj Date : 01-NOV-2011 15:58
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-14A,,62672,
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111101.B\V5N2544.D
Date : 01-NOV-2011 15:58
Client ID: H30Y2
Sample Info: 25ML,K2200-14A,,62672,
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i
Operator: SRC: LIMS
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Y3

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-15A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2545.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	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.

H30Y3

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-15A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2545.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30Y3

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-15A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2545.D

Level: (TRACE or LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

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/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.388	0.93	J
	E966796[1]	Total Alkanes	N/A		

[1] EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111101.B\V5N2545.D
Report Date: 07-Nov-2011 13:10

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2545.D
Lab Smp Id: K2200-15A Client Smp ID: H30Y3
Inj Date : 01-NOV-2011 16:27
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-15A,,62672,
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.191	2.173	(0.346)	166773	4.02894	4.0
$ 80 Chloroethane-d5	69	2.585	2.591	(0.409)	117407	4.29546	4.3
$ 81 1,1-Dichloroethene-d2	65	3.363	3.369	(0.532)	38110	4.00405	4.0(Q)
$ 82 2-Butanone-d5	46	5.071	5.065	(0.802)	174366	42.2467	42(AQ)
$ 83 Chloroform-d	84	5.384	5.378	(0.851)	178406	4.56254	4.6(Q)
$ 23 1,2-Dichloroethane-d4	65	5.895	5.901	(0.932)	66324	4.33788	4.3
$ 84 Benzene-d6	84	5.918	5.913	(0.627)	364757	5.29489	5.3
* 26 1,4-Difluorobenzene	114	6.325	6.319	(1.000)	362223	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.731	6.726	(0.713)	114725	4.67795	4.7
$ 33 Toluene-d8	98	7.846	7.840	(0.831)	320380	5.05230	5.1
$ 86 trans-1,3-Dichloropropene-d4	79	8.136	8.119	(0.862)	67088	4.81363	4.8
$ 87 2-Hexanone-d5	63	8.578	8.572	(0.909)	96751	38.5433	39(A)
* 42 Chlorobenzene-d5	117	9.437	9.431	(1.000)	245738	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.947	10.918	(1.160)	41691	4.25597	4.3
* 78 1,4-Dichlorobenzene-d4	152	12.178	12.172	(1.000)	88912	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.642	12.625	(1.038)	72971	4.99184	5.0(Q)

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111101.B\V5N2545.D
Report Date: 07-Nov-2011 13:10

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2545.D
Lab Smp Id: K2200-15A Client Smp ID: H30Y3
Inj Date : 01-NOV-2011 16:27
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-15A,,62672,
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

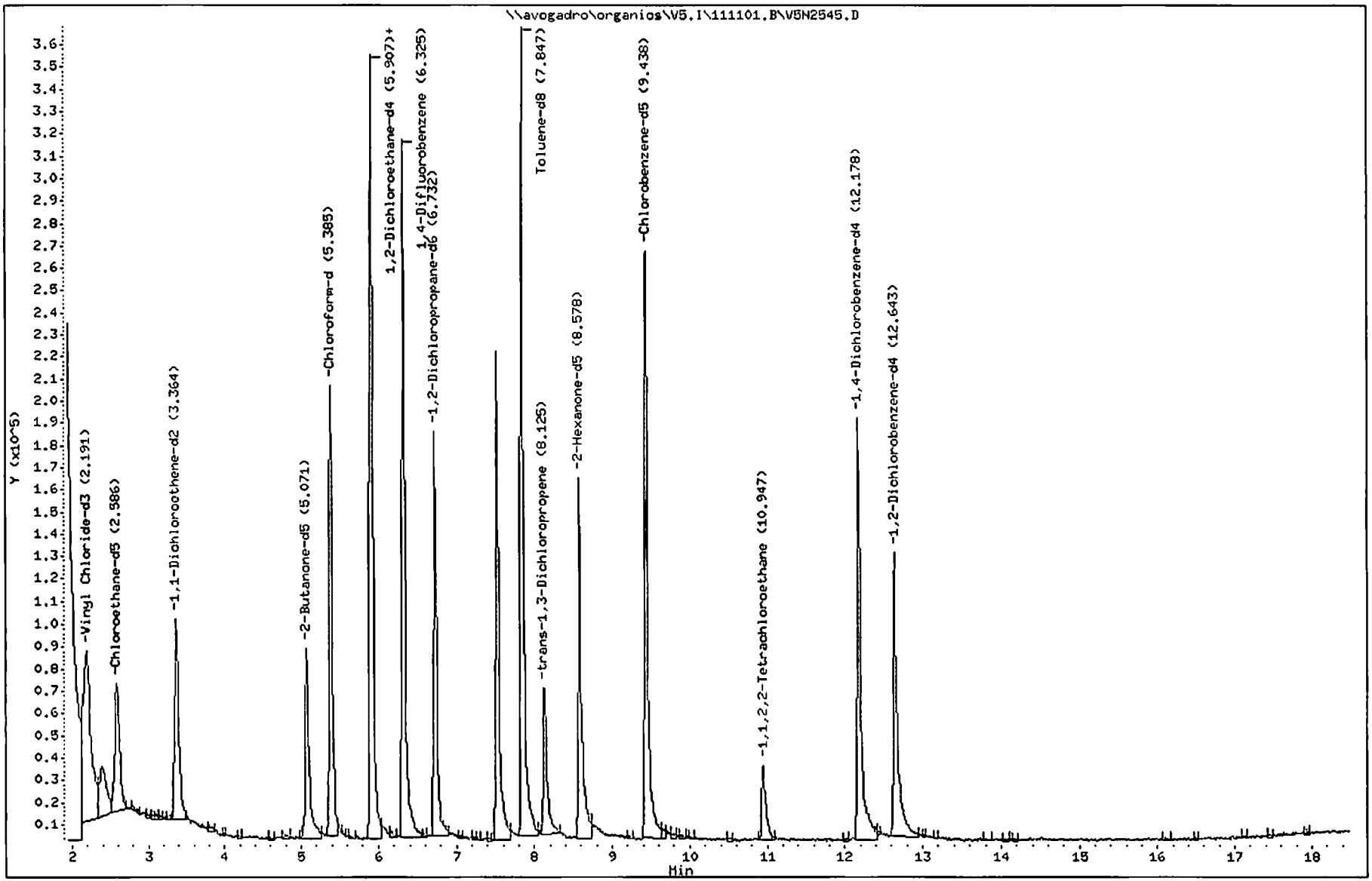
ISTD	RT	AREA	AMOUNT
* 26 1,4-Difluorobenzene	6.325	818037	5.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.388	152538	0.93234057	0.93	0		0	26

Data File: \\avogadro\organics\V5.I\111101.B\V5N2545.D
Date : 01-NOV-2011 16:27
Client ID: H30Y3
Sample Info: 25ML,K2200-15A,,62672,
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: SRC: LIMS
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111101.B\V5N2545.D

Date : 01-NOV-2011 16:27

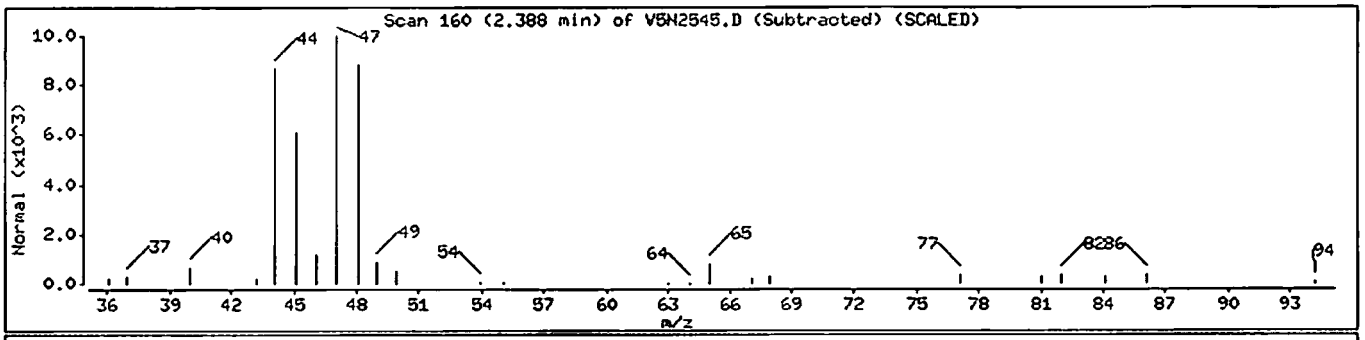
Client ID: H30Y3 Instrument: V5.i

Sample Info: 25ML,K2200-15A,,62672,

Purge Volume: 25.0 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



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. H30Y4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-16A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2546.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	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.

H30Y4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-16A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2546.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30Y4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-16A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2546.D

Level: (TRACE or LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

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/L Purge Volume: 25.0 (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\111101.B\V5N2546.D
Report Date: 07-Nov-2011 13:10

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2546.D
Lab Smp Id: K2200-16A Client Smp ID: H30Y4
Inj Date : 01-NOV-2011 16:55
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-16A,,62672,
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.179	2.173	(0.345)	176399	4.29532	4.3
$ 80 Chloroethane-d5	69	2.586	2.591	(0.409)	118154	4.35710	4.4
$ 81 1,1-Dichloroethene-d2	65	3.352	3.369	(0.530)	39477	4.18060	4.2(Q)
$ 82 2-Butanone-d5	46	5.071	5.065	(0.802)	167732	40.9620	41(AQ)
$ 83 Chloroform-d	84	5.385	5.378	(0.851)	179058	4.61557	4.6(Q)
$ 23 1,2-Dichloroethane-d4	65	5.895	5.901	(0.932)	66315	4.37172	4.4
$ 84 Benzene-d6	84	5.907	5.913	(0.627)	364259	5.11943	5.1
* 26 1,4-Difluorobenzene	114	6.325	6.319	(1.000)	359370	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.732	6.726	(0.714)	116903	4.61510	4.6
$ 33 Toluene-d8	98	7.846	7.840	(0.832)	326483	4.98474	5.0
$ 86 trans-1,3-Dichloropropene-d4	79	8.125	8.119	(0.862)	66571	4.62457	4.6
$ 87 2-Hexanone-d5	63	8.578	8.572	(0.910)	104576	40.3352	40(A)
* 42 Chlorobenzene-d5	117	9.426	9.431	(1.000)	253813	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.936	10.918	(1.160)	40156	3.96885	4.0
* 78 1,4-Dichlorobenzene-d4	152	12.178	12.172	(1.000)	93968	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.643	12.625	(1.038)	65814	4.26000	4.3

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111101.B\V5N2546.D
Report Date: 07-Nov-2011 13:10

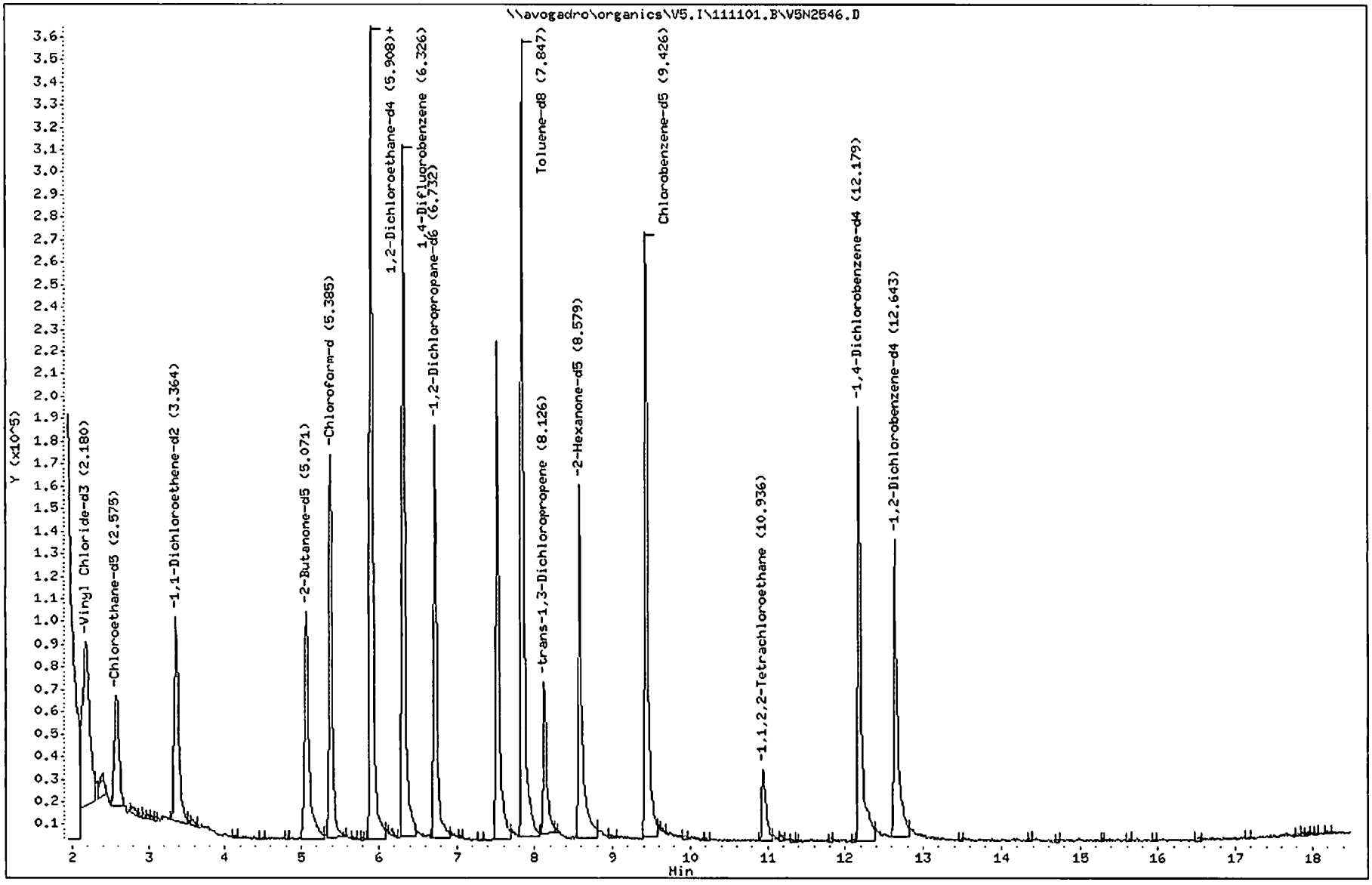
Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file :	\\avogadro\organics\V5.I\111101.B\V5N2546.D		
Lab Smp Id:	K2200-16A	Client Smp ID:	H30Y4
Inj Date :	01-NOV-2011 16:55		
Operator :	SRC: LIMS	Inst ID:	V5.i
Smp Info :	25ML,K2200-16A,,62672,		
Misc Info :			
Comment :			
Method :	\\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m		
Meth Date :	03-Nov-2011 11:40 V5.i	Quant Type:	ISTD
Cal Date :	15-OCT-2011 13:24	Cal File:	V5N1684.D
Als bottle:	21		
Dil Factor:	1.00000		
Integrator:	HP RTE	Compound Sublist:	SOM01.2.sub
Target Version:	4.14		

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111101.B\V5N2546.D
Date : 01-NOV-2011 16:55
Client ID: H30Y4
Instrument: V5.i
Sample Info: 25ML,K2200-16A,,62672,
Purge Volume: 25.0
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. H30Y5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-17A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2547.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	3.8	J
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	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.

H30Y5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-17A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2547.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: H30Y5

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

Lab Code: MITKEM | Case No.: 41926 | Mod. Ref No.: | SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER | Lab Sample ID: K2200-17A

Sample wt/vol: 25.0 (g/mL) ML | Lab File ID: V5N2547.D

Level: (TRACE or LOW/MED) TRACE | Date Received: 10/28/2011

% Moisture: not dec. | Date Analyzed: 11/01/2011

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/L | Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.395	0.87	J
	E96679[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111101.B\V5N2547.D
Report Date: 07-Nov-2011 13:10

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2547.D
Lab Smp Id: K2200-17A Client Smp ID: H30Y5
Inj Date : 01-NOV-2011 17:23
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-17A,,62672,
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
S	79	Vinyl Chloride-d3	65	2.185	2.173	(0.346)	174284	4.26001	4.3
S	80	Chloroethane-d5	69	2.592	2.591	(0.410)	116401	4.30884	4.3
S	81	1,1-Dichloroethene-d2	65	3.358	3.369	(0.531)	36174	3.84543	3.8(Q)
	9	Acetone	43	3.451	3.451	(0.546)	12122	3.76458	3.8(H)
S	82	2-Butanone-d5	46	5.077	5.065	(0.803)	173019	42.4143	42(AQ)
S	83	Chloroform-d	84	5.390	5.378	(0.853)	173365	4.48587	4.5(Q)
S	23	1,2-Dichloroethane-d4	65	5.901	5.901	(0.934)	66409	4.39462	4.4
S	84	Benzene-d6	84	5.913	5.913	(0.627)	367533	5.31401	5.3
*	26	1,4-Difluorobenzene	114	6.319	6.319	(1.000)	358004	5.00000	
S	85	1,2-Dichloropropane-d6	67	6.726	6.726	(0.713)	119030	4.83423	4.8
S	33	Toluene-d8	98	7.841	7.840	(0.831)	326975	5.13584	5.1
S	86	trans-1,3-Dichloropropene-d4	79	8.131	8.119	(0.862)	65973	4.71485	4.7
S	87	2-Hexanone-d5	63	8.572	8.572	(0.909)	104233	41.3592	41(A)
*	42	Chlorobenzene-d5	117	9.432	9.431	(1.000)	246717	5.00000	
S	89	1,1,2,2-Tetrachloroethane-d2	84	10.941	10.918	(1.160)	42765	4.34828	4.3
*	78	1,4-Dichlorobenzene-d4	152	12.184	12.172	(1.000)	94389	5.00000	
S	90	1,2-Dichlorobenzene-d4	152	12.637	12.625	(1.037)	71185	4.58710	4.6(Q)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\avogadro\organics\V5.I\111101.B\V5N2547.D
Report Date: 07-Nov-2011 13:10

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111101.B\V5N2547.D
Report Date: 07-Nov-2011 13:10

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2547.D
Lab Smp Id: K2200-17A Client Smp ID: H30Y5
Inj Date : 01-NOV-2011 17:23
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-17A,,62672,
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

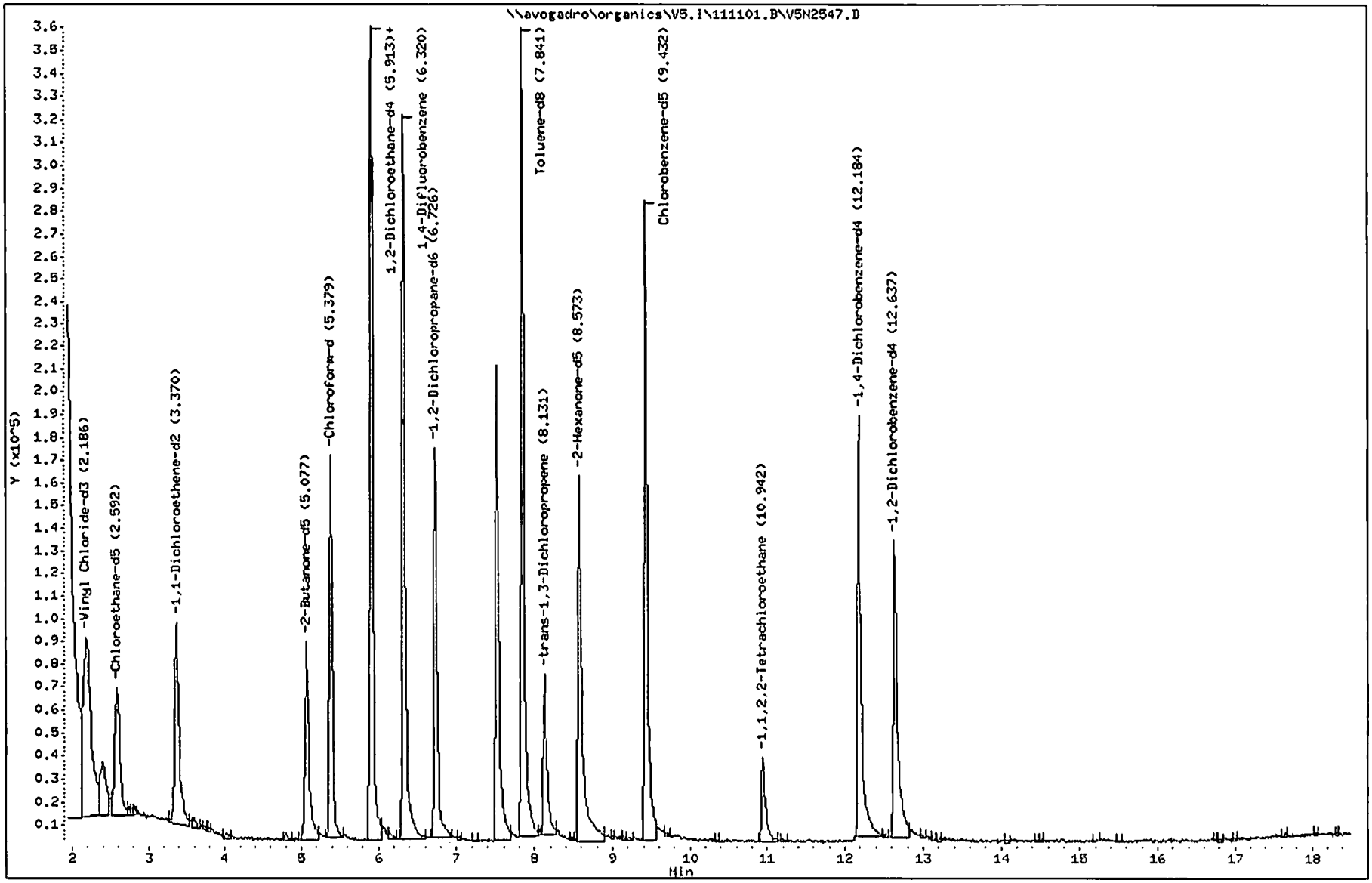
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 26 1,4-Difluorobenzene	6.320	817741	5.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.395	142921	0.87387314	0.87	0		0	26

Data File: \\avogadro\organics\V5.I\111101.B\V5N2547.D
Date : 01-NOV-2011 17:23
Client ID: H30Y5
Sample Info: 25ML,K2200-17A,,62672,
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i
Operator: SRC: LIMS
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111101.B\V5N2547.D

Date : 01-NOV-2011 17:23

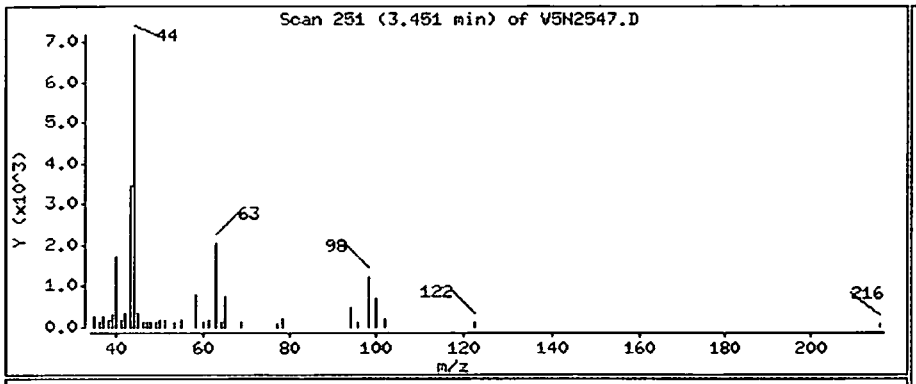
Client ID: H30Y5 Instrument: V5.i

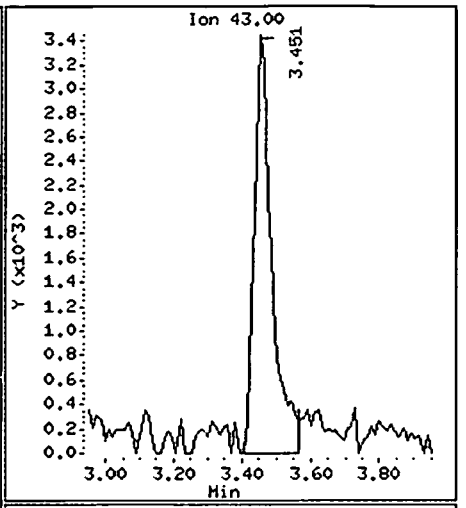
Sample Info: 25ML,K2200-17A,,62672,

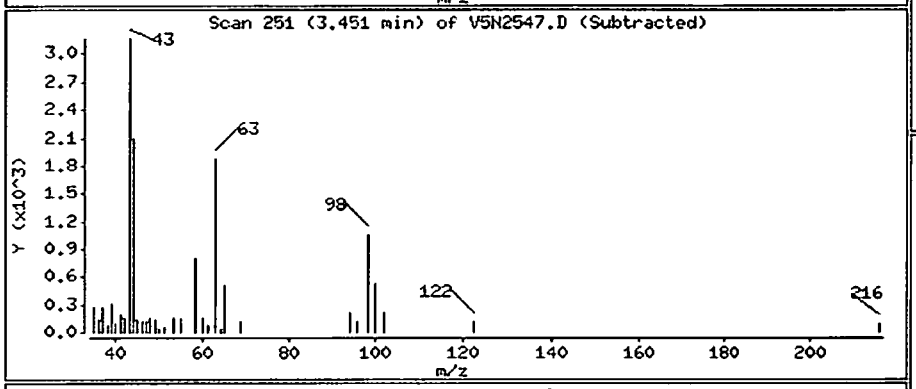
Purge Volume: 25.0 Operator: SRC: LIMS

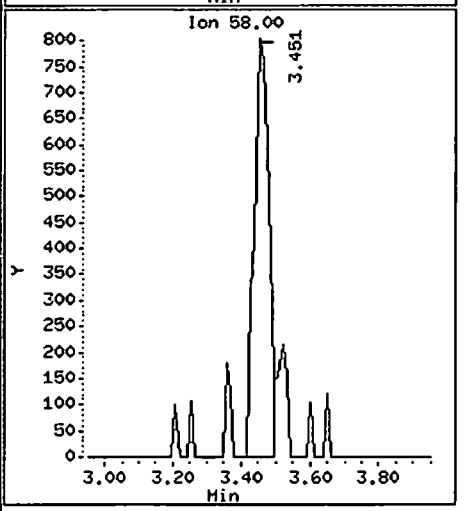
Column phase: DB-624 Column diameter: 0.25

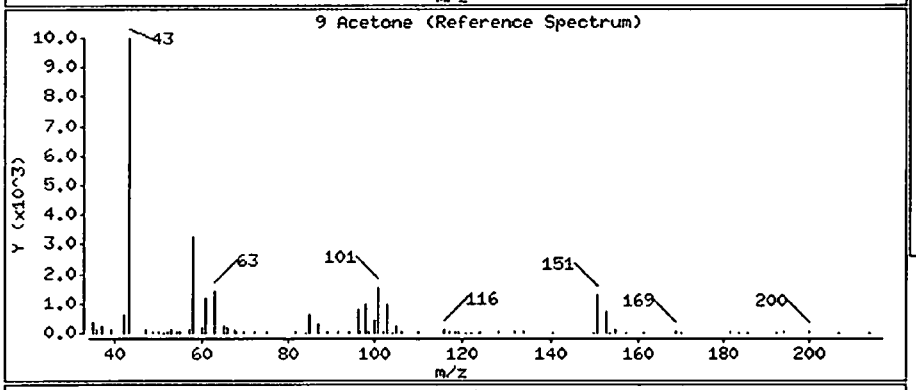
9 Acetone Concentration: 3.8 ug/L

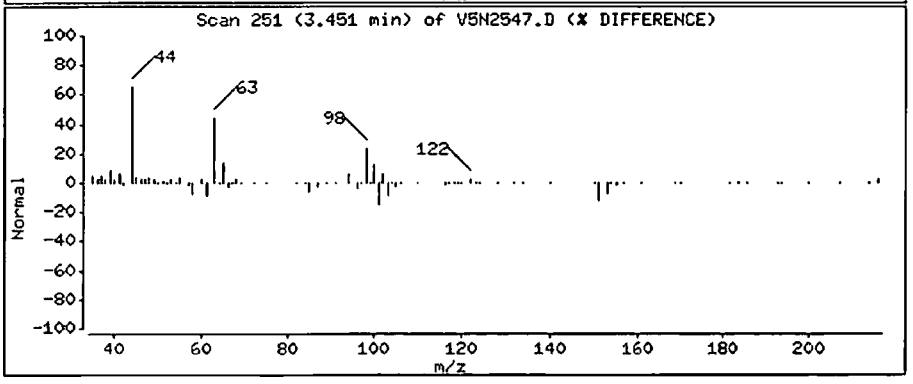












Data File: \\avogadro\organics\V5.I\111101.B\V5N2547.D

Date : 01-NOV-2011 17:23

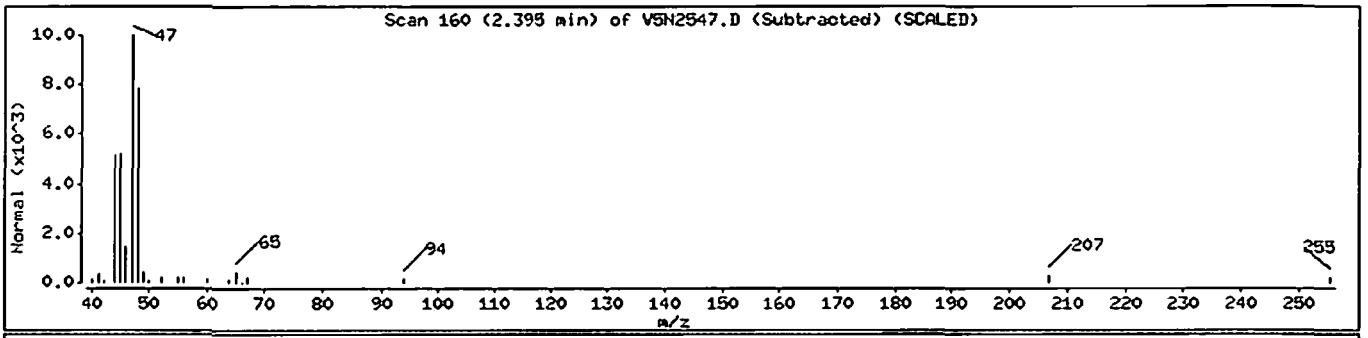
Client ID: H30Y5 Instrument: V5.i

Sample Info: 25ML,K2200-17A,,62672,

Purge Volume: 25.0 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



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Y6

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-18A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2548.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. H30Y6

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-18A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2548.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30Y6

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-18A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2548.D

Level: (TRACE or LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

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/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.394	0.66	J
	E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111101.B\V5N2548.D
Report Date: 07-Nov-2011 13:10

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2548.D
Lab Smp Id: K2200-18A Client Smp ID: H30Y6
Inj Date : 01-NOV-2011 17:52
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-18A,,62672,
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.196	2.173	(0.348)	175475	4.06374	4.1
$ 80 Chloroethane-d5	69	2.579	2.591	(0.408)	120010	4.20899	4.2
$ 81 1,1-Dichloroethene-d2	65	3.358	3.369	(0.531)	36568	3.68304	3.7(Q)
$ 82 2-Butanone-d5	46	5.076	5.065	(0.803)	169619	39.3958	39(AQ)
$ 83 Chloroform-d	84	5.378	5.378	(0.851)	183130	4.48954	4.5(Q)
$ 23 1,2-Dichloroethane-d4	65	5.901	5.901	(0.934)	66484	4.16840	4.2
$ 84 Benzene-d6	84	5.912	5.913	(0.627)	377636	5.12167	5.1
* 26 1,4-Difluorobenzene	114	6.319	6.319	(1.000)	377860	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.725	6.726	(0.713)	120908	4.60615	4.6
$ 33 Toluene-d8	98	7.840	7.840	(0.831)	337552	4.97336	5.0
$ 86 trans-1,3-Dichloropropene-d4	79	8.130	8.119	(0.862)	61194	4.10225	4.1
$ 87 2-Hexanone-d5	63	8.572	8.572	(0.909)	107802	40.1242	40(A)
* 42 Chlorobenzene-d5	117	9.431	9.431	(1.000)	263019	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.941	10.918	(1.160)	43748	4.17253	4.2
* 78 1,4-Dichlorobenzene-d4	152	12.183	12.172	(1.000)	94001	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.636	12.625	(1.037)	70225	4.54392	4.5(Q)

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111101.B\V5N2548.D
Report Date: 07-Nov-2011 13:10

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2548.D
Lab Smp Id: K2200-18A Client Smp ID: H30Y6
Inj Date : 01-NOV-2011 17:52
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-18A,,62672,
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

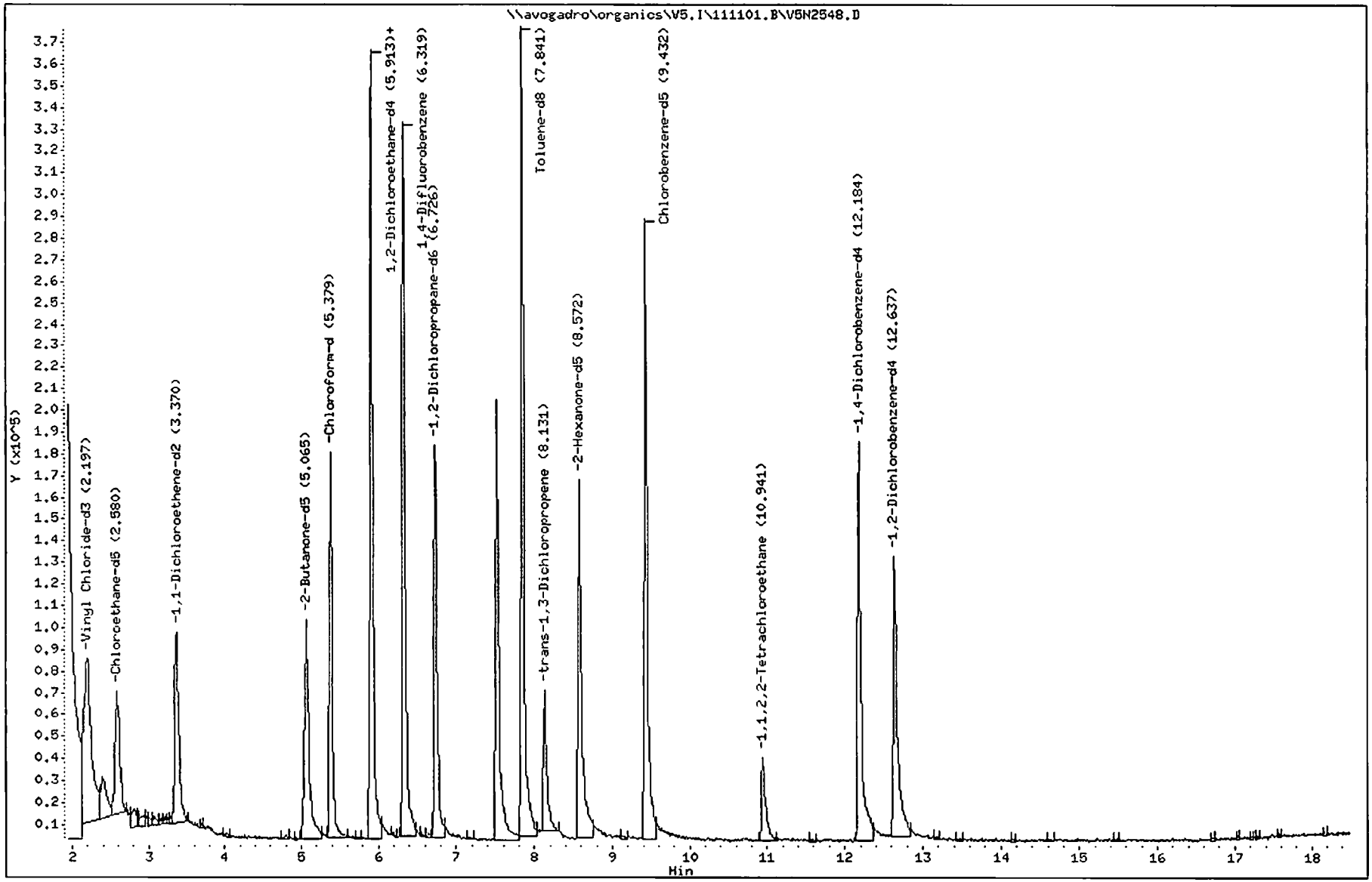
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 26 1,4-Difluorobenzene	6.319	830385	5.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.394	109647	0.66021790	0.66	0		0	26

Data File: \\avogadro\organics\V5.I\111101.B\V5N2548.D
Date : 01-NOV-2011 17:52
Client ID: H30Y6
Sample Info: 25ML,K2200-18A,,62672,
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i
Operator: SRC: LIMS
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111101.B\V5N2548.D

Date : 01-NOV-2011 17:52

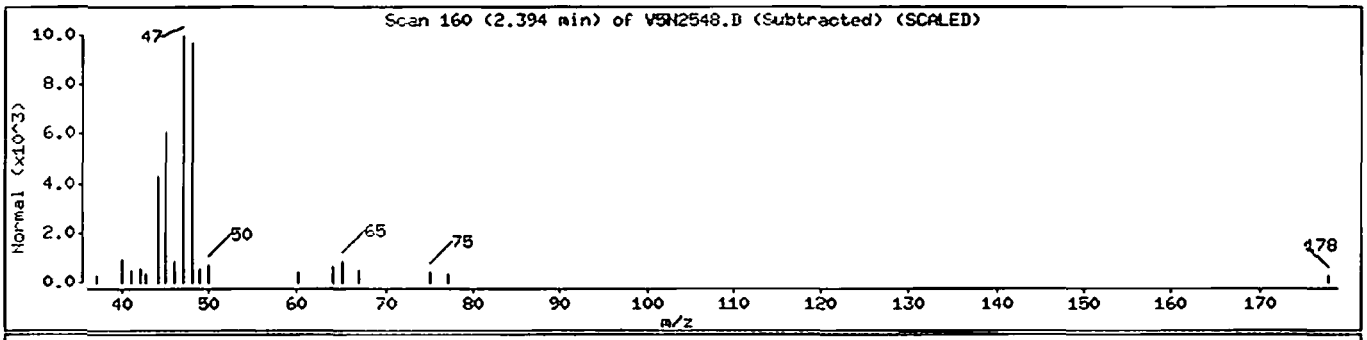
Client ID: H30Y6 Instrument: V5.i

Sample Info: 25ML,K2200-18A,,62672,

Purge Volume: 25.0 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



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.: H30Z6

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

Lab Code: MITKEM | Case No.: 41926 | Mod. Ref No.: | SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER | Lab Sample ID: K2200-19A

Sample wt/vol: 25.0 (g/mL) ML | Lab File ID: V5N2622.D

Level: (TRACE/LOW/MED) TRACE | Date Received: 10/28/2011

% Moisture: not dec. | Date Analyzed: 11/02/2011

GC Column: DB-624 | ID: 0.25 (mm) | Dilution Factor: 1.0

Soil Extract Volume: (uL) | Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Z6

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-19A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2622.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/02/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H3026

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-19A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2622.D

Level: (TRACE or LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/02/2011

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/L Purge Volume: 25.0 (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\111102A.B\V5N2622.D
Report Date: 07-Nov-2011 13:12

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111102A.B\V5N2622.D
Lab Smp Id: K2200-19A Client Smp ID: H30Z6
Inj Date : 02-NOV-2011 18:46
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-19A,,62673,
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111102A.B\V5_TVOA1359.m
Meth Date : 04-Nov-2011 15:45 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.191	2.179	(0.346)	175511	4.25796	4.3
$ 80 Chloroethane-d5	69	2.597	2.585	(0.411)	123055	4.52113	4.5
$ 81 1,1-Dichloroethene-d2	65	3.375	3.375	(0.534)	41760	4.40609	4.4(Q)
$ 82 2-Butanone-d5	46	5.082	5.071	(0.804)	164818	40.1021	40(AQ)
$ 83 Chloroform-d	84	5.384	5.384	(0.851)	176270	4.52697	4.5(Q)
$ 23 1,2-Dichloroethane-d4	65	5.895	5.895	(0.932)	63325	4.15924	4.2
$ 84 Benzene-d6	84	5.918	5.907	(0.627)	368338	5.08361	5.1
* 26 1,4-Difluorobenzene	114	6.325	6.325	(1.000)	360698	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.731	6.731	(0.713)	114739	4.44816	4.4
$ 33 Toluene-d8	98	7.846	7.846	(0.831)	325969	4.88734	4.9
$ 86 trans-1,3-Dichloropropene-d4	79	8.125	8.125	(0.861)	64378	4.39175	4.4
$ 87 2-Hexanone-d5	63	8.578	8.566	(0.909)	103018	39.0193	39(A)
* 42 Chlorobenzene-d5	117	9.437	9.425	(1.000)	258464	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.947	10.924	(1.160)	41899	4.06660	4.1
* 78 1,4-Dichlorobenzene-d4	152	12.178	12.166	(1.000)	94525	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.642	12.631	(1.038)	70802	4.55586	4.6(Q)

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111102A.B\V5N2622.D
Report Date: 07-Nov-2011 13:12

Spectrum Analytical, Inc. RI Division

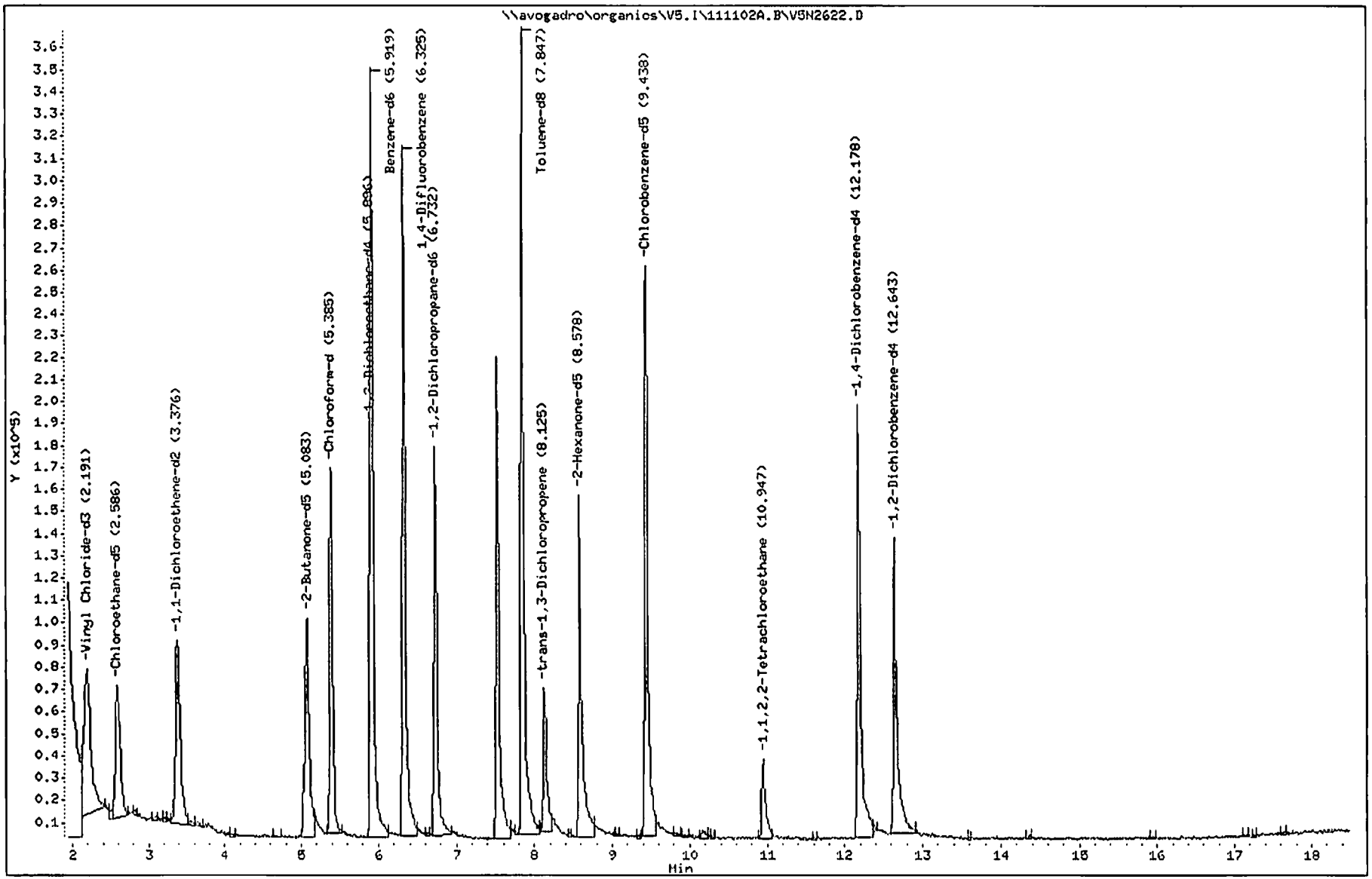
SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111102A.B\V5N2622.D
Lab Smp Id: K2200-19A Client Smp ID: H30Z6
Inj Date : 02-NOV-2011 18:46
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-19A,,62673,
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111102A.B\V5_TVOA1359.m
Meth Date : 04-Nov-2011 15:45 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111102A.B\V5N2622.D
Date : 02-NOV-2011 18:46
Client ID: H30Z6
Sample Info: 25ML,K2200-19A,,62673,
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.I
Operator: SRC: LIMS
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.: H30S7

Instrument ID: V5 Calibration Date(s): 10/15/2011 10/15/2011

Heated Purge: (Y/N) N Calibration Time(s): 11:28 13:24

Purge Volume: 25.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: RRF0.5 = V5N1681.D RRF001 = V5N1684.D

RRF005 = V5N1680.D RRF010 = V5N1683.D RRF020 = V5N1682.D

COMPOUND	RRF0.5	RRF001	RRF005	RRF010	RRF020	$\overline{RRF}$	%RSD
Dichlorodifluoromethane	0.560	0.606	0.633	0.563	0.583	0.589	5.2
Chloromethane	0.912	0.928	1.009	0.884	0.907	0.928	5.2
Vinyl chloride	0.669	0.706	0.722	0.657	0.636	0.678	5.2
Bromomethane	0.484	0.471	0.456	0.427	0.415	0.451	6.4
Chloroethane	0.325	0.376	0.364	0.338	0.331	0.347	6.4
Trichlorofluoromethane	0.666	0.747	0.729	0.704	0.721	0.713	4.3
1,1-Dichloroethene	0.426	0.453	0.440	0.426	0.418	0.433	3.2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.493	0.520	0.493	0.473	0.475	0.491	3.9
Acetone	0.047	0.044	0.047	0.044	0.043	0.045	3.6
Carbon disulfide	1.671	1.834	1.768	1.668	1.618	1.712	5.1
Methyl acetate	0.120	0.143	0.135	0.122	0.119	0.128	8.4
Methylene chloride	0.356	0.380	0.360	0.361	0.342	0.360	3.8
trans-1,2-Dichloroethene	0.389	0.406	0.421	0.394	0.369	0.395	4.9
Methyl tert-butyl ether	0.417	0.459	0.464	0.433	0.406	0.436	5.8
1,1-Dichloroethane	0.703	0.765	0.766	0.700	0.681	0.723	5.5
cis-1,2-Dichloroethene	0.363	0.383	0.388	0.346	0.338	0.364	6.1
2-Butanone	0.056	0.057	0.061	0.058	0.056	0.058	3.5
Bromochloromethane	0.138	0.142	0.145	0.138	0.132	0.139	3.5
Chloroform	0.581	0.620	0.620	0.561	0.541	0.585	6.0
1,1,1-Trichloroethane	0.658	0.761	0.727	0.704	0.643	0.699	7.0
Cyclohexane	0.769	1.011	0.956	0.896	0.846	0.896	10.5
Carbon tetrachloride	0.587	0.706	0.671	0.622	0.578	0.633	8.7
Benzene	1.479	1.913	1.721	1.615	1.491	1.644	11.0
1,2-Dichloroethane	0.261	0.273	0.273	0.257	0.247	0.262	4.2
Trichloroethene	0.455	0.531	0.528	0.488	0.444	0.489	8.2
Methylcyclohexane	0.711	0.821	0.789	0.685	0.649	0.731	9.8

Report 1,4-Dioxane for Low-Medium VOA analysis only SOM01.2 (6/2007)

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.: H30S7

Instrument ID: V5 Calibration Date(s): 10/15/2011 10/15/2011

Heated Purge: (Y/N) N Calibration Time(s): 11:28 13:24

Purge Volume: 25.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: RRF0.5 = V5N1681.D RRF001 = V5N1684.D

RRF005 = V5N1680.D RRF010 = V5N1683.D RRF020 = V5N1682.D

COMPOUND	RRF0.5	RRF001	RRF005	RRF010	RRF020	$\overline{RRF}$	%RSD
1,2-Dichloropropane	0.392	0.482	0.470	0.417	0.397	0.431	9.7
Bromodichloromethane	0.383	0.479	0.472	0.457	0.425	0.443	8.9
cis-1,3-Dichloropropene	0.429	0.540	0.571	0.527	0.478	0.509	11.0
4-Methyl-2-pentanone	0.165	0.194	0.193	0.170	0.161	0.177	9.0
Toluene	1.392	1.867	1.727	1.585	1.485	1.611	11.7
trans-1,3-Dichloropropene	0.324	0.355	0.380	0.359	0.328	0.349	6.7
1,1,2-Trichloroethane	0.156	0.218	0.208	0.197	0.184	0.193	12.6
Tetrachloroethene	0.294	0.381	0.365	0.354	0.316	0.342	10.5
2-Hexanone	0.106	0.122	0.129	0.115	0.112	0.117	7.8
Dibromochloromethane	0.259	0.300	0.300	0.289	0.263	0.282	7.0
1,2-Dibromoethane	0.171	0.216	0.231	0.216	0.205	0.208	10.8
Chlorobenzene	0.986	1.184	1.115	1.046	0.994	1.065	7.9
Ethylbenzene	1.523	2.014	1.842	1.704	1.635	1.744	10.9
m,p-Xylene	0.552	0.797	0.782	0.746	0.718	0.719	13.6
o-Xylene	0.644	0.788	0.723	0.687	0.661	0.701	8.2
Styrene	0.803	1.095	1.102	1.023	0.986	1.002	12.1
Bromoform	0.343	0.382	0.358	0.332	0.306	0.344	8.3
Isopropylbenzene	1.591	2.062	2.019	1.822	1.724	1.844	10.7
1,1,2,2-Tetrachloroethane	0.163	0.232	0.231	0.205	0.192	0.205	14.1
1,3-Dichlorobenzene	1.462	1.776	1.809	1.634	1.583	1.653	8.6
1,4-Dichlorobenzene	1.845	2.017	1.896	1.696	1.605	1.812	9.0
1,2-Dichlorobenzene	1.430	1.578	1.498	1.367	1.309	1.436	7.4
1,2-Dibromo-3-chloropropane	0.043	0.064	0.070	0.061	0.060	0.060	16.6
1,2,4-Trichlorobenzene	0.769	1.102	1.177	1.119	1.043	1.042	15.3
1,2,3-Trichlorobenzene	0.698	0.902	0.860	0.792	0.767	0.804	9.9

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.: H30S7

Instrument ID: V5 Calibration Date(s): 10/15/2011 10/15/2011

Heated Purge: (Y/N) N Calibration Time(s): 11:28 13:24

Purge Volume: 25.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: RRF0.5 = V5N1681.D RRF001 = V5N1684.D

RRF005 = V5N1680.D RRF010 = V5N1683.D RRF020 = V5N1682.D

COMPOUND	RRF0.5	RRF001	RRF005	RRF010	RRF020	$\overline{RRF}$	%RSD
Vinyl chloride-d3	0.566	0.585	0.591	0.565	0.550	0.571	2.9
Chloroethane-d5	0.392	0.375	0.386	0.372	0.362	0.377	3.1
1,1-Dichloroethene-d2	0.143	0.136	0.130	0.124	0.124	0.131	6.2
2-Butanone-d5	0.054	0.054	0.060	0.058	0.058	0.057	4.5
Chloroform-d	0.521	0.553	0.565	0.540	0.520	0.540	3.6
1,2-Dichloroethane-d4	0.197	0.219	0.226	0.211	0.202	0.211	5.7
Benzene-d6	1.252	1.526	1.496	1.427	1.307	1.402	8.5
1,2-Dichloropropane-d6	0.410	0.537	0.552	0.516	0.481	0.499	11.3
Toluene-d8	1.142	1.424	1.317	1.333	1.235	1.290	8.3
trans-1,3-Dichloropropene-d4	0.193	0.300	0.318	0.314	0.292	0.284	18.2
2-Hexanone-d5	0.041	0.050	0.057	0.055	0.053	0.051	11.9
1,1,2,2-Tetrachloroethane-d2	0.177	0.213	0.216	0.204	0.186	0.199	8.7
1,2-Dichlorobenzene-d4	0.819	0.900	0.848	0.771	0.772	0.822	6.6

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only SOM01.2 (6/2007)

Data File: \\avogadro\organics\V5.I\111015A.B\V5N1680.D
Report Date: 19-Oct-2011 09:46

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111015A.B\V5N1680.D
Lab Smp Id: VSTD005B5 Client Smp ID: VSTD005B5
Inj Date : 15-OCT-2011 11:28
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD005B5,VSTD005B5
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111015A.B\V5_TVOA1359.m
Meth Date : 17-Oct-2011 14:56 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 11:28 Cal File: V5N1680.D
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1359.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
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	1.911	1.893	(0.302)	309157	5.00000	5.4
	2 Chloromethane	50	2.039	2.044	(0.322)	492673	5.00000	5.4
S	79 Vinyl Chloride-d3	65	2.178	2.184	(0.344)	288782	5.00000	5.2
	3 Vinyl Chloride	62	2.189	2.195	(0.346)	352856	5.00000	5.3
	4 Bromomethane	94	2.526	2.520	(0.400)	222754	5.00000	5.1
S	80 Chloroethane-d5	69	2.584	2.590	(0.409)	188387	5.00000	5.1
	5 Chloroethane	64	2.619	2.625	(0.414)	178061	5.00000	5.3
	6 Trichlorofluoromethane	101	2.909	2.927	(0.460)	356398	5.00000	5.1
S	81 1,1-Dichloroethene-d2	65	3.386	3.368	(0.535)	63572	5.00000	5.0(Q)
	7 1,1-Dichloroethene	96	3.397	3.391	(0.537)	214995	5.00000	5.1
	8 1,1,2-Trichloro-1,2,2-trifluo	101	3.420	3.426	(0.541)	241056	5.00000	5.0
	9 Acetone	43	3.455	3.449	(0.546)	227258	50.0000	52
	10 Carbon Disulfide	76	3.618	3.612	(0.572)	863645	5.00000	5.2
	11 Methyl Acetate	43	3.769	3.775	(0.596)	66136	5.00000	5.3
	12 Methylene Chloride	84	3.862	3.856	(0.611)	176105	5.00000	5.0
	13 trans-1,2-Dichloroethene	96	4.129	4.123	(0.653)	205466	5.00000	5.3
	14 Methyl tert-Butyl Ether	73	4.140	4.135	(0.655)	226537	5.00000	5.3
	15 1,1-Dichloroethane	63	4.535	4.541	(0.717)	374247	5.00000	5.3
S	82 2-Butanone-d5	46	5.070	5.075	(0.802)	292912	50.0000	53
	17 cis-1,2-Dichloroethene	96	5.104	5.098	(0.807)	189698	5.00000	5.3
	120 2,2-Dichloropropane	77	5.104	5.098	(0.541)	287185	5.00000	5.3
	16 2-Butanone	43	5.128	5.122	(0.811)	298542	50.0000	53

Data File: \\avogadro\organics\V5.I\111015A.B\V5N1680.D
Report Date: 19-Oct-2011 09:46

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	18	Bromochloromethane	128	5.337	5.342	(0.844)	70764	5.00000	5.2
$	83	Chloroform-d	84	5.385	5.389	(0.853)	276006	5.00000	5.2
	19	Chloroform	83	5.406	5.400	(0.855)	303084	5.00000	5.3
	20	1,1,1-Trichloroethane	97	5.592	5.598	(0.593)	267042	5.00000	5.2
	21	Cyclohexane	56	5.650	5.644	(0.599)	350923	5.00000	5.3
	105	1,1-Dichloropropene	110	5.755	5.749	(0.610)	89713	5.00000	5.3
	22	Carbon Tetrachloride	117	5.755	5.749	(0.610)	246276	5.00000	5.3
$	23	1,2-Dichloroethane-d4	65	5.906	5.900	(0.934)	110514	5.00000	5.4
$	84	Benzene-d6	84	5.917	5.911	(0.627)	549404	5.00000	5.3
	25	Benzene	78	5.952	5.958	(0.631)	632067	5.00000	5.2
	24	1,2-Dichloroethane	62	5.975	5.969	(0.945)	133447	5.00000	5.2
*	26	1,4-Difluorobenzene	114	6.324	6.329	(1.000)	488589	5.00000	
	27	Trichloroethene	95	6.591	6.585	(0.698)	193808	5.00000	5.4
$	85	1,2-Dichloropropane-d6	67	6.730	6.736	(0.713)	202671	5.00000	5.5
	28	Methylcyclohexane	83	6.788	6.782	(0.719)	289539	5.00000	5.4
	29	1,2-Dichloropropane	63	6.823	6.817	(0.723)	172452	5.00000	5.4
	119	Dibromomethane	93	6.951	6.957	(1.099)	65781	5.00000	5.3
	30	Bromodichloromethane	83	7.102	7.096	(0.753)	173195	5.00000	5.3
	31	cis-1,3-Dichloropropene	75	7.566	7.560	(0.802)	209515	5.00000	5.6
	32	4-Methyl-2-Pentanone	43	7.717	7.723	(0.818)	708713	50.0000	55
$	33	Toluene-d8	98	7.845	7.839	(0.831)	483438	5.00000	5.1
	34	Toluene	91	7.915	7.920	(0.839)	634085	5.00000	5.4
$	86	trans-1,3-Dichloropropene-d4	79	8.124	8.118	(0.861)	116872	5.00000	5.6
	35	trans-1,3-Dichloropropene	75	8.159	8.153	(0.865)	139549	5.00000	5.4
	36	1,1,2-Trichloroethane	97	8.356	8.350	(0.886)	76287	5.00000	5.4
	37	Tetrachloroethene	164	8.507	8.501	(0.902)	134198	5.00000	5.3
	107	1,3-Dichloropropane	76	8.542	8.536	(1.351)	139387	5.00000	5.4
$	87	2-Hexanone-d5	63	8.565	8.571	(0.908)	207688	50.0000	55(Q)
	38	2-Hexanone	43	8.623	8.617	(0.914)	474537	50.0000	55
	39	Dibromochloromethane	129	8.786	8.780	(0.931)	110146	5.00000	5.3
	40	1,2-Dibromoethane	107	8.925	8.919	(0.946)	84814	5.00000	5.6
*	42	Chlorobenzene-d5	117	9.436	9.430	(1.000)	367174	5.00000	
	43	Chlorobenzene	112	9.459	9.465	(1.002)	409342	5.00000	5.2
	124	1,1,1,2-Tetrachloroethane	131	9.552	9.546	(1.510)	142476	5.00000	5.3
	44	Ethylbenzene	91	9.575	9.581	(1.015)	676273	5.00000	5.3
	45	m,p-Xylene	106	9.715	9.709	(1.030)	287081	5.00000	5.4
	46	o-Xylene	106	10.168	10.173	(1.078)	265403	5.00000	5.2
	47	Styrene	104	10.191	10.197	(1.080)	404689	5.00000	5.5
	48	Bromoform	173	10.423	10.417	(0.856)	54648	5.00000	5.2
	49	Isopropylbenzene	105	10.597	10.603	(1.123)	741267	5.00000	5.5
$	89	1,1,2,2-Tetrachloroethane-d2	84	10.923	10.928	(1.158)	79487	5.00000	5.4
	51	1,1,2,2-Tetrachloroethane	83	10.957	10.951	(1.161)	84935	5.00000	5.7
	113	Bromobenzene	156	10.981	10.975	(0.902)	137749	5.00000	5.5
	106	1,2,3-Trichloropropane	75	11.015	11.010	(0.905)	47736	5.00000	4.5(Q)
	123	n-Propylbenzene	120	11.085	11.091	(0.910)	194139	5.00000	5.5
	117	2-Chlorotoluene	126	11.190	11.195	(0.919)	173539	5.00000	5.3
	101	1,2,4-Trimethylbenzene	105	11.294	11.300	(0.928)	608147	5.00000	5.4
	118	4-Chlorotoluene	126	11.329	11.323	(0.930)	170233	5.00000	5.5(Q)
	116	tert-Butylbenzene	119	11.689	11.683	(0.960)	483241	5.00000	5.2
	102	1,3,5-Trimethylbenzene	105	11.747	11.753	(0.965)	589182	5.00000	5.4
	115	sec-Butylbenzene	105	11.956	11.950	(0.982)	804574	5.00000	5.2
	52	1,3-Dichlorobenzene	146	12.095	12.090	(0.993)	275855	5.00000	5.5
M	41	Xylene (total)	106				552484	5.00000	11
	122	P-Isopropyltoluene	119	12.130	12.124	(0.996)	607778	5.00000	5.3

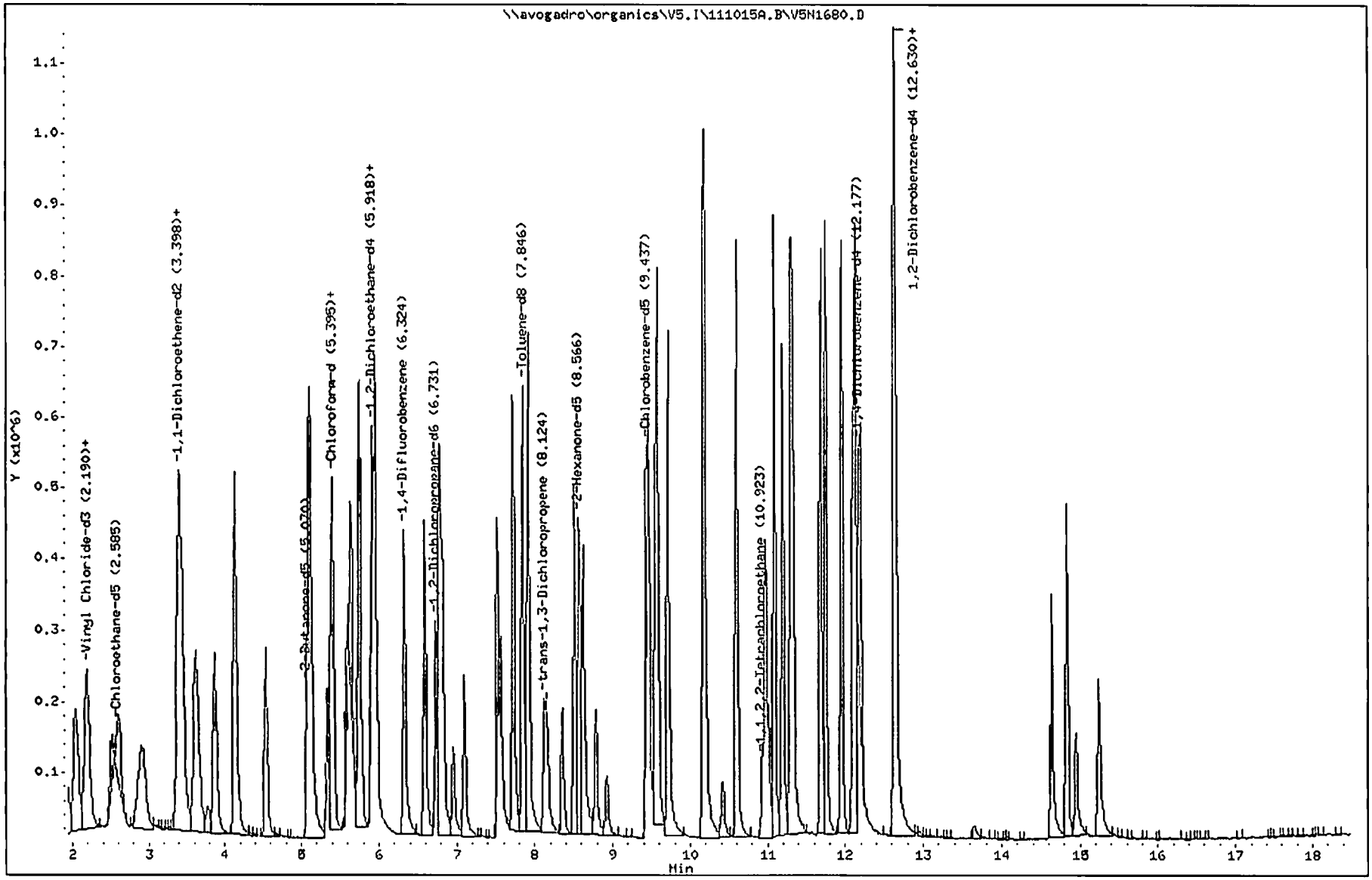
Data File: \\avogadro\organics\V5.I\111015A.B\V5N1680.D
Report Date: 19-Oct-2011 09:46

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
* 78	1,4-Dichlorobenzene-d4	152	12.177	12.171	(1.000)	152515	5.00000	
53	1,4-Dichlorobenzene	146	12.200	12.206	(1.002)	289183	5.00000	5.2
114	n-Butylbenzene	91	12.630	12.635	(1.037)	600153	5.00000	5.5
$ 90	1,2-Dichlorobenzene-d4	152	12.630	12.635	(1.037)	129345	5.00000	5.2
54	1,2-Dichlorobenzene	146	12.653	12.659	(1.039)	228417	5.00000	5.2
55	1,2-Dibromo-3-chloropropane	75	13.652	13.657	(1.121)	10647	5.00000	5.8(Q)
56	1,2,4-Trichlorobenzene	180	14.639	14.644	(1.202)	179547	5.00000	5.6
121	Hexachlorobutadiene	225	14.836	14.830	(1.218)	121658	5.00000	5.1
97	Naphthalene	128	14.952	14.946	(1.228)	214252	5.00000	5.9
77	1,2,3-Trichlorobenzene	180	15.243	15.248	(1.252)	131137	5.00000	5.3

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111015A.B\V5N1680.D
Date : 15-OCT-2011 11:28
Client ID: VSTD005B5
Instrument: V5.i
Sample Info: 25ML,VSTD005B5,VSTD005B5
Purge Volume: 25.0
Operator: SRC:
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111015A.B\V5N1681.D
Report Date: 19-Oct-2011 09:46

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111015A.B\V5N1681.D
Lab Smp Id: VSTD0.5B5 Client Smp ID: VSTD0.5B5
Inj Date : 15-OCT-2011 11:57
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD0.5B5,VSTD0.5B5
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111015A.B\V5_TVOA1359.m
Meth Date : 17-Oct-2011 14:56 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 11:57 Cal File: V5N1681.D
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1359.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
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	1.895	1.893	(0.299)	28806	0.50000	0.48(a)
2	Chloromethane	50	2.023	2.044	(0.320)	46898	0.50000	0.49(a)
$ 79	Vinyl Chloride-d3	65	2.162	2.184	(0.342)	29073	0.50000	0.49(a)
3	Vinyl Chloride	62	2.173	2.195	(0.343)	34367	0.50000	0.49(a)
4	Bromomethane	94	2.499	2.520	(0.395)	24859	0.50000	0.54
$ 80	Chloroethane-d5	69	2.580	2.590	(0.408)	20150	0.50000	0.52
5	Chloroethane	64	2.603	2.625	(0.411)	16709	0.50000	0.47(a)
6	Trichlorofluoromethane	101	2.917	2.927	(0.461)	34240	0.50000	0.47(a)
$ 81	1,1-Dichloroethene-d2	65	3.393	3.368	(0.536)	7340	0.50000	0.54(Q)
7	1,1-Dichloroethene	96	3.393	3.391	(0.536)	21886	0.50000	0.49(a)
8	1,1,2-Trichloro-1,2,2-trifluo	101	3.428	3.426	(0.541)	25327	0.50000	0.50
9	Acetone	43	3.463	3.449	(0.547)	24112	5.00000	5.2
10	Carbon Disulfide	76	3.614	3.612	(0.571)	85870	0.50000	0.49(a)
11	Methyl Acetate	43	3.788	3.775	(0.598)	6167	0.50000	0.47(a)
12	Methylene Chloride	84	3.869	3.856	(0.611)	18275	0.50000	0.49(a)
13	trans-1,2-Dichloroethene	96	4.136	4.123	(0.653)	19989	0.50000	0.49(a)
14	Methyl tert-Butyl Ether	73	4.148	4.135	(0.655)	21439	0.50000	0.48(a)
15	1,1-Dichloroethane	63	4.543	4.541	(0.718)	36155	0.50000	0.49(a)
$ 82	2-Butanone-d5	46	5.088	5.075	(0.804)	27945	5.00000	4.8(a)
17	cis-1,2-Dichloroethene	96	5.112	5.098	(0.807)	18682	0.50000	0.50
120	2,2-Dichloropropane	77	5.100	5.098	(0.541)	28375	0.50000	0.46(a)
16	2-Butanone	43	5.158	5.122	(0.815)	28820	5.00000	4.9(a)

Data File: \\avogadro\organics\V5.I\111015A.B\V5N1681.D
Report Date: 19-Oct-2011 09:46

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	18	Bromochloromethane	128	5.344	5.342	(0.844)	7078	0.50000	0.50(Q)
S	83	Chloroform-d	84	5.390	5.389	(0.851)	26803	0.50000	0.48(a)
	19	Chloroform	83	5.414	5.400	(0.855)	29876	0.50000	0.50
	20	1,1,1-Trichloroethane	97	5.599	5.598	(0.594)	27320	0.50000	0.47(a)
	21	Cyclohexane	56	5.646	5.644	(0.599)	31937	0.50000	0.43(a)
	105	1,1-Dichloropropene	110	5.762	5.749	(0.611)	8338	0.50000	0.43(a)
	22	Carbon Tetrachloride	117	5.750	5.749	(0.610)	24353	0.50000	0.46(a)
$	23	1,2-Dichloroethane-d4	65	5.913	5.900	(0.934)	10144	0.50000	0.47(aQ)
S	84	Benzene-d6	84	5.925	5.911	(0.628)	51961	0.50000	0.45(a)
	25	Benzene	78	5.959	5.958	(0.632)	61398	0.50000	0.45(a)
	24	1,2-Dichloroethane	62	5.983	5.969	(0.945)	13416	0.50000	0.50
*	26	1,4-Difluorobenzene	114	6.331	6.329	(1.000)	513989	5.00000	
	27	Trichloroethene	95	6.610	6.585	(0.701)	18867	0.50000	0.46(a)
$	85	1,2-Dichloropropane-d6	67	6.737	6.736	(0.714)	17012	0.50000	0.41(a)
	28	Methylcyclohexane	83	6.784	6.782	(0.719)	29531	0.50000	0.49(a)
	29	1,2-Dichloropropane	63	6.830	6.817	(0.724)	16263	0.50000	0.45(Ta)
	119	Dibromomethane	93	6.981	6.957	(1.103)	6393	0.50000	0.49(a)
	30	Bromodichloromethane	83	7.109	7.096	(0.754)	15896	0.50000	0.43(a)
	31	cis-1,3-Dichloropropene	75	7.585	7.560	(0.804)	17603	0.50000	0.42(a)
	32	4-Methyl-2-Pentanone	43	7.748	7.723	(0.821)	68608	5.00000	4.7(a)
$	33	Toluene-d8	98	7.864	7.839	(0.834)	47395	0.50000	0.44(a)
	34	Toluene	91	7.934	7.920	(0.841)	57798	0.50000	0.43(a)
$	86	trans-1,3-Dichloropropene-d4	79	8.166	8.118	(0.866)	8028	0.50000	0.34(a)
	35	trans-1,3-Dichloropropene	75	8.189	8.153	(0.868)	13432	0.50000	0.46(a)
	36	1,1,2-Trichloroethane	97	8.363	8.350	(0.887)	6460	0.50000	0.40(aQ)
	37	Tetrachloroethene	164	8.514	8.501	(0.903)	12219	0.50000	0.43(a)
	107	1,3-Dichloropropane	76	8.572	8.536	(1.354)	12257	0.50000	0.45(a)
$	87	2-Hexanone-d5	63	8.619	8.571	(0.914)	17091	5.00000	4.0(aH)
	38	2-Hexanone	43	8.677	8.617	(0.920)	43922	5.00000	4.5(a)
	39	Dibromochloromethane	129	8.805	8.780	(0.934)	10755	0.50000	0.46(a)
	40	1,2-Dibromoethane	107	8.944	8.919	(0.948)	7102	0.50000	0.41(Ta)
*	42	Chlorobenzene-d5	117	9.432	9.430	(1.000)	415099	5.00000	
	43	Chlorobenzene	112	9.467	9.465	(1.004)	40925	0.50000	0.46(a)
	124	1,1,1,2-Tetrachloroethane	131	9.559	9.546	(1.510)	13244	0.50000	0.47(a)
	44	Ethylbenzene	91	9.594	9.581	(1.017)	63204	0.50000	0.44(a)
	45	m,p-Xylene	106	9.745	9.709	(1.033)	22931	0.50000	0.38(aQ)
	46	o-Xylene	106	10.198	10.173	(1.081)	26731	0.50000	0.46(a)
	47	Styrene	104	10.245	10.197	(1.086)	33352	0.50000	0.40(a)
	48	Bromoform	173	10.442	10.417	(0.857)	5589	0.50000	0.50
	49	Isopropylbenzene	105	10.616	10.603	(1.126)	66058	0.50000	0.43(a)
$	89	1,1,2,2-Tetrachloroethane-d2	84	10.941	10.928	(1.160)	7350	0.50000	0.44(a)
	51	1,1,2,2-Tetrachloroethane	83	10.976	10.951	(1.164)	6780	0.50000	0.40(a)
	113	Bromobenzene	156	11.011	10.975	(0.904)	10935	0.50000	0.41(a)
	106	1,2,3-Trichloropropane	75	11.046	11.010	(0.907)	6719	0.50000	0.60(Q)
	123	n-Propylbenzene	120	11.104	11.091	(0.911)	15408	0.50000	0.41(a)
	117	2-Chlorotoluene	126	11.208	11.195	(0.920)	15332	0.50000	0.44(aQ)
	101	1,2,4-Trimethylbenzene	105	11.313	11.300	(0.929)	56178	0.50000	0.46(a)
	118	4-Chlorotoluene	126	11.371	11.323	(0.933)	13172	0.50000	0.40(a)
	116	tert-Butylbenzene	119	11.696	11.683	(0.960)	44733	0.50000	0.45(a)
	102	1,3,5-Trimethylbenzene	105	11.766	11.753	(0.966)	53723	0.50000	0.46(a)
	115	sec-Butylbenzene	105	11.963	11.950	(0.982)	78446	0.50000	0.48(a)
	52	1,3-Dichlorobenzene	146	12.114	12.090	(0.994)	23858	0.50000	0.44(a)
M	41	Xylene (total)	106				49662	0.50000	0.84
	122	P-Isopropyltoluene	119	12.149	12.124	(0.997)	56066	0.50000	0.46(a)

Data File: \\avogadro\organics\V5.I\111015A.B\V5N1681.D
Report Date: 19-Oct-2011 09:46

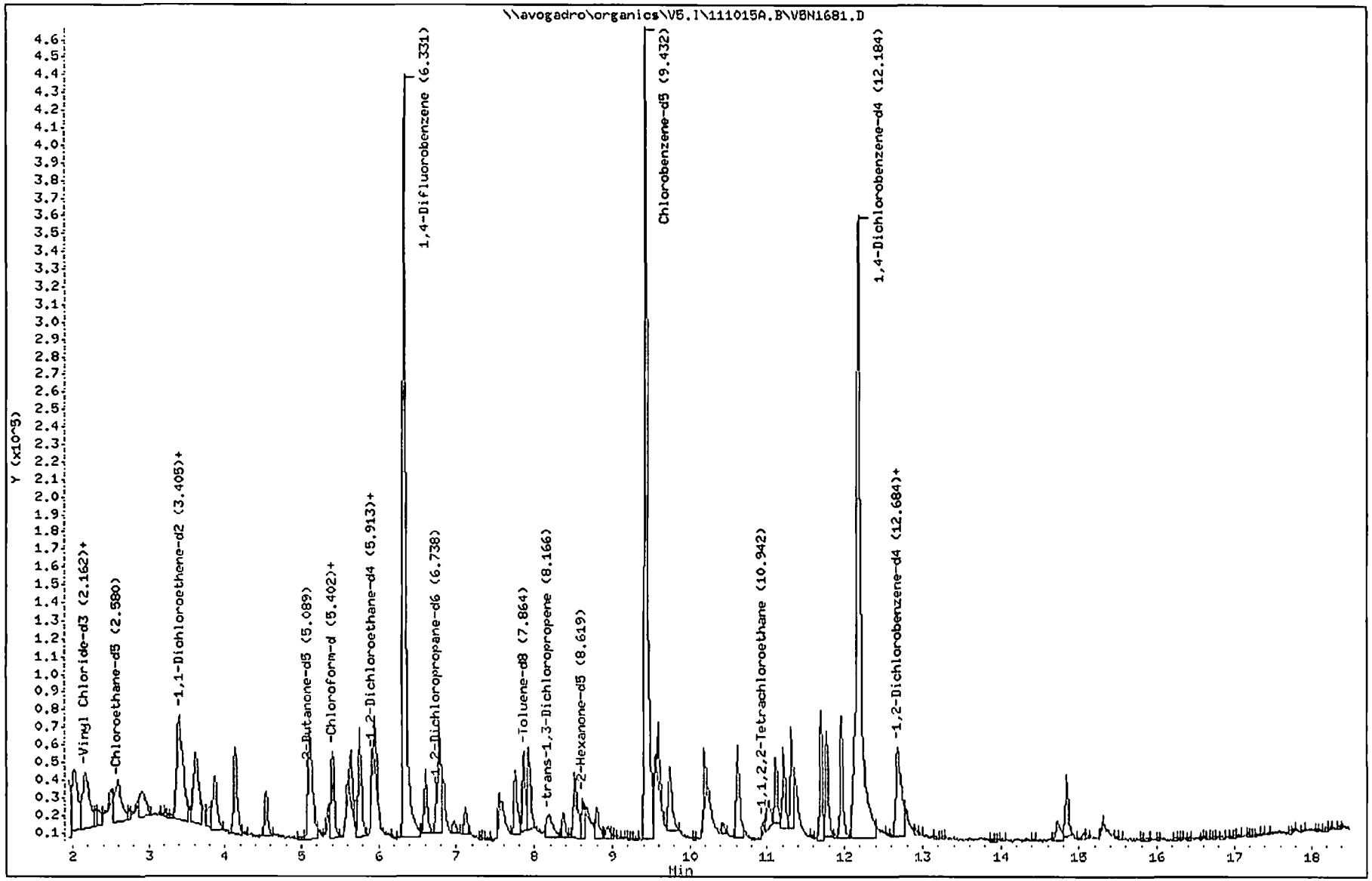
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
* 78	1,4-Dichlorobenzene-d4	152	12.184	12.171	(1.000)	163174	5.00000	
53	1,4-Dichlorobenzene	146	12.219	12.206	(1.003)	30106	0.50000	0.51
114	n-Butylbenzene	91	12.695	12.635	(1.042)	51241	0.50000	0.44(a)
$ 90	1,2-Dichlorobenzene-d4	152	12.672	12.635	(1.040)	13357	0.50000	0.50
54	1,2-Dichlorobenzene	146	12.695	12.659	(1.042)	23337	0.50000	0.50
55	1,2-Dibromo-3-chloropropane	75	13.821	13.657	(1.134)	708	0.50000	0.36(TaQ)
56	1,2,4-Trichlorobenzene	180	14.727	14.644	(1.209)	12554	0.50000	0.37(a)
121	Hexachlorobutadiene	225	14.843	14.830	(1.218)	11421	0.50000	0.45(a)
97	Naphthalene	128	15.052	14.946	(1.235)	10112	0.50000	0.26(a)
77	1,2,3-Trichlorobenzene	180	15.296	15.248	(1.255)	11395	0.50000	0.43(a)

QC Flag Legend

T - Target compound detected outside RT window.
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\V5.I\111015A.B\V5N1681.D
Date : 15-OCT-2011 11:57
Client ID: VSTD0.5B5
Sample Info: 25ML,VSTD0.5B5,VSTD0.5B5
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i
Operator: SRC:
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111015A.B\V5N1682.D
Report Date: 19-Oct-2011 09:46

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111015A.B\V5N1682.D
Lab Smp Id: VSTD020B5 Client Smp ID: VSTD020B5
Inj Date : 15-OCT-2011 12:26
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD020B5,VSTD020B5
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111015A.B\V5_TVOA1359.m
Meth Date : 17-Oct-2011 14:56 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 12:26 Cal File: V5N1682.D
Als bottle: 3 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1359.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
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	1.900	1.893	(0.300)	1186564	30.0000	20
	2 Chloromethane	50	2.051	2.044	(0.324)	1846481	20.0000	20
$	79 Vinyl Chloride-d3	65	2.190	2.184	(0.346)	1120609	20.0000	19
	3 Vinyl Chloride	62	2.202	2.195	(0.348)	1295383	20.0000	19
	4 Bromomethane	94	2.516	2.520	(0.398)	845711	20.0000	18
$	80 Chloroethane-d5	69	2.585	2.590	(0.409)	737395	20.0000	19
	5 Chloroethane	64	2.609	2.625	(0.412)	673556	20.0000	19
	6 Trichlorofluoromethane	101	2.899	2.927	(0.458)	1469249	20.0000	20(A)
$	81 1,1-Dichloroethene-d2	65	3.375	3.368	(0.534)	252877	20.0000	19(Q)
	7 1,1-Dichloroethene	96	3.387	3.391	(0.535)	851386	20.0000	19
	8 1,1,2-Trichloro-1,2,2-trifluo	101	3.421	3.426	(0.541)	967033	20.0000	19
	9 Acetone	43	3.445	3.449	(0.545)	884087	200.000	190
	10 Carbon Disulfide	76	3.607	3.612	(0.570)	3295343	20.0000	19
	11 Methyl Acetate	43	3.758	3.775	(0.594)	243115	20.0000	19
	12 Methylene Chloride	84	3.851	3.856	(0.609)	696781	20.0000	19
	13 trans-1,2-Dichloroethene	96	4.118	4.123	(0.651)	750477	20.0000	19
	14 Methyl tert-Butyl Ether	73	4.130	4.135	(0.653)	827236	20.0000	19
	15 1,1-Dichloroethane	63	4.525	4.541	(0.715)	1387005	20.0000	19
$	82 2-Butanone-d5	46	5.059	5.075	(0.800)	1179759	200.000	200(A)
	17 cis-1,2-Dichloroethene	96	5.094	5.098	(0.805)	687439	20.0000	19
	120 2,2-Dichloropropane	77	5.105	5.098	(0.542)	1079302	20.0000	18
	16 2-Butanone	43	5.117	5.122	(0.809)	1149412	200.000	200

Data File: \\avogadro\organics\V5.I\111015A.B\V5N1682.D
Report Date: 19-Oct-2011 09:46

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	18	Bromochloromethane	128	5.326	5.342	(0.842)	268691	20.0000	19
S	83	Chloroform-d	84	5.384	5.389	(0.851)	1058256	20.0000	19
	19	Chloroform	83	5.407	5.400	(0.855)	1101320	20.0000	18
	20	1,1,1-Trichloroethane	97	5.593	5.598	(0.593)	1018058	20.0000	18
	21	Cyclohexane	56	5.640	5.644	(0.598)	1338429	20.0000	19
	105	1,1-Dichloropropene	110	5.744	5.749	(0.609)	338415	20.0000	18
	22	Carbon Tetrachloride	117	5.744	5.749	(0.609)	914299	20.0000	18
S	23	1,2-Dichloroethane-d4	65	5.895	5.900	(0.932)	410540	20.0000	19
S	84	Benzene-d6	84	5.907	5.911	(0.627)	2068668	20.0000	19
	25	Benzene	78	5.953	5.958	(0.632)	2359029	20.0000	18
	24	1,2-Dichloroethane	62	5.965	5.969	(0.943)	503728	20.0000	19
*	26	1,4-Difluorobenzene	114	6.325	6.329	(1.000)	509114	5.00000	
	27	Trichloroethene	95	6.592	6.585	(0.699)	703235	20.0000	18
S	85	1,2-Dichloropropane-d6	67	6.731	6.736	(0.714)	760970	20.0000	19
	28	Methylcyclohexane	83	6.778	6.782	(0.719)	1026577	20.0000	18
	29	1,2-Dichloropropane	63	6.812	6.817	(0.723)	627598	20.0000	18
	119	Dibromomethane	93	6.940	6.957	(1.097)	246991	20.0000	19
	30	Bromodichloromethane	83	7.091	7.096	(0.752)	672121	20.0000	19
	31	cis-1,3-Dichloropropene	75	7.556	7.560	(0.802)	756221	20.0000	19
	32	4-Methyl-2-Pentanone	43	7.718	7.723	(0.819)	2545567	200.000	180
S	33	Toluene-d8	98	7.846	7.839	(0.832)	1954984	20.0000	19
	34	Toluene	91	7.916	7.920	(0.840)	2350527	20.0000	18
S	86	trans-1,3-Dichloropropene-d4	79	8.113	8.118	(0.861)	462790	20.0000	21(A)
	35	trans-1,3-Dichloropropene	75	8.148	8.153	(0.864)	519621	20.0000	19
	36	1,1,2-Trichloroethane	97	8.345	8.350	(0.885)	291217	20.0000	19
	37	Tetrachloroethene	164	8.508	8.501	(0.903)	500633	20.0000	18
	107	1,3-Dichloropropane	76	8.531	8.536	(1.349)	521231	20.0000	20
S	87	2-Hexanone-d5	63	8.566	8.571	(0.909)	831479	200.000	210(AQ)
	38	2-Hexanone	43	8.613	8.617	(0.914)	1774442	200.000	190
	39	Dibromochloromethane	129	8.787	8.780	(0.932)	416484	20.0000	19
	40	1,2-Dibromoethane	107	8.914	8.919	(0.946)	324781	20.0000	20
*	42	Chlorobenzene-d5	117	9.425	9.430	(1.000)	395616	5.00000	
	43	Chlorobenzene	112	9.460	9.465	(1.004)	1572184	20.0000	19
	124	1,1,1,2-Tetrachloroethane	131	9.553	9.546	(1.510)	529737	20.0000	19
	44	Ethylbenzene	91	9.576	9.581	(1.016)	2588029	20.0000	19
	45	m,p-Xylene	106	9.716	9.709	(1.031)	1136898	20.0000	20
	46	o-Xylene	106	10.169	10.173	(1.079)	1045399	20.0000	19
	47	Styrene	104	10.192	10.197	(1.081)	1560720	20.0000	20
	48	Bromoform	173	10.413	10.417	(0.856)	206529	20.0000	18
	49	Isopropylbenzene	105	10.598	10.603	(1.124)	2728672	20.0000	19
S	89	1,1,2,2-Tetrachloroethane-d2	84	10.924	10.928	(1.159)	293725	20.0000	19
	51	1,1,2,2-Tetrachloroethane	83	10.958	10.951	(1.163)	303089	20.0000	19
	113	Bromobenzene	156	10.970	10.975	(0.902)	549054	20.0000	20
	106	1,2,3-Trichloropropane	75	11.005	11.010	(0.905)	194914	20.0000	17(Q)
	123	n-Propylbenzene	120	11.086	11.091	(0.911)	758411	20.0000	20(Q)
	117	2-Chlorotoluene	126	11.191	11.195	(0.920)	699847	20.0000	19(Q)
	101	1,2,4-Trimethylbenzene	105	11.295	11.300	(0.928)	2318317	20.0000	19
	118	4-Chlorotoluene	126	11.318	11.323	(0.930)	678616	20.0000	20(Q)
	116	tert-Butylbenzene	119	11.690	11.683	(0.961)	1990009	20.0000	19
	102	1,3,5-Trimethylbenzene	105	11.748	11.753	(0.966)	2283278	20.0000	19
	115	sec-Butylbenzene	105	11.957	11.950	(0.983)	3147235	20.0000	18
	52	1,3-Dichlorobenzene	146	12.096	12.090	(0.994)	1069153	20.0000	19
M	41	Xylene (total)	106				2182297	20.0000	39
	122	P-Isopropyltoluene	119	12.131	12.124	(0.997)	2432728	20.0000	19

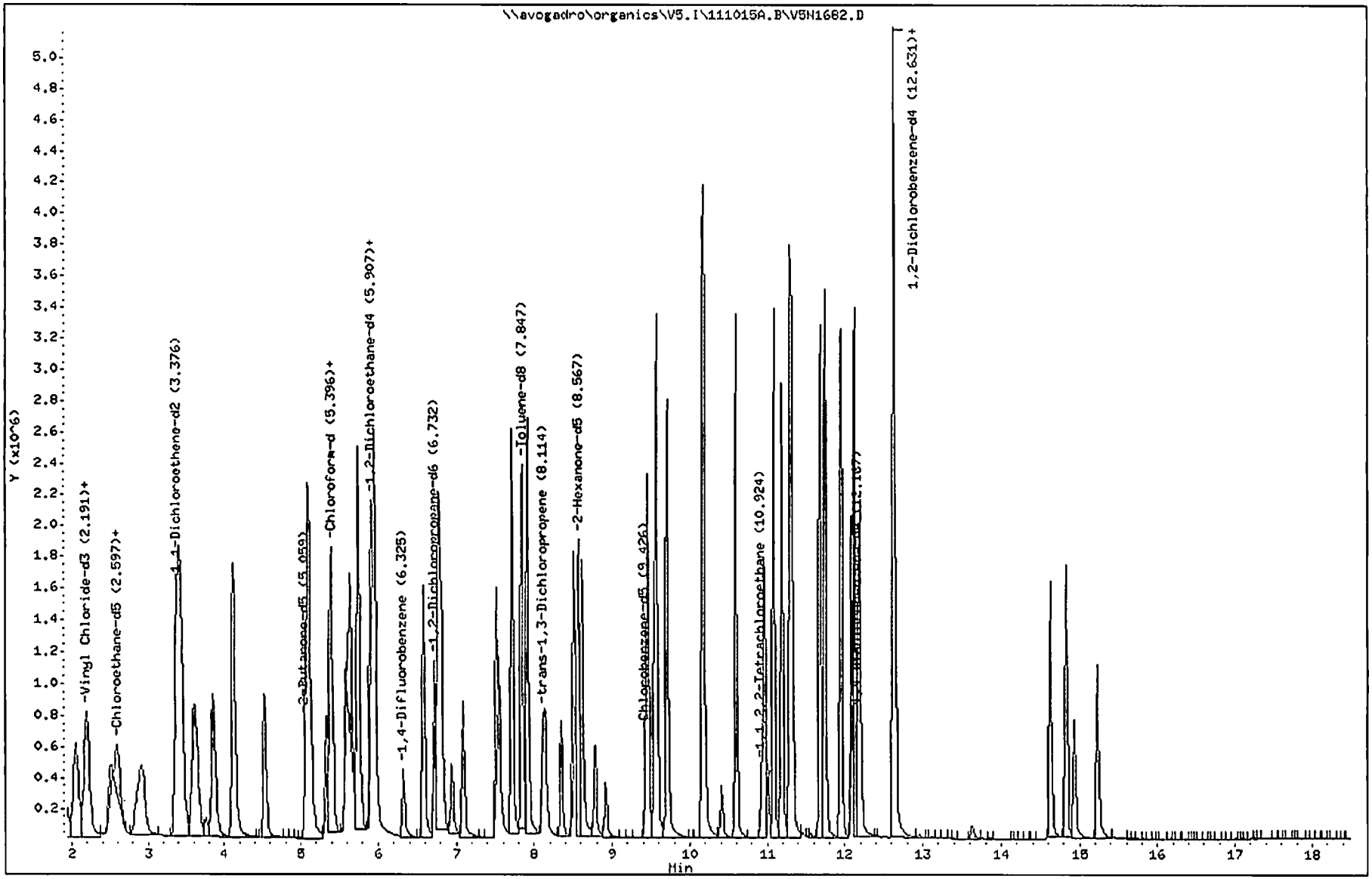
Data File: \\avogadro\organics\V5.I\111015A.B\V5N1682.D
Report Date: 19-Oct-2011 09:46

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
* 78	1,4-Dichlorobenzene-d4	152	12.166	12.171	(1.000)	168830	5.00000	(Q)
53	1,4-Dichlorobenzene	146	12.201	12.206	(1.003)	1083816	20.0000	18
114	n-Butylbenzene	91	12.631	12.635	(1.038)	2266600	20.0000	19
$ 90	1,2-Dichlorobenzene-d4	152	12.631	12.635	(1.038)	521586	20.0000	19
54	1,2-Dichlorobenzene	146	12.654	12.659	(1.040)	884247	20.0000	18
55	1,2-Dibromo-3-chloropropane	75	13.618	13.657	(1.119)	40566	20.0000	20(AQ)
56	1,2,4-Trichlorobenzene	180	14.628	14.644	(1.202)	704532	20.0000	20(A)
121	Hexachlorobutadiene	225	14.837	14.830	(1.220)	483559	20.0000	18
97	Naphthalene	128	14.942	14.946	(1.228)	909233	20.0000	23(A)
77	1,2,3-Trichlorobenzene	180	15.232	15.248	(1.252)	518136	20.0000	19

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111015A.B\V5N1682.D
Date : 15-OCT-2011 12:26
Client ID: VSTD020B5
Instrument: V5.i
Sample Info: 25ML,VSTD020B5,VSTD020B5
Purge Volume: 25.0
Operator: SRC:
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111015A.B\V5N1683.D
Report Date: 19-Oct-2011 09:46

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111015A.B\V5N1683.D
Lab Smp Id: VSTD010B5 Client Smp ID: VSTD010B5
Inj Date : 15-OCT-2011 12:55
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD010B5,VSTD010B5
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111015A.B\V5_TVOA1359.m
Meth Date : 17-Oct-2011 14:56 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 12:55 Cal File: V5N1683.D
Als bottle: 4 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1359.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
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	1.894	1.893	(0.300)	627610	10.0000	9.6
2	Chloromethane	50	2.045	2.044	(0.324)	985653	10.0000	9.5
$ 79	Vinyl Chloride-d3	65	2.184	2.184	(0.346)	630294	10.0000	9.9
3	Vinyl Chloride	62	2.196	2.195	(0.348)	733059	10.0000	9.7
4	Bromomethane	94	2.510	2.520	(0.397)	476876	10.0000	9.5
$ 80	Chloroethane-d5	69	2.579	2.590	(0.408)	414902	10.0000	9.9
5	Chloroethane	64	2.614	2.625	(0.414)	377300	10.0000	9.8
6	Trichlorofluoromethane	101	2.904	2.927	(0.460)	784902	10.0000	9.9
$ 81	1,1-Dichloroethene-d2	65	3.369	3.368	(0.533)	137969	10.0000	9.4(Q)
7	1,1-Dichloroethene	96	3.392	3.391	(0.537)	475171	10.0000	9.8
8	1,1,2-Trichloro-1,2,2-trifluo	101	3.415	3.426	(0.541)	527354	10.0000	9.6
9	Acetone	43	3.450	3.449	(0.546)	487333	100.000	97
10	Carbon Disulfide	76	3.613	3.612	(0.572)	1860882	10.0000	9.7
11	Methyl Acetate	43	3.764	3.775	(0.596)	136304	10.0000	9.5
12	Methylene Chloride	84	3.857	3.856	(0.610)	402517	10.0000	10
13	trans-1,2-Dichloroethene	96	4.124	4.123	(0.653)	439156	10.0000	10
14	Methyl tert-Butyl Ether	73	4.135	4.135	(0.655)	482906	10.0000	9.9
15	1,1-Dichloroethane	63	4.530	4.541	(0.717)	781448	10.0000	9.7
$ 82	2-Butanone-d5	46	5.065	5.075	(0.802)	651789	100.000	100
17	cis-1,2-Dichloroethene	96	5.099	5.098	(0.807)	385547	10.0000	9.5
120	2,2-Dichloropropane	77	5.099	5.098	(0.541)	604214	10.0000	10
16	2-Butanone	43	5.123	5.122	(0.811)	643992	100.000	100

Data File: \\avogadro\organics\V5.I\111015A.B\V5N1683.D
Report Date: 19-Oct-2011 09:46

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	18	Bromochloromethane	128	5.332	5.342	(0.844)	153645	10.0000	9.9
$	83	Chloroform-d	84	5.378	5.389	(0.851)	602192	10.0000	10
	19	Chloroform	83	5.401	5.400	(0.855)	626079	10.0000	9.6
	20	1,1,1-Trichloroethane	97	5.587	5.598	(0.592)	574494	10.0000	10
	21	Cyclohexane	56	5.645	5.644	(0.599)	731095	10.0000	10
	105	1,1-Dichloropropene	110	5.738	5.749	(0.608)	194285	10.0000	10
	22	Carbon Tetrachloride	117	5.750	5.749	(0.610)	507017	10.0000	9.8
$	23	1,2-Dichloroethane-d4	65	5.889	5.900	(0.932)	235055	10.0000	10
$	84	Benzene-d6	84	5.912	5.911	(0.627)	1163894	10.0000	10
	25	Benzene	78	5.947	5.958	(0.631)	1317020	10.0000	9.8
	24	1,2-Dichloroethane	62	5.970	5.969	(0.945)	286337	10.0000	9.8
*	26	1,4-Difluorobenzene	114	6.319	6.329	(1.000)	557807	5.00000	
	27	Trichloroethene	95	6.586	6.585	(0.698)	397779	10.0000	10
$	85	1,2-Dichloropropane-d6	67	6.725	6.736	(0.713)	420653	10.0000	10
	28	Methylcyclohexane	83	6.783	6.782	(0.719)	558709	10.0000	9.4
	29	1,2-Dichloropropane	63	6.818	6.817	(0.723)	339743	10.0000	9.7
	119	Dibromomethane	93	6.946	6.957	(1.099)	140915	10.0000	10
	30	Bromodichloromethane	83	7.097	7.096	(0.753)	372856	10.0000	10
	31	cis-1,3-Dichloropropene	75	7.561	7.560	(0.802)	429903	10.0000	10
	32	4-Methyl-2-Pentanone	43	7.724	7.723	(0.819)	1389638	100.000	96
$	33	Toluene-d8	98	7.840	7.839	(0.831)	1087461	10.0000	10
	34	Toluene	91	7.910	7.920	(0.839)	1292490	10.0000	9.8
$	86	trans-1,3-Dichloropropene-d4	79	8.119	8.118	(0.861)	256059	10.0000	11
	35	trans-1,3-Dichloropropene	75	8.142	8.153	(0.863)	292633	10.0000	10
	36	1,1,2-Trichloroethane	97	8.351	8.350	(0.885)	161009	10.0000	10
	37	Tetrachloroethene	164	8.502	8.501	(0.901)	288523	10.0000	10
	107	1,3-Dichloropropane	76	8.537	8.536	(1.351)	293237	10.0000	10
$	87	2-Hexanone-d5	63	8.560	8.571	(0.908)	450245	100.000	110(Q)
	38	2-Hexanone	43	8.618	8.617	(0.914)	939978	100.000	99
	39	Dibromochloromethane	129	8.781	8.780	(0.931)	235844	10.0000	10
	40	1,2-Dibromoethane	107	8.920	8.919	(0.946)	176298	10.0000	10
*	42	Chlorobenzene-d5	117	9.431	9.430	(1.000)	407777	5.00000	
	43	Chlorobenzene	112	9.454	9.465	(1.002)	853211	10.0000	9.8
	124	1,1,1,2-Tetrachloroethane	131	9.547	9.546	(1.511)	288576	10.0000	9.5
	44	Ethylbenzene	91	9.582	9.581	(1.016)	1390015	10.0000	9.8
	45	m,p-Xylene	106	9.710	9.709	(1.030)	608478	10.0000	10
	46	o-Xylene	106	10.174	10.173	(1.079)	560469	10.0000	9.8
	47	Styrene	104	10.186	10.197	(1.080)	834493	10.0000	10
	48	Bromoform	173	10.418	10.417	(0.856)	115650	10.0000	9.6
	49	Isopropylbenzene	105	10.592	10.603	(1.123)	1485964	10.0000	9.9
$	89	1,1,2,2-Tetrachloroethane-d2	84	10.929	10.928	(1.159)	166567	10.0000	10
	51	1,1,2,2-Tetrachloroethane	83	10.952	10.951	(1.161)	166907	10.0000	10
	113	Bromobenzene	156	10.964	10.975	(0.901)	290937	10.0000	10
	106	1,2,3-Trichloropropane	75	11.010	11.010	(0.905)	97966	10.0000	8.2(Q)
	123	n-Propylbenzene	120	11.092	11.091	(0.911)	410227	10.0000	10(Q)
	117	2-Chlorotoluene	126	11.196	11.195	(0.920)	364287	10.0000	9.8(Q)
	101	1,2,4-Trimethylbenzene	105	11.301	11.300	(0.928)	1264776	10.0000	9.8
	118	4-Chlorotoluene	126	11.324	11.323	(0.930)	363060	10.0000	10(Q)
	116	tert-Butylbenzene	119	11.684	11.683	(0.960)	1040519	10.0000	9.8
	102	1,3,5-Trimethylbenzene	105	11.742	11.753	(0.965)	1221242	10.0000	9.7
	115	sec-Butylbenzene	105	11.951	11.950	(0.982)	1687966	10.0000	9.6
	52	1,3-Dichlorobenzene	146	12.090	12.090	(0.993)	569516	10.0000	9.9
M	41	Xylene (total)	106				1168947	10.0000	20
	122	P-Isopropyltoluene	119	12.125	12.124	(0.996)	1280454	10.0000	9.7

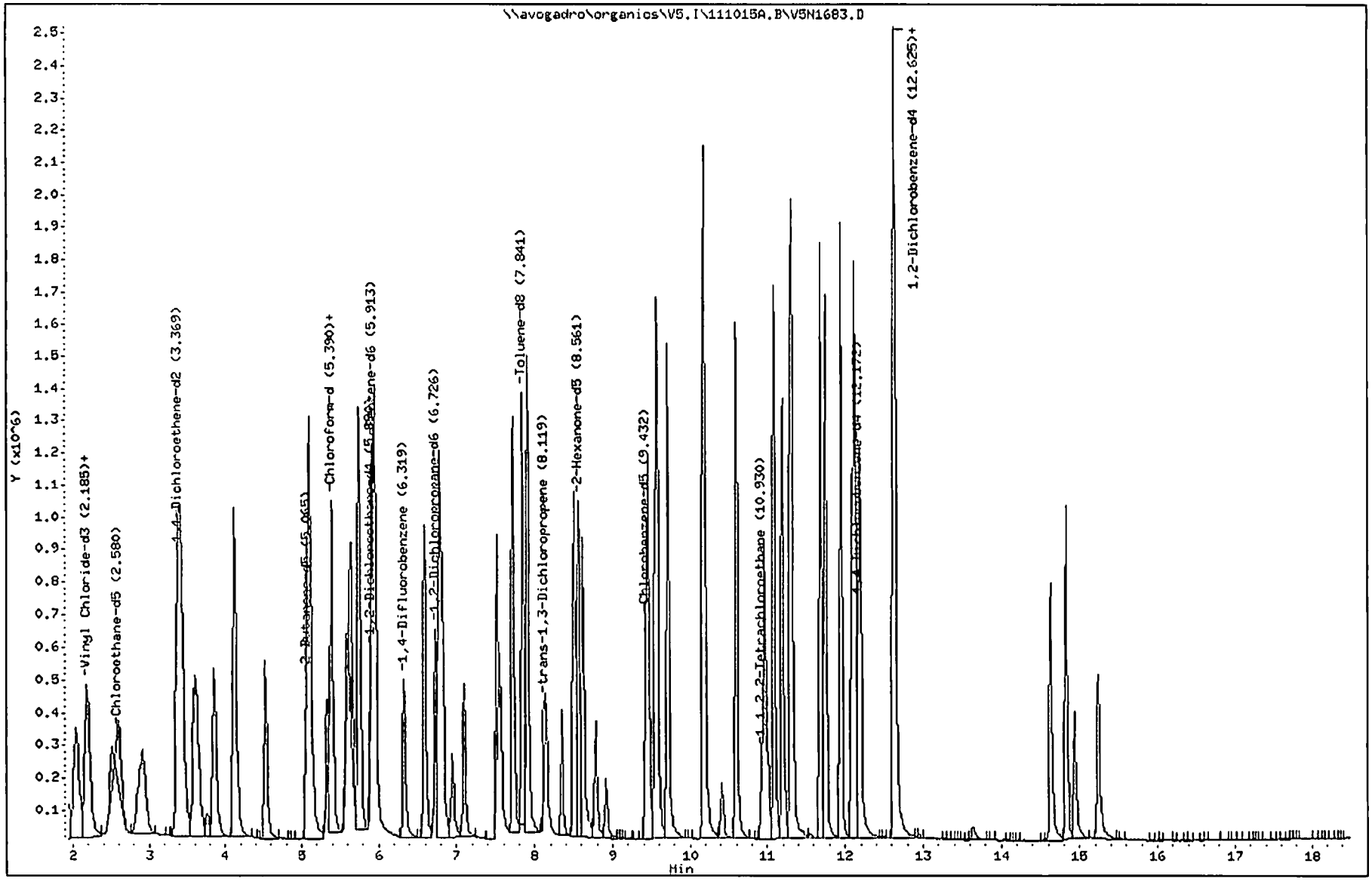
Data File: \\avogadro\organics\V5.I\111015A.B\V5N1683.D
Report Date: 19-Oct-2011 09:46

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	78 1,4-Dichlorobenzene-d4	152	12.172	12.171	(1.000)	174316	5.00000	
	53 1,4-Dichlorobenzene	146	12.195	12.206	(1.002)	591234	10.0000	9.4
	114 n-Butylbenzene	91	12.625	12.635	(1.037)	1238528	10.0000	10
S	90 1,2-Dichlorobenzene-d4	152	12.625	12.635	(1.037)	268745	10.0000	9.4
	54 1,2-Dichlorobenzene	146	12.648	12.659	(1.039)	476491	10.0000	9.5
	55 1,2-Dibromo-3-chloropropane	75	13.635	13.657	(1.120)	21228	10.0000	10(Q)
	56 1,2,4-Trichlorobenzene	180	14.634	14.644	(1.202)	390141	10.0000	11
	121 Hexachlorobutadiene	225	14.831	14.830	(1.218)	271145	10.0000	9.9
	97 Naphthalene	128	14.936	14.946	(1.227)	492830	10.0000	12
	77 1,2,3-Trichlorobenzene	180	15.238	15.248	(1.252)	276117	10.0000	9.9

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111015A.B\V5N1683.D
Date : 15-OCT-2011 12:55
Client ID: VSTD010B5
Instrument: V5.i
Sample Info: 25ML,VSTD010B5,VSTD010B5
Purge Volume: 25.0
Operator: SRC:
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111015A.B\V5N1684.D
Report Date: 19-Oct-2011 09:46

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111015A.B\V5N1684.D
Lab Smp Id: VSTD001B5 Client Smp ID: VSTD001B5
Inj Date : 15-OCT-2011 13:24
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD001B5,VSTD001B5
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111015A.B\V5_TVOA1359.m
Meth Date : 17-Oct-2011 14:56 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 5 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1359.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
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	1.903	1.893	(0.301)	68331	1.00000	1.0
	2	Chloromethane	50	2.042	2.044	(0.323)	104618	1.00000	1.0
S	79	Vinyl Chloride-d3	65	2.181	2.184	(0.345)	65957	1.00000	1.0
	3	Vinyl Chloride	62	2.193	2.195	(0.347)	79577	1.00000	1.0
	4	Bromomethane	94	2.518	2.520	(0.398)	53140	1.00000	1.0
S	80	Chloroethane-d5	69	2.588	2.590	(0.409)	42265	1.00000	0.99
	5	Chloroethane	64	2.611	2.625	(0.413)	42359	1.00000	1.1
	6	Trichlorofluoromethane	101	2.890	2.927	(0.457)	84188	1.00000	1.0
S	81	1,1-Dichloroethene-d2	65	3.389	3.368	(0.536)	15350	1.00000	1.0
	7	1,1-Dichloroethene	96	3.389	3.391	(0.536)	51059	1.00000	1.0
	8	1,1,2-Trichloro-1,2,2-trifluo	101	3.424	3.426	(0.541)	58661	1.00000	1.1
	9	Acetone	43	3.459	3.449	(0.547)	49991	10.0000	9.9
	10	Carbon Disulfide	76	3.621	3.612	(0.572)	206829	1.00000	1.1
	11	Methyl Acetate	43	3.772	3.775	(0.596)	16145	1.00000	1.1
	12	Methylene Chloride	84	3.865	3.856	(0.611)	42825	1.00000	1.1
	13	trans-1,2-Dichloroethene	96	4.132	4.123	(0.653)	45745	1.00000	1.0
	14	Methyl tert-Butyl Ether	73	4.144	4.135	(0.655)	51774	1.00000	1.1
	15	1,1-Dichloroethane	63	4.539	4.541	(0.717)	86267	1.00000	1.1
S	82	2-Butanone-d5	46	5.085	5.075	(0.804)	61094	10.0000	9.5
	17	cis-1,2-Dichloroethene	96	5.108	5.098	(0.807)	43173	1.00000	1.1
	120	2,2-Dichloropropane	77	5.108	5.098	(0.542)	66699	1.00000	1.1
	16	2-Butanone	43	5.143	5.122	(0.813)	64409	10.0000	9.9

Data File: \\avogadro\organics\V5.I\111015A.B\V5N1684.D
Report Date: 19-Oct-2011 09:46

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	18 Bromochloromethane	128	5.340	5.342	(0.844)	15966	1.00000	1.0
$	83 Chloroform-d	84	5.398	5.389	(0.853)	62346	1.00000	1.0
	19 Chloroform	83	5.410	5.400	(0.855)	69884	1.00000	1.1
	20 1,1,1-Trichloroethane	97	5.596	5.598	(0.594)	61007	1.00000	1.1
	21 Cyclohexane	56	5.642	5.644	(0.598)	81028	1.00000	1.1
	105 1,1-Dichloropropene	110	5.758	5.749	(0.611)	21138	1.00000	1.1(Q)
	22 Carbon Tetrachloride	117	5.758	5.749	(0.611)	56638	1.00000	1.1
$	23 1,2-Dichloroethane-d4	65	5.909	5.900	(0.934)	24739	1.00000	1.0
$	84 Benzene-d6	84	5.921	5.911	(0.628)	122326	1.00000	1.1
	25 Benzene	78	5.956	5.958	(0.632)	153330	1.00000	1.2
	24 1,2-Dichloroethane	62	5.979	5.969	(0.945)	30801	1.00000	1.0
*	26 1,4-Difluorobenzene	114	6.327	6.329	(1.000)	563748	5.00000	
	27 Trichloroethene	95	6.594	6.585	(0.699)	42565	1.00000	1.1
$	85 1,2-Dichloropropane-d6	67	6.734	6.736	(0.714)	43012	1.00000	1.1
	28 Methylcyclohexane	83	6.792	6.782	(0.720)	65782	1.00000	1.1
	29 1,2-Dichloropropane	63	6.827	6.817	(0.724)	38663	1.00000	1.1
	119 Dibromomethane	93	6.966	6.957	(1.101)	14124	1.00000	0.99
	30 Bromodichloromethane	83	7.105	7.096	(0.754)	38406	1.00000	1.1
	31 cis-1,3-Dichloropropene	75	7.582	7.560	(0.804)	43305	1.00000	1.1
	32 4-Methyl-2-Pentanone	43	7.733	7.723	(0.820)	155877	10.0000	11
$	33 Toluene-d8	98	7.849	7.839	(0.832)	114160	1.00000	1.1
	34 Toluene	91	7.918	7.920	(0.840)	149634	1.00000	1.2
$	86 trans-1,3-Dichloropropene-d4	79	8.139	8.118	(0.863)	24031	1.00000	1.1
	35 trans-1,3-Dichloropropene	75	8.174	8.153	(0.867)	28453	1.00000	1.0
	36 1,1,2-Trichloroethane	97	8.360	8.350	(0.887)	17495	1.00000	1.1
	37 Tetrachloroethene	164	8.511	8.501	(0.903)	30583	1.00000	1.1
	107 1,3-Dichloropropane	76	8.545	8.536	(1.351)	30395	1.00000	1.0
$	87 2-Hexanone-d5	63	8.603	8.571	(0.913)	39991	10.0000	9.8(H)
	38 2-Hexanone	43	8.650	8.617	(0.917)	98164	10.0000	10(H)
	39 Dibromochloromethane	129	8.789	8.780	(0.932)	24053	1.00000	1.1
	40 1,2-Dibromoethane	107	8.940	8.919	(0.948)	17285	1.00000	1.0(T)
*	42 Chlorobenzene-d5	117	9.428	9.430	(1.000)	400836	5.00000	
	43 Chlorobenzene	112	9.463	9.465	(1.004)	94896	1.00000	1.1
	124 1,1,1,2-Tetrachloroethane	131	9.556	9.546	(1.510)	33597	1.00000	1.1
	44 Ethylbenzene	91	9.591	9.581	(1.017)	161478	1.00000	1.2
	45 m,p-Xylene	106	9.730	9.709	(1.032)	63867	1.00000	1.1
	46 o-Xylene	106	10.183	10.173	(1.080)	63184	1.00000	1.1
	47 Styrene	104	10.218	10.197	(1.084)	87755	1.00000	1.1
	48 Bromoform	173	10.438	10.417	(0.857)	13185	1.00000	1.1
	49 Isopropylbenzene	105	10.613	10.603	(1.126)	165302	1.00000	1.1
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.938	10.928	(1.160)	17090	1.00000	1.1
	51 1,1,2,2-Tetrachloroethane	83	10.973	10.951	(1.164)	18578	1.00000	1.1
	113 Bromobenzene	156	10.996	10.975	(0.903)	30355	1.00000	1.1
	106 1,2,3-Trichloropropane	75	11.031	11.010	(0.906)	14758	1.00000	1.2
	123 n-Propylbenzene	120	11.100	11.091	(0.911)	42830	1.00000	1.1
	117 2-Chlorotoluene	126	11.205	11.195	(0.920)	40424	1.00000	1.1
	101 1,2,4-Trimethylbenzene	105	11.309	11.300	(0.928)	140083	1.00000	1.1
	118 4-Chlorotoluene	126	11.344	11.323	(0.931)	38649	1.00000	1.1
	116 tert-Butylbenzene	119	11.693	11.683	(0.960)	115089	1.00000	1.1
	102 1,3,5-Trimethylbenzene	105	11.762	11.753	(0.966)	136696	1.00000	1.1
	115 sec-Butylbenzene	105	11.960	11.950	(0.982)	196039	1.00000	1.1
	52 1,3-Dichlorobenzene	146	12.111	12.090	(0.994)	61351	1.00000	1.1
M	41 Xylene (total)	106				127051	1.00000	2.2
	122 P-Isopropyltoluene	119	12.134	12.124	(0.996)	143144	1.00000	1.1

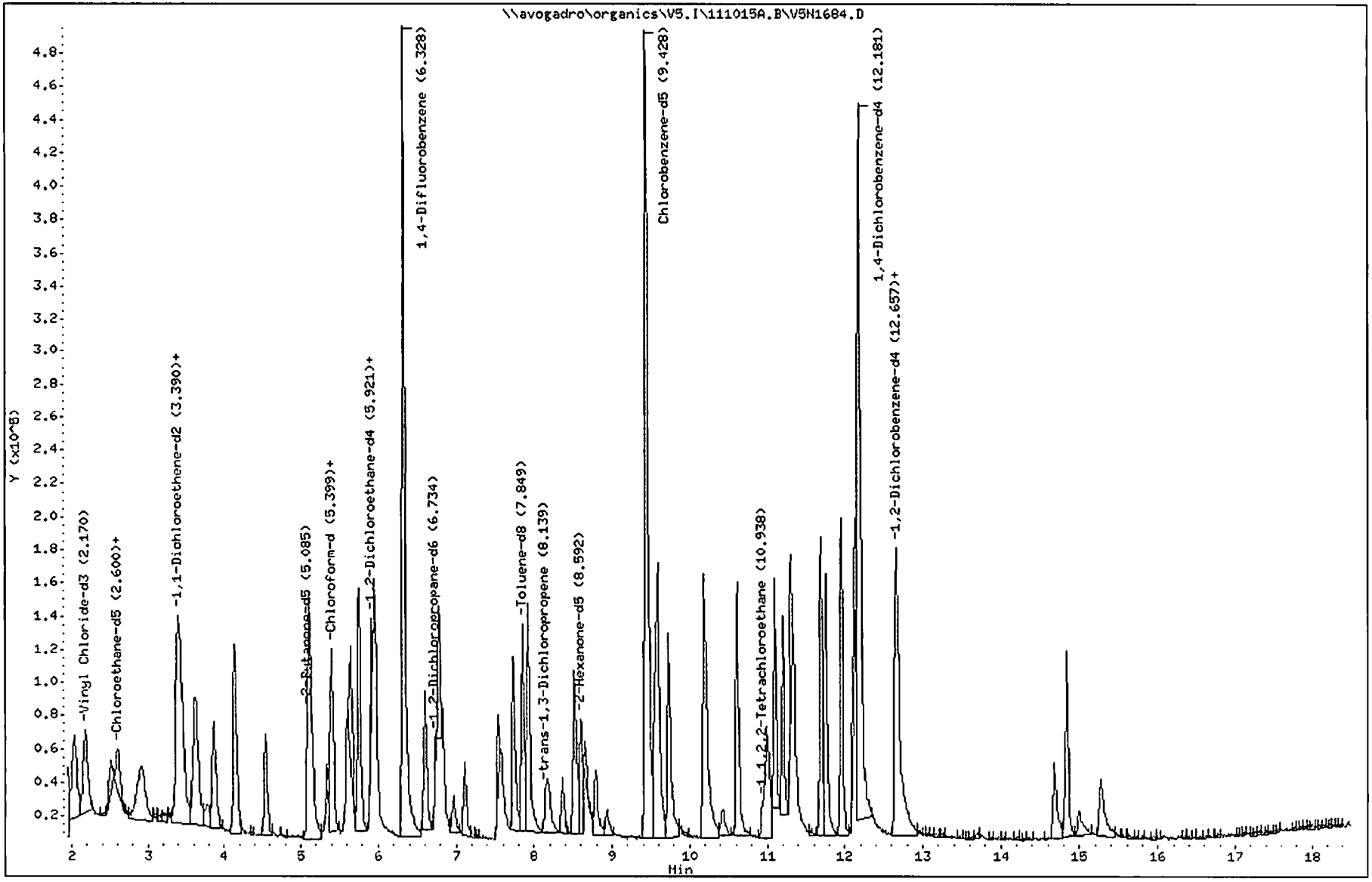
Data File: \\avogadro\organics\V5.I\111015A.B\V5N1684.D
Report Date: 19-Oct-2011 09:46

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
*	78	1,4-Dichlorobenzene-d4	152	12.180	12.171	(1.000)	172747	5.00000	
	53	1,4-Dichlorobenzene	146	12.204	12.206	(1.002)	69680	1.00000	1.1
	114	n-Butylbenzene	91	12.656	12.635	(1.039)	132849	1.00000	1.1
$	90	1,2-Dichlorobenzene-d4	152	12.656	12.635	(1.039)	31108	1.00000	1.1
	54	1,2-Dichlorobenzene	146	12.668	12.659	(1.040)	54534	1.00000	1.1
	55	1,2-Dibromo-3-chloropropane	75	13.725	13.657	(1.127)	2222	1.00000	1.1
	56	1,2,4-Trichlorobenzene	180	14.677	14.644	(1.205)	38078	1.00000	1.1
	121	Hexachlorobutadiene	225	14.840	14.830	(1.218)	31704	1.00000	1.2
	97	Naphthalene	128	14.991	14.946	(1.231)	40085	1.00000	0.98
	77	1,2,3-Trichlorobenzene	180	15.269	15.248	(1.254)	31171	1.00000	1.1

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\V5.I\111015A.B\V5N1684.D
Date : 15-OCT-2011 13:24
Client ID: VSTD001B5 Instrument: V5.i
Sample Info: 25ML,VSTD001B5,VSTD001B5
Purge Volume: 25.0 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.: H30S7

Instrument ID: V5 Calibration Date: 11/01/2011 Time: 6:58

Lab File ID: V5N2526.D Init. Calib. Date(s): 10/15/2011 10/15/2011

EPA Sample No.(VSTD#####) VSTD0055T Init. Calib. Time(s): 11:28 13:24

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF005	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.589	0.455	0.010	-22.7	40.0
Chloromethane	0.928	0.830	0.010	-10.6	40.0
Vinyl chloride	0.678	0.639	0.100	-5.7	30.0
Bromomethane	0.451	0.381	0.100	-15.5	30.0
Chloroethane	0.347	0.329	0.010	-5.2	40.0
Trichlorofluoromethane	0.713	0.710	0.010	-0.5	40.0
1,1-Dichloroethene	0.433	0.354	0.100	-18.1	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.491	0.423	0.010	-13.8	40.0
Acetone	0.045	0.035	0.010	-21.4	40.0
Carbon disulfide	1.712	1.415	0.010	-17.3	40.0
Methyl acetate	0.128	0.096	0.010	-25.3	40.0
Methylene chloride	0.360	0.301	0.010	-16.4	40.0
trans-1,2-Dichloroethene	0.395	0.370	0.010	-6.5	40.0
Methyl tert-butyl ether	0.436	0.384	0.010	-11.9	40.0
1,1-Dichloroethane	0.723	0.686	0.200	-5.1	30.0
cis-1,2-Dichloroethene	0.364	0.339	0.010	-6.8	40.0
2-Butanone	0.058	0.054	0.010	-5.9	40.0
Bromochloromethane	0.139	0.119	0.050	-14.1	40.0
Chloroform	0.585	0.548	0.200	-6.2	30.0
1,1,1-Trichloroethane	0.699	0.732	0.100	4.7	30.0
Cyclohexane	0.896	0.993	0.010	10.8	40.0
Carbon tetrachloride	0.633	0.677	0.100	7.0	30.0
Benzene	1.644	1.632	0.400	-0.7	30.0
1,2-Dichloroethane	0.262	0.242	0.100	-7.8	30.0
Trichloroethene	0.489	0.515	0.300	5.2	30.0
Methylcyclohexane	0.731	0.785	0.010	7.4	40.0

Report 1,4-Dioxane for Low-Medium VOA analysis only SOM01.2 (6/2007)

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.: H30S7

Instrument ID: V5 Calibration Date: 11/01/2011 Time: 6:58

Lab File ID: V5N2526.D Init. Calib. Date(s): 10/15/2011 10/15/2011

EPA Sample No.(VSTD#####) VSTD0055T Init. Calib. Time(s): 11:28 13:24

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 25.0 (mL)

COMPOUND	RRF	RRF005	MIN RRF	%D	MAX %D
1,2-Dichloropropane	0.431	0.425	0.010	-1.4	40.0
Bromodichloromethane	0.443	0.421	0.200	-5.0	30.0
cis-1,3-Dichloropropene	0.509	0.503	0.200	-1.3	30.0
4-Methyl-2-pentanone	0.177	0.164	0.010	-7.1	40.0
Toluene	1.611	1.645	0.400	2.1	30.0
trans-1,3-Dichloropropene	0.349	0.342	0.100	-2.0	30.0
1,1,2-Trichloroethane	0.193	0.178	0.100	-7.4	30.0
Tetrachloroethene	0.342	0.351	0.100	2.6	30.0
2-Hexanone	0.117	0.116	0.010	-0.9	40.0
Dibromochloromethane	0.282	0.240	0.100	-15.0	30.0
1,2-Dibromoethane	0.208	0.191	0.010	-8.2	40.0
Chlorobenzene	1.065	1.040	0.500	-2.4	30.0
Ethylbenzene	1.744	1.827	0.100	4.8	30.0
m,p-Xylene	0.719	0.743	0.300	3.3	30.0
o-Xylene	0.701	0.678	0.300	-3.2	30.0
Styrene	1.002	0.991	0.300	-1.1	30.0
Bromoform	0.344	0.248	0.050	-27.8	30.0
Isopropylbenzene	1.844	1.969	0.010	6.8	40.0
1,1,2,2-Tetrachloroethane	0.205	0.190	0.100	-7.2	30.0
1,3-Dichlorobenzene	1.653	1.604	0.400	-2.9	30.0
1,4-Dichlorobenzene	1.812	1.684	0.400	-7.0	30.0
1,2-Dichlorobenzene	1.436	1.311	0.400	-8.8	30.0
1,2-Dibromo-3-chloropropane	0.060	0.047	0.010	-21.4	40.0
1,2,4-Trichlorobenzene	1.042	0.939	0.200	-9.9	30.0
1,2,3-Trichlorobenzene	0.804	0.694	0.200	-13.7	30.0

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.: H30S7

Instrument ID: V5 Calibration Date: 11/01/2011 Time: 6:58

Lab File ID: V5N2526.D Init. Calib. Date(s): 10/15/2011 10/15/2011

EPA Sample No.(VSTD#####) VSTD0055T Init. Calib. Time(s): 11:28 13:24

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF005	MIN RRF	%D	MAX %D
Vinyl chloride-d3	0.571	0.564	0.010	-1.4	30.0
Chloroethane-d5	0.377	0.343	0.010	-9.2	40.0
1,1-Dichloroethene-d2	0.131	0.121	0.010	-8.2	30.0
2-Butanone-d5	0.057	0.054	0.010	-4.8	40.0
Chloroform-d	0.540	0.517	0.010	-4.1	30.0
1,2-Dichloroethane-d4	0.211	0.196	0.010	-6.9	30.0
Benzene-d6	1.402	1.453	0.010	3.7	30.0
1,2-Dichloropropane-d6	0.499	0.506	0.010	1.4	40.0
Toluene-d8	1.290	1.355	0.010	5.0	30.0
trans-1,3-Dichloropropene-d4	0.284	0.294	0.010	3.6	30.0
2-Hexanone-d5	0.051	0.053	0.010	4.0	40.0
1,1,2,2-Tetrachloroethane-d2	0.199	0.182	0.010	-8.8	30.0
1,2-Dichlorobenzene-d4	0.822	0.764	0.010	-7.1	30.0

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only SOM01.2 (6/2007)

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.: H30S7

Instrument ID: V5 Calibration Date: 11/01/2011 Time: 18:25

Lab File ID: V5N2571.D Init. Calib. Date(s): 10/15/2011 10/15/2011

EPA Sample No.(VSTD#####) VSTD0055U Init. Calib. Time(s): 11:28 13:24

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF005	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.589	0.387	0.010	-34.3	40.0
Chloromethane	0.928	0.745	0.010	-19.7	40.0
Vinyl chloride	0.678	0.572	0.100	-15.6	30.0
Bromomethane	0.451	0.351	0.100	-22.2	30.0
Chloroethane	0.347	0.307	0.010	-11.6	40.0
Trichlorofluoromethane	0.713	0.658	0.010	-7.8	40.0
1,1-Dichloroethene	0.433	0.375	0.100	-13.3	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.491	0.429	0.010	-12.5	40.0
Acetone	0.045	0.037	0.010	-16.6	40.0
Carbon disulfide	1.712	1.459	0.010	-14.8	40.0
Methyl acetate	0.128	0.113	0.010	-11.8	40.0
Methylene chloride	0.360	0.312	0.010	-13.4	40.0
trans-1,2-Dichloroethene	0.395	0.409	0.010	3.5	40.0
Methyl tert-butyl ether	0.436	0.405	0.010	-7.2	40.0
1,1-Dichloroethane	0.723	0.757	0.200	4.6	30.0
cis-1,2-Dichloroethene	0.364	0.362	0.010	-0.5	40.0
2-Butanone	0.058	0.054	0.010	-5.8	40.0
Bromochloromethane	0.139	0.131	0.050	-5.4	40.0
Chloroform	0.585	0.583	0.200	-0.3	30.0
1,1,1-Trichloroethane	0.699	0.782	0.100	11.9	30.0
Cyclohexane	0.896	1.043	0.010	16.4	40.0
Carbon tetrachloride	0.633	0.712	0.100	12.6	30.0
Benzene	1.644	1.711	0.400	4.1	30.0
1,2-Dichloroethane	0.262	0.244	0.100	-7.1	30.0
Trichloroethene	0.489	0.534	0.300	9.2	30.0
Methylcyclohexane	0.731	0.820	0.010	12.2	40.0

Report 1,4-Dioxane for Low-Medium VOA analysis only SOM01.2 (6/2007)

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.: H30S7

Instrument ID: V5 Calibration Date: 11/01/2011 Time: 18:25

Lab File ID: V5N2571.D Init. Calib. Date(s): 10/15/2011 10/15/2011

EPA Sample No.(VSTD#####) VSTD0055U Init. Calib. Time(s): 11:28 13:24

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF005	MIN RRF	%D	MAX %D
1,2-Dichloropropane	0.431	0.433	0.010	0.4	40.0
Bromodichloromethane	0.443	0.454	0.200	2.4	30.0
cis-1,3-Dichloropropene	0.509	0.522	0.200	2.5	30.0
4-Methyl-2-pentanone	0.177	0.172	0.010	-2.9	40.0
Toluene	1.611	1.742	0.400	8.1	30.0
trans-1,3-Dichloropropene	0.349	0.351	0.100	0.5	30.0
1,1,2-Trichloroethane	0.193	0.181	0.100	-5.9	30.0
Tetrachloroethene	0.342	0.382	0.100	11.7	30.0
2-Hexanone	0.117	0.116	0.010	-0.8	40.0
Dibromochloromethane	0.282	0.267	0.100	-5.5	30.0
1,2-Dibromoethane	0.208	0.199	0.010	-4.3	40.0
Chlorobenzene	1.065	1.107	0.500	4.0	30.0
Ethylbenzene	1.744	1.910	0.100	9.5	30.0
m,p-Xylene	0.719	0.796	0.300	10.7	30.0
o-Xylene	0.701	0.723	0.300	3.2	30.0
Styrene	1.002	1.049	0.300	4.7	30.0
Bromoform	0.344	0.282	0.050	-18.2	30.0
Isopropylbenzene	1.844	2.076	0.010	12.6	40.0
1,1,2,2-Tetrachloroethane	0.205	0.199	0.100	-2.8	30.0
1,3-Dichlorobenzene	1.653	1.747	0.400	5.7	30.0
1,4-Dichlorobenzene	1.812	1.780	0.400	-1.7	30.0
1,2-Dichlorobenzene	1.436	1.364	0.400	-5.0	30.0
1,2-Dibromo-3-chloropropane	0.060	0.057	0.010	-5.0	40.0
1,2,4-Trichlorobenzene	1.042	1.034	0.200	-0.8	30.0
1,2,3-Trichlorobenzene	0.804	0.744	0.200	-7.5	30.0

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.: H30S7

Instrument ID: V5 Calibration Date: 11/01/2011 Time: 18:25

Lab File ID: V5N2571.D Init. Calib. Date(s): 10/15/2011 10/15/2011

EPA Sample No.(VSTD#####) VSTD0055U Init. Calib. Time(s): 11:28 13:24

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF005	MIN RRF	%D	MAX %D
Vinyl chloride-d3	0.571	0.491	0.010	-14.0	30.0
Chloroethane-d5	0.377	0.335	0.010	-11.3	40.0
1,1-Dichloroethene-d2	0.131	0.120	0.010	-8.8	30.0
2-Butanone-d5	0.057	0.051	0.010	-10.6	40.0
Chloroform-d	0.540	0.558	0.010	3.4	30.0
1,2-Dichloroethane-d4	0.211	0.205	0.010	-2.7	30.0
Benzene-d6	1.402	1.512	0.010	7.9	30.0
1,2-Dichloropropane-d6	0.499	0.542	0.010	8.6	40.0
Toluene-d8	1.290	1.394	0.010	8.1	30.0
trans-1,3-Dichloropropene-d4	0.284	0.295	0.010	4.0	30.0
2-Hexanone-d5	0.051	0.051	0.010	0.3	40.0
1,1,2,2-Tetrachloroethane-d2	0.199	0.174	0.010	-12.5	30.0
1,2-Dichlorobenzene-d4	0.822	0.825	0.010	0.3	30.0

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only SOM01.2 (6/2007)

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.: H30S7

Instrument ID: V5 Calibration Date: 11/02/2011 Time: 5:55

Lab File ID: V5N2595.D Init. Calib. Date(s): 10/15/2011 10/15/2011

EPA Sample No.(VSTD#####) VSTD0055V Init. Calib. Time(s): 11:28 13:24

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF005	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.589	0.410	0.010	-30.4	40.0
Chloromethane	0.928	0.822	0.010	-11.4	40.0
Vinyl chloride	0.678	0.614	0.100	-9.5	30.0
Bromomethane	0.451	0.375	0.100	-16.8	30.0
Chloroethane	0.347	0.334	0.010	-3.8	40.0
Trichlorofluoromethane	0.713	0.683	0.010	-4.3	40.0
1,1-Dichloroethene	0.433	0.351	0.100	-18.9	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.491	0.399	0.010	-18.6	40.0
Acetone	0.045	0.038	0.010	-15.6	40.0
Carbon disulfide	1.712	1.346	0.010	-21.4	40.0
Methyl acetate	0.128	0.103	0.010	-19.8	40.0
Methylene chloride	0.360	0.303	0.010	-15.8	40.0
trans-1,2-Dichloroethene	0.395	0.391	0.010	-1.2	40.0
Methyl tert-butyl ether	0.436	0.380	0.010	-12.7	40.0
1,1-Dichloroethane	0.723	0.728	0.200	0.7	30.0
cis-1,2-Dichloroethene	0.364	0.344	0.010	-5.3	40.0
2-Butanone	0.058	0.052	0.010	-10.2	40.0
Bromochloromethane	0.139	0.118	0.050	-14.6	40.0
Chloroform	0.585	0.556	0.200	-4.9	30.0
1,1,1-Trichloroethane	0.699	0.772	0.100	10.5	30.0
Cyclohexane	0.896	1.001	0.010	11.8	40.0
Carbon tetrachloride	0.633	0.698	0.100	10.3	30.0
Benzene	1.644	1.667	0.400	1.4	30.0
1,2-Dichloroethane	0.262	0.238	0.100	-9.2	30.0
Trichloroethene	0.489	0.541	0.300	10.5	30.0
Methylcyclohexane	0.731	0.790	0.010	8.1	40.0

Report 1,4-Dioxane for Low-Medium VOA analysis only SOM01.2 (6/2007)

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.: H30S7

Instrument ID: V5 Calibration Date: 11/02/2011 Time: 5:55

Lab File ID: V5N2595.D Init. Calib. Date(s): 10/15/2011 10/15/2011

EPA Sample No.(VSTD#####) VSTD0055V Init. Calib. Time(s): 11:28 13:24

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 25.0 (mL)

COMPOUND	RRF	RRF005	MIN RRF	%D	MAX %D
1,2-Dichloropropane	0.431	0.466	0.010	8.1	40.0
Bromodichloromethane	0.443	0.438	0.200	-1.1	30.0
cis-1,3-Dichloropropene	0.509	0.550	0.200	8.0	30.0
4-Methyl-2-pentanone	0.177	0.170	0.010	-3.7	40.0
Toluene	1.611	1.757	0.400	9.1	30.0
trans-1,3-Dichloropropene	0.349	0.354	0.100	1.3	30.0
1,1,2-Trichloroethane	0.193	0.187	0.100	-2.7	30.0
Tetrachloroethene	0.342	0.368	0.100	7.6	30.0
2-Hexanone	0.117	0.114	0.010	-2.7	40.0
Dibromochloromethane	0.282	0.265	0.100	-6.2	30.0
1,2-Dibromoethane	0.208	0.191	0.010	-8.1	40.0
Chlorobenzene	1.065	1.094	0.500	2.7	30.0
Ethylbenzene	1.744	1.926	0.100	10.4	30.0
m,p-Xylene	0.719	0.784	0.300	9.0	30.0
o-Xylene	0.701	0.696	0.300	-0.7	30.0
Styrene	1.002	1.054	0.300	5.2	30.0
Bromoform	0.344	0.260	0.050	-24.4	30.0
Isopropylbenzene	1.844	2.034	0.010	10.3	40.0
1,1,2,2-Tetrachloroethane	0.205	0.192	0.100	-6.0	30.0
1,3-Dichlorobenzene	1.653	1.639	0.400	-0.8	30.0
1,4-Dichlorobenzene	1.812	1.667	0.400	-8.0	30.0
1,2-Dichlorobenzene	1.436	1.295	0.400	-9.8	30.0
1,2-Dibromo-3-chloropropane	0.060	0.048	0.010	-20.3	40.0
1,2,4-Trichlorobenzene	1.042	0.926	0.200	-11.2	30.0
1,2,3-Trichlorobenzene	0.804	0.631	0.200	-21.6	30.0

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.: H30S7

Instrument ID: V5 Calibration Date: 11/02/2011 Time: 5:55

Lab File ID: V5N2595.D Init. Calib. Date(s): 10/15/2011 10/15/2011

EPA Sample No.(VSTD######) VSTD0055V Init. Calib. Time(s): 11:28 13:24

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 25.0 (mL)

COMPOUND	RRF	RRF005	MIN RRF	%D	MAX %D
Vinyl chloride-d3	0.571	0.463	0.010	-18.9	30.0
Chloroethane-d5	0.377	0.317	0.010	-16.0	40.0
1,1-Dichloroethene-d2	0.131	0.111	0.010	-15.8	30.0
2-Butanone-d5	0.057	0.052	0.010	-9.3	40.0
Chloroform-d	0.540	0.515	0.010	-4.6	30.0
1,2-Dichloroethane-d4	0.211	0.198	0.010	-6.1	30.0
Benzene-d6	1.402	1.514	0.010	8.0	30.0
1,2-Dichloropropane-d6	0.499	0.540	0.010	8.3	40.0
Toluene-d8	1.290	1.397	0.010	8.3	30.0
trans-1,3-Dichloropropene-d4	0.284	0.299	0.010	5.5	30.0
2-Hexanone-d5	0.051	0.055	0.010	7.1	40.0
1,1,2,2-Tetrachloroethane-d2	0.199	0.191	0.010	-4.3	30.0
1,2-Dichlorobenzene-d4	0.822	0.785	0.010	-4.5	30.0

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only SOM01.2 (6/2007)

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.: H30S7

Instrument ID: V5 Calibration Date: 11/02/2011 Time: 17:48

Lab File ID: V5N2620.D Init. Calib. Date(s): 10/15/2011 10/15/2011

EPA Sample No.(VSTD######) VSTD0055W Init. Calib. Time(s): 11:28 13:24

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 25.0 (mL)

COMPOUND	RRF	RRF005	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.589	0.435	0.010	-26.1	40.0
Chloromethane	0.928	0.830	0.010	-10.5	40.0
Vinyl chloride	0.678	0.613	0.100	-9.6	30.0
Bromomethane	0.451	0.368	0.100	-18.3	30.0
Chloroethane	0.347	0.322	0.010	-7.2	40.0
Trichlorofluoromethane	0.713	0.680	0.010	-4.7	40.0
1,1-Dichloroethene	0.433	0.345	0.100	-20.3	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.491	0.404	0.010	-17.8	40.0
Acetone	0.045	0.037	0.010	-18.8	40.0
Carbon disulfide	1.712	1.373	0.010	-19.8	40.0
Methyl acetate	0.128	0.109	0.010	-14.6	40.0
Methylene chloride	0.360	0.296	0.010	-17.6	40.0
trans-1,2-Dichloroethene	0.395	0.364	0.010	-8.0	40.0
Methyl tert-butyl ether	0.436	0.371	0.010	-14.9	40.0
1,1-Dichloroethane	0.723	0.710	0.200	-1.8	30.0
cis-1,2-Dichloroethene	0.364	0.328	0.010	-9.9	40.0
2-Butanone	0.058	0.051	0.010	-11.1	40.0
Bromochloromethane	0.139	0.116	0.050	-16.1	40.0
Chloroform	0.585	0.532	0.200	-9.0	30.0
1,1,1-Trichloroethane	0.699	0.748	0.100	7.1	30.0
Cyclohexane	0.896	0.997	0.010	11.3	40.0
Carbon tetrachloride	0.633	0.670	0.100	6.0	30.0
Benzene	1.644	1.682	0.400	2.4	30.0
1,2-Dichloroethane	0.262	0.221	0.100	-15.8	30.0
Trichloroethene	0.489	0.528	0.300	8.0	30.0
Methylcyclohexane	0.731	0.778	0.010	6.5	40.0

Report 1,4-Dioxane for Low-Medium VOA analysis only SOM01.2 (6/2007)

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.: H30S7

Instrument ID: V5 Calibration Date: 11/02/2011 Time: 17:48

Lab File ID: V5N2620.D Init. Calib. Date(s): 10/15/2011 10/15/2011

EPA Sample No.(VSTD######) VSTD0055W Init. Calib. Time(s): 11:28 13:24

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF005	MIN RRF	%D	MAX %D
1,2-Dichloropropane	0.431	0.448	0.010	3.8	40.0
Bromodichloromethane	0.443	0.446	0.200	0.6	30.0
cis-1,3-Dichloropropene	0.509	0.506	0.200	-0.7	30.0
4-Methyl-2-pentanone	0.177	0.170	0.010	-3.8	40.0
Toluene	1.611	1.728	0.400	7.2	30.0
trans-1,3-Dichloropropene	0.349	0.335	0.100	-4.1	30.0
1,1,2-Trichloroethane	0.193	0.186	0.100	-3.4	30.0
Tetrachloroethene	0.342	0.361	0.100	5.5	30.0
2-Hexanone	0.117	0.116	0.010	-0.8	40.0
Dibromochloromethane	0.282	0.254	0.100	-10.0	30.0
1,2-Dibromoethane	0.208	0.200	0.010	-3.6	40.0
Chlorobenzene	1.065	1.067	0.500	0.2	30.0
Ethylbenzene	1.744	1.867	0.100	7.1	30.0
m,p-Xylene	0.719	0.778	0.300	8.2	30.0
o-Xylene	0.701	0.703	0.300	0.4	30.0
Styrene	1.002	1.033	0.300	3.1	30.0
Bromoform	0.344	0.256	0.050	-25.7	30.0
Isopropylbenzene	1.844	1.985	0.010	7.7	40.0
1,1,2,2-Tetrachloroethane	0.205	0.195	0.100	-4.6	30.0
1,3-Dichlorobenzene	1.653	1.639	0.400	-0.8	30.0
1,4-Dichlorobenzene	1.812	1.699	0.400	-6.2	30.0
1,2-Dichlorobenzene	1.436	1.335	0.400	-7.1	30.0
1,2-Dibromo-3-chloropropane	0.060	0.058	0.010	-2.0	40.0
1,2,4-Trichlorobenzene	1.042	0.975	0.200	-6.5	30.0
1,2,3-Trichlorobenzene	0.804	0.685	0.200	-14.8	30.0

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.: H30S7

Instrument ID: V5 Calibration Date: 11/02/2011 Time: 17:48

Lab File ID: V5N2620.D Init. Calib. Date(s): 10/15/2011 10/15/2011

EPA Sample No.(VSTD#####) VSTD0055W Init. Calib. Time(s): 11:28 13:24

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF005	MIN RRF	%D	MAX %D
Vinyl chloride-d3	0.571	0.507	0.010	-11.2	30.0
Chloroethane-d5	0.377	0.330	0.010	-12.5	40.0
1,1-Dichloroethene-d2	0.131	0.104	0.010	-20.5	30.0
2-Butanone-d5	0.057	0.050	0.010	-13.1	40.0
Chloroform-d	0.540	0.485	0.010	-10.2	30.0
1,2-Dichloroethane-d4	0.211	0.174	0.010	-17.7	30.0
Benzene-d6	1.402	1.411	0.010	0.7	30.0
1,2-Dichloropropane-d6	0.499	0.514	0.010	3.0	40.0
Toluene-d8	1.290	1.308	0.010	1.4	30.0
trans-1,3-Dichloropropene-d4	0.284	0.286	0.010	0.7	30.0
2-Hexanone-d5	0.051	0.053	0.010	2.8	40.0
1,1,2,2-Tetrachloroethane-d2	0.199	0.166	0.010	-16.8	30.0
1,2-Dichlorobenzene-d4	0.822	0.708	0.010	-13.8	30.0

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only SOM01.2 (6/2007)

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.: H30S7

Instrument ID: V5 Calibration Date: 11/03/2011 Time: 5:35

Lab File ID: V5N2643.D Init. Calib. Date(s): 10/15/2011 10/15/2011

EPA Sample No.(VSTD#####) VSTD0055X Init. Calib. Time(s): 11:28 13:24

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF005	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.589	0.468	0.010	-20.6	40.0
Chloromethane	0.928	0.873	0.010	-5.9	40.0
Vinyl chloride	0.678	0.666	0.100	-1.7	30.0
Bromomethane	0.451	0.404	0.100	-10.3	30.0
Chloroethane	0.347	0.349	0.010	0.6	40.0
Trichlorofluoromethane	0.713	0.743	0.010	4.1	40.0
1,1-Dichloroethene	0.433	0.362	0.100	-16.2	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.491	0.420	0.010	-14.4	40.0
Acetone	0.045	0.043	0.010	-3.8	40.0
Carbon disulfide	1.712	1.482	0.010	-13.4	40.0
Methyl acetate	0.128	0.108	0.010	-15.4	40.0
Methylene chloride	0.360	0.311	0.010	-13.6	40.0
trans-1,2-Dichloroethene	0.395	0.398	0.010	0.7	40.0
Methyl tert-butyl ether	0.436	0.404	0.010	-7.4	40.0
1,1-Dichloroethane	0.723	0.755	0.200	4.4	30.0
cis-1,2-Dichloroethene	0.364	0.352	0.010	-3.2	40.0
2-Butanone	0.058	0.059	0.010	2.0	40.0
Bromochloromethane	0.139	0.134	0.050	-3.1	40.0
Chloroform	0.585	0.587	0.200	0.4	30.0
1,1,1-Trichloroethane	0.699	0.785	0.100	12.4	30.0
Cyclohexane	0.896	1.052	0.010	17.4	40.0
Carbon tetrachloride	0.633	0.716	0.100	13.1	30.0
Benzene	1.644	1.722	0.400	4.8	30.0
1,2-Dichloroethane	0.262	0.254	0.100	-3.2	30.0
Trichloroethene	0.489	0.535	0.300	9.5	30.0
Methylcyclohexane	0.731	0.827	0.010	13.1	40.0

Report 1,4-Dioxane for Low-Medium VOA analysis only SOM01.2 (6/2007)

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.: H30S7

Instrument ID: V5 Calibration Date: 11/03/2011 Time: 5:35

Lab File ID: V5N2643.D Init. Calib. Date(s): 10/15/2011 10/15/2011

EPA Sample No.(VSTD######) VSTD0055X Init. Calib. Time(s): 11:28 13:24

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF005	MIN RRF	%D	MAX %D
1,2-Dichloropropane	0.431	0.468	0.010	8.5	40.0
Bromodichloromethane	0.443	0.448	0.200	1.1	30.0
cis-1,3-Dichloropropene	0.509	0.549	0.200	7.8	30.0
4-Methyl-2-pentanone	0.177	0.186	0.010	5.2	40.0
Toluene	1.611	1.780	0.400	10.5	30.0
trans-1,3-Dichloropropene	0.349	0.359	0.100	2.7	30.0
1,1,2-Trichloroethane	0.193	0.194	0.100	0.9	30.0
Tetrachloroethene	0.342	0.395	0.100	15.4	30.0
2-Hexanone	0.117	0.128	0.010	9.3	40.0
Dibromochloromethane	0.282	0.274	0.100	-3.0	30.0
1,2-Dibromoethane	0.208	0.199	0.010	-4.1	40.0
Chlorobenzene	1.065	1.137	0.500	6.8	30.0
Ethylbenzene	1.744	1.976	0.100	13.3	30.0
m,p-Xylene	0.719	0.807	0.300	12.2	30.0
o-Xylene	0.701	0.741	0.300	5.8	30.0
Styrene	1.002	1.061	0.300	5.9	30.0
Bromoform	0.344	0.267	0.050	-22.3	30.0
Isopropylbenzene	1.844	2.119	0.010	14.9	40.0
1,1,2,2-Tetrachloroethane	0.205	0.209	0.100	2.1	30.0
1,3-Dichlorobenzene	1.653	1.680	0.400	1.7	30.0
1,4-Dichlorobenzene	1.812	1.766	0.400	-2.5	30.0
1,2-Dichlorobenzene	1.436	1.392	0.400	-3.1	30.0
1,2-Dibromo-3-chloropropane	0.060	0.054	0.010	-8.8	40.0
1,2,4-Trichlorobenzene	1.042	1.001	0.200	-4.0	30.0
1,2,3-Trichlorobenzene	0.804	0.744	0.200	-7.4	30.0

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.: H30S7

Instrument ID: V5 Calibration Date: 11/03/2011 Time: 5:35

Lab File ID: V5N2643.D Init. Calib. Date(s): 10/15/2011 10/15/2011

EPA Sample No.(VSTD#####) VSTD0055X Init. Calib. Time(s): 11:28 13:24

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF005	MIN RRF	%D	MAX %D
Vinyl chloride-d3	0.571	0.501	0.010	-12.4	30.0
Chloroethane-d5	0.377	0.345	0.010	-8.6	40.0
1,1-Dichloroethene-d2	0.131	0.111	0.010	-15.7	30.0
2-Butanone-d5	0.057	0.057	0.010	0.5	40.0
Chloroform-d	0.540	0.553	0.010	2.5	30.0
1,2-Dichloroethane-d4	0.211	0.209	0.010	-0.9	30.0
Benzene-d6	1.402	1.567	0.010	11.8	30.0
1,2-Dichloropropane-d6	0.499	0.558	0.010	11.7	40.0
Toluene-d8	1.290	1.409	0.010	9.2	30.0
trans-1,3-Dichloropropene-d4	0.284	0.320	0.010	12.9	30.0
2-Hexanone-d5	0.051	0.057	0.010	11.9	40.0
1,1,2,2-Tetrachloroethane-d2	0.199	0.201	0.010	1.0	30.0
1,2-Dichlorobenzene-d4	0.822	0.814	0.010	-1.0	30.0

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only SOM01.2 (6/2007)

Data File: \\avogadro\organics\V5.I\111101.B\V5N2526.D
Report Date: 07-Nov-2011 13:09

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2526.D
Lab Smp Id: VSTD0055T Client Smp ID: VSTD0055T
Inj Date : 01-NOV-2011 06:58
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD0055T,VSTD0055T
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
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	1.894	1.906	(0.300)	146590	5.00000	3.9
	2 Chloromethane	50	2.045	2.046	(0.324)	266980	5.00000	4.5
$	79 Vinyl Chloride-d3	65	2.172	2.173	(0.344)	181376	5.00000	4.9
	3 Vinyl Chloride	62	2.184	2.185	(0.346)	205747	5.00000	4.7
	4 Bromomethane	94	2.521	2.522	(0.399)	122553	5.00000	4.2
$	80 Chloroethane-d5	69	2.590	2.591	(0.410)	110238	5.00000	4.5
	5 Chloroethane	64	2.614	2.615	(0.414)	105766	5.00000	4.7
	6 Trichlorofluoromethane	101	2.916	2.917	(0.461)	228568	5.00000	5.0
$	81 1,1-Dichloroethene-d2	65	3.368	3.369	(0.533)	38810	5.00000	4.6(Q)
	7 1,1-Dichloroethene	96	3.380	3.381	(0.535)	114068	5.00000	4.1(Q)
	8 1,1,2-Trichloro-1,2,2-trifluo	101	3.426	3.416	(0.542)	136194	5.00000	4.3
	9 Acetone	43	3.450	3.451	(0.546)	113807	50.0000	39
	10 Carbon Disulfide	76	3.601	3.602	(0.570)	455514	5.00000	4.1
	11 Methyl Acetate	43	3.775	3.764	(0.597)	30771	5.00000	3.7
	12 Methylene Chloride	84	3.856	3.857	(0.610)	96808	5.00000	4.2(Q)
	13 trans-1,2-Dichloroethene	96	4.123	4.124	(0.653)	119023	5.00000	4.7
	14 Methyl tert-Butyl Ether	73	4.135	4.136	(0.654)	123540	5.00000	4.4
	15 1,1-Dichloroethane	63	4.530	4.531	(0.717)	220832	5.00000	4.7
$	82 2-Butanone-d5	46	5.064	5.065	(0.801)	174503	50.0000	48(A)
	17 cis-1,2-Dichloroethene	96	5.099	5.100	(0.807)	108994	5.00000	4.7
	16 2-Butanone	43	5.122	5.123	(0.811)	174705	50.0000	47
	18 Bromochloromethane	128	5.331	5.332	(0.844)	38374	5.00000	4.3

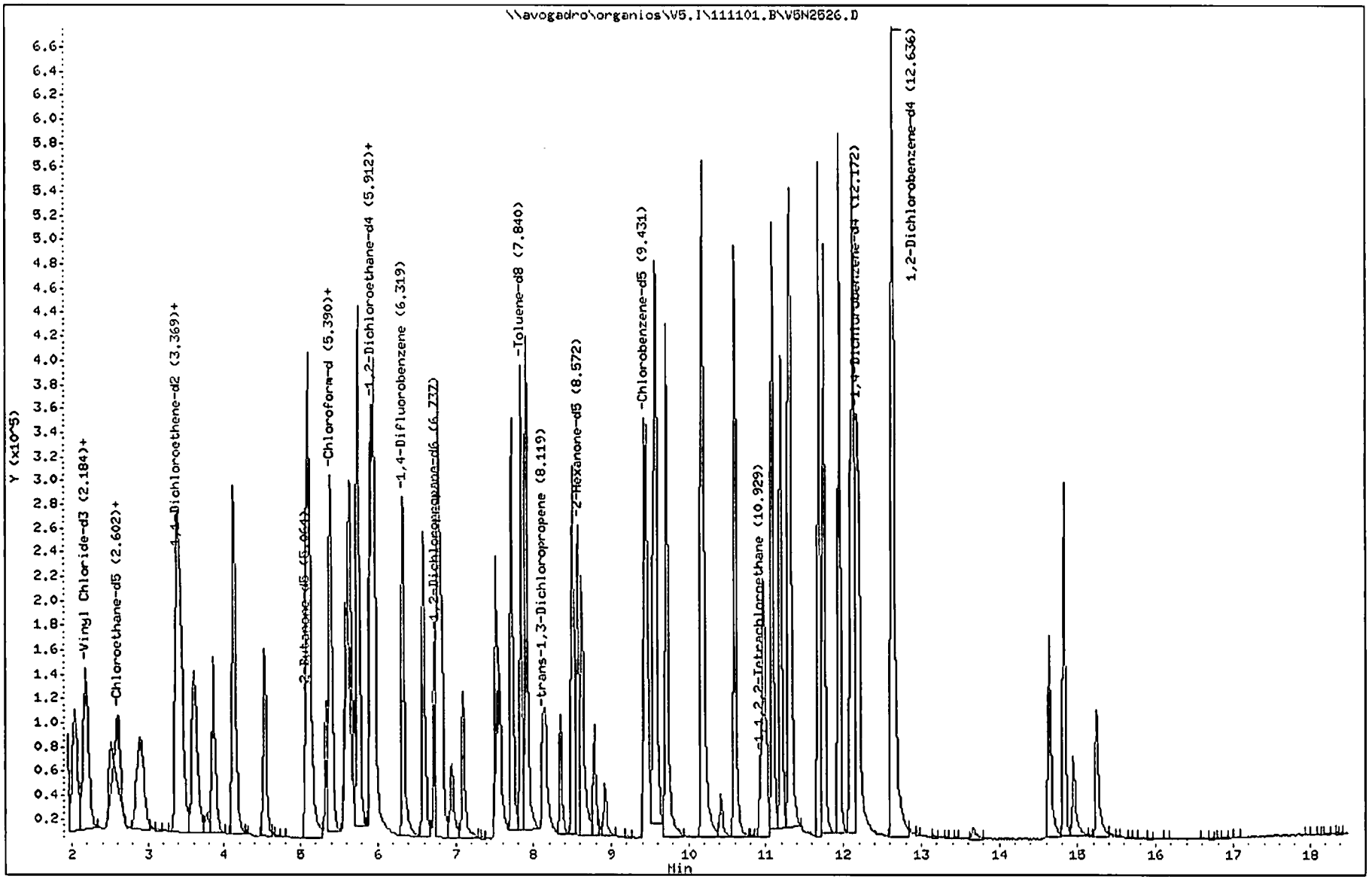
Data File: \\avogadro\organics\V5.I\111101.B\V5N2526.D
Report Date: 07-Nov-2011 13:09

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
S	83	Chloroform-d	84	5.389	5.378	(0.853)	166499	5.00000	4.8
	19	Chloroform	83	5.401	5.402	(0.855)	176408	5.00000	4.7
	20	1,1,1-Trichloroethane	97	5.587	5.588	(0.592)	167647	5.00000	5.2
	21	Cyclohexane	56	5.645	5.646	(0.599)	227463	5.00000	5.5
	22	Carbon Tetrachloride	117	5.749	5.750	(0.610)	155134	5.00000	5.4
S	23	1,2-Dichloroethane-d4	65	5.900	5.901	(0.934)	63201	5.00000	4.7
S	84	Benzene-d6	84	5.912	5.913	(0.627)	332891	5.00000	5.2
	25	Benzene	78	5.947	5.948	(0.631)	373846	5.00000	5.0
	24	1,2-Dichloroethane	62	5.970	5.971	(0.945)	77816	5.00000	4.6
*	26	1,4-Difluorobenzene	114	6.318	6.319	(1.000)	321823	5.00000	
	27	Trichloroethene	95	6.585	6.586	(0.698)	117940	5.00000	5.3
S	85	1,2-Dichloropropane-d6	67	6.725	6.726	(0.713)	115964	5.00000	5.1
	28	Methylcyclohexane	83	6.783	6.784	(0.719)	179832	5.00000	5.4
	29	1,2-Dichloropropane	63	6.817	6.819	(0.723)	97418	5.00000	4.9
	30	Bromodichloromethane	83	7.096	7.097	(0.752)	96427	5.00000	4.7
	31	cis-1,3-Dichloropropene	75	7.561	7.562	(0.802)	115139	5.00000	4.9
	32	4-Methyl-2-Pentanone	43	7.723	7.724	(0.819)	376467	50.0000	46
S	33	Toluene-d8	98	7.839	7.840	(0.831)	310451	5.00000	5.3
	34	Toluene	91	7.909	7.910	(0.839)	376952	5.00000	5.1
S	86	trans-1,3-Dichloropropene-d4	79	8.118	8.119	(0.861)	67306	5.00000	5.2
	35	trans-1,3-Dichloropropene	75	8.153	8.154	(0.865)	78388	5.00000	4.9
	36	1,1,2-Trichloroethane	97	8.350	8.351	(0.885)	40857	5.00000	4.6
	37	Tetrachloroethene	164	8.501	8.502	(0.901)	80492	5.00000	5.1
S	87	2-Hexanone-d5	63	8.571	8.572	(0.909)	121748	50.0000	52(AQ)
	38	2-Hexanone	43	8.618	8.619	(0.914)	265529	50.0000	50
	39	Dibromochloromethane	129	8.780	8.781	(0.931)	55001	5.00000	4.3
	40	1,2-Dibromoethane	107	8.919	8.920	(0.946)	43699	5.00000	4.6
*	42	Chlorobenzene-d5	117	9.430	9.431	(1.000)	229121	5.00000	
	43	Chlorobenzene	112	9.465	9.466	(1.004)	238194	5.00000	4.9
	44	Ethylbenzene	91	9.581	9.571	(1.016)	418524	5.00000	5.2
	45	m,p-Xylene	106	9.709	9.710	(1.030)	170220	5.00000	5.2
	46	o-Xylene	106	10.174	10.175	(1.079)	155338	5.00000	4.8
	47	Styrene	104	10.185	10.186	(1.080)	226974	5.00000	4.9
	48	Bromoform	173	10.418	10.419	(0.856)	24719	5.00000	3.6
	49	Isopropylbenzene	105	10.592	10.593	(1.123)	451093	5.00000	5.3
S	89	1,1,2,2-Tetrachloroethane-d2	84	10.929	10.918	(1.159)	41629	5.00000	4.6
	51	1,1,2,2-Tetrachloroethane	83	10.952	10.953	(1.161)	43481	5.00000	4.6
	52	1,3-Dichlorobenzene	146	12.090	12.091	(0.993)	159619	5.00000	4.9
*	78	1,4-Dichlorobenzene-d4	152	12.171	12.172	(1.000)	99508	5.00000	
	53	1,4-Dichlorobenzene	146	12.194	12.195	(1.002)	167607	5.00000	4.6
S	90	1,2-Dichlorobenzene-d4	152	12.636	12.625	(1.038)	75981	5.00000	4.6
	54	1,2-Dichlorobenzene	146	12.659	12.660	(1.040)	130429	5.00000	4.6
	55	1,2-Dibromo-3-chloropropane	75	13.658	13.659	(1.122)	4666	5.00000	3.9(Q)
	56	1,2,4-Trichlorobenzene	180	14.645	14.634	(1.203)	93407	5.00000	4.5
	77	1,2,3-Trichlorobenzene	180	15.237	15.250	(1.252)	69051	5.00000	4.3

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111101.B\V5N2526.D
Date : 01-NOV-2011 06:58
Client ID: VSTD0055T
Instrument: V5.I
Sample Info: 25ML,VSTD0055T,VSTD0055T
Purge Volume: 25.0
Operator: SRC:
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111101.B\V5N2571.D
Report Date: 07-Nov-2011 13:10

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2571.D
Lab Smp Id: VSTD0055U Client Smp ID: VSTD0055U
Inj Date : 01-NOV-2011 18:25
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD0055U,VSTD0055U
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 43 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
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)	131689	5.00000	3.3
2	Chloromethane	50	2.046	2.046	(0.324)	253530	5.00000	4.0
$ 79	Vinyl Chloride-d3	65	2.173	2.173	(0.344)	167254	5.00000	4.3
3	Vinyl Chloride	62	2.185	2.185	(0.346)	194824	5.00000	4.2
4	Bromomethane	94	2.522	2.522	(0.399)	119439	5.00000	3.9
$ 80	Chloroethane-d5	69	2.591	2.591	(0.410)	113874	5.00000	4.4
5	Chloroethane	64	2.615	2.615	(0.414)	104423	5.00000	4.4
6	Trichlorofluoromethane	101	2.917	2.917	(0.462)	223884	5.00000	4.6
$ 81	1,1-Dichloroethene-d2	65	3.369	3.369	(0.533)	40779	5.00000	4.6(Q)
7	1,1-Dichloroethene	96	3.381	3.381	(0.535)	127622	5.00000	4.3
8	1,1,2-Trichloro-1,2,2-trifluo	101	3.416	3.416	(0.541)	146111	5.00000	4.4
9	Acetone	43	3.451	3.451	(0.546)	127644	50.0000	42
10	Carbon Disulfide	76	3.602	3.602	(0.570)	496614	5.00000	4.3
11	Methyl Acetate	43	3.764	3.764	(0.596)	38444	5.00000	4.4
12	Methylene Chloride	84	3.857	3.857	(0.610)	106092	5.00000	4.3(Q)
13	trans-1,2-Dichloroethene	96	4.124	4.124	(0.653)	139321	5.00000	5.2
14	Methyl tert-Butyl Ether	73	4.136	4.136	(0.655)	137722	5.00000	4.6
15	1,1-Dichloroethane	63	4.531	4.531	(0.717)	257571	5.00000	5.2
$ 82	2-Butanone-d5	46	5.065	5.065	(0.802)	173441	50.0000	45(A)
17	cis-1,2-Dichloroethene	96	5.100	5.100	(0.807)	123186	5.00000	5.0
16	2-Butanone	43	5.123	5.123	(0.811)	184927	50.0000	47
18	Bromochloromethane	128	5.332	5.332	(0.844)	44701	5.00000	4.7

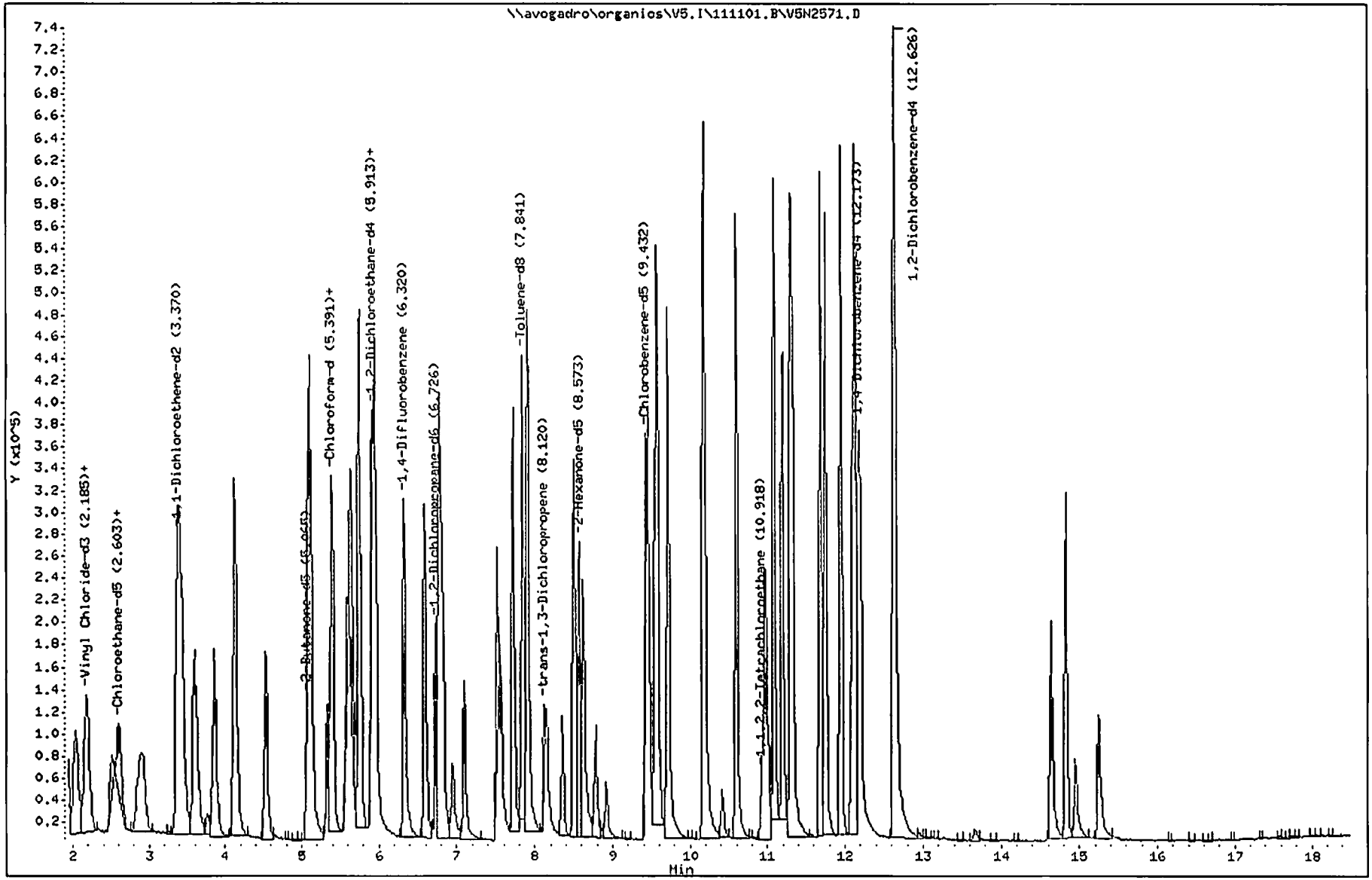
Data File: \\avogadro\organics\V5.I\111101.B\V5N2571.D
Report Date: 07-Nov-2011 13:10

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	83	Chloroform-d	84	5.378	5.378	(0.851)	189967	5.00000	5.2
	19	Chloroform	83	5.402	5.402	(0.855)	198523	5.00000	5.0
	20	1,1,1-Trichloroethane	97	5.588	5.588	(0.592)	191845	5.00000	5.6
	21	Cyclohexane	56	5.646	5.646	(0.599)	255666	5.00000	5.8
	22	Carbon Tetrachloride	117	5.750	5.750	(0.610)	174704	5.00000	5.6
$	23	1,2-Dichloroethane-d4	65	5.901	5.901	(0.934)	69907	5.00000	4.9
$	84	Benzene-d6	84	5.913	5.913	(0.627)	370834	5.00000	5.4
	25	Benzene	78	5.948	5.948	(0.631)	419585	5.00000	5.2
	24	1,2-Dichloroethane	62	5.971	5.971	(0.945)	82933	5.00000	4.6
*	26	1,4-Difluorobenzene	114	6.319	6.319	(1.000)	340406	5.00000	
	27	Trichloroethene	95	6.586	6.586	(0.698)	131020	5.00000	5.5
$	85	1,2-Dichloropropane-d6	67	6.726	6.726	(0.713)	132882	5.00000	5.4
	28	Methylcyclohexane	83	6.784	6.784	(0.719)	201091	5.00000	5.6
	29	1,2-Dichloropropane	63	6.819	6.819	(0.723)	106202	5.00000	5.0
	30	Bromodichloromethane	83	7.097	7.097	(0.753)	111265	5.00000	5.1
	31	cis-1,3-Dichloropropene	75	7.562	7.562	(0.802)	127977	5.00000	5.1
	32	4-Methyl-2-Pentanone	43	7.724	7.724	(0.819)	420875	50.0000	49
$	33	Toluene-d8	98	7.840	7.840	(0.831)	341923	5.00000	5.4
	34	Toluene	91	7.910	7.910	(0.839)	427317	5.00000	5.4
$	86	trans-1,3-Dichloropropene-d4	79	8.119	8.119	(0.861)	72344	5.00000	5.2
	35	trans-1,3-Dichloropropene	75	8.154	8.154	(0.865)	86019	5.00000	5.0
	36	1,1,2-Trichloroethane	97	8.351	8.351	(0.885)	44450	5.00000	4.7
	37	Tetrachloroethene	164	8.502	8.502	(0.901)	93790	5.00000	5.6
$	87	2-Hexanone-d5	63	8.572	8.572	(0.909)	125582	50.0000	50(AQ)
	38	2-Hexanone	43	8.619	8.619	(0.914)	284555	50.0000	50
	39	Dibromochloromethane	129	8.781	8.781	(0.931)	65401	5.00000	4.7
	40	1,2-Dibromoethane	107	8.920	8.920	(0.946)	48782	5.00000	4.8
*	42	Chlorobenzene-d5	117	9.431	9.431	(1.000)	245236	5.00000	
	43	Chlorobenzene	112	9.466	9.466	(1.004)	271464	5.00000	5.2
	44	Ethylbenzene	91	9.571	9.571	(1.015)	468399	5.00000	5.5
	45	m,p-Xylene	106	9.710	9.710	(1.030)	195270	5.00000	5.5
	46	o-Xylene	106	10.175	10.175	(1.079)	177267	5.00000	5.2
	47	Styrene	104	10.186	10.186	(1.080)	257341	5.00000	5.2
	48	Bromoform	173	10.419	10.419	(0.856)	29019	5.00000	4.1
	49	Isopropylbenzene	105	10.593	10.593	(1.123)	509051	5.00000	5.6
$	89	1,1,2,2-Tetrachloroethane-d2	84	10.918	10.918	(1.158)	42770	5.00000	4.4
	51	1,1,2,2-Tetrachloroethane	83	10.953	10.953	(1.161)	48756	5.00000	4.9
	52	1,3-Dichlorobenzene	146	12.091	12.091	(0.993)	180112	5.00000	5.3
*	78	1,4-Dichlorobenzene-d4	152	12.172	12.172	(1.000)	103084	5.00000	
	53	1,4-Dichlorobenzene	146	12.195	12.195	(1.002)	183538	5.00000	4.9
$	90	1,2-Dichlorobenzene-d4	152	12.625	12.625	(1.037)	85019	5.00000	5.0
	54	1,2-Dichlorobenzene	146	12.660	12.660	(1.040)	140607	5.00000	4.7
	55	1,2-Dibromo-3-chloropropane	75	13.659	13.659	(1.122)	5843	5.00000	4.7(Q)
	56	1,2,4-Trichlorobenzene	180	14.634	14.634	(1.202)	106538	5.00000	5.0
	77	1,2,3-Trichlorobenzene	180	15.250	15.250	(1.253)	76649	5.00000	4.6

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111101.B\V5N2571.D
Date : 01-NOV-2011 18:25
Client ID: VSTD0055U
Instrument: V5.I
Sample Info: 25ML,VSTD0055U,VSTD0055U
Purge Volume: 25.0
Operator: SRC:
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111102.B\V5N2595.D
Report Date: 07-Nov-2011 13:11

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111102.B\V5N2595.D
Lab Smp Id: VSTD0055V Client Smp ID: VSTD0055V
Inj Date : 02-NOV-2011 05:55
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD0055V,VSTD0055V
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111102.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 14:22 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
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	1.895	1.891	(0.300)	136769	5.00000	3.5
2	Chloromethane	50	2.034	2.030	(0.322)	274209	5.00000	4.4
$ 79	Vinyl Chloride-d3	65	2.162	2.169	(0.342)	154498	5.00000	4.1
3	Vinyl Chloride	62	2.173	2.181	(0.344)	204703	5.00000	4.5
4	Bromomethane	94	2.510	2.506	(0.397)	125022	5.00000	4.2
$ 80	Chloroethane-d5	69	2.592	2.587	(0.410)	105640	5.00000	4.2
5	Chloroethane	64	2.615	2.611	(0.414)	111304	5.00000	4.8
6	Trichlorofluoromethane	101	2.893	2.901	(0.458)	227801	5.00000	4.8
$ 81	1,1-Dichloroethene-d2	65	3.346	3.354	(0.530)	36883	5.00000	4.2(Q)
7	1,1-Dichloroethene	96	3.370	3.377	(0.533)	116990	5.00000	4.1
8	1,1,2-Trichloro-1,2,2-trifluo	101	3.416	3.412	(0.541)	133167	5.00000	4.1
9	Acetone	43	3.439	3.447	(0.544)	126504	50.0000	42
10	Carbon Disulfide	76	3.590	3.598	(0.568)	448711	5.00000	3.9
11	Methyl Acetate	43	3.764	3.772	(0.596)	34255	5.00000	4.0
12	Methylene Chloride	84	3.846	3.853	(0.609)	100964	5.00000	4.2(Q)
13	trans-1,2-Dichloroethene	96	4.113	4.120	(0.651)	130344	5.00000	4.9
14	Methyl tert-Butyl Ether	73	4.136	4.132	(0.655)	126815	5.00000	4.4
15	1,1-Dichloroethane	63	4.531	4.527	(0.717)	242786	5.00000	5.0
$ 82	2-Butanone-d5	46	5.065	5.061	(0.802)	172277	50.0000	45(A)
17	cis-1,2-Dichloroethene	96	5.088	5.096	(0.805)	114762	5.00000	4.7
16	2-Butanone	43	5.123	5.119	(0.811)	172832	50.0000	45
18	Bromochloromethane	128	5.332	5.328	(0.844)	39510	5.00000	4.3

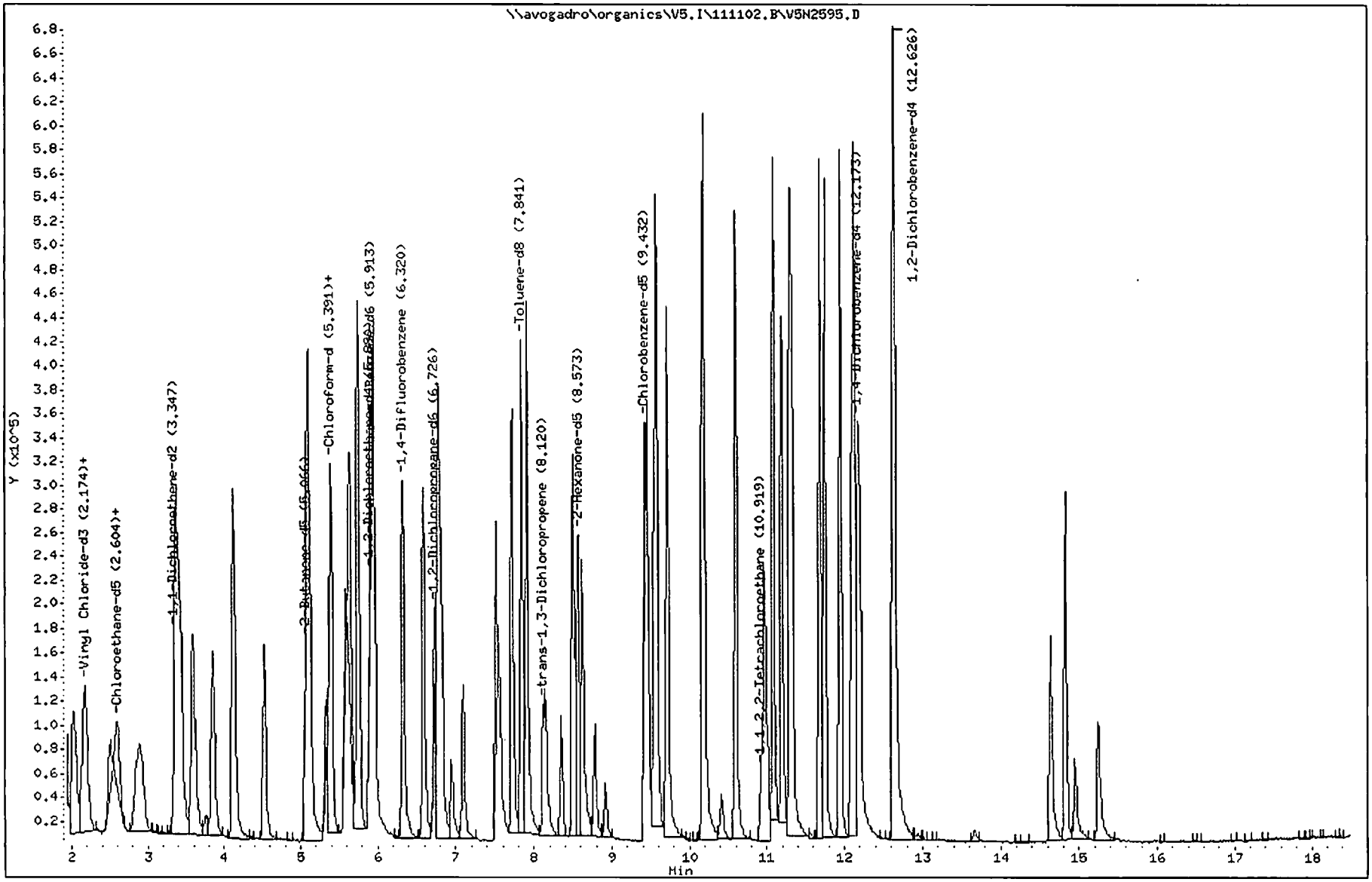
Data File: \\avogadro\organics\V5.I\111102.B\V5N2595.D
Report Date: 07-Nov-2011 13:11

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
$	83	Chloroform-d	84	5.379	5.386	(0.851)	171656	5.00000	4.8
	19	Chloroform	83	5.402	5.398	(0.855)	185460	5.00000	4.8
	20	1,1,1-Trichloroethane	97	5.588	5.584	(0.592)	179382	5.00000	5.5
	21	Cyclohexane	56	5.634	5.642	(0.597)	232606	5.00000	5.6
	22	Carbon Tetrachloride	117	5.750	5.746	(0.610)	162128	5.00000	5.5
$	23	1,2-Dichloroethane-d4	65	5.890	5.897	(0.932)	66095	5.00000	4.7
$	84	Benzene-d6	84	5.913	5.909	(0.627)	351676	5.00000	5.4
	25	Benzene	78	5.948	5.944	(0.631)	387238	5.00000	5.1
	24	1,2-Dichloroethane	62	5.971	5.967	(0.945)	79439	5.00000	4.5
*	26	1,4-Difluorobenzene	114	6.319	6.327	(1.000)	333482	5.00000	
	27	Trichloroethene	95	6.586	6.582	(0.698)	125562	5.00000	5.5
$	85	1,2-Dichloropropane-d6	67	6.726	6.733	(0.713)	125538	5.00000	5.4
	28	Methylcyclohexane	83	6.772	6.780	(0.718)	183506	5.00000	5.4
	29	1,2-Dichloropropane	63	6.819	6.815	(0.723)	108300	5.00000	5.4
	30	Bromodichloromethane	83	7.097	7.093	(0.753)	101830	5.00000	4.9
	31	cis-1,3-Dichloropropene	75	7.562	7.558	(0.802)	127693	5.00000	5.4
	32	4-Methyl-2-Pentanone	43	7.725	7.720	(0.819)	395324	50.0000	48
$	33	Toluene-d8	98	7.841	7.837	(0.831)	324607	5.00000	5.4
	34	Toluene	91	7.910	7.906	(0.839)	408269	5.00000	5.5
$	86	trans-1,3-Dichloropropene-d4	79	8.119	8.115	(0.861)	69495	5.00000	5.3
	35	trans-1,3-Dichloropropene	75	8.154	8.150	(0.865)	82126	5.00000	5.1
	36	1,1,2-Trichloroethane	97	8.352	8.348	(0.885)	43554	5.00000	4.9
	37	Tetrachloroethene	164	8.503	8.499	(0.902)	85528	5.00000	5.4
$	87	2-Hexanone-d5	63	8.572	8.568	(0.909)	127078	50.0000	54(AQ)
	38	2-Hexanone	43	8.619	8.615	(0.914)	264417	50.0000	49
	39	Dibromochloromethane	129	8.781	8.777	(0.931)	61484	5.00000	4.7
	40	1,2-Dibromoethane	107	8.921	8.917	(0.946)	44351	5.00000	4.6
*	42	Chlorobenzene-d5	117	9.432	9.428	(1.000)	232305	5.00000	
	43	Chlorobenzene	112	9.455	9.462	(1.002)	254070	5.00000	5.1
	44	Ethylbenzene	91	9.571	9.579	(1.015)	447324	5.00000	5.5
	45	m,p-Xylene	106	9.710	9.706	(1.030)	182129	5.00000	5.5
	46	o-Xylene	106	10.175	10.171	(1.079)	161638	5.00000	5.0
	47	Styrene	104	10.186	10.194	(1.080)	244934	5.00000	5.3
	48	Bromoform	173	10.419	10.415	(0.856)	26242	5.00000	3.8
	49	Isopropylbenzene	105	10.593	10.600	(1.123)	472420	5.00000	5.5
$	89	1,1,2,2-Tetrachloroethane-d2	84	10.918	10.926	(1.158)	44298	5.00000	4.8
	51	1,1,2,2-Tetrachloroethane	83	10.953	10.949	(1.161)	44644	5.00000	4.7
	52	1,3-Dichlorobenzene	146	12.091	12.099	(0.993)	165308	5.00000	5.0
*	78	1,4-Dichlorobenzene-d4	152	12.172	12.168	(1.000)	100870	5.00000	
	53	1,4-Dichlorobenzene	146	12.196	12.203	(1.002)	168126	5.00000	4.6
$	90	1,2-Dichlorobenzene-d4	152	12.625	12.633	(1.037)	79221	5.00000	4.8
	54	1,2-Dichlorobenzene	146	12.660	12.656	(1.040)	130669	5.00000	4.5
	55	1,2-Dibromo-3-chloropropane	75	13.659	13.666	(1.122)	4801	5.00000	4.0(Q)
	56	1,2,4-Trichlorobenzene	180	14.634	14.642	(1.202)	93393	5.00000	4.4
	77	1,2,3-Trichlorobenzene	180	15.250	15.246	(1.253)	63605	5.00000	3.9

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111102.B\V5N2595.D
Date : 02-NOV-2011 05:55
Client ID: VSTD0055V
Instrument: V5.i
Sample Info: 25ML,VSTD0055V,VSTD0055V
Purge Volume: 25.0
Operator: SRC:
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111102.B\V5N2620.D
Report Date: 07-Nov-2011 14:03

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111102.B\V5N2620.D
Lab Smp Id: VSTD0055W Client Smp ID: VSTD0055W
Inj Date : 02-NOV-2011 17:48
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD0055W,VSTD0055W
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111102.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 14:22 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 11 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
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	1.891	1.891	(0.299)	150332	5.00000	3.7
	2 Chloromethane	50	2.030	2.030	(0.321)	286897	5.00000	4.5
$	79 Vinyl Chloride-d3	65	2.169	2.169	(0.343)	175251	5.00000	4.4
	3 Vinyl Chloride	62	2.181	2.181	(0.345)	211650	5.00000	4.5
	4 Bromomethane	94	2.506	2.506	(0.396)	127294	5.00000	4.1
$	80 Chloroethane-d5	69	2.587	2.587	(0.409)	114080	5.00000	4.4
	5 Chloroethane	64	2.611	2.611	(0.413)	111237	5.00000	4.6
	6 Trichlorofluoromethane	101	2.901	2.901	(0.459)	234927	5.00000	4.8
$	81 1,1-Dichloroethene-d2	65	3.354	3.354	(0.530)	36094	5.00000	4.0(Q)
	7 1,1-Dichloroethene	96	3.377	3.377	(0.534)	119149	5.00000	4.0(Q)
	8 1,1,2-Trichloro-1,2,2-trifluo	101	3.412	3.412	(0.539)	139408	5.00000	4.1
	9 Acetone	43	3.447	3.447	(0.545)	126222	50.0000	41
	10 Carbon Disulfide	76	3.598	3.598	(0.569)	474226	5.00000	4.0
	11 Methyl Acetate	43	3.772	3.772	(0.596)	37752	5.00000	4.3
	12 Methylene Chloride	84	3.853	3.853	(0.609)	102432	5.00000	4.1
	13 trans-1,2-Dichloroethene	96	4.120	4.120	(0.651)	125654	5.00000	4.6
	14 Methyl tert-Butyl Ether	73	4.132	4.132	(0.653)	128169	5.00000	4.3
	15 1,1-Dichloroethane	63	4.527	4.527	(0.716)	245357	5.00000	4.9
$	82 2-Butanone-d5	46	5.061	5.061	(0.800)	171042	50.0000	43(A)
	17 cis-1,2-Dichloroethene	96	5.096	5.096	(0.805)	113212	5.00000	4.5
	16 2-Butanone	43	5.119	5.119	(0.809)	177186	50.0000	44
	18 Bromochloromethane	128	5.328	5.328	(0.842)	40211	5.00000	4.2

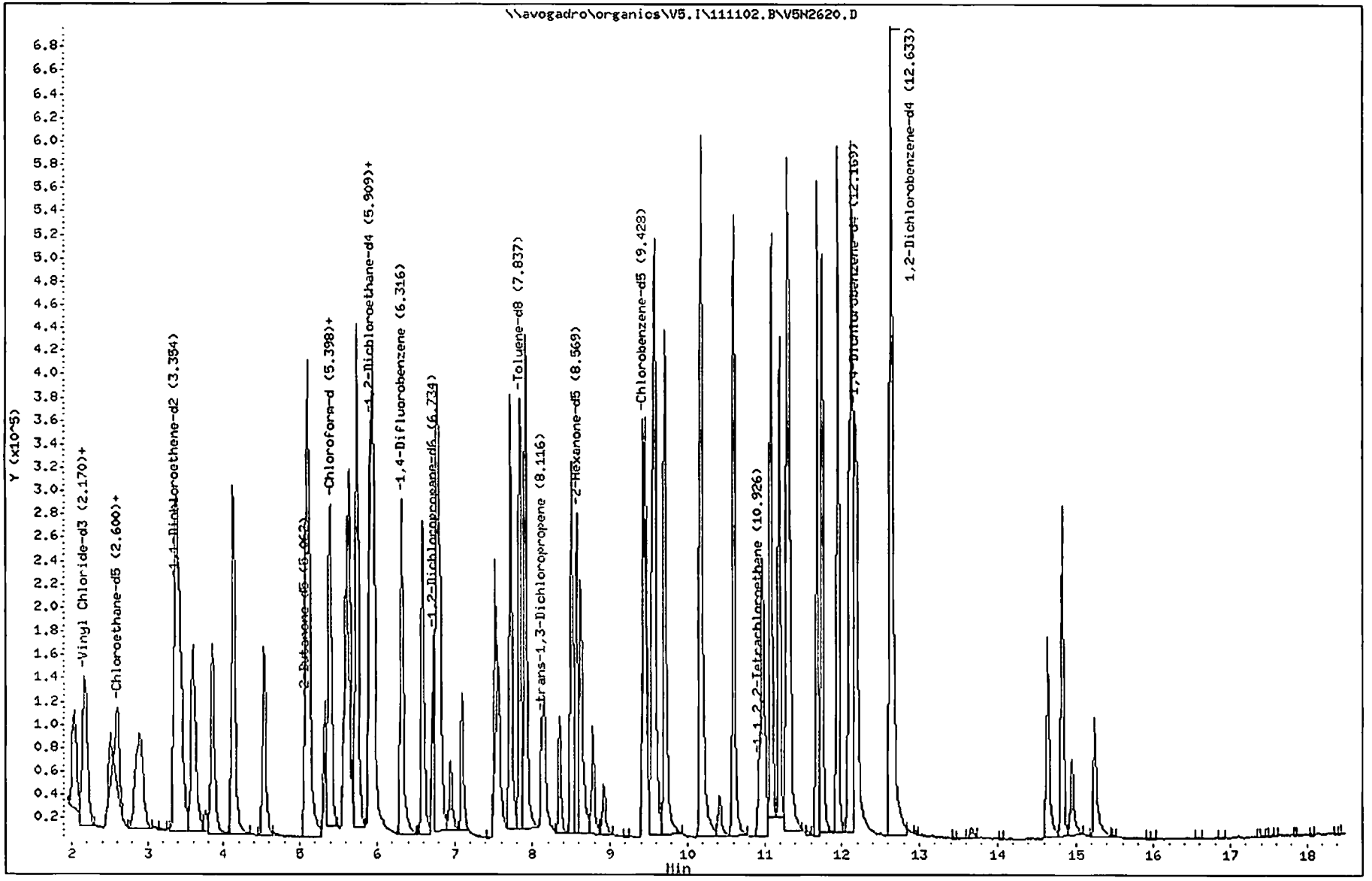
Data File: \\avogadro\organics\V5.I\111102.B\V5N2620.D
Report Date: 07-Nov-2011 14:03

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	83 Chloroform-d	84	5.386	5.386	(0.851)	167539	5.00000	4.5
	19 Chloroform	83	5.398	5.398	(0.853)	183823	5.00000	4.6
	20 1,1,1-Trichloroethane	97	5.584	5.584	(0.592)	176569	5.00000	5.4
	21 Cyclohexane	56	5.642	5.642	(0.598)	235236	5.00000	5.6
	22 Carbon Tetrachloride	117	5.746	5.746	(0.610)	158163	5.00000	5.3
$	23 1,2-Dichloroethane-d4	65	5.897	5.897	(0.932)	60027	5.00000	4.1
$	84 Benzene-d6	84	5.909	5.909	(0.627)	332985	5.00000	5.0
	25 Benzene	78	5.944	5.944	(0.630)	396933	5.00000	5.1
	24 1,2-Dichloroethane	62	5.967	5.967	(0.943)	76285	5.00000	4.2
*	26 1,4-Difluorobenzene	114	6.327	6.327	(1.000)	345489	5.00000	
	27 Trichloroethene	95	6.582	6.582	(0.698)	124596	5.00000	5.4
$	85 1,2-Dichloropropane-d6	67	6.733	6.733	(0.714)	121306	5.00000	5.2
	28 Methylcyclohexane	83	6.780	6.780	(0.719)	183589	5.00000	5.3
	29 1,2-Dichloropropane	63	6.815	6.815	(0.723)	105654	5.00000	5.2
	30 Bromodichloromethane	83	7.093	7.093	(0.752)	105159	5.00000	5.0
	31 cis-1,3-Dichloropropene	75	7.558	7.558	(0.802)	119268	5.00000	5.0
	32 4-Methyl-2-Pentanone	43	7.720	7.720	(0.819)	401301	50.0000	48
$	33 Toluene-d8	98	7.837	7.837	(0.831)	308525	5.00000	5.1
	34 Toluene	91	7.906	7.906	(0.839)	407631	5.00000	5.4
$	86 trans-1,3-Dichloropropene-d4	79	8.115	8.115	(0.861)	67387	5.00000	5.0
	35 trans-1,3-Dichloropropene	75	8.150	8.150	(0.865)	79011	5.00000	4.8
	36 1,1,2-Trichloroethane	97	8.348	8.348	(0.885)	43910	5.00000	4.8
	37 Tetrachloroethene	164	8.499	8.499	(0.901)	85204	5.00000	5.3
$	87 2-Hexanone-d5	63	8.568	8.568	(0.909)	123908	50.0000	51(AQ)
	38 2-Hexanone	43	8.615	8.615	(0.914)	273767	50.0000	50
	39 Dibromochloromethane	129	8.777	8.777	(0.931)	59965	5.00000	4.5
	40 1,2-Dibromoethane	107	8.917	8.917	(0.946)	47249	5.00000	4.8
*	42 Chlorobenzene-d5	117	9.428	9.428	(1.000)	235932	5.00000	
	43 Chlorobenzene	112	9.462	9.462	(1.004)	251767	5.00000	5.0
	44 Ethylbenzene	91	9.579	9.579	(1.016)	440567	5.00000	5.4
	45 m,p-Xylene	106	9.706	9.706	(1.030)	183598	5.00000	5.4
	46 o-Xylene	106	10.171	10.171	(1.079)	165878	5.00000	5.0
	47 Styrene	104	10.194	10.194	(1.081)	243801	5.00000	5.2
	48 Bromoform	173	10.415	10.415	(0.856)	25525	5.00000	3.7
	49 Isopropylbenzene	105	10.600	10.600	(1.124)	468281	5.00000	5.4
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.926	10.926	(1.159)	39127	5.00000	4.2
	51 1,1,2,2-Tetrachloroethane	83	10.949	10.949	(1.161)	46036	5.00000	4.8
	52 1,3-Dichlorobenzene	146	12.099	12.099	(0.994)	163715	5.00000	5.0
*	78 1,4-Dichlorobenzene-d4	152	12.168	12.168	(1.000)	99862	5.00000	
	53 1,4-Dichlorobenzene	146	12.203	12.203	(1.003)	169688	5.00000	4.7
$	90 1,2-Dichlorobenzene-d4	152	12.633	12.633	(1.038)	70724	5.00000	4.3
	54 1,2-Dichlorobenzene	146	12.656	12.656	(1.040)	133275	5.00000	4.6
	55 1,2-Dibromo-3-chloropropane	75	13.666	13.666	(1.123)	5840	5.00000	4.9(Q)
	56 1,2,4-Trichlorobenzene	180	14.642	14.642	(1.203)	97328	5.00000	4.7
	77 1,2,3-Trichlorobenzene	180	15.246	15.246	(1.253)	68421	5.00000	4.3

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111102.B\V5N2620.D
Date : 02-NOV-2011 17:48
Client ID: VSTD0055W
Instrument: V5.i
Sample Info: 25ML,VSTD0055W,VSTD0055W
Purge Volume: 25.0
Operator: SRC:
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111102A.B\V5N2643.D
Report Date: 07-Nov-2011 13:13

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111102A.B\V5N2643.D
Lab Smp Id: VSTD0055X Client Smp ID: VSTD0055X
Inj Date : 03-NOV-2011 05:35
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD0055X,VSTD0055X
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111102A.B\V5_TVOA1359.m
Meth Date : 04-Nov-2011 15:45 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 14 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
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	1.900	1.900	(0.300)	148820	5.00000	4.0
2	Chloromethane	50	2.040	2.040	(0.323)	277865	5.00000	4.7
S 79	Vinyl Chloride-d3	65	2.179	2.179	(0.345)	159294	5.00000	4.4
3	Vinyl Chloride	62	2.179	2.179	(0.345)	212064	5.00000	4.9
4	Bromomethane	94	2.516	2.516	(0.398)	128617	5.00000	4.5
S 80	Chloroethane-d5	69	2.585	2.585	(0.409)	109727	5.00000	4.6
5	Chloroethane	64	2.609	2.609	(0.412)	110975	5.00000	5.0
6	Trichlorofluoromethane	101	2.899	2.899	(0.458)	236390	5.00000	5.2
S 81	1,1-Dichloroethene-d2	65	3.375	3.375	(0.534)	35222	5.00000	4.2(Q)
7	1,1-Dichloroethene	96	3.387	3.387	(0.535)	115288	5.00000	4.2(Q)
8	1,1,2-Trichloro-1,2,2-trifluo	101	3.421	3.421	(0.541)	133745	5.00000	4.3
9	Acetone	43	3.445	3.445	(0.545)	137649	50.0000	48
10	Carbon Disulfide	76	3.607	3.607	(0.570)	471460	5.00000	4.3
11	Methyl Acetate	43	3.770	3.770	(0.596)	34451	5.00000	4.2
12	Methylene Chloride	84	3.863	3.863	(0.611)	98896	5.00000	4.3(Q)
13	trans-1,2-Dichloroethene	96	4.130	4.130	(0.653)	126667	5.00000	5.0
14	Methyl tert-Butyl Ether	73	4.141	4.141	(0.655)	128461	5.00000	4.6
15	1,1-Dichloroethane	63	4.536	4.536	(0.717)	240185	5.00000	5.2
S 82	2-Butanone-d5	46	5.071	5.071	(0.802)	182221	50.0000	50(A)
17	cis-1,2-Dichloroethene	96	5.094	5.094	(0.805)	111984	5.00000	4.8
16	2-Butanone	43	5.129	5.129	(0.811)	187283	50.0000	51
18	Bromochloromethane	128	5.338	5.338	(0.844)	42796	5.00000	4.8

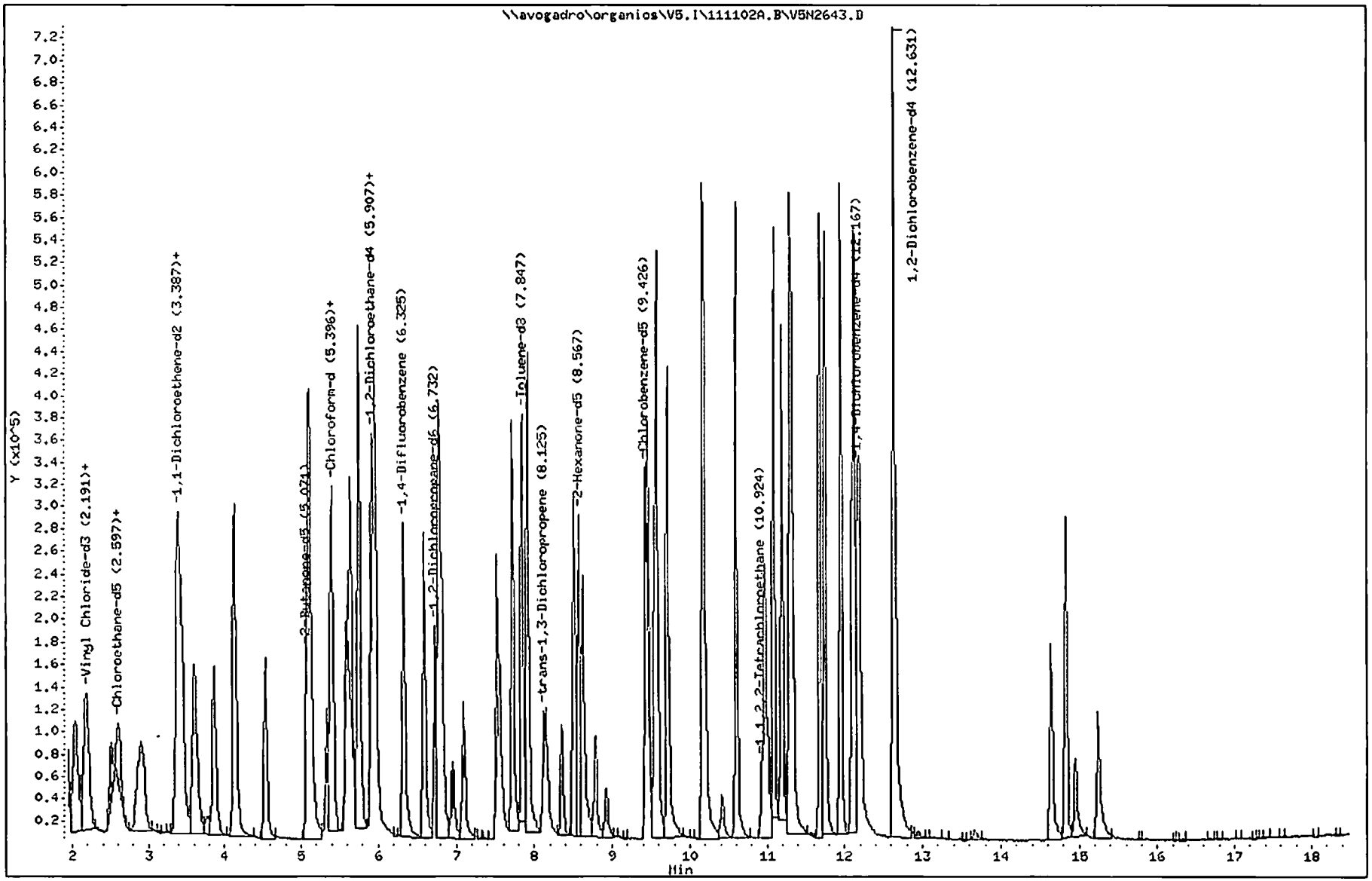
Data File: \\avogadro\organics\V5.I\111102A.B\V5N2643.D
Report Date: 07-Nov-2011 13:13

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	83	Chloroform-d	84	5.384	5.384	(0.851)	176109	5.00000	5.1
	19	Chloroform	83	5.407	5.407	(0.855)	186773	5.00000	5.0
	20	1,1,1-Trichloroethane	97	5.593	5.593	(0.593)	177152	5.00000	5.6
	21	Cyclohexane	56	5.640	5.640	(0.598)	237201	5.00000	5.9
	22	Carbon Tetrachloride	117	5.744	5.744	(0.609)	161456	5.00000	5.7
$	23	1,2-Dichloroethane-d4	65	5.895	5.895	(0.932)	66581	5.00000	5.0
$	84	Benzene-d6	84	5.907	5.907	(0.627)	353571	5.00000	5.6
	25	Benzene	78	5.953	5.953	(0.632)	388450	5.00000	5.2
	24	1,2-Dichloroethane	62	5.976	5.976	(0.945)	80784	5.00000	4.8
*	26	1,4-Difluorobenzene	114	6.325	6.325	(1.000)	318186	5.00000	
	27	Trichloroethene	95	6.592	6.592	(0.699)	120762	5.00000	5.5
$	85	1,2-Dichloropropane-d6	67	6.731	6.731	(0.714)	125778	5.00000	5.6
	28	Methylcyclohexane	83	6.778	6.778	(0.719)	186458	5.00000	5.7
	29	1,2-Dichloropropane	63	6.824	6.824	(0.724)	105585	5.00000	5.4
	30	Bromodichloromethane	83	7.091	7.091	(0.752)	101032	5.00000	5.1
	31	cis-1,3-Dichloropropene	75	7.556	7.556	(0.802)	123809	5.00000	5.4
	32	4-Methyl-2-Pentanone	43	7.718	7.718	(0.819)	419584	50.0000	53
$	33	Toluene-d8	98	7.846	7.846	(0.832)	317896	5.00000	5.5
	34	Toluene	91	7.916	7.916	(0.840)	401498	5.00000	5.5
$	86	trans-1,3-Dichloropropene-d4	79	8.125	8.125	(0.862)	72206	5.00000	5.6
	35	trans-1,3-Dichloropropene	75	8.148	8.148	(0.864)	80885	5.00000	5.1
	36	1,1,2-Trichloroethane	97	8.357	8.357	(0.887)	43847	5.00000	5.0
	37	Tetrachloroethene	164	8.508	8.508	(0.903)	89073	5.00000	5.8
$	87	2-Hexanone-d5	63	8.566	8.566	(0.909)	128924	50.0000	56(AQ)
	38	2-Hexanone	43	8.624	8.624	(0.915)	288319	50.0000	55
	39	Dibromochloromethane	129	8.787	8.787	(0.932)	61757	5.00000	4.8
	40	1,2-Dibromoethane	107	8.926	8.926	(0.947)	44973	5.00000	4.8
*	42	Chlorobenzene-d5	117	9.425	9.425	(1.000)	225578	5.00000	
	43	Chlorobenzene	112	9.460	9.460	(1.004)	256435	5.00000	5.3
	44	Ethylbenzene	91	9.576	9.576	(1.016)	445719	5.00000	5.7
	45	m,p-Xylene	106	9.716	9.716	(1.031)	182039	5.00000	5.6
	46	o-Xylene	106	10.169	10.169	(1.079)	167128	5.00000	5.3
	47	Styrene	104	10.192	10.192	(1.081)	239436	5.00000	5.3
	48	Bromoform	173	10.413	10.413	(0.856)	26067	5.00000	3.9
	49	Isopropylbenzene	105	10.598	10.598	(1.124)	478058	5.00000	5.7
$	89	1,1,2,2-Tetrachloroethane-d2	84	10.924	10.924	(1.159)	45423	5.00000	5.1
	51	1,1,2,2-Tetrachloroethane	83	10.958	10.958	(1.163)	47125	5.00000	5.1
	52	1,3-Dichlorobenzene	146	12.096	12.096	(0.994)	163807	5.00000	5.1
*	78	1,4-Dichlorobenzene-d4	152	12.166	12.166	(1.000)	97488	5.00000	
	53	1,4-Dichlorobenzene	146	12.201	12.201	(1.003)	172170	5.00000	4.9
$	90	1,2-Dichlorobenzene-d4	152	12.631	12.631	(1.038)	79372	5.00000	5.0
	54	1,2-Dichlorobenzene	146	12.654	12.654	(1.040)	135752	5.00000	4.8
	55	1,2-Dibromo-3-chloropropane	75	13.676	13.676	(1.124)	5308	5.00000	4.6(Q)
	56	1,2,4-Trichlorobenzene	180	14.640	14.640	(1.203)	97570	5.00000	4.8
	77	1,2,3-Trichlorobenzene	180	15.244	15.244	(1.253)	72569	5.00000	4.6

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111102A.B\V5N2643.D
Date : 03-NOV-2011 05:35
Client ID: VSTD0055X
Instrument: V5.i
Sample Info: 25ML,VSTD0055X,VSTD0055X
Purge Volume: 25.0
Operator: SRC:
Column phase: DB-624
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\V5.I\111015A.B\V5N1679.D
Lab Smp Id: BFBB5 Client Smp ID: BFBB5
Inj Date : 15-OCT-2011 10:58
Operator : SRC: Inst ID: V5.i
Smp Info : 2UL,BFBB5,BFBB5
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111015A.B\V5_BFB_SOM.m
Meth Date : 29-Jun-2011 08:45 tmontmarqu 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		
10.807	10.800	(0.000)	95	33784			0.00- 100.00	100.00
10.807	10.800	(0.000)	50	7031			15.00- 40.00	20.81
10.807	10.800	(0.000)	75	14397			30.00- 80.00	42.61
10.807	10.800	(0.000)	96	2189			5.00- 9.00	6.48
10.807	10.800	(0.000)	173	135			0.00- 2.00	0.52
10.807	10.800	(0.000)	174	26176			50.00- 120.00	77.48
10.807	10.800	(0.000)	175	1617			5.00- 9.00	6.18
10.807	10.800	(0.000)	176	25768			95.00- 101.00	98.44
10.807	10.800	(0.000)	177	1830			5.00- 9.00	7.10

Data File: \\avogadro\organics\V5.I\111015A.B\V5N1679.D

Date : 15-OCT-2011 10:58

Client ID: BFBB5

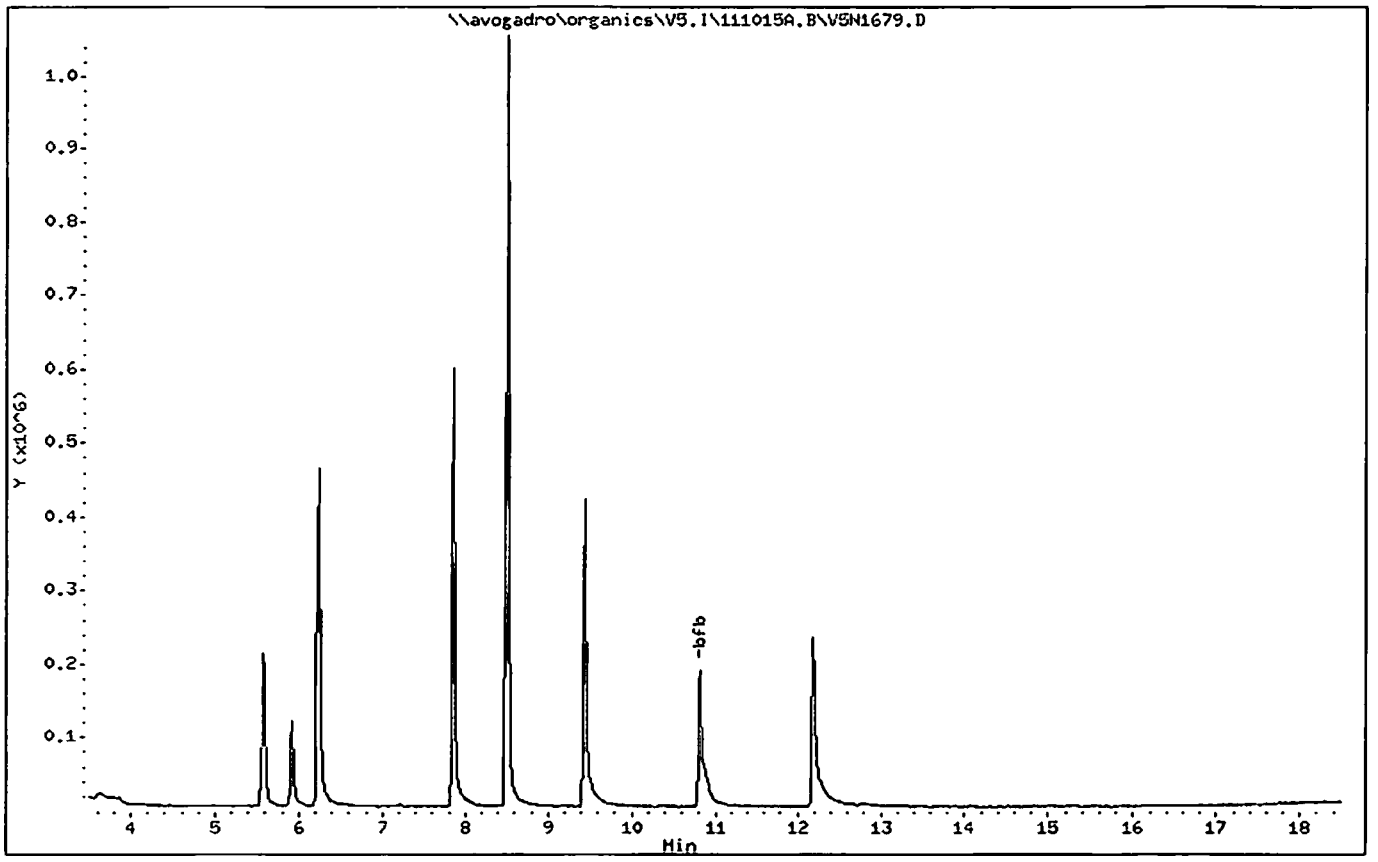
Instrument: V5.i

Sample Info: 2UL,BFBB5,BFBB5

Operator: SRC:

Column phase: DB-624

Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111015A.B\V5N1679.D

Date : 15-OCT-2011 10:58

Client ID: BFBB5

Instrument: V5.i

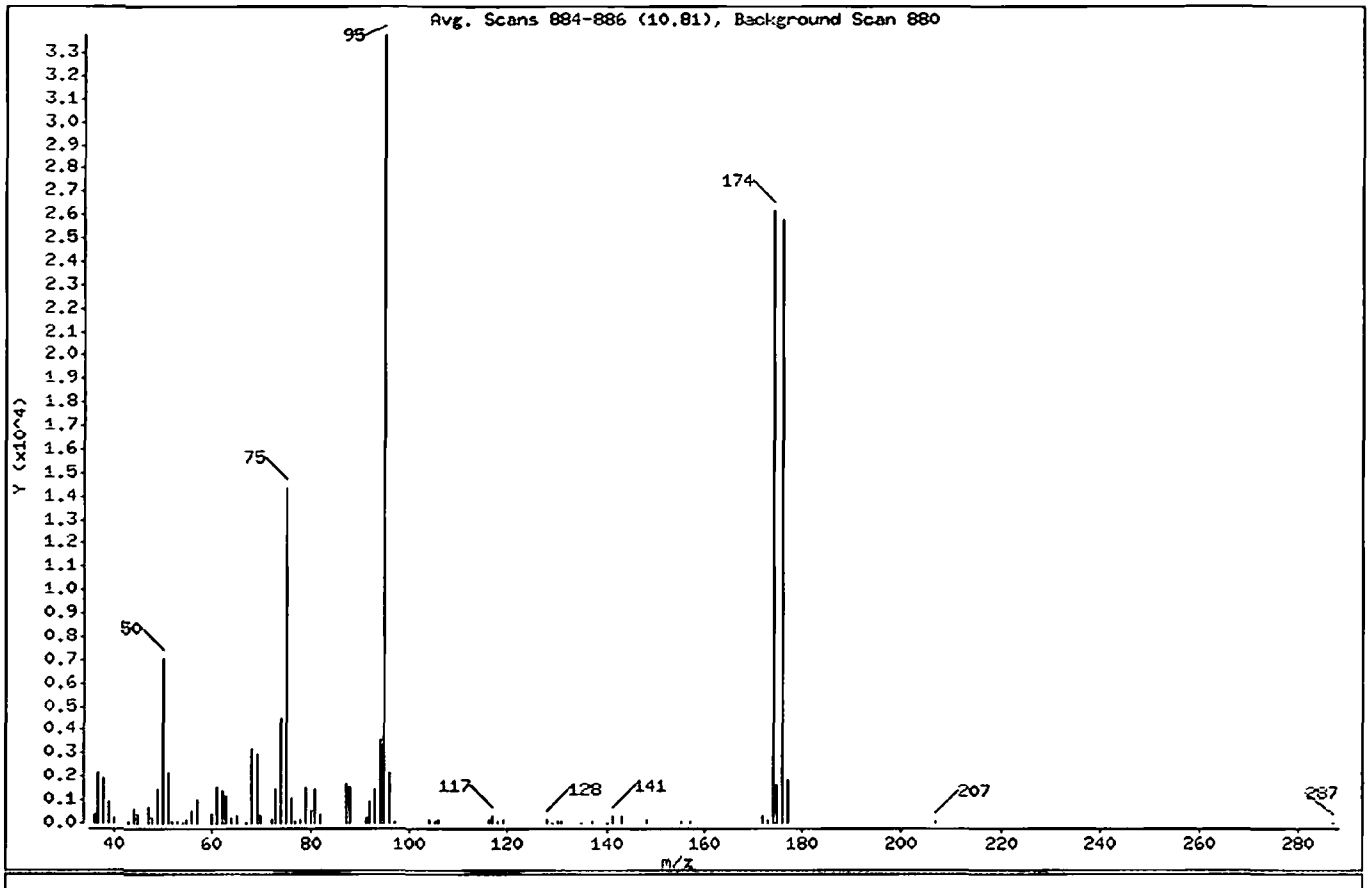
Sample Info: 2UL,BFBB5,BFBB5

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	20.81
75	30.00 - 80.00% of mass 95	42.61
96	5.00 - 9.00% of mass 95	6.48
173	Less than 2.00% of mass 174	0.40 (0.52)
174	50.00 - 120.00% of mass 95	77.48
175	5.00 - 9.00% of mass 174	4.79 (6.18)
176	95.00 - 101.00% of mass 174	76.27 (98.44)
177	5.00 - 9.00% of mass 176	5.42 (7.10)

Date : 15-OCT-2011 10:58

Client ID: BFBB5 Instrument: V5.i

Sample Info: 2UL,BFBB5,BFBB5

Operator: SRC:

Column phase: DB-624 Column diameter: 0.25

Data File: V5N1679.D
Spectrum: Avg. Scans 884-886 (10.81), Background Scan 880
Location of Maximum: 95.00
Number of points: 76

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	382	61.00	1522	87.00	1745	135.00	36
37.00	2196	62.00	1405	88.00	1585	137.00	43
38.00	1947	63.00	1174	91.00	195	140.00	34
39.00	904	64.00	198	92.00	912	141.00	321
40.00	209	65.00	274	93.00	1477	143.00	315
43.00	78	67.00	34	94.00	3584	148.00	142
44.00	629	68.00	3184	95.00	33784	155.00	41
45.00	396	69.00	2987	96.00	2189	157.00	44
47.00	684	70.00	276	97.00	85	172.00	314
48.00	253	72.00	176	104.00	192	173.00	135
49.00	1486	73.00	1506	105.00	50	174.00	26176
50.00	7031	74.00	4539	106.00	165	175.00	1617
51.00	2203	75.00	14397	116.00	128	176.00	25768
52.00	49	76.00	1091	117.00	321	177.00	1830
53.00	47	77.00	116	118.00	43	207.00	100
54.00	36	78.00	166	119.00	171	287.00	38
55.00	159	79.00	1561	128.00	128		
56.00	527	80.00	570	129.00	35		
57.00	977	81.00	1490	130.00	107		
60.00	395	82.00	379	131.00	45		

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\V5.I\111101.B\V5N2525.D
Lab Smp Id: BFB5T Client Smp ID: BFB5T
Inj Date : 01-NOV-2011 06:27
Operator : SRC: Inst ID: V5.i
Smp Info : 2UL,BFB5T,BFB5T
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111101.B\V5_BFB_SOM.m
Meth Date : 29-Jun-2011 08:45 tmontmarqu 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

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	REL RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
10.790	10.800	(0.000)	95	45912			0.00- 100.00	100.00
10.790	10.800	(0.000)	50	10272			15.00- 40.00	22.37
10.790	10.800	(0.000)	75	20176			30.00- 80.00	43.94
10.790	10.800	(0.000)	96	3219			5.00- 9.00	7.01
10.790	10.800	(0.000)	173	0	0.0	0.0	0.00- 2.00	0.00
10.790	10.800	(0.000)	174	34176			50.00- 120.00	74.44
10.790	10.800	(0.000)	175	2585			5.00- 9.00	7.56
10.790	10.800	(0.000)	176	33360			95.00- 101.00	97.61
10.790	10.800	(0.000)	177	2286			5.00- 9.00	6.85

Data File: \\avogadro\organics\V5.I\111101.B\V5N2525.D

Date : 01-NOV-2011 06:27

Client ID: BFB5T

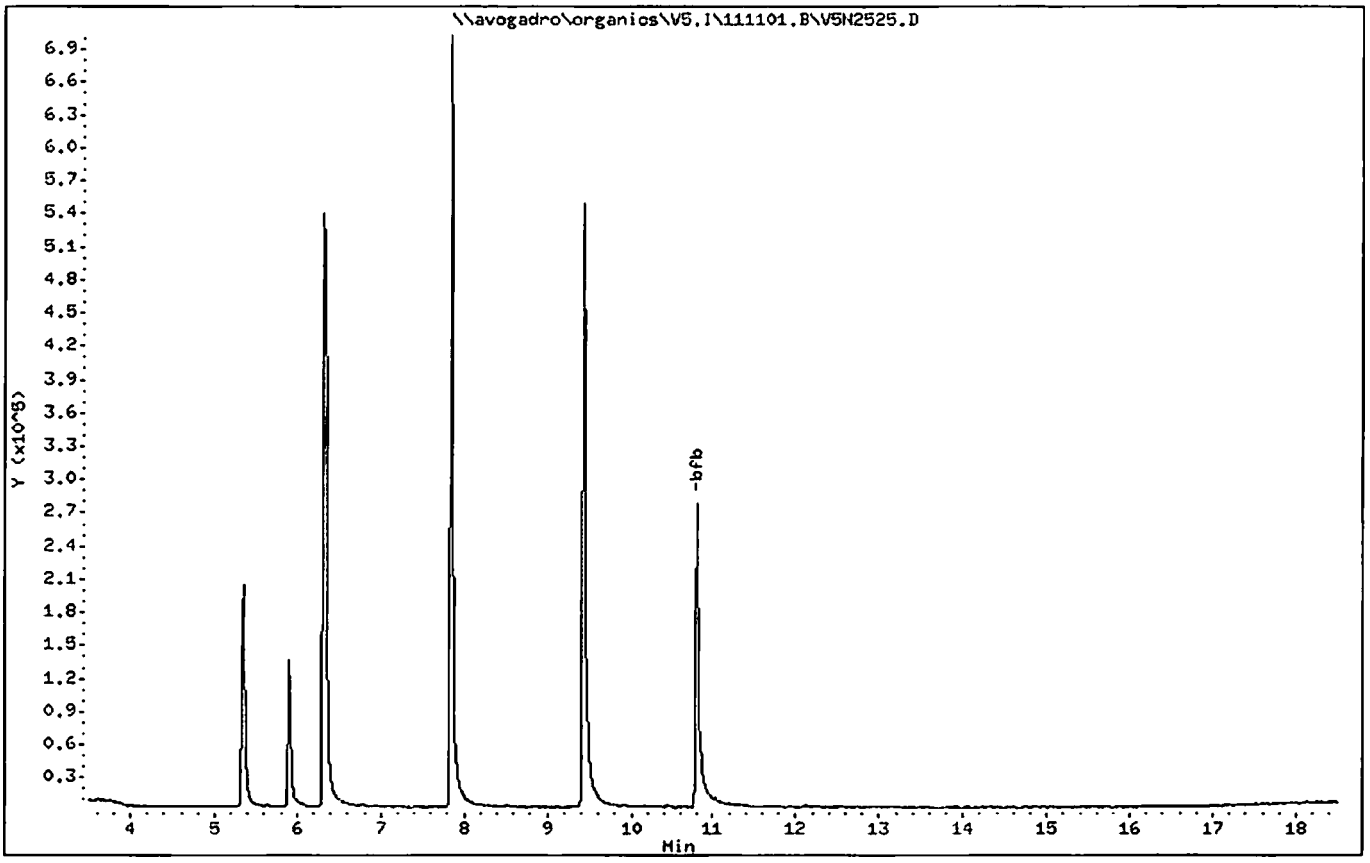
Instrument: V5.i

Sample Info: 2UL,BFB5T,BFB5T

Operator: SRC:

Column phase: DB-624

Column diameter: 0.25



Data File: \\avogadro\organics\V5.i\111101.B\V5N2525.D

Date : 01-NOV-2011 06:27

Client ID: BFB5T

Instrument: V5.i

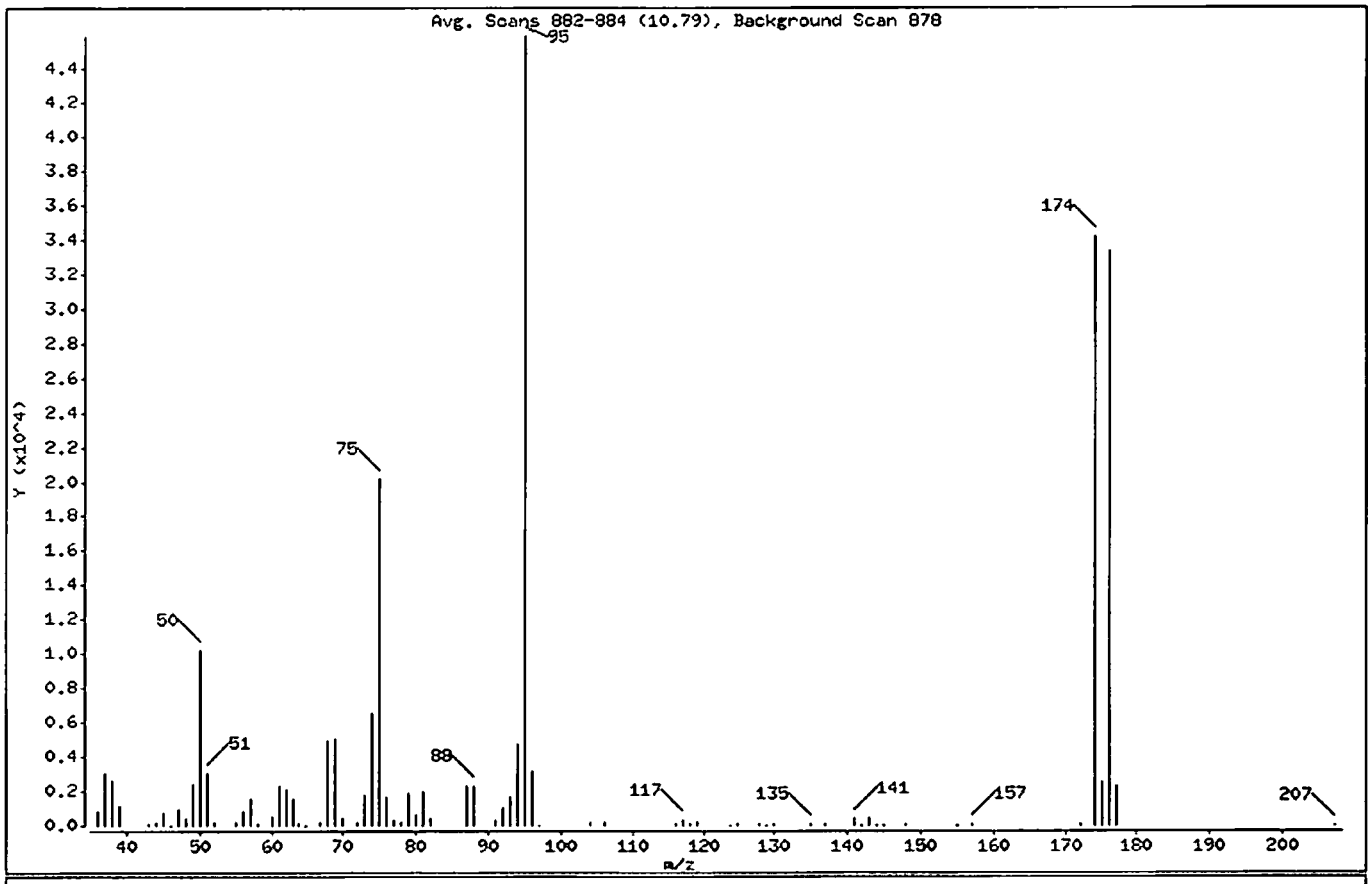
Sample Info: 2UL,BFB5T,BFB5T

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	22.37
75	30.00 - 80.00% of mass 95	43.94
96	5.00 - 9.00% of mass 95	7.01
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 120.00% of mass 95	74.44
175	5.00 - 9.00% of mass 174	5.63 (7.56)
176	95.00 - 101.00% of mass 174	72.66 (97.61)
177	5.00 - 9.00% of mass 176	4.98 (6.85)

Date : 01-NOV-2011 06:27

Client ID: BFBST Instrument: V5.i

Sample Info: 2UL,BFBST,BFBST

Operator: SRC:

Column phase: DB-624 Column diameter: 0.25

Data File: V5N2525.D

Spectrum: Avg. Scans 882-884 (10.79), Background Scan 878

Location of Maximum: 95.00

Number of points: 75

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	810	61.00	2275	82.00	413	129.00	49
37.00	3082	62.00	2083	87.00	2329	130.00	107
38.00	2634	63.00	1597	88.00	2331	135.00	123
39.00	1159	64.00	112	91.00	274	137.00	78
43.00	68	65.00	41	92.00	1104	141.00	422
44.00	186	67.00	210	93.00	1710	142.00	38
45.00	708	68.00	4924	94.00	4779	143.00	371
46.00	33	69.00	5035	95.00	45912	144.00	33
47.00	983	70.00	416	96.00	3219	145.00	38
48.00	435	72.00	214	97.00	34	148.00	57
49.00	2410	73.00	1842	104.00	214	155.00	34
50.00	10272	74.00	6596	106.00	224	157.00	54
51.00	3048	75.00	20176	116.00	153	172.00	143
52.00	205	76.00	1738	117.00	314	174.00	34176
55.00	207	77.00	326	118.00	150	175.00	2585
56.00	848	78.00	180	119.00	262	176.00	33360
57.00	1578	79.00	1951	124.00	35	177.00	2286
58.00	92	80.00	681	125.00	57	207.00	38
60.00	557	81.00	1988	128.00	99		

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK5T

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-62672

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2526A.D

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK5T

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-62672

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2526A.D

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK5T

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-62672

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2526A.D

Level: (TRACE or LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 11/01/2011

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/L Purge Volume: 25.0 (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\111101.B\V5N2526A.D
Report Date: 07-Nov-2011 13:09

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2526A.D
Lab Smp Id: MB-62672 Client Smp ID: VBLK5T
Inj Date : 01-NOV-2011 07:25
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,MB-62672,VBLK5T,62672
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.161	2.173	(0.342)	150009	3.87649	3.9
$ 80 Chloroethane-d5	69	2.568	2.591	(0.406)	103918	4.06899	4.1
$ 81 1,1-Dichloroethene-d2	65	3.369	3.369	(0.533)	33829	3.80391	3.8(Q)
$ 82 2-Butanone-d5	46	5.076	5.065	(0.803)	179937	46.6586	47(AQ)
$ 83 Chloroform-d	84	5.378	5.378	(0.851)	168549	4.61321	4.6(Q)
$ 23 1,2-Dichloroethane-d4	65	5.901	5.901	(0.934)	63394	4.43747	4.4
$ 84 Benzene-d6	84	5.912	5.913	(0.627)	348855	5.02963	5.0
* 26 1,4-Difluorobenzene	114	6.319	6.319	(1.000)	338451	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.725	6.726	(0.713)	106637	4.31860	4.3
$ 33 Toluene-d8	98	7.840	7.840	(0.831)	310023	4.85574	4.9
$ 86 trans-1,3-Dichloropropene-d4	79	8.130	8.119	(0.862)	66272	4.72276	4.7
$ 87 2-Hexanone-d5	63	8.572	8.572	(0.909)	102013	40.3633	40(A)
* 42 Chlorobenzene-d5	117	9.431	9.431	(1.000)	247420	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.941	10.918	(1.160)	38661	3.91982	3.9
* 78 1,4-Dichlorobenzene-d4	152	12.183	12.172	(1.000)	89970	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.636	12.625	(1.037)	68580	4.63629	4.6

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111101.B\V5N2526A.D
Report Date: 07-Nov-2011 13:09

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

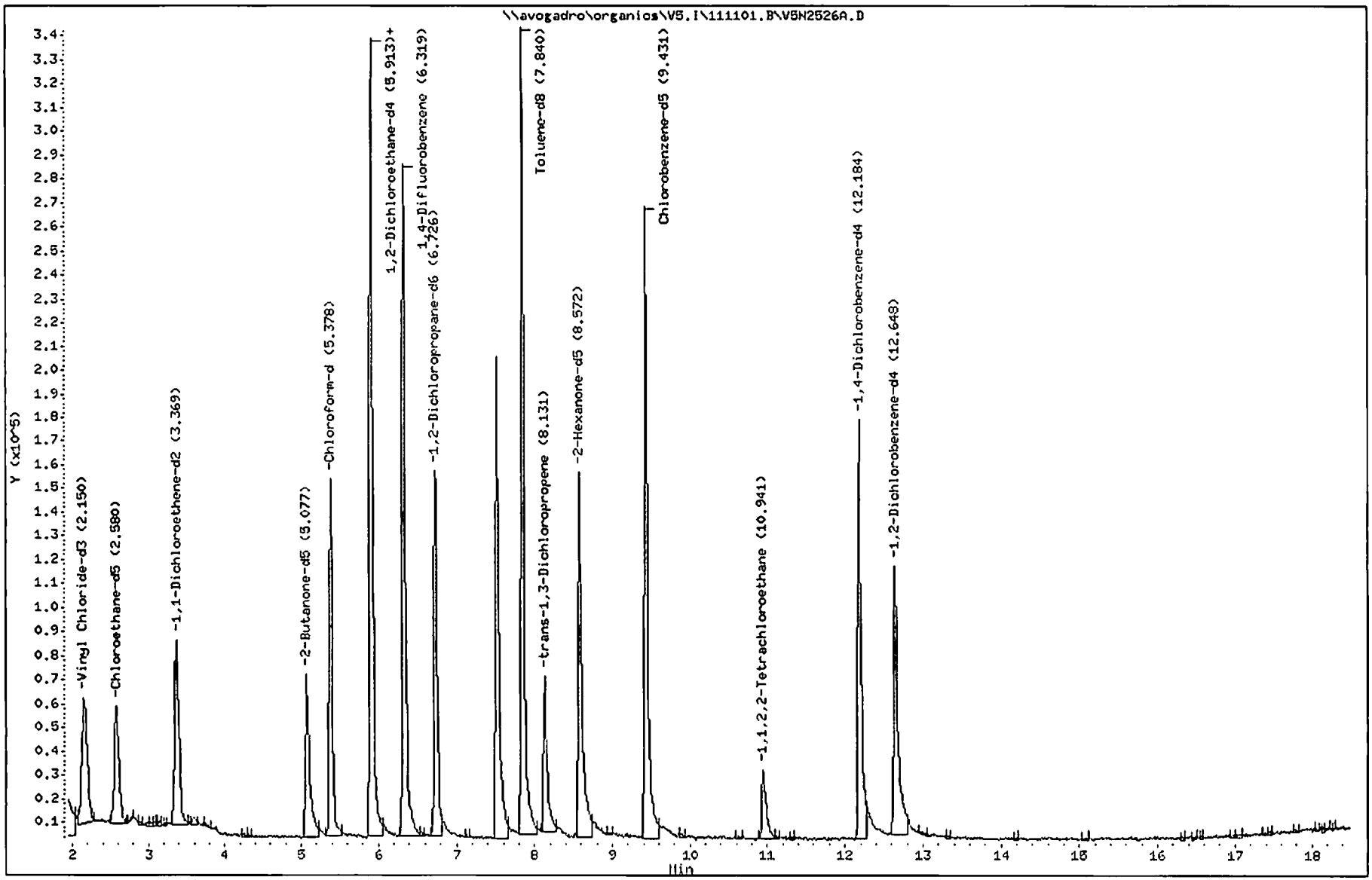
Data file :	\\avogadro\organics\V5.I\111101.B\V5N2526A.D		
Lab Smp Id:	MB-62672	Client Smp ID:	VBLK5T
Inj Date :	01-NOV-2011 07:25		
Operator :	SRC: LIMS	Inst ID:	V5.i
Smp Info :	25ML,MB-62672,VBLK5T,62672		
Misc Info :			
Comment :			
Method :	\\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m		
Meth Date :	03-Nov-2011 11:40 V5.i	Quant Type:	ISTD
Cal Date :	15-OCT-2011 13:24	Cal File:	V5N1684.D
Als bottle:	1	QC Sample:	BLANK
Dil Factor:	1.00000		
Integrator:	HP RTE	Compound Sublist:	SOM01.2.sub
Target Version:	4.14		

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111101.B\V5N2526A.D
Date : 01-NOV-2011 07:25
Client ID: VBLK5T
Sample Info: 25ML,MB-62672,VBLK5T,62672
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: SRC: LIMS
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK5W

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-62673

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2621.D

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 11/02/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK5W

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-62673

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2621.D

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 11/02/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK5W

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-62673

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2621.D

Level: (TRACE or LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 11/02/2011

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/L Purge Volume: 25.0 (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\111102A.B\V5N2621.D
Report Date: 07-Nov-2011 13:12

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111102A.B\V5N2621.D
Lab Smp Id: MB-62673 Client Smp ID: VBLK5W
Inj Date : 02-NOV-2011 18:16
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,MB-62673,VBLK5W,62673
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111102A.B\V5_TVOA1359.m
Meth Date : 04-Nov-2011 15:45 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 12 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.161	2.179	(0.342)	184542	4.61869	4.6
$ 80 Chloroethane-d5	69	2.579	2.585	(0.408)	119962	4.54692	4.5
$ 81 1,1-Dichloroethene-d2	65	3.369	3.375	(0.533)	38065	4.14329	4.1(Q)
$ 82 2-Butanone-d5	46	5.076	5.071	(0.803)	171789	43.1206	43(AQ)
$ 83 Chloroform-d	84	5.389	5.384	(0.853)	171911	4.55470	4.6(Q)
$ 23 1,2-Dichloroethane-d4	65	5.900	5.895	(0.934)	60715	4.11397	4.1
$ 84 Benzene-d6	84	5.912	5.907	(0.627)	352111	5.33570	5.3
* 26 1,4-Difluorobenzene	114	6.318	6.325	(1.000)	349637	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.725	6.731	(0.713)	114033	4.85385	4.9
$ 33 Toluene-d8	98	7.840	7.846	(0.831)	306865	5.05161	5.1
$ 86 trans-1,3-Dichloropropene-d4	79	8.130	8.125	(0.862)	66369	4.97109	5.0
$ 87 2-Hexanone-d5	63	8.571	8.566	(0.909)	97813	40.6770	41(A)
* 42 Chlorobenzene-d5	117	9.431	9.425	(1.000)	235404	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.952	10.924	(1.161)	38050	4.05480	4.1
* 78 1,4-Dichlorobenzene-d4	152	12.183	12.166	(1.000)	91389	5.00000	(Q)
$ 90 1,2-Dichlorobenzene-d4	152	12.647	12.631	(1.038)	67396	4.48550	4.5(Q)

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111102A.B\V5N2621.D
Report Date: 07-Nov-2011 13:12

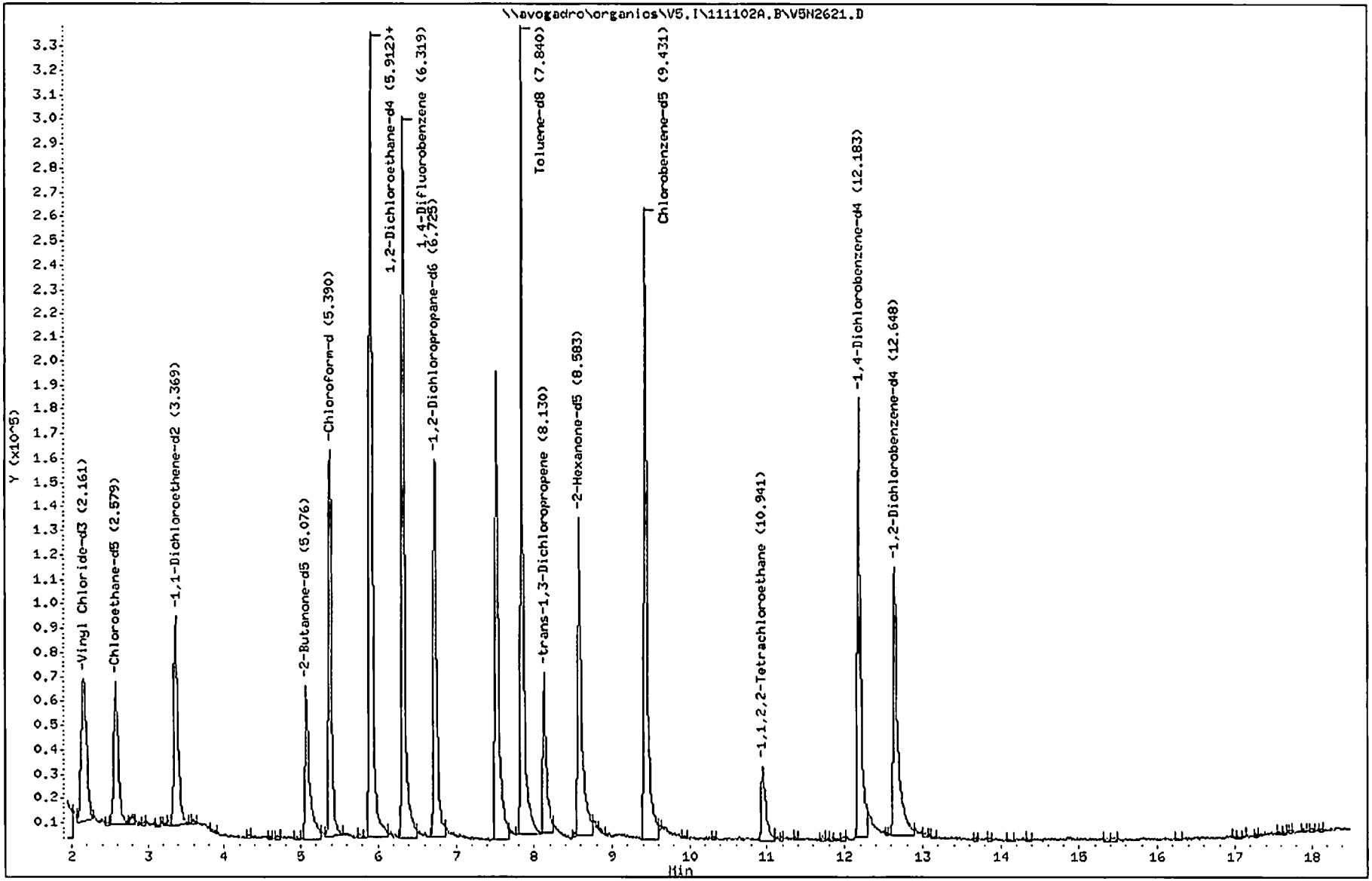
Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file :	\\avogadro\organics\V5.I\111102A.B\V5N2621.D		
Lab Smp Id:	MB-62673	Client Smp ID:	VBLK5W
Inj Date :	02-NOV-2011 18:16		
Operator :	SRC: LIMS	Inst ID:	V5.i
Smp Info :	25ML,MB-62673,VBLK5W,62673		
Misc Info :			
Comment :			
Method :	\\avogadro\organics\V5.I\111102A.B\V5_TVOA1359.m		
Meth Date :	04-Nov-2011 15:45 V5.i	Quant Type:	ISTD
Cal Date :	15-OCT-2011 13:24	Cal File:	V5N1684.D
Als bottle:	12	QC Sample:	BLANK
Dil Factor:	1.00000		
Integrator:	HP RTE	Compound Sublist:	SOM01.2.sub
Target Version:	4.14		

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111102A.B\V5N2621.D
Date : 02-NOV-2011 18:16
Client ID: VBLK5W
Instrument: V5.i
Sample Info: 25ML,MB-62673,VBLK5W,62673
Purge Volume: 25.0
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VHBLK5W

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: VHBLK5W

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2642.D

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 11/03/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	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.

VHBLK5W

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: VHBLK5W

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2642.D

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 11/03/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VHBLK5W

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: VHBLK5W

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2642.D

Level: (TRACE or LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 11/03/2011

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/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111102A.B\V5N2642.D
Report Date: 07-Nov-2011 13:13

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111102A.B\V5N2642.D
Lab Smp Id: VHBLK5W Client Smp ID: VHBLK5W
Inj Date : 03-NOV-2011 05:06
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VHBLK5W,VHBLK5W,62673
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111102A.B\V5_TVOA1359.m
Meth Date : 04-Nov-2011 15:45 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 13 QC Sample: STORAGEBLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.166	2.179	(0.343)	197927	4.68137	4.7
$ 80 Chloroethane-d5	69	2.584	2.585	(0.409)	128206	4.59226	4.6
$ 81 1,1-Dichloroethene-d2	65	3.362	3.375	(0.532)	42774	4.39990	4.4(Q)
$ 82 2-Butanone-d5	46	5.081	5.071	(0.804)	191359	45.3923	45(AQ)
$ 83 Chloroform-d	84	5.383	5.384	(0.851)	178764	4.47589	4.5(Q)
$ 23 1,2-Dichloroethane-d4	65	5.894	5.895	(0.932)	64716	4.14401	4.1(Q)
$ 84 Benzene-d6	84	5.917	5.907	(0.627)	378520	5.17655	5.2
* 26 1,4-Difluorobenzene	114	6.324	6.325	(1.000)	369976	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.730	6.731	(0.713)	114836	4.41137	4.4
$ 33 Toluene-d8	98	7.845	7.846	(0.831)	341719	5.07681	5.1
$ 86 trans-1,3-Dichloropropene-d4	79	8.135	8.125	(0.862)	71088	4.80532	4.8
$ 87 2-Hexanone-d5	63	8.577	8.566	(0.909)	109510	41.1004	41(A)
* 42 Chlorobenzene-d5	117	9.436	9.425	(1.000)	260840	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.946	10.924	(1.160)	38662	3.71825	3.7
* 78 1,4-Dichlorobenzene-d4	152	12.188	12.166	(1.000)	98882	5.00000	(Q)
$ 90 1,2-Dichlorobenzene-d4	152	12.641	12.631	(1.037)	68976	4.24279	4.2(Q)

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111102A.B\V5N2642.D
Report Date: 07-Nov-2011 13:13

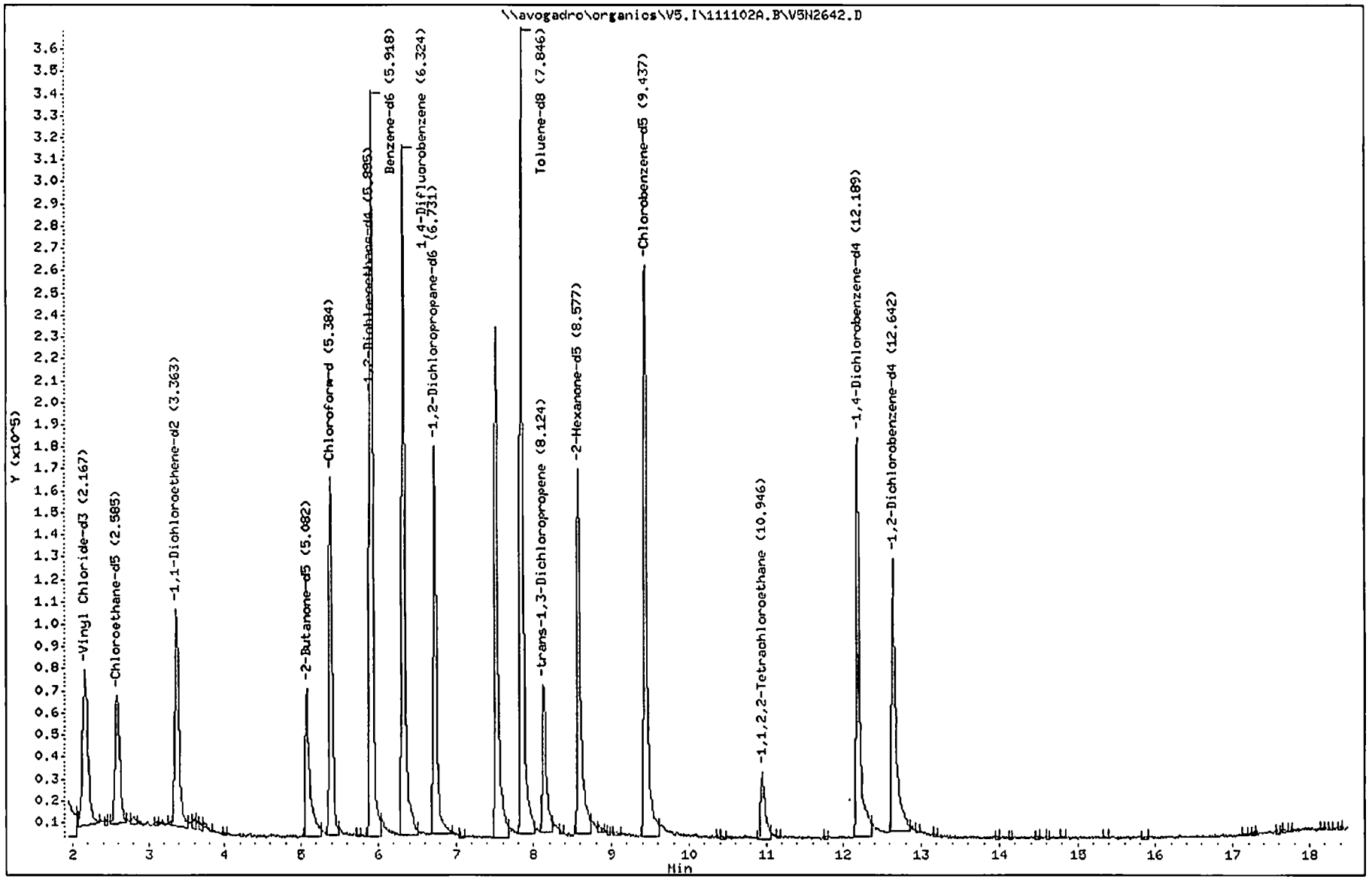
Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file	: \\avogadro\organics\V5.I\111102A.B\V5N2642.D		
Lab Smp Id	: VHBLK5W	Client Smp ID	: VHBLK5W
Inj Date	: 03-NOV-2011 05:06		
Operator	: SRC:	Inst ID	: V5.i
Smp Info	: 25ML,VHBLK5W,VHBLK5W,62673		
Misc Info	:		
Comment	:		
Method	: \\avogadro\organics\V5.I\111102A.B\V5_TVOA1359.m		
Meth Date	: 04-Nov-2011 15:45 V5.i	Quant Type	: ISTD
Cal Date	: 15-OCT-2011 13:24	Cal File	: V5N1684.D
Als bottle	: 13	QC Sample	: STORAGEBLANK
Dil Factor	: 1.00000		
Integrator	: HP RTE	Compound Sublist	: SOM01.2.sub
Target Version	: 4.14		

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111102A.B\V5N2642.D
Date : 03-NOV-2011 05:06
Client ID: VHBLK5W
Instrument: V5.i
Sample Info: 25ML,VHBLK5W,VHBLK5W,62673
Purge Volume: 25.0
Operator: SRC:
Column phase: DB-624
Column diameter: 0.25



2G - FORM II SV-1

WATER 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.: H30S7

	CLIENT SAMPLE NO.	SDMC1 (PHL) #	SDMC2 (BCE) #	SDMC3 (2CP) #	SDMC4 (4MP) #	SDMC5 (NBZ) #	SDMC6 (2NP) #	SDMC7 (DCP) #	SDMC8 (4CA) #
01	SBLK2Q	66	65	70	63	71	76	75	59
02	H30T9	63	66	70	69	68	73	71	31
03	H30W0	69	71	74	76	62	70	71	40
04	H30W2	68	67	69	74	64	70	74	20
05	H30W3	63	62	66	61	61	70	70	38
06	H30W4	58	56	59	60	54	61	64	41
07	H30W5	57	59	60	63	57	61	64	39
08	H30W6	65	62	69	64	59	67	69	46
09	H30W7	72	66	73	72	61	77	77	52
10	H30W8	75	74	77	82	70	82	85	64
11	H30X0	63	66	65	76	64	68	72	61
12	H30X1	79	73	81	84	64	78	81	63
13	H30Y2	60	64	65	67	72	74	73	35
14	H30Y3	67	72	73	72	70	81	78	31
15	H30Y4	61	67	66	72	73	77	74	32
16	H30Y5	61	68	69	70	70	81	78	15
17	H30Y6	69	76	77	82	79	83	81	32
18	H30Z6	66	72	70	82	76	77	81	52
19	H30X3	64	62	67	71	54	64	65	40
20	H30W1	40	74	75	64	80	72	75	12
21	SBLK2S	75	82	82	81	87	91	86	79
22	H30X3MS	84	78	81	81	70	74	73	7
23	H30X3MSD	101	86	87	88	72	75	76	8

		QC LIMITS
SDMC1	(PHL) = Phenol-d5	(39-106)
SDMC2	(BCE) = Bis(2-chloroethyl)ether-d8	(40-105)
SDMC3	(2CP) = 2-Chlorophenol-d4	(41-106)
SDMC4	(4MP) = 4-Methylphenol-d8	(25-111)
SDMC5	(NBZ) = Nitrobenzene-d5	(43-108)
SDMC6	(2NP) = 2-Nitrophenol-d4	(40-108)
SDMC7	(DCP) = 2,4-Dichlorophenol-d3	(37-105)
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

2H - FORM II SV-2

WATER 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.: H30S7

	CLIENT SAMPLE NO.	SDMC9 (DMP) #	SDMC10 (ACY) #	SDMC11 (4NP) #	SDMC12 (FLR) #	SDMC13 (NMP) #	SDMC14 (ANC) #	SDMC15 (PYR) #	SDMC16 (BAP) #	TOT OUT
01	SBLK2Q	71	72	77	65	62	70	94	71	0
02	H30T9	72	67	68	63	68	65	81	62	0
03	H30W0	76	66	69	67	81	64	85	65	0
04	H30W2	74	64	64	66	82	64	79	60	0
05	H30W3	73	67	71	68	72	63	84	66	0
06	H30W4	71	58	67	65	81	63	76	62	0
07	H30W5	74	60	59	65	83	64	84	52	0
08	H30W6	70	66	68	64	65	61	78	58	0
09	H30W7	73	67	77	67	70	61	79	63	0
10	H30W8	87	74	79	78	86	50	82	57	0
11	H30X0	76	63	67	66	82	73	62	64	0
12	H30X1	78	72	75	73	82	66	87	73	0
13	H30Y2	77	63	60	65	91	65	58	23 *	1
14	H30Y3	77	64	58	64	92	57	48 *	20 *	2
15	H30Y4	75	62	54	58	90	52	41 *	17 *	2
16	H30Y5	74	56	49	56	91	47	34 *	15 *	2
17	H30Y6	79	61	63	53	91	44 *	30 *	16 *	3
18	H30Z6	85	73	67	74	90	80	89	71	0
19	H30X3	72	61	60	57	70	54	57	22 *	1
20	H30W1	59	33 *	67	54	74	34 *	47 *	30 *	4
21	SBLK2S	80	85	82	77	84	86	100	81	0
22	H30X3MS	70	73	70	73	99	73	69	34	0
23	H30X3MSD	72	72	72	69	104	58	42 *	26 *	2

		QC LIMITS
SDMC9	(DMP) = Dimethylphthalate-d6	(47-114)
SDMC10	(ACY) = Acenaphthylene-d8	(41-107)
SDMC11	(4NP) = 4-Nitrophenol-d4	(33-116)
SDMC12	(FLR) = Fluorene-d10	(42-111)
SDMC13	(NMP) = 4,6-Dinitro-2-methylphenol-d2	(22-104)
SDMC14	(ANC) = Anthracene-d10	(44-110)
SDMC15	(PYR) = Pyrene-d10	(52-119)
SDMC16	(BAP) = Benzo(a)pyrene-d12	(32-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D DMC diluted out

3C - FORM III SV-1

WATER 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.: H30S7

Matrix Spike - EPA Sample No.: H30X3

COMPOUND	SPIKE ADDED (µg/L)	SAMPLE CONCENTRATION (µg/L)	MS CONCENTRATION (µg/L)	MS %REC	#	QC. LIMITS REC.
Phenol	40.0000	1.6265	35.7996	85		12-110
2-Chlorophenol	40.0000	0.0000	35.0341	88		27-123
N-Nitroso-di-n-propylamine	40.0000	0.0000	34.6629	87		41-116
4-Chloro-3-methylphenol	40.0000	0.0000	33.2496	83		23-97
Acenaphthene	40.0000	0.0000	27.5445	69		46-118
4-Nitrophenol	40.0000	0.0000	40.4625	101	*	10-80
2,4-Dinitrotoluene	40.0000	0.0000	28.9285	72		24-96
Pentachlorophenol	40.0000	0.0000	51.4364	129	*	9-103
Pyrene	40.0000	0.0000	20.5736	51		26-127

COMPOUND	SPIKE ADDED (µg/L)	MSD CONCENTRATION (µg/L)	MSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Phenol	40.0000	39.1410	94		9		0-42	12-110
2-Chlorophenol	40.0000	36.0174	90		3		0-40	27-123
N-Nitroso-di-n-propylamine	40.0000	44.8498	112		26		0-38	41-116
4-Chloro-3-methylphenol	40.0000	36.9695	92		11		0-42	23-97
Acenaphthene	40.0000	27.4215	69		0		0-31	46-118
4-Nitrophenol	40.0000	43.9676	110	*	8		0-50	10-80
2,4-Dinitrotoluene	40.0000	31.2038	78		8		0-38	24-96
Pentachlorophenol	40.0000	48.4973	121	*	6		0-50	9-103
Pyrene	40.0000	10.9948	27		61	*	0-31	26-127

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 1 out of 9 outside limits

Spike Recovery: 4 out of 18 outside limits

COMMENTS:

4C - FORM IV SV

SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

SBLK2Q

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Lab File ID: S2H5203.D Lab Sample ID: MB-62636

Instrument ID: S2 Date Extracted: 11/02/2011

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 11/03/2011

Level: (LOW/MED) LOW Time Analyzed: 16:05

Extraction: (Type) CONT GPC Cleanup: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	H30T9	K2200-02B	S2H5204.D	11/03/2011
02	H30W0	K2200-03B	S2H5205.D	11/03/2011
03	H30W2	K2200-05B	S2H5207.D	11/03/2011
04	H30W3	K2200-06B	S2H5208.D	11/03/2011
05	H30W4	K2200-07B	S2H5209.D	11/03/2011
06	H30W5	K2200-08B	S2H5210.D	11/03/2011
07	H30W6	K2200-09B	S2H5211.D	11/03/2011
08	H30W7	K2200-10B	S2H5212.D	11/03/2011
09	H30W8	K2200-11B	S2H5213.D	11/03/2011
10	H30X0	K2200-12B	S2H5214.D	11/03/2011
11	H30X1	K2200-13B	S2H5215.D	11/03/2011
12	H30Y2	K2200-14B	S2H5216.D	11/03/2011
13	H30Y3	K2200-15B	S2H5217.D	11/03/2011
14	H30Y4	K2200-16B	S2H5218.D	11/03/2011
15	H30Y5	K2200-17B	S2H5219.D	11/03/2011
16	H30Y6	K2200-18B	S2H5220.D	11/03/2011
17	H30Z6	K2200-19B	S2H5221.D	11/03/2011
18	H30X3	K2200-20A	S2H5222.D	11/03/2011
19	H30W1	K2200-04B	S2H5226.D	11/04/2011

COMMENTS:

4C - FORM IV SV

SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

SBLK2S

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Lab File ID: S2H5227.D Lab Sample ID: MB-62685

Instrument ID: S2 Date Extracted: 11/03/2011

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 11/04/2011

Level: (LOW/MED) LOW Time Analyzed: 15:14

Extraction: (Type) CONT GPC Cleanup: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	H30X3MS	K2200-20AMS	S2H5229.D	11/04/2011
02	H30X3MSD	K2200-20AMSD	S2H5230.D	11/04/2011

COMMENTS:

5B - FORM V SV

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPINE (DFTPP)

CLIENT SAMPLE NO.

DFTPP2W

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

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)

CLIENT SAMPLE NO.

DFTPP2P

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Lab File ID: S2H5188.D DFTPP Injection Date: 11/03/2011

Instrument ID: S2 DFTPP Injection Time: 9:42

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	52.2
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	70.9
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	10.0 - 80.0% of mass 198	44.4
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	15.9
365	Greater than 1.0% of mass 198	1.7
441	Present, but less than mass 443	10.9
442	50.0 - 100% of mass 198	61.8
443	15.0 - 24.0% of mass 442	12.1 (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	SSTD0202P	SSTD0202P	S2H5189.D	11/03/2011	9:55
02	SSTD0202Q	SSTD0202Q	S2H5202A.D	11/03/2011	15:43
03	SBLK2Q	MB-62636	S2H5203.D	11/03/2011	16:05
04	H30T9	K2200-02B	S2H5204.D	11/03/2011	16:26
05	H30W0	K2200-03B	S2H5205.D	11/03/2011	16:47
06	H30W2	K2200-05B	S2H5207.D	11/03/2011	17:30
07	H30W3	K2200-06B	S2H5208.D	11/03/2011	17:51
08	H30W4	K2200-07B	S2H5209.D	11/03/2011	18:12
09	H30W5	K2200-08B	S2H5210.D	11/03/2011	18:34
10	H30W6	K2200-09B	S2H5211.D	11/03/2011	18:55
11	H30W7	K2200-10B	S2H5212.D	11/03/2011	19:17
12	H30W8	K2200-11B	S2H5213.D	11/03/2011	19:39
13	H30X0	K2200-12B	S2H5214.D	11/03/2011	20:00
14	H30X1	K2200-13B	S2H5215.D	11/03/2011	20:22
15	H30Y2	K2200-14B	S2H5216.D	11/03/2011	20:43
16	H30Y3	K2200-15B	S2H5217.D	11/03/2011	21:05
17	H30Y4	K2200-16B	S2H5218.D	11/03/2011	21:27
18	H30Y5	K2200-17B	S2H5219.D	11/03/2011	21:48
19	H30Y6	K2200-18B	S2H5220.D	11/03/2011	22:10

5B - FORM V SV

SEMIVOLATILE ORGANIC INSTRUMENT

PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPINE (DFTPP)

CLIENT SAMPLE NO.

DFTPP2P

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Lab File ID: S2H5188.D DFTPP Injection Date: 11/03/2011

Instrument ID: S2 DFTPP Injection Time: 9:42

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	52.2
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	70.9
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	10.0 - 80.0% of mass 198	44.4
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	15.9
365	Greater than 1.0% of mass 198	1.7
441	Present, but less than mass 443	10.9
442	50.0 - 100% of mass 198	61.8
443	15.0 - 24.0% of mass 442	12.1 (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
20	H30Z6	K2200-19B	S2H5221.D	11/03/2011	22:31
21	H30X3	K2200-20A	S2H5222.D	11/03/2011	22:53
22	SSTD0202R	SSTD0202R	S2H5223.D	11/03/2011	23:14

5B - FORM V SV
SEMIVOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPINE (DFTPP)

CLIENT SAMPLE NO.
DFTPP2S

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Lab File ID: S2H5224.D DFTPP Injection Date: 11/04/2011

Instrument ID: S2 DFTPP Injection Time: 12:41

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	43.2
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	60.6
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	10.0 - 80.0% of mass 198	41.4
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	16.0
365	Greater than 1.0% of mass 198	1.8
441	Present, but less than mass 443	8.7
442	50.0 - 100% of mass 198	63.7
443	15.0 - 24.0% of mass 442	12.4 (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	SSTD0202S	SSTD0202S	S2H5225.D	11/04/2011	13:08
02	H30W1	K2200-04B	S2H5226.D	11/04/2011	13:30
03	SBLK2S	MB-62685	S2H5227.D	11/04/2011	15:14
04	H30X3MS	K2200-20AMS	S2H5229.D	11/04/2011	15:57
05	H30X3MSD	K2200-20AMSD	S2H5230.D	11/04/2011	16:18
06	SSTD0202T	SSTD0202T	S2H5234.D	11/04/2011	17:43

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.: H30S7

GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202Q Date Analyzed: 11/03/2011

Lab File ID (Standard): S2H5202A.D Time Analyzed: 15:43

Instrument ID: S2

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	105201	3.887	302721	4.949	247962	6.418
	UPPER LIMIT	210402	4.387	605442	5.449	495924	6.918
	LOWER LIMIT	52601	3.387	151361	4.449	123981	5.918
	SAMPLE NO.						
01	SBLK2Q	116462	3.881	302920	4.953	209089	6.411
02	H30T9	111951	3.881	331634	4.953	249882	6.412
03	H30W0	119545	3.888	384113	4.949	270205	6.419
04	H30W2	117905	3.888	367641	4.949	282394	6.418
05	H30W3	108815	3.888	301728	4.950	202515	6.419
06	H30W4	132164	3.888	401278	4.950	296425	6.419
07	H30W5	124981	3.887	368969	4.949	289040	6.418
08	H30W6	116896	3.891	356773	4.953	259961	6.411
09	H30W7	121228	3.891	383036	4.953	286008	6.422
10	H30W8	120995	3.889	376046	4.951	302921	6.420
11	H30X0	129959	3.887	397692	4.949	356814	6.418
12	H30X1	130588	3.890	449683	4.952	342083	6.421
13	H30Y2	129661	3.887	333189	4.949	243846	6.418
14	H30Y3	135814	3.888	382334	4.950	266005	6.419
15	H30Y4	131856	3.887	341054	4.948	250373	6.417

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.: H30S7

EPA Sample No.(SSTD020##) SSTD0202Q Date Analyzed: 11/03/2011

Lab File ID (Standard): S2H5202A.D Time Analyzed: 15:43

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	382122		7.641		249238		9.871		134073		11.233	
	UPPER LIMIT	764244		8.141		498476		10.371		268146		11.733	
	LOWER LIMIT	191061		7.141		124619		9.371		67037		10.733	
	SAMPLE NO.												
01	SBLK2Q	374347		7.645		219246		9.875		116388		11.248	
02	H30T9	453893		7.645		282179		9.876		147590		11.237	
03	H30W0	469230		7.641		296739		9.893		163510		11.255	
04	H30W2	463896		7.641		307437		9.914		159310		11.298	
05	H30W3	359820		7.641		211562		9.926		113290		11.309	
06	H30W4	491637		7.642		328366		9.883		171296		11.255	
07	H30W5	473034		7.640		298204		9.892		151981		11.265	
08	H30W6	482250		7.644		294484		9.864		149097		11.215	
09	H30W7	535248		7.644		339157		9.885		176005		11.247	
10	H30W8	576559		7.642		398360		9.894		219908		11.256	
11	H30X0	602054		7.641		496585		9.860		250744		11.201	
12	H30X1	655238		7.644		418225		9.863		218851		11.225	
13	H30Y2	365030		7.640		214761		9.871		124953		11.233	
14	H30Y3	403740		7.642		207042		9.872		115325		11.234	
15	H30Y4	361462		7.640		185327		9.881		105970		11.232	

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.: H30S7

GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202Q Date Analyzed: 11/03/2011

Lab File ID (Standard): S2H5202A.D Time Analyzed: 15:43

Instrument ID: S2

		IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
	12 HOUR STD	105201		3.887		302721		4.949		247962		6.418	
	UPPER LIMIT	210402		4.387		605442		5.449		495924		6.918	
	LOWER LIMIT	52601		3.387		151361		4.449		123981		5.918	
	SAMPLE NO.												
16	H30Y5	133606		3.888		355900		4.950		238745		6.419	
17	H30Y6	146369		3.887		402011		4.949		302182		6.418	
18	H30Z6	136149		3.887		374816		4.949		286014		6.418	
19	H30X3	137890		3.891		442978		4.953		294707		6.422	

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.: H30S7

EPA Sample No.(SSTD020##) SSTD0202Q Date Analyzed: 11/03/2011

Lab File ID (Standard): S2H5202A.D Time Analyzed: 15:43

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	382122		7.641		249238		9.871		134073		11.233	
	UPPER LIMIT	764244		8.141		498476		10.371		268146		11.733	
	LOWER LIMIT	191061		7.141		124619		9.371		67037		10.733	
	SAMPLE NO.												
16	H30Y5	329471		7.641		159817		9.882		96503		11.244	
17	H30Y6	434755		7.641		224578		9.893		107308		11.265	
18	H30Z6	447953		7.640		292510		9.903		147779		11.276	
19	H30X3	516557		7.645		256202		9.918		126032		11.312	

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.: H30S7

GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202S Date Analyzed: 11/04/2011

Lab File ID (Standard): S2H5225.D Time Analyzed: 13:08

Instrument ID: S2

		IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
	12 HOUR STD	88620		3.823		249024		4.884		181712		6.353	
	UPPER LIMIT	177240		4.323		498048		5.384		363424		6.853	
	LOWER LIMIT	44310		3.323		124512		4.384		90856		5.853	
	SAMPLE NO.												
01	H30W1	110924		3.819		299271		4.881		239842		6.350	
02	SBLK2S	92750		3.819		233872		4.881		185984		6.350	
03	H30X3MS	128350		3.831		383451		4.892		252592		6.351	
04	H30X3MSD	123638		3.830		367587		4.891		241484		6.350	

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.: H30S7

EPA Sample No.(SSTD020##) SSTD0202S Date Analyzed: 11/04/2011

Lab File ID (Standard): S2H5225.D Time Analyzed: 13:08

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	285205		7.576		209242		9.881		137943		11.275	
	UPPER LIMIT	570410		8.076		418484		10.381		275886		11.775	
	LOWER LIMIT	142603		7.076		104621		9.381		68972		10.775	
	SAMPLE NO.												
01	H30W1	356825		7.573		234078		9.857		136017		11.229	
02	SBLK2S	279122		7.583		181671		9.835		110306		11.197	
03	H30X3MS	387628		7.573		247188		9.814		174533		11.165	
04	H30X3MSD	358258		7.572		268979		9.824		184220		11.175	

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

CLIENT SAMPLE NO.

H30T9

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-02B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5204.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2´-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1´-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

H30T9

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-02B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5204.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

H30T9

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-02B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5204.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.675	7.9	BNJ
02		Unknown-01	4.878	5.7	J
03		Unknown-02	5.189	2.3	J
04		Unknown-03	5.404	7.4	J
05		Unknown-04	5.522	3.3	J
06		Unknown-05	6.358	2.9	J
07		Unknown-06	8.095	5.2	J
08		Unknown-07	10.594	8.0	J
	E96679[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5204.D
Report Date: 07-Nov-2011 14:01

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5204.D
Lab Smp Id: K2200-02B Client Smp ID: H30T9
Inj Date : 03-NOV-2011 16:26
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-02B,,62636,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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 * (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)
$	2 Phenol-d5	71	3.570	3.565	(0.920)	176847	50.1647	25
$	4 bis(2-Chloroethyl)ether-d8	67	3.612	3.619	(0.931)	257824	53.0741	27
$	6 2-Chlorophenol-d4	132	3.698	3.694	(0.953)	171556	56.2548	28
*	8 1,4-Dichlorobenzene-d4	152	3.881	3.887	(1.000)	111951	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.192	4.198	(1.080)	262403	54.9032	27
$	16 Nitrobenzene-d5	128	4.342	4.348	(0.877)	93922	54.3820	27
$	19 2-Nitrophenol-d4	143	4.620	4.616	(0.933)	111718	58.5959	29
$	23 2,4-Dichlorophenol-d3	165	4.824	4.820	(0.974)	198814	57.1224	29
*	25 Naphthalene-d8	136	4.953	4.948	(1.000)	331634	40.0000	
$	27 4-Chloroaniline-d4	131	5.007	5.002	(1.011)	76120	24.6313	12(Q)
$	40 Dimethylphthalate-d6	166	6.165	6.171	(0.962)	526324	57.2857	29
$	43 Acenaphthylene-d8	160	6.283	6.289	(0.980)	636266	53.2550	27
*	46 Acenaphthene-d10	164	6.411	6.418	(1.000)	249882	40.0000	
$	49 4-Nitrophenol-d4	143	6.508	6.503	(1.015)	72230	54.5517	27
$	54 Fluorene-d10	176	6.840	6.847	(1.067)	428409	50.7620	25
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.894	6.900	(0.902)	96646	54.5655	27
*	65 Phenanthrene-d10	188	7.645	7.640	(1.000)	453893	40.0000	
$	67 Anthracene-d10	188	7.687	7.694	(1.006)	675573	52.1051	26
$	72 Pyrene-d10	212	8.824	8.820	(0.894)	578648	65.0949	33
*	77 Chrysene-d12	240	9.875	9.871	(1.000)	282179	40.0000	(Q)
$	83 Benzo(a)pyrene-d12	264	11.151	11.147	(0.992)	178342	49.2435	25(H)

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5204.D
Report Date: 07-Nov-2011 14:01

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)	
* 85 Perylene-d12	264	11.237	11.233	(1.000)	147590	40.0000		(Q)

QC Flag Legend

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

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5204.D
Report Date: 07-Nov-2011 14:01

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5204.D
Lab Smp Id: K2200-02B Client Smp ID: H30T9
Inj Date : 03-NOV-2011 16:26
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-02B,,62636,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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 * (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

ISTD	RT	AREA	AMOUNT
* 25 Naphthalene-d8	4.953	1135504	40.000
* 46 Acenaphthene-d10	6.412	1332720	40.000
* 65 Phenanthrene-d10	7.645	1288113	40.000
* 85 Perylene-d12	11.237	392951	40.000

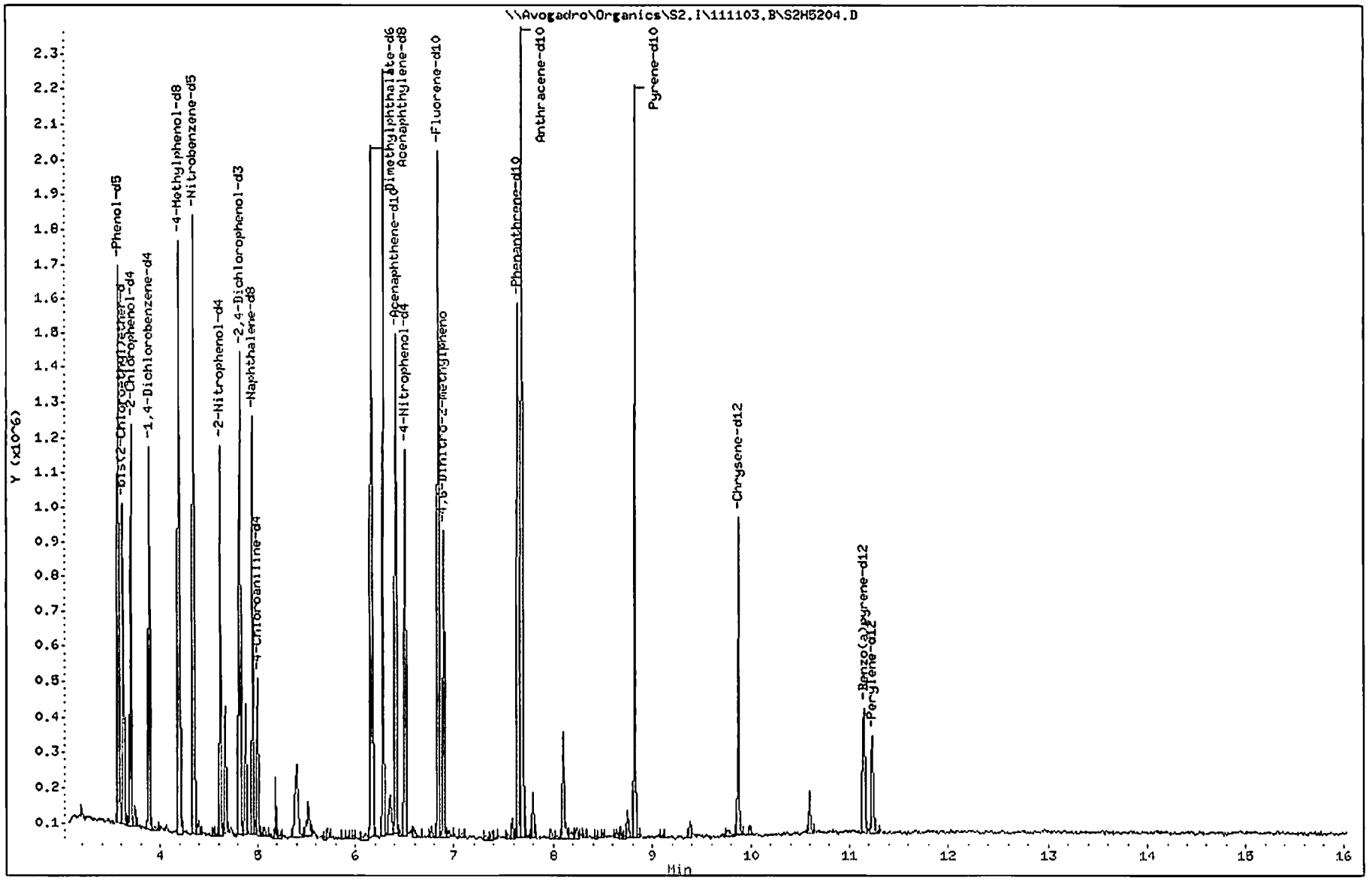
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
2(3H)-Furanone, dihydro-4-hydroxy-				CAS #: 5469-16-9			
4.675	448340	15.7935225	7.9	91	NIST2002.L	4145	25
Unknown				CAS #:			
4.878	322538	11.3619394	5.7	0		0	25
Unknown				CAS #:			
5.189	133211	4.69258478	2.3	0		0	25

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5204.D
Report Date: 07-Nov-2011 14:01

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
5.404	417896	14.7210754	7.4	0		0	25
Unknown				CAS #:			
5.522	184776	6.50903440	3.3	0		0	25
Unknown				CAS #:			
6.358	195499	5.86767068	2.9	0		0	46
Unknown				CAS #:			
8.095	334250	10.3795291	5.2	0		0	65
Unknown				CAS #:			
10.594	158087	16.0922592	8.0	0		0	85

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5204.D
Date : 03-NOV-2011 16:26
Client ID: H30T9
Sample Info: K2200-02B,,62636,,
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\111103.B\S2H5204.D

Date : 03-NOV-2011 16:26

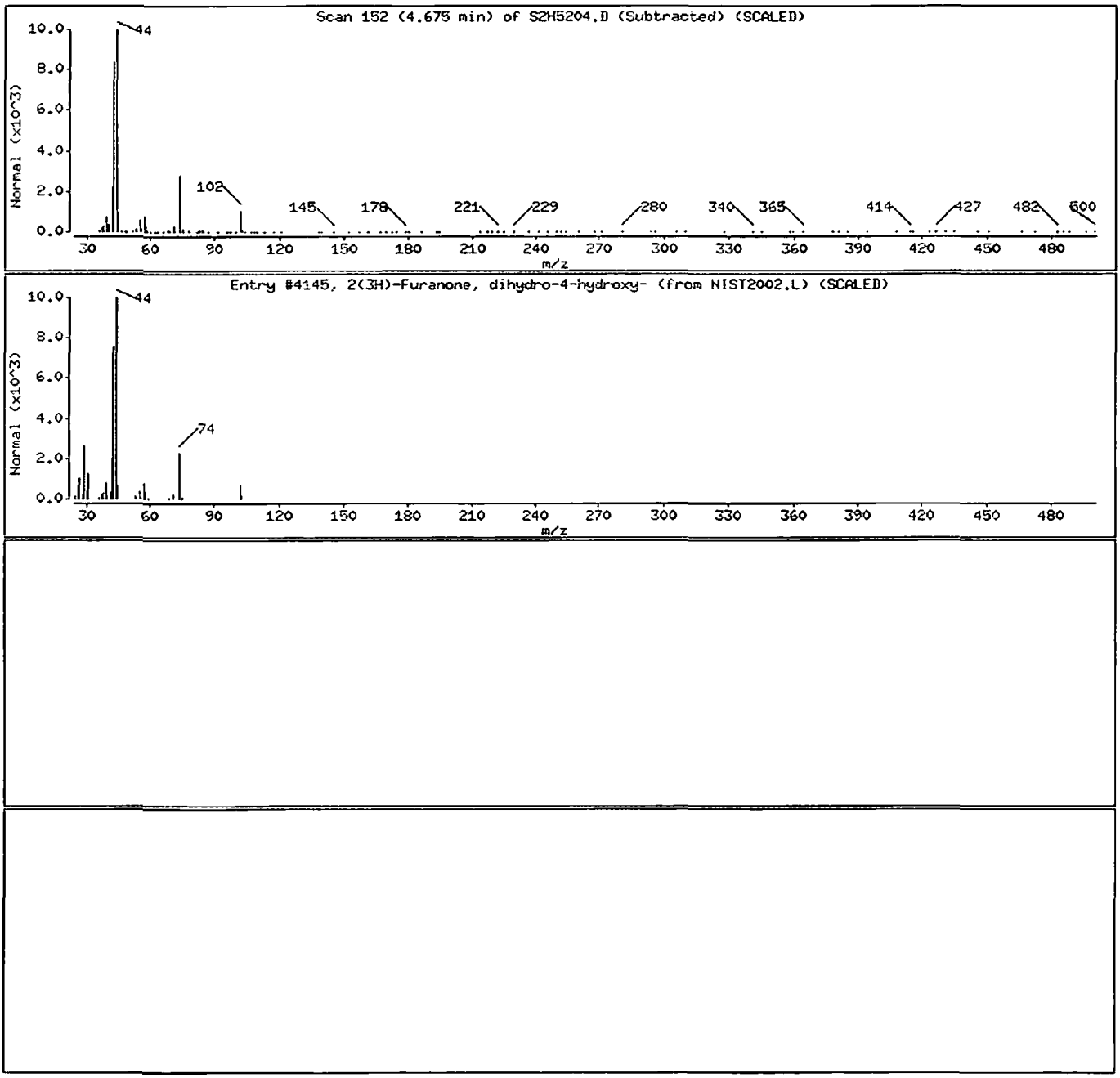
Client ID: H30T9 Instrument: S2.i

Sample Info: K2200-02B,,62636,,

Volume Injected (uL): 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	91	C4H6O3	102



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5204.D

Date : 03-NOV-2011 16:26

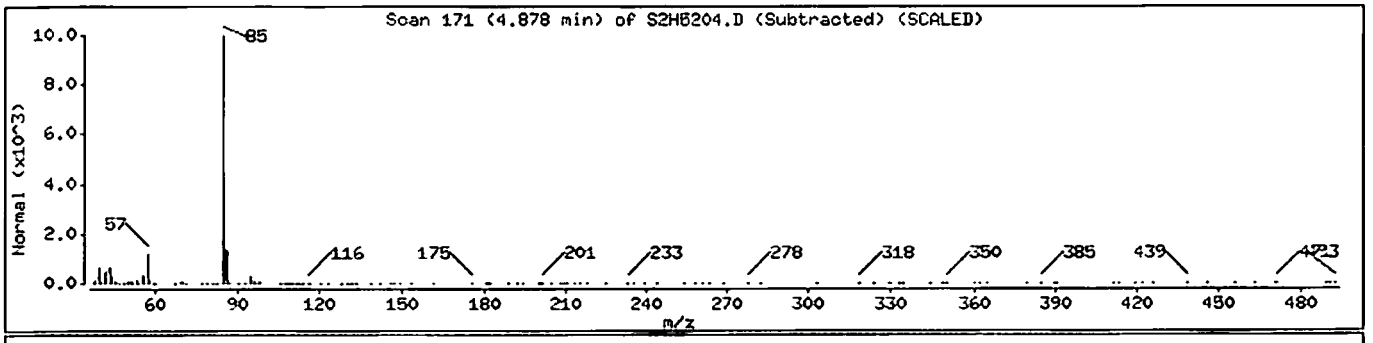
Client ID: H30T9 Instrument: S2.i

Sample Info: K2200-02B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5204.D

Date : 03-NOV-2011 16:26

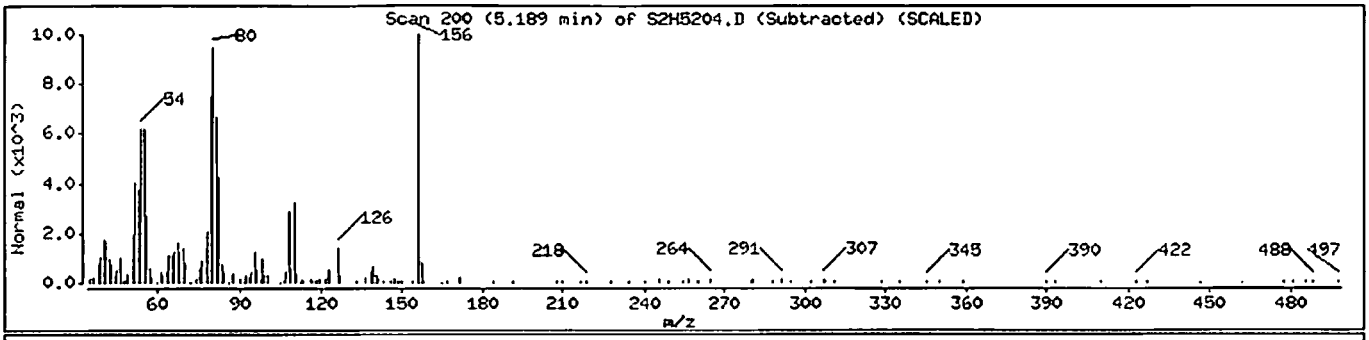
Client ID: H30T9 Instrument: S2.i

Sample Info: K2200-02B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5204.D

Date : 03-NOV-2011 16:26

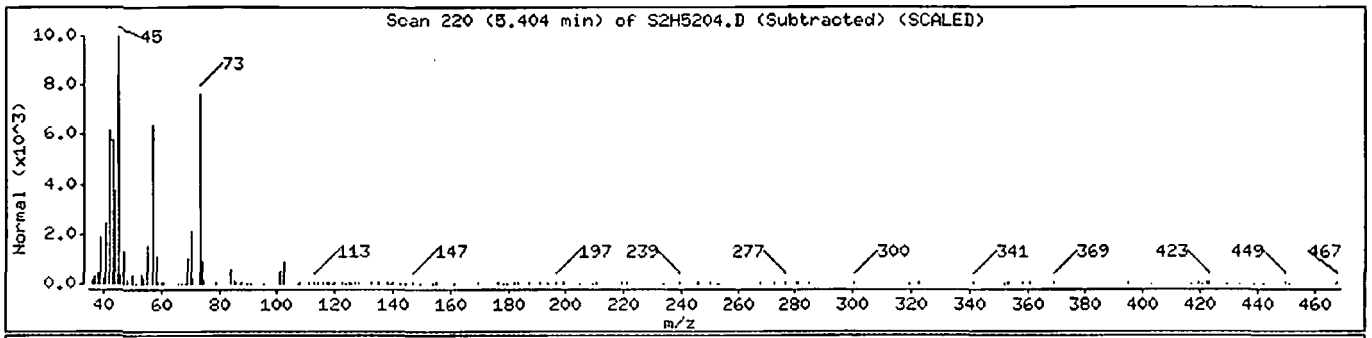
Client ID: H30T9 Instrument: S2.i

Sample Info: K2200-02B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5204.D

Date : 03-NOV-2011 16:26

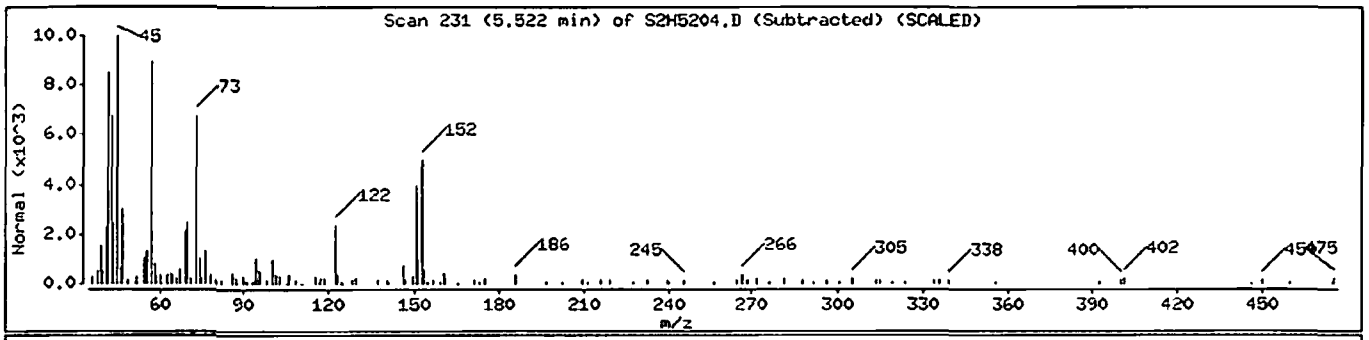
Client ID: H30T9 Instrument: S2.i

Sample Info: K2200-02B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5204.D

Date : 03-NOV-2011 16:26

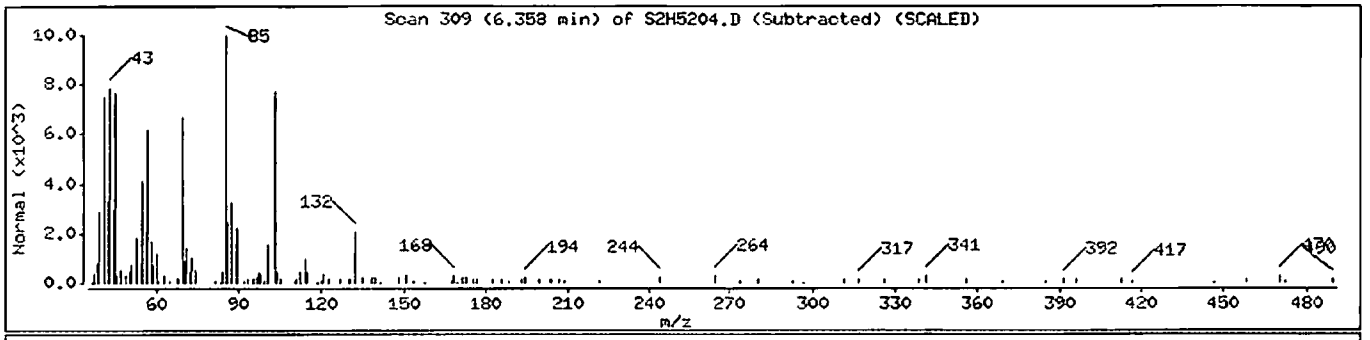
Client ID: H30T9 Instrument: S2.i

Sample Info: K2200-02B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5204.D

Date : 03-NOV-2011 16:26

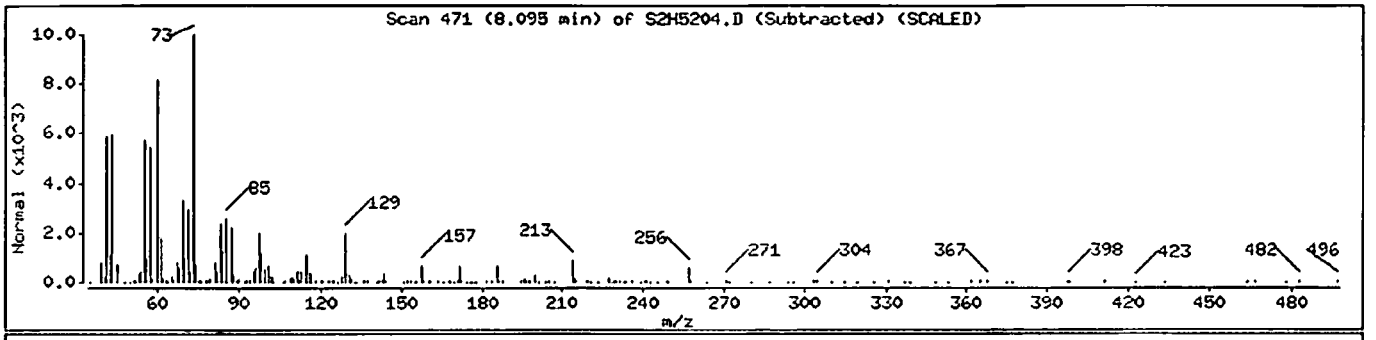
Client ID: H30T9 Instrument: S2.i

Sample Info: K2200-02B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5204.D

Date : 03-NOV-2011 16:26

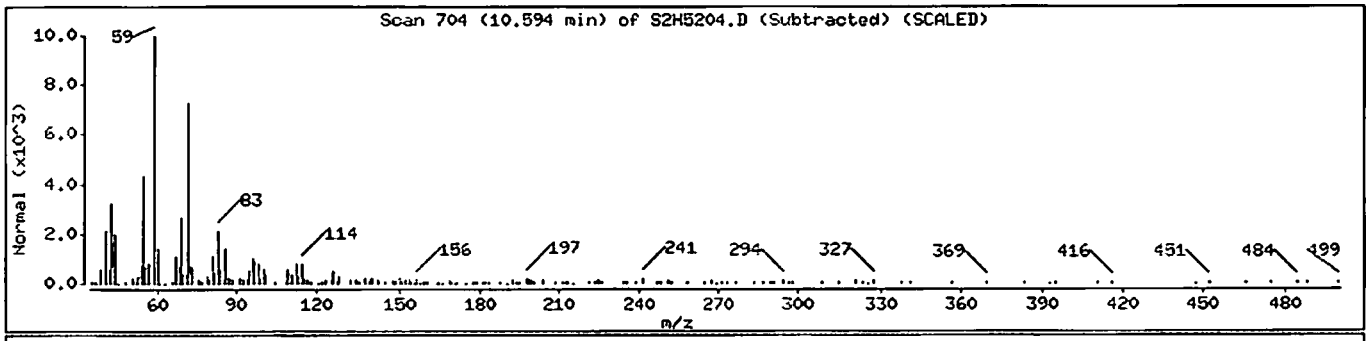
Client ID: H30T9 Instrument: S2.i

Sample Info: K2200-02B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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

CLIENT SAMPLE NO.

H30W0

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5205.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2´-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1´-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

H30W0

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5205.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

H30W0

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5205.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.671	6.5	BNJ
02		Unknown-01	4.874	4.6	J
03		Unknown-02	5.185	2.2	J
04		Unknown-03	5.400	5.9	J
05		Unknown-04	5.496	2.1	J
06		Unknown-05	6.354	3.4	J
07		Unknown-06	8.102	3.7	J
08		Unknown-07	10.622	3.8	J
	E96679[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5205.D
Report Date: 07-Nov-2011 14:01

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5205.D
Lab Smp Id: K2200-03B Client Smp ID: H30W0
Inj Date : 03-NOV-2011 16:47
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-03B,,62636,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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 * (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)
$	2 Phenol-d5	71	3.566	3.565	(0.917)	208975	55.5126	28
$	4 bis(2-Chloroethyl)ether-d8	67	3.619	3.619	(0.931)	292805	56.4461	28
$	6 2-Chlorophenol-d4	132	3.694	3.694	(0.950)	193737	59.4926	30
•	8 1,4-Dichlorobenzene-d4	152	3.887	3.887	(1.000)	119545	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.198	4.198	(1.080)	310247	60.7901	30
$	16 Nitrobenzene-d5	128	4.348	4.348	(0.879)	99073	49.5271	25
$	19 2-Nitrophenol-d4	143	4.617	4.616	(0.933)	123676	56.0054	28
$	23 2,4-Dichlorophenol-d3	165	4.820	4.820	(0.974)	230007	57.0559	29
•	25 Naphthalene-d8	136	4.949	4.948	(1.000)	384113	40.0000	
$	27 4-Chloroaniline-d4	131	5.003	5.002	(1.011)	114981	32.1230	16(Q)
$	40 Dimethylphthalate-d6	166	6.171	6.171	(0.962)	606548	61.0520	31
$	43 Acenaphthylene-d8	160	6.289	6.289	(0.980)	677930	52.4745	26
•	46 Acenaphthene-d10	164	6.418	6.418	(1.000)	270205	40.0000	
$	49 4-Nitrophenol-d4	143	6.504	6.503	(1.013)	79567	55.5732	28
$	54 Fluorene-d10	176	6.847	6.847	(1.067)	490748	53.7750	27
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.901	6.900	(0.903)	118383	64.6534	32(Q)
•	65 Phenanthrene-d10	188	7.641	7.640	(1.000)	469230	40.0000	
$	67 Anthracene-d10	188	7.683	7.694	(1.006)	689594	51.4480	26
$	72 Pyrene-d10	212	8.831	8.820	(0.893)	635708	68.0049	34
•	77 Chrysene-d12	240	9.893	9.871	(1.000)	296739	40.0000	(Q)
$	83 Benzo(a)pyrene-d12	264	11.169	11.147	(0.978)	207556	51.7306	26(H)

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5205.D
Report Date: 07-Nov-2011 14:01

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)	
* 85 Perylene-d12	264	11.254	11.233	(1.000)	163510	40.0000		(QH)

QC Flag Legend

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

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5205.D
Report Date: 07-Nov-2011 14:01

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5205.D
Lab Smp Id: K2200-03B Client Smp ID: H30W0
Inj Date : 03-NOV-2011 16:47
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-03B,,62636,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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 * (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

ISTD	RT	AREA	AMOUNT
* 25 Naphthalene-d8	4.949	1302558	40.000
* 46 Acenaphthene-d10	6.419	1437827	40.000
* 65 Phenanthrene-d10	7.641	1361346	40.000
* 77 Chrysene-d12	9.893	816120	40.000

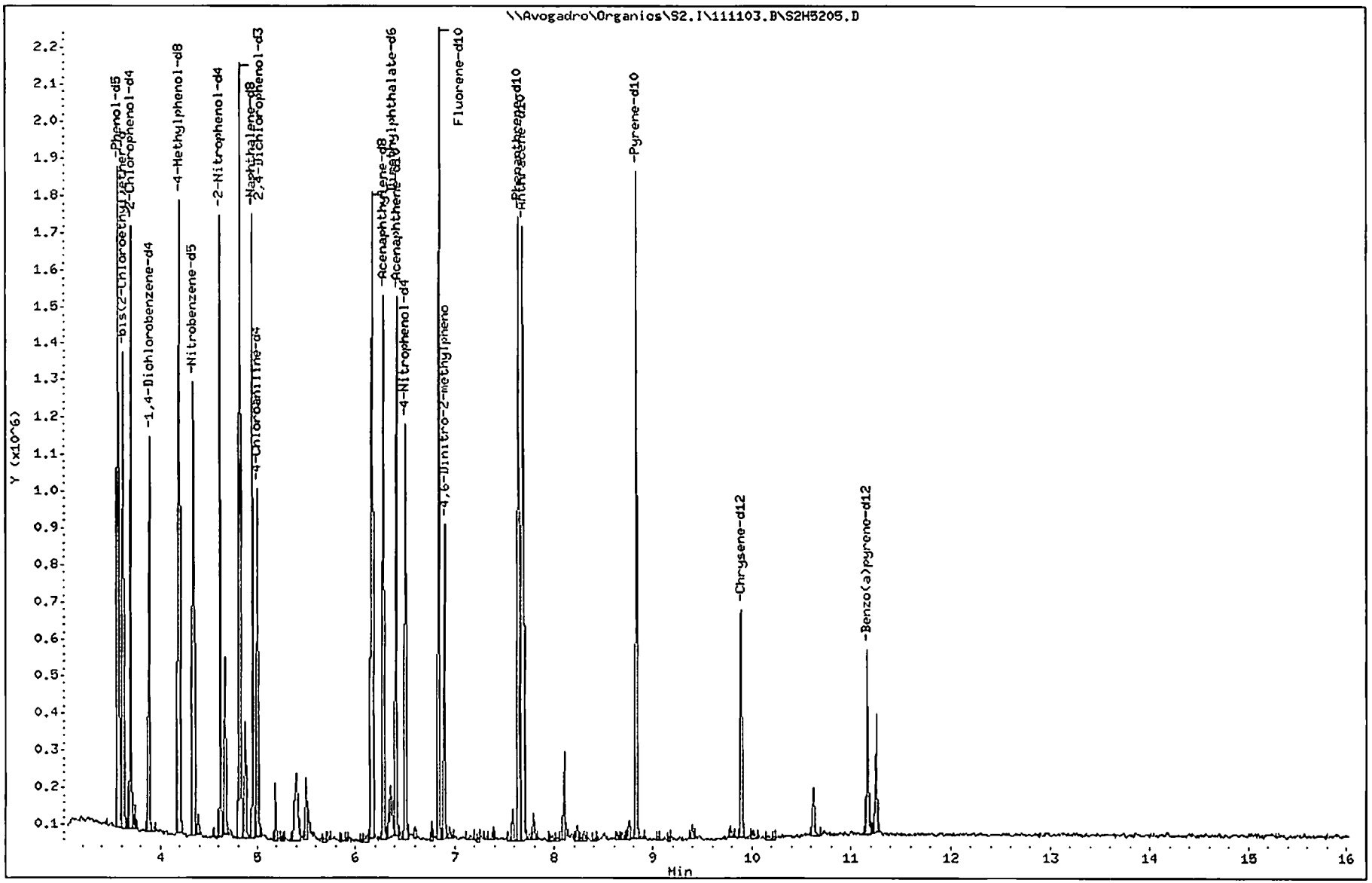
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
2(3H)-Furanone, dihydro-4-hydroxy-				CAS #: 5469-16-9			
4.671	422591	12.9772611	6.5	90	NIST2002.L	4145	25
Unknown				CAS #:			
4.874	298054	9.15288215	4.6	0		0	25
Unknown				CAS #:			
5.185	144555	4.43911102	2.2	0		0	25

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5205.D
Report Date: 07-Nov-2011 14:01

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
5.400	387442	11.8978909	5.9	0		0	25
Unknown				CAS #:			
5.496	139917	4.29667245	2.1	0		0	25
Unknown				CAS #:			
6.354	245442	6.82814264	3.4	0		0	46
Unknown				CAS #:			
8.102	251649	7.39413215	3.7	0		0	65
Unknown				CAS #:			
10.622	155378	7.61546363	3.8	0		0	77

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5205.D
Date : 03-NOV-2011 16:47
Client ID: H30W0
Sample Info: K2200-03B,,62636,,
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\111103.B\S2H5205.D

Date : 03-NOV-2011 16:47

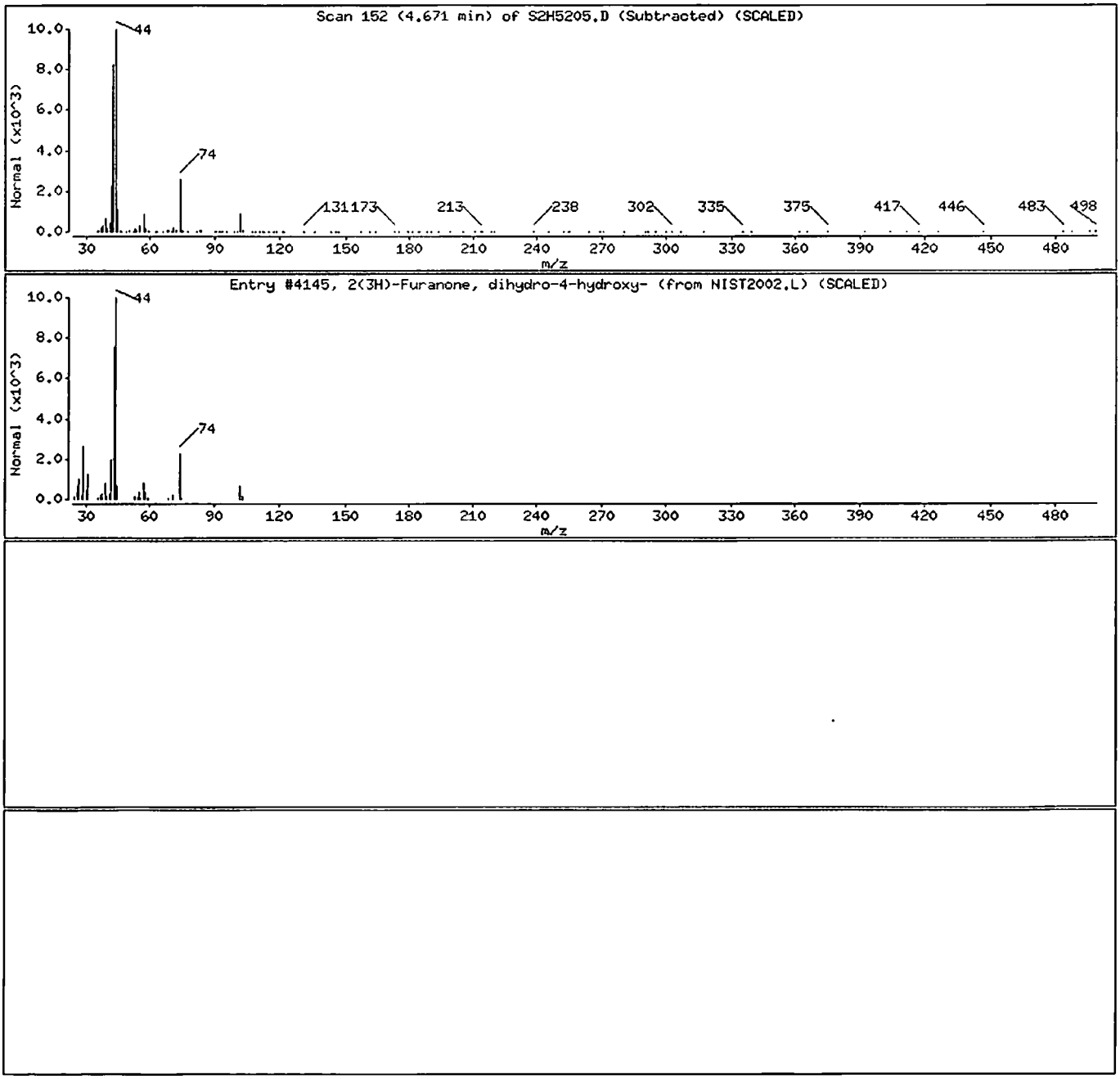
Client ID: H30W0 Instrument: S2.i

Sample Info: K2200-03B,,62636,,

Volume Injected (uL): 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\111103.B\S2H5205.D

Date : 03-NOV-2011 16:47

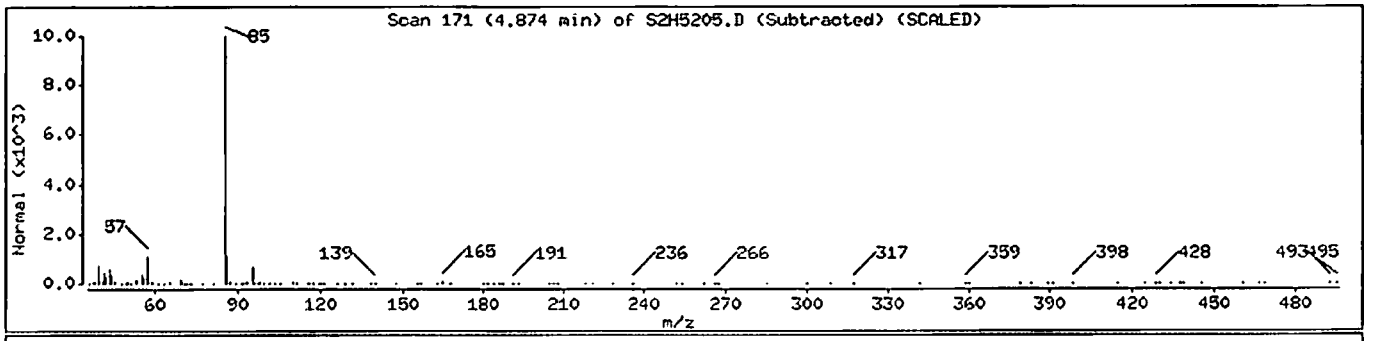
Client ID: H30W0 Instrument: S2.i

Sample Info: K2200-03B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5205.D

Date : 03-NOV-2011 16:47

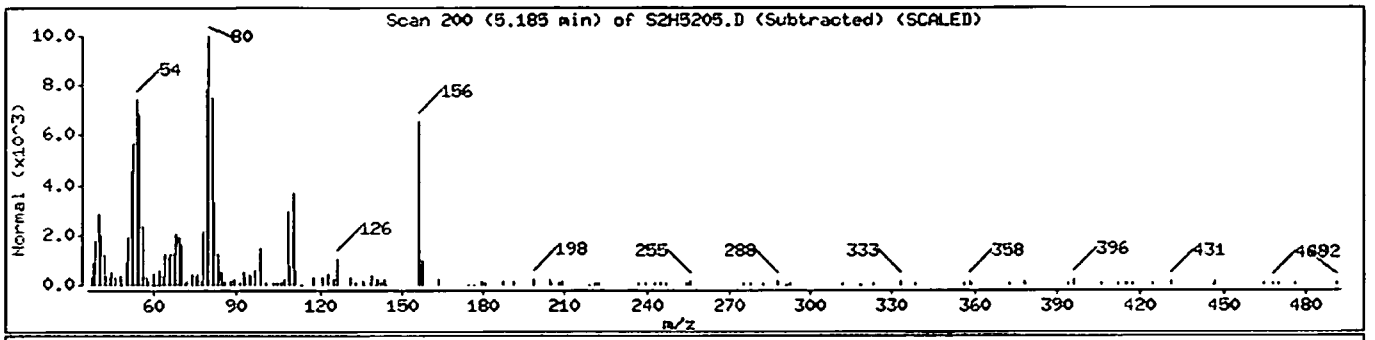
Client ID: H30W0 Instrument: S2.i

Sample Info: K2200-03B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5205.D

Date : 03-NOV-2011 16:47

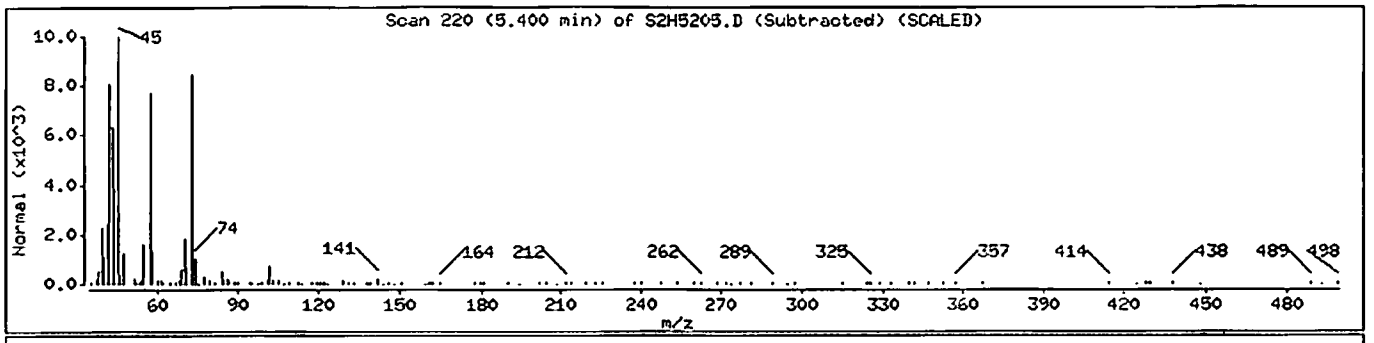
Client ID: H30W0 Instrument: S2.i

Sample Info: K2200-03B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5205.D

Date : 03-NOV-2011 16:47

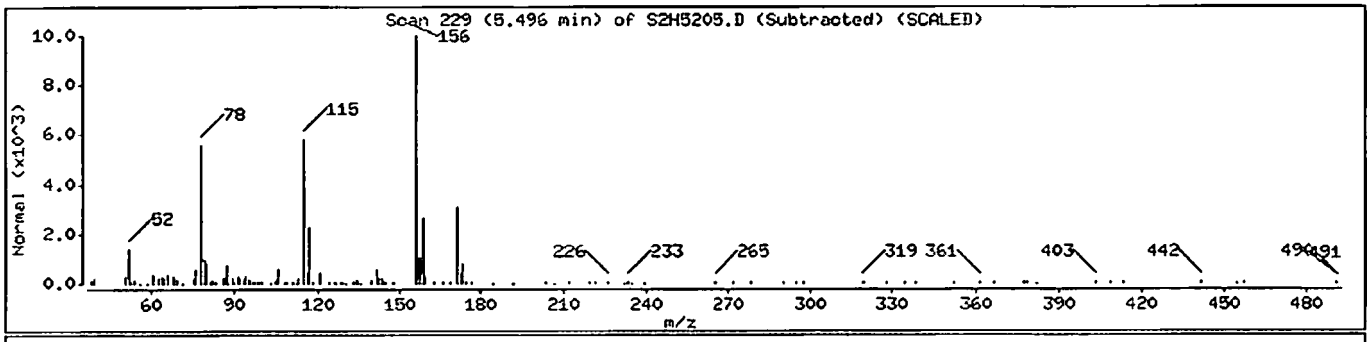
Client ID: H30W0 Instrument: S2.i

Sample Info: K2200-03B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5205.D

Date : 03-NOV-2011 16:47

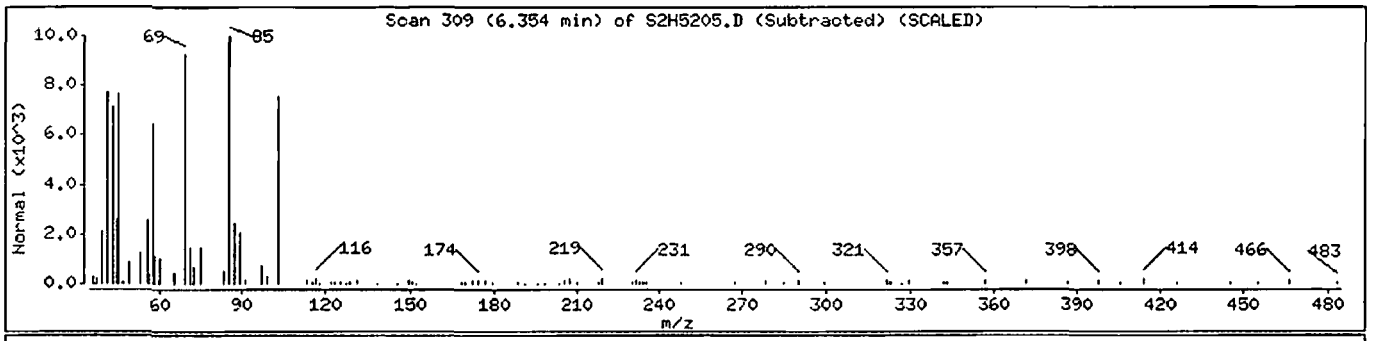
Client ID: H30W0 Instrument: S2.i

Sample Info: K2200-03B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5205.D

Date : 03-NOV-2011 16:47

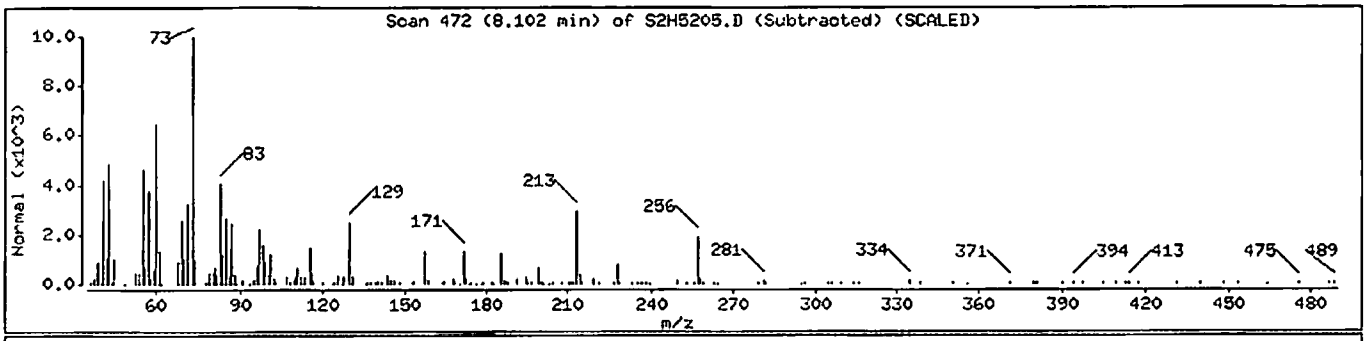
Client ID: H30W0 Instrument: S2.i

Sample Info: K2200-03B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5205.D

Date : 03-NOV-2011 16:47

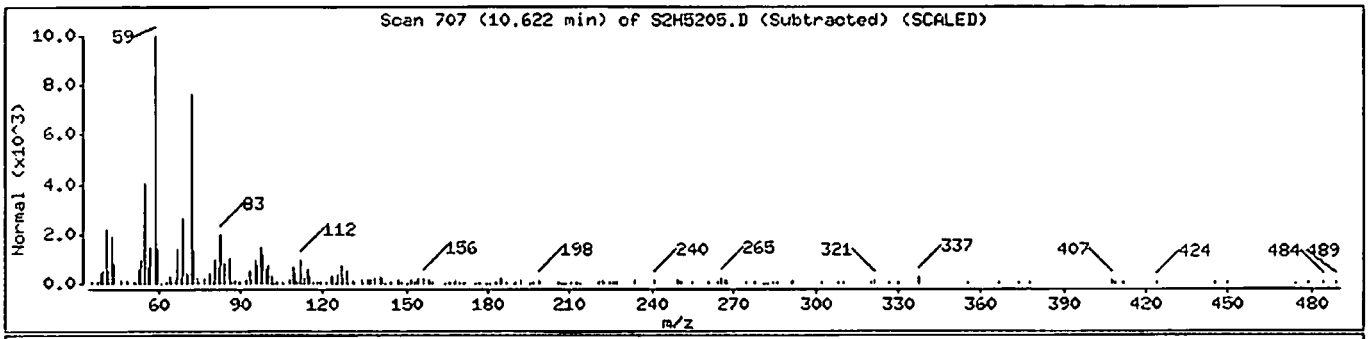
Client ID: H30W0 Instrument: S2.i

Sample Info: K2200-03B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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

CLIENT SAMPLE NO.

H30W1

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-04B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5226.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/04/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

H30W1

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-04B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5226.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/04/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine 1	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.: H30W1

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

Lab Code: MITKEM | Case No.: 41926 | Mod. Ref No.: | SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER | Lab Sample ID: K2200-04B

Sample wt/vol: 1000 (g/mL) ML | Lab File ID: S2H5226.D

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

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

Concentrated Extract Volume: 1000 (uL) | Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) | GPC Factor: 1.00 | Date Analyzed: 11/04/2011

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	4.602	8.9	J
02		Unknown-02	4.817	5.0	J
03		Unknown-03	5.106	7.6	J
04		Unknown-04	5.331	5.8	J
05		Unknown-05	5.374	9.7	J
06		Unknown-06	5.439	14	J
07		Unknown-07	5.524	4.4	J
08		Unknown-08	7.734	2.2	J
09		Unknown-09	8.045	3.4	J
10	301-02-0	9-Octadecenamide, (Z)-	10.618	6.5	BNJ
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5226.D
Report Date: 07-Nov-2011 13:26

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111104.B\S2H5226.D
Lab Smp Id: K2200-04B Client Smp ID: H30W1
Inj Date : 04-NOV-2011 13:30
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-04B,,62636,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S2.I\111104.B\S2_SOM.m
Meth Date : 07-Nov-2011 13:26 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 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	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)
$	2 Phenol-d5	71	3.497	3.500	(0.916)	110500	31.6348	16(Q)
$	4 bis(2-Chloroethyl)ether-d8	67	3.551	3.554	(0.930)	284712	59.1517	30
$	6 2-Chlorophenol-d4	132	3.626	3.629	(0.949)	180927	59.8770	30
*	8 1,4-Dichlorobenzene-d4	152	3.819	3.822	(1.000)	110924	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.130	4.133	(1.081)	244097	51.5458	26(Q)
$	16 Nitrobenzene-d5	128	4.280	4.283	(0.877)	100265	64.3326	32
$	19 2-Nitrophenol-d4	143	4.548	4.551	(0.932)	99383	57.7631	29
$	23 2,4-Dichlorophenol-d3	165	4.752	4.755	(0.974)	187484	59.6923	30
*	25 Naphthalene-d8	136	4.881	4.884	(1.000)	299271	40.0000	
$	27 4-Chloroaniline-d4	131	4.934	4.937	(1.011)	27075	9.70850	4.9(aQ)
$	40 Dimethylphthalate-d6	166	6.103	6.106	(0.961)	416634	47.2452	24
$	43 Acenaphthylene-d8	160	6.221	6.224	(0.980)	299839	26.1469	13(R)
*	46 Acenaphthene-d10	164	6.350	6.353	(1.000)	239842	40.0000	
$	49 4-Nitrophenol-d4	143	6.446	6.449	(1.015)	67895	53.4242	27
$	54 Fluorene-d10	176	6.779	6.782	(1.068)	348236	42.9896	21
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.832	6.835	(0.902)	82806	59.4695	30(Q)
*	65 Phenanthrene-d10	188	7.572	7.575	(1.000)	356825	40.0000	
$	67 Anthracene-d10	188	7.626	7.629	(1.007)	280829	27.5517	14(R)
$	72 Pyrene-d10	212	8.773	8.776	(0.890)	276019	37.4314	19(R)
*	77 Chrysene-d12	240	9.856	9.881	(1.000)	234078	40.0000	(Q)
$	83 Benzo(a)pyrene-d12	264	11.143	11.189	(0.992)	79234	23.7394	12(RH)

Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5226.D
Report Date: 07-Nov-2011 13:26

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
* 85 Perylene-d12	264	11.229	11.275	(1.000)	136017	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\111104.B\S2H5226.D
Report Date: 07-Nov-2011 13:26

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111104.B\S2H5226.D
Lab Smp Id: K2200-04B Client Smp ID: H30W1
Inj Date : 04-NOV-2011 13:30
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-04B,,62636,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S2.I\111104.B\S2_SOM.m
Meth Date : 07-Nov-2011 13:26 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 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

ISTD	RT	AREA	AMOUNT
* 25 Naphthalene-d8	4.881	1023534	40.000
* 65 Phenanthrene-d10	7.573	1016586	40.000
* 85 Perylene-d12	11.229	340960	40.000

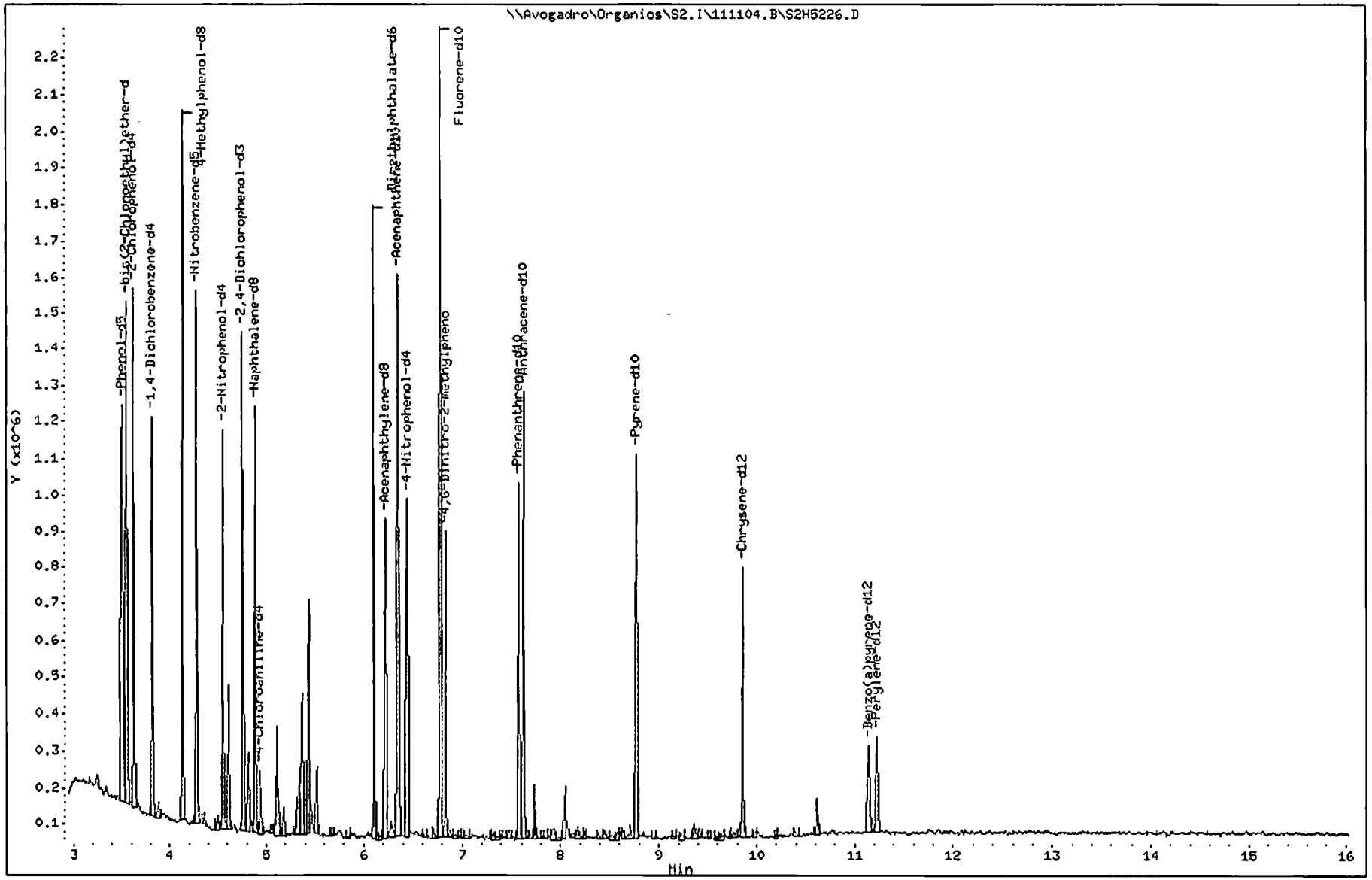
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.602	457789	17.8905263	8.9	0		0	25
Unknown				CAS #:			
4.817	256437	10.0216225	5.0	0		0	25
Unknown				CAS #:			
5.106	391368	15.2947728	7.6	0		0	25
Unknown				CAS #:			
5.331	295922	11.5647203	5.8	0		0	25

Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5226.D
Report Date: 07-Nov-2011 13:26

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
5.374	496027	19.3848414	9.7	0		0	25
Unknown				CAS #:			
5.439	710254	27.7568856	14	0		0	25
Unknown				CAS #:			
5.524	226040	8.83371175	4.4	0		0	25
Unknown				CAS #:			
7.734	112440	4.42420771	2.2	0		0	65
Unknown				CAS #:			
8.045	172533	6.78870301	3.4	0		0	65
9-Octadecenamide, (Z)-				CAS #: 301-02-0			
10.618	111479	13.0781809	6.5	91	NIST2002.L	106877	85

Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5226.D
Date : 04-NOV-2011 13:30
Client ID: H30W1
Sample Info: K2200-04B,,62636,,
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\111104.B\S2H5226.D

Date : 04-NOV-2011 13:30

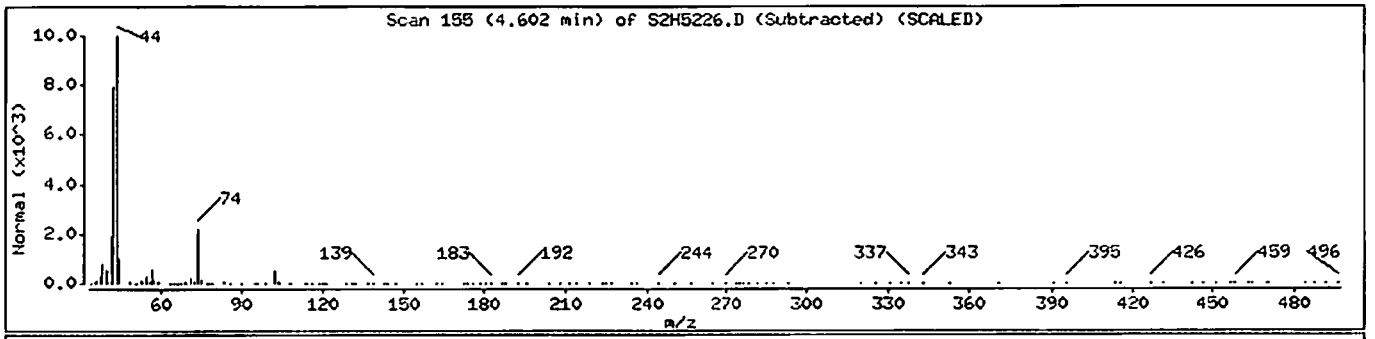
Client ID: H30W1 Instrument: S2.i

Sample Info: K2200-04B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111104.B\S2H5226.D

Date : 04-NOV-2011 13:30

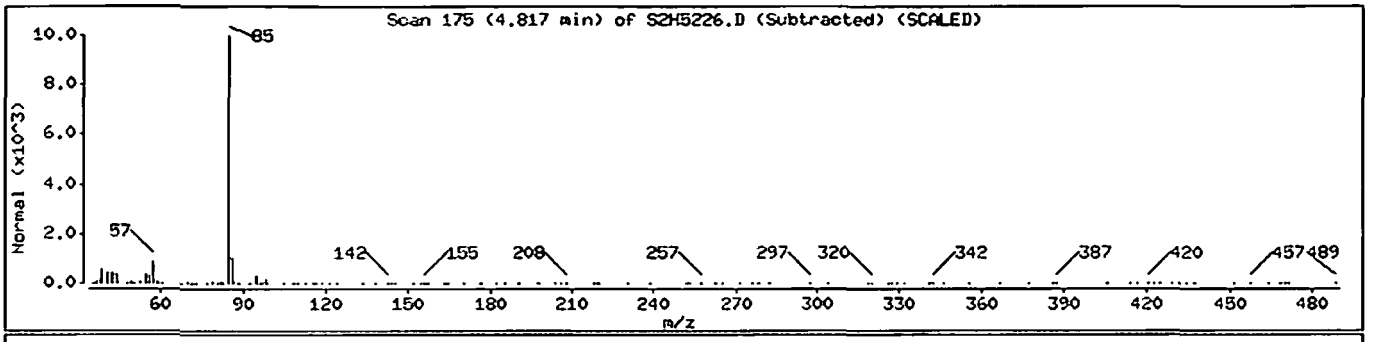
Client ID: H30W1 Instrument: S2.i

Sample Info: K2200-04B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111104.B\S2H5226.D

Date : 04-NOV-2011 13:30

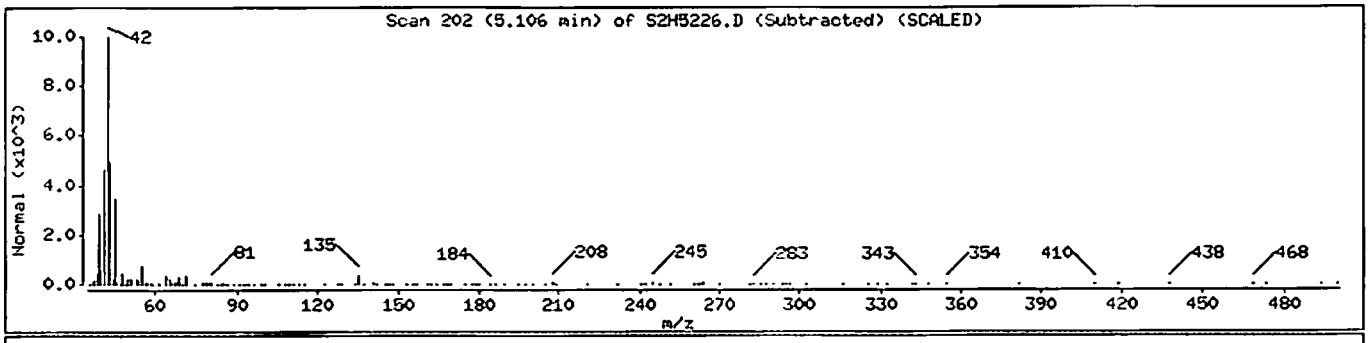
Client ID: H30W1 Instrument: S2.i

Sample Info: K2200-04B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111104.B\S2H5226.D

Date : 04-NOV-2011 13:30

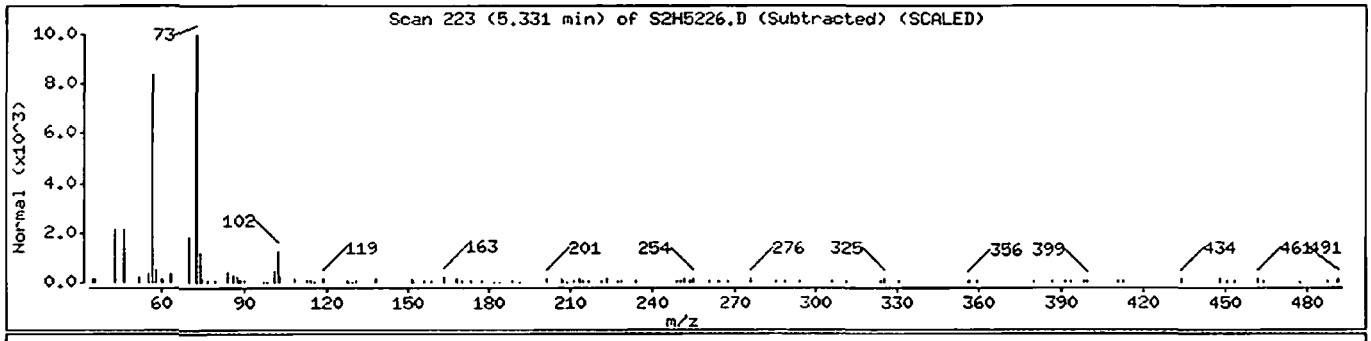
Client ID: M30W1 Instrument: S2.i

Sample Info: K2200-04B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111104.B\S2H5226.D

Date : 04-NOV-2011 13:30

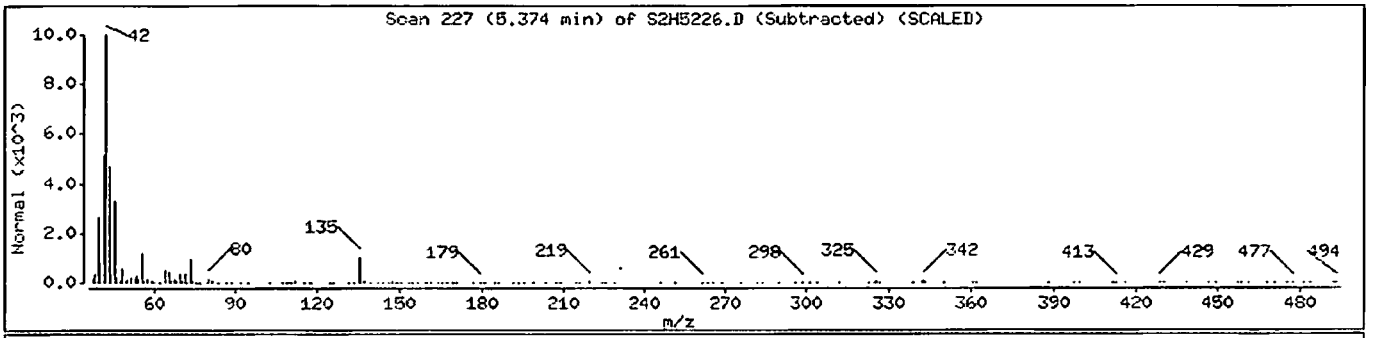
Client ID: H30W1 Instrument: S2.i

Sample Info: K2200-04B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111104.B\S2H5226.D

Date : 04-NOV-2011 13:30

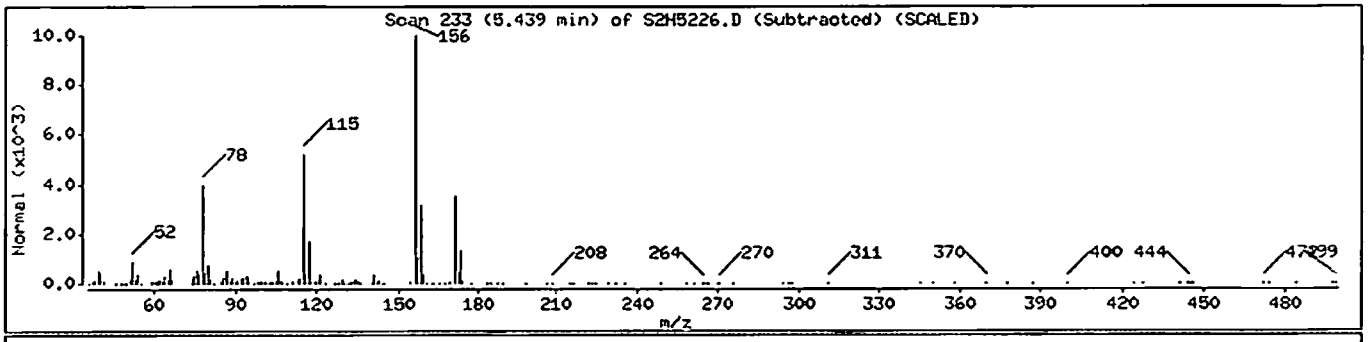
Client ID: H30W1 Instrument: S2.i

Sample Info: K2200-04B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111104.B\S2H5226.D

Date : 04-NOV-2011 13:30

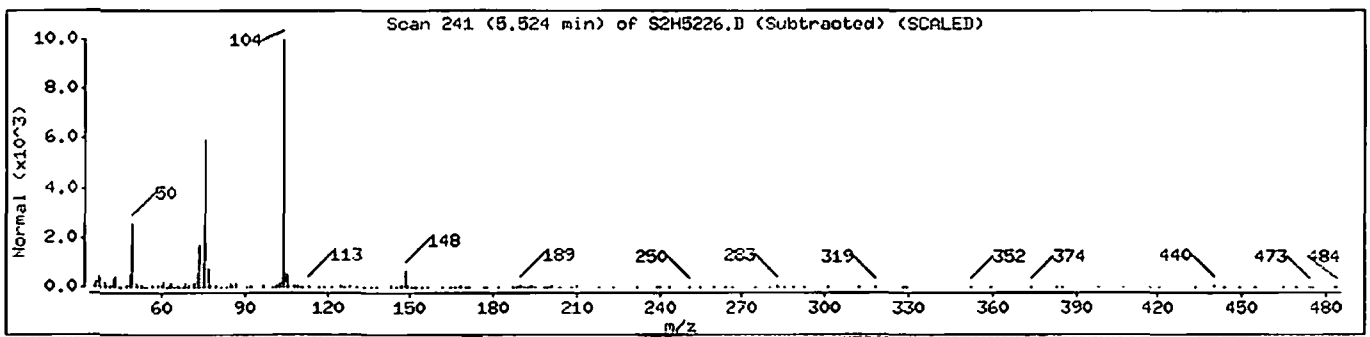
Client ID: H30W1 Instrument: S2.i

Sample Info: K2200-04B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111104.B\S2H5226.D

Date : 04-NOV-2011 13:30

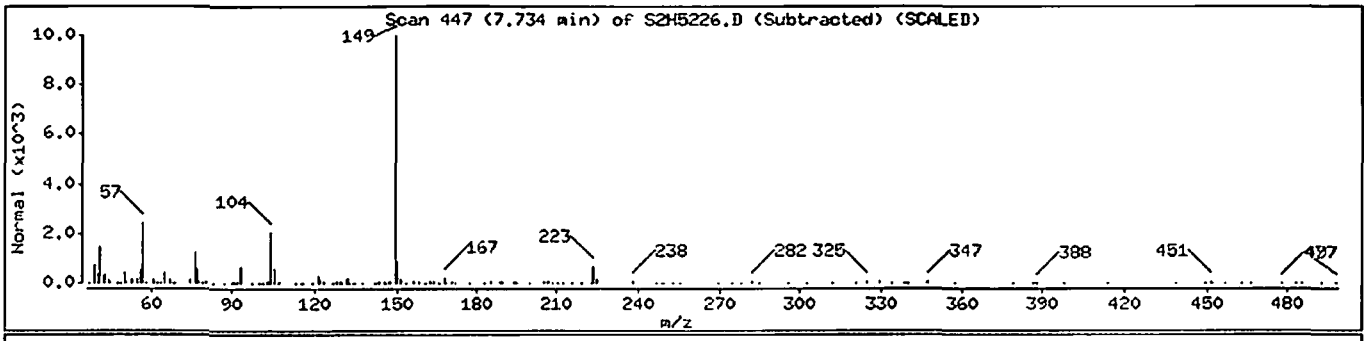
Client ID: H30W1 Instrument: S2.i

Sample Info: K2200-04B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111104.B\S2H5226.D

Date : 04-NOV-2011 13:30

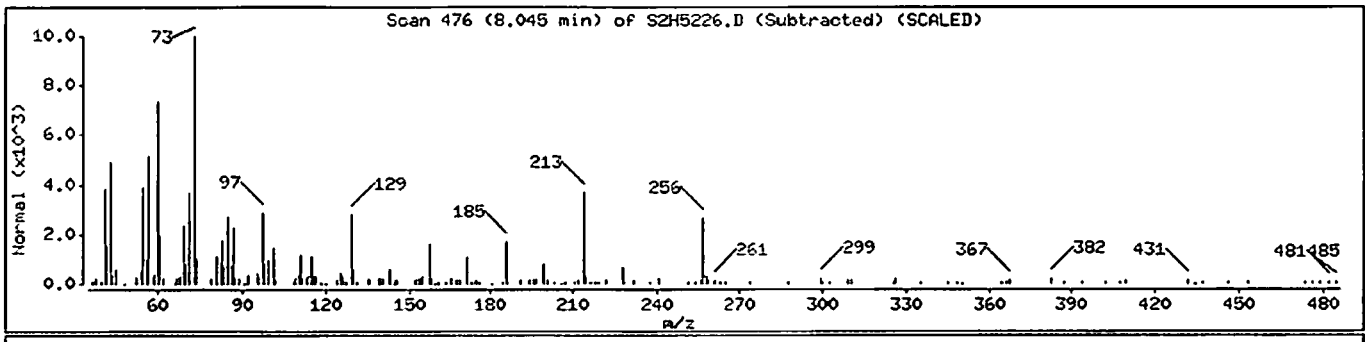
Client ID: H30W1 Instrument: S2.i

Sample Info: K2200-04B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111104.B\S2H5226.D

Date : 04-NOV-2011 13:30

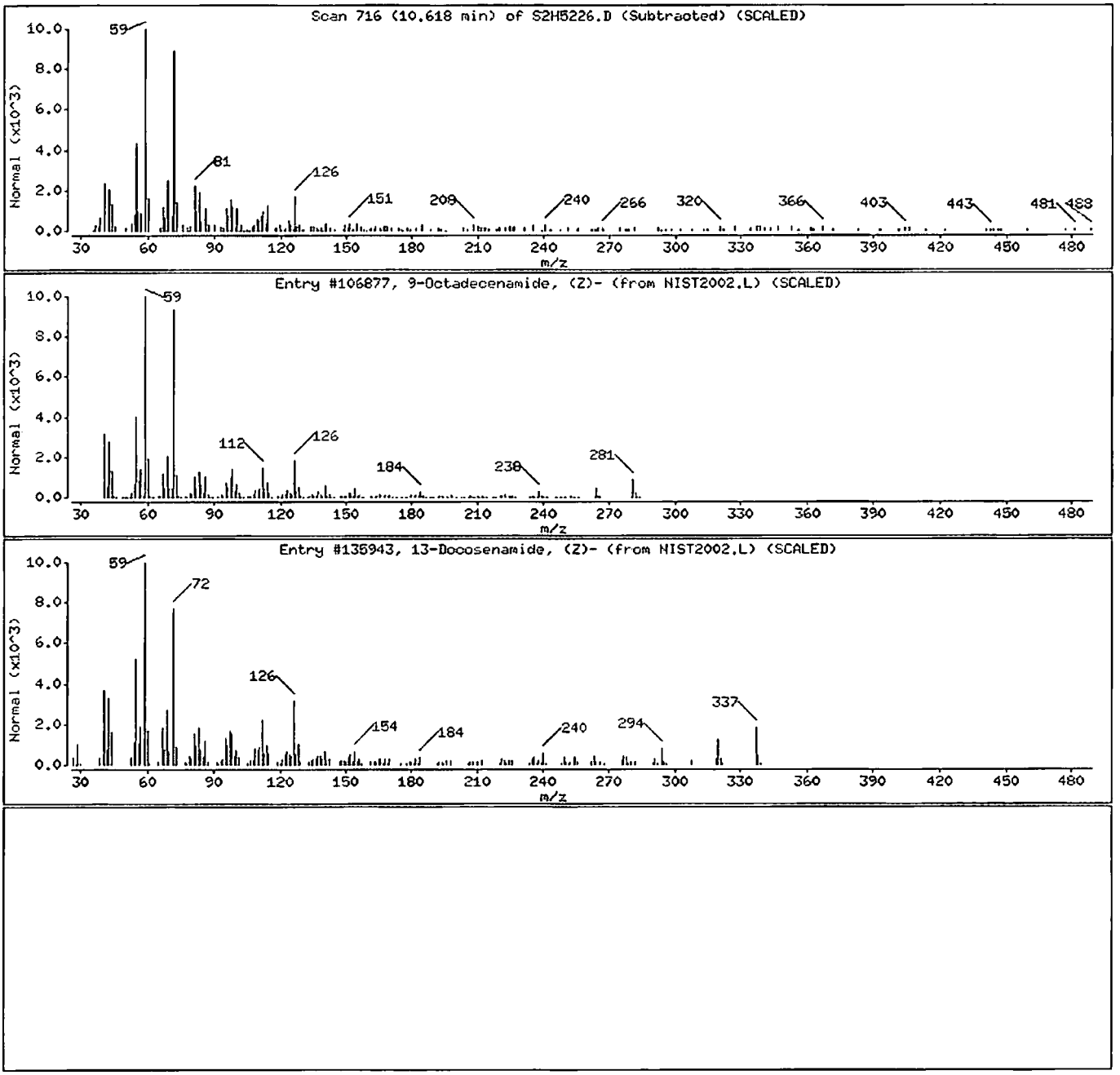
Client ID: H30W1 Instrument: S2.i

Sample Info: K2200-04B,,62636,,

Volume Injected (uL): 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
13-Docosenamide, (Z)-	112-84-5	NIST2002.L	135943	87	C22H43NO	337



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

H30W2

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-05B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5207.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.: H30W2

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

Lab Code: MITKEM | Case No.: 41926 | Mod. Ref No.: | SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER | Lab Sample ID: K2200-05B

Sample wt/vol: 1000 (g/mL) ML | Lab File ID: S2H5207.D

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

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

Concentrated Extract Volume: 1000 (uL) | Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) | GPC Factor: 1.00 | Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

H30W2

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-05B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5207.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.671	6.9	BNJ
02		Unknown-01	4.874	4.4	J
03		Unknown-02	5.185	2.3	J
04		Unknown-03	5.400	6.3	J
05		Unknown-04	5.518	3.3	J
06		Unknown-05	6.354	3.5	J
07	57-10-3	n-Hexadecanoic acid	8.102	4.0	NJ
08		Unknown-06	10.665	6.3	J
	E96679[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5207.D
Report Date: 07-Nov-2011 14:01

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5207.D
Lab Smp Id: K2200-05B Client Smp ID: H30W2
Inj Date : 03-NOV-2011 17:30
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-05B,,62636,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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 * (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)
$ 2 Phenol-d5	71	3.566	3.565	(0.917)	202305	54.4883	27
$ 4 bis(2-Chloroethyl)ether-d8	67	3.619	3.619	(0.931)	274898	53.7312	27
$ 6 2-Chlorophenol-d4	132	3.694	3.694	(0.950)	177856	55.3756	28
* 8 1,4-Dichlorobenzene-d4	152	3.887	3.887	(1.000)	117905	40.0000	(Q)
$ 11 4-Methylphenol-d8	113	4.198	4.198	(1.080)	296780	58.9602	29
$ 16 Nitrobenzene-d5	128	4.348	4.348	(0.879)	98544	51.4698	26
$ 19 2-Nitrophenol-d4	143	4.616	4.616	(0.933)	118534	56.0818	28
$ 23 2,4-Dichlorophenol-d3	165	4.820	4.820	(0.974)	228713	59.2769	30
* 25 Naphthalene-d8	136	4.949	4.948	(1.000)	367641	40.0000	
$ 27 4-Chloroaniline-d4	131	5.002	5.002	(1.011)	53453	15.6026	7.8(Q)
$ 40 Dimethylphthalate-d6	166	6.171	6.171	(0.962)	610977	58.8434	29
$ 43 Acenaphthylene-d8	160	6.289	6.289	(0.980)	689406	51.0595	26
* 46 Acenaphthene-d10	164	6.418	6.418	(1.000)	282394	40.0000	
$ 49 4-Nitrophenol-d4	143	6.504	6.503	(1.013)	76710	51.2651	26
$ 54 Fluorene-d10	176	6.847	6.847	(1.067)	503275	52.7673	26
$ 58 4,6-Dinitro-2-methylphenol-d2	200	6.901	6.900	(0.903)	119407	65.9625	33(Q)
* 65 Phenanthrene-d10	188	7.640	7.640	(1.000)	463896	40.0000	
$ 67 Anthracene-d10	188	7.694	7.694	(1.007)	683226	51.5591	26
$ 72 Pyrene-d10	212	8.831	8.820	(0.898)	613422	63.3374	32(H)
* 77 Chrysene-d12	240	9.914	9.871	(1.000)	307437	40.0000	(QH)
$ 83 Benzo(a)pyrene-d12	264	11.211	11.147	(0.992)	187968	48.0832	24

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5207.D
Report Date: 07-Nov-2011 14:01

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
* 85 Perylene-d12	264	11.297	11.233	(1.000)	159310	40.0000	

QC Flag Legend

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

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5207.D
Report Date: 07-Nov-2011 14:01

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5207.D
Lab Smp Id: K2200-05B Client Smp ID: H30W2
Inj Date : 03-NOV-2011 17:30
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-05B,,62636,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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 * (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

ISTD	RT	AREA	AMOUNT
* 25 Naphthalene-d8	4.949	1247652	40.000
* 46 Acenaphthene-d10	6.418	1491420	40.000
* 65 Phenanthrene-d10	7.641	1337014	40.000
* 85 Perylene-d12	11.298	411065	40.000

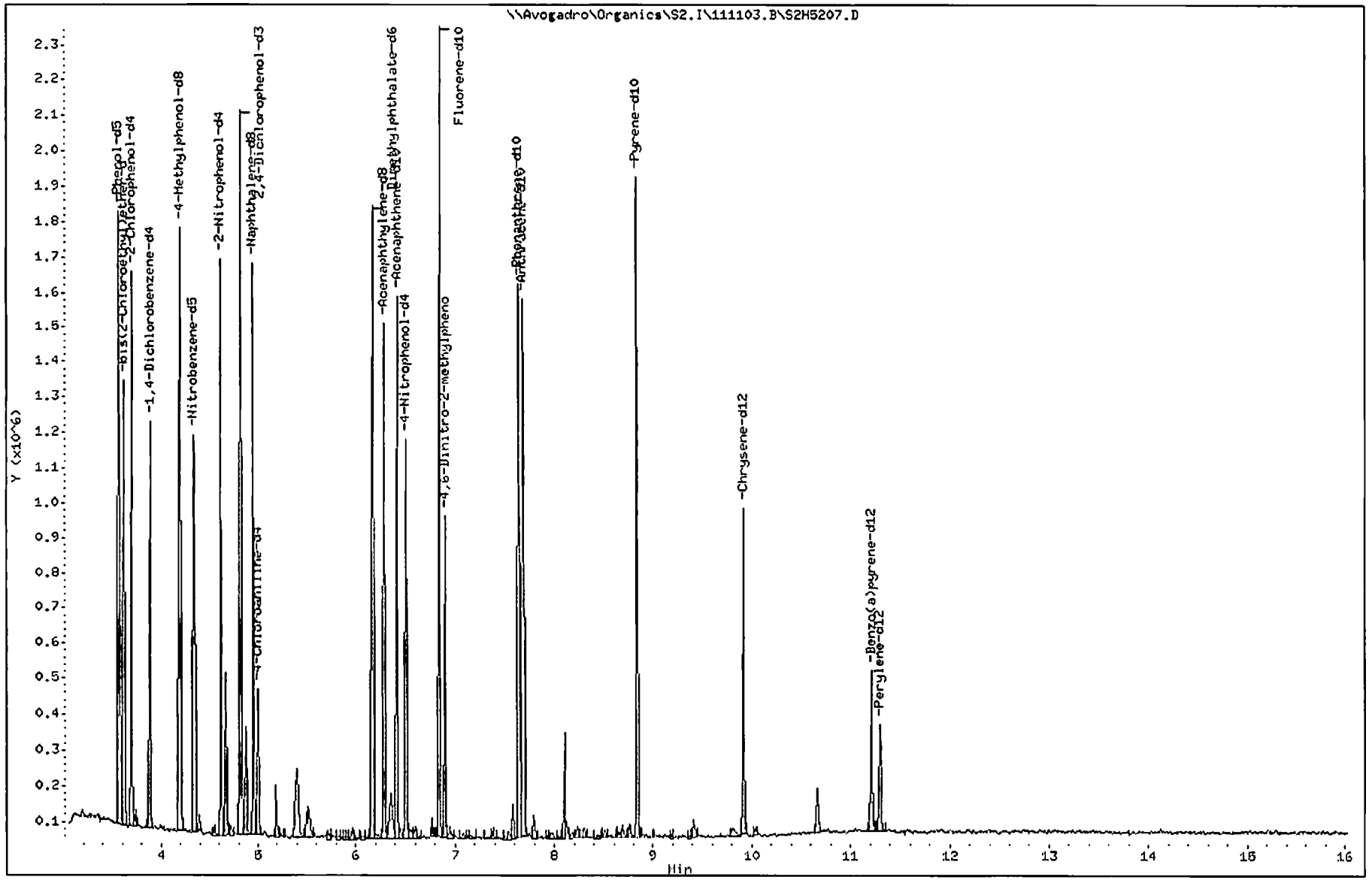
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
2(3H)-Furanone, dihydro-4-hydroxy-				CAS #: 5469-16-9			
4.671	429455	13.7684034	6.9	90	NIST2002.L	4145	25
Unknown				CAS #:			
4.874	277107	8.88409513	4.4	0		0	25
Unknown				CAS #:			
5.185	144241	4.62438335	2.3	0		0	25

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5207.D
Report Date: 07-Nov-2011 14:01

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
5.400	395660	12.6849473	6.3	0		0	25
Unknown				CAS #:			
5.518	208136	6.67288855	3.3	0		0	25
Unknown				CAS #:			
6.354	260449	6.98526688	3.5	0		0	46
n-Hexadecanoic acid				CAS #: 57-10-3			
8.102	265049	7.92958827	4.0	96	NIST2002.L	92227	65
Unknown				CAS #:			
10.665	128941	12.5470152	6.3	0		0	85

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5207.D
Date : 03-NOV-2011 17:30
Client ID: H30W2
Sample Info: K2200-05B,,62636,,
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\111103.B\S2H5207.D

Date : 03-NOV-2011 17:30

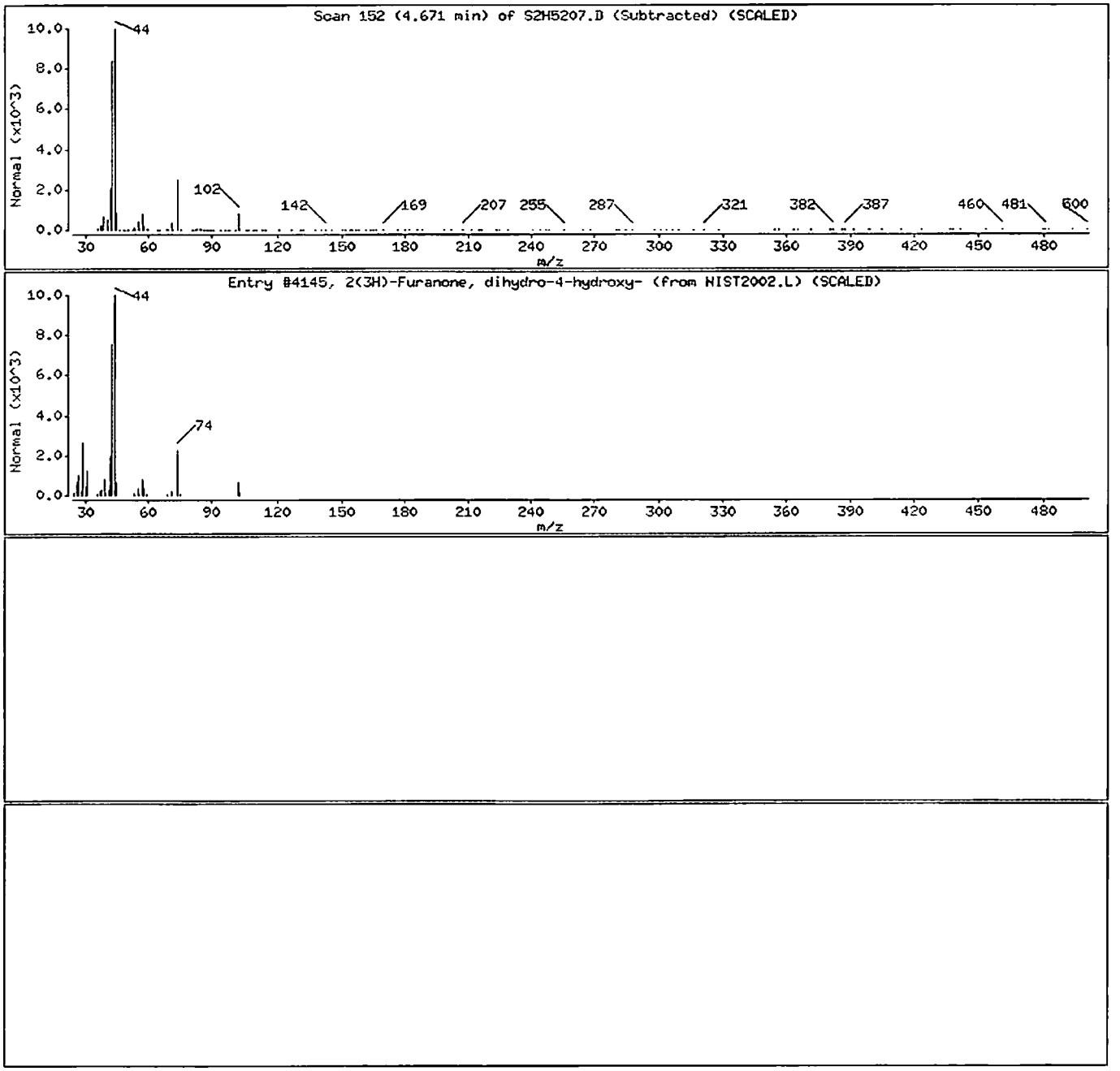
Client ID: H30W2 Instrument: S2.i

Sample Info: K2200-05B,,62636,,

Volume Injected (uL): 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\111103.B\S2H5207.D

Date : 03-NOV-2011 17:30

Client ID: H30W2 Instrument: S2.i

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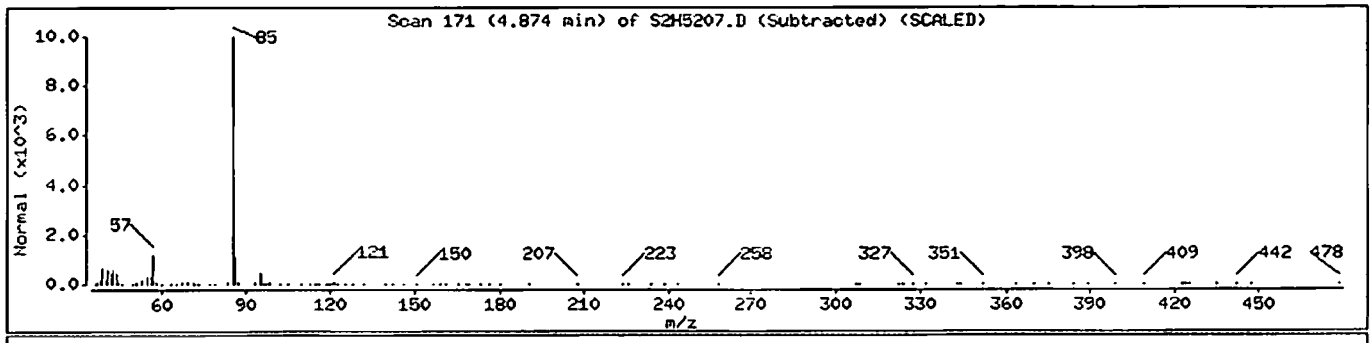
Volume Injected (uL): 2.0 Operator: SRC: LIMS

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\111103.B\S2H5207.D

Date : 03-NOV-2011 17:30

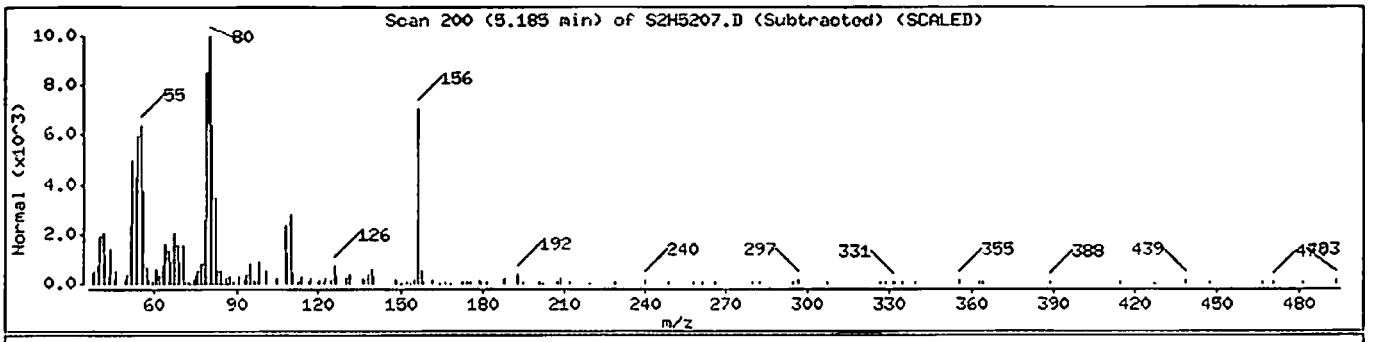
Client ID: H30H2 Instrument: S2.i

Sample Info: K2200-05B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5207.D

Date : 03-NOV-2011 17:30

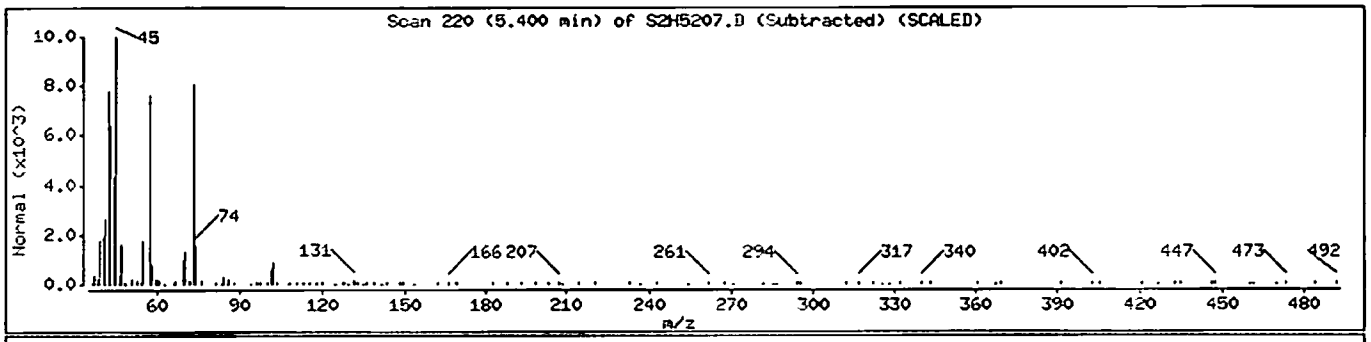
Client ID: H30W2 Instrument: S2.i

Sample Info: K2200-05B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5207.D

Date : 03-NOV-2011 17:30

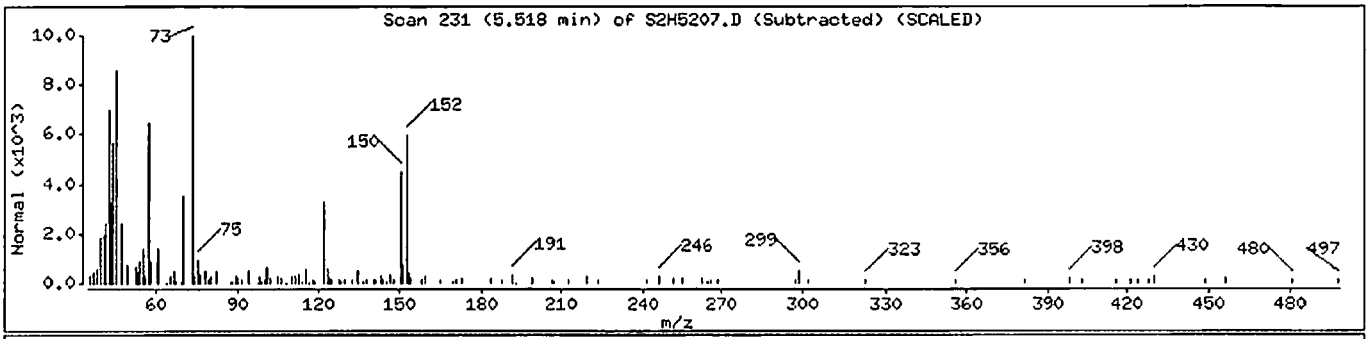
Client ID: H30W2 Instrument: S2.i

Sample Info: K2200-05B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5207.D

Date : 03-NOV-2011 17:30

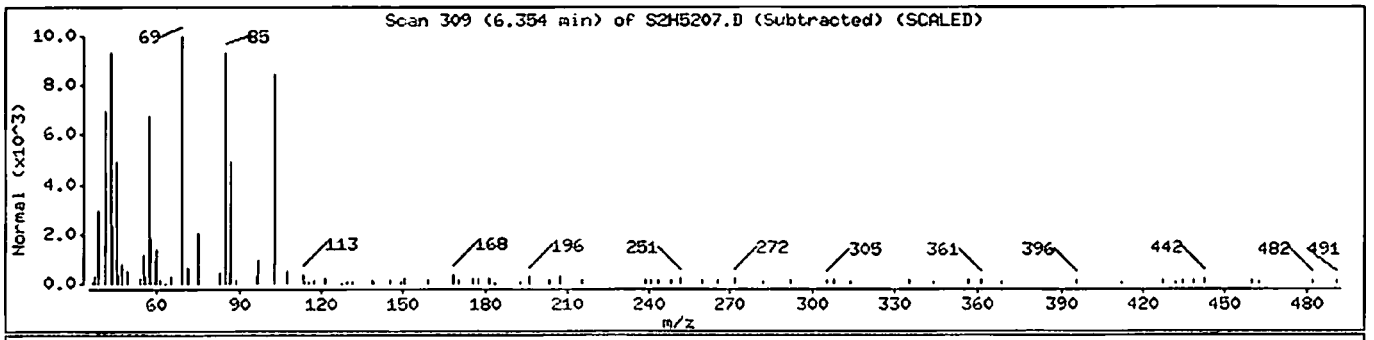
Client ID: H30W2 Instrument: S2.i

Sample Info: K2200-05B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5207.D

Date : 03-NOV-2011 17:30

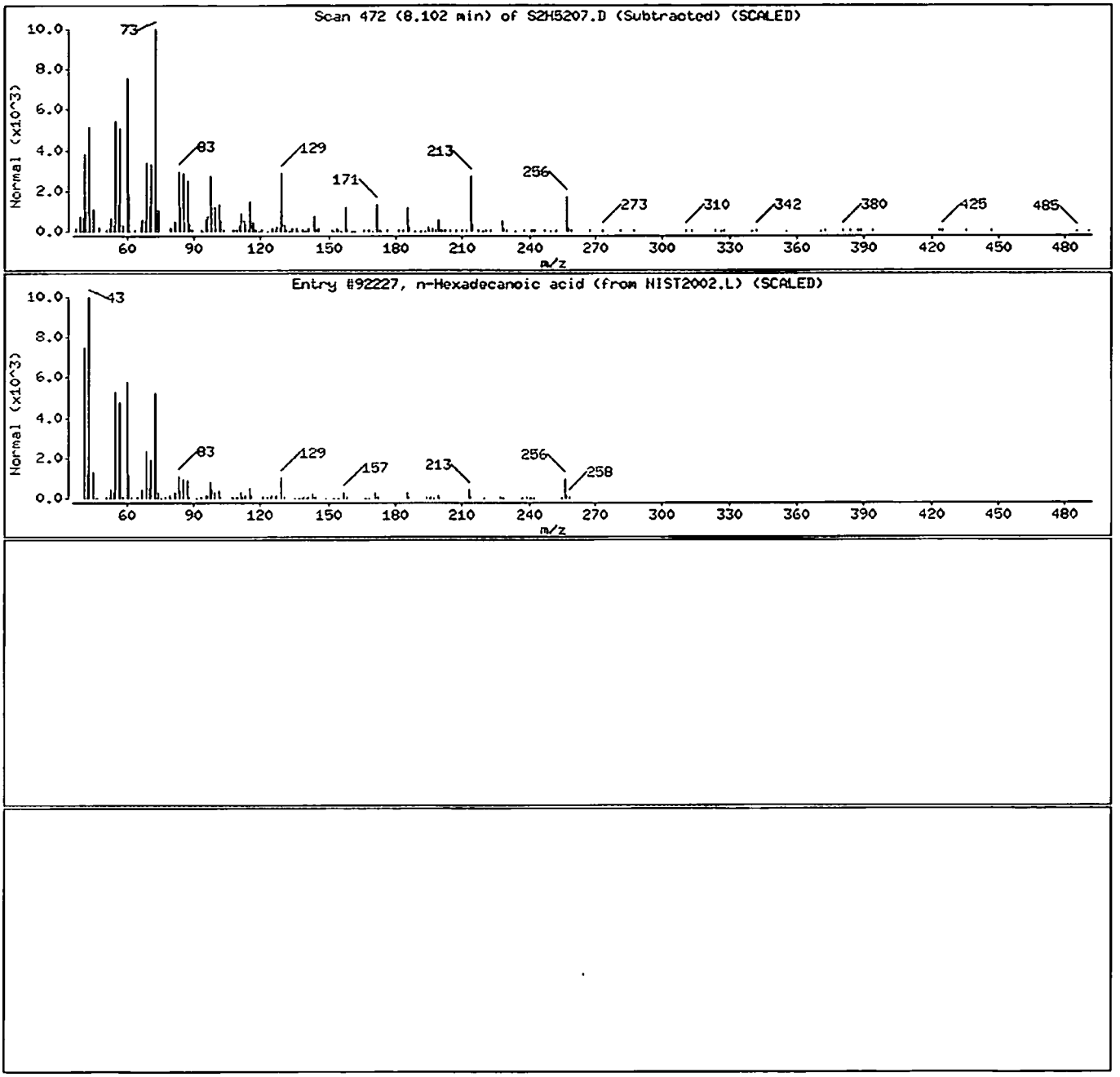
Client ID: H30W2 Instrument: S2.i

Sample Info: K2200-05B,,62636,,

Volume Injected (uL): 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



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5207.D

Date : 03-NOV-2011 17:30

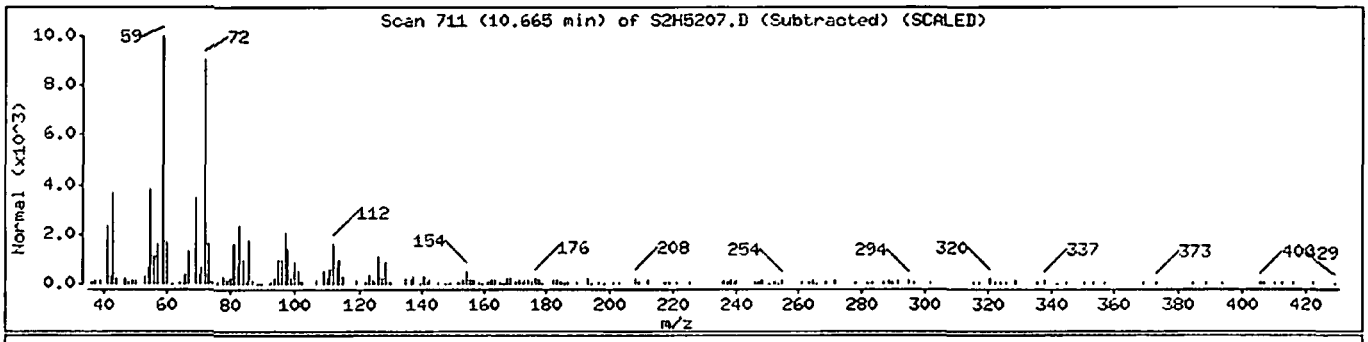
Client ID: H30W2 Instrument: S2.i

Sample Info: K2200-05B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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

CLIENT SAMPLE NO.: H30W3

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-06B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5208.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

H30W3

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-06B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5208.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.: H30W3

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

Lab Code: MITKEM | Case No.: 41926 | Mod. Ref No.: | SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER | Lab Sample ID: K2200-06B

Sample wt/vol: 1000 (g/mL) ML | Lab File ID: S2H5208.D

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

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

Concentrated Extract Volume: 1000 (uL) | Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) | GPC Factor: 1.00 | Date Analyzed: 11/03/2011

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.671	6.5	BNJ
02		Unknown-01	4.875	4.2	J
03		Unknown-02	5.186	2.1	J
04		Unknown-03	5.390	7.2	J
05		Unknown-04	5.518	3.8	J
06		Unknown-05	6.355	3.4	J
07	57-10-3	n-Hexadecanoic acid	8.103	4.3	NJ
08	112-84-5	13-Docosenamide, (Z)-	10.676	8.2	NJ
	E96679[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5208.D
Report Date: 07-Nov-2011 14:01

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5208.D
Lab Smp Id: K2200-06B Client Smp ID: H30W3
Inj Date : 03-NOV-2011 17:51
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-06B,,62636,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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 * (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)
$	2 Phenol-d5	71	3.566	3.565	(0.917)	172090	50.2222	25
$	4 bis(2-Chloroethyl)ether-d8	67	3.620	3.619	(0.931)	232861	49.3168	25
$	6 2-Chlorophenol-d4	132	3.695	3.694	(0.950)	157537	53.1466	27
*	8 1,4-Dichlorobenzene-d4	152	3.888	3.887	(1.000)	108815	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.199	4.198	(1.080)	225541	48.5504	24
$	16 Nitrobenzene-d5	128	4.349	4.348	(0.879)	77108	49.0716	25
$	19 2-Nitrophenol-d4	143	4.617	4.616	(0.933)	96696	55.7437	28
$	23 2,4-Dichlorophenol-d3	165	4.821	4.820	(0.974)	176675	55.7928	28
*	25 Naphthalene-d8	136	4.949	4.948	(1.000)	301728	40.0000	
$	27 4-Chloroaniline-d4	131	5.003	5.002	(1.011)	86554	30.7836	15(Q)
$	40 Dimethylphthalate-d6	166	6.172	6.171	(0.962)	437588	58.7674	29
$	43 Acenaphthylene-d8	160	6.290	6.289	(0.980)	520812	53.7874	27
*	46 Acenaphthene-d10	164	6.419	6.418	(1.000)	202515	40.0000	
$	49 4-Nitrophenol-d4	143	6.504	6.503	(1.013)	61217	57.0480	29
$	54 Fluorene-d10	176	6.647	6.847	(1.067)	372926	54.5231	27
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.901	6.900	(0.903)	80647	57.4369	29(Q)
*	65 Phenanthrene-d10	188	7.641	7.640	(1.000)	359820	40.0000	
$	67 Anthracene-d10	188	7.684	7.694	(1.006)	518371	50.4332	25
$	72 Pyrene-d10	212	8.831	8.820	(0.890)	448158	67.2436	34
*	77 Chrysene-d12	240	9.925	9.871	(1.000)	211562	40.0000	(Q)
$	83 Benzo(a)pyrene-d12	264	11.223	11.147	(0.992)	146661	52.7564	26

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5208.D
Report Date: 07-Nov-2011 14:01

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)	
* 85 Perylene-d12	264	11.308	11.233	(1.000)	113290	40.0000		(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5208.D
Report Date: 07-Nov-2011 14:01

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5208.D
Lab Smp Id: K2200-06B Client Smp ID: H30W3
Inj Date : 03-NOV-2011 17:51
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-06B,,62636,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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 * (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

ISTD	RT	AREA	AMOUNT
* 25 Naphthalene-d8	4.950	1044326	40.000
* 46 Acenaphthene-d10	6.419	1129367	40.000
* 65 Phenanthrene-d10	7.642	1011693	40.000
* 85 Perylene-d12	11.309	291875	40.000

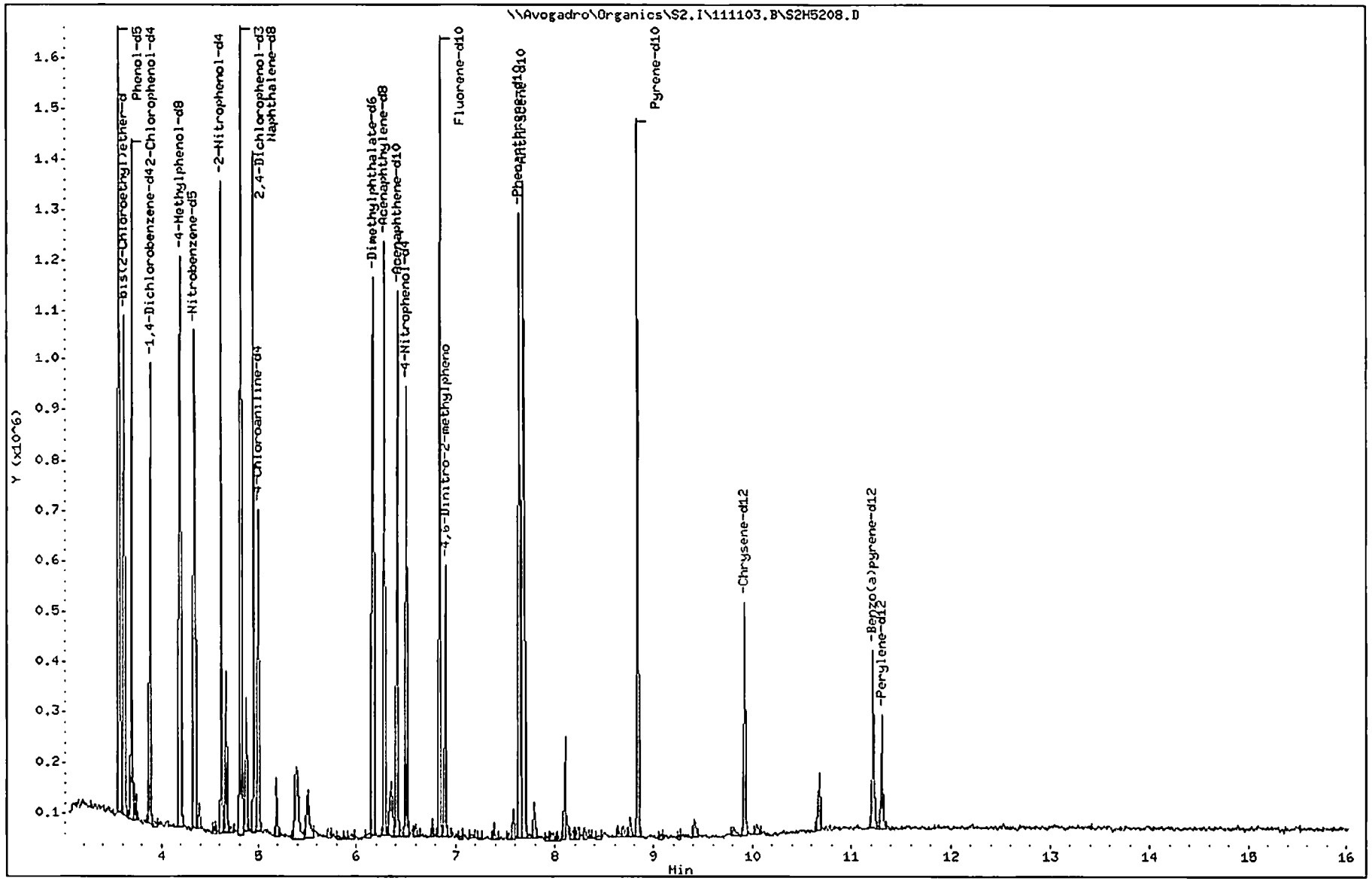
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
2(3H)-Furanone, dihydro-4-hydroxy-				CAS #: 5469-16-9			
4.671	337715	12.9352196	6.5	90	NIST2002.L	4145	25
Unknown				CAS #:			
4.875	221803	8.49554644	4.2	0		0	25
Unknown				CAS #:			
5.186	111506	4.27091359	2.1	0		0	25

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5208.D
Report Date: 07-Nov-2011 14:01

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
5.390	375780	14.3932139	7.2	0		0	25
Unknown				CAS #:			
5.518	197890	7.57961784	3.8	0		0	25
Unknown				CAS #:			
6.355	193095	6.83906901	3.4	0		0	46
n-Hexadecanoic acid				CAS #: 57-10-3			
8.103	218422	8.63587824	4.3	95	NIST2002.L	92228	65
13-Docosenamide, (Z)-				CAS #: 112-84-5			
10.676	120296	16.4859310	8.2	95	NIST2002.L	135943	85

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5208.D
Date : 03-NOV-2011 17:51
Client ID: H30W3
Sample Info: K2200-06B,,62636,,
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\111103.B\S2H5208.D

Date : 03-NOV-2011 17:51

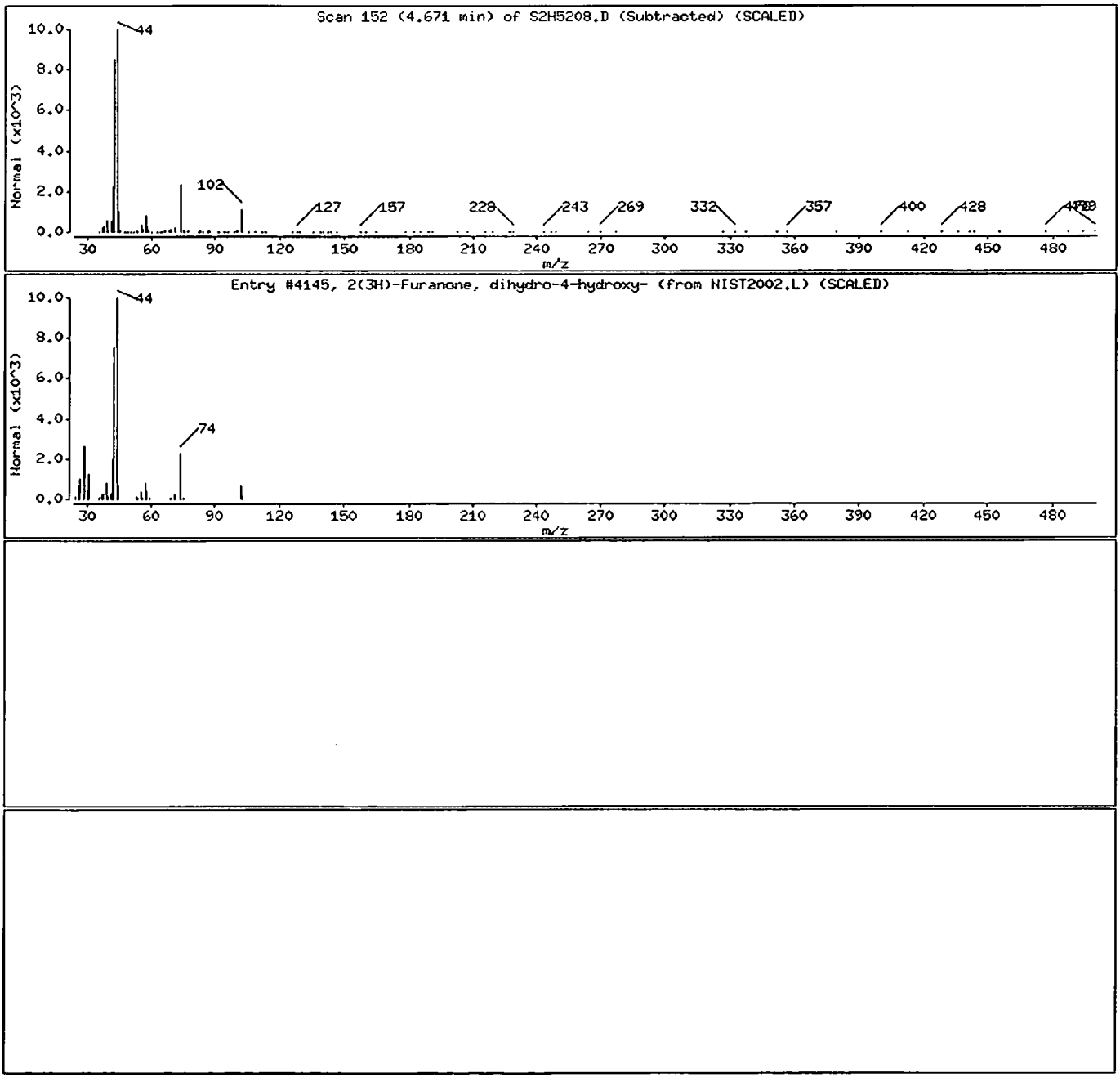
Client ID: H30W3 Instrument: S2.i

Sample Info: K2200-06B,,62636,,

Volume Injected (uL): 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\111103.B\S2H5208.D

Date : 03-NOV-2011 17:51

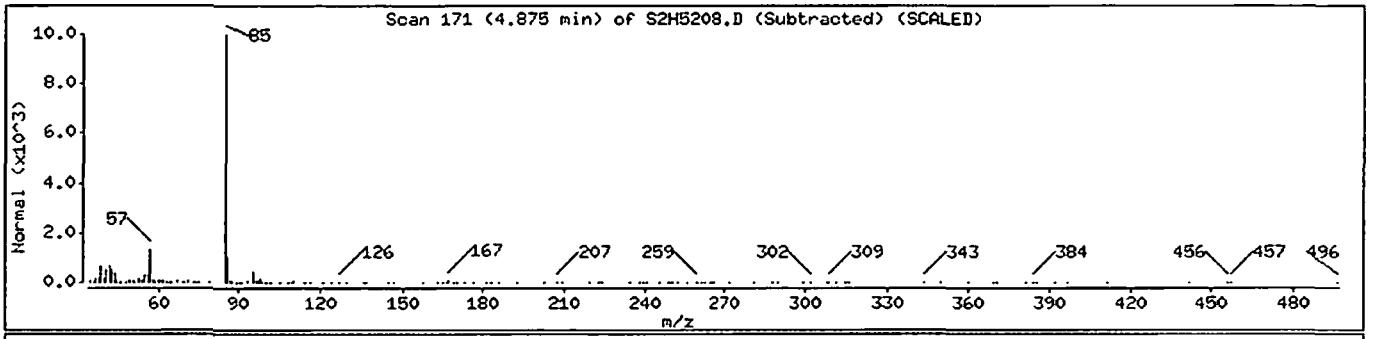
Client ID: H30W3 Instrument: S2.i

Sample Info: K2200-06B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5208.D

Date : 03-NOV-2011 17:51

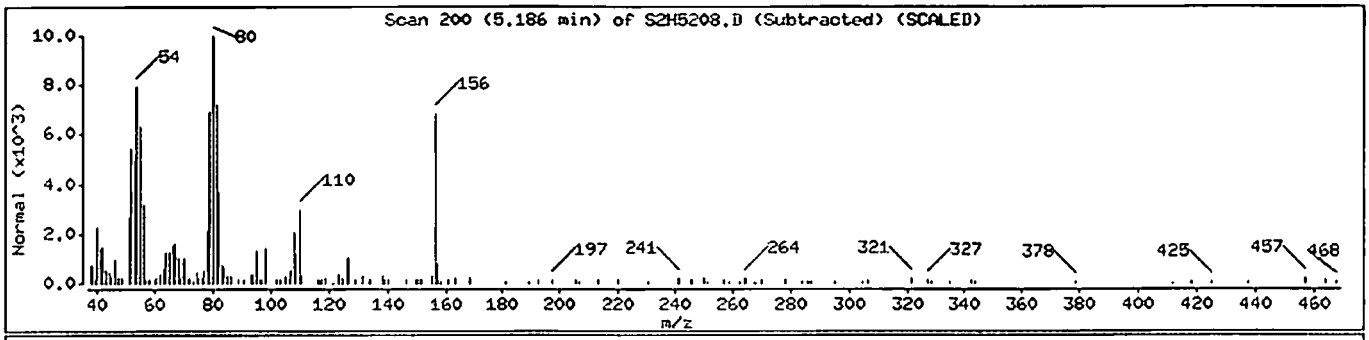
Client ID: H30W3 Instrument: S2.i

Sample Info: K2200-06B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5208.D

Date : 03-NOV-2011 17:51

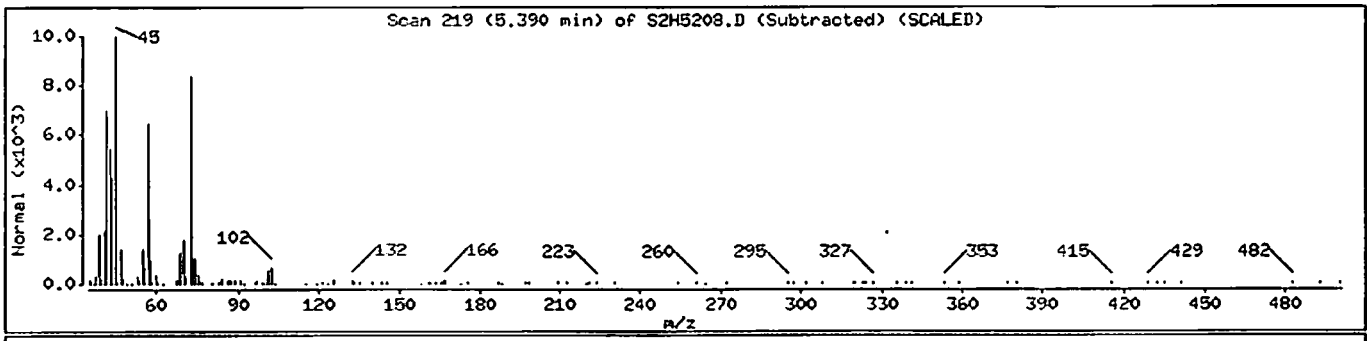
Client ID: H30W3 Instrument: S2.i

Sample Info: K2200-06B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5208.D

Date : 03-NOV-2011 17:51

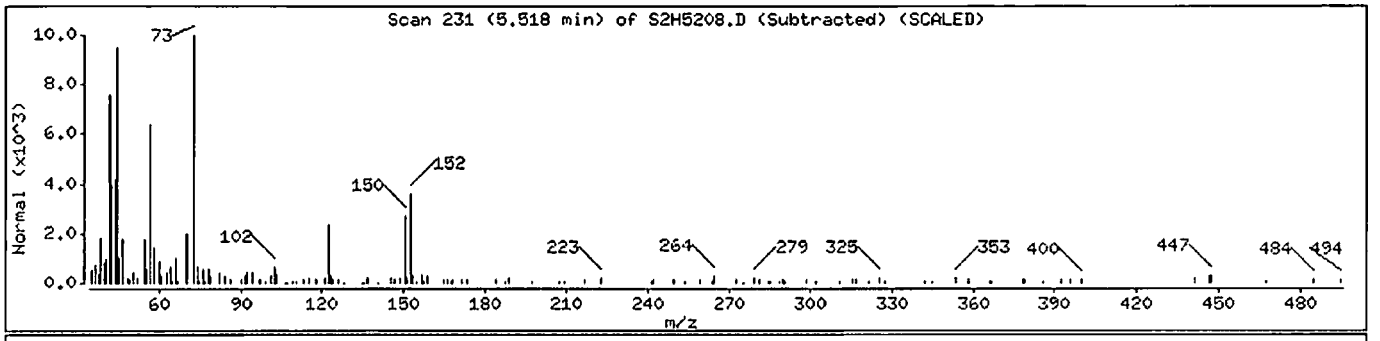
Client ID: H30W3 Instrument: S2.i

Sample Info: K2200-06B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5208.D

Date : 03-NOV-2011 17:51

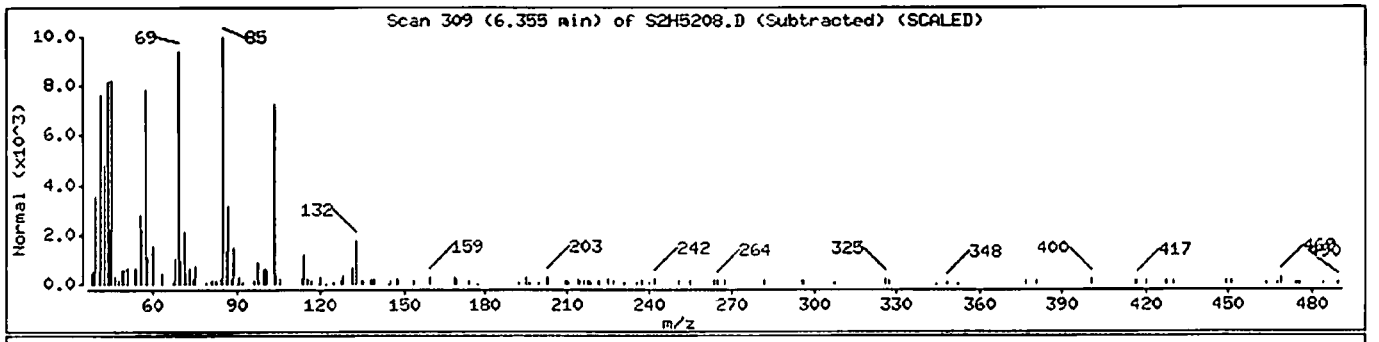
Client ID: H30W3 Instrument: S2.i

Sample Info: K2200-06B,,62636,,

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

Column phase: RX1-5SILMS 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\111103.B\S2H5208.D

Date : 03-NOV-2011 17:51

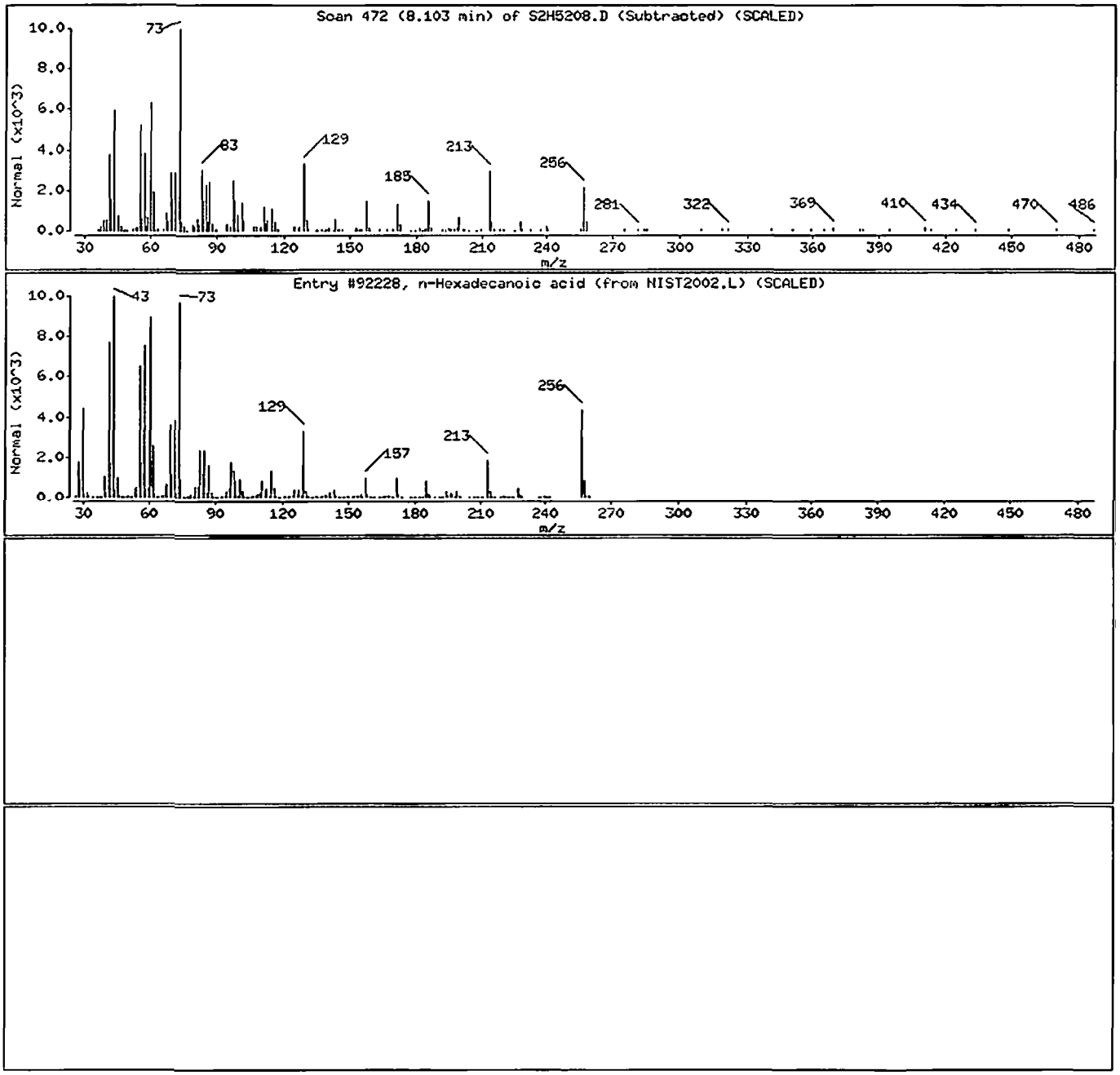
Client ID: H30W3 Instrument: S2.i

Sample Info: K2200-06B,,62636,,

Volume Injected (uL): 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	92228	95	C16H32O2	256



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5208.D

Date : 03-NOV-2011 17:51

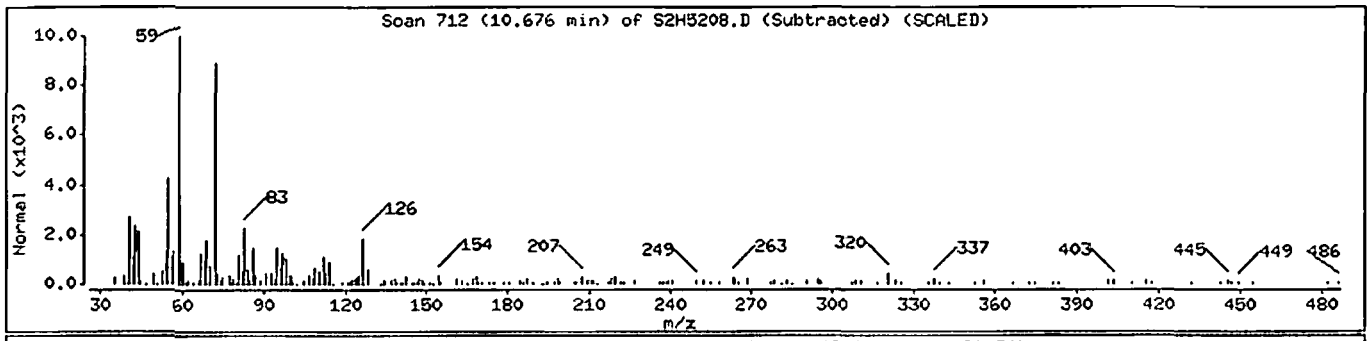
Client ID: H30W3 Instrument: S2.i

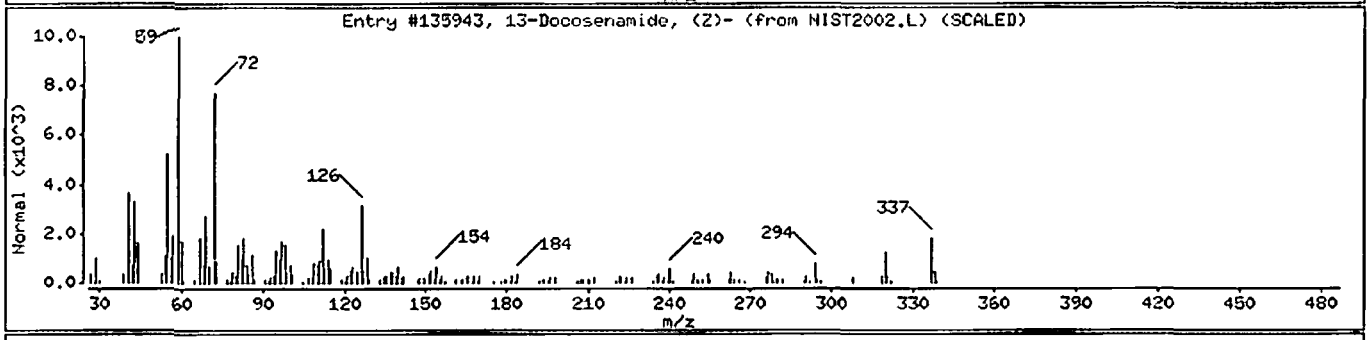
Sample Info: K2200-06B,,62636,,

Volume Injected (uL): 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	135943	95	C22H43NO	337





1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

H30W4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-07B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5209.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

H30W4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-07B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5209.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

H30W4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-07B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5209.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	4.671	6.2	J
02		Unknown-02	4.875	3.7	J
03		Unknown-03	5.400	6.2	J
04		Unknown-04	5.529	2.6	J
05		Unknown-05	6.355	3.3	J
06	57-10-3	n-Hexadecanoic acid	8.103	4.9	NJ
07		Unknown-06	10.612	7.1	J
	E96679[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5209.D
Report Date: 07-Nov-2011 14:02

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5209.D
Lab Smp Id: K2200-07B Client Smp ID: H30W4
Inj Date : 03-NOV-2011 18:12
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-07B,,62636,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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 * (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)
$	2 Phenol-d5	71	3.566	3.565	(0.917)	192418	46.2340	23
$	4 bis(2-Chloroethyl)ether-d8	67	3.620	3.619	(0.931)	258496	45.0742	23
$	6 2-Chlorophenol-d4	132	3.695	3.694	(0.950)	170212	47.2780	24
*	8 1,4-Dichlorobenzene-d4	152	3.888	3.887	(1.000)	132164	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.199	4.198	(1.080)	270142	47.8779	24
$	16 Nitrobenzene-d5	128	4.349	4.348	(0.879)	90611	43.3593	22
$	19 2-Nitrophenol-d4	143	4.617	4.616	(0.933)	112983	48.9746	24
$	23 2,4-Dichlorophenol-d3	165	4.821	4.820	(0.974)	214633	50.9648	25
*	25 Naphthalene-d8	136	4.949	4.948	(1.000)	401278	40.0000	
$	27 4-Chloroaniline-d4	131	5.003	5.002	(1.011)	121605	32.5203	16(Q)
$	40 Dimethylphthalate-d6	166	6.172	6.171	(0.962)	621633	57.0358	29
$	43 Acenaphthylene-d8	160	6.290	6.289	(0.980)	653879	46.1359	23
*	46 Acenaphthene-d10	164	6.419	6.418	(1.000)	296425	40.0000	
$	49 4-Nitrophenol-d4	143	6.504	6.503	(1.013)	84403	53.7364	27
$	54 Fluorene-d10	176	6.848	6.847	(1.067)	517381	51.6786	26
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.901	6.900	(0.503)	123894	64.5793	32(Q)
*	65 Phenanthrene-d10	188	7.641	7.640	(1.000)	491637	40.0000	
$	67 Anthracene-d10	188	7.695	7.694	(1.007)	710029	50.5583	25
$	72 Pyrene-d10	212	8.831	8.820	(0.894)	631988	61.0953	31
*	77 Chrysene-d12	240	9.882	9.871	(1.000)	328366	40.0000	(Q)
$	83 Benzo(a)pyrene-d12	264	11.158	11.147	(0.991)	210161	49.9985	25(H)

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5209.D
Report Date: 07-Nov-2011 14:02

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)	
* 85 Perylene-d12	264	11.255	11.233	(1.000)	171296	40.0000		(Q)

QC Flag Legend

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

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5209.D
Report Date: 07-Nov-2011 14:02

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5209.D
Lab Smp Id: K2200-07B Client Smp ID: H30W4
Inj Date : 03-NOV-2011 18:12
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-07B,,62636,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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 * (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

ISTD	RT	AREA	AMOUNT
* 25 Naphthalene-d8	4.950	1376226	40.000
* 46 Acenaphthene-d10	6.419	1589787	40.000
* 65 Phenanthrene-d10	7.642	1420842	40.000
* 85 Perylene-d12	11.255	443233	40.000

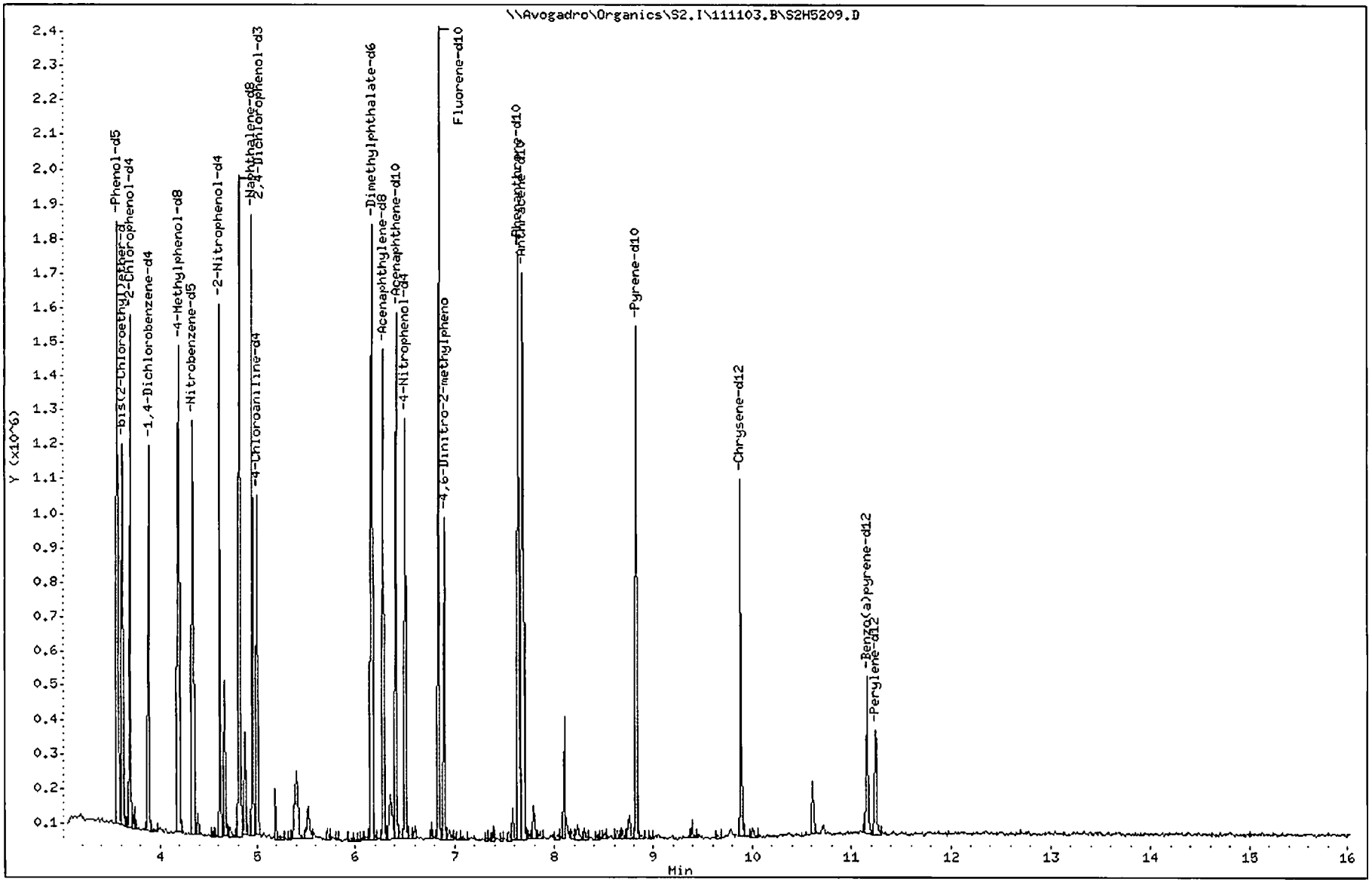
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.671	425158	12.3572229	6.2	0	0		25
Unknown				CAS #:			
4.875	255617	7.42950506	3.7	0	0		25
Unknown				CAS #:			
5.400	428288	12.4481734	6.2	0	0		25

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5209.D
Report Date: 07-Nov-2011 14:02

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
5.529	180852	5.25645149	2.6	0		0	25
Unknown				CAS #:			
6.355	263164	6.62136948	3.3	0		0	46
n-Hexadecanoic acid				CAS #: 57-10-3			
8.103	345962	9.73963164	4.9	96	NIST2002.L	92227	65
Unknown				CAS #:			
10.612	157376	14.2025043	7.1	0		0	85

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5209.D
Date : 03-NOV-2011 18:12
Client ID: H30W4
Sample Info: K2200-07B,,62636,,
Volume Injected (uL): 2.0
Column phase: RXI-5SILMS

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



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Date : 03-NOV-2011 18:12

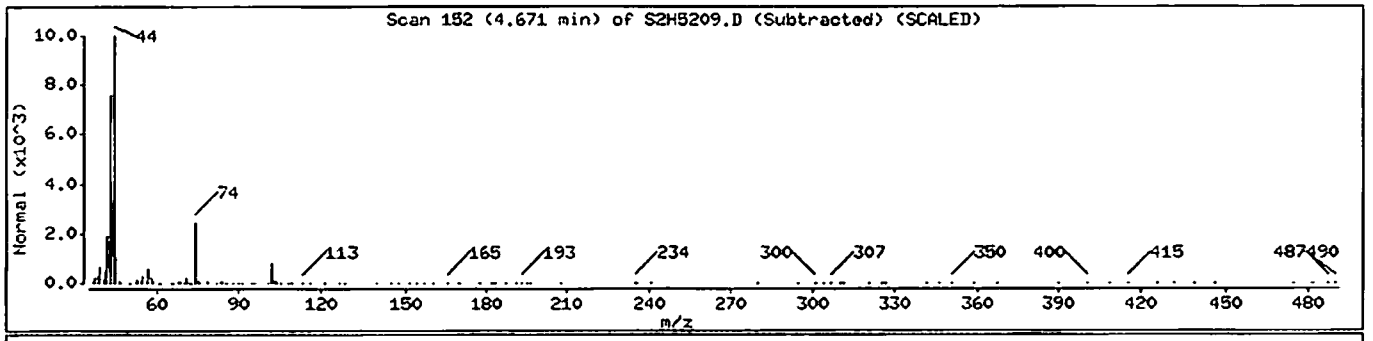
Client ID: H30W4 Instrument: S2.i

Sample Info: K2200-07B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 18:12

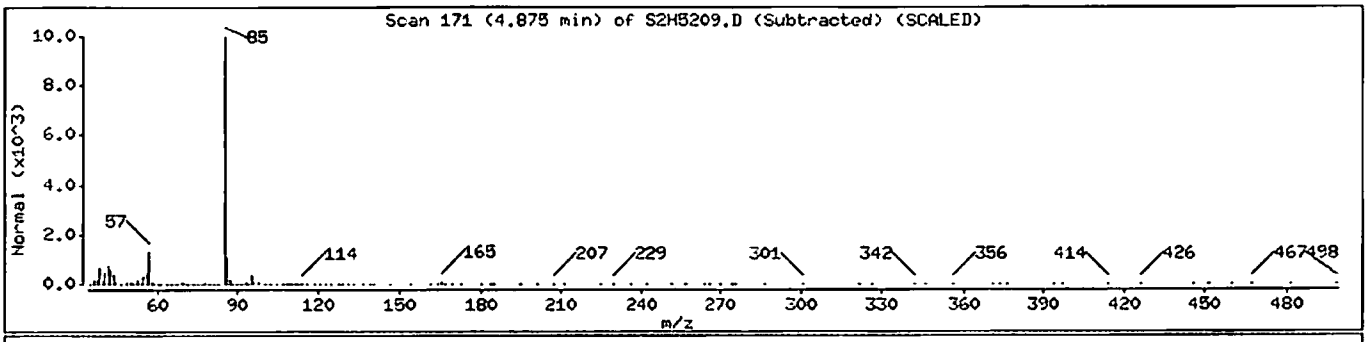
Client ID: H30W4 Instrument: S2.i

Sample Info: K2200-07B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5209.D

Date : 03-NOV-2011 18:12

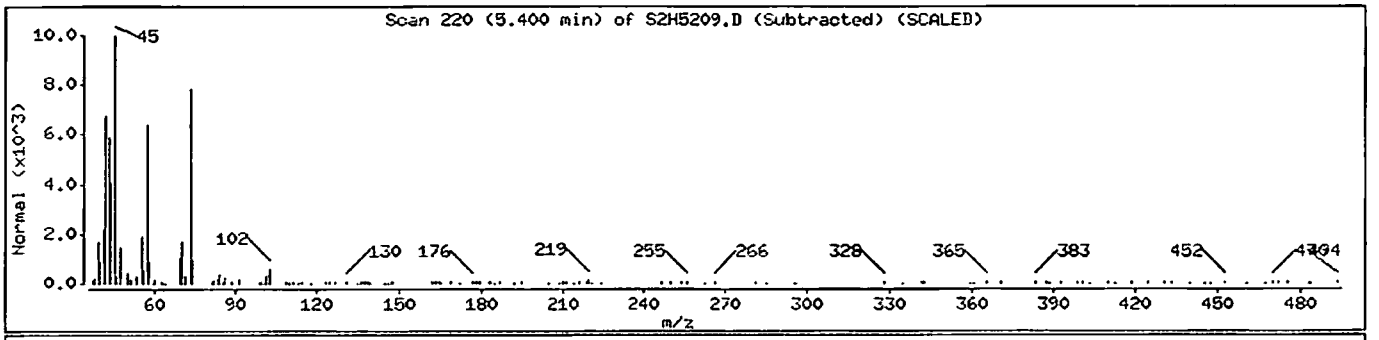
Client ID: H30W4 Instrument: S2.i

Sample Info: K2200-07B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5209.D

Date : 03-NOV-2011 18:12

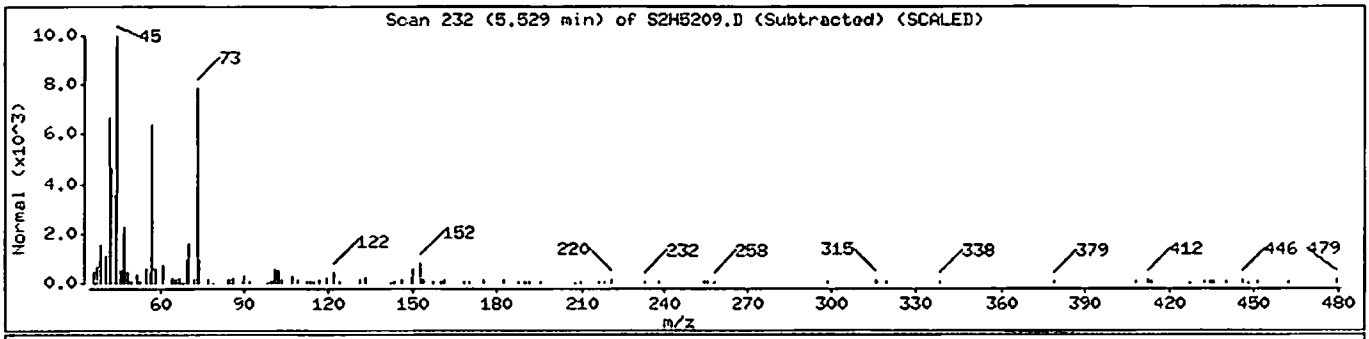
Client ID: H30W4 Instrument: S2.i

Sample Info: K2200-07B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5209.D

Date : 03-NOV-2011 18:12

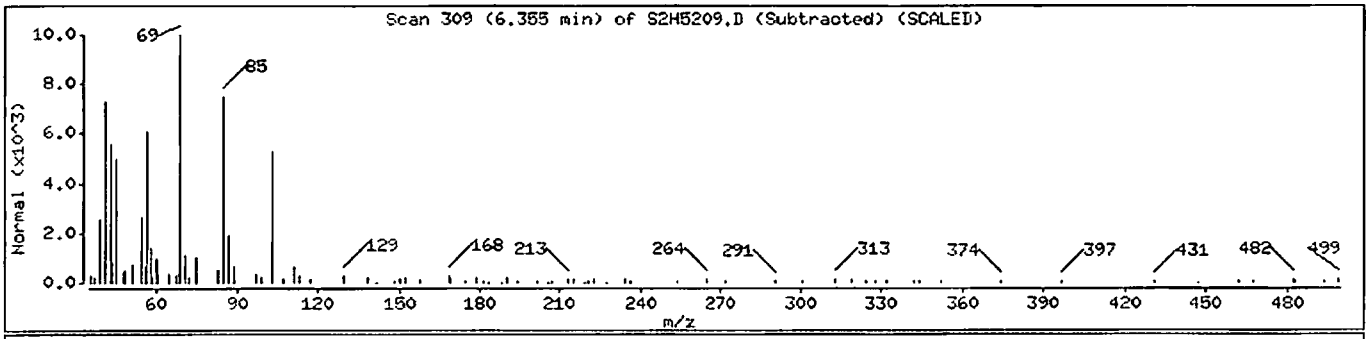
Client ID: H30W4 Instrument: S2.i

Sample Info: K2200-07B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5209.D

Date : 03-NOV-2011 18:12

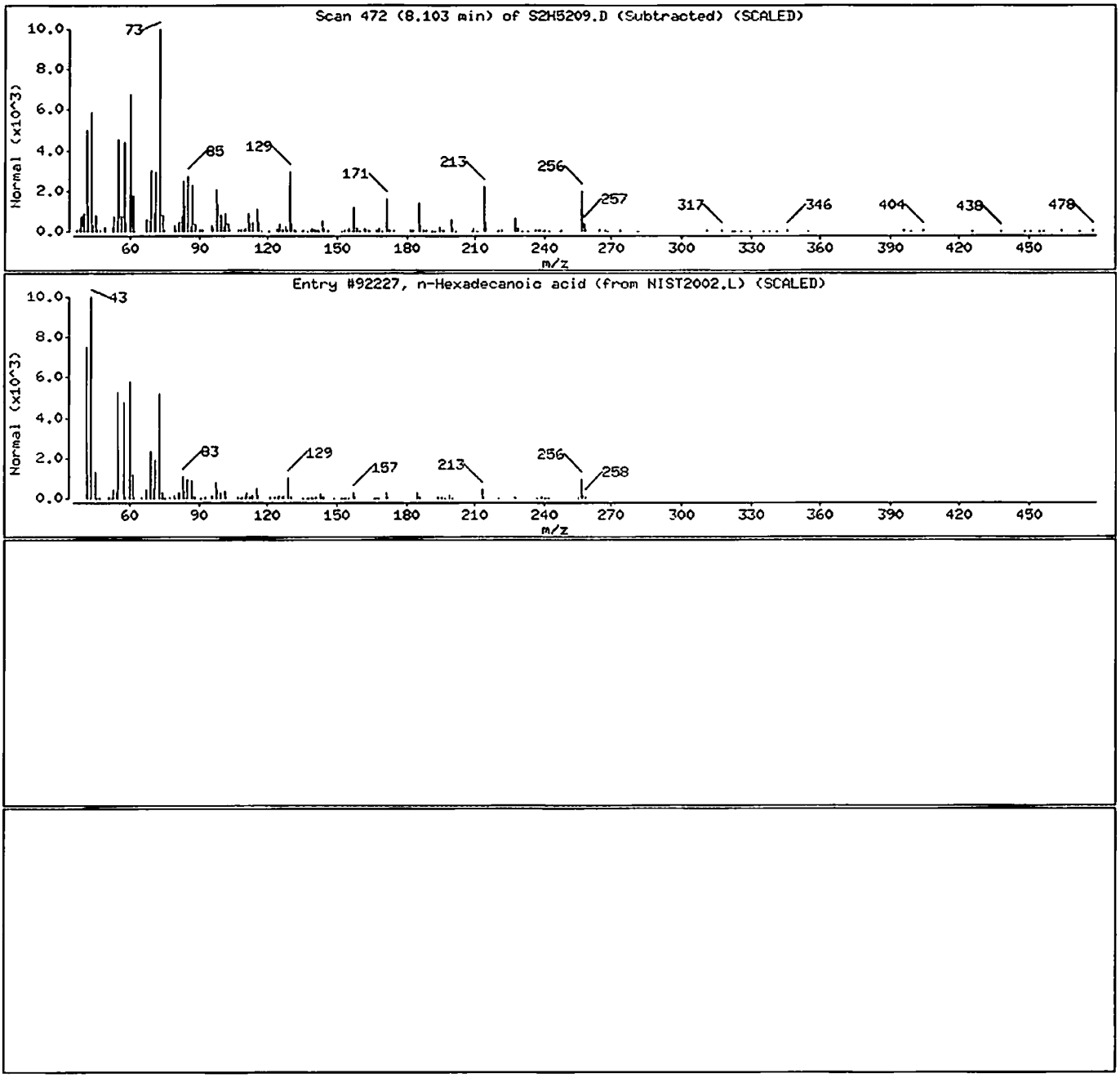
Client ID: H30W4 Instrument: S2.i

Sample Info: K2200-07B,,62636,,

Volume Injected (uL): 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



Data File: \\Avogadro\Organics\S2.i\111103.B\S2H5209.D

Date : 03-NOV-2011 18:12

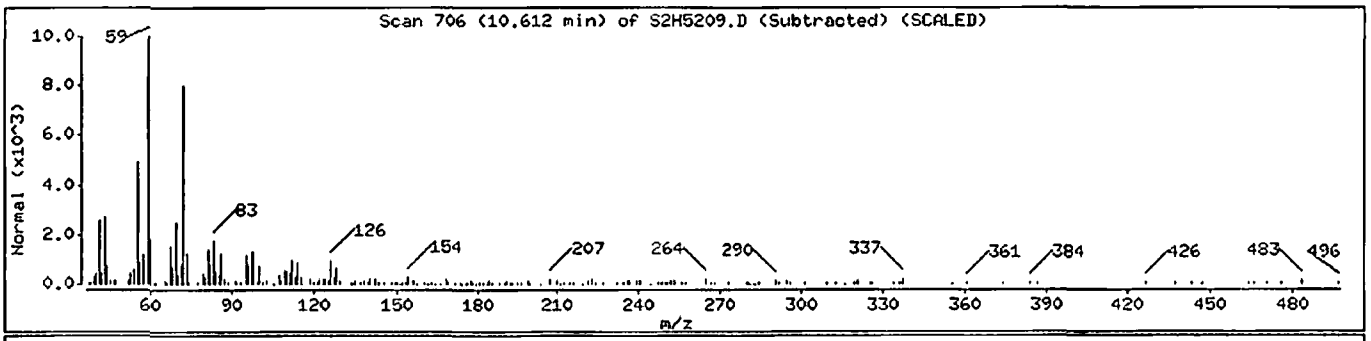
Client ID: H30W4 Instrument: S2.i

Sample Info: K2200-07B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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

CLIENT SAMPLE NO.

H30W5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-08B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5210.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

H30W5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-08B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5210.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

H30W5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-08B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5210.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.670	6.6	BNJ
02		Unknown-01	4.874	4.1	J
03		Unknown-02	5.185	2.1	J
04		Unknown-03	5.399	5.8	J
05		Unknown-04	5.528	3.0	J
06		Unknown-05	6.353	3.1	J
07	57-10-3	n-Hexadecanoic acid	8.101	4.8	NJ
08		Unknown-06	10.621	9.2	J
	E96679[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5210.D
Report Date: 07-Nov-2011 14:02

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5210.D
Lab Smp Id: K2200-08B Client Smp ID: H30W5
Inj Date : 03-NOV-2011 18:34
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-08B,,62636,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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 * (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)
$ 2 Phenol-d5	71	3.565	3.565	(0.917)	180442	45.8482	23
$ 4 bis(2-Chloroethyl)ether-d8	67	3.618	3.619	(0.931)	254834	46.9895	23
$ 6 2-Chlorophenol-d4	132	3.694	3.694	(0.950)	163883	48.1362	24
* 8 1,4-Dichlorobenzene-d4	152	3.887	3.887	(1.000)	124981	40.0000	(Q)
$ 11 4-Methylphenol-d8	113	4.198	4.198	(1.080)	266976	50.0362	25
$ 16 Nitrobenzene-d5	128	4.348	4.348	(0.879)	87956	45.7744	23
$ 19 2-Nitrophenol-d4	143	4.616	4.616	(0.933)	102976	48.5455	24
$ 23 2,4-Dichlorophenol-d3	165	4.820	4.820	(0.974)	199137	51.4258	26
* 25 Naphthalene-d8	136	4.948	4.948	(1.000)	368969	40.0000	
$ 27 4-Chloroaniline-d4	131	5.002	5.002	(1.011)	107105	31.1507	16(Q)
$ 40 Dimethylphthalate-d6	166	6.171	6.171	(0.962)	629820	59.2634	30
$ 43 Acenaphthylene-d8	160	6.289	6.289	(0.980)	662431	47.9335	24
* 46 Acenaphthene-d10	164	6.417	6.418	(1.000)	289040	40.0000	
$ 49 4-Nitrophenol-d4	143	6.503	6.503	(1.013)	72225	47.1580	24
$ 54 Fluorene-d10	176	6.846	6.847	(1.067)	507221	51.9582	26
$ 58 4,6-Dinitro-2-methylphenol-d2	200	6.900	6.900	(0.903)	122429	66.3254	33(Q)
* 65 Phenanthrene-d10	188	7.640	7.640	(1.000)	473034	40.0000	
$ 67 Anthracene-d10	188	7.693	7.694	(1.007)	692694	51.2637	26
$ 72 Pyrene-d10	212	8.830	8.820	(0.896)	627603	66.8080	33
* 77 Chrysene-d12	240	9.892	9.871	(1.000)	298204	40.0000	(QH)
$ 83 Benzo(a)pyrene-d12	264	11.179	11.147	(0.992)	155579	41.7171	21(H)

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5210.D
Report Date: 07-Nov-2011 14:02

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)	
* 85 Perylene-d12	264	11.264	11.233	(1.000)	151981	40.0000		(Q)

QC Flag Legend

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

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5210.D
Report Date: 07-Nov-2011 14:02

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5210.D
Lab Smp Id: K2200-08B Client Smp ID: H30W5
Inj Date : 03-NOV-2011 18:34
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-08B,,62636,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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 * (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

ISTD	RT	AREA	AMOUNT
* 25 Naphthalene-d8	4.949	1264705	40.000
* 46 Acenaphthene-d10	6.418	1521590	40.000
* 65 Phenanthrene-d10	7.640	1352269	40.000
* 85 Perylene-d12	11.265	388307	40.000

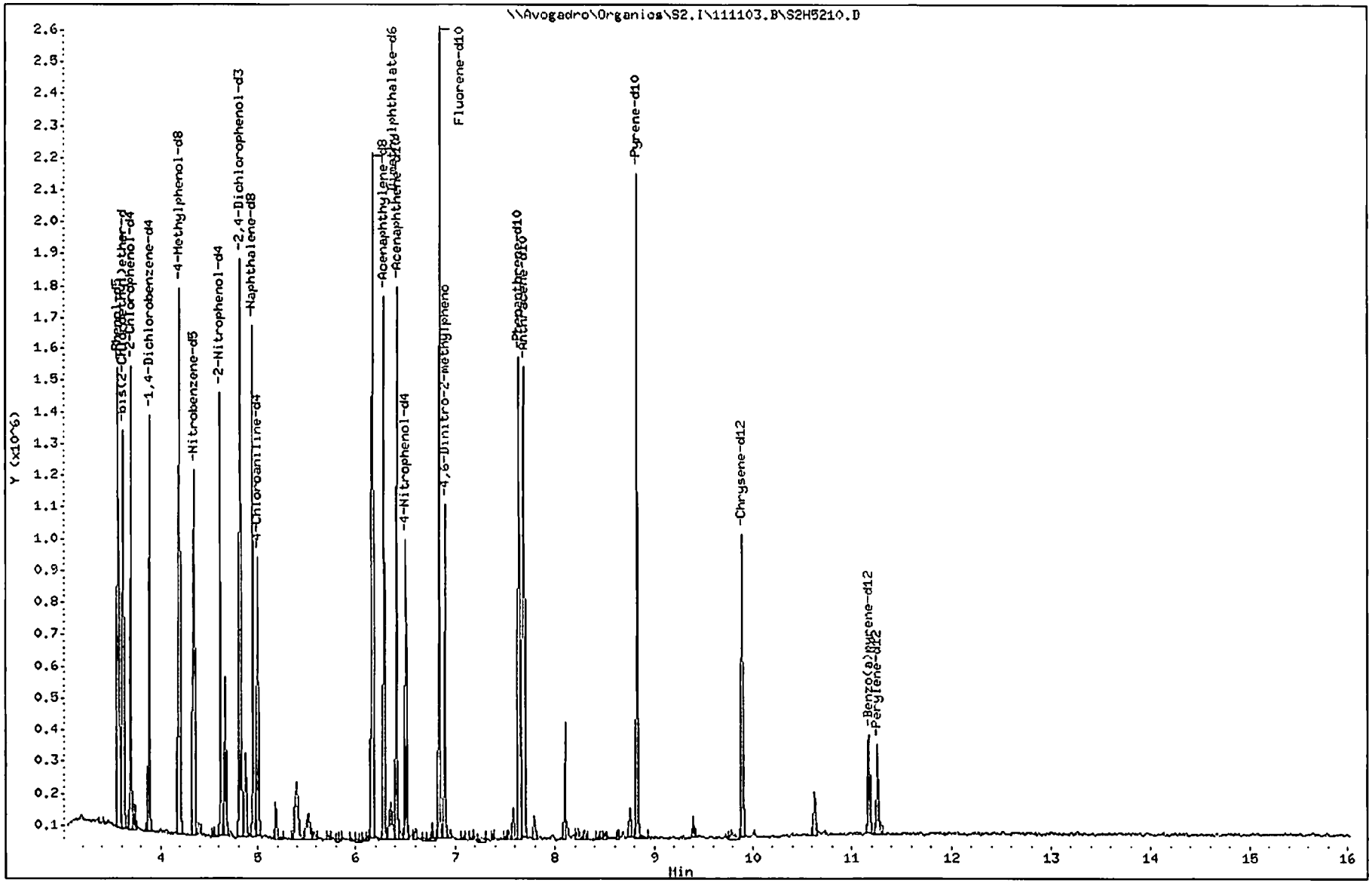
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
2(3H)-Furanone, dihydro-4-hydroxy-				CAS #: 5469-16-9			
4.670	419491	13.2676384	6.6	86	NIST2002.L	4145	25
Unknown				CAS #:			
4.874	258164	8.16520058	4.1	0		0	25
Unknown				CAS #:			
5.185	132633	4.19490939	2.1	0		0	25

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5210.D
Report Date: 07-Nov-2011 14:02

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
5.399	364156	11.5175147	5.8	0		0	25
Unknown				CAS #:			
5.528	187644	5.93478699	3.0	0		0	25
Unknown				CAS #:			
6.353	234391	6.16175073	3.1	0		0	46
n-Hexadecanoic acid				CAS #: 57-10-3			
8.101	322578	9.54183335	4.8	95	NIST2002.L	92227	85
Unknown				CAS #:			
10.621	177778	18.3131787	9.2	0		0	85

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5210.D
Date : 03-NOV-2011 18:34
Client ID: H30W5
Sample Info: K2200-08B,,62636,,
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\111103.B\S2H5210.D

Date : 03-NOV-2011 18:34

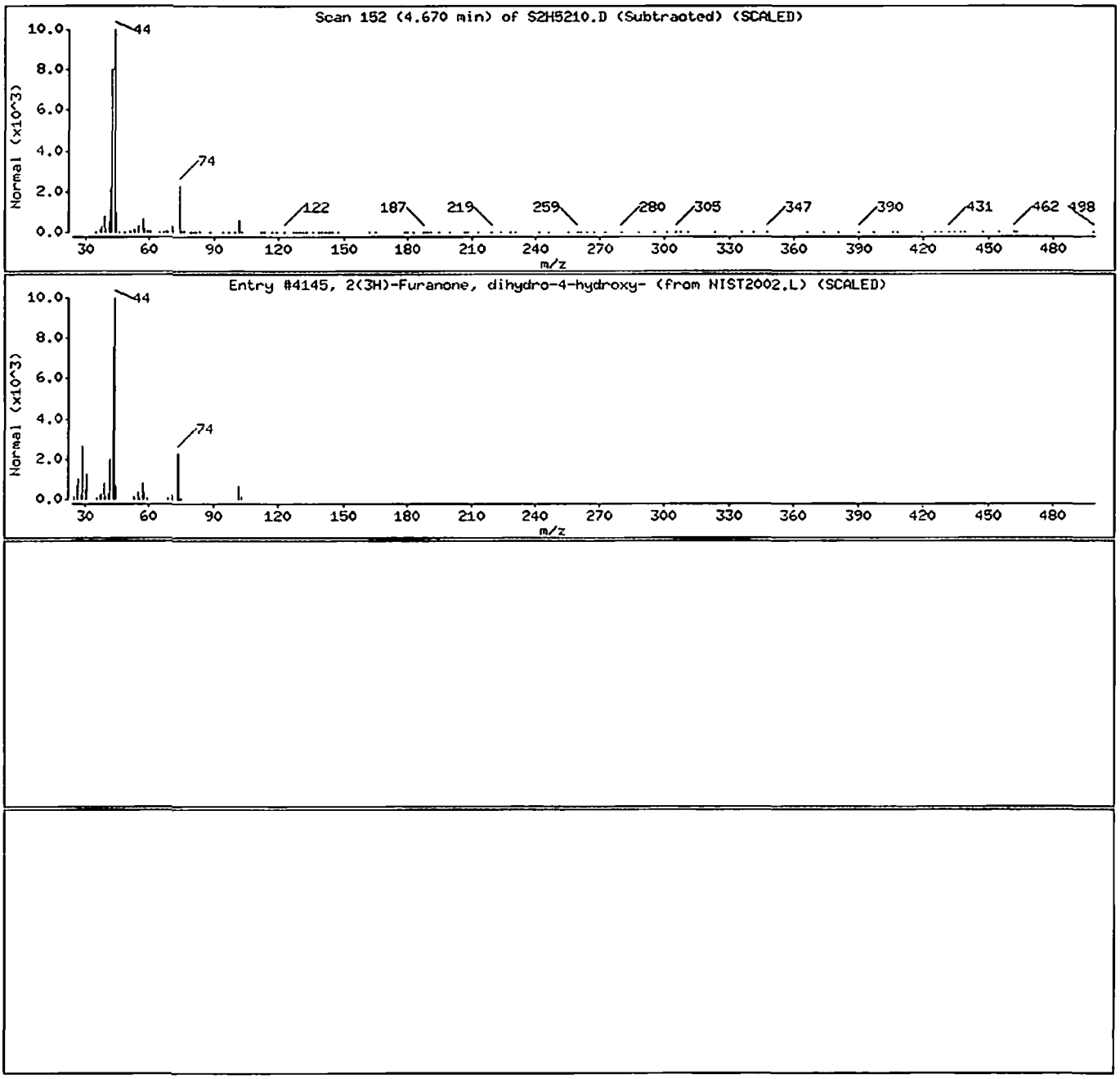
Client ID: H30W5 Instrument: S2.i

Sample Info: K2200-08B,,62636,,

Volume Injected (uL): 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\111103.B\S2H5210.D

Date : 03-NOV-2011 18:34

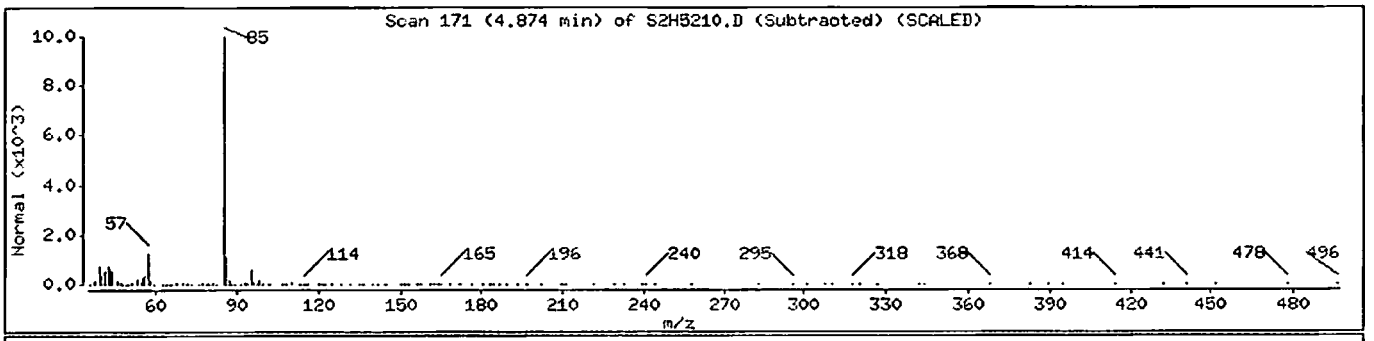
Client ID: H30W5 Instrument: S2.i

Sample Info: K2200-08B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5210.D

Date : 03-NOV-2011 18:34

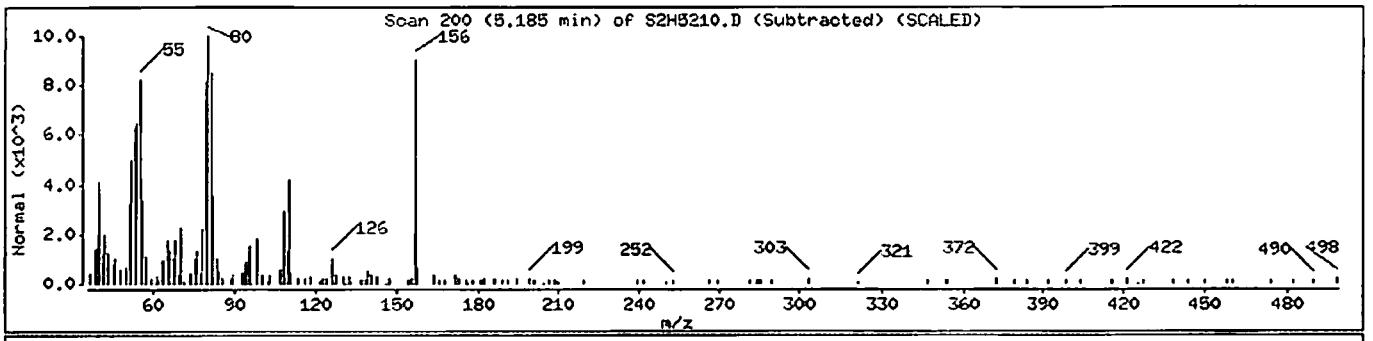
Client ID: H30W5 Instrument: S2.i

Sample Info: K2200-08B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5210.D

Date : 03-NOV-2011 18:34

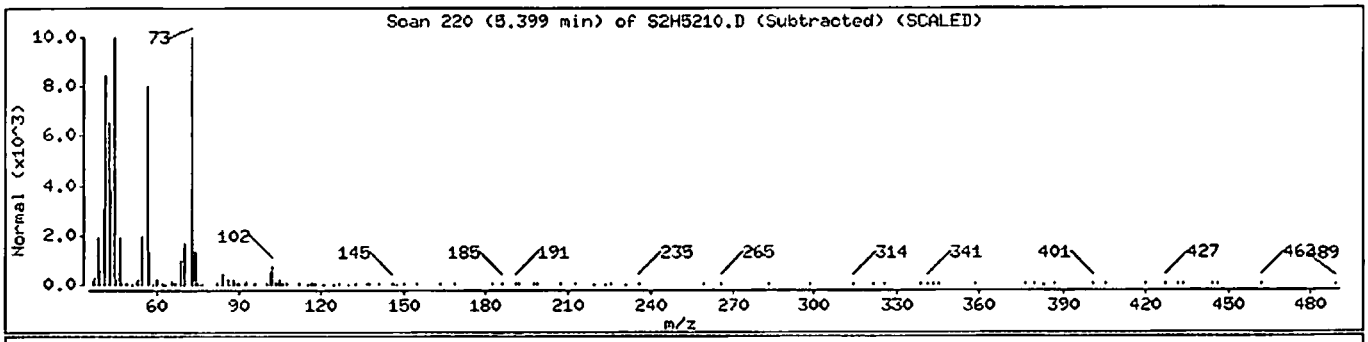
Client ID: H30W5 Instrument: S2.i

Sample Info: K2200-08B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5210.D

Date : 03-NOV-2011 18:34

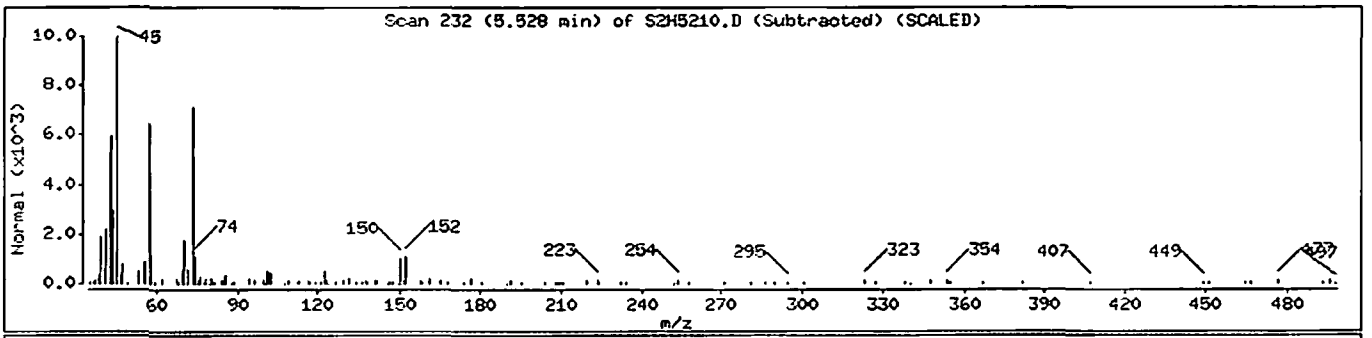
Client ID: H30W5 Instrument: S2.i

Sample Info: K2200-08B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5210.D

Date : 03-NOV-2011 18:34

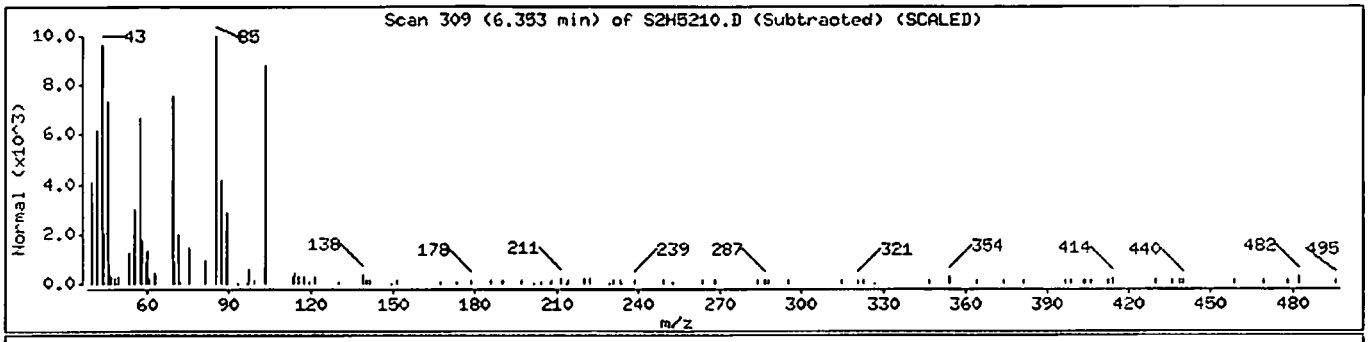
Client ID: H30W5 Instrument: S2.i

Sample Info: K2200-08B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5210.D

Date : 03-NOV-2011 18:34

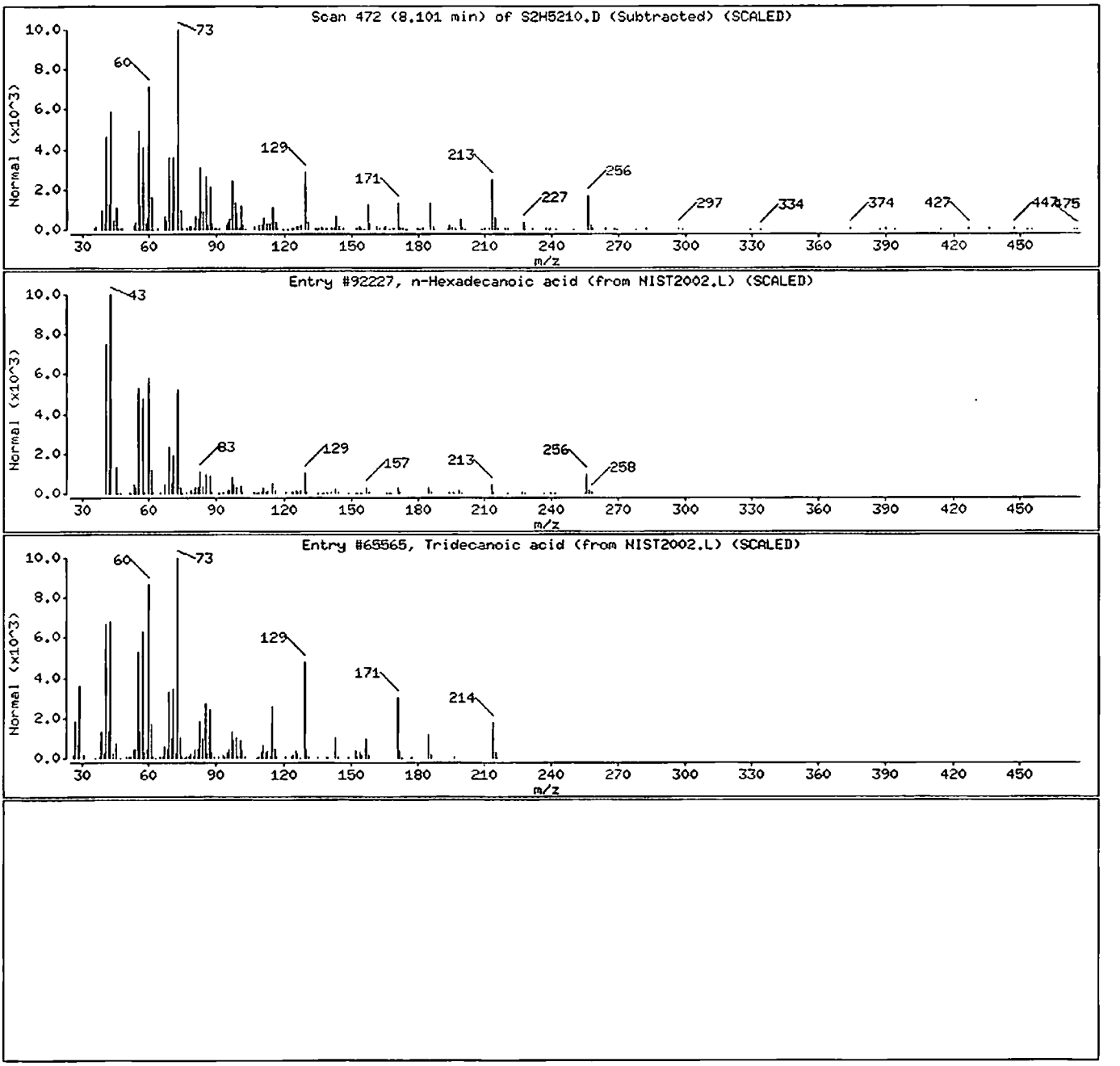
Client ID: H30W5 Instrument: S2.i

Sample Info: K2200-08B,,62636,,

Volume Injected (uL): 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
Tridecanoic acid	638-53-9	NIST2002.L	65565	93	C13H26O2	214



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5210.D

Date : 03-NOV-2011 18:34

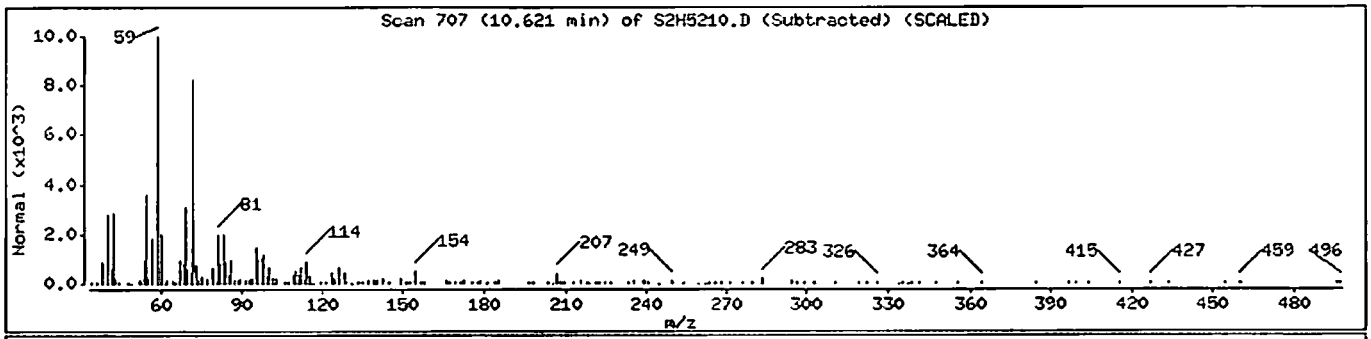
Client ID: H30W5 Instrument: S2.i

Sample Info: K2200-08B,,62636,,

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



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

H30W6

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-09B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5211.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

H30W6

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-09B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5211.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

H30W6

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-09B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5211.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.663	4.6	BNJ
02		Unknown-01	4.877	3.8	J
03		Unknown-02	5.188	2.1	J
04		Unknown-03	5.392	5.3	J
05		Unknown-04	5.521	2.1	J
06		Unknown-05	6.347	2.2	J
07	57-10-3	n-Hexadecanoic acid	8.095	5.1	NJ
08		Unknown-06	10.572	4.7	J
	E966796[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5211.D
Report Date: 07-Nov-2011 14:02

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5211.D
Lab Smp Id: K2200-09B Client Smp ID: H30W6
Inj Date : 03-NOV-2011 18:55
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-09B,,62636,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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 * (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)
$	2 Phenol-d5	71	3.569	3.565	(0.917)	190506	51.7533	26
$	4 bis(2-Chloroethyl)ether-d8	67	3.622	3.619	(0.931)	250896	49.4631	25
$	6 2-Chlorophenol-d4	132	3.697	3.694	(0.950)	175428	55.0911	28
*	8 1,4-Dichlorobenzene-d4	152	3.890	3.887	(1.000)	116896	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.191	4.198	(1.077)	255790	51.2555	26
$	16 Nitrobenzene-d5	128	4.341	4.348	(0.877)	87494	47.0905	24(Q)
$	19 2-Nitrophenol-d4	143	4.620	4.616	(0.933)	109769	53.5169	27
$	23 2,4-Dichlorophenol-d3	165	4.823	4.820	(0.974)	207972	55.5433	28
*	25 Naphthalene-d8	136	4.952	4.948	(1.000)	356773	40.0000	
$	27 4-Chloroaniline-d4	131	5.006	5.002	(1.011)	121907	36.6678	18(Q)
$	40 Dimethylphthalate-d6	166	6.164	6.171	(0.962)	532504	55.7113	28
$	43 Acenaphthylene-d8	160	6.282	6.289	(0.980)	657860	52.9276	26
*	46 Acenaphthene-d10	164	6.410	6.418	(1.000)	259961	40.0000	
$	49 4-Nitrophenol-d4	143	6.507	6.503	(1.015)	75042	54.4781	27
$	54 Fluorene-d10	176	6.839	6.847	(1.067)	449764	51.2262	26
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.904	6.900	(0.903)	97928	52.0382	26(Q)
*	65 Phenanthrene-d10	188	7.644	7.640	(1.000)	482250	40.0000	
$	67 Anthracene-d10	188	7.687	7.694	(1.006)	674817	48.9863	24
$	72 Pyrene-d10	212	8.823	8.820	(0.695)	578855	62.3972	31
*	77 Chrysene-d12	240	9.863	9.871	(1.000)	294484	40.0000	(Q)
$	83 Benzo(a)pyrene-d12	264	11.118	11.147	(0.979)	169034	46.2016	23(H)

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5211.D
Report Date: 07-Nov-2011 14:02

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)	
* 85 Perylene-d12	264	11.215	11.233	(1.000)	149097	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\111103.B\S2H5211.D
Report Date: 07-Nov-2011 14:02

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5211.D
Lab Smp Id: K2200-09B Client Smp ID: H30W6
Inj Date : 03-NOV-2011 18:55
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-09B,,62636,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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 * (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

ISTD	RT	AREA	AMOUNT
* 25 Naphthalene-d8	4.953	1232901	40.000
* 46 Acenaphthene-d10	6.411	1334234	40.000
* 65 Phenanthrene-d10	7.644	1367897	40.000
* 85 Perylene-d12	11.215	379480	40.000

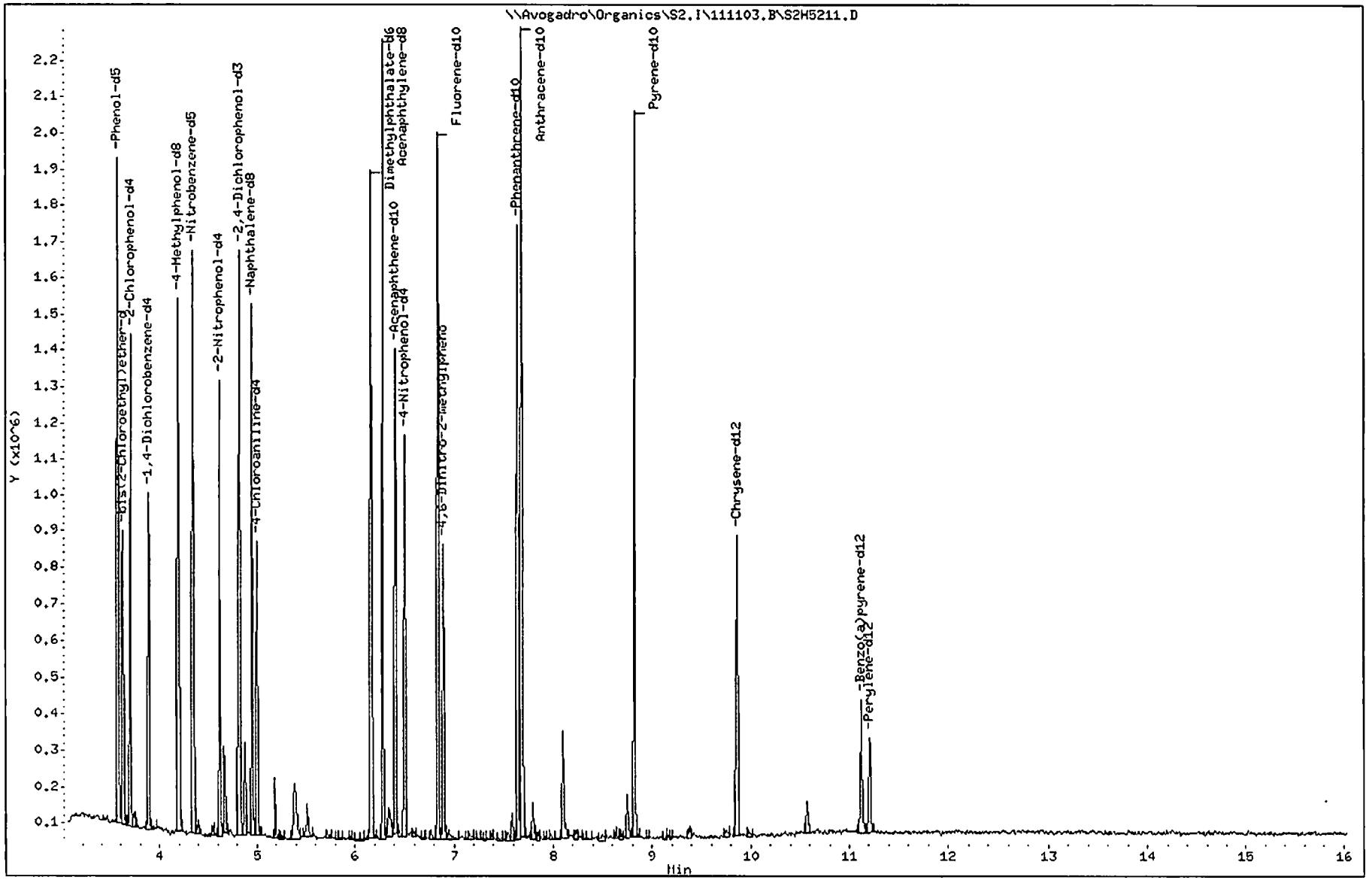
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
2(3H)-Furanone, dihydro-4-hydroxy-				CAS #: 5469-16-9			
4.663	285776	9.27165169	4.6	90	NIST2002.L	4145	25
Unknown				CAS #:			
4.877	233227	7.56677423	3.8	0		0	25
Unknown				CAS #:			
5.188	130998	4.25005759	2.1	0		0	25

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5211.D
Report Date: 07-Nov-2011 14:02

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
5.392	329567	10.6924090	5.3	0		0	25
Unknown				CAS #:			
5.521	129376	4.19743727	2.1	0		0	25
Unknown				CAS #:			
6.347	148250	4.44448963	2.2	0		0	46
n-Hexadecanoic acid				CAS #: 57-10-3			
8.095	349979	10.2340611	5.1	94	NIST2002.L	92227	65
Unknown				CAS #:			
10.572	89220	9.40447407	4.7	0		0	85

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5211.D
Date : 03-NOV-2011 18:55
Client ID: H30W6
Sample Info: K2200-09B,,62636,,
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\111103.B\S2H5211.D

Date : 03-NOV-2011 18:55

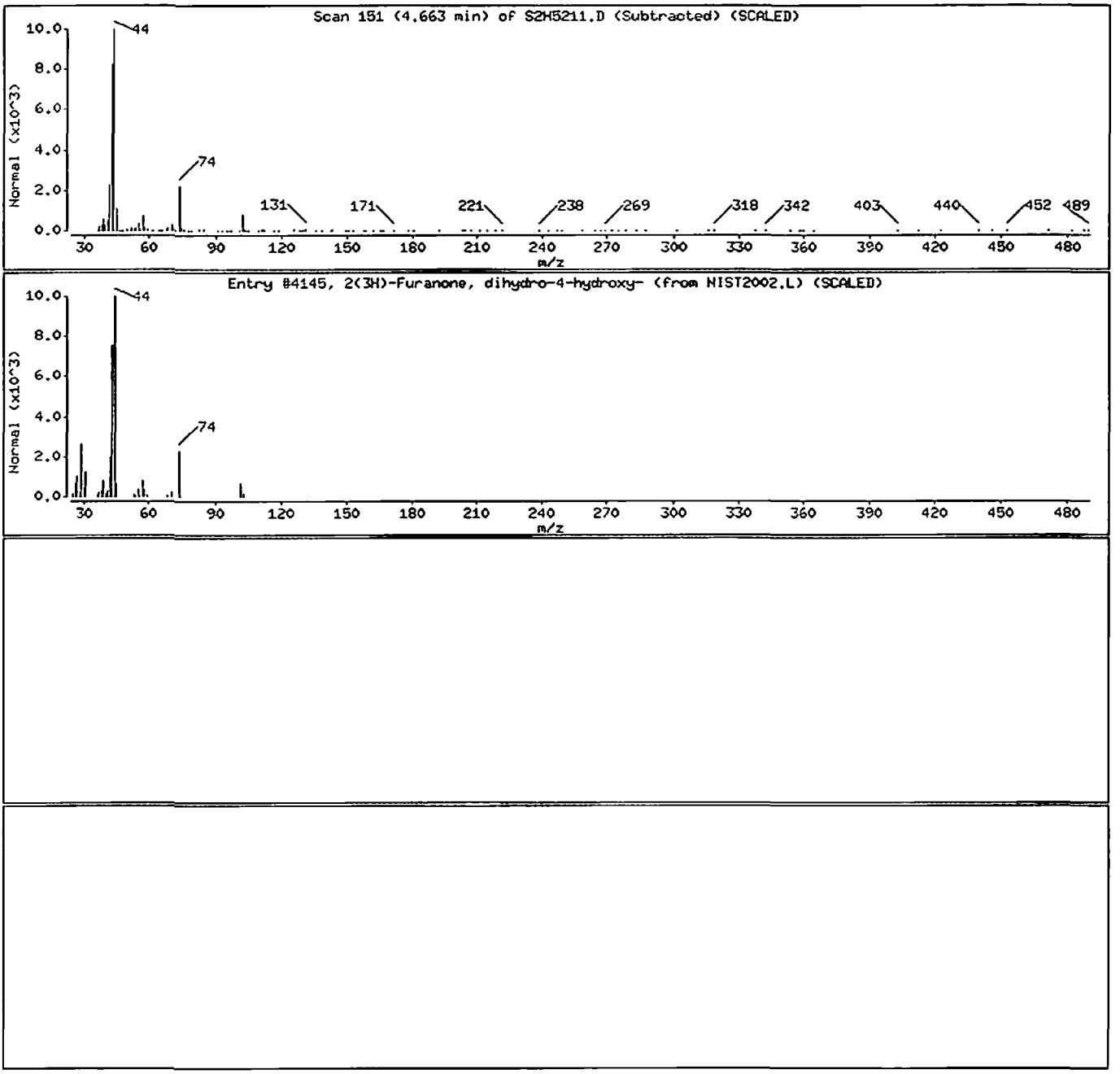
Client ID: H30W6 Instrument: S2.i

Sample Info: K2200-09B,,62636,,

Volume Injected (uL): 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\111103.B\S2H5211.D

Date : 03-NOV-2011 18:55

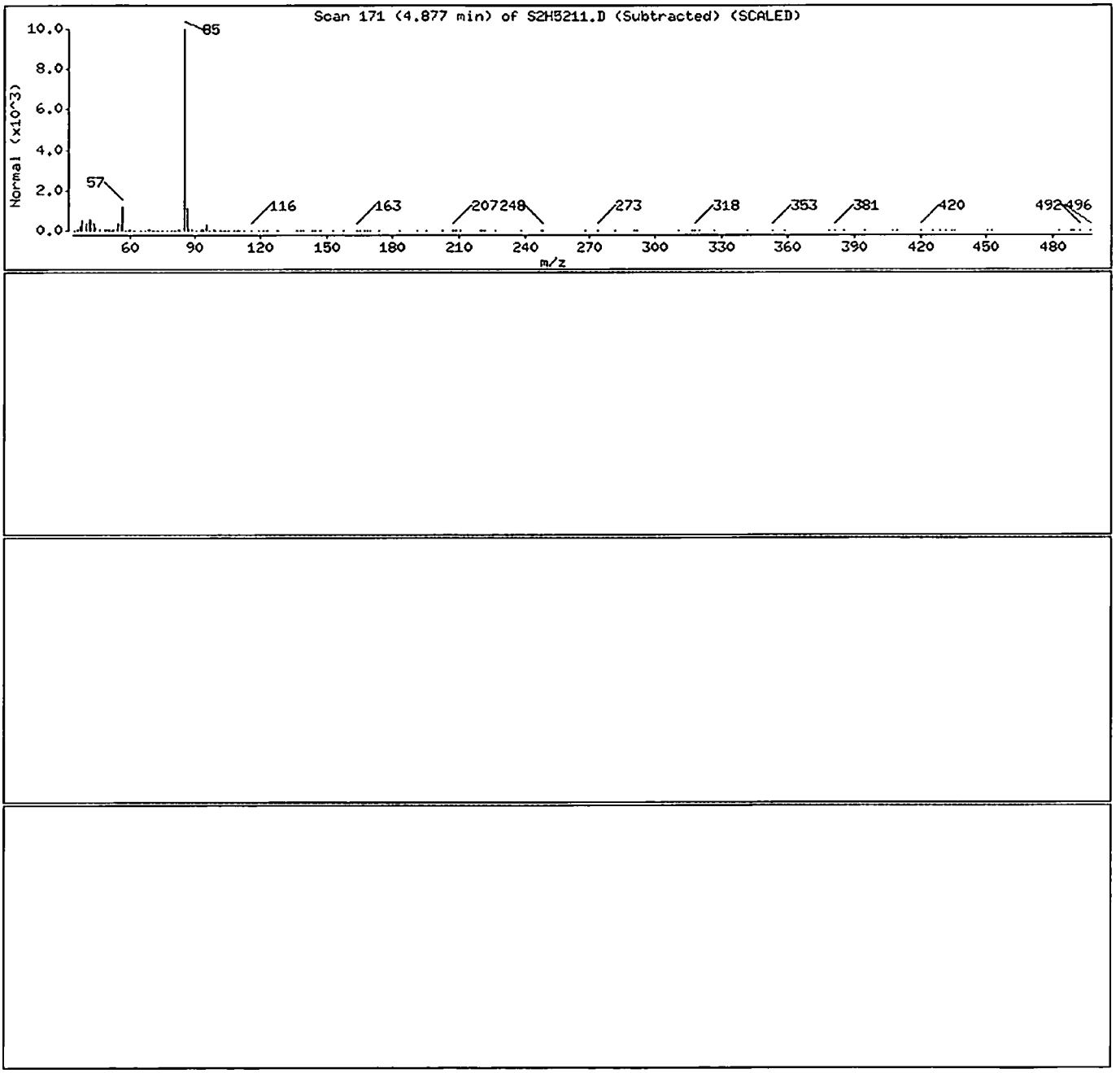
Client ID: H30W6 Instrument: S2.i

Sample Info: K2200-09B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5211.D

Date : 03-NOV-2011 18:55

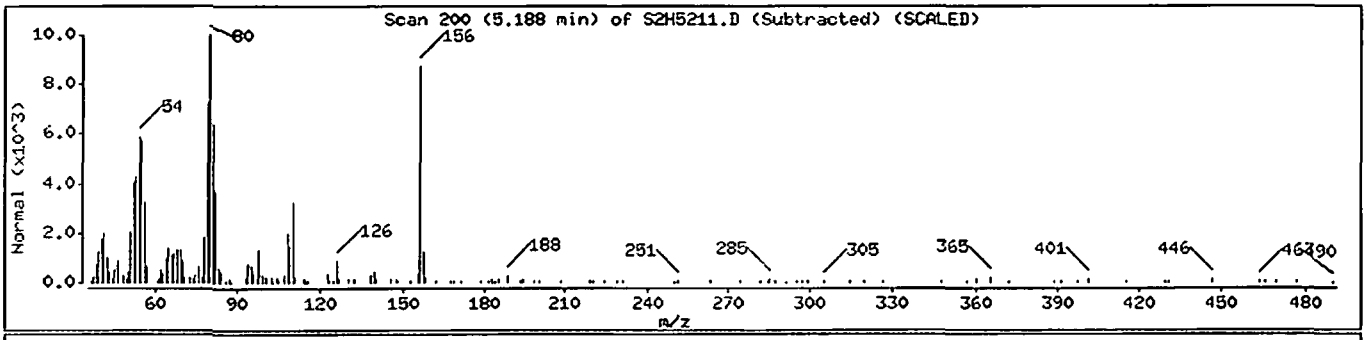
Client ID: H30W6 Instrument: S2.i

Sample Info: K2200-09B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5211.D

Date : 03-NOV-2011 18:55

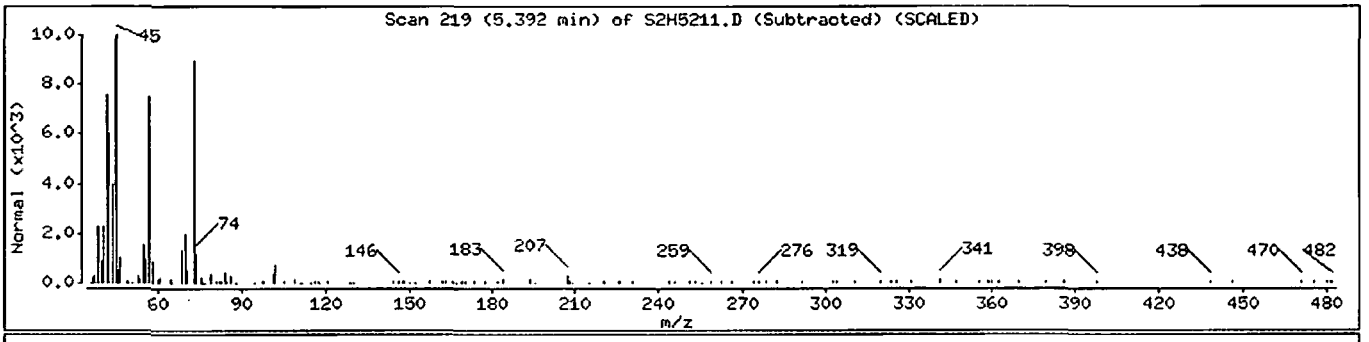
Client ID: H30W6 Instrument: S2.i

Sample Info: K2200-09B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5211.D

Date : 03-NOV-2011 18:55

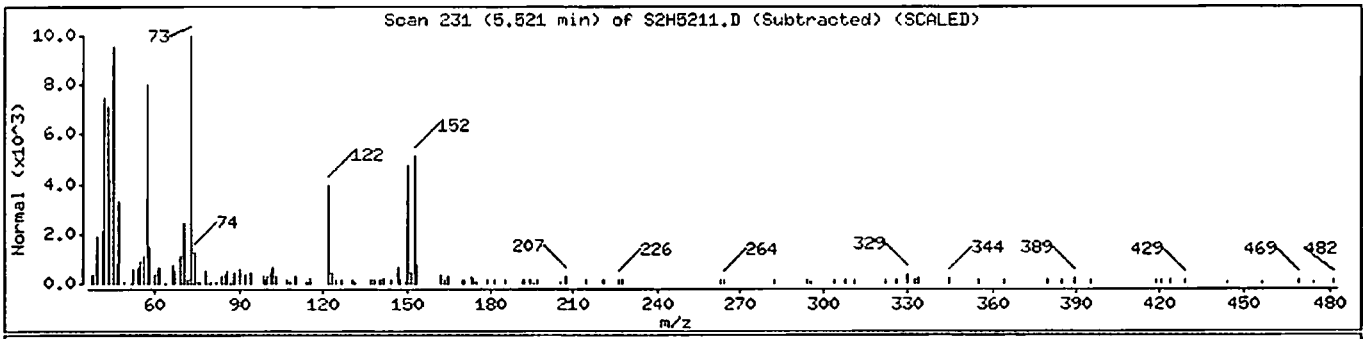
Client ID: H30W6 Instrument: S2.i

Sample Info: K2200-09B,,62636,,

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\111103.B\S2H5211.D

Date : 03-NOV-2011 18:55

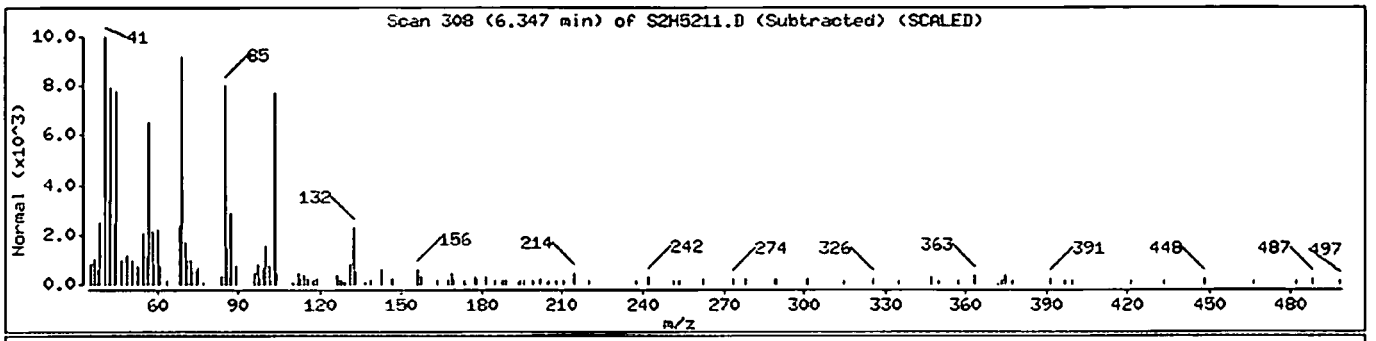
Client ID: H30W6 Instrument: S2.i

Sample Info: K2200-09B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5211.D

Date : 03-NOV-2011 18:55

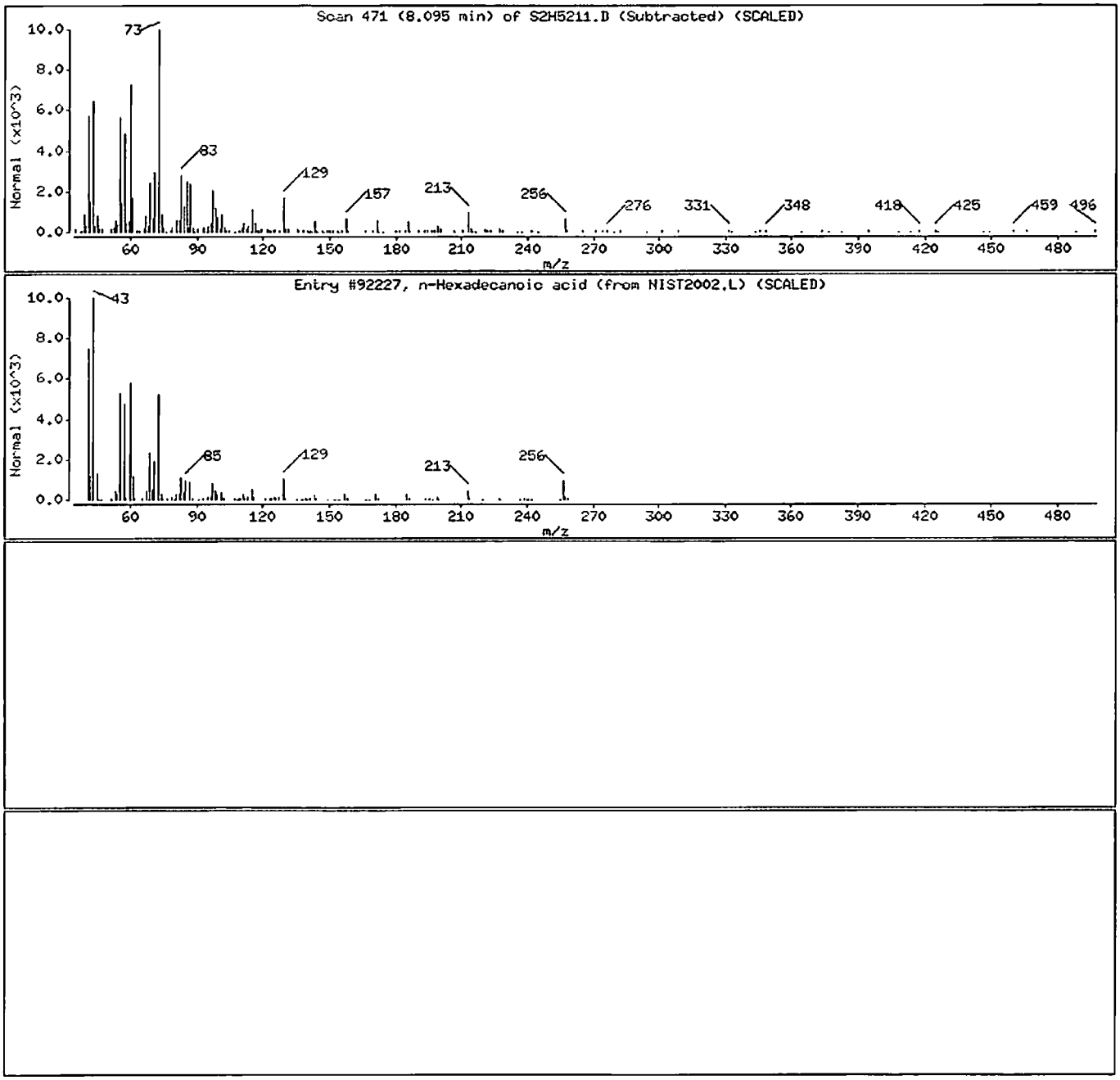
Client ID: H30W6 Instrument: S2.i

Sample Info: K2200-09B,,62636,,

Volume Injected (uL): 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\111103.B\S2H5211.D

Date : 03-NOV-2011 18:55

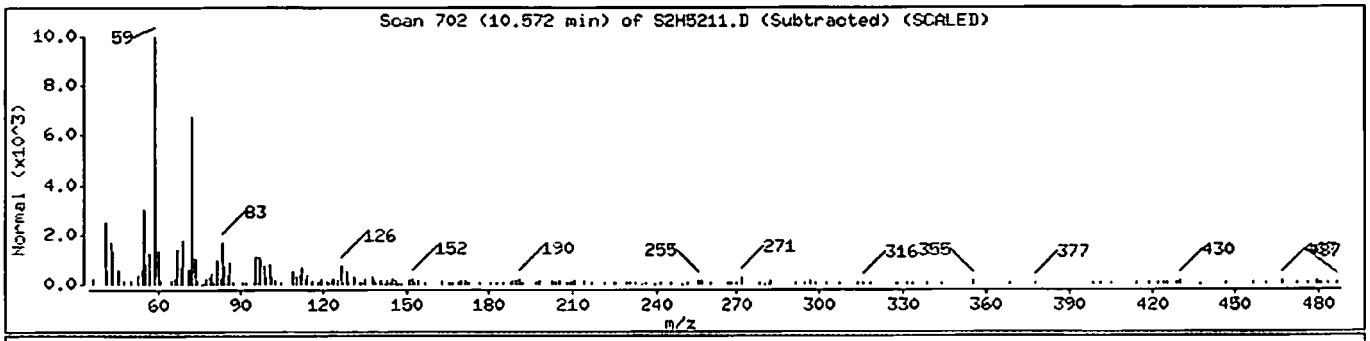
Client ID: H3046 Instrument: S2.i

Sample Info: K2200-09B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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

CLIENT SAMPLE NO.

H30W7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-10B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5212.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.: H30W7

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

Lab Code: MITKEM | Case No.: 41926 | Mod. Ref No.: | SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER | Lab Sample ID: K2200-10B

Sample wt/vol: 1000 (g/mL) ML | Lab File ID: S2H5212.D

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

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

Concentrated Extract Volume: 1000 (uL) | Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) | GPC Factor: 1.00 | Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine 1	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.: H30W7

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

Lab Code: MITKEM | Case No.: 41926 | Mod. Ref No.: | SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER | Lab Sample ID: K2200-10B

Sample wt/vol: 1000 (g/mL) ML | Lab File ID: S2H5212.D

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

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

Concentrated Extract Volume: 1000 (uL) | Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) | GPC Factor: 1.00 | Date Analyzed: 11/03/2011

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.674	8.0	BNJ
02		Unknown-01	4.877	4.8	J
03		Unknown-02	5.188	2.4	J
04		Unknown-03	5.403	7.7	J
05		Unknown-04	5.532	3.2	J
06		Unknown-05	6.357	3.3	J
07		Unknown-06	8.095	5.1	J
08		Unknown-07	10.604	8.4	J
	E96679[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5212.D
Report Date: 07-Nov-2011 14:02

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5212.D
Lab Smp Id: K2200-10B Client Smp ID: H30W7
Inj Date : 03-NOV-2011 19:17
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-10B,,62636,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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 * (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)	
$	2	Phenol-d5	71	3.569	3.565	(0.917)	220552	57.7746	29	
$	4	bis(2-Chloroethyl)ether-d8	67	3.622	3.619	(0.931)	276029	52.4734	26	
$	6	2-Chlorophenol-d4	132	3.697	3.694	(0.950)	192424	58.2691	29	
*	8	1,4-Dichlorobenzene-d4	152	3.890	3.887	(1.000)	121228	40.0000		(Q)
$	11	4-Methylphenol-d8	113	4.191	4.198	(1.077)	299615	57.8918	29	
$	16	Nitrobenzene-d5	128	4.341	4.348	(0.877)	96603	48.4281	24	(Q)
$	19	2-Nitrophenol-d4	143	4.620	4.616	(0.933)	136455	61.9659	31	
$	23	2,4-Dichlorophenol-d3	165	4.823	4.820	(0.974)	248642	61.8520	31	
*	25	Naphthalene-d8	136	4.952	4.948	(1.000)	383036	40.0000		
$	27	4-Chloroaniline-d4	131	5.006	5.002	(1.011)	149741	41.9517	21	(Q)
$	40	Dimethylphthalate-d6	166	6.164	6.171	(0.960)	613483	58.3382	29	
$	43	Acenaphthylene-d8	160	6.282	6.289	(0.978)	731059	53.4602	27	
*	46	Acenaphthene-d10	164	6.421	6.418	(1.000)	286008	40.0000		
$	49	4-Nitrophenol-d4	143	6.507	6.503	(1.013)	93220	61.5115	31	
$	54	Fluorene-d10	176	6.850	6.847	(1.067)	518916	53.7198	27	
$	58	4,6-Dinitro-2-methylphenol-d2	200	6.904	6.900	(0.903)	117012	56.0226	28	(Q)
*	65	Phenanthrene-d10	188	7.644	7.640	(1.000)	535248	40.0000		
$	67	Anthracene-d10	188	7.687	7.694	(1.006)	749776	49.0386	25	
$	72	Pyrene-d10	212	8.823	8.820	(0.893)	675586	63.2320	32	
*	77	Chrysene-d12	240	9.885	9.871	(1.000)	339157	40.0000		(Q)
$	83	Benzo(a)pyrene-d12	264	11.150	11.147	(0.983)	216757	50.1881	25	(H)

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5212.D
Report Date: 07-Nov-2011 14:02

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)	
* 85 Perylene-d12	264	11.247	11.233	(1.000)	176005	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\111103.B\S2H5212.D
Report Date: 07-Nov-2011 14:02

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5212.D
Lab Smp Id: K2200-10B Client Smp ID: H30W7
Inj Date : 03-NOV-2011 19:17
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-10B,,62636,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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 * (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

ISTD	RT	AREA	AMOUNT
* 25 Naphthalene-d8	4.953	1317707	40.000
* 46 Acenaphthene-d10	6.422	1527100	40.000
* 65 Phenanthrene-d10	7.644	1467714	40.000
* 85 Perylene-d12	11.247	455022	40.000

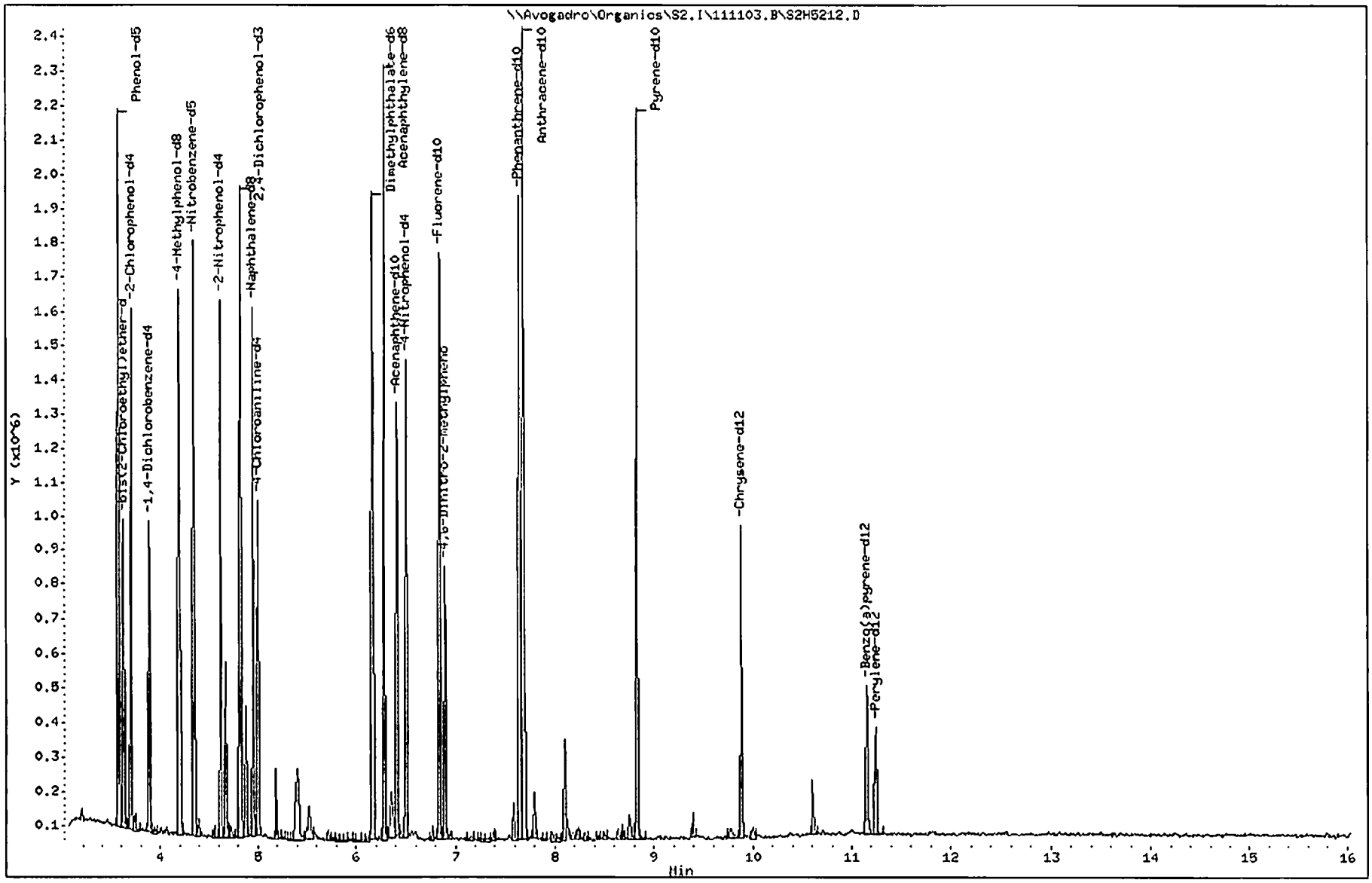
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
2(3H)-Furanone, dihydro-4-hydroxy-				CAS #: 5469-16-9			
4.674	526114	15.9705826	8.0	90	NIST2002.L	4145	25
Unknown				CAS #:			
4.877	316388	9.60419555	4.8	0		0	25
Unknown				CAS #:			
5.188	155784	4.72894559	2.4	0		0	25

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5212.D
Report Date: 07-Nov-2011 14:02

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
5.403	506613	15.3786027	7.7	0		0	25
Unknown				CAS #:			
5.532	209832	6.36962085	3.2	0		0	25
Unknown				CAS #:			
6.357	251774	6.59481291	3.3	0		0	46
Unknown				CAS #:			
8.095	373242	10.1720689	5.1	0		0	65
Unknown				CAS #:			
10.604	191018	16.7919655	8.4	0		0	85

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5212.D
Date : 03-NOV-2011 19:17
Client ID: H30W7
Sample Info: K2200-10B,,62636,,
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\111103.B\S2H5212.D

Date : 03-NOV-2011 19:17

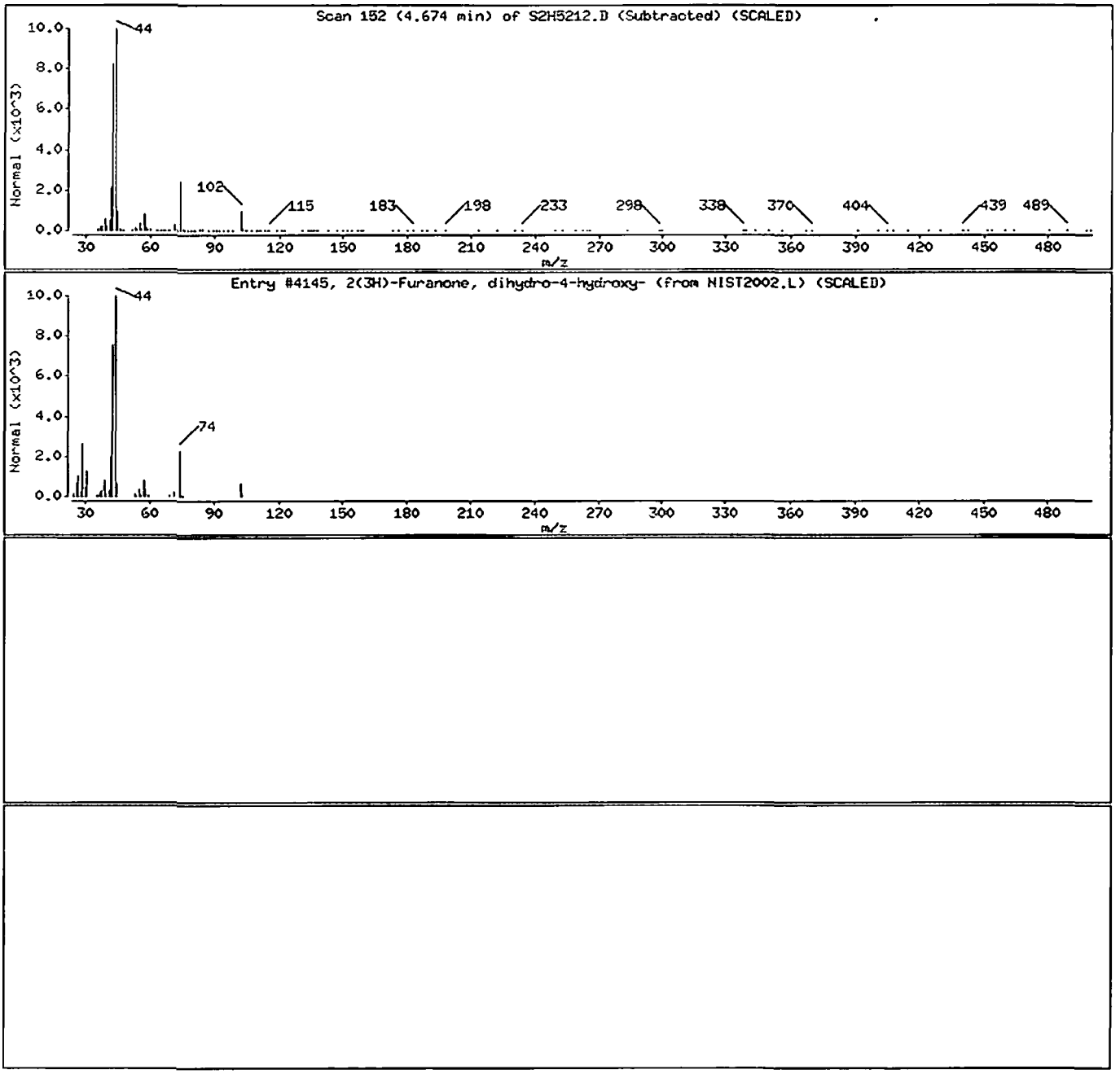
Client ID: H30W7 Instrument: S2.i

Sample Info: K2200-10B,,62636,,

Volume Injected (uL): 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\111103.B\S2H5212.D

Date : 03-NOV-2011 19:17

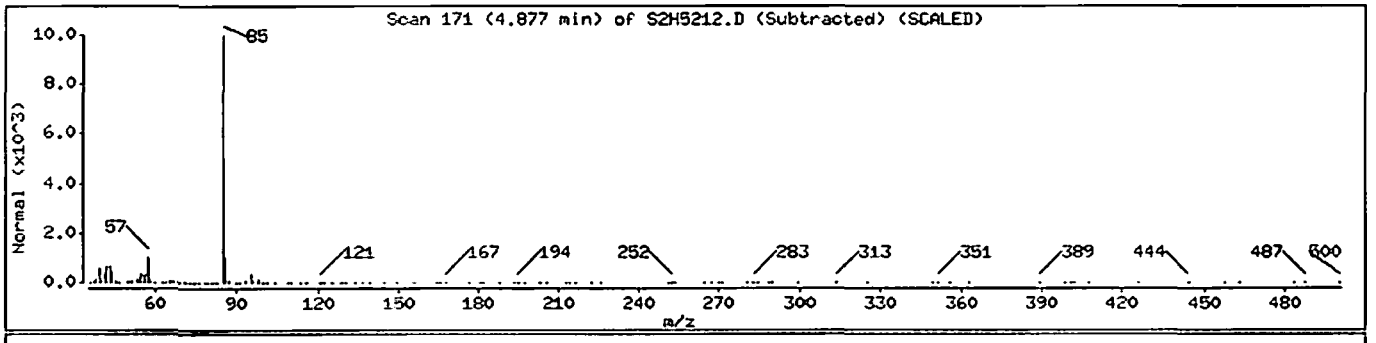
Client ID: H30W7 Instrument: S2.i

Sample Info: K2200-10B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5212.D

Date : 03-NOV-2011 19:17

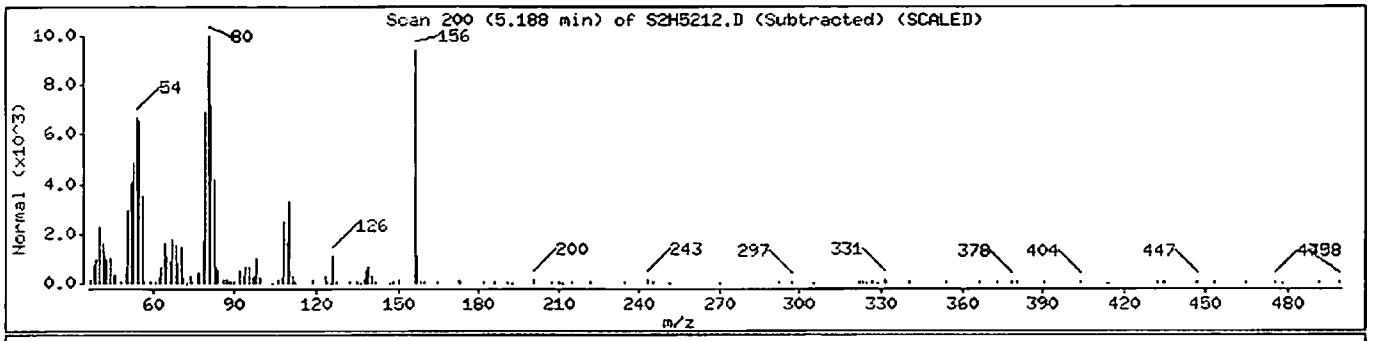
Client ID: H30W7 Instrument: S2.i

Sample Info: K2200-10B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5212.D

Date : 03-NOV-2011 19:17

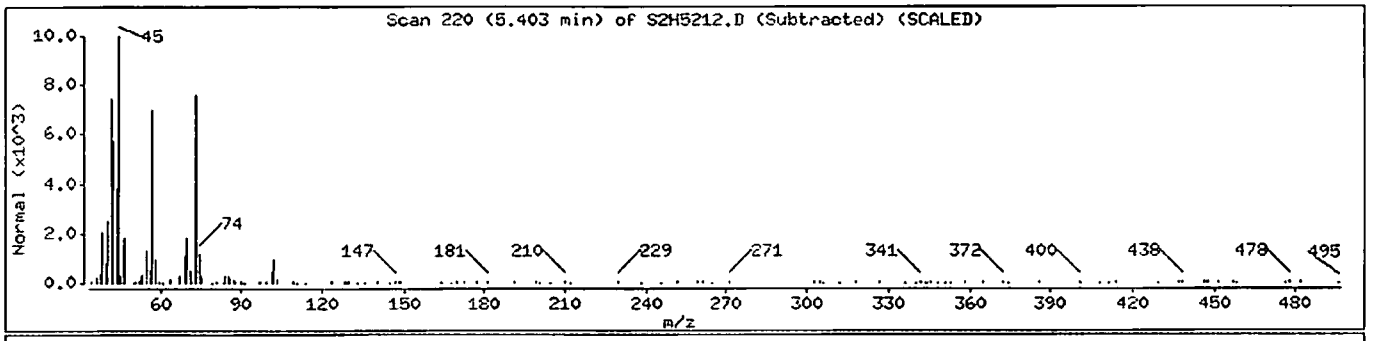
Client ID: H30W7 Instrument: S2.i

Sample Info: K2200-10B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5212.D

Date : 03-NOV-2011 19:17

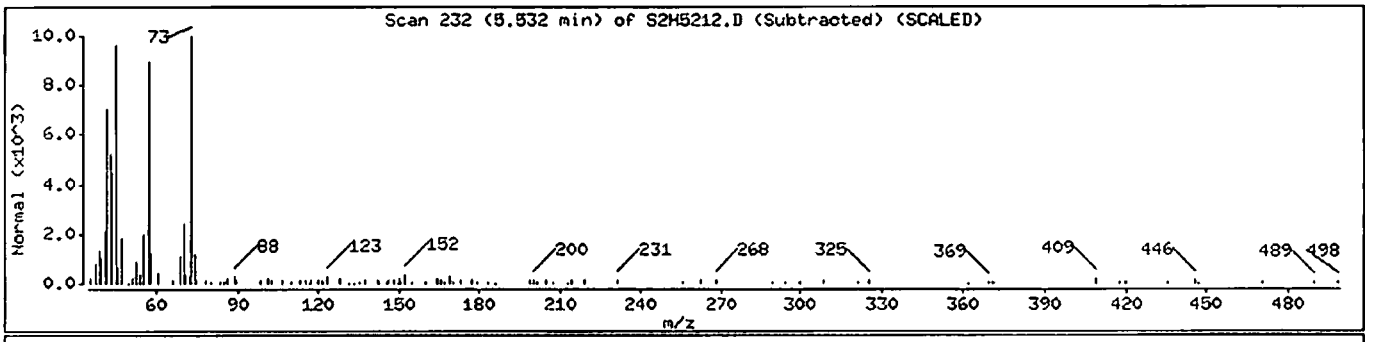
Client ID: H30W7 Instrument: S2.i

Sample Info: K2200-10B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5212.D

Date : 03-NOV-2011 19:17

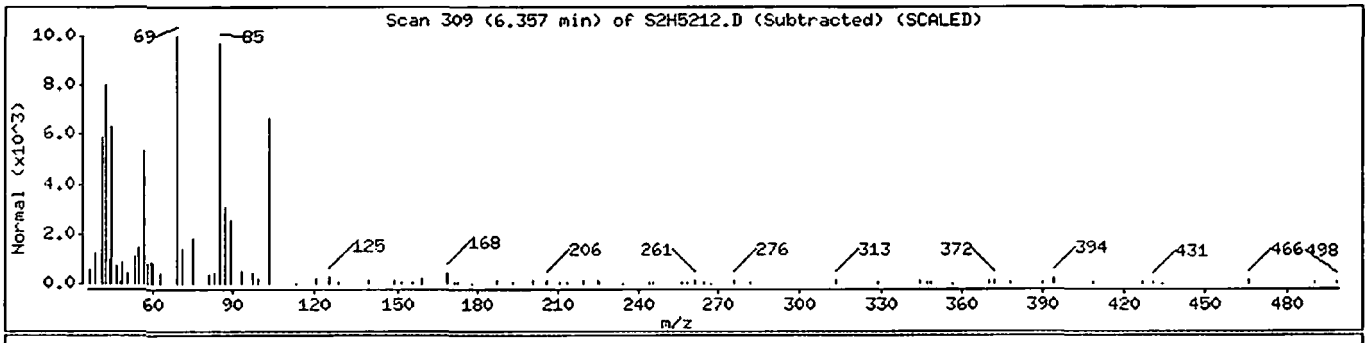
Client ID: H30W7 Instrument: S2.i

Sample Info: K2200-10B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5212.D

Date : 03-NOV-2011 19:17

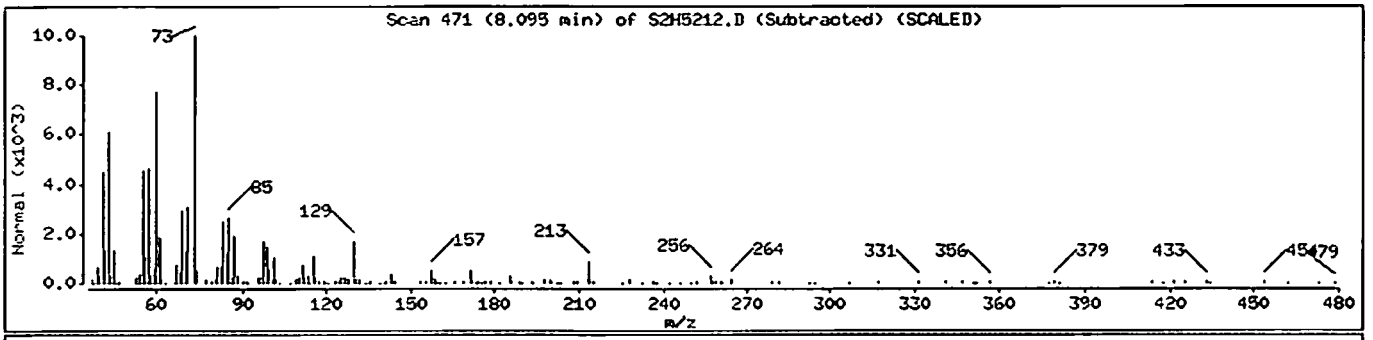
Client ID: H30W7 Instrument: S2.i

Sample Info: K2200-10B.,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5212.D

Date : 03-NOV-2011 19:17

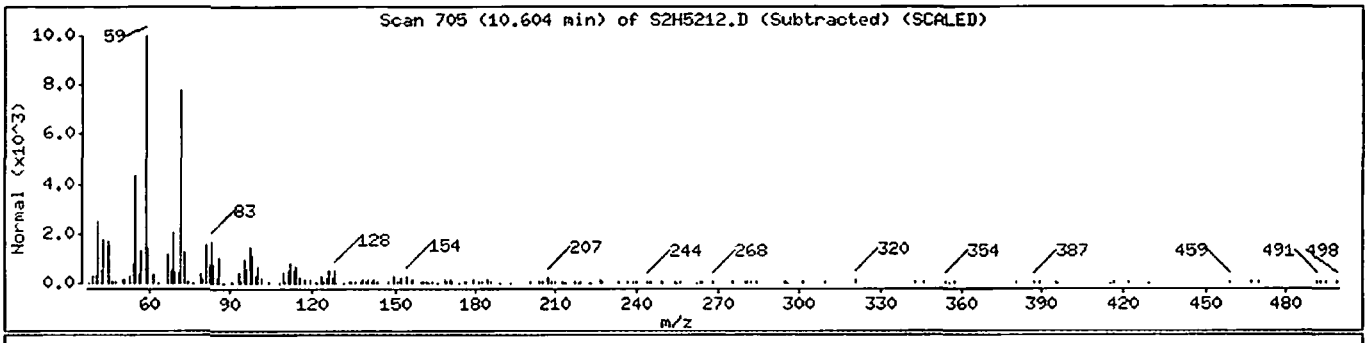
Client ID: H30W7 Instrument: S2.i

Sample Info: K2200-10B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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

CLIENT SAMPLE NO.

H30W8

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-11B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5213.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2´-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1´-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.: H30W8

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

Lab Code: MITKEM | Case No.: 41926 | Mod. Ref No.: | SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER | Lab Sample ID: K2200-11B

Sample wt/vol: 1000 (g/mL) ML | Lab File ID: S2H5213.D

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

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

Concentrated Extract Volume: 1000 (uL) | Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) | GPC Factor: 1.00 | Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

H30W8

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-11B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5213.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.672	8.4	BNJ
02		Unknown-01	4.876	5.1	J
03		Unknown-02	5.187	2.6	J
04		Unknown-03	5.412	3.2	J
05		Unknown-04	5.530	3.9	J
06		Unknown-05	6.366	3.7	J
07		Unknown-06	7.589	4.7	J
08	57-10-3	n-Hexadecanoic acid	8.103	5.4	NJ
09		Unknown-07	8.554	2.4	J
10	112-84-5	13-Docosenamide, (Z)-	10.623	7.0	NJ
11		Unknown-08	11.009	2.2	J
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5213.D
Report Date: 07-Nov-2011 14:02

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5213.D
Lab Smp Id: K2200-11B Client Smp ID: H30W8
Inj Date : 03-NOV-2011 19:39
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-11B,,62636,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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 * (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)
$	2 Phenol-d5	71	3.567	3.565	(0.917)	227815	59.7921	30
$	4 bis(2-Chloroethyl)ether-d8	67	3.620	3.619	(0.931)	312649	59.5493	30
$	6 2-Chlorophenol-d4	132	3.696	3.694	(0.950)	203724	61.8097	31
*	8 1,4-Dichlorobenzene-d4	152	3.889	3.887	(1.000)	120995	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.200	4.198	(1.080)	337688	65.3740	33
$	16 Nitrobenzene-d5	128	4.350	4.348	(0.879)	110236	56.2897	28
$	19 2-Nitrophenol-d4	143	4.618	4.616	(0.933)	142202	65.7761	33
$	23 2,4-Dichlorophenol-d3	165	4.821	4.820	(0.974)	269741	68.3478	34
*	25 Naphthalene-d8	136	4.950	4.948	(1.000)	376046	40.0000	
$	27 4-Chloroaniline-d4	131	5.004	5.002	(1.011)	178834	51.0337	26(Q)
$	40 Dimethylphthalate-d6	166	6.173	6.171	(0.962)	778667	69.9118	35
$	43 Acenaphthylene-d8	160	6.291	6.289	(0.980)	856769	59.1550	30
*	46 Acenaphthene-d10	164	6.419	6.418	(1.000)	302921	40.0000	
$	49 4-Nitrophenol-d4	143	6.505	6.503	(1.013)	101421	63.1865	32
$	54 Fluorene-d10	176	6.848	6.847	(1.067)	641499	62.7021	31
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.902	6.900	(0.903)	155126	68.9491	34(Q)
*	65 Phenanthrene-d10	188	7.642	7.640	(1.000)	576559	40.0000	
$	67 Anthracene-d10	188	7.685	7.694	(1.006)	659619	40.0507	20
$	72 Pyrene-d10	212	8.832	8.820	(0.896)	827775	65.9620	33
*	77 Chrysene-d12	240	9.894	9.871	(1.000)	398360	40.0000	(QH)
$	83 Benzo(a)pyrene-d12	264	11.170	11.147	(0.992)	245126	45.4256	23(H)

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5213.D
Report Date: 07-Nov-2011 14:02

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)	
* 85 Perylene-d12	264	11.256	11.233	(1.000)	219908	40.0000		(Q)

QC Flag Legend

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

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5213.D
Report Date: 07-Nov-2011 14:02

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5213.D
Lab Smp Id: K2200-11B Client Smp ID: H30W8
Inj Date : 03-NOV-2011 19:39
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-11B,,62636,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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 * (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

ISTD	RT	AREA	AMOUNT
* 25 Naphthalene-d8	4.951	1312188	40.000
* 46 Acenaphthene-d10	6.420	1648613	40.000
* 65 Phenanthrene-d10	7.642	1624349	40.000
* 85 Perylene-d12	11.256	552075	40.000

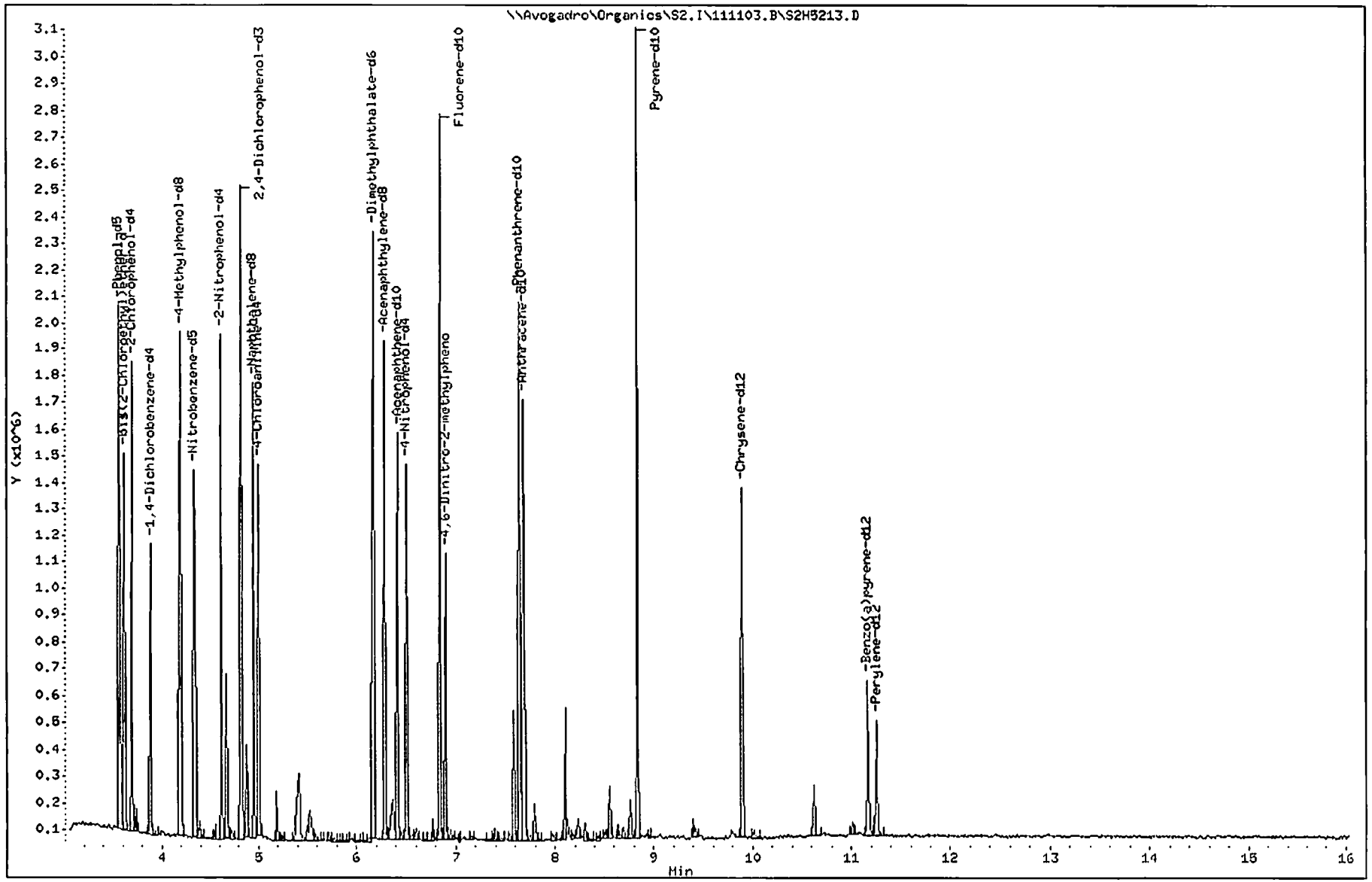
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
2(3H)-Furanone, dihydro-4-hydroxy-				CAS #: 5469-16-9			
4.672	547954	16.7035001	8.4	90	NIST2002.L	4145	25
Unknown				CAS #:			
4.876	334895	10.2087591	5.1	0		0	25
Unknown				CAS #:			
5.187	169287	5.16043873	2.6	0		0	25

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5213.D
Report Date: 07-Nov-2011 14:02

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
5.412	538101	16.4031622	8.2	0		0	25
Unknown				CAS #:			
5.530	256132	7.80776472	3.9	0		0	25
Unknown				CAS #:			
6.366	300926	7.30131538	3.7	0		0	46
Unknown				CAS #:			
7.589	382074	9.40865435	4.7	0		0	65
n-Hexadecanoic acid				CAS #: 57-10-3			
8.103	442267	10.8909370	5.4	98	NIST2002.L	92228	65
Unknown				CAS #:			
8.554	193679	4.76939413	2.4	0		0	65
13-Docosenamide, (Z)-				CAS #: 112-84-5			
10.623	194308	14.0783450	7.0	91	NIST2002.L	135943	85
Unknown				CAS #:			
11.010	60545	4.38670265	2.2	0		0	85

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5213.D
Date : 03-NOV-2011 19:39
Client ID: H30W8
Sample Info: K2200-11B,,62636,,
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\111103.B\S2H5213.D

Date : 03-NOV-2011 19:39

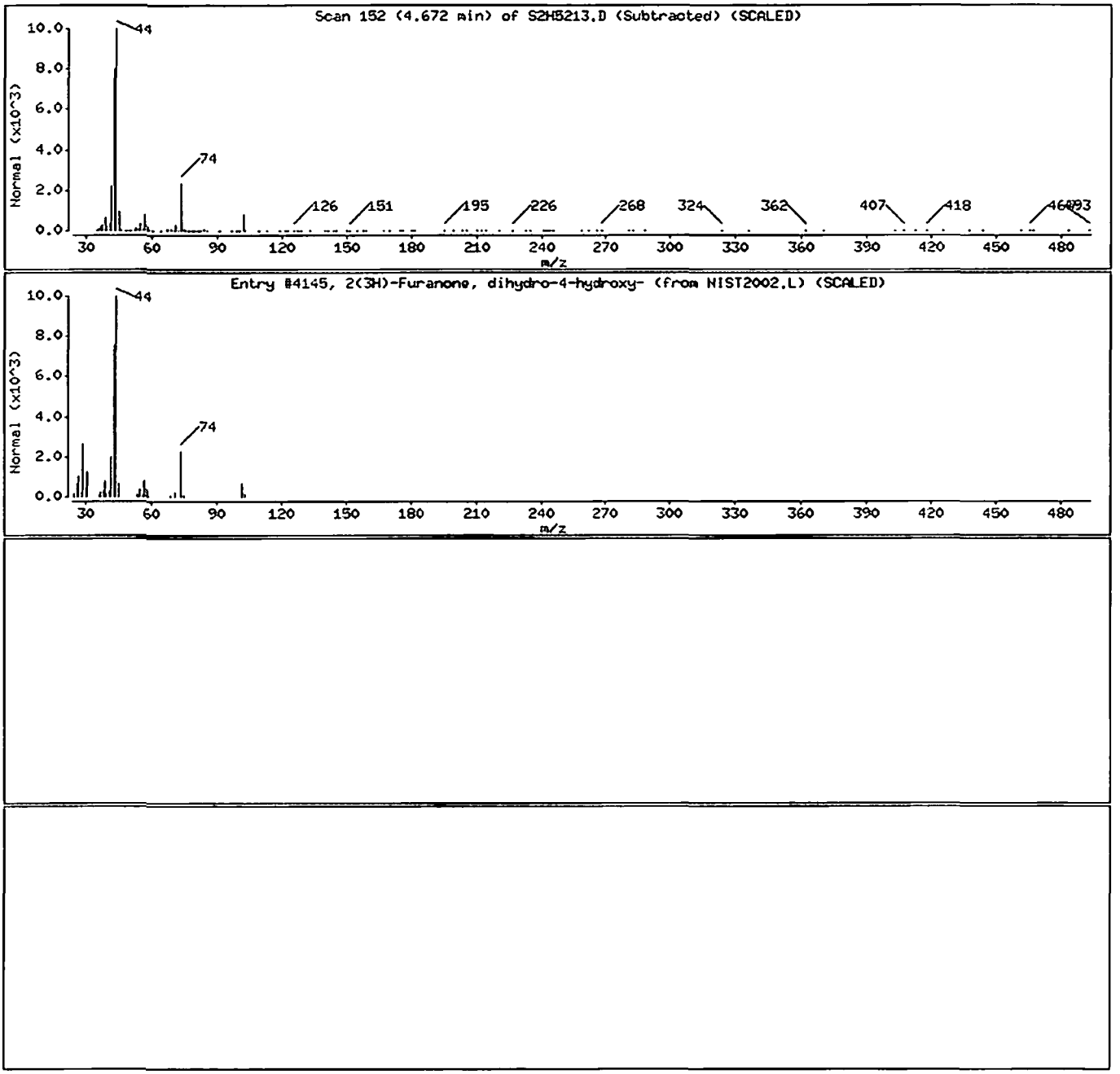
Client ID: H30W8 Instrument: S2.i

Sample Info: K2200-11B,,62636,,

Volume Injected (uL): 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\111103.B\S2H5213.D

Date : 03-NOV-2011 19:39

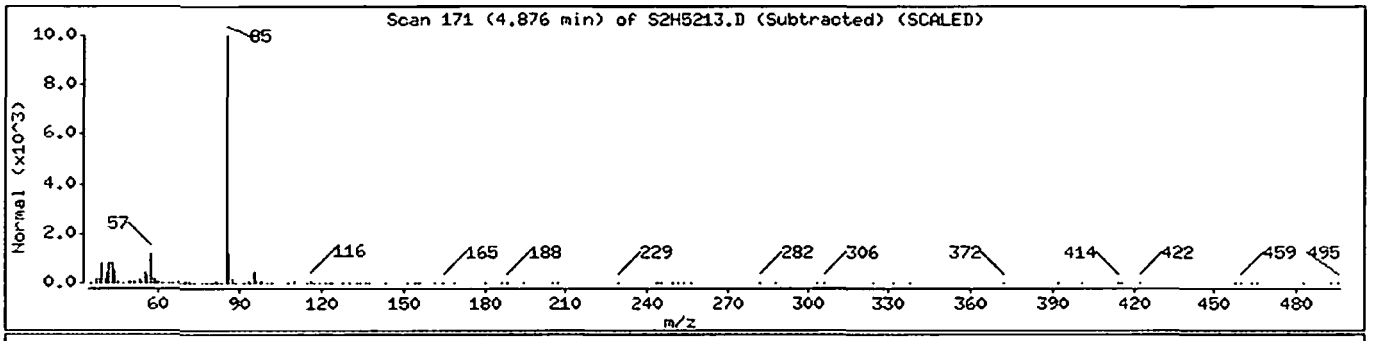
Client ID: H30W8 Instrument: S2.i

Sample Info: K2200-11B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5213.D

Date : 03-NOV-2011 19:39

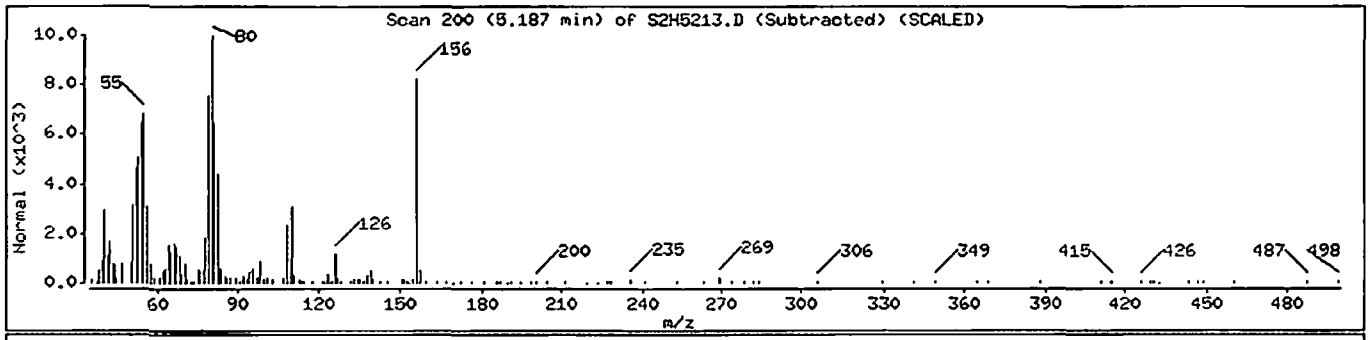
Client ID: H30W8 Instrument: S2.i

Sample Info: K2200-11B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5213.D

Date : 03-NOV-2011 19:39

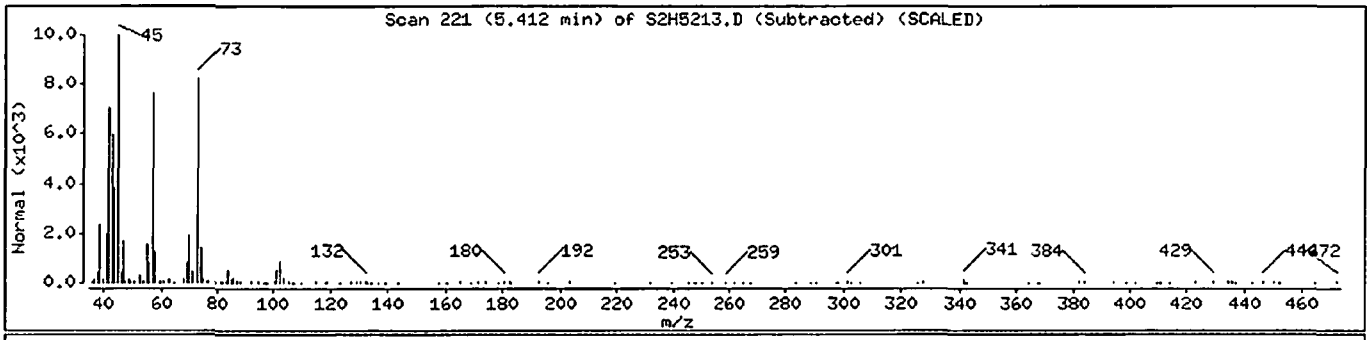
Client ID: H30W8 Instrument: S2.i

Sample Info: K2200-11B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5213.D

Date : 03-NOV-2011 19:39

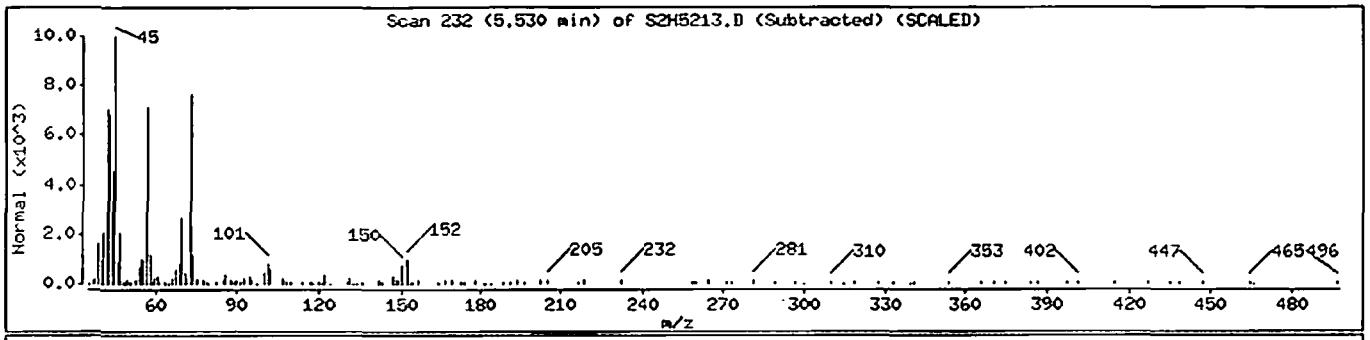
Client ID: H30W8 Instrument: S2.i

Sample Info: K2200-11B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5213.D

Date : 03-NOV-2011 19:39

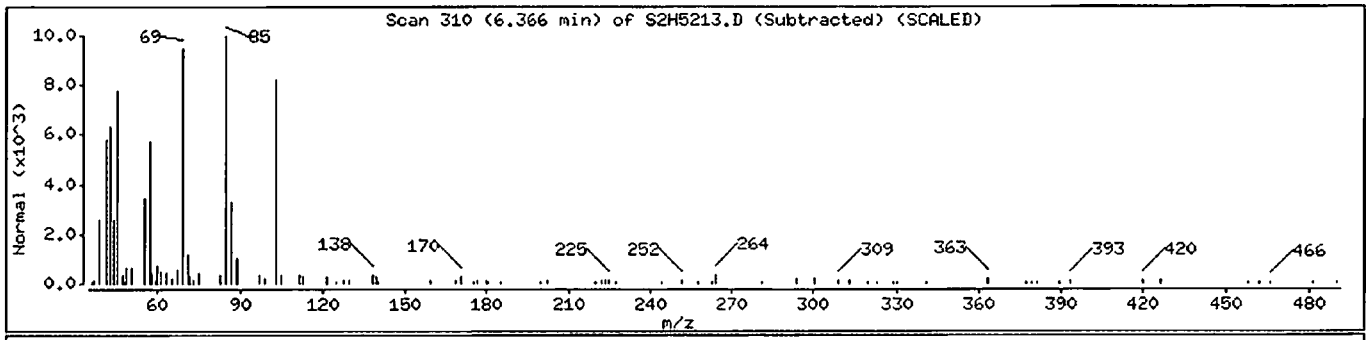
Client ID: H30W8 Instrument: S2.i

Sample Info: K2200-11B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5213.D

Date : 03-NOV-2011 19:39

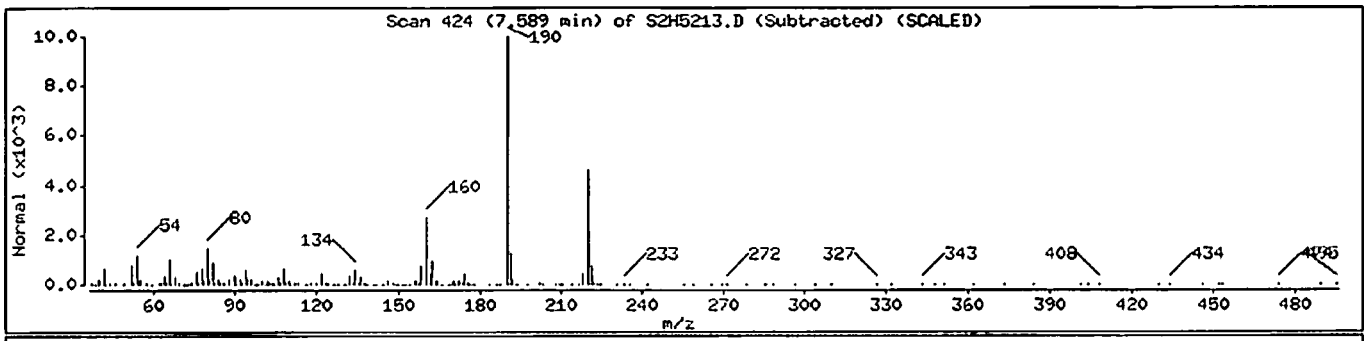
Client ID: H3048 Instrument: S2.i

Sample Info: K2200-11B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5213.D

Date : 03-NOV-2011 19:39

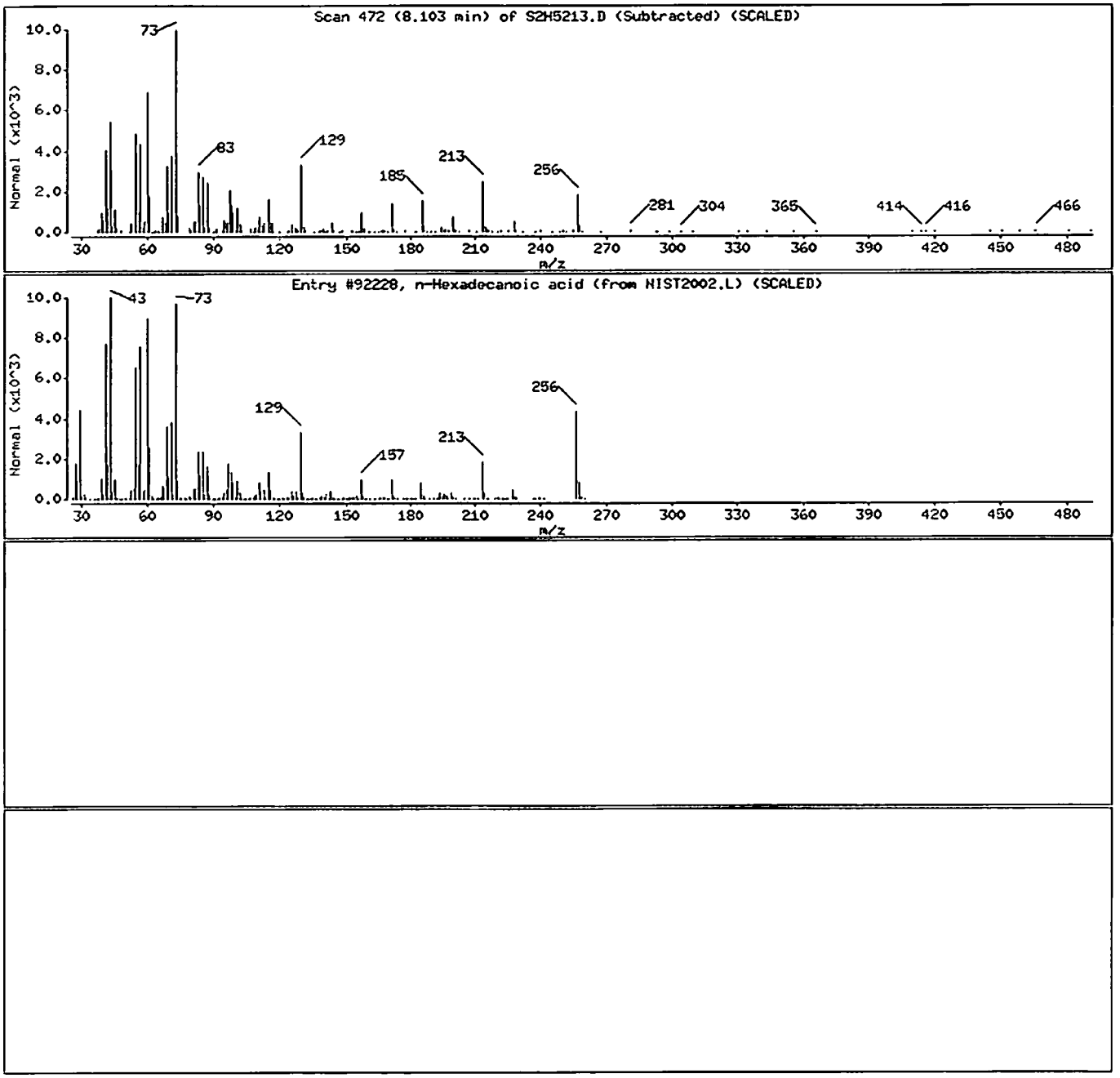
Client ID: H30W8 Instrument: S2.i

Sample Info: K2200-11B,,62636,,

Volume Injected (uL): 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	92228	98	C16H3202	256



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5213.D

Date : 03-NOV-2011 19:39

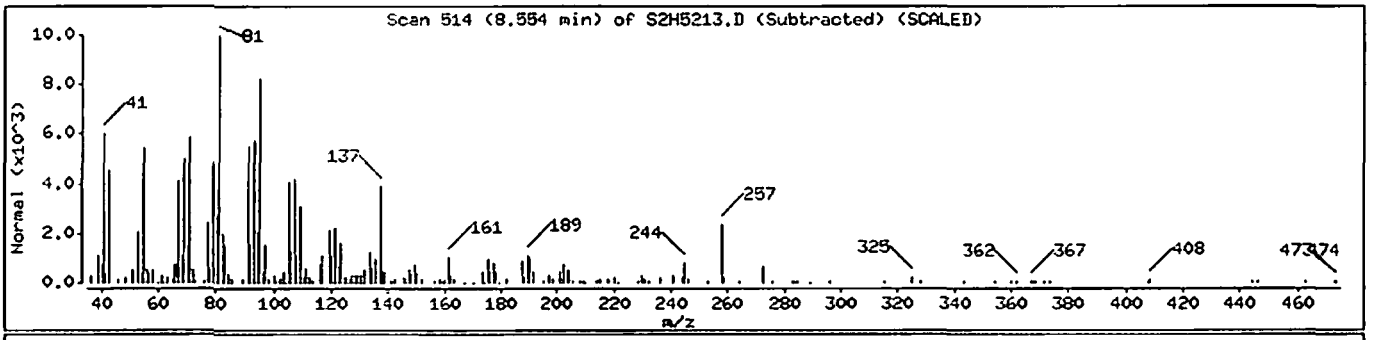
Client ID: H30W8 Instrument: S2.i

Sample Info: K2200-11B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5213.D

Date : 03-NOV-2011 19:39

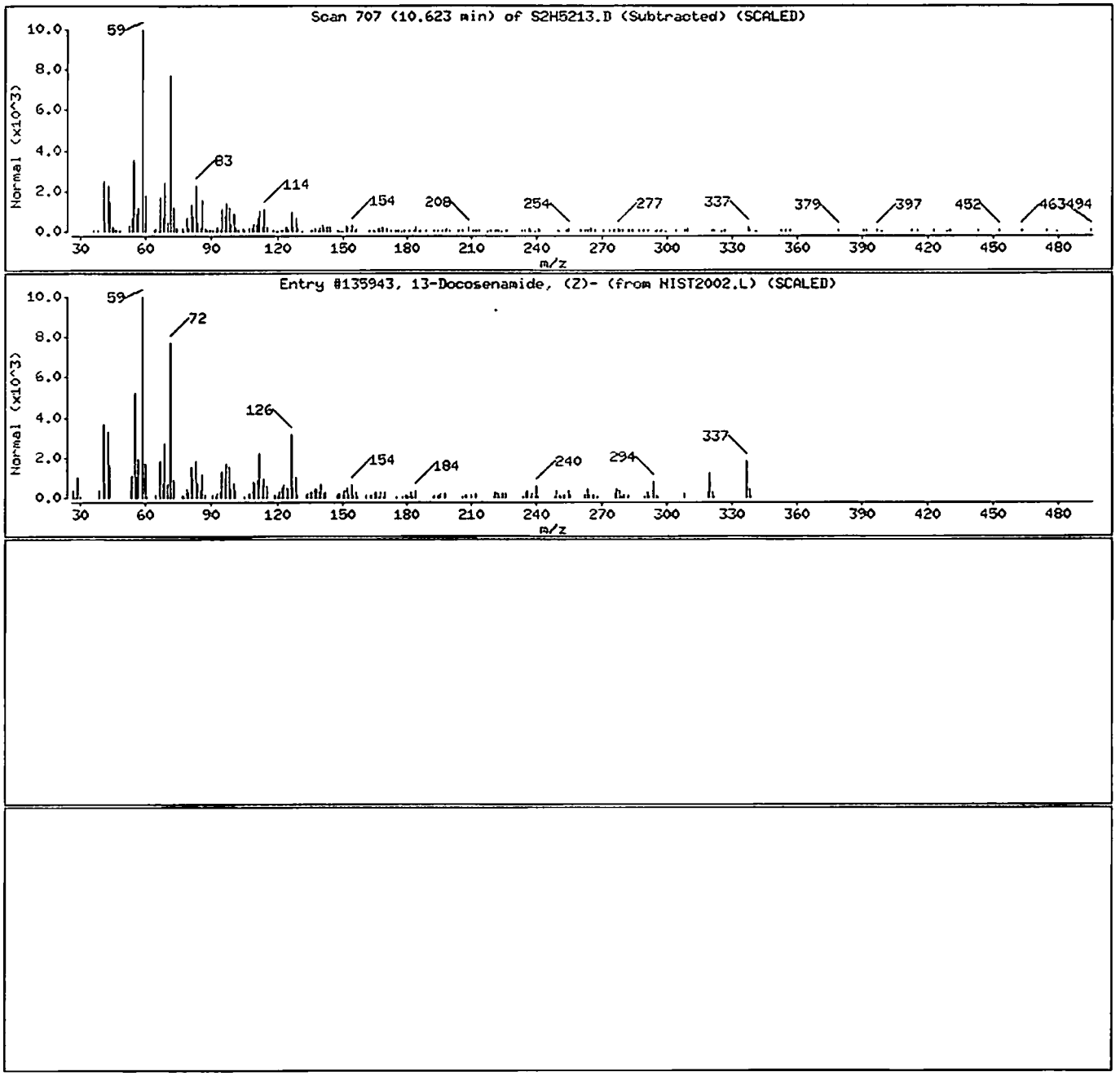
Client ID: H30W8 Instrument: S2.i

Sample Info: K2200-11B,,62636,,

Volume Injected (uL): 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	135943	91	C22H43NO	337



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5213.D

Date : 03-NOV-2011 19:39

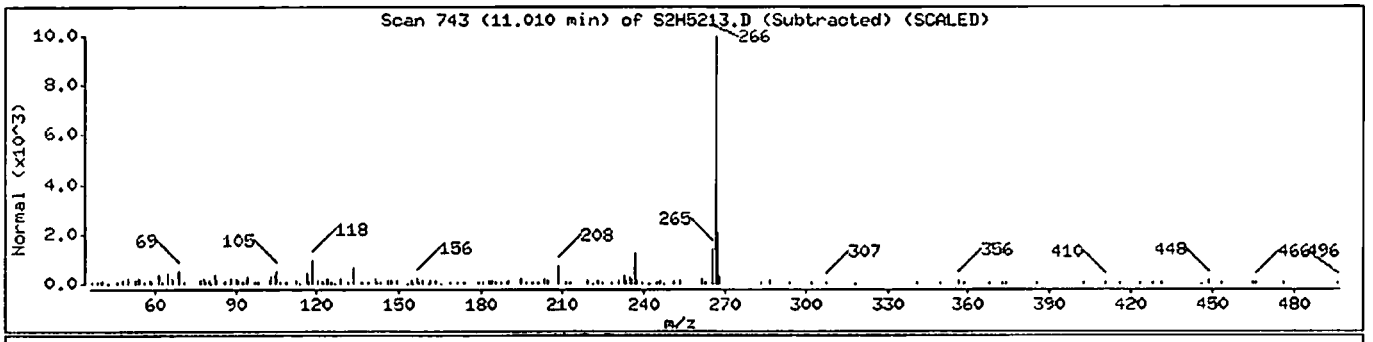
Client ID: H30W8 Instrument: S2.i

Sample Info: K2200-11B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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

CLIENT SAMPLE NO.: H30X0

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

Lab Code: MITKEM | Case No.: 41926 | Mod. Ref No.: | SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER | Lab Sample ID: K2200-12B

Sample wt/vol: 1000 (g/mL) ML | Lab File ID: S2H5214.D

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

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

Concentrated Extract Volume: 1000 (uL) | Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) | GPC Factor: 1.00 | Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.: H30X0

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

Lab Code: MITKEM | Case No.: 41926 | Mod. Ref No.: | SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER | Lab Sample ID: K2200-12B

Sample wt/vol: 1000 (g/mL) ML | Lab File ID: S2H5214.D

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

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

Concentrated Extract Volume: 1000 (uL) | Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) | GPC Factor: 1.00 | Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.: H30X0

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

Lab Code: MITKEM | Case No.: 41926 | Mod. Ref No.: | SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER | Lab Sample ID: K2200-12B

Sample wt/vol: 1000 (g/mL) ML | Lab File ID: S2H5214.D

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

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

Concentrated Extract Volume: 1000 (uL) | Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) | GPC Factor: 1.00 | Date Analyzed: 11/03/2011

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.670	11	BNJ
02		Unknown-01	4.885	8.1	J
03		Unknown-02	5.185	2.4	J
04		Unknown-03	5.421	11	J
05		Unknown-04	5.539	4.6	J
06		Unknown-05	6.364	3.0	J
07	57-10-3	n-Hexadecanoic acid	8.102	5.5	NJ
08		Unknown-06	10.568	11	J
	E96679[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5214.D
Report Date: 07-Nov-2011 14:02

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5214.D
Lab Smp Id: K2200-12B Client Smp ID: H30X0
Inj Date : 03-NOV-2011 20:00
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-12B,,62636,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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 * (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)
$	2 Phenol-d5	71	3.565	3.565	(0.917)	207333	50.6630	25
$	4 bis(2-Chloroethyl)ether-d8	67	3.619	3.619	(0.931)	297786	52.8062	26
$	6 2-Chlorophenol-d4	132	3.694	3.694	(0.950)	184326	52.0669	26
*	8 1,4-Dichlorobenzene-d4	152	3.887	3.887	(1.000)	129959	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.198	4.198	(1.080)	336673	60.6818	30
$	16 Nitrobenzene-d5	128	4.348	4.348	(0.879)	106534	51.4385	26
$	19 2-Nitrophenol-d4	143	4.616	4.616	(0.933)	123756	54.1281	27
$	23 2,4-Dichlorophenol-d3	165	4.820	4.820	(0.974)	241895	57.9561	29
*	25 Naphthalene-d8	136	4.948	4.948	(1.000)	397692	40.0000	
$	27 4-Chloroaniline-d4	131	5.002	5.002	(1.011)	180457	48.6940	24(Q)
$	40 Dimethylphthalate-d6	166	6.171	6.171	(0.962)	800341	61.0044	31
$	43 Acenaphthylene-d8	160	6.289	6.289	(0.980)	858092	50.2978	25
*	46 Acenaphthene-d10	164	6.418	6.418	(1.000)	356814	40.0000	
$	49 4-Nitrophenol-d4	143	6.514	6.503	(1.015)	100587	53.2017	27
$	54 Fluorene-d10	176	6.847	6.847	(1.067)	634666	52.6646	26
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.900	6.900	(0.903)	154550	65.7842	33(Q)
*	65 Phenanthrene-d10	188	7.640	7.640	(1.000)	602054	40.0000	
$	67 Anthracene-d10	188	7.694	7.694	(1.007)	1005182	58.4481	29
$	72 Pyrene-d10	212	8.820	8.820	(0.895)	778911	49.7911	25
*	77 Chrysene-d12	240	9.860	9.871	(1.000)	496585	40.0000	(Q)
$	83 Benzo(a)pyrene-d12	264	11.115	11.147	(0.992)	315666	51.3038	26(H)

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5214.D
Report Date: 07-Nov-2011 14:02

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)	
* 85 Perylene-d12	264	11.200	11.233	(1.000)	250744	40.0000		(Q)

QC Flag Legend

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

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5214.D
Report Date: 07-Nov-2011 14:02

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5214.D
Lab Smp Id: K2200-12B Client Smp ID: H30X0
Inj Date : 03-NOV-2011 20:00
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-12B,,62636,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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 * (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

ISTD	RT	AREA	AMOUNT
* 25 Naphthalene-d8	4.949	1381212	40.000
* 46 Acenaphthene-d10	6.418	1850687	40.000
* 65 Phenanthrene-d10	7.641	1734208	40.000
* 85 Perylene-d12	11.201	629524	40.000

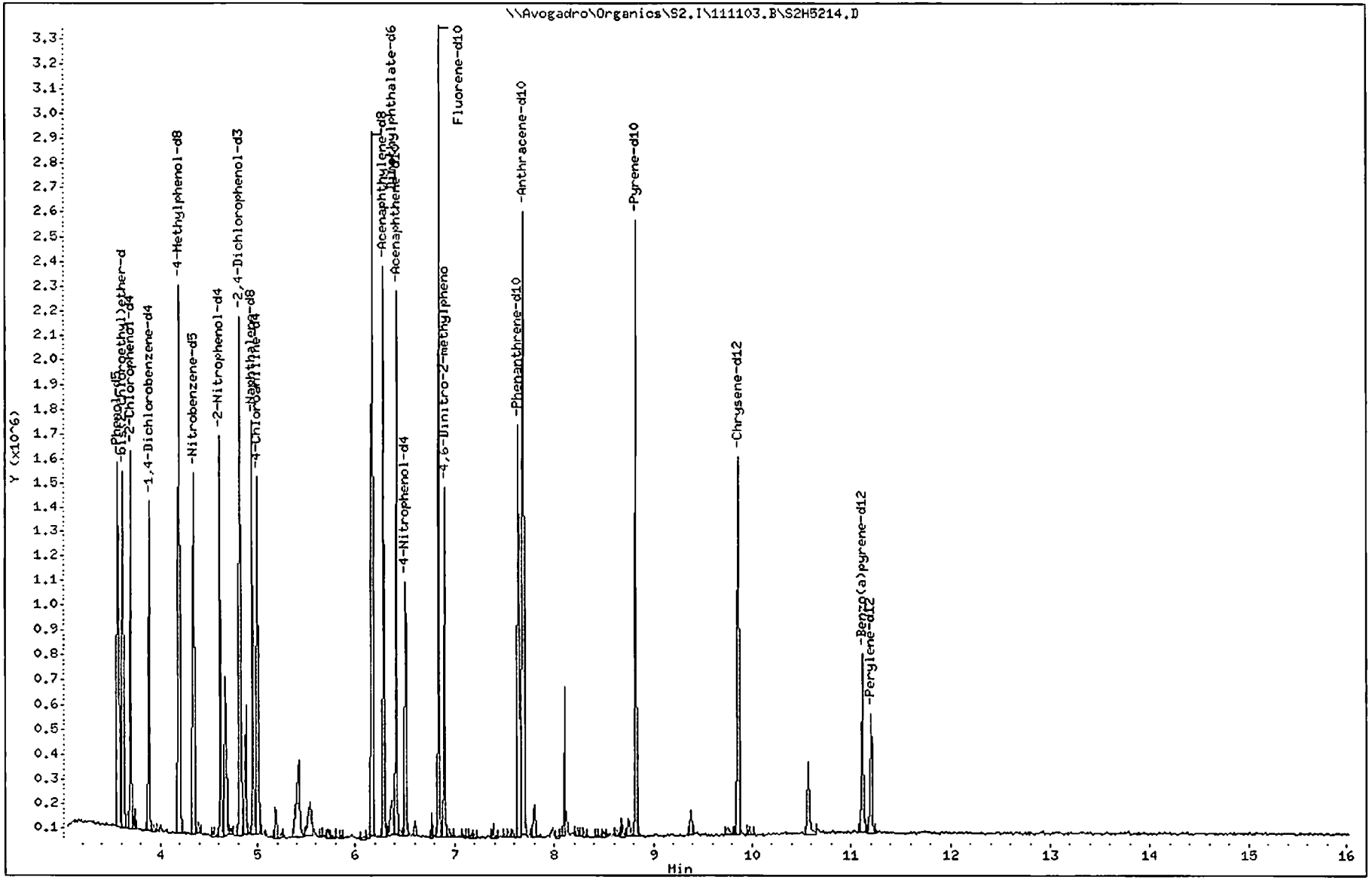
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
2(3H)-Furanone, dihydro-4-hydroxy-				CAS #: 5469-16-9			
4.670	789474	22.8632122	11	90	NIST2002.L	4145	25
Unknown				CAS #:			
4.885	560158	16.2221974	8.1	0		0	25
Unknown				CAS #:			
5.185	165019	4.77896451	2.4	0		0	25

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5214.D
Report Date: 07-Nov-2011 14:02

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
5.421	771993	22.3569629	11	0		0	25
Unknown				CAS #:			
5.539	315223	9.12888387	4.6	0		0	25
Unknown				CAS #:			
6.365	279065	6.03159558	3.0	0		0	46
n-Hexadecanoic acid				CAS #: 57-10-3			
8.102	476445	10.9893371	5.5	96	NIST2002.L	92227	65
Unknown				CAS #:			
10.568	342520	21.7636953	11	0		0	85

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5214.D
Date : 03-NOV-2011 20:00
Client ID: H30X0
Sample Info: K2200-12B,,62636,,
Volume Injected (uL): 2.0
Column phase: RXI-5SILMS

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



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Date : 03-NOV-2011 20:00

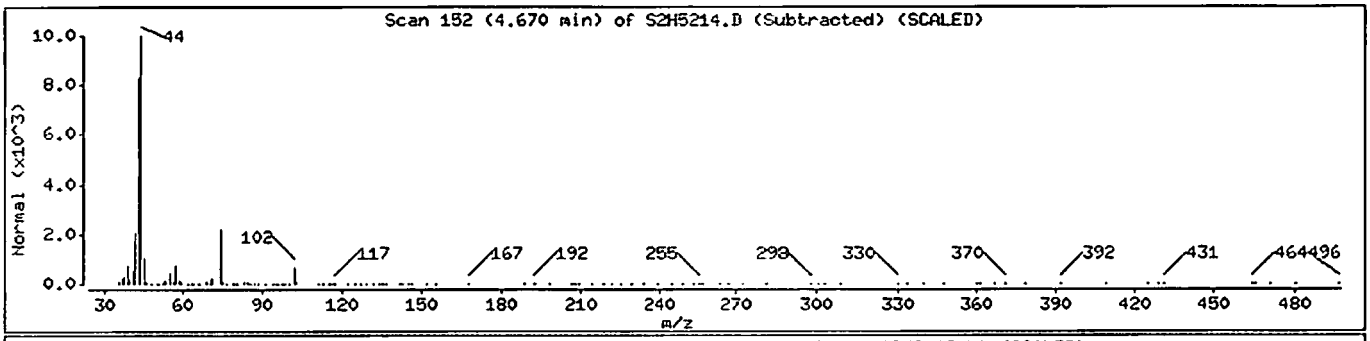
Client ID: H30X0 Instrument: S2.i

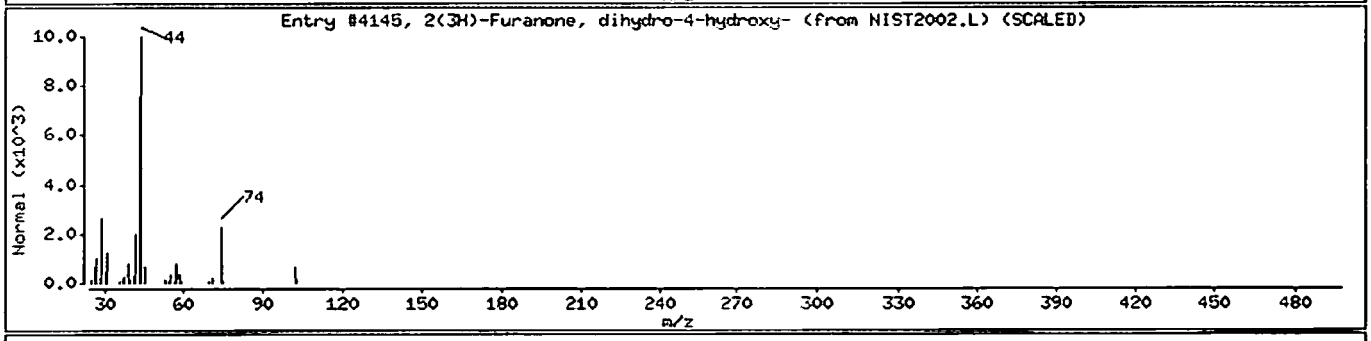
Sample Info: K2200-12B,,62636,,

Volume Injected (uL): 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\111103.B\S2H5214.D

Date : 03-NOV-2011 20:00

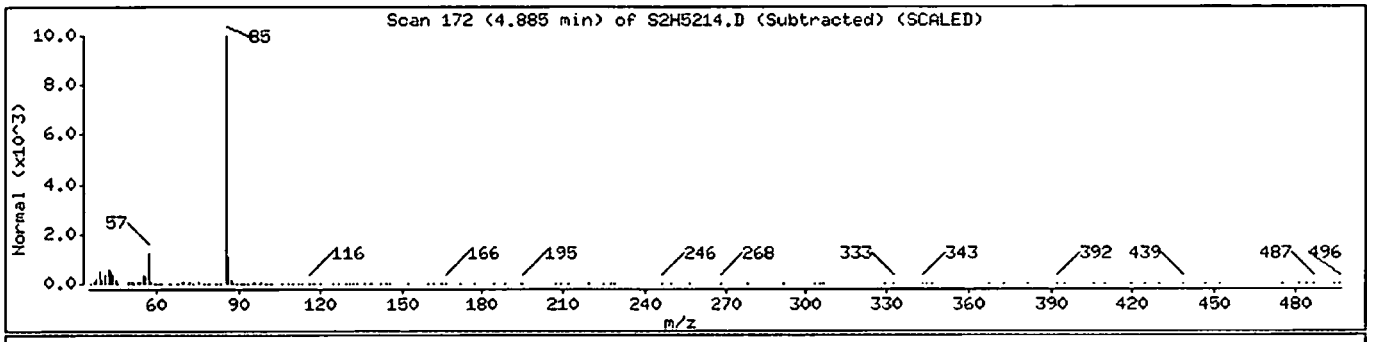
Client ID: H30X0 Instrument: S2.i

Sample Info: K2200-12B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5214.D

Date : 03-NOV-2011 20:00

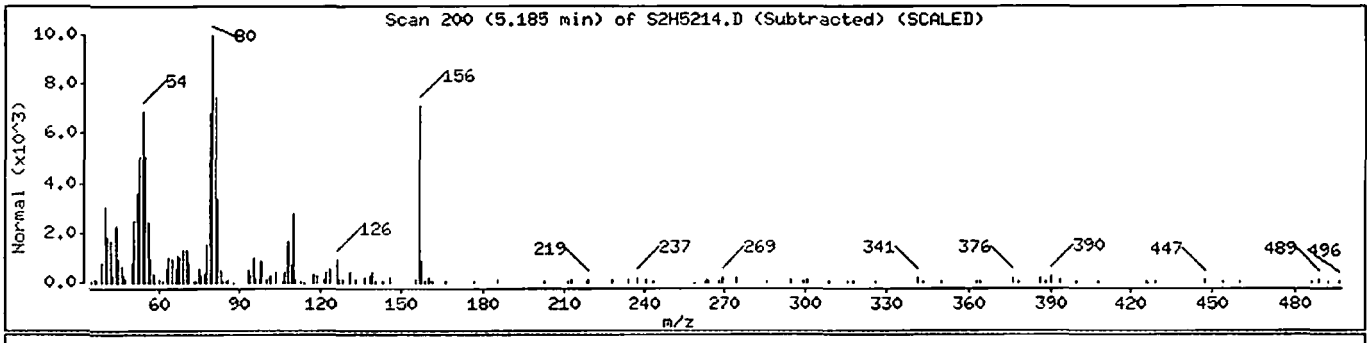
Client ID: H30X0 Instrument: S2.i

Sample Info: K2200-12B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5214.D

Date : 03-NOV-2011 20:00

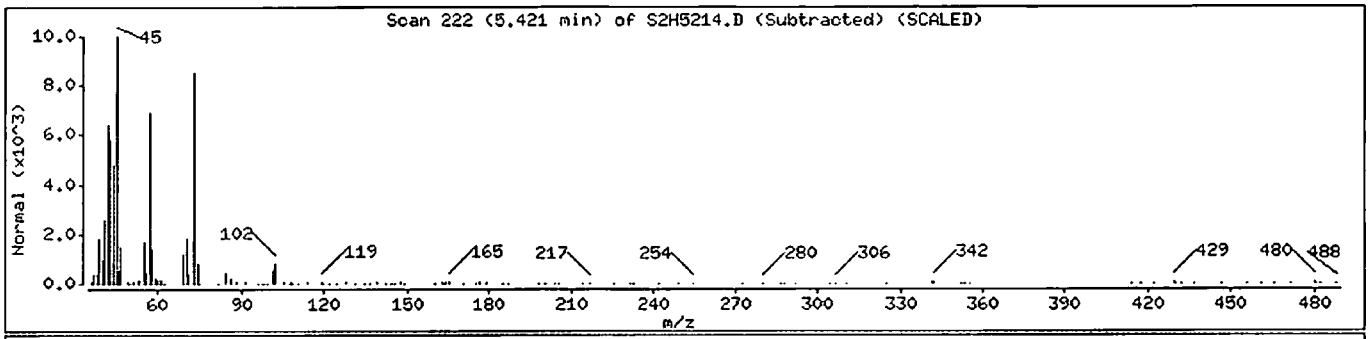
Client ID: H30X0 Instrument: S2.i

Sample Info: K2200-12B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5214.D

Date : 03-NOV-2011 20:00

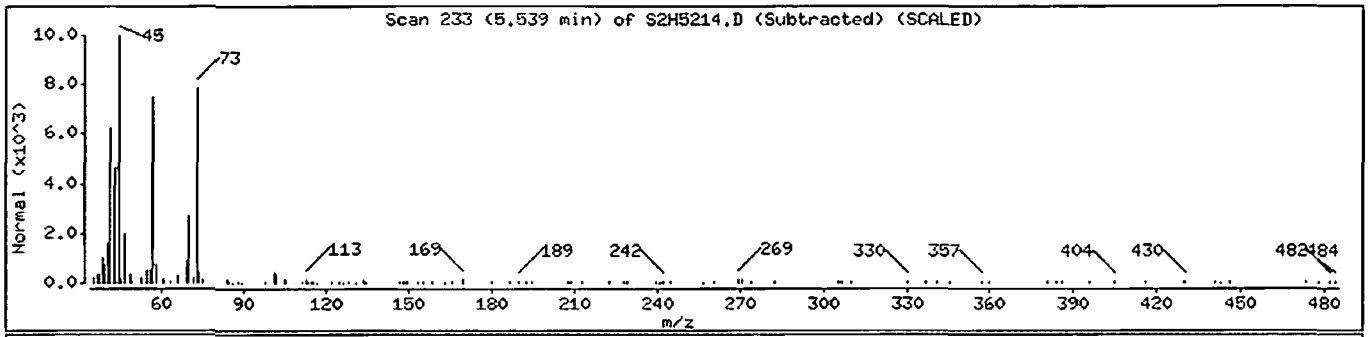
Client ID: H30X0 Instrument: S2.i

Sample Info: K2200-12B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5214.D

Date : 03-NOV-2011 20:00

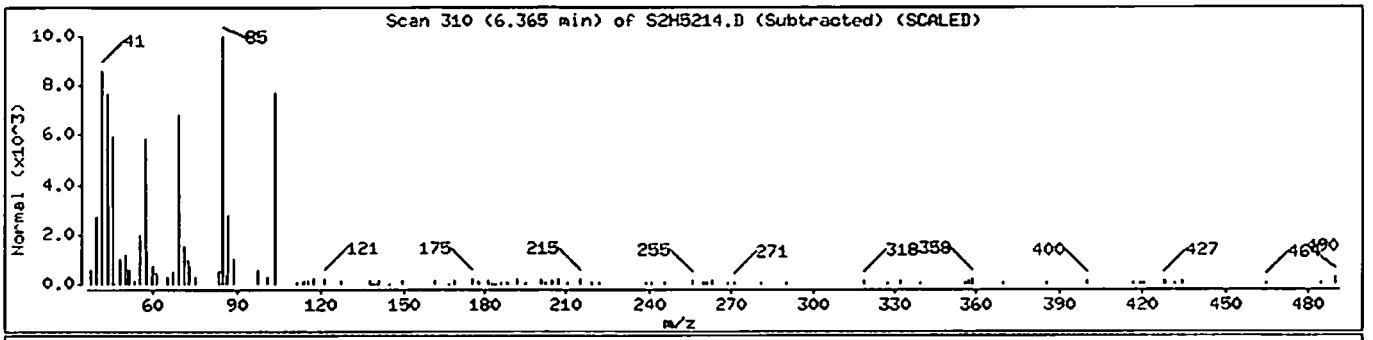
Client ID: H30X0 Instrument: S2.i

Sample Info: K2200-12B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5214.D

Date : 03-NOV-2011 20:00

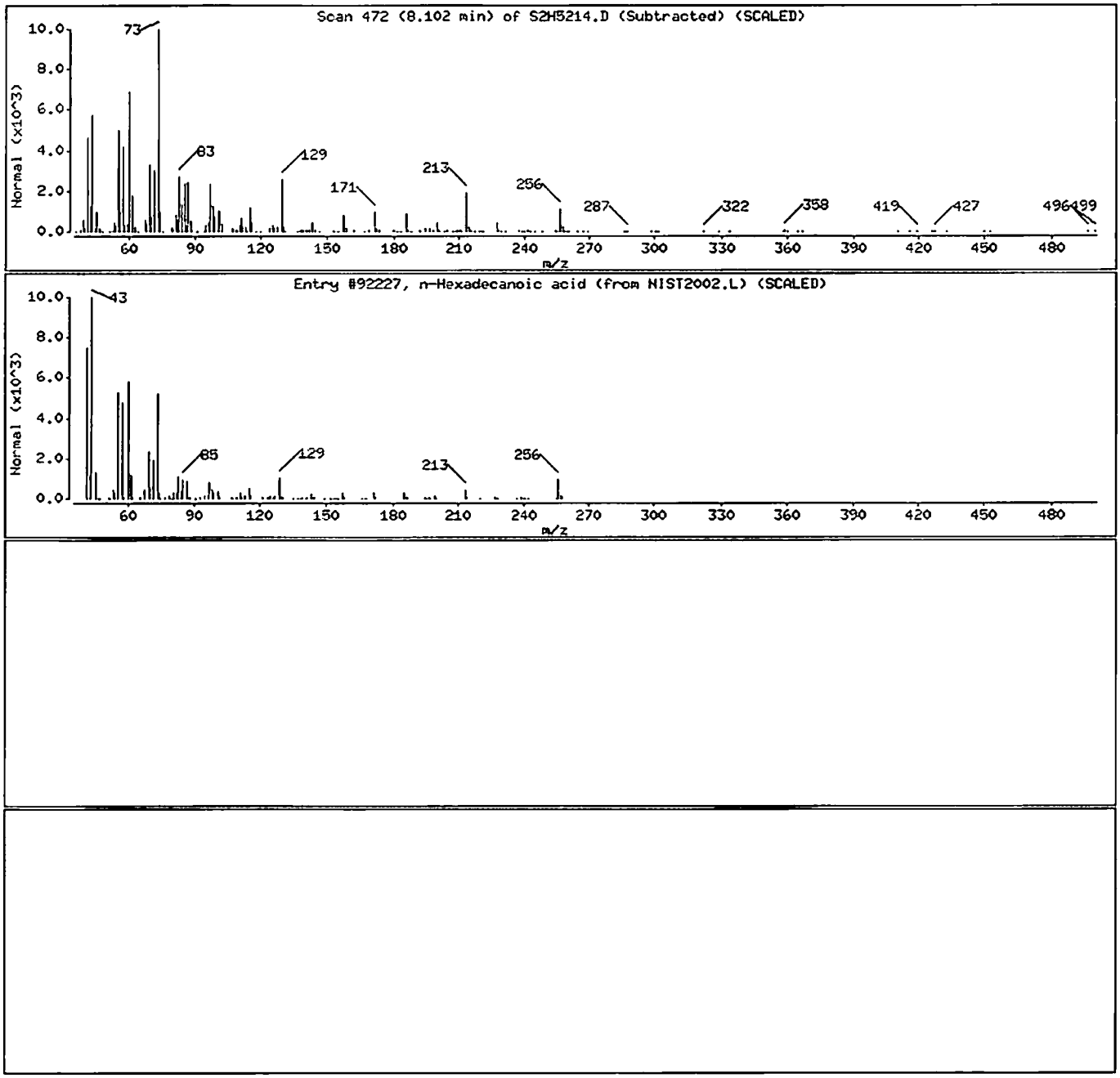
Client ID: H30X0 Instrument: S2.i

Sample Info: K2200-12B,,62636,,

Volume Injected (uL): 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



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5214.D

Date : 03-NOV-2011 20:00

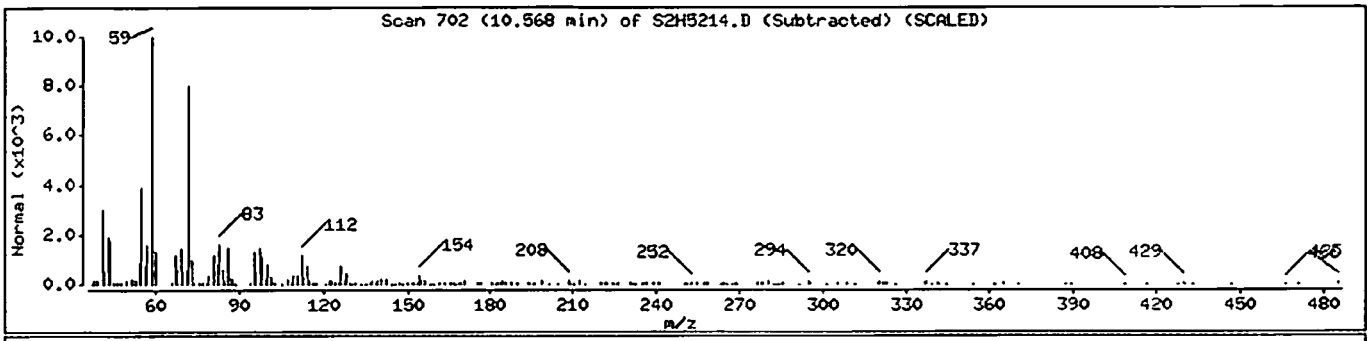
Client ID: H30X0 Instrument: S2.i

Sample Info: K2200-12B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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

CLIENT SAMPLE NO.

H30X1

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-13B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5215.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2´-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1´-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

H30X1

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-13B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5215.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

H30X1

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-13B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5215.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.673	9.0	BNJ
02		Unknown-01	4.877	5.3	J
03		Unknown-02	5.188	2.5	J
04		Unknown-03	5.413	9.5	J
05		Unknown-04	5.542	2.7	J
06		Unknown-05	6.367	3.6	J
07		Unknown-06	8.105	4.8	J
08		Unknown-07	10.582	9.7	J
	E96679[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5215.D
Report Date: 07-Nov-2011 14:02

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5215.D
Lab Smp Id: K2200-13B Client Smp ID: H30X1
Inj Date : 03-NOV-2011 20:22
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-13B,,62636,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 25
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)
$	2 Phenol-d5	71	3.568	3.565	(0.917)	261150	63.5061	32
$	4 bis(2-Chloroethyl)ether-d8	67	3.622	3.619	(0.931)	329962	58.2301	29
$	6 2-Chlorophenol-d4	132	3.697	3.694	(0.950)	230784	64.8760	32
*	8 1,4-Dichlorobenzene-d4	152	3.890	3.887	(1.000)	130588	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.201	4.198	(1.080)	372528	66.8209	33
$	16 Nitrobenzene-d5	128	4.340	4.348	(0.877)	119618	51.0783	26(Q)
$	19 2-Nitrophenol-d4	143	4.619	4.616	(0.933)	160975	62.2666	31
$	23 2,4-Dichlorophenol-d3	165	4.823	4.820	(0.974)	305793	64.7948	32
*	25 Naphthalene-d8	136	4.951	4.948	(1.000)	449683	40.0000	
$	27 4-Chloroaniline-d4	131	5.005	5.002	(1.011)	211646	50.5070	25(Q)
$	40 Dimethylphthalate-d6	166	6.174	6.171	(0.962)	785783	62.4740	31
$	43 Acenaphthylene-d8	160	6.281	6.289	(0.978)	938912	57.4051	29
*	46 Acenaphthene-d10	164	6.421	6.418	(1.000)	342083	40.0000	
$	49 4-Nitrophenol-d4	143	6.506	6.503	(1.013)	108891	60.0739	30
$	54 Fluorene-d10	176	6.850	6.847	(1.067)	671638	58.1325	29
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.903	6.900	(0.903)	167321	65.4394	33(Q)
*	65 Phenanthrene-d10	188	7.643	7.640	(1.000)	655238	40.0000	
$	67 Anthracene-d10	188	7.686	7.694	(1.006)	991126	52.9531	26
$	72 Pyrene-d10	212	8.823	8.820	(0.895)	915381	69.4783	35
*	77 Chrysene-d12	240	9.863	9.871	(1.000)	418225	40.0000	(Q)
$	83 Benzo(a)pyrene-d12	264	11.128	11.147	(0.976)	311679	58.0378	29(H)

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5215.D
Report Date: 07-Nov-2011 14:02

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)	
* 85 Perylene-d12	264	11.225	11.233	(1.000)	218851	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\111103.B\S2H5215.D
Report Date: 07-Nov-2011 14:02

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5215.D
Lab Smp Id: K2200-13B Client Smp ID: H30X1
Inj Date : 03-NOV-2011 20:22
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-13B,,62636,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 25
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

ISTD	RT	AREA	AMOUNT
* 25 Naphthalene-d8	4.952	1548607	40.000
* 46 Acenaphthene-d10	6.421	1890129	40.000
* 65 Phenanthrene-d10	7.644	1857601	40.000
* 85 Perylene-d12	11.225	539962	40.000

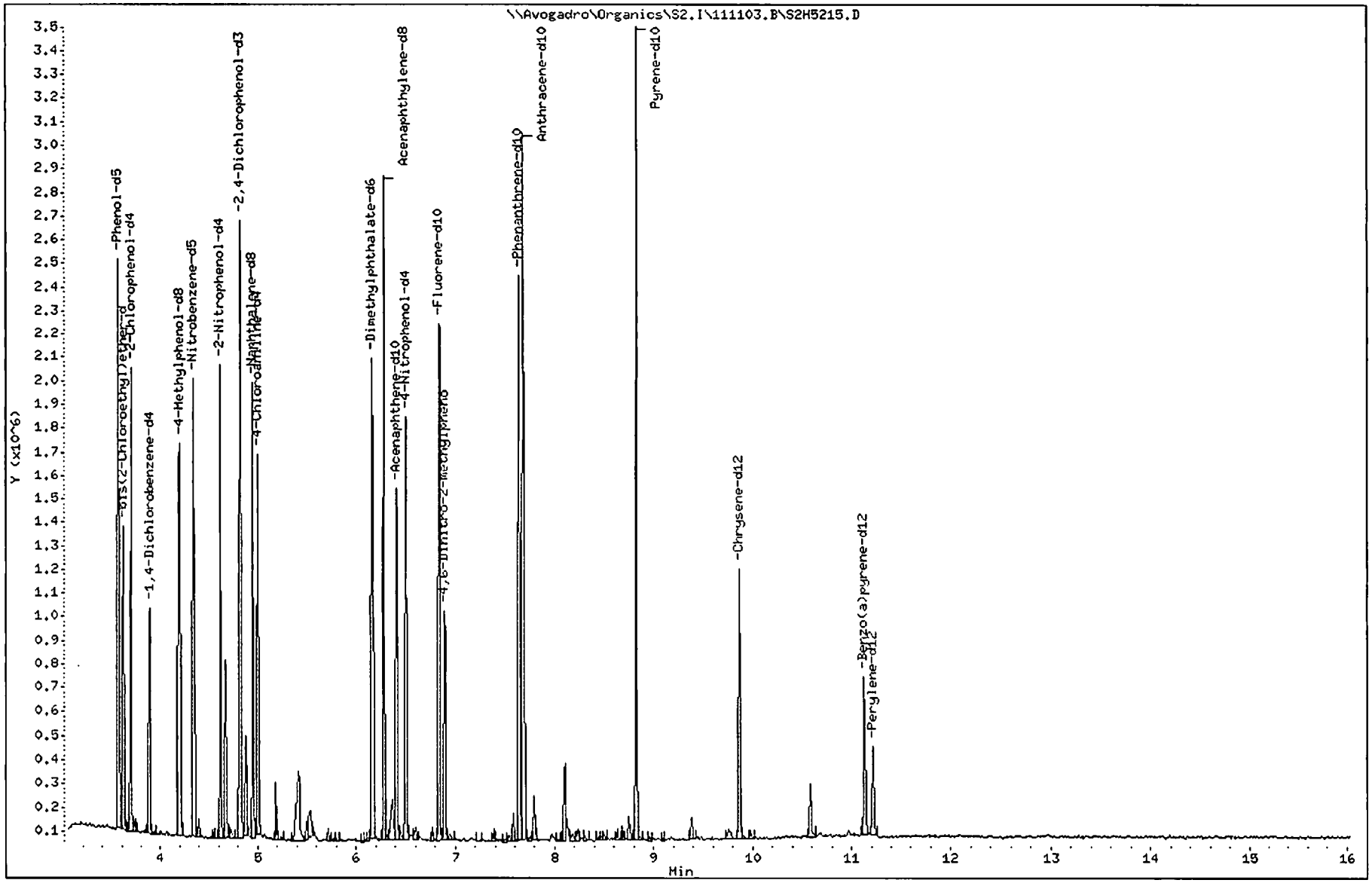
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
2(3H)-Furanone, dihydro-4-hydroxy-				CAS #: 5469-16-9			
4.673	695416	17.9623532	9.0	90	NIST2002.L	4145	25
Unknown				CAS #:			
4.877	412733	10.6607649	5.3	0		0	25
Unknown				CAS #:			
5.188	194657	5.02793703	2.5	0		0	25

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5215.D
Report Date: 07-Nov-2011 14:02

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
5.413	732978	18.9325723	9.5	0		0	25
Unknown				CAS #:			
5.542	206141	5.32456585	2.7	0		0	25
Unknown				CAS #:			
6.367	340512	7.20610749	3.6	0		0	46
Unknown				CAS #:			
8.105	441361	9.50388244	4.8	0		0	65
Unknown				CAS #:			
10.582	261562	19.3763043	9.7	0		0	85

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5215.D
Date : 03-NOV-2011 20:22
Client ID: H30X1
Sample Info: K2200-13B,,62636,,
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\111103.B\S2H5215.D

Date : 03-NOV-2011 20:22

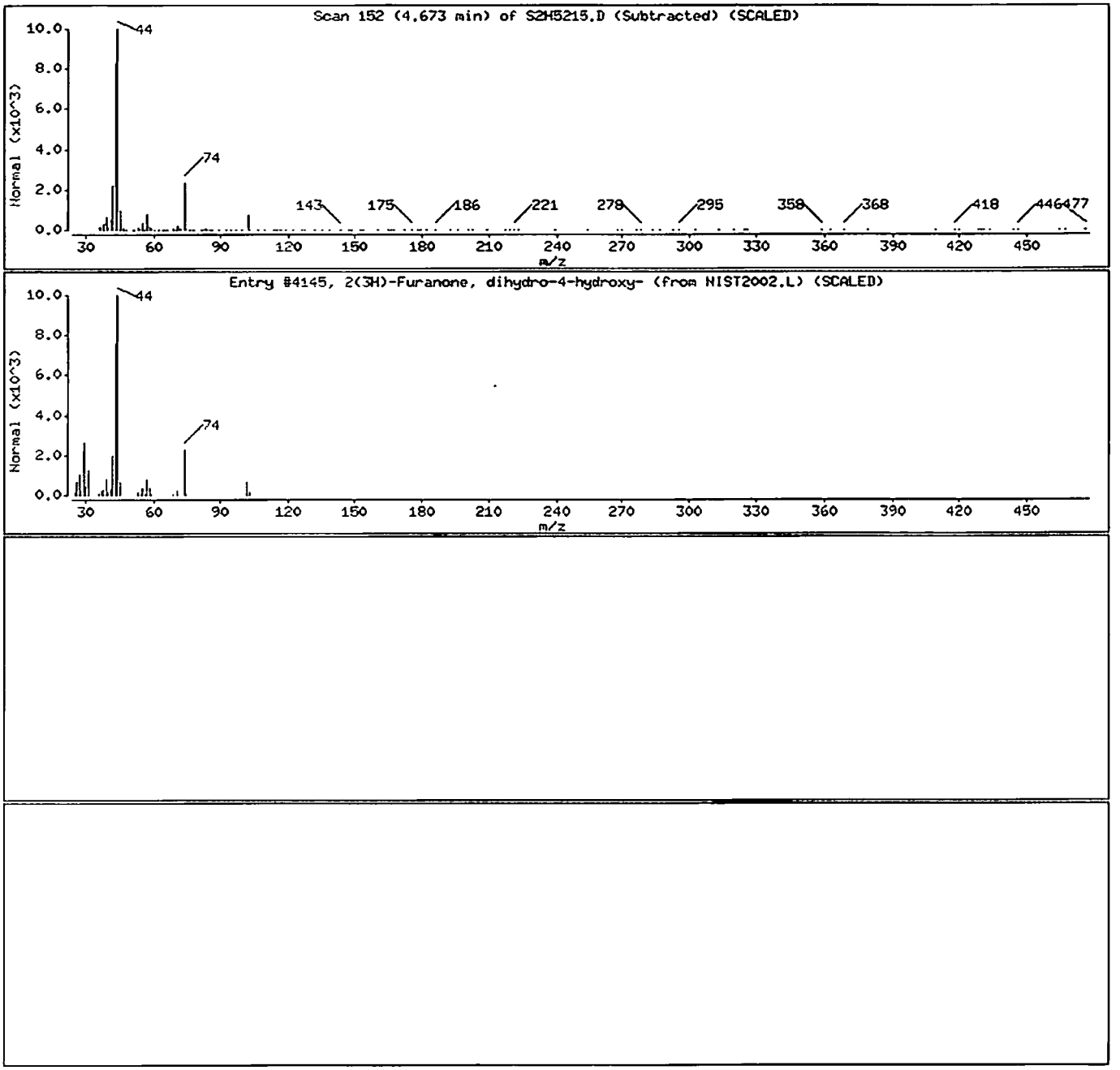
Client ID: H30X1 Instrument: S2.i

Sample Info: K2200-13B,,62636,,

Volume Injected (uL): 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 : 03-NOV-2011 20:22

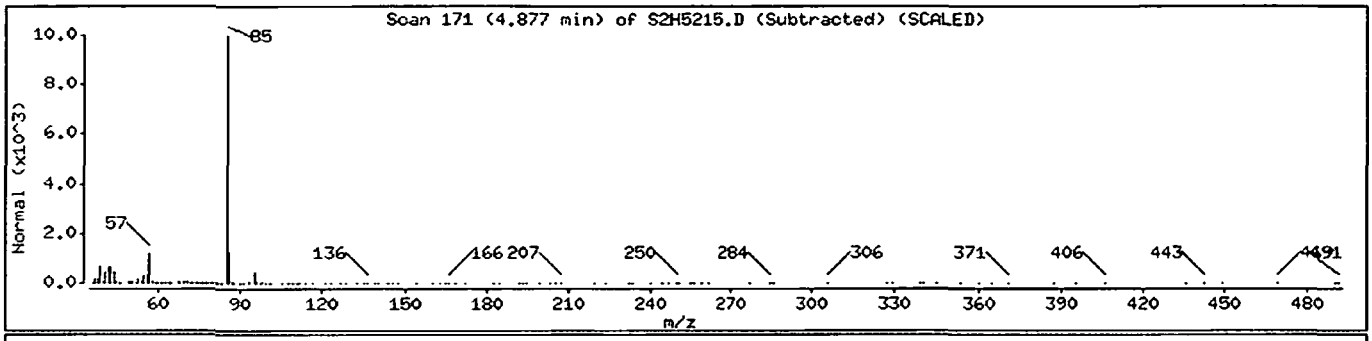
Client ID: H30X1 Instrument: S2.i

Sample Info: K2200-13B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 20:22

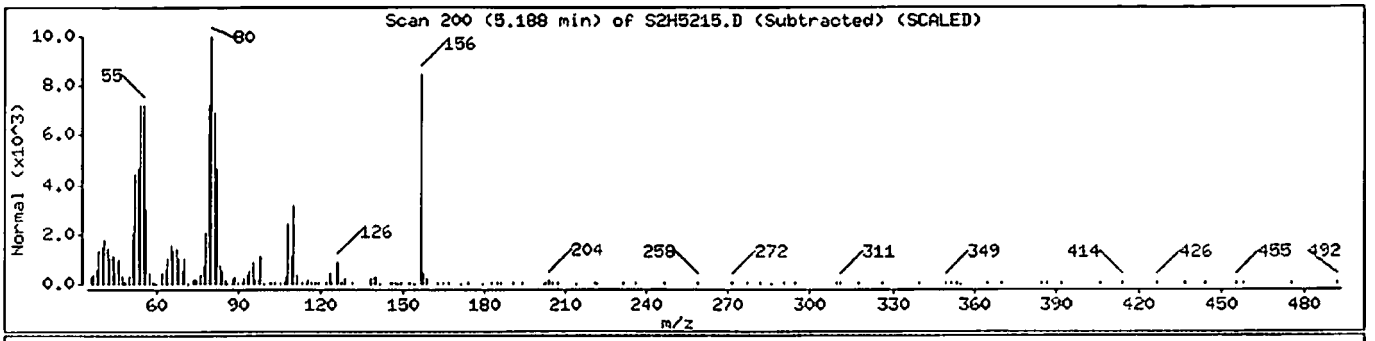
Client ID: H30X1 Instrument: S2.i

Sample Info: K2200-13B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5215.D

Date : 03-NOV-2011 20:22

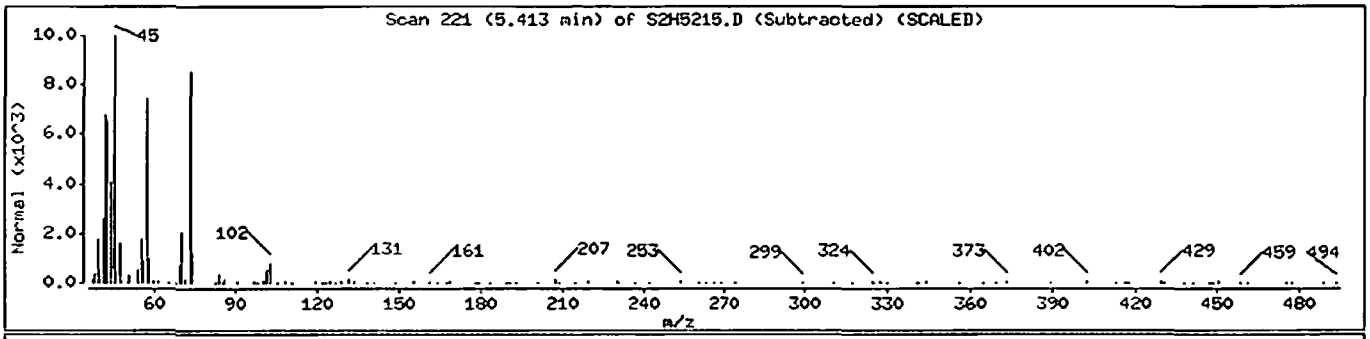
Client ID: H30X1 Instrument: S2.i

Sample Info: K2200-13B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5215.D

Date : 03-NOV-2011 20:22

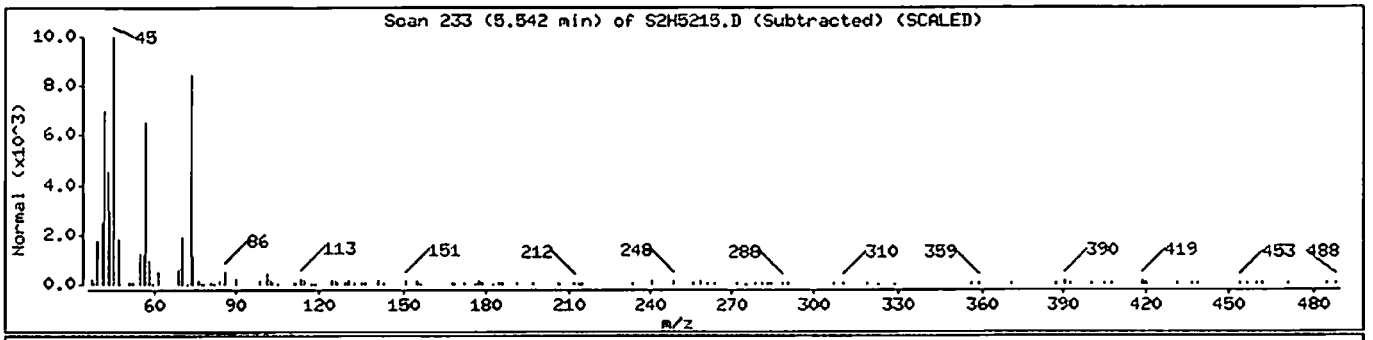
Client ID: H30X1 Instrument: S2.i

Sample Info: K2200-13B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5215.D

Date : 03-NOV-2011 20:22

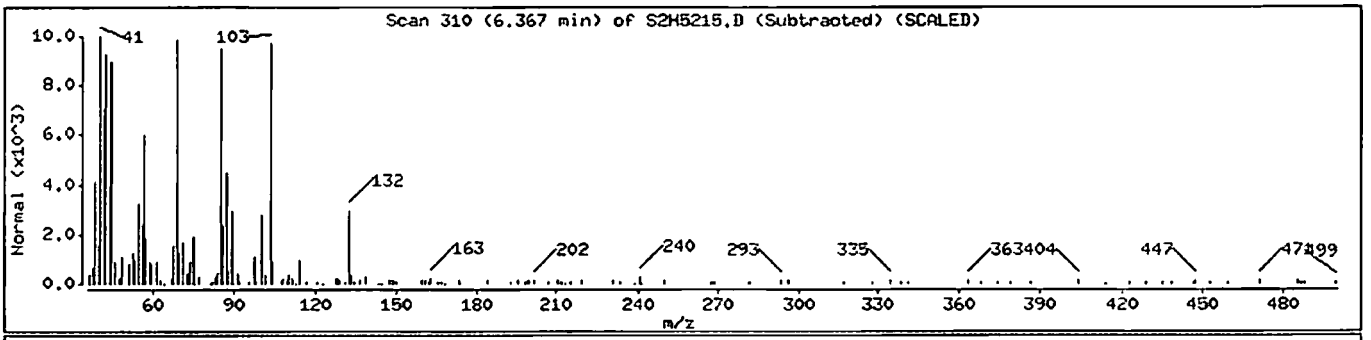
Client ID: H30X1 Instrument: S2.i

Sample Info: K2200-13B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5215.D

Date : 03-NOV-2011 20:22

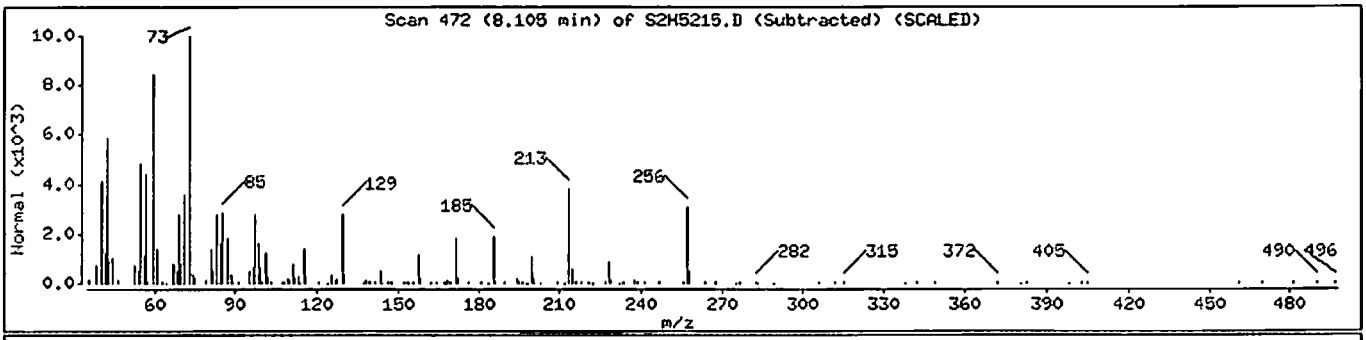
Client ID: H30X1 Instrument: S2.i

Sample Info: K2200-13B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5215.D

Date : 03-NOV-2011 20:22

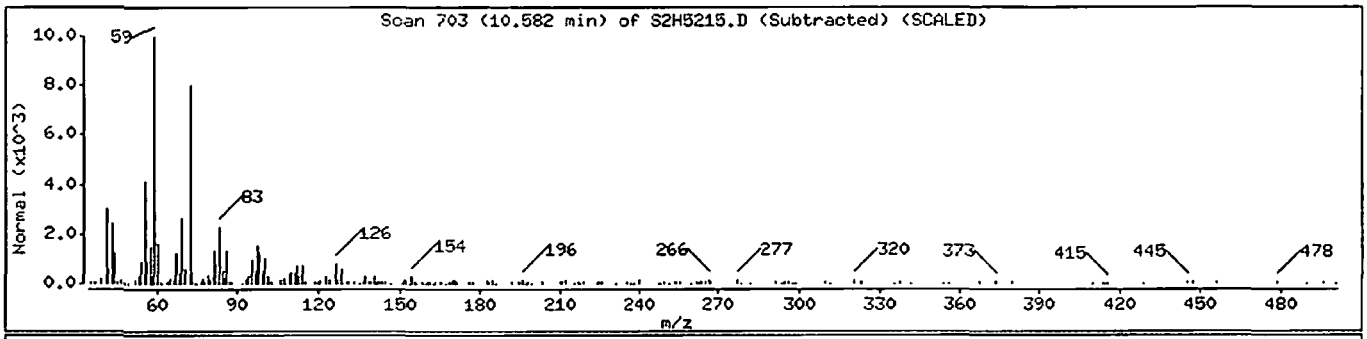
Client ID: H30X1 Instrument: S2.i

Sample Info: K2200-13B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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

CLIENT SAMPLE NO.

H30X3

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-20A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5222.D

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

% Moisture: Decanted: (Y/N) Date Received: 10/29/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	1.6	J
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	9.5	
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.: H30X3

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

Lab Code: MITKEM | Case No.: 41926 | Mod. Ref No.: | SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER | Lab Sample ID: K2200-20A

Sample wt/vol: 1000 (g/mL) ML | Lab File ID: S2H5222.D

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

% Moisture: | Decanted: (Y/N) | Date Received: 10/29/2011

Concentrated Extract Volume: 1000 (uL) | Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) | GPC Factor: 1.00 | Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.: H30X3

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-20A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5222.D

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

% Moisture: Decanted: (Y/N) Date Received: 10/29/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	3.419	8.4	J
02		Unknown-02	3.484	6.1	J
03		Unknown-03	3.752	4.7	J
04		Unknown-04	3.784	2.8	J
05	5208-50-4	4-Carene, (1S,3S,6R)-(-)-	3.859	5.5	NJ
06	527-84-4	Benzene, 1-methyl-2-(1-methy	3.956	38	NJ
07		Unknown-05	4.041	8.7	J
08	1195-79-5	Bicyclo[2.2.1]heptan-2-one,	4.385	19	NJ
09		Unknown-06	4.427	4.3	J
10		Unknown-07	4.503	3.4	J
11		Unknown-08	4.685	13	J
12	464-49-3	Bicyclo[2.2.1]heptan-2-one,	4.749	290	NJ
13		Unknown-09	4.792	47	J
14		Unknown-10	4.878	38	J
15		Unknown-11	4.910	33	J
16		Unknown-12	4.985	24	J
17		Unknown-13	5.082	4.7	J
18		Unknown-14	5.135	4.1	J
19		Unknown-15	5.189	7.6	J
20		Unknown-16	5.468	7.6	J
21		Unknown-17	5.521	4.6	J
22		Unknown-18	5.575	3.6	J
23	501-52-0	Benzenepropanoic acid	5.639	20	NJ
24		Unknown-19	5.725	6.8	J
25		Unknown-20	5.757	23	J
26		Unknown-21	5.843	23	J
27		Unknown-22	6.637	18	J
28	544-63-8	Tetradecanoic acid	7.387	4.0	NJ
29	57-10-3	n-Hexadecanoic acid	8.106	11	NJ
30		Unknown-23	10.636	23	J
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5222.D
Report Date: 07-Nov-2011 14:03

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5222.D
Lab Smp Id: K2200-20A Client Smp ID: H30X3
Inj Date : 03-NOV-2011 22:53
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-20A,,62636,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 32
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)
$	2 Phenol-d5	71	3.580	3.565	(0.920)	223694	51.5170	26
	3 Phenol	94	3.591	3.576	(0.923)	38739	3.25296	1.6(aQ)
$	4 bis(2-Chloroethyl)ether-d8	67	3.623	3.619	(0.931)	296990	49.6359	25
$	6 2-Chlorophenol-d4	132	3.698	3.694	(0.950)	201236	53.5741	27
*	8 1,4-Dichlorobenzene-d4	152	3.891	3.887	(1.000)	137890	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.202	4.198	(1.080)	334270	56.7834	28
	12 4-Methylphenol	108	4.223	4.219	(1.085)	127505	19.0412	9.5
$	16 Nitrobenzene-d5	128	4.352	4.348	(0.879)	100549	43.5855	22
$	19 2-Nitrophenol-d4	143	4.620	4.616	(0.933)	129410	50.8146	25(Q)
$	23 2,4-Dichlorophenol-d3	165	4.824	4.820	(0.974)	241360	51.9161	26
*	25 Naphthalene-d8	136	4.952	4.948	(1.000)	442978	40.0000	
$	27 4-Chloroaniline-d4	131	5.006	5.002	(1.011)	132387	32.0709	16(Q)
$	40 Dimethylphthalate-d6	166	6.175	6.171	(0.962)	625795	57.7524	29
$	43 Acenaphthylene-d8	160	6.282	6.289	(0.978)	687853	48.8160	24
*	46 Acenaphthene-d10	164	6.422	6.418	(1.000)	294707	40.0000	
$	49 4-Nitrophenol-d4	143	6.518	6.503	(1.015)	75236	48.1793	24(Q)
$	54 Fluorene-d10	176	6.850	6.847	(1.067)	457286	45.9423	23
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.904	6.900	(0.903)	112876	55.9978	28
*	65 Phenanthrene-d10	188	7.644	7.640	(1.000)	516557	40.0000	
$	67 Anthracene-d10	188	7.687	7.694	(1.006)	631619	42.8054	21
$	72 Pyrene-d10	212	8.834	8.820	(0.894)	367644	45.5514	23

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5222.D
Report Date: 07-Nov-2011 14:03

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)
* 77 Chrysene-d12	240	9.917	9.871	(1.000)	256202	40.0000	(QH)
$ 83 Benzo(a)pyrene-d12	264	11.215	11.147	(0.991)	53230	17.2119	8.6(R)
* 85 Perylene-d12	264	11.311	11.233	(1.000)	126032	40.0000	(Q)

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\111103.B\S2H5222.D
Report Date: 07-Nov-2011 14:03

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5222.D
Lab Smp Id: K2200-20A Client Smp ID: H30X3
Inj Date : 03-NOV-2011 22:53
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-20A,,62636,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 32
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

ISTD	RT	AREA	AMOUNT
* 8 1,4-Dichlorobenzene-d4	3.891	1252792	40.000
* 25 Naphthalene-d8	4.953	2714280	40.000
* 46 Acenaphthene-d10	6.422	1511160	40.000
* 65 Phenanthrene-d10	7.645	1730670	40.000
* 85 Perylene-d12	11.312	335835	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown			CAS #:				
3.419	523990	16.7302990	8.4	0		0	8
Unknown			CAS #:				
3.484	384275	12.2693998	6.1	0		0	8

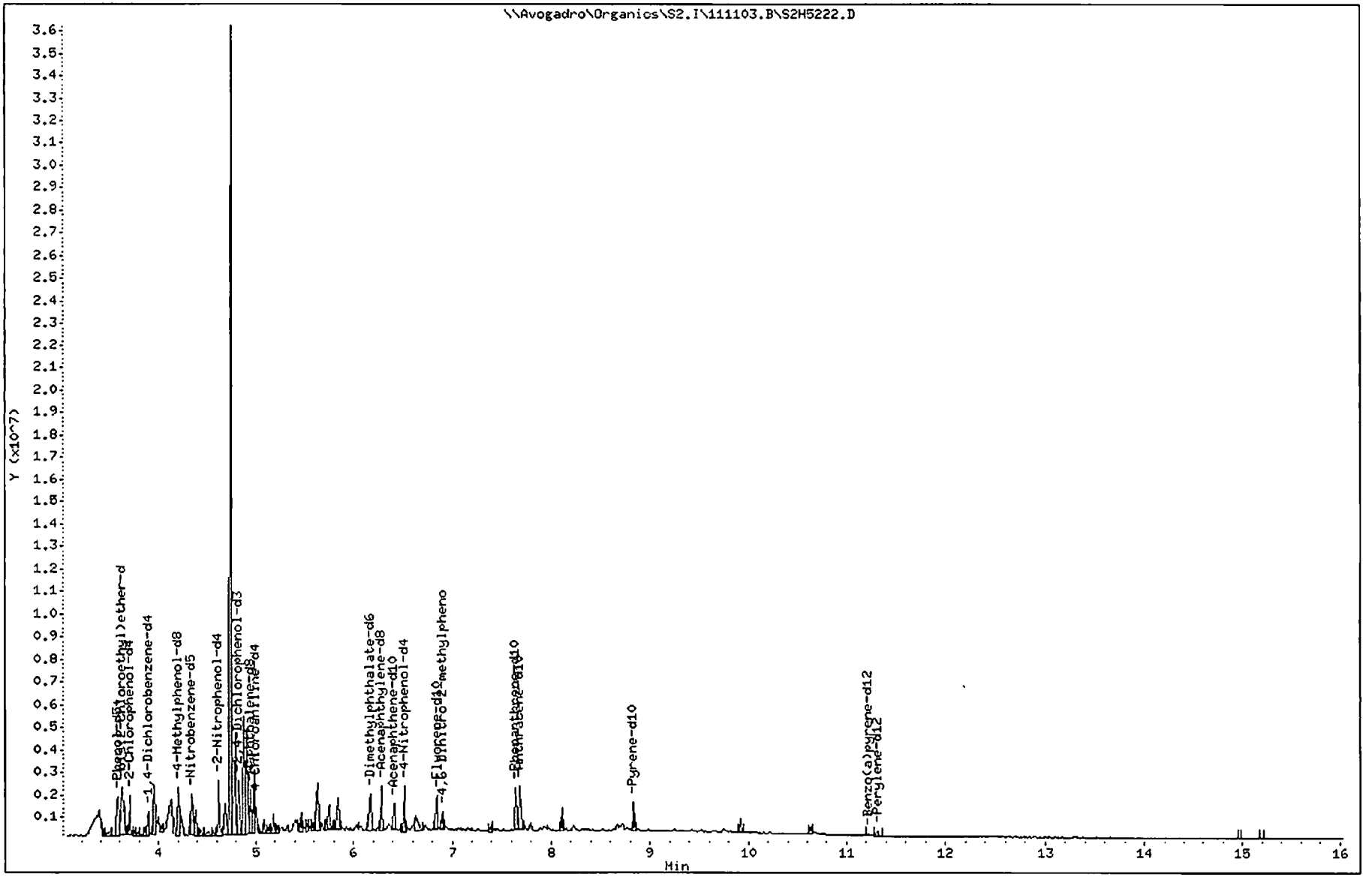
Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5222.D
Report Date: 07-Nov-2011 14:03

RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/L)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
3.752	295631	9.43910587	4.7	0		0	8
Unknown				CAS #:			
3.784	173726	5.54685228	2.8	0		0	8
4-Carene, (1S,3S,6R)-(-)-				CAS #: 5208-50-4			
3.859	342881	10.9477442	5.5	91	NIST2002.L	15191	8
Benzene, 1-methyl-2-(1-methylethyl)-				CAS #: 527-84-4			
3.956	2383480	76.1013615	38	95	NIST2002.L	14395	8
Unknown				CAS #:			
4.041	542343	17.3163079	8.7	0		0	8
Bicyclo[2.2.1]heptan-2-one, 1,3,3-trimet				CAS #: 1195-79-5			
4.385	1209711	38.6244645	19	90	NIST2002.L	24122	8
Unknown				CAS #:			
4.427	577117	8.50490102	4.3	0		0	25
Unknown				CAS #:			
4.503	461141	6.79577939	3.4	0		0	25
Unknown				CAS #:			
4.685	1718854	25.3305288	13	0		0	25
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet				CAS #: 464-49-3			
4.749	38769996	571.348398	290	94	NIST2002.L	24211	25
Unknown				CAS #:			
4.792	6404667	94.3847520	47	0		0	25
Unknown				CAS #:			
4.878	5169489	76.1820871	38	0		0	25
Unknown				CAS #:			
4.910	4510977	66.4776887	33	0		0	25
Unknown				CAS #:			
4.985	3240339	47.7524517	24	0		0	25
Unknown				CAS #:			
5.082	635860	9.37059170	4.7	0		0	25
Unknown				CAS #:			
5.135	555842	8.19137101	4.1	0		0	25
Unknown				CAS #:			
5.189	1025764	15.1165452	7.6	0		0	25
Unknown				CAS #:			
5.468	1028085	15.1507487	7.6	0		0	25

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5222.D
Report Date: 07-Nov-2011 14:03

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
5.521	628102	9.25625430	4.6	0		0	25
Unknown				CAS #:			
5.575	492243	7.25412537	3.6	0		0	25
Benzenepropanoic acid				CAS #: 501-52-0			
5.639	2735859	40.3180032	20	90	NIST2002.L	23322	25
Unknown				CAS #:			
5.725	517330	13.6935819	6.8	0		0	46
Unknown				CAS #:			
5.757	1760559	46.6014922	23	0		0	46
Unknown				CAS #:			
5.843	1754477	46.4405147	23	0		0	46
Unknown				CAS #:			
6.637	1335344	35.3461874	18	0		0	46
Tetradecanoic acid				CAS #: 544-63-8			
7.387	343337	7.93535756	4.0	90	NIST2002.L	75070	65
n-Hexadecanoic acid				CAS #: 57-10-3			
8.106	915737	21.1648943	11	95	NIST2002.L	92227	65
Unknown				CAS #:			
10.636	384709	45.8211556	23	0		0	85

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5222.D
Date : 03-NOV-2011 22:53
Client ID: H30X3 Instrument: S2.i
Sample Info: K2200-20A,,62636,,
Volume Injected (uL): 2.0 Operator: SRC: LIMS
Column phase: RXI-5SILHS Column diameter: 0.25



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Date : 03-NOV-2011 22:53

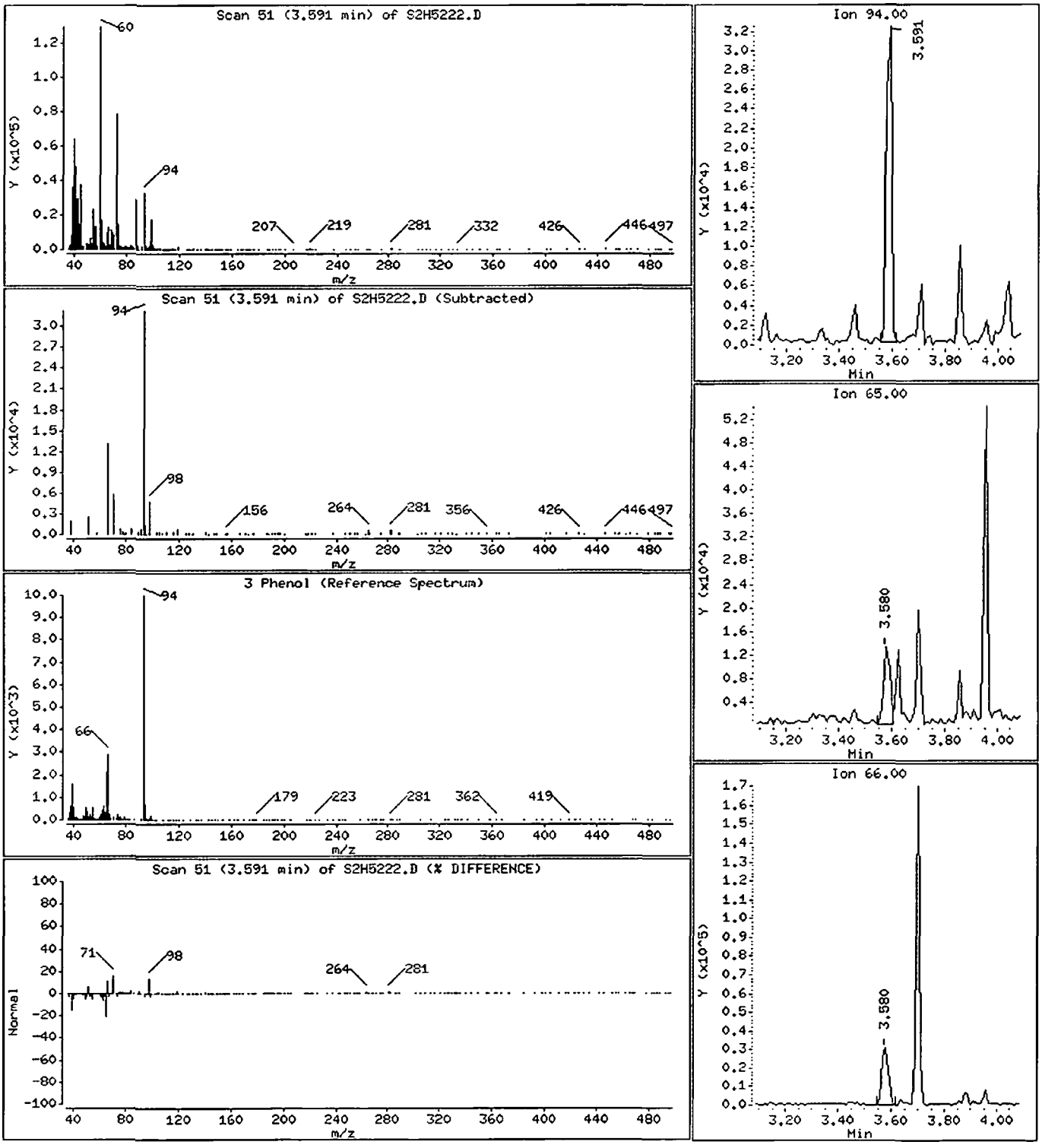
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

3 Phenol Concentration: 1.6 ug/L



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Date : 03-NOV-2011 22:53

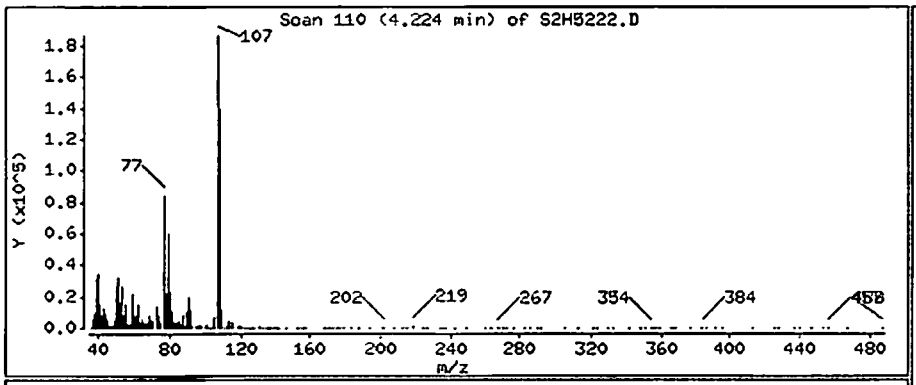
Client ID: H30X3 Instrument: S2.i

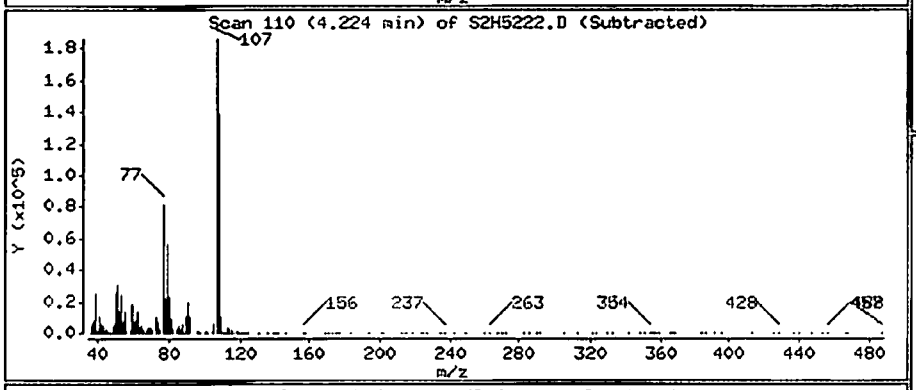
Sample Info: K2200-20A,,62636,,

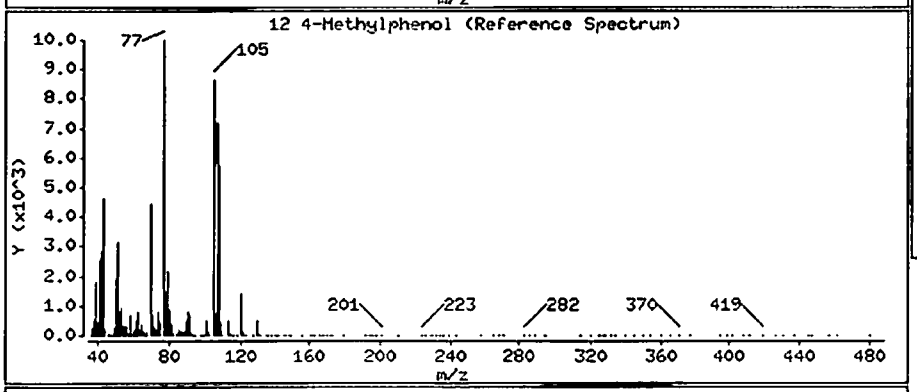
Volume Injected (uL): 2.0 Operator: SRC: LIMS

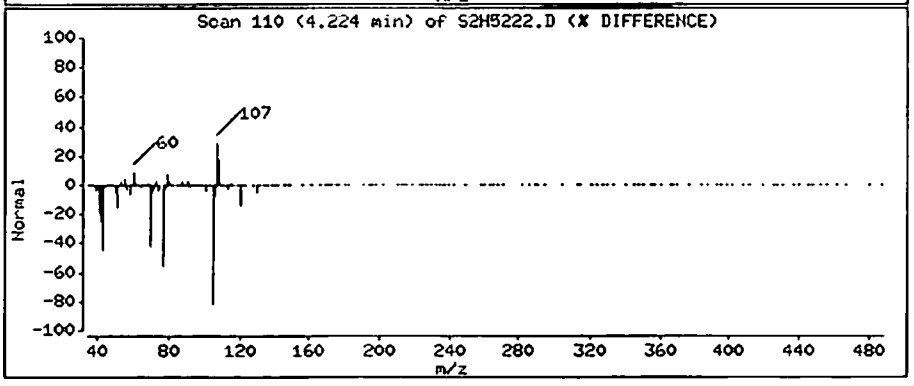
Column phase: RXI-5SILMS Column diameter: 0.25

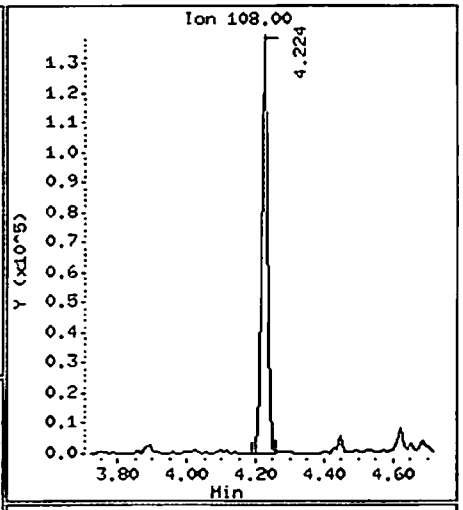
12 4-Methylphenol Concentration: 9.5 ug/L

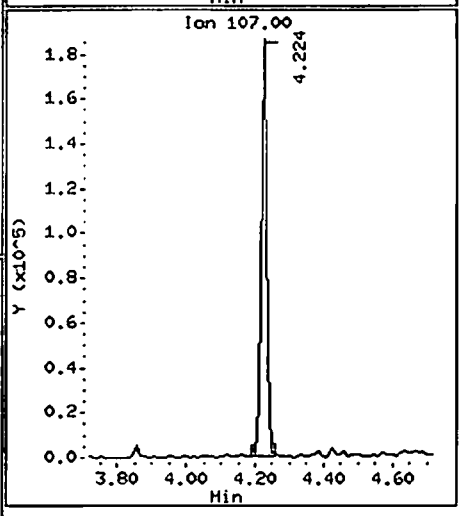












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Date : 03-NOV-2011 22:53

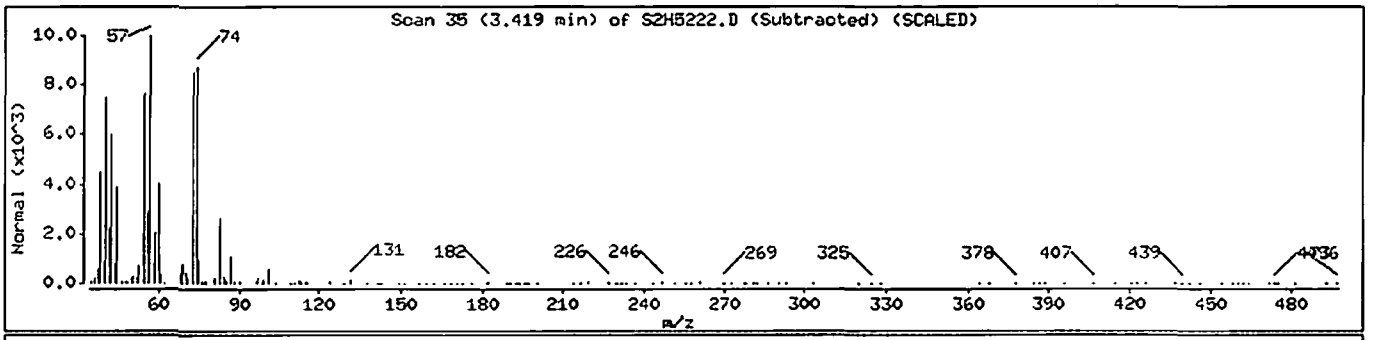
Client ID: M30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 22:53

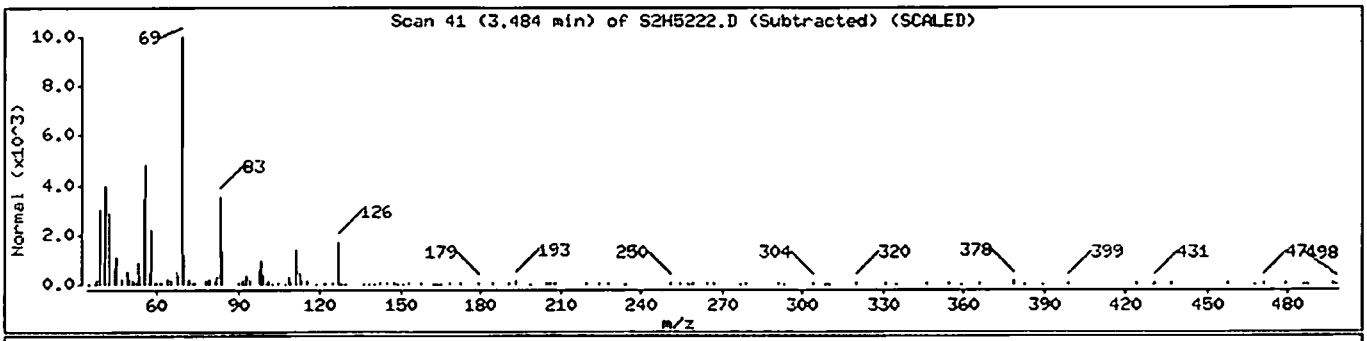
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

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



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Date : 03-NOV-2011 22:53

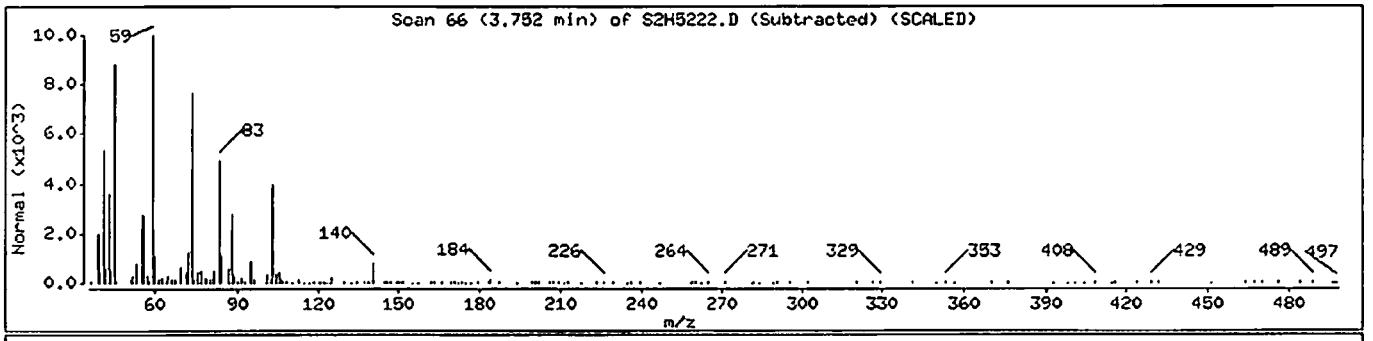
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 22:53

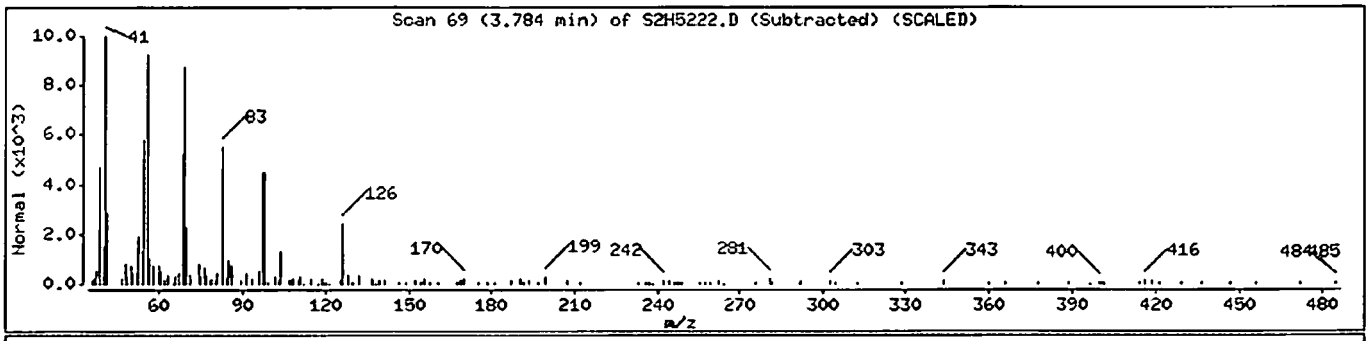
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 22:53

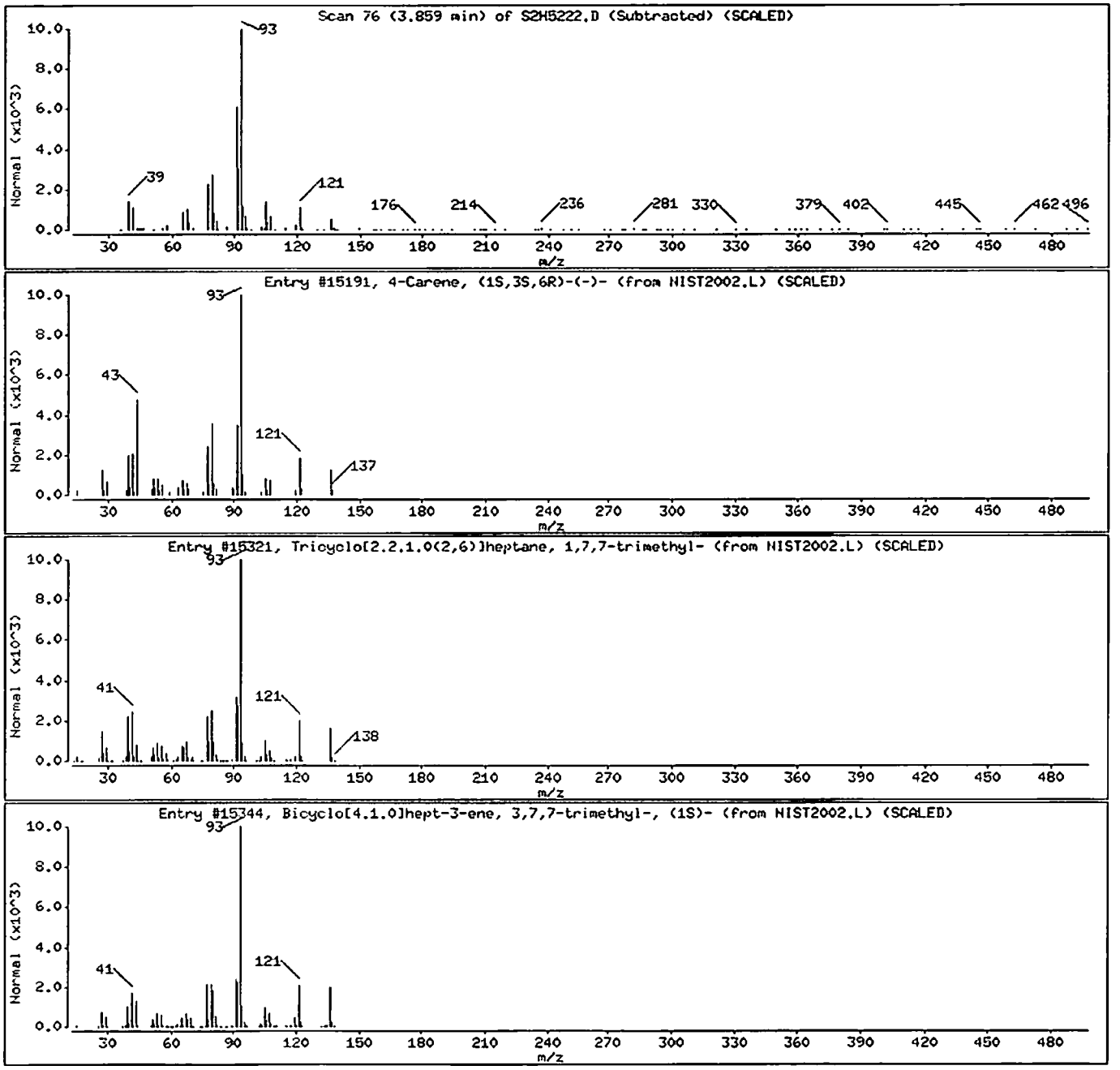
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
4-Carene, (1S,3S,6R)-(-)-	5208-50-4	NIST2002.L	15191	91	C10H16	136
Tricyclo[2.2.1.0(2,6)]heptane, 1,7,7-tri	508-32-7	NIST2002.L	15321	91	C10H16	136
Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	498-15-7	NIST2002.L	15344	91	C10H16	136



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Date : 03-NOV-2011 22:53

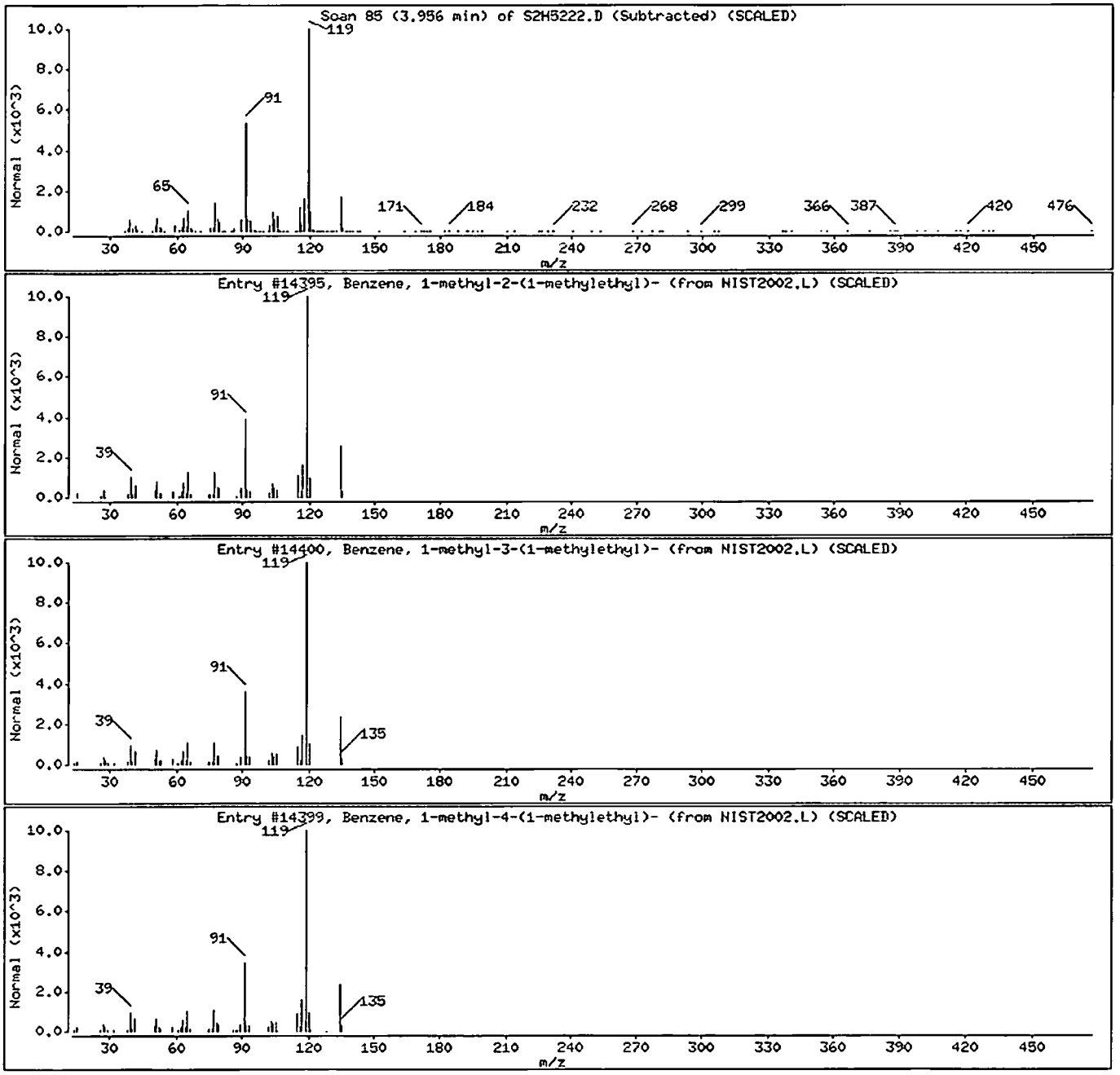
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 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-2-(1-methylethyl)-	527-84-4	NIST2002.L	14395	95	C10H14	134
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



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Date : 03-NOV-2011 22:53

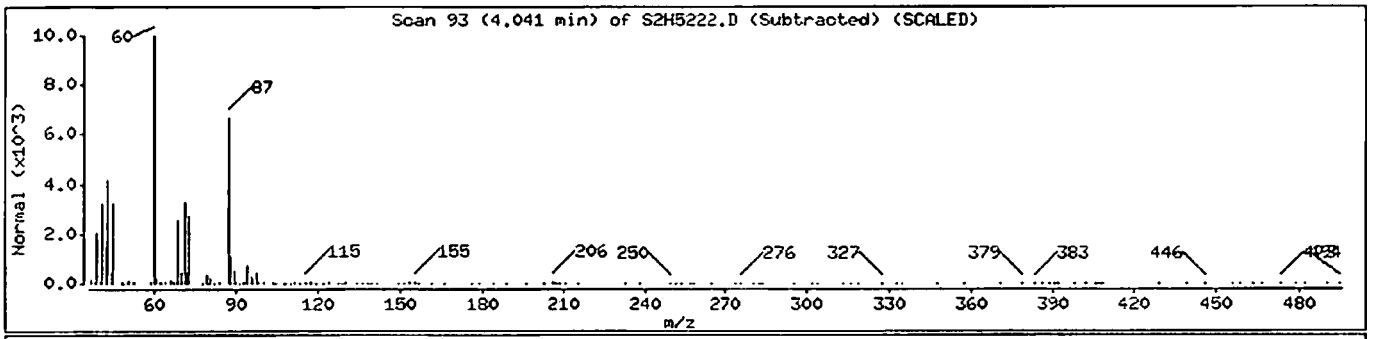
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 22:53

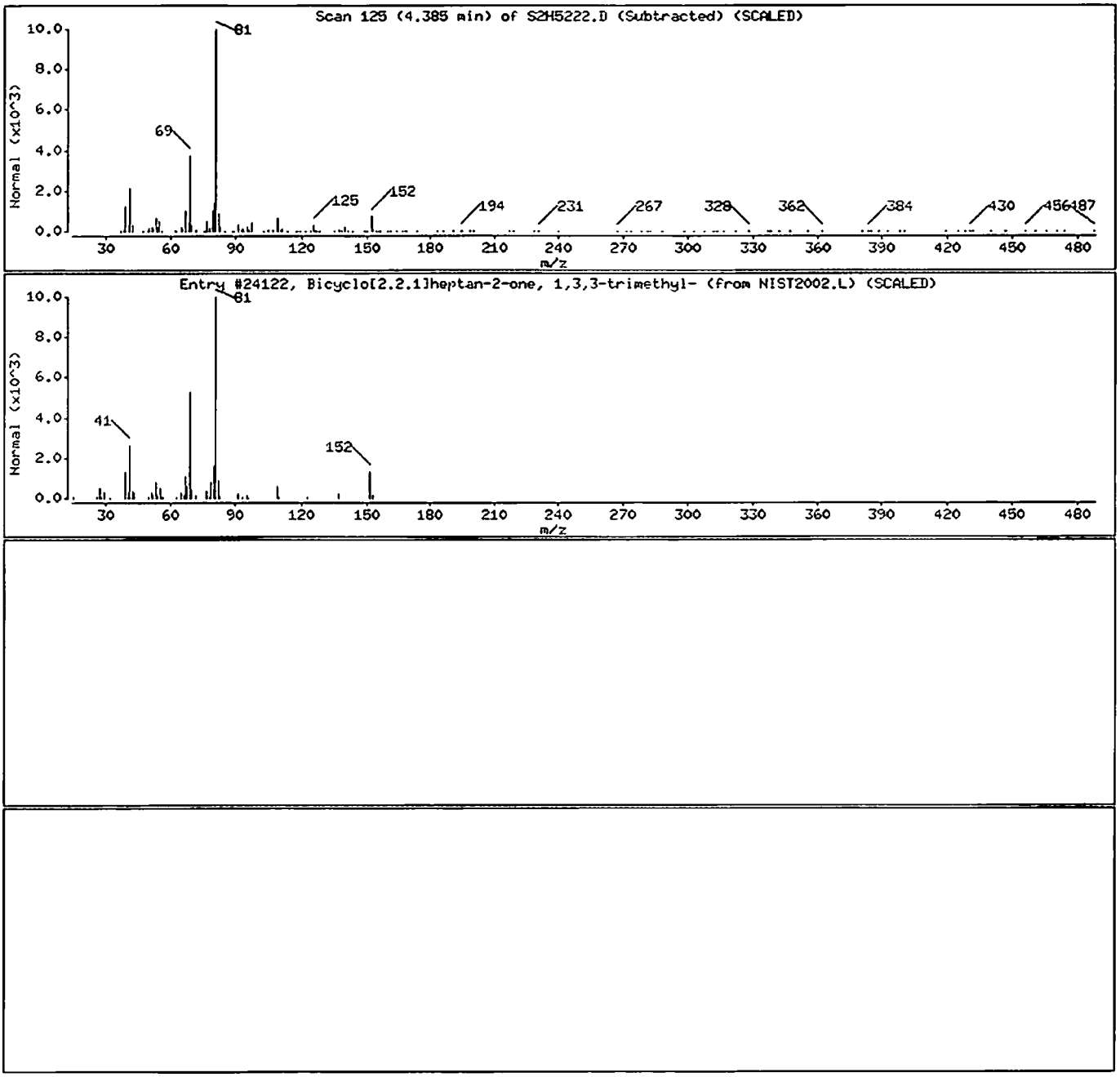
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 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	90	C10H16O	152



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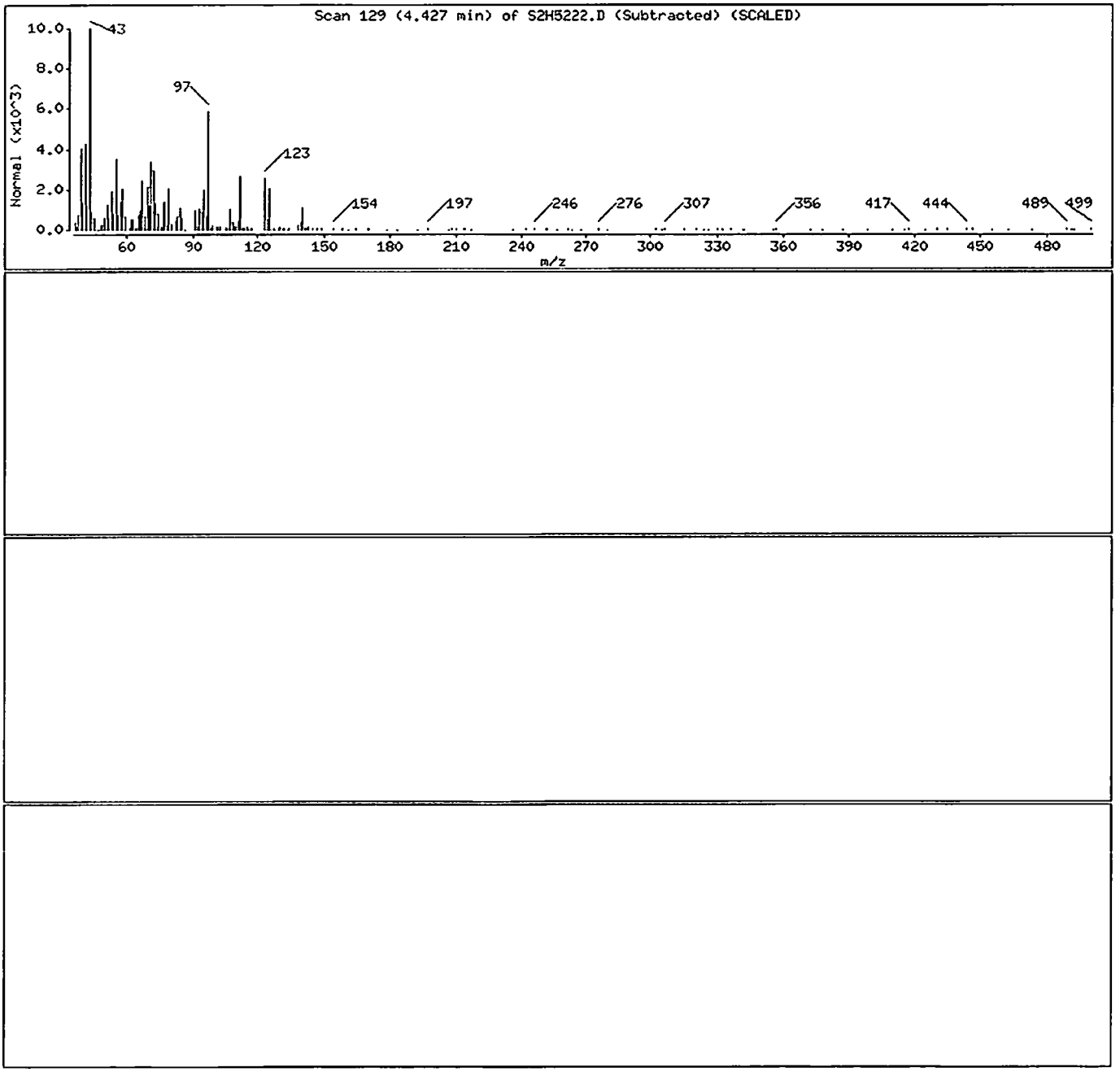
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 22:53

Client ID: H30X3 Instrument: S2.i

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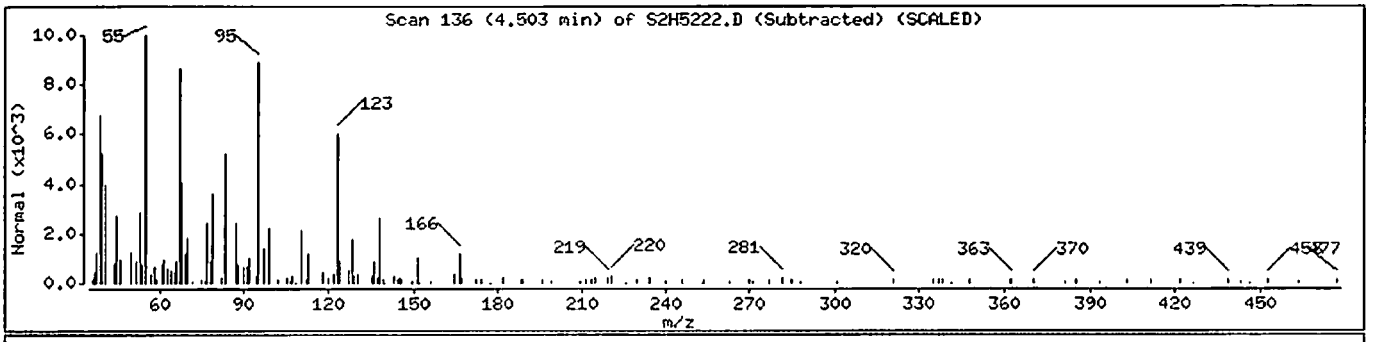
Volume Injected (uL): 2.0 Operator: SRC: LIMS

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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Date : 03-NOV-2011 22:53

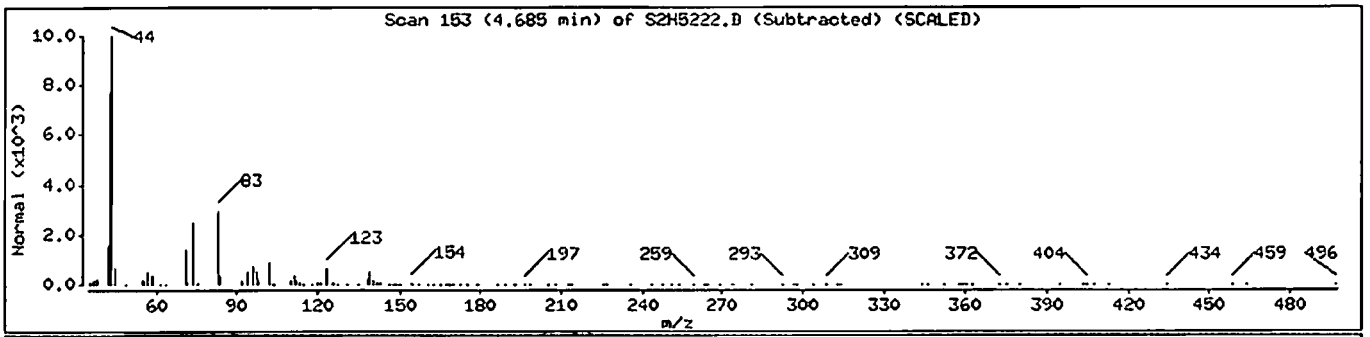
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 22:53

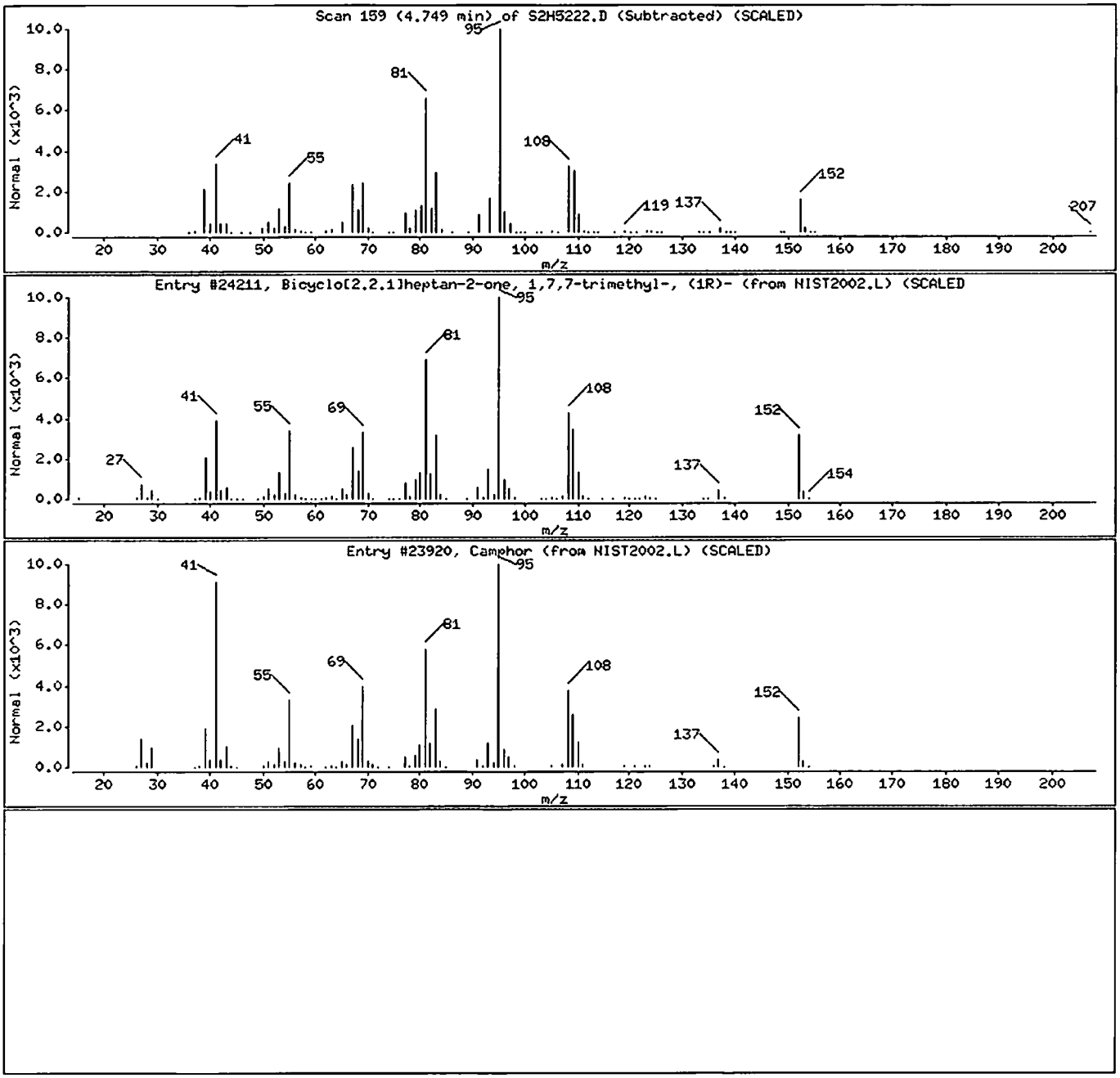
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 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	94	C10H16O	152
Camphor	76-22-2	NIST2002.L	23920	91	C10H16O	152



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Client ID: H30X3 Instrument: S2.i

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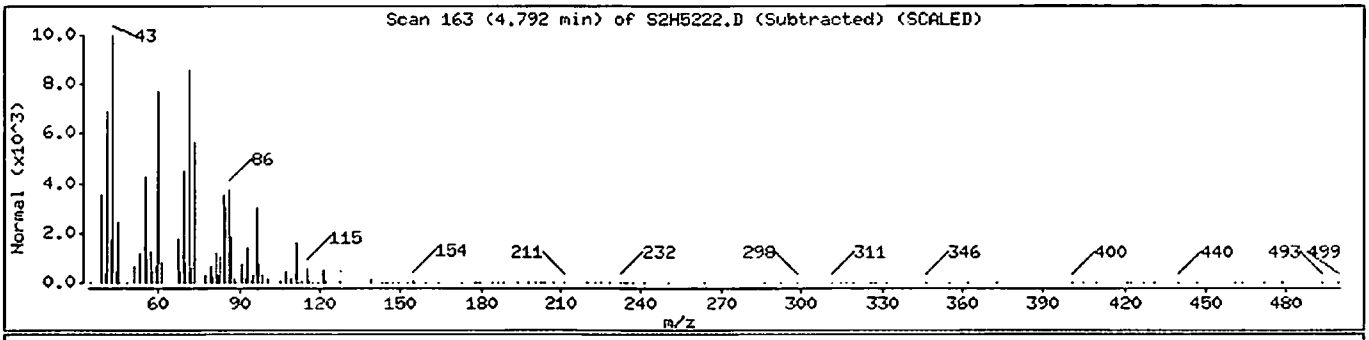
Volume Injected (uL): 2.0 Operator: SRC: LIMS

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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Date : 03-NOV-2011 22:53

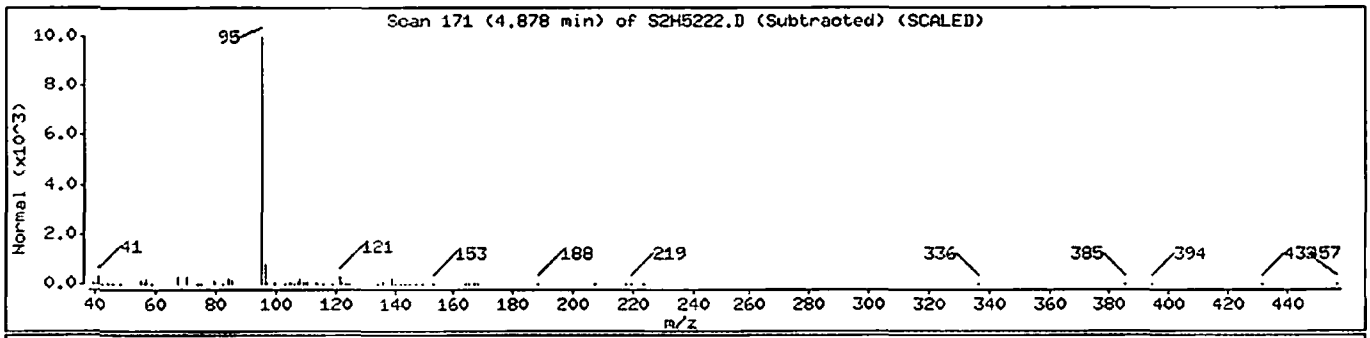
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 22:53

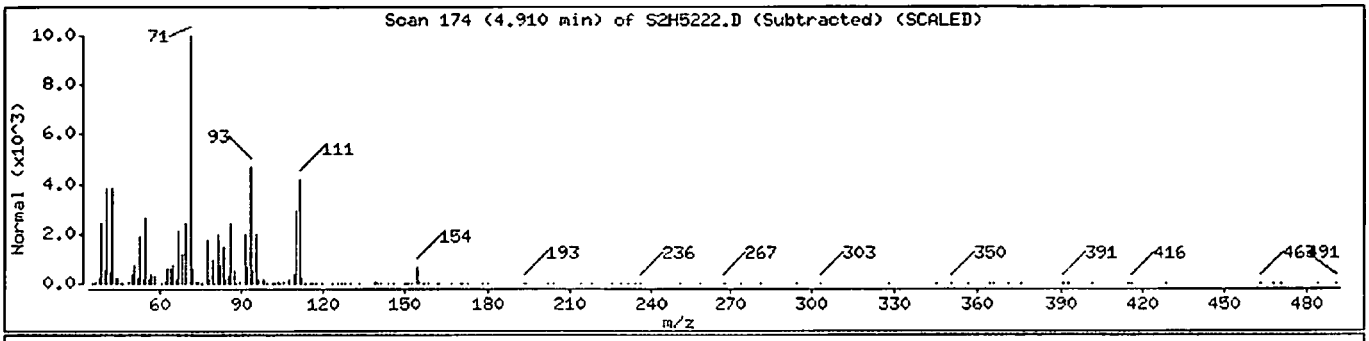
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 22:53

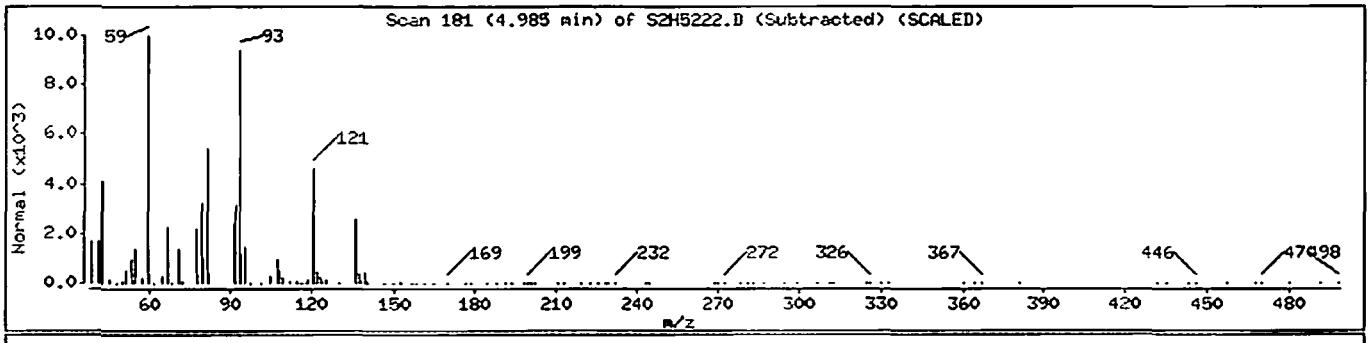
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

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

Column phase: RX1-5SILMS Column diameter: 0.25

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



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Date : 03-NOV-2011 22:53

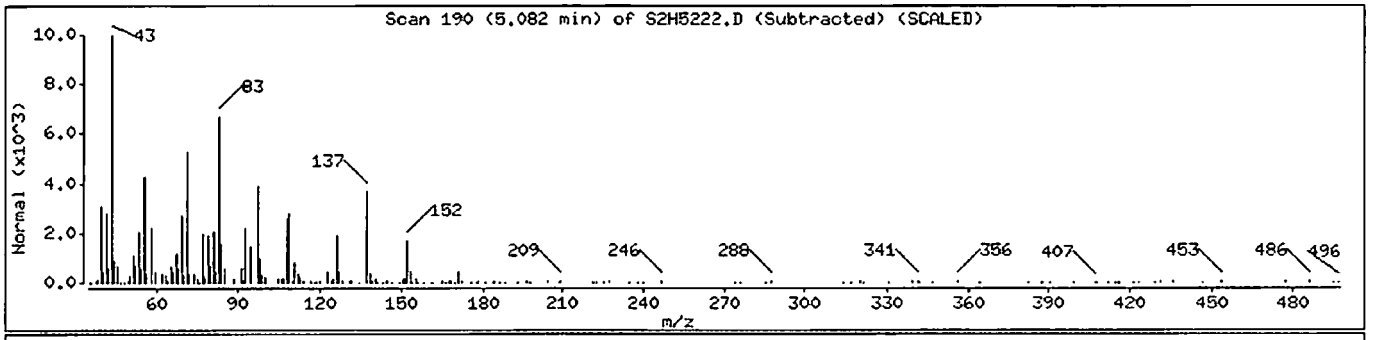
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 22:53

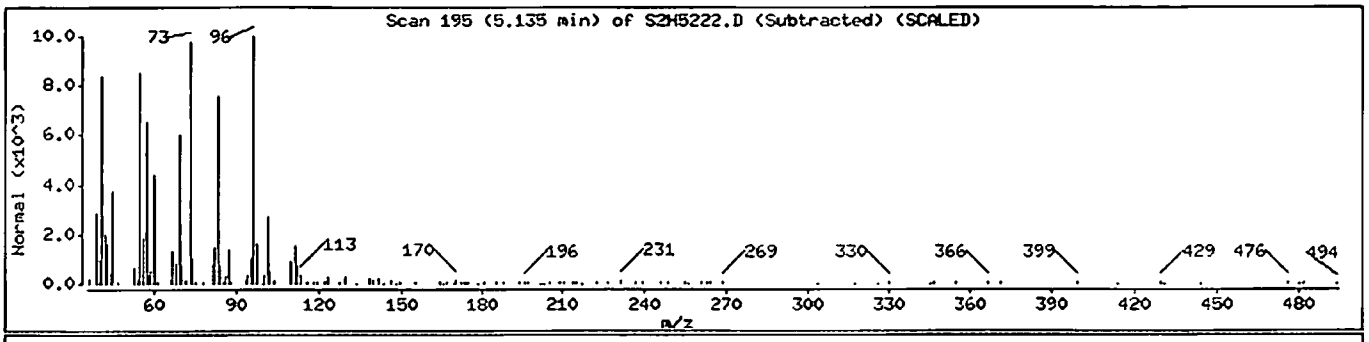
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 22:53

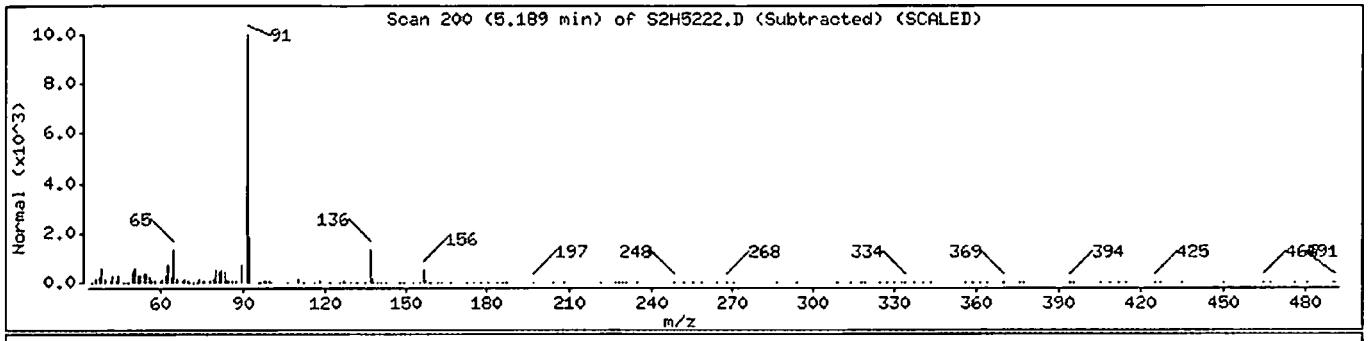
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

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



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Date : 03-NOV-2011 22:53

Client ID: H30X3 Instrument: S2.i

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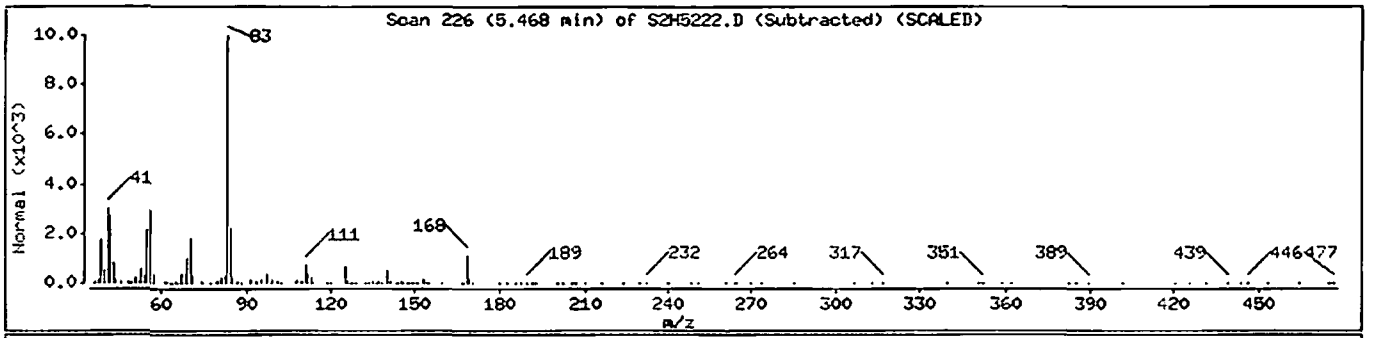
Volume Injected (uL): 2.0 Operator: SRC: LIMS

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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Date : 03-NOV-2011 22:53

Client ID: H30X3 Instrument: S2.i

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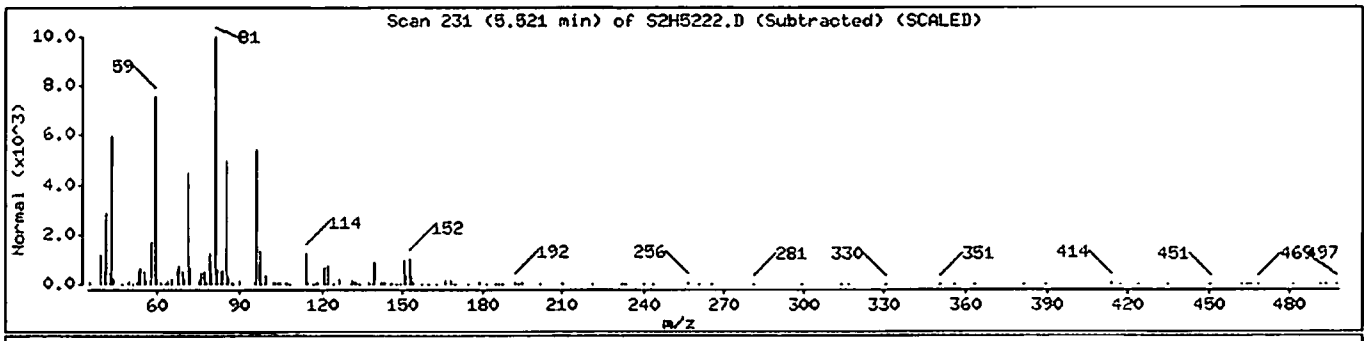
Volume Injected (uL): 2.0 Operator: SRC: LIMS

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\111103.B\S2H5222.D

Date : 03-NOV-2011 22:53

Client ID: H30X3 Instrument: S2.i

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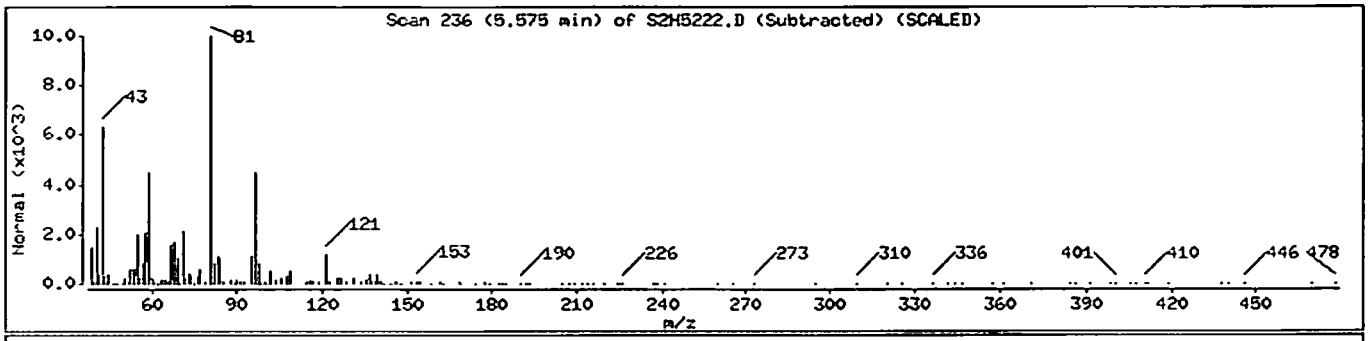
Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5222.D

Date : 03-NOV-2011 22:53

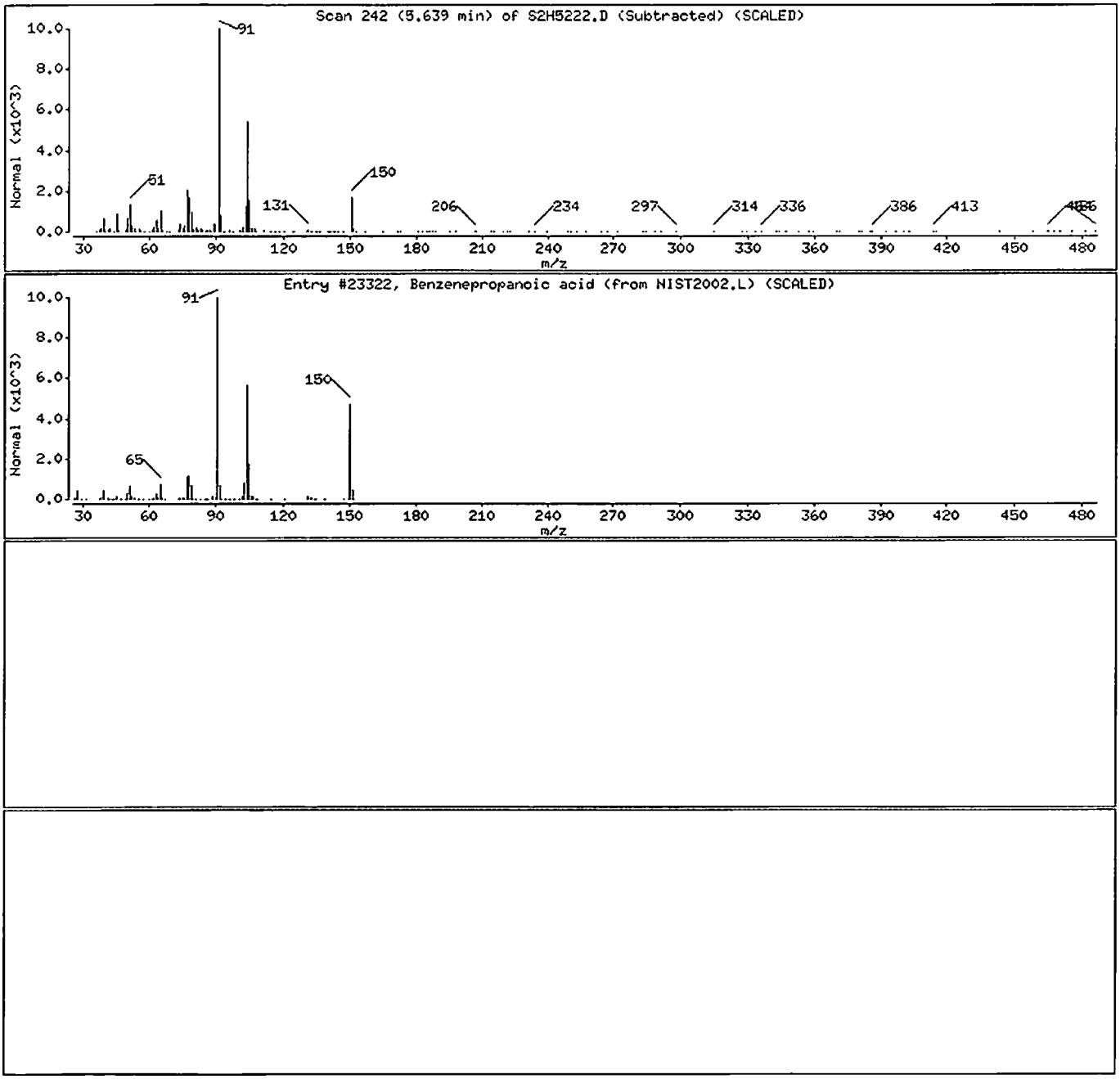
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzenepropanoic acid	501-52-0	NIST2002.L	23322	90	C9H10O2	150



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Date : 03-NOV-2011 22:53

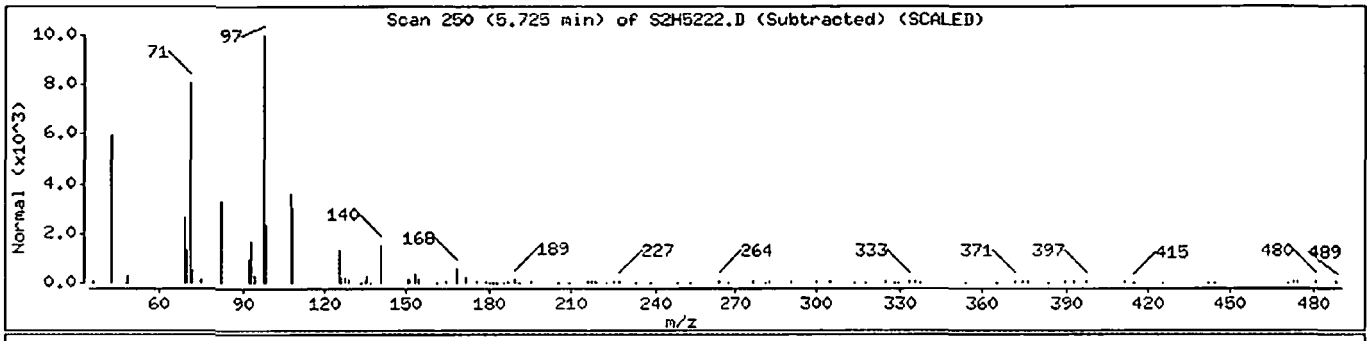
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,.62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 22:53

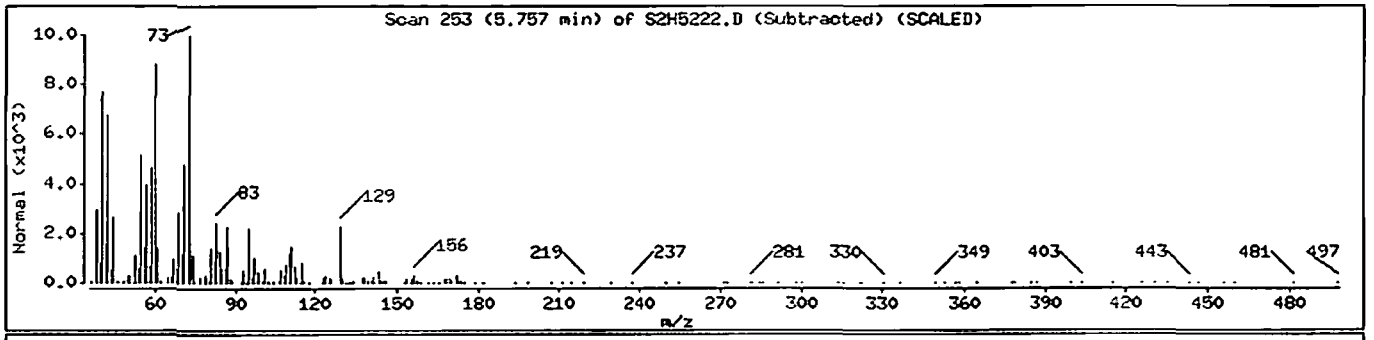
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5222.D

Date : 03-NOV-2011 22:53

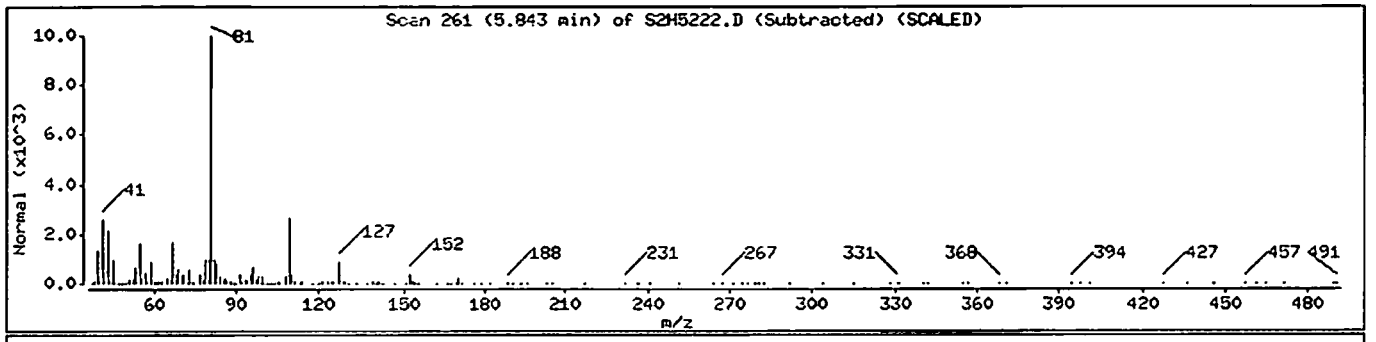
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

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\111103.B\S2H5222.D

Date : 03-NOV-2011 22:53

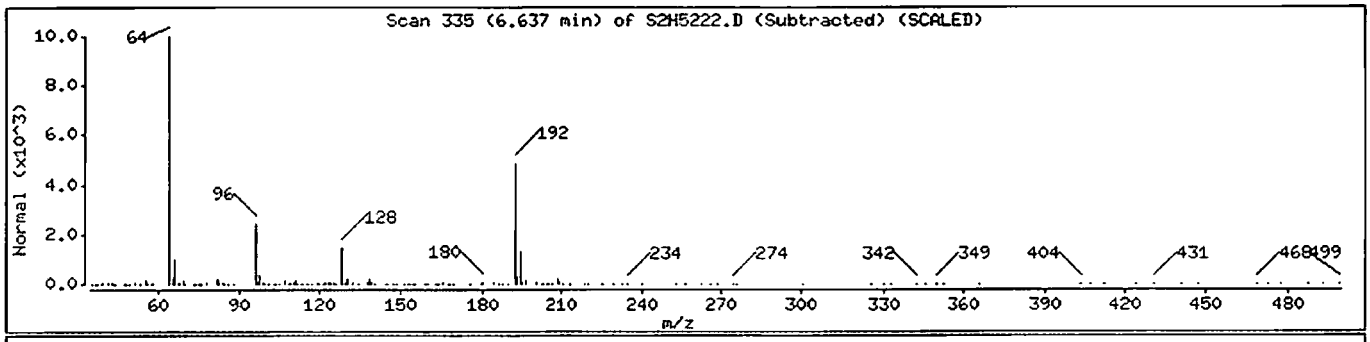
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5222.D

Date : 03-NOV-2011 22:53

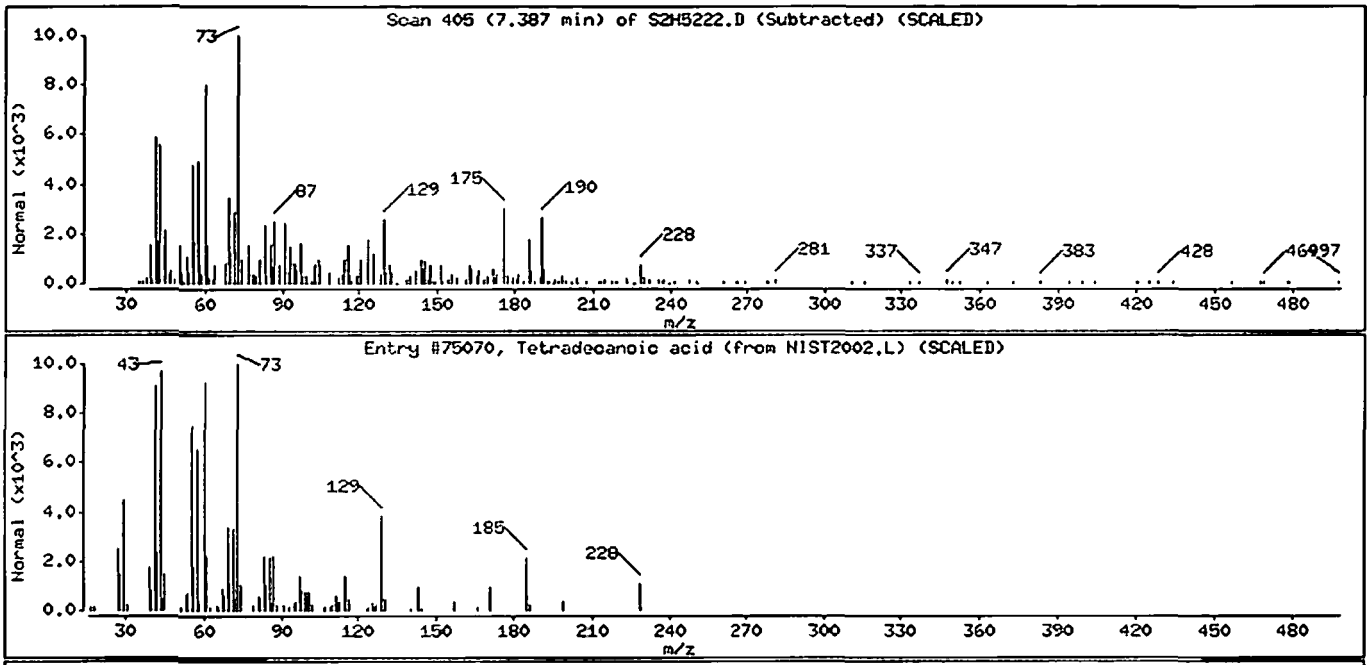
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 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	90	C14H28O2	228



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5222.D

Date : 03-NOV-2011 22:53

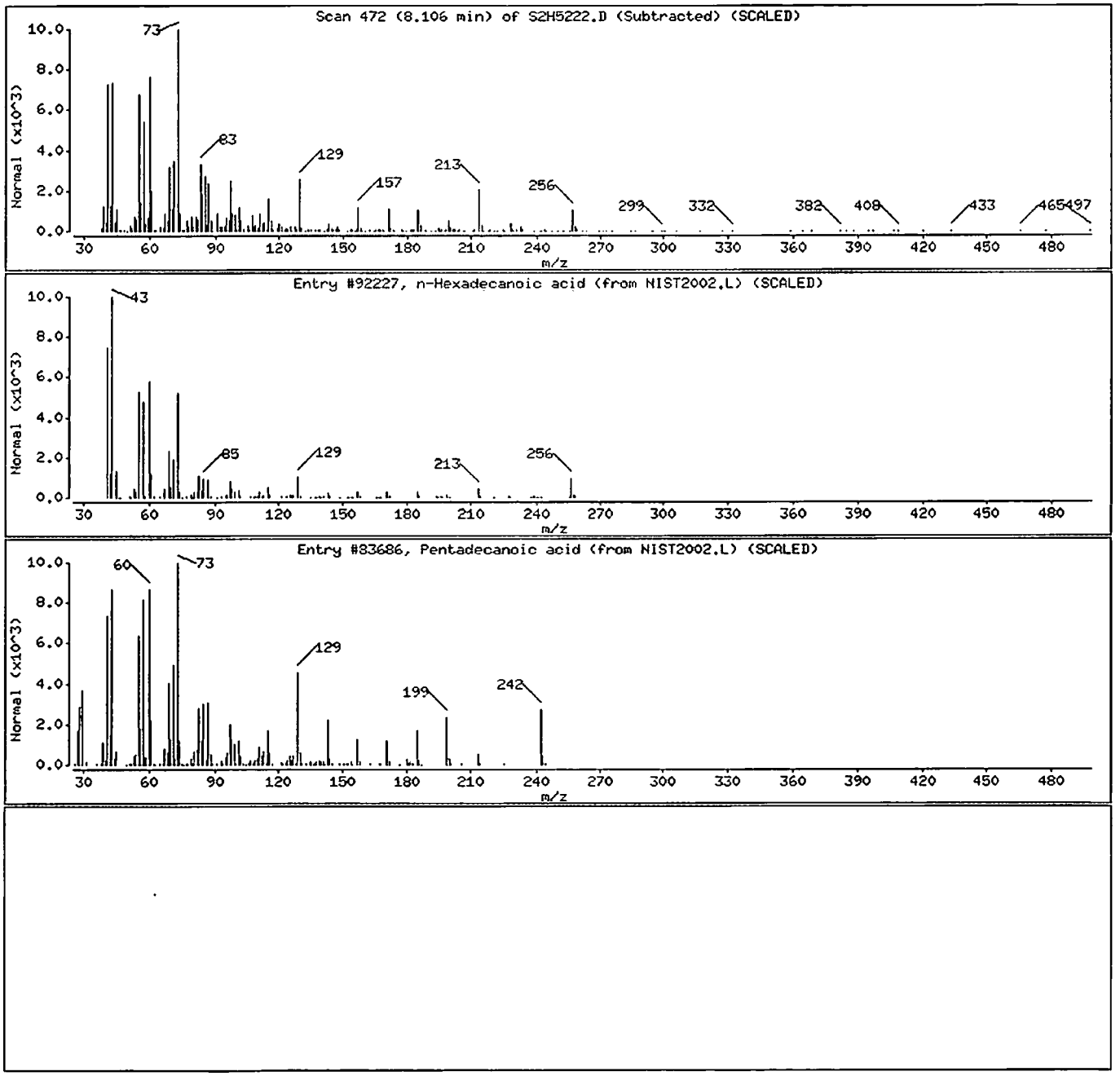
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

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	95	C16H3202	256
Pentadecanoic acid	1002-84-2	NIST2002.L	83686	90	C15H3002	242



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5222.D

Date : 03-NOV-2011 22:53

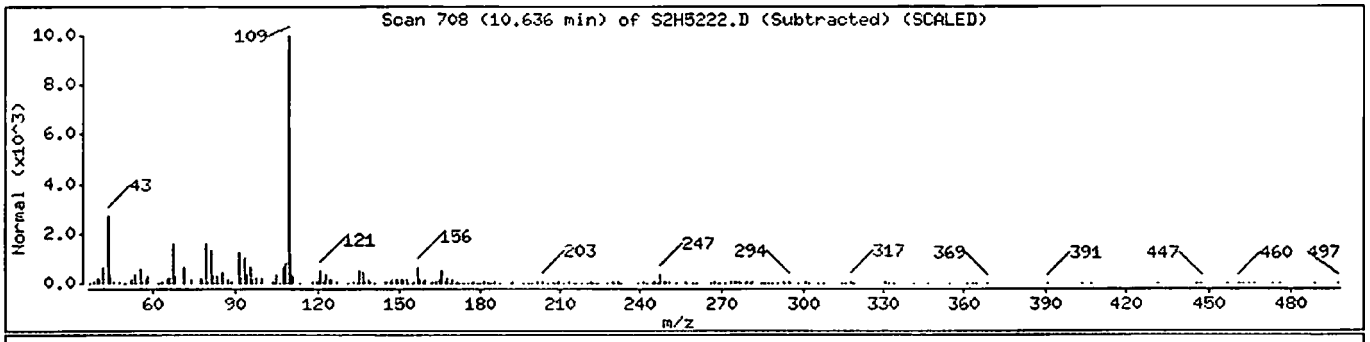
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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

CLIENT SAMPLE NO.

H30Y2

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-14B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5216.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.: H30Y2

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

Lab Code: MITKEM | Case No.: 41926 | Mod. Ref No.: | SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER | Lab Sample ID: K2200-14B

Sample wt/vol: 1000 (g/mL) ML | Lab File ID: S2H5216.D

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

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

Concentrated Extract Volume: 1000 (uL) | Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) | GPC Factor: 1.00 | Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

H30Y2

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-14B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5216.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.670	8.3	BNJ
02		Unknown-01	4.874	5.5	J
03		Unknown-02	5.185	2.4	J
04		Unknown-03	5.399	7.6	J
05		Unknown-04	5.742	7.0	J
06		Unknown-05	5.967	2.5	J
07	57-10-3	n-Hexadecanoic acid	8.101	7.9	NJ
08	57-11-4	Octadecanoic acid	8.756	2.9	NJ
09		Unknown-06	10.600	12	J
	E96679[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5216.D
Report Date: 07-Nov-2011 14:02

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5216.D
Lab Smp Id: K2200-14B Client Smp ID: H30Y2
Inj Date : 03-NOV-2011 20:43
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-14B,,62636,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 26
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)
$	2 Phenol-d5	71	3.565	3.565	(0.917)	195656	47.9195	24
$	4 bis(2-Chloroethyl)ether-d8	67	3.618	3.619	(0.931)	287641	51.1244	26
$	6 2-Chlorophenol-d4	132	3.694	3.694	(0.950)	183540	51.9641	26
*	8 1,4-Dichlorobenzene-d4	152	3.887	3.887	(1.000)	129661	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.198	4.198	(1.080)	297796	53.7980	27
$	16 Nitrobenzene-d5	128	4.348	4.348	(0.879)	99357	57.2604	29
$	19 2-Nitrophenol-d4	143	4.616	4.616	(0.933)	112637	58.8022	29
$	23 2,4-Dichlorophenol-d3	165	4.820	4.820	(0.974)	205220	58.6878	29
*	25 Naphthalene-d8	136	4.948	4.948	(1.000)	333189	40.0000	
$	27 4-Chloroaniline-d4	131	5.002	5.002	(1.011)	87936	28.3220	14(Q)
$	40 Dimethylphthalate-d6	166	6.171	6.171	(0.962)	551313	61.4909	31
$	43 Acenaphthylene-d8	160	6.289	6.289	(0.980)	591034	50.6937	25
*	46 Acenaphthene-d10	164	6.417	6.418	(1.000)	243846	40.0000	
$	49 4-Nitrophenol-d4	143	6.514	6.503	(1.015)	61585	47.6634	24(Q)
$	54 Fluorene-d10	176	6.846	6.847	(1.067)	429542	52.1561	26
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.900	6.900	(0.903)	103274	72.5021	36(Q)
*	65 Phenanthrene-d10	188	7.640	7.640	(1.000)	365030	40.0000	
$	67 Anthracene-d10	188	7.693	7.694	(1.007)	543972	52.1686	26
$	72 Pyrene-d10	212	8.830	8.820	(0.895)	313997	46.4117	23
*	77 Chrysene-d12	240	9.870	9.871	(1.000)	214761	40.0000	(Q)
$	83 Benzo(a)pyrene-d12	264	11.146	11.147	(0.985)	56167	18.3184	9.2(RH)

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5216.D
Report Date: 07-Nov-2011 14:02

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)	
+ 85 Perylene-d12	264	11.232	11.233	(1.000)	124953	40.0000		(H)

QC Flag Legend

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\111103.B\S2H5216.D
Report Date: 07-Nov-2011 14:02

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5216.D
Lab Smp Id: K2200-14B Client Smp ID: H30Y2
Inj Date : 03-NOV-2011 20:43
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-14B,,62636,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 26
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

ISTD	RT	AREA	AMOUNT
* 25 Naphthalene-d8	4.949	1213061	40.000
* 46 Acenaphthene-d10	6.418	1309691	40.000
* 65 Phenanthrene-d10	7.640	1027021	40.000
* 77 Chrysene-d12	9.871	683954	40.000
* 85 Perylene-d12	11.233	319948	40.000

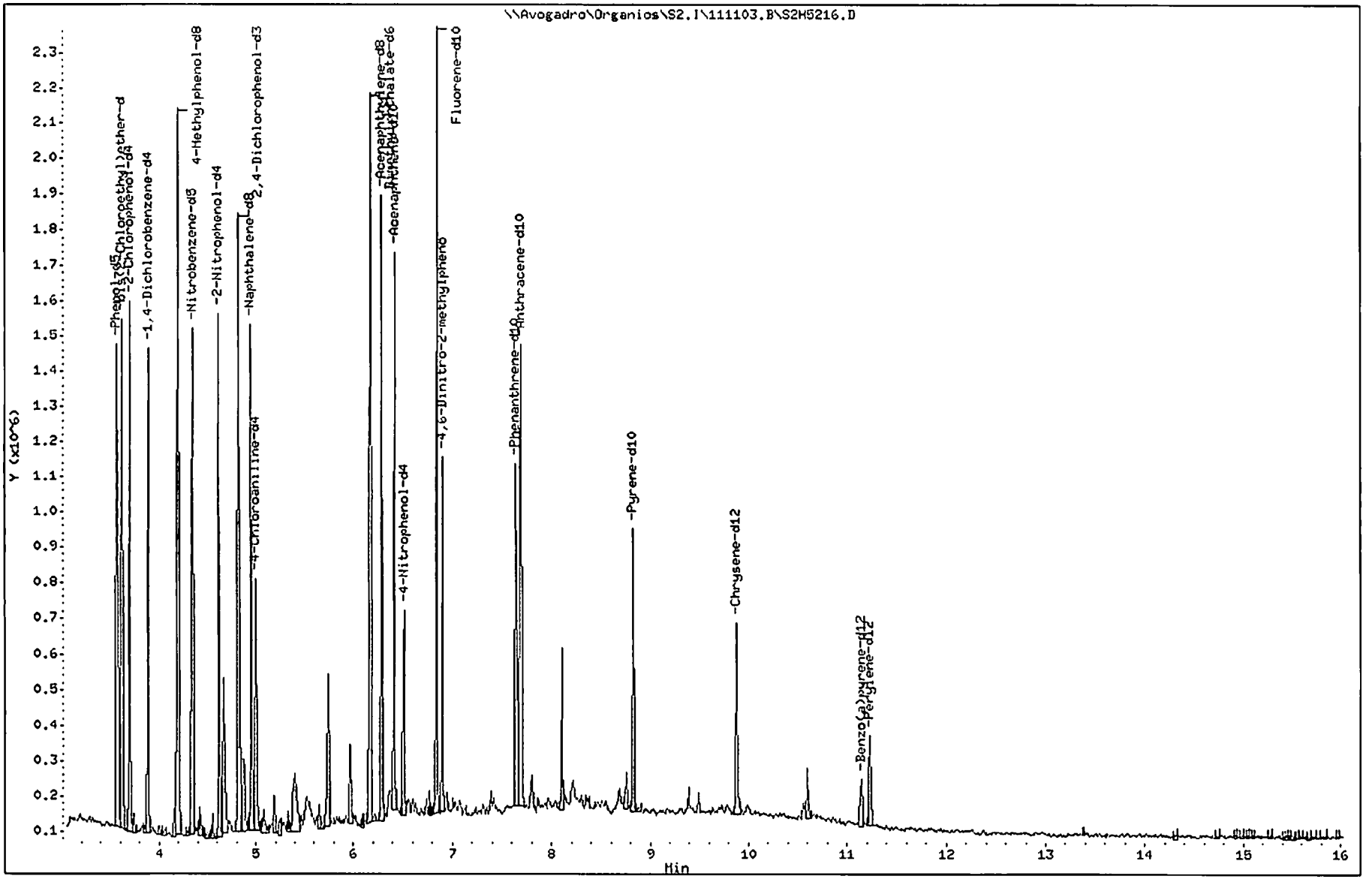
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
2(3H)-Furanone, dihydro-4-hydroxy-				CAS #: 5469-16-9			
4.670	501142	16.5248589	8.3	90	NIST2002.L	4145	25
Unknown				CAS #:			
4.874	330866	10.9101080	5.5	0		0	25

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5216.D
Report Date: 07-Nov-2011 14:02

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
5.185	147713	4.87075379	2.4	0		0	25
Unknown				CAS #:			
5.399	459623	15.1557874	7.6	0		0	25
Unknown				CAS #:			
5.742	460322	14.0589593	7.0	0		0	46
Unknown				CAS #:			
5.967	164931	5.03725683	2.5	0		0	46
n-Hexadecanoic acid				CAS #: 57-10-3			
8.101	406485	15.8316147	7.9	95	NIST2002.L	92227	65
Octadecanoic acid				CAS #: 57-11-4			
8.756	100009	5.84884457	2.9	87	NIST2002.L	108341	77
Unknown				CAS #:			
10.600	185895	23.2406267	12	0		0	85

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5216.D
Date : 03-NOV-2011 20:43
Client ID: H30Y2
Sample Info: K2200-14B,,62636,,
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\111103.B\S2H5216.D

Date : 03-NOV-2011 20:43

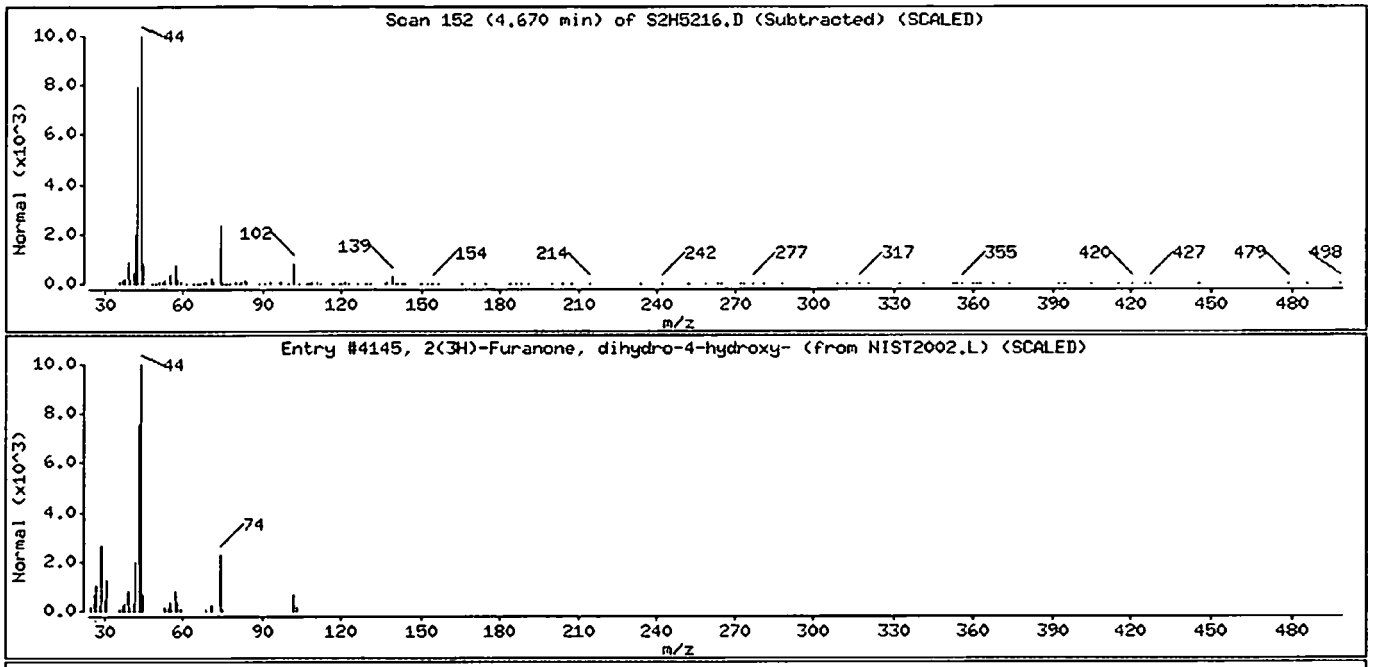
Client ID: H30Y2 Instrument: S2.i

Sample Info: K2200-14B,,62636,,

Volume Injected (uL): 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\111103.B\S2H5216.D

Date : 03-NOV-2011 20:43

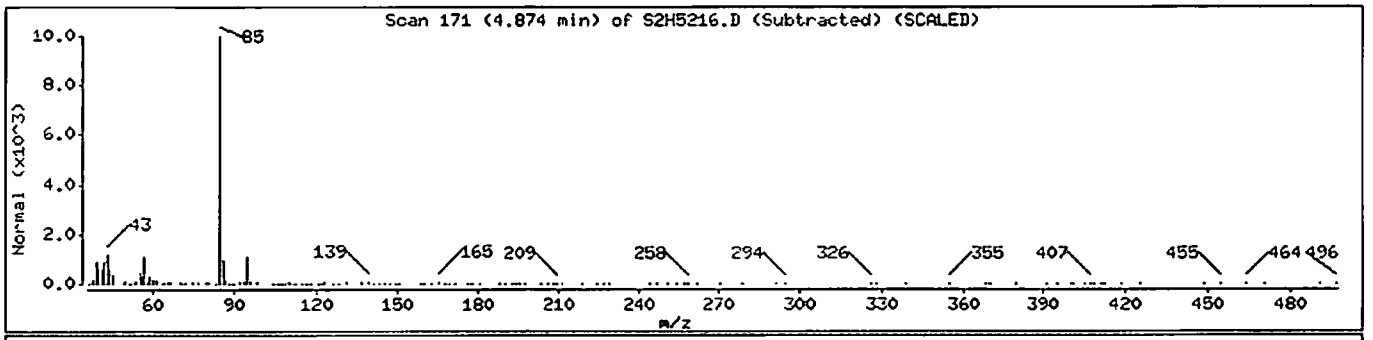
Client ID: H30Y2 Instrument: S2.i

Sample Info: K2200-14B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 20:43

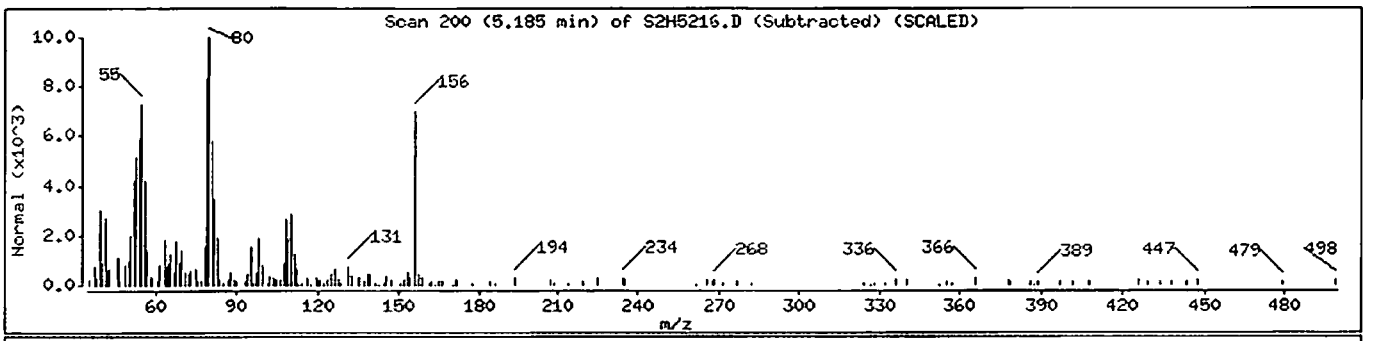
Client ID: H30Y2 Instrument: S2.i

Sample Info: K2200-14B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 20:43

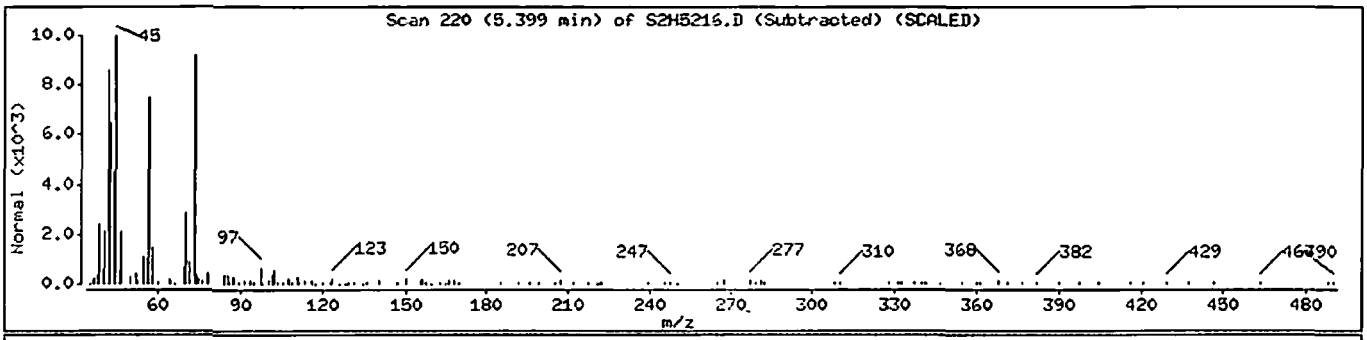
Client ID: H30Y2 Instrument: S2.i

Sample Info: K2200-14B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5216.D

Date : 03-NOV-2011 20:43

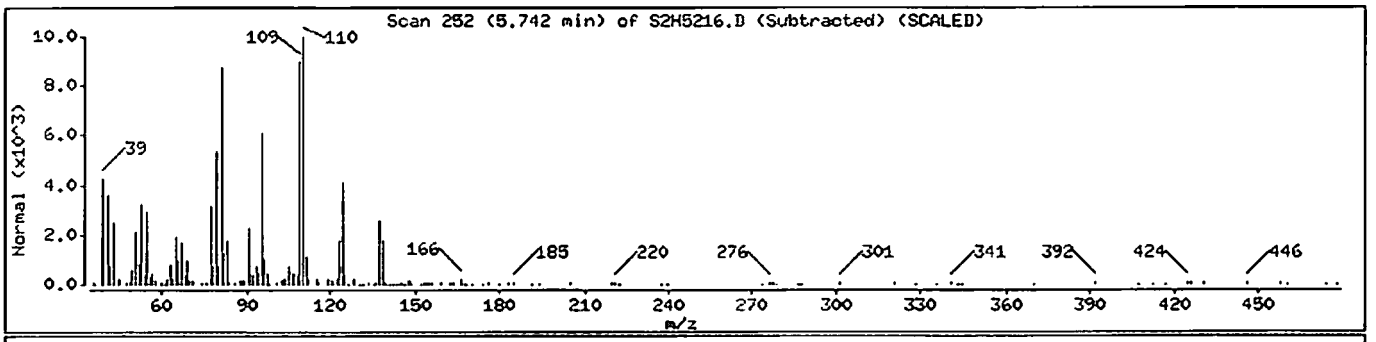
Client ID: H30Y2 Instrument: S2.i

Sample Info: K2200-14B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5216.D

Date : 03-NOV-2011 20:43

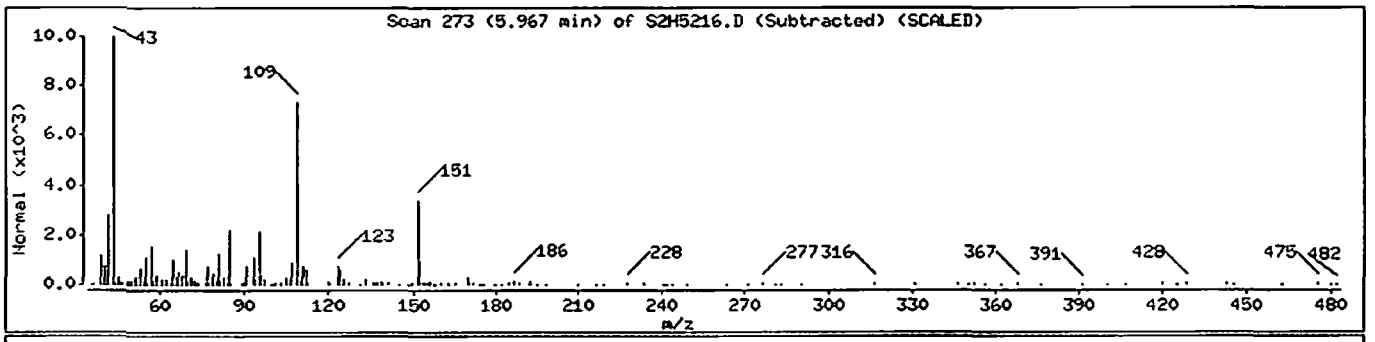
Client ID: H30Y2 Instrument: S2.i

Sample Info: K2200-14B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 20:43

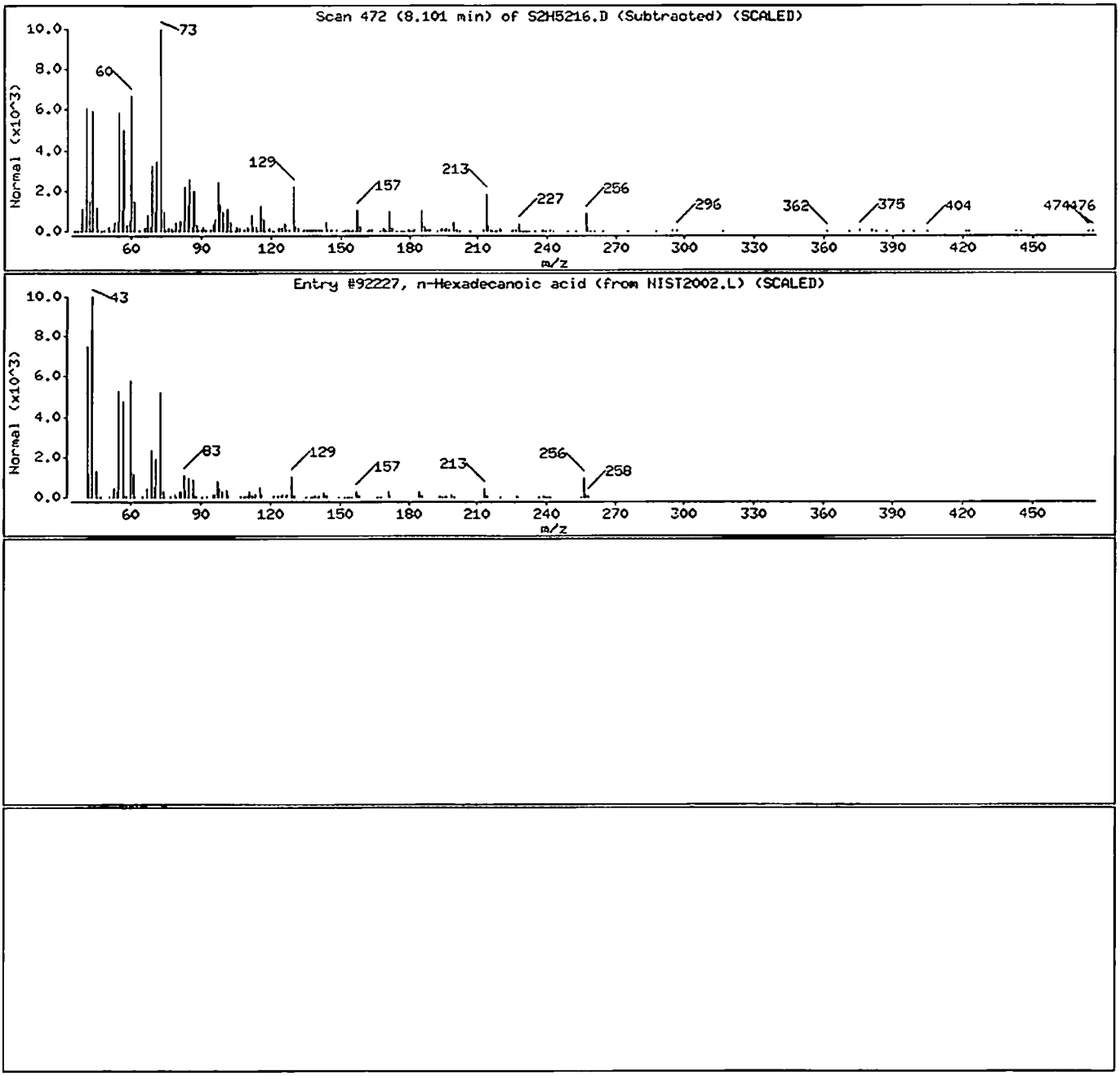
Client ID: H30Y2 Instrument: S2.i

Sample Info: K2200-14B,,62636,,

Volume Injected (uL): 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



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Date : 03-NOV-2011 20:43

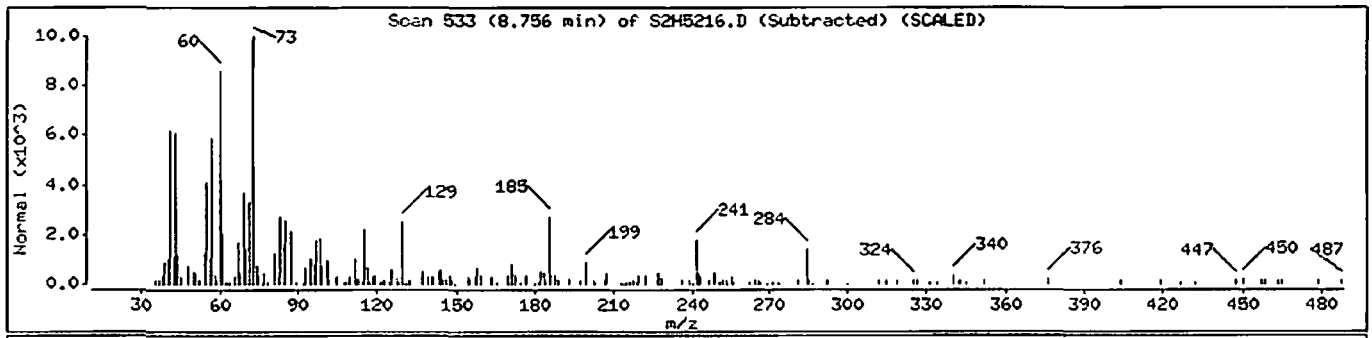
Client ID: H30Y2 Instrument: S2.i

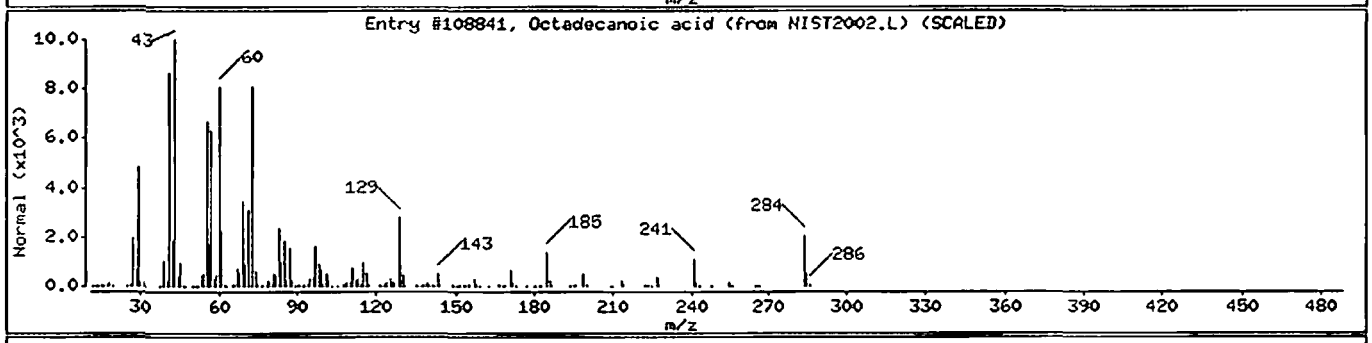
Sample Info: K2200-14B,,62636,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Octadecanoic acid	57-11-4	NIST2002.L	108841	87	C18H3602	284





Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5216.D

Date : 03-NOV-2011 20:43

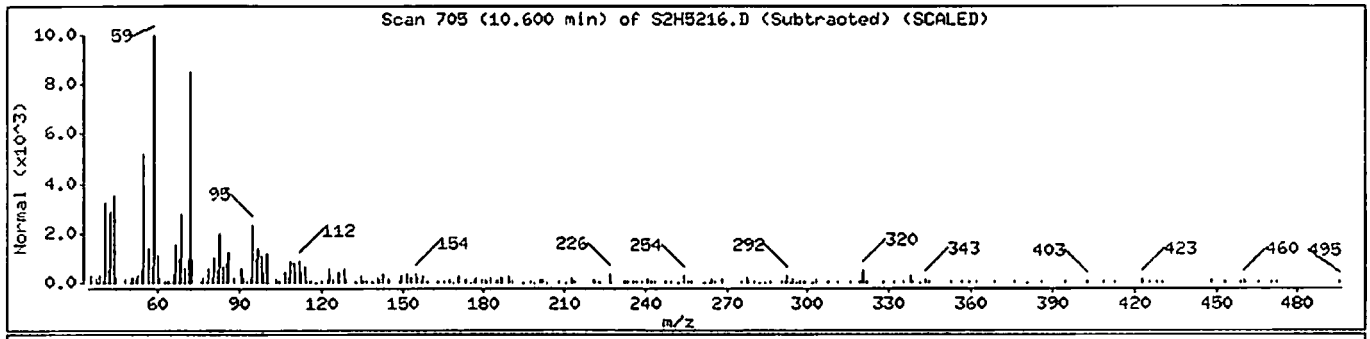
Client ID: H30Y2 Instrument: S2.i

Sample Info: K2200-14B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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

CLIENT SAMPLE NO.

H30Y3

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-15B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5217.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2´-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1´-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

H30Y3

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-15B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5217.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

H30Y3

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-15B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5217.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	3.738	2.0	J
02		Unknown-02	4.156	2.6	J
03		Unknown-03	4.414	2.5	J
04	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.671	8.5	BNJ
05		Unknown-04	4.875	6.5	J
06		Unknown-05	5.079	2.0	J
07		Unknown-06	5.186	3.5	J
08		Unknown-07	5.250	2.7	J
09		Unknown-08	5.400	6.7	J
10		Unknown-09	5.744	9.1	J
11		Unknown-10	5.969	3.4	J
12	57-10-3	n-Hexadecanoic acid	8.103	11	NJ
13		Unknown-11	9.486	4.9	J
	E96679[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5217.D
Report Date: 07-Nov-2011 14:02

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5217.D
Lab Smp Id: K2200-15B Client Smp ID: H30Y3
Inj Date : 03-NOV-2011 21:05
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-15B,,62636,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 27
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)
$	2	Phenol-d5	71	3.566	3.565	(0.917)	228788	53.4955	27
$	4	bis(2-Chloroethyl)ether-d8	67	3.620	3.619	(0.931)	339140	57.5469	29
$	6	2-Chlorophenol-d4	132	3.695	3.694	(0.950)	217088	58.6777	29
*	8	1,4-Dichlorobenzene-d4	152	3.888	3.887	(1.000)	135814	40.0000	(Q)
$	11	4-Methylphenol-d8	113	4.199	4.198	(1.080)	331899	57.2424	29
$	16	Nitrobenzene-d5	128	4.349	4.348	(0.879)	110768	55.6311	28
$	19	2-Nitrophenol-d4	143	4.617	4.616	(0.933)	142935	65.0278	33
$	23	2,4-Dichlorophenol-d3	165	4.821	4.820	(0.974)	249016	62.0588	31
*	25	Naphthalene-d8	136	4.949	4.948	(1.000)	382334	40.0000	
$	27	4-Chloroaniline-d4	131	5.003	5.002	(1.011)	89749	25.1904	13(Q)
$	40	Dimethylphthalate-d6	166	6.172	6.171	(0.962)	599722	61.3181	31
$	43	Acenaphthylene-d8	160	6.290	6.289	(0.980)	648328	50.9755	25
*	46	Acenaphthene-d10	164	6.419	6.418	(1.000)	266005	40.0000	
$	49	4-Nitrophenol-d4	143	6.515	6.503	(1.015)	65435	46.4243	23
$	54	Fluorene-d10	176	6.848	6.847	(1.067)	459617	51.1589	26
$	58	4,6-Dinitro-2-methylphenol-d2	200	6.901	6.900	(0.903)	116212	73.7628	37(Q)
*	65	Phenanthrene-d10	188	7.641	7.640	(1.000)	403740	40.0000	
$	67	Anthracene-d10	188	7.695	7.694	(1.007)	524847	45.5085	23
$	72	Pyrene-d10	212	8.821	8.820	(0.894)	248321	38.0726	19(R)
*	77	Chrysene-d12	240	9.872	9.871	(1.000)	207042	40.0000	(Q)
$	83	Benzo(a)pyrene-d12	264	11.137	11.147	(0.991)	44304	15.6557	7.8(RH)

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5217.D
Report Date: 07-Nov-2011 14:02

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)	
* 85 Perylene-d12	264	11.233	11.233	(1.000)	115325	40.0000		(Q)

QC Flag Legend

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\111103.B\S2H5217.D
Report Date: 07-Nov-2011 14:02

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5217.D
Lab Smp Id: K2200-15B Client Smp ID: H30Y3
Inj Date : 03-NOV-2011 21:05
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-15B,,62636,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 27
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

ISTD	RT	AREA	AMOUNT
* 8 1,4-Dichlorobenzene-d4	3.888	1226433	40.000
* 25 Naphthalene-d8	4.950	1388956	40.000
* 46 Acenaphthene-d10	6.419	1406184	40.000
* 65 Phenanthrene-d10	7.642	1208365	40.000
* 77 Chrysene-d12	9.872	622743	40.000

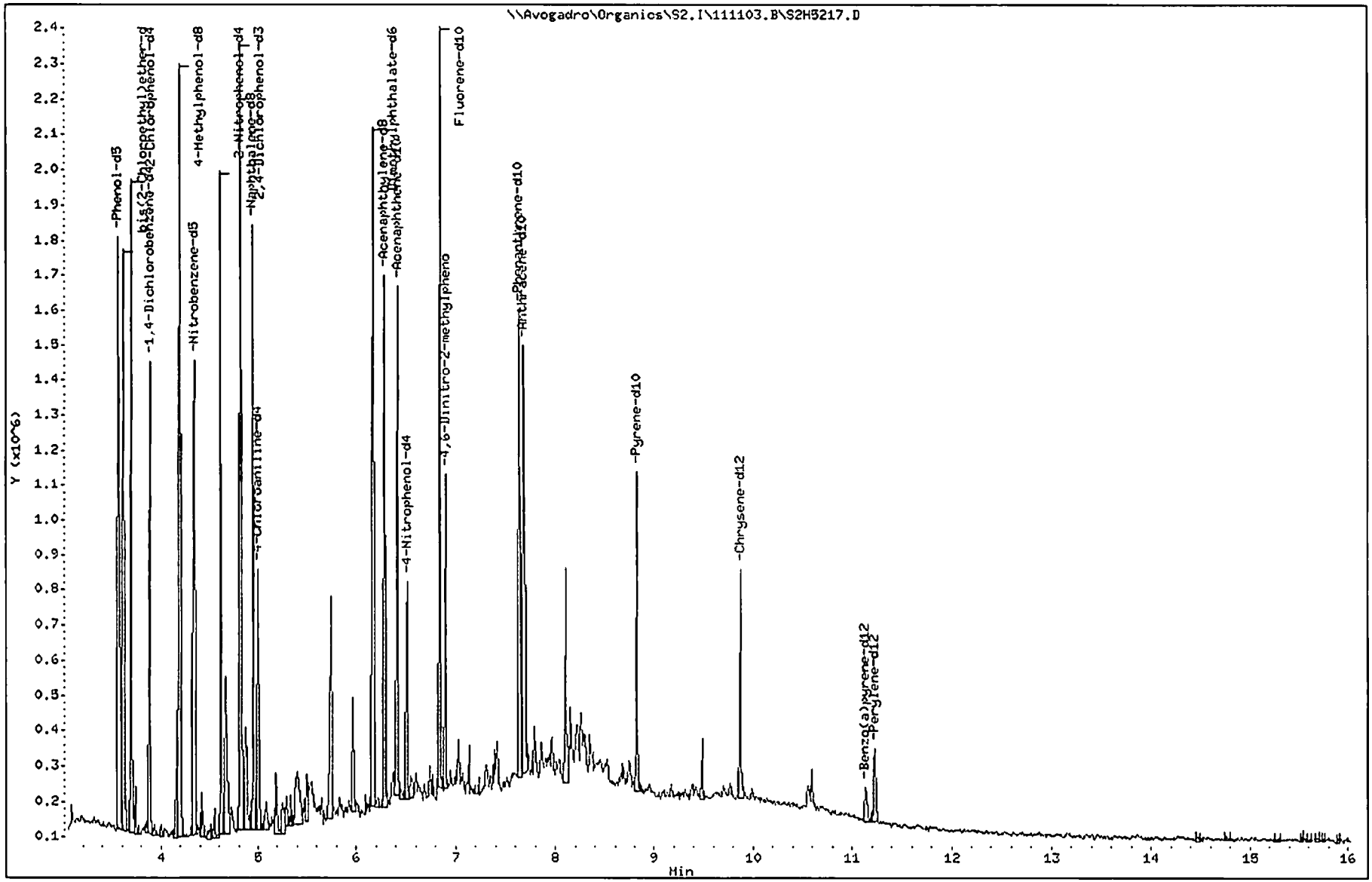
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
3.738	123818	4.03830816	2.0	0		0	8
Unknown				CAS #:			
4.156	159473	5.20118927	2.6	0		0	8

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5217.D
Report Date: 07-Nov-2011 14:02

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.414	152341	4.96850257	2.5	0		0	8
2(3H)-Furanone, dihydro-4-hydroxy-				CAS #: 5469-16-9			
4.671	587516	16.9196457	8.5	86	NIST2002.L	4145	25
Unknown				CAS #:			
4.875	450573	12.9758676	6.5	0		0	25
Unknown				CAS #:			
5.079	140970	4.05974596	2.0	0		0	25
Unknown				CAS #:			
5.186	244521	7.04185538	3.5	0		0	25
Unknown				CAS #:			
5.250	184088	5.30148695	2.7	0		0	25
Unknown				CAS #:			
5.400	464986	13.3909418	6.7	0		0	25
Unknown				CAS #:			
5.744	641716	18.2540964	9.1	0		0	46
Unknown				CAS #:			
5.969	237042	6.74283156	3.4	0		0	46
n-Hexadecanoic acid				CAS #: 57-10-3			
8.103	693789	22.9661792	11	95	NIST2002.L	92227	65
Unknown				CAS #:			
9.486	153778	9.87744092	4.9	0		0	77

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5217.D
Date : 03-NOV-2011 21:05
Client ID: H30Y3
Sample Info: K2200-15B,,62636,,
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\111103.B\S2H5217.D

Date : 03-NOV-2011 21:05

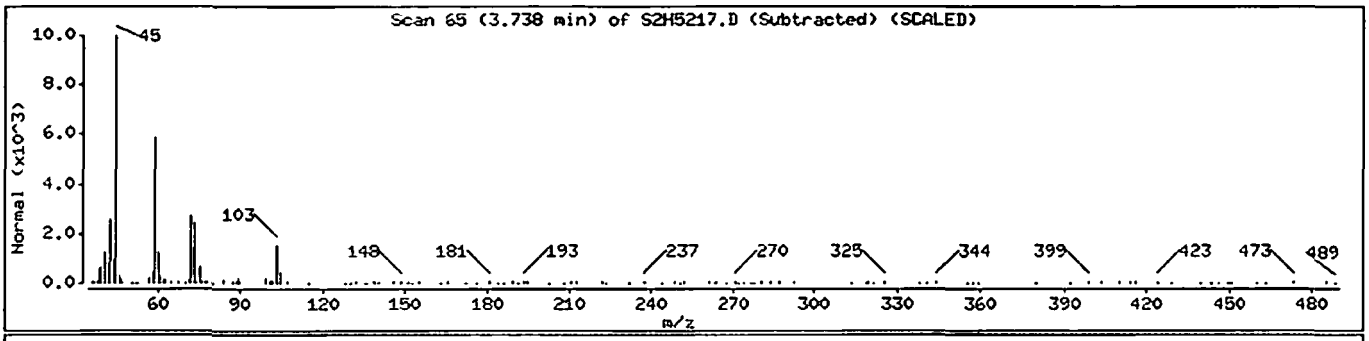
Client ID: H30Y3 Instrument: S2.i

Sample Info: K2200-15B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5217.D

Date : 03-NOV-2011 21:05

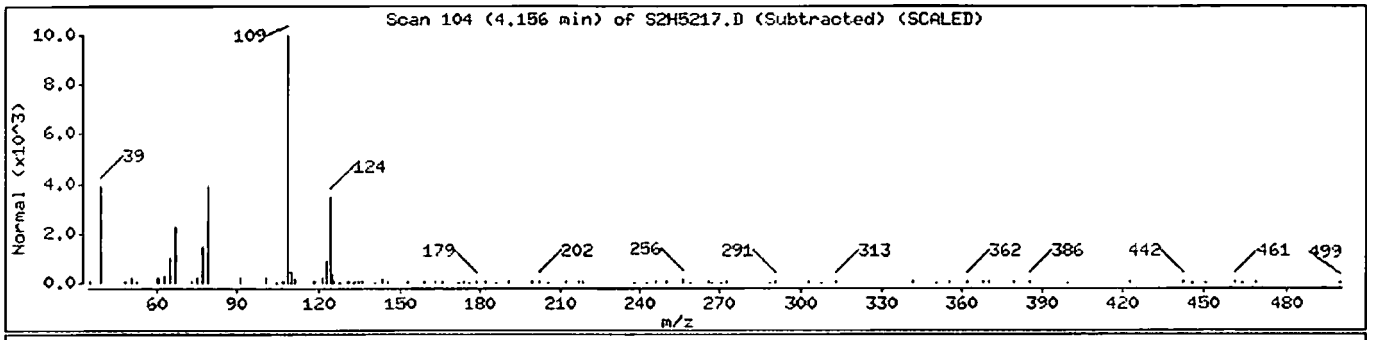
Client ID: H30Y3 Instrument: S2.i

Sample Info: K2200-15B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5217.D

Date : 03-NOV-2011 21:05

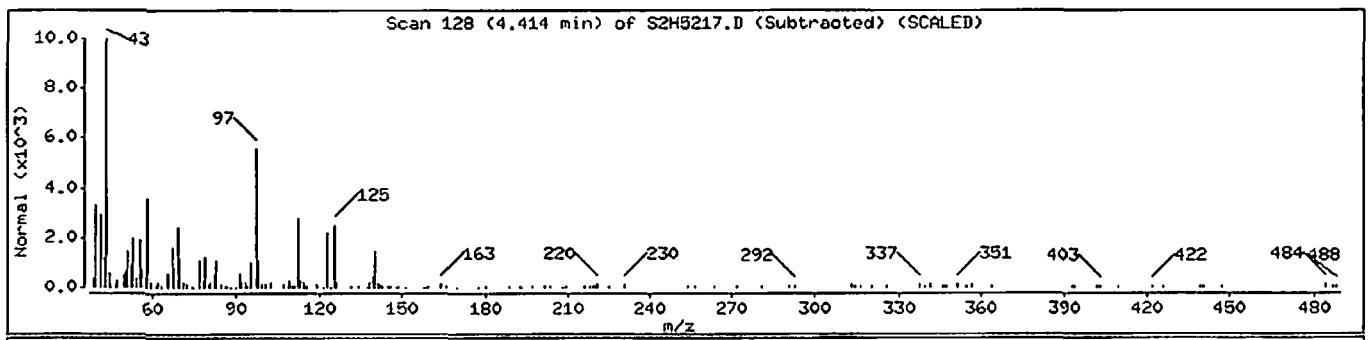
Client ID: H30Y3 Instrument: S2.i

Sample Info: K2200-15B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5217.D

Date : 03-NOV-2011 21:05

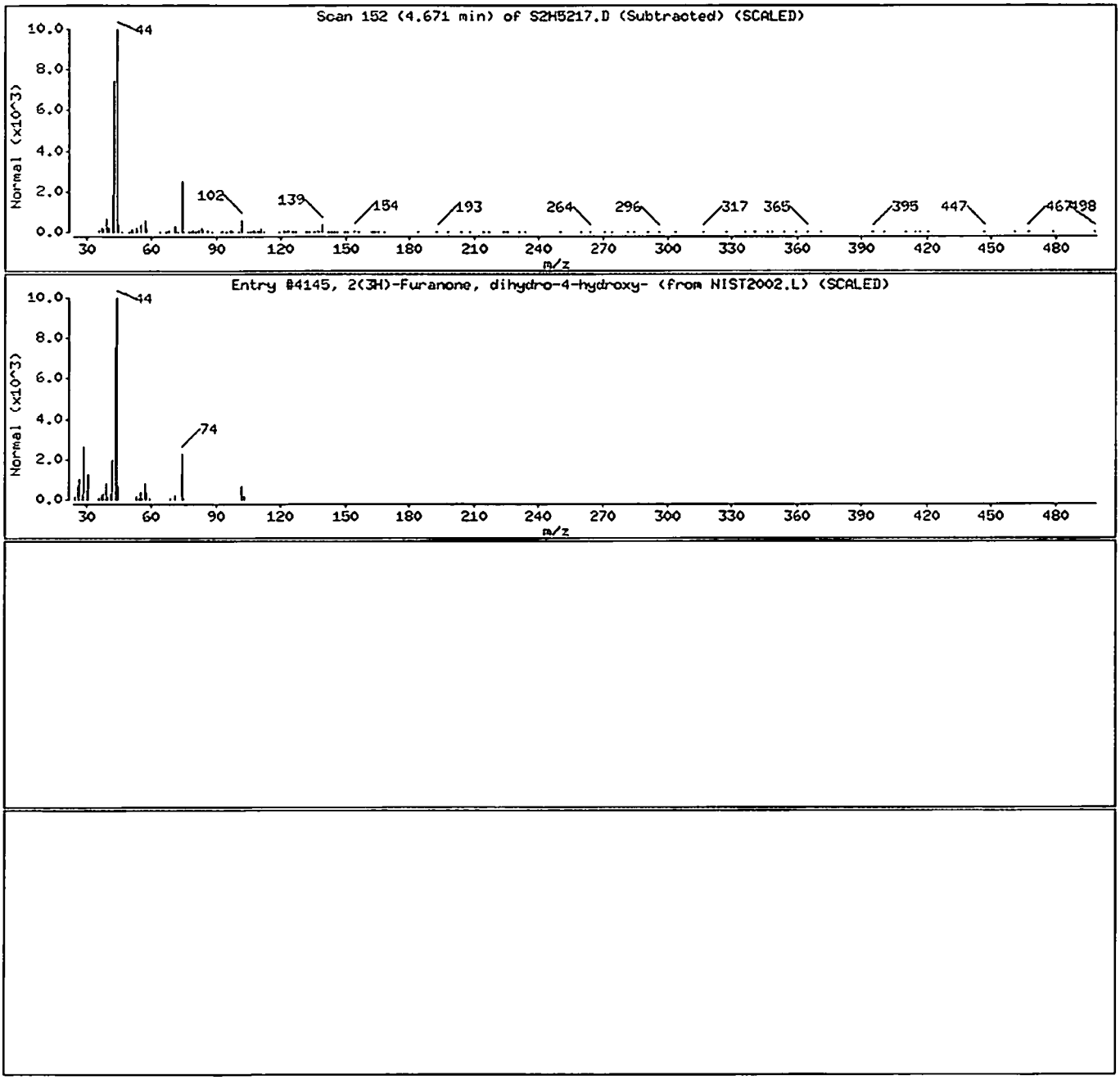
Client ID: H30Y3 Instrument: S2.i

Sample Info: K2200-15B,,62636,,

Volume Injected (uL): 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\111103.B\S2H5217.D

Date : 03-NOV-2011 21:05

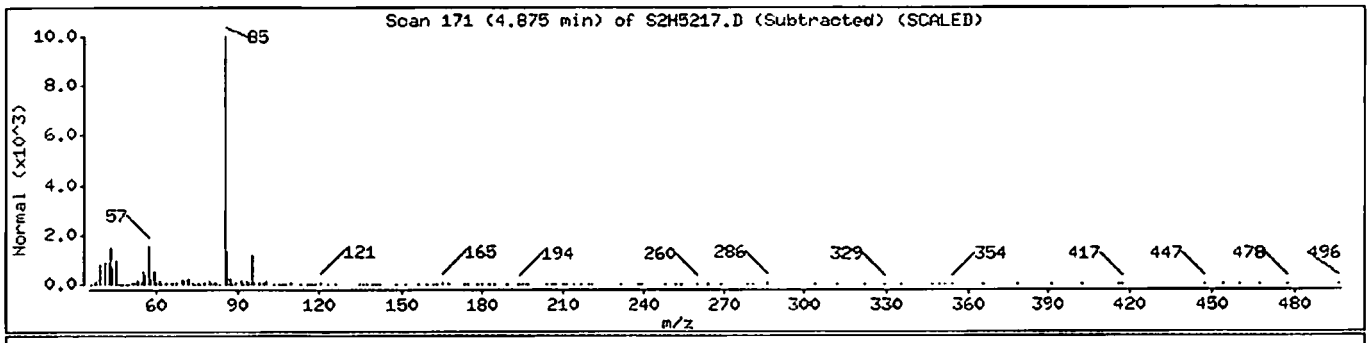
Client ID: H30Y3 Instrument: S2.i

Sample Info: K2200-15B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5217.D

Date : 03-NOV-2011 21:05

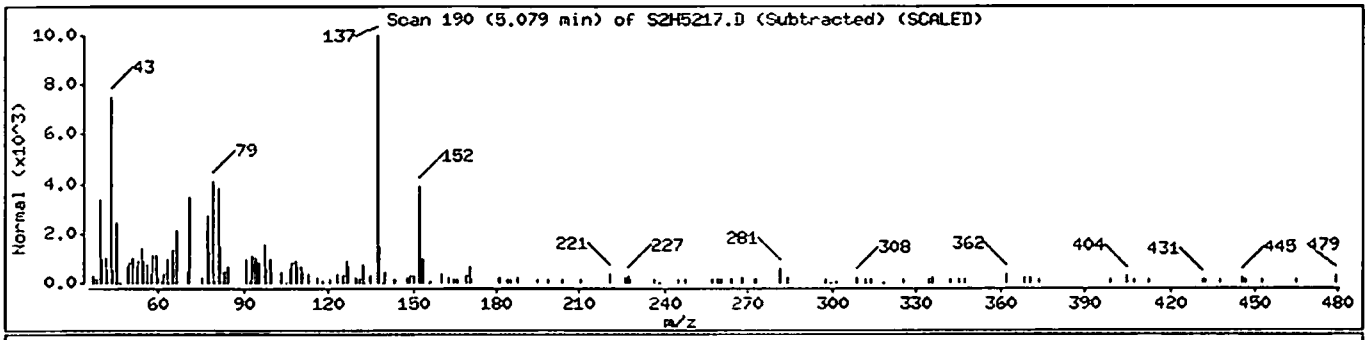
Client ID: H30Y3 Instrument: S2.i

Sample Info: K2200-15B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5217.D

Date : 03-NOV-2011 21:05

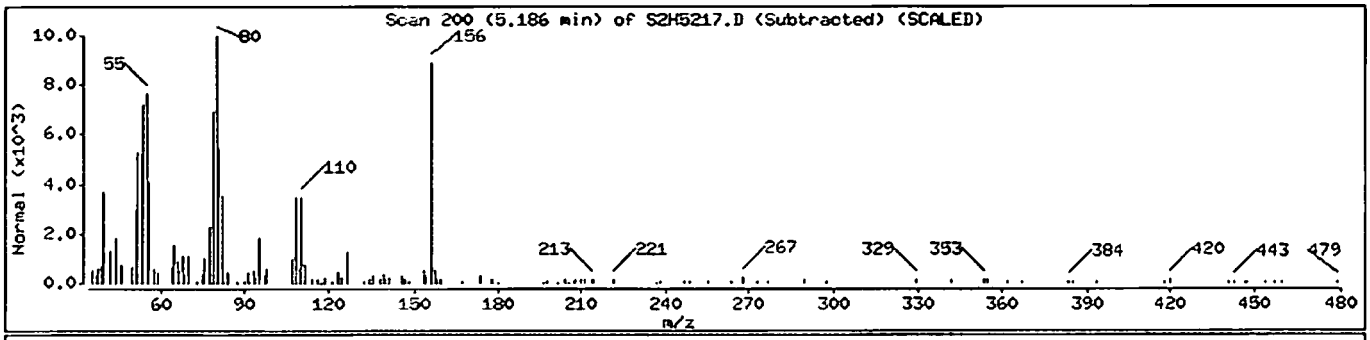
Client ID: H30Y3 Instrument: S2.i

Sample Info: K2200-15B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5217.D

Date : 03-NOV-2011 21:05

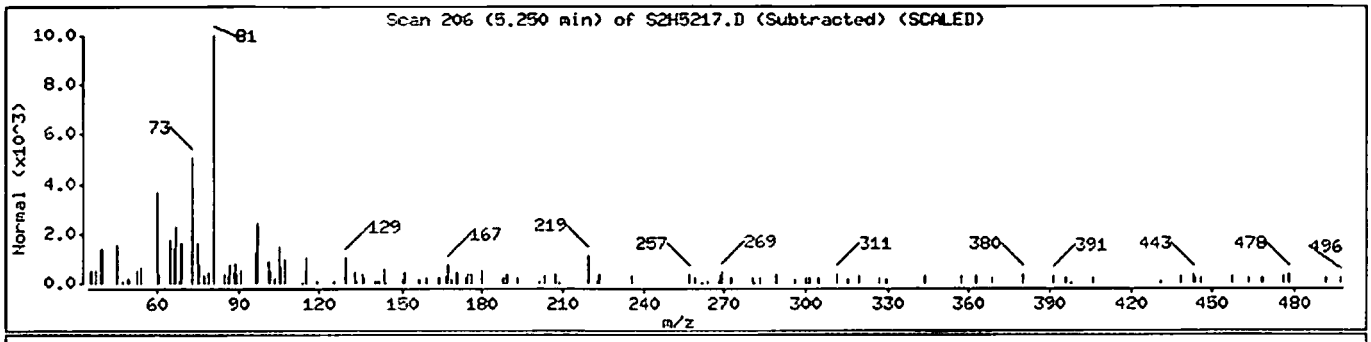
Client ID: H30Y3 Instrument: S2.i

Sample Info: K2200-15B,,62636,,

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

Column phase: RX1-5SILMS 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\111103.B\S2H5217.D

Date : 03-NOV-2011 21:05

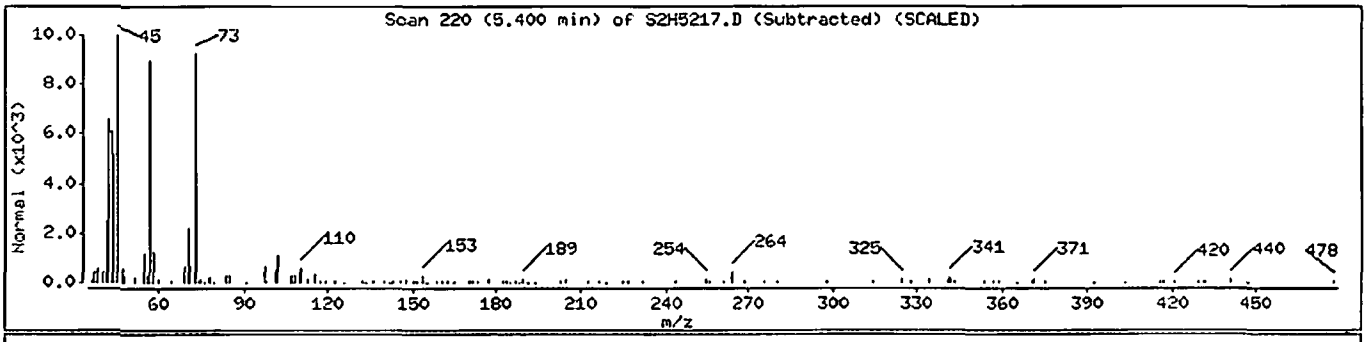
Client ID: H30Y3 Instrument: S2.i

Sample Info: K2200-15B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5217.D

Date : 03-NOV-2011 21:05

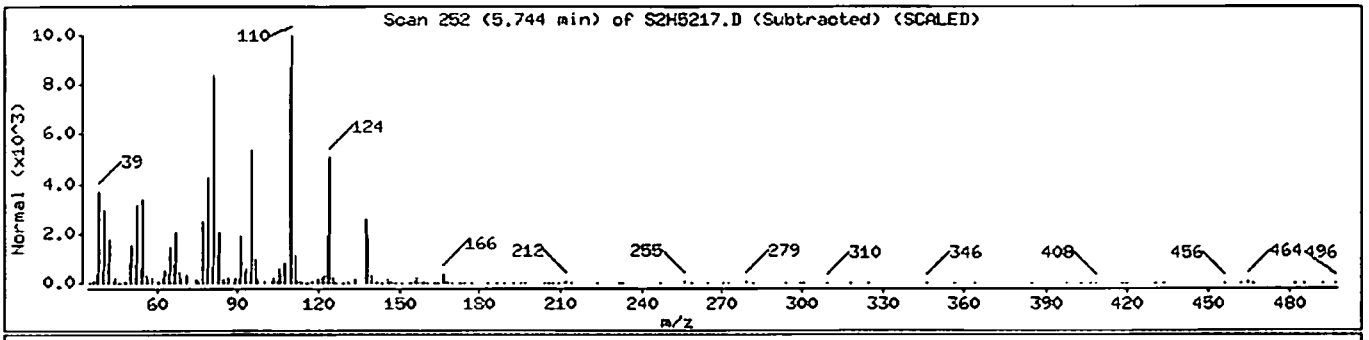
Client ID: H30Y3 Instrument: S2.i

Sample Info: K2200-158,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5217.D

Date : 03-NOV-2011 21:05

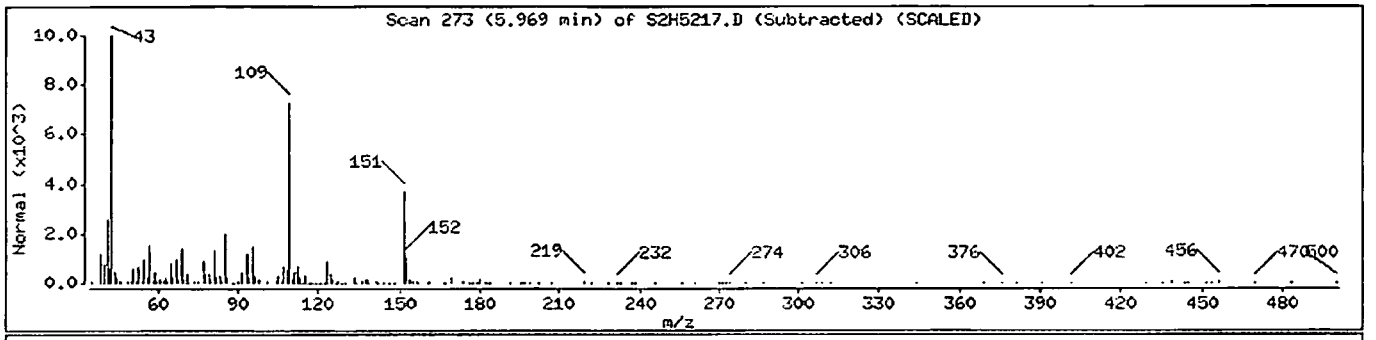
Client ID: H30Y3 Instrument: S2.i

Sample Info: K2200-15B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5217.D

Date : 03-NOV-2011 21:05

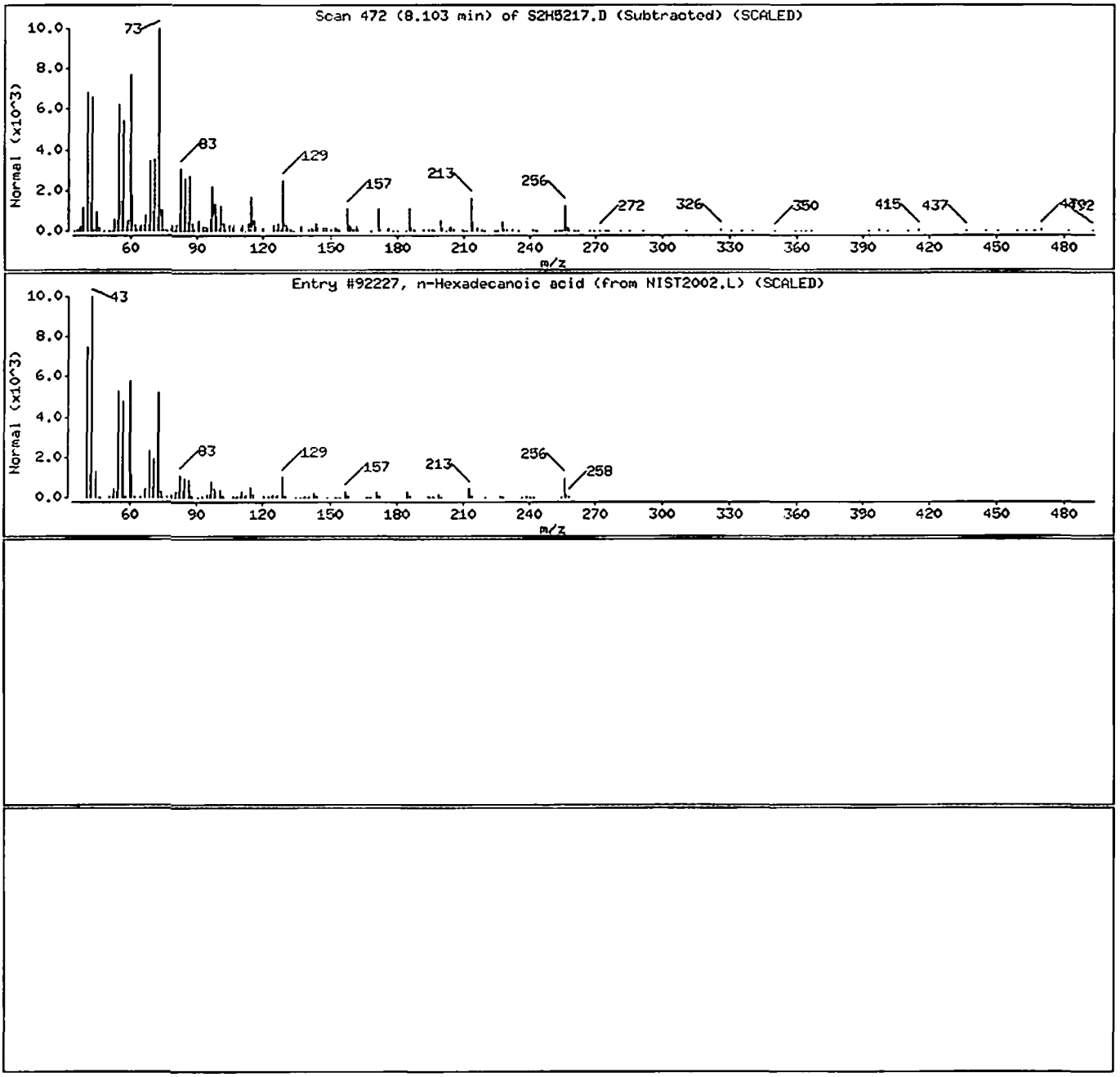
Client ID: H30Y3 Instrument: S2.i

Sample Info: K2200-15B,,62636,,

Volume Injected (uL): 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\111103.B\S2H5217.D

Date : 03-NOV-2011 21:05

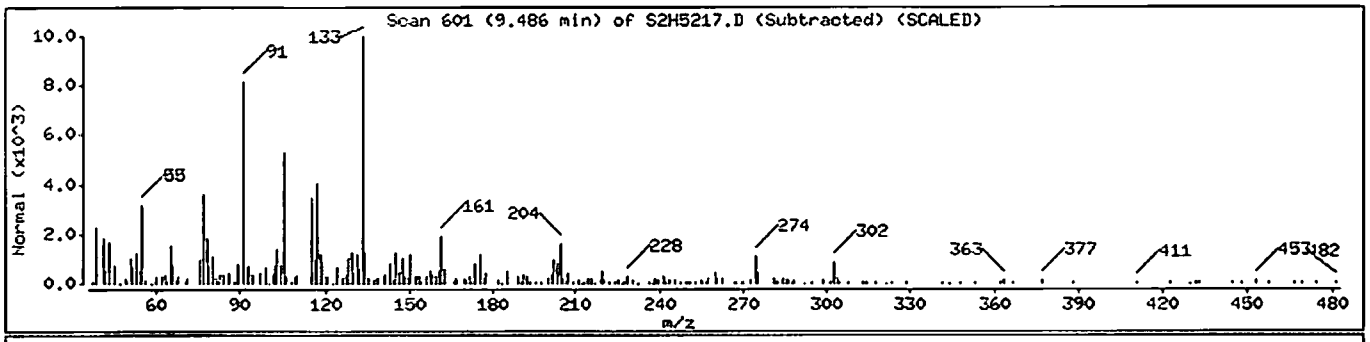
Client ID: H30Y3 Instrument: S2.i

Sample Info: K2200-15B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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

CLIENT SAMPLE NO.

H30Y4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-16B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5218.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

H30Y4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-16B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5218.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

H30Y4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-16B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5218.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	4.155	2.3	J
02		Unknown-02	4.412	2.3	J
03		Unknown-03	4.669	8.9	J
04		Unknown-04	4.873	7.3	J
05		Unknown-05	5.077	2.1	J
06		Unknown-06	5.195	2.4	J
07		Unknown-07	5.399	8.1	J
08		Unknown-08	5.742	7.6	J
09		Unknown-09	5.967	3.9	J
10	57-10-3	n-Hexadecanoic acid	8.101	6.6	NJ
11		Unknown-10	9.484	4.1	J
12		Unknown-11	10.557	7.9	J
13		Unknown-12	10.600	8.1	J
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5218.D
Report Date: 07-Nov-2011 14:03

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5218.D
Lab Smp Id: K2200-16B Client Smp ID: H30Y4
Inj Date : 03-NOV-2011 21:27
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-16B,,62636,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 28
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)
$ 2	Phenol-d5	71	3.564	3.565	(0.917)	201112	48.4358	24
$ 4	bis(2-Chloroethyl)ether-d8	67	3.618	3.619	(0.931)	308551	53.9280	27
$ 6	2-Chlorophenol-d4	132	3.693	3.694	(0.950)	189831	52.8505	26
* 8	1,4-Dichlorobenzene-d4	152	3.886	3.887	(1.000)	131856	40.0000	(Q)
$ 11	4-Methylphenol-d8	113	4.197	4.198	(1.080)	326152	57.9398	29
$ 16	Nitrobenzene-d5	128	4.347	4.348	(0.879)	104163	58.6458	29(Q)
$ 19	2-Nitrophenol-d4	143	4.615	4.616	(0.933)	120207	61.3070	31
$ 23	2,4-Dichlorophenol-d3	165	4.819	4.820	(0.974)	212858	59.4683	30
* 25	Naphthalene-d8	136	4.948	4.948	(1.000)	341054	40.0000	
$ 27	4-Chloroaniline-d4	131	5.001	5.002	(1.011)	80910	25.4582	13(Q)
$ 40	Dimethylphthalate-d6	166	6.170	6.171	(0.962)	551124	59.8674	30
$ 43	Acenaphthylene-d8	160	6.288	6.289	(0.980)	595060	49.7084	25
* 46	Acenaphthene-d10	164	6.417	6.418	(1.000)	250373	40.0000	
$ 49	4-Nitrophenol-d4	143	6.513	6.503	(1.015)	57279	43.1751	22(Q)
$ 54	Fluorene-d10	176	6.846	6.847	(1.067)	391869	46.3413	23
$ 58	4,6-Dinitro-2-methylphenol-d2	200	6.899	6.900	(0.903)	101180	71.7332	36(Q)
* 65	Phenanthrene-d10	188	7.639	7.640	(1.000)	361462	40.0000	
$ 67	Anthracene-d10	188	7.693	7.694	(1.007)	428829	41.5320	21
$ 72	Pyrene-d10	212	8.819	8.820	(0.893)	192678	33.0028	17(R)
+ 77	Chrysene-d12	240	9.881	9.871	(1.000)	185327	40.0000	(Q)
$ 83	Benzo(a)pyrene-d12	264	11.146	11.147	(0.984)	35353	13.5955	6.8(RH)

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5218.D
Report Date: 07-Nov-2011 14:03

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)	
* 85 Perylene-d12	264	11.232	11.233	(1.000)	105970	40.0000		(H)

QC Flag Legend

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\111103.B\S2H5218.D
Report Date: 07-Nov-2011 14:03

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5218.D
Lab Smp Id: K2200-16B Client Smp ID: H30Y4
Inj Date : 03-NOV-2011 21:27
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-16B,,62636,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 28
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

ISTD	RT	AREA	AMOUNT
* 8 1,4-Dichlorobenzene-d4	3.887	1162963	40.000
* 25 Naphthalene-d8	4.948	1233246	40.000
* 46 Acenaphthene-d10	6.417	1326699	40.000
* 65 Phenanthrene-d10	7.640	1053761	40.000
* 77 Chrysene-d12	9.881	583834	40.000
* 85 Perylene-d12	11.232	307942	40.000

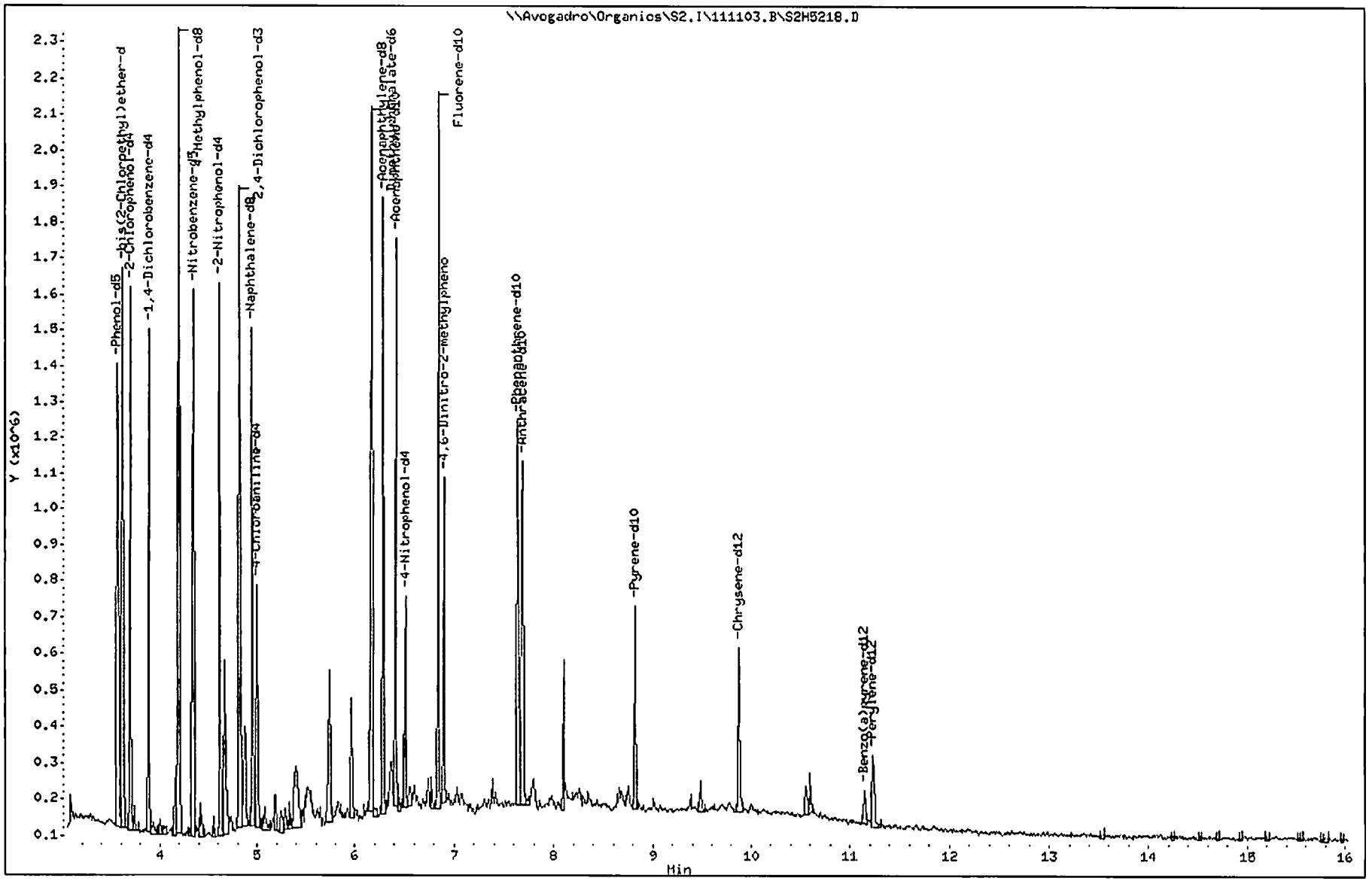
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.155	133946	4.60705022	2.3	0		0	8
Unknown				CAS #:			
4.412	136120	4.68181858	2.3	0		0	8

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5218.D
Report Date: 07-Nov-2011 14:03

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.669	548561	17.7924065	8.9	0		0	25
Unknown				CAS #:			
4.873	451178	14.6338415	7.3	0		0	25
Unknown				CAS #:			
5.077	129590	4.20320609	2.1	0		0	25
Unknown				CAS #:			
5.195	146753	4.75990285	2.4	0		0	25
Unknown				CAS #:			
5.399	500339	16.2283382	8.1	0		0	25
Unknown				CAS #:			
5.742	501319	15.1147819	7.6	0		0	46
Unknown				CAS #:			
5.967	259522	7.82459852	3.9	0		0	46
n-Hexadecanoic acid				CAS #: 57-10-3			
8.101	348279	13.2204316	6.6	95	NIST2002.L	92227	65
Unknown				CAS #:			
9.484	120521	8.25717347	4.1	0		0	77
Unknown				CAS #:			
10.557	121289	15.7547136	7.9	0		0	85
Unknown				CAS #:			
10.600	125128	16.2534569	8.1	0		0	85

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5218.D
Date : 03-NOV-2011 21:27
Client ID: H30Y4
Sample Info: K2200-16B,,62636,,
Volume Injected (uL): 2.0
Column phase: RXI-5SILMS

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



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Date : 03-NOV-2011 21:27

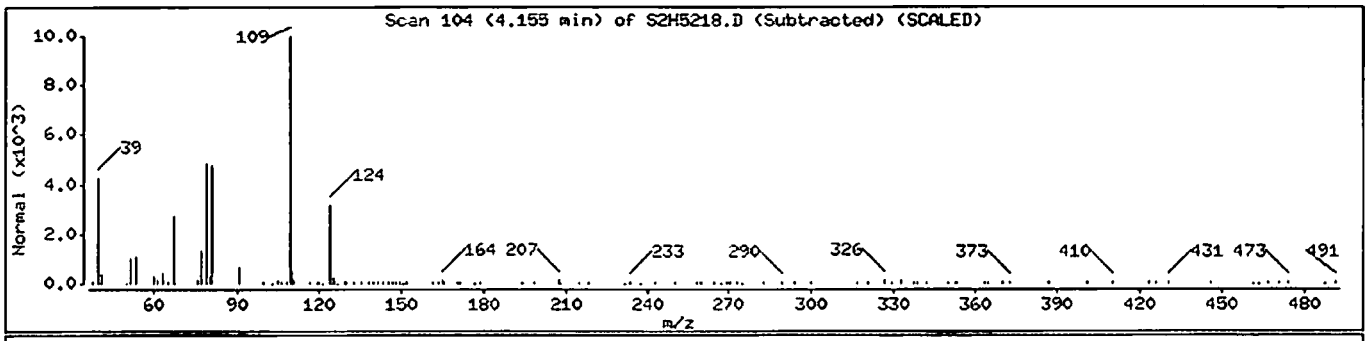
Client ID: H30Y4 Instrument: S2.i

Sample Info: K2200-16B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 21:27

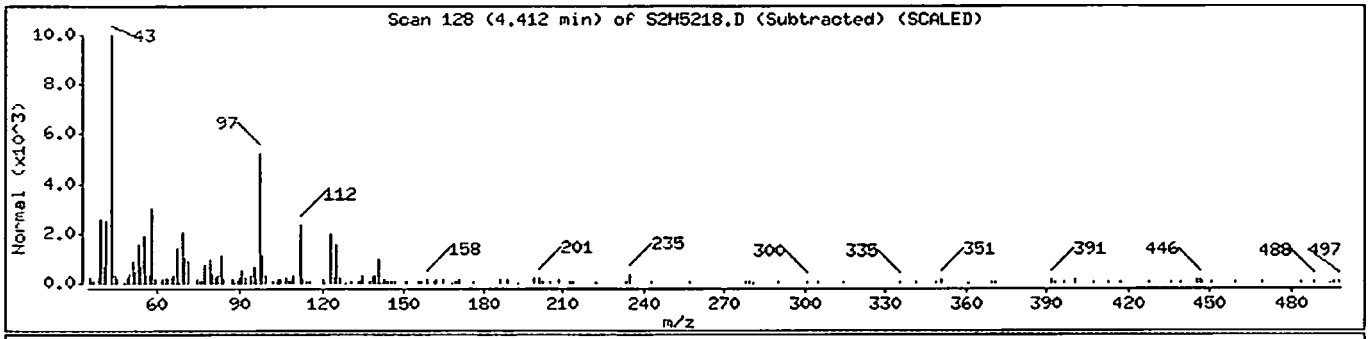
Client ID: H30Y4 Instrument: S2.i

Sample Info: K2200-16B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 21:27

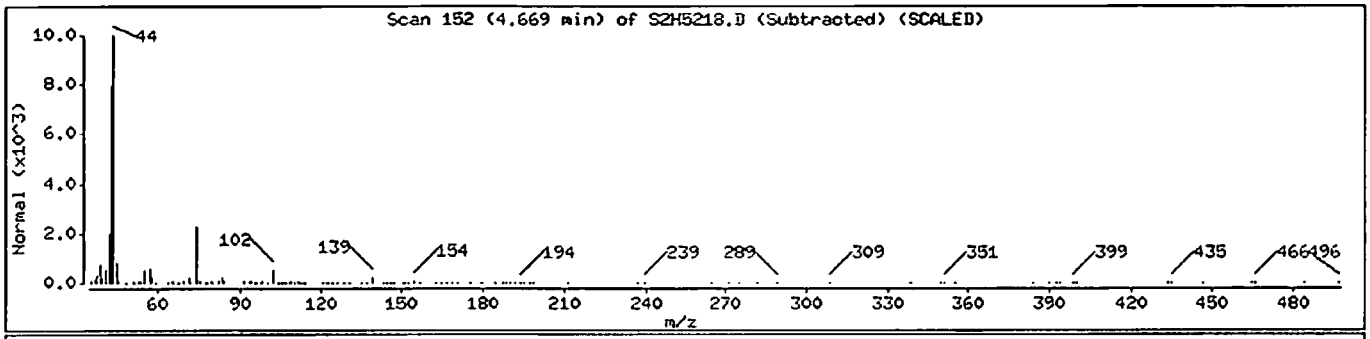
Client ID: H30Y4 Instrument: S2.i

Sample Info: K2200-16B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 21:27

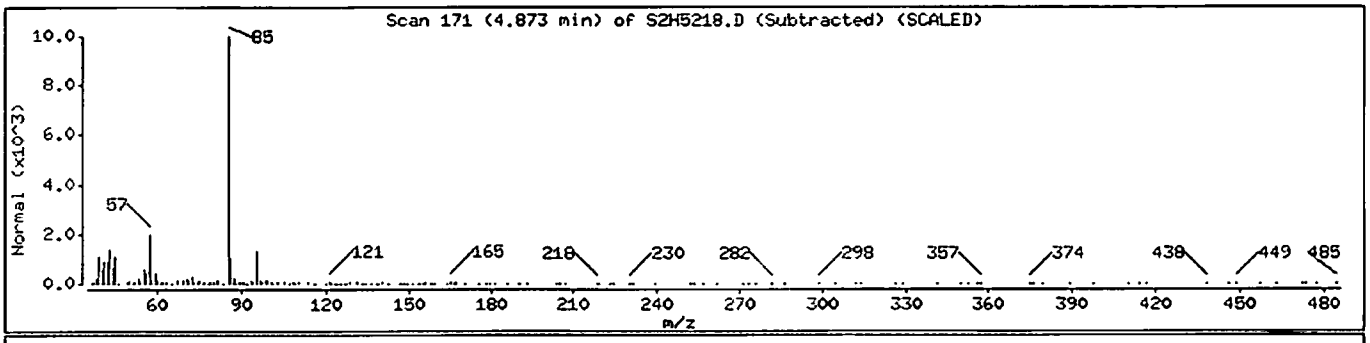
Client ID: H30Y4 Instrument: S2.i

Sample Info: K2200-16B,,62636,,

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



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Date : 03-NOV-2011 21:27

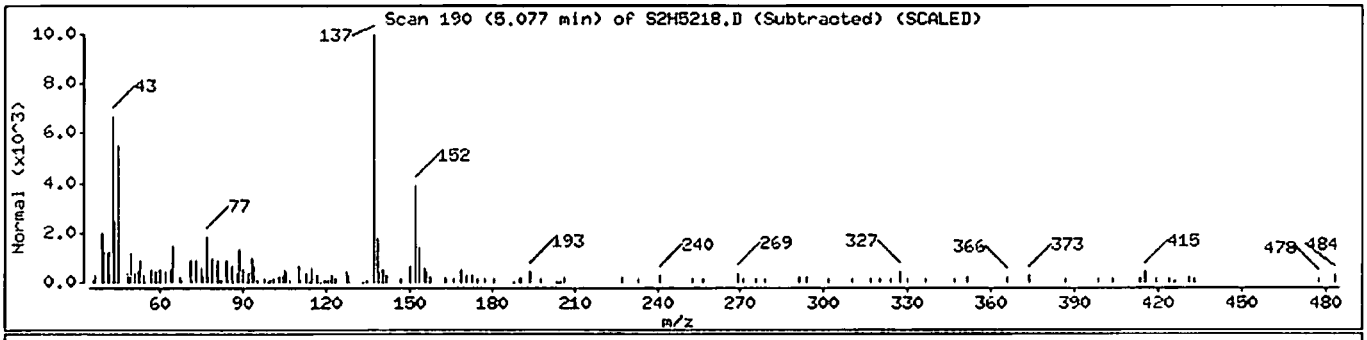
Client ID: H30Y4 Instrument: S2.i

Sample Info: K2200-16B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5218.D

Date : 03-NOV-2011 21:27

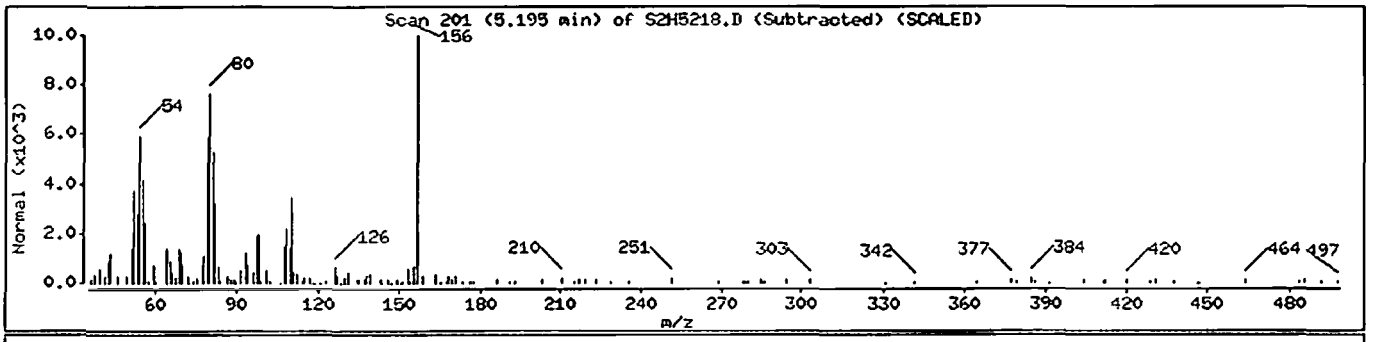
Client ID: H30Y4 Instrument: S2.i

Sample Info: K2200-16B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 21:27

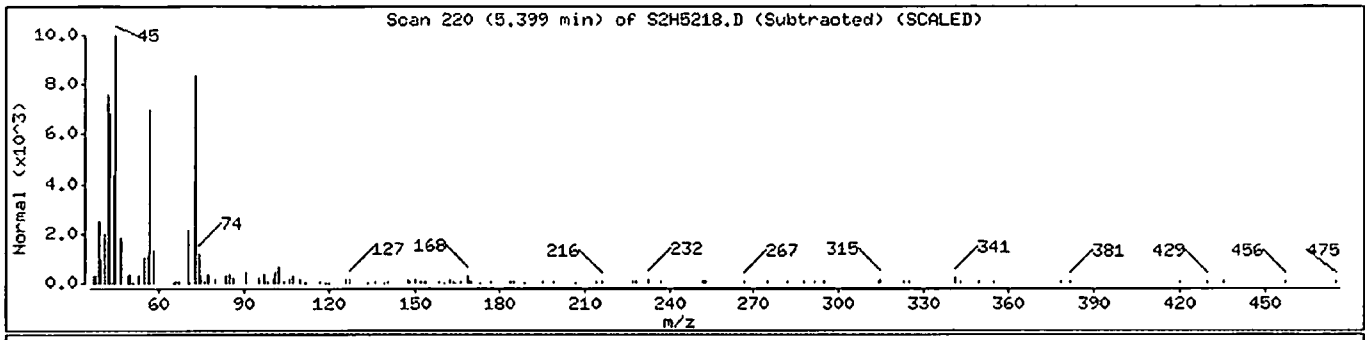
Client ID: H30Y4 Instrument: S2.i

Sample Info: K2200-16B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5218.D

Date : 03-NOV-2011 21:27

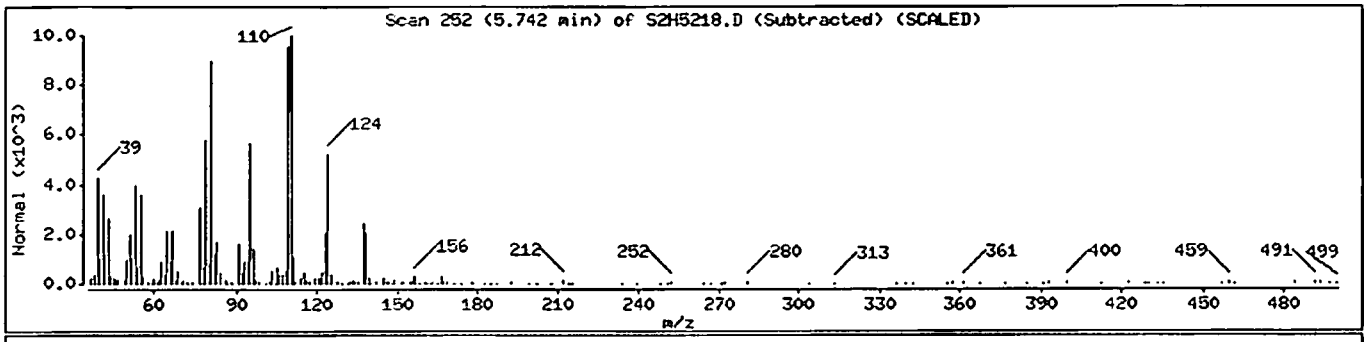
Client ID: H30Y4 Instrument: S2.i

Sample Info: K2200-16B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5218.D

Date : 03-NOV-2011 21:27

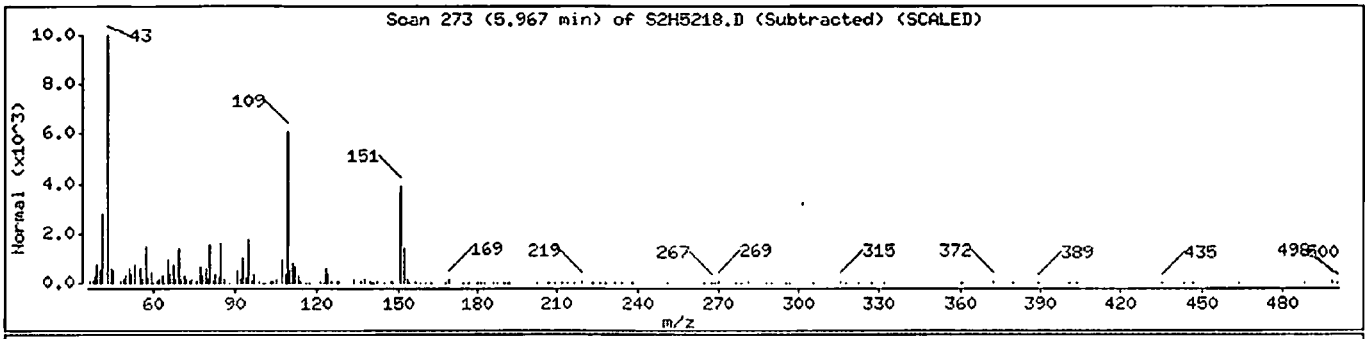
Client ID: H30Y4 Instrument: S2.i

Sample Info: K2200-16B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103,B\S2H5218.D

Date : 03-NOV-2011 21:27

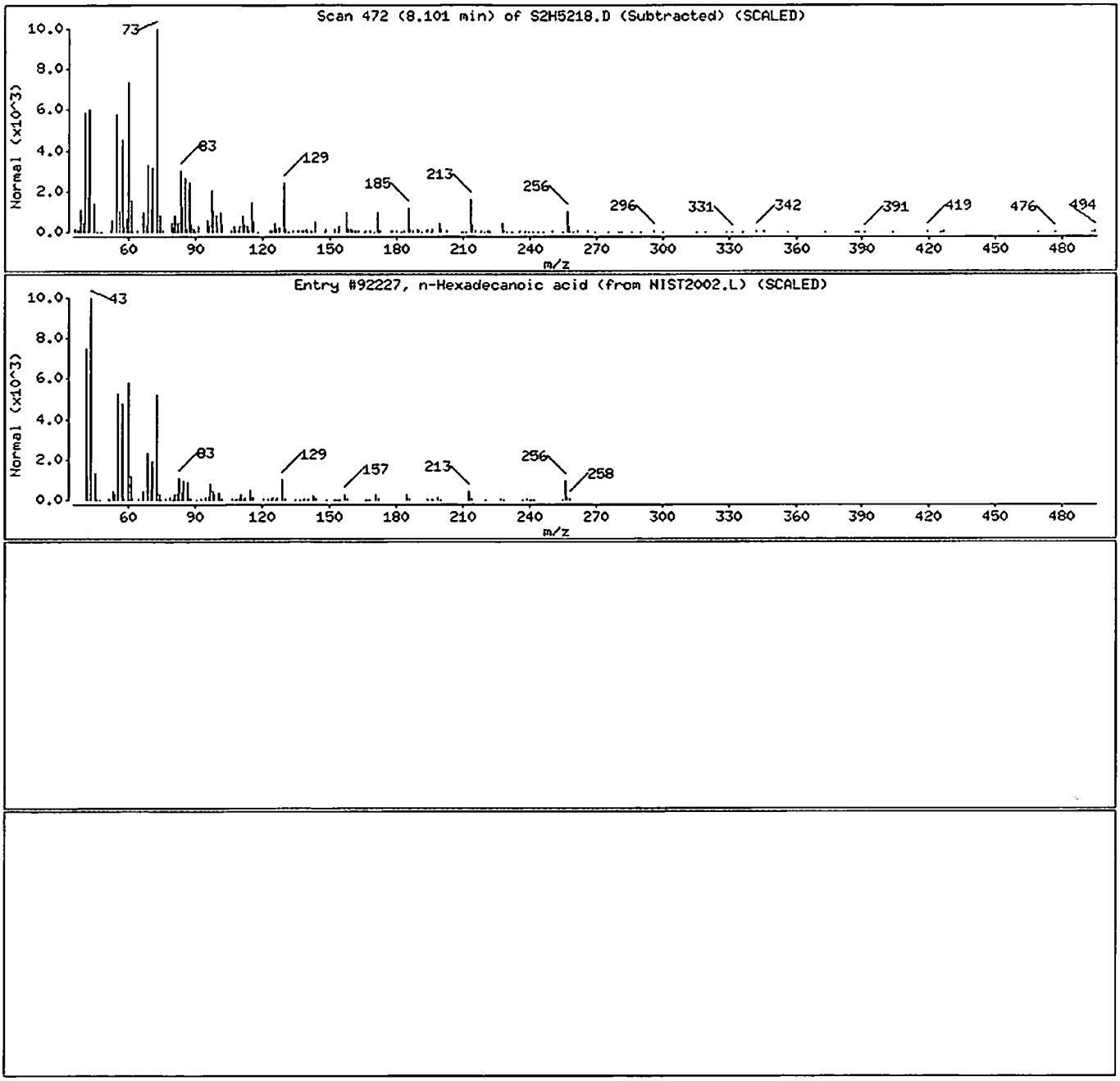
Client ID: H30Y4 Instrument: S2.i

Sample Info: K2200-16B,,62636,,

Volume Injected (uL): 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\111103.B\S2H5218.D

Date : 03-NOV-2011 21:27

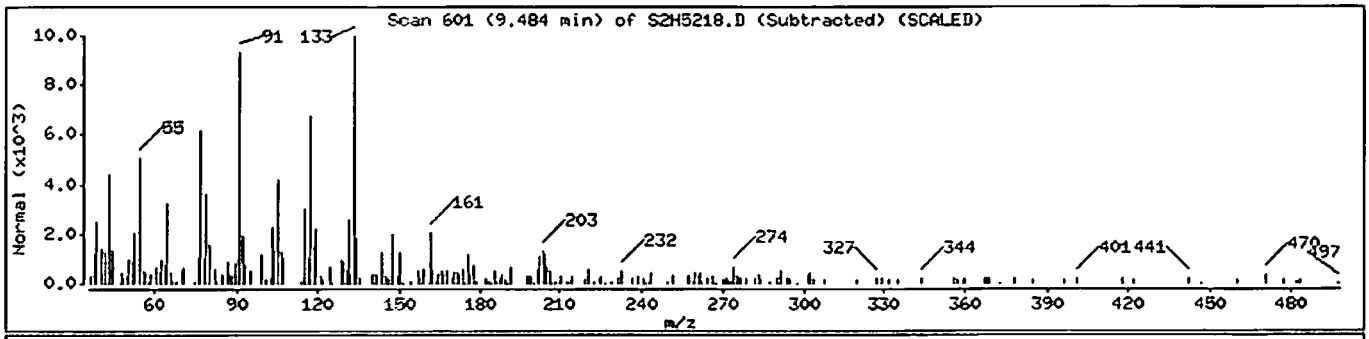
Client ID: H30Y4 Instrument: S2.i

Sample Info: K2200-16B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5218.D

Date : 03-NOV-2011 21:27

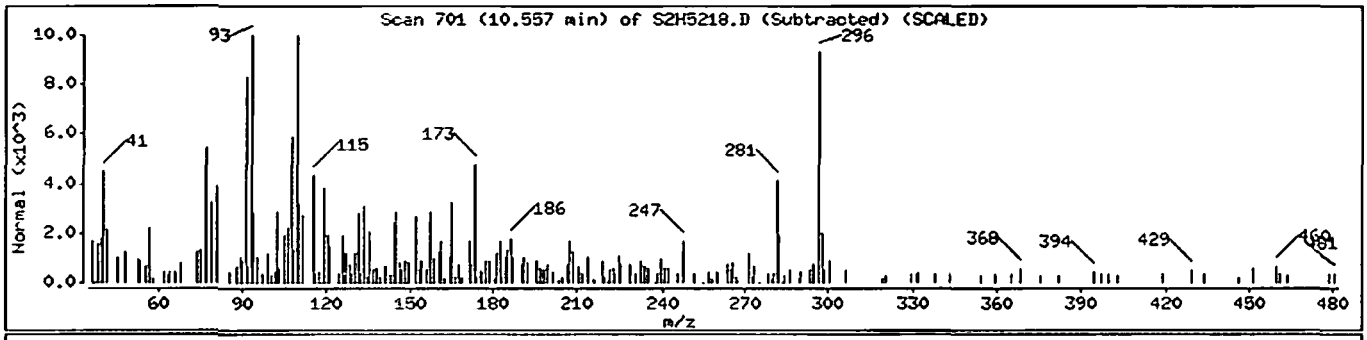
Client ID: H30Y4 Instrument: S2.i

Sample Info: K2200-16B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5218.D

Date : 03-NOV-2011 21:27

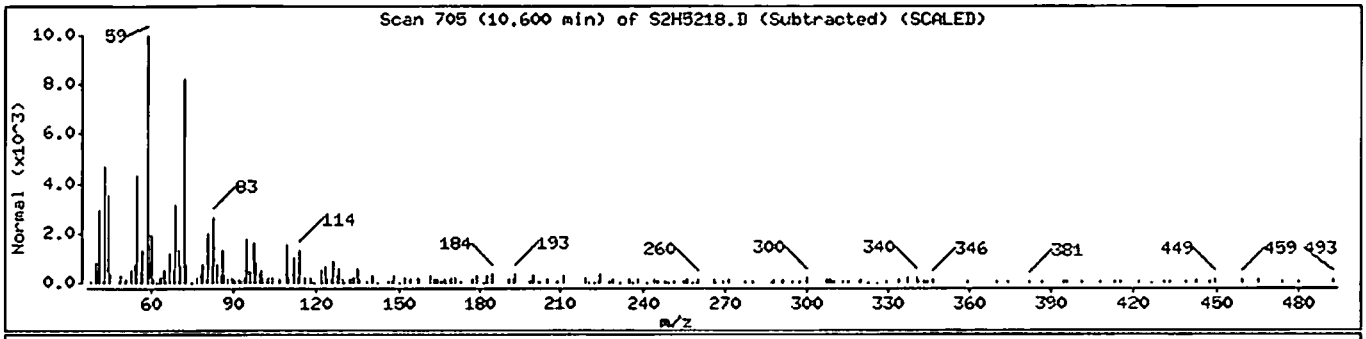
Client ID: H30Y4 Instrument: S2.i

Sample Info: K2200-16B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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

CLIENT SAMPLE NO.

H30Y5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-17B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5219.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

H30Y5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-17B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5219.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.: H30Y5

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

Lab Code: MITKEM | Case No.: 41926 | Mod. Ref No.: | SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER | Lab Sample ID: K2200-17B

Sample wt/vol: 1000 (g/mL) ML | Lab File ID: S2H5219.D

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

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

Concentrated Extract Volume: 1000 (uL) | Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) | GPC Factor: 1.00 | Date Analyzed: 11/03/2011

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	4.413	2.3	J
02		Unknown-02	4.553	2.0	J
03	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.671	8.1	BNJ
04		Unknown-03	4.875	5.5	J
05		Unknown-04	5.186	3.2	J
06		Unknown-05	5.250	2.1	J
07		Unknown-06	5.400	5.8	J
08		Unknown-07	5.743	7.1	J
09		Unknown-08	5.968	2.2	J
10		Unknown-09	6.376	3.5	J
11		Unknown-10	7.309	6.0	J
12		Unknown-11	7.727	23	J
13	57-10-3	n-Hexadecanoic acid	8.102	15	NJ
14		Unknown-12	8.263	9.2	J
15		Unknown-13	15.137	2.2	J
	E96679(2)	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5219.D
Report Date: 07-Nov-2011 14:03

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5219.D
Lab Smp Id: K2200-17B Client Smp ID: H30Y5
Inj Date : 03-NOV-2011 21:48
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-17B,,62636,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 29
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)
$	2	Phenol-d5	71	3.566	3.565	(0.917)	203696	48.4156	24
$	4	bis(2-Chloroethyl)ether-d8	67	3.619	3.619	(0.931)	316721	54.6309	27
$	6	2-Chlorophenol-d4	132	3.694	3.694	(0.950)	200674	55.1375	28
*	8	1,4-Dichlorobenzene-d4	152	3.887	3.887	(1.000)	133606	40.0000	(Q)
$	11	4-Methylphenol-d8	113	4.198	4.198	(1.080)	318650	55.8656	28
$	16	Nitrobenzene-d5	128	4.349	4.348	(0.879)	104367	56.3095	28
$	19	2-Nitrophenol-d4	143	4.617	4.616	(0.933)	133075	65.0387	33
$	23	2,4-Dichlorophenol-d3	165	4.820	4.820	(0.974)	232852	62.3406	31
*	25	Naphthalene-d8	136	4.949	4.948	(1.000)	355900	40.0000	
$	27	4-Chloroaniline-d4	131	5.003	5.002	(1.011)	41115	12.3971	6.2(Q)
$	40	Dimethylphthalate-d6	166	6.172	6.171	(0.962)	516264	58.8120	29
$	43	Acenaphthylene-d8	160	6.290	6.289	(0.980)	510202	44.6956	22
*	46	Acenaphthene-d10	164	6.418	6.418	(1.000)	238745	40.0000	
$	49	4-Nitrophenol-d4	143	6.515	6.503	(1.015)	49821	39.3825	20(Q)
$	54	Fluorene-d10	176	6.847	6.847	(1.067)	359916	44.6357	22
$	58	4,6-Dinitro-2-methylphenol-d2	200	6.901	6.900	(0.903)	93282	72.5552	36(Q)
*	65	Phenanthrene-d10	188	7.641	7.640	(1.000)	329471	40.0000	
$	67	Anthracene-d10	188	7.694	7.694	(1.007)	354576	37.6750	19
$	72	Pyrene-d10	212	8.820	8.820	(0.893)	135610	26.9356	13(R)
*	77	Chrysene-d12	240	9.882	9.871	(1.000)	159817	40.0000	(Q)
$	83	Benzo(a)pyrene-d12	264	11.147	11.147	(0.991)	28735	12.1345	6.1(RH)

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5219.D
Report Date: 07-Nov-2011 14:03

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)	
• 85 Perylene-d12	264	11.244	11.233	(1.000)	96503	40.0000		(Q)

QC Flag Legend

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\111103.B\S2H5219.D
Report Date: 07-Nov-2011 14:03

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5219.D
Lab Smp Id: K2200-17B Client Smp ID: H30Y5
Inj Date : 03-NOV-2011 21:48
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-17B,,62636,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 29
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

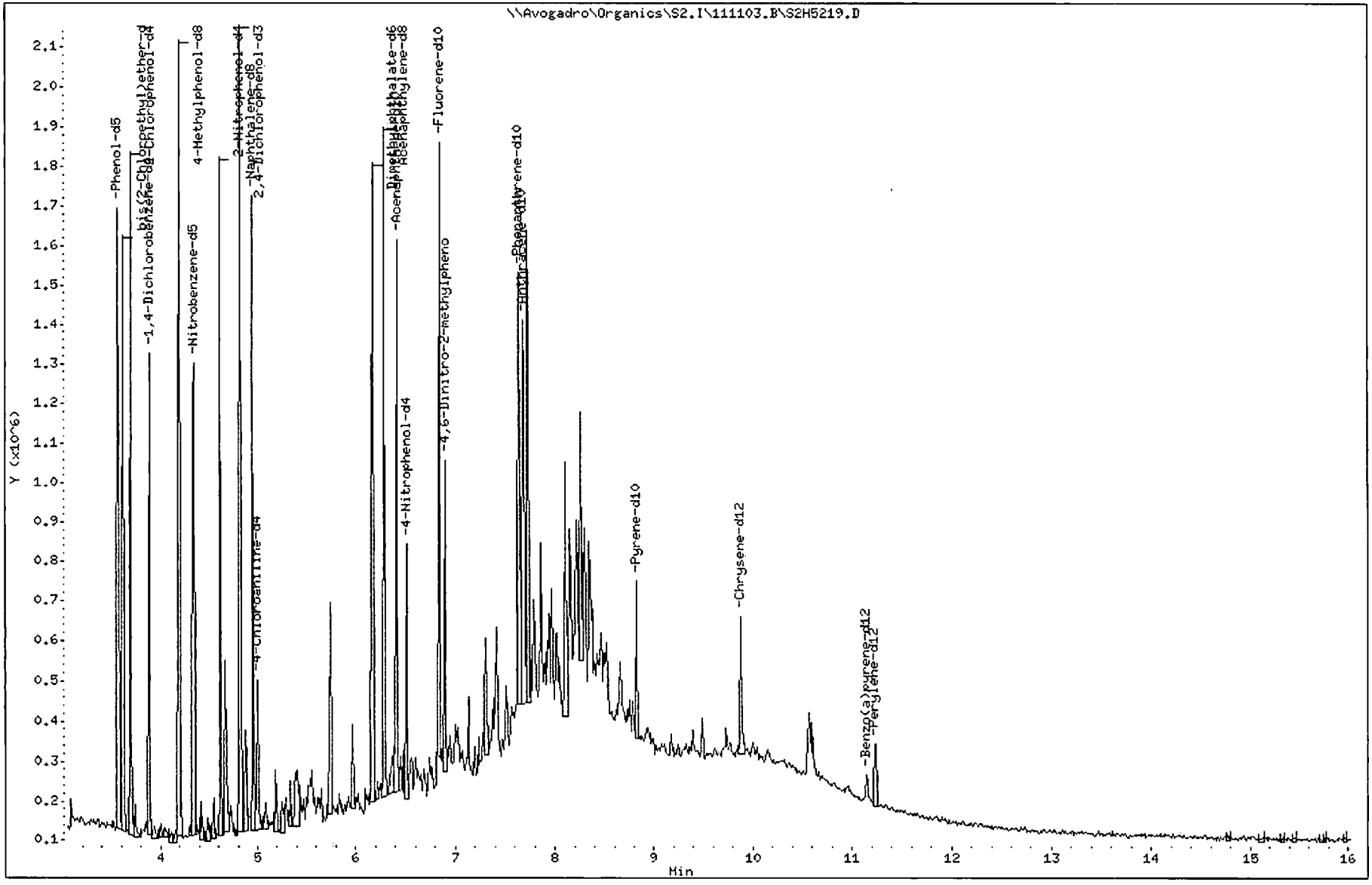
ISTD	RT	AREA	AMOUNT
* 8 1,4-Dichlorobenzene-d4	3.888	1138087	40.000
* 25 Naphthalene-d8	4.950	1275592	40.000
* 46 Acenaphthene-d10	6.419	1452866	40.000
* 65 Phenanthrene-d10	7.641	1276491	40.000
* 85 Perylene-d12	11.244	254757	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.413	129913	4.56601854	2.3	0	0		8
Unknown				CAS #:			
4.553	127890	4.01036487	2.0	0	0		25

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5219.D
Report Date: 07-Nov-2011 14:03

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
2(3H)-Furanone, dihydro-4-hydroxy-				CAS #: 5469-16-9			
4.671	519801	16.2998966	8.1	90	NIST2002.L	4145	25
Unknown				CAS #:			
4.875	350295	10.9845387	5.5	0		0	25
Unknown				CAS #:			
5.186	202896	6.36239147	3.2	0		0	25
Unknown				CAS #:			
5.250	135147	4.23792176	2.1	0		0	25
Unknown				CAS #:			
5.400	369931	11.6002963	5.8	0		0	25
Unknown				CAS #:			
5.743	514281	14.1590678	7.1	0		0	46
Unknown				CAS #:			
5.968	162556	4.47545046	2.2	0		0	46
Unknown				CAS #:			
6.376	252062	6.93971052	3.5	0		0	46
Unknown				CAS #:			
7.309	380658	11.9282573	6.0	0		0	65
Unknown				CAS #:			
7.727	1440517	45.1398736	23	0		0	65
n-Hexadecanoic acid				CAS #: 57-10-3			
8.102	950278	29.7778100	15	96	NIST2002.L	92227	65
Unknown				CAS #:			
8.263	585635	18.3513879	9.2	0		0	65
Unknown				CAS #:			
15.137	28062	4.40600084	2.2	0		0	85

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5219.D
Date : 03-NOV-2011 21:48
Client ID: H30Y5
Instrument: S2.i
Sample Info: K2200-17B,,62636,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5219.D

Date : 03-NOV-2011 21:48

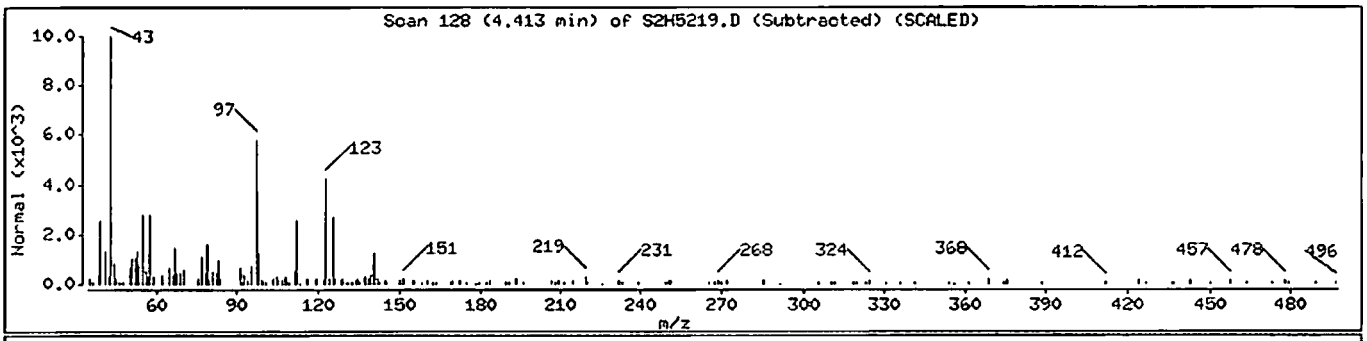
Client ID: H30Y5 Instrument: S2.i

Sample Info: K2200-17B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5219.D

Date : 03-NOV-2011 21:48

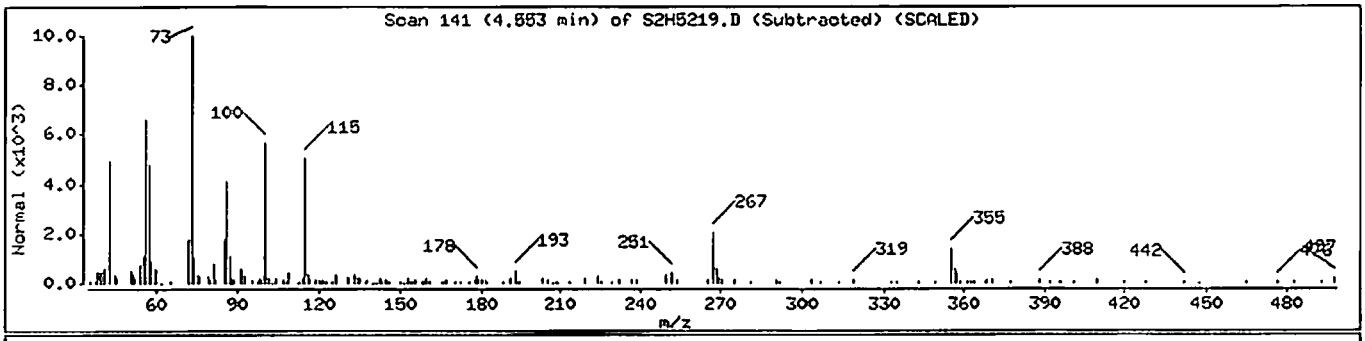
Client ID: H30Y5 Instrument: S2.i

Sample Info: K2200-17B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5219.D

Date : 03-NOV-2011 21:48

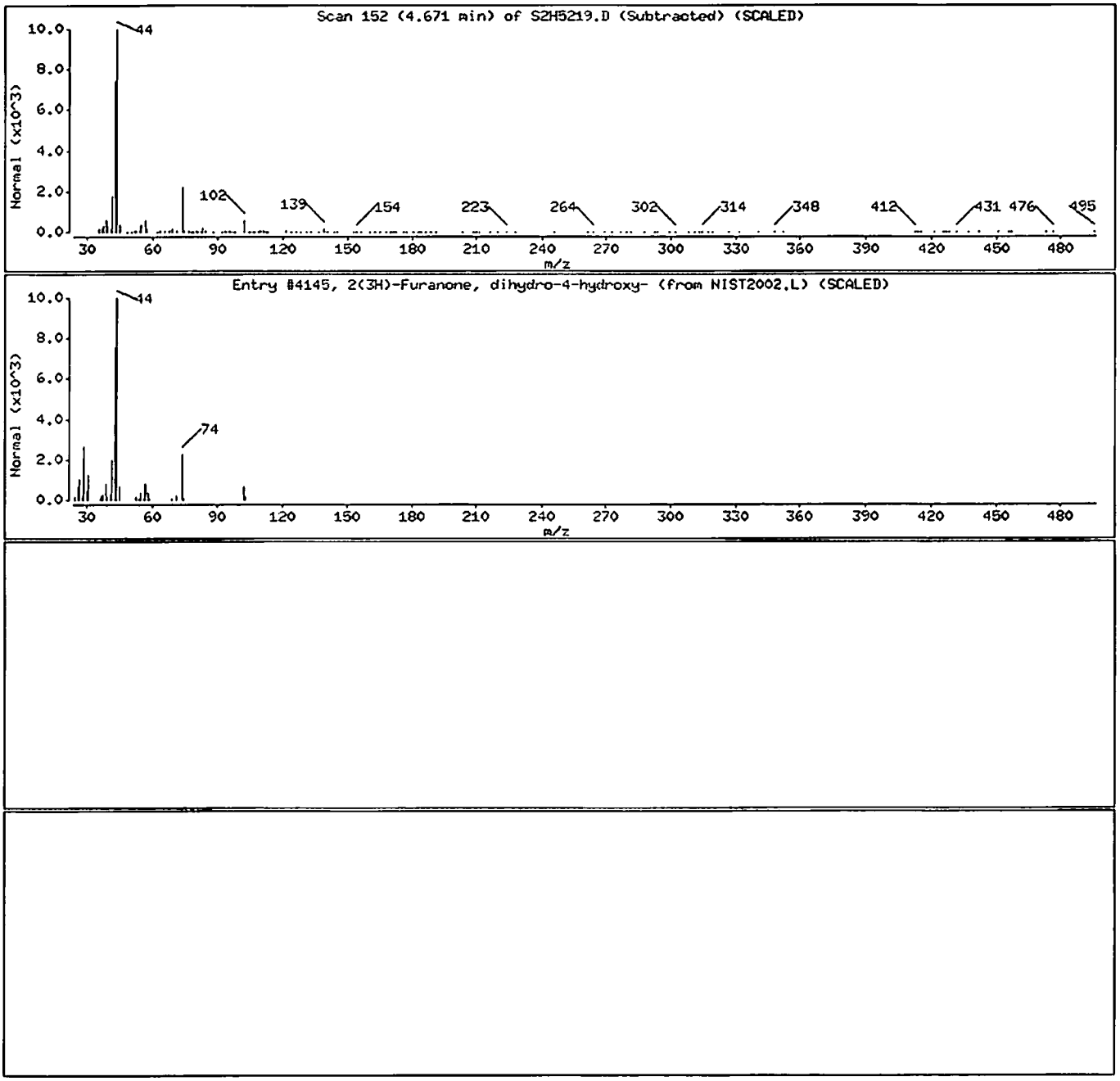
Client ID: H30Y5 Instrument: S2.i

Sample Info: K2200-17B,,62636,,

Volume Injected (uL): 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\111103.B\S2H5219.D

Date : 03-NOV-2011 21:48

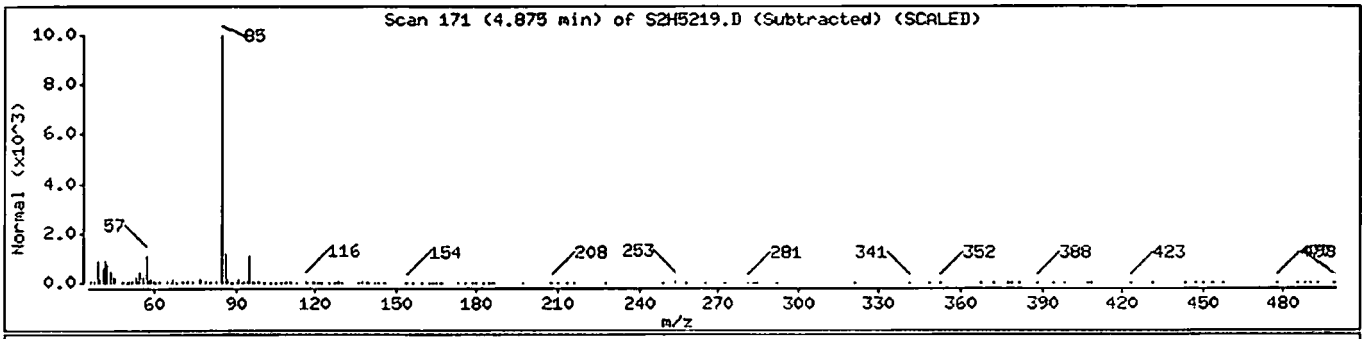
Client ID: H30Y5 Instrument: S2.i

Sample Info: K2200-17B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5219.D

Date : 03-NOV-2011 21:48

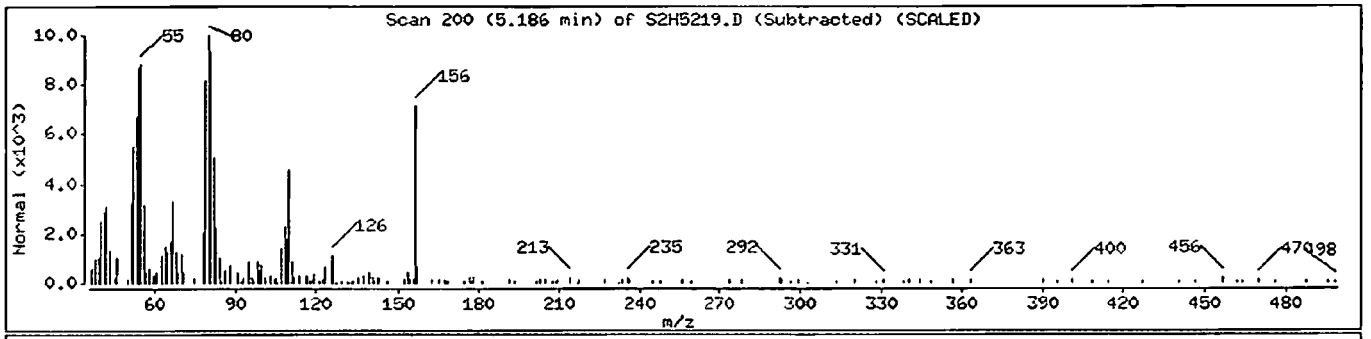
Client ID: H30Y5 Instrument: S2.i

Sample Info: K2200-17B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5219.D

Date : 03-NOV-2011 21:48

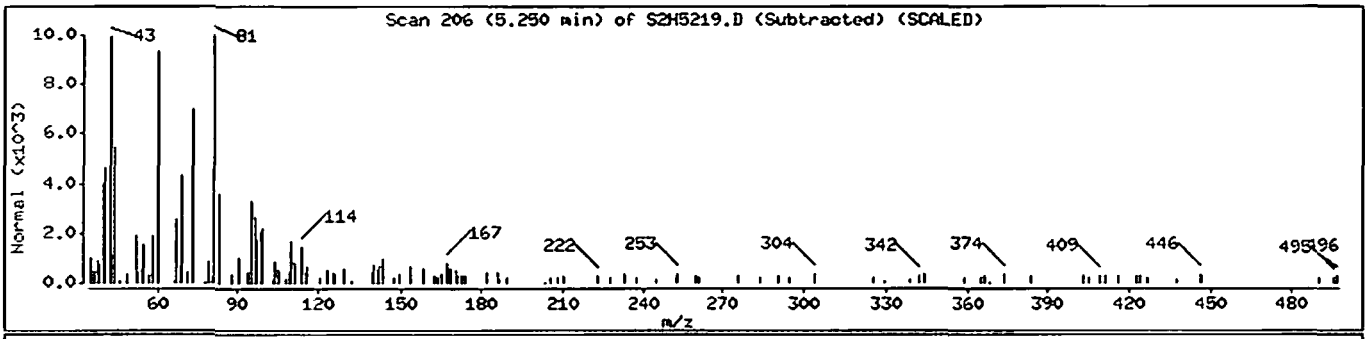
Client ID: H30Y5 Instrument: S2.i

Sample Info: K2200-17B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5219.D

Date : 03-NOV-2011 21:48

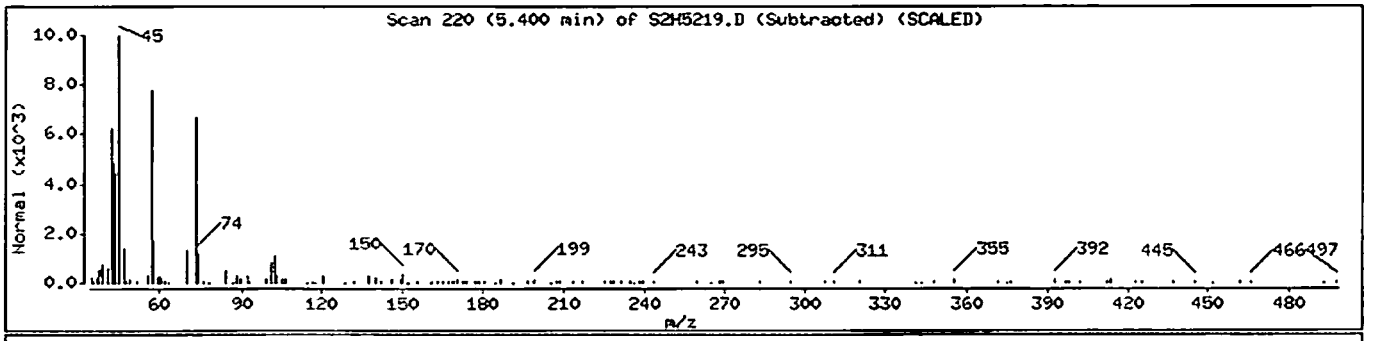
Client ID: H30Y5 Instrument: S2.i

Sample Info: K2200-17B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5219.D

Date : 03-NOV-2011 21:48

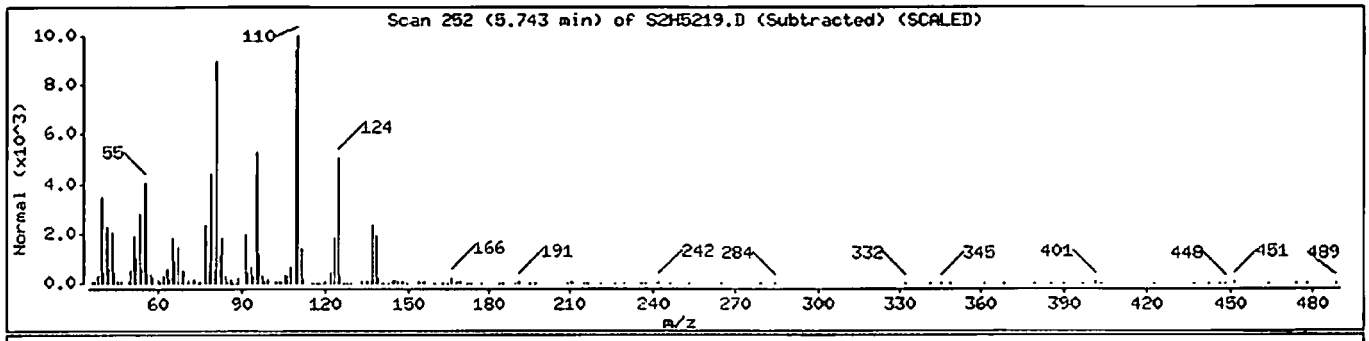
Client ID: H30Y5 Instrument: S2.i

Sample Info: K2200-17B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5219.D

Date : 03-NOV-2011 21:48

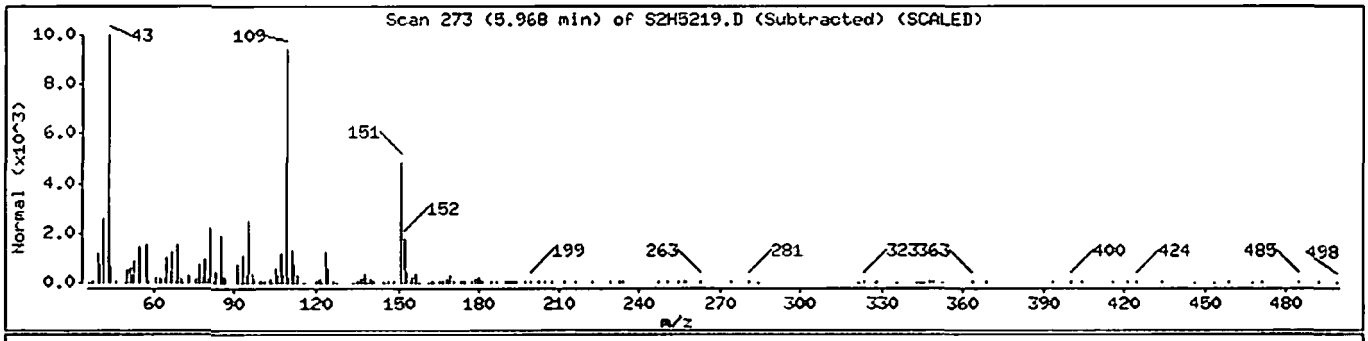
Client ID: H30Y5 Instrument: S2.i

Sample Info: K2200-17B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5219.D

Date : 03-NOV-2011 21:48

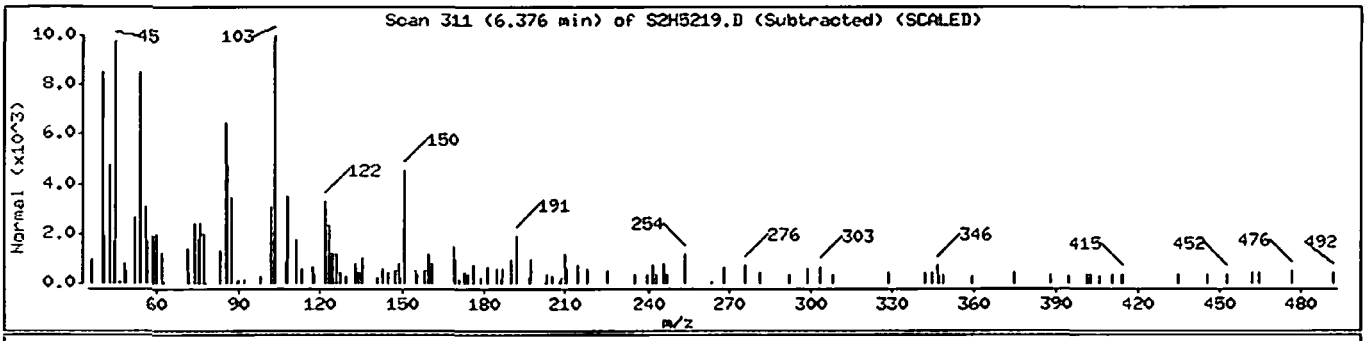
Client ID: H30Y5 Instrument: S2.i

Sample Info: K2200-17B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5219.D

Date : 03-NOV-2011 21:48

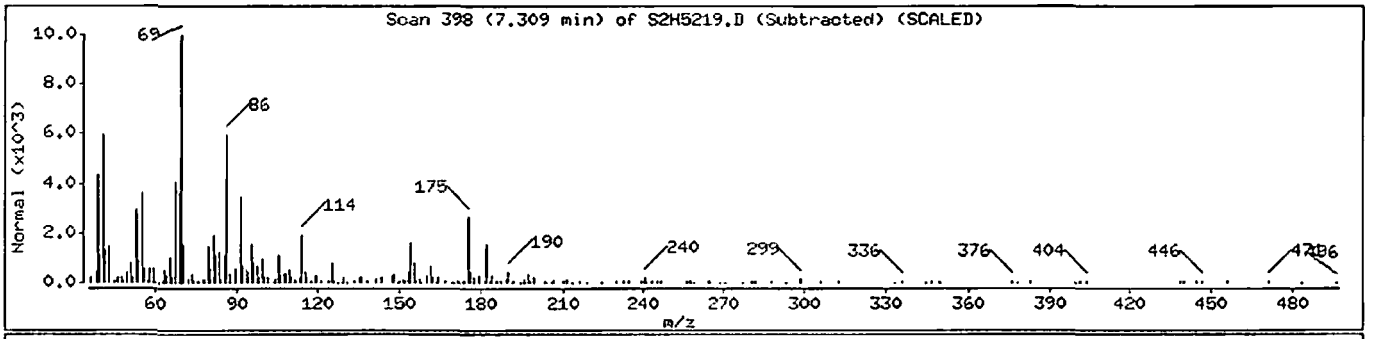
Client ID: H30Y5 Instrument: S2.i

Sample Info: K2200-17B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5219.D

Date : 03-NOV-2011 21:48

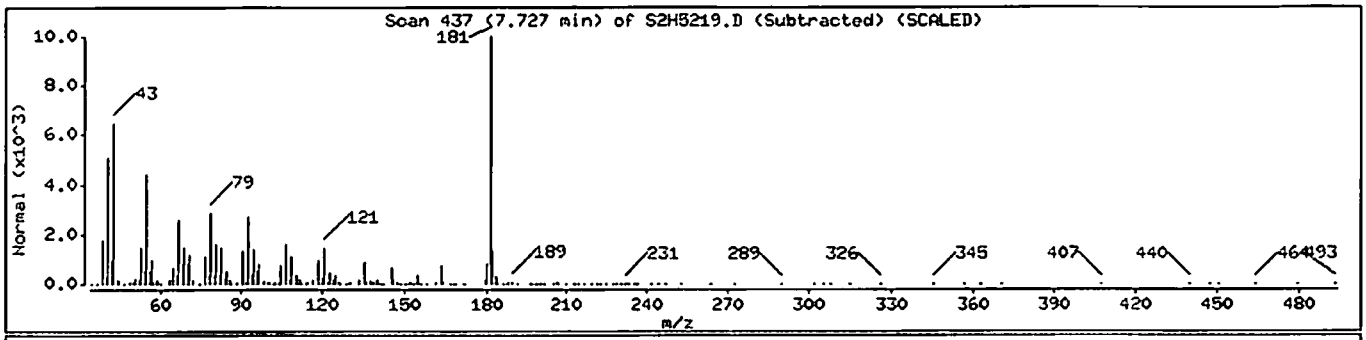
Client ID: H30Y5 Instrument: S2.i

Sample Info: K2200-17B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5219.D

Date : 03-NOV-2011 21:48

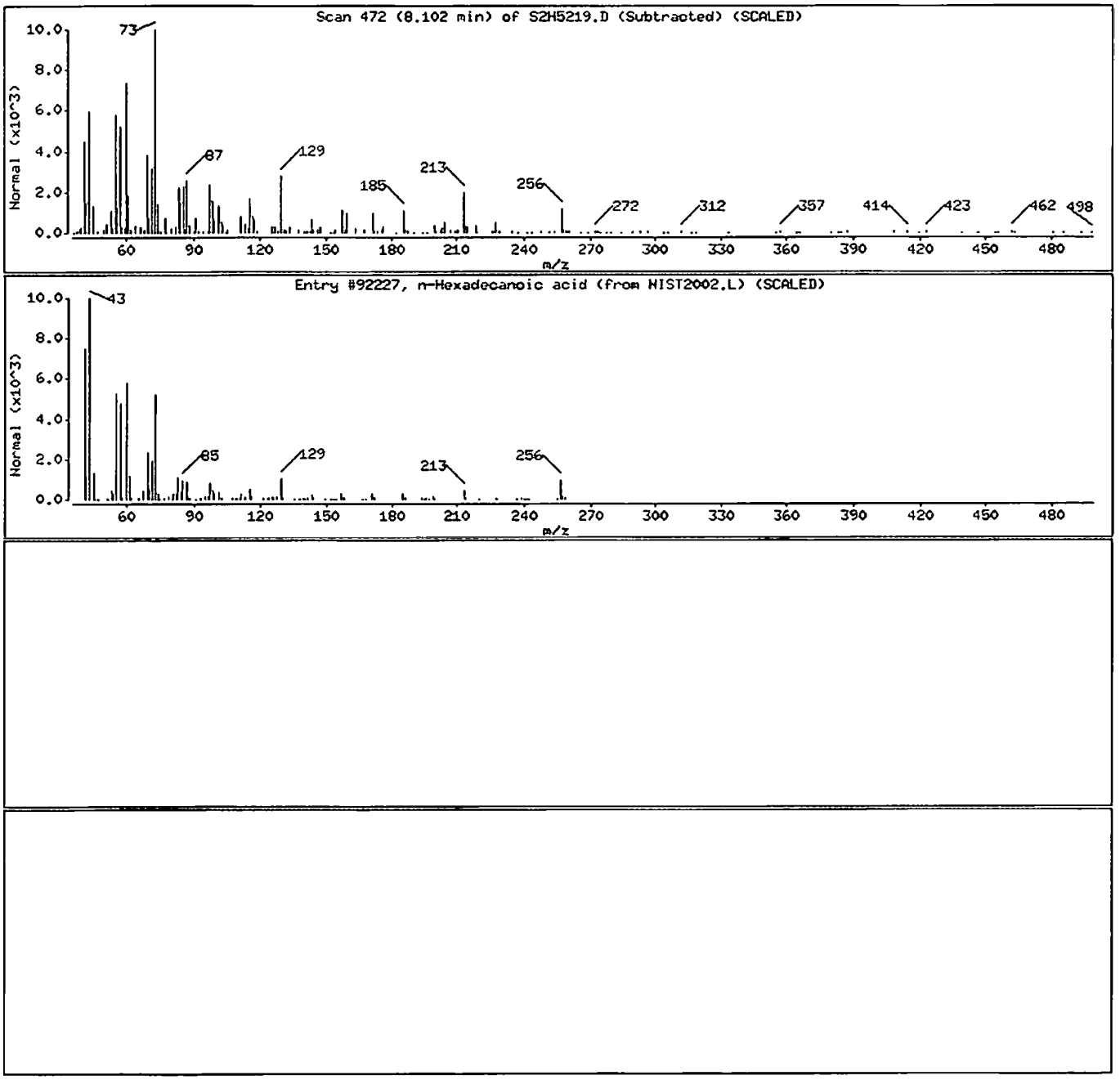
Client ID: H30Y5 Instrument: S2.i

Sample Info: K2200-17B,,62636,,

Volume Injected (uL): 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



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5219.D

Date : 03-NOV-2011 21:48

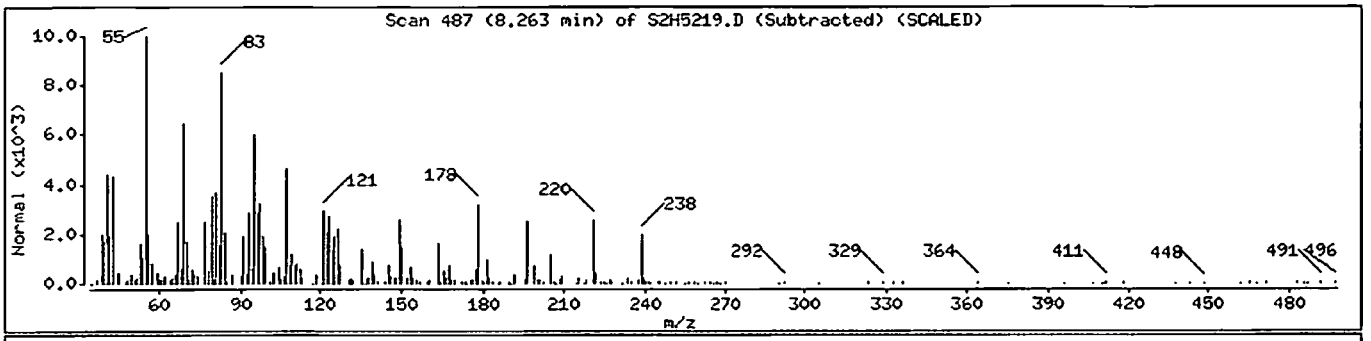
Client ID: H30Y5 Instrument: S2.i

Sample Info: K2200-17B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5219.D

Date : 03-NOV-2011 21:48

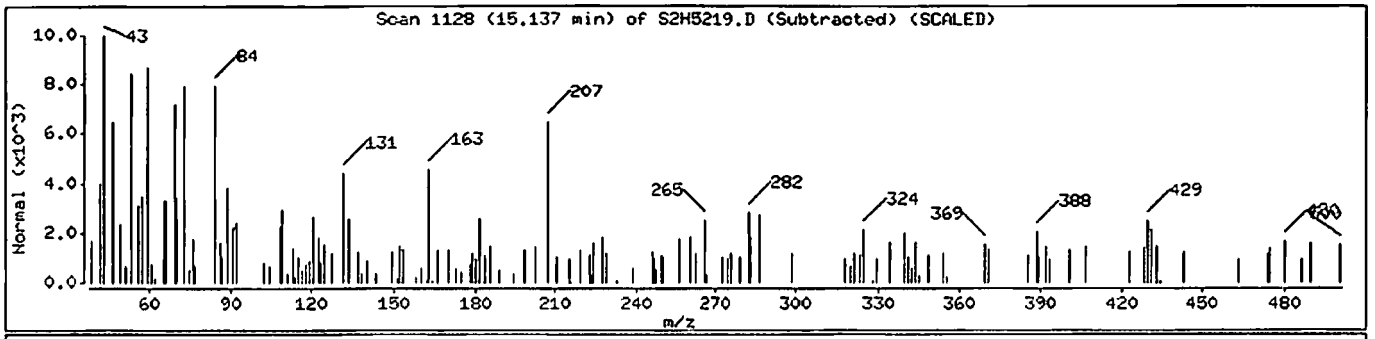
Client ID: H30Y5 Instrument: S2.i

Sample Info: K2200-17B,,62636,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Report Date:
18-Nov-11 10:01

☑ 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: K2200
SDG No: H30S7
Case No: 41926

Attn: Nazy Abousaeedi

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
K2200-01	H30S7	Aqueous	26-Oct-11 10:30	28-Oct-11 09:00
K2200-02	H30T9	Aqueous	24-Oct-11 14:00	28-Oct-11 09:00
K2200-03	H30W0	Aqueous	24-Oct-11 15:25	28-Oct-11 09:00
K2200-04	H30W1	Aqueous	24-Oct-11 16:11	28-Oct-11 09:00
K2200-05	H30W2	Aqueous	24-Oct-11 15:22	28-Oct-11 09:00
K2200-06	H30W3	Aqueous	24-Oct-11 16:45	28-Oct-11 09:00
K2200-07	H30W4	Aqueous	24-Oct-11 17:30	28-Oct-11 09:00
K2200-08	H30W5	Aqueous	24-Oct-11 17:45	28-Oct-11 09:00
K2200-09	H30W6	Aqueous	25-Oct-11 10:15	28-Oct-11 09:00
K2200-10	H30W7	Aqueous	25-Oct-11 11:35	28-Oct-11 09:00
K2200-11	H30W8	Aqueous	25-Oct-11 12:40	28-Oct-11 09:00
K2200-12	H30X0	Aqueous	26-Oct-11 09:30	28-Oct-11 09:00
K2200-13	H30X1	Aqueous	26-Oct-11 10:30	28-Oct-11 09:00
K2200-14	H30Y2	Aqueous	26-Oct-11 10:55	28-Oct-11 09:00
K2200-15	H30Y3	Aqueous	26-Oct-11 12:05	28-Oct-11 09:00
K2200-16	H30Y4	Aqueous	26-Oct-11 15:05	28-Oct-11 09:00
K2200-17	H30Y5	Aqueous	26-Oct-11 17:05	28-Oct-11 09:00
K2200-18	H30Y6	Aqueous	26-Oct-11 18:20	28-Oct-11 09:00
K2200-19	H30Z6	Aqueous	25-Oct-11 16:05	28-Oct-11 09:00
K2200-20	H30X3	Aqueous	27-Oct-11 14:05	29-Oct-11 08:45

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.: H30S7
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)				
2. **SDG Case Narrative**	1	11	✓	
3. **SDG Cover Sheet/Traffic Report**	12	18	✓	
4. **Trace Volatiles Data**				
a. QC Summary				
Deuterated Monitoring Compound Recovery (Form II VOA-1 and VOA-2)	19	20	✓	
Matrix Spike/Matrix Spike Duplicate Recovery (Form III VOA) (if requested by USEPA Region)	N/A	N/A	N/A	
Method Blank Summary (Form IV VOA)	21	22	✓	
GC/MS Instrument Performance Check (Form V VOA)	23	25	✓	
Internal Standard Area and RT Summary (Form VIII VOA)	26	28	✓	
b. Sample Data	29	149	✓	
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)	150	202		
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	203	210	✓	
Blank Data	~~211~~ 211	228	✓	

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET
FORM DC-2 (CON'T)

CASE NO. 41926 SDG NO. H30S7 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)	N/A	N/A	N/A	
Matrix Spike/Matrix Spike Duplicate Recovery (Form III VOA-1 and VOA-2) (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. H30S7 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)	N/A	N/A	N/A	
6. Semivolatiles Data				
a. QC Summary				
Deuterated Monitoring Compound Recovery (Form II SV-1, SV-2, SV-3, SV-4)	229	230	✓	
Matrix Spike/Matrix Spike Duplicate Recovery Summary (Form III SV-1 and SV-2) (if requested by USEPA Region)	231	231	✓	
Method Blank Summary (Form IV SV)	232	233	✓	
GC/MS Instrument Performance Check (Form V SV)	234	237	✓	
Internal Standard Area and RT Summary (Form VIII SV-1 and SV-2)	238	243	✓	
b. Sample Data	244	606		
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:	244	606		
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)			N/A	
c. Standards Data (All Instruments)	607	664		
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	665	682	✓	
Blank Data	683	712	✓	
MS/MSD Data (if requested by USEPA Region)	713	724	✓	
e. Raw GPC Data	N/A	N/A	N/A	

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET
FORM DC-2 (CON'T)

CASE NO. 41926 SDG NO. H30S7 SDG NOS. TO FOLLOW —

— — MOD. REF. NO. —

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK USEPA
f. Semivolatile SIM Data	N/A	N/A	N/A	
[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.]				
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. H30S7 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)	725	725	✓	
Matrix Spike/Matrix Spike Duplicate Summary (Form III ARO-1 and ARO-2)	726	727	✓	
Laboratory Control Sample Recovery(Form III ARO-3 and ARO-4)	728	729	✓	
Method Blank Summary (Form IV ARO)	730	731	✓	
b. Sample Data	732	826		
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. H30S7 SDG NOS. TO FOLLOW —

— — MOD. REF. NO. —

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK USEPA
c. Standards Data	827	978		
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	979	1000	✓	
Matrix Spike/Matrix Spike Duplicate Data	1001	1012	✓	
Laboratory Control Sample (LCS) Data	1013	1028	✓	
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	1029	1045	✓	
Internal sample and sample extract transfer chain-of-custody records	1046	1055	✓	
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	1056	1067	✓	
—	N/A	N/A	N/A	
10. **EPA Shipping/Receiving Documents**				
Airbills (No. of shipments 3)	1068	1070	✓	
Chain of Custody Records	1071	1077	✓	
Sample Tags (in a plastic bag, if present)			N/A	
Sample Log-in Sheet (Lab & DC-1)	1078	1090	✓	
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. H30S7	SDG NOS. TO FOLLOW —
—	—	MOD. REF. NO. —

	PAGE NOs FROM	TO	CHECK LAB	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)	1691	1163	✓	
—	N/A	N/A	N/A	

13. **Comments**

/

Completed by: (CLP Lab)	Jennifer Emerson (Signature)	Jennifer Emerson/Laboratory Specialist (Printed Name/Title)	11/18/11 (Date)
Verified by: (CLP Lab)	Agnes R Huntley (Signature)	Agnes Huntley/CLP Project Manager (Printed Name/Title)	11/18/11 (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# H30S7. Analyses were performed for twenty aqueous samples that were received on October 28 and October 29, 2011.

The analyses were performed under USEPA Contract # EP-W-11-033.

Please note that nine sample-shipping coolers were received on October 28. The temperature of the coolers was measured at 6.5°C, 9.0°C, 9.5°C, 8.5°C, 8.0°C, 9.0°C, 9.5°C, 10.0°C and 9.0°C. The temperature of cooler received on October 29 was measured at 9.0°C.

The following samples are submitted in this data package:

Client ID	Lab ID	Analysis	VOA pH
H30S7	K2200-01A	TV	< 2
H30T9	K2200-02A	TV	< 2
H30T9	K2200-02B	S A	
H30W0	K2200-03A	TV	< 2
H30W0	K2200-03B	S A	
H30W1	K2200-04A	TV	< 2
H30W1	K2200-04B	S A	
H30W2	K2200-05A	TV	< 2
H30W2	K2200-05B	S A	
H30W3	K2200-06A	TV	< 2
H30W3	K2200-06B	S A	
H30W4	K2200-07A	TV	< 2
H30W4	K2200-07B	S A	
H30W5	K2200-08A	TV	< 2
H30W5	K2200-08B	S A	
H30W6	K2200-09A	TV	< 2
H30W6	K2200-09B	S A	
H30W7	K2200-10A	TV	< 2
H30W7	K2200-10B	S A	
H30W8	K2200-11A	TV	< 2
H30W8	K2200-11B	S A	
H30X0	K2200-12A	TV	< 2
H30X0	K2200-12B	S A	
H30X1	K2200-13A	TV	< 2
H30X1	K2200-13B	S A	
H30Y2	K2200-14A	TV	< 2
H30Y2	K2200-14B	S A	
H30Y3	K2200-15A	TV	< 2
H30Y3	K2200-15B	S A	
H30Y4	K2200-16A	TV	< 2

H30Y4	K2200-16B		S	A
H30Y5	K2200-17A	TV		< 2
H30Y5	K2200-17B		S	A
H30Y6	K2200-18A	TV		< 2
H30Y6	K2200-18B		S	A
H30Z6	K2200-19A	TV		< 2
H30Z6	K2200-19B		S	A
H30X3	K2200-20A		S	A
H30X3MS	K2200-20AMS		S	A
H30X3MSD	K2200-20AMSD		S	A

TV = Trace 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 analysis as VOA, SVOA, and ARO for water samples; however, per Scheduling this Case requires TVOA, SVOA, and ARO analysis for water samples. In accordance with previous direction from Region 8, the laboratory will note the issue in the SDG Narrative, perform the analyses as indicated on the Scheduling Notification Form, and proceed with the analysis of the samples. The resolution will be applied to all TR/COCs received for this Case that list an incorrect analysis.

Per Scheduling, water samples require laboratory QC required for the TVOA, SVOA, and ARO fractions. However, the laboratory only received three VOA vials for TVOA analysis and four 1L amber bottles for SVOA/ARO analysis. This is insufficient sample volume for laboratory QC for all fractions. The laboratory can perform the analysis and reduced volume laboratory QC for SVOA/ARO with no volume left if re-extraction is necessary. Per Region 8, the laboratory shall perform reduced volume laboratory QC for SVOA/ARO fractions and cancel TVOA laboratory QC for these SDGs. The lab shall note the issue in the SDG Narrative and proceed with analysis.

The laboratory received two of four 1L amber bottles broken for sample H30W2 and one of four 1L amber bottles broken for samples H30T9 (reported by CHEM and transhipped to MITKEM) and H30Y6. The laboratory has sufficient sample volume remaining for SVOA and ARO analysis but may have an issue if re-extraction is required. 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 samples. If re-extraction/reanalysis is necessary, the laboratory will contact the SMO coordinator and wait for a resolution.

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.

Trace 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 TRACE

The following equation was used to calculate the concentration of target analytes for aqueous samples:

$$\text{Concentration } (\mu\text{g/L}) = \frac{(\text{Amt})(\text{DF})(\text{UF})(25)}{V_o}$$

where: Amt = on-column amount on raw data
DF = Dilution factor
UF = ng unit correction factor
V_o = Sample volume purged (mL)

The following equation was used to calculate the Amt in the previous equation:

$$Amt = \frac{(A_x)(IS)}{(A_{is})(RRF)}$$

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

Aqueous Samples were prepared following procedures in laboratory test code: SW5030B

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.

D. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

Matrix spike and matrix spike duplicate were canceled due to insufficient sample volume.

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.

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 concentration of target analytes was determined for aqueous samples using the following equation:

$$\text{Concentration (ug/L)} = (\text{Amt})(\text{DF})(\text{Uf})\left(\frac{V_t}{V_i}\right)\left(\frac{1}{V_o}\right)$$

where: Amt = on-column amount on raw data
DF = Dilution Factor

Uf = GPC correction factor
V_t = final extract volume (mL)
V_i = volume injected (mL)
V_o = initial volume of sample extracted (mL)

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

Aqueous Samples were prepared following procedures in laboratory test code: SW3520C

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:

H30W1: recovery is below criteria for Acenaphthylene-d8 at 33% with criteria of (41-107), Anthracene-d10 at 34% with criteria of (44-110), Benzo(a)pyrene-d12 at 30% with criteria of (32-121) and Pyrene-d10 at 47% with criteria of (52-119).

H30Y2: recovery is below criteria for Benzo(a)pyrene-d12 at 23% with criteria of (32-121).

H30Y3: recovery is below criteria for Benzo(a)pyrene-d12 at 20% with criteria of (32-121) and Pyrene-d10 at 48% with criteria of (52-119).

H30Y4: recovery is below criteria for Benzo(a)pyrene-d12 at 17% with criteria of (32-121) and Pyrene-d10 at 41% with criteria of (52-119).

H30Y5: recovery is below criteria for Benzo(a)pyrene-d12 at 15% with criteria of (32-121) and Pyrene-d10 at 34% with criteria of (52-119).

H30Y6: recovery is below criteria for Anthracene-d10 at 44% with criteria of (44-110), Benzo(a)pyrene-d12 at 16% with criteria of (32-121) and Pyrene-d10 at 30% with criteria of (52-119).

H30X3: recovery is below criteria for Benzo(a)pyrene-d12 at 22% with criteria of (32-121).

H30X3MSD: recovery is below criteria for Benzo(a)pyrene-d12 at 26% with criteria of (32-121) and Pyrene-d10 at 42% with criteria of (52-119).

D. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

Duplicate matrix spikes were performed on sample H30X3.

Spike recoveries were within the advisory QC limits with the exception of the following:

H30X3MS: recovery is above criteria for 4-Nitrophenol at 101% with criteria of (10-80)a nd Pentachlorophenol at 129% with criteria of (9-103).

H30X3MSD: recovery is above criteria for 4-Nitrophenol at 110% with criteria of (10-80) and Pentachlorophenol at 121% with criteria of (9-103).

Replicate RPDs were within the advisory QC limits with the exception of Pyrene.

Due to limited sample volume, the matrix spike and matrix spike duplicate were performed at reduced volume. The spike amounts and extract final volume were adjusted accordingly to achieve comparable CRQLs.

E. Internal Standards:

Internal standard area counts were within QC criteria.

F. Dilutions:

No sample in this SDG required analysis at dilution.

G. Samples:

No other unusual observations were made for the analysis.

H. Manual Integration:

No manual integrations were performed on any sample or standard.

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 concentration of target analytes was determined using the following equation for the aqueous samples:

$$\text{Concentration } (\mu\text{g/L}) = \frac{(\text{Amt})(\text{DF})(\text{UF})(V_t)}{(V_o * V_i)}$$

where: Amt = Lower value of two Conc
DF = Dilution Factor

UF = Correction Factor
V_t = Volume of final extract (µL)
V_i = Volume of sample injected (µL)
V_o = Volume of sample extracted (mL)

III. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW3510C

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:

H30Y2: recovery is below criteria for Decachlorobiphenyl on rear column at 25% with criteria of (30-150) and Decachlorobiphenyl on front column at 26% with criteria of (30-150).

H30Y3: recovery is below criteria for Decachlorobiphenyl on rear column at 18% with criteria of (30-150) and Decachlorobiphenyl on front column at 19% with criteria of (30-150).

H30Y4: recovery is below criteria for Decachlorobiphenyl on rear column at 20% with criteria of (30-150) and Decachlorobiphenyl on front column at 21% with criteria of (30-150).

H30Y5: recovery is below criteria for Decachlorobiphenyl on rear column at 17% with criteria of (30-150) and Decachlorobiphenyl on front column at 18% with criteria of (30-150).

H30Y6: recovery is below criteria for Decachlorobiphenyl on rear column at 15% with criteria of (30-150) and Decachlorobiphenyl on front column at 16% with criteria of (30-150).

H30X3: recovery is below criteria for Decachlorobiphenyl on rear column at 17% with criteria of (30-150) and Decachlorobiphenyl on front column at 18% with criteria of (30-150).

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

Duplicate matrix spikes were performed on sample H30X3.

Spike recoveries were within the advisory QC limits.

Replicate RPDs were within the advisory QC limits with the exception of Aroclor-1260 on the rear column.

Due to limited sample volume, the matrix spike and matrix spike duplicate were performed at reduced volume. The spike amounts and extract final volume were adjusted accordingly to achieve comparable CRQLs.

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:

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

The following samples were manually integrated:

H30W0: Decachlorobiphenyl due to M6 in the front column
H30W5: Decachlorobiphenyl, Tetrachloro-m-xylene due to M6 in the front column

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
11/18/11

Contract Laboratory Program

Sample Delivery Group (SDG)

Cover Sheet

SDG Number H30S7

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) H30S7	08) H30W5	15) H30X3MS	22) H30Z6
02) H30T9	09) H30W6	16) H30X3MSD	
03) H30W0	10) H30W7	17) H30Y2	
04) H30W1	11) H30W8	18) H30Y3	
05) H30W2	12) H30X0	19) H30Y4	
06) H30W3	13) H30X1	20) H30Y5	
07) H30W4	14) H30X3	21) H30Y6	

First Sample in SDG	Last Sample in SDG
H30S7	H30X3

First Sample Receipt Date	Last Sample Receipt Date
10/28/2011	10/29/2011

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 11/07/2011

SDG H3057

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		
	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

COPY

Original Documents Are Included in CSF H3000
Signed: AGM **Date:** 10/27/11

6.5°C 9.0°C 9.5°C 10.0°C 9.5°C

SDG H30S7

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		
	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

COPY
Original Documents Are Included in CSF H30Q0
Signed: AMA **Date:** 10/28/11

9.0°C 9.0°C 9.5°C 8.0°C 8.5°C

SDG H3057

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
	H30W4	Semivolatiles (SVOAs)	Surface Water	10/24/2011	17:30		
	H30W4	Aroclors	Surface Water	10/24/2011	17:30		
	H30W5	Semivolatiles (SVOAs)	Surface Water	10/24/2011	17:45		
	H30W5	Aroclors	Surface Water	10/24/2011	17:45		
	H30W6	Semivolatiles (SVOAs)	Surface Water	10/25/2011	10:15		
	H30W6	Aroclors	Surface Water	10/25/2011	10:15		
	H30W7	Semivolatiles (SVOAs)	Surface Water	10/25/2011	11:35		
	H30W7	Aroclors	Surface Water	10/25/2011	11:35		
	H30W8	Semivolatiles (SVOAs)	Surface Water	10/25/2011	12:40		
	H30W8	Aroclors	Surface Water	10/25/2011	12:40		

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
	[signature]	10/26/11	FedEx	10/26/11	1300				[signature]	10/27/11	9:15
									[signature]	10/28/11	9:00

9.0°C 9.0°C 9.5°C 8.0°C 8.5°C

SDG H3087

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
	H30W4	Volatiles (VOAs)	Surface Water	10/24/2011	17:30	HCl	
	H30W5	Volatiles (VOAs)	Surface Water	10/24/2011	17:45	HCl	
	H30W6	Volatiles (VOAs)	Surface Water	10/25/2011	10:15	HCl	
	H30W7	Volatiles (VOAs)	Surface Water	10/25/2011	11:35	HCl	
	H30W8	Volatiles (VOAs)	Surface Water	10/25/2011	12:40	HCl	
	H30X0	Volatiles (VOAs)	Ground Water	10/26/2011	09:30	HCl	
	H30X0	Semivolatiles (SVOAs)	Ground Water	10/26/2011	09:30		
	H30X0	Aroclors	Ground Water	10/26/2011	09:30		
	H30X1	Volatiles (VOAs)	Ground Water	10/26/2011	10:30	HCl	
	H30X1	Semivolatiles (SVOAs)	Ground Water	10/26/2011	10:30		
	H30X1	Aroclors	Ground Water	10/26/2011	10:30		
	H30Y2	Volatiles (VOAs)	Ground Water	10/26/2011	10:55	HCl	
	H30Y2	Semivolatiles (SVOAs)	Ground Water	10/26/2011	10:55		
	H30Y2	Aroclors	Ground Water	10/26/2011	10:55		
	H30Y3	Volatiles (VOAs)	Ground Water	10/26/2011	12:05	HCl	
	H30Y3	Semivolatiles (SVOAs)	Ground Water	10/26/2011	12:05		
	H30Y3	Aroclors	Ground Water	10/26/2011	12:05		
	H30Y4	Volatiles (VOAs)	Ground Water	10/26/2011	15:05	HCl	
	H30Y4	Semivolatiles (SVOAs)	Ground Water	10/26/2011	15:05		
	H30Y4	Aroclors	Ground Water	10/26/2011	15:05		

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 Potman	10/27/11	FedEx	10/27/11	1400		FedEx	10-28-11	[illegible]	10-28-11	9:00

6.5°C 9.0°C 9.5°C 10.0°C 9.5°C

SDG H30857

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
	H30Y5	Volatiles (VOAs)	Ground Water	10/26/2011	17:05	HCl	
	H30Y5	Semivolatiles (SVOAs)	Ground Water	10/26/2011	17:05		
	H30Y5	Aroclors	Ground Water	10/26/2011	17:05		
	H30Y6	Volatiles (VOAs)	Ground Water	10/26/2011	18:20	HCl	
	H30Y6	Semivolatiles (SVOAs)	Ground Water	10/26/2011	18:20		
	H30Y6	Aroclors	Ground Water	10/26/2011	18:20		
	H30Z6	Volatiles (VOAs)	Ground Water	10/25/2011	16:05	HCl	
	H30Z6	Semivolatiles (SVOAs)	Ground Water	10/25/2011	16:05		
	H30Z6	Aroclors	Ground Water	10/25/2011	16:05		

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 Patrum	10/27/11	FedEx	10/27/11	1400		FedEx	10-28-11	Dennis Mann	10-28-11	9:00

6.5°C 9.0°C 9.5°C 10.0°C 9.5°C

SDG H30S7

USEPA
DateShipped: 10/28/2011
CarrierName: FedEx
AirbillNo:

CHAIN OF CUSTODY RECORD
Site #: 41926
Contact Name: Jeff Miller
Contact Phone: 720-219-7891

No: 8-102811-114448-0006
Cooler #:
Lab: Spectrum Analytical
Lab Phone: 401-732-3400

Lab #	CLP Sample #	Analyses	Matrix	Collected	Sample Time	Preservative	MS/MSD
	H30Q5	Semivolatiles (SVOAs)/PCBs	Soil	10/27/2011	10:10		
	H30Q7	Semivolatiles (SVOAs)/PCBs	Soil	10/27/2011	11:10		
	H30R2	Semivolatiles (SVOAs)/PCBs	Soil	10/27/2011	14:10		
	H30R3	Semivolatiles (SVOAs)/PCBs	Soil	10/27/2011	13:50		
	H30R4	Semivolatiles (SVOAs)/PCBs	Soil	10/27/2011	17:45		
	H30R6	Semivolatiles (SVOAs)/PCBs	Soil	10/27/2011	15:40		
	H30R7	Semivolatiles (SVOAs)/PCBs	Soil	10/27/2011	16:00		
	H30R8	Semivolatiles (SVOAs)/PCBs	Soil	10/27/2011	17:20		
SDG-Field Sample	H30X3	Semivolatiles (SVOAs)	Ground Water	10/27/2011	14:05		
	H30X3	Aroclors	Ground Water	10/27/2011	14:05		
	H30X4	Semivolatiles (SVOAs)	Ground Water	10/27/2011	17:25		
	H30X4	Aroclors	Ground Water	10/27/2011	17:25		
	H30Y7	Semivolatiles (SVOAs)	Ground Water	10/27/2011	10:23		
	H30Y7	Aroclors	Ground Water	10/27/2011	10:23		

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
	[signature]	10/28/11	FedEx	10/28/11	1230		FedEx	10-29-11	[signature]	10-29-11	8:45

COPY

Original Documents Are Included in CSF H30T6
Signed: [signature] **Date:** 10/31/11

9.0°C

2A - FORM II VOA-1

WATER 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.: H30S7

Level: (TRACE or LOW) TRACE

	EPA SAMPLE NO.	VDMC1 (VCL) #	VDMC2 (CLA) #	VDMC3 (DCE) #	VDMC4 (BUT) #	VDMC5 (CLF) #	VDMC6 (DCA) #	VDMC7 (BEN) #
01	VBLK5T	78	81	76	93	92	89	101
02	H30S7	89	90	83	79	90	86	102
03	H30T9	89	88	85	84	93	87	101
04	H30W0	84	84	80	80	91	84	104
05	H30W1	85	88	80	81	93	82	100
06	H30W2	88	88	85	80	93	87	102
07	H30W3	87	88	86	80	90	89	99
08	H30W4	85	87	85	83	91	85	101
09	H30W5	86	87	85	84	92	81	108
10	H30W6	84	88	83	84	95	89	100
11	H30W7	81	86	79	82	91	81	103
12	H30W8	80	85	79	81	90	84	103
13	H30X0	89	91	83	81	93	88	108
14	H30X1	88	92	82	79	93	85	100
15	H30Y2	84	85	82	83	90	79	105
16	H30Y3	81	86	80	84	91	87	106
17	H30Y4	86	87	84	82	92	87	102
18	H30Y5	85	86	77	85	90	88	106
19	H30Y6	81	84	74	79	90	83	102
20	VBLK5W	92	91	83	86	91	82	107
21	H30Z6	85	90	88	80	91	83	102
22	VHBLK5W	94	92	88	91	90	83	104

		QC LIMITS
VDMC1	(VCL) = Vinyl chloride-d3	(65-131)
VDMC2	(CLA) = Chloroethane-d5	(71-131)
VDMC3	(DCE) = 1,1-Dichloroethene-d2	(55-104)
VDMC4	(BUT) = 2-Butanone-d5	(49-155)
VDMC5	(CLF) = Chloroform-d	(78-121)
VDMC6	(DCA) = 1,2-Dichloroethane-d4	(78-129)
VDMC7	(BEN) = Benzene-d6	(77-124)

Column to be used to flag recovery values

* Values outside of contract required QC limits

2B - FORM II VOA-2

WATER 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.: H30S7

Level: (TRACE or LOW) TRACE

	SAMPLE NO.	VDMC8 (DPA) #	VDMC9 (TOL) #	VDMC10 (TDP) #	VDMC11 (HEX) #	VDMC12 (TCA) #	VDMC13 (DCZ) #	VDMC14 #	TOT OUT
01	VBLK5T	86	97	94	81	78	93		0
02	H30S7	88	95	96	73	78	90		0
03	H30T9	85	94	89	72	74	93		0
04	H30W0	91	101	91	76	81	83		0
05	H30W1	90	99	92	75	77	94		0
06	H30W2	88	98	95	75	79	90		0
07	H30W3	89	99	94	75	80	91		0
08	H30W4	85	97	91	76	80	92		0
09	H30W5	97	103	98	83	83	90		0
10	H30W6	92	99	87	78	79	85		0
11	H30W7	88	101	98	70	81	90		0
12	H30W8	89	100	91	77	81	86		0
13	H30X0	95	105	106	83	80	85		0
14	H30X1	89	98	87	77	78	89		0
15	H30Y2	93	102	97	81	82	92		0
16	H30Y3	94	101	96	77	85	100		0
17	H30Y4	92	100	92	81	79	85		0
18	H30Y5	97	103	94	83	87	92		0
19	H30Y6	92	99	82	80	83	91		0
20	VBLK5W	97	101	99	81	81	90		0
21	H30Z6	89	98	88	78	81	91		0
22	VHBLK5W	88	102	96	82	74	85		0

		QC LIMITS
VDMC8	(DPA) = 1,2-Dichloropropane-d6	(79-124)
VDMC9	(TOL) = Toluene-d8	(77-121)
VDMC10	(TDP) = trans-1,3-Dichloropropene-d4	(73-121)
VDMC11	(HEX) = 2-Hexanone-d5	(28-135)
VDMC12	(TCA) = 1,1,2,2-Tetrachloroethane-d2	(73-125)
VDMC13	(DCZ) = 1,2-Dichlorobenzene-d4	(80-131)

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

4A - FORM IV VOA

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK5T

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Lab File ID: V5N2526A.D Lab Sample ID: MB-62672

Instrument ID: V5

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 11/01/2011

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 7:25

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	H30S7	K2200-01A	V5N2531.D	9:49
02	H30T9	K2200-02A	V5N2532.D	10:17
03	H30W0	K2200-03A	V5N2533.D	10:46
04	H30W1	K2200-04A	V5N2534.D	11:14
05	H30W2	K2200-05A	V5N2535.D	11:43
06	H30W3	K2200-06A	V5N2536.D	12:11
07	H30W4	K2200-07A	V5N2537.D	12:40
08	H30W5	K2200-08A	V5N2538.D	13:08
09	H30W6	K2200-09A	V5N2539.D	13:36
10	H30W7	K2200-10A	V5N2540.D	14:05
11	H30W8	K2200-11A	V5N2541.D	14:33
12	H30X0	K2200-12A	V5N2542.D	15:01
13	H30X1	K2200-13A	V5N2543.D	15:30
14	H30Y2	K2200-14A	V5N2544.D	15:58
15	H30Y3	K2200-15A	V5N2545.D	16:27
16	H30Y4	K2200-16A	V5N2546.D	16:55
17	H30Y5	K2200-17A	V5N2547.D	17:23
18	H30Y6	K2200-18A	V5N2548.D	17:52

COMMENTS:

4A - FORM IV VOA

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK5W

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Lab File ID: V5N2621.D Lab Sample ID: MB-62673

Instrument ID: V5

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 11/02/2011

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 18:16

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	H30Z6	K2200-19A	V5N2622.D	18:46
02	VHBLK5W	VHBLK5W	V5N2642.D	5:06

COMMENTS:

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.
BFBB5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Lab File ID: V5N1679.D BFB Injection Date: 10/15/2011

Instrument ID: V5 BFB Injection Time: 10:58

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.8
75	30.0 - 80.0% of mass 95	42.6
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	0.4 (0.5)1
174	50.0 -120% of mass 95	77.5
175	5.0 - 9.0% of mass 174	4.8 (6.2)1
176	95.0 - 101% of mass 174	76.3 (98.4)1
177	5.0 - 9.0% of mass 176	5.4 (7.1)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	VSTD005B5	VSTD005B5	V5N1680.D	10/15/2011	11:28
02	VSTD0.5B5	VSTD0.5B5	V5N1681.D	10/15/2011	11:57
03	VSTD020B5	VSTD020B5	V5N1682.D	10/15/2011	12:26
04	VSTD010B5	VSTD010B5	V5N1683.D	10/15/2011	12:55
05	VSTD001B5	VSTD001B5	V5N1684.D	10/15/2011	13:24

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.
BFB5T

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Lab File ID: V5N2525.D BFB Injection Date: 11/01/2011

Instrument ID: V5 BFB Injection Time: 6:27

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.4
75	30.0 - 80.0% of mass 95	43.9
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 -120% of mass 95	74.4
175	5.0 - 9.0% of mass 174	5.6 (7.6)1
176	95.0 - 101% of mass 174	72.7 (97.6)1
177	5.0 - 9.0% of mass 176	5.0 (6.9)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	VSTD0055T	VSTD0055T	V5N2526.D	11/01/2011	6:58
02	VBLK5T	MB-62672	V5N2526A.D	11/01/2011	7:25
03	H30S7	K2200-01A	V5N2531.D	11/01/2011	9:49
04	H30T9	K2200-02A	V5N2532.D	11/01/2011	10:17
05	H30W0	K2200-03A	V5N2533.D	11/01/2011	10:46
06	H30W1	K2200-04A	V5N2534.D	11/01/2011	11:14
07	H30W2	K2200-05A	V5N2535.D	11/01/2011	11:43
08	H30W3	K2200-06A	V5N2536.D	11/01/2011	12:11
09	H30W4	K2200-07A	V5N2537.D	11/01/2011	12:40
10	H30W5	K2200-08A	V5N2538.D	11/01/2011	13:08
11	H30W6	K2200-09A	V5N2539.D	11/01/2011	13:36
12	H30W7	K2200-10A	V5N2540.D	11/01/2011	14:05
13	H30W8	K2200-11A	V5N2541.D	11/01/2011	14:33
14	H30X0	K2200-12A	V5N2542.D	11/01/2011	15:01
15	H30X1	K2200-13A	V5N2543.D	11/01/2011	15:30
16	H30Y2	K2200-14A	V5N2544.D	11/01/2011	15:58
17	H30Y3	K2200-15A	V5N2545.D	11/01/2011	16:27
18	H30Y4	K2200-16A	V5N2546.D	11/01/2011	16:55
19	H30Y5	K2200-17A	V5N2547.D	11/01/2011	17:23
20	H30Y6	K2200-18A	V5N2548.D	11/01/2011	17:52
21	VSTD0055U	VSTD0055U	V5N2571.D	11/01/2011	18:25
22	VSTD0055V	VSTD0055V	V5N2595.D	11/02/2011	5:55

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.
BFB5T

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Lab File ID: V5N2525.D BFB Injection Date: 11/01/2011

Instrument ID: V5 BFB Injection Time: 6:27

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.4
75	30.0 - 80.0% of mass 95	43.9
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 -120% of mass 95	74.4
175	5.0 - 9.0% of mass 174	5.6 (7.6)1
176	95.0 - 101% of mass 174	72.7 (97.6)1
177	5.0 - 9.0% of mass 176	5.0 (6.9)2

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

23	VSTD0055W	VSTD0055W	V5N2620.D	11/02/2011	17:48
24	VBLK5W	MB-62673	V5N2621.D	11/02/2011	18:16
25	H30Z6	K2200-19A	V5N2622.D	11/02/2011	18:46
26	VHBLK5W	VHBLK5W	V5N2642.D	11/03/2011	5:06
27	VSTD0055X	VSTD0055X	V5N2643.D	11/03/2011	5:35

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.: H30S7

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 10/15/2011 10/15/2011

EPA Sample No.(VSTD#####): VSTD0055T Date Analyzed: 11/01/2011

Lab File ID (Standard): V5N2526.D Time Analyzed: 6:58

Instrument ID: V5 Heated Purge: (Y/N) N

		IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD	229121		9.431		321823		6.319		99508		12.172	
	UPPER LIMIT	320769		9.761		450552		6.649		139311		12.502	
	LOWER LIMIT	137473		9.101		193094		5.989		59705		11.842	
	EPA SAMPLE NO.												
01	VBLK5T	247420		9.431		338451		6.319		89970		12.184	
02	H30S7	249979		9.437		348111		6.325		91772		12.190	
03	H30T9	258713		9.431		342196		6.319		87606		12.184	
04	H30W0	251018		9.438		358366		6.325		89992		12.190	
05	H30W1	257387		9.432		361912		6.319		89841		12.184	
06	H30W2	259236		9.431		356684		6.319		94733		12.183	
07	H30W3	257795		9.437		356169		6.325		87578		12.189	
08	H30W4	247703		9.437		337426		6.325		87354		12.189	
09	H30W5	237883		9.438		348091		6.326		90864		12.179	
10	H30W6	265041		9.430		365913		6.329		97190		12.182	
11	H30W7	262154		9.437		375587		6.325		94167		12.190	
12	H30W8	256934		9.438		371951		6.325		94798		12.179	
13	H30X0	241056		9.431		357753		6.330		96038		12.183	
14	H30X1	265442		9.432		362142		6.320		96827		12.184	
15	H30Y2	253268		9.427		364892		6.327		90683		12.180	

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.: H30S7

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 10/15/2011 10/15/2011

EPA Sample No.(VSTD#####): VSTD0055T Date Analyzed: 11/01/2011

Lab File ID (Standard): V5N2526.D Time Analyzed: 6:58

Instrument ID: V5 Heated Purge: (Y/N) N

		IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD	229121		9.431		321823		6.319		99508		12.172	
	UPPER LIMIT	320769		9.761		450552		6.649		139311		12.502	
	LOWER LIMIT	137473		9.101		193094		5.989		59705		11.842	
	EPA SAMPLE NO.												
16	H30Y3	245738		9.438		362223		6.325		88912		12.178	
17	H30Y4	253813		9.426		359370		6.326		93968		12.179	
18	H30Y5	246717		9.432		358004		6.320		94389		12.184	
19	H30Y6	263019		9.432		377860		6.319		94001		12.184	

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.: H30S7

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 10/15/2011 10/15/2011

EPA Sample No.(VSTD#####): VSTD0055W Date Analyzed: 11/02/2011

Lab File ID (Standard): V5N2620.D Time Analyzed: 17:48

Instrument ID: V5 Heated Purge: (Y/N) N

		IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD	235932		9.428		345489		6.327		99862		12.169	
	UPPER LIMIT	330305		9.758		483685		6.657		139807		12.499	
	LOWER LIMIT	141559		9.098		207293		5.997		59917		11.839	
	EPA SAMPLE NO.												
01	VBLK5W	235404		9.431		349637		6.319		91389		12.183	
02	H30Z6	258464		9.438		360698		6.325		94525		12.178	
03	VHBLK5W	260840		9.437		369976		6.324		98882		12.189	

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.

H30S7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-01A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2531.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.64	
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30S7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-01A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2531.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30S7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-01A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2531.D

Level: (TRACE or LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

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/L Purge Volume: 25.0 (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\111101.B\V5N2531.D
Report Date: 07-Nov-2011 13:09

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2531.D
Lab Smp Id: K2200-01A Client Smp ID: H30S7
Inj Date : 01-NOV-2011 09:49
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-01A,,62672,
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.179	2.173	(0.345)	177060	4.45086	4.5
$ 80 Chloroethane-d5	69	2.597	2.591	(0.411)	118504	4.51135	4.5
$ 81 1,1-Dichloroethene-d2	65	3.375	3.369	(0.534)	37968	4.15084	4.2(Q)
$ 82 2-Butanone-d5	46	5.070	5.065	(0.802)	157634	39.7410	40(AQ)
$ 83 Chloroform-d	84	5.384	5.378	(0.851)	168350	4.47990	4.5(Q)
19 Chloroform	83	5.407	5.402	(0.855)	26146	0.64230	0.64
$ 23 1,2-Dichloroethane-d4	65	5.895	5.901	(0.932)	63449	4.31807	4.3
$ 84 Benzene-d6	84	5.918	5.913	(0.627)	356146	5.08218	5.1
* 26 1,4-Difluorobenzene	114	6.325	6.319	(1.000)	348111	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.731	6.726	(0.713)	109782	4.40045	4.4
$ 33 Toluene-d8	98	7.846	7.840	(0.831)	306201	4.74678	4.7
$ 86 trans-1,3-Dichloropropene-d4	79	8.125	8.119	(0.861)	67979	4.79481	4.8
$ 87 2-Hexanone-d5	63	8.577	8.572	(0.909)	93384	36.5709	37(A)
* 42 Chlorobenzene-d5	117	9.437	9.431	(1.000)	249979	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.947	10.918	(1.160)	38918	3.90549	3.9
* 78 1,4-Dichlorobenzene-d4	152	12.189	12.172	(1.000)	91772	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.642	12.625	(1.037)	68119	4.51470	4.5(Q)

QC Flag Legend

A - Target compound detected but, quantitated amount
    exceeded maximum amount.

Data File: \\avogadro\organics\V5.I\111101.B\V5N2531.D
Report Date: 07-Nov-2011 13:09

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111101.B\V5N2531.D
Report Date: 07-Nov-2011 13:09

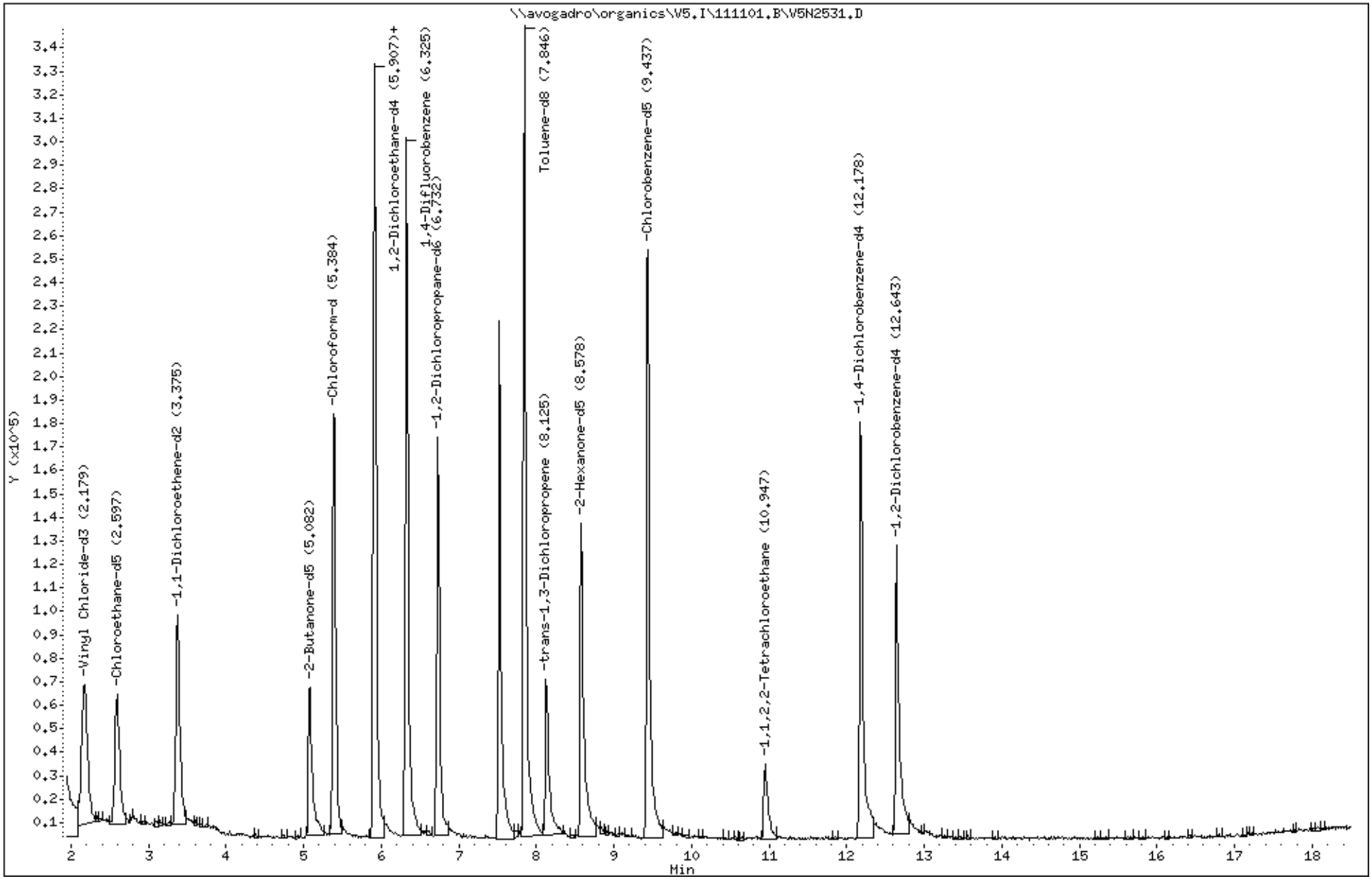
Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2531.D
Lab Smp Id: K2200-01A Client Smp ID: H30S7
Inj Date : 01-NOV-2011 09:49
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-01A,,62672,
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111101.B\V5N2531.D
Date : 01-NOV-2011 09:49
Client ID: H30S7
Instrument: V5.i
Sample Info: 25ML,K2200-01A,,62672,
Purge Volume: 25.0
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111101.B\V5N2531.D

Date : 01-NOV-2011 09:49

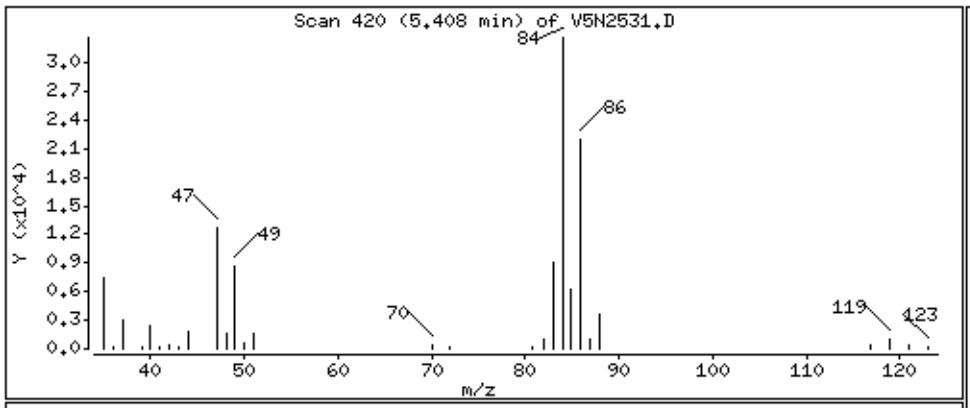
Client ID: H30S7 Instrument: V5.i

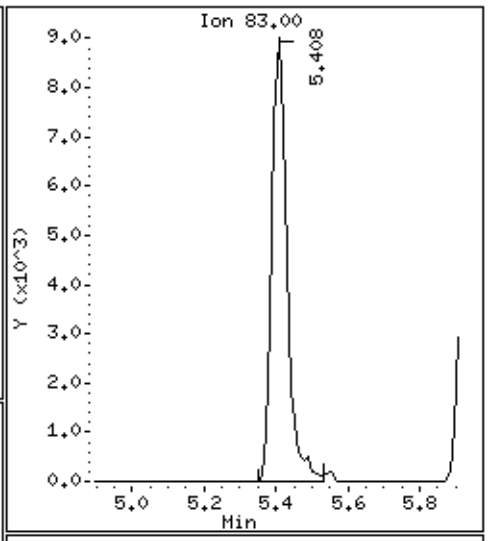
Sample Info: 25ML,K2200-01A,,62672,

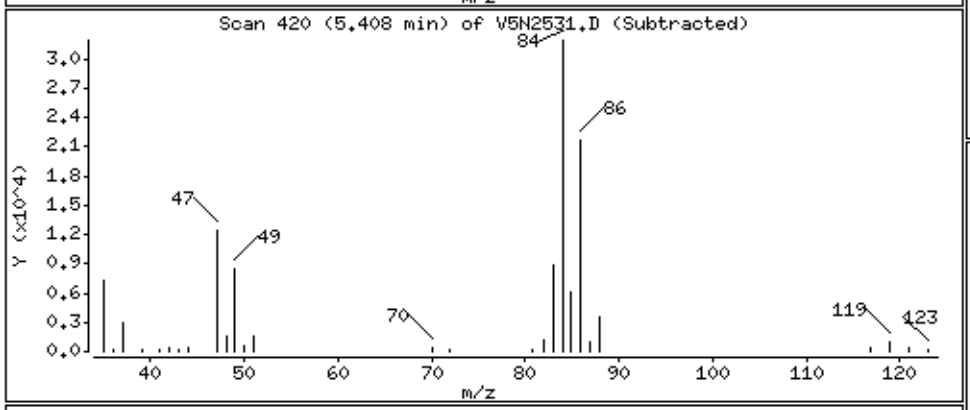
Purge Volume: 25.0 Operator: SRC: LIMS

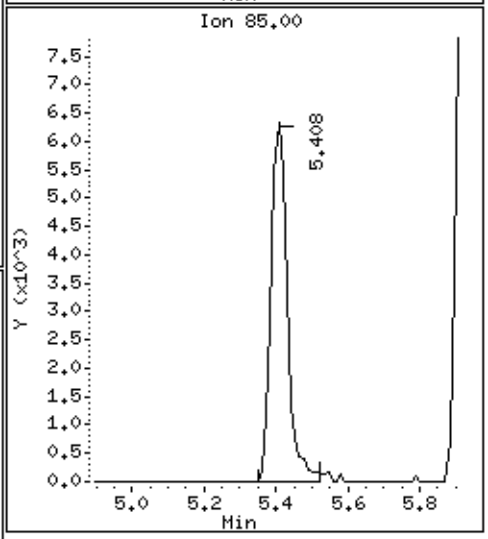
Column phase: DB-624 Column diameter: 0.25

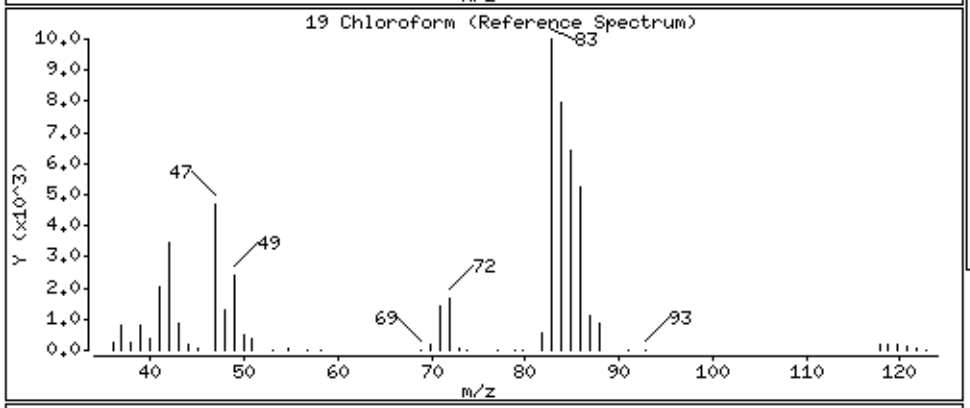
19 Chloroform Concentration: 0.64 ug/L

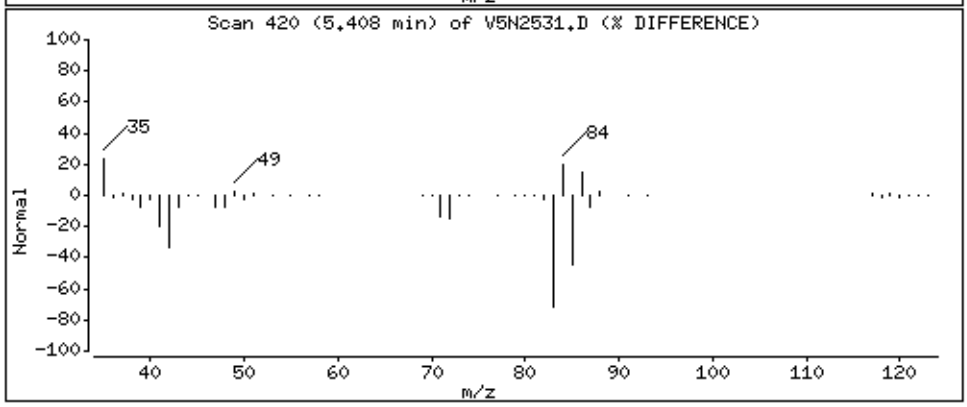












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T9

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-02A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2532.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T9

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-02A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2532.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30T9

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-02A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2532.D

Level: (TRACE or LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

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/L Purge Volume: 25.0 (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\111101.B\V5N2532.D
Report Date: 07-Nov-2011 13:09

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2532.D
Lab Smp Id: K2200-02A Client Smp ID: H30T9
Inj Date : 01-NOV-2011 10:17
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-02A,,62672,
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	79 Vinyl Chloride-d3	65	2.173	2.173	(0.344)	174587	4.46456	4.5
$	80 Chloroethane-d5	69	2.591	2.591	(0.410)	113609	4.39976	4.4
$	81 1,1-Dichloroethene-d2	65	3.369	3.369	(0.533)	38387	4.26919	4.3(Q)
$	82 2-Butanone-d5	46	5.076	5.065	(0.803)	163511	41.9352	42(AQ)
$	83 Chloroform-d	84	5.390	5.378	(0.853)	172146	4.66010	4.7(Q)
$	23 1,2-Dichloroethane-d4	65	5.901	5.901	(0.934)	63152	4.37215	4.4
$	84 Benzene-d6	84	5.912	5.913	(0.627)	365429	5.03860	5.0
*	26 1,4-Difluorobenzene	114	6.319	6.319	(1.000)	342196	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.725	6.726	(0.713)	109190	4.22897	4.2
$	33 Toluene-d8	98	7.840	7.840	(0.831)	314182	4.70608	4.7
$	86 trans-1,3-Dichloropropene-d4	79	8.130	8.119	(0.862)	65385	4.45615	4.5
$	87 2-Hexanone-d5	63	8.583	8.572	(0.910)	94877	35.9012	36(A)
*	42 Chlorobenzene-d5	117	9.431	9.431	(1.000)	258713	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.952	10.918	(1.161)	38251	3.70897	3.7
*	78 1,4-Dichlorobenzene-d4	152	12.183	12.172	(1.000)	87606	5.00000	
$	90 1,2-Dichlorobenzene-d4	152	12.648	12.625	(1.038)	66714	4.63185	4.6

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111101.B\V5N2532.D
Report Date: 07-Nov-2011 13:09

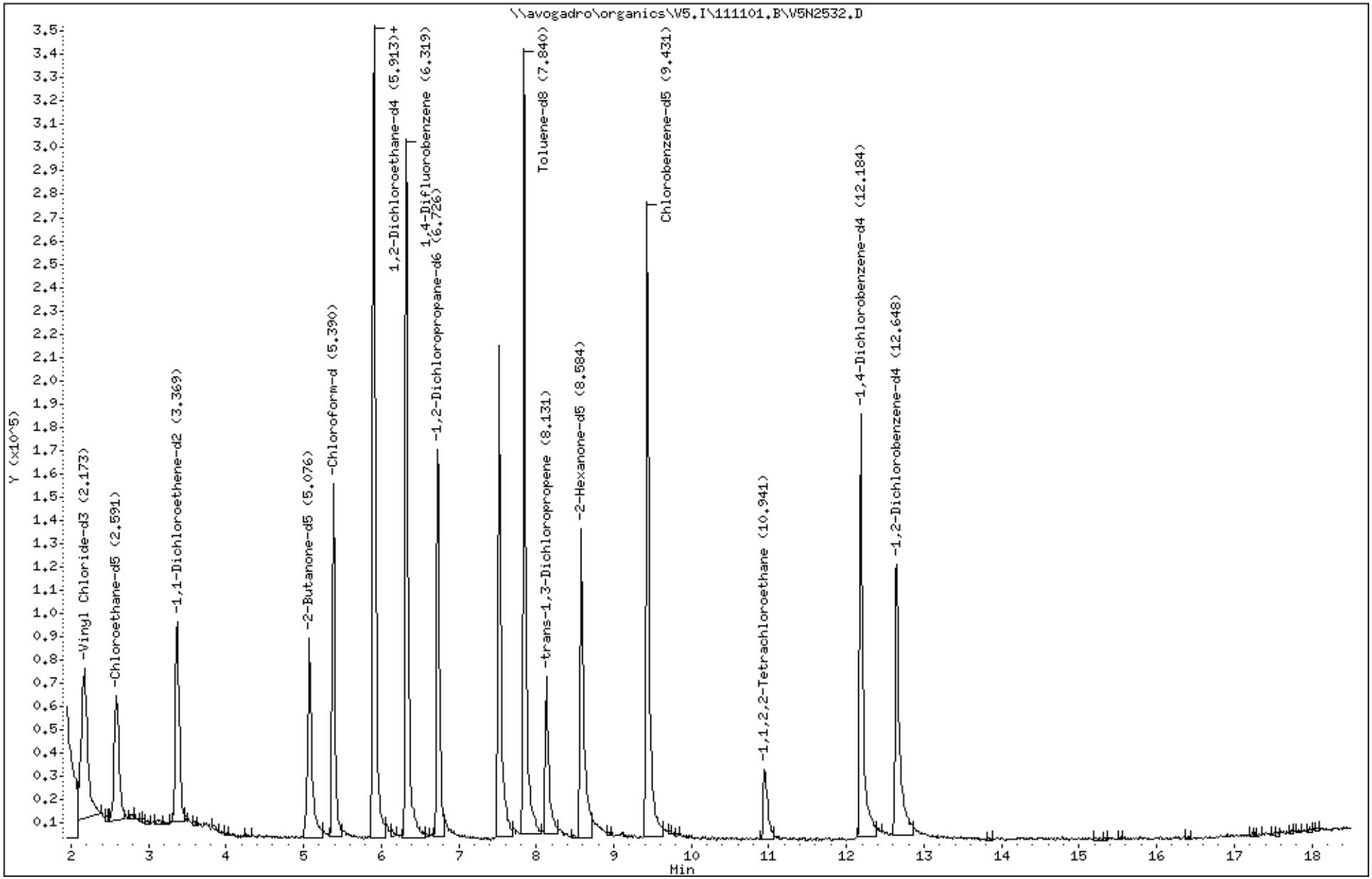
Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2532.D
Lab Smp Id: K2200-02A Client Smp ID: H30T9
Inj Date : 01-NOV-2011 10:17
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-02A,,62672,
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111101.B\V5N2532.D
Date : 01-NOV-2011 10:17
Client ID: H30T9
Instrument: V5.i
Sample Info: 25ML,K2200-02A,,62672,
Purge Volume: 25.0
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30W0

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-03A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2533.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30W0

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-03A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2533.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30W0

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-03A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2533.D

Level: (TRACE or LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

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/L Purge Volume: 25.0 (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\111101.B\V5N2533.D
Report Date: 07-Nov-2011 13:09

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2533.D
Lab Smp Id: K2200-03A Client Smp ID: H30W0
Inj Date : 01-NOV-2011 10:46
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-03A,,62672,
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	79 Vinyl Chloride-d3	65	2.167	2.173	(0.343)	172359	4.20871	4.2
$	80 Chloroethane-d5	69	2.585	2.591	(0.409)	113695	4.20442	4.2
$	81 1,1-Dichloroethene-d2	65	3.363	3.369	(0.532)	37698	4.00339	4.0(Q)
$	82 2-Butanone-d5	46	5.071	5.065	(0.802)	163903	40.1390	40(AQ)
$	83 Chloroform-d	84	5.384	5.378	(0.851)	176574	4.56429	4.6(Q)
$	23 1,2-Dichloroethane-d4	65	5.895	5.901	(0.932)	63446	4.19431	4.2
$	84 Benzene-d6	84	5.907	5.913	(0.626)	367160	5.21766	5.2
*	26 1,4-Difluorobenzene	114	6.325	6.319	(1.000)	358366	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.731	6.726	(0.713)	113761	4.54107	4.5
$	33 Toluene-d8	98	7.846	7.840	(0.831)	326472	5.04008	5.0
$	86 trans-1,3-Dichloropropene-d4	79	8.125	8.119	(0.861)	64834	4.55406	4.6
$	87 2-Hexanone-d5	63	8.578	8.572	(0.909)	97972	38.2088	38(AQ)
*	42 Chlorobenzene-d5	117	9.437	9.431	(1.000)	251018	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.947	10.918	(1.160)	40660	4.06341	4.1
*	78 1,4-Dichlorobenzene-d4	152	12.189	12.172	(1.000)	89992	5.00000	
$	90 1,2-Dichlorobenzene-d4	152	12.642	12.625	(1.037)	61593	4.16292	4.2

QC Flag Legend

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

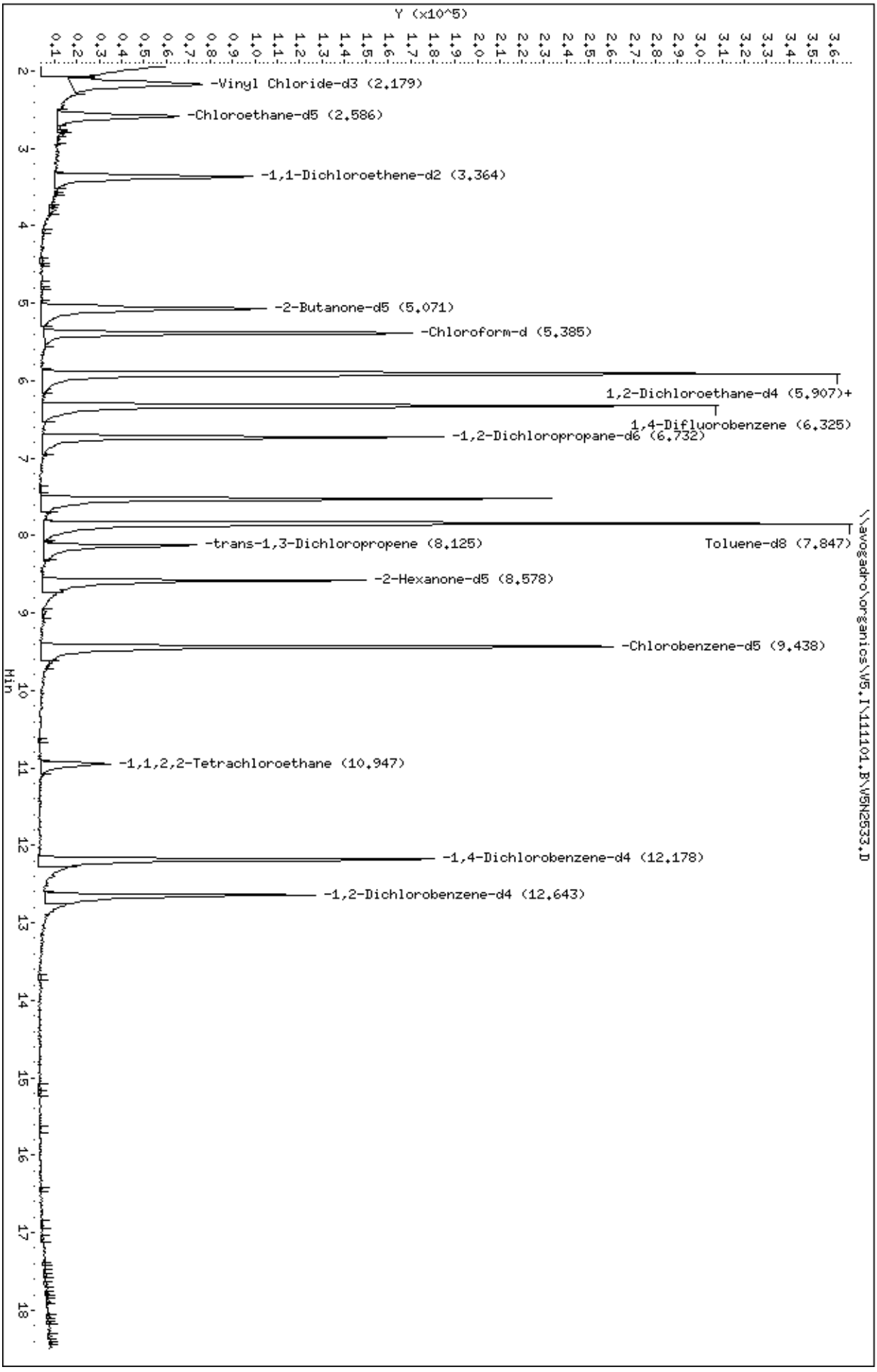
Data File: \\avogadro\organics\V5.I\111101.B\V5N2533.D
Report Date: 07-Nov-2011 13:09

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2533.D
Lab Smp Id: K2200-03A Client Smp ID: H30W0
Inj Date : 01-NOV-2011 10:46
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-03A,,62672,
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -


Data File: \\avogadro\organics\W5,I\111101.B\W5N2533.D
Date : 01-NOV-2011 10:46
Client ID: H30W0
Sample Info: 25ML,K2200-03A,,62672,
Purge Volume: 25.0
Column phase: DB-624
Instrument: W5,i
Operator: SRC: LIMS
Column diameter: 0.25
Y (x10^5)
-Vinyl Chloride-d3 (2.179)
-Chloroethane-d5 (2.586)
-1,1-Dichloroethene-d2 (3.364)
-2-Butanone-d5 (5.071)
-Chloroform-d (5.385)
1,2-Dichloroethane-d4 (5.907)+
1,4-Difluorobenzene (6.325)
-1,2-Dichloropropane-d6 (6.732)
Toluene-d8 (7.847)
-trans-1,3-Dichloropropene (8.125)
-2-Hexanone-d5 (8.578)
-Chlorobenzene-d5 (9.438)
-1,1,2,2-Tetrachloroethane (10.947)
-1,4-Dichlorobenzene-d4 (12.178)
-1,2-Dichlorobenzene-d4 (12.643)
\\avogadro\organics\W5,I\111101.B\W5N2533.D
Min

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30W1

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-04A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2534.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30W1

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-04A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2534.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30W1

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-04A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2534.D

Level: (TRACE or LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

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/L Purge Volume: 25.0 (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\111101.B\V5N2534.D
Report Date: 07-Nov-2011 13:09

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2534.D
Lab Smp Id: K2200-04A Client Smp ID: H30W1
Inj Date : 01-NOV-2011 11:14
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-04A,,62672,
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	79 Vinyl Chloride-d3	65	2.173	2.173	(0.344)	174744	4.22514	4.2
$	80 Chloroethane-d5	69	2.591	2.591	(0.410)	119864	4.38912	4.4
$	81 1,1-Dichloroethene-d2	65	3.369	3.369	(0.533)	38216	4.01864	4.0(Q)
$	82 2-Butanone-d5	46	5.076	5.065	(0.803)	167754	40.6796	41(AQ)
$	83 Chloroform-d	84	5.390	5.378	(0.853)	182459	4.67020	4.7(Q)
$	23 1,2-Dichloroethane-d4	65	5.901	5.901	(0.934)	62915	4.11845	4.1(Q)
$	84 Benzene-d6	84	5.912	5.913	(0.627)	361051	5.00389	5.0
*	26 1,4-Difluorobenzene	114	6.319	6.319	(1.000)	361912	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.725	6.726	(0.713)	115187	4.48422	4.5
$	33 Toluene-d8	98	7.840	7.840	(0.831)	328378	4.94406	4.9
$	86 trans-1,3-Dichloropropene-d4	79	8.130	8.119	(0.862)	67233	4.60571	4.6
$	87 2-Hexanone-d5	63	8.583	8.572	(0.910)	99045	37.6714	38(A)
*	42 Chlorobenzene-d5	117	9.431	9.431	(1.000)	257387	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.941	10.918	(1.160)	39463	3.84620	3.8
*	78 1,4-Dichlorobenzene-d4	152	12.183	12.172	(1.000)	89841	5.00000	
$	90 1,2-Dichlorobenzene-d4	152	12.648	12.625	(1.038)	69094	4.67775	4.7

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111101.B\V5N2534.D
Report Date: 07-Nov-2011 13:09

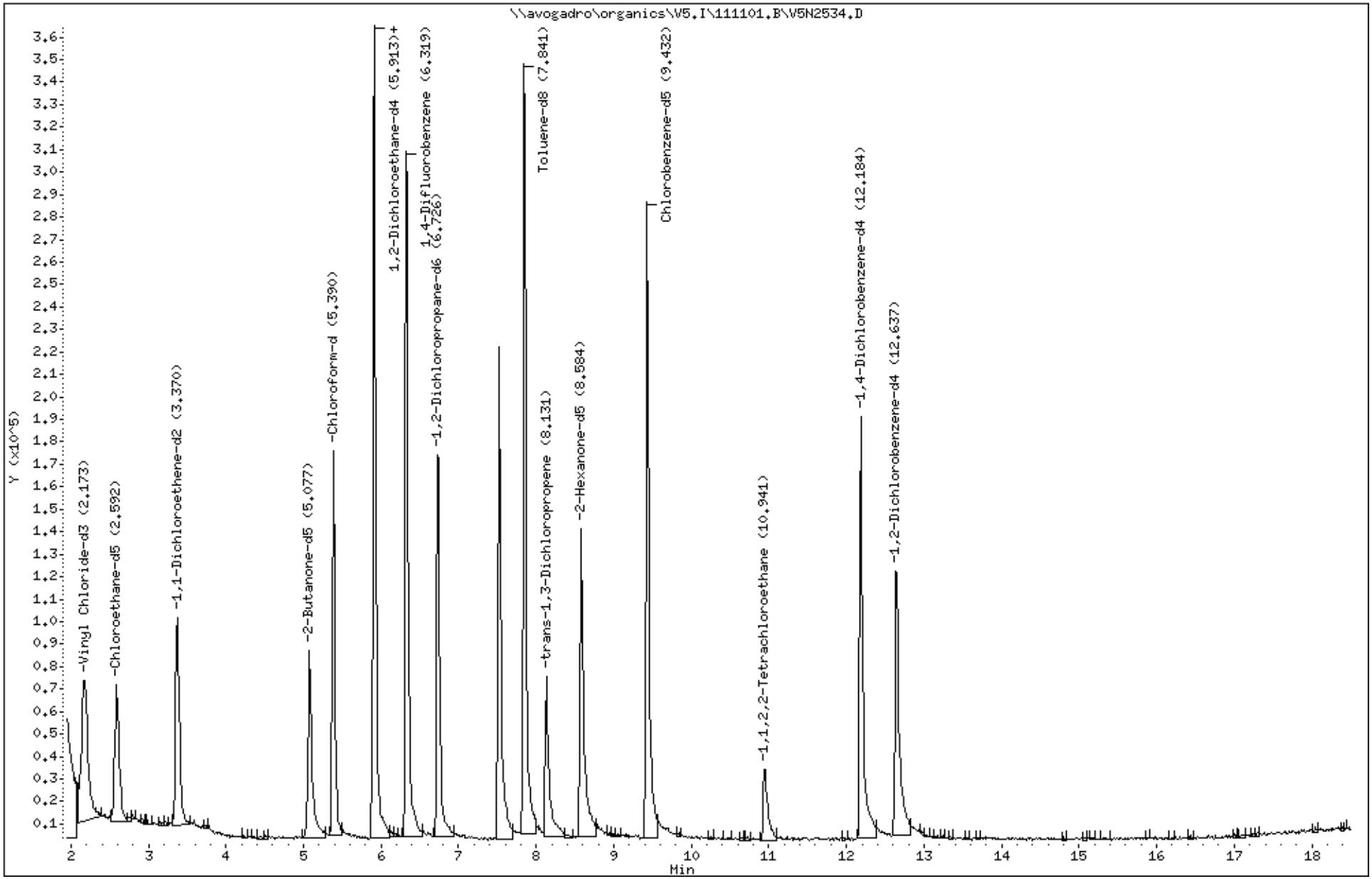
Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2534.D
Lab Smp Id: K2200-04A Client Smp ID: H30W1
Inj Date : 01-NOV-2011 11:14
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-04A,,62672,
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111101.B\V5N2534.D
Date : 01-NOV-2011 11:14
Client ID: H30W1
Instrument: V5.i
Sample Info: 25ML,K2200-04A,,62672,
Purge Volume: 25.0
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30W2

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-05A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2535.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30W2

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-05A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2535.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30W2

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-05A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2535.D

Level: (TRACE or LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

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/L Purge Volume: 25.0 (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\111101.B\V5N2535.D
Report Date: 07-Nov-2011 13:09

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2535.D
Lab Smp Id: K2200-05A Client Smp ID: H30W2
Inj Date : 01-NOV-2011 11:43
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-05A,,62672,
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	79 Vinyl Chloride-d3	65	2.172	2.173	(0.344)	180052	4.41729	4.4
$	80 Chloroethane-d5	69	2.590	2.591	(0.410)	118104	4.38806	4.4
$	81 1,1-Dichloroethene-d2	65	3.357	3.369	(0.531)	39829	4.24964	4.2(Q)
$	82 2-Butanone-d5	46	5.075	5.065	(0.803)	162709	40.0345	40(AQ)
$	83 Chloroform-d	84	5.389	5.378	(0.853)	178151	4.62677	4.6(Q)
$	23 1,2-Dichloroethane-d4	65	5.900	5.901	(0.934)	65141	4.32667	4.3
$	84 Benzene-d6	84	5.912	5.913	(0.627)	371501	5.11199	5.1
*	26 1,4-Difluorobenzene	114	6.318	6.319	(1.000)	356684	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.725	6.726	(0.713)	114121	4.41103	4.4
$	33 Toluene-d8	98	7.839	7.840	(0.831)	327148	4.89041	4.9
$	86 trans-1,3-Dichloropropene-d4	79	8.130	8.119	(0.862)	69590	4.73317	4.7
$	87 2-Hexanone-d5	63	8.583	8.572	(0.910)	99201	37.4617	37(A)
*	42 Chlorobenzene-d5	117	9.430	9.431	(1.000)	259236	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.940	10.918	(1.160)	41060	3.97330	4.0
*	78 1,4-Dichlorobenzene-d4	152	12.183	12.172	(1.000)	94733	5.00000	(Q)
$	90 1,2-Dichlorobenzene-d4	152	12.647	12.625	(1.038)	70226	4.50887	4.5(Q)

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111101.B\V5N2535.D
Report Date: 07-Nov-2011 13:09

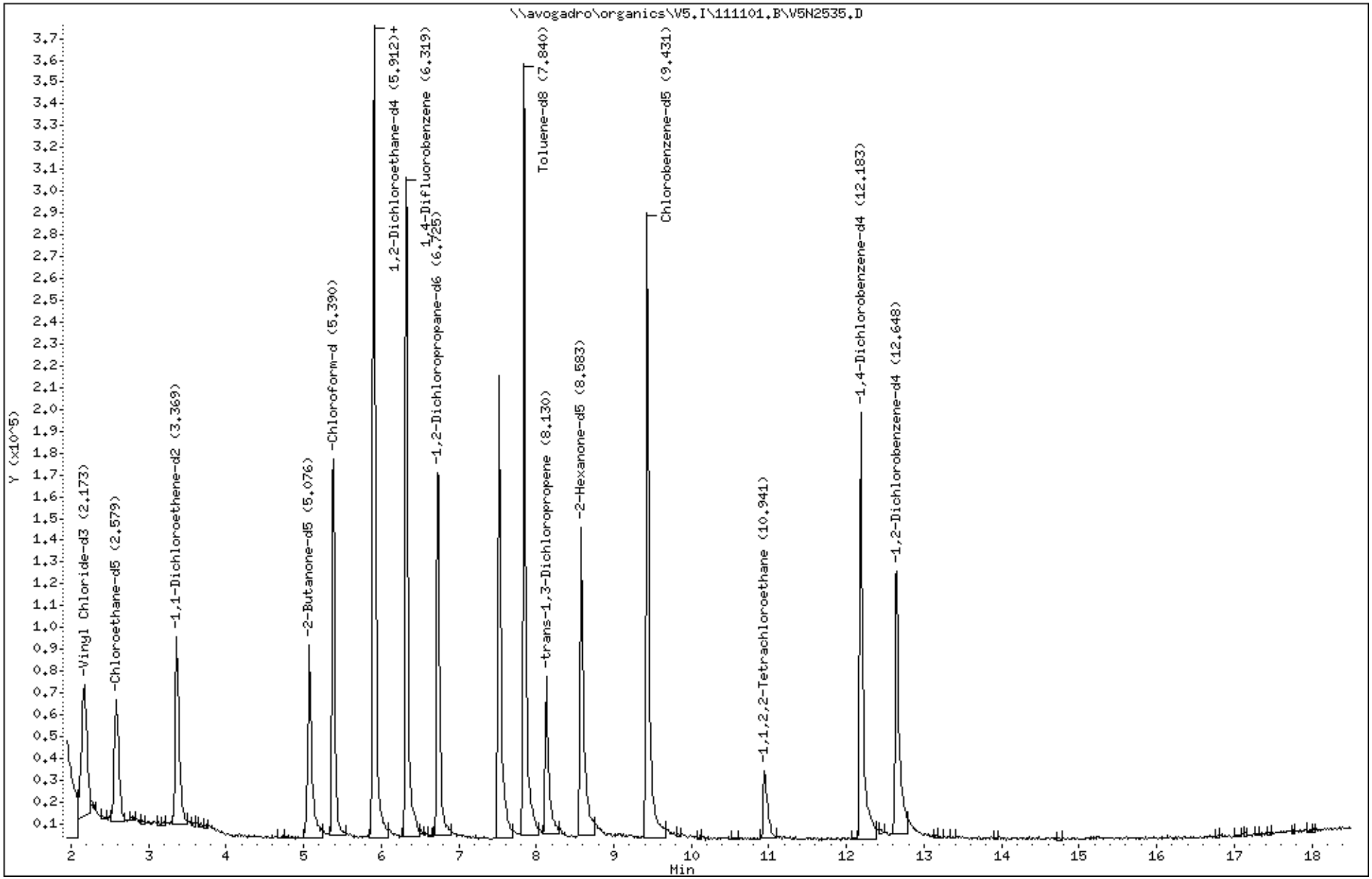
Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2535.D
Lab Smp Id: K2200-05A Client Smp ID: H30W2
Inj Date : 01-NOV-2011 11:43
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-05A,,62672,
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111101.B\V5N2535.D
Date : 01-NOV-2011 11:43
Client ID: H30W2
Instrument: V5.i
Sample Info: 25ML,K2200-05A,,62672,
Purge Volume: 25.0
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30W3

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-06A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2536.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30W3

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-06A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2536.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30W3

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-06A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2536.D

Level: (TRACE or LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

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/L Purge Volume: 25.0 (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\111101.B\V5N2536.D
Report Date: 07-Nov-2011 13:09

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2536.D
Lab Smp Id: K2200-06A Client Smp ID: H30W3
Inj Date : 01-NOV-2011 12:11
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-06A,,62672,
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	79 Vinyl Chloride-d3	65	2.167	2.173	(0.343)	177951	4.37206	4.4
$	80 Chloroethane-d5	69	2.585	2.591	(0.409)	117609	4.37599	4.4
$	81 1,1-Dichloroethene-d2	65	3.363	3.369	(0.532)	40294	4.30547	4.3(Q)
$	82 2-Butanone-d5	46	5.070	5.065	(0.802)	162233	39.9751	40(AQ)
$	83 Chloroform-d	84	5.383	5.378	(0.851)	173018	4.49996	4.5(Q)
$	23 1,2-Dichloroethane-d4	65	5.894	5.901	(0.932)	66526	4.42505	4.4
$	84 Benzene-d6	84	5.906	5.913	(0.626)	357820	4.95126	5.0
*	26 1,4-Difluorobenzene	114	6.324	6.319	(1.000)	356169	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.731	6.726	(0.713)	114088	4.43440	4.4
$	33 Toluene-d8	98	7.845	7.840	(0.831)	330737	4.97169	5.0
$	86 trans-1,3-Dichloropropene-d4	79	8.136	8.119	(0.862)	68419	4.67953	4.7
$	87 2-Hexanone-d5	63	8.577	8.572	(0.909)	99291	37.7052	38(A)
*	42 Chlorobenzene-d5	117	9.436	9.431	(1.000)	257795	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.946	10.918	(1.160)	41122	4.00155	4.0
*	78 1,4-Dichlorobenzene-d4	152	12.189	12.172	(1.000)	87578	5.00000	
$	90 1,2-Dichlorobenzene-d4	152	12.642	12.625	(1.037)	65547	4.55228	4.6

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111101.B\V5N2536.D
Report Date: 07-Nov-2011 13:09

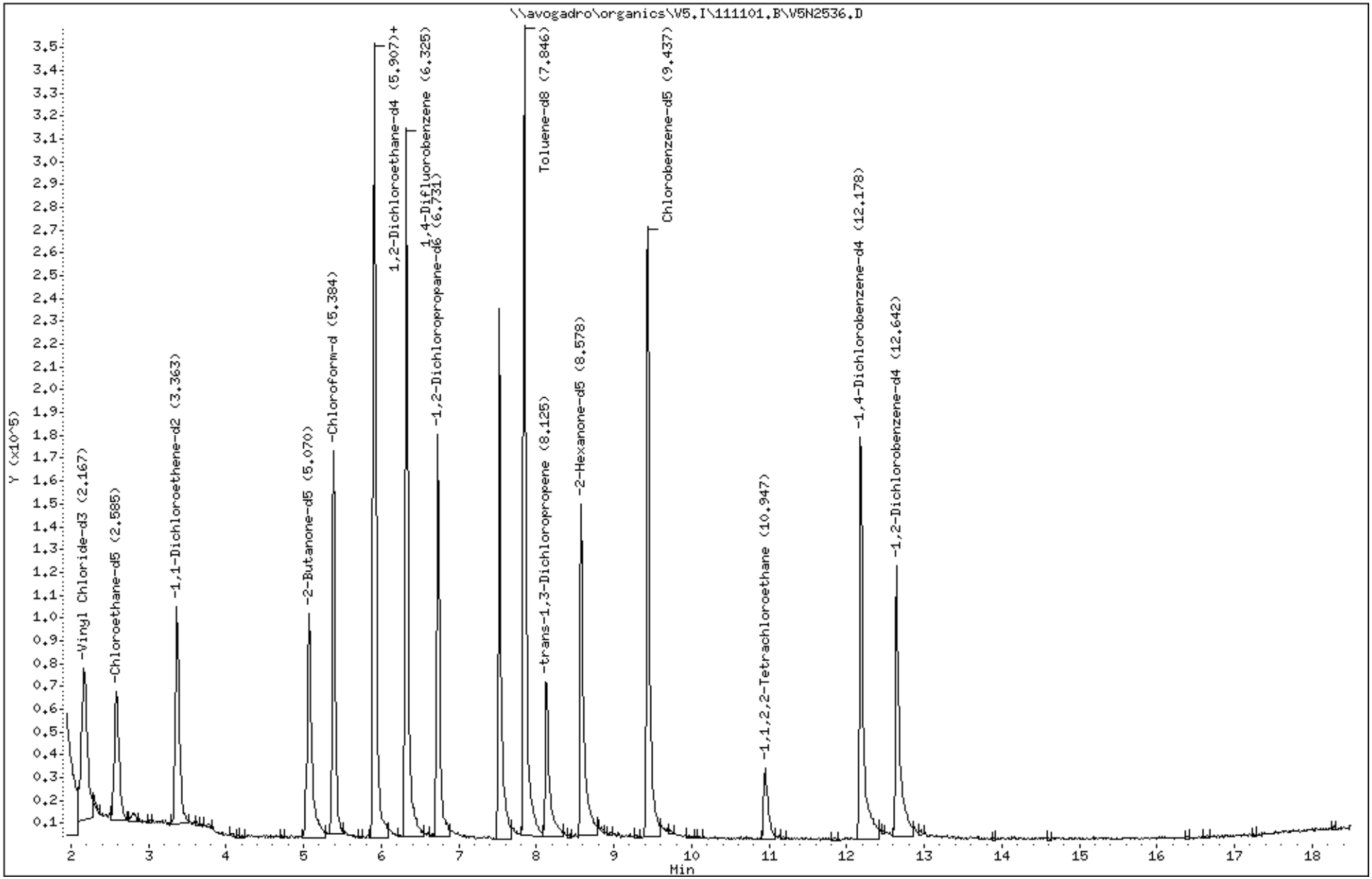
Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2536.D
Lab Smp Id: K2200-06A Client Smp ID: H30W3
Inj Date : 01-NOV-2011 12:11
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-06A,,62672,
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111101.B\V5N2536.D
Date : 01-NOV-2011 12:11
Client ID: H30W3
Instrument: V5.i
Sample Info: 25ML,K2200-06A,,62672,
Purge Volume: 25.0
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30W4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-07A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2537.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30W4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-07A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2537.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30W4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-07A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2537.D

Level: (TRACE or LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

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/L Purge Volume: 25.0 (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\111101.B\V5N2537.D
Report Date: 07-Nov-2011 13:09

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2537.D
Lab Smp Id: K2200-07A Client Smp ID: H30W4
Inj Date : 01-NOV-2011 12:40
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-07A,,62672,
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	79 Vinyl Chloride-d3	65	2.167	2.173	(0.343)	164002	4.25316	4.3
$	80 Chloroethane-d5	69	2.585	2.591	(0.409)	111097	4.36330	4.4
$	81 1,1-Dichloroethene-d2	65	3.363	3.369	(0.532)	37541	4.23413	4.2(Q)
$	82 2-Butanone-d5	46	5.070	5.065	(0.802)	158835	41.3118	41(AQ)
$	83 Chloroform-d	84	5.384	5.378	(0.851)	165671	4.54822	4.5(Q)
$	23 1,2-Dichloroethane-d4	65	5.894	5.901	(0.932)	60848	4.27219	4.3(Q)
$	84 Benzene-d6	84	5.906	5.913	(0.626)	351814	5.06649	5.1
*	26 1,4-Difluorobenzene	114	6.324	6.319	(1.000)	337426	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.731	6.726	(0.713)	104672	4.23418	4.2
$	33 Toluene-d8	98	7.845	7.840	(0.831)	310014	4.85005	4.9
$	86 trans-1,3-Dichloropropene-d4	79	8.124	8.119	(0.861)	63928	4.55051	4.6
$	87 2-Hexanone-d5	63	8.577	8.572	(0.909)	95683	37.8155	38(A)
*	42 Chlorobenzene-d5	117	9.436	9.431	(1.000)	247703	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.946	10.918	(1.160)	39444	3.99464	4.0
*	78 1,4-Dichlorobenzene-d4	152	12.189	12.172	(1.000)	87354	5.00000	
$	90 1,2-Dichlorobenzene-d4	152	12.642	12.625	(1.037)	65858	4.58561	4.6(Q)

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111101.B\V5N2537.D
Report Date: 07-Nov-2011 13:09

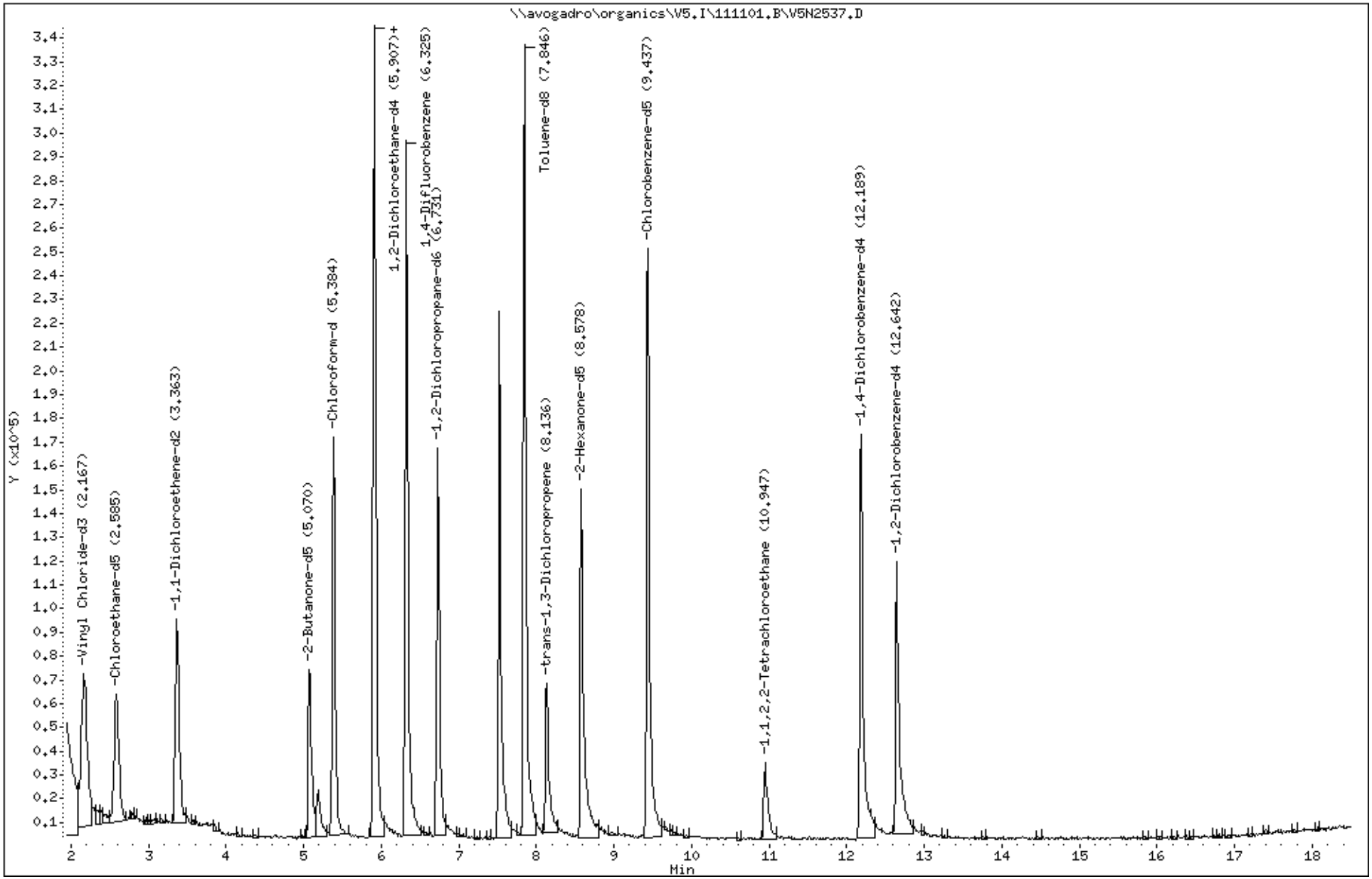
Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2537.D
Lab Smp Id: K2200-07A Client Smp ID: H30W4
Inj Date : 01-NOV-2011 12:40
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-07A,,62672,
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111101.B\V5N2537.D
Date : 01-NOV-2011 12:40
Client ID: H30W4
Instrument: V5.i
Sample Info: 25ML,K2200-07A,,62672,
Purge Volume: 25.0
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30W5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-08A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2538.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30W5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-08A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2538.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30W5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-08A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2538.D

Level: (TRACE or LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

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/L Purge Volume: 25.0 (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\111101.B\V5N2538.D
Report Date: 07-Nov-2011 13:09

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2538.D
Lab Smp Id: K2200-08A Client Smp ID: H30W5
Inj Date : 01-NOV-2011 13:08
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-08A,,62672,
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	79 Vinyl Chloride-d3	65	2.180	2.173	(0.345)	171110	4.30154	4.3
$	80 Chloroethane-d5	69	2.586	2.591	(0.409)	114304	4.35171	4.4
$	81 1,1-Dichloroethene-d2	65	3.364	3.369	(0.532)	38928	4.25604	4.3(Q)
$	82 2-Butanone-d5	46	5.071	5.065	(0.802)	166082	41.8732	42(AQ)
$	83 Chloroform-d	84	5.385	5.378	(0.851)	172315	4.58568	4.6(Q)
$	23 1,2-Dichloroethane-d4	65	5.896	5.901	(0.932)	59574	4.05459	4.1(Q)
$	84 Benzene-d6	84	5.919	5.913	(0.627)	360785	5.41017	5.4
*	26 1,4-Difluorobenzene	114	6.325	6.319	(1.000)	348091	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.732	6.726	(0.713)	115454	4.86312	4.9
$	33 Toluene-d8	98	7.847	7.840	(0.831)	315386	5.13777	5.1
$	86 trans-1,3-Dichloropropene-d4	79	8.125	8.119	(0.861)	66169	4.90446	4.9
$	87 2-Hexanone-d5	63	8.578	8.572	(0.909)	100817	41.4893	41(A)
*	42 Chlorobenzene-d5	117	9.438	9.431	(1.000)	237883	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.947	10.918	(1.160)	39183	4.13202	4.1
*	78 1,4-Dichlorobenzene-d4	152	12.178	12.172	(1.000)	90864	5.00000	(Q)
$	90 1,2-Dichlorobenzene-d4	152	12.643	12.625	(1.038)	67277	4.50346	4.5(Q)

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111101.B\V5N2538.D
Report Date: 07-Nov-2011 13:09

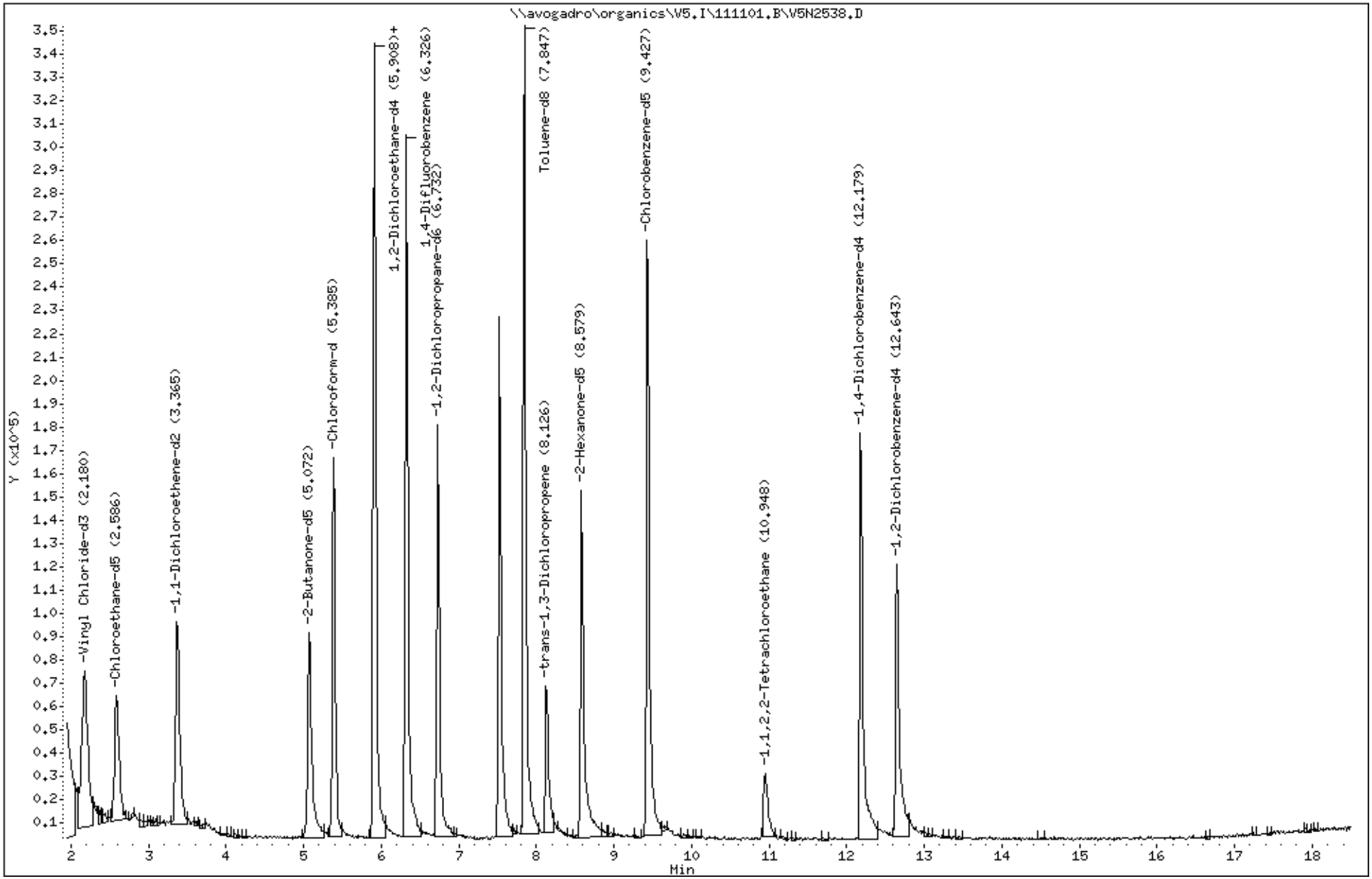
Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2538.D
Lab Smp Id: K2200-08A Client Smp ID: H30W5
Inj Date : 01-NOV-2011 13:08
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-08A,,62672,
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111101.B\V5N2538.D
Date : 01-NOV-2011 13:08
Client ID: H30W5
Instrument: V5.i
Sample Info: 25ML,K2200-08A,,62672,
Purge Volume: 25.0
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30W6

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-09A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2539.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30W6

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-09A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2539.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30W6

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-09A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2539.D

Level: (TRACE or LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

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/L Purge Volume: 25.0 (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\111101.B\V5N2539.D
Report Date: 07-Nov-2011 13:10

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2539.D
Lab Smp Id: K2200-09A Client Smp ID: H30W6
Inj Date : 01-NOV-2011 13:36
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-09A,,62672,
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.183	2.173	(0.345)	176015	4.20933	4.2
$ 80 Chloroethane-d5	69	2.589	2.591	(0.409)	121048	4.38401	4.4
$ 81 1,1-Dichloroethene-d2	65	3.367	3.369	(0.532)	39861	4.14579	4.1(Q)
$ 82 2-Butanone-d5	46	5.074	5.065	(0.802)	174531	41.8602	42(AQ)
$ 83 Chloroform-d	84	5.388	5.378	(0.851)	187246	4.74032	4.7(Q)
$ 23 1,2-Dichloroethane-d4	65	5.899	5.901	(0.932)	69046	4.47037	4.5
$ 84 Benzene-d6	84	5.910	5.913	(0.627)	370758	4.99003	5.0
* 26 1,4-Difluorobenzene	114	6.328	6.319	(1.000)	365913	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.735	6.726	(0.714)	121385	4.58904	4.6
$ 33 Toluene-d8	98	7.850	7.840	(0.833)	340026	4.97159	5.0
$ 86 trans-1,3-Dichloropropene-d4	79	8.128	8.119	(0.862)	65486	4.35648	4.4
$ 87 2-Hexanone-d5	63	8.581	8.572	(0.910)	105681	39.0346	39(A)
* 42 Chlorobenzene-d5	117	9.429	9.431	(1.000)	265041	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.939	10.918	(1.160)	41662	3.94326	3.9
* 78 1,4-Dichlorobenzene-d4	152	12.181	12.172	(1.000)	97190	5.00000	(Q)
$ 90 1,2-Dichlorobenzene-d4	152	12.646	12.625	(1.038)	67826	4.24469	4.2

QC Flag Legend

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

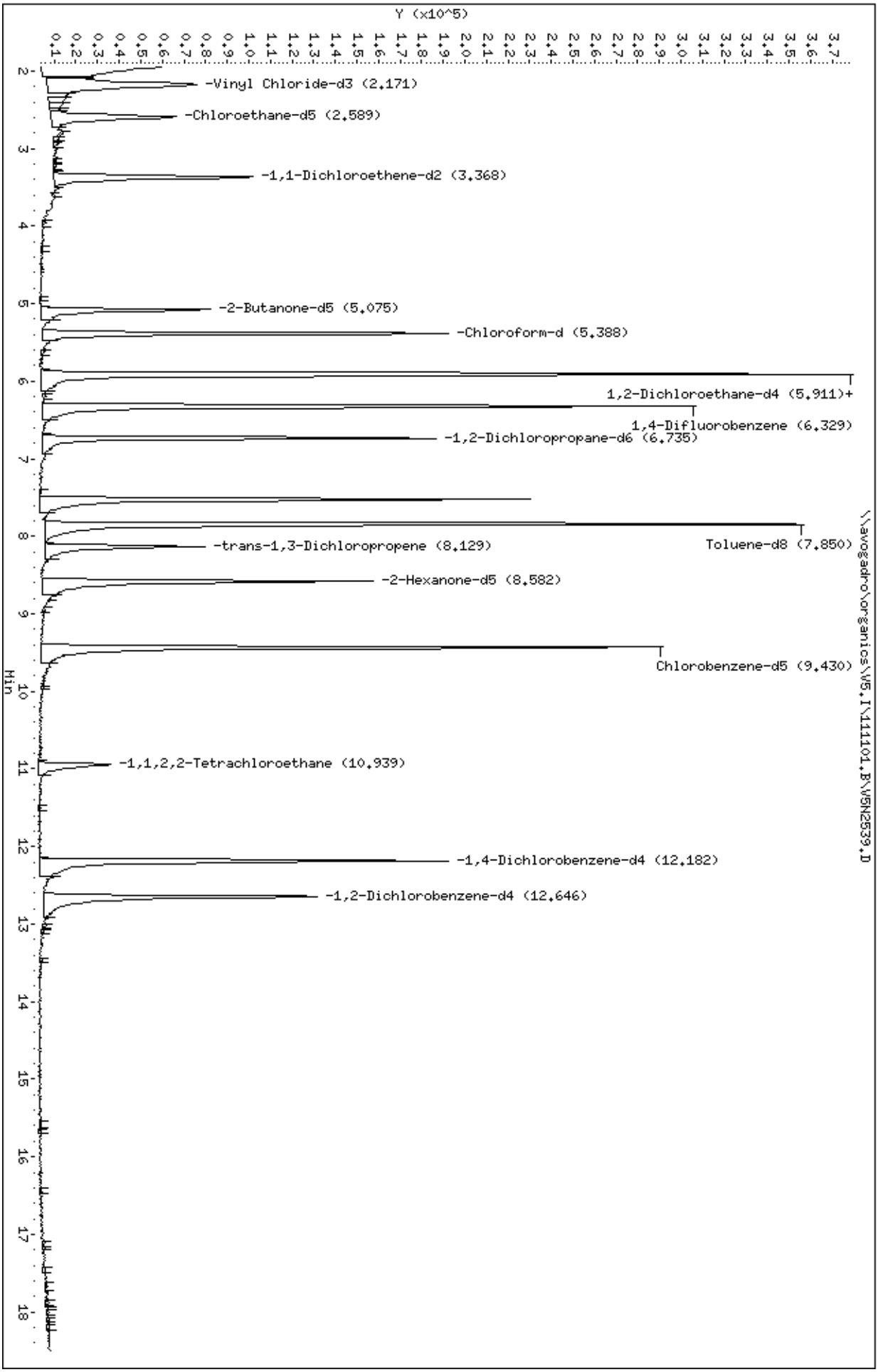
Data File: \\avogadro\organics\V5.I\111101.B\V5N2539.D
Report Date: 07-Nov-2011 13:10

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2539.D
Lab Smp Id: K2200-09A Client Smp ID: H30W6
Inj Date : 01-NOV-2011 13:36
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-09A,,62672,
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -


Data File: \\avogadro\organics\W5.I\111101.B\W5N2539.D
Date : 01-NOV-2011 13:36
Client ID: H30W6
Sample Info: 25ML,K2200-09A,,62672,
Purge Volume: 25.0
Column phase: DB-624
Instrument: W5.i
Operator: SRC: LIMS
Column diameter: 0.25
Y (x10^5)
-Vinyl Chloride-d3 (2.171)
-Chloroethane-d5 (2.589)
-1,1-Dichloroethene-d2 (3.368)
-2-Butanone-d5 (5.075)
-Chloroform-d (5.388)
1,2-Dichloroethane-d4 (5.911)+
1,4-Difluorobenzene (6.329)
-1,2-Dichloropropane-d6 (6.735)
Toluene-d8 (7.850)
-trans-1,3-Dichloropropene (8.129)
-2-Hexanone-d5 (8.582)
Chlorobenzene-d5 (9.430)
-1,1,2,2-Tetrachloroethane (10.939)
-1,4-Dichlorobenzene-d4 (12.182)
-1,2-Dichlorobenzene-d4 (12.646)
\\avogadro\organics\W5.I\111101.B\W5N2539.D
Min

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30W7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-10A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2540.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30W7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-10A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2540.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30W7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-10A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2540.D

Level: (TRACE or LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

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/L Purge Volume: 25.0 (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\111101.B\V5N2540.D
Report Date: 07-Nov-2011 13:10

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2540.D
Lab Smp Id: K2200-10A Client Smp ID: H30W7
Inj Date : 01-NOV-2011 14:05
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-10A,,62672,
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	79 Vinyl Chloride-d3	65	2.179	2.173	(0.345)	174803	4.07267	4.1
$	80 Chloroethane-d5	69	2.597	2.591	(0.411)	121716	4.29466	4.3
$	81 1,1-Dichloroethene-d2	65	3.375	3.369	(0.534)	39060	3.95784	4.0(Q)
$	82 2-Butanone-d5	46	5.082	5.065	(0.804)	175813	41.0816	41(AQ)
$	83 Chloroform-d	84	5.384	5.378	(0.851)	185272	4.56954	4.6(Q)
$	23 1,2-Dichloroethane-d4	65	5.895	5.901	(0.932)	64334	4.05801	4.1(Q)
$	84 Benzene-d6	84	5.918	5.913	(0.627)	380238	5.17398	5.2
*	26 1,4-Difluorobenzene	114	6.325	6.319	(1.000)	375587	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.731	6.726	(0.713)	115223	4.40405	4.4
$	33 Toluene-d8	98	7.846	7.840	(0.831)	342285	5.05973	5.1
$	86 trans-1,3-Dichloropropene-d4	79	8.125	8.119	(0.861)	72550	4.87957	4.9
$	87 2-Hexanone-d5	63	8.577	8.572	(0.909)	93858	35.0494	35(A)
*	42 Chlorobenzene-d5	117	9.437	9.431	(1.000)	262154	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.947	10.918	(1.160)	42427	4.05989	4.1
*	78 1,4-Dichlorobenzene-d4	152	12.189	12.172	(1.000)	94167	5.00000	
$	90 1,2-Dichlorobenzene-d4	152	12.642	12.625	(1.037)	69585	4.49457	4.5

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111101.B\V5N2540.D
Report Date: 07-Nov-2011 13:10

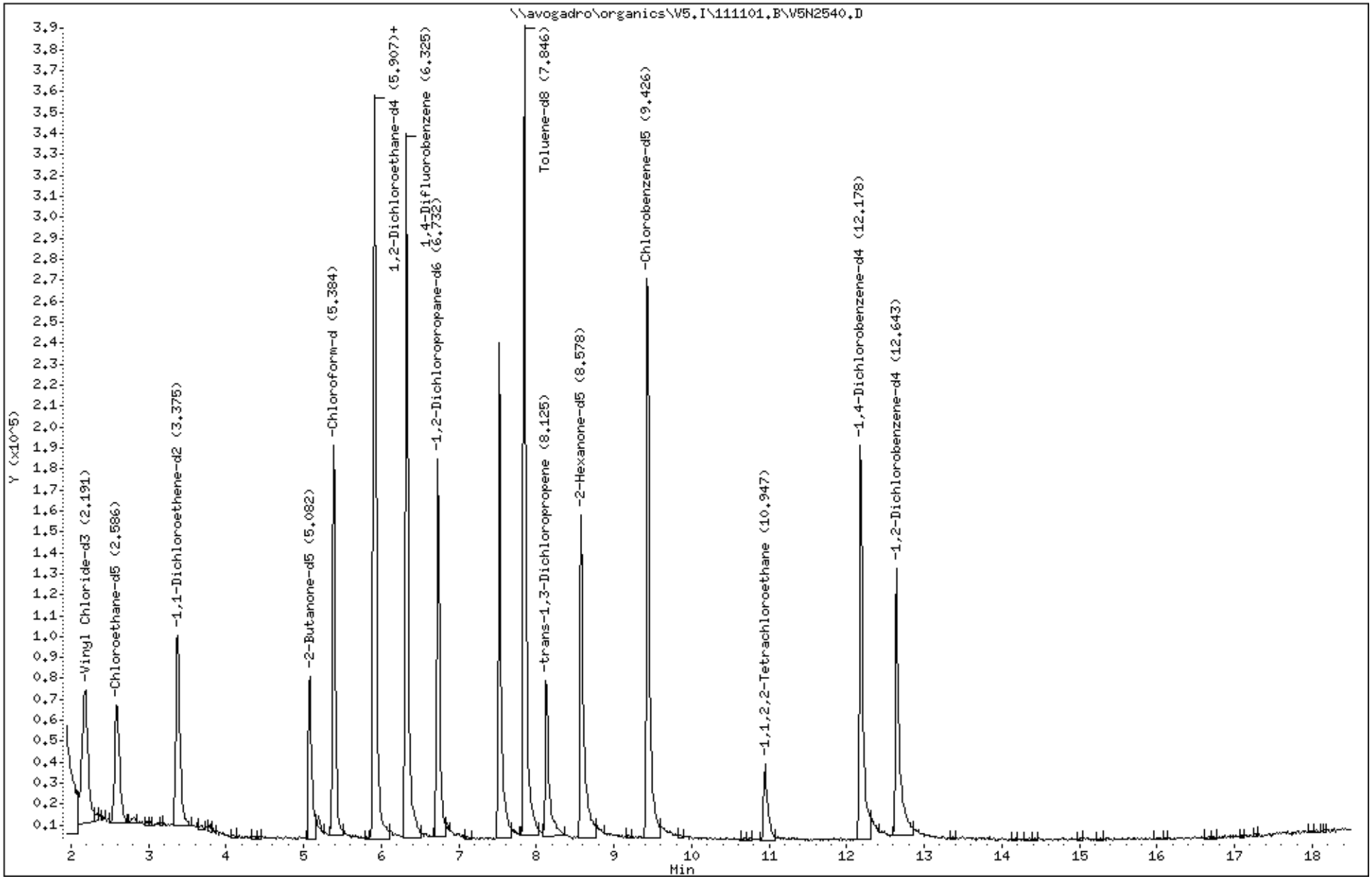
Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2540.D
Lab Smp Id: K2200-10A Client Smp ID: H30W7
Inj Date : 01-NOV-2011 14:05
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-10A,,62672,
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111101.B\V5N2540.D
Date : 01-NOV-2011 14:05
Client ID: H30W7
Instrument: V5.i
Sample Info: 25ML,K2200-10A,,62672,
Purge Volume: 25.0
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30W8

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-11A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2541.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	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.

H30W8

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-11A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2541.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30W8

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-11A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2541.D

Level: (TRACE or LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

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/L Purge Volume: 25.0 (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\111101.B\V5N2541.D
Report Date: 07-Nov-2011 13:10

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2541.D
Lab Smp Id: K2200-11A Client Smp ID: H30W8
Inj Date : 01-NOV-2011 14:33
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-11A,,62672,
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	79 Vinyl Chloride-d3	65	2.191	2.173	(0.346)	171034	4.02382	4.0
$	80 Chloroethane-d5	69	2.597	2.591	(0.411)	118744	4.23075	4.2
$	81 1,1-Dichloroethene-d2	65	3.375	3.369	(0.534)	38611	3.95059	4.0(Q)
$	82 2-Butanone-d5	46	5.071	5.065	(0.802)	171191	40.3926	40(AQ)
$	83 Chloroform-d	84	5.384	5.378	(0.851)	181066	4.50946	4.5(Q)
$	23 1,2-Dichloroethane-d4	65	5.895	5.901	(0.932)	65802	4.19118	4.2
$	84 Benzene-d6	84	5.919	5.913	(0.627)	371646	5.15981	5.2
*	26 1,4-Difluorobenzene	114	6.325	6.319	(1.000)	371951	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.731	6.726	(0.713)	114695	4.47294	4.5
$	33 Toluene-d8	98	7.846	7.840	(0.831)	329853	4.97502	5.0
$	86 trans-1,3-Dichloropropene-d4	79	8.137	8.119	(0.862)	66310	4.55049	4.6
$	87 2-Hexanone-d5	63	8.578	8.572	(0.909)	101168	38.5468	39(A)
*	42 Chlorobenzene-d5	117	9.437	9.431	(1.000)	256934	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.947	10.918	(1.160)	41642	4.06573	4.1
*	78 1,4-Dichlorobenzene-d4	152	12.178	12.172	(1.000)	94798	5.00000	
$	90 1,2-Dichlorobenzene-d4	152	12.643	12.625	(1.038)	67022	4.30021	4.3(Q)

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111101.B\V5N2541.D
Report Date: 07-Nov-2011 13:10

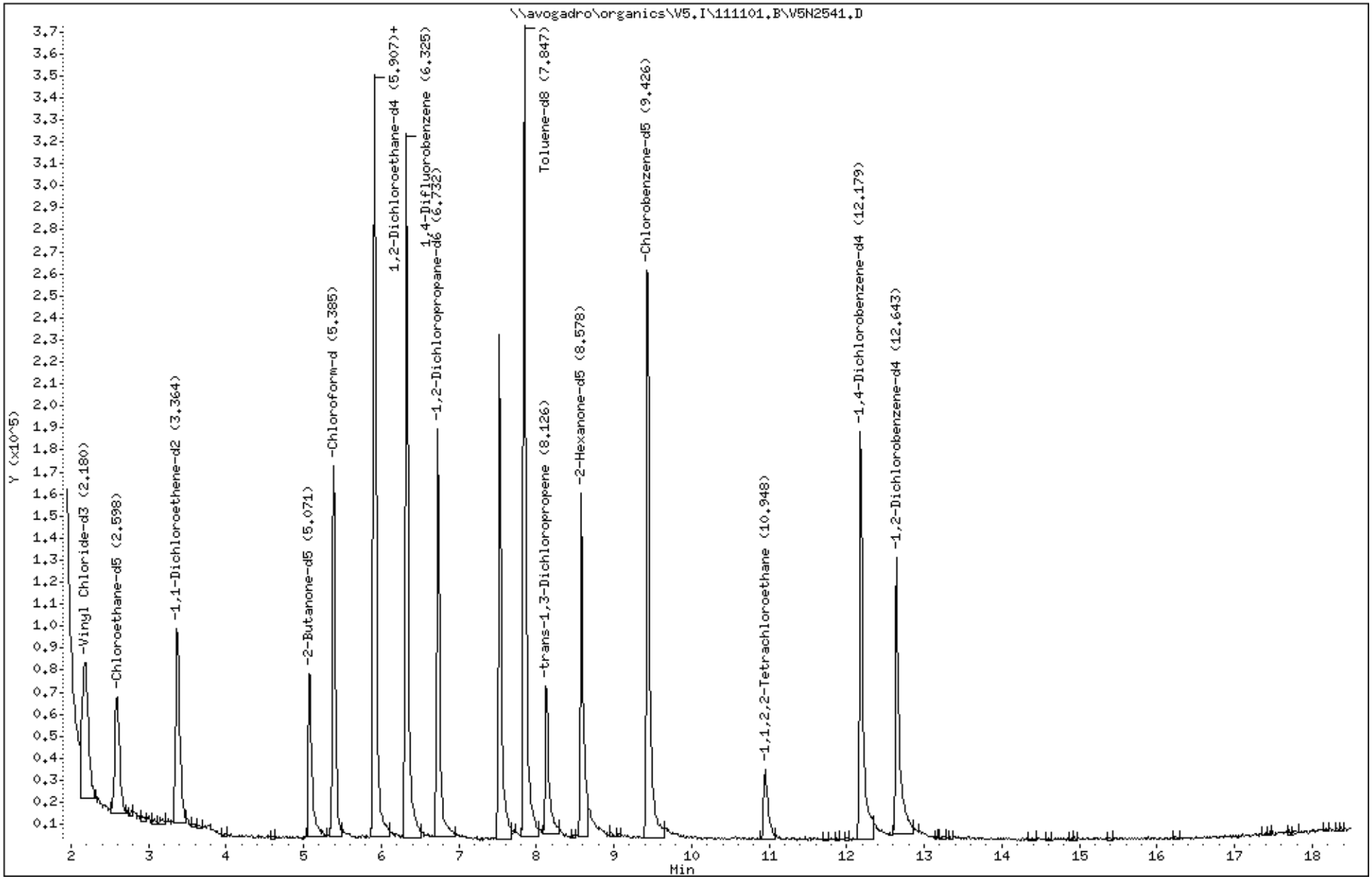
Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2541.D
Lab Smp Id: K2200-11A Client Smp ID: H30W8
Inj Date : 01-NOV-2011 14:33
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-11A,,62672,
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111101.B\V5N2541.D
Date : 01-NOV-2011 14:33
Client ID: H30W8
Instrument: V5.i
Sample Info: 25ML,K2200-11A,,62672,
Purge Volume: 25.0
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30X0

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-12A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2542.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	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.

H30X0

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-12A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2542.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30X0

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-12A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2542.D

Level: (TRACE or LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

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/L Purge Volume: 25.0 (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\111101.B\V5N2542.D
Report Date: 07-Nov-2011 13:10

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2542.D
Lab Smp Id: K2200-12A Client Smp ID: H30X0
Inj Date : 01-NOV-2011 15:01
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-12A,,62672,
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	79 Vinyl Chloride-d3	65	2.183	2.173	(0.345)	181865	4.44844	4.4
$	80 Chloroethane-d5	69	2.590	2.591	(0.409)	123277	4.56657	4.6
$	81 1,1-Dichloroethene-d2	65	3.368	3.369	(0.532)	38787	4.12610	4.1(Q)
$	82 2-Butanone-d5	46	5.075	5.065	(0.802)	165079	40.4963	40(AQ)
$	83 Chloroform-d	84	5.389	5.378	(0.851)	179299	4.64267	4.6(Q)
$	23 1,2-Dichloroethane-d4	65	5.900	5.901	(0.932)	66249	4.38711	4.4
$	84 Benzene-d6	84	5.911	5.913	(0.627)	364909	5.39998	5.4
*	26 1,4-Difluorobenzene	114	6.329	6.319	(1.000)	357753	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.736	6.726	(0.714)	114568	4.76228	4.8
$	33 Toluene-d8	98	7.851	7.840	(0.833)	327092	5.25833	5.3
$	86 trans-1,3-Dichloropropene-d4	79	8.129	8.119	(0.862)	72350	5.29201	5.3
$	87 2-Hexanone-d5	63	8.582	8.572	(0.910)	101958	41.4066	41(A)
*	42 Chlorobenzene-d5	117	9.430	9.431	(1.000)	241056	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.940	10.918	(1.160)	38365	3.99251	4.0
*	78 1,4-Dichlorobenzene-d4	152	12.182	12.172	(1.000)	96038	5.00000	
$	90 1,2-Dichlorobenzene-d4	152	12.635	12.625	(1.037)	66853	4.23398	4.2

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111101.B\V5N2542.D
Report Date: 07-Nov-2011 13:10

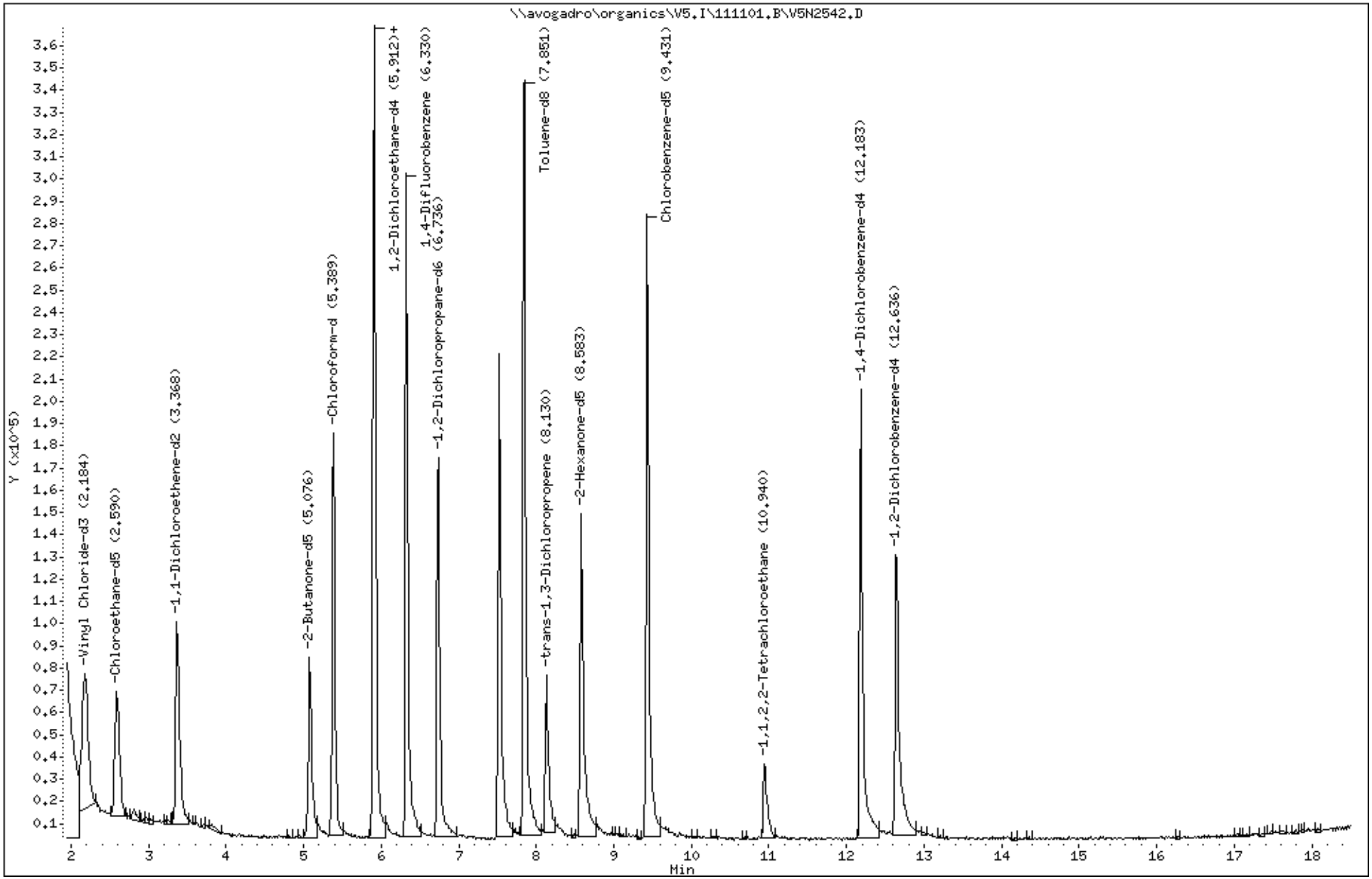
Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2542.D
Lab Smp Id: K2200-12A Client Smp ID: H30X0
Inj Date : 01-NOV-2011 15:01
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-12A,,62672,
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111101.B\V5N2542.D
Date : 01-NOV-2011 15:01
Client ID: H30X0
Instrument: V5.i
Sample Info: 25ML,K2200-12A,,62672,
Purge Volume: 25.0
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30X1

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-13A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2543.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30X1

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-13A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2543.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30X1

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-13A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2543.D

Level: (TRACE or LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

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/L Purge Volume: 25.0 (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\111101.B\V5N2543.D
Report Date: 07-Nov-2011 13:10

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2543.D
Lab Smp Id: K2200-13A Client Smp ID: H30X1
Inj Date : 01-NOV-2011 15:30
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-13A,,62672,
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	79 Vinyl Chloride-d3	65	2.185	2.173	(0.346)	181487	4.38539	4.4
$	80 Chloroethane-d5	69	2.592	2.591	(0.410)	125356	4.58731	4.6
$	81 1,1-Dichloroethene-d2	65	3.370	3.369	(0.533)	39182	4.11760	4.1(Q)
$	82 2-Butanone-d5	46	5.077	5.065	(0.803)	162682	39.4246	39(AQ)
$	83 Chloroform-d	84	5.390	5.378	(0.853)	181216	4.63544	4.6(Q)
$	23 1,2-Dichloroethane-d4	65	5.901	5.901	(0.934)	64992	4.25171	4.3
$	84 Benzene-d6	84	5.913	5.913	(0.627)	371082	4.98684	5.0
*	26 1,4-Difluorobenzene	114	6.319	6.319	(1.000)	362142	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.726	6.726	(0.713)	117994	4.45410	4.5
$	33 Toluene-d8	98	7.841	7.840	(0.831)	334194	4.87893	4.9
$	86 trans-1,3-Dichloropropene-d4	79	8.131	8.119	(0.862)	65784	4.36969	4.4
$	87 2-Hexanone-d5	63	8.572	8.572	(0.909)	104722	38.6220	39(A)
*	42 Chlorobenzene-d5	117	9.432	9.431	(1.000)	265442	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.941	10.918	(1.160)	41500	3.92199	3.9
*	78 1,4-Dichlorobenzene-d4	152	12.184	12.172	(1.000)	96827	5.00000	
$	90 1,2-Dichlorobenzene-d4	152	12.637	12.625	(1.037)	70688	4.44038	4.4(Q)

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111101.B\V5N2543.D
Report Date: 07-Nov-2011 13:10

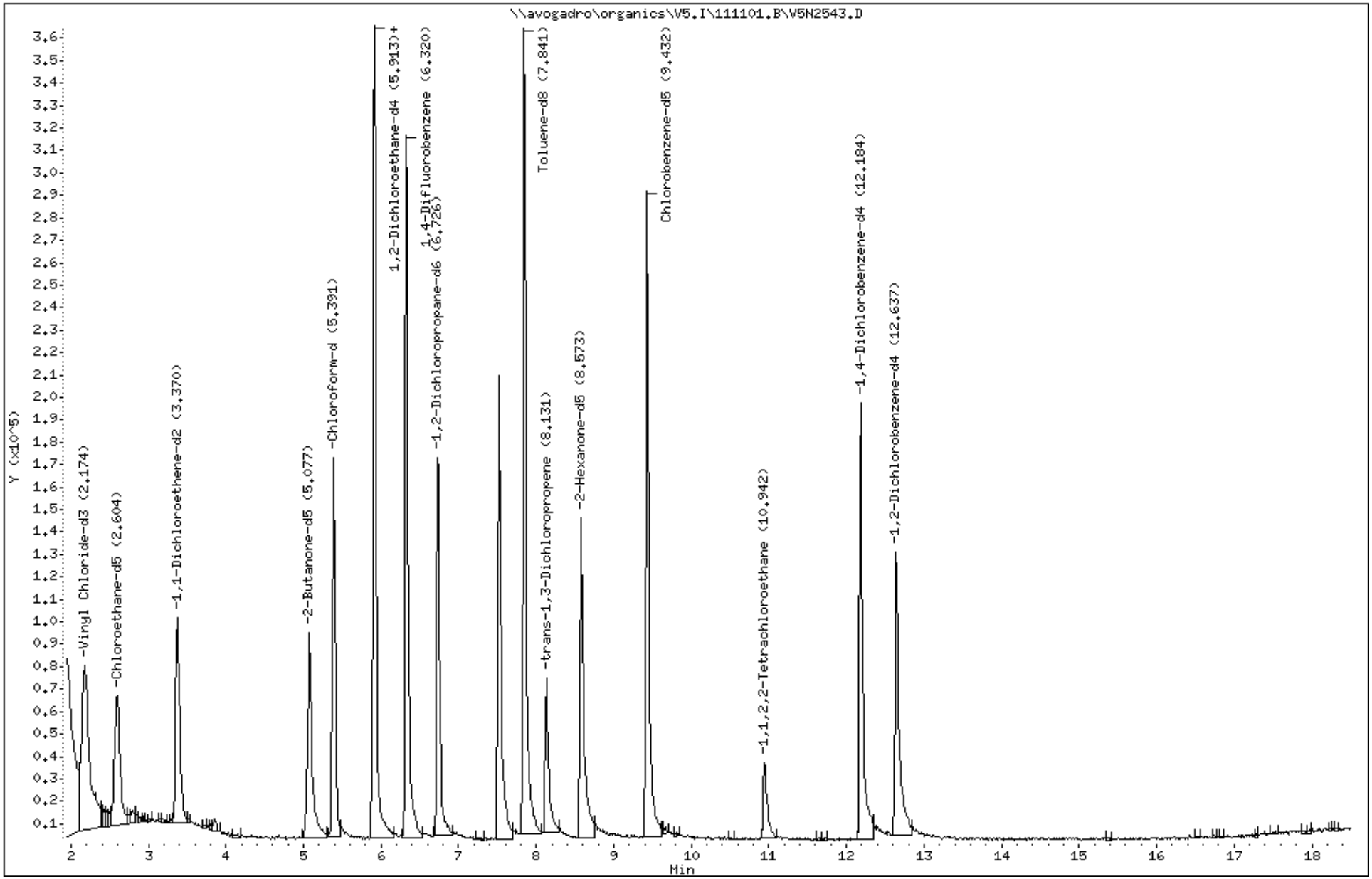
Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2543.D
Lab Smp Id: K2200-13A Client Smp ID: H30X1
Inj Date : 01-NOV-2011 15:30
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-13A,,62672,
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111101.B\V5N2543.D
Date : 01-NOV-2011 15:30
Client ID: H30X1
Instrument: V5.i
Sample Info: 25ML,K2200-13A,,62672,
Purge Volume: 25.0
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Y2

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-14A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2544.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Y2

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-14A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2544.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30Y2

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-14A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2544.D

Level: (TRACE or LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

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/L Purge Volume: 25.0 (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\111101.B\V5N2544.D
Report Date: 07-Nov-2011 13:10

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2544.D
Lab Smp Id: K2200-14A Client Smp ID: H30Y2
Inj Date : 01-NOV-2011 15:58
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-14A,,62672,
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	79 Vinyl Chloride-d3	65	2.192	2.173	(0.347)	174848	4.19312	4.2
$	80 Chloroethane-d5	69	2.587	2.591	(0.409)	117140	4.25434	4.3
$	81 1,1-Dichloroethene-d2	65	3.365	3.369	(0.532)	39283	4.09710	4.1(Q)
$	82 2-Butanone-d5	46	5.072	5.065	(0.802)	172867	41.5771	42(AQ)
$	83 Chloroform-d	84	5.386	5.378	(0.851)	177563	4.50777	4.5(Q)
$	23 1,2-Dichloroethane-d4	65	5.897	5.901	(0.932)	60823	3.94899	3.9(Q)
$	84 Benzene-d6	84	5.908	5.913	(0.627)	373122	5.25528	5.3
*	26 1,4-Difluorobenzene	114	6.326	6.319	(1.000)	364892	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.733	6.726	(0.714)	117149	4.63477	4.6
$	33 Toluene-d8	98	7.848	7.840	(0.832)	331711	5.07546	5.1
$	86 trans-1,3-Dichloropropene-d4	79	8.126	8.119	(0.862)	69768	4.85709	4.9
$	87 2-Hexanone-d5	63	8.579	8.572	(0.910)	105149	40.6435	41(A)
*	42 Chlorobenzene-d5	117	9.427	9.431	(1.000)	253268	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.948	10.918	(1.161)	41257	4.08644	4.1
*	78 1,4-Dichlorobenzene-d4	152	12.179	12.172	(1.000)	90683	5.00000	
$	90 1,2-Dichlorobenzene-d4	152	12.644	12.625	(1.038)	68795	4.61426	4.6(Q)

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111101.B\V5N2544.D
Report Date: 07-Nov-2011 13:10

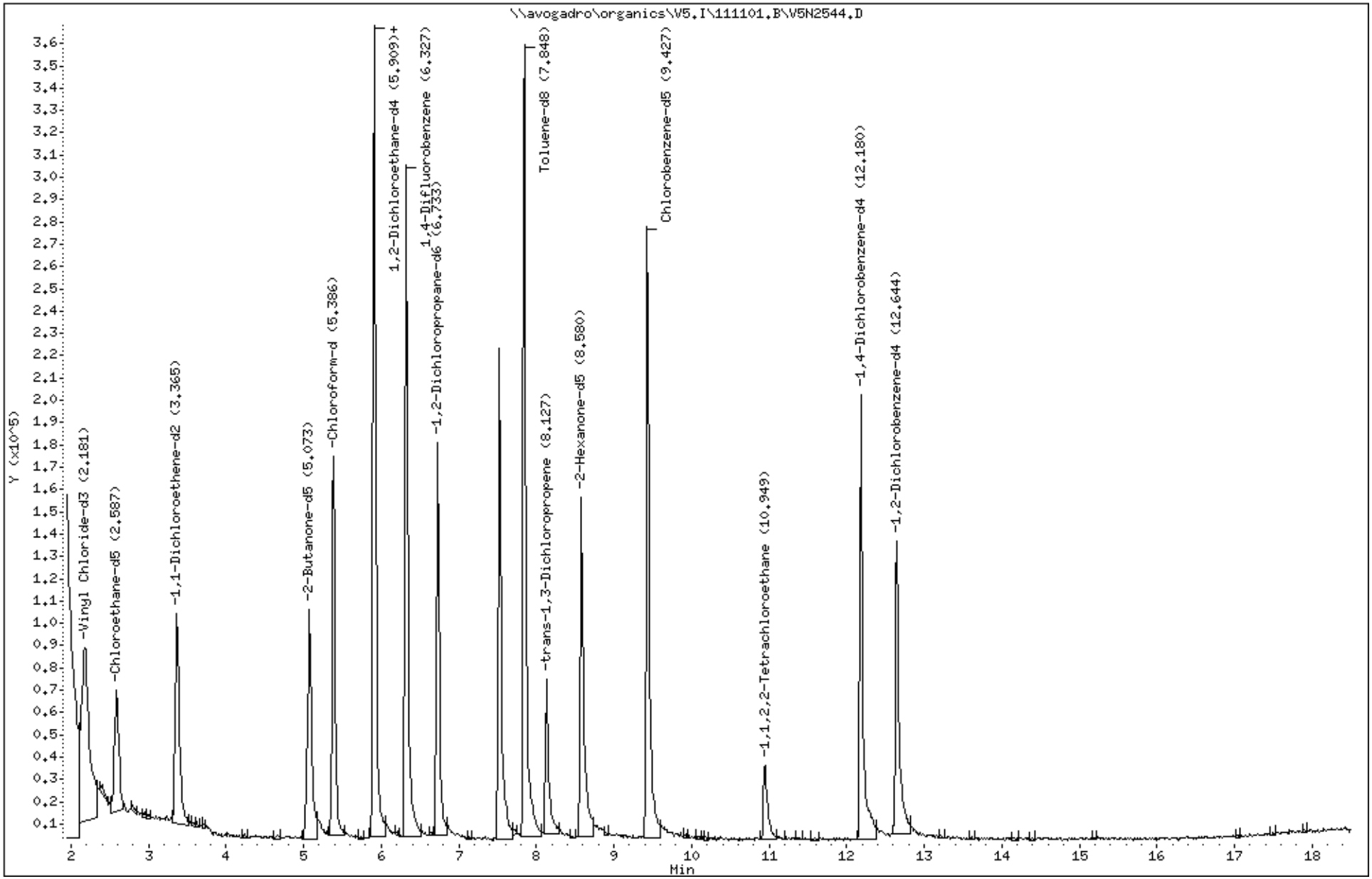
Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2544.D
Lab Smp Id: K2200-14A Client Smp ID: H30Y2
Inj Date : 01-NOV-2011 15:58
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-14A,,62672,
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111101.B\V5N2544.D
Date : 01-NOV-2011 15:58
Client ID: H30Y2
Instrument: V5.i
Sample Info: 25ML,K2200-14A,,62672,
Purge Volume: 25.0
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Y3

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-15A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2545.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Y3

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-15A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2545.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30Y3

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-15A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2545.D

Level: (TRACE or LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

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/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.388	0.93	J
	E96679[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111101.B\V5N2545.D
Report Date: 07-Nov-2011 13:10

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2545.D
Lab Smp Id: K2200-15A Client Smp ID: H30Y3
Inj Date : 01-NOV-2011 16:27
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-15A,,62672,
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	79 Vinyl Chloride-d3	65	2.191	2.173	(0.346)	166773	4.02894	4.0
$	80 Chloroethane-d5	69	2.585	2.591	(0.409)	117407	4.29546	4.3
$	81 1,1-Dichloroethene-d2	65	3.363	3.369	(0.532)	38110	4.00405	4.0(Q)
$	82 2-Butanone-d5	46	5.071	5.065	(0.802)	174366	42.2467	42(AQ)
$	83 Chloroform-d	84	5.384	5.378	(0.851)	178406	4.56254	4.6(Q)
$	23 1,2-Dichloroethane-d4	65	5.895	5.901	(0.932)	66324	4.33788	4.3
$	84 Benzene-d6	84	5.918	5.913	(0.627)	364757	5.29489	5.3
*	26 1,4-Difluorobenzene	114	6.325	6.319	(1.000)	362223	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.731	6.726	(0.713)	114725	4.67795	4.7
$	33 Toluene-d8	98	7.846	7.840	(0.831)	320380	5.05230	5.1
$	86 trans-1,3-Dichloropropene-d4	79	8.136	8.119	(0.862)	67088	4.81363	4.8
$	87 2-Hexanone-d5	63	8.578	8.572	(0.909)	96751	38.5433	39(A)
*	42 Chlorobenzene-d5	117	9.437	9.431	(1.000)	245738	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.947	10.918	(1.160)	41691	4.25597	4.3
*	78 1,4-Dichlorobenzene-d4	152	12.178	12.172	(1.000)	88912	5.00000	
$	90 1,2-Dichlorobenzene-d4	152	12.642	12.625	(1.038)	72971	4.99184	5.0(Q)

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111101.B\V5N2545.D
Report Date: 07-Nov-2011 13:10

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2545.D
Lab Smp Id: K2200-15A Client Smp ID: H30Y3
Inj Date : 01-NOV-2011 16:27
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-15A,,62672,
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

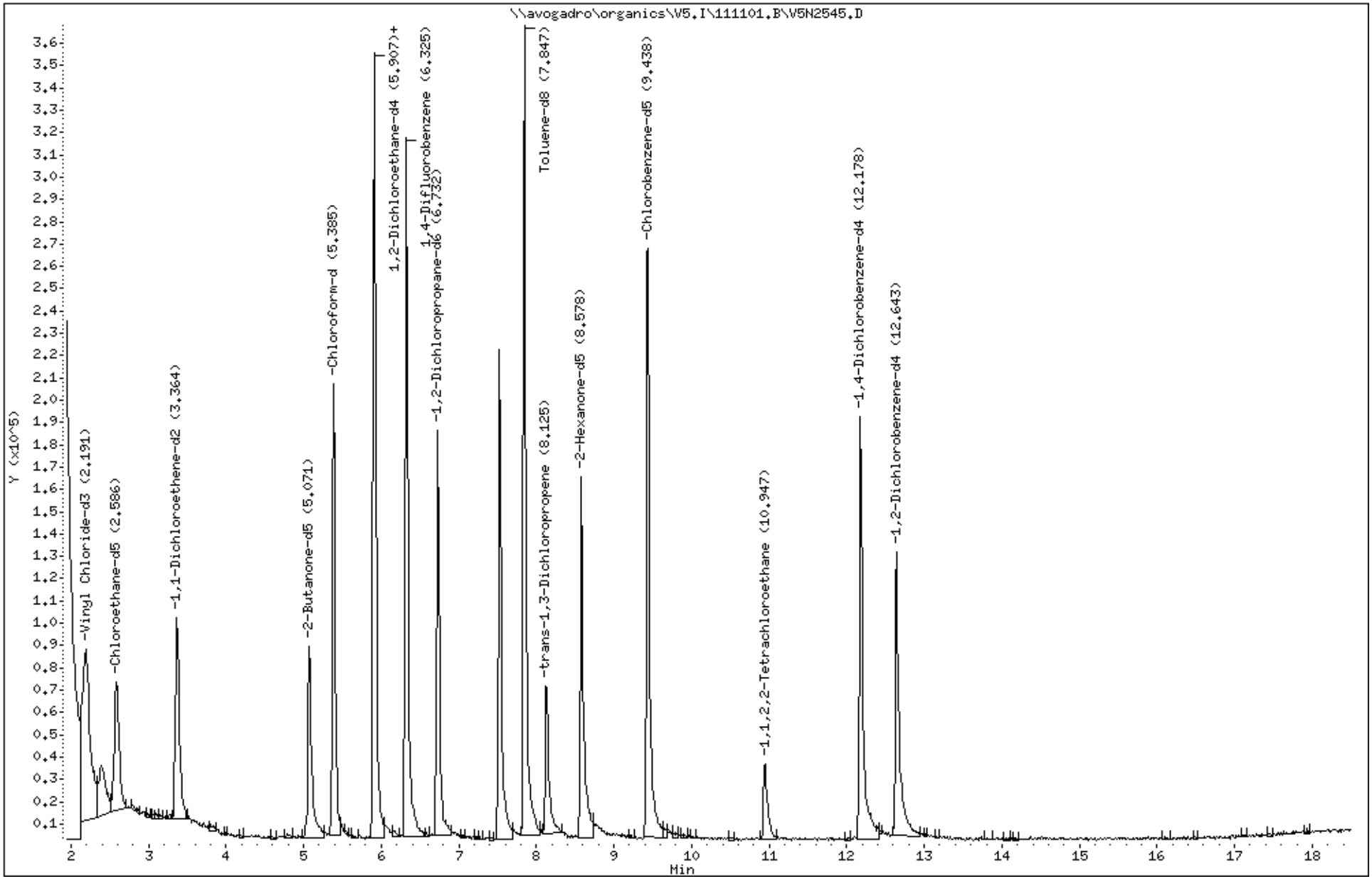
Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 26 1,4-Difluorobenzene	6.325	818037	5.000

	CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.388	152538	0.93234057	0.93	0		0	26

Data File: \\avogadro\organics\V5.I\111101.B\V5N2545.D
Date : 01-NOV-2011 16:27
Client ID: H30Y3
Instrument: V5.i
Sample Info: 25ML,K2200-15A,,62672,
Purge Volume: 25.0
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111101.B\V5N2545.D

Date : 01-NOV-2011 16:27

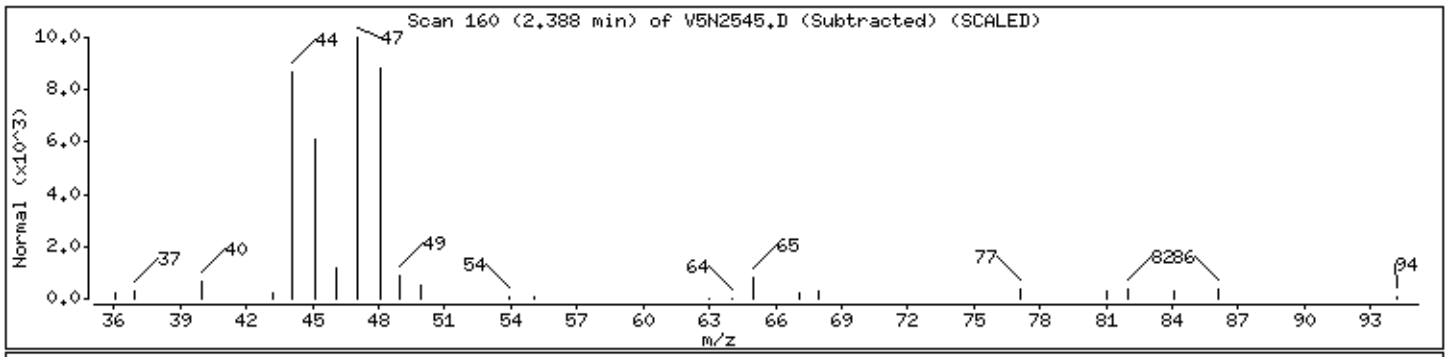
Client ID: H30Y3 Instrument: V5.i

Sample Info: 25ML,K2200-15A,,62672,

Purge Volume: 25.0 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



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Y4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-16A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2546.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Y4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-16A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2546.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30Y4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-16A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2546.D

Level: (TRACE or LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

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/L Purge Volume: 25.0 (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\111101.B\V5N2546.D
Report Date: 07-Nov-2011 13:10

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2546.D
Lab Smp Id: K2200-16A Client Smp ID: H30Y4
Inj Date : 01-NOV-2011 16:55
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-16A,,62672,
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	79 Vinyl Chloride-d3	65	2.179	2.173	(0.345)	176399	4.29532	4.3
$	80 Chloroethane-d5	69	2.586	2.591	(0.409)	118154	4.35710	4.4
$	81 1,1-Dichloroethene-d2	65	3.352	3.369	(0.530)	39477	4.18060	4.2(Q)
$	82 2-Butanone-d5	46	5.071	5.065	(0.802)	167732	40.9620	41(AQ)
$	83 Chloroform-d	84	5.385	5.378	(0.851)	179058	4.61557	4.6(Q)
$	23 1,2-Dichloroethane-d4	65	5.895	5.901	(0.932)	66315	4.37172	4.4
$	84 Benzene-d6	84	5.907	5.913	(0.627)	364259	5.11943	5.1
*	26 1,4-Difluorobenzene	114	6.325	6.319	(1.000)	359370	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.732	6.726	(0.714)	116903	4.61510	4.6
$	33 Toluene-d8	98	7.846	7.840	(0.832)	326483	4.98474	5.0
$	86 trans-1,3-Dichloropropene-d4	79	8.125	8.119	(0.862)	66571	4.62457	4.6
$	87 2-Hexanone-d5	63	8.578	8.572	(0.910)	104576	40.3352	40(A)
*	42 Chlorobenzene-d5	117	9.426	9.431	(1.000)	253813	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.936	10.918	(1.160)	40156	3.96885	4.0
*	78 1,4-Dichlorobenzene-d4	152	12.178	12.172	(1.000)	93968	5.00000	
$	90 1,2-Dichlorobenzene-d4	152	12.643	12.625	(1.038)	65814	4.26000	4.3

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111101.B\V5N2546.D
Report Date: 07-Nov-2011 13:10

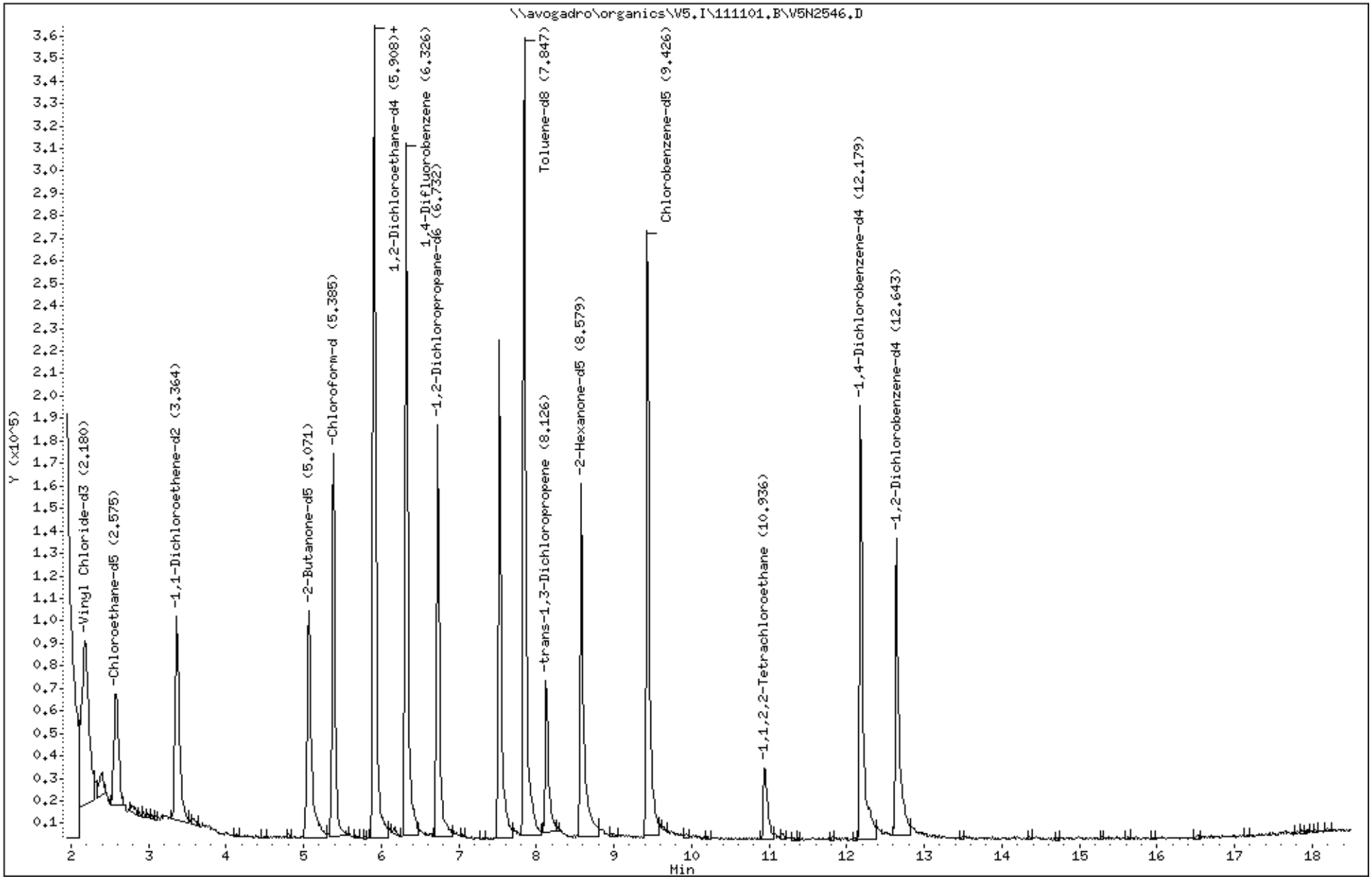
Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2546.D
Lab Smp Id: K2200-16A Client Smp ID: H30Y4
Inj Date : 01-NOV-2011 16:55
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-16A,,62672,
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111101.B\V5N2546.D
Date : 01-NOV-2011 16:55
Client ID: H30Y4
Instrument: V5.i
Sample Info: 25ML,K2200-16A,,62672,
Purge Volume: 25.0
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Y5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-17A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2547.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	3.8	J
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Y5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-17A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2547.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30Y5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-17A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2547.D

Level: (TRACE or LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

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/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.395	0.87	J
	E96679[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111101.B\V5N2547.D
Report Date: 07-Nov-2011 13:10

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2547.D
Lab Smp Id: K2200-17A Client Smp ID: H30Y5
Inj Date : 01-NOV-2011 17:23
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-17A,,62672,
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	79 Vinyl Chloride-d3	65	2.185	2.173	(0.346)	174284	4.26001	4.3
$	80 Chloroethane-d5	69	2.592	2.591	(0.410)	116401	4.30884	4.3
$	81 1,1-Dichloroethene-d2	65	3.358	3.369	(0.531)	36174	3.84543	3.8(Q)
	9 Acetone	43	3.451	3.451	(0.546)	12122	3.76458	3.8(H)
$	82 2-Butanone-d5	46	5.077	5.065	(0.803)	173019	42.4143	42(AQ)
$	83 Chloroform-d	84	5.390	5.378	(0.853)	173365	4.48587	4.5(Q)
$	23 1,2-Dichloroethane-d4	65	5.901	5.901	(0.934)	66409	4.39462	4.4
$	84 Benzene-d6	84	5.913	5.913	(0.627)	367533	5.31401	5.3
*	26 1,4-Difluorobenzene	114	6.319	6.319	(1.000)	358004	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.726	6.726	(0.713)	119030	4.83423	4.8
$	33 Toluene-d8	98	7.841	7.840	(0.831)	326975	5.13584	5.1
$	86 trans-1,3-Dichloropropene-d4	79	8.131	8.119	(0.862)	65973	4.71485	4.7
$	87 2-Hexanone-d5	63	8.572	8.572	(0.909)	104233	41.3592	41(A)
*	42 Chlorobenzene-d5	117	9.432	9.431	(1.000)	246717	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.941	10.918	(1.160)	42765	4.34828	4.3
*	78 1,4-Dichlorobenzene-d4	152	12.184	12.172	(1.000)	94389	5.00000	
$	90 1,2-Dichlorobenzene-d4	152	12.637	12.625	(1.037)	71185	4.58710	4.6(Q)

QC Flag Legend

A - Target compound detected but, quantitated amount
    exceeded maximum amount.

Data File: \\avogadro\organics\V5.I\111101.B\V5N2547.D
Report Date: 07-Nov-2011 13:10

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111101.B\V5N2547.D
Report Date: 07-Nov-2011 13:10

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2547.D
Lab Smp Id: K2200-17A Client Smp ID: H30Y5
Inj Date : 01-NOV-2011 17:23
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-17A,,62672,
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

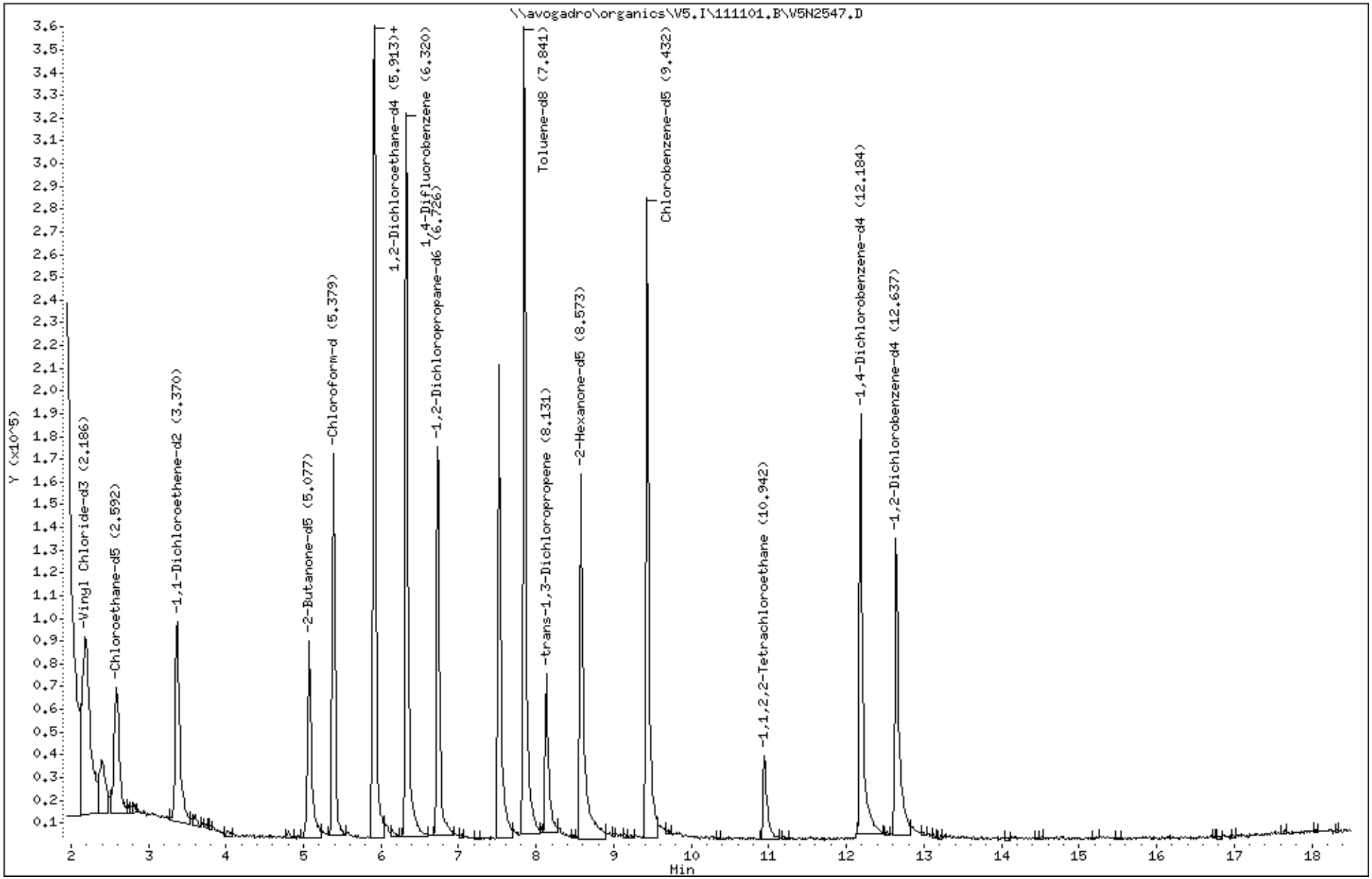
Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 26 1,4-Difluorobenzene	6.320	817741	5.000

	CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.395	142921	0.87387314	0.87	0		0	26

Data File: \\avogadro\organics\V5.I\111101.B\V5N2547.D
Date : 01-NOV-2011 17:23
Client ID: H30Y5
Instrument: V5.i
Sample Info: 25ML,K2200-17A,,62672,
Purge Volume: 25.0
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111101.B\V5N2547.D

Date : 01-NOV-2011 17:23

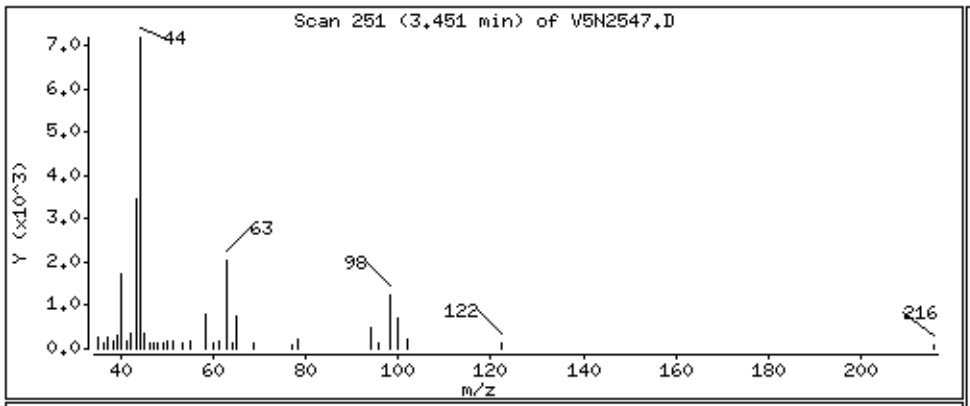
Client ID: H30Y5 Instrument: V5.i

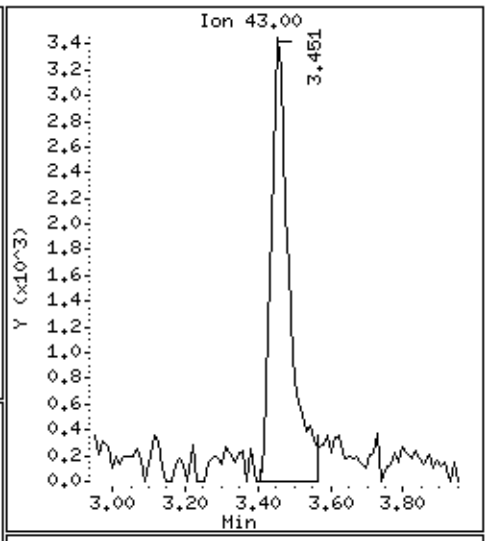
Sample Info: 25ML,K2200-17A,,62672,

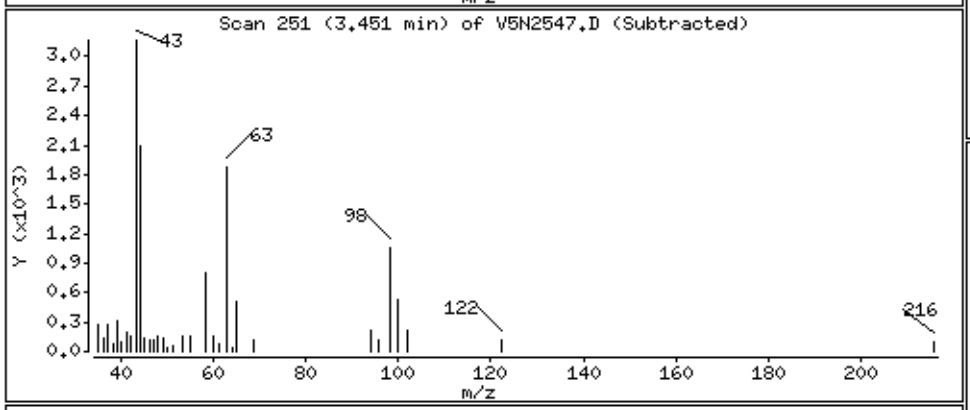
Purge Volume: 25.0 Operator: SRC: LIMS

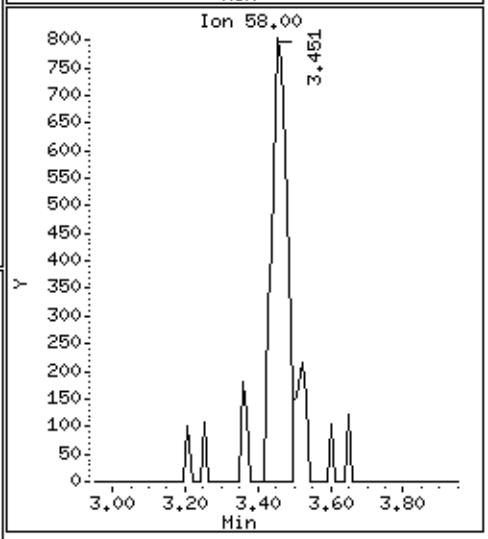
Column phase: DB-624 Column diameter: 0.25

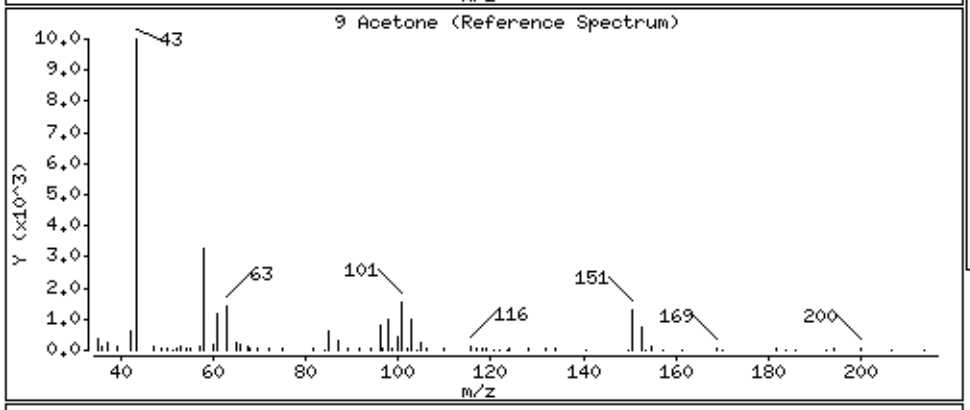
9 Acetone Concentration: 3.8 ug/L

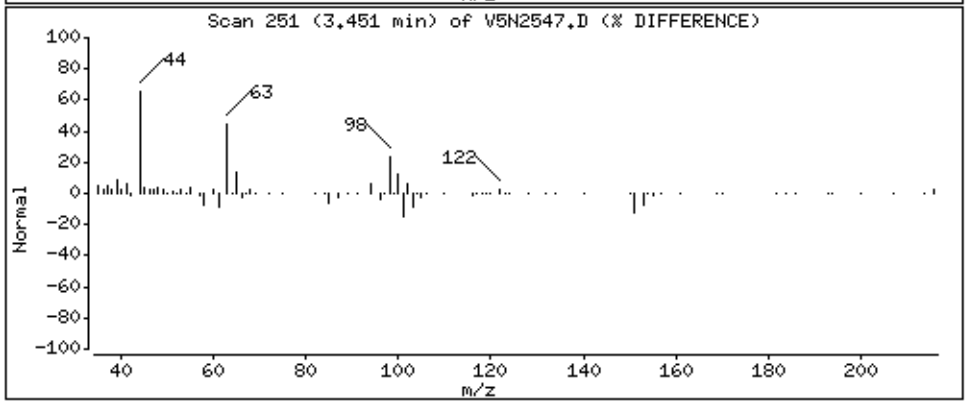












Data File: \\avogadro\organics\V5.I\111101.B\V5N2547.D

Date : 01-NOV-2011 17:23

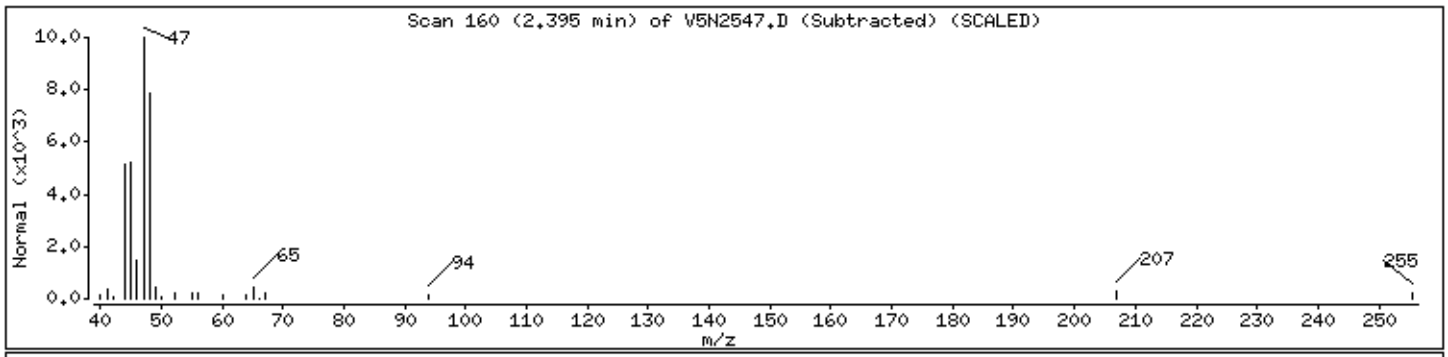
Client ID: H30Y5 Instrument: V5.i

Sample Info: 25ML,K2200-17A,,62672,

Purge Volume: 25.0 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



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Y6

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-18A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2548.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Y6

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-18A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2548.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30Y6

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-18A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2548.D

Level: (TRACE or LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/01/2011

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/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.394	0.66	J
	E96679[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111101.B\V5N2548.D
Report Date: 07-Nov-2011 13:10

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2548.D
Lab Smp Id: K2200-18A Client Smp ID: H30Y6
Inj Date : 01-NOV-2011 17:52
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-18A,,62672,
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	79 Vinyl Chloride-d3	65	2.196	2.173	(0.348)	175475	4.06374	4.1
$	80 Chloroethane-d5	69	2.579	2.591	(0.408)	120010	4.20899	4.2
$	81 1,1-Dichloroethene-d2	65	3.358	3.369	(0.531)	36568	3.68304	3.7(Q)
$	82 2-Butanone-d5	46	5.076	5.065	(0.803)	169619	39.3958	39(AQ)
$	83 Chloroform-d	84	5.378	5.378	(0.851)	183130	4.48954	4.5(Q)
$	23 1,2-Dichloroethane-d4	65	5.901	5.901	(0.934)	66484	4.16840	4.2
$	84 Benzene-d6	84	5.912	5.913	(0.627)	377636	5.12167	5.1
*	26 1,4-Difluorobenzene	114	6.319	6.319	(1.000)	377860	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.725	6.726	(0.713)	120908	4.60615	4.6
$	33 Toluene-d8	98	7.840	7.840	(0.831)	337552	4.97336	5.0
$	86 trans-1,3-Dichloropropene-d4	79	8.130	8.119	(0.862)	61194	4.10225	4.1
$	87 2-Hexanone-d5	63	8.572	8.572	(0.909)	107802	40.1242	40(A)
*	42 Chlorobenzene-d5	117	9.431	9.431	(1.000)	263019	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.941	10.918	(1.160)	43748	4.17253	4.2
*	78 1,4-Dichlorobenzene-d4	152	12.183	12.172	(1.000)	94001	5.00000	
$	90 1,2-Dichlorobenzene-d4	152	12.636	12.625	(1.037)	70225	4.54392	4.5(Q)

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111101.B\V5N2548.D
Report Date: 07-Nov-2011 13:10

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2548.D
Lab Smp Id: K2200-18A Client Smp ID: H30Y6
Inj Date : 01-NOV-2011 17:52
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-18A,,62672,
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

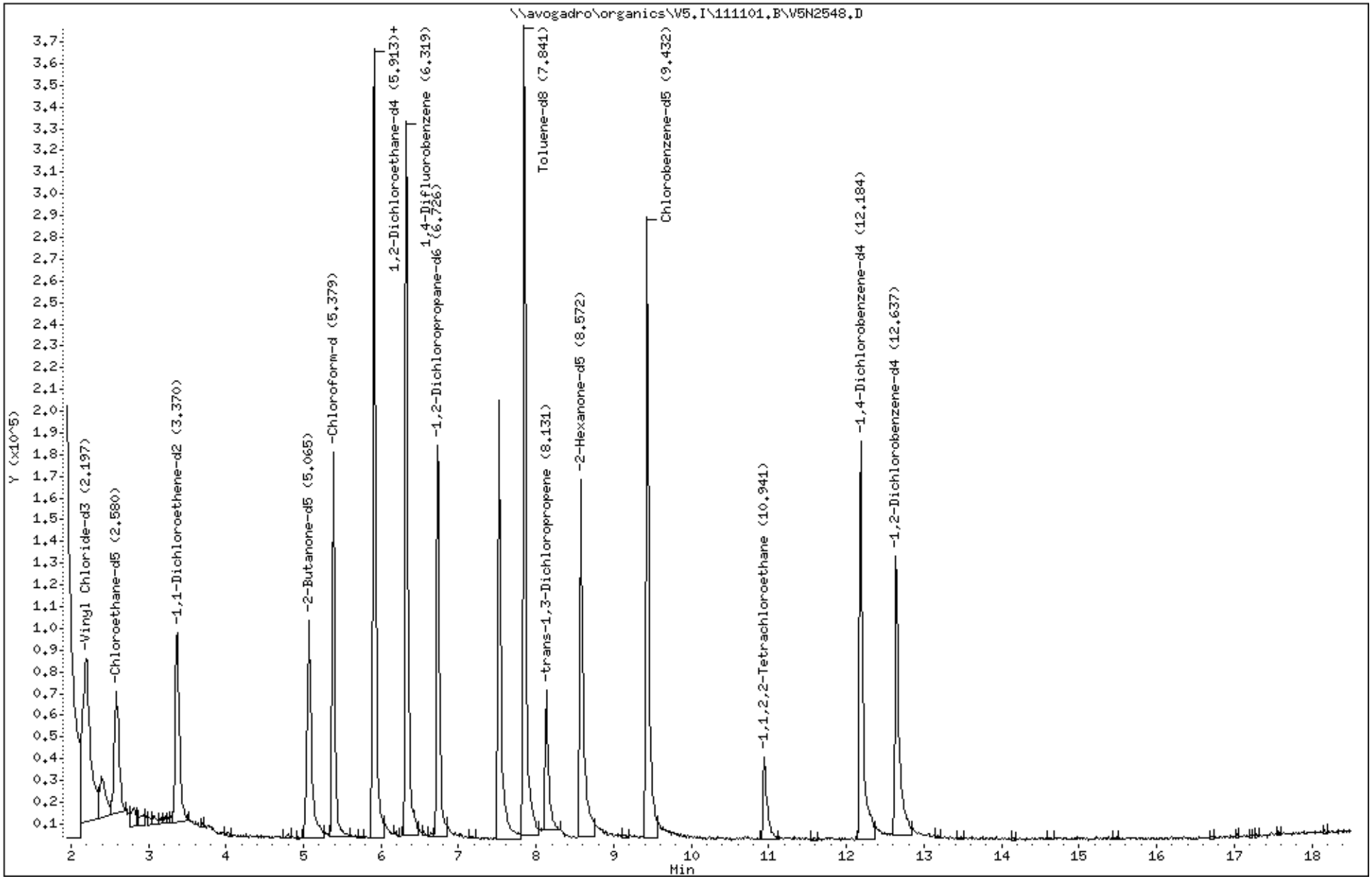
Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 26 1,4-Difluorobenzene	6.319	830385	5.000

	CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.394	109647	0.66021790	0.66	0		0	26

Data File: \\avogadro\organics\V5.I\111101.B\V5N2548.D
Date : 01-NOV-2011 17:52
Client ID: H30Y6
Instrument: V5.i
Sample Info: 25ML,K2200-18A,,62672,
Purge Volume: 25.0
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111101.B\V5N2548.D

Date : 01-NOV-2011 17:52

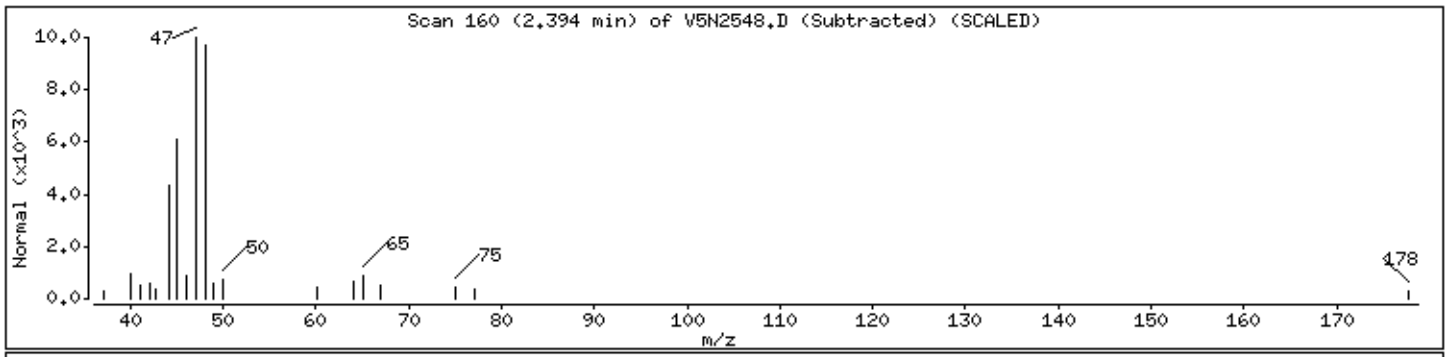
Client ID: H30Y6 Instrument: V5.i

Sample Info: 25ML,K2200-18A,,62672,

Purge Volume: 25.0 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



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Z6

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-19A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2622.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/02/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Z6

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-19A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2622.D

Level: (TRACE/LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/02/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30Z6

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-19A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2622.D

Level: (TRACE or LOW/MED) TRACE Date Received: 10/28/2011

% Moisture: not dec. Date Analyzed: 11/02/2011

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/L Purge Volume: 25.0 (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\111102A.B\V5N2622.D
Report Date: 07-Nov-2011 13:12

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111102A.B\V5N2622.D
Lab Smp Id: K2200-19A Client Smp ID: H30Z6
Inj Date : 02-NOV-2011 18:46
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-19A,,62673,
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111102A.B\V5_TVOA1359.m
Meth Date : 04-Nov-2011 15:45 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	79 Vinyl Chloride-d3	65	2.191	2.179	(0.346)	175511	4.25796	4.3
$	80 Chloroethane-d5	69	2.597	2.585	(0.411)	123055	4.52113	4.5
$	81 1,1-Dichloroethene-d2	65	3.375	3.375	(0.534)	41760	4.40609	4.4(Q)
$	82 2-Butanone-d5	46	5.082	5.071	(0.804)	164818	40.1021	40(AQ)
$	83 Chloroform-d	84	5.384	5.384	(0.851)	176270	4.52697	4.5(Q)
$	23 1,2-Dichloroethane-d4	65	5.895	5.895	(0.932)	63325	4.15924	4.2
$	84 Benzene-d6	84	5.918	5.907	(0.627)	368338	5.08361	5.1
*	26 1,4-Difluorobenzene	114	6.325	6.325	(1.000)	360698	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.731	6.731	(0.713)	114739	4.44816	4.4
$	33 Toluene-d8	98	7.846	7.846	(0.831)	325969	4.88734	4.9
$	86 trans-1,3-Dichloropropene-d4	79	8.125	8.125	(0.861)	64378	4.39175	4.4
$	87 2-Hexanone-d5	63	8.578	8.566	(0.909)	103018	39.0193	39(A)
*	42 Chlorobenzene-d5	117	9.437	9.425	(1.000)	258464	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.947	10.924	(1.160)	41899	4.06660	4.1
*	78 1,4-Dichlorobenzene-d4	152	12.178	12.166	(1.000)	94525	5.00000	
$	90 1,2-Dichlorobenzene-d4	152	12.642	12.631	(1.038)	70802	4.55586	4.6(Q)

QC Flag Legend

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

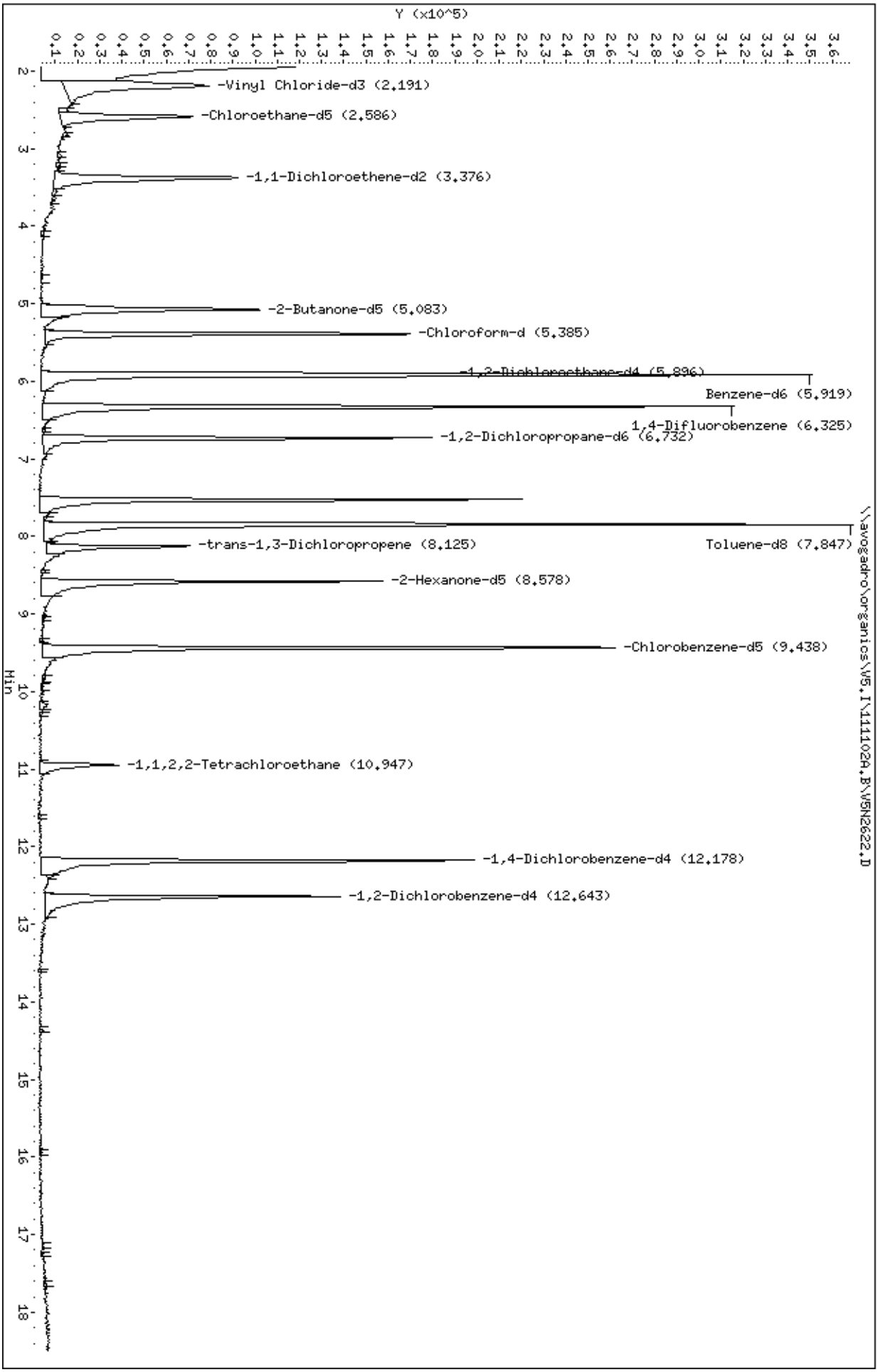
Data File: \\avogadro\organics\V5.I\111102A.B\V5N2622.D
Report Date: 07-Nov-2011 13:12

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111102A.B\V5N2622.D
Lab Smp Id: K2200-19A Client Smp ID: H30Z6
Inj Date : 02-NOV-2011 18:46
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2200-19A,,62673,
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111102A.B\V5_TVOA1359.m
Meth Date : 04-Nov-2011 15:45 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -


Data File: \\avogadro\organics\W5.I\111102A.B\W5N2622.D
Date : 02-NOV-2011 18:46
Client ID: H3026
Sample Info: 25ML,K2200-19A,,62673,
Purge Volume: 25.0
Column phase: DB-624
Instrument: W5.i
Operator: SRC: LIMS
Column diameter: 0.25
Y (x10^5)
Min
-Vinyl Chloride-d3 (2.191)
-Chloroethane-d5 (2.586)
-1,1-Dichloroethene-d2 (3.376)
-2-Butanone-d5 (5.083)
-Chloroform-d (5.385)
-1,2-Dichloroethane-d4 (5.896)
Benzene-d6 (5.919)
1,4-Difluorobenzene (6.325)
-1,2-Dichloropropane-d6 (6.732)
Toluene-d8 (7.847)
-trans-1,3-Dichloropropene (8.125)
-2-Hexanone-d5 (8.578)
-Chlorobenzene-d5 (9.438)
-1,1,2,2-Tetrachloroethane (10.947)
-1,4-Dichlorobenzene-d4 (12.178)
-1,2-Dichlorobenzene-d4 (12.643)
\\avogadro\organics\W5.I\111102A.B\W5N2622.D

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.: H30S7

Instrument ID: V5 Calibration Date(s): 10/15/2011 10/15/2011

Heated Purge: (Y/N) N Calibration Time(s): 11:28 13:24

Purge Volume: 25.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: RRF0.5 = V5N1681.D RRF001 = V5N1684.D

RRF005 = V5N1680.D RRF010 = V5N1683.D RRF020 = V5N1682.D

COMPOUND	RRF0.5	RRF001	RRF005	RRF010	RRF020	$\overline{RRF}$	%RSD
Dichlorodifluoromethane	0.560	0.606	0.633	0.563	0.583	0.589	5.2
Chloromethane	0.912	0.928	1.009	0.884	0.907	0.928	5.2
Vinyl chloride	0.669	0.706	0.722	0.657	0.636	0.678	5.2
Bromomethane	0.484	0.471	0.456	0.427	0.415	0.451	6.4
Chloroethane	0.325	0.376	0.364	0.338	0.331	0.347	6.4
Trichlorofluoromethane	0.666	0.747	0.729	0.704	0.721	0.713	4.3
1,1-Dichloroethene	0.426	0.453	0.440	0.426	0.418	0.433	3.2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.493	0.520	0.493	0.473	0.475	0.491	3.9
Acetone	0.047	0.044	0.047	0.044	0.043	0.045	3.6
Carbon disulfide	1.671	1.834	1.768	1.668	1.618	1.712	5.1
Methyl acetate	0.120	0.143	0.135	0.122	0.119	0.128	8.4
Methylene chloride	0.356	0.380	0.360	0.361	0.342	0.360	3.8
trans-1,2-Dichloroethene	0.389	0.406	0.421	0.394	0.369	0.395	4.9
Methyl tert-butyl ether	0.417	0.459	0.464	0.433	0.406	0.436	5.8
1,1-Dichloroethane	0.703	0.765	0.766	0.700	0.681	0.723	5.5
cis-1,2-Dichloroethene	0.363	0.383	0.388	0.346	0.338	0.364	6.1
2-Butanone	0.056	0.057	0.061	0.058	0.056	0.058	3.5
Bromochloromethane	0.138	0.142	0.145	0.138	0.132	0.139	3.5
Chloroform	0.581	0.620	0.620	0.561	0.541	0.585	6.0
1,1,1-Trichloroethane	0.658	0.761	0.727	0.704	0.643	0.699	7.0
Cyclohexane	0.769	1.011	0.956	0.896	0.846	0.896	10.5
Carbon tetrachloride	0.587	0.706	0.671	0.622	0.578	0.633	8.7
Benzene	1.479	1.913	1.721	1.615	1.491	1.644	11.0
1,2-Dichloroethane	0.261	0.273	0.273	0.257	0.247	0.262	4.2
Trichloroethene	0.455	0.531	0.528	0.488	0.444	0.489	8.2
Methylcyclohexane	0.711	0.821	0.789	0.685	0.649	0.731	9.8

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.: H30S7

Instrument ID: V5 Calibration Date(s): 10/15/2011 10/15/2011

Heated Purge: (Y/N) N Calibration Time(s): 11:28 13:24

Purge Volume: 25.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: RRF0.5 = V5N1681.D RRF001 = V5N1684.D

RRF005 = V5N1680.D RRF010 = V5N1683.D RRF020 = V5N1682.D

COMPOUND	RRF0.5	RRF001	RRF005	RRF010	RRF020	$\overline{RRF}$	%RSD
1,2-Dichloropropane	0.392	0.482	0.470	0.417	0.397	0.431	9.7
Bromodichloromethane	0.383	0.479	0.472	0.457	0.425	0.443	8.9
cis-1,3-Dichloropropene	0.429	0.540	0.571	0.527	0.478	0.509	11.0
4-Methyl-2-pentanone	0.165	0.194	0.193	0.170	0.161	0.177	9.0
Toluene	1.392	1.867	1.727	1.585	1.485	1.611	11.7
trans-1,3-Dichloropropene	0.324	0.355	0.380	0.359	0.328	0.349	6.7
1,1,2-Trichloroethane	0.156	0.218	0.208	0.197	0.184	0.193	12.6
Tetrachloroethene	0.294	0.381	0.365	0.354	0.316	0.342	10.5
2-Hexanone	0.106	0.122	0.129	0.115	0.112	0.117	7.8
Dibromochloromethane	0.259	0.300	0.300	0.289	0.263	0.282	7.0
1,2-Dibromoethane	0.171	0.216	0.231	0.216	0.205	0.208	10.8
Chlorobenzene	0.986	1.184	1.115	1.046	0.994	1.065	7.9
Ethylbenzene	1.523	2.014	1.842	1.704	1.635	1.744	10.9
m,p-Xylene	0.552	0.797	0.782	0.746	0.718	0.719	13.6
o-Xylene	0.644	0.788	0.723	0.687	0.661	0.701	8.2
Styrene	0.803	1.095	1.102	1.023	0.986	1.002	12.1
Bromoform	0.343	0.382	0.358	0.332	0.306	0.344	8.3
Isopropylbenzene	1.591	2.062	2.019	1.822	1.724	1.844	10.7
1,1,2,2-Tetrachloroethane	0.163	0.232	0.231	0.205	0.192	0.205	14.1
1,3-Dichlorobenzene	1.462	1.776	1.809	1.634	1.583	1.653	8.6
1,4-Dichlorobenzene	1.845	2.017	1.896	1.696	1.605	1.812	9.0
1,2-Dichlorobenzene	1.430	1.578	1.498	1.367	1.309	1.436	7.4
1,2-Dibromo-3-chloropropane	0.043	0.064	0.070	0.061	0.060	0.060	16.6
1,2,4-Trichlorobenzene	0.769	1.102	1.177	1.119	1.043	1.042	15.3
1,2,3-Trichlorobenzene	0.698	0.902	0.860	0.792	0.767	0.804	9.9

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.: H30S7

Instrument ID: V5 Calibration Date(s): 10/15/2011 10/15/2011

Heated Purge: (Y/N) N Calibration Time(s): 11:28 13:24

Purge Volume: 25.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: RRF0.5 = V5N1681.D RRF001 = V5N1684.D

RRF005 = V5N1680.D RRF010 = V5N1683.D RRF020 = V5N1682.D

COMPOUND	RRF0.5	RRF001	RRF005	RRF010	RRF020	$\overline{RRF}$	%RSD
Vinyl chloride-d3	0.566	0.585	0.591	0.565	0.550	0.571	2.9
Chloroethane-d5	0.392	0.375	0.386	0.372	0.362	0.377	3.1
1,1-Dichloroethene-d2	0.143	0.136	0.130	0.124	0.124	0.131	6.2
2-Butanone-d5	0.054	0.054	0.060	0.058	0.058	0.057	4.5
Chloroform-d	0.521	0.553	0.565	0.540	0.520	0.540	3.6
1,2-Dichloroethane-d4	0.197	0.219	0.226	0.211	0.202	0.211	5.7
Benzene-d6	1.252	1.526	1.496	1.427	1.307	1.402	8.5
1,2-Dichloropropane-d6	0.410	0.537	0.552	0.516	0.481	0.499	11.3
Toluene-d8	1.142	1.424	1.317	1.333	1.235	1.290	8.3
trans-1,3-Dichloropropene-d4	0.193	0.300	0.318	0.314	0.292	0.284	18.2
2-Hexanone-d5	0.041	0.050	0.057	0.055	0.053	0.051	11.9
1,1,2,2-Tetrachloroethane-d2	0.177	0.213	0.216	0.204	0.186	0.199	8.7
1,2-Dichlorobenzene-d4	0.819	0.900	0.848	0.771	0.772	0.822	6.6

Data File: \\avogadro\organics\V5.I\111015A.B\V5N1680.D
Report Date: 19-Oct-2011 09:46

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111015A.B\V5N1680.D
Lab Smp Id: VSTD005B5 Client Smp ID: VSTD005B5
Inj Date : 15-OCT-2011 11:28
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD005B5,VSTD005B5
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111015A.B\V5_TVOA1359.m
Meth Date : 17-Oct-2011 14:56 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 11:28 Cal File: V5N1680.D
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1359.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
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	1.911	1.893	(0.302)	309157	5.00000	5.4
	2 Chloromethane	50	2.039	2.044	(0.322)	492873	5.00000	5.4
$	79 Vinyl Chloride-d3	65	2.178	2.184	(0.344)	288782	5.00000	5.2
	3 Vinyl Chloride	62	2.189	2.195	(0.346)	352856	5.00000	5.3
	4 Bromomethane	94	2.526	2.520	(0.400)	222754	5.00000	5.1
$	80 Chloroethane-d5	69	2.584	2.590	(0.409)	188387	5.00000	5.1
	5 Chloroethane	64	2.619	2.625	(0.414)	178061	5.00000	5.3
	6 Trichlorofluoromethane	101	2.909	2.927	(0.460)	356398	5.00000	5.1
$	81 1,1-Dichloroethene-d2	65	3.386	3.368	(0.535)	63572	5.00000	5.0(Q)
	7 1,1-Dichloroethene	96	3.397	3.391	(0.537)	214995	5.00000	5.1
	8 1,1,2-Trichloro-1,2,2-trifluo	101	3.420	3.426	(0.541)	241056	5.00000	5.0
	9 Acetone	43	3.455	3.449	(0.546)	227258	50.0000	52
	10 Carbon Disulfide	76	3.618	3.612	(0.572)	863645	5.00000	5.2
	11 Methyl Acetate	43	3.769	3.775	(0.596)	66136	5.00000	5.3
	12 Methylene Chloride	84	3.862	3.856	(0.611)	176105	5.00000	5.0
	13 trans-1,2-Dichloroethene	96	4.129	4.123	(0.653)	205466	5.00000	5.3
	14 Methyl tert-Butyl Ether	73	4.140	4.135	(0.655)	226537	5.00000	5.3
	15 1,1-Dichloroethane	63	4.535	4.541	(0.717)	374247	5.00000	5.3
$	82 2-Butanone-d5	46	5.070	5.075	(0.802)	292912	50.0000	53
	17 cis-1,2-Dichloroethene	96	5.104	5.098	(0.807)	189698	5.00000	5.3
	120 2,2-Dichloropropane	77	5.104	5.098	(0.541)	287185	5.00000	5.3
	16 2-Butanone	43	5.128	5.122	(0.811)	298542	50.0000	53

Data File: \\avogadro\organics\V5.I\111015A.B\V5N1680.D
Report Date: 19-Oct-2011 09:46

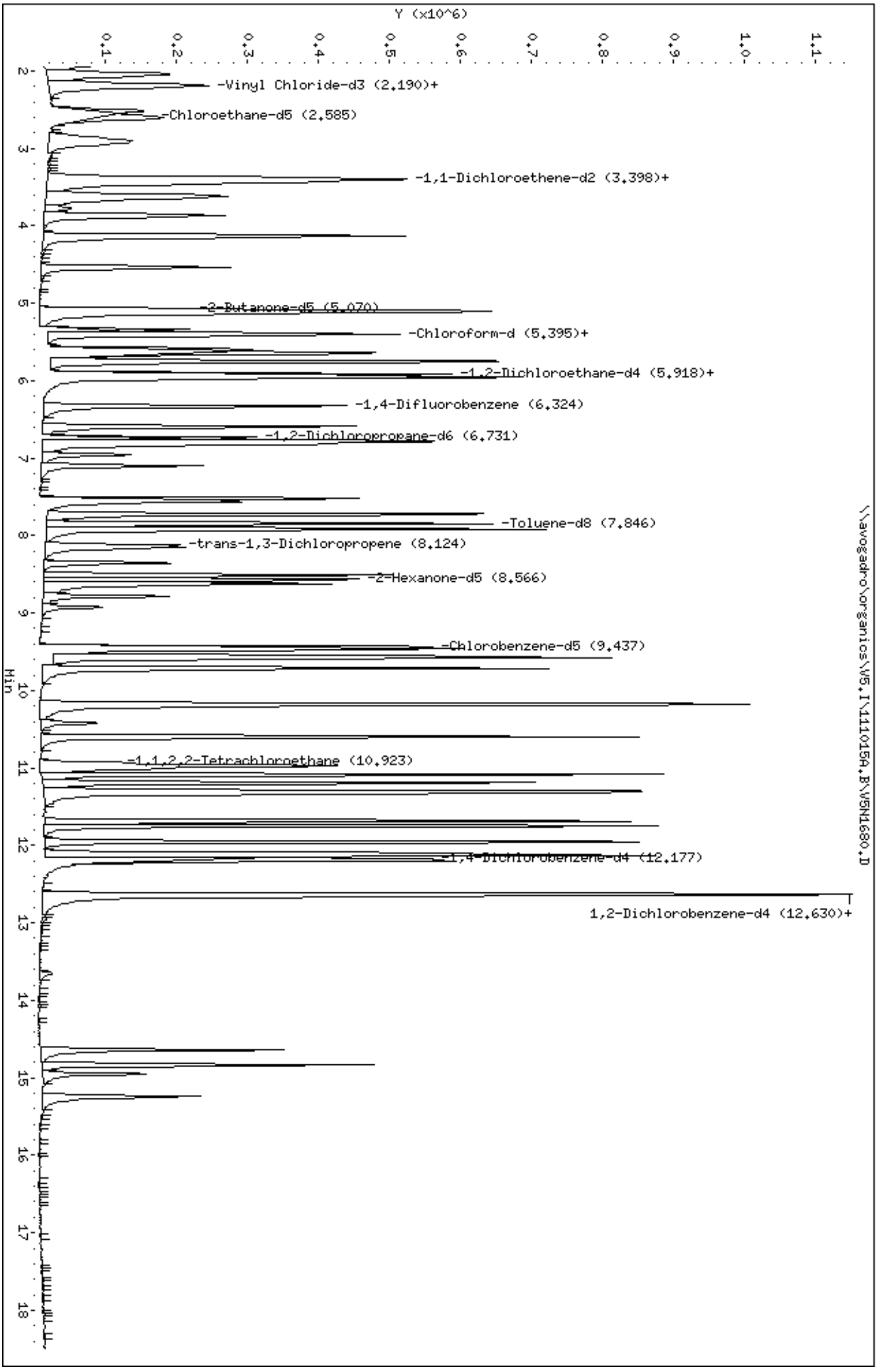
			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	18	Bromochloromethane	128	5.337	5.342	(0.844)	70764	5.00000	5.2
$	83	Chloroform-d	84	5.395	5.389	(0.853)	276006	5.00000	5.2
	19	Chloroform	83	5.406	5.400	(0.855)	303084	5.00000	5.3
	20	1,1,1-Trichloroethane	97	5.592	5.598	(0.593)	267042	5.00000	5.2
	21	Cyclohexane	56	5.650	5.644	(0.599)	350923	5.00000	5.3
	105	1,1-Dichloropropene	110	5.755	5.749	(0.610)	89713	5.00000	5.3
	22	Carbon Tetrachloride	117	5.755	5.749	(0.610)	246276	5.00000	5.3
$	23	1,2-Dichloroethane-d4	65	5.906	5.900	(0.934)	110514	5.00000	5.4
$	84	Benzene-d6	84	5.917	5.911	(0.627)	549404	5.00000	5.3
	25	Benzene	78	5.952	5.958	(0.631)	632067	5.00000	5.2
	24	1,2-Dichloroethane	62	5.975	5.969	(0.945)	133447	5.00000	5.2
*	26	1,4-Difluorobenzene	114	6.324	6.329	(1.000)	488589	5.00000	
	27	Trichloroethene	95	6.591	6.585	(0.698)	193808	5.00000	5.4
$	85	1,2-Dichloropropane-d6	67	6.730	6.736	(0.713)	202671	5.00000	5.5
	28	Methylcyclohexane	83	6.788	6.782	(0.719)	289539	5.00000	5.4
	29	1,2-Dichloropropane	63	6.823	6.817	(0.723)	172452	5.00000	5.4
	119	Dibromomethane	93	6.951	6.957	(1.099)	65781	5.00000	5.3
	30	Bromodichloromethane	83	7.102	7.096	(0.753)	173195	5.00000	5.3
	31	cis-1,3-Dichloropropene	75	7.566	7.560	(0.802)	209515	5.00000	5.6
	32	4-Methyl-2-Pentanone	43	7.717	7.723	(0.818)	708713	50.0000	55
$	33	Toluene-d8	98	7.845	7.839	(0.831)	483438	5.00000	5.1
	34	Toluene	91	7.915	7.920	(0.839)	634085	5.00000	5.4
$	86	trans-1,3-Dichloropropene-d4	79	8.124	8.118	(0.861)	116872	5.00000	5.6
	35	trans-1,3-Dichloropropene	75	8.159	8.153	(0.865)	139549	5.00000	5.4
	36	1,1,2-Trichloroethane	97	8.356	8.350	(0.886)	76287	5.00000	5.4
	37	Tetrachloroethene	164	8.507	8.501	(0.902)	134198	5.00000	5.3
	107	1,3-Dichloropropane	76	8.542	8.536	(1.351)	139387	5.00000	5.4
$	87	2-Hexanone-d5	63	8.565	8.571	(0.908)	207688	50.0000	55(Q)
	38	2-Hexanone	43	8.623	8.617	(0.914)	474537	50.0000	55
	39	Dibromochloromethane	129	8.786	8.780	(0.931)	110146	5.00000	5.3
	40	1,2-Dibromoethane	107	8.925	8.919	(0.946)	84814	5.00000	5.6
*	42	Chlorobenzene-d5	117	9.436	9.430	(1.000)	367174	5.00000	
	43	Chlorobenzene	112	9.459	9.465	(1.002)	409342	5.00000	5.2
	124	1,1,1,2-Tetrachloroethane	131	9.552	9.546	(1.510)	142476	5.00000	5.3
	44	Ethylbenzene	91	9.575	9.581	(1.015)	676273	5.00000	5.3
	45	m,p-Xylene	106	9.715	9.709	(1.030)	287081	5.00000	5.4
	46	o-Xylene	106	10.168	10.173	(1.078)	265403	5.00000	5.2
	47	Styrene	104	10.191	10.197	(1.080)	404689	5.00000	5.5
	48	Bromoform	173	10.423	10.417	(0.856)	54648	5.00000	5.2
	49	Isopropylbenzene	105	10.597	10.603	(1.123)	741267	5.00000	5.5
$	89	1,1,2,2-Tetrachloroethane-d2	84	10.923	10.928	(1.158)	79487	5.00000	5.4
	51	1,1,2,2-Tetrachloroethane	83	10.957	10.951	(1.161)	84935	5.00000	5.7
	113	Bromobenzene	156	10.981	10.975	(0.902)	137749	5.00000	5.5
	106	1,2,3-Trichloropropane	75	11.015	11.010	(0.905)	47736	5.00000	4.5(Q)
	123	n-Propylbenzene	120	11.085	11.091	(0.910)	194139	5.00000	5.5
	117	2-Chlorotoluene	126	11.190	11.195	(0.919)	173539	5.00000	5.3
	101	1,2,4-Trimethylbenzene	105	11.294	11.300	(0.928)	608147	5.00000	5.4
	118	4-Chlorotoluene	126	11.329	11.323	(0.930)	170233	5.00000	5.5(Q)
	116	tert-Butylbenzene	119	11.689	11.683	(0.960)	483241	5.00000	5.2
	102	1,3,5-Trimethylbenzene	105	11.747	11.753	(0.965)	589182	5.00000	5.4
	115	sec-Butylbenzene	105	11.956	11.950	(0.982)	804574	5.00000	5.2
	52	1,3-Dichlorobenzene	146	12.095	12.090	(0.993)	275855	5.00000	5.5
M	41	Xylene (total)	106				552484	5.00000	11
	122	P-Isopropyltoluene	119	12.130	12.124	(0.996)	607778	5.00000	5.3

Data File: \\avogadro\organics\V5.I\111015A.B\V5N1680.D
Report Date: 19-Oct-2011 09:46

		QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
*	78 1,4-Dichlorobenzene-d4	152	12.177	12.171	(1.000)	152515	5.00000	
	53 1,4-Dichlorobenzene	146	12.200	12.206	(1.002)	289183	5.00000	5.2
	114 n-Butylbenzene	91	12.630	12.635	(1.037)	600153	5.00000	5.5
$	90 1,2-Dichlorobenzene-d4	152	12.630	12.635	(1.037)	129345	5.00000	5.2
	54 1,2-Dichlorobenzene	146	12.653	12.659	(1.039)	228417	5.00000	5.2
	55 1,2-Dibromo-3-chloropropane	75	13.652	13.657	(1.121)	10647	5.00000	5.8(Q)
	56 1,2,4-Trichlorobenzene	180	14.639	14.644	(1.202)	179547	5.00000	5.6
	121 Hexachlorobutadiene	225	14.836	14.830	(1.218)	121658	5.00000	5.1
	97 Naphthalene	128	14.952	14.946	(1.228)	214252	5.00000	5.9
	77 1,2,3-Trichlorobenzene	180	15.243	15.248	(1.252)	131137	5.00000	5.3

QC Flag Legend

Q - Qualifier signal failed the ratio test.


Data File: \\avogadro\organics\V5.I\111015A.B\V5N1680.D
Date : 15-OCT-2011 11:28
Client ID: VSTD005B5
Sample Info: 25ML,VSTD005B5,VSTD005B5
Purge Volume: 25.0
Column phase: DB-624
Instrument: V5.i
Operator: SRC:
Column diameter: 0.25
Y (x10^6)
Min
\\avogadro\organics\V5.I\111015A.B\V5N1680.D
-Vinyl Chloride-d3 (2.190)+
-Chloroethane-d5 (2.585)
-1,1-Dichloroethene-d2 (3.398)+
-2-Butanone-d5 (5.070)
-Chloroform-d (5.395)+
-1,2-Dichloroethane-d4 (5.918)+
-1,4-Difluorobenzene (6.324)
-1,2-Dichloropropane-d6 (6.731)
-Toluene-d8 (7.846)
-trans-1,3-Dichloropropene (8.124)
-2-Hexanone-d5 (8.566)
-Chlorobenzene-d5 (9.437)
-1,1,2,2-Tetrachloroethane (10.923)
-1,4-Dichlorobenzene-d4 (12.177)
1,2-Dichlorobenzene-d4 (12.630)+

Data File: \\avogadro\organics\V5.I\111015A.B\V5N1681.D
Report Date: 19-Oct-2011 09:46

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111015A.B\V5N1681.D
Lab Smp Id: VSTD0.5B5 Client Smp ID: VSTD0.5B5
Inj Date : 15-OCT-2011 11:57
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD0.5B5,VSTD0.5B5
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111015A.B\V5_TVOA1359.m
Meth Date : 17-Oct-2011 14:56 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 11:57 Cal File: V5N1681.D
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1359.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
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	1.895	1.893	(0.299)	28806	0.50000	0.48(a)
	2 Chloromethane	50	2.023	2.044	(0.320)	46898	0.50000	0.49(a)
$	79 Vinyl Chloride-d3	65	2.162	2.184	(0.342)	29073	0.50000	0.49(a)
	3 Vinyl Chloride	62	2.173	2.195	(0.343)	34367	0.50000	0.49(a)
	4 Bromomethane	94	2.499	2.520	(0.395)	24859	0.50000	0.54
$	80 Chloroethane-d5	69	2.580	2.590	(0.408)	20150	0.50000	0.52
	5 Chloroethane	64	2.603	2.625	(0.411)	16709	0.50000	0.47(a)
	6 Trichlorofluoromethane	101	2.917	2.927	(0.461)	34240	0.50000	0.47(a)
$	81 1,1-Dichloroethene-d2	65	3.393	3.368	(0.536)	7340	0.50000	0.54(Q)
	7 1,1-Dichloroethene	96	3.393	3.391	(0.536)	21886	0.50000	0.49(a)
	8 1,1,2-Trichloro-1,2,2-trifluo	101	3.428	3.426	(0.541)	25327	0.50000	0.50
	9 Acetone	43	3.463	3.449	(0.547)	24112	5.00000	5.2
	10 Carbon Disulfide	76	3.614	3.612	(0.571)	85870	0.50000	0.49(a)
	11 Methyl Acetate	43	3.788	3.775	(0.598)	6167	0.50000	0.47(a)
	12 Methylene Chloride	84	3.869	3.856	(0.611)	18275	0.50000	0.49(a)
	13 trans-1,2-Dichloroethene	96	4.136	4.123	(0.653)	19989	0.50000	0.49(a)
	14 Methyl tert-Butyl Ether	73	4.148	4.135	(0.655)	21439	0.50000	0.48(a)
	15 1,1-Dichloroethane	63	4.543	4.541	(0.718)	36155	0.50000	0.49(a)
$	82 2-Butanone-d5	46	5.088	5.075	(0.804)	27945	5.00000	4.8(a)
	17 cis-1,2-Dichloroethene	96	5.112	5.098	(0.807)	18682	0.50000	0.50
	120 2,2-Dichloropropane	77	5.100	5.098	(0.541)	28375	0.50000	0.46(a)
	16 2-Butanone	43	5.158	5.122	(0.815)	28820	5.00000	4.9(a)

Data File: \\avogadro\organics\V5.I\111015A.B\V5N1681.D
Report Date: 19-Oct-2011 09:46

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	18	Bromochloromethane	128	5.344	5.342	(0.844)	7078	0.50000	0.50(Q)
$	83	Chloroform-d	84	5.390	5.389	(0.851)	26803	0.50000	0.48(a)
	19	Chloroform	83	5.414	5.400	(0.855)	29876	0.50000	0.50
	20	1,1,1-Trichloroethane	97	5.599	5.598	(0.594)	27320	0.50000	0.47(a)
	21	Cyclohexane	56	5.646	5.644	(0.599)	31937	0.50000	0.43(a)
	105	1,1-Dichloropropene	110	5.762	5.749	(0.611)	8338	0.50000	0.43(a)
	22	Carbon Tetrachloride	117	5.750	5.749	(0.610)	24353	0.50000	0.46(a)
$	23	1,2-Dichloroethane-d4	65	5.913	5.900	(0.934)	10144	0.50000	0.47(aQ)
$	84	Benzene-d6	84	5.925	5.911	(0.628)	51961	0.50000	0.45(a)
	25	Benzene	78	5.959	5.958	(0.632)	61398	0.50000	0.45(a)
	24	1,2-Dichloroethane	62	5.983	5.969	(0.945)	13416	0.50000	0.50
*	26	1,4-Difluorobenzene	114	6.331	6.329	(1.000)	513989	5.00000	
	27	Trichloroethene	95	6.610	6.585	(0.701)	18867	0.50000	0.46(a)
$	85	1,2-Dichloropropane-d6	67	6.737	6.736	(0.714)	17012	0.50000	0.41(a)
	28	Methylcyclohexane	83	6.784	6.782	(0.719)	29531	0.50000	0.49(a)
	29	1,2-Dichloropropane	63	6.830	6.817	(0.724)	16263	0.50000	0.45(Ta)
	119	Dibromomethane	93	6.981	6.957	(1.103)	6393	0.50000	0.49(a)
	30	Bromodichloromethane	83	7.109	7.096	(0.754)	15896	0.50000	0.43(a)
	31	cis-1,3-Dichloropropene	75	7.585	7.560	(0.804)	17803	0.50000	0.42(a)
	32	4-Methyl-2-Pentanone	43	7.748	7.723	(0.821)	68608	5.00000	4.7(a)
$	33	Toluene-d8	98	7.864	7.839	(0.834)	47395	0.50000	0.44(a)
	34	Toluene	91	7.934	7.920	(0.841)	57798	0.50000	0.43(a)
$	86	trans-1,3-Dichloropropene-d4	79	8.166	8.118	(0.866)	8028	0.50000	0.34(a)
	35	trans-1,3-Dichloropropene	75	8.189	8.153	(0.868)	13432	0.50000	0.46(a)
	36	1,1,2-Trichloroethane	97	8.363	8.350	(0.887)	6460	0.50000	0.40(aQ)
	37	Tetrachloroethene	164	8.514	8.501	(0.903)	12219	0.50000	0.43(a)
	107	1,3-Dichloropropane	76	8.572	8.536	(1.354)	12257	0.50000	0.45(a)
$	87	2-Hexanone-d5	63	8.619	8.571	(0.914)	17091	5.00000	4.0(aH)
	38	2-Hexanone	43	8.677	8.617	(0.920)	43922	5.00000	4.5(a)
	39	Dibromochloromethane	129	8.805	8.780	(0.934)	10755	0.50000	0.46(a)
	40	1,2-Dibromoethane	107	8.944	8.919	(0.948)	7102	0.50000	0.41(Ta)
*	42	Chlorobenzene-d5	117	9.432	9.430	(1.000)	415099	5.00000	
	43	Chlorobenzene	112	9.467	9.465	(1.004)	40925	0.50000	0.46(a)
	124	1,1,1,2-Tetrachloroethane	131	9.559	9.546	(1.510)	13244	0.50000	0.47(a)
	44	Ethylbenzene	91	9.594	9.581	(1.017)	63204	0.50000	0.44(a)
	45	m,p-Xylene	106	9.745	9.709	(1.033)	22931	0.50000	0.38(aQ)
	46	o-Xylene	106	10.198	10.173	(1.081)	26731	0.50000	0.46(a)
	47	Styrene	104	10.245	10.197	(1.086)	33352	0.50000	0.40(a)
	48	Bromoform	173	10.442	10.417	(0.857)	5589	0.50000	0.50
	49	Isopropylbenzene	105	10.616	10.603	(1.126)	66058	0.50000	0.43(a)
$	89	1,1,2,2-Tetrachloroethane-d2	84	10.941	10.928	(1.160)	7350	0.50000	0.44(a)
	51	1,1,2,2-Tetrachloroethane	83	10.976	10.951	(1.164)	6780	0.50000	0.40(a)
	113	Bromobenzene	156	11.011	10.975	(0.904)	10935	0.50000	0.41(a)
	106	1,2,3-Trichloropropane	75	11.046	11.010	(0.907)	6719	0.50000	0.60(Q)
	123	n-Propylbenzene	120	11.104	11.091	(0.911)	15408	0.50000	0.41(a)
	117	2-Chlorotoluene	126	11.208	11.195	(0.920)	15332	0.50000	0.44(aQ)
	101	1,2,4-Trimethylbenzene	105	11.313	11.300	(0.929)	56178	0.50000	0.46(a)
	118	4-Chlorotoluene	126	11.371	11.323	(0.933)	13172	0.50000	0.40(a)
	116	tert-Butylbenzene	119	11.696	11.683	(0.960)	44733	0.50000	0.45(a)
	102	1,3,5-Trimethylbenzene	105	11.766	11.753	(0.966)	53723	0.50000	0.46(a)
	115	sec-Butylbenzene	105	11.963	11.950	(0.982)	78446	0.50000	0.48(a)
	52	1,3-Dichlorobenzene	146	12.114	12.090	(0.994)	23858	0.50000	0.44(a)
M	41	Xylene (total)	106				49662	0.50000	0.84
	122	P-Isopropyltoluene	119	12.149	12.124	(0.997)	56066	0.50000	0.46(a)

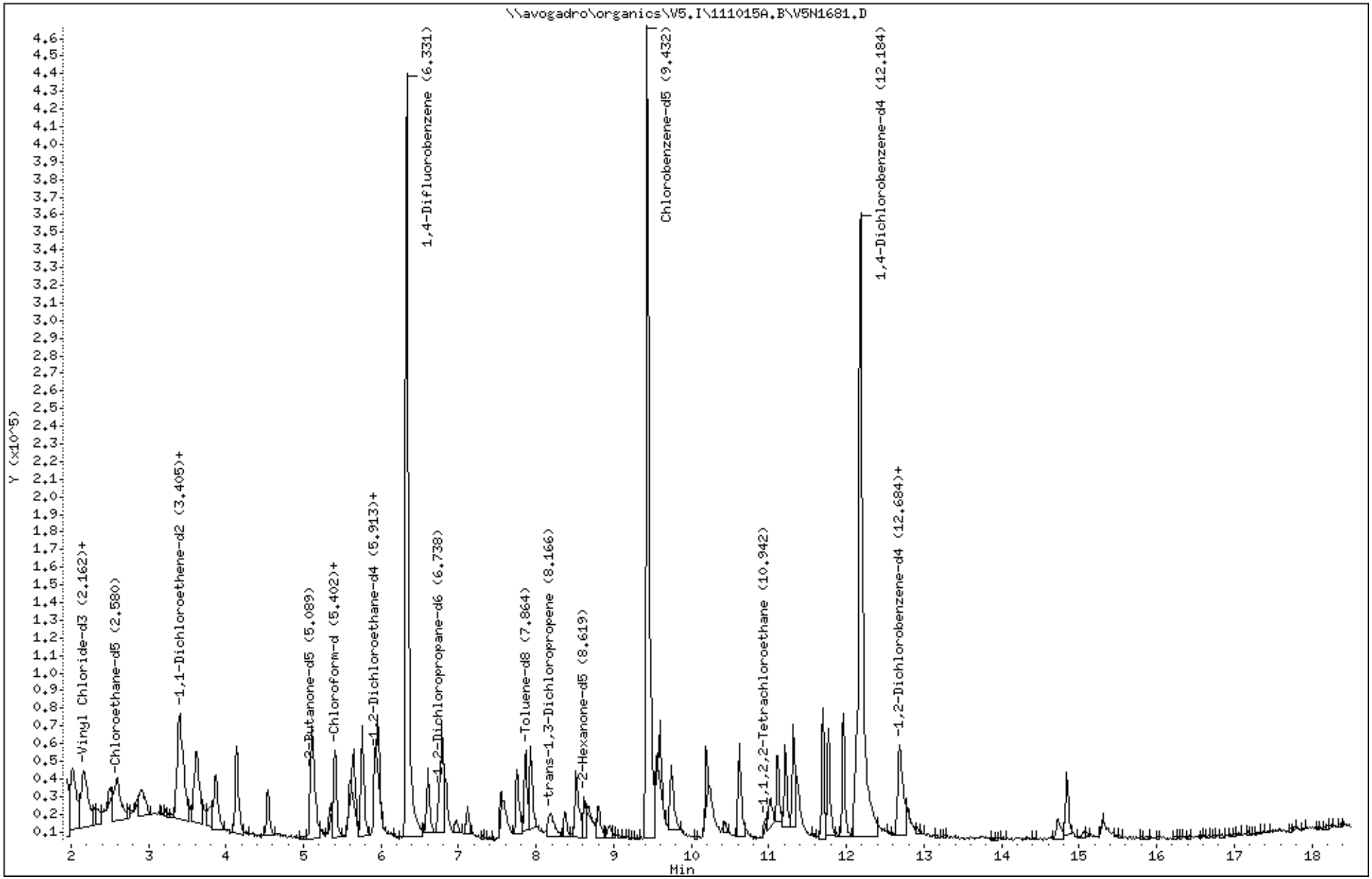
Data File: \\avogadro\organics\V5.I\111015A.B\V5N1681.D
Report Date: 19-Oct-2011 09:46

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
*	78 1,4-Dichlorobenzene-d4	152	12.184	12.171	(1.000)	163174	5.00000	
	53 1,4-Dichlorobenzene	146	12.219	12.206	(1.003)	30106	0.50000	0.51
	114 n-Butylbenzene	91	12.695	12.635	(1.042)	51241	0.50000	0.44(a)
$	90 1,2-Dichlorobenzene-d4	152	12.672	12.635	(1.040)	13357	0.50000	0.50
	54 1,2-Dichlorobenzene	146	12.695	12.659	(1.042)	23337	0.50000	0.50
	55 1,2-Dibromo-3-chloropropane	75	13.821	13.657	(1.134)	708	0.50000	0.36(TaQ)
	56 1,2,4-Trichlorobenzene	180	14.727	14.644	(1.209)	12554	0.50000	0.37(a)
	121 Hexachlorobutadiene	225	14.843	14.830	(1.218)	11421	0.50000	0.45(a)
	97 Naphthalene	128	15.052	14.946	(1.235)	10112	0.50000	0.26(a)
	77 1,2,3-Trichlorobenzene	180	15.296	15.248	(1.255)	11395	0.50000	0.43(a)

QC Flag Legend

T - Target compound detected outside RT window.
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\V5.I\111015A.B\V5N1681.D
Date : 15-OCT-2011 11:57
Client ID: VSTD0.5B5
Instrument: V5.i
Sample Info: 25ML,VSTD0.5B5,VSTD0.5B5
Purge Volume: 25.0
Operator: SRC:
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111015A.B\V5N1682.D
Report Date: 19-Oct-2011 09:46

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111015A.B\V5N1682.D
Lab Smp Id: VSTD020B5 Client Smp ID: VSTD020B5
Inj Date : 15-OCT-2011 12:26
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD020B5,VSTD020B5
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111015A.B\V5_TVOA1359.m
Meth Date : 17-Oct-2011 14:56 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 12:26 Cal File: V5N1682.D
Als bottle: 3 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1359.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
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	1.900	1.893	(0.300)	1186564	20.0000	20
	2 Chloromethane	50	2.051	2.044	(0.324)	1846481	20.0000	20
$	79 Vinyl Chloride-d3	65	2.190	2.184	(0.346)	1120609	20.0000	19
	3 Vinyl Chloride	62	2.202	2.195	(0.348)	1295383	20.0000	19
	4 Bromomethane	94	2.516	2.520	(0.398)	845711	20.0000	18
$	80 Chloroethane-d5	69	2.585	2.590	(0.409)	737395	20.0000	19
	5 Chloroethane	64	2.609	2.625	(0.412)	673556	20.0000	19
	6 Trichlorofluoromethane	101	2.899	2.927	(0.458)	1469249	20.0000	20(A)
$	81 1,1-Dichloroethene-d2	65	3.375	3.368	(0.534)	252877	20.0000	19(Q)
	7 1,1-Dichloroethene	96	3.387	3.391	(0.535)	851386	20.0000	19
	8 1,1,2-Trichloro-1,2,2-trifluo	101	3.421	3.426	(0.541)	967033	20.0000	19
	9 Acetone	43	3.445	3.449	(0.545)	884087	200.000	190
	10 Carbon Disulfide	76	3.607	3.612	(0.570)	3295343	20.0000	19
	11 Methyl Acetate	43	3.758	3.775	(0.594)	243115	20.0000	19
	12 Methylene Chloride	84	3.851	3.856	(0.609)	696781	20.0000	19
	13 trans-1,2-Dichloroethene	96	4.118	4.123	(0.651)	750477	20.0000	19
	14 Methyl tert-Butyl Ether	73	4.130	4.135	(0.653)	827236	20.0000	19
	15 1,1-Dichloroethane	63	4.525	4.541	(0.715)	1387005	20.0000	19
$	82 2-Butanone-d5	46	5.059	5.075	(0.800)	1179759	200.000	200(A)
	17 cis-1,2-Dichloroethene	96	5.094	5.098	(0.805)	687439	20.0000	19
	120 2,2-Dichloropropane	77	5.105	5.098	(0.542)	1079302	20.0000	18
	16 2-Butanone	43	5.117	5.122	(0.809)	1149412	200.000	200

Data File: \\avogadro\organics\V5.I\111015A.B\V5N1682.D
Report Date: 19-Oct-2011 09:46

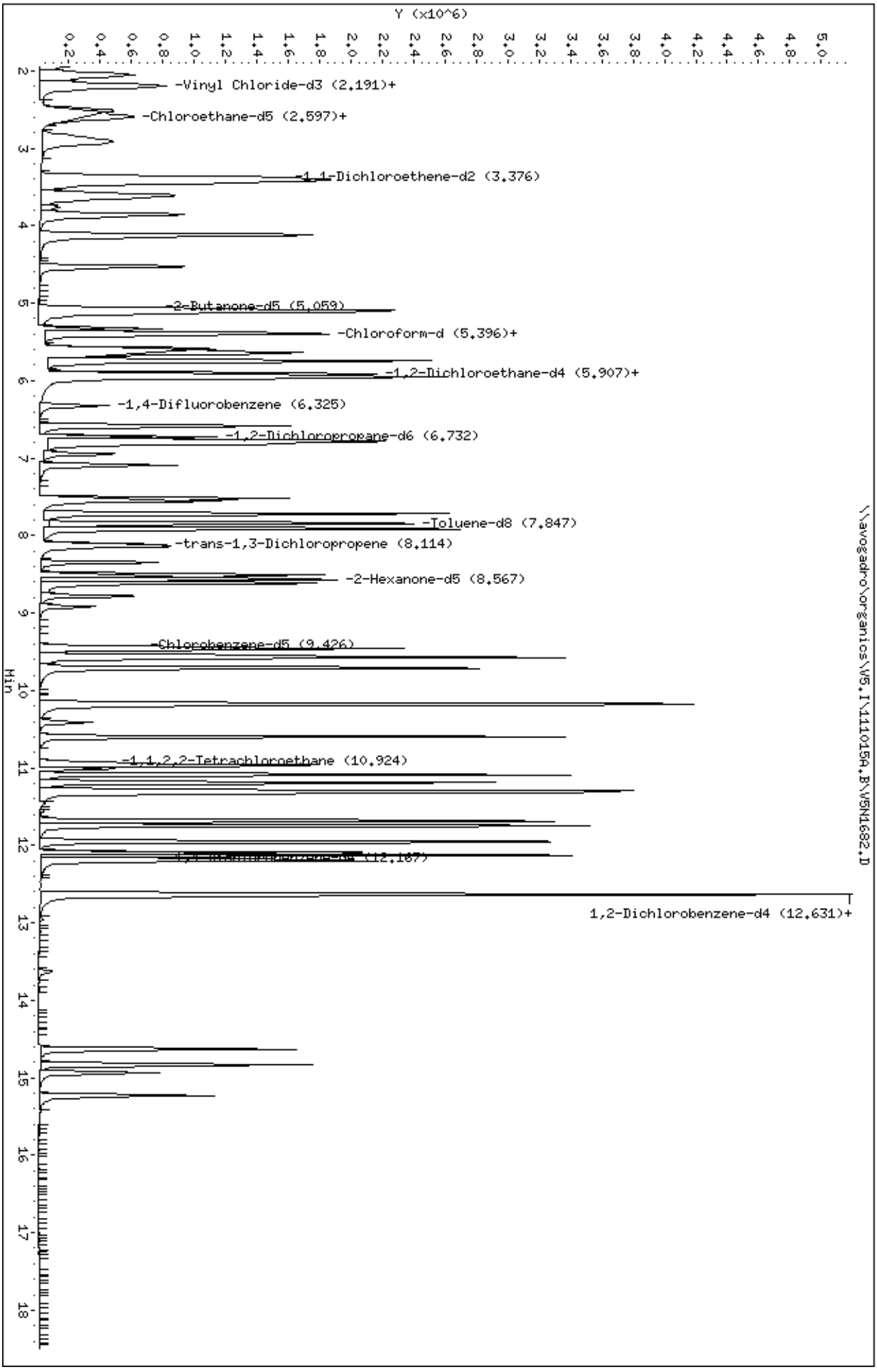
			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	18	Bromochloromethane	128	5.326	5.342	(0.842)	268691	20.0000	19
$	83	Chloroform-d	84	5.384	5.389	(0.851)	1058256	20.0000	19
	19	Chloroform	83	5.407	5.400	(0.855)	1101320	20.0000	18
	20	1,1,1-Trichloroethane	97	5.593	5.598	(0.593)	1018058	20.0000	18
	21	Cyclohexane	56	5.640	5.644	(0.598)	1338429	20.0000	19
	105	1,1-Dichloropropene	110	5.744	5.749	(0.609)	338415	20.0000	18
	22	Carbon Tetrachloride	117	5.744	5.749	(0.609)	914299	20.0000	18
$	23	1,2-Dichloroethane-d4	65	5.895	5.900	(0.932)	410540	20.0000	19
$	84	Benzene-d6	84	5.907	5.911	(0.627)	2068668	20.0000	19
	25	Benzene	78	5.953	5.958	(0.632)	2359029	20.0000	18
	24	1,2-Dichloroethane	62	5.965	5.969	(0.943)	503728	20.0000	19
*	26	1,4-Difluorobenzene	114	6.325	6.329	(1.000)	509114	5.00000	
	27	Trichloroethene	95	6.592	6.585	(0.699)	703235	20.0000	18
$	85	1,2-Dichloropropane-d6	67	6.731	6.736	(0.714)	760970	20.0000	19
	28	Methylcyclohexane	83	6.778	6.782	(0.719)	1026577	20.0000	18
	29	1,2-Dichloropropane	63	6.812	6.817	(0.723)	627598	20.0000	18
	119	Dibromomethane	93	6.940	6.957	(1.097)	246991	20.0000	19
	30	Bromodichloromethane	83	7.091	7.096	(0.752)	672121	20.0000	19
	31	cis-1,3-Dichloropropene	75	7.556	7.560	(0.802)	756221	20.0000	19
	32	4-Methyl-2-Pentanone	43	7.718	7.723	(0.819)	2545567	200.000	180
$	33	Toluene-d8	98	7.846	7.839	(0.832)	1954984	20.0000	19
	34	Toluene	91	7.916	7.920	(0.840)	2350527	20.0000	18
$	86	trans-1,3-Dichloropropene-d4	79	8.113	8.118	(0.861)	462790	20.0000	21(A)
	35	trans-1,3-Dichloropropene	75	8.148	8.153	(0.864)	519621	20.0000	19
	36	1,1,2-Trichloroethane	97	8.345	8.350	(0.885)	291217	20.0000	19
	37	Tetrachloroethene	164	8.508	8.501	(0.903)	500633	20.0000	18
	107	1,3-Dichloropropane	76	8.531	8.536	(1.349)	521231	20.0000	20
$	87	2-Hexanone-d5	63	8.566	8.571	(0.909)	831479	200.000	210(AQ)
	38	2-Hexanone	43	8.613	8.617	(0.914)	1774442	200.000	190
	39	Dibromochloromethane	129	8.787	8.780	(0.932)	416484	20.0000	19
	40	1,2-Dibromoethane	107	8.914	8.919	(0.946)	324781	20.0000	20
*	42	Chlorobenzene-d5	117	9.425	9.430	(1.000)	395616	5.00000	
	43	Chlorobenzene	112	9.460	9.465	(1.004)	1572184	20.0000	19
	124	1,1,1,2-Tetrachloroethane	131	9.553	9.546	(1.510)	529737	20.0000	19
	44	Ethylbenzene	91	9.576	9.581	(1.016)	2588029	20.0000	19
	45	m,p-Xylene	106	9.716	9.709	(1.031)	1136898	20.0000	20
	46	o-Xylene	106	10.169	10.173	(1.079)	1045399	20.0000	19
	47	Styrene	104	10.192	10.197	(1.081)	1560720	20.0000	20
	48	Bromoform	173	10.413	10.417	(0.856)	206529	20.0000	18
	49	Isopropylbenzene	105	10.598	10.603	(1.124)	2728672	20.0000	19
$	89	1,1,2,2-Tetrachloroethane-d2	84	10.924	10.928	(1.159)	293725	20.0000	19
	51	1,1,2,2-Tetrachloroethane	83	10.958	10.951	(1.163)	303089	20.0000	19
	113	Bromobenzene	156	10.970	10.975	(0.902)	549054	20.0000	20
	106	1,2,3-Trichloropropane	75	11.005	11.010	(0.905)	194914	20.0000	17(Q)
	123	n-Propylbenzene	120	11.086	11.091	(0.911)	758411	20.0000	20(Q)
	117	2-Chlorotoluene	126	11.191	11.195	(0.920)	699847	20.0000	19(Q)
	101	1,2,4-Trimethylbenzene	105	11.295	11.300	(0.928)	2318317	20.0000	19
	118	4-Chlorotoluene	126	11.318	11.323	(0.930)	678616	20.0000	20(Q)
	116	tert-Butylbenzene	119	11.690	11.683	(0.961)	1990009	20.0000	19
	102	1,3,5-Trimethylbenzene	105	11.748	11.753	(0.966)	2283278	20.0000	19
	115	sec-Butylbenzene	105	11.957	11.950	(0.983)	3147235	20.0000	18
	52	1,3-Dichlorobenzene	146	12.096	12.090	(0.994)	1069153	20.0000	19
M	41	Xylene (total)	106				2182297	20.0000	39
	122	P-Isopropyltoluene	119	12.131	12.124	(0.997)	2432728	20.0000	19

Data File: \\avogadro\organics\V5.I\111015A.B\V5N1682.D
Report Date: 19-Oct-2011 09:46

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	12.166	12.171	(1.000)	168830	5.00000	(Q)
53 1,4-Dichlorobenzene	146	12.201	12.206	(1.003)	1083816	20.0000	18
114 n-Butylbenzene	91	12.631	12.635	(1.038)	2266600	20.0000	19
$ 90 1,2-Dichlorobenzene-d4	152	12.631	12.635	(1.038)	521586	20.0000	19
54 1,2-Dichlorobenzene	146	12.654	12.659	(1.040)	884247	20.0000	18
55 1,2-Dibromo-3-chloropropane	75	13.618	13.657	(1.119)	40566	20.0000	20(AQ)
56 1,2,4-Trichlorobenzene	180	14.628	14.644	(1.202)	704532	20.0000	20(A)
121 Hexachlorobutadiene	225	14.837	14.830	(1.220)	483559	20.0000	18
97 Naphthalene	128	14.942	14.946	(1.228)	909233	20.0000	23(A)
77 1,2,3-Trichlorobenzene	180	15.232	15.248	(1.252)	518136	20.0000	19

QC Flag Legend

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


Data File: \\avogadro\organics\V5.I\111015A.B\V5N1682.D
Date : 15-OCT-2011 12:26
Client ID: VSTD020B5
Sample Info: 25ML,VSTD020B5,VSTD020B5
Purge Volume: 25.0
Column phase: DB-624
Instrument: V5.i
Operator: SRC:
Column diameter: 0.25
Y (x10^6)
Min
-Vinyl Chloride-d3 (2.191)+
-Chloroethane-d5 (2.597)+
-1,1-Dichloroethene-d2 (3.376)
-2-Butanone-d5 (5.059)
-Chloroform-d (5.396)+
-1,2-Dichloroethane-d4 (5.907)+
-1,4-Difluorobenzene (6.325)
-1,2-Dichloropropane-d6 (6.732)
-Toluene-d8 (7.847)
-trans-1,3-Dichloropropene (8.114)
-2-Hexanone-d5 (8.567)
-Chlorobenzene-d5 (9.426)
-1,1,2,2-Tetrachloroethane (10.924)
1,2-Dichlorobenzene-d4 (12.631)+
\\avogadro\organics\V5.I\111015A.B\V5N1682.D

Data File: \\avogadro\organics\V5.I\111015A.B\V5N1683.D
Report Date: 19-Oct-2011 09:46

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111015A.B\V5N1683.D
Lab Smp Id: VSTD010B5 Client Smp ID: VSTD010B5
Inj Date : 15-OCT-2011 12:55
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD010B5,VSTD010B5
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111015A.B\V5_TVOA1359.m
Meth Date : 17-Oct-2011 14:56 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 12:55 Cal File: V5N1683.D
Als bottle: 4 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1359.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
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	1.894	1.893	(0.300)	627610	10.0000	9.6
	2 Chloromethane	50	2.045	2.044	(0.324)	985653	10.0000	9.5
$	79 Vinyl Chloride-d3	65	2.184	2.184	(0.346)	630294	10.0000	9.9
	3 Vinyl Chloride	62	2.196	2.195	(0.348)	733059	10.0000	9.7
	4 Bromomethane	94	2.510	2.520	(0.397)	476876	10.0000	9.5
$	80 Chloroethane-d5	69	2.579	2.590	(0.408)	414902	10.0000	9.9
	5 Chloroethane	64	2.614	2.625	(0.414)	377300	10.0000	9.8
	6 Trichlorofluoromethane	101	2.904	2.927	(0.460)	784902	10.0000	9.9
$	81 1,1-Dichloroethene-d2	65	3.369	3.368	(0.533)	137969	10.0000	9.4(Q)
	7 1,1-Dichloroethene	96	3.392	3.391	(0.537)	475171	10.0000	9.8
	8 1,1,2-Trichloro-1,2,2-trifluo	101	3.415	3.426	(0.541)	527354	10.0000	9.6
	9 Acetone	43	3.450	3.449	(0.546)	487333	100.000	97
	10 Carbon Disulfide	76	3.613	3.612	(0.572)	1860882	10.0000	9.7
	11 Methyl Acetate	43	3.764	3.775	(0.596)	136304	10.0000	9.5
	12 Methylene Chloride	84	3.857	3.856	(0.610)	402517	10.0000	10
	13 trans-1,2-Dichloroethene	96	4.124	4.123	(0.653)	439156	10.0000	10
	14 Methyl tert-Butyl Ether	73	4.135	4.135	(0.655)	482906	10.0000	9.9
	15 1,1-Dichloroethane	63	4.530	4.541	(0.717)	781448	10.0000	9.7
$	82 2-Butanone-d5	46	5.065	5.075	(0.802)	651789	100.000	100
	17 cis-1,2-Dichloroethene	96	5.099	5.098	(0.807)	385547	10.0000	9.5
	120 2,2-Dichloropropane	77	5.099	5.098	(0.541)	604214	10.0000	10
	16 2-Butanone	43	5.123	5.122	(0.811)	643992	100.000	100

Data File: \\avogadro\organics\V5.I\111015A.B\V5N1683.D
Report Date: 19-Oct-2011 09:46

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	18	Bromochloromethane	128	5.332	5.342	(0.844)	153645	10.0000	9.9
$	83	Chloroform-d	84	5.378	5.389	(0.851)	602192	10.0000	10
	19	Chloroform	83	5.401	5.400	(0.855)	626079	10.0000	9.6
	20	1,1,1-Trichloroethane	97	5.587	5.598	(0.592)	574494	10.0000	10
	21	Cyclohexane	56	5.645	5.644	(0.599)	731095	10.0000	10
	105	1,1-Dichloropropene	110	5.738	5.749	(0.608)	194285	10.0000	10
	22	Carbon Tetrachloride	117	5.750	5.749	(0.610)	507017	10.0000	9.8
$	23	1,2-Dichloroethane-d4	65	5.889	5.900	(0.932)	235055	10.0000	10
$	84	Benzene-d6	84	5.912	5.911	(0.627)	1163894	10.0000	10
	25	Benzene	78	5.947	5.958	(0.631)	1317020	10.0000	9.8
	24	1,2-Dichloroethane	62	5.970	5.969	(0.945)	286337	10.0000	9.8
*	26	1,4-Difluorobenzene	114	6.319	6.329	(1.000)	557807	5.00000	
	27	Trichloroethene	95	6.586	6.585	(0.698)	397779	10.0000	10
$	85	1,2-Dichloropropane-d6	67	6.725	6.736	(0.713)	420653	10.0000	10
	28	Methylcyclohexane	83	6.783	6.782	(0.719)	558709	10.0000	9.4
	29	1,2-Dichloropropane	63	6.818	6.817	(0.723)	339743	10.0000	9.7
	119	Dibromomethane	93	6.946	6.957	(1.099)	140915	10.0000	10
	30	Bromodichloromethane	83	7.097	7.096	(0.753)	372856	10.0000	10
	31	cis-1,3-Dichloropropene	75	7.561	7.560	(0.802)	429903	10.0000	10
	32	4-Methyl-2-Pentanone	43	7.724	7.723	(0.819)	1389638	100.000	96
$	33	Toluene-d8	98	7.840	7.839	(0.831)	1087461	10.0000	10
	34	Toluene	91	7.910	7.920	(0.839)	1292490	10.0000	9.8
$	86	trans-1,3-Dichloropropene-d4	79	8.119	8.118	(0.861)	256059	10.0000	11
	35	trans-1,3-Dichloropropene	75	8.142	8.153	(0.863)	292633	10.0000	10
	36	1,1,2-Trichloroethane	97	8.351	8.350	(0.885)	161009	10.0000	10
	37	Tetrachloroethene	164	8.502	8.501	(0.901)	288523	10.0000	10
	107	1,3-Dichloropropane	76	8.537	8.536	(1.351)	293237	10.0000	10
$	87	2-Hexanone-d5	63	8.560	8.571	(0.908)	450245	100.000	110(Q)
	38	2-Hexanone	43	8.618	8.617	(0.914)	939978	100.000	99
	39	Dibromochloromethane	129	8.781	8.780	(0.931)	235844	10.0000	10
	40	1,2-Dibromoethane	107	8.920	8.919	(0.946)	176298	10.0000	10
*	42	Chlorobenzene-d5	117	9.431	9.430	(1.000)	407777	5.00000	
	43	Chlorobenzene	112	9.454	9.465	(1.002)	853211	10.0000	9.8
	124	1,1,1,2-Tetrachloroethane	131	9.547	9.546	(1.511)	288576	10.0000	9.5
	44	Ethylbenzene	91	9.582	9.581	(1.016)	1390015	10.0000	9.8
	45	m,p-Xylene	106	9.710	9.709	(1.030)	608478	10.0000	10
	46	o-Xylene	106	10.174	10.173	(1.079)	560469	10.0000	9.8
	47	Styrene	104	10.186	10.197	(1.080)	834493	10.0000	10
	48	Bromoform	173	10.418	10.417	(0.856)	115650	10.0000	9.6
	49	Isopropylbenzene	105	10.592	10.603	(1.123)	1485964	10.0000	9.9
$	89	1,1,2,2-Tetrachloroethane-d2	84	10.929	10.928	(1.159)	166567	10.0000	10
	51	1,1,2,2-Tetrachloroethane	83	10.952	10.951	(1.161)	166907	10.0000	10
	113	Bromobenzene	156	10.964	10.975	(0.901)	290937	10.0000	10
	106	1,2,3-Trichloropropane	75	11.010	11.010	(0.905)	97966	10.0000	8.2(Q)
	123	n-Propylbenzene	120	11.092	11.091	(0.911)	410227	10.0000	10(Q)
	117	2-Chlorotoluene	126	11.196	11.195	(0.920)	364287	10.0000	9.8(Q)
	101	1,2,4-Trimethylbenzene	105	11.301	11.300	(0.928)	1264776	10.0000	9.8
	118	4-Chlorotoluene	126	11.324	11.323	(0.930)	363060	10.0000	10(Q)
	116	tert-Butylbenzene	119	11.684	11.683	(0.960)	1040519	10.0000	9.8
	102	1,3,5-Trimethylbenzene	105	11.742	11.753	(0.965)	1221242	10.0000	9.7
	115	sec-Butylbenzene	105	11.951	11.950	(0.982)	1687966	10.0000	9.6
	52	1,3-Dichlorobenzene	146	12.090	12.090	(0.993)	569516	10.0000	9.9
M	41	Xylene (total)	106				1168947	10.0000	20
	122	P-Isopropyltoluene	119	12.125	12.124	(0.996)	1280454	10.0000	9.7

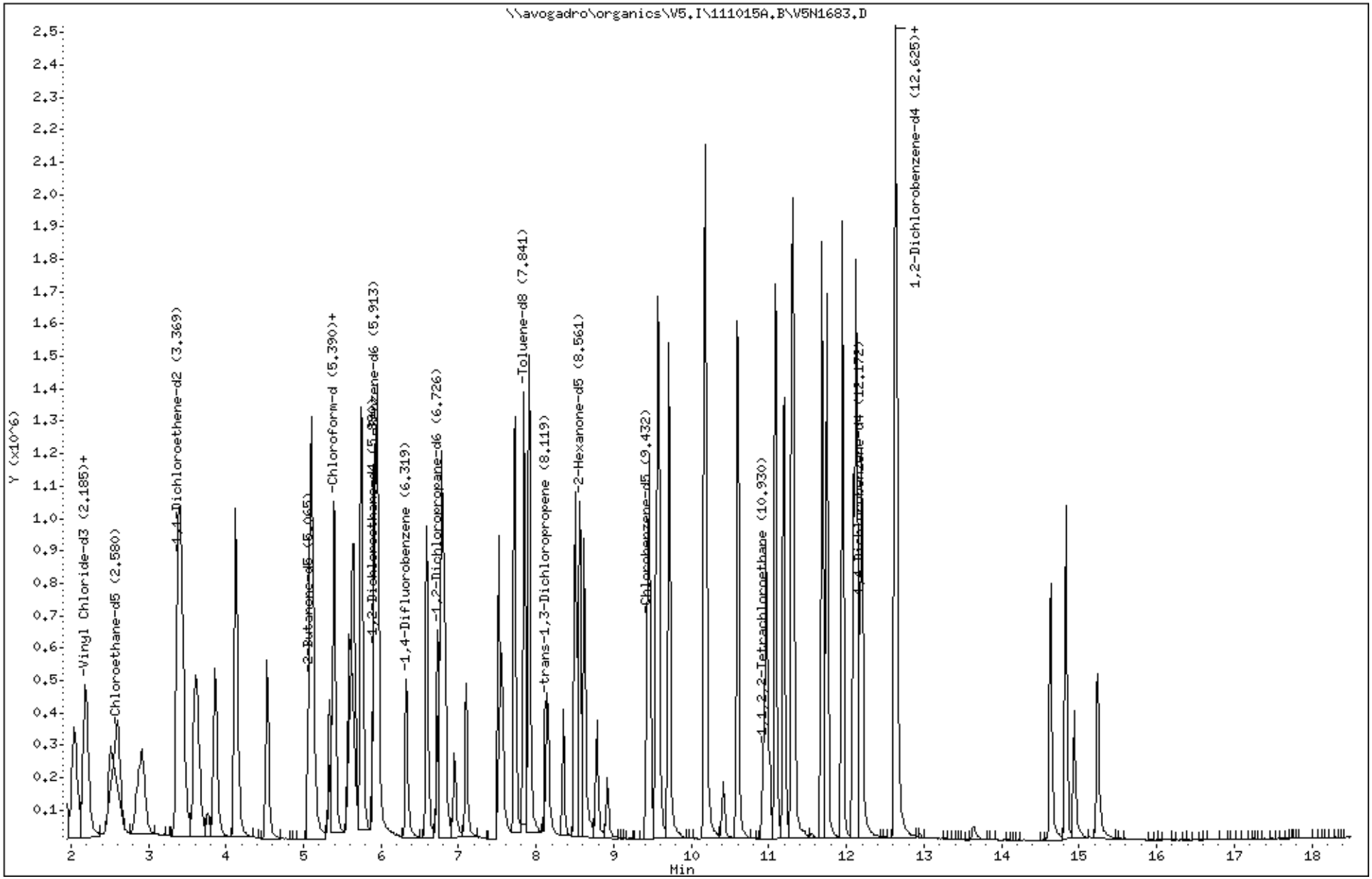
Data File: \\avogadro\organics\V5.I\111015A.B\V5N1683.D
Report Date: 19-Oct-2011 09:46

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
*	78 1,4-Dichlorobenzene-d4	152	12.172	12.171	(1.000)	174316	5.00000	
	53 1,4-Dichlorobenzene	146	12.195	12.206	(1.002)	591234	10.0000	9.4
	114 n-Butylbenzene	91	12.625	12.635	(1.037)	1238528	10.0000	10
$	90 1,2-Dichlorobenzene-d4	152	12.625	12.635	(1.037)	268745	10.0000	9.4
	54 1,2-Dichlorobenzene	146	12.648	12.659	(1.039)	476491	10.0000	9.5
	55 1,2-Dibromo-3-chloropropane	75	13.635	13.657	(1.120)	21228	10.0000	10(Q)
	56 1,2,4-Trichlorobenzene	180	14.634	14.644	(1.202)	390141	10.0000	11
	121 Hexachlorobutadiene	225	14.831	14.830	(1.218)	271145	10.0000	9.9
	97 Naphthalene	128	14.936	14.946	(1.227)	492830	10.0000	12
	77 1,2,3-Trichlorobenzene	180	15.238	15.248	(1.252)	276117	10.0000	9.9

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111015A.B\V5N1683.D
Date : 15-OCT-2011 12:55
Client ID: VSTD010B5
Instrument: V5.i
Sample Info: 25ML,VSTD010B5,VSTD010B5
Purge Volume: 25.0
Operator: SRC:
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111015A.B\V5N1684.D
Report Date: 19-Oct-2011 09:46

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111015A.B\V5N1684.D
Lab Smp Id: VSTD001B5 Client Smp ID: VSTD001B5
Inj Date : 15-OCT-2011 13:24
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD001B5,VSTD001B5
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111015A.B\V5_TVOA1359.m
Meth Date : 17-Oct-2011 14:56 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 5 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1359.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
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	1.903	1.893	(0.301)	68331	1.00000	1.0
	2 Chloromethane	50	2.042	2.044	(0.323)	104618	1.00000	1.0
$	79 Vinyl Chloride-d3	65	2.181	2.184	(0.345)	65957	1.00000	1.0
	3 Vinyl Chloride	62	2.193	2.195	(0.347)	79577	1.00000	1.0
	4 Bromomethane	94	2.518	2.520	(0.398)	53140	1.00000	1.0
$	80 Chloroethane-d5	69	2.588	2.590	(0.409)	42265	1.00000	0.99
	5 Chloroethane	64	2.611	2.625	(0.413)	42359	1.00000	1.1
	6 Trichlorofluoromethane	101	2.890	2.927	(0.457)	84188	1.00000	1.0
$	81 1,1-Dichloroethene-d2	65	3.389	3.368	(0.536)	15350	1.00000	1.0
	7 1,1-Dichloroethene	96	3.389	3.391	(0.536)	51059	1.00000	1.0
	8 1,1,2-Trichloro-1,2,2-trifluo	101	3.424	3.426	(0.541)	58661	1.00000	1.1
	9 Acetone	43	3.459	3.449	(0.547)	49991	10.0000	9.9
	10 Carbon Disulfide	76	3.621	3.612	(0.572)	206829	1.00000	1.1
	11 Methyl Acetate	43	3.772	3.775	(0.596)	16145	1.00000	1.1
	12 Methylene Chloride	84	3.865	3.856	(0.611)	42825	1.00000	1.1
	13 trans-1,2-Dichloroethene	96	4.132	4.123	(0.653)	45745	1.00000	1.0
	14 Methyl tert-Butyl Ether	73	4.144	4.135	(0.655)	51774	1.00000	1.1
	15 1,1-Dichloroethane	63	4.539	4.541	(0.717)	86267	1.00000	1.1
$	82 2-Butanone-d5	46	5.085	5.075	(0.804)	61094	10.0000	9.5
	17 cis-1,2-Dichloroethene	96	5.108	5.098	(0.807)	43173	1.00000	1.1
	120 2,2-Dichloropropane	77	5.108	5.098	(0.542)	66699	1.00000	1.1
	16 2-Butanone	43	5.143	5.122	(0.813)	64409	10.0000	9.9

Data File: \\avogadro\organics\V5.I\111015A.B\V5N1684.D
Report Date: 19-Oct-2011 09:46

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	18	Bromochloromethane	128	5.340	5.342	(0.844)	15966	1.00000	1.0
$	83	Chloroform-d	84	5.398	5.389	(0.853)	62346	1.00000	1.0
	19	Chloroform	83	5.410	5.400	(0.855)	69884	1.00000	1.1
	20	1,1,1-Trichloroethane	97	5.596	5.598	(0.594)	61007	1.00000	1.1
	21	Cyclohexane	56	5.642	5.644	(0.598)	81028	1.00000	1.1
	105	1,1-Dichloropropene	110	5.758	5.749	(0.611)	21138	1.00000	1.1(Q)
	22	Carbon Tetrachloride	117	5.758	5.749	(0.611)	56638	1.00000	1.1
$	23	1,2-Dichloroethane-d4	65	5.909	5.900	(0.934)	24739	1.00000	1.0
$	84	Benzene-d6	84	5.921	5.911	(0.628)	122326	1.00000	1.1
	25	Benzene	78	5.956	5.958	(0.632)	153330	1.00000	1.2
	24	1,2-Dichloroethane	62	5.979	5.969	(0.945)	30801	1.00000	1.0
*	26	1,4-Difluorobenzene	114	6.327	6.329	(1.000)	563748	5.00000	
	27	Trichloroethene	95	6.594	6.585	(0.699)	42565	1.00000	1.1
$	85	1,2-Dichloropropane-d6	67	6.734	6.736	(0.714)	43012	1.00000	1.1
	28	Methylcyclohexane	83	6.792	6.782	(0.720)	65782	1.00000	1.1
	29	1,2-Dichloropropane	63	6.827	6.817	(0.724)	38663	1.00000	1.1
	119	Dibromomethane	93	6.966	6.957	(1.101)	14124	1.00000	0.99
	30	Bromodichloromethane	83	7.105	7.096	(0.754)	38406	1.00000	1.1
	31	cis-1,3-Dichloropropene	75	7.582	7.560	(0.804)	43305	1.00000	1.1
	32	4-Methyl-2-Pentanone	43	7.733	7.723	(0.820)	155877	10.0000	11
$	33	Toluene-d8	98	7.849	7.839	(0.832)	114160	1.00000	1.1
	34	Toluene	91	7.918	7.920	(0.840)	149634	1.00000	1.2
$	86	trans-1,3-Dichloropropene-d4	79	8.139	8.118	(0.863)	24031	1.00000	1.1
	35	trans-1,3-Dichloropropene	75	8.174	8.153	(0.867)	28453	1.00000	1.0
	36	1,1,2-Trichloroethane	97	8.360	8.350	(0.887)	17495	1.00000	1.1
	37	Tetrachloroethene	164	8.511	8.501	(0.903)	30583	1.00000	1.1
	107	1,3-Dichloropropane	76	8.545	8.536	(1.351)	30395	1.00000	1.0
$	87	2-Hexanone-d5	63	8.603	8.571	(0.913)	39991	10.0000	9.8(H)
	38	2-Hexanone	43	8.650	8.617	(0.917)	98164	10.0000	10(H)
	39	Dibromochloromethane	129	8.789	8.780	(0.932)	24053	1.00000	1.1
	40	1,2-Dibromoethane	107	8.940	8.919	(0.948)	17285	1.00000	1.0(T)
*	42	Chlorobenzene-d5	117	9.428	9.430	(1.000)	400836	5.00000	
	43	Chlorobenzene	112	9.463	9.465	(1.004)	94896	1.00000	1.1
	124	1,1,1,2-Tetrachloroethane	131	9.556	9.546	(1.510)	33597	1.00000	1.1
	44	Ethylbenzene	91	9.591	9.581	(1.017)	161478	1.00000	1.2
	45	m,p-Xylene	106	9.730	9.709	(1.032)	63867	1.00000	1.1
	46	o-Xylene	106	10.183	10.173	(1.080)	63184	1.00000	1.1
	47	Styrene	104	10.218	10.197	(1.084)	87755	1.00000	1.1
	48	Bromoform	173	10.438	10.417	(0.857)	13185	1.00000	1.1
	49	Isopropylbenzene	105	10.613	10.603	(1.126)	165302	1.00000	1.1
$	89	1,1,2,2-Tetrachloroethane-d2	84	10.938	10.928	(1.160)	17090	1.00000	1.1
	51	1,1,2,2-Tetrachloroethane	83	10.973	10.951	(1.164)	18578	1.00000	1.1
	113	Bromobenzene	156	10.996	10.975	(0.903)	30355	1.00000	1.1
	106	1,2,3-Trichloropropane	75	11.031	11.010	(0.906)	14758	1.00000	1.2
	123	n-Propylbenzene	120	11.100	11.091	(0.911)	42830	1.00000	1.1
	117	2-Chlorotoluene	126	11.205	11.195	(0.920)	40424	1.00000	1.1
	101	1,2,4-Trimethylbenzene	105	11.309	11.300	(0.928)	140083	1.00000	1.1
	118	4-Chlorotoluene	126	11.344	11.323	(0.931)	38649	1.00000	1.1
	116	tert-Butylbenzene	119	11.693	11.683	(0.960)	115089	1.00000	1.1
	102	1,3,5-Trimethylbenzene	105	11.762	11.753	(0.966)	136696	1.00000	1.1
	115	sec-Butylbenzene	105	11.960	11.950	(0.982)	196039	1.00000	1.1
	52	1,3-Dichlorobenzene	146	12.111	12.090	(0.994)	61351	1.00000	1.1
M	41	Xylene (total)	106				127051	1.00000	2.2
	122	P-Isopropyltoluene	119	12.134	12.124	(0.996)	143144	1.00000	1.1

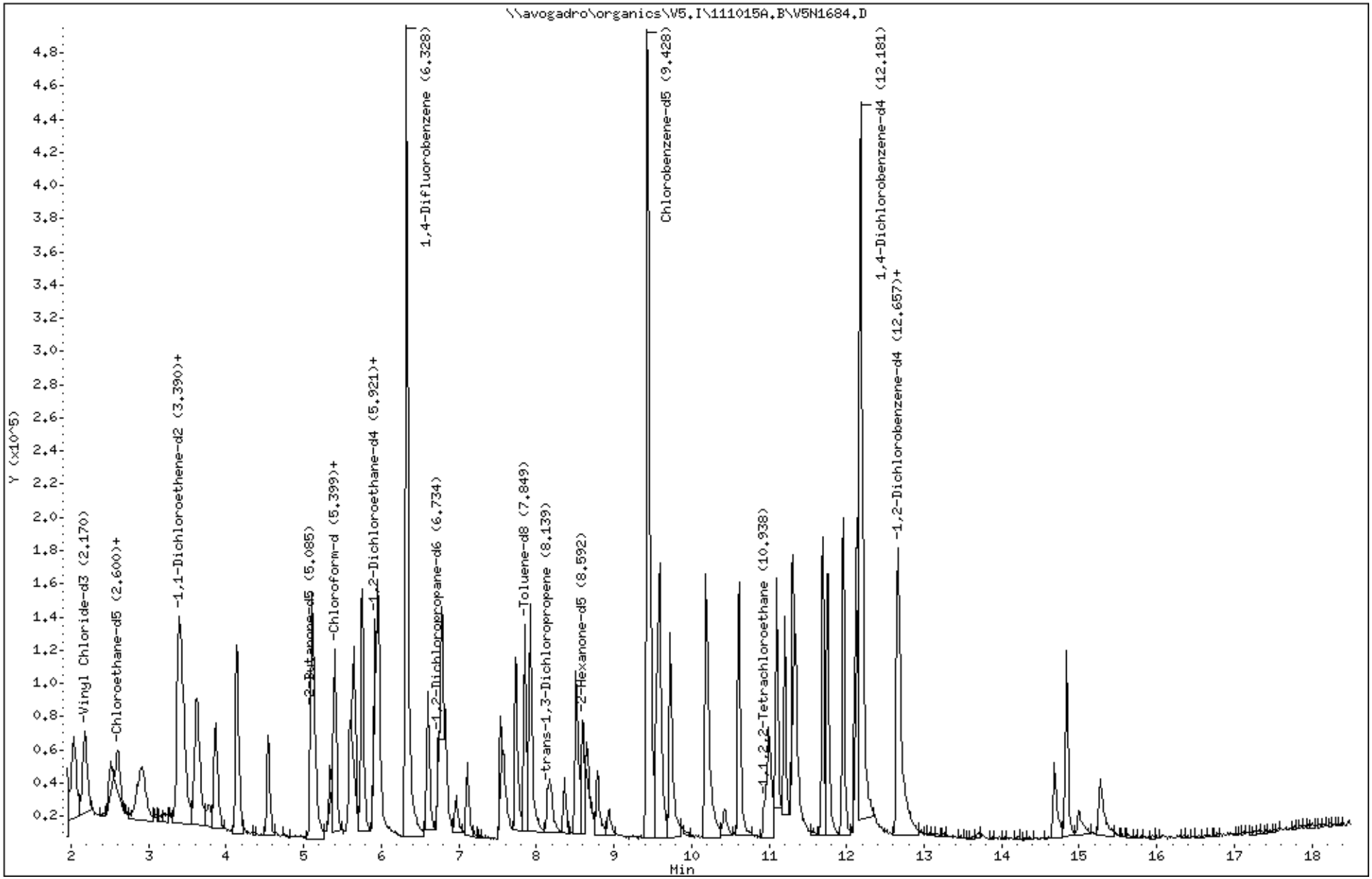
Data File: \\avogadro\organics\V5.I\111015A.B\V5N1684.D
Report Date: 19-Oct-2011 09:46

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
*	78 1,4-Dichlorobenzene-d4	152	12.180	12.171	(1.000)	172747	5.00000	
	53 1,4-Dichlorobenzene	146	12.204	12.206	(1.002)	69680	1.00000	1.1
	114 n-Butylbenzene	91	12.656	12.635	(1.039)	132849	1.00000	1.1
$	90 1,2-Dichlorobenzene-d4	152	12.656	12.635	(1.039)	31108	1.00000	1.1
	54 1,2-Dichlorobenzene	146	12.668	12.659	(1.040)	54534	1.00000	1.1
	55 1,2-Dibromo-3-chloropropane	75	13.725	13.657	(1.127)	2222	1.00000	1.1
	56 1,2,4-Trichlorobenzene	180	14.677	14.644	(1.205)	38078	1.00000	1.1
	121 Hexachlorobutadiene	225	14.840	14.830	(1.218)	31704	1.00000	1.2
	97 Naphthalene	128	14.991	14.946	(1.231)	40085	1.00000	0.98
	77 1,2,3-Trichlorobenzene	180	15.269	15.248	(1.254)	31171	1.00000	1.1

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\V5.I\111015A.B\V5N1684.D
Date : 15-OCT-2011 13:24
Client ID: VSTD001B5
Instrument: V5.i
Sample Info: 25ML,VSTD001B5,VSTD001B5
Purge Volume: 25.0
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.: H30S7

Instrument ID: V5 Calibration Date: 11/01/2011 Time: 6:58

Lab File ID: V5N2526.D Init. Calib. Date(s): 10/15/2011 10/15/2011

EPA Sample No.(VSTD#####) VSTD0055T Init. Calib. Time(s): 11:28 13:24

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF005	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.589	0.455	0.010	-22.7	40.0
Chloromethane	0.928	0.830	0.010	-10.6	40.0
Vinyl chloride	0.678	0.639	0.100	-5.7	30.0
Bromomethane	0.451	0.381	0.100	-15.5	30.0
Chloroethane	0.347	0.329	0.010	-5.2	40.0
Trichlorofluoromethane	0.713	0.710	0.010	-0.5	40.0
1,1-Dichloroethene	0.433	0.354	0.100	-18.1	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.491	0.423	0.010	-13.8	40.0
Acetone	0.045	0.035	0.010	-21.4	40.0
Carbon disulfide	1.712	1.415	0.010	-17.3	40.0
Methyl acetate	0.128	0.096	0.010	-25.3	40.0
Methylene chloride	0.360	0.301	0.010	-16.4	40.0
trans-1,2-Dichloroethene	0.395	0.370	0.010	-6.5	40.0
Methyl tert-butyl ether	0.436	0.384	0.010	-11.9	40.0
1,1-Dichloroethane	0.723	0.686	0.200	-5.1	30.0
cis-1,2-Dichloroethene	0.364	0.339	0.010	-6.8	40.0
2-Butanone	0.058	0.054	0.010	-5.9	40.0
Bromochloromethane	0.139	0.119	0.050	-14.1	40.0
Chloroform	0.585	0.548	0.200	-6.2	30.0
1,1,1-Trichloroethane	0.699	0.732	0.100	4.7	30.0
Cyclohexane	0.896	0.993	0.010	10.8	40.0
Carbon tetrachloride	0.633	0.677	0.100	7.0	30.0
Benzene	1.644	1.632	0.400	-0.7	30.0
1,2-Dichloroethane	0.262	0.242	0.100	-7.8	30.0
Trichloroethene	0.489	0.515	0.300	5.2	30.0
Methylcyclohexane	0.731	0.785	0.010	7.4	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.: H30S7

Instrument ID: V5 Calibration Date: 11/01/2011 Time: 6:58

Lab File ID: V5N2526.D Init. Calib. Date(s): 10/15/2011 10/15/2011

EPA Sample No.(VSTD#####) VSTD0055T Init. Calib. Time(s): 11:28 13:24

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF005	MIN RRF	%D	MAX %D
1,2-Dichloropropane	0.431	0.425	0.010	-1.4	40.0
Bromodichloromethane	0.443	0.421	0.200	-5.0	30.0
cis-1,3-Dichloropropene	0.509	0.503	0.200	-1.3	30.0
4-Methyl-2-pentanone	0.177	0.164	0.010	-7.1	40.0
Toluene	1.611	1.645	0.400	2.1	30.0
trans-1,3-Dichloropropene	0.349	0.342	0.100	-2.0	30.0
1,1,2-Trichloroethane	0.193	0.178	0.100	-7.4	30.0
Tetrachloroethene	0.342	0.351	0.100	2.6	30.0
2-Hexanone	0.117	0.116	0.010	-0.9	40.0
Dibromochloromethane	0.282	0.240	0.100	-15.0	30.0
1,2-Dibromoethane	0.208	0.191	0.010	-8.2	40.0
Chlorobenzene	1.065	1.040	0.500	-2.4	30.0
Ethylbenzene	1.744	1.827	0.100	4.8	30.0
m,p-Xylene	0.719	0.743	0.300	3.3	30.0
o-Xylene	0.701	0.678	0.300	-3.2	30.0
Styrene	1.002	0.991	0.300	-1.1	30.0
Bromoform	0.344	0.248	0.050	-27.8	30.0
Isopropylbenzene	1.844	1.969	0.010	6.8	40.0
1,1,2,2-Tetrachloroethane	0.205	0.190	0.100	-7.2	30.0
1,3-Dichlorobenzene	1.653	1.604	0.400	-2.9	30.0
1,4-Dichlorobenzene	1.812	1.684	0.400	-7.0	30.0
1,2-Dichlorobenzene	1.436	1.311	0.400	-8.8	30.0
1,2-Dibromo-3-chloropropane	0.060	0.047	0.010	-21.4	40.0
1,2,4-Trichlorobenzene	1.042	0.939	0.200	-9.9	30.0
1,2,3-Trichlorobenzene	0.804	0.694	0.200	-13.7	30.0

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.: H30S7

Instrument ID: V5 Calibration Date: 11/01/2011 Time: 6:58

Lab File ID: V5N2526.D Init. Calib. Date(s): 10/15/2011 10/15/2011

EPA Sample No.(VSTD#####) VSTD0055T Init. Calib. Time(s): 11:28 13:24

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF005	MIN RRF	%D	MAX %D
Vinyl chloride-d3	0.571	0.564	0.010	-1.4	30.0
Chloroethane-d5	0.377	0.343	0.010	-9.2	40.0
1,1-Dichloroethene-d2	0.131	0.121	0.010	-8.2	30.0
2-Butanone-d5	0.057	0.054	0.010	-4.8	40.0
Chloroform-d	0.540	0.517	0.010	-4.1	30.0
1,2-Dichloroethane-d4	0.211	0.196	0.010	-6.9	30.0
Benzene-d6	1.402	1.453	0.010	3.7	30.0
1,2-Dichloropropane-d6	0.499	0.506	0.010	1.4	40.0
Toluene-d8	1.290	1.355	0.010	5.0	30.0
trans-1,3-Dichloropropene-d4	0.284	0.294	0.010	3.6	30.0
2-Hexanone-d5	0.051	0.053	0.010	4.0	40.0
1,1,2,2-Tetrachloroethane-d2	0.199	0.182	0.010	-8.8	30.0
1,2-Dichlorobenzene-d4	0.822	0.764	0.010	-7.1	30.0

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.: H30S7

Instrument ID: V5 Calibration Date: 11/01/2011 Time: 18:25

Lab File ID: V5N2571.D Init. Calib. Date(s): 10/15/2011 10/15/2011

EPA Sample No.(VSTD#####) VSTD0055U Init. Calib. Time(s): 11:28 13:24

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{\text{RRF}}$	RRF005	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.589	0.387	0.010	-34.3	40.0
Chloromethane	0.928	0.745	0.010	-19.7	40.0
Vinyl chloride	0.678	0.572	0.100	-15.6	30.0
Bromomethane	0.451	0.351	0.100	-22.2	30.0
Chloroethane	0.347	0.307	0.010	-11.6	40.0
Trichlorofluoromethane	0.713	0.658	0.010	-7.8	40.0
1,1-Dichloroethene	0.433	0.375	0.100	-13.3	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.491	0.429	0.010	-12.5	40.0
Acetone	0.045	0.037	0.010	-16.6	40.0
Carbon disulfide	1.712	1.459	0.010	-14.8	40.0
Methyl acetate	0.128	0.113	0.010	-11.8	40.0
Methylene chloride	0.360	0.312	0.010	-13.4	40.0
trans-1,2-Dichloroethene	0.395	0.409	0.010	3.5	40.0
Methyl tert-butyl ether	0.436	0.405	0.010	-7.2	40.0
1,1-Dichloroethane	0.723	0.757	0.200	4.6	30.0
cis-1,2-Dichloroethene	0.364	0.362	0.010	-0.5	40.0
2-Butanone	0.058	0.054	0.010	-5.8	40.0
Bromochloromethane	0.139	0.131	0.050	-5.4	40.0
Chloroform	0.585	0.583	0.200	-0.3	30.0
1,1,1-Trichloroethane	0.699	0.782	0.100	11.9	30.0
Cyclohexane	0.896	1.043	0.010	16.4	40.0
Carbon tetrachloride	0.633	0.712	0.100	12.6	30.0
Benzene	1.644	1.711	0.400	4.1	30.0
1,2-Dichloroethane	0.262	0.244	0.100	-7.1	30.0
Trichloroethene	0.489	0.534	0.300	9.2	30.0
Methylcyclohexane	0.731	0.820	0.010	12.2	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.: H30S7

Instrument ID: V5 Calibration Date: 11/01/2011 Time: 18:25

Lab File ID: V5N2571.D Init. Calib. Date(s): 10/15/2011 10/15/2011

EPA Sample No.(VSTD#####) VSTD0055U Init. Calib. Time(s): 11:28 13:24

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF005	MIN RRF	%D	MAX %D
1,2-Dichloropropane	0.431	0.433	0.010	0.4	40.0
Bromodichloromethane	0.443	0.454	0.200	2.4	30.0
cis-1,3-Dichloropropene	0.509	0.522	0.200	2.5	30.0
4-Methyl-2-pentanone	0.177	0.172	0.010	-2.9	40.0
Toluene	1.611	1.742	0.400	8.1	30.0
trans-1,3-Dichloropropene	0.349	0.351	0.100	0.5	30.0
1,1,2-Trichloroethane	0.193	0.181	0.100	-5.9	30.0
Tetrachloroethene	0.342	0.382	0.100	11.7	30.0
2-Hexanone	0.117	0.116	0.010	-0.8	40.0
Dibromochloromethane	0.282	0.267	0.100	-5.5	30.0
1,2-Dibromoethane	0.208	0.199	0.010	-4.3	40.0
Chlorobenzene	1.065	1.107	0.500	4.0	30.0
Ethylbenzene	1.744	1.910	0.100	9.5	30.0
m,p-Xylene	0.719	0.796	0.300	10.7	30.0
o-Xylene	0.701	0.723	0.300	3.2	30.0
Styrene	1.002	1.049	0.300	4.7	30.0
Bromoform	0.344	0.282	0.050	-18.2	30.0
Isopropylbenzene	1.844	2.076	0.010	12.6	40.0
1,1,2,2-Tetrachloroethane	0.205	0.199	0.100	-2.8	30.0
1,3-Dichlorobenzene	1.653	1.747	0.400	5.7	30.0
1,4-Dichlorobenzene	1.812	1.780	0.400	-1.7	30.0
1,2-Dichlorobenzene	1.436	1.364	0.400	-5.0	30.0
1,2-Dibromo-3-chloropropane	0.060	0.057	0.010	-5.0	40.0
1,2,4-Trichlorobenzene	1.042	1.034	0.200	-0.8	30.0
1,2,3-Trichlorobenzene	0.804	0.744	0.200	-7.5	30.0

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.: H30S7

Instrument ID: V5 Calibration Date: 11/01/2011 Time: 18:25

Lab File ID: V5N2571.D Init. Calib. Date(s): 10/15/2011 10/15/2011

EPA Sample No.(VSTD#####) VSTD0055U Init. Calib. Time(s): 11:28 13:24

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF005	MIN RRF	%D	MAX %D
Vinyl chloride-d3	0.571	0.491	0.010	-14.0	30.0
Chloroethane-d5	0.377	0.335	0.010	-11.3	40.0
1,1-Dichloroethene-d2	0.131	0.120	0.010	-8.8	30.0
2-Butanone-d5	0.057	0.051	0.010	-10.6	40.0
Chloroform-d	0.540	0.558	0.010	3.4	30.0
1,2-Dichloroethane-d4	0.211	0.205	0.010	-2.7	30.0
Benzene-d6	1.402	1.512	0.010	7.9	30.0
1,2-Dichloropropane-d6	0.499	0.542	0.010	8.6	40.0
Toluene-d8	1.290	1.394	0.010	8.1	30.0
trans-1,3-Dichloropropene-d4	0.284	0.295	0.010	4.0	30.0
2-Hexanone-d5	0.051	0.051	0.010	0.3	40.0
1,1,2,2-Tetrachloroethane-d2	0.199	0.174	0.010	-12.5	30.0
1,2-Dichlorobenzene-d4	0.822	0.825	0.010	0.3	30.0

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.: H30S7

Instrument ID: V5 Calibration Date: 11/02/2011 Time: 5:55

Lab File ID: V5N2595.D Init. Calib. Date(s): 10/15/2011 10/15/2011

EPA Sample No.(VSTD#####) VSTD0055V Init. Calib. Time(s): 11:28 13:24

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF005	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.589	0.410	0.010	-30.4	40.0
Chloromethane	0.928	0.822	0.010	-11.4	40.0
Vinyl chloride	0.678	0.614	0.100	-9.5	30.0
Bromomethane	0.451	0.375	0.100	-16.8	30.0
Chloroethane	0.347	0.334	0.010	-3.8	40.0
Trichlorofluoromethane	0.713	0.683	0.010	-4.3	40.0
1,1-Dichloroethene	0.433	0.351	0.100	-18.9	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.491	0.399	0.010	-18.6	40.0
Acetone	0.045	0.038	0.010	-15.6	40.0
Carbon disulfide	1.712	1.346	0.010	-21.4	40.0
Methyl acetate	0.128	0.103	0.010	-19.8	40.0
Methylene chloride	0.360	0.303	0.010	-15.8	40.0
trans-1,2-Dichloroethene	0.395	0.391	0.010	-1.2	40.0
Methyl tert-butyl ether	0.436	0.380	0.010	-12.7	40.0
1,1-Dichloroethane	0.723	0.728	0.200	0.7	30.0
cis-1,2-Dichloroethene	0.364	0.344	0.010	-5.3	40.0
2-Butanone	0.058	0.052	0.010	-10.2	40.0
Bromochloromethane	0.139	0.118	0.050	-14.6	40.0
Chloroform	0.585	0.556	0.200	-4.9	30.0
1,1,1-Trichloroethane	0.699	0.772	0.100	10.5	30.0
Cyclohexane	0.896	1.001	0.010	11.8	40.0
Carbon tetrachloride	0.633	0.698	0.100	10.3	30.0
Benzene	1.644	1.667	0.400	1.4	30.0
1,2-Dichloroethane	0.262	0.238	0.100	-9.2	30.0
Trichloroethene	0.489	0.541	0.300	10.5	30.0
Methylcyclohexane	0.731	0.790	0.010	8.1	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.: H30S7

Instrument ID: V5 Calibration Date: 11/02/2011 Time: 5:55

Lab File ID: V5N2595.D Init. Calib. Date(s): 10/15/2011 10/15/2011

EPA Sample No.(VSTD#####) VSTD0055V Init. Calib. Time(s): 11:28 13:24

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF005	MIN RRF	%D	MAX %D
1,2-Dichloropropane	0.431	0.466	0.010	8.1	40.0
Bromodichloromethane	0.443	0.438	0.200	-1.1	30.0
cis-1,3-Dichloropropene	0.509	0.550	0.200	8.0	30.0
4-Methyl-2-pentanone	0.177	0.170	0.010	-3.7	40.0
Toluene	1.611	1.757	0.400	9.1	30.0
trans-1,3-Dichloropropene	0.349	0.354	0.100	1.3	30.0
1,1,2-Trichloroethane	0.193	0.187	0.100	-2.7	30.0
Tetrachloroethene	0.342	0.368	0.100	7.6	30.0
2-Hexanone	0.117	0.114	0.010	-2.7	40.0
Dibromochloromethane	0.282	0.265	0.100	-6.2	30.0
1,2-Dibromoethane	0.208	0.191	0.010	-8.1	40.0
Chlorobenzene	1.065	1.094	0.500	2.7	30.0
Ethylbenzene	1.744	1.926	0.100	10.4	30.0
m,p-Xylene	0.719	0.784	0.300	9.0	30.0
o-Xylene	0.701	0.696	0.300	-0.7	30.0
Styrene	1.002	1.054	0.300	5.2	30.0
Bromoform	0.344	0.260	0.050	-24.4	30.0
Isopropylbenzene	1.844	2.034	0.010	10.3	40.0
1,1,2,2-Tetrachloroethane	0.205	0.192	0.100	-6.0	30.0
1,3-Dichlorobenzene	1.653	1.639	0.400	-0.8	30.0
1,4-Dichlorobenzene	1.812	1.667	0.400	-8.0	30.0
1,2-Dichlorobenzene	1.436	1.295	0.400	-9.8	30.0
1,2-Dibromo-3-chloropropane	0.060	0.048	0.010	-20.3	40.0
1,2,4-Trichlorobenzene	1.042	0.926	0.200	-11.2	30.0
1,2,3-Trichlorobenzene	0.804	0.631	0.200	-21.6	30.0

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.: H30S7

Instrument ID: V5 Calibration Date: 11/02/2011 Time: 5:55

Lab File ID: V5N2595.D Init. Calib. Date(s): 10/15/2011 10/15/2011

EPA Sample No.(VSTD#####) VSTD0055V Init. Calib. Time(s): 11:28 13:24

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF005	MIN RRF	%D	MAX %D
Vinyl chloride-d3	0.571	0.463	0.010	-18.9	30.0
Chloroethane-d5	0.377	0.317	0.010	-16.0	40.0
1,1-Dichloroethene-d2	0.131	0.111	0.010	-15.8	30.0
2-Butanone-d5	0.057	0.052	0.010	-9.3	40.0
Chloroform-d	0.540	0.515	0.010	-4.6	30.0
1,2-Dichloroethane-d4	0.211	0.198	0.010	-6.1	30.0
Benzene-d6	1.402	1.514	0.010	8.0	30.0
1,2-Dichloropropane-d6	0.499	0.540	0.010	8.3	40.0
Toluene-d8	1.290	1.397	0.010	8.3	30.0
trans-1,3-Dichloropropene-d4	0.284	0.299	0.010	5.5	30.0
2-Hexanone-d5	0.051	0.055	0.010	7.1	40.0
1,1,2,2-Tetrachloroethane-d2	0.199	0.191	0.010	-4.3	30.0
1,2-Dichlorobenzene-d4	0.822	0.785	0.010	-4.5	30.0

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.: H30S7

Instrument ID: V5 Calibration Date: 11/02/2011 Time: 17:48

Lab File ID: V5N2620.D Init. Calib. Date(s): 10/15/2011 10/15/2011

EPA Sample No.(VSTD#####) VSTD0055W Init. Calib. Time(s): 11:28 13:24

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF005	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.589	0.435	0.010	-26.1	40.0
Chloromethane	0.928	0.830	0.010	-10.5	40.0
Vinyl chloride	0.678	0.613	0.100	-9.6	30.0
Bromomethane	0.451	0.368	0.100	-18.3	30.0
Chloroethane	0.347	0.322	0.010	-7.2	40.0
Trichlorofluoromethane	0.713	0.680	0.010	-4.7	40.0
1,1-Dichloroethene	0.433	0.345	0.100	-20.3	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.491	0.404	0.010	-17.8	40.0
Acetone	0.045	0.037	0.010	-18.8	40.0
Carbon disulfide	1.712	1.373	0.010	-19.8	40.0
Methyl acetate	0.128	0.109	0.010	-14.6	40.0
Methylene chloride	0.360	0.296	0.010	-17.6	40.0
trans-1,2-Dichloroethene	0.395	0.364	0.010	-8.0	40.0
Methyl tert-butyl ether	0.436	0.371	0.010	-14.9	40.0
1,1-Dichloroethane	0.723	0.710	0.200	-1.8	30.0
cis-1,2-Dichloroethene	0.364	0.328	0.010	-9.9	40.0
2-Butanone	0.058	0.051	0.010	-11.1	40.0
Bromochloromethane	0.139	0.116	0.050	-16.1	40.0
Chloroform	0.585	0.532	0.200	-9.0	30.0
1,1,1-Trichloroethane	0.699	0.748	0.100	7.1	30.0
Cyclohexane	0.896	0.997	0.010	11.3	40.0
Carbon tetrachloride	0.633	0.670	0.100	6.0	30.0
Benzene	1.644	1.682	0.400	2.4	30.0
1,2-Dichloroethane	0.262	0.221	0.100	-15.8	30.0
Trichloroethene	0.489	0.528	0.300	8.0	30.0
Methylcyclohexane	0.731	0.778	0.010	6.5	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.: H30S7

Instrument ID: V5 Calibration Date: 11/02/2011 Time: 17:48

Lab File ID: V5N2620.D Init. Calib. Date(s): 10/15/2011 10/15/2011

EPA Sample No.(VSTD#####) VSTD0055W Init. Calib. Time(s): 11:28 13:24

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF005	MIN RRF	%D	MAX %D
1,2-Dichloropropane	0.431	0.448	0.010	3.8	40.0
Bromodichloromethane	0.443	0.446	0.200	0.6	30.0
cis-1,3-Dichloropropene	0.509	0.506	0.200	-0.7	30.0
4-Methyl-2-pentanone	0.177	0.170	0.010	-3.8	40.0
Toluene	1.611	1.728	0.400	7.2	30.0
trans-1,3-Dichloropropene	0.349	0.335	0.100	-4.1	30.0
1,1,2-Trichloroethane	0.193	0.186	0.100	-3.4	30.0
Tetrachloroethene	0.342	0.361	0.100	5.5	30.0
2-Hexanone	0.117	0.116	0.010	-0.8	40.0
Dibromochloromethane	0.282	0.254	0.100	-10.0	30.0
1,2-Dibromoethane	0.208	0.200	0.010	-3.6	40.0
Chlorobenzene	1.065	1.067	0.500	0.2	30.0
Ethylbenzene	1.744	1.867	0.100	7.1	30.0
m,p-Xylene	0.719	0.778	0.300	8.2	30.0
o-Xylene	0.701	0.703	0.300	0.4	30.0
Styrene	1.002	1.033	0.300	3.1	30.0
Bromoform	0.344	0.256	0.050	-25.7	30.0
Isopropylbenzene	1.844	1.985	0.010	7.7	40.0
1,1,2,2-Tetrachloroethane	0.205	0.195	0.100	-4.6	30.0
1,3-Dichlorobenzene	1.653	1.639	0.400	-0.8	30.0
1,4-Dichlorobenzene	1.812	1.699	0.400	-6.2	30.0
1,2-Dichlorobenzene	1.436	1.335	0.400	-7.1	30.0
1,2-Dibromo-3-chloropropane	0.060	0.058	0.010	-2.0	40.0
1,2,4-Trichlorobenzene	1.042	0.975	0.200	-6.5	30.0
1,2,3-Trichlorobenzene	0.804	0.685	0.200	-14.8	30.0

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.: H30S7

Instrument ID: V5 Calibration Date: 11/02/2011 Time: 17:48

Lab File ID: V5N2620.D Init. Calib. Date(s): 10/15/2011 10/15/2011

EPA Sample No.(VSTD#####) VSTD0055W Init. Calib. Time(s): 11:28 13:24

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF005	MIN RRF	%D	MAX %D
Vinyl chloride-d3	0.571	0.507	0.010	-11.2	30.0
Chloroethane-d5	0.377	0.330	0.010	-12.5	40.0
1,1-Dichloroethene-d2	0.131	0.104	0.010	-20.5	30.0
2-Butanone-d5	0.057	0.050	0.010	-13.1	40.0
Chloroform-d	0.540	0.485	0.010	-10.2	30.0
1,2-Dichloroethane-d4	0.211	0.174	0.010	-17.7	30.0
Benzene-d6	1.402	1.411	0.010	0.7	30.0
1,2-Dichloropropane-d6	0.499	0.514	0.010	3.0	40.0
Toluene-d8	1.290	1.308	0.010	1.4	30.0
trans-1,3-Dichloropropene-d4	0.284	0.286	0.010	0.7	30.0
2-Hexanone-d5	0.051	0.053	0.010	2.8	40.0
1,1,2,2-Tetrachloroethane-d2	0.199	0.166	0.010	-16.8	30.0
1,2-Dichlorobenzene-d4	0.822	0.708	0.010	-13.8	30.0

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.: H30S7

Instrument ID: V5 Calibration Date: 11/03/2011 Time: 5:35

Lab File ID: V5N2643.D Init. Calib. Date(s): 10/15/2011 10/15/2011

EPA Sample No.(VSTD#####) VSTD0055X Init. Calib. Time(s): 11:28 13:24

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF005	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.589	0.468	0.010	-20.6	40.0
Chloromethane	0.928	0.873	0.010	-5.9	40.0
Vinyl chloride	0.678	0.666	0.100	-1.7	30.0
Bromomethane	0.451	0.404	0.100	-10.3	30.0
Chloroethane	0.347	0.349	0.010	0.6	40.0
Trichlorofluoromethane	0.713	0.743	0.010	4.1	40.0
1,1-Dichloroethene	0.433	0.362	0.100	-16.2	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.491	0.420	0.010	-14.4	40.0
Acetone	0.045	0.043	0.010	-3.8	40.0
Carbon disulfide	1.712	1.482	0.010	-13.4	40.0
Methyl acetate	0.128	0.108	0.010	-15.4	40.0
Methylene chloride	0.360	0.311	0.010	-13.6	40.0
trans-1,2-Dichloroethene	0.395	0.398	0.010	0.7	40.0
Methyl tert-butyl ether	0.436	0.404	0.010	-7.4	40.0
1,1-Dichloroethane	0.723	0.755	0.200	4.4	30.0
cis-1,2-Dichloroethene	0.364	0.352	0.010	-3.2	40.0
2-Butanone	0.058	0.059	0.010	2.0	40.0
Bromochloromethane	0.139	0.134	0.050	-3.1	40.0
Chloroform	0.585	0.587	0.200	0.4	30.0
1,1,1-Trichloroethane	0.699	0.785	0.100	12.4	30.0
Cyclohexane	0.896	1.052	0.010	17.4	40.0
Carbon tetrachloride	0.633	0.716	0.100	13.1	30.0
Benzene	1.644	1.722	0.400	4.8	30.0
1,2-Dichloroethane	0.262	0.254	0.100	-3.2	30.0
Trichloroethene	0.489	0.535	0.300	9.5	30.0
Methylcyclohexane	0.731	0.827	0.010	13.1	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.: H30S7

Instrument ID: V5 Calibration Date: 11/03/2011 Time: 5:35

Lab File ID: V5N2643.D Init. Calib. Date(s): 10/15/2011 10/15/2011

EPA Sample No.(VSTD#####) VSTD0055X Init. Calib. Time(s): 11:28 13:24

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF005	MIN RRF	%D	MAX %D
1,2-Dichloropropane	0.431	0.468	0.010	8.5	40.0
Bromodichloromethane	0.443	0.448	0.200	1.1	30.0
cis-1,3-Dichloropropene	0.509	0.549	0.200	7.8	30.0
4-Methyl-2-pentanone	0.177	0.186	0.010	5.2	40.0
Toluene	1.611	1.780	0.400	10.5	30.0
trans-1,3-Dichloropropene	0.349	0.359	0.100	2.7	30.0
1,1,2-Trichloroethane	0.193	0.194	0.100	0.9	30.0
Tetrachloroethene	0.342	0.395	0.100	15.4	30.0
2-Hexanone	0.117	0.128	0.010	9.3	40.0
Dibromochloromethane	0.282	0.274	0.100	-3.0	30.0
1,2-Dibromoethane	0.208	0.199	0.010	-4.1	40.0
Chlorobenzene	1.065	1.137	0.500	6.8	30.0
Ethylbenzene	1.744	1.976	0.100	13.3	30.0
m,p-Xylene	0.719	0.807	0.300	12.2	30.0
o-Xylene	0.701	0.741	0.300	5.8	30.0
Styrene	1.002	1.061	0.300	5.9	30.0
Bromoform	0.344	0.267	0.050	-22.3	30.0
Isopropylbenzene	1.844	2.119	0.010	14.9	40.0
1,1,2,2-Tetrachloroethane	0.205	0.209	0.100	2.1	30.0
1,3-Dichlorobenzene	1.653	1.680	0.400	1.7	30.0
1,4-Dichlorobenzene	1.812	1.766	0.400	-2.5	30.0
1,2-Dichlorobenzene	1.436	1.392	0.400	-3.1	30.0
1,2-Dibromo-3-chloropropane	0.060	0.054	0.010	-8.8	40.0
1,2,4-Trichlorobenzene	1.042	1.001	0.200	-4.0	30.0
1,2,3-Trichlorobenzene	0.804	0.744	0.200	-7.4	30.0

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.: H30S7

Instrument ID: V5 Calibration Date: 11/03/2011 Time: 5:35

Lab File ID: V5N2643.D Init. Calib. Date(s): 10/15/2011 10/15/2011

EPA Sample No.(VSTD#####) VSTD0055X Init. Calib. Time(s): 11:28 13:24

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF005	MIN RRF	%D	MAX %D
Vinyl chloride-d3	0.571	0.501	0.010	-12.4	30.0
Chloroethane-d5	0.377	0.345	0.010	-8.6	40.0
1,1-Dichloroethene-d2	0.131	0.111	0.010	-15.7	30.0
2-Butanone-d5	0.057	0.057	0.010	0.5	40.0
Chloroform-d	0.540	0.553	0.010	2.5	30.0
1,2-Dichloroethane-d4	0.211	0.209	0.010	-0.9	30.0
Benzene-d6	1.402	1.567	0.010	11.8	30.0
1,2-Dichloropropane-d6	0.499	0.558	0.010	11.7	40.0
Toluene-d8	1.290	1.409	0.010	9.2	30.0
trans-1,3-Dichloropropene-d4	0.284	0.320	0.010	12.9	30.0
2-Hexanone-d5	0.051	0.057	0.010	11.9	40.0
1,1,2,2-Tetrachloroethane-d2	0.199	0.201	0.010	1.0	30.0
1,2-Dichlorobenzene-d4	0.822	0.814	0.010	-1.0	30.0

Data File: \\avogadro\organics\V5.I\111101.B\V5N2526.D
Report Date: 07-Nov-2011 13:09

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2526.D
Lab Smp Id: VSTD0055T Client Smp ID: VSTD0055T
Inj Date : 01-NOV-2011 06:58
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD0055T,VSTD0055T
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
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	1.894	1.906	(0.300)	146590	5.00000	3.9
	2 Chloromethane	50	2.045	2.046	(0.324)	266980	5.00000	4.5
$	79 Vinyl Chloride-d3	65	2.172	2.173	(0.344)	181376	5.00000	4.9
	3 Vinyl Chloride	62	2.184	2.185	(0.346)	205747	5.00000	4.7
	4 Bromomethane	94	2.521	2.522	(0.399)	122553	5.00000	4.2
$	80 Chloroethane-d5	69	2.590	2.591	(0.410)	110238	5.00000	4.5
	5 Chloroethane	64	2.614	2.615	(0.414)	105766	5.00000	4.7
	6 Trichlorofluoromethane	101	2.916	2.917	(0.461)	228568	5.00000	5.0
$	81 1,1-Dichloroethene-d2	65	3.368	3.369	(0.533)	38810	5.00000	4.6(Q)
	7 1,1-Dichloroethene	96	3.380	3.381	(0.535)	114068	5.00000	4.1(Q)
	8 1,1,2-Trichloro-1,2,2-trifluo	101	3.426	3.416	(0.542)	136194	5.00000	4.3
	9 Acetone	43	3.450	3.451	(0.546)	113807	50.0000	39
	10 Carbon Disulfide	76	3.601	3.602	(0.570)	455514	5.00000	4.1
	11 Methyl Acetate	43	3.775	3.764	(0.597)	30771	5.00000	3.7
	12 Methylene Chloride	84	3.856	3.857	(0.610)	96808	5.00000	4.2(Q)
	13 trans-1,2-Dichloroethene	96	4.123	4.124	(0.653)	119023	5.00000	4.7
	14 Methyl tert-Butyl Ether	73	4.135	4.136	(0.654)	123540	5.00000	4.4
	15 1,1-Dichloroethane	63	4.530	4.531	(0.717)	220832	5.00000	4.7
$	82 2-Butanone-d5	46	5.064	5.065	(0.801)	174503	50.0000	48(A)
	17 cis-1,2-Dichloroethene	96	5.099	5.100	(0.807)	108994	5.00000	4.7
	16 2-Butanone	43	5.122	5.123	(0.811)	174705	50.0000	47
	18 Bromochloromethane	128	5.331	5.332	(0.844)	38374	5.00000	4.3

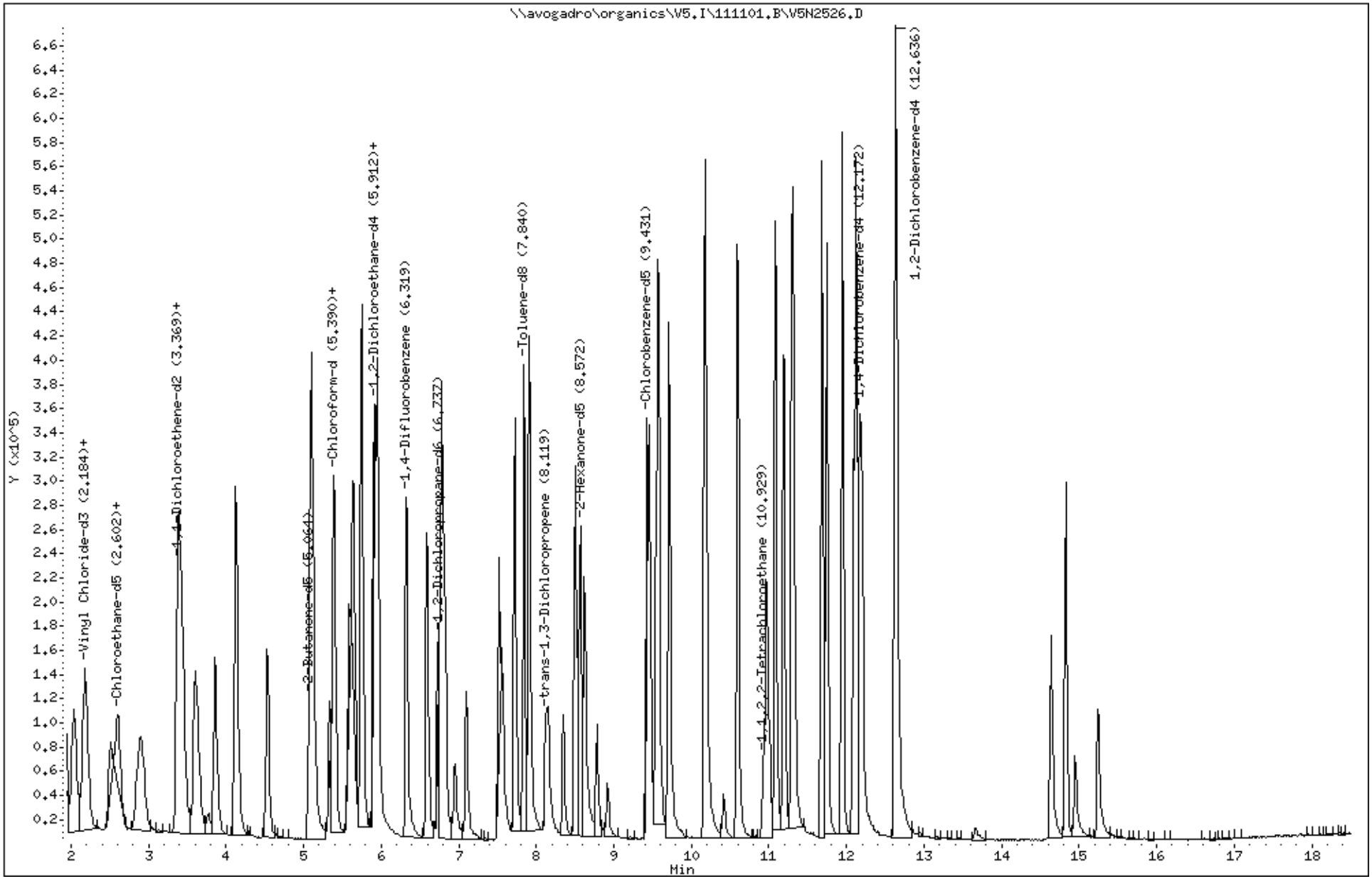
Data File: \\avogadro\organics\V5.I\111101.B\V5N2526.D
Report Date: 07-Nov-2011 13:09

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
$	83 Chloroform-d	84	5.389	5.378	(0.853)	166499	5.00000	4.8
	19 Chloroform	83	5.401	5.402	(0.855)	176408	5.00000	4.7
	20 1,1,1-Trichloroethane	97	5.587	5.588	(0.592)	167647	5.00000	5.2
	21 Cyclohexane	56	5.645	5.646	(0.599)	227463	5.00000	5.5
	22 Carbon Tetrachloride	117	5.749	5.750	(0.610)	155134	5.00000	5.4
$	23 1,2-Dichloroethane-d4	65	5.900	5.901	(0.934)	63201	5.00000	4.7
$	84 Benzene-d6	84	5.912	5.913	(0.627)	332891	5.00000	5.2
	25 Benzene	78	5.947	5.948	(0.631)	373846	5.00000	5.0
	24 1,2-Dichloroethane	62	5.970	5.971	(0.945)	77816	5.00000	4.6
*	26 1,4-Difluorobenzene	114	6.318	6.319	(1.000)	321823	5.00000	
	27 Trichloroethene	95	6.585	6.586	(0.698)	117940	5.00000	5.3
$	85 1,2-Dichloropropane-d6	67	6.725	6.726	(0.713)	115964	5.00000	5.1
	28 Methylcyclohexane	83	6.783	6.784	(0.719)	179832	5.00000	5.4
	29 1,2-Dichloropropane	63	6.817	6.819	(0.723)	97418	5.00000	4.9
	30 Bromodichloromethane	83	7.096	7.097	(0.752)	96427	5.00000	4.7
	31 cis-1,3-Dichloropropene	75	7.561	7.562	(0.802)	115139	5.00000	4.9
	32 4-Methyl-2-Pentanone	43	7.723	7.724	(0.819)	376467	50.0000	46
$	33 Toluene-d8	98	7.839	7.840	(0.831)	310451	5.00000	5.3
	34 Toluene	91	7.909	7.910	(0.839)	376952	5.00000	5.1
$	86 trans-1,3-Dichloropropene-d4	79	8.118	8.119	(0.861)	67306	5.00000	5.2
	35 trans-1,3-Dichloropropene	75	8.153	8.154	(0.865)	78388	5.00000	4.9
	36 1,1,2-Trichloroethane	97	8.350	8.351	(0.885)	40857	5.00000	4.6
	37 Tetrachloroethene	164	8.501	8.502	(0.901)	80492	5.00000	5.1
$	87 2-Hexanone-d5	63	8.571	8.572	(0.909)	121748	50.0000	52(AQ)
	38 2-Hexanone	43	8.618	8.619	(0.914)	265529	50.0000	50
	39 Dibromochloromethane	129	8.780	8.781	(0.931)	55001	5.00000	4.3
	40 1,2-Dibromoethane	107	8.919	8.920	(0.946)	43699	5.00000	4.6
*	42 Chlorobenzene-d5	117	9.430	9.431	(1.000)	229121	5.00000	
	43 Chlorobenzene	112	9.465	9.466	(1.004)	238194	5.00000	4.9
	44 Ethylbenzene	91	9.581	9.571	(1.016)	418524	5.00000	5.2
	45 m,p-Xylene	106	9.709	9.710	(1.030)	170220	5.00000	5.2
	46 o-Xylene	106	10.174	10.175	(1.079)	155338	5.00000	4.8
	47 Styrene	104	10.185	10.186	(1.080)	226974	5.00000	4.9
	48 Bromoform	173	10.418	10.419	(0.856)	24719	5.00000	3.6
	49 Isopropylbenzene	105	10.592	10.593	(1.123)	451093	5.00000	5.3
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.929	10.918	(1.159)	41629	5.00000	4.6
	51 1,1,2,2-Tetrachloroethane	83	10.952	10.953	(1.161)	43481	5.00000	4.6
	52 1,3-Dichlorobenzene	146	12.090	12.091	(0.993)	159619	5.00000	4.9
*	78 1,4-Dichlorobenzene-d4	152	12.171	12.172	(1.000)	99508	5.00000	
	53 1,4-Dichlorobenzene	146	12.194	12.195	(1.002)	167607	5.00000	4.6
$	90 1,2-Dichlorobenzene-d4	152	12.636	12.625	(1.038)	75981	5.00000	4.6
	54 1,2-Dichlorobenzene	146	12.659	12.660	(1.040)	130429	5.00000	4.6
	55 1,2-Dibromo-3-chloropropane	75	13.658	13.659	(1.122)	4666	5.00000	3.9(Q)
	56 1,2,4-Trichlorobenzene	180	14.645	14.634	(1.203)	93407	5.00000	4.5
	77 1,2,3-Trichlorobenzene	180	15.237	15.250	(1.252)	69051	5.00000	4.3

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111101.B\V5N2526.D
Date : 01-NOV-2011 06:58
Client ID: VSTD0055T
Instrument: V5.i
Sample Info: 25ML,VSTD0055T,VSTD0055T
Purge Volume: 25.0
Operator: SRC:
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111101.B\V5N2571.D
Report Date: 07-Nov-2011 13:10

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2571.D
Lab Smp Id: VSTD0055U Client Smp ID: VSTD0055U
Inj Date : 01-NOV-2011 18:25
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD0055U,VSTD0055U
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 43 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

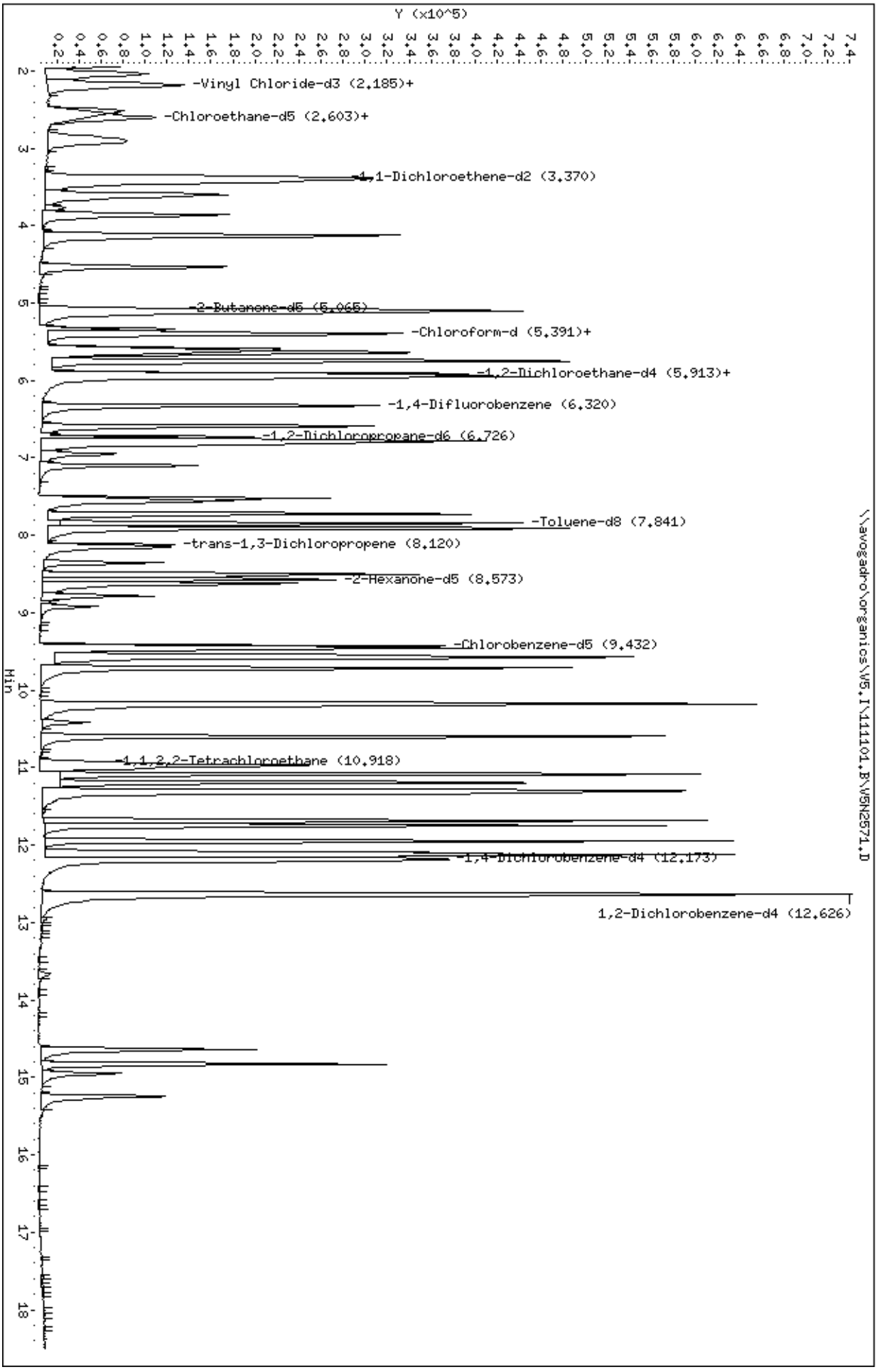
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	1 Dichlorodifluoromethane	85	1.906	1.906	(0.302)	131689	5.00000	3.3
	2 Chloromethane	50	2.046	2.046	(0.324)	253530	5.00000	4.0
$	79 Vinyl Chloride-d3	65	2.173	2.173	(0.344)	167254	5.00000	4.3
	3 Vinyl Chloride	62	2.185	2.185	(0.346)	194824	5.00000	4.2
	4 Bromomethane	94	2.522	2.522	(0.399)	119439	5.00000	3.9
$	80 Chloroethane-d5	69	2.591	2.591	(0.410)	113874	5.00000	4.4
	5 Chloroethane	64	2.615	2.615	(0.414)	104423	5.00000	4.4
	6 Trichlorofluoromethane	101	2.917	2.917	(0.462)	223884	5.00000	4.6
$	81 1,1-Dichloroethene-d2	65	3.369	3.369	(0.533)	40779	5.00000	4.6(Q)
	7 1,1-Dichloroethene	96	3.381	3.381	(0.535)	127622	5.00000	4.3
	8 1,1,2-Trichloro-1,2,2-trifluo	101	3.416	3.416	(0.541)	146111	5.00000	4.4
	9 Acetone	43	3.451	3.451	(0.546)	127644	50.0000	42
	10 Carbon Disulfide	76	3.602	3.602	(0.570)	496614	5.00000	4.3
	11 Methyl Acetate	43	3.764	3.764	(0.596)	38444	5.00000	4.4
	12 Methylene Chloride	84	3.857	3.857	(0.610)	106092	5.00000	4.3(Q)
	13 trans-1,2-Dichloroethene	96	4.124	4.124	(0.653)	139321	5.00000	5.2
	14 Methyl tert-Butyl Ether	73	4.136	4.136	(0.655)	137722	5.00000	4.6
	15 1,1-Dichloroethane	63	4.531	4.531	(0.717)	257571	5.00000	5.2
$	82 2-Butanone-d5	46	5.065	5.065	(0.802)	173441	50.0000	45(A)
	17 cis-1,2-Dichloroethene	96	5.100	5.100	(0.807)	123186	5.00000	5.0
	16 2-Butanone	43	5.123	5.123	(0.811)	184927	50.0000	47
	18 Bromochloromethane	128	5.332	5.332	(0.844)	44701	5.00000	4.7

Data File: \\avogadro\organics\V5.I\111101.B\V5N2571.D
Report Date: 07-Nov-2011 13:10

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	83 Chloroform-d	84	5.378	5.378	(0.851)	189967	5.00000	5.2
	19 Chloroform	83	5.402	5.402	(0.855)	198523	5.00000	5.0
	20 1,1,1-Trichloroethane	97	5.588	5.588	(0.592)	191845	5.00000	5.6
	21 Cyclohexane	56	5.646	5.646	(0.599)	255666	5.00000	5.8
	22 Carbon Tetrachloride	117	5.750	5.750	(0.610)	174704	5.00000	5.6
$	23 1,2-Dichloroethane-d4	65	5.901	5.901	(0.934)	69907	5.00000	4.9
$	84 Benzene-d6	84	5.913	5.913	(0.627)	370834	5.00000	5.4
	25 Benzene	78	5.948	5.948	(0.631)	419585	5.00000	5.2
	24 1,2-Dichloroethane	62	5.971	5.971	(0.945)	82933	5.00000	4.6
*	26 1,4-Difluorobenzene	114	6.319	6.319	(1.000)	340406	5.00000	
	27 Trichloroethene	95	6.586	6.586	(0.698)	131020	5.00000	5.5
$	85 1,2-Dichloropropane-d6	67	6.726	6.726	(0.713)	132882	5.00000	5.4
	28 Methylcyclohexane	83	6.784	6.784	(0.719)	201091	5.00000	5.6
	29 1,2-Dichloropropane	63	6.819	6.819	(0.723)	106202	5.00000	5.0
	30 Bromodichloromethane	83	7.097	7.097	(0.753)	111265	5.00000	5.1
	31 cis-1,3-Dichloropropene	75	7.562	7.562	(0.802)	127977	5.00000	5.1
	32 4-Methyl-2-Pentanone	43	7.724	7.724	(0.819)	420875	50.0000	49
$	33 Toluene-d8	98	7.840	7.840	(0.831)	341923	5.00000	5.4
	34 Toluene	91	7.910	7.910	(0.839)	427317	5.00000	5.4
$	86 trans-1,3-Dichloropropene-d4	79	8.119	8.119	(0.861)	72344	5.00000	5.2
	35 trans-1,3-Dichloropropene	75	8.154	8.154	(0.865)	86019	5.00000	5.0
	36 1,1,2-Trichloroethane	97	8.351	8.351	(0.885)	44450	5.00000	4.7
	37 Tetrachloroethene	164	8.502	8.502	(0.901)	93790	5.00000	5.6
$	87 2-Hexanone-d5	63	8.572	8.572	(0.909)	125582	50.0000	50(AQ)
	38 2-Hexanone	43	8.619	8.619	(0.914)	284555	50.0000	50
	39 Dibromochloromethane	129	8.781	8.781	(0.931)	65401	5.00000	4.7
	40 1,2-Dibromoethane	107	8.920	8.920	(0.946)	48782	5.00000	4.8
*	42 Chlorobenzene-d5	117	9.431	9.431	(1.000)	245236	5.00000	
	43 Chlorobenzene	112	9.466	9.466	(1.004)	271464	5.00000	5.2
	44 Ethylbenzene	91	9.571	9.571	(1.015)	468399	5.00000	5.5
	45 m,p-Xylene	106	9.710	9.710	(1.030)	195270	5.00000	5.5
	46 o-Xylene	106	10.175	10.175	(1.079)	177267	5.00000	5.2
	47 Styrene	104	10.186	10.186	(1.080)	257341	5.00000	5.2
	48 Bromoform	173	10.419	10.419	(0.856)	29019	5.00000	4.1
	49 Isopropylbenzene	105	10.593	10.593	(1.123)	509051	5.00000	5.6
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.918	10.918	(1.158)	42770	5.00000	4.4
	51 1,1,2,2-Tetrachloroethane	83	10.953	10.953	(1.161)	48756	5.00000	4.9
	52 1,3-Dichlorobenzene	146	12.091	12.091	(0.993)	180112	5.00000	5.3
*	78 1,4-Dichlorobenzene-d4	152	12.172	12.172	(1.000)	103084	5.00000	
	53 1,4-Dichlorobenzene	146	12.195	12.195	(1.002)	183538	5.00000	4.9
$	90 1,2-Dichlorobenzene-d4	152	12.625	12.625	(1.037)	85019	5.00000	5.0
	54 1,2-Dichlorobenzene	146	12.660	12.660	(1.040)	140607	5.00000	4.7
	55 1,2-Dibromo-3-chloropropane	75	13.659	13.659	(1.122)	5843	5.00000	4.7(Q)
	56 1,2,4-Trichlorobenzene	180	14.634	14.634	(1.202)	106538	5.00000	5.0
	77 1,2,3-Trichlorobenzene	180	15.250	15.250	(1.253)	76649	5.00000	4.6

QC Flag Legend

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


Data File: \\avogadro\organics\W5.I\111101.B\W5N2571.D
Date : 01-NOV-2011 18:25
Client ID: VSTD0055U
Sample Info: 25ML,VSTD0055U,VSTD0055U
Purge Volume: 25.0
Column phase: DB-624
Instrument: W5.i
Operator: SRC:
Column diameter: 0.25
Y (x10^5)
Min
-Vinyl Chloride-d3 (2.185)+
-Chloroethane-d5 (2.603)+
-1,1-Dichloroethene-d2 (3.370)
-2-Butanone-d5 (5.065)
-Chloroform-d (5.391)+
-1,2-Dichloroethane-d4 (5.913)+
-1,4-Difluorobenzene (6.320)
-1,2-Dichloropropane-d6 (6.726)
-Toluene-d8 (7.841)
-trans-1,3-Dichloropropene (8.120)
-2-Hexanone-d5 (8.573)
-Chlorobenzene-d5 (9.432)
-1,1,2,2-Tetrachloroethane (10.918)
-1,4-Dichlorobenzene-d4 (12.173)
1,2-Dichlorobenzene-d4 (12.626)
\\avogadro\organics\W5.I\111101.B\W5N2571.D

Data File: \\avogadro\organics\V5.I\111102.B\V5N2595.D
Report Date: 07-Nov-2011 13:11

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111102.B\V5N2595.D
Lab Smp Id: VSTD0055V Client Smp ID: VSTD0055V
Inj Date : 02-NOV-2011 05:55
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD0055V,VSTD0055V
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111102.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 14:22 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
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	1.895	1.891	(0.300)	136769	5.00000	3.5
	2 Chloromethane	50	2.034	2.030	(0.322)	274209	5.00000	4.4
$	79 Vinyl Chloride-d3	65	2.162	2.169	(0.342)	154498	5.00000	4.1
	3 Vinyl Chloride	62	2.173	2.181	(0.344)	204703	5.00000	4.5
	4 Bromomethane	94	2.510	2.506	(0.397)	125022	5.00000	4.2
$	80 Chloroethane-d5	69	2.592	2.587	(0.410)	105640	5.00000	4.2
	5 Chloroethane	64	2.615	2.611	(0.414)	111304	5.00000	4.8
	6 Trichlorofluoromethane	101	2.893	2.901	(0.458)	227801	5.00000	4.8
$	81 1,1-Dichloroethene-d2	65	3.346	3.354	(0.530)	36883	5.00000	4.2(Q)
	7 1,1-Dichloroethene	96	3.370	3.377	(0.533)	116990	5.00000	4.1
	8 1,1,2-Trichloro-1,2,2-trifluo	101	3.416	3.412	(0.541)	133167	5.00000	4.1
	9 Acetone	43	3.439	3.447	(0.544)	126504	50.0000	42
	10 Carbon Disulfide	76	3.590	3.598	(0.568)	448711	5.00000	3.9
	11 Methyl Acetate	43	3.764	3.772	(0.596)	34255	5.00000	4.0
	12 Methylene Chloride	84	3.846	3.853	(0.609)	100964	5.00000	4.2(Q)
	13 trans-1,2-Dichloroethene	96	4.113	4.120	(0.651)	130344	5.00000	4.9
	14 Methyl tert-Butyl Ether	73	4.136	4.132	(0.655)	126815	5.00000	4.4
	15 1,1-Dichloroethane	63	4.531	4.527	(0.717)	242786	5.00000	5.0
$	82 2-Butanone-d5	46	5.065	5.061	(0.802)	172277	50.0000	45(A)
	17 cis-1,2-Dichloroethene	96	5.088	5.096	(0.805)	114762	5.00000	4.7
	16 2-Butanone	43	5.123	5.119	(0.811)	172832	50.0000	45
	18 Bromochloromethane	128	5.332	5.328	(0.844)	39510	5.00000	4.3

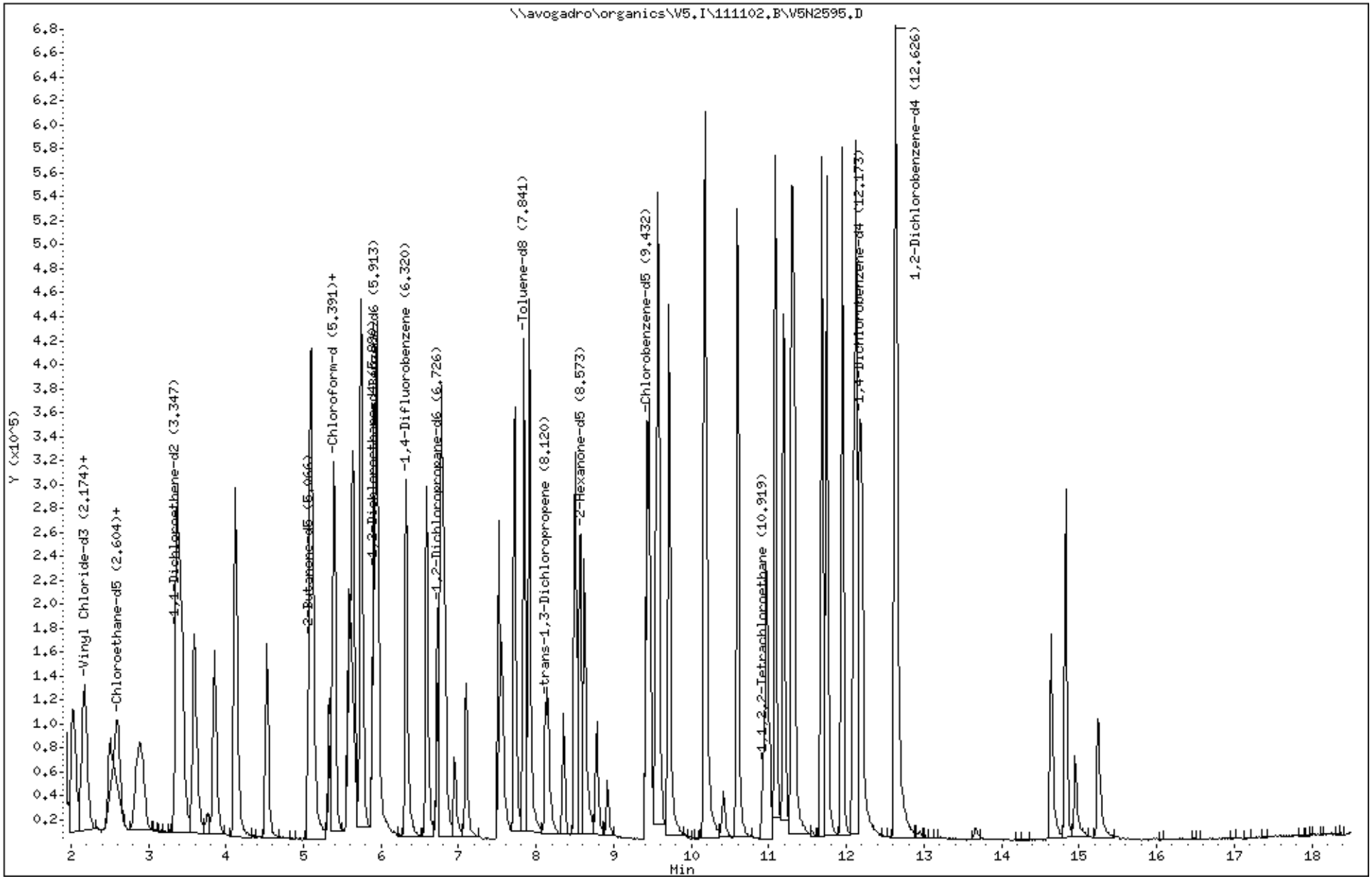
Data File: \\avogadro\organics\V5.I\111102.B\V5N2595.D
Report Date: 07-Nov-2011 13:11

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
$	83 Chloroform-d	84	5.379	5.386	(0.851)	171656	5.00000	4.8
	19 Chloroform	83	5.402	5.398	(0.855)	185460	5.00000	4.8
	20 1,1,1-Trichloroethane	97	5.588	5.584	(0.592)	179382	5.00000	5.5
	21 Cyclohexane	56	5.634	5.642	(0.597)	232606	5.00000	5.6
	22 Carbon Tetrachloride	117	5.750	5.746	(0.610)	162128	5.00000	5.5
$	23 1,2-Dichloroethane-d4	65	5.890	5.897	(0.932)	66095	5.00000	4.7
$	84 Benzene-d6	84	5.913	5.909	(0.627)	351676	5.00000	5.4
	25 Benzene	78	5.948	5.944	(0.631)	387238	5.00000	5.1
	24 1,2-Dichloroethane	62	5.971	5.967	(0.945)	79439	5.00000	4.5
*	26 1,4-Difluorobenzene	114	6.319	6.327	(1.000)	333482	5.00000	
	27 Trichloroethene	95	6.586	6.582	(0.698)	125562	5.00000	5.5
$	85 1,2-Dichloropropane-d6	67	6.726	6.733	(0.713)	125538	5.00000	5.4
	28 Methylcyclohexane	83	6.772	6.780	(0.718)	183506	5.00000	5.4
	29 1,2-Dichloropropane	63	6.819	6.815	(0.723)	108300	5.00000	5.4
	30 Bromodichloromethane	83	7.097	7.093	(0.753)	101830	5.00000	4.9
	31 cis-1,3-Dichloropropene	75	7.562	7.558	(0.802)	127693	5.00000	5.4
	32 4-Methyl-2-Pentanone	43	7.725	7.720	(0.819)	395324	50.0000	48
$	33 Toluene-d8	98	7.841	7.837	(0.831)	324607	5.00000	5.4
	34 Toluene	91	7.910	7.906	(0.839)	408269	5.00000	5.5
$	86 trans-1,3-Dichloropropene-d4	79	8.119	8.115	(0.861)	69495	5.00000	5.3
	35 trans-1,3-Dichloropropene	75	8.154	8.150	(0.865)	82126	5.00000	5.1
	36 1,1,2-Trichloroethane	97	8.352	8.348	(0.885)	43554	5.00000	4.9
	37 Tetrachloroethene	164	8.503	8.499	(0.902)	85528	5.00000	5.4
$	87 2-Hexanone-d5	63	8.572	8.568	(0.909)	127078	50.0000	54(AQ)
	38 2-Hexanone	43	8.619	8.615	(0.914)	264417	50.0000	49
	39 Dibromochloromethane	129	8.781	8.777	(0.931)	61484	5.00000	4.7
	40 1,2-Dibromoethane	107	8.921	8.917	(0.946)	44351	5.00000	4.6
*	42 Chlorobenzene-d5	117	9.432	9.428	(1.000)	232305	5.00000	
	43 Chlorobenzene	112	9.455	9.462	(1.002)	254070	5.00000	5.1
	44 Ethylbenzene	91	9.571	9.579	(1.015)	447324	5.00000	5.5
	45 m,p-Xylene	106	9.710	9.706	(1.030)	182129	5.00000	5.5
	46 o-Xylene	106	10.175	10.171	(1.079)	161638	5.00000	5.0
	47 Styrene	104	10.186	10.194	(1.080)	244934	5.00000	5.3
	48 Bromoform	173	10.419	10.415	(0.856)	26242	5.00000	3.8
	49 Isopropylbenzene	105	10.593	10.600	(1.123)	472420	5.00000	5.5
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.918	10.926	(1.158)	44298	5.00000	4.8
	51 1,1,2,2-Tetrachloroethane	83	10.953	10.949	(1.161)	44644	5.00000	4.7
	52 1,3-Dichlorobenzene	146	12.091	12.099	(0.993)	165308	5.00000	5.0
*	78 1,4-Dichlorobenzene-d4	152	12.172	12.168	(1.000)	100870	5.00000	
	53 1,4-Dichlorobenzene	146	12.196	12.203	(1.002)	168126	5.00000	4.6
$	90 1,2-Dichlorobenzene-d4	152	12.625	12.633	(1.037)	79221	5.00000	4.8
	54 1,2-Dichlorobenzene	146	12.660	12.656	(1.040)	130669	5.00000	4.5
	55 1,2-Dibromo-3-chloropropane	75	13.659	13.666	(1.122)	4801	5.00000	4.0(Q)
	56 1,2,4-Trichlorobenzene	180	14.634	14.642	(1.202)	93393	5.00000	4.4
	77 1,2,3-Trichlorobenzene	180	15.250	15.246	(1.253)	63605	5.00000	3.9

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111102.B\V5N2595.D
Date : 02-NOV-2011 05:55
Client ID: VSTD0055V
Instrument: V5.i
Sample Info: 25ML,VSTD0055V,VSTD0055V
Purge Volume: 25.0
Operator: SRC:
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111102.B\V5N2620.D
Report Date: 07-Nov-2011 14:03

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111102.B\V5N2620.D
Lab Smp Id: VSTD0055W Client Smp ID: VSTD0055W
Inj Date : 02-NOV-2011 17:48
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD0055W,VSTD0055W
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111102.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 14:22 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 11 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
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	1.891	1.891	(0.299)	150332	5.00000	3.7
2	Chloromethane	50	2.030	2.030	(0.321)	286897	5.00000	4.5
$ 79	Vinyl Chloride-d3	65	2.169	2.169	(0.343)	175251	5.00000	4.4
3	Vinyl Chloride	62	2.181	2.181	(0.345)	211650	5.00000	4.5
4	Bromomethane	94	2.506	2.506	(0.396)	127294	5.00000	4.1
$ 80	Chloroethane-d5	69	2.587	2.587	(0.409)	114080	5.00000	4.4
5	Chloroethane	64	2.611	2.611	(0.413)	111237	5.00000	4.6
6	Trichlorofluoromethane	101	2.901	2.901	(0.459)	234927	5.00000	4.8
$ 81	1,1-Dichloroethene-d2	65	3.354	3.354	(0.530)	36094	5.00000	4.0(Q)
7	1,1-Dichloroethene	96	3.377	3.377	(0.534)	119149	5.00000	4.0(Q)
8	1,1,2-Trichloro-1,2,2-trifluo	101	3.412	3.412	(0.539)	139408	5.00000	4.1
9	Acetone	43	3.447	3.447	(0.545)	126222	50.0000	41
10	Carbon Disulfide	76	3.598	3.598	(0.569)	474226	5.00000	4.0
11	Methyl Acetate	43	3.772	3.772	(0.596)	37752	5.00000	4.3
12	Methylene Chloride	84	3.853	3.853	(0.609)	102432	5.00000	4.1
13	trans-1,2-Dichloroethene	96	4.120	4.120	(0.651)	125654	5.00000	4.6
14	Methyl tert-Butyl Ether	73	4.132	4.132	(0.653)	128169	5.00000	4.3
15	1,1-Dichloroethane	63	4.527	4.527	(0.716)	245357	5.00000	4.9
$ 82	2-Butanone-d5	46	5.061	5.061	(0.800)	171042	50.0000	43(A)
17	cis-1,2-Dichloroethene	96	5.096	5.096	(0.805)	113212	5.00000	4.5
16	2-Butanone	43	5.119	5.119	(0.809)	177186	50.0000	44
18	Bromochloromethane	128	5.328	5.328	(0.842)	40211	5.00000	4.2

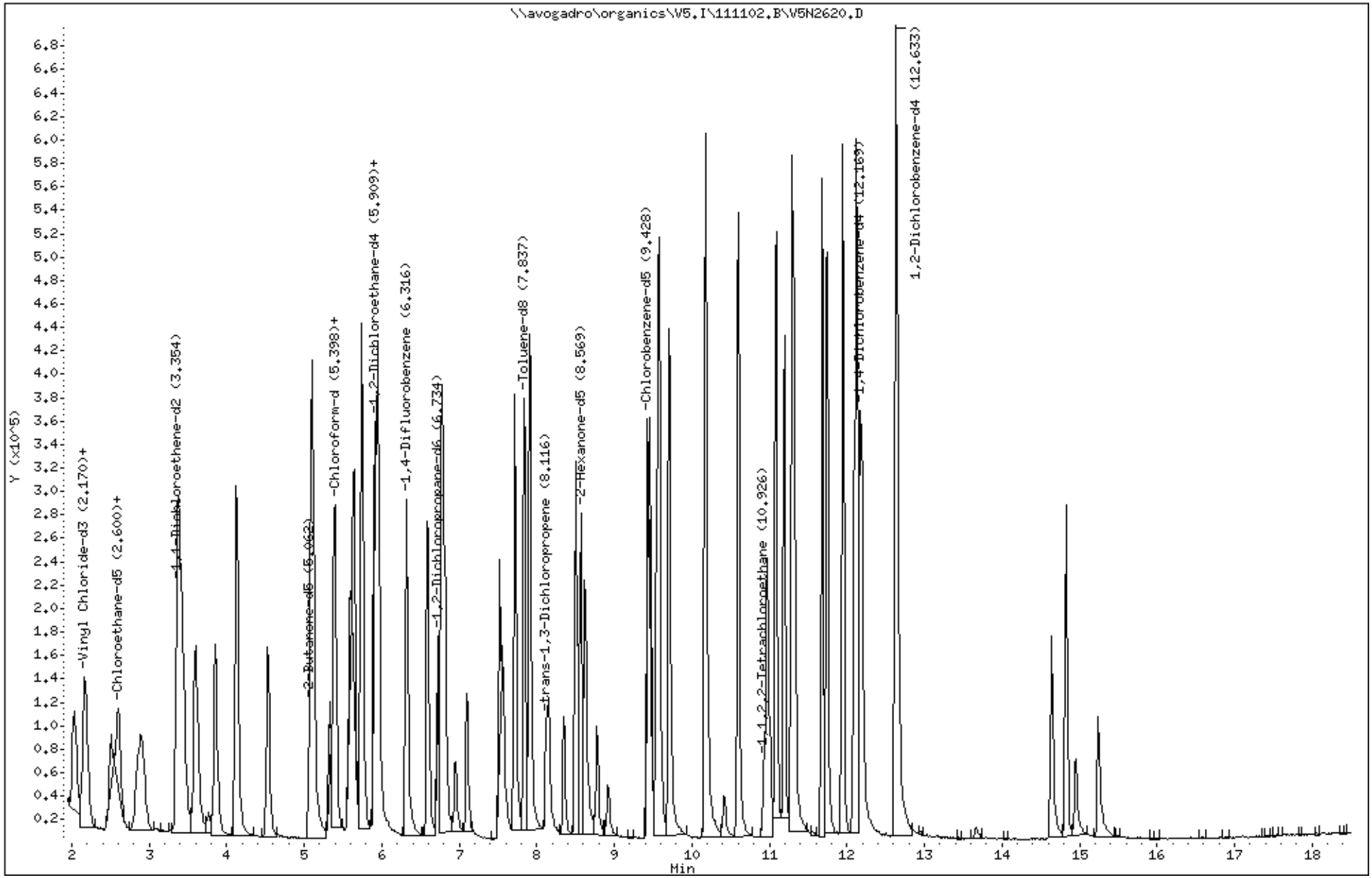
Data File: \\avogadro\organics\V5.I\111102.B\V5N2620.D
Report Date: 07-Nov-2011 14:03

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
$	83 Chloroform-d	84	5.386	5.386	(0.851)	167539	5.00000	4.5
	19 Chloroform	83	5.398	5.398	(0.853)	183823	5.00000	4.6
	20 1,1,1-Trichloroethane	97	5.584	5.584	(0.592)	176569	5.00000	5.4
	21 Cyclohexane	56	5.642	5.642	(0.598)	235236	5.00000	5.6
	22 Carbon Tetrachloride	117	5.746	5.746	(0.610)	158163	5.00000	5.3
$	23 1,2-Dichloroethane-d4	65	5.897	5.897	(0.932)	60027	5.00000	4.1
$	84 Benzene-d6	84	5.909	5.909	(0.627)	332985	5.00000	5.0
	25 Benzene	78	5.944	5.944	(0.630)	396933	5.00000	5.1
	24 1,2-Dichloroethane	62	5.967	5.967	(0.943)	76285	5.00000	4.2
*	26 1,4-Difluorobenzene	114	6.327	6.327	(1.000)	345489	5.00000	
	27 Trichloroethene	95	6.582	6.582	(0.698)	124596	5.00000	5.4
$	85 1,2-Dichloropropane-d6	67	6.733	6.733	(0.714)	121306	5.00000	5.2
	28 Methylcyclohexane	83	6.780	6.780	(0.719)	183589	5.00000	5.3
	29 1,2-Dichloropropane	63	6.815	6.815	(0.723)	105654	5.00000	5.2
	30 Bromodichloromethane	83	7.093	7.093	(0.752)	105159	5.00000	5.0
	31 cis-1,3-Dichloropropene	75	7.558	7.558	(0.802)	119268	5.00000	5.0
	32 4-Methyl-2-Pentanone	43	7.720	7.720	(0.819)	401301	50.0000	48
$	33 Toluene-d8	98	7.837	7.837	(0.831)	308525	5.00000	5.1
	34 Toluene	91	7.906	7.906	(0.839)	407631	5.00000	5.4
$	86 trans-1,3-Dichloropropene-d4	79	8.115	8.115	(0.861)	67387	5.00000	5.0
	35 trans-1,3-Dichloropropene	75	8.150	8.150	(0.865)	79011	5.00000	4.8
	36 1,1,2-Trichloroethane	97	8.348	8.348	(0.885)	43910	5.00000	4.8
	37 Tetrachloroethene	164	8.499	8.499	(0.901)	85204	5.00000	5.3
$	87 2-Hexanone-d5	63	8.568	8.568	(0.909)	123908	50.0000	51(AQ)
	38 2-Hexanone	43	8.615	8.615	(0.914)	273767	50.0000	50
	39 Dibromochloromethane	129	8.777	8.777	(0.931)	59965	5.00000	4.5
	40 1,2-Dibromoethane	107	8.917	8.917	(0.946)	47249	5.00000	4.8
*	42 Chlorobenzene-d5	117	9.428	9.428	(1.000)	235932	5.00000	
	43 Chlorobenzene	112	9.462	9.462	(1.004)	251767	5.00000	5.0
	44 Ethylbenzene	91	9.579	9.579	(1.016)	440567	5.00000	5.4
	45 m,p-Xylene	106	9.706	9.706	(1.030)	183598	5.00000	5.4
	46 o-Xylene	106	10.171	10.171	(1.079)	165878	5.00000	5.0
	47 Styrene	104	10.194	10.194	(1.081)	243801	5.00000	5.2
	48 Bromoform	173	10.415	10.415	(0.856)	25525	5.00000	3.7
	49 Isopropylbenzene	105	10.600	10.600	(1.124)	468281	5.00000	5.4
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.926	10.926	(1.159)	39127	5.00000	4.2
	51 1,1,2,2-Tetrachloroethane	83	10.949	10.949	(1.161)	46036	5.00000	4.8
	52 1,3-Dichlorobenzene	146	12.099	12.099	(0.994)	163715	5.00000	5.0
*	78 1,4-Dichlorobenzene-d4	152	12.168	12.168	(1.000)	99862	5.00000	
	53 1,4-Dichlorobenzene	146	12.203	12.203	(1.003)	169688	5.00000	4.7
$	90 1,2-Dichlorobenzene-d4	152	12.633	12.633	(1.038)	70724	5.00000	4.3
	54 1,2-Dichlorobenzene	146	12.656	12.656	(1.040)	133275	5.00000	4.6
	55 1,2-Dibromo-3-chloropropane	75	13.666	13.666	(1.123)	5840	5.00000	4.9(Q)
	56 1,2,4-Trichlorobenzene	180	14.642	14.642	(1.203)	97328	5.00000	4.7
	77 1,2,3-Trichlorobenzene	180	15.246	15.246	(1.253)	68421	5.00000	4.3

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111102.B\V5N2620.D
Date : 02-NOV-2011 17:48
Client ID: VSTD0055W
Instrument: V5.i
Sample Info: 25ML,VSTD0055W,VSTD0055W
Purge Volume: 25.0
Operator: SRC:
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111102A.B\V5N2643.D
Report Date: 07-Nov-2011 13:13

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111102A.B\V5N2643.D
Lab Smp Id: VSTD0055X Client Smp ID: VSTD0055X
Inj Date : 03-NOV-2011 05:35
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD0055X,VSTD0055X
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111102A.B\V5_TVOA1359.m
Meth Date : 04-Nov-2011 15:45 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 14 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

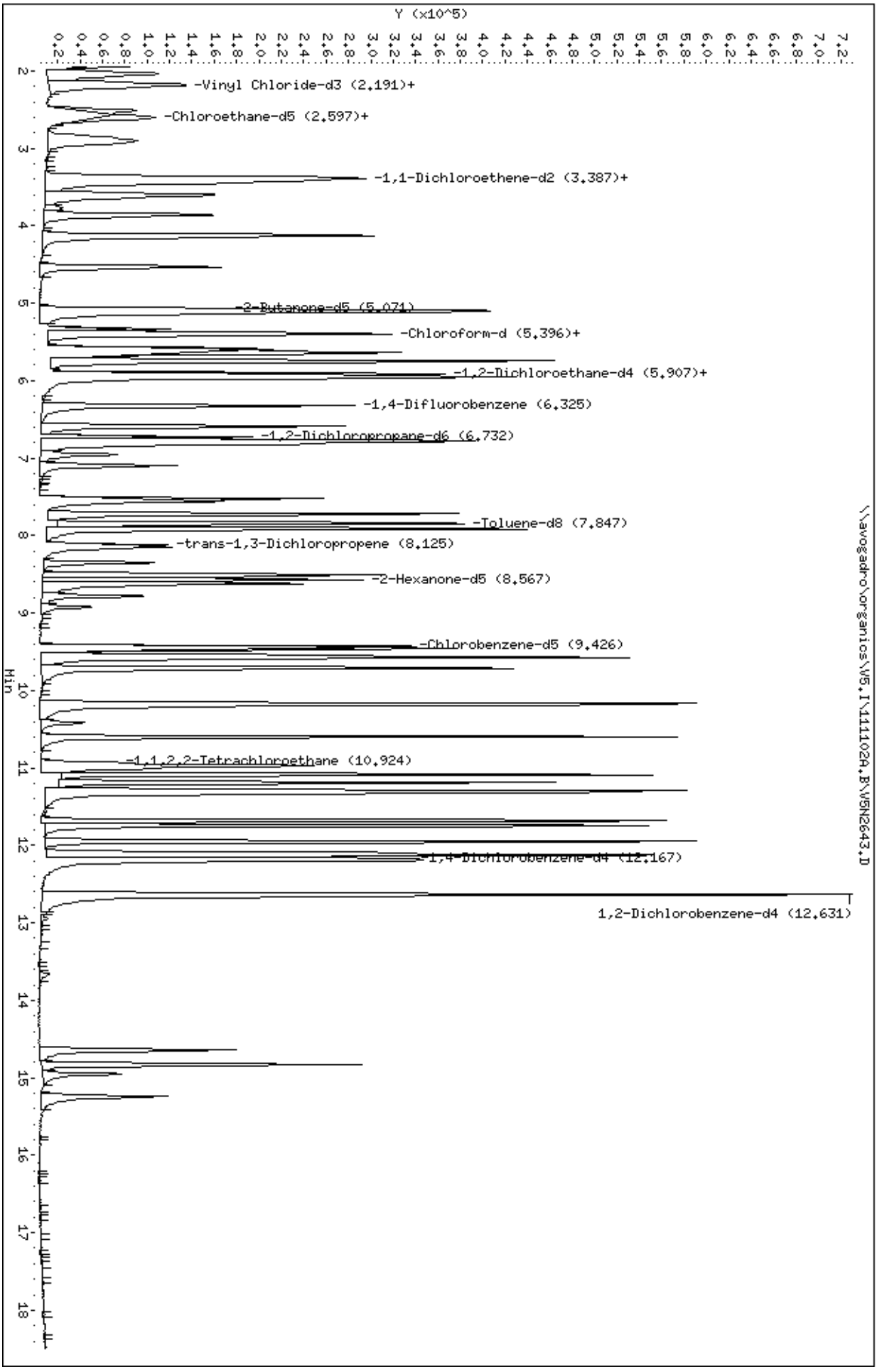
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	1 Dichlorodifluoromethane	85	1.900	1.900	(0.300)	148820	5.00000	4.0
	2 Chloromethane	50	2.040	2.040	(0.323)	277865	5.00000	4.7
$	79 Vinyl Chloride-d3	65	2.179	2.179	(0.345)	159294	5.00000	4.4
	3 Vinyl Chloride	62	2.179	2.179	(0.345)	212064	5.00000	4.9
	4 Bromomethane	94	2.516	2.516	(0.398)	128617	5.00000	4.5
$	80 Chloroethane-d5	69	2.585	2.585	(0.409)	109727	5.00000	4.6
	5 Chloroethane	64	2.609	2.609	(0.412)	110975	5.00000	5.0
	6 Trichlorofluoromethane	101	2.899	2.899	(0.458)	236390	5.00000	5.2
$	81 1,1-Dichloroethene-d2	65	3.375	3.375	(0.534)	35222	5.00000	4.2(Q)
	7 1,1-Dichloroethene	96	3.387	3.387	(0.535)	115288	5.00000	4.2(Q)
	8 1,1,2-Trichloro-1,2,2-trifluo	101	3.421	3.421	(0.541)	133745	5.00000	4.3
	9 Acetone	43	3.445	3.445	(0.545)	137649	50.0000	48
	10 Carbon Disulfide	76	3.607	3.607	(0.570)	471460	5.00000	4.3
	11 Methyl Acetate	43	3.770	3.770	(0.596)	34451	5.00000	4.2
	12 Methylene Chloride	84	3.863	3.863	(0.611)	98896	5.00000	4.3(Q)
	13 trans-1,2-Dichloroethene	96	4.130	4.130	(0.653)	126667	5.00000	5.0
	14 Methyl tert-Butyl Ether	73	4.141	4.141	(0.655)	128461	5.00000	4.6
	15 1,1-Dichloroethane	63	4.536	4.536	(0.717)	240185	5.00000	5.2
$	82 2-Butanone-d5	46	5.071	5.071	(0.802)	182221	50.0000	50(A)
	17 cis-1,2-Dichloroethene	96	5.094	5.094	(0.805)	111984	5.00000	4.8
	16 2-Butanone	43	5.129	5.129	(0.811)	187283	50.0000	51
	18 Bromochloromethane	128	5.338	5.338	(0.844)	42796	5.00000	4.8

Data File: \\avogadro\organics\V5.I\111102A.B\V5N2643.D
Report Date: 07-Nov-2011 13:13

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
$	83 Chloroform-d	84	5.384	5.384	(0.851)	176109	5.00000	5.1
	19 Chloroform	83	5.407	5.407	(0.855)	186773	5.00000	5.0
	20 1,1,1-Trichloroethane	97	5.593	5.593	(0.593)	177152	5.00000	5.6
	21 Cyclohexane	56	5.640	5.640	(0.598)	237201	5.00000	5.9
	22 Carbon Tetrachloride	117	5.744	5.744	(0.609)	161456	5.00000	5.7
$	23 1,2-Dichloroethane-d4	65	5.895	5.895	(0.932)	66581	5.00000	5.0
$	84 Benzene-d6	84	5.907	5.907	(0.627)	353571	5.00000	5.6
	25 Benzene	78	5.953	5.953	(0.632)	388450	5.00000	5.2
	24 1,2-Dichloroethane	62	5.976	5.976	(0.945)	80784	5.00000	4.8
*	26 1,4-Difluorobenzene	114	6.325	6.325	(1.000)	318186	5.00000	
	27 Trichloroethene	95	6.592	6.592	(0.699)	120762	5.00000	5.5
$	85 1,2-Dichloropropane-d6	67	6.731	6.731	(0.714)	125778	5.00000	5.6
	28 Methylcyclohexane	83	6.778	6.778	(0.719)	186458	5.00000	5.7
	29 1,2-Dichloropropane	63	6.824	6.824	(0.724)	105585	5.00000	5.4
	30 Bromodichloromethane	83	7.091	7.091	(0.752)	101032	5.00000	5.1
	31 cis-1,3-Dichloropropene	75	7.556	7.556	(0.802)	123809	5.00000	5.4
	32 4-Methyl-2-Pentanone	43	7.718	7.718	(0.819)	419584	50.0000	53
$	33 Toluene-d8	98	7.846	7.846	(0.832)	317896	5.00000	5.5
	34 Toluene	91	7.916	7.916	(0.840)	401498	5.00000	5.5
$	86 trans-1,3-Dichloropropene-d4	79	8.125	8.125	(0.862)	72206	5.00000	5.6
	35 trans-1,3-Dichloropropene	75	8.148	8.148	(0.864)	80885	5.00000	5.1
	36 1,1,2-Trichloroethane	97	8.357	8.357	(0.887)	43847	5.00000	5.0
	37 Tetrachloroethene	164	8.508	8.508	(0.903)	89073	5.00000	5.8
$	87 2-Hexanone-d5	63	8.566	8.566	(0.909)	128924	50.0000	56(AQ)
	38 2-Hexanone	43	8.624	8.624	(0.915)	288319	50.0000	55
	39 Dibromochloromethane	129	8.787	8.787	(0.932)	61757	5.00000	4.8
	40 1,2-Dibromoethane	107	8.926	8.926	(0.947)	44973	5.00000	4.8
*	42 Chlorobenzene-d5	117	9.425	9.425	(1.000)	225578	5.00000	
	43 Chlorobenzene	112	9.460	9.460	(1.004)	256435	5.00000	5.3
	44 Ethylbenzene	91	9.576	9.576	(1.016)	445719	5.00000	5.7
	45 m,p-Xylene	106	9.716	9.716	(1.031)	182039	5.00000	5.6
	46 o-Xylene	106	10.169	10.169	(1.079)	167128	5.00000	5.3
	47 Styrene	104	10.192	10.192	(1.081)	239436	5.00000	5.3
	48 Bromoform	173	10.413	10.413	(0.856)	26067	5.00000	3.9
	49 Isopropylbenzene	105	10.598	10.598	(1.124)	478058	5.00000	5.7
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.924	10.924	(1.159)	45423	5.00000	5.1
	51 1,1,2,2-Tetrachloroethane	83	10.958	10.958	(1.163)	47125	5.00000	5.1
	52 1,3-Dichlorobenzene	146	12.096	12.096	(0.994)	163807	5.00000	5.1
*	78 1,4-Dichlorobenzene-d4	152	12.166	12.166	(1.000)	97488	5.00000	
	53 1,4-Dichlorobenzene	146	12.201	12.201	(1.003)	172170	5.00000	4.9
$	90 1,2-Dichlorobenzene-d4	152	12.631	12.631	(1.038)	79372	5.00000	5.0
	54 1,2-Dichlorobenzene	146	12.654	12.654	(1.040)	135752	5.00000	4.8
	55 1,2-Dibromo-3-chloropropane	75	13.676	13.676	(1.124)	5308	5.00000	4.6(Q)
	56 1,2,4-Trichlorobenzene	180	14.640	14.640	(1.203)	97570	5.00000	4.8
	77 1,2,3-Trichlorobenzene	180	15.244	15.244	(1.253)	72569	5.00000	4.6

QC Flag Legend

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


Data File: \\avogadro\organics\V5,I\111102A,B\V5N2643.D
Date : 03-NOV-2011 05:35
Client ID: VSTD0055X
Sample Info: 25ML,VSTD0055X,VSTD0055X
Purge Volume: 25.0
Column phase: DB-624
Instrument: V5,i
Operator: SRC:
Column diameter: 0.25
Y (x10^5)
-Vinyl Chloride-d3 (2.191)+
-Chloroethane-d5 (2.597)+
-1,1-Dichloroethene-d2 (3.387)+
-2-Butanone-d5 (5.071)
-Chloroform-d (5.396)+
-1,2-Dichloroethane-d4 (5.907)+
-1,4-Difluorobenzene (6.325)
-1,2-Dichloropropane-d6 (6.732)
-Toluene-d8 (7.847)
-trans-1,3-Dichloropropene (8.125)
-2-Hexanone-d5 (8.567)
-Chlorobenzene-d5 (9.426)
-1,1,2,2-Tetrachloroethane (10.924)
-1,4-Dichlorobenzene-d4 (12.167)
1,2-Dichlorobenzene-d4 (12.631)
\\avogadro\organics\V5,I\111102A,B\V5N2643.D
Min

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\V5.I\111015A.B\V5N1679.D
Lab Smp Id: BFBB5 Client Smp ID: BFBB5
Inj Date : 15-OCT-2011 10:58
Operator : SRC: Inst ID: V5.i
Smp Info : 2UL,BFBB5,BFBB5
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111015A.B\V5_BFB_SOM.m
Meth Date : 29-Jun-2011 08:45 tmontmarqu 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

					CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)		
RT	EXP RT	REL RT	MASS	RESPONSE			TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
10.807	10.800	(0.000)	95	33784			0.00- 100.00	100.00
10.807	10.800	(0.000)	50	7031			15.00- 40.00	20.81
10.807	10.800	(0.000)	75	14397			30.00- 80.00	42.61
10.807	10.800	(0.000)	96	2189			5.00- 9.00	6.48
10.807	10.800	(0.000)	173	135			0.00- 2.00	0.52
10.807	10.800	(0.000)	174	26176			50.00- 120.00	77.48
10.807	10.800	(0.000)	175	1617			5.00- 9.00	6.18
10.807	10.800	(0.000)	176	25768			95.00- 101.00	98.44
10.807	10.800	(0.000)	177	1830			5.00- 9.00	7.10

Data File: \\avogadro\organics\V5.I\111015A.B\V5N1679.D

Date : 15-OCT-2011 10:58

Client ID: BFBB5

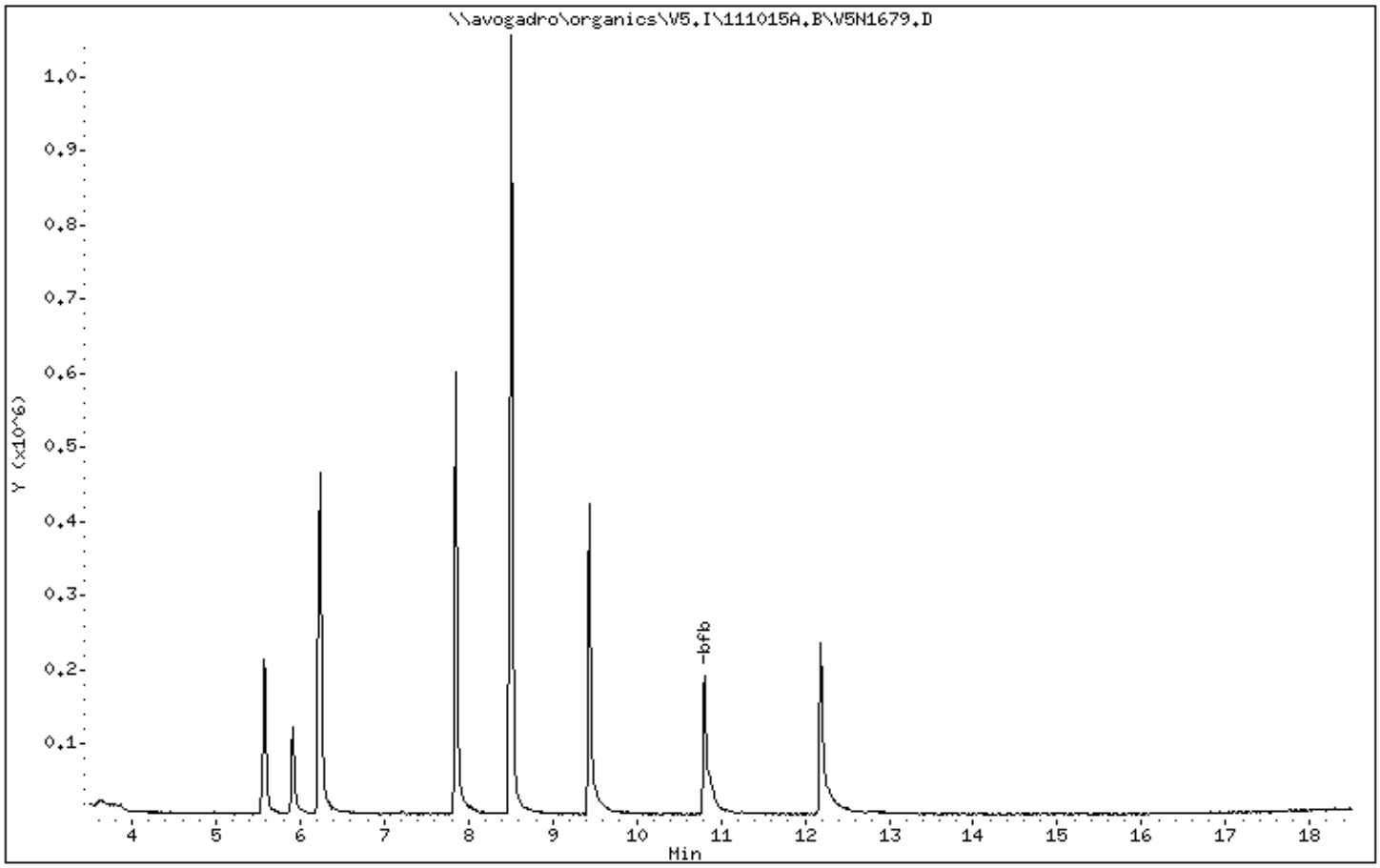
Instrument: V5.i

Sample Info: 2UL,BFBB5,BFBB5

Operator: SRC:

Column phase: DB-624

Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111015A.B\V5N1679.D

Date : 15-OCT-2011 10:58

Client ID: BFBB5

Instrument: V5.i

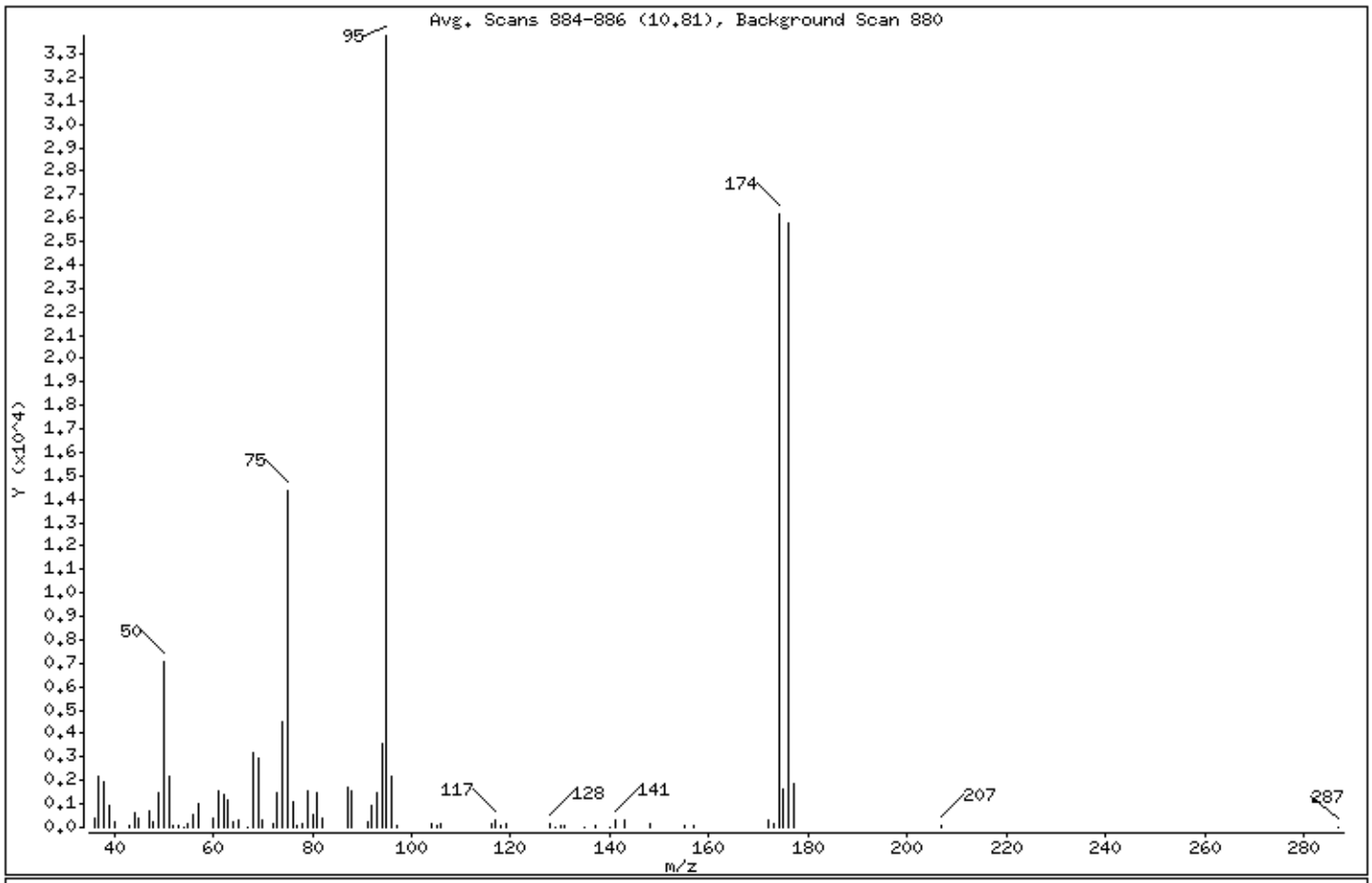
Sample Info: 2UL,BFBB5,BFBB5

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	20.81
75	30.00 - 80.00% of mass 95	42.61
96	5.00 - 9.00% of mass 95	6.48
173	Less than 2.00% of mass 174	0.40 (0.52)
174	50.00 - 120.00% of mass 95	77.48
175	5.00 - 9.00% of mass 174	4.79 (6.18)
176	95.00 - 101.00% of mass 174	76.27 (98.44)
177	5.00 - 9.00% of mass 176	5.42 (7.10)

Date : 15-OCT-2011 10:58

Client ID: BFBB5 Instrument: V5.i

Sample Info: 2UL,BFBB5,BFBB5

Operator: SRC:

Column phase: DB-624 Column diameter: 0.25

Data File: V5N1679.D
Spectrum: Avg. Scans 884-886 (10.81), Background Scan 880
Location of Maximum: 95.00
Number of points: 76

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	382	61.00	1522	87.00	1745	135.00	36
37.00	2196	62.00	1405	88.00	1585	137.00	43
38.00	1947	63.00	1174	91.00	195	140.00	34
39.00	904	64.00	198	92.00	912	141.00	321
40.00	209	65.00	274	93.00	1477	143.00	315
43.00	78	67.00	34	94.00	3584	148.00	142
44.00	629	68.00	3184	95.00	33784	155.00	41
45.00	396	69.00	2987	96.00	2189	157.00	44
47.00	684	70.00	276	97.00	85	172.00	314
48.00	253	72.00	176	104.00	192	173.00	135
49.00	1486	73.00	1506	105.00	50	174.00	26176
50.00	7031	74.00	4539	106.00	165	175.00	1617
51.00	2203	75.00	14397	116.00	128	176.00	25768
52.00	49	76.00	1091	117.00	321	177.00	1830
53.00	47	77.00	116	118.00	43	207.00	100
54.00	36	78.00	166	119.00	171	287.00	38
55.00	159	79.00	1561	128.00	128		
56.00	527	80.00	570	129.00	35		
57.00	977	81.00	1490	130.00	107		
60.00	395	82.00	379	131.00	45		

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\V5.I\111101.B\V5N2525.D
Lab Smp Id: BFB5T Client Smp ID: BFB5T
Inj Date : 01-NOV-2011 06:27
Operator : SRC: Inst ID: V5.i
Smp Info : 2UL,BFB5T,BFB5T
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111101.B\V5_BFB_SOM.m
Meth Date : 29-Jun-2011 08:45 tmontmarqu 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		
10.790	10.800	(0.000)	95	45912			0.00- 100.00	100.00
10.790	10.800	(0.000)	50	10272			15.00- 40.00	22.37
10.790	10.800	(0.000)	75	20176			30.00- 80.00	43.94
10.790	10.800	(0.000)	96	3219			5.00- 9.00	7.01
10.790	10.800	(0.000)	173	0	0.0	0.0	0.00- 2.00	0.00
10.790	10.800	(0.000)	174	34176			50.00- 120.00	74.44
10.790	10.800	(0.000)	175	2585			5.00- 9.00	7.56
10.790	10.800	(0.000)	176	33360			95.00- 101.00	97.61
10.790	10.800	(0.000)	177	2286			5.00- 9.00	6.85

Data File: \\avogadro\organics\V5.I\111101.B\V5N2525.D

Date : 01-NOV-2011 06:27

Client ID: BFB5T

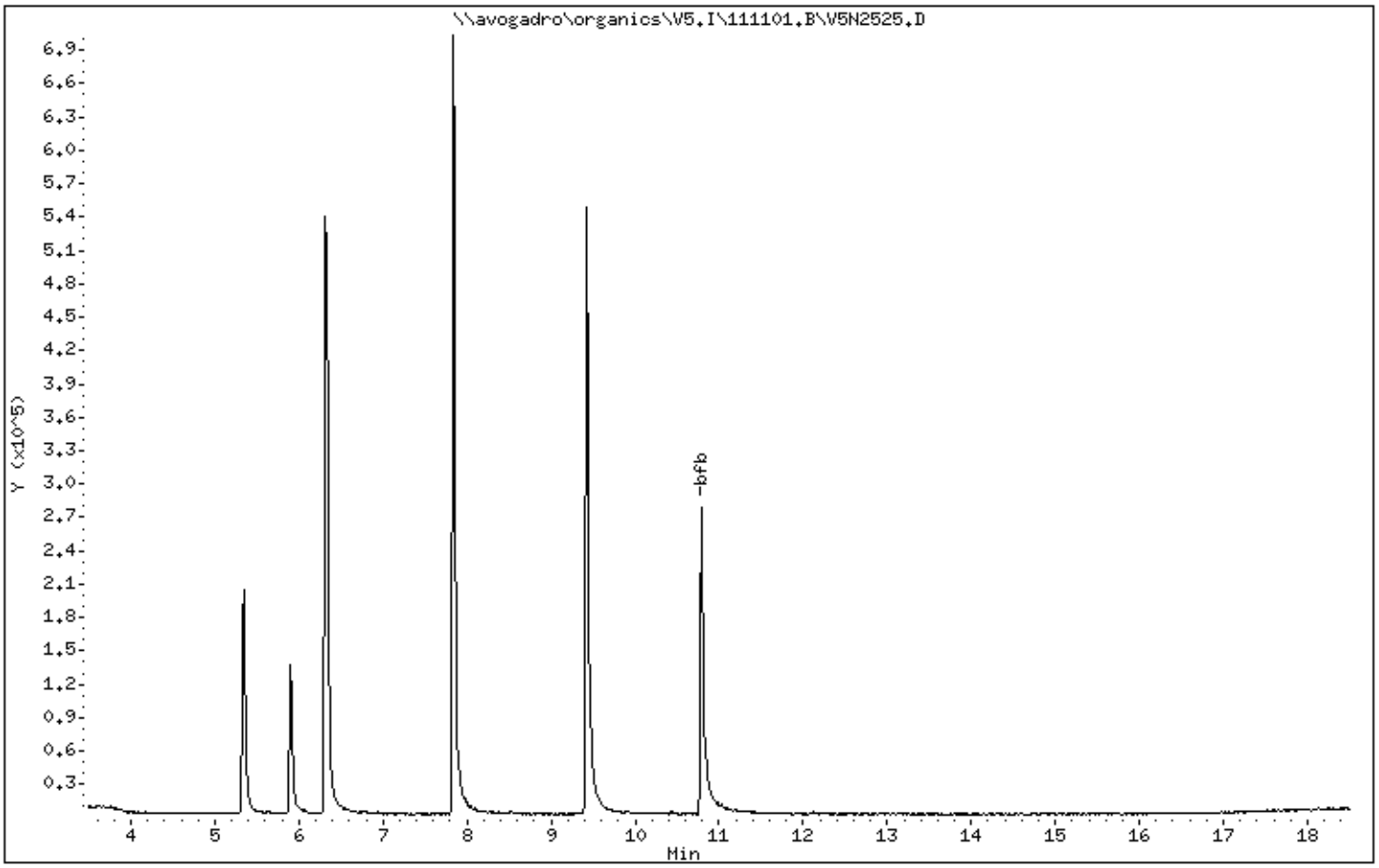
Instrument: V5.i

Sample Info: 2UL,BFB5T,BFB5T

Operator: SRC:

Column phase: DB-624

Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111101.B\V5N2525.D

Date : 01-NOV-2011 06:27

Client ID: BFB5T

Instrument: V5.i

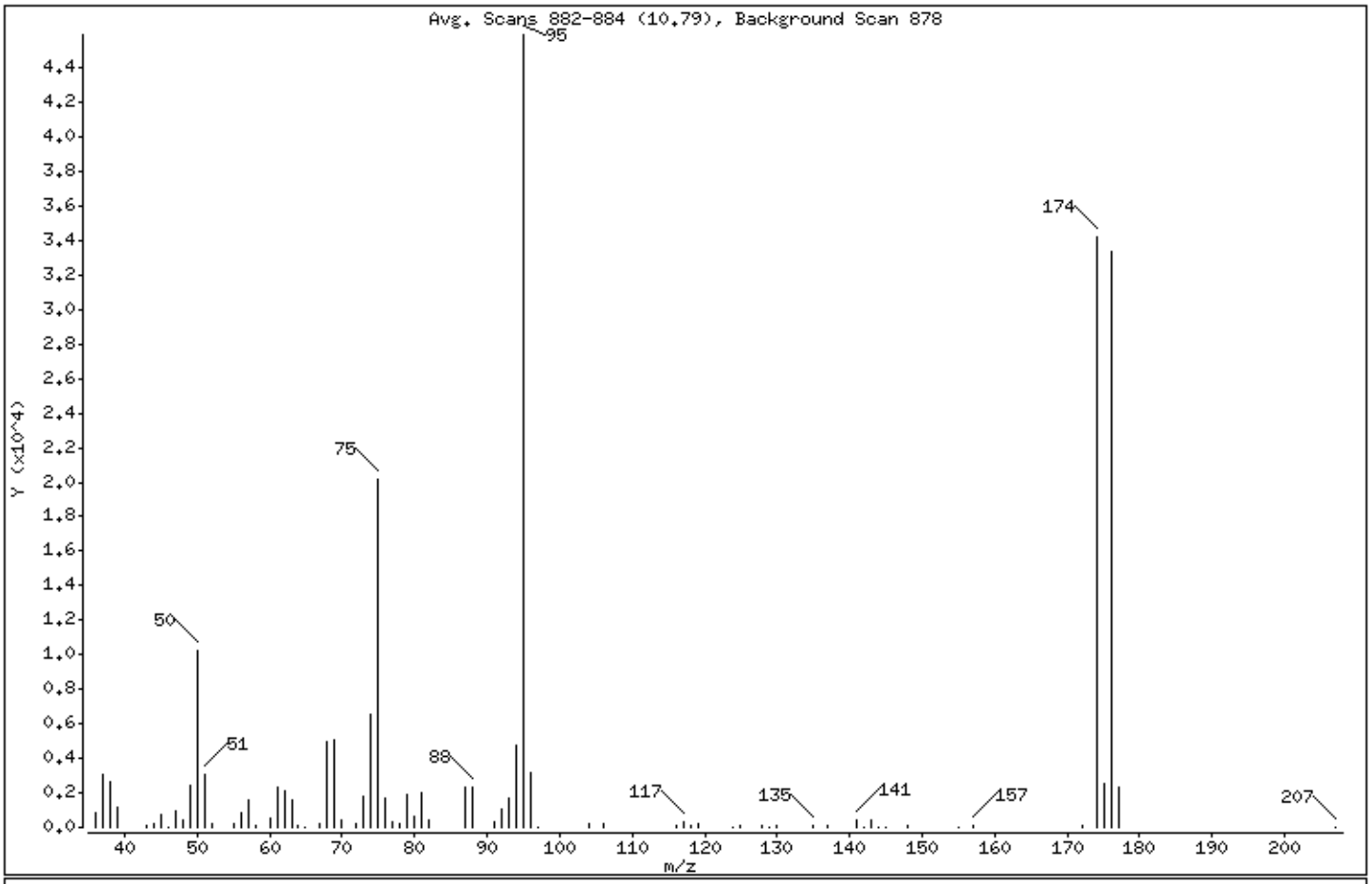
Sample Info: 2UL,BFB5T,BFB5T

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	22.37
75	30.00 - 80.00% of mass 95	43.94
96	5.00 - 9.00% of mass 95	7.01
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 120.00% of mass 95	74.44
175	5.00 - 9.00% of mass 174	5.63 (7.56)
176	95.00 - 101.00% of mass 174	72.66 (97.61)
177	5.00 - 9.00% of mass 176	4.98 (6.85)

Date : 01-NOV-2011 06:27

Client ID: BFB5T Instrument: V5.i

Sample Info: 2UL,BFB5T,BFB5T

Operator: SRC:

Column phase: DB-624 Column diameter: 0.25

Data File: V5N2525.D
Spectrum: Avg. Scans 882-884 (10.79), Background Scan 878
Location of Maximum: 95.00
Number of points: 75

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	810	61.00	2275	82.00	413	129.00	49
37.00	3082	62.00	2083	87.00	2329	130.00	107
38.00	2634	63.00	1597	88.00	2331	135.00	123
39.00	1159	64.00	112	91.00	274	137.00	78
43.00	68	65.00	41	92.00	1104	141.00	422
44.00	186	67.00	210	93.00	1710	142.00	38
45.00	708	68.00	4924	94.00	4779	143.00	371
46.00	33	69.00	5035	95.00	45912	144.00	33
47.00	983	70.00	416	96.00	3219	145.00	38
48.00	435	72.00	214	97.00	34	148.00	57
49.00	2410	73.00	1842	104.00	214	155.00	34
50.00	10272	74.00	6596	106.00	224	157.00	54
51.00	3048	75.00	20176	116.00	153	172.00	143
52.00	205	76.00	1738	117.00	314	174.00	34176
55.00	207	77.00	326	118.00	150	175.00	2585
56.00	848	78.00	180	119.00	262	176.00	33360
57.00	1578	79.00	1951	124.00	35	177.00	2286
58.00	92	80.00	681	125.00	57	207.00	38
60.00	557	81.00	1988	128.00	99		

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK5T

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-62672

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2526A.D

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK5T

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-62672

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2526A.D

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 11/01/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK5T

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-62672

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2526A.D

Level: (TRACE or LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 11/01/2011

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/L Purge Volume: 25.0 (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\111101.B\V5N2526A.D
Report Date: 07-Nov-2011 13:09

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2526A.D
Lab Smp Id: MB-62672 Client Smp ID: VBLK5T
Inj Date : 01-NOV-2011 07:25
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,MB-62672,VBLK5T,62672
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	79 Vinyl Chloride-d3	65	2.161	2.173	(0.342)	150009	3.87849	3.9
$	80 Chloroethane-d5	69	2.568	2.591	(0.406)	103918	4.06899	4.1
$	81 1,1-Dichloroethene-d2	65	3.369	3.369	(0.533)	33829	3.80391	3.8(Q)
$	82 2-Butanone-d5	46	5.076	5.065	(0.803)	179937	46.6586	47(AQ)
$	83 Chloroform-d	84	5.378	5.378	(0.851)	168549	4.61321	4.6(Q)
$	23 1,2-Dichloroethane-d4	65	5.901	5.901	(0.934)	63394	4.43747	4.4
$	84 Benzene-d6	84	5.912	5.913	(0.627)	348855	5.02963	5.0
*	26 1,4-Difluorobenzene	114	6.319	6.319	(1.000)	338451	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.725	6.726	(0.713)	106637	4.31860	4.3
$	33 Toluene-d8	98	7.840	7.840	(0.831)	310023	4.85574	4.9
$	86 trans-1,3-Dichloropropene-d4	79	8.130	8.119	(0.862)	66272	4.72276	4.7
$	87 2-Hexanone-d5	63	8.572	8.572	(0.909)	102013	40.3633	40(A)
*	42 Chlorobenzene-d5	117	9.431	9.431	(1.000)	247420	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.941	10.918	(1.160)	38661	3.91982	3.9
*	78 1,4-Dichlorobenzene-d4	152	12.183	12.172	(1.000)	89970	5.00000	
$	90 1,2-Dichlorobenzene-d4	152	12.636	12.625	(1.037)	68580	4.63629	4.6

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111101.B\V5N2526A.D
Report Date: 07-Nov-2011 13:09

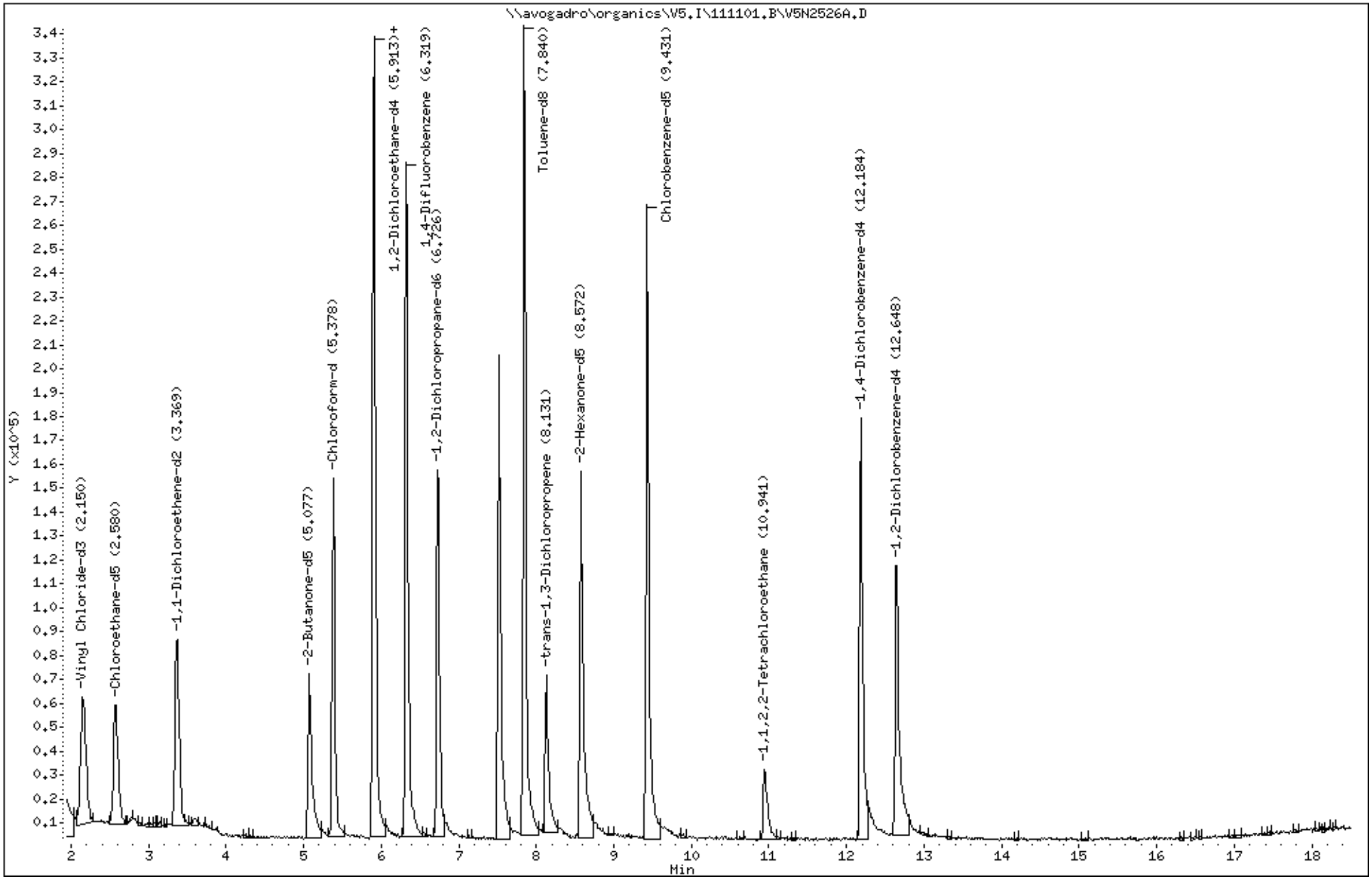
Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111101.B\V5N2526A.D
Lab Smp Id: MB-62672 Client Smp ID: VBLK5T
Inj Date : 01-NOV-2011 07:25
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,MB-62672,VBLK5T,62672
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111101.B\V5_TVOA1359.m
Meth Date : 03-Nov-2011 11:40 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111101.B\V5N2526A.D
Date : 01-NOV-2011 07:25
Client ID: VBLK5T
Instrument: V5.i
Sample Info: 25ML,MB-62672,VBLK5T,62672
Purge Volume: 25.0
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK5W

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-62673

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2621.D

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 11/02/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK5W

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-62673

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2621.D

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 11/02/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK5W

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-62673

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2621.D

Level: (TRACE or LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 11/02/2011

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/L Purge Volume: 25.0 (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\111102A.B\V5N2621.D
Report Date: 07-Nov-2011 13:12

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111102A.B\V5N2621.D
Lab Smp Id: MB-62673 Client Smp ID: VBLK5W
Inj Date : 02-NOV-2011 18:16
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,MB-62673,VBLK5W,62673
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111102A.B\V5_TVOA1359.m
Meth Date : 04-Nov-2011 15:45 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 12 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	79 Vinyl Chloride-d3	65	2.161	2.179	(0.342)	184542	4.61869	4.6
$	80 Chloroethane-d5	69	2.579	2.585	(0.408)	119962	4.54692	4.5
$	81 1,1-Dichloroethene-d2	65	3.369	3.375	(0.533)	38065	4.14329	4.1(Q)
$	82 2-Butanone-d5	46	5.076	5.071	(0.803)	171789	43.1206	43(AQ)
$	83 Chloroform-d	84	5.389	5.384	(0.853)	171911	4.55470	4.6(Q)
$	23 1,2-Dichloroethane-d4	65	5.900	5.895	(0.934)	60715	4.11397	4.1
$	84 Benzene-d6	84	5.912	5.907	(0.627)	352111	5.33570	5.3
*	26 1,4-Difluorobenzene	114	6.318	6.325	(1.000)	349637	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.725	6.731	(0.713)	114033	4.85385	4.9
$	33 Toluene-d8	98	7.840	7.846	(0.831)	306865	5.05161	5.1
$	86 trans-1,3-Dichloropropene-d4	79	8.130	8.125	(0.862)	66369	4.97109	5.0
$	87 2-Hexanone-d5	63	8.571	8.566	(0.909)	97813	40.6770	41(A)
*	42 Chlorobenzene-d5	117	9.431	9.425	(1.000)	235404	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.952	10.924	(1.161)	38050	4.05480	4.1
*	78 1,4-Dichlorobenzene-d4	152	12.183	12.166	(1.000)	91389	5.00000	(Q)
$	90 1,2-Dichlorobenzene-d4	152	12.647	12.631	(1.038)	67396	4.48550	4.5(Q)

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111102A.B\V5N2621.D
Report Date: 07-Nov-2011 13:12

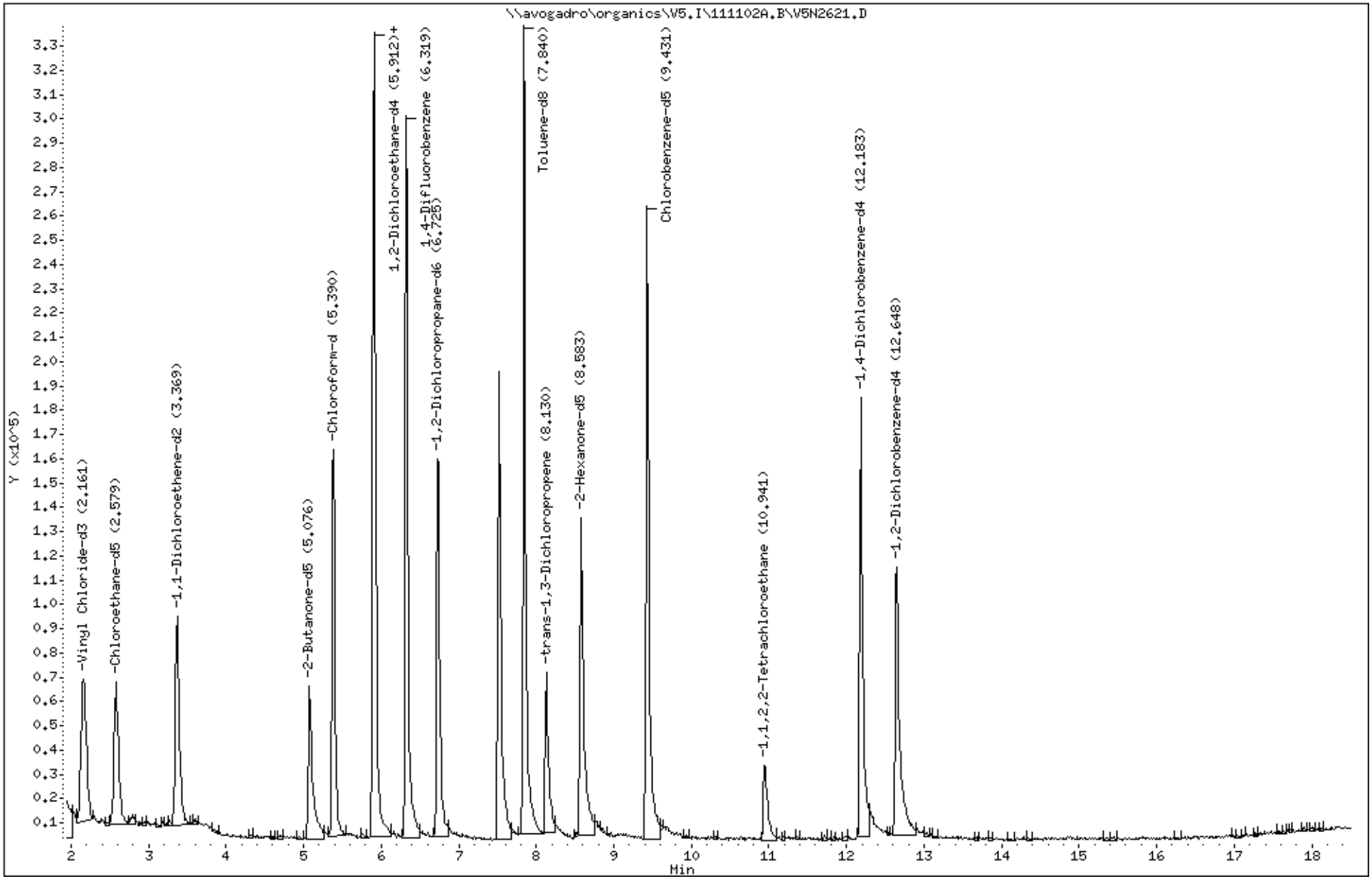
Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111102A.B\V5N2621.D
Lab Smp Id: MB-62673 Client Smp ID: VBLK5W
Inj Date : 02-NOV-2011 18:16
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,MB-62673,VBLK5W,62673
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111102A.B\V5_TVOA1359.m
Meth Date : 04-Nov-2011 15:45 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 12 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111102A.B\V5N2621.D
Date : 02-NOV-2011 18:16
Client ID: VBLK5W
Instrument: V5.i
Sample Info: 25ML,MB-62673,VBLK5W,62673
Purge Volume: 25.0
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VHBLK5W

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: VHBLK5W

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2642.D

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 11/03/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VHBLK5W

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: VHBLK5W

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2642.D

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 11/03/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VHBLK5W

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: VHBLK5W

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2642.D

Level: (TRACE or LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 11/03/2011

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/L Purge Volume: 25.0 (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\111102A.B\V5N2642.D
Report Date: 07-Nov-2011 13:13

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111102A.B\V5N2642.D
Lab Smp Id: VHBLK5W Client Smp ID: VHBLK5W
Inj Date : 03-NOV-2011 05:06
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VHBLK5W,VHBLK5W,62673
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111102A.B\V5_TVOA1359.m
Meth Date : 04-Nov-2011 15:45 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 13 QC Sample: STORAGEBLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	79 Vinyl Chloride-d3	65	2.166	2.179	(0.343)	197927	4.68137	4.7
$	80 Chloroethane-d5	69	2.584	2.585	(0.409)	128206	4.59226	4.6
$	81 1,1-Dichloroethene-d2	65	3.362	3.375	(0.532)	42774	4.39990	4.4(Q)
$	82 2-Butanone-d5	46	5.081	5.071	(0.804)	191359	45.3923	45(AQ)
$	83 Chloroform-d	84	5.383	5.384	(0.851)	178764	4.47589	4.5(Q)
$	23 1,2-Dichloroethane-d4	65	5.894	5.895	(0.932)	64716	4.14401	4.1(Q)
$	84 Benzene-d6	84	5.917	5.907	(0.627)	378520	5.17655	5.2
*	26 1,4-Difluorobenzene	114	6.324	6.325	(1.000)	369976	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.730	6.731	(0.713)	114836	4.41137	4.4
$	33 Toluene-d8	98	7.845	7.846	(0.831)	341719	5.07681	5.1
$	86 trans-1,3-Dichloropropene-d4	79	8.135	8.125	(0.862)	71088	4.80532	4.8
$	87 2-Hexanone-d5	63	8.577	8.566	(0.909)	109510	41.1004	41(A)
*	42 Chlorobenzene-d5	117	9.436	9.425	(1.000)	260840	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.946	10.924	(1.160)	38662	3.71825	3.7
*	78 1,4-Dichlorobenzene-d4	152	12.188	12.166	(1.000)	98882	5.00000	(Q)
$	90 1,2-Dichlorobenzene-d4	152	12.641	12.631	(1.037)	68976	4.24279	4.2(Q)

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111102A.B\V5N2642.D
Report Date: 07-Nov-2011 13:13

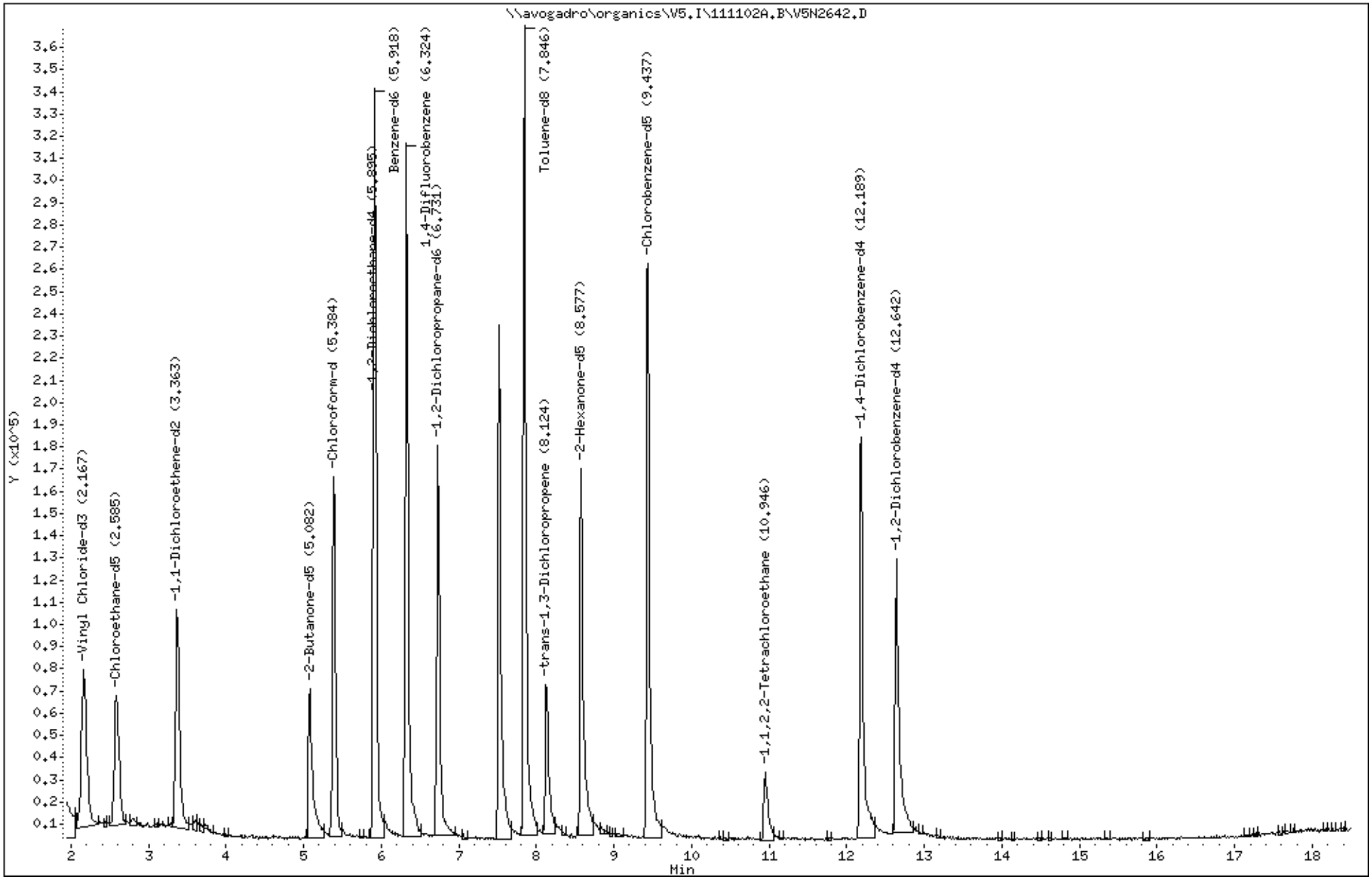
Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111102A.B\V5N2642.D
Lab Smp Id: VHBLK5W Client Smp ID: VHBLK5W
Inj Date : 03-NOV-2011 05:06
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VHBLK5W,VHBLK5W,62673
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111102A.B\V5_TVOA1359.m
Meth Date : 04-Nov-2011 15:45 V5.i Quant Type: ISTD
Cal Date : 15-OCT-2011 13:24 Cal File: V5N1684.D
Als bottle: 13 QC Sample: STORAGEBLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V5.I\111102A.B\V5N2642.D
Date : 03-NOV-2011 05:06
Client ID: VHBLK5W
Instrument: V5.i
Sample Info: 25ML,VHBLK5W,VHBLK5W,62673
Purge Volume: 25.0
Operator: SRC:
Column phase: DB-624
Column diameter: 0.25



2G - FORM II SV-1

WATER 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.: H30S7

	CLIENT SAMPLE NO.	SDMC1 (PHL) #	SDMC2 (BCE) #	SDMC3 (2CP) #	SDMC4 (4MP) #	SDMC5 (NBZ) #	SDMC6 (2NP) #	SDMC7 (DCP) #	SDMC8 (4CA) #
01	SBLK2Q	66	65	70	63	71	76	75	59
02	H30T9	63	66	70	69	68	73	71	31
03	H30W0	69	71	74	76	62	70	71	40
04	H30W2	68	67	69	74	64	70	74	20
05	H30W3	63	62	66	61	61	70	70	38
06	H30W4	58	56	59	60	54	61	64	41
07	H30W5	57	59	60	63	57	61	64	39
08	H30W6	65	62	69	64	59	67	69	46
09	H30W7	72	66	73	72	61	77	77	52
10	H30W8	75	74	77	82	70	82	85	64
11	H30X0	63	66	65	76	64	68	72	61
12	H30X1	79	73	81	84	64	78	81	63
13	H30Y2	60	64	65	67	72	74	73	35
14	H30Y3	67	72	73	72	70	81	78	31
15	H30Y4	61	67	66	72	73	77	74	32
16	H30Y5	61	68	69	70	70	81	78	15
17	H30Y6	69	76	77	82	79	83	81	32
18	H30Z6	66	72	70	82	76	77	81	52
19	H30X3	64	62	67	71	54	64	65	40
20	H30W1	40	74	75	64	80	72	75	12
21	SBLK2S	75	82	82	81	87	91	86	79
22	H30X3MS	84	78	81	81	70	74	73	7
23	H30X3MSD	101	86	87	88	72	75	76	8

		QC LIMITS
SDMC1	(PHL) = Phenol-d5	(39-106)
SDMC2	(BCE) = Bis(2-chloroethyl)ether-d8	(40-105)
SDMC3	(2CP) = 2-Chlorophenol-d4	(41-106)
SDMC4	(4MP) = 4-Methylphenol-d8	(25-111)
SDMC5	(NBZ) = Nitrobenzene-d5	(43-108)
SDMC6	(2NP) = 2-Nitrophenol-d4	(40-108)
SDMC7	(DCP) = 2,4-Dichlorophenol-d3	(37-105)
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

2H - FORM II SV-2

WATER 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.: H30S7

	CLIENT SAMPLE NO.	SDMC9 (DMP) #	SDMC10 (ACY) #	SDMC11 (4NP) #	SDMC12 (FLR) #	SDMC13 (NMP) #	SDMC14 (ANC) #	SDMC15 (PYR) #	SDMC16 (BAP) #	TOT OUT
01	SBLK2Q	71	72	77	65	62	70	94	71	0
02	H30T9	72	67	68	63	68	65	81	62	0
03	H30W0	76	66	69	67	81	64	85	65	0
04	H30W2	74	64	64	66	82	64	79	60	0
05	H30W3	73	67	71	68	72	63	84	66	0
06	H30W4	71	58	67	65	81	63	76	62	0
07	H30W5	74	60	59	65	83	64	84	52	0
08	H30W6	70	66	68	64	65	61	78	58	0
09	H30W7	73	67	77	67	70	61	79	63	0
10	H30W8	87	74	79	78	86	50	82	57	0
11	H30X0	76	63	67	66	82	73	62	64	0
12	H30X1	78	72	75	73	82	66	87	73	0
13	H30Y2	77	63	60	65	91	65	58	23 *	1
14	H30Y3	77	64	58	64	92	57	48 *	20 *	2
15	H30Y4	75	62	54	58	90	52	41 *	17 *	2
16	H30Y5	74	56	49	56	91	47	34 *	15 *	2
17	H30Y6	79	61	63	53	91	44 *	30 *	16 *	3
18	H30Z6	85	73	67	74	90	80	89	71	0
19	H30X3	72	61	60	57	70	54	57	22 *	1
20	H30W1	59	33 *	67	54	74	34 *	47 *	30 *	4
21	SBLK2S	80	85	82	77	84	86	100	81	0
22	H30X3MS	70	73	70	73	99	73	69	34	0
23	H30X3MSD	72	72	72	69	104	58	42 *	26 *	2

		QC LIMITS
SDMC9	(DMP) = Dimethylphthalate-d6	(47-114)
SDMC10	(ACY) = Acenaphthylene-d8	(41-107)
SDMC11	(4NP) = 4-Nitrophenol-d4	(33-116)
SDMC12	(FLR) = Fluorene-d10	(42-111)
SDMC13	(NMP) = 4,6-Dinitro-2-methylphenol-d2	(22-104)
SDMC14	(ANC) = Anthracene-d10	(44-110)
SDMC15	(PYR) = Pyrene-d10	(52-119)
SDMC16	(BAP) = Benzo(a)pyrene-d12	(32-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D DMC diluted out

3C - FORM III SV-1

WATER 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.: H30S7

Matrix Spike - EPA Sample No.: H30X3

COMPOUND	SPIKE ADDED (µg/L)	SAMPLE CONCENTRATION (µg/L)	MS CONCENTRATION (µg/L)	MS %REC	#	QC. LIMITS REC.
Phenol	40.0000	1.6265	35.7996	85		12-110
2-Chlorophenol	40.0000	0.0000	35.0341	88		27-123
N-Nitroso-di-n-propylamine	40.0000	0.0000	34.6629	87		41-116
4-Chloro-3-methylphenol	40.0000	0.0000	33.2496	83		23-97
Acenaphthene	40.0000	0.0000	27.5445	69		46-118
4-Nitrophenol	40.0000	0.0000	40.4625	101	*	10-80
2,4-Dinitrotoluene	40.0000	0.0000	28.9285	72		24-96
Pentachlorophenol	40.0000	0.0000	51.4364	129	*	9-103
Pyrene	40.0000	0.0000	20.5736	51		26-127

COMPOUND	SPIKE ADDED (µg/L)	MSD CONCENTRATION (µg/L)	MSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Phenol	40.0000	39.1410	94		9		0-42	12-110
2-Chlorophenol	40.0000	36.0174	90		3		0-40	27-123
N-Nitroso-di-n-propylamine	40.0000	44.8498	112		26		0-38	41-116
4-Chloro-3-methylphenol	40.0000	36.9695	92		11		0-42	23-97
Acenaphthene	40.0000	27.4215	69		0		0-31	46-118
4-Nitrophenol	40.0000	43.9676	110	*	8		0-50	10-80
2,4-Dinitrotoluene	40.0000	31.2038	78		8		0-38	24-96
Pentachlorophenol	40.0000	48.4973	121	*	6		0-50	9-103
Pyrene	40.0000	10.9948	27		61	*	0-31	26-127

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 1 out of 9 outside limits

Spike Recovery: 4 out of 18 outside limits

COMMENTS:

4C - FORM IV SV
SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.
SBLK2Q

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

Lab Code: MITKEM | Case No.: 41926 | Mod. Ref No.: | SDG No.: H30S7

Lab File ID: S2H5203.D | Lab Sample ID: MB-62636

Instrument ID: S2 | Date Extracted: 11/02/2011

Matrix: (SOIL/SED/WATER) WATER | Date Analyzed: 11/03/2011

Level: (LOW/MED) LOW | Time Analyzed: 16:05

Extraction: (Type) CONT | GPC Cleanup: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	H30T9	K2200-02B	S2H5204.D	11/03/2011
02	H30W0	K2200-03B	S2H5205.D	11/03/2011
03	H30W2	K2200-05B	S2H5207.D	11/03/2011
04	H30W3	K2200-06B	S2H5208.D	11/03/2011
05	H30W4	K2200-07B	S2H5209.D	11/03/2011
06	H30W5	K2200-08B	S2H5210.D	11/03/2011
07	H30W6	K2200-09B	S2H5211.D	11/03/2011
08	H30W7	K2200-10B	S2H5212.D	11/03/2011
09	H30W8	K2200-11B	S2H5213.D	11/03/2011
10	H30X0	K2200-12B	S2H5214.D	11/03/2011
11	H30X1	K2200-13B	S2H5215.D	11/03/2011
12	H30Y2	K2200-14B	S2H5216.D	11/03/2011
13	H30Y3	K2200-15B	S2H5217.D	11/03/2011
14	H30Y4	K2200-16B	S2H5218.D	11/03/2011
15	H30Y5	K2200-17B	S2H5219.D	11/03/2011
16	H30Y6	K2200-18B	S2H5220.D	11/03/2011
17	H30Z6	K2200-19B	S2H5221.D	11/03/2011
18	H30X3	K2200-20A	S2H5222.D	11/03/2011
19	H30W1	K2200-04B	S2H5226.D	11/04/2011

COMMENTS:

4C - FORM IV SV

SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

SBLK2S

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Lab File ID: S2H5227.D Lab Sample ID: MB-62685

Instrument ID: S2 Date Extracted: 11/03/2011

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 11/04/2011

Level: (LOW/MED) LOW Time Analyzed: 15:14

Extraction: (Type) CONT GPC Cleanup: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	H30X3MS	K2200-20AMS	S2H5229.D	11/04/2011
02	H30X3MSD	K2200-20AMSD	S2H5230.D	11/04/2011

COMMENTS:

5B - FORM V SV
SEMIVOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPINE (DFTPP)

CLIENT SAMPLE NO.
DFTPP2W

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

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)

CLIENT SAMPLE NO.
DFTPP2P

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Lab File ID: S2H5188.D DFTPP Injection Date: 11/03/2011

Instrument ID: S2 DFTPP Injection Time: 9:42

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	52.2
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	70.9
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	10.0 - 80.0% of mass 198	44.4
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	15.9
365	Greater than 1.0% of mass 198	1.7
441	Present, but less than mass 443	10.9
442	50.0 - 100% of mass 198	61.8
443	15.0 - 24.0% of mass 442	12.1 (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	SSTD0202P	SSTD0202P	S2H5189.D	11/03/2011	9:55
02	SSTD0202Q	SSTD0202Q	S2H5202A.D	11/03/2011	15:43
03	SBLK2Q	MB-62636	S2H5203.D	11/03/2011	16:05
04	H30T9	K2200-02B	S2H5204.D	11/03/2011	16:26
05	H30W0	K2200-03B	S2H5205.D	11/03/2011	16:47
06	H30W2	K2200-05B	S2H5207.D	11/03/2011	17:30
07	H30W3	K2200-06B	S2H5208.D	11/03/2011	17:51
08	H30W4	K2200-07B	S2H5209.D	11/03/2011	18:12
09	H30W5	K2200-08B	S2H5210.D	11/03/2011	18:34
10	H30W6	K2200-09B	S2H5211.D	11/03/2011	18:55
11	H30W7	K2200-10B	S2H5212.D	11/03/2011	19:17
12	H30W8	K2200-11B	S2H5213.D	11/03/2011	19:39
13	H30X0	K2200-12B	S2H5214.D	11/03/2011	20:00
14	H30X1	K2200-13B	S2H5215.D	11/03/2011	20:22
15	H30Y2	K2200-14B	S2H5216.D	11/03/2011	20:43
16	H30Y3	K2200-15B	S2H5217.D	11/03/2011	21:05
17	H30Y4	K2200-16B	S2H5218.D	11/03/2011	21:27
18	H30Y5	K2200-17B	S2H5219.D	11/03/2011	21:48
19	H30Y6	K2200-18B	S2H5220.D	11/03/2011	22:10

5B - FORM V SV
SEMIVOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPINE (DFTPP)

CLIENT SAMPLE NO.
DFTPP2P

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Lab File ID: S2H5188.D DFTPP Injection Date: 11/03/2011

Instrument ID: S2 DFTPP Injection Time: 9:42

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	52.2
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	70.9
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	10.0 - 80.0% of mass 198	44.4
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	15.9
365	Greater than 1.0% of mass 198	1.7
441	Present, but less than mass 443	10.9
442	50.0 - 100% of mass 198	61.8
443	15.0 - 24.0% of mass 442	12.1 (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
20	H30Z6	K2200-19B	S2H5221.D	11/03/2011	22:31
21	H30X3	K2200-20A	S2H5222.D	11/03/2011	22:53
22	SSTD0202R	SSTD0202R	S2H5223.D	11/03/2011	23:14

5B - FORM V SV
SEMIVOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPINE (DFTPP)

CLIENT SAMPLE NO.
DFTPP2S

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Lab File ID: S2H5224.D DFTPP Injection Date: 11/04/2011

Instrument ID: S2 DFTPP Injection Time: 12:41

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	43.2
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	60.6
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	10.0 - 80.0% of mass 198	41.4
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	16.0
365	Greater than 1.0% of mass 198	1.8
441	Present, but less than mass 443	8.7
442	50.0 - 100% of mass 198	63.7
443	15.0 - 24.0% of mass 442	12.4 (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	SSTD0202S	SSTD0202S	S2H5225.D	11/04/2011	13:08
02	H30W1	K2200-04B	S2H5226.D	11/04/2011	13:30
03	SBLK2S	MB-62685	S2H5227.D	11/04/2011	15:14
04	H30X3MS	K2200-20AMS	S2H5229.D	11/04/2011	15:57
05	H30X3MSD	K2200-20AMSD	S2H5230.D	11/04/2011	16:18
06	SSTD0202T	SSTD0202T	S2H5234.D	11/04/2011	17:43

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.: H30S7

GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202Q Date Analyzed: 11/03/2011

Lab File ID (Standard): S2H5202A.D Time Analyzed: 15:43

Instrument ID: S2

		IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
	12 HOUR STD	105201		3.887		302721		4.949		247962		6.418	
	UPPER LIMIT	210402		4.387		605442		5.449		495924		6.918	
	LOWER LIMIT	52601		3.387		151361		4.449		123981		5.918	
	SAMPLE NO.												
01	SBLK2Q	116462		3.881		302920		4.953		209089		6.411	
02	H30T9	111951		3.881		331634		4.953		249882		6.412	
03	H30W0	119545		3.888		384113		4.949		270205		6.419	
04	H30W2	117905		3.888		367641		4.949		282394		6.418	
05	H30W3	108815		3.888		301728		4.950		202515		6.419	
06	H30W4	132164		3.888		401278		4.950		296425		6.419	
07	H30W5	124981		3.887		368969		4.949		289040		6.418	
08	H30W6	116896		3.891		356773		4.953		259961		6.411	
09	H30W7	121228		3.891		383036		4.953		286008		6.422	
10	H30W8	120995		3.889		376046		4.951		302921		6.420	
11	H30X0	129959		3.887		397692		4.949		356814		6.418	
12	H30X1	130588		3.890		449683		4.952		342083		6.421	
13	H30Y2	129661		3.887		333189		4.949		243846		6.418	
14	H30Y3	135814		3.888		382334		4.950		266005		6.419	
15	H30Y4	131856		3.887		341054		4.948		250373		6.417	

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.: H30S7

EPA Sample No.(SSTD020##) SSTD0202Q Date Analyzed: 11/03/2011

Lab File ID (Standard): S2H5202A.D Time Analyzed: 15:43

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	382122		7.641		249238		9.871		134073		11.233	
	UPPER LIMIT	764244		8.141		498476		10.371		268146		11.733	
	LOWER LIMIT	191061		7.141		124619		9.371		67037		10.733	
	SAMPLE NO.												
01	SBLK2Q	374347		7.645		219246		9.875		116388		11.248	
02	H30T9	453893		7.645		282179		9.876		147590		11.237	
03	H30W0	469230		7.641		296739		9.893		163510		11.255	
04	H30W2	463896		7.641		307437		9.914		159310		11.298	
05	H30W3	359820		7.641		211562		9.926		113290		11.309	
06	H30W4	491637		7.642		328366		9.883		171296		11.255	
07	H30W5	473034		7.640		298204		9.892		151981		11.265	
08	H30W6	482250		7.644		294484		9.864		149097		11.215	
09	H30W7	535248		7.644		339157		9.885		176005		11.247	
10	H30W8	576559		7.642		398360		9.894		219908		11.256	
11	H30X0	602054		7.641		496585		9.860		250744		11.201	
12	H30X1	655238		7.644		418225		9.863		218851		11.225	
13	H30Y2	365030		7.640		214761		9.871		124953		11.233	
14	H30Y3	403740		7.642		207042		9.872		115325		11.234	
15	H30Y4	361462		7.640		185327		9.881		105970		11.232	

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.: H30S7

GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202Q Date Analyzed: 11/03/2011

Lab File ID (Standard): S2H5202A.D Time Analyzed: 15:43

Instrument ID: S2

		IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
	12 HOUR STD	105201		3.887		302721		4.949		247962		6.418	
	UPPER LIMIT	210402		4.387		605442		5.449		495924		6.918	
	LOWER LIMIT	52601		3.387		151361		4.449		123981		5.918	
	SAMPLE NO.												
16	H30Y5	133606		3.888		355900		4.950		238745		6.419	
17	H30Y6	146369		3.887		402011		4.949		302182		6.418	
18	H30Z6	136149		3.887		374816		4.949		286014		6.418	
19	H30X3	137890		3.891		442978		4.953		294707		6.422	

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.: H30S7

EPA Sample No.(SSTD020##) SSTD0202Q Date Analyzed: 11/03/2011

Lab File ID (Standard): S2H5202A.D Time Analyzed: 15:43

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	382122		7.641		249238		9.871		134073		11.233	
	UPPER LIMIT	764244		8.141		498476		10.371		268146		11.733	
	LOWER LIMIT	191061		7.141		124619		9.371		67037		10.733	
	SAMPLE NO.												
16	H30Y5	329471		7.641		159817		9.882		96503		11.244	
17	H30Y6	434755		7.641		224578		9.893		107308		11.265	
18	H30Z6	447953		7.640		292510		9.903		147779		11.276	
19	H30X3	516557		7.645		256202		9.918		126032		11.312	

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.: H30S7

GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202S Date Analyzed: 11/04/2011

Lab File ID (Standard): S2H5225.D Time Analyzed: 13:08

Instrument ID: S2

		IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
	12 HOUR STD	88620		3.823		249024		4.884		181712		6.353	
	UPPER LIMIT	177240		4.323		498048		5.384		363424		6.853	
	LOWER LIMIT	44310		3.323		124512		4.384		90856		5.853	
	SAMPLE NO.												
01	H30W1	110924		3.819		299271		4.881		239842		6.350	
02	SBLK2S	92750		3.819		233872		4.881		185984		6.350	
03	H30X3MS	128350		3.831		383451		4.892		252592		6.351	
04	H30X3MSD	123638		3.830		367587		4.891		241484		6.350	

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.: H30S7

EPA Sample No.(SSTD020##) SSTD0202S Date Analyzed: 11/04/2011

Lab File ID (Standard): S2H5225.D Time Analyzed: 13:08

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	285205		7.576		209242		9.881		137943		11.275	
	UPPER LIMIT	570410		8.076		418484		10.381		275886		11.775	
	LOWER LIMIT	142603		7.076		104621		9.381		68972		10.775	
	SAMPLE NO.												
01	H30W1	356825		7.573		234078		9.857		136017		11.229	
02	SBLK2S	279122		7.583		181671		9.835		110306		11.197	
03	H30X3MS	387628		7.573		247188		9.814		174533		11.165	
04	H30X3MSD	358258		7.572		268979		9.824		184220		11.175	

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

CLIENT SAMPLE NO.

H30T9

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-02B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5204.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2´-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1´-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

H30T9

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-02B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5204.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3´-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

H30T9

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-02B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5204.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.675	7.9	BNJ
02		Unknown-01	4.878	5.7	J
03		Unknown-02	5.189	2.3	J
04		Unknown-03	5.404	7.4	J
05		Unknown-04	5.522	3.3	J
06		Unknown-05	6.358	2.9	J
07		Unknown-06	8.095	5.2	J
08		Unknown-07	10.594	8.0	J
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5204.D
Report Date: 07-Nov-2011 14:01

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5204.D
Lab Smp Id: K2200-02B Client Smp ID: H30T9
Inj Date : 03-NOV-2011 16:26
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-02B,,62636,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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 * (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)
$	2 Phenol-d5	71	3.570	3.565	(0.920)	176847	50.1647	25
$	4 bis(2-Chloroethyl)ether-d8	67	3.612	3.619	(0.931)	257824	53.0741	27
$	6 2-Chlorophenol-d4	132	3.698	3.694	(0.953)	171556	56.2548	28
*	8 1,4-Dichlorobenzene-d4	152	3.881	3.887	(1.000)	111951	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.192	4.198	(1.080)	262403	54.9032	27
$	16 Nitrobenzene-d5	128	4.342	4.348	(0.877)	93922	54.3820	27
$	19 2-Nitrophenol-d4	143	4.620	4.616	(0.933)	111718	58.5959	29
$	23 2,4-Dichlorophenol-d3	165	4.824	4.820	(0.974)	198814	57.1224	29
*	25 Naphthalene-d8	136	4.953	4.948	(1.000)	331634	40.0000	
$	27 4-Chloroaniline-d4	131	5.007	5.002	(1.011)	76120	24.6313	12(Q)
$	40 Dimethylphthalate-d6	166	6.165	6.171	(0.962)	526324	57.2857	29
$	43 Acenaphthylene-d8	160	6.283	6.289	(0.980)	636266	53.2550	27
*	46 Acenaphthene-d10	164	6.411	6.418	(1.000)	249882	40.0000	
$	49 4-Nitrophenol-d4	143	6.508	6.503	(1.015)	72230	54.5517	27
$	54 Fluorene-d10	176	6.840	6.847	(1.067)	428409	50.7620	25
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.894	6.900	(0.902)	96646	54.5655	27
*	65 Phenanthrene-d10	188	7.645	7.640	(1.000)	453893	40.0000	
$	67 Anthracene-d10	188	7.687	7.694	(1.006)	675573	52.1051	26
$	72 Pyrene-d10	212	8.824	8.820	(0.894)	578648	65.0949	33
*	77 Chrysene-d12	240	9.875	9.871	(1.000)	282179	40.0000	(Q)
$	83 Benzo(a)pyrene-d12	264	11.151	11.147	(0.992)	178342	49.2435	25(H)

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5204.D
Report Date: 07-Nov-2011 14:01

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)	
* 85 Perylene-d12	264	11.237	11.233	(1.000)	147590	40.0000		(Q)

QC Flag Legend

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

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5204.D
Report Date: 07-Nov-2011 14:01

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5204.D
Lab Smp Id: K2200-02B Client Smp ID: H30T9
Inj Date : 03-NOV-2011 16:26
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-02B,,62636,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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 * (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

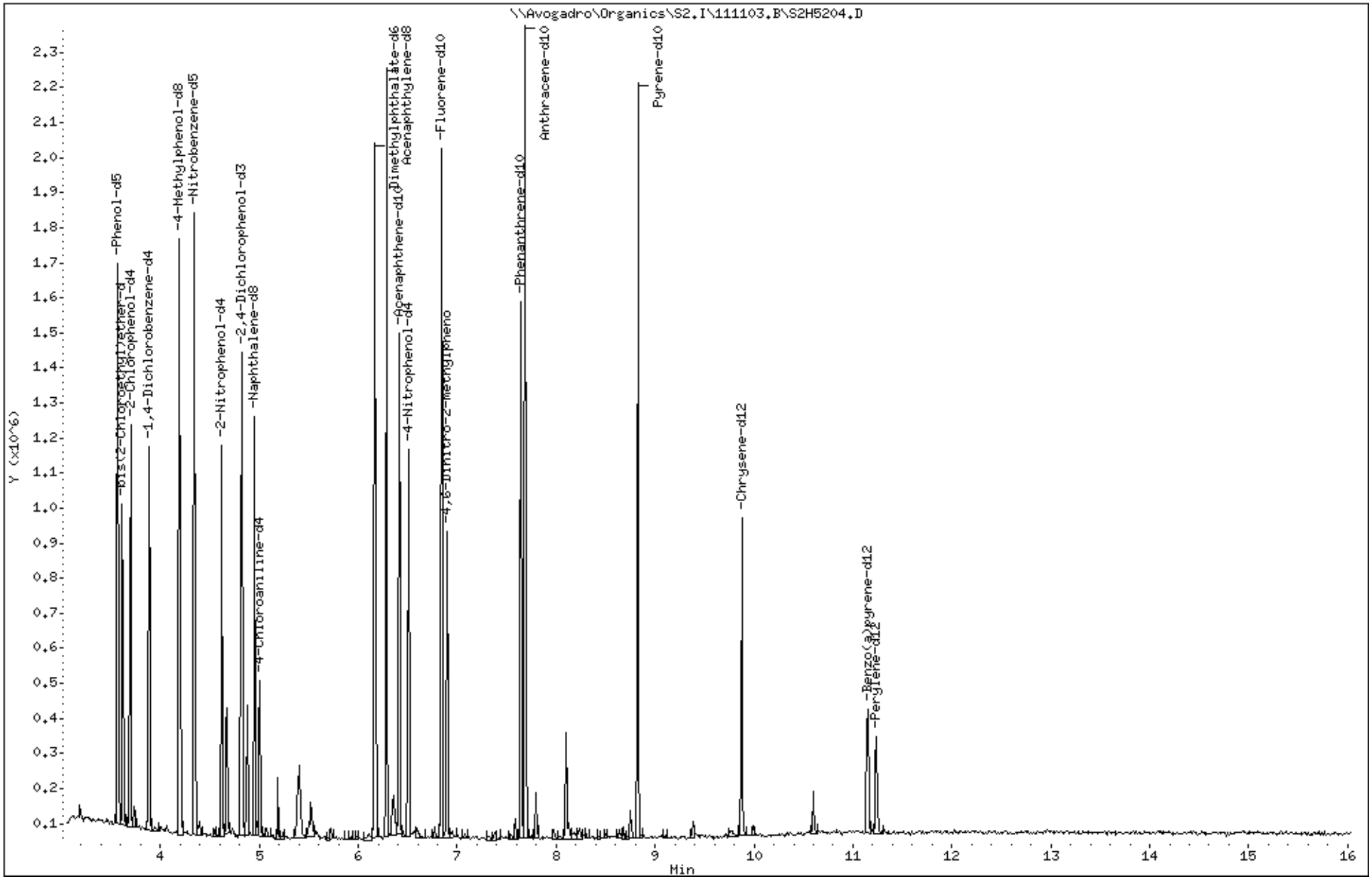
ISTD	RT	AREA	AMOUNT
* 25 Naphthalene-d8	4.953	1135504	40.000
* 46 Acenaphthene-d10	6.412	1332720	40.000
* 65 Phenanthrene-d10	7.645	1288113	40.000
* 85 Perylene-d12	11.237	392951	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
2(3H)-Furanone, dihydro-4-hydroxy-				CAS #: 5469-16-9			
4.675	448340	15.7935225	7.9	91	NIST2002.L	4145	25
Unknown				CAS #:			
4.878	322538	11.3619394	5.7	0		0	25
Unknown				CAS #:			
5.189	133211	4.69258478	2.3	0		0	25

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5204.D
Report Date: 07-Nov-2011 14:01

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
5.404	417896	14.7210754	7.4	0		0	25
Unknown				CAS #:			
5.522	184776	6.50903440	3.3	0		0	25
Unknown				CAS #:			
6.358	195499	5.86767068	2.9	0		0	46
Unknown				CAS #:			
8.095	334250	10.3795291	5.2	0		0	65
Unknown				CAS #:			
10.594	158087	16.0922592	8.0	0		0	85

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5204.D
Date : 03-NOV-2011 16:26
Client ID: H30T9
Instrument: S2.i
Sample Info: K2200-02B,,62636,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5204.D

Date : 03-NOV-2011 16:26

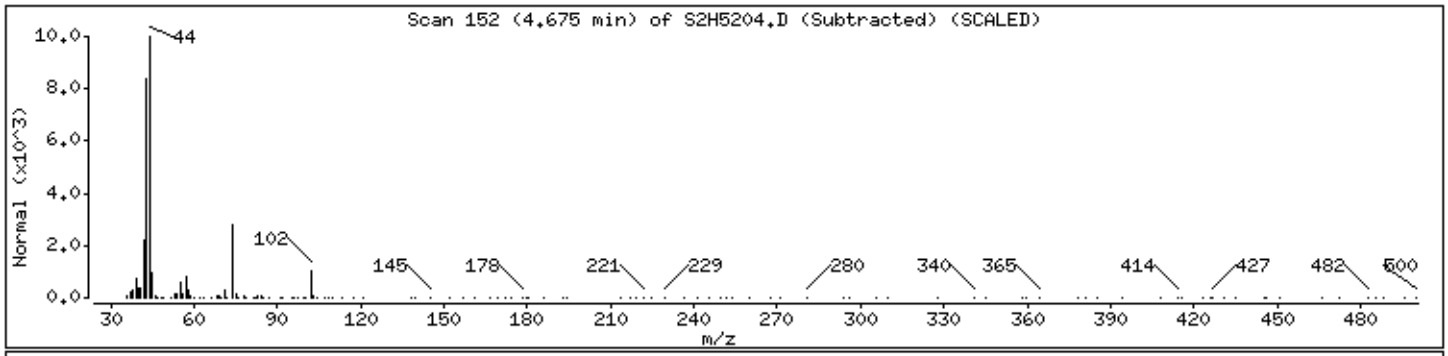
Client ID: H30T9 Instrument: S2.i

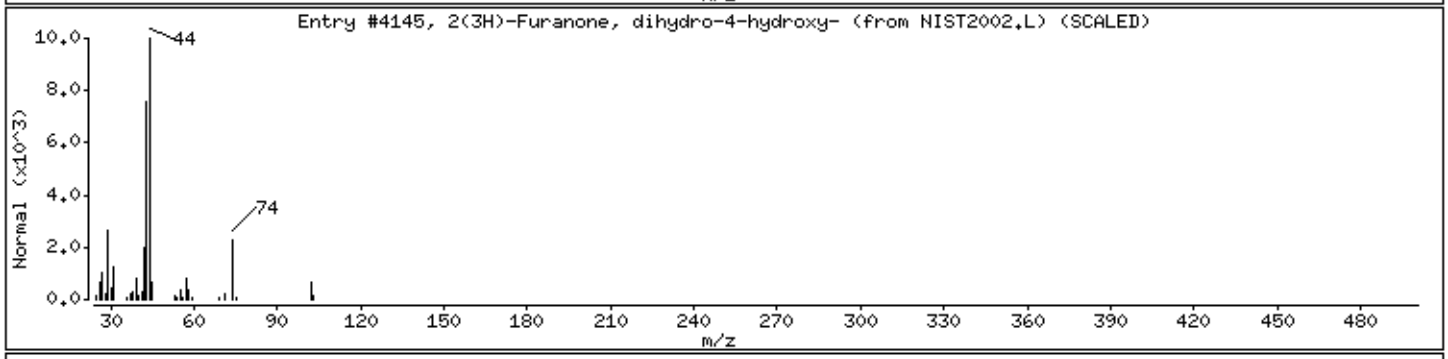
Sample Info: K2200-02B,,62636,,

Volume Injected (uL): 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	91	C4H6O3	102





Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5204.D

Date : 03-NOV-2011 16:26

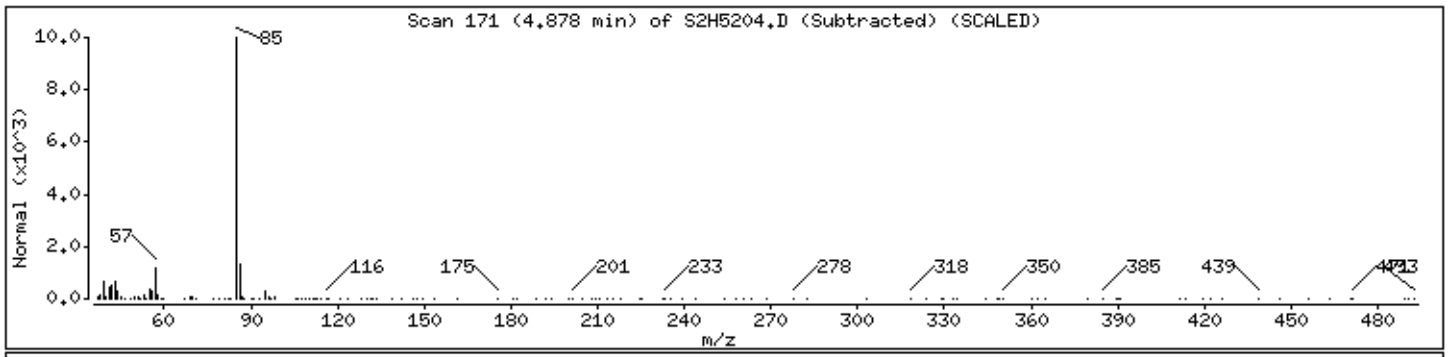
Client ID: H30T9 Instrument: S2.i

Sample Info: K2200-02B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5204.D

Date : 03-NOV-2011 16:26

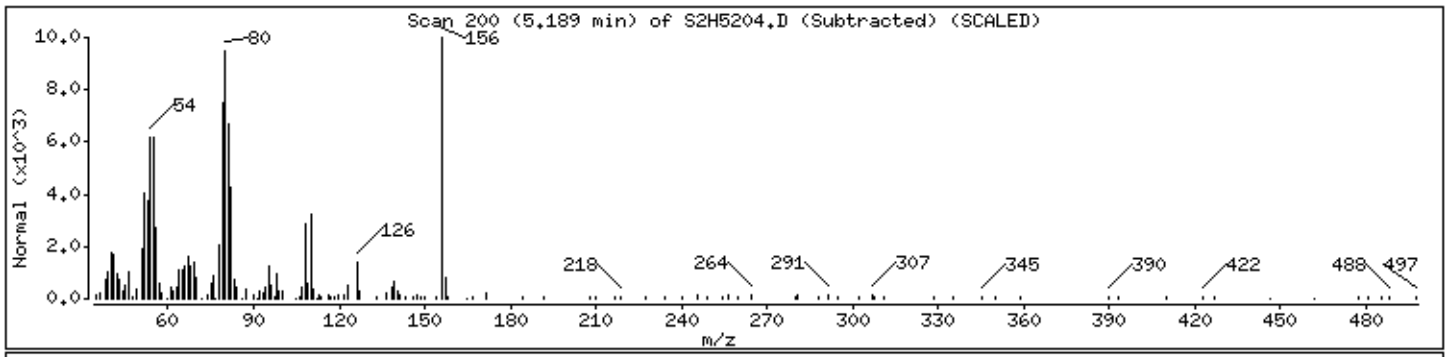
Client ID: H30T9 Instrument: S2.i

Sample Info: K2200-02B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5204.D

Date : 03-NOV-2011 16:26

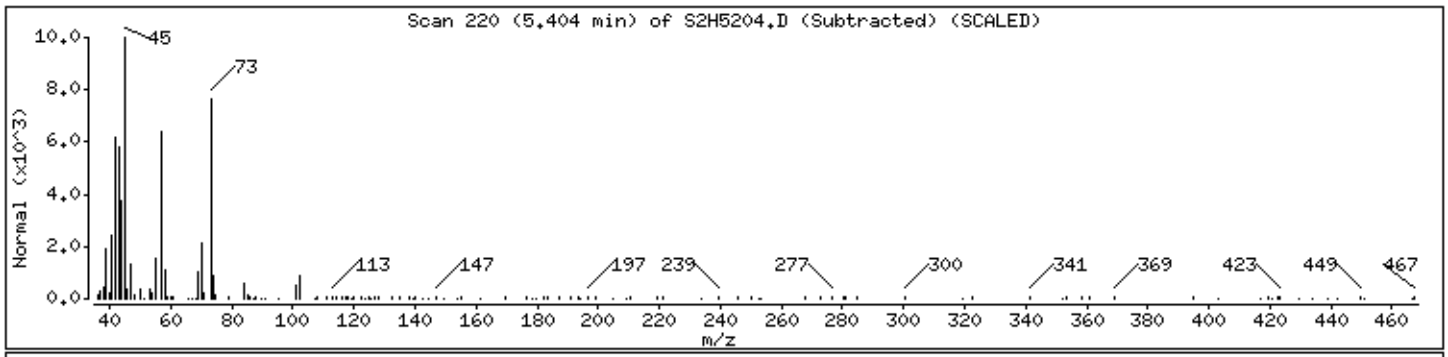
Client ID: H30T9 Instrument: S2.i

Sample Info: K2200-02B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5204.D

Date : 03-NOV-2011 16:26

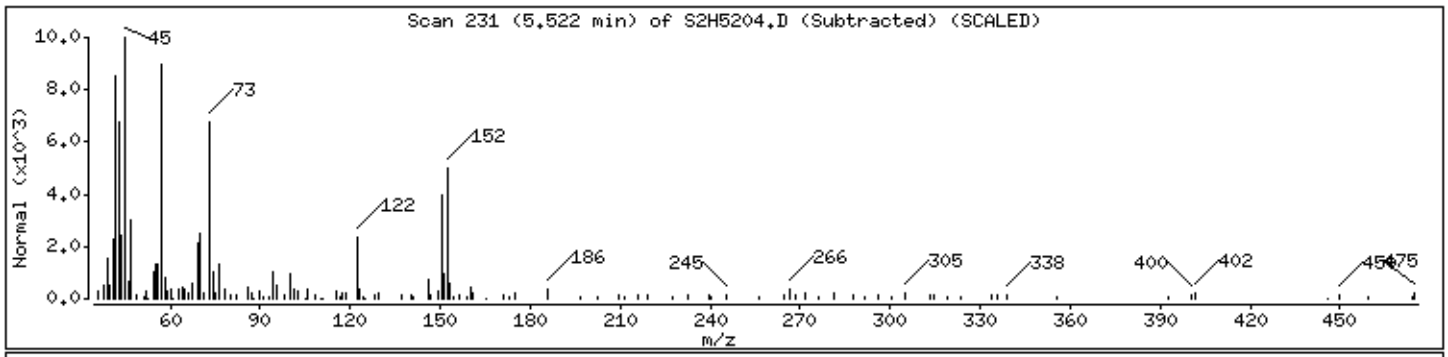
Client ID: H30T9 Instrument: S2.i

Sample Info: K2200-02B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5204.D

Date : 03-NOV-2011 16:26

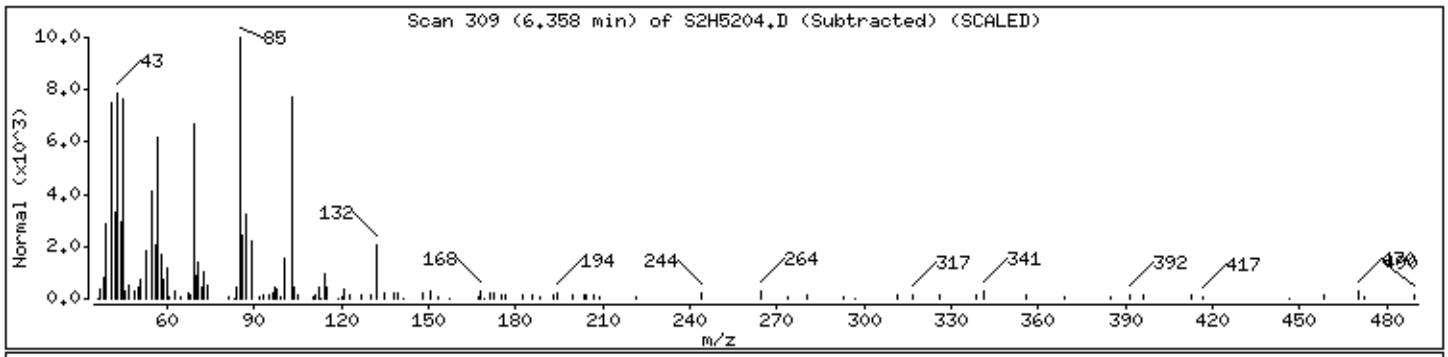
Client ID: H30T9 Instrument: S2.i

Sample Info: K2200-02B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5204.D

Date : 03-NOV-2011 16:26

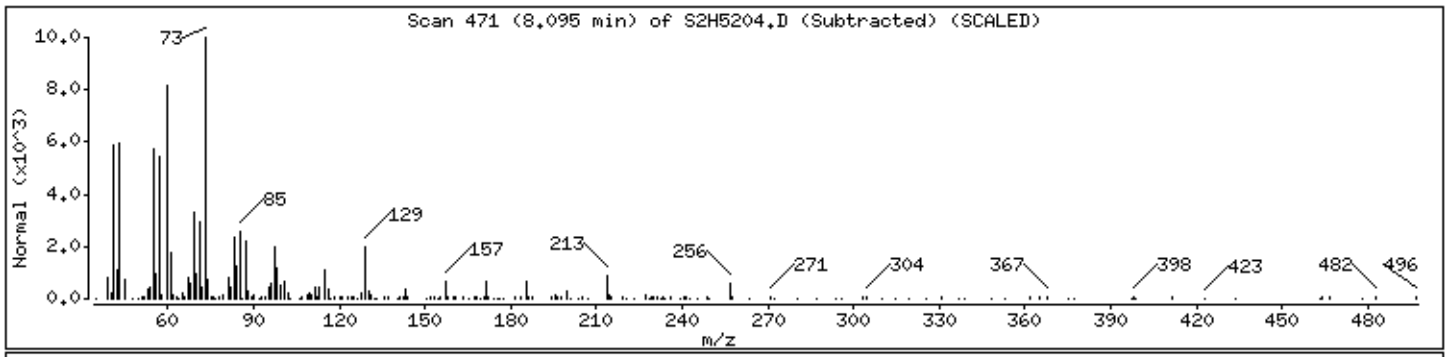
Client ID: H30T9 Instrument: S2.i

Sample Info: K2200-02B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5204.D

Date : 03-NOV-2011 16:26

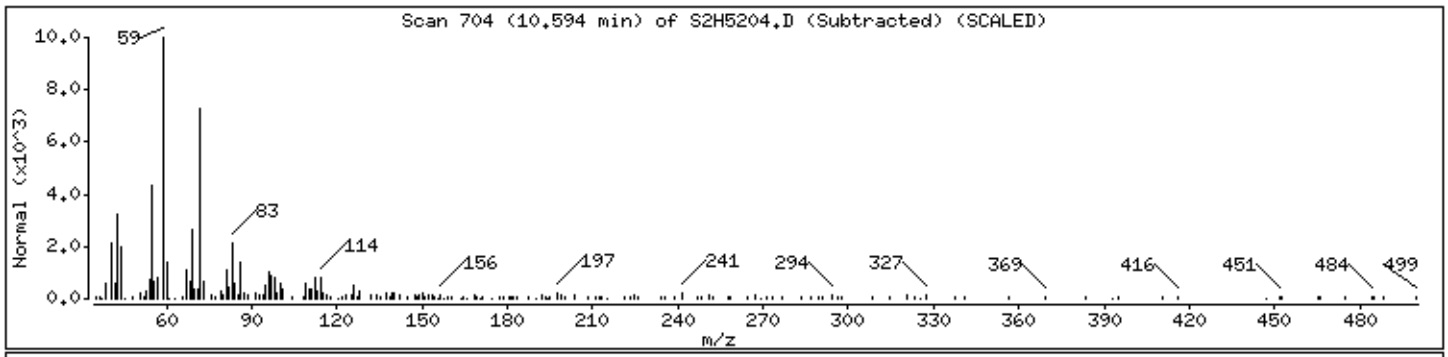
Client ID: H30T9 Instrument: S2.i

Sample Info: K2200-02B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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

CLIENT SAMPLE NO.

H30W0

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5205.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2´-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1´-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

H30W0

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5205.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3´-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

H30W0

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5205.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.671	6.5	BNJ
02		Unknown-01	4.874	4.6	J
03		Unknown-02	5.185	2.2	J
04		Unknown-03	5.400	5.9	J
05		Unknown-04	5.496	2.1	J
06		Unknown-05	6.354	3.4	J
07		Unknown-06	8.102	3.7	J
08		Unknown-07	10.622	3.8	J
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5205.D
Report Date: 07-Nov-2011 14:01

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5205.D
Lab Smp Id: K2200-03B Client Smp ID: H30W0
Inj Date : 03-NOV-2011 16:47
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-03B,,62636,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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 * (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)
$	2 Phenol-d5	71	3.566	3.565	(0.917)	208975	55.5126	28
$	4 bis(2-Chloroethyl)ether-d8	67	3.619	3.619	(0.931)	292805	56.4461	28
$	6 2-Chlorophenol-d4	132	3.694	3.694	(0.950)	193737	59.4926	30
*	8 1,4-Dichlorobenzene-d4	152	3.887	3.887	(1.000)	119545	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.198	4.198	(1.080)	310247	60.7901	30
$	16 Nitrobenzene-d5	128	4.348	4.348	(0.879)	99073	49.5271	25
$	19 2-Nitrophenol-d4	143	4.617	4.616	(0.933)	123676	56.0054	28
$	23 2,4-Dichlorophenol-d3	165	4.820	4.820	(0.974)	230007	57.0559	29
*	25 Naphthalene-d8	136	4.949	4.948	(1.000)	384113	40.0000	
$	27 4-Chloroaniline-d4	131	5.003	5.002	(1.011)	114981	32.1230	16(Q)
$	40 Dimethylphthalate-d6	166	6.171	6.171	(0.962)	606548	61.0520	31
$	43 Acenaphthylene-d8	160	6.289	6.289	(0.980)	677930	52.4745	26
*	46 Acenaphthene-d10	164	6.418	6.418	(1.000)	270205	40.0000	
$	49 4-Nitrophenol-d4	143	6.504	6.503	(1.013)	79567	55.5732	28
$	54 Fluorene-d10	176	6.847	6.847	(1.067)	490748	53.7750	27
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.901	6.900	(0.903)	118383	64.6534	32(Q)
*	65 Phenanthrene-d10	188	7.641	7.640	(1.000)	469230	40.0000	
$	67 Anthracene-d10	188	7.683	7.694	(1.006)	689594	51.4480	26
$	72 Pyrene-d10	212	8.831	8.820	(0.893)	635708	68.0049	34
*	77 Chrysene-d12	240	9.893	9.871	(1.000)	296739	40.0000	(Q)
$	83 Benzo(a)pyrene-d12	264	11.169	11.147	(0.978)	207558	51.7306	26(H)

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5205.D
Report Date: 07-Nov-2011 14:01

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)	
* 85 Perylene-d12	264	11.254	11.233	(1.000)	163510	40.0000		(QH)

QC Flag Legend

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

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5205.D
Report Date: 07-Nov-2011 14:01

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5205.D
Lab Smp Id: K2200-03B Client Smp ID: H30W0
Inj Date : 03-NOV-2011 16:47
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-03B,,62636,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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 * (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

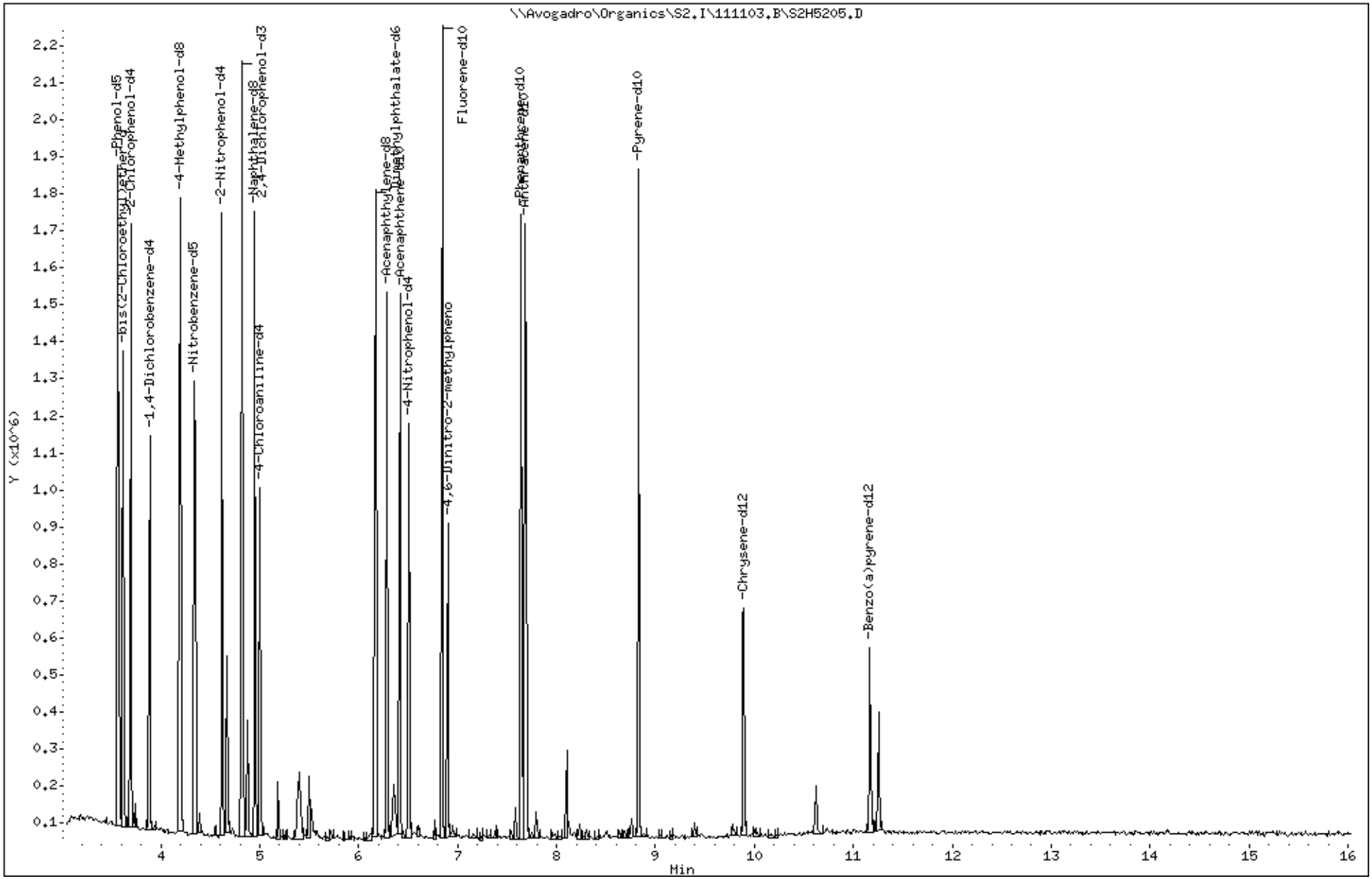
ISTD	RT	AREA	AMOUNT
* 25 Naphthalene-d8	4.949	1302558	40.000
* 46 Acenaphthene-d10	6.419	1437827	40.000
* 65 Phenanthrene-d10	7.641	1361346	40.000
* 77 Chrysene-d12	9.893	816120	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
2(3H)-Furanone, dihydro-4-hydroxy-				CAS #: 5469-16-9			
4.671	422591	12.9772611	6.5	90	NIST2002.L	4145	25
Unknown				CAS #:			
4.874	298054	9.15288215	4.6	0		0	25
Unknown				CAS #:			
5.185	144555	4.43911102	2.2	0		0	25

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5205.D
Report Date: 07-Nov-2011 14:01

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
5.400	387442	11.8978909	5.9	0		0	25
Unknown				CAS #:			
5.496	139917	4.29667245	2.1	0		0	25
Unknown				CAS #:			
6.354	245442	6.82814264	3.4	0		0	46
Unknown				CAS #:			
8.102	251649	7.39413215	3.7	0		0	65
Unknown				CAS #:			
10.622	155378	7.61546363	3.8	0		0	77

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5205.D
Date : 03-NOV-2011 16:47
Client ID: H30W0
Instrument: S2.i
Sample Info: K2200-03B,,62636,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5205.D

Date : 03-NOV-2011 16:47

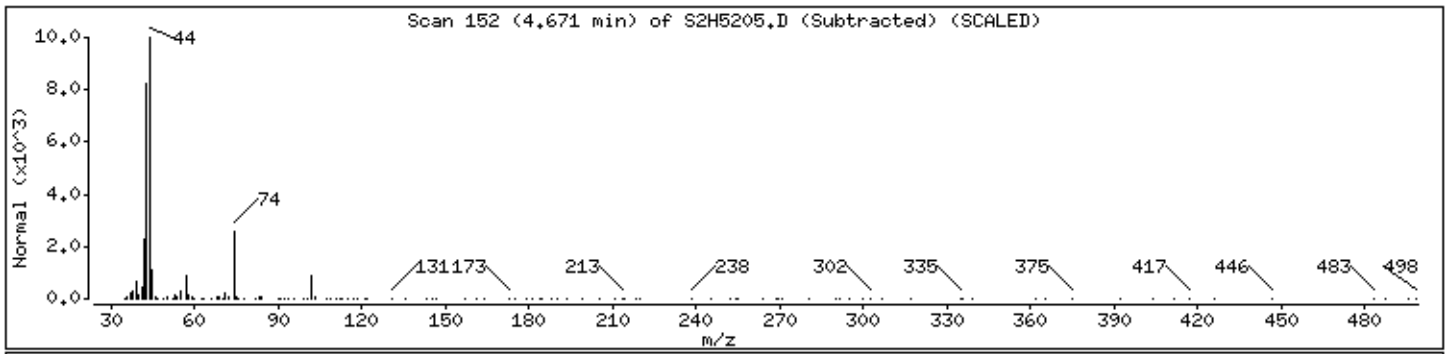
Client ID: H30W0 Instrument: S2.i

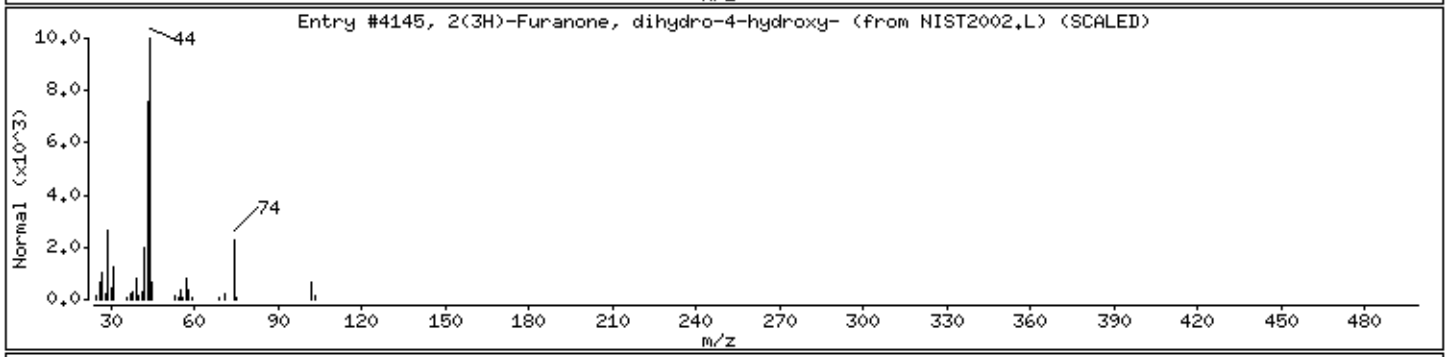
Sample Info: K2200-03B,,62636,,

Volume Injected (uL): 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\111103.B\S2H5205.D

Date : 03-NOV-2011 16:47

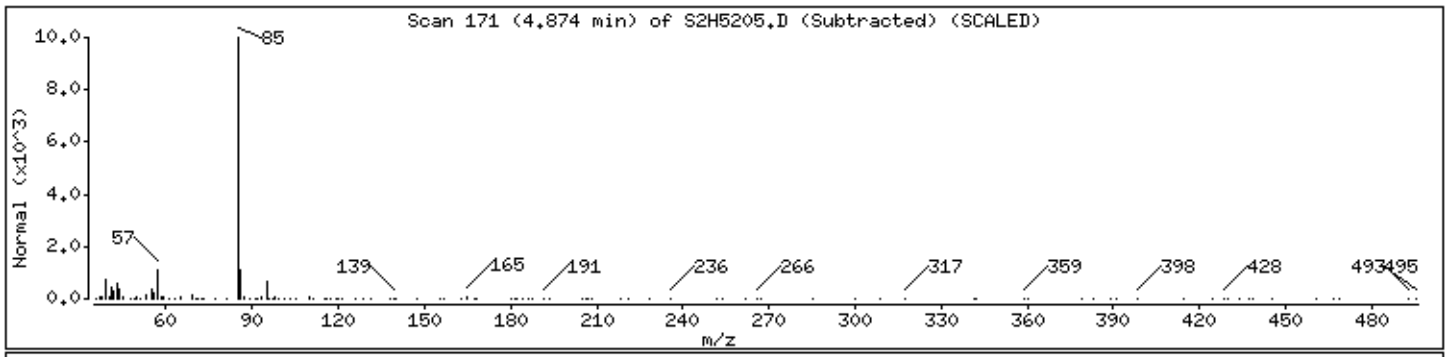
Client ID: H30W0 Instrument: S2.i

Sample Info: K2200-03B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5205.D

Date : 03-NOV-2011 16:47

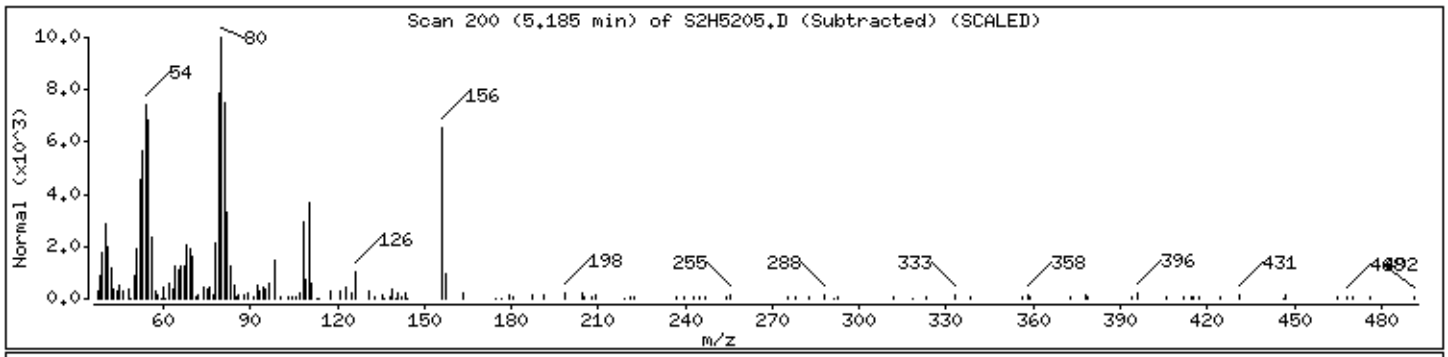
Client ID: H30W0 Instrument: S2.i

Sample Info: K2200-03B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5205.D

Date : 03-NOV-2011 16:47

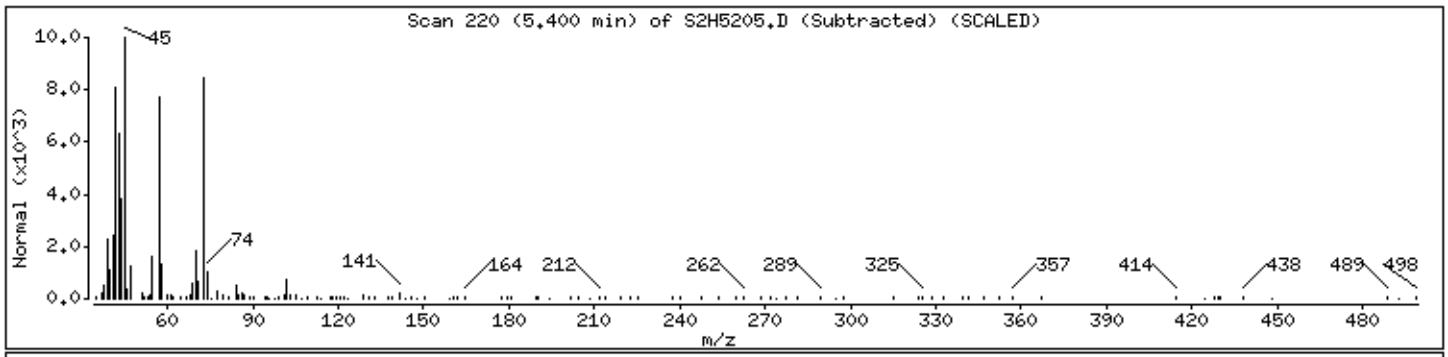
Client ID: H30W0 Instrument: S2.i

Sample Info: K2200-03B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5205.D

Date : 03-NOV-2011 16:47

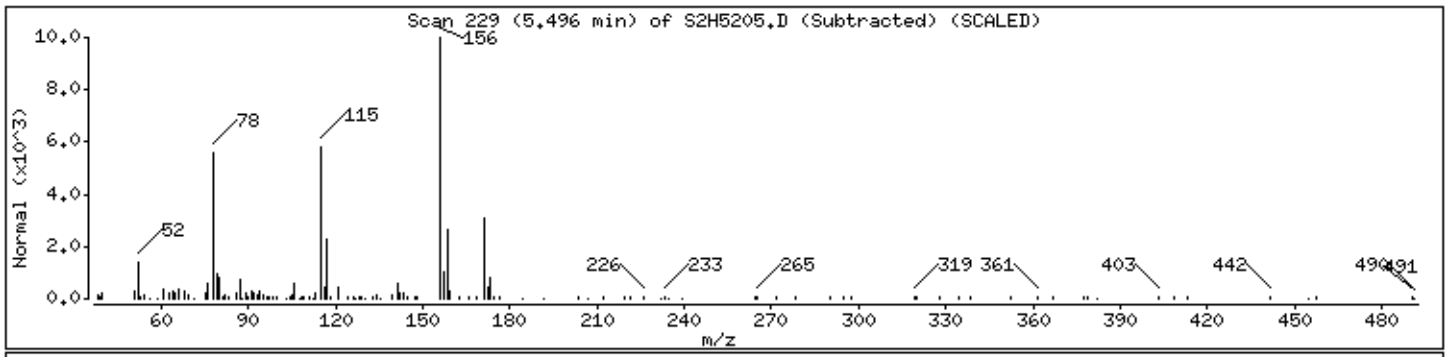
Client ID: H30W0 Instrument: S2.i

Sample Info: K2200-03B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5205.D

Date : 03-NOV-2011 16:47

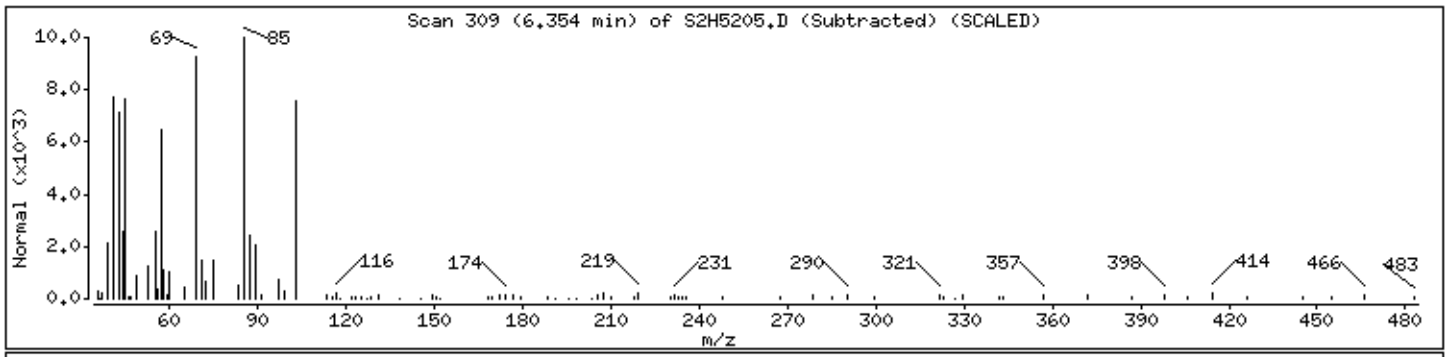
Client ID: H30W0 Instrument: S2.i

Sample Info: K2200-03B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5205.D

Date : 03-NOV-2011 16:47

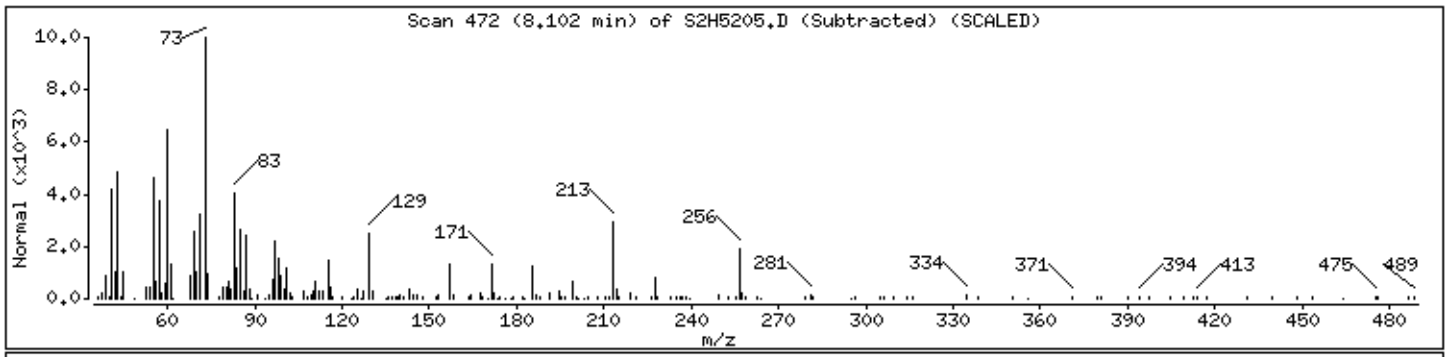
Client ID: H30W0 Instrument: S2.i

Sample Info: K2200-03B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5205.D

Date : 03-NOV-2011 16:47

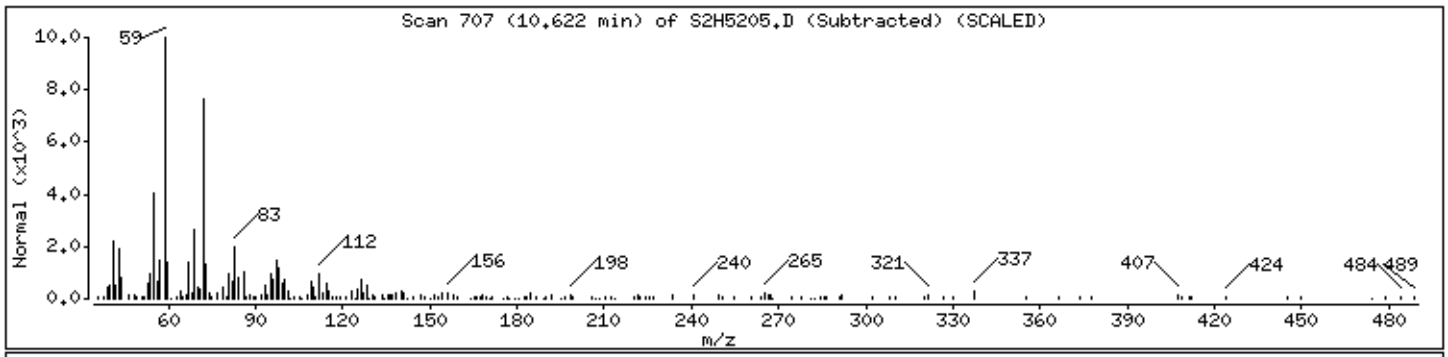
Client ID: H30W0 Instrument: S2.i

Sample Info: K2200-03B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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

CLIENT SAMPLE NO.

H30W1

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-04B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5226.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/04/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2´-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1´-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

H30W1

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-04B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5226.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/04/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3´-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

H30W1

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-04B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5226.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/04/2011

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	4.602	8.9	J
02		Unknown-02	4.817	5.0	J
03		Unknown-03	5.106	7.6	J
04		Unknown-04	5.331	5.8	J
05		Unknown-05	5.374	9.7	J
06		Unknown-06	5.439	14	J
07		Unknown-07	5.524	4.4	J
08		Unknown-08	7.734	2.2	J
09		Unknown-09	8.045	3.4	J
10	301-02-0	9-Octadecenamide, (Z)-	10.618	6.5	BNJ
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5226.D
Report Date: 07-Nov-2011 13:26

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111104.B\S2H5226.D
Lab Smp Id: K2200-04B Client Smp ID: H30W1
Inj Date : 04-NOV-2011 13:30
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-04B,,62636,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111104.B\S2_SOM.m
Meth Date : 07-Nov-2011 13:26 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 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	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
$	2 Phenol-d5	71	3.497	3.500	(0.916)	110500	31.6348	16(Q)
$	4 bis(2-Chloroethyl)ether-d8	67	3.551	3.554	(0.930)	284712	59.1517	30
$	6 2-Chlorophenol-d4	132	3.626	3.629	(0.949)	180927	59.8770	30
*	8 1,4-Dichlorobenzene-d4	152	3.819	3.822	(1.000)	110924	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.130	4.133	(1.081)	244097	51.5458	26(Q)
$	16 Nitrobenzene-d5	128	4.280	4.283	(0.877)	100265	64.3326	32
$	19 2-Nitrophenol-d4	143	4.548	4.551	(0.932)	99383	57.7631	29
$	23 2,4-Dichlorophenol-d3	165	4.752	4.755	(0.974)	187484	59.6923	30
*	25 Naphthalene-d8	136	4.881	4.884	(1.000)	299271	40.0000	
$	27 4-Chloroaniline-d4	131	4.934	4.937	(1.011)	27075	9.70850	4.9(aQ)
$	40 Dimethylphthalate-d6	166	6.103	6.106	(0.961)	416634	47.2452	24
$	43 Acenaphthylene-d8	160	6.221	6.224	(0.980)	299839	26.1469	13(R)
*	46 Acenaphthene-d10	164	6.350	6.353	(1.000)	239842	40.0000	
$	49 4-Nitrophenol-d4	143	6.446	6.449	(1.015)	67895	53.4242	27
$	54 Fluorene-d10	176	6.779	6.782	(1.068)	348236	42.9896	21
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.832	6.835	(0.902)	82806	59.4695	30(Q)
*	65 Phenanthrene-d10	188	7.572	7.575	(1.000)	356825	40.0000	
$	67 Anthracene-d10	188	7.626	7.629	(1.007)	280829	27.5517	14(R)
$	72 Pyrene-d10	212	8.773	8.776	(0.890)	276019	37.4314	19(R)
*	77 Chrysene-d12	240	9.856	9.881	(1.000)	234078	40.0000	(Q)
$	83 Benzo(a)pyrene-d12	264	11.143	11.189	(0.992)	79234	23.7394	12(RH)

Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5226.D
Report Date: 07-Nov-2011 13:26

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
* 85 Perylene-d12	264	11.229	11.275	(1.000)	136017	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\111104.B\S2H5226.D
Report Date: 07-Nov-2011 13:26

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111104.B\S2H5226.D
Lab Smp Id: K2200-04B Client Smp ID: H30W1
Inj Date : 04-NOV-2011 13:30
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-04B,,62636,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111104.B\S2_SOM.m
Meth Date : 07-Nov-2011 13:26 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 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

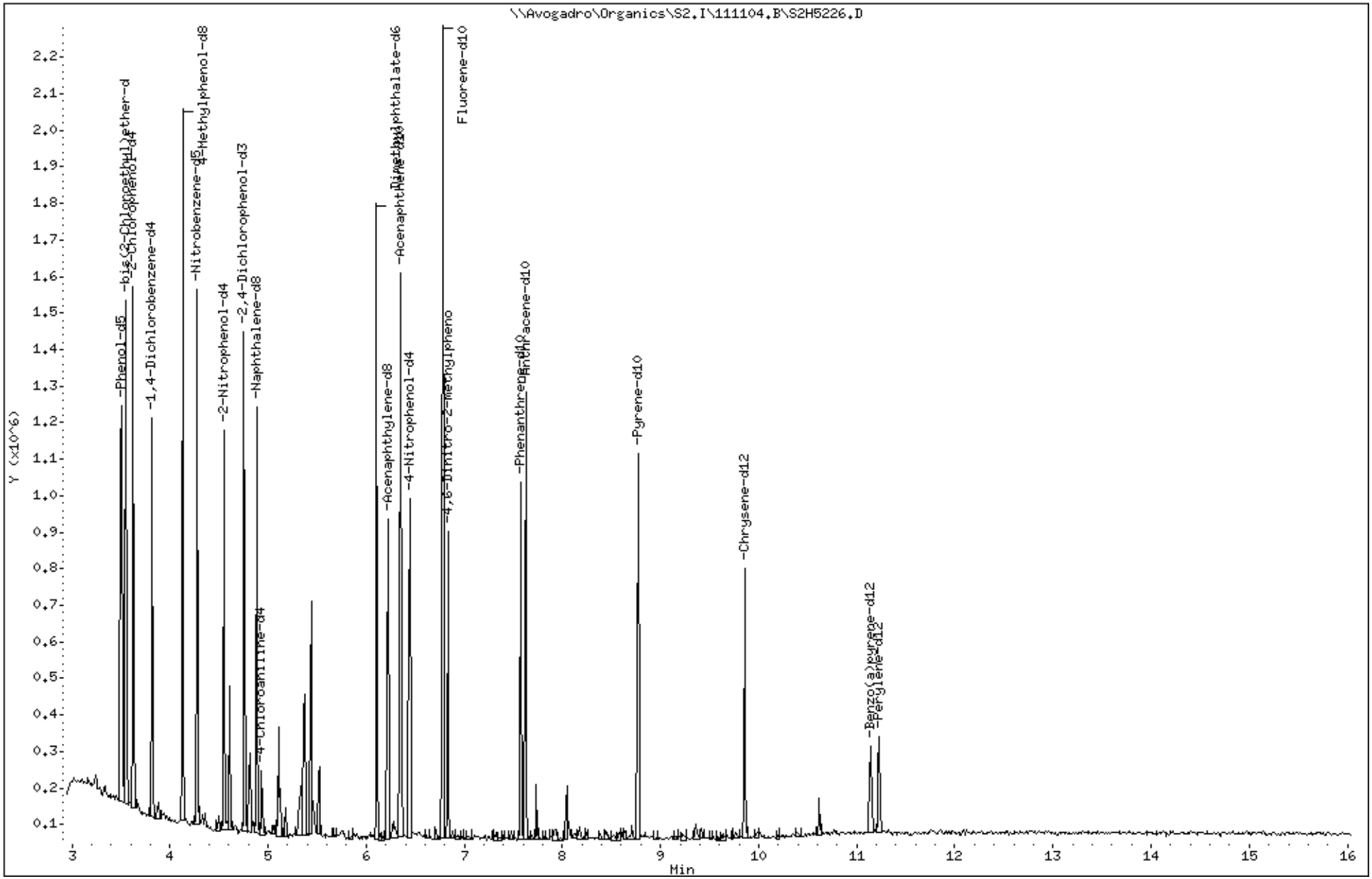
ISTD	RT	AREA	AMOUNT
* 25 Naphthalene-d8	4.881	1023534	40.000
* 65 Phenanthrene-d10	7.573	1016586	40.000
* 85 Perylene-d12	11.229	340960	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.602	457789	17.8905263	8.9	0	0		25
Unknown				CAS #:			
4.817	256437	10.0216225	5.0	0	0		25
Unknown				CAS #:			
5.106	391368	15.2947728	7.6	0	0		25
Unknown				CAS #:			
5.331	295922	11.5647203	5.8	0	0		25

Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5226.D
Report Date: 07-Nov-2011 13:26

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
5.374	496027	19.3848414	9.7	0		0	25
Unknown				CAS #:			
5.439	710254	27.7568856	14	0		0	25
Unknown				CAS #:			
5.524	226040	8.83371175	4.4	0		0	25
Unknown				CAS #:			
7.734	112440	4.42420771	2.2	0		0	65
Unknown				CAS #:			
8.045	172533	6.78870301	3.4	0		0	65
9-Octadecenamide, (Z)-				CAS #: 301-02-0			
10.618	111479	13.0781809	6.5	91	NIST2002.L	106877	85

Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5226.D
Date : 04-NOV-2011 13:30
Client ID: H30W1
Instrument: S2.i
Sample Info: K2200-04B,,62636,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



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Date : 04-NOV-2011 13:30

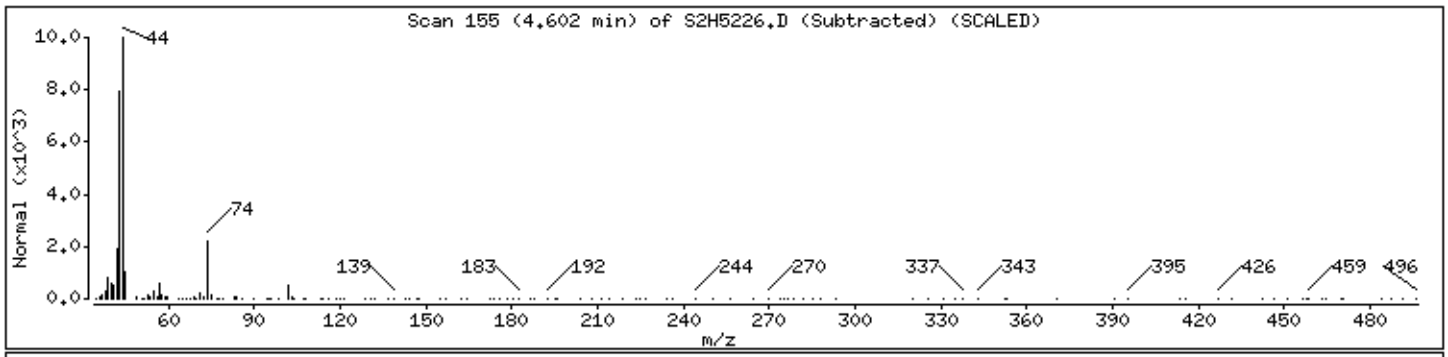
Client ID: H30W1 Instrument: S2.i

Sample Info: K2200-04B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111104.B\S2H5226.D

Date : 04-NOV-2011 13:30

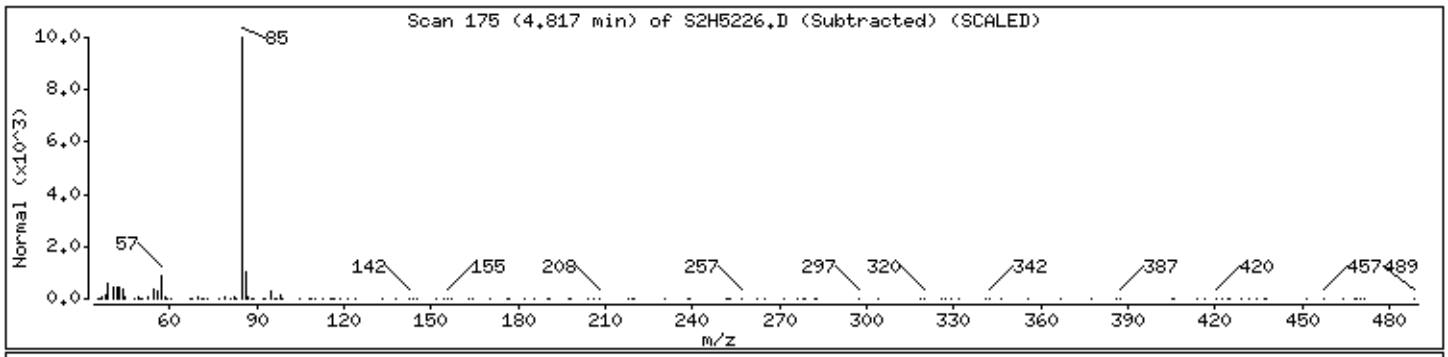
Client ID: H30W1 Instrument: S2.i

Sample Info: K2200-04B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111104.B\S2H5226.D

Date : 04-NOV-2011 13:30

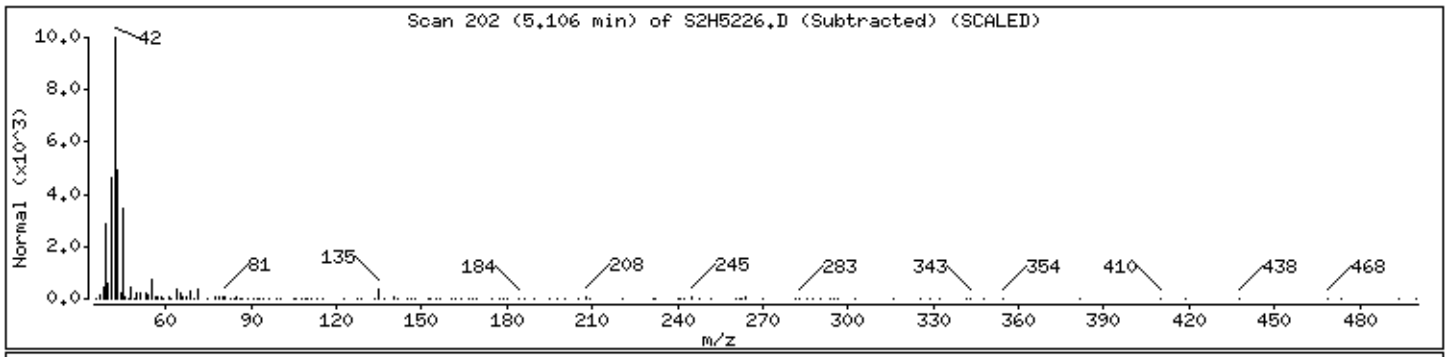
Client ID: H30W1 Instrument: S2.i

Sample Info: K2200-04B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 04-NOV-2011 13:30

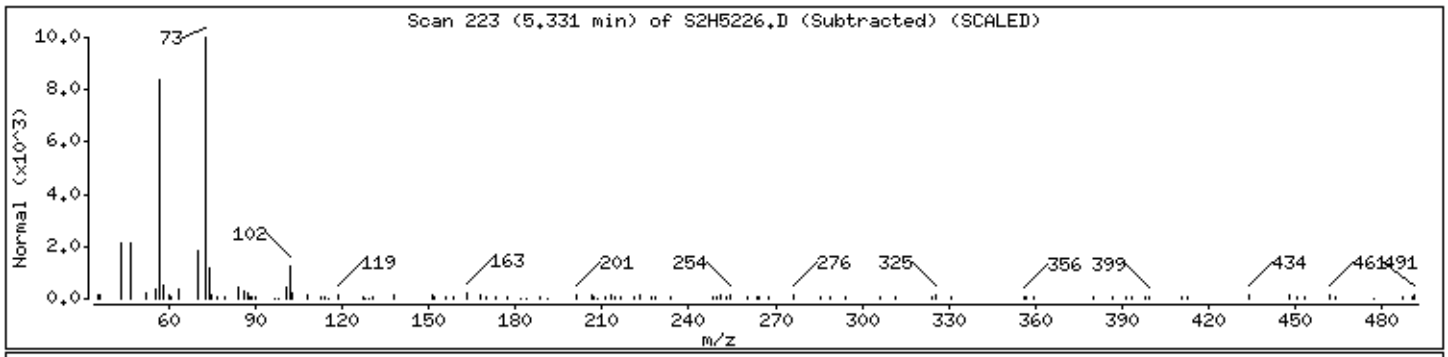
Client ID: H30W1 Instrument: S2.i

Sample Info: K2200-04B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 04-NOV-2011 13:30

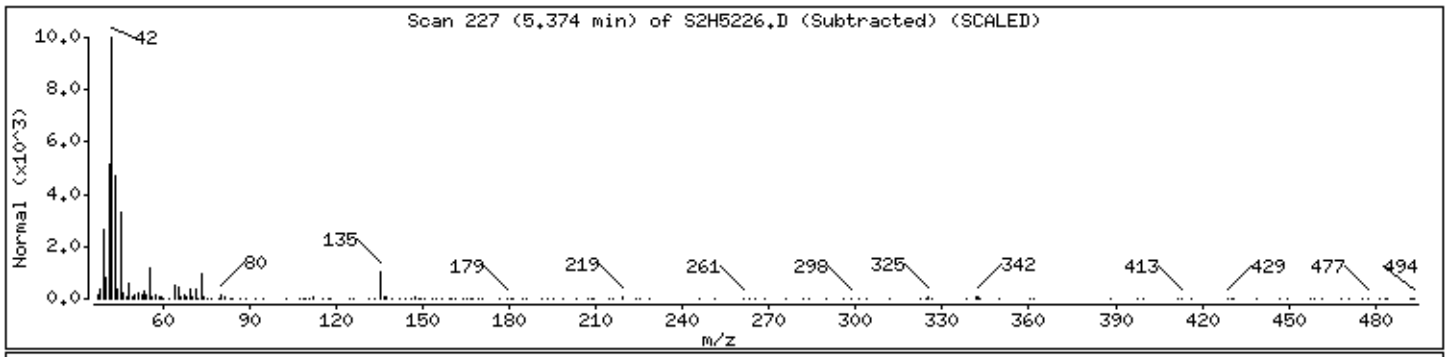
Client ID: H30W1 Instrument: S2.i

Sample Info: K2200-04B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111104.B\S2H5226.D

Date : 04-NOV-2011 13:30

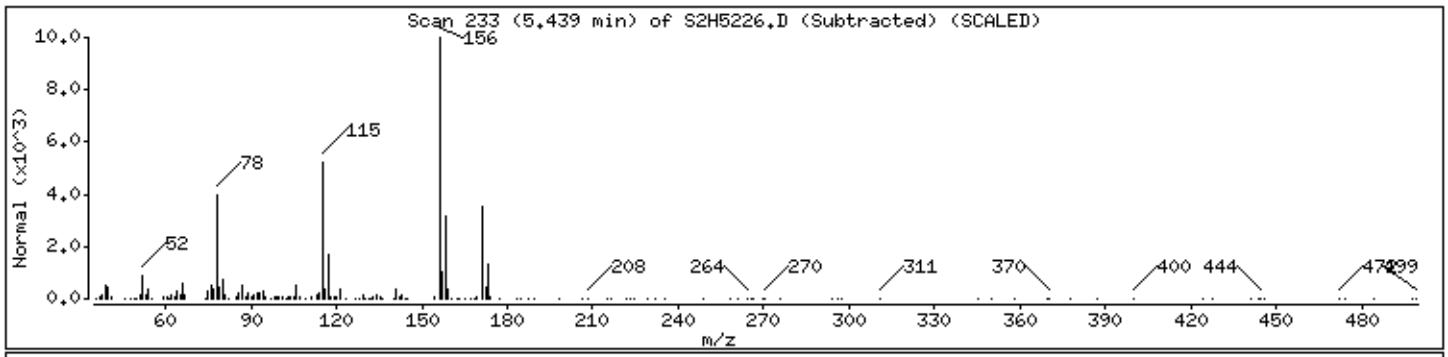
Client ID: H30W1 Instrument: S2.i

Sample Info: K2200-04B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111104.B\S2H5226.D

Date : 04-NOV-2011 13:30

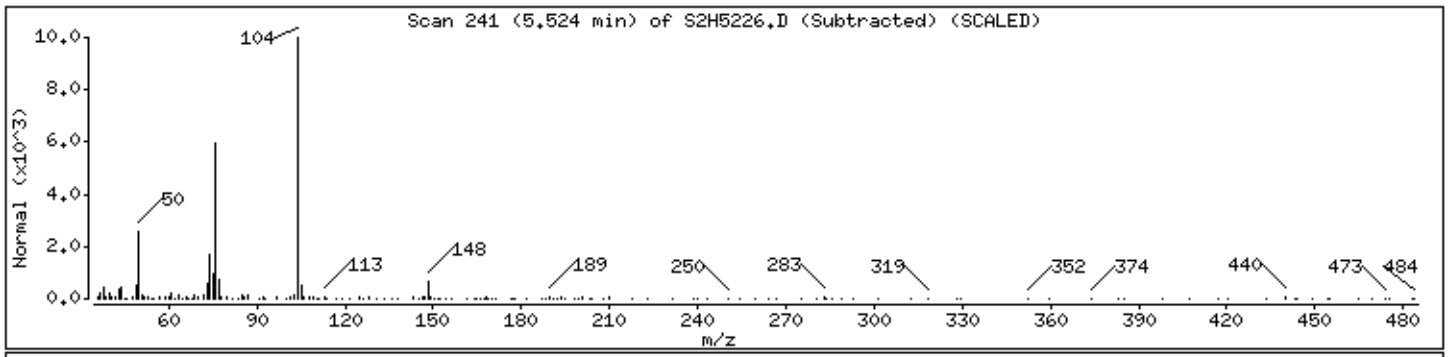
Client ID: H30W1 Instrument: S2.i

Sample Info: K2200-04B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111104.B\S2H5226.D

Date : 04-NOV-2011 13:30

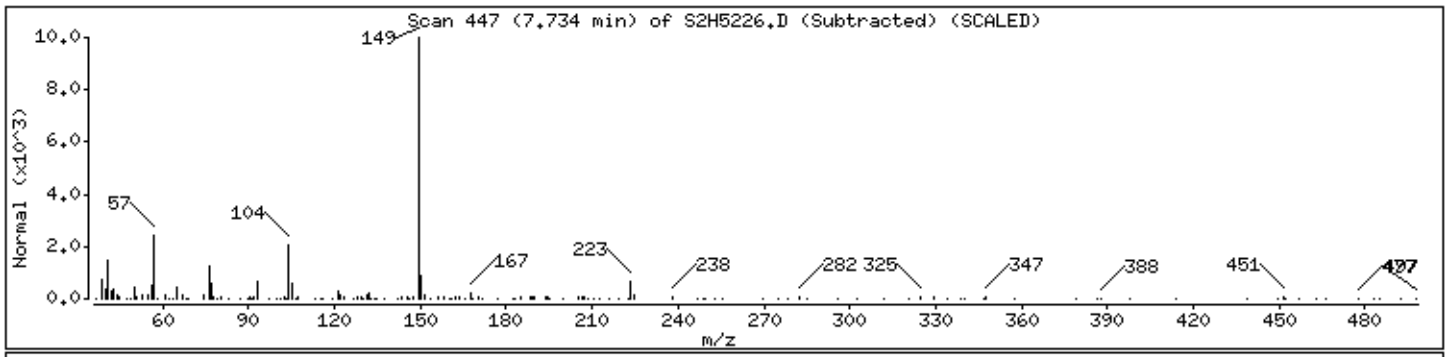
Client ID: H30W1 Instrument: S2.i

Sample Info: K2200-04B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111104.B\S2H5226.D

Date : 04-NOV-2011 13:30

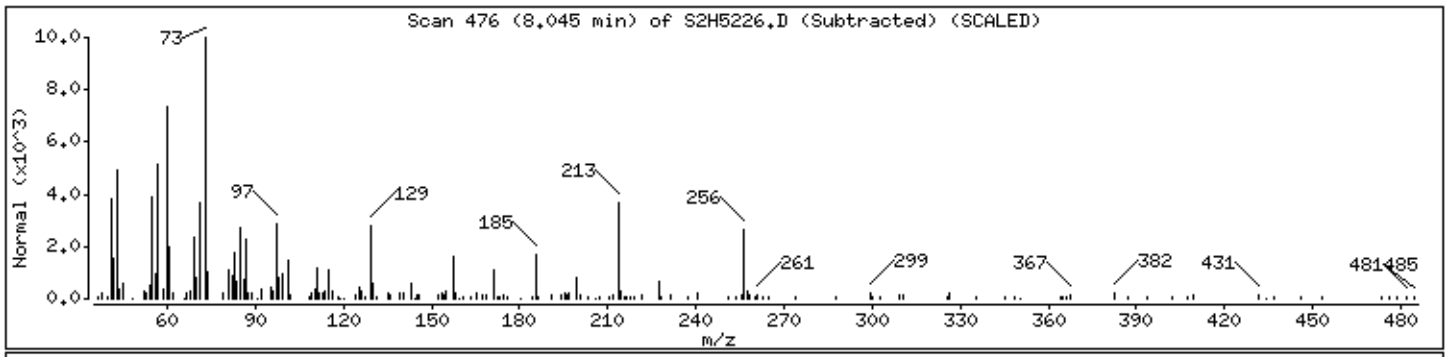
Client ID: H30W1 Instrument: S2.i

Sample Info: K2200-04B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111104.B\S2H5226.D

Date : 04-NOV-2011 13:30

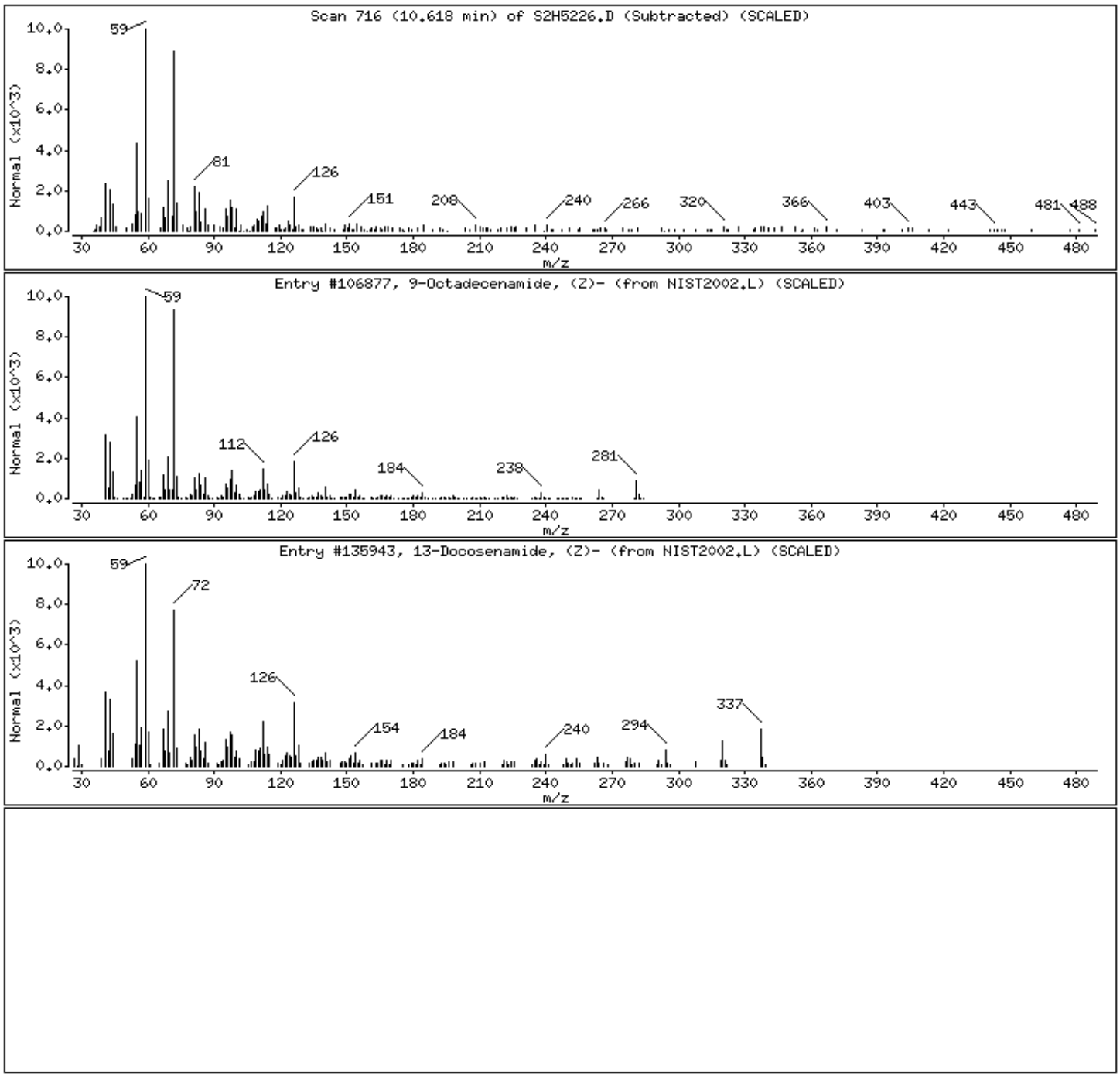
Client ID: H30W1 Instrument: S2.i

Sample Info: K2200-04B,,62636,,

Volume Injected (uL): 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
13-Docosenamide, (Z)-	112-84-5	NIST2002.L	135943	87	C22H43NO	337



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

H30W2

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-05B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5207.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2´-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1´-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

H30W2

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-05B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5207.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3´-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

H30W2

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-05B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5207.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.671	6.9	BNJ
02		Unknown-01	4.874	4.4	J
03		Unknown-02	5.185	2.3	J
04		Unknown-03	5.400	6.3	J
05		Unknown-04	5.518	3.3	J
06		Unknown-05	6.354	3.5	J
07	57-10-3	n-Hexadecanoic acid	8.102	4.0	NJ
08		Unknown-06	10.665	6.3	J
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5207.D
Report Date: 07-Nov-2011 14:01

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5207.D
Lab Smp Id: K2200-05B Client Smp ID: H30W2
Inj Date : 03-NOV-2011 17:30
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-05B,,62636,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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 * (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)
$	2 Phenol-d5	71	3.566	3.565	(0.917)	202305	54.4883	27
$	4 bis(2-Chloroethyl)ether-d8	67	3.619	3.619	(0.931)	274898	53.7312	27
$	6 2-Chlorophenol-d4	132	3.694	3.694	(0.950)	177856	55.3756	28
*	8 1,4-Dichlorobenzene-d4	152	3.887	3.887	(1.000)	117905	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.198	4.198	(1.080)	296780	58.9602	29
$	16 Nitrobenzene-d5	128	4.348	4.348	(0.879)	98544	51.4698	26
$	19 2-Nitrophenol-d4	143	4.616	4.616	(0.933)	118534	56.0818	28
$	23 2,4-Dichlorophenol-d3	165	4.820	4.820	(0.974)	228713	59.2769	30
*	25 Naphthalene-d8	136	4.949	4.948	(1.000)	367641	40.0000	
$	27 4-Chloroaniline-d4	131	5.002	5.002	(1.011)	53453	15.6026	7.8(Q)
$	40 Dimethylphthalate-d6	166	6.171	6.171	(0.962)	610977	58.8434	29
$	43 Acenaphthylene-d8	160	6.289	6.289	(0.980)	689406	51.0595	26
*	46 Acenaphthene-d10	164	6.418	6.418	(1.000)	282394	40.0000	
$	49 4-Nitrophenol-d4	143	6.504	6.503	(1.013)	76710	51.2651	26
$	54 Fluorene-d10	176	6.847	6.847	(1.067)	503275	52.7673	26
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.901	6.900	(0.903)	119407	65.9625	33(Q)
*	65 Phenanthrene-d10	188	7.640	7.640	(1.000)	463896	40.0000	
$	67 Anthracene-d10	188	7.694	7.694	(1.007)	683226	51.5591	26
$	72 Pyrene-d10	212	8.831	8.820	(0.898)	613422	63.3374	32(H)
*	77 Chrysene-d12	240	9.914	9.871	(1.000)	307437	40.0000	(QH)
$	83 Benzo(a)pyrene-d12	264	11.211	11.147	(0.992)	187968	48.0832	24

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5207.D
Report Date: 07-Nov-2011 14:01

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
* 85 Perylene-d12	264	11.297	11.233	(1.000)	159310	40.0000	

QC Flag Legend

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

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5207.D
Report Date: 07-Nov-2011 14:01

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5207.D
Lab Smp Id: K2200-05B Client Smp ID: H30W2
Inj Date : 03-NOV-2011 17:30
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-05B,,62636,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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 * (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

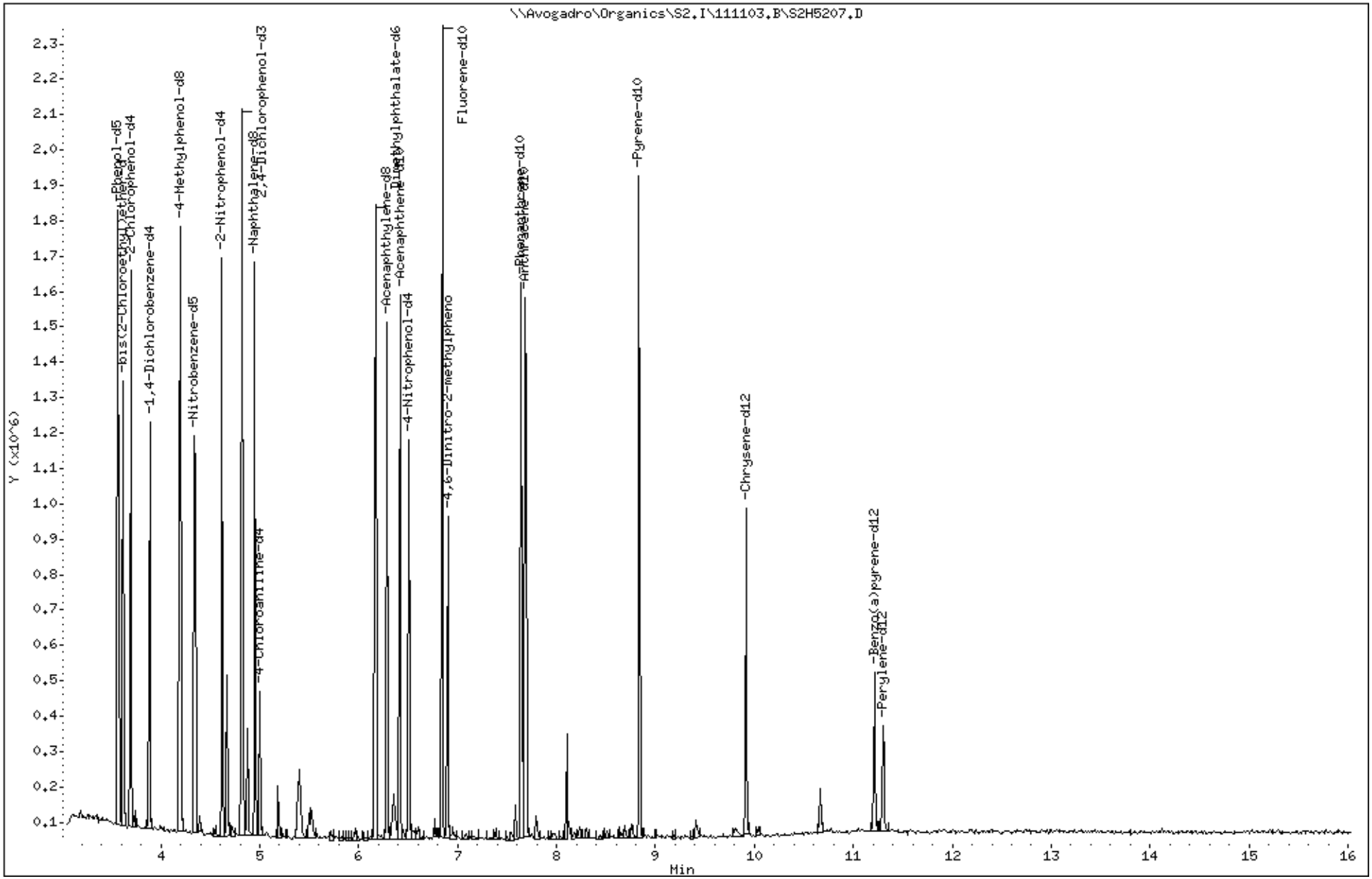
ISTD	RT	AREA	AMOUNT
* 25 Naphthalene-d8	4.949	1247652	40.000
* 46 Acenaphthene-d10	6.418	1491420	40.000
* 65 Phenanthrene-d10	7.641	1337014	40.000
* 85 Perylene-d12	11.298	411065	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
2(3H)-Furanone, dihydro-4-hydroxy-				CAS #: 5469-16-9			
4.671	429455	13.7684034	6.9	90	NIST2002.L	4145	25
Unknown				CAS #:			
4.874	277107	8.88409513	4.4	0		0	25
Unknown				CAS #:			
5.185	144241	4.62438335	2.3	0		0	25

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5207.D
Report Date: 07-Nov-2011 14:01

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
5.400	395660	12.6849473	6.3	0		0	25
Unknown				CAS #:			
5.518	208136	6.67288855	3.3	0		0	25
Unknown				CAS #:			
6.354	260449	6.98526688	3.5	0		0	46
n-Hexadecanoic acid				CAS #: 57-10-3			
8.102	265049	7.92958827	4.0	96	NIST2002.L	92227	65
Unknown				CAS #:			
10.665	128941	12.5470152	6.3	0		0	85

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5207.D
Date : 03-NOV-2011 17:30
Client ID: H30W2
Instrument: S2.i
Sample Info: K2200-05B,,62636,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5207.D

Date : 03-NOV-2011 17:30

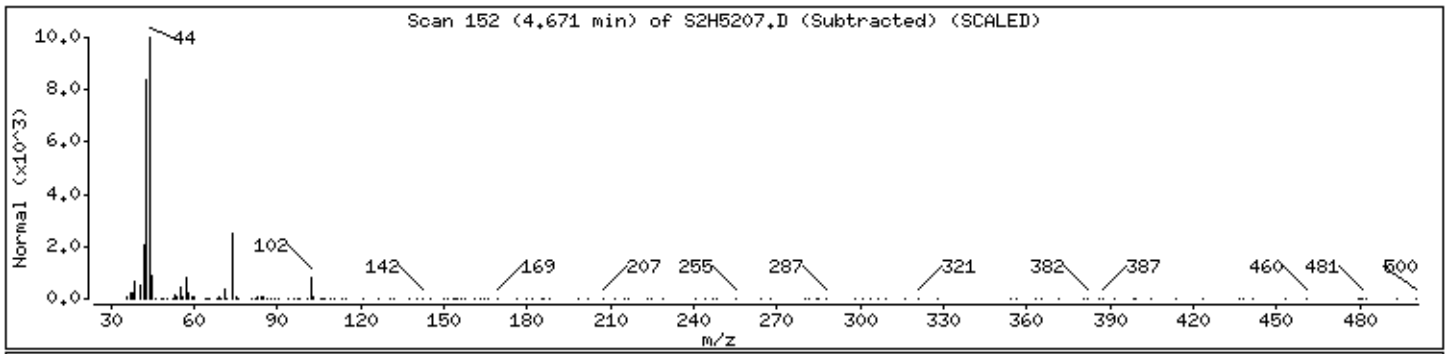
Client ID: H30W2 Instrument: S2.i

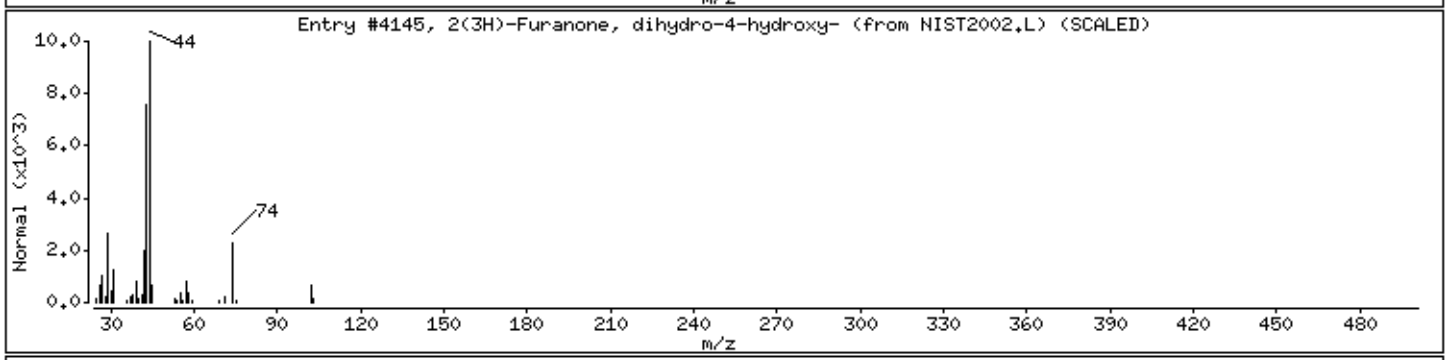
Sample Info: K2200-05B,,62636,,

Volume Injected (uL): 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\111103.B\S2H5207.D

Date : 03-NOV-2011 17:30

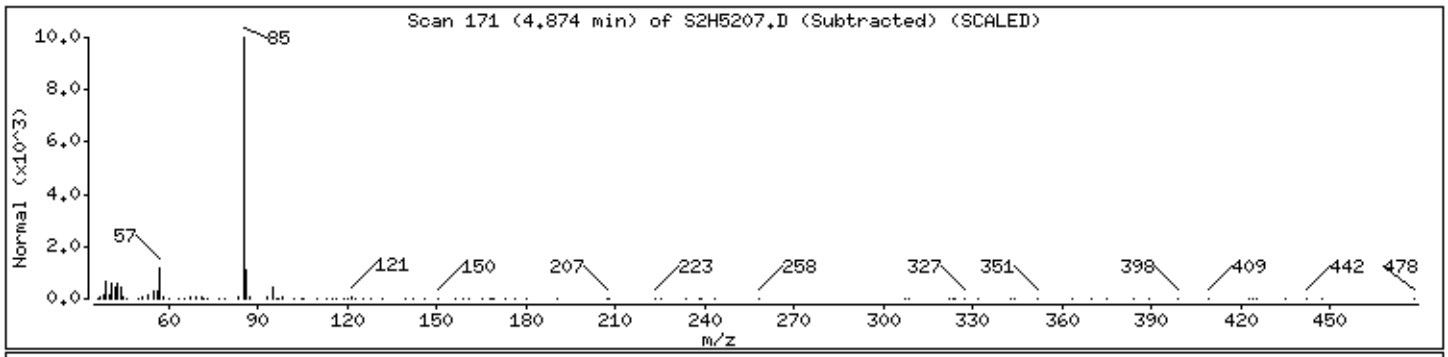
Client ID: H30W2 Instrument: S2.i

Sample Info: K2200-05B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5207.D

Date : 03-NOV-2011 17:30

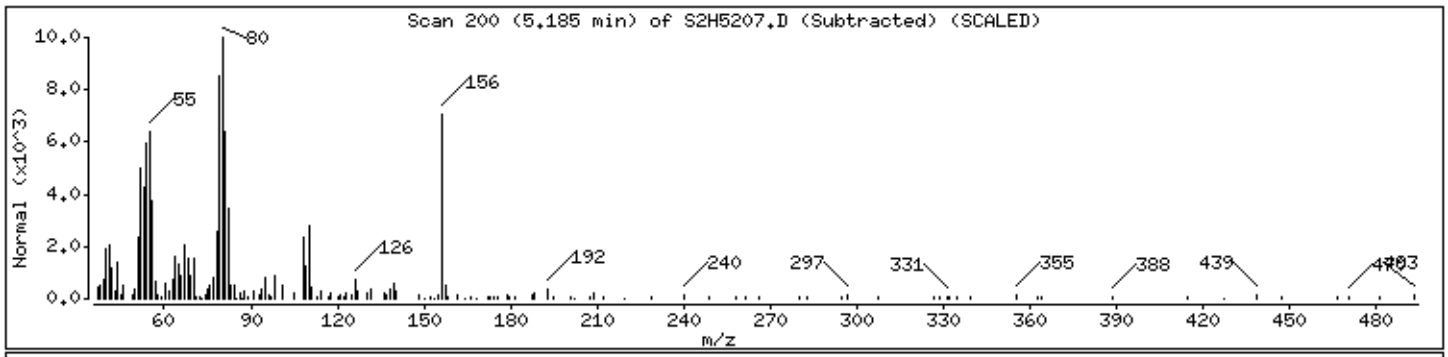
Client ID: H30W2 Instrument: S2.i

Sample Info: K2200-05B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5207.D

Date : 03-NOV-2011 17:30

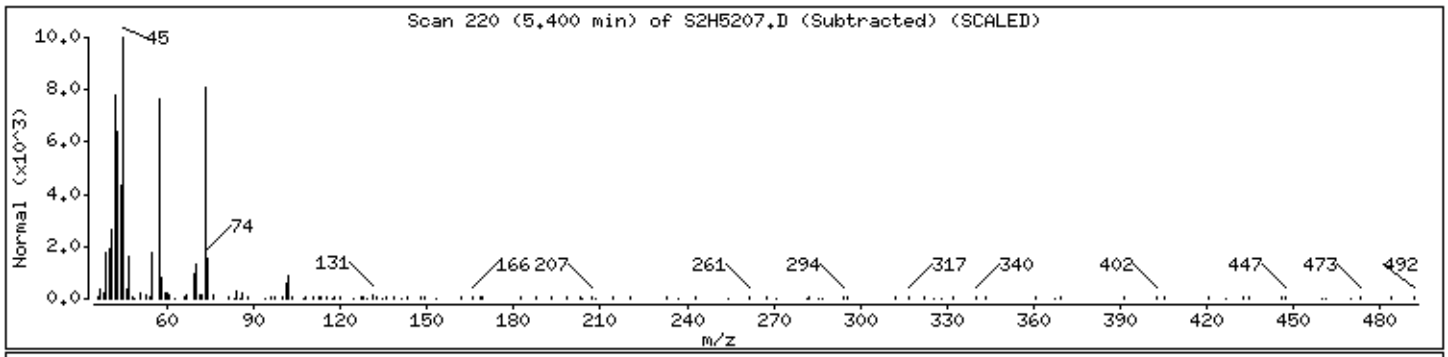
Client ID: H30W2 Instrument: S2.i

Sample Info: K2200-05B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5207.D

Date : 03-NOV-2011 17:30

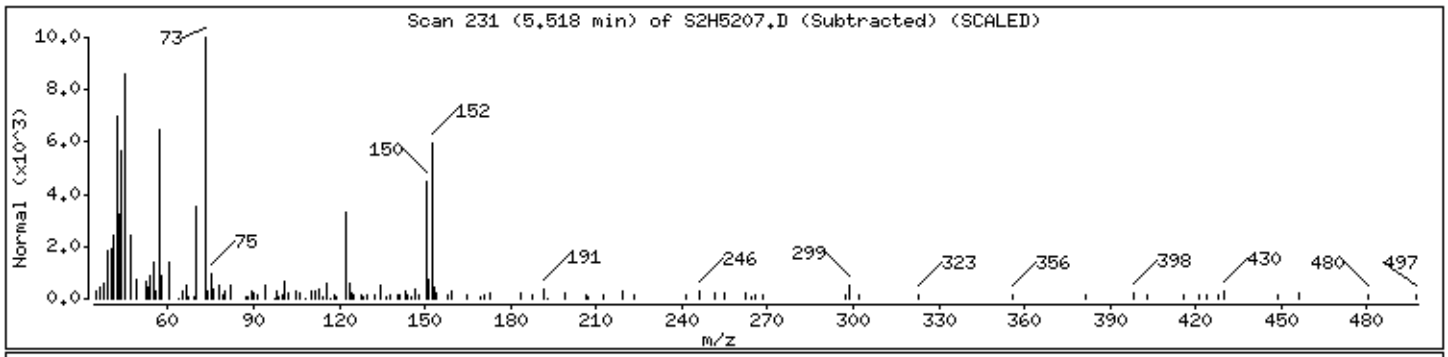
Client ID: H30W2 Instrument: S2.i

Sample Info: K2200-05B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5207.D

Date : 03-NOV-2011 17:30

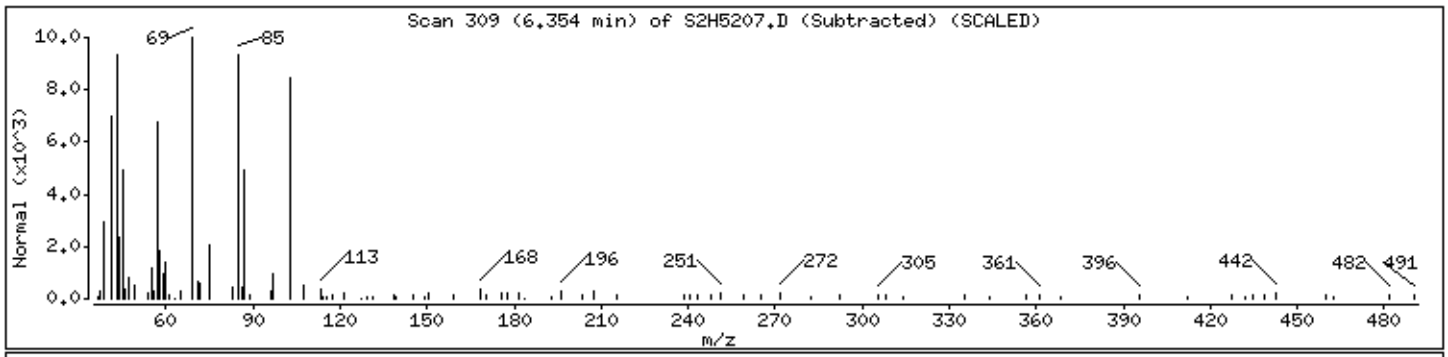
Client ID: H30W2 Instrument: S2.i

Sample Info: K2200-05B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5207.D

Date : 03-NOV-2011 17:30

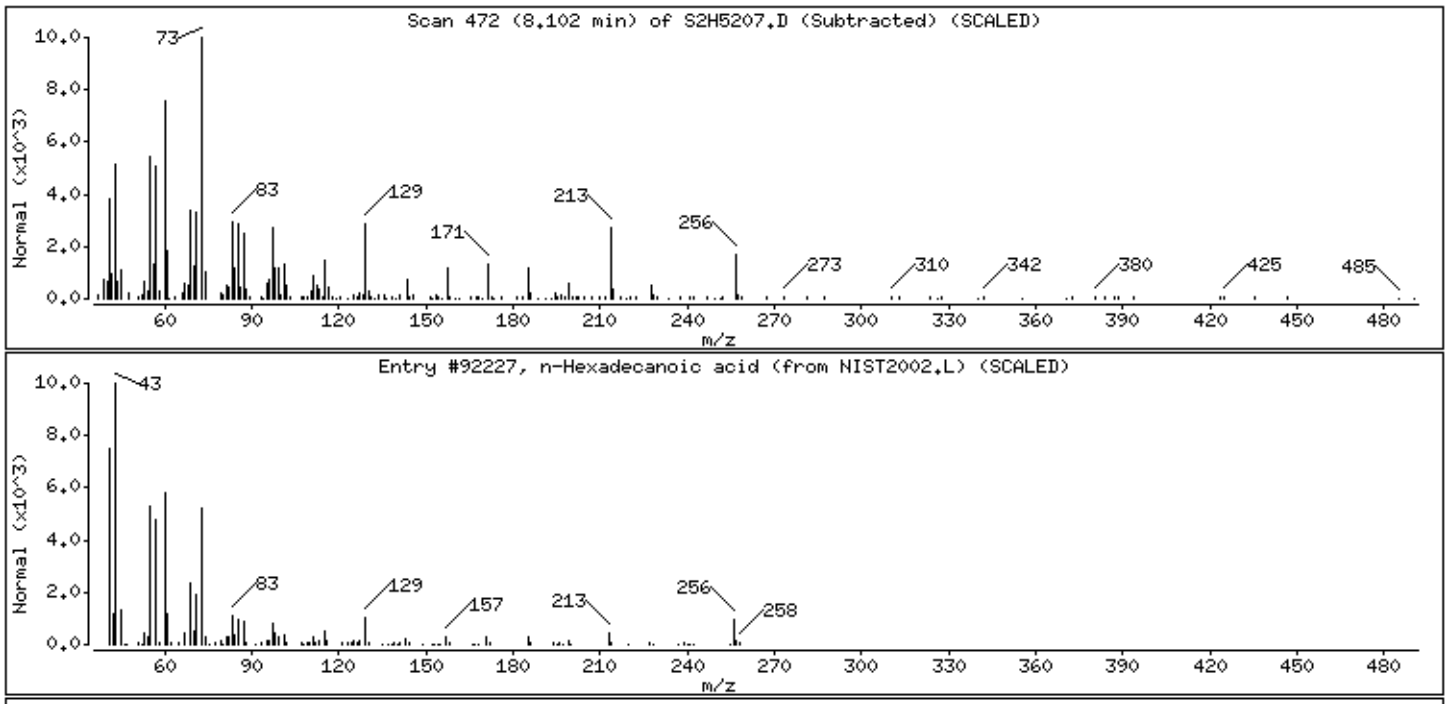
Client ID: H30W2 Instrument: S2.i

Sample Info: K2200-05B,,62636,,

Volume Injected (uL): 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



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5207.D

Date : 03-NOV-2011 17:30

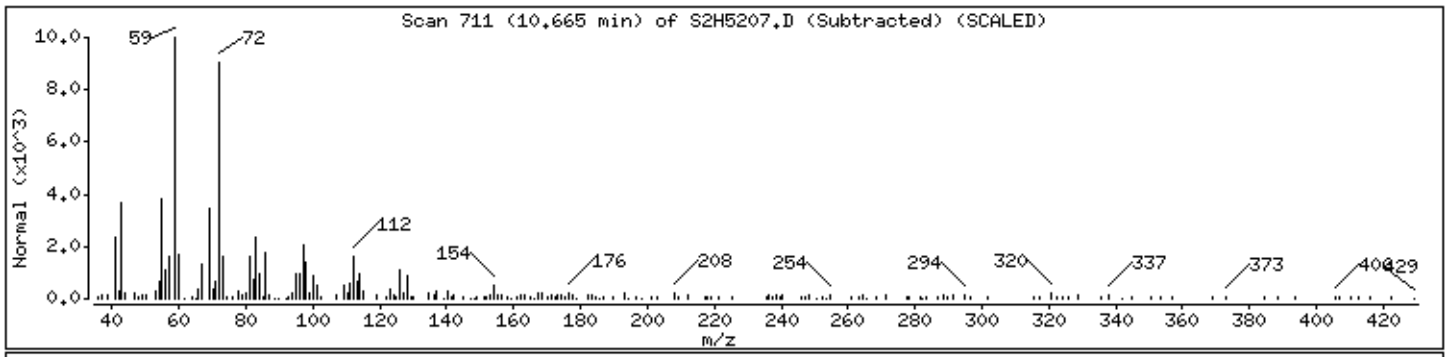
Client ID: H30W2 Instrument: S2.i

Sample Info: K2200-05B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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

CLIENT SAMPLE NO.

H30W3

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-06B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5208.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2´-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1´-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

H30W3

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-06B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5208.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3´-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

H30W3

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-06B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5208.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.671	6.5	BNJ
02		Unknown-01	4.875	4.2	J
03		Unknown-02	5.186	2.1	J
04		Unknown-03	5.390	7.2	J
05		Unknown-04	5.518	3.8	J
06		Unknown-05	6.355	3.4	J
07	57-10-3	n-Hexadecanoic acid	8.103	4.3	NJ
08	112-84-5	13-Docosenamide, (Z)-	10.676	8.2	NJ
	E96679[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5208.D
Report Date: 07-Nov-2011 14:01

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5208.D
Lab Smp Id: K2200-06B Client Smp ID: H30W3
Inj Date : 03-NOV-2011 17:51
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-06B,,62636,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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 * (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)
$	2 Phenol-d5	71	3.566	3.565	(0.917)	172090	50.2222	25
$	4 bis(2-Chloroethyl)ether-d8	67	3.620	3.619	(0.931)	232861	49.3168	25
$	6 2-Chlorophenol-d4	132	3.695	3.694	(0.950)	157537	53.1466	27
*	8 1,4-Dichlorobenzene-d4	152	3.888	3.887	(1.000)	108815	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.199	4.198	(1.080)	225541	48.5504	24
$	16 Nitrobenzene-d5	128	4.349	4.348	(0.879)	77108	49.0716	25
$	19 2-Nitrophenol-d4	143	4.617	4.616	(0.933)	96696	55.7437	28
$	23 2,4-Dichlorophenol-d3	165	4.821	4.820	(0.974)	176675	55.7928	28
*	25 Naphthalene-d8	136	4.949	4.948	(1.000)	301728	40.0000	
$	27 4-Chloroaniline-d4	131	5.003	5.002	(1.011)	86554	30.7836	15(Q)
$	40 Dimethylphthalate-d6	166	6.172	6.171	(0.962)	437588	58.7674	29
$	43 Acenaphthylene-d8	160	6.290	6.289	(0.980)	520812	53.7874	27
*	46 Acenaphthene-d10	164	6.419	6.418	(1.000)	202515	40.0000	
$	49 4-Nitrophenol-d4	143	6.504	6.503	(1.013)	61217	57.0480	29
$	54 Fluorene-d10	176	6.847	6.847	(1.067)	372926	54.5231	27
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.901	6.900	(0.903)	80647	57.4369	29(Q)
*	65 Phenanthrene-d10	188	7.641	7.640	(1.000)	359820	40.0000	
$	67 Anthracene-d10	188	7.684	7.694	(1.006)	518371	50.4332	25
$	72 Pyrene-d10	212	8.831	8.820	(0.890)	448158	67.2436	34
*	77 Chrysene-d12	240	9.925	9.871	(1.000)	211562	40.0000	(Q)
$	83 Benzo(a)pyrene-d12	264	11.223	11.147	(0.992)	146661	52.7564	26

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5208.D
Report Date: 07-Nov-2011 14:01

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)	
* 85 Perylene-d12	264	11.308	11.233	(1.000)	113290	40.0000		(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5208.D
Report Date: 07-Nov-2011 14:01

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5208.D
Lab Smp Id: K2200-06B Client Smp ID: H30W3
Inj Date : 03-NOV-2011 17:51
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-06B,,62636,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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 * (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

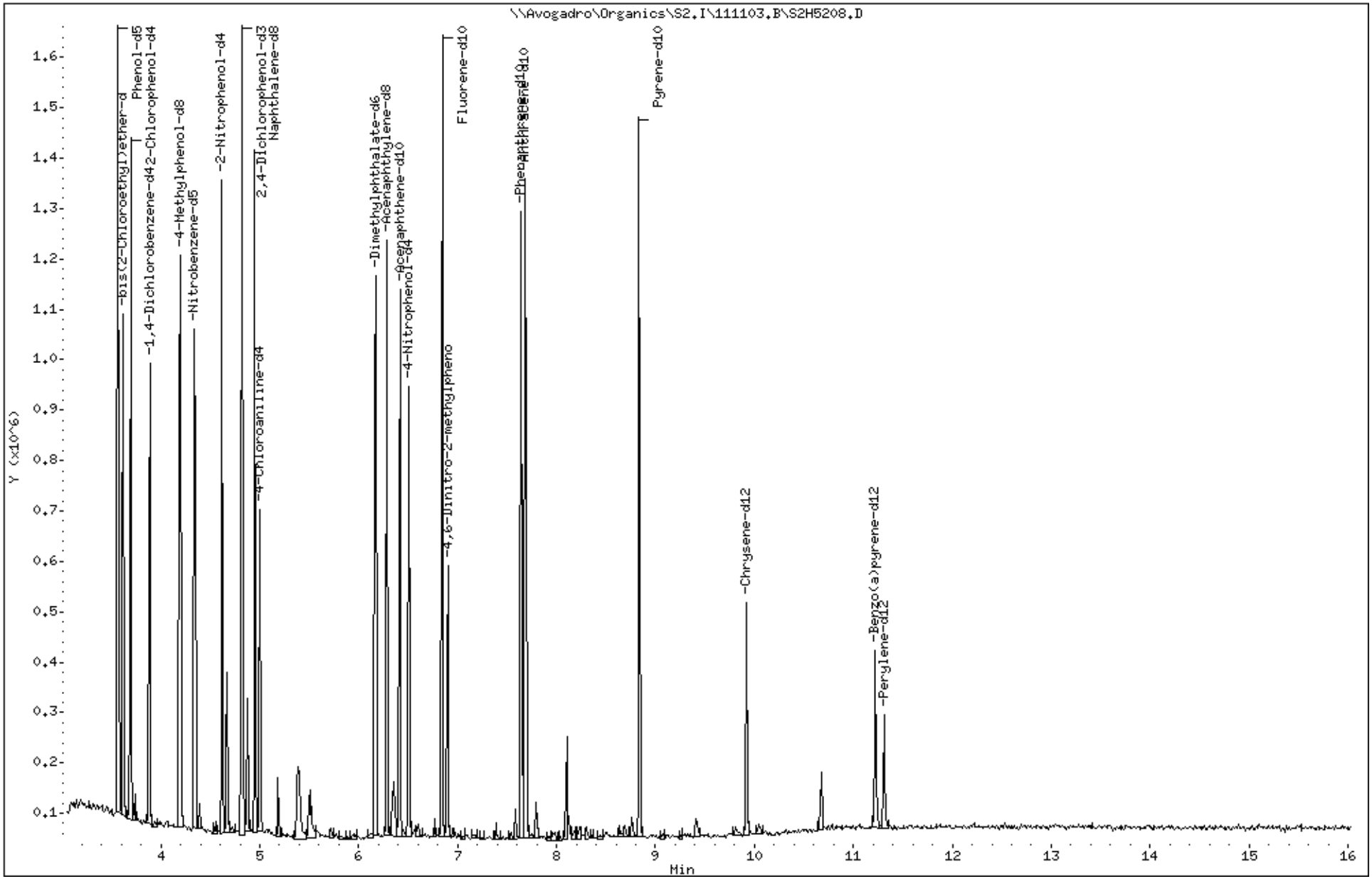
ISTD	RT	AREA	AMOUNT
* 25 Naphthalene-d8	4.950	1044326	40.000
* 46 Acenaphthene-d10	6.419	1129367	40.000
* 65 Phenanthrene-d10	7.642	1011693	40.000
* 85 Perylene-d12	11.309	291875	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
2(3H)-Furanone, dihydro-4-hydroxy-				CAS #: 5469-16-9			
4.671	337715	12.9352196	6.5	90	NIST2002.L	4145	25
Unknown				CAS #:			
4.875	221803	8.49554644	4.2	0		0	25
Unknown				CAS #:			
5.186	111506	4.27091359	2.1	0		0	25

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5208.D
Report Date: 07-Nov-2011 14:01

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
5.390	375780	14.3932139	7.2	0		0	25
Unknown				CAS #:			
5.518	197890	7.57961784	3.8	0		0	25
Unknown				CAS #:			
6.355	193095	6.83906901	3.4	0		0	46
n-Hexadecanoic acid				CAS #: 57-10-3			
8.103	218422	8.63587824	4.3	95	NIST2002.L	92228	65
13-Docosenamide, (Z)-				CAS #: 112-84-5			
10.676	120296	16.4859310	8.2	95	NIST2002.L	135943	85

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5208.D
Date : 03-NOV-2011 17:51
Client ID: H30W3
Instrument: S2.i
Sample Info: K2200-06B,,62636,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5208.D

Date : 03-NOV-2011 17:51

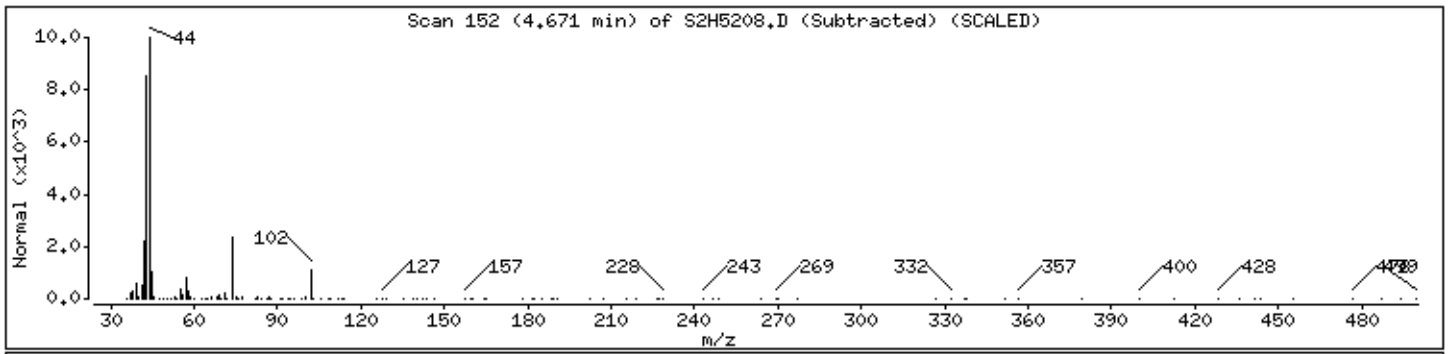
Client ID: H30W3 Instrument: S2.i

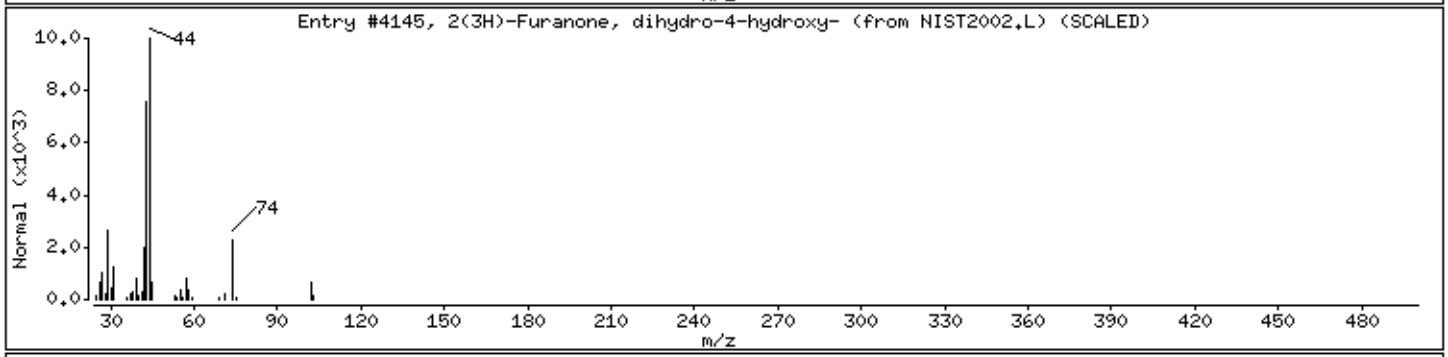
Sample Info: K2200-06B,,62636,,

Volume Injected (uL): 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\111103.B\S2H5208.D

Date : 03-NOV-2011 17:51

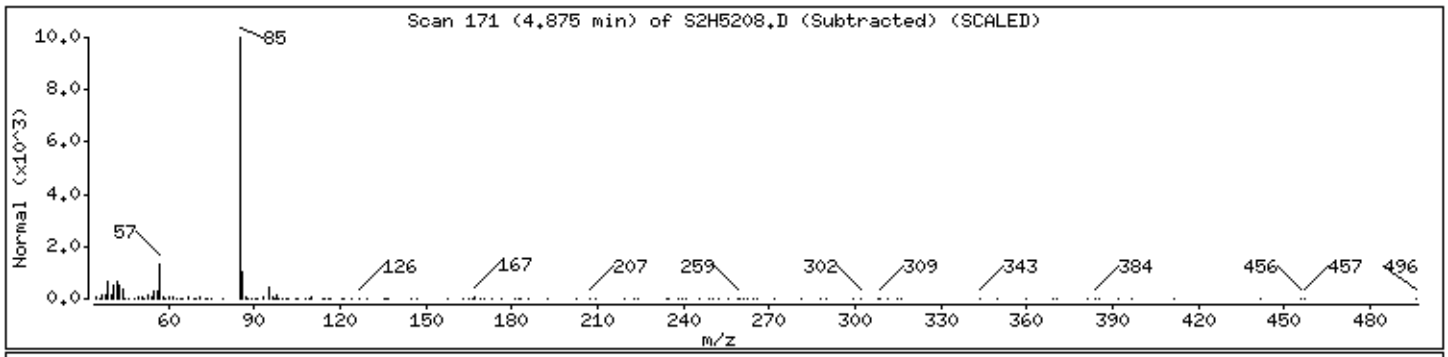
Client ID: H30W3 Instrument: S2.i

Sample Info: K2200-06B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5208.D

Date : 03-NOV-2011 17:51

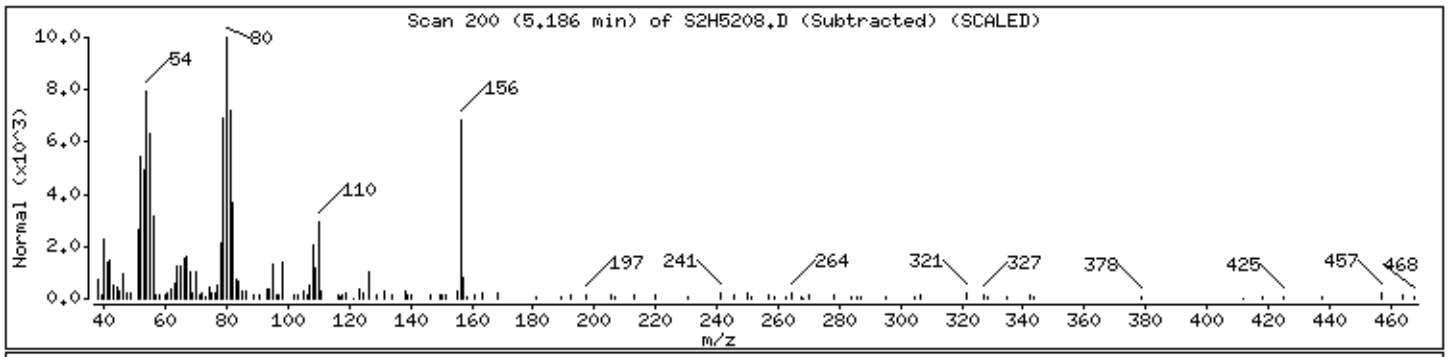
Client ID: H30W3 Instrument: S2.i

Sample Info: K2200-06B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5208.D

Date : 03-NOV-2011 17:51

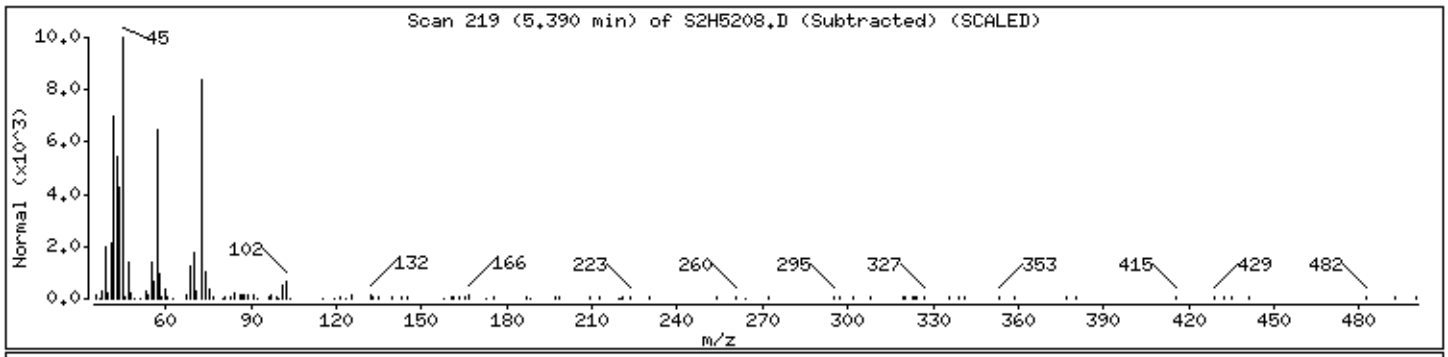
Client ID: H30W3 Instrument: S2.i

Sample Info: K2200-06B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5208.D

Date : 03-NOV-2011 17:51

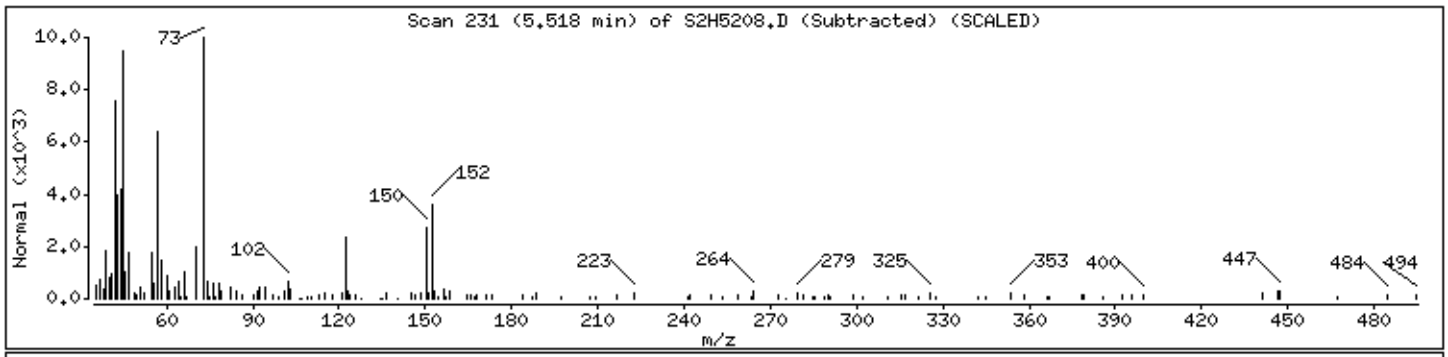
Client ID: H30W3 Instrument: S2.i

Sample Info: K2200-06B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 17:51

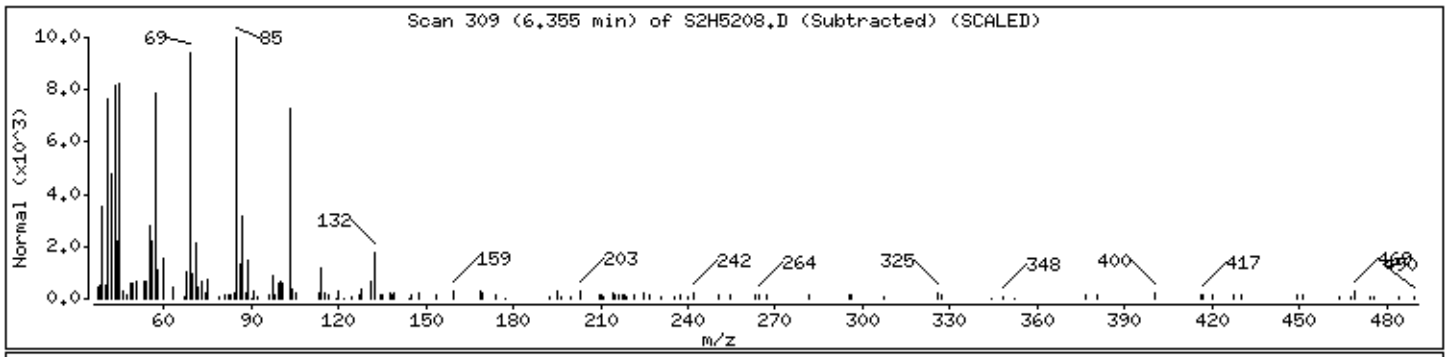
Client ID: H30W3 Instrument: S2.i

Sample Info: K2200-06B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5208.D

Date : 03-NOV-2011 17:51

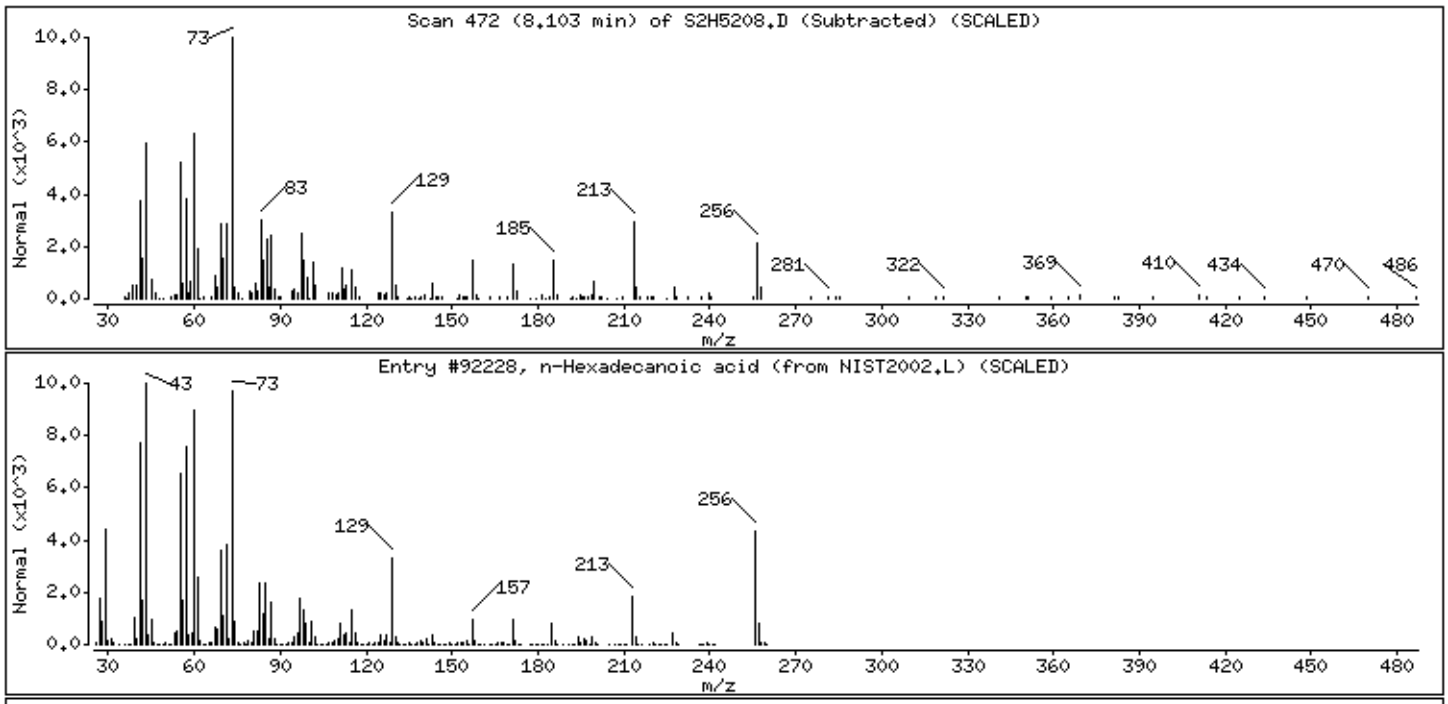
Client ID: H30W3 Instrument: S2.i

Sample Info: K2200-06B,,62636,,

Volume Injected (uL): 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	92228	95	C16H32O2	256



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5208.D

Date : 03-NOV-2011 17:51

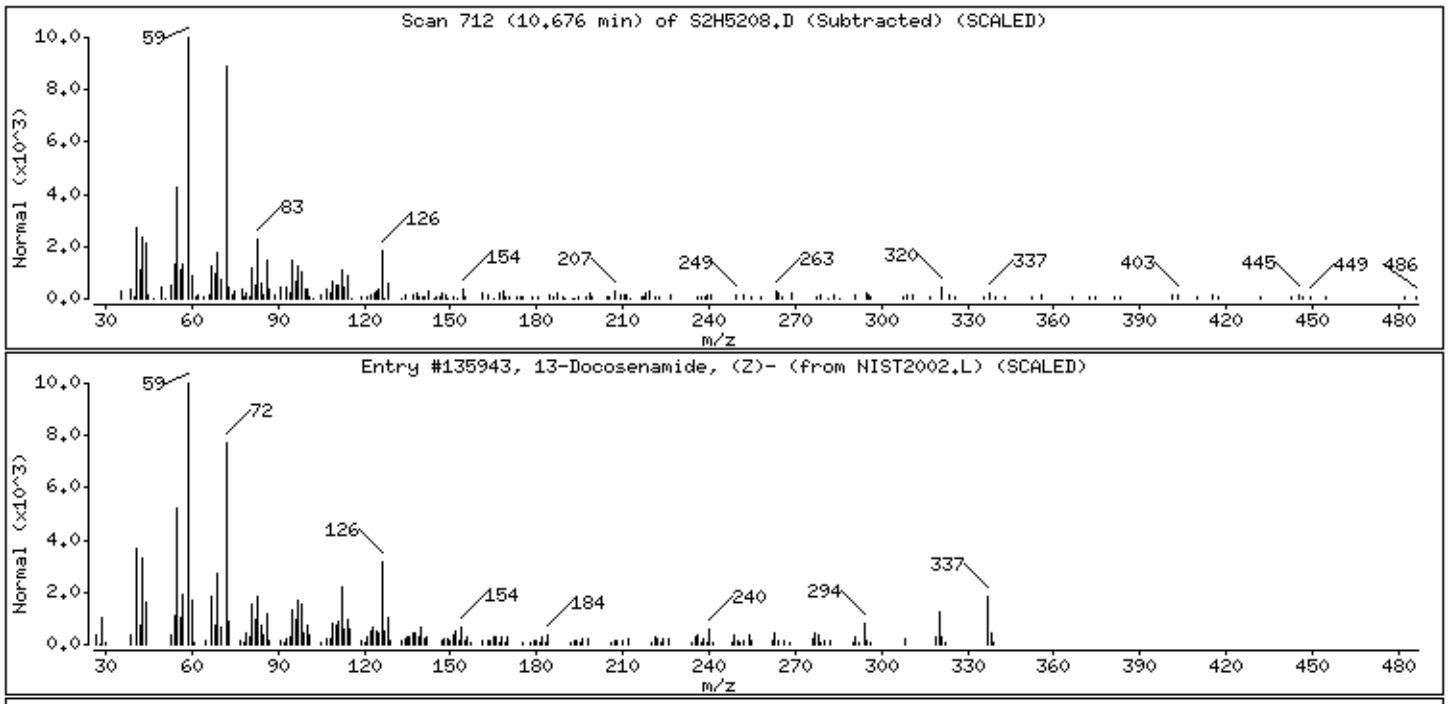
Client ID: H30W3 Instrument: S2.i

Sample Info: K2200-06B,,62636,,

Volume Injected (uL): 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	135943	95	C22H43NO	337



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

H30W4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-07B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5209.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2´-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1´-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

H30W4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-07B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5209.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3´-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

H30W4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-07B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5209.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	4.671	6.2	J
02		Unknown-02	4.875	3.7	J
03		Unknown-03	5.400	6.2	J
04		Unknown-04	5.529	2.6	J
05		Unknown-05	6.355	3.3	J
06	57-10-3	n-Hexadecanoic acid	8.103	4.9	NJ
07		Unknown-06	10.612	7.1	J
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5209.D
Report Date: 07-Nov-2011 14:02

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5209.D
Lab Smp Id: K2200-07B Client Smp ID: H30W4
Inj Date : 03-NOV-2011 18:12
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-07B,,62636,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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 * (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)
$	2 Phenol-d5	71	3.566	3.565	(0.917)	192418	46.2340	23
$	4 bis(2-Chloroethyl)ether-d8	67	3.620	3.619	(0.931)	258496	45.0742	23
$	6 2-Chlorophenol-d4	132	3.695	3.694	(0.950)	170212	47.2780	24
*	8 1,4-Dichlorobenzene-d4	152	3.888	3.887	(1.000)	132164	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.199	4.198	(1.080)	270142	47.8779	24
$	16 Nitrobenzene-d5	128	4.349	4.348	(0.879)	90611	43.3593	22
$	19 2-Nitrophenol-d4	143	4.617	4.616	(0.933)	112983	48.9746	24
$	23 2,4-Dichlorophenol-d3	165	4.821	4.820	(0.974)	214633	50.9648	25
*	25 Naphthalene-d8	136	4.949	4.948	(1.000)	401278	40.0000	
$	27 4-Chloroaniline-d4	131	5.003	5.002	(1.011)	121605	32.5203	16(Q)
$	40 Dimethylphthalate-d6	166	6.172	6.171	(0.962)	621633	57.0358	29
$	43 Acenaphthylene-d8	160	6.290	6.289	(0.980)	653879	46.1359	23
*	46 Acenaphthene-d10	164	6.419	6.418	(1.000)	296425	40.0000	
$	49 4-Nitrophenol-d4	143	6.504	6.503	(1.013)	84403	53.7364	27
$	54 Fluorene-d10	176	6.848	6.847	(1.067)	517381	51.6786	26
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.901	6.900	(0.903)	123894	64.5793	32(Q)
*	65 Phenanthrene-d10	188	7.641	7.640	(1.000)	491637	40.0000	
$	67 Anthracene-d10	188	7.695	7.694	(1.007)	710029	50.5583	25
$	72 Pyrene-d10	212	8.831	8.820	(0.894)	631988	61.0953	31
*	77 Chrysene-d12	240	9.882	9.871	(1.000)	328366	40.0000	(Q)
$	83 Benzo(a)pyrene-d12	264	11.158	11.147	(0.991)	210161	49.9985	25(H)

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5209.D
Report Date: 07-Nov-2011 14:02

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)	
* 85 Perylene-d12	264	11.255	11.233	(1.000)	171296	40.0000		(Q)

QC Flag Legend

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

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5209.D
Report Date: 07-Nov-2011 14:02

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5209.D
Lab Smp Id: K2200-07B Client Smp ID: H30W4
Inj Date : 03-NOV-2011 18:12
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-07B,,62636,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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 * (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

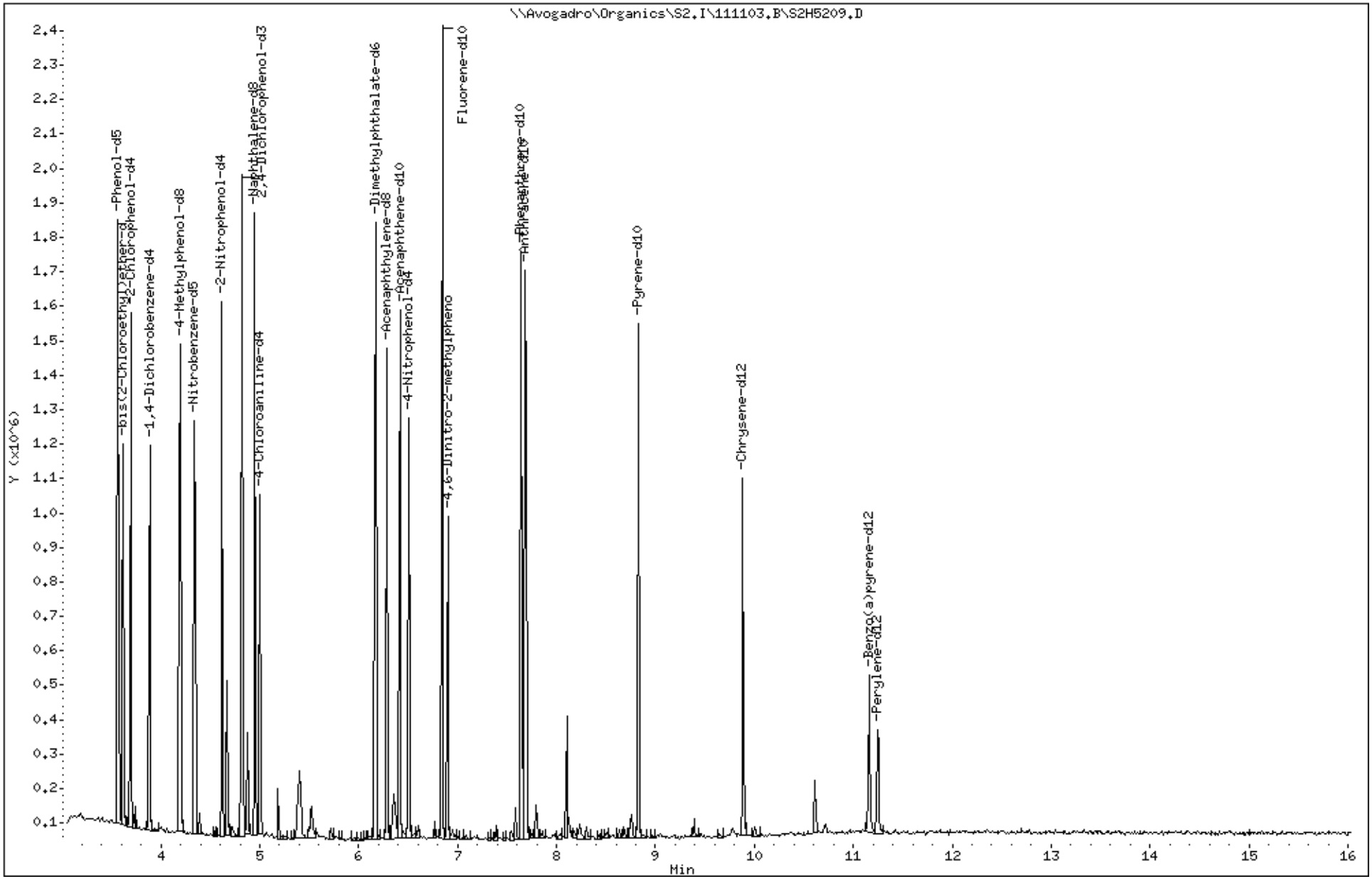
ISTD	RT	AREA	AMOUNT
* 25 Naphthalene-d8	4.950	1376226	40.000
* 46 Acenaphthene-d10	6.419	1589787	40.000
* 65 Phenanthrene-d10	7.642	1420842	40.000
* 85 Perylene-d12	11.255	443233	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.671	425158	12.3572229	6.2	0	0		25
Unknown				CAS #:			
4.875	255617	7.42950506	3.7	0	0		25
Unknown				CAS #:			
5.400	428288	12.4481734	6.2	0	0		25

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5209.D
Report Date: 07-Nov-2011 14:02

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
5.529	180852	5.25645149	2.6	0		0	25
Unknown				CAS #:			
6.355	263164	6.62136948	3.3	0		0	46
n-Hexadecanoic acid				CAS #: 57-10-3			
8.103	345962	9.73963164	4.9	96	NIST2002.L	92227	65
Unknown				CAS #:			
10.612	157376	14.2025043	7.1	0		0	85

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5209.D
Date : 03-NOV-2011 18:12
Client ID: H30W4
Instrument: S2.i
Sample Info: K2200-07B,,62636,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5209.D

Date : 03-NOV-2011 18:12

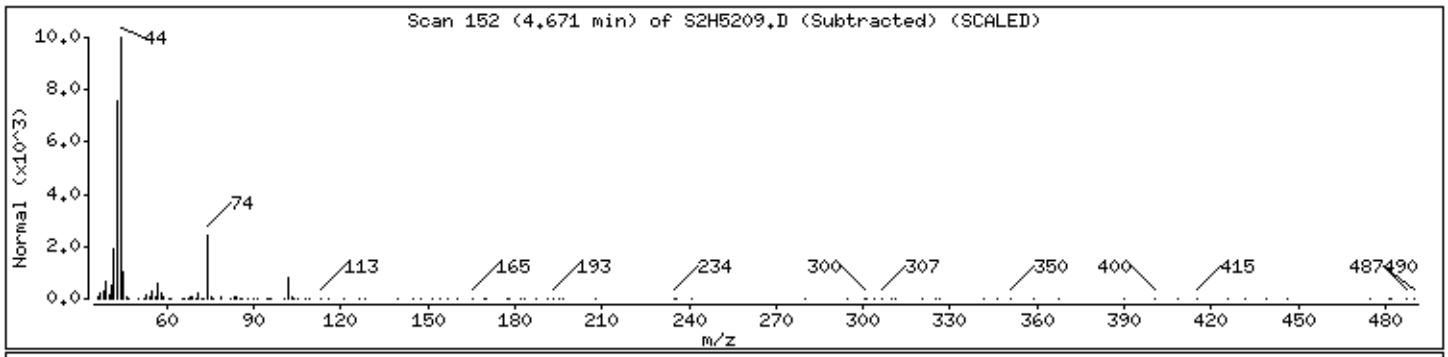
Client ID: H30W4 Instrument: S2.i

Sample Info: K2200-07B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5209.D

Date : 03-NOV-2011 18:12

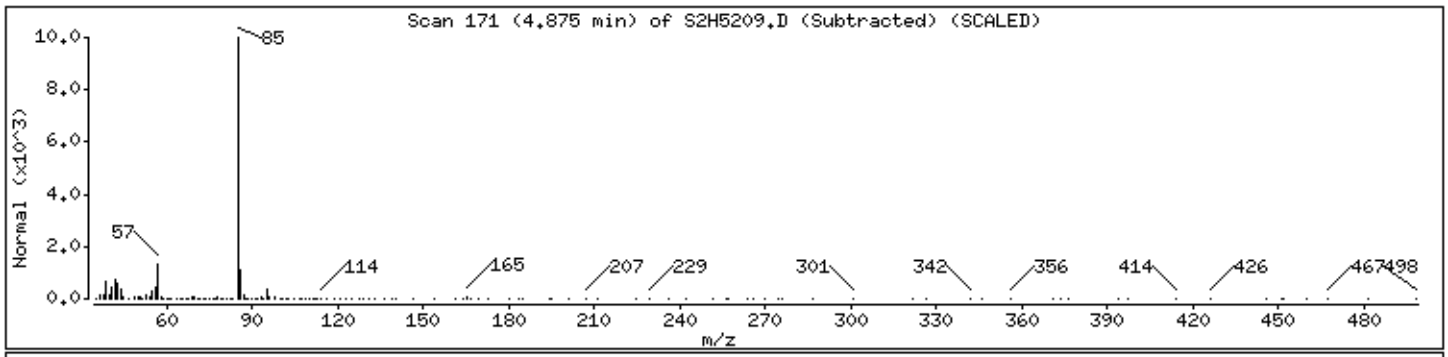
Client ID: H30W4 Instrument: S2.i

Sample Info: K2200-07B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5209.D

Date : 03-NOV-2011 18:12

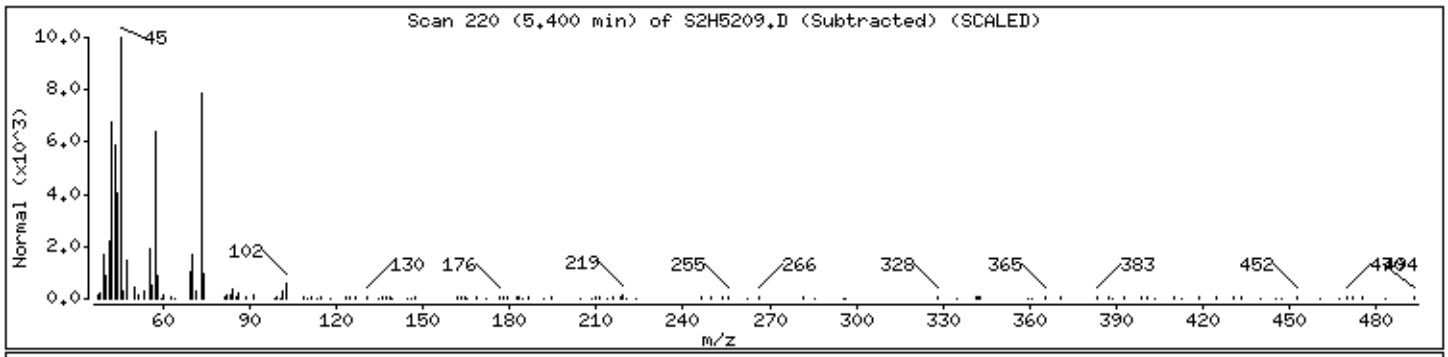
Client ID: H30W4 Instrument: S2.i

Sample Info: K2200-07B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5209.D

Date : 03-NOV-2011 18:12

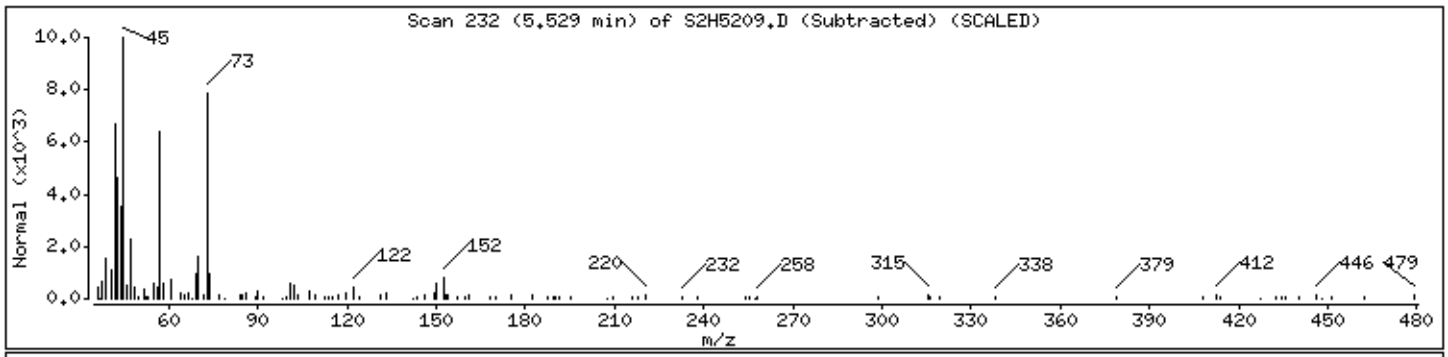
Client ID: H30W4 Instrument: S2.i

Sample Info: K2200-07B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5209.D

Date : 03-NOV-2011 18:12

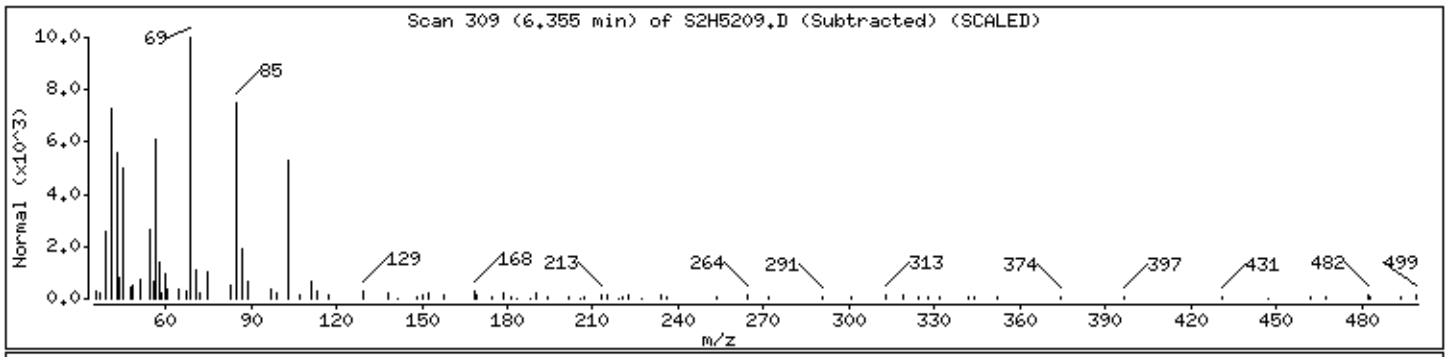
Client ID: H30W4 Instrument: S2.i

Sample Info: K2200-07B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5209.D

Date : 03-NOV-2011 18:12

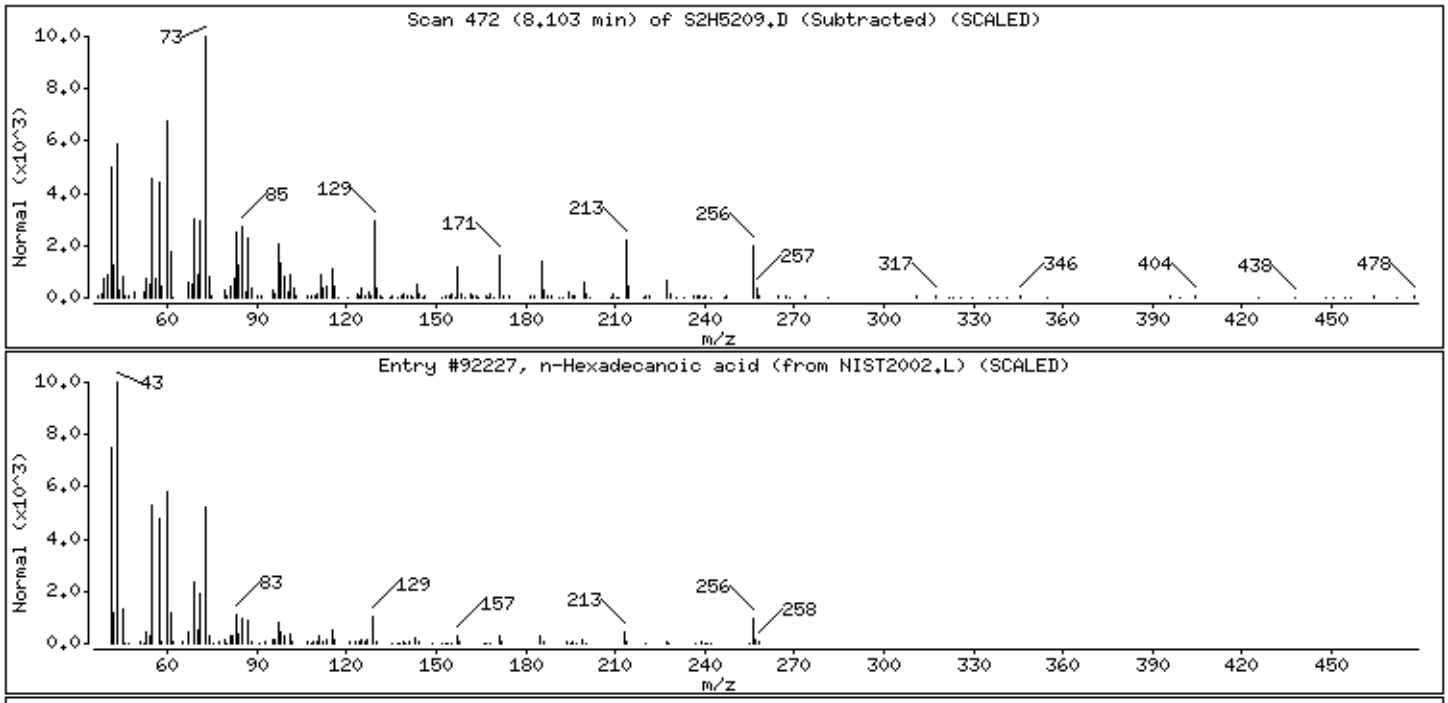
Client ID: H30W4 Instrument: S2.i

Sample Info: K2200-07B,,62636,,

Volume Injected (uL): 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



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5209.D

Date : 03-NOV-2011 18:12

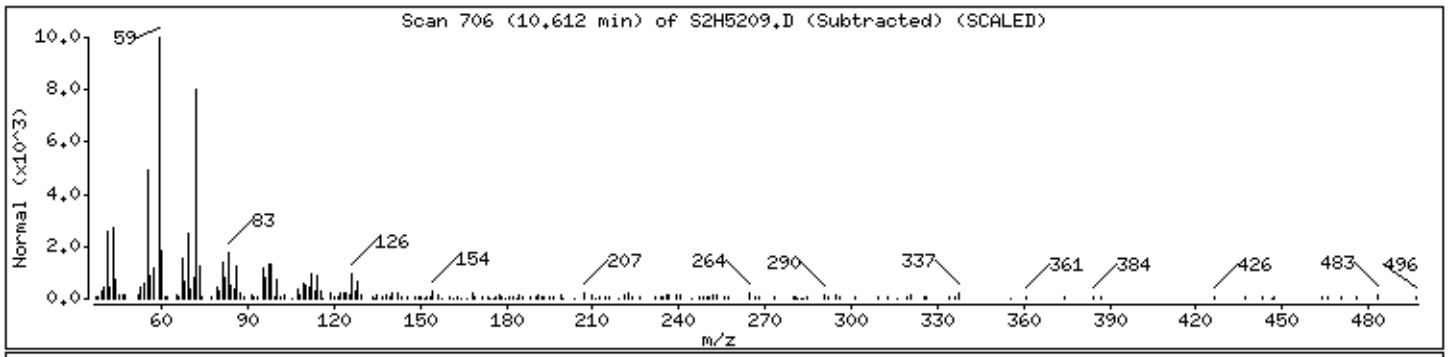
Client ID: H30W4 Instrument: S2.i

Sample Info: K2200-07B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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

CLIENT SAMPLE NO.

H30W5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-08B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5210.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2´-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1´-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

H30W5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-08B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5210.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine [1]	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3´-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

H30W5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-08B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5210.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.670	6.6	BNJ
02		Unknown-01	4.874	4.1	J
03		Unknown-02	5.185	2.1	J
04		Unknown-03	5.399	5.8	J
05		Unknown-04	5.528	3.0	J
06		Unknown-05	6.353	3.1	J
07	57-10-3	n-Hexadecanoic acid	8.101	4.8	NJ
08		Unknown-06	10.621	9.2	J
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5210.D
Report Date: 07-Nov-2011 14:02

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5210.D
Lab Smp Id: K2200-08B Client Smp ID: H30W5
Inj Date : 03-NOV-2011 18:34
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-08B,,62636,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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 * (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)
$	2 Phenol-d5	71	3.565	3.565	(0.917)	180442	45.8482	23
$	4 bis(2-Chloroethyl)ether-d8	67	3.618	3.619	(0.931)	254834	46.9895	23
$	6 2-Chlorophenol-d4	132	3.694	3.694	(0.950)	163883	48.1362	24
*	8 1,4-Dichlorobenzene-d4	152	3.887	3.887	(1.000)	124981	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.198	4.198	(1.080)	266976	50.0362	25
$	16 Nitrobenzene-d5	128	4.348	4.348	(0.879)	87956	45.7744	23
$	19 2-Nitrophenol-d4	143	4.616	4.616	(0.933)	102976	48.5455	24
$	23 2,4-Dichlorophenol-d3	165	4.820	4.820	(0.974)	199137	51.4258	26
*	25 Naphthalene-d8	136	4.948	4.948	(1.000)	368969	40.0000	
$	27 4-Chloroaniline-d4	131	5.002	5.002	(1.011)	107105	31.1507	16(Q)
$	40 Dimethylphthalate-d6	166	6.171	6.171	(0.962)	629820	59.2634	30
$	43 Acenaphthylene-d8	160	6.289	6.289	(0.980)	662431	47.9335	24
*	46 Acenaphthene-d10	164	6.417	6.418	(1.000)	289040	40.0000	
$	49 4-Nitrophenol-d4	143	6.503	6.503	(1.013)	72225	47.1580	24
$	54 Fluorene-d10	176	6.846	6.847	(1.067)	507221	51.9582	26
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.900	6.900	(0.903)	122429	66.3254	33(Q)
*	65 Phenanthrene-d10	188	7.640	7.640	(1.000)	473034	40.0000	
$	67 Anthracene-d10	188	7.693	7.694	(1.007)	692694	51.2637	26
$	72 Pyrene-d10	212	8.830	8.820	(0.896)	627603	66.8080	33
*	77 Chrysene-d12	240	9.892	9.871	(1.000)	298204	40.0000	(QH)
$	83 Benzo(a)pyrene-d12	264	11.179	11.147	(0.992)	155579	41.7171	21(H)

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5210.D
Report Date: 07-Nov-2011 14:02

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)	
* 85 Perylene-d12	264	11.264	11.233	(1.000)	151981	40.0000		(Q)

QC Flag Legend

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

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5210.D
Report Date: 07-Nov-2011 14:02

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5210.D
Lab Smp Id: K2200-08B Client Smp ID: H30W5
Inj Date : 03-NOV-2011 18:34
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-08B,,62636,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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 * (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

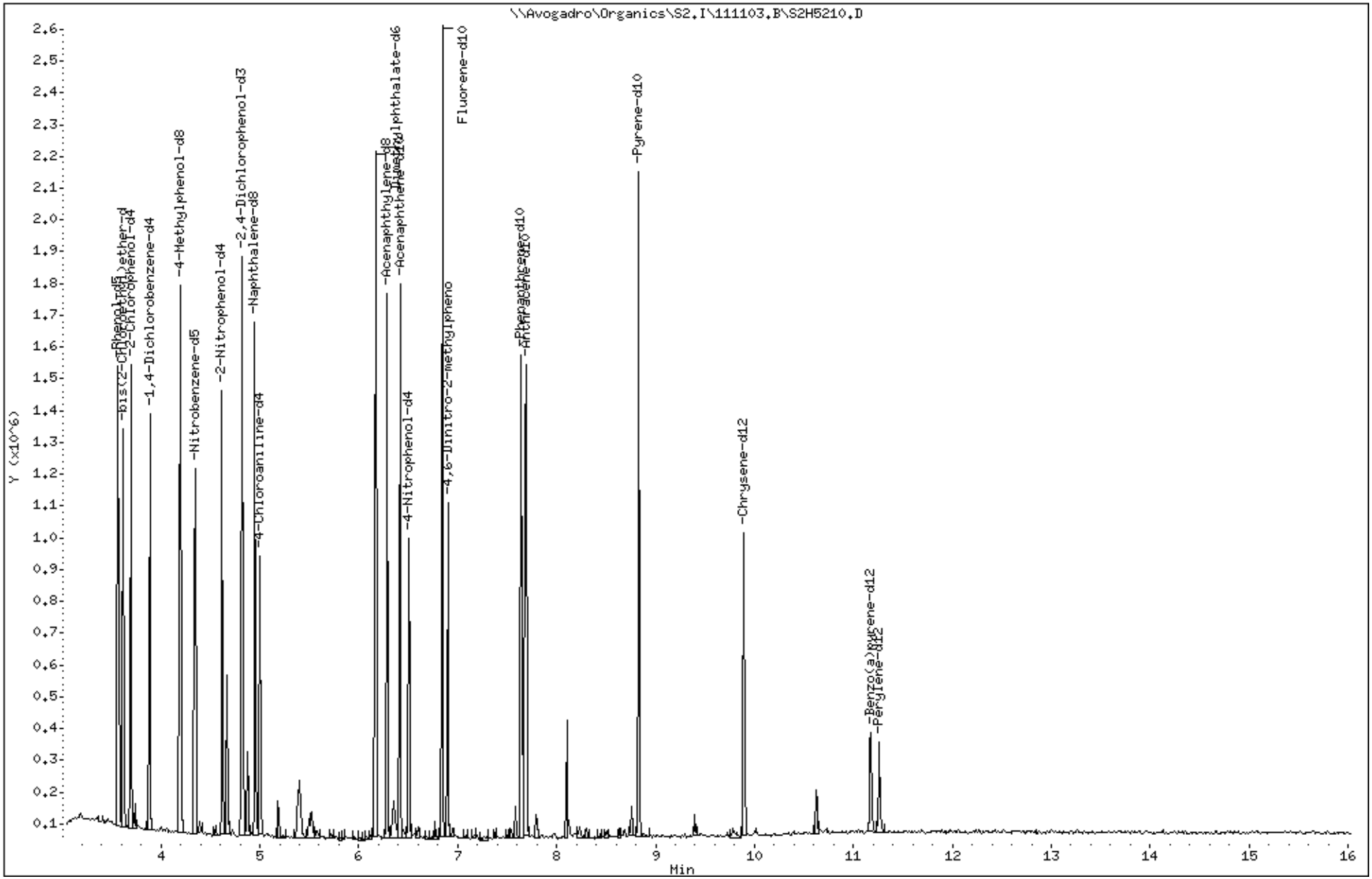
ISTD	RT	AREA	AMOUNT
* 25 Naphthalene-d8	4.949	1264705	40.000
* 46 Acenaphthene-d10	6.418	1521590	40.000
* 65 Phenanthrene-d10	7.640	1352269	40.000
* 85 Perylene-d12	11.265	388307	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
2(3H)-Furanone, dihydro-4-hydroxy-				CAS #: 5469-16-9			
4.670	419491	13.2676384	6.6	86	NIST2002.L	4145	25
Unknown				CAS #:			
4.874	258164	8.16520058	4.1	0		0	25
Unknown				CAS #:			
5.185	132633	4.19490939	2.1	0		0	25

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5210.D
Report Date: 07-Nov-2011 14:02

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
5.399	364156	11.5175147	5.8	0		0	25
Unknown					CAS #:		
5.528	187644	5.93478699	3.0	0		0	25
Unknown					CAS #:		
6.353	234391	6.16175073	3.1	0		0	46
n-Hexadecanoic acid					CAS #: 57-10-3		
8.101	322578	9.54183335	4.8	95	NIST2002.L	92227	65
Unknown					CAS #:		
10.621	177778	18.3131787	9.2	0		0	85

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5210.D
Date : 03-NOV-2011 18:34
Client ID: H30W5
Instrument: S2.i
Sample Info: K2200-08B,,62636,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5210.D

Date : 03-NOV-2011 18:34

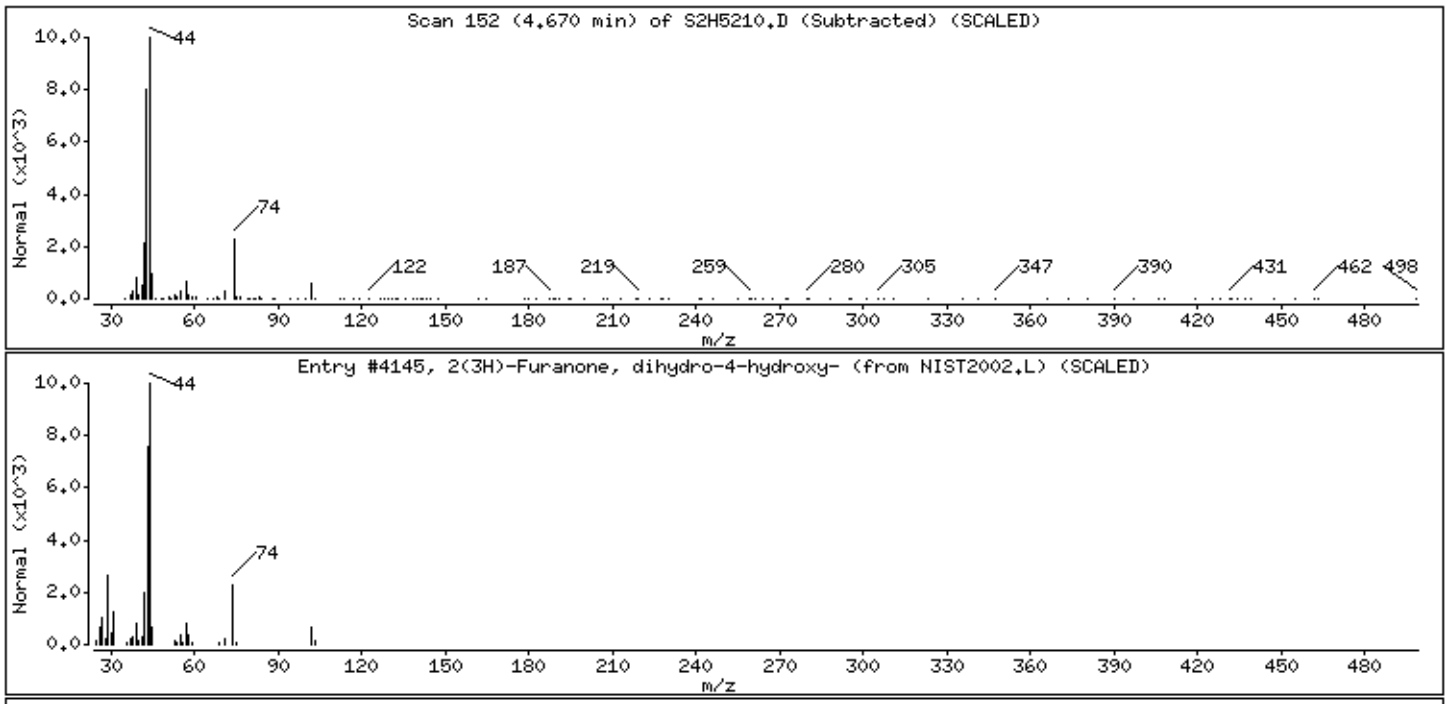
Client ID: H30W5 Instrument: S2.i

Sample Info: K2200-08B,,62636,,

Volume Injected (uL): 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\111103.B\S2H5210.D

Date : 03-NOV-2011 18:34

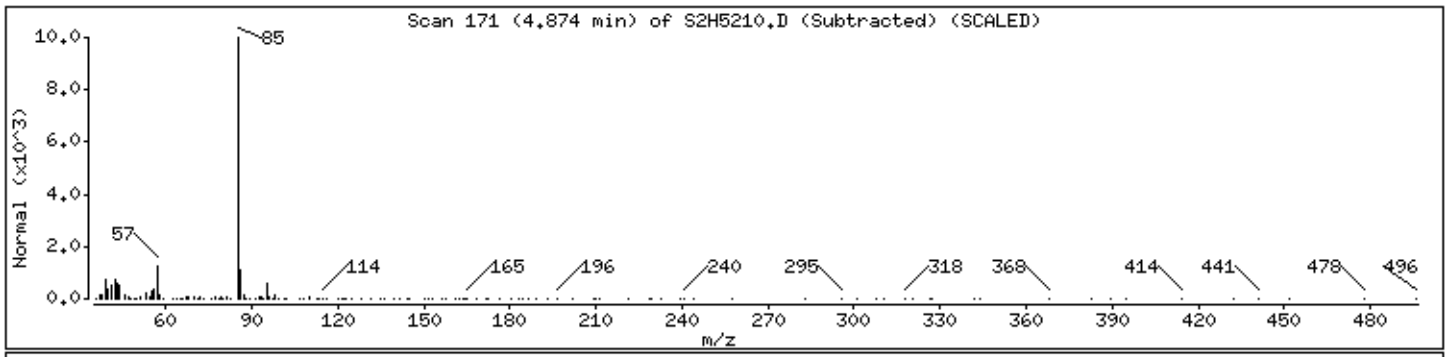
Client ID: H30W5 Instrument: S2.i

Sample Info: K2200-08B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5210.D

Date : 03-NOV-2011 18:34

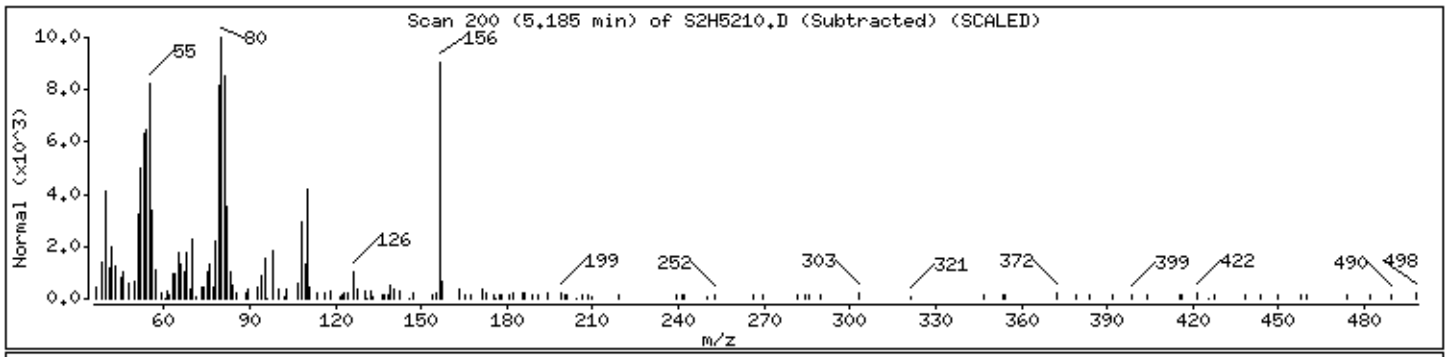
Client ID: H30W5 Instrument: S2.i

Sample Info: K2200-08B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5210.D

Date : 03-NOV-2011 18:34

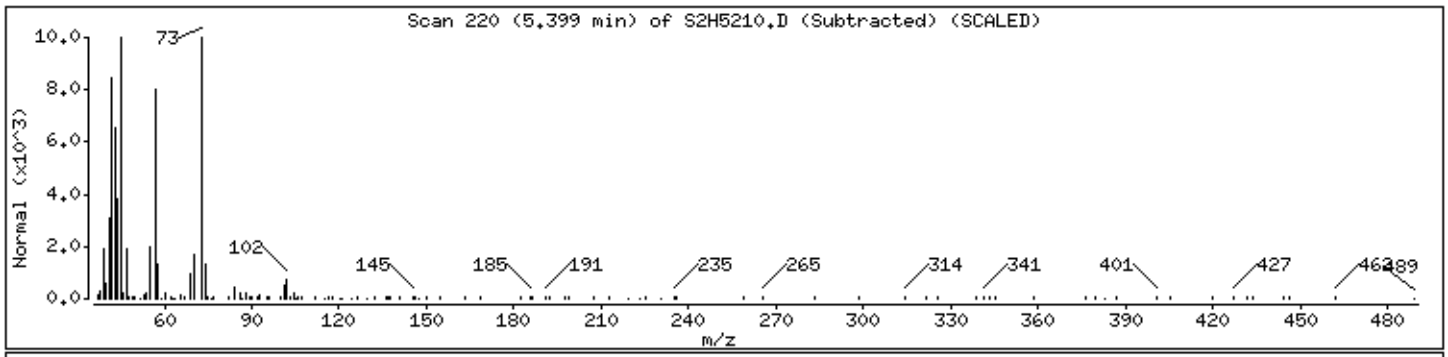
Client ID: H30W5 Instrument: S2.i

Sample Info: K2200-08B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5210.D

Date : 03-NOV-2011 18:34

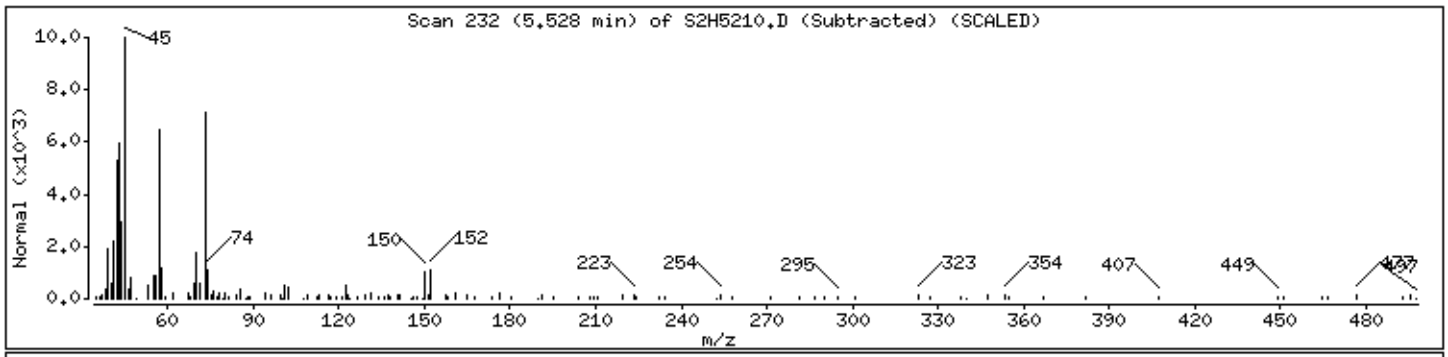
Client ID: H30W5 Instrument: S2.i

Sample Info: K2200-08B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5210.D

Date : 03-NOV-2011 18:34

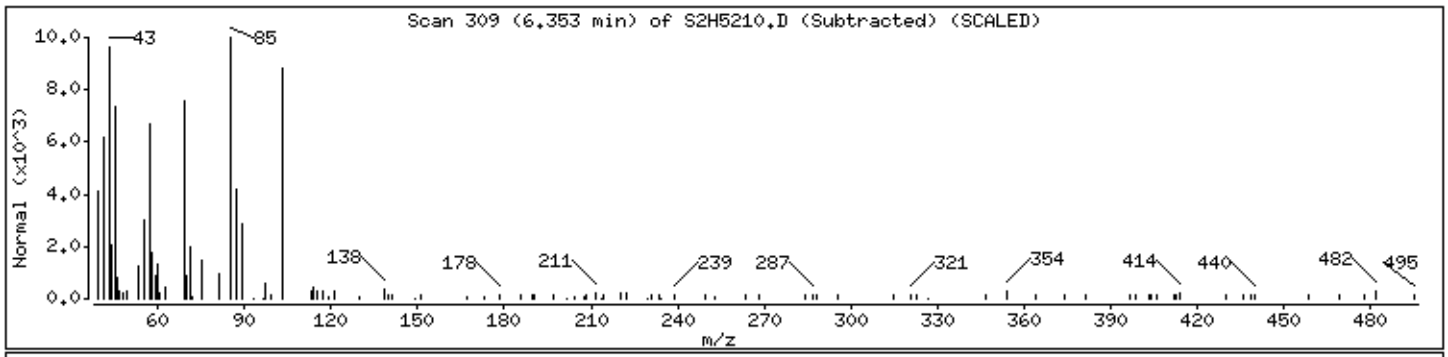
Client ID: H30W5 Instrument: S2.i

Sample Info: K2200-08B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5210.D

Date : 03-NOV-2011 18:34

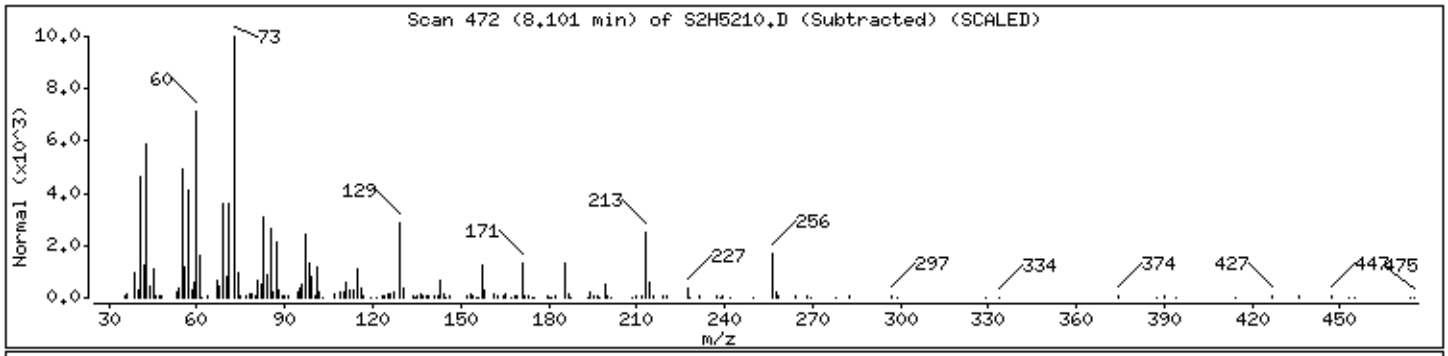
Client ID: H30W5 Instrument: S2.i

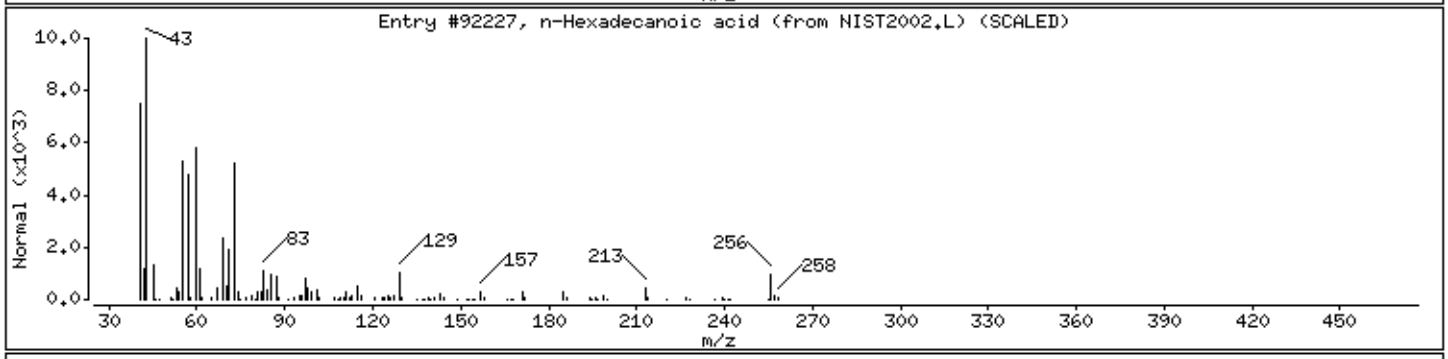
Sample Info: K2200-08B,,62636,,

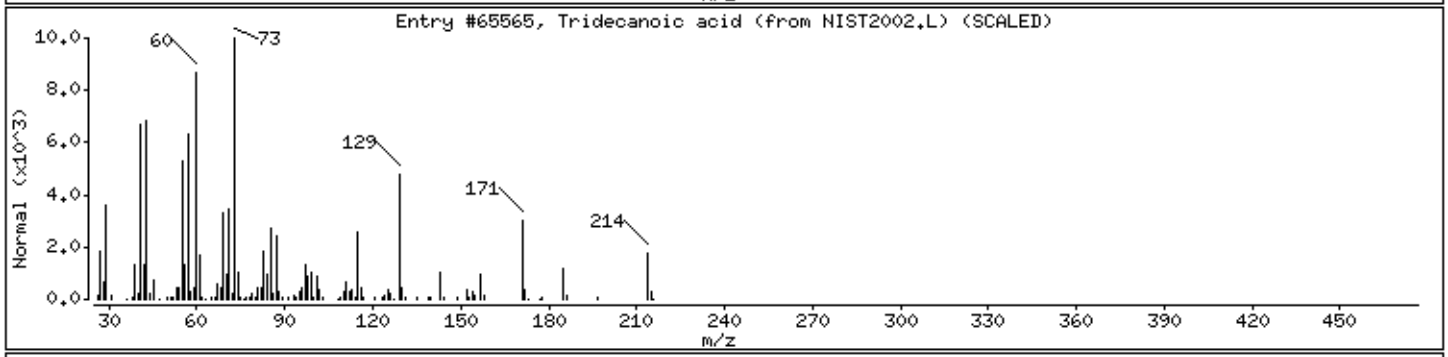
Volume Injected (uL): 2.0 Operator: SRC: LIMS

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
Tridecanoic acid	638-53-9	NIST2002.L	65565	93	C13H26O2	214







Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5210.D

Date : 03-NOV-2011 18:34

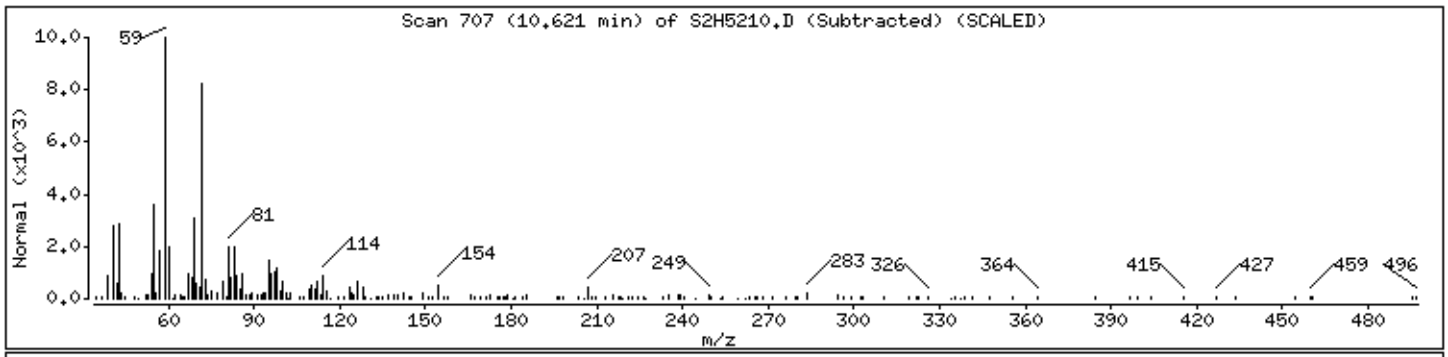
Client ID: H30W5 Instrument: S2.i

Sample Info: K2200-08B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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

CLIENT SAMPLE NO.

H30W6

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-09B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5211.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2´-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1´-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

H30W6

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-09B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5211.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3´-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

H30W6

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-09B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5211.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.663	4.6	BNJ
02		Unknown-01	4.877	3.8	J
03		Unknown-02	5.188	2.1	J
04		Unknown-03	5.392	5.3	J
05		Unknown-04	5.521	2.1	J
06		Unknown-05	6.347	2.2	J
07	57-10-3	n-Hexadecanoic acid	8.095	5.1	NJ
08		Unknown-06	10.572	4.7	J
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5211.D
Report Date: 07-Nov-2011 14:02

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5211.D
Lab Smp Id: K2200-09B Client Smp ID: H30W6
Inj Date : 03-NOV-2011 18:55
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-09B,,62636,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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 * (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)
$	2 Phenol-d5	71	3.569	3.565	(0.917)	190506	51.7533	26
$	4 bis(2-Chloroethyl)ether-d8	67	3.622	3.619	(0.931)	250896	49.4631	25
$	6 2-Chlorophenol-d4	132	3.697	3.694	(0.950)	175428	55.0911	28
*	8 1,4-Dichlorobenzene-d4	152	3.890	3.887	(1.000)	116896	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.191	4.198	(1.077)	255790	51.2555	26
$	16 Nitrobenzene-d5	128	4.341	4.348	(0.877)	87494	47.0905	24(Q)
$	19 2-Nitrophenol-d4	143	4.620	4.616	(0.933)	109769	53.5169	27
$	23 2,4-Dichlorophenol-d3	165	4.823	4.820	(0.974)	207972	55.5433	28
*	25 Naphthalene-d8	136	4.952	4.948	(1.000)	356773	40.0000	
$	27 4-Chloroaniline-d4	131	5.006	5.002	(1.011)	121907	36.6678	18(Q)
$	40 Dimethylphthalate-d6	166	6.164	6.171	(0.962)	532504	55.7113	28
$	43 Acenaphthylene-d8	160	6.282	6.289	(0.980)	657860	52.9276	26
*	46 Acenaphthene-d10	164	6.410	6.418	(1.000)	259961	40.0000	
$	49 4-Nitrophenol-d4	143	6.507	6.503	(1.015)	75042	54.4781	27
$	54 Fluorene-d10	176	6.839	6.847	(1.067)	449764	51.2262	26
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.904	6.900	(0.903)	97928	52.0382	26(Q)
*	65 Phenanthrene-d10	188	7.644	7.640	(1.000)	482250	40.0000	
$	67 Anthracene-d10	188	7.687	7.694	(1.006)	674817	48.9863	24
$	72 Pyrene-d10	212	8.823	8.820	(0.895)	578855	62.3972	31
*	77 Chrysene-d12	240	9.863	9.871	(1.000)	294484	40.0000	(Q)
$	83 Benzo(a)pyrene-d12	264	11.118	11.147	(0.979)	169034	46.2016	23(H)

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5211.D
Report Date: 07-Nov-2011 14:02

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)	
* 85 Perylene-d12	264	11.215	11.233	(1.000)	149097	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\111103.B\S2H5211.D
Report Date: 07-Nov-2011 14:02

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5211.D
Lab Smp Id: K2200-09B Client Smp ID: H30W6
Inj Date : 03-NOV-2011 18:55
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-09B,,62636,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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 * (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

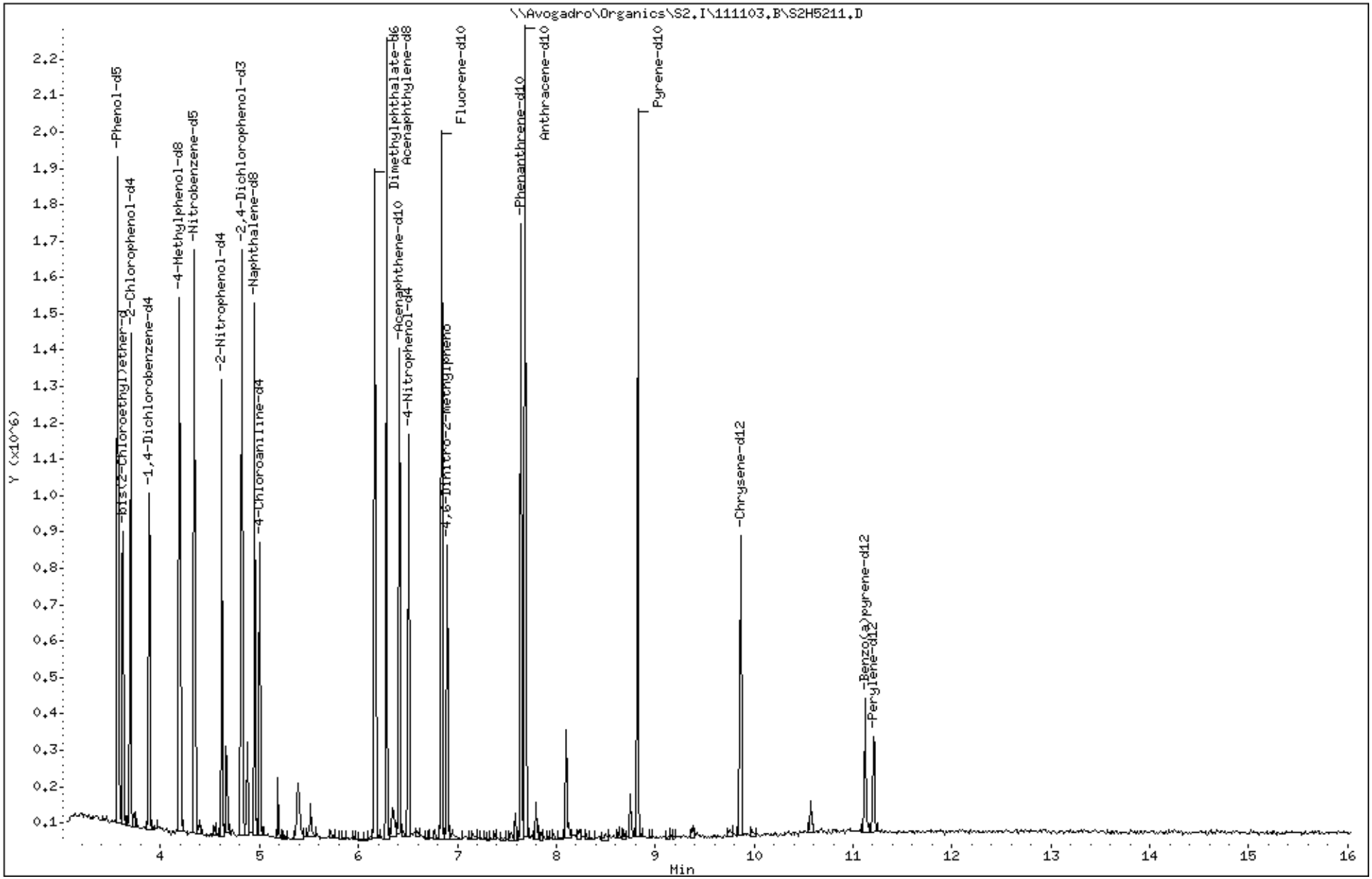
ISTD	RT	AREA	AMOUNT
* 25 Naphthalene-d8	4.953	1232901	40.000
* 46 Acenaphthene-d10	6.411	1334234	40.000
* 65 Phenanthrene-d10	7.644	1367897	40.000
* 85 Perylene-d12	11.215	379480	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
2(3H)-Furanone, dihydro-4-hydroxy-				CAS #: 5469-16-9			
4.663	285776	9.27165169	4.6	90	NIST2002.L	4145	25
Unknown				CAS #:			
4.877	233227	7.56677423	3.8	0		0	25
Unknown				CAS #:			
5.188	130998	4.25005759	2.1	0		0	25

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5211.D
Report Date: 07-Nov-2011 14:02

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
5.392	329567	10.6924090	5.3	0		0	25
Unknown				CAS #:			
5.521	129376	4.19743727	2.1	0		0	25
Unknown				CAS #:			
6.347	148250	4.44448963	2.2	0		0	46
n-Hexadecanoic acid				CAS #: 57-10-3			
8.095	349979	10.2340611	5.1	94	NIST2002.L	92227	65
Unknown				CAS #:			
10.572	89220	9.40447407	4.7	0		0	85

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5211.D
Date : 03-NOV-2011 18:55
Client ID: H30W6
Instrument: S2.i
Sample Info: K2200-09B,,62636,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5211.D

Date : 03-NOV-2011 18:55

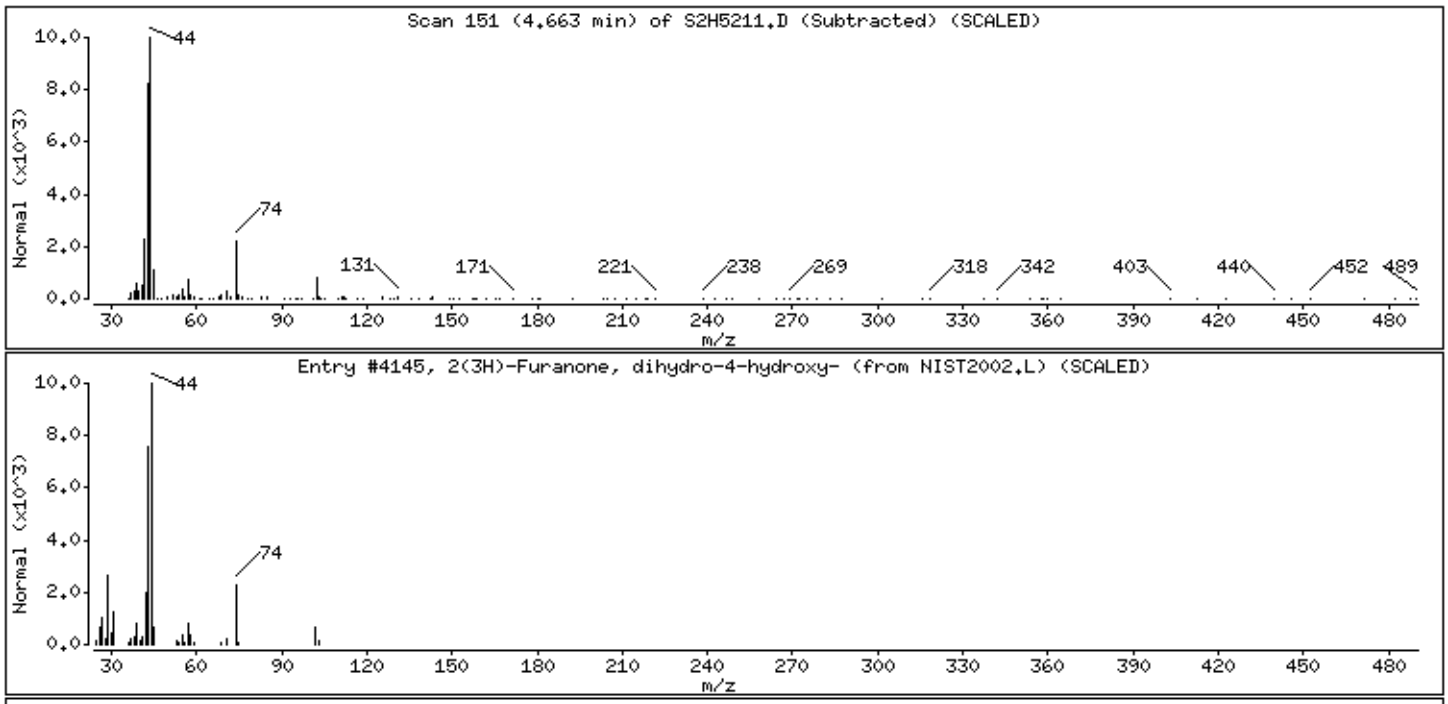
Client ID: H30W6 Instrument: S2.i

Sample Info: K2200-09B,,62636,,

Volume Injected (uL): 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\111103.B\S2H5211.D

Date : 03-NOV-2011 18:55

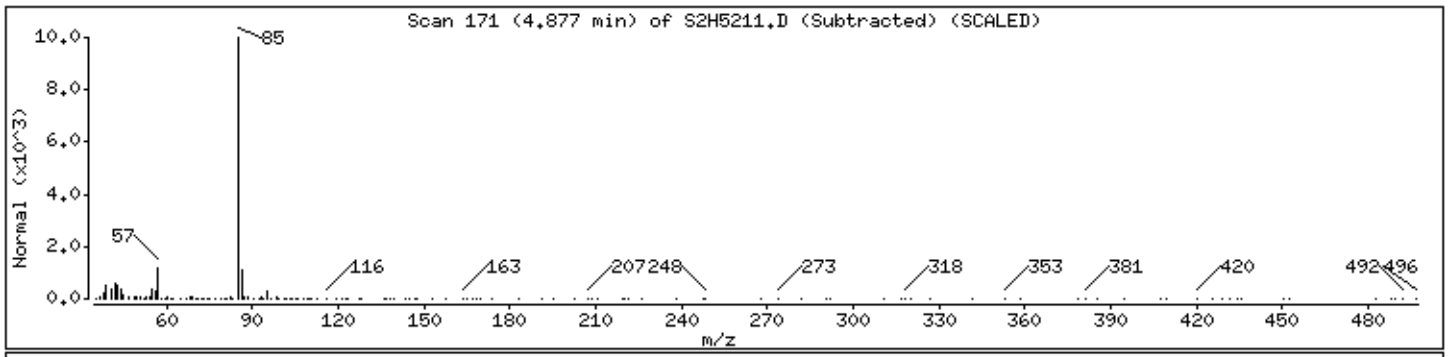
Client ID: H30W6 Instrument: S2.i

Sample Info: K2200-09B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5211.D

Date : 03-NOV-2011 18:55

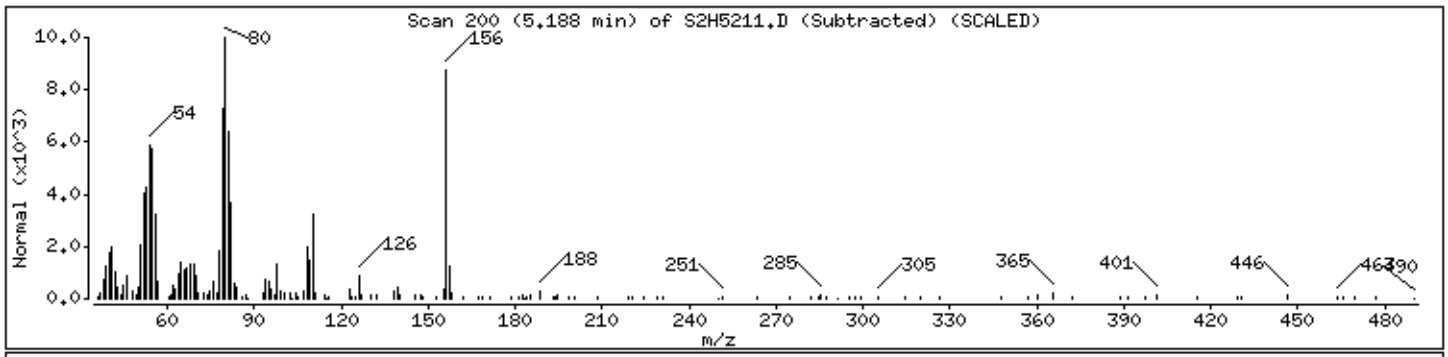
Client ID: H30W6 Instrument: S2.i

Sample Info: K2200-09B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5211.D

Date : 03-NOV-2011 18:55

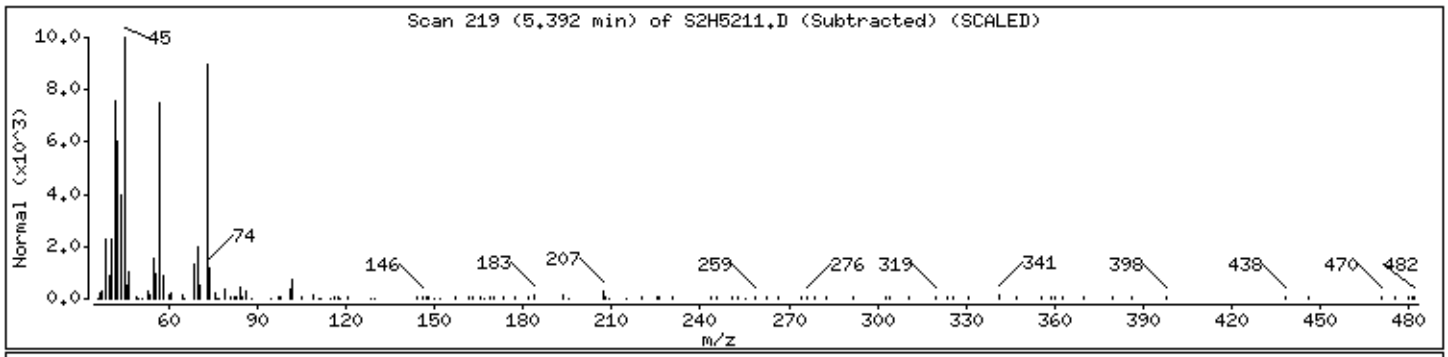
Client ID: H30W6 Instrument: S2.i

Sample Info: K2200-09B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5211.D

Date : 03-NOV-2011 18:55

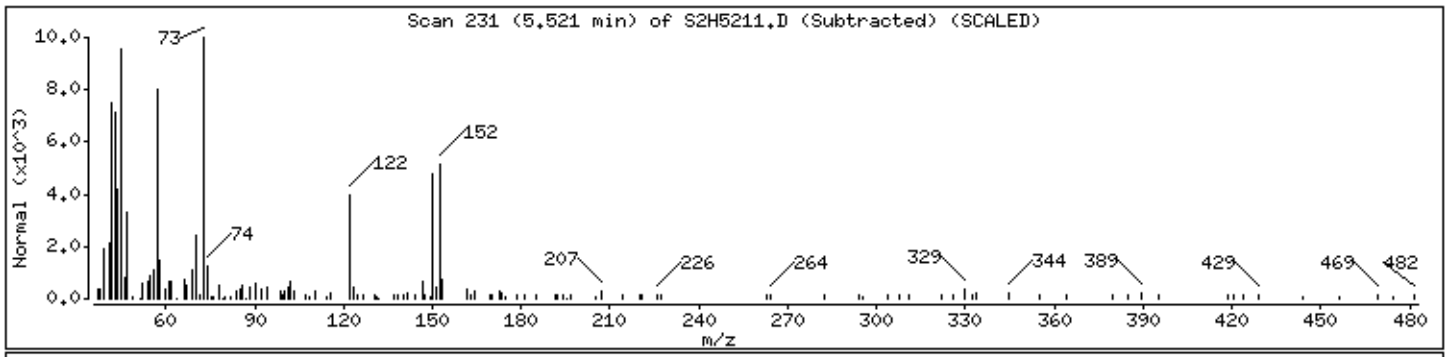
Client ID: H30W6 Instrument: S2.i

Sample Info: K2200-09B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5211.D

Date : 03-NOV-2011 18:55

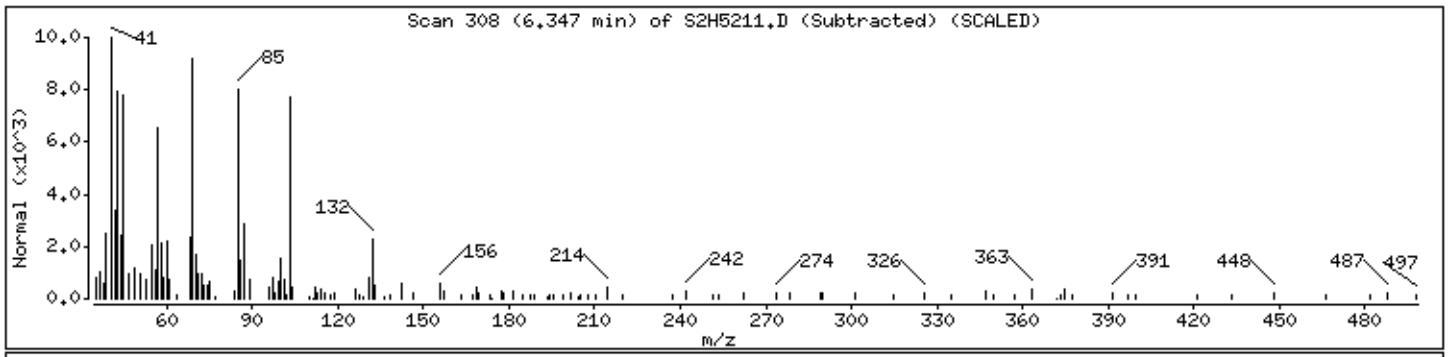
Client ID: H30W6 Instrument: S2.i

Sample Info: K2200-09B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5211.D

Date : 03-NOV-2011 18:55

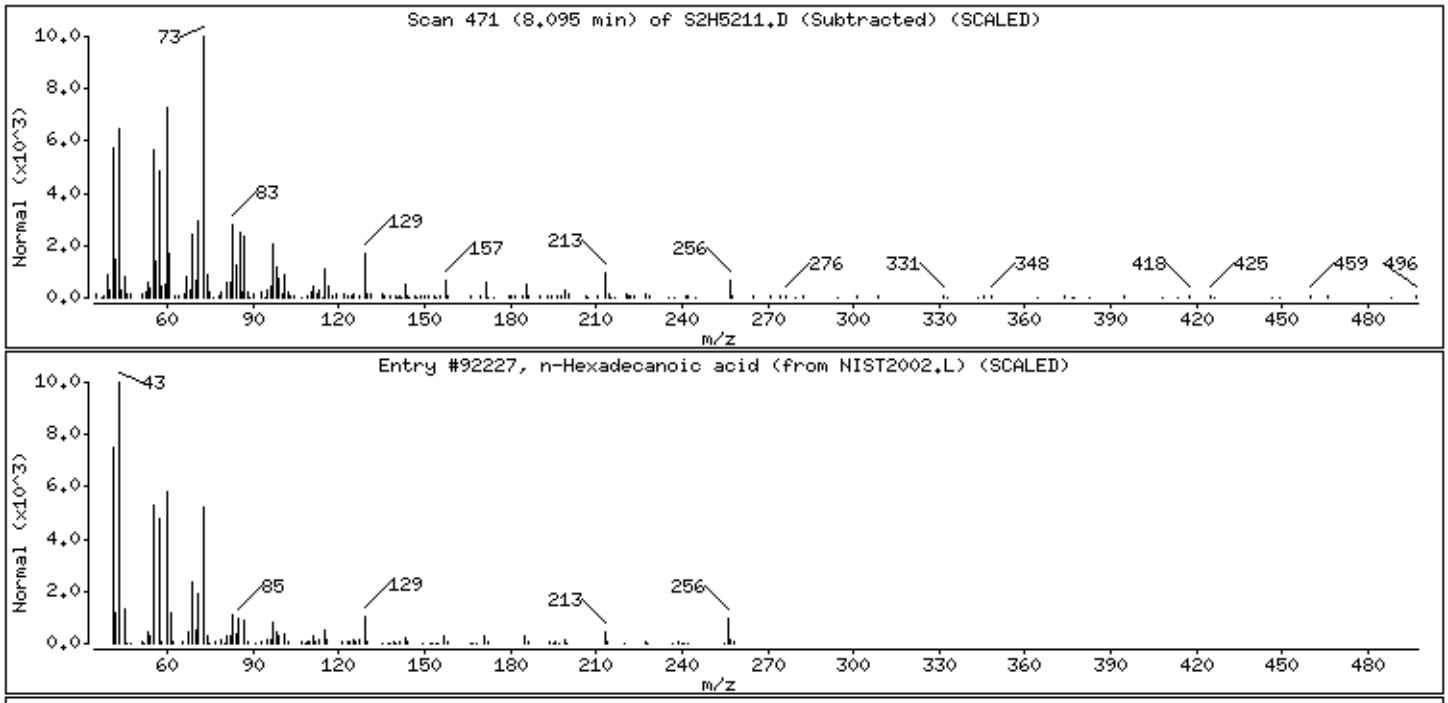
Client ID: H30W6 Instrument: S2.i

Sample Info: K2200-09B,,62636,,

Volume Injected (uL): 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\111103.B\S2H5211.D

Date : 03-NOV-2011 18:55

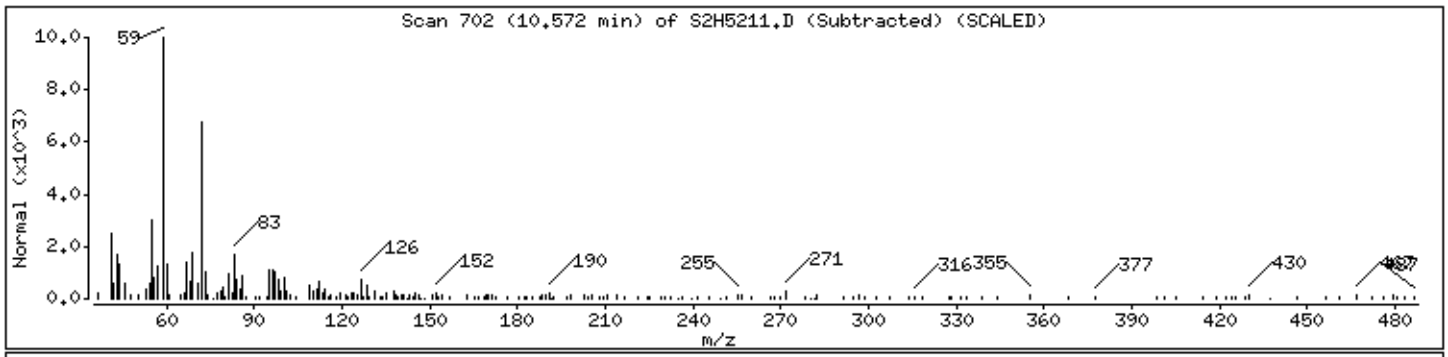
Client ID: H30W6 Instrument: S2.i

Sample Info: K2200-09B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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

CLIENT SAMPLE NO.

H30W7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-10B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5212.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2´-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1´-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

H30W7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-10B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5212.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3´-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

H30W7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-10B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5212.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.674	8.0	BNJ
02		Unknown-01	4.877	4.8	J
03		Unknown-02	5.188	2.4	J
04		Unknown-03	5.403	7.7	J
05		Unknown-04	5.532	3.2	J
06		Unknown-05	6.357	3.3	J
07		Unknown-06	8.095	5.1	J
08		Unknown-07	10.604	8.4	J
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5212.D
Report Date: 07-Nov-2011 14:02

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5212.D
Lab Smp Id: K2200-10B Client Smp ID: H30W7
Inj Date : 03-NOV-2011 19:17
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-10B,,62636,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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 * (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)
$	2 Phenol-d5	71	3.569	3.565	(0.917)	220552	57.7746	29
$	4 bis(2-Chloroethyl)ether-d8	67	3.622	3.619	(0.931)	276029	52.4734	26
$	6 2-Chlorophenol-d4	132	3.697	3.694	(0.950)	192424	58.2691	29
*	8 1,4-Dichlorobenzene-d4	152	3.890	3.887	(1.000)	121228	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.191	4.198	(1.077)	299615	57.8918	29
$	16 Nitrobenzene-d5	128	4.341	4.348	(0.877)	96603	48.4281	24(Q)
$	19 2-Nitrophenol-d4	143	4.620	4.616	(0.933)	136455	61.9659	31
$	23 2,4-Dichlorophenol-d3	165	4.823	4.820	(0.974)	248642	61.8520	31
*	25 Naphthalene-d8	136	4.952	4.948	(1.000)	383036	40.0000	
$	27 4-Chloroaniline-d4	131	5.006	5.002	(1.011)	149741	41.9517	21(Q)
$	40 Dimethylphthalate-d6	166	6.164	6.171	(0.960)	613483	58.3382	29
$	43 Acenaphthylene-d8	160	6.282	6.289	(0.978)	731059	53.4602	27
*	46 Acenaphthene-d10	164	6.421	6.418	(1.000)	286008	40.0000	
$	49 4-Nitrophenol-d4	143	6.507	6.503	(1.013)	93220	61.5115	31
$	54 Fluorene-d10	176	6.850	6.847	(1.067)	518916	53.7198	27
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.904	6.900	(0.903)	117012	56.0226	28(Q)
*	65 Phenanthrene-d10	188	7.644	7.640	(1.000)	535248	40.0000	
$	67 Anthracene-d10	188	7.687	7.694	(1.006)	749776	49.0386	25
$	72 Pyrene-d10	212	8.823	8.820	(0.893)	675586	63.2320	32
*	77 Chrysene-d12	240	9.885	9.871	(1.000)	339157	40.0000	(Q)
$	83 Benzo(a)pyrene-d12	264	11.150	11.147	(0.983)	216757	50.1881	25(H)

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5212.D
Report Date: 07-Nov-2011 14:02

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)	
* 85 Perylene-d12	264	11.247	11.233	(1.000)	176005	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\111103.B\S2H5212.D
Report Date: 07-Nov-2011 14:02

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5212.D
Lab Smp Id: K2200-10B Client Smp ID: H30W7
Inj Date : 03-NOV-2011 19:17
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-10B,,62636,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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 * (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

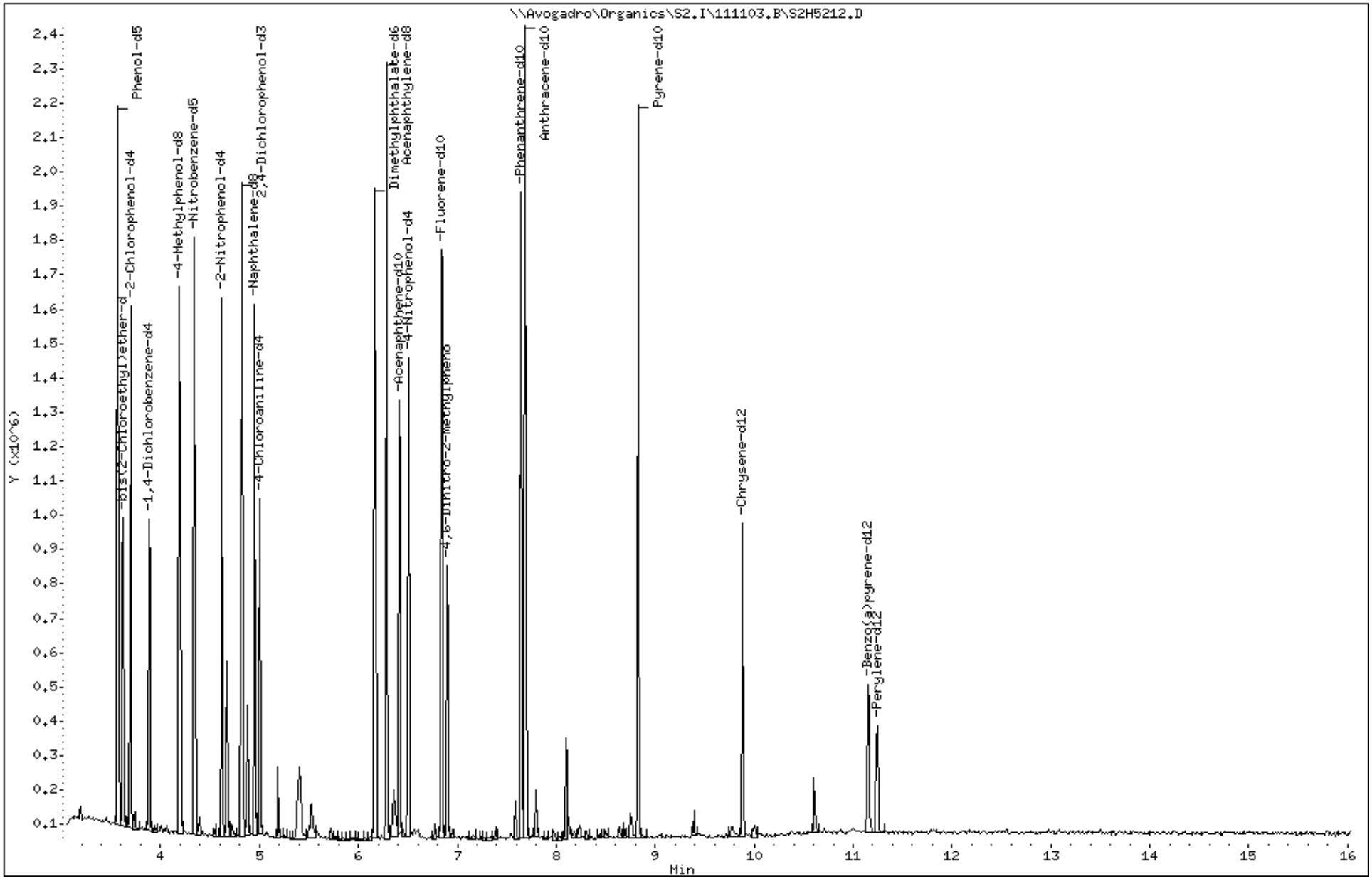
ISTD	RT	AREA	AMOUNT
* 25 Naphthalene-d8	4.953	1317707	40.000
* 46 Acenaphthene-d10	6.422	1527100	40.000
* 65 Phenanthrene-d10	7.644	1467714	40.000
* 85 Perylene-d12	11.247	455022	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
2(3H)-Furanone, dihydro-4-hydroxy-				CAS #: 5469-16-9			
4.674	526114	15.9705826	8.0	90	NIST2002.L	4145	25
Unknown				CAS #:			
4.877	316388	9.60419555	4.8	0		0	25
Unknown				CAS #:			
5.188	155784	4.72894559	2.4	0		0	25

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5212.D
Report Date: 07-Nov-2011 14:02

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
5.403	506613	15.3786027	7.7	0		0	25
Unknown				CAS #:			
5.532	209832	6.36962085	3.2	0		0	25
Unknown				CAS #:			
6.357	251774	6.59481291	3.3	0		0	46
Unknown				CAS #:			
8.095	373242	10.1720689	5.1	0		0	65
Unknown				CAS #:			
10.604	191018	16.7919655	8.4	0		0	85

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5212.D
Date : 03-NOV-2011 19:17
Client ID: H30W7
Instrument: S2.i
Sample Info: K2200-10B,,62636,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5212.D

Date : 03-NOV-2011 19:17

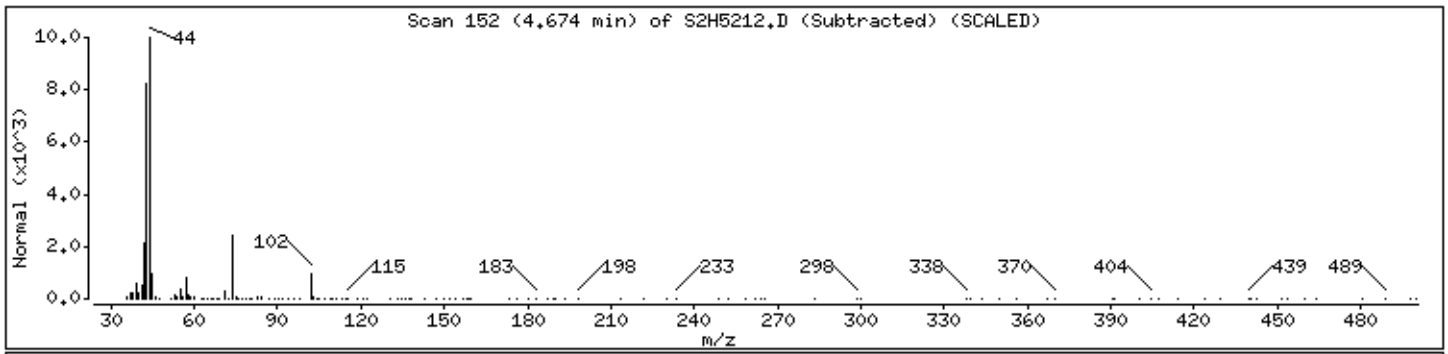
Client ID: H30W7 Instrument: S2.i

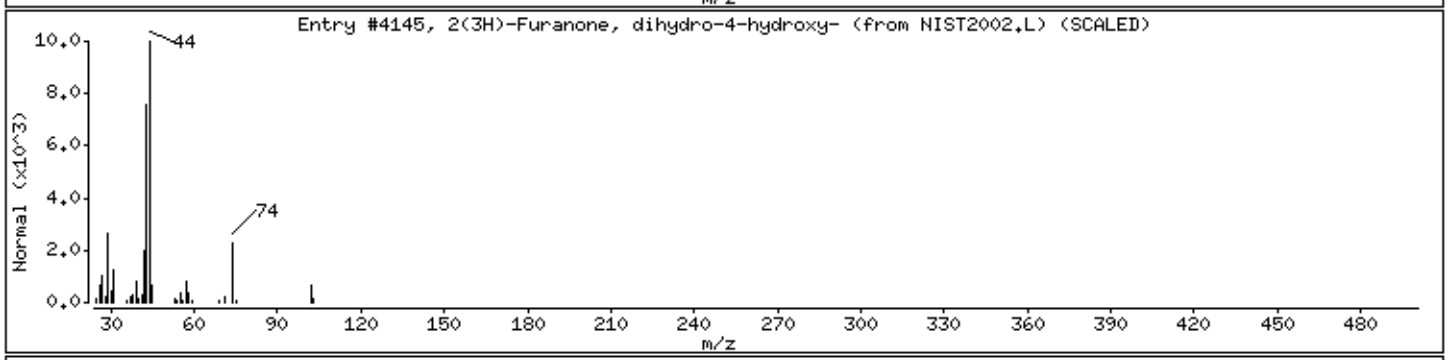
Sample Info: K2200-10B,,62636,,

Volume Injected (uL): 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 : 03-NOV-2011 19:17

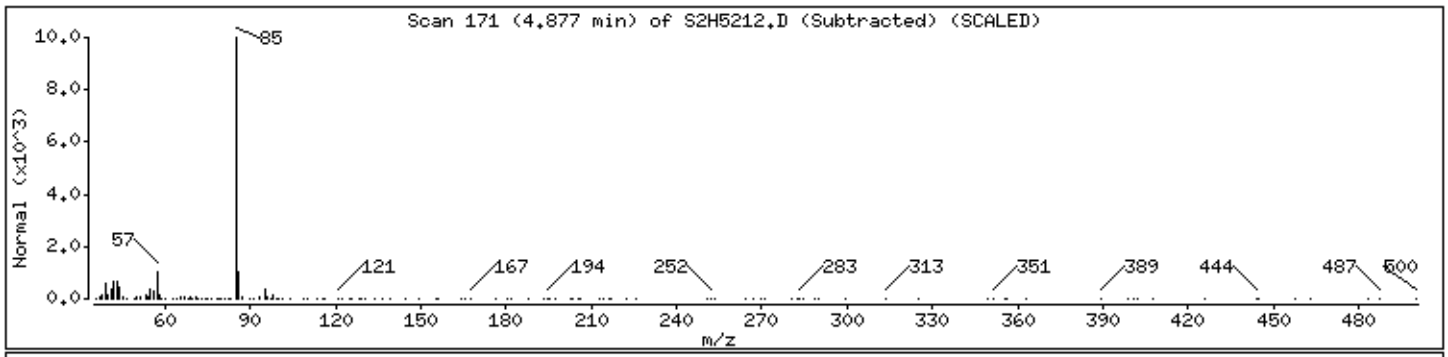
Client ID: H30W7 Instrument: S2.i

Sample Info: K2200-10B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 19:17

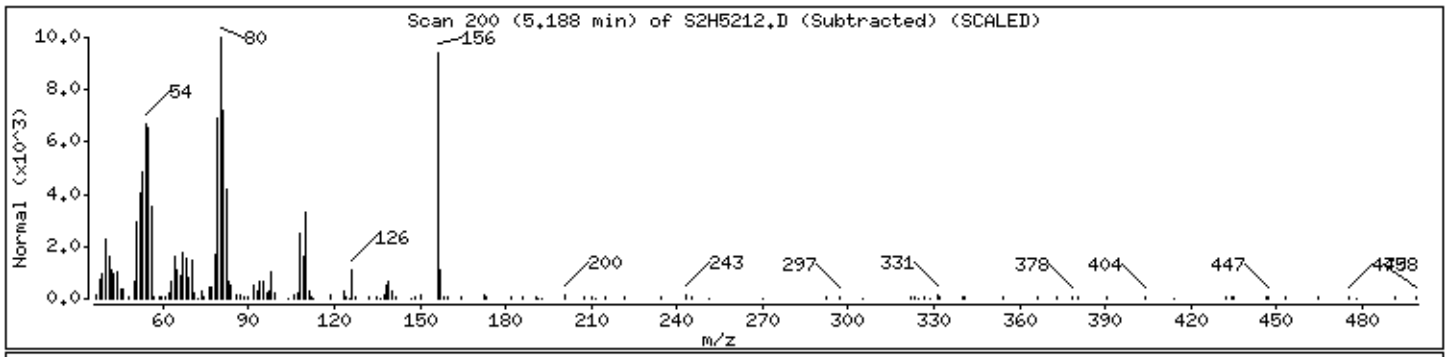
Client ID: H30W7 Instrument: S2.i

Sample Info: K2200-10B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5212.D

Date : 03-NOV-2011 19:17

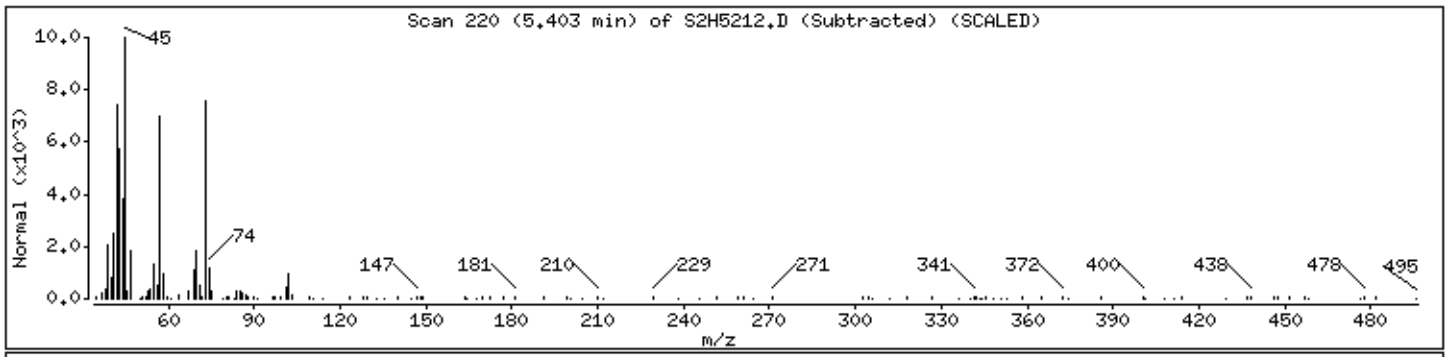
Client ID: H30W7 Instrument: S2.i

Sample Info: K2200-10B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5212.D

Date : 03-NOV-2011 19:17

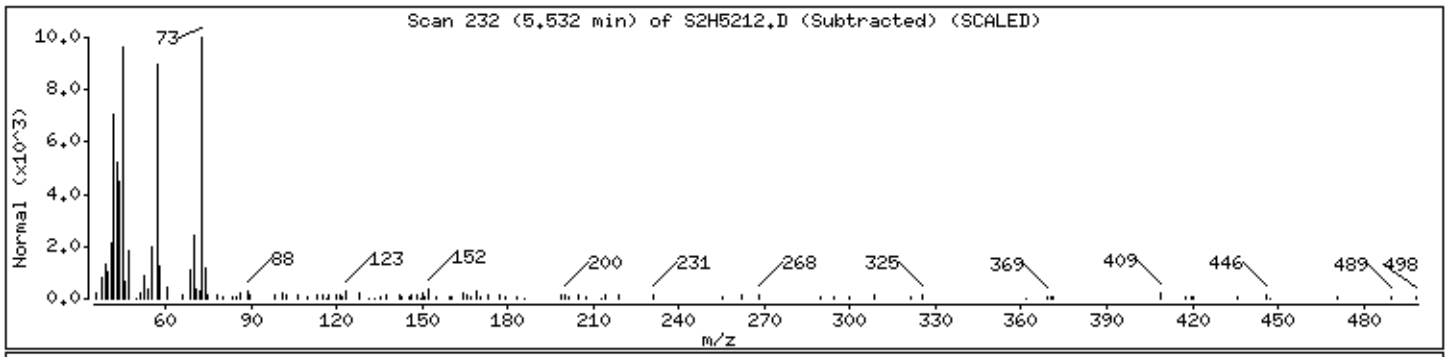
Client ID: H30W7 Instrument: S2.i

Sample Info: K2200-10B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 19:17

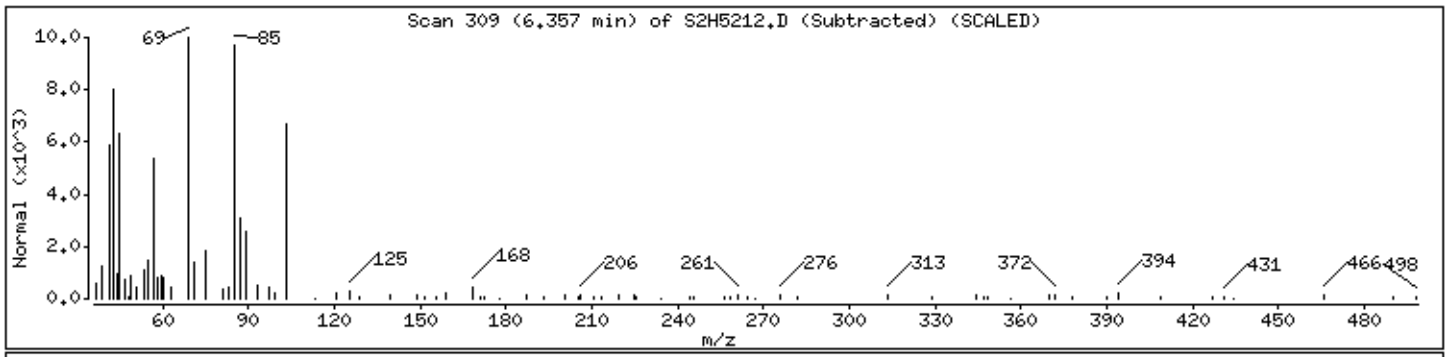
Client ID: H30W7 Instrument: S2.i

Sample Info: K2200-10B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 19:17

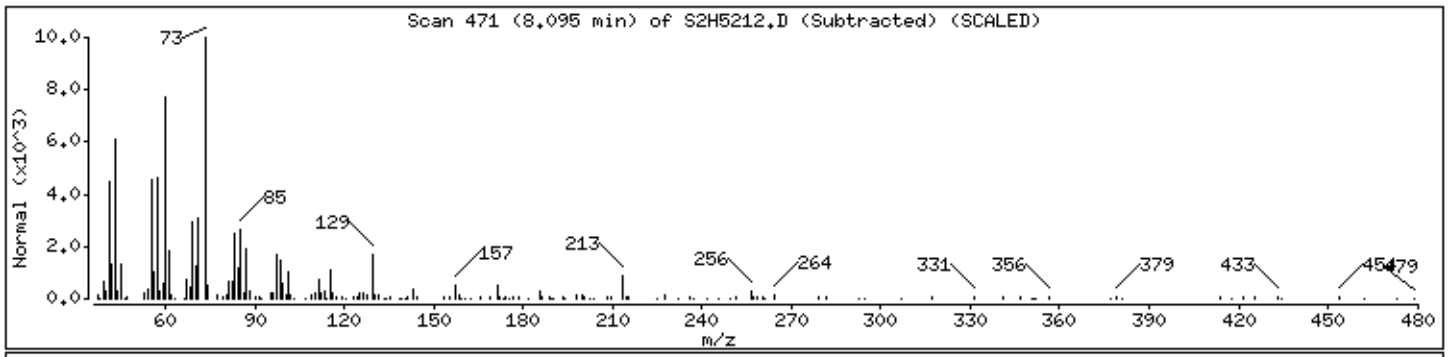
Client ID: H30W7 Instrument: S2.i

Sample Info: K2200-10B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5212.D

Date : 03-NOV-2011 19:17

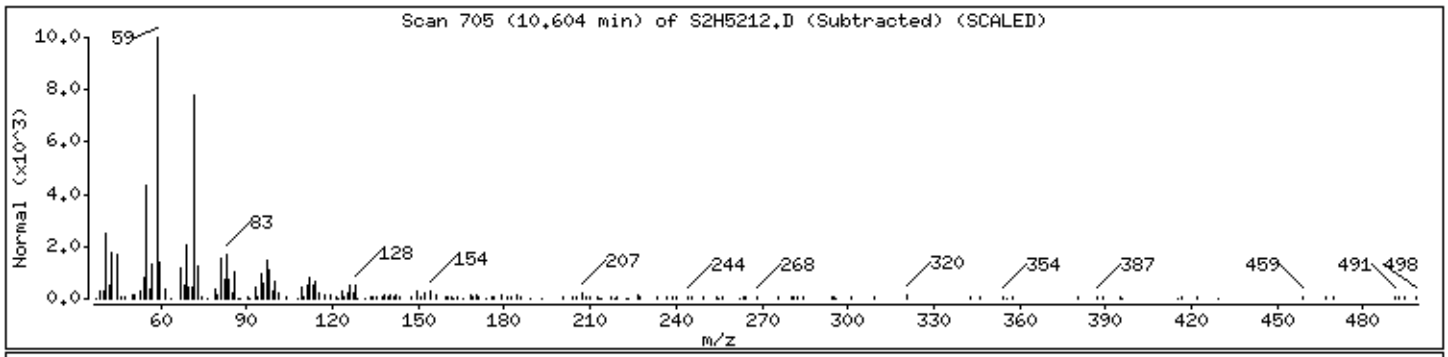
Client ID: H30W7 Instrument: S2.i

Sample Info: K2200-10B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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

CLIENT SAMPLE NO.

H30W8

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-11B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5213.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2´-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1´-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

H30W8

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-11B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5213.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3´-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

H30W8

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-11B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5213.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.672	8.4	BNJ
02		Unknown-01	4.876	5.1	J
03		Unknown-02	5.187	2.6	J
04		Unknown-03	5.412	8.2	J
05		Unknown-04	5.530	3.9	J
06		Unknown-05	6.366	3.7	J
07		Unknown-06	7.589	4.7	J
08	57-10-3	n-Hexadecanoic acid	8.103	5.4	NJ
09		Unknown-07	8.554	2.4	J
10	112-84-5	13-Docosenamide, (Z)-	10.623	7.0	NJ
11		Unknown-08	11.009	2.2	J
	E96679[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5213.D
Report Date: 07-Nov-2011 14:02

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5213.D
Lab Smp Id: K2200-11B Client Smp ID: H30W8
Inj Date : 03-NOV-2011 19:39
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-11B,,62636,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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 * (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)
$	2 Phenol-d5	71	3.567	3.565	(0.917)	227815	59.7921	30
$	4 bis(2-Chloroethyl)ether-d8	67	3.620	3.619	(0.931)	312649	59.5493	30
$	6 2-Chlorophenol-d4	132	3.696	3.694	(0.950)	203724	61.8097	31
*	8 1,4-Dichlorobenzene-d4	152	3.889	3.887	(1.000)	120995	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.200	4.198	(1.080)	337688	65.3740	33
$	16 Nitrobenzene-d5	128	4.350	4.348	(0.879)	110236	56.2897	28
$	19 2-Nitrophenol-d4	143	4.618	4.616	(0.933)	142202	65.7761	33
$	23 2,4-Dichlorophenol-d3	165	4.821	4.820	(0.974)	269741	68.3478	34
*	25 Naphthalene-d8	136	4.950	4.948	(1.000)	376046	40.0000	
$	27 4-Chloroaniline-d4	131	5.004	5.002	(1.011)	178834	51.0337	26(Q)
$	40 Dimethylphthalate-d6	166	6.173	6.171	(0.962)	778667	69.9118	35
$	43 Acenaphthylene-d8	160	6.291	6.289	(0.980)	856769	59.1550	30
*	46 Acenaphthene-d10	164	6.419	6.418	(1.000)	302921	40.0000	
$	49 4-Nitrophenol-d4	143	6.505	6.503	(1.013)	101421	63.1865	32
$	54 Fluorene-d10	176	6.848	6.847	(1.067)	641499	62.7021	31
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.902	6.900	(0.903)	155126	68.9491	34(Q)
*	65 Phenanthrene-d10	188	7.642	7.640	(1.000)	576559	40.0000	
$	67 Anthracene-d10	188	7.685	7.694	(1.006)	659619	40.0507	20
$	72 Pyrene-d10	212	8.832	8.820	(0.896)	827775	65.9620	33
*	77 Chrysene-d12	240	9.894	9.871	(1.000)	398360	40.0000	(QH)
$	83 Benzo(a)pyrene-d12	264	11.170	11.147	(0.992)	245126	45.4256	23(H)

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5213.D
Report Date: 07-Nov-2011 14:02

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)	
* 85 Perylene-d12	264	11.256	11.233	(1.000)	219908	40.0000		(Q)

QC Flag Legend

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

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5213.D
Report Date: 07-Nov-2011 14:02

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5213.D
Lab Smp Id: K2200-11B Client Smp ID: H30W8
Inj Date : 03-NOV-2011 19:39
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-11B,,62636,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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 * (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

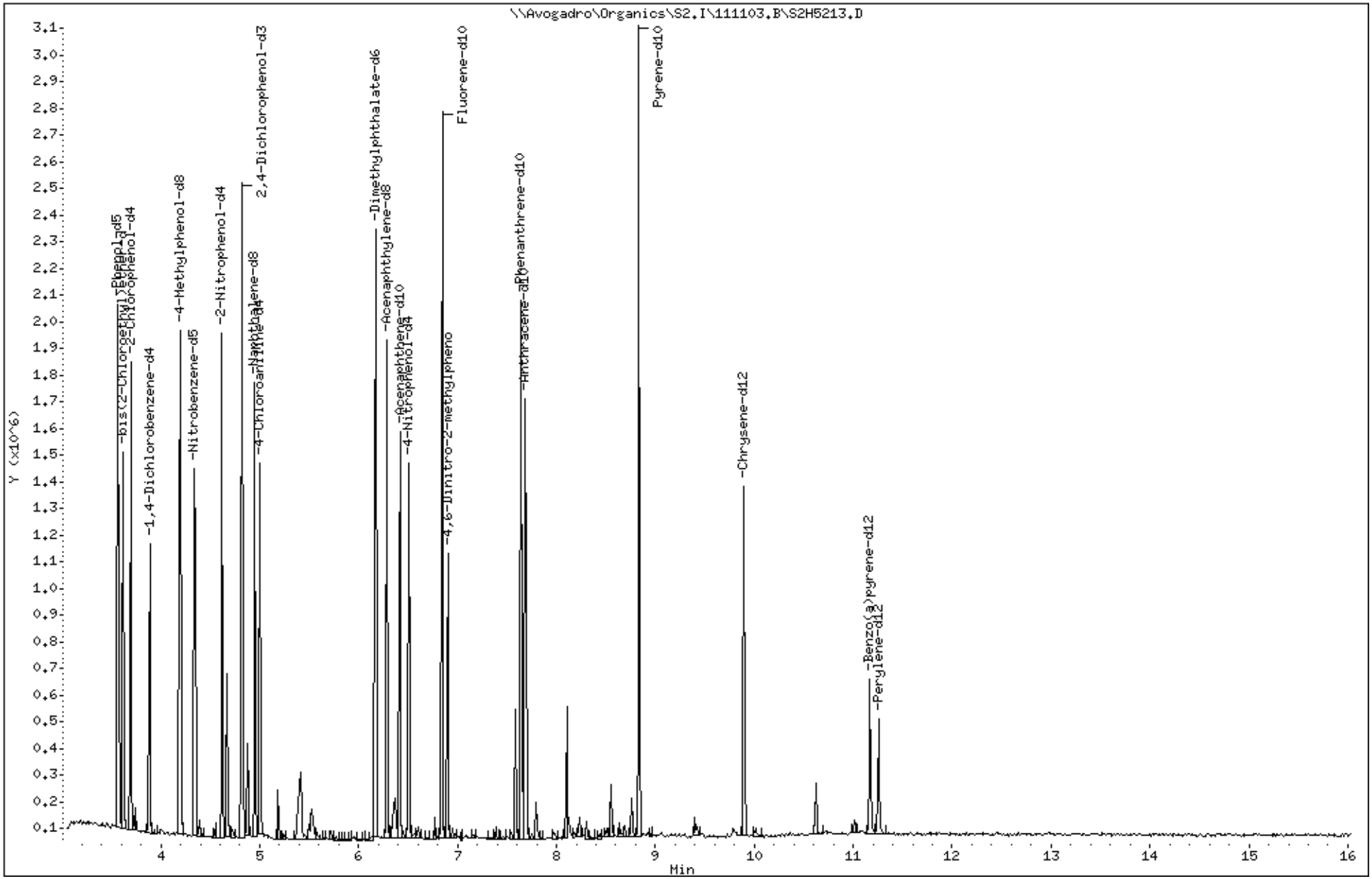
ISTD	RT	AREA	AMOUNT
* 25 Naphthalene-d8	4.951	1312188	40.000
* 46 Acenaphthene-d10	6.420	1648613	40.000
* 65 Phenanthrene-d10	7.642	1624349	40.000
* 85 Perylene-d12	11.256	552075	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
2(3H)-Furanone, dihydro-4-hydroxy-				CAS #: 5469-16-9			
4.672	547954	16.7035001	8.4	90	NIST2002.L	4145	25
Unknown				CAS #:			
4.876	334895	10.2087591	5.1	0		0	25
Unknown				CAS #:			
5.187	169287	5.16043873	2.6	0		0	25

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5213.D
Report Date: 07-Nov-2011 14:02

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
5.412	538101	16.4031622	8.2	0		0	25
Unknown					CAS #:		
5.530	256132	7.80776472	3.9	0		0	25
Unknown					CAS #:		
6.366	300926	7.30131538	3.7	0		0	46
Unknown					CAS #:		
7.589	382074	9.40865435	4.7	0		0	65
n-Hexadecanoic acid					CAS #: 57-10-3		
8.103	442267	10.8909370	5.4	98	NIST2002.L	92228	65
Unknown					CAS #:		
8.554	193679	4.76939413	2.4	0		0	65
13-Docosenamide, (Z)-					CAS #: 112-84-5		
10.623	194308	14.0783450	7.0	91	NIST2002.L	135943	85
Unknown					CAS #:		
11.010	60545	4.38670265	2.2	0		0	85

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5213.D
Date : 03-NOV-2011 19:39
Client ID: H30W8
Instrument: S2.i
Sample Info: K2200-11B,,62636,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5213.D

Date : 03-NOV-2011 19:39

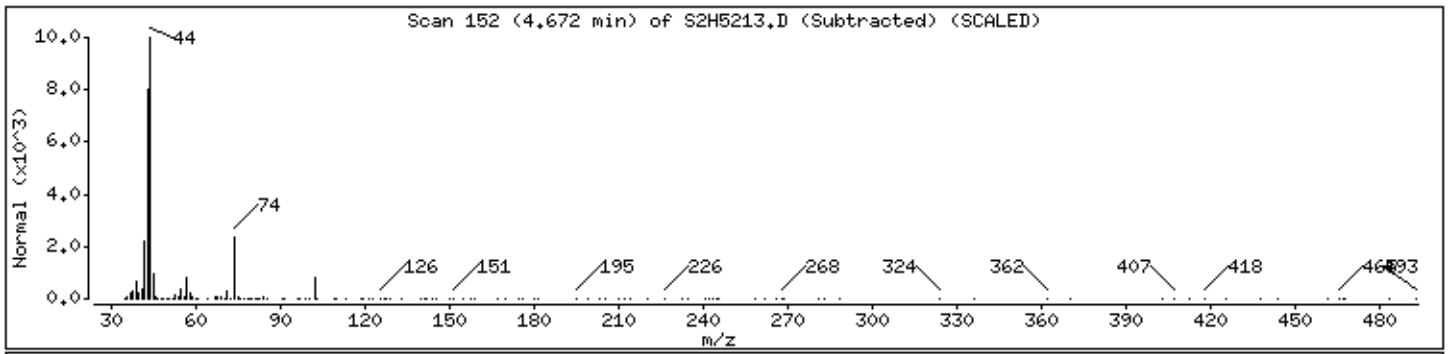
Client ID: H30W8 Instrument: S2.i

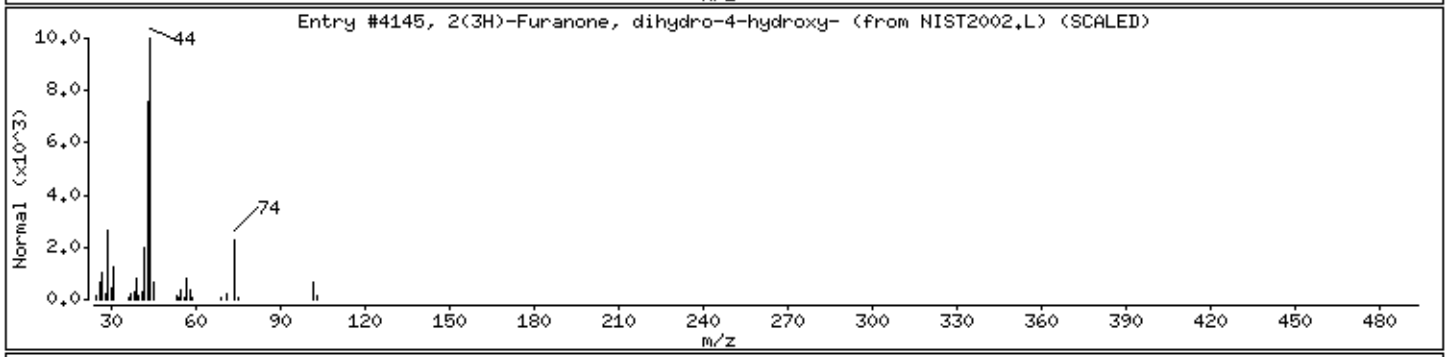
Sample Info: K2200-11B,,62636,,

Volume Injected (uL): 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\111103.B\S2H5213.D

Date : 03-NOV-2011 19:39

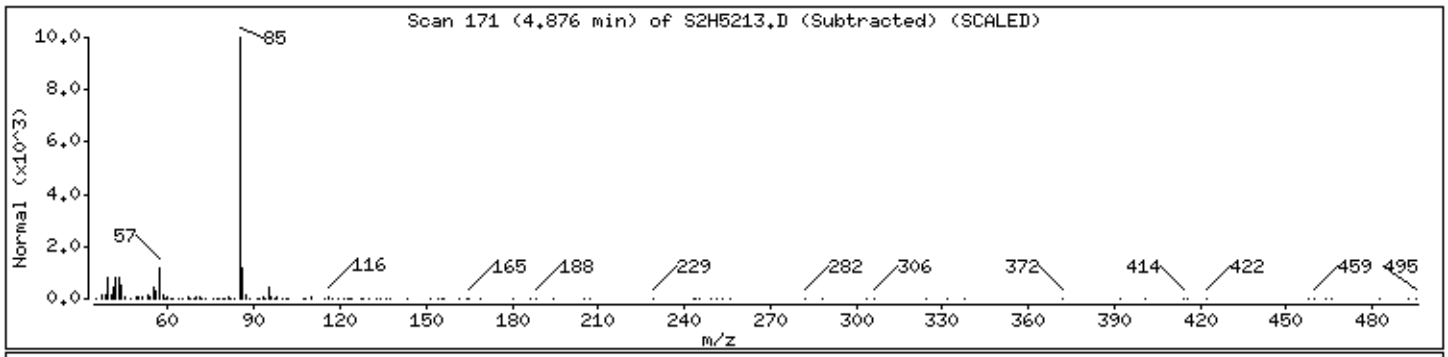
Client ID: H30W8 Instrument: S2.i

Sample Info: K2200-11B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5213.D

Date : 03-NOV-2011 19:39

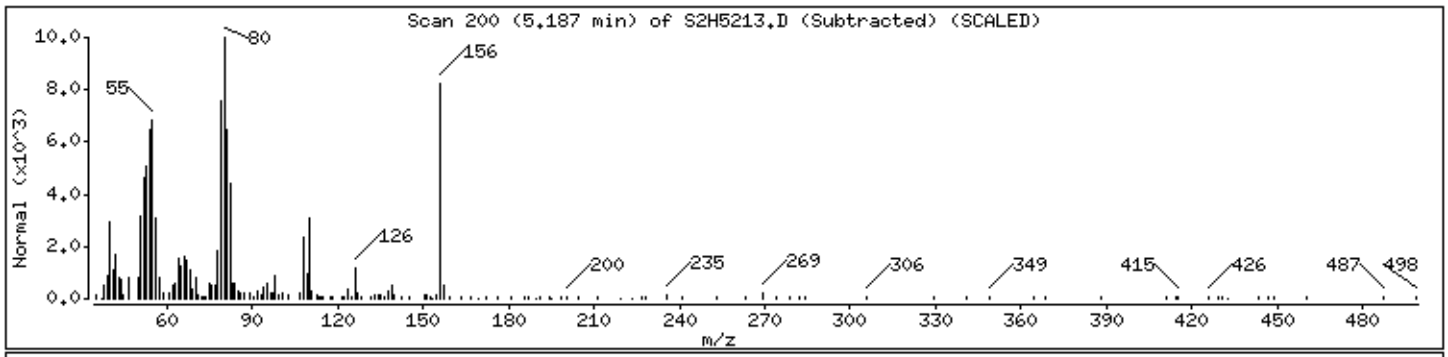
Client ID: H30W8 Instrument: S2.i

Sample Info: K2200-11B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5213.D

Date : 03-NOV-2011 19:39

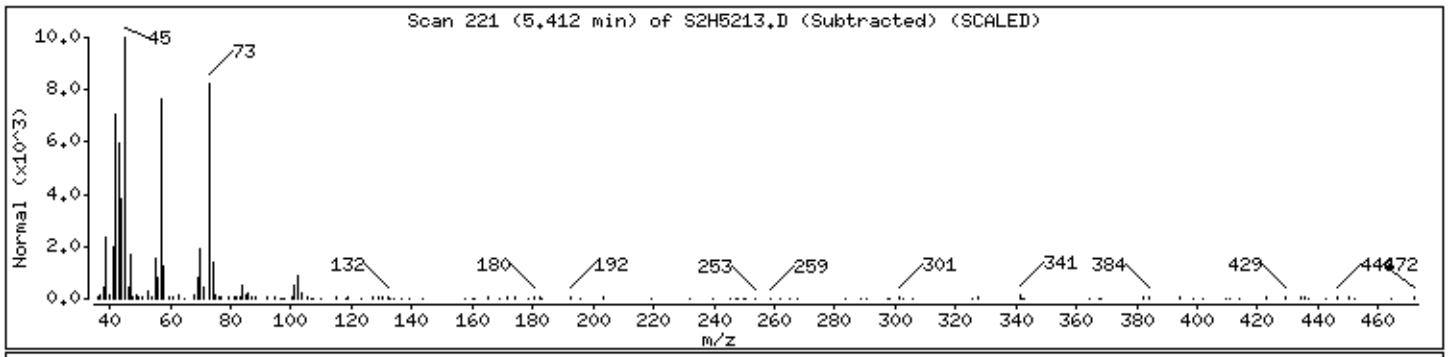
Client ID: H30W8 Instrument: S2.i

Sample Info: K2200-11B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5213.D

Date : 03-NOV-2011 19:39

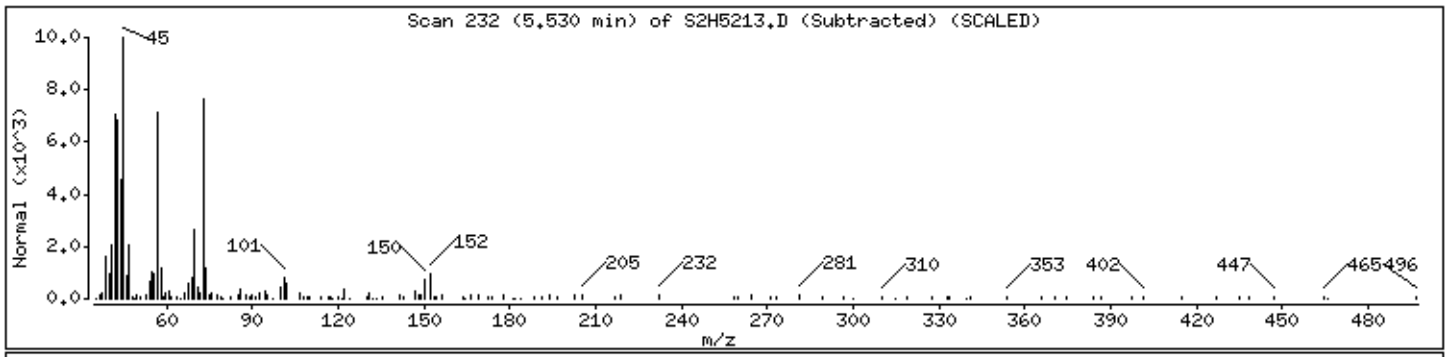
Client ID: H30W8 Instrument: S2.i

Sample Info: K2200-11B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5213.D

Date : 03-NOV-2011 19:39

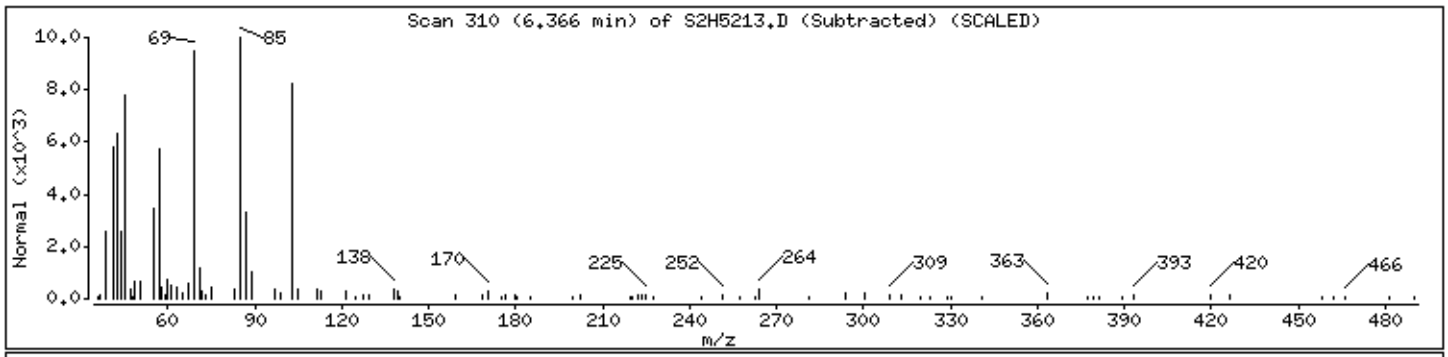
Client ID: H30W8 Instrument: S2.i

Sample Info: K2200-11B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5213.D

Date : 03-NOV-2011 19:39

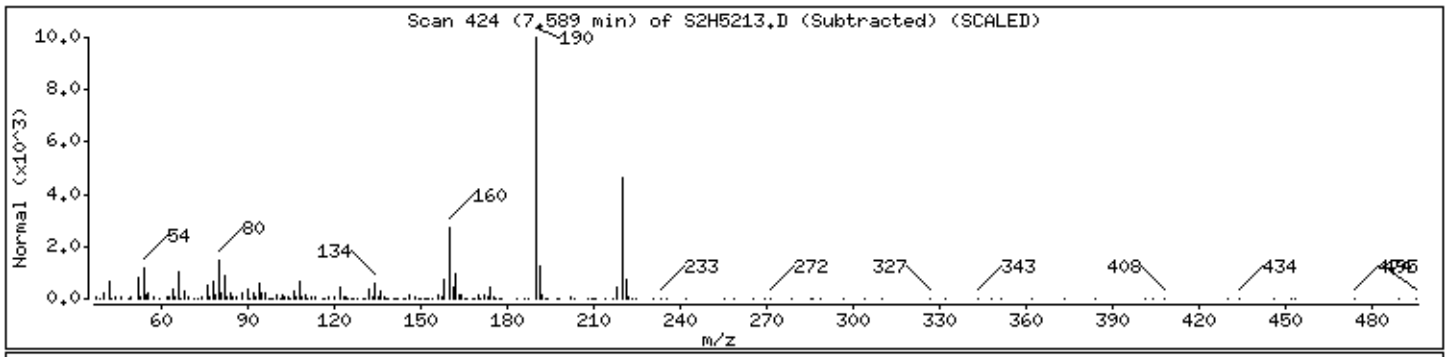
Client ID: H30W8 Instrument: S2.i

Sample Info: K2200-11B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5213.D

Date : 03-NOV-2011 19:39

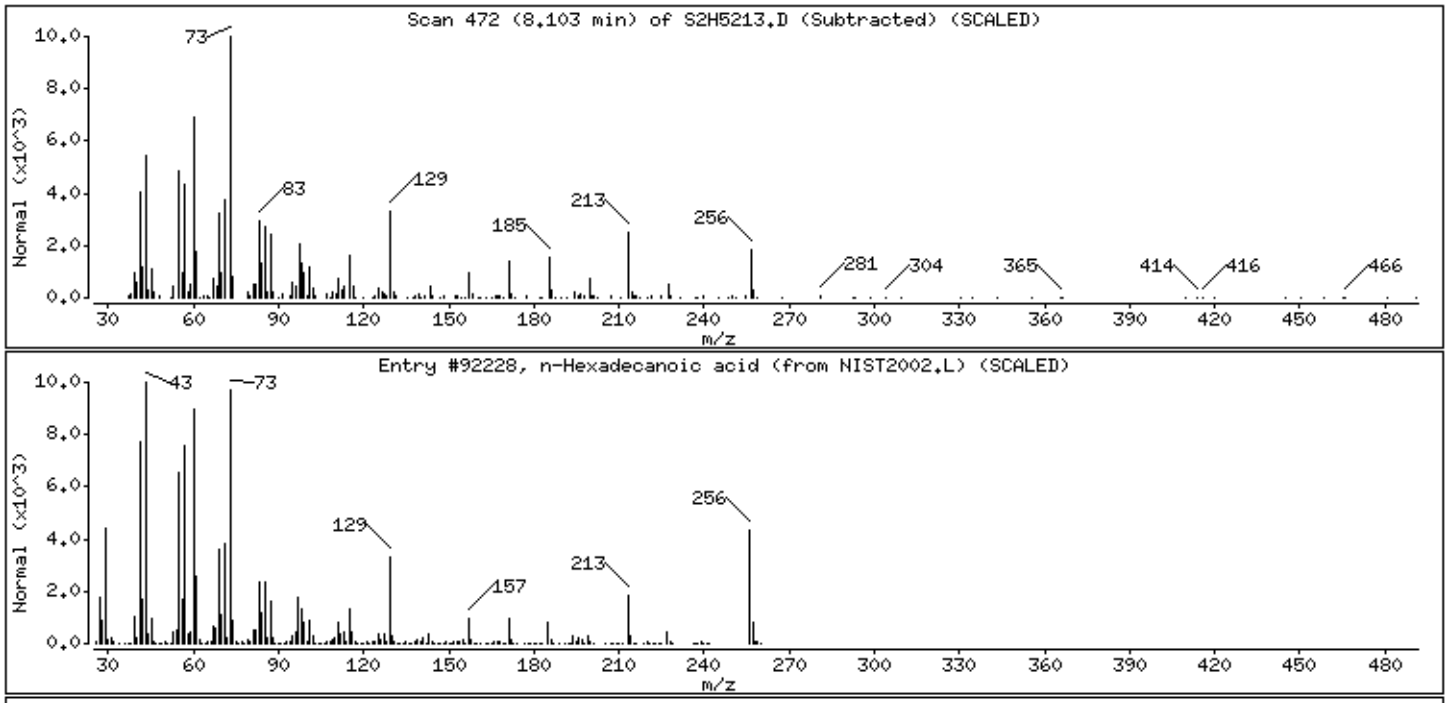
Client ID: H30W8 Instrument: S2.i

Sample Info: K2200-11B,,62636,,

Volume Injected (uL): 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	92228	98	C16H32O2	256



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5213.D

Date : 03-NOV-2011 19:39

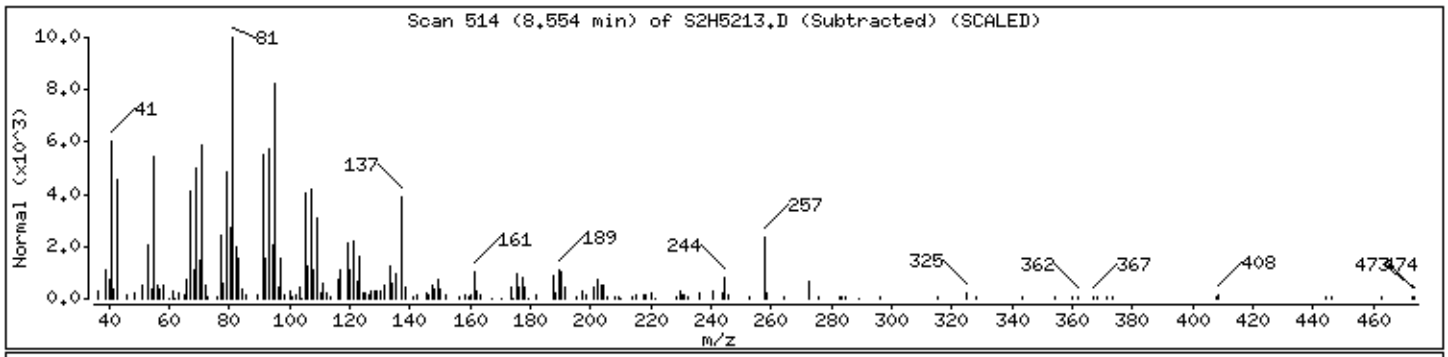
Client ID: H30W8 Instrument: S2.i

Sample Info: K2200-11B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5213.D

Date : 03-NOV-2011 19:39

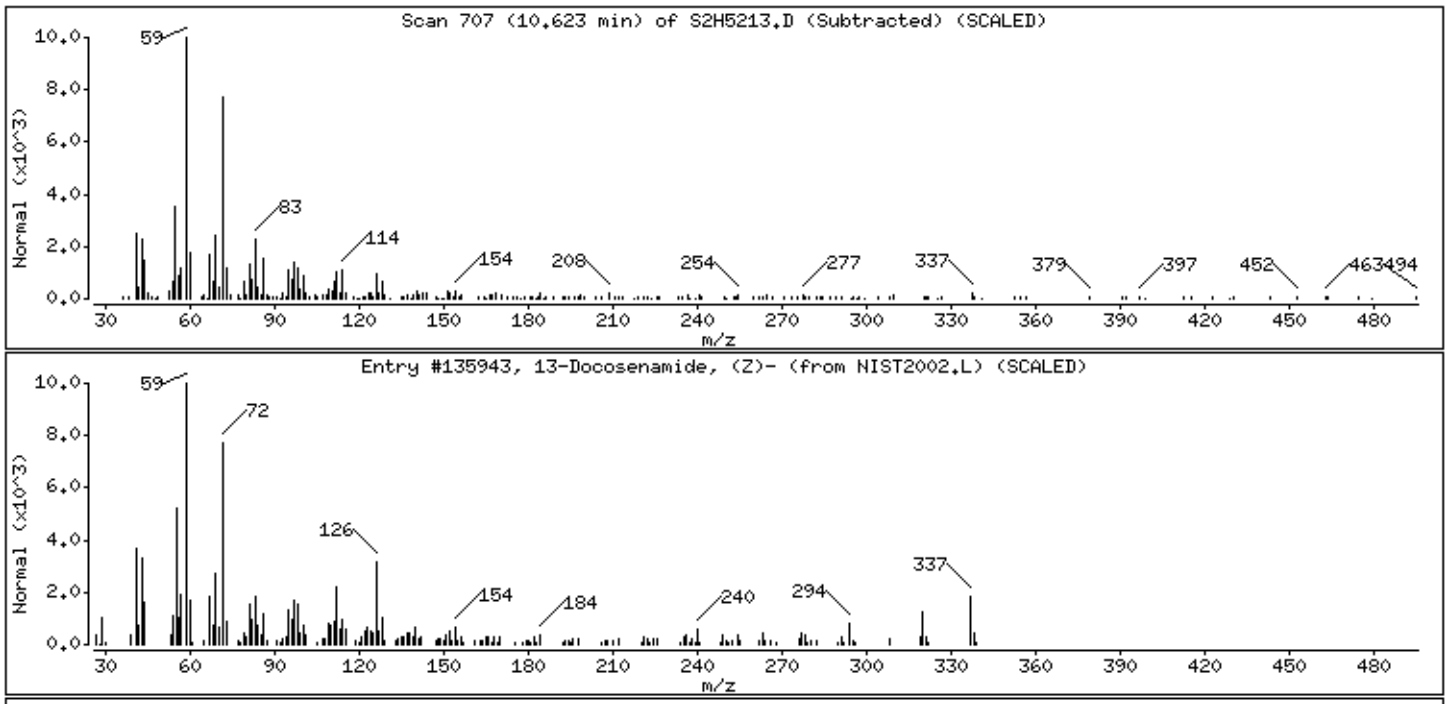
Client ID: H30W8 Instrument: S2.i

Sample Info: K2200-11B,,62636,,

Volume Injected (uL): 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	135943	91	C22H43NO	337



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5213.D

Date : 03-NOV-2011 19:39

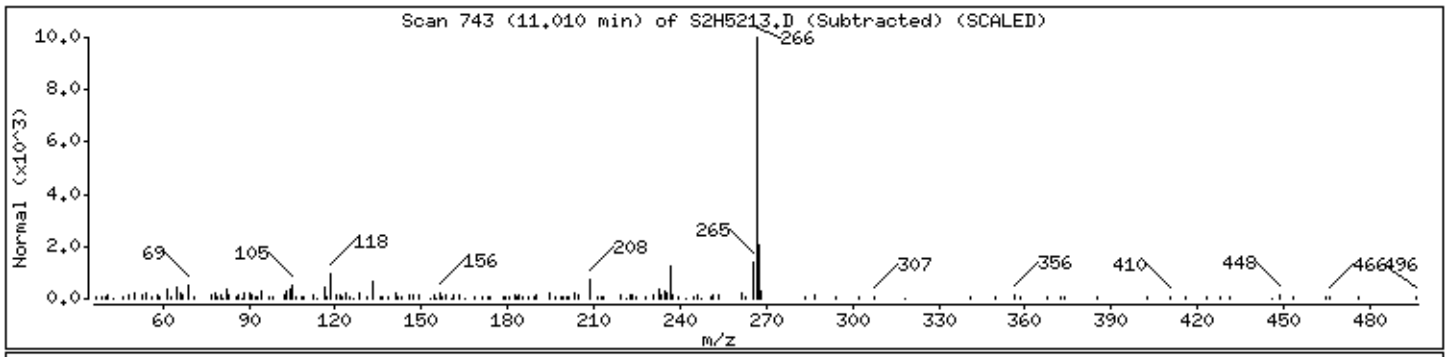
Client ID: H30W8 Instrument: S2.i

Sample Info: K2200-11B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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

CLIENT SAMPLE NO.

H30X0

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-12B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5214.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2´-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1´-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

H30X0

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-12B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5214.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3´-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

H30X0

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-12B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5214.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.670	11	BNJ
02		Unknown-01	4.885	8.1	J
03		Unknown-02	5.185	2.4	J
04		Unknown-03	5.421	11	J
05		Unknown-04	5.539	4.6	J
06		Unknown-05	6.364	3.0	J
07	57-10-3	n-Hexadecanoic acid	8.102	5.5	NJ
08		Unknown-06	10.568	11	J
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5214.D
Report Date: 07-Nov-2011 14:02

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5214.D
Lab Smp Id: K2200-12B Client Smp ID: H30X0
Inj Date : 03-NOV-2011 20:00
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-12B,,62636,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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 * (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)
$	2 Phenol-d5	71	3.565	3.565	(0.917)	207333	50.6630	25
$	4 bis(2-Chloroethyl)ether-d8	67	3.619	3.619	(0.931)	297786	52.8062	26
$	6 2-Chlorophenol-d4	132	3.694	3.694	(0.950)	184326	52.0669	26
*	8 1,4-Dichlorobenzene-d4	152	3.887	3.887	(1.000)	129959	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.198	4.198	(1.080)	336673	60.6818	30
$	16 Nitrobenzene-d5	128	4.348	4.348	(0.879)	106534	51.4385	26
$	19 2-Nitrophenol-d4	143	4.616	4.616	(0.933)	123756	54.1281	27
$	23 2,4-Dichlorophenol-d3	165	4.820	4.820	(0.974)	241895	57.9561	29
*	25 Naphthalene-d8	136	4.948	4.948	(1.000)	397692	40.0000	
$	27 4-Chloroaniline-d4	131	5.002	5.002	(1.011)	180457	48.6940	24(Q)
$	40 Dimethylphthalate-d6	166	6.171	6.171	(0.962)	800341	61.0044	31
$	43 Acenaphthylene-d8	160	6.289	6.289	(0.980)	858092	50.2978	25
*	46 Acenaphthene-d10	164	6.418	6.418	(1.000)	356814	40.0000	
$	49 4-Nitrophenol-d4	143	6.514	6.503	(1.015)	100587	53.2017	27
$	54 Fluorene-d10	176	6.847	6.847	(1.067)	634666	52.6646	26
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.900	6.900	(0.903)	154550	65.7842	33(Q)
*	65 Phenanthrene-d10	188	7.640	7.640	(1.000)	602054	40.0000	
$	67 Anthracene-d10	188	7.694	7.694	(1.007)	1005182	58.4481	29
$	72 Pyrene-d10	212	8.820	8.820	(0.895)	778911	49.7911	25
*	77 Chrysene-d12	240	9.860	9.871	(1.000)	496585	40.0000	(Q)
$	83 Benzo(a)pyrene-d12	264	11.115	11.147	(0.992)	315666	51.3038	26(H)

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5214.D
Report Date: 07-Nov-2011 14:02

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)	
* 85 Perylene-d12	264	11.200	11.233	(1.000)	250744	40.0000		(Q)

QC Flag Legend

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

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5214.D
Report Date: 07-Nov-2011 14:02

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5214.D
Lab Smp Id: K2200-12B Client Smp ID: H30X0
Inj Date : 03-NOV-2011 20:00
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-12B,,62636,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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 * (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

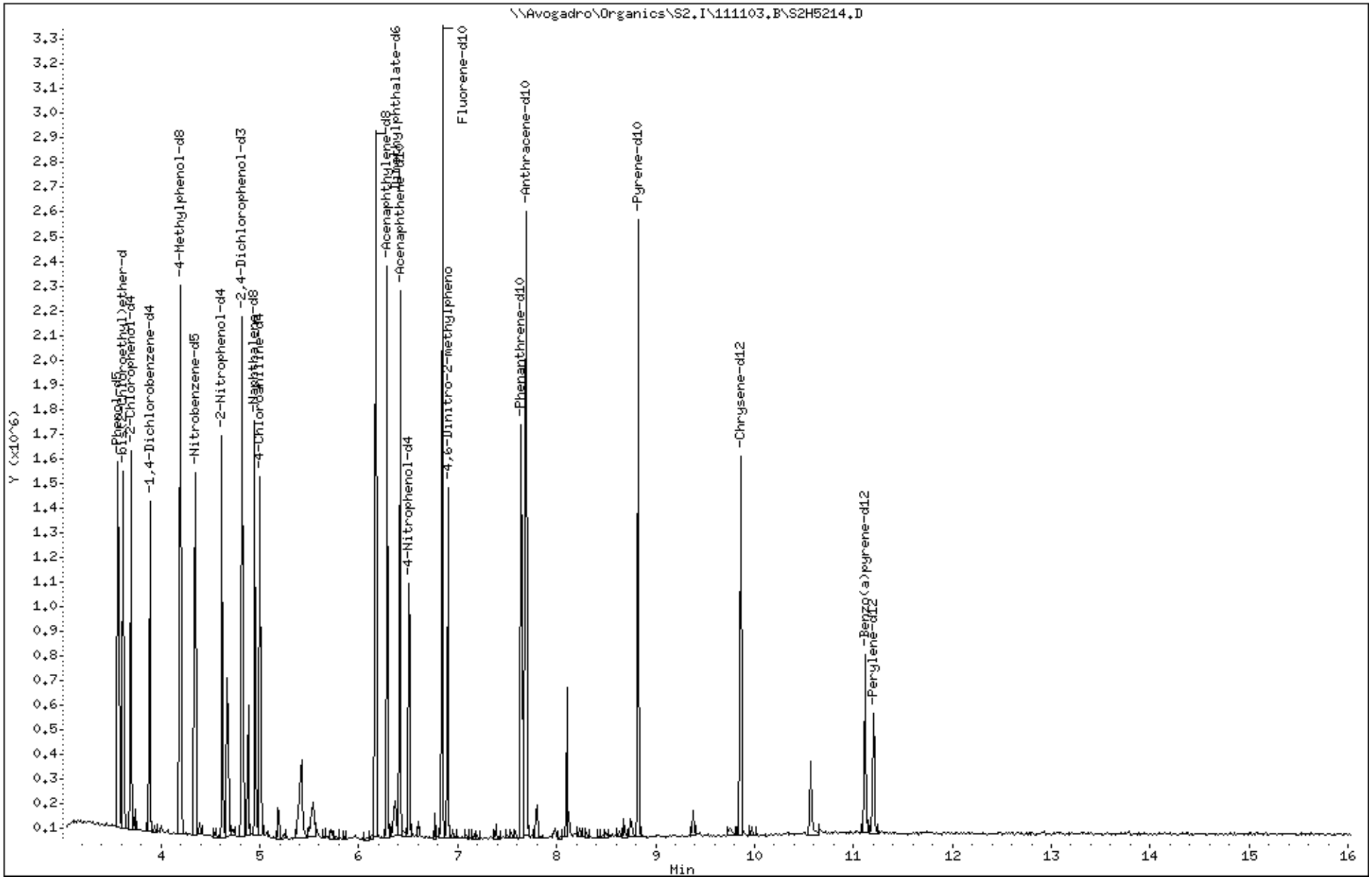
ISTD	RT	AREA	AMOUNT
* 25 Naphthalene-d8	4.949	1381212	40.000
* 46 Acenaphthene-d10	6.418	1850687	40.000
* 65 Phenanthrene-d10	7.641	1734208	40.000
* 85 Perylene-d12	11.201	629524	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
2(3H)-Furanone, dihydro-4-hydroxy-				CAS #: 5469-16-9			
4.670	789474	22.8632122	11	90	NIST2002.L	4145	25
Unknown				CAS #:			
4.885	560158	16.2221974	8.1	0		0	25
Unknown				CAS #:			
5.185	165019	4.77896451	2.4	0		0	25

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5214.D
Report Date: 07-Nov-2011 14:02

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
5.421	771993	22.3569629	11	0		0	25
Unknown					CAS #:		
5.539	315223	9.12888387	4.6	0		0	25
Unknown					CAS #:		
6.365	279065	6.03159558	3.0	0		0	46
n-Hexadecanoic acid					CAS #: 57-10-3		
8.102	476445	10.9893371	5.5	96	NIST2002.L	92227	65
Unknown					CAS #:		
10.568	342520	21.7636953	11	0		0	85

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5214.D
Date : 03-NOV-2011 20:00
Client ID: H30X0
Instrument: S2.i
Sample Info: K2200-12B,,62636,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5214.D

Date : 03-NOV-2011 20:00

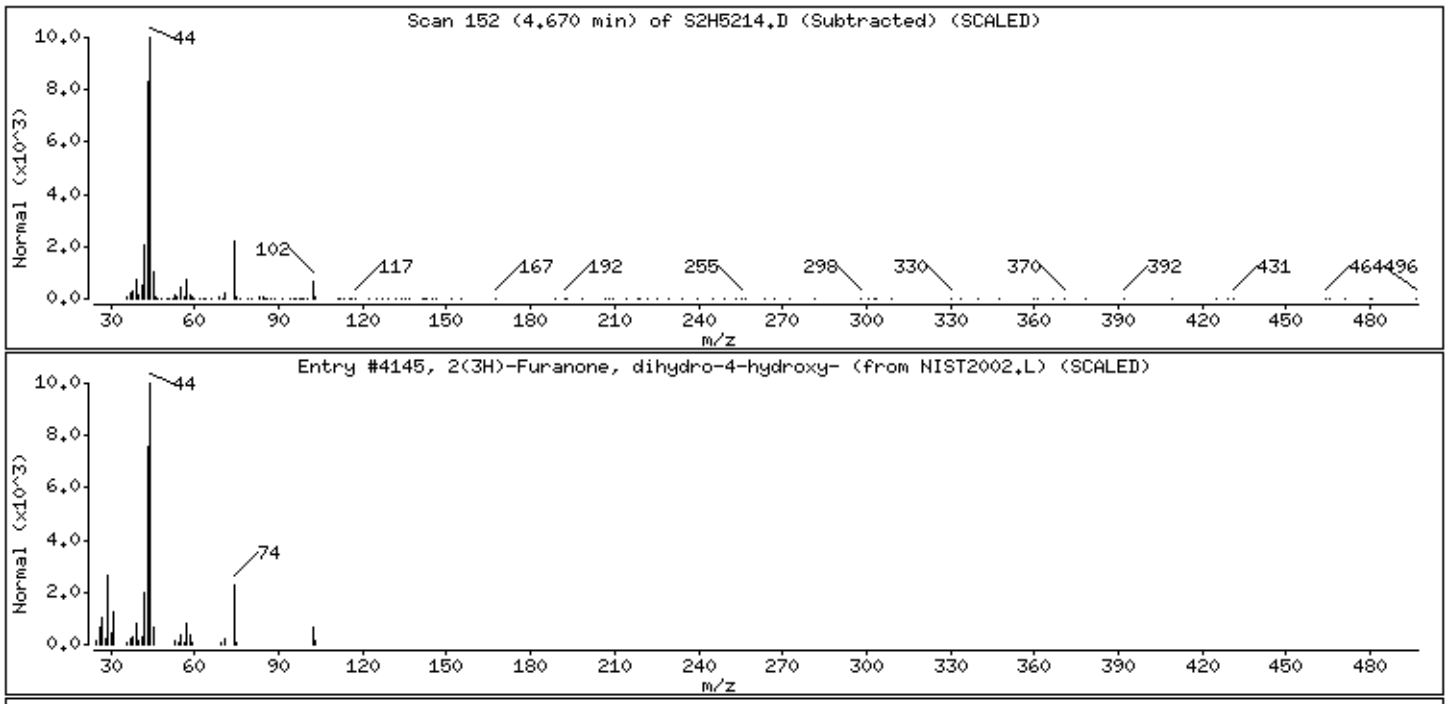
Client ID: H30X0 Instrument: S2.i

Sample Info: K2200-12B,,62636,,

Volume Injected (uL): 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 : 03-NOV-2011 20:00

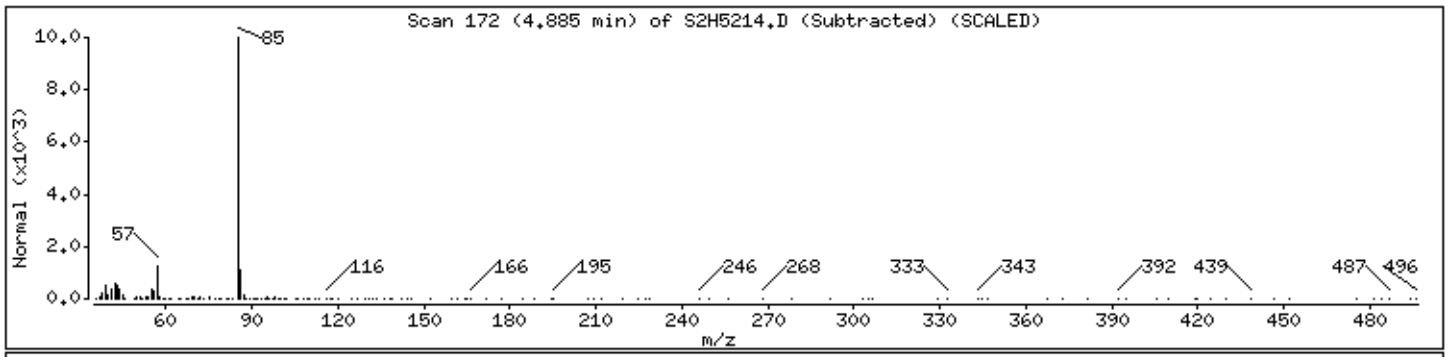
Client ID: H30X0 Instrument: S2.i

Sample Info: K2200-12B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5214.D

Date : 03-NOV-2011 20:00

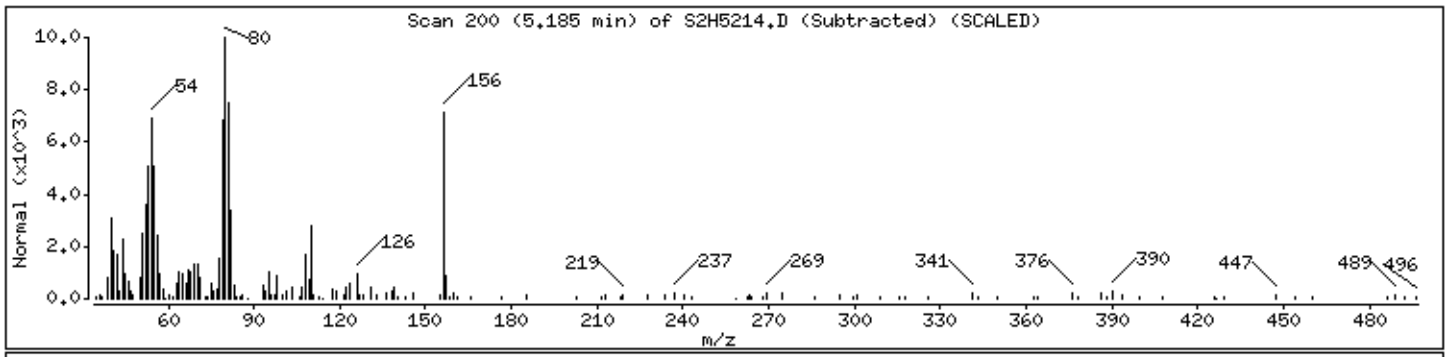
Client ID: H30X0 Instrument: S2.i

Sample Info: K2200-12B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5214.D

Date : 03-NOV-2011 20:00

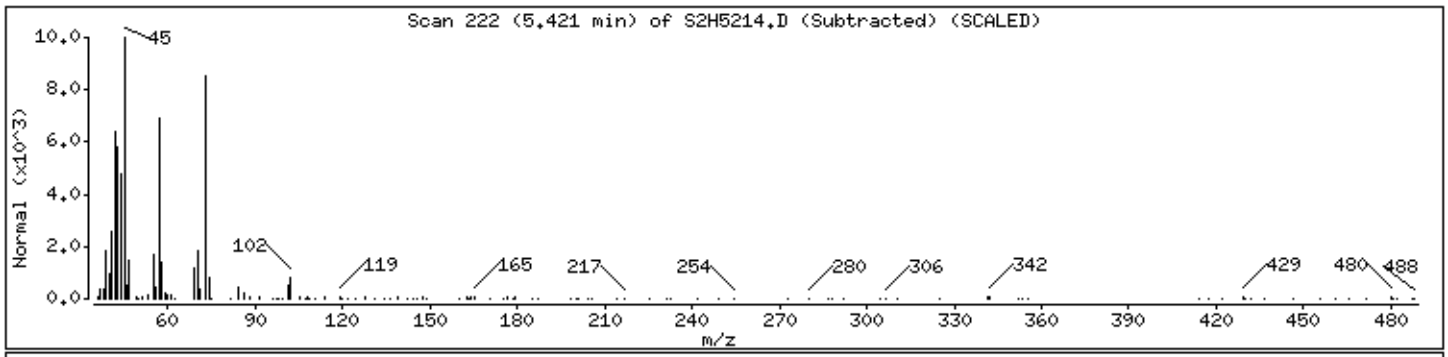
Client ID: H30X0 Instrument: S2.i

Sample Info: K2200-12B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5214.D

Date : 03-NOV-2011 20:00

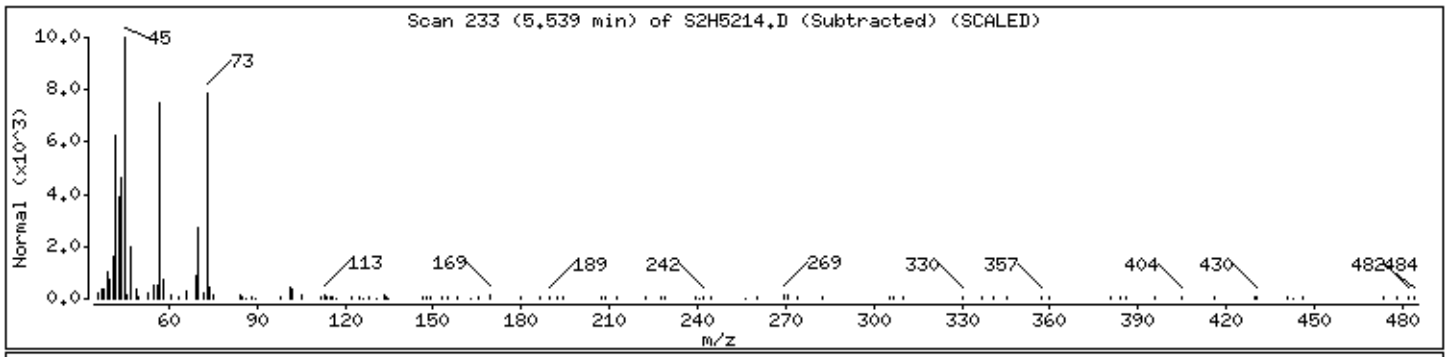
Client ID: H30X0 Instrument: S2.i

Sample Info: K2200-12B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 20:00

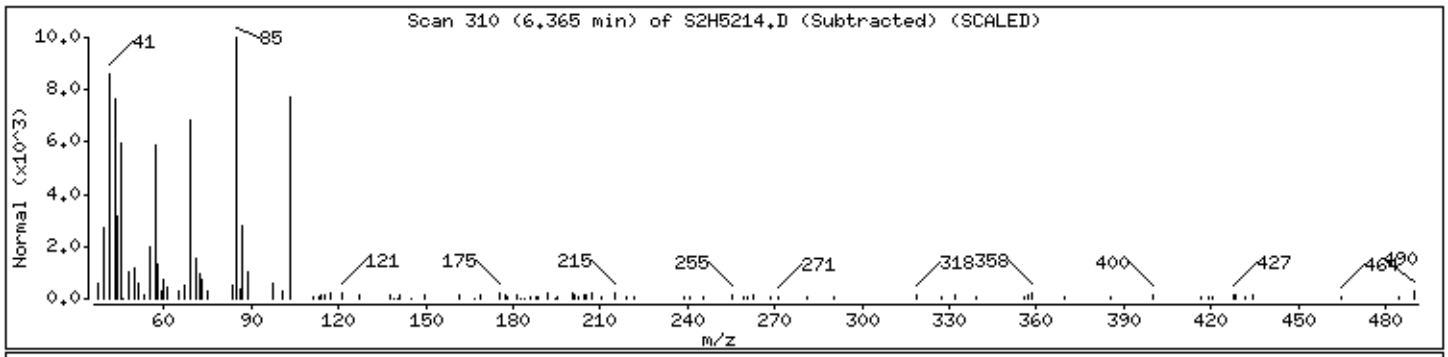
Client ID: H30X0 Instrument: S2.i

Sample Info: K2200-12B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5214.D

Date : 03-NOV-2011 20:00

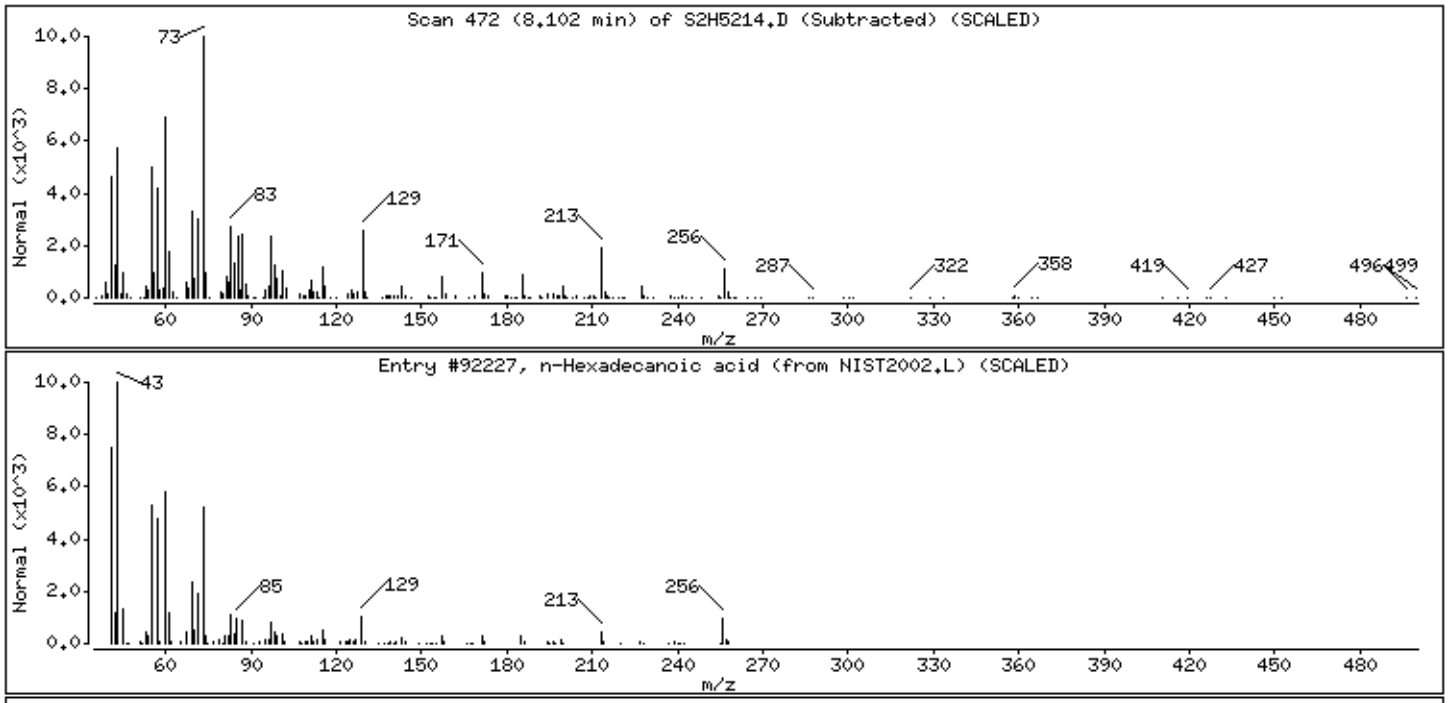
Client ID: H30X0 Instrument: S2.i

Sample Info: K2200-12B,,62636,,

Volume Injected (uL): 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



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Date : 03-NOV-2011 20:00

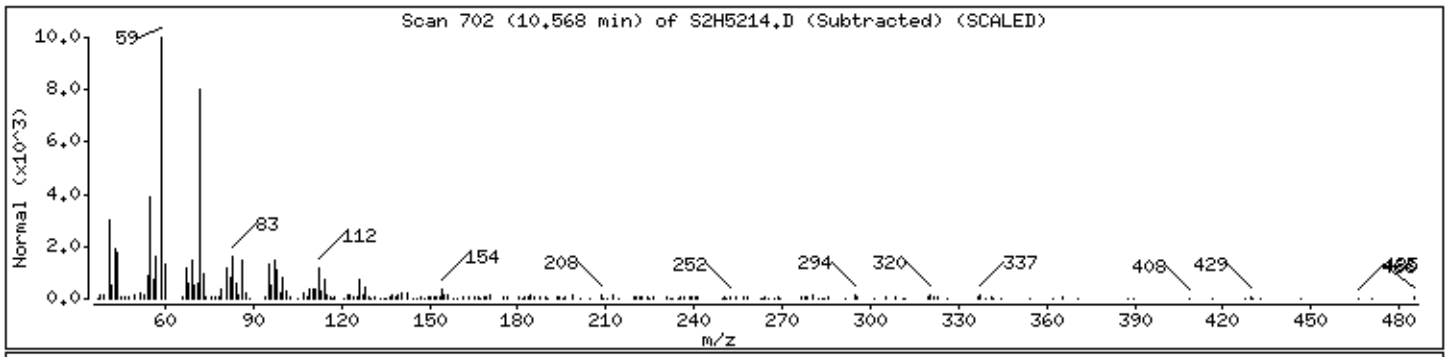
Client ID: H30X0 Instrument: S2.i

Sample Info: K2200-12B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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

CLIENT SAMPLE NO.

H30X1

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-13B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5215.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2´-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1´-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

H30X1

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-13B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5215.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3´-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

H30X1

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-13B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5215.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.673	9.0	BNJ
02		Unknown-01	4.877	5.3	J
03		Unknown-02	5.188	2.5	J
04		Unknown-03	5.413	9.5	J
05		Unknown-04	5.542	2.7	J
06		Unknown-05	6.367	3.6	J
07		Unknown-06	8.105	4.8	J
08		Unknown-07	10.582	9.7	J
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5215.D
Report Date: 07-Nov-2011 14:02

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5215.D
Lab Smp Id: K2200-13B Client Smp ID: H30X1
Inj Date : 03-NOV-2011 20:22
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-13B,,62636,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 25
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)
$	2 Phenol-d5	71	3.568	3.565	(0.917)	261150	63.5061	32
$	4 bis(2-Chloroethyl)ether-d8	67	3.622	3.619	(0.931)	329962	58.2301	29
$	6 2-Chlorophenol-d4	132	3.697	3.694	(0.950)	230784	64.8760	32
*	8 1,4-Dichlorobenzene-d4	152	3.890	3.887	(1.000)	130588	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.201	4.198	(1.080)	372528	66.8209	33
$	16 Nitrobenzene-d5	128	4.340	4.348	(0.877)	119618	51.0783	26(Q)
$	19 2-Nitrophenol-d4	143	4.619	4.616	(0.933)	160975	62.2666	31
$	23 2,4-Dichlorophenol-d3	165	4.823	4.820	(0.974)	305793	64.7948	32
*	25 Naphthalene-d8	136	4.951	4.948	(1.000)	449683	40.0000	
$	27 4-Chloroaniline-d4	131	5.005	5.002	(1.011)	211646	50.5070	25(Q)
$	40 Dimethylphthalate-d6	166	6.174	6.171	(0.962)	785783	62.4740	31
$	43 Acenaphthylene-d8	160	6.281	6.289	(0.978)	938912	57.4051	29
*	46 Acenaphthene-d10	164	6.421	6.418	(1.000)	342083	40.0000	
$	49 4-Nitrophenol-d4	143	6.506	6.503	(1.013)	108891	60.0739	30
$	54 Fluorene-d10	176	6.850	6.847	(1.067)	671638	58.1325	29
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.903	6.900	(0.903)	167321	65.4394	33(Q)
*	65 Phenanthrene-d10	188	7.643	7.640	(1.000)	655238	40.0000	
$	67 Anthracene-d10	188	7.686	7.694	(1.006)	991126	52.9531	26
$	72 Pyrene-d10	212	8.823	8.820	(0.895)	915381	69.4783	35
*	77 Chrysene-d12	240	9.863	9.871	(1.000)	418225	40.0000	(Q)
$	83 Benzo(a)pyrene-d12	264	11.128	11.147	(0.976)	311679	58.0378	29(H)

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5215.D
Report Date: 07-Nov-2011 14:02

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)	
* 85 Perylene-d12	264	11.225	11.233	(1.000)	218851	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\111103.B\S2H5215.D
Report Date: 07-Nov-2011 14:02

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5215.D
Lab Smp Id: K2200-13B Client Smp ID: H30X1
Inj Date : 03-NOV-2011 20:22
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-13B,,62636,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 25
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

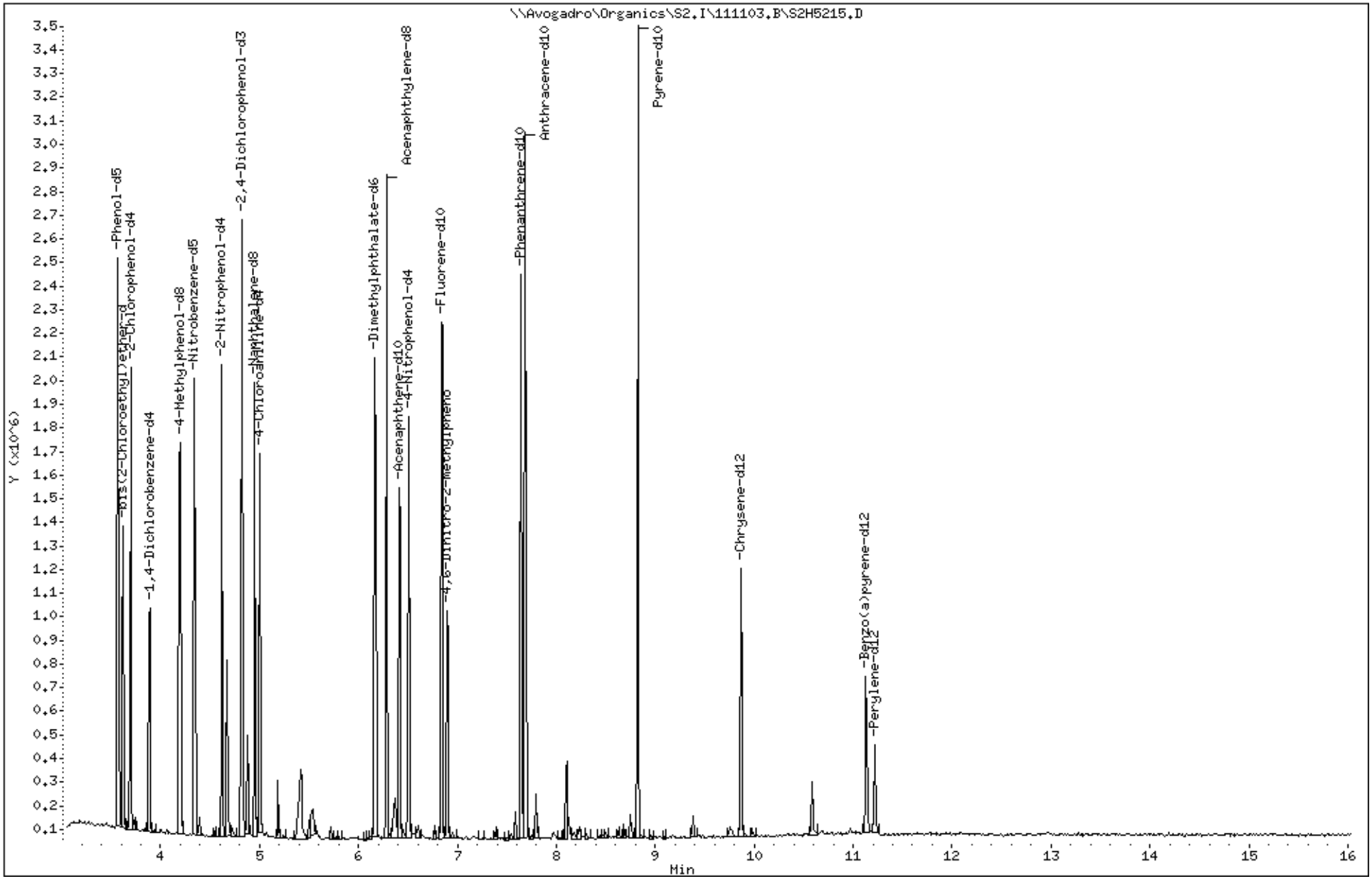
ISTD	RT	AREA	AMOUNT
* 25 Naphthalene-d8	4.952	1548607	40.000
* 46 Acenaphthene-d10	6.421	1890129	40.000
* 65 Phenanthrene-d10	7.644	1857601	40.000
* 85 Perylene-d12	11.225	539962	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
2(3H)-Furanone, dihydro-4-hydroxy-				CAS #: 5469-16-9			
4.673	695416	17.9623532	9.0	90	NIST2002.L	4145	25
Unknown				CAS #:			
4.877	412733	10.6607649	5.3	0		0	25
Unknown				CAS #:			
5.188	194657	5.02793703	2.5	0		0	25

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5215.D
Report Date: 07-Nov-2011 14:02

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
5.413	732978	18.9325723	9.5	0		0	25
Unknown				CAS #:			
5.542	206141	5.32456585	2.7	0		0	25
Unknown				CAS #:			
6.367	340512	7.20610749	3.6	0		0	46
Unknown				CAS #:			
8.105	441361	9.50388244	4.8	0		0	65
Unknown				CAS #:			
10.582	261562	19.3763043	9.7	0		0	85

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5215.D
Date : 03-NOV-2011 20:22
Client ID: H30X1
Instrument: S2.i
Sample Info: K2200-13B,,62636,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5215.D

Date : 03-NOV-2011 20:22

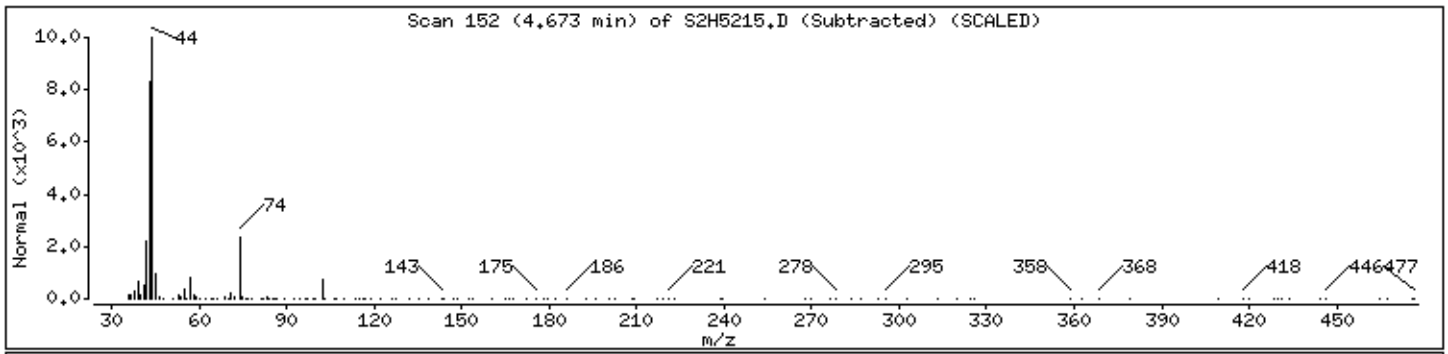
Client ID: H30X1 Instrument: S2.i

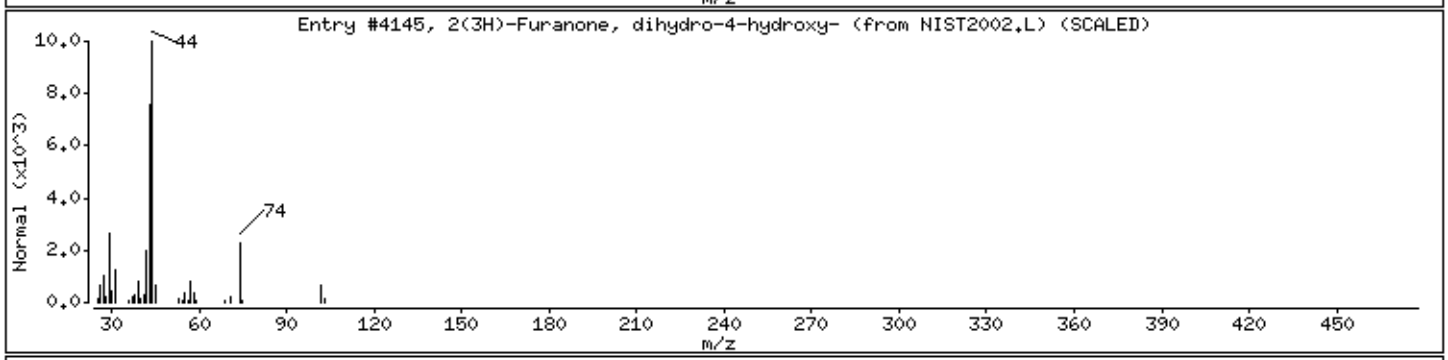
Sample Info: K2200-13B,,62636,,

Volume Injected (uL): 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\111103.B\S2H5215.D

Date : 03-NOV-2011 20:22

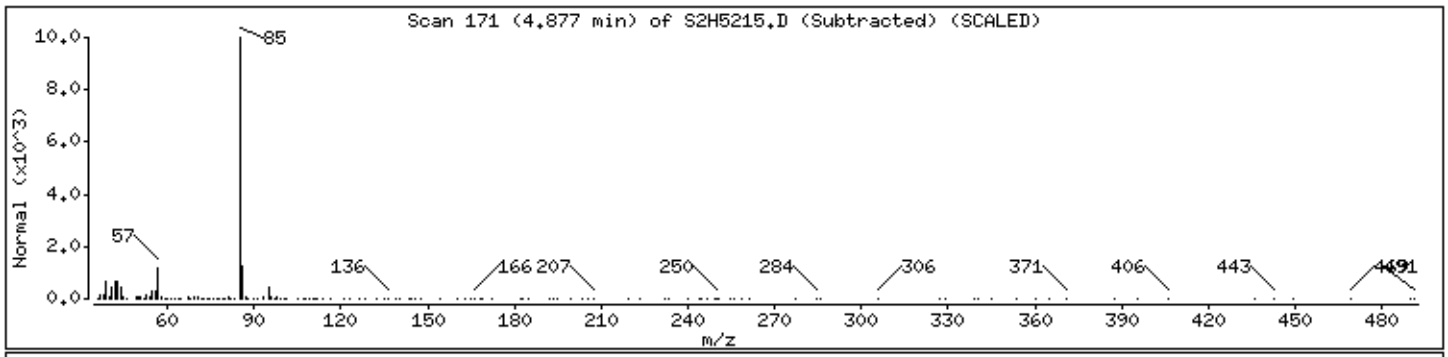
Client ID: H30X1 Instrument: S2.i

Sample Info: K2200-13B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5215.D

Date : 03-NOV-2011 20:22

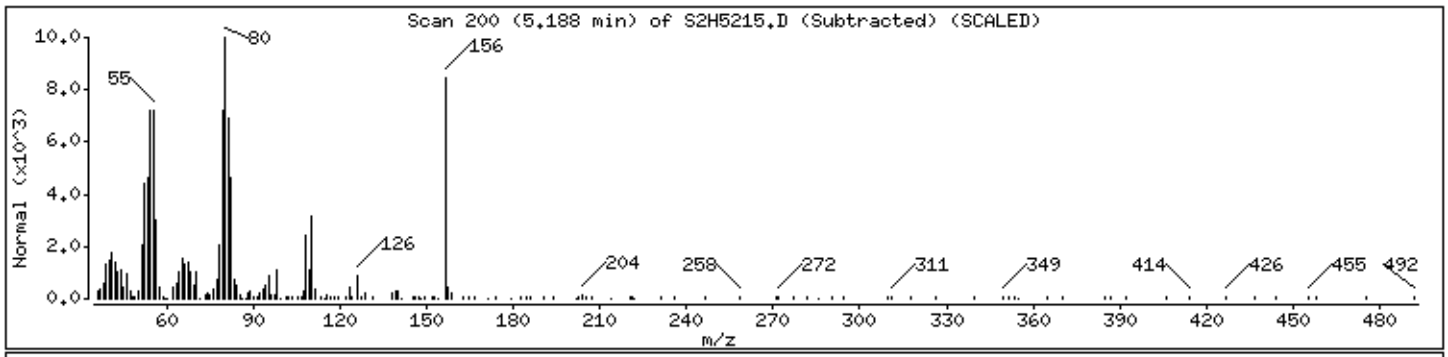
Client ID: H30X1 Instrument: S2.i

Sample Info: K2200-13B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5215.D

Date : 03-NOV-2011 20:22

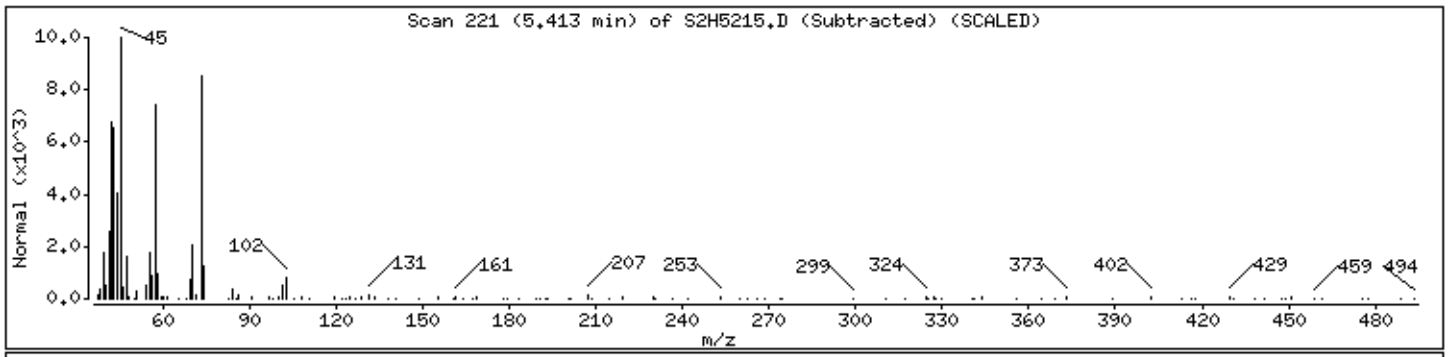
Client ID: H30X1 Instrument: S2.i

Sample Info: K2200-13B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5215.D

Date : 03-NOV-2011 20:22

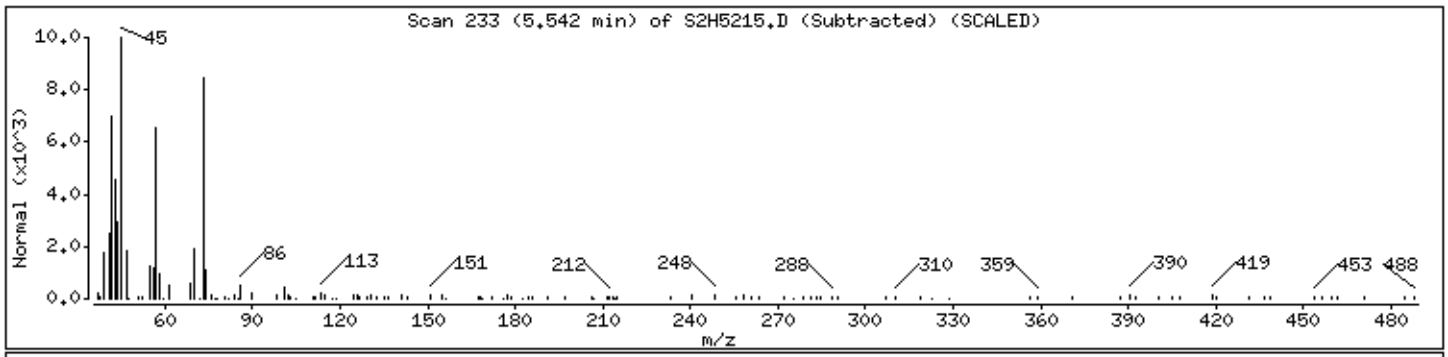
Client ID: H30X1 Instrument: S2.i

Sample Info: K2200-13B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5215.D

Date : 03-NOV-2011 20:22

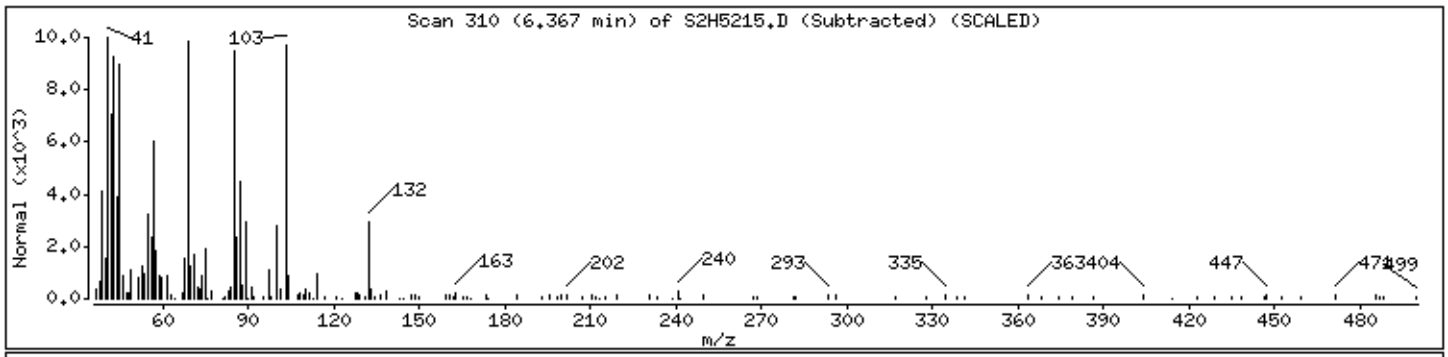
Client ID: H30X1 Instrument: S2.i

Sample Info: K2200-13B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5215.D

Date : 03-NOV-2011 20:22

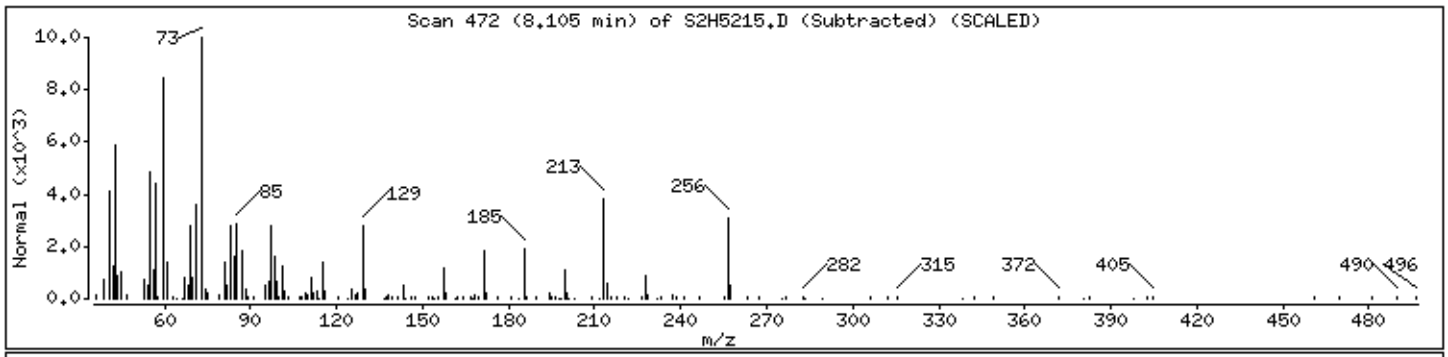
Client ID: H30X1 Instrument: S2.i

Sample Info: K2200-13B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5215.D

Date : 03-NOV-2011 20:22

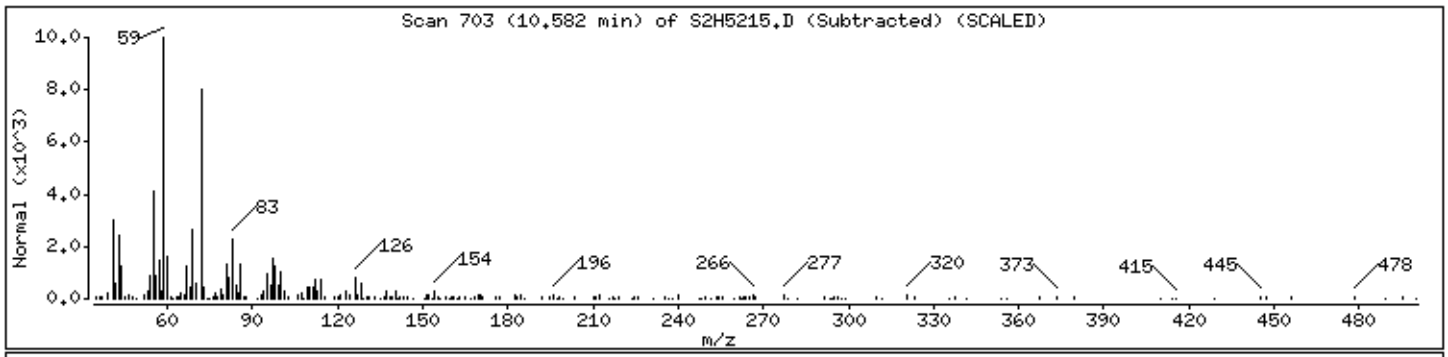
Client ID: H30X1 Instrument: S2.i

Sample Info: K2200-13B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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

CLIENT SAMPLE NO.

H30X3

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-20A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5222.D

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

% Moisture: Decanted: (Y/N) Date Received: 10/29/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	1.6	J
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2´-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	9.5	
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1´-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

H30X3

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-20A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5222.D

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

% Moisture: Decanted: (Y/N) Date Received: 10/29/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3´-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

H30X3

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-20A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5222.D

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

% Moisture: Decanted: (Y/N) Date Received: 10/29/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	3.419	8.4	J
02		Unknown-02	3.484	6.1	J
03		Unknown-03	3.752	4.7	J
04		Unknown-04	3.784	2.8	J
05	5208-50-4	4-Carene, (1S,3S,6R)-(-)-	3.859	5.5	NJ
06	527-84-4	Benzene, 1-methyl-2-(1-methy	3.956	38	NJ
07		Unknown-05	4.041	8.7	J
08	1195-79-5	Bicyclo[2.2.1]heptan-2-one,	4.385	19	NJ
09		Unknown-06	4.427	4.3	J
10		Unknown-07	4.503	3.4	J
11		Unknown-08	4.685	13	J
12	464-49-3	Bicyclo[2.2.1]heptan-2-one,	4.749	290	NJ
13		Unknown-09	4.792	47	J
14		Unknown-10	4.878	38	J
15		Unknown-11	4.910	33	J
16		Unknown-12	4.985	24	J
17		Unknown-13	5.082	4.7	J
18		Unknown-14	5.135	4.1	J
19		Unknown-15	5.189	7.6	J
20		Unknown-16	5.468	7.6	J
21		Unknown-17	5.521	4.6	J
22		Unknown-18	5.575	3.6	J
23	501-52-0	Benzenepropanoic acid	5.639	20	NJ
24		Unknown-19	5.725	6.8	J
25		Unknown-20	5.757	23	J
26		Unknown-21	5.843	23	J
27		Unknown-22	6.637	18	J
28	544-63-8	Tetradecanoic acid	7.387	4.0	NJ
29	57-10-3	n-Hexadecanoic acid	8.106	11	NJ
30		Unknown-23	10.636	23	J
	E96679[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5222.D
Report Date: 07-Nov-2011 14:03

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5222.D
Lab Smp Id: K2200-20A Client Smp ID: H30X3
Inj Date : 03-NOV-2011 22:53
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-20A,,62636,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 32
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)
$ 2 Phenol-d5	71	3.580	3.565	(0.920)	223694	51.5170	26
3 Phenol	94	3.591	3.576	(0.923)	38739	3.25296	1.6(aQ)
$ 4 bis(2-Chloroethyl)ether-d8	67	3.623	3.619	(0.931)	296990	49.6359	25
$ 6 2-Chlorophenol-d4	132	3.698	3.694	(0.950)	201236	53.5741	27
* 8 1,4-Dichlorobenzene-d4	152	3.891	3.887	(1.000)	137890	40.0000	(Q)
$ 11 4-Methylphenol-d8	113	4.202	4.198	(1.080)	334270	56.7834	28
12 4-Methylphenol	108	4.223	4.219	(1.085)	127505	19.0412	9.5
$ 16 Nitrobenzene-d5	128	4.352	4.348	(0.879)	100549	43.5855	22
$ 19 2-Nitrophenol-d4	143	4.620	4.616	(0.933)	129410	50.8146	25(Q)
$ 23 2,4-Dichlorophenol-d3	165	4.824	4.820	(0.974)	241360	51.9161	26
* 25 Naphthalene-d8	136	4.952	4.948	(1.000)	442978	40.0000	
$ 27 4-Chloroaniline-d4	131	5.006	5.002	(1.011)	132387	32.0709	16(Q)
$ 40 Dimethylphthalate-d6	166	6.175	6.171	(0.962)	625795	57.7524	29
$ 43 Acenaphthylene-d8	160	6.282	6.289	(0.978)	687853	48.8160	24
* 46 Acenaphthene-d10	164	6.422	6.418	(1.000)	294707	40.0000	
$ 49 4-Nitrophenol-d4	143	6.518	6.503	(1.015)	75236	48.1793	24(Q)
$ 54 Fluorene-d10	176	6.850	6.847	(1.067)	457286	45.9423	23
$ 58 4,6-Dinitro-2-methylphenol-d2	200	6.904	6.900	(0.903)	112876	55.9978	28
* 65 Phenanthrene-d10	188	7.644	7.640	(1.000)	516557	40.0000	
$ 67 Anthracene-d10	188	7.687	7.694	(1.006)	631619	42.8054	21
$ 72 Pyrene-d10	212	8.834	8.820	(0.894)	367644	45.5514	23

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5222.D
Report Date: 07-Nov-2011 14:03

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
* 77 Chrysene-d12	240	9.917	9.871	(1.000)	256202	40.0000	(QH)
$ 83 Benzo(a)pyrene-d12	264	11.215	11.147	(0.991)	53230	17.2119	8.6(R)
* 85 Perylene-d12	264	11.311	11.233	(1.000)	126032	40.0000	(Q)

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\111103.B\S2H5222.D
Report Date: 07-Nov-2011 14:03

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5222.D
Lab Smp Id: K2200-20A Client Smp ID: H30X3
Inj Date : 03-NOV-2011 22:53
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-20A,,62636,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 32
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

ISTD		RT	AREA	AMOUNT
*	8 1,4-Dichlorobenzene-d4	3.891	1252792	40.000
*	25 Naphthalene-d8	4.953	2714280	40.000
*	46 Acenaphthene-d10	6.422	1511160	40.000
*	65 Phenanthrene-d10	7.645	1730670	40.000
*	85 Perylene-d12	11.312	335835	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
3.419	523990	16.7302990	8.4	0	0		8
Unknown				CAS #:			
3.484	384275	12.2693998	6.1	0	0		8

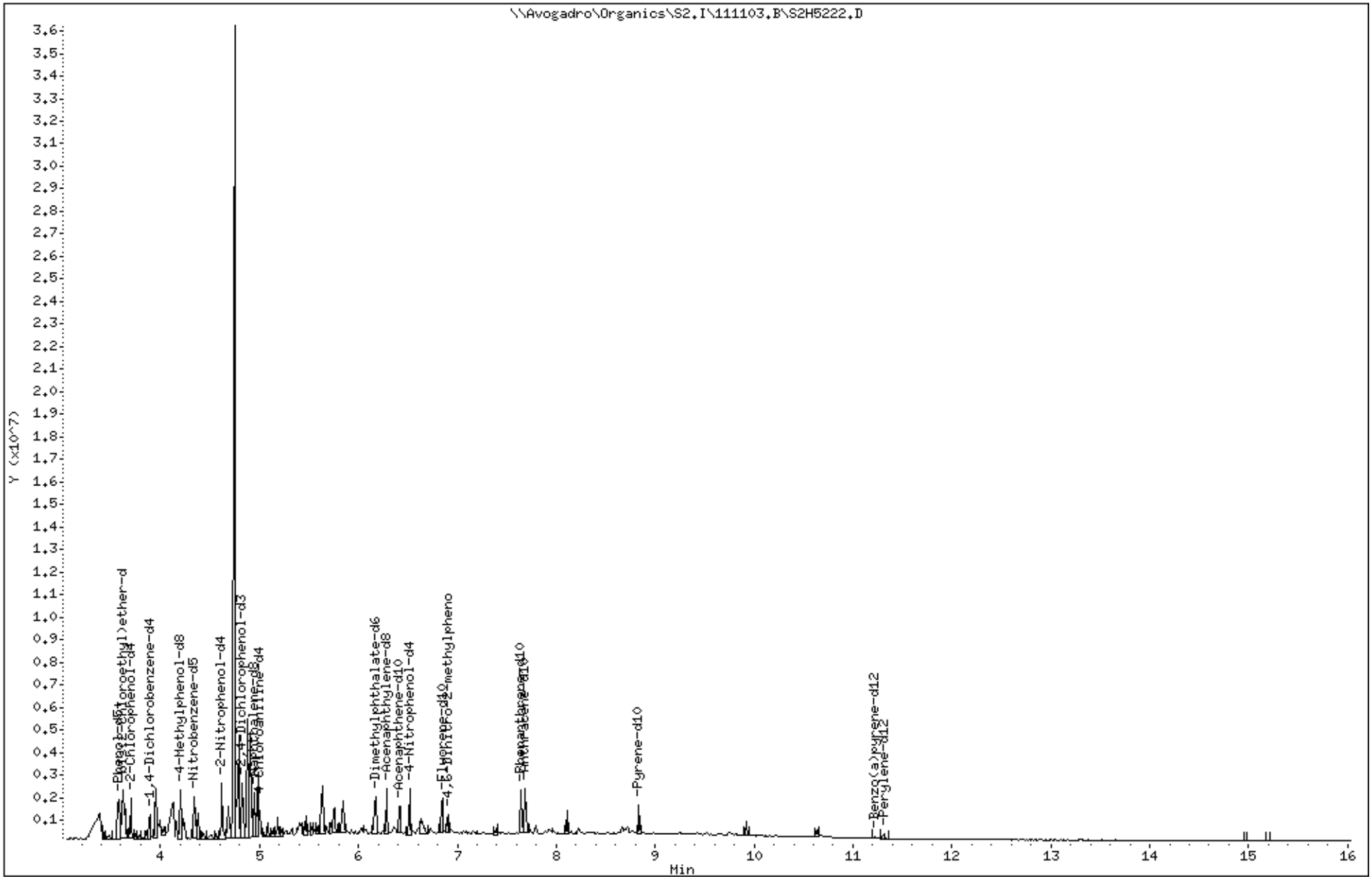
Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5222.D
Report Date: 07-Nov-2011 14:03

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
3.752	295631	9.43910587	4.7	0		0	8
Unknown					CAS #:		
3.784	173726	5.54685228	2.8	0		0	8
4-Carene, (1S,3S,6R)-(-)-					CAS #: 5208-50-4		
3.859	342881	10.9477442	5.5	91	NIST2002.L	15191	8
Benzene, 1-methyl-2-(1-methylethyl)-					CAS #: 527-84-4		
3.956	2383480	76.1013615	38	95	NIST2002.L	14395	8
Unknown					CAS #:		
4.041	542343	17.3163079	8.7	0		0	8
Bicyclo[2.2.1]heptan-2-one, 1,3,3-trimet					CAS #: 1195-79-5		
4.385	1209711	38.6244645	19	90	NIST2002.L	24122	8
Unknown					CAS #:		
4.427	577117	8.50490102	4.3	0		0	25
Unknown					CAS #:		
4.503	461141	6.79577939	3.4	0		0	25
Unknown					CAS #:		
4.685	1718854	25.3305288	13	0		0	25
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet					CAS #: 464-49-3		
4.749	38769996	571.348398	290	94	NIST2002.L	24211	25
Unknown					CAS #:		
4.792	6404667	94.3847520	47	0		0	25
Unknown					CAS #:		
4.878	5169489	76.1820871	38	0		0	25
Unknown					CAS #:		
4.910	4510977	66.4776887	33	0		0	25
Unknown					CAS #:		
4.985	3240339	47.7524517	24	0		0	25
Unknown					CAS #:		
5.082	635860	9.37059170	4.7	0		0	25
Unknown					CAS #:		
5.135	555842	8.19137101	4.1	0		0	25
Unknown					CAS #:		
5.189	1025764	15.1165452	7.6	0		0	25
Unknown					CAS #:		
5.468	1028085	15.1507487	7.6	0		0	25

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5222.D
Report Date: 07-Nov-2011 14:03

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
5.521	628102	9.25625430	4.6	0		0	25
Unknown				CAS #:			
5.575	492243	7.25412537	3.6	0		0	25
Benzenepropanoic acid				CAS #: 501-52-0			
5.639	2735859	40.3180032	20	90	NIST2002.L	23322	25
Unknown				CAS #:			
5.725	517330	13.6935819	6.8	0		0	46
Unknown				CAS #:			
5.757	1760559	46.6014922	23	0		0	46
Unknown				CAS #:			
5.843	1754477	46.4405147	23	0		0	46
Unknown				CAS #:			
6.637	1335344	35.3461874	18	0		0	46
Tetradecanoic acid				CAS #: 544-63-8			
7.387	343337	7.93535756	4.0	90	NIST2002.L	75070	65
n-Hexadecanoic acid				CAS #: 57-10-3			
8.106	915737	21.1648943	11	95	NIST2002.L	92227	65
Unknown				CAS #:			
10.636	384709	45.8211556	23	0		0	85

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5222.D
Date : 03-NOV-2011 22:53
Client ID: H30X3
Instrument: S2.i
Sample Info: K2200-20A,,62636,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



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Date : 03-NOV-2011 22:53

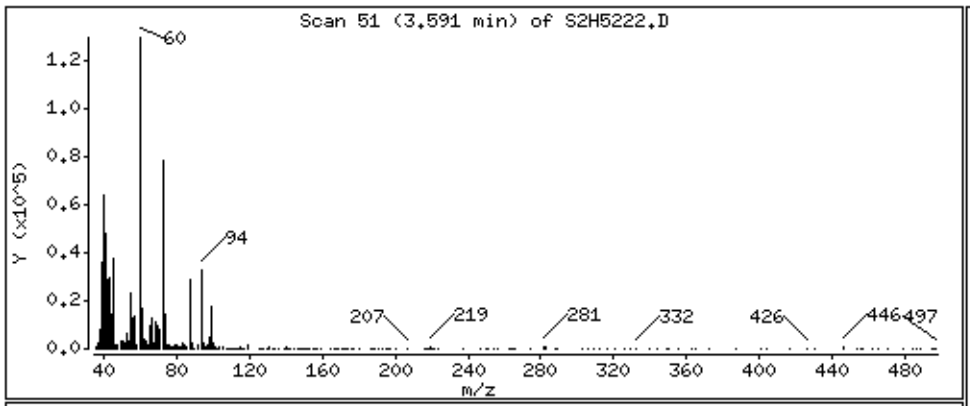
Client ID: H30X3 Instrument: S2.i

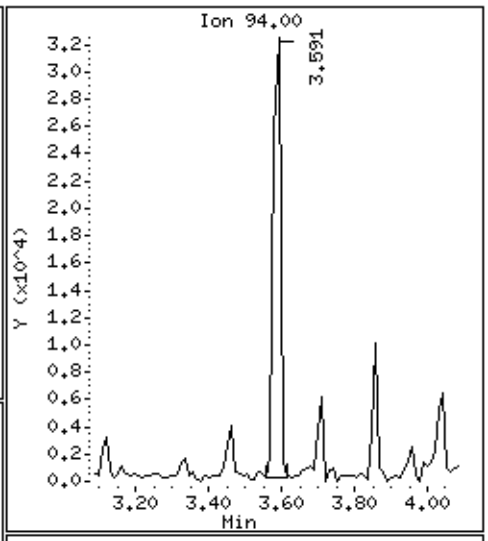
Sample Info: K2200-20A,,62636,,

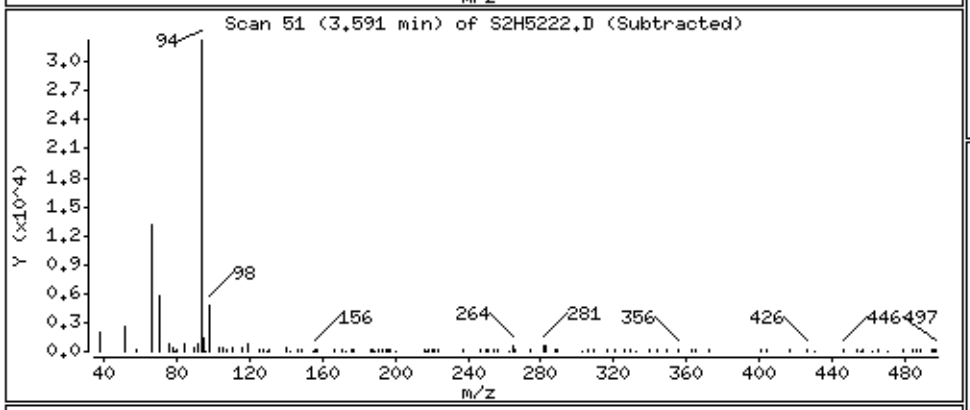
Volume Injected (uL): 2.0 Operator: SRC: LIMS

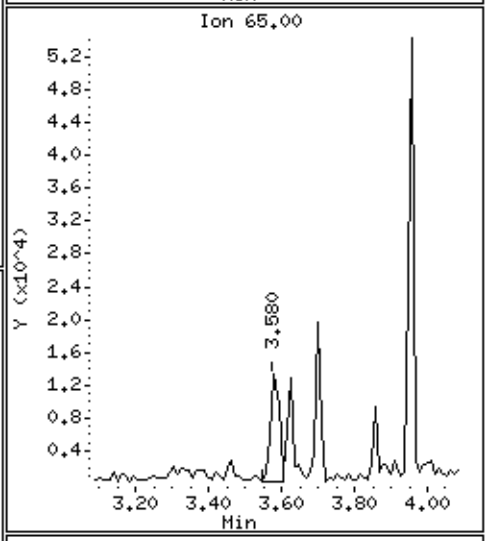
Column phase: RXI-5SILMS Column diameter: 0.25

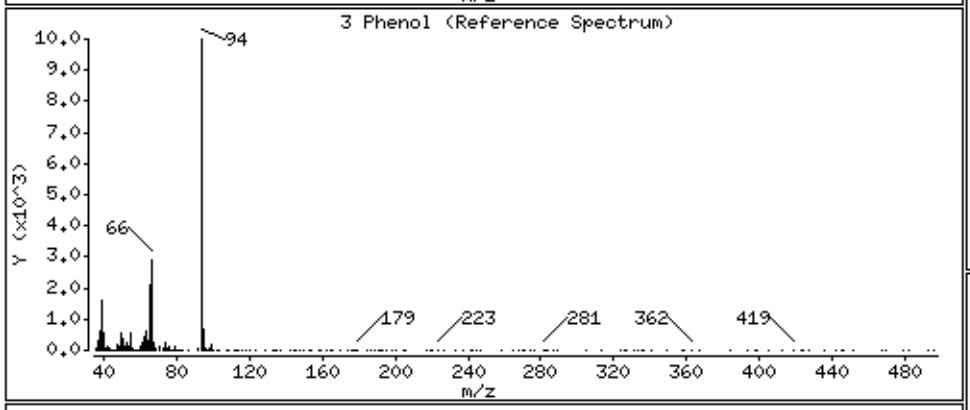
3 Phenol Concentration: 1.6 ug/L

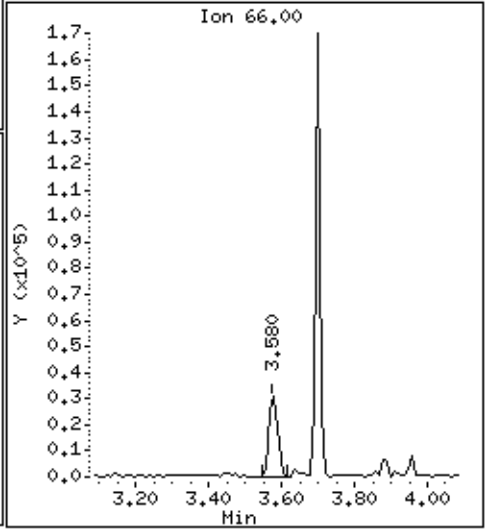


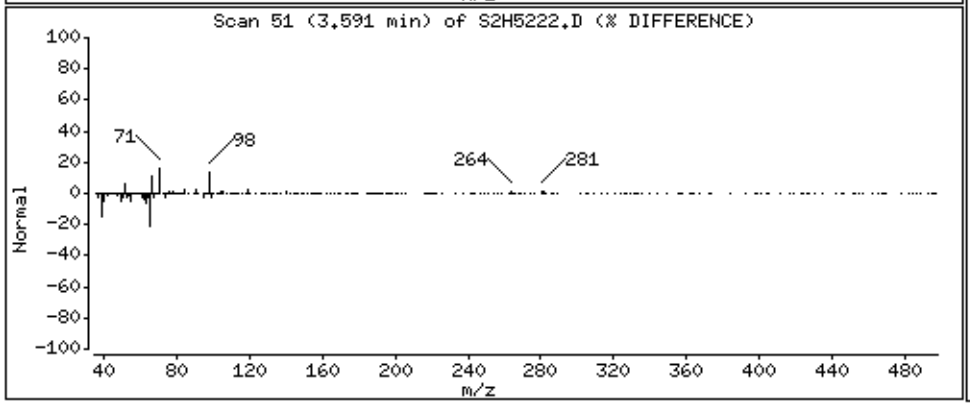












Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5222.D

Date : 03-NOV-2011 22:53

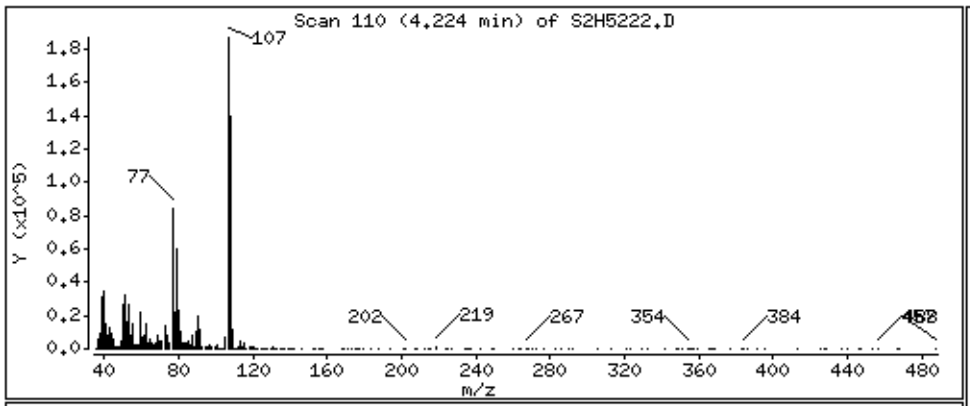
Client ID: H30X3 Instrument: S2.i

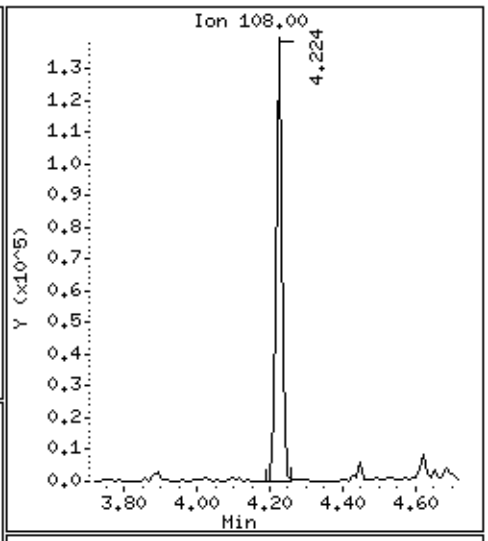
Sample Info: K2200-20A,,62636,,

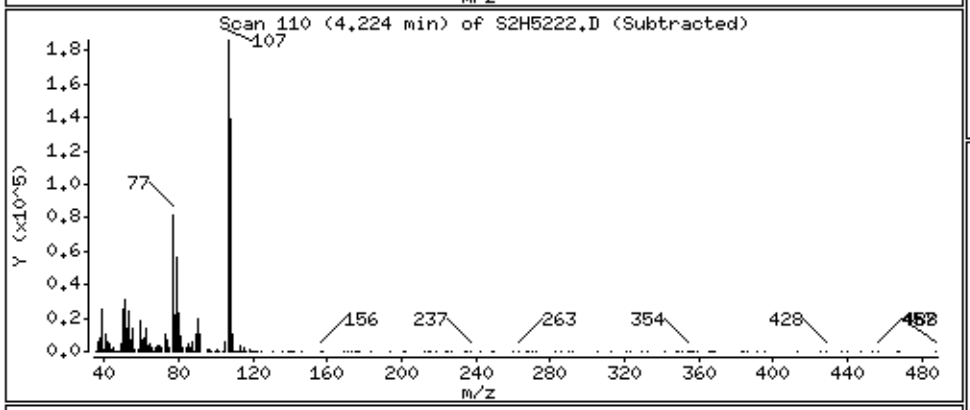
Volume Injected (uL): 2.0 Operator: SRC: LIMS

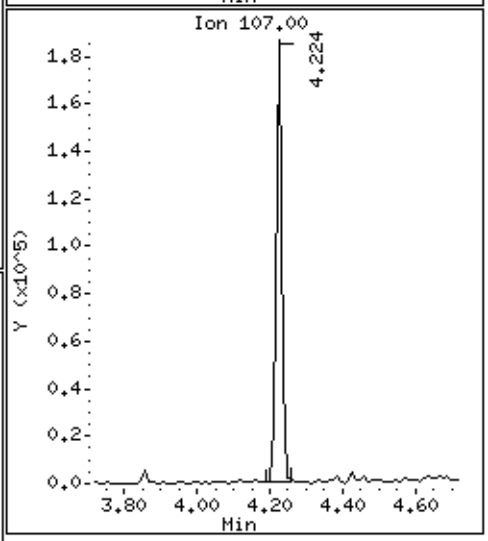
Column phase: RXI-5SILMS Column diameter: 0.25

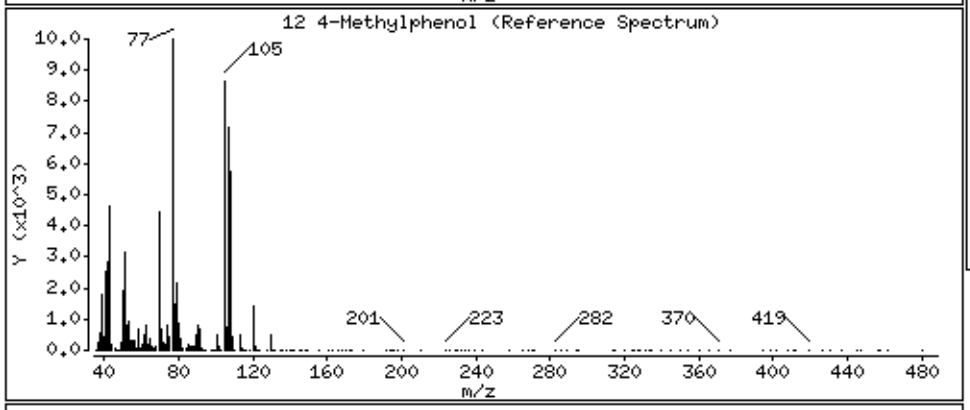
12 4-Methylphenol Concentration: 9.5 ug/L

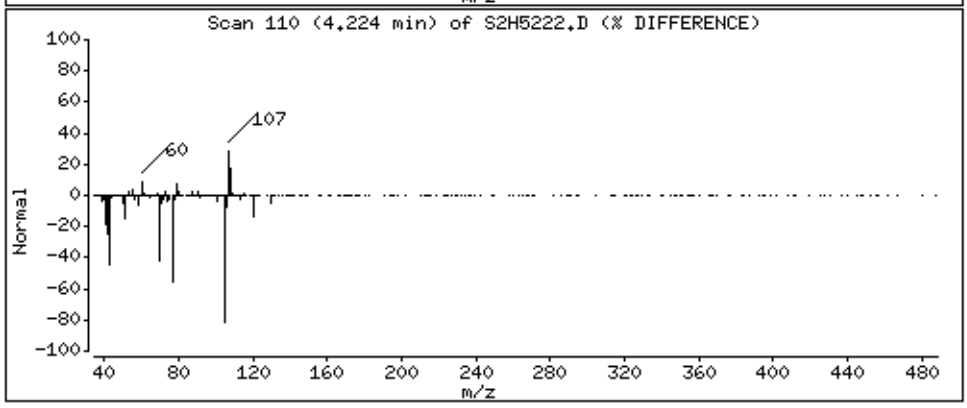












Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5222.D

Date : 03-NOV-2011 22:53

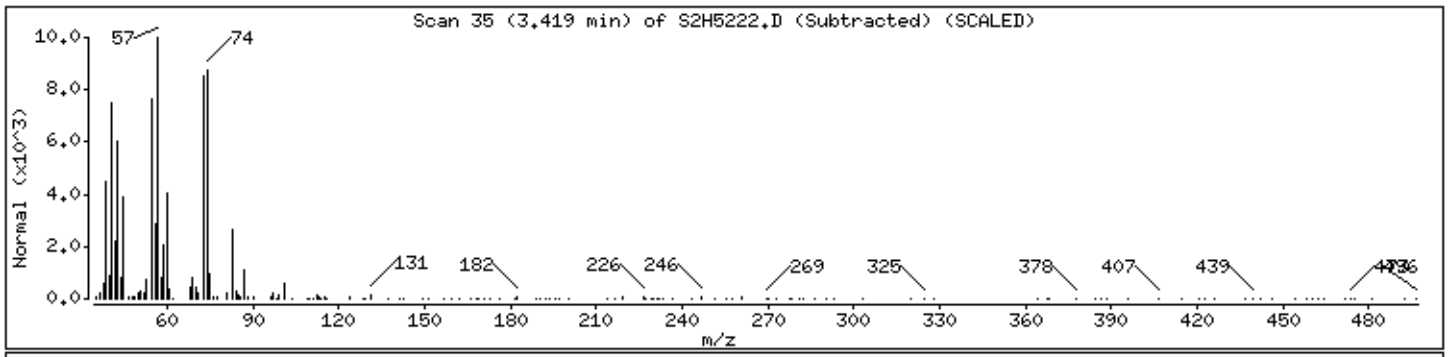
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5222.D

Date : 03-NOV-2011 22:53

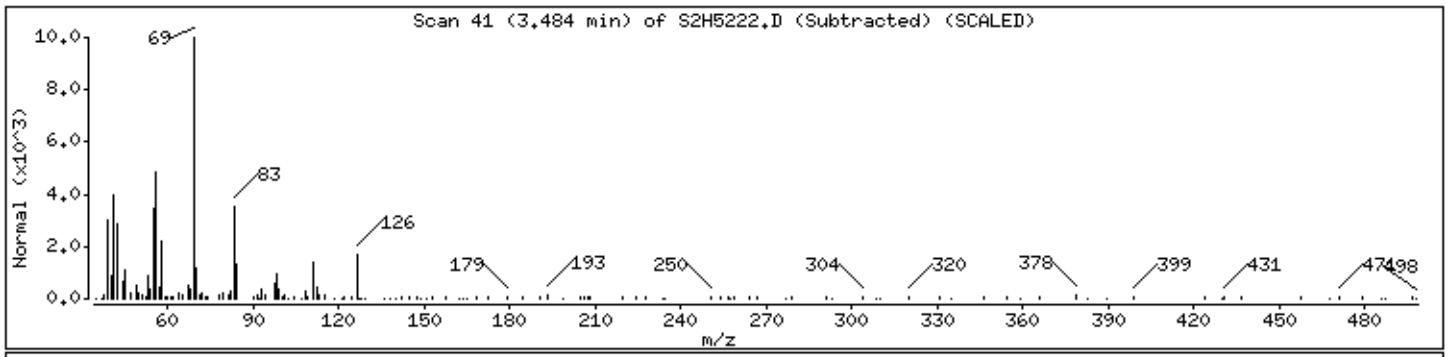
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 22:53

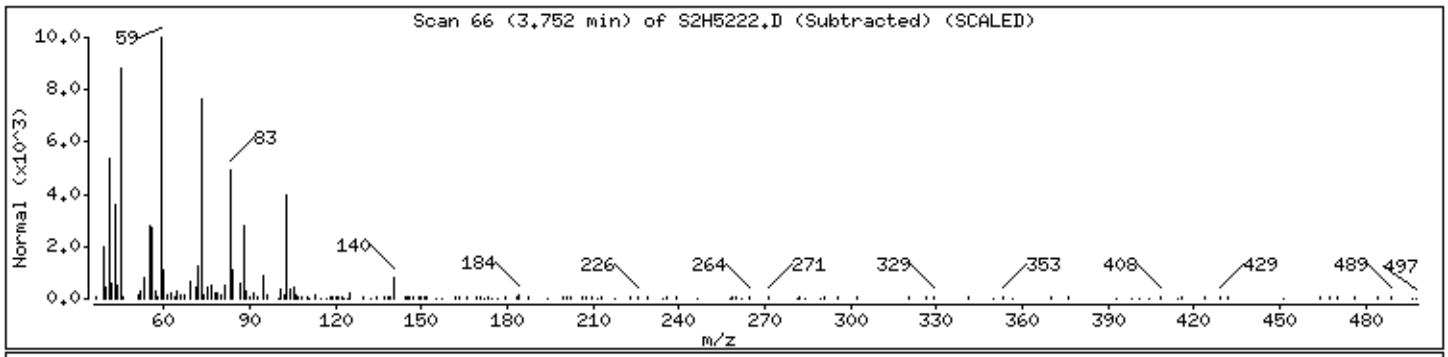
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5222.D

Date : 03-NOV-2011 22:53

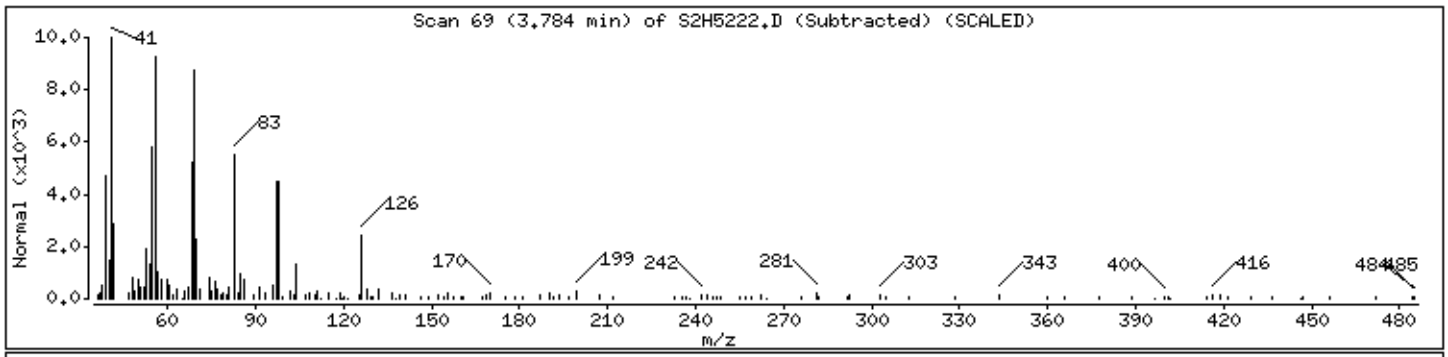
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 22:53

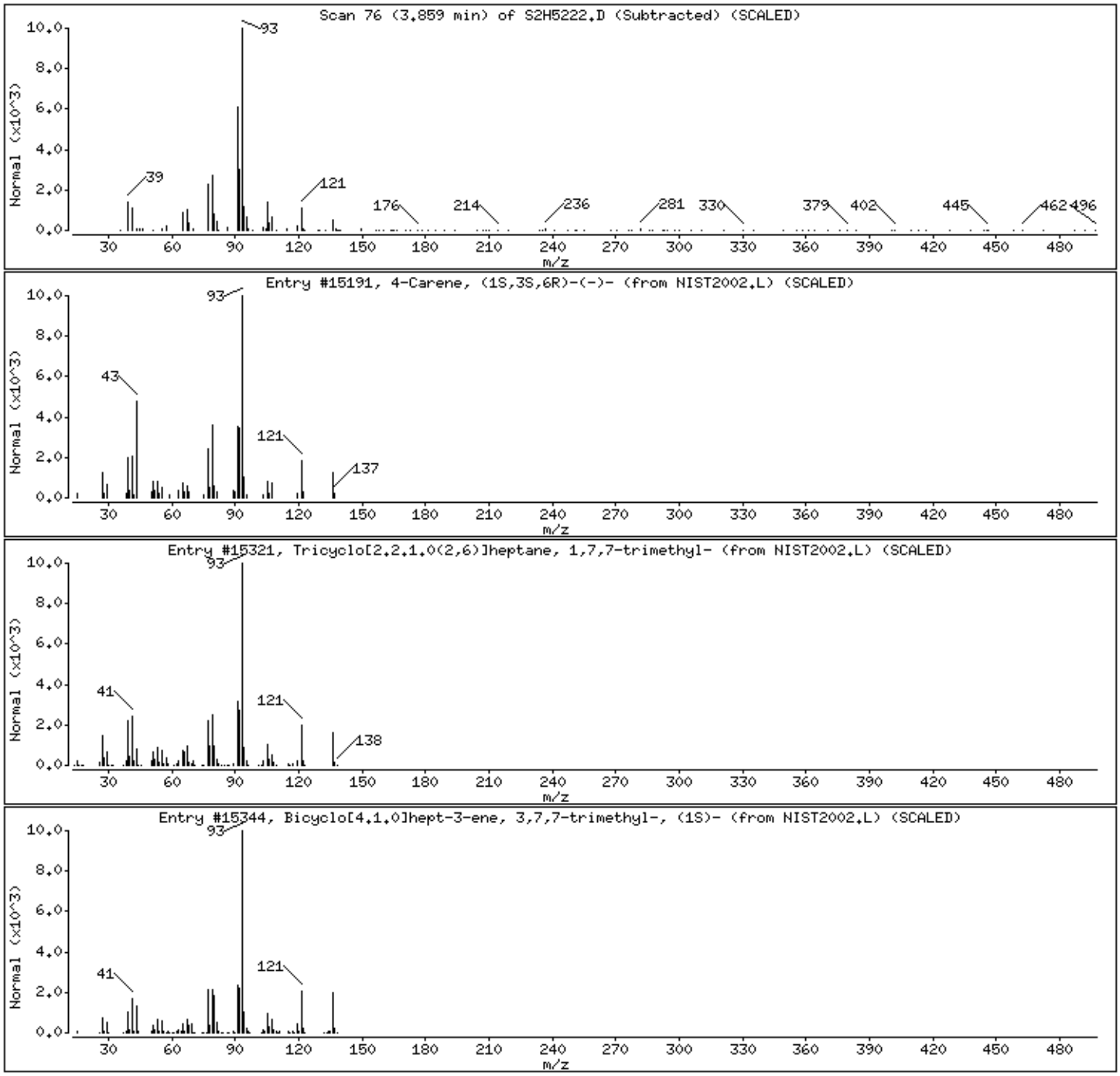
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
4-Carene, (1S,3S,6R)-(-)-	5208-50-4	NIST2002.L	15191	91	C10H16	136
Tricyclo[2.2.1.0(2,6)]heptane, 1,7,7-tri	508-32-7	NIST2002.L	15321	91	C10H16	136
Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	498-15-7	NIST2002.L	15344	91	C10H16	136



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Date : 03-NOV-2011 22:53

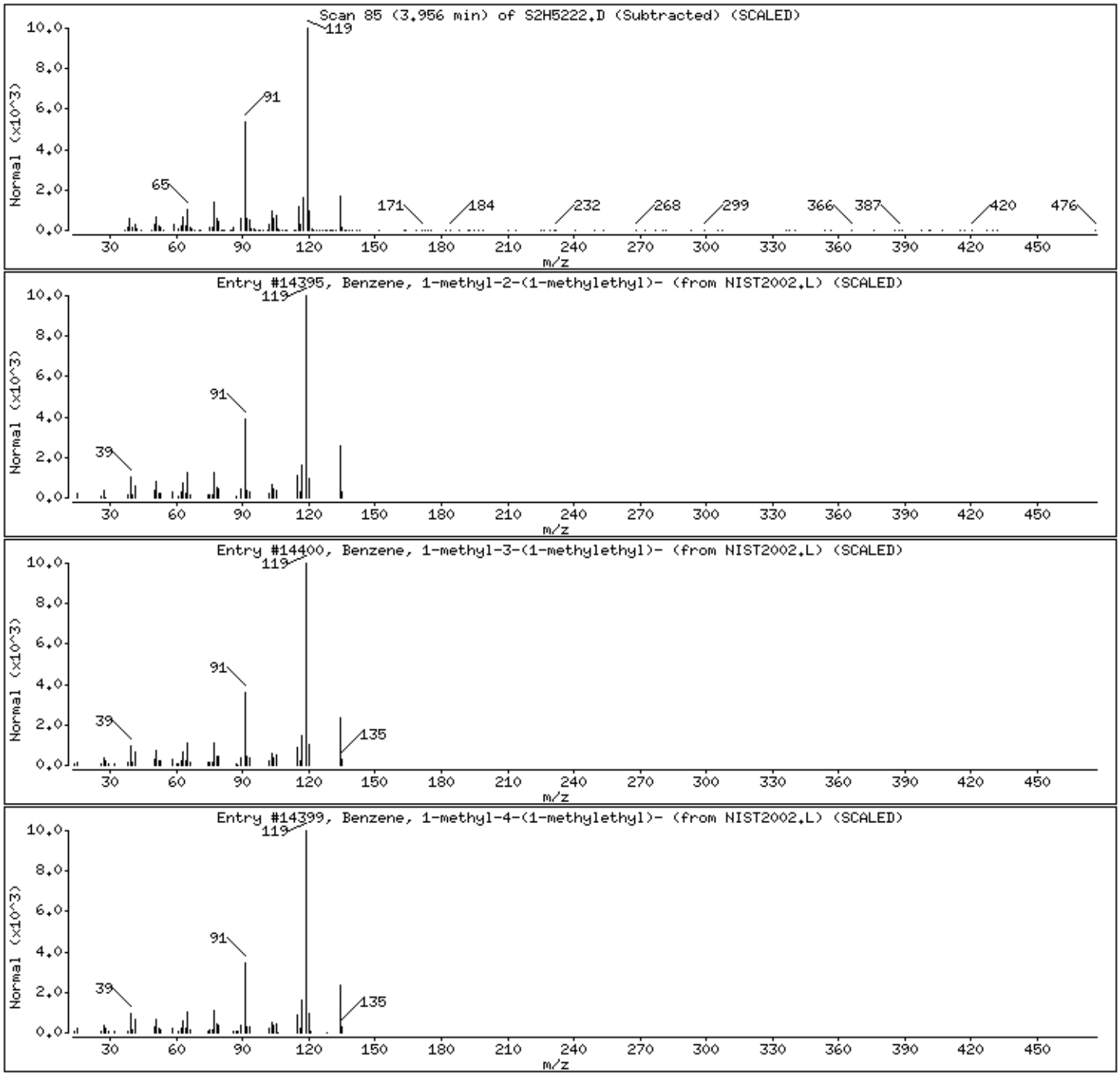
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 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-2-(1-methylethyl)-	527-84-4	NIST2002.L	14395	95	C10H14	134
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



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Date : 03-NOV-2011 22:53

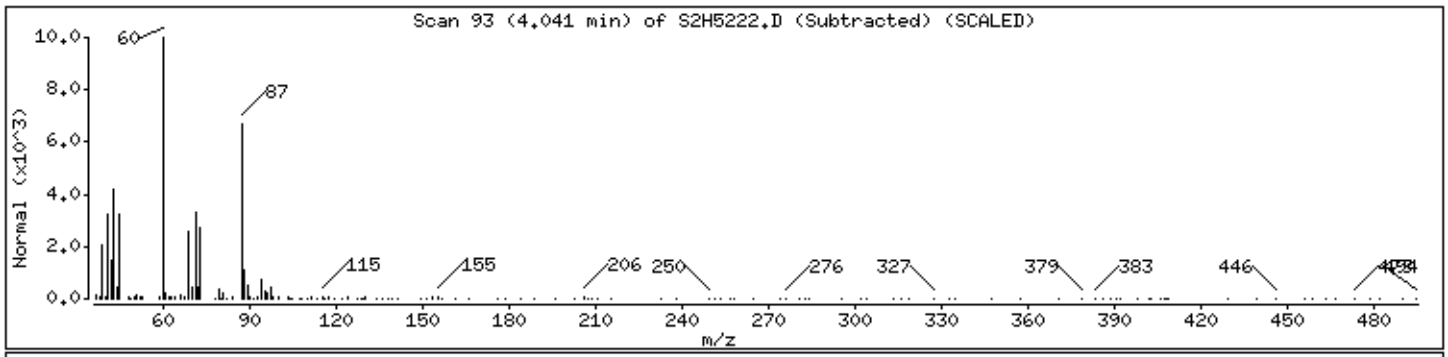
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 22:53

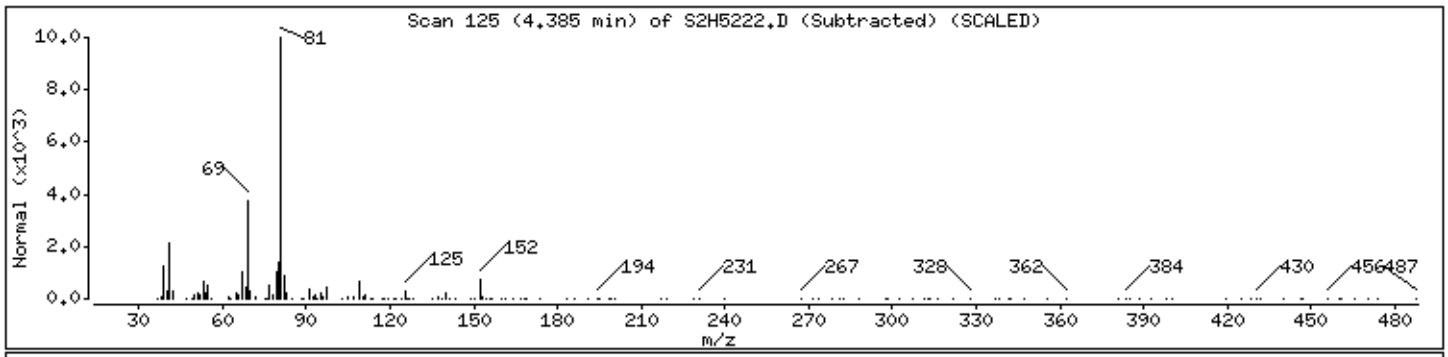
Client ID: H30X3 Instrument: S2.i

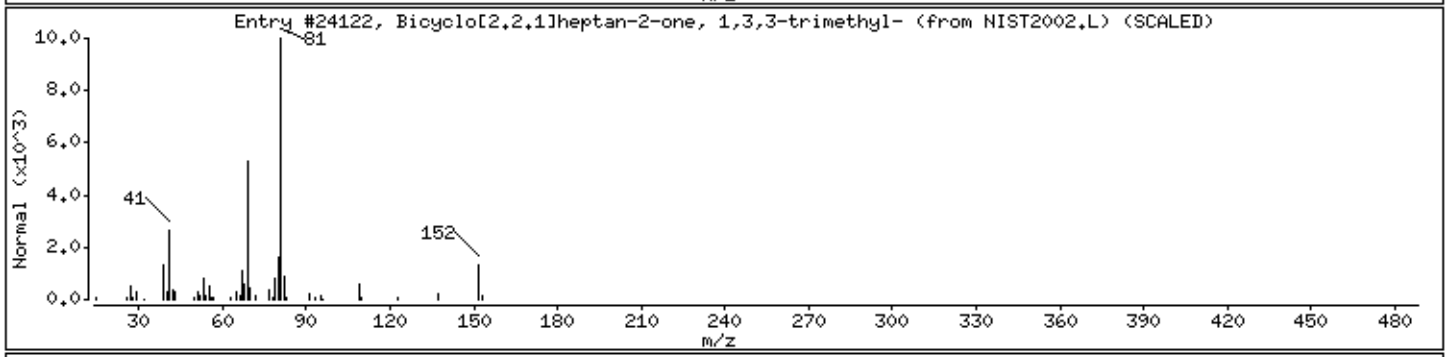
Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 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	90	C10H16O	152





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Date : 03-NOV-2011 22:53

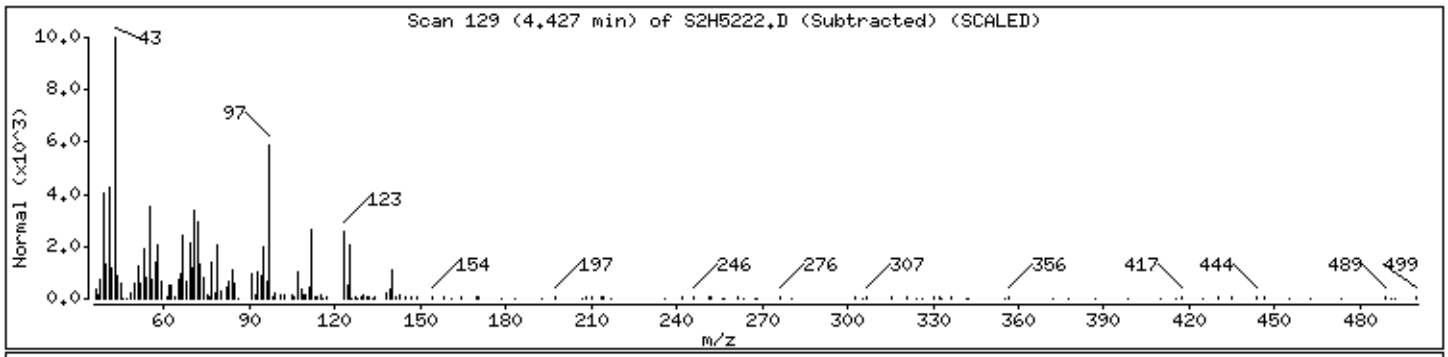
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 22:53

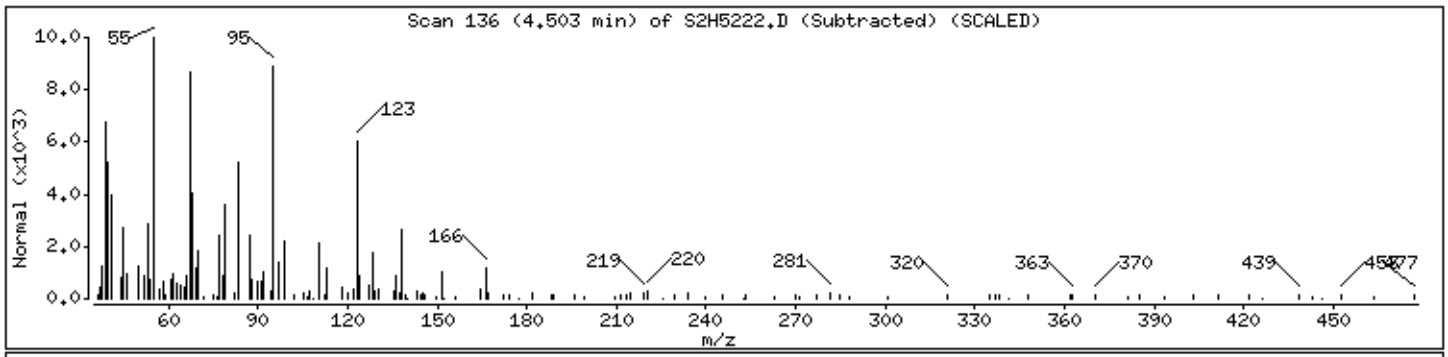
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 22:53

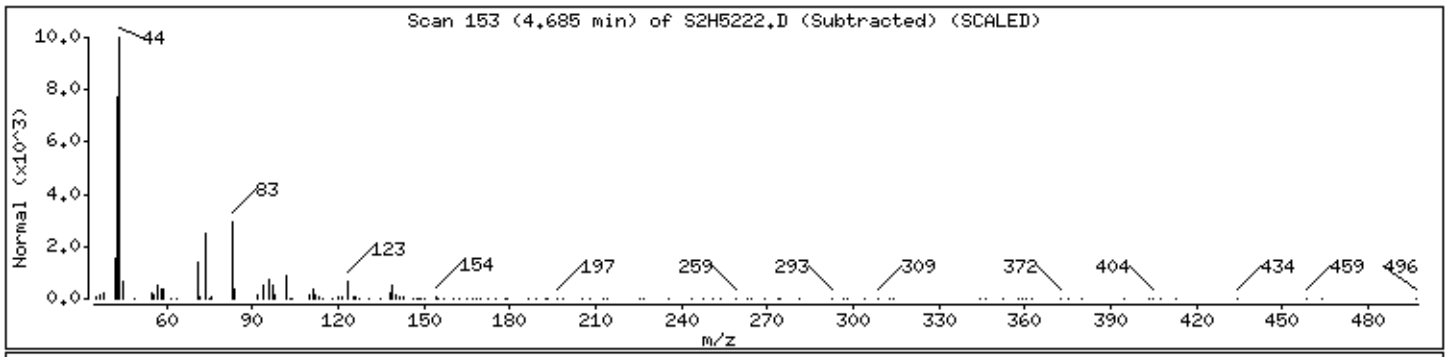
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 22:53

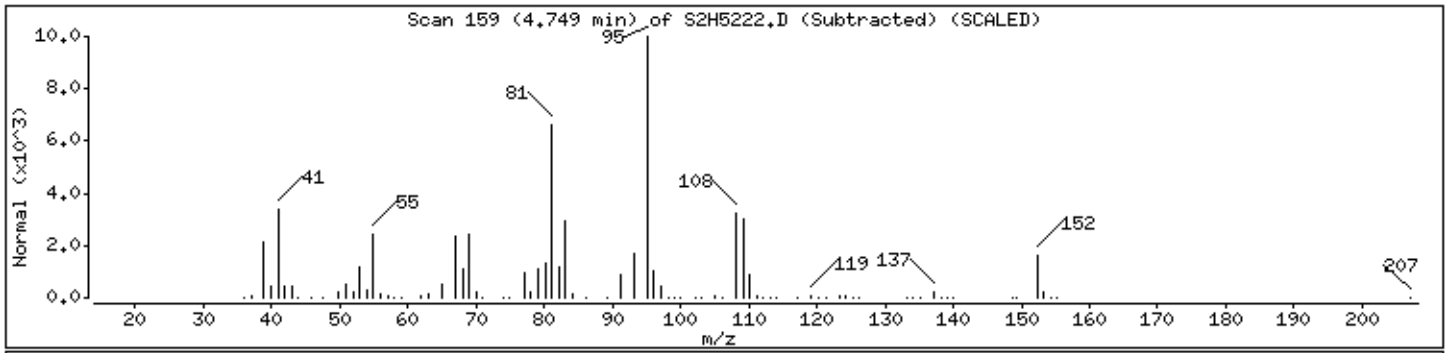
Client ID: H30X3 Instrument: S2.i

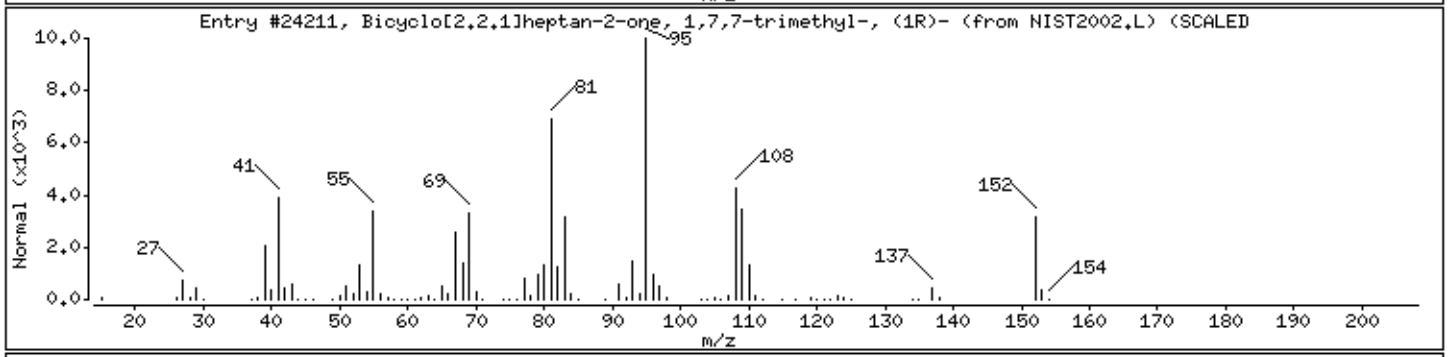
Sample Info: K2200-20A,,62636,,

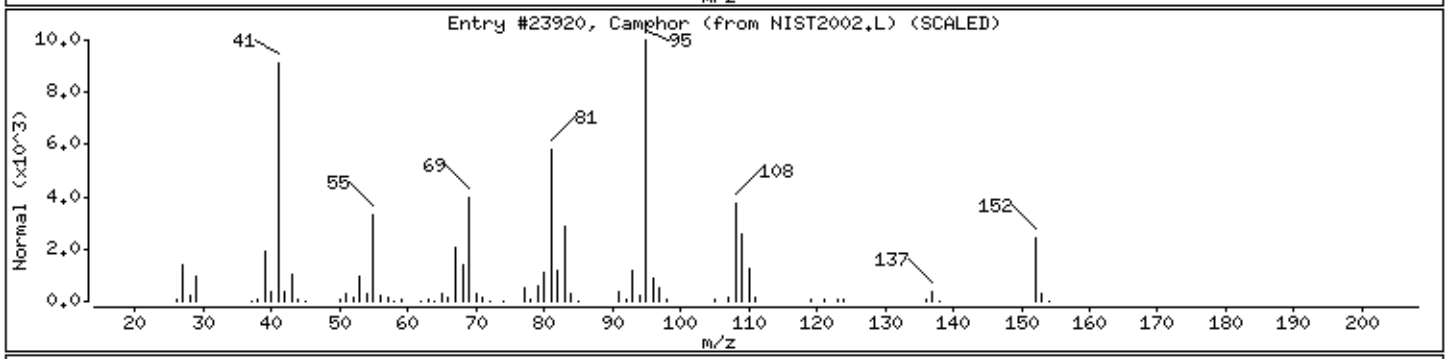
Volume Injected (uL): 2.0 Operator: SRC: LIMS

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	94	C10H16O	152
Camphor	76-22-2	NIST2002.L	23920	91	C10H16O	152







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Date : 03-NOV-2011 22:53

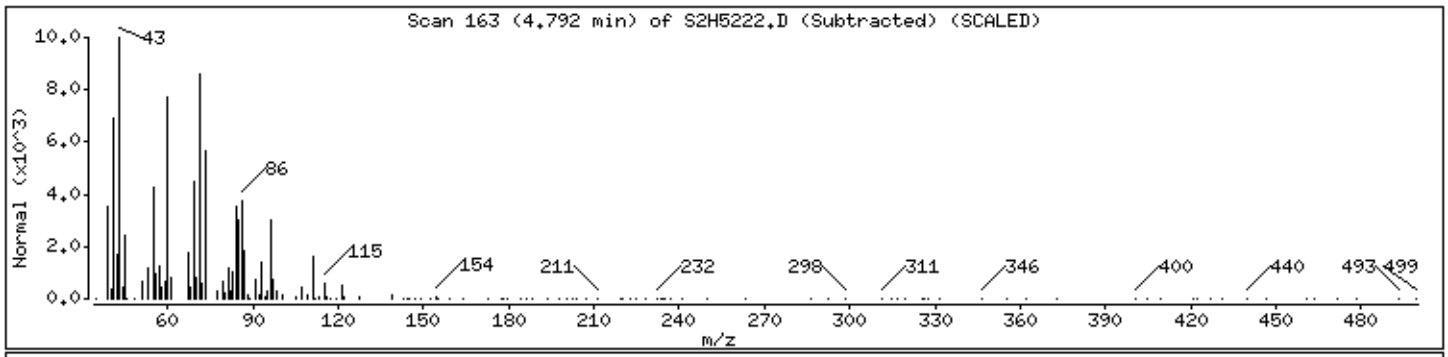
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 22:53

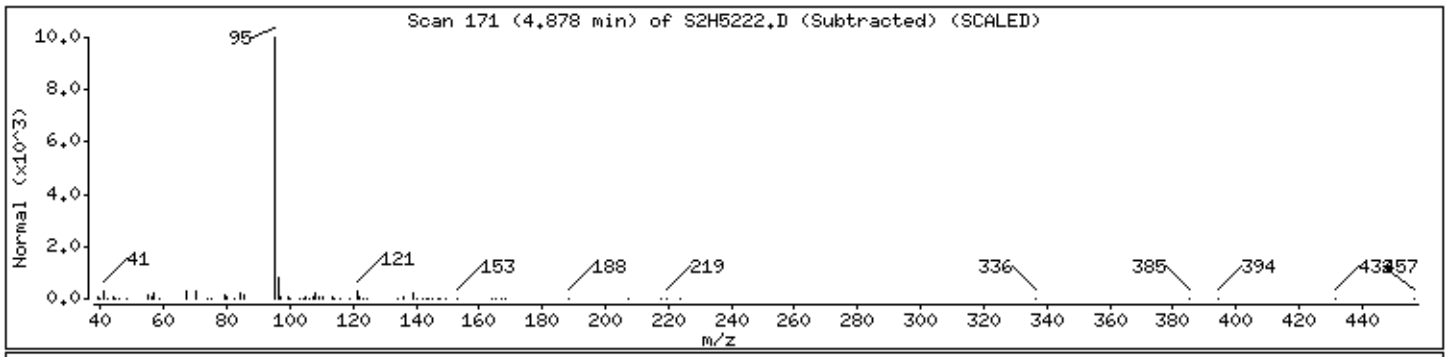
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 22:53

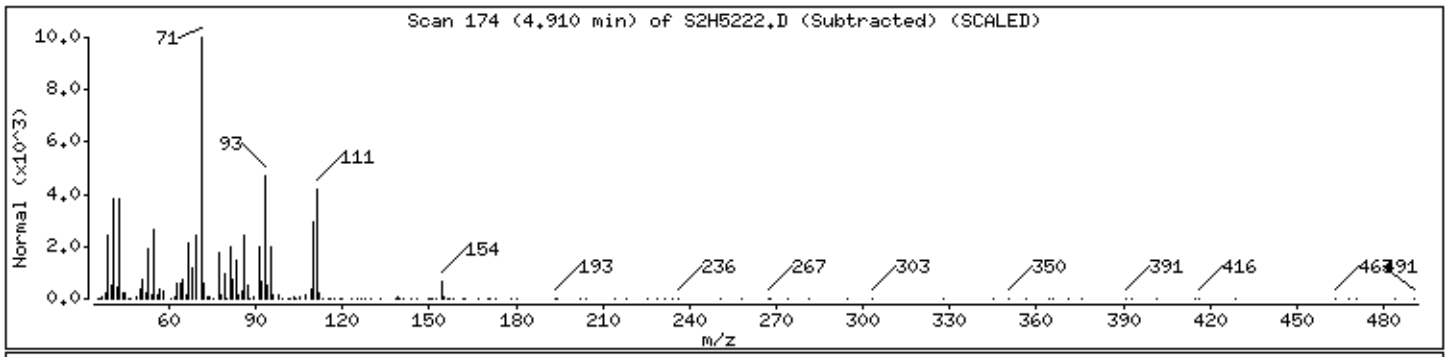
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 22:53

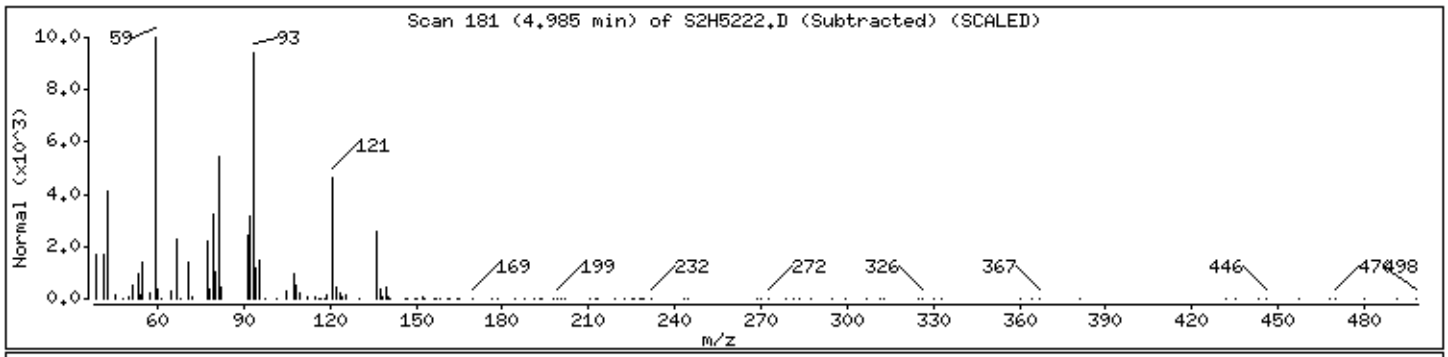
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5222.D

Date : 03-NOV-2011 22:53

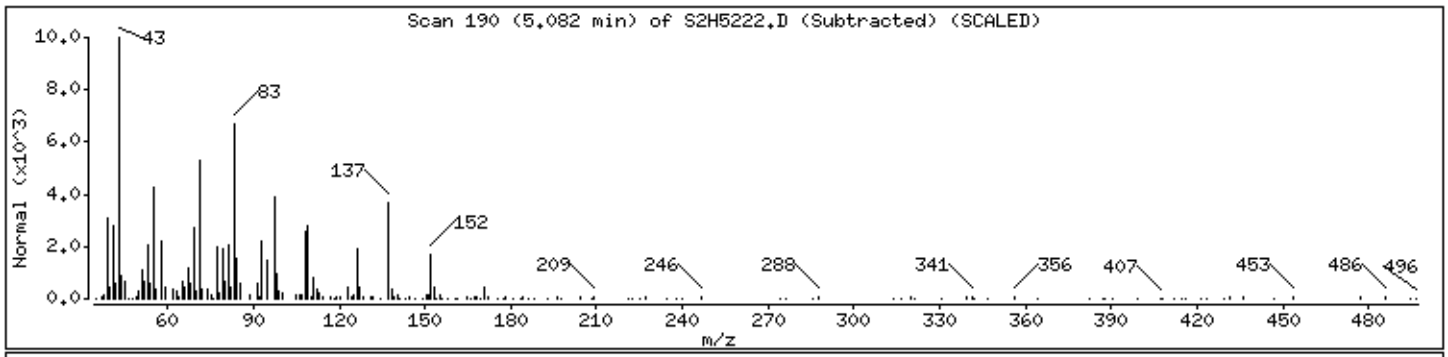
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5222.D

Date : 03-NOV-2011 22:53

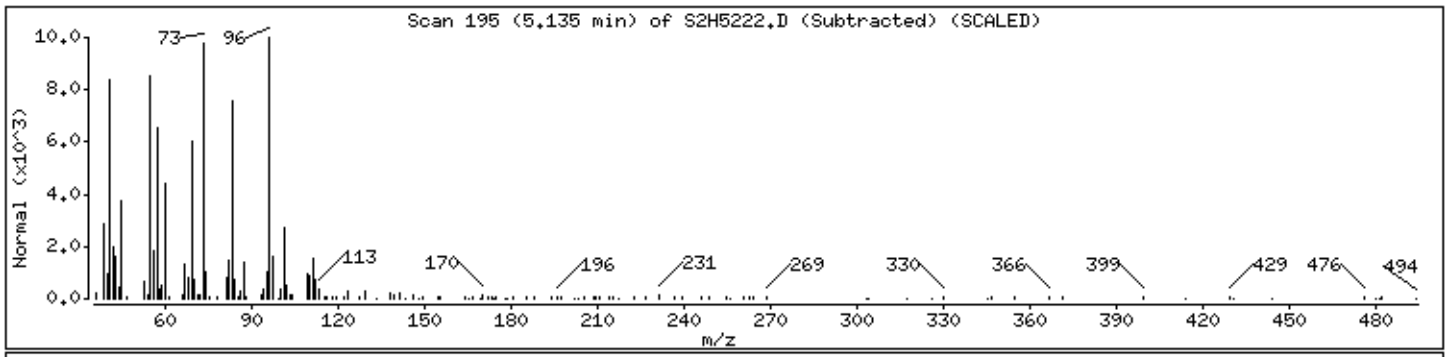
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5222.D

Date : 03-NOV-2011 22:53

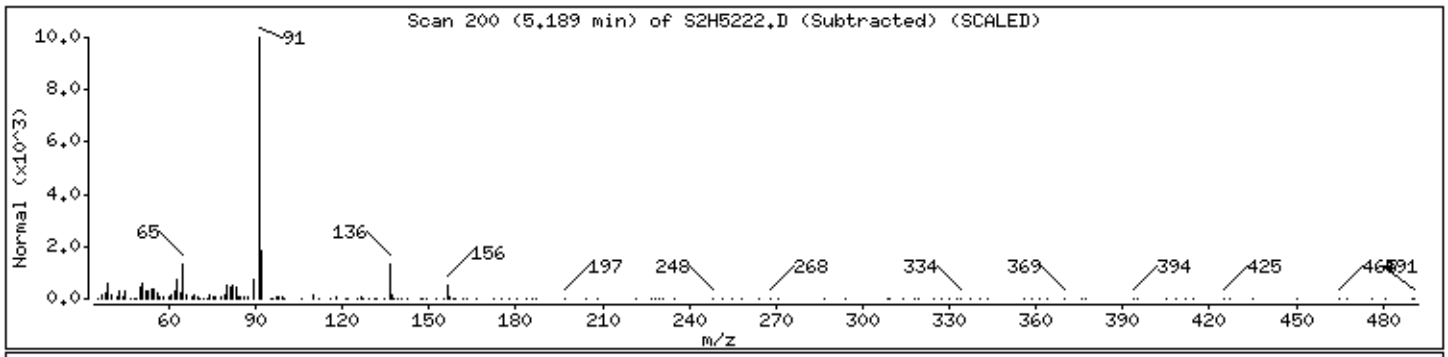
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5222.D

Date : 03-NOV-2011 22:53

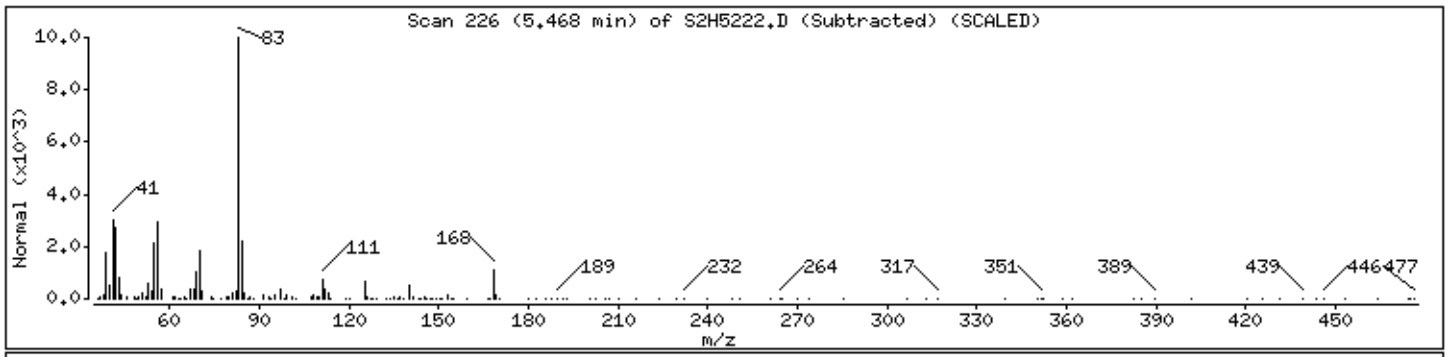
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 22:53

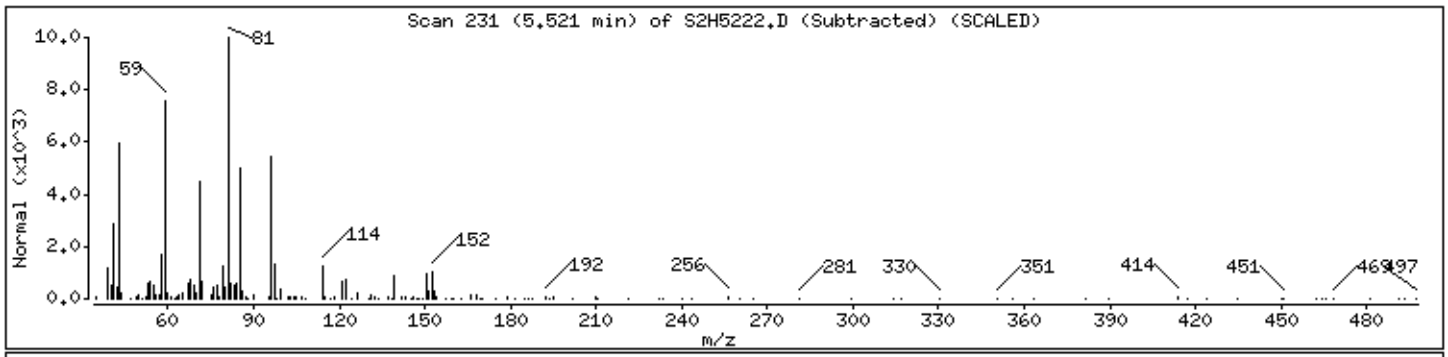
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 22:53

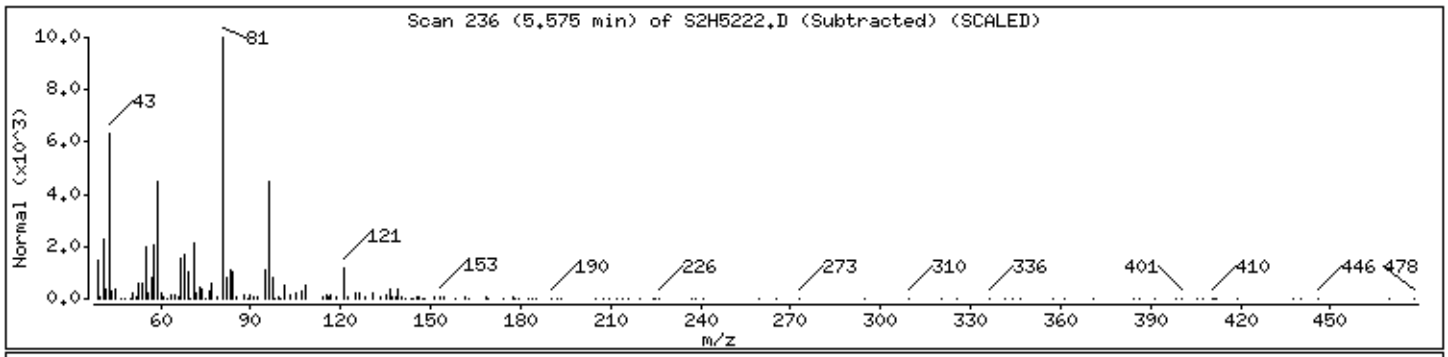
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5222.D

Date : 03-NOV-2011 22:53

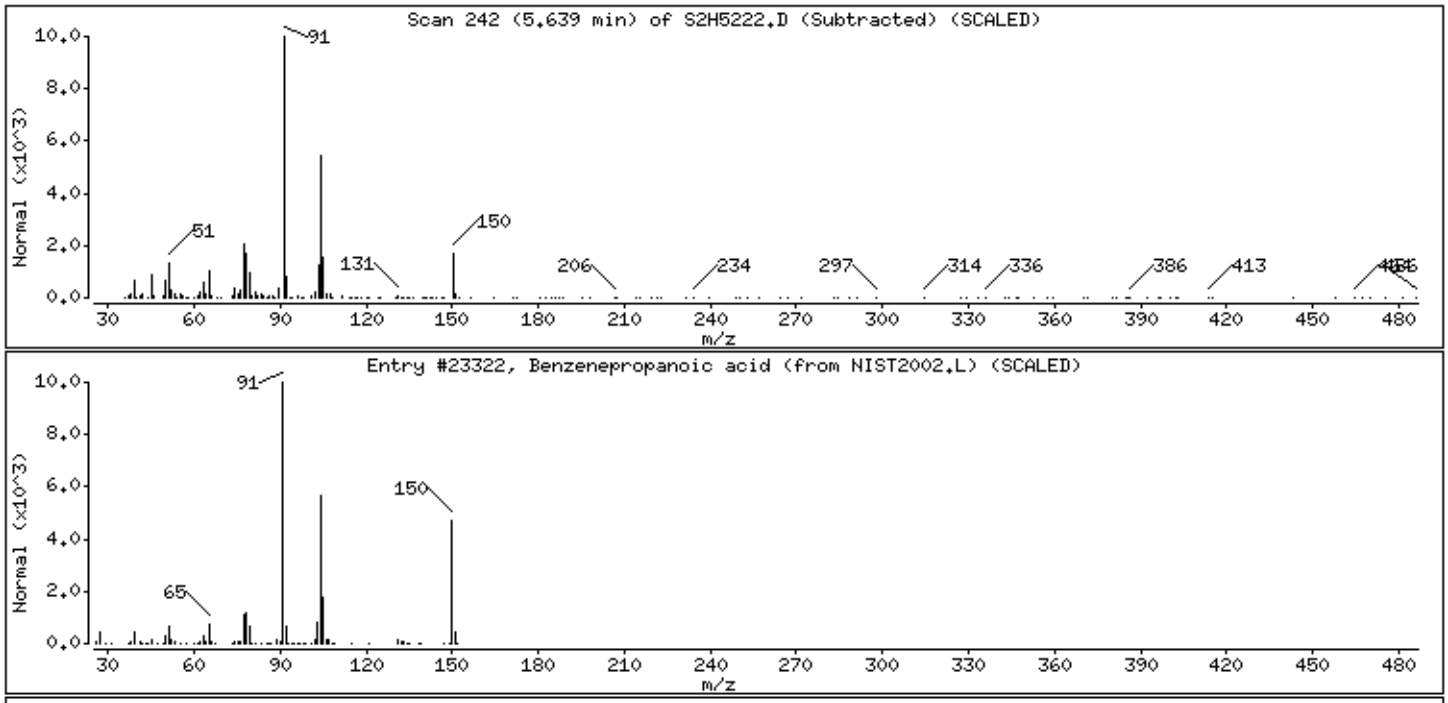
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzenepropanoic acid	501-52-0	NIST2002.L	23322	90	C9H10O2	150



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5222.D

Date : 03-NOV-2011 22:53

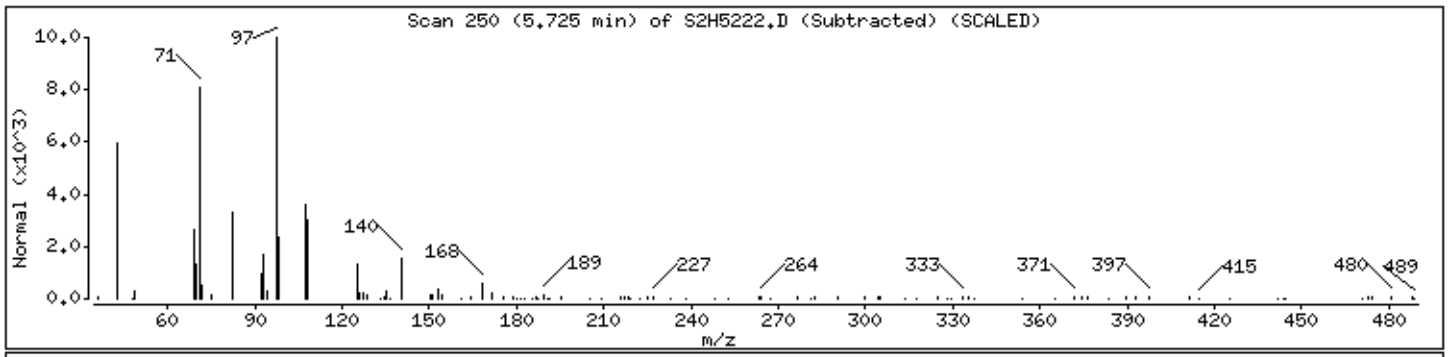
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5222.D

Date : 03-NOV-2011 22:53

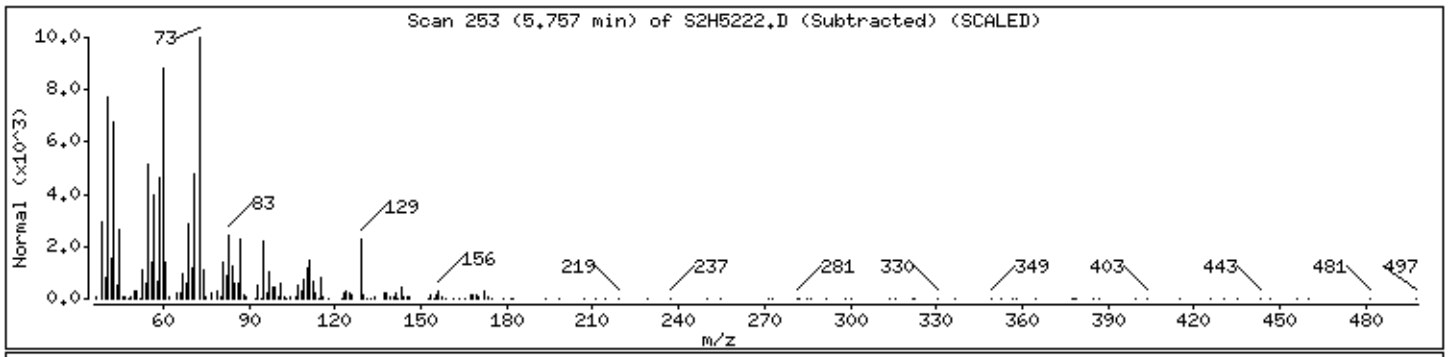
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5222.D

Date : 03-NOV-2011 22:53

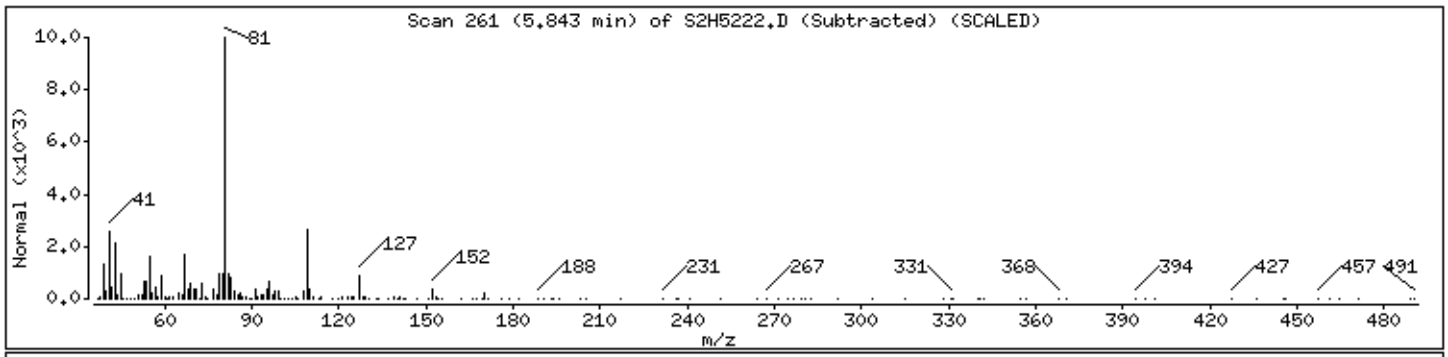
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5222.D

Date : 03-NOV-2011 22:53

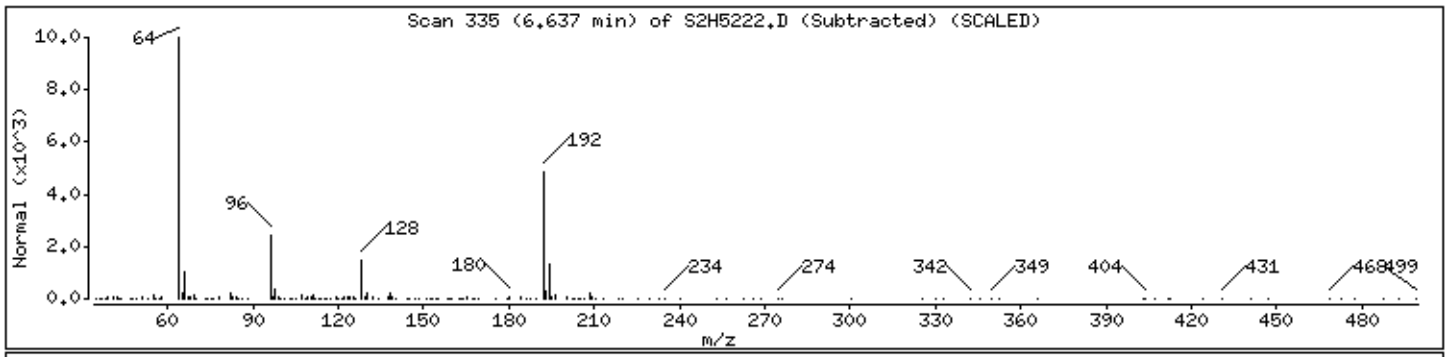
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5222.D

Date : 03-NOV-2011 22:53

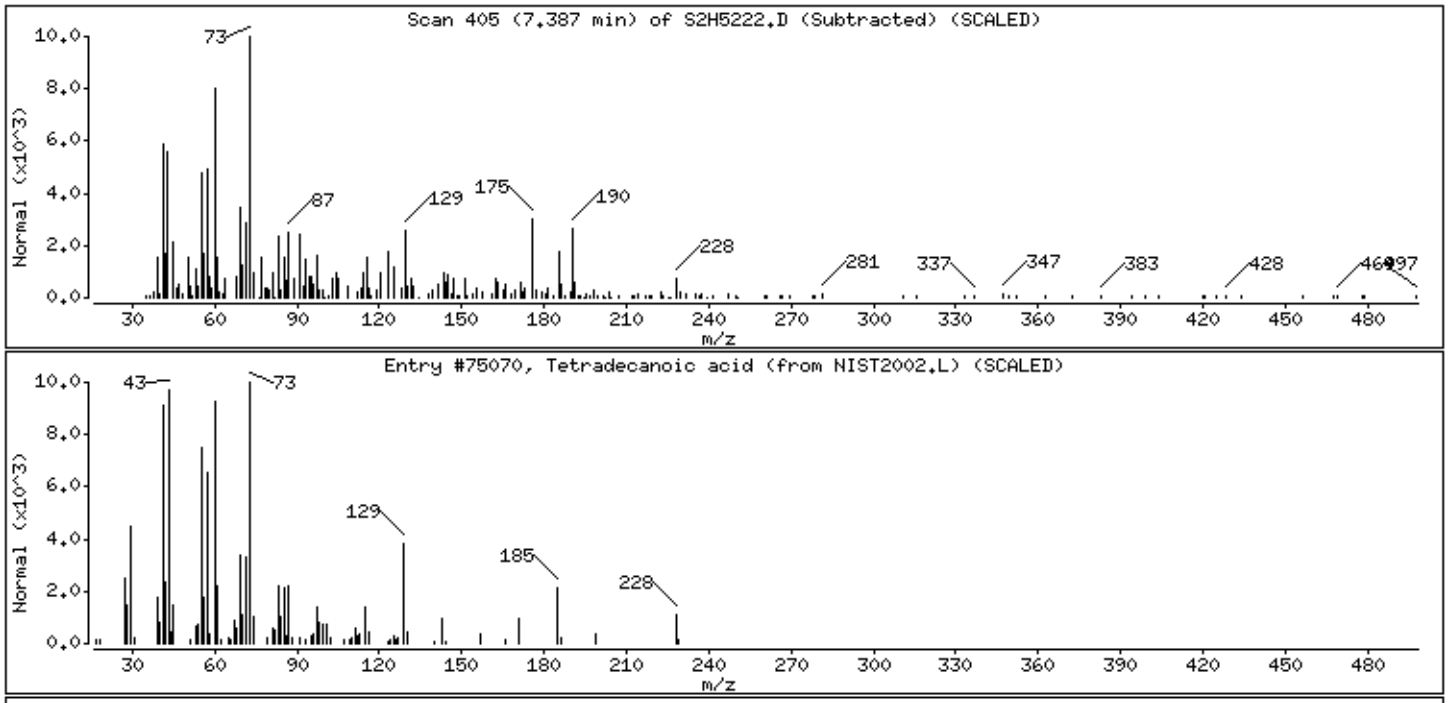
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 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	90	C14H28O2	228



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5222.D

Date : 03-NOV-2011 22:53

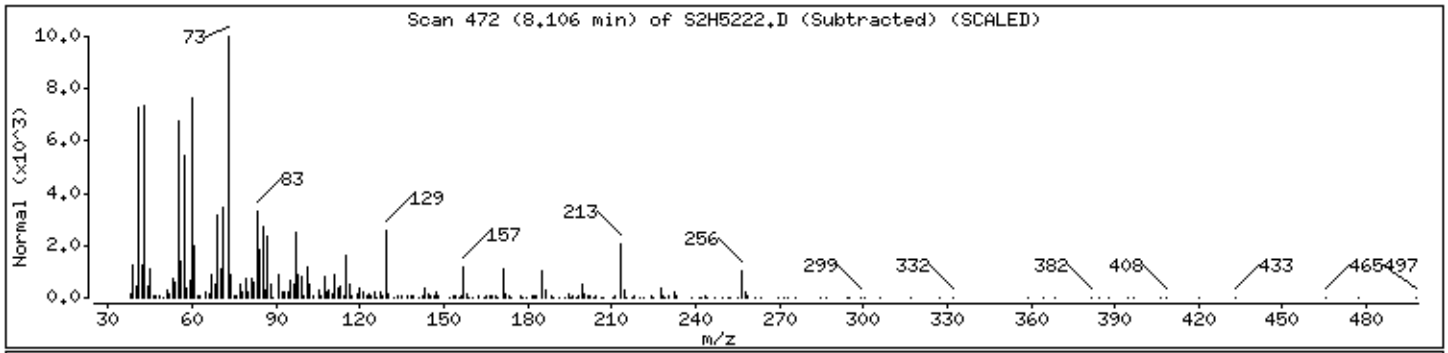
Client ID: H30X3 Instrument: S2.i

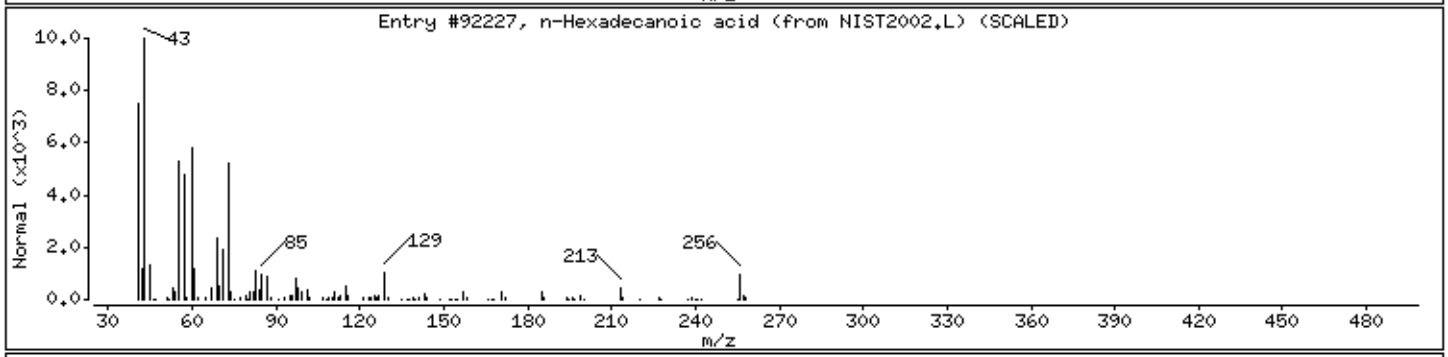
Sample Info: K2200-20A,,62636,,

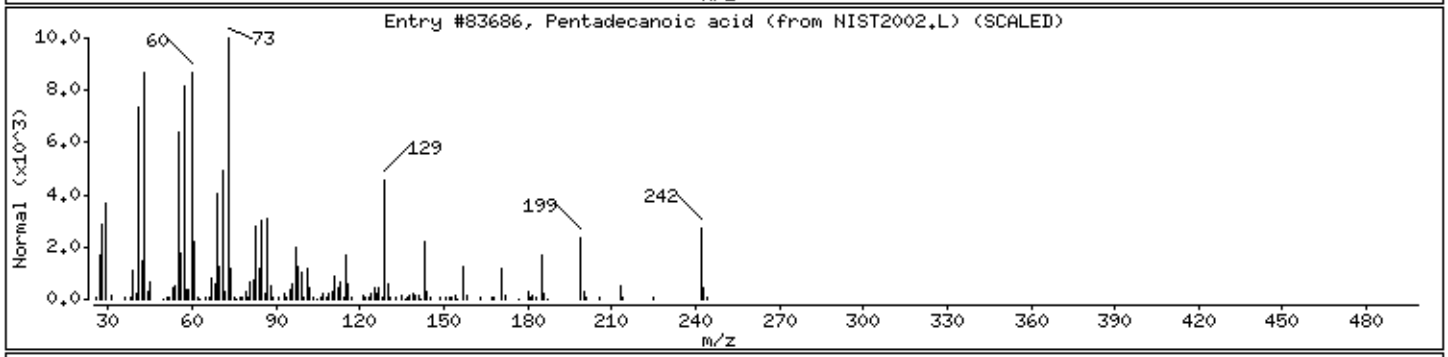
Volume Injected (uL): 2.0 Operator: SRC: LIMS

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	90	C15H30O2	242







Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5222.D

Date : 03-NOV-2011 22:53

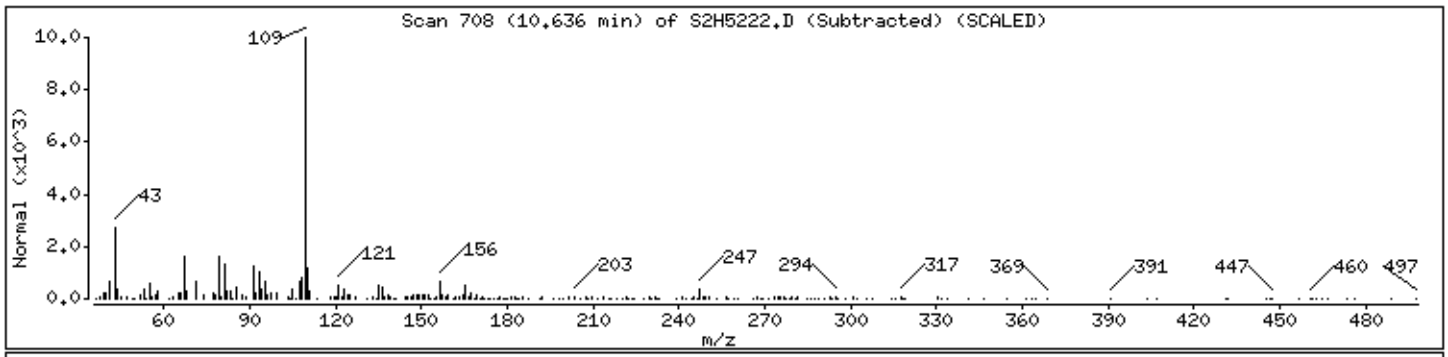
Client ID: H30X3 Instrument: S2.i

Sample Info: K2200-20A,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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

CLIENT SAMPLE NO.

H30Y2

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-14B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5216.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2´-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1´-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

H30Y2

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-14B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5216.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3´-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

H30Y2

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-14B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5216.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.670	8.3	BNJ
02		Unknown-01	4.874	5.5	J
03		Unknown-02	5.185	2.4	J
04		Unknown-03	5.399	7.6	J
05		Unknown-04	5.742	7.0	J
06		Unknown-05	5.967	2.5	J
07	57-10-3	n-Hexadecanoic acid	8.101	7.9	NJ
08	57-11-4	Octadecanoic acid	8.756	2.9	NJ
09		Unknown-06	10.600	12	J
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5216.D
Report Date: 07-Nov-2011 14:02

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5216.D
Lab Smp Id: K2200-14B Client Smp ID: H30Y2
Inj Date : 03-NOV-2011 20:43
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-14B,,62636,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 26
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)
$ 2 Phenol-d5	71	3.565	3.565	(0.917)	195656	47.9195	24
$ 4 bis(2-Chloroethyl)ether-d8	67	3.618	3.619	(0.931)	287641	51.1244	26
$ 6 2-Chlorophenol-d4	132	3.694	3.694	(0.950)	183540	51.9641	26
* 8 1,4-Dichlorobenzene-d4	152	3.887	3.887	(1.000)	129661	40.0000	(Q)
$ 11 4-Methylphenol-d8	113	4.198	4.198	(1.080)	297796	53.7980	27
$ 16 Nitrobenzene-d5	128	4.348	4.348	(0.879)	99357	57.2604	29
$ 19 2-Nitrophenol-d4	143	4.616	4.616	(0.933)	112637	58.8022	29
$ 23 2,4-Dichlorophenol-d3	165	4.820	4.820	(0.974)	205220	58.6878	29
* 25 Naphthalene-d8	136	4.948	4.948	(1.000)	333189	40.0000	
$ 27 4-Chloroaniline-d4	131	5.002	5.002	(1.011)	87936	28.3220	14(Q)
$ 40 Dimethylphthalate-d6	166	6.171	6.171	(0.962)	551313	61.4909	31
$ 43 Acenaphthylene-d8	160	6.289	6.289	(0.980)	591034	50.6937	25
* 46 Acenaphthene-d10	164	6.417	6.418	(1.000)	243846	40.0000	
$ 49 4-Nitrophenol-d4	143	6.514	6.503	(1.015)	61585	47.6634	24(Q)
$ 54 Fluorene-d10	176	6.846	6.847	(1.067)	429542	52.1561	26
$ 58 4,6-Dinitro-2-methylphenol-d2	200	6.900	6.900	(0.903)	103274	72.5021	36(Q)
* 65 Phenanthrene-d10	188	7.640	7.640	(1.000)	365030	40.0000	
$ 67 Anthracene-d10	188	7.693	7.694	(1.007)	543972	52.1686	26
$ 72 Pyrene-d10	212	8.830	8.820	(0.895)	313997	46.4117	23
* 77 Chrysene-d12	240	9.870	9.871	(1.000)	214761	40.0000	(Q)
$ 83 Benzo(a)pyrene-d12	264	11.146	11.147	(0.985)	56167	18.3184	9.2(RH)

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5216.D
Report Date: 07-Nov-2011 14:02

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)	
* 85 Perylene-d12	264	11.232	11.233	(1.000)	124953	40.0000		(H)

QC Flag Legend

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\111103.B\S2H5216.D
Report Date: 07-Nov-2011 14:02

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5216.D
Lab Smp Id: K2200-14B Client Smp ID: H30Y2
Inj Date : 03-NOV-2011 20:43
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-14B,,62636,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 26
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

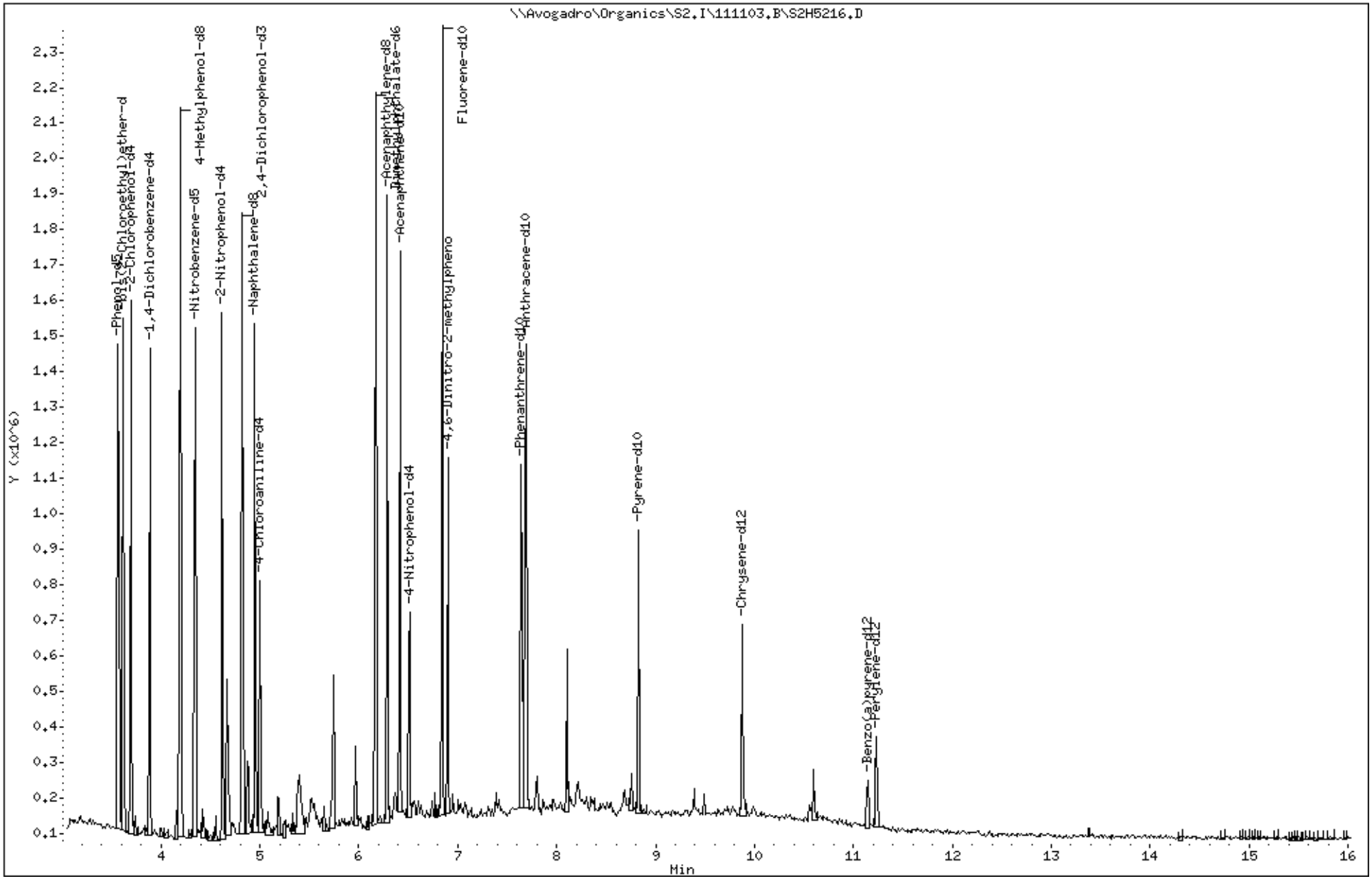
ISTD	RT	AREA	AMOUNT
* 25 Naphthalene-d8	4.949	1213061	40.000
* 46 Acenaphthene-d10	6.418	1309691	40.000
* 65 Phenanthrene-d10	7.640	1027021	40.000
* 77 Chrysene-d12	9.871	683954	40.000
* 85 Perylene-d12	11.233	319948	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
2(3H)-Furanone, dihydro-4-hydroxy-					CAS #: 5469-16-9		
4.670	501142	16.5248589	8.3	90	NIST2002.L	4145	25
Unknown					CAS #:		
4.874	330866	10.9101080	5.5	0		0	25

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5216.D
Report Date: 07-Nov-2011 14:02

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
5.185	147713	4.87075379	2.4	0		0	25
Unknown				CAS #:			
5.399	459623	15.1557874	7.6	0		0	25
Unknown				CAS #:			
5.742	460322	14.0589593	7.0	0		0	46
Unknown				CAS #:			
5.967	164931	5.03725883	2.5	0		0	46
n-Hexadecanoic acid				CAS #: 57-10-3			
8.101	406485	15.8316147	7.9	95	NIST2002.L	92227	65
Octadecanoic acid				CAS #: 57-11-4			
8.756	100009	5.84884457	2.9	87	NIST2002.L	108841	77
Unknown				CAS #:			
10.600	185895	23.2406267	12	0		0	85

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5216.D
Date : 03-NOV-2011 20:43
Client ID: H30Y2
Instrument: S2.i
Sample Info: K2200-14B,,62636,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5216.D

Date : 03-NOV-2011 20:43

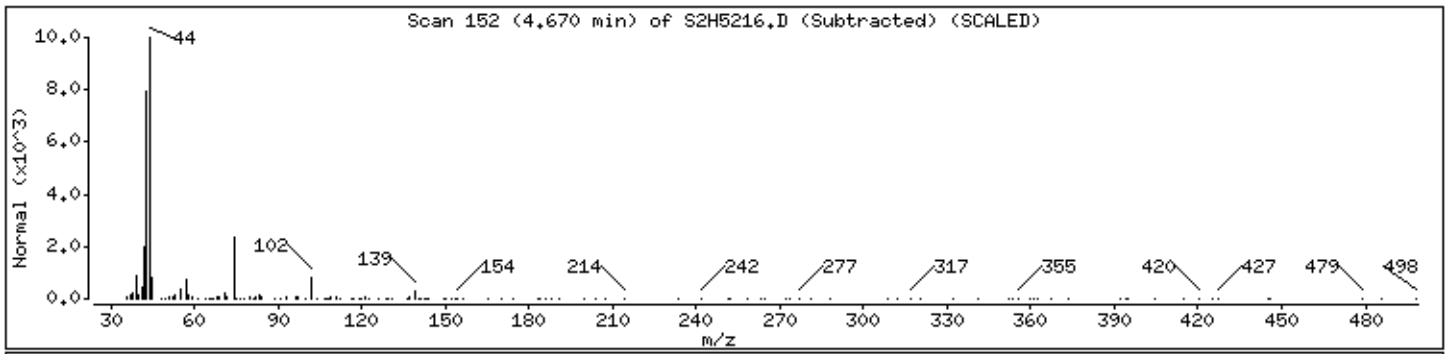
Client ID: H30Y2 Instrument: S2.i

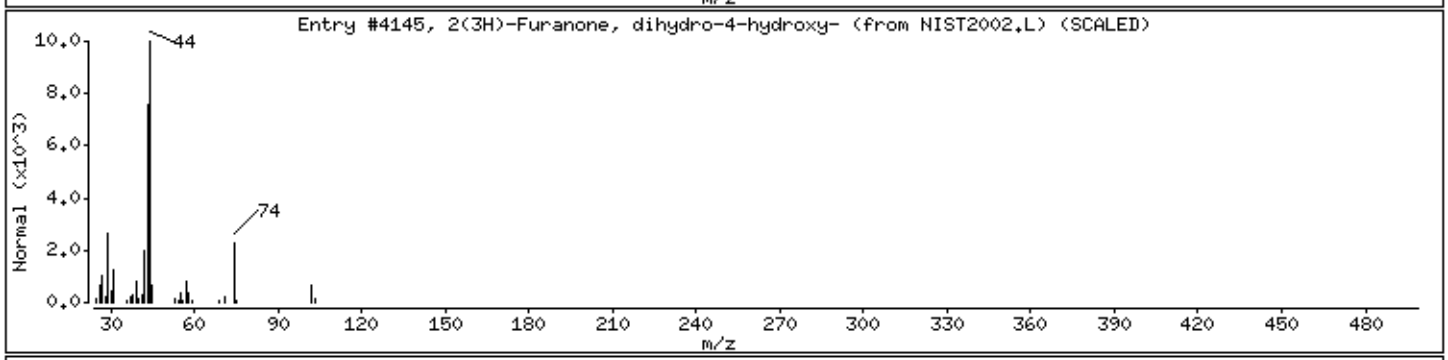
Sample Info: K2200-14B,,62636,,

Volume Injected (uL): 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\111103.B\S2H5216.D

Date : 03-NOV-2011 20:43

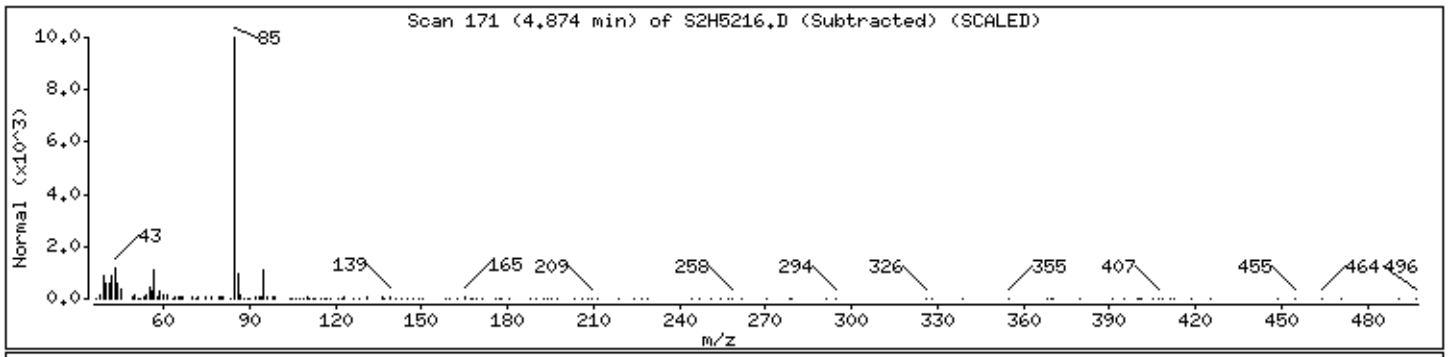
Client ID: H30Y2 Instrument: S2.i

Sample Info: K2200-14B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5216.D

Date : 03-NOV-2011 20:43

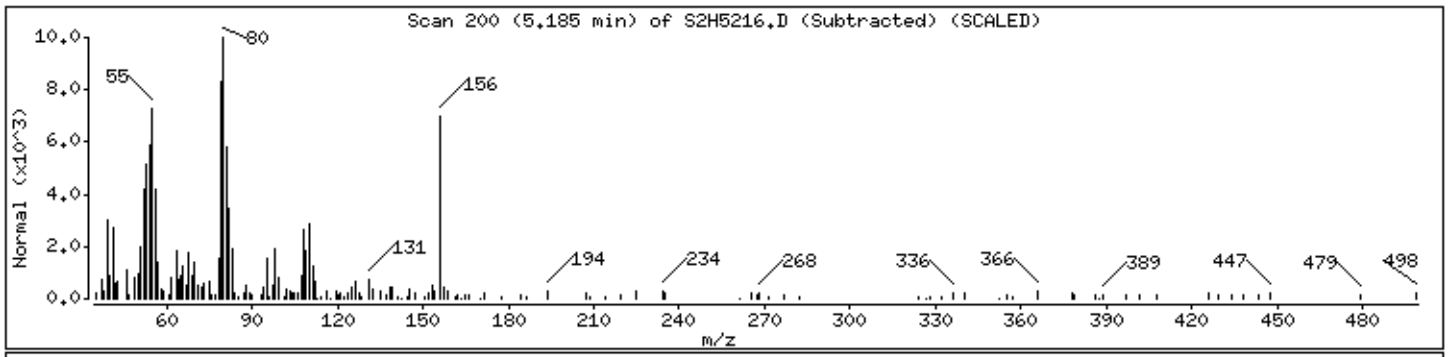
Client ID: H30Y2 Instrument: S2.i

Sample Info: K2200-14B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5216.D

Date : 03-NOV-2011 20:43

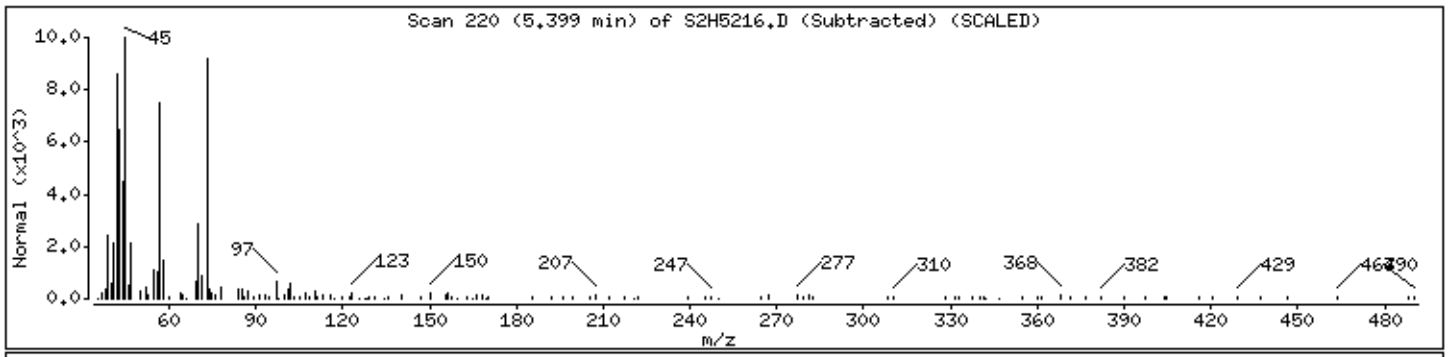
Client ID: H30Y2 Instrument: S2.i

Sample Info: K2200-14B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5216.D

Date : 03-NOV-2011 20:43

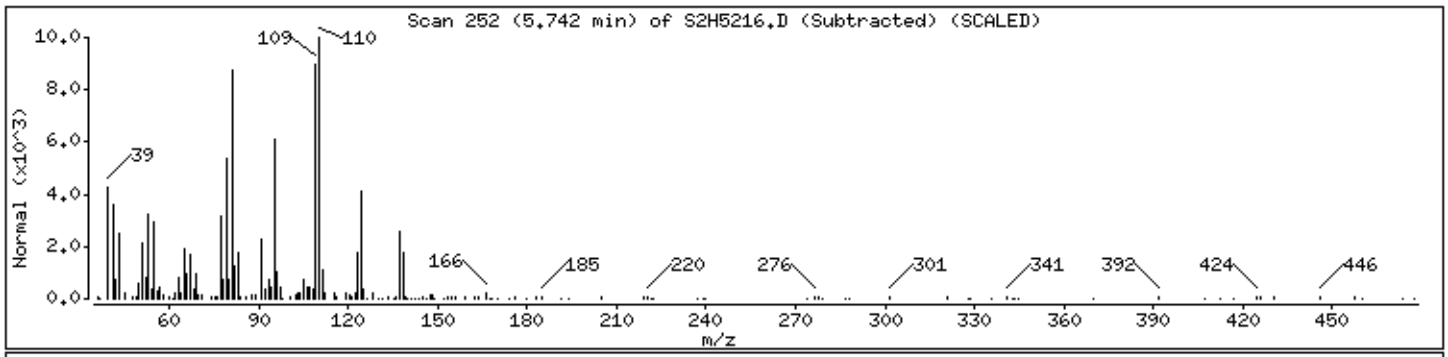
Client ID: H30Y2 Instrument: S2.i

Sample Info: K2200-14B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5216.D

Date : 03-NOV-2011 20:43

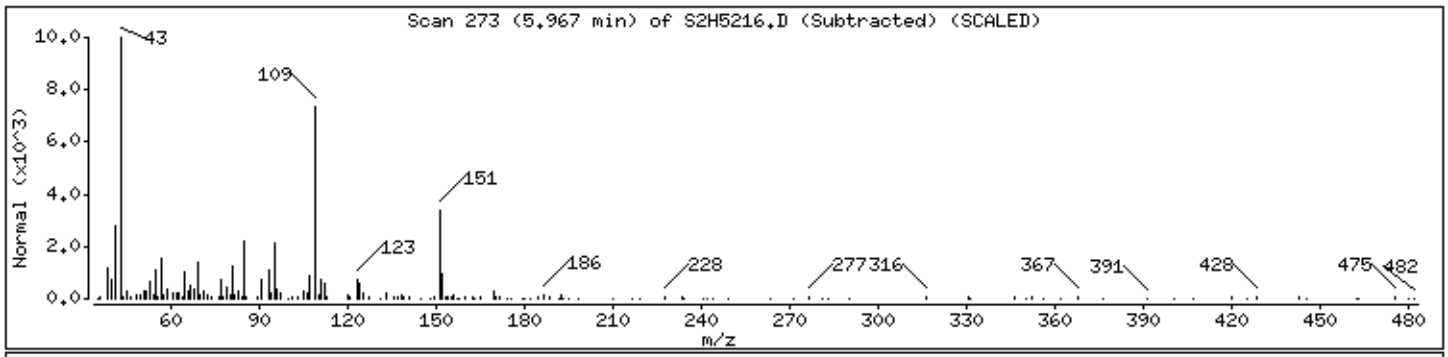
Client ID: H30Y2 Instrument: S2.i

Sample Info: K2200-14B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5216.D

Date : 03-NOV-2011 20:43

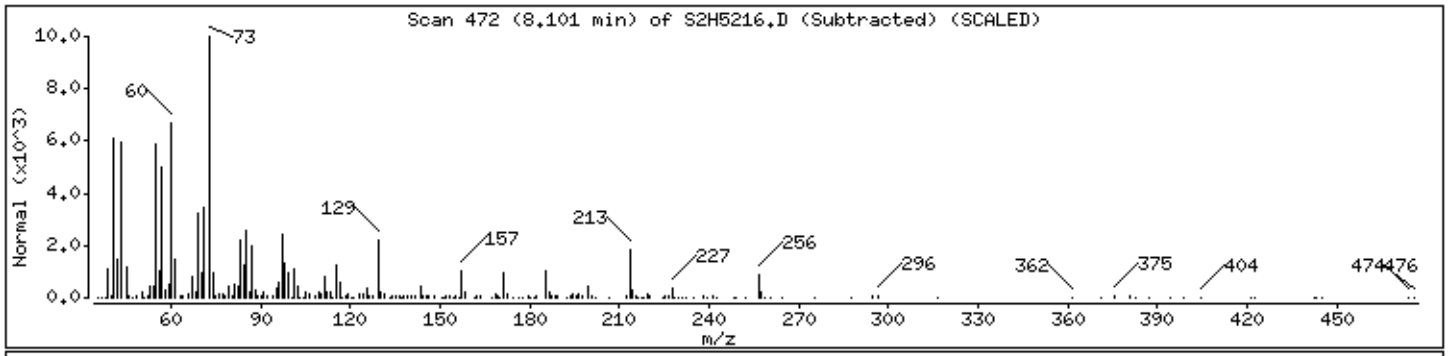
Client ID: H30Y2 Instrument: S2.i

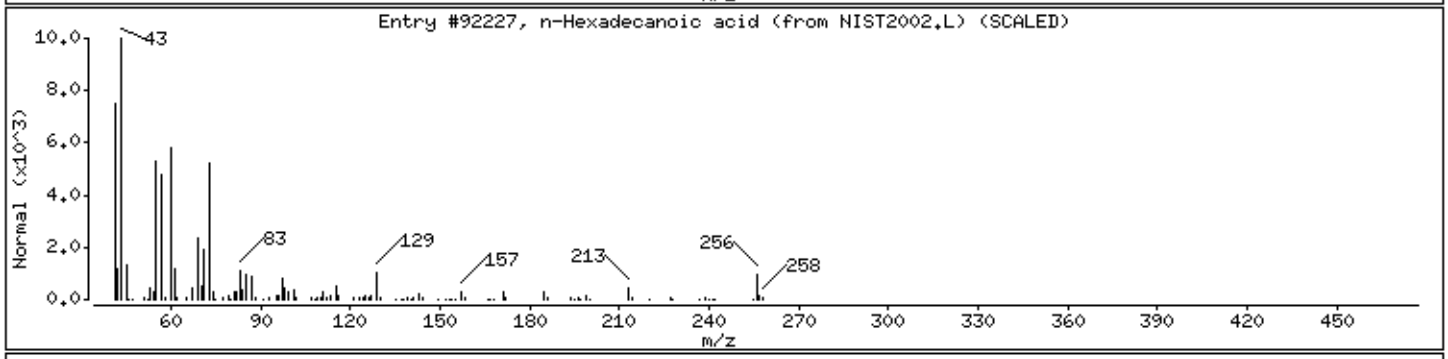
Sample Info: K2200-14B,,62636,,

Volume Injected (uL): 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\111103.B\S2H5216.D

Date : 03-NOV-2011 20:43

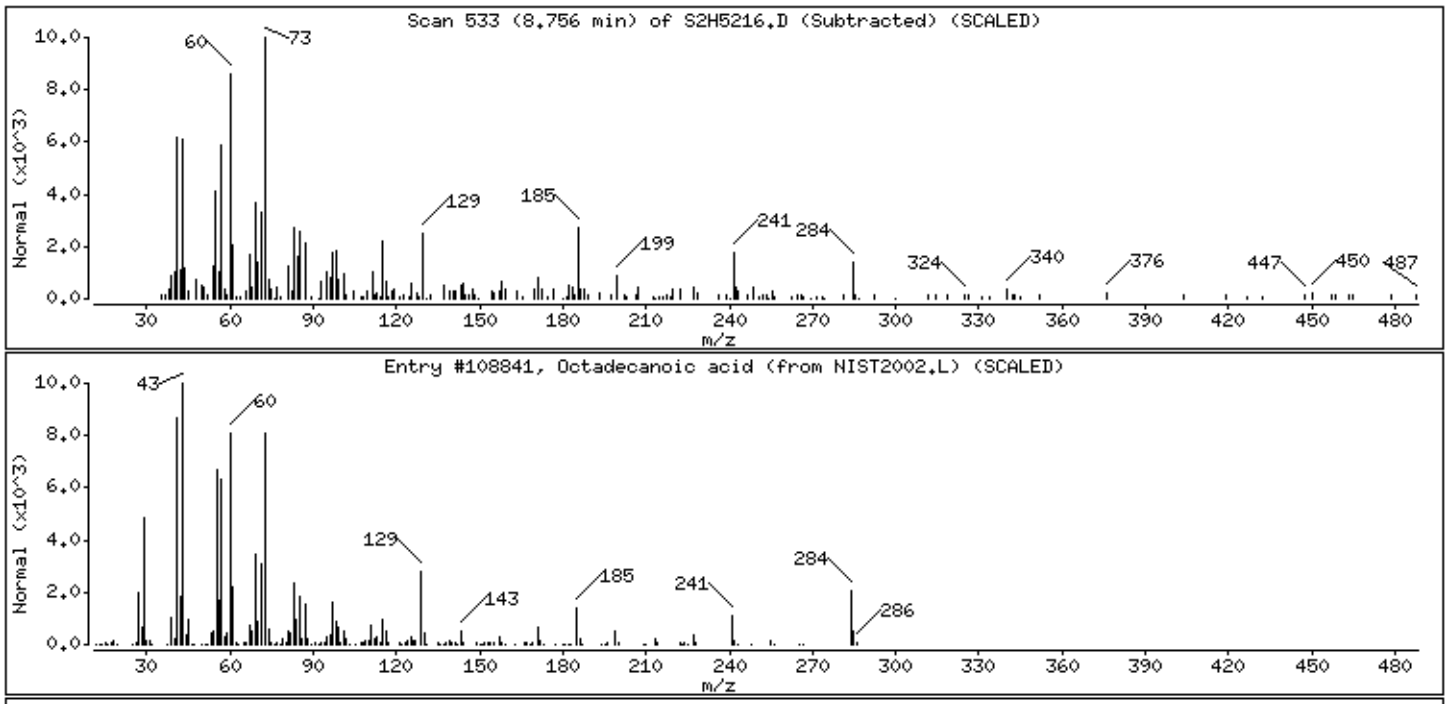
Client ID: H30Y2 Instrument: S2.i

Sample Info: K2200-14B,,62636,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Octadecanoic acid	57-11-4	NIST2002.L	108841	87	C18H36O2	284



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5216.D

Date : 03-NOV-2011 20:43

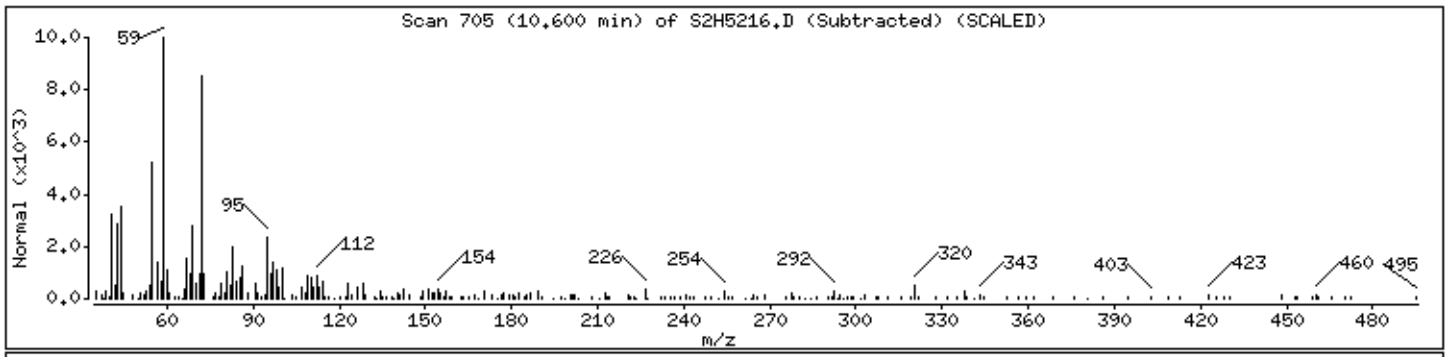
Client ID: H30Y2 Instrument: S2.i

Sample Info: K2200-14B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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

CLIENT SAMPLE NO.

H30Y3

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-15B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5217.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2´-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1´-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

H30Y3

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-15B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5217.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3´-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

H30Y3

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-15B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5217.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	3.738	2.0	J
02		Unknown-02	4.156	2.6	J
03		Unknown-03	4.414	2.5	J
04	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.671	8.5	BNJ
05		Unknown-04	4.875	6.5	J
06		Unknown-05	5.079	2.0	J
07		Unknown-06	5.186	3.5	J
08		Unknown-07	5.250	2.7	J
09		Unknown-08	5.400	6.7	J
10		Unknown-09	5.744	9.1	J
11		Unknown-10	5.969	3.4	J
12	57-10-3	n-Hexadecanoic acid	8.103	11	NJ
13		Unknown-11	9.486	4.9	J
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5217.D
Report Date: 07-Nov-2011 14:02

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5217.D
Lab Smp Id: K2200-15B Client Smp ID: H30Y3
Inj Date : 03-NOV-2011 21:05
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-15B,,62636,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 27
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)
$	2 Phenol-d5	71	3.566	3.565	(0.917)	228788	53.4955	27
$	4 bis(2-Chloroethyl)ether-d8	67	3.620	3.619	(0.931)	339140	57.5469	29
$	6 2-Chlorophenol-d4	132	3.695	3.694	(0.950)	217088	58.6777	29
*	8 1,4-Dichlorobenzene-d4	152	3.888	3.887	(1.000)	135814	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.199	4.198	(1.080)	331899	57.2424	29
$	16 Nitrobenzene-d5	128	4.349	4.348	(0.879)	110768	55.6311	28
$	19 2-Nitrophenol-d4	143	4.617	4.616	(0.933)	142935	65.0278	33
$	23 2,4-Dichlorophenol-d3	165	4.821	4.820	(0.974)	249016	62.0588	31
*	25 Naphthalene-d8	136	4.949	4.948	(1.000)	382334	40.0000	
$	27 4-Chloroaniline-d4	131	5.003	5.002	(1.011)	89749	25.1904	13(Q)
$	40 Dimethylphthalate-d6	166	6.172	6.171	(0.962)	599722	61.3181	31
$	43 Acenaphthylene-d8	160	6.290	6.289	(0.980)	648328	50.9755	25
*	46 Acenaphthene-d10	164	6.419	6.418	(1.000)	266005	40.0000	
$	49 4-Nitrophenol-d4	143	6.515	6.503	(1.015)	65435	46.4243	23
$	54 Fluorene-d10	176	6.848	6.847	(1.067)	459617	51.1589	26
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.901	6.900	(0.903)	116212	73.7628	37(Q)
*	65 Phenanthrene-d10	188	7.641	7.640	(1.000)	403740	40.0000	
$	67 Anthracene-d10	188	7.695	7.694	(1.007)	524847	45.5085	23
$	72 Pyrene-d10	212	8.821	8.820	(0.894)	248321	38.0726	19(R)
*	77 Chrysene-d12	240	9.872	9.871	(1.000)	207042	40.0000	(Q)
$	83 Benzo(a)pyrene-d12	264	11.137	11.147	(0.991)	44304	15.6557	7.8(RH)

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5217.D
Report Date: 07-Nov-2011 14:02

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)	
* 85 Perylene-d12	264	11.233	11.233	(1.000)	115325	40.0000		(Q)

QC Flag Legend

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\111103.B\S2H5217.D
Report Date: 07-Nov-2011 14:02

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5217.D
Lab Smp Id: K2200-15B Client Smp ID: H30Y3
Inj Date : 03-NOV-2011 21:05
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-15B,,62636,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 27
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

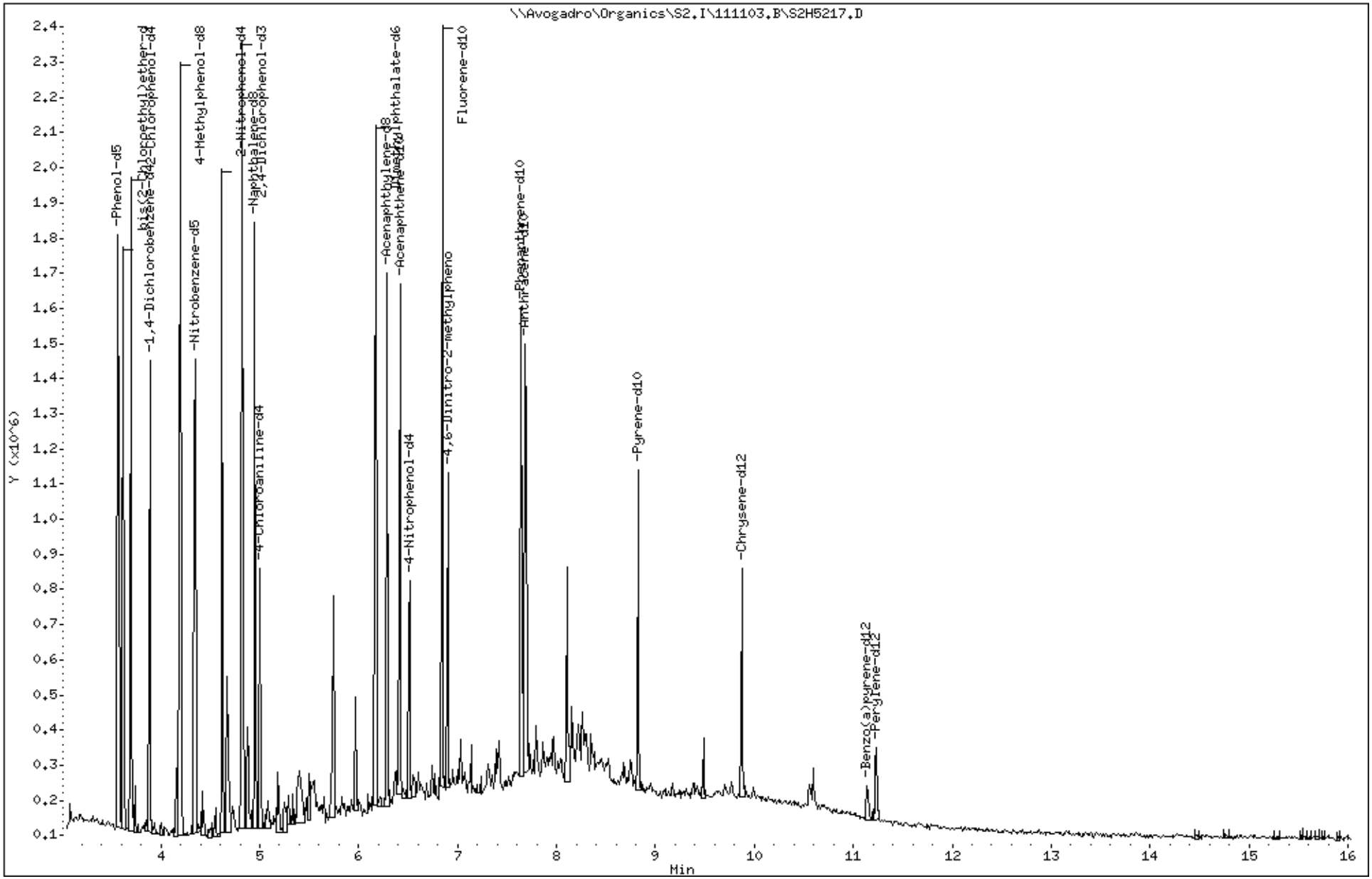
ISTD		RT	AREA	AMOUNT
* 8	1,4-Dichlorobenzene-d4	3.888	1226433	40.000
* 25	Naphthalene-d8	4.950	1388956	40.000
* 46	Acenaphthene-d10	6.419	1406184	40.000
* 65	Phenanthrene-d10	7.642	1208365	40.000
* 77	Chrysene-d12	9.872	622743	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
3.738	123818	4.03830816	2.0	0	0		8
Unknown				CAS #:			
4.156	159473	5.20118927	2.6	0	0		8

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5217.D
Report Date: 07-Nov-2011 14:02

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
4.414	152341	4.96858257	2.5	0		0	8
2(3H)-Furanone, dihydro-4-hydroxy-					CAS #: 5469-16-9		
4.671	587516	16.9196457	8.5	86	NIST2002.L	4145	25
Unknown					CAS #:		
4.875	450573	12.9758676	6.5	0		0	25
Unknown					CAS #:		
5.079	140970	4.05974596	2.0	0		0	25
Unknown					CAS #:		
5.186	244521	7.04185538	3.5	0		0	25
Unknown					CAS #:		
5.250	184088	5.30148695	2.7	0		0	25
Unknown					CAS #:		
5.400	464986	13.3909418	6.7	0		0	25
Unknown					CAS #:		
5.744	641716	18.2540964	9.1	0		0	46
Unknown					CAS #:		
5.969	237042	6.74283156	3.4	0		0	46
n-Hexadecanoic acid					CAS #: 57-10-3		
8.103	693789	22.9661792	11	95	NIST2002.L	92227	65
Unknown					CAS #:		
9.486	153778	9.87744092	4.9	0		0	77

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5217.D
Date : 03-NOV-2011 21:05
Client ID: H30Y3
Instrument: S2.i
Sample Info: K2200-15B,,62636,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5217.D

Date : 03-NOV-2011 21:05

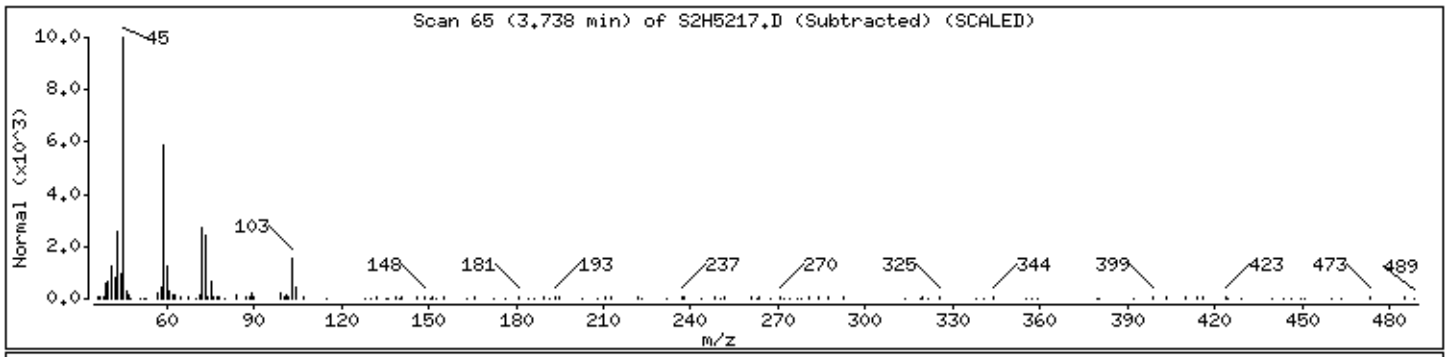
Client ID: H30Y3 Instrument: S2.i

Sample Info: K2200-15B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 21:05

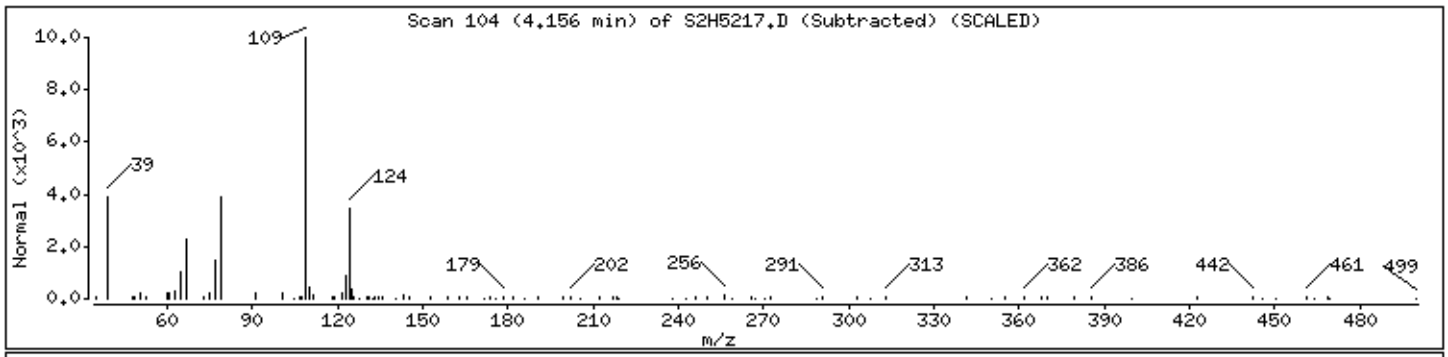
Client ID: H30Y3 Instrument: S2.i

Sample Info: K2200-15B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5217.D

Date : 03-NOV-2011 21:05

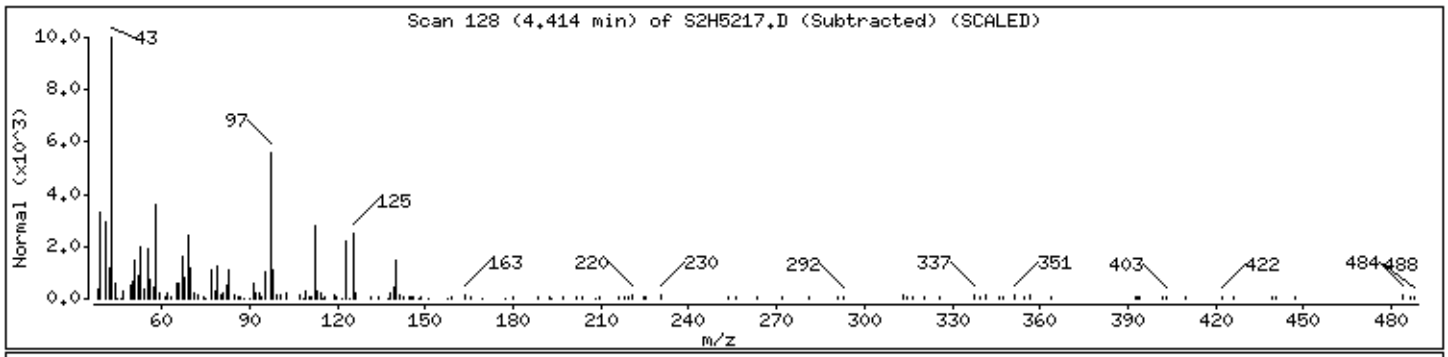
Client ID: H30Y3 Instrument: S2.i

Sample Info: K2200-15B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5217.D

Date : 03-NOV-2011 21:05

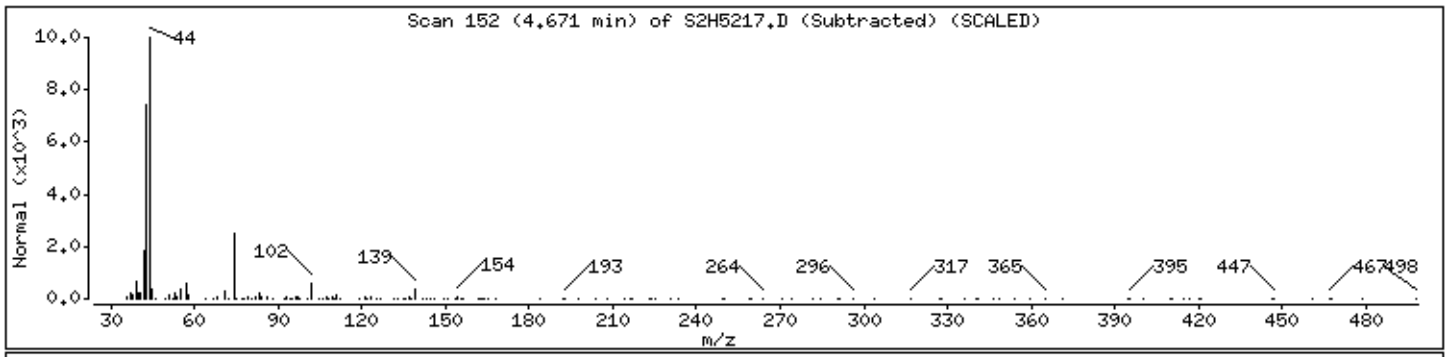
Client ID: H30Y3 Instrument: S2.i

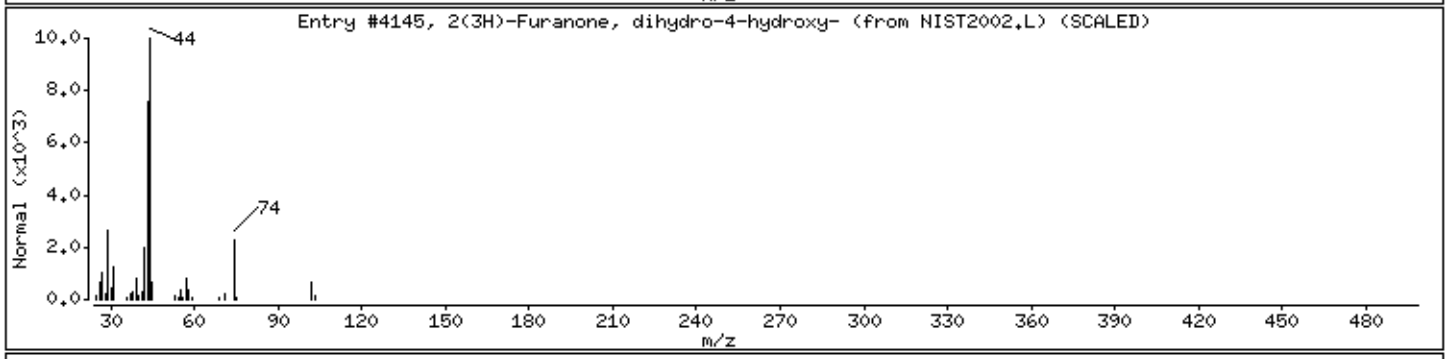
Sample Info: K2200-15B,,62636,,

Volume Injected (uL): 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





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Date : 03-NOV-2011 21:05

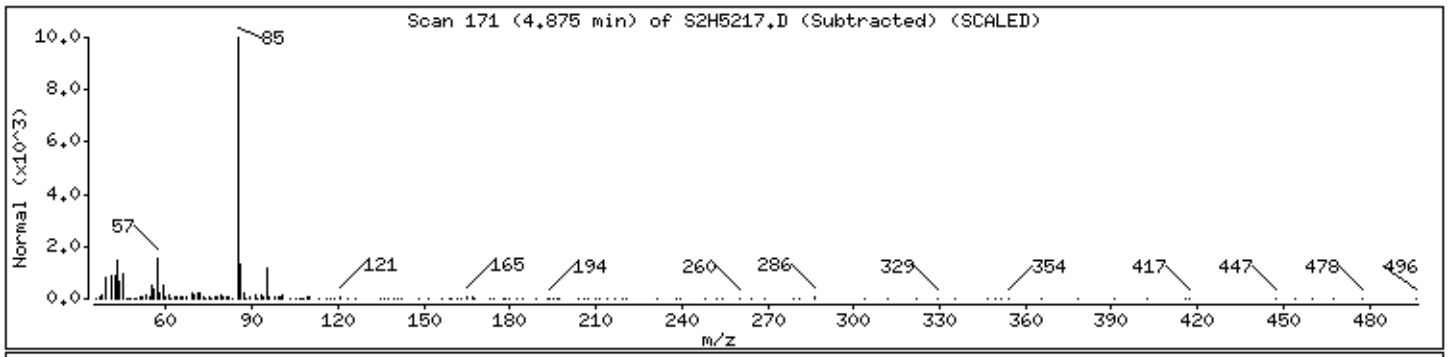
Client ID: H30Y3 Instrument: S2.i

Sample Info: K2200-15B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5217.D

Date : 03-NOV-2011 21:05

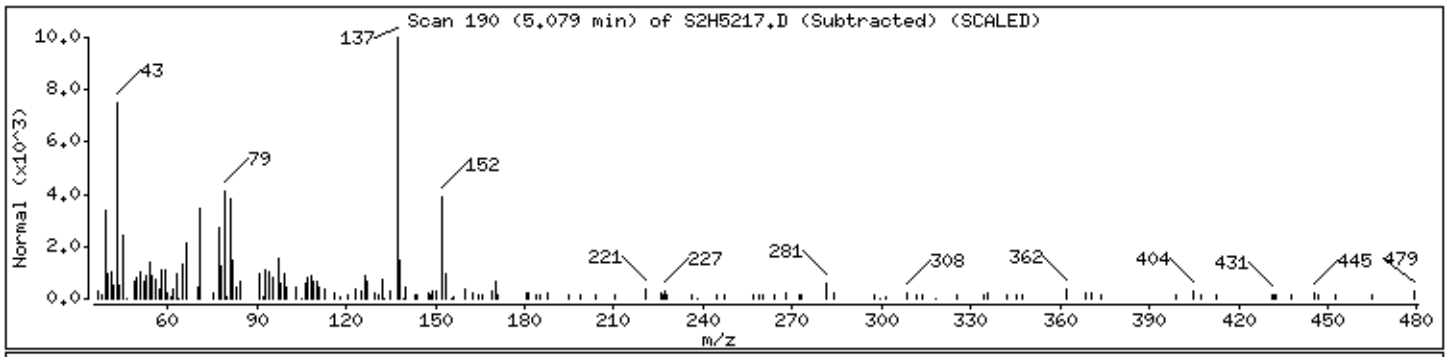
Client ID: H30Y3 Instrument: S2.i

Sample Info: K2200-15B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 21:05

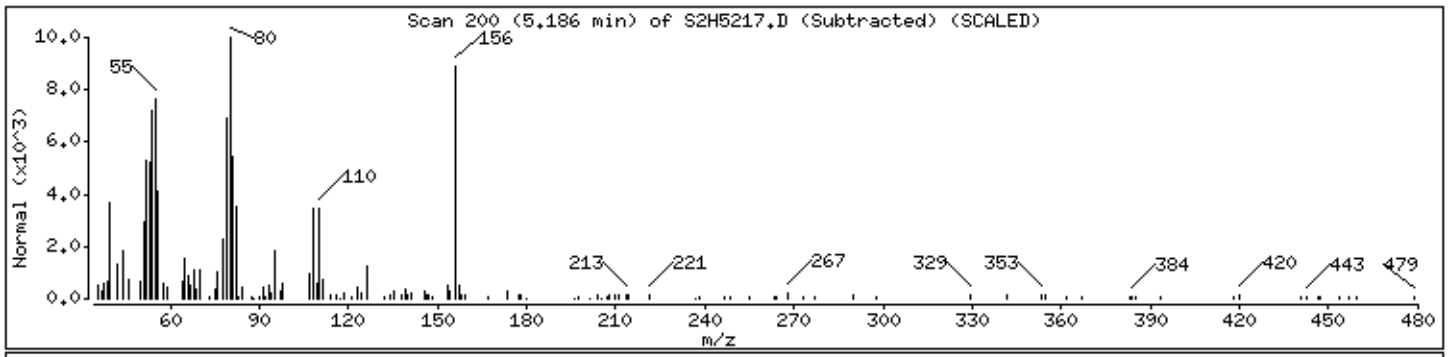
Client ID: H30Y3 Instrument: S2.i

Sample Info: K2200-15B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5217.D

Date : 03-NOV-2011 21:05

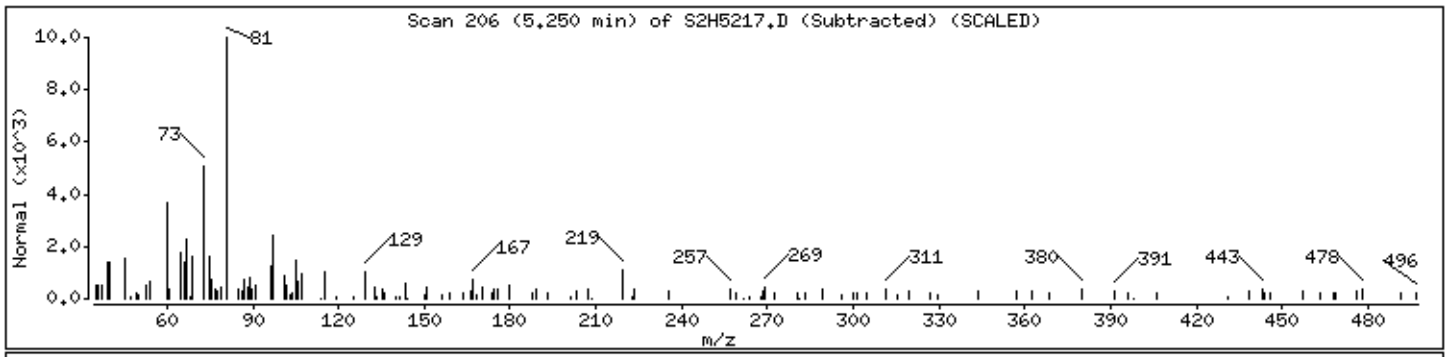
Client ID: H30Y3 Instrument: S2.i

Sample Info: K2200-15B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5217.D

Date : 03-NOV-2011 21:05

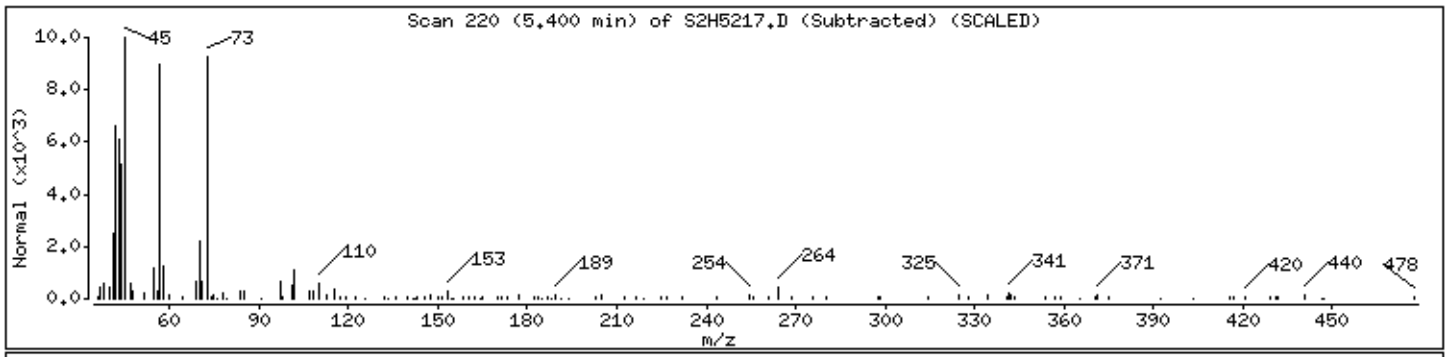
Client ID: H30Y3 Instrument: S2.i

Sample Info: K2200-15B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5217.D

Date : 03-NOV-2011 21:05

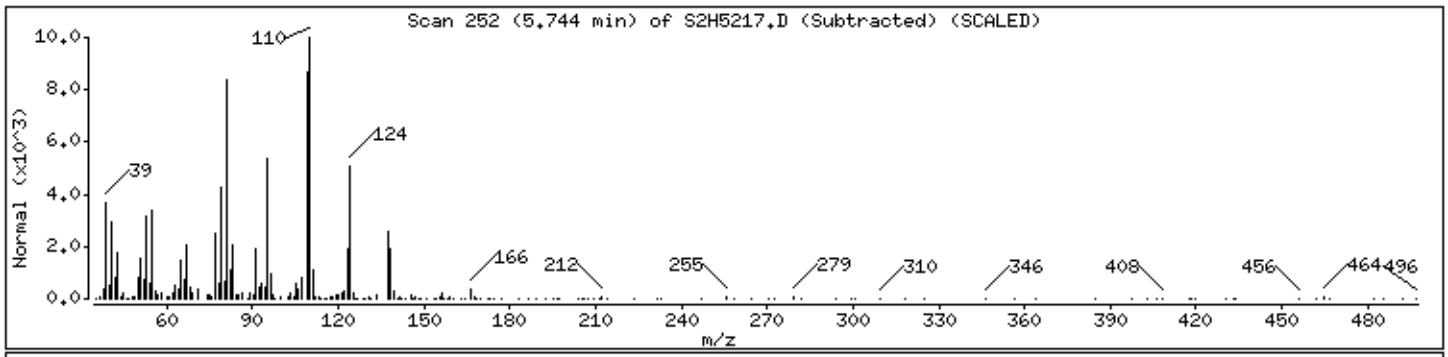
Client ID: H30Y3 Instrument: S2.i

Sample Info: K2200-15B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5217.D

Date : 03-NOV-2011 21:05

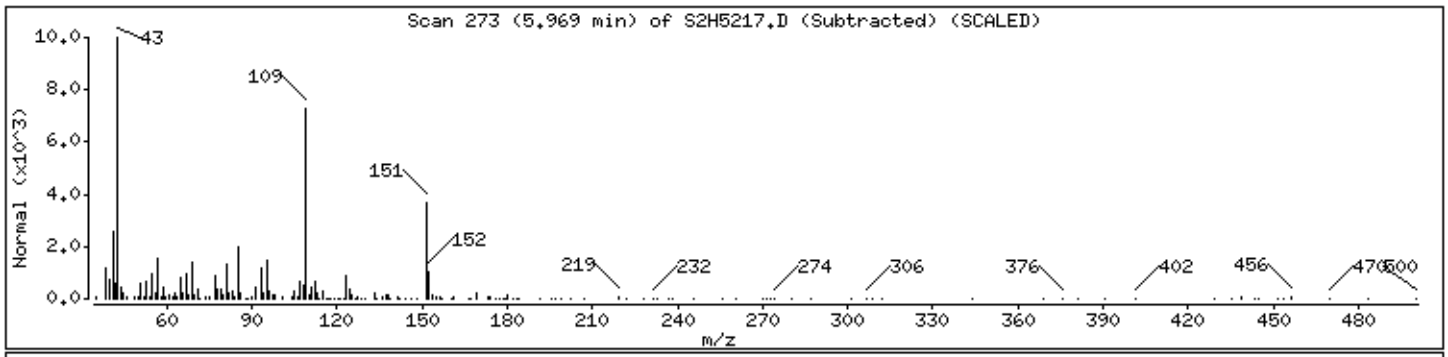
Client ID: H30Y3 Instrument: S2.i

Sample Info: K2200-15B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5217.D

Date : 03-NOV-2011 21:05

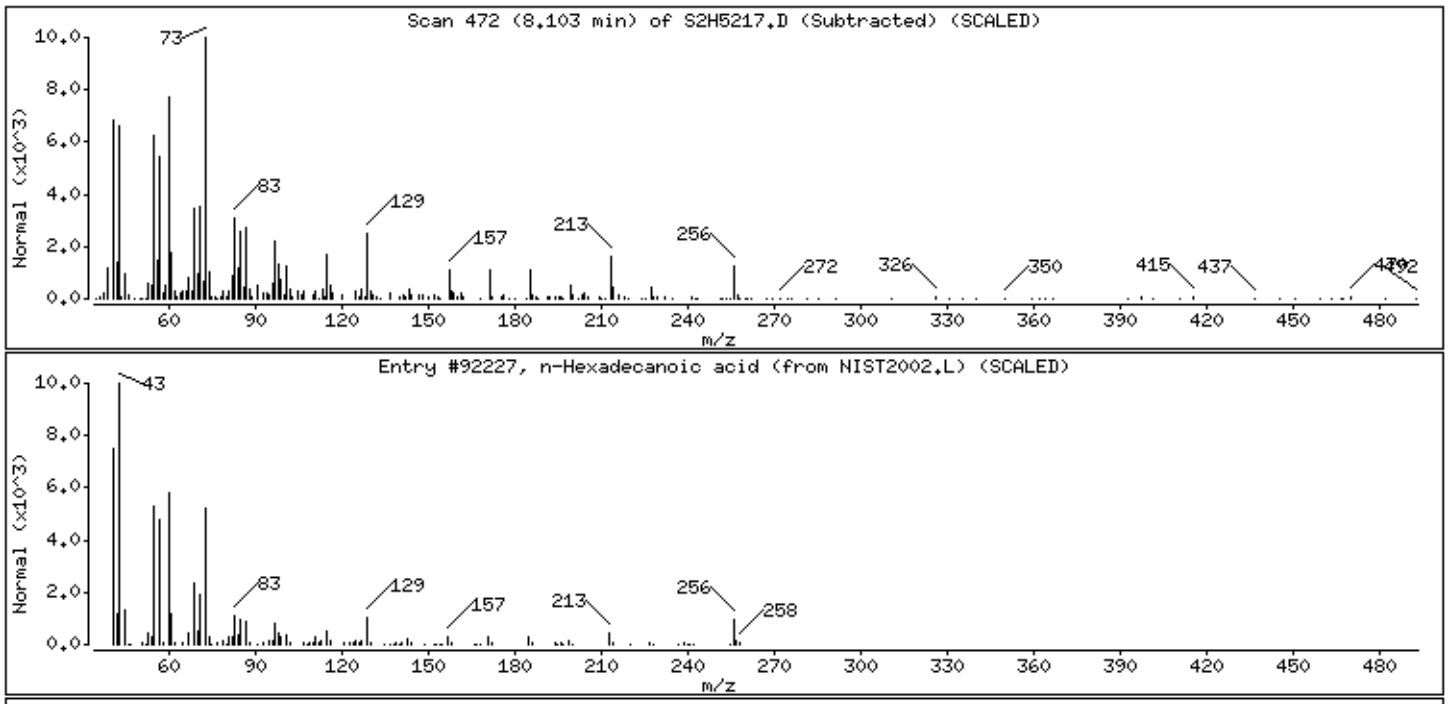
Client ID: H30Y3 Instrument: S2.i

Sample Info: K2200-15B,,62636,,

Volume Injected (uL): 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\111103.B\S2H5217.D

Date : 03-NOV-2011 21:05

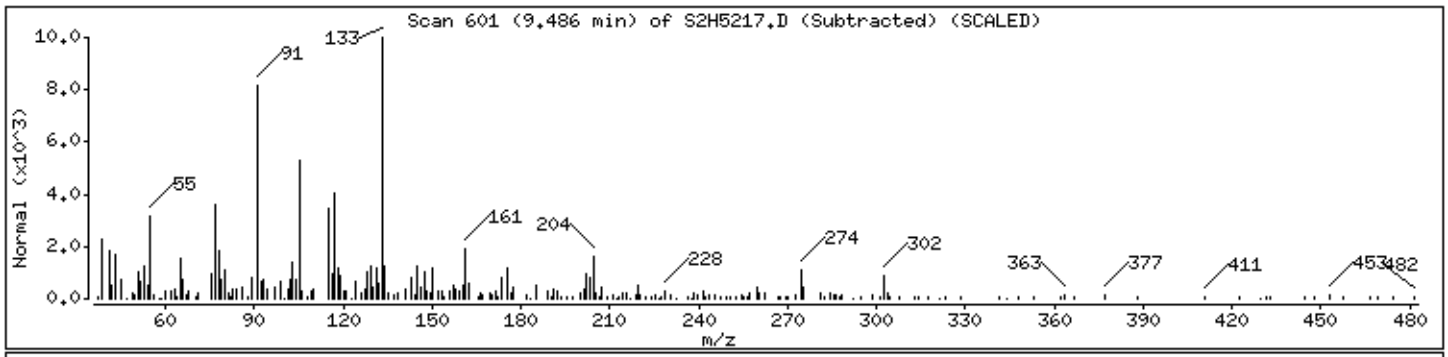
Client ID: H30Y3 Instrument: S2.i

Sample Info: K2200-15B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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

CLIENT SAMPLE NO.

H30Y4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-16B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5218.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2´-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1´-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

H30Y4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-16B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5218.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3´-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

H30Y4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-16B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5218.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	4.155	2.3	J
02		Unknown-02	4.412	2.3	J
03		Unknown-03	4.669	8.9	J
04		Unknown-04	4.873	7.3	J
05		Unknown-05	5.077	2.1	J
06		Unknown-06	5.195	2.4	J
07		Unknown-07	5.399	8.1	J
08		Unknown-08	5.742	7.6	J
09		Unknown-09	5.967	3.9	J
10	57-10-3	n-Hexadecanoic acid	8.101	6.6	NJ
11		Unknown-10	9.484	4.1	J
12		Unknown-11	10.557	7.9	J
13		Unknown-12	10.600	8.1	J
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5218.D
Report Date: 07-Nov-2011 14:03

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5218.D
Lab Smp Id: K2200-16B Client Smp ID: H30Y4
Inj Date : 03-NOV-2011 21:27
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-16B,,62636,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 28
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)
$	2 Phenol-d5	71	3.564	3.565	(0.917)	201112	48.4358	24
$	4 bis(2-Chloroethyl)ether-d8	67	3.618	3.619	(0.931)	308551	53.9280	27
$	6 2-Chlorophenol-d4	132	3.693	3.694	(0.950)	189831	52.8505	26
*	8 1,4-Dichlorobenzene-d4	152	3.886	3.887	(1.000)	131856	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.197	4.198	(1.080)	326152	57.9398	29
$	16 Nitrobenzene-d5	128	4.347	4.348	(0.879)	104163	58.6458	29(Q)
$	19 2-Nitrophenol-d4	143	4.615	4.616	(0.933)	120207	61.3070	31
$	23 2,4-Dichlorophenol-d3	165	4.819	4.820	(0.974)	212858	59.4683	30
*	25 Naphthalene-d8	136	4.948	4.948	(1.000)	341054	40.0000	
$	27 4-Chloroaniline-d4	131	5.001	5.002	(1.011)	80910	25.4582	13(Q)
$	40 Dimethylphthalate-d6	166	6.170	6.171	(0.962)	551124	59.8674	30
$	43 Acenaphthylene-d8	160	6.288	6.289	(0.980)	595060	49.7084	25
*	46 Acenaphthene-d10	164	6.417	6.418	(1.000)	250373	40.0000	
$	49 4-Nitrophenol-d4	143	6.513	6.503	(1.015)	57279	43.1751	22(Q)
$	54 Fluorene-d10	176	6.846	6.847	(1.067)	391869	46.3413	23
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.899	6.900	(0.903)	101180	71.7332	36(Q)
*	65 Phenanthrene-d10	188	7.639	7.640	(1.000)	361462	40.0000	
$	67 Anthracene-d10	188	7.693	7.694	(1.007)	428829	41.5320	21
$	72 Pyrene-d10	212	8.819	8.820	(0.893)	192678	33.0028	17(R)
*	77 Chrysene-d12	240	9.881	9.871	(1.000)	185327	40.0000	(Q)
$	83 Benzo(a)pyrene-d12	264	11.146	11.147	(0.984)	35353	13.5955	6.8(RH)

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5218.D
Report Date: 07-Nov-2011 14:03

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)	
* 85 Perylene-d12	264	11.232	11.233	(1.000)	105970	40.0000		(H)

QC Flag Legend

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\111103.B\S2H5218.D
Report Date: 07-Nov-2011 14:03

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5218.D
Lab Smp Id: K2200-16B Client Smp ID: H30Y4
Inj Date : 03-NOV-2011 21:27
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-16B,,62636,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 28
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

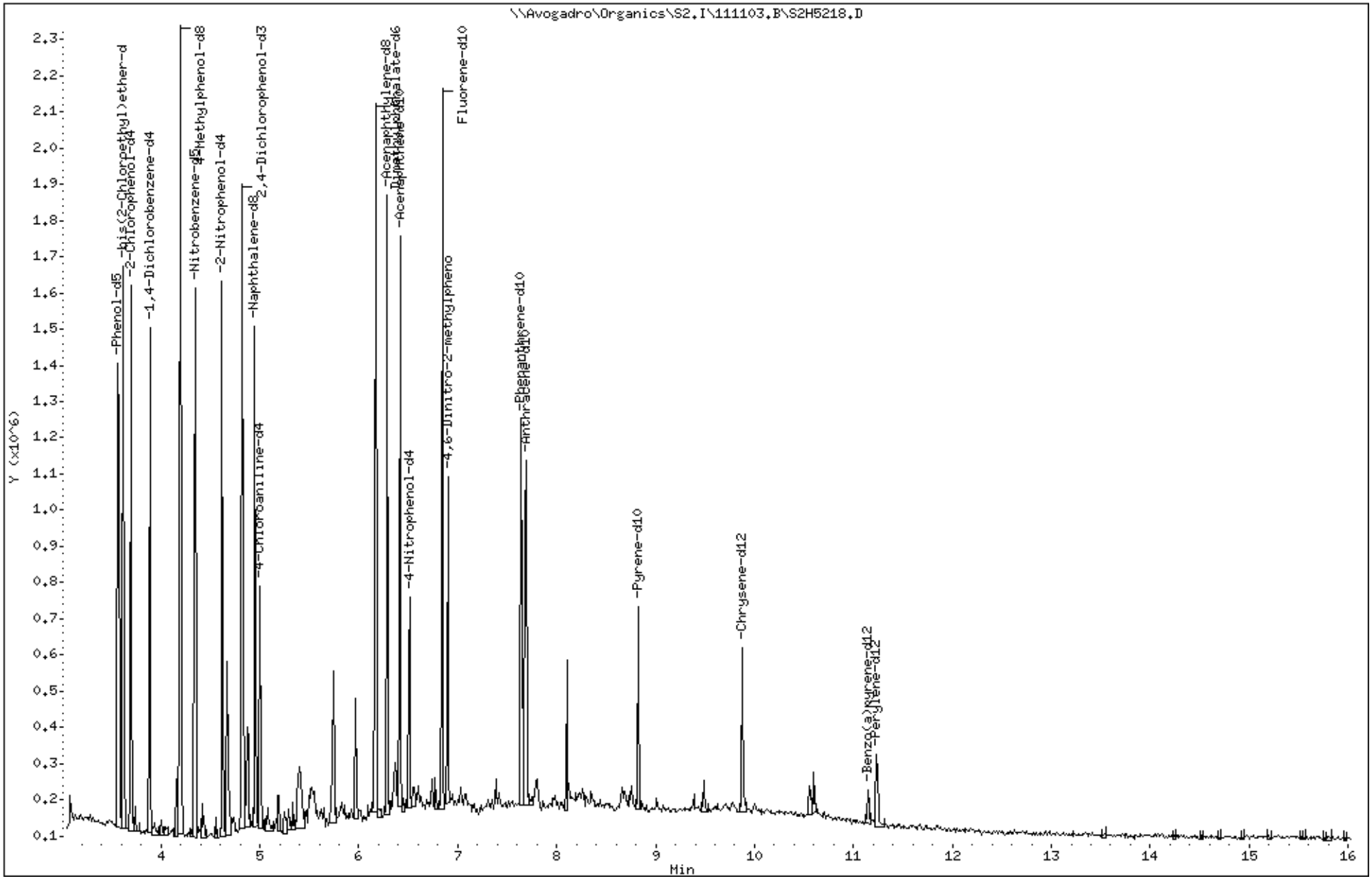
ISTD		RT	AREA	AMOUNT
*	8 1,4-Dichlorobenzene-d4	3.887	1162963	40.000
*	25 Naphthalene-d8	4.948	1233246	40.000
*	46 Acenaphthene-d10	6.417	1326699	40.000
*	65 Phenanthrene-d10	7.640	1053761	40.000
*	77 Chrysene-d12	9.881	583834	40.000
*	85 Perylene-d12	11.232	307942	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
4.155	133946	4.60705022	2.3	0	0		8
Unknown					CAS #:		
4.412	136120	4.68181858	2.3	0	0		8

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5218.D
Report Date: 07-Nov-2011 14:03

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.669	548561	17.7924065	8.9	0		0	25
Unknown				CAS #:			
4.873	451178	14.6338415	7.3	0		0	25
Unknown				CAS #:			
5.077	129590	4.20320609	2.1	0		0	25
Unknown				CAS #:			
5.195	146753	4.75990285	2.4	0		0	25
Unknown				CAS #:			
5.399	500339	16.2283382	8.1	0		0	25
Unknown				CAS #:			
5.742	501319	15.1147819	7.6	0		0	46
Unknown				CAS #:			
5.967	259522	7.82459852	3.9	0		0	46
n-Hexadecanoic acid				CAS #: 57-10-3			
8.101	348279	13.2204316	6.6	95	NIST2002.L	92227	65
Unknown				CAS #:			
9.484	120521	8.25717347	4.1	0		0	77
Unknown				CAS #:			
10.557	121289	15.7547136	7.9	0		0	85
Unknown				CAS #:			
10.600	125128	16.2534569	8.1	0		0	85

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5218.D
Date : 03-NOV-2011 21:27
Client ID: H30Y4
Instrument: S2.i
Sample Info: K2200-16B,,62636,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5218.D

Date : 03-NOV-2011 21:27

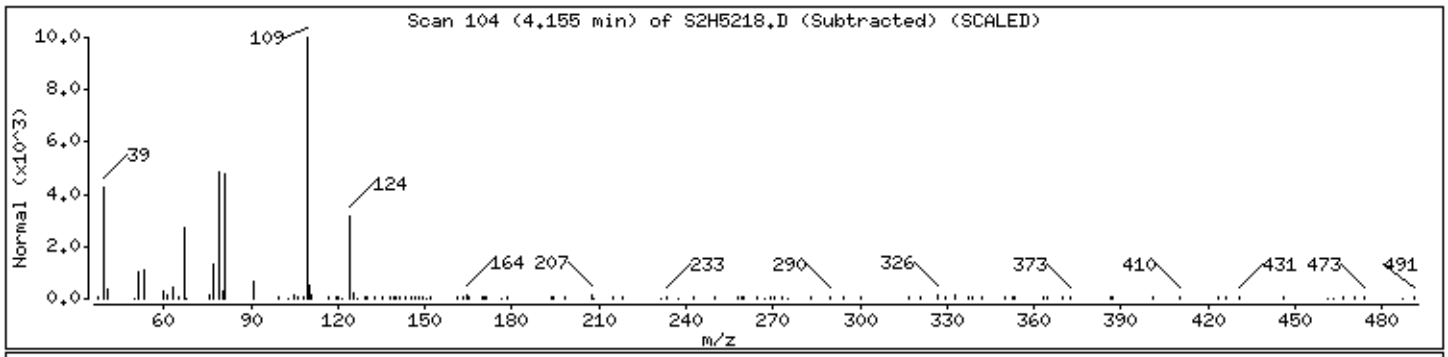
Client ID: H30Y4 Instrument: S2.i

Sample Info: K2200-16B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5218.D

Date : 03-NOV-2011 21:27

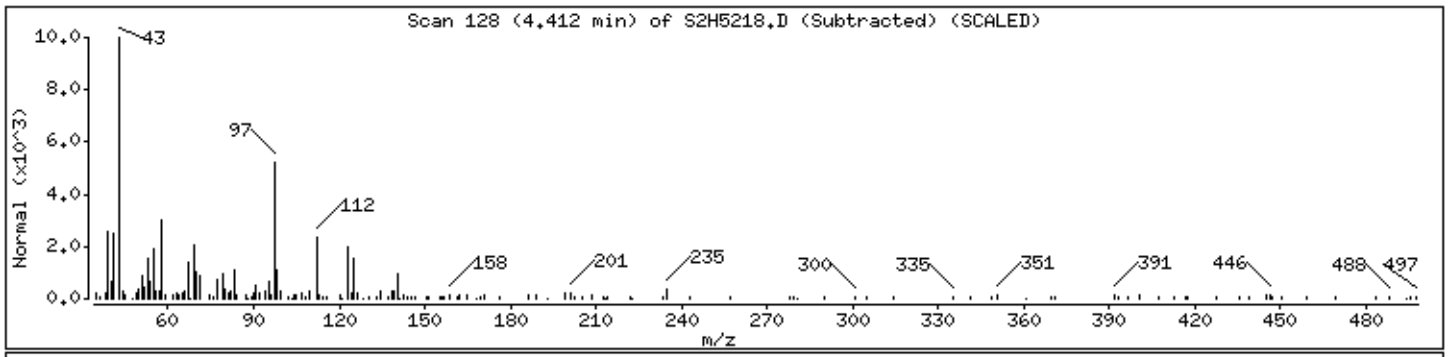
Client ID: H30Y4 Instrument: S2.i

Sample Info: K2200-16B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5218.D

Date : 03-NOV-2011 21:27

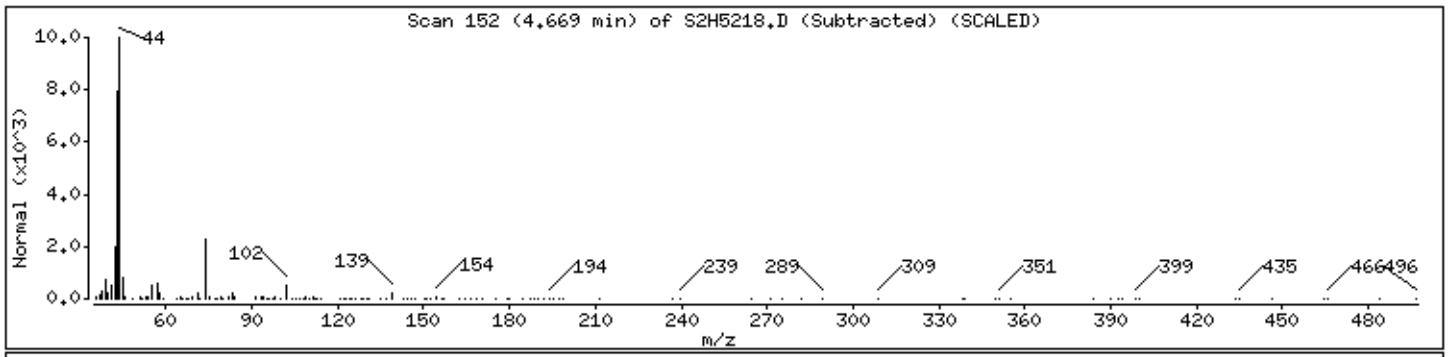
Client ID: H30Y4 Instrument: S2.i

Sample Info: K2200-16B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5218.D

Date : 03-NOV-2011 21:27

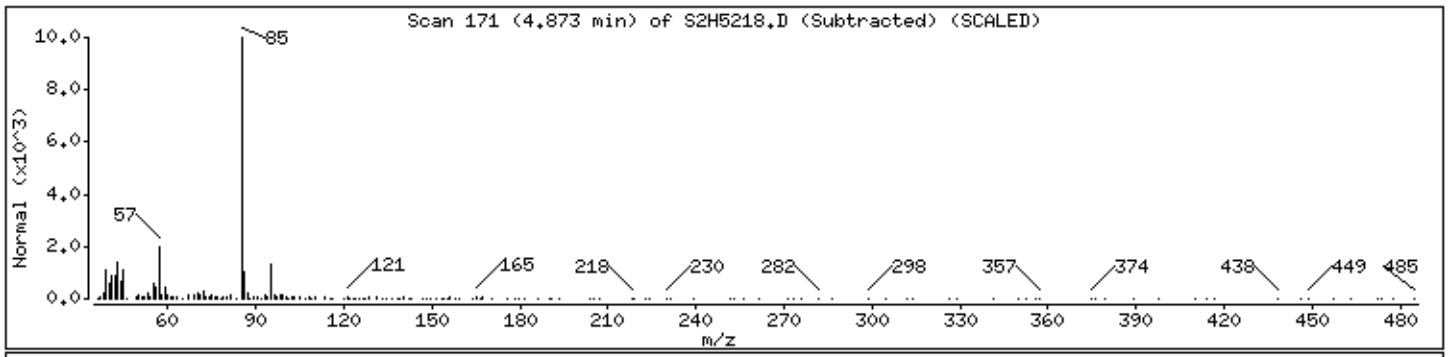
Client ID: H30Y4 Instrument: S2.i

Sample Info: K2200-16B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5218.D

Date : 03-NOV-2011 21:27

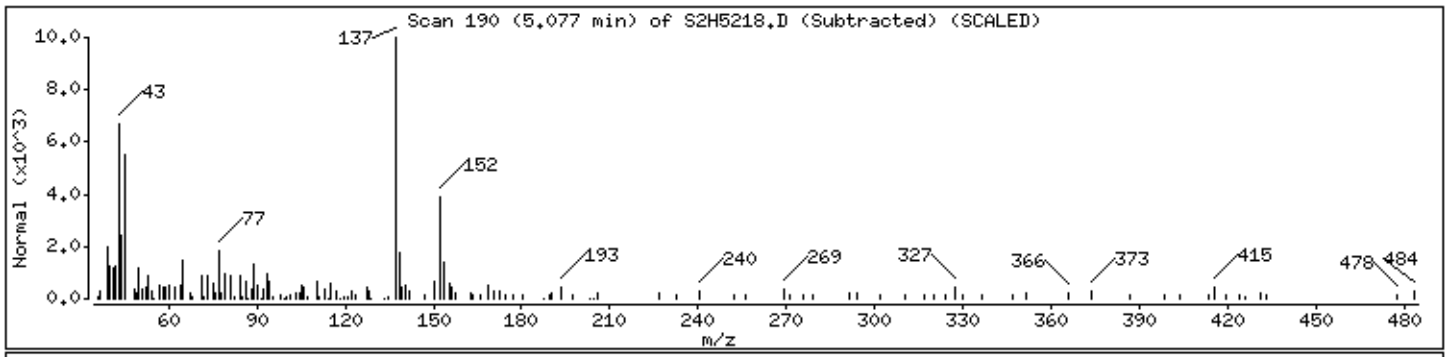
Client ID: H30Y4 Instrument: S2.i

Sample Info: K2200-16B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5218.D

Date : 03-NOV-2011 21:27

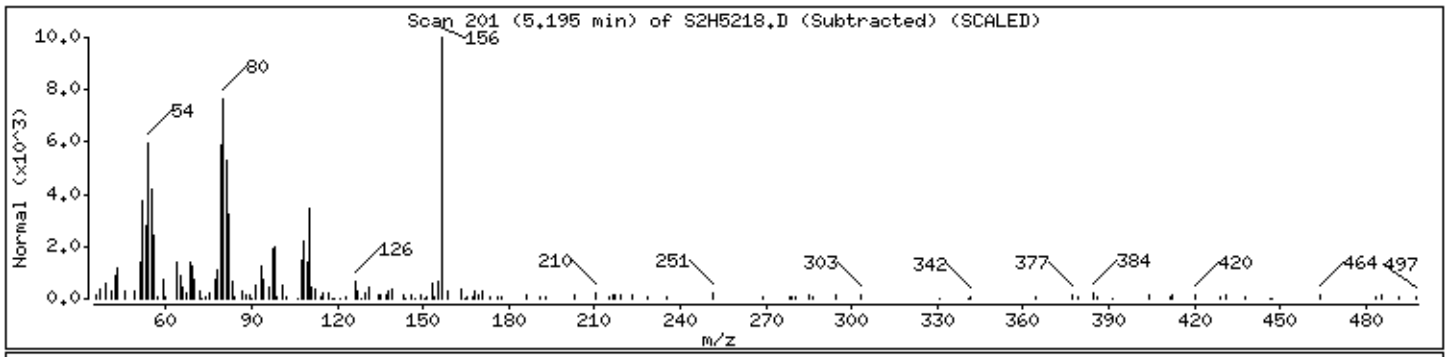
Client ID: H30Y4 Instrument: S2.i

Sample Info: K2200-16B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5218.D

Date : 03-NOV-2011 21:27

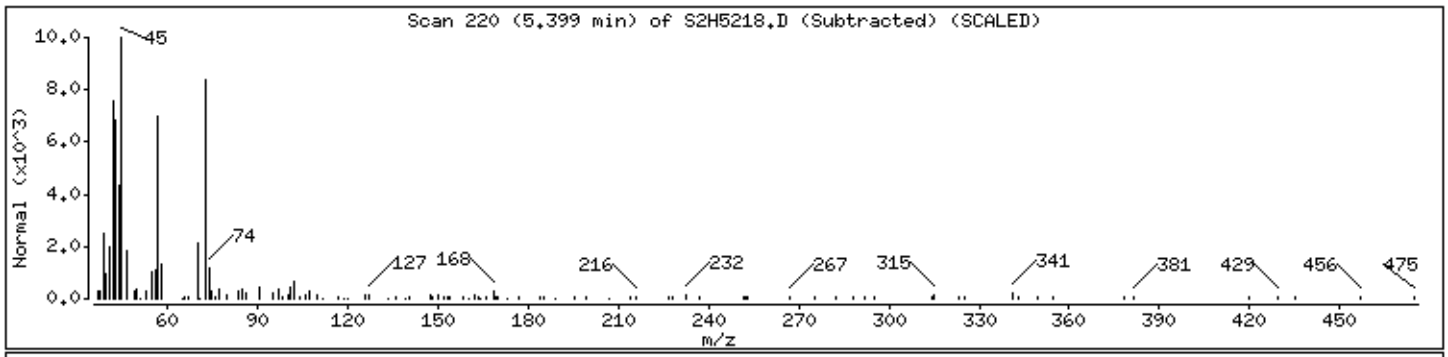
Client ID: H30Y4 Instrument: S2.i

Sample Info: K2200-16B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5218.D

Date : 03-NOV-2011 21:27

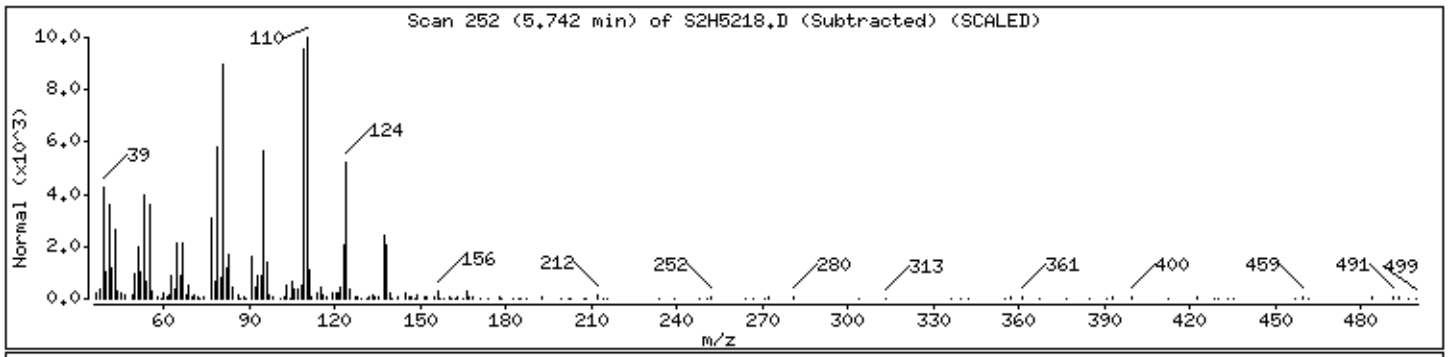
Client ID: H30Y4 Instrument: S2.i

Sample Info: K2200-16B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5218.D

Date : 03-NOV-2011 21:27

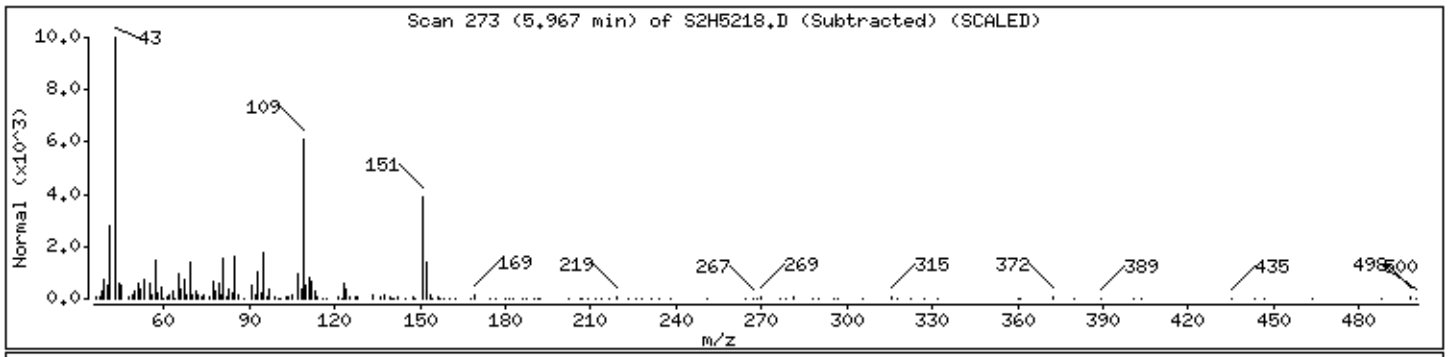
Client ID: H30Y4 Instrument: S2.i

Sample Info: K2200-16B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5218.D

Date : 03-NOV-2011 21:27

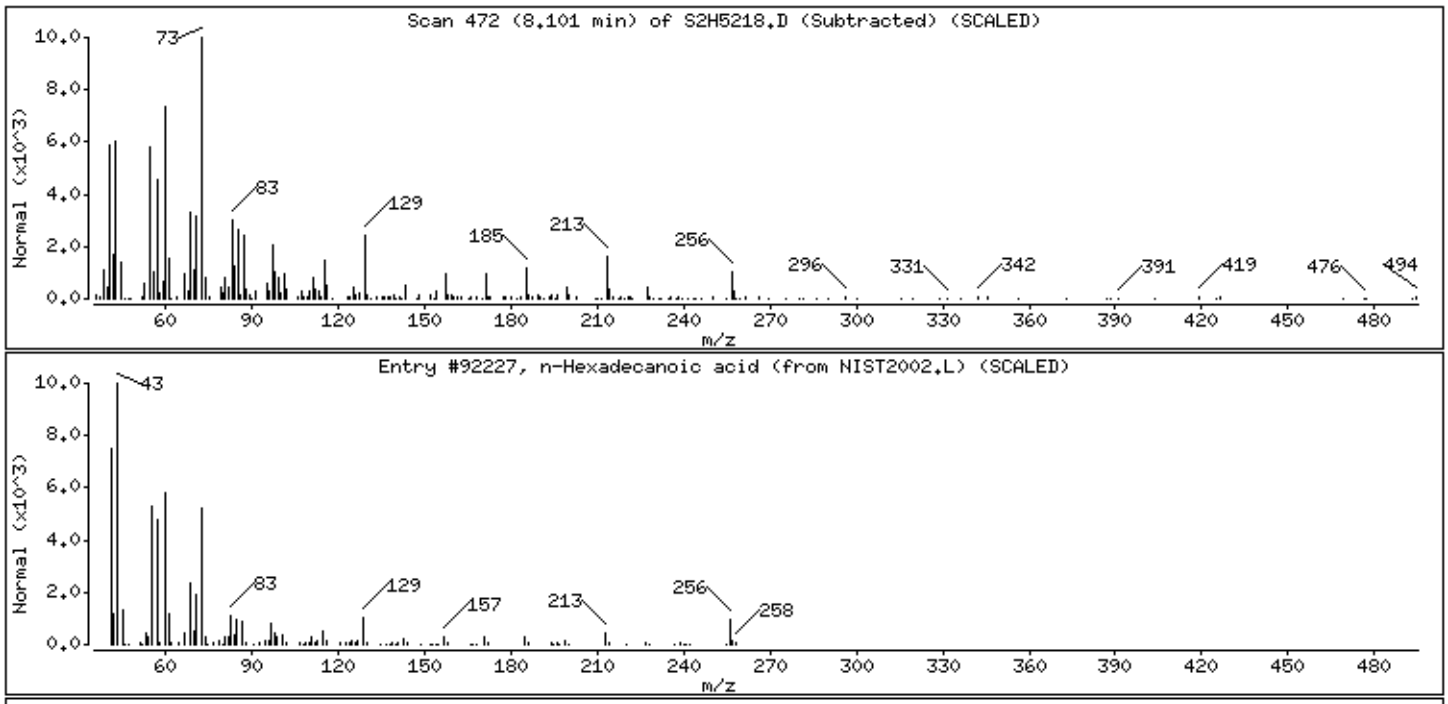
Client ID: H30Y4 Instrument: S2.i

Sample Info: K2200-16B,,62636,,

Volume Injected (uL): 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\111103.B\S2H5218.D

Date : 03-NOV-2011 21:27

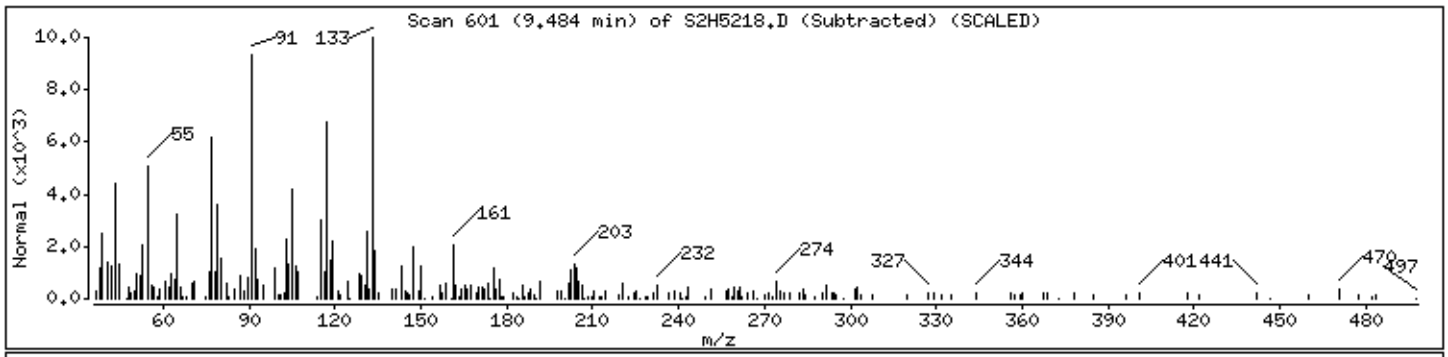
Client ID: H30Y4 Instrument: S2.i

Sample Info: K2200-16B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5218.D

Date : 03-NOV-2011 21:27

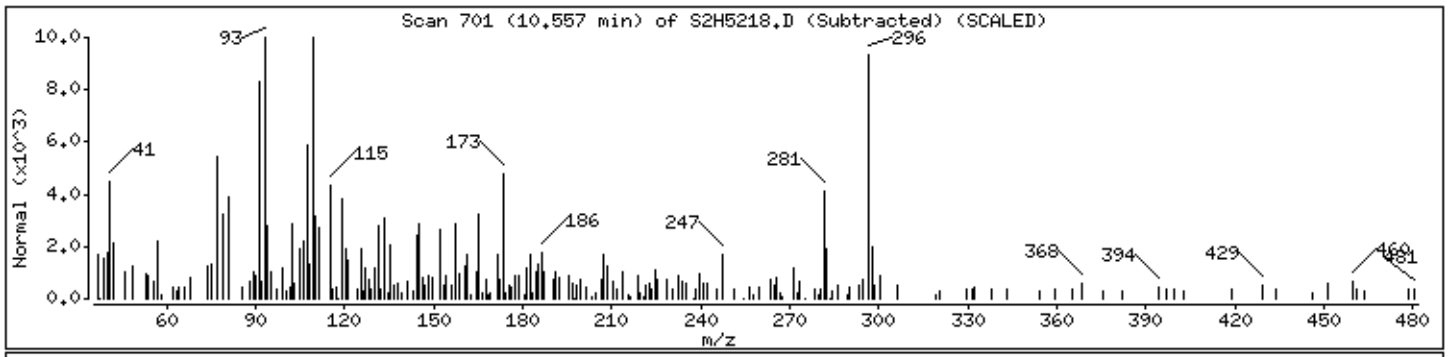
Client ID: H30Y4 Instrument: S2.i

Sample Info: K2200-16B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5218.D

Date : 03-NOV-2011 21:27

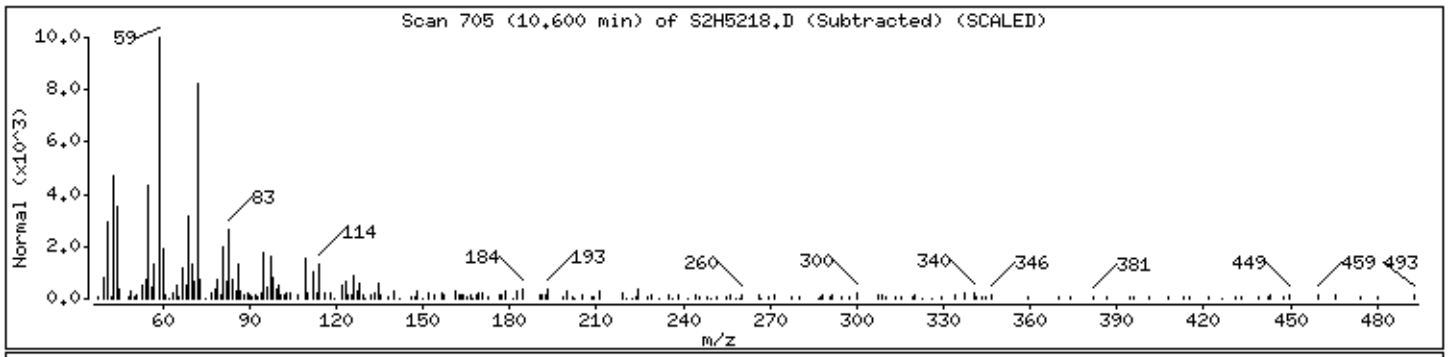
Client ID: H30Y4 Instrument: S2.i

Sample Info: K2200-16B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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

CLIENT SAMPLE NO.

H30Y5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-17B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5219.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2´-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1´-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

H30Y5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-17B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5219.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3´-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

H30Y5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-17B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5219.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	4.413	2.3	J
02		Unknown-02	4.553	2.0	J
03	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.671	8.1	BNJ
04		Unknown-03	4.875	5.5	J
05		Unknown-04	5.186	3.2	J
06		Unknown-05	5.250	2.1	J
07		Unknown-06	5.400	5.8	J
08		Unknown-07	5.743	7.1	J
09		Unknown-08	5.968	2.2	J
10		Unknown-09	6.376	3.5	J
11		Unknown-10	7.309	6.0	J
12		Unknown-11	7.727	23	J
13	57-10-3	n-Hexadecanoic acid	8.102	15	NJ
14		Unknown-12	8.263	9.2	J
15		Unknown-13	15.137	2.2	J
	E96679€ [2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5219.D
Report Date: 07-Nov-2011 14:03

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5219.D
Lab Smp Id: K2200-17B Client Smp ID: H30Y5
Inj Date : 03-NOV-2011 21:48
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-17B,,62636,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 29
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)
$	2 Phenol-d5	71	3.566	3.565	(0.917)	203696	48.4156	24
$	4 bis(2-Chloroethyl)ether-d8	67	3.619	3.619	(0.931)	316721	54.6309	27
$	6 2-Chlorophenol-d4	132	3.694	3.694	(0.950)	200674	55.1375	28
*	8 1,4-Dichlorobenzene-d4	152	3.887	3.887	(1.000)	133606	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.198	4.198	(1.080)	318650	55.8656	28
$	16 Nitrobenzene-d5	128	4.349	4.348	(0.879)	104367	56.3095	28
$	19 2-Nitrophenol-d4	143	4.617	4.616	(0.933)	133075	65.0387	33
$	23 2,4-Dichlorophenol-d3	165	4.820	4.820	(0.974)	232852	62.3406	31
*	25 Naphthalene-d8	136	4.949	4.948	(1.000)	355900	40.0000	
$	27 4-Chloroaniline-d4	131	5.003	5.002	(1.011)	41115	12.3971	6.2(Q)
$	40 Dimethylphthalate-d6	166	6.172	6.171	(0.962)	516264	58.8120	29
$	43 Acenaphthylene-d8	160	6.290	6.289	(0.980)	510202	44.6956	22
*	46 Acenaphthene-d10	164	6.418	6.418	(1.000)	238745	40.0000	
$	49 4-Nitrophenol-d4	143	6.515	6.503	(1.015)	49821	39.3825	20(Q)
$	54 Fluorene-d10	176	6.847	6.847	(1.067)	359916	44.6357	22
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.901	6.900	(0.903)	93282	72.5552	36(Q)
*	65 Phenanthrene-d10	188	7.641	7.640	(1.000)	329471	40.0000	
$	67 Anthracene-d10	188	7.694	7.694	(1.007)	354576	37.6750	19
$	72 Pyrene-d10	212	8.820	8.820	(0.893)	135610	26.9356	13(R)
*	77 Chrysene-d12	240	9.882	9.871	(1.000)	159817	40.0000	(Q)
$	83 Benzo(a)pyrene-d12	264	11.147	11.147	(0.991)	28735	12.1345	6.1(RH)

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5219.D
Report Date: 07-Nov-2011 14:03

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)	
* 85 Perylene-d12	264	11.244	11.233	(1.000)	96503	40.0000		(Q)

QC Flag Legend

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\111103.B\S2H5219.D
Report Date: 07-Nov-2011 14:03

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5219.D
Lab Smp Id: K2200-17B Client Smp ID: H30Y5
Inj Date : 03-NOV-2011 21:48
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-17B,,62636,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 29
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

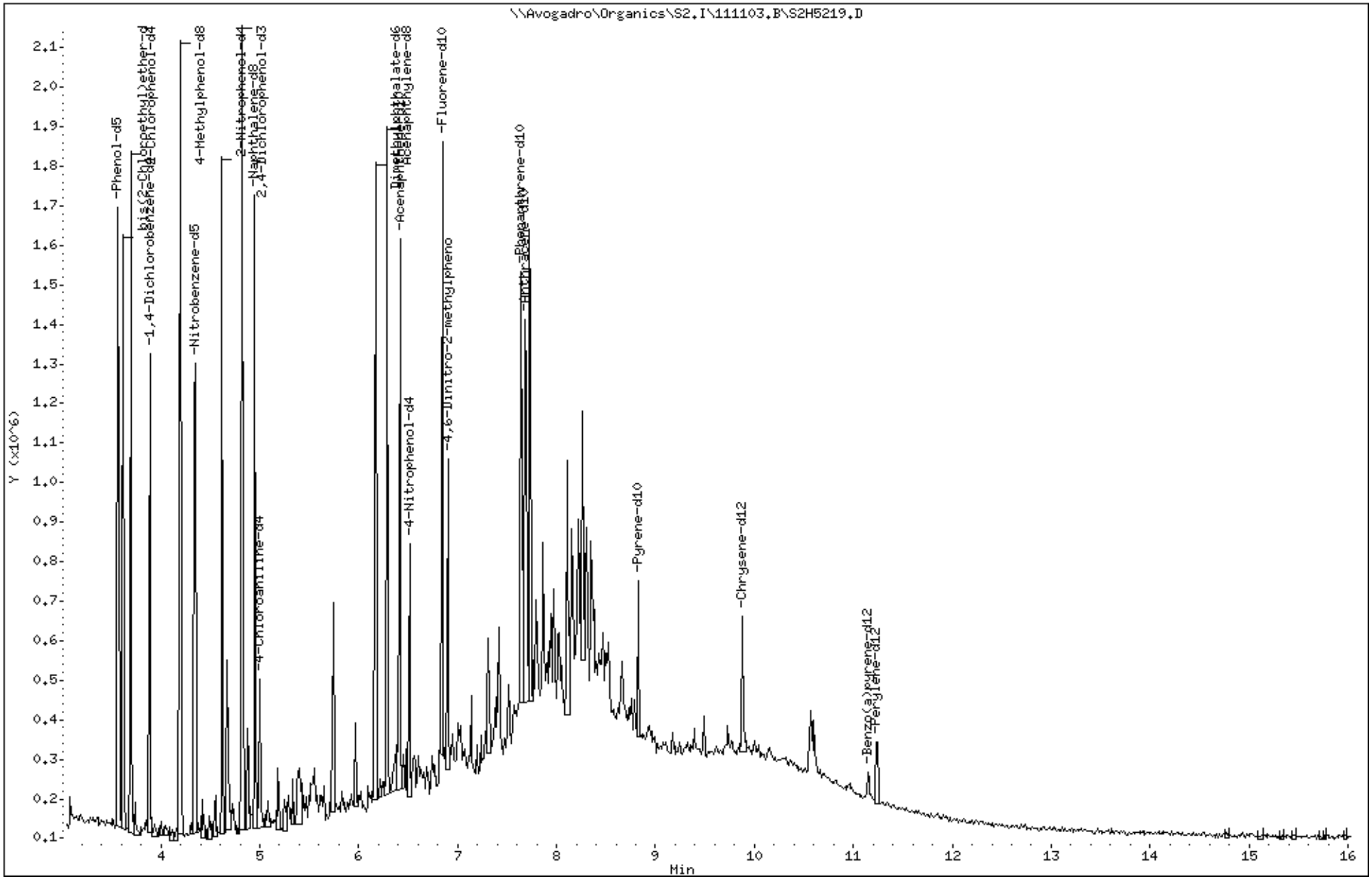
ISTD		RT	AREA	AMOUNT
*	8 1,4-Dichlorobenzene-d4	3.888	1138087	40.000
*	25 Naphthalene-d8	4.950	1275592	40.000
*	46 Acenaphthene-d10	6.419	1452866	40.000
*	65 Phenanthrene-d10	7.641	1276491	40.000
*	85 Perylene-d12	11.244	254757	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.413	129913	4.56601854	2.3	0	0		8
Unknown				CAS #:			
4.553	127890	4.01036487	2.0	0	0		25

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5219.D
Report Date: 07-Nov-2011 14:03

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
2(3H)-Furanone, dihydro-4-hydroxy-					CAS #: 5469-16-9		
4.671	519801	16.2998966	8.1	90	NIST2002.L	4145	25
Unknown					CAS #:		
4.875	350295	10.9845387	5.5	0		0	25
Unknown					CAS #:		
5.186	202896	6.36239147	3.2	0		0	25
Unknown					CAS #:		
5.250	135147	4.23792176	2.1	0		0	25
Unknown					CAS #:		
5.400	369931	11.6002963	5.8	0		0	25
Unknown					CAS #:		
5.743	514281	14.1590678	7.1	0		0	46
Unknown					CAS #:		
5.968	162556	4.47545046	2.2	0		0	46
Unknown					CAS #:		
6.376	252062	6.93971052	3.5	0		0	46
Unknown					CAS #:		
7.309	380658	11.9282573	6.0	0		0	65
Unknown					CAS #:		
7.727	1440517	45.1398736	23	0		0	65
n-Hexadecanoic acid					CAS #: 57-10-3		
8.102	950278	29.7778100	15	96	NIST2002.L	92227	65
Unknown					CAS #:		
8.263	585635	18.3513879	9.2	0		0	65
Unknown					CAS #:		
15.137	28062	4.40600084	2.2	0		0	85

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5219.D
Date : 03-NOV-2011 21:48
Client ID: H30Y5
Instrument: S2.i
Sample Info: K2200-17B,,62636,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



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Date : 03-NOV-2011 21:48

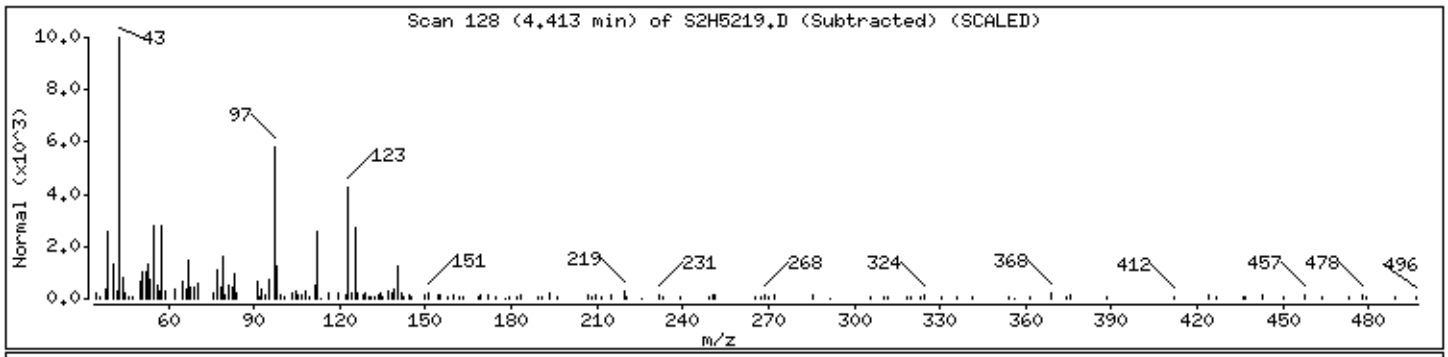
Client ID: H30Y5 Instrument: S2.i

Sample Info: K2200-17B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5219.D

Date : 03-NOV-2011 21:48

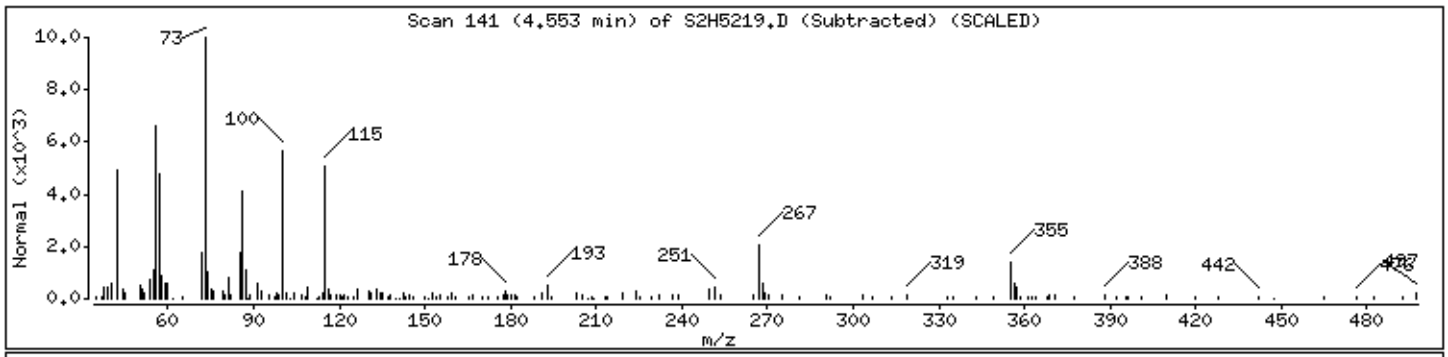
Client ID: H30Y5 Instrument: S2.i

Sample Info: K2200-17B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 21:48

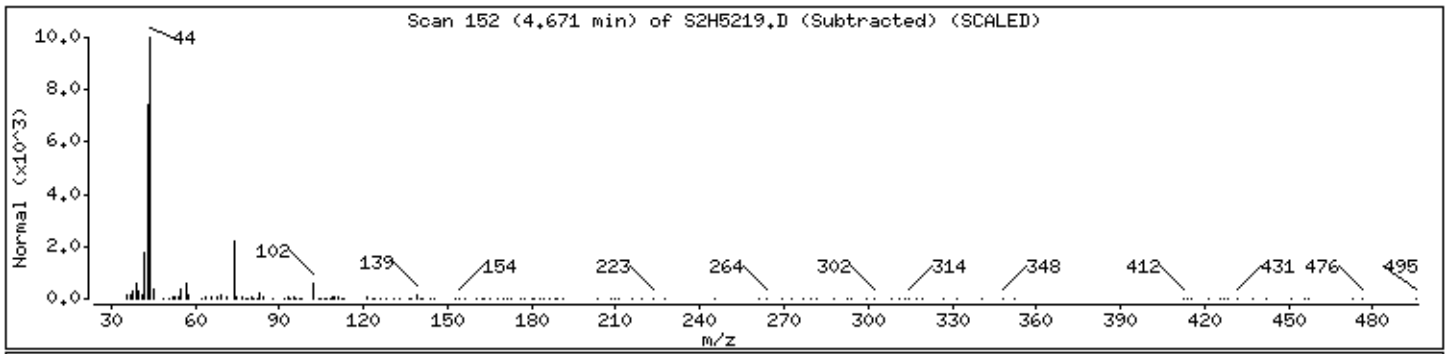
Client ID: H30Y5 Instrument: S2.i

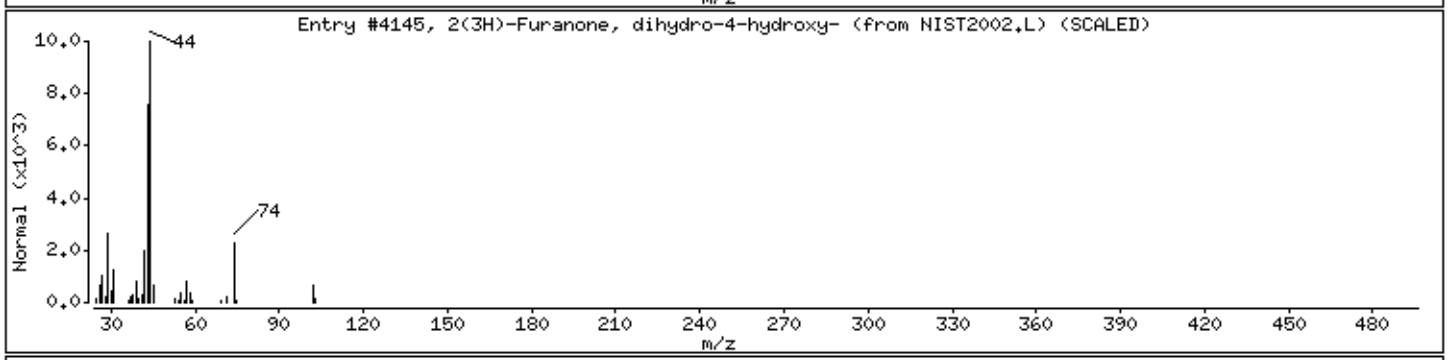
Sample Info: K2200-17B,,62636,,

Volume Injected (uL): 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\111103.B\S2H5219.D

Date : 03-NOV-2011 21:48

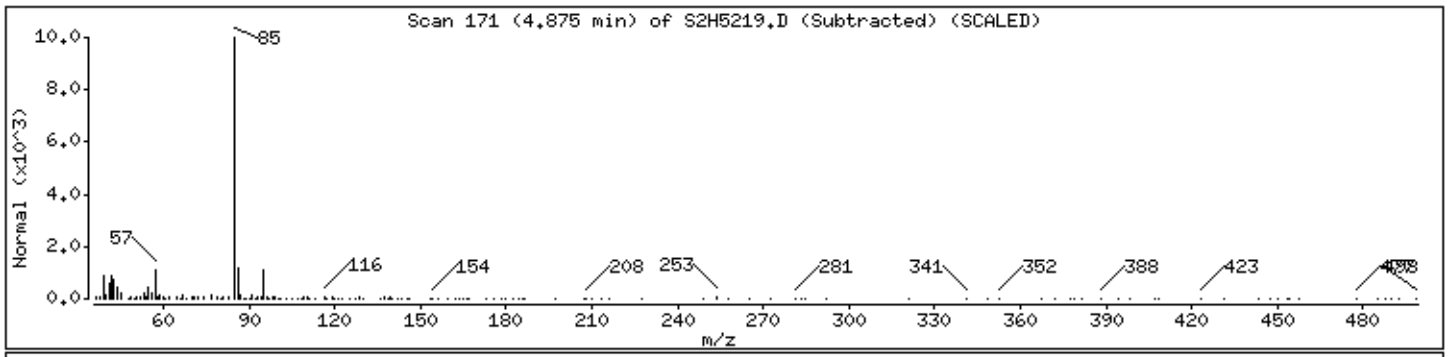
Client ID: H30Y5 Instrument: S2.i

Sample Info: K2200-17B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 21:48

Client ID: H30Y5 Instrument: S2.i

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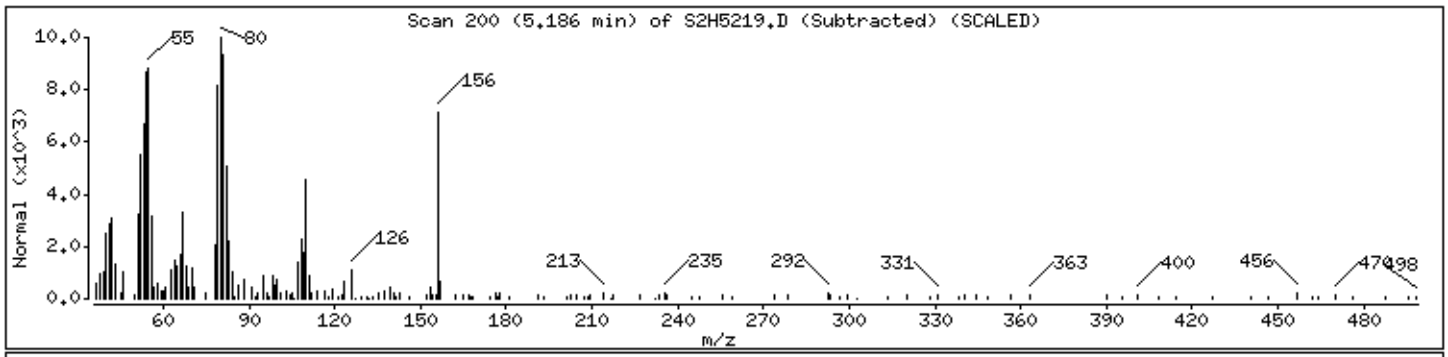
Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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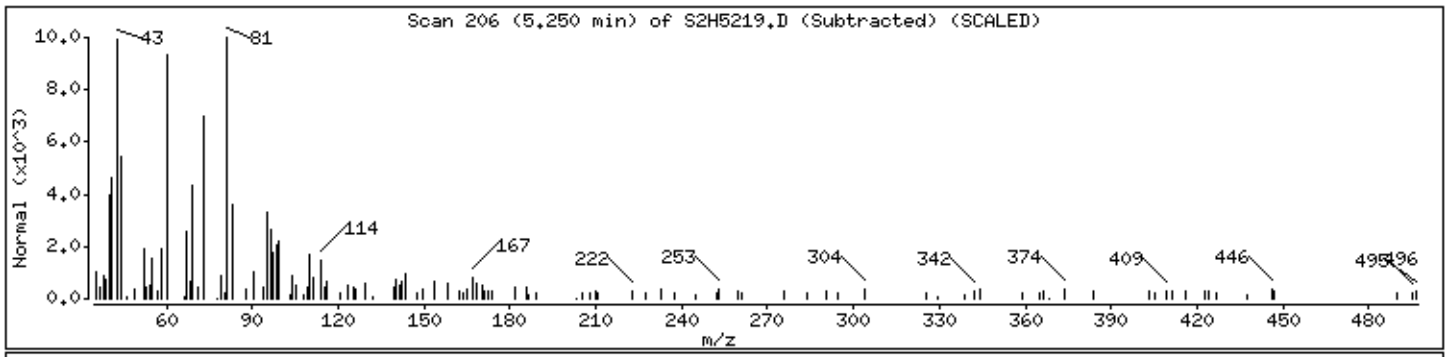
Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 03-NOV-2011 21:48

Client ID: H30Y5 Instrument: S2.i

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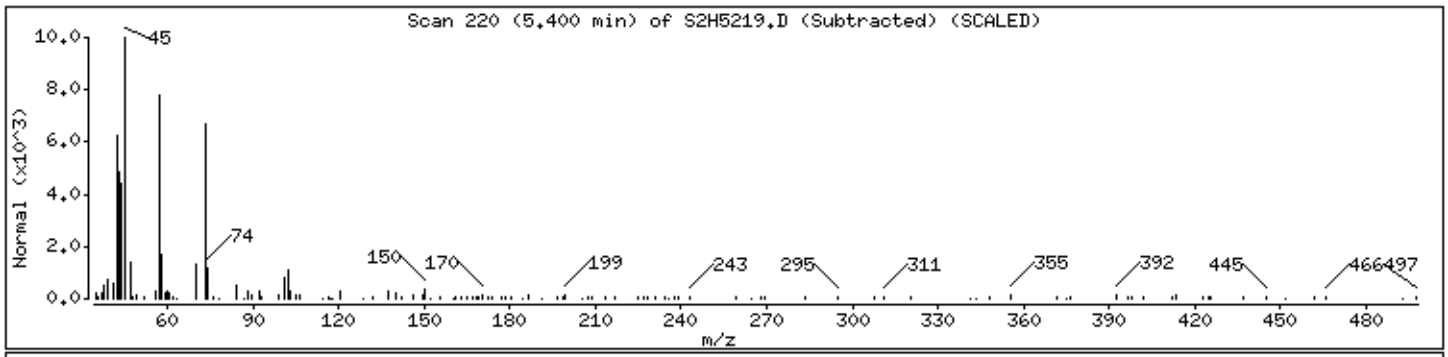
Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 03-NOV-2011 21:48

Client ID: H30Y5 Instrument: S2.i

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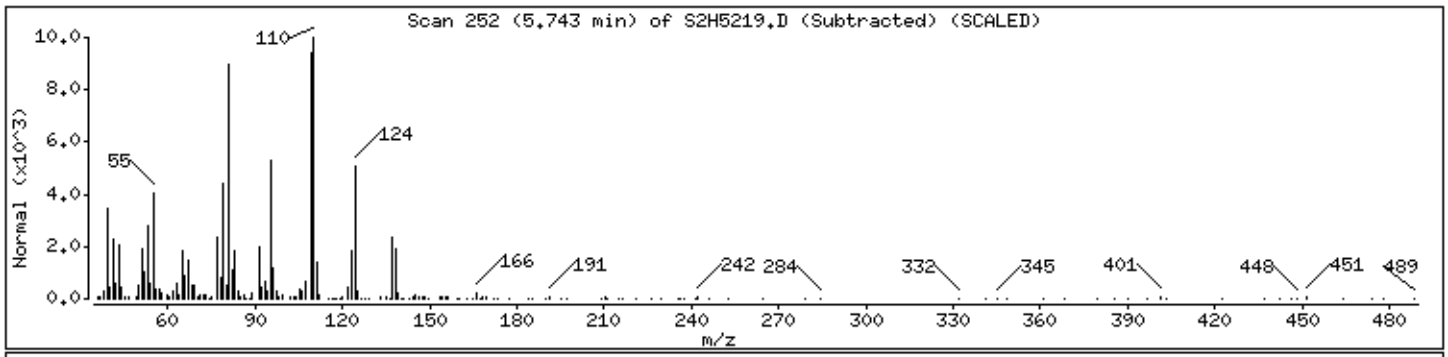
Volume Injected (uL): 2.0 Operator: SRC: LIMS

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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Date : 03-NOV-2011 21:48

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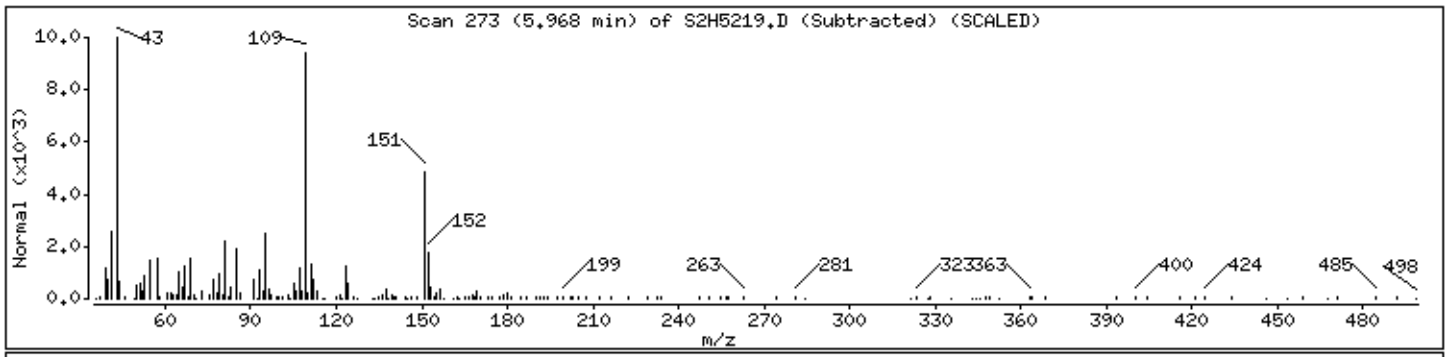
Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 03-NOV-2011 21:48

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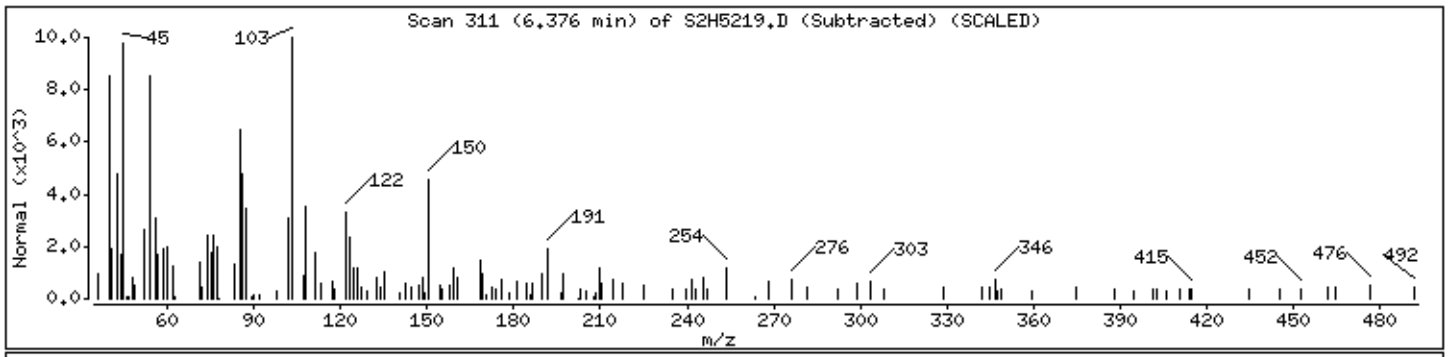
Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5219.D

Date : 03-NOV-2011 21:48

Client ID: H30Y5 Instrument: S2.i

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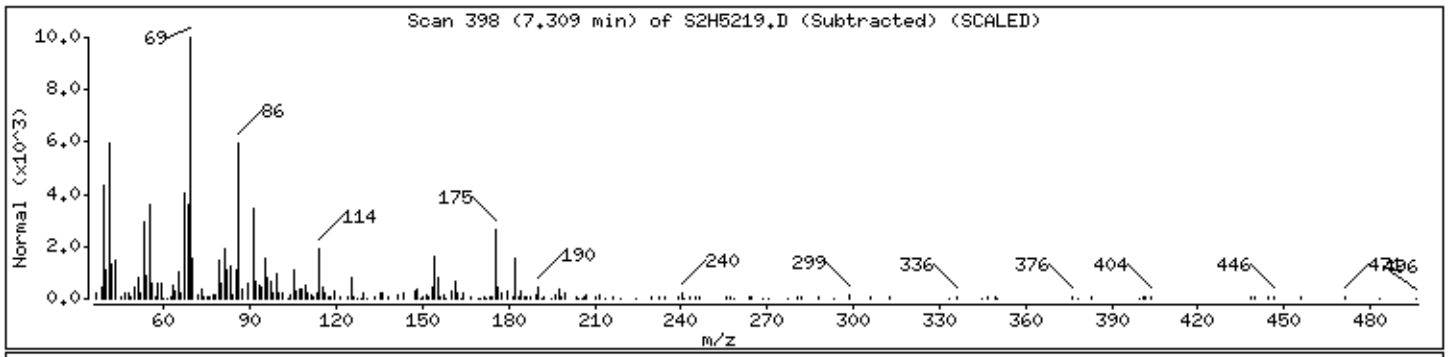
Volume Injected (uL): 2.0 Operator: SRC: LIMS

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\111103.B\S2H5219.D

Date : 03-NOV-2011 21:48

Client ID: H30Y5 Instrument: S2.i

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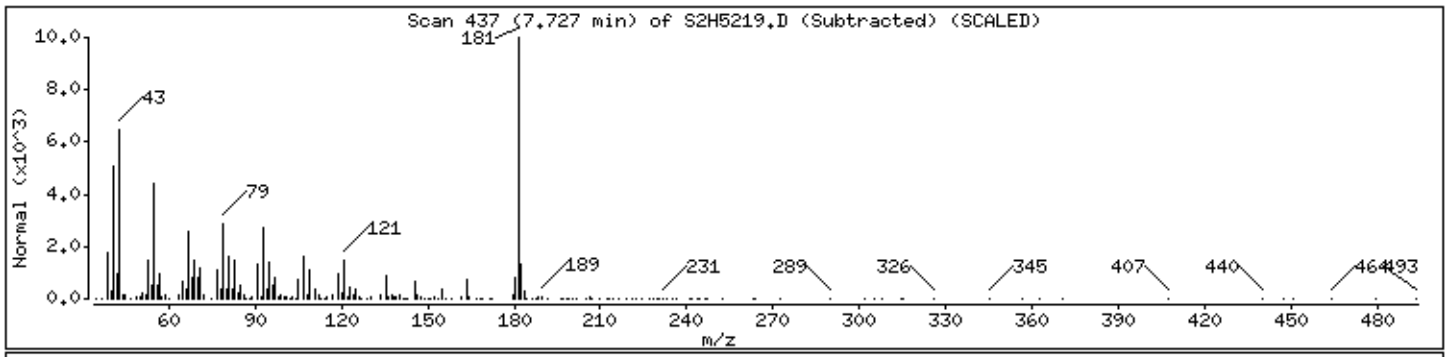
Volume Injected (uL): 2.0 Operator: SRC: LIMS

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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Date : 03-NOV-2011 21:48

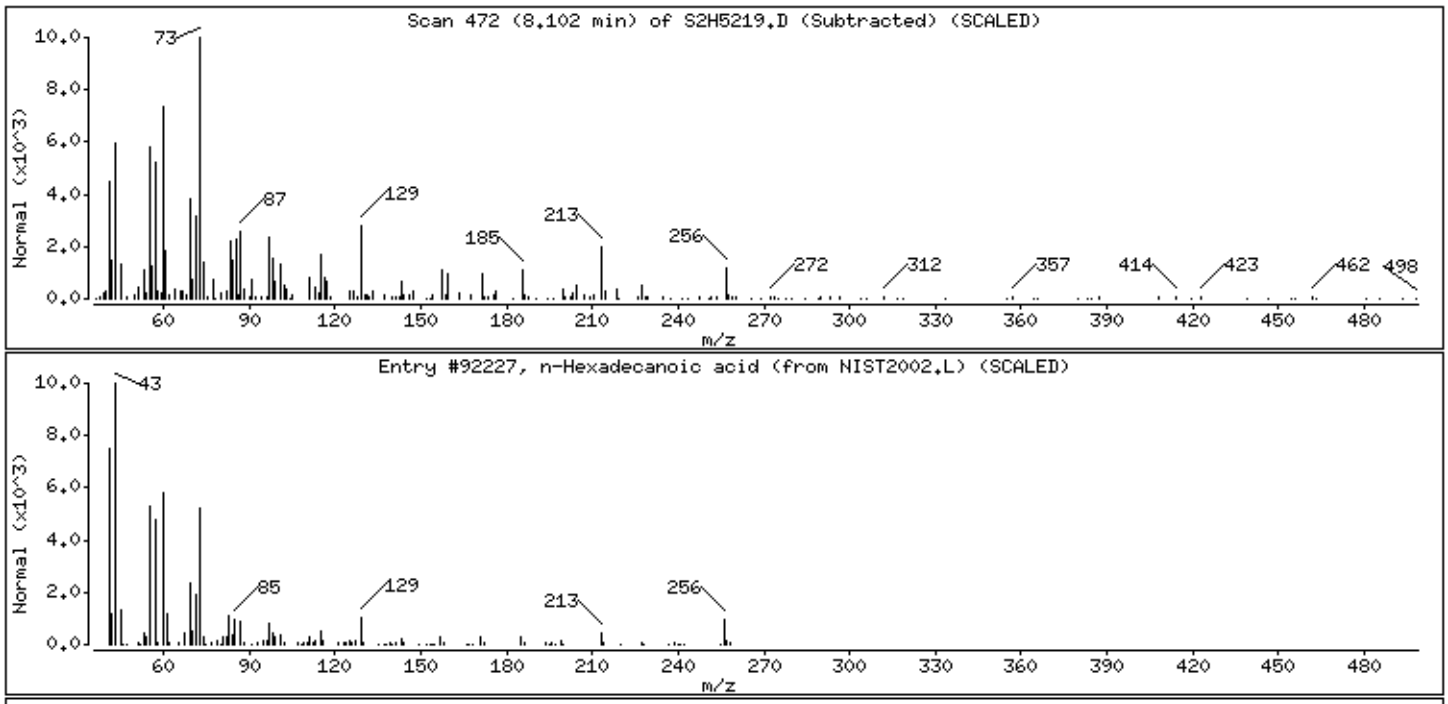
Client ID: H30Y5 Instrument: S2.i

Sample Info: K2200-17B,,62636,,

Volume Injected (uL): 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



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5219.D

Date : 03-NOV-2011 21:48

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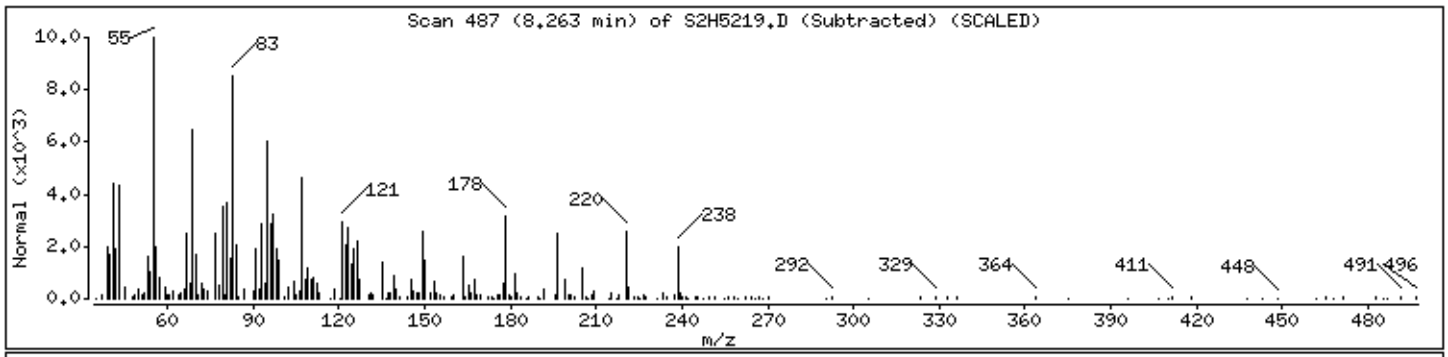
Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5219.D

Date : 03-NOV-2011 21:48

Client ID: H30Y5 Instrument: S2.i

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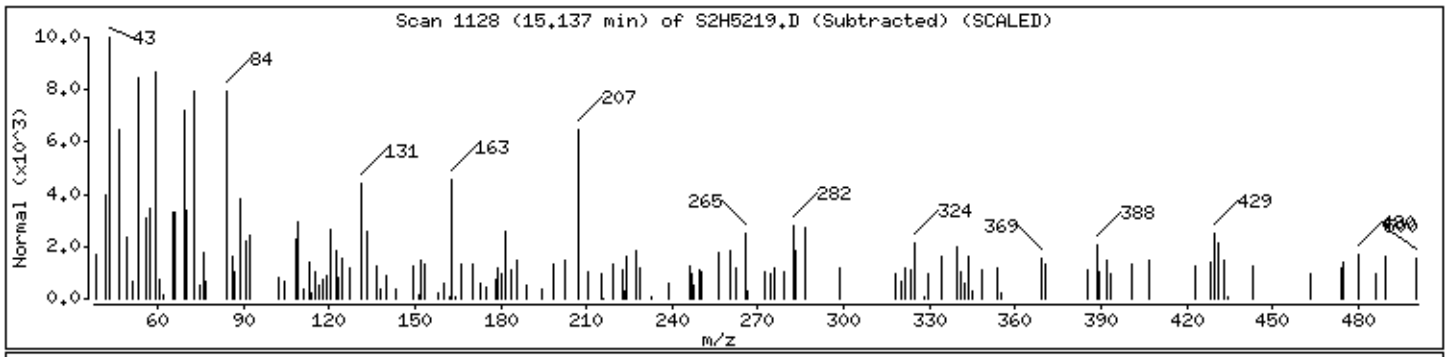
Column phase: RXI-5SILMS Column diameter: 0.25

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



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

H30Y6

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-18B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5220.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2´-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1´-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

H30Y6

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-18B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5220.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	1.0	J
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3´-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

H30Y6

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-18B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5220.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	4.670	7.5	J
02		Unknown-02	4.874	5.9	J
03		Unknown-03	5.185	2.7	J
04		Unknown-04	5.399	6.5	J
05		Unknown-05	5.743	3.7	J
06		Unknown-06	6.365	5.0	J
07		Unknown-07	6.633	2.5	J
08		Unknown-08	6.740	4.3	J
09	7044-92-0	1,4-Benzenedicarboxaldehyde,	7.512	6.1	NJ
10		Unknown-09	7.727	4.3	J
11	638-53-9	Tridecanoic acid	8.102	10	NJ
12		Unknown-10	8.263	4.1	J
13		Unknown-11	8.306	9.2	J
14		Unknown-12	10.590	30	J
15		Unknown-13	14.322	2.0	J
16		Unknown-14	15.426	2.5	J
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5220.D
Report Date: 07-Nov-2011 14:03

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5220.D
Lab Smp Id: K2200-18B Client Smp ID: H30Y6
Inj Date : 03-NOV-2011 22:10
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-18B,,62636,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 30
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)
$	2 Phenol-d5	71	3.565	3.565	(0.917)	253909	55.0881	28
$	4 bis(2-Chloroethyl)ether-d8	67	3.619	3.619	(0.931)	383890	60.4428	30
$	6 2-Chlorophenol-d4	132	3.694	3.694	(0.950)	245817	61.6516	31
*	8 1,4-Dichlorobenzene-d4	152	3.887	3.887	(1.000)	146369	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.198	4.198	(1.080)	409346	65.5085	33
$	16 Nitrobenzene-d5	128	4.348	4.348	(0.879)	131565	62.8419	31(Q)
$	19 2-Nitrophenol-d4	143	4.616	4.616	(0.933)	153227	66.2980	33
$	23 2,4-Dichlorophenol-d3	165	4.820	4.820	(0.974)	275044	65.1903	33
*	25 Naphthalene-d8	136	4.949	4.948	(1.000)	402011	40.0000	
$	27 4-Chloroaniline-d4	131	5.002	5.002	(1.011)	96046	25.6383	13(Q)
$	40 Dimethylphthalate-d6	166	6.171	6.171	(0.962)	702328	63.2120	32
$	43 Acenaphthylene-d8	160	6.289	6.289	(0.980)	710022	49.1428	25
*	46 Acenaphthene-d10	164	6.418	6.418	(1.000)	302182	40.0000	
$	49 4-Nitrophenol-d4	143	6.514	6.503	(1.015)	81213	50.7204	25
$	54 Fluorene-d10	176	6.847	6.847	(1.067)	434373	42.5608	21
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.900	6.900	(0.903)	123616	72.8648	36(Q)
*	65 Phenanthrene-d10	188	7.640	7.640	(1.000)	434755	40.0000	
$	67 Anthracene-d10	188	7.694	7.694	(1.007)	432502	34.8261	17(R)
	70 Di-n-butylphthalate	149	8.123	8.123	(1.063)	21821	2.02525	1.0(a)
$	72 Pyrene-d10	212	8.831	8.820	(0.893)	171150	24.1917	12(R)
*	77 Chrysene-d12	240	9.892	9.871	(1.000)	224578	40.0000	(Q)

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5220.D
Report Date: 07-Nov-2011 14:03

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
$ 83 Benzo(a)pyrene-d12	264	11.179	11.147	(0.983)	33754	12.8187	6.4(RH)
* 85 Perylene-d12	264	11.265	11.233	(1.000)	107308	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\111103.B\S2H5220.D
Report Date: 07-Nov-2011 14:03

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5220.D
Lab Smp Id: K2200-18B Client Smp ID: H30Y6
Inj Date : 03-NOV-2011 22:10
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-18B,,62636,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 30
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

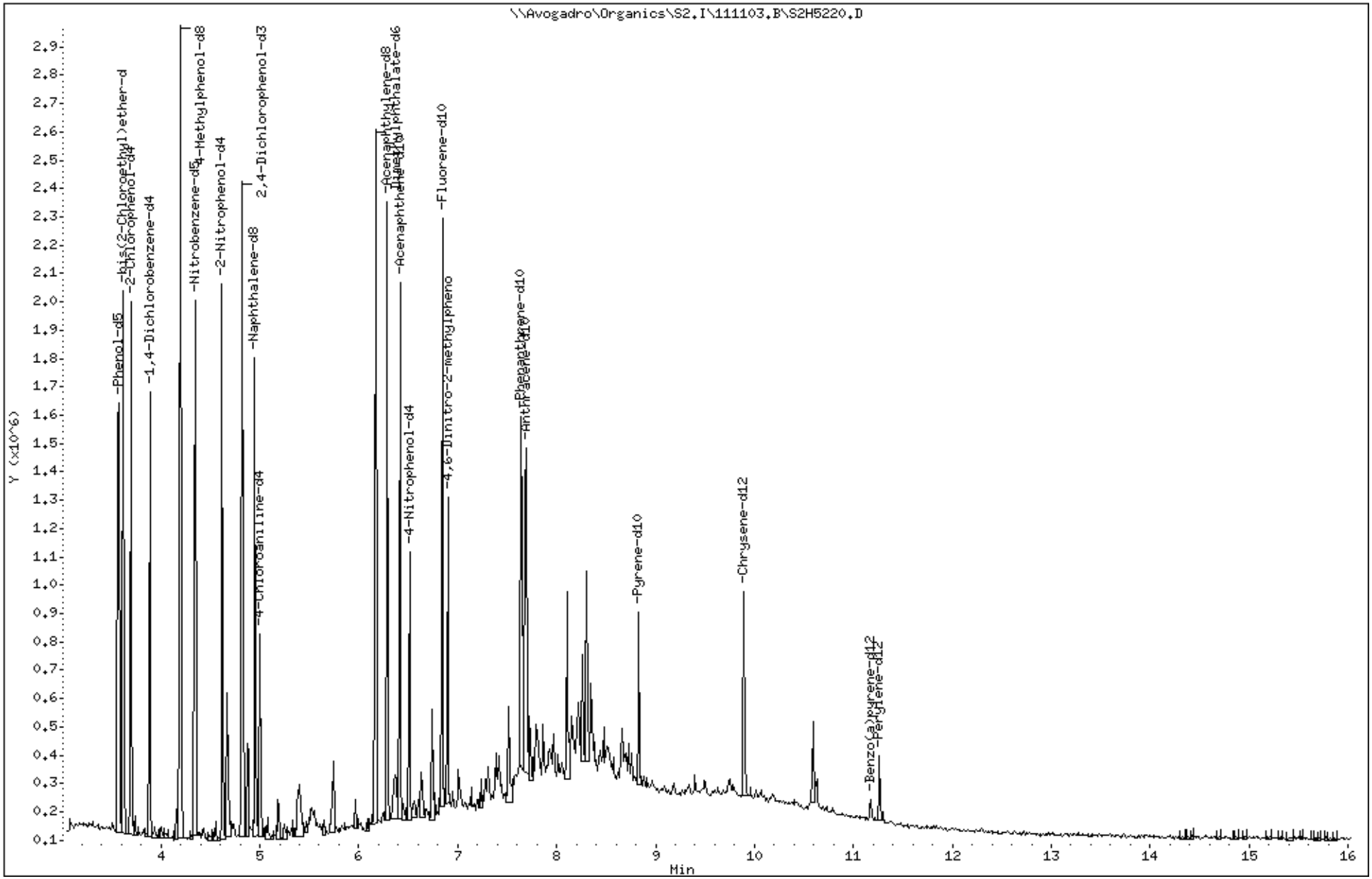
ISTD	RT	AREA	AMOUNT
* 25 Naphthalene-d8	4.949	1486170	40.000
* 46 Acenaphthene-d10	6.418	1676035	40.000
* 65 Phenanthrene-d10	7.641	1474894	40.000
* 85 Perylene-d12	11.265	257677	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.670	559269	15.0526091	7.5	0	0		25
Unknown				CAS #:			
4.874	439410	11.8266412	5.9	0	0		25
Unknown				CAS #:			
5.185	202825	5.45898992	2.7	0	0		25

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5220.D
Report Date: 07-Nov-2011 14:03

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
5.400	480867	12.9424426	6.5	0		0	25
Unknown				CAS #:			
5.743	309016	7.37492697	3.7	0		0	46
Unknown				CAS #:			
6.365	418196	9.98059922	5.0	0		0	46
Unknown				CAS #:			
6.633	209588	5.00198311	2.5	0		0	46
Unknown				CAS #:			
6.740	356782	8.51490577	4.3	0		0	46
1,4-Benzenedicarboxaldehyde, 2,5-dimethy				CAS #: 7044-92-0			
7.512	446539	12.1104002	6.1	90	NIST2002.L	30429	65
Unknown				CAS #:			
7.727	316950	8.59587484	4.3	0		0	65
Tridecanoic acid				CAS #: 638-53-9			
8.102	753763	20.4424990	10	93	NIST2002.L	65565	65
Unknown				CAS #:			
8.263	303821	8.23981709	4.1	0		0	65
Unknown				CAS #:			
8.306	677086	18.3629787	9.2	0		0	65
Unknown				CAS #:			
10.590	390206	60.5727502	30	0		0	85
Unknown				CAS #:			
14.322	25873	4.01633982	2.0	0		0	85
Unknown				CAS #:			
15.426	32413	5.03156888	2.5	0		0	85

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5220.D
Date : 03-NOV-2011 22:10
Client ID: H30Y6
Instrument: S2.i
Sample Info: K2200-18B,,62636,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



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Date : 03-NOV-2011 22:10

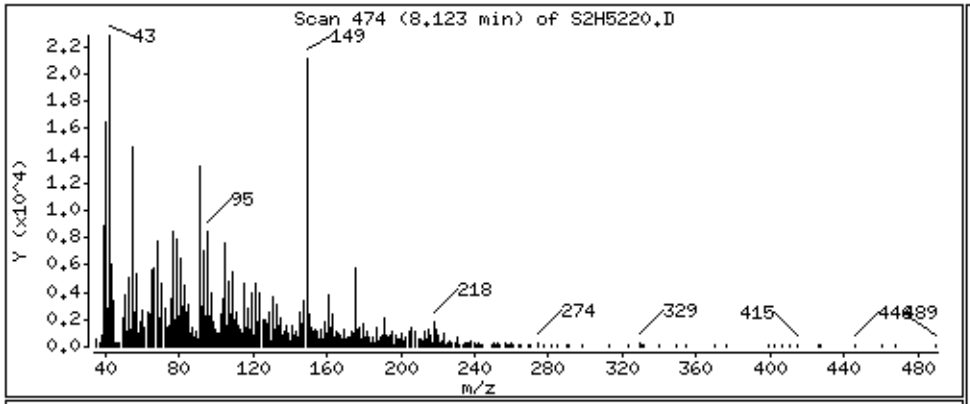
Client ID: H30Y6 Instrument: S2.i

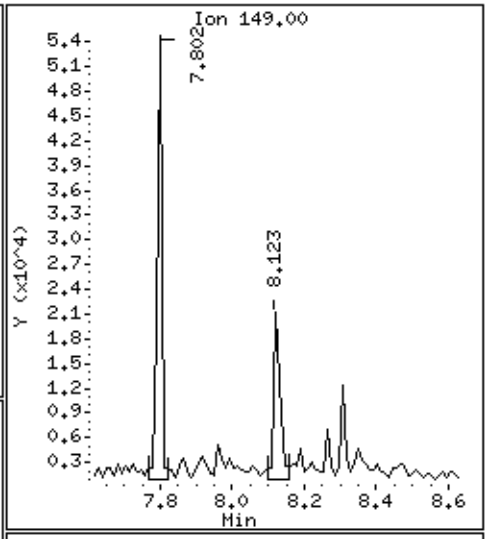
Sample Info: K2200-18B,,62636,,

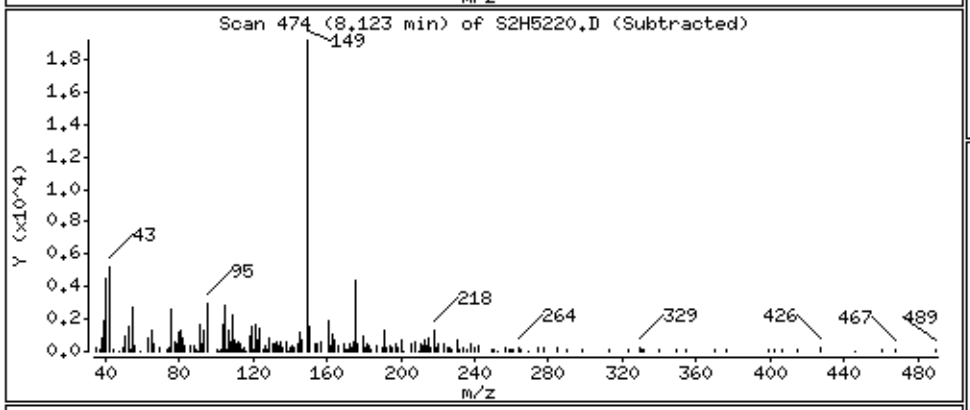
Volume Injected (uL): 2.0 Operator: SRC: LIMS

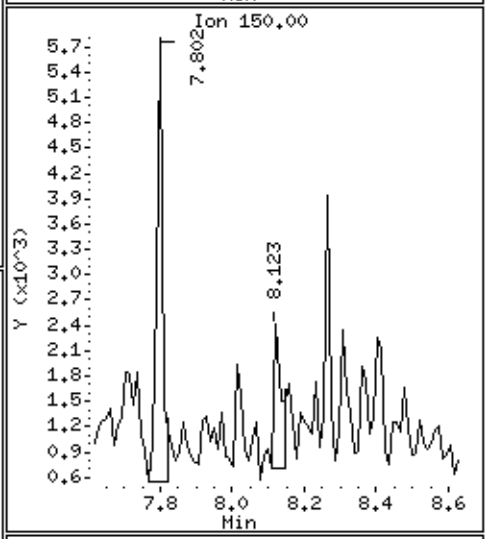
Column phase: RXI-5SILMS Column diameter: 0.25

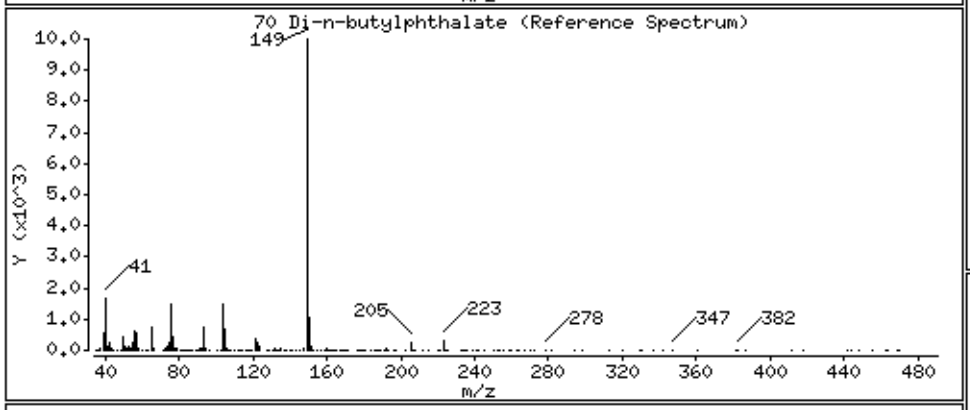
70 Di-n-butylphthalate Concentration: 1.0 ug/L

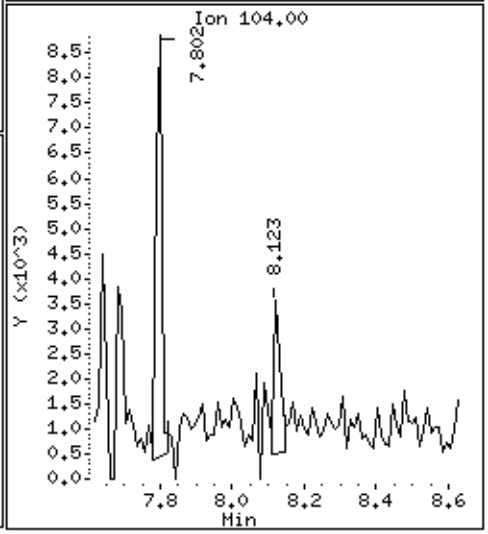


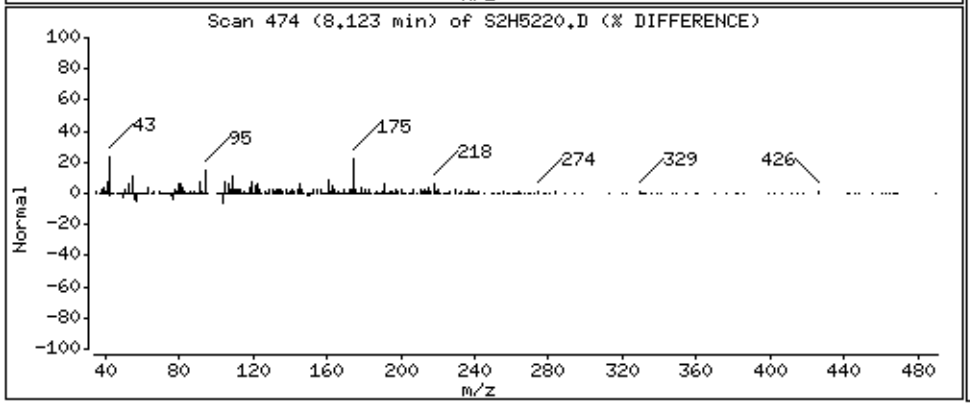












Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5220.D

Date : 03-NOV-2011 22:10

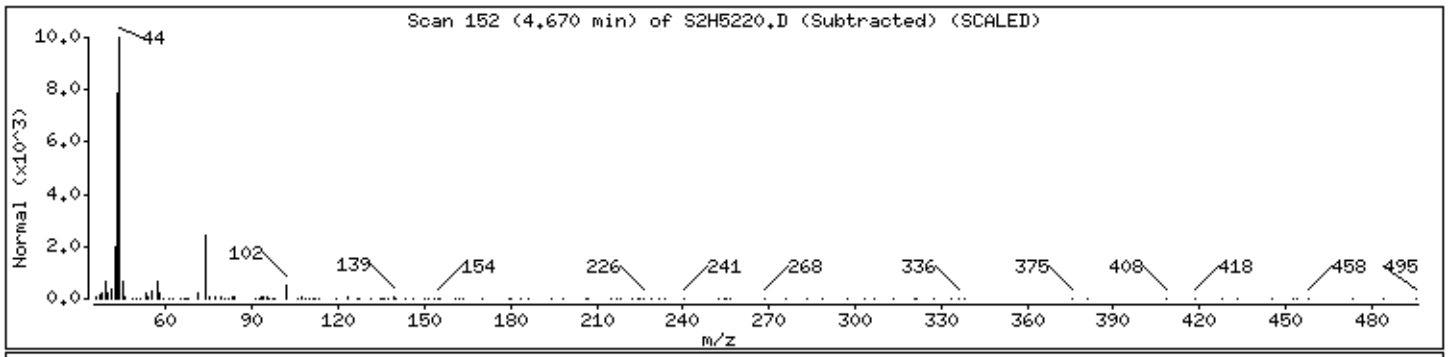
Client ID: H30Y6 Instrument: S2.i

Sample Info: K2200-18B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 22:10

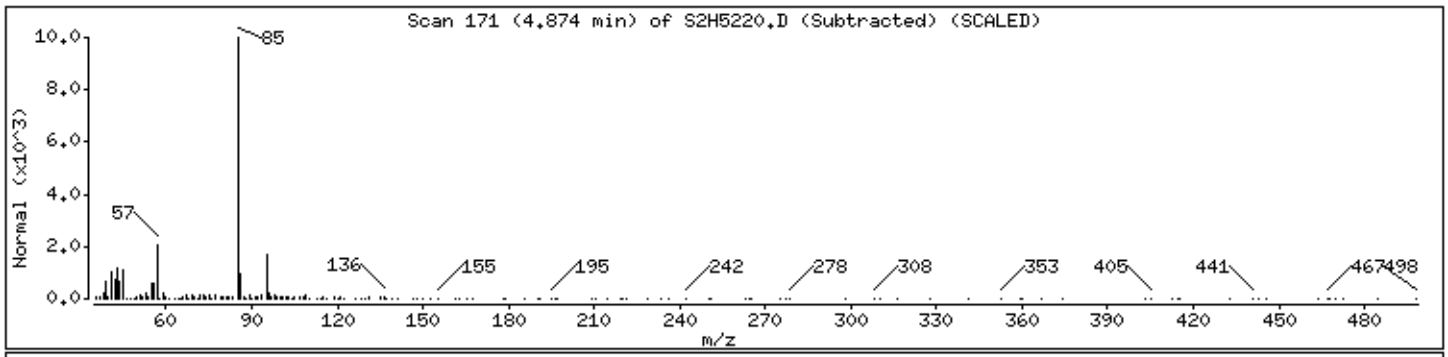
Client ID: H30Y6 Instrument: S2.i

Sample Info: K2200-18B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 22:10

Client ID: H30Y6 Instrument: S2.i

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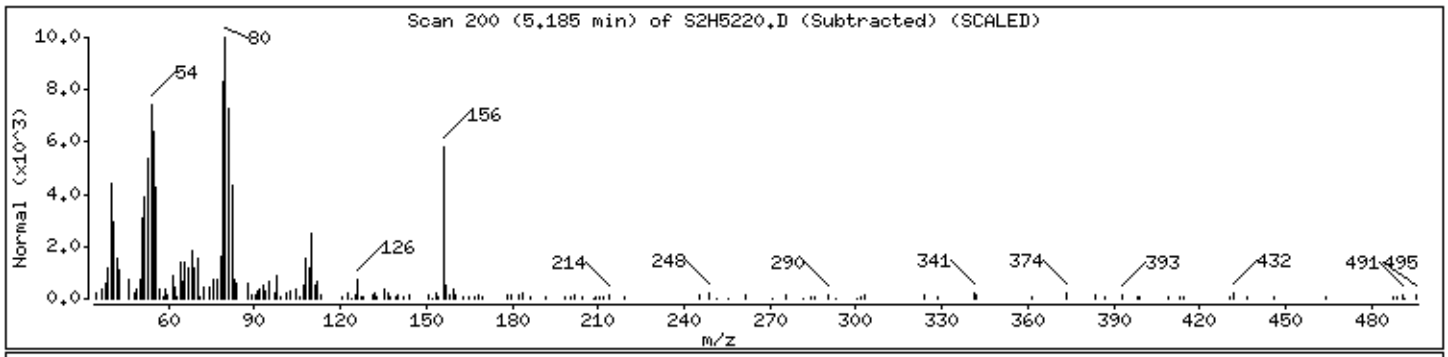
Volume Injected (uL): 2.0 Operator: SRC: LIMS

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\111103.B\S2H5220.D

Date : 03-NOV-2011 22:10

Client ID: H30Y6 Instrument: S2.i

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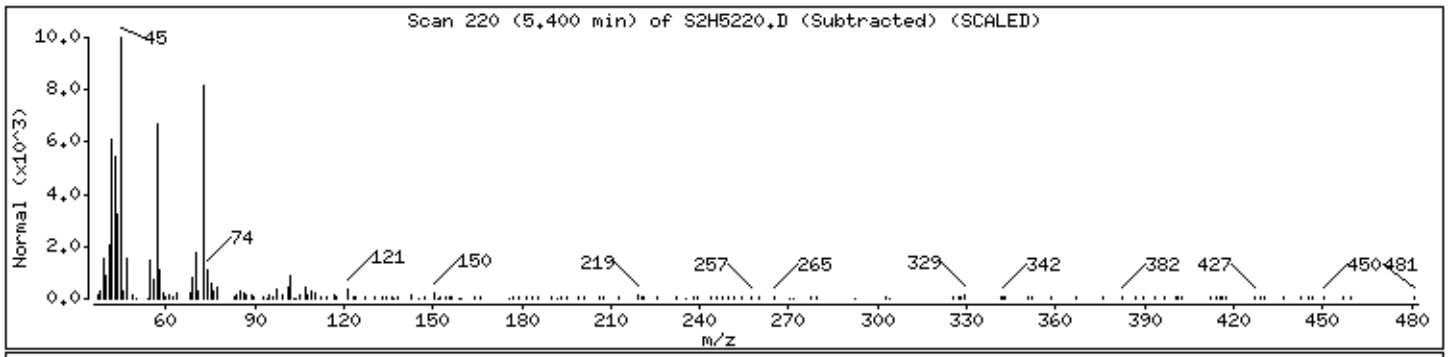
Volume Injected (uL): 2.0 Operator: SRC: LIMS

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\111103.B\S2H5220.D

Date : 03-NOV-2011 22:10

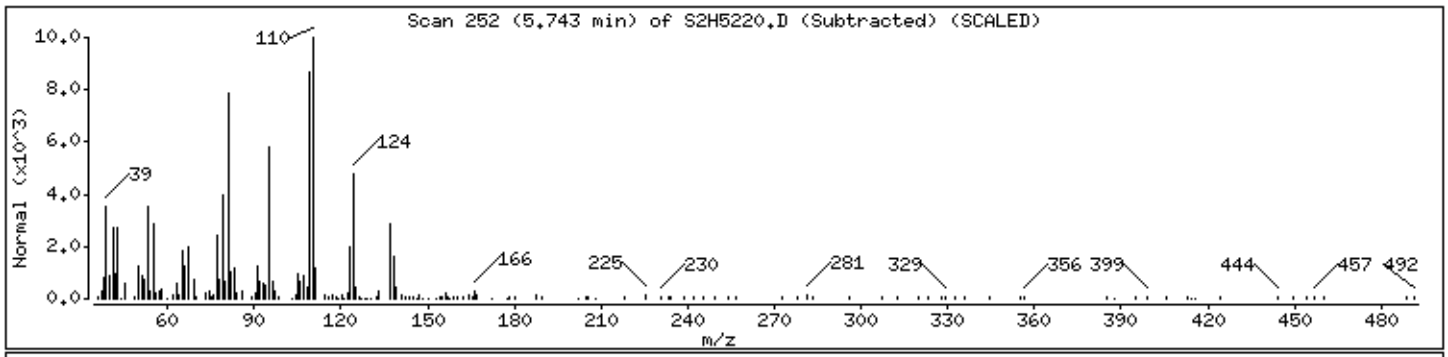
Client ID: H30Y6 Instrument: S2.i

Sample Info: K2200-18B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5220.D

Date : 03-NOV-2011 22:10

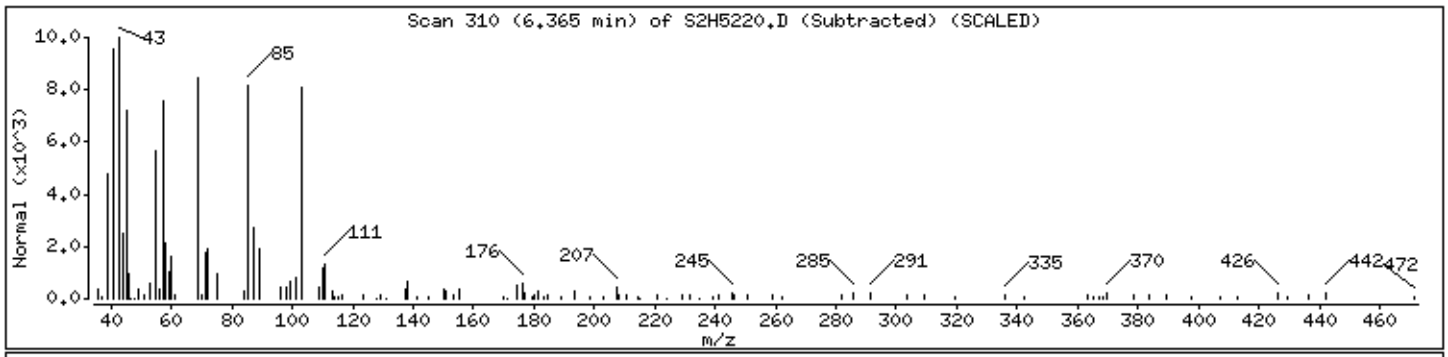
Client ID: H30Y6 Instrument: S2.i

Sample Info: K2200-18B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 22:10

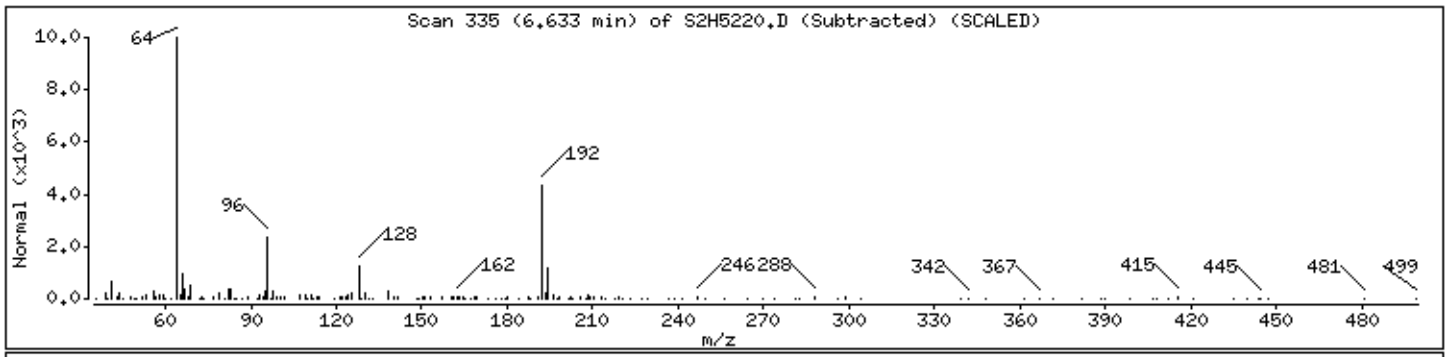
Client ID: H30Y6 Instrument: S2.i

Sample Info: K2200-18B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5220.D

Date : 03-NOV-2011 22:10

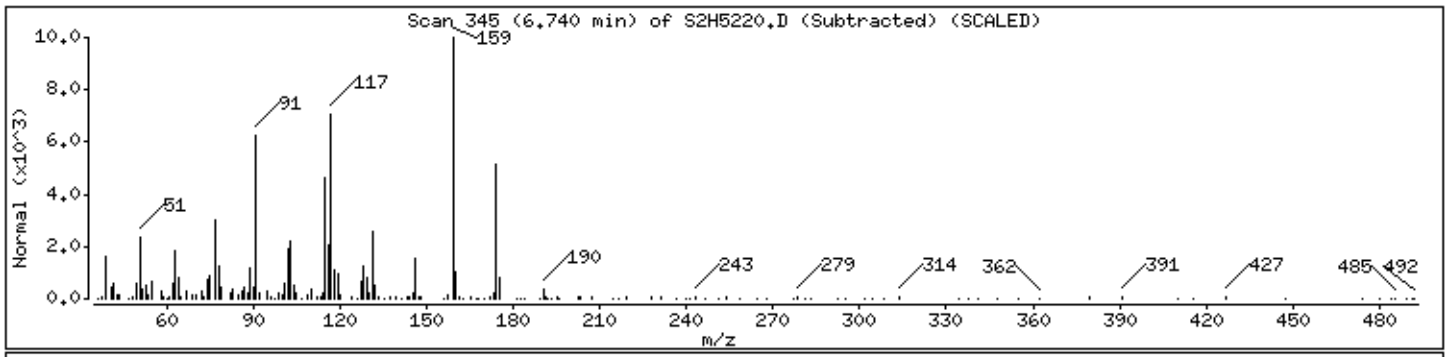
Client ID: H30Y6 Instrument: S2.i

Sample Info: K2200-18B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5220.D

Date : 03-NOV-2011 22:10

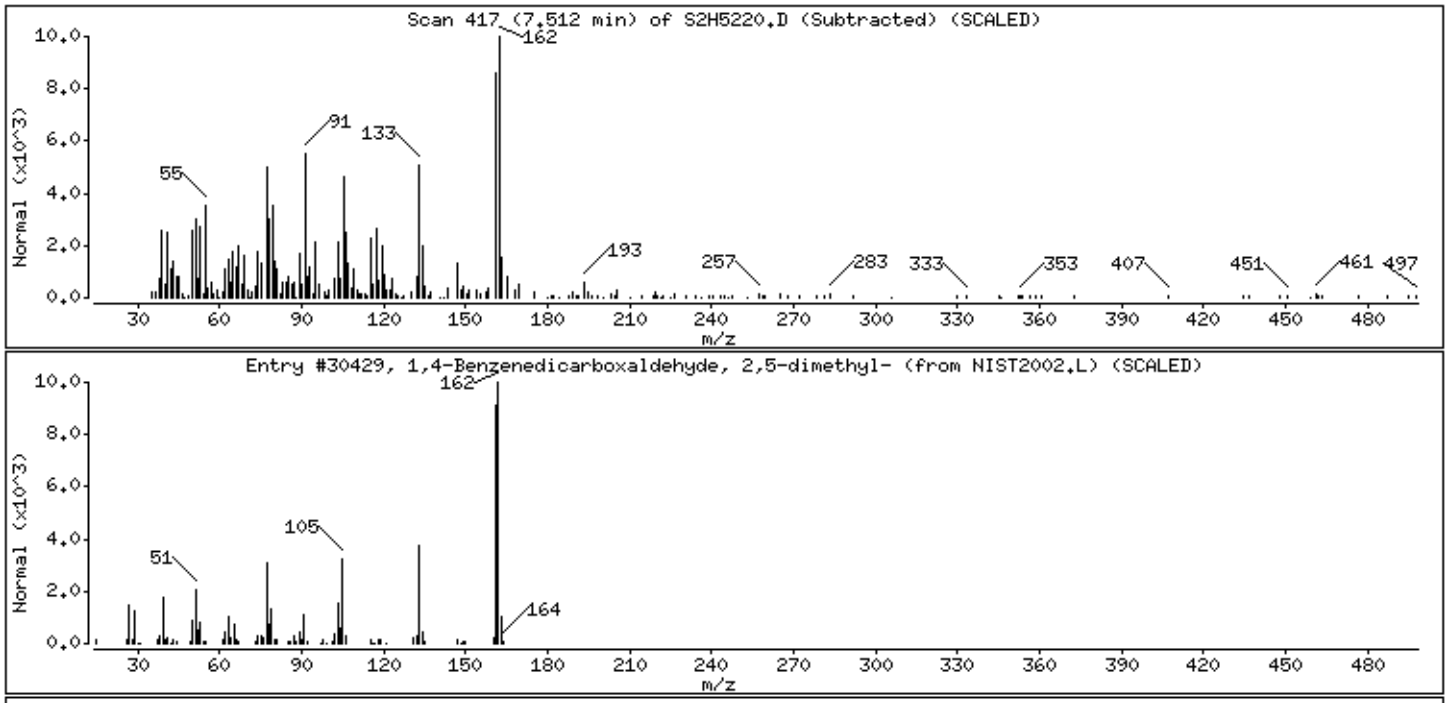
Client ID: H30Y6 Instrument: S2.i

Sample Info: K2200-18B,,62636,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,4-Benzenedicarboxaldehyde, 2,5-dimethy	7044-92-0	NIST2002.L	30429	90	C10H10O2	162



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Date : 03-NOV-2011 22:10

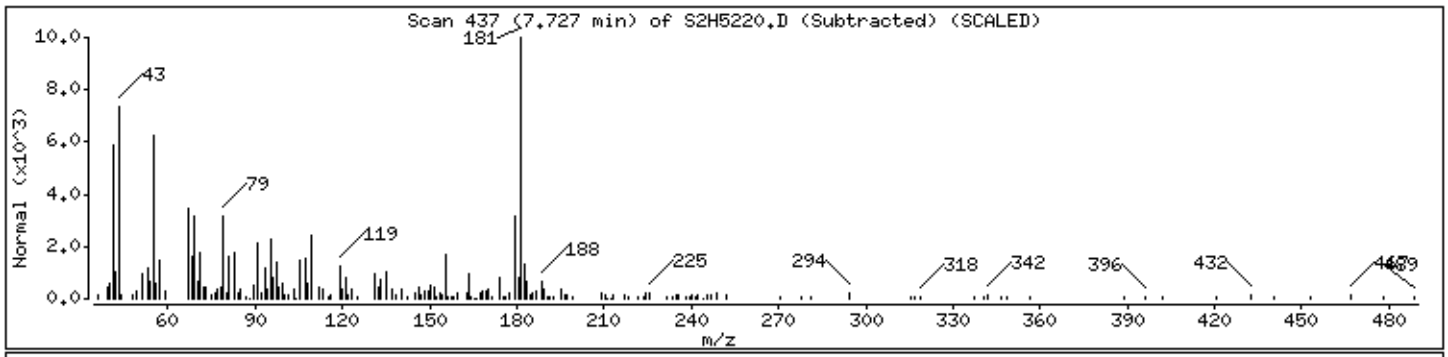
Client ID: H30Y6 Instrument: S2.i

Sample Info: K2200-18B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 22:10

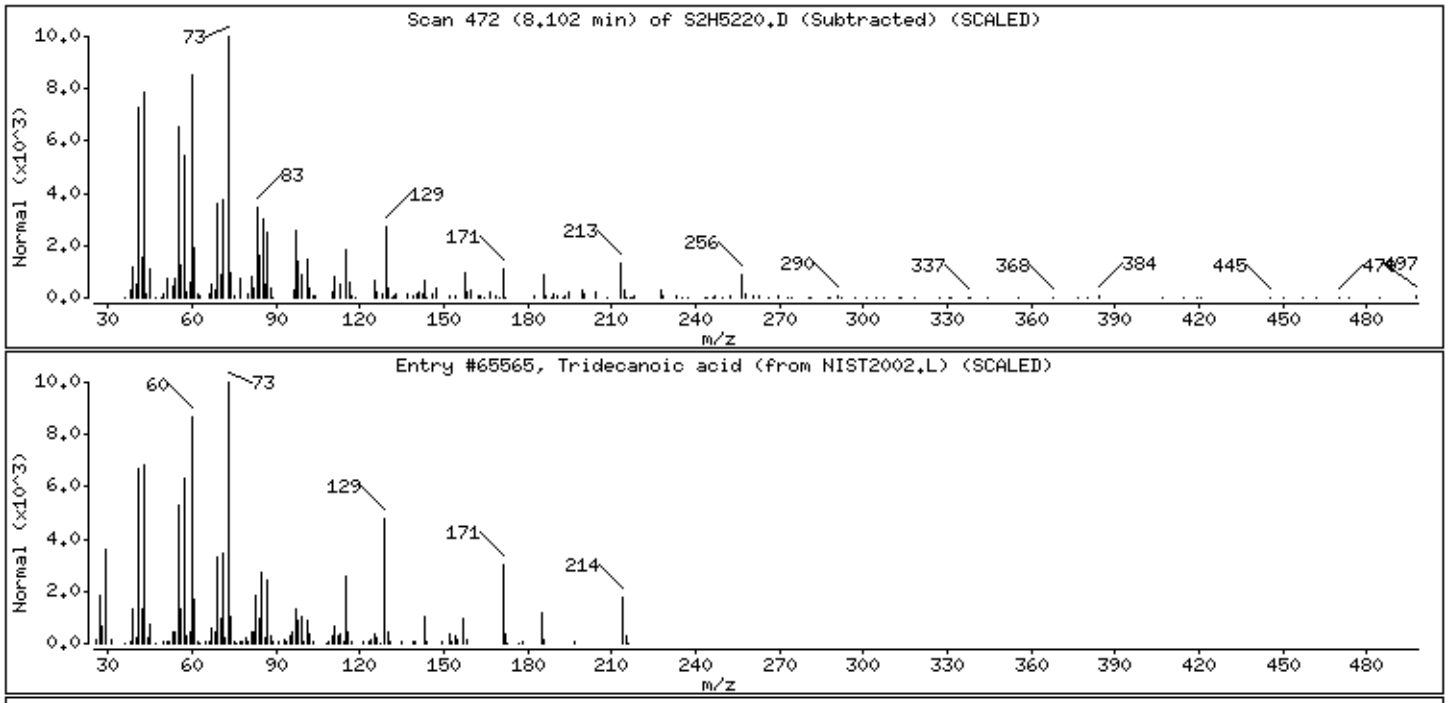
Client ID: H30Y6 Instrument: S2.i

Sample Info: K2200-18B,,62636,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Tridecanoic acid	638-53-9	NIST2002.L	65565	93	C13H26O2	214



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Date : 03-NOV-2011 22:10

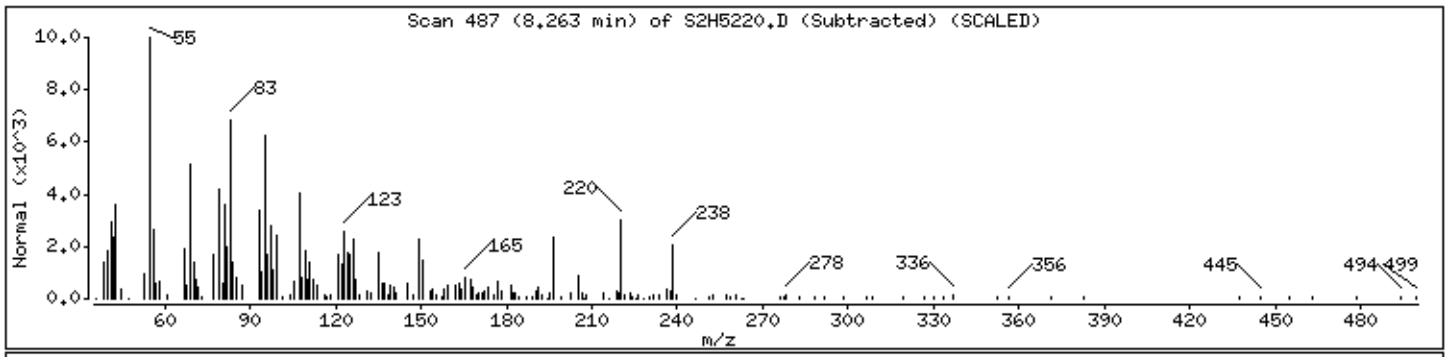
Client ID: H30Y6 Instrument: S2.i

Sample Info: K2200-18B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5220.D

Date : 03-NOV-2011 22:10

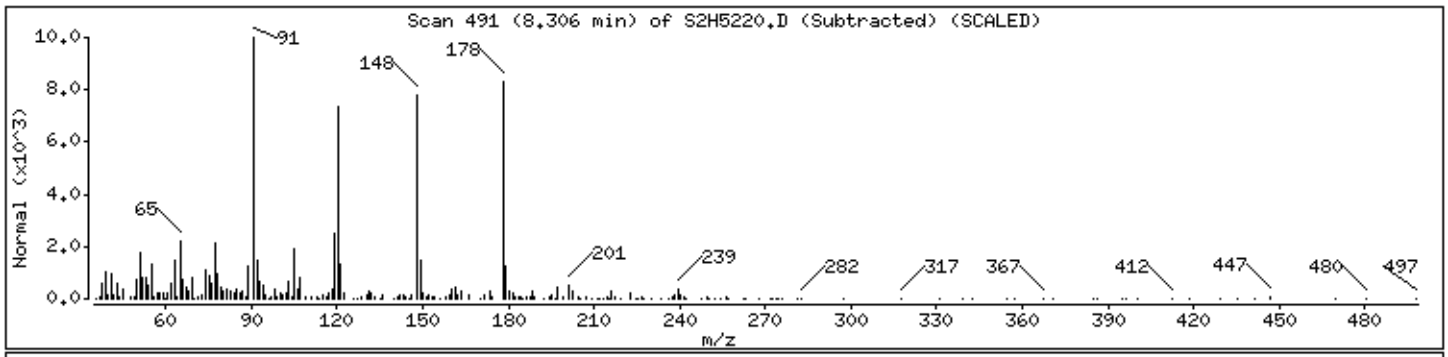
Client ID: H30Y6 Instrument: S2.i

Sample Info: K2200-18B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5220.D

Date : 03-NOV-2011 22:10

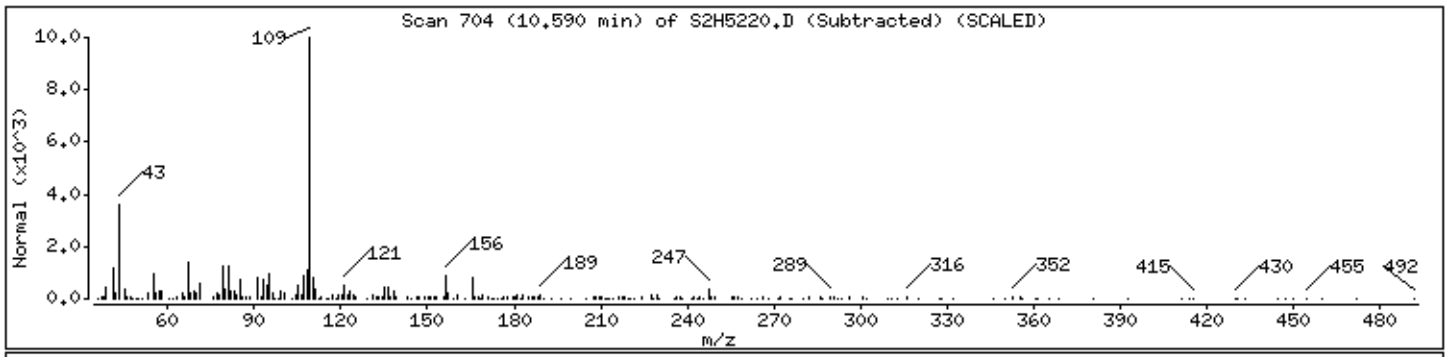
Client ID: H30Y6 Instrument: S2.i

Sample Info: K2200-18B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 22:10

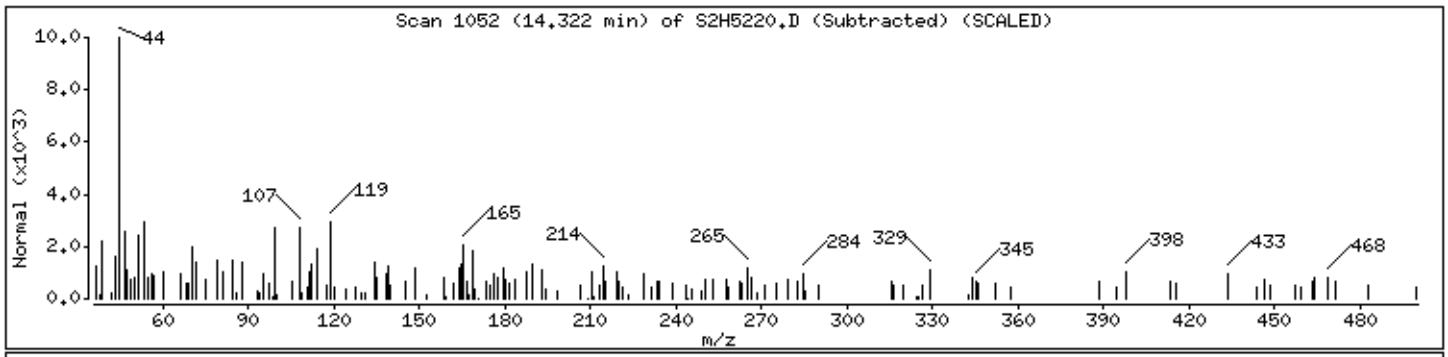
Client ID: H30Y6 Instrument: S2.i

Sample Info: K2200-18B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5220.D

Date : 03-NOV-2011 22:10

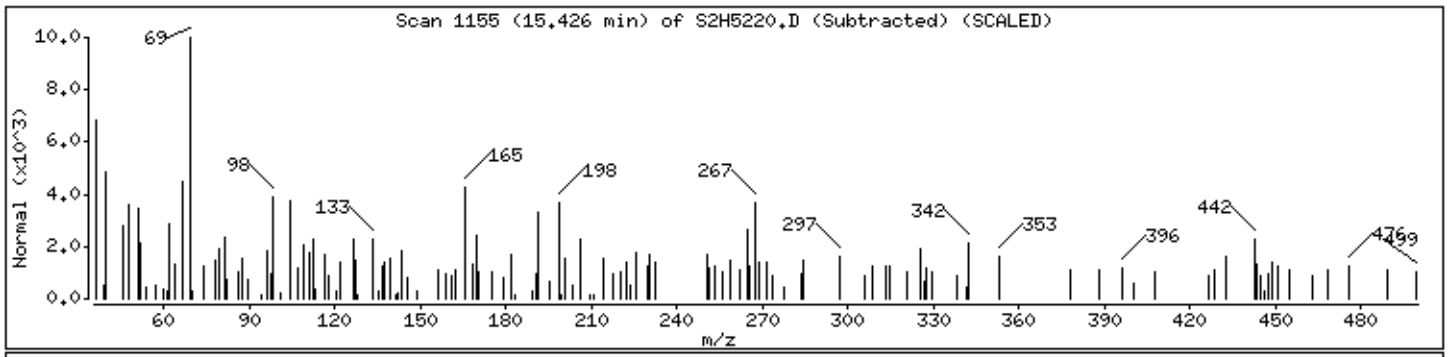
Client ID: H30Y6 Instrument: S2.i

Sample Info: K2200-18B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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

CLIENT SAMPLE NO.

H30Z6

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-19B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5221.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2´-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1´-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

H30Z6

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-19B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5221.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3´-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

H30Z6

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-19B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5221.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	4.413	2.5	J
02		Unknown-02	4.670	9.6	J
03		Unknown-03	5.185	2.8	J
04		Unknown-04	5.399	7.5	J
05		Unknown-05	5.742	7.4	J
06		Unknown-06	6.107	2.6	J
07		Unknown-07	6.214	4.2	J
08		Unknown-08	6.354	4.7	J
09	57-10-3	n-Hexadecanoic acid	8.102	5.7	NJ
10		Unknown-09	9.506	2.6	J
11		Unknown-10	10.632	7.6	J
	E96679[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5221.D
Report Date: 07-Nov-2011 14:03

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5221.D
Lab Smp Id: K2200-19B Client Smp ID: H30Z6
Inj Date : 03-NOV-2011 22:31
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-19B,,62636,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 31
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)
$	2 Phenol-d5	71	3.565	3.565	(0.917)	226749	52.8883	26
$	4 bis(2-Chloroethyl)ether-d8	67	3.619	3.619	(0.931)	341233	57.7595	29
$	6 2-Chlorophenol-d4	132	3.694	3.694	(0.950)	208171	56.1290	28
*	8 1,4-Dichlorobenzene-d4	152	3.887	3.887	(1.000)	136149	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.198	4.198	(1.080)	382781	65.8556	33
$	16 Nitrobenzene-d5	128	4.348	4.348	(0.879)	118292	60.6016	30
$	19 2-Nitrophenol-d4	143	4.616	4.616	(0.933)	132421	61.4528	31
$	23 2,4-Dichlorophenol-d3	165	4.820	4.820	(0.974)	255471	64.9445	32
*	25 Naphthalene-d8	136	4.948	4.948	(1.000)	374816	40.0000	
$	27 4-Chloroaniline-d4	131	5.002	5.002	(1.011)	145373	41.6211	21(Q)
$	40 Dimethylphthalate-d6	166	6.171	6.171	(0.962)	712201	67.7242	34
$	43 Acenaphthylene-d8	160	6.289	6.289	(0.980)	801947	58.6429	29
*	46 Acenaphthene-d10	164	6.417	6.418	(1.000)	286014	40.0000	
$	49 4-Nitrophenol-d4	143	6.514	6.503	(1.015)	81147	53.5440	27
$	54 Fluorene-d10	176	6.846	6.847	(1.067)	571112	59.1220	30
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.900	6.900	(0.903)	125590	71.8473	36(Q)
*	65 Phenanthrene-d10	188	7.640	7.640	(1.000)	447953	40.0000	
$	67 Anthracene-d10	188	7.694	7.694	(1.007)	820336	64.1092	32
$	72 Pyrene-d10	212	8.830	8.820	(0.896)	657120	71.3118	36
*	77 Chrysene-d12	240	9.903	9.871	(1.000)	292510	40.0000	(QH)
$	83 Benzo(a)pyrene-d12	264	11.179	11.147	(0.983)	207320	57.1717	29(H)

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5221.D
Report Date: 07-Nov-2011 14:03

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)	
* 85 Perylene-d12	264	11.275	11.233	(1.000)	147779	40.0000		(QH)

QC Flag Legend

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

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5221.D
Report Date: 07-Nov-2011 14:03

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5221.D
Lab Smp Id: K2200-19B Client Smp ID: H30Z6
Inj Date : 03-NOV-2011 22:31
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-19B,,62636,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 31
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

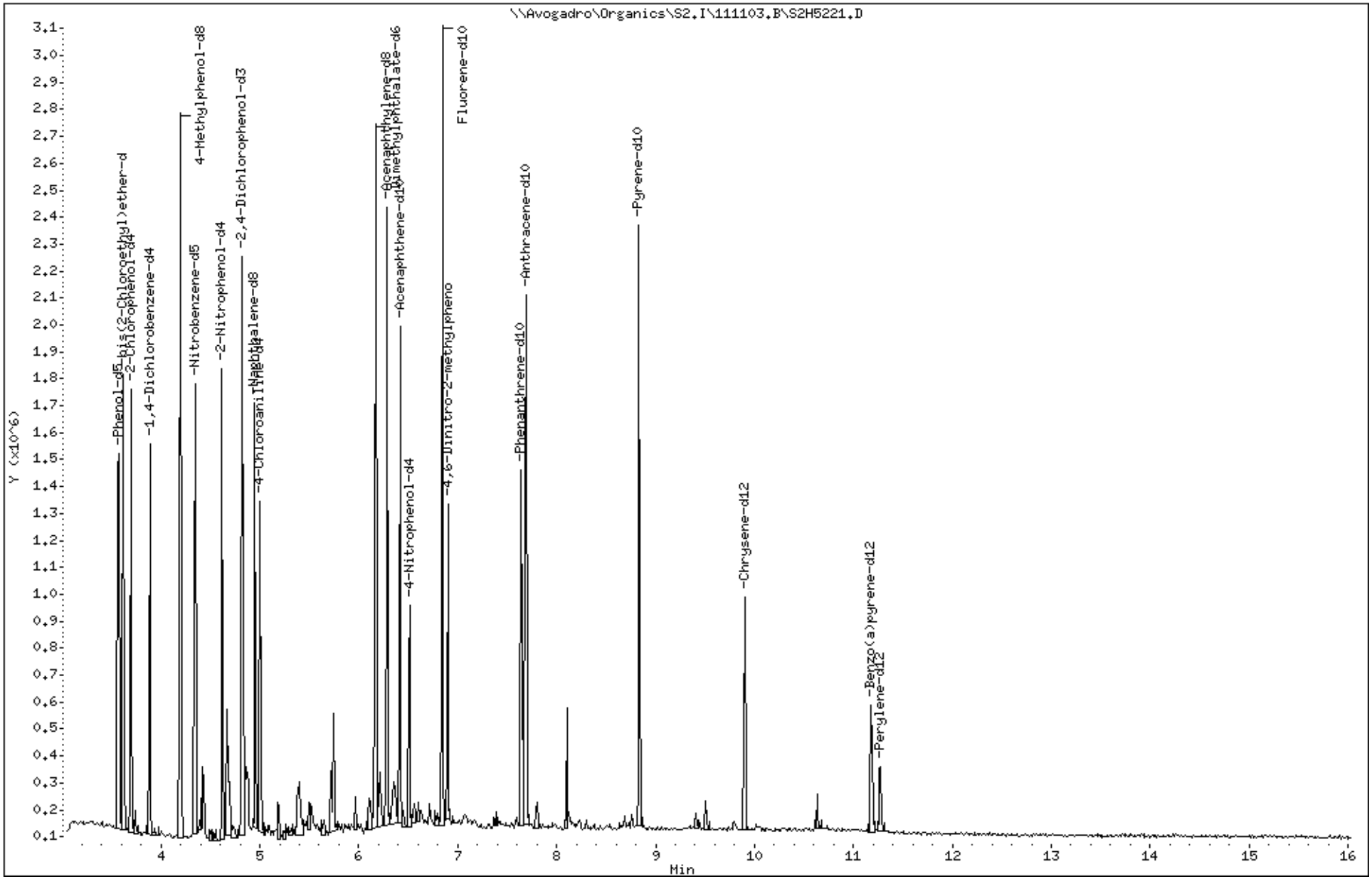
	ISTD	RT	AREA	AMOUNT
*	8 1,4-Dichlorobenzene-d4	3.887	1205778	40.000
*	25 Naphthalene-d8	4.949	1266921	40.000
*	46 Acenaphthene-d10	6.418	1537131	40.000
*	65 Phenanthrene-d10	7.640	1280301	40.000
*	77 Chrysene-d12	9.903	821077	40.000
*	85 Perylene-d12	11.276	366889	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
4.413	150658	4.99785156	2.5	0	0		8
Unknown					CAS #:		
4.670	609076	19.2301099	9.6	0	0		25

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5221.D
Report Date: 07-Nov-2011 14:03

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
5.185	180312	5.69292345	2.8	0		0	25
Unknown				CAS #:			
5.399	473186	14.9397172	7.5	0		0	25
Unknown				CAS #:			
5.742	568135	14.7842976	7.4	0		0	46
Unknown				CAS #:			
6.107	197392	5.13662504	2.6	0		0	46
Unknown				CAS #:			
6.214	322719	8.39795880	4.2	0		0	46
Unknown				CAS #:			
6.354	362251	9.42666571	4.7	0		0	46
n-Hexadecanoic acid				CAS #: 57-10-3			
8.102	362464	11.3243246	5.7	96	NIST2002.L	92227	65
Unknown				CAS #:			
9.506	105502	5.13967867	2.6	0		0	77
Unknown				CAS #:			
10.632	139563	15.2158010	7.6	0		0	85

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5221.D
Date : 03-NOV-2011 22:31
Client ID: H30Z6
Instrument: S2.i
Sample Info: K2200-19B,,62636,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5221.D

Date : 03-NOV-2011 22:31

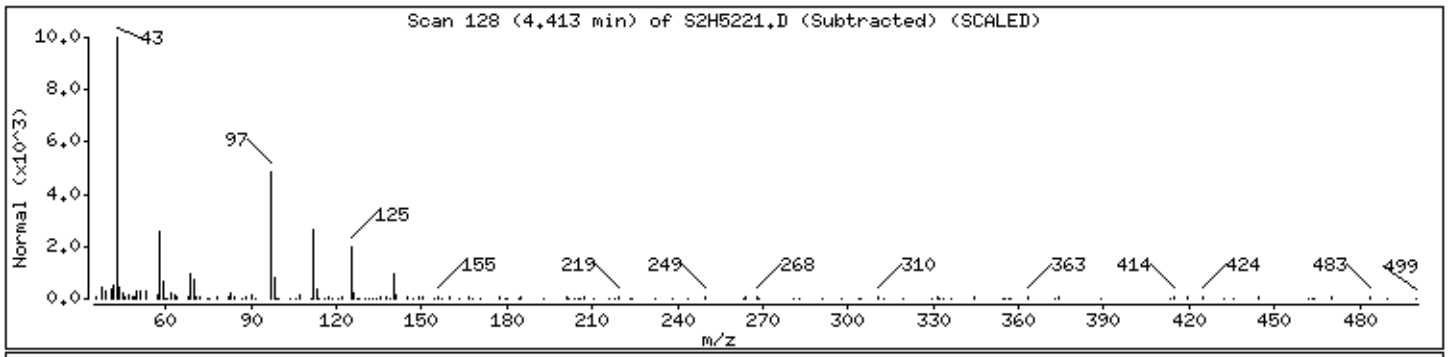
Client ID: H30Z6 Instrument: S2.i

Sample Info: K2200-19B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5221.D

Date : 03-NOV-2011 22:31

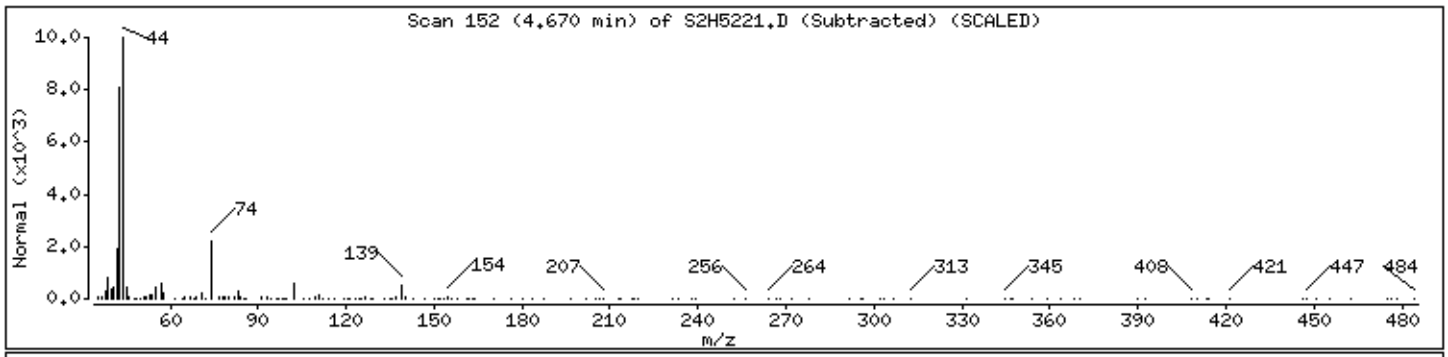
Client ID: H30Z6 Instrument: S2.i

Sample Info: K2200-19B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5221.D

Date : 03-NOV-2011 22:31

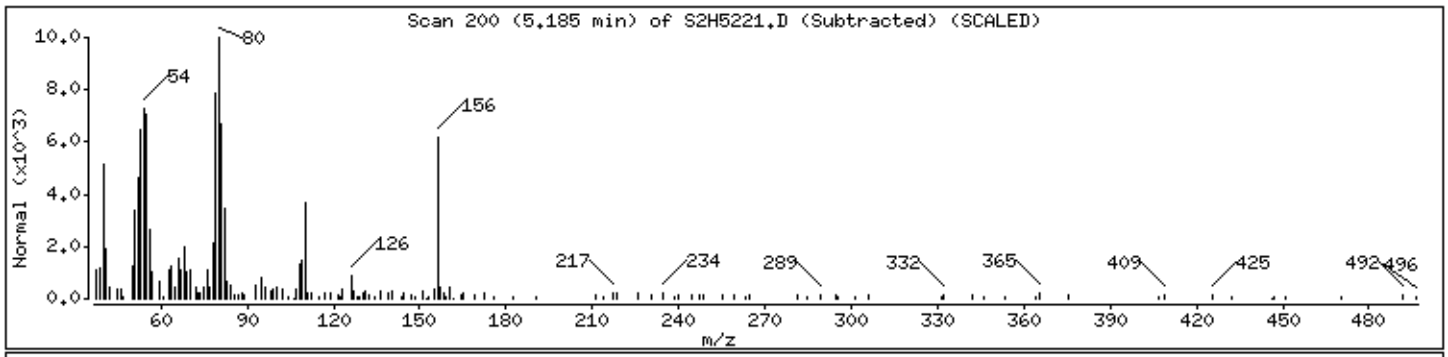
Client ID: H30Z6 Instrument: S2.i

Sample Info: K2200-19B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5221.D

Date : 03-NOV-2011 22:31

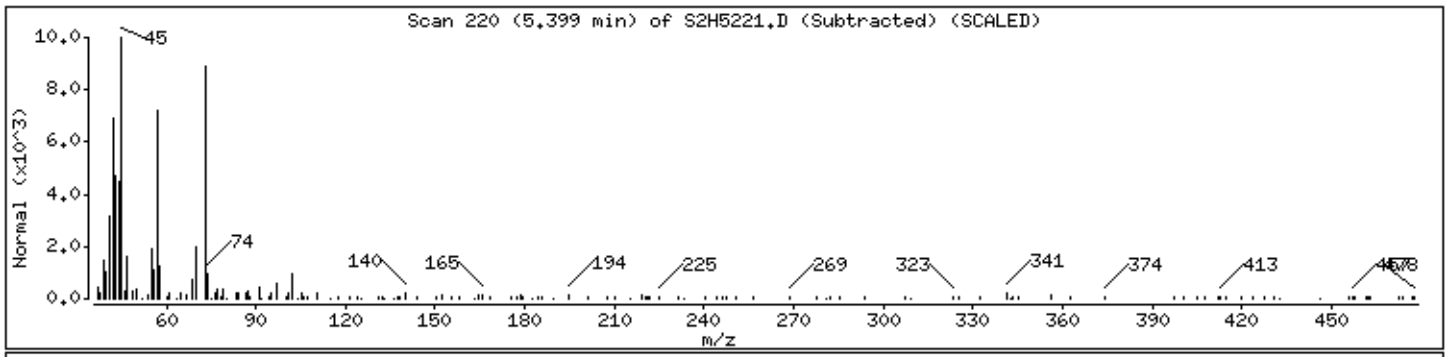
Client ID: H30Z6 Instrument: S2.i

Sample Info: K2200-19B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5221.D

Date : 03-NOV-2011 22:31

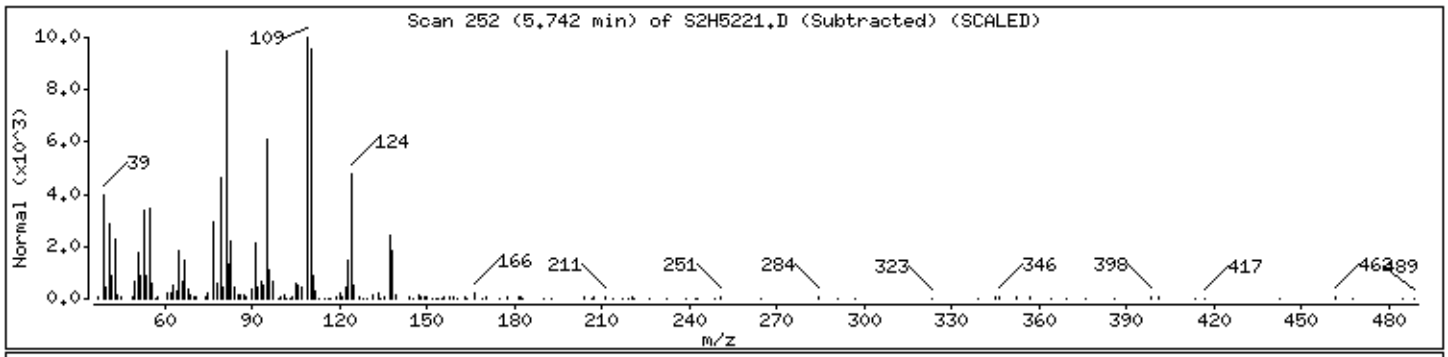
Client ID: H30Z6 Instrument: S2.i

Sample Info: K2200-19B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 22:31

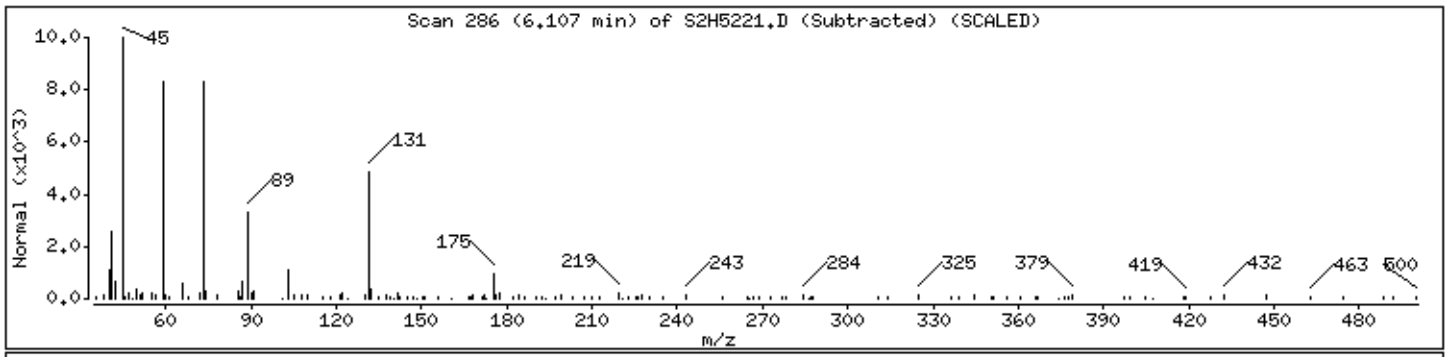
Client ID: H30Z6 Instrument: S2.i

Sample Info: K2200-19B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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 : 03-NOV-2011 22:31

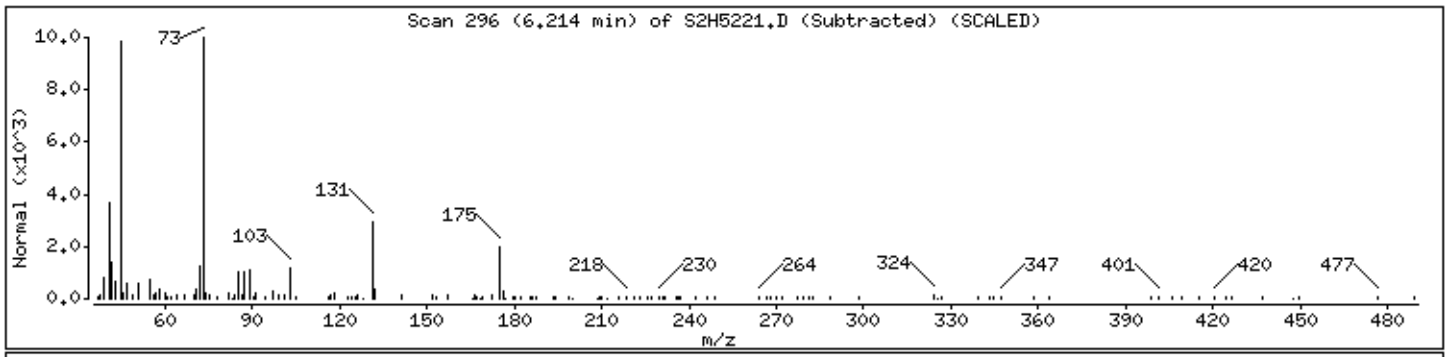
Client ID: H30Z6 Instrument: S2.i

Sample Info: K2200-19B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5221.D

Date : 03-NOV-2011 22:31

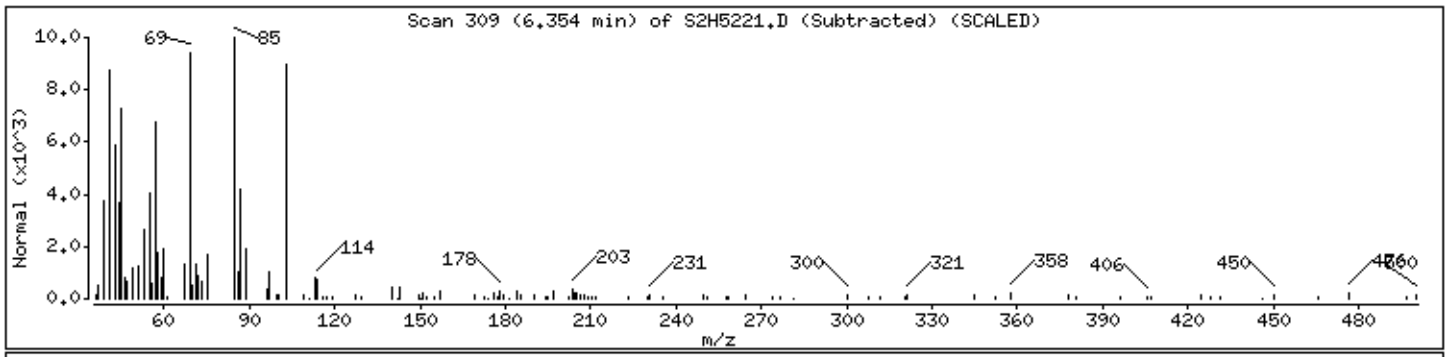
Client ID: H30Z6 Instrument: S2.i

Sample Info: K2200-19B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5221.D

Date : 03-NOV-2011 22:31

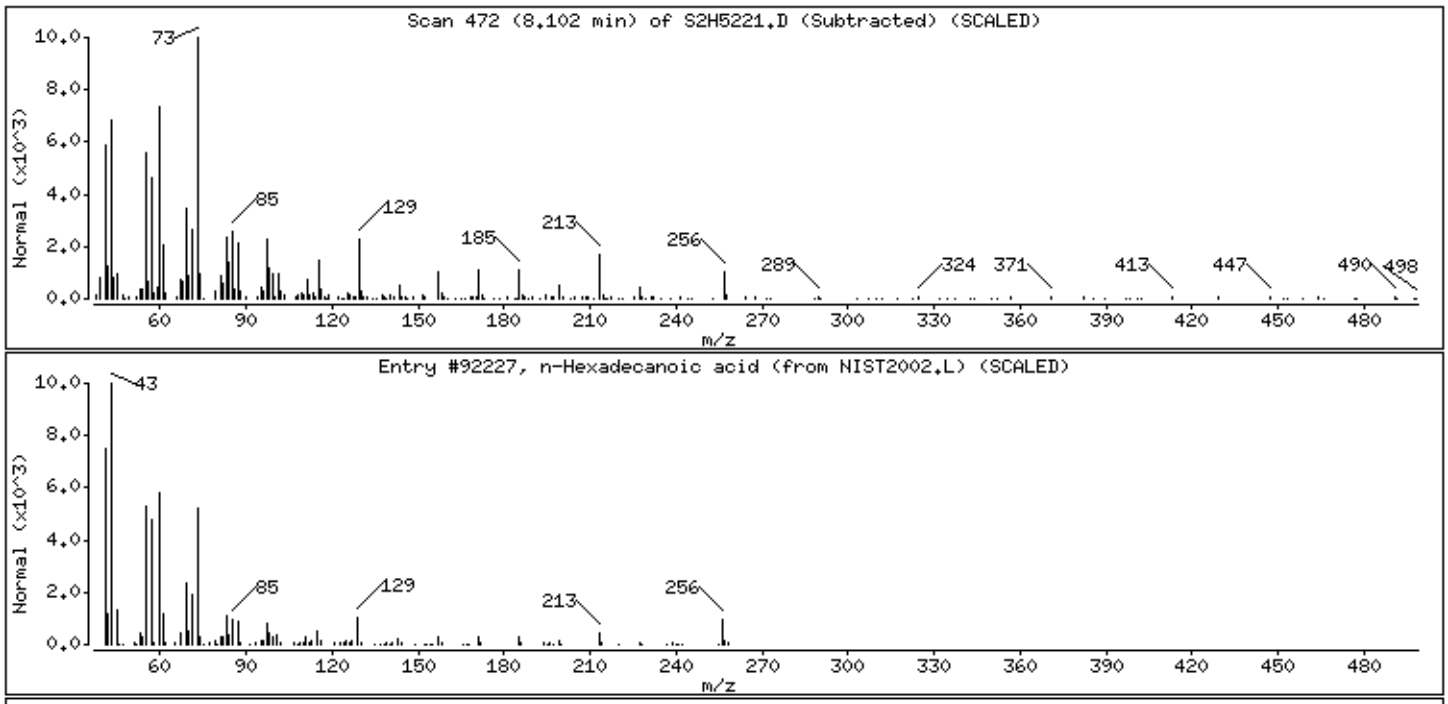
Client ID: H30Z6 Instrument: S2.i

Sample Info: K2200-19B,,62636,,

Volume Injected (uL): 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



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5221.D

Date : 03-NOV-2011 22:31

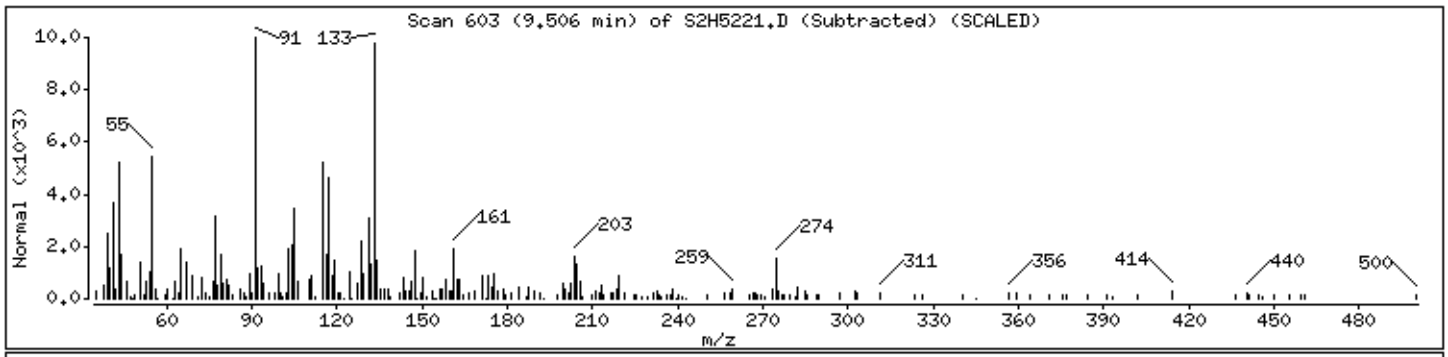
Client ID: H30Z6 Instrument: S2.i

Sample Info: K2200-19B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5221.D

Date : 03-NOV-2011 22:31

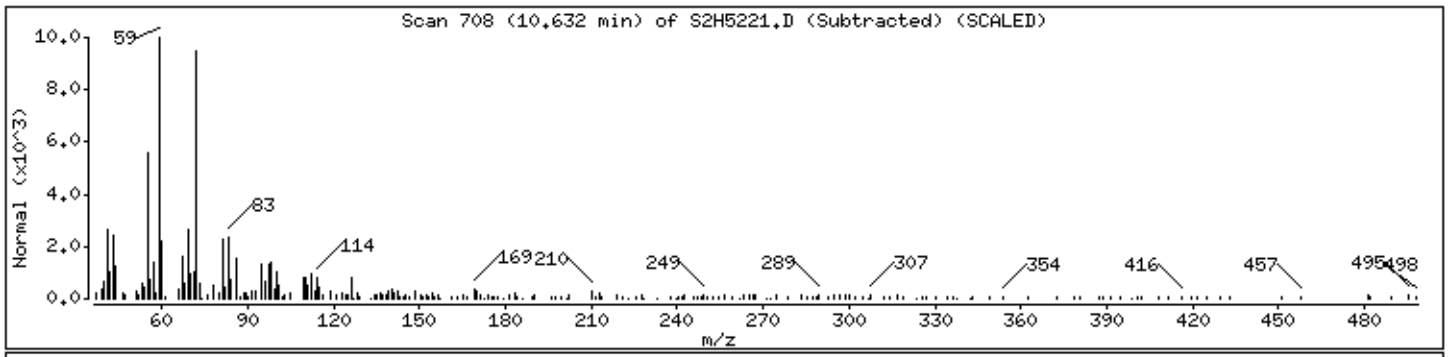
Client ID: H30Z6 Instrument: S2.i

Sample Info: K2200-19B,,62636,,

Volume Injected (uL): 2.0 Operator: SRC: 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.: H30S7

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.: H30S7

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.: H30S7

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	$\overline{\text{RRF}}$	%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

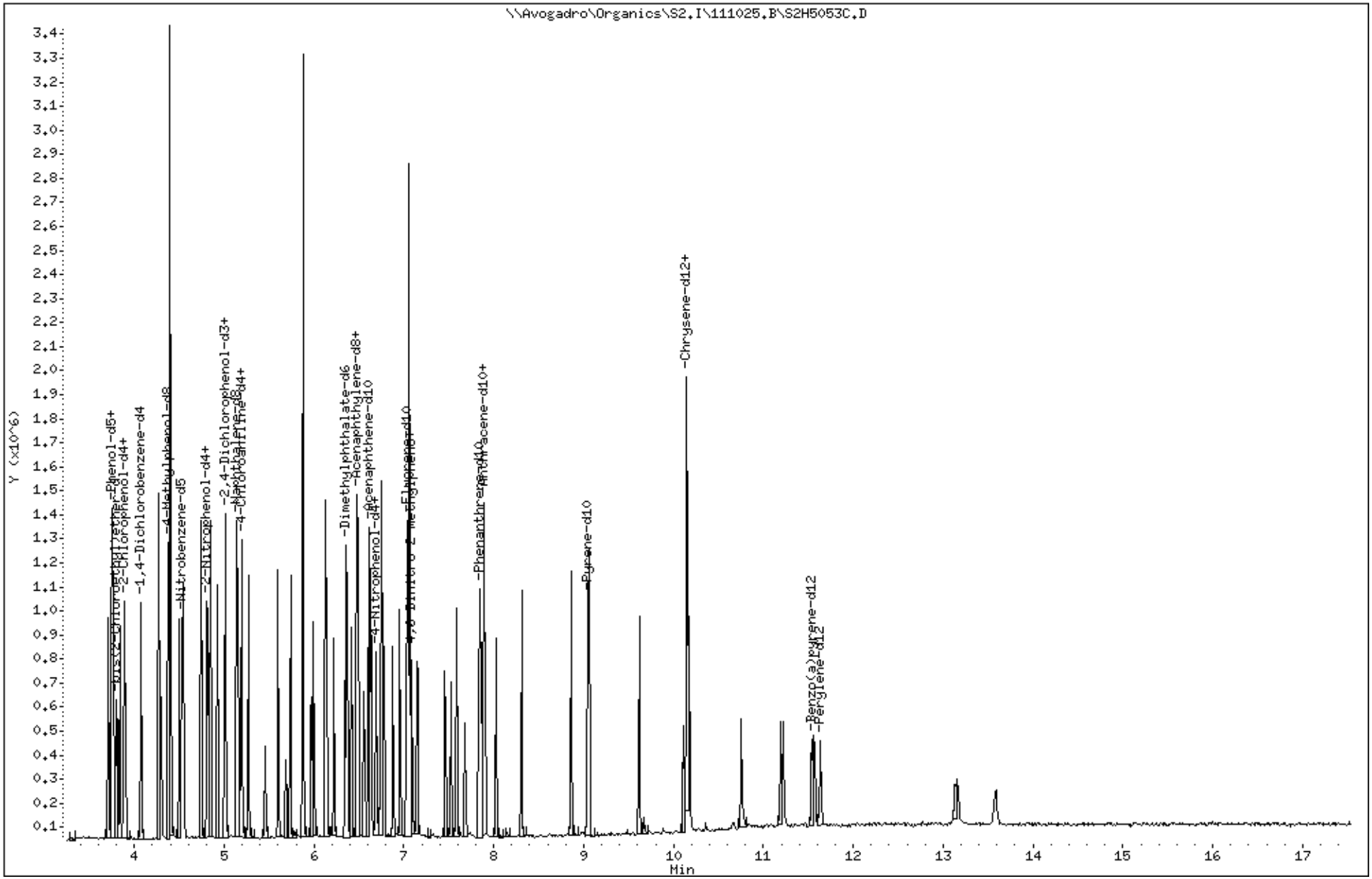
Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5053C.D
Report Date: 26-Oct-2011 09:59

	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: SSTD005ZW
Sample Info: SSTD005ZW,SSTD005ZW
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)	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)

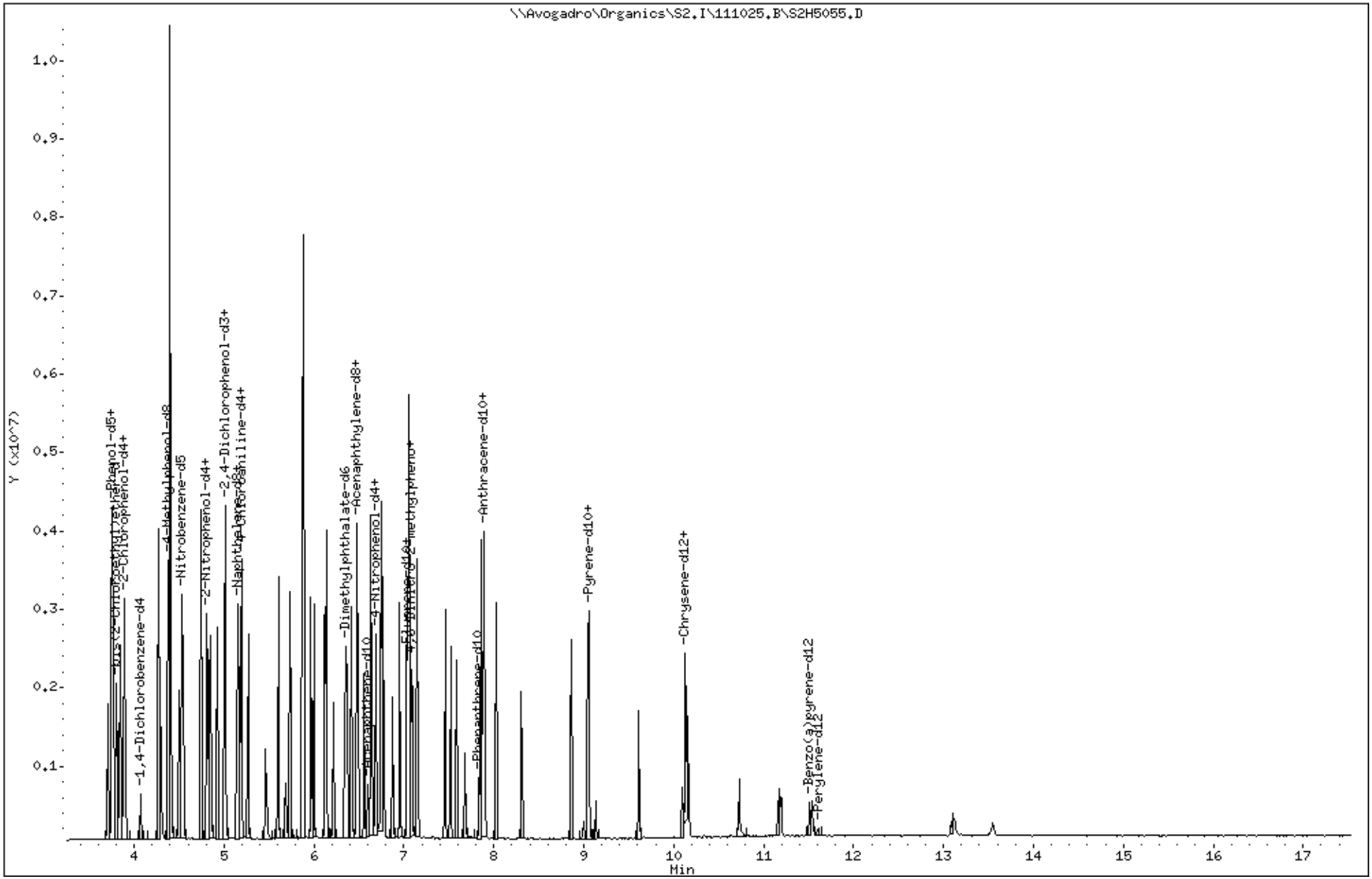
Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5055.D
Report Date: 26-Oct-2011 09:59

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

			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
Sample Info: SSTD0102W,SSTD0102W
Volume Injected (uL): 2.0
Column phase: RXI-5SILMS

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

\\Avogadro\Organics\S2.I\111025.B\S2H5056.D

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)	AMOUNTS 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
Sample Info: SSTD0402W,SSTD0402W
Volume Injected (uL): 2.0
Column phase: RXI-5SILMS

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

\\Avogadro\Organics\S2.I\111025.B\S2H5057.D

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.: H30S7

Instrument ID: S2 Calibration Date: 11/03/2011 Time: 9:55

Lab File ID: S2H5189.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202P 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	2.119	0.010	7.9	40.0
Phenol	3.455	3.739	0.800	8.2	25.0
Bis(2-chloroethyl)ether	2.539	2.657	0.700	4.6	25.0
2-Chlorophenol	1.121	1.207	0.800	7.7	25.0
2-Methylphenol	1.896	2.007	0.700	5.8	25.0
2,2´-Oxybis(1-chloropropane)	2.566	2.734	0.010	6.5	40.0
Acetophenone	3.271	3.510	0.010	7.3	40.0
4-Methylphenol	1.942	2.087	0.600	7.4	25.0
N-Nitroso-di-n-propylamine	1.580	1.839	0.500	16.4	25.0
Hexachloroethane	0.872	0.859	0.300	-1.5	25.0
Nitrobenzene	1.043	0.968	0.200	-7.2	25.0
Isophorone	1.782	1.687	0.400	-5.3	25.0
2-Nitrophenol	0.226	0.217	0.100	-3.9	25.0
2,4-Dimethylphenol	0.785	0.692	0.200	-11.8	25.0
Bis(2-chloroethoxy)methane	0.992	0.966	0.300	-2.6	25.0
2,4-Dichlorophenol	0.386	0.400	0.200	3.7	25.0
Naphthalene	1.030	0.964	0.700	-6.4	25.0
4-Chloroaniline	0.413	0.424	0.010	2.7	40.0
Hexachlorobutadiene	0.287	0.262	0.010	-8.8	40.0
Caprolactam	0.154	0.160	0.010	4.1	40.0
4-Chloro-3-methylphenol	0.625	0.687	0.200	9.9	25.0
2-Methylnaphthalene	0.704	0.737	0.400	4.7	25.0
Hexachlorocyclopentadiene	0.450	0.459	0.010	2.0	40.0
2,4,6-Trichlorophenol	0.494	0.475	0.200	-3.7	25.0
2,4,5-Trichlorophenol	0.508	0.480	0.200	-5.6	25.0
1,1´-Biphenyl	1.414	1.451	0.010	2.6	40.0
2-Chloronaphthalene	1.263	1.094	0.800	-13.4	25.0
2-Nitroaniline	0.606	0.605	0.010	-0.2	25.0
Dimethylphthalate	1.370	1.354	0.010	-1.2	40.0
2,6-Dinitrotoluene	0.339	0.357	0.200	5.4	25.0
Acenaphthylene	1.742	1.580	0.900	-9.3	25.0
3-Nitroaniline	0.224	0.244	0.010	8.6	40.0
Acenaphthene	1.128	1.043	0.900	-7.5	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.: H30S7

Instrument ID: S2 Calibration Date: 11/03/2011 Time: 9:55

Lab File ID: S2H5189.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202P 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	0.152	0.010	-2.0	40.0
4-Nitrophenol	0.410	0.414	0.010	1.0	40.0
Dibenzofuran	1.657	1.544	0.800	-6.8	25.0
2,4-Dinitrotoluene	0.430	0.456	0.200	6.1	25.0
Diethylphthalate	1.288	1.337	0.010	3.8	40.0
Fluorene	1.352	1.376	0.900	1.7	25.0
4-Chlorophenyl-phenylether	0.719	0.808	0.400	12.4	25.0
4-Nitroaniline	0.246	0.259	0.010	4.9	40.0
4,6-Dinitro-2-methylphenol	0.152	0.135	0.010	-11.3	40.0
N-Nitrosodiphenylamine [1]	0.610	0.622	0.010	2.0	40.0
1,2,4,5-Tetrachlorobenzene	1.610	1.395	0.010	-13.3	40.0
4-Bromophenyl-phenylether	0.217	0.207	0.100	-4.5	25.0
Hexachlorobenzene	0.231	0.212	0.100	-7.9	25.0
Atrazine	0.220	0.238	0.010	8.4	40.0
Pentachlorophenol	0.113	0.120	0.050	6.7	25.0
Phenanthrene	1.123	1.119	0.700	-0.4	25.0
Anthracene	1.142	1.118	0.700	-2.1	25.0
Carbazole	0.923	0.871	0.010	-5.7	40.0
Di-n-butylphthalate	0.991	1.055	0.010	6.5	40.0
Fluoranthene	1.156	1.140	0.600	-1.4	25.0
Pyrene	1.604	1.534	0.600	-4.4	25.0
Butylbenzylphthalate	0.497	0.506	0.010	1.9	40.0
3,3´-Dichlorobenzidine	0.297	0.333	0.010	12.4	40.0
Benzo(a)anthracene	1.187	1.079	0.800	-9.1	25.0
Chrysene	1.047	1.012	0.700	-3.3	25.0
Bis(2-ethylhexyl)phthalate	0.608	0.663	0.010	9.2	40.0
Di-n-octylphthalate	1.456	1.665	0.010	14.3	40.0
Benzo(b)fluoranthene	1.298	1.564	0.700	20.5	25.0
Benzo(k)fluoranthene	1.501	1.311	0.700	-12.7	25.0
Benzo(a)pyrene	1.140	1.060	0.700	-7.0	25.0
Indeno(1,2,3-cd)pyrene	0.878	0.689	0.500	-21.6	25.0
Dibenzo(a,h)anthracene	0.723	0.567	0.400	-21.6	25.0
Benzo(g,h,i)perylene	0.724	0.547	0.500	-24.4	25.0
2,3,4,6-Tetrachlorophenol	0.348	0.336	0.100	-3.7	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.: H30S7

Instrument ID: S2 Calibration Date: 11/03/2011 Time: 9:55

Lab File ID: S2H5189.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202P 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	1.266	0.010	0.5	25.0
Bis(2-chloroethyl)ether-d8	1.736	1.776	0.010	2.3	25.0
2-Chlorophenol-d4	1.090	1.130	0.010	3.7	25.0
4-Methylphenol-d8	1.708	1.888	0.010	10.6	25.0
Nitrobenzene-d5	0.208	0.188	0.010	-9.9	40.0
2-Nitrophenol-d4	0.230	0.232	0.010	1.1	25.0
2,4-Dichlorophenol-d3	0.420	0.458	0.010	9.2	25.0
4-Chloroaniline-d4	0.373	0.423	0.010	13.4	40.0
Dimethylphthalate-d6	1.471	1.465	0.010	-0.4	40.0
Acenaphthylene-d8	1.913	1.788	0.010	-6.5	25.0
4-Nitrophenol-d4	0.212	0.202	0.010	-4.9	40.0
Fluorene-d10	1.351	1.294	0.010	-4.2	25.0
4,6-Dinitro-2-methylphenol-d2	0.156	0.157	0.010	0.5	25.0
Anthracene-d10	1.143	1.066	0.010	-6.7	25.0
Pyrene-d10	1.260	1.203	0.010	-4.6	25.0
Benzo(a)pyrene-d12	0.982	0.894	0.010	-8.9	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.: H30S7

Instrument ID: S2 Calibration Date: 11/03/2011 Time: 15:43

Lab File ID: S2H5202A.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202Q 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	1.964	0.010	0.0	40.0
Phenol	3.455	3.092	0.800	-10.5	25.0
Bis(2-chloroethyl)ether	2.539	2.320	0.700	-8.6	25.0
2-Chlorophenol	1.121	1.011	0.800	-9.7	25.0
2-Methylphenol	1.896	1.829	0.700	-3.6	25.0
2,2´-Oxybis(1-chloropropane)	2.566	2.241	0.010	-12.7	40.0
Acetophenone	3.271	3.204	0.010	-2.0	40.0
4-Methylphenol	1.942	1.960	0.600	0.9	25.0
N-Nitroso-di-n-propylamine	1.580	1.633	0.500	3.4	25.0
Hexachloroethane	0.872	0.835	0.300	-4.2	25.0
Nitrobenzene	1.043	1.026	0.200	-1.7	25.0
Isophorone	1.782	1.675	0.400	-6.0	25.0
2-Nitrophenol	0.226	0.211	0.100	-6.5	25.0
2,4-Dimethylphenol	0.785	0.800	0.200	1.8	25.0
Bis(2-chloroethoxy)methane	0.992	1.014	0.300	2.3	25.0
2,4-Dichlorophenol	0.386	0.420	0.200	8.8	25.0
Naphthalene	1.030	1.057	0.700	2.6	25.0
4-Chloroaniline	0.413	0.465	0.010	12.5	40.0
Hexachlorobutadiene	0.287	0.282	0.010	-1.7	40.0
Caprolactam	0.154	0.140	0.010	-9.3	40.0
4-Chloro-3-methylphenol	0.625	0.658	0.200	5.2	25.0
2-Methylnaphthalene	0.704	0.787	0.400	11.8	25.0
Hexachlorocyclopentadiene	0.450	0.392	0.010	-12.8	40.0
2,4,6-Trichlorophenol	0.494	0.440	0.200	-10.9	25.0
2,4,5-Trichlorophenol	0.508	0.467	0.200	-8.1	25.0
1,1´-Biphenyl	1.414	1.253	0.010	-11.4	40.0
2-Chloronaphthalene	1.263	1.056	0.800	-16.4	25.0
2-Nitroaniline	0.606	0.507	0.010	-16.3	25.0
Dimethylphthalate	1.370	1.264	0.010	-7.7	40.0
2,6-Dinitrotoluene	0.339	0.331	0.200	-2.4	25.0
Acenaphthylene	1.742	1.557	0.900	-10.6	25.0
3-Nitroaniline	0.224	0.211	0.010	-6.1	40.0
Acenaphthene	1.128	0.927	0.900	-17.8	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.: H30S7

Instrument ID: S2 Calibration Date: 11/03/2011 Time: 15:43

Lab File ID: S2H5202A.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202Q 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	0.100	0.010	-35.4	40.0
4-Nitrophenol	0.410	0.312	0.010	-23.9	40.0
Dibenzofuran	1.657	1.443	0.800	-12.9	25.0
2,4-Dinitrotoluene	0.430	0.409	0.200	-4.9	25.0
Diethylphthalate	1.288	1.167	0.010	-9.4	40.0
Fluorene	1.352	1.200	0.900	-11.3	25.0
4-Chlorophenyl-phenylether	0.719	0.721	0.400	0.3	25.0
4-Nitroaniline	0.246	0.223	0.010	-9.6	40.0
4,6-Dinitro-2-methylphenol	0.152	0.109	0.010	-28.2	40.0
N-Nitrosodiphenylamine [1]	0.610	0.660	0.010	8.2	40.0
1,2,4,5-Tetrachlorobenzene	1.610	1.250	0.010	-22.4	40.0
4-Bromophenyl-phenylether	0.217	0.232	0.100	7.1	25.0
Hexachlorobenzene	0.231	0.212	0.100	-8.2	25.0
Atrazine	0.220	0.240	0.010	9.1	40.0
Pentachlorophenol	0.113	0.108	0.050	-4.2	25.0
Phenanthrene	1.123	1.065	0.700	-5.2	25.0
Anthracene	1.142	1.143	0.700	0.1	25.0
Carbazole	0.923	0.811	0.010	-12.1	40.0
Di-n-butylphthalate	0.991	1.039	0.010	4.8	40.0
Fluoranthene	1.156	1.126	0.600	-2.6	25.0
Pyrene	1.604	1.712	0.600	6.7	25.0
Butylbenzylphthalate	0.497	0.518	0.010	4.2	40.0
3,3´-Dichlorobenzidine	0.297	0.277	0.010	-6.7	40.0
Benzo(a)anthracene	1.187	1.077	0.800	-9.3	25.0
Chrysene	1.047	0.963	0.700	-8.0	25.0
Bis(2-ethylhexyl)phthalate	0.608	0.679	0.010	11.7	40.0
Di-n-octylphthalate	1.456	1.419	0.010	-2.5	40.0
Benzo(b)fluoranthene	1.298	1.340	0.700	3.2	25.0
Benzo(k)fluoranthene	1.501	1.387	0.700	-7.6	25.0
Benzo(a)pyrene	1.140	1.034	0.700	-9.3	25.0
Indeno(1,2,3-cd)pyrene	0.878	0.669	0.500	-23.9	25.0
Dibenzo(a,h)anthracene	0.723	0.536	0.400	-25.9	25.0
Benzo(g,h,i)perylene	0.724	0.528	0.500	-27.0	25.0
2,3,4,6-Tetrachlorophenol	0.348	0.286	0.100	-17.9	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.: H30S7

Instrument ID: S2 Calibration Date: 11/03/2011 Time: 15:43

Lab File ID: S2H5202A.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202Q 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	1.170	0.010	-7.1	25.0
Bis(2-chloroethyl)ether-d8	1.736	1.665	0.010	-4.1	25.0
2-Chlorophenol-d4	1.090	1.056	0.010	-3.1	25.0
4-Methylphenol-d8	1.708	1.739	0.010	1.8	25.0
Nitrobenzene-d5	0.208	0.197	0.010	-5.7	40.0
2-Nitrophenol-d4	0.230	0.228	0.010	-0.6	25.0
2,4-Dichlorophenol-d3	0.420	0.445	0.010	6.1	25.0
4-Chloroaniline-d4	0.373	0.418	0.010	12.1	40.0
Dimethylphthalate-d6	1.471	1.440	0.010	-2.1	40.0
Acenaphthylene-d8	1.913	1.655	0.010	-13.4	25.0
4-Nitrophenol-d4	0.212	0.157	0.010	-26.1	40.0
Fluorene-d10	1.351	1.271	0.010	-6.0	25.0
4,6-Dinitro-2-methylphenol-d2	0.156	0.143	0.010	-8.2	25.0
Anthracene-d10	1.143	1.120	0.010	-2.0	25.0
Pyrene-d10	1.260	1.272	0.010	1.0	25.0
Benzo(a)pyrene-d12	0.982	0.868	0.010	-11.6	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.: H30S7

Instrument ID: S2 Calibration Date: 11/03/2011 Time: 23:14

Lab File ID: S2H5223.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202R 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	1.814	0.010	-7.6	50.0
Phenol	3.455	2.956	0.010	-14.4	50.0
Bis(2-chloroethyl)ether	2.539	2.171	0.010	-14.5	50.0
2-Chlorophenol	1.121	0.927	0.010	-17.3	50.0
2-Methylphenol	1.896	1.703	0.010	-10.2	50.0
2,2´-Oxybis(1-chloropropane)	2.566	2.062	0.010	-19.6	50.0
Acetophenone	3.271	3.126	0.010	-4.4	50.0
4-Methylphenol	1.942	1.874	0.010	-3.5	50.0
N-Nitroso-di-n-propylamine	1.580	1.443	0.010	-8.7	50.0
Hexachloroethane	0.872	0.771	0.010	-11.6	50.0
Nitrobenzene	1.043	0.965	0.010	-7.5	50.0
Isophorone	1.782	1.667	0.010	-6.4	50.0
2-Nitrophenol	0.226	0.212	0.010	-5.9	50.0
2,4-Dimethylphenol	0.785	0.754	0.010	-3.9	50.0
Bis(2-chloroethoxy)methane	0.992	1.012	0.010	2.0	50.0
2,4-Dichlorophenol	0.386	0.406	0.010	5.2	50.0
Naphthalene	1.030	1.051	0.010	2.1	50.0
4-Chloroaniline	0.413	0.435	0.010	5.3	50.0
Hexachlorobutadiene	0.287	0.279	0.010	-2.7	50.0
Caprolactam	0.154	0.135	0.010	-12.4	50.0
4-Chloro-3-methylphenol	0.625	0.617	0.010	-1.3	50.0
2-Methylnaphthalene	0.704	0.762	0.010	8.2	50.0
Hexachlorocyclopentadiene	0.450	0.445	0.010	-1.0	50.0
2,4,6-Trichlorophenol	0.494	0.497	0.010	0.7	50.0
2,4,5-Trichlorophenol	0.508	0.497	0.010	-2.2	50.0
1,1´-Biphenyl	1.414	1.327	0.010	-6.1	50.0
2-Chloronaphthalene	1.263	1.106	0.010	-12.4	50.0
2-Nitroaniline	0.606	0.491	0.010	-18.9	50.0
Dimethylphthalate	1.370	1.320	0.010	-3.6	50.0
2,6-Dinitrotoluene	0.339	0.345	0.010	1.8	50.0
Acenaphthylene	1.742	1.640	0.010	-5.9	50.0
3-Nitroaniline	0.224	0.215	0.010	-4.2	50.0
Acenaphthene	1.128	0.988	0.010	-12.3	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.: H30S7

Instrument ID: S2 Calibration Date: 11/03/2011 Time: 23:14

Lab File ID: S2H5223.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202R 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	0.081	0.010	-47.6	50.0
4-Nitrophenol	0.410	0.294	0.010	-28.2	50.0
Dibenzofuran	1.657	1.533	0.010	-7.5	50.0
2,4-Dinitrotoluene	0.430	0.447	0.010	4.0	50.0
Diethylphthalate	1.288	1.254	0.010	-2.6	50.0
Fluorene	1.352	1.313	0.010	-2.9	50.0
4-Chlorophenyl-phenylether	0.719	0.764	0.010	6.2	50.0
4-Nitroaniline	0.246	0.200	0.010	-19.0	50.0
4,6-Dinitro-2-methylphenol	0.152	0.102	0.010	-33.0	50.0
N-Nitrosodiphenylamine [1]	0.610	0.646	0.010	5.9	50.0
1,2,4,5-Tetrachlorobenzene	1.610	1.455	0.010	-9.6	50.0
4-Bromophenyl-phenylether	0.217	0.244	0.010	12.6	50.0
Hexachlorobenzene	0.231	0.224	0.010	-3.0	50.0
Atrazine	0.220	0.236	0.010	7.5	50.0
Pentachlorophenol	0.113	0.114	0.010	0.8	50.0
Phenanthrene	1.123	1.050	0.010	-6.5	50.0
Anthracene	1.142	1.087	0.010	-4.8	50.0
Carbazole	0.923	0.752	0.010	-18.5	50.0
Di-n-butylphthalate	0.991	0.958	0.010	-3.3	50.0
Fluoranthene	1.156	1.062	0.010	-8.1	50.0
Pyrene	1.604	1.771	0.010	10.4	50.0
Butylbenzylphthalate	0.497	0.582	0.010	17.1	50.0
3,3´-Dichlorobenzidine	0.297	0.271	0.010	-8.5	50.0
Benzo(a)anthracene	1.187	1.047	0.010	-11.8	50.0
Chrysene	1.047	0.983	0.010	-6.1	50.0
Bis(2-ethylhexyl)phthalate	0.608	0.755	0.010	24.3	50.0
Di-n-octylphthalate	1.456	2.164	0.010	48.6	50.0
Benzo(b)fluoranthene	1.298	1.303	0.010	0.4	50.0
Benzo(k)fluoranthene	1.501	1.504	0.010	0.2	50.0
Benzo(a)pyrene	1.140	1.005	0.010	-11.8	50.0
Indeno(1,2,3-cd)pyrene	0.878	0.647	0.010	-26.3	50.0
Dibenzo(a,h)anthracene	0.723	0.542	0.010	-25.1	50.0
Benzo(g,h,i)perylene	0.724	0.572	0.010	-21.0	50.0
2,3,4,6-Tetrachlorophenol	0.348	0.324	0.010	-6.9	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.: H30S7

Instrument ID: S2 Calibration Date: 11/03/2011 Time: 23:14

Lab File ID: S2H5223.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202R 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	1.032	0.010	-18.1	50.0
Bis(2-chloroethyl)ether-d8	1.736	1.578	0.010	-9.1	50.0
2-Chlorophenol-d4	1.090	0.983	0.010	-9.8	50.0
4-Methylphenol-d8	1.708	1.607	0.010	-5.9	50.0
Nitrobenzene-d5	0.208	0.188	0.010	-9.9	50.0
2-Nitrophenol-d4	0.230	0.228	0.010	-1.0	50.0
2,4-Dichlorophenol-d3	0.420	0.434	0.010	3.4	50.0
4-Chloroaniline-d4	0.373	0.377	0.010	1.1	50.0
Dimethylphthalate-d6	1.471	1.487	0.010	1.1	50.0
Acenaphthylene-d8	1.913	1.784	0.010	-6.7	50.0
4-Nitrophenol-d4	0.212	0.149	0.010	-29.7	50.0
Fluorene-d10	1.351	1.333	0.010	-1.3	50.0
4,6-Dinitro-2-methylphenol-d2	0.156	0.123	0.010	-21.2	50.0
Anthracene-d10	1.143	1.079	0.010	-5.6	50.0
Pyrene-d10	1.260	1.351	0.010	7.2	50.0
Benzo(a)pyrene-d12	0.982	0.875	0.010	-10.9	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.: H30S7

Instrument ID: S2 Calibration Date: 11/04/2011 Time: 13:08

Lab File ID: S2H5225.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202S 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	1.812	0.010	-7.7	40.0
Phenol	3.455	3.102	0.800	-10.2	25.0
Bis(2-chloroethyl)ether	2.539	2.327	0.700	-8.4	25.0
2-Chlorophenol	1.121	1.084	0.800	-3.3	25.0
2-Methylphenol	1.896	1.827	0.700	-3.7	25.0
2,2´-Oxybis(1-chloropropane)	2.566	2.320	0.010	-9.6	40.0
Acetophenone	3.271	2.962	0.010	-9.4	40.0
4-Methylphenol	1.942	1.926	0.600	-0.8	25.0
N-Nitroso-di-n-propylamine	1.580	1.453	0.500	-8.0	25.0
Hexachloroethane	0.872	0.838	0.300	-3.8	25.0
Nitrobenzene	1.043	0.936	0.200	-10.3	25.0
Isophorone	1.782	1.722	0.400	-3.4	25.0
2-Nitrophenol	0.226	0.201	0.100	-11.1	25.0
2,4-Dimethylphenol	0.785	0.779	0.200	-0.7	25.0
Bis(2-chloroethoxy)methane	0.992	0.958	0.300	-3.4	25.0
2,4-Dichlorophenol	0.386	0.400	0.200	3.5	25.0
Naphthalene	1.030	1.049	0.700	1.9	25.0
4-Chloroaniline	0.413	0.447	0.010	8.1	40.0
Hexachlorobutadiene	0.287	0.279	0.010	-2.8	40.0
Caprolactam	0.154	0.158	0.010	2.5	40.0
4-Chloro-3-methylphenol	0.625	0.603	0.200	-3.5	25.0
2-Methylnaphthalene	0.704	0.747	0.400	6.1	25.0
Hexachlorocyclopentadiene	0.450	0.411	0.010	-8.6	40.0
2,4,6-Trichlorophenol	0.494	0.443	0.200	-10.2	25.0
2,4,5-Trichlorophenol	0.508	0.532	0.200	4.7	25.0
1,1´-Biphenyl	1.414	1.288	0.010	-8.9	40.0
2-Chloronaphthalene	1.263	1.137	0.800	-10.0	25.0
2-Nitroaniline	0.606	0.519	0.010	-14.4	25.0
Dimethylphthalate	1.370	1.387	0.010	1.2	40.0
2,6-Dinitrotoluene	0.339	0.340	0.200	0.5	25.0
Acenaphthylene	1.742	1.549	0.900	-11.0	25.0
3-Nitroaniline	0.224	0.216	0.010	-3.8	40.0
Acenaphthene	1.128	0.985	0.900	-12.7	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.: H30S7

Instrument ID: S2 Calibration Date: 11/04/2011 Time: 13:08

Lab File ID: S2H5225.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202S 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
2,4-Dinitrophenol	0.155	0.122	0.010	-21.4	40.0
4-Nitrophenol	0.410	0.332	0.010	-19.1	40.0
Dibenzofuran	1.657	1.483	0.800	-10.5	25.0
2,4-Dinitrotoluene	0.430	0.374	0.200	-13.0	25.0
Diethylphthalate	1.288	1.059	0.010	-17.7	40.0
Fluorene	1.352	1.241	0.900	-8.3	25.0
4-Chlorophenyl-phenylether	0.719	0.690	0.400	-4.1	25.0
4-Nitroaniline	0.246	0.223	0.010	-9.4	40.0
4,6-Dinitro-2-methylphenol	0.152	0.133	0.010	-12.4	40.0
N-Nitrosodiphenylamine [1]	0.610	0.647	0.010	6.1	40.0
1,2,4,5-Tetrachlorobenzene	1.610	1.375	0.010	-14.6	40.0
4-Bromophenyl-phenylether	0.217	0.234	0.100	8.2	25.0
Hexachlorobenzene	0.231	0.217	0.100	-5.8	25.0
Atrazine	0.220	0.219	0.010	-0.5	40.0
Pentachlorophenol	0.113	0.098	0.050	-12.6	25.0
Phenanthrene	1.123	1.132	0.700	0.8	25.0
Anthracene	1.142	1.111	0.700	-2.7	25.0
Carbazole	0.923	0.823	0.010	-10.8	40.0
Di-n-butylphthalate	0.991	1.117	0.010	12.7	40.0
Fluoranthene	1.156	1.121	0.600	-3.0	25.0
Pyrene	1.604	1.535	0.600	-4.4	25.0
Butylbenzylphthalate	0.497	0.519	0.010	4.5	40.0
3,3´-Dichlorobenzidine	0.297	0.311	0.010	4.8	40.0
Benzo(a)anthracene	1.187	1.057	0.800	-10.9	25.0
Chrysene	1.047	0.975	0.700	-6.8	25.0
Bis(2-ethylhexyl)phthalate	0.608	0.700	0.010	15.3	40.0
Di-n-octylphthalate	1.456	1.548	0.010	6.3	40.0
Benzo(b)fluoranthene	1.298	1.490	0.700	14.8	25.0
Benzo(k)fluoranthene	1.501	1.137	0.700	-24.2	25.0
Benzo(a)pyrene	1.140	1.029	0.700	-9.7	25.0
Indeno(1,2,3-cd)pyrene	0.878	0.750	0.500	-14.6	25.0
Dibenzo(a,h)anthracene	0.723	0.582	0.400	-19.5	25.0
Benzo(g,h,i)perylene	0.724	0.626	0.500	-13.5	25.0
2,3,4,6-Tetrachlorophenol	0.348	0.293	0.100	-15.9	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.: H30S7

Instrument ID: S2 Calibration Date: 11/04/2011 Time: 13:08

Lab File ID: S2H5225.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202S 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	1.169	0.010	-7.2	25.0
Bis(2-chloroethyl)ether-d8	1.736	1.610	0.010	-7.3	25.0
2-Chlorophenol-d4	1.090	1.042	0.010	-4.4	25.0
4-Methylphenol-d8	1.708	1.690	0.010	-1.0	25.0
Nitrobenzene-d5	0.208	0.189	0.010	-9.1	40.0
2-Nitrophenol-d4	0.230	0.226	0.010	-1.9	25.0
2,4-Dichlorophenol-d3	0.420	0.447	0.010	6.4	25.0
4-Chloroaniline-d4	0.373	0.384	0.010	2.9	40.0
Dimethylphthalate-d6	1.471	1.496	0.010	1.7	40.0
Acenaphthylene-d8	1.913	1.645	0.010	-14.0	25.0
4-Nitrophenol-d4	0.212	0.174	0.010	-17.7	40.0
Fluorene-d10	1.351	1.254	0.010	-7.2	25.0
4,6-Dinitro-2-methylphenol-d2	0.156	0.145	0.010	-7.3	25.0
Anthracene-d10	1.143	1.051	0.010	-8.0	25.0
Pyrene-d10	1.260	1.271	0.010	0.9	25.0
Benzo(a)pyrene-d12	0.982	0.888	0.010	-9.6	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.: H30S7

Instrument ID: S2 Calibration Date: 11/04/2011 Time: 17:43

Lab File ID: S2H5234.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202T 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	2.036	0.010	3.7	50.0
Phenol	3.455	3.421	0.010	-1.0	50.0
Bis(2-chloroethyl)ether	2.539	2.514	0.010	-1.0	50.0
2-Chlorophenol	1.121	1.192	0.010	6.4	50.0
2-Methylphenol	1.896	1.967	0.010	3.7	50.0
2,2´-Oxybis(1-chloropropane)	2.566	2.257	0.010	-12.0	50.0
Acetophenone	3.271	3.060	0.010	-6.4	50.0
4-Methylphenol	1.942	1.994	0.010	2.7	50.0
N-Nitroso-di-n-propylamine	1.580	1.690	0.010	7.0	50.0
Hexachloroethane	0.872	0.884	0.010	1.4	50.0
Nitrobenzene	1.043	0.896	0.010	-14.1	50.0
Isophorone	1.782	1.675	0.010	-6.0	50.0
2-Nitrophenol	0.226	0.207	0.010	-8.1	50.0
2,4-Dimethylphenol	0.785	0.775	0.010	-1.2	50.0
Bis(2-chloroethoxy)methane	0.992	0.999	0.010	0.7	50.0
2,4-Dichlorophenol	0.386	0.414	0.010	7.1	50.0
Naphthalene	1.030	0.987	0.010	-4.2	50.0
4-Chloroaniline	0.413	0.403	0.010	-2.4	50.0
Hexachlorobutadiene	0.287	0.284	0.010	-1.1	50.0
Caprolactam	0.154	0.157	0.010	2.3	50.0
4-Chloro-3-methylphenol	0.625	0.664	0.010	6.2	50.0
2-Methylnaphthalene	0.704	0.699	0.010	-0.8	50.0
Hexachlorocyclopentadiene	0.450	0.448	0.010	-0.4	50.0
2,4,6-Trichlorophenol	0.494	0.491	0.010	-0.6	50.0
2,4,5-Trichlorophenol	0.508	0.499	0.010	-1.8	50.0
1,1´-Biphenyl	1.414	1.431	0.010	1.2	50.0
2-Chloronaphthalene	1.263	1.162	0.010	-8.0	50.0
2-Nitroaniline	0.606	0.561	0.010	-7.5	50.0
Dimethylphthalate	1.370	1.341	0.010	-2.2	50.0
2,6-Dinitrotoluene	0.339	0.358	0.010	5.7	50.0
Acenaphthylene	1.742	1.615	0.010	-7.3	50.0
3-Nitroaniline	0.224	0.235	0.010	4.7	50.0
Acenaphthene	1.128	1.111	0.010	-1.5	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.: H30S7

Instrument ID: S2 Calibration Date: 11/04/2011 Time: 17:43

Lab File ID: S2H5234.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202T 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	0.108	0.010	-30.1	50.0
4-Nitrophenol	0.410	0.350	0.010	-14.7	50.0
Dibenzofuran	1.657	1.581	0.010	-4.6	50.0
2,4-Dinitrotoluene	0.430	0.460	0.010	7.0	50.0
Diethylphthalate	1.288	1.363	0.010	5.9	50.0
Fluorene	1.352	1.340	0.010	-0.9	50.0
4-Chlorophenyl-phenylether	0.719	0.816	0.010	13.4	50.0
4-Nitroaniline	0.246	0.230	0.010	-6.7	50.0
4,6-Dinitro-2-methylphenol	0.152	0.107	0.010	-29.7	50.0
N-Nitrosodiphenylamine [1]	0.610	0.550	0.010	-9.8	50.0
1,2,4,5-Tetrachlorobenzene	1.610	1.613	0.010	0.2	50.0
4-Bromophenyl-phenylether	0.217	0.191	0.010	-11.6	50.0
Hexachlorobenzene	0.231	0.222	0.010	-3.7	50.0
Atrazine	0.220	0.228	0.010	3.7	50.0
Pentachlorophenol	0.113	0.093	0.010	-17.0	50.0
Phenanthrene	1.123	0.966	0.010	-14.0	50.0
Anthracene	1.142	0.947	0.010	-17.1	50.0
Carbazole	0.923	0.799	0.010	-13.4	50.0
Di-n-butylphthalate	0.991	0.976	0.010	-1.5	50.0
Fluoranthene	1.156	1.061	0.010	-8.2	50.0
Pyrene	1.604	1.513	0.010	-5.7	50.0
Butylbenzylphthalate	0.497	0.566	0.010	14.1	50.0
3,3´-Dichlorobenzidine	0.297	0.308	0.010	4.0	50.0
Benzo(a)anthracene	1.187	1.061	0.010	-10.6	50.0
Chrysene	1.047	1.027	0.010	-1.9	50.0
Bis(2-ethylhexyl)phthalate	0.608	0.784	0.010	29.0	50.0
Di-n-octylphthalate	1.456	1.836	0.010	26.1	50.0
Benzo(b)fluoranthene	1.298	1.503	0.010	15.8	50.0
Benzo(k)fluoranthene	1.501	1.213	0.010	-19.2	50.0
Benzo(a)pyrene	1.140	0.983	0.010	-13.8	50.0
Indeno(1,2,3-cd)pyrene	0.878	0.738	0.010	-16.0	50.0
Dibenzo(a,h)anthracene	0.723	0.593	0.010	-18.0	50.0
Benzo(g,h,i)perylene	0.724	0.589	0.010	-18.6	50.0
2,3,4,6-Tetrachlorophenol	0.348	0.341	0.010	-2.2	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.: H30S7

Instrument ID: S2 Calibration Date: 11/04/2011 Time: 17:43

Lab File ID: S2H5234.D Init. Calib. Date(s): 10/25/2011 10/25/2011

EPA Sample No.(SSTD020##) SSTD0202T 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	1.134	0.010	-10.0	50.0
Bis(2-chloroethyl)ether-d8	1.736	1.598	0.010	-7.9	50.0
2-Chlorophenol-d4	1.090	1.141	0.010	4.7	50.0
4-Methylphenol-d8	1.708	1.870	0.010	9.5	50.0
Nitrobenzene-d5	0.208	0.185	0.010	-11.0	50.0
2-Nitrophenol-d4	0.230	0.236	0.010	2.7	50.0
2,4-Dichlorophenol-d3	0.420	0.465	0.010	10.7	50.0
4-Chloroaniline-d4	0.373	0.413	0.010	10.8	50.0
Dimethylphthalate-d6	1.471	1.601	0.010	8.8	50.0
Acenaphthylene-d8	1.913	1.863	0.010	-2.6	50.0
4-Nitrophenol-d4	0.212	0.187	0.010	-11.8	50.0
Fluorene-d10	1.351	1.236	0.010	-8.5	50.0
4,6-Dinitro-2-methylphenol-d2	0.156	0.120	0.010	-23.4	50.0
Anthracene-d10	1.143	1.031	0.010	-9.7	50.0
Pyrene-d10	1.260	1.285	0.010	2.0	50.0
Benzo(a)pyrene-d12	0.982	0.850	0.010	-13.4	50.0

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5189.D
Report Date: 07-Nov-2011 13:59

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5189.D
Lab Smp Id: SSTD0202P Client Smp ID: SSTD0202P
Inj Date : 03-NOV-2011 09:55
Operator : SRC: Inst ID: S2.i
Smp Info : SSTD0202P,SSTD0202P
Misc Info : 2,3
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 13:59 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	3.511	3.511	(0.903)	274839	40.0000	43
$	2 Phenol-d5	71	3.565	3.565	(0.917)	164178	40.0000	40
	3 Phenol	94	3.576	3.576	(0.920)	484853	40.0000	43
$	4 bis(2-Chloroethyl)ether-d8	67	3.619	3.619	(0.931)	230340	40.0000	41
	5 bis(2-Chloroethyl)ether	93	3.651	3.651	(0.939)	344549	40.0000	42
$	6 2-Chlorophenol-d4	132	3.694	3.694	(0.950)	146516	40.0000	41
	7 2-Chlorophenol	128	3.704	3.704	(0.953)	156589	40.0000	43
*	8 1,4-Dichlorobenzene-d4	152	3.887	3.887	(1.000)	129684	40.0000	(Q)
	9 2-Methylphenol	108	4.090	4.090	(1.052)	260266	40.0000	42
	10 2,2'-oxybis(1-Chloropropane)	45	4.112	4.112	(1.058)	354569	40.0000	43(Q)
$	11 4-Methylphenol-d8	113	4.198	4.198	(1.080)	244906	40.0000	44
	13 Acetophenone	105	4.208	4.208	(1.083)	455161	40.0000	43
	14 N-Nitroso-di-n-propylamine	70	4.219	4.219	(1.086)	238502	40.0000	47(Q)
	12 4-Methylphenol	108	4.219	4.219	(1.086)	270668	40.0000	43
	15 Hexachloroethane	117	4.305	4.305	(1.108)	111346	40.0000	39(Q)
$	16 Nitrobenzene-d5	128	4.337	4.337	(0.876)	82815	40.0000	36(Q)
	17 Nitrobenzene	77	4.358	4.358	(0.881)	427275	40.0000	37
	18 Isophorone	82	4.552	4.552	(0.920)	744184	40.0000	38
$	19 2-Nitrophenol-d4	143	4.616	4.616	(0.933)	102543	40.0000	40
	20 2-Nitrophenol	139	4.627	4.627	(0.935)	95662	40.0000	38
	21 2,4-Dimethylphenol	107	4.669	4.669	(0.944)	305490	40.0000	35(Q)

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5189.D
Report Date: 07-Nov-2011 13:59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	22 bis(2-Chloroethoxy)methane	93	4.745	4.745	(0.959)	426028	40.0000	39
$	23 2,4-Dichlorophenol-d3	165	4.820	4.820	(0.974)	202210	40.0000	44
	24 2,4-Dichlorophenol	162	4.830	4.830	(0.976)	176640	40.0000	41
*	25 Naphthalene-d8	136	4.948	4.948	(1.000)	441173	40.0000	
	26 Naphthalene	128	4.970	4.970	(1.004)	425178	40.0000	37
$	27 4-Chloroaniline-d4	131	5.002	5.002	(1.011)	186457	40.0000	45(Q)
	28 4-Chloroaniline	127	5.013	5.013	(1.013)	187170	40.0000	41
	29 Hexachlorobutadiene	225	5.077	5.077	(1.026)	115372	40.0000	36
	30 Caprolactam	113	5.270	5.270	(1.065)	70672	40.0000	42
	31 4-Chloro-3-methylphenol	107	5.420	5.420	(1.095)	303282	40.0000	44
	32 2-Methylnaphthalene	142	5.549	5.549	(1.121)	325031	40.0000	42
	33 Hexachlorocyclopentadiene	237	5.688	5.688	(0.886)	152559	40.0000	41(Q)
	34 1,2,4,5-Tetrachlorobenzene	216	5.688	5.688	(0.886)	463824	40.0000	35
	35 2,4,6-Trichlorophenol	196	5.785	5.785	(0.901)	158049	40.0000	39
	36 2,4,5-Trichlorophenol	196	5.817	5.817	(0.906)	159451	40.0000	38
	37 1,1'-Biphenyl	154	5.935	5.935	(0.925)	482364	40.0000	41
	38 2-Chloronaphthalene	162	5.946	5.946	(0.926)	363810	40.0000	35
	39 2-Nitroaniline	65	6.031	6.031	(0.940)	201005	40.0000	40
$	40 Dimethylphthalate-d6	166	6.171	6.171	(0.962)	486959	40.0000	40
	41 Dimethylphthalate	163	6.192	6.192	(0.965)	450109	40.0000	40
	42 2,6-Dinitrotoluene	165	6.235	6.235	(0.972)	118618	40.0000	42
$	43 Acenaphthylene-d8	160	6.289	6.289	(0.980)	594500	40.0000	37
	44 Acenaphthylene	152	6.299	6.299	(0.982)	525319	40.0000	36
	45 3-Nitroaniline	138	6.375	6.375	(0.993)	80999	40.0000	43
*	46 Acenaphthene-d10	164	6.417	6.417	(1.000)	332463	40.0000	
	47 Acenaphthene	153	6.439	6.439	(1.003)	346892	40.0000	37
	48 2,4-Dinitrophenol	184	6.460	6.460	(1.007)	50548	40.0000	39(Q)
	52 Dibenzofuran	168	6.589	6.589	(1.027)	513345	40.0000	37
$	49 4-Nitrophenol-d4	143	6.503	6.503	(1.013)	67004	40.0000	38
	50 4-Nitrophenol	109	6.514	6.514	(1.015)	137613	40.0000	40
	51 2,4-Dinitrotoluene	165	6.568	6.568	(1.023)	151740	40.0000	42(Q)
	118 2,3,4,6-Tetrachlorophenol	232	6.686	6.686	(1.042)	111554	40.0000	39
	53 Diethylphthalate	149	6.771	6.771	(1.055)	444397	40.0000	42
$	54 Fluorene-d10	176	6.846	6.846	(1.067)	430338	40.0000	38
	56 Fluorene	166	6.868	6.868	(1.070)	457415	40.0000	41
	55 4-Chlorophenyl-phenylether	204	6.868	6.868	(1.070)	268733	40.0000	45
	57 4-Nitroaniline	138	6.879	6.879	(1.072)	85958	40.0000	42(Q)
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.900	6.900	(0.903)	94202	40.0000	40
	59 4,6-Dinitro-2-methylphenol	198	6.911	6.911	(0.905)	81204	40.0000	35(Q)
	60 N-Nitrosodiphenylamine	169	6.964	6.964	(0.912)	373505	40.0000	41
	61 4-Bromophenyl-phenylether	248	7.275	7.275	(0.952)	124187	40.0000	38
	62 Hexachlorobenzene	284	7.329	7.329	(0.959)	127520	40.0000	37
	63 Atrazine	200	7.404	7.404	(0.969)	143086	40.0000	43
	64 Pentachlorophenol	266	7.490	7.490	(0.980)	72136	40.0000	43
*	65 Phenanthrene-d10	188	7.640	7.640	(1.000)	600388	40.0000	
	66 Phenanthrene	178	7.661	7.661	(1.003)	671664	40.0000	40
$	67 Anthracene-d10	188	7.694	7.694	(1.007)	639954	40.0000	37
	68 Anthracene	178	7.704	7.704	(1.008)	671101	40.0000	39
	117 Carbazole	167	7.833	7.833	(1.025)	522646	40.0000	38
	70 Di-n-butylphthalate	149	8.122	8.122	(1.063)	633700	40.0000	43
	71 Fluoranthene	202	8.659	8.659	(1.133)	684416	40.0000	39
$	72 Pyrene-d10	212	8.830	8.830	(0.891)	542841	40.0000	38
	73 Pyrene	202	8.852	8.852	(0.893)	692373	40.0000	38
	74 Butylbenzylphthalate	149	9.409	9.409	(0.949)	228435	40.0000	41

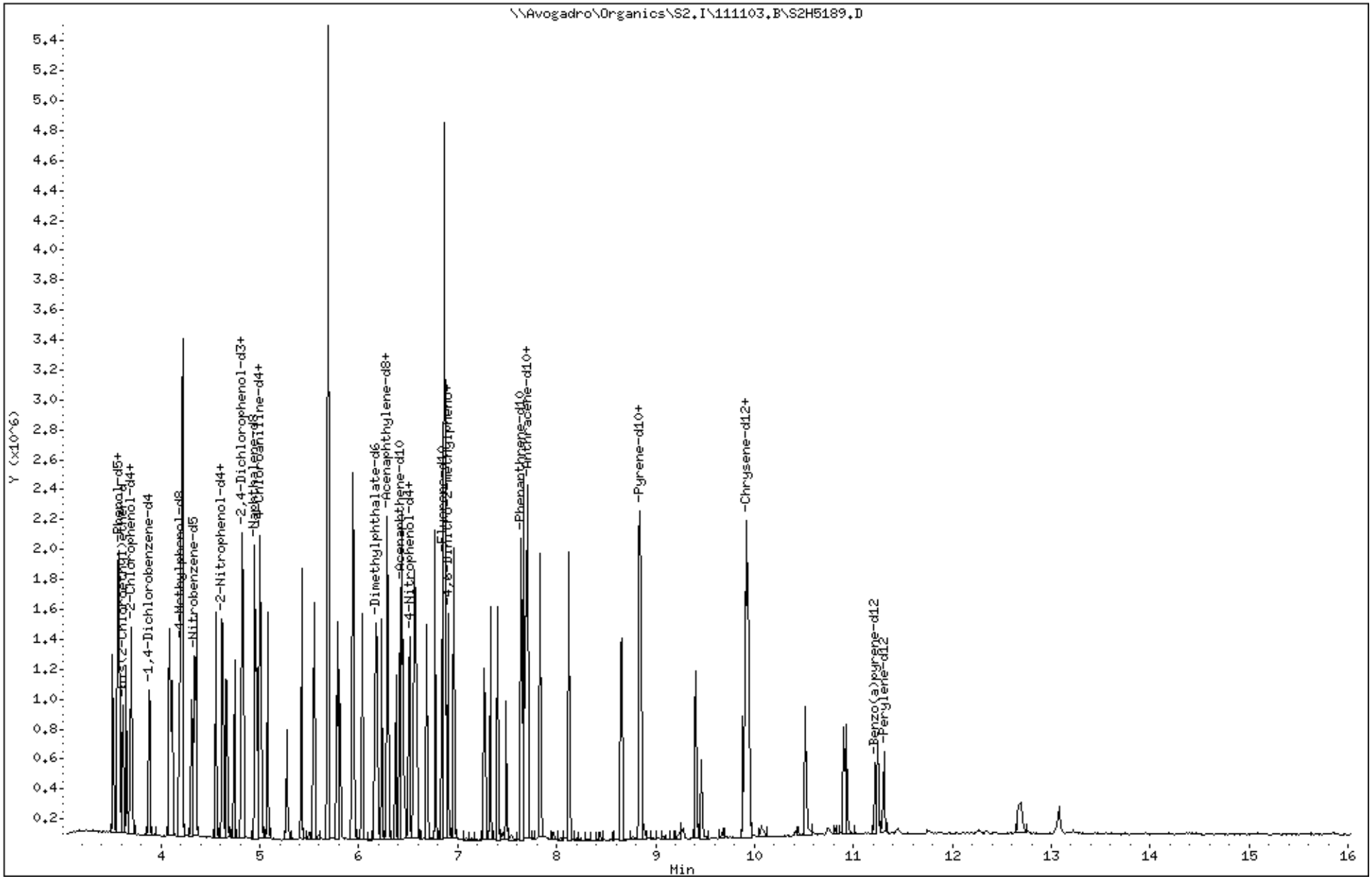
Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5189.D
Report Date: 07-Nov-2011 13:59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	75 3,3'-Dichlorobenzidine	252	9.881	9.881	(0.997)	150447	40.0000	45
	76 Benzo(a)anthracene	228	9.903	9.903	(0.999)	486865	40.0000	36
*	77 Chrysene-d12	240	9.913	9.913	(1.000)	451332	40.0000	(Q)
	78 Chrysene	228	9.945	9.945	(1.003)	456793	40.0000	39
	79 bis(2-Ethylhexyl)phthalate	149	9.935	9.935	(1.002)	299362	40.0000	44
	80 Di-n-octylphthalate	149	10.514	10.514	(0.930)	428513	40.0000	46
	81 Benzo(b)fluoranthene	252	10.900	10.900	(0.964)	402504	40.0000	48
	82 Benzo(k)fluoranthene	252	10.932	10.932	(0.967)	337377	40.0000	35
$	83 Benzo(a)pyrene-d12	264	11.222	11.222	(0.992)	230145	40.0000	36
	84 Benzo(a)pyrene	252	11.243	11.243	(0.994)	272866	40.0000	37
*	85 Perylene-d12	264	11.307	11.307	(1.000)	257396	40.0000	
	86 Indeno(1,2,3-cd)pyrene	276	12.669	12.669	(1.120)	177306	40.0000	31
	87 Dibenzo(a,h)anthracene	278	12.701	12.701	(1.123)	146025	40.0000	31
	88 Benzo(g,h,i)perylene	276	13.077	13.077	(1.156)	140811	40.0000	30

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5189.D
Date : 03-NOV-2011 09:55
Client ID: SSTD0202P
Instrument: S2.i
Sample Info: SSTD0202P,SSTD0202P
Volume Injected (uL): 2.0
Operator: SRC:
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5202A.D
Report Date: 07-Nov-2011 14:01

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5202A.D
Lab Smp Id: SSTD0202Q Client Smp ID: SSTD0202Q
Inj Date : 03-NOV-2011 15:43
Operator : SRC: Inst ID: S2.i
Smp Info : SSTD0202Q,SSTD0202Q
Misc Info : 2,3
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 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	3.522	3.522	(0.906)	206595	40.0000	40
$	2 Phenol-d5	71	3.565	3.565	(0.917)	123051	40.0000	37
	3 Phenol	94	3.576	3.576	(0.920)	325301	40.0000	36
$	4 bis(2-Chloroethyl)ether-d8	67	3.619	3.619	(0.931)	175121	40.0000	38
	5 bis(2-Chloroethyl)ether	93	3.651	3.651	(0.939)	244118	40.0000	37
$	6 2-Chlorophenol-d4	132	3.694	3.694	(0.950)	111061	40.0000	39
	7 2-Chlorophenol	128	3.705	3.705	(0.953)	106409	40.0000	36
*	8 1,4-Dichlorobenzene-d4	152	3.887	3.887	(1.000)	105201	40.0000	(Q)
	9 2-Methylphenol	108	4.091	4.091	(1.052)	192371	40.0000	39
	10 2,2'-oxybis(1-Chloropropane)	45	4.112	4.112	(1.058)	235708	40.0000	35(Q)
$	11 4-Methylphenol-d8	113	4.198	4.198	(1.080)	182959	40.0000	41
	13 Acetophenone	105	4.219	4.219	(1.086)	337041	40.0000	39
	14 N-Nitroso-di-n-propylamine	70	4.219	4.219	(1.086)	171790	40.0000	41(Q)
	12 4-Methylphenol	108	4.219	4.219	(1.086)	206244	40.0000	40
	15 Hexachloroethane	117	4.316	4.316	(1.110)	87847	40.0000	38(Q)
$	16 Nitrobenzene-d5	128	4.348	4.348	(0.879)	59486	40.0000	38
	17 Nitrobenzene	77	4.359	4.359	(0.881)	310516	40.0000	39
	18 Isophorone	82	4.562	4.562	(0.922)	506982	40.0000	38
$	19 2-Nitrophenol-d4	143	4.616	4.616	(0.933)	69166	40.0000	40
	20 2-Nitrophenol	139	4.627	4.627	(0.935)	63885	40.0000	37
	21 2,4-Dimethylphenol	107	4.670	4.670	(0.944)	242035	40.0000	41(Q)

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5202A.D
Report Date: 07-Nov-2011 14:01

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
	22 bis(2-Chloroethoxy)methane	93	4.745	4.745	(0.959)	307049	40.0000	41
$	23 2,4-Dichlorophenol-d3	165	4.820	4.820	(0.974)	134795	40.0000	42
	24 2,4-Dichlorophenol	162	4.831	4.831	(0.976)	127195	40.0000	44
*	25 Naphthalene-d8	136	4.948	4.948	(1.000)	302721	40.0000	
	26 Naphthalene	128	4.970	4.970	(1.004)	319834	40.0000	41
$	27 4-Chloroaniline-d4	131	5.002	5.002	(1.011)	126512	40.0000	45(Q)
	28 4-Chloroaniline	127	5.013	5.013	(1.013)	140723	40.0000	45
	29 Hexachlorobutadiene	225	5.088	5.088	(1.028)	85378	40.0000	39
	30 Caprolactam	113	5.270	5.270	(1.065)	42254	40.0000	36
	31 4-Chloro-3-methylphenol	107	5.420	5.420	(1.095)	199228	40.0000	42
	32 2-Methylnaphthalene	142	5.549	5.549	(1.121)	238157	40.0000	45
	33 Hexachlorocyclopentadiene	237	5.688	5.688	(0.886)	97302	40.0000	35(Q)
	34 1,2,4,5-Tetrachlorobenzene	216	5.688	5.688	(0.886)	309849	40.0000	31
	35 2,4,6-Trichlorophenol	196	5.785	5.785	(0.901)	109166	40.0000	36
	36 2,4,5-Trichlorophenol	196	5.817	5.817	(0.906)	115766	40.0000	37
	37 1,1'-Biphenyl	154	5.935	5.935	(0.925)	310697	40.0000	35
	38 2-Chloronaphthalene	162	5.957	5.957	(0.928)	261893	40.0000	33
	39 2-Nitroaniline	65	6.032	6.032	(0.940)	125832	40.0000	33
$	40 Dimethylphthalate-d6	166	6.171	6.171	(0.962)	357061	40.0000	39
	41 Dimethylphthalate	163	6.192	6.192	(0.965)	313484	40.0000	37
	42 2,6-Dinitrotoluene	165	6.235	6.235	(0.972)	81965	40.0000	39
$	43 Acenaphthylene-d8	160	6.289	6.289	(0.980)	410465	40.0000	35
	44 Acenaphthylene	152	6.300	6.300	(0.982)	386021	40.0000	36
	45 3-Nitroaniline	138	6.375	6.375	(0.993)	52211	40.0000	38
*	46 Acenaphthene-d10	164	6.418	6.418	(1.000)	247962	40.0000	
	47 Acenaphthene	153	6.439	6.439	(1.003)	229775	40.0000	33
	48 2,4-Dinitrophenol	184	6.461	6.461	(1.007)	24840	40.0000	26(Q)
	52 Dibenzofuran	168	6.589	6.589	(1.027)	357754	40.0000	35
$	49 4-Nitrophenol-d4	143	6.503	6.503	(1.013)	38831	40.0000	30
	50 4-Nitrophenol	109	6.514	6.514	(1.015)	77339	40.0000	30
	51 2,4-Dinitrotoluene	165	6.568	6.568	(1.023)	101425	40.0000	38(Q)
	118 2,3,4,6-Tetrachlorophenol	232	6.686	6.686	(1.042)	70921	40.0000	33
	53 Diethylphthalate	149	6.772	6.772	(1.055)	289280	40.0000	36
$	54 Fluorene-d10	176	6.847	6.847	(1.067)	315052	40.0000	38
	56 Fluorene	166	6.868	6.868	(1.070)	297544	40.0000	35
	55 4-Chlorophenyl-phenylether	204	6.868	6.868	(1.070)	178837	40.0000	40
	57 4-Nitroaniline	138	6.879	6.879	(1.072)	55248	40.0000	36(Q)
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.900	6.900	(0.903)	54754	40.0000	37
	59 4,6-Dinitro-2-methylphenol	198	6.911	6.911	(0.905)	41808	40.0000	29(Q)
	60 N-Nitrosodiphenylamine	169	6.965	6.965	(0.912)	252165	40.0000	43
	61 4-Bromophenyl-phenylether	248	7.276	7.276	(0.952)	88673	40.0000	43
	62 Hexachlorobenzene	284	7.329	7.329	(0.959)	80868	40.0000	37
	63 Atrazine	200	7.404	7.404	(0.969)	91701	40.0000	44
	64 Pentachlorophenol	266	7.490	7.490	(0.980)	41214	40.0000	38
*	65 Phenanthrene-d10	188	7.640	7.640	(1.000)	382122	40.0000	
	66 Phenanthrene	178	7.662	7.662	(1.003)	406820	40.0000	38
$	67 Anthracene-d10	188	7.694	7.694	(1.007)	427980	40.0000	39
	68 Anthracene	178	7.704	7.704	(1.008)	436818	40.0000	40
	117 Carbazole	167	7.833	7.833	(1.025)	309867	40.0000	35
	70 Di-n-butylphthalate	149	8.123	8.123	(1.063)	396946	40.0000	42
	71 Fluoranthene	202	8.648	8.648	(1.132)	430238	40.0000	39
$	72 Pyrene-d10	212	8.820	8.820	(0.894)	317146	40.0000	40
	73 Pyrene	202	8.841	8.841	(0.896)	426680	40.0000	43
	74 Butylbenzylphthalate	149	9.377	9.377	(0.950)	129008	40.0000	42

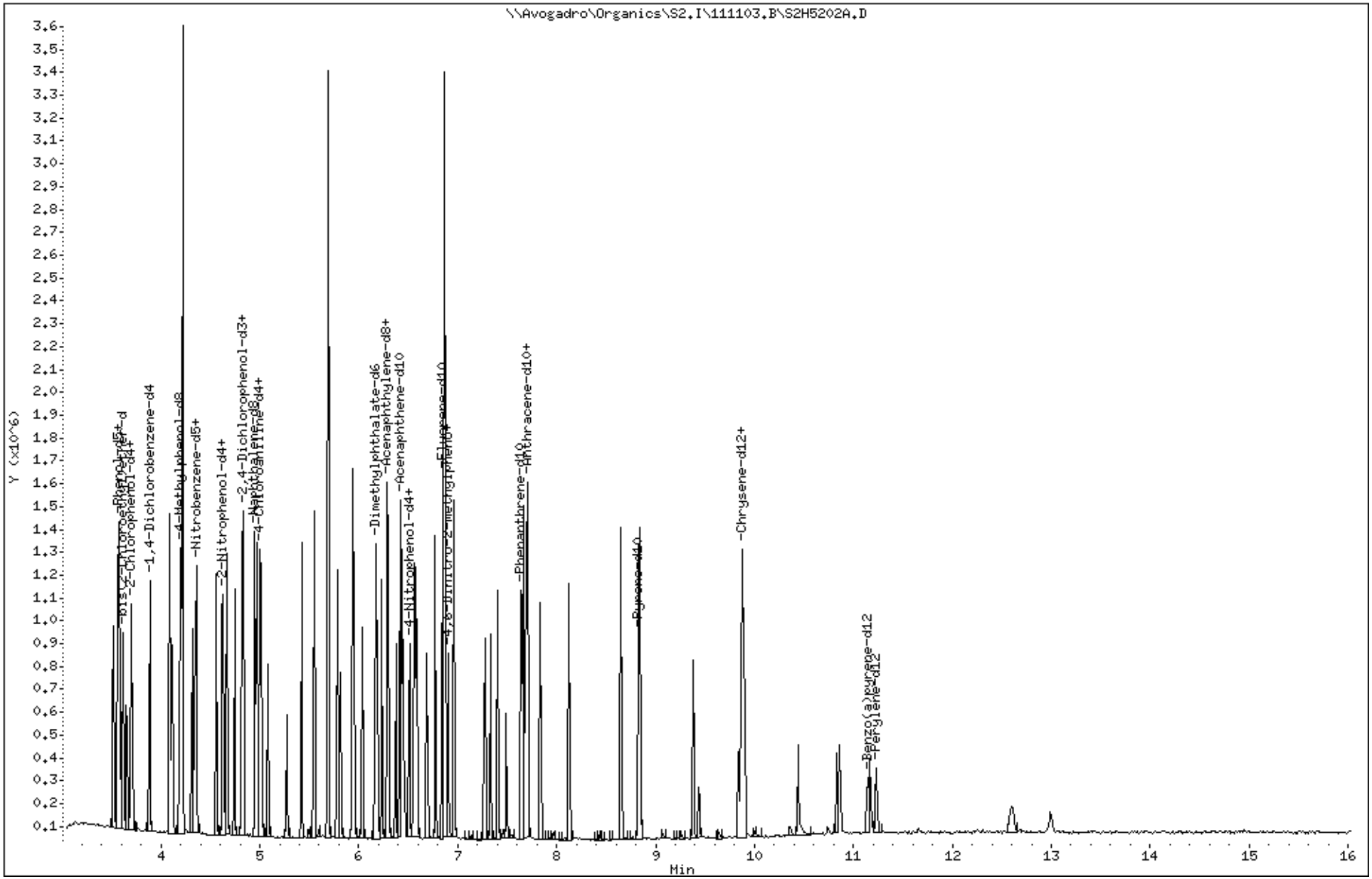
Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5202A.D
Report Date: 07-Nov-2011 14:01

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
75	3,3'-Dichlorobenzidine	252	9.838	9.838	(0.997)	68958	40.0000	37
76	Benzo(a)anthracene	228	9.871	9.871	(1.000)	268328	40.0000	36
* 77	Chrysene-d12	240	9.871	9.871	(1.000)	249238	40.0000	(Q)
78	Chrysene	228	9.892	9.892	(1.002)	240101	40.0000	37
79	bis(2-Ethylhexyl)phthalate	149	9.881	9.881	(1.001)	169165	40.0000	45
80	Di-n-octylphthalate	149	10.439	10.439	(0.921)	190260	40.0000	39(H)
81	Benzo(b)fluoranthene	252	10.836	10.836	(0.956)	179651	40.0000	41(H)
82	Benzo(k)fluoranthene	252	10.857	10.857	(0.957)	186002	40.0000	37(H)
$ 83	Benzo(a)pyrene-d12	264	11.147	11.147	(0.983)	116384	40.0000	35(H)
84	Benzo(a)pyrene	252	11.168	11.168	(0.985)	138573	40.0000	36(H)
* 85	Perylene-d12	264	11.233	11.233	(1.000)	134073	40.0000	(H)
86	Indeno(1,2,3-cd)pyrene	276	12.584	12.584	(1.110)	89675	40.0000	30(H)
87	Dibenzo(a,h)anthracene	278	12.616	12.616	(1.113)	71817	40.0000	30(H)
88	Benzo(g,h,i)perylene	276	12.991	12.991	(1.146)	70781	40.0000	29(H)

QC Flag Legend

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

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5202A.D
Date : 03-NOV-2011 15:43
Client ID: SSTD0202Q
Instrument: S2.i
Sample Info: SSTD0202Q,SSTD0202Q
Volume Injected (uL): 2.0
Operator: SRC:
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5223.D
Report Date: 07-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5223.D
Lab Smp Id: SSTD0202R Client Smp ID: SSTD0202R
Inj Date : 03-NOV-2011 23:14
Operator : SRC: Inst ID: S2.i
Smp Info : SSTD0202R,SSTD0202R
Misc Info : 2,3
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:04 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	3.523	3.523	(0.906)	234815	40.0000	37
$	2 Phenol-d5	71	3.566	3.566	(0.917)	133626	40.0000	33
	3 Phenol	94	3.587	3.587	(0.923)	382639	40.0000	34
$	4 bis(2-Chloroethyl)ether-d8	67	3.620	3.620	(0.931)	204292	40.0000	36
	5 bis(2-Chloroethyl)ether	93	3.662	3.662	(0.942)	281087	40.0000	34
$	6 2-Chlorophenol-d4	132	3.695	3.695	(0.950)	127223	40.0000	36
	7 2-Chlorophenol	128	3.716	3.716	(0.956)	120055	40.0000	33
*	8 1,4-Dichlorobenzene-d4	152	3.888	3.888	(1.000)	129461	40.0000	(Q)
	9 2-Methylphenol	108	4.091	4.091	(1.052)	220459	40.0000	36
	10 2,2'-oxybis(1-Chloropropane)	45	4.113	4.113	(1.058)	266972	40.0000	32(Q)
$	11 4-Methylphenol-d8	113	4.199	4.199	(1.080)	207984	40.0000	38
	13 Acetophenone	105	4.220	4.220	(1.085)	404636	40.0000	38
	14 N-Nitroso-di-n-propylamine	70	4.220	4.220	(1.085)	186820	40.0000	37(Q)
	12 4-Methylphenol	108	4.220	4.220	(1.085)	242633	40.0000	39
	15 Hexachloroethane	117	4.317	4.317	(1.110)	99810	40.0000	35(Q)
$	16 Nitrobenzene-d5	128	4.349	4.349	(0.879)	67814	40.0000	36
	17 Nitrobenzene	77	4.360	4.360	(0.881)	348467	40.0000	37
	18 Isophorone	82	4.563	4.563	(0.922)	602105	40.0000	37
$	19 2-Nitrophenol-d4	143	4.617	4.617	(0.933)	82225	40.0000	40
	20 2-Nitrophenol	139	4.628	4.628	(0.935)	76724	40.0000	38
	21 2,4-Dimethylphenol	107	4.670	4.670	(0.944)	272349	40.0000	38(Q)

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5223.D
Report Date: 07-Nov-2011 14:04

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	22 bis(2-Chloroethoxy)methane	93	4.746	4.746	(0.959)	365341	40.0000	41
$	23 2,4-Dichlorophenol-d3	165	4.821	4.821	(0.974)	156722	40.0000	41
	24 2,4-Dichlorophenol	162	4.831	4.831	(0.976)	146762	40.0000	42
*	25 Naphthalene-d8	136	4.949	4.949	(1.000)	361181	40.0000	
	26 Naphthalene	128	4.971	4.971	(1.004)	379748	40.0000	41
$	27 4-Chloroaniline-d4	131	5.003	5.003	(1.011)	136151	40.0000	40(Q)
	28 4-Chloroaniline	127	5.014	5.014	(1.013)	157060	40.0000	42
	29 Hexachlorobutadiene	225	5.089	5.089	(1.028)	100818	40.0000	39
	30 Caprolactam	113	5.282	5.282	(1.067)	48650	40.0000	35
	31 4-Chloro-3-methylphenol	107	5.421	5.421	(1.095)	222848	40.0000	39
	32 2-Methylnaphthalene	142	5.550	5.550	(1.121)	275142	40.0000	43
	33 Hexachlorocyclopentadiene	237	5.689	5.689	(0.886)	118306	40.0000	40(Q)
	34 1,2,4,5-Tetrachlorobenzene	216	5.689	5.689	(0.886)	386511	40.0000	36
	35 2,4,6-Trichlorophenol	196	5.786	5.786	(0.901)	132100	40.0000	40
	36 2,4,5-Trichlorophenol	196	5.818	5.818	(0.906)	132004	40.0000	39
	37 1,1'-Biphenyl	154	5.936	5.936	(0.925)	352575	40.0000	38
	38 2-Chloronaphthalene	162	5.957	5.957	(0.928)	293868	40.0000	35
	39 2-Nitroaniline	65	6.032	6.032	(0.940)	130551	40.0000	32
$	40 Dimethylphthalate-d6	166	6.172	6.172	(0.962)	395088	40.0000	40
	41 Dimethylphthalate	163	6.193	6.193	(0.965)	350700	40.0000	39
	42 2,6-Dinitrotoluene	165	6.236	6.236	(0.972)	91605	40.0000	41
$	43 Acenaphthylene-d8	160	6.290	6.290	(0.980)	473820	40.0000	37
	44 Acenaphthylene	152	6.300	6.300	(0.982)	435552	40.0000	38
	45 3-Nitroaniline	138	6.376	6.376	(0.993)	57099	40.0000	38
*	46 Acenaphthene-d10	164	6.418	6.418	(1.000)	265645	40.0000	
	47 Acenaphthene	153	6.440	6.440	(1.003)	262566	40.0000	35
	48 2,4-Dinitrophenol	184	6.461	6.461	(1.007)	21589	40.0000	21(Q)
	52 Dibenzofuran	168	6.590	6.590	(1.027)	407326	40.0000	37
$	49 4-Nitrophenol-d4	143	6.515	6.515	(1.015)	39567	40.0000	28
	50 4-Nitrophenol	109	6.515	6.515	(1.015)	78195	40.0000	29
	51 2,4-Dinitrotoluene	165	6.569	6.569	(1.023)	118788	40.0000	42(Q)
	118 2,3,4,6-Tetrachlorophenol	232	6.687	6.687	(1.042)	86165	40.0000	37
	53 Diethylphthalate	149	6.772	6.772	(1.055)	333097	40.0000	39
$	54 Fluorene-d10	176	6.847	6.847	(1.067)	354082	40.0000	39
	56 Fluorene	166	6.869	6.869	(1.070)	348842	40.0000	39
	55 4-Chlorophenyl-phenylether	204	6.869	6.869	(1.070)	202938	40.0000	42
	57 4-Nitroaniline	138	6.880	6.880	(1.072)	53020	40.0000	32
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.901	6.901	(0.903)	53440	40.0000	32
	59 4,6-Dinitro-2-methylphenol	198	6.912	6.912	(0.905)	44324	40.0000	27(Q)
	60 N-Nitrosodiphenylamine	169	6.965	6.965	(0.912)	280495	40.0000	42
	61 4-Bromophenyl-phenylether	248	7.276	7.276	(0.952)	105908	40.0000	45
	62 Hexachlorobenzene	284	7.330	7.330	(0.959)	97082	40.0000	39
	63 Atrazine	200	7.405	7.405	(0.969)	102622	40.0000	43
	64 Pentachlorophenol	266	7.491	7.491	(0.980)	49292	40.0000	40
*	65 Phenanthrene-d10	188	7.641	7.641	(1.000)	434208	40.0000	
	66 Phenanthrene	178	7.662	7.662	(1.003)	455772	40.0000	37
$	67 Anthracene-d10	188	7.695	7.695	(1.007)	468360	40.0000	38
	68 Anthracene	178	7.705	7.705	(1.008)	472190	40.0000	38
	117 Carbazole	167	7.834	7.834	(1.025)	326582	40.0000	33
	70 Di-n-butylphthalate	149	8.123	8.123	(1.063)	416071	40.0000	39
	71 Fluoranthene	202	8.660	8.660	(1.133)	460996	40.0000	37
$	72 Pyrene-d10	212	8.831	8.831	(0.899)	344045	40.0000	43(H)
	73 Pyrene	202	8.853	8.853	(0.901)	451227	40.0000	44(H)
	74 Butylbenzylphthalate	149	9.410	9.410	(0.957)	148164	40.0000	47

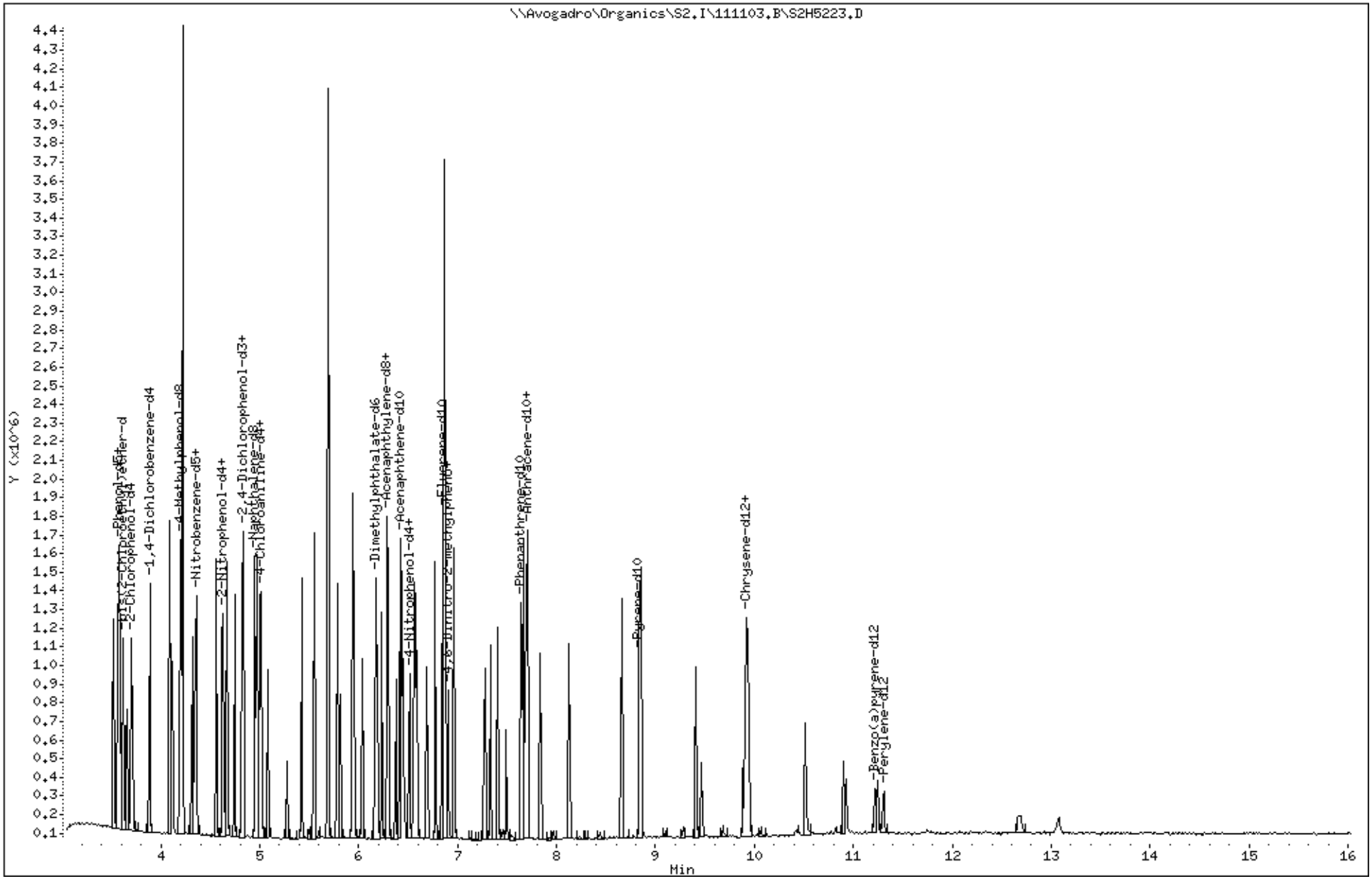
Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5223.D
Report Date: 07-Nov-2011 14:04

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
75	3,3'-Dichlorobenzidine	252	9.882	9.882	(1.005)	69150	40.0000	37(H)
76	Benzo(a)anthracene	228	9.914	9.914	(1.009)	266770	40.0000	35
* 77	Chrysene-d12	240	9.914	9.914	(1.000)	254724	40.0000	(QH)
78	Chrysene	228	9.946	9.946	(1.012)	250473	40.0000	38(H)
79	bis(2-Ethylhexyl)phthalate	149	9.936	9.936	(1.011)	192432	40.0000	50(H)
80	Di-n-octylphthalate	149	10.515	10.515	(0.930)	275871	40.0000	59(H)
81	Benzo(b)fluoranthene	252	10.901	10.901	(0.964)	166060	40.0000	40(H)
82	Benzo(k)fluoranthene	252	10.933	10.933	(0.967)	191725	40.0000	40
$ 83	Benzo(a)pyrene-d12	264	11.212	11.212	(0.991)	111480	40.0000	36
84	Benzo(a)pyrene	252	11.244	11.244	(0.994)	128118	40.0000	35
* 85	Perylene-d12	264	11.308	11.308	(1.000)	127467	40.0000	
86	Indeno(1,2,3-cd)pyrene	276	12.670	12.670	(1.120)	82529	40.0000	29
87	Dibenzo(a,h)anthracene	278	12.692	12.692	(1.122)	69066	40.0000	30
88	Benzo(g,h,i)perylene	276	13.078	13.078	(1.156)	72908	40.0000	32

QC Flag Legend

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

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5223.D
Date : 03-NOV-2011 23:14
Client ID: SSTD0202R
Instrument: S2.i
Sample Info: SSTD0202R,SSTD0202R
Volume Injected (uL): 2.0
Operator: SRC:
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5225.D
Report Date: 07-Nov-2011 13:26

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111104.B\S2H5225.D
Lab Smp Id: SSTD0202S Client Smp ID: SSTD0202S
Inj Date : 04-NOV-2011 13:08
Operator : SRC: Inst ID: S2.i
Smp Info : SSTD0202S,SSTD0202S
Misc Info : 2,3
Comment   :
Method   : \\Avogadro\Organics\S2.I\111104.B\S2_SOM.m
Meth Date : 07-Nov-2011 13:26 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	3.447	3.447	(0.902)	160557	40.0000	37
$	2 Phenol-d5	71	3.500	3.500	(0.916)	103602	40.0000	37
	3 Phenol	94	3.511	3.511	(0.919)	274935	40.0000	36
$	4 bis(2-Chloroethyl)ether-d8	67	3.554	3.554	(0.930)	142662	40.0000	37
	5 bis(2-Chloroethyl)ether	93	3.586	3.586	(0.938)	206225	40.0000	37
$	6 2-Chlorophenol-d4	132	3.629	3.629	(0.950)	92298	40.0000	38
	7 2-Chlorophenol	128	3.640	3.640	(0.952)	96066	40.0000	39
*	8 1,4-Dichlorobenzene-d4	152	3.822	3.822	(1.000)	88620	40.0000	(Q)
	9 2-Methylphenol	108	4.026	4.026	(1.053)	161907	40.0000	39
	10 2,2'-oxybis(1-Chloropropane)	45	4.047	4.047	(1.059)	205596	40.0000	36
$	11 4-Methylphenol-d8	113	4.133	4.133	(1.081)	149805	40.0000	40
	13 Acetophenone	105	4.154	4.154	(1.087)	262527	40.0000	36
	14 N-Nitroso-di-n-propylamine	70	4.154	4.154	(1.087)	128747	40.0000	37(Q)
	12 4-Methylphenol	108	4.154	4.154	(1.087)	170682	40.0000	40
	15 Hexachloroethane	117	4.251	4.251	(1.112)	74296	40.0000	38(Q)
$	16 Nitrobenzene-d5	128	4.283	4.283	(0.877)	47144	40.0000	36
	17 Nitrobenzene	77	4.294	4.294	(0.879)	232982	40.0000	36
	18 Isophorone	82	4.498	4.498	(0.921)	428777	40.0000	39
$	19 2-Nitrophenol-d4	143	4.551	4.551	(0.932)	56180	40.0000	39
	20 2-Nitrophenol	139	4.562	4.562	(0.934)	49943	40.0000	36
	21 2,4-Dimethylphenol	107	4.605	4.605	(0.943)	194027	40.0000	40(Q)

Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5225.D
Report Date: 07-Nov-2011 13:26

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	22 bis(2-Chloroethoxy)methane	93	4.680	4.680	(0.958)	238539	40.0000	39
$	23 2,4-Dichlorophenol-d3	165	4.755	4.755	(0.974)	111238	40.0000	43
	24 2,4-Dichlorophenol	162	4.766	4.766	(0.976)	99539	40.0000	41
*	25 Naphthalene-d8	136	4.884	4.884	(1.000)	249024	40.0000	
	26 Naphthalene	128	4.905	4.905	(1.004)	261338	40.0000	41
$	27 4-Chloroaniline-d4	131	4.937	4.937	(1.011)	95528	40.0000	41(Q)
	28 4-Chloroaniline	127	4.948	4.948	(1.013)	111236	40.0000	43
	29 Hexachlorobutadiene	225	5.023	5.023	(1.029)	69427	40.0000	39
	30 Caprolactam	113	5.205	5.205	(1.066)	39278	40.0000	41
	31 4-Chloro-3-methylphenol	107	5.356	5.356	(1.097)	150259	40.0000	39
	32 2-Methylnaphthalene	142	5.484	5.484	(1.123)	186006	40.0000	42
	33 Hexachlorocyclopentadiene	237	5.624	5.624	(0.885)	74696	40.0000	37(Q)
	34 1,2,4,5-Tetrachlorobenzene	216	5.624	5.624	(0.885)	249889	40.0000	34
	35 2,4,6-Trichlorophenol	196	5.720	5.720	(0.900)	80587	40.0000	36
	36 2,4,5-Trichlorophenol	196	5.752	5.752	(0.905)	96677	40.0000	42
	37 1,1'-Biphenyl	154	5.870	5.870	(0.924)	234109	40.0000	36
	38 2-Chloronaphthalene	162	5.892	5.892	(0.927)	206522	40.0000	36
	39 2-Nitroaniline	65	5.967	5.967	(0.939)	94278	40.0000	34
$	40 Dimethylphthalate-d6	166	6.106	6.106	(0.961)	271832	40.0000	41
	41 Dimethylphthalate	163	6.128	6.128	(0.965)	252037	40.0000	40
	42 2,6-Dinitrotoluene	165	6.170	6.170	(0.971)	61844	40.0000	40
$	43 Acenaphthylene-d8	160	6.224	6.224	(0.980)	298966	40.0000	34
	44 Acenaphthylene	152	6.235	6.235	(0.981)	281545	40.0000	36
	45 3-Nitroaniline	138	6.310	6.310	(0.993)	39196	40.0000	38
*	46 Acenaphthene-d10	164	6.353	6.353	(1.000)	181712	40.0000	
	47 Acenaphthene	153	6.374	6.374	(1.003)	178954	40.0000	35
	48 2,4-Dinitrophenol	184	6.396	6.396	(1.007)	22167	40.0000	31
	52 Dibenzofuran	168	6.524	6.524	(1.027)	269549	40.0000	36
$	49 4-Nitrophenol-d4	143	6.449	6.449	(1.015)	31698	40.0000	33
	50 4-Nitrophenol	109	6.449	6.449	(1.015)	60238	40.0000	32
	51 2,4-Dinitrotoluene	165	6.503	6.503	(1.024)	67971	40.0000	35(Q)
	118 2,3,4,6-Tetrachlorophenol	232	6.632	6.632	(1.044)	53214	40.0000	34
	53 Diethylphthalate	149	6.707	6.707	(1.056)	192489	40.0000	33
$	54 Fluorene-d10	176	6.782	6.782	(1.068)	227781	40.0000	37
	56 Fluorene	166	6.803	6.803	(1.071)	225431	40.0000	37
	55 4-Chlorophenyl-phenylether	204	6.803	6.803	(1.071)	125305	40.0000	38
	57 4-Nitroaniline	138	6.814	6.814	(1.073)	40540	40.0000	36
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.835	6.835	(0.902)	41274	40.0000	37
	59 4,6-Dinitro-2-methylphenol	198	6.846	6.846	(0.904)	38071	40.0000	35(Q)
	60 N-Nitrosodiphenylamine	169	6.900	6.900	(0.911)	184585	40.0000	42
	61 4-Bromophenyl-phenylether	248	7.211	7.211	(0.952)	66869	40.0000	43
	62 Hexachlorobenzene	284	7.264	7.264	(0.959)	61947	40.0000	38
	63 Atrazine	200	7.339	7.339	(0.969)	62414	40.0000	40
	64 Pentachlorophenol	266	7.425	7.425	(0.980)	28052	40.0000	35
*	65 Phenanthrene-d10	188	7.575	7.575	(1.000)	285205	40.0000	
	66 Phenanthrene	178	7.597	7.597	(1.003)	322972	40.0000	40
$	67 Anthracene-d10	188	7.629	7.629	(1.007)	299843	40.0000	37
	68 Anthracene	178	7.640	7.640	(1.008)	316891	40.0000	39
	117 Carbazole	167	7.768	7.768	(1.025)	234787	40.0000	36
	70 Di-n-butylphthalate	149	8.069	8.069	(1.065)	318521	40.0000	45
	71 Fluoranthene	202	8.594	8.594	(1.134)	319650	40.0000	39
$	72 Pyrene-d10	212	8.776	8.776	(0.888)	265986	40.0000	40
	73 Pyrene	202	8.798	8.798	(0.890)	321090	40.0000	38
	74 Butylbenzylphthalate	149	9.366	9.366	(0.948)	108597	40.0000	42

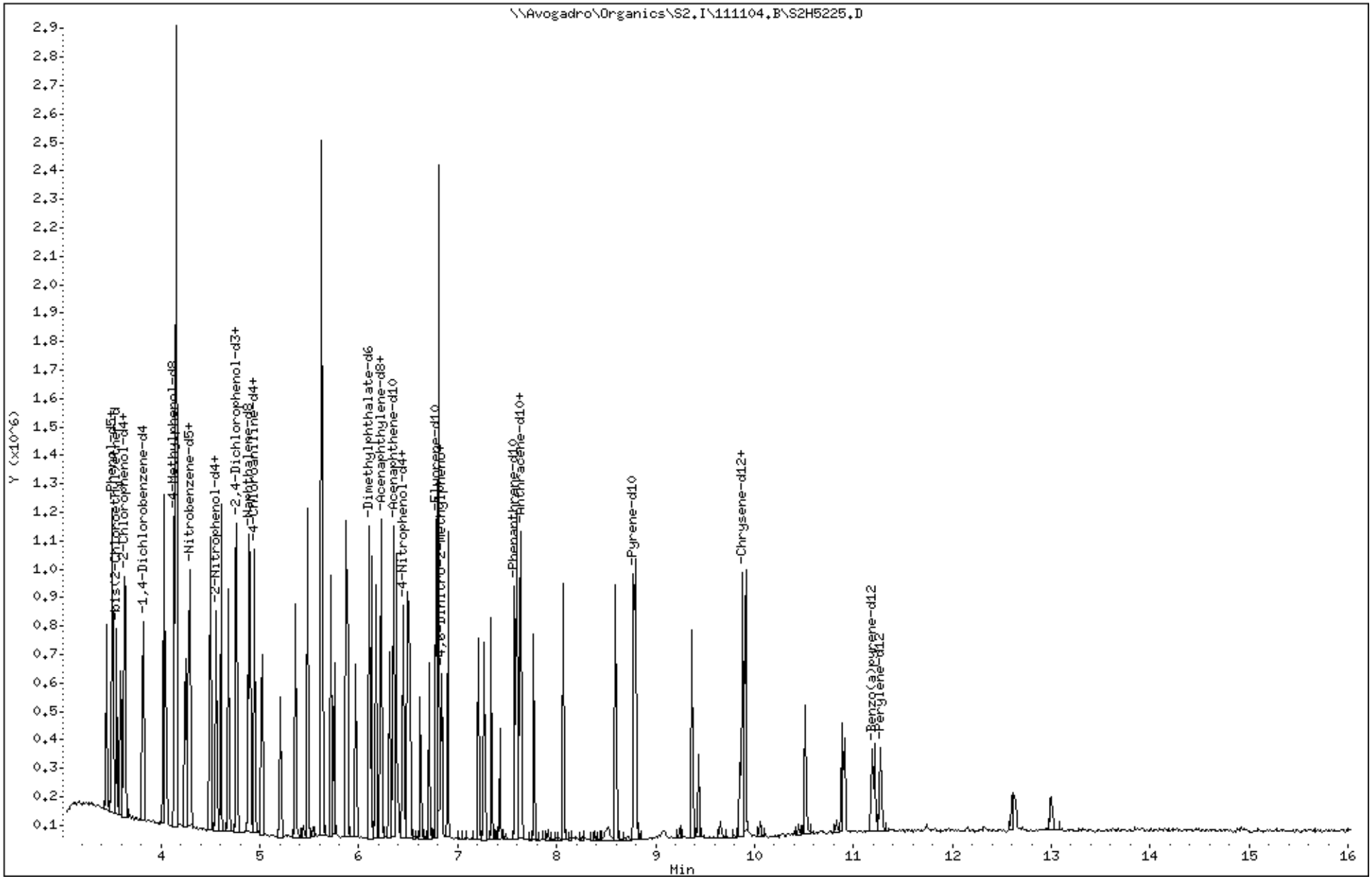
Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5225.D
Report Date: 07-Nov-2011 13:26

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
75	3,3'-Dichlorobenzidine	252	9.859	9.859	(0.998)	65056	40.0000	42
76	Benzo(a)anthracene	228	9.870	9.870	(0.999)	221226	40.0000	36
* 77	Chrysene-d12	240	9.881	9.881	(1.000)	209242	40.0000	(Q)
78	Chrysene	228	9.913	9.913	(1.003)	204061	40.0000	37
79	bis(2-Ethylhexyl)phthalate	149	9.913	9.913	(1.003)	146552	40.0000	46
80	Di-n-octylphthalate	149	10.514	10.514	(0.932)	213568	40.0000	43
81	Benzo(b)fluoranthene	252	10.878	10.878	(0.965)	205485	40.0000	46
82	Benzo(k)fluoranthene	252	10.910	10.910	(0.968)	156816	40.0000	30
$ 83	Benzo(a)pyrene-d12	264	11.189	11.189	(0.992)	122435	40.0000	36
84	Benzo(a)pyrene	252	11.211	11.211	(0.994)	141946	40.0000	36
* 85	Perylene-d12	264	11.275	11.275	(1.000)	137943	40.0000	
86	Indeno(1,2,3-cd)pyrene	276	12.605	12.605	(1.118)	103479	40.0000	34
87	Dibenzo(a,h)anthracene	278	12.637	12.637	(1.121)	80291	40.0000	32
88	Benzo(g,h,i)perylene	276	13.001	13.001	(1.153)	86319	40.0000	35

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5225.D
Date : 04-NOV-2011 13:08
Client ID: SSTD0202S
Instrument: S2.i
Sample Info: SSTD0202S,SSTD0202S
Volume Injected (uL): 2.0
Operator: SRC:
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5234.D
Report Date: 07-Nov-2011 13:27

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111104.B\S2H5234.D
Lab Smp Id: SSTD0202T Client Smp ID: SSTD0202T
Inj Date : 04-NOV-2011 17:43
Operator : SRC: Inst ID: S2.i
Smp Info : SSTD0202T,SSTD0202T
Misc Info : 2,3
Comment   :
Method   : \\Avogadro\Organics\S2.I\111104.B\S2_SOM.m
Meth Date : 07-Nov-2011 13:27 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	3.445	3.445	(0.904)	165454	40.0000	41
$	2 Phenol-d5	71	3.498	3.498	(0.918)	92124	40.0000	36(Q)
	3 Phenol	94	3.509	3.509	(0.921)	277988	40.0000	40
$	4 bis(2-Chloroethyl)ether-d8	67	3.552	3.552	(0.932)	129828	40.0000	37
	5 bis(2-Chloroethyl)ether	93	3.584	3.584	(0.941)	204305	40.0000	40
$	6 2-Chlorophenol-d4	132	3.627	3.627	(0.952)	92703	40.0000	42
	7 2-Chlorophenol	128	3.638	3.638	(0.955)	96877	40.0000	43
*	8 1,4-Dichlorobenzene-d4	152	3.809	3.809	(1.000)	81255	40.0000	(Q)
	9 2-Methylphenol	108	4.024	4.024	(1.056)	159828	40.0000	41
	10 2,2'-oxybis(1-Chloropropane)	45	4.045	4.045	(1.062)	183429	40.0000	35(Q)
$	11 4-Methylphenol-d8	113	4.131	4.131	(1.084)	151930	40.0000	44
	13 Acetophenone	105	4.142	4.142	(1.087)	248642	40.0000	37
	14 N-Nitroso-di-n-propylamine	70	4.153	4.153	(1.090)	137359	40.0000	43(Q)
	12 4-Methylphenol	108	4.153	4.153	(1.090)	162040	40.0000	41
	15 Hexachloroethane	117	4.238	4.238	(1.113)	71793	40.0000	41(Q)
$	16 Nitrobenzene-d5	128	4.270	4.270	(0.875)	45168	40.0000	36
	17 Nitrobenzene	77	4.292	4.292	(0.879)	218363	40.0000	34
	18 Isophorone	82	4.496	4.496	(0.921)	408102	40.0000	38
$	19 2-Nitrophenol-d4	143	4.549	4.549	(0.932)	57555	40.0000	41
	20 2-Nitrophenol	139	4.560	4.560	(0.934)	50543	40.0000	37
	21 2,4-Dimethylphenol	107	4.603	4.603	(0.943)	188942	40.0000	40(Q)

Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5234.D
Report Date: 07-Nov-2011 13:27

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	22 bis(2-Chloroethoxy)methane	93	4.678	4.678	(0.958)	243449	40.0000	40
$	23 2,4-Dichlorophenol-d3	165	4.753	4.753	(0.974)	113221	40.0000	44
	24 2,4-Dichlorophenol	162	4.764	4.764	(0.976)	100821	40.0000	43
*	25 Naphthalene-d8	136	4.882	4.882	(1.000)	243679	40.0000	
	26 Naphthalene	128	4.892	4.892	(1.002)	240419	40.0000	38
$	27 4-Chloroaniline-d4	131	4.935	4.935	(1.011)	100621	40.0000	44(Q)
	28 4-Chloroaniline	127	4.946	4.946	(1.013)	98245	40.0000	39
	29 Hexachlorobutadiene	225	5.010	5.010	(1.026)	69144	40.0000	40
	30 Caprolactam	113	5.203	5.203	(1.066)	38332	40.0000	41
	31 4-Chloro-3-methylphenol	107	5.354	5.354	(1.097)	161882	40.0000	42
	32 2-Methylnaphthalene	142	5.482	5.482	(1.123)	170252	40.0000	40
	33 Hexachlorocyclopentadiene	237	5.622	5.622	(0.887)	76970	40.0000	40(Q)
	34 1,2,4,5-Tetrachlorobenzene	216	5.622	5.622	(0.887)	277060	40.0000	40
	35 2,4,6-Trichlorophenol	196	5.718	5.718	(0.902)	84304	40.0000	40
	36 2,4,5-Trichlorophenol	196	5.750	5.750	(0.907)	85678	40.0000	39
	37 1,1'-Biphenyl	154	5.868	5.868	(0.926)	245708	40.0000	40
	38 2-Chloronaphthalene	162	5.879	5.879	(0.927)	199562	40.0000	37
	39 2-Nitroaniline	65	5.965	5.965	(0.941)	96268	40.0000	37
$	40 Dimethylphthalate-d6	166	6.104	6.104	(0.963)	274899	40.0000	44
	41 Dimethylphthalate	163	6.126	6.126	(0.966)	230231	40.0000	39
	42 2,6-Dinitrotoluene	165	6.169	6.169	(0.973)	61488	40.0000	42
$	43 Acenaphthylene-d8	160	6.211	6.211	(0.980)	319874	40.0000	39
	44 Acenaphthylene	152	6.222	6.222	(0.981)	277389	40.0000	37
	45 3-Nitroaniline	138	6.308	6.308	(0.995)	40333	40.0000	42(Q)
*	46 Acenaphthene-d10	164	6.340	6.340	(1.000)	171740	40.0000	
	47 Acenaphthene	153	6.372	6.372	(1.005)	190743	40.0000	39
	48 2,4-Dinitrophenol	184	6.394	6.394	(1.008)	18626	40.0000	28(Q)
	52 Dibenzofuran	168	6.512	6.512	(1.027)	271473	40.0000	38
$	49 4-Nitrophenol-d4	143	6.447	6.447	(1.017)	32117	40.0000	35
	50 4-Nitrophenol	109	6.447	6.447	(1.017)	60028	40.0000	34
	51 2,4-Dinitrotoluene	165	6.501	6.501	(1.025)	79070	40.0000	43(Q)
	118 2,3,4,6-Tetrachlorophenol	232	6.619	6.619	(1.044)	58495	40.0000	39
	53 Diethylphthalate	149	6.705	6.705	(1.058)	234072	40.0000	42
$	54 Fluorene-d10	176	6.769	6.769	(1.068)	212248	40.0000	37
	56 Fluorene	166	6.801	6.801	(1.073)	230140	40.0000	40
	55 4-Chlorophenyl-phenylether	204	6.801	6.801	(1.073)	140068	40.0000	45
	57 4-Nitroaniline	138	6.812	6.812	(1.074)	39484	40.0000	37(Q)
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.833	6.833	(0.902)	40330	40.0000	31
	59 4,6-Dinitro-2-methylphenol	198	6.833	6.833	(0.902)	36125	40.0000	28(Q)
	60 N-Nitrosodiphenylamine	169	6.898	6.898	(0.911)	185531	40.0000	36
	61 4-Bromophenyl-phenylether	248	7.209	7.209	(0.952)	64549	40.0000	35
	62 Hexachlorobenzene	284	7.262	7.262	(0.959)	74895	40.0000	39
	63 Atrazine	200	7.337	7.337	(0.969)	76898	40.0000	41
	64 Pentachlorophenol	266	7.423	7.423	(0.980)	31493	40.0000	33
*	65 Phenanthrene-d10	188	7.573	7.573	(1.000)	337180	40.0000	
	66 Phenanthrene	178	7.595	7.595	(1.003)	325553	40.0000	34
$	67 Anthracene-d10	188	7.616	7.616	(1.006)	347745	40.0000	36
	68 Anthracene	178	7.638	7.638	(1.008)	319328	40.0000	33
	117 Carbazole	167	7.766	7.766	(1.025)	269407	40.0000	35
	70 Di-n-butylphthalate	149	8.056	8.056	(1.064)	329245	40.0000	39
	71 Fluoranthene	202	8.581	8.581	(1.133)	357599	40.0000	37
$	72 Pyrene-d10	212	8.764	8.764	(0.890)	294327	40.0000	41(H)
	73 Pyrene	202	8.774	8.774	(0.891)	346588	40.0000	38
	74 Butylbenzylphthalate	149	9.343	9.343	(0.949)	129746	40.0000	46

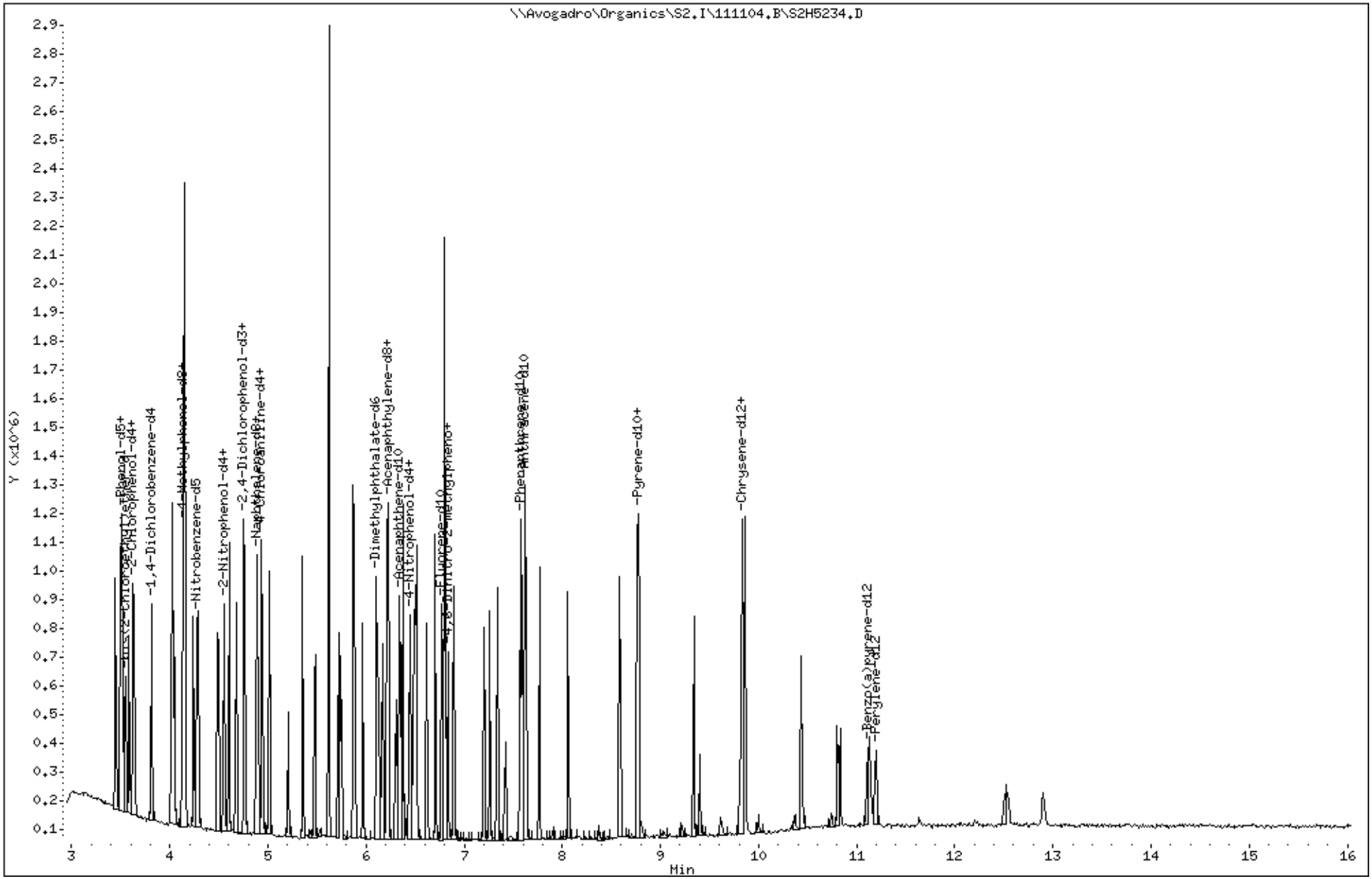
Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5234.D
Report Date: 07-Nov-2011 13:27

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	75 3,3'-Dichlorobenzidine	252	9.815	9.815	(0.997)	70651	40.0000	42
	76 Benzo(a)anthracene	228	9.836	9.836	(0.999)	243046	40.0000	36
*	77 Chrysene-d12	240	9.847	9.847	(1.000)	229076	40.0000	(Q)
	78 Chrysene	228	9.868	9.868	(1.002)	235211	40.0000	39
	79 bis(2-Ethylhexyl)phthalate	149	9.857	9.857	(1.001)	179559	40.0000	52
	80 Di-n-octylphthalate	149	10.437	10.437	(0.922)	250129	40.0000	50(H)
	81 Benzo(b)fluoranthene	252	10.801	10.801	(0.955)	204833	40.0000	46(H)
	82 Benzo(k)fluoranthene	252	10.833	10.833	(0.957)	165243	40.0000	32(H)
$	83 Benzo(a)pyrene-d12	264	11.112	11.112	(0.982)	115840	40.0000	35(H)
	84 Benzo(a)pyrene	252	11.134	11.134	(0.984)	133946	40.0000	34(H)
*	85 Perylene-d12	264	11.198	11.198	(1.000)	136265	40.0000	(H)
	86 Indeno(1,2,3-cd)pyrene	276	12.506	12.506	(1.105)	100565	40.0000	34(H)
	87 Dibenzo(a,h)anthracene	278	12.538	12.538	(1.108)	80866	40.0000	33(H)
	88 Benzo(g,h,i)perylene	276	12.903	12.903	(1.140)	80262	40.0000	33(H)

QC Flag Legend

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

Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5234.D
Date : 04-NOV-2011 17:43
Client ID: SSTD0202T
Instrument: S2.i
Sample Info: SSTD0202T,SSTD0202T
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

					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	
5.674	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

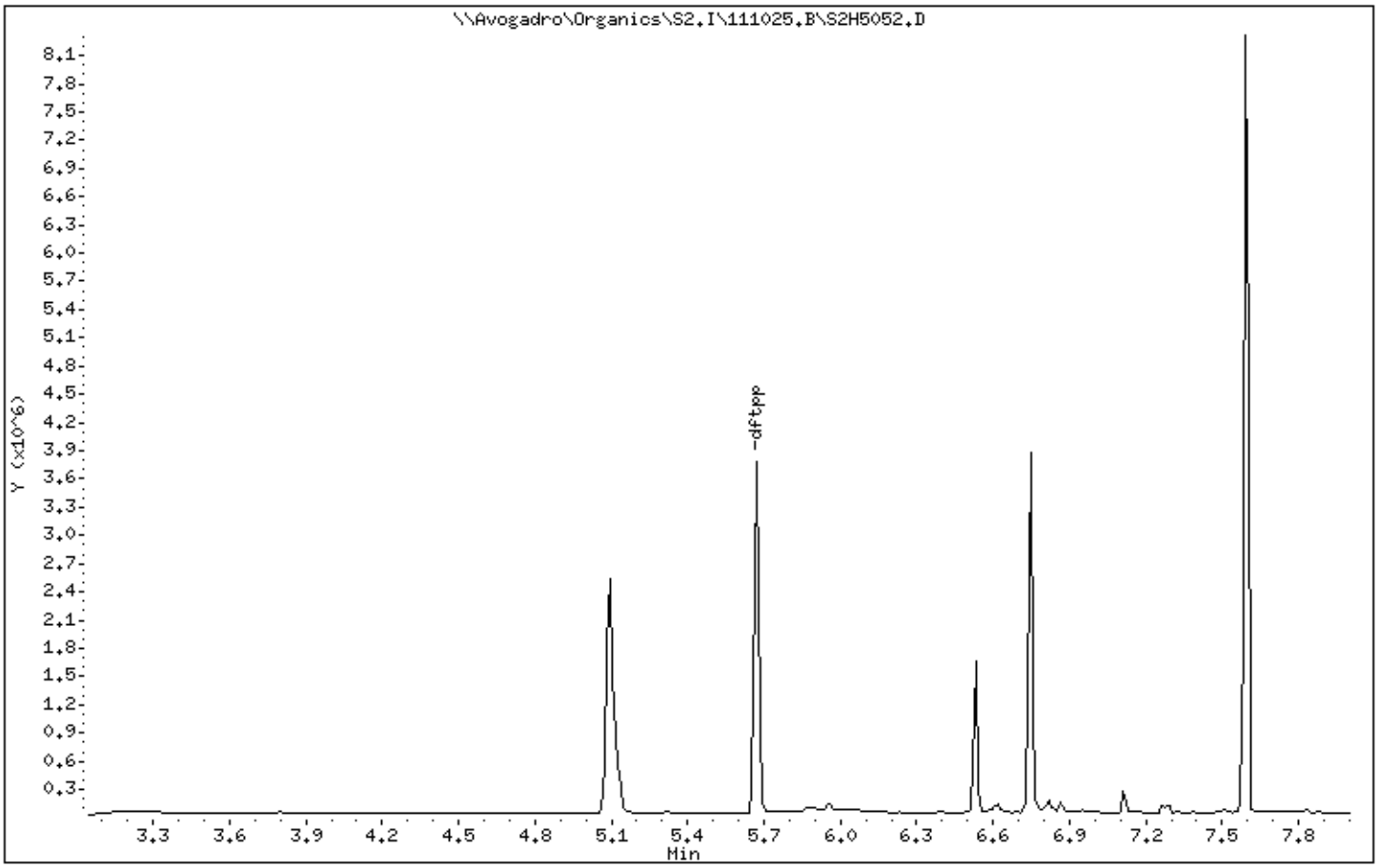
Sample Info: DFTPP2W,DFTPP2W

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

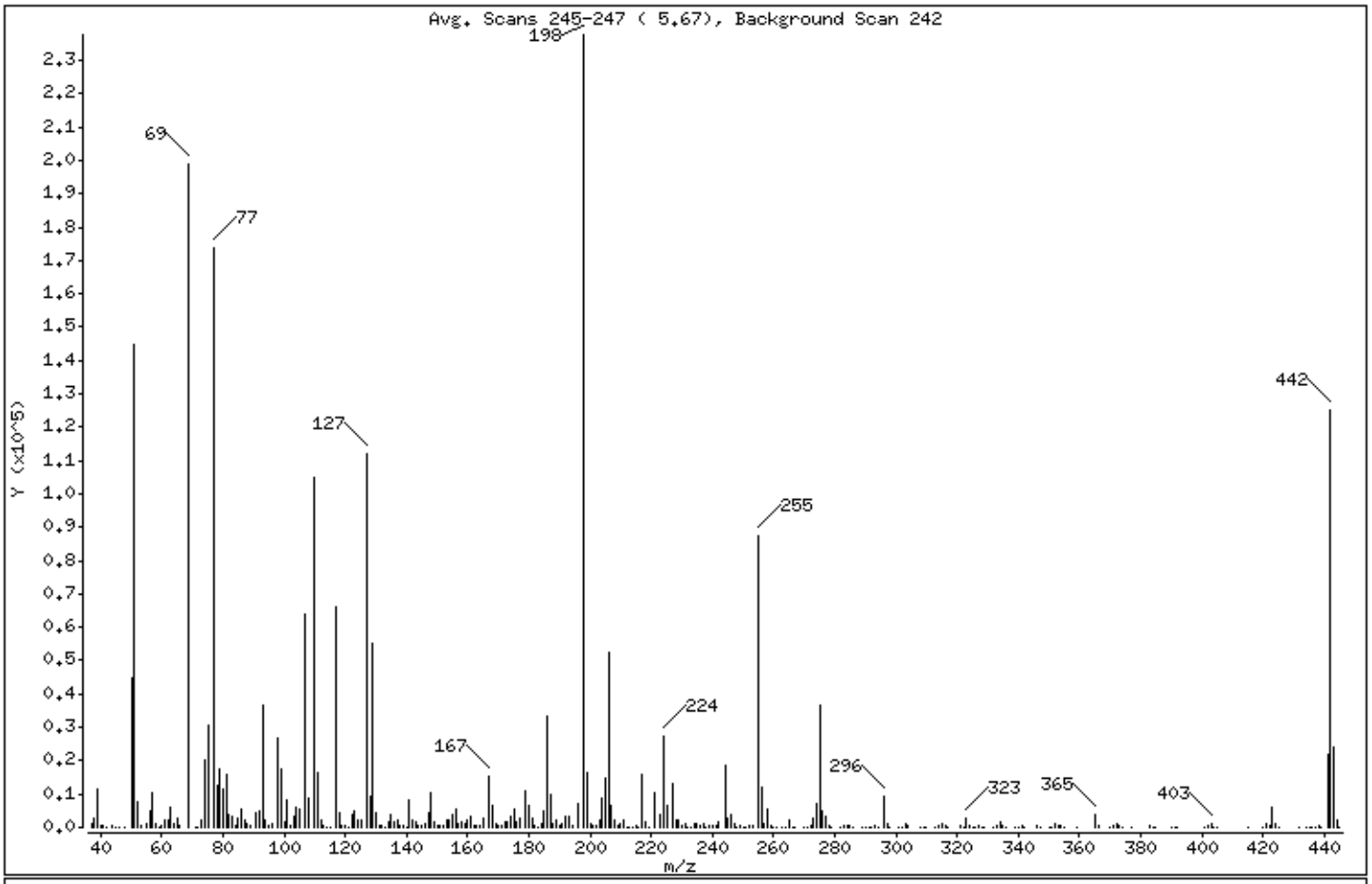
Volume Injected (uL): 2.0

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\111103.B\S2H5188.D
Lab Smp Id: DFTPP2P Client Smp ID: DFTPP2P
Inj Date : 03-NOV-2011 09:42
Operator : SRC: Inst ID: S2.i
Smp Info : DFTPP2P,DFTPP2P
Misc Info : 3,3
Comment :
Method : \\Avogadro\Organics\S2.I\111103.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		
5.488	5.552	-0.064	198	286976			0.00- 100.00	100.00
5.488	5.552	-0.064	51	149760			10.00- 80.00	52.19
5.488	5.552	-0.064	68	0	0.0	0.0	0.00- 2.00	0.00
5.488	5.552	-0.064	69	203392			0.00- 0.00	70.87
5.488	5.552	-0.064	70	0	0.0	0.0	0.00- 2.00	0.00
5.488	5.552	-0.064	127	127448			10.00- 80.00	44.41
5.488	5.552	-0.064	197	0	0.0	0.0	0.00- 2.00	0.00
5.488	5.552	-0.064	199	19992			5.00- 9.00	6.97
5.488	5.552	-0.064	275	45496			10.00- 60.00	15.85
5.488	5.552	-0.064	365	4828			1.00- 0.00	1.68
5.488	5.552	-0.064	441	31256			0.01- 99.99	90.31
5.488	5.552	-0.064	442	177280			50.00- 100.00	61.78
5.488	5.552	-0.064	443	34608			15.00- 24.00	19.52

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5188.D

Date : 03-NOV-2011 09:42

Client ID: DFTPP2P

Instrument: S2.i

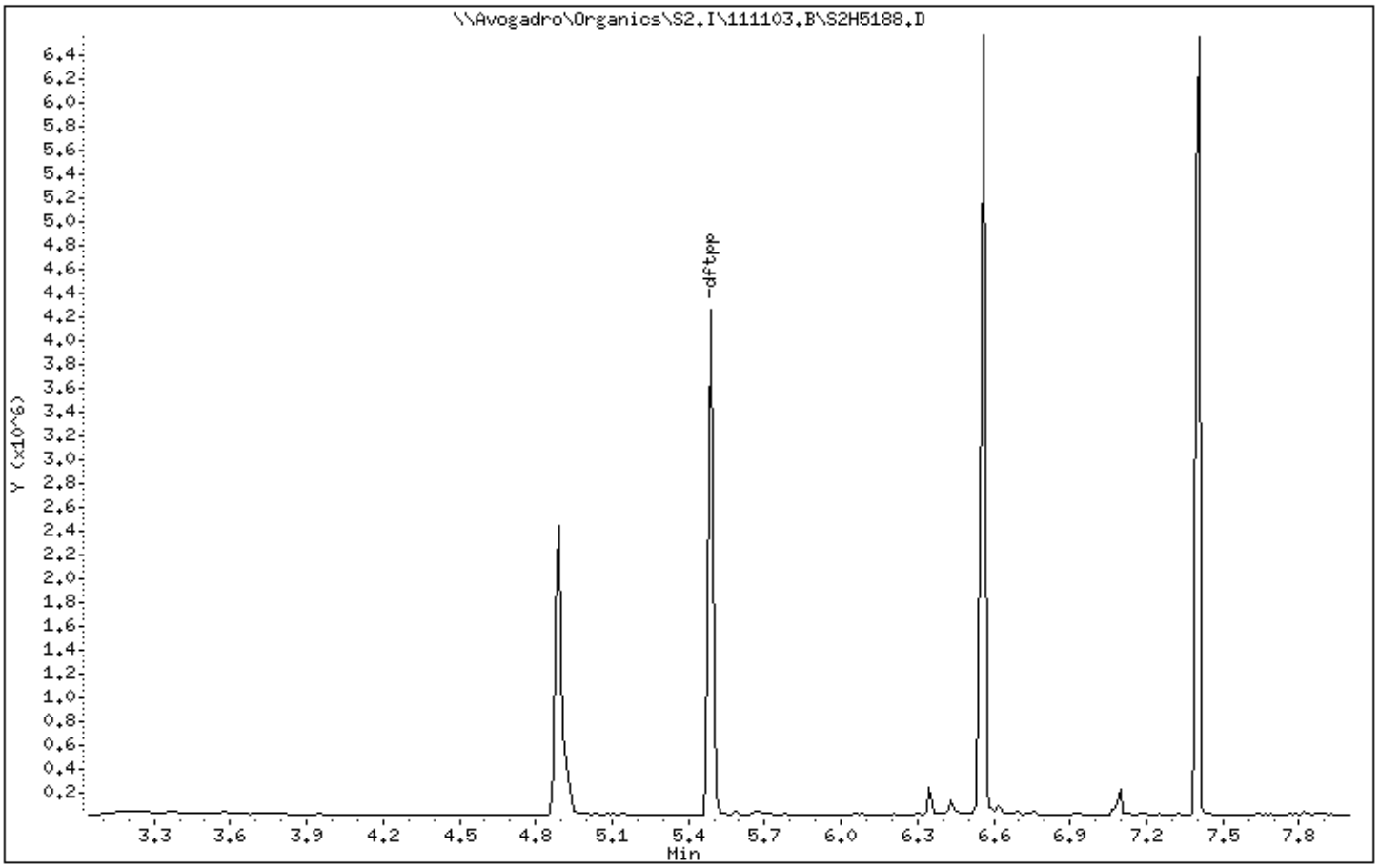
Sample Info: DFTPP2P,DFTPP2P

Volume Injected (uL): 2.0

Operator: SRC:

Column phase: RXi-5SILMS

Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5188.D

Date : 03-NOV-2011 09:42

Client ID: DFTPP2P

Instrument: S2.i

Sample Info: DFTPP2P,DFTPP2P

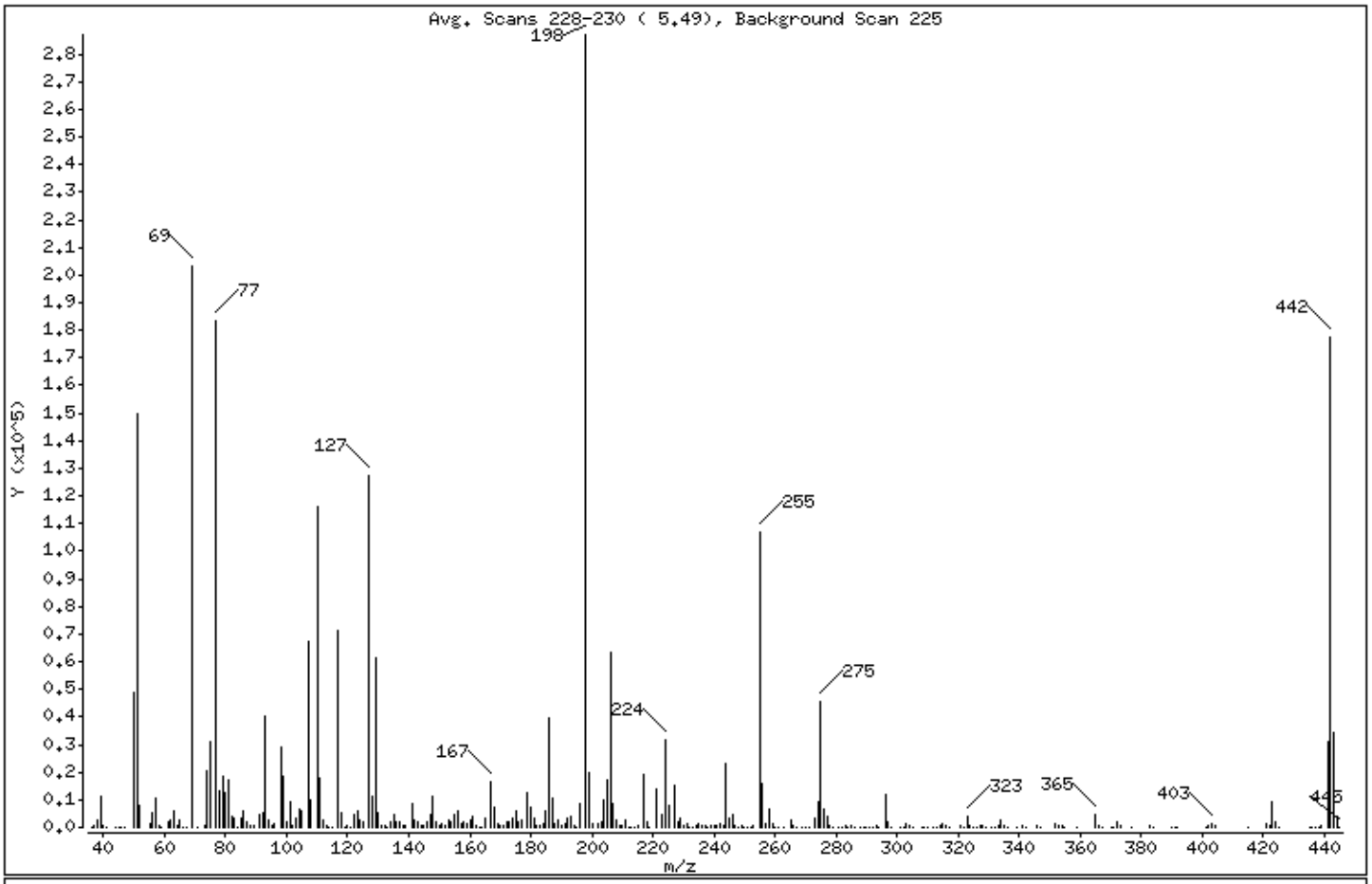
Volume Injected (uL): 2.0

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	52.19
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	70.87
70	Less than 2.00% of mass 69	0.00 (0.00)
127	10.00 - 80.00% of mass 198	44.41
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.97
275	10.00 - 60.00% of mass 198	15.85
365	Greater than 1.00% of mass 198	1.68
441	Present, but less than mass 443	10.89
442	50.00 - 100.00% of mass 198	61.78
443	15.00 - 24.00% of mass 442	12.06 (19.52)

Date : 03-NOV-2011 09:42

Client ID: DFTPP2P Instrument: S2.i

Sample Info: DFTPP2P,DFTPP2P

Volume Injected (uL): 2.0 Operator: SRC:

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S2H5188.D
Spectrum: Avg. Scans 228-230 (5.49), Background Scan 225
Location of Maximum: 198.00
Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	61	129.00	61680	210.00	954	298.00	109
37.00	954	130.00	5251	211.00	2690	301.00	130
38.00	2670	131.00	785	212.00	68	302.00	260
39.00	11029	132.00	514	213.00	219	303.00	1355
40.00	351	133.00	267	214.00	119	304.00	399
41.00	278	134.00	2007	215.00	858	305.00	40
44.00	175	135.00	4451	217.00	18832	308.00	155
45.00	303	136.00	1823	218.00	2142	309.00	96
46.00	41	137.00	2249	219.00	209	310.00	118
47.00	219	138.00	510	221.00	13786	312.00	40
50.00	48688	139.00	404	223.00	4376	313.00	120
51.00	149760	141.00	8474	224.00	31640	314.00	608
52.00	8081	142.00	2634	225.00	8098	315.00	1184
55.00	1042	143.00	1749	227.00	14993	316.00	681
56.00	5029	144.00	422	228.00	2028	317.00	137
57.00	10451	145.00	362	229.00	3021	321.00	388
58.00	584	146.00	1837	230.00	468	322.00	144
59.00	225	147.00	4377	231.00	1209	323.00	3654
61.00	2077	148.00	11477	232.00	239	324.00	739
62.00	2611	149.00	2014	233.00	273	325.00	50
63.00	6221	150.00	524	234.00	874	326.00	65
64.00	891	151.00	1102	235.00	1083	327.00	684
65.00	2566	152.00	658	236.00	694	328.00	365
66.00	236	153.00	2796	237.00	939	329.00	44
67.00	74	154.00	1976	238.00	74	331.00	38
69.00	203392	155.00	4384	239.00	533	332.00	280
71.00	157	156.00	6137	240.00	499	333.00	408
73.00	891	157.00	1139	241.00	852	334.00	2316
74.00	20656	158.00	1661	242.00	1588	335.00	477
75.00	31192	159.00	1099	243.00	375	336.00	49
77.00	183424	160.00	2602	244.00	23040	339.00	40
78.00	13282	161.00	3761	245.00	3045	341.00	518
79.00	18520	162.00	949	246.00	4798	342.00	87
80.00	12648	163.00	313	247.00	987	346.00	825
81.00	17072	164.00	98	248.00	203	347.00	194

Date : 03-NOV-2011 09:42

Client ID: DFTPP2P Instrument: S2.i

Sample Info: DFTPP2P,DFTPP2P

Volume Injected (uL): 2.0 Operator: SRC:

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S2H5188.D
Spectrum: Avg. Scans 228-230 (5.49), Background Scan 225
Location of Maximum: 198.00
Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
82.00	3956	165.00	3330	249.00	822	352.00	1003
83.00	3146	167.00	16776	250.00	182	353.00	742
84.00	306	168.00	7310	251.00	157	354.00	910
85.00	3297	169.00	1228	252.00	312	355.00	216
86.00	5941	170.00	635	253.00	879	359.00	72
87.00	2225	171.00	737	255.00	106624	365.00	4828
88.00	880	172.00	1788	256.00	15631	366.00	772
89.00	484	173.00	2090	257.00	1315	367.00	52
91.00	4524	174.00	3332	258.00	6558	370.00	107
92.00	5329	175.00	5767	259.00	1050	371.00	279
93.00	40096	176.00	1696	260.00	241	372.00	1882
94.00	2432	177.00	2894	261.00	220	373.00	410
95.00	402	179.00	12640	263.00	88	377.00	39
96.00	1092	180.00	7464	265.00	2610	383.00	484
98.00	29280	181.00	3626	266.00	516	384.00	100
99.00	18584	182.00	697	267.00	81	390.00	257
100.00	1713	183.00	379	269.00	35	391.00	203
101.00	9326	184.00	1041	270.00	152	392.00	156
102.00	505	185.00	5825	271.00	321	401.00	108
103.00	3287	186.00	39848	273.00	3592	402.00	809
104.00	6753	187.00	10868	274.00	9093	403.00	1118
105.00	5989	188.00	1271	275.00	45496	404.00	470
107.00	67312	189.00	2610	276.00	6286	415.00	42
108.00	9657	190.00	534	277.00	3780	421.00	1180
110.00	116400	191.00	1387	278.00	659	422.00	866
111.00	17960	192.00	3580	279.00	68	423.00	8958
112.00	2341	193.00	3692	281.00	79	424.00	1708
113.00	634	194.00	852	282.00	89	425.00	166
114.00	203	195.00	64	283.00	450	435.00	46
115.00	51	196.00	8820	284.00	302	436.00	123
117.00	71080	198.00	286976	285.00	610	437.00	322
118.00	4987	199.00	19992	286.00	138	438.00	305
119.00	326	200.00	1514	288.00	69	439.00	354
120.00	818	202.00	1346	289.00	170	441.00	31256
121.00	215	203.00	2246	290.00	94	442.00	177280

Date : 03-NOV-2011 09:42

Client ID: DFTPP2P Instrument: S2.i

Sample Info: DFTPP2P,DFTPP2P

Volume Injected (uL): 2.0 Operator: SRC:

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S2H5188.D
Spectrum: Avg. Scans 228-230 (5.49), Background Scan 225
Location of Maximum: 198.00
Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
122.00	4386	204.00	10207	291.00	193	443.00	34608
123.00	5901	205.00	17416	292.00	160	444.00	3058
124.00	2582	206.00	63424	293.00	723	445.00	227
125.00	2051	207.00	8274	294.00	235		
127.00	127448	208.00	2483	296.00	11887		
128.00	11072	209.00	868	297.00	1880		

Spectrum Analytical, Inc. RI Division

Data file : \\Avogadro\Organics\S2.I\111104.B\S2H5224.D
Lab Smp Id: DFTPP2S Client Smp ID: DFTPP2S
Inj Date : 04-NOV-2011 12:41
Operator : SRC: Inst ID: S2.i
Smp Info : DFTPP2S,DFTPP2S
Misc Info : 3,3
Comment :
Method : \\Avogadro\Organics\S2.I\111104.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		
5.402	5.552	-0.150	198	421696			0.00- 100.00	100.00
5.402	5.552	-0.150	51	182208			10.00- 80.00	43.21
5.402	5.552	-0.150	68	0	0.0	0.0	0.00- 2.00	0.00
5.402	5.552	-0.150	69	255488			0.00- 0.00	60.59
5.402	5.552	-0.150	70	0	0.0	0.0	0.00- 2.00	0.00
5.402	5.552	-0.150	127	174528			10.00- 80.00	41.39
5.402	5.552	-0.150	197	0	0.0	0.0	0.00- 2.00	0.00
5.402	5.552	-0.150	199	29520			5.00- 9.00	7.00
5.402	5.552	-0.150	275	67320			10.00- 60.00	15.96
5.402	5.552	-0.150	365	7527			1.00- 0.00	1.78
5.402	5.552	-0.150	441	36784			0.01- 99.99	70.35
5.402	5.552	-0.150	442	268800			50.00- 100.00	63.74
5.402	5.552	-0.150	443	52288			15.00- 24.00	19.45

Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5224.D

Date : 04-NOV-2011 12:41

Client ID: DFTPP2S

Instrument: S2.i

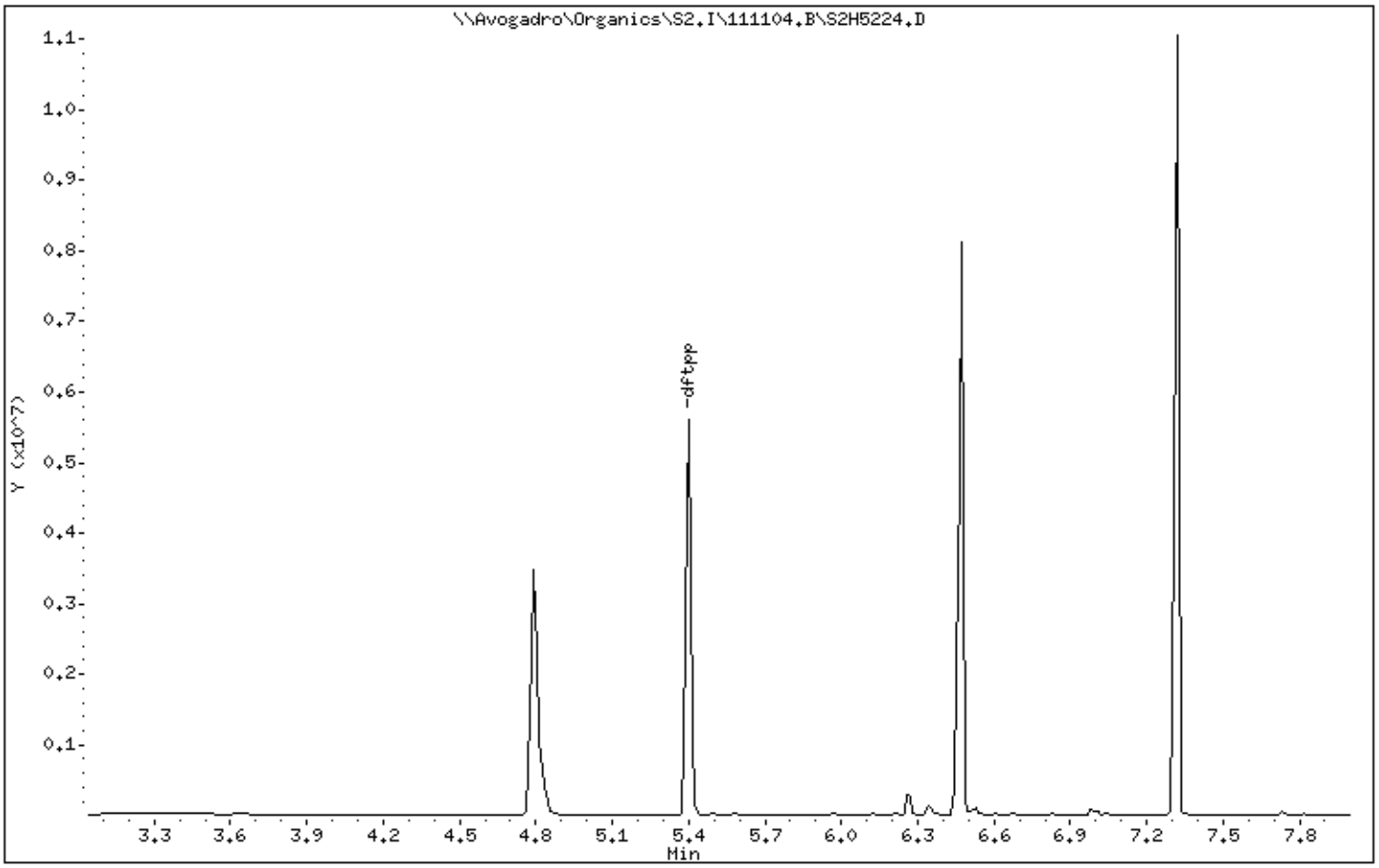
Sample Info: DFTPP2S,DFTPP2S

Volume Injected (uL): 2.0

Operator: SRC:

Column phase: RXi-5SILMS

Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5224.D

Date : 04-NOV-2011 12:41

Client ID: DFTPP2S

Instrument: S2.i

Sample Info: DFTPP2S,DFTPP2S

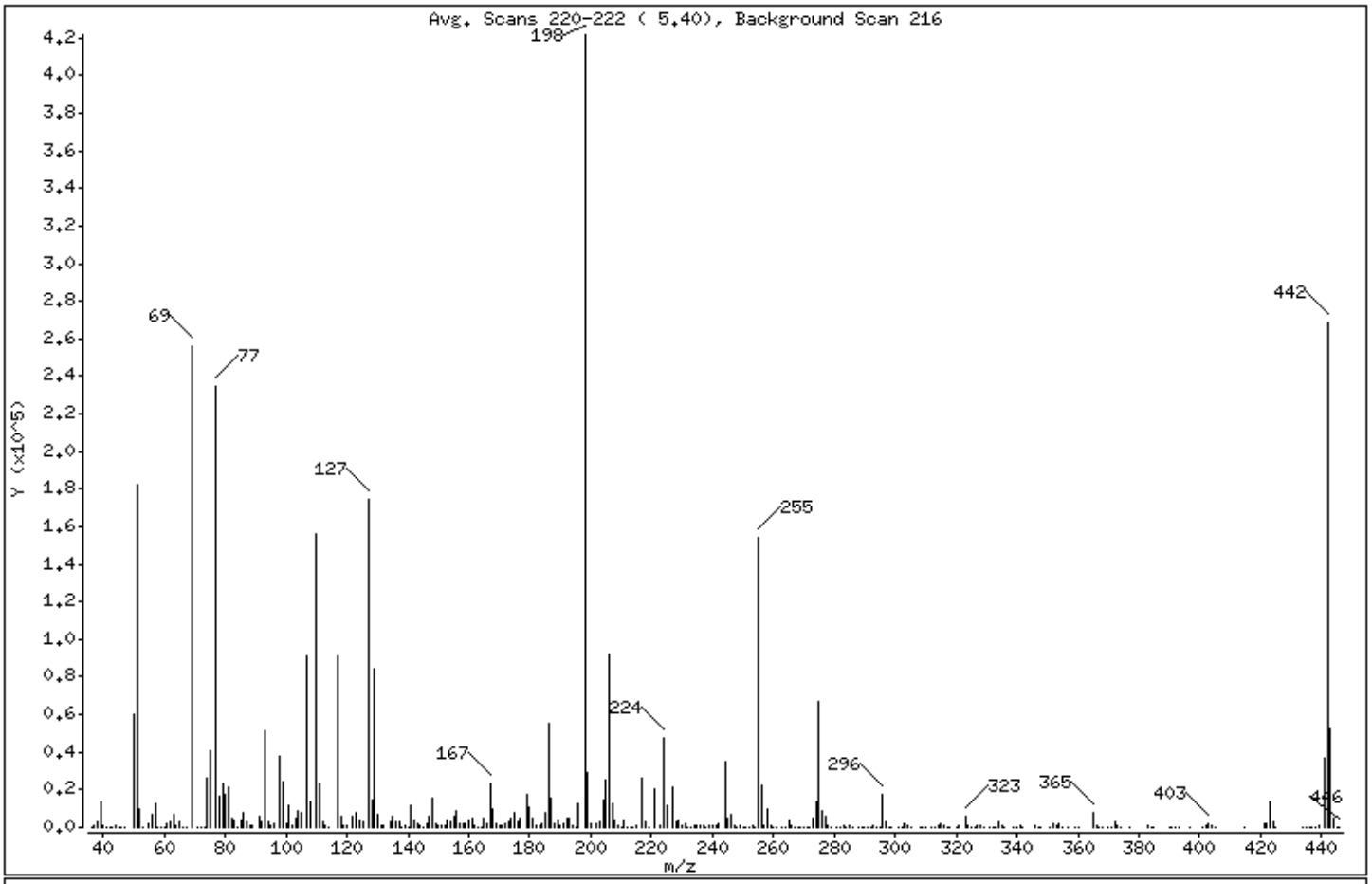
Volume Injected (uL): 2.0

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	43.21
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	60.59
70	Less than 2.00% of mass 69	0.00 (0.00)
127	10.00 - 80.00% of mass 198	41.39
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	7.00
275	10.00 - 60.00% of mass 198	15.96
365	Greater than 1.00% of mass 198	1.78
441	Present, but less than mass 443	8.72
442	50.00 - 100.00% of mass 198	63.74
443	15.00 - 24.00% of mass 442	12.40 (19.45)

Date : 04-NOV-2011 12:41

Client ID: DFTPP2S Instrument: S2.i

Sample Info: DFTPP2S,DFTPP2S

Volume Injected (uL): 2.0 Operator: SRC:

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S2H5224.D
Spectrum: Avg. Scans 220-222 (5.40), Background Scan 216
Location of Maximum: 198.00
Number of points: 324

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	225	132.00	603	219.00	451	312.00	37
37.00	1125	134.00	2577	221.00	20720	313.00	201
38.00	3307	135.00	5510	223.00	630	314.00	951
39.00	13746	136.00	2525	224.00	47552	315.00	1861
40.00	749	137.00	3004	225.00	11991	316.00	1086
41.00	316	138.00	425	227.00	21328	317.00	169
42.00	8	139.00	538	228.00	3042	318.00	52
43.00	104	140.00	79	229.00	4252	320.00	71
44.00	822	141.00	11727	230.00	670	321.00	574
45.00	351	142.00	3427	231.00	1725	323.00	5691
46.00	136	143.00	2398	232.00	300	324.00	1097
47.00	236	144.00	581	233.00	284	325.00	79
50.00	59648	145.00	482	234.00	1313	326.00	109
51.00	182208	146.00	2248	235.00	1219	327.00	988
52.00	9835	147.00	5614	236.00	958	328.00	572
53.00	346	148.00	15034	237.00	1227	329.00	100
55.00	1608	149.00	2402	238.00	189	331.00	46
56.00	6684	150.00	717	239.00	779	332.00	447
57.00	12415	151.00	1365	240.00	631	333.00	416
58.00	152	152.00	911	241.00	1093	334.00	3357
59.00	306	153.00	3598	242.00	2371	335.00	938
60.00	333	154.00	2454	244.00	34600	336.00	86
61.00	2350	155.00	6212	245.00	4433	339.00	103
62.00	3145	156.00	8323	246.00	6725	340.00	45
63.00	7268	157.00	1708	247.00	1434	341.00	614
64.00	1122	158.00	2136	248.00	349	342.00	188
65.00	3051	159.00	1635	249.00	1077	346.00	1120
66.00	397	160.00	3780	250.00	347	347.00	171
67.00	121	161.00	5126	251.00	319	348.00	40
69.00	255488	162.00	1370	252.00	365	351.00	127
71.00	218	163.00	431	253.00	1003	352.00	1539
72.00	43	164.00	306	254.00	156	353.00	1268
73.00	152	165.00	4403	255.00	153728	354.00	1680
74.00	26016	166.00	1722	256.00	22408	355.00	302
75.00	40872	167.00	22840	257.00	851	357.00	48

Date : 04-NOV-2011 12:41

Client ID: DFTPP2S Instrument: S2.i

Sample Info: DFTPP2S,DFTPP2S

Volume Injected (uL): 2.0 Operator: SRC:

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S2H5224.D
Spectrum: Avg. Scans 220-222 (5.40), Background Scan 216
Location of Maximum: 198.00
Number of points: 324

m/z	Y	m/z	Y	m/z	Y	m/z	Y
77.00	234176	168.00	10078	258.00	9296	359.00	125
78.00	16776	169.00	1859	259.00	1421	360.00	43
79.00	23688	170.00	773	260.00	264	365.00	7527
80.00	17168	171.00	905	261.00	271	366.00	1054
81.00	21088	172.00	2154	263.00	140	367.00	79
82.00	5184	173.00	2465	264.00	262	368.00	40
83.00	4222	174.00	4554	265.00	3773	370.00	160
84.00	200	175.00	8195	266.00	591	371.00	470
85.00	3745	176.00	2434	267.00	115	372.00	2868
86.00	7730	177.00	4486	268.00	128	373.00	715
87.00	2943	179.00	17408	269.00	67	374.00	69
88.00	1219	180.00	10237	270.00	202	377.00	76
89.00	592	181.00	5044	271.00	440	383.00	799
91.00	5757	182.00	864	272.00	89	384.00	195
92.00	3083	183.00	579	273.00	4812	385.00	52
93.00	51424	184.00	1545	274.00	13509	390.00	439
94.00	2947	185.00	8065	275.00	67320	391.00	365
95.00	572	186.00	55456	276.00	9020	392.00	282
96.00	1715	187.00	15855	277.00	5433	393.00	38
98.00	37768	188.00	1846	278.00	981	397.00	41
99.00	24576	189.00	4062	279.00	172	401.00	203
100.00	2001	190.00	699	281.00	40	402.00	1242
101.00	12014	191.00	1824	282.00	178	403.00	1791
102.00	656	192.00	5075	283.00	687	404.00	651
103.00	4592	193.00	5033	284.00	401	405.00	60
104.00	8666	194.00	982	285.00	988	415.00	58
105.00	8185	195.00	85	286.00	160	421.00	1688
107.00	90888	196.00	12728	288.00	51	422.00	1993
108.00	13363	198.00	421696	289.00	222	423.00	13286
110.00	156480	199.00	29520	290.00	262	424.00	2541
111.00	23112	200.00	2331	291.00	159	425.00	255
112.00	3032	202.00	2189	292.00	228	434.00	68
113.00	1016	203.00	3217	293.00	1045	435.00	179
114.00	33	204.00	14591	294.00	340	436.00	183
117.00	90976	205.00	24952	295.00	41	437.00	237

Date : 04-NOV-2011 12:41

Client ID: DFTPP2S Instrument: S2.i

Sample Info: DFTPP2S,DFTPP2S

Volume Injected (uL): 2.0 Operator: SRC:

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S2H5224.D
Spectrum: Avg. Scans 220-222 (5.40), Background Scan 216
Location of Maximum: 198.00
Number of points: 324

m/z	Y	m/z	Y	m/z	Y	m/z	Y
118.00	6163	206.00	91816	296.00	17496	438.00	242
119.00	564	207.00	12313	297.00	2527	439.00	549
120.00	986	208.00	3461	298.00	248	441.00	36784
122.00	5586	209.00	1089	299.00	88	442.00	268800
123.00	7867	210.00	172	301.00	255	443.00	52288
124.00	3803	211.00	4197	302.00	387	444.00	4793
125.00	2952	212.00	51	303.00	1959	445.00	379
127.00	174528	213.00	249	304.00	521	446.00	44
128.00	14268	214.00	126	305.00	36		
129.00	84352	215.00	1071	308.00	251		
130.00	6724	217.00	25952	309.00	169		
131.00	1314	218.00	3211	310.00	209		

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SBLK2Q

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-62636

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5203.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2´-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1´-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SBLK2Q

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-62636

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5203.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3´-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

SBLK2Q

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-62636

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5203.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/02/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/03/2011

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	5469-16-9	2(3H)-Furanone, dihydro-4-hy	4.664	7.2	NJ
02		Unknown-01	4.878	5.1	J
03		Unknown-02	5.189	2.3	J
04		Unknown-03	5.393	7.1	J
05		Unknown-04	5.521	3.7	J
06		Unknown-05	6.347	3.5	J
07		Unknown-06	8.095	5.1	J
08	301-02-0	9-Octadecenamide, (Z)-	10.604	8.1	NJ
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5203.D
Report Date: 07-Nov-2011 14:01

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5203.D
Lab Smp Id: MB-62636 Client Smp ID: SBLK2Q
Inj Date : 03-NOV-2011 16:05
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : MB-62636,SBLK2Q,62636
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 13 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)
$	2 Phenol-d5	71	3.569	3.565	(0.920)	193288	52.7047	26
$	4 bis(2-Chloroethyl)ether-d8	67	3.612	3.619	(0.931)	261590	51.7635	26
$	6 2-Chlorophenol-d4	132	3.698	3.694	(0.953)	176738	55.7093	28
*	8 1,4-Dichlorobenzene-d4	152	3.880	3.887	(1.000)	116462	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.191	4.198	(1.080)	249489	50.1792	25
$	16 Nitrobenzene-d5	128	4.341	4.348	(0.877)	89501	56.7344	28
$	19 2-Nitrophenol-d4	143	4.620	4.616	(0.933)	105971	60.8502	30
$	23 2,4-Dichlorophenol-d3	165	4.824	4.820	(0.974)	190863	60.0361	30
*	25 Naphthalene-d8	136	4.953	4.948	(1.000)	302920	40.0000	
$	27 4-Chloroaniline-d4	131	5.006	5.002	(1.011)	133544	47.3091	24(Q)
$	40 Dimethylphthalate-d6	166	6.164	6.171	(0.962)	437478	56.9054	28
$	43 Acenaphthylene-d8	160	6.282	6.289	(0.980)	575042	57.5208	29
*	46 Acenaphthene-d10	164	6.411	6.418	(1.000)	209089	40.0000	
$	49 4-Nitrophenol-d4	143	6.507	6.503	(1.015)	68415	61.7512	31
$	54 Fluorene-d10	176	6.840	6.847	(1.067)	367702	52.0691	26
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.904	6.900	(0.903)	72387	49.5535	25
*	65 Phenanthrene-d10	188	7.644	7.640	(1.000)	374347	40.0000	
$	67 Anthracene-d10	188	7.687	7.694	(1.006)	594607	55.6054	28
$	72 Pyrene-d10	212	8.824	8.820	(0.894)	517993	74.9980	37
*	77 Chrysene-d12	240	9.875	9.871	(1.000)	219246	40.0000	(Q)
$	83 Benzo(a)pyrene-d12	264	11.151	11.147	(0.991)	162216	56.7986	28(H)

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5203.D
Report Date: 07-Nov-2011 14:01

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)	
* 85 Perylene-d12	264	11.247	11.233	(1.000)	116388	40.0000		(Q)

QC Flag Legend

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

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5203.D
Report Date: 07-Nov-2011 14:01

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111103.B\S2H5203.D
Lab Smp Id: MB-62636 Client Smp ID: SBLK2Q
Inj Date : 03-NOV-2011 16:05
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : MB-62636,SBLK2Q,62636
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111103.B\S2_SOM.m
Meth Date : 07-Nov-2011 14:01 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 13 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

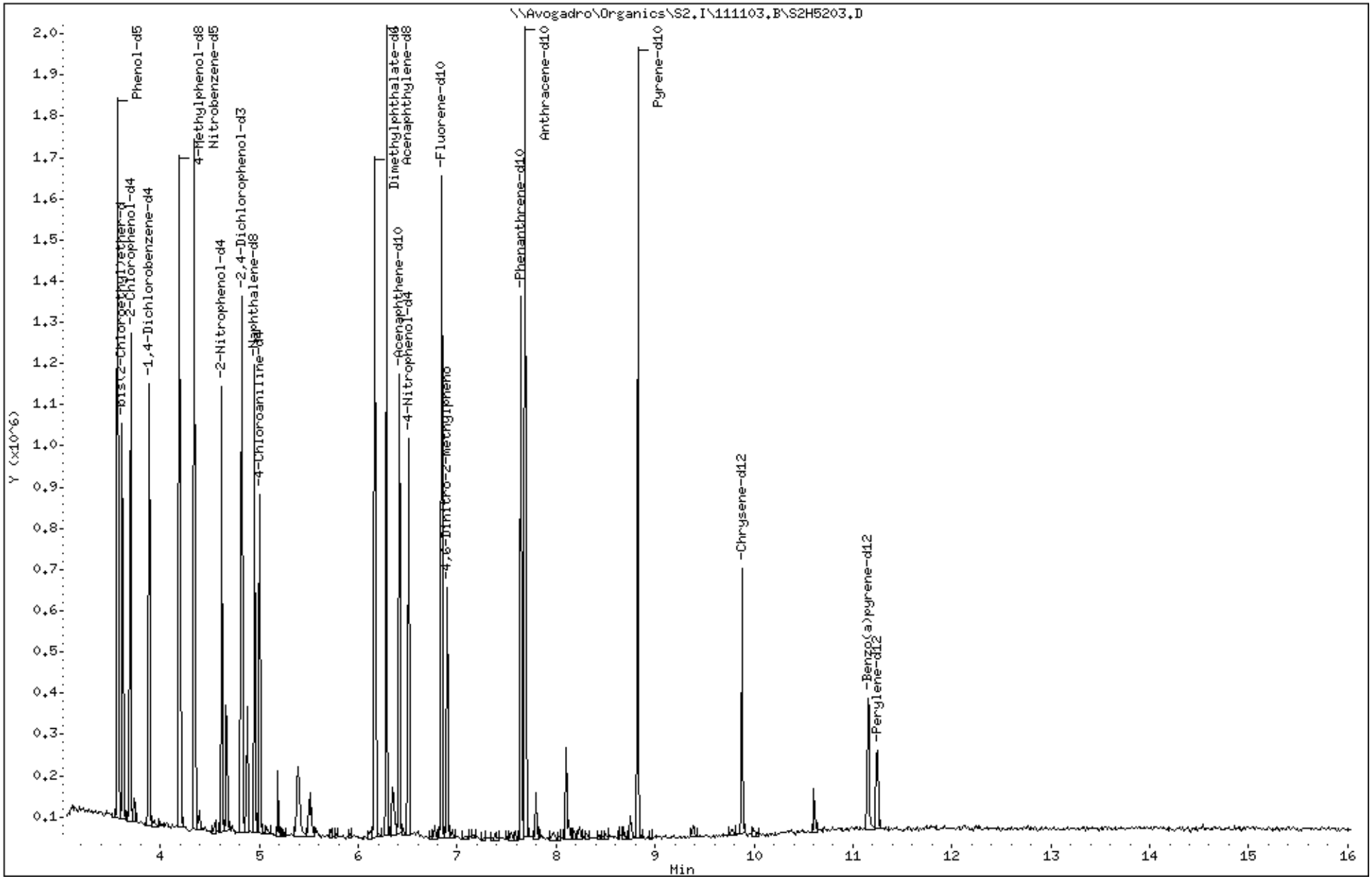
ISTD	RT	AREA	AMOUNT
* 25 Naphthalene-d8	4.953	1053691	40.000
* 46 Acenaphthene-d10	6.411	1123756	40.000
* 65 Phenanthrene-d10	7.645	1062912	40.000
* 85 Perylene-d12	11.248	289808	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
2(3H)-Furanone, dihydro-4-hydroxy-				CAS #: 5469-16-9			
4.664	377956	14.3478653	7.2	90	NIST2002.L	4145	25
Unknown				CAS #:			
4.878	271083	10.2907925	5.1	0		0	25
Unknown				CAS #:			
5.189	123212	4.67734383	2.3	0		0	25

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5203.D
Report Date: 07-Nov-2011 14:01

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
5.393	374322	14.2099413	7.1	0		0	25
Unknown				CAS #:			
5.521	197152	7.48422536	3.7	0		0	25
Unknown				CAS #:			
6.347	193861	6.90044503	3.5	0		0	46
Unknown				CAS #:			
8.095	272556	10.2569346	5.1	0		0	65
9-Octadecenamide, (Z)-				CAS #: 301-02-0			
10.604	116921	16.1376426	8.1	90	NIST2002.L	106877	85

Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5203.D
Date : 03-NOV-2011 16:05
Client ID: SBLK2Q
Instrument: S2.i
Sample Info: MB-62636,SBLK2Q,62636
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111103.B\S2H5203.D

Date : 03-NOV-2011 16:05

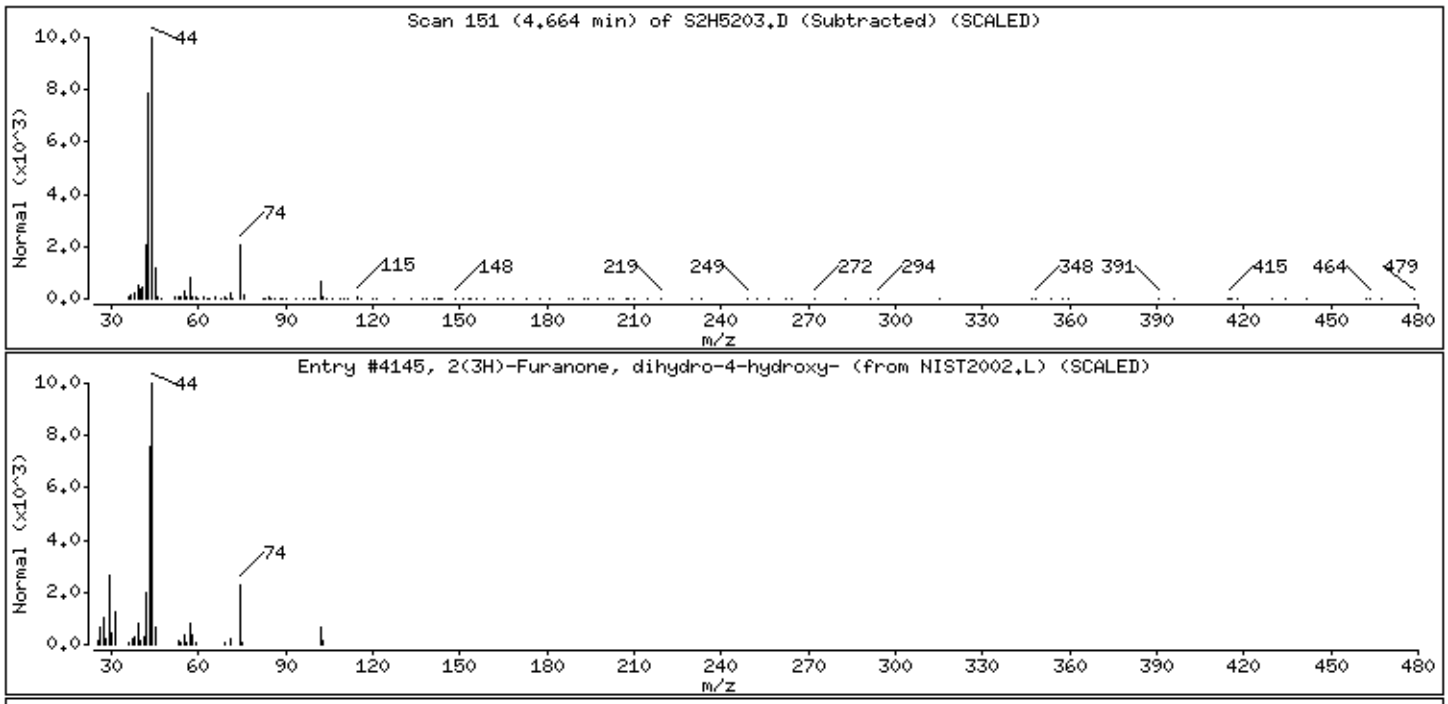
Client ID: SBLK2Q Instrument: S2.i

Sample Info: MB-62636,SBLK2Q,62636

Volume Injected (uL): 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\111103.B\S2H5203.D

Date : 03-NOV-2011 16:05

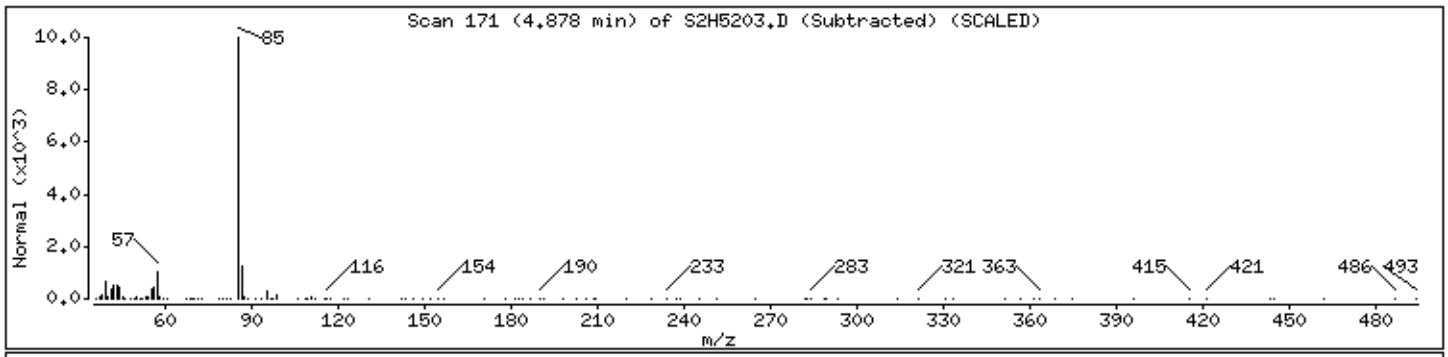
Client ID: SBLK2Q Instrument: S2.i

Sample Info: MB-62636,SBLK2Q,62636

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5203.D

Date : 03-NOV-2011 16:05

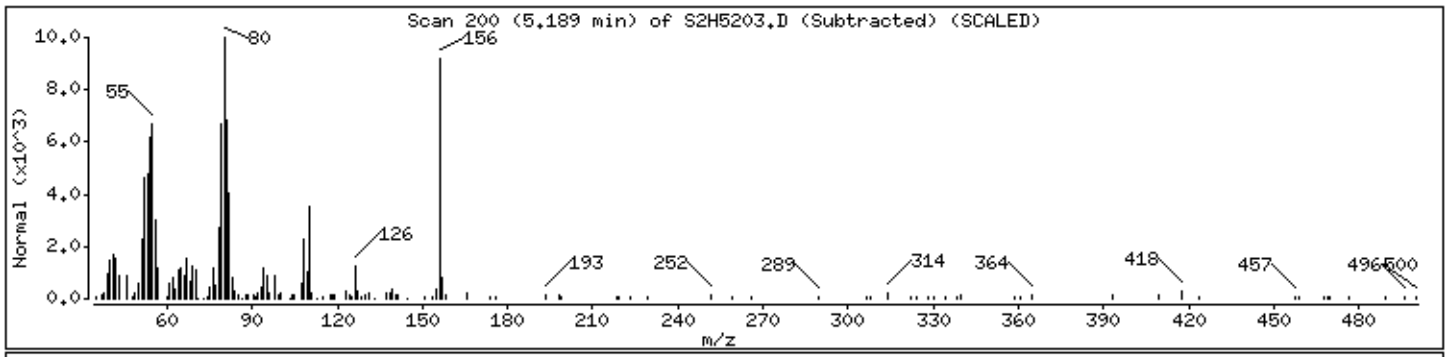
Client ID: SBLK2Q Instrument: S2.i

Sample Info: MB-62636,SBLK2Q,62636

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5203.D

Date : 03-NOV-2011 16:05

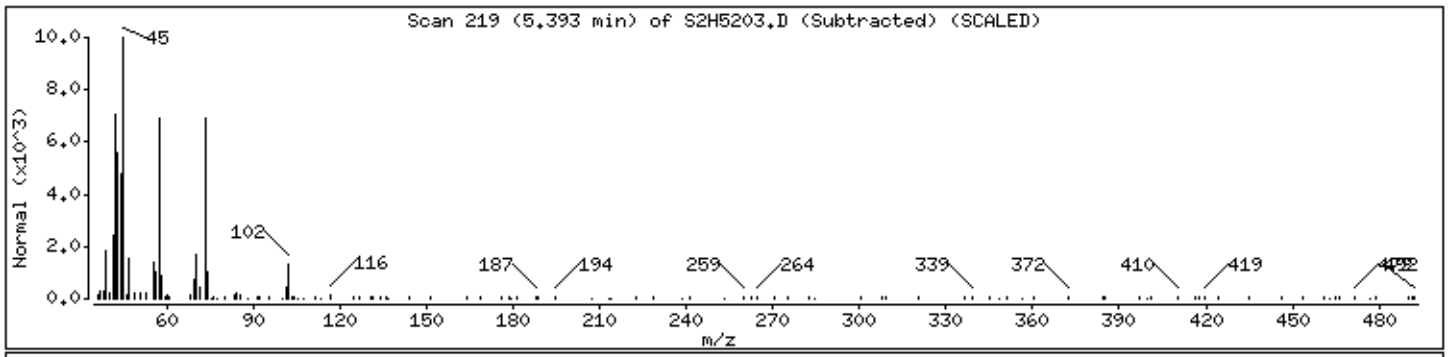
Client ID: SBLK2Q Instrument: S2.i

Sample Info: MB-62636,SBLK2Q,62636

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5203.D

Date : 03-NOV-2011 16:05

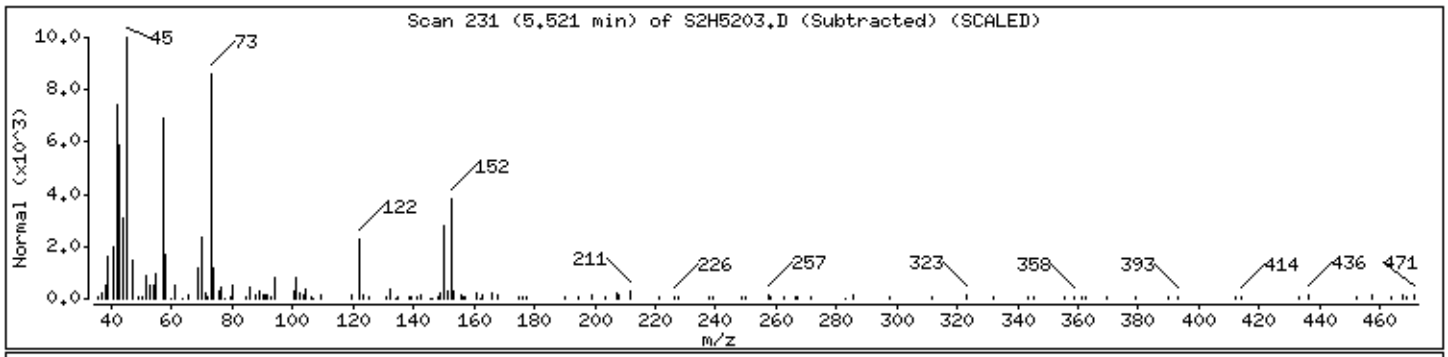
Client ID: SBLK2Q Instrument: S2.i

Sample Info: MB-62636,SBLK2Q,62636

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5203.D

Date : 03-NOV-2011 16:05

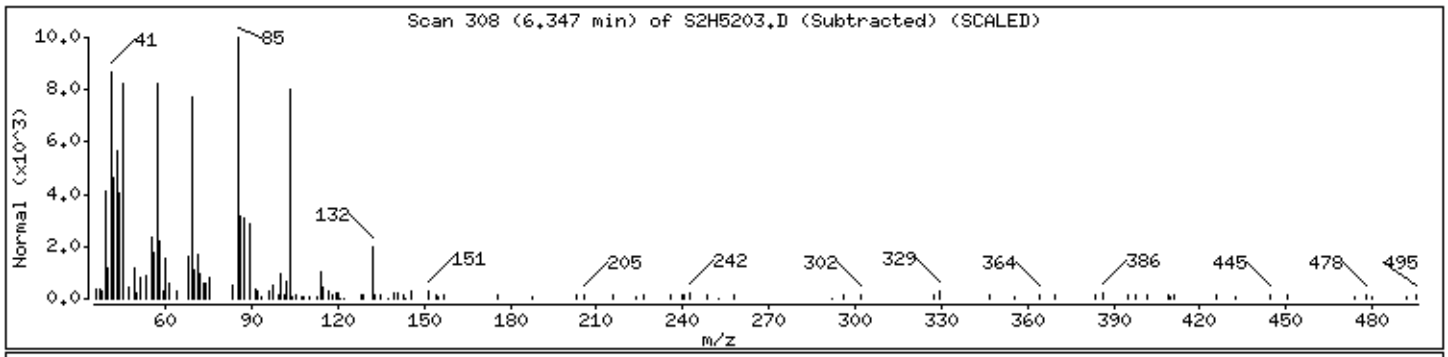
Client ID: SBLK2Q Instrument: S2.i

Sample Info: MB-62636,SBLK2Q,62636

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5203.D

Date : 03-NOV-2011 16:05

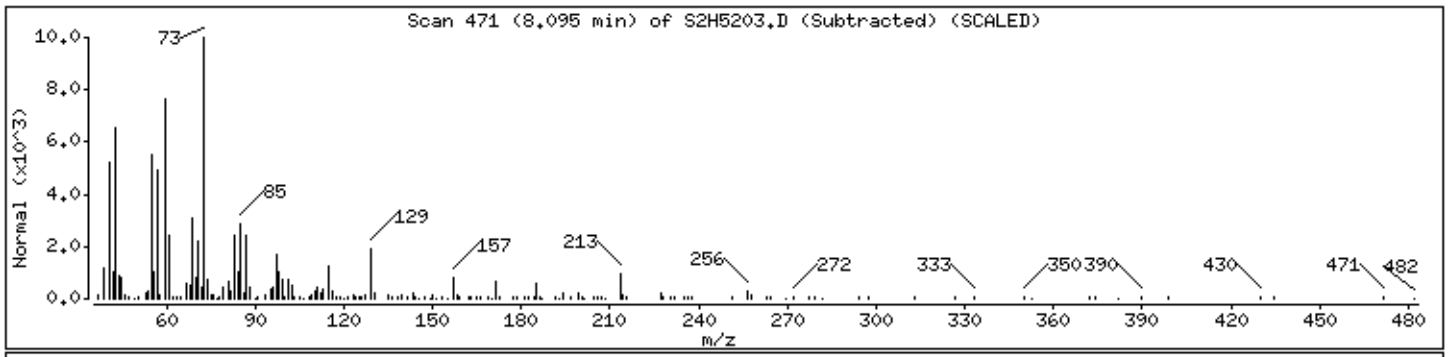
Client ID: SBLK2Q Instrument: S2.i

Sample Info: MB-62636,SBLK2Q,62636

Volume Injected (uL): 2.0 Operator: SRC: 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\111103.B\S2H5203.D

Date : 03-NOV-2011 16:05

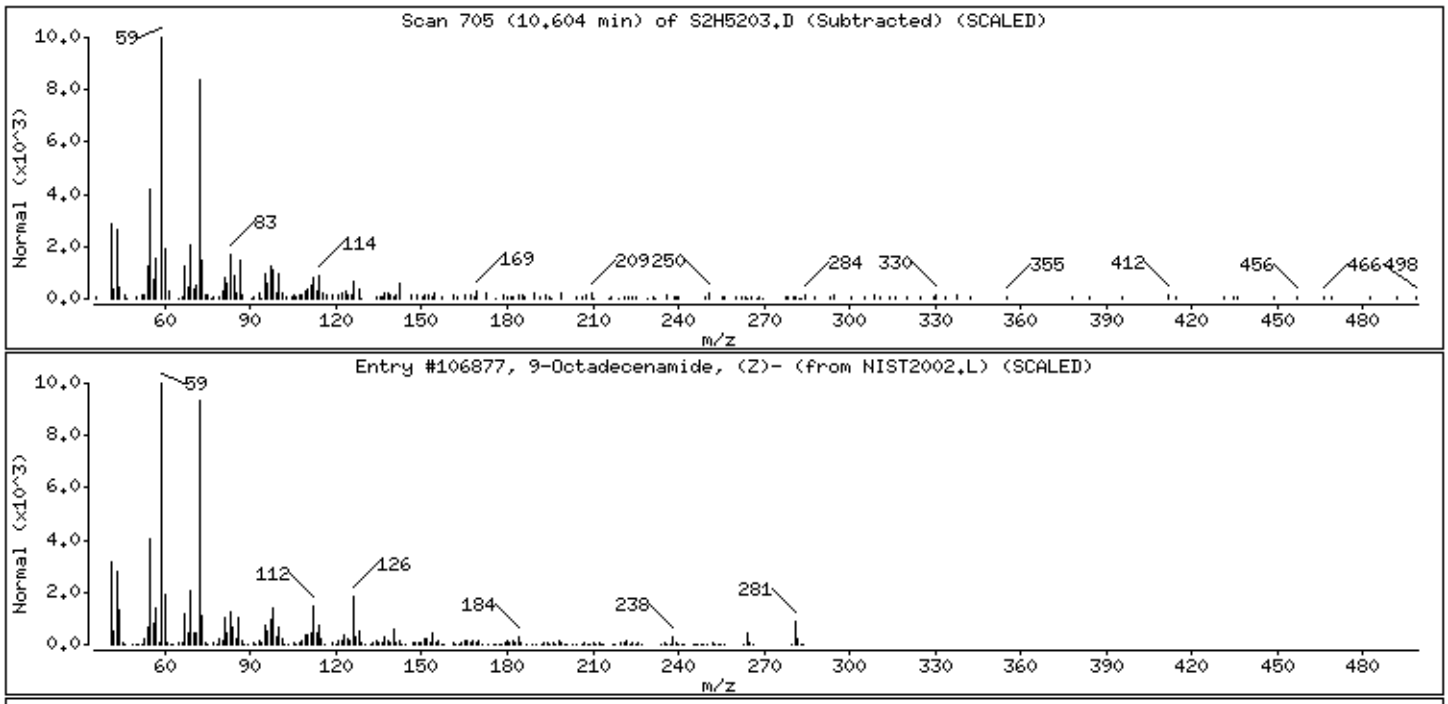
Client ID: SBLK2Q Instrument: S2.i

Sample Info: MB-62636,SBLK2Q,62636

Volume Injected (uL): 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

CLIENT SAMPLE NO.

SBLK2S

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-62685

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5227.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/03/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/04/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2´-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1´-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SBLK2S

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-62685

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5227.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/03/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/04/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3´-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

(1) Cannot be separated from Diphenylamine

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

SBLK2S

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-62685

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5227.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/03/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/04/2011

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	3.669	3.7	J
02		Unknown-02	4.602	4.0	J
03		Unknown-03	4.817	2.6	J
04		Unknown-04	5.128	2.6	J
05		Unknown-05	5.310	3.7	J
06		Unknown-06	10.586	4.1	J
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5227.D
Report Date: 07-Nov-2011 13:26

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111104.B\S2H5227.D
Lab Smp Id: MB-62685 Client Smp ID: SBLK2S
Inj Date : 04-NOV-2011 15:14
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : MB-62685,SBLK2S,62685
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111104.B\S2_SOM.m
Meth Date : 07-Nov-2011 13:26 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)
$	2 Phenol-d5	71	3.508	3.500	(0.919)	176175	60.3197	30
$	4 bis(2-Chloroethyl)ether-d8	67	3.551	3.554	(0.930)	263631	65.5043	33
$	6 2-Chlorophenol-d4	132	3.626	3.629	(0.949)	165978	65.6929	33
*	8 1,4-Dichlorobenzene-d4	152	3.819	3.822	(1.000)	92750	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.130	4.133	(1.081)	255622	64.5566	32
$	16 Nitrobenzene-d5	128	4.280	4.283	(0.877)	85024	69.8088	35(Q)
$	19 2-Nitrophenol-d4	143	4.548	4.551	(0.932)	97778	72.7220	36
$	23 2,4-Dichlorophenol-d3	165	4.762	4.755	(0.976)	169637	69.1132	35
*	25 Naphthalene-d8	136	4.880	4.884	(1.000)	233872	40.0000	
$	27 4-Chloroaniline-d4	131	4.934	4.937	(1.011)	137448	63.0679	32(Q)
$	40 Dimethylphthalate-d6	166	6.103	6.106	(0.961)	435223	63.6450	32
$	43 Acenaphthylene-d8	160	6.221	6.224	(0.980)	603537	67.8711	34
*	46 Acenaphthene-d10	164	6.350	6.353	(1.000)	185984	40.0000	
$	49 4-Nitrophenol-d4	143	6.446	6.449	(1.015)	64467	65.4165	33
$	54 Fluorene-d10	176	6.779	6.782	(1.068)	389031	61.9332	31
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.832	6.835	(0.901)	73399	67.3882	34(Q)
*	65 Phenanthrene-d10	188	7.583	7.575	(1.000)	279122	40.0000	
$	67 Anthracene-d10	188	7.626	7.629	(1.006)	545890	68.4656	34
$	72 Pyrene-d10	212	8.762	8.776	(0.891)	455574	79.6032	40
*	77 Chrysene-d12	240	9.835	9.881	(1.000)	181671	40.0000	(Q)
$	83 Benzo(a)pyrene-d12	264	11.111	11.189	(0.983)	175651	64.8939	32(H)

Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5227.D
Report Date: 07-Nov-2011 13:26

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)	
* 85 Perylene-d12	264	11.197	11.275	(1.000)	110306	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\111104.B\S2H5227.D
Report Date: 07-Nov-2011 13:26

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111104.B\S2H5227.D
Lab Smp Id: MB-62685 Client Smp ID: SBLK2S
Inj Date : 04-NOV-2011 15:14
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : MB-62685,SBLK2S,62685
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111104.B\S2_SOM.m
Meth Date : 07-Nov-2011 13:26 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

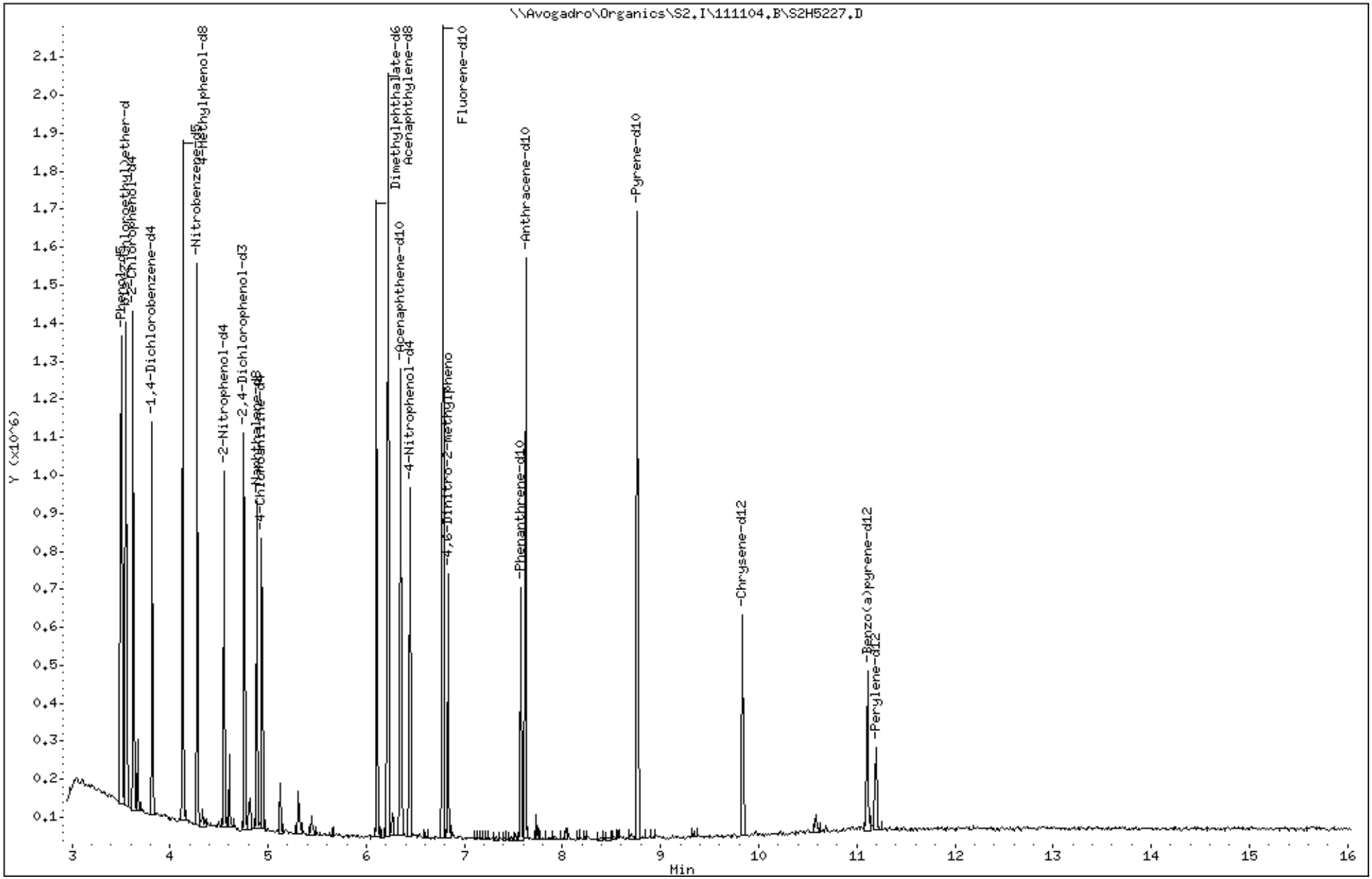
ISTD	RT	AREA	AMOUNT
* 8 1,4-Dichlorobenzene-d4	3.819	850993	40.000
* 25 Naphthalene-d8	4.881	840065	40.000
* 85 Perylene-d12	11.197	290846	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
3.669	159398	7.49233427	3.7	0	0		8
Unknown				CAS #:			
4.602	166438	7.92500529	4.0	0	0		25
Unknown				CAS #:			
4.817	109434	5.21073258	2.6	0	0		25
Unknown				CAS #:			
5.128	110100	5.24242803	2.6	0	0		25

Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5227.D
Report Date: 07-Nov-2011 13:26

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
5.310	156158	7.43549175	3.7	0		0	25
Unknown				CAS #:			
10.586	59628	8.20061286	4.1	0		0	85

Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5227.D
Date : 04-NOV-2011 15:14
Client ID: SBLK2S
Instrument: S2.i
Sample Info: MB-62685,SBLK2S,62685
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5227.D

Date : 04-NOV-2011 15:14

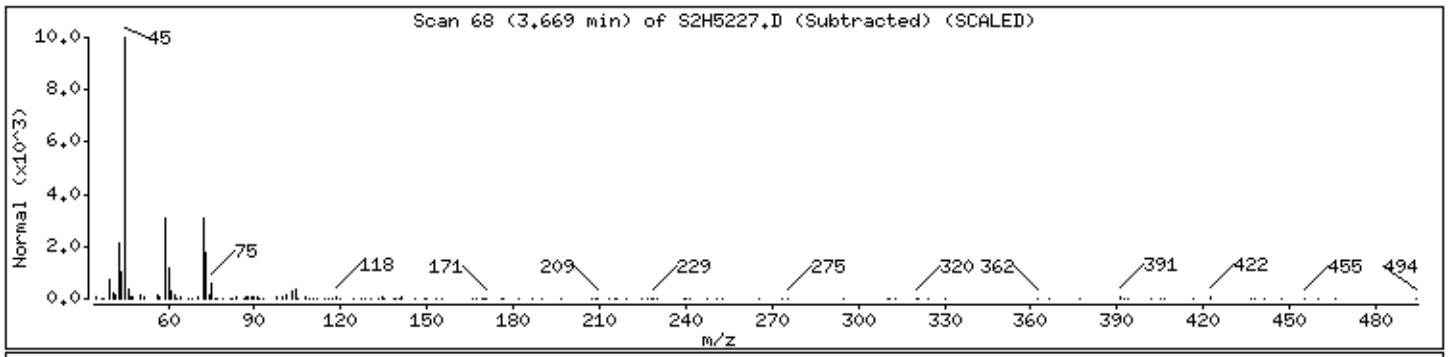
Client ID: SBLK2S Instrument: S2.i

Sample Info: MB-62685,SBLK2S,62685

Volume Injected (uL): 2.0 Operator: SRC: 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\111104.B\S2H5227.D

Date : 04-NOV-2011 15:14

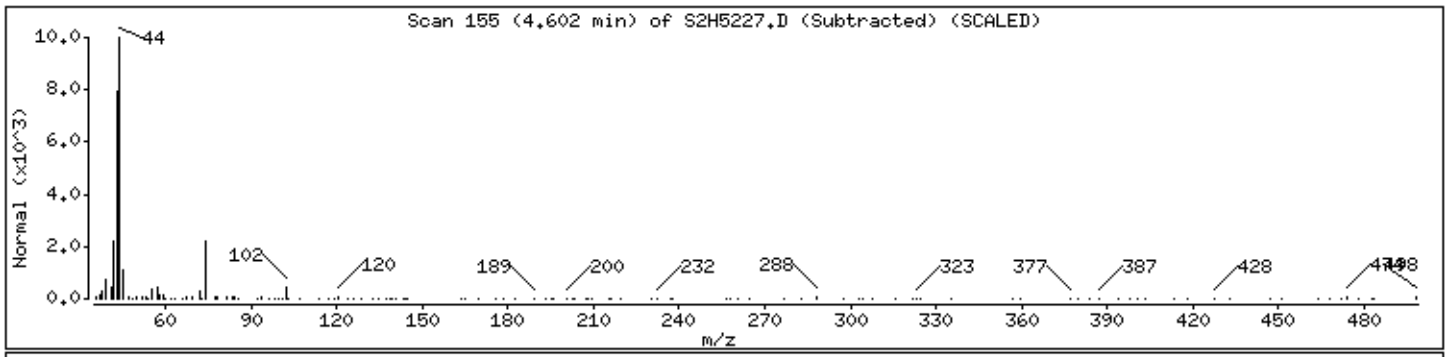
Client ID: SBLK2S Instrument: S2.i

Sample Info: MB-62685,SBLK2S,62685

Volume Injected (uL): 2.0 Operator: SRC: 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\111104.B\S2H5227.D

Date : 04-NOV-2011 15:14

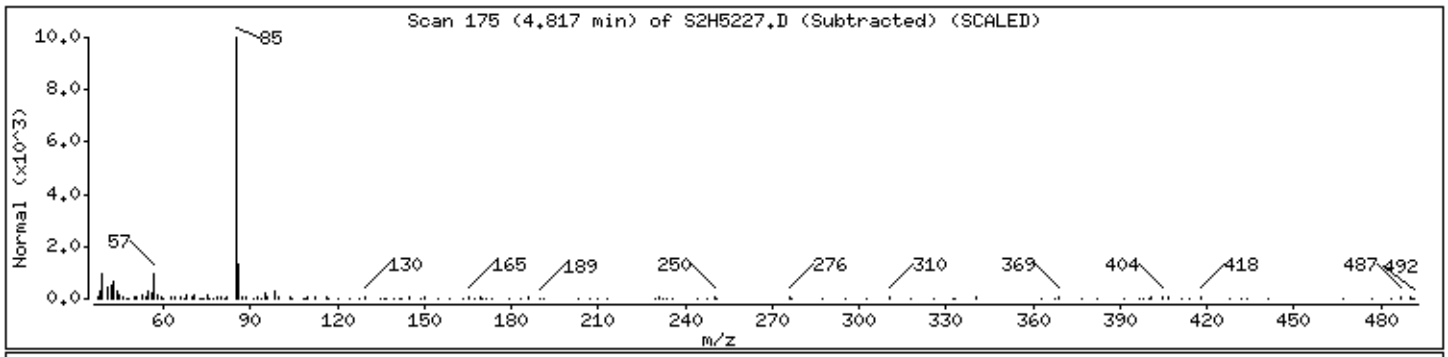
Client ID: SBLK2S Instrument: S2.i

Sample Info: MB-62685,SBLK2S,62685

Volume Injected (uL): 2.0 Operator: SRC: 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\111104.B\S2H5227.D

Date : 04-NOV-2011 15:14

Client ID: SBLK2S

Instrument: S2.i

Sample Info: MB-62685,SBLK2S,62685

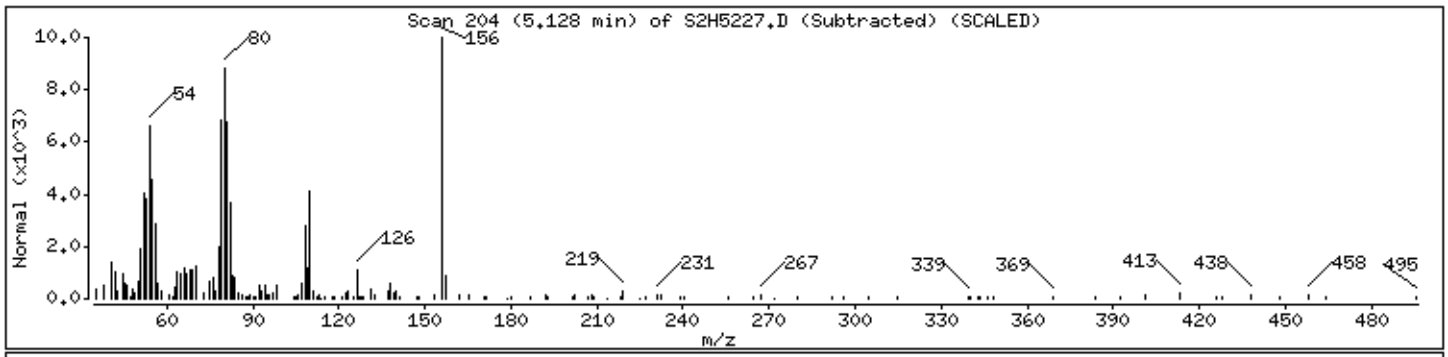
Volume Injected (uL): 2.0

Operator: SRC: 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\111104.B\S2H5227.D

Date : 04-NOV-2011 15:14

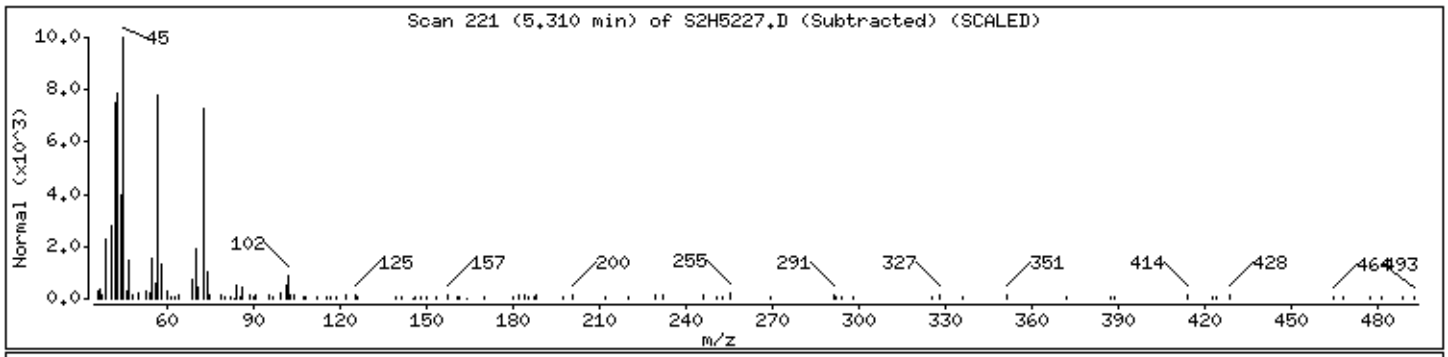
Client ID: SBLK2S Instrument: S2.i

Sample Info: MB-62685,SBLK2S,62685

Volume Injected (uL): 2.0 Operator: SRC: 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\111104.B\S2H5227.D

Date : 04-NOV-2011 15:14

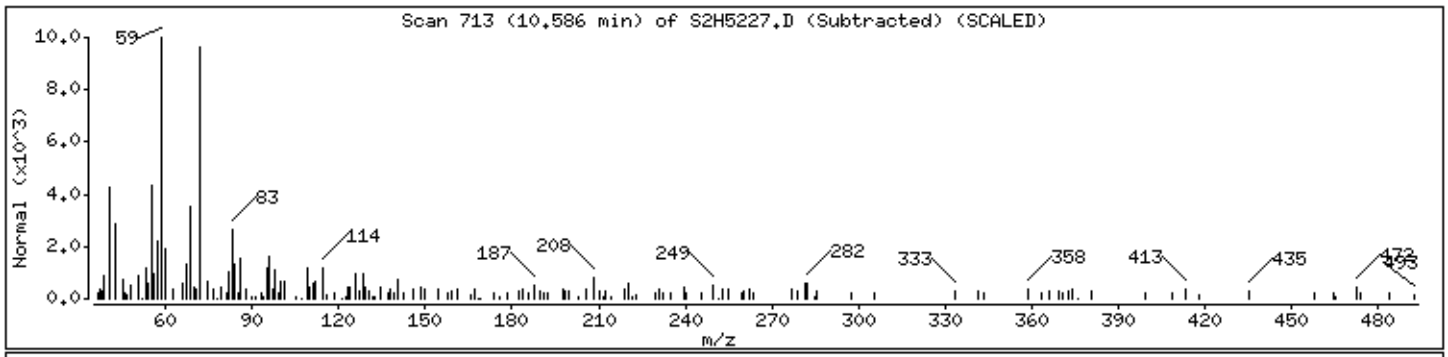
Client ID: SBLK2S Instrument: S2.i

Sample Info: MB-62685,SBLK2S,62685

Volume Injected (uL): 2.0 Operator: SRC: 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

CLIENT SAMPLE NO.

H30X3MS

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-20AMS

Sample wt/vol: 500 (g/mL) ML Lab File ID: S2H5229.D

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

% Moisture: Decanted: (Y/N) Date Received: 10/29/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/03/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/04/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	36	
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	35	
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2´-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	26	
621-64-7	N-Nitroso-di-n-propylamine	35	
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	33	
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1´-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	28	

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

H30X3MS

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-20AMS

Sample wt/vol: 500 (g/mL) ML Lab File ID: S2H5229.D

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

% Moisture: Decanted: (Y/N) Date Received: 10/29/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/03/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/04/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	40	
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	29	
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	1.5	J
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	51	
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	21	
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3´-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

(1) Cannot be separated from Diphenylamine

Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5229.D
Report Date: 07-Nov-2011 13:26

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111104.B\S2H5229.D
Lab Smp Id: K2200-20AMS Client Smp ID: H30X3MS
Inj Date : 04-NOV-2011 15:57
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-20AMS,,62685,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111104.B\S2_SOM.m
Meth Date : 07-Nov-2011 13:26 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 5 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 * (Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	500.000	Volume of final extract (uL)
Vi	2.000	Volume injected (uL)
Vo	500.000	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)
$	2 Phenol-d5	71	3.551	3.500	(0.927)	271841	67.2586	34(Q)
	3 Phenol	94	3.562	3.511	(0.930)	793671	71.5992	36
$	4 bis(2-Chloroethyl)ether-d8	67	3.573	3.554	(0.933)	348004	62.4850	31(Q)
$	6 2-Chlorophenol-d4	132	3.648	3.629	(0.952)	227296	65.0096	33(Q)
	7 2-Chlorophenol	128	3.669	3.640	(0.958)	251979	70.0681	35
*	8 1,4-Dichlorobenzene-d4	152	3.830	3.822	(1.000)	128350	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.173	4.133	(1.090)	357123	65.1746	33(Q)
	14 N-Nitroso-di-n-propylamine	70	4.173	4.154	(1.090)	351408	69.3258	35(QH)
	12 4-Methylphenol	108	4.184	4.154	(1.092)	326966	52.4574	26
$	16 Nitrobenzene-d5	128	4.291	4.283	(0.877)	112414	56.2934	28
$	19 2-Nitrophenol-d4	143	4.559	4.551	(0.932)	130722	59.2983	30(Q)
$	23 2,4-Dichlorophenol-d3	165	4.774	4.755	(0.976)	235505	58.5206	29(Q)
*	25 Naphthalene-d8	136	4.892	4.884	(1.000)	383451	40.0000	
$	27 4-Chloroaniline-d4	131	4.956	4.937	(1.013)	19096	5.34418	2.7(aQ)
	31 4-Chloro-3-methylphenol	107	5.364	5.356	(1.096)	398651	66.4991	33
$	40 Dimethylphthalate-d6	166	6.103	6.106	(0.961)	520212	56.0130	28
$	43 Acenaphthylene-d8	160	6.221	6.224	(0.980)	707333	58.5681	29
*	46 Acenaphthene-d10	164	6.350	6.353	(1.000)	252592	40.0000	
	47 Acenaphthene	153	6.372	6.374	(1.003)	392269	55.0890	28
$	49 4-Nitrophenol-d4	143	6.457	6.449	(1.017)	75015	56.0472	28(Q)
	50 4-Nitrophenol	109	6.457	6.449	(1.017)	209447	80.9251	40(QR)

Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5229.D
Report Date: 07-Nov-2011 13:26

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
	51 2,4-Dinitrotoluene	165	6.511	6.503	(1.025)	157156	57.8571	29(Q)
$	54 Fluorene-d10	176	6.779	6.782	(1.068)	497615	58.3296	29
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.833	6.835	(0.902)	119528	79.0210	40
	59 4,6-Dinitro-2-methylphenol	198	6.833	6.846	(0.902)	4429	2.99821	1.5(aQ)
	64 Pentachlorophenol	266	7.422	7.425	(0.980)	112241	102.873	51(R)
*	65 Phenanthrene-d10	188	7.573	7.575	(1.000)	387628	40.0000	
$	67 Anthracene-d10	188	7.626	7.629	(1.007)	647000	58.4319	29
$	72 Pyrene-d10	212	8.763	8.776	(0.884)	429626	55.1722	28
	73 Pyrene	202	8.774	8.798	(0.885)	407985	41.1473	21(H)
*	77 Chrysene-d12	240	9.814	9.881	(1.000)	247188	40.0000	(QH)
$	83 Benzo(a)pyrene-d12	264	11.079	11.189	(0.984)	114848	26.8163	13(H)
*	85 Perylene-d12	264	11.165	11.275	(1.000)	174533	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\111104.B\S2H5229.D
Report Date: 07-Nov-2011 13:26

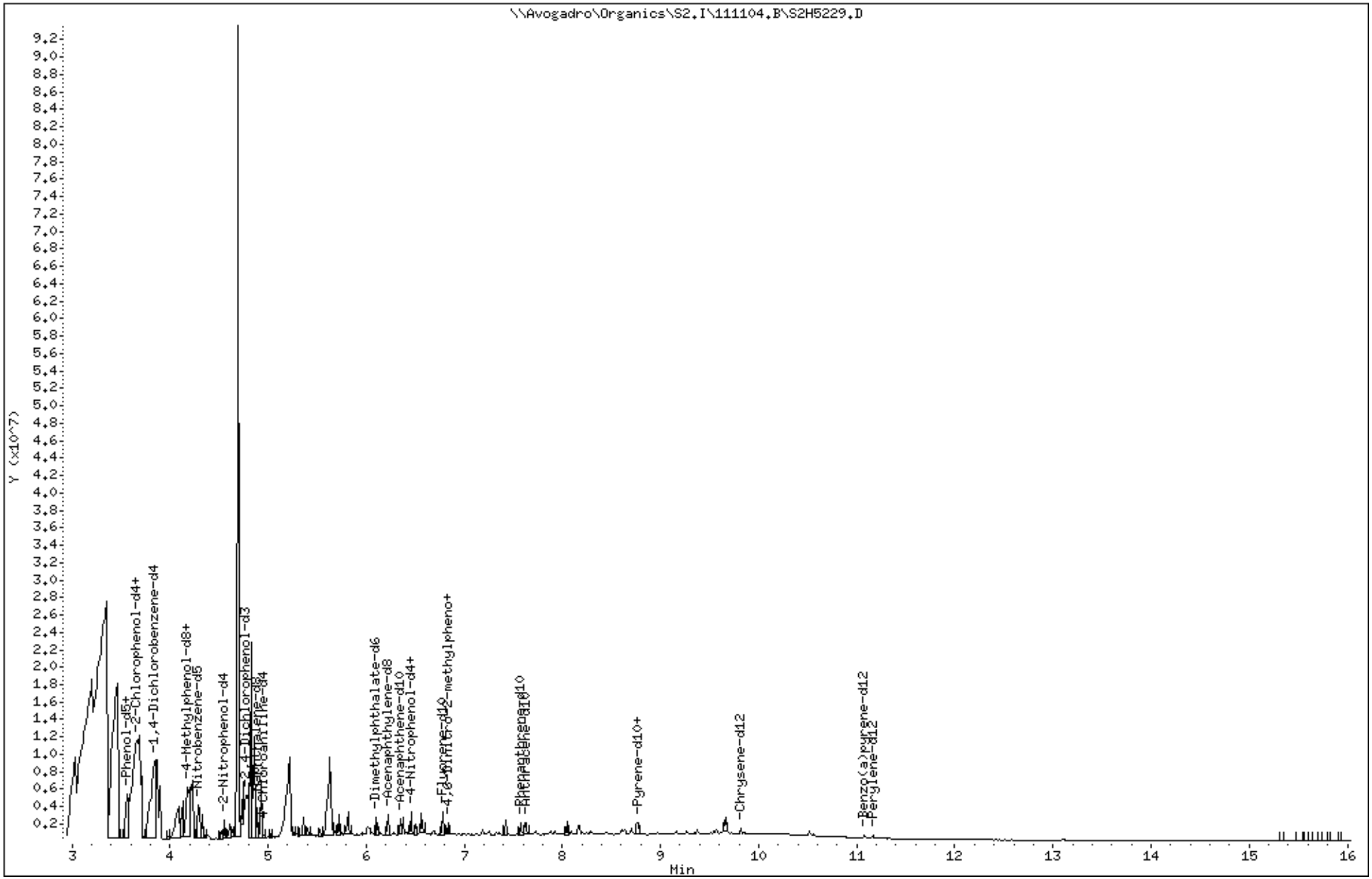
Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111104.B\S2H5229.D
Lab Smp Id: K2200-20AMS Client Smp ID: H30X3MS
Inj Date : 04-NOV-2011 15:57
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-20AMS,,62685,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111104.B\S2_SOM.m
Meth Date : 07-Nov-2011 13:26 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 5 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\111104.B\S2H5229.D
Date : 04-NOV-2011 15:57
Client ID: H30X3MS
Instrument: S2.i
Sample Info: K2200-20AMS,,62685,,
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

CLIENT SAMPLE NO.

H30X3MSD

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-20AMSD

Sample wt/vol: 500 (g/mL) ML Lab File ID: S2H5230.D

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

% Moisture: Decanted: (Y/N) Date Received: 10/29/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/03/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/04/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	39	
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	36	
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2´-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	31	
621-64-7	N-Nitroso-di-n-propylamine	45	
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	37	
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1´-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	27	

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

H30X3MSD

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-20AMSD

Sample wt/vol: 500 (g/mL) ML Lab File ID: S2H5230.D

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

% Moisture: Decanted: (Y/N) Date Received: 10/29/2011

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/03/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/04/2011

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	44	
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	31	
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	48	
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	11	
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3´-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

(1) Cannot be separated from Diphenylamine

Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5230.D
Report Date: 07-Nov-2011 13:26

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111104.B\S2H5230.D
Lab Smp Id: K2200-20AMSD Client Smp ID: H30X3MSD
Inj Date : 04-NOV-2011 16:18
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-20AMSD,,62685,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111104.B\S2_SOM.m
Meth Date : 07-Nov-2011 13:26 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 6 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 * (Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	500.000	Volume of final extract (uL)
Vi	2.000	Volume injected (uL)
Vo	500.000	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)
$	2 Phenol-d5	71	3.550	3.500	(0.927)	315120	80.9380	40(QH)
	3 Phenol	94	3.561	3.511	(0.930)	835892	78.2820	39
$	4 bis(2-Chloroethyl)ether-d8	67	3.572	3.554	(0.933)	367443	68.4897	34(Q)
$	6 2-Chlorophenol-d4	132	3.647	3.629	(0.952)	234199	69.5368	35
	7 2-Chlorophenol	128	3.668	3.640	(0.958)	249541	72.0347	36
*	8 1,4-Dichlorobenzene-d4	152	3.829	3.822	(1.000)	123638	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.172	4.133	(1.090)	369925	70.0839	35(QH)
	14 N-Nitroso-di-n-propylamine	70	4.172	4.154	(1.090)	437989	89.6996	45(QH)
	12 4-Methylphenol	108	4.194	4.154	(1.095)	370122	61.6443	31
$	16 Nitrobenzene-d5	128	4.290	4.283	(0.877)	110015	57.4696	29
$	19 2-Nitrophenol-d4	143	4.558	4.551	(0.932)	126901	60.0493	30(Q)
$	23 2,4-Dichlorophenol-d3	165	4.773	4.755	(0.976)	233641	60.5630	30(Q)
*	25 Naphthalene-d8	136	4.891	4.884	(1.000)	367587	40.0000	
$	27 4-Chloroaniline-d4	131	4.955	4.937	(1.013)	21520	6.28247	3.1(aQ)
	31 4-Chloro-3-methylphenol	107	5.363	5.356	(1.096)	424914	73.9391	37
$	40 Dimethylphthalate-d6	166	6.113	6.106	(0.963)	513422	57.8248	29
$	43 Acenaphthylene-d8	160	6.221	6.224	(0.980)	661680	57.3081	29
*	46 Acenaphthene-d10	164	6.349	6.353	(1.000)	241484	40.0000	
	47 Acenaphthene	153	6.371	6.374	(1.003)	373344	54.8430	27
$	49 4-Nitrophenol-d4	143	6.457	6.449	(1.017)	73276	57.2663	29(Q)
	50 4-Nitrophenol	109	6.467	6.449	(1.019)	217582	87.9353	44(QR)

Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5230.D
Report Date: 07-Nov-2011 13:26

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
	51 2,4-Dinitrotoluene	165	6.510	6.503	(1.025)	162062	62.4076	31(Q)
$	54 Fluorene-d10	176	6.778	6.782	(1.068)	449025	55.0551	28
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.832	6.835	(0.902)	115831	82.8546	41
	64 Pentachlorophenol	266	7.422	7.425	(0.980)	97809	96.9946	48(R)
*	65 Phenanthrene-d10	188	7.572	7.575	(1.000)	358258	40.0000	
$	67 Anthracene-d10	188	7.625	7.629	(1.007)	474867	46.4021	23
$	72 Pyrene-d10	212	8.762	8.776	(0.882)	287111	33.8835	17(R)
	73 Pyrene	202	8.773	8.798	(0.883)	237252	21.9895	11(H)
*	77 Chrysene-d12	240	9.824	9.881	(1.000)	268979	40.0000	(QH)
$	83 Benzo(a)pyrene-d12	264	11.089	11.189	(0.975)	93953	20.7839	10(RH)
*	85 Perylene-d12	264	11.175	11.275	(1.000)	184220	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\111104.B\S2H5230.D
Report Date: 07-Nov-2011 13:26

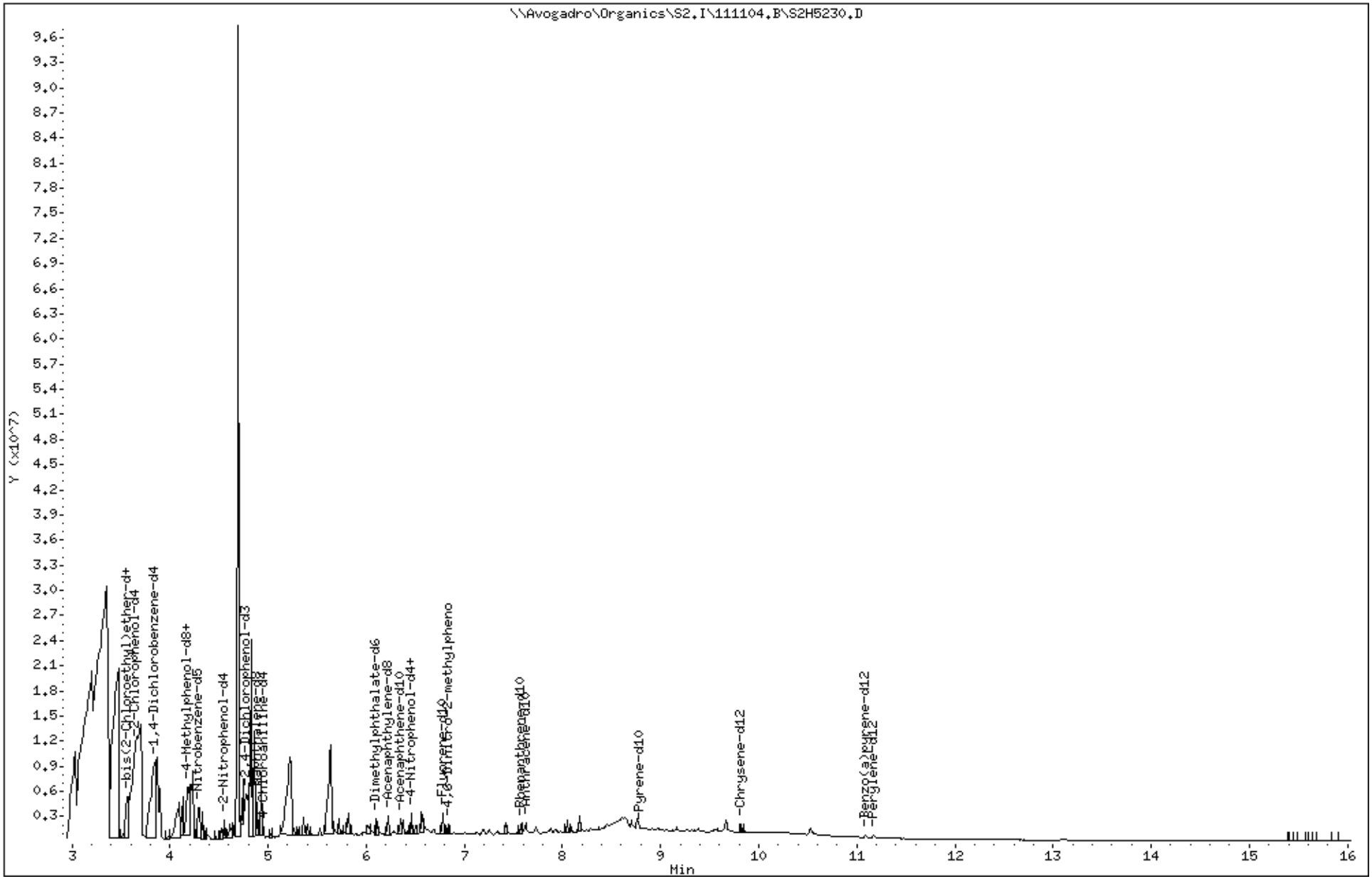
Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111104.B\S2H5230.D
Lab Smp Id: K2200-20AMSD Client Smp ID: H30X3MSD
Inj Date : 04-NOV-2011 16:18
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2200-20AMSD,,62685,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S2.I\111104.B\S2_SOM.m
Meth Date : 07-Nov-2011 13:26 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 6 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\111104.B\S2H5230.D
Date : 04-NOV-2011 16:18
Client ID: H30X3MSD
Instrument: S2.i
Sample Info: K2200-20AMSD,,62685,,
Volume Injected (uL): 2.0
Operator: SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



2Q - FORM II ARO-1

WATER AROCLOR SURROGATE RECOVERY

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

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	ABLK2M	76	85	74	75			0
02	ALCS2M	78	86	78	80			0
03	H30T9	62	67	48	47			0
04	H30W0	61	66	39	38			0
05	H30W1	73	79	48	48			0
06	H30W2	74	81	54	54			0
07	H30W3	78	86	58	59			0
08	H30W4	72	78	60	60			0
09	H30W5	76	83	60	61			0
10	H30W6	69	75	54	54			0
11	H30W7	72	79	54	54			0
12	H30W8	64	70	47	47			0
13	H30X0	67	73	55	56			0
14	H30X1	67	74	53	54			0
15	H30Y2	55	59	26 *	25 *			2
16	H30Y3	42	45	19 *	18 *			2
17	H30Y4	36	38	21 *	20 *			2
18	H30Y5	48	50	18 *	17 *			2
19	H30Y6	32	33	16 *	15 *			2
20	H30Z6	50	54	47	47			0
21	H30X3	48	52	18 *	17 *			2
22	ABLK2N	75	83	77	80			0
23	ALCS2N	77	85	76	79			0
24	H30X3MS	57	60	38	38			0
25	H30X3MSD	49	51	34	33			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

3J - FORM III ARO-1

WATER 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.: H30S7

Matrix Spike - EPA Sample No.: H30X3

Instrument ID: E2 GC Column : CLPPest ID: 0.53 (mm)

COMPOUND	SPIKE ADDED (µg/L)	SAMPLE CONCENTRATION (µg/L)	MS CONCENTRATION (µg/L)	MS %REC	#	QC. LIMITS REC.
AR1016	4.0000	0.0000	2.2486	56		29-135
AR1260	4.0000	0.0000	1.8070	45		29-135

COMPOUND	SPIKE ADDED (µg/L)	MSD CONCENTRATION (µg/L)	MSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
AR1016	4.0000	1.9609	49		14		0-15	29-135
AR1260	4.0000	1.4968	37		19		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:

3J - FORM III ARO-1

WATER 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.: H30S7

Matrix Spike - EPA Sample No.: H30X3

Instrument ID: E2 GC Column : CLPPestII ID: 0.53 (mm)

COMPOUND	SPIKE ADDED (µg/L)	SAMPLE CONCENTRATION (µg/L)	MS CONCENTRATION (µg/L)	MS %REC	#	QC. LIMITS REC.
AR1016	4.0000	0.0000	2.7375	68		29-135
AR1260	4.0000	0.0000	1.8199	45		29-135

COMPOUND	SPIKE ADDED (µg/L)	MSD CONCENTRATION (µg/L)	MSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
AR1016	4.0000	2.3691	59		14		0-15	29-135
AR1260	4.0000	1.4383	36		23	*	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:

3N - FORM III ARO-3
WATER AROCLOR LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
ALCS2M

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Lab Sample ID: LCS-62638 LCS Lot No.:

Date Extracted: 11/02/2011 Date Analyzed (1): 11/16/2011

Instrument ID (1): E2 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC #	QC LIMITS
Aroclor-1016	1.0000	0.9955	100	50-150
Aroclor-1260	1.0000	0.9097	91	50-150

Instrument ID (2): E2 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 11/16/2011

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC #	QC LIMITS
Aroclor-1016	1.0000	0.9269	93	50-150
Aroclor-1260	1.0000	0.8272	83	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:

3N - FORM III ARO-3
WATER AROCLOR LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
ALCS2N

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Lab Sample ID: LCS-62719 LCS Lot No.:

Date Extracted: 11/03/2011 Date Analyzed (1): 11/16/2011

Instrument ID (1): E2 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC #	QC LIMITS
Aroclor-1016	1.0000	0.9616	96	50-150
Aroclor-1260	1.0000	0.9199	92	50-150

Instrument ID (2): E2 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 11/16/2011

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC #	QC LIMITS
Aroclor-1016	1.0000	0.9050	91	50-150
Aroclor-1260	1.0000	0.8618	86	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.

ABLK2M

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Lab File ID: E2K7948F.D / E2K7948R.D Lab Sample ID: MB-62638

Matrix: (SOIL/SED/WATER) WATER Extraction: (Type) SEPF Date Extracted: 11/02/2011

Sulfur Cleanup: (Y/N) Y GPC Cleanup:(Y/N) N

Acid Cleanup: (Y/N Y

Date Analyzed (1): 11/16/2011 Date Analyzed (2): 11/16/2011

Time Analyzed (1): 3:55 Time Analyzed (2): 3:55

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	ALCS2M	LCS-62638	11/16/2011	11/16/2011
02	H30T9	K2200-02B	11/16/2011	11/16/2011
03	H30W0	K2200-03B	11/16/2011	11/16/2011
04	H30W1	K2200-04B	11/16/2011	11/16/2011
05	H30W2	K2200-05B	11/16/2011	11/16/2011
06	H30W3	K2200-06B	11/16/2011	11/16/2011
07	H30W4	K2200-07B	11/16/2011	11/16/2011
08	H30W5	K2200-08B	11/16/2011	11/16/2011
09	H30W6	K2200-09B	11/16/2011	11/16/2011
10	H30W7	K2200-10B	11/16/2011	11/16/2011
11	H30W8	K2200-11B	11/16/2011	11/16/2011
12	H30X0	K2200-12B	11/16/2011	11/16/2011
13	H30X1	K2200-13B	11/16/2011	11/16/2011
14	H30Y2	K2200-14B	11/16/2011	11/16/2011
15	H30Y3	K2200-15B	11/16/2011	11/16/2011
16	H30Y4	K2200-16B	11/16/2011	11/16/2011
17	H30Y5	K2200-17B	11/16/2011	11/16/2011
18	H30Y6	K2200-18B	11/16/2011	11/16/2011
19	H30Z6	K2200-19B	11/16/2011	11/16/2011
20	H30X3	K2200-20A	11/16/2011	11/16/2011

COMMENTS:

4F - FORM IV ARO

AROCLOR METHOD BLANK SUMMARY

EPA SAMPLE NO.

ABLK2N

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Lab File ID: E2K7969F.D / E2K7969R.D Lab Sample ID: MB-62719

Matrix: (SOIL/SED/WATER) WATER Extraction: (Type) SEPF Date Extracted: 11/03/2011

Sulfur Cleanup: (Y/N) Y GPC Cleanup:(Y/N) N

Acid Cleanup: (Y/N Y

Date Analyzed (1): 11/16/2011 Date Analyzed (2): 11/16/2011

Time Analyzed (1): 11:14 Time Analyzed (2): 11:14

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	ALCS2N	LCS-62719	11/16/2011	11/16/2011
02	H30X3MS	K2200-20AMS	11/16/2011	11/16/2011
03	H30X3MSD	K2200-20AMSD	11/16/2011	11/16/2011

COMMENTS:

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30T9

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-02B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2K7950F.D/E2K7950R.D

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

Extraction: (Type) SEPF Date Extracted: 11/02/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/16/2011

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/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\111115F.B\E2K7950F.D
Report Date: 17-Nov-2011 10:59

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

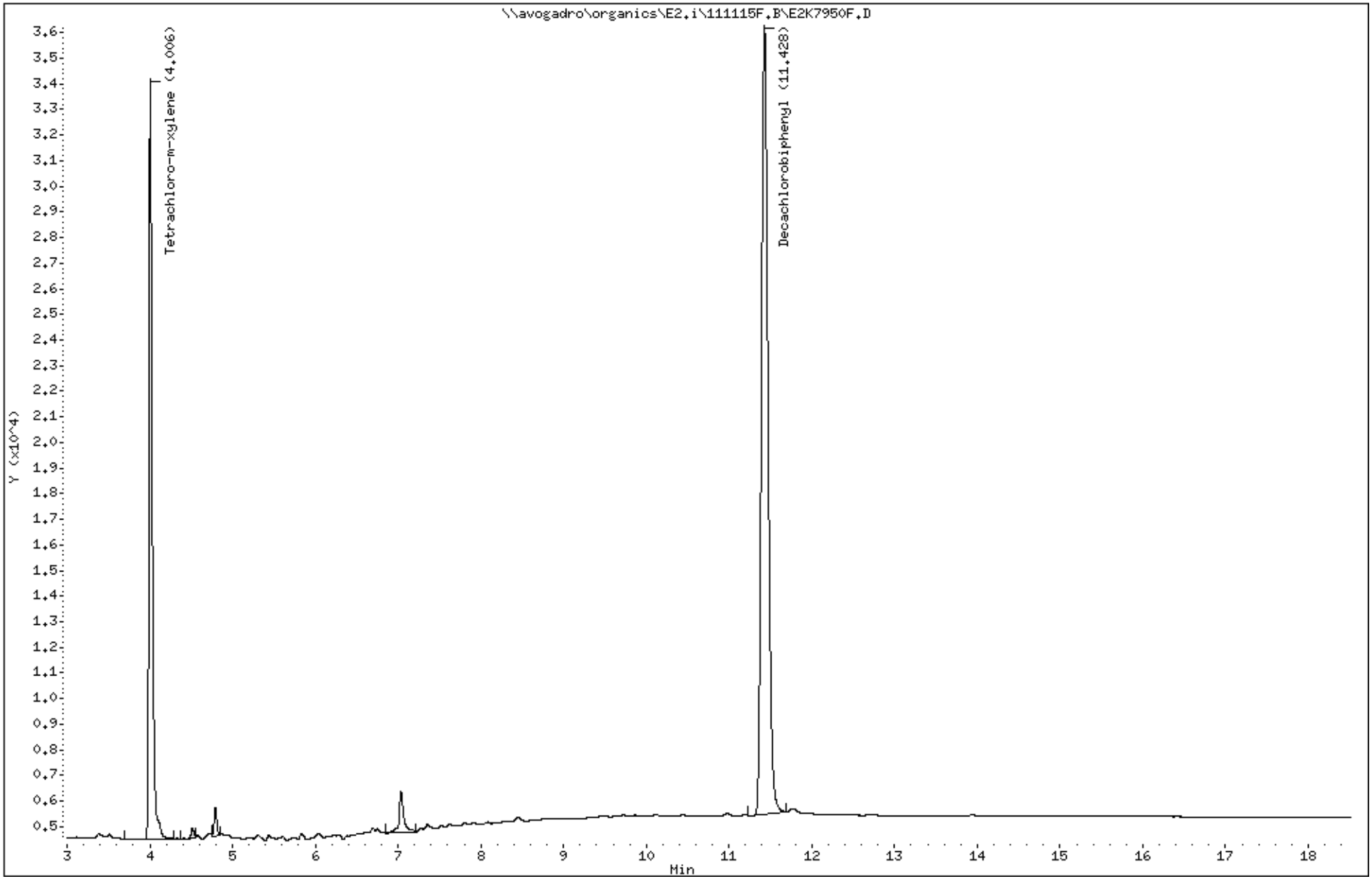
Data file : \\avogadro\organics\E2.i\111115F.B\E2K7950F.D
Lab Smp Id: K2200-02B Client Smp ID: H30T9
Inj Date : 16-NOV-2011 04:36
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-02B,,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111115F.B\E2_ARO_5_F.m
Meth Date : 16-Nov-2011 17:19 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807F.D
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.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	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.005	4.001	0.004	799433	0.03749	0.37		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.427	11.422	0.005	1676101	0.05719	0.57		

Data File: \\avogadro\organics\E2.i\111115F.B\E2K7950F.D
Date : 16-NOV-2011 04:36
Client ID: H30T9
Instrument: E2.i
Sample Info: K2200-02B,,62638,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111115R.B\E2K7950R.D
Report Date: 17-Nov-2011 11:00

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

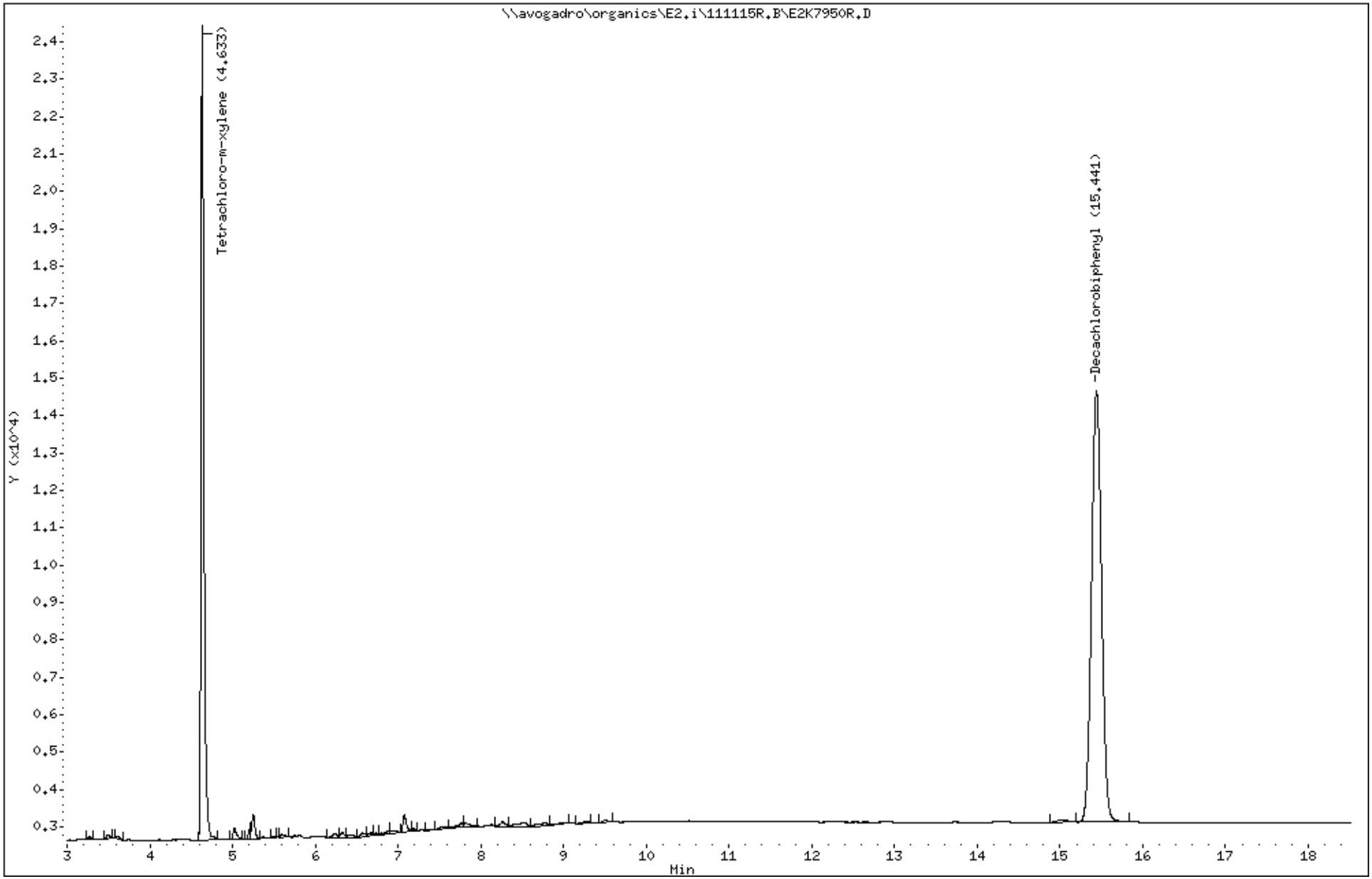
Data file : \\avogadro\organics\E2.i\111115R.B\E2K7950R.D
Lab Smp Id: K2200-02B Client Smp ID: H30T9
Inj Date : 16-NOV-2011 04:36
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-02B,,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\Avogadro\Organics\E2.i\111115R.B\E2_ARO_5_R.m
Meth Date : 16-Nov-2011 17:21 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807R.D
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET111

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

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.633	4.629	0.004	526808	0.04025	0.40		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
15.440	15.432	0.008	971109	0.05605	0.56		

Data File: \\avogadro\organics\E2.i\111115R.B\E2K7950R.D
Date : 16-NOV-2011 04:36
Client ID: H30T9
Instrument: E2.i
Sample Info: K2200-02B,,62638,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.

H30W0

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2K7951F.D/E2K7951R.D

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

Extraction: (Type) SEPF Date Extracted: 11/02/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/16/2011

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/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\111115F.B\E2K7951F.D
Report Date: 17-Nov-2011 10:59

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111115F.B\E2K7951F.D
Lab Smp Id: K2200-03B Client Smp ID: H30W0
Inj Date : 16-NOV-2011 04:57
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-03B,,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111115F.B\E2_ARO_5_F.m
Meth Date : 16-Nov-2011 17:19 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807F.D
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

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

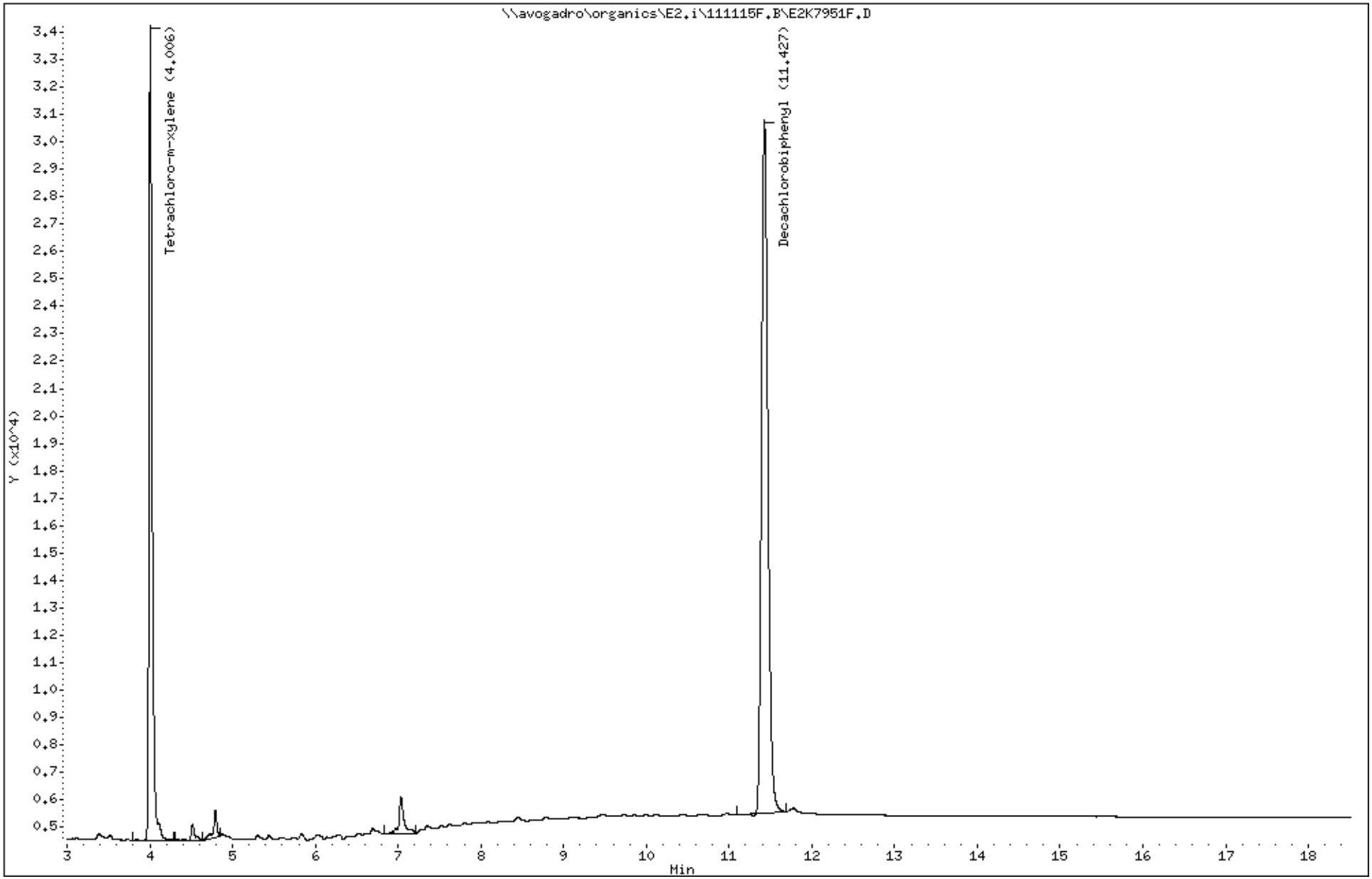
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.005	4.001	0.004	785905	0.03686	0.37			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.427	11.422	0.005	1365579	0.04660	0.46			(M)M6 GMA 11/17

QC Flag Legend

M - Compound response manually integrated.

Data File: \\avogadro\organics\E2.i\111115F.B\E2K7951F.D
Date : 16-NOV-2011 04:57
Client ID: H30W0
Instrument: E2.i
Sample Info: K2200-03B,,62638,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111115R.B\E2K7951R.D
Report Date: 17-Nov-2011 11:00

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

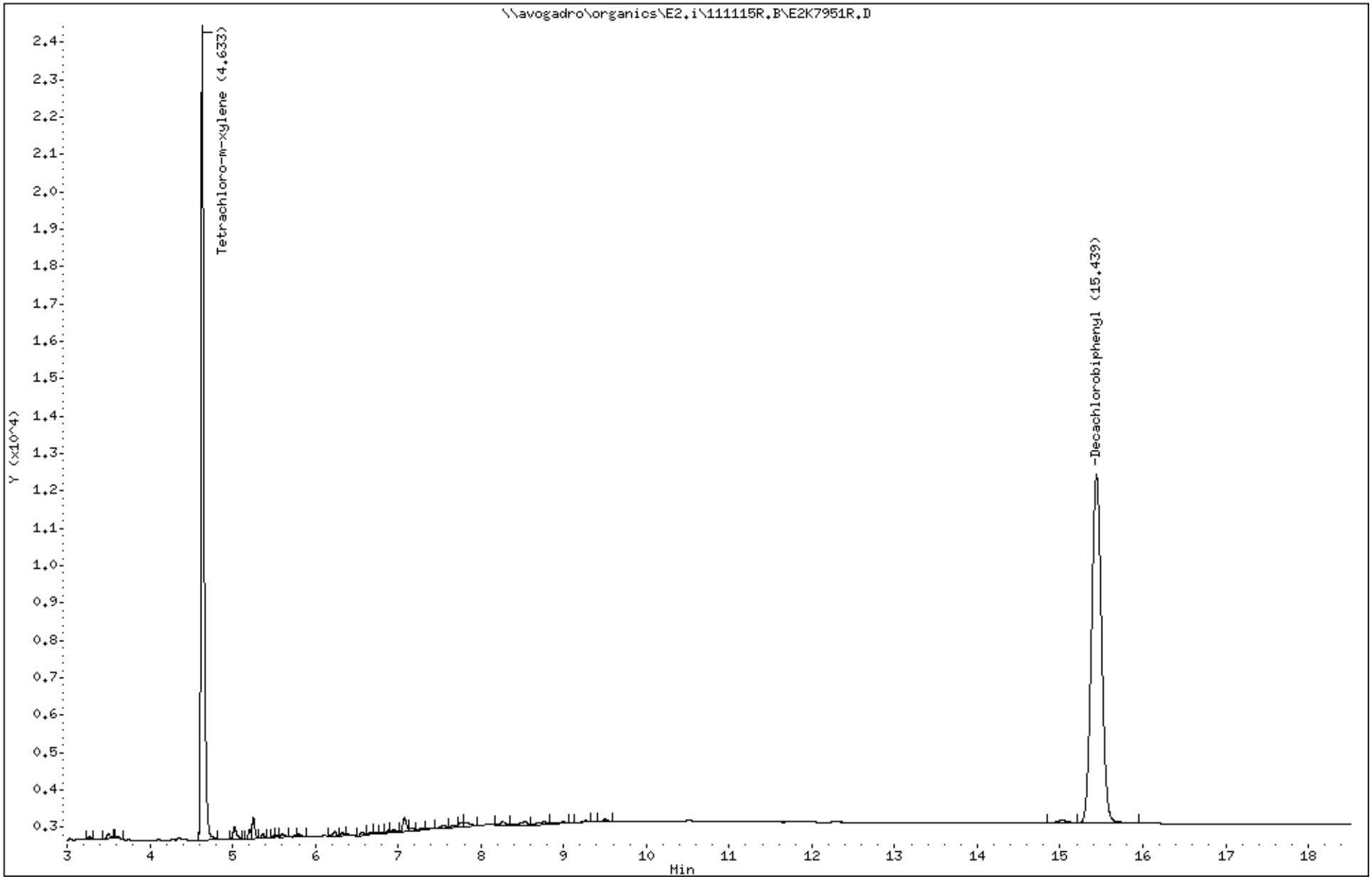
Data file : \\avogadro\organics\E2.i\111115R.B\E2K7951R.D
Lab Smp Id: K2200-03B Client Smp ID: H30W0
Inj Date : 16-NOV-2011 04:57
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-03B,,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\Avogadro\Organics\E2.i\111115R.B\E2_ARO_5_R.m
Meth Date : 16-Nov-2011 17:21 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807R.D
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.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

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.633	4.629	0.004	517653	0.03955	0.40		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
15.439	15.432	0.007	787382	0.04545	0.45		

Data File: \\avogadro\organics\E2.i\111115R.B\E2K7951R.D
Date : 16-NOV-2011 04:57
Client ID: H30W0
Instrument: E2.i
Sample Info: K2200-03B,,62638,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.

H30W1

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-04B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2K7952F.D/E2K7952R.D

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

Extraction: (Type) SEPF Date Extracted: 11/02/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/16/2011

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/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\111115F.B\E2K7952F.D
Report Date: 17-Nov-2011 10:59

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

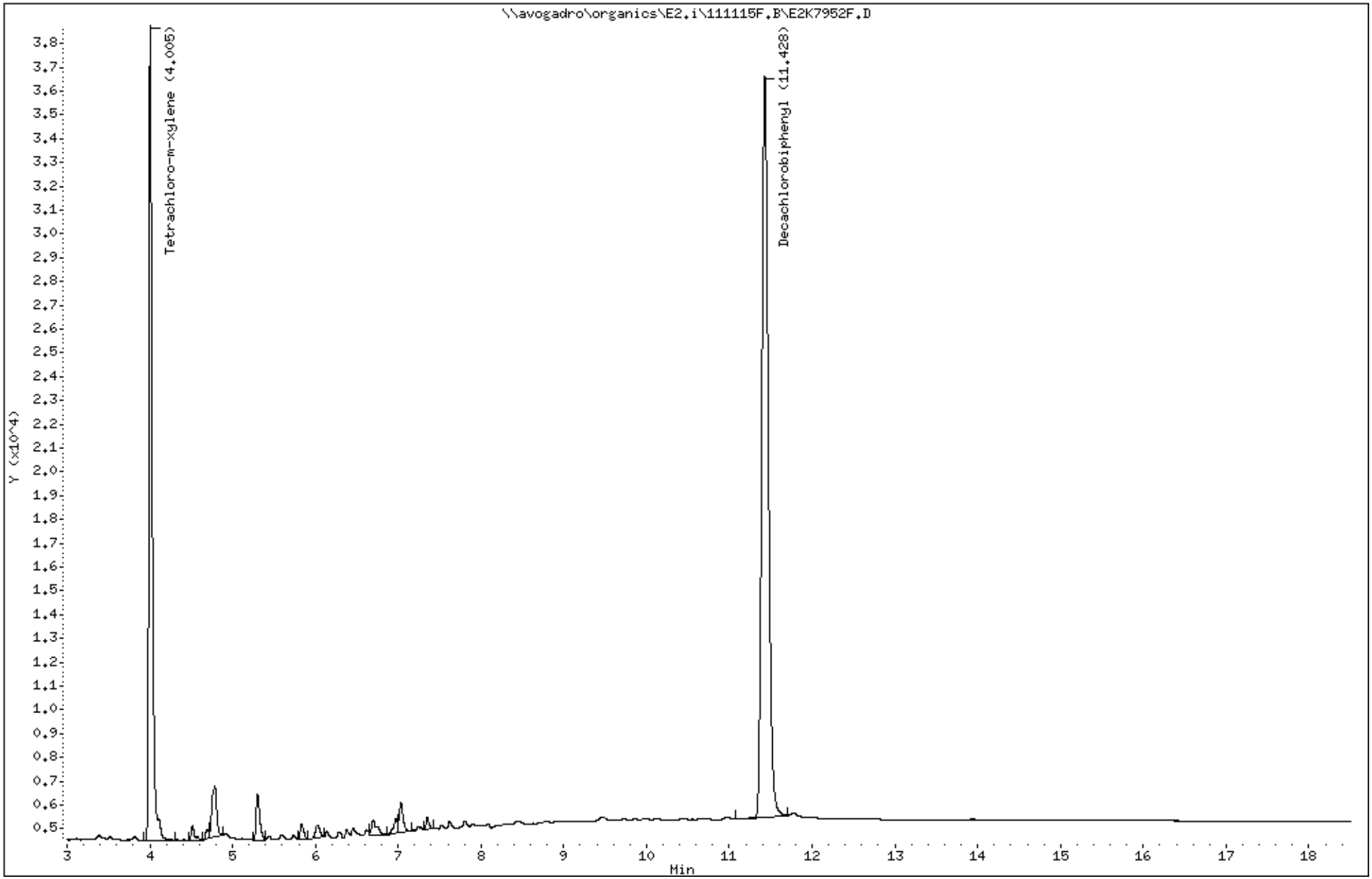
Data file : \\avogadro\organics\E2.i\111115F.B\E2K7952F.D
Lab Smp Id: K2200-04B Client Smp ID: H30W1
Inj Date : 16-NOV-2011 05:18
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-04B,,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111115F.B\E2_ARO_5_F.m
Meth Date : 16-Nov-2011 17:19 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807F.D
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.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	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.004	4.001	0.003	929706	0.04360	0.44		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
11.428	11.422	0.006	1697911	0.05794	0.58		

Data File: \\avogadro\organics\E2.i\111115F.B\E2K7952F.D
Date : 16-NOV-2011 05:18
Client ID: H30W1
Instrument: E2.i
Sample Info: K2200-04B,,62638,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111115R.B\E2K7952R.D
Report Date: 17-Nov-2011 11:00

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

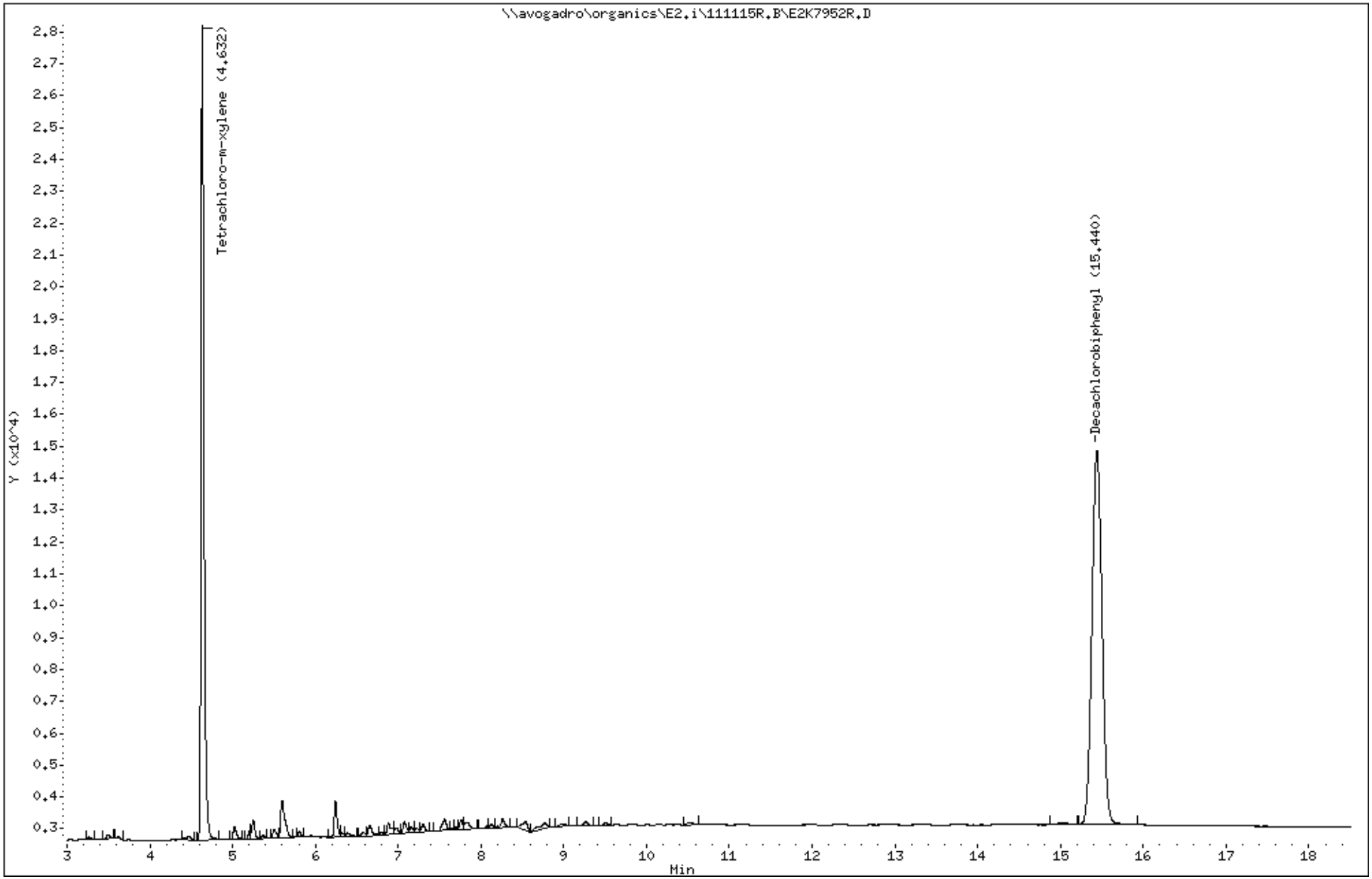
Data file : \\avogadro\organics\E2.i\111115R.B\E2K7952R.D
Lab Smp Id: K2200-04B Client Smp ID: H30W1
Inj Date : 16-NOV-2011 05:18
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-04B,,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\Avogadro\Organics\E2.i\111115R.B\E2_ARO_5_R.m
Meth Date : 16-Nov-2011 17:21 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807R.D
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET111

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	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.632	4.629	0.003	619237	0.04731	0.47		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.440	15.432	0.008	993375	0.05734	0.57		

Data File: \\avogadro\organics\E2.i\111115R.B\E2K7952R.D
Date : 16-NOV-2011 05:18
Client ID: H30W1
Instrument: E2.i
Sample Info: K2200-04B,,62638,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.

H30W2

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-05B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2K7953F.D/E2K7953R.D

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

Extraction: (Type) SEPF Date Extracted: 11/02/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/16/2011

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/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\111115F.B\E2K7953F.D
Report Date: 17-Nov-2011 10:59

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

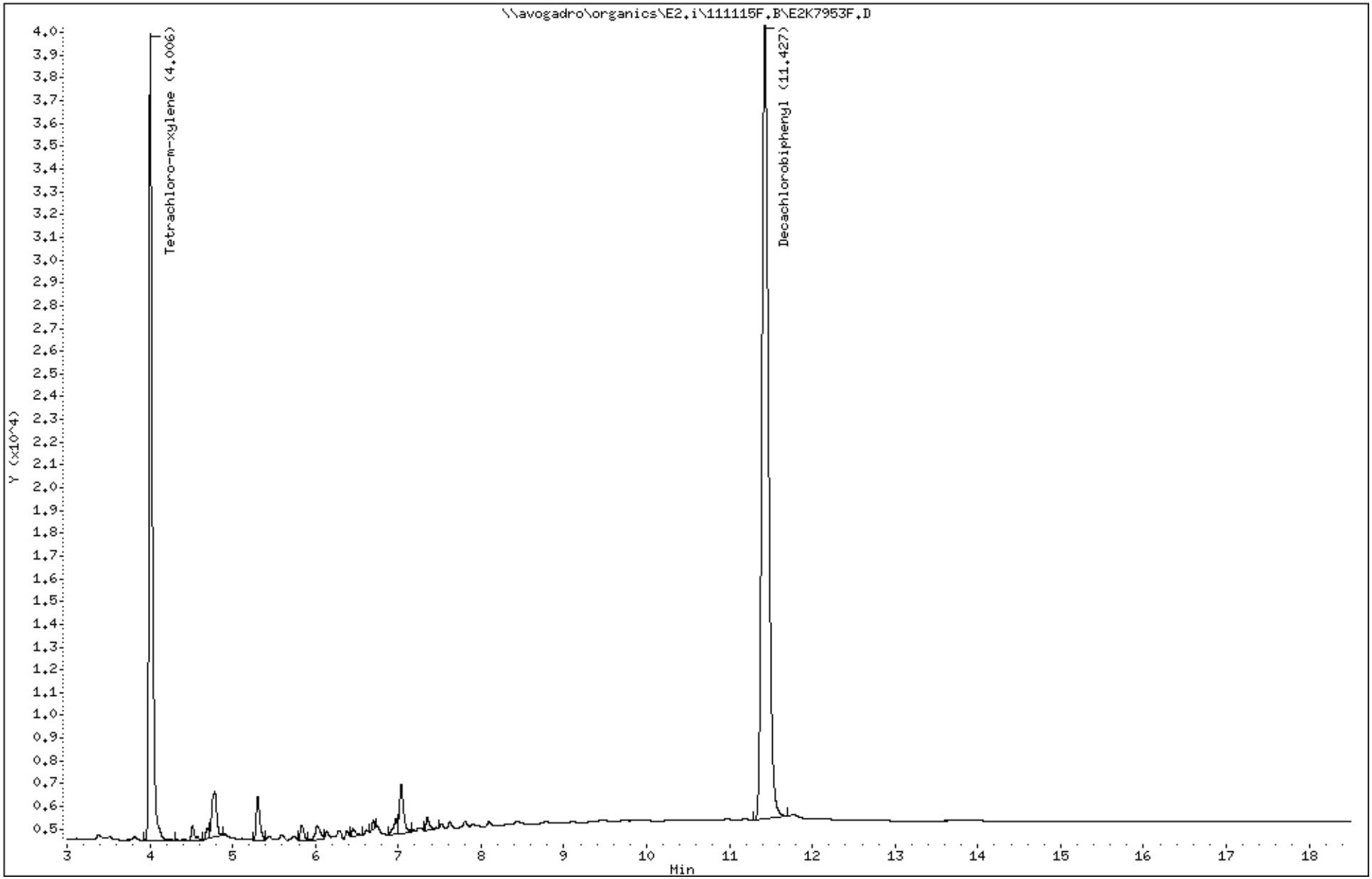
Data file : \\avogadro\organics\E2.i\111115F.B\E2K7953F.D
Lab Smp Id: K2200-05B Client Smp ID: H30W2
Inj Date : 16-NOV-2011 05:39
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-05B,,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111115F.B\E2_ARO_5_F.m
Meth Date : 16-Nov-2011 17:19 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807F.D
Als bottle: 26
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.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	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.005	4.001	0.004	944898	0.04431	0.44		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.427	11.422	0.005	1908948	0.06514	0.65		

Data File: \\avogadro\organics\E2.i\111115F.B\E2K7953F.D
Date : 16-NOV-2011 05:39
Client ID: H30W2
Instrument: E2.i
Sample Info: K2200-05B,,62638,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111115R.B\E2K7953R.D
Report Date: 17-Nov-2011 11:00

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

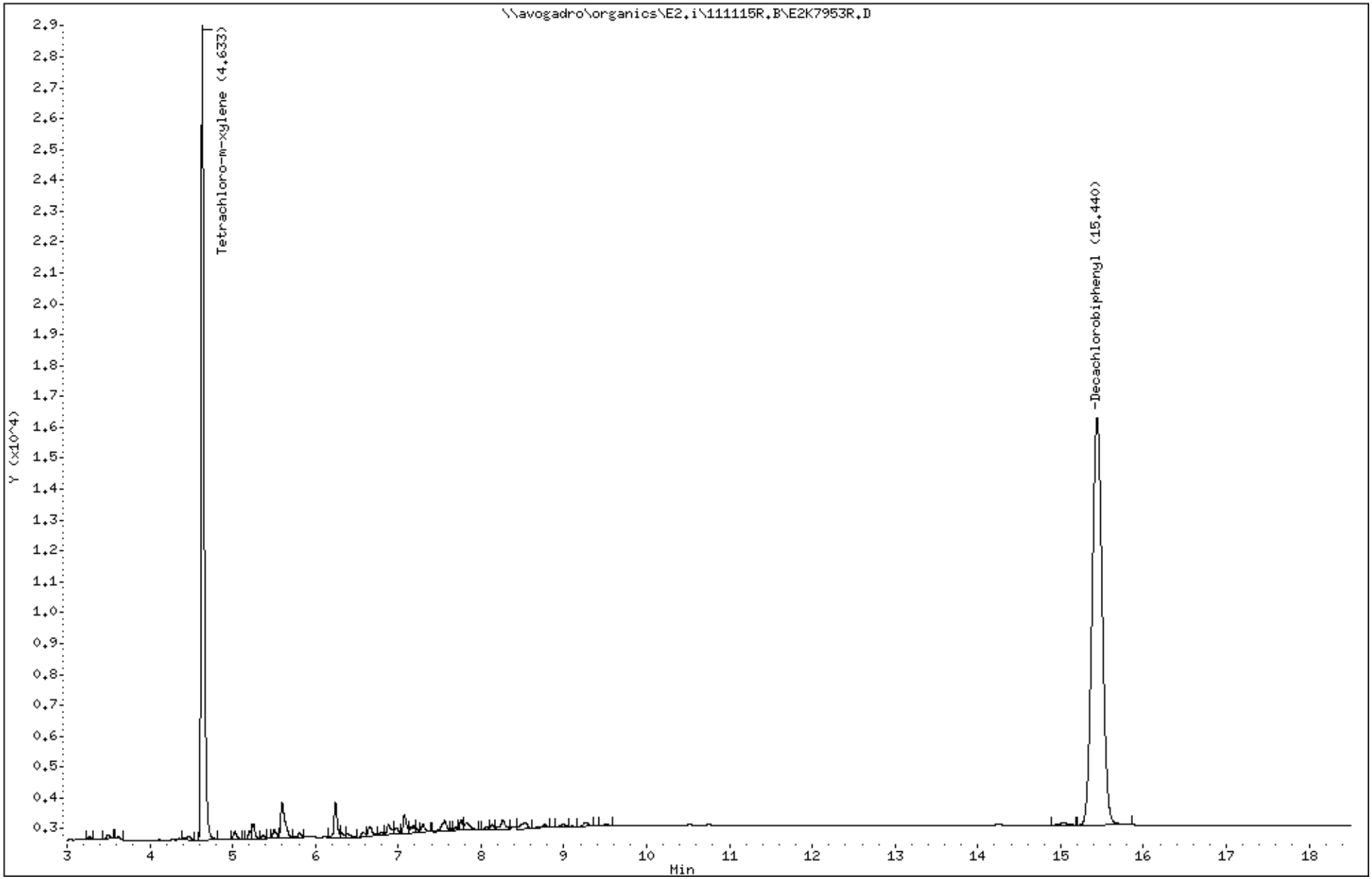
Data file : \\avogadro\organics\E2.i\111115R.B\E2K7953R.D
Lab Smp Id: K2200-05B Client Smp ID: H30W2
Inj Date : 16-NOV-2011 05:39
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-05B,,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\Avogadro\Organics\E2.i\111115R.B\E2_ARO_5_R.m
Meth Date : 16-Nov-2011 17:21 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807R.D
Als bottle: 26
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET111

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

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.632	4.629	0.003	637214	0.04869	0.49		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
15.439	15.432	0.007	1123834	0.06487	0.65		

Data File: \\avogadro\organics\E2.i\111115R.B\E2K7953R.D
Date : 16-NOV-2011 05:39
Client ID: H30W2
Instrument: E2.i
Sample Info: K2200-05B,,62638,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.

H30W3

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-06B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2K7954F.D/E2K7954R.D

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

Extraction: (Type) SEPF Date Extracted: 11/02/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/16/2011

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/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\111115F.B\E2K7954F.D
Report Date: 17-Nov-2011 10:59

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

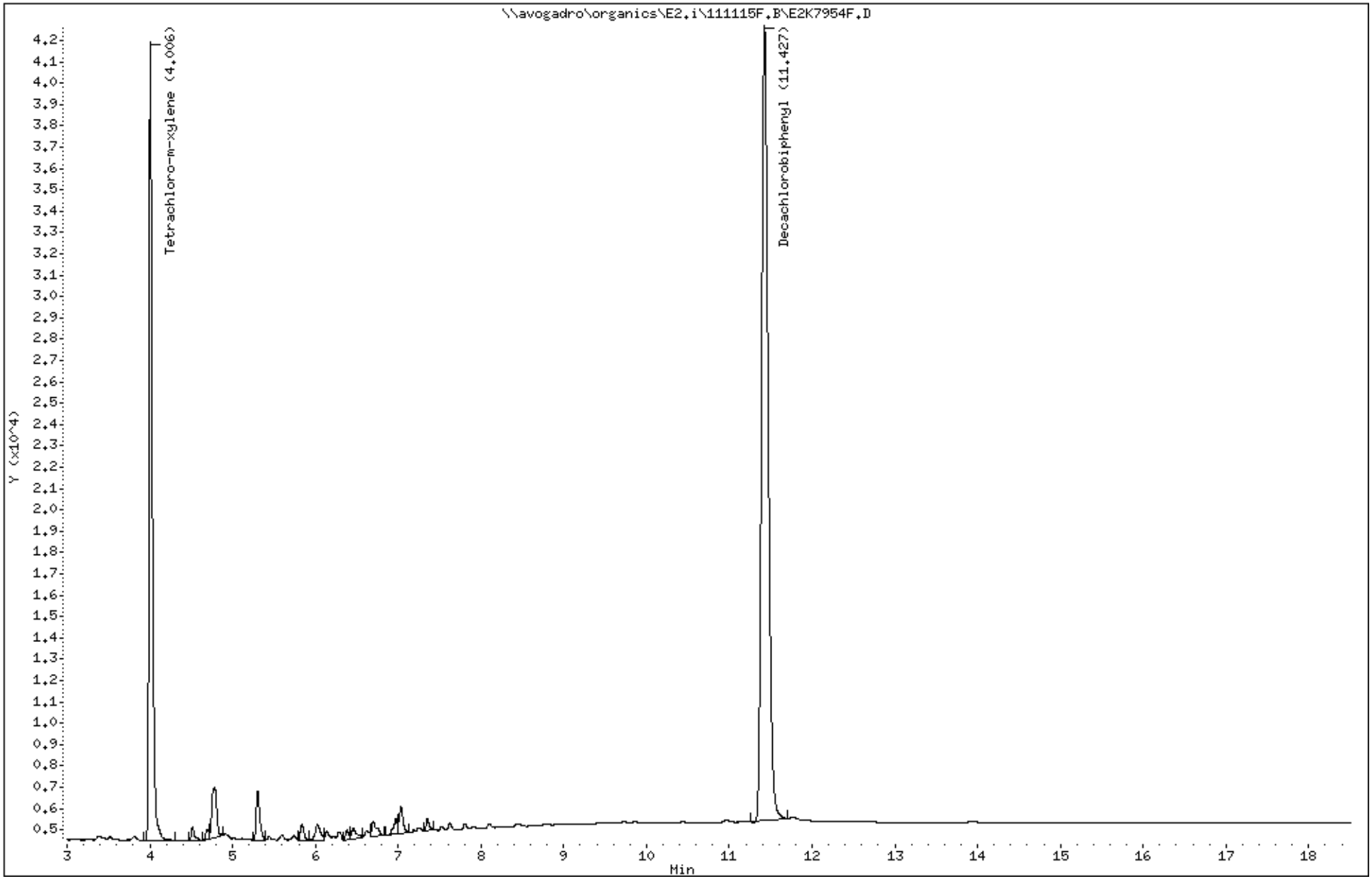
Data file : \\avogadro\organics\E2.i\111115F.B\E2K7954F.D
Lab Smp Id: K2200-06B Client Smp ID: H30W3
Inj Date : 16-NOV-2011 06:00
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-06B,,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111115F.B\E2_ARO_5_F.m
Meth Date : 16-Nov-2011 17:19 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807F.D
Als bottle: 27
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.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	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.006	4.001	0.005	996209	0.04672	0.47		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
11.426	11.422	0.004	2049906	0.06995	0.70		

Data File: \\avogadro\organics\E2.i\111115F.B\E2K7954F.D
Date : 16-NOV-2011 06:00
Client ID: H30W3
Instrument: E2.i
Sample Info: K2200-06B,,62638,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111115R.B\E2K7954R.D
Report Date: 17-Nov-2011 11:00

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

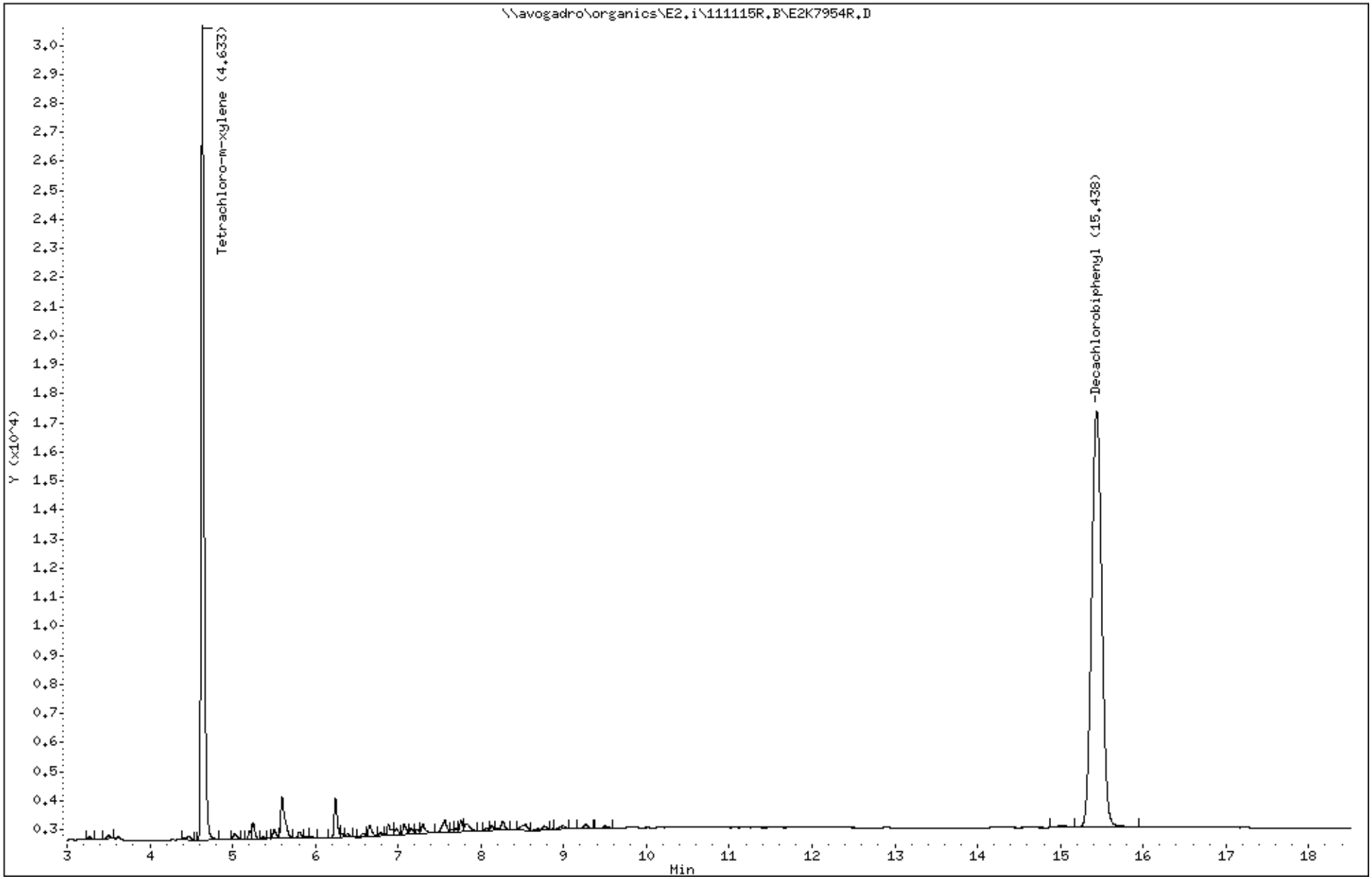
Data file : \\avogadro\organics\E2.i\111115R.B\E2K7954R.D
Lab Smp Id: K2200-06B Client Smp ID: H30W3
Inj Date : 16-NOV-2011 06:00
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-06B,,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\Avogadro\Organics\E2.i\111115R.B\E2_ARO_5_R.m
Meth Date : 16-Nov-2011 17:21 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807R.D
Als bottle: 27
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET111

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	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.633	4.629	0.004	675761	0.05163	0.52		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.438	15.432	0.006	1216308	0.07020	0.70		

Data File: \\avogadro\organics\E2.i\111115R.B\E2K7954R.D
Date : 16-NOV-2011 06:00
Client ID: H30W3
Instrument: E2.i
Sample Info: K2200-06B,,62638,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.

H30W4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-07B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2K7955F.D/E2K7955R.D

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

Extraction: (Type) SEPF Date Extracted: 11/02/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/16/2011

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/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\111115F.B\E2K7955F.D
Report Date: 17-Nov-2011 10:59

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

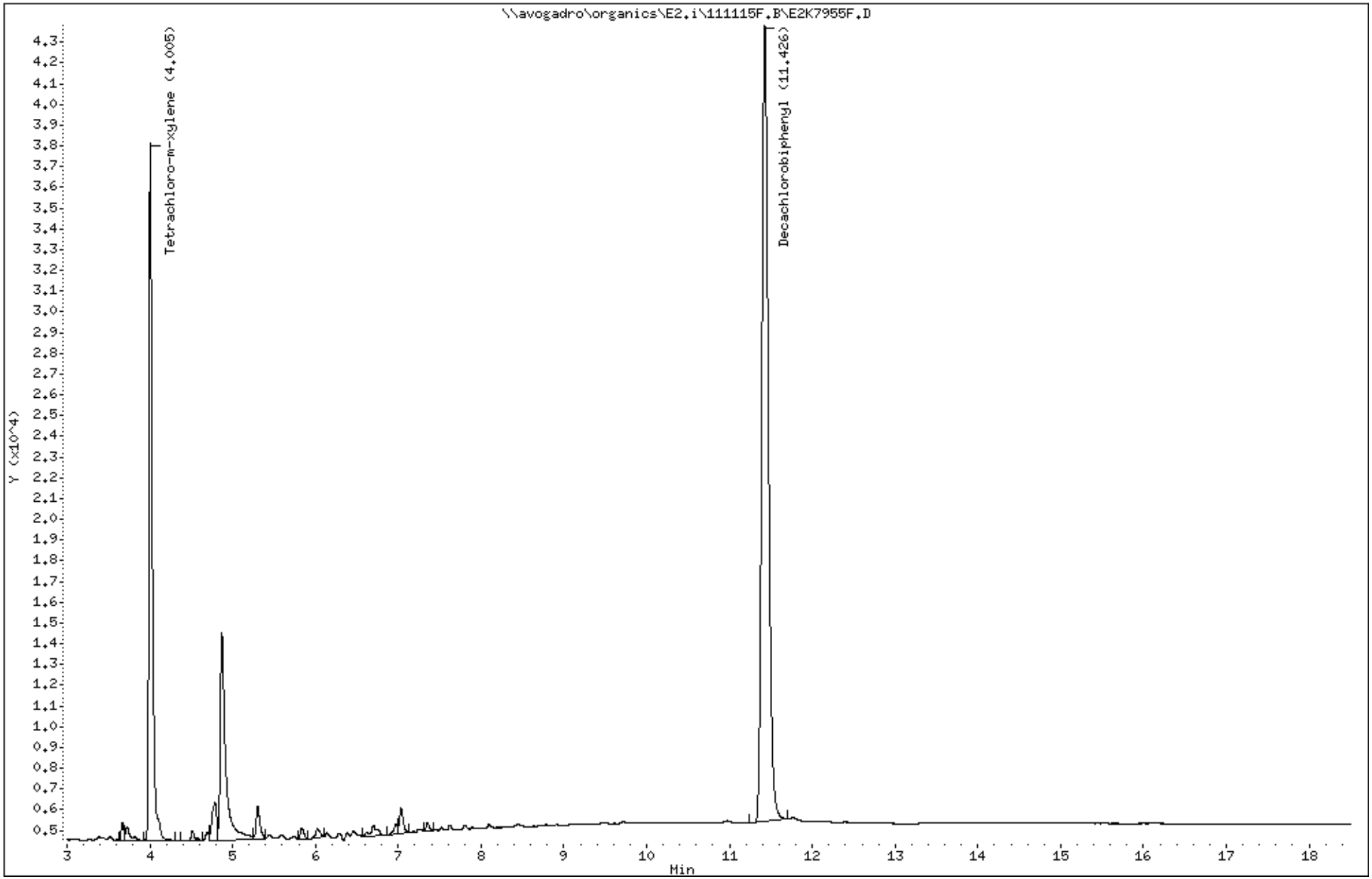
Data file : \\avogadro\organics\E2.i\111115F.B\E2K7955F.D
Lab Smp Id: K2200-07B Client Smp ID: H30W4
Inj Date : 16-NOV-2011 06:21
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-07B,,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111115F.B\E2_ARO_5_F.m
Meth Date : 16-Nov-2011 17:19 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807F.D
Als bottle: 28
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.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	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.005	4.001	0.004	918439	0.04307	0.43		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
11.426	11.422	0.004	2107231	0.07191	0.72		

Data File: \\avogadro\organics\E2.i\111115F.B\E2K7955F.D
Date : 16-NOV-2011 06:21
Client ID: H30W4
Instrument: E2.i
Sample Info: K2200-07B,,62638,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111115R.B\E2K7955R.D
Report Date: 17-Nov-2011 11:00

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

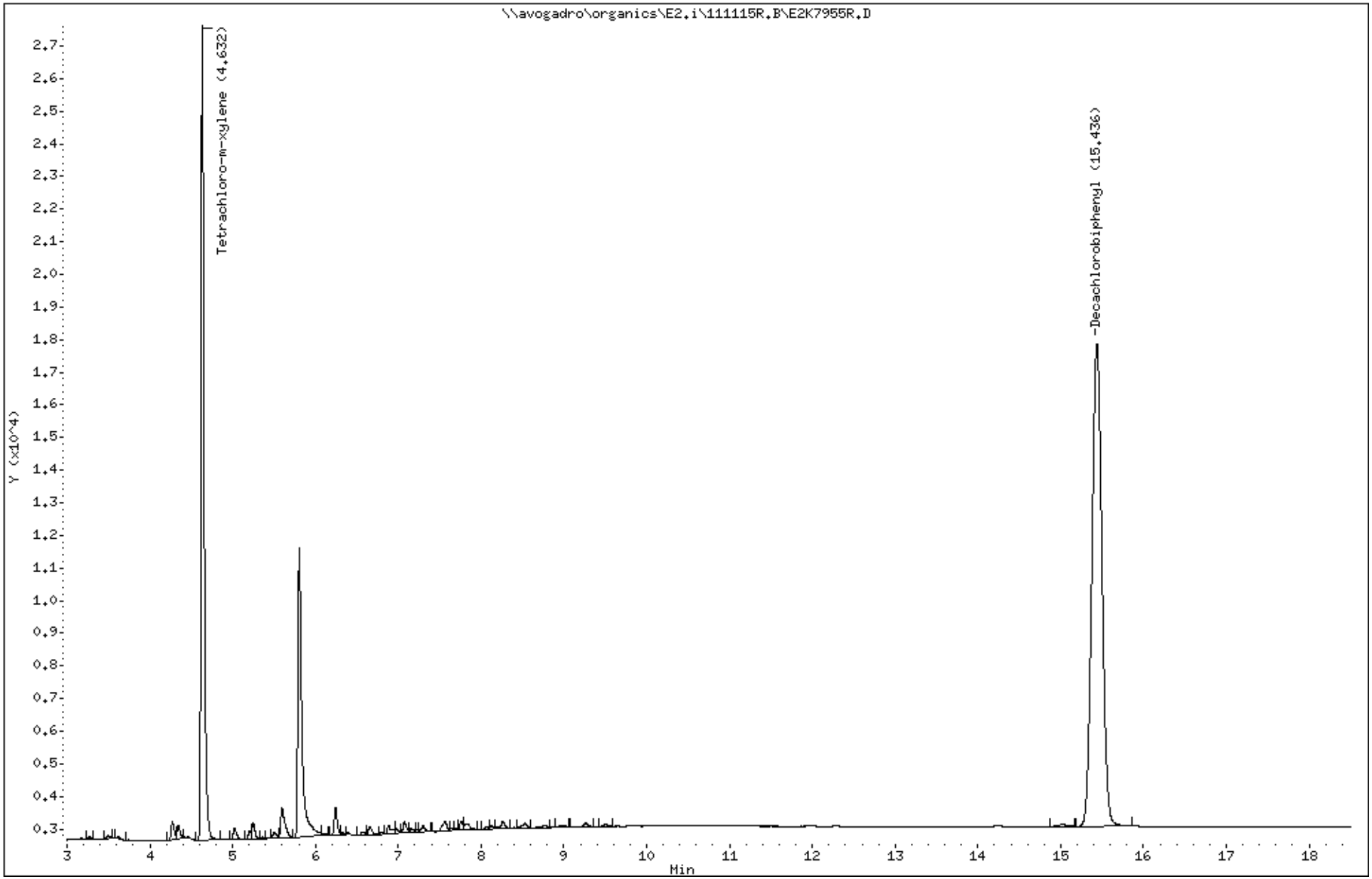
Data file : \\avogadro\organics\E2.i\111115R.B\E2K7955R.D
Lab Smp Id: K2200-07B Client Smp ID: H30W4
Inj Date : 16-NOV-2011 06:21
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-07B,,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\Avogadro\Organics\E2.i\111115R.B\E2_ARO_5_R.m
Meth Date : 16-Nov-2011 17:21 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807R.D
Als bottle: 28
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET111

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

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.632	4.629	0.003	613868	0.04690	0.47		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
15.436	15.432	0.004	1251981	0.07226	0.72		

Data File: \\avogadro\organics\E2.i\111115R.B\E2K7955R.D
Date : 16-NOV-2011 06:21
Client ID: H30W4
Instrument: E2.i
Sample Info: K2200-07B,,62638,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.

H30W5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-08B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2K7956F.D/E2K7956R.D

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

Extraction: (Type) SEPF Date Extracted: 11/02/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/16/2011

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/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\111115F.B\E2K7956F.D
Report Date: 17-Nov-2011 10:59

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111115F.B\E2K7956F.D
Lab Smp Id: K2200-08B Client Smp ID: H30W5
Inj Date : 16-NOV-2011 06:42
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-08B,,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111115F.B\E2_ARO_5_F.m
Meth Date : 16-Nov-2011 17:19 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807F.D
Als bottle: 29
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

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

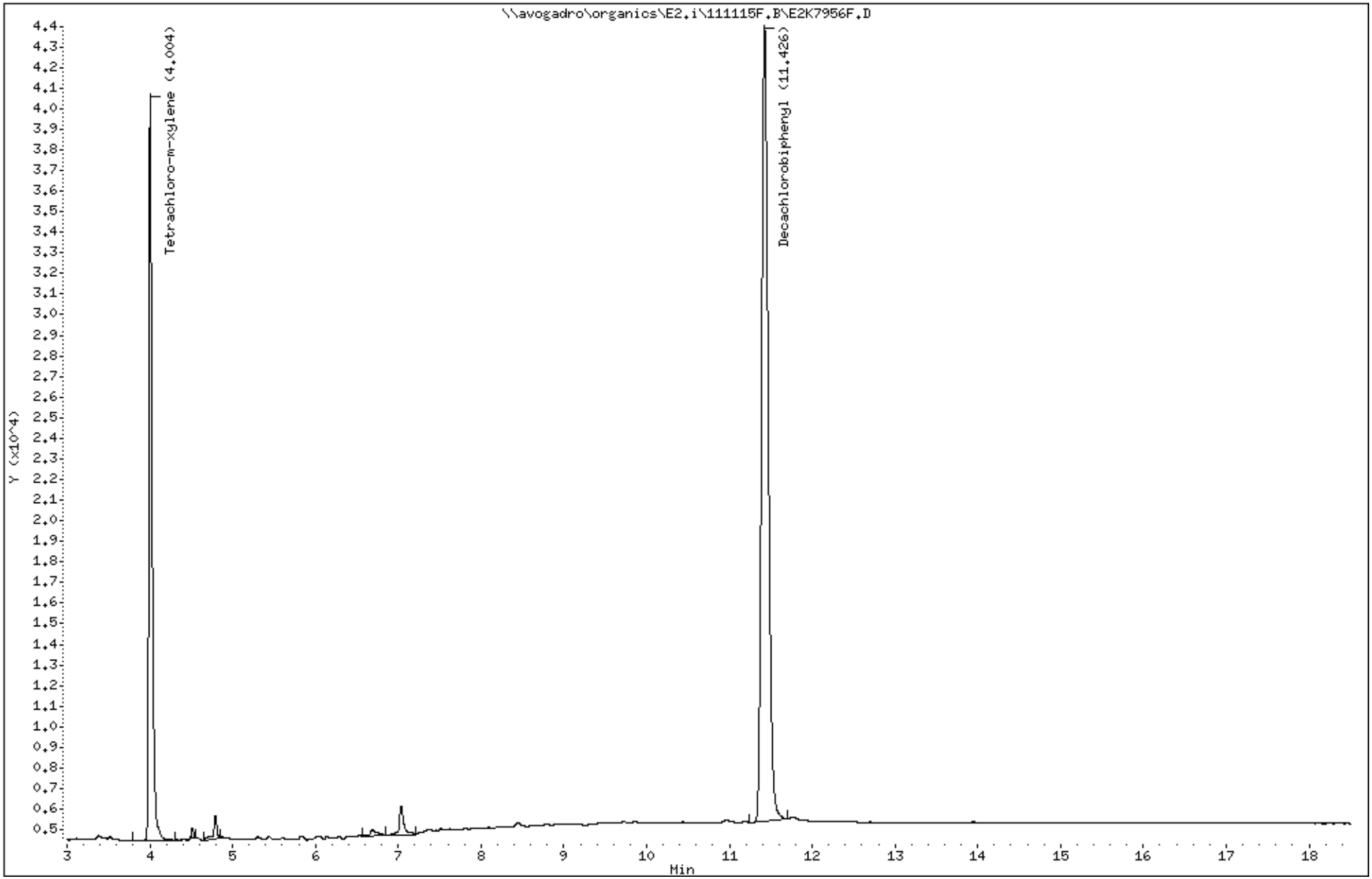
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (ug/L)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.004	4.001	0.003	969188	0.04545	0.45			(M)M6 GMA 11/17
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.425	11.422	0.003	2122774	0.07244	0.72			(M)M6 GMA 11/17

QC Flag Legend

M - Compound response manually integrated.

Data File: \\avogadro\organics\E2.i\111115F.B\E2K7956F.D
Date : 16-NOV-2011 06:42
Client ID: H30W5 Instrument: E2.i
Sample Info: K2200-08B,,62638,somaro,sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPest Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111115R.B\E2K7956R.D
Report Date: 17-Nov-2011 11:00

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

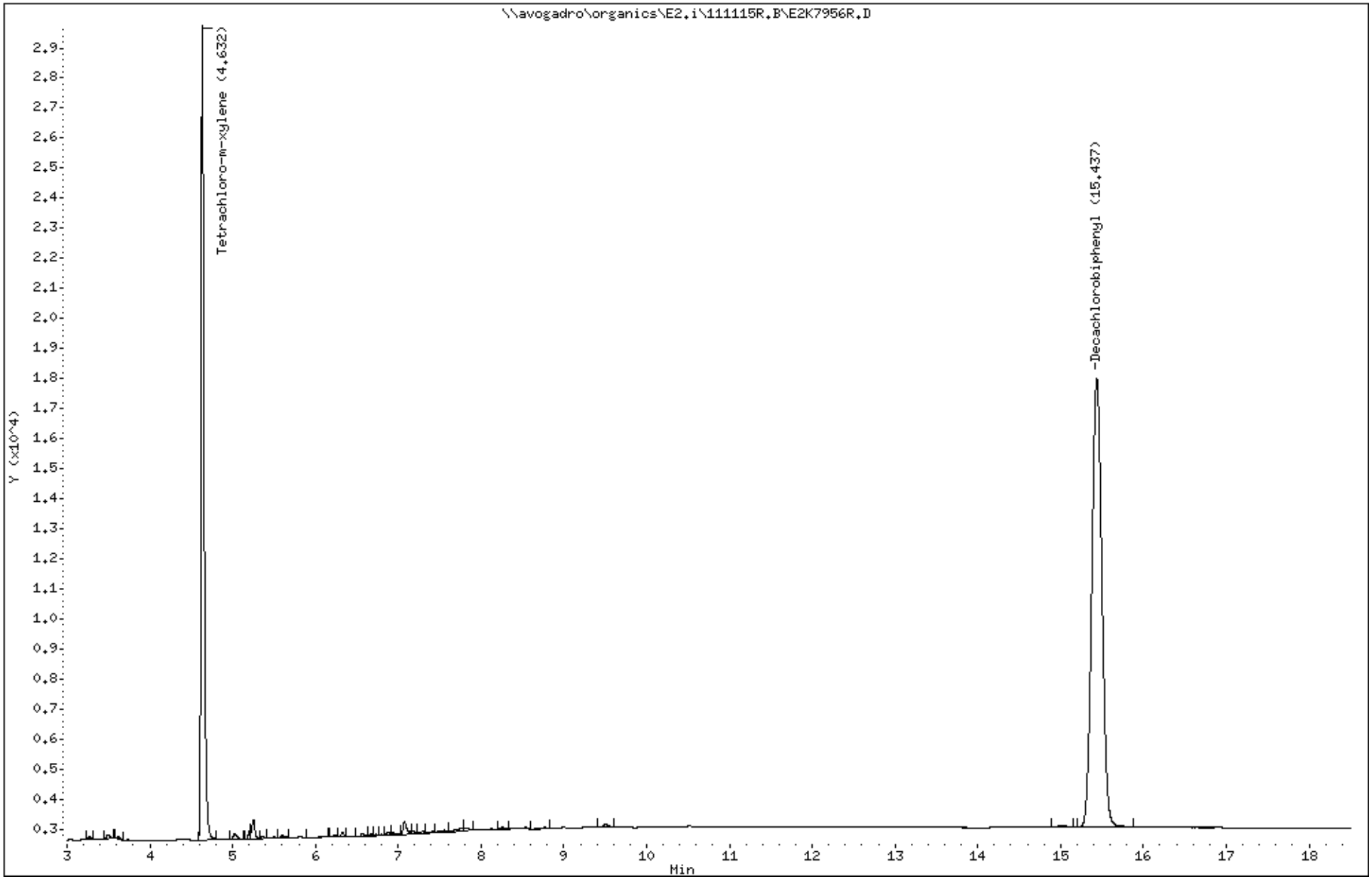
Data file : \\avogadro\organics\E2.i\111115R.B\E2K7956R.D
Lab Smp Id: K2200-08B Client Smp ID: H30W5
Inj Date : 16-NOV-2011 06:42
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-08B,,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\Avogadro\Organics\E2.i\111115R.B\E2_ARO_5_R.m
Meth Date : 16-Nov-2011 17:21 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807R.D
Als bottle: 29
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.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	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.632	4.629	0.003	654642	0.05002	0.50		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
15.437	15.432	0.005	1267975	0.07319	0.73		

Data File: \\avogadro\organics\E2.i\111115R.B\E2K7956R.D
Date : 16-NOV-2011 06:42
Client ID: H30W5
Instrument: E2.i
Sample Info: K2200-08B,,62638,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.

H30W6

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-09B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2K7957F.D/E2K7957R.D

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

Extraction: (Type) SEPF Date Extracted: 11/02/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/16/2011

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/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\111115F.B\E2K7957F.D
Report Date: 17-Nov-2011 10:59

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

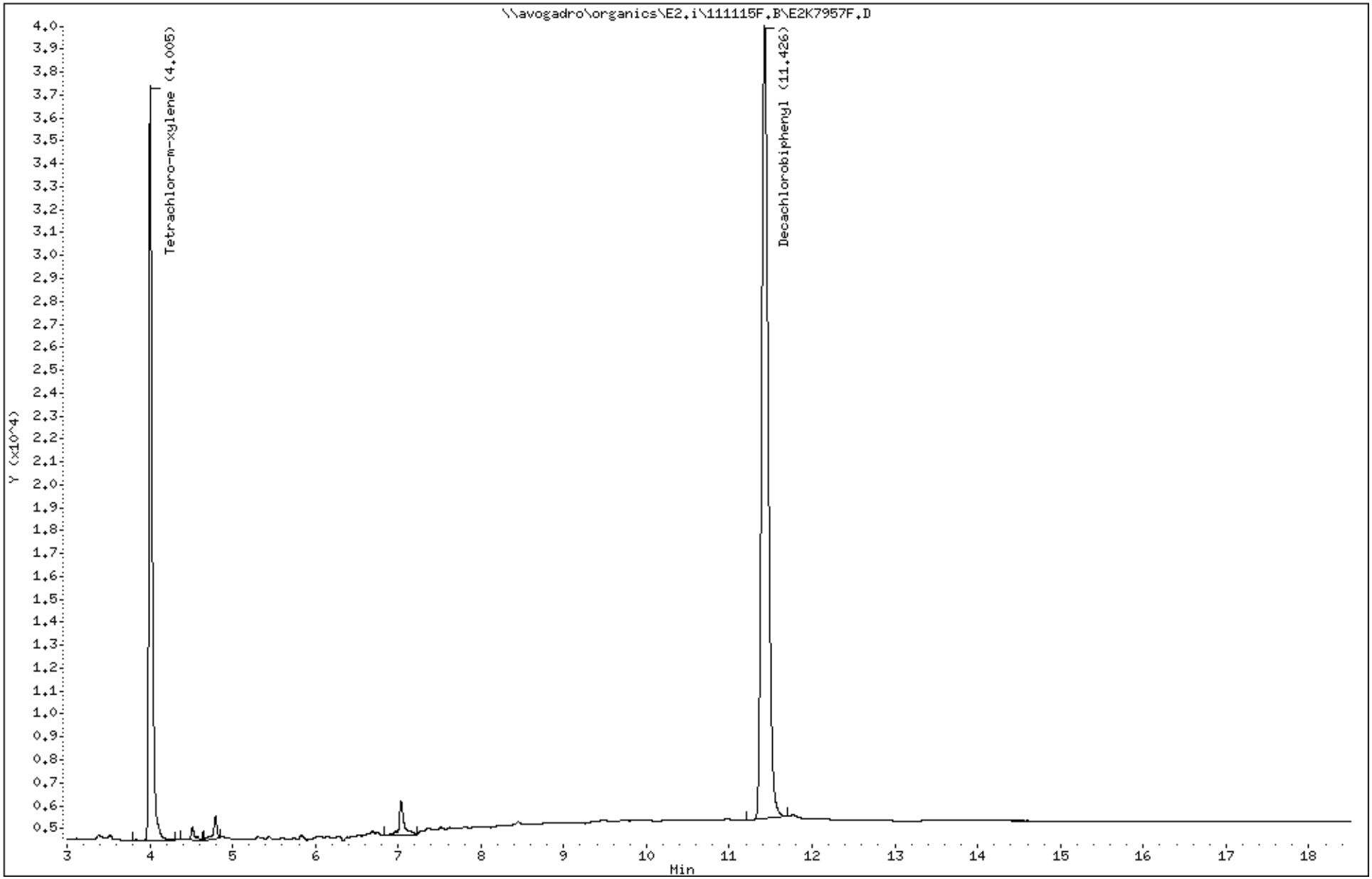
Data file : \\avogadro\organics\E2.i\111115F.B\E2K7957F.D
Lab Smp Id: K2200-09B Client Smp ID: H30W6
Inj Date : 16-NOV-2011 07:03
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-09B,,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111115F.B\E2_ARO_5_F.m
Meth Date : 16-Nov-2011 17:19 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807F.D
Als bottle: 30
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.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	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.004	4.001	0.003	882043	0.04137	0.41		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
11.426	11.422	0.004	1898754	0.06479	0.65		

Data File: \\avogadro\organics\E2.i\111115F.B\E2K7957F.D
Date : 16-NOV-2011 07:03
Client ID: H30W6
Instrument: E2.i
Sample Info: K2200-09B,,62638,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111115R.B\E2K7957R.D
Report Date: 17-Nov-2011 11:00

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

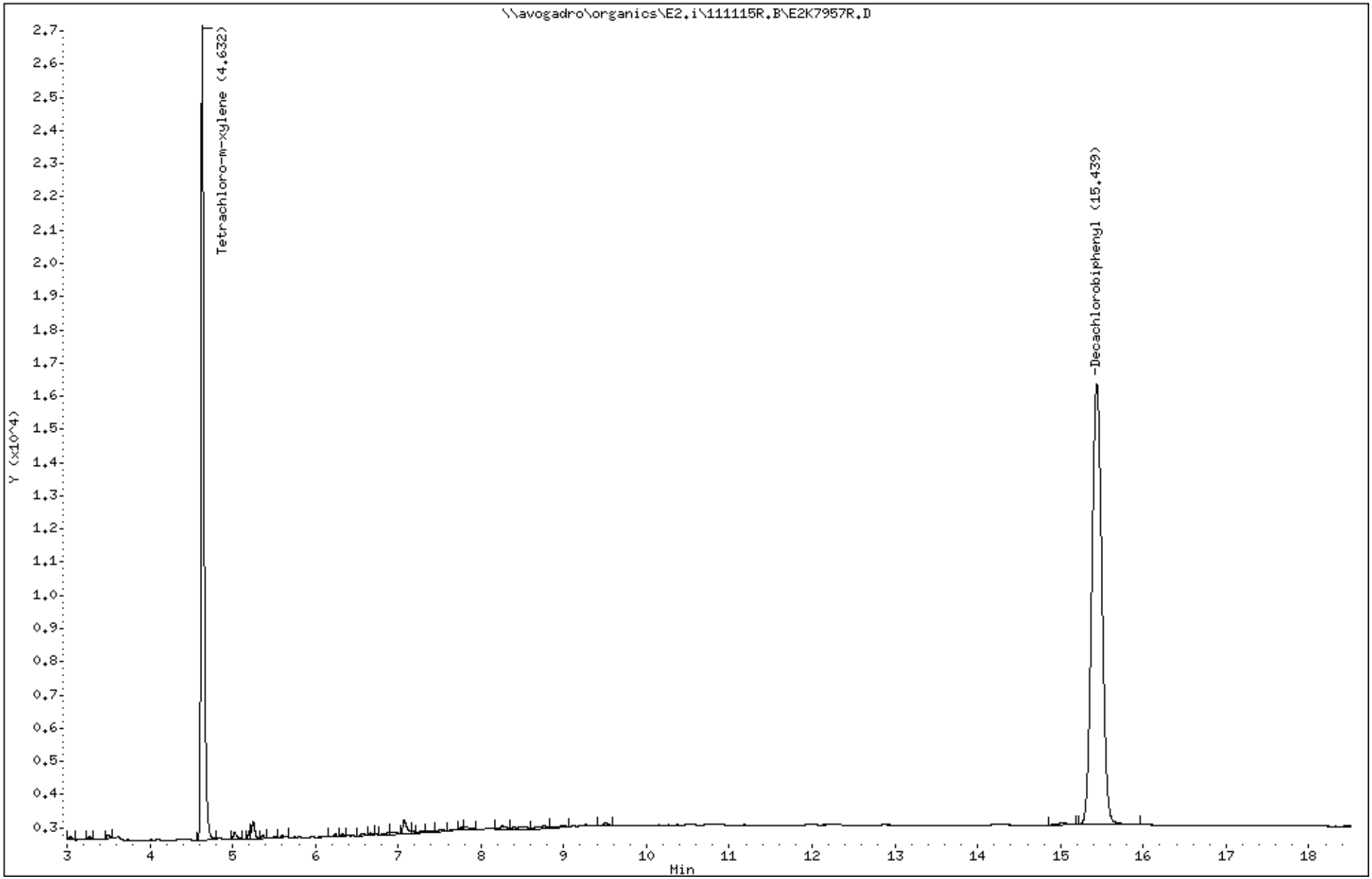
Data file : \\avogadro\organics\E2.i\111115R.B\E2K7957R.D
Lab Smp Id: K2200-09B Client Smp ID: H30W6
Inj Date : 16-NOV-2011 07:03
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-09B,,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\Avogadro\Organics\E2.i\111115R.B\E2_ARO_5_R.m
Meth Date : 16-Nov-2011 17:21 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807R.D
Als bottle: 30
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET111

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

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.631	4.629	0.002	590549	0.04512	0.45		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
15.438	15.432	0.006	1127711	0.06509	0.65		

Data File: \\avogadro\organics\E2.i\111115R.B\E2K7957R.D
Date : 16-NOV-2011 07:03
Client ID: H30W6
Instrument: E2.i
Sample Info: K2200-09B,,62638,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.

H30W7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-10B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2K7958F.D/E2K7958R.D

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

Extraction: (Type) SEPF Date Extracted: 11/02/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/16/2011

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/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\111115F.B\E2K7958F.D
Report Date: 17-Nov-2011 10:59

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

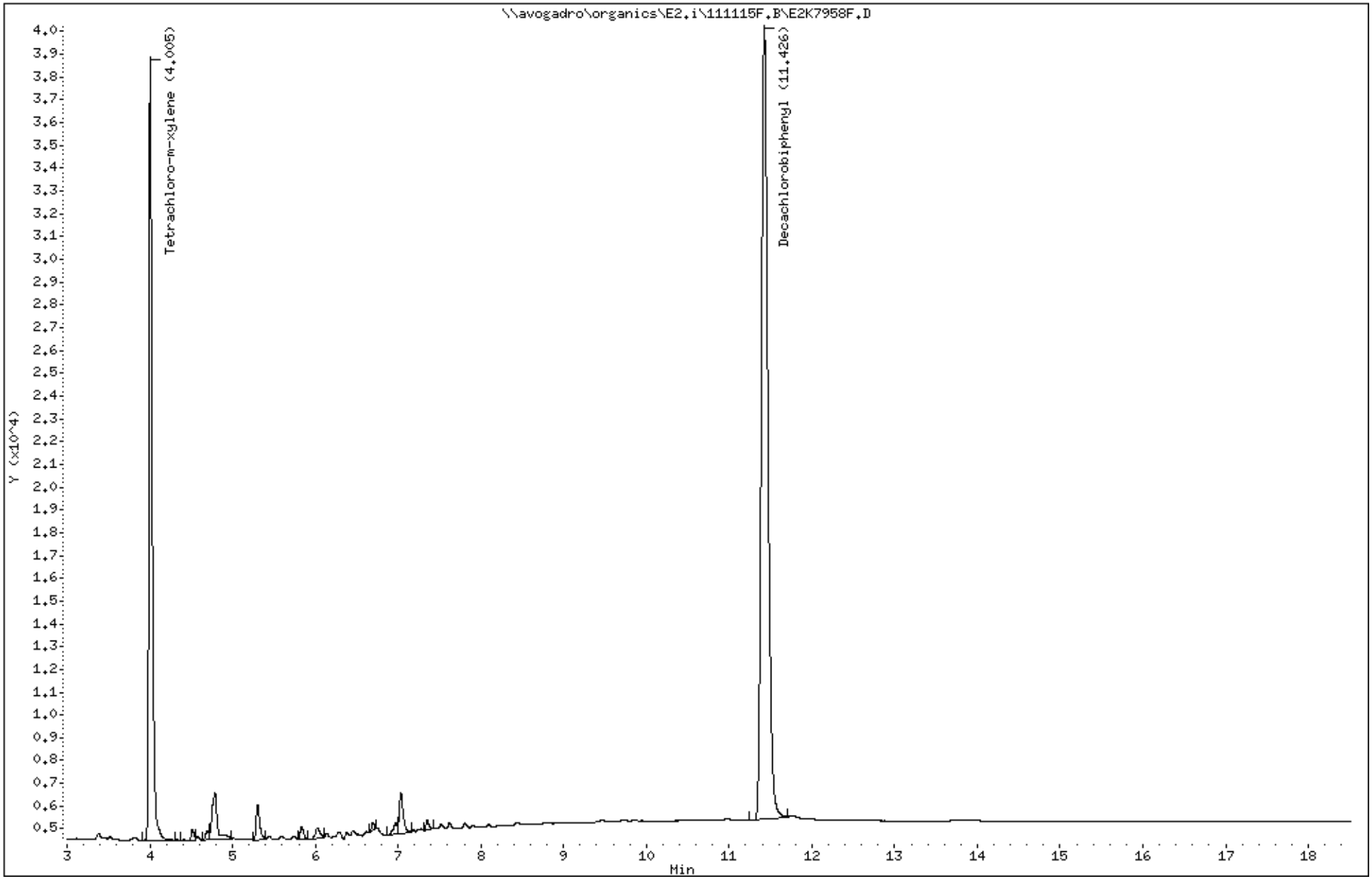
Data file : \\avogadro\organics\E2.i\111115F.B\E2K7958F.D
Lab Smp Id: K2200-10B Client Smp ID: H30W7
Inj Date : 16-NOV-2011 07:24
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-10B,,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111115F.B\E2_ARO_5_F.m
Meth Date : 16-Nov-2011 17:19 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807F.D
Als bottle: 31
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.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	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.005	4.001	0.004	917248	0.04302	0.43		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.425	11.422	0.003	1903010	0.06494	0.65		

Data File: \\avogadro\organics\E2.i\111115F.B\E2K7958F.D
Date : 16-NOV-2011 07:24
Client ID: H30W7
Instrument: E2.i
Sample Info: K2200-10B,,62638,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111115R.B\E2K7958R.D
Report Date: 17-Nov-2011 11:00

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

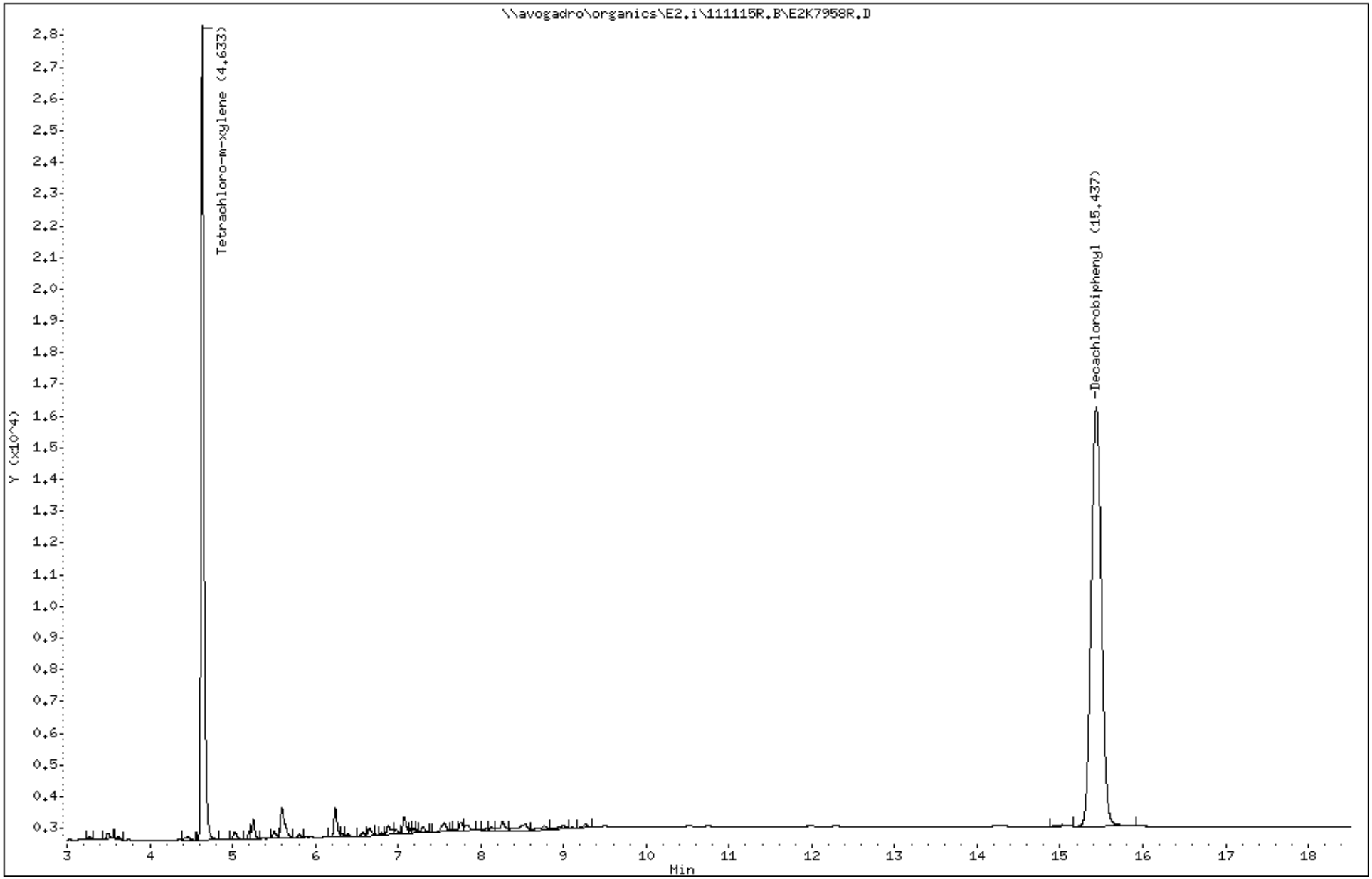
Data file : \\avogadro\organics\E2.i\111115R.B\E2K7958R.D
Lab Smp Id: K2200-10B Client Smp ID: H30W7
Inj Date : 16-NOV-2011 07:24
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-10B,,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\Avogadro\Organics\E2.i\111115R.B\E2_ARO_5_R.m
Meth Date : 16-Nov-2011 17:21 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807R.D
Als bottle: 31
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET111

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

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.632	4.629	0.003	619545	0.04734	0.47		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
15.436	15.432	0.004	1127876	0.06510	0.65		

Data File: \\avogadro\organics\E2.i\111115R.B\E2K7958R.D
Date : 16-NOV-2011 07:24
Client ID: H30W7
Instrument: E2.i
Sample Info: K2200-10B,,62638,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.

H30W8

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-11B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2K7959F.D/E2K7959R.D

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

Extraction: (Type) SEPF Date Extracted: 11/02/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/16/2011

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/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\111115F.B\E2K7959F.D
Report Date: 17-Nov-2011 10:59

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

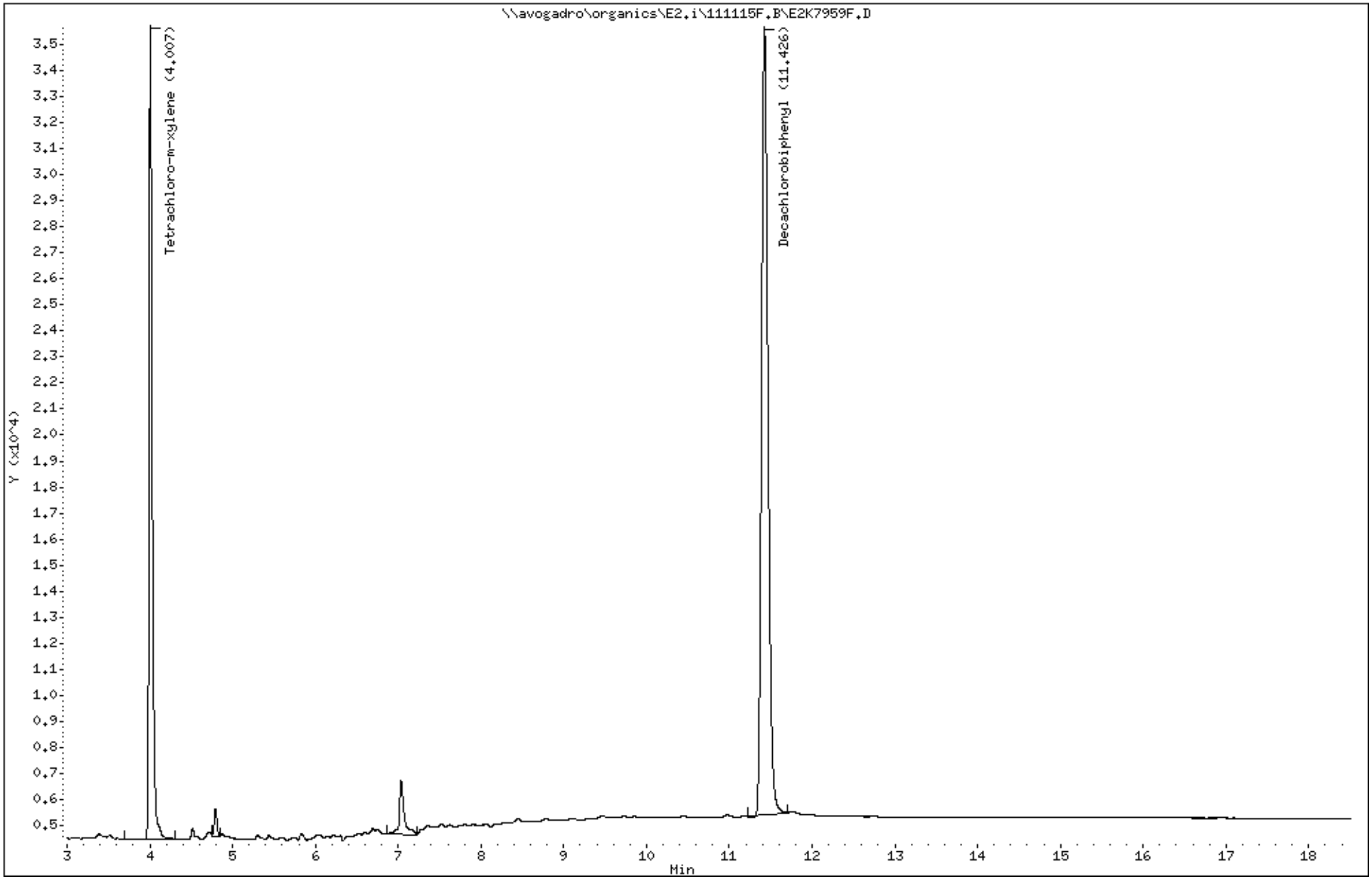
Data file : \\avogadro\organics\E2.i\111115F.B\E2K7959F.D
Lab Smp Id: K2200-11B Client Smp ID: H30W8
Inj Date : 16-NOV-2011 07:45
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-11B,,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111115F.B\E2_ARO_5_F.m
Meth Date : 16-Nov-2011 17:19 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807F.D
Als bottle: 32
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.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	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.006	4.001	0.005	822873	0.03859	0.38		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.426	11.422	0.004	1649294	0.05628	0.56		

Data File: \\avogadro\organics\E2.i\111115F.B\E2K7959F.D
Date : 16-NOV-2011 07:45
Client ID: H30W8
Instrument: E2.i
Sample Info: K2200-11B,,62638,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111115R.B\E2K7959R.D
Report Date: 17-Nov-2011 11:00

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

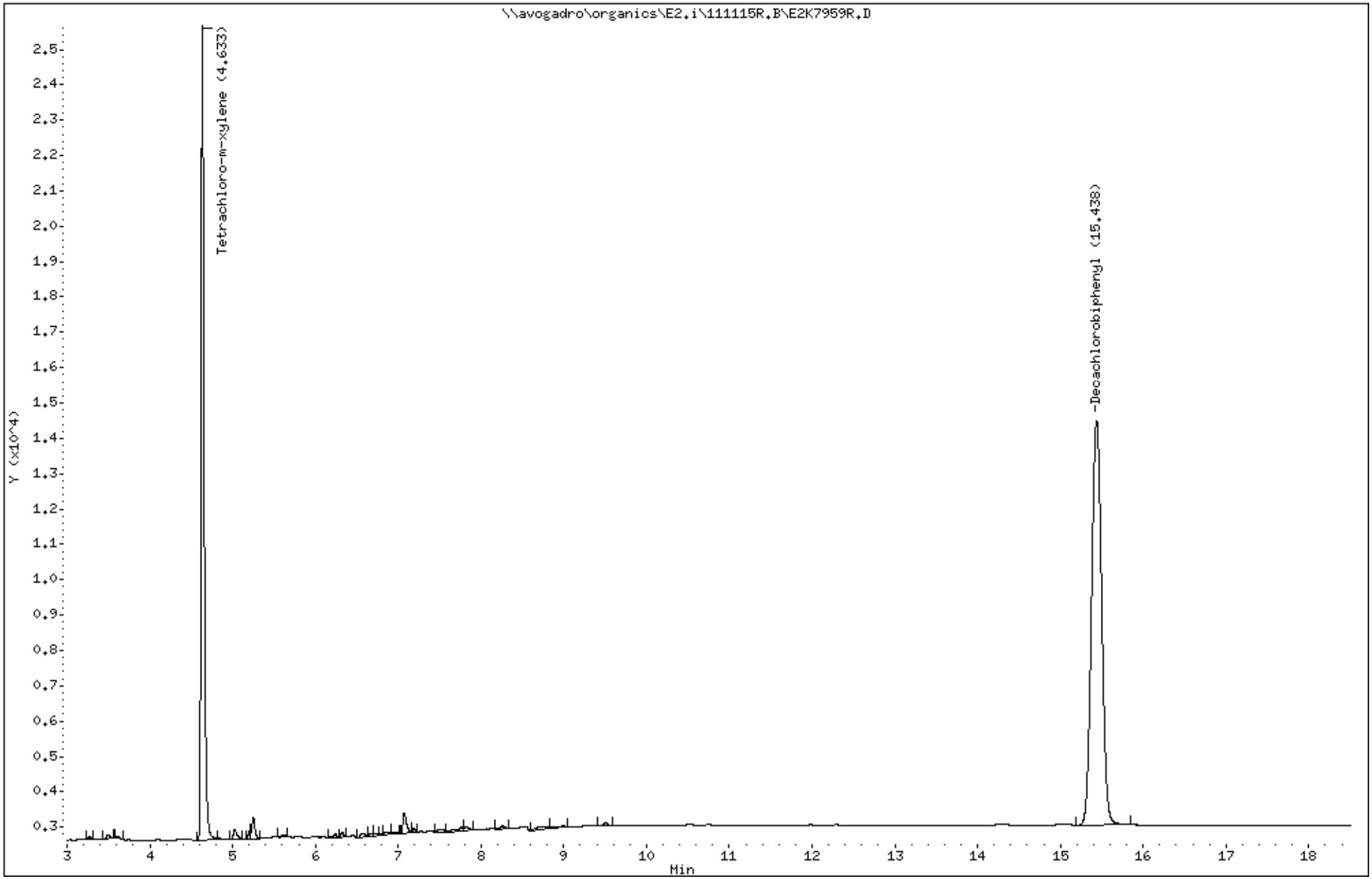
Data file : \\avogadro\organics\E2.i\111115R.B\E2K7959R.D
Lab Smp Id: K2200-11B Client Smp ID: H30W8
Inj Date : 16-NOV-2011 07:45
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-11B,,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\Avogadro\Organics\E2.i\111115R.B\E2_ARO_5_R.m
Meth Date : 16-Nov-2011 17:21 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807R.D
Als bottle: 32
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET111

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

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.633	4.629	0.004	548890	0.04194	0.42		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
15.437	15.432	0.005	968856	0.05592	0.56		

Data File: \\avogadro\organics\E2.i\111115R.B\E2K7959R.D
Date : 16-NOV-2011 07:45
Client ID: H30W8
Instrument: E2.i
Sample Info: K2200-11B,,62638,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.

H30X0

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-12B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2K7960F.D/E2K7960R.D

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

Extraction: (Type) SEPF Date Extracted: 11/02/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/16/2011

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/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\111115F.B\E2K7960F.D
Report Date: 17-Nov-2011 10:59

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

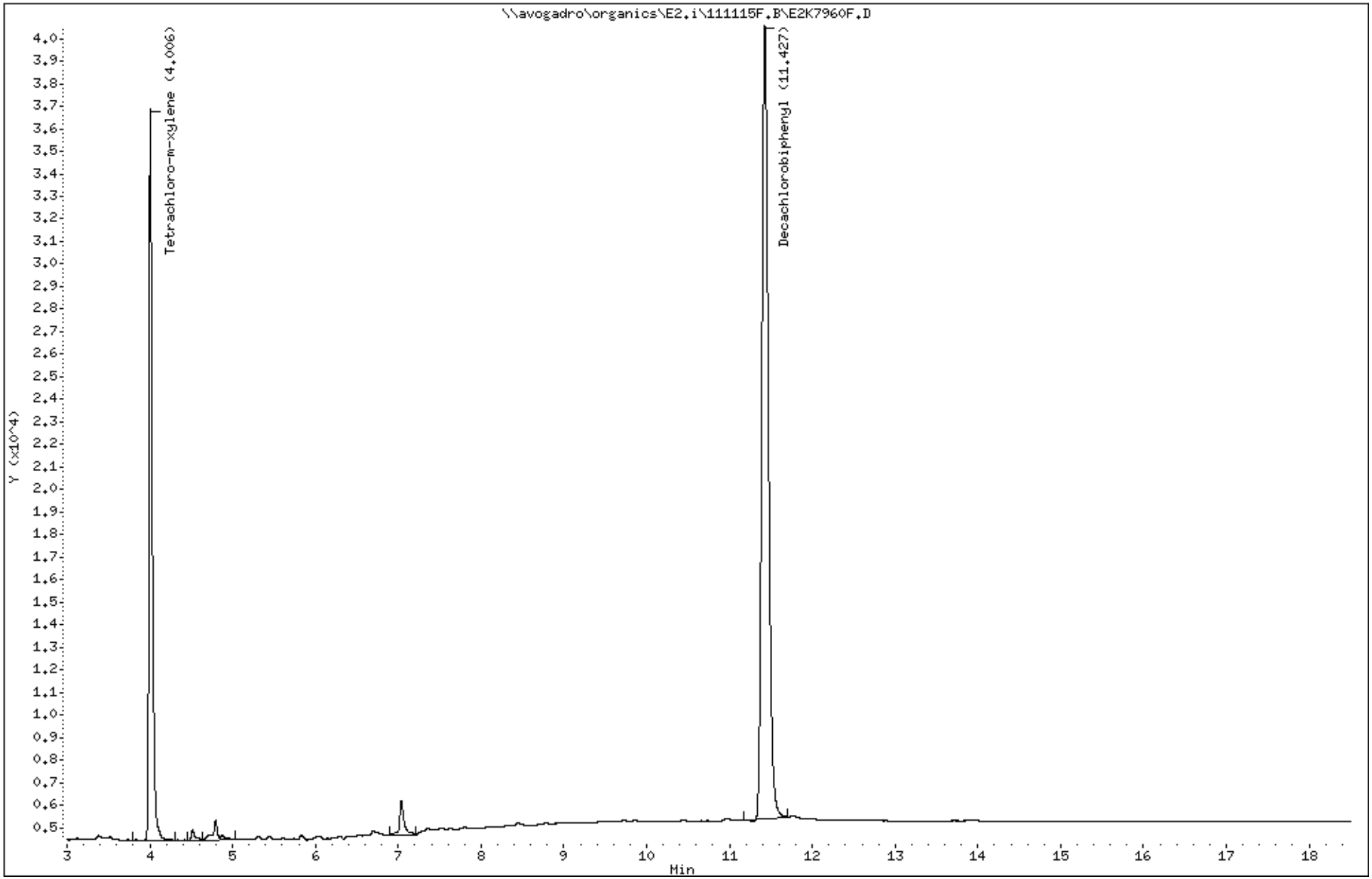
Data file : \\avogadro\organics\E2.i\111115F.B\E2K7960F.D
Lab Smp Id: K2200-12B Client Smp ID: H30X0
Inj Date : 16-NOV-2011 08:06
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-12B,,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111115F.B\E2_ARO_5_F.m
Meth Date : 16-Nov-2011 17:19 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807F.D
Als bottle: 33
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.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

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.006	4.001	0.005	853458	0.04003	0.40		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
11.427	11.422	0.005	1934326	0.06601	0.66		

Data File: \\avogadro\organics\E2.i\111115F.B\E2K7960F.D
Date : 16-NOV-2011 08:06
Client ID: H30X0
Instrument: E2.i
Sample Info: K2200-12B,,62638,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111115R.B\E2K7960R.D
Report Date: 17-Nov-2011 11:00

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

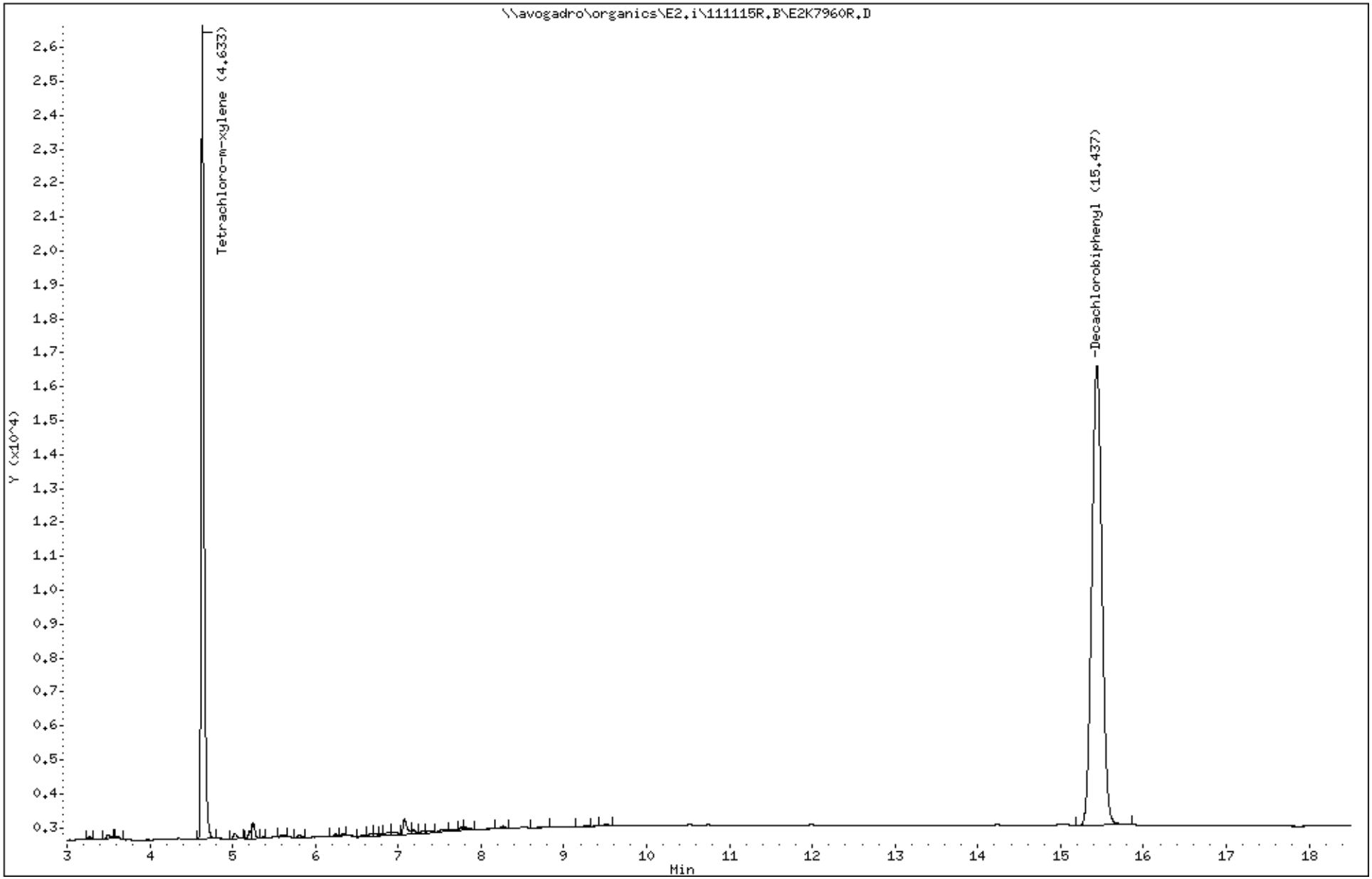
Data file : \\avogadro\organics\E2.i\111115R.B\E2K7960R.D
Lab Smp Id: K2200-12B Client Smp ID: H30X0
Inj Date : 16-NOV-2011 08:06
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-12B,,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\Avogadro\Organics\E2.i\111115R.B\E2_ARO_5_R.m
Meth Date : 16-Nov-2011 17:21 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807R.D
Als bottle: 33
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET111

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

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.633	4.629	0.004	573764	0.04384	0.44		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
15.437	15.432	0.005	1154886	0.06666	0.67		

Data File: \\avogadro\organics\E2.i\111115R.B\E2K7960R.D
Date : 16-NOV-2011 08:06
Client ID: H30X0
Instrument: E2.i
Sample Info: K2200-12B,,62638,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.

H30X1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-13B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2K7961F.D/E2K7961R.D

% Moisture: Decanted: (Y/N) Date Received: 10/28/2011

Extraction: (Type) SEPF Date Extracted: 11/02/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/16/2011

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/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\111115F.B\E2K7961F.D
Report Date: 17-Nov-2011 10:59

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

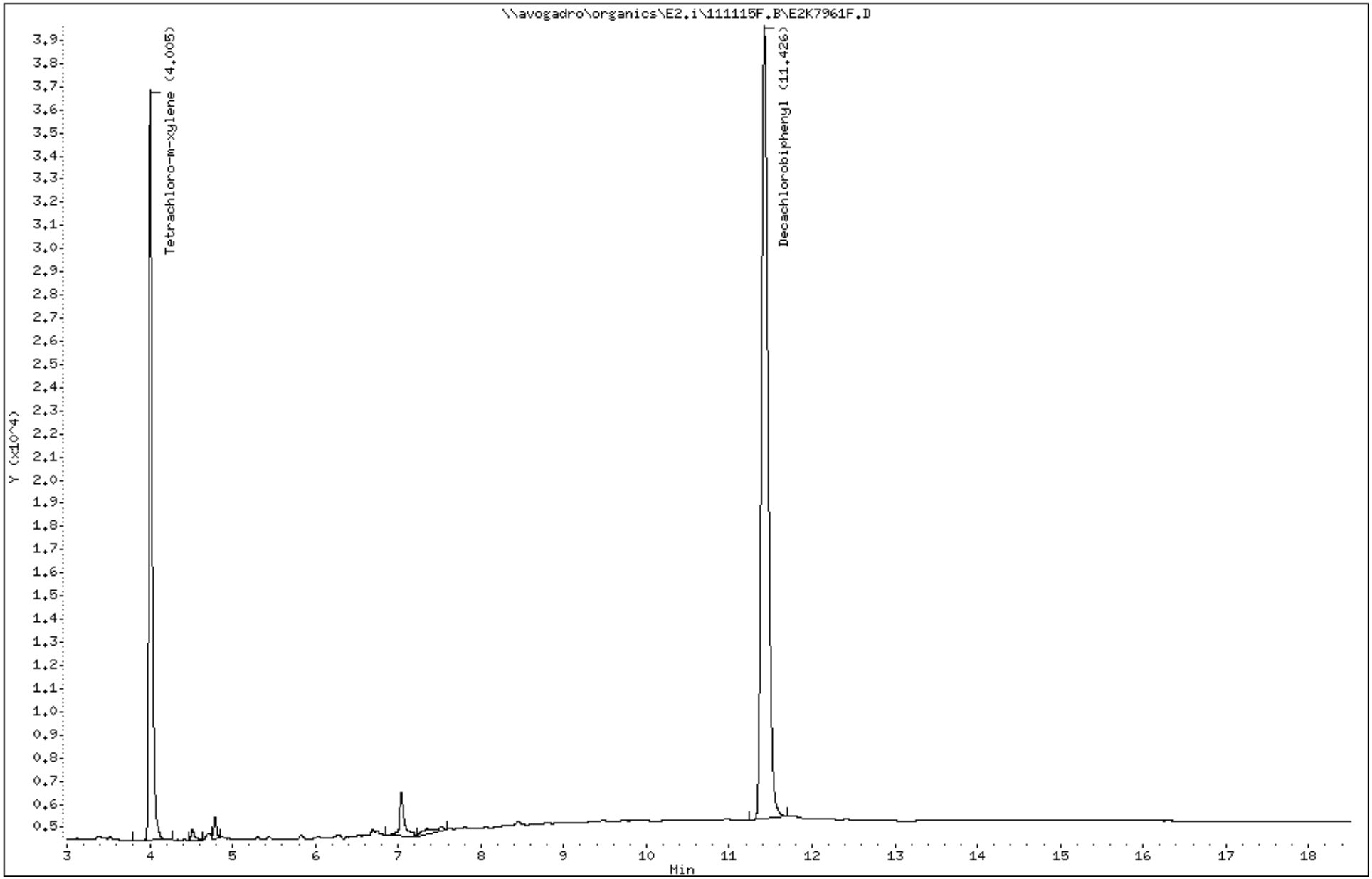
Data file : \\avogadro\organics\E2.i\111115F.B\E2K7961F.D
Lab Smp Id: K2200-13B Client Smp ID: H30X1
Inj Date : 16-NOV-2011 08:26
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-13B,,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111115F.B\E2_ARO_5_F.m
Meth Date : 16-Nov-2011 17:19 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807F.D
Als bottle: 34
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.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	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.004	4.001	0.003	860746	0.04037	0.40		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
11.425	11.422	0.003	1878347	0.06410	0.64		

Data File: \\avogadro\organics\E2.i\111115F.B\E2K7961F.D
Date : 16-NOV-2011 08:26
Client ID: H30X1
Instrument: E2.i
Sample Info: K2200-13B,,62638,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111115R.B\E2K7961R.D
Report Date: 17-Nov-2011 11:00

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

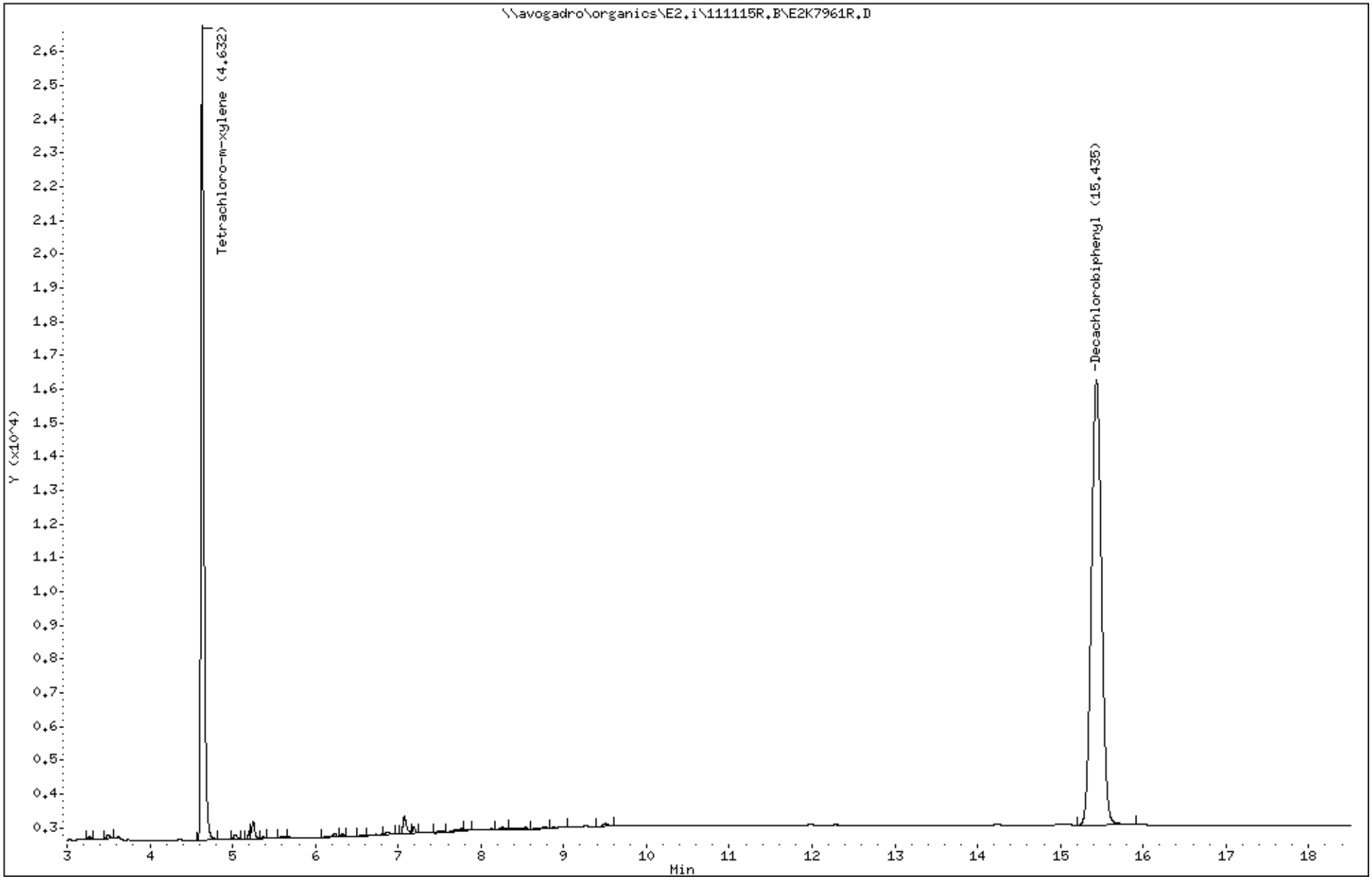
Data file : \\avogadro\organics\E2.i\111115R.B\E2K7961R.D
Lab Smp Id: K2200-13B Client Smp ID: H30X1
Inj Date : 16-NOV-2011 08:26
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-13B,,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\Avogadro\Organics\E2.i\111115R.B\E2_ARO_5_R.m
Meth Date : 16-Nov-2011 17:21 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807R.D
Als bottle: 34
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET111

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

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.631	4.629	0.002	583144	0.04455	0.44		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
15.435	15.432	0.003	1119642	0.06462	0.65		

Data File: \\avogadro\organics\E2.i\111115R.B\E2K7961R.D
Date : 16-NOV-2011 08:26
Client ID: H30X1 Instrument: E2.i
Sample Info: K2200-13B,,62638,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.

H30X3

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-20A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2K7968F.D/E2K7968R.D

% Moisture: Decanted: (Y/N) Date Received: 10/29/2011

Extraction: (Type) SEPF Date Extracted: 11/02/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/16/2011

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/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\111115F.B\E2K7968F.D
Report Date: 17-Nov-2011 10:59

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111115F.B\E2K7968F.D
Lab Smp Id: K2200-20A Client Smp ID: H30X3
Inj Date : 16-NOV-2011 10:53
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-20A,,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111115F.B\E2_ARO_5_F.m
Meth Date : 16-Nov-2011 17:19 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807F.D
Als bottle: 41
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET111

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

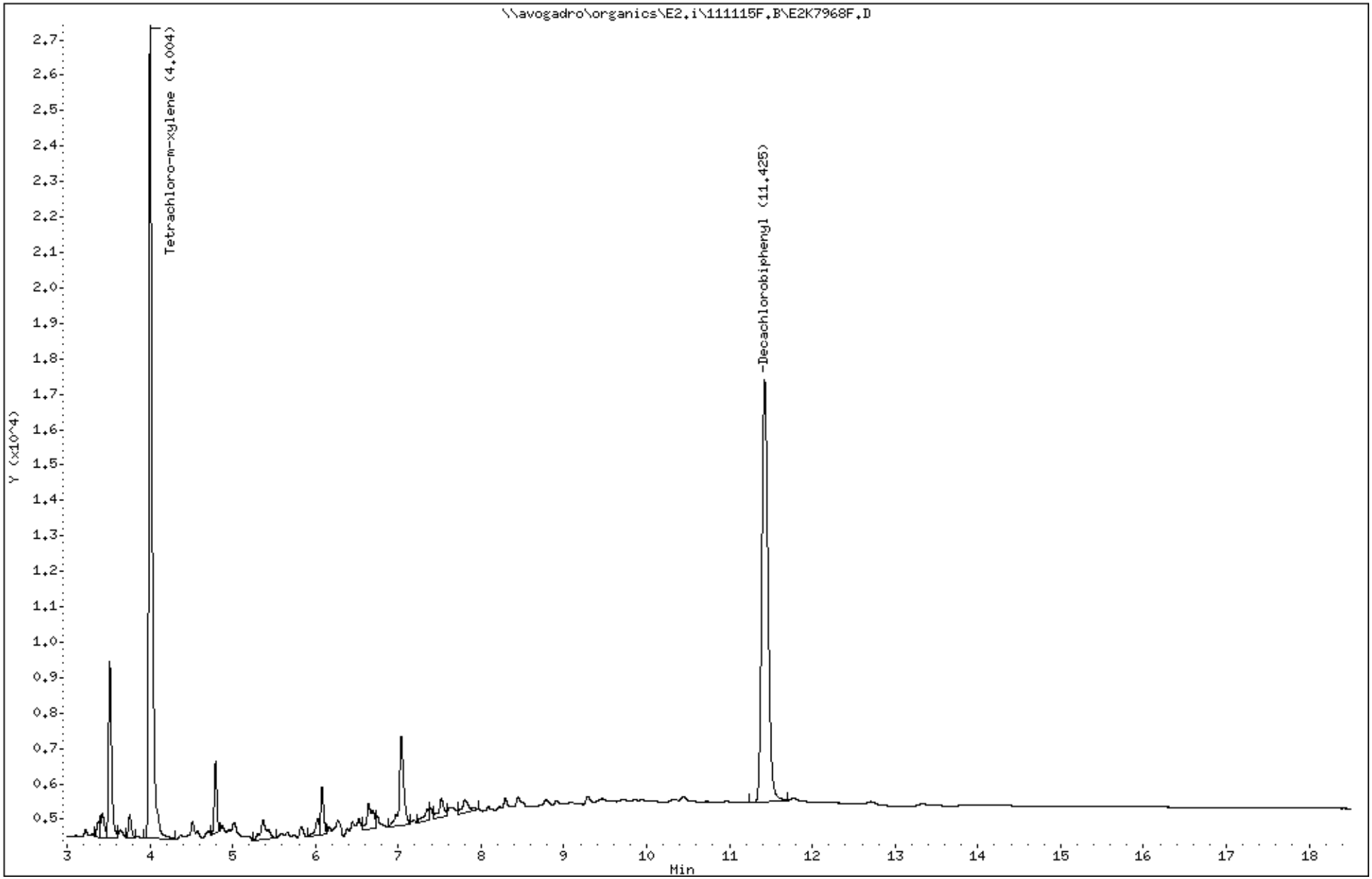
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.003	4.001	0.002	620268	0.02909	0.29			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.424	11.422	0.002	623067	0.02126	0.21			(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E2.i\111115F.B\E2K7968F.D
Date : 16-NOV-2011 10:53
Client ID: H30X3 Instrument: E2.i
Sample Info: K2200-20A,,62638,somaro,sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPest Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111115R.B\E2K7968R.D
Report Date: 17-Nov-2011 11:00

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111115R.B\E2K7968R.D
Lab Smp Id: K2200-20A Client Smp ID: H30X3
Inj Date : 16-NOV-2011 10:53
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-20A,,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111115R.B\E2_ARO_5_R.m
Meth Date : 16-Nov-2011 17:21 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807R.D
Als bottle: 41
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

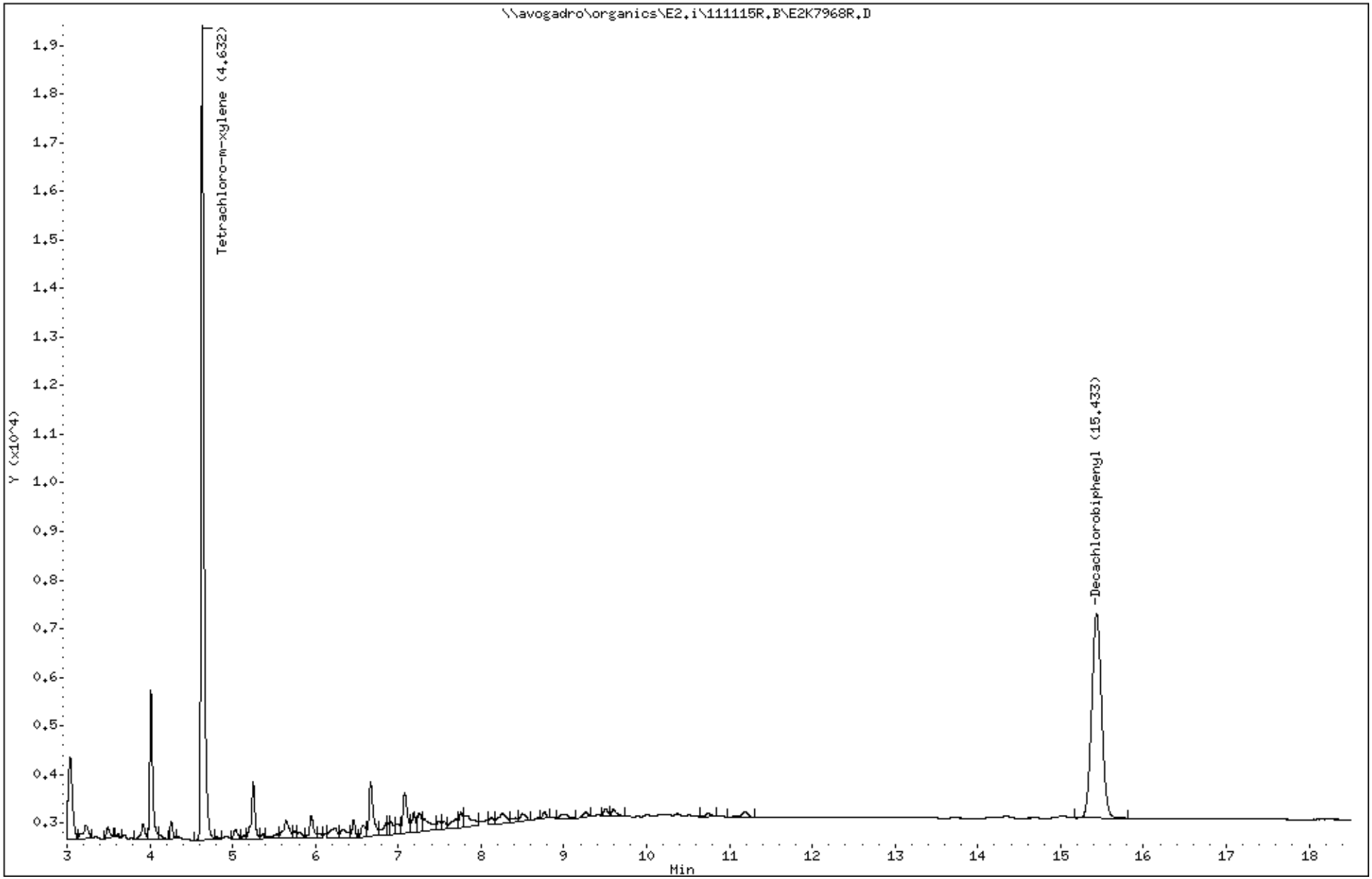
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.631	4.629	0.002	407066	0.03110	0.31			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.432	15.432	0.000	349707	0.02018	0.20			(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E2.i\111115R.B\E2K7968R.D
Date : 16-NOV-2011 10:53
Client ID: H30X3
Instrument: E2.i
Sample Info: K2200-20A,,62638,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.

H30Y2

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-14B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2K7962F.D/E2K7962R.D

% Moisture: Decanted: (Y/N) Date Received: 10/28/2011

Extraction: (Type) SEPF Date Extracted: 11/02/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/16/2011

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/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\111115F.B\E2K7962F.D
Report Date: 17-Nov-2011 10:59

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111115F.B\E2K7962F.D
Lab Smp Id: K2200-14B Client Smp ID: H30Y2
Inj Date : 16-NOV-2011 08:47
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-14B,,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111115F.B\E2_ARO_5_F.m
Meth Date : 16-Nov-2011 17:19 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807F.D
Als bottle: 35
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

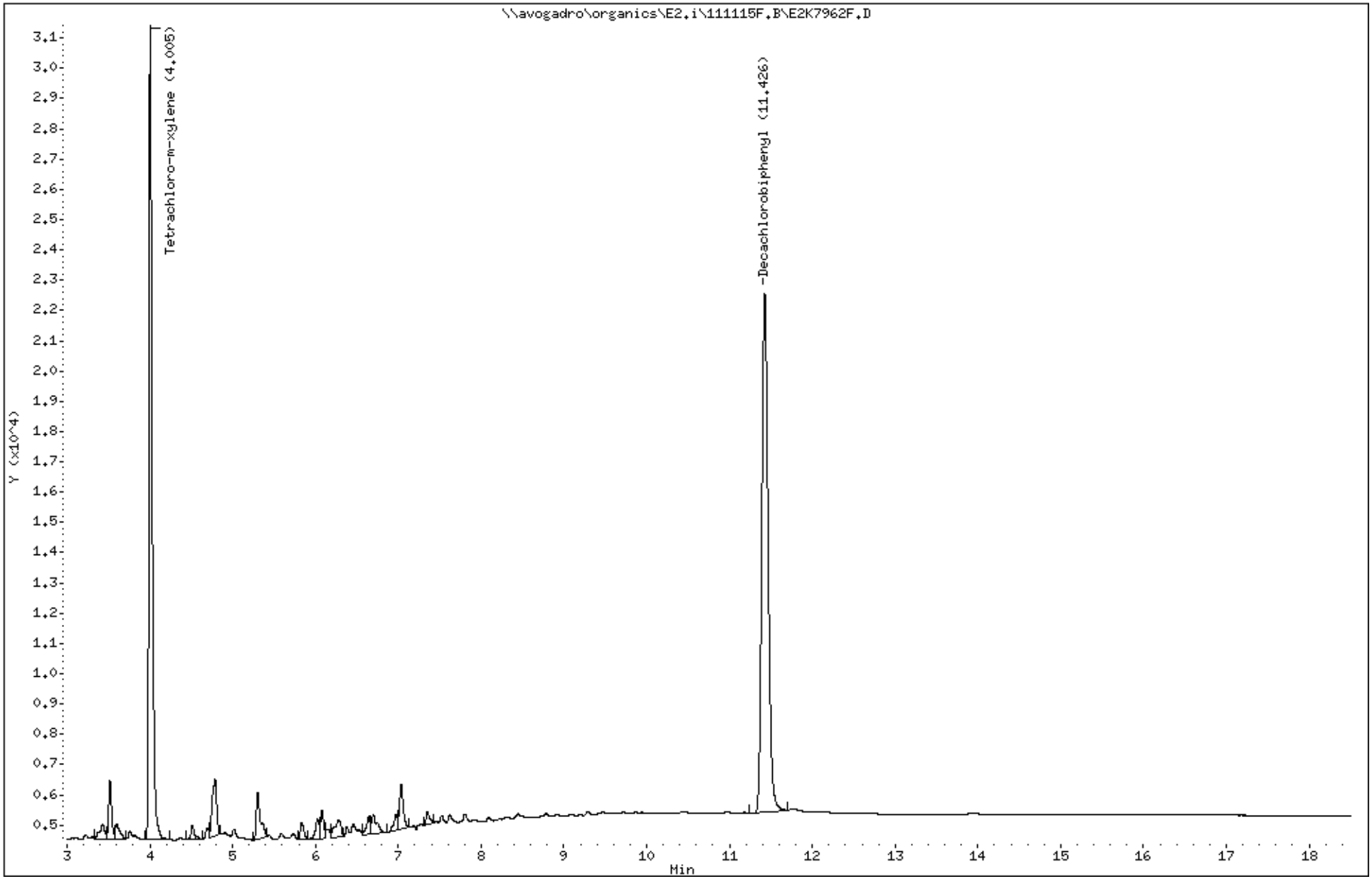
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.004	4.001	0.003	701124	0.03288	0.33			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.425	11.422	0.003	911706	0.03111	0.31			(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E2.i\111115F.B\E2K7962F.D
Date : 16-NOV-2011 08:47
Client ID: H30Y2
Instrument: E2.i
Sample Info: K2200-14B,,62638,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111115R.B\E2K7962R.D
Report Date: 17-Nov-2011 11:00

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111115R.B\E2K7962R.D
Lab Smp Id: K2200-14B Client Smp ID: H30Y2
Inj Date : 16-NOV-2011 08:47
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-14B,,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\Avogadro\Organics\E2.i\111115R.B\E2_ARO_5_R.m
Meth Date : 16-Nov-2011 17:21 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807R.D
Als bottle: 35
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET111

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

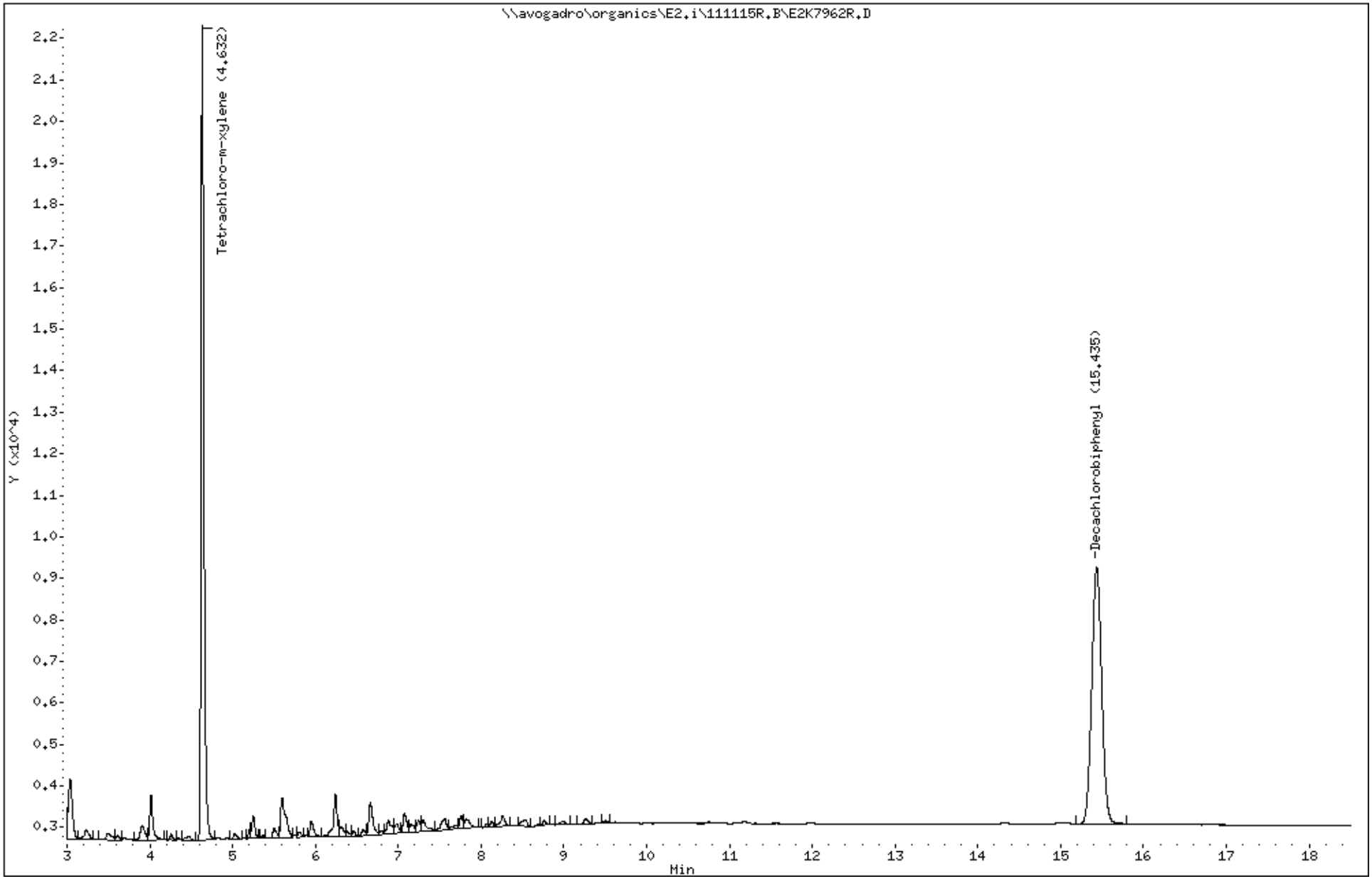
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.632	4.629	0.003	466681	0.03566	0.36			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.434	15.432	0.002	516669	0.02982	0.30			(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E2.i\111115R.B\E2K7962R.D
Date : 16-NOV-2011 08:47
Client ID: H30Y2 Instrument: E2.i
Sample Info: K2200-14B,,62638,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.

H30Y3

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-15B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2K7963F.D/E2K7963R.D

% Moisture: Decanted: (Y/N) Date Received: 10/28/2011

Extraction: (Type) SEPF Date Extracted: 11/02/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/16/2011

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/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\111115F.B\E2K7963F.D
Report Date: 17-Nov-2011 10:59

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111115F.B\E2K7963F.D
Lab Smp Id: K2200-15B Client Smp ID: H30Y3
Inj Date : 16-NOV-2011 09:08
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-15B,,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111115F.B\E2_ARO_5_F.m
Meth Date : 16-Nov-2011 17:19 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807F.D
Als bottle: 36
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

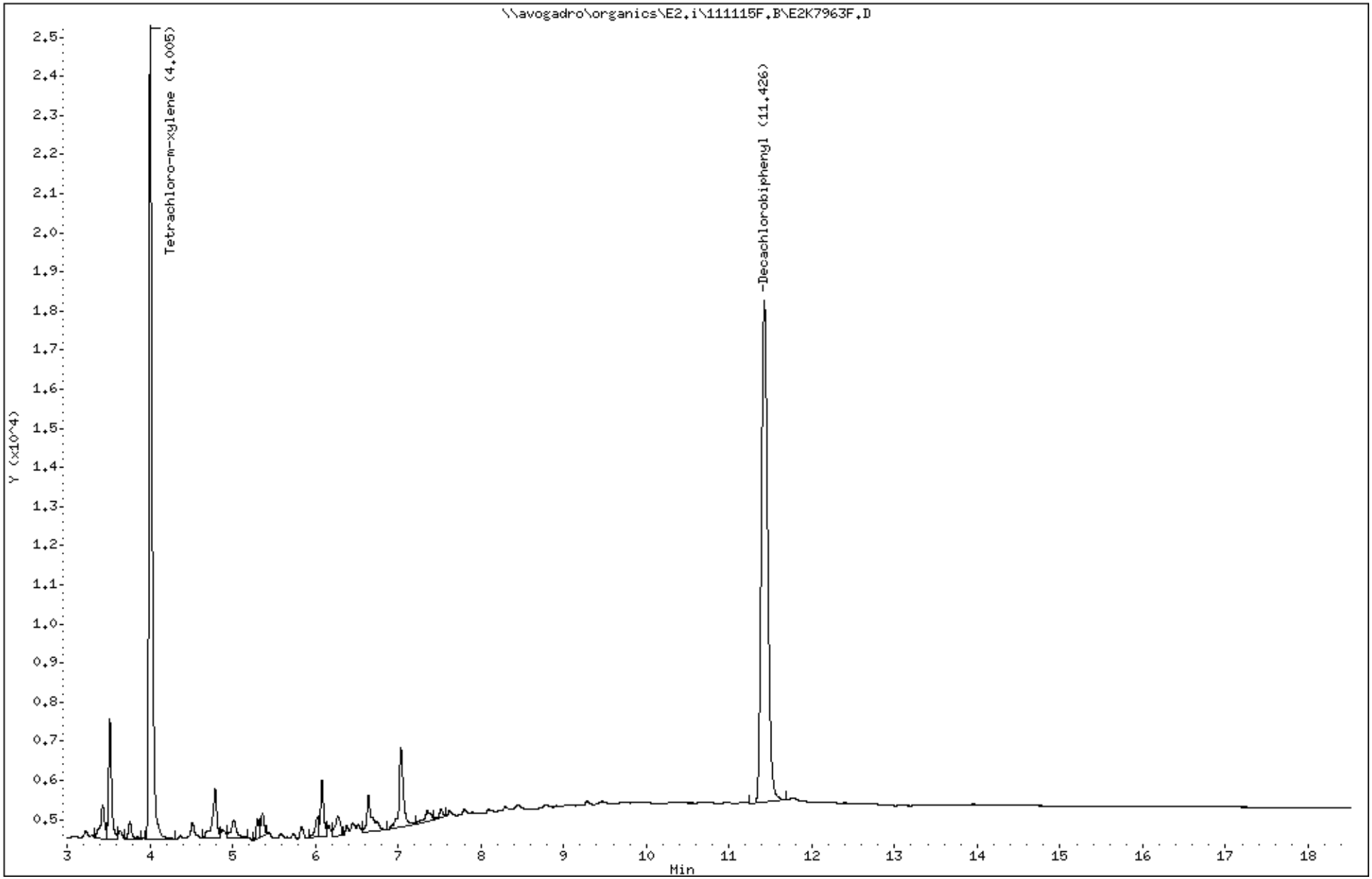
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.004	4.001	0.003	543535	0.02549	0.25			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.425	11.422	0.003	675258	0.02304	0.23			(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E2.i\111115F.B\E2K7963F.D
Date : 16-NOV-2011 09:08
Client ID: H30Y3
Instrument: E2.i
Sample Info: K2200-15B,,62638,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111115R.B\E2K7963R.D
Report Date: 17-Nov-2011 11:00

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111115R.B\E2K7963R.D
Lab Smp Id: K2200-15B Client Smp ID: H30Y3
Inj Date : 16-NOV-2011 09:08
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-15B,,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\Avogadro\Organics\E2.i\111115R.B\E2_ARO_5_R.m
Meth Date : 16-Nov-2011 17:21 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807R.D
Als bottle: 36
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET111

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

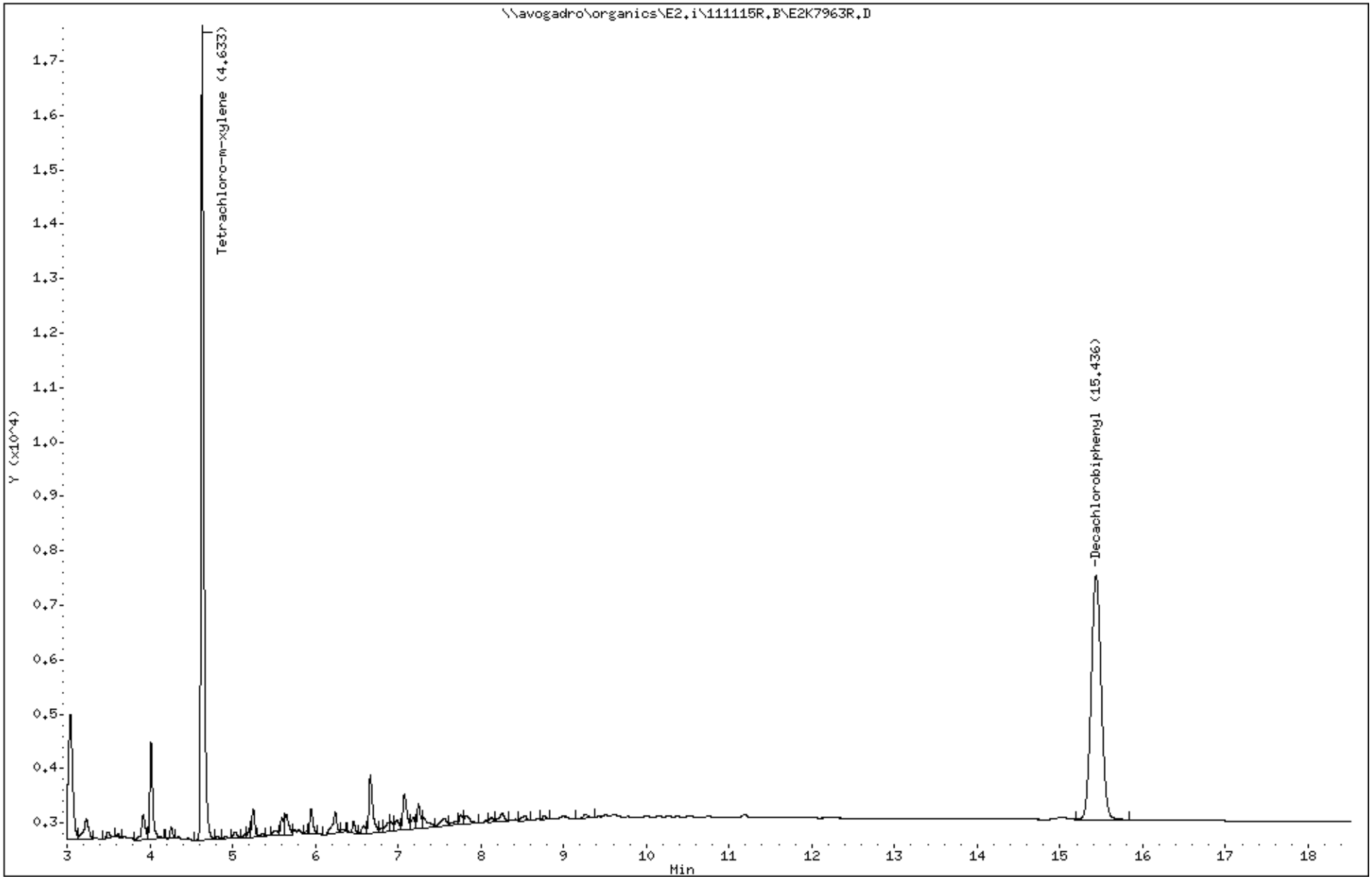
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/L)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.633	4.629	0.004	355718	0.02718	0.27			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.436	15.432	0.004	377971	0.02182	0.22			(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E2.i\111115R.B\E2K7963R.D
Date : 16-NOV-2011 09:08
Client ID: H30Y3
Instrument: E2.i
Sample Info: K2200-15B,,62638,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.

H30Y4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-16B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2K7964F.D/E2K7964R.D

% Moisture: Decanted: (Y/N) Date Received: 10/28/2011

Extraction: (Type) SEPF Date Extracted: 11/02/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/16/2011

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/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\111115F.B\E2K7964F.D
Report Date: 17-Nov-2011 10:59

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111115F.B\E2K7964F.D
Lab Smp Id: K2200-16B Client Smp ID: H30Y4
Inj Date : 16-NOV-2011 09:29
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-16B,,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111115F.B\E2_ARO_5_F.m
Meth Date : 16-Nov-2011 17:19 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807F.D
Als bottle: 37
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET111

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

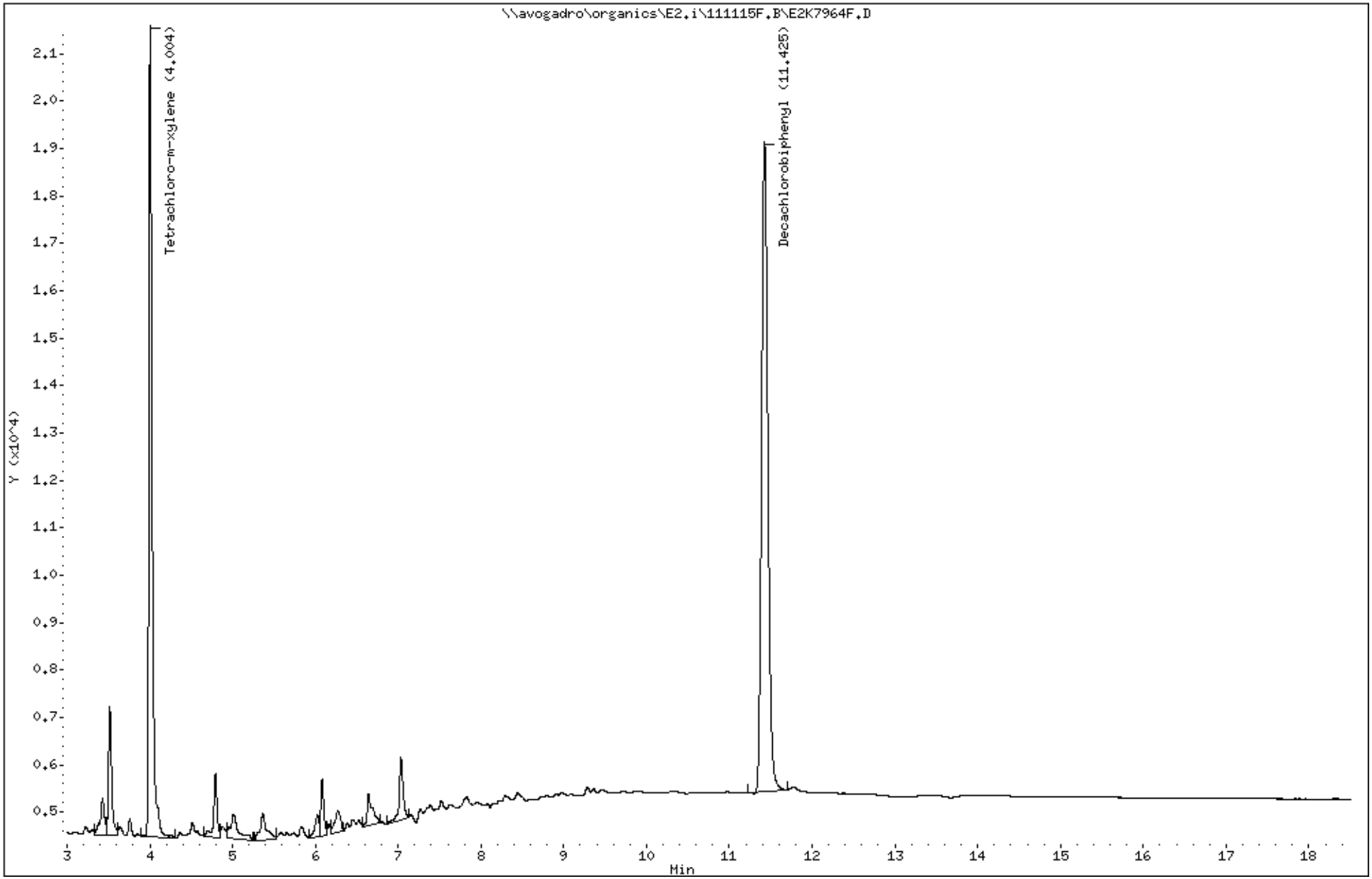
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.004	4.001	0.003	463466	0.02174	0.22			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.424	11.422	0.002	725842	0.02477	0.25			(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E2.i\111115F.B\E2K7964F.D
Date : 16-NOV-2011 09:29
Client ID: H30Y4
Instrument: E2.i
Sample Info: K2200-16B,,62638,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111115R.B\E2K7964R.D
Report Date: 17-Nov-2011 11:00

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111115R.B\E2K7964R.D
Lab Smp Id: K2200-16B Client Smp ID: H30Y4
Inj Date : 16-NOV-2011 09:29
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-16B,,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111115R.B\E2_ARO_5_R.m
Meth Date : 16-Nov-2011 17:21 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807R.D
Als bottle: 37
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

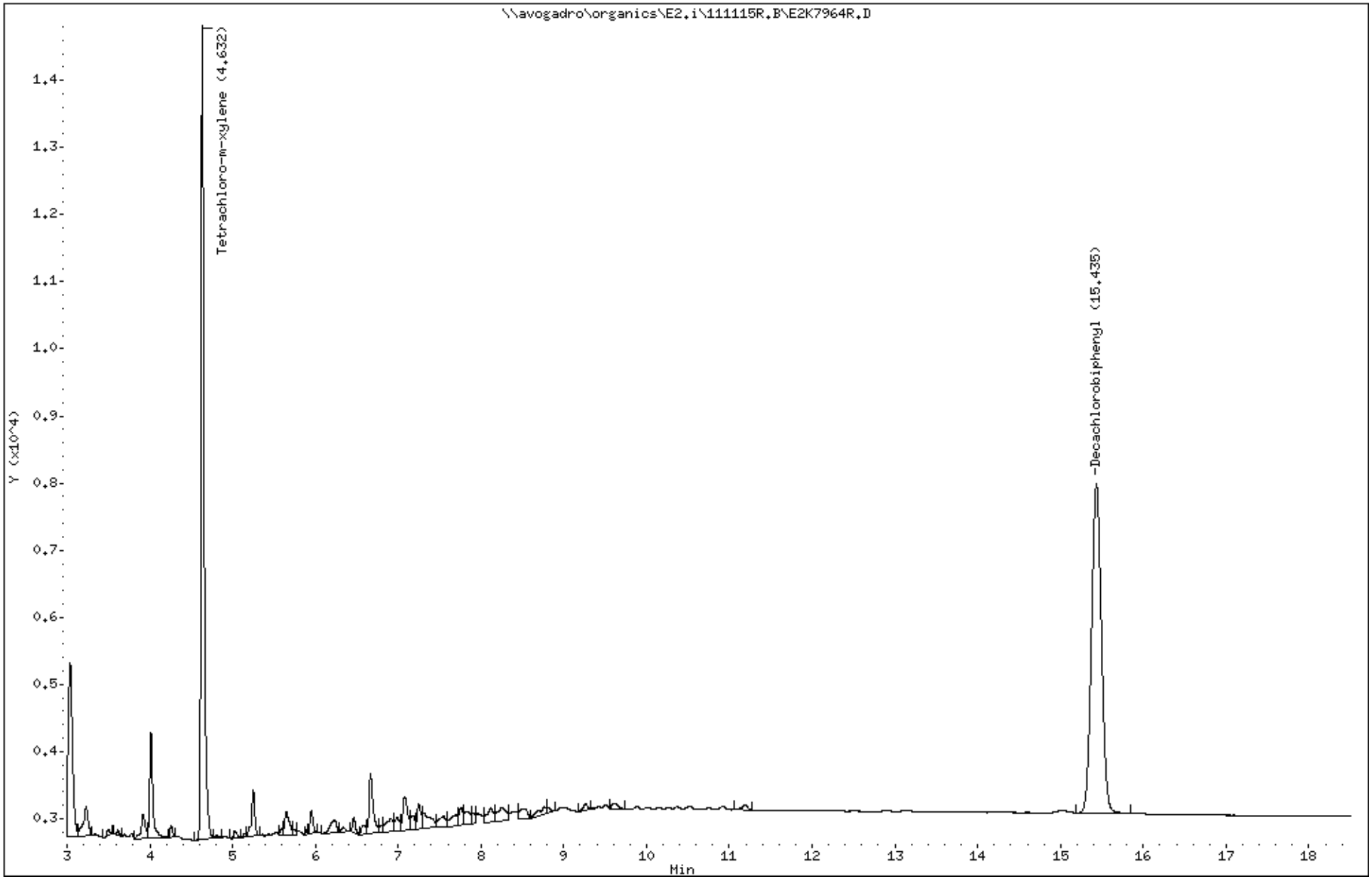
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.632	4.629	0.003	296226	0.02263	0.23			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.434	15.432	0.002	408961	0.02360	0.24			(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E2.i\111115R.B\E2K7964R.D
Date : 16-NOV-2011 09:29
Client ID: H30Y4
Instrument: E2.i
Sample Info: K2200-16B,,62638,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.

H30Y5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-17B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2K7965F.D/E2K7965R.D

% Moisture: Decanted: (Y/N) Date Received: 10/28/2011

Extraction: (Type) SEPF Date Extracted: 11/02/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/16/2011

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/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\111115F.B\E2K7965F.D
Report Date: 17-Nov-2011 10:59

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111115F.B\E2K7965F.D
Lab Smp Id: K2200-17B Client Smp ID: H30Y5
Inj Date : 16-NOV-2011 09:50
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-17B,,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111115F.B\E2_ARO_5_F.m
Meth Date : 16-Nov-2011 17:19 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807F.D
Als bottle: 38
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET111

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

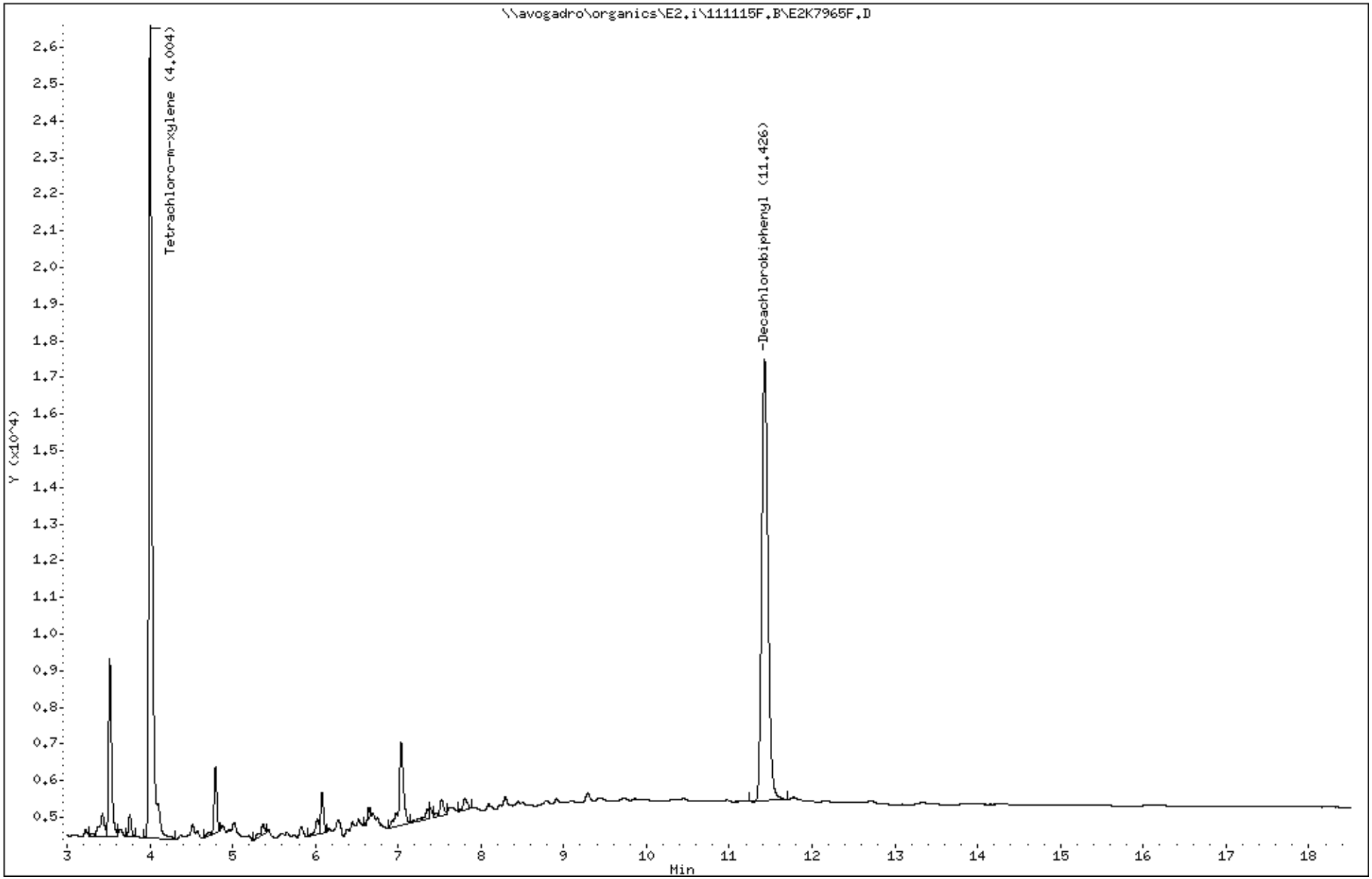
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.004	4.001	0.003	613387	0.02877	0.29			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.426	11.422	0.004	634989	0.02167	0.22			(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E2.i\111115F.B\E2K7965F.D
Date : 16-NOV-2011 09:50
Client ID: H30Y5
Instrument: E2.i
Sample Info: K2200-17B,,62638,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111115R.B\E2K7965R.D
Report Date: 17-Nov-2011 11:00

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111115R.B\E2K7965R.D
Lab Smp Id: K2200-17B Client Smp ID: H30Y5
Inj Date : 16-NOV-2011 09:50
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-17B,,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111115R.B\E2_ARO_5_R.m
Meth Date : 16-Nov-2011 17:21 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807R.D
Als bottle: 38
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

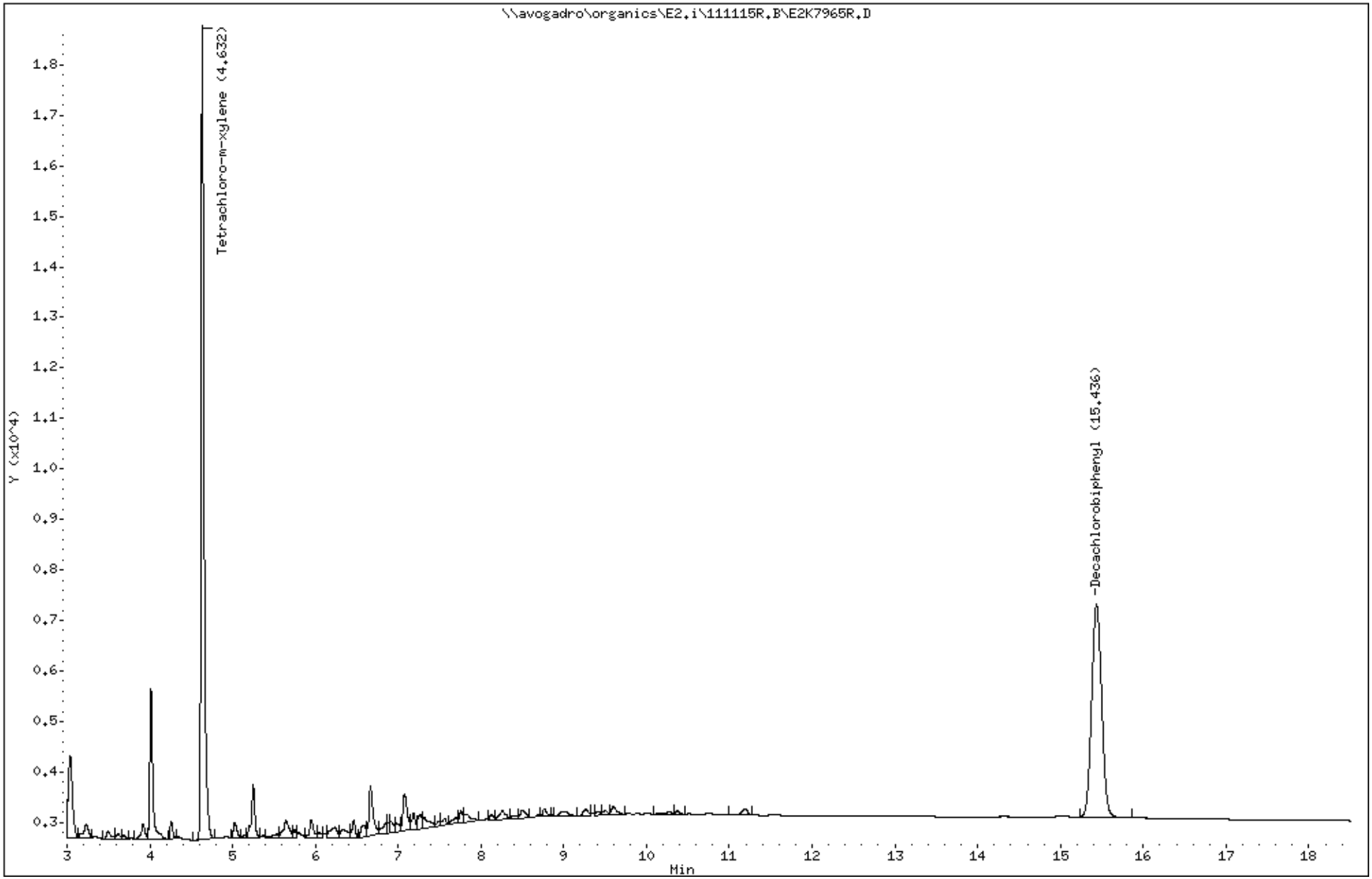
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/L)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.632	4.629	0.003	394711	0.03016	0.30			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.435	15.432	0.003	356065	0.02055	0.20			(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E2.i\111115R.B\E2K7965R.D
Date : 16-NOV-2011 09:50
Client ID: H30Y5
Instrument: E2.i
Sample Info: K2200-17B,,62638,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.

H30Y6

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-18B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2K7966F.D/E2K7966R.D

% Moisture: Decanted: (Y/N) Date Received: 10/28/2011

Extraction: (Type) SEPF Date Extracted: 11/02/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/16/2011

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/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\111115F.B\E2K7966F.D
Report Date: 17-Nov-2011 10:59

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111115F.B\E2K7966F.D
Lab Smp Id: K2200-18B Client Smp ID: H30Y6
Inj Date : 16-NOV-2011 10:11
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-18B,,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111115F.B\E2_ARO_5_F.m
Meth Date : 16-Nov-2011 17:19 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807F.D
Als bottle: 39
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

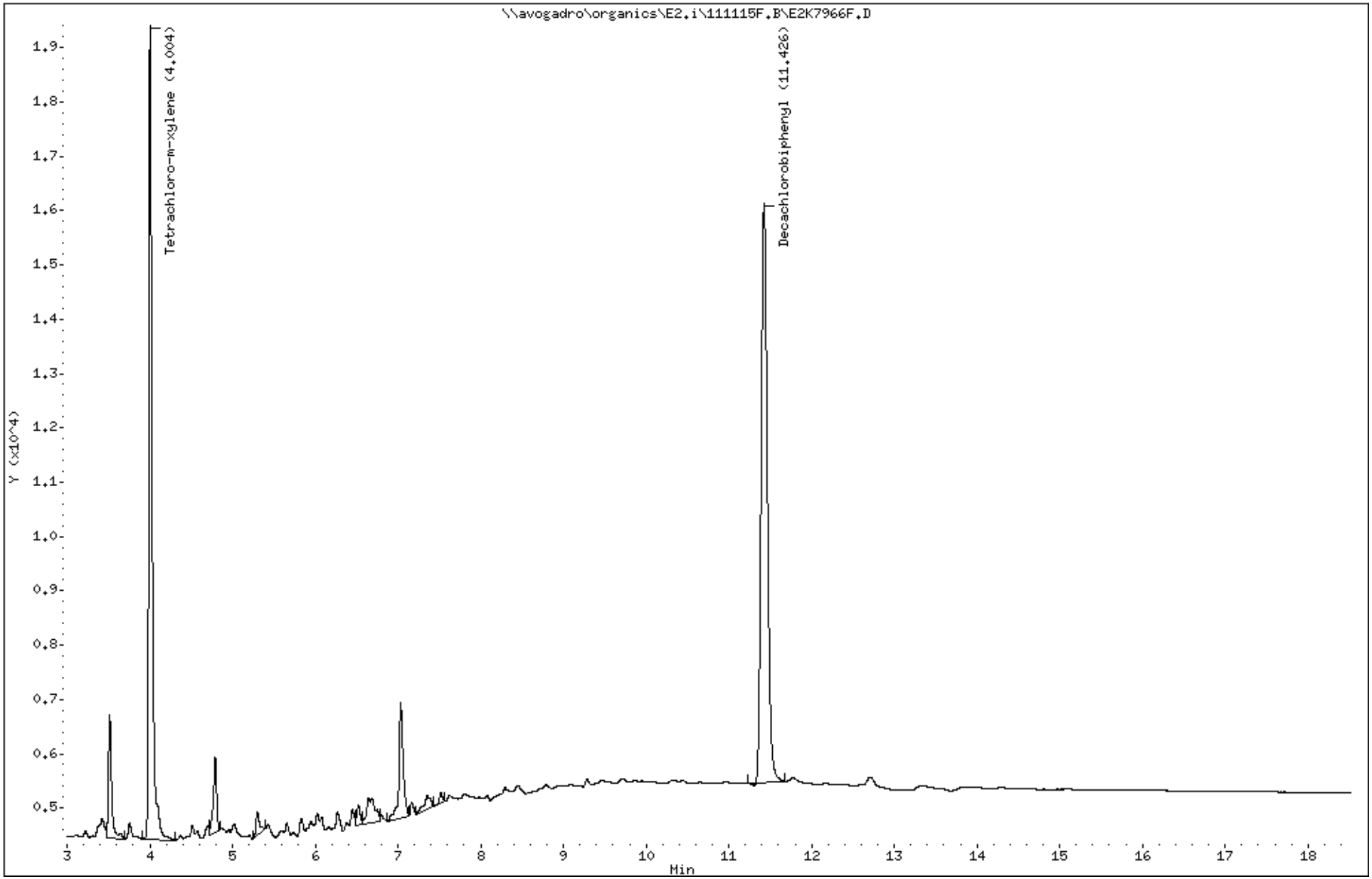
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.003	4.001	0.002	408818	0.01917	0.19			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.425	11.422	0.003	556090	0.01898	0.19			(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E2.i\111115F.B\E2K7966F.D
Date : 16-NOV-2011 10:11
Client ID: H30Y6
Instrument: E2.i
Sample Info: K2200-18B,,62638,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111115R.B\E2K7966R.D
Report Date: 17-Nov-2011 11:00

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111115R.B\E2K7966R.D
Lab Smp Id: K2200-18B Client Smp ID: H30Y6
Inj Date : 16-NOV-2011 10:11
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-18B,,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111115R.B\E2_ARO_5_R.m
Meth Date : 16-Nov-2011 17:21 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807R.D
Als bottle: 39
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

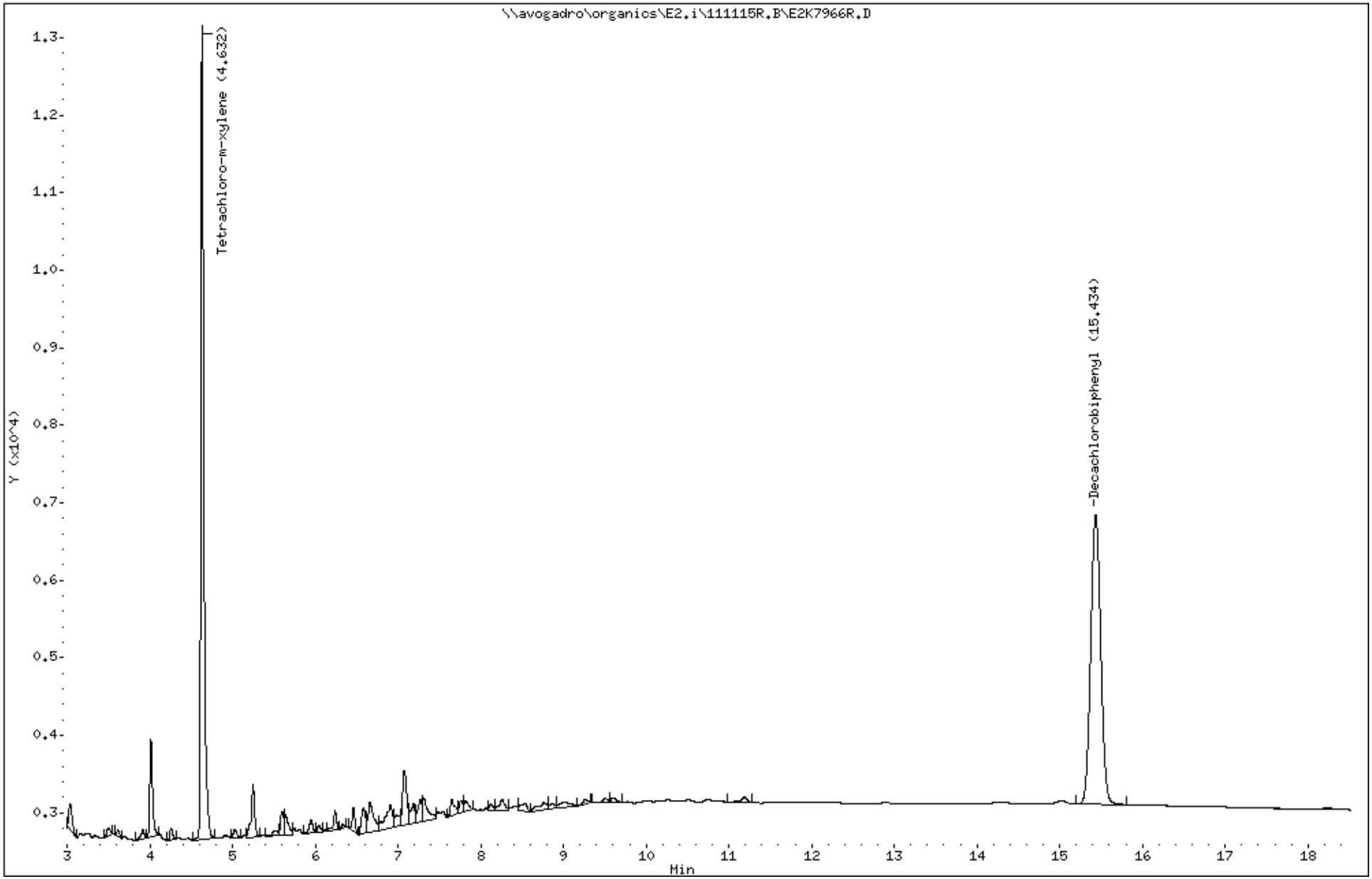
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.631	4.629	0.002	257987	0.01971	0.20			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.434	15.432	0.002	312236	0.01802	0.18			(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E2.i\111115R.B\E2K7966R.D
Date : 16-NOV-2011 10:11
Client ID: H30Y6
Instrument: E2.i
Sample Info: K2200-18B,,62638,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.

H30Z6

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-19B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2K7967F.D/E2K7967R.D

% Moisture: Decanted: (Y/N) Date Received: 10/28/2011

Extraction: (Type) SEPF Date Extracted: 11/02/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/16/2011

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/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\111115F.B\E2K7967F.D
Report Date: 17-Nov-2011 10:59

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

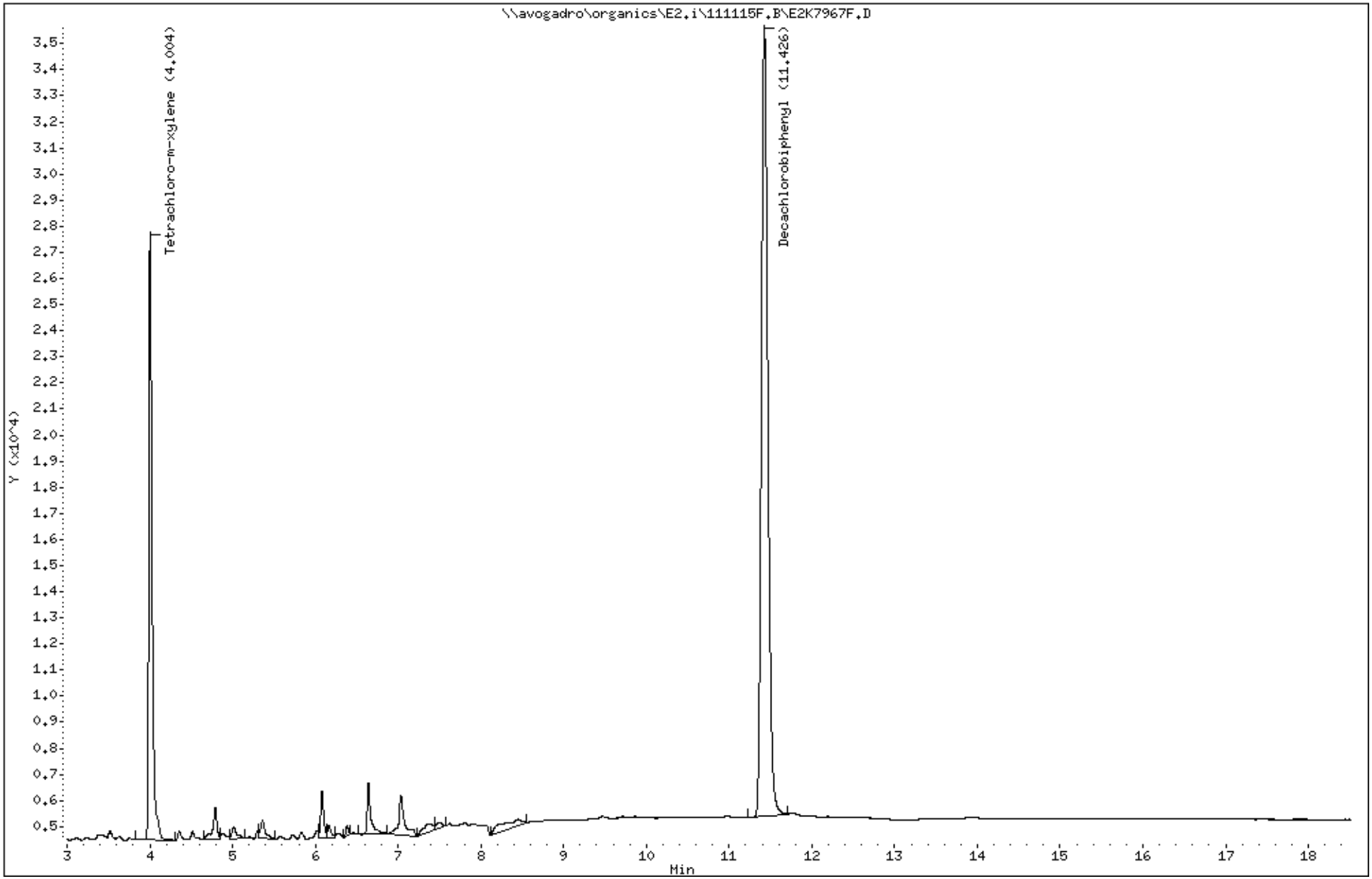
Data file : \\avogadro\organics\E2.i\111115F.B\E2K7967F.D
Lab Smp Id: K2200-19B Client Smp ID: H30Z6
Inj Date : 16-NOV-2011 10:32
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-19B,,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111115F.B\E2_ARO_5_F.m
Meth Date : 16-Nov-2011 17:19 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807F.D
Als bottle: 40
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.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

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.003	4.001	0.002	636522	0.02985	0.30		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
11.426	11.422	0.004	1659288	0.05662	0.57		

Data File: \\avogadro\organics\E2.i\111115F.B\E2K7967F.D
Date : 16-NOV-2011 10:32
Client ID: H30Z6
Instrument: E2.i
Sample Info: K2200-19B,,62638,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111115R.B\E2K7967R.D
Report Date: 17-Nov-2011 11:00

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

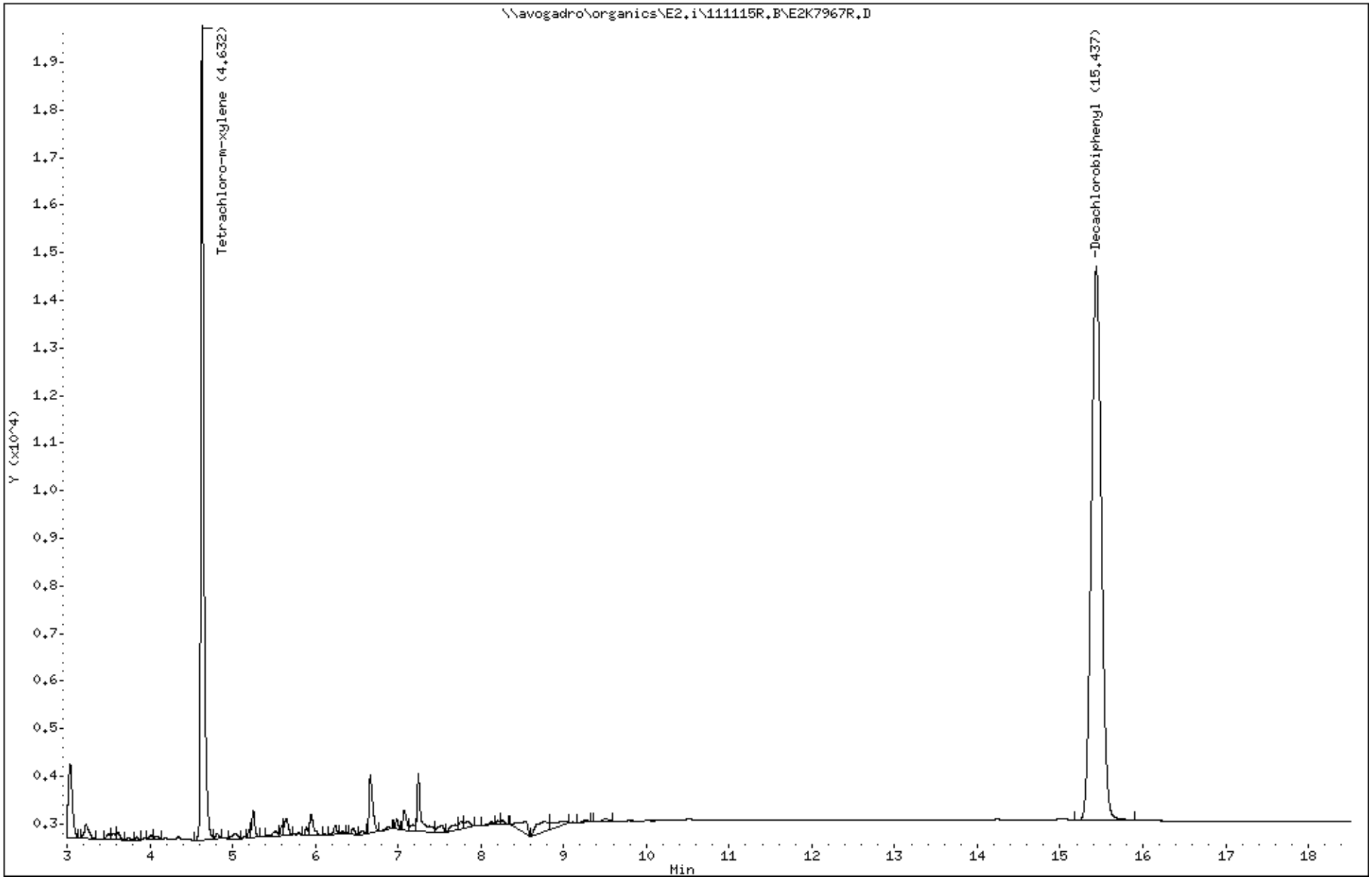
Data file : \\avogadro\organics\E2.i\111115R.B\E2K7967R.D
Lab Smp Id: K2200-19B Client Smp ID: H30Z6
Inj Date : 16-NOV-2011 10:32
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-19B,,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111115R.B\E2_ARO_5_R.m
Meth Date : 16-Nov-2011 17:21 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807R.D
Als bottle: 40
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.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

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.631	4.629	0.002	422499	0.03228	0.32		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
15.436	15.432	0.004	984969	0.05685	0.57		

Data File: \\avogadro\organics\E2.i\111115R.B\E2K7967R.D
Date : 16-NOV-2011 10:32
Client ID: H30Z6
Instrument: E2.i
Sample Info: K2200-19B,,62638,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.: H30S7

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): 11/13/2011 11/14/2011

COMPOUND	PEAK*	RT OF STANDARDS					__	RT WINDOW **	
		CS1	CS2	CS3	CS4	CS5	RT	FROM	TO
AR1016	1	5.607	5.608	5.608	5.607	5.607	5.607	5.537	5.677
	2	5.785	5.785	5.785	5.784	5.783	5.785	5.715	5.855
	3	6.041	6.041	6.041	6.041	6.040	6.041	5.971	6.111
AR1260	1	7.803	7.802	7.802	7.800	7.800	7.801	7.731	7.871
	2	8.097	8.097	8.097	8.096	8.096	8.096	8.026	8.166
	3	8.508	8.507	8.508	8.506	8.506	8.507	8.437	8.577
AR1242	1	5.244	5.243	5.242	5.240	5.241	5.242	5.172	5.312
	2	5.863	5.862	5.862	5.860	5.861	5.861	5.791	5.931
	3	6.419	6.418	6.417	6.415	6.415	6.417	6.347	6.487
AR1248	1	6.285	6.284	6.283	6.283	6.282	6.283	6.213	6.353
	2	6.381	6.379	6.379	6.378	6.378	6.379	6.309	6.449
	3	6.765	6.764	6.763	6.764	6.764	6.764	6.694	6.834
AR1254	1	6.969	6.969	6.967	6.967	6.965	6.967	6.897	7.037
	2	7.351	7.350	7.350	7.349	7.348	7.350	7.280	7.420
	3	7.619	7.619	7.618	7.617	7.616	7.618	7.548	7.688
AR1268	1	9.410	9.429	9.426	9.411	9.409	9.417	9.347	9.487
	2	9.715	9.735	9.732	9.717	9.715	9.723	9.653	9.793
	3	10.966	10.991	10.986	10.968	10.966	10.975	10.905	11.045
TCX		4.003	4.004	4.003	4.003	4.002	4.003	3.953	4.053
DCB		11.424	11.422	11.423	11.422	11.423	11.423	11.323	11.523

* 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.: H30S7

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): 11/13/2011 11/14/2011

COMPOUND	PEAK*	RT OF STANDARDS					__	RT WINDOW **	
		CS1	CS2	CS3	CS4	CS5	RT	FROM	TO
AR1016	1	6.254	6.254	6.254	6.252	6.251	6.253	6.183	6.323
	2	6.505	6.506	6.506	6.505	6.505	6.505	6.435	6.575
	3	6.661	6.661	6.661	6.659	6.659	6.660	6.590	6.730
AR1260	1	9.260	9.260	9.259	9.259	9.258	9.259	9.189	9.329
	2	9.405	9.404	9.403	9.402	9.401	9.403	9.333	9.473
	3	9.890	9.889	9.888	9.888	9.887	9.888	9.818	9.958
AR1242	1	5.955	5.954	5.953	5.951	5.951	5.953	5.883	6.023
	2	6.256	6.255	6.255	6.253	6.253	6.254	6.184	6.324
	3	6.774	6.773	6.773	6.772	6.772	6.773	6.703	6.843
AR1248	1	7.154	7.153	7.152	7.151	7.151	7.152	7.082	7.222
	2	7.275	7.275	7.274	7.274	7.273	7.274	7.204	7.344
	3	7.460	7.460	7.459	7.458	7.458	7.459	7.389	7.529
AR1254	1	7.758	7.757	7.756	7.756	7.754	7.756	7.686	7.826
	2	8.261	8.261	8.260	8.260	8.258	8.260	8.190	8.330
	3	8.535	8.534	8.534	8.533	8.532	8.533	8.463	8.603
AR1268	1	11.293	11.305	11.303	11.294	11.291	11.297	11.227	11.367
	2	11.985	11.999	11.997	11.986	11.984	11.990	11.920	12.060
	3	14.232	14.250	14.247	14.234	14.231	14.239	14.169	14.309
TCX		4.631	4.632	4.630	4.630	4.629	4.631	4.581	4.681
DCB		15.433	15.432	15.431	15.429	15.432	15.432	15.332	15.532

* 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.: H30S7

Instrument ID: E2 Date(s) Analyzed: 11/13/2011 11/14/2011

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	2446780	2300980	2086243	1940871	1794181	12.5
	2	918340	866295	788068	734381	676313	12.2
	3	1647290	1538190	1412800	1310225	1209493	12.3
AR1260	1	2981110	2718990	2452925	2238681	2054126	14.9
	2	2155480	2003210	1904025	1755094	1653789	10.5
	3	2406370	2252450	2124698	2001458	1896405	9.4
AR1242	1	563230	551950	555078	534363	504996	4.3
	2	437680	420350	435895	431224	418656	2.1
	3	761550	732515	748513	726114	694062	3.5
AR1248	1	1237240	1186565	1083995	1019225	932498	11.3
	2	1082360	1065185	999010	979939	936844	6.0
	3	2263370	2170135	2260630	2129938	1720614	10.7
AR1254	1	2713870	2584745	2374600	2182394	1984397	12.5
	2	1805640	1751000	1654063	1558004	1451686	8.7
	3	1506980	1441435	1345845	1259808	1157012	10.4
AR1268	1	4119990	3884105	4092730	3915163	4245793	3.7
	2	3164650	2906945	3012755	2894804	2724931	5.5
	3	9926540	9289850	9420808	8854800	8328982	6.6
TCX		21251400	21611000	21393550	21206300	21149900	0.9
DCB		32376400	31865100	29165900	27449250	25668813	9.8

[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.: H30S7

Instrument ID: E2 Date(s) Analyzed: 11/13/2011 11/14/2011

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	332070	322780	314883	304054	297851	4.4
	2	1277930	1260300	1214998	1192946	1156523	4.0
	3	594230	571455	546550	527516	509361	6.2
AR1260	1	1295760	1277325	1233170	1227085	1216584	2.8
	2	834070	803820	764695	734066	706188	6.7
	3	827330	837960	803658	790365	785267	2.8
AR1242	1	725520	684230	675223	634165	584466	8.1
	2	266310	256900	261130	256896	248408	2.6
	3	283330	267075	285275	296940	297922	4.4
AR1248	1	812300	813265	781845	770951	731722	4.3
	2	628580	638150	622640	625723	607821	1.8
	3	307580	312715	297553	300006	294908	2.4
AR1254	1	833980	820595	771838	727148	673524	8.7
	2	1118610	1148765	1130330	1116908	1081665	2.2
	3	1279890	1302200	1272468	1250619	833374	16.7
AR1268	1	1946710	1926870	2087680	2113265	2100668	4.4
	2	1732160	1694945	1783038	1772103	1734463	2.0
	3	5437540	5330290	5710680	5602678	5429877	2.8
TCX		12045800	12718800	12969250	13531275	14176813	6.2
DCB		17996900	18111700	17068025	16846488	16603131	4.0

[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.: H30S7

Instrument ID: E2 Date(s) Analyzed: 11/13/2011 11/14/2011

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	3.37	3.30	3.44	228420
		2	3.84	3.77	3.91	87663
		3	4.23	4.16	4.30	262980
		4				
		5				
Aroclor-1232	0.4	1	4.23	4.16	4.30	180390
		2	4.48	4.41	4.55	610315
		3	4.96	4.89	5.03	508970
		4				
		5				
Aroclor-1262	0.4	1	8.91	8.84	8.98	3005913
		2	9.35	9.28	9.42	2023213
		3	9.87	9.80	9.94	495783
		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.: H30S7

Instrument ID: E2 Date(s) Analyzed: 11/13/2011 11/14/2011

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	197760
		2	4.49	4.42	4.56	72905
		3	5.06	4.99	5.13	168445
		4				
		5				
Aroclor-1232	0.4	1	5.06	4.99	5.13	114003
		2	5.28	5.21	5.35	94723
		3	5.37	5.30	5.44	391043
		4				
		5				
Aroclor-1262	0.4	1	11.18	11.11	11.25	1268240
		2	12.36	12.29	12.43	255425
		3	12.94	12.87	13.01	611663
		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.: H30S7

GC Column: CLPPest ID: 0.53 (mm) Calibration Date(s): 11/13/2011 11/14/2011

EPA Sample No. (AR####3##): AR16603KG Date Analyzed: 11/16/2011

Lab Sample ID: AR16603KG Time Analyzed: 2:10

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	5.609	5.537	5.677	2113811	2168400	2.6
	2	5.786	5.715	5.855	796679.375	819210	2.8
	3	6.042	5.971	6.111	1423599.5	1435937.5	0.9
AR1260	1	7.804	7.731	7.871	2489166.375	2157620	-13.3
	2	8.099	8.026	8.166	1894319.5	1740650	-8.1
	3	8.509	8.437	8.577	2136276	1982897.5	-7.2
TCX		4.004	3.953	4.053	21322430	21897950	2.7
DCB		11.428	11.323	11.523	29305092.5	27331175	-6.7

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.: H30S7

GC Column: CLPPestII ID: 0.53 (mm) Calibration Date(s): 11/13/2011 11/14/2011

EPA Sample No. (AR####3##): AR16603KG Date Analyzed: 11/16/2011

Lab Sample ID: AR16603KG Time Analyzed: 2:10

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	6.255	6.183	6.323	314327.5	315865	0.5
	2	6.508	6.435	6.575	1220539.25	1242292.5	1.8
	3	6.662	6.590	6.730	549822.5	544410	-1.0
AR1260	1	9.263	9.189	9.329	1249984.875	1086140	-13.1
	2	9.407	9.333	9.473	768567.875	661787.5	-13.9
	3	9.892	9.818	9.958	808915.875	702692.5	-13.1
TCX		4.633	4.581	4.681	13088387.5	13013850	-0.6
DCB		15.438	15.332	15.532	17325248.75	15388975	-11.2

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.: H30S7

GC Column: CLPPest ID: 0.53 (mm) Calibration Date(s): 11/13/2011 11/14/2011

EPA Sample No. (AR####3##): AR16603KH Date Analyzed: 11/16/2011

Lab Sample ID: AR16603KH Time Analyzed: 12:58

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	5.609	5.537	5.677	2113811	2167212.5	2.5
	2	5.786	5.715	5.855	796679.375	823712.5	3.4
	3	6.043	5.971	6.111	1423599.5	1413782.5	-0.7
AR1260	1	7.804	7.731	7.871	2489166.375	2473695	-0.6
	2	8.099	8.026	8.166	1894319.5	1840785	-2.8
	3	8.510	8.437	8.577	2136276	2151542.5	0.7
TCX		4.005	3.953	4.053	21322430	22275100	4.5
DCB		11.426	11.323	11.523	29305092.5	29658025	1.2

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.: H30S7

GC Column: CLPPestII ID: 0.53 (mm) Calibration Date(s): 11/13/2011 11/14/2011

EPA Sample No. (AR####3##): AR16603KH Date Analyzed: 11/16/2011

Lab Sample ID: AR16603KH Time Analyzed: 12:58

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	6.254	6.183	6.323	314327.5	327512.5	4.2
	2	6.507	6.435	6.575	1220539.25	1256417.5	2.9
	3	6.662	6.590	6.730	549822.5	563322.5	2.5
AR1260	1	9.262	9.189	9.329	1249984.875	1241250	-0.7
	2	9.406	9.333	9.473	768567.875	763057.5	-0.7
	3	9.891	9.818	9.958	808915.875	802347.5	-0.8
TCX		4.632	4.581	4.681	13088387.5	13309300	1.7
DCB		15.434	15.332	15.532	17325248.75	17272975	-0.3

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.: H30S7

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 11/13/2011 11/14/2011

Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 4.003 DCB: 11.423

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12213K2	E2K7775F.D	11/13/2011	17:59	4.004	11.427
02	AR12323K2	E2K7776F.D	11/13/2011	18:20	4.003	11.427
03	AR12421K2	E2K7777F.D	11/13/2011	18:41	4.004	11.427
04	AR12422K2	E2K7779F.D	11/13/2011	19:23	4.003	11.427
05	AR12423K2	E2K7780F.D	11/13/2011	19:44	4.004	11.427
06	AR12424K2	E2K7781F.D	11/13/2011	20:05	4.002	11.425
07	AR12425K2	E2K7782F.D	11/13/2011	20:26	4.003	11.426
08	AR12481K2	E2K7783F.D	11/13/2011	20:47	4.004	11.426
09	AR12482K2	E2K7785F.D	11/13/2011	21:29	4.003	11.426
10	AR12483K2	E2K7786F.D	11/13/2011	21:50	4.003	11.425
11	AR12484K2	E2K7787F.D	11/13/2011	22:11	4.002	11.426
12	AR12485K2	E2K7788F.D	11/13/2011	22:32	4.002	11.426
13	AR12541K2	E2K7789F.D	11/13/2011	22:52	4.003	11.425
14	AR12542K2	E2K7791F.D	11/13/2011	23:34	4.003	11.427
15	AR12543K2	E2K7792F.D	11/13/2011	23:56	4.003	11.427
16	AR12544K2	E2K7793F.D	11/14/2011	0:16	4.002	11.426
17	AR12545K2	E2K7794F.D	11/14/2011	0:37	4.002	11.424
18	AR12623K2	E2K7795F.D	11/14/2011	0:58	4.002	11.425
19	AR12681K2	E2K7796F.D	11/14/2011	1:19	4.002	11.425
20	AR12682K2	E2K7798F.D	11/14/2011	8:23	4.021	11.451
21	AR12683K2	E2K7799F.D	11/14/2011	8:54	4.018	11.447
22	AR12684K2	E2K7800F.D	11/14/2011	9:17	4.004	11.427
23	AR12685K2	E2K7801F.D	11/14/2011	9:38	4.003	11.425
24	AR16601K2	E2K7802F.D	11/14/2011	9:59	4.003	11.424
25	AR16602K2	E2K7804F.D	11/14/2011	10:40	4.004	11.422
26	AR16603K2	E2K7805F.D	11/14/2011	11:01	4.003	11.423
27	AR16604K2	E2K7806F.D	11/14/2011	11:22	4.003	11.422

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

AROCLOR ANALYTICAL SEQUENCE

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 11/13/2011 11/14/2011

Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.003 DCB: 11.423

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR16605K2	E2K7807F.D	11/14/2011	11:43	4.002	11.423
29	AIBLKKG	E2K7942F.D	11/16/2011	1:49	4.007	11.429
30	AR16603KG	E2K7943F.D	11/16/2011	2:10	4.004	11.428
31	ZZZZZ	E2K7944F.D	11/16/2011	2:31	4.005	11.427
32	ZZZZZ	E2K7945F.D	11/16/2011	2:52	4.007	11.428
33	ZZZZZ	E2K7946F.D	11/16/2011	3:13	4.006	11.428
34	ZZZZZ	E2K7947F.D	11/16/2011	3:34	4.006	11.429
35	ABLK2M	E2K7948F.D	11/16/2011	3:55	4.005	11.429
36	ALCS2M	E2K7949F.D	11/16/2011	4:15	4.004	11.425
37	H30T9	E2K7950F.D	11/16/2011	4:36	4.006	11.428
38	H30W0	E2K7951F.D	11/16/2011	4:57	4.006	11.427
39	H30W1	E2K7952F.D	11/16/2011	5:18	4.005	11.428
40	H30W2	E2K7953F.D	11/16/2011	5:39	4.006	11.427
41	H30W3	E2K7954F.D	11/16/2011	6:00	4.006	11.427
42	H30W4	E2K7955F.D	11/16/2011	6:21	4.005	11.426
43	H30W5	E2K7956F.D	11/16/2011	6:42	4.004	11.426
44	H30W6	E2K7957F.D	11/16/2011	7:03	4.005	11.426
45	H30W7	E2K7958F.D	11/16/2011	7:24	4.005	11.426
46	H30W8	E2K7959F.D	11/16/2011	7:45	4.007	11.426
47	H30X0	E2K7960F.D	11/16/2011	8:06	4.006	11.427
48	H30X1	E2K7961F.D	11/16/2011	8:26	4.005	11.426
49	H30Y2	E2K7962F.D	11/16/2011	8:47	4.005	11.426
50	H30Y3	E2K7963F.D	11/16/2011	9:08	4.005	11.426
51	H30Y4	E2K7964F.D	11/16/2011	9:29	4.004	11.425
52	H30Y5	E2K7965F.D	11/16/2011	9:50	4.004	11.426
53	H30Y6	E2K7966F.D	11/16/2011	10:11	4.004	11.426
54	H30Z6	E2K7967F.D	11/16/2011	10:32	4.004	11.426

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.: H30S7

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 11/13/2011 11/14/2011

Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

	MEAN SURROGATE RT FROM INITIAL CALIBRATION TCX: 4.003 DCB: 11.423							
	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT	#	DCB RT	#
55	H30X3	E2K7968F.D	11/16/2011	10:53	4.004		11.425	
56	ABLK2N	E2K7969F.D	11/16/2011	11:14	4.004		11.425	
57	ALCS2N	E2K7970F.D	11/16/2011	11:35	4.004		11.425	
58	H30X3MS	E2K7971F.D	11/16/2011	11:56	4.003		11.425	
59	H30X3MSD	E2K7972F.D	11/16/2011	12:16	4.004		11.426	
60	AIBLKKH	E2K7973F.D	11/16/2011	12:37	4.003		11.426	
61	AR16603KH	E2K7974F.D	11/16/2011	12:58	4.005		11.426	

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.: H30S7

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 11/13/2011 11/14/2011

Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 4.631 DCB: 15.432

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12213K2	E2K7775R.D	11/13/2011	17:59	4.632	15.440
02	AR12323K2	E2K7776R.D	11/13/2011	18:20	4.632	15.438
03	AR12421K2	E2K7777R.D	11/13/2011	18:41	4.633	15.440
04	AR12422K2	E2K7779R.D	11/13/2011	19:23	4.631	15.440
05	AR12423K2	E2K7780R.D	11/13/2011	19:44	4.631	15.439
06	AR12424K2	E2K7781R.D	11/13/2011	20:05	4.630	15.440
07	AR12425K2	E2K7782R.D	11/13/2011	20:26	4.630	15.439
08	AR12481K2	E2K7783R.D	11/13/2011	20:47	4.632	15.438
09	AR12482K2	E2K7785R.D	11/13/2011	21:29	4.631	15.436
10	AR12483K2	E2K7786R.D	11/13/2011	21:50	4.631	15.438
11	AR12484K2	E2K7787R.D	11/13/2011	22:11	4.630	15.439
12	AR12485K2	E2K7788R.D	11/13/2011	22:32	4.630	15.438
13	AR12541K2	E2K7789R.D	11/13/2011	22:52	4.632	15.435
14	AR12542K2	E2K7791R.D	11/13/2011	23:34	4.631	15.438
15	AR12543K2	E2K7792R.D	11/13/2011	23:56	4.631	15.439
16	AR12544K2	E2K7793R.D	11/14/2011	0:16	4.630	15.437
17	AR12545K2	E2K7794R.D	11/14/2011	0:37	4.630	15.437
18	AR12623K2	E2K7795R.D	11/14/2011	0:58	4.631	15.437
19	AR12681K2	E2K7796R.D	11/14/2011	1:19	4.631	15.436
20	AR12682K2	E2K7798R.D	11/14/2011	8:23	4.638	15.456
21	AR12683K2	E2K7799R.D	11/14/2011	8:54	4.636	15.450
22	AR12684K2	E2K7800R.D	11/14/2011	9:17	4.631	15.438
23	AR12685K2	E2K7801R.D	11/14/2011	9:38	4.629	15.434
24	AR16601K2	E2K7802R.D	11/14/2011	9:59	4.631	15.433
25	AR16602K2	E2K7804R.D	11/14/2011	10:40	4.632	15.432
26	AR16603K2	E2K7805R.D	11/14/2011	11:01	4.630	15.431
27	AR16604K2	E2K7806R.D	11/14/2011	11:22	4.630	15.429

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

AROCLOR ANALYTICAL SEQUENCE

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 11/13/2011 11/14/2011

Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.631 DCB: 15.432

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR16605K2	E2K7807R.D	11/14/2011	11:43	4.629	15.432
29	AIBLKKG	E2K7942R.D	11/16/2011	1:49	4.633	15.440
30	AR16603KG	E2K7943R.D	11/16/2011	2:10	4.633	15.438
31	ZZZZZ	E2K7944R.D	11/16/2011	2:31	4.633	15.437
32	ZZZZZ	E2K7945R.D	11/16/2011	2:52	4.634	15.440
33	ZZZZZ	E2K7946R.D	11/16/2011	3:13	4.633	15.439
34	ZZZZZ	E2K7947R.D	11/16/2011	3:34	4.633	15.442
35	ABLK2M	E2K7948R.D	11/16/2011	3:55	4.632	15.442
36	ALCS2M	E2K7949R.D	11/16/2011	4:15	4.632	15.437
37	H30T9	E2K7950R.D	11/16/2011	4:36	4.633	15.441
38	H30W0	E2K7951R.D	11/16/2011	4:57	4.633	15.439
39	H30W1	E2K7952R.D	11/16/2011	5:18	4.632	15.440
40	H30W2	E2K7953R.D	11/16/2011	5:39	4.633	15.440
41	H30W3	E2K7954R.D	11/16/2011	6:00	4.633	15.438
42	H30W4	E2K7955R.D	11/16/2011	6:21	4.632	15.436
43	H30W5	E2K7956R.D	11/16/2011	6:42	4.632	15.437
44	H30W6	E2K7957R.D	11/16/2011	7:03	4.632	15.439
45	H30W7	E2K7958R.D	11/16/2011	7:24	4.633	15.437
46	H30W8	E2K7959R.D	11/16/2011	7:45	4.633	15.438
47	H30X0	E2K7960R.D	11/16/2011	8:06	4.633	15.437
48	H30X1	E2K7961R.D	11/16/2011	8:26	4.632	15.435
49	H30Y2	E2K7962R.D	11/16/2011	8:47	4.632	15.435
50	H30Y3	E2K7963R.D	11/16/2011	9:08	4.633	15.436
51	H30Y4	E2K7964R.D	11/16/2011	9:29	4.632	15.435
52	H30Y5	E2K7965R.D	11/16/2011	9:50	4.632	15.436
53	H30Y6	E2K7966R.D	11/16/2011	10:11	4.632	15.434
54	H30Z6	E2K7967R.D	11/16/2011	10:32	4.632	15.437

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

AROCLOR ANALYTICAL SEQUENCE

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 11/13/2011 11/14/2011

Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 4.631 DCB: 15.432

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT	#	DCB RT	#
55	H30X3	E2K7968R.D	11/16/2011	10:53	4.632		15.433	
56	ABLK2N	E2K7969R.D	11/16/2011	11:14	4.632		15.434	
57	ALCS2N	E2K7970R.D	11/16/2011	11:35	4.632		15.435	
58	H30X3MS	E2K7971R.D	11/16/2011	11:56	4.632		15.433	
59	H30X3MSD	E2K7972R.D	11/16/2011	12:16	4.632		15.435	
60	AIBLKKH	E2K7973R.D	11/16/2011	12:37	4.631		15.435	
61	AR16603KH	E2K7974R.D	11/16/2011	12:58	4.632		15.434	

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.
H30X3MS

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Lab Sample ID: K2200-20AMS Date(s) Analyzed: 11/16/2011 11/16/2011

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	5.608	5.537	5.677	2.2334		
	2	5.786	5.715	5.855	2.2842		
COLUMN 1	3	6.041	5.971	6.111	2.2282		
	4						
	5					2.248601	
	1	6.252	6.183	6.323	3.6127		
	2	6.507	6.435	6.575	2.0971		
COLUMN 2	3	6.662	6.590	6.730	2.5027		
	4						
	5					2.737510	21.7
Aroclor-1260	1	7.803	7.731	7.871	1.8823		
	2	8.098	8.026	8.166	1.7536		
COLUMN 1	3	8.509	8.437	8.577	1.7850		
	4						
	5					1.806990	
	1	9.260	9.189	9.329	1.7955		
	2	9.405	9.333	9.473	1.8232		
COLUMN 2	3	9.890	9.818	9.958	1.8411		
	4						
	5					1.819910	0.7

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.
H30X3MSD

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Lab Sample ID: K2200-20AMSD Date(s) Analyzed: 11/16/2011 11/16/2011

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	5.609	5.537	5.677	1.9186		
	2	5.786	5.715	5.855	1.9991		
COLUMN 1	3	6.040	5.971	6.111	1.9649		
	4						
	5					1.960887	
	1	6.252	6.183	6.323	3.2010		
	2	6.507	6.435	6.575	1.7712		
COLUMN 2	3	6.662	6.590	6.730	2.1350		
	4						
	5					2.369061	20.8
Aroclor-1260	1	7.804	7.731	7.871	1.5693		
	2	8.099	8.026	8.166	1.4478		
COLUMN 1	3	8.510	8.437	8.577	1.4734		
	4						
	5					1.496829	
	1	9.262	9.189	9.329	1.4264		
	2	9.406	9.333	9.473	1.4548		
COLUMN 2	3	9.891	9.818	9.958	1.4338		
	4						
	5					1.438323	4.1

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.
ALCS2M

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Lab Sample ID: LCS-62638 Date(s) Analyzed: 11/16/2011 11/16/2011

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	5.609	5.537	5.677	0.9899		
	2	5.787	5.715	5.855	0.9894		
COLUMN 1	3	6.042	5.971	6.111	1.0073		
	4						
	5					0.995520	
	1	6.254	6.183	6.323	0.9902		
	2	6.508	6.435	6.575	0.8677		
COLUMN 2	3	6.663	6.590	6.730	0.9227		
	4						
	5					0.926855	7.4
Aroclor-1260	1	7.804	7.731	7.871	0.9026		
	2	8.099	8.026	8.166	0.9170		
COLUMN 1	3	8.510	8.437	8.577	0.9094		
	4						
	5					0.909663	
	1	9.263	9.189	9.329	0.8137		
	2	9.407	9.333	9.473	0.8391		
COLUMN 2	3	9.892	9.818	9.958	0.8288		
	4						
	5					0.827217	10

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.
ALCS2N

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Lab Sample ID: LCS-62719 Date(s) Analyzed: 11/16/2011 11/16/2011

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	5.610	5.537	5.677	0.9424		
	2	5.788	5.715	5.855	0.9652		
COLUMN 1	3	6.043	5.971	6.111	0.9772		
	4						
	5					0.961603	
	1	6.254	6.183	6.323	0.9827		
	2	6.507	6.435	6.575	0.8371		
COLUMN 2	3	6.663	6.590	6.730	0.8953		
	4						
	5					0.905048	6.2
Aroclor-1260	1	7.805	7.731	7.871	0.9751		
	2	8.099	8.026	8.166	0.8687		
COLUMN 1	3	8.510	8.437	8.577	0.9158		
	4						
	5					0.919859	
	1	9.262	9.189	9.329	0.8394		
	2	9.406	9.333	9.473	0.8832		
COLUMN 2	3	9.891	9.818	9.958	0.8628		
	4						
	5					0.861805	6.7

At least 3 peaks for each column are required for identification of multicomponent analytes

Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7775F.D
Report Date: 17-Nov-2011 11:07

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CF.B\E2K7775F.D
Lab Smp Id: AR12213K2 Client Smp ID: AR12213K2
Inj Date : 13-NOV-2011 17:59
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12213K2,AR12213K2,,ar1221.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CF.B\E2_ARO_5_F.m
Meth Date : 17-Nov-2011 11:00 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:01 Cal File: E2K7805F.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

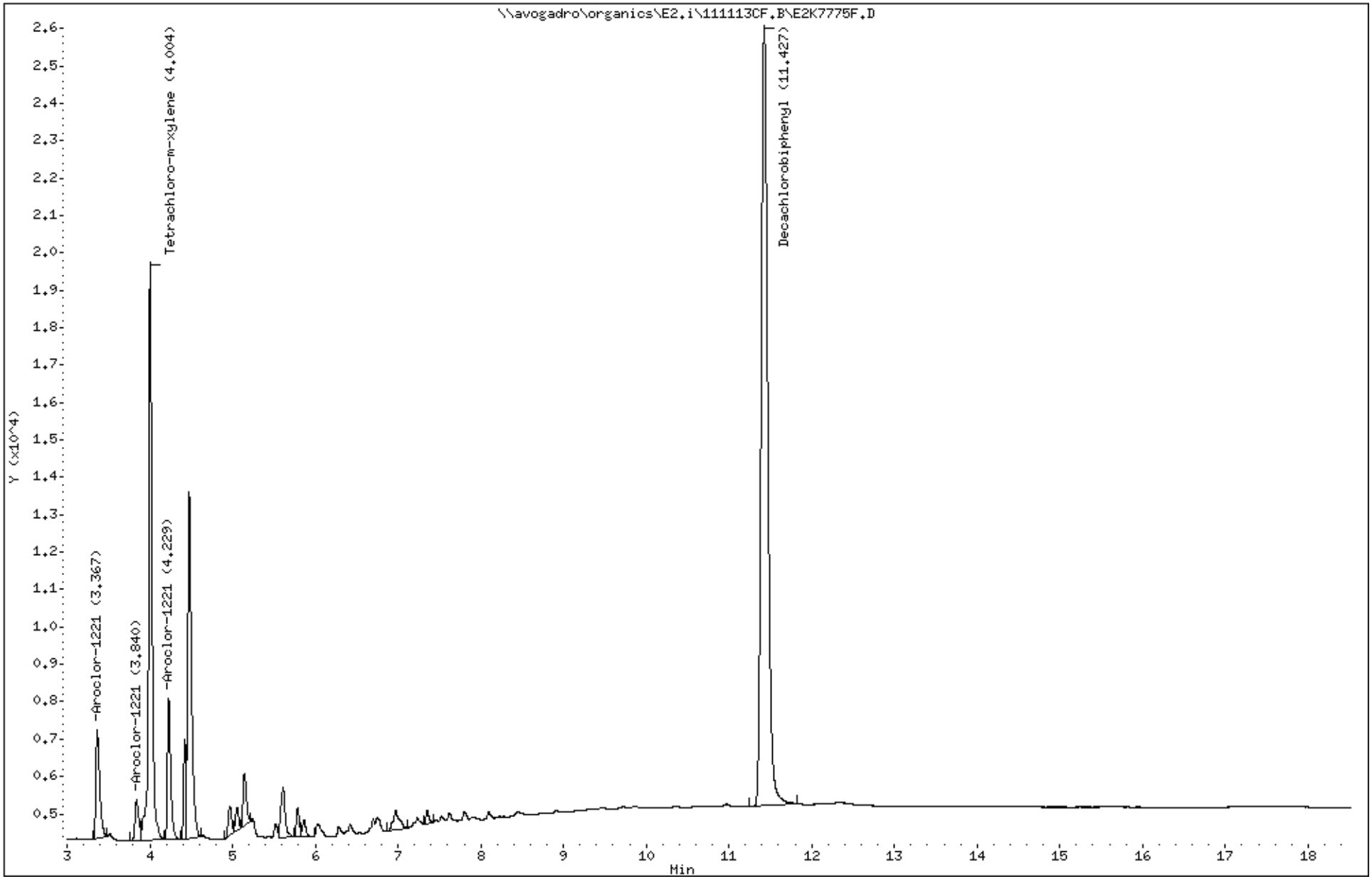
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.004	4.001	0.003	438813	0.02000	0.020			(a)
3 Aroclor-1221					CAS #: 11104-28-2			
3.366	3.366	0.000	91368	0.40000	0.40	80.00- 120.00	100.00	(a)
3.840	3.840	0.000	35065	0.40000	0.40	18.38- 58.38	38.38	
4.229	4.229	0.000	105192	0.40000	0.40	95.13- 135.13	115.13	
Average of Peak Amounts =				0.40000				
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.426	11.422	0.004	1137412	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\111113CF.B\E2K7775F.D
Date : 13-NOV-2011 17:59
Client ID: AR12213K2
Instrument: E2.i
Sample Info: AR12213K2,AR12213K2,,ar1221.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7775R.D
Report Date: 17-Nov-2011 11:08

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CR.B\E2K7775R.D
Lab Smp Id: AR12213K2 Client Smp ID: AR12213K2
Inj Date : 13-NOV-2011 17:59
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12213K2,AR12213K2,,ar1221.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CR.B\E2_ARO_5_R.m
Meth Date : 17-Nov-2011 10:48 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:01 Cal File: E2K7805R.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

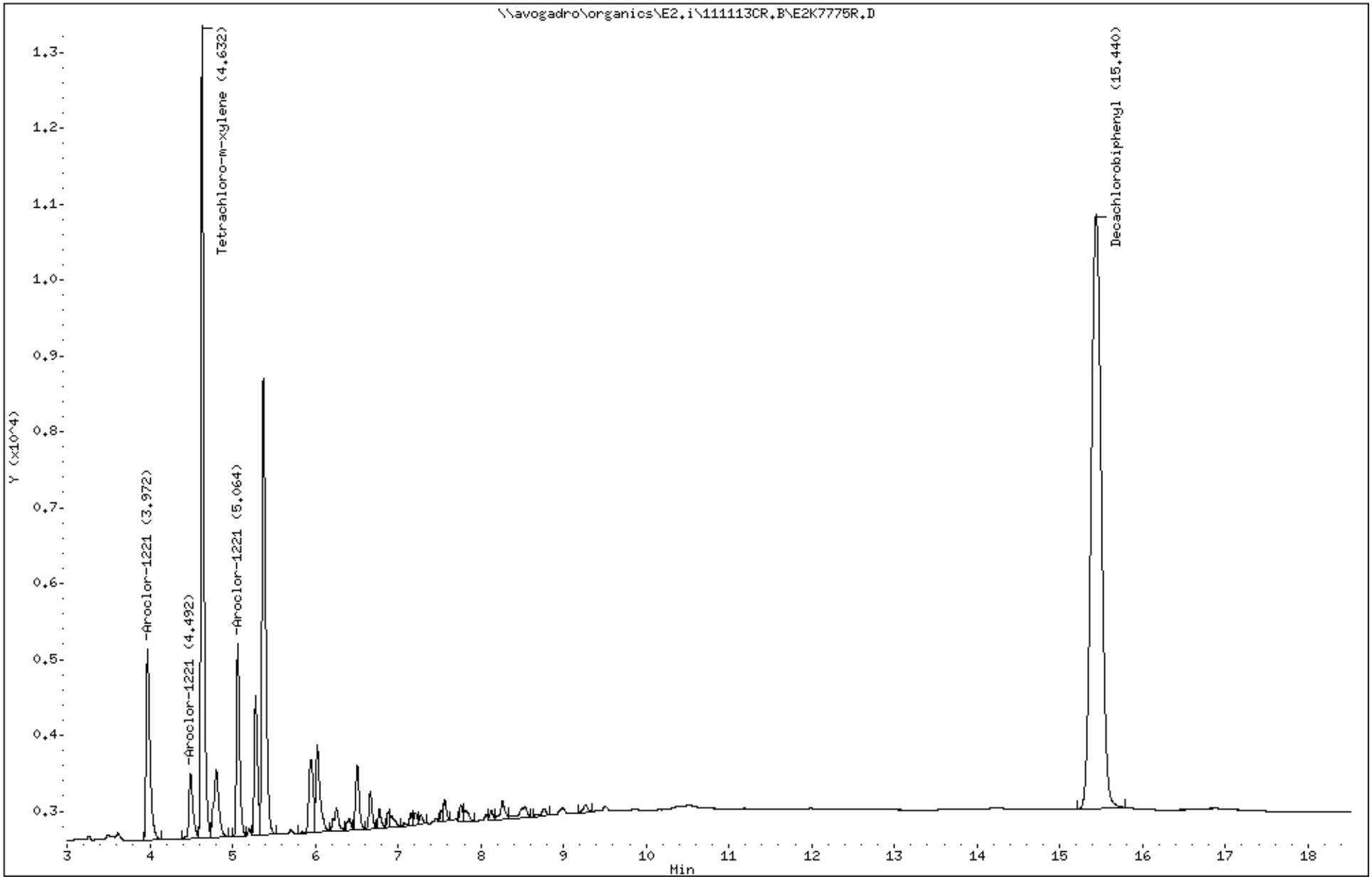
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.632	4.629	0.003	254538	0.02000	0.020			(a)
2 Aroclor-1221						CAS #: 11104-28-2		
3.972	3.972	0.000	79104	0.40000	0.40	80.00- 120.00	100.00	(a)
4.491	4.491	0.000	29162	0.40000	0.40	16.87- 56.87	36.87	
5.063	5.063	0.000	67378	0.40000	0.40	65.18- 105.18	85.18	
Average of Peak Amounts =					0.40000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.439	15.432	0.007	662686	0.04000	0.038			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7775R.D
Date : 13-NOV-2011 17:59
Client ID: AR12213K2 Instrument: E2.i
Sample Info: AR12213K2,AR12213K2,,ar1221.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPestII Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7776F.D
Report Date: 17-Nov-2011 11:07

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CF.B\E2K7776F.D
Lab Smp Id: AR12323K2 Client Smp ID: AR12323K2
Inj Date : 13-NOV-2011 18:20
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12323K2,AR12323K2,,ar1232.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CF.B\E2_ARO_5_F.m
Meth Date : 17-Nov-2011 11:00 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:01 Cal File: E2K7805F.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

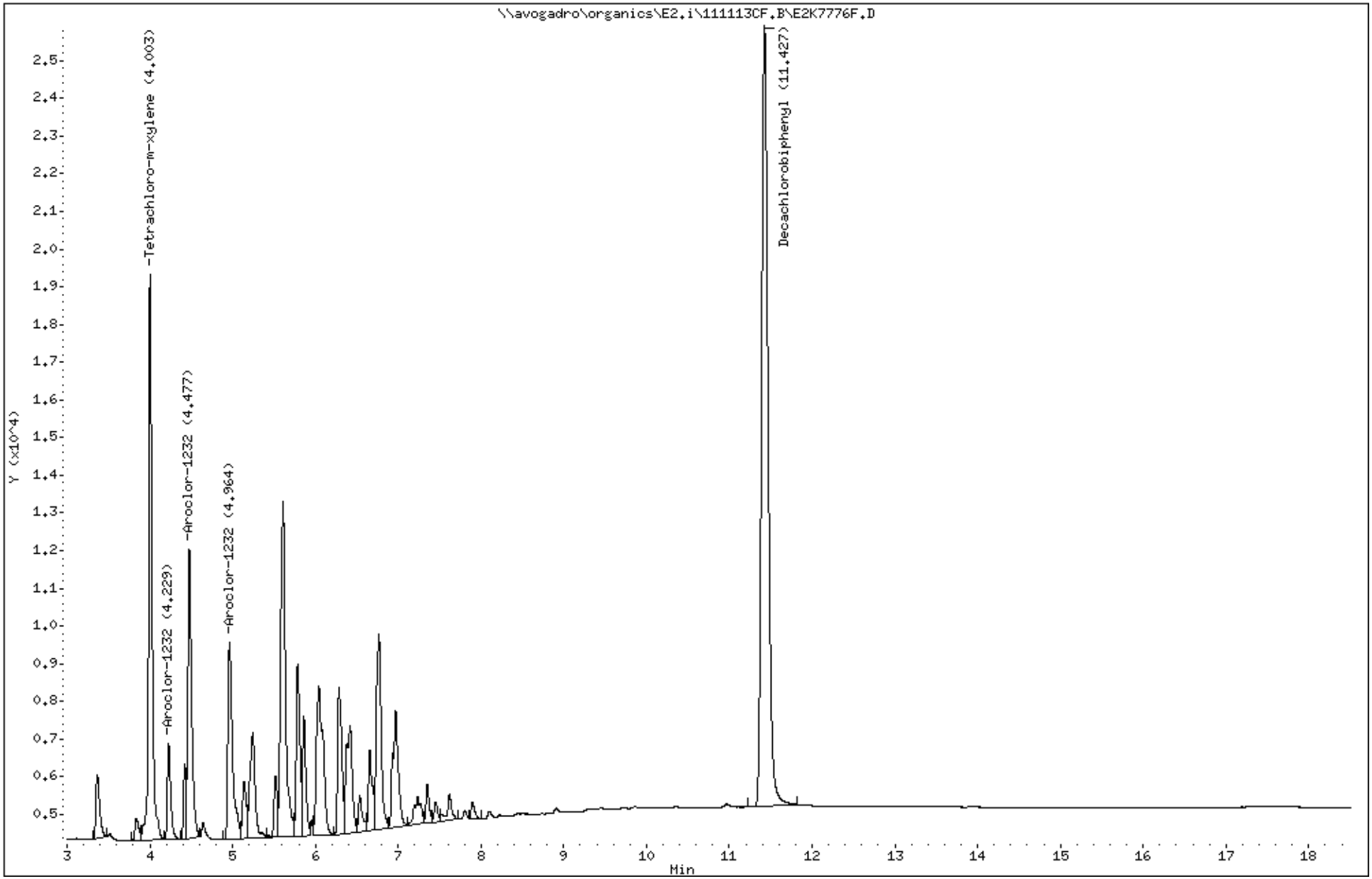
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.003	4.001	0.002	430652	0.02000	0.020			(a)
4 Aroclor-1232					CAS #: 11141-16-5			
4.228	4.228	0.000	72156	0.40000	0.40	80.00- 120.00	100.00	(a)
4.477	4.477	0.000	244126	0.40000	0.40	318.33- 358.33	338.33	
4.964	4.964	0.000	203588	0.40000	0.40	262.15- 302.15	282.15	
Average of Peak Amounts =				0.40000				
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.426	11.422	0.004	1124501	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\111113CF.B\E2K7776F.D
Date : 13-NOV-2011 18:20
Client ID: AR12323K2
Instrument: E2.i
Sample Info: AR12323K2,AR12323K2,,ar1232.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7776R.D
Report Date: 17-Nov-2011 11:08

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CR.B\E2K7776R.D
Lab Smp Id: AR12323K2 Client Smp ID: AR12323K2
Inj Date : 13-NOV-2011 18:20
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12323K2,AR12323K2,,ar1232.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CR.B\E2_ARO_5_R.m
Meth Date : 17-Nov-2011 10:48 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:01 Cal File: E2K7805R.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

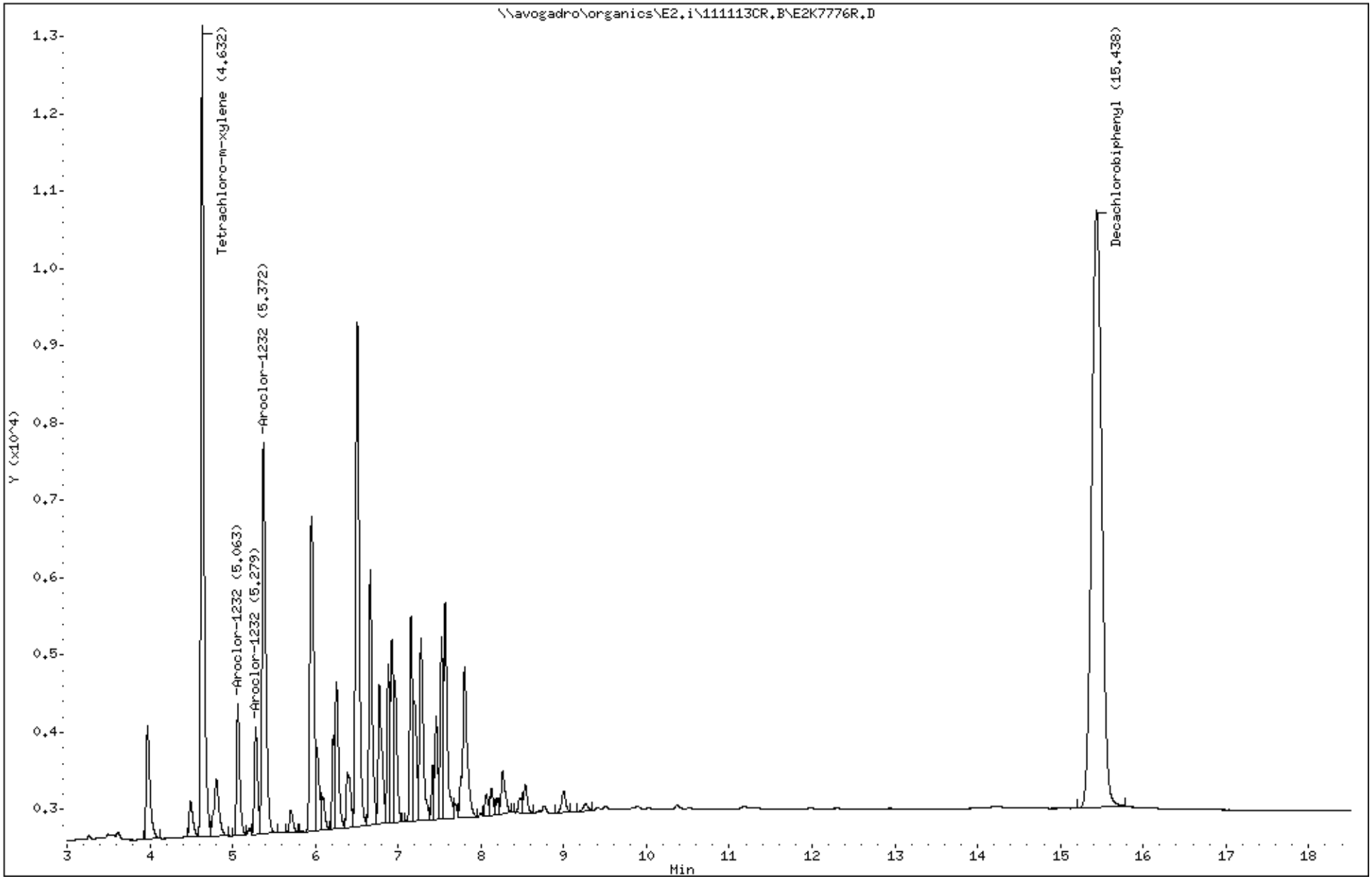
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.631	4.629	0.002	254455	0.02000	0.020			(a)
3 Aroclor-1232					CAS #: 11141-16-5			
5.063	5.063	0.000	45601	0.40000	0.40	80.00- 120.00	100.00	(a)
5.279	5.279	0.000	37889	0.40000	0.40	63.09- 103.09	83.09	
5.372	5.372	0.000	156417	0.40000	0.40	323.01- 363.01	343.01	
Average of Peak Amounts =				0.40000				
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.437	15.432	0.005	654474	0.04000	0.038			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7776R.D
Date : 13-NOV-2011 18:20
Client ID: AR12323K2 Instrument: E2.i
Sample Info: AR12323K2,AR12323K2,,ar1232.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPestII Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7777F.D
Report Date: 17-Nov-2011 11:07

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CF.B\E2K7777F.D
Lab Smp Id: AR12421K2 Client Smp ID: AR12421K2
Inj Date : 13-NOV-2011 18:41
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12421K2,AR12421K2,,ar1242.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CF.B\E2_ARO_5_F.m
Meth Date : 17-Nov-2011 11:00 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 09:59 Cal File: E2K7802F.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

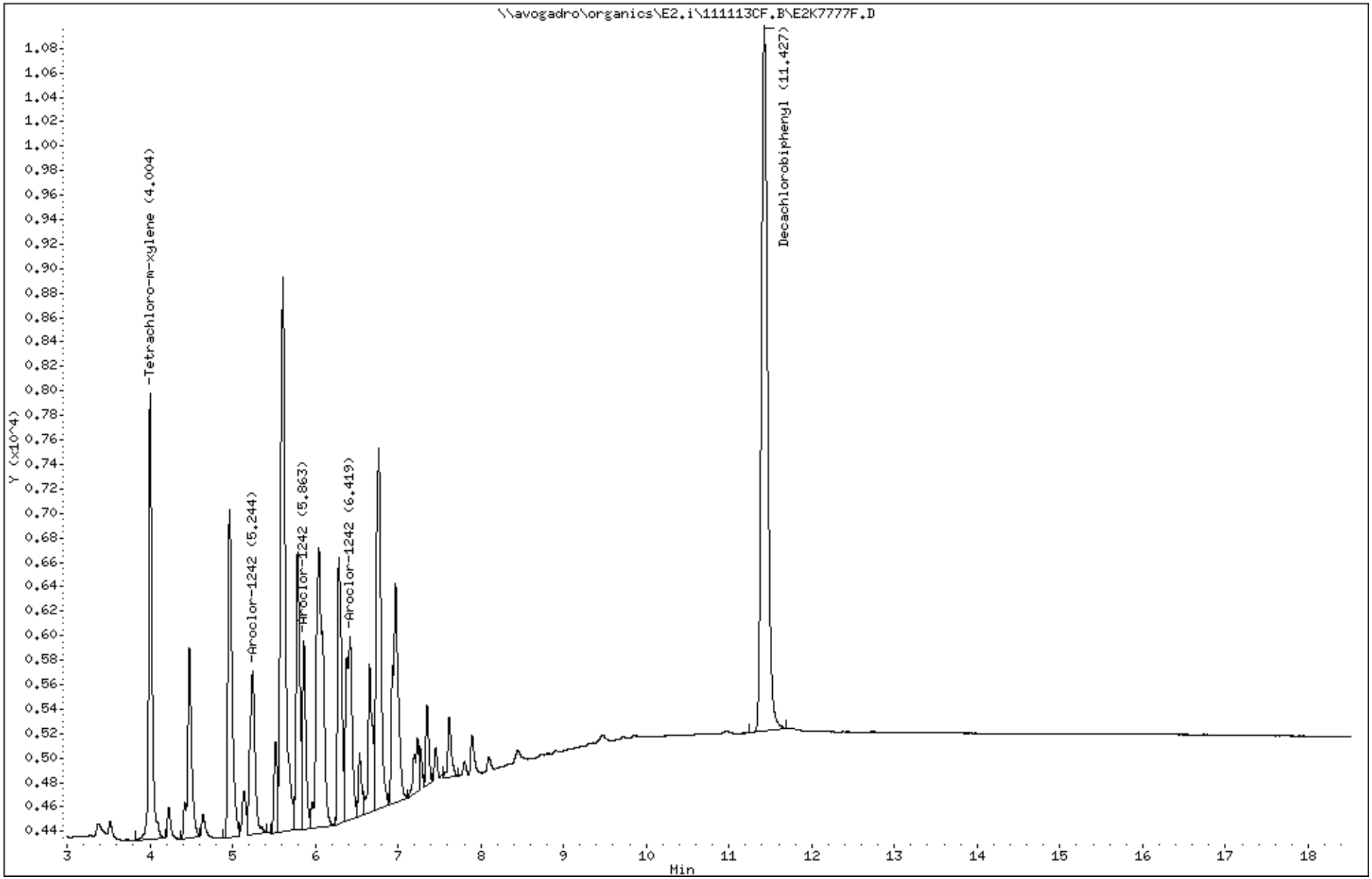
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.003	4.001	0.002	100165	0.00500	0.0047			(a)
6 Aroclor-1242						CAS #: 53469-21-9		
5.243	5.241	0.002	56323	0.10000	0.10	80.00- 120.00	100.00	(a)
5.862	5.860	0.002	43768	0.10000	0.10	62.69- 102.69	77.71	
6.419	6.415	0.004	76155	0.10000	0.10	120.31- 160.31	135.21	
Average of Peak Amounts =					0.10000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.426	11.422	0.004	298163	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\111113CF.B\E2K7777F.D
Date : 13-NOV-2011 18:41
Client ID: AR12421K2
Instrument: E2.i
Sample Info: AR12421K2,AR12421K2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7777R.D
Report Date: 17-Nov-2011 11:08

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CR.B\E2K7777R.D
Lab Smp Id: AR12421K2 Client Smp ID: AR12421K2
Inj Date : 13-NOV-2011 18:41
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12421K2,AR12421K2,,ar1242.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CR.B\E2_ARO_5_R.m
Meth Date : 17-Nov-2011 10:48 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 09:59 Cal File: E2K7802R.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

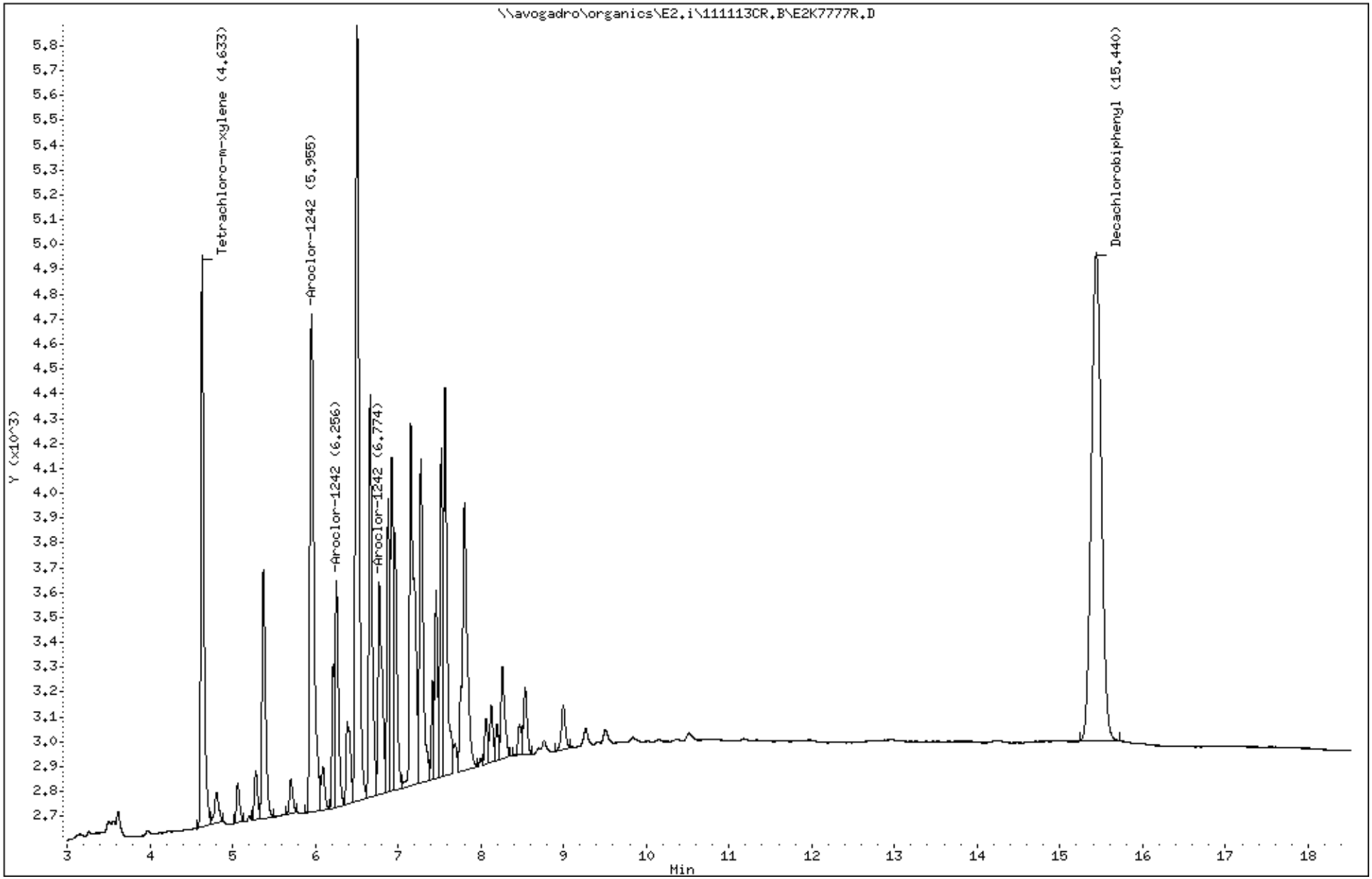
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.632	4.629	0.003	57728	0.00500	0.0045			(a)
4 Aroclor-1242					CAS #: 53469-21-9			
5.955	5.951	0.004	72552	0.10000	0.11	80.00- 120.00	100.00	(a)
6.255	6.252	0.003	26631	0.10000	0.10	18.62- 58.62	36.71	
6.773	6.772	0.001	28333	0.10000	0.099	23.16- 63.16	39.05	
Average of Peak Amounts =					0.10300			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.440	15.432	0.008	165162	0.01000	0.0098			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7777R.D
Date : 13-NOV-2011 18:41
Client ID: AR12421K2
Instrument: E2.i
Sample Info: AR12421K2,AR12421K2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7779F.D
Report Date: 17-Nov-2011 11:07

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CF.B\E2K7779F.D
Lab Smp Id: AR12422K2 Client Smp ID: AR12422K2
Inj Date : 13-NOV-2011 19:23
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12422K2,AR12422K2,,ar1242.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CF.B\E2_ARO_5_F.m
Meth Date : 17-Nov-2011 11:00 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 10:40 Cal File: E2K7804F.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

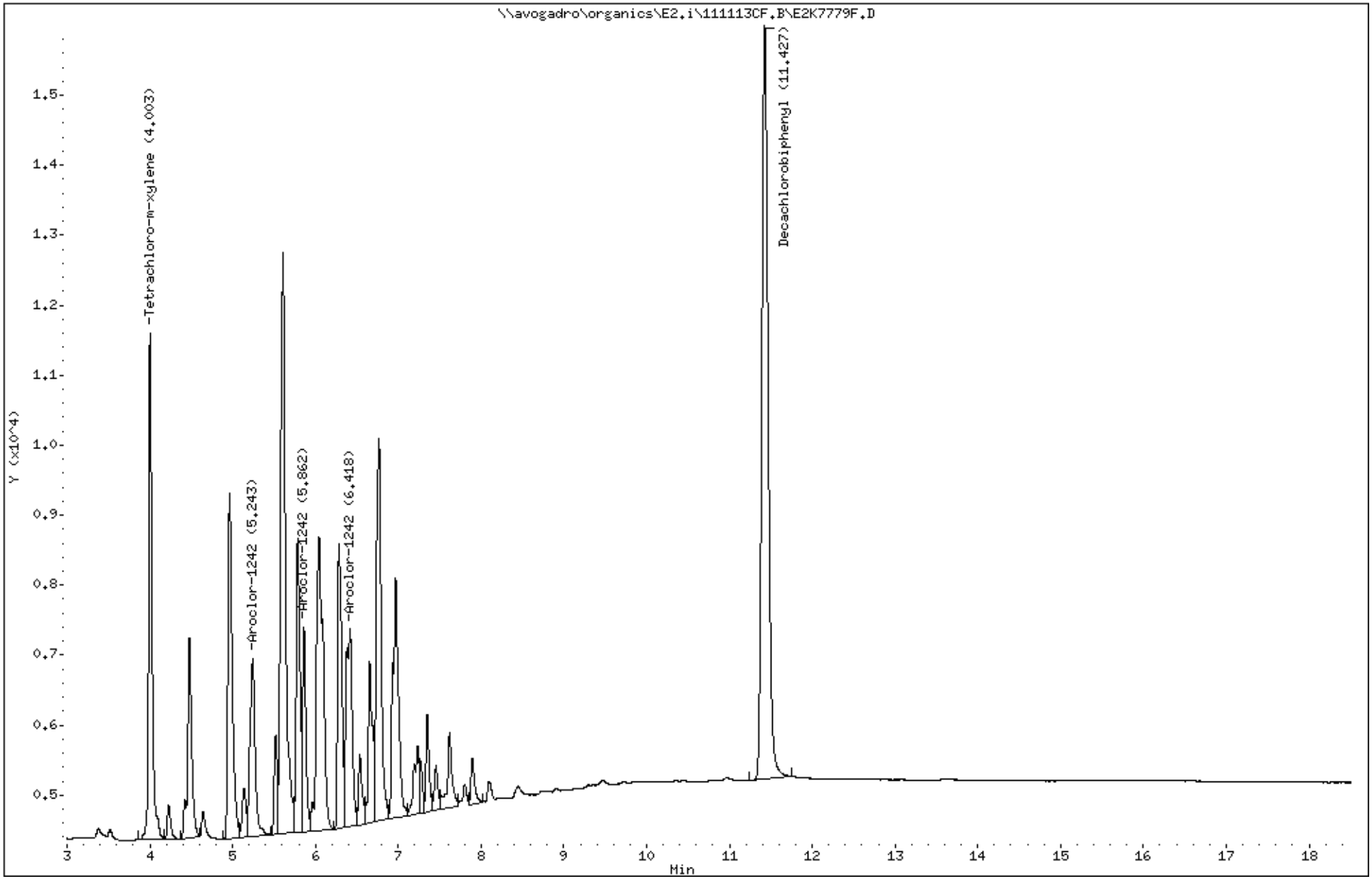
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.003	4.001	0.002	201766	0.01000	0.0097			(a)
6 Aroclor-1242						CAS #: 53469-21-9		
5.242	5.241	0.001	110390	0.20000	0.20	80.00- 120.00	100.00	(a)
5.861	5.860	0.001	84070	0.20000	0.20	62.69- 102.69	76.16	
6.418	6.415	0.003	146503	0.20000	0.20	120.31- 160.31	132.71	
Average of Peak Amounts =					0.20000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.427	11.422	0.005	566580	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\111113CF.B\E2K7779F.D
Date : 13-NOV-2011 19:23
Client ID: AR12422K2
Instrument: E2.i
Sample Info: AR12422K2,AR12422K2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7779R.D
Report Date: 17-Nov-2011 11:08

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report
Data file : \\avogadro\organics\E2.i\111113CR.B\E2K7779R.D
Lab Smp Id: AR12422K2 Client Smp ID: AR12422K2
Inj Date : 13-NOV-2011 19:23
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12422K2,AR12422K2,,ar1242.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CR.B\E2_ARO_5_R.m
Meth Date : 17-Nov-2011 10:48 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 10:40 Cal File: E2K7804R.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

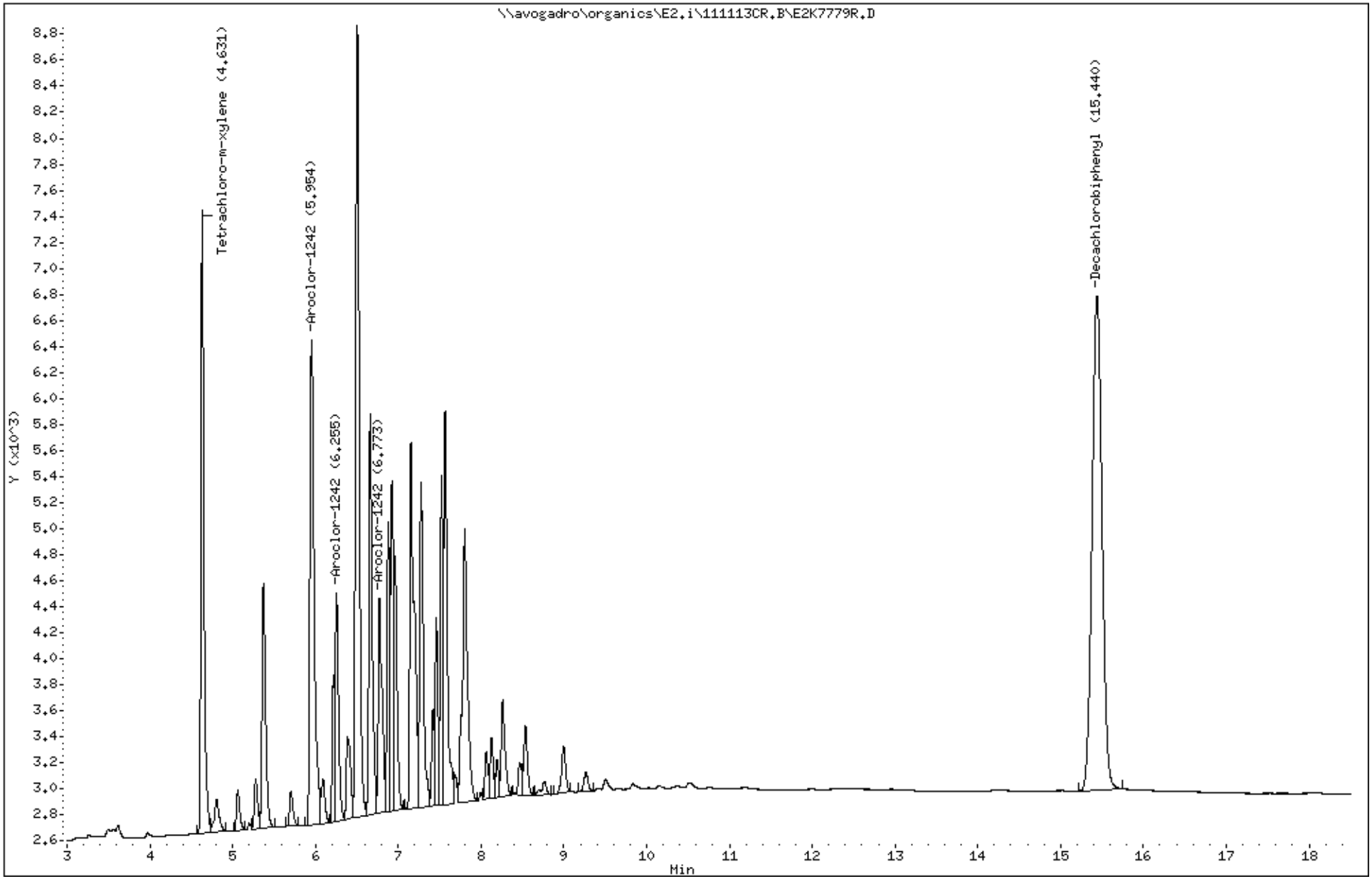
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.631	4.629	0.002	119425	0.01000	0.0093			(a)
4 Aroclor-1242					CAS #: 53469-21-9			
5.954	5.951	0.003	136846	0.20000	0.21	80.00- 120.00	100.00	(a)
6.255	6.252	0.003	51380	0.20000	0.20	18.62- 58.62	37.55	
6.772	6.772	0.000	53415	0.20000	0.19	23.16- 63.16	39.03	
Average of Peak Amounts =				0.20000				
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.440	15.432	0.008	319707	0.02000	0.019			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7779R.D
Date : 13-NOV-2011 19:23
Client ID: AR12422K2
Instrument: E2.i
Sample Info: AR12422K2,AR12422K2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7780F.D
Report Date: 17-Nov-2011 11:07

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CF.B\E2K7780F.D
Lab Smp Id: AR12423K2 Client Smp ID: AR12423K2
Inj Date : 13-NOV-2011 19:44
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12423K2,AR12423K2,,ar1242.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CF.B\E2_ARO_5_F.m
Meth Date : 17-Nov-2011 11:00 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:01 Cal File: E2K7805F.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

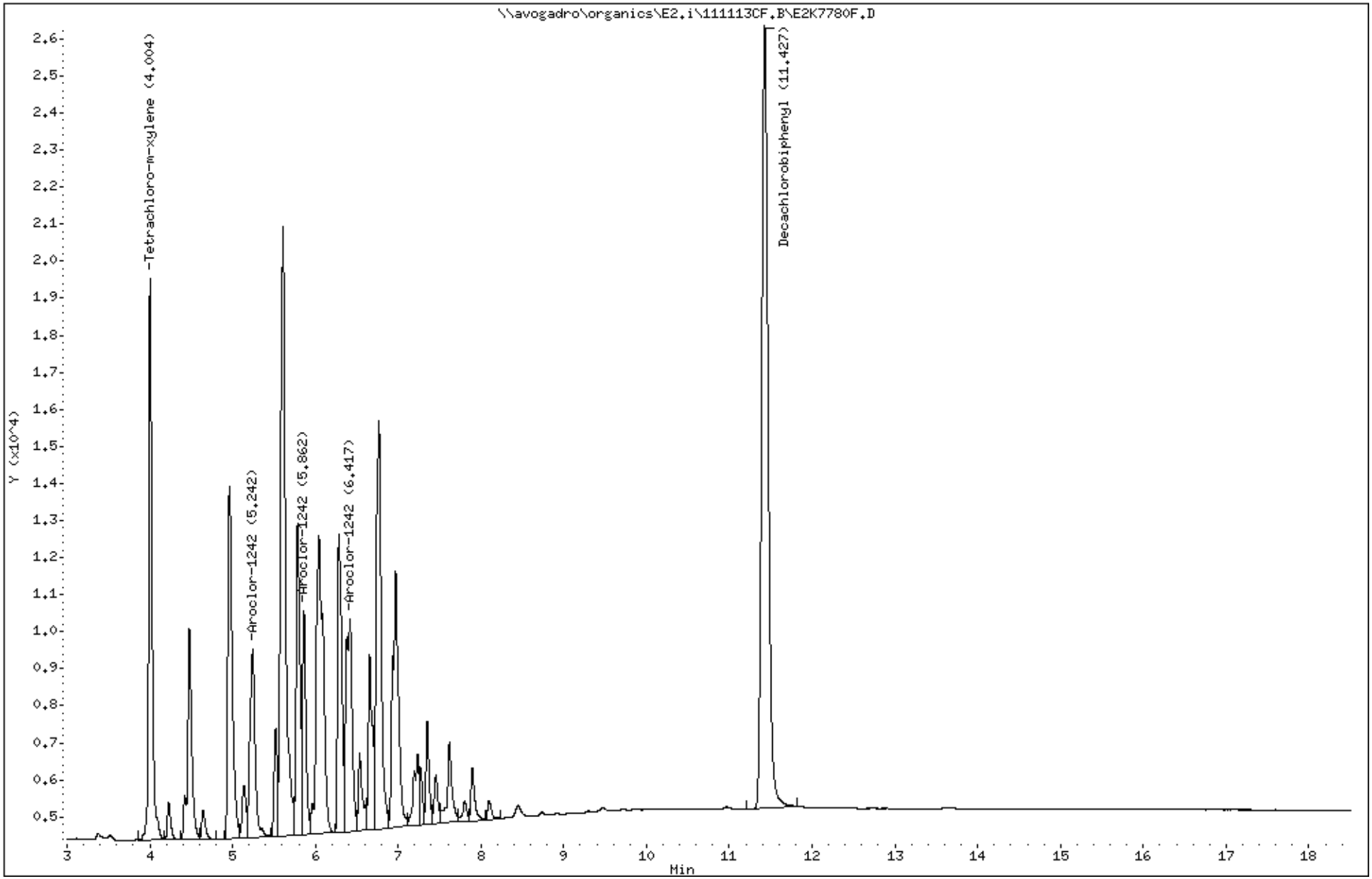
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.003	4.001	0.002	421320	0.02000	0.020			(a)
6 Aroclor-1242					CAS #: 53469-21-9			
5.242	5.241	0.001	222031	0.40000	0.41	80.00- 120.00	100.00	(a)
5.861	5.860	0.001	174358	0.40000	0.41	62.69- 102.69	78.53	
6.417	6.415	0.002	299405	0.40000	0.41	120.31- 160.31	134.85	
Average of Peak Amounts =					0.41000			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.426	11.422	0.004	1147877	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\111113CF.B\E2K7780F.D
Date : 13-NOV-2011 19:44
Client ID: AR12423K2
Instrument: E2.i
Sample Info: AR12423K2,AR12423K2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7780R.D
Report Date: 17-Nov-2011 11:08

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CR.B\E2K7780R.D
Lab Smp Id: AR12423K2 Client Smp ID: AR12423K2
Inj Date : 13-NOV-2011 19:44
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12423K2,AR12423K2,,ar1242.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CR.B\E2_ARO_5_R.m
Meth Date : 17-Nov-2011 10:48 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:01 Cal File: E2K7805R.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

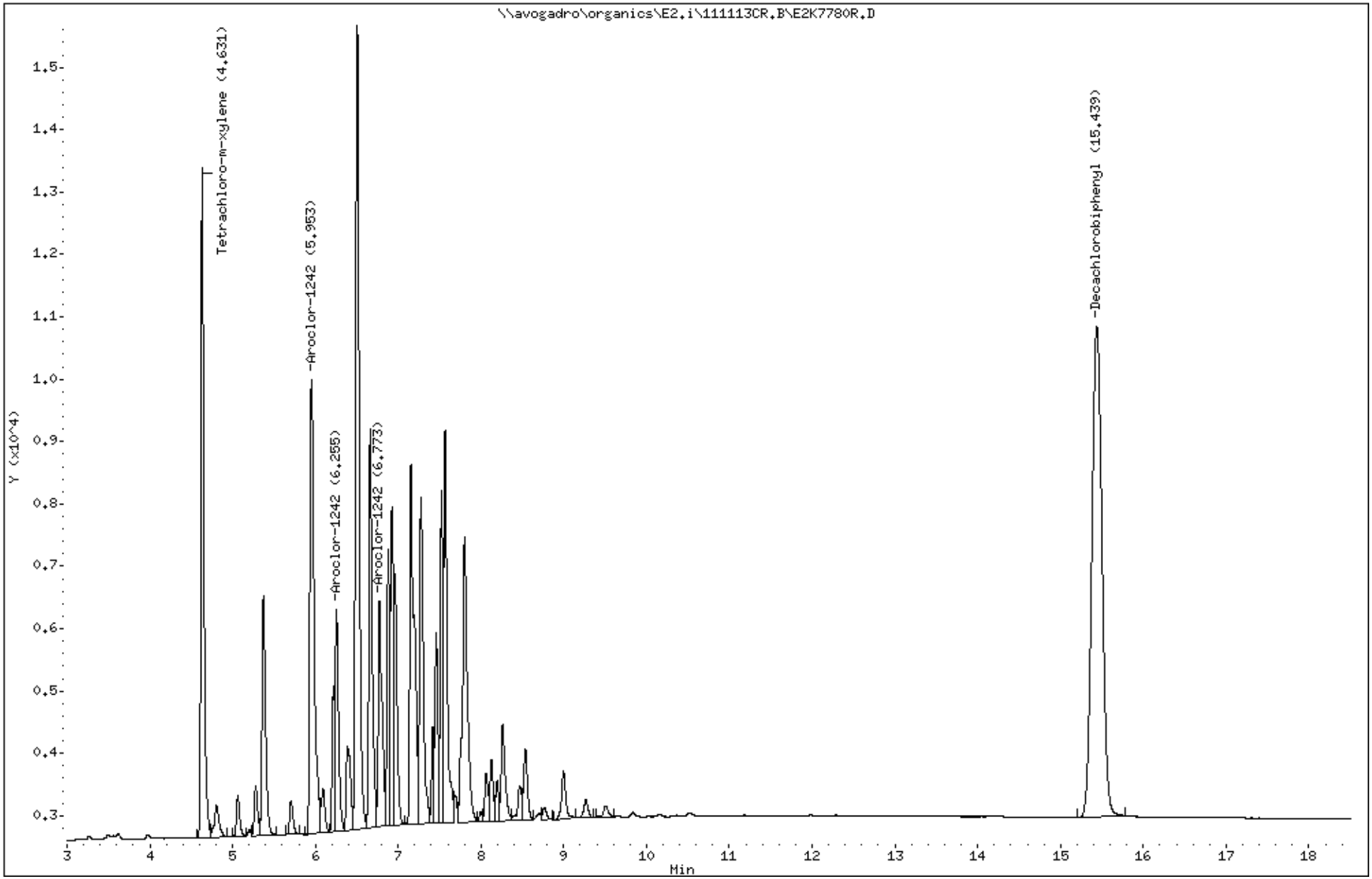
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.631	4.629	0.002	260349	0.02000	0.020			(a)
4 Aroclor-1242					CAS #: 53469-21-9			
5.952	5.951	0.001	270089	0.40000	0.41	80.00- 120.00	100.00	(a)
6.254	6.252	0.002	104452	0.40000	0.40	18.62- 58.62	38.67	
6.772	6.772	0.000	114110	0.40000	0.40	23.16- 63.16	42.25	
Average of Peak Amounts =					0.40333			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.439	15.432	0.007	671138	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\111113CR.B\E2K7780R.D
Date : 13-NOV-2011 19:44
Client ID: AR12423K2
Instrument: E2.i
Sample Info: AR12423K2,AR12423K2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7781F.D
Report Date: 17-Nov-2011 11:07

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CF.B\E2K7781F.D
Lab Smp Id: AR12424K2 Client Smp ID: AR12424K2
Inj Date : 13-NOV-2011 20:05
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12424K2,AR12424K2,,ar1242.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CF.B\E2_ARO_5_F.m
Meth Date : 17-Nov-2011 11:00 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:22 Cal File: E2K7806F.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

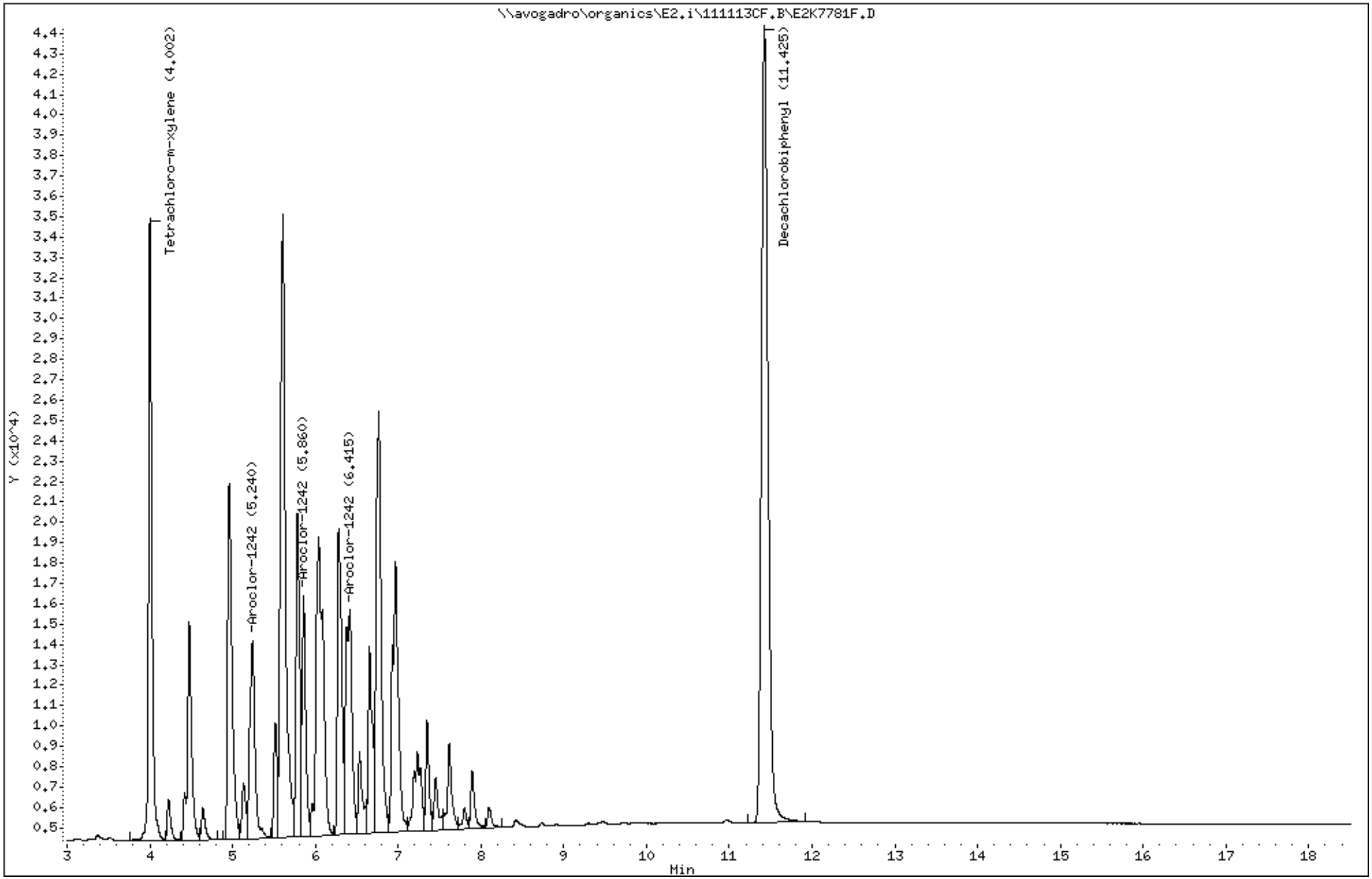
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.002	4.001	0.001	854288	0.04000	0.041			(a)
6 Aroclor-1242					CAS #: 53469-21-9			
5.240	5.241	-0.001	427490	0.80000	0.79	80.00- 120.00	100.00	(a)
5.859	5.860	-0.001	344979	0.80000	0.80	62.69- 102.69	80.70	
6.415	6.415	0.000	580891	0.80000	0.79	120.31- 160.31	135.88	
Average of Peak Amounts =					0.79333			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.424	11.422	0.002	2178023	0.08000	0.078			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7781F.D
Date : 13-NOV-2011 20:05
Client ID: AR12424K2
Instrument: E2.i
Sample Info: AR12424K2,AR12424K2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7781R.D
Report Date: 17-Nov-2011 11:08

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report
Data file : \\avogadro\organics\E2.i\111113CR.B\E2K7781R.D
Lab Smp Id: AR12424K2 Client Smp ID: AR12424K2
Inj Date : 13-NOV-2011 20:05
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12424K2,AR12424K2,,ar1242.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CR.B\E2_ARO_5_R.m
Meth Date : 17-Nov-2011 10:48 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:22 Cal File: E2K7806R.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

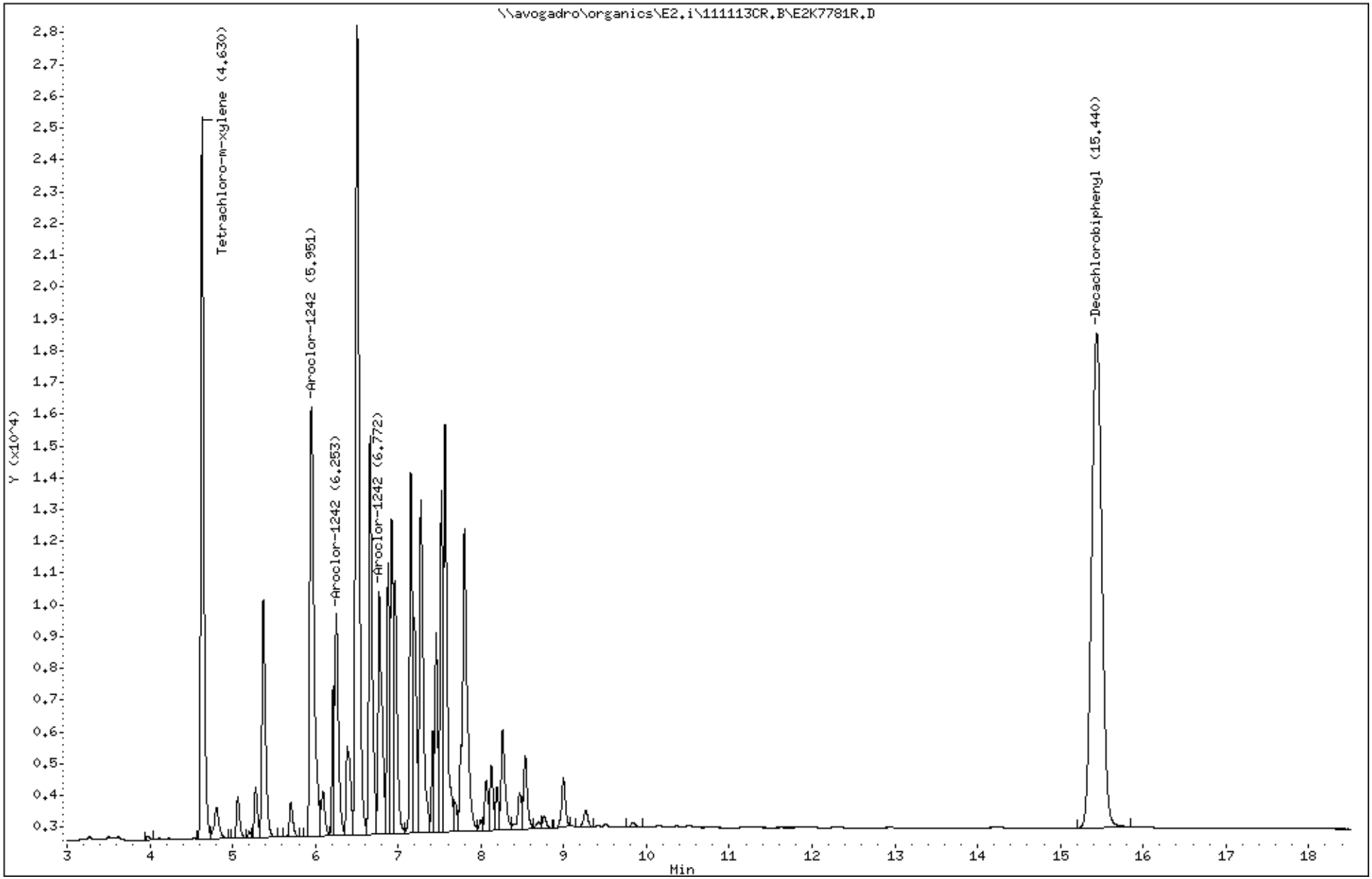
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.630	4.629	0.001	551843	0.04000	0.043			(a)
4 Aroclor-1242						CAS #: 53469-21-9		
5.951	5.951	0.000	507332	0.80000	0.77	80.00- 120.00	100.00	(a)
6.253	6.252	0.001	205517	0.80000	0.80	18.62- 58.62	40.51	
6.772	6.772	0.000	237552	0.80000	0.83	23.16- 63.16	46.82	
		Average of Peak Amounts =		0.80000				
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.439	15.432	0.007	1333936	0.08000	0.081			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7781R.D
Date : 13-NOV-2011 20:05
Client ID: AR12424K2
Instrument: E2.i
Sample Info: AR12424K2,AR12424K2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7782F.D
Report Date: 17-Nov-2011 11:07

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

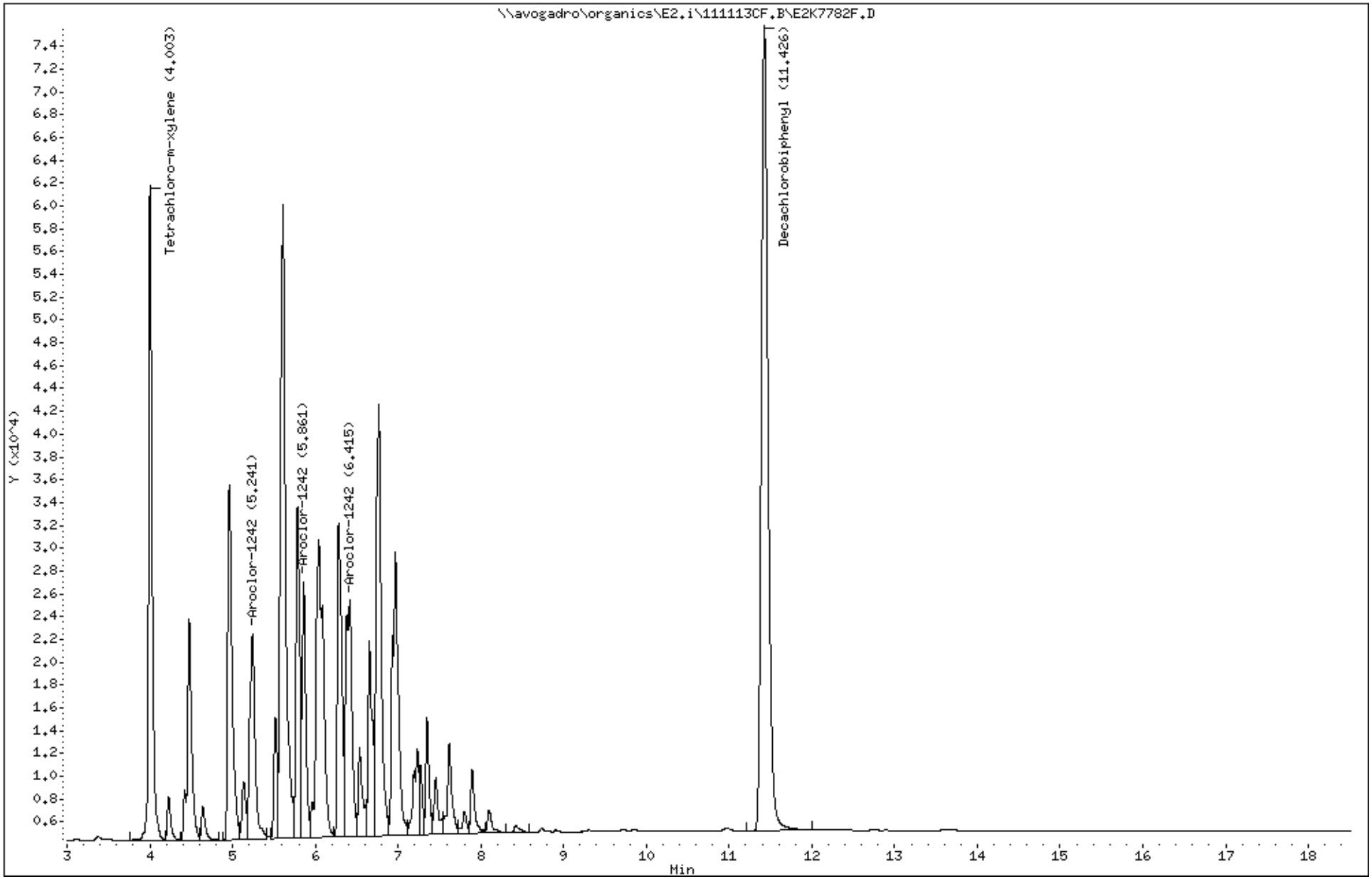
Data file : \\avogadro\organics\E2.i\111113CF.B\E2K7782F.D
Lab Smp Id: AR12425K2 Client Smp ID: AR12425K2
Inj Date : 13-NOV-2011 20:26
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12425K2,AR12425K2,,ar1242.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CF.B\E2_ARO_5_F.m
Meth Date : 17-Nov-2011 11:00 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807F.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		
4.002	4.001	0.001	1670340	0.08000	0.081			
6 Aroclor-1242						CAS #: 53469-21-9		
5.241	5.241	0.000	807993	1.60000	1.5	80.00- 120.00		100.00
5.860	5.860	0.000	669850	1.60000	1.6	62.69- 102.69		82.90
6.415	6.415	0.000	1110499	1.60000	1.5	120.31- 160.31		137.44
		Average of Peak Amounts =			1.53333			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.426	11.422	0.004	4012397	0.16000	0.14			

Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7782F.D
Date : 13-NOV-2011 20:26
Client ID: AR12425K2
Instrument: E2.i
Sample Info: AR12425K2,AR12425K2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7782R.D
Report Date: 17-Nov-2011 11:08

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

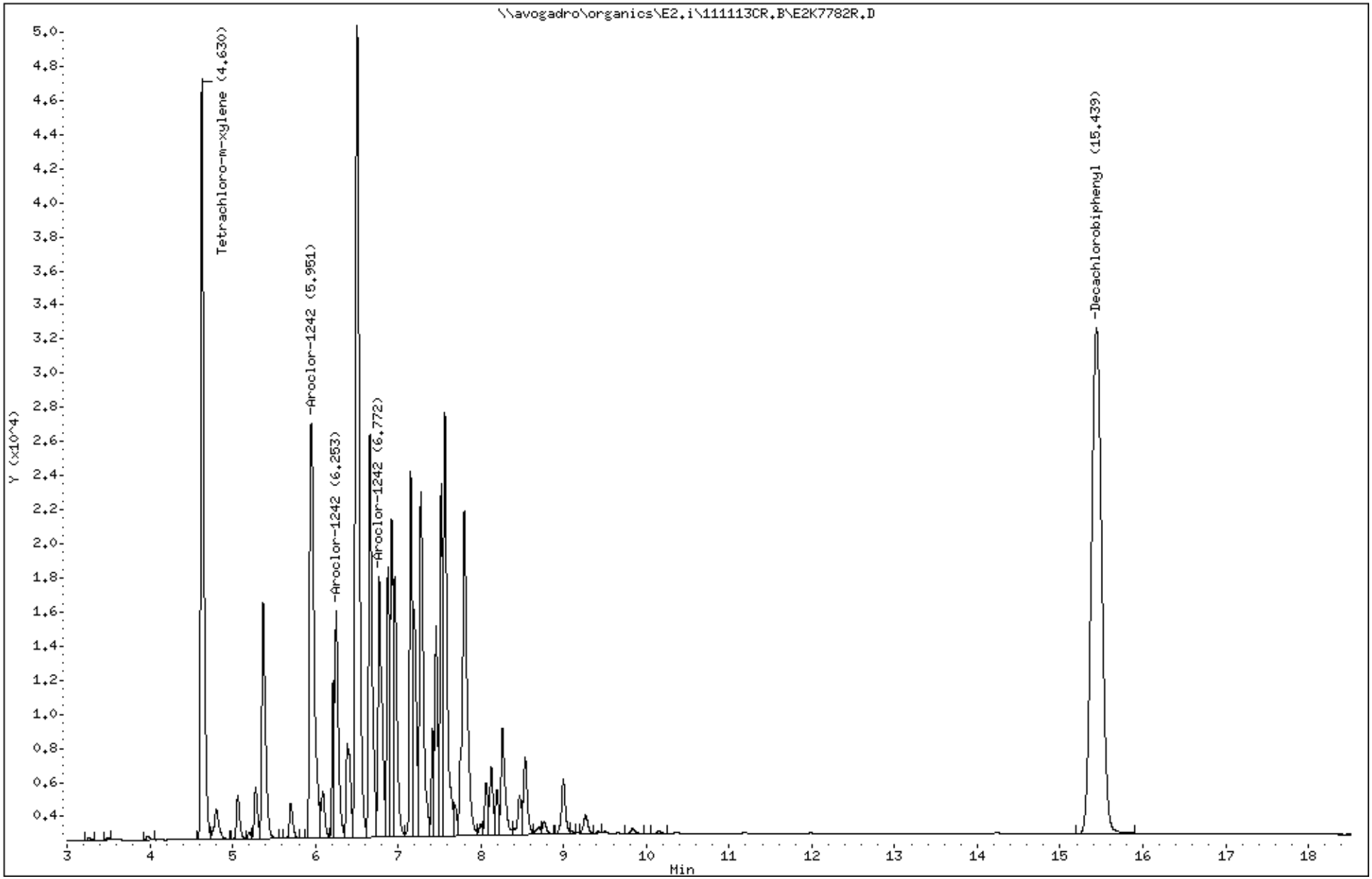
Data file : \\avogadro\organics\E2.i\111113CR.B\E2K7782R.D
Lab Smp Id: AR12425K2 Client Smp ID: AR12425K2
Inj Date : 13-NOV-2011 20:26
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12425K2,AR12425K2,,ar1242.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CR.B\E2_ARO_5_R.m
Meth Date : 17-Nov-2011 10:48 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807R.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		
4.630	4.629	0.001	1135720	0.08000	0.088			
4 Aroclor-1242						CAS #: 53469-21-9		
5.951	5.951	0.000	935146	1.60000	1.4	80.00- 120.00		100.00
6.252	6.252	0.000	397452	1.60000	1.5	18.62- 58.62		42.50
6.772	6.772	0.000	476675	1.60000	1.7	23.16- 63.16		50.97
Average of Peak Amounts =					1.53333			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.438	15.432	0.006	2582708	0.16000	0.16			

Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7782R.D
Date : 13-NOV-2011 20:26
Client ID: AR12425K2
Instrument: E2.i
Sample Info: AR12425K2,AR12425K2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7783F.D
Report Date: 17-Nov-2011 11:07

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CF.B\E2K7783F.D
Lab Smp Id: AR12481K2 Client Smp ID: AR12481K2
Inj Date : 13-NOV-2011 20:47
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12481K2,AR12481K2,,ar1248.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CF.B\E2_ARO_5_F.m
Meth Date : 17-Nov-2011 11:00 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 09:59 Cal File: E2K7802F.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

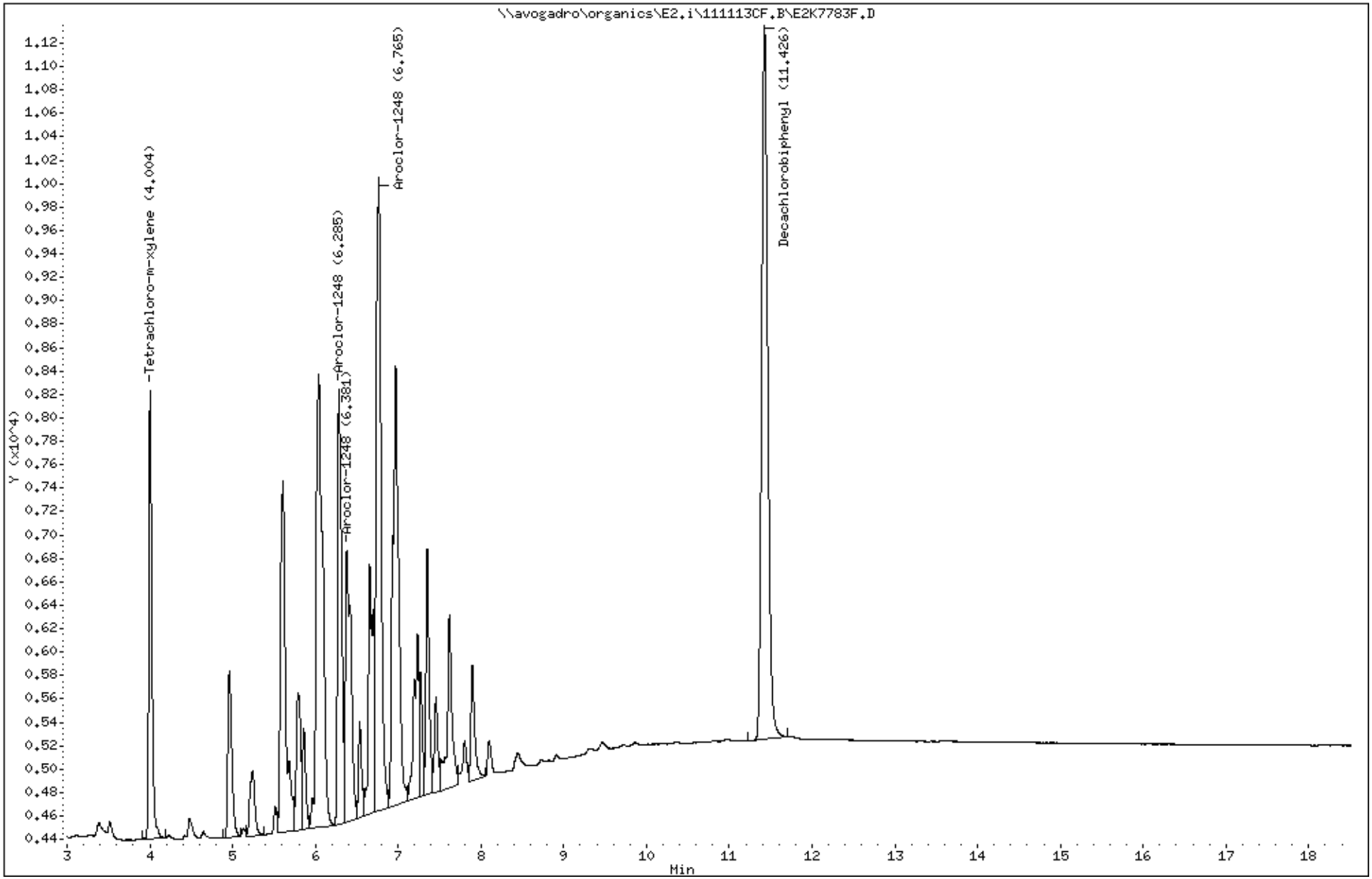
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.004	4.001	0.003	97408	0.00500	0.0047			(a)
7 Aroclor-1248						CAS #: 12672-29-6		
6.284	6.282	0.002	123724	0.10000	0.11	80.00- 120.00	100.00	(a)
6.381	6.378	0.003	108236	0.10000	0.11	72.61- 112.61	87.48	
6.764	6.763	0.001	226337	0.10000	0.11	165.48- 205.48	182.94	
Average of Peak Amounts =					0.11000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.426	11.422	0.004	313928	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\111113CF.B\E2K7783F.D
Date : 13-NOV-2011 20:47
Client ID: AR12481K2
Instrument: E2.i
Sample Info: AR12481K2,AR12481K2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7783R.D
Report Date: 17-Nov-2011 11:08

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report
Data file : \\avogadro\organics\E2.i\111113CR.B\E2K7783R.D
Lab Smp Id: AR12481K2 Client Smp ID: AR12481K2
Inj Date : 13-NOV-2011 20:47
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12481K2,AR12481K2,,ar1248.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CR.B\E2_ARO_5_R.m
Meth Date : 17-Nov-2011 10:48 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 09:59 Cal File: E2K7802R.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

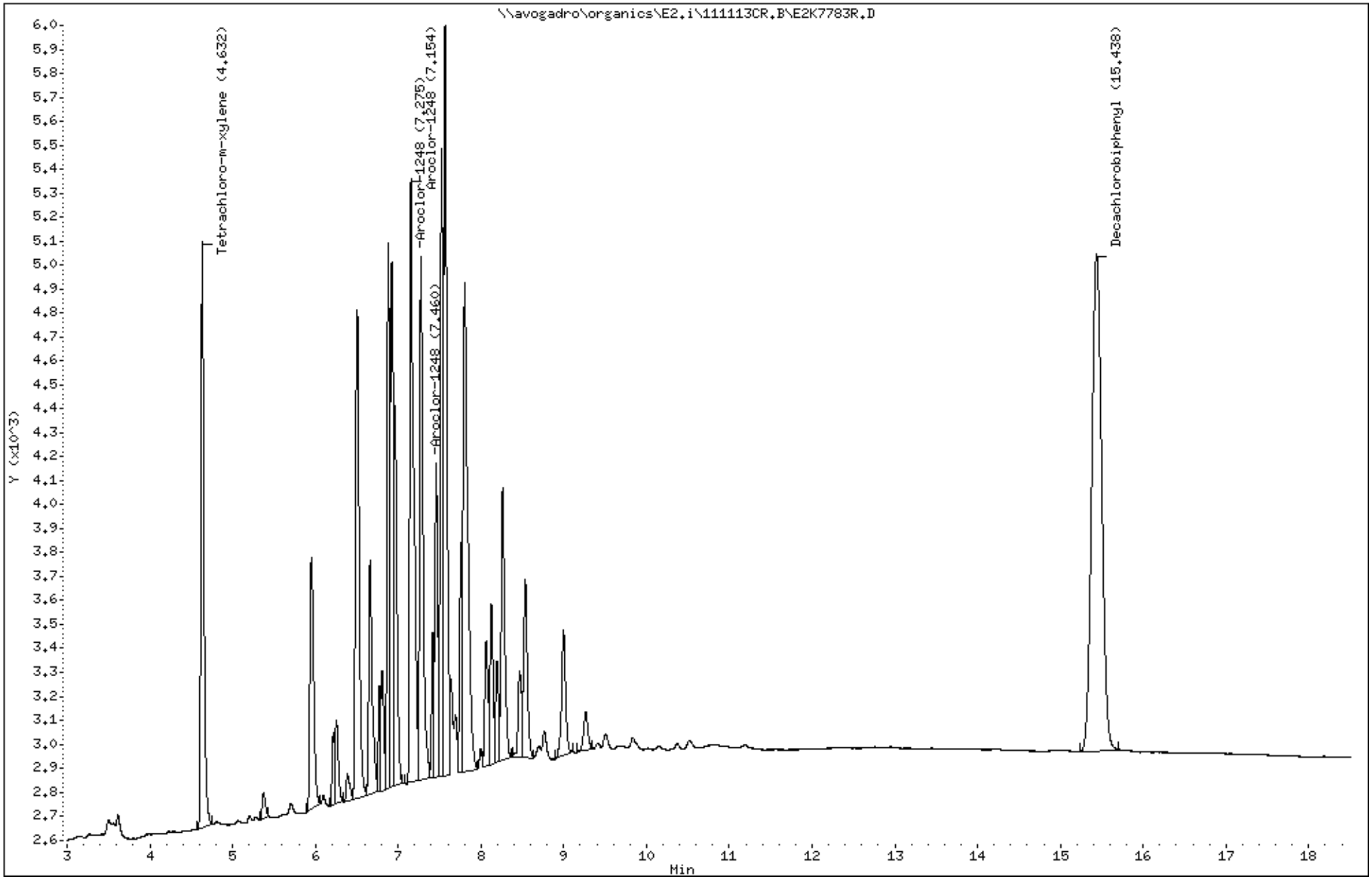
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.632	4.629	0.003	59535	0.00500	0.0046			(a)
5 Aroclor-1248						CAS #: 12672-29-6		
7.153	7.150	0.003	81230	0.10000	0.10	80.00- 120.00	100.00	(a)
7.275	7.272	0.003	62858	0.10000	0.10	60.19- 100.19	77.38	
7.460	7.457	0.003	30758	0.10000	0.10	18.95- 58.95	37.87	
Average of Peak Amounts =					0.10000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.437	15.432	0.005	173235	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\111113CR.B\E2K7783R.D
Date : 13-NOV-2011 20:47
Client ID: AR12481K2
Instrument: E2.i
Sample Info: AR12481K2,AR12481K2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7785F.D
Report Date: 17-Nov-2011 11:07

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CF.B\E2K7785F.D
Lab Smp Id: AR12482K2 Client Smp ID: AR12482K2
Inj Date : 13-NOV-2011 21:29
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12482K2,AR12482K2,,ar1248.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CF.B\E2_ARO_5_F.m
Meth Date : 17-Nov-2011 11:00 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 10:40 Cal File: E2K7804F.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

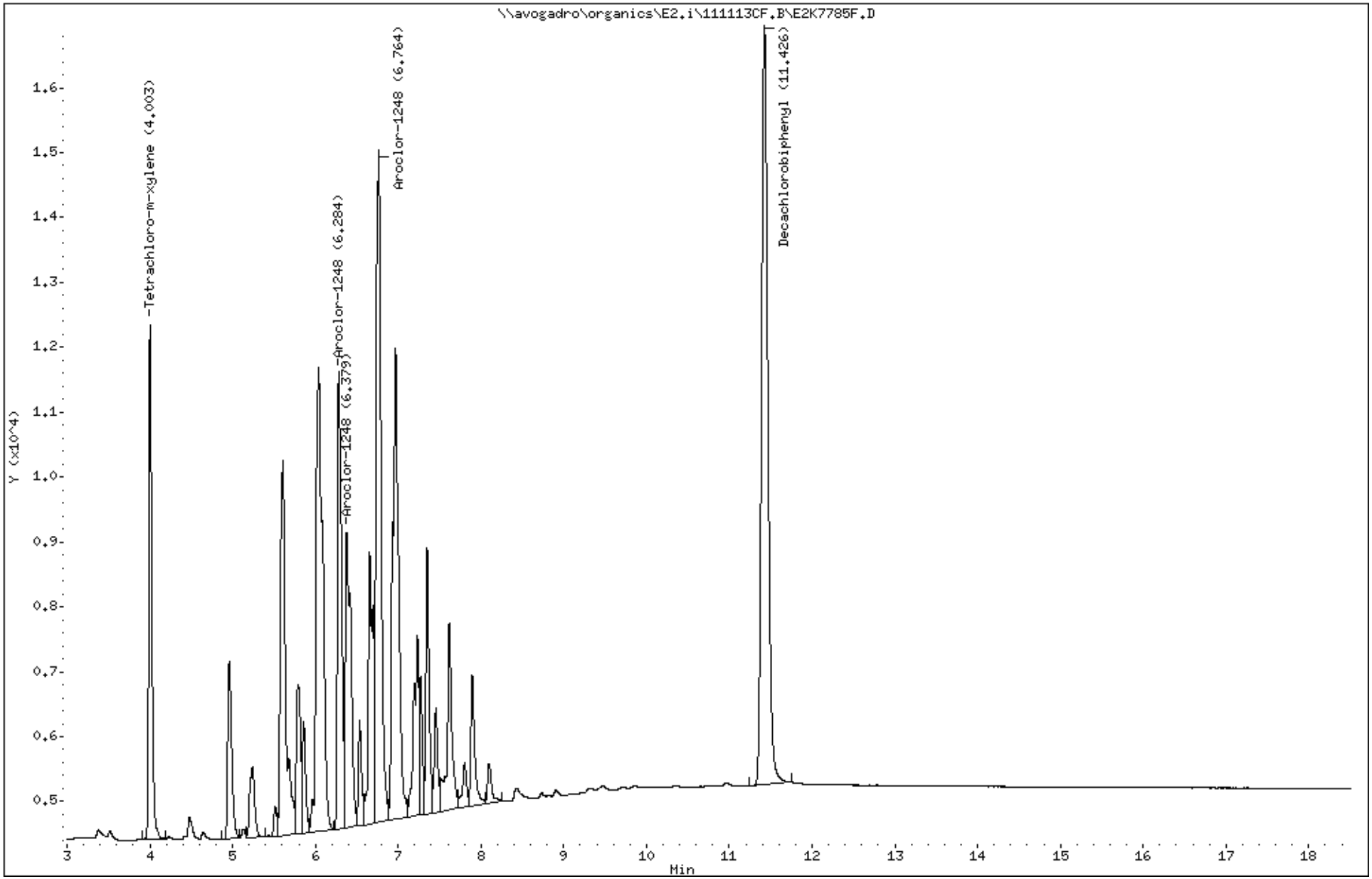
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT	AMOUNTS ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.003	4.001	0.002	198532	0.01000	0.0097		(a)
7 Aroclor-1248					CAS #: 12672-29-6		
6.283	6.282	0.001	237313	0.20000	0.22	80.00- 120.00	100.00(a)
6.379	6.378	0.001	213037	0.20000	0.21	72.61- 112.61	89.77
6.764	6.763	0.001	434027	0.20000	0.20	165.48- 205.48	182.89
Average of Peak Amounts =					0.21000		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.425	11.422	0.003	617141	0.02000	0.022		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7785F.D
Date : 13-NOV-2011 21:29
Client ID: AR12482K2
Instrument: E2.i
Sample Info: AR12482K2,AR12482K2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7785R.D
Report Date: 17-Nov-2011 11:08

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CR.B\E2K7785R.D
Lab Smp Id: AR12482K2 Client Smp ID: AR12482K2
Inj Date : 13-NOV-2011 21:29
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12482K2,AR12482K2,,ar1248.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CR.B\E2_ARO_5_R.m
Meth Date : 17-Nov-2011 10:48 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 10:40 Cal File: E2K7804R.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

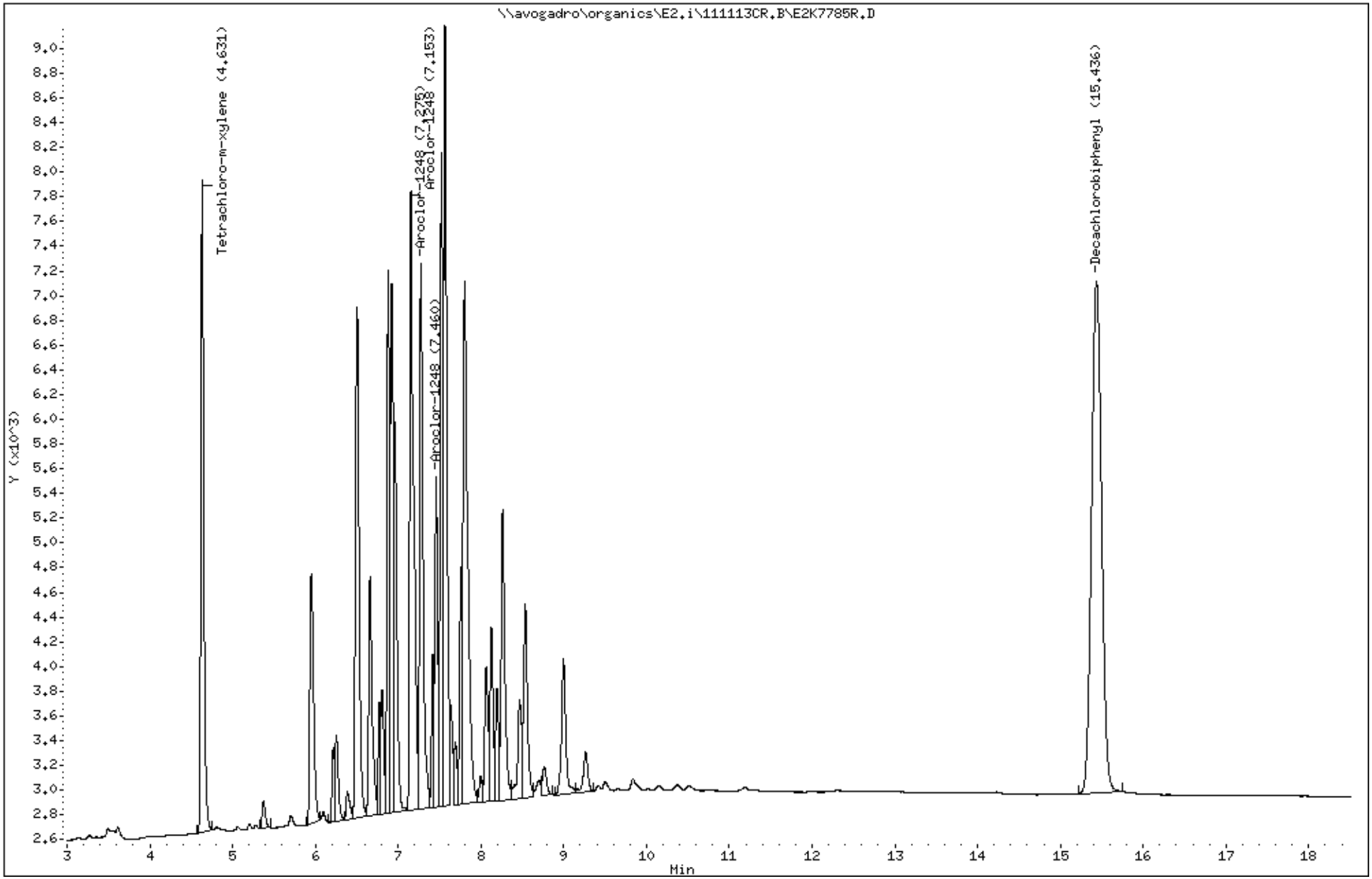
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.631	4.629	0.002	123933	0.01000	0.0095			(a)
5 Aroclor-1248						CAS #: 12672-29-6		
7.152	7.150	0.002	162653	0.20000	0.21	80.00- 120.00	100.00	(a)
7.274	7.272	0.002	127630	0.20000	0.20	60.19- 100.19	78.47	
7.459	7.457	0.002	62543	0.20000	0.21	18.95- 58.95	38.45	
Average of Peak Amounts =					0.20667			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.436	15.432	0.004	347985	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\111113CR.B\E2K7785R.D
Date : 13-NOV-2011 21:29
Client ID: AR12482K2
Instrument: E2.i
Sample Info: AR12482K2,AR12482K2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7786F.D
Report Date: 17-Nov-2011 11:07

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CF.B\E2K7786F.D
Lab Smp Id: AR12483K2 Client Smp ID: AR12483K2
Inj Date : 13-NOV-2011 21:50
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12483K2,AR12483K2,,ar1248.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CF.B\E2_ARO_5_F.m
Meth Date : 17-Nov-2011 11:00 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:01 Cal File: E2K7805F.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

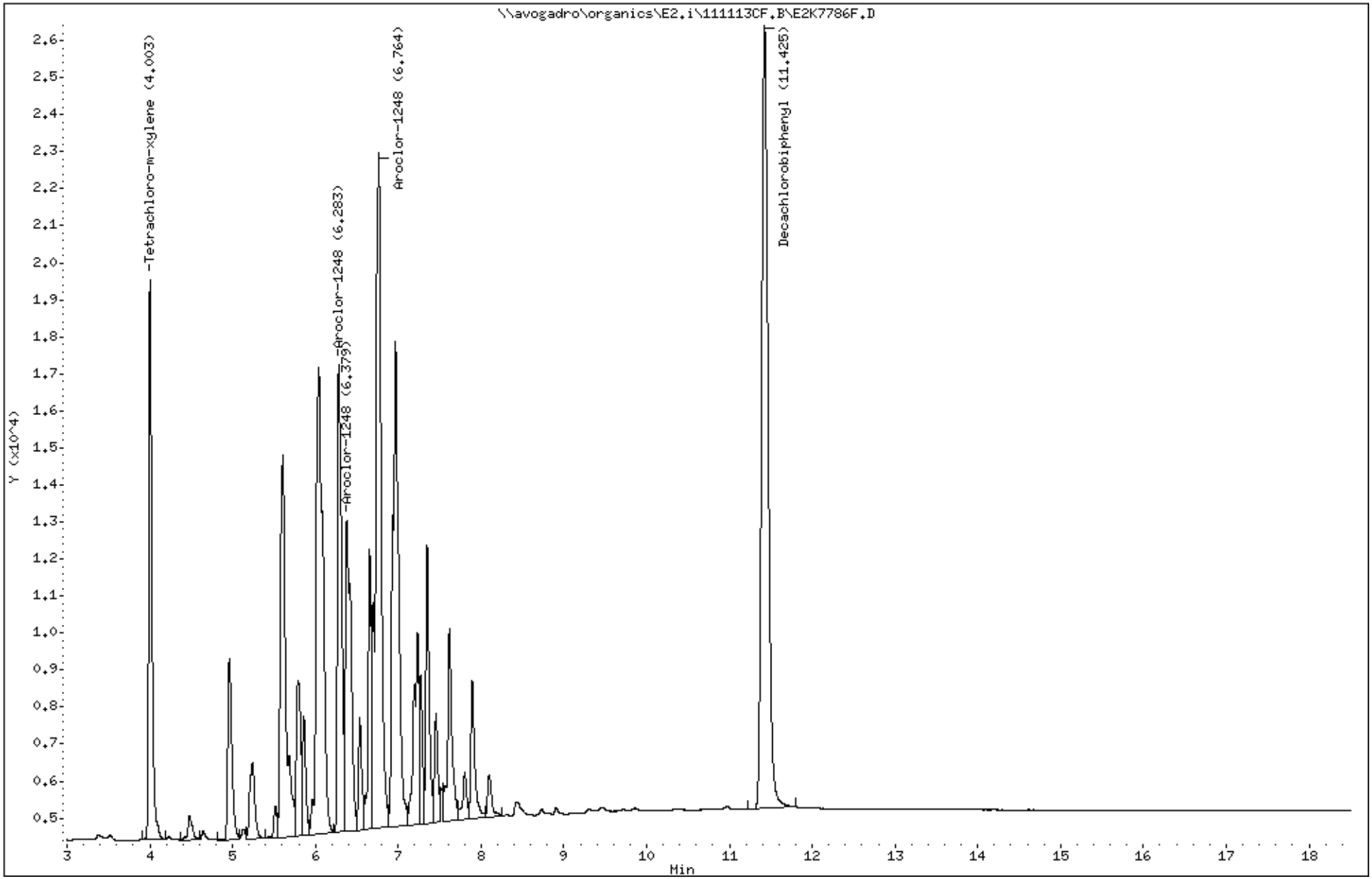
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.003	4.001	0.002	395769	0.02000	0.020			(a)
7 Aroclor-1248					CAS #: 12672-29-6			
6.283	6.282	0.001	433598	0.40000	0.40	80.00- 120.00	100.00	(a)
6.379	6.378	0.001	399604	0.40000	0.39	72.61- 112.61	92.16	
6.763	6.763	0.000	904252	0.40000	0.43	165.48- 205.48	208.55	
Average of Peak Amounts =					0.40667			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.425	11.422	0.003	1143315	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\111113CF.B\E2K7786F.D
Date : 13-NOV-2011 21:50
Client ID: AR12483K2
Instrument: E2.i
Sample Info: AR12483K2,AR12483K2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7786R.D
Report Date: 17-Nov-2011 11:09

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CR.B\E2K7786R.D
Lab Smp Id: AR12483K2 Client Smp ID: AR12483K2
Inj Date : 13-NOV-2011 21:50
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12483K2,AR12483K2,,ar1248.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CR.B\E2_ARO_5_R.m
Meth Date : 17-Nov-2011 10:48 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:01 Cal File: E2K7805R.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

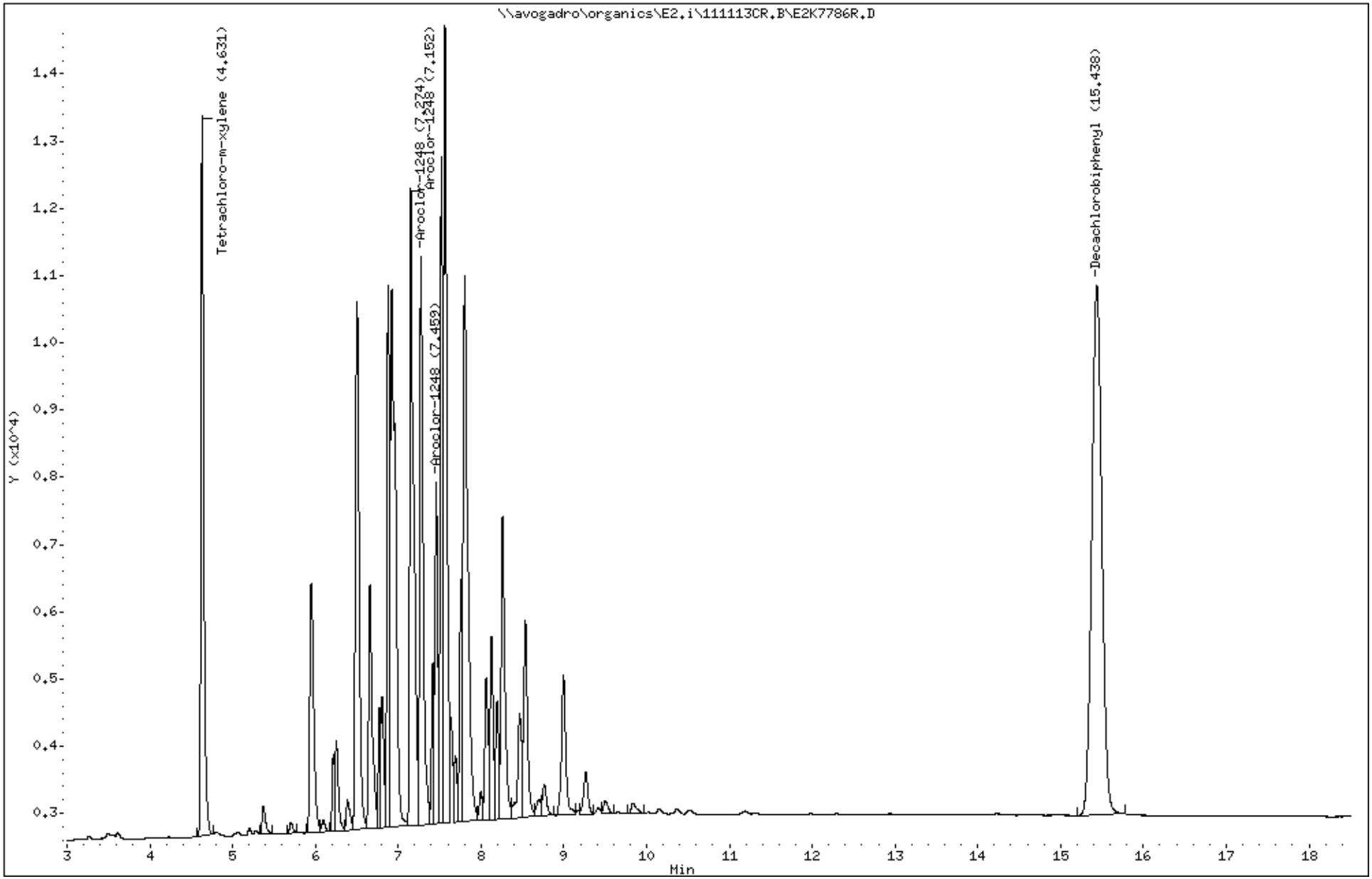
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.630	4.629	0.001	256227	0.02000	0.020			(a)
5 Aroclor-1248						CAS #: 12672-29-6		
7.152	7.150	0.002	312738	0.40000	0.40	80.00- 120.00	100.00	(a)
7.274	7.272	0.002	249056	0.40000	0.40	60.19- 100.19	79.64	
7.459	7.457	0.002	119021	0.40000	0.39	18.95- 58.95	38.06	
Average of Peak Amounts =					0.39667			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.437	15.432	0.005	666234	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\111113CR.B\E2K7786R.D
Date : 13-NOV-2011 21:50
Client ID: AR12483K2
Instrument: E2.i
Sample Info: AR12483K2,AR12483K2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7787F.D
Report Date: 17-Nov-2011 11:08

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CF.B\E2K7787F.D
Lab Smp Id: AR12484K2 Client Smp ID: AR12484K2
Inj Date : 13-NOV-2011 22:11
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12484K2,AR12484K2,,ar1248.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CF.B\E2_ARO_5_F.m
Meth Date : 17-Nov-2011 11:00 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:22 Cal File: E2K7806F.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

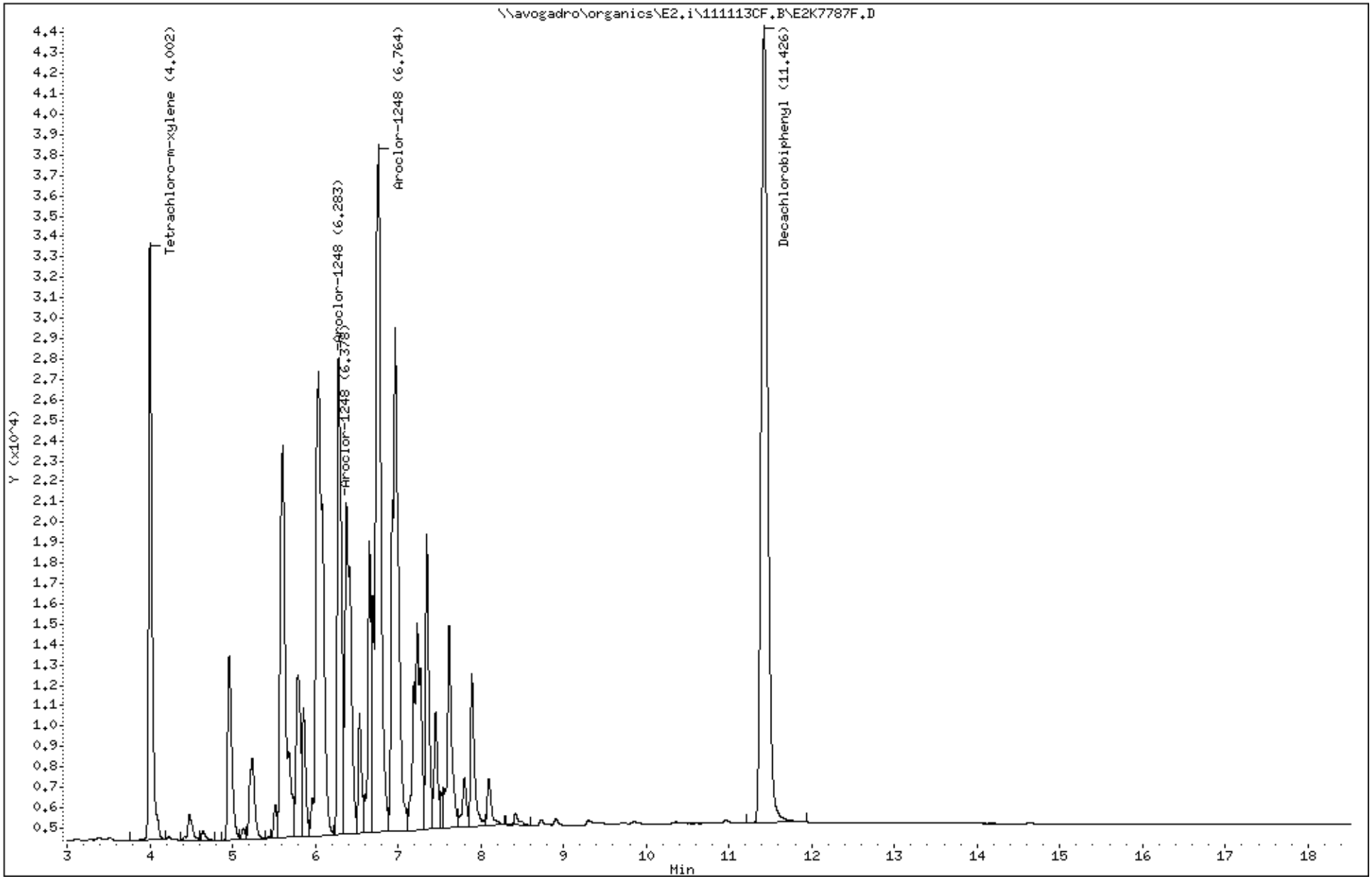
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.002	4.001	0.001	804264	0.04000	0.040			(a)
7 Aroclor-1248					CAS #: 12672-29-6			
6.282	6.282	0.000	815380	0.80000	0.75	80.00- 120.00	100.00	(a)
6.378	6.378	0.000	783951	0.80000	0.77	72.61- 112.61	96.15	
6.763	6.763	0.000	1703950	0.80000	0.81	165.48- 205.48	208.98	
Average of Peak Amounts =					0.77667			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.425	11.422	0.003	2182310	0.08000	0.076			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7787F.D
Date : 13-NOV-2011 22:11
Client ID: AR12484K2
Instrument: E2.i
Sample Info: AR12484K2,AR12484K2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7787R.D
Report Date: 17-Nov-2011 11:09

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report
Data file : \\avogadro\organics\E2.i\111113CR.B\E2K7787R.D
Lab Smp Id: AR12484K2 Client Smp ID: AR12484K2
Inj Date : 13-NOV-2011 22:11
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12484K2,AR12484K2,,ar1248.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CR.B\E2_ARO_5_R.m
Meth Date : 17-Nov-2011 10:48 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:22 Cal File: E2K7806R.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

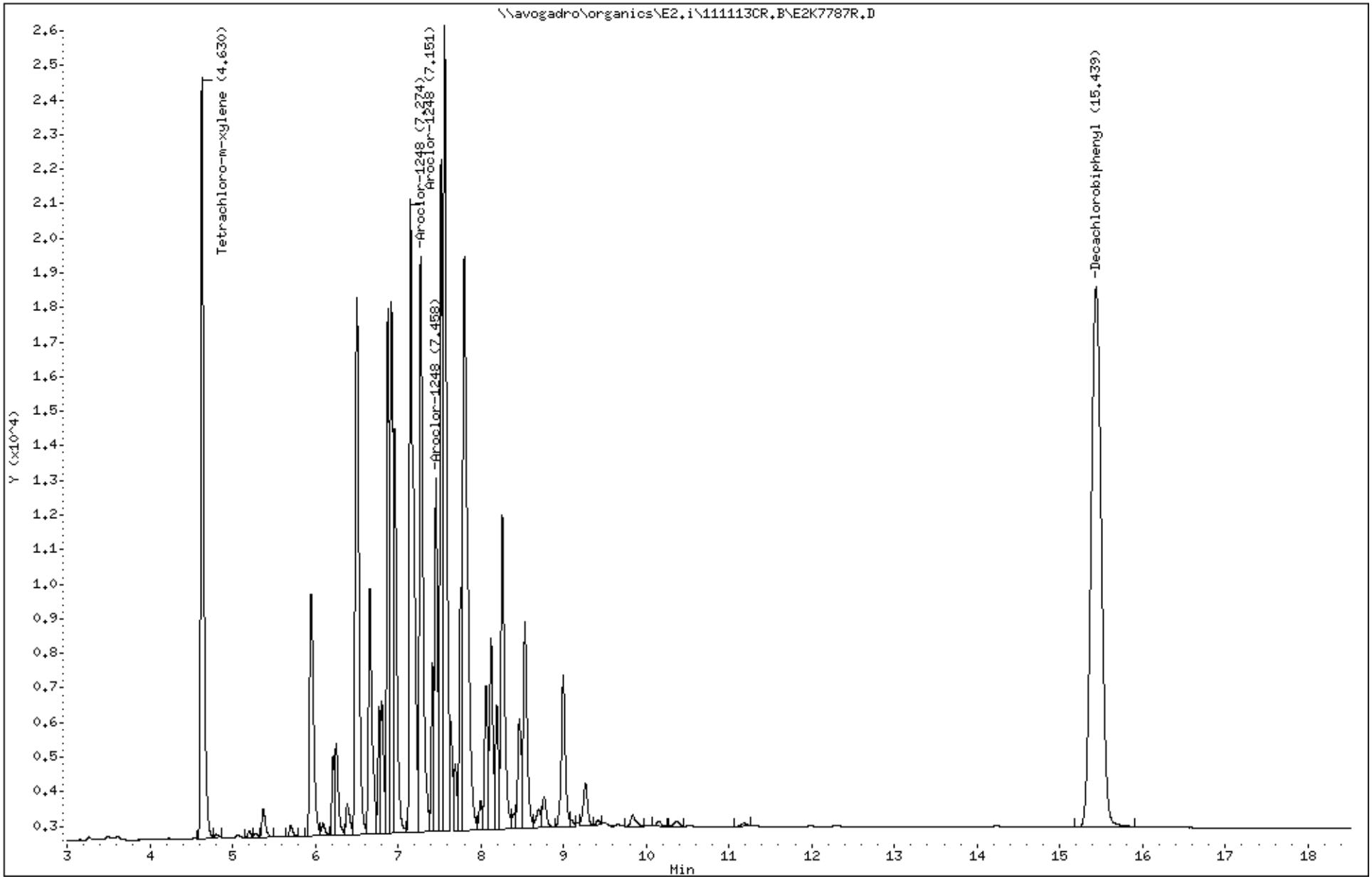
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.630	4.629	0.001	546100	0.04000	0.042			(a)
5 Aroclor-1248						CAS #: 12672-29-6		
7.151	7.150	0.001	616761	0.80000	0.79	80.00- 120.00	100.00	(a)
7.273	7.272	0.001	500578	0.80000	0.80	60.19- 100.19	81.16	
7.458	7.457	0.001	240005	0.80000	0.79	18.95- 58.95	38.91	
		Average of Peak Amounts =			0.79333			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.438	15.432	0.006	1335633	0.08000	0.079			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7787R.D
Date : 13-NOV-2011 22:11
Client ID: AR12484K2
Instrument: E2.i
Sample Info: AR12484K2,AR12484K2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7788F.D
Report Date: 17-Nov-2011 11:08

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

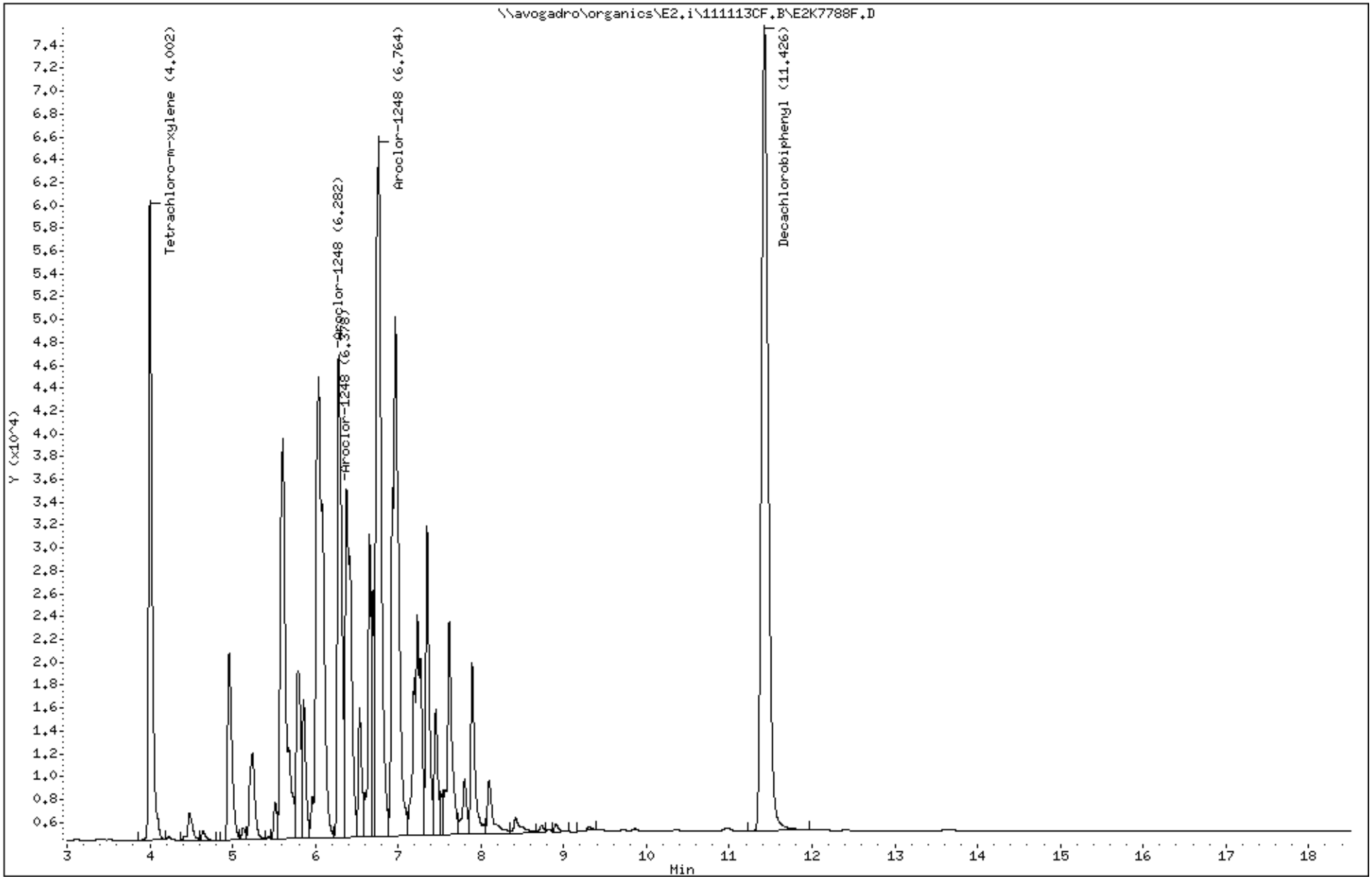
Data file : \\avogadro\organics\E2.i\111113CF.B\E2K7788F.D
Lab Smp Id: AR12485K2 Client Smp ID: AR12485K2
Inj Date : 13-NOV-2011 22:32
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12485K2,AR12485K2,,ar1248.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CF.B\E2_ARO_5_F.m
Meth Date : 17-Nov-2011 11:00 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807F.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		
4.002	4.001	0.001	1579236	0.08000	0.080			
7 Aroclor-1248						CAS #: 12672-29-6		
6.282	6.282	0.000	1491996	1.60000	1.4	80.00- 120.00		100.00
6.378	6.378	0.000	1498950	1.60000	1.5	72.61- 112.61		100.47
6.763	6.763	0.000	2752982	1.60000	1.3	165.48- 205.48		184.52
Average of Peak Amounts =					1.40000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.426	11.422	0.004	4004178	0.16000	0.14			

Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7788F.D
Date : 13-NOV-2011 22:32
Client ID: AR12485K2
Instrument: E2.i
Sample Info: AR12485K2,AR12485K2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7788R.D
Report Date: 17-Nov-2011 11:09

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

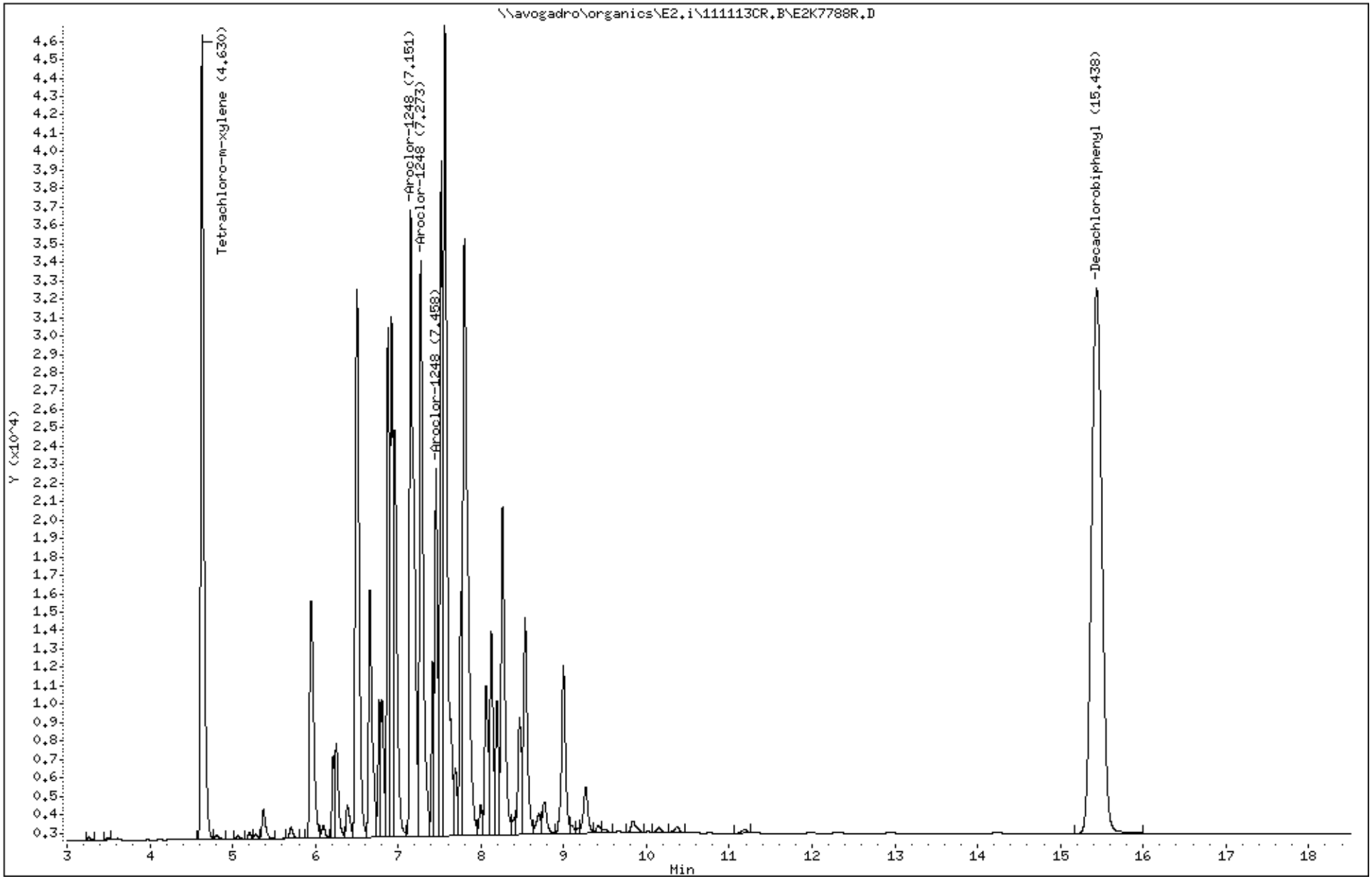
Data file : \\avogadro\organics\E2.i\111113CR.B\E2K7788R.D
Lab Smp Id: AR12485K2 Client Smp ID: AR12485K2
Inj Date : 13-NOV-2011 22:32
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12485K2,AR12485K2,,ar1248.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CR.B\E2_ARO_5_R.m
Meth Date : 17-Nov-2011 10:48 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807R.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		
4.629	4.629	0.000	1123168	0.08000	0.087			
5 Aroclor-1248						CAS #: 12672-29-6		
7.150	7.150	0.000	1170755	1.60000	1.5	80.00- 120.00		100.00
7.272	7.272	0.000	972513	1.60000	1.6	60.19- 100.19		83.07
7.457	7.457	0.000	471852	1.60000	1.6	18.95- 58.95		40.30
Average of Peak Amounts =					1.56667			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.437	15.432	0.005	2583493	0.16000	0.15			

Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7788R.D
Date : 13-NOV-2011 22:32
Client ID: AR12485K2
Instrument: E2.i
Sample Info: AR12485K2,AR12485K2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7789F.D
Report Date: 17-Nov-2011 11:08

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CF.B\E2K7789F.D
Lab Smp Id: AR12541K2 Client Smp ID: AR12541K2
Inj Date : 13-NOV-2011 22:52
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12541K2,AR12541K2,,ar1254.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CF.B\E2_ARO_5_F.m
Meth Date : 17-Nov-2011 11:00 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 09:59 Cal File: E2K7802F.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			
4.003	4.001	0.002	95255	0.00500	0.0048			(a)
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.424	11.422	0.002	311911	0.01000	0.011			(a)
8 Aroclor-1254					CAS #: 11097-69-1			
6.968	6.965	0.003	271387	0.10000	0.11	80.00- 120.00	100.00	(a)
7.350	7.347	0.003	180564	0.10000	0.11	49.74- 89.74	66.53	
7.619	7.616	0.003	150698	0.10000	0.11	37.50- 77.50	55.53	
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\11111113CF.B\E2K7789F.D
Date : 13-NOV-2011 22:52
Client ID: AR1254IK2
Sample Info: AR1254IK2,AR1254IK2,,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\111113CR.B\E2K7789R.D
Report Date: 17-Nov-2011 11:09

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CR.B\E2K7789R.D
Lab Smp Id: AR12541K2 Client Smp ID: AR12541K2
Inj Date : 13-NOV-2011 22:52
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12541K2,AR12541K2,,ar1254.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CR.B\E2_ARO_5_R.m
Meth Date : 17-Nov-2011 10:48 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 09:59 Cal File: E2K7802R.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

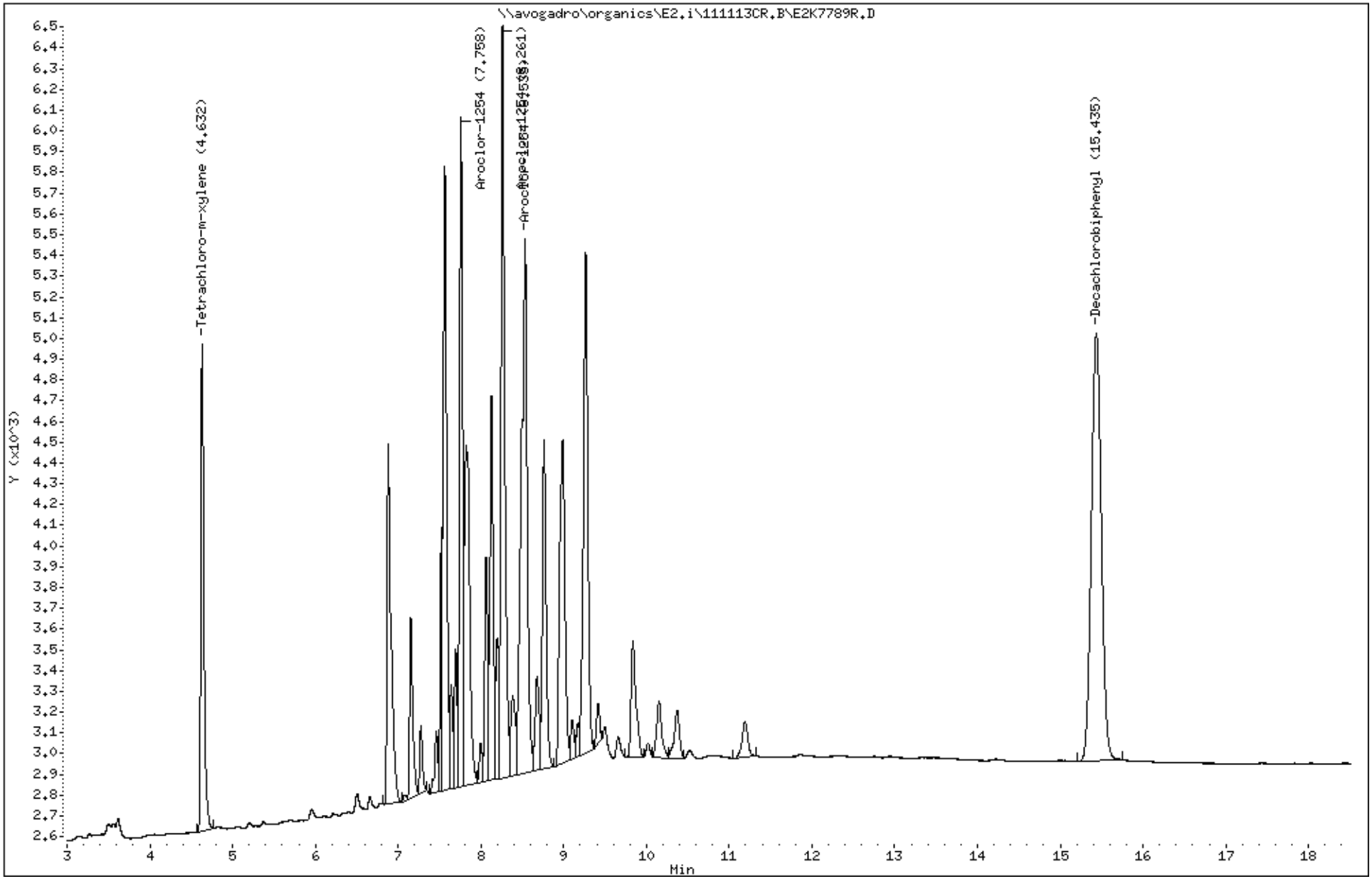
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.631	4.629	0.002	58286	0.00500	0.0045			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.435	15.432	0.003	172522	0.01000	0.010			(a)
7 Aroclor-1254						CAS #: 11097-69-1		
7.758	7.754	0.004	83398	0.10000	0.11	80.00- 120.00	100.00	(a)
8.261	8.258	0.003	111861	0.10000	0.100	127.94- 167.94	134.13	
8.534	8.531	0.003	127989	0.10000	0.11	147.62- 187.62	153.47	
Average of Peak Amounts =					0.10667			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7789R.D
Date : 13-NOV-2011 22:52
Client ID: AR12541K2
Instrument: E2.i
Sample Info: AR12541K2,AR12541K2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7791F.D
Report Date: 17-Nov-2011 11:08

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CF.B\E2K7791F.D
Lab Smp Id: AR12542K2 Client Smp ID: AR12542K2
Inj Date : 13-NOV-2011 23:34
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12542K2,AR12542K2,,ar1254.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CF.B\E2_ARO_5_F.m
Meth Date : 17-Nov-2011 11:00 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 10:40 Cal File: E2K7804F.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

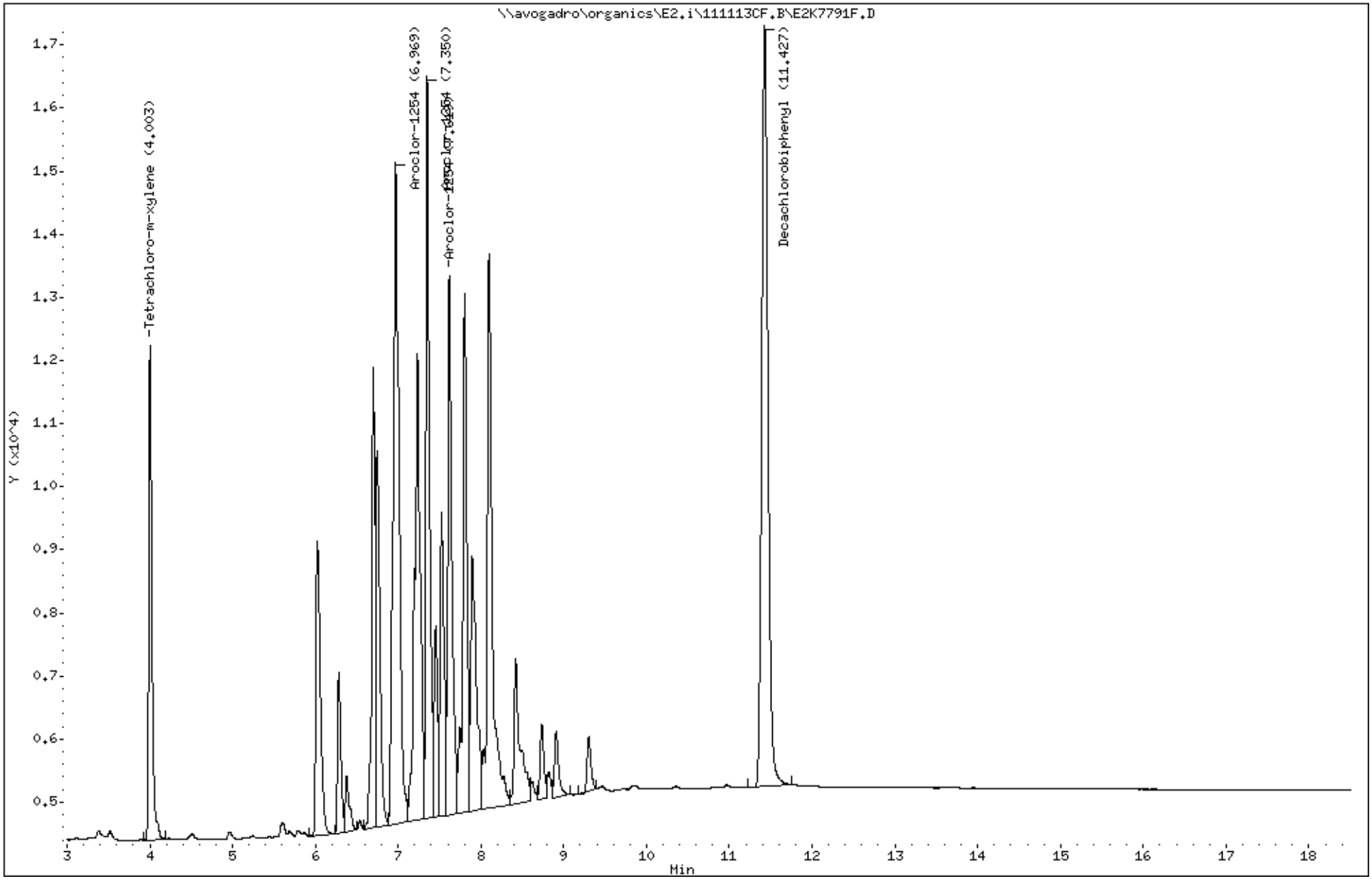
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.003	4.001	0.002	205025	0.01000	0.010			(a)
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.426	11.422	0.004	638363	0.02000	0.022			(a)
8 Aroclor-1254					CAS #: 11097-69-1			
6.968	6.965	0.003	516949	0.20000	0.22	80.00- 120.00	100.00	(a)
7.350	7.347	0.003	350200	0.20000	0.21	49.74- 89.74	67.74	
7.618	7.616	0.002	288287	0.20000	0.21	37.50- 77.50	55.77	
Average of Peak Amounts =					0.21333			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7791F.D
Date : 13-NOV-2011 23:34
Client ID: AR12542K2
Instrument: E2.i
Sample Info: AR12542K2,AR12542K2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7791R.D
Report Date: 17-Nov-2011 11:09

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CR.B\E2K7791R.D
Lab Smp Id: AR12542K2 Client Smp ID: AR12542K2
Inj Date : 13-NOV-2011 23:34
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12542K2,AR12542K2,,ar1254.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CR.B\E2_ARO_5_R.m
Meth Date : 17-Nov-2011 10:48 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 10:40 Cal File: E2K7804R.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		
4.631	4.629	0.002	128490	0.01000	0.0099			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.438	15.432	0.006	361725	0.02000	0.021			(a)
7 Aroclor-1254						CAS #: 11097-69-1		
7.757	7.754	0.003	164119	0.20000	0.21	80.00- 120.00	100.00	(a)
8.260	8.258	0.002	229753	0.20000	0.20	127.94- 167.94	139.99	
8.533	8.531	0.002	260440	0.20000	0.22	147.62- 187.62	158.69	
Average of Peak Amounts =					0.21000			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111113CR.B\E2K779R.D
Date : 13-NOV-2011 23:34
Client ID: AR1254K2
Sample Info: AR1254K2,AR1254K2,,ar1254,sub,,
Volume Injected (uL): 1.0
Column phase: CLPPest1I
Instrument: E2.i
Operator: DL SRC: DL
Column diameter: 0.32
\\avogadro\organics\E2.i\111113CR.B\E2K779R.D
Min
Y (x10^4)
-Decachlorobiphenyl (15.438)
-Aroclor-1254 (7.757)
-Tetrachloro-m-xylene (4.631)

Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7792F.D
Report Date: 17-Nov-2011 11:08

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CF.B\E2K7792F.D
Lab Smp Id: AR12543K2 Client Smp ID: AR12543K2
Inj Date : 13-NOV-2011 23:56
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12543K2,AR12543K2,,ar1254.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CF.B\E2_ARO_5_F.m
Meth Date : 17-Nov-2011 11:00 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:01 Cal File: E2K7805F.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

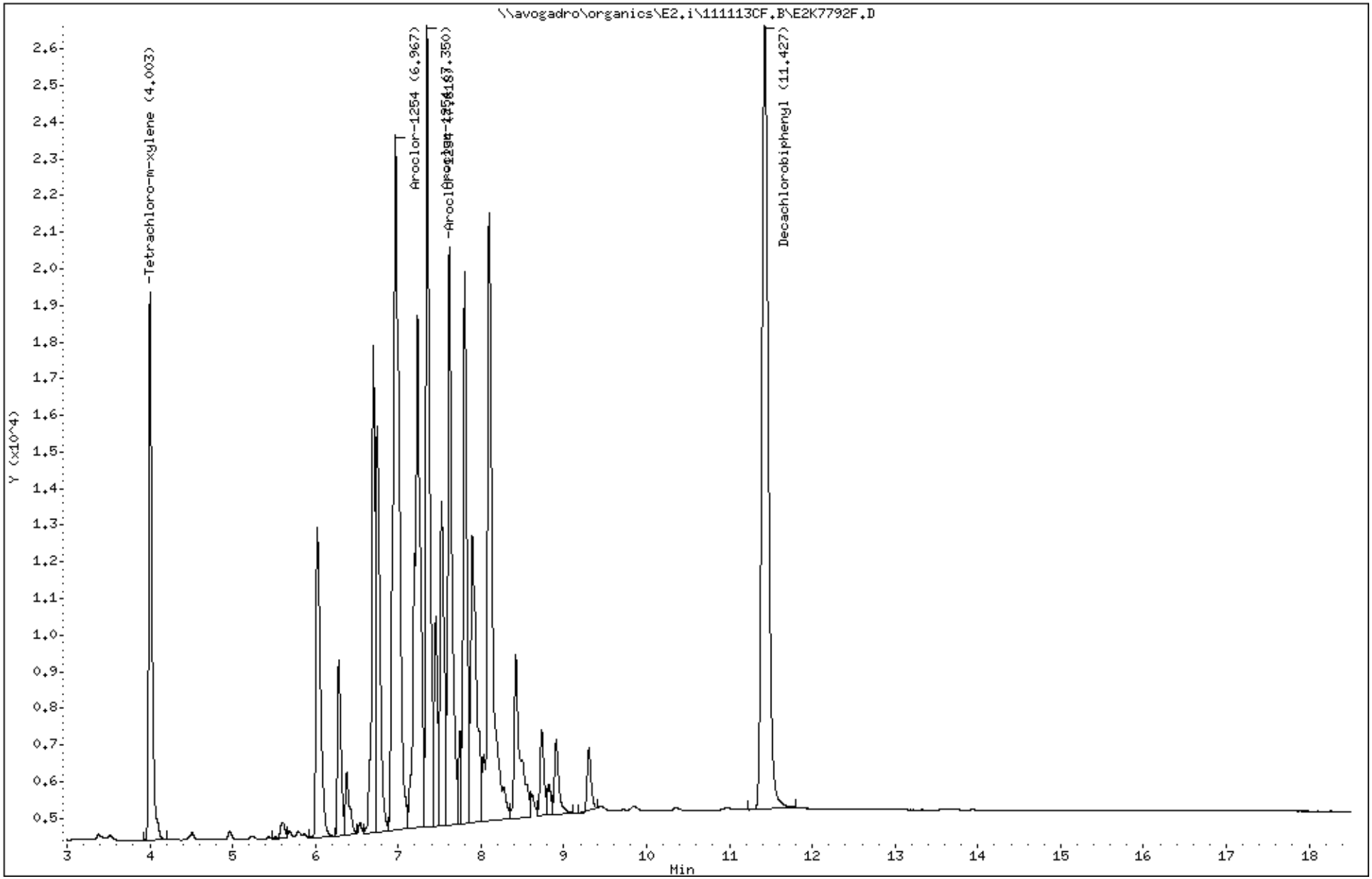
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.003	4.001	0.002	394941	0.02000	0.020			(a)
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.426	11.422	0.004	1159070	0.04000	0.040			(a)
8 Aroclor-1254					CAS #: 11097-69-1			
6.967	6.965	0.002	949840	0.40000	0.40	80.00- 120.00	100.00	(a)
7.349	7.347	0.002	661625	0.40000	0.40	49.74- 89.74	69.66	
7.617	7.616	0.001	538338	0.40000	0.40	37.50- 77.50	56.68	
Average of Peak Amounts =					0.40000			

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7792F.D
Date : 13-NOV-2011 23:56
Client ID: AR12543K2
Instrument: E2.i
Sample Info: AR12543K2,AR12543K2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7792R.D
Report Date: 17-Nov-2011 11:09

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CR.B\E2K7792R.D
Lab Smp Id: AR12543K2 Client Smp ID: AR12543K2
Inj Date : 13-NOV-2011 23:56
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12543K2,AR12543K2,,ar1254.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CR.B\E2_ARO_5_R.m
Meth Date : 17-Nov-2011 10:48 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:01 Cal File: E2K7805R.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

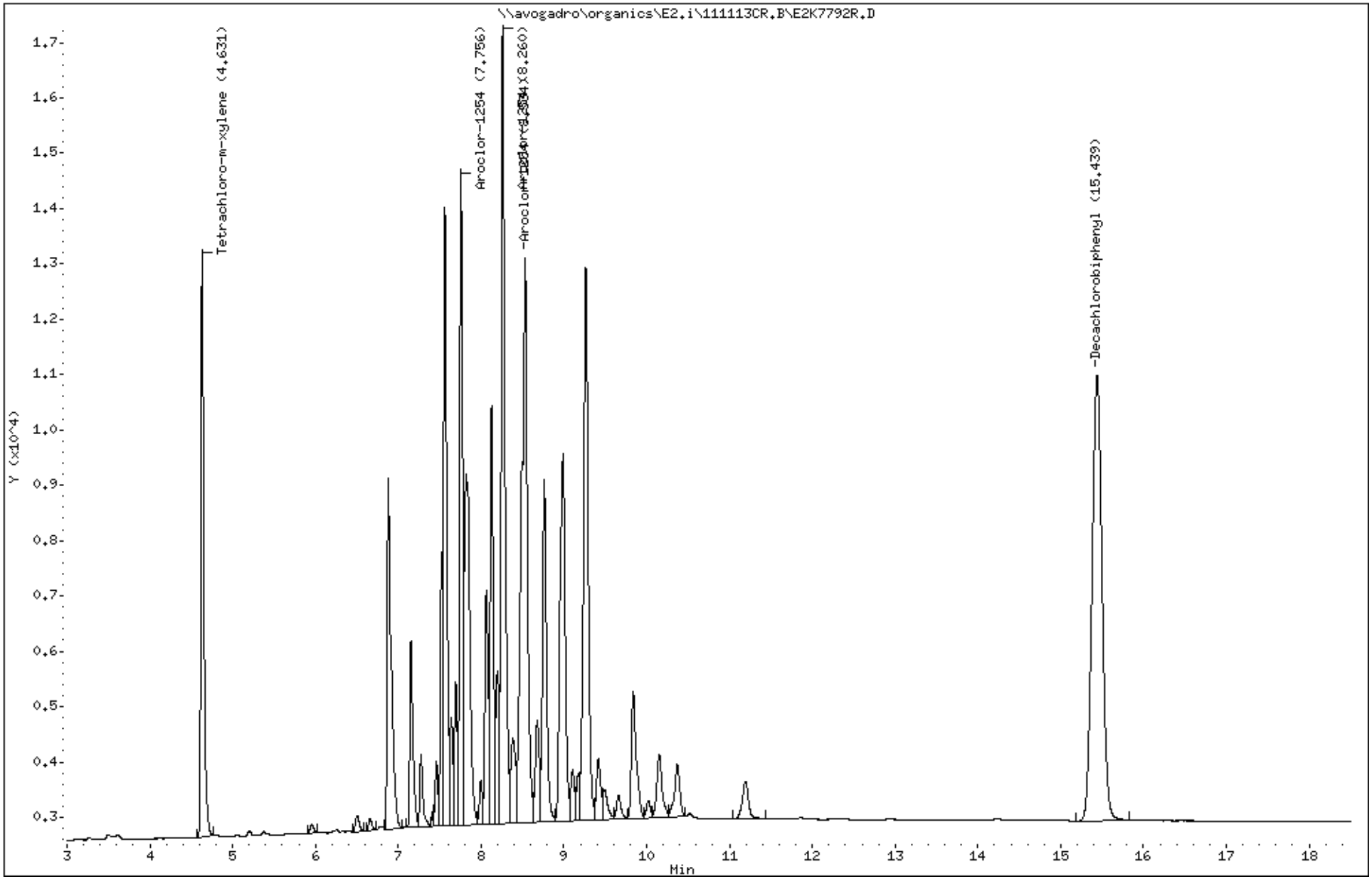
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.630	4.629	0.001	256431	0.02000	0.020			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.439	15.432	0.007	677071	0.04000	0.040			(a)
7 Aroclor-1254						CAS #: 11097-69-1		
7.756	7.754	0.002	308735	0.40000	0.40	80.00- 120.00	100.00	(a)
8.260	8.258	0.002	452132	0.40000	0.40	127.94- 167.94	146.45	
8.533	8.531	0.002	508987	0.40000	0.43	147.62- 187.62	164.86	
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\111113CR.B\E2K7792R.D
Date : 13-NOV-2011 23:56
Client ID: AR12543K2
Instrument: E2.i
Sample Info: AR12543K2,AR12543K2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7793F.D
Report Date: 17-Nov-2011 11:08

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CF.B\E2K7793F.D
Lab Smp Id: AR12544K2 Client Smp ID: AR12544K2
Inj Date : 14-NOV-2011 00:16
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12544K2,AR12544K2,,ar1254.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CF.B\E2_ARO_5_F.m
Meth Date : 17-Nov-2011 11:00 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:22 Cal File: E2K7806F.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

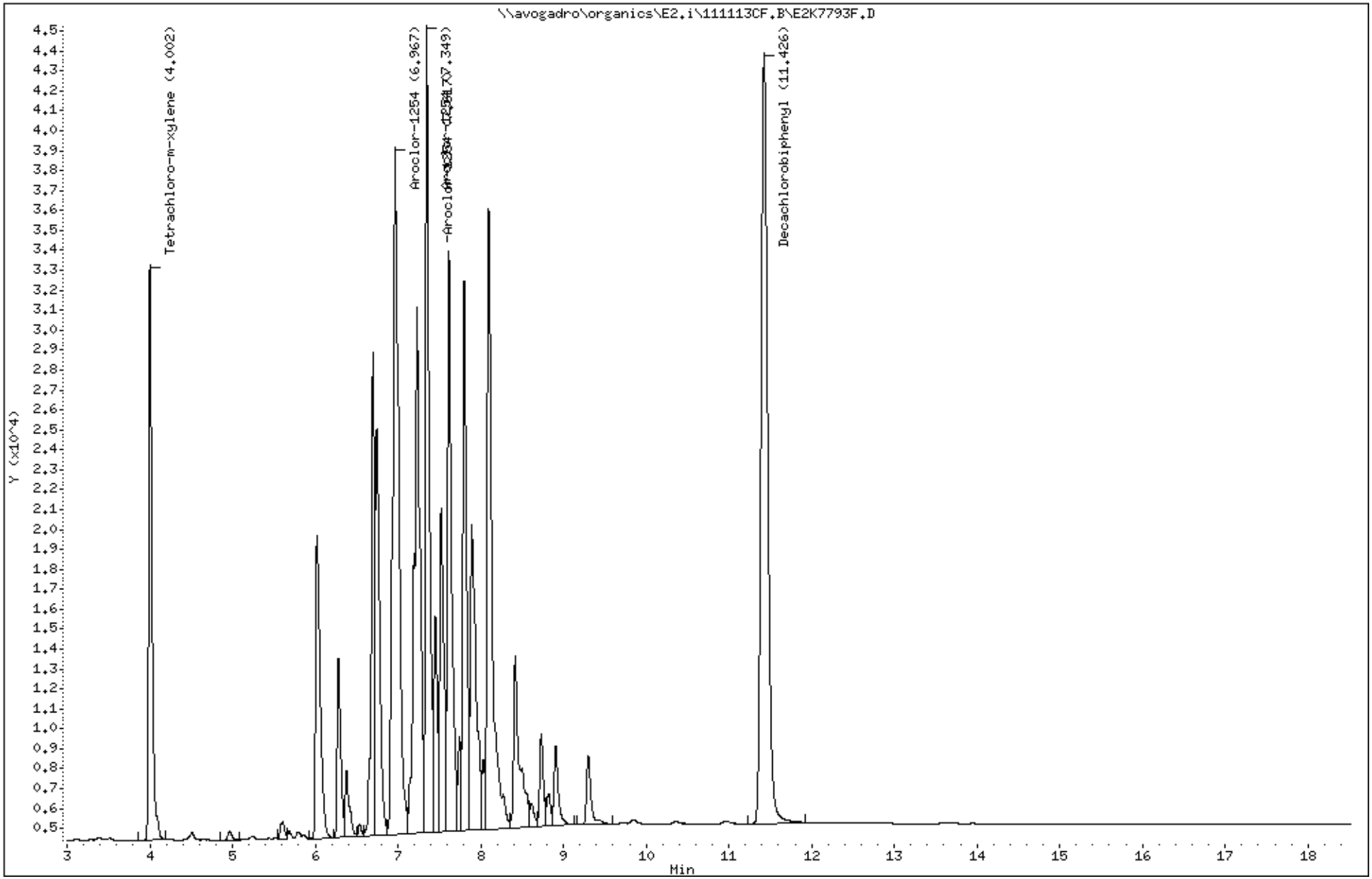
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.002	4.001	0.001	788501	0.04000	0.040			(a)
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.426	11.422	0.004	2164077	0.08000	0.075			
8 Aroclor-1254					CAS #: 11097-69-1			
6.966	6.965	0.001	1745915	0.80000	0.74	80.00- 120.00	100.00(a)	
7.349	7.347	0.002	1246403	0.80000	0.76	49.74- 89.74	71.39	
7.617	7.616	0.001	1007846	0.80000	0.75	37.50- 77.50	57.73	
Average of Peak Amounts =					0.75000			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7793F.D
Date : 14-NOV-2011 00:16
Client ID: AR12544K2
Instrument: E2.i
Sample Info: AR12544K2,AR12544K2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7793R.D
Report Date: 17-Nov-2011 11:09

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CR.B\E2K7793R.D
Lab Smp Id: AR12544K2 Client Smp ID: AR12544K2
Inj Date : 14-NOV-2011 00:16
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12544K2,AR12544K2,,ar1254.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CR.B\E2_ARO_5_R.m
Meth Date : 17-Nov-2011 10:48 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:22 Cal File: E2K7806R.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

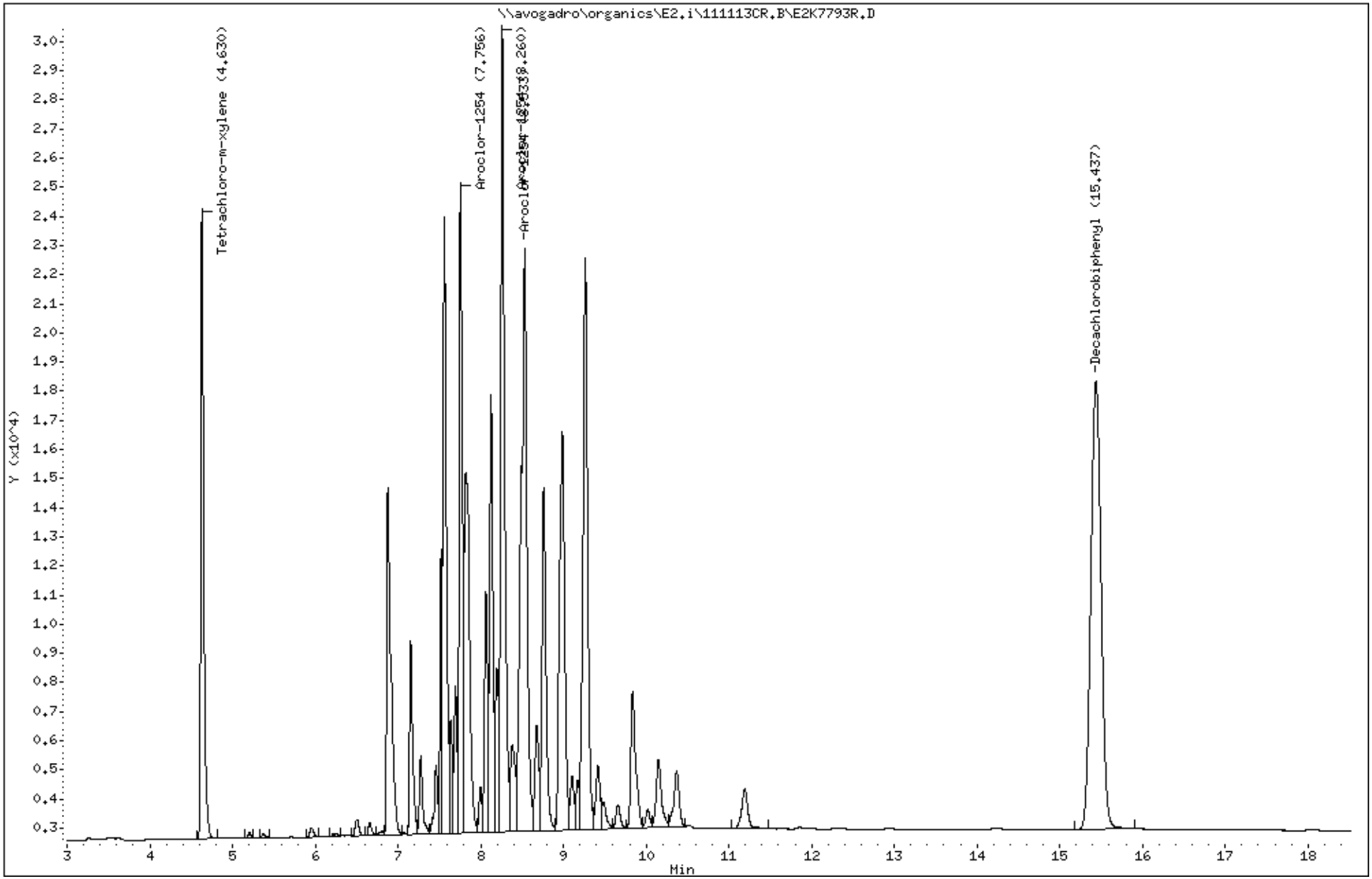
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.630	4.629	0.001	535748	0.04000	0.041			(a)
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.437	15.432	0.005	1324222	0.08000	0.078			
7 Aroclor-1254					CAS #: 11097-69-1			
7.755	7.754	0.001	581718	0.80000	0.76	80.00- 120.00	100.00(a)	
8.259	8.258	0.001	893526	0.80000	0.80	127.94- 167.94	153.60	
8.532	8.531	0.001	1000495	0.80000	0.84	147.62- 187.62	171.99	
Average of Peak Amounts =					0.80000			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7793R.D
Date : 14-NOV-2011 00:16
Client ID: AR12544K2
Instrument: E2.i
Sample Info: AR12544K2,AR12544K2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7794F.D
Report Date: 17-Nov-2011 11:08

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

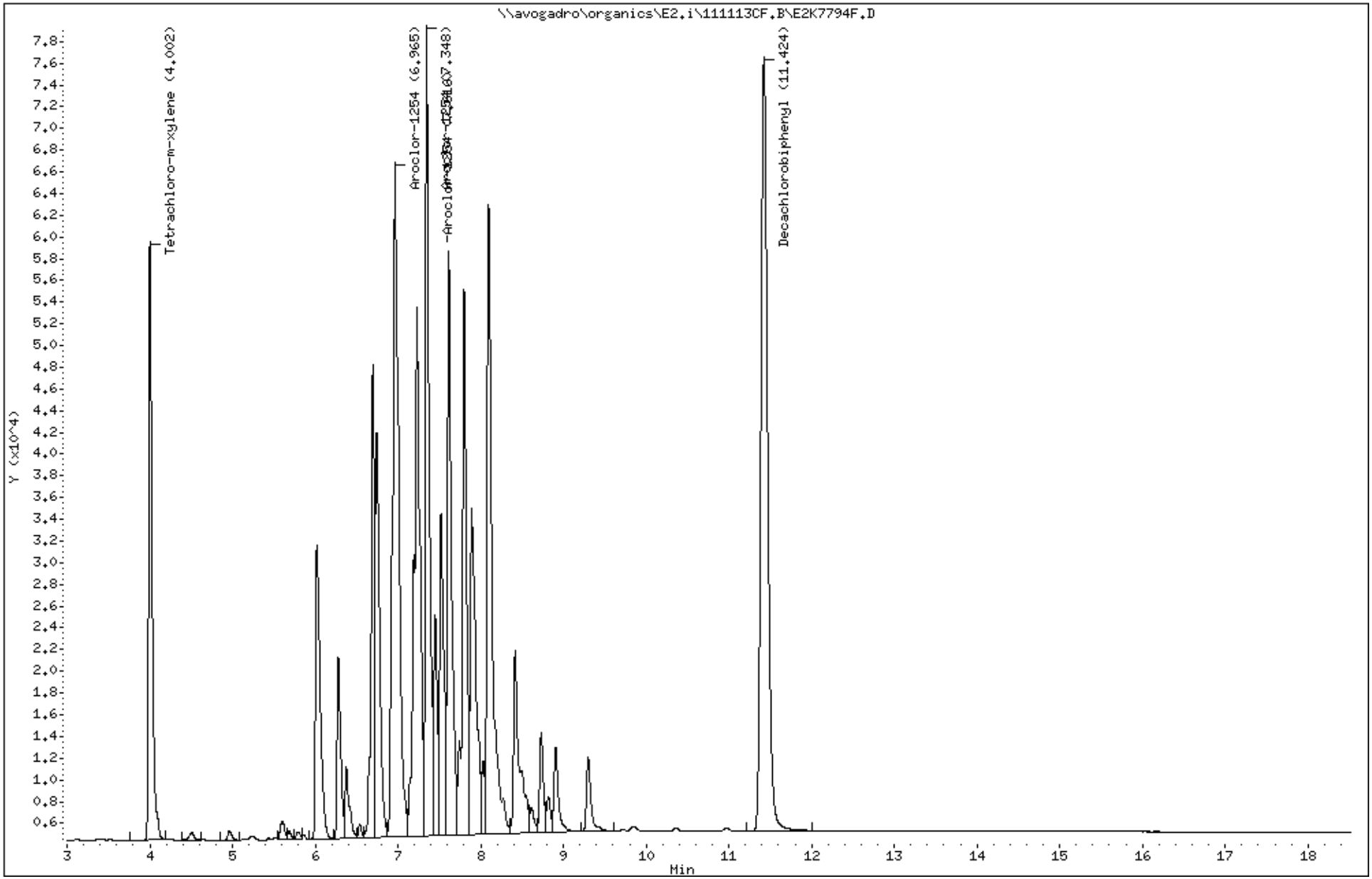
Data file : \\avogadro\organics\E2.i\111113CF.B\E2K7794F.D
Lab Smp Id: AR12545K2 Client Smp ID: AR12545K2
Inj Date : 14-NOV-2011 00:37
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12545K2,AR12545K2,,ar1254.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CF.B\E2_ARO_5_F.m
Meth Date : 17-Nov-2011 11:00 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807F.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		
4.002	4.001	0.001	1573173	0.08000	0.080			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.424	11.422	0.002	4031822	0.16000	0.14			
8 Aroclor-1254						CAS #: 11097-69-1		
6.965	6.965	0.000	3175035	1.60000	1.3	80.00- 120.00		100.00
7.347	7.347	0.000	2322697	1.60000	1.4	49.74- 89.74		73.16
7.616	7.616	0.000	1851219	1.60000	1.4	37.50- 77.50		58.31
Average of Peak Amounts =					1.36667			

Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7794F.D
Date : 14-NOV-2011 00:37
Client ID: AR12545K2
Instrument: E2.i
Sample Info: AR12545K2,AR12545K2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7794R.D
Report Date: 17-Nov-2011 11:09

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

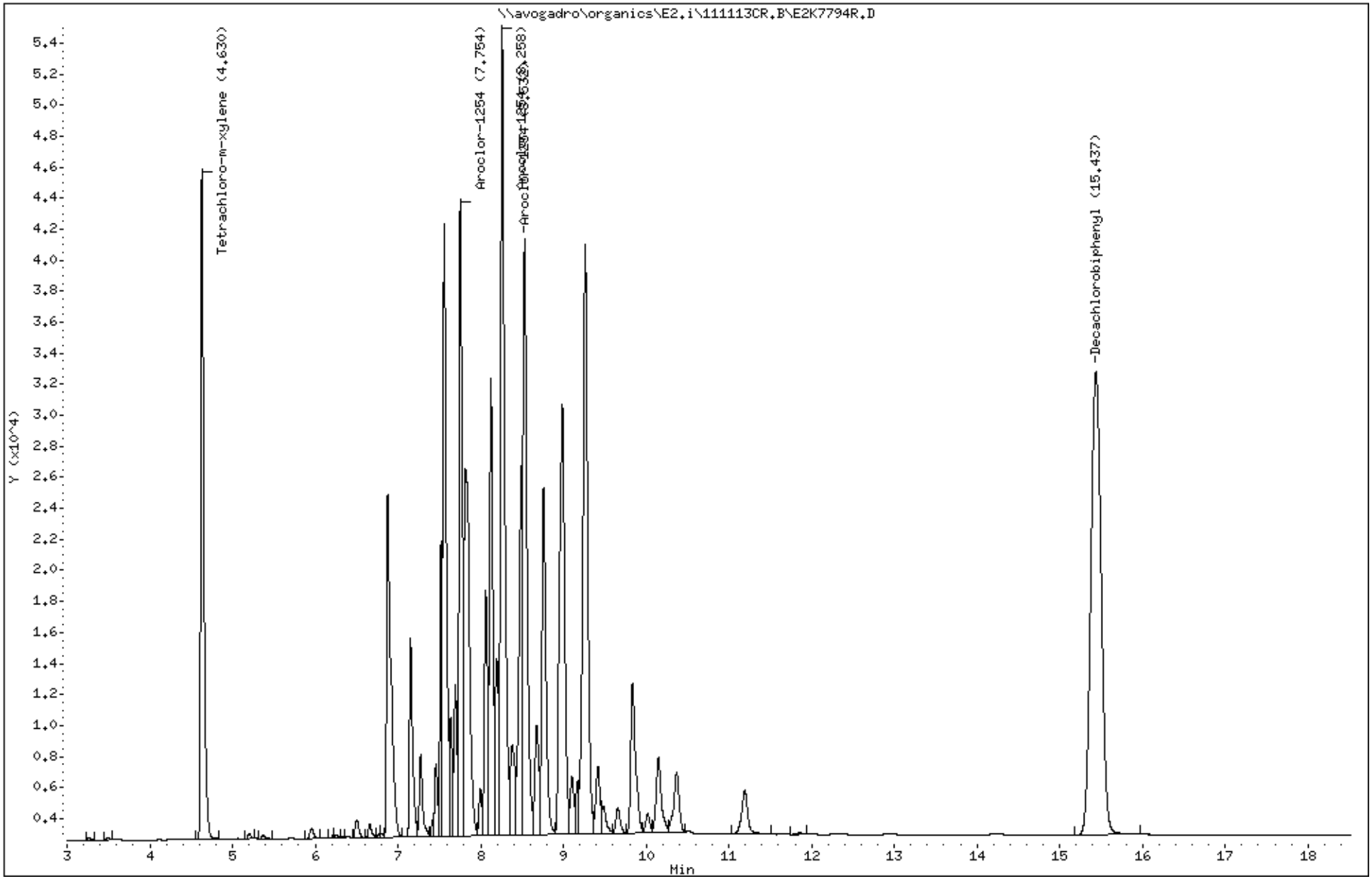
Data file : \\avogadro\organics\E2.i\111113CR.B\E2K7794R.D
Lab Smp Id: AR12545K2 Client Smp ID: AR12545K2
Inj Date : 14-NOV-2011 00:37
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12545K2,AR12545K2,,ar1254.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CR.B\E2_ARO_5_R.m
Meth Date : 17-Nov-2011 10:48 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807R.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		
4.630	4.629	0.001	1120844	0.08000	0.086			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.436	15.432	0.004	2601581	0.16000	0.15			
7 Aroclor-1254						CAS #: 11097-69-1		
7.754	7.754	0.000	1077639	1.60000	1.4	80.00- 120.00		100.00
8.258	8.258	0.000	1730664	1.60000	1.5	127.94- 167.94		160.60
8.531	8.531	0.000	1333398	1.60000	1.1	147.62- 187.62		123.73
Average of Peak Amounts =					1.33333			

Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7794R.D
Date : 14-NOV-2011 00:37
Client ID: AR12545K2
Instrument: E2.i
Sample Info: AR12545K2,AR12545K2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7795F.D
Report Date: 17-Nov-2011 11:08

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CF.B\E2K7795F.D
Lab Smp Id: AR12623K2 Client Smp ID: AR12623K2
Inj Date : 14-NOV-2011 00:58
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12623K2,AR12623K2,,ar1262.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CF.B\E2_ARO_5_F.m
Meth Date : 17-Nov-2011 11:00 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:01 Cal File: E2K7805F.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

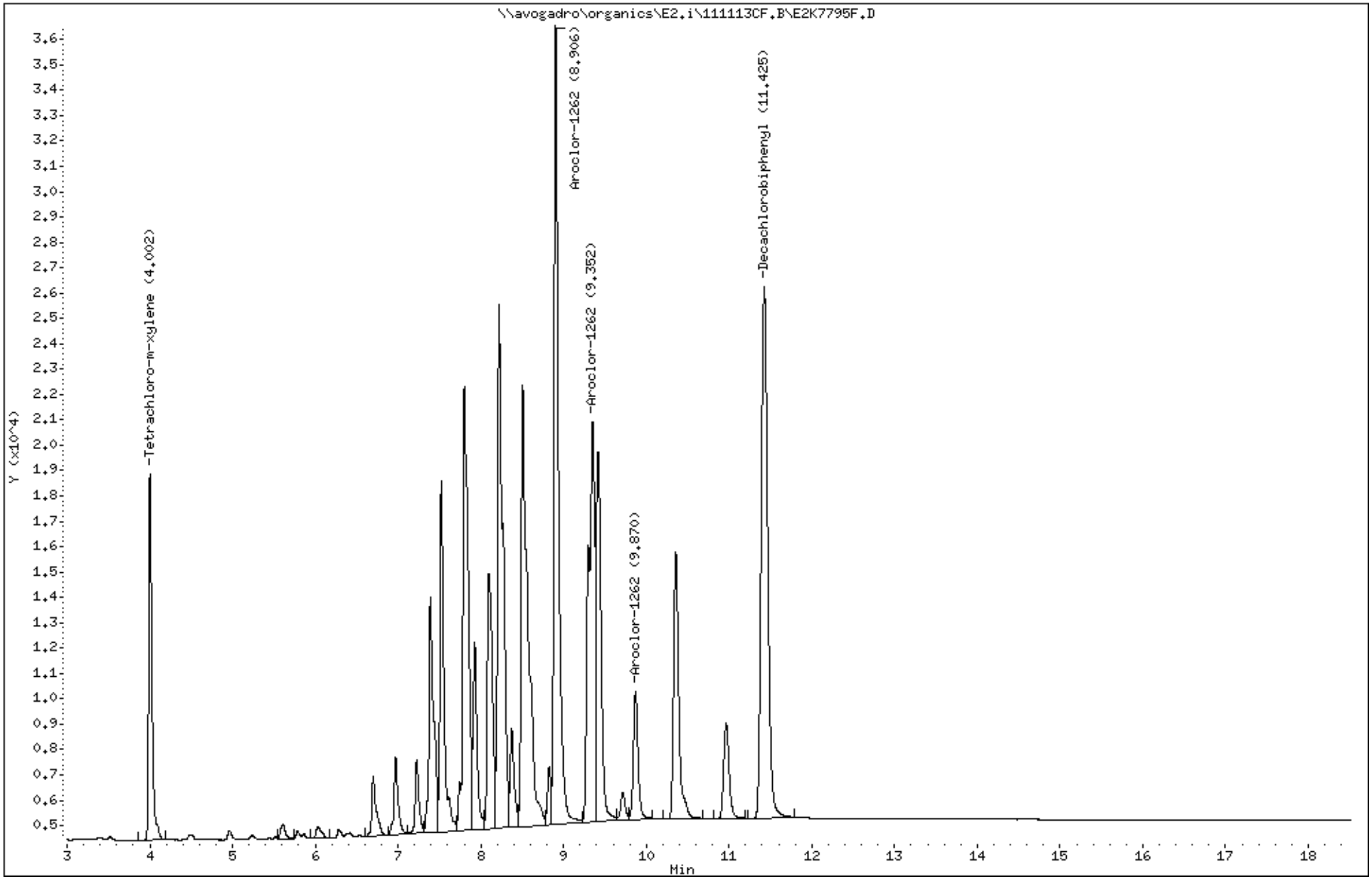
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.002	4.001	0.001	388944	0.02000	0.020			(a)
2 Aroclor-1262					CAS #: 37324-23-5			
8.905	8.905	0.000	1202365	0.40000	0.40	80.00- 120.00	100.00	
9.352	9.352	0.000	809285	0.40000	0.40	47.31- 87.31	67.31	
9.870	9.870	0.000	198313	0.40000	0.40	0.00- 36.49	16.49	
Average of Peak Amounts =				0.40000				
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.425	11.422	0.003	1139476	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\111113CF.B\E2K7795F.D
Date : 14-NOV-2011 00:58
Client ID: AR12623K2
Instrument: E2.i
Sample Info: AR12623K2,AR12623K2,,ar1262.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7795R.D
Report Date: 17-Nov-2011 11:09

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CR.B\E2K7795R.D
Lab Smp Id: AR12623K2 Client Smp ID: AR12623K2
Inj Date : 14-NOV-2011 00:58
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12623K2,AR12623K2,,ar1262.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CR.B\E2_ARO_5_R.m
Meth Date : 17-Nov-2011 10:48 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:01 Cal File: E2K7805R.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		
4.630	4.629	0.001	251618	0.02000	0.020			(a)
10 Aroclor-1262						CAS #: 37324-23-5		
11.180	11.180	0.000	507296	0.40000	0.40	80.00- 120.00	100.00	
12.355	12.355	0.000	102170	0.40000	0.40	0.14- 40.14	20.14	
12.941	12.941	0.000	244665	0.40000	0.40	28.23- 68.23	48.23	
Average of Peak Amounts =					0.40000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.436	15.432	0.004	666859	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\41111307R.B\E2K7795R.D
Date : 14-NOV-2011 00:58
Client ID: AR126223K2
Sample Info: AR126223K2,AR126223K2,,ar1262,sub,,
Volume Injected (uL): 1.0
Column phase: CLPPest11
Instrument: E2.i
Operator: DL SRC: DL
Column diameter: 0.32
\\avogadro\organics\E2.i\41111307R.B\E2K7795R.D
-Decachlorobiphenyl (15.437)
-Aroclor-1262 (12.942)
-Aroclor-1262 (12.356)
-Aroclor-1262 (11.180)
-Tetrachloro-m-xylene (4.631)
Min
Y (x10^4)

Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7796F.D
Report Date: 17-Nov-2011 11:08

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CF.B\E2K7796F.D
Lab Smp Id: AR12681K2 Client Smp ID: AR12681K2
Inj Date : 14-NOV-2011 01:19
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12681K2,AR12681K2,,ar1268.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CF.B\E2_ARO_5_F.m
Meth Date : 17-Nov-2011 11:00 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 09:59 Cal File: E2K7802F.D
Als bottle: 29 Calibration Sample, Level: 1
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

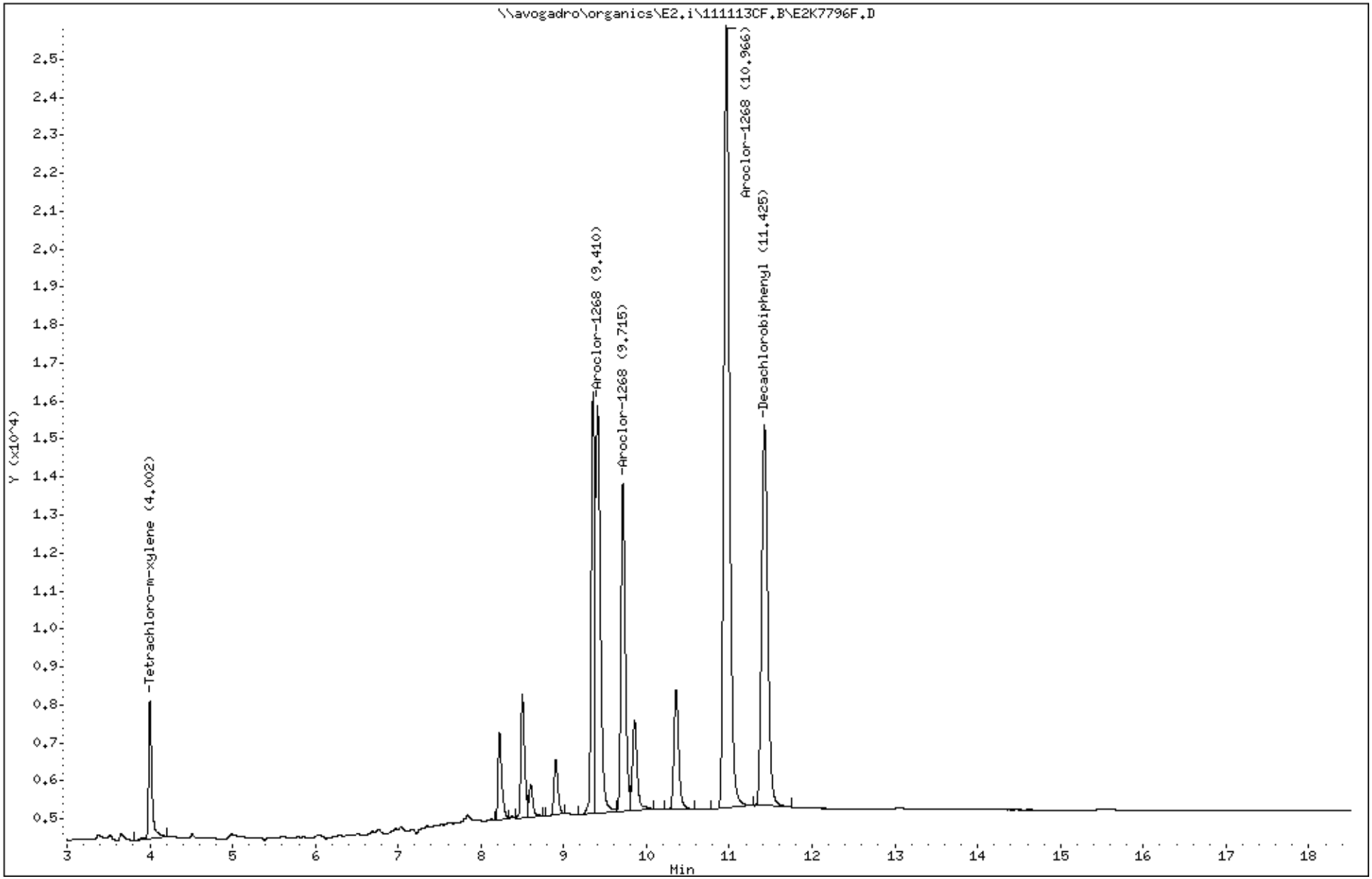
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				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	4.001	0.000	98306	0.00500	0.0050			(a)
10 Aroclor-1268						CAS #: 11100-14-4		
9.409	9.409	0.000	411999	0.10000	0.10	80.00- 120.00	100.00	(a)
9.714	9.715	-0.001	316465	0.10000	0.11	53.42- 93.42	76.81	
10.965	10.965	0.000	992654	0.10000	0.11	212.09- 252.09	240.94	
Average of Peak Amounts =					0.10667			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.424	11.422	0.002	521802	0.01000	0.016			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7796F.D
Date : 14-NOV-2011 01:19
Client ID: AR12681K2
Instrument: E2.i
Sample Info: AR12681K2,AR12681K2,,ar1268.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7796R.D
Report Date: 17-Nov-2011 11:09

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CR.B\E2K7796R.D
Lab Smp Id: AR12681K2 Client Smp ID: AR12681K2
Inj Date : 14-NOV-2011 01:19
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12681K2,AR12681K2,,ar1268.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CR.B\E2_ARO_5_R.m
Meth Date : 17-Nov-2011 10:48 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 09:59 Cal File: E2K7802R.D
Als bottle: 29 Calibration Sample, Level: 1
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

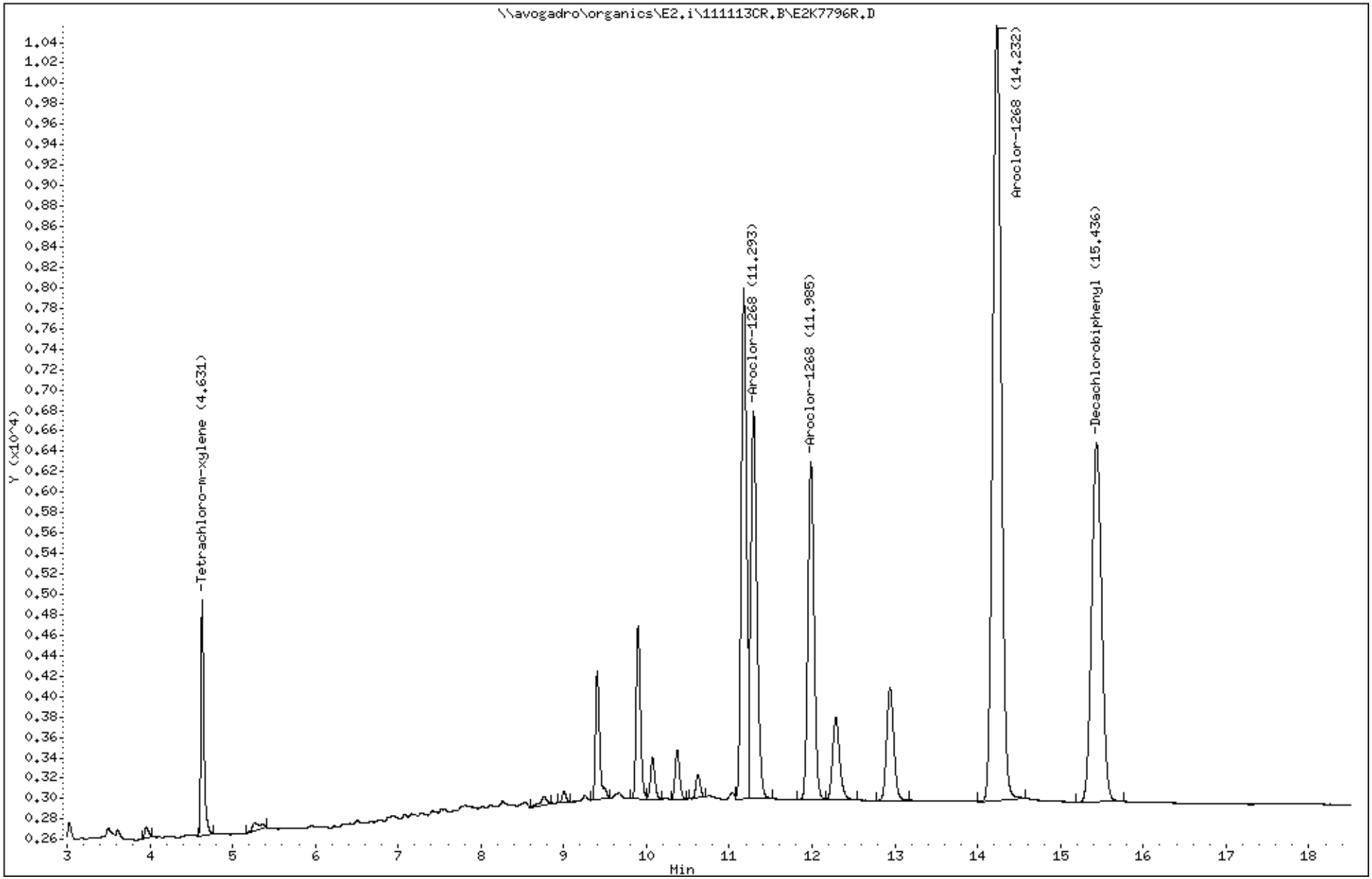
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)		
RT	EXP RT	DLT RT	RESPONSE			TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.631	4.629	0.002	57502	0.00500	0.0045		(a)
9 Aroclor-1268					CAS #: 11100-14-4		
11.292	11.291	0.001	194671	0.10000	0.096	80.00- 120.00	100.00(a)
11.985	11.984	0.001	173216	0.10000	0.099	64.43- 104.43	88.98
14.232	14.231	0.001	543754	0.10000	0.099	257.74- 297.74	279.32
Average of Peak Amounts =					0.09800		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.436	15.432	0.004	295884	0.01000	0.015		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7796R.D
Date : 14-NOV-2011 01:19
Client ID: AR12681K2
Instrument: E2.i
Sample Info: AR12681K2,AR12681K2,,ar1268.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7798F.D
Report Date: 17-Nov-2011 11:08

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CF.B\E2K7798F.D
Lab Smp Id: AR12682K2 Client Smp ID: AR12682K2
Inj Date : 14-NOV-2011 08:23
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12682K2,AR12682K2,,ar1268.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CF.B\E2_ARO_5_F.m
Meth Date : 17-Nov-2011 11:00 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 10:40 Cal File: E2K7804F.D
Als bottle: 31 Calibration Sample, Level: 2
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

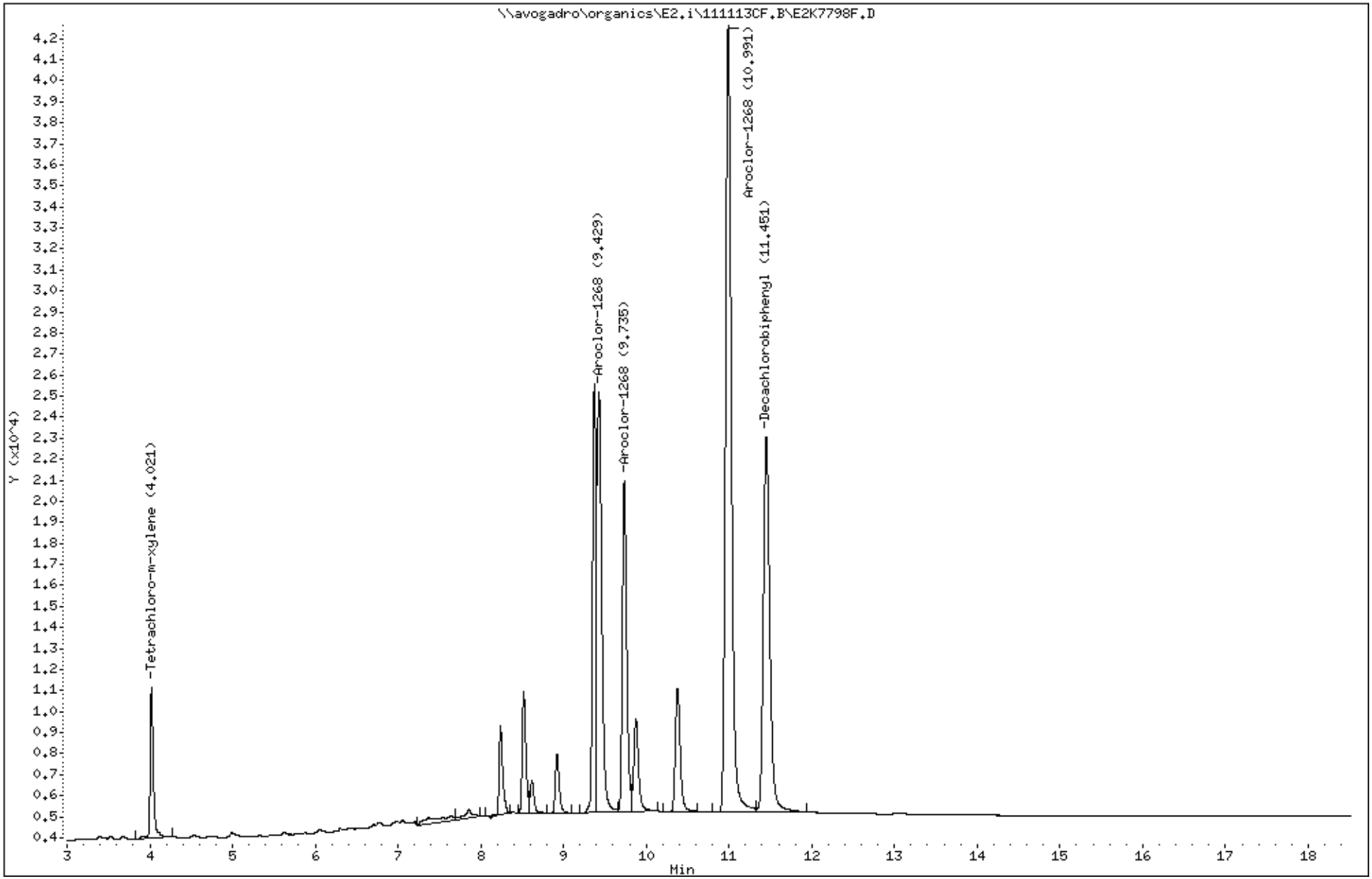
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.020	4.001	0.019	193069	0.01000	0.0099			(a)
10 Aroclor-1268						CAS #: 11100-14-4		
9.429	9.409	0.020	776821	0.20000	0.19	80.00- 120.00	100.00	(a)
9.735	9.715	0.020	581389	0.20000	0.20	53.42- 93.42	74.84	
10.990	10.965	0.025	1857970	0.20000	0.20	212.09- 252.09	239.18	
Average of Peak Amounts =					0.19667			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.451	11.422	0.029	977276	0.02000	0.027			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7798F.D
Date : 14-NOV-2011 08:23
Client ID: AR12682K2
Instrument: E2.i
Sample Info: AR12682K2,AR12682K2,,ar1268.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7798R.D
Report Date: 17-Nov-2011 11:09

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CR.B\E2K7798R.D
Lab Smp Id: AR12682K2 Client Smp ID: AR12682K2
Inj Date : 14-NOV-2011 08:23
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12682K2,AR12682K2,,ar1268.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CR.B\E2_ARO_5_R.m
Meth Date : 17-Nov-2011 10:48 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 10:40 Cal File: E2K7804R.D
Als bottle: 31 Calibration Sample, Level: 2
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

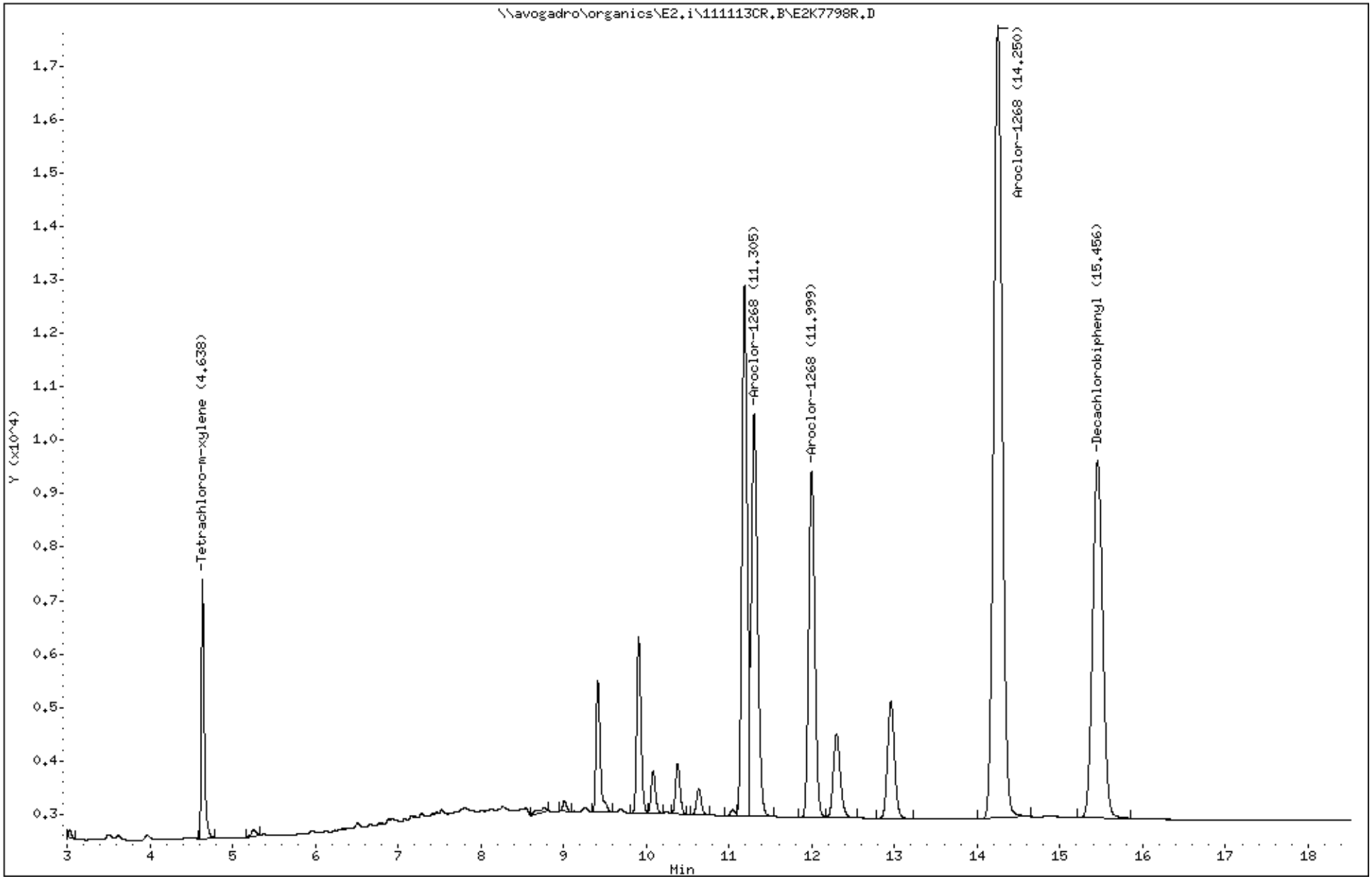
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.637	4.629	0.008	117469	0.01000	0.0093			(a)
9 Aroclor-1268						CAS #: 11100-14-4		
11.304	11.291	0.013	385374	0.20000	0.19	80.00- 120.00	100.00	(a)
11.999	11.984	0.015	338989	0.20000	0.19	64.43- 104.43	87.96	
14.250	14.231	0.019	1066058	0.20000	0.19	257.74- 297.74	276.63	
Average of Peak Amounts =					0.19000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.455	15.432	0.023	563094	0.02000	0.026			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7798R.D
Date : 14-NOV-2011 08:23
Client ID: AR12682K2
Instrument: E2.i
Sample Info: AR12682K2,AR12682K2,,ar1268.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7799F.D
Report Date: 17-Nov-2011 11:08

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CF.B\E2K7799F.D
Lab Smp Id: AR12683K2 Client Smp ID: AR12683K2
Inj Date : 14-NOV-2011 08:54
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12683K2,AR12683K2,,ar1268.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CF.B\E2_ARO_5_F.m
Meth Date : 17-Nov-2011 11:00 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:01 Cal File: E2K7805F.D
Als bottle: 32 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

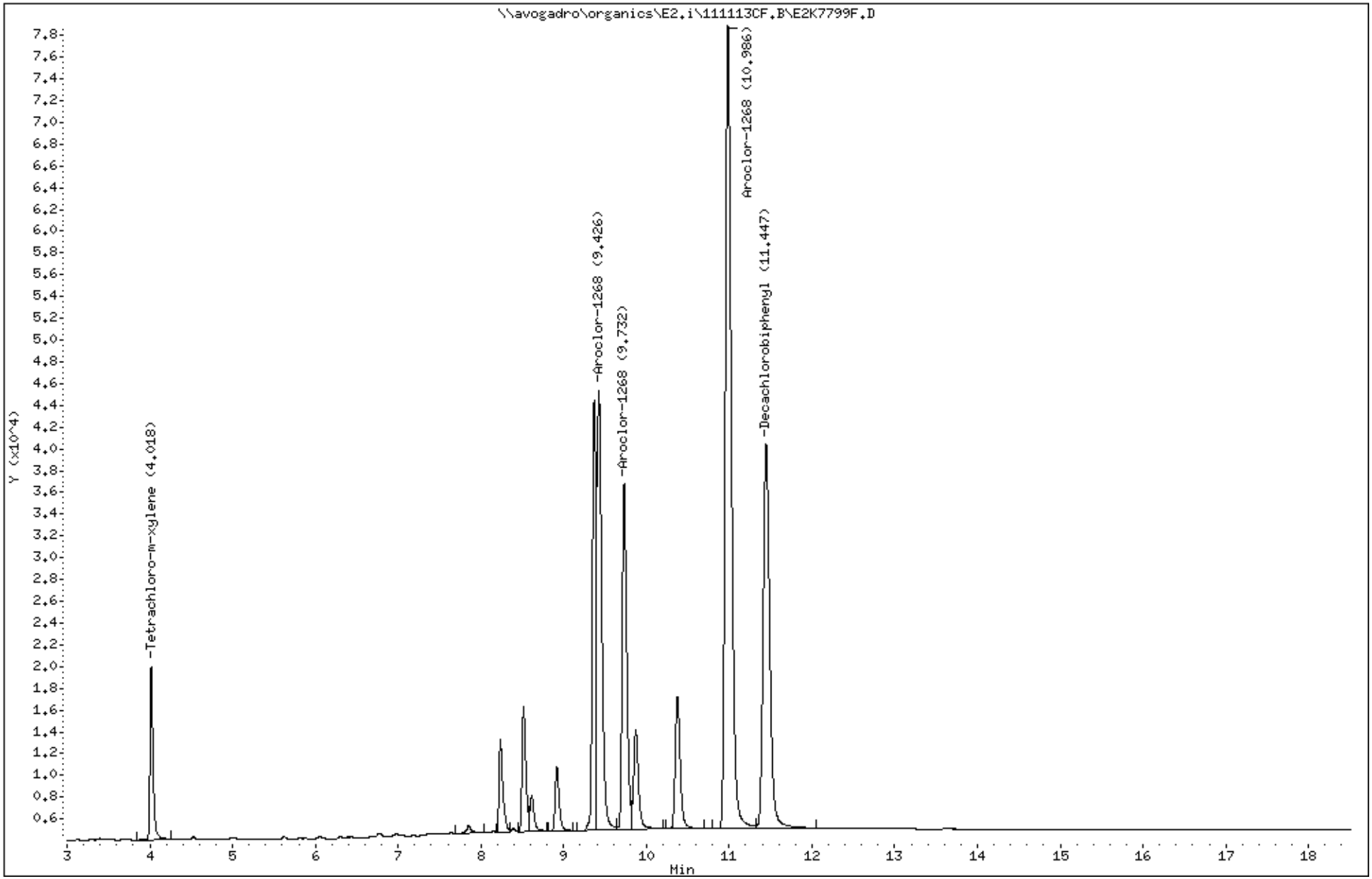
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.017	4.001	0.016	404663	0.02000	0.020			(a)
10 Aroclor-1268					CAS #: 11100-14-4			
9.425	9.409	0.016	1637092	0.40000	0.40	80.00- 120.00	100.00	(a)
9.731	9.715	0.016	1205102	0.40000	0.41	53.42- 93.42	73.61	
10.985	10.965	0.020	3768323	0.40000	0.41	212.09- 252.09	230.18	
Average of Peak Amounts =					0.40667			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.446	11.422	0.024	1983306	0.04000	0.049			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7799F.D
Date : 14-NOV-2011 08:54
Client ID: AR12683K2
Instrument: E2.i
Sample Info: AR12683K2,AR12683K2,,ar1268.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7799R.D
Report Date: 17-Nov-2011 11:09

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CR.B\E2K7799R.D
Lab Smp Id: AR12683K2 Client Smp ID: AR12683K2
Inj Date : 14-NOV-2011 08:54
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12683K2,AR12683K2,,ar1268.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CR.B\E2_ARO_5_R.m
Meth Date : 17-Nov-2011 10:48 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:01 Cal File: E2K7805R.D
Als bottle: 32 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

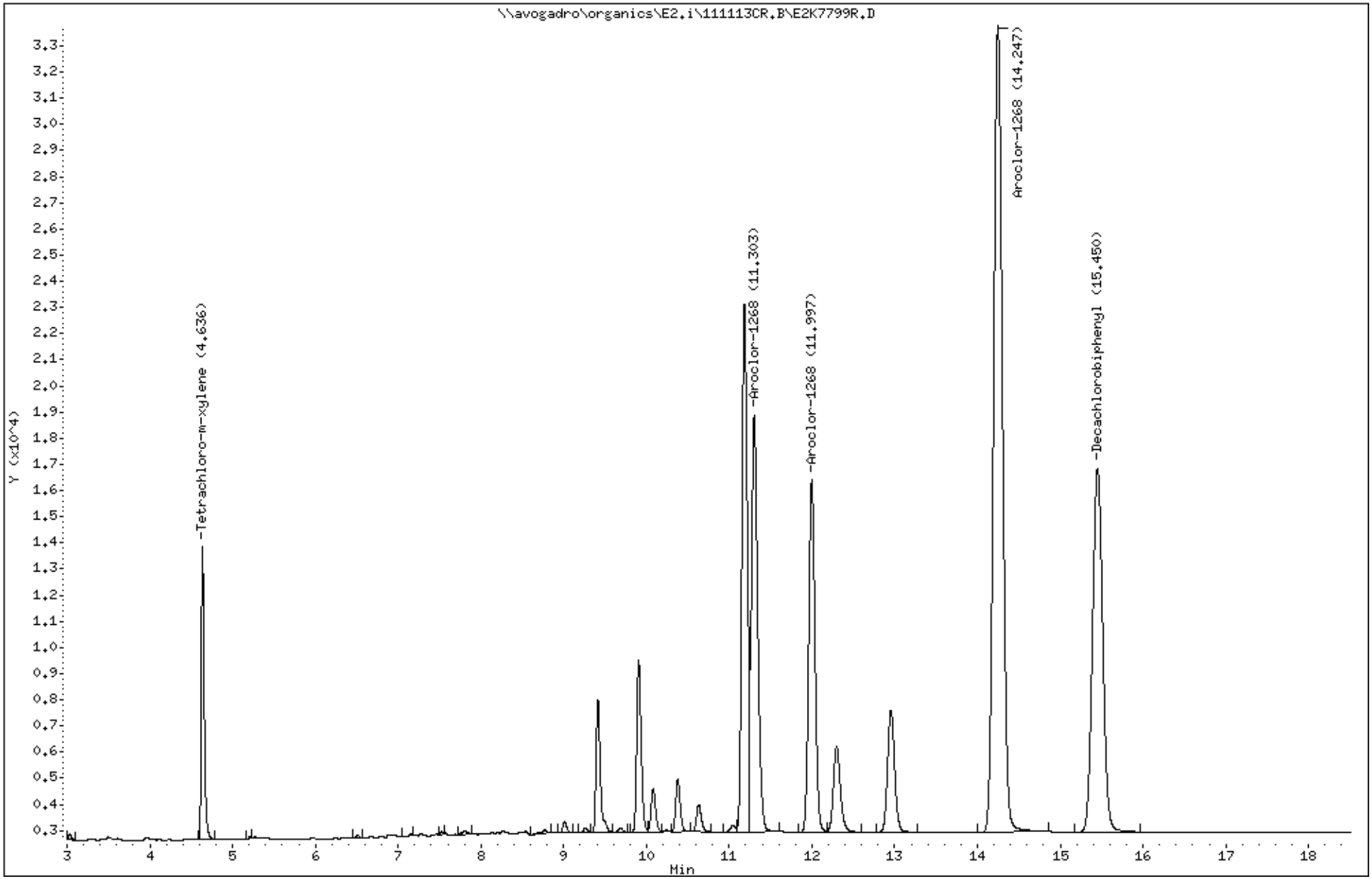
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.636	4.629	0.007	264153	0.02000	0.021			(a)
9 Aroclor-1268					CAS #: 11100-14-4			
11.302	11.291	0.011	835072	0.40000	0.41	80.00- 120.00	100.00	(a)
11.996	11.984	0.012	713215	0.40000	0.41	64.43- 104.43	85.41	
14.246	14.231	0.015	2284272	0.40000	0.42	257.74- 297.74	273.54	
Average of Peak Amounts =					0.41333			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.450	15.432	0.018	1191190	0.04000	0.049			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7799R.D
Date : 14-NOV-2011 08:54
Client ID: AR12683K2
Instrument: E2.i
Sample Info: AR12683K2,AR12683K2,,ar1268.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7800F.D
Report Date: 17-Nov-2011 11:08

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CF.B\E2K7800F.D
Lab Smp Id: AR12684K2 Client Smp ID: AR12684K2
Inj Date : 14-NOV-2011 09:17
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12684K2,AR12684K2,,ar1268.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CF.B\E2_ARO_5_F.m
Meth Date : 17-Nov-2011 11:00 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:22 Cal File: E2K7806F.D
Als bottle: 33 Calibration Sample, Level: 4
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

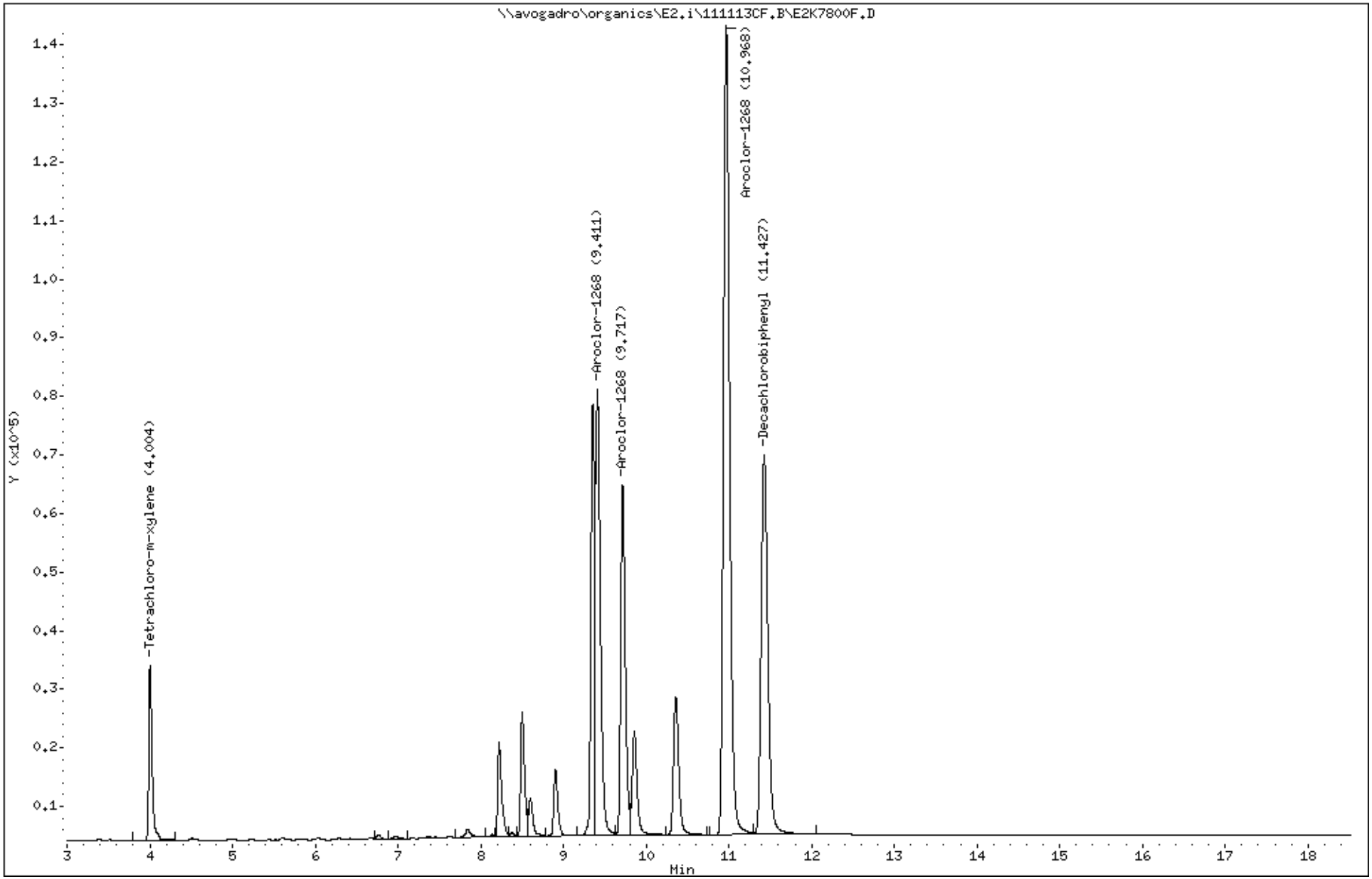
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.003	4.001	0.002	819466	0.04000	0.041			(a)
10 Aroclor-1268					CAS #: 11100-14-4			
9.411	9.409	0.002	3132130	0.80000	0.77	80.00- 120.00	100.00	(a)
9.717	9.715	0.002	2315843	0.80000	0.79	53.42- 93.42	73.94	
10.968	10.965	0.003	7083840	0.80000	0.77	212.09- 252.09	226.17	
Average of Peak Amounts =					0.77667			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.427	11.422	0.005	3698391	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\111113CF.B\E2K7800F.D
Date : 14-NOV-2011 09:17
Client ID: AR12684K2
Instrument: E2.i
Sample Info: AR12684K2,AR12684K2,,ar1268.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7800R.D
Report Date: 17-Nov-2011 11:09

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CR.B\E2K7800R.D
Lab Smp Id: AR12684K2 Client Smp ID: AR12684K2
Inj Date : 14-NOV-2011 09:17
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12684K2,AR12684K2,,ar1268.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CR.B\E2_ARO_5_R.m
Meth Date : 17-Nov-2011 10:48 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:22 Cal File: E2K7806R.D
Als bottle: 33 Calibration Sample, Level: 4
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

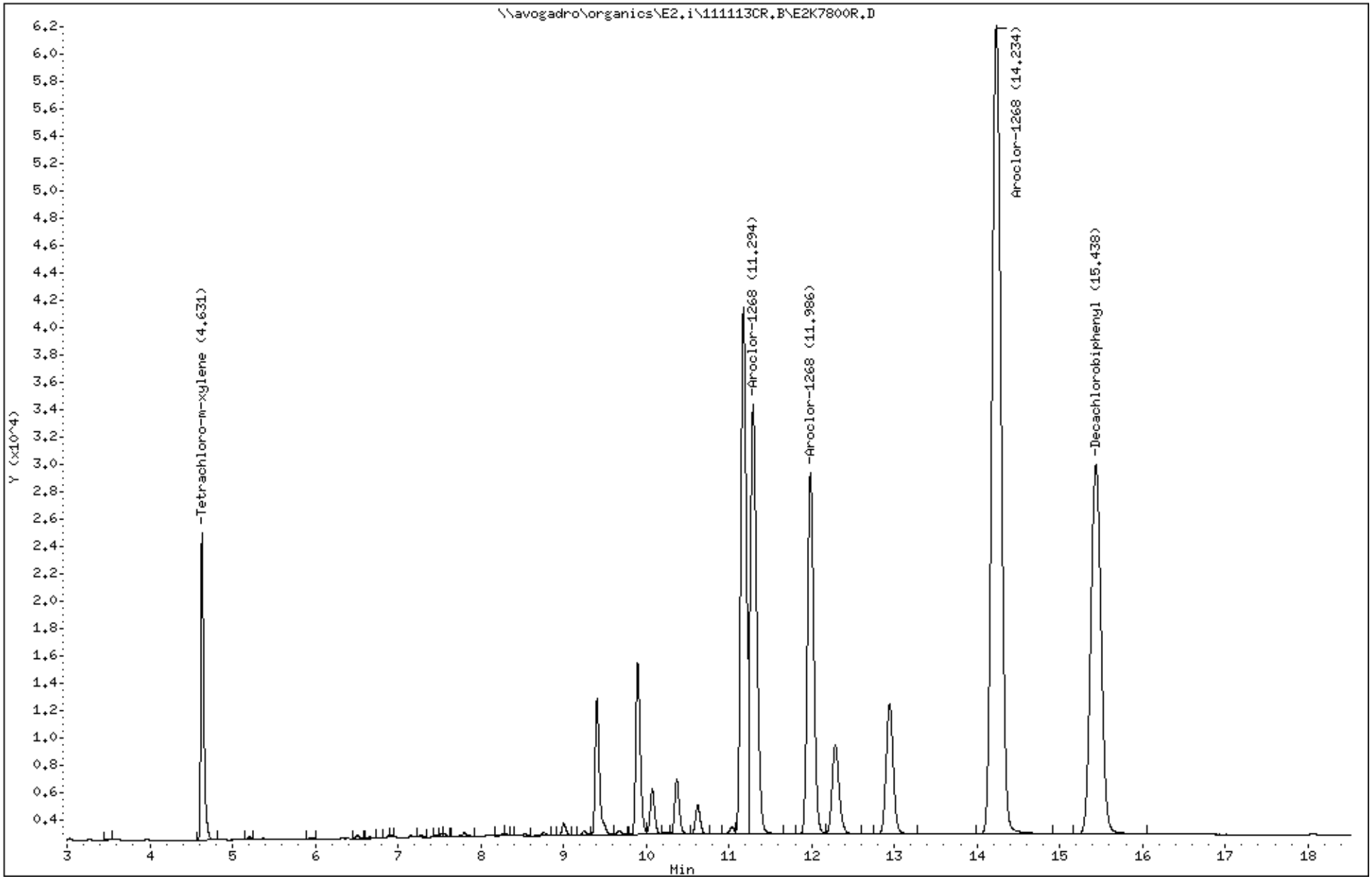
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)		
RT	EXP RT	DLT RT	RESPONSE			TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.631	4.629	0.002	554118	0.04000	0.043		(a)
9 Aroclor-1268					CAS #: 11100-14-4		
11.293	11.291	0.002	1690612	0.80000	0.83	80.00- 120.00	100.00(a)
11.985	11.984	0.001	1417682	0.80000	0.81	64.43- 104.43	83.86
14.233	14.231	0.002	4482142	0.80000	0.81	257.74- 297.74	265.12
Average of Peak Amounts =					0.81667		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.437	15.432	0.005	2347323	0.08000	0.088		

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7800R.D
Date : 14-NOV-2011 09:17
Client ID: AR12684K2
Instrument: E2.i
Sample Info: AR12684K2,AR12684K2,,ar1268.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7801F.D
Report Date: 17-Nov-2011 11:08

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

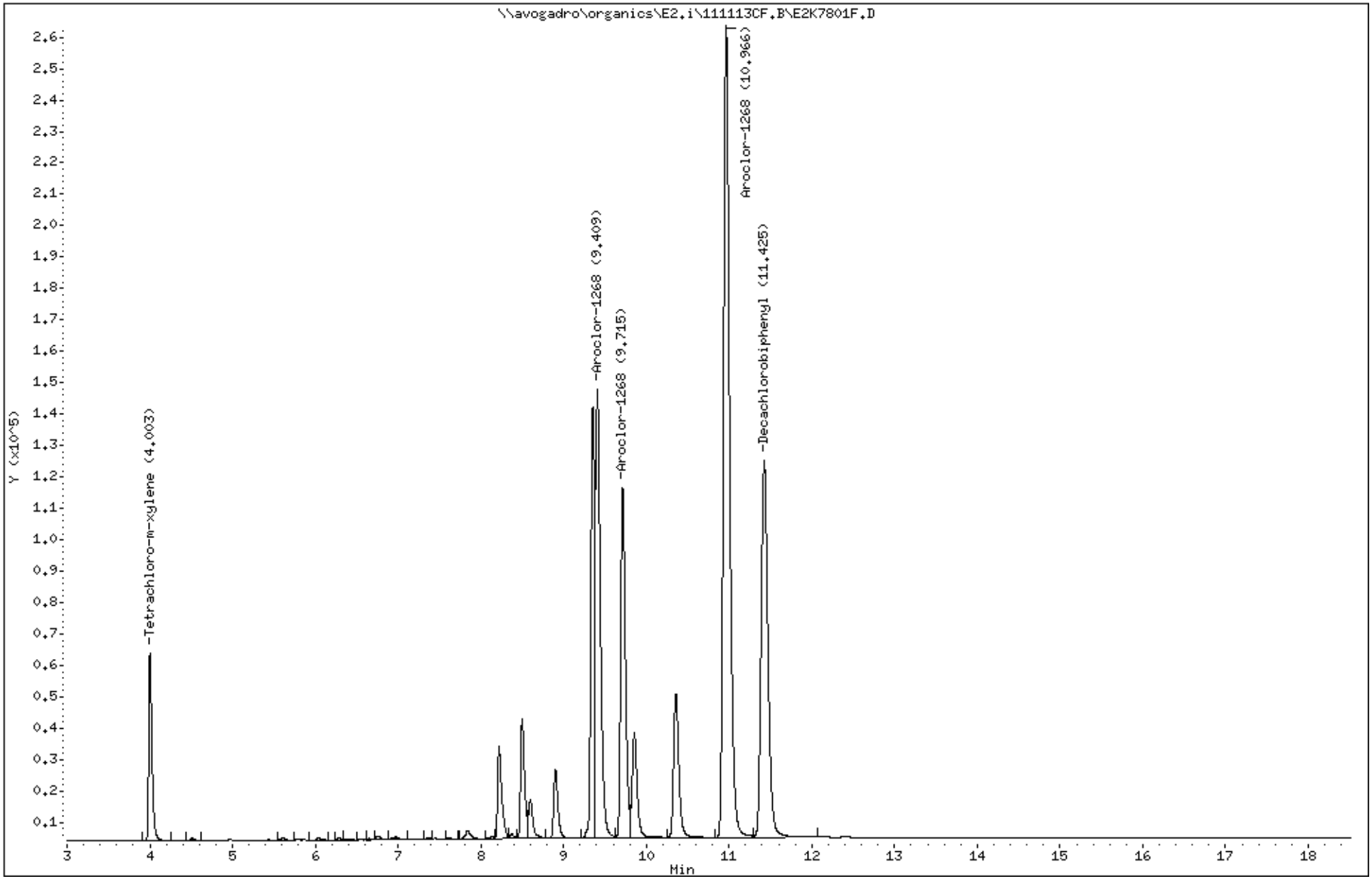
Data file : \\avogadro\organics\E2.i\111113CF.B\E2K7801F.D
Lab Smp Id: AR12685K2 Client Smp ID: AR12685K2
Inj Date : 14-NOV-2011 09:38
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12685K2,AR12685K2,,ar1268.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CF.B\E2_ARO_5_F.m
Meth Date : 17-Nov-2011 11:00 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807F.D
Als bottle: 34 Calibration Sample, Level: 5
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		
4.002	4.001	0.001	1616536	0.08000	0.081			
10 Aroclor-1268						CAS #: 11100-14-4		
9.409	9.409	0.000	6793269	1.60000	1.7	80.00- 120.00		100.00
9.715	9.715	0.000	4359889	1.60000	1.5	53.42- 93.42		64.18
10.965	10.965	0.000	13326371	1.60000	1.4	212.09- 252.09		196.17
Average of Peak Amounts =					1.53333			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.425	11.422	0.003	6861887	0.16000	0.14			

Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7801F.D
Date : 14-NOV-2011 09:38
Client ID: AR12685K2
Instrument: E2.i
Sample Info: AR12685K2,AR12685K2,,ar1268.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7801R.D
Report Date: 17-Nov-2011 11:09

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CR.B\E2K7801R.D
Lab Smp Id: AR12685K2 Client Smp ID: AR12685K2
Inj Date : 14-NOV-2011 09:38
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12685K2,AR12685K2,,ar1268.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CR.B\E2_ARO_5_R.m
Meth Date : 17-Nov-2011 10:48 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807R.D
Als bottle: 34 Calibration Sample, Level: 5
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

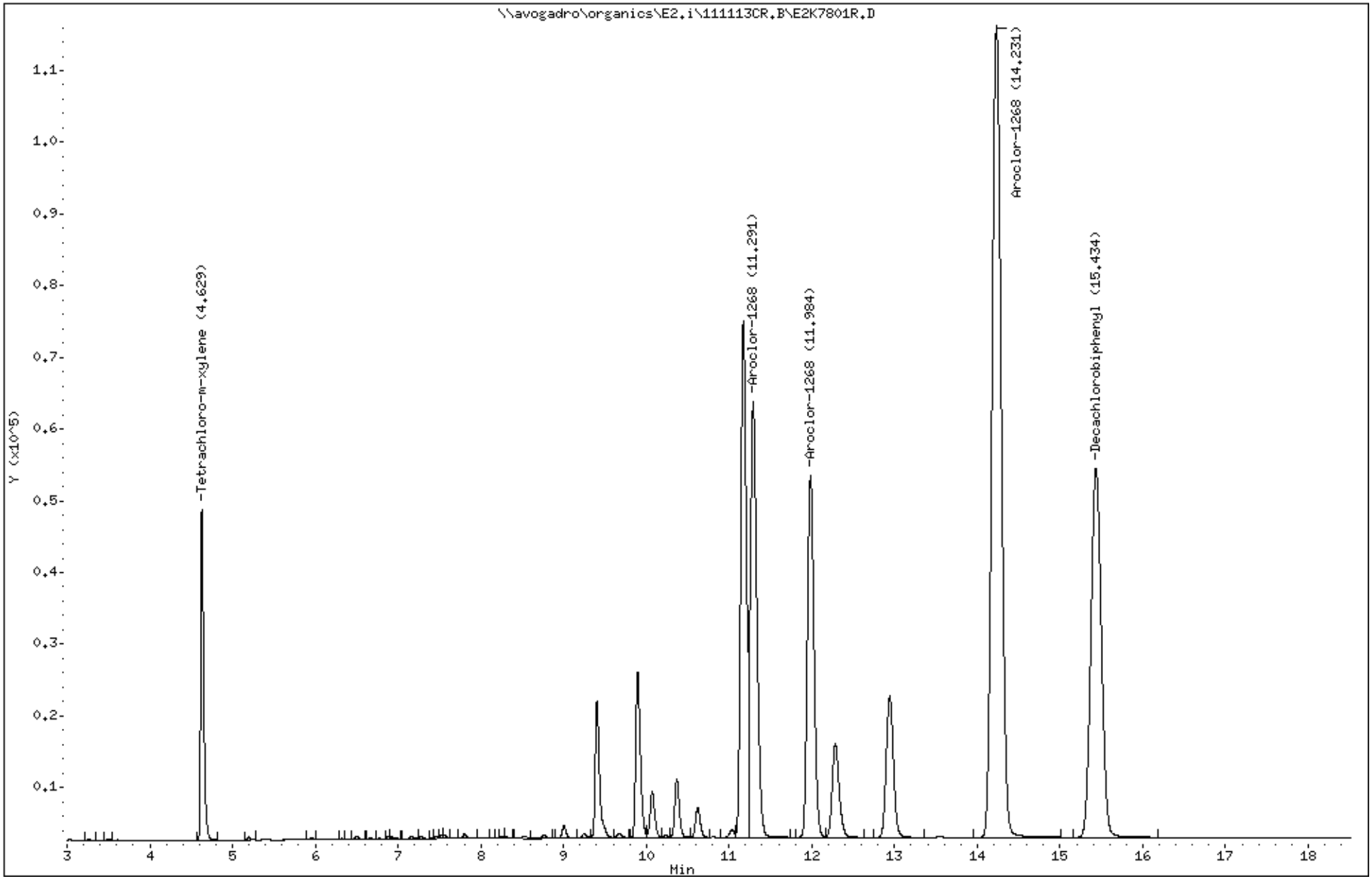
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.629	4.629	0.000	1153232	0.08000	0.089			
9 Aroclor-1268						CAS #: 11100-14-4		
11.291	11.291	0.000	3361068	1.60000	1.6	80.00- 120.00		100.00(A)
11.984	11.984	0.000	2775140	1.60000	1.6	64.43- 104.43		82.57
14.231	14.231	0.000	8687803	1.60000	1.6	257.74- 297.74		258.48
Average of Peak Amounts =				1.60000				
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.434	15.432	0.002	4544776	0.16000	0.16			

QC Flag Legend

A - Target compound detected but, quantitated amount
    exceeded maximum amount.

Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7801R.D
Date : 14-NOV-2011 09:38
Client ID: AR12685K2
Instrument: E2.i
Sample Info: AR12685K2,AR12685K2,,ar1268.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7802F.D
Report Date: 17-Nov-2011 11:08

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CF.B\E2K7802F.D
Lab Smp Id: AR16601K2 Client Smp ID: AR16601K2
Inj Date : 14-NOV-2011 09:59
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16601K2,AR16601K2,,ar1660.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CF.B\E2_ARO_5_F.m
Meth Date : 17-Nov-2011 11:00 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 09:59 Cal File: E2K7802F.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

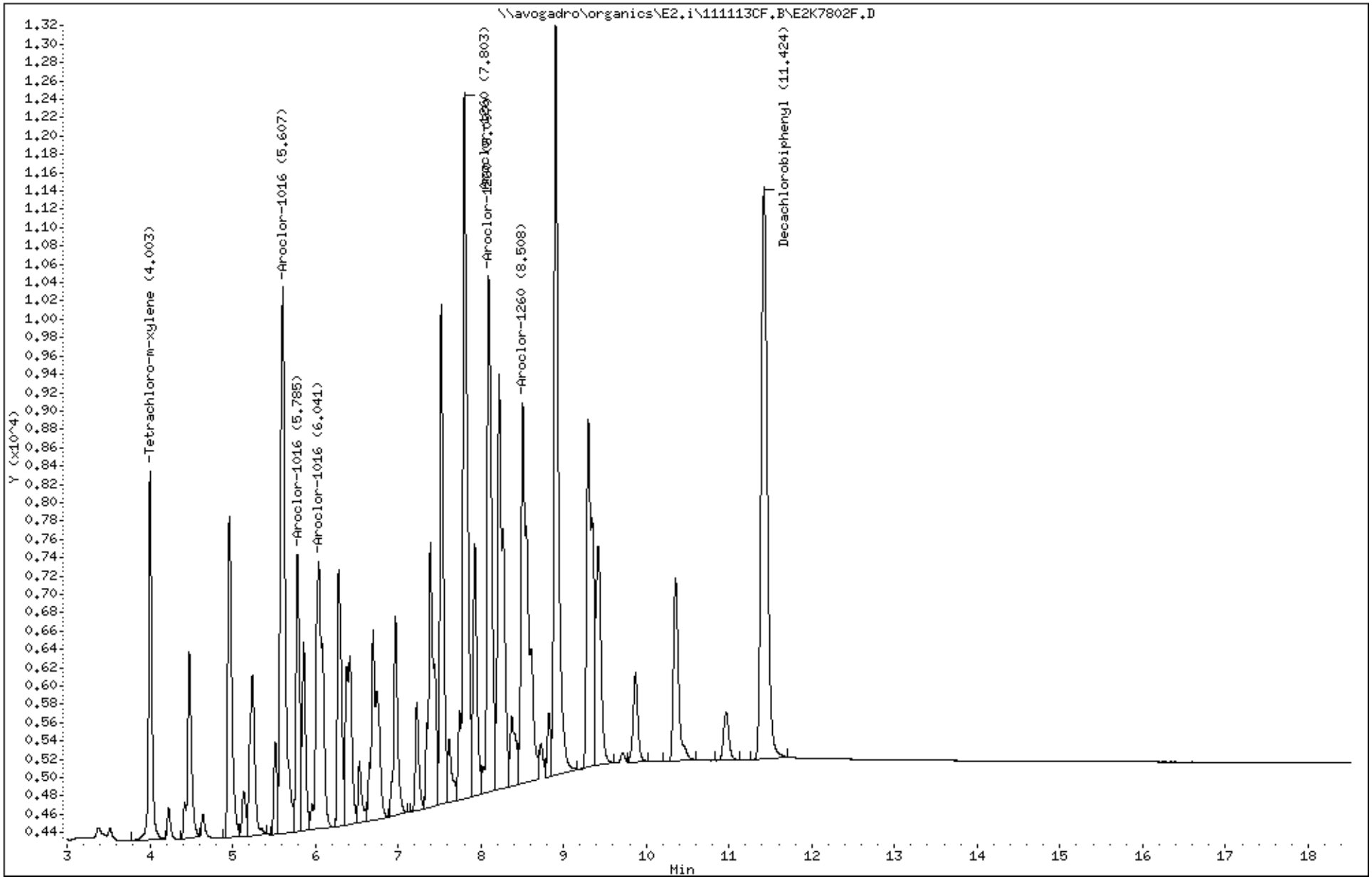
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.003	4.001	0.002	106257	0.00500	0.0052			(a)
5 Aroclor-1016						CAS #: 12674-11-2		
5.607	5.606	0.001	244678	0.10000	0.12	80.00- 120.00	100.00	(a)
5.785	5.783	0.002	91834	0.10000	0.12	17.61- 57.61	37.53	
6.040	6.040	0.000	164729	0.10000	0.12	46.07- 86.07	67.32	
Average of Peak Amounts =					0.12000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.423	11.422	0.001	323764	0.01000	0.0074			(a)
9 Aroclor-1260						CAS #: 11096-82-5		
7.802	7.799	0.003	298111	0.10000	0.12	80.00- 120.00	100.00	(a)
8.097	8.095	0.002	215548	0.10000	0.11	54.46- 94.46	72.30	
8.507	8.505	0.002	240637	0.10000	0.11	67.66- 107.66	80.72	
Average of Peak Amounts =					0.11333			

Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7802F.D
Report Date: 17-Nov-2011 11:08

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7802F.D
Date : 14-NOV-2011 09:59
Client ID: AR16601K2
Instrument: E2.i
Sample Info: AR16601K2,AR16601K2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7802R.D
Report Date: 17-Nov-2011 11:09

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CR.B\E2K7802R.D
Lab Smp Id: AR16601K2 Client Smp ID: AR16601K2
Inj Date : 14-NOV-2011 09:59
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16601K2,AR16601K2,,ar1660.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CR.B\E2_ARO_5_R.m
Meth Date : 17-Nov-2011 10:48 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 09:59 Cal File: E2K7802R.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

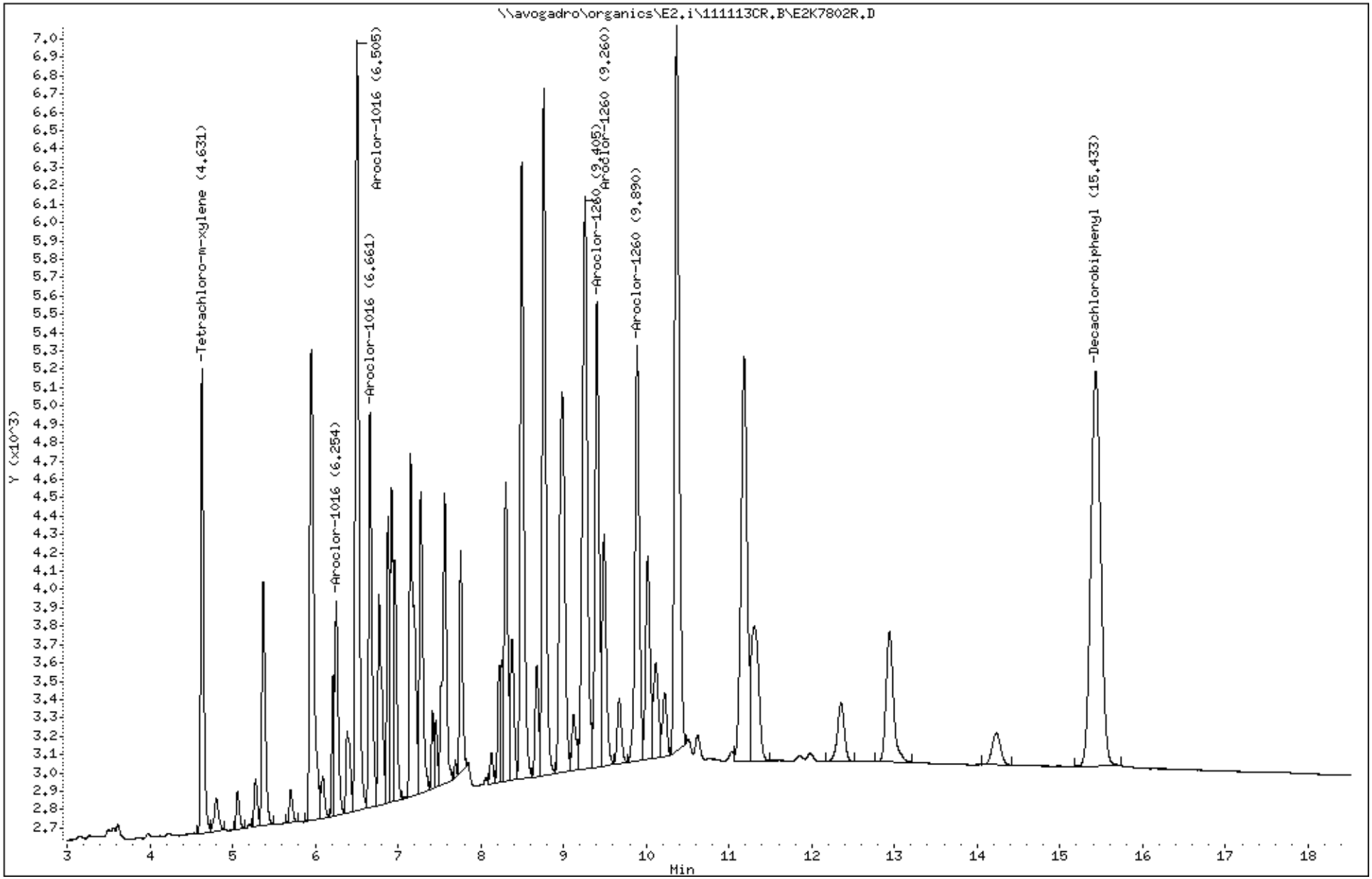
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.630	4.629	0.001	60229	0.00500	0.0046			(a)
6 Aroclor-1016						CAS #: 12674-11-2		
6.253	6.251	0.002	33207	0.10000	0.10	80.00- 120.00	100.00	(a)
6.505	6.504	0.001	127793	0.10000	0.10	376.07- 416.07	384.84	
6.661	6.658	0.003	59423	0.10000	0.11	154.78- 194.78	178.95	
Average of Peak Amounts =					0.10333			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.432	15.432	0.000	179969	0.01000	0.0067			(a)
8 Aroclor-1260						CAS #: 11096-82-5		
9.259	9.257	0.002	129576	0.10000	0.10	80.00- 120.00	100.00	(a)
9.404	9.401	0.003	83407	0.10000	0.11	40.60- 80.60	64.37	
9.889	9.887	0.002	82733	0.10000	0.10	43.80- 83.80	63.85	
Average of Peak Amounts =					0.10333			

Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7802R.D
Report Date: 17-Nov-2011 11:09

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7802R.D
Date : 14-NOV-2011 09:59
Client ID: AR16601K2
Instrument: E2.i
Sample Info: AR16601K2,AR16601K2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7804F.D
Report Date: 17-Nov-2011 11:08

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CF.B\E2K7804F.D
Lab Smp Id: AR16602K2 Client Smp ID: AR16602K2
Inj Date : 14-NOV-2011 10:40
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16602K2,AR16602K2,,ar1660.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CF.B\E2_ARO_5_F.m
Meth Date : 17-Nov-2011 11:00 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 10:40 Cal File: E2K7804F.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

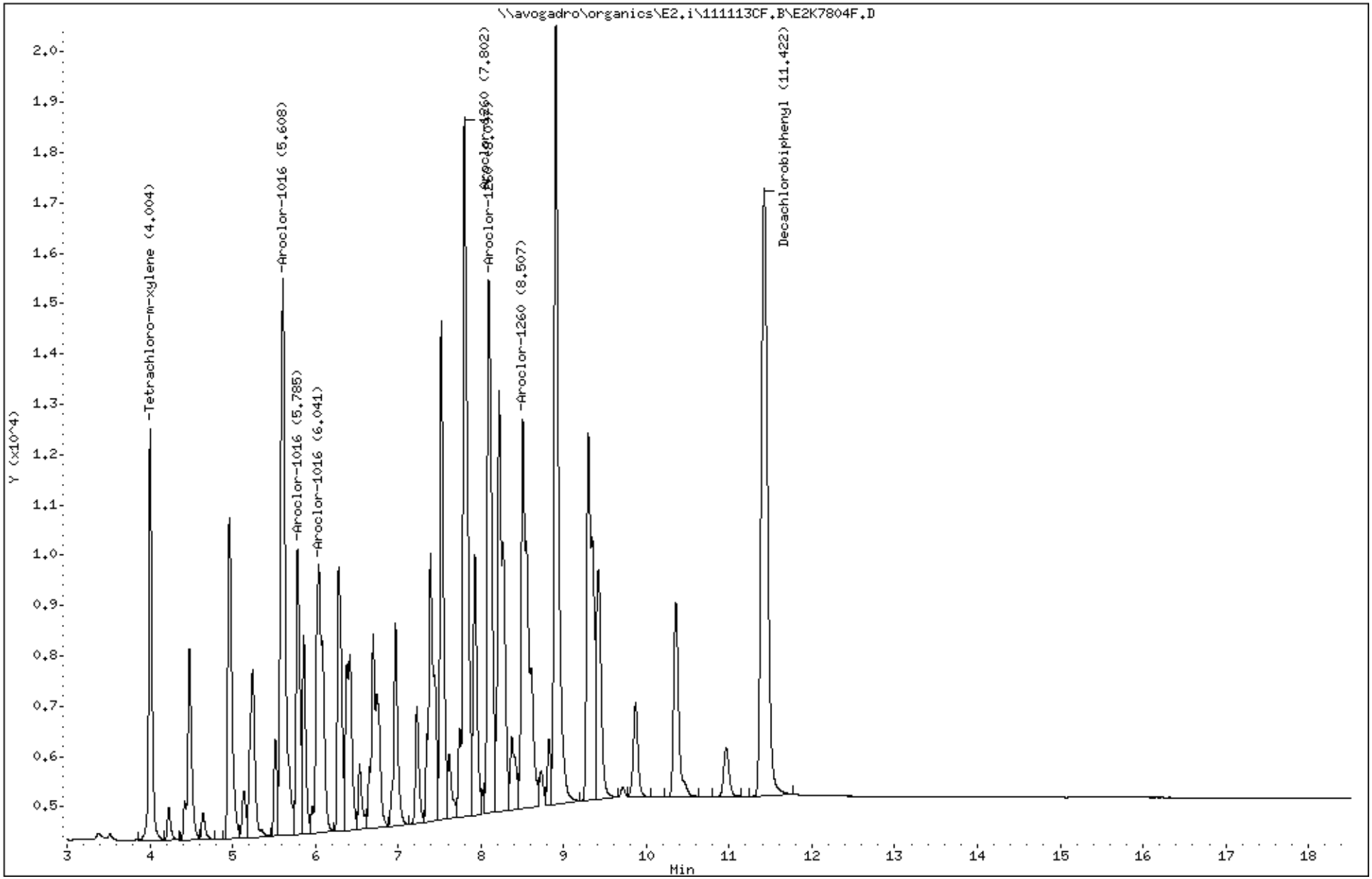
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.004	4.001	0.003	216110	0.01000	0.010			(a)
5 Aroclor-1016						CAS #: 12674-11-2		
5.607	5.606	0.001	460196	0.20000	0.22	80.00- 120.00	100.00	(a)
5.785	5.783	0.002	173259	0.20000	0.22	17.61- 57.61	37.65	
6.041	6.040	0.001	307638	0.20000	0.22	46.07- 86.07	66.85	
Average of Peak Amounts =					0.22000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.422	11.422	0.000	637302	0.02000	0.016			(a)
9 Aroclor-1260						CAS #: 11096-82-5		
7.801	7.799	0.002	543798	0.20000	0.22	80.00- 120.00	100.00	(a)
8.096	8.095	0.001	400642	0.20000	0.21	54.46- 94.46	73.67	
8.507	8.505	0.002	450490	0.20000	0.21	67.66- 107.66	82.84	
Average of Peak Amounts =					0.21333			

Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7804F.D
Report Date: 17-Nov-2011 11:08

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7804F.D
Date : 14-NOV-2011 10:40
Client ID: AR16602K2
Instrument: E2.i
Sample Info: AR16602K2,AR16602K2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7804R.D
Report Date: 17-Nov-2011 11:09

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CR.B\E2K7804R.D
Lab Smp Id: AR16602K2 Client Smp ID: AR16602K2
Inj Date : 14-NOV-2011 10:40
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16602K2,AR16602K2,,ar1660.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CR.B\E2_ARO_5_R.m
Meth Date : 17-Nov-2011 10:48 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 10:40 Cal File: E2K7804R.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

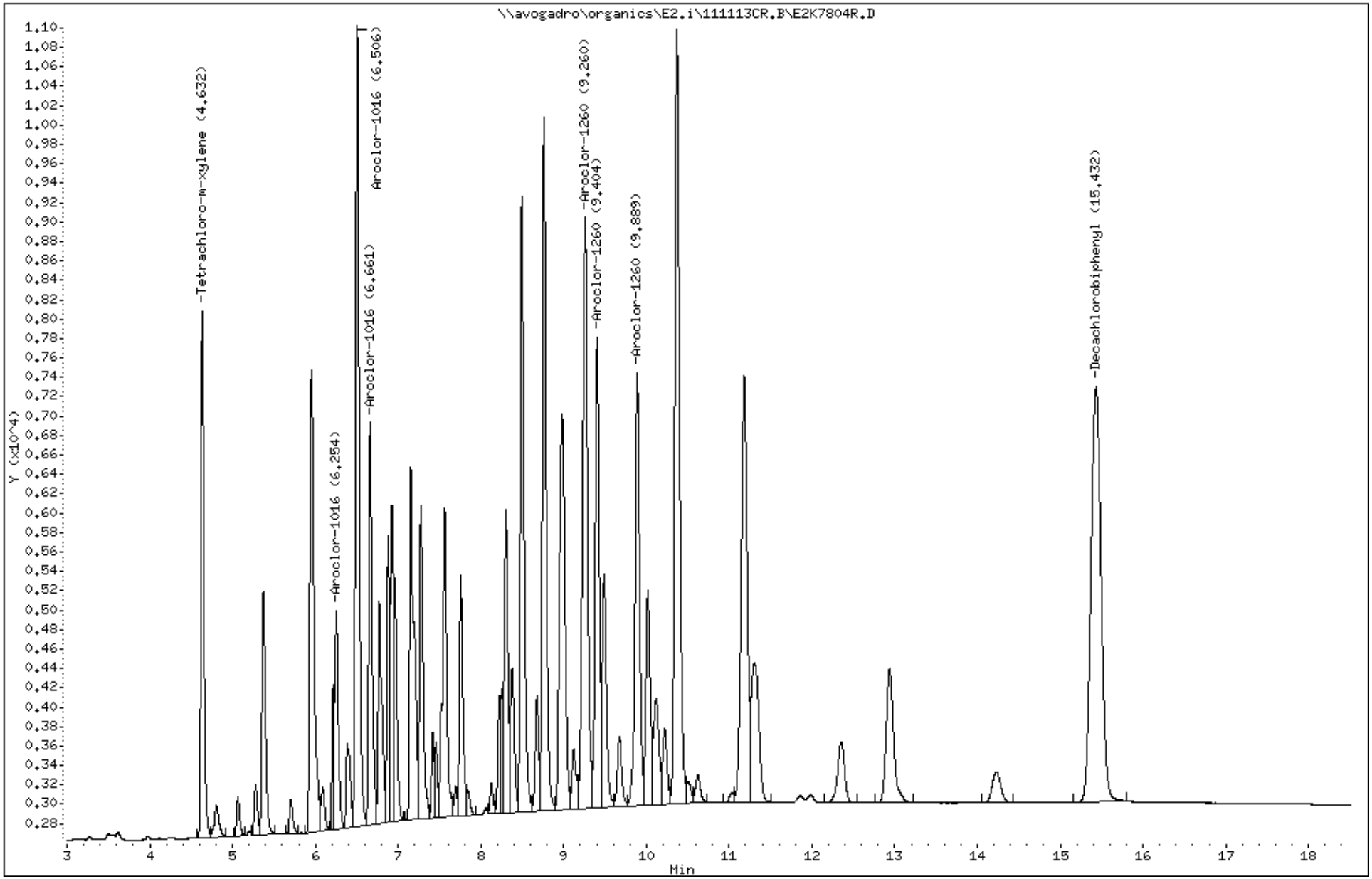
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.632	4.629	0.003	127188	0.01000	0.0096			(a)
6 Aroclor-1016						CAS #: 12674-11-2		
6.254	6.251	0.003	64556	0.20000	0.20	80.00- 120.00	100.00	(a)
6.506	6.504	0.002	252060	0.20000	0.21	376.07- 416.07	390.45	
6.661	6.658	0.003	114291	0.20000	0.21	154.78- 194.78	177.04	
Average of Peak Amounts =					0.20667			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.432	15.432	0.000	362234	0.02000	0.015			(a)
8 Aroclor-1260						CAS #: 11096-82-5		
9.259	9.257	0.002	255465	0.20000	0.20	80.00- 120.00	100.00	(a)
9.403	9.401	0.002	160764	0.20000	0.21	40.60- 80.60	62.93	
9.888	9.887	0.001	167592	0.20000	0.21	43.80- 83.80	65.60	
Average of Peak Amounts =					0.20667			

Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7804R.D
Report Date: 17-Nov-2011 11:09

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7804R.D
Date : 14-NOV-2011 10:40
Client ID: AR16602K2
Instrument: E2.i
Sample Info: AR16602K2,AR16602K2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7805F.D
Report Date: 17-Nov-2011 11:08

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CF.B\E2K7805F.D
Lab Smp Id: AR16603K2 Client Smp ID: AR16603K2
Inj Date : 14-NOV-2011 11:01
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16603K2,AR16603K2,,ar1660.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CF.B\E2_ARO_5_F.m
Meth Date : 17-Nov-2011 11:00 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:01 Cal File: E2K7805F.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

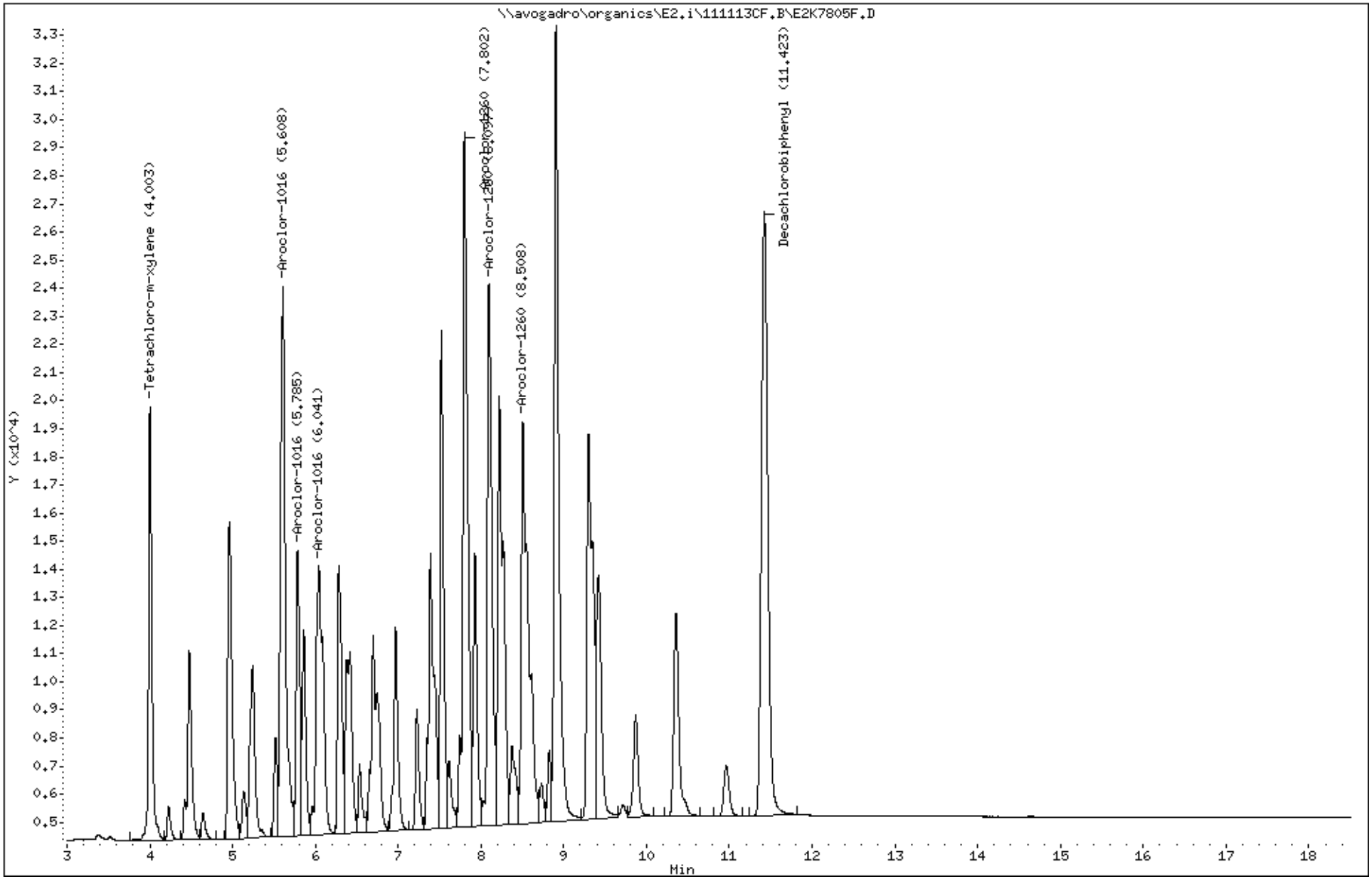
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.002	4.001	0.001	427871	0.02000	0.020			(a)
5 Aroclor-1016					CAS #: 12674-11-2			
5.607	5.606	0.001	834497	0.40000	0.39	80.00- 120.00	100.00	(a)
5.784	5.783	0.001	315227	0.40000	0.40	17.61- 57.61	37.77	
6.041	6.040	0.001	565120	0.40000	0.40	46.07- 86.07	67.72	
		Average of Peak Amounts =			0.39667			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.422	11.422	0.000	1166636	0.04000	0.032			(a)
9 Aroclor-1260					CAS #: 11096-82-5			
7.801	7.799	0.002	981170	0.40000	0.39	80.00- 120.00	100.00	(a)
8.096	8.095	0.001	761610	0.40000	0.40	54.46- 94.46	77.62	
8.507	8.505	0.002	849879	0.40000	0.40	67.66- 107.66	86.62	
		Average of Peak Amounts =			0.39667			

Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7805F.D
Report Date: 17-Nov-2011 11:08

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7805F.D
Date : 14-NOV-2011 11:01
Client ID: AR16603K2
Instrument: E2.i
Sample Info: AR16603K2,AR16603K2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7805R.D
Report Date: 17-Nov-2011 11:09

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CR.B\E2K7805R.D
Lab Smp Id: AR16603K2 Client Smp ID: AR16603K2
Inj Date : 14-NOV-2011 11:01
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16603K2,AR16603K2,,ar1660.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CR.B\E2_ARO_5_R.m
Meth Date : 17-Nov-2011 10:48 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:01 Cal File: E2K7805R.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		
4.630	4.629	0.001	259385	0.02000	0.020			(a)
6 Aroclor-1016						CAS #: 12674-11-2		
6.253	6.251	0.002	125953	0.40000	0.40	80.00- 120.00	100.00	(a)
6.505	6.504	0.001	485999	0.40000	0.40	376.07- 416.07	385.86	
6.660	6.658	0.002	218620	0.40000	0.40	154.78- 194.78	173.57	
Average of Peak Amounts =					0.40000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.431	15.432	-0.001	682721	0.04000	0.031			(a)
8 Aroclor-1260						CAS #: 11096-82-5		
9.259	9.257	0.002	493268	0.40000	0.39	80.00- 120.00	100.00	(a)
9.402	9.401	0.001	305878	0.40000	0.40	40.60- 80.60	62.01	
9.888	9.887	0.001	321463	0.40000	0.40	43.80- 83.80	65.17	
Average of Peak Amounts =					0.39667			

Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7805R.D
Report Date: 17-Nov-2011 11:09

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7805R.D
Date : 14-NOV-2011 11:01
Client ID: AR1660302
Sample Info: AR1660302,AR1660302,,ar1660,sub,,
Volume Injected (uL): 1.0
Column phase: CLPPest11

Instrument: E2.i
Operator: DL SRC: DL
Column diameter: 0.32

Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7806F.D
Report Date: 17-Nov-2011 11:08

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CF.B\E2K7806F.D
Lab Smp Id: AR16604K2 Client Smp ID: AR16604K2
Inj Date : 14-NOV-2011 11:22
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16604K2,AR16604K2,,ar1660.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CF.B\E2_ARO_5_F.m
Meth Date : 17-Nov-2011 11:00 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:22 Cal File: E2K7806F.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

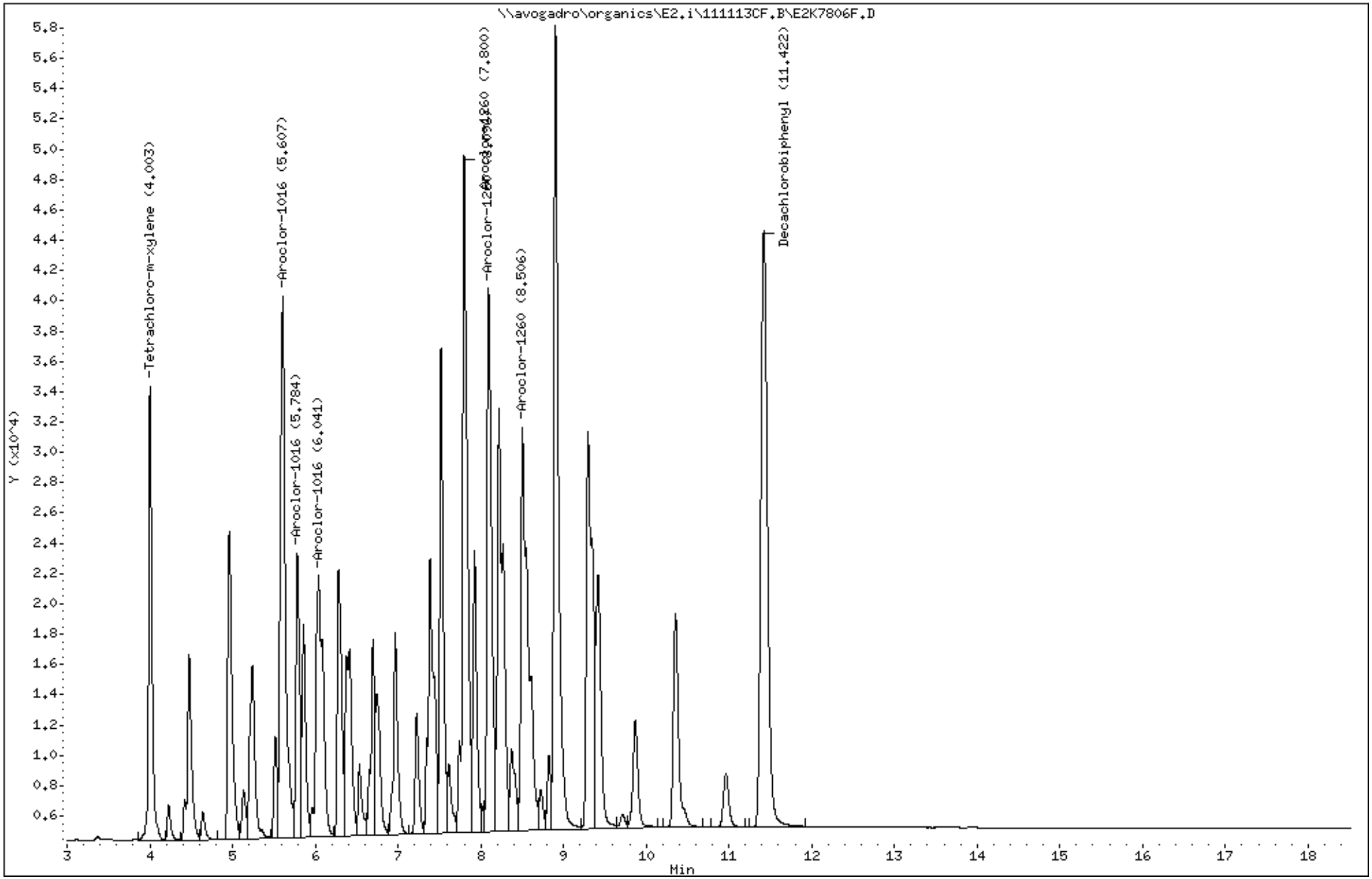
				AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.002	4.001	0.001	848252	0.04000	0.040			(a)
5 Aroclor-1016					CAS #: 12674-11-2			
5.607	5.606	0.001	1552697	0.80000	0.73	80.00- 120.00	100.00	(a)
5.784	5.783	0.001	587505	0.80000	0.74	17.61- 57.61	37.84	
6.041	6.040	0.001	1048180	0.80000	0.74	46.07- 86.07	67.51	
Average of Peak Amounts =					0.73667			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.422	11.422	0.000	2195940	0.08000	0.067			
9 Aroclor-1260					CAS #: 11096-82-5			
7.800	7.799	0.001	1790945	0.80000	0.72	80.00- 120.00	100.00	(a)
8.095	8.095	0.000	1404075	0.80000	0.74	54.46- 94.46	78.40	
8.506	8.505	0.001	1601166	0.80000	0.75	67.66- 107.66	89.40	
Average of Peak Amounts =					0.73667			

Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7806F.D
Report Date: 17-Nov-2011 11:08

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7806F.D
Date : 14-NOV-2011 11:22
Client ID: AR16604K2
Instrument: E2.i
Sample Info: AR16604K2,AR16604K2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7806R.D
Report Date: 17-Nov-2011 11:09

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111113CR.B\E2K7806R.D
Lab Smp Id: AR16604K2 Client Smp ID: AR16604K2
Inj Date : 14-NOV-2011 11:22
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16604K2,AR16604K2,,ar1660.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CR.B\E2_ARO_5_R.m
Meth Date : 17-Nov-2011 10:48 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:22 Cal File: E2K7806R.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

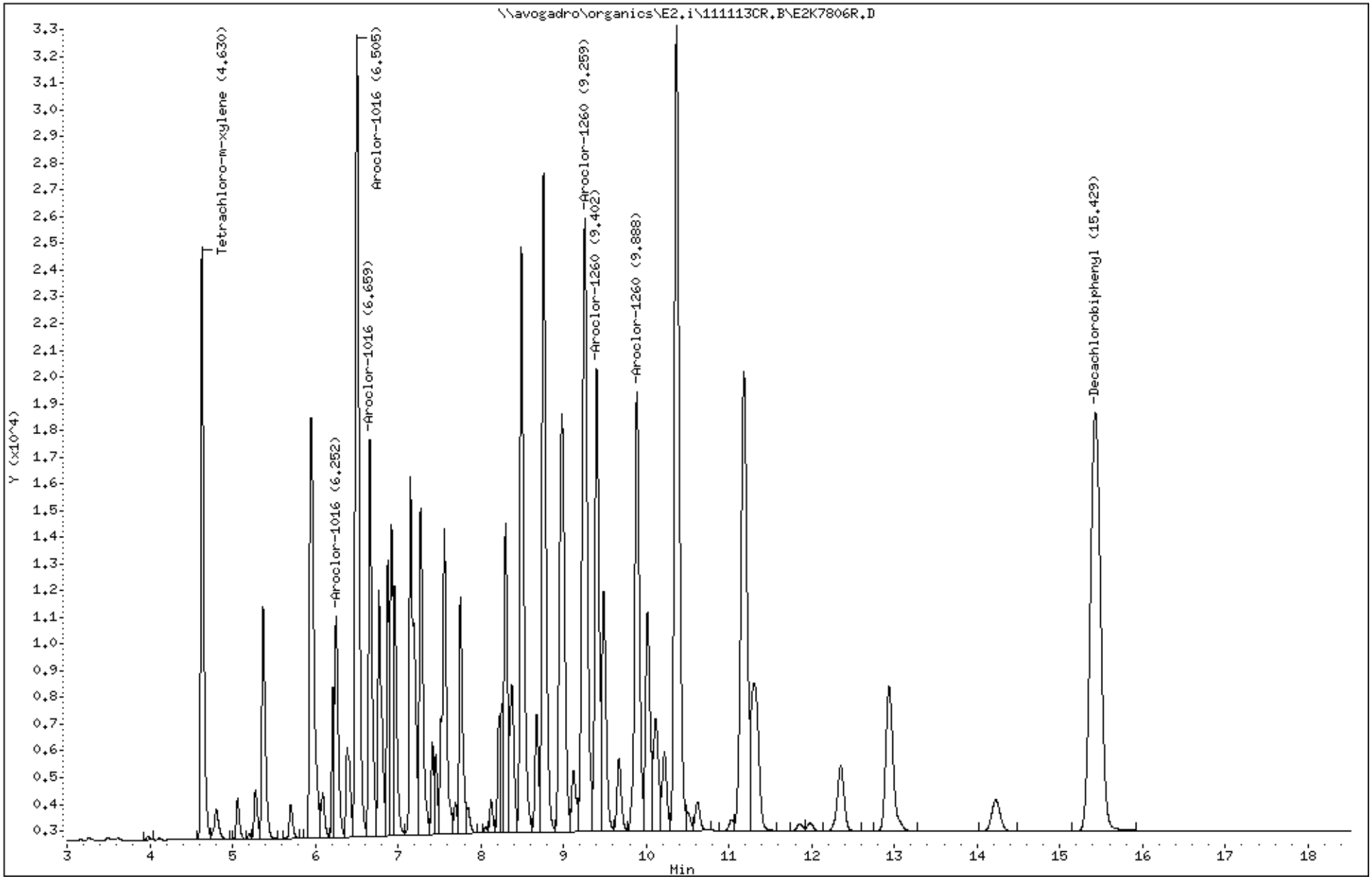
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.630	4.629	0.001	541251	0.04000	0.041		(a)
6 Aroclor-1016					CAS #: 12674-11-2		
6.252	6.251	0.001	243243	0.80000	0.77	80.00- 120.00	100.00(a)
6.505	6.504	0.001	954357	0.80000	0.78	376.07- 416.07	392.35
6.659	6.658	0.001	422013	0.80000	0.77	154.78- 194.78	173.49
Average of Peak Amounts =					0.77333		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.429	15.432	-0.003	1347719	0.08000	0.068		
8 Aroclor-1260					CAS #: 11096-82-5		
9.258	9.257	0.001	981668	0.80000	0.78	80.00- 120.00	100.00(a)
9.402	9.401	0.001	587253	0.80000	0.76	40.60- 80.60	59.82
9.887	9.887	0.000	632292	0.80000	0.78	43.80- 83.80	64.41
Average of Peak Amounts =					0.77333		

Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7806R.D
Report Date: 17-Nov-2011 11:09

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7806R.D
Date : 14-NOV-2011 11:22
Client ID: AR16604K2
Instrument: E2.i
Sample Info: AR16604K2,AR16604K2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7807F.D
Report Date: 17-Nov-2011 11:08

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

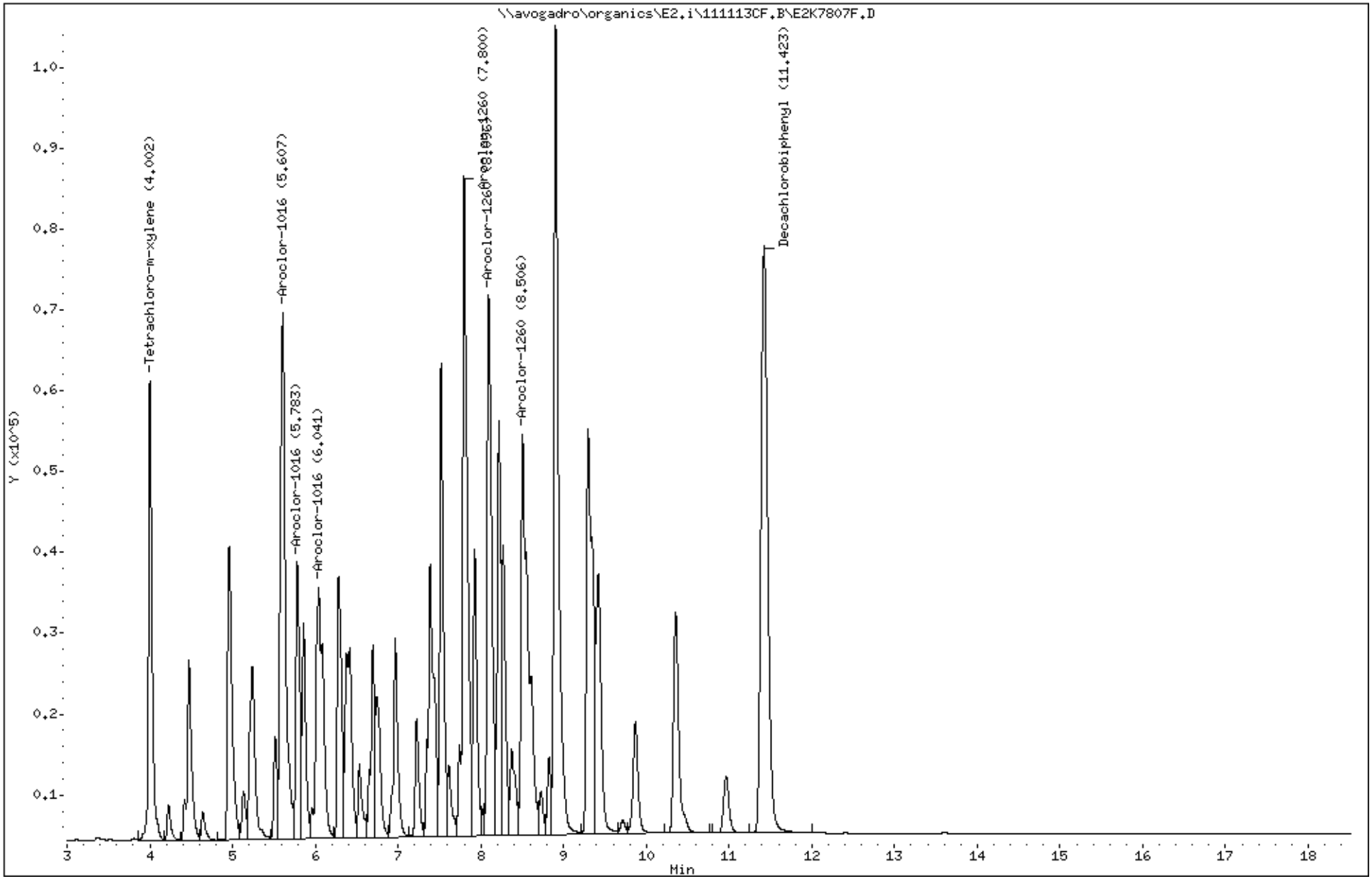
Data file : \\avogadro\organics\E2.i\111113CF.B\E2K7807F.D
Lab Smp Id: AR16605K2 Client Smp ID: AR16605K2
Inj Date : 14-NOV-2011 11:43
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16605K2,AR16605K2,,ar1660.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CF.B\E2_ARO_5_F.m
Meth Date : 17-Nov-2011 11:00 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807F.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		
4.001	4.001	0.000	1691992	0.08000	0.079			
5 Aroclor-1016						CAS #: 12674-11-2		
5.606	5.606	0.000	2870690	1.60000	1.4	80.00- 120.00		100.00
5.783	5.783	0.000	1082101	1.60000	1.4	17.61- 57.61		37.69
6.040	6.040	0.000	1935188	1.60000	1.4	46.07- 86.07		67.41
Average of Peak Amounts =					1.40000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.422	11.422	0.000	4107010	0.16000	0.14			
9 Aroclor-1260						CAS #: 11096-82-5		
7.799	7.799	0.000	3286601	1.60000	1.3	80.00- 120.00		100.00
8.095	8.095	0.000	2646062	1.60000	1.4	54.46- 94.46		80.51
8.505	8.505	0.000	3034248	1.60000	1.4	67.66- 107.66		92.32
Average of Peak Amounts =					1.36667			

Data File: \\avogadro\organics\E2.i\111113CF.B\E2K7807F.D
Date : 14-NOV-2011 11:43
Client ID: AR16605K2
Instrument: E2.i
Sample Info: AR16605K2,AR16605K2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7807R.D
Report Date: 17-Nov-2011 11:09

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

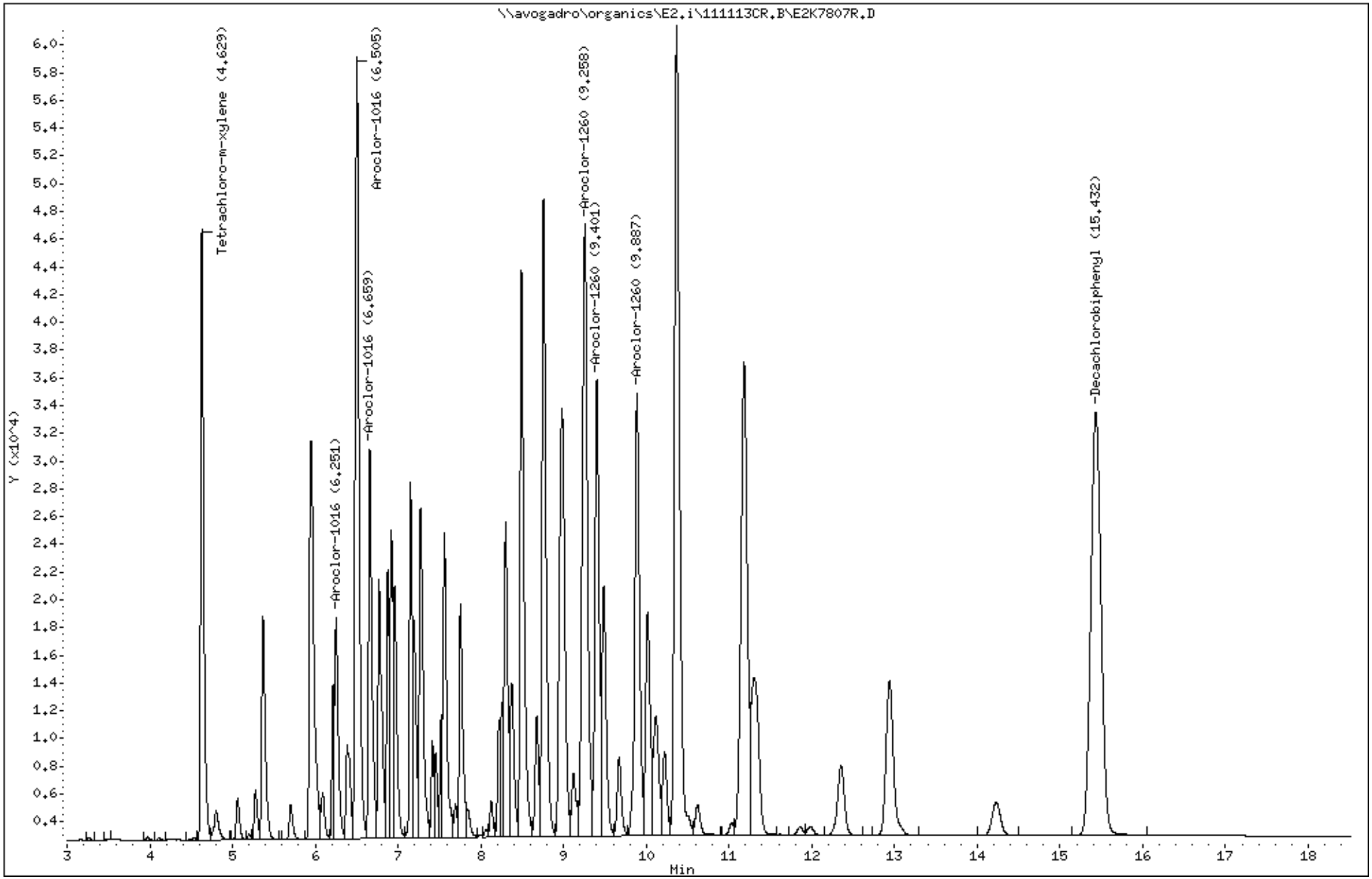
Data file : \\avogadro\organics\E2.i\111113CR.B\E2K7807R.D
Lab Smp Id: AR16605K2 Client Smp ID: AR16605K2
Inj Date : 14-NOV-2011 11:43
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16605K2,AR16605K2,,ar1660.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111113CR.B\E2_ARO_5_R.m
Meth Date : 17-Nov-2011 10:48 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807R.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		
4.629	4.629	0.000	1134145	0.08000	0.087			
6 Aroclor-1016						CAS #: 12674-11-2		
6.251	6.251	0.000	476562	1.60000	1.5	80.00- 120.00		100.00
6.504	6.504	0.000	1850436	1.60000	1.5	376.07- 416.07		388.29
6.658	6.658	0.000	814978	1.60000	1.5	154.78- 194.78		171.01
Average of Peak Amounts =					1.50000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.432	15.432	0.000	2656501	0.16000	0.15			
8 Aroclor-1260						CAS #: 11096-82-5		
9.257	9.257	0.000	1946535	1.60000	1.6	80.00- 120.00		100.00
9.401	9.401	0.000	1129901	1.60000	1.5	40.60- 80.60		58.05
9.887	9.887	0.000	1256427	1.60000	1.6	43.80- 83.80		64.55
Average of Peak Amounts =					1.56667			

Data File: \\avogadro\organics\E2.i\111113CR.B\E2K7807R.D
Date : 14-NOV-2011 11:43
Client ID: AR16605K2
Instrument: E2.i
Sample Info: AR16605K2,AR16605K2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111115F.B\E2K7943F.D
Report Date: 17-Nov-2011 10:58

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111115F.B\E2K7943F.D
Lab Smp Id: AR16603KG Client Smp ID: AR16603KG
Inj Date : 16-NOV-2011 02:10
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16603KG,AR16603KG,,ar1660.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111115F.B\E2_ARO_5_F.m
Meth Date : 16-Nov-2011 17:19 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807F.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

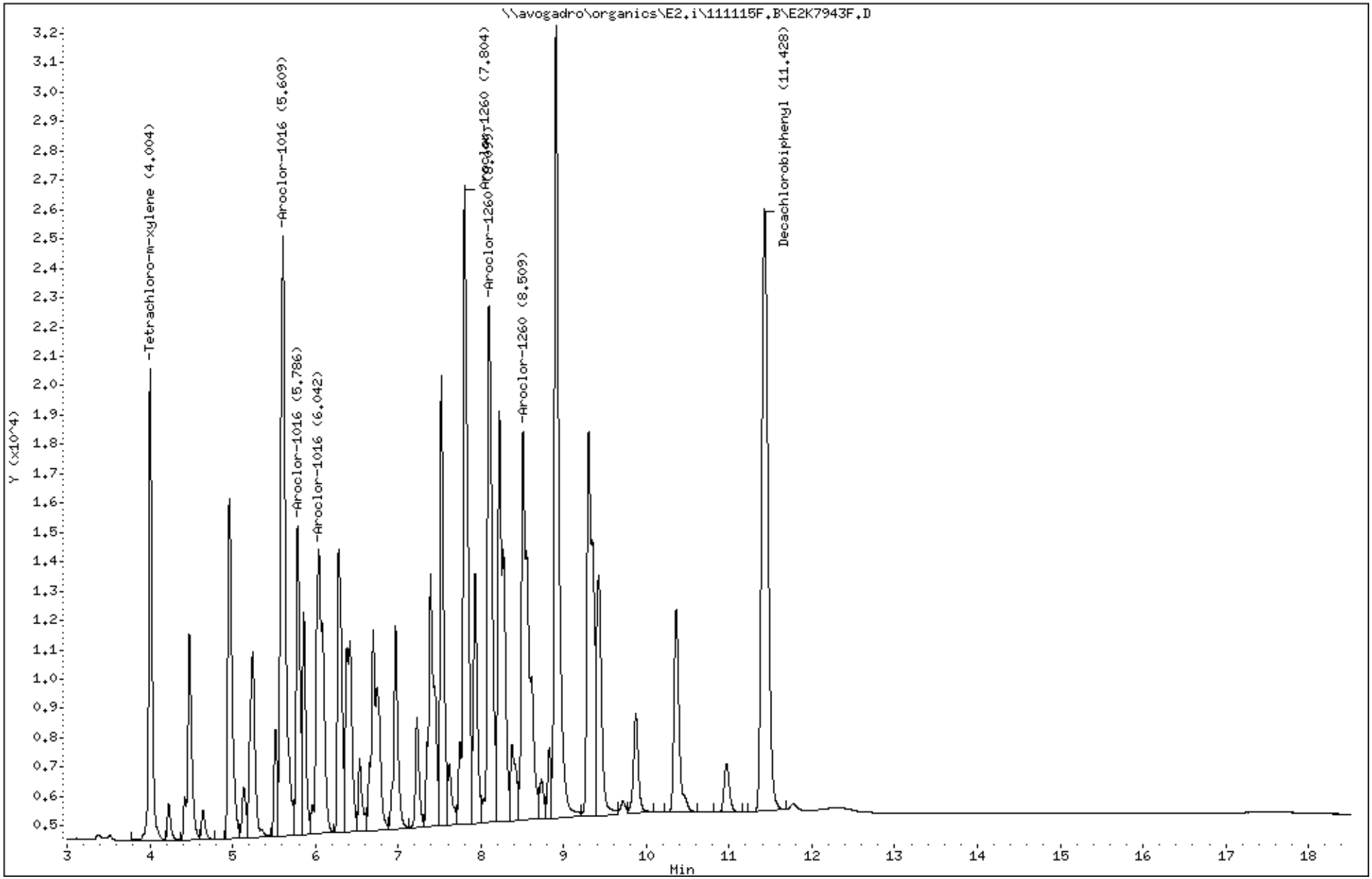
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.004	4.001	0.003	437959	0.02000	0.020			(a)
5 Aroclor-1016					CAS #: 12674-11-2			
5.608	5.606	0.002	867360	0.40000	0.41	80.00- 120.00	100.00	(a)
5.785	5.783	0.002	327684	0.40000	0.41	18.01- 58.01	37.78	
6.042	6.040	0.002	574375	0.40000	0.40	45.24- 85.24	66.22	
	Average of Peak Amounts =				0.40667			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.428	11.422	0.006	1093247	0.04000	0.037			(a)
9 Aroclor-1260					CAS #: 11096-82-5			
7.803	7.799	0.004	863048	0.40000	0.35	80.00- 120.00	100.00	(a)
8.098	8.095	0.003	696260	0.40000	0.37	54.41- 94.41	80.67	
8.509	8.505	0.004	793159	0.40000	0.37	66.98- 106.98	91.90	
	Average of Peak Amounts =				0.36333			

Data File: \\avogadro\organics\E2.i\111115F.B\E2K7943F.D
Report Date: 17-Nov-2011 10:58

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111115F.B\E2K7943F.D
Date : 16-NOV-2011 02:10
Client ID: AR16603KG
Instrument: E2.i
Sample Info: AR16603KG,AR16603KG,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111115R.B\E2K7943R.D
Report Date: 17-Nov-2011 11:00

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111115R.B\E2K7943R.D
Lab Smp Id: AR16603KG Client Smp ID: AR16603KG
Inj Date : 16-NOV-2011 02:10
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16603KG,AR16603KG,,ar1660.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\Avogadro\Organics\E2.i\111115R.B\E2_ARO_5_R.m
Meth Date : 16-Nov-2011 17:21 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807R.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: TARGET111

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

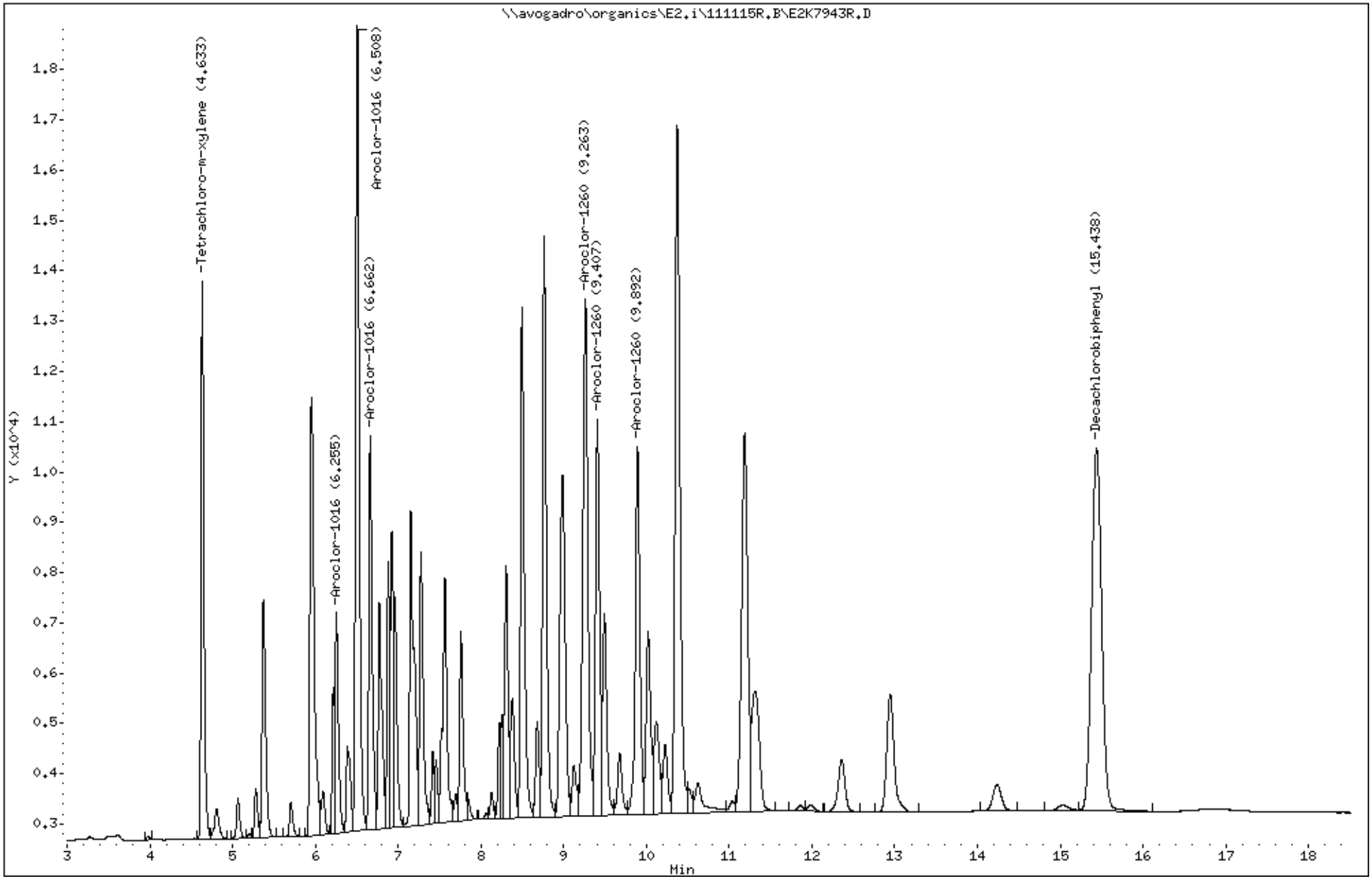
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.633	4.629	0.004	260277	0.02000	0.020			(a)
6 Aroclor-1016						CAS #: 12674-11-2		
6.254	6.251	0.003	126346	0.40000	0.40	80.00- 120.00	100.00	(a)
6.507	6.504	0.003	496917	0.40000	0.41	363.62- 403.62	393.30	
6.662	6.658	0.004	217764	0.40000	0.40	152.00- 192.00	172.35	
		Average of Peak Amounts =			0.40333			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.438	15.432	0.006	615559	0.04000	0.036			(a)
8 Aroclor-1260						CAS #: 11096-82-5		
9.263	9.257	0.006	434456	0.40000	0.35	80.00- 120.00	100.00	(a)
9.406	9.401	0.005	264715	0.40000	0.34	41.47- 81.47	60.93	
9.892	9.887	0.005	281077	0.40000	0.35	44.64- 84.64	64.70	
		Average of Peak Amounts =			0.34667			

Data File: \\avogadro\organics\E2.i\111115R.B\E2K7943R.D
Report Date: 17-Nov-2011 11:00

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111115R.B\E2K7943R.D
Date : 16-NOV-2011 02:10
Client ID: AR16603KG
Instrument: E2.i
Sample Info: AR16603KG,AR16603KG,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111115F.B\E2K7974F.D
Report Date: 17-Nov-2011 10:59

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111115F.B\E2K7974F.D
Lab Smp Id: AR16603KH Client Smp ID: AR16603KH
Inj Date : 16-NOV-2011 12:58
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16603KH,AR16603KH,,ar1660.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111115F.B\E2_ARO_5_F.m
Meth Date : 16-Nov-2011 17:19 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807F.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

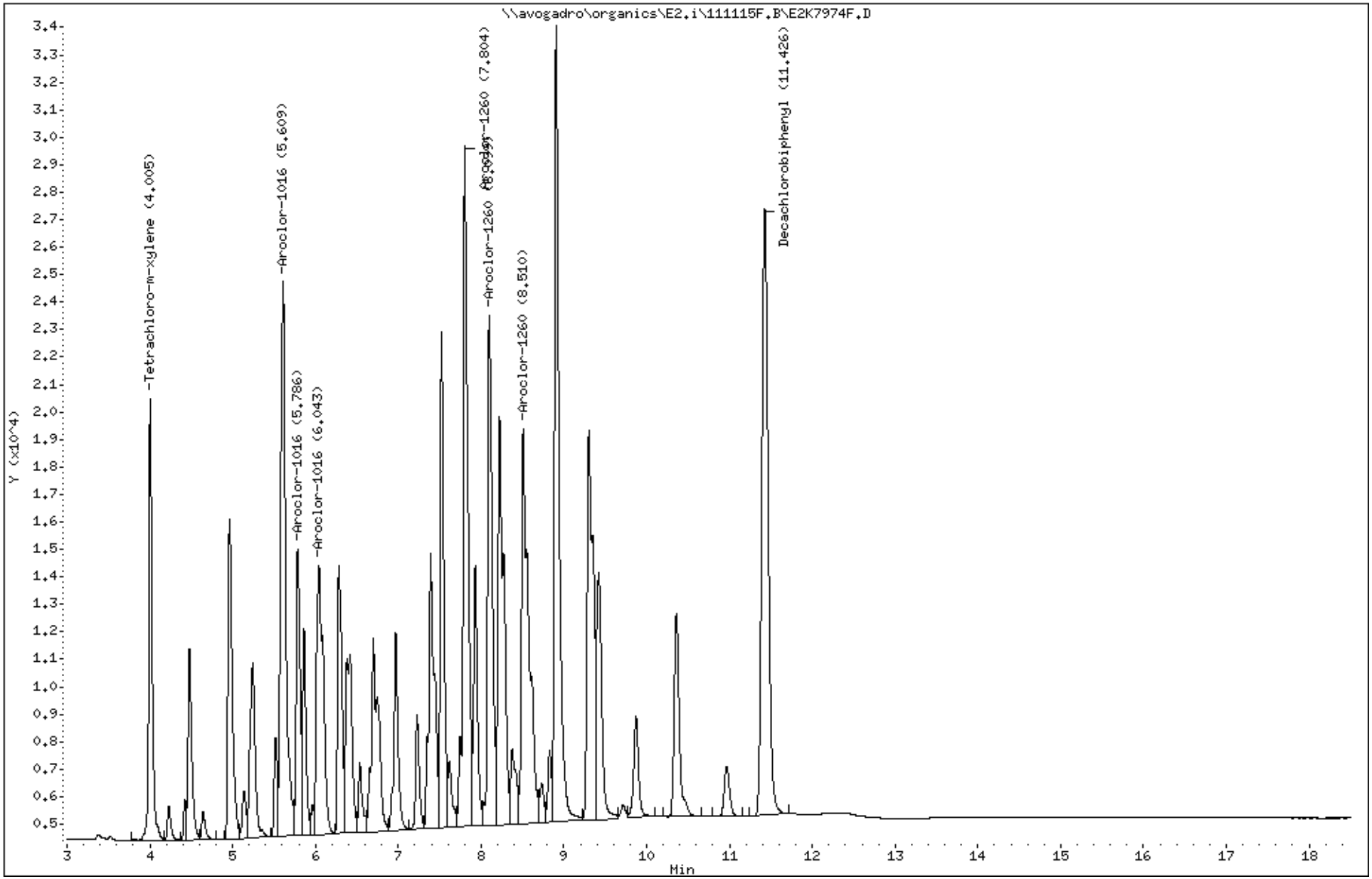
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.004	4.001	0.003	445502	0.02000	0.021			(a)
5 Aroclor-1016						CAS #: 12674-11-2		
5.609	5.606	0.003	866885	0.40000	0.41	80.00- 120.00	100.00	(a)
5.786	5.783	0.003	329485	0.40000	0.41	18.01- 58.01	38.01	
6.042	6.040	0.002	565513	0.40000	0.40	45.24- 85.24	65.24	
	Average of Peak Amounts =				0.40667			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.426	11.422	0.004	1186321	0.04000	0.040			(a)
9 Aroclor-1260						CAS #: 11096-82-5		
7.803	7.799	0.004	989478	0.40000	0.40	80.00- 120.00	100.00	(a)
8.098	8.095	0.003	736314	0.40000	0.39	54.41- 94.41	74.41	
8.509	8.505	0.004	860617	0.40000	0.40	66.98- 106.98	86.98	
	Average of Peak Amounts =				0.39667			

Data File: \\avogadro\organics\E2.i\111115F.B\E2K7974F.D
Report Date: 17-Nov-2011 10:59

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111115F.B\E2K7974F.D
Date : 16-NOV-2011 12:58
Client ID: AR16603KH
Instrument: E2.i
Sample Info: AR16603KH,AR16603KH,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111115R.B\E2K7974R.D
Report Date: 17-Nov-2011 11:00

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111115R.B\E2K7974R.D
Lab Smp Id: AR16603KH Client Smp ID: AR16603KH
Inj Date : 16-NOV-2011 12:58
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16603KH,AR16603KH,,ar1660.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111115R.B\E2_ARO_5_R.m
Meth Date : 16-Nov-2011 17:21 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807R.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

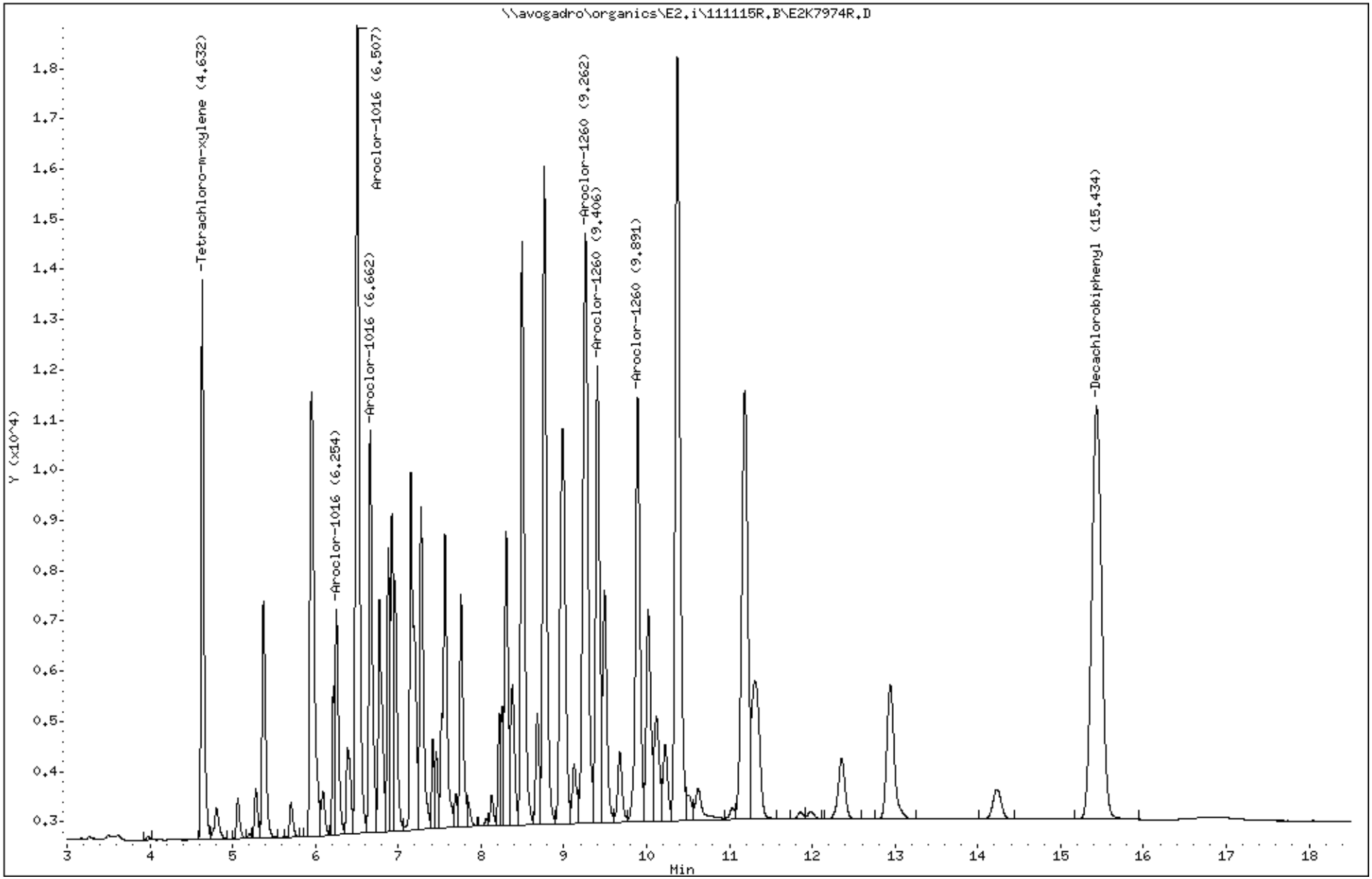
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.632	4.629	0.003	266186	0.02000	0.020			(a)
6 Aroclor-1016						CAS #: 12674-11-2		
6.254	6.251	0.003	131005	0.40000	0.42	80.00- 120.00	100.00	(a)
6.506	6.504	0.002	502567	0.40000	0.41	363.62- 403.62	383.62	
6.661	6.658	0.003	225329	0.40000	0.41	152.00- 192.00	172.00	
Average of Peak Amounts =					0.41333			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.433	15.432	0.001	690919	0.04000	0.040			(a)
8 Aroclor-1260						CAS #: 11096-82-5		
9.261	9.257	0.004	496500	0.40000	0.40	80.00- 120.00	100.00	(a)
9.405	9.401	0.004	305223	0.40000	0.40	41.47- 81.47	61.48	
9.890	9.887	0.003	320939	0.40000	0.40	44.64- 84.64	64.64	
Average of Peak Amounts =					0.40000			

Data File: \\avogadro\organics\E2.i\111115R.B\E2K7974R.D
Report Date: 17-Nov-2011 11:00

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111115R.B\E2K7974R.D
Date : 16-NOV-2011 12:58
Client ID: AR16603KH
Instrument: E2.i
Sample Info: AR16603KH,AR16603KH,,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.

ABLK2M

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-62638

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2K7948F.D/E2K7948R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 11/02/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/16/2011

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/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\111115F.B\E2K7948F.D
Report Date: 17-Nov-2011 10:59

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

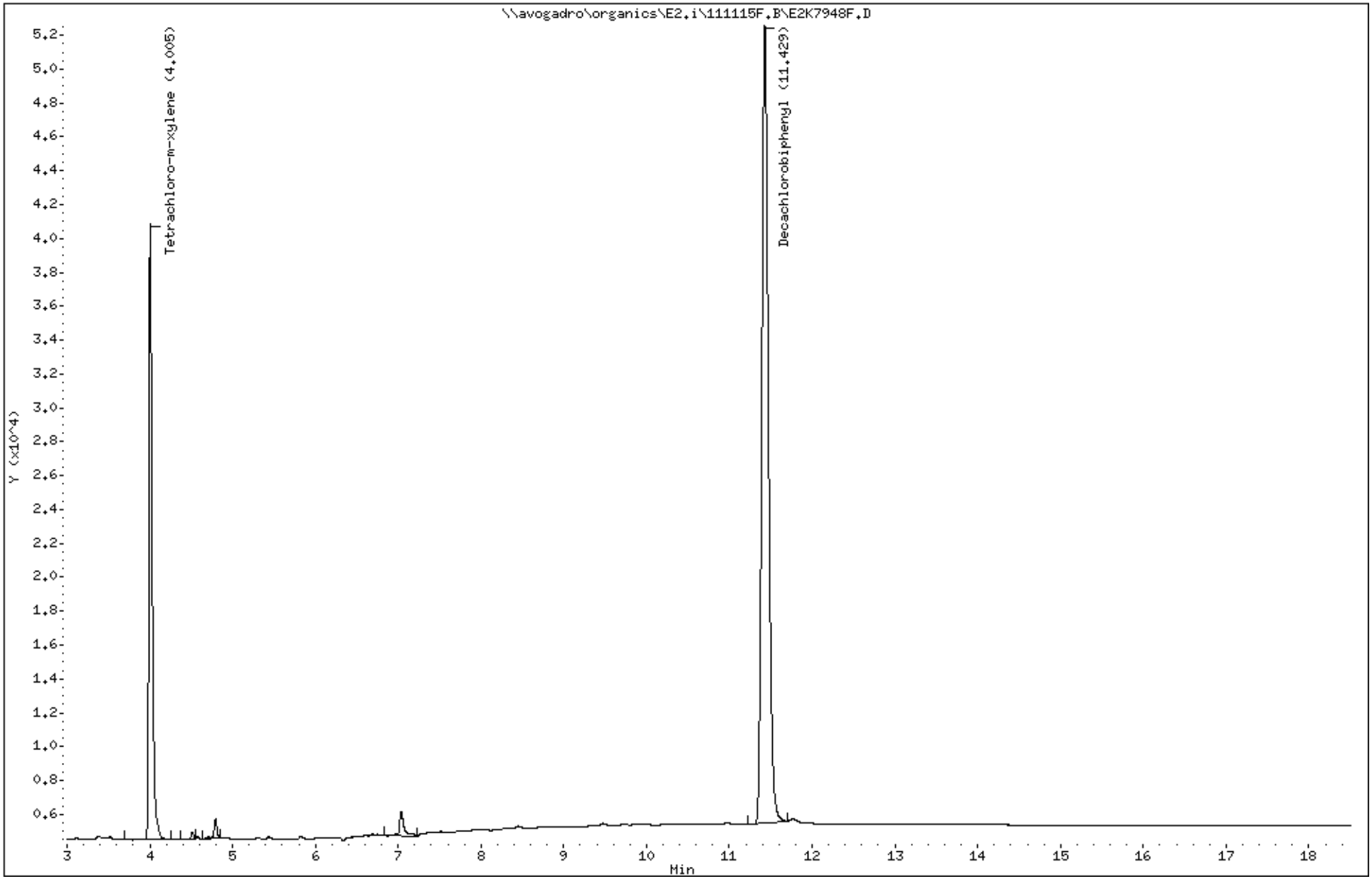
Data file : \\avogadro\organics\E2.i\111115F.B\E2K7948F.D
Lab Smp Id: MB-62638 Client Smp ID: ABLK2M
Inj Date : 16-NOV-2011 03:55
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : MB-62638,ABLK2M,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111115F.B\E2_ARO_5_F.m
Meth Date : 16-Nov-2011 17:19 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807F.D
Als bottle: 21 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.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	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.004	4.001	0.003	977778	0.04586	0.46		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
11.428	11.422	0.006	2595573	0.08857	0.88		

Data File: \\avogadro\organics\E2.i\111115F.B\E2K7948F.D
Date : 16-NOV-2011 03:55
Client ID: ABLK2M
Instrument: E2.i
Sample Info: MB-62638,ABLK2M,62638,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111115R.B\E2K7948R.D
Report Date: 17-Nov-2011 11:00

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

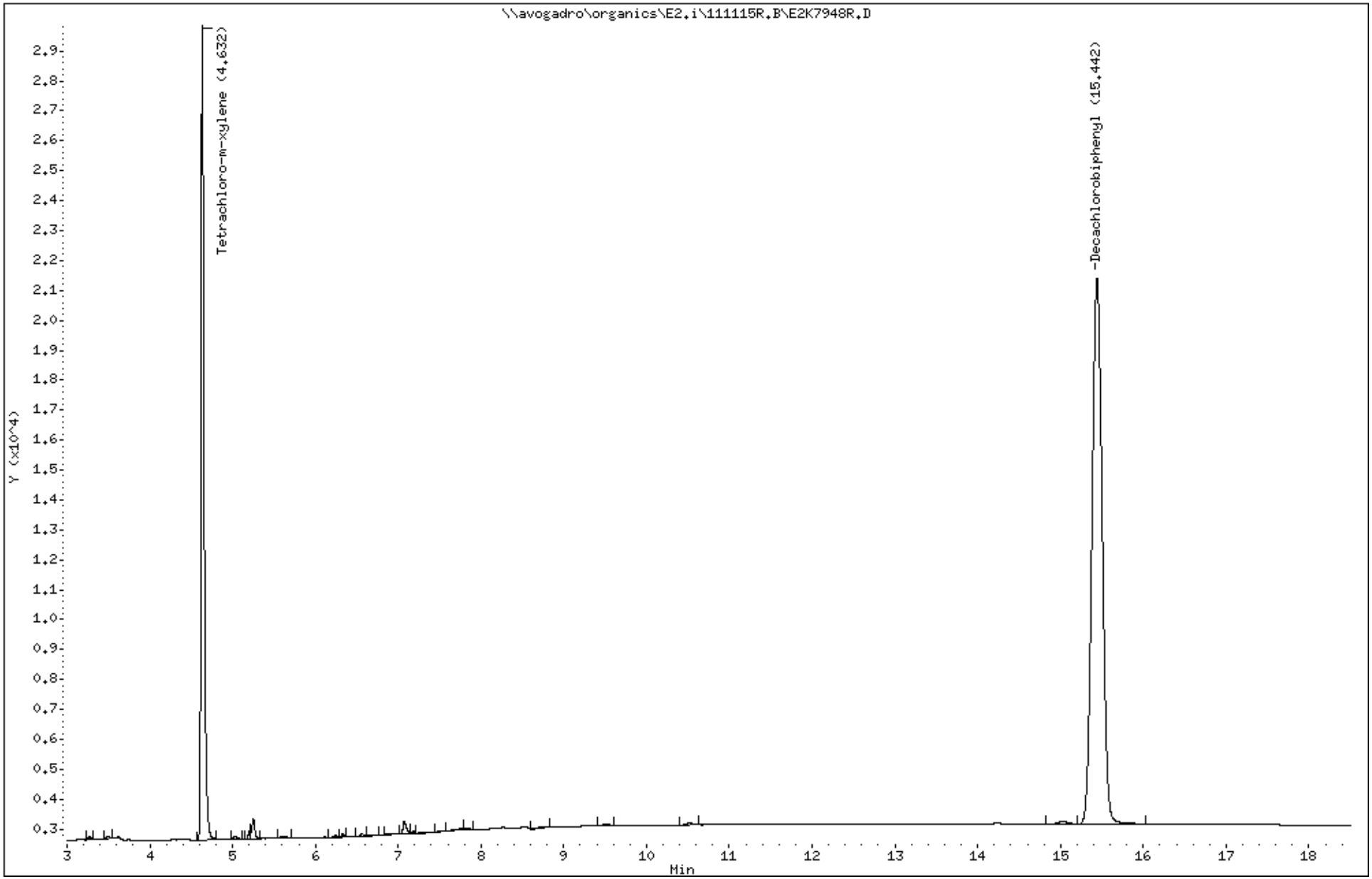
Data file : \\avogadro\organics\E2.i\111115R.B\E2K7948R.D
Lab Smp Id: MB-62638 Client Smp ID: ABLK2M
Inj Date : 16-NOV-2011 03:55
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : MB-62638,ABLK2M,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment :
Method : \\Avogadro\Organics\E2.i\111115R.B\E2_ARO_5_R.m
Meth Date : 16-Nov-2011 17:21 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807R.D
Als bottle: 21 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET111

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

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.632	4.629	0.003	665532	0.05085	0.51		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
15.441	15.432	0.009	1561771	0.09014	0.90		

Data File: \\avogadro\organics\E2.i\111115R.B\E2K7948R.D
Date : 16-NOV-2011 03:55
Client ID: ABLK2M
Instrument: E2.i
Sample Info: MB-62638,ABLK2M,62638,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.

ABLK2N

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-62719

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2K7969F.D/E2K7969R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 11/03/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/16/2011

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/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\111115F.B\E2K7969F.D
Report Date: 17-Nov-2011 10:59

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

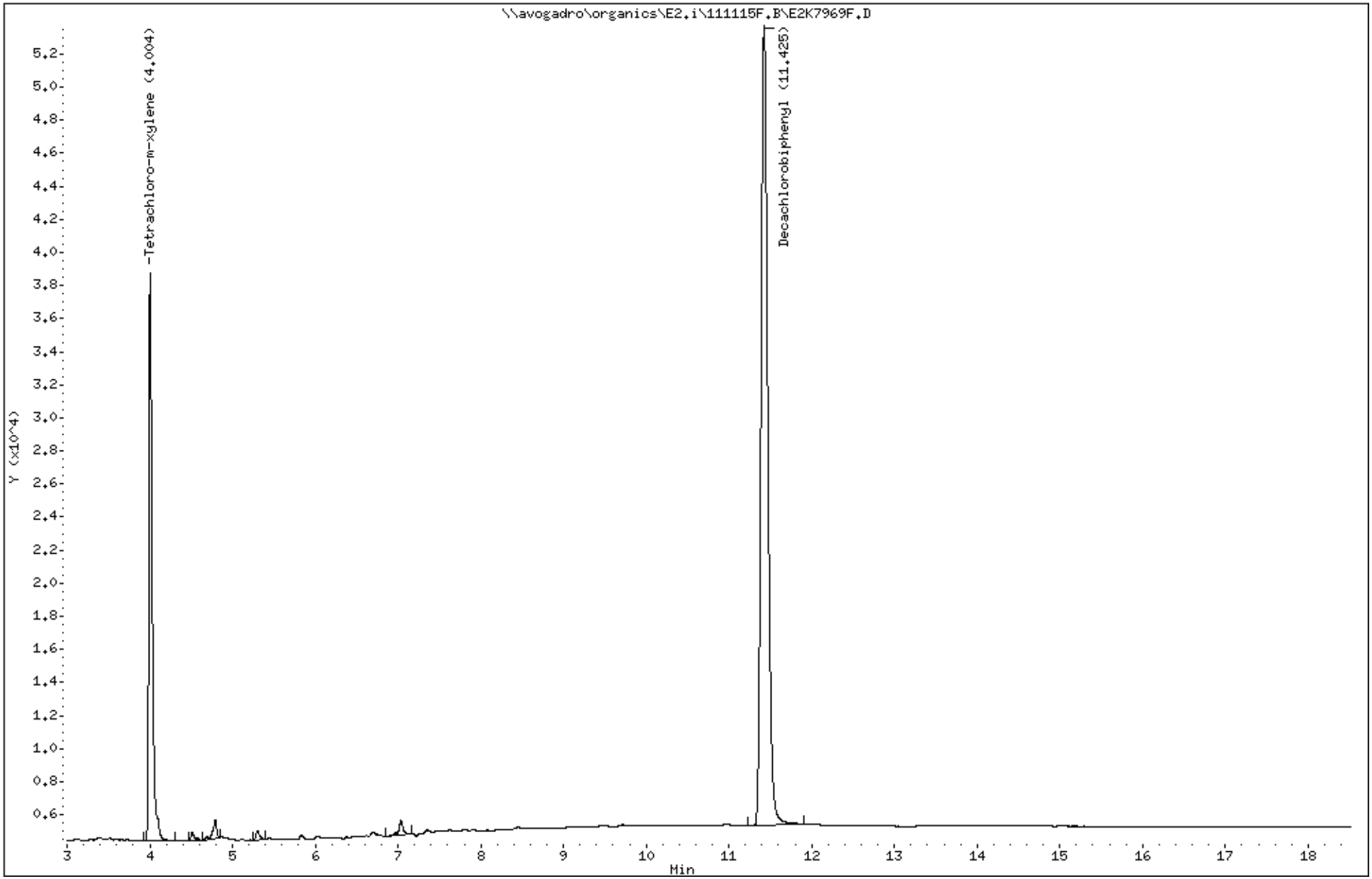
Data file : \\avogadro\organics\E2.i\111115F.B\E2K7969F.D
Lab Smp Id: MB-62719 Client Smp ID: ABLK2N
Inj Date : 16-NOV-2011 11:14
Operator : DL SRC: LIMS Inst ID: E2.i
Smp Info : MB-62719,ABLK2N,62719,somaro.sub,,
Misc Info : 1,3,,1
Comment :
Method : \\avogadro\organics\E2.i\111115F.B\E2_ARO_5_F.m
Meth Date : 16-Nov-2011 17:19 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807F.D
Als bottle: 42 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET111

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	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.004	4.001	0.003	956667	0.04487	0.45		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.425	11.422	0.003	2711069	0.09251	0.92		

Data File: \\avogadro\organics\E2.i\111115F.B\E2K7969F.D
Date : 16-NOV-2011 11:14
Client ID: ABLK2N
Instrument: E2.i
Sample Info: MB-62719,ABLK2N,62719,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111115R.B\E2K7969R.D
Report Date: 17-Nov-2011 11:00

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

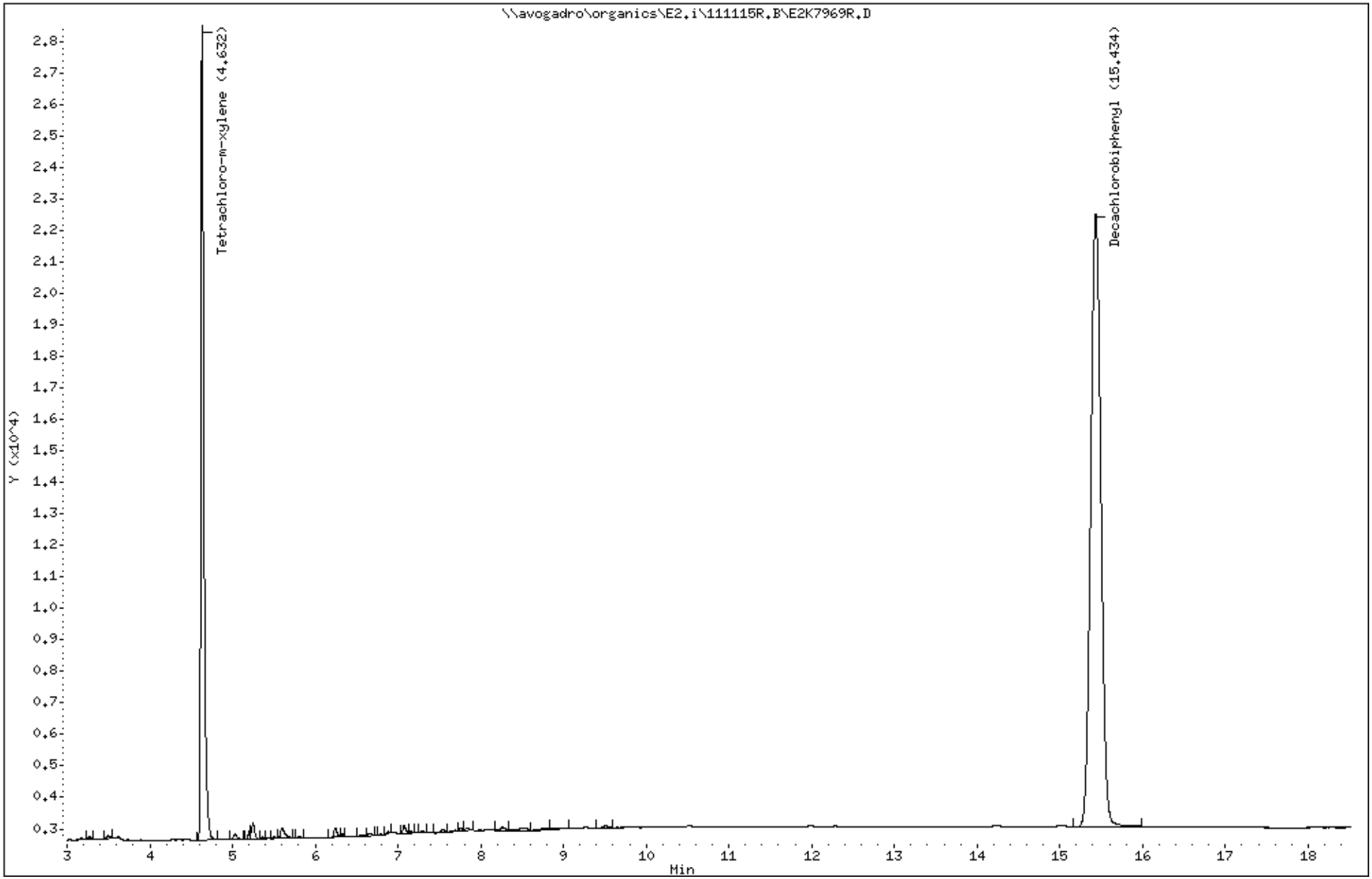
Data file : \\avogadro\organics\E2.i\111115R.B\E2K7969R.D
Lab Smp Id: MB-62719 Client Smp ID: ABLK2N
Inj Date : 16-NOV-2011 11:14
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : MB-62719,ABLK2N,62719,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111115R.B\E2_ARO_5_R.m
Meth Date : 16-Nov-2011 17:21 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807R.D
Als bottle: 42 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.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	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.631	4.629	0.002	647941	0.04951	0.50		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
15.434	15.432	0.002	1664649	0.09608	0.96		

Data File: \\avogadro\organics\E2.i\111115R.B\E2K7969R.D
Date : 16-NOV-2011 11:14
Client ID: ABLK2N
Instrument: E2.i
Sample Info: MB-62719,ABLK2N,62719,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

1645801

EPA SAMPLE NO.

AIBLKKG(1)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: AIBLKKG

Sample wt/vol: (g/mL) ML Lab File ID: E2K7942F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) Date Extracted:

Concentrated Extract Volume: (uL) Date Analyzed: 11/16/2011

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

1645844

EPA SAMPLE NO.

AIBLKKG(2)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: AIBLKKG

Sample wt/vol: (g/mL) ML Lab File ID: E2K7942R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) Date Extracted:

Concentrated Extract Volume: (uL) Date Analyzed: 11/16/2011

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\111115F.B\E2K7942F.D
Report Date: 17-Nov-2011 10:58

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111115F.B\E2K7942F.D
Lab Smp Id: AIBLKKG Client Smp ID: AIBLKKG
Inj Date : 16-NOV-2011 01:49
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AIBLKKG,AIBLKKG,,AIBLK.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111115F.B\E2_ARO_5_F.m
Meth Date : 16-Nov-2011 17:19 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807F.D
Als bottle: 100 Calibration Sample, Level: 3
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

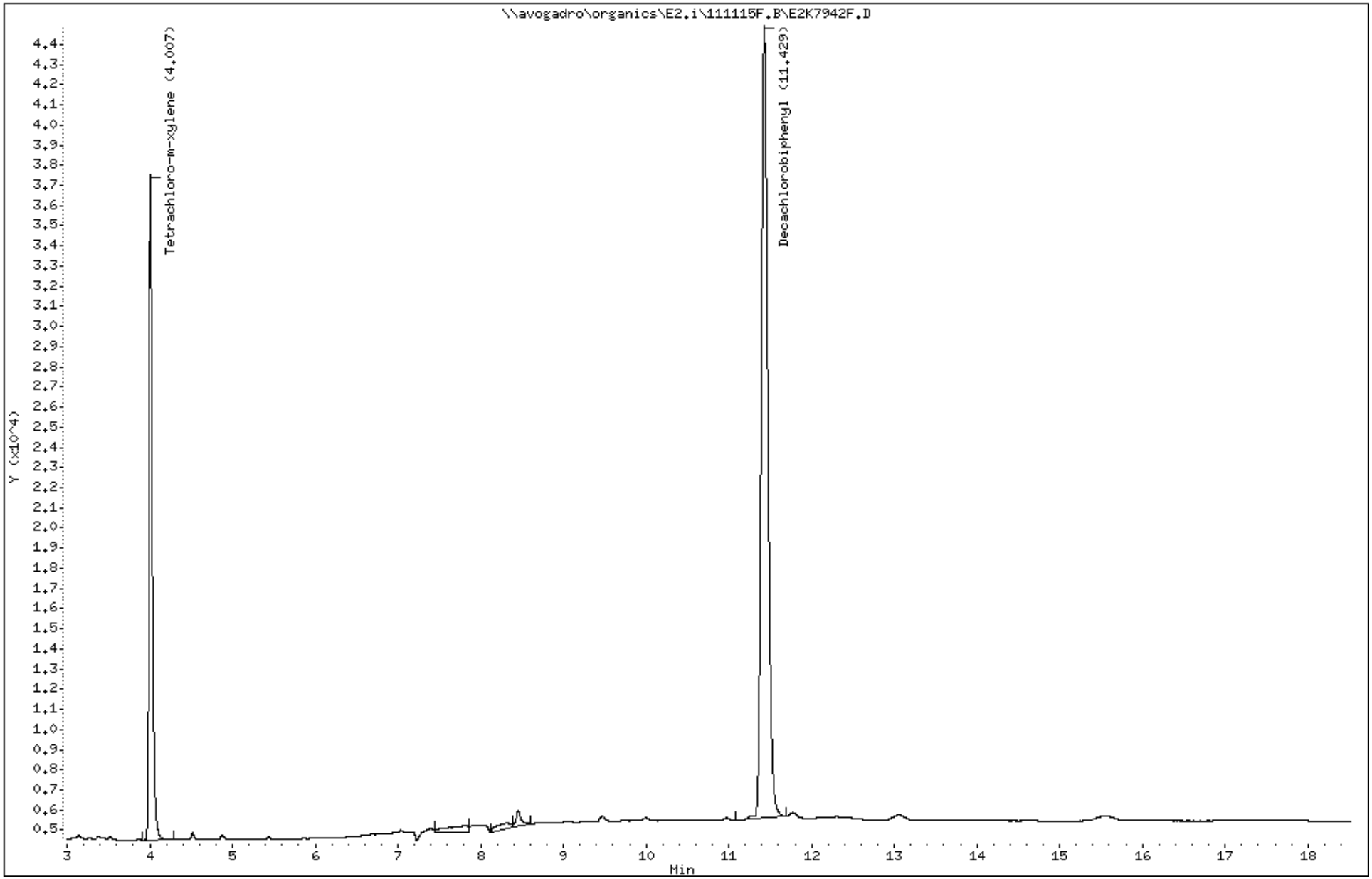
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.006	4.001	0.005	865031	0.02000	0.040			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.428	11.422	0.006	2170050	0.04000	0.074			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111115F.B\E2K7942F.D
Date : 16-NOV-2011 01:49
Client ID: AIBLKKG
Instrument: E2.i
Sample Info: AIBLKKG,AIBLKKG,,AIBLK,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111115R.B\E2K7942R.D
Report Date: 17-Nov-2011 11:00

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111115R.B\E2K7942R.D
Lab Smp Id: AIBLKKG Client Smp ID: AIBLKKG
Inj Date : 16-NOV-2011 01:49
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AIBLKKG,AIBLKKG,,AIBLK.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111115R.B\E2_ARO_5_R.m
Meth Date : 16-Nov-2011 17:21 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807R.D
Als bottle: 100 Calibration Sample, Level: 3
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

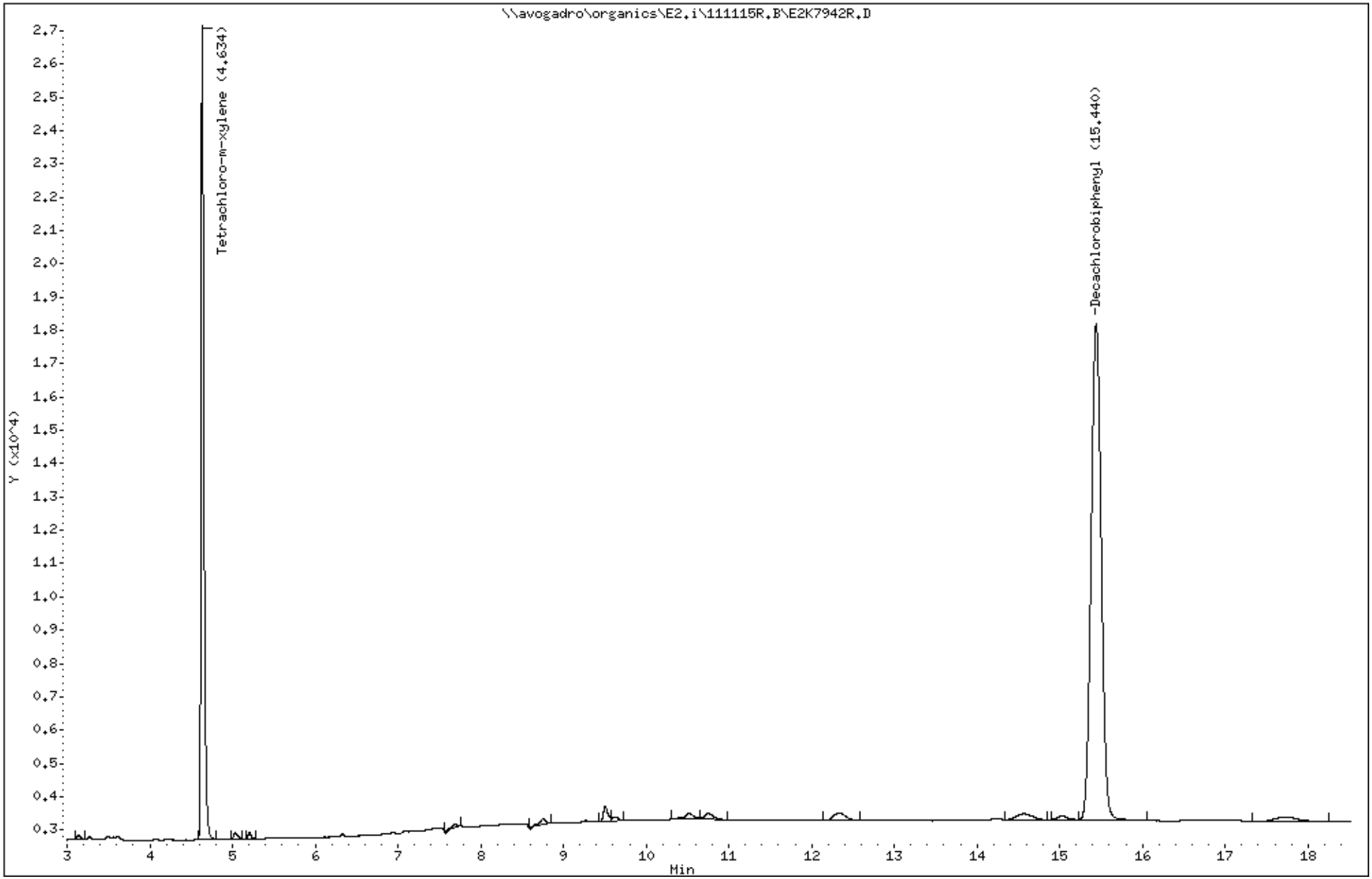
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.633	4.629	0.004	581674	0.02000	0.044			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.440	15.432	0.008	1267462	0.04000	0.073			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111115R.B\E2K7942R.D
Date : 16-NOV-2011 01:49
Client ID: AIBLKKG
Instrument: E2.i
Sample Info: AIBLKKG,AIBLKKG,,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

1645832

EPA SAMPLE NO.

AIBLKKH(1)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: AIBLKKH

Sample wt/vol: (g/mL) ML Lab File ID: E2K7973F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) Date Extracted:

Concentrated Extract Volume: (uL) Date Analyzed: 11/16/2011

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

1645878

EPA SAMPLE NO.

AIBLKKH(2)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: AIBLKKH

Sample wt/vol: (g/mL) ML Lab File ID: E2K7973R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) Date Extracted:

Concentrated Extract Volume: (uL) Date Analyzed: 11/16/2011

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\111115F.B\E2K7973F.D
Report Date: 17-Nov-2011 10:59

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111115F.B\E2K7973F.D
Lab Smp Id: AIBLKKH Client Smp ID: AIBLKKH
Inj Date : 16-NOV-2011 12:37
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AIBLKKH,AIBLKKH,,AIBLK.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111115F.B\E2_ARO_5_F.m
Meth Date : 16-Nov-2011 17:19 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807F.D
Als bottle: 100 Calibration Sample, Level: 3
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

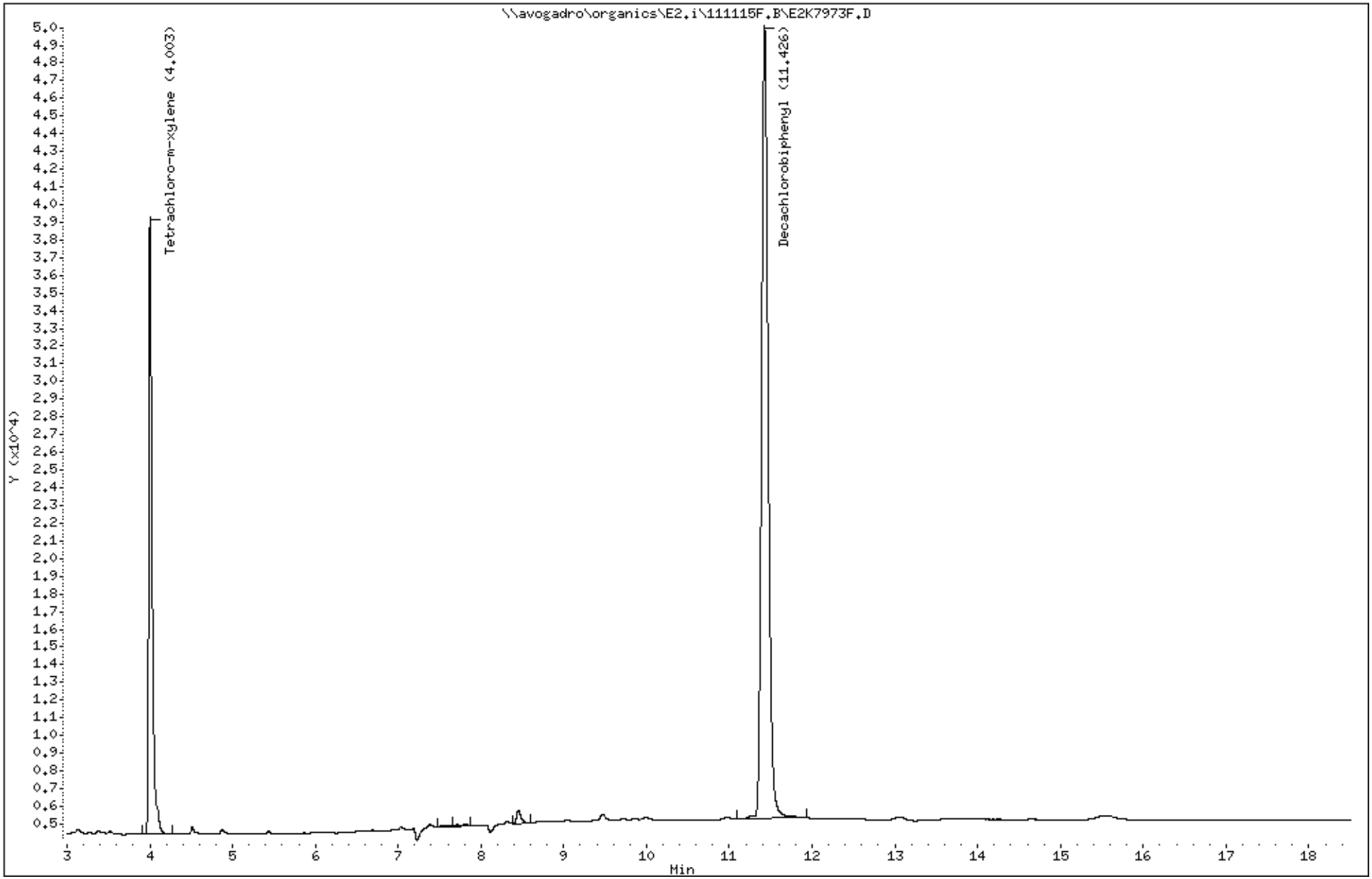
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.002	4.001	0.001	969429	0.02000	0.045			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.425	11.422	0.003	2518335	0.04000	0.086			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111115F.B\E2K7973F.D
Date : 16-NOV-2011 12:37
Client ID: AIBLKKH
Instrument: E2.i
Sample Info: AIBLKKH,AIBLKKH,,AIBLK,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111115R.B\E2K7973R.D
Report Date: 17-Nov-2011 11:00

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

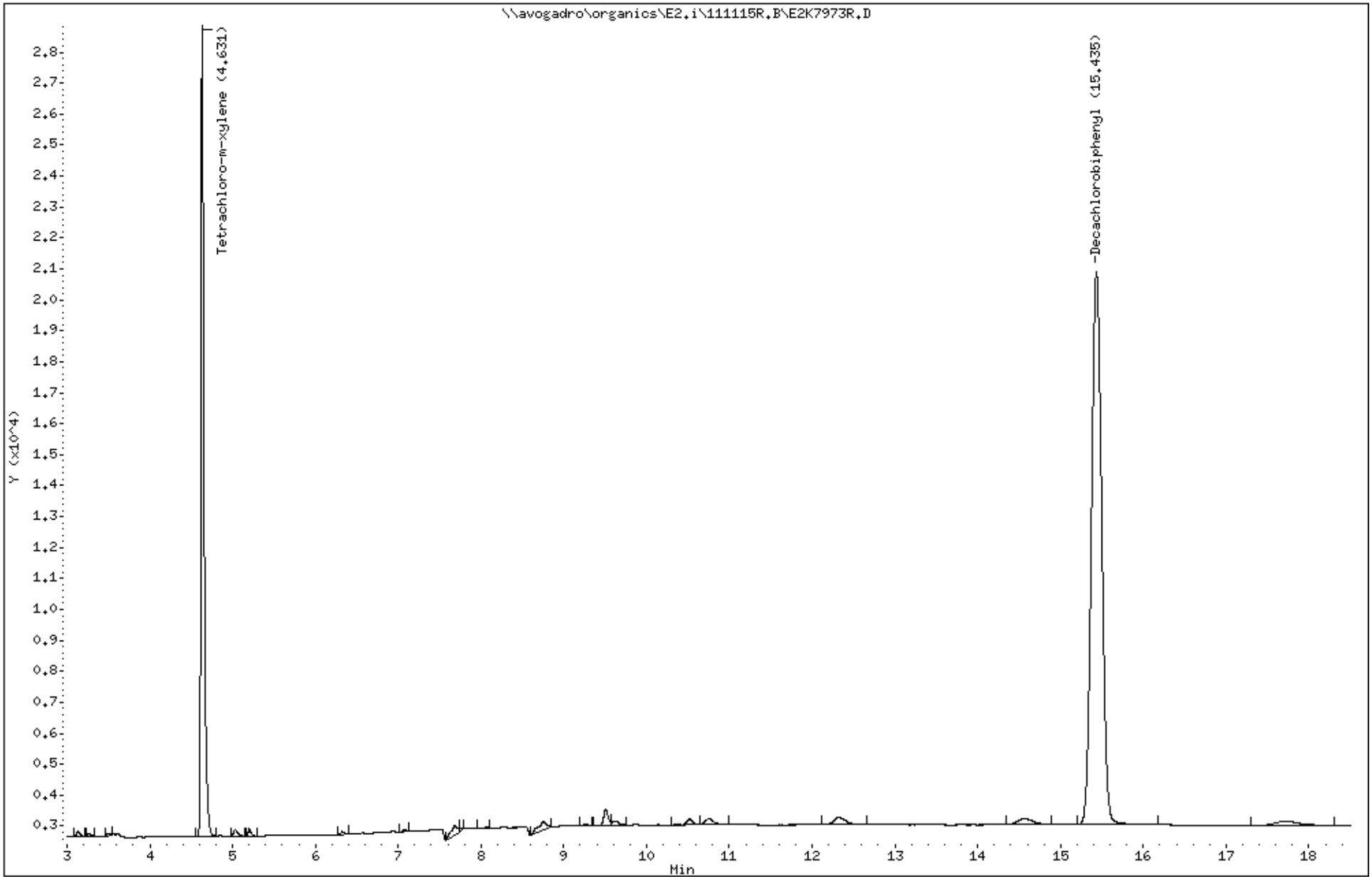
Data file : \\avogadro\organics\E2.i\111115R.B\E2K7973R.D
Lab Smp Id: AIBLKKH Client Smp ID: AIBLKKH
Inj Date : 16-NOV-2011 12:37
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AIBLKKH,AIBLKKH,,AIBLK.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111115R.B\E2_ARO_5_R.m
Meth Date : 16-Nov-2011 17:21 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807R.D
Als bottle: 100 Calibration Sample, Level: 3
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		
4.630	4.629	0.001	657585	0.02000	0.050			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.434	15.432	0.002	1537640	0.04000	0.089			

Data File: \\avogadro\organics\E2.i\111115R.B\E2K7973R.D
Date : 16-NOV-2011 12:37
Client ID: AIBLKKH
Instrument: E2.i
Sample Info: AIBLKKH,AIBLKKH,,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.

H30X3MS(1)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-20AMS

Sample wt/vol: 500 (g/mL) ML Lab File ID: E2K7971F.D

% Moisture: Decanted: (Y/N) Date Received: 10/29/2011

Extraction: (Type) SEPF Date Extracted: 11/03/2011

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/16/2011

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/L	Q
12674-11-2	Aroclor-1016	2.2	
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	1.8	
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

EPA SAMPLE NO.

H30X3MS(2)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-20AMS

Sample wt/vol: 500 (g/mL) ML Lab File ID: E2K7971R.D

% Moisture: Decanted: (Y/N) Date Received: 10/29/2011

Extraction: (Type) SEPF Date Extracted: 11/03/2011

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/16/2011

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/L	Q
12674-11-2	Aroclor-1016	2.7	
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	1.8	
37324-23-5	Aroclor-1262	1.0	U
11100-14-4	Aroclor-1268	1.0	U

Data File: \\avogadro\organics\E2.i\111115F.B\E2K7971F.D
Report Date: 17-Nov-2011 10:59

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

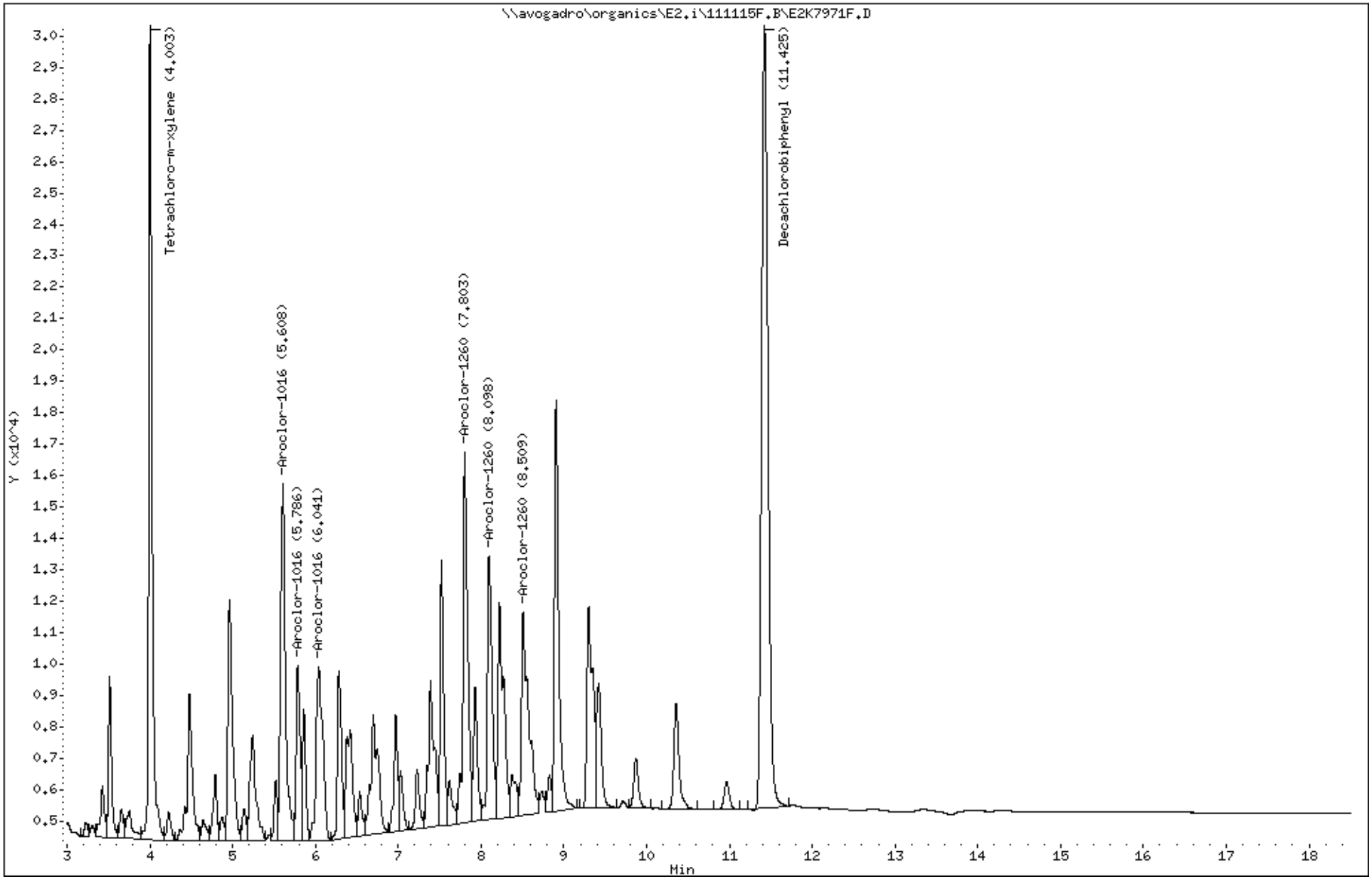
Data file : \\avogadro\organics\E2.i\111115F.B\E2K7971F.D
Lab Smp Id: K2200-20AMS Client Smp ID: H30X3MS
Inj Date : 16-NOV-2011 11:56
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-20AMS,,62719,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111115F.B\E2_ARO_5_F.m
Meth Date : 16-Nov-2011 17:19 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807F.D
Als bottle: 44 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.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	5000.000	Volume of final extract (uL)
Vo	500.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.003	4.001	0.002	728732	0.03418	0.34		
5 Aroclor-1016					CAS #: 12674-11-2		
5.608	5.606	0.002	472093	0.22334	2.2	80.00- 120.00	100.00
5.786	5.783	0.003	181980	0.22842	2.3	18.01- 58.01	38.55
6.040	6.040	0.000	317206	0.22282	2.2	45.24- 85.24	67.19
Average of Peak Concentrations =					2.2		
9 Aroclor-1260					CAS #: 11096-82-5		
7.803	7.799	0.004	468537	0.18823	1.9	80.00- 120.00	100.00
8.097	8.095	0.002	332194	0.17536	1.8	54.41- 94.41	70.90
8.508	8.505	0.003	381332	0.17850	1.8	66.98- 106.98	81.39
Average of Peak Concentrations =					1.8		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.424	11.422	0.002	1345234	0.04590	0.46		

Data File: \\avogadro\organics\E2.i\111115F.B\E2K7971F.D
Date : 16-NOV-2011 11:56
Client ID: H30X3MS
Instrument: E2.i
Sample Info: K2200-20AMS,,62719,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111115R.B\E2K7971R.D
Report Date: 17-Nov-2011 11:00

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

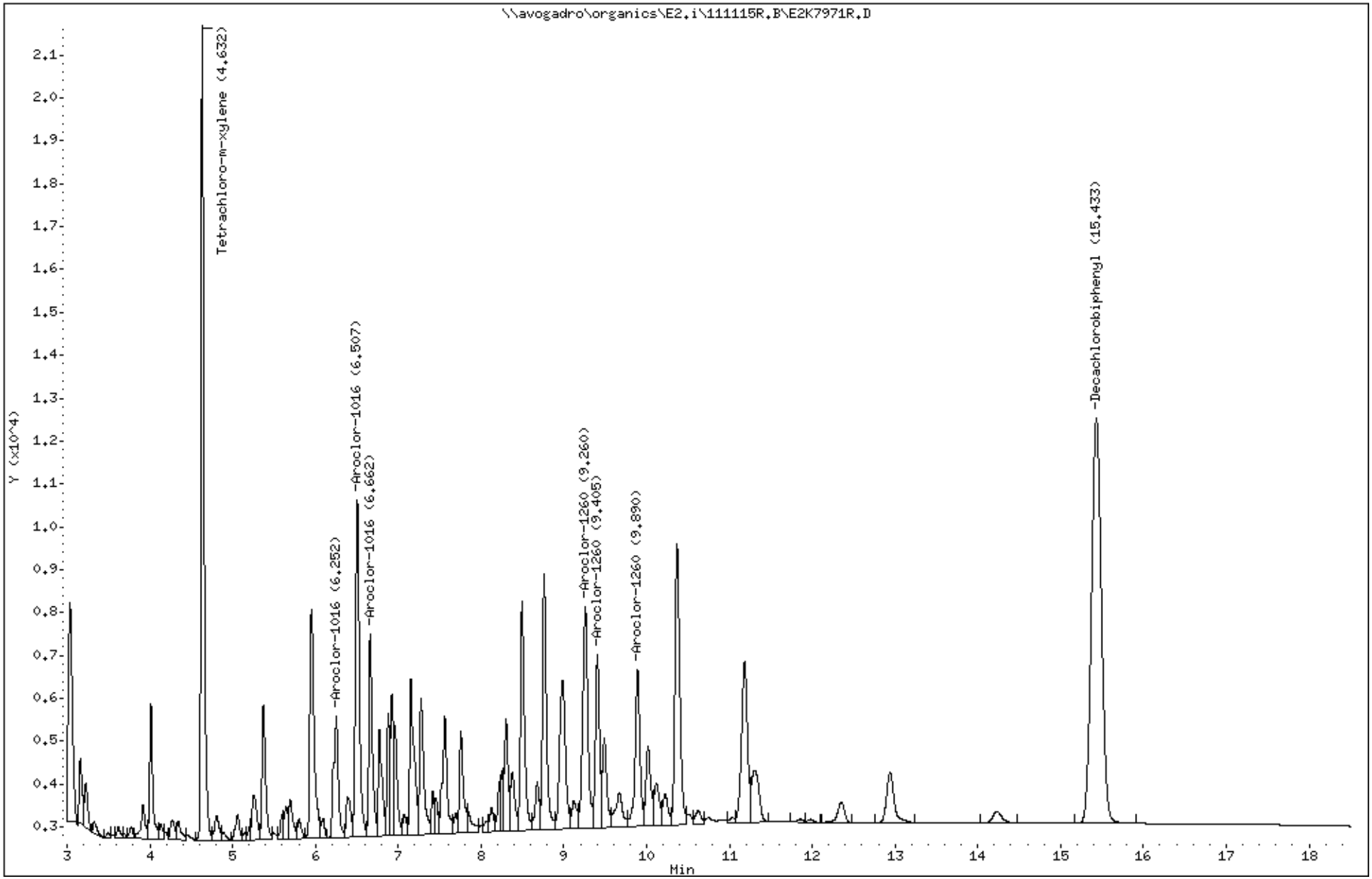
Data file : \\avogadro\organics\E2.i\111115R.B\E2K7971R.D
Lab Smp Id: K2200-20AMS Client Smp ID: H30X3MS
Inj Date : 16-NOV-2011 11:56
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-20AMS,,62719,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111115R.B\E2_ARO_5_R.m
Meth Date : 16-Nov-2011 17:21 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807R.D
Als bottle: 44 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.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	5000.000	Volume of final extract (uL)
Vo	500.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.631	4.629	0.002	468227	0.03577	0.36		
6 Aroclor-1016						CAS #: 12674-11-2	
6.252	6.251	0.001	113558	0.36127	3.6	80.00- 120.00	100.00
6.506	6.504	0.002	255962	0.20971	2.1	363.62- 403.62	225.40
6.661	6.658	0.003	137603	0.25027	2.5	152.00- 192.00	121.17
Average of Peak Concentrations =					2.7		
8 Aroclor-1260						CAS #: 11096-82-5	
9.260	9.257	0.003	224429	0.17955	1.8	80.00- 120.00	100.00
9.404	9.401	0.003	140125	0.18232	1.8	41.47- 81.47	62.44
9.889	9.887	0.002	148928	0.18411	1.8	44.64- 84.64	66.36
Average of Peak Concentrations =					1.8		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
15.432	15.432	0.000	794366	0.04585	0.46		

Data File: \\avogadro\organics\E2.i\111115R.B\E2K7971R.D
Date : 16-NOV-2011 11:56
Client ID: H30X3MS
Instrument: E2.i
Sample Info: K2200-20AMS,,62719,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.

H30X3MSD(1)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-20AMSD

Sample wt/vol: 500 (g/mL) ML Lab File ID: E2K7972F.D

% Moisture: Decanted: (Y/N) Date Received: 10/29/2011

Extraction: (Type) SEPF Date Extracted: 11/03/2011

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/16/2011

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/L	Q
12674-11-2	Aroclor-1016	2.0	
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	1.5	
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

EPA SAMPLE NO.

H30X3MSD(2)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2200-20AMSD

Sample wt/vol: 500 (g/mL) ML Lab File ID: E2K7972R.D

% Moisture: Decanted: (Y/N) Date Received: 10/29/2011

Extraction: (Type) SEPF Date Extracted: 11/03/2011

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/16/2011

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/L	Q
12674-11-2	Aroclor-1016	2.4	
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	1.4	
37324-23-5	Aroclor-1262	1.0	U
11100-14-4	Aroclor-1268	1.0	U

Data File: \\avogadro\organics\E2.i\111115F.B\E2K7972F.D
Report Date: 17-Nov-2011 10:59

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

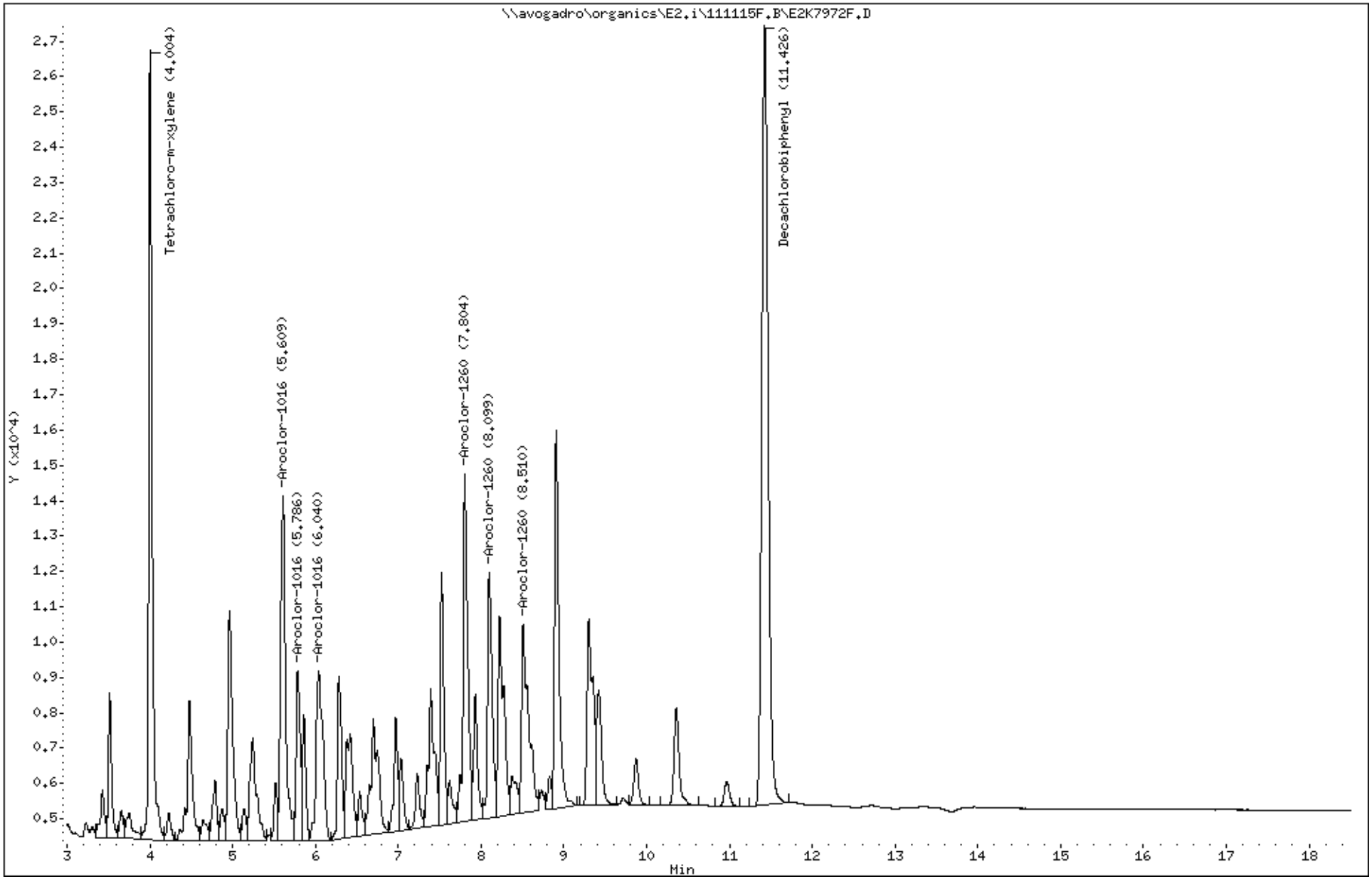
Data file : \\avogadro\organics\E2.i\111115F.B\E2K7972F.D
Lab Smp Id: K2200-20AMSD Client Smp ID: H30X3MSD
Inj Date : 16-NOV-2011 12:16
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-20AMSD,,62719,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111115F.B\E2_ARO_5_F.m
Meth Date : 16-Nov-2011 17:19 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807F.D
Als bottle: 45 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.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	5000.000	Volume of final extract (uL)
Vo	500.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.003	4.001	0.002	633176	0.02970	0.30		
5 Aroclor-1016					CAS #: 12674-11-2		
5.608	5.606	0.002	405564	0.19186	1.9	80.00- 120.00	100.00
5.786	5.783	0.003	159267	0.19991	2.0	18.01- 58.01	39.27
6.040	6.040	0.000	279721	0.19649	2.0	45.24- 85.24	68.97
Average of Peak Concentrations =					2.0		
9 Aroclor-1260					CAS #: 11096-82-5		
7.804	7.799	0.005	390616	0.15693	1.6	80.00- 120.00	100.00
8.098	8.095	0.003	274261	0.14478	1.4	54.41- 94.41	70.21
8.509	8.505	0.004	314762	0.14734	1.5	66.98- 106.98	80.58
Average of Peak Concentrations =					1.5		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.425	11.422	0.003	1185032	0.04044	0.40		

Data File: \\avogadro\organics\E2.i\111115F.B\E2K7972F.D
Date : 16-NOV-2011 12:16
Client ID: H30X3MSD
Instrument: E2.i
Sample Info: K2200-20AMSD,,62719,somaro.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111115R.B\E2K7972R.D
Report Date: 17-Nov-2011 11:00

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

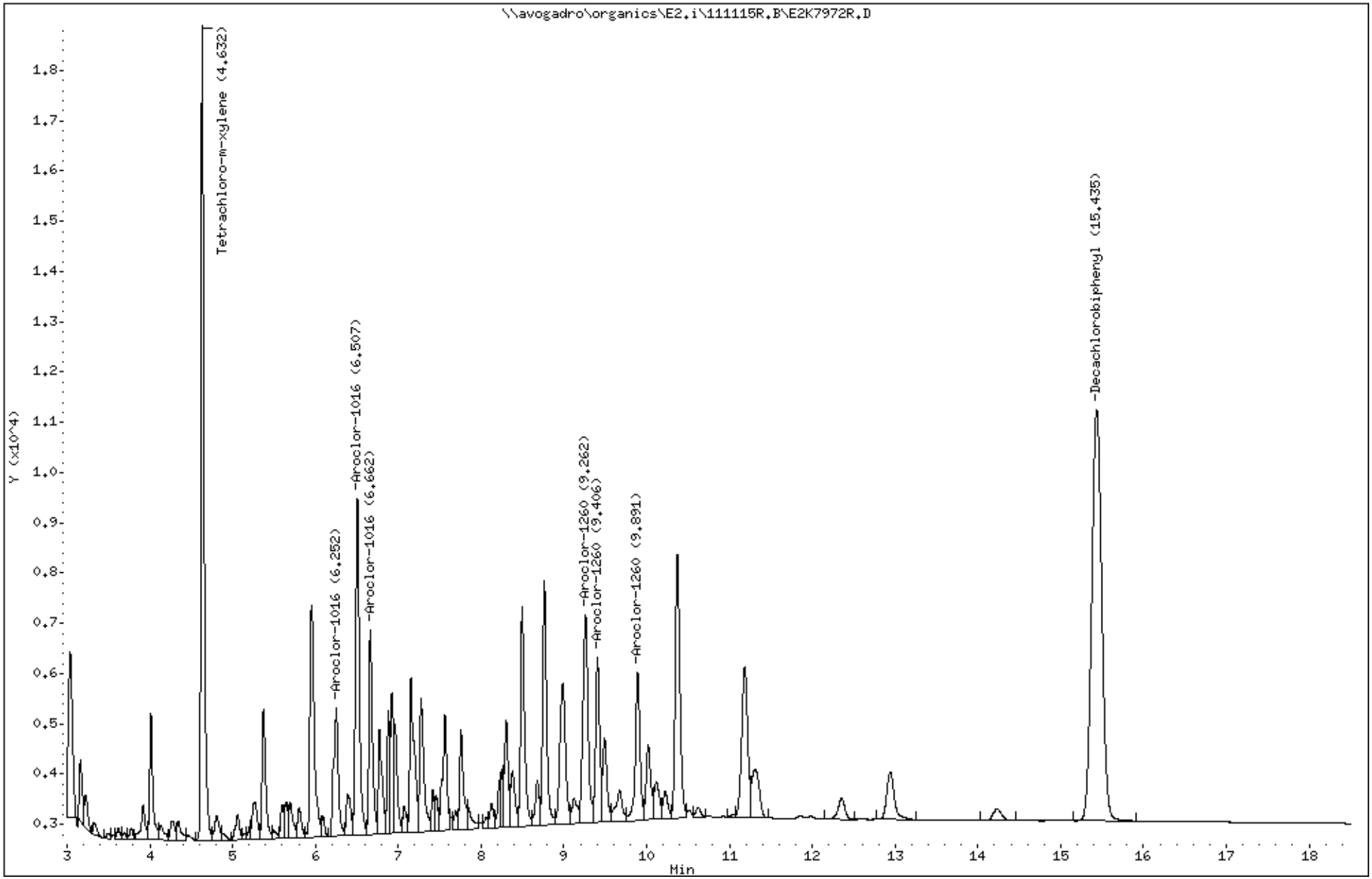
Data file : \\avogadro\organics\E2.i\111115R.B\E2K7972R.D
Lab Smp Id: K2200-20AMSD Client Smp ID: H30X3MSD
Inj Date : 16-NOV-2011 12:16
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2200-20AMSD,,62719,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111115R.B\E2_ARO_5_R.m
Meth Date : 16-Nov-2011 17:21 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807R.D
Als bottle: 45 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.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	5000.000	Volume of final extract (uL)
Vo	500.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.631	4.629	0.002	401737	0.03069	0.31		
6 Aroclor-1016						CAS #: 12674-11-2	
6.252	6.251	0.001	100615	0.32010	3.2	80.00- 120.00	100.00
6.507	6.504	0.003	216187	0.17712	1.8	363.62- 403.62	214.87
6.662	6.658	0.004	117386	0.21350	2.1	152.00- 192.00	116.67
Average of Peak Concentrations =					2.4		
8 Aroclor-1260						CAS #: 11096-82-5	
9.261	9.257	0.004	178293	0.14264	1.4	80.00- 120.00	100.00
9.406	9.401	0.005	111814	0.14548	1.4	41.47- 81.47	62.71
9.891	9.887	0.004	115980	0.14338	1.4	44.64- 84.64	65.05
Average of Peak Concentrations =					1.4		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
15.434	15.432	0.002	692241	0.03996	0.40		

Data File: \\avogadro\organics\E2.i\111115R.B\E2K7972R.D
Date : 16-NOV-2011 12:16
Client ID: H30X3MSD
Instrument: E2.i
Sample Info: K2200-20AMSD,,62719,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.

ALCS2M(1)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-62638

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2K7949F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 11/02/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/16/2011

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/L	Q
12674-11-2	Aroclor-1016	1.0	J
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	0.91	J
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

EPA SAMPLE NO.

ALCS2M(2)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-62638

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2K7949R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 11/02/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/16/2011

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/L	Q
12674-11-2	Aroclor-1016	0.93	J
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	0.83	J
37324-23-5	Aroclor-1262	1.0	U
11100-14-4	Aroclor-1268	1.0	U

Data File: \\avogadro\organics\E2.i\111115F.B\E2K7949F.D
Report Date: 17-Nov-2011 10:59

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111115F.B\E2K7949F.D
Lab Smp Id: LCS-62638 Client Smp ID: ALCS2M
Inj Date : 16-NOV-2011 04:15
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : LCS-62638,ALCS2M,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111115F.B\E2_ARO_5_F.m
Meth Date : 16-Nov-2011 17:19 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807F.D
Als bottle: 22 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.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

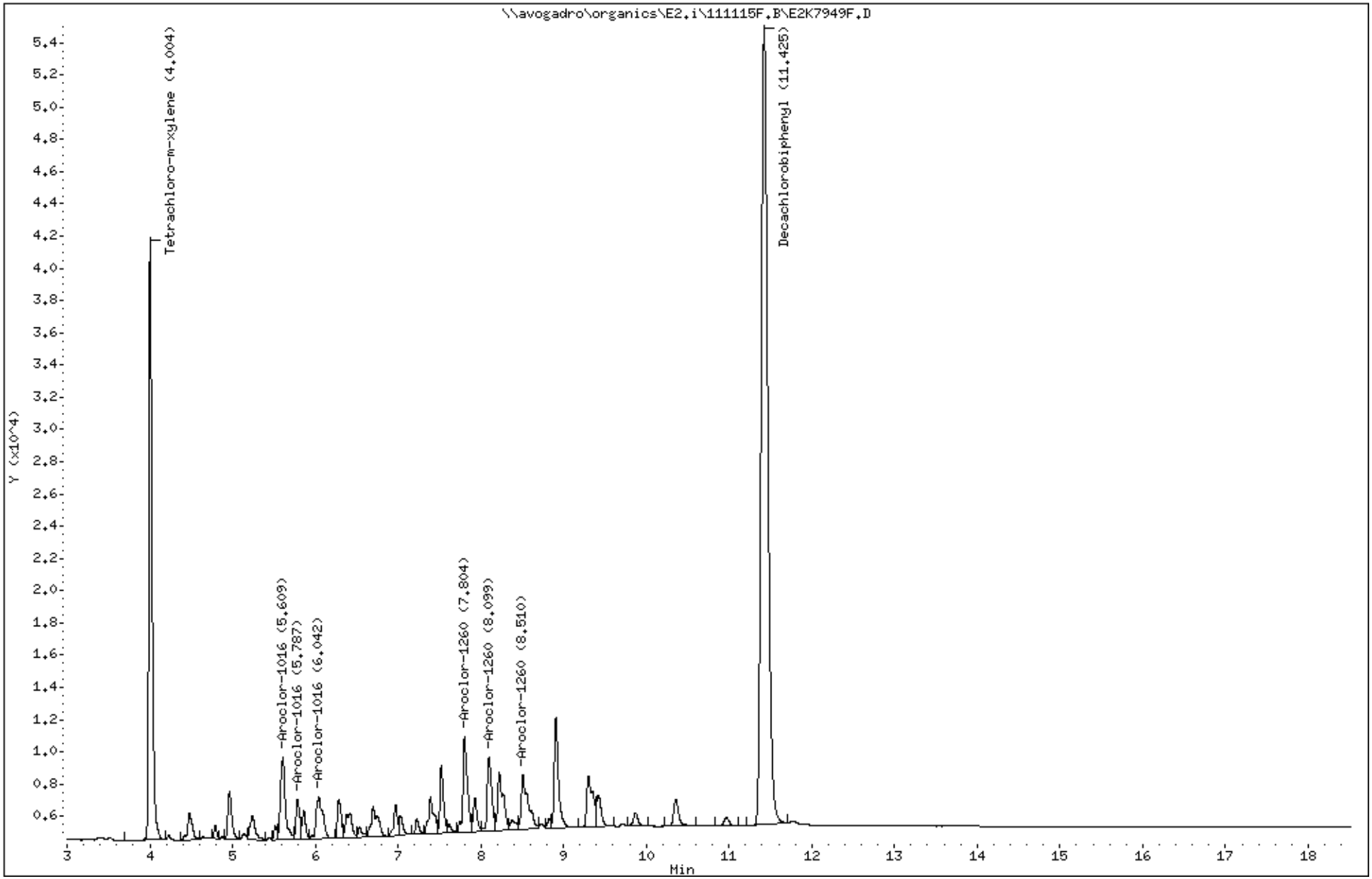
RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.004	4.001	0.003	993064	0.04657	0.46		
5 Aroclor-1016						CAS #: 12674-11-2	
5.608	5.606	0.002	209238	0.09899	0.99	80.00- 120.00	100.00
5.786	5.783	0.003	78824	0.09894	0.99	18.01- 58.01	37.67
6.042	6.040	0.002	143398	0.10073	1.0	45.24- 85.24	68.53
Average of Peak Concentrations =					1.0		
9 Aroclor-1260						CAS #: 11096-82-5	
7.804	7.799	0.005	224669	0.09026	0.90	80.00- 120.00	100.00(a)
8.099	8.095	0.004	173710	0.09170	0.92	54.41- 94.41	77.32
8.509	8.505	0.004	194272	0.09094	0.91	66.98- 106.98	86.47
Average of Peak Concentrations =					0.91		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
11.425	11.422	0.003	2751028	0.09388	0.94		

Data File: \\avogadro\organics\E2.i\111115F.B\E2K7949F.D
Report Date: 17-Nov-2011 10:59

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111115F.B\E2K7949F.D
Date : 16-NOV-2011 04:15
Client ID: ALCS2M
Instrument: E2.i
Sample Info: LCS-62638,ALCS2M,62638,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111115R.B\E2K7949R.D
Report Date: 17-Nov-2011 11:00

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111115R.B\E2K7949R.D
Lab Smp Id: LCS-62638 Client Smp ID: ALCS2M
Inj Date : 16-NOV-2011 04:15
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : LCS-62638,ALCS2M,62638,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\Avogadro\Organics\E2.i\111115R.B\E2_ARO_5_R.m
Meth Date : 16-Nov-2011 17:21 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807R.D
Als bottle: 22 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.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

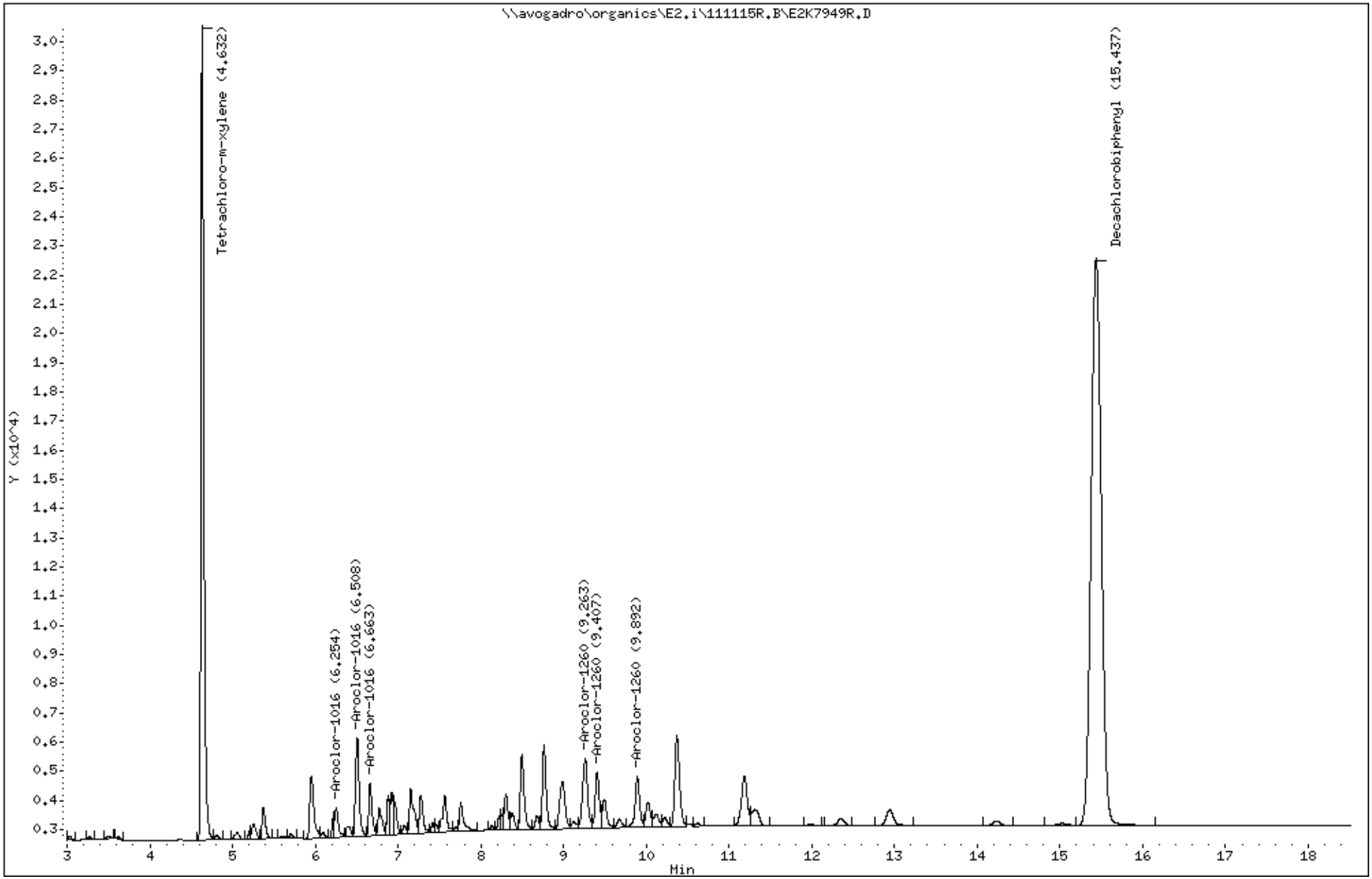
				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.632	4.629	0.003	677974	0.05180	0.52		
6 Aroclor-1016						CAS #: 12674-11-2	
6.253	6.251	0.002	31124	0.09902	0.99	80.00- 120.00	100.00(a)
6.507	6.504	0.003	105907	0.08677	0.87	363.62- 403.62	340.27
6.662	6.658	0.004	50731	0.09227	0.92	152.00- 192.00	163.00
	Average of Peak Concentrations =				0.93		
8 Aroclor-1260						CAS #: 11096-82-5	
9.262	9.257	0.005	101709	0.08137	0.81	80.00- 120.00	100.00(a)
9.406	9.401	0.005	64492	0.08391	0.84	41.47- 81.47	63.41
9.892	9.887	0.005	67047	0.08289	0.83	44.64- 84.64	65.92
	Average of Peak Concentrations =				0.83		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
15.437	15.432	0.005	1668285	0.09629	0.96		

Data File: \\avogadro\organics\E2.i\111115R.B\E2K7949R.D
Report Date: 17-Nov-2011 11:00

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111115R.B\E2K7949R.D
Date : 16-NOV-2011 04:15
Client ID: ALCS2M
Instrument: E2.i
Sample Info: LCS-62638,ALCS2M,62638,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.

ALCS2N(1)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-62719

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2K7970F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 11/03/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/16/2011

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/L	Q
12674-11-2	Aroclor-1016	0.96	J
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	0.92	J
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

EPA SAMPLE NO.

ALCS2N(2)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30S7

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-62719

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2K7970R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 11/03/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/16/2011

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/L	Q
12674-11-2	Aroclor-1016	0.91	J
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	0.86	J
37324-23-5	Aroclor-1262	1.0	U
11100-14-4	Aroclor-1268	1.0	U

Data File: \\avogadro\organics\E2.i\111115F.B\E2K7970F.D
Report Date: 17-Nov-2011 10:59

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111115F.B\E2K7970F.D
Lab Smp Id: LCS-62719 Client Smp ID: ALCS2N
Inj Date : 16-NOV-2011 11:35
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : LCS-62719,ALCS2N,62719,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111115F.B\E2_ARO_5_F.m
Meth Date : 16-Nov-2011 17:19 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807F.D
Als bottle: 43 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.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

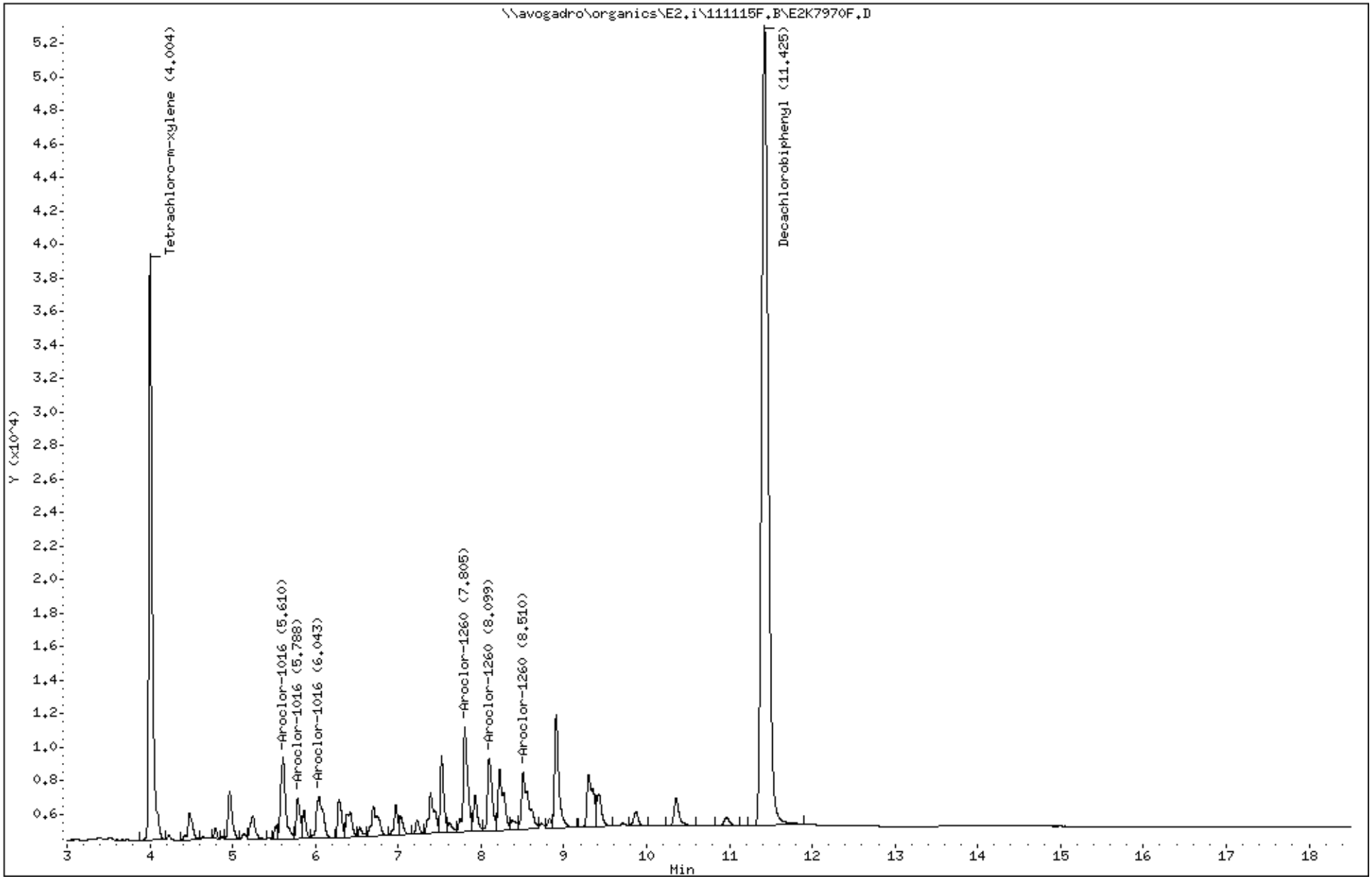
RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.004	4.001	0.003	980148	0.04597	0.46		
5 Aroclor-1016					CAS #: 12674-11-2		
5.609	5.606	0.003	199213	0.09424	0.94	80.00- 120.00	100.00(a)
5.787	5.783	0.004	76893	0.09652	0.96	18.01- 58.01	38.60
6.042	6.040	0.002	139115	0.09772	0.98	45.24- 85.24	69.83
Average of Peak Concentrations =					0.96		
9 Aroclor-1260					CAS #: 11096-82-5		
7.804	7.799	0.005	242725	0.09751	0.98	80.00- 120.00	100.00(a)
8.099	8.095	0.004	164552	0.08687	0.87	54.41- 94.41	67.79
8.509	8.505	0.004	195638	0.09158	0.92	66.98- 106.98	80.60
Average of Peak Concentrations =					0.92		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.424	11.422	0.002	2668095	0.09105	0.91		

Data File: \\avogadro\organics\E2.i\111115F.B\E2K7970F.D
Report Date: 17-Nov-2011 10:59

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111115F.B\E2K7970F.D
Date : 16-NOV-2011 11:35
Client ID: ALCS2N
Instrument: E2.i
Sample Info: LCS-62719,ALCS2N,62719,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111115R.B\E2K7970R.D
Report Date: 17-Nov-2011 11:00

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111115R.B\E2K7970R.D
Lab Smp Id: LCS-62719 Client Smp ID: ALCS2N
Inj Date : 16-NOV-2011 11:35
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : LCS-62719,ALCS2N,62719,somaro.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111115R.B\E2_ARO_5_R.m
Meth Date : 16-Nov-2011 17:21 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 11:43 Cal File: E2K7807R.D
Als bottle: 43 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: somaro.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

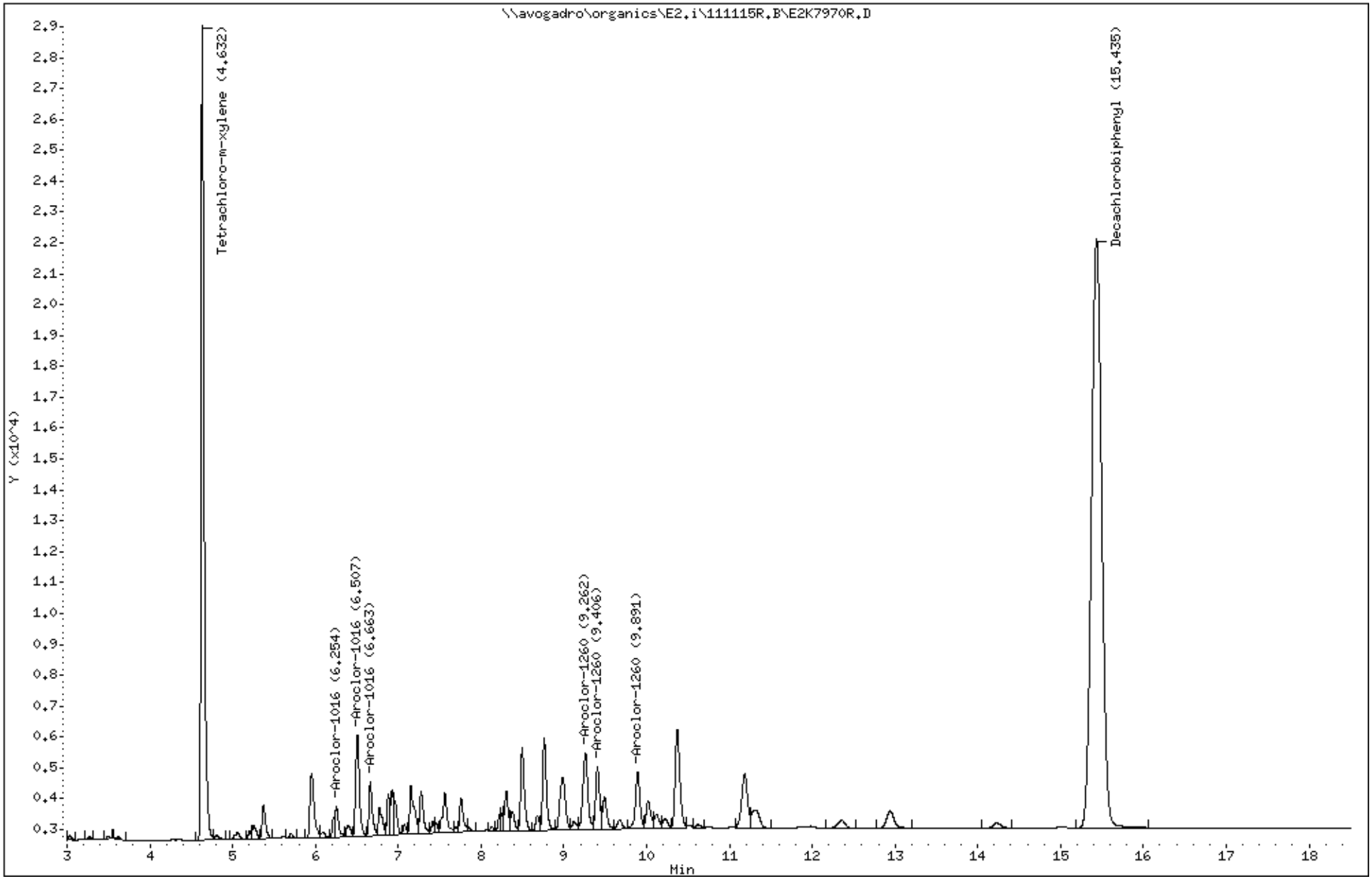
RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.632	4.629	0.003	666687	0.05094	0.51			
6 Aroclor-1016						CAS #: 12674-11-2		
6.254	6.251	0.003	30888	0.09827	0.98	80.00- 120.00	100.00(a)	
6.507	6.504	0.003	102175	0.08371	0.84	363.62- 403.62	330.79	
6.662	6.658	0.004	49228	0.08953	0.90	152.00- 192.00	159.38	
	Average of Peak Concentrations =				0.90			
8 Aroclor-1260						CAS #: 11096-82-5		
9.261	9.257	0.004	104918	0.08394	0.84	80.00- 120.00	100.00(a)	
9.406	9.401	0.005	67883	0.08832	0.88	41.47- 81.47	64.70	
9.891	9.887	0.004	69795	0.08628	0.86	44.64- 84.64	66.52	
	Average of Peak Concentrations =				0.86			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.434	15.432	0.002	1642143	0.09478	0.95			

Data File: \\avogadro\organics\E2.i\111115R.B\E2K7970R.D
Report Date: 17-Nov-2011 11:00

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111115R.B\E2K7970R.D
Date : 16-NOV-2011 11:35
Client ID: ALCS2N
Instrument: E2.i
Sample Info: LCS-62719,ALCS2N,62719,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.32



Thursday, November 03, 2011 14:45

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division PREP BATCH REPORT

Prep Start Date: **11/2/2011 3:30:00 P**
Prep End Date: **11/3/2011 2:17:00 P**
Prep Batch ID: **62636**
Prep Code: **SOM01.0_SVOA_LOW_W_PR** Prep Type: **CONT/SW3520C**
Technician: **Antonio AP Cardoso**
Prep Factor Units: **mL / mL**

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): N/A
Solvent (2) Lot: N/A
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

L/L Start Time: 11/02/2011 15:30
L/L End Time: 11/03/2011 09:30
L/L Cycles/Hour 5
Sonicator Tuned? N/A
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-62636	BatchQC		1000	1	OSW110725C	1			TM	APC			11/03/11	JMV	R7		☐	☑	KD 1
K2200-02B	H30T9	A	1000	1	OSW110725C	1			TM	APC	11/17/11	01	11/03/11	JMV	R7	7	☐	☑	KD 1
K2200-03B	H30W0	A	1000	1	OSW110725C	1			TM	APC	11/17/11	01	11/03/11	JMV	R7	7	☐	☑	KD 1
K2200-04B	H30W1	A	1000	1	OSW110725C	1			TM	APC	11/17/11	01	11/03/11	JMV	R7	7	☐	☑	KD 1
K2200-05B	H30W2	A	1000	1	OSW110725C	1			TM	APC	11/17/11	02	11/03/11	JMV	R7	7	☐	☑	KD 1
K2200-06B	H30W3	A	1000	1	OSW110725C	1			TM	APC	11/17/11	01	11/03/11	JMV	R7	7	☐	☑	KD 1
K2200-07B	H30W4	A	1000	1	OSW110725C	1			TM	APC	11/17/11	01	11/03/11	JMV	R7	7	☐	☑	KD 1
K2200-08B	H30W5	A	1000	1	OSW110725C	1			TM	APC	11/17/11	02	11/03/11	JMV	R7	7	☐	☑	KD 1
K2200-09B	H30W6	A	1000	1	OSW110725C	1			TM	APC	11/17/11	01	11/03/11	JMV	R7	7	☐	☑	KD 1
K2200-10B	H30W7	A	1000	1	OSW110725C	1			TM	APC	11/17/11	01	11/03/11	JMV	R7	7	☐	☑	KD 1
K2200-11B	H30W8	A	1000	1	OSW110725C	1			TM	APC	11/17/11	01	11/03/11	JMV	R7	7	☐	☑	KD 1
K2200-12B	H30X0	A	1000	1	OSW110725C	1			TM	APC	11/17/11	01	11/03/11	JMV	R7	7	☐	☑	KD 1
K2200-13B	H30X1	A	1000	1	OSW110725C	1			TM	APC	11/17/11	01	11/03/11	JMV	R7	7	☐	☑	KD 1
K2200-14B	H30Y2	A	1000	1	OSW110725C	1			TM	APC	11/17/11	01	11/03/11	JMV	R7	7	☐	☑	KD 1
K2200-15B	H30Y3	A	1000	1	OSW110725C	1			TM	APC	11/17/11	01	11/03/11	JMV	R7	7	☐	☑	KD 1
K2200-16B	H30Y4	A	1000	1	OSW110725C	1			TM	APC	11/17/11	02	11/03/11	JMV	R7	7	☐	☑	KD 1
K2200-17B	H30Y5	A	1000	1	OSW110725C	1			TM	APC	11/17/11	03	11/03/11	JMV	R7	7	☐	☑	KD 1
K2200-18B	H30Y6	A	1000	1	OSW110725C	1			TM	APC	11/17/11	03	11/03/11	JMV	R7	7	☐	☑	KD 1
K2200-19B	H30Z6	A	1000	1	OSW110725C	1			TM	APC	11/17/11	01	11/03/11	JMV	R7	7	☐	☑	KD 1
K2200-20A	H30X3	A	1000	1	OSW110725C	1			TM	APC	11/17/11	01	11/03/11	JMV	R7	7	☐	☑	KD 1

Jonathan M Vales 11/03/2011
Analyst Reviewed Date

Timothy McDaniel 11/03/2011
Manager Reviewed Date

Comments:

*A = Analyst (Spiked) *W = Witnessed (Spike) *T = Transferred

Logbook ID: 50.0147-10/11

86 JV 11/3/11

1029

Tuesday, November 08, 2011 14:45

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

PREP BATCH REPORT

Prep Start Date: **11/3/2011 3:00:00 P**
Prep End Date: **11/4/2011 1:30:00 P**
Prep Batch ID: **62685**

Prep Code: **SOM01.0_SVOA_LOW_W_PR** Prep Type: **CONT/SW3520C**
Technician: **Antonio AP Cardoso**

Prep Factor Units: **mL / mL**

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): N/A
Solvent (2) Lot: N/A

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

L/L Start Time: 11/03/2011 15:30
L/L End Time: 11/04/2011 09:30

L/L Cycles/Hour 5

Sonicator Tuned?N/A

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-62685	BatchQC		1000	1	OSW111013A	1			TM	CJA			11/04/11	JBW	R7	7.0	☐	☑	KD 1
K2213-01A	H30X4	A	1000	1	OSW111013A	1			TM	CJA	11/22/11	01	11/04/11	JBW	R7	7.0	☐	☑	KD 1
K2213-02A	H30Y7	A	1000	1	OSW111013A	1			TM	CJA	11/22/11	01	11/04/11	JBW	R7	7.0	☐	☑	KD 1
K2200-20AMS	H30X3	A	500	0.5	OSW111013A	0.5	OSW110916A	0.5	TM	CJA	11/17/11		11/04/11	JBW	R7	7.0	☐	☑	KD 1
K2200-20AMSD	H30X3	A	500	0.5	OSW111013A	0.5	OSW110916A	0.5	TM	CJA	11/17/11		11/04/11	JBW	R7	7.0	☐	☑	KD 1
K2260-01B	CY4N9	A	1000	1	OSW111013A	1			TM	CJA	11/22/11	01	11/04/11	JBW	R7	7.0	☐	☑	KD 1
Use with Sol. 1628																			
K2195-02BRE	C09K3	A	1000	1	OSW111013A	1			TM	CJA	11/16/11	01	11/04/11	JBW	R7	7.0	☐	☑	KD 1

Jonathan M Vales — 11/04/2011
Analyst Reviewed — Date

Timothy McDaniel — 11/08/2011
Manager Reviewed — Date

Comments:

*A = Analyst (Spiked) *W = Witnessed (Spike) *T = Transferred

Drip Rate_____

Reviewed By:_____

Water Bath Temp:_____/MT-___

Logbook ID: 50.0147-10/11

1030

Prep Start Date: **11/2/2011 9:00:00 A**
Prep End Date: **11/14/2011 2:57:00**
Prep Batch ID: **62638**

Prep Code: **SOM01.0_ARO_W_PR**
Technician: **Courtney J Anderson**

Prep Type: **SEPF/SW3510C**

Prep Factor Units: **mL / mL**

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): HEXANE
Solvent (2) Lot: DA 782

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? N/A

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
MB-62638	BatchQC		1000	10	OPW110822B	1			CJA	TM			11/14/11	JBW	R21	7	☐	☐	Turbo Vap 1
CLEAN UP (MB-62638): ACID_111114C/jwarner, CU_111114C/jwarner																			
LCS-62638	BatchQC		1000	10	OPW110822B	1	OPW110606A	1	CJA	TM			11/14/11	JBW	R21	7	☐	☐	Turbo Vap 1
CLEAN UP (LCS-62638): ACID_111114C/jwarner, CU_111114C/jwarner																			
K2200-02B	H30T9	A	1000	10	OPW110822B	1			CJA	TM	11/17/11	01	11/14/11	JBW	R21	7	☐	☐	Turbo Vap 1
CLEAN UP (K2200-02B): ACID_111114C/jwarner, CU_111114C/jwarner																			
K2200-03B	H30W0	A	1000	10	OPW110822B	1			CJA	TM	11/17/11	01	11/14/11	JBW	R21	7	☐	☐	Turbo Vap 1
CLEAN UP (K2200-03B): ACID_111114C/jwarner, CU_111114C/jwarner																			
K2200-04B	H30W1	A	1000	10	OPW110822B	1			CJA	TM	11/17/11	01	11/14/11	JBW	R21	7	☐	☐	Turbo Vap 1
CLEAN UP (K2200-04B): ACID_111114C/jwarner, CU_111114C/jwarner																			
K2200-05B	H30W2	A	1000	10	OPW110822B	1			CJA	TM	11/17/11	01	11/14/11	JBW	R21	7	☐	☐	Turbo Vap 1
CLEAN UP (K2200-05B): ACID_111114C/jwarner, CU_111114C/jwarner																			
K2200-06B	H30W3	A	1000	10	OPW110822B	1			CJA	TM	11/17/11	01	11/14/11	JBW	R21	7	☐	☐	Turbo Vap 1
CLEAN UP (K2200-06B): ACID_111114C/jwarner, CU_111114C/jwarner																			
K2200-07B	H30W4	A	1000	10	OPW110822B	1			CJA	TM	11/17/11	01	11/14/11	JBW	R21	7	☐	☐	Turbo Vap 1
CLEAN UP (K2200-07B): ACID_111114C/jwarner, CU_111114C/jwarner																			
K2200-08B	H30W5	A	1000	10	OPW110822B	1			CJA	TM	11/17/11	01	11/14/11	JBW	R21	7	☐	☐	Turbo Vap 1
CLEAN UP (K2200-08B): ACID_111114C/jwarner, CU_111114C/jwarner																			
K2200-09B	H30W6	A	1000	10	OPW110822B	1			CJA	TM	11/17/11	01	11/14/11	JBW	R21	7	☐	☐	Turbo Vap 1
CLEAN UP (K2200-09B): ACID_111114C/jwarner, CU_111114C/jwarner																			
K2200-10B	H30W7	A	1000	10	OPW110822B	1			CJA	TM	11/17/11	01	11/14/11	JBW	R21	7	☐	☐	Turbo Vap 1
CLEAN UP (K2200-10B): ACID_111114C/jwarner, CU_111114C/jwarner																			
K2200-11B	H30W8	A	1000	10	OPW110822B	1			CJA	TM	11/17/11	01	11/14/11	JBW	R21	7	☐	☐	Turbo Vap 1
CLEAN UP (K2200-11B): ACID_111114C/jwarner, CU_111114C/jwarner																			
K2200-12B	H30X0	A	1000	10	OPW110822B	1			CJA	TM	11/17/11	01	11/14/11	JBW	R21	7	☐	☐	Turbo Vap 1
CLEAN UP (K2200-12B): ACID_111114C/jwarner, CU_111114C/jwarner																			
K2200-13B	H30X1	A	1000	10	OPW110822B	1			CJA	TM	11/17/11	01	11/14/11	JBW	R21	7	☐	☐	Turbo Vap 1
CLEAN UP (K2200-13B): ACID_111114C/jwarner, CU_111114C/jwarner																			
K2200-14B	H30Y2	A	1000	10	OPW110822B	1			CJA	TM	11/17/11	01	11/14/11	JBW	R21	7	☐	☐	Turbo Vap 1
CLEAN UP (K2200-14B): ACID_111114C/jwarner, CU_111114C/jwarner																			
K2200-15B	H30Y3	A	1000	10	OPW110822B	1			CJA	TM	11/17/11	01	11/14/11	JBW	R21	7	☐	☐	Turbo Vap 1
CLEAN UP (K2200-15B): ACID_111114C/jwarner, CU_111114C/jwarner																			

Logbook ID: 50.0149-10/11

JW 11/14/11

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division PREP BATCH REPORT

Prep Start Date: **11/2/2011 9:00:00 A**
Prep End Date: **11/14/2011 2:57:00** Prep Code: **SOM01.0_ARO_W_PR** Prep Type: **SEPF/SW3510C** Prep Factor Units: **mL / mL**
Prep Batch ID: **62638** Technician: **Courtney J Anderson**

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): HEXANE
Solvent (2) Lot: DA 782
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? N/A
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
K2200-16B	H30Y4	A	1000	10	OPW110822B	1			CJA	TM	11/17/11	01	11/14/11	JBW	R21	7	☐	☐	Turbo Vap 1
	CLEAN UP (K2200-16B): ACID_111114C/jwarner, CU_111114C/jwarner																		
K2200-17B	H30Y5	A	1000	10	OPW110822B	1			CJA	TM	11/17/11	01	11/14/11	JBW	R21	7	☐	☐	Turbo Vap 1
	CLEAN UP (K2200-17B): ACID_111114C/jwarner, CU_111114C/jwarner																		
K2200-18B	H30Y6	A	1000	10	OPW110822B	1			CJA	TM	11/17/11	01	11/14/11	JBW	R21	7	☐	☐	Turbo Vap 1
	CLEAN UP (K2200-18B): ACID_111114C/jwarner, CU_111114C/jwarner																		
K2200-19B	H30Z6	A	1000	10	OPW110822B	1			CJA	TM	11/17/11	01	11/14/11	JBW	R21	7	☐	☐	Turbo Vap 1
	CLEAN UP (K2200-19B): ACID_111114C/jwarner, CU_111114C/jwarner																		
K2200-20A	H30X3	A	1000	10	OPW110822B	1			CJA	TM	11/17/11	01	11/14/11	JBW	R21	7	☐	☐	Turbo Vap 1
	CLEAN UP (K2200-20A): ACID_111114C/jwarner, CU_111114C/jwarner																		

Jodie B Warner 11/14/2011
Analyst Reviewed Date

Timothy McDaniel 11/14/2011
Manager Reviewed Date

Comments:

*A = Analyst (Spiked) *W = Witnessed (Spike) *T = Transferred

PCB LCS Spike Std ID: Vol. Spiked: Sulfur cleanup Copper lot # Soxhlet Cycle/Hour:

Sonicator Tuned? Yes/No

Reviewed By: JW 11/14/11

Logbook ID: 50.0149-10/11

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division PREP BATCH REPORT

Prep Start Date: **11/3/2011 4:07:05 P**
Prep End Date: **11/14/2011 2:57:00**
Prep Batch ID: **62719**
Prep Code: **SOM01.0_ARO_W_PR**
Technician: **Timothy McDaniel**
Prep Type: **SEPF/SW3510C**
Prep Factor Units: **mL / mL**

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): HEXANE
Solvent (2) Lot: DA 782
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? N/A
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
MB-62719	BatchQC		1000	10	OPW110822B	1			CJA	TM			11/14/11	JBW	R21	7	☐	☐	Turbo Vap 1
	CLEAN UP (MB-62719): ACID_111114C/jwarner, CU_111114C/jwarner																		
LCS-62719	BatchQC		1000	10	OPW110822B	1	OPW110606A	1	CJA	TM			11/14/11	JBW	R21	7	☐	☐	Turbo Vap 1
	CLEAN UP (LCS-62719): ACID_111114C/jwarner, CU_111114C/jwarner																		
K2200-20AMS	H30X3	A	500	5	OPW110822B	0.5	OPW110701A	0.5	CJA	TM	11/17/11		11/14/11	JBW	R21	7	☐	☐	Turbo Vap 1
	CLEAN UP (K2200-20AMS): ACID_111114C/jwarner, CU_111114C/jwarner																		
K2200-20AMSD	H30X3	A	500	5	OPW110822B	0.5	OPW110701A	0.5	CJA	TM	11/17/11		11/14/11	JBW	R21	7	☐	☐	Turbo Vap 1
	CLEAN UP (K2200-20AMSD): ACID_111114C/jwarner, CU_111114C/jwarner																		

Jodie B Warner 11/14/2011
Analyst Reviewed Date

Timothy McDaniel 11/14/2011
Manager Reviewed Date

Comments:

*A = Analyst (Spiked) *W = Witnessed (Spike) *T = Transferred

PCB LCS Spike Std ID: Vol. Spiked: Sulfur cleanup Copper lot #

Sonicator Tuned? Yes/No

Reviewed By:

JW 11/14/11

Logbook ID: 50.0149-10/11

Spectrum Analytical, Inc. RI Division V5 Injection Log
Volatiles Laboratory

METHOD: TVOA
ICAL DATE: 10/15/11
ANALYST: WL
BATCH: 111015A.B
Start: 15-OCT-11 10:58
End: 15-OCT-11 22:29

Comments:

Standards:
IS-VW 110926A ___ uL
PMC-VW110926B ___ uL
STD-VW111015A ___ uL
___ ___ uL

Reviewed By: [signature] 10/17/11
Manual Integration: NA
MI Review: WL

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS DFB	INTERNAL STDS CBZ	INTERNAL STDS DCB	SURROGATES OLC-SOM A	B	C	D	E	F	G	H	I	J	K	L	M	N	DILN	FLG	COMMENTS	pH
V5N1679	10:58	BFBB5	BFBB5		AQ																			1		OK	
V5N1680	11:28	VSTD005B5	VSTD005B5		AQ		100	100	100															1		ok	
V5N1681	11:57	VSTD0.5B5	VSTD0.5B5		AQ		105	113	107															1		ok	
V5N1682	12:26	VSTD020B5	VSTD020B5		AQ		104	108	111															1		ok	
V5N1683	12:55	VSTD010B5	VSTD010B5		AQ		114	111	114															1		ok	
V5N1684	13:24	VSTD001B5	VSTD001B5		AQ		115	109	113															1		ok	
V5N1685	13:52	MB-62222	VBLKB5	62222	AQ		120	118	115															1		ok	2
V5N1686	14:22	K1996-01A	E5DA9	62222	AQ	1	116	113	108															1		ok	2
V5N1687	14:51	K1976-13A	C01X9	62222	AQ	1	116	116	107															1		ok	2
V5N1688	15:20	K1976-15A	C01Y1	62222	AQ	1	114	114	108															1		ok	2
V5N1689	15:48	K1976-17A	C01Y3	62222	AQ	1	113	112	109															1		ok	2
V5N1690	16:17	K1976-18A	C01Y4	62222	AQ	1	114	114	100															1		ok	2
V5N1691	16:45	K1976-11A	C01X7	62222	AQ	1	110	109	103															1		ok	2
V5N1692	17:14	K2005-03A	C01Y9	62222	AQ	1	104	107	99															1		ok	2
V5N1693	17:42	K2005-04A	C01Z0	62222	AQ	1	107	109	96															1		ok	2
V5N1694	18:11	K2005-05A	C01Z1	62222	AQ	1	108	107	101															1		ok	2
V5N1695	18:40	K2005-06A	C01Z2	62222	AQ	1	107	107	101															1		ok	2
V5N1696	19:08	K2005-07A	C01Z3	62222	AQ	1	110	108	98															1		ok	2
V5N1697	19:37	K1976-12A	C01X8	62222	AQ	1	106	104	102															1	E	cis-DCE = 275, RRx50	2
V5N1698	20:05	K1976-14A	C01Y0	62222	AQ	1	114	113	97															1	E	" = 93, RRx10	2
V5N1699	20:34	K1976-16A	C01Y2	62222	AQ	1	108	108	98															1	E	TCE = 44, RRx5	2
V5N1700	21:02	K1976-09A	C01X5	62222	AQ	1	107	109	94										*					1	E	" = 38, RRx4	2
V5N1701	21:31	K1976-10A	C01X6	62222	AQ	1	103	102	94										*					1	E	" = 36, RRx4	2
V5N1702	21:59	K1994-08A	TRIP-BLANK-1012	62222	AQ	1	111	109	98															1		OK, clean	2
V5N1703	22:29	VSTD005C5	VSTD005C5		AQ		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 10/18/11

[redacted] INST[redacted]IEN[redacted] Spe[redacted]a An[redacted]al, In[redacted] Div [redacted]

INJECTION LOG

VOLATILES LABORATORY

Spectrum Analytical, Inc. RI Division V5 Injection Log
Volatiles Laboratory

METHOD: TVOA ANALYST: WL BATCH: 111101.B Start: 01-NOV-11 06:27
ICAL DATE: 10/15/11 End: 01-NOV-11 18:25

Comments:

Standards: IS-VW111024A ___ uL
PMC-VW111024B ___ uL
STD-VW111015A ___ uL
_____ ___ uL

Reviewed By: 11-3-11 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
V5N2525	06:27	BFB5T	BFB5T		AQ																			1		OK	
V5N2526	06:58	VSTD0055T	VSTD0055T		AQ		100	100	100															1		ok	
V5N2526A	07:25	MB-62672	VBLK5T	62672	AQ		105	108	90															1		ok	
V5N2527	07:54	K2117-04ADL	B9J30DL	62672	AQ	2	105	100	85															2.5		ok	2
V5N2528	08:22	K2117-07ADL	B9WR3DL	62672	AQ	2	108	106	90															16		OK	2
V5N2529	08:51	K2117-11ADL	B9WR8DL	62672	AQ	2	103	107	89															4		ok	2
V5N2530	09:20	K2117-17ADL	B9WS4DL	62672	AQ	2	108	109	90															2		ok	2
V5N2531	09:49	K2200-01A	H30S7	62672	AQ	1	108	109	92															1		OK	2
V5N2532	10:17	K2200-02A	H30T9	62672	AQ	1	106	113	88															1		OK	2
V5N2533	10:46	K2200-03A	H30W0	62672	AQ	1	111	110	90															1		ok	2
V5N2534	11:14	K2200-04A	H30W1	62672	AQ	1	112	112	90															1		ok	2
V5N2535	11:43	K2200-05A	H30W2	62672	AQ	1	111	113	95															1		ok	2
V5N2536	12:11	K2200-06A	H30W3	62672	AQ	1	111	113	88															1		OK	2
V5N2537	12:40	K2200-07A	H30W4	62672	AQ	1	105	108	88															1		ok	2
V5N2538	13:08	K2200-08A	H30W5	62672	AQ	1	108	104	91															1		ok	2
V5N2539	13:36	K2200-09A	H30W6	62672	AQ	1	114	116	98															1		ok	2
V5N2540	14:05	K2200-10A	H30W7	62672	AQ	1	117	114	95															1		OK	2
V5N2541	14:33	K2200-11A	H30W8	62672	AQ	1	116	112	95															1		ok	2
V5N2542	15:01	K2200-12A	H30X0	62672	AQ	1	111	105	97															1		OK	2
V5N2543	15:30	K2200-13A	H30X1	62672	AQ	1	113	116	97															1		ok	2
V5N2544	15:58	K2200-14A	H30Y2	62672	AQ	1	113	111	91															1		ok	2
V5N2545	16:27	K2200-15A	H30Y3	62672	AQ	1	113	107	89															1		OK	2
V5N2546	16:55	K2200-16A	H30Y4	62672	AQ	1	112	111	94															1		OK	2
V5N2547	17:23	K2200-17A	H30Y5	62672	AQ	1	111	108	95															1		ok	2
V5N2548	17:52	K2200-18A	H30Y6	62672	AQ	1	117	115	94															1		OK	2
V5N2571	18:25	VSTD0055U	VSTD0055U		AQ		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

1 WL 11/3/11

Spectrum Analytical, Inc. RI Division V5 Injection Log
Volatiles Laboratory

METHOD: TVOA ANALYST: WL BATCH: 111102.B Start: 02-NOV-11 05:55
ICAL DATE: 10/15/11 End: 02-NOV-11 17:48

Comments:

Standards: IS-VW111024A ___ uL
SMC-VW111024B ___ uL
STP-VW111017A ___ uL
___ ___ uL

Reviewed By: 11-3-11 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
V5N2595	05:55	VSTD0055V	VSTD0055V		AQ		100	100	100															1		OK	
V5N2596	06:23	MB-62632	VBLK5V	62632	AQ		120	122	102															1	E	PCE=57, RRX8	2
V5N2597	06:51	K2163-15A	SF-MW-2-H-RI	62632	AQ	1	116	113	91															1	E	PCE=99, RRX10	2
V5N2598	07:20	K2123-01A	SF-MW-4-C-RI	62632	AQ	1	116	118	96															1	E	102, 10	2
V5N2599	07:49	K2123-02A	SF-MW-4-D-RI	62632	AQ	1	113	122	94															80	E	50 400	2
V5N2600	08:18	K2123-03A	SF-MW-4-K-RI	62632	AQ	1	106	108	93															10	E	75 80	2
V5N2601	08:47	K2123-06A	SF-MW-5-H-RI	62632	AQ	1	110	112	95															200	E	54 1000	2
V5N2602	09:15	K2123-08A	SF-MW-5-G-RI	62632	AQ	1	108	107	93															200	E	63 1000	2
V5N2603	09:44	K2123-09A	SF-MW-5-F-RI	62632	AQ	1	111	111	90															10	E	70 80	2
V5N2604	10:12	K2123-13A	SF-MW-5-K-RI	62632	AQ	1	108	108	93															80	E	42 320	2
V5N2605	10:41	K2163-09A	SF-MW-6-D-R1	62632	AQ	1	107	110	92															5	E	70 40	2
V5N2606	11:09	K2163-11A	SF-MW-6-E-R1	62632	AQ	1	104	108	88															40	E	29 100	2
V5N2607	11:38	K2163-13A	SF-MW-6-F-R1	62632	AQ	1	105	104	85															40	E	27 100	2
V5N2608	12:07	K2163-14A	SF-MW-600-F-R1	62632	AQ	1	101	110	84															1000	E	48 5000	2
V5N2609	12:35	K2163-16A	SF-MW-2-D-RI	62632	AQ	1	104	106	85															1		OK, PCE=0.2	2
V5N2610	13:03	K2175-07A	130172-TB-10271	62632	AQ	1	105	108	90															1		OK	2
V5N2611	13:31	K2175-06A	130172-FB-10271	62632	AQ	1	107	109	87															1		OK	2
V5N2612	14:00	K2201-06A	130172-FB-10281	62632	AQ	1	102	105	87															1		OK	2
V5N2613	14:28	K2201-07A	130172-TB-10281	62632	AQ	1	104	106	88															1		OK	2
V5N2614	14:56	K2123-11ADL	SF-MW-5-C-RIDL	62632	AQ	2	105	109	90															2.5		OK, PCE=11	2
V5N2615	15:24	K2123-12ADL	SF-MW-5-J-RIDL	62632	AQ	2	104	107	90															5		OK 10	2
V5N2616	15:53	K2163-02ADL	SF-MW-6-I-R1DL	62632	AQ	2	106	109	93															8		OK 11	2
V5N2617	16:21	K2163-08ADL	SF-MW-6-C-R1DL	62632	AQ	2	108	107	86															10		OK 11	2
V5N2618	16:50	K2163-10ADL	SF-MW-6-K-R1DL	62632	AQ	2	101	105	89															4		OK 10	2
V5N2619	17:19	VHBLK5V	VHBLK5V	62632	AQ		100	103	90															1		OK	
V5N2620	17:48	VSTD0055W	VSTD0055W		AQ		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 11/3/11

[redacted] INJECTION LOG

[redacted] VOLATILES LABORATORY

Spectrum Analytical, Inc. RI Division V5 Injection Log
Volatiles Laboratory

METHOD: TVOA ANALYST: WL BATCH: 111102A.B Start: 02-NOV-11 17:48
ICAL DATE: 10/15/11 End: 03-NOV-11 05:35

Comments:

Standards: IS-VW111024A ____ uL
PMC-VW111024B ____ uL
STD-VW111015A ____ uL
____ ____ uL

Reviewed By: CHM 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
V5N2620	17:48	VSTD0055W	VSTD0055W		AQ		100	100	100															1		OK	
V5N2621	18:16	MB-62673	VBLK5W	62673	AQ		101	100	92															1		ok	
V5N2622	18:46	K2200-19A	H30Z6	62673	AQ	1	104	110	95															1		ok	2
V5N2623	19:15	K2206-02A	C0AH0	62673	AQ	1	109	109	98															1		ok	2
V5N2624	19:44	K2206-04A	C0AH2	62673	AQ	1	102	105	89															1		ok	2
V5N2625	20:12	K2206-01A	C0AG9	62673	AQ	1	104	106	93															1		ok	2
V5N2626	20:41	K2206-03A	C0AH1	62673	AQ	1	98	104	85															1		ok	2
V5N2627	21:09	K2123-01ADL	SF-MW-4-C-RIDL	62673	AQ	2	100	102	89															10		ok, PCE=10	2
V5N2628	21:34	K2123-02ADL	SF-MW-4-D-RIDL	62673	AQ	2	100	106	82															10		ok =9	2
V5N2629	22:03	K2123-03ADL	SF-MW-4-K-RIDL	62673	AQ	2	101	106	83															400		ok 10	2
V5N2630	22:31	K2123-06ADL	SF-MW-5-H-RIDL	62673	AQ	2	103	103	88															80		OK 11	2
V5N2631	23:00	K2123-08ADL	SF-MW-5-G-RIDL	62673	AQ	2	101	104	93															1000		ok 11	2
V5N2632	23:28	K2123-09ADL	SF-MW-5-F-RIDL	62673	AQ	2	104	110	93															1000		ok 12	2
V5N2633	23:58	K2123-13ADL	SF-MW-5-K-RIDL	62673	AQ	2	99	107	87															80		ok 11	2
V5N2634	00:28	K2163-09ADL	SF-MW-6-D-R1DL	62673	AQ	2	102	103	88															320		OK 10	2
V5N2635	00:57	K2163-11ADL	SF-MW-6-E-R1DL	62673	AQ	2	100	104	82															40		ok 12	2
V5N2636	01:25	K2163-12ADL	SF-MW-6-G-R1DL	62673	AQ	2	101	106	97															4		ok 11	2
V5N2637	01:54	K2163-13ADL	SF-MW-6-F-R1DL	62673	AQ	2	100	104	92															100		ok 13	2
V5N2638	02:23	K2163-14ADL	SF-MW-600-F-R1D	62673	AQ	2	97	101	90															100		ok 13	2
V5N2639	02:52	K2163-15ADL	SF-MW-2-H-RIDL	62673	AQ	2	96	101	86															5		ok 13	2
V5N2640	03:21	K2163-16ADL	SF-MW-2-D-RIDL	62673	AQ	2	95	101	88															5000		ok 13	2
V5N2641	04:12	VHBLK5W	VHBLK5W	62673	AQ		114	124	116															1		ok (K2123) (K2163)	
V5N2642	05:06	VHBLK5W	VHBLK5W	62673	AQ		107	111	99															1		ok (K2200) (K2206)	
V5N2643	05:35	VSTD0055X	VSTD0055X		AQ		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 11/7/11

1037

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: SOM LOW
ICAL DATE: 10/25/11
ANALYST: MMS
EMV: 2801
BATCH: 111025.B
Start: 25-OCT-11 09:32
End: 25-OCT-11 16:41

Internal Standard: SI111018A
Comments:

Tune: SW110727A
L1: SW111019A
L2: SW111019B
L3: SW111019C
L4: SW111019D
L5: 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
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 L3 OCCV
S2H5054	11:58	SSTD0052W	SSTD0052W		AQ	76	77	75	81	81	77																	1		L1
S2H5055	12:21	SSTD0802W	SSTD0802W		AQ	62	67	63	64	38*	27*																	1		L5
S2H5056	12:44	SSTD0102W	SSTD0102W		AQ	113	107	100	97	96	98																	1		L2
S2H5057	13:07	SSTD0402W	SSTD0402W		AQ	75	78	82	83	83	71																	1		L4
S2H5059	14:28	MB-62327	SBLK2X	62327	SL	56	51	50*	44*	39*	40*																	1		No MM
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

1038

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: SOM10W
ICAL DATE: 10/25/11
ANALYST: MMS
EMV: 2716

BATCH: 111103.B

Start: 03-NOV-11 09:42
End: 03-NOV-11 23:14

Time: SW110727A

Internal Standard: SI111019A
Comments:

C3: SW110190

Inlet Maintenance By: MMS
Liner : Cleaned
Column : Clipped
Inlet Seal: Cleaned
Septum : New

Reviewed By: 11/04/11 BM
Manual Integration: NA
MI Review: NA

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
S2H5188	09:42	DFTPP2P	DFTPP2P		AQ																							1		OK
S2H5189	09:55	SSTD0202P	SSTD0202P		AQ	100	100	100	100	100	100																	1		OK OCCV
S2H5190	10:17	MB-62608	SBLK2P	62608	AQ	98	82	86	86	76	78																	1		OK
S2H5191	10:39	K2152-13B	B9TB1	62608	AQ	101	87	83	89	80	81																*	1		OK
S2H5192	11:00	K2152-14B	B9TB3	62608	AQ	108	84	88	80	68	68																	1		OK
S2H5193	11:21	K2152-15B	B9TE1	62608	AQ	102	91	83	82	65	52										*				*	*	*	1		OK
S2H5194	11:42	K2152-16B	B9TE3	62608	AQ	97	87	78	79	71	68																	1		OK
S2H5195	12:04	K2152-17B	B9TG6	62608	AQ	102	95	89	90	77	77																	1		OK
S2H5196	12:25	K2195-02B	C09K3	62608	AQ	101	82	75	73	53	49*	*		*	*			*							*	*		1		re-extract
S2H5197	12:46	K2195-03B	C09K4	62608	AQ	237*	132	118	123	131	133																	1	E	OK DX x 5 Nitrobenzene
S2H5198	13:08	K2195-04B	C09K5	62608	AQ	182	95	110	119	107	100							*										1	E	OK DX x 5 Nitrobenzene
S2H5199	13:38	K2195-03BDL	C09K4DL	62608	AQ	234*	117	126	123	121	108	D	D															5		OK
S2H5200	14:14	K2195-02B	C09K3	62608	AQ	113	86	84	83	62	54	*		*	*			*							*	*	*	1		Don't use
S2H5201	14:35	K2195-04BDL	C09K5DL	62608	AQ	232*	118	117	112	111	105	D	D	D														5		low surr
S2H5201A	15:00	K2195-04BDL	C09K5DL	62608	AQ	168	84	86	85	80	69	D		D														5		OK
S2H5202A	15:43	SSTD0202Q	SSTD0202Q		AQ	100	100	100	100	100	100																	1		OK OCCV
S2H5203	16:05	MB-62636	SBLK2Q	62636	AQ	111	100	84	98	88	87																	1		OK
S2H5204	16:26	K2200-02B	H30T9	62636	AQ	106	110	101	119	113	110																	1		OK
S2H5205	16:47	K2200-03B	H30W0	62636	AQ	114	127	109	123	119	122																	1		OK
S2H5206	17:09	K2200-04B	H30W1	62636	AQ	128	123	111	112	101	59	*									*				*	*	*	1		low surr H_2O
S2H5207	17:30	K2200-05B	H30W2	62636	AQ	112	121	114	121	123	119																	1		OK
S2H5208	17:51	K2200-06B	H30W3	62636	AQ	103	100	82	94	85	84																	1		OK
S2H5209	18:12	K2200-07B	H30W4	62636	AQ	126	133	120	129	132	128																	1		OK
S2H5210	18:34	K2200-08B	H30W5	62636	AQ	119	122	117	124	120	113																	1		OK
S2H5211	18:55	K2200-09B	H30W6	62636	AQ	111	118	105	126	118	111																	1		OK
S2H5212	19:17	K2200-10B	H30W7	62636	AQ	115	127	115	140	136	131																	1		OK
S2H5213	19:39	K2200-11B	H30W8	62636	AQ	115	124	122	151	160	164																	1		OK
S2H5214	20:00	K2200-12B	H30X0	62636	AQ	124	131	144	158	199	187																	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

MMS 11/4/11

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: SOM.LAN
ICAL DATE: 10/25/11

ANALYST: MMS
EMV: 2716

BATCH: 111103.B

Start: 03-NOV-11 09:42
End: 03-NOV-11 23:14

Tune: SVM10727A

Internal Standard: SI111018A

CB: SVM111019C

Comments:

Inlet Maintenance By: MMS
Liner : Cleaned
Column : Clipped
Inlet Seal: Cleaned
Septum : New

Reviewed By: 11/04/11 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
S2H5215	20:22	K2200-13B	H30X1	62636	AQ	124	149	138	171	168	163																	1		OK
S2H5216	20:43	K2200-14B	H30Y2	62636	AQ	123	110	98	96	86	93																*	1		OK
S2H5217	21:05	K2200-15B	H30Y3	62636	AQ	129	126	107	106	83	86															*	*	1		OK
S2H5218	21:27	K2200-16B	H30Y4	62636	AQ	125	113	101	95	74	79															*	*	1		OK
S2H5219	21:48	K2200-17B	H30Y5	62636	AQ	127	118	96	86	64	72															*	*	1		OK
S2H5220	22:10	K2200-18B	H30Y6	62636	AQ	139	133	122	114	90	80														*	*	*	1	T	OK
S2H5221	22:31	K2200-19B	H30Z6	62636	AQ	129	124	115	117	117	110																	1	T	OK
S2H5222	22:53	K2200-20A	H30X3	62636	AQ	131	146	119	135	103	94																*	1	T	OK
S2H5223	23:14	SSTD0202R	SSTD0202R		AQ	100	100	100	100	100	100																	1	T	OK ECCV

* - 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

Liner	
Clipped Column	
Ferrule	

MMS 11/4/11

1040

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: SOM LOW
ICAL DATE: 10/25/11

ANALYST: MMS
EMV: 2716

BATCH: 111104.B

Start: 04-NOV-11 12:41
End: 04-NOV-11 17:43

Tune: SW110727A

Internal Standard: S1 111 018A 23: SW110219C
Comments:

Inlet Maintenance By: MMS
Liner : Cleaned
Column : Clipped
Inlet Seal: Cleaned
Septum : New

Reviewed By: 11/07/11 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
S2H5224	12:41	DFTPP2S	DFTPP2S		AQ																							1		ok
S2H5225	13:08	SSTD0202S	SSTD0202S		AQ	100	100	100	100	100	100																	1		ok OCC ✓
S2H5226	13:30	K2200-04B	H30W1	62636	AQ	125	120	132	125	112	99										*				*	*	*	1		OK
S2H5227	15:14	MB-62685	SBLK2S	62685	AQ	105	94	102	98	87	80																	1		OK
S2H5228	15:35	K2195-02BRE	C09K3RX	62685	AQ	109	115	110	128	105	101	*		*	*			*							*	*	*	1		OK
S2H5229	15:57	K2200-20AMS	H30X3MS	62685	AQ	145	154	139	136	118	127																	1	R	OK
S2H5230	16:18	K2200-20AMSD	H30X3MSD	62685	AQ	140	148	133	126	129	134	*			*											*		1	R	OK
S2H5231	16:39	K2213-01A	H30X4	62685	AQ	153	150	133	134	152	79															*		1		OK
S2H5232	17:01	K2213-02A	H30Y7	62685	AQ	133	124	111	113	108	135													*		*	*	1		OK
S2H5233	17:22	K2260-01B	CY4N9	62685	AQ	126	136	120	150	147	138																	1		OK
S2H5234	17:43	SSTD0202T	SSTD0202T		AQ	100	100	100	100	100	100																	1		OK FCC ✓

* - 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	

MMS 11/7/11

1041

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: 11/14/11
ANALYST: CWO
START BATCH: 111113CF.B
END BATCH: 111113CF.B
Start: 13-NOV-11 17:38
End: 15-NOV-11 09:22

STDs Page 96

Inlet Maintenance By:
Liner :
Column : 6
Inlet Seal:
Septum :

Comments:

Reviewed By: _____ Manual Integration: CWA MI Review: _____

5pt ICAL

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
E2K7774F/R	17:38	AIBLKKA	AIBLKKA		AQ	134	88	145*	87	1			✓		PW110524AC
E2K7775F/R	17:59	AR12213K2	AR12213K2		AQ					1			✓		PW110524M
E2K7776F/R	18:20	AR12323K2	AR12323K2		AQ					1			✓		PW110721 M
E2K7777F/R	18:41	AR12421K2	AR12421K2		AQ					1			✓		PW110524
E2K7778F/R	19:02	AR12426K2	AR12426K2		AQ					1			✓		P
E2K7779F/R	19:23	AR12422K2	AR12422K2		AQ					1			✓		W
E2K7780F/R	19:44	AR12423K2	AR12423K2		AQ					1			✓		M
E2K7781F/R	20:05	AR12424K2	AR12424K2		AQ					1			✓		S
E2K7782F/R	20:26	AR12425K2	AR12425K2		AQ					1			✓		R
E2K7783F/R	20:47	AR12481K2	AR12481K2		AQ					1			✓		V
E2K7784F/R	21:08	AR12486K2	AR12486K2		AQ					1			✓		V
E2K7785F/R	21:29	AR12482K2	AR12482K2		AQ					1			✓		I
E2K7786F/R	21:50	AR12483K2	AR12483K2		AQ					1			✓		S
E2K7787F/R	22:11	AR12484K2	AR12484K2		AQ					1			✓		K
E2K7788F/R	22:32	AR12485K2	AR12485K2		AQ					1			✓		Q
E2K7789F/R	22:52	AR12541K2	AR12541K2		AQ					1			✓		AA
E2K7790F/R	23:13	AR12546K2	AR12546K2		AQ					1			✓		AB
E2K7791F/R	23:34	AR12542K2	AR12542K2		AQ					1			✓		Z
E2K7792F/R	23:56	AR12543K2	AR12543K2		AQ					1			✓		Y
E2K7793F/R	00:16	AR12544K2	AR12544K2		AQ					1			✓		X
E2K7794F/R	00:37	AR12545K2	AR12545K2		AQ					1			✓		W
E2K7795F/R	00:58	AR12623K2	AR12623K2		AQ					1			✓		PW110524 C
E2K7796F/R	01:19	AR12681K2	AR12681K2		AQ					1			✓		PW111113 A
E2K7797F/R	01:40	AR12686K2	AR12686K2		AQ					1			✓		F
E2K7798F/R	08:23	AR12682K2	AR12682K2		AQ					1			✓		B
E2K7799F/R	08:54	AR12683K2	AR12683K2		AQ					1			✓		C
E2K7800F/R	09:17	AR12684K2	AR12684K2		AQ					1			✓		PW111113 D

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
11/15/11

Spectrum Analytical, Inc. RI Division - PEST/PCB RUN LOGBOOK: INSTRUMENT E2

Spectrum Analytical, Inc. RI Division E2 Injection Log
GC Semivolatiles Laboratory

METHOD: 4R0 ANALYST: CMO
ICAL DATE: 11/14/11

START BATCH: 111113CF.B Start: 13-NOV-11 17:38
END BATCH: 111113CF.B End: 15-NOV-11 09:22

STDs Page 96

Comments:

11/15/11

Inlet Maintenance By:
Liner :
Column :
Inlet Seal:
Septum :

Reviewed By: _____ Manual Integration: CMO 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
E2K7801F/R	09:38	AR12685K2	AR12685K2		AQ					1			✓		PW111136
E2K7802F/R	09:59	AR16601K2	AR16601K2		AQ					1			✓		PW110524I
E2K7803F/R	10:20	AR16606K2	AR16606K2		AQ					1			✓		H
E2K7804F/R	10:40	AR16602K2	AR16602K2		AQ					1			✓		G
E2K7805F/R	11:01	AR16603K2	AR16603K2		AQ					1			✓		E
E2K7806F/R	11:22	AR16604K2	AR16604K2		AQ					1			✓		
E2K7807F/R	11:43	AR16605K2	AR16605K2		AQ					1			✓		PW110524E
E2K7808F/R	12:04	AR1660ICV2J	AR1660ICV2J		AQ					1			✓		PW110524D
E2K7809F/R	12:25	AIBLKKA	AILBKKA		AQ					1			✓		
E2K7810F/R	12:46	AR16603KA	AR16603KA		AQ					1			✓	✓	
E2K7811F/R	13:07	AR12423KA	AR12423KA		AQ					1			✓	✓	
E2K7812F/R	13:28	AR12483KA	AR12483KA		AQ					1			✓	✓	
E2K7813F/R	13:49	AR12543KA	AR12543KA		AQ					1			✓	✓	
E2K7814F/R	14:10	AR12683KA	AR12683KA		AQ					1			✓	✓	
E2K7848F/R	02:03	AIBLKKD	AILBKKD		AQ					1			✓		
E2K7849F/R	02:24	AR16603KD	AR16603KD		AQ					1			✓	✓	
E2K7850F/R	02:45	AR12423KD	AR12423KD		AQ					1			✓	✓	
E2K7851F/R	03:06	AR12483KD	AR12483KD		AQ					1			✓	✓	
E2K7852F/R	03:27	AR12543KD	AR12543KD		AQ					1			✓	✓	MD
E2K7853F/R	03:48	AR12683KD	AR12683KD		AQ					1			✓	✓	
E2K7855F/R	04:09	MB-62849	ABLK2K	62849	AQ	68	70	73	72	1			✓		
E2K7856F/R	04:29	LCS-62849	ALCS2K	62849	AQ	71	78	78	81	1			✓		
E2K7857F/R	04:50	K2155-11A	B9TA7	62849	AQ	34	25*	36	24*	1			✓		42/54
E2K7858F/R	05:11	K2155-12A	B9TC9	62849	AQ	72	50	82	53	1			✓		
E2K7859F/R	05:32	K2155-13A	B9TB9	62849	AQ	58	30*	64	30	1			✓		
E2K7860F/R	05:53	K2155-14A	B9TC1	62849	AQ	65	38	72	38	1			✓		
E2K7861F/R	06:14	K2155-14AMS	B9TC1MS	62849	AQ	77	40	85	40	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 11/15/11

Spectrum Analytical, Inc. RI Division - PEST/PCB RUN LOGBOOK: INSTRUMENT E2

Spectrum Analytical, Inc. RI Division E2 Injection Log
GC Semivolatiles Laboratory

METHOD: ARO ANALYST: [signature]
ICAL DATE: 11/4/11

START BATCH: 111115F.B Start: 15-NOV-11 23:02
END BATCH: 111115F.B End: 16-NOV-11 14:22

Comments: STDs Page 96 11/16/11

Inlet Maintenance By:
Liner :
Column :
Inlet Seal: 6
Septum :

Reviewed By: [signature] 11/17/11 Manual Integration: [signature] MI Review: [signature] 11/17/11

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
E2K7934F/R	23:02	AIBLKKF	AIBLKKF		AQ					1			—		
E2K7935F/R	23:23	AIBLKKF	AIBLKKF		AQ					1			—		
E2K7936F/R	23:43	AIBLKKF	AIBLKKF		AQ					1			—		
E2K7937F/R	00:04	AIBLKKF	AIBLKKF		AQ					1			—		
E2K7938F/R	00:25	AIBLKKF	AIBLKKF		AQ					1			—		
E2K7939F/R	00:46	AIBLKKF	AIBLKKF		AQ					1			—		
E2K7940F/R	01:07	AIBLKKF	AIBLKKF		AQ					1			—		
E2K7941F/R	01:28	AIBLKKF	AILBKKF		AQ					1			—		
E2K7942F/R	01:49	AIBLKKG	AIBLKKG		AQ					1			✓		
E2K7943F/R	02:10	AR16603KG	AR16603KG		AQ					1			✓	✓	
E2K7944F/R	02:31	AR12423KG	AR12423KG		AQ					1			✓	✓	
E2K7945F/R	02:52	AR12483KG	AR12483KG		AQ					1			✓	✓	
E2K7946F/R	03:13	AR12543KG	AR12543KG		AQ					1			✓	✓	
E2K7947F/R	03:34	AR12683KG	AR12683KG		AQ					1			✓	✓	
E2K7948F/R	03:55	MB-62638	ABLK2M	62638	AQ	76	74	85	75	1			✓		
E2K7949F/R	04:15	LCS-62638	~~ALC2M~~ ALC32M	62638	AQ	78	78	86	80	1			✓		
E2K7950F/R	04:36	K2200-02B	H30T9	62638	AQ	62	48	67	47	1			✓		
E2K7951F/R	04:57	K2200-03B	H30W0	62638	AQ	61	39	66	38	1			✓		MI_F11
E2K7952F/R	05:18	K2200-04B	H30W1	62638	AQ	73	48	79	48	1			✓		
E2K7953F/R	05:39	K2200-05B	H30W2	62638	AQ	74	54	81	54	1			✓		
E2K7954F/R	06:00	K2200-06B	H30W3	62638	AQ	78	58	86	58	1			✓		
E2K7955F/R	06:21	K2200-07B	H30W4	62638	AQ	72	60	78	60	1			✓		
E2K7956F/R	06:42	K2200-08B	H30W5	62638	AQ	76	60	83	61	1			✓		MI_F1_11
E2K7957F/R	07:03	K2200-09B	H30W6	62638	AQ	69	54	75	54	1			✓		
E2K7958F/R	07:24	K2200-10B	H30W7	62638	AQ	72	54	79	54	1			✓		
E2K7959F/R	07:45	K2200-11B	H30W8	62638	AQ	64	47	70	47	1			✓		
E2K7960F/R	08:06	K2200-12B	H30X0	62638	AQ	67	55	73	56	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

[signature] 11/16/11

Spectrum Analytical, Inc. RI Division - PEST/PCB RUN LOGBOOK: INSTRUMENT E2

Spectrum Analytical, Inc. RI Division E2 Injection Log
GC Semivolatiles Laboratory

METHOD: 4ARO
ICAL DATE: 10/13/11
ANALYST: Cano

START BATCH: 111115F.B
END BATCH: 111115F.B

Start: 15-NOV-11 23:02
End: 16-NOV-11 14:22

Comments: STDs Page 96

Inlet Maintenance By:
Liner :
Column : 5
Inlet Seal:
Septum :

Reviewed By: 11/17/11
Manual Integration: 10/10
MI Review: 11/17/11

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
E2K7961F/R	08:26	K2200-13B	H30X1	62638	AQ	67	53	74	54	1			✓		
E2K7962F/R	08:47	K2200-14B	H30Y2	62638	AQ	55	26*	59	25*	1			✓		
E2K7963F/R	09:08	K2200-15B	H30Y3	62638	AQ	42	19*	45	18*	1			✓		
E2K7964F/R	09:29	K2200-16B	H30Y4	62638	AQ	36	21*	38	20*	1			✓		
E2K7965F/R	09:50	K2200-17B	H30Y5	62638	AQ	48	18*	50	17*	1			✓		
E2K7966F/R	10:11	K2200-18B	H30Y6	62638	AQ	32	16*	33	15*	1			✓		
E2K7967F/R	10:32	K2200-19B	H30Z6	62638	AQ	50	47	54	47	1			✓		
E2K7968F/R	10:53	K2200-20A	H30X3	62638	AQ	48	18*	52	17*	1			✓		
E2K7969F/R	11:14	MB-62719	ABLK2N	62719	AQ	75	77	82	80	1			✓		
E2K7970F/R	11:35	LCS-62719	ALCS2N	62719	AQ	77	76	85	79	1			✓		
E2K7971F/R	11:56	K2200-20AMS	H30X3MS	62719	AQ	57	38	60	38	1			✓		
E2K7972F/R	12:16	K2200-20AMSD	H30X3MSD	62719	AQ	49	34	51	33	1			✓		
E2K7973F/R	12:37	AIBLKKH	AIBLKKH		AQ					1			✓		
E2K7974F/R	12:58	AR16603KH	AR16603KH		AQ					1			✓	✓	
E2K7975F/R	13:19	AR12423KH	AR12423KH		AQ					1			✓	✓	
E2K7976F/R	13:40	AR12483KH	AR12483KH		AQ					1			✓	✓	
E2K7977F/R	14:01	AR12543KH	AR12543KH		AQ					1			✓	✓	
E2K7978F/R	14:22	AR12683KH	AR12683KH		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

Cano 11/16/11

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	Phoenix	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: LW 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: K2200 **Profile Name:** SOM_VIII_21

MATRIX **Aqueous**

Samp #	Bottle	Test	Status	Received	Date
01A	001	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
01A	002	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
01A	003	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
02A	001	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
02A	002	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
02A	003	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
02B	001	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
02B	001	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
02B	001	SOM1.2_SVOA_LOW_W	Consumed	Antonio AP Cardoso	11/2/2011 2:54:00 PM
02B	002	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
02B	002	SOM01.2_ARO_W	Consumed	Ken Pierce	11/2/2011 8:52:00 AM
02B	002	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
02B	002	SOM1.2_SVOA_LOW_W	Consumed	Ken Pierce	11/2/2011 8:58:00 AM
02B	003	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
02B	003	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
03A	001	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
03A	002	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
03A	003	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
03B	001	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
03B	001	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
03B	001	SOM1.2_SVOA_LOW_W	Consumed	Antonio AP Cardoso	11/2/2011 2:54:00 PM
03B	002	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
03B	002	SOM01.2_ARO_W	Consumed	Ken Pierce	11/2/2011 8:52:00 AM
03B	002	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
03B	003	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
03B	003	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
04B	001	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/2/2011 2:55:00 PM
04B	001	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/2/2011 2:55:00 PM
04B	001	SOM1.2_SVOA_LOW_W	Consumed	Antonio AP Cardoso	11/2/2011 2:55:00 PM
04B	004	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
04B	004	SOM01.2_ARO_W	Consumed	Ken Pierce	11/2/2011 8:52:00 AM
04B	004	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM

Client: EPAINV

Work Order: K2200 **Profile Name:** SOM_VIII_21

MATRIX **Aqueous**

Samp #	Bottle	Test	Status	Received	Date
05A	001	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
05A	002	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
05A	003	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
05B	001	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
05B	001	SOM01.2_ARO_W	Consumed	Ken Pierce	11/2/2011 8:52:00 AM
05B	001	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
05B	002	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
05B	002	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
05B	002	SOM1.2_SVOA_LOW_W	Consumed	Antonio AP Cardoso	11/2/2011 2:54:00 PM
06A	001	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
06A	002	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
06A	003	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
06B	001	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
06B	001	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
06B	001	SOM1.2_SVOA_LOW_W	Consumed	Antonio AP Cardoso	11/2/2011 2:54:00 PM
06B	002	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
06B	002	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
06B	003	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
06B	003	SOM01.2_ARO_W	Consumed	Ken Pierce	11/2/2011 8:52:00 AM
06B	003	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
06B	004	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
06B	004	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
07A	001	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
07A	002	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
07A	003	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM

Client: EPAINV

Work Order: K2200 **Profile Name:** SOM_VIII_21

MATRIX **Aqueous**

Samp #	Bottle	Test	Status	Received	Date
07B	001	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
07B	001	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
07B	001	SOM1.2_SVOA_LOW_W	Consumed	Antonio AP Cardoso	11/2/2011 2:54:00 PM
07B	002	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
07B	002	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
07B	003	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
07B	003	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
07B	004	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
07B	004	SOM01.2_ARO_W	Consumed	Ken Pierce	11/2/2011 8:52:00 AM
07B	004	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
08A	001	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
08A	002	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
08A	003	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
08B	001	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
08B	001	SOM01.2_ARO_W	Consumed	Ken Pierce	11/2/2011 8:52:00 AM
08B	001	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
08B	002	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
08B	002	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
08B	002	SOM1.2_SVOA_LOW_W	Consumed	Antonio AP Cardoso	11/2/2011 2:54:00 PM
08B	003	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
08B	003	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
08B	004	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
08B	004	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
09A	001	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
09A	002	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
09A	003	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM

Client: EPAINV

Work Order: K2200 **Profile Name:** SOM_VIII_21

MATRIX **Aqueous**

Samp #	Bottle	Test	Status	Received	Date
09B	001	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
09B	001	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
09B	001	SOM1.2_SVOA_LOW_W	Consumed	Antonio AP Cardoso	11/2/2011 2:54:00 PM
09B	002	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
09B	002	SOM01.2_ARO_W	Consumed	Ken Pierce	11/2/2011 8:52:00 AM
09B	002	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
09B	003	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
09B	003	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
09B	004	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
09B	004	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
10A	001	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
10A	002	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
10A	003	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
10B	001	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
10B	001	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
10B	001	SOM1.2_SVOA_LOW_W	Consumed	Antonio AP Cardoso	11/2/2011 2:54:00 PM
10B	002	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
10B	002	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
10B	003	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
10B	003	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
10B	004	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
10B	004	SOM01.2_ARO_W	Consumed	Ken Pierce	11/2/2011 8:52:00 AM
10B	004	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
11A	001	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
11A	002	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
11A	003	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM

Client: EPAINV

Work Order: K2200 **Profile Name:** SOM_VIII_21

MATRIX **Aqueous**

Samp #	Bottle	Test	Status	Received	Date
11B	001	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
11B	001	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
11B	001	SOM1.2_SVOA_LOW_W	Consumed	Antonio AP Cardoso	11/2/2011 2:54:00 PM
11B	002	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
11B	002	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
11B	003	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
11B	003	SOM01.2_ARO_W	Consumed	Ken Pierce	11/2/2011 8:52:00 AM
11B	003	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
11B	004	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
11B	004	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
12A	001	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
12A	002	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
12A	003	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
12B	001	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
12B	001	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
12B	001	SOM1.2_SVOA_LOW_W	Consumed	Antonio AP Cardoso	11/2/2011 2:54:00 PM
12B	002	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
12B	002	SOM01.2_ARO_W	Consumed	Ken Pierce	11/2/2011 8:52:00 AM
12B	002	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
12B	003	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
12B	003	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
12B	004	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
12B	004	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
13A	001	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
13A	002	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
13A	003	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM

Client: EPAINV

Work Order: K2200 **Profile Name:** SOM_VIII_21

MATRIX **Aqueous**

Samp #	Bottle	Test	Status	Received	Date
13B	001	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
13B	001	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
13B	001	SOM1.2_SVOA_LOW_W	Consumed	Antonio AP Cardoso	11/2/2011 2:54:00 PM
13B	002	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
13B	002	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
13B	003	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
13B	003	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
13B	004	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
13B	004	SOM01.2_ARO_W	Consumed	Ken Pierce	11/2/2011 8:52:00 AM
13B	004	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
14A	001	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
14A	002	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
14A	003	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
14B	001	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
14B	001	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
14B	001	SOM1.2_SVOA_LOW_W	Consumed	Antonio AP Cardoso	11/2/2011 2:54:00 PM
14B	002	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
14B	002	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
14B	003	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
14B	003	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
14B	004	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
14B	004	SOM01.2_ARO_W	Consumed	Ken Pierce	11/2/2011 8:52:00 AM
14B	004	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
15A	001	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
15A	002	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
15A	003	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM

Client: EPAINV

Work Order: K2200 **Profile Name:** SOM_VIII_21

MATRIX **Aqueous**

Samp #	Bottle	Test	Status	Received	Date
15B	001	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
15B	001	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
15B	001	SOM1.2_SVOA_LOW_W	Consumed	Antonio AP Cardoso	11/2/2011 2:54:00 PM
15B	002	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
15B	002	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
15B	003	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
15B	003	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
15B	004	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
15B	004	SOM01.2_ARO_W	Consumed	Ken Pierce	11/2/2011 8:52:00 AM
15B	004	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
16A	001	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
16A	002	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
16A	003	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
16B	001	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
16B	001	SOM01.2_ARO_W	Consumed	Ken Pierce	11/2/2011 8:52:00 AM
16B	001	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
16B	002	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
16B	002	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
16B	002	SOM1.2_SVOA_LOW_W	Consumed	Antonio AP Cardoso	11/2/2011 2:54:00 PM
16B	003	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
16B	003	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
16B	004	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
16B	004	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
17A	001	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
17A	002	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
17A	003	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM

Client: EPAINV

Work Order: K2200 **Profile Name:** SOM_VIII_21

MATRIX **Aqueous**

Samp #	Bottle	Test	Status	Received	Date
17B	001	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
17B	001	SOM01.2_ARO_W	Consumed	Ken Pierce	11/2/2011 8:52:00 AM
17B	001	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
17B	002	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
17B	002	SOM01.2_ARO_W	Consumed	Ken Pierce	11/2/2011 8:52:00 AM
17B	002	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
17B	003	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
17B	003	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
17B	003	SOM1.2_SVOA_LOW_W	Consumed	Antonio AP Cardoso	11/2/2011 2:54:00 PM
17B	004	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
17B	004	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
18A	001	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
18A	002	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
18A	003	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
18B	001	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
18B	001	SOM01.2_ARO_W	Consumed	Ken Pierce	11/2/2011 8:52:00 AM
18B	001	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
18B	002	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
18B	002	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
18B	003	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
18B	003	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
18B	003	SOM1.2_SVOA_LOW_W	Consumed	Antonio AP Cardoso	11/2/2011 2:54:00 PM
19A	001	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
19A	002	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
19A	003	SOM1.2_VOA_TRACE_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM

Client: EPAINV

Work Order: K2200 **Profile Name:** SOM_VIII_21

MATRIX **Aqueous**

Samp #	Bottle	Test	Status	Received	Date
19B	001	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
19B	001	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
19B	001	SOM1.2_SVOA_LOW_W	Consumed	Antonio AP Cardoso	11/2/2011 2:54:00 PM
19B	002	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
19B	002	SOM01.2_ARO_W	Consumed	Ken Pierce	11/2/2011 8:52:00 AM
19B	002	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
19B	003	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
19B	003	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
19B	004	SOM01.2_ARO_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
19B	004	SOM1.2_SVOA_LOW_W	In	LOGIN: dmckenna	10/28/2011 5:18:00 PM
20A	001	SOM01.2_ARO_W	In	LOGIN: cnadeau	10/31/2011 11:08:00 AM
20A	001	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	10/31/2011 11:08:00 AM
20A	001	SOM1.2_SVOA_LOW_W	Consumed	Antonio AP Cardoso	11/2/2011 2:54:00 PM
20A	002	SOM01.2_ARO_W	In	LOGIN: cnadeau	10/31/2011 11:08:00 AM
20A	002	SOM01.2_ARO_W	Consumed	Timothy McDaniel	11/3/2011 4:17:00 PM
20A	002	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	10/31/2011 11:08:00 AM
20A	003	SOM01.2_ARO_W	In	LOGIN: cnadeau	10/31/2011 11:08:00 AM
20A	003	SOM01.2_ARO_W	Consumed	Ken Pierce	11/2/2011 8:52:00 AM
20A	003	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	10/31/2011 11:08:00 AM
20A	004	SOM01.2_ARO_W	In	LOGIN: cnadeau	10/31/2011 11:08:00 AM
20A	004	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	10/31/2011 11:08:00 AM
20A	004	SOM1.2_SVOA_LOW_W	Consumed	Antonio AP Cardoso	11/3/2011 12:21:00 PM

STD ID	Analyte(s)	Prep Date	Exp Date	Final Conc	Conc Units	Fin Vol	Solvent	Sol Lot	Prep By	Val By
VP081114A	8260 Compounds	11/14/08	12/31/10	2500	µg/mL	1 mL	MeOH		HZA	
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	
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
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
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

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

VW110926A	TVOA IS	09/26/11	10/25/11	20	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	0.032	mL

VW110926B	TVOA DMC	09/26/11	12/25/11	20 - 200	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	0.04	mL
VP110210C	SOM DMC NONGAS	2000	µg/mL	0.04	mL
VW110817D	SOM DMCB STOCK	5000	µg/mL	0.16	mL

VW111015A	TVOA STD	10/15/11	11/15/11	20 - 200	µg/mL	4 mL	MeOH	51145	WL	

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
VP081114A	8260 Compounds	2500	µg/mL	0.032	mL
VP100208F	KETONES	5000	µg/mL	0.16	mL
VP101115A	502.2 CALIBRATION MIX	2000	µg/mL	0.04	mL
VP110215A	SOM STD	2000	µg/mL	0.04	mL

VW111024A	TVOA IS	10/24/11	11/24/11	20	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	0.032	mL

STD ID	Analyte(s)	Prep Date	Exp Date	Final Conc	Conc Units	Fin Vol	Solvent	Sol Lot	Prep By	Val By
VW111024B	TVOA DMC	10/24/11	11/24/11	20 - 200	µg/mL	4 mL			WL	

Stock ID	Analyte(s)		Conc	Conc Units	Amt Added	Amt Added Units
VP110210A	SOM DMC GAS		2000	µg/mL	0.04	mL
VP110210C	SOM DMC NONGAS		2000	µg/mL	0.04	mL
VW110817D	SOM DMCB STOCK		5000	µg/mL	0.16	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
SP101215A	2-METHYLNAPHTHALENE-D10	12/15/10	06/18/20	200	µg/mL	mL			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
SP110406B	2-METHYLNAPHTHALENE-D10	04/06/11	06/18/20	200	µg/mL	1 mL	ISOO		MMS	MMS

1058

STD ID	Analyte(s)	Prep Date	Exp Date	Final Conc	Conc Units	Fin Vol	Solvent	Sol Lot	Prep By	Val By
SP110406D	FLOURANTHENE-D10	04/06/11	11/20/19	200	µg/mL	1 mL	ISOO		MMS	BM
SP110421C	CLP SVOA DMC STOCK SOLUTION	04/21/11	11/25/13	2000	µg/mL	4 mL	MeCL2		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
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
SP110719B	1,2,4,5-TETRACHLOROBENZENE	07/19/11	07/31/13	1000	µg/mL	1 mL	ACN		MMS	CLM
OSW110725C	SOM LOW/SIM SURROGATE	07/25/11	07/25/12	0.4 - 40	µg/mL	500 mL	MeOH	105003	MMS	BM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
SP110406B	2-METHYLNAPHTHALENE-D10	200	µg/mL	1	mL
SP110406D	FLOURANTHENE-D10	200	µg/mL	1	mL
SP110421C	CLP SVOA DMC STOCK SOLUTION	2000	µg/mL	10	mL

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

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

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

SP111006A	CLP SVOA DMC STOCK SOLUTION	10/06/11	09/30/16	2000	µg/mL	14 mL	MeCL2		MMS	BM
OSW111013A	SOM LOW/SIM SURROGATE	10/13/11	10/13/12	0.4 - 40	µg/mL	500 mL	MeOH	107164	MMS	BM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
SP101215A	2-METHYLNAPHTHALENE-D10	200	µg/mL	1	mL
SP110617A	FLOURANTHENE-D10	200	µg/mL	1	mL
SP111006A	CLP SVOA DMC STOCK SOLUTION	2000	µg/mL	10	mL

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

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

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

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

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
PP100609B	ARO 1016/1260 MIX	06/09/10	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		

STD ID	Analyte(s)	Prep Date	Exp Date	Final Conc	Conc Units	Fin Vol	Solvent	Sol Lot	Prep By	Val By
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		
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		

1063

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		
OPW110606A	SOM ARO LCS	06/06/11	11/24/11	1	µg/mL	50 mL	ACE	107200	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added		Amt Added Units		
PI110524A	ARO 1660 PI			10	µg/mL	5		Ml		
PP110608C	TCX MIX	06/08/11	05/31/17	200	µg/mL	1 mL	ACE		DJL	CLM
OPW110701A	PCB LACS/MS SPIKE	07/01/11	01/01/12	4	µg/mL	250 mL	ACE	108096	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added		Amt Added Units		
PP100609B	ARO 1016/1260 MIX			1000	µg/mL	1		Ml		
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		
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 USA Airbill

8418 2969 6944

0200 Form I.D. No.

FedEx Retrieval Copy

1 From

Date 10/__/11

Sender's FedEx Account Number

Sender's Name Snehal Mehta Phone 908 737-8[illegible]

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 7[illegible]

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 0[illegible]

8418 2969 6944

Agnes L 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 [X] 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. 1492-3[illegible]-2 Exp. Date

Total Packages: 5 Total Weight: 210 Total Charges

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.

446

Rev. Date 10/01 • Part #157612 • [illegible] FedEx • PRINTED IN U.S.A. WCSL 03

Case 41926
SDG H3057

COPY
Original Documents Are Included In CSF H3000
Signed: ABA **Date:** 10/28/11

FedEx Express **NEW Package / US Airbill**

FedEx Tracking Number: 8768 2874 0622

0200 Form ID No.

FedEx Retrieval Copy

1 From

Date: 10/27/11 Sender's FedEx Account Number: 1942-5093-2

Sender's Name: Josh 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 31549158.00000

3 To

Recipient's Name: Diane Smart Phone: 401 732-3400

Company: Spectrum Analytical, Inc

Address: 175 Metro Center Blvd

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Dept/Floor/Suite/Room:

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

Total Packages: 1 Total Weight: 20 lbs. Credit Card Auth.:

*Our liability is limited to $100 unless you declare a higher value. See the current FedEx Service Guide for details.

612

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Case 41926
SDG H3057

COPY
Original Documents Are Included in CSF H3000
Signed: AAA **Date:** 10/28/11

1069

FedEx Express **NEW Package US Airbill**

FedEx Tracking Number 8768 2872 4020 0200 Form ID No.

FedEx Retrieval Copy

1 From

Date 10/28/11 Sender's FedEx Account Number 1942-5093-2

Sender's Name Jen Patterson Phone 720 810-0993

Company UBS Operating Services

Address 1099 18th St ste 710

Dept/Floor/Suite/Room

City Denver State CO ZIP 80202

2 Your Internal Billing Reference 3684 9107.00000

3 To

Recipient's Name Denise Swartz Phone 401 732-3402

Company Spectrum Analytical, Inc

Address 175 Metro Center Blvd

We cannot deliver to P.O. boxes or P.O. ZIP codes. Dept/Floor/Suite/Room

01 ☐ HOLD Weekday FedEx location address REQUIRED. NOT available for FedEx First Overnight.

HOLD Saturday FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

31 ☐

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City Warwick State RI ZIP 02886

8768 2872 4020

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 6.5 lbs. Credit Card Auth.

†Our liability is limited to $100 unless you declare a higher value. See the current FedEx Service Guide for details.

612

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10/31/11

Case 41926
SDG H3057

COPY
Original Documents Are Included in CSF H3D76
Signed: AOA **Date:** 10/31/11

1070

Contract Laboratory Program

Sample Delivery Group (SDG)

Cover Sheet

SDG Number H30S7

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) H30S7	08) H30W5	15) H30X3MS	22) H30Z6
02) H30T9	09) H30W6	16) H30X3MSD	
03) H30W0	10) H30W7	17) H30Y2	
04) H30W1	11) H30W8	18) H30Y3	
05) H30W2	12) H30X0	19) H30Y4	
06) H30W3	13) H30X1	20) H30Y5	
07) H30W4	14) H30X3	21) H30Y6	

First Sample in SDG	Last Sample in SDG
H30S7	H30X3

First Sample Receipt Date	Last Sample Receipt Date
10/28/2011	10/29/2011

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 11/07/2011

SDG H3057

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		
	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

COPY

Original Documents Are Included in CSF H3000
Signed: AGM **Date:** 10/27/11

6.5°C 9.0°C 9.5°C 10.0°C 9.5°C

SDG H30S7

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		
	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

COPY
Original Documents Are Included in CSF H30Q0
Signed: AMA **Date:** 10/28/11

9.0°C 9.0°C 9.5°C 8.0°C 8.5°C

SDG H3057

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
	H30W4	Semivolatiles (SVOAs)	Surface Water	10/24/2011	17:30		
	H30W4	Aroclors	Surface Water	10/24/2011	17:30		
	H30W5	Semivolatiles (SVOAs)	Surface Water	10/24/2011	17:45		
	H30W5	Aroclors	Surface Water	10/24/2011	17:45		
	H30W6	Semivolatiles (SVOAs)	Surface Water	10/25/2011	10:15		
	H30W6	Aroclors	Surface Water	10/25/2011	10:15		
	H30W7	Semivolatiles (SVOAs)	Surface Water	10/25/2011	11:35		
	H30W7	Aroclors	Surface Water	10/25/2011	11:35		
	H30W8	Semivolatiles (SVOAs)	Surface Water	10/25/2011	12:40		
	H30W8	Aroclors	Surface Water	10/25/2011	12:40		

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
	[signature]	10/26/11	FedEx	10/26/11	1300				[signature]	10/27/11	9:15
									[signature]	10/28/11	9:00

9.0°C 9.0°C 9.5°C 8.0°C 8.5°C

SDG H3087

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
	H30W4	Volatiles (VOAs)	Surface Water	10/24/2011	17:30	HCl	
	H30W5	Volatiles (VOAs)	Surface Water	10/24/2011	17:45	HCl	
	H30W6	Volatiles (VOAs)	Surface Water	10/25/2011	10:15	HCl	
	H30W7	Volatiles (VOAs)	Surface Water	10/25/2011	11:35	HCl	
	H30W8	Volatiles (VOAs)	Surface Water	10/25/2011	12:40	HCl	
	H30X0	Volatiles (VOAs)	Ground Water	10/26/2011	09:30	HCl	
	H30X0	Semivolatiles (SVOAs)	Ground Water	10/26/2011	09:30		
	H30X0	Aroclors	Ground Water	10/26/2011	09:30		
	H30X1	Volatiles (VOAs)	Ground Water	10/26/2011	10:30	HCl	
	H30X1	Semivolatiles (SVOAs)	Ground Water	10/26/2011	10:30		
	H30X1	Aroclors	Ground Water	10/26/2011	10:30		
	H30Y2	Volatiles (VOAs)	Ground Water	10/26/2011	10:55	HCl	
	H30Y2	Semivolatiles (SVOAs)	Ground Water	10/26/2011	10:55		
	H30Y2	Aroclors	Ground Water	10/26/2011	10:55		
	H30Y3	Volatiles (VOAs)	Ground Water	10/26/2011	12:05	HCl	
	H30Y3	Semivolatiles (SVOAs)	Ground Water	10/26/2011	12:05		
	H30Y3	Aroclors	Ground Water	10/26/2011	12:05		
	H30Y4	Volatiles (VOAs)	Ground Water	10/26/2011	15:05	HCl	
	H30Y4	Semivolatiles (SVOAs)	Ground Water	10/26/2011	15:05		
	H30Y4	Aroclors	Ground Water	10/26/2011	15:05		

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 Patrum	10/27/11	FedEx	10/27/11	1400		FedEx	10-28-11	Vanessa Miller	10-28-11	9:00

6.5°C 9.0°C 9.5°C 10.0°C 9.5°C

SDG H30857

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
	H30Y5	Volatiles (VOAs)	Ground Water	10/26/2011	17:05	HCl	
	H30Y5	Semivolatiles (SVOAs)	Ground Water	10/26/2011	17:05		
	H30Y5	Aroclors	Ground Water	10/26/2011	17:05		
	H30Y6	Volatiles (VOAs)	Ground Water	10/26/2011	18:20	HCl	
	H30Y6	Semivolatiles (SVOAs)	Ground Water	10/26/2011	18:20		
	H30Y6	Aroclors	Ground Water	10/26/2011	18:20		
	H30Z6	Volatiles (VOAs)	Ground Water	10/25/2011	16:05	HCl	
	H30Z6	Semivolatiles (SVOAs)	Ground Water	10/25/2011	16:05		
	H30Z6	Aroclors	Ground Water	10/25/2011	16:05		

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	Dennis Mann	10-28-11	9:00

6.5°C 9.0°C 9.5°C 10.0°C 9.5?

SDG H30S7

USEPA
DateShipped: 10/28/2011
CarrierName: FedEx
AirbillNo:

CHAIN OF CUSTODY RECORD
Site #: 41926
Contact Name: Jeff Miller
Contact Phone: 720-219-7891

No: 8-102811-114448-0006
Cooler #:
Lab: Spectrum Analytical
Lab Phone: 401-732-3400

Lab #	CLP Sample #	Analyses	Matrix	Collected	Sample Time	Preservative	MS/MSD
	H30Q5	Semivolatiles (SVOAs)/PCBs	Soil	10/27/2011	10:10		
	H30Q7	Semivolatiles (SVOAs)/PCBs	Soil	10/27/2011	11:10		
	H30R2	Semivolatiles (SVOAs)/PCBs	Soil	10/27/2011	14:10		
	H30R3	Semivolatiles (SVOAs)/PCBs	Soil	10/27/2011	13:50		
	H30R4	Semivolatiles (SVOAs)/PCBs	Soil	10/27/2011	17:45		
	H30R6	Semivolatiles (SVOAs)/PCBs	Soil	10/27/2011	15:40		
	H30R7	Semivolatiles (SVOAs)/PCBs	Soil	10/27/2011	16:00		
	H30R8	Semivolatiles (SVOAs)/PCBs	Soil	10/27/2011	17:20		
SAS - Fluid Sample	H30X3	Semivolatiles (SVOAs)	Ground Water	10/27/2011	14:05		
	H30X3	Aroclors	Ground Water	10/27/2011	14:05		
	H30X4	Semivolatiles (SVOAs)	Ground Water	10/27/2011	17:25		
	H30X4	Aroclors	Ground Water	10/27/2011	17:25		
	H30Y7	Semivolatiles (SVOAs)	Ground Water	10/27/2011	10:23		
	H30Y7	Aroclors	Ground Water	10/27/2011	10:23		

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
	[signature]	10/28/11	fedex	10/28/11	1230		FedEx	10-29-11	[signature]	10-29-11	8:45

COPY

Original Documents Are Included in CSF H30T6
Signed: [signature] **Date:** 10/31/11

9.0°C

1077

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: K2200

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: H30S7
PO: EP-W-11-033

HC Due: 11/17/11
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
K2200-01A	H30S7	10/26/2011 10:30	10/28/2011	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
K2200-02A	H30T9	10/24/2011 14:00	10/28/2011	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
K2200-02B	H30T9	10/24/2011 14:00	10/28/2011	Aqueous	SOM01.2_ARO_W	/					I1
K2200-02B	H30T9	10/24/2011 14:00	10/28/2011	Aqueous	SOM1.2_SVOA_LOW_W	/					I1
K2200-03A	H30W0	10/24/2011 15:25	10/28/2011	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
K2200-03B	H30W0	10/24/2011 15:25	10/28/2011	Aqueous	SOM01.2_ARO_W	/					I1
K2200-03B	H30W0	10/24/2011 15:25	10/28/2011	Aqueous	SOM1.2_SVOA_LOW_W	/					I1
K2200-04A	H30W1	10/24/2011 16:11	10/28/2011	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
K2200-04B	H30W1	10/24/2011 16:11	10/28/2011	Aqueous	SOM01.2_ARO_W	/					I1
K2200-04B	H30W1	10/24/2011 16:11	10/28/2011	Aqueous	SOM1.2_SVOA_LOW_W	/					I1
K2200-05A	H30W2	10/24/2011 15:22	10/28/2011	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
K2200-05B	H30W2	10/24/2011 15:22	10/28/2011	Aqueous	SOM01.2_ARO_W	/					I1
K2200-05B	H30W2	10/24/2011 15:22	10/28/2011	Aqueous	SOM1.2_SVOA_LOW_W	/					I1
K2200-06A	H30W3	10/24/2011 16:45	10/28/2011	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
K2200-06B	H30W3	10/24/2011 16:45	10/28/2011	Aqueous	SOM01.2_ARO_W	/					I1
K2200-06B	H30W3	10/24/2011 16:45	10/28/2011	Aqueous	SOM1.2_SVOA_LOW_W	/					I1
K2200-07A	H30W4	10/24/2011 17:30	10/28/2011	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
K2200-07B	H30W4	10/24/2011 17:30	10/28/2011	Aqueous	SOM01.2_ARO_W	/					I1
K2200-07B	H30W4	10/24/2011 17:30	10/28/2011	Aqueous	SOM1.2_SVOA_LOW_W	/					I1
K2200-08A	H30W5	10/24/2011 17:45	10/28/2011	Aqueous	SOM1.2_VOA_TRACE_W	/					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: K2200

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: H30S7
PO: EP-W-11-033

HC Due: 11/17/11
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
K2200-08B	H30W5	10/24/2011 17:45	10/28/2011	Aqueous	SOM01.2_ARO_W	/					I1
K2200-08B	H30W5	10/24/2011 17:45	10/28/2011	Aqueous	SOM1.2_SVOA_LOW_W	/					I1
K2200-09A	H30W6	10/25/2011 10:15	10/28/2011	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
K2200-09B	H30W6	10/25/2011 10:15	10/28/2011	Aqueous	SOM01.2_ARO_W	/					I1
K2200-09B	H30W6	10/25/2011 10:15	10/28/2011	Aqueous	SOM1.2_SVOA_LOW_W	/					I1
K2200-10A	H30W7	10/25/2011 11:35	10/28/2011	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
K2200-10B	H30W7	10/25/2011 11:35	10/28/2011	Aqueous	SOM01.2_ARO_W	/					I1
K2200-10B	H30W7	10/25/2011 11:35	10/28/2011	Aqueous	SOM1.2_SVOA_LOW_W	/					I1
K2200-11A	H30W8	10/25/2011 12:40	10/28/2011	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
K2200-11B	H30W8	10/25/2011 12:40	10/28/2011	Aqueous	SOM01.2_ARO_W	/					I1
K2200-11B	H30W8	10/25/2011 12:40	10/28/2011	Aqueous	SOM1.2_SVOA_LOW_W	/					I1
K2200-12A	H30X0	10/26/2011 09:30	10/28/2011	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
K2200-12B	H30X0	10/26/2011 09:30	10/28/2011	Aqueous	SOM01.2_ARO_W	/					I1
K2200-12B	H30X0	10/26/2011 09:30	10/28/2011	Aqueous	SOM1.2_SVOA_LOW_W	/					I1
K2200-13A	H30X1	10/26/2011 10:30	10/28/2011	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
K2200-13B	H30X1	10/26/2011 10:30	10/28/2011	Aqueous	SOM01.2_ARO_W	/					I1
K2200-13B	H30X1	10/26/2011 10:30	10/28/2011	Aqueous	SOM1.2_SVOA_LOW_W	/					I1
K2200-14A	H30Y2	10/26/2011 10:55	10/28/2011	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
K2200-14B	H30Y2	10/26/2011 10:55	10/28/2011	Aqueous	SOM01.2_ARO_W	/					I1
K2200-14B	H30Y2	10/26/2011 10:55	10/28/2011	Aqueous	SOM1.2_SVOA_LOW_W	/					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: K2200

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: H30S7
PO: EP-W-11-033

HC Due: 11/17/11
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
K2200-15A	H30Y3	10/26/2011 12:05	10/28/2011	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
K2200-15B	H30Y3	10/26/2011 12:05	10/28/2011	Aqueous	SOM01.2_ARO_W	/					I1
K2200-15B	H30Y3	10/26/2011 12:05	10/28/2011	Aqueous	SOM1.2_SVOA_LOW_W	/					I1
K2200-16A	H30Y4	10/26/2011 15:05	10/28/2011	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
K2200-16B	H30Y4	10/26/2011 15:05	10/28/2011	Aqueous	SOM01.2_ARO_W	/					I1
K2200-16B	H30Y4	10/26/2011 15:05	10/28/2011	Aqueous	SOM1.2_SVOA_LOW_W	/					I1
K2200-17A	H30Y5	10/26/2011 17:05	10/28/2011	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
K2200-17B	H30Y5	10/26/2011 17:05	10/28/2011	Aqueous	SOM01.2_ARO_W	/					I1
K2200-17B	H30Y5	10/26/2011 17:05	10/28/2011	Aqueous	SOM1.2_SVOA_LOW_W	/					I1
K2200-18A	H30Y6	10/26/2011 18:20	10/28/2011	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
K2200-18B	H30Y6	10/26/2011 18:20	10/28/2011	Aqueous	SOM01.2_ARO_W	/					I1
K2200-18B	H30Y6	10/26/2011 18:20	10/28/2011	Aqueous	SOM1.2_SVOA_LOW_W	/					I1
K2200-19A	H30Z6	10/25/2011 16:05	10/28/2011	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
K2200-19B	H30Z6	10/25/2011 16:05	10/28/2011	Aqueous	SOM01.2_ARO_W	/					I1
K2200-19B	H30Z6	10/25/2011 16:05	10/28/2011	Aqueous	SOM1.2_SVOA_LOW_W	/					I1
K2200-20A	H30X3	10/27/2011 14:05	10/29/2011	Aqueous	SOM01.2_ARO_W	/			Y		I2
K2200-20A	H30X3	10/27/2011 14:05	10/29/2011	Aqueous	SOM1.2_SVOA_LOW_W	/			Y		I2

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) Shirley NS	Log-in Date 10/28/2011
Received By (Signature) Shirley NS	
Case Number 41926	Sample Delivery Group No. H30S7 / 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

Sample Transfer	
Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area # VOA Lab	Area #
By DRM	By
On 10/28/11	On

EPA Sample #	Corresponding: Sample Tag #	Corresponding: Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
H30S7	N/A	K2200-01	Good
H30T9	N/A	K2200-02	
H30W0	N/A	K2200-03	
H30W1	N/A	K2200-04	
H30W2	N/A	K2200-05	
H30W3	N/A	K2200-06	
H30W4	N/A	K2200-07	
H30W5	N/A	K2200-08	
H30W6	N/A	K2200-09	
H30W7	N/A	K2200-10	
H30W8	N/A	K2200-11	
H30X0	N/A	K2200-12	
H30X1	N/A	K2200-13	
H30Y2	N/A	K2200-14	
H30Y3	N/A	K2200-15	
H30Y4	N/A	K2200-16	
H30Y5	N/A	K2200-17	
H30Y6	N/A	K2200-18	
H30Z6	N/A	K2200-19	Good

* Contact SMO and attach record of resolution

Reviewed By Daniel Mehr	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)	Shirley NS	Log-in Date 10/28/2011
Received By (Signature)	Shirley NS	
Case Number 41926	Sample Delivery Group No. H30S7	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

EPA Sample #	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
H30T9	N/A	K2200-02	1 amber rec'd broken
H30W0	N/A	K2200-03	Good
H30W1	N/A	K2200-04	Good

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

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 Daniel Mitkem	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) Shirley NJ	Log-in Date 10/28/2011
Received By (Signature) [signature] NJ	
Case Number 41926	Sample Delivery Group No. H30S7 / 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	9.5 °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

Corresponding			Remarks: Condition of Sample Shipment, etc.
EPA Sample #	Sample Tag #	Assigned Lab #	
H30W1	N/A	K2200-04	Good
H30W2	N/A	K2200-05	2 amber rec'd broken
H30W3	N/A	K2200-06	Good
H30W4	N/A	K2200-07	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 Daniel Mercer	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)	Shirley Ng	Log-in Date 10/28/2011
Received By (Signature)	Shirley Ng	
Case Number 41926	Sample Delivery Group No. H30S7	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.
H30W4	N/A	K2200-07	Good
H30W5	N/A	K2200-08	Good
H30W6	N/A	K2200-09	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 Daniel McCon	Logbook No. /
Date 10-28-11	Logbook Page No. /

WO: K2200 / CID:000 611 / CWID:001 349

SOM01.2 (4/2007)

SAMPLE LOG-IN SHEET

FORM DC-1

Lab Name Mitkem Laboratories		Page 01 of 01
Received By (Print Name)	Shirley NS	Log-in Date 10/28/2011
Received By (Signature)	NS	
Case Number 41926	Sample Delivery Group No. H30S7	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

Sample Transfer		
	Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area #	/	RI
By	/	DRH
On	/	10/28/11

EPA Sample #	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
H30W6	N/A	K2200-09	Good
H30W7	N/A	K2200-10	Good
H30W8	N/A	K2200-11	Good

* Contact SMO and attach record of resolution

Reviewed By Daniel McCann	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)	Shirley Ng	Log-in Date 10/28/2011
Received By (Signature)	Shirley Ng	
Case Number 41926	Sample Delivery Group No. H30S7	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

Corresponding			Remarks: Condition of Sample Shipment, etc.
EPA Sample #	Sample Tag #	Assigned Lab #	
H30W8	N/A	K2200-11	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 Danar Mitkem	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) Shirley NS	Log-in Date 10/28/2011
Received By (Signature) NS	
Case Number 41926	Sample Delivery Group No. H30S7 / 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	9.5 °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

Sample Transfer	
Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area # /	Area # R1
By /	By DRM
On /	On 10/28/11

EPA Sample #	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
H30X0	N/A	K2200-12	Good
H30X1	N/A	K2200-13	
H30Y2	N/A	K2200-14	
H30Y3	N/A	K2200-15	
H30Y4	N/A	K2200-16	
H30Y5	N/A	K2200-17	Good

* Contact SMO and attach record of resolution

Reviewed By William McKenna	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)	Shirley Ng	Log-in Date 10/28/2011
Received By (Signature)	Shirley Ng	
Case Number 41926	Sample Delivery Group No. H30S7	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	10.0 °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

Sample Transfer	
Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area # /	Area # R1
By /	By DRM
On /	On 10/28/11

EPA Sample #	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
H30X0	N/A	K2200-12	Good
H30X1	N/A	K2200-13	
H30Y2	N/A	K2200-14	
H30Y3	N/A	K2200-15	
H30Y4	N/A	K2200-16	Good

* Contact SMO and attach record of resolution

Reviewed By Daniel McKenna	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) Shirley NS	Log-in Date 10/28/2011
Received By (Signature)	
Case Number 41926	Sample Delivery Group No. H30S7 / 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.
H30Y5	N/A	K2200-17	Good
H30Y6	N/A	K2200-18	1 amber rec'd broken
H30Z6	N/A	K2200-19	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 Dawn Mitkem	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)	Shirley Ng	Log-in Date 10/31/2011
Received By (Signature)	Shirley Ng	
Case Number 41926	Sample Delivery Group No. H30S7	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 2872 4020
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	10/29/2011
12. Time Received	08:45

EPA Sample #	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
H30X3	N/A	K2200-20	Good

Sample Transfer

Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area # /	Area # RI
By /	By SN
On /	On 10/31/11

* Contact SMO and attach record of resolution

Reviewed By CG Walker	Logbook No.
Date 10/3/4	Logbook Page No. /

Subject:	Region 08 | Case 41926 | Lab MITKEM | Issue Multiple | FINAL
From:	Mroz, Ryan (rmroz@fedcsc.com)
To:	agnes_ng@mitkem.com; dsmart@mitkem.com; mitkemlabs@yahoo.com;
Cc:	Goodrich.Donald@epamail.epa.gov;
Date:	Thursday, November 3, 2011 8:11 AM

Agnes,

Summary Start

-Discrepancies with tags, jars, and/or TR/COC-

Issue 1: The TR/COC lists the analysis as VOA, SVOA, and ARO for water samples; however, per Scheduling this Case requires TVOA, SVOA, and ARO analysis for water samples.

Resolution 1: In accordance with previous direction from Region 8, the laboratory will note the issue in the SDG Narrative, perform the analyses as indicated on the Scheduling Notification Form, and proceed with the analysis of the samples. The resolution will be applied to all TR/COCs received for this Case that list an incorrect analysis.

-Insufficient volume-

Issue 2: Per Scheduling, water samples require laboratory QC required for the TVOA, SVOA, and ARO fractions. However, the laboratory only received three VOA vials for TVOA analysis and four 1L amber bottles for SVOA/ARO analysis. This is insufficient sample volume for laboratory QC for all fractions. The SDGs affected are H30S7 and H30X4. SDG H30X4 contains two samples for SVOA and ARO only. The laboratory can perform the analysis and reduced volume laboratory QC for SVOA/ARO with no volume left if re-extraction is necessary.

Resolution 2: Per Region 8, the laboratory shall perform reduced volume laboratory QC for SVOA/ARO fractions and cancel TVOA laboratory QC for these SDGs. The lab shall note the issue in the SDG Narrative and proceed with analysis.

-Broken samples-

Issue 3: The laboratory received two of four 1L amber bottles broken for sample H30W2 and one of four 1L amber bottles broken for samples H30T9 (reported by CHEM and transhipped to MITKEM) and H30Y6. The laboratory has sufficient sample volume remaining for SVOA and ARO analysis but may have an issue if re-extraction is required.

Resolution 3: 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 samples. If re-extraction/reanalysis is necessary, the laboratory will contact the SMO coordinator and wait for a resolution.

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 6:06 PM
To: Mroz, Ryan
Cc: Kent_Alexander@URSCorp.com
Subject: Re: Region 08 | Case 41926 | Lab MITKEM | Issue Multiple

Ryan, for issue 2, perform QC at reduced volume on fractions with
sufficient volume and cancel QC for fractions where QC performed at a
reduced volume is not an option.

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 1:34 PM
To: 'Donald Goodrich'
Cc: Kent_Alexander@URSCorp.com
Subject: Region 08 | Case 41926 | Lab MITKEM | Issue Multiple

Don,

MITKEM is reporting the following Issues with Case 41926. Issues 1 and 3 can be resolved with a standard answer. Please advise the laboratory how to proceed for TVOA, and SVOA/ARO analysis in Issue 2.

-Discrepancies with tags, jars, and/or TR/COC-

Issue 1: The TR/COC lists the analysis as VOA, SVOA, and ARO for water samples; however, per Scheduling this Case requires TVOA, SVOA, and ARO analysis for water samples.

Resolution 1: In accordance with previous direction from Region 8, the laboratory will note the issue in the SDG Narrative, perform the analyses as indicated on the Scheduling Notification Form, and proceed with the analysis of the samples. The resolution will be applied to all TR/COCs received for this Case that list an incorrect analysis.

-Insufficient volume-

Issue 2: Per Scheduling, water samples require laboratory QC required for the TVOA, SVOA, and ARO fractions. However, the laboratory only received three VOA vials for TVOA analysis and four 1L amber bottles for SVOA/ARO analysis. This is insufficient sample volume for laboratory QC for all fractions. The SDGs affected are H30S7 and H30X4. SDG H30X4 contains two samples for SVOA and ARO only. The laboratory can perform the analysis and reduced volume laboratory QC for SVOA/ARO with no volume left if re-extraction is necessary.

-Broken samples-

Issue 3: The laboratory received two of four 1L amber bottles broken for sample H30W2 and one of four 1L amber bottles broken for samples H30T9 (reported by CHEM and transhipped to MITKEM) and H30Y6. The laboratory has sufficient sample volume remaining for SVOA and ARO analysis but may have an issue if re-extraction is required.

Resolution 3: 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 samples. If re-extraction/reanalysis is necessary, the laboratory will contact the SMO coordinator and wait for a resolution.

Let me know if you have any questions.

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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From: Agnes Huntley [Warwick] [mailto:agnes_ng@mitkem.com]
Sent: Wednesday, November 02, 2011 12:24 PM
To: Mroz, Ryan
Subject: RE: Case 41926

Hi Ryan,

It is an option, however, there will be no remaining sample volume for re-extraction if re-extraction is required.

Agnes (Ng) Huntley

CLP Project Manager

Mitkem Laboratories

A Division of Spectrum Analytical, Featuring Hanibal Technology

(P) 401-732-3400 x316

(F) 401-732-3499

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From: Mroz, Ryan [mailto:rmroz@fedcsc.com]
Sent: Wed 11/2/2011 12:15 PM
To: Agnes Huntley [Warwick]
Subject: RE: Case 41926

Agnes,

Is reduced volume an option for SVOA/ARO QC (with no volume remaining after the QC is performed)?

Thanks,

Ryan Mroz

Environmental Coordinator - Regions 5 & 8

CSC

15000 Conference Center Drive Chantilly, VA 20151

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From: Agnes Huntley [Warwick] [mailto:agnes_ng@mitkem.com]
Sent: Wednesday, November 02, 2011 12:06 PM
To: Mroz, Ryan
Subject: Case 41926

Hi Ryan,

The TR/COC lists VOA, SVOA and ARO as the analyses. This case was scheduled for TVOA, SVOA and ARO.

Scheduling notes that lab QC is required for TVOA, SVOA and ARO. The laboratory only received three VOA vials for TVOA and four 1L amber bottles for SVOA and ARO. This is insufficient sample volume for laboratory QC for all fractions. How is the laboratory to proceed? This affects SDGs H30S7 and H30X4. SDG H30X4 contains two samples for SVOA and ARO only.

The laboratory received two of four 1L amber bottles broken for sample H30W2. The laboratory has sufficient sample volume remaining for SVOA and ARO analyses. The laboratory does not have any remaining sample volume for re-extraction if re-extraction is required.

The laboratory received one of four 1L amber bottles broken for samples H30T9 (reported by ChemTech and transhipped to Spectrum) and H30Y6. The laboratory has sufficient sample volume for SVOA and ARO analyses. There will be an issue with sample volume if both fractions require re-extraction.

Thank you,

Agnes

Agnes (Ng) Huntley

CLP Project Manager

Mitkem Laboratories

A Division of Spectrum Analytical, Featuring Hanibal Technology

(P) 401-732-3400 x316

(F) 401-732-3499

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Agnes Huntley [Warwick]

From: Mroz, Ryan [rmroz@fedcsc.com]
Sent: Friday, October 28, 2011 9:22 AM
To: Agnes Huntley [Warwick]; Dawne Smart [Warwick]
Cc: Goodrich.Donald@epamail.epa.gov
Subject: Region 08 | Case 41926 | Lab MITKEM | Issue Samples shipped to the incorrect laboratory | FINAL

Agnes,

Summary Start
Issue 1: The laboratory scheduled to receive the organic samples, received inorganic samples.
Resolution 2: Per Region 8, the laboratory shall transship the samples using the information below.

FedEx: 1942-5093-2
Internal Billing Reference: 36549158.00000

To: **Chemtech Consulting Group - CHEM**
284 Sheffield Street
Mountainside, NJ 07092
Phone Number: 908-789-8900
Laboratory Contact: Divya Mehta
908-789-8900 (ext 3150)
epa@chemtech.net
Sample Custodian: Snehal Mehta
908-789-8900 (ext 3158)
epa@chemtech.net

Issue 2: The laboratory received 1 out of 4 amber bottles for sample H3T09 was received broken. This sample was received broken at the incorrect laboratory; where samples were subsequently transshipped to MITKEM.
Resolution 2: 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 samples. If re-extraction/reanalysis is necessary, the laboratory will contact the SMO coordinator and wait for a resolution.
Summary End

SMO will note samples were transshipped to CHEM on 10/27 under airbills 795344724996 and 795344725054. In addition, samples were transshipped to MITKEM laboratory on 10/27 under airbill 841829696944. .

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
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From: Agnes Huntley [Warwick] [mailto:agnes_ng@mitkem.com]
Sent: Friday, October 28, 2011 8:10 AM
To: Mroz, Ryan
Subject: RE: Region 08 | Case 41926 | Lab MITKEM | Issue Samples shipped to the incorrect laboratory

Hi Ryan,

There are the tracking numbers.
795344724996
795344725054

Agnes Huntley
CLP Project Manager
Spectrum Analytical, featuring Hanibal Technology
Rhode Island Division
Formerly Mitkem Laboratories
(P) 401-732-3400
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From: Snehal Mehta [mailto:Snehal@chemtech.net]
Sent: Thursday, October 27, 2011 6:28 PM
To: Mroz, Ryan
Subject: RE: Region 08 | Case 41926 | Lab CHEM | Issue Samples shipped to the incorrect laboratory

Ryan,

'CHEM' shipped these samples using Fed Ex Air Bill# 841829696944

Please note that for 'H30T9' 1 of 4 Amber was received broken

Regards,

Snehal Mehta

Tel. 908 728 3158
Fax: 908-789-8514

From: Mroz, Ryan [mailto:rmroz@fedcsc.com]
Sent: Thursday, October 27, 2011 1:07 PM
To: Agnes Huntley [Warwick]; Dawne Smart [Warwick]
Subject: Region 08 | Case 41926 | Lab MITKEM | Issue Samples shipped to the incorrect laboratory

Agnes,

Please see the Resolution below. Please let me know the airbill number when you have transshipped the samples and I will send a FINAL ROC.

Issue: The laboratory scheduled to receive the organic samples, received inorganic samples.
Resolution: Per Region 8, the laboratory shall transship the samples using the information below.

FedEx: 1942-5093-2

Internal Billing Reference: 36549158.00000

To: **Chemtech Consulting Group - CHEM**
284 Sheffield Street
Mountainside, NJ 07092
Phone Number: 908-789-8900
Laboratory Contact: Divya Mehta
908-789-8900 (ext 3150)
epa@chemtech.net
Sample Custodian: Snehal Mehta
908-789-8900 (ext 3158)
epa@chemtech.net

Let me know if you have any questions.
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: Thursday, October 27, 2011 12:38 PM
To: Mroz, Ryan
Subject: RE: Region 08 | Case 41926 | Lab MITKEM | Issue Samples shipped to the incorrect laboratory

please do so.

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: Thursday, October 27, 2011 12:33 PM
To: 'Goodrich.Donald@epamail.epa.gov'
Subject: RE: Region 08 | Case 41926 | Lab MITKEM | Issue Samples shipped to the incorrect laboratory

Don,

Please advise if I may pass on the PROPOSED Resolution to the laboratory.

Issue: The laboratory scheduled to receive the organic samples, received inorganic samples.
PROPOSED Resolution: Per Region 8, the laboratory shall transship the samples using the information below.

FedEx: 1942-5093-2
Internal Billing Reference: 36549158.00000

To: **Chemtech Consulting Group - CHEM**
284 Sheffield Street
Mountainside, NJ 07092
Phone Number: 908-789-8900
Laboratory Contact: Divya Mehta
908-789-8900 (ext 3150)
epa@chemtech.net
Sample Custodian: Snehal Mehta
908-789-8900 (ext 3158)
epa@chemtech.net

Let me know if you have any questions.
Thanks,

Ryan Mroz
Environmental Coordinator - Regions 5 & 8
CSC

15000 Conference Center Drive Chantilly, VA 20151
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From: Patureau, Jenifer [mailto:jenifer.patureau@urs.com]
Sent: Thursday, October 27, 2011 12:13 PM
To: Mroz, Ryan
Cc: goodrich.donald@epa.gov; Alexander, Kent
Subject: RE: Region 08 | Case 41926 | Lab MITKEM | Issue Samples shipped to the incorrect laboratory

Hi Ryan,
Our FedEx account number is 1942-5093-2, and the internal billing reference for shipment is 36549158.00000. The inorganic lab will also receive the organic samples today, as this was a mistake on my part filling out the airbills and COCs. The COCs inside the coolers will therefore list the incorrect lab. I can correct them and resubmit via SMO if that will help. I apologize for this mix-up, and the project will pay for reshipment.

Thank you, and please let me know if any further action is needed.
Jen

Jenifer Patureau
Chemist
URS Operating Services
1099 18th St, ste 710
Denver, CO 80202
Office: 303-291-8204
Cell: 720-810-0792

From: Mroz, Ryan
Sent: Thursday, October 27, 2011 10:45 AM
To: 'Kent_Alexander@URSCorp.com'; 'Patureau, Jenifer'
Cc: 'Goodrich.Donald@epamail.epa.gov'
Subject: Region 08 | Case 41926 | Lab MITKEM | Issue Samples shipped to the incorrect laboratory

Kent/Jennifer,

MITKEM is reporting the following Issue with Case 41926. Please provide an the FedEx number to have the samples transshipped if you would like these samples analyzed. I am checking with the inorganic lab to see if they received the organic samples.

Issue: The laboratory scheduled to receive the organic samples, received inorganic samples.

Let me know if you have any questions.
Thanks,

Ryan Mroz
Environmental Coordinator - Regions 5 & 8
CSC

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Civil Division | phone: 703.818.4568 | fax: 703.818.4602 | rmroz@fedcsc.com | www.csc.com

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From: Agnes Huntley [Warwick] [mailto:agnes_ng@mitkem.com]
Sent: Thursday, October 27, 2011 10:39 AM
To: Mroz, Ryan
Subject: RE: Case 41926

Hi Ryan,

No...just inorganic samples.

Agnes Huntley
CLP Project Manager
Spectrum Analytical, featuring Hanibal Technology
Rhode Island Division
Formerly Mitkem Laboratories
(P) 401-732-3400
(F) 401-732-3499

From: Mroz, Ryan [mailto:rmroz@fedcsc.com]
Sent: Thursday, October 27, 2011 10:39 AM
To: Agnes Huntley [Warwick]
Subject: RE: Case 41926

Agnes,

Did you get the organic samples as well?
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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From: Agnes Huntley [Warwick] [mailto:agnes_ng@mitkem.com]
Sent: Thursday, October 27, 2011 9:24 AM
To: Mroz, Ryan
Subject: Case 41926

Hi Ryan,

I have attached the TR/COC.

We were scheduled for organics for this case, however, we received inorganic samples. Please let us know where we should send these samples.

Thank you,
Agnes

Agnes Huntley
CLP Project Manager
Spectrum Analytical, featuring Hanibal Technology
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Due to rising cost of rush shipments, Spectrum Analytical requests that you allow sufficient time for all sample bottle order requests, 3 days notice at a minimum. If you need an expedited bottle order request Spectrum Analytical will provide the bottles but will request that you pay for the shipping. Spectrum Analytical will continue to pay for all shipping previously agreed to, given proper notification. Thank you for your understanding and cooperation

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