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

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

MT

Audit Number R8-2011- 237 Site Name: Smurfit Stone Mill

Date CSF Received: 11-29-2011 Site Manager: Robert Parker

Received By: J. MacDonald Case Number: 41926

Lab. Name: Mitkem Laboratories SDG Number: H30X4

Number of Samples/Matrix: 17 Water

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 Dodrich R. Parker

K Alexander URS

15: Comments:

Frances MacDonald — Signature

Frances MacDonald — Print Name

11-29-2011 — Date

Report Date:
23-Nov-11 09:11

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: K2213
SDG No: H30X4
Case No: 41926

Attn: Nazy Abousaeedi

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
K2213-01	H30X4	Aqueous	27-Oct-11 17:25	29-Oct-11 08:45
K2213-01	H30X4	Aqueous	27-Oct-11 17:25	03-Nov-11 09:00
K2213-02	H30Y7	Aqueous	27-Oct-11 10:23	29-Oct-11 08:45
K2213-02	H30Y7	Aqueous	27-Oct-11 10:23	03-Nov-11 09:00
K2213-03	H30W9	Aqueous	29-Oct-11 09:00	03-Nov-11 09:00
K2213-04	H30X2	Aqueous	28-Oct-11 09:10	03-Nov-11 09:00
K2213-05	H30X3	Aqueous	27-Oct-11 14:05	03-Nov-11 09:00
K2213-06	H30X6	Aqueous	28-Oct-11 11:37	03-Nov-11 09:00
K2213-07	H30X7	Aqueous	28-Oct-11 18:50	03-Nov-11 09:00
K2213-08	H30X9	Aqueous	28-Oct-11 14:10	03-Nov-11 09:00
K2213-09	H30Y0	Aqueous	28-Oct-11 17:20	03-Nov-11 09:00
K2213-10	H30Y1	Aqueous	29-Oct-11 10:20	03-Nov-11 09:00
K2213-11	H30Z2	Aqueous	29-Oct-11 12:45	03-Nov-11 09:00
K2213-12	H30Z3	Aqueous	29-Oct-11 13:50	03-Nov-11 09:00
K2213-13	H30Z4	Aqueous	29-Oct-11 13:20	03-Nov-11 09:00
K2213-14	H30Z5	Aqueous	29-Oct-11 11:50	03-Nov-11 09:00
K2213-15	H30Z7	Aqueous	29-Oct-11 14:10	03-Nov-11 09:00
K2213-16	H30Z8	Aqueous	29-Oct-11 11:55	03-Nov-11 09:00
K2213-17	H3BA1	Aqueous	01-Nov-11 13:00	03-Nov-11 09:00

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Mitkem Laboratories.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and is certified by several States, as well as USEPA and US Department of Defense. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.mitkem.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Pennsylvania	68-00520
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED LABORATORY TNI

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.: H30X4
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	13	✓	
3. **SDG Cover Sheet/Traffic Report**	14	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)	21	21	✓	
Method Blank Summary (Form IV VOA)	22	23	✓	
GC/MS Instrument Performance Check (Form V VOA)	24	25	✓	
Internal Standard Area and RT Summary (Form VIII VOA)	26	28	✓	
b. Sample Data	29	199	✓	
TCL Results - Organics Analysis Data Sheet (Form I VOA-1 and VOA-2)			✓	
Tentatively Identified Compounds (Form I VOA-TIC)			✓	
Reconstructed total ion chromatograms (RIC) for each sample			✓	
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds identified			✓	
Quantitation reports			✓	
Mass Spectra of all reported TICs with three best library matches			✓	
c. Standards Data (All Instruments)	200	235		
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	236	239	✓	
Blank Data	~~240~~ 240 fe 11/23/11	257	✓	

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

CASE NO. 41926 SDG NO. H30X4 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)	258	279	✓	
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. H30X4 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)	280	281	✓	
Matrix Spike/Matrix Spike Duplicate Recovery Summary (Form III SV-1 and SV-2) (if requested by USEPA Region)	282	282	✓	
Method Blank Summary (Form IV SV)	283	284	✓	
GC/MS Instrument Performance Check (Form V SV)	285	288	✓	
Internal Standard Area and RT Summary (Form VIII SV-1 and SV-2)	289	294	✓	
b. Sample Data	295	607		
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:	295	607		
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)	608	688		
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	689	706	✓	
Blank Data	707	738	✓	
MS/MSD Data (if requested by USEPA Region)	739	750	✓	
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. H30X4 SDG NOS. TO FOLLOW —

— — MOD. REF. NO. —

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK USEPA
f. Semivolatile SIM Data [Form I SV-SIM; Form II SV-SIM1 and SV-SIM2; Form III SV-SIM1 and SV-SIM2 (if required); Form IV SV-SIM; Form VI SV-SIM; Form VII SV-SIM; Form VIII SV-SIM1 and SV-SIM2; and all raw data for QC, Samples, and Standards.]	N/A	N/A	N/A	
7. Pesticides Data				
a. QC Summary				
Surrogate Recovery Summary (Form II PEST-1 and PEST-2)	N/A	N/A	N/A	
Matrix Spike/Matrix Spike Duplicate Recovery Summary (Form III PEST-1 and PEST-2)				
Laboratory Control Sample Recovery (Form III PEST-3 and PEST-4)				
Method Blank Summary (Form IV PEST)				
b. Sample Data	N/A	N/A		
TCL Results - Organics Analysis Data Sheet (Form I PEST)				
Chromatograms (Primary Column)				
Chromatograms from second GC column confirmation				
GC Integration report or data system printout				
Manual work sheets				
For pesticides by GC/MS: Copies of raw spectra and copies of background-subtracted mass spectra of target compounds (samples & standards)				
c. Standards Data	N/A	N/A		
Initial Calibration of Single Component Analytes (Form VI PEST-1 and PEST-2)				
Toxaphene Initial Calibration (Form VI PEST-3 and PEST-4)				
Analyte Resolution Summary (Form VI PEST-5, per column)				
Performance Evaluation Mixture (Form VI PEST-6)				
Individual Standard Mixture A (Form VI PEST-7)				
Individual Standard Mixture B (Form VI PEST-8)				
Individual Standard Mixture C (Form VI PEST-9 and PEST-10)				
Calibration Verification Summary (Form VII PEST-1)				
Calibration Verification Summary (Form VII PEST-2)				
Calibration Verification Summary (Form VII PEST-3)			N/A	

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

CASE NO. 41926 SDG NO. H30X4 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)	751	751	✓	
Matrix Spike/Matrix Spike Duplicate Summary (Form III ARO-1 and ARO-2)	752	753	✓	
Laboratory Control Sample Recovery(Form III ARO-3 and ARO-4)	754	756	✓	
Method Blank Summary (Form IV ARO)	757	759	✓	
b. Sample Data	760	844		
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. H30X4 SDG NOS. TO FOLLOW —

— — MOD. REF. NO. —

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK USEPA
c. Standards Data	845	1127		
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	1128	1178	✓	
Matrix Spike/Matrix Spike Duplicate Data	1179	1191	✓	
Laboratory Control Sample (LCS) Data	1192	1215	✓	
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	1216	1237	✓	
Internal sample and sample extract transfer chain-of-custody records	1238	1247	✓	
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	1248	1259	✓	
—	N/A	N/A	N/A	
10. **EPA Shipping/Receiving Documents**				
Airbills (No. of shipments 2)	1260	1261	✓	
Chain of Custody Records	1262	1266	✓	
Sample Tags (in a plastic bag, if present)			N/A	
Sample Log-in Sheet (Lab & DC-1)	1267	1280	✓	
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. H30X4 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)	1281	1294	✓	
—	N/A	N/A	N/A	

13. **Comments**

/

Completed by: (CLP Lab) Jennifer Emerson (Signature) Jennifer Emerson/Data Rpt'g Specialist (Printed Name/Title) 11/23/11 (Date)

Verified by: (CLP Lab) Agnes R Huntley (Signature) Agnes Huntley/CLP Project Manager (Printed Name/Title) 11/23/11 (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# H30X4. Analyses were performed for seventeen aqueous samples that were received on October 29 and November 3, 2011.

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

Please note that the sample-shipping cooler received on October 29 was measured at 9.0°C. Ten coolers were received on November 3. The temperature of the coolers was measured at 9.0°C, 10.0°C, 9.0°C, 9.0°C, 9.5°C, 10.0°C, 9.0°C, 8.5°C, 9.0°C and 6.0°C.

The following samples are submitted in this data package:

Client ID	Lab ID	Analysis	VOA pH
H30X4	K2213-01A	S A	
H30X4RX	K2213-01ARE	A	
H30X4	K2213-01B	TV	< 2
H30Y7	K2213-02A	S A	
H30Y7RX	K2213-02ARE	A	
H30Y7	K2213-02B	TV	< 2
H30W9	K2213-03A	S A	
H30W9	K2213-03B	TV	< 2
H30X2	K2213-04A	S A	
H30X2	K2213-04B	TV	< 2
H30X3	K2213-05A	TV	< 2
H30X6	K2213-06A	S A	
H30X6	K2213-06B	TV	< 2
H30X7	K2213-07A	S A	
H30X7	K2213-07B	TV	< 2
H30X9	K2213-08A	S A	
H30X9	K2213-08B	TV	< 2
H30Y0	K2213-09A	S A	
H30Y0	K2213-09B	TV	< 2
H30Y1	K2213-10A	S A	
H30Y1	K2213-10B	TV	< 2
H30Z2	K2213-11A	S A	
H30Z2MS	K2213-11AMS	S A	
H30Z2MSD	K2213-11AMSD	S A	
H30Z2	K2213-11B	TV	< 2
H30Z2MS	K2213-11BMS	TV	< 2
H30Z2MSD	K2213-11BMSD	TV	< 2
H30Z3	K2213-12A	S A	
H30Z3	K2213-12B	TV	< 2
H30Z4	K2213-13A	S A	

H30Z4	K2213-13B	TV	< 2
H30Z5	K2213-14A	S A	
H30Z5	K2213-14B	TV	< 2
H30Z7	K2213-15A	S A	
H30Z7	K2213-15B	TV	< 2
H30Z8	K2213-16A	S A	
H30Z8	K2213-16B	TV	< 2
H3BA1	K2213-17A	TV	< 2

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.

The TR/COC does not list samples with CLP formatted IDs. There are CLP IDs on the containers and the lab can match up the information between the TR/COC station locations and sample containers to identify the samples. Per Region 8, the lab shall use the sample IDs on the sample containers to identify the samples, note the issue in the SDG Narrative, and proceed with analysis.

The TR/COC does not list a TAT. Per Scheduling, this Case requires a 21 day TAT. In accordance with previous direction from Region 8, the laboratory will proceed with the turnaround time indicated on the Scheduling Notification Form, note the issue in the SDG Narrative, 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 turnaround time.

The laboratory received a sample (station location SSSW99B) without a CLP formatted ID. In accordance with previous direction from Region 8, the SMO coordinator will assign new sample IDs and provide the laboratory and the Region with a copy of the cross-referenced sample IDs. The laboratory will note the issue in the SDG Narrative and proceed with the analysis of the samples. CLP sample ID used for this sample H3BA1.

The laboratory received two of four 1L amber bottles broken for sample H30X2, and 1 of four 1L amber bottles broken for sample H30X9. The laboratory has sufficient sample volume for SVOA and ARO analyses; however, the laboratory will have trouble if re-extraction is required for these 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 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 with the exception of the following:

H30X4: recovery is above criteria for 1,1-Dichloroethene-d2 at 106% with criteria of (55-104).

H30X9: recovery is above criteria for 1,1-Dichloroethene-d2 at 107% with criteria of (55-104).

H30Y0: recovery is above criteria for 1,1-Dichloroethene-d2 at 110% with criteria of (55-104) and Chloroethane-d5 at 132% with criteria of (71-131).

H30Y1: recovery is above criteria for 1,1-Dichloroethene-d2 at 110% with criteria of (55-104).

H30Z2: recovery is above criteria for 1,1-Dichloroethene-d2 at 107% with criteria of (55-104).

H30Z2MS: recovery is above criteria for 1,1-Dichloroethene-d2 at 109% with criteria of (55-104).

H30Z2MSD: recovery is above criteria for 1,1-Dichloroethene-d2 at 106% with criteria of (55-104).

H30Z3: recovery is above criteria for 1,1-Dichloroethene-d2 at 110% with criteria of (55-104).

H30Z7: recovery is above criteria for 1,1-Dichloroethene-d2 at 107% with criteria of (55-104).

H30Z8: recovery is above criteria for 1,1-Dichloroethene-d2 at 108% with criteria of (55-104).

H3BA1: recovery is above criteria for 1,1-Dichloroethene-d2 at 109% with criteria of (55-104).

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

Duplicate matrix spikes were performed on sample H30Z2.

Spike recoveries were within the advisory QC limits.

Replicate RPDs were within the advisory QC limits.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

F. Dilutions:

The following sample was analyzed at dilution:

H30X4: Dilution Factor: 4

Sample H30X4 was analyzed at a 4X dilution due to foaming.

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.

Instrument Code: S4
Instrument Type: GCMS-SEMI
Description: HP6890 / HP5973
Manufacturer: Hewlett-Packard
Model: 6890N / 5973N

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:

H30X4: recovery is below criteria for Benzo(a)pyrene-d12 at 22% with criteria of (32-121) and Pyrene-d10 at 40% with criteria of (52-119).

H30Y7: recovery is above criteria for 4,6-Dinitro-2-methylphenol-d2 at 107% with criteria of (22-104) and recovery is below criteria for Pyrene-d10 at 37% with criteria of (52-119).

H30W9: recovery is above criteria for Phenol-d5 at 107% with criteria of (39-106).

H30X2: recovery is below criteria for Benzo(a)pyrene-d12 at 29% with criteria of (32-121).

H30X7: recovery is below criteria for Benzo(a)pyrene-d12 at 20% with criteria of (32-121) and Pyrene-d10 at 32% with criteria of (52-119).

H30X9: recovery is below criteria for Benzo(a)pyrene-d12 at 24% with criteria of (32-121) and Pyrene-d10 at 31% with criteria of (52-119).

H30Y0: recovery is below criteria for Benzo(a)pyrene-d12 at 21% with criteria of (32-121) and Pyrene-d10 at 30% with criteria of (52-119).

H30Y1: recovery is below criteria for Benzo(a)pyrene-d12 at 22% with criteria of (32-121) and Pyrene-d10 at 32% with criteria of (52-119).

H30Z7: recovery is below criteria for Anthracene-d10 at 41% with criteria of (44-110), Benzo(a)pyrene-d12 at 19% with criteria of (32-121) and Pyrene-d10 at 26% with criteria of (52-119).

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

Duplicate matrix spikes were performed on sample H30Z2.

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

following:

H30Z2MS: recovery is above criteria for 4-Nitrophenol at 103% with criteria of (10-80).

H30Z2MSD: recovery is above criteria for 4-Nitrophenol at 111% with criteria of (10-80).

Replicate RPDs were within the advisory QC limits.

E. Internal Standards:

Internal standard area counts were within QC criteria.

F. Dilutions:

No sample in this SDG required analysis at dilution.

G. Samples:

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 with the following exceptions:

H30X4RX exceed by-11 Days
H30Y7RX exceed by-11 Days

The samples were re-extracted to confirm matrix interference on surrogate recoveries.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

II. METHODS

Samples were analyzed following procedures in laboratory test code: EPA CLP SOM 1.2 ARO

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

$$\text{Concentration (ug/Kg)} = (\text{Amt})(\text{DF})(\text{Uf})\left(\frac{\text{Vt}}{(\text{Vi} * \text{WS} * \left(\frac{100 - \text{m}}{100}\right)}\right)$$

where: Amt = CAL - AMT on raw data
DF = Dilution factor
UF = ng unit correction factor
WS = Weight of sample extracted (g)
Vt = Volume of final extract (uL)
Vi = Volume injected (uL)
M = %moisture (not decanted)

III. PREPARATION

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 Column used: 30 m X 0.53 mm ID [0.50 um thickness] CLPPest capillary column.
GC Column used: 30 m X 0.53 mm ID [0.42 um thickness] CLPPestII capillary column.

Instrument Code: E3
Instrument Type: GC-ECD
Description: HP5890 II
Manufacturer: Hewlett-Packard
Model: 5890
GC Column used: 30 m X 0.53 mm ID [0.50 um thickness] CLPPest capillary

column.
GC Column used: 30 m X 0.53 mm ID [0.42 um thickness] CLPPestII 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:

H30X4: recovery is below criteria for Decachlorobiphenyl on rear column at 8% with criteria of (30-150), Decachlorobiphenyl on front column at 8% with criteria of (30-150), Tetrachloro-m-xylene on rear column at 14% with criteria of (30-150) and Tetrachloro-m-xylene on front column at 12% with criteria of (30-150).

H30X4RX: recovery is below criteria for Decachlorobiphenyl on rear column at 8% with criteria of (30-150), Decachlorobiphenyl on front column at 13% with criteria of (30-150), Tetrachloro-m-xylene on rear column at 26% with criteria of (30-150) and Tetrachloro-m-xylene on front column at 14% with criteria of (30-150).

H30Y7: recovery is below criteria for Decachlorobiphenyl on rear column at 7% with criteria of (30-150), Decachlorobiphenyl on front column at 8% with criteria of (30-150), Tetrachloro-m-xylene on rear column at 27% with criteria of (30-150) and Tetrachloro-m-xylene on front column at 23% with criteria of (30-150).

H30Y7RX: recovery is below criteria for Decachlorobiphenyl on rear column at 6% with criteria of (30-150), Decachlorobiphenyl on front column at 11% with criteria of (30-150), Tetrachloro-m-xylene on rear column at 30% with criteria of (30-150) and Tetrachloro-m-xylene on front column at 26% with criteria of (30-150).

H30X2: 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).

H30X6: recovery is below criteria for Decachlorobiphenyl on rear column at 26%

with criteria of (30-150) and Decachlorobiphenyl on front column at 21% with criteria of (30-150).

H30X7: recovery is below criteria for Decachlorobiphenyl on rear column at 10% with criteria of (30-150) and Decachlorobiphenyl on front column at 12% with criteria of (30-150).

H30X9: recovery is below criteria for Decachlorobiphenyl on rear column at 28% with criteria of (30-150).

H30Y0: recovery is below criteria for Decachlorobiphenyl on rear column at 30% with criteria of (30-150).

H30Y1: recovery is below criteria for Decachlorobiphenyl on rear column at 25% with criteria of (30-150) and Decachlorobiphenyl on front column at 25% with criteria of (30-150).

H30Z7: recovery is below criteria for Decachlorobiphenyl on rear column at 22% with criteria of (30-150) and Decachlorobiphenyl on front column at 23% 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 H30Z2.

Spike recoveries were within the advisory QC limits.

Replicate RPDs were within the advisory QC limits.

E. Dilutions:

No sample in this SDG required analysis at dilution.

F. Samples:

The re-extracts for samples H30X4 and H30Y7 are billable. The samples were re-extracted to demonstrate matrix interference on surrogate recoveries. Matrix interference confirmed on surrogate recoveries as the re-extracts exhibited findings similar to the initial extraction.

No other unusual observations were made for the analysis.

G. Manual Integration:

No manual integrations were performed on any sample or standard.

All of the submittals to the region are originals other than logbook pages. Photocopies of logbook pages are included, with the originals maintained on file at the laboratory. Tunes, calibration verifications and initial calibrations that are shared among several cases are photocopies indicating the location of the originals.

I certify that this Sample Data Package is in compliance with the terms and condition of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy Sample Data Package and in the electronic data deliverable has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Agnes Huntley

Agnes Huntley
CLP Project Manager
11/23/11

Contract Laboratory Program

Sample Delivery Group (SDG)

Cover Sheet

SDG Number H30X4

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) H30W9	08) H30Y0	15) H30Z4	
02) H30X2	09) H30Y1	16) H30Z5	
03) H30X3	10) H30Y7	17) H30Z7	
04) H30X4	11) H30Z2	18) H30Z8	
05) H30X6	12) H30Z2MS	19) H3BA1	
06) H30X7	13) H30Z2MSD		
07) H30X9	14) H30Z3		

First Sample in SDG	Last Sample in SDG
H30X4	H3BA1
First Sample Receipt Date	**Last Sample Receipt Date**
10/29/2011	11/03/2011

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 [signature] Date 11/07/2011

SDG H30X4

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		
	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

SDG H30X4

USEPA

CHAIN OF CUSTODY RECORD

No: 8-110111-145735-0009

DateShipped: 11/1/2011
CarrierName: FedEx
AirbillNo:

Site #: 41926
Contact Name: Jeff Miller
Contact Phone: 720-810-7891

Cooler #:
Lab: Spectrum Analytical
Lab Phone: 401-732-3400

Lab #	Location		Analyses	Matrix	Collected	Sample Time	Preservative	MS/MSD
	SSSW89	H30X1 H30W1	Volatiles (VOAs)	Surface Water	10/29/2011	9:00	HCl	
	SSSW89		Semivolatiles (SVOAs)	Surface Water	10/29/2011	9:00		
	SSSW89		Aroclors	Surface Water	10/29/2011	9:00		
	SSGW03		Volatiles (VOAs)	Ground Water	10/28/2011	9:10	HCl	
	SSGW03	H30X2	Semivolatiles (SVOAs)	Ground Water	10/28/2011	9:10		
	SSGW03		Aroclors	Ground Water	10/28/2011	9:10		
	SSGW04	H30X3	Volatiles (VOAs)	Ground Water	10/27/2011	14:05	HCl	
	SSGW05	H30X4	Volatiles (VOAs)	Ground Water	10/27/2011	17:25	HCl	
	SSGW07		Volatiles (VOAs)	Ground Water	10/28/2011	11:37	HCl	
	SSGW07	H30X6	Semivolatiles (SVOAs)	Ground Water	10/28/2011	11:37		
	SSGW07		Aroclors	Ground Water	10/28/2011	11:37		
	SSGW08		Volatiles (VOAs)	Ground Water	10/28/2011	18:50	HCl	
	SSGW08	H30X7	Semivolatiles (SVOAs)	Ground Water	10/28/2011	18:50		
	SSGW08		Aroclors	Ground Water	10/28/2011	18:50		
	SSGW10		Volatiles (VOAs)	Ground Water	10/28/2011	14:10	HCl	
	SSGW10	H30X9	Semivolatiles (SVOAs)	Ground Water	10/28/2011	14:10		
	SSGW10		Aroclors	Ground Water	10/28/2011	14:10		
	SSGW11		Volatiles (VOAs)	Ground Water	10/28/2011	17:20	HCl	
	SSGW11	H30Y0	Semivolatiles (SVOAs)	Ground Water	10/28/2011	17:20		
	SSGW11		Aroclors	Ground Water	10/28/2011	17:20		

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
		Nov 1, 2011	FEDEX				FedEx	11-03-11	Dawnmarie	11-03-11	9:40

SDG H30X4

USEPA

CHAIN OF CUSTODY RECORD

No: 8-110111-145735-0009

DateShipped: 11/1/2011
CarrierName: FedEx
AirbillNo:

Site #: 41926
Contact Name: Jeff Miller
Contact Phone: 720-810-7891

Cooler #:
Lab: Spectrum Analytical
Lab Phone: 401-732-3400

Lab #	Location		Analyses	Matrix	Collected	Sample Time	Preservative	MS/MSD
	SSGW12		Volatiles (VOAs)	Ground Water	10/29/2011	10:20	HCl	
	SSGW12	H3041	Semivolatiles (SVOAs)	Ground Water	10/29/2011	10:20		
	SSGW12		Aroclors	Ground Water	10/29/2011	10:20		
	SSGW18	H3045 H3047	Volatiles (VOAs)	Ground Water	10/27/2011	10:23	HCl	
	SSGW23		Volatiles (VOAs)	Ground Water	10/29/2011	12:45	HCl	Y
	SSGW23	H30Z2	Semivolatiles (SVOAs)	Ground Water	10/29/2011	12:45		Y
	SSGW23		Aroclors	Ground Water	10/29/2011	12:45		Y
	SSGW24		Volatiles (VOAs)	Ground Water	10/29/2011	13:50	HCl	
	SSGW24	H30Z3	Semivolatiles (SVOAs)	Ground Water	10/29/2011	13:50		
	SSGW24		Aroclors	Ground Water	10/29/2011	13:50		
	SSGW25		Volatiles (VOAs)	Ground Water	10/29/2011	13:20	HCl	
	SSGW25	H30Z4	Semivolatiles (SVOAs)	Ground Water	10/29/2011	13:20		
	SSGW25		Aroclors	Ground Water	10/29/2011	13:20		
	SSGW26		Volatiles (VOAs)	Ground Water	10/29/2011	11:50	HCl	
	SSGW26	H30Z5	Semivolatiles (SVOAs)	Ground Water	10/29/2011	11:50		
	SSGW26		Aroclors	Ground Water	10/29/2011	11:50		
	SSGW89		Volatiles (VOAs)	Ground Water	10/29/2011	14:10	HCl	
	SSGW89	H30Z7	Semivolatiles (SVOAs)	Ground Water	10/29/2011	14:10		
	SSGW89		Aroclors	Ground Water	10/29/2011	14:10		
	SSGW99	H3028	Volatiles (VOAs)	Ground Water	10/29/2011	11:55	HCl	

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
		NOV 1, 2011	FEDEX				FedEx	11-03-11		11-03-11	9:00

SDG H30X4

USEPA
DateShipped: 11/1/2011
CarrierName: FedEx
AirbillNo:

CHAIN OF CUSTODY RECORD
Site #: 41926
Contact Name: Jeff Miller
Contact Phone: 720-810-7891

No: 8-110111-145735-0009
Cooler #:
Lab: Spectrum Analytical
Lab Phone: 401-732-3400

Lab #	Location	Analyses	Matrix	Collected	Sample Time	Preservative	MS/MSD
	SSGW99 H3028	Semivolatiles (SVOAs)	Ground Water	10/29/2011	11:55		
	SSGW99	Aroclors	Ground Water	10/29/2011	11:55		
	SSSW99B H3BA1	Volatiles (VOAs)	Surface Water	11/1/2011	13:00	HCl	
	↓						
	SDG - Final Sample						

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
		Nov 1 2011	FEDEX				FedEx	11-03-11		11-03-11	9:00

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.: H30X4

Level: (TRACE or LOW) TRACE

	EPA SAMPLE NO.	VDMC1 (VCL)	#	VDMC2 (CLA)	#	VDMC3 (DCE)	#	VDMC4 (BUT)	#	VDMC5 (CLF)	#	VDMC6 (DCA)	#	VDMC7 (BEN)	#
01	VBLKP5	113		109		101		91		92		87		96	
02	H30X4	119		121		106	*	113		93		93		92	
03	H30Y7	105		105		90		92		91		90		100	
04	H30W9	111		111		96		96		95		95		96	
05	H30X2	115		106		95		107		95		101		89	
06	H30X3	118		116		100		106		93		95		97	
07	H30X6	128		127		100		111		96		95		90	
08	H30X7	125		122		104		102		96		93		93	
09	H30X9	127		125		107	*	100		96		97		91	
10	H30Y0	126		132	*	110	*	107		100		95		95	
11	H30Y1	129		127		110	*	98		97		93		92	
12	H30Z3	126		130		110	*	102		98		95		94	
13	H30Z4	121		123		101		110		97		97		95	
14	H30Z5	125		125		99		104		97		98		96	
15	H30Z7	128		129		107	*	105		97		98		94	
16	H30Z8	129		130		108	*	104		96		98		97	
17	H3BA1	128		125		109	*	104		96		96		93	
18	VBLKQ5	131		130		103		112		99		98		94	
19	H30Z2	126		125		107	*	105		99		97		95	
20	H30Z2MS	125		125		109	*	102		96		95		94	
21	H30Z2MSD	127		126		106	*	98		95		92		97	
22	VHBLKQ5	126		124		104		102		98		96		95	

			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.: H30X4

Level: (TRACE or LOW) TRACE

	SAMPLE NO.	VDMC8 (DPA) #	VDMC9 (TOL) #	VDMC10 (TDP) #	VDMC11 (HEX) #	VDMC12 (TCA) #	VDMC13 (DCZ) #	VDMC14 #	TOT OUT
01	VBLKP5	88	95	98	82	90	92		0
02	H30X4	87	94	104	122	102	99		1
03	H30Y7	90	94	99	101	94	96		0
04	H30W9	90	93	91	90	99	97		0
05	H30X2	90	90	97	119	115	102		0
06	H30X3	89	94	115	105	103	97		0
07	H30X6	90	91	108	113	102	95		0
08	H30X7	90	91	106	105	105	100		0
09	H30X9	88	94	108	98	98	98		1
10	H30Y0	89	97	99	105	108	103		2
11	H30Y1	89	90	102	93	93	99		1
12	H30Z3	89	91	106	98	91	107		1
13	H30Z4	89	91	103	103	101	98		0
14	H30Z5	93	96	100	102	105	93		0
15	H30Z7	92	94	91	104	103	98		1
16	H30Z8	92	93	101	97	102	100		1
17	H3BA1	88	92	99	95	101	96		1
18	VBLKQ5	88	94	104	103	98	102		0
19	H30Z2	92	92	103	95	99	94		1
20	H30Z2MS	87	90	100	98	96	97		1
21	H30Z2MSD	91	96	103	99	101	100		1
22	VHBLKQ5	91	94	95	98	99	96		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

3A - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix Spike - EPA Sample No.: H30Z2 Level: (TRACE or LOW) TRACE

COMPOUND	SPIKE ADDED (µg/L)	SAMPLE CONCENTRATION (µg/L)	MS CONCENTRATION (µg/L)	MS %REC	#	QC. LIMITS REC.
1,1-Dichloroethene	5.0000	0.0000	4.2487	85		61-145
Benzene	5.0000	0.0000	4.1237	82		76-127
Trichloroethene	5.0000	0.0000	4.0270	81		71-120
Toluene	5.0000	0.0000	4.0132	80		76-125
Chlorobenzene	5.0000	0.0000	4.0612	81		75-130

COMPOUND	SPIKE ADDED (µg/L)	MSD CONCENTRATION (µg/L)	MSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	5.0000	4.0303	81		5		0-14	61-145
Benzene	5.0000	4.2295	85		3		0-11	76-127
Trichloroethene	5.0000	3.9511	79		2		0-14	71-120
Toluene	5.0000	4.0532	81		1		0-13	76-125
Chlorobenzene	5.0000	4.0925	82		1		0-13	75-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:

4A - FORM IV VOA

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKP5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Lab File ID: V5N2845.D Lab Sample ID: MB-62892

Instrument ID: V5

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 11/10/2011

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 6:57

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	H30X4	K2213-01B	V5N2846.D	7:25
02	H30Y7	K2213-02B	V5N2847.D	7:55
03	H30W9	K2213-03B	V5N2848.D	8:23
04	H30X2	K2213-04B	V5N2849.D	8:52
05	H30X3	K2213-05A	V5N2853.D	10:45
06	H30X6	K2213-06B	V5N2854.D	11:14
07	H30X7	K2213-07B	V5N2855.D	11:43
08	H30X9	K2213-08B	V5N2856.D	12:11
09	H30Y0	K2213-09B	V5N2857.D	12:40
10	H30Y1	K2213-10B	V5N2858.D	13:09
11	H30Z3	K2213-12B	V5N2860.D	13:38
12	H30Z4	K2213-13B	V5N2861.D	14:06
13	H30Z5	K2213-14B	V5N2862.D	14:35
14	H30Z7	K2213-15B	V5N2863.D	15:04
15	H30Z8	K2213-16B	V5N2864.D	15:33
16	H3BA1	K2213-17A	V5N2865.D	16:02

COMMENTS:

4A - FORM IV VOA

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKQ5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Lab File ID: V5N2869.D Lab Sample ID: MB-62893

Instrument ID: V5

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 11/10/2011

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 18:26

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	H30Z2	K2213-11B	V5N2870.D	18:54
02	H30Z2MS	K2213-11BMS	V5N2871.D	19:23
03	H30Z2MSD	K2213-11BMSD	V5N2872.D	19:52
04	VHBLKQ5	VHBLKQ5	V5N2891.D	4:56

COMMENTS:

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

EPA SAMPLE NO.
BFB05

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Lab File ID: V5N2820.D BFB Injection Date: 11/09/2011

Instrument ID: V5 BFB Injection Time: 19:00

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.1
75	30.0 - 80.0% of mass 95	43.0
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	74.2
175	5.0 - 9.0% of mass 174	5.0 (6.7)1
176	95.0 - 101% of mass 174	72.1 (97.3)1
177	5.0 - 9.0% of mass 176	4.6 (6.4)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	VSTD005O5	VSTD005O5	V5N2822.D	11/09/2011	19:57
02	VSTD0.5O5	VSTD0.5O5	V5N2823.D	11/09/2011	20:26
03	VSTD020O5	VSTD020O5	V5N2824.D	11/09/2011	20:55
04	VSTD010O5	VSTD010O5	V5N2825.D	11/09/2011	21:23
05	VSTD001O5	VSTD001O5	V5N2826.D	11/09/2011	21:52
06	VSTD005P5	VSTD005P5	V5N2844.D	11/10/2011	6:28
07	VBLKP5	MB-62892	V5N2845.D	11/10/2011	6:57
08	H30X4	K2213-01B	V5N2846.D	11/10/2011	7:25
09	H30Y7	K2213-02B	V5N2847.D	11/10/2011	7:55
10	H30W9	K2213-03B	V5N2848.D	11/10/2011	8:23
11	H30X2	K2213-04B	V5N2849.D	11/10/2011	8:52
12	H30X3	K2213-05A	V5N2853.D	11/10/2011	10:45
13	H30X6	K2213-06B	V5N2854.D	11/10/2011	11:14
14	H30X7	K2213-07B	V5N2855.D	11/10/2011	11:43
15	H30X9	K2213-08B	V5N2856.D	11/10/2011	12:11
16	H30Y0	K2213-09B	V5N2857.D	11/10/2011	12:40
17	H30Y1	K2213-10B	V5N2858.D	11/10/2011	13:09
18	H30Z3	K2213-12B	V5N2860.D	11/10/2011	13:38
19	H30Z4	K2213-13B	V5N2861.D	11/10/2011	14:06
20	H30Z5	K2213-14B	V5N2862.D	11/10/2011	14:35
21	H30Z7	K2213-15B	V5N2863.D	11/10/2011	15:04
22	H30Z8	K2213-16B	V5N2864.D	11/10/2011	15:33

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

EPA SAMPLE NO.
BFB05

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Lab File ID: V5N2820.D BFB Injection Date: 11/09/2011

Instrument ID: V5 BFB Injection Time: 19:00

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.1
75	30.0 - 80.0% of mass 95	43.0
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	74.2
175	5.0 - 9.0% of mass 174	5.0 (6.7)1
176	95.0 - 101% of mass 174	72.1 (97.3)1
177	5.0 - 9.0% of mass 176	4.6 (6.4)2

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

23	H3BA1	K2213-17A	V5N2865.D	11/10/2011	16:02
24	VSTD005Q5	VSTD005Q5	V5N2868.D	11/10/2011	17:28
25	VBLKQ5	MB-62893	V5N2869.D	11/10/2011	18:26
26	H30Z2	K2213-11B	V5N2870.D	11/10/2011	18:54
27	H30Z2MS	K2213-11BMS	V5N2871.D	11/10/2011	19:23
28	H30Z2MSD	K2213-11BMSD	V5N2872.D	11/10/2011	19:52
29	VHBLKQ5	VHBLKQ5	V5N2891.D	11/11/2011	4:56
30	VSTD005R5	VSTD005R5	V5N2892.D	11/11/2011	5:25

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.: H30X4

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 11/09/2011 11/09/2011

EPA Sample No.(VSTD#####): VSTD005P5 Date Analyzed: 11/10/2011

Lab File ID (Standard): V5N2844.D Time Analyzed: 6:28

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

		IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD	167705		9.428		228852		6.327		66458		12.169	
	UPPER LIMIT	234787		9.758		320393		6.657		93041		12.499	
	LOWER LIMIT	100623		9.098		137311		5.997		39875		11.839	
	EPA SAMPLE NO.												
01	VBLKP5	214798		9.432		290112		6.331		84648		12.184	
02	H30X4	172986		9.426		224183		6.325		73942		12.166	
03	H30Y7	154610		9.428		220467		6.327		61218		12.169	
04	H30W9	151138		9.432		198847		6.320		63023		12.173	
05	H30X2	144031		9.426		186888		6.325		64734		12.167	
06	H30X3	173051		9.432		237434		6.320		73067		12.173	
07	H30X6	180150		9.430		234199		6.317		78460		12.170	
08	H30X7	170309		9.428		226089		6.327		70632		12.180	
09	H30X9	175329		9.432		232380		6.319		72134		12.172	
10	H30Y0	169027		9.430		221033		6.318		69022		12.171	
11	H30Y1	186647		9.432		242004		6.319		74584		12.172	
12	H30Z3	188590		9.426		244717		6.325		73822		12.178	
13	H30Z4	178142		9.426		235248		6.325		74931		12.178	
14	H30Z5	181254		9.432		240269		6.320		75724		12.173	
15	H30Z7	191414		9.432		252205		6.320		78900		12.173	

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.: H30X4

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 11/09/2011 11/09/2011

EPA Sample No.(VSTD#####): VSTD005P5 Date Analyzed: 11/10/2011

Lab File ID (Standard): V5N2844.D Time Analyzed: 6:28

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

		IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD	167705		9.428		228852		6.327		66458		12.169	
	UPPER LIMIT	234787		9.758		320393		6.657		93041		12.499	
	LOWER LIMIT	100623		9.098		137311		5.997		39875		11.839	
	EPA SAMPLE NO.												
16	H30Z8	188164		9.426		252324		6.326		77053		12.179	
17	H3BA1	195606		9.431		255050		6.318		82786		12.171	

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.: H30X4

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 11/09/2011 11/09/2011

EPA Sample No.(VSTD#####): VSTD005Q5 Date Analyzed: 11/10/2011

Lab File ID (Standard): V5N2868.D Time Analyzed: 17:28

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

		IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD	144332		9.429		190819		6.328		63377		12.169	
	UPPER LIMIT	202065		9.759		267147		6.658		88728		12.499	
	LOWER LIMIT	86599		9.099		114491		5.998		38026		11.839	
	EPA SAMPLE NO.												
01	VBLKQ5	174508		9.432		229033		6.320		73311		12.173	
02	H30Z2	186887		9.428		245108		6.327		78016		12.180	
03	H30Z2MS	168627		9.426		218664		6.326		69384		12.179	
04	H30Z2MSD	160408		9.427		217607		6.326		66987		12.179	
05	VHBLKQ5	178817		9.426		235794		6.326		71040		12.179	

IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4
AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area
AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area
RT UPPER LIMIT = +0.50 (Low-Medium Volatiles) and +0.33 (Trace Volatiles) minutes of internal standard RT
RT LOWER LIMIT = -0.50 (Low-Medium Volatiles) and -0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30W9

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-03B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2848.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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
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	0.65	
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.

H30W9

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-03B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2848.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30W9

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-03B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2848.D

Level: (TRACE or LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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\111110.B\V5N2848.D
Report Date: 15-Nov-2011 09:35

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2848.D
Lab Smp Id: K2213-03B Client Smp ID: H30W9
Inj Date : 10-NOV-2011 08:23
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-03B,,62892
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 29
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	2.197	2.216	(0.348)	100440	5.55228	5.6
$ 80 Chloroethane-d5	69	2.603	2.600	(0.412)	68027	5.53877	5.5
$ 81 1,1-Dichloroethene-d2	65	3.369	3.378	(0.533)	22461	4.79437	4.8(Q)
$ 82 2-Butanone-d5	46	5.065	5.062	(0.802)	104519	48.1700	48(AQ)
$ 83 Chloroform-d	84	5.378	5.387	(0.851)	102427	4.72816	4.7(Q)
19 Chloroform	83	5.402	5.410	(0.855)	14565	0.64695	0.65
$ 23 1,2-Dichloroethane-d4	65	5.889	5.898	(0.932)	40615	4.76730	4.8(Q)
$ 84 Benzene-d6	84	5.913	5.909	(0.627)	212015	4.78248	4.8
* 26 1,4-Difluorobenzene	114	6.319	6.327	(1.000)	198847	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.726	6.734	(0.713)	69485	4.51562	4.5
$ 33 Toluene-d8	98	7.840	7.837	(0.831)	184074	4.62690	4.6
$ 86 trans-1,3-Dichloropropene-d4	79	8.119	8.116	(0.861)	40102	4.54817	4.5
$ 87 2-Hexanone-d5	63	8.560	8.569	(0.908)	68708	44.9937	45(AQ)
* 42 Chlorobenzene-d5	117	9.431	9.428	(1.000)	151138	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.930	10.926	(1.159)	28173	4.94535	4.9
* 78 1,4-Dichlorobenzene-d4	152	12.172	12.169	(1.000)	63023	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.625	12.633	(1.037)	48247	4.86984	4.9(Q)

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111110.B\V5N2848.D
Report Date: 15-Nov-2011 09:35

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111110.B\V5N2848.D
Report Date: 15-Nov-2011 09:35

Spectrum Analytical, Inc. RI Division

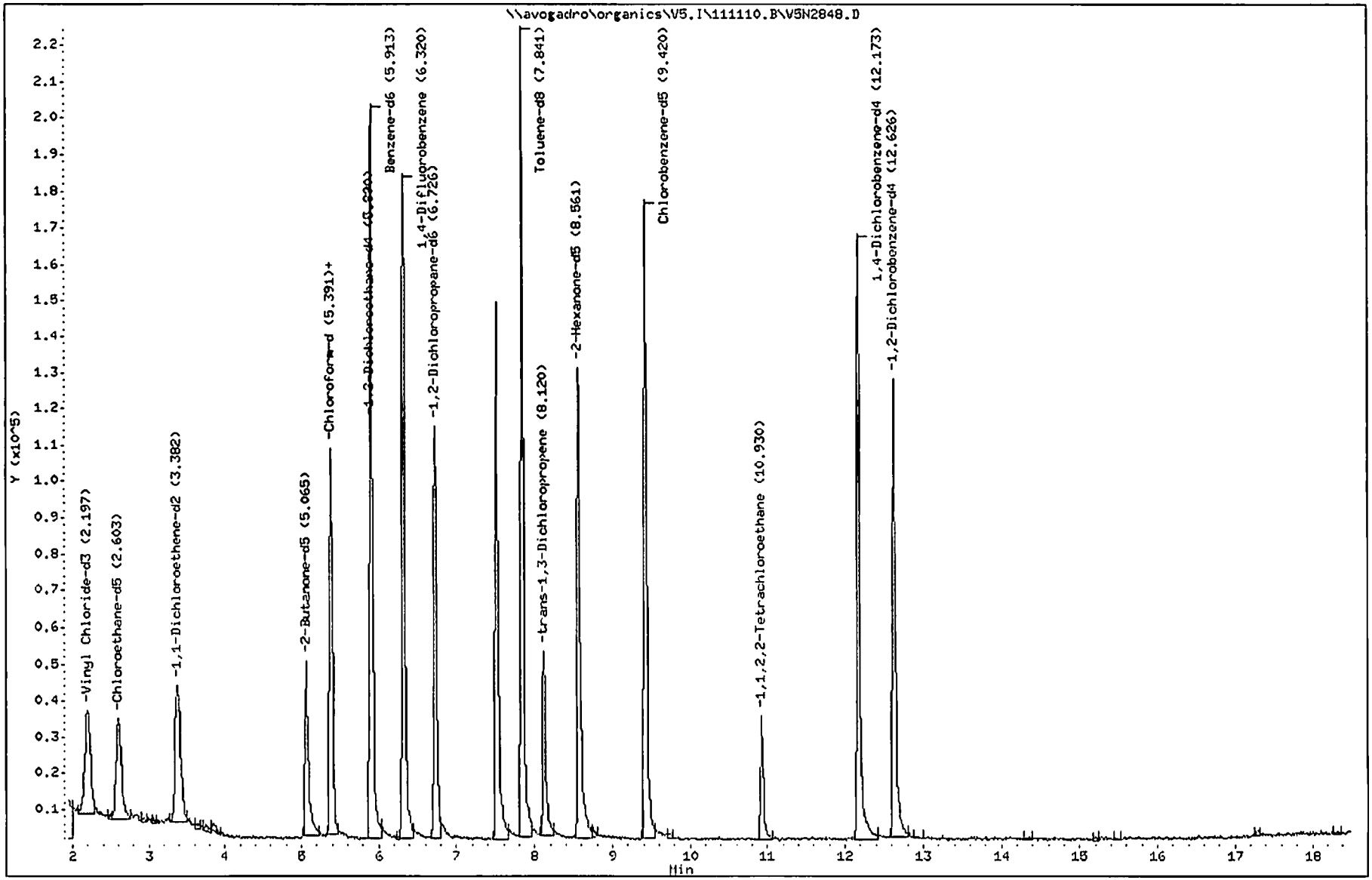
SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2848.D
Lab Smp Id: K2213-03B Client Smp ID: H30W9
Inj Date : 10-NOV-2011 08:23
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-03B,,62892
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 29
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\111110.B\V5N2848.D
Date : 10-NOV-2011 08:23
Client ID: H30W9
Sample Info: 25ML,K2213-03B,,62892
Purge Volume: 25.0
Column phase: DB-624

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



Data File: \\avogadro\organics\V5.I\111110.B\V5N2848.D

Date : 10-NOV-2011 08:23

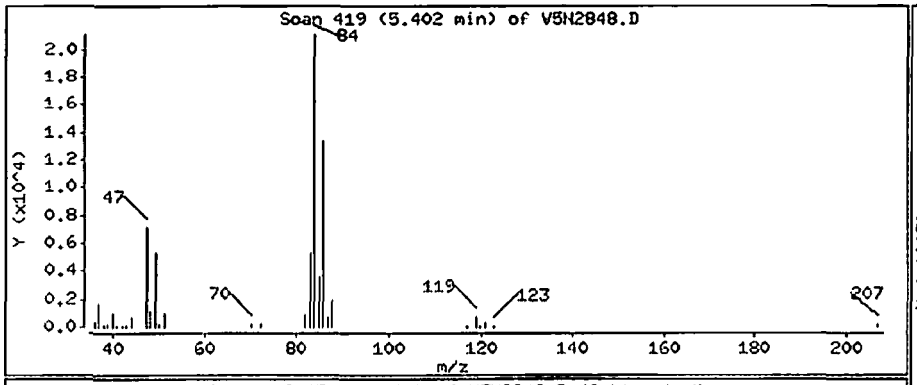
Client ID: H30W9 Instrument: V5.i

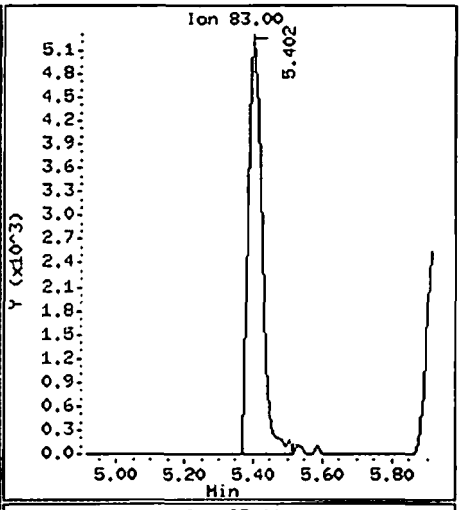
Sample Info: 25ML,K2213-03B,,62892

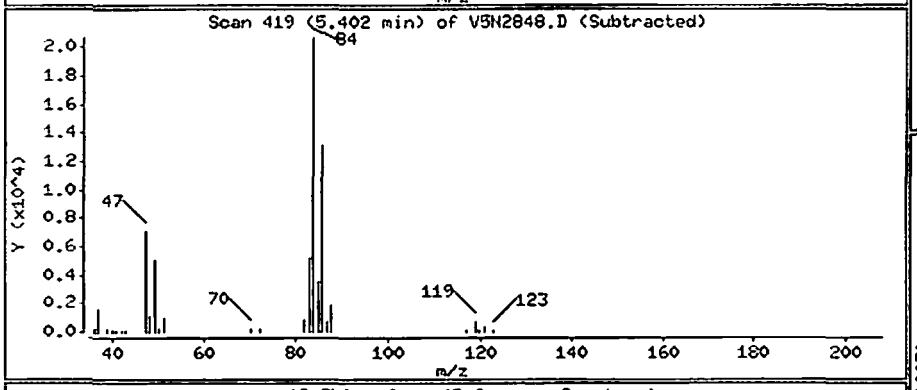
Purge Volume: 25.0 Operator: SRC: LIMS

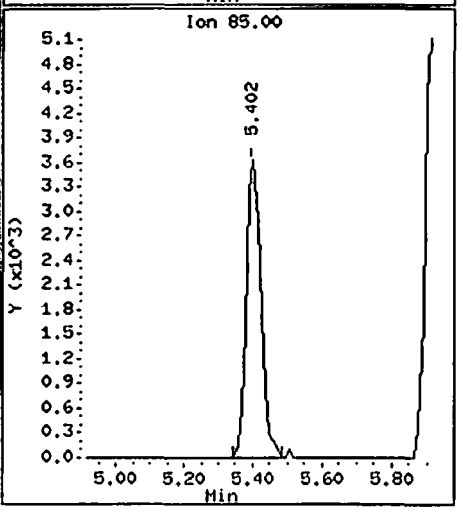
Column phase: DB-624 Column diameter: 0.25

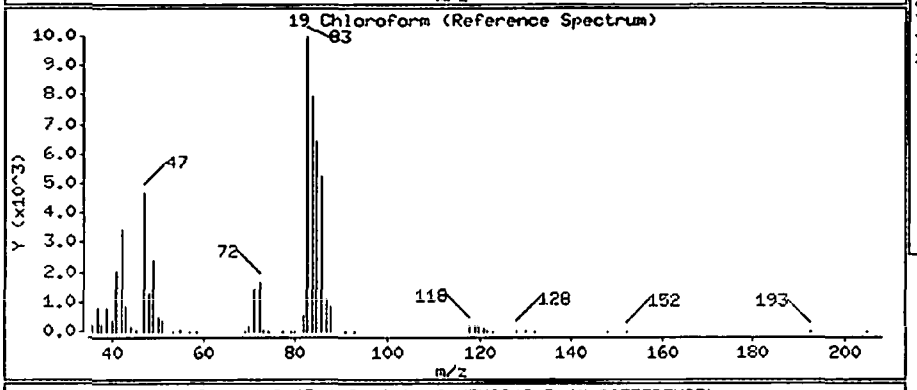
19 Chloroform Concentration: 0.65 ug/L

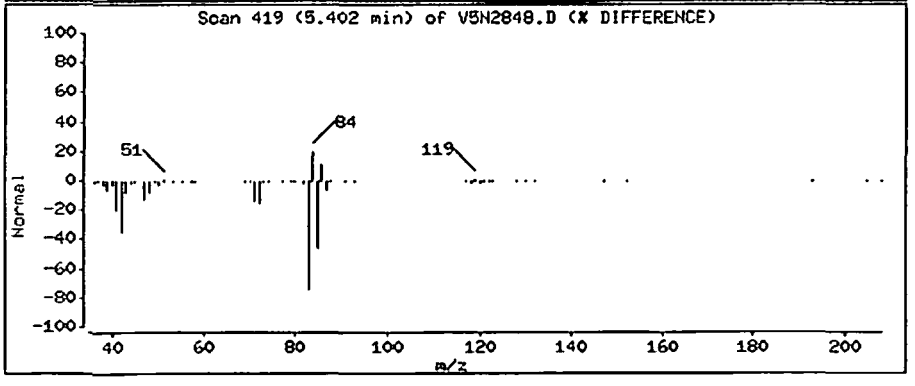












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30X2

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-04B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2849.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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	0.22	J
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.

H30X2

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-04B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2849.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.: H30X2

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

Lab Code: MITKEM | Case No.: 41926 | Mod. Ref No.: | SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER | Lab Sample ID: K2213-04B

Sample wt/vol: 25.0 (g/mL) ML | Lab File ID: V5N2849.D

Level: (TRACE or LOW/MED) TRACE | Date Received: 11/03/2011

% Moisture: not dec. | Date Analyzed: 11/10/2011

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	4041-09-2	Cyclopentanone, 2,5-dimethyl	10.309	1.1	NJ
02		Unknown-01	11.122	1.5	J
03		Unknown-02	11.586	1.0	J
04	470-67-7	7-Oxabicyclo[2.2.1]heptane,	11.934	1.0	NJ
05	527-84-4	Benzene, 1-methyl-2-(1-methy	12.062	1.6	NJ
06		Unknown-03	12.805	0.53	J
07	4695-62-9	Bicyclo[2.2.1]heptan-2-one,	13.525	12	NJ
08		Unknown-04	14.129	15	J
09		Unknown-05	14.199	2.9	J
10		Unknown-06	14.338	2.2	J
11	464-48-2	Bicyclo[2.2.1]heptan-2-one,	14.501	7.7	NJ
	E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111110.B\V5N2849.D
Report Date: 15-Nov-2011 09:35

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2849.D
Lab Smp Id: K2213-04B Client Smp ID: H30X2
Inj Date : 10-NOV-2011 08:52
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-04B,,62892
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 30
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	2.216	(0.346)	97430	5.73053	5.7
$	80 Chloroethane-d5	69	2.597	2.600	(0.411)	61450	5.32343	5.3
$	81 1,1-Dichloroethene-d2	65	3.387	3.378	(0.535)	20820	4.72847	4.7(Q)
$	82 2-Butanone-d5	46	5.071	5.062	(0.802)	109030	53.4644	53(AQ)
$	83 Chloroform-d	84	5.384	5.387	(0.851)	96607	4.74487	4.7(Q)
$	23 1,2-Dichloroethane-d4	65	5.895	5.898	(0.932)	40538	5.06274	5.1(Q)
$	84 Benzene-d6	84	5.907	5.909	(0.627)	188087	4.45208	4.5
	25 Benzene	78	5.953	5.956	(0.632)	10152	0.21738	0.22
*	26 1,4-Difluorobenzene	114	6.325	6.327	(1.000)	186888	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.731	6.734	(0.714)	65992	4.50024	4.5
$	33 Toluene-d8	98	7.835	7.837	(0.831)	171207	4.51582	4.5
$	86 trans-1,3-Dichloropropene-d4	79	8.113	8.116	(0.861)	40574	4.82877	4.8
$	87 2-Hexanone-d5	63	8.566	8.569	(0.909)	86540	59.4674	59(AQ)
*	42 Chlorobenzene-d5	117	9.426	9.428	(1.000)	144031	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.924	10.926	(1.159)	31257	5.75743	5.8
*	78 1,4-Dichlorobenzene-d4	152	12.166	12.169	(1.000)	64734	5.00000	(Q)
$	90 1,2-Dichlorobenzene-d4	152	12.631	12.633	(1.038)	52057	5.11552	5.1(Q)

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111110.B\V5N2849.D
Report Date: 15-Nov-2011 09:35

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111110.B\V5N2849.D
Report Date: 15-Nov-2011 09:35

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2849.D
Lab Smp Id: K2213-04B Client Smp ID: H30X2
Inj Date : 10-NOV-2011 08:52
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-04B,,62892
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 30
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

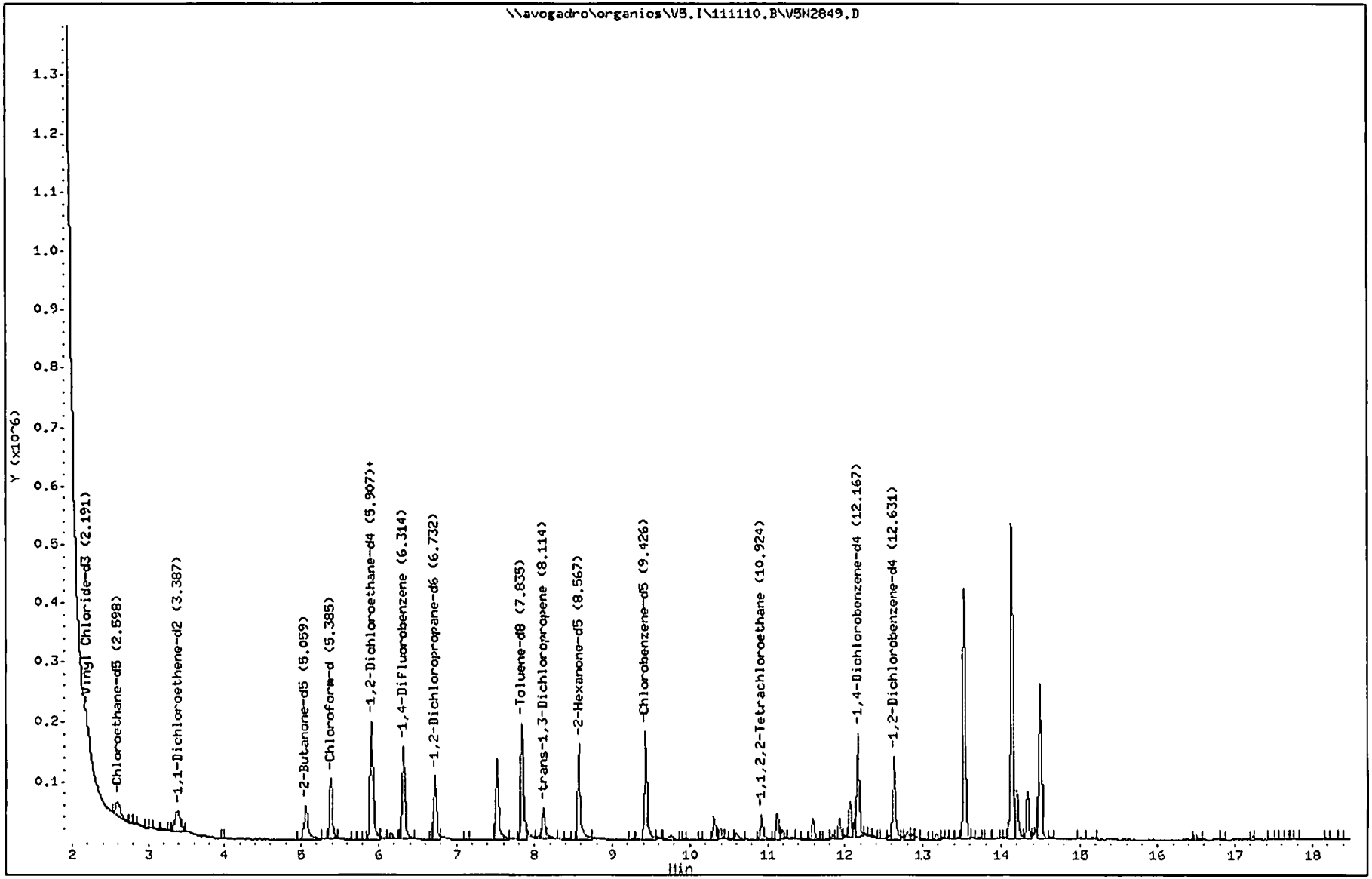
ISTD	RT	AREA	AMOUNT
* 42 Chlorobenzene-d5	9.426	429062	5.000
* 78 1,4-Dichlorobenzene-d4	12.167	394161	5.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Cyclopentanone, 2,5-dimethyl-				CAS #: 4041-09-2			
10.309	90676	1.05667346	1.1	87	NIST2002.L	6411	42
Unknown				CAS #:			
11.122	116011	1.47162237	1.5	0		0	78
Unknown				CAS #:			
11.586	80620	1.02268007	1.0	0		0	78
7-Oxabicyclo[2.2.1]heptane, 1-methyl-4-(				CAS #: 470-67-7			
11.934	78779	0.99932024	1.00	90	NIST2002.L	25723	78
Benzene, 1-methyl-2-(1-methylethyl)-				CAS #: 527-84-4			
12.062	126108	1.59970120	1.6	95	NIST2002.L	14405	78

Data File: \\avogadro\organics\V5.I\111110.B\V5N2849.D
Report Date: 15-Nov-2011 09:35

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
12.805	41498	0.52640644	0.53	0		0	78
Bicyclo[2.2.1]heptan-2-one, 1,3,3-trimet				CAS #: 4695-62-9			
13.525	914821	11.6046438	12	95	NIST2002.L	24107	78
Unknown				CAS #:			
14.129	1180708	14.9774612	15	0		0	78
Unknown				CAS #:			
14.199	230423	2.92294731	2.9	0		0	78
Unknown				CAS #:			
14.338	172073	2.18276907	2.2	0		0	78
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet				CAS #: 464-48-2			
14.501	605466	7.68042377	7.7	98	NIST2002.L	24208	78

Data File: \\avogadro\organics\V5.I\111110.B\V5N2849.D
Date : 10-NOV-2011 08:52
Client ID: H30X2
Instrument: V5.i
Sample Info: 25ML,K2213-04B,,62892
Purge Volume: 25.0
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111110.B\V5N2849.D

Date : 10-NOV-2011 08:52

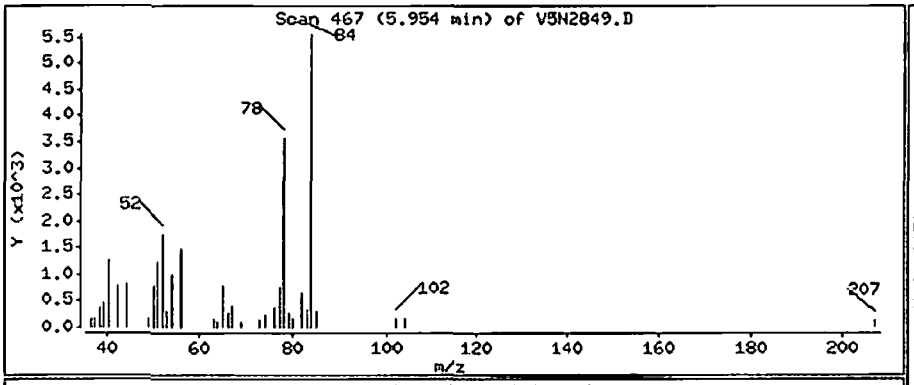
Client ID: H30X2 Instrument: V5.i

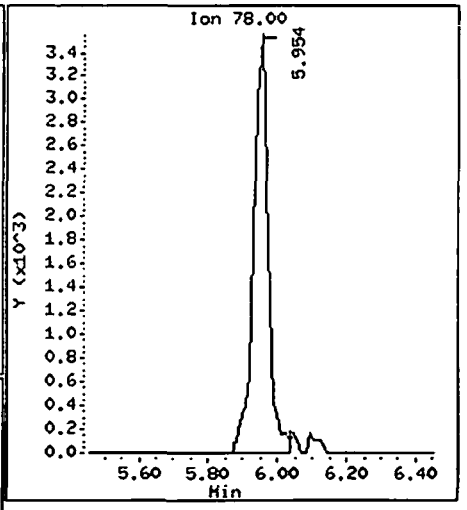
Sample Info: 25ML,K2213-04B,,62892

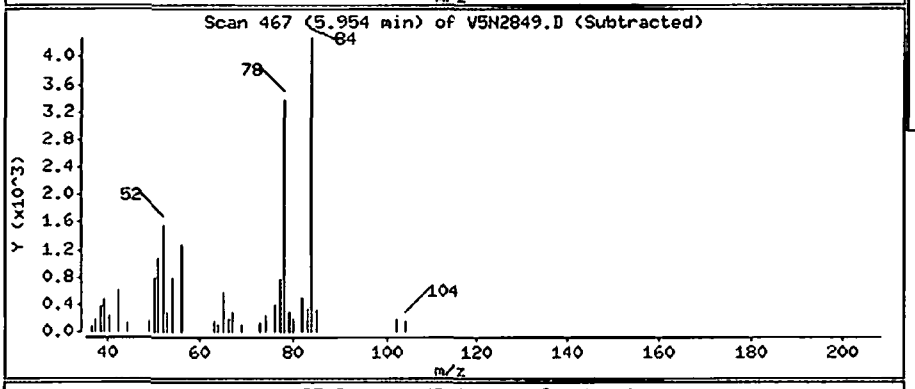
Purge Volume: 25.0 Operator: SRC: LIMS

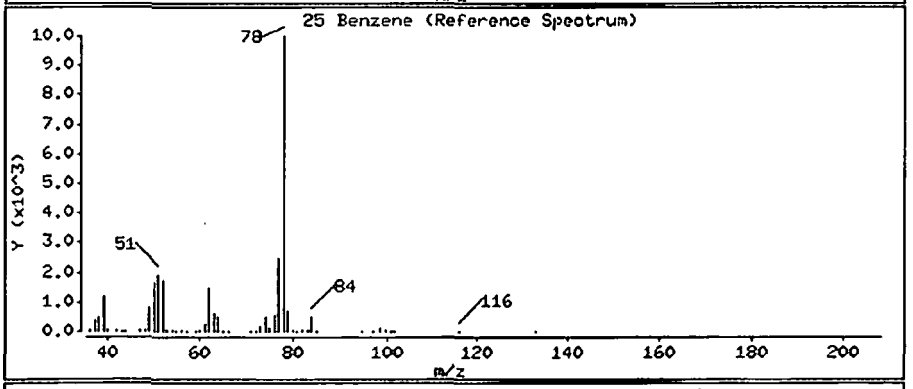
Column phase: DB-624 Column diameter: 0.25

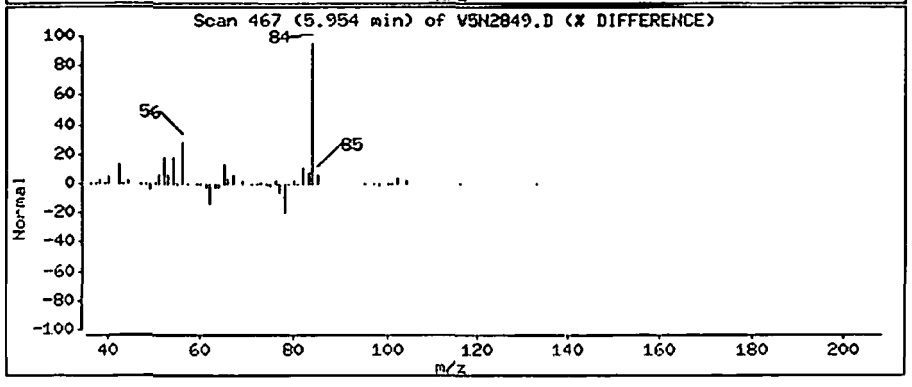
25 Benzene Concentration: 0.22 ug/L











Data File: \\avogadro\organics\V5.I\111110.B\V5N2849.D

Date : 10-NOV-2011 08:52

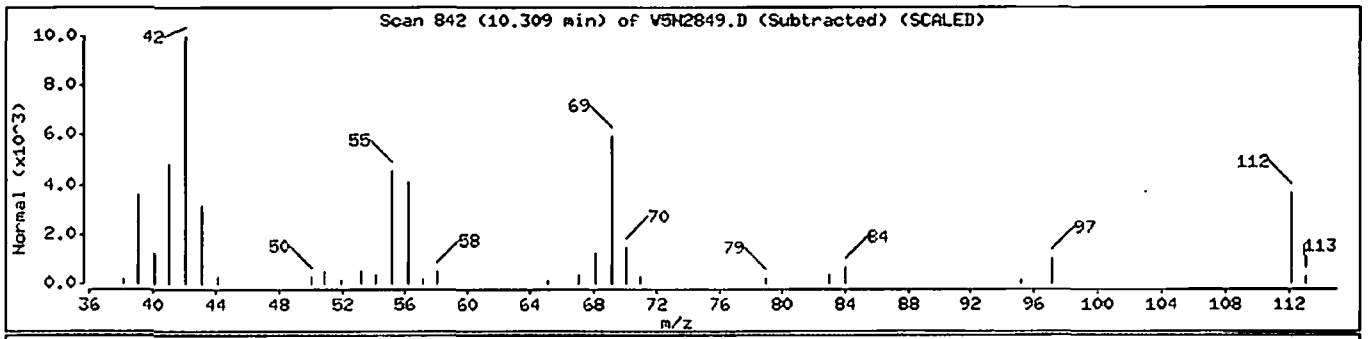
Client ID: H30X2 Instrument: V5.i

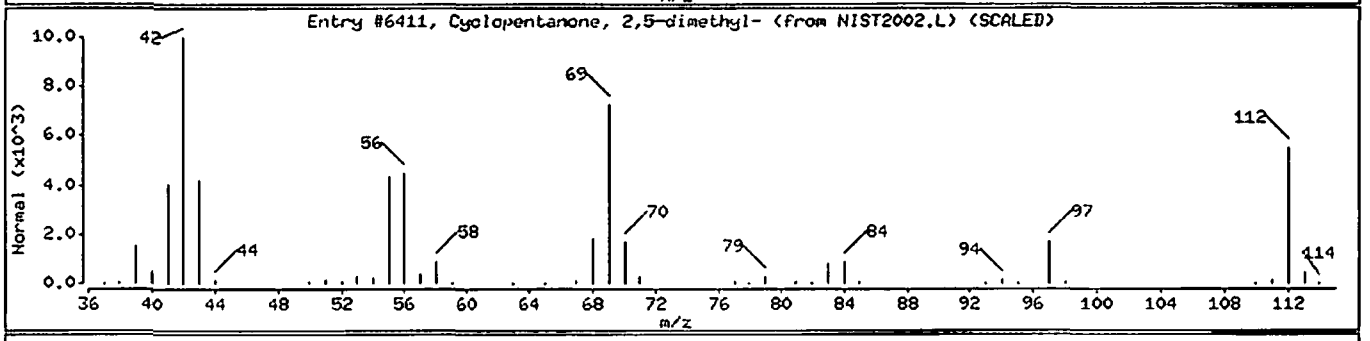
Sample Info: 25ML,K2213-04B,,62892

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
Cyclopentanone, 2,5-dimethyl-	4041-09-2	NIST2002.L	6411	87	C7H12O	112





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Date : 10-NOV-2011 08:52

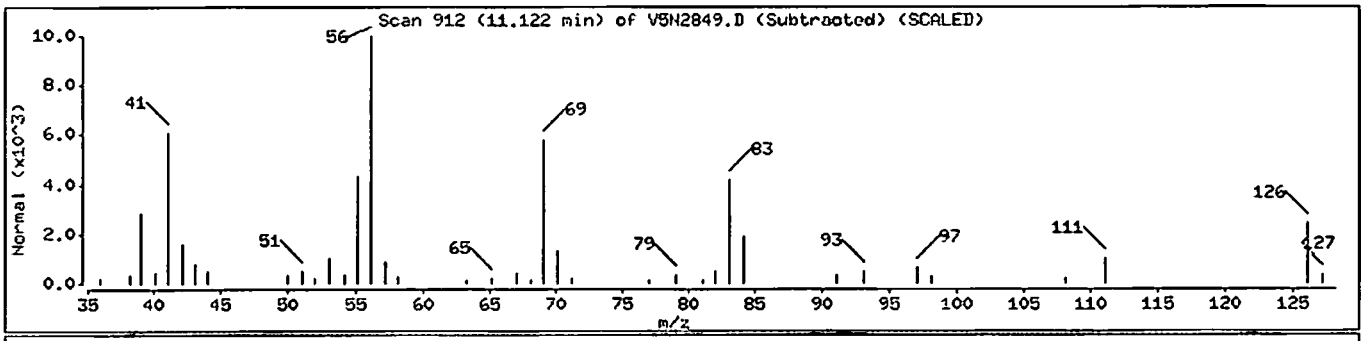
Client ID: H30X2 Instrument: V5.i

Sample Info: 25ML,K2213-04B,,62892

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



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Date : 10-NOV-2011 08:52

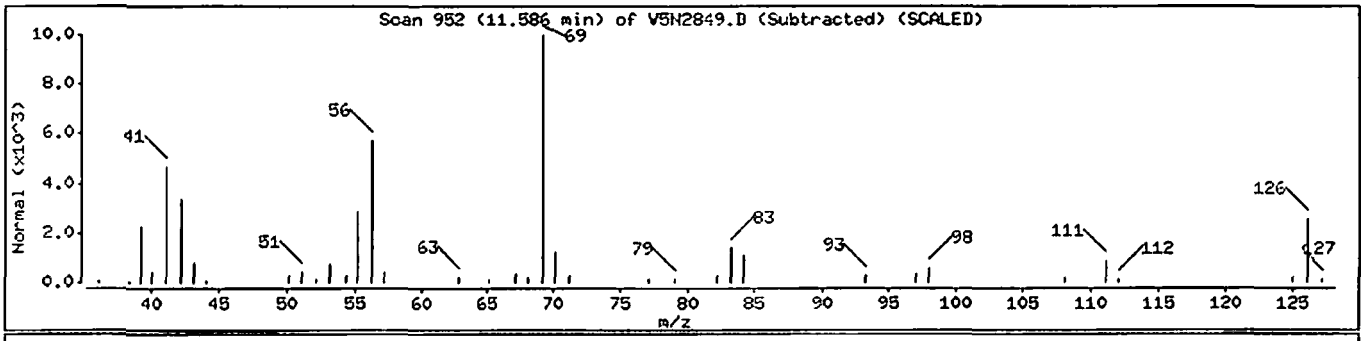
Client ID: H30X2 Instrument: V5.i

Sample Info: 25ML,K2213-04B,,62892

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



Data File: \\avogadro\organics\V5.I\111110.B\V5N2849.D

Date : 10-NOV-2011 08:52

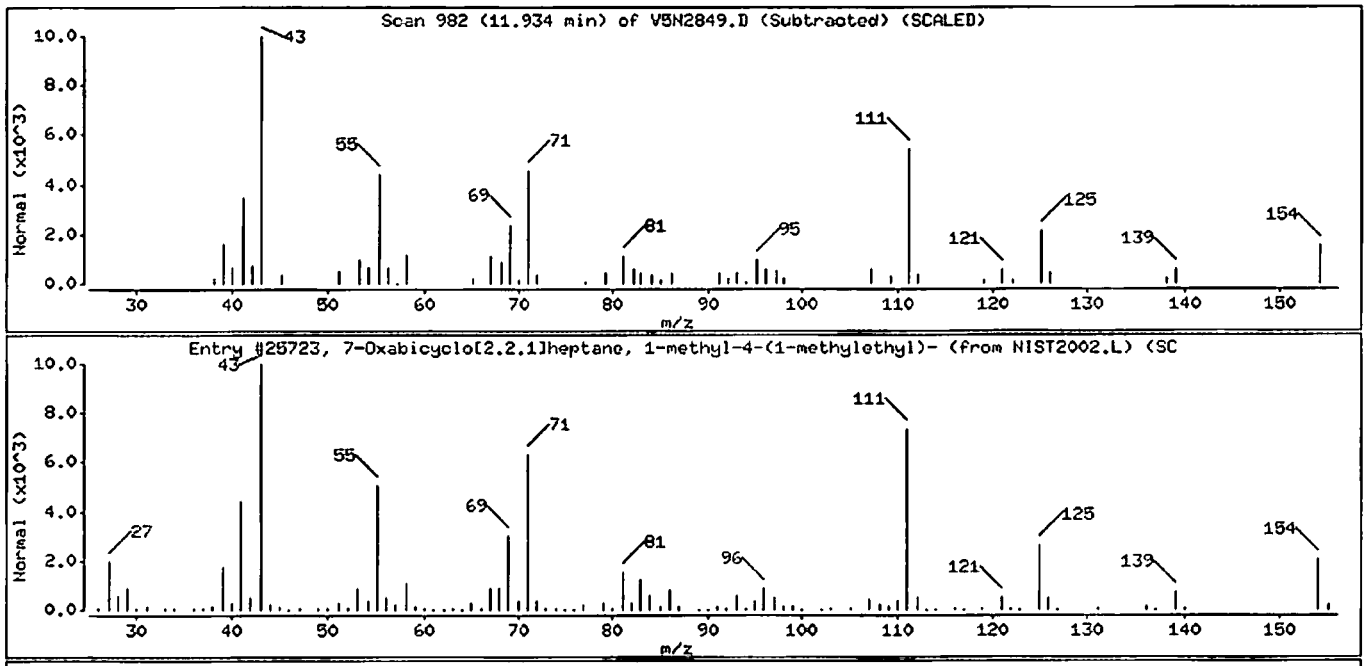
Client ID: H30X2 Instrument: V5.i

Sample Info: 25ML,K2213-04B,,62892

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
7-Oxabicyclo[2.2.1]heptane, 1-methyl-4-(	470-67-7	NIST2002.L	25723	90	C10H18O	154



Data File: \\avogadro\organics\V5.i\111110.B\V5N2849.D

Date : 10-NOV-2011 08:52

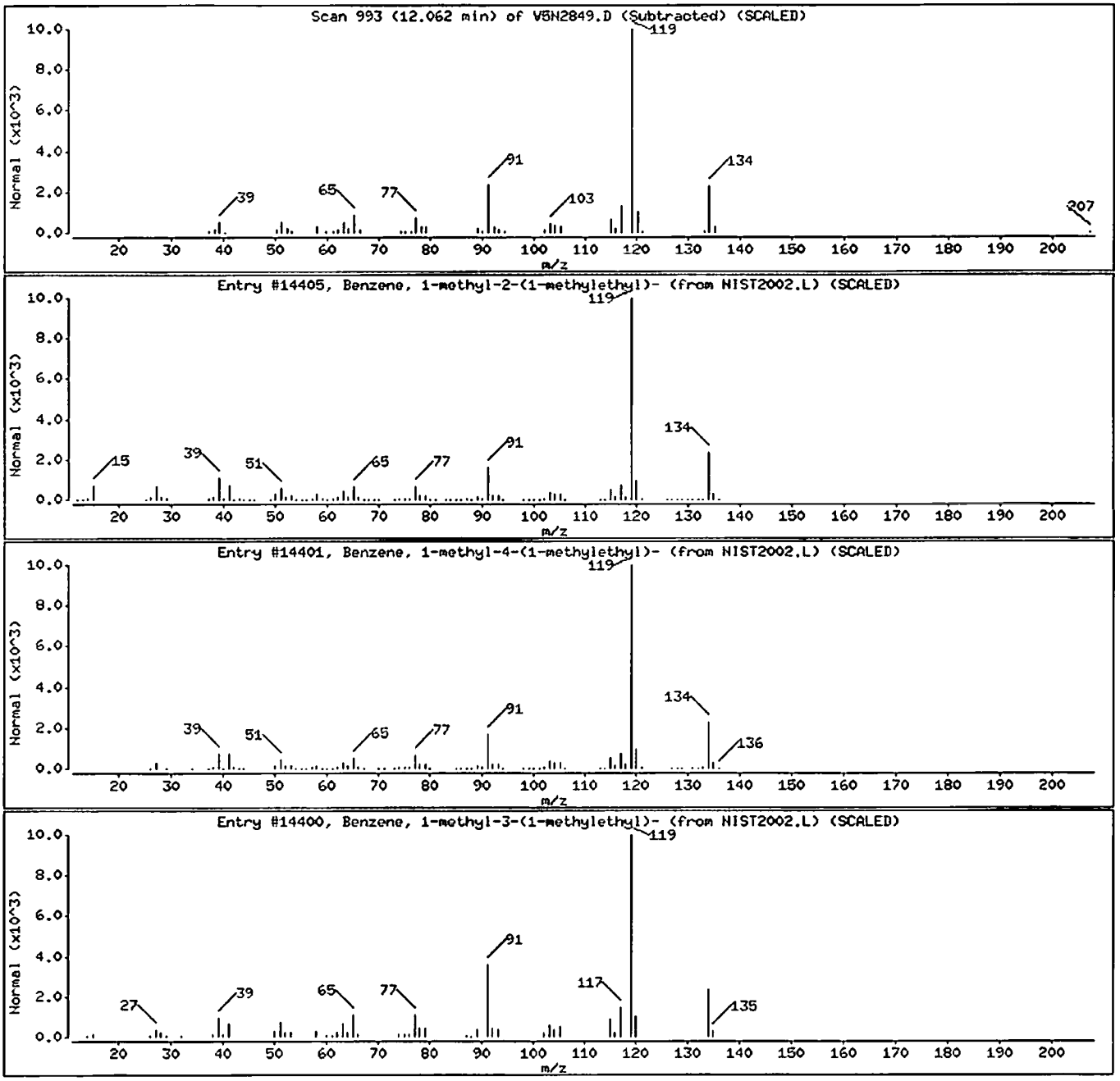
Client ID: H30X2 Instrument: V5.i

Sample Info: 25ML,K2213-04B,,62892

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
Benzene, 1-methyl-2-(1-methylethyl)-	527-84-4	NIST2002.L	14405	95	C10H14	134
Benzene, 1-methyl-4-(1-methylethyl)-	99-87-6	NIST2002.L	14401	95	C10H14	134
Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	NIST2002.L	14400	95	C10H14	134



Data File: \\avogadro\organics\V5.i\111110.B\V5N2849.D

Date : 10-NOV-2011 08:52

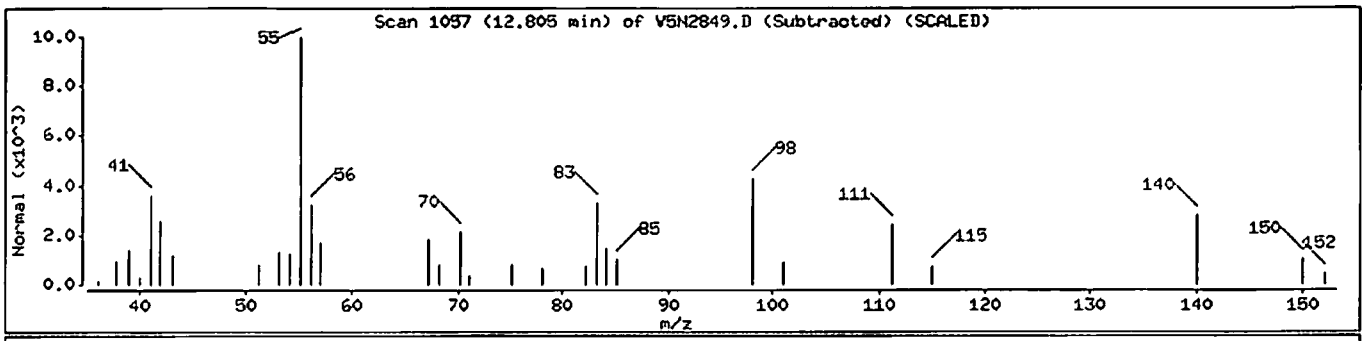
Client ID: H30X2 Instrument: V5.i

Sample Info: 25ML,K2213-04B,,62892

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



Data File: \\avogadro\organics\V5.I\111110.B\V5N2849.D

Date : 10-NOV-2011 08:52

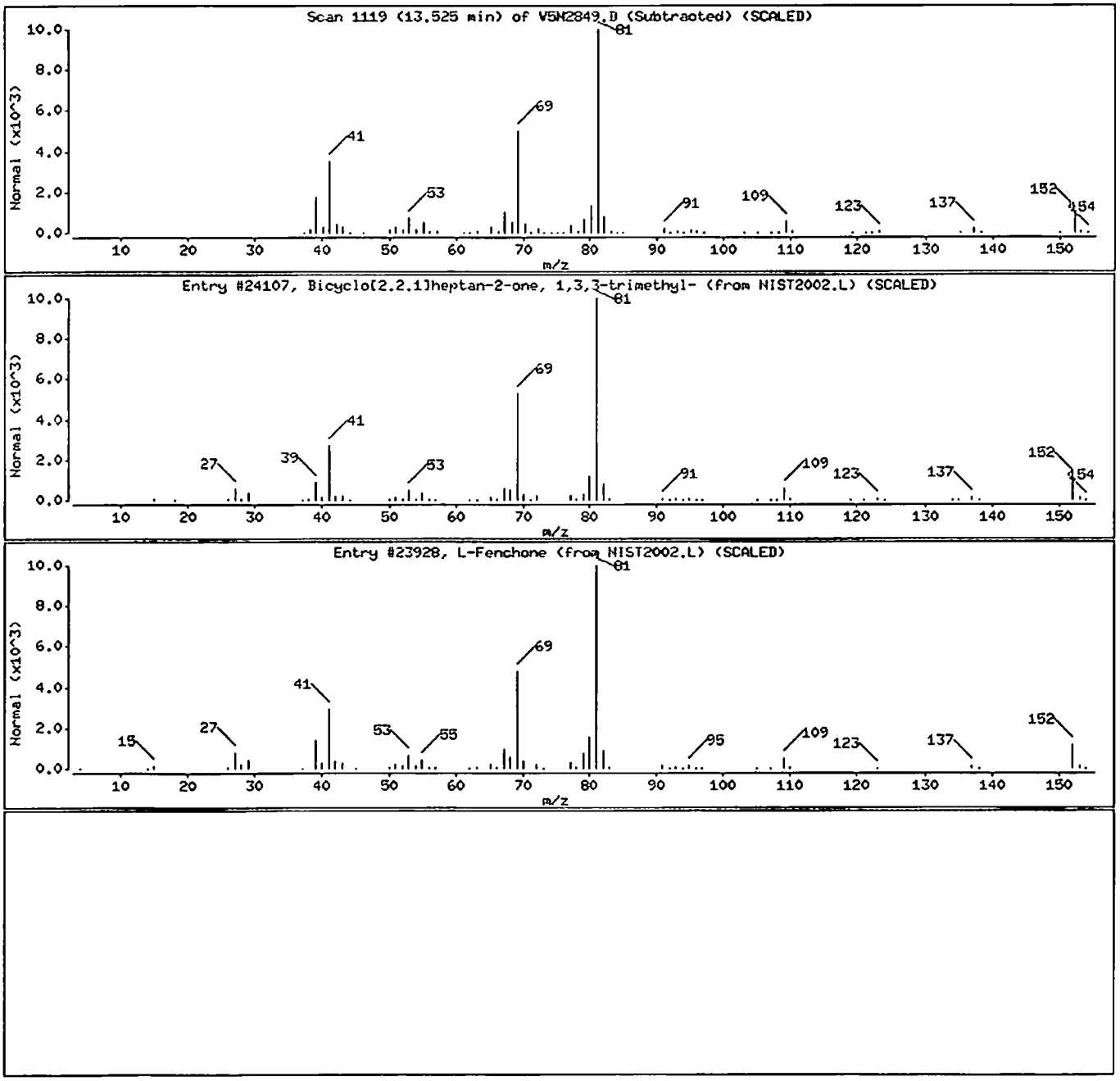
Client ID: H30X2 Instrument: V5.i

Sample Info: 25ML,K2213-04B,,62892

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
Bicyclo[2.2.1]heptan-2-one, 1,3,3-trimet	4695-62-9	NIST2002.L	24107	95	C10H160	152
L-Fenchone	126-21-6	NIST2002.L	23928	95	C10H160	152



Data File: \\avogadro\organics\V5.I\111110.B\V5N2849.D

Date : 10-NOV-2011 08:52

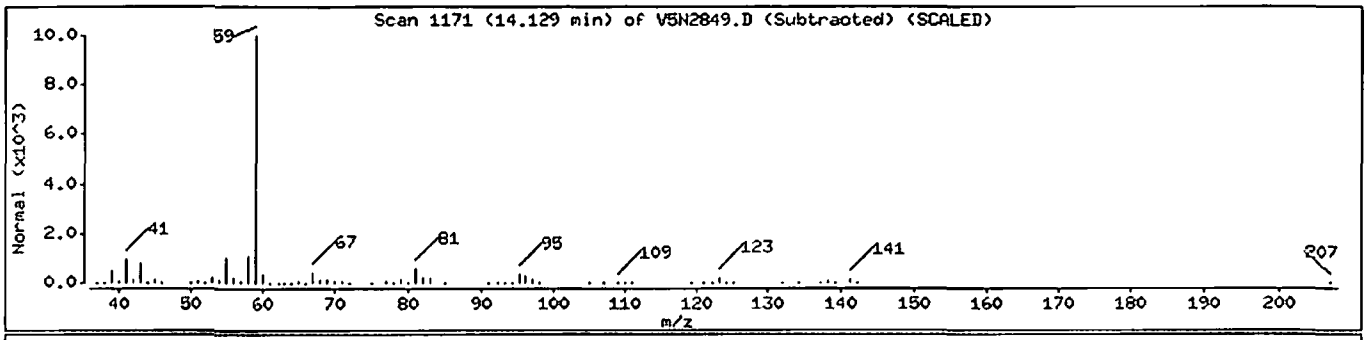
Client ID: H30X2 Instrument: V5.i

Sample Info: 25ML,K2213-04B,,62892

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



Data File: \\avogadro\organics\V5.i\111110.B\V5N2849.D

Date : 10-NOV-2011 08:52

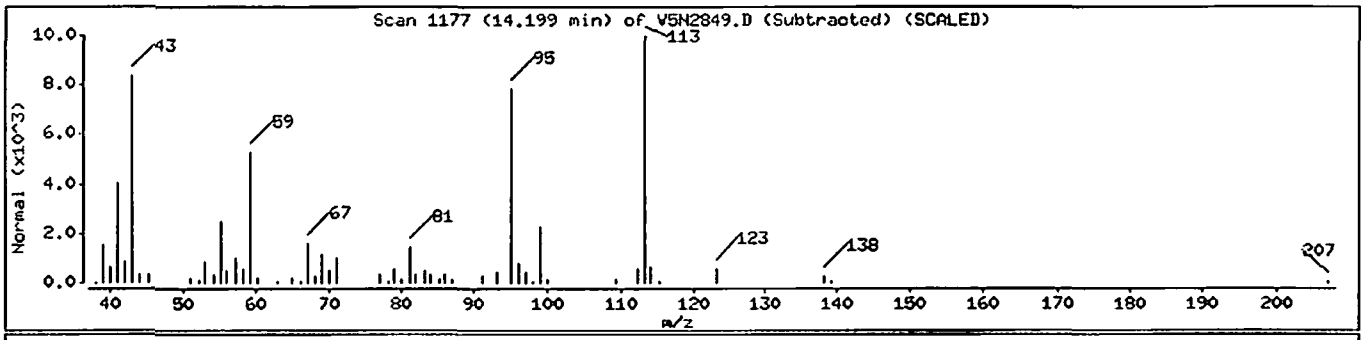
Client ID: H30X2 Instrument: V5.i

Sample Info: 25ML,K2213-04B,,62892

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



Data File: \\avogadro\organics\V5.I\111110.B\V5N2849.D

Date : 10-NOV-2011 08:52

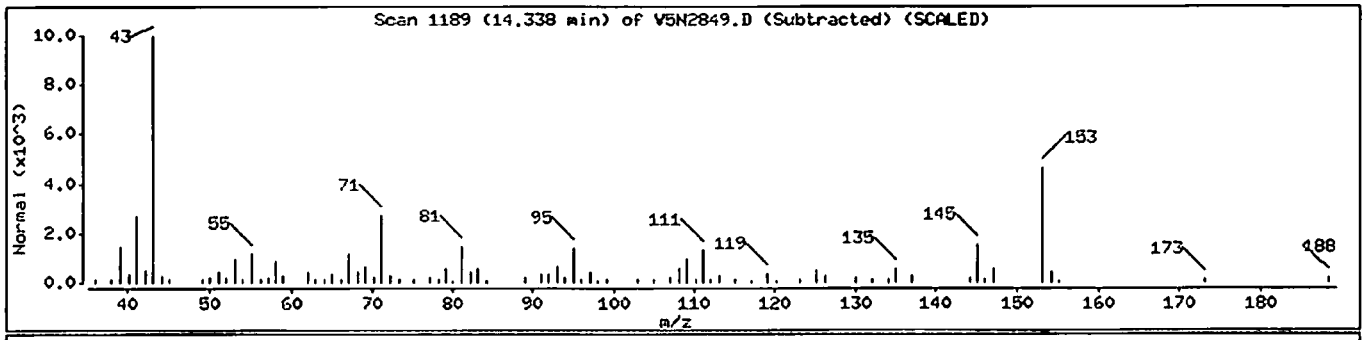
Client ID: H30X2 Instrument: V5.i

Sample Info: 25ML,K2213-04B,,62892

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



Data File: \\avogadro\organics\V5.I\111110.B\V5N2849.D

Date : 10-NOV-2011 08:52

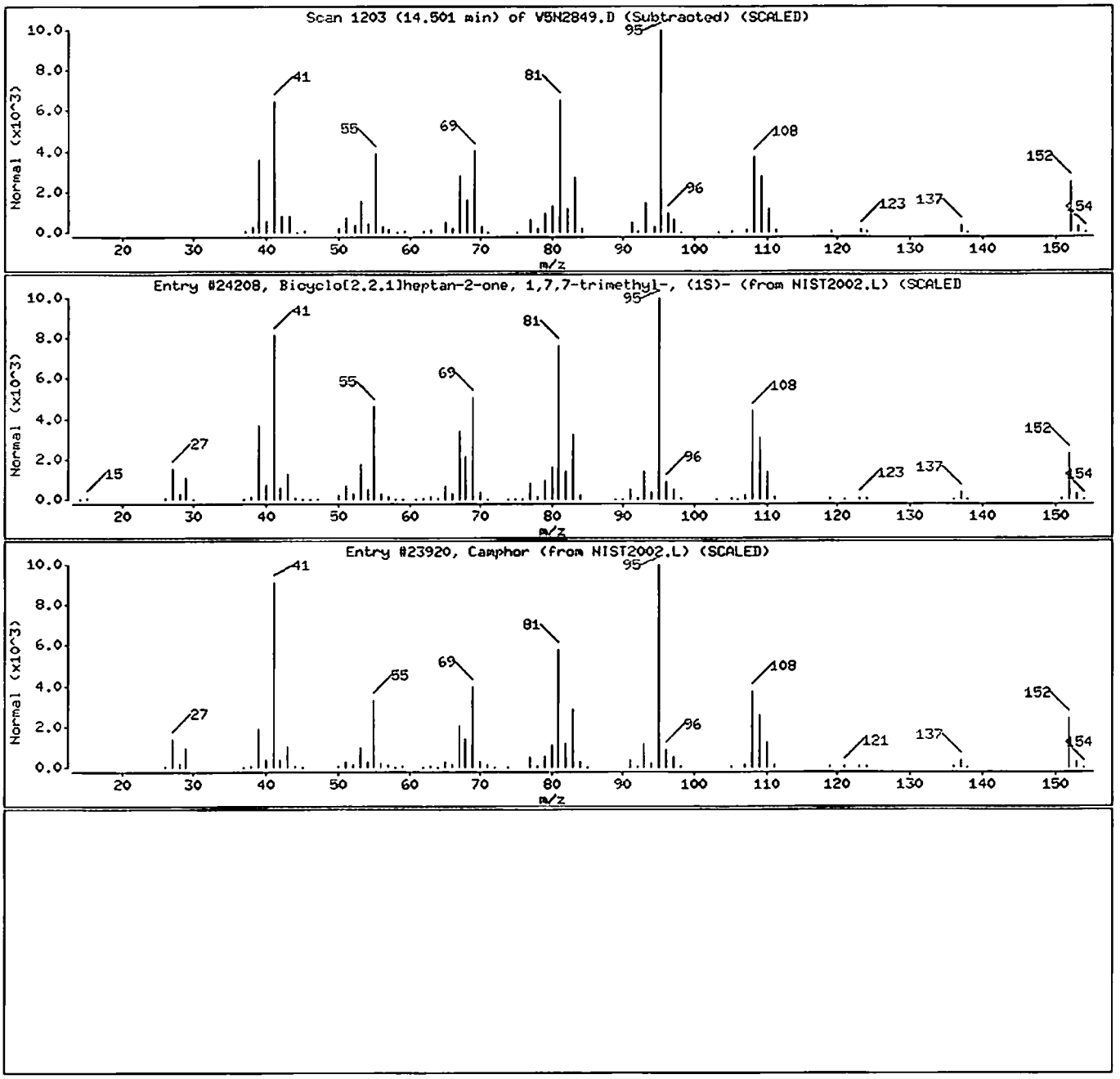
Client ID: H30X2 Instrument: V5.i

Sample Info: 25ML,K2213-04B,,62892

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
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet	464-48-2	NIST2002.L	24208	98	C10H16O	152
Camphor	76-22-2	NIST2002.L	23920	98	C10H16O	152



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30X3

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-05A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2853.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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	0.20	J
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.32	J
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	0.21	J
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.

H30X3

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-05A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2853.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.: H30X3

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

Lab Code: MITKEM | Case No.: 41926 | Mod. Ref No.: | SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER | Lab Sample ID: K2213-05A

Sample wt/vol: 25.0 (g/mL) ML | Lab File ID: V5N2853.D

Level: (TRACE or LOW/MED) TRACE | Date Received: 11/03/2011

% Moisture: not dec. | Date Analyzed: 11/10/2011

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	3.393	2.2	J
02	535-77-3	Benzene, 1-methyl-3-(1-methy	12.126	4.7	NJ
03	464-48-2	Bicyclo[2.2.1]heptan-2-one,	14.495	2.9	NJ
	E96679[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111110.B\V5N2853.D
Report Date: 15-Nov-2011 09:35

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2853.D
Lab Smp Id: K2213-05A Client Smp ID: H30X3
Inj Date : 10-NOV-2011 10:45
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-05A,,62892
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 34
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	2.208	2.216	(0.350)	127464	5.90103	5.9
$ 80 Chloroethane-d5	69	2.615	2.600	(0.414)	84913	5.79005	5.8
$ 81 1,1-Dichloroethene-d2	65	3.370	3.378	(0.533)	28087	5.02093	5.0(Q)
9 Acetone	43	3.463	3.447	(0.548)	5081	2.70283	2.7
10 Carbon Disulfide	76	3.625	3.622	(0.574)	13147	0.20401	0.20
12 Methylene Chloride	84	3.857	3.854	(0.610)	4931	0.31627	0.32
$ 82 2-Butanone-d5	46	5.065	5.062	(0.802)	137265	52.9806	53(AQ)
$ 83 Chloroform-d	84	5.390	5.387	(0.853)	120202	4.64692	4.6(Q)
19 Chloroform	83	5.402	5.410	(0.855)	5563	0.20694	0.21(Q)
$ 23 1,2-Dichloroethane-d4	65	5.901	5.898	(0.934)	48072	4.72557	4.7(Q)
$ 84 Benzene-d6	84	5.913	5.909	(0.627)	245261	4.83186	4.8
* 26 1,4-Difluorobenzene	114	6.319	6.327	(1.000)	237434	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.726	6.734	(0.713)	78752	4.46980	4.5
$ 33 Toluene-d8	98	7.841	7.837	(0.831)	215129	4.72276	4.7
$ 86 trans-1,3-Dichloropropene-d4	79	8.119	8.116	(0.861)	58144	5.75937	5.8
$ 87 2-Hexanone-d5	63	8.561	8.569	(0.908)	91444	52.2997	52(AQ)
* 42 Chlorobenzene-d5	117	9.432	9.428	(1.000)	173051	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.930	10.926	(1.159)	33447	5.12767	5.1
* 78 1,4-Dichlorobenzene-d4	152	12.172	12.169	(1.000)	73067	5.00000	(Q)
$ 90 1,2-Dichlorobenzene-d4	152	12.625	12.633	(1.037)	55625	4.84275	4.8(Q)

Data File: \\avogadro\organics\V5.I\111110.B\V5N2853.D
Report Date: 15-Nov-2011 09:35

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\111110.B\V5N2853.D
Report Date: 15-Nov-2011 09:35

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2853.D
Lab Smp Id: K2213-05A Client Smp ID: H30X3
Inj Date : 10-NOV-2011 10:45
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-05A,,62892
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 34
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

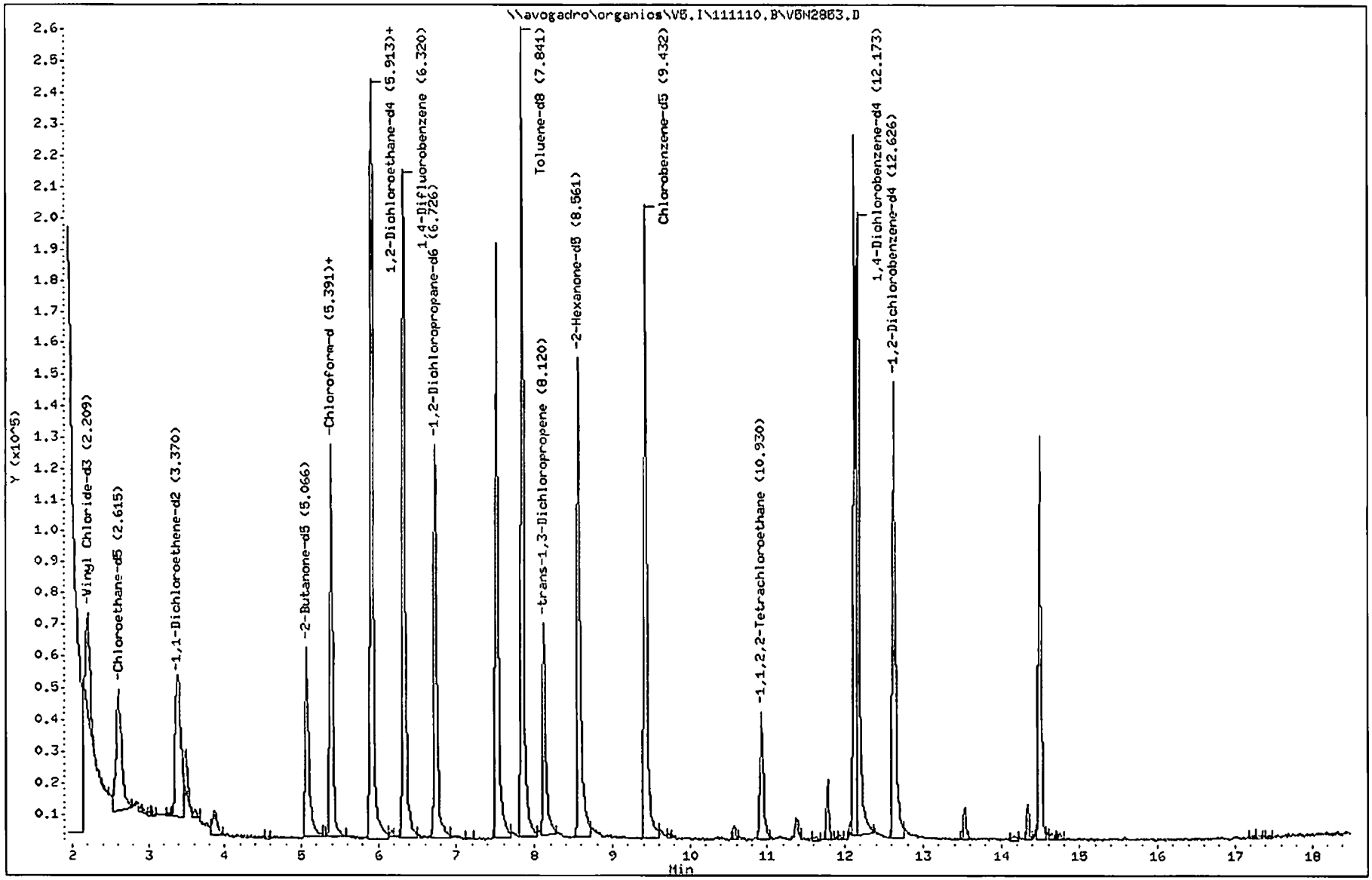
ISTD	RT	AREA	AMOUNT
* 26 1,4-Difluorobenzene	6.320	530287	5.000
* 78 1,4-Dichlorobenzene-d4	12.173	496334	5.000

RT	AREA	CONCENTRATIONS ON-COL(ug/L)	FINAL(ug/L)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
3.393	232346	2.19075725	2.2	0		0	26
Benzene, 1-methyl-3-(1-methylethyl)-				CAS #: 535-77-3			
12.126	468446	4.71905286	4.7	91	NIST2002.L	14397	78
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet				CAS #: 464-48-2			
14.495	292148	2.94304947	2.9	98	NIST2002.L	24202	78

Data File: \\avogadro\organics\V5.I\111110.B\V5N2853.D
Date : 10-NOV-2011 10:45
Client ID: H30X3
Sample Info: 25ML,K2213-05A,,62892
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: SRC: LIMS
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111110.B\V5N2853.D

Date : 10-NOV-2011 10:45

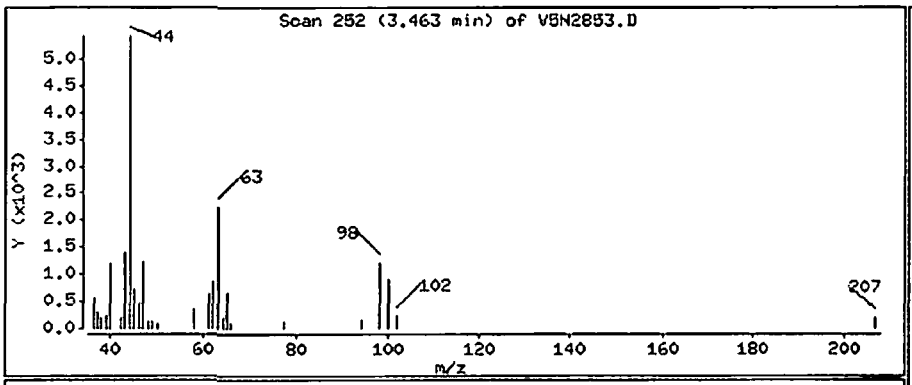
Client ID: H30X3 Instrument: V5.i

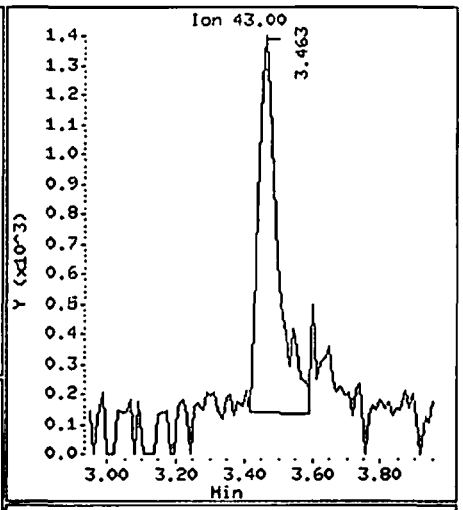
Sample Info: 25ML,K2213-05A,,62892

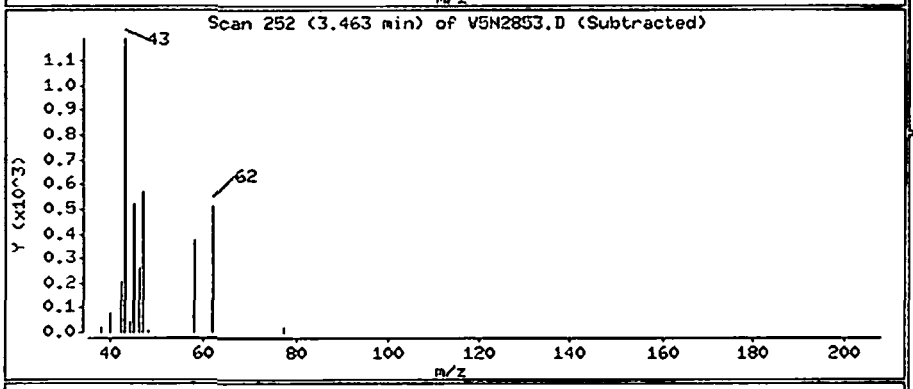
Purge Volume: 25.0 Operator: SRC: LIMS

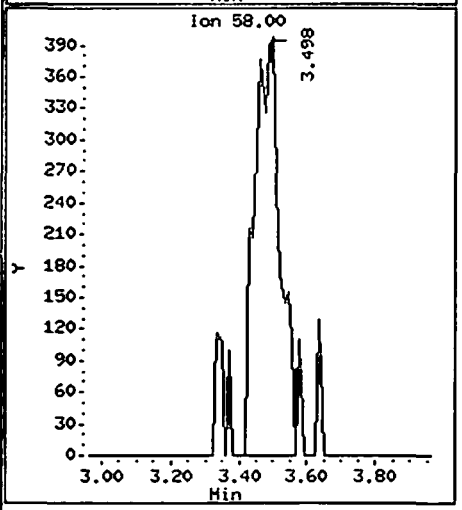
Column phase: DB-624 Column diameter: 0.25

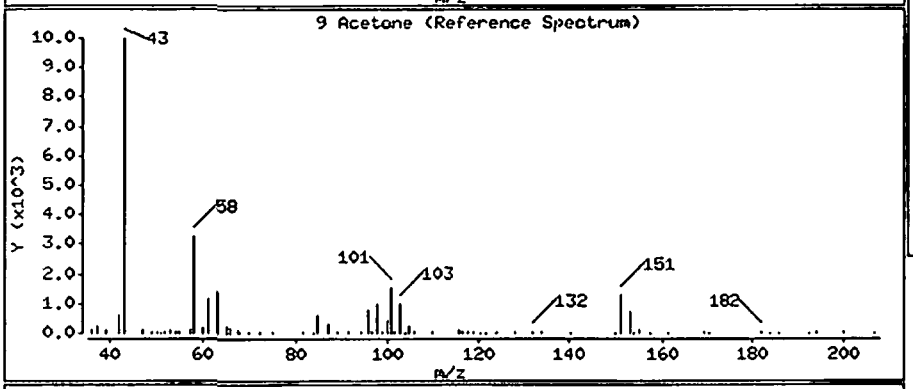
9 Acetone Concentration: 2.7 ug/L

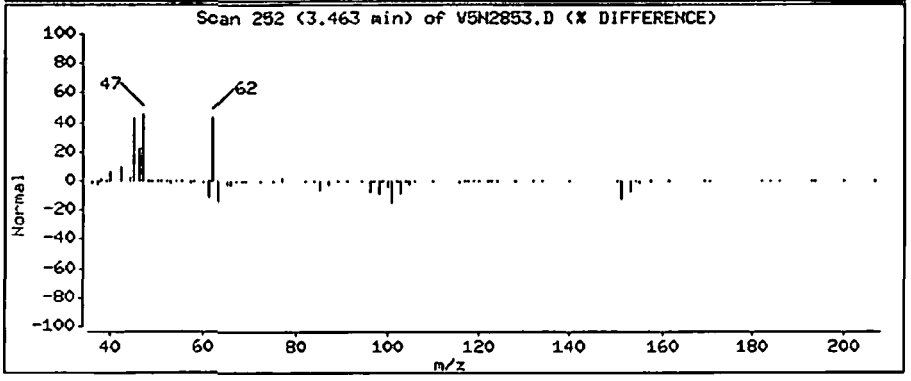












Data File: \\avogadro\organics\V5.I\111110.B\V5N2853.D

Date : 10-NOV-2011 10:45

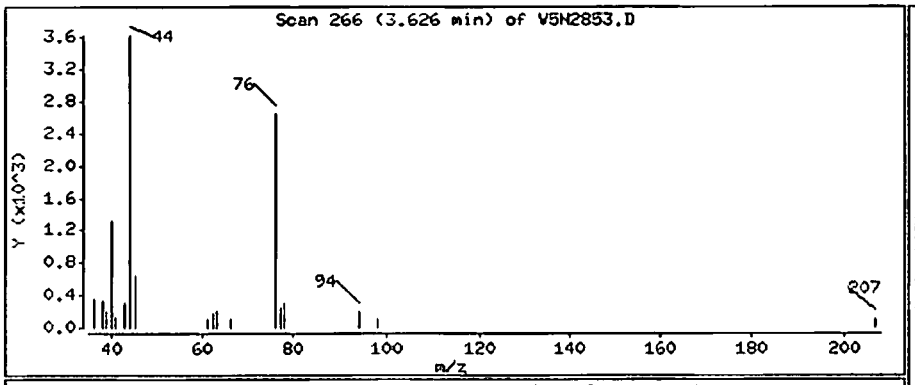
Client ID: H30X3 Instrument: V5.i

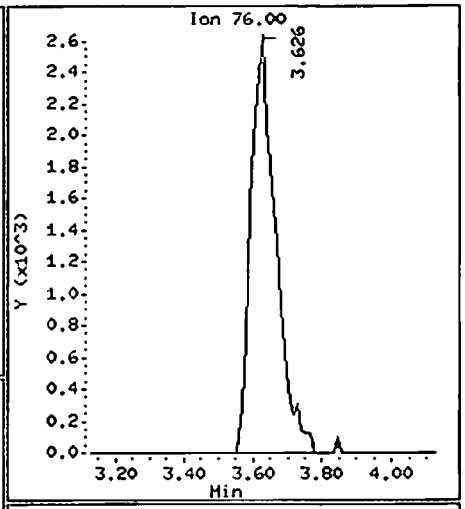
Sample Info: 25ML,K2213-05A,,62892

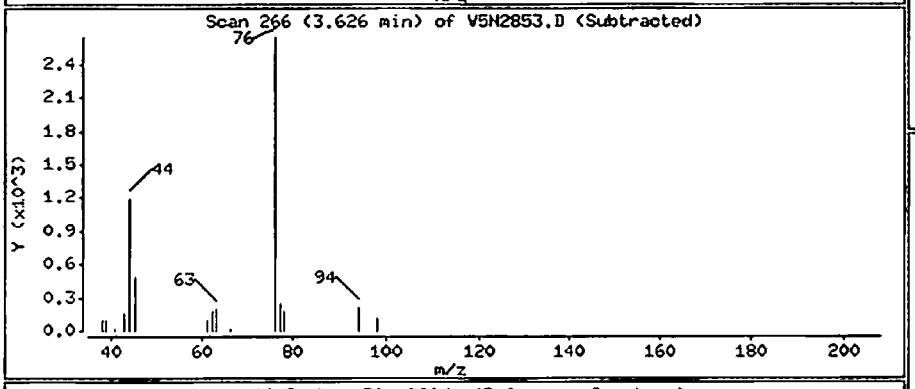
Purge Volume: 25.0 Operator: SRC: LIMS

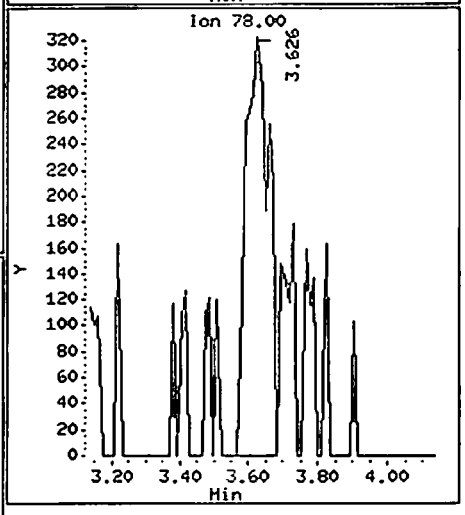
Column phase: DB-624 Column diameter: 0.25

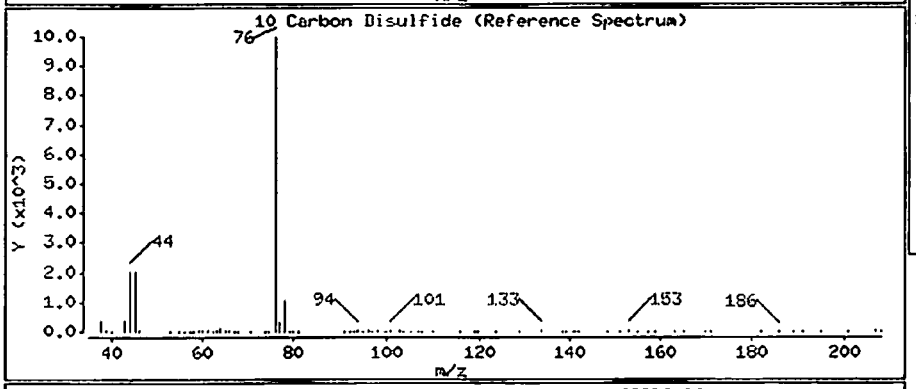
10 Carbon Disulfide Concentration: 0.20 ug/L

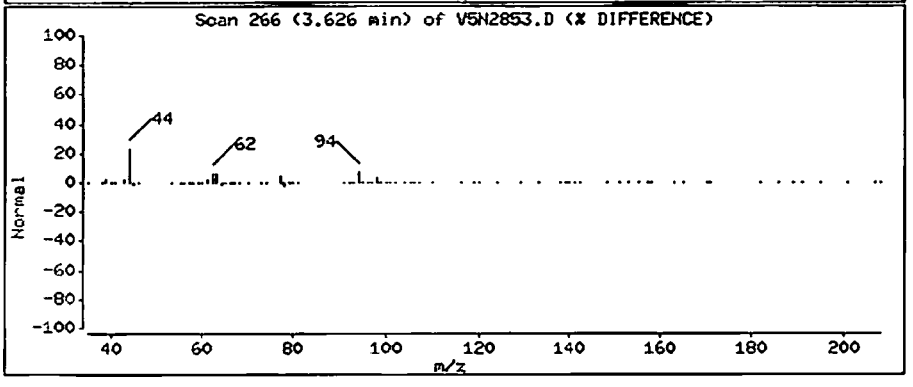












Data File: \\avogadro\organics\V5.I\111110.B\V5N2853.D

Date : 10-NOV-2011 10:45

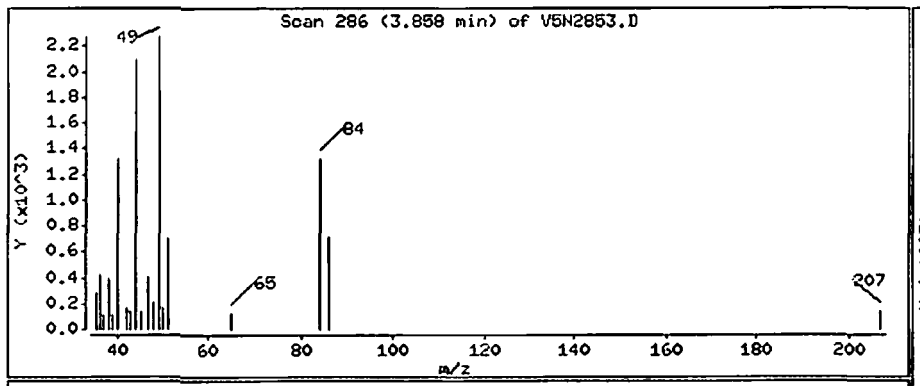
Client ID: H30X3 Instrument: V5.i

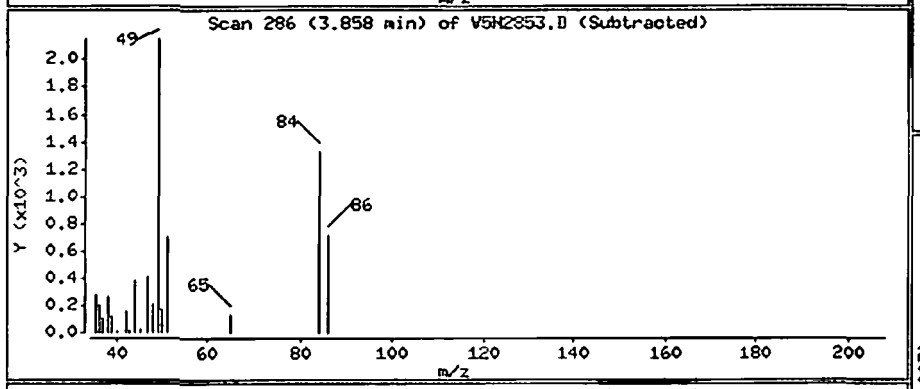
Sample Info: 25ML,K2213-05A,,62892

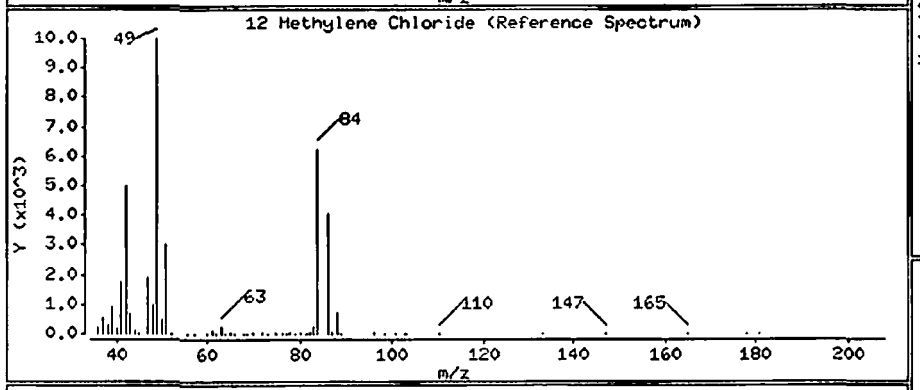
Purge Volume: 25.0 Operator: SRC: LIMS

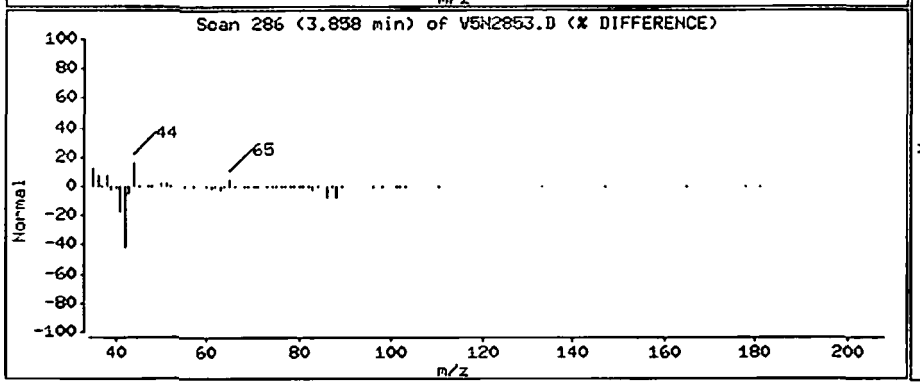
Column phase: DB-624 Column diameter: 0.25

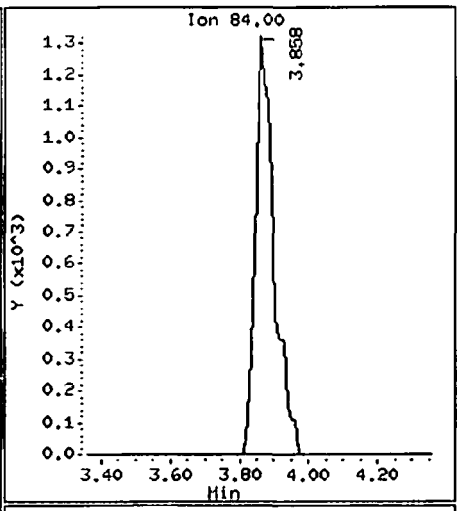
12 Methylene Chloride Concentration: 0.32 ug/L

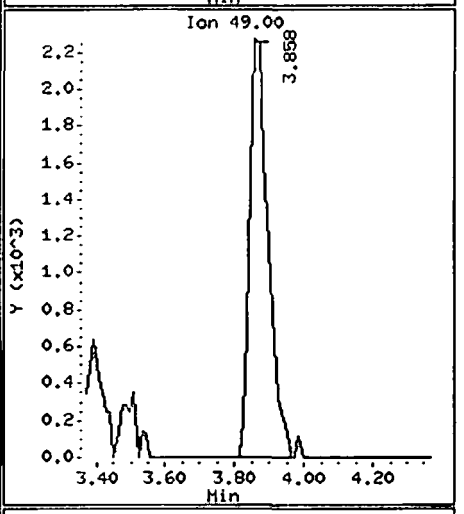


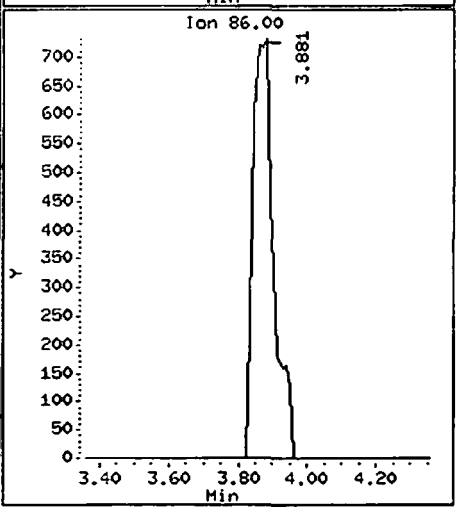












Data File: \\avogadro\organics\V5.I\111110.B\V5N2853.D

Date : 10-NOV-2011 10:45

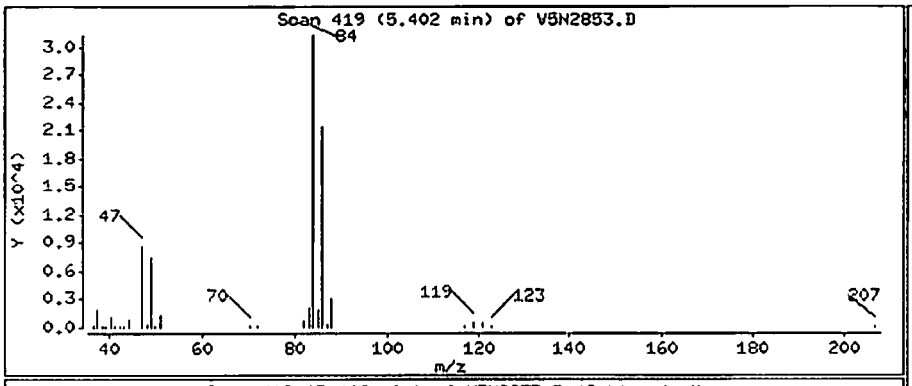
Client ID: H30X3 Instrument: V5.i

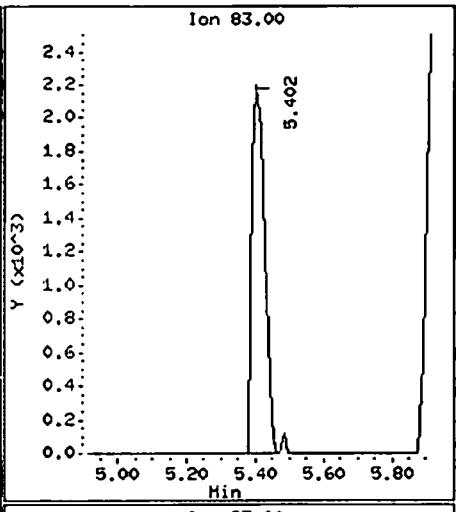
Sample Info: 25ML,K2213-05A,,62892

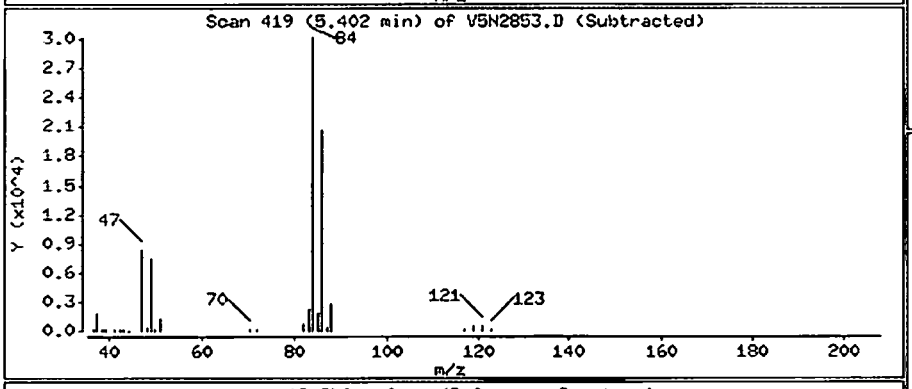
Purge Volume: 25.0 Operator: SRC: LIMS

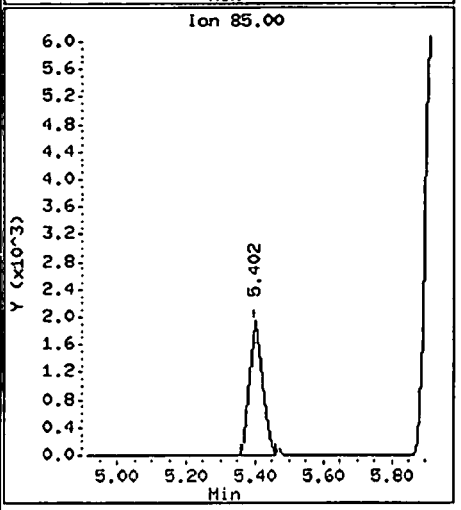
Column phase: DB-624 Column diameter: 0.25

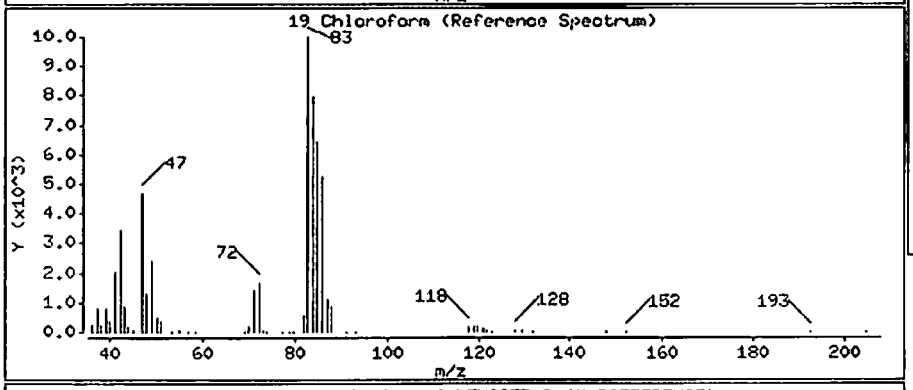
19 Chloroform Concentration: 0.21 ug/L

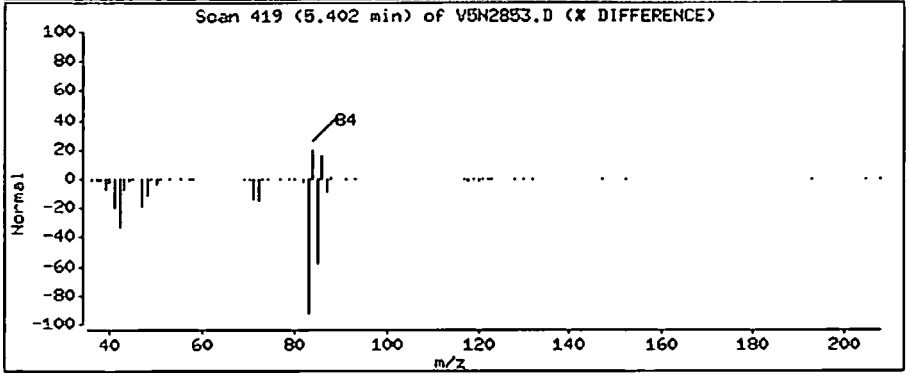












Data File: \\avogadro\organics\V5.I\111110.B\V5N2853.D

Date : 10-NOV-2011 10:45

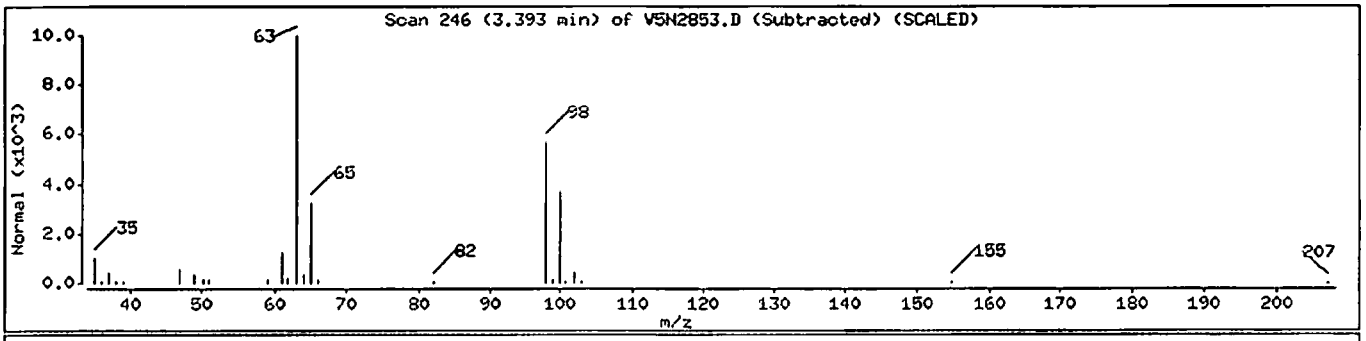
Client ID: H30X3 Instrument: V5.i

Sample Info: 25ML,K2213-05A,,62892

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



Data File: \\avogadro\organics\V5.I\111110.B\V5N2853.D

Date : 10-NOV-2011 10:45

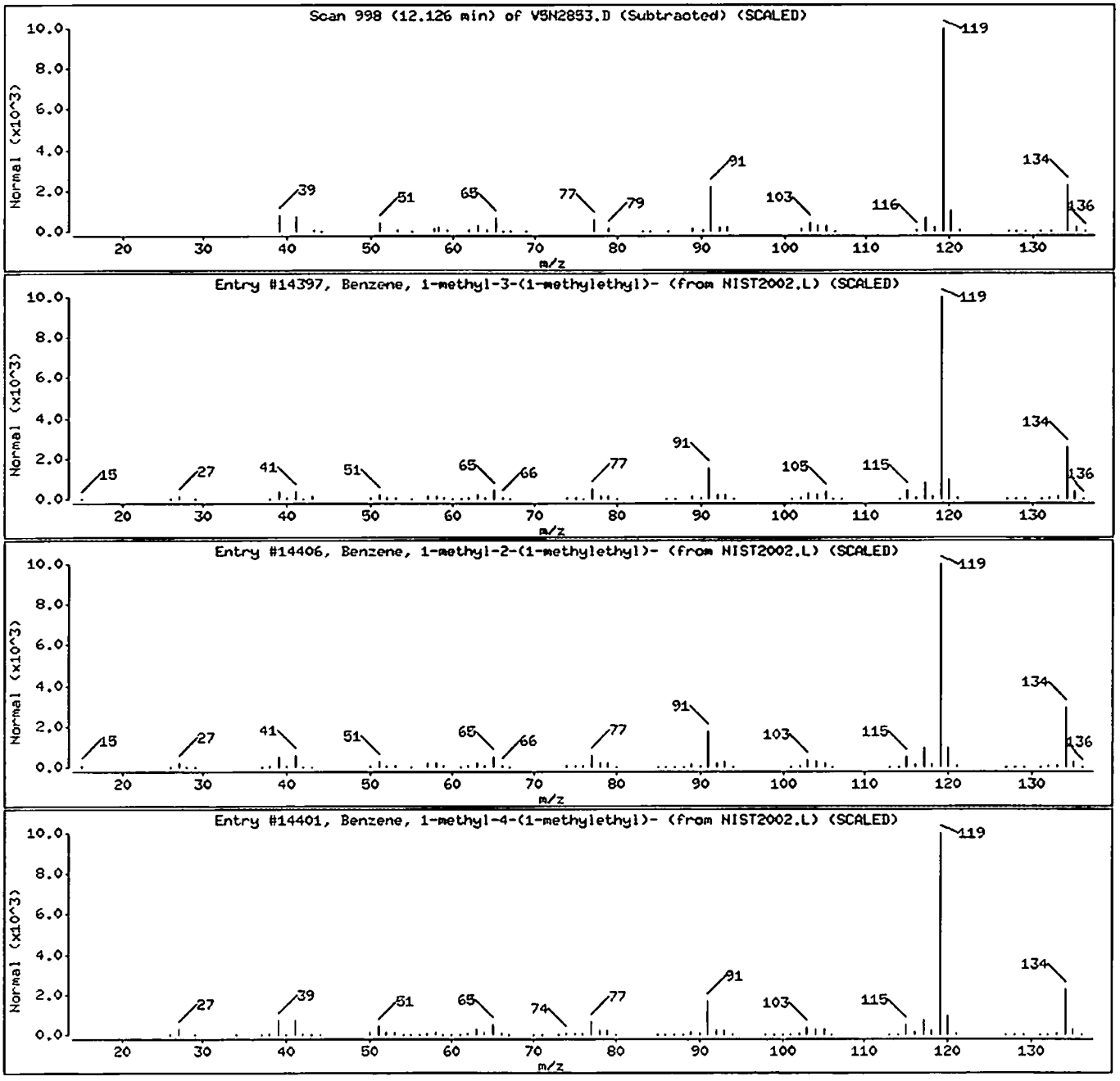
Client ID: H30X3 Instrument: V5.i

Sample Info: 25ML,K2213-05A,,62892

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
Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	NIST2002.L	14397	91	C10H14	134
Benzene, 1-methyl-2-(1-methylethyl)-	527-84-4	NIST2002.L	14406	91	C10H14	134
Benzene, 1-methyl-4-(1-methylethyl)-	99-87-6	NIST2002.L	14401	91	C10H14	134



Data File: \\avogadro\organics\V5.I\111110.B\V5N2853.D

Date : 10-NOV-2011 10:45

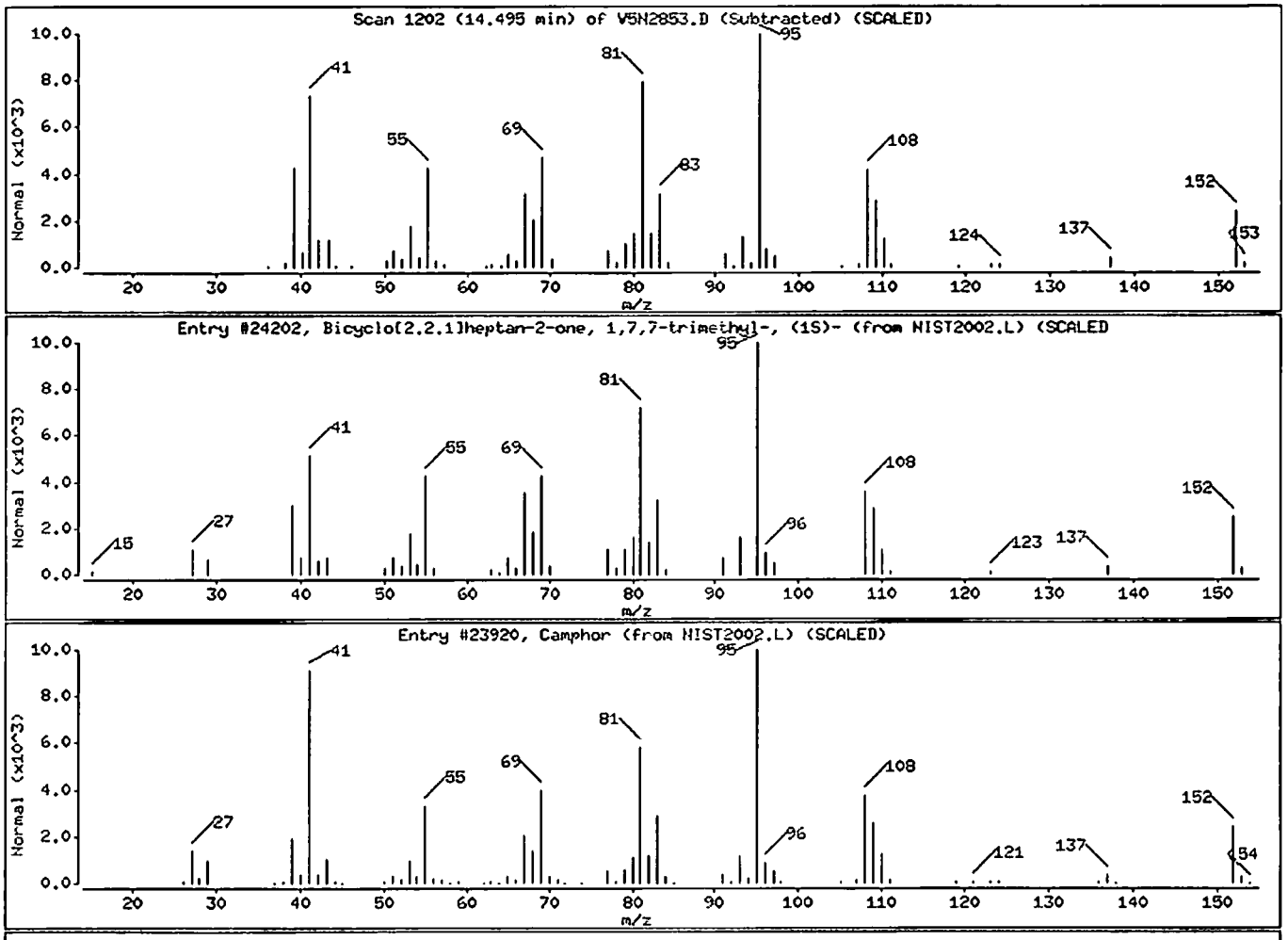
Client ID: H30X3 Instrument: V5.i

Sample Info: 25ML,K2213-05A,,62892

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
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet	464-48-2	NIST2002.L	24202	98	C10H160	152
Camphor	76-22-2	NIST2002.L	23920	96	C10H160	152



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30X4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-01B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2846.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 4.0

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	2.0	U
74-87-3	Chloromethane	2.0	U
75-01-4	Vinyl chloride	2.0	U
74-83-9	Bromomethane	2.0	U
75-00-3	Chloroethane	2.0	U
75-69-4	Trichlorofluoromethane	2.0	U
75-35-4	1,1-Dichloroethene	2.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2.0	U
67-64-1	Acetone	38	
75-15-0	Carbon disulfide	2.0	U
79-20-9	Methyl acetate	2.0	U
75-09-2	Methylene chloride	2.0	U
156-60-5	trans-1,2-Dichloroethene	2.0	U
1634-04-4	Methyl tert-butyl ether	2.0	U
75-34-3	1,1-Dichloroethane	2.0	U
156-59-2	cis-1,2-Dichloroethene	2.0	U
78-93-3	2-Butanone	20	U
74-97-5	Bromochloromethane	2.0	U
67-66-3	Chloroform	2.0	U
71-55-6	1,1,1-Trichloroethane	2.0	U
110-82-7	Cyclohexane	3.6	
56-23-5	Carbon tetrachloride	2.0	U
71-43-2	Benzene	1.3	J
107-06-2	1,2-Dichloroethane	2.0	U

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

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. H30X4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-01B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2846.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 4.0

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	2.0	U
108-87-2	Methylcyclohexane	2.2	
78-87-5	1,2-Dichloropropane	2.0	U
75-27-4	Bromodichloromethane	2.0	U
10061-01-5	cis-1,3-Dichloropropene	2.0	U
108-10-1	4-Methyl-2-pentanone	20	U
108-88-3	Toluene	1.4	J
10061-02-6	trans-1,3-Dichloropropene	2.0	U
79-00-5	1,1,2-Trichloroethane	2.0	U
127-18-4	Tetrachloroethene	2.0	U
591-78-6	2-Hexanone	20	U
124-48-1	Dibromochloromethane	2.0	U
106-93-4	1,2-Dibromoethane	2.0	U
108-90-7	Chlorobenzene	50	
100-41-4	Ethylbenzene	1.7	J
179601-23-1	m,p-Xylene	42	
95-47-6	o-Xylene	16	
100-42-5	Styrene	2.0	U
75-25-2	Bromoform	2.0	U
98-82-8	Isopropylbenzene	2.0	
79-34-5	1,1,2,2-Tetrachloroethane	2.0	U
541-73-1	1,3-Dichlorobenzene	2.0	U
106-46-7	1,4-Dichlorobenzene	2.0	U
95-50-1	1,2-Dichlorobenzene	2.0	U
96-12-8	1,2-Dibromo-3-chloropropane	2.0	U
120-82-1	1,2,4-Trichlorobenzene	2.0	U
87-61-6	1,2,3-Trichlorobenzene	2.0	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: H30X4

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

Lab Code: MITKEM | Case No.: 41926 | Mod. Ref No.: | SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER | Lab Sample ID: K2213-01B

Sample wt/vol: 25.0 (g/mL) ML | Lab File ID: V5N2846.D

Level: (TRACE or LOW/MED) TRACE | Date Received: 11/03/2011

% Moisture: not dec. | Date Analyzed: 11/10/2011

GC Column: DB-624 | ID: 0.25 (mm) | Dilution Factor: 4.0

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	4.989	2.4	J
02	7459-71-4	3,5-Dimethylcyclopentene	7.335	3.3	NJ
03	103-65-1	Benzene, propyl-	11.086	4.9	NJ
04	611-14-3	Benzene, 1-ethyl-2-methyl-	11.191	26	NJ
05	108-67-8	Benzene, 1,3,5-trimethyl-	11.295	13	NJ
06	620-14-4	Benzene, 1-ethyl-3-methyl-	11.539	8.8	NJ
07	526-73-8	Benzene, 1,2,3-trimethyl-	11.748	22	NJ
08		Unknown-02	11.946	2.4	J
09	99-87-6	Benzene, 1-methyl-4-(1-methy	12.073	2.7	NJ
10	95-63-6	Benzene, 1,2,4-trimethyl-	12.259	6.7	NJ
11	766-90-5	cis-.beta.-Methylstyrene	12.503	3.6	NJ
12	126-21-6	L-Fenchone	13.537	7.3	NJ
13		Unknown-03	14.141	8.5	J
14	464-49-3	Bicyclo[2.2.1]heptan-2-one,	14.501	2.6	NJ
	E96679[1]	Total Alkanes	N/A		

[1] EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D
Report Date: 15-Nov-2011 09:35

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2846.D
Lab Smp Id: K2213-01B Client Smp ID: H30X4
Inj Date : 10-NOV-2011 07:25
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-01B,,62892,4
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 15
Dil Factor: 4.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

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

Name	Value	Description
DF	4.000	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	2.202	2.216	(0.348)	121339	5.94951	5.9
$	80 Chloroethane-d5	69	2.608	2.600	(0.412)	83650	6.04108	6.0
$	81 1,1-Dichloroethene-d2	65	3.386	3.378	(0.535)	27971	5.29575	5.3(QR)
	9 Acetone	43	3.468	3.447	(0.548)	16980	9.56638	38
$	82 2-Butanone-d5	46	5.070	5.062	(0.802)	137938	56.3873	56(AQ)
$	83 Chloroform-d	84	5.384	5.387	(0.851)	113860	4.66192	4.7(Q)
	21 Cyclohexane	56	5.639	5.642	(0.598)	27820	0.91186	3.6
$	23 1,2-Dichloroethane-d4	65	5.895	5.898	(0.932)	44436	4.62633	4.6
$	84 Benzene-d6	84	5.918	5.909	(0.628)	234147	4.61464	4.6
	25 Benzene	78	5.953	5.956	(0.632)	17547	0.31263	1.3
*	26 1,4-Difluorobenzene	114	6.324	6.327	(1.000)	224183	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.731	6.734	(0.714)	76562	4.34713	4.3
	28 Methylcyclohexane	83	6.777	6.780	(0.719)	13209	0.53845	2.2
$	33 Toluene-d8	98	7.846	7.837	(0.832)	214567	4.71220	4.7
	34 Toluene	91	7.927	7.907	(0.841)	19897	0.34793	1.4
$	86 trans-1,3-Dichloropropene-d4	79	8.124	8.116	(0.862)	52240	5.17650	5.2
$	87 2-Hexanone-d5	63	8.566	8.569	(0.909)	106278	60.8066	61(A)
*	42 Chlorobenzene-d5	117	9.425	9.428	(1.000)	172986	5.00000	
	43 Chlorobenzene	112	9.460	9.463	(1.004)	474767	12.5428	50
	44 Ethylbenzene	91	9.588	9.579	(1.017)	27008	0.42819	1.7
	45 m,p-Xylene	106	9.704	9.707	(1.030)	279829	10.3955	42
	46 o-Xylene	106	10.168	10.171	(1.079)	98563	4.00281	16

Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D
Report Date: 15-Nov-2011 09:35

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	49 Isopropylbenzene	105	10.610	10.601	(1.126)	33699	0.50275	2.0
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.923	10.926	(1.159)	33195	5.09095	5.1
M	41 Xylene (total)	106				378392	14.3983	58
*	78 1,4-Dichlorobenzene-d4	152	12.166	12.169	(1.000)	73942	5.00000	
$	90 1,2-Dichlorobenzene-d4	152	12.630	12.633	(1.038)	57467	4.94391	4.9(Q)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D
Report Date: 15-Nov-2011 09:35

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2846.D
Lab Smp Id: K2213-01B Client Smp ID: H30X4
Inj Date : 10-NOV-2011 07:25
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-01B,,62892,4
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 15
Dil Factor: 4.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

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

Name	Value	Description
DF	4.000	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	563010	5.000
* 78 1,4-Dichlorobenzene-d4	12.166	491660	5.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.989	67404	0.59860297	2.4	0		0	26
3,5-Dimethylcyclopentene				CAS #: 7459-71-4			
7.335	93414	0.82959468	3.3	90	NIST2002.L	2841	26
Benzene, propyl-				CAS #: 103-65-1			
11.086	121320	1.23377370	4.9	90	NIST2002.L	9109	78
Benzene, 1-ethyl-2-methyl-				CAS #: 611-14-3			
11.191	634275	6.45033546	26	95	NIST2002.L	9127	78
Benzene, 1,3,5-trimethyl-				CAS #: 108-67-8			
11.295	309127	3.14370839	13	95	NIST2002.L	9121	78

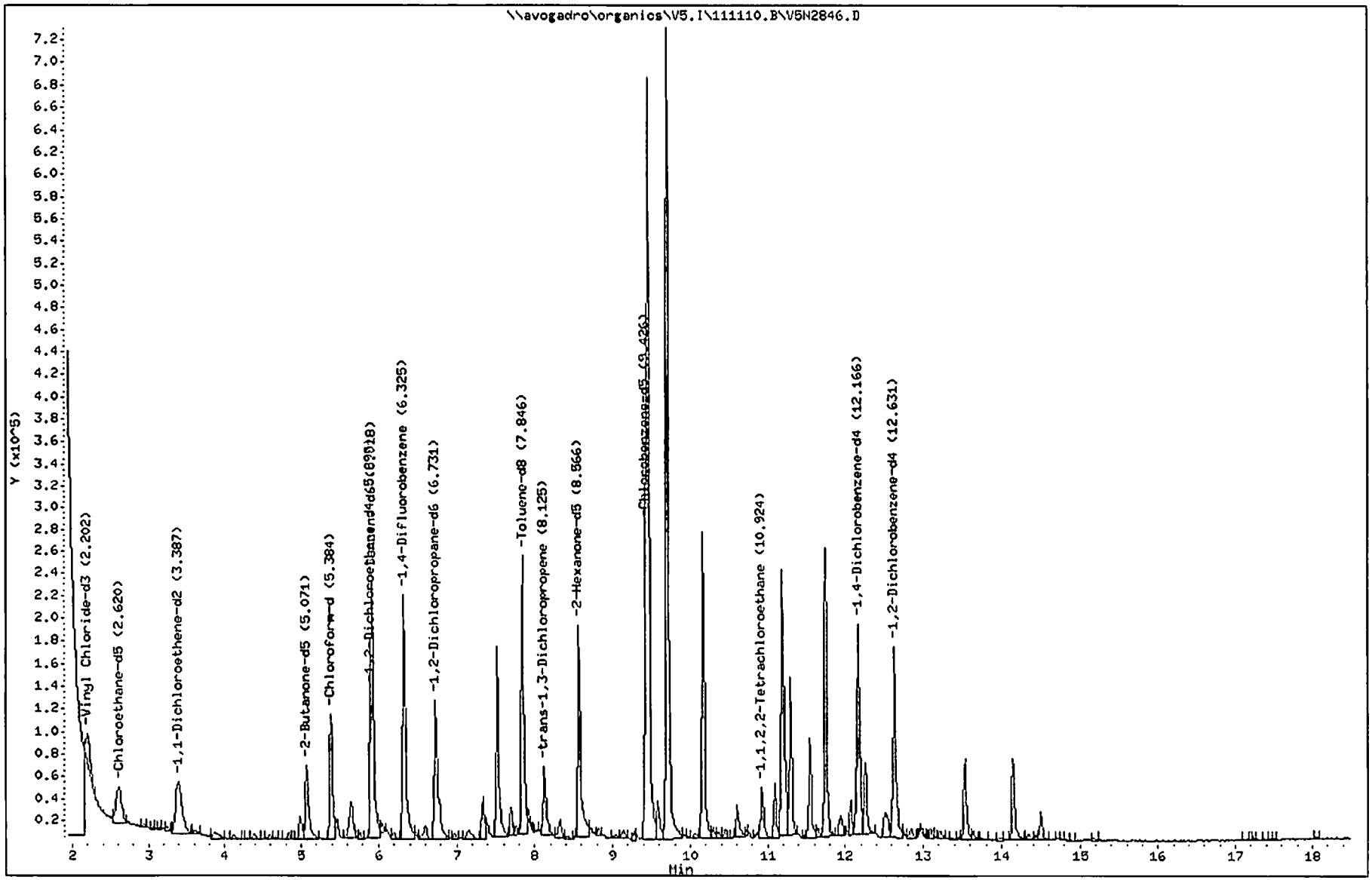
Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D
Report Date: 15-Nov-2011 09:35

RT	AREA	CONCENTRATIONS ON-COL(ug/L)	CONCENTRATIONS FINAL(ug/L)	QUAL	QUANT LIBRARY	QUANT LIB ENTRY	QUANT CPND #
Benzene, 1-ethyl-3-methyl-					CAS #: 620-14-4		
11.539	217032	2.20713144	8.8	91	NIST2002.L	9131	78(L)
Benzene, 1,2,3-trimethyl-					CAS #: 526-73-8		
11.748	551910	5.61272086	22	97	NIST2002.L	9123	78
Unknown					CAS #:		
11.946	58686	0.59681489	2.4	0		0	78
Benzene, 1-methyl-4-(1-methylethyl)-					CAS #: 99-87-6		
12.073	67204	0.68343724	2.7	94	NIST2002.L	14401	78(L)
Benzene, 1,2,4-trimethyl-					CAS #: 95-63-6		
12.259	163507	1.66280115	6.7	95	NIST2002.L	9126	78(L)
cis-.beta.-Methylstyrene					CAS #: 766-90-5		
12.503	89137	0.90648660	3.6	91	NIST2002.L	8693	78
L-Fenchone					CAS #: 126-21-6		
13.537	179442	1.82485873	7.3	95	NIST2002.L	23928	78
Unknown					CAS #:		
14.141	208806	2.12348300	8.5	0		0	78
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet					CAS #: 464-49-3		
14.501	63111	0.64181783	2.6	97	NIST2002.L	24210	78

QC Flag Legend

L - Operator selected an alternate library search match.

Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D
Date : 10-NOV-2011 07:25
Client ID: H30X4
Instrument: V5.i
Sample Info: 25ML,K2213-01B,,62892,4
Purge Volume: 25.0
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D

Date : 10-NOV-2011 07:25

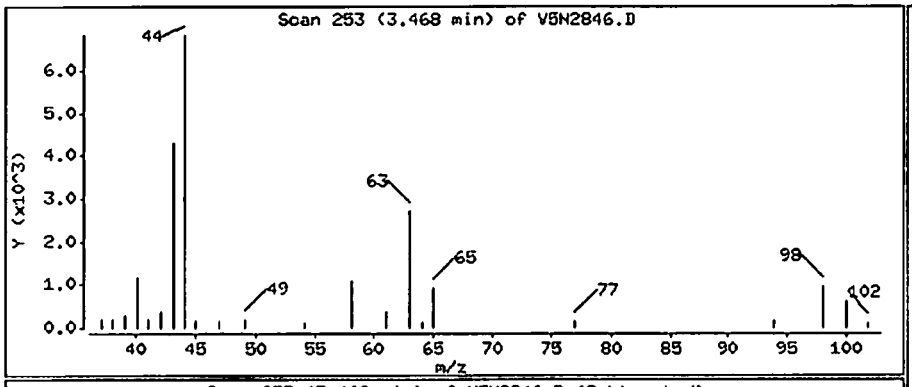
Client ID: H30X4 Instrument: V5.i

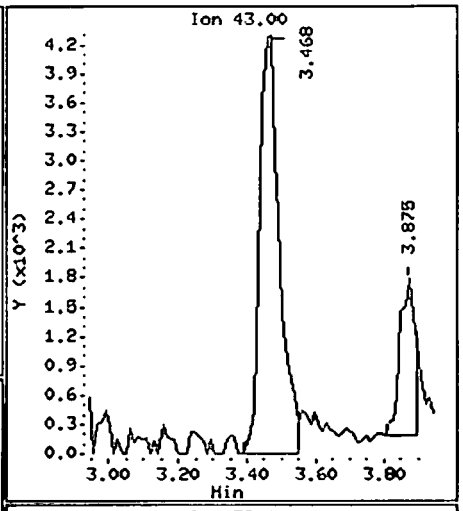
Sample Info: 25ML,K2213-01B,,62892,4

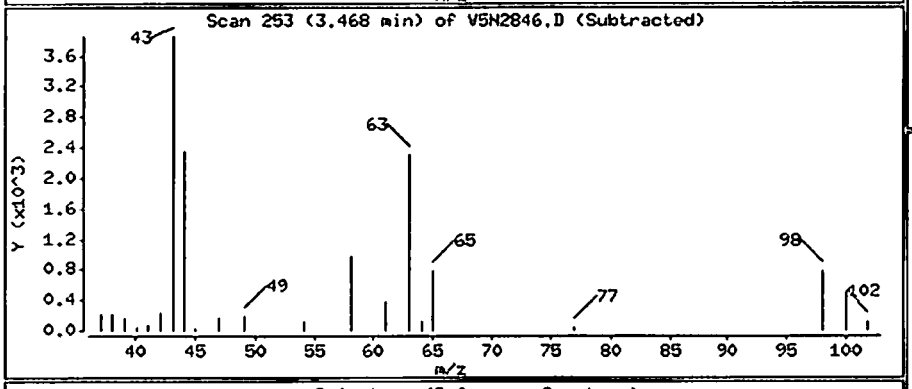
Purge Volume: 25.0 Operator: SRC: LIMS

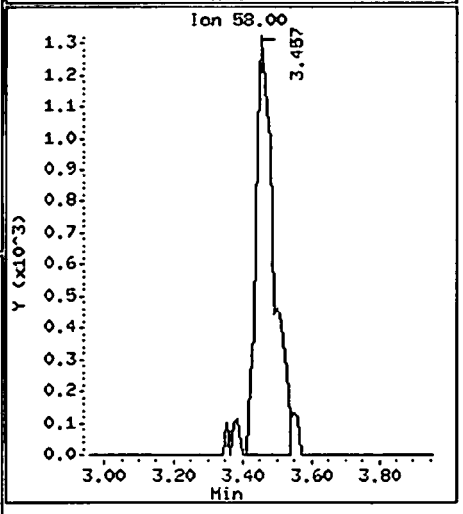
Column phase: DB-624 Column diameter: 0.25

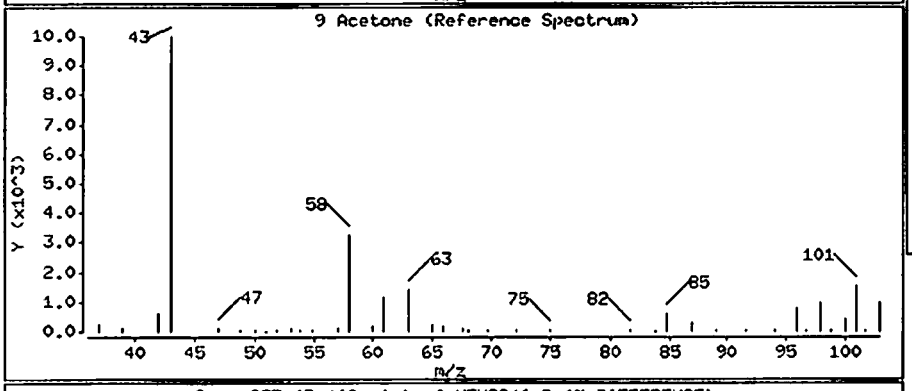
9 Acetone Concentration: 38 ug/L

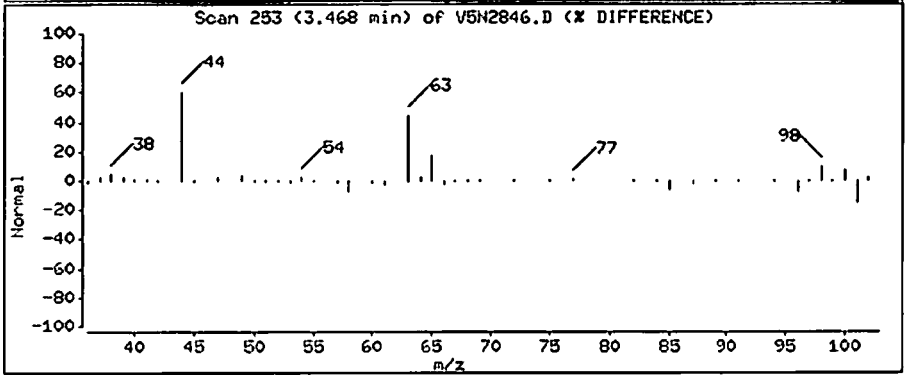












Data File: \\avogadro\organics\V5.i\111110.B\V5N2846.D

Date : 10-NOV-2011 07:25

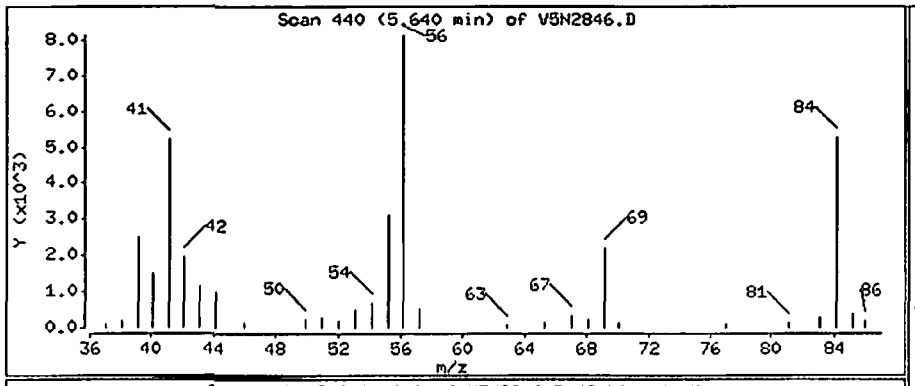
Client ID: H30X4 Instrument: V5.i

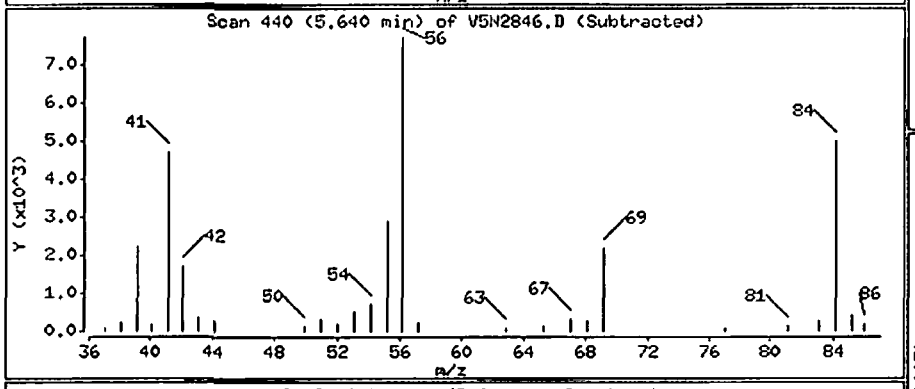
Sample Info: 25ML,K2213-01B,,62892,4

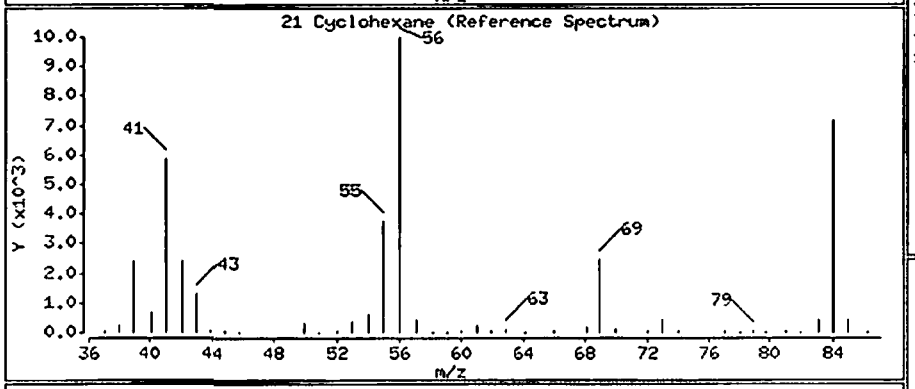
Purge Volume: 25.0 Operator: SRC: LIMS

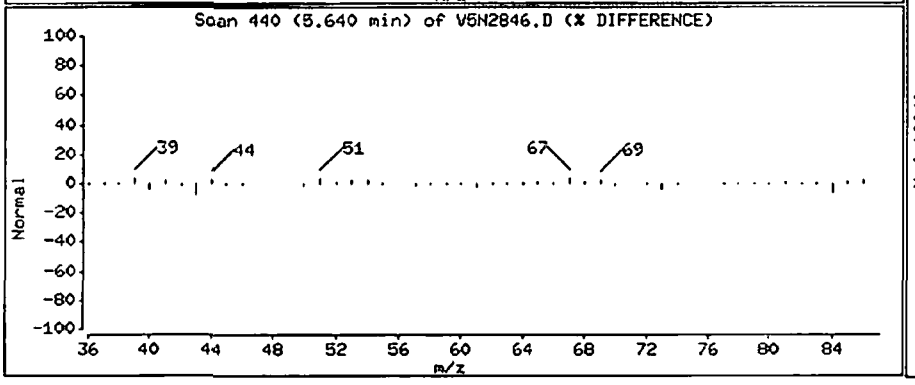
Column phase: DB-624 Column diameter: 0.25

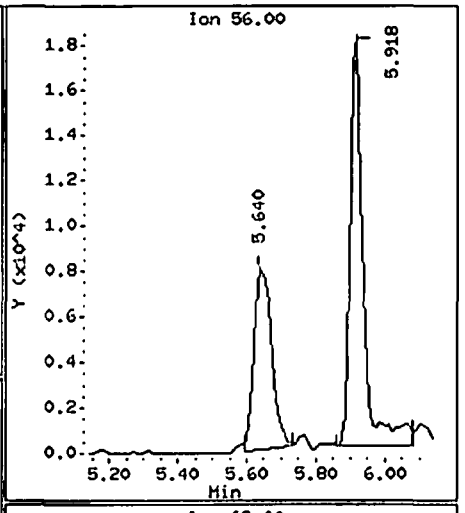
21 Cyclohexane Concentration: 3.6 ug/L

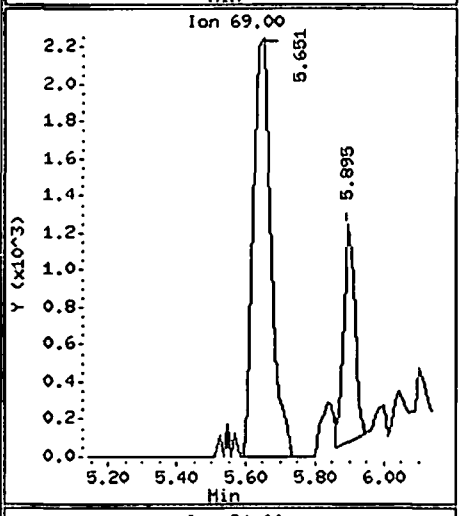


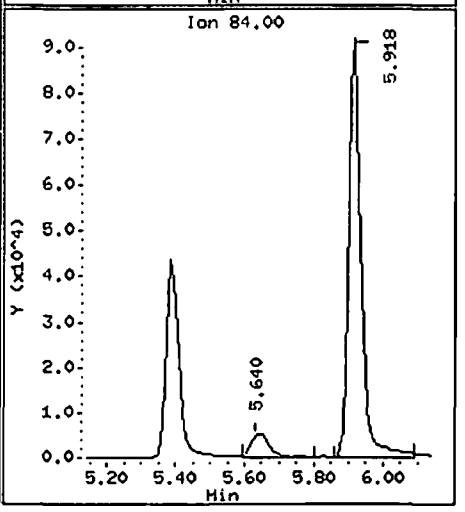












Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D

Date : 10-NOV-2011 07:25

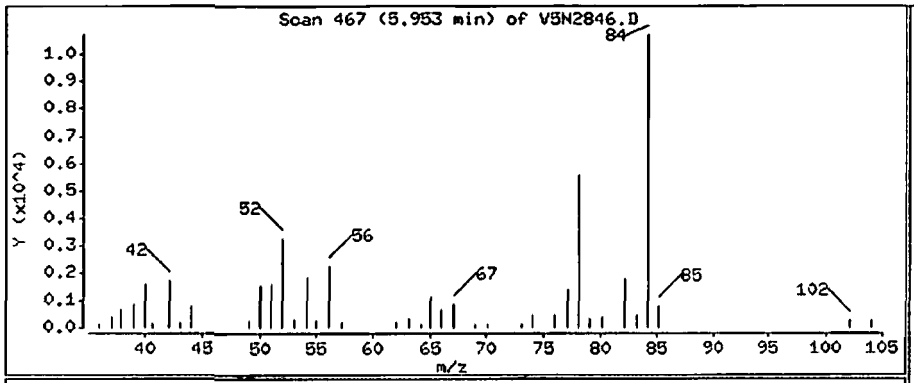
Client ID: H30X4 Instrument: V5.i

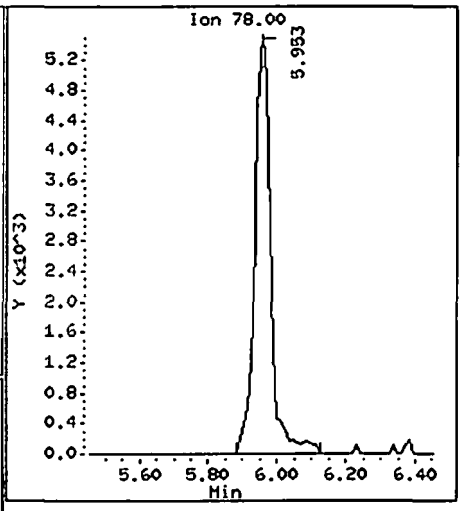
Sample Info: 25ML,K2213-01B,,62892,4

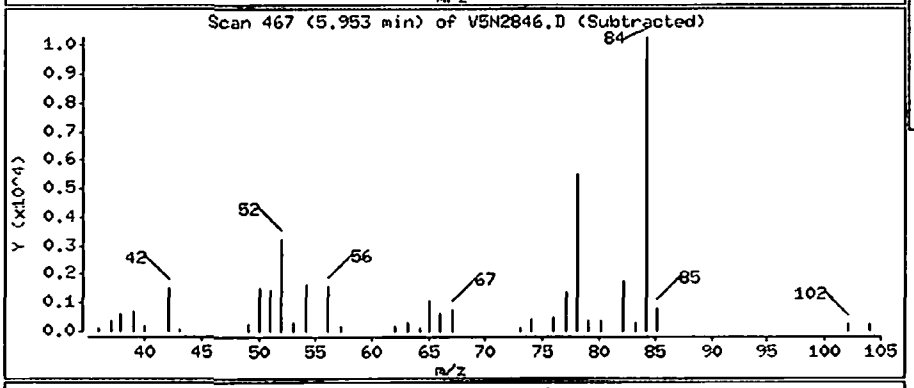
Purge Volume: 25.0 Operator: SRC: LIMS

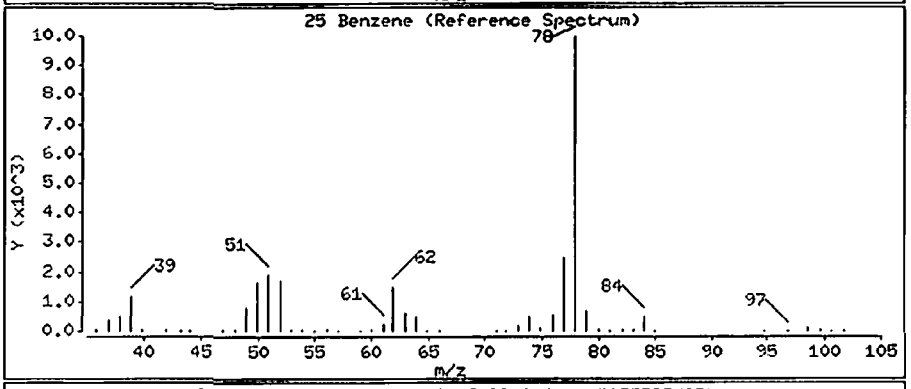
Column phase: DB-624 Column diameter: 0.25

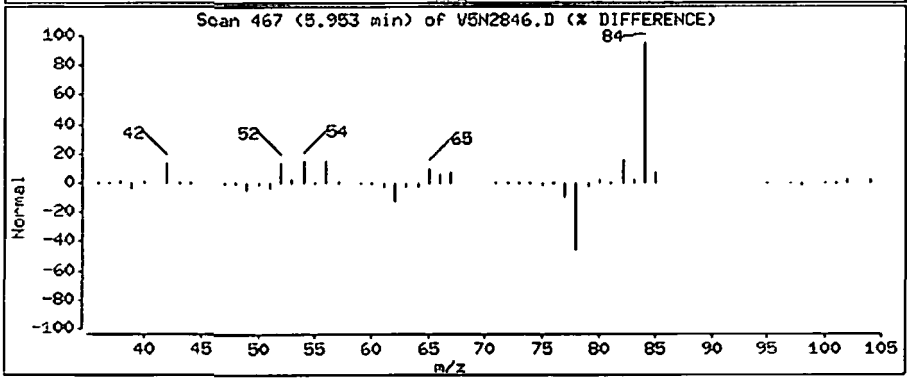
25 Benzene Concentration: 1.3 ug/L











Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D

Date : 10-NOV-2011 07:25

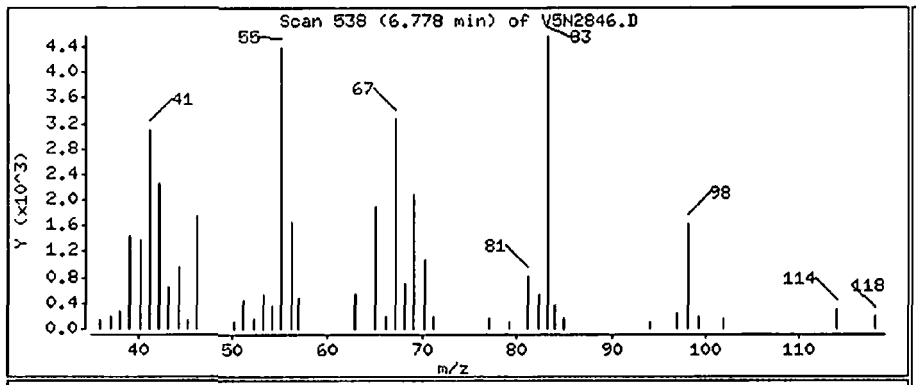
Client ID: H30X4 Instrument: V5.i

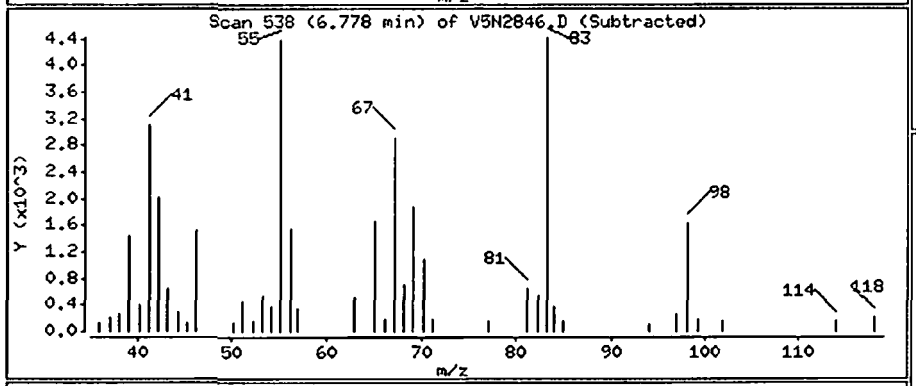
Sample Info: 25ML,K2213-01B,,62892,4

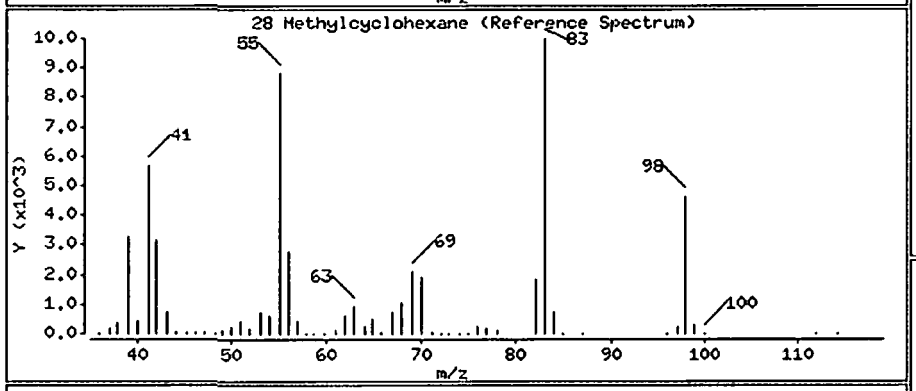
Purge Volume: 25.0 Operator: SRC: LIMS

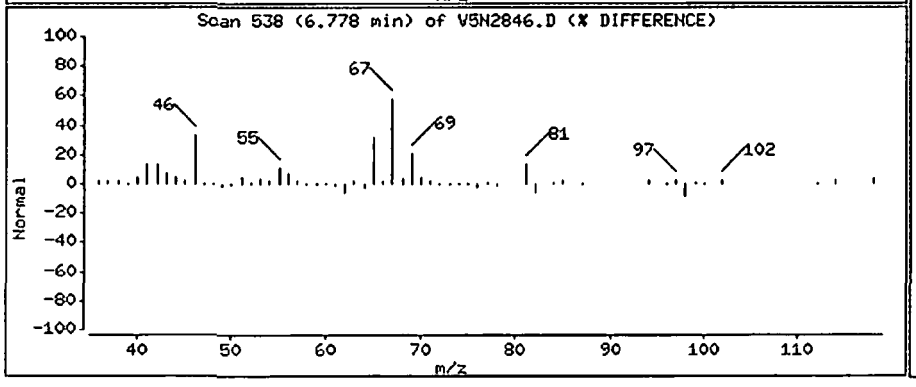
Column phase: DB-624 Column diameter: 0.25

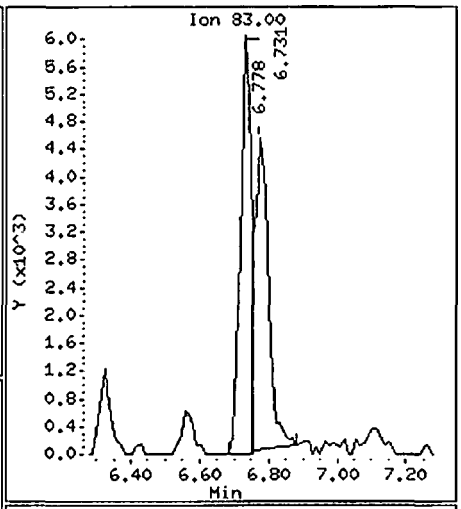
28 Methylcyclohexane Concentration: 2.2 ug/L

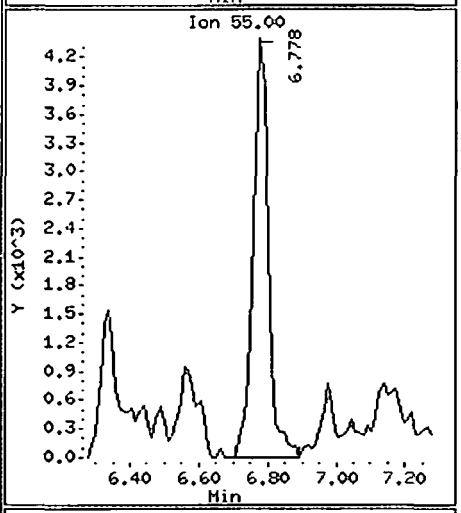


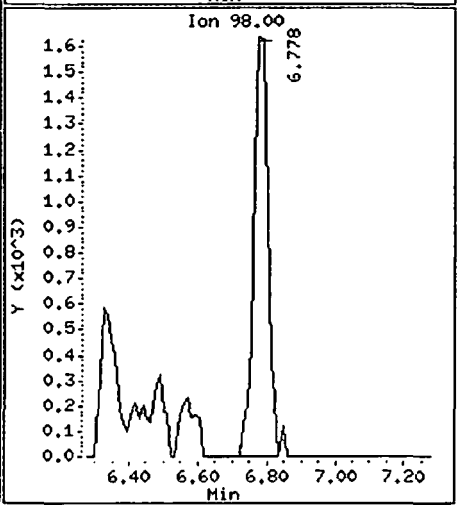












Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D

Date : 10-NOV-2011 07:25

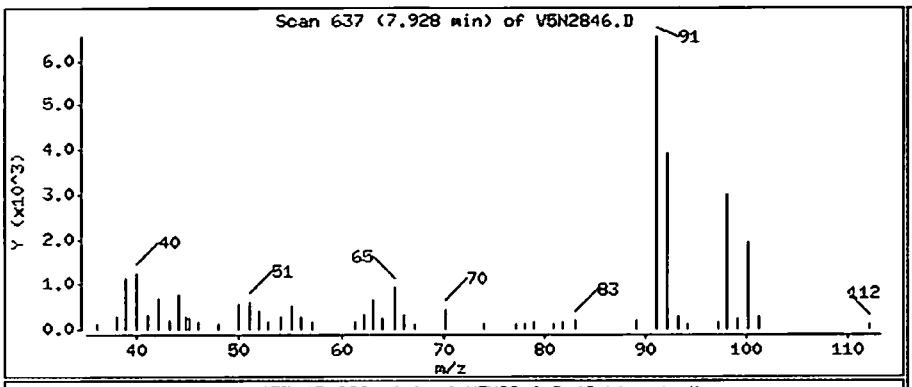
Client ID: H30X4 Instrument: V5.i

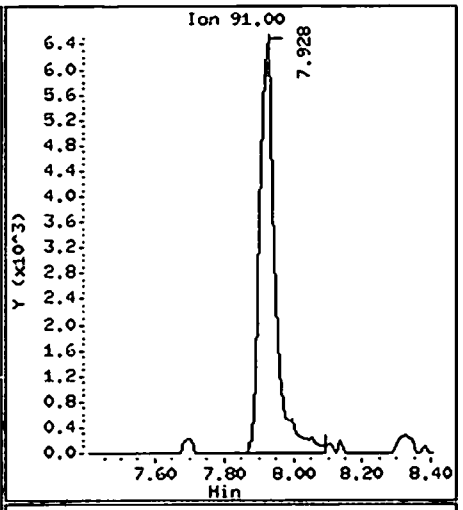
Sample Info: 25HL,K2213-01B,,62892,4

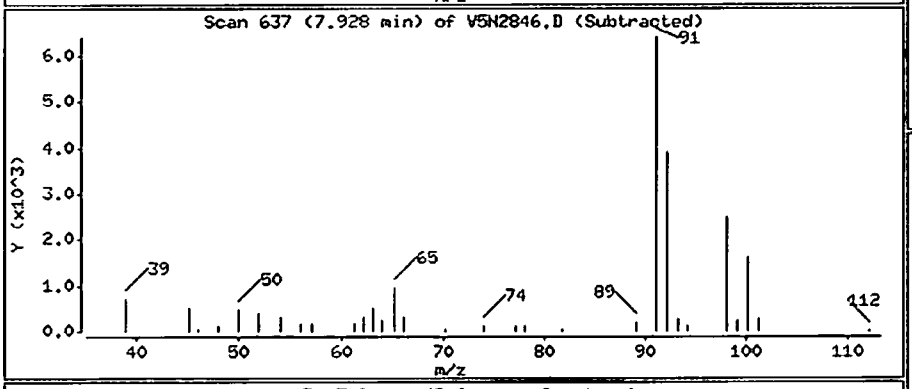
Purge Volume: 25.0 Operator: SRC: LIMS

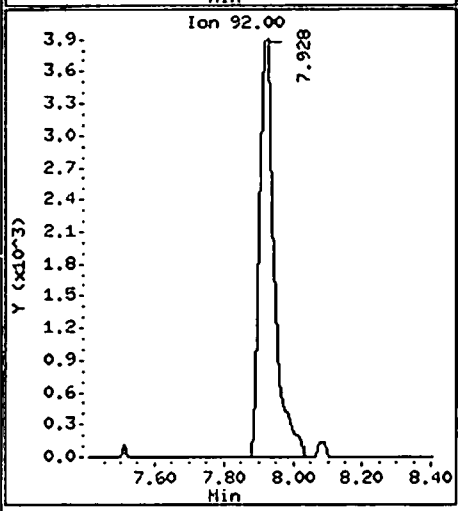
Column phase: DB-624 Column diameter: 0.25

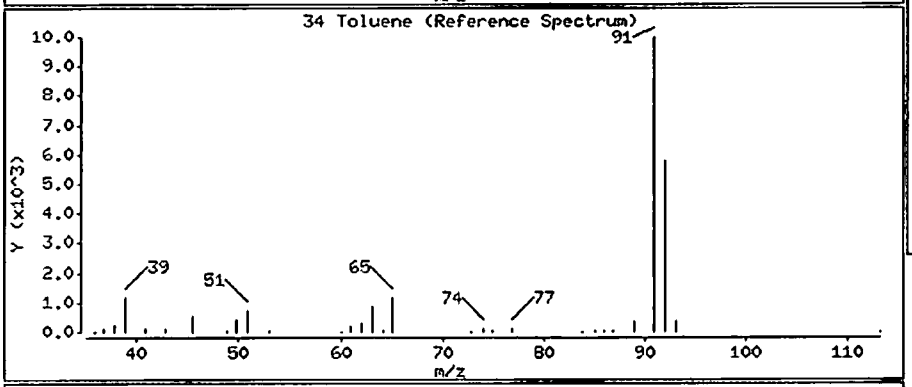
34 Toluene Concentration: 1.4 ug/L

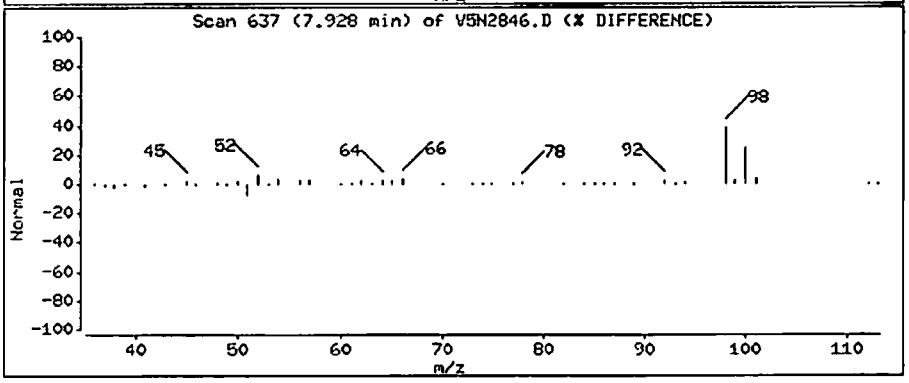












Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D

Date : 10-NOV-2011 07:25

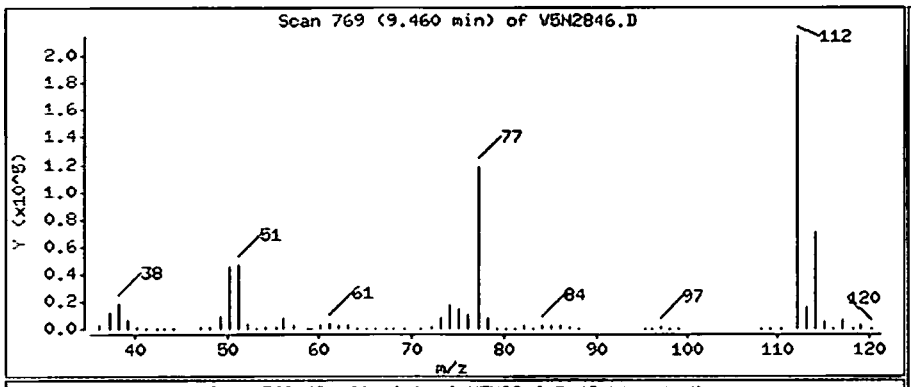
Client ID: H30X4 Instrument: V5.i

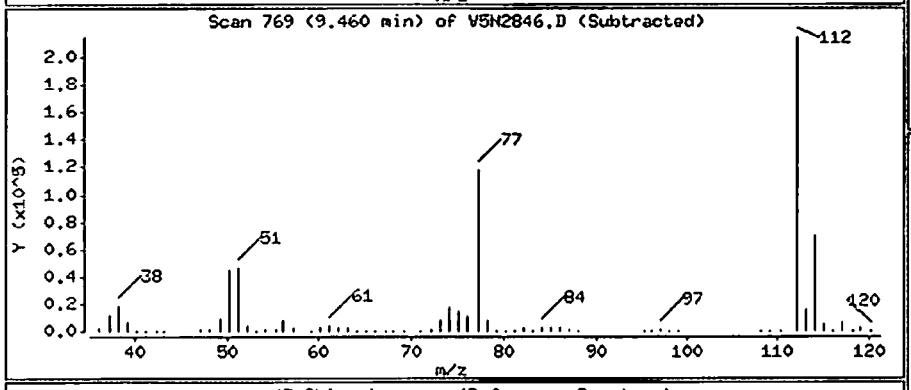
Sample Info: 25ML,K2213-01B,,62892,4

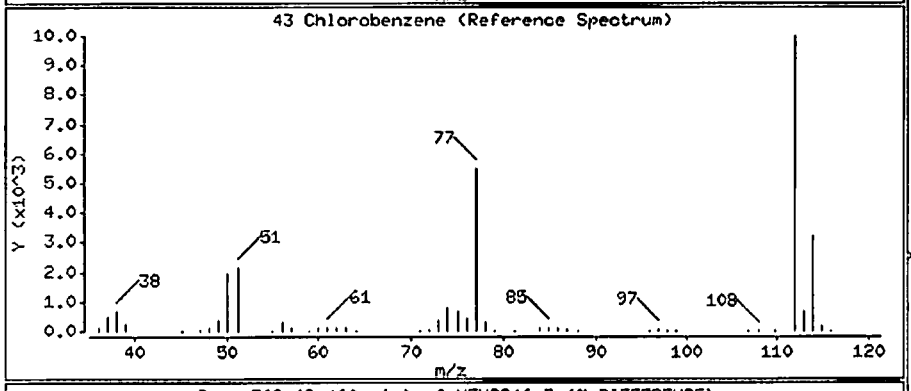
Purge Volume: 25.0 Operator: SRC: LIMS

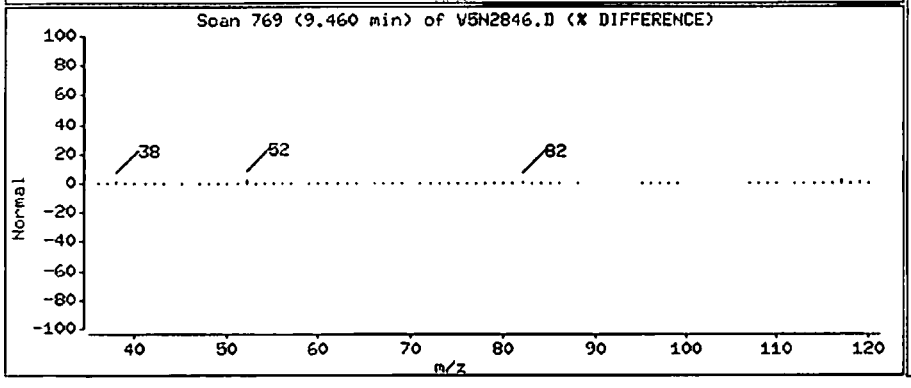
Column phase: DB-624 Column diameter: 0.25

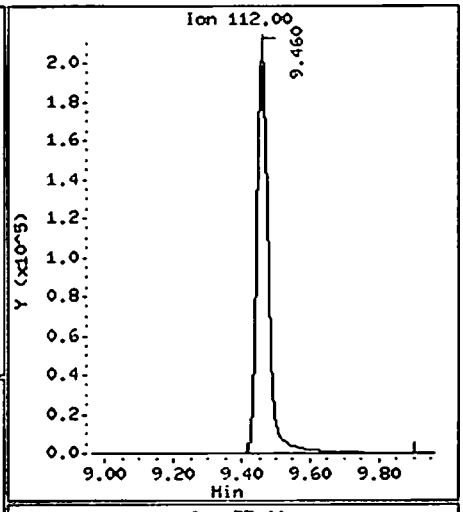
43 Chlorobenzene Concentration: 50 ug/L

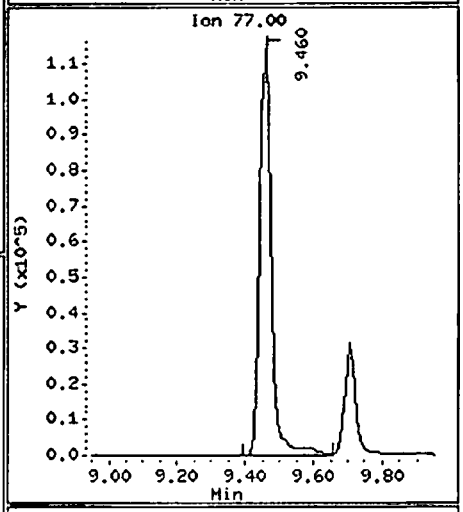


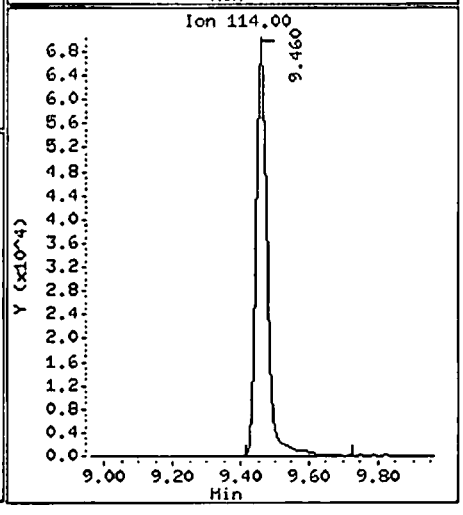












Data File: \\avogadro\organics\V5.i\111110.B\V5N2846.D

Date : 10-NOV-2011 07:25

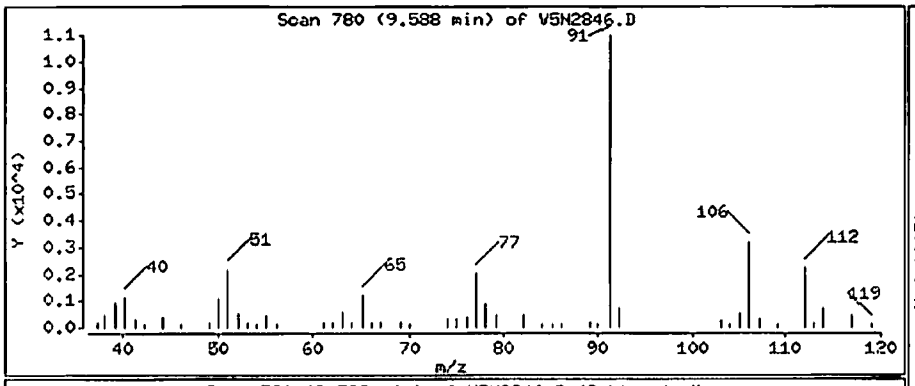
Client ID: H30X4 Instrument: V5.i

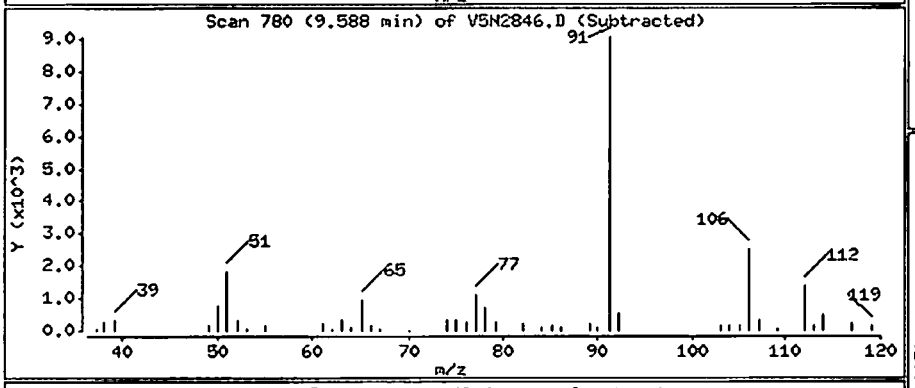
Sample Info: 25ML,K2213-01B,,62892,4

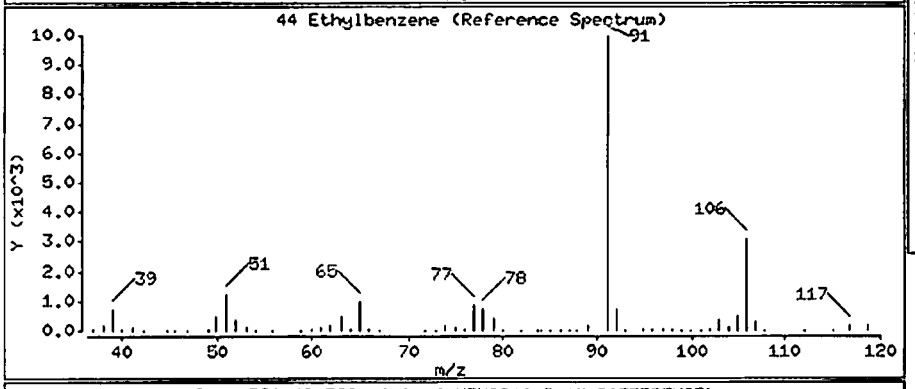
Purge Volume: 25.0 Operator: SRC: LIMS

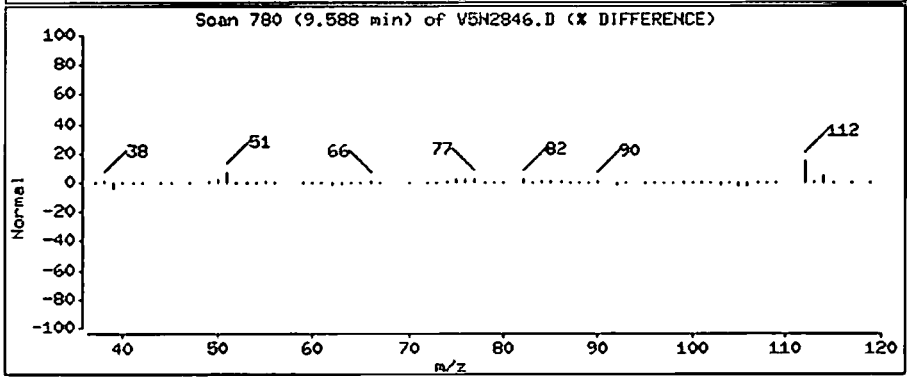
Column phase: DB-624 Column diameter: 0.25

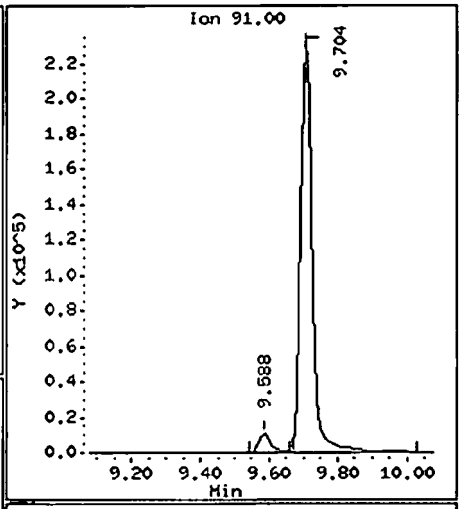
44 Ethylbenzene Concentration: 1.7 ug/L

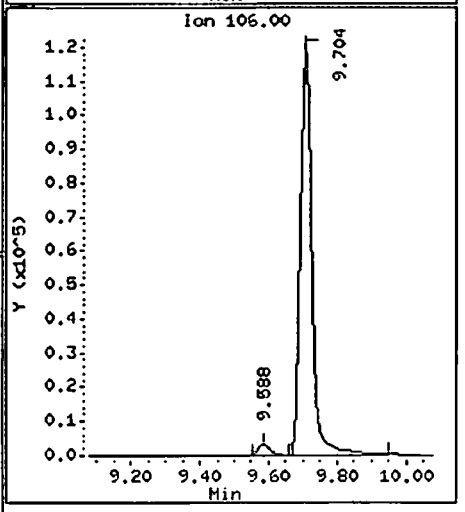












Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D

Date : 10-NOV-2011 07:25

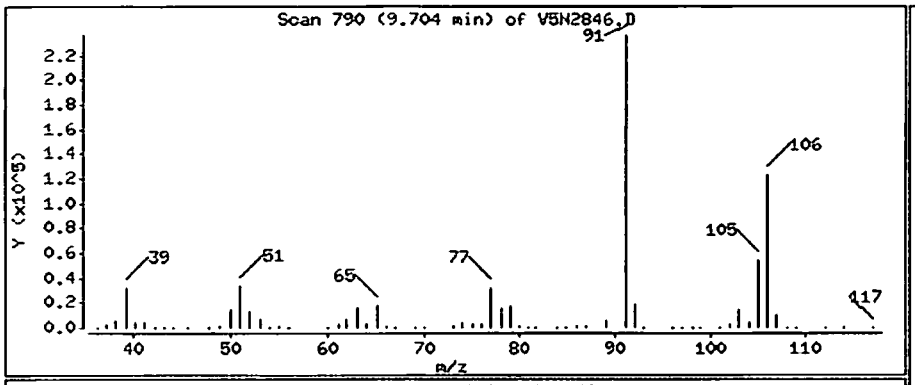
Client ID: H30X4 Instrument: V5.i

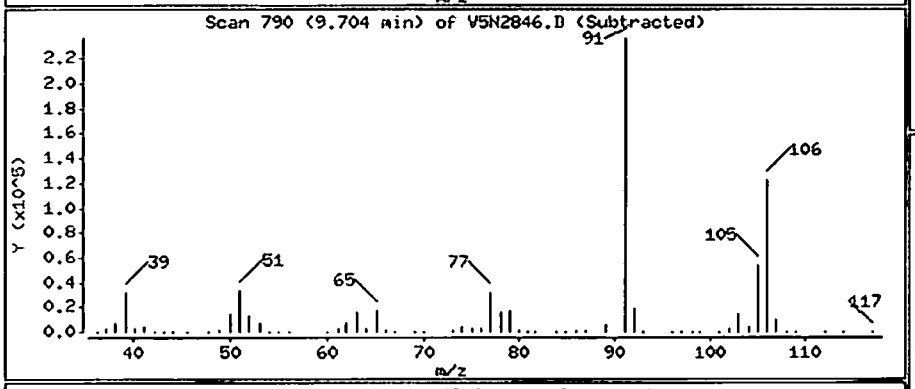
Sample Info: 25ML,K2213-01B,,62892,4

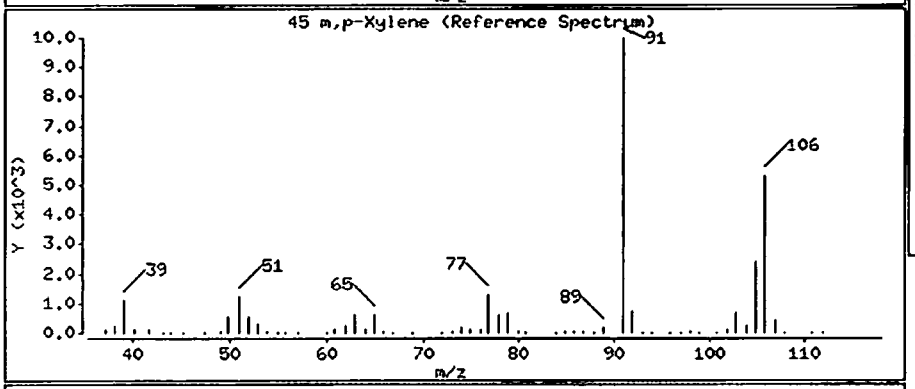
Purge Volume: 25.0 Operator: SRC: LIMS

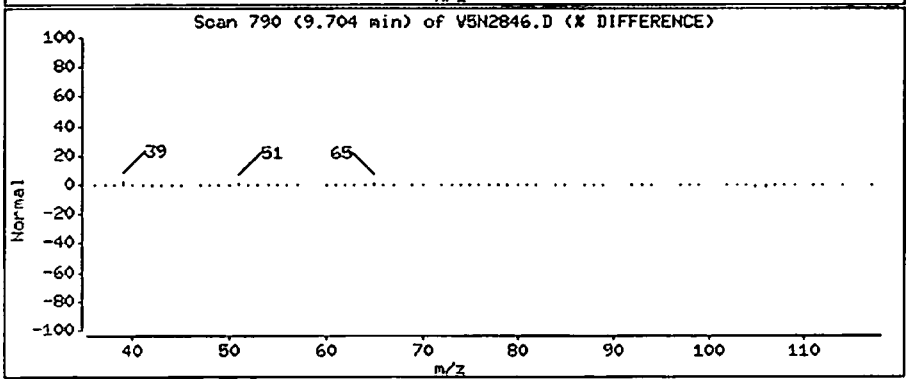
Column phase: DB-624 Column diameter: 0.25

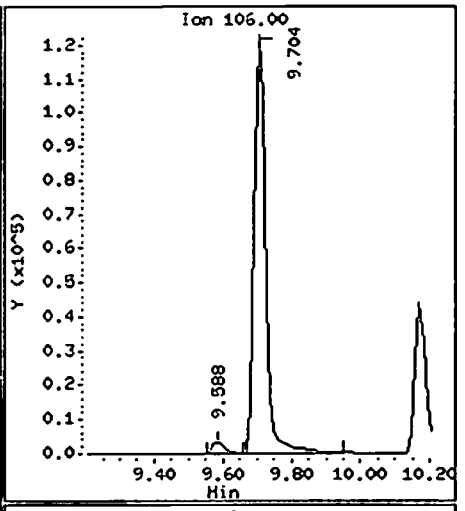
45 m,p-Xylene Concentration: 42 ug/L

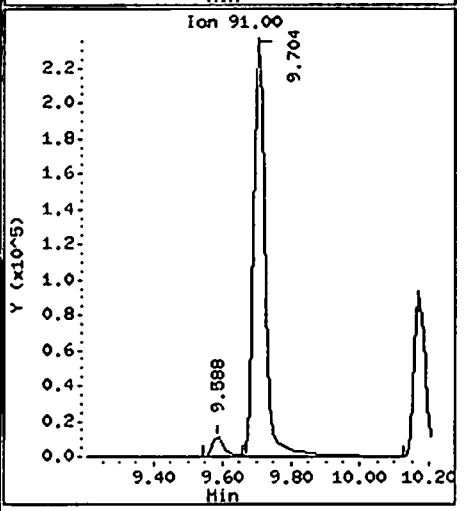












Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D

Date : 10-NOV-2011 07:25

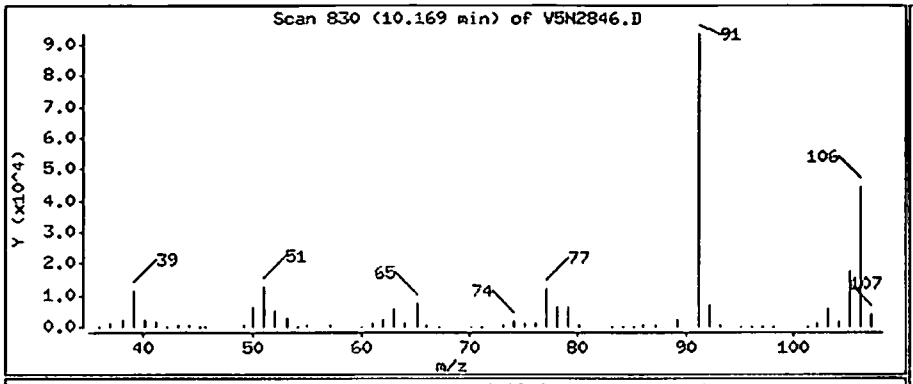
Client ID: H30X4 Instrument: V5.i

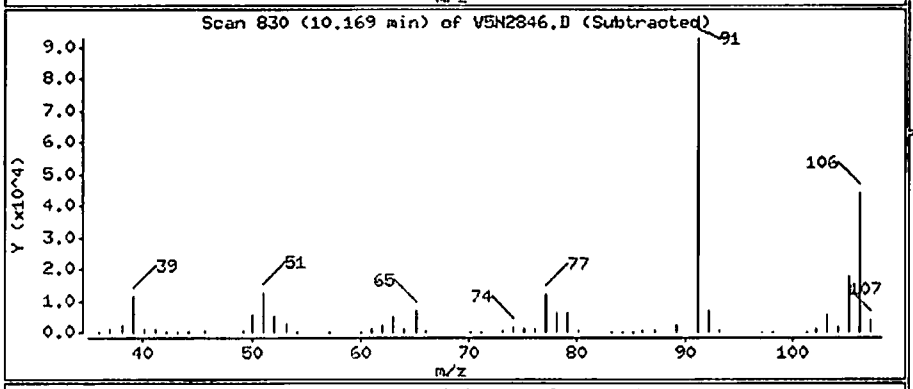
Sample Info: 25ML,K2213-01B,,62892,4

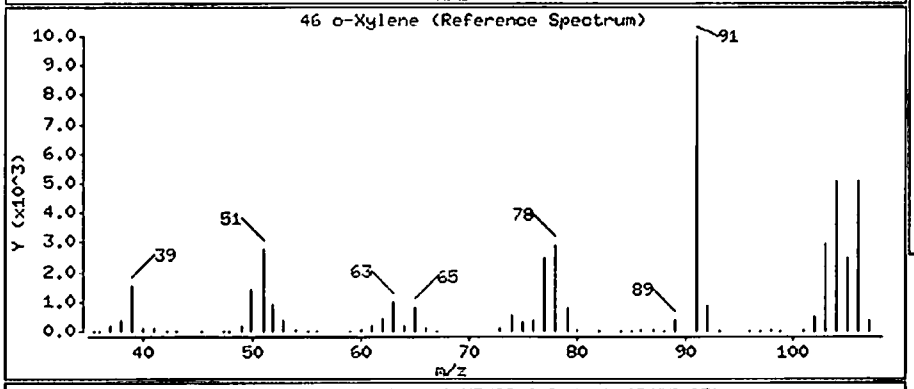
Purge Volume: 25.0 Operator: SRC: LIMS

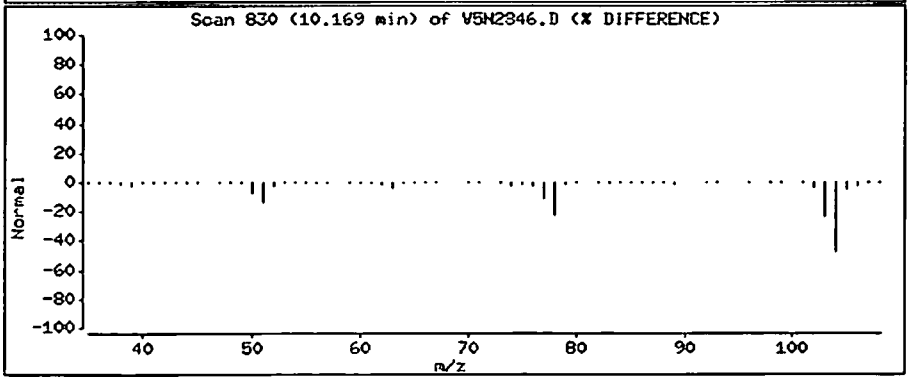
Column phase: DB-624 Column diameter: 0.25

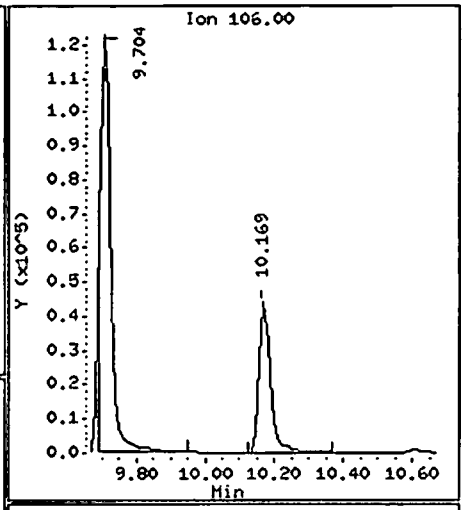
46 o-Xylene Concentration: 16 ug/L

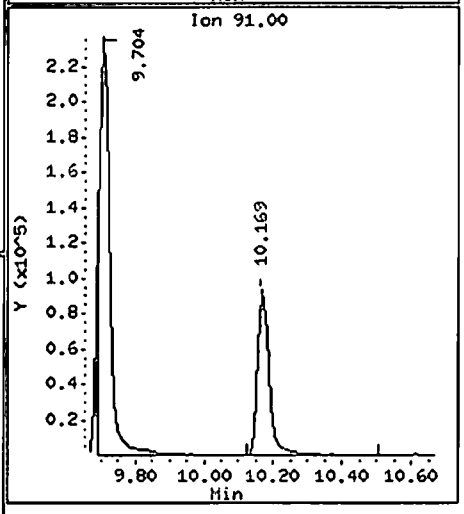












Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D

Date : 10-NOV-2011 07:25

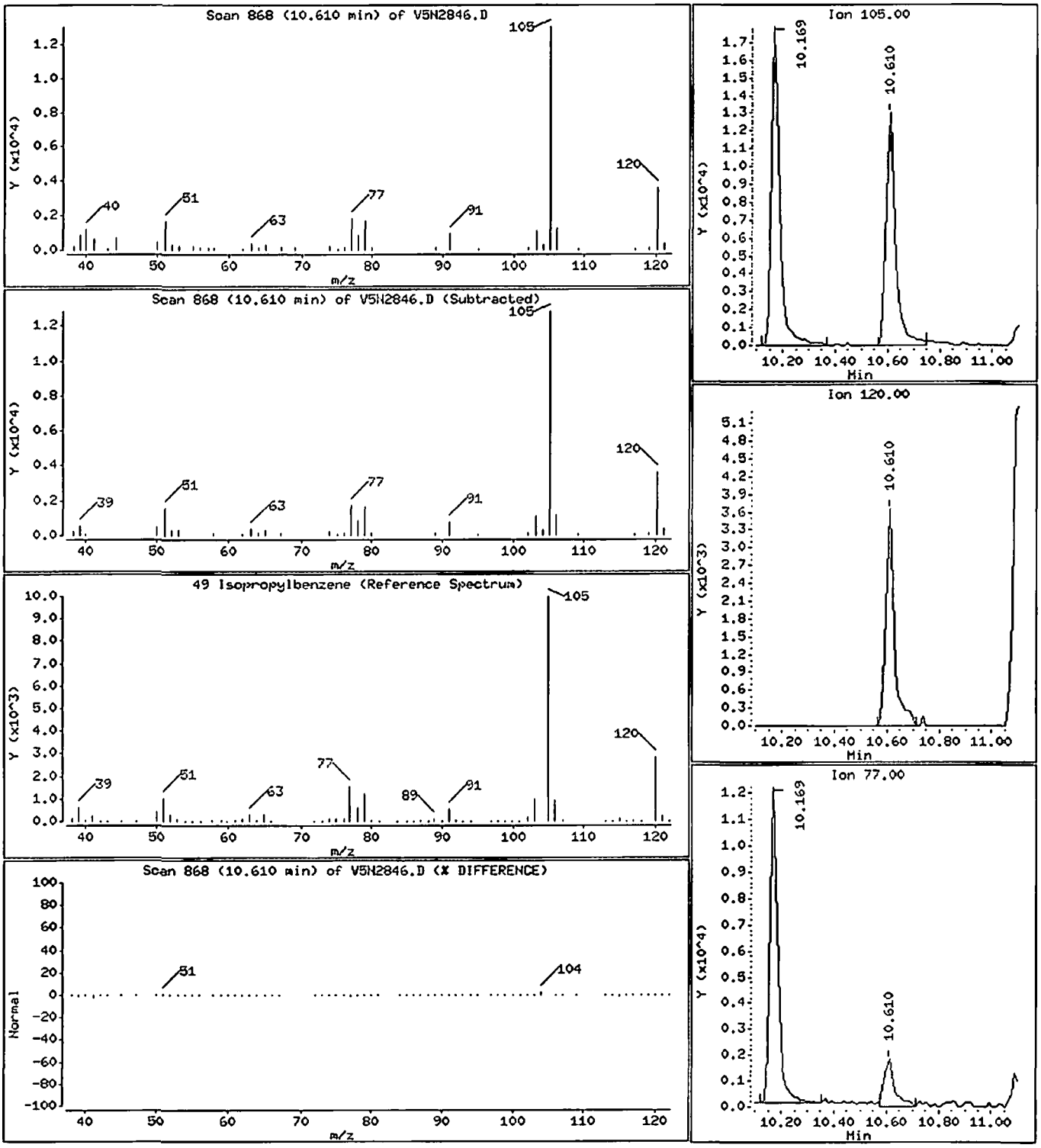
Client ID: H30X4 Instrument: V5.i

Sample Info: 25ML,K2213-01B,,62892,4

Purge Volume: 25.0 Operator: SRC: LIMS

Column phase: DB-624 *Column diameter:* 0.25

49 Isopropylbenzene Concentration: 2.0 ug/L



Data File: \\avogadro\organics\V5.i\111110.B\V5N2846.D

Date : 10-NOV-2011 07:25

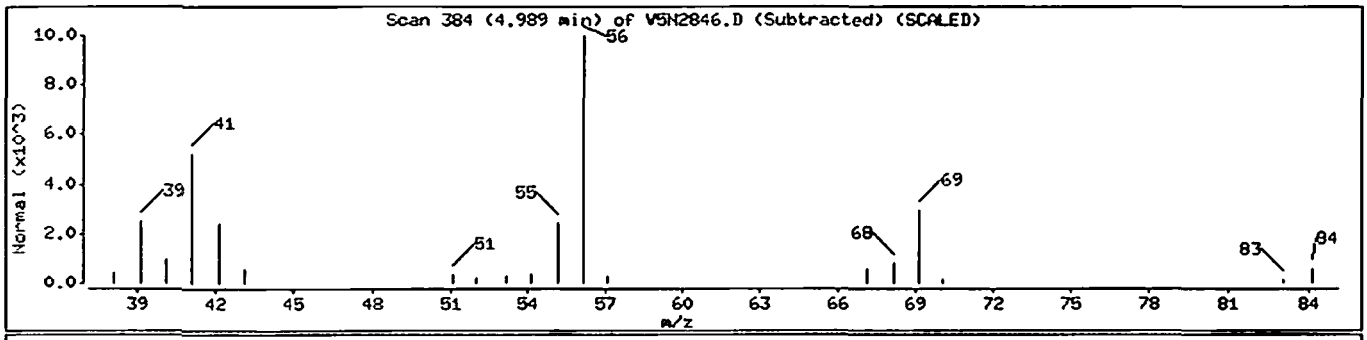
Client ID: H30X4 Instrument: V5.i

Sample Info: 25ML,K2213-01B,,62892,4

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



Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D

Date : 10-NOV-2011 07:25

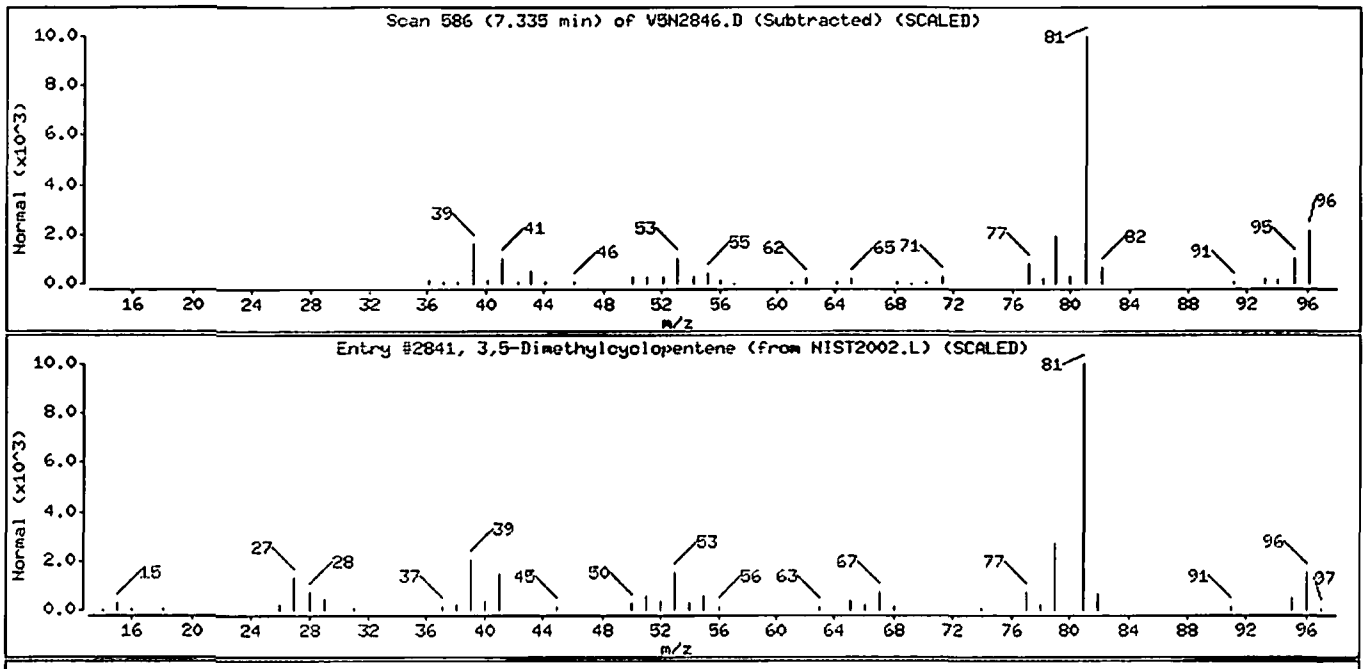
Client ID: H30X4 Instrument: V5.i

Sample Info: 25ML,K2213-01B,,62892,4

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
3,5-Dimethylcyclopentene	7459-71-4	NIST2002.L	2841	90	C7H12	96



Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D

Date : 10-NOV-2011 07:25

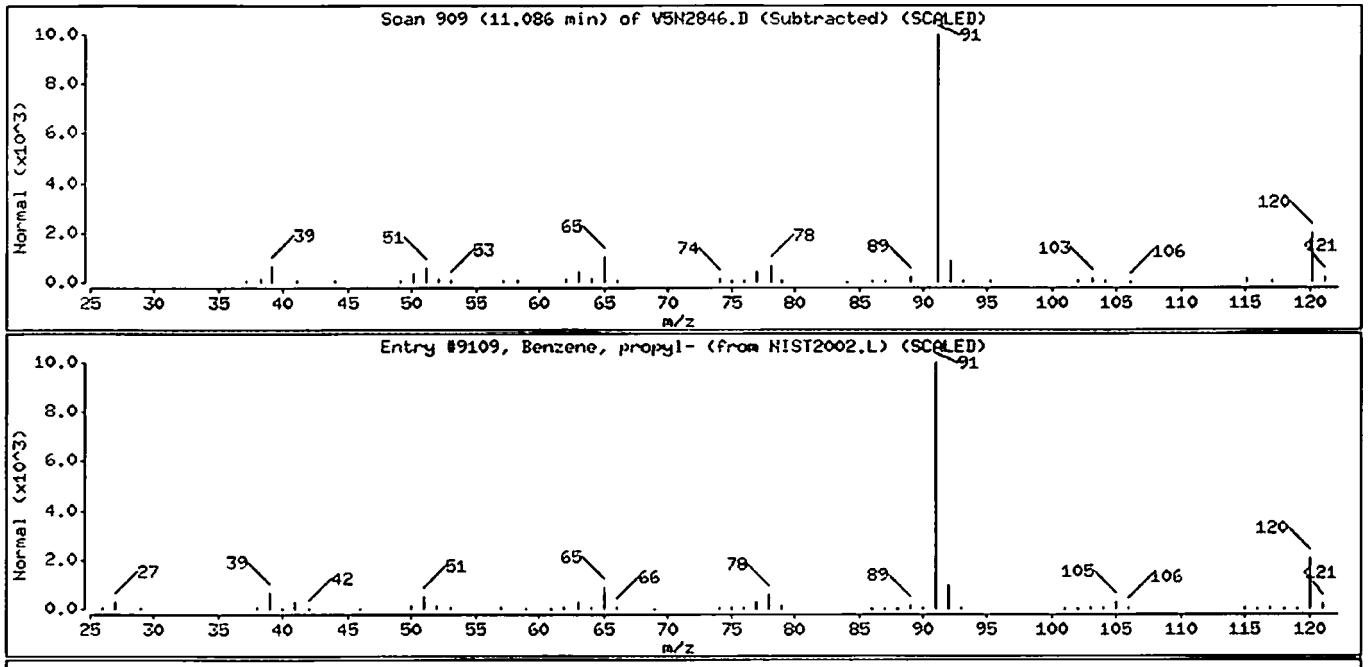
Client ID: H30X4 Instrument: V5.i

Sample Info: 25ML,K2213-01B,,62892,4

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
Benzene, propyl-	103-65-1	NIST2002.L	9109	90	C9H12	120



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Date : 10-NOV-2011 07:25

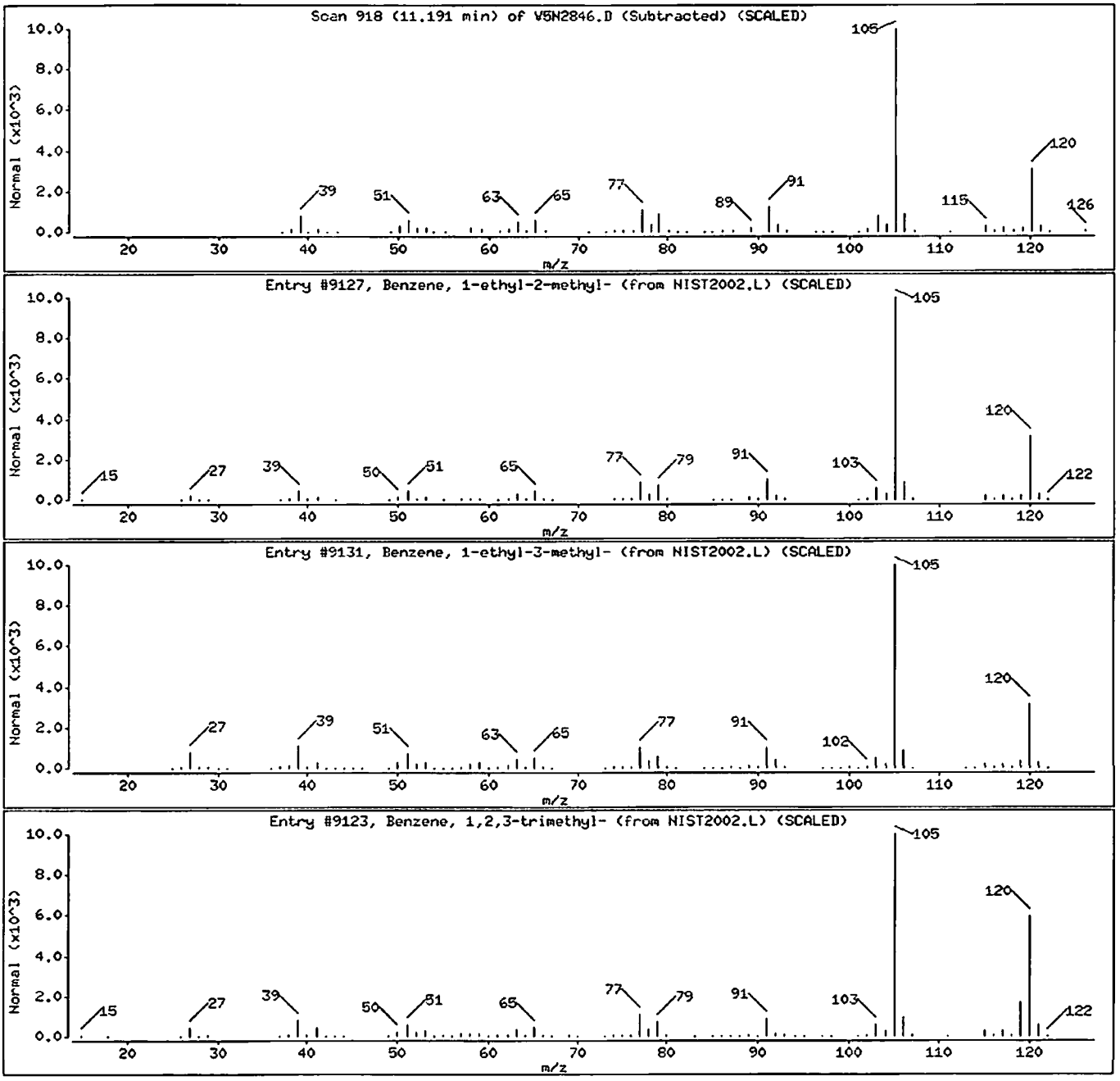
Client ID: H30X4 Instrument: V5.i

Sample Info: 25ML,K2213-01B,,62892,4

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
Benzene, 1-ethyl-2-methyl-	611-14-3	NIST2002.L	9127	95	C9H12	120
Benzene, 1-ethyl-3-methyl-	620-14-4	NIST2002.L	9131	94	C9H12	120
Benzene, 1,2,3-trimethyl-	526-73-8	NIST2002.L	9123	91	C9H12	120



Data File: \\avogadro\organics\V5.i\111110.B\V5N2846.D

Date : 10-NOV-2011 07:25

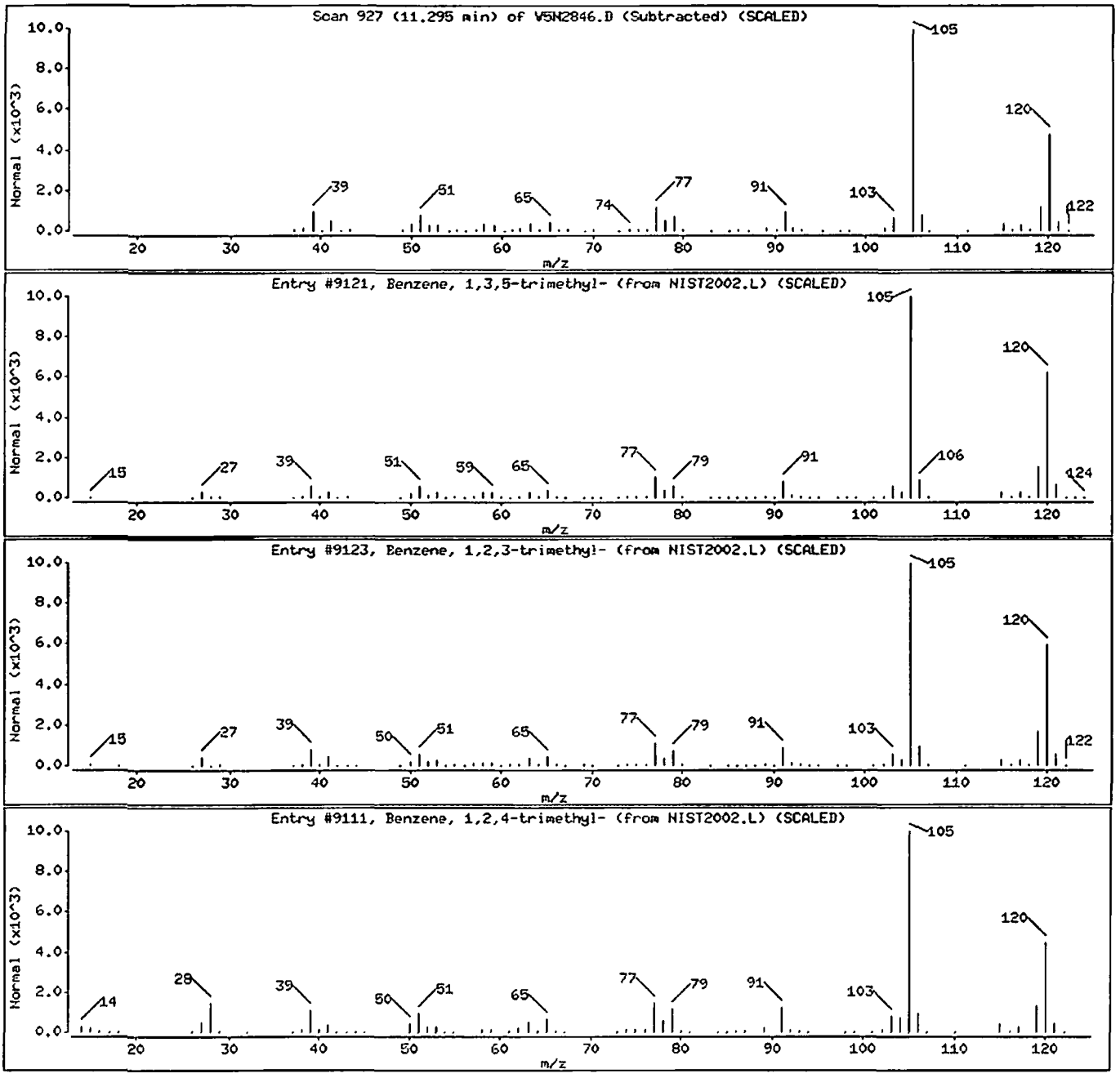
Client ID: H30X4 Instrument: V5.i

Sample Info: 25ML,K2213-01B,,62892,4

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
Benzene, 1,3,5-trimethyl-	108-67-8	NIST2002.L	9121	95	C9H12	120
Benzene, 1,2,3-trimethyl-	526-73-8	NIST2002.L	9123	95	C9H12	120
Benzene, 1,2,4-trimethyl-	95-63-6	NIST2002.L	9111	94	C9H12	120



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Date : 10-NOV-2011 07:25

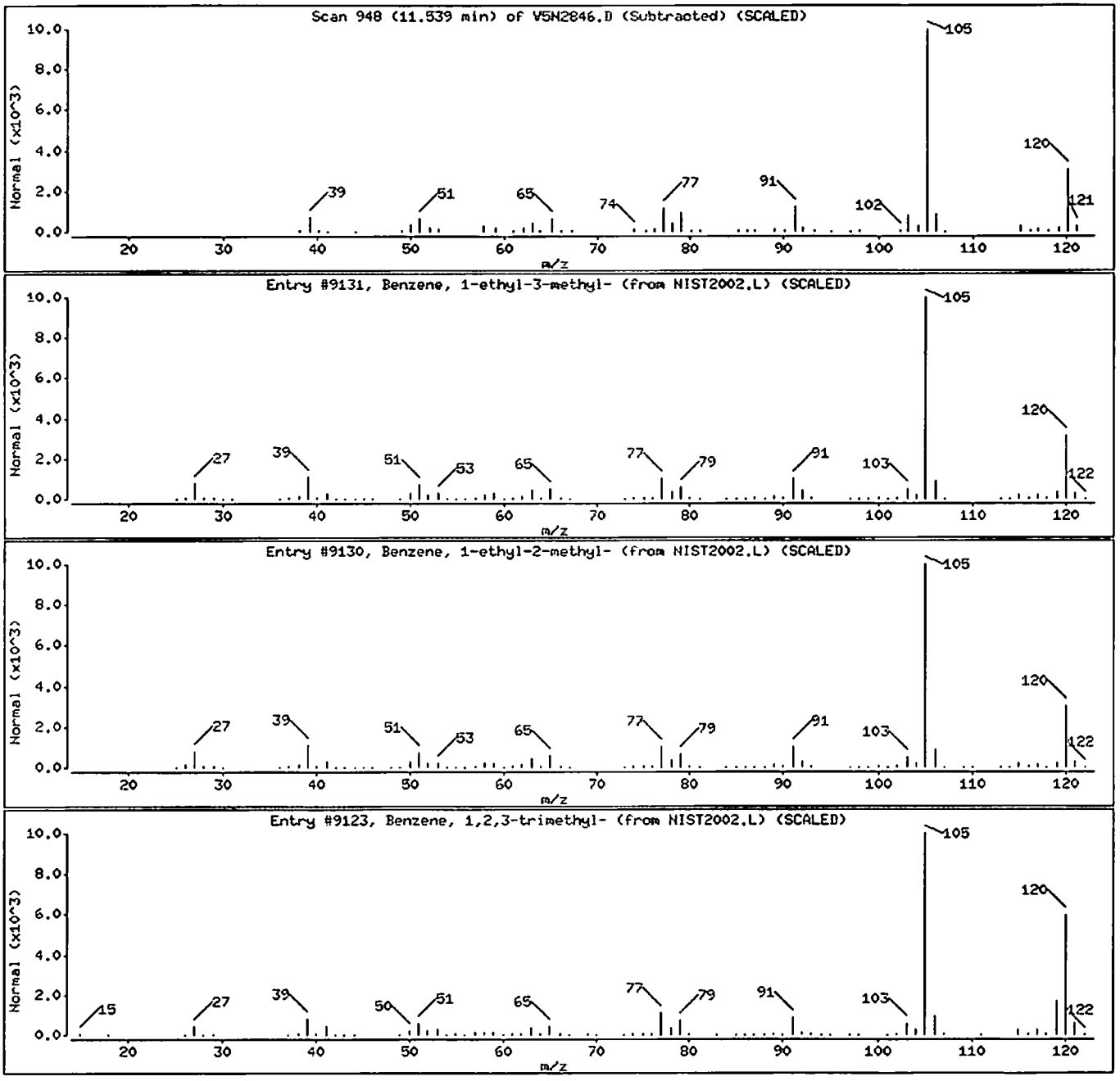
Client ID: H30X4 Instrument: V5.i

Sample Info: 25ML,K2213-01B,,62892,4

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
Benzene, 1-ethyl-3-methyl-	620-14-4	NIST2002.L	9131	91	C9H12	120
Benzene, 1-ethyl-2-methyl-	611-14-3	NIST2002.L	9130	95	C9H12	120
Benzene, 1,2,3-trimethyl-	526-73-8	NIST2002.L	9123	91	C9H12	120



Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D

Date : 10-NOV-2011 07:25

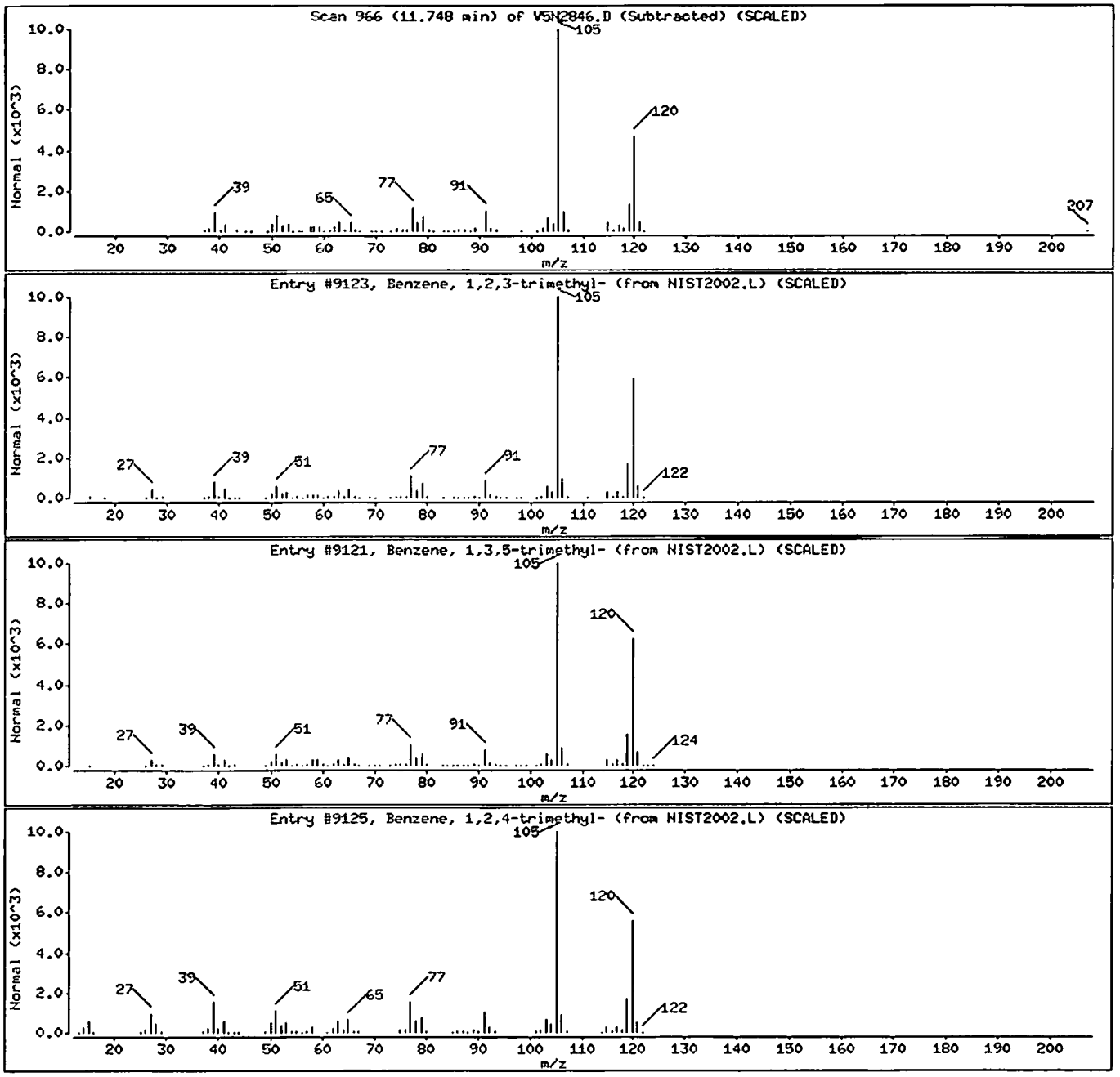
Client ID: H30X4 Instrument: V5.i

Sample Info: 25ML,K2213-01B,,62892,4

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
Benzene, 1,2,3-trimethyl-	526-73-8	NIST2002.L	9123	97	C9H12	120
Benzene, 1,3,5-trimethyl-	108-67-8	NIST2002.L	9121	97	C9H12	120
Benzene, 1,2,4-trimethyl-	95-63-6	NIST2002.L	9125	95	C9H12	120



Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D

Date : 10-NOV-2011 07:25

Client ID: H30X4 Instrument: V5.i

Sample Info: 25ML,K2213-01B,,62892,4

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
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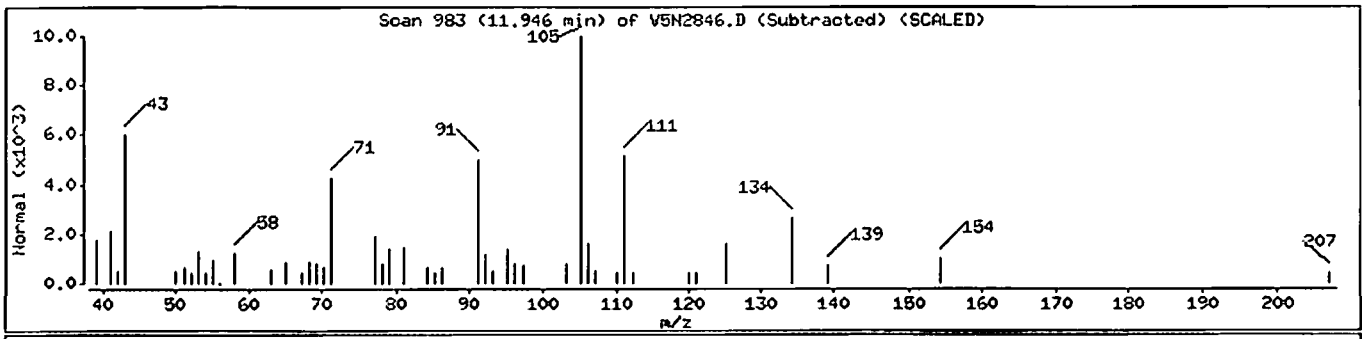

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Date : 10-NOV-2011 07:25

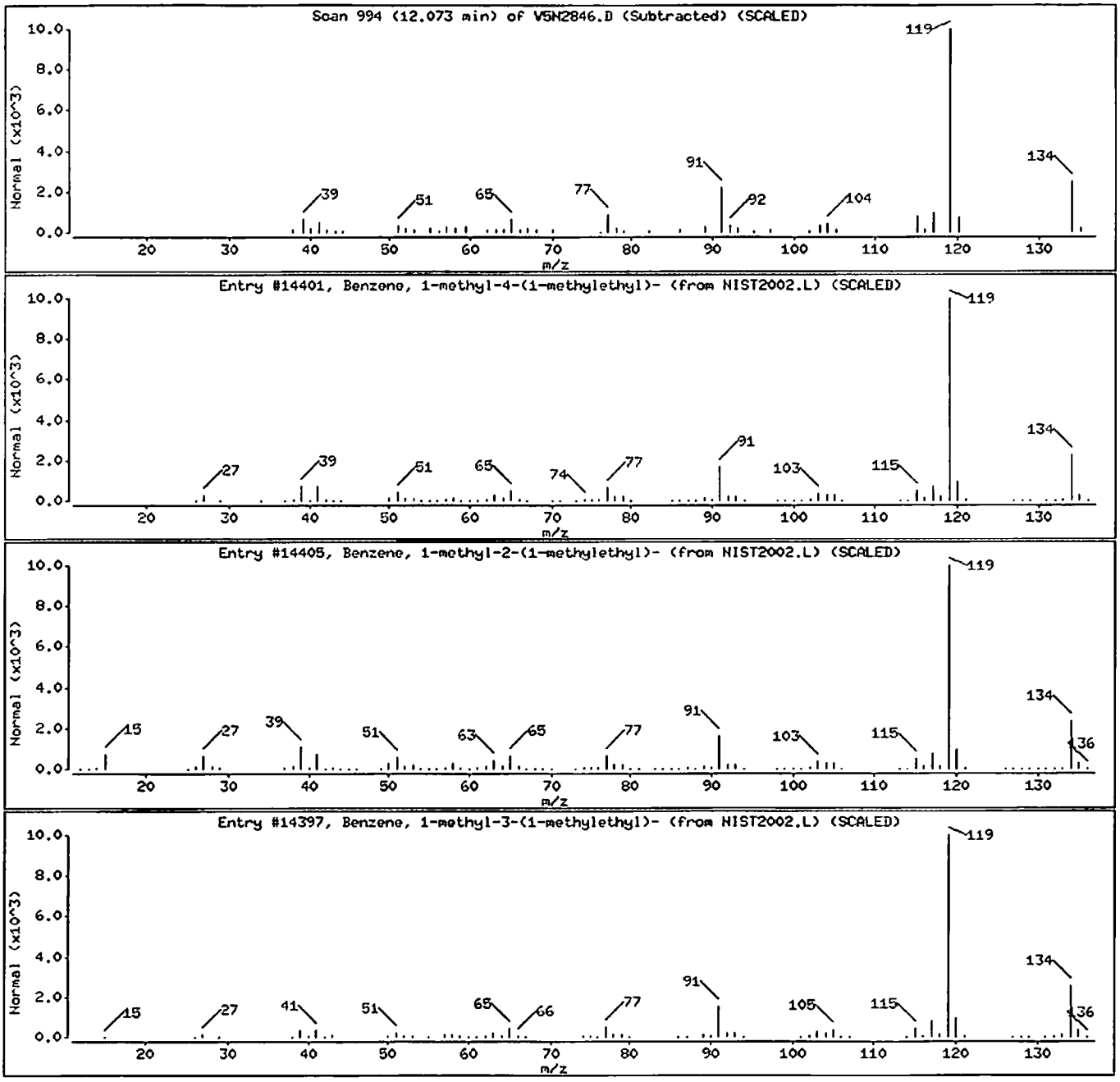
Client ID: H30X4 Instrument: V5.i

Sample Info: 25ML,K2213-01B,,62892,4

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
Benzene, 1-methyl-4-(1-methylethyl)-	99-87-6	NIST2002.L	14401	94	C10H14	134
Benzene, 1-methyl-2-(1-methylethyl)-	527-84-4	NIST2002.L	14405	94	C10H14	134
Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	NIST2002.L	14397	91	C10H14	134



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Date : 10-NOV-2011 07:25

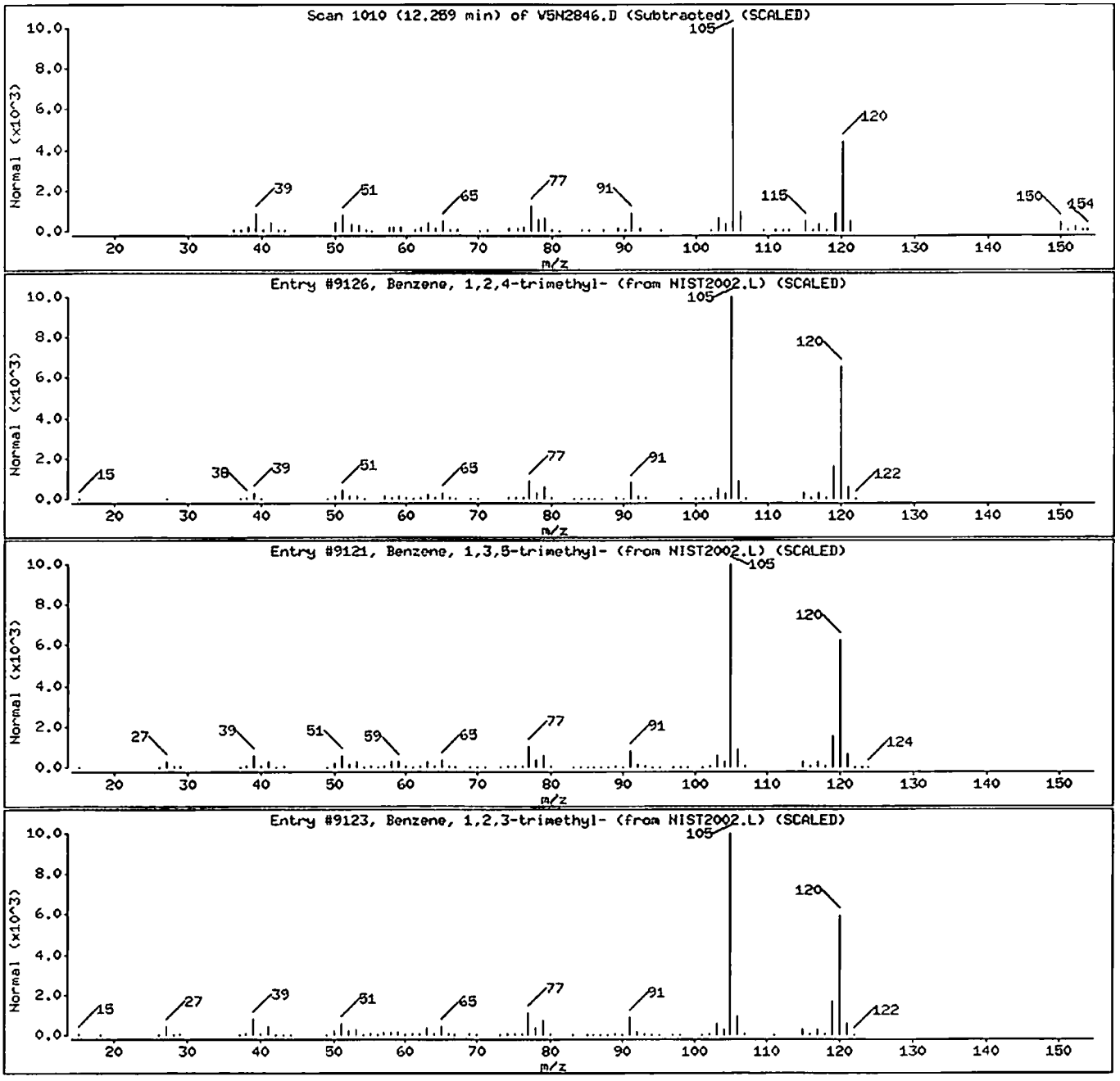
Client ID: H30X4 Instrument: V5.i

Sample Info: 25ML,K2213-01B,,62892,4

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
Benzene, 1,2,4-trimethyl-	95-63-6	NIST2002.L	9126	95	C9H12	120
Benzene, 1,3,5-trimethyl-	108-67-8	NIST2002.L	9121	95	C9H12	120
Benzene, 1,2,3-trimethyl-	526-73-8	NIST2002.L	9123	95	C9H12	120



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Date : 10-NOV-2011 07:25

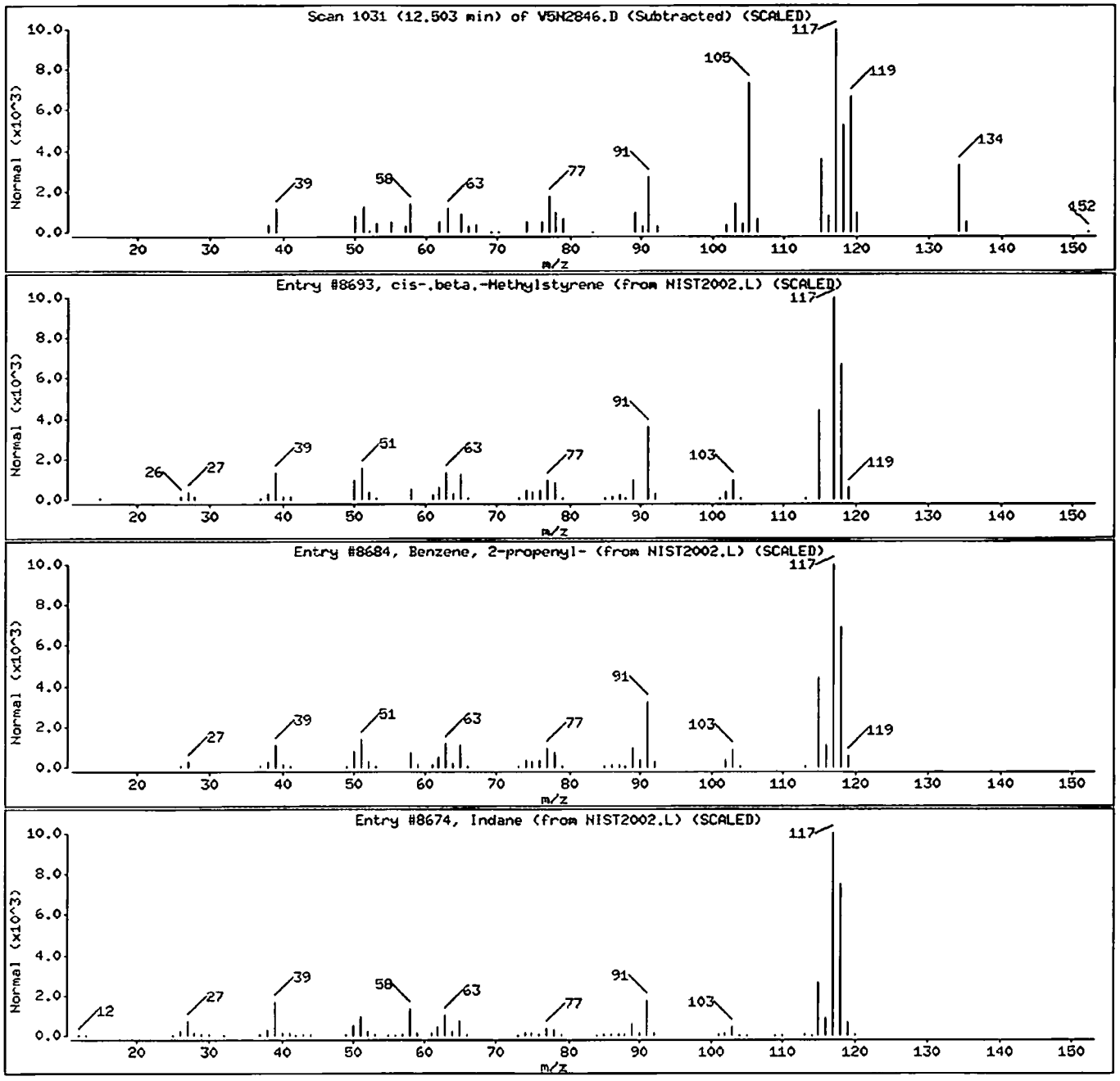
Client ID: H30X4 Instrument: V5.i

Sample Info: 25ML,K2213-01B,,62892,4

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
cis-.beta.-Methylstyrene	766-90-5	NIST2002.L	8693	91	C9H10	118
Benzene, 2-propenyl-	300-57-2	NIST2002.L	8684	90	C9H10	118
Indane	496-11-7	NIST2002.L	8674	87	C9H10	118



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Date : 10-NOV-2011 07:25

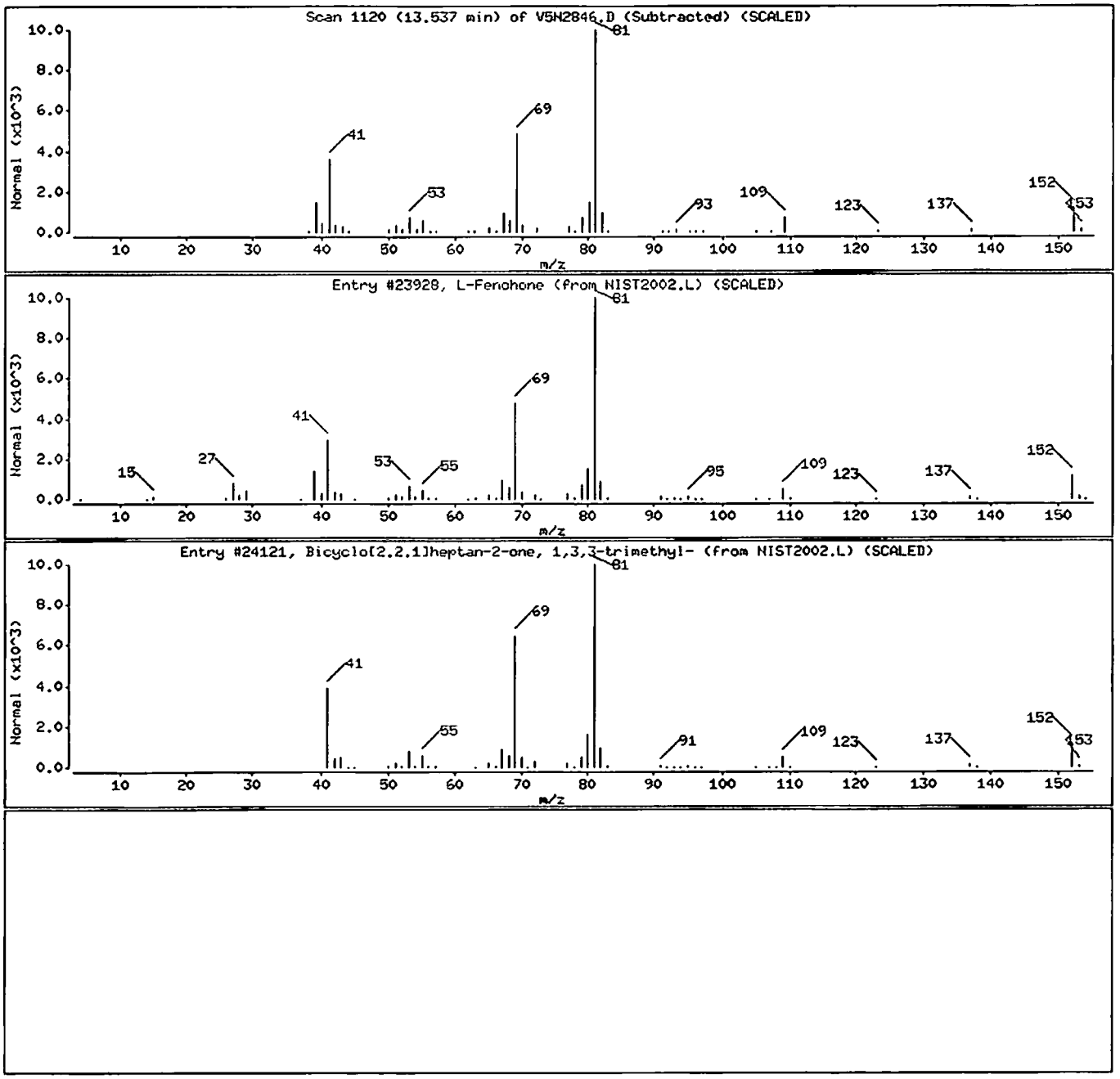
Client ID: H30X4 Instrument: V5.i

Sample Info: 25ML,K2213-01B,,62892,4

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
L-Fenchone	126-21-6	NIST2002.L	23928	95	C10H16O	152
Bicyclo[2.2.1]heptan-2-one, 1,3,3-trimet	1195-79-5	NIST2002.L	24121	95	C10H16O	152



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Date : 10-NOV-2011 07:25

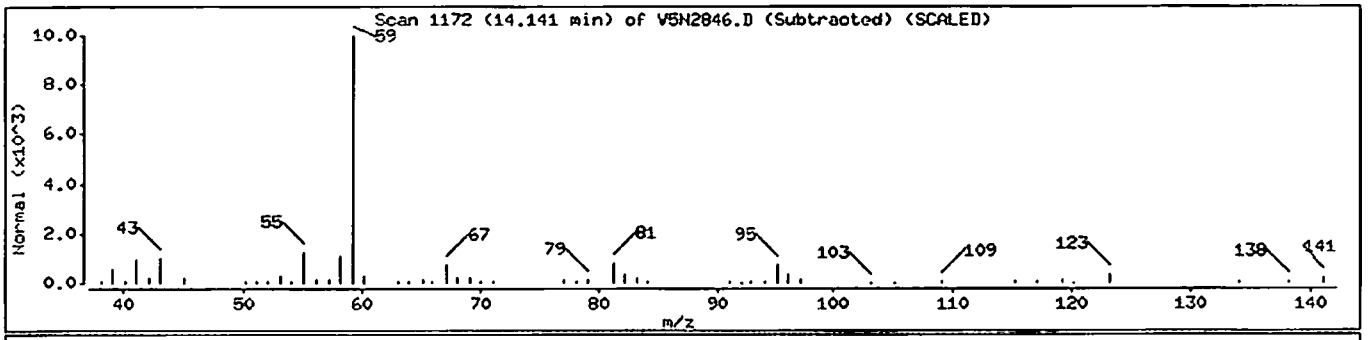
Client ID: H30X4 Instrument: V5.i

Sample Info: 25ML,K2213-01B,,62892,4

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



Data File: \\avogadro\organics\V5.i\111110.B\V5N2846.D

Date : 10-NOV-2011 07:25

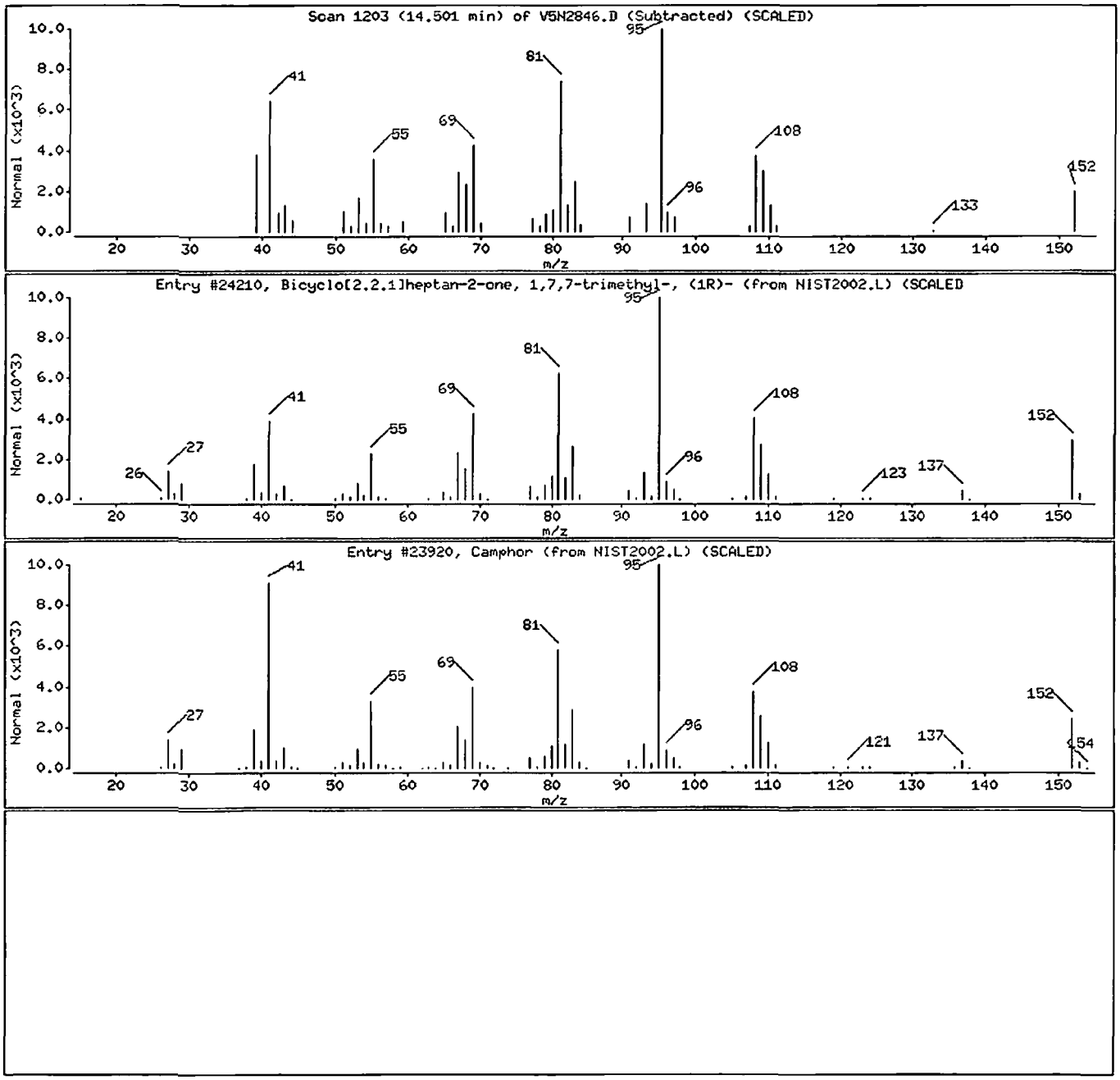
Client ID: H30X4 Instrument: V5.i

Sample Info: 25ML,K2213-01B,,62892,4

Purge Volume: 25.0 Operator: SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Hatch	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet	464-49-3	NIST2002.L	24210	97	C10H16O	152
Camphor	76-22-2	NIST2002.L	23920	96	C10H16O	152



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.: H30X6

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

Lab Code: MITKEM | Case No.: 41926 | Mod. Ref No.: | SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER | Lab Sample ID: K2213-06B

Sample wt/vol: 25.0 (g/mL) ML | Lab File ID: V5N2854.D

Level: (TRACE/LOW/MED) TRACE | Date Received: 11/03/2011

% Moisture: not dec. | Date Analyzed: 11/10/2011

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	0.44	J
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.

H30X6

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-06B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2854.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30X6

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-06B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2854.D

Level: (TRACE or LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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	14.145	1.1	J
02	464-48-2	Bicyclo[2.2.1]heptan-2-one,	14.493	1.6	NJ
	E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111110.B\V5N2854.D
Report Date: 15-Nov-2011 09:35

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2854.D
Lab Smp Id: K2213-06B Client Smp ID: H30X6
Inj Date : 10-NOV-2011 11:14
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-06B,,62892
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 35
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	2.218	2.216	(0.351)	136009	6.38361	6.4
s 80 Chloroethane-d5	69	2.612	2.600	(0.414)	91982	6.35871	6.4
s 81 1,1-Dichloroethene-d2	65	3.379	3.378	(0.535)	27680	5.01652	5.0(Q)
10 Carbon Disulfide	76	3.623	3.622	(0.574)	27849	0.43811	0.44
s 82 2-Butanone-d5	46	5.074	5.062	(0.803)	141262	55.2765	55(AQ)
s 83 Chloroform-d	84	5.388	5.387	(0.853)	122964	4.81936	4.8(Q)
s 23 1,2-Dichloroethane-d4	65	5.899	5.898	(0.934)	47564	4.74021	4.7(Q)
s 84 Benzene-d6	84	5.910	5.909	(0.627)	237895	4.50206	4.5
* 26 1,4-Difluorobenzene	114	6.317	6.327	(1.000)	234199	5.00000	
s 85 1,2-Dichloropropane-d6	67	6.735	6.734	(0.714)	82374	4.49114	4.5
s 33 Toluene-d8	98	7.838	7.837	(0.831)	214902	4.53187	4.5
s 86 trans-1,3-Dichloropropene-d4	79	8.117	8.116	(0.861)	56963	5.42005	5.4
s 87 2-Hexanone-d5	63	8.570	8.569	(0.909)	102740	56.4447	56(AQ)
* 42 Chlorobenzene-d5	117	9.429	9.428	(1.000)	180150	5.00000	
s 89 1,1,2,2-Tetrachloroethane-d2	84	10.927	10.926	(1.159)	34746	5.11691	5.1
* 78 1,4-Dichlorobenzene-d4	152	12.170	12.169	(1.000)	78460	5.00000	(Q)
s 90 1,2-Dichlorobenzene-d4	152	12.634	12.633	(1.038)	58350	4.73081	4.7(Q)

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111110.B\V5N2854.D
Report Date: 15-Nov-2011 09:35

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111110.B\V5N2854.D
Report Date: 15-Nov-2011 09:35

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2854.D
Lab Smp Id: K2213-06B Client Smp ID: H30X6
Inj Date : 10-NOV-2011 11:14
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-06B,,62892
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 35
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

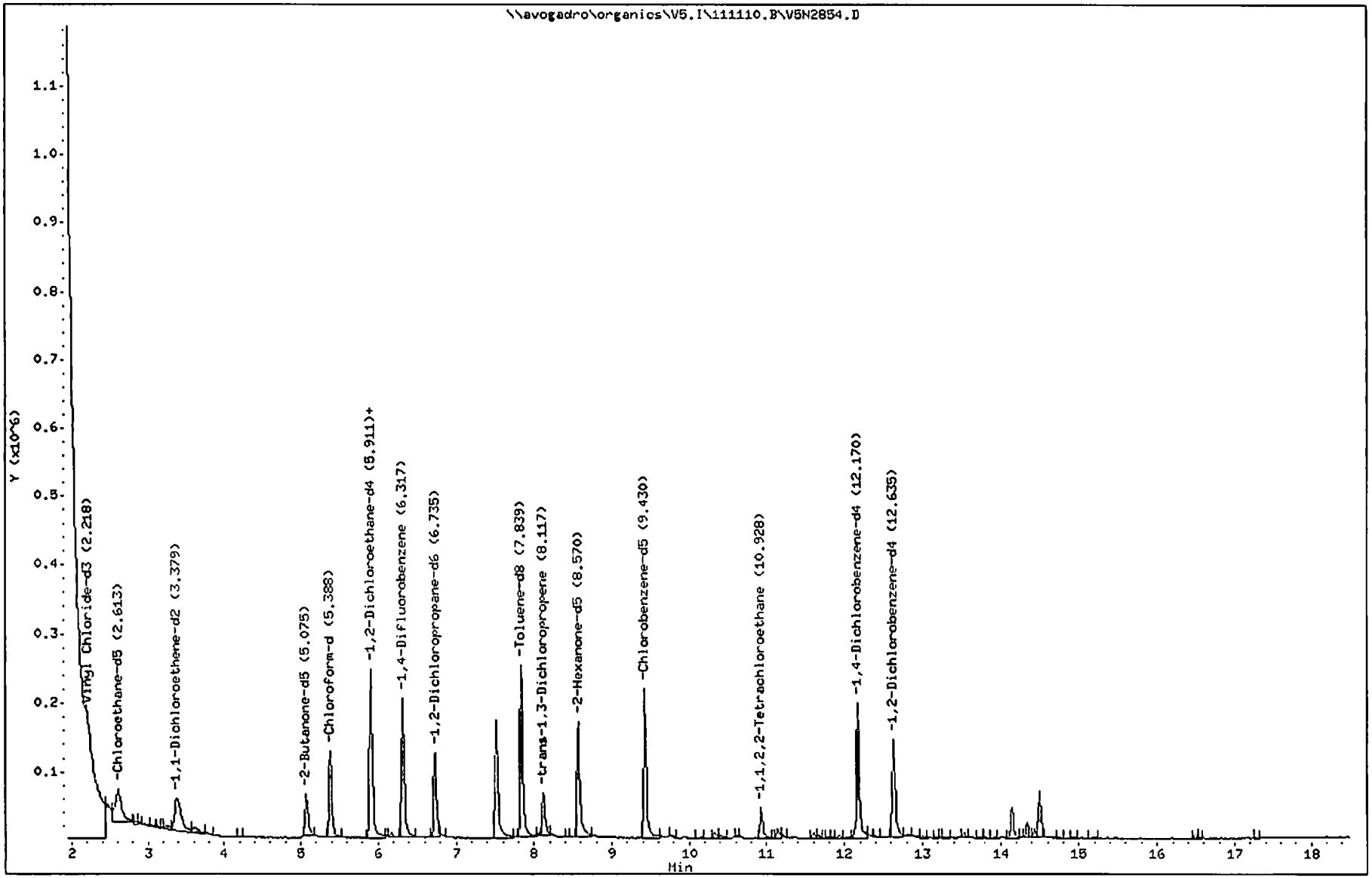
Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

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
* 78 1,4-Dichlorobenzene-d4	12.170	508831	5.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
14.145	116692	1.14666647	1.1	0		0	78
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet				CAS #: 464-48-2			
14.493	159639	1.56868122	1.6	98	NIST2002.L	24208	78

Data File: \\avogadro\organics\V5.I\111110.B\V5N2854.D
Date : 10-NOV-2011 11:14
Client ID: H30X6
Instrument: V5.i
Sample Info: 25ML,K2213-06B,,62892
Purge Volume: 25.0
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111110.B\V5N2854.D

Date : 10-NOV-2011 11:14

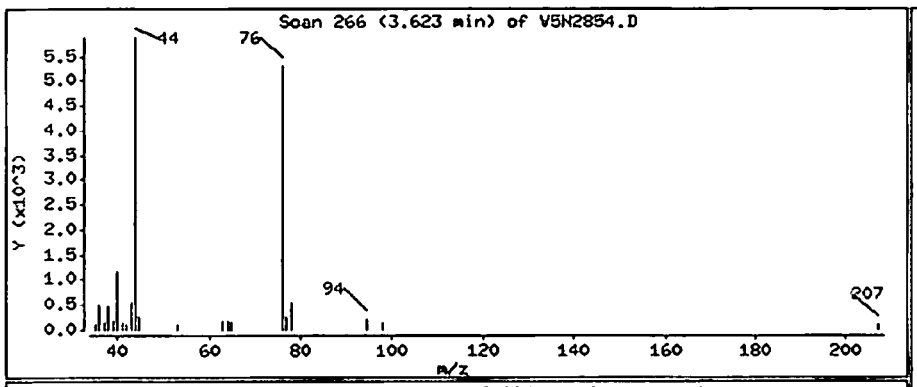
Client ID: H30X6 Instrument: V5.i

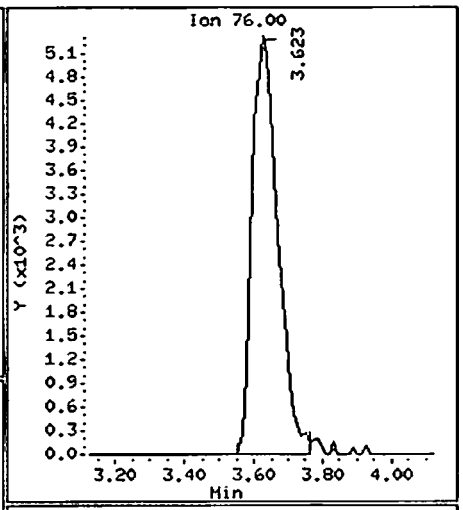
Sample Info: 25ML,K2213-06B,,62892

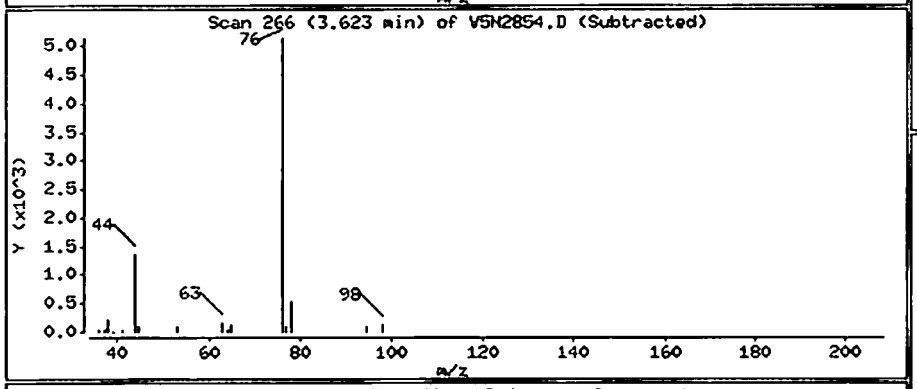
Purge Volume: 25.0 Operator: SRC: LIMS

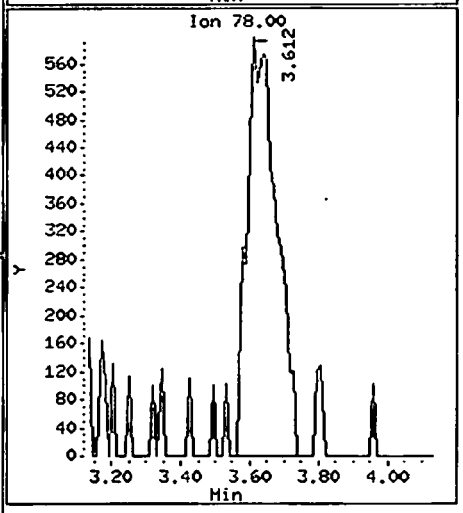
Column phase: DB-624 Column diameter: 0.25

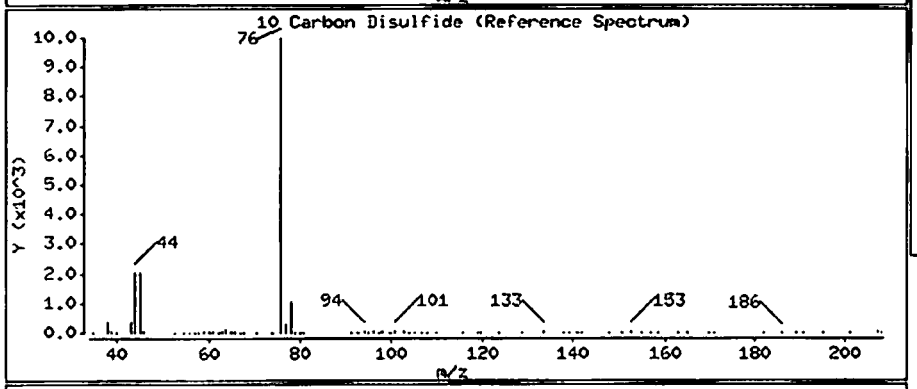
10 Carbon Disulfide Concentration: 0.44 ug/L

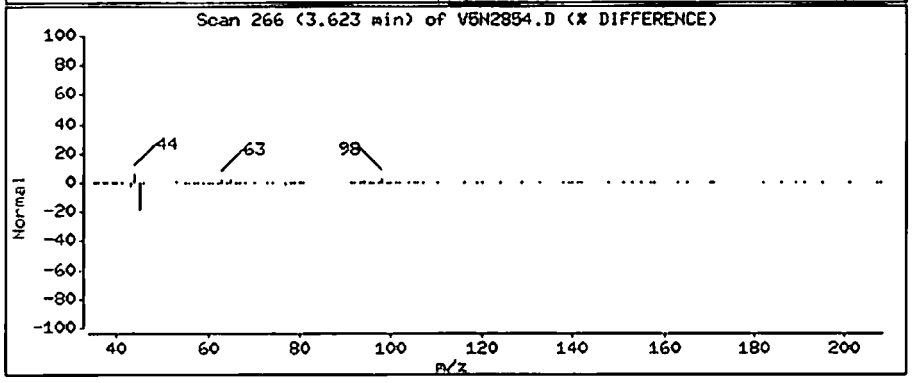












Data File: \\avogadro\organics\V5.I\111110.B\V5N2854.D

Date : 10-NOV-2011 11:14

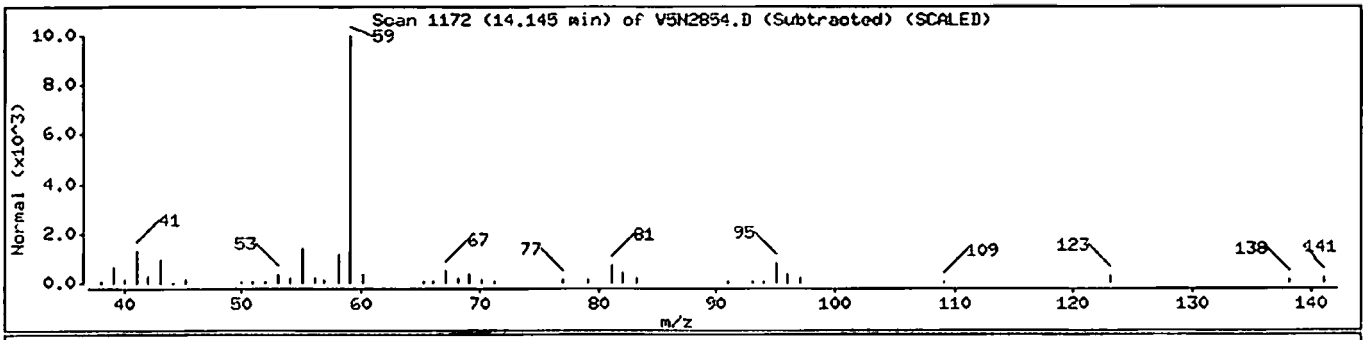
Client ID: H30X6 Instrument: V5.i

Sample Info: 25ML,K2213-06B,,62892

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



Data File: \\avogadro\organics\V5.I\111110.B\V5N2854.D

Date : 10-NOV-2011 11:14

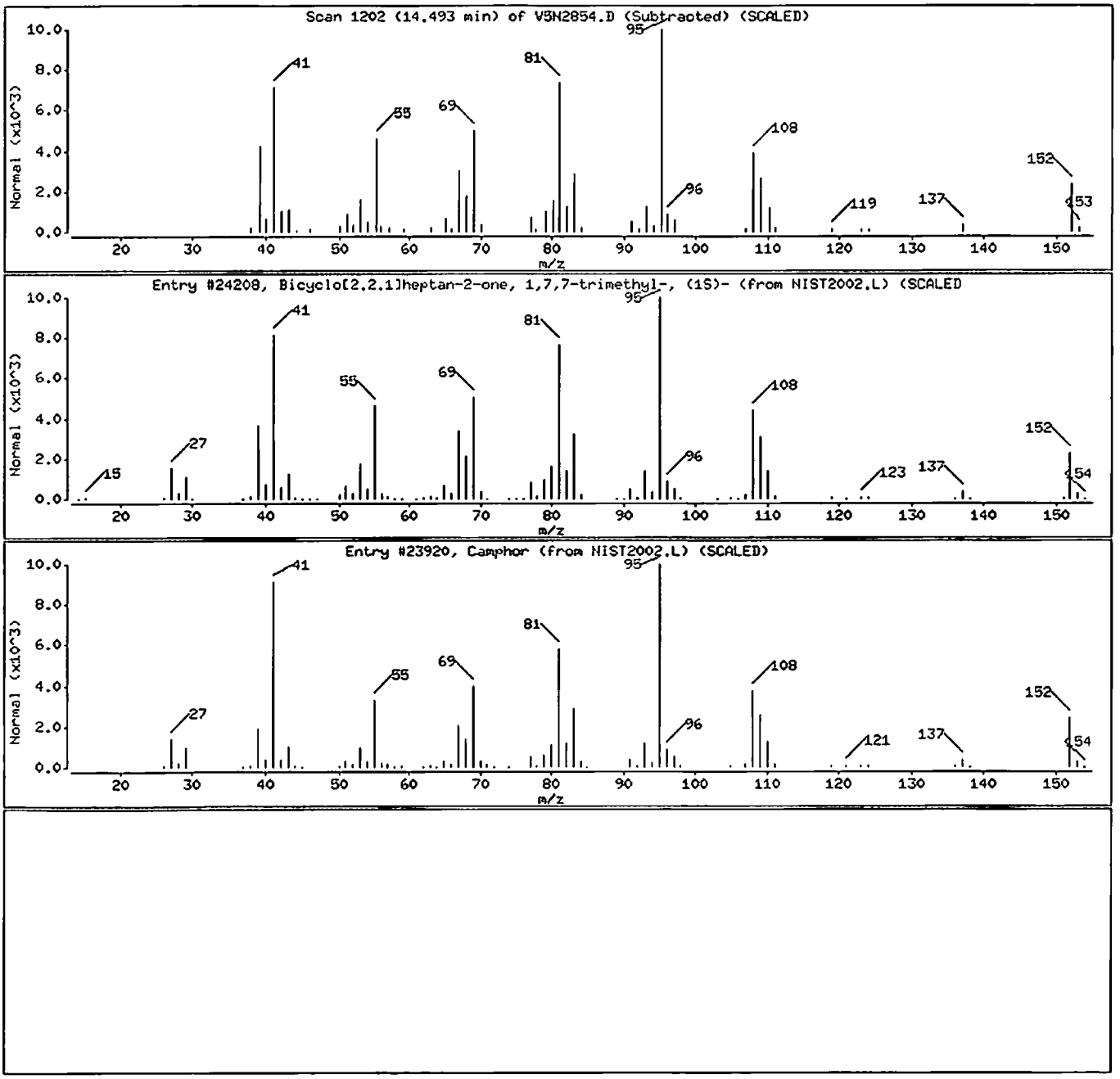
Client ID: H30X6 Instrument: V5.i

Sample Info: 25ML,K2213-06B,,62892

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
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet	464-48-2	NIST2002.L	24208	98	C10H16O	152
Camphor	76-22-2	NIST2002.L	23920	97	C10H16O	152



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30X7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-07B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2855.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30X7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-07B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2855.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30X7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-07B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2855.D

Level: (TRACE or LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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	74-93-1	Methanethiol	2.413	1.2	NJ
	E966796[1]	Total Alkanes	N/A		

[1] EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111110.B\V5N2855.D
Report Date: 15-Nov-2011 09:35

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2855.D
Lab Smp Id: K2213-07B Client Smp ID: H30X7
Inj Date : 10-NOV-2011 11:43
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-07B,,62892
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 36
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	2.215	2.216	(0.350)	128504	6.24771	6.2
$	80 Chloroethane-d5	69	2.610	2.600	(0.413)	85187	6.10021	6.1
$	81 1,1-Dichloroethene-d2	65	3.388	3.378	(0.536)	27652	5.19121	5.2(Q)
$	82 2-Butanone-d5	46	5.072	5.062	(0.802)	125891	51.0288	51(AQ)
$	93 Chloroform-d	84	5.386	5.387	(0.851)	118067	4.79342	4.8(Q)
$	23 1,2-Dichloroethane-d4	65	5.897	5.898	(0.932)	45277	4.67415	4.7(Q)
$	84 Benzene-d6	84	5.920	5.909	(0.628)	232342	4.65104	4.7
*	26 1,4-Difluorobenzene	114	6.326	6.327	(1.000)	226089	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.733	6.734	(0.714)	78129	4.50583	4.5
$	33 Toluene-d8	98	7.848	7.837	(0.832)	205058	4.57415	4.6
$	86 trans-1,3-Dichloropropene-d4	79	8.127	8.116	(0.862)	52604	5.29451	5.3
$	87 2-Hexanone-d5	63	8.568	8.569	(0.909)	90504	52.5954	53(AQ)
*	42 Chlorobenzene-d5	117	9.427	9.428	(1.000)	170309	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.925	10.926	(1.159)	33546	5.22565	5.2
*	78 1,4-Dichlorobenzene-d4	152	12.179	12.169	(1.000)	70632	5.00000	
$	90 1,2-Dichlorobenzene-d4	152	12.632	12.633	(1.037)	55360	4.98583	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\111110.B\V5N2855.D
Report Date: 15-Nov-2011 09:35

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2855.D
Lab Smp Id: K2213-07B Client Smp ID: H30X7
Inj Date : 10-NOV-2011 11:43
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-07B,,62892
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 36
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

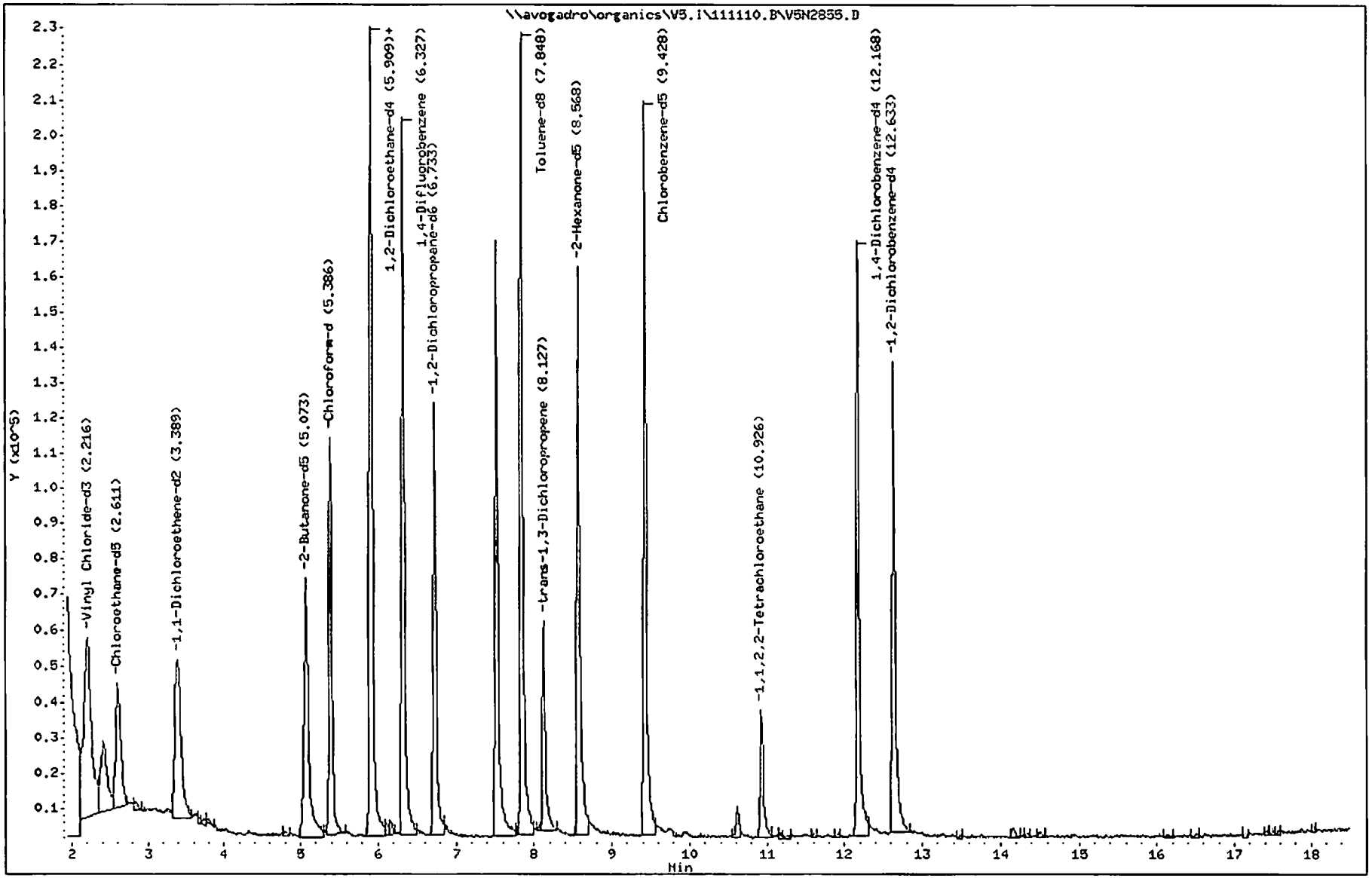
ISTD	RT	AREA	AMOUNT
* 26 1,4-Difluorobenzene	6.327	503078	5.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Methanethiol			CAS #: 74-93-1				
2.413	123952	1.23193666	1.2	91	NIST2002.L	109	26

Data File: \\avogadro\organics\V5.I\111110.B\V5N2855.D
Date : 10-NOV-2011 11:43
Client ID: H30X7
Sample Info: 25ML,K2213-07B,,62892
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: SRC: LIMS
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111110.B\V5N2855.D

Date : 10-NOV-2011 11:43

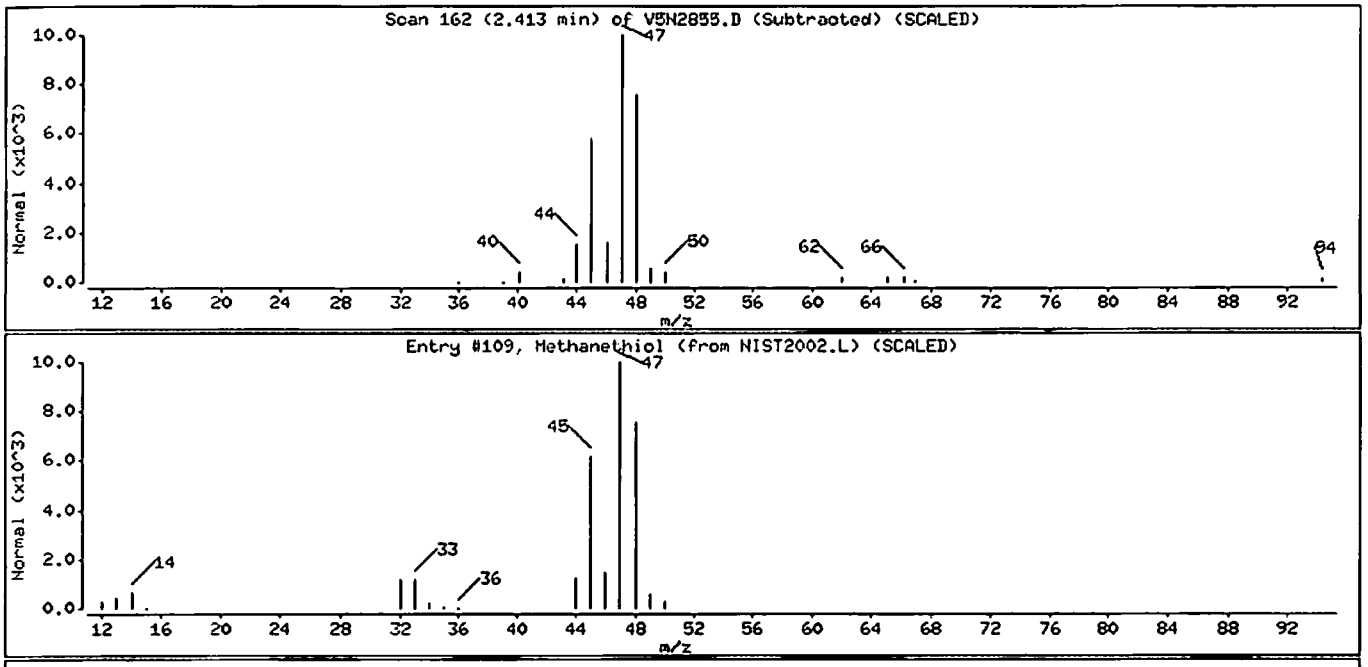
Client ID: H30X7 Instrument: V5.i

Sample Info: 25ML,K2213-07B,,62892

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
Methanethiol	74-93-1	NIST2002.L	109	91	CH4S	48



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30X9

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-08B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2856.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30X9

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-08B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2856.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30X9

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-08B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2856.D

Level: (TRACE or LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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\111110.B\V5N2856.D
Report Date: 15-Nov-2011 09:35

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2856.D
Lab Smp Id: K2213-08B Client Smp ID: H30X9
Inj Date : 10-NOV-2011 12:11
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-08B,,62892
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 37
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	2.208	2.216	(0.349)	133911	6.33433	6.3
$ 80 Chloroethane-d5	69	2.614	2.600	(0.414)	89852	6.26008	6.3
$ 81 1,1-Dichloroethene-d2	65	3.369	3.378	(0.533)	29369	5.36429	5.4(QR)
$ 82 2-Butanone-d5	46	5.076	5.062	(0.803)	126535	49.9013	50(AQ)
$ 83 Chloroform-d	84	5.390	5.387	(0.853)	121034	4.78085	4.8(Q)
$ 23 1,2-Dichloroethane-d4	65	5.901	5.898	(0.934)	48399	4.86119	4.9(Q)
$ 84 Benzene-d6	84	5.913	5.909	(0.627)	234943	4.56845	4.6
* 26 1,4-Difluorobenzene	114	6.319	6.327	(1.000)	232380	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.725	6.734	(0.713)	78675	4.40741	4.4
$ 33 Toluene-d8	98	7.840	7.837	(0.831)	216056	4.68149	4.7
$ 86 trans-1,3-Dichloropropene-d4	79	8.119	8.116	(0.861)	55104	5.38733	5.4
$ 87 2-Hexanone-d5	63	8.572	8.569	(0.909)	86566	48.8665	49(AQ)
* 42 Chlorobenzene-d5	117	9.431	9.428	(1.000)	175329	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.929	10.926	(1.159)	32314	4.88961	4.9
* 78 1,4-Dichlorobenzene-d4	152	12.172	12.169	(1.000)	72134	5.00000	(Q)
$ 90 1,2-Dichlorobenzene-d4	152	12.636	12.633	(1.038)	55644	4.90706	4.9(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\111110.B\V5N2856.D
Report Date: 15-Nov-2011 09:35

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\V5.I\111110.B\V5N2856.D
Report Date: 15-Nov-2011 09:35

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

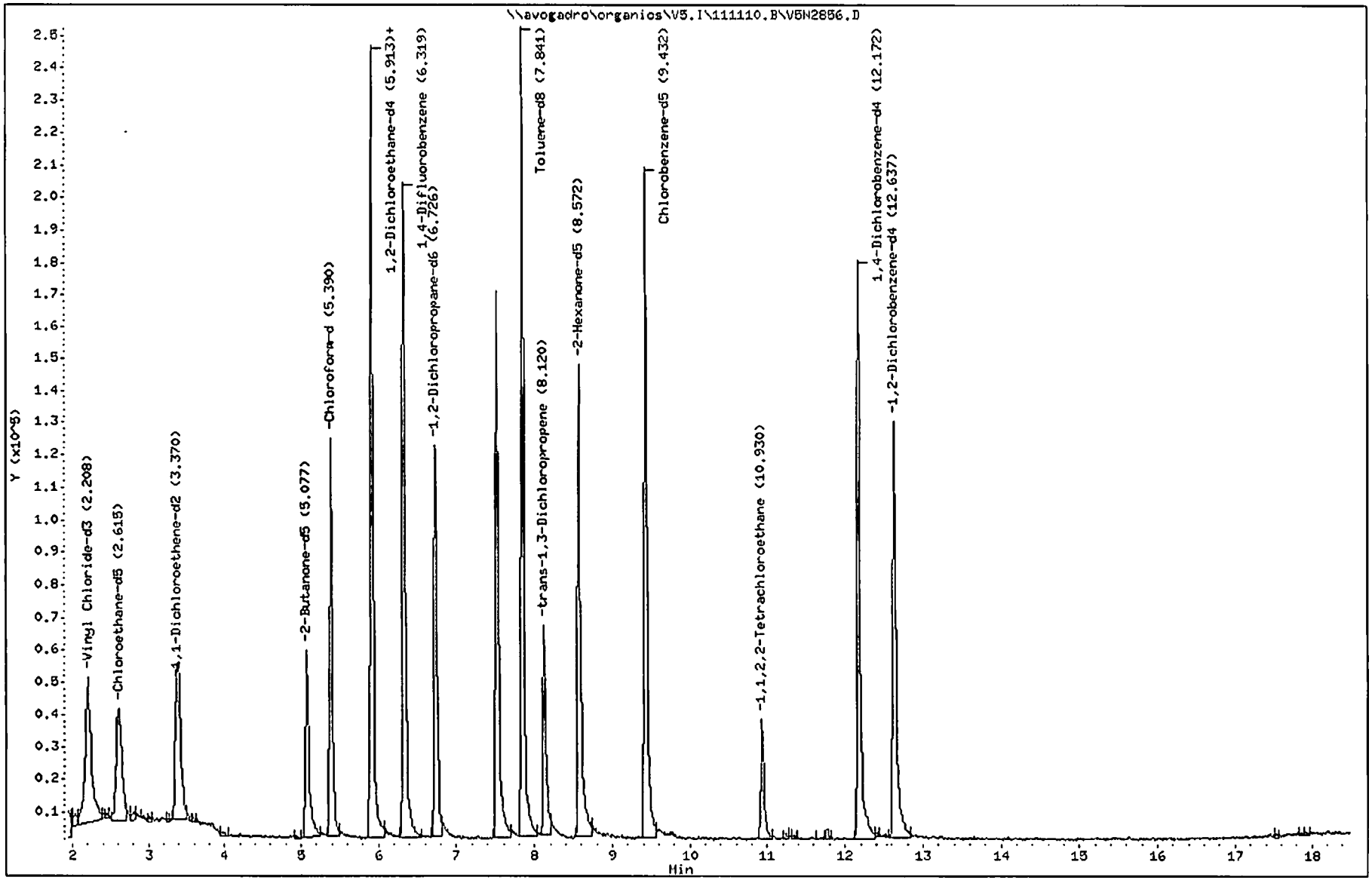
Data file	: \\avogadro\organics\V5.I\111110.B\V5N2856.D		
Lab Smp Id	: K2213-08B	Client Smp ID:	H30X9
Inj Date	: 10-NOV-2011 12:11		
Operator	: SRC: LIMS	Inst ID:	V5.i
Smp Info	: 25ML,K2213-08B,,62892		
Misc Info	:		
Comment	:		
Method	: \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m		
Meth Date	: 14-Nov-2011 21:20 V5.i	Quant Type:	ISTD
Cal Date	: 09-NOV-2011 21:52	Cal File:	V5N2826.D
Als bottle	: 37		
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\111110.B\V5N2856.D
Date : 10-NOV-2011 12:11
Client ID: H30X9
Sample Info: 25ML,K2213-088,,62892
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.

H30Y0

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-09B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2857.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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	0.83	
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.

H30Y0

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-09B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2857.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30Y0

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-09B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2857.D

Level: (TRACE or LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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	2.416	1.7	J
02		Unknown-02	11.137	0.61	J
	E96679[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111110.B\V5N2857.D
Report Date: 15-Nov-2011 09:35

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2857.D
Lab Smp Id: K2213-09B Client Smp ID: H30Y0
Inj Date : 10-NOV-2011 12:40
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-09B,,62892
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 38
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	2.206	2.216	(0.349)	126261	6.27907	6.3
$	80 Chloroethane-d5	69	2.613	2.600	(0.414)	90108	6.60020	6.6(R)
$	81 1,1-Dichloroethene-d2	65	3.379	3.378	(0.535)	28575	5.48720	5.5(QR)
	10 Carbon Disulfide	76	3.623	3.622	(0.574)	49711	0.82862	0.83
$	82 2-Butanone-d5	46	5.075	5.062	(0.803)	129550	53.7131	54(AQ)
$	83 Chloroform-d	84	5.388	5.387	(0.853)	120423	5.00091	5.0(Q)
$	23 1,2-Dichloroethane-d4	65	5.899	5.898	(0.934)	44761	4.72658	4.7(Q)
$	84 Benzene-d6	84	5.911	5.909	(0.627)	234569	4.73124	4.7
*	26 1,4-Difluorobenzene	114	6.317	6.327	(1.000)	221033	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.724	6.734	(0.713)	76983	4.47341	4.5
$	33 Toluene-d8	98	7.839	7.837	(0.831)	215836	4.85109	4.9
$	86 trans-1,3-Dichloropropene-d4	79	8.117	8.116	(0.861)	48615	4.93013	4.9
$	87 2-Hexanone-d5	63	8.570	8.569	(0.909)	89458	52.3819	52(AQ)
*	42 Chlorobenzene-d5	117	9.430	9.428	(1.000)	169027	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.928	10.926	(1.159)	34372	5.39493	5.4
*	78 1,4-Dichlorobenzene-d4	152	12.170	12.169	(1.000)	69022	5.00000	(Q)
$	90 1,2-Dichlorobenzene-d4	152	12.635	12.633	(1.038)	55972	5.15854	5.2(Q)

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111110.B\V5N2857.D
Report Date: 15-Nov-2011 09:35

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\V5.I\111110.B\V5N2857.D
Report Date: 15-Nov-2011 09:35

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2857.D
Lab Smp Id: K2213-09B Client Smp ID: H30Y0
Inj Date : 10-NOV-2011 12:40
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-09B,,62892
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 38
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

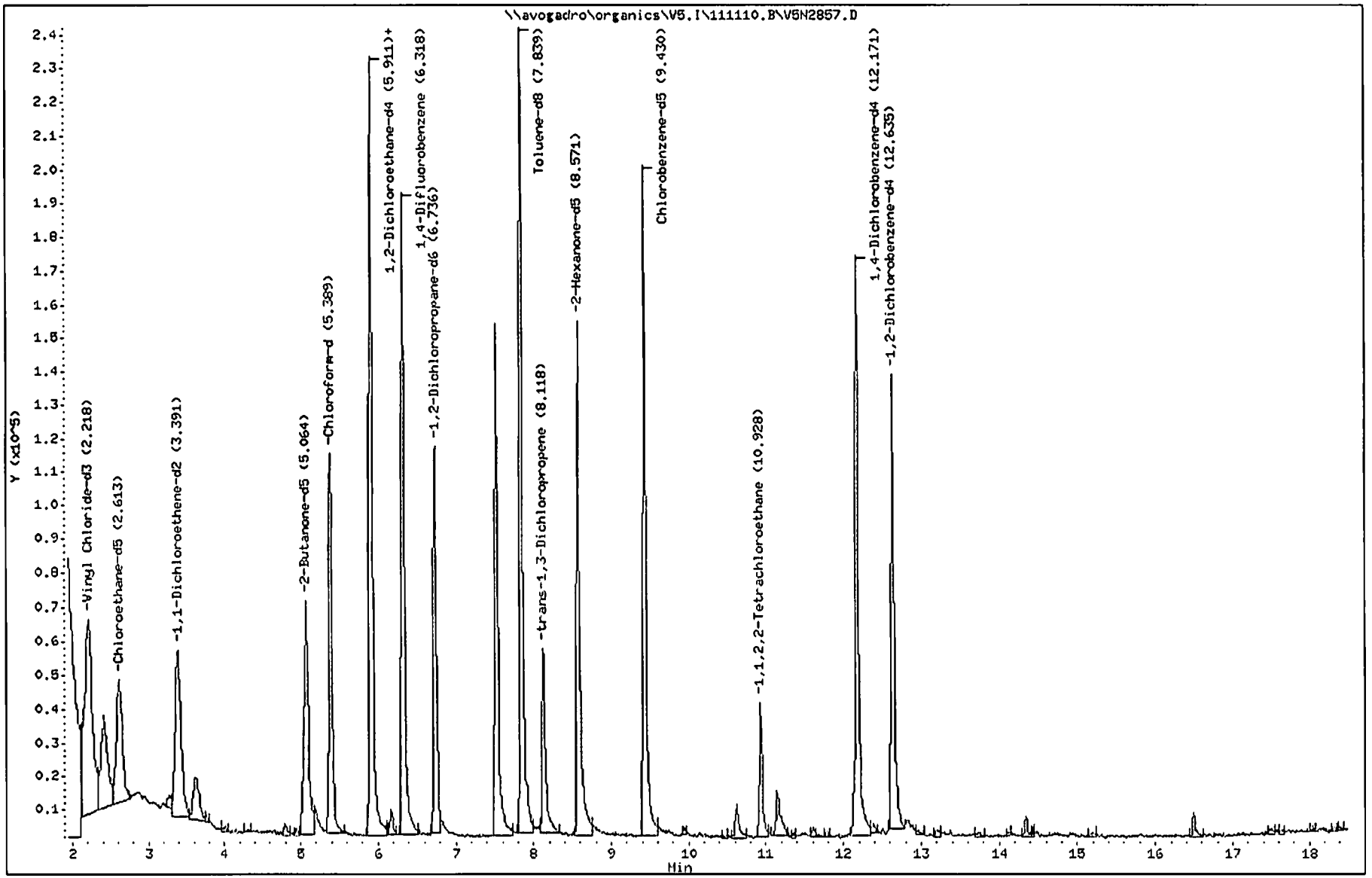
ISTD	RT	AREA	AMOUNT
* 26 1,4-Difluorobenzene	6.318	502032	5.000
* 78 1,4-Dichlorobenzene-d4	12.171	461837	5.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.416	173650	1.72946902	1.7	0		0	26
Unknown				CAS #:			
11.137	56040	0.60670446	0.61	0		0	78

Data File: \\avogadro\organics\V5.I\111110.B\V5N2857.D
Date : 10-NOV-2011 12:40
Client ID: H30Y0
Sample Info: 25ML,K2213-09B,,62892
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: SRC: LIMS
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111110.B\V5N2857.D

Date : 10-NOV-2011 12:40

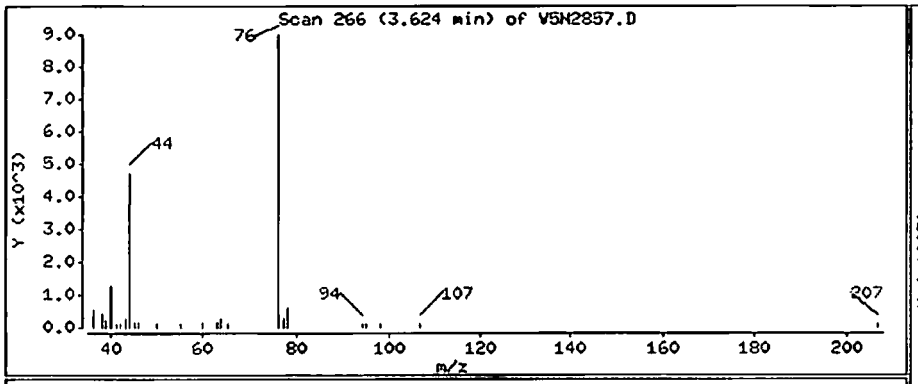
Client ID: H30Y0 Instrument: V5.i

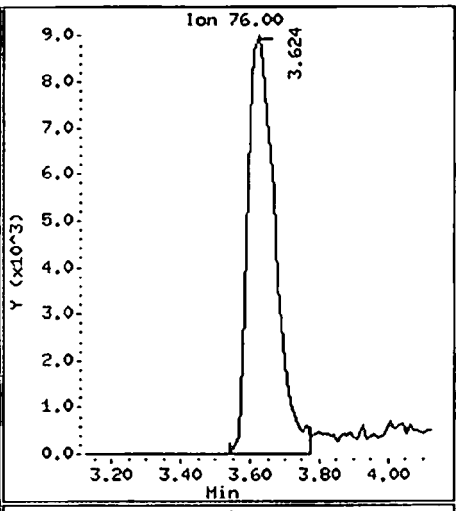
Sample Info: 25ML,K2213-09B,,62892

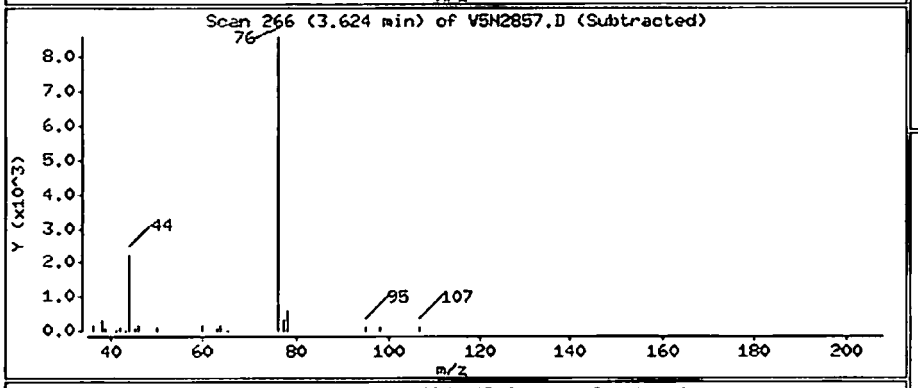
Purge Volume: 25.0 Operator: SRC: LIMS

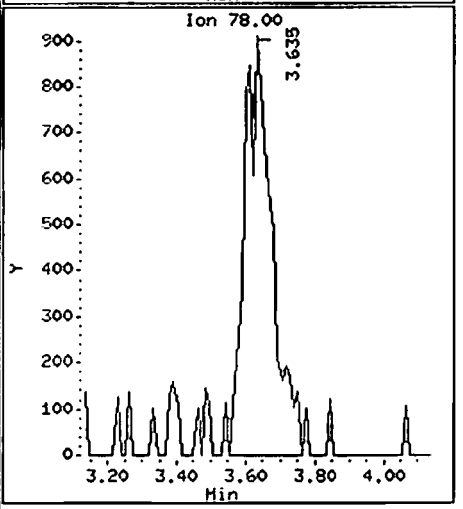
Column phase: DB-624 Column diameter: 0.25

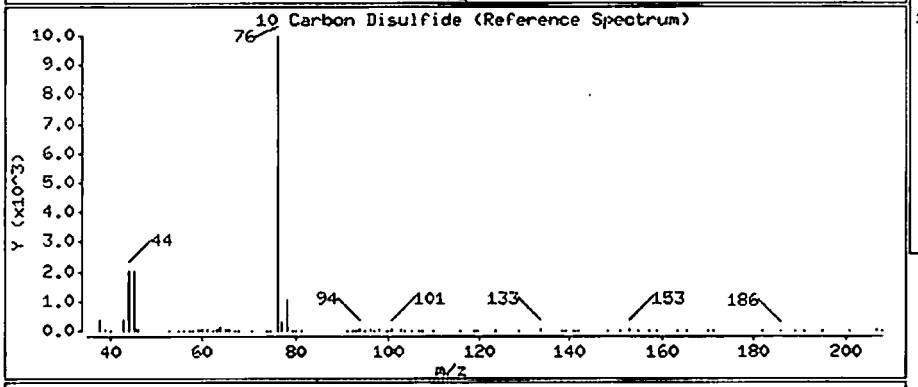
10 Carbon Disulfide Concentration: 0.83 ug/L

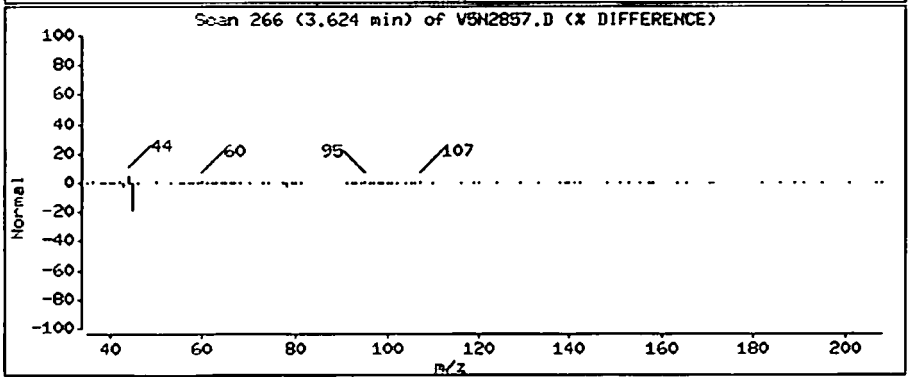












Data File: \\avogadro\organics\V5.I\111110.B\V5N2857.D

Date : 10-NOV-2011 12:40

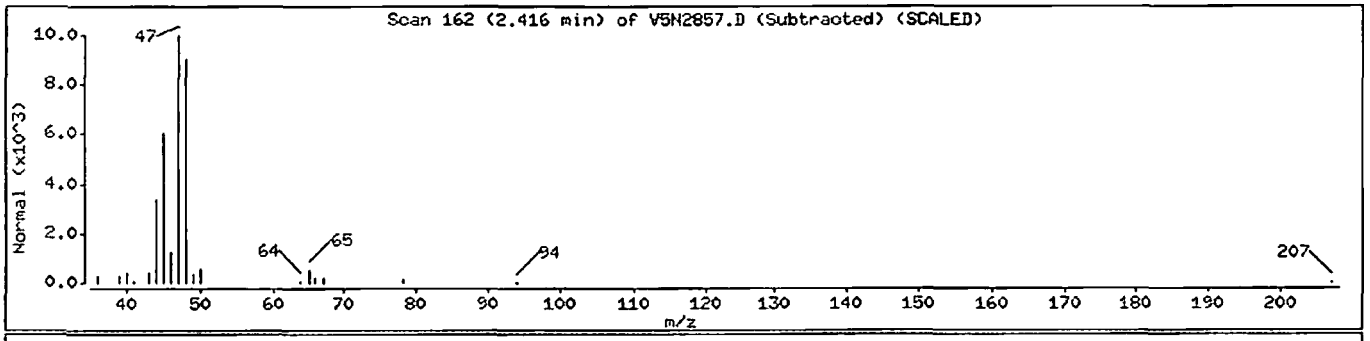
Client ID: H30Y0 Instrument: V5.i

Sample Info: 25ML,K2213-09B,,62892

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



Data File: \\avogadro\organics\V5.I\111110.B\V5N2857.D

Date : 10-NOV-2011 12:40

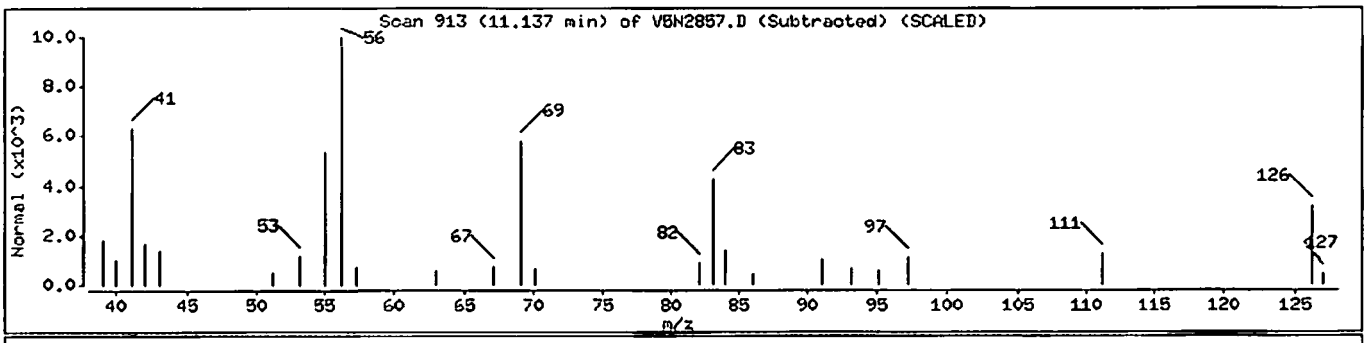
Client ID: H30Y0 Instrument: V5.i

Sample Info: 25ML,K2213-09B,,62892

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.

H30Y1

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-10B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2858.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30Y1

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-10B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2858.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30Y1

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-10B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2858.D

Level: (TRACE or LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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\111110.B\V5N2858.D
Report Date: 15-Nov-2011 09:36

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2858.D
Lab Smp Id: K2213-10B Client Smp ID: H30Y1
Inj Date : 10-NOV-2011 13:09
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-10B,,62892
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 39
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	2.208	2.216	(0.349)	142477	6.47151	6.5
$	80 Chloroethane-d5	69	2.614	2.600	(0.414)	95143	6.36510	6.4
$	81 1,1-Dichloroethene-d2	65	3.392	3.378	(0.537)	31286	5.48718	5.5(QR)
$	82 2-Butanone-d5	46	5.076	5.062	(0.803)	129725	49.1249	49(AQ)
$	83 Chloroform-d	84	5.390	5.387	(0.853)	127600	4.83977	4.8(Q)
$	23 1,2-Dichloroethane-d4	65	5.901	5.898	(0.934)	47965	4.62601	4.6(Q)
$	84 Benzene-d6	84	5.912	5.909	(0.627)	252161	4.60593	4.6
*	26 1,4-Difluorobenzene	114	6.319	6.327	(1.000)	242004	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.725	6.734	(0.713)	84220	4.43195	4.4
$	33 Toluene-d8	98	7.840	7.837	(0.831)	221999	4.51857	4.5
$	86 trans-1,3-Dichloropropene-d4	79	8.119	8.116	(0.861)	55411	5.08885	5.1
$	87 2-Hexanone-d5	63	8.572	8.569	(0.909)	87945	46.6346	47(AQ)
*	42 Chlorobenzene-d5	117	9.431	9.428	(1.000)	186647	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.929	10.926	(1.159)	32818	4.66475	4.7
*	78 1,4-Dichlorobenzene-d4	152	12.172	12.169	(1.000)	74584	5.00000	(Q)
$	90 1,2-Dichlorobenzene-d4	152	12.636	12.633	(1.038)	58074	4.95313	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\111110.B\V5N2858.D
Report Date: 15-Nov-2011 09:36

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\V5.I\111110.B\V5N2858.D
Report Date: 15-Nov-2011 09:36

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

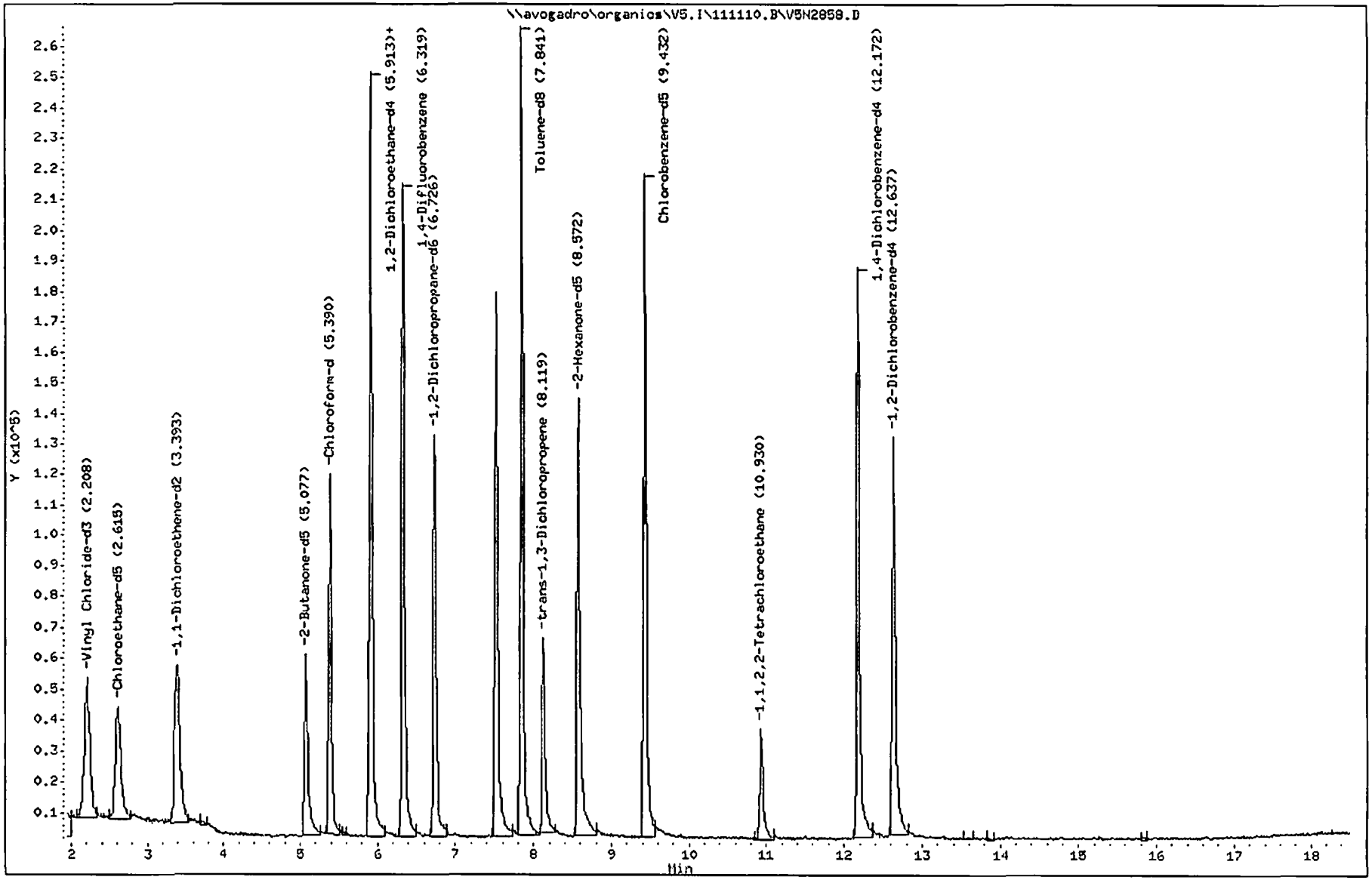
Data file : \\avogadro\organics\V5.I\111110.B\V5N2858.D
Lab Smp Id: K2213-10B Client Smp ID: H30Y1
Inj Date : 10-NOV-2011 13:09
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-10B,,62892
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 39
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\111110.B\V5N2858.D
Date : 10-NOV-2011 13:09
Client ID: H30Y1
Sample Info: 25ML,K2213-10B,,62892
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. H30Y7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-02B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2847.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30Y7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-02B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2847.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30Y7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-02B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2847.D

Level: (TRACE or LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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\111110.B\V5N2847.D
Report Date: 15-Nov-2011 09:35

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2847.D
Lab Smp Id: K2213-02B Client Smp ID: H30Y7
Inj Date : 10-NOV-2011 07:55
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-02B,,62892
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 28
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	2.216	2.216	(0.350)	105443	5.25724	5.3
$ 80 Chloroethane-d5	69	2.611	2.600	(0.413)	71751	5.26909	5.3
$ 81 1,1-Dichloroethene-d2	65	3.377	3.378	(0.534)	23401	4.50518	4.5(Q)
$ 82 2-Butanone-d5	46	5.072	5.062	(0.802)	110673	46.0043	46(AQ)
$ 83 Chloroform-d	84	5.386	5.387	(0.851)	109308	4.55098	4.6(Q)
$ 23 1,2-Dichloroethane-d4	65	5.897	5.898	(0.932)	42711	4.52169	4.5(Q)
$ 84 Benzene-d6	84	5.920	5.909	(0.628)	225712	4.97711	5.0
* 26 1,4-Difluorobenzene	114	6.327	6.327	(1.000)	220467	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.733	6.734	(0.714)	70698	4.49128	4.5
$ 33 Toluene-d8	98	7.836	7.837	(0.831)	191351	4.70180	4.7
$ 86 trans-1,3-Dichloropropene-d4	79	8.115	8.116	(0.861)	44434	4.92631	4.9
$ 87 2-Hexanone-d5	63	8.568	8.569	(0.909)	78519	50.2638	50(AQ)
* 42 Chlorobenzene-d5	117	9.427	9.428	(1.000)	154610	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.925	10.926	(1.159)	27348	4.69273	4.7
* 78 1,4-Dichlorobenzene-d4	152	12.168	12.169	(1.000)	61218	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.633	12.633	(1.038)	46221	4.80290	4.8(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\111110.B\V5N2847.D
Report Date: 15-Nov-2011 09:35

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

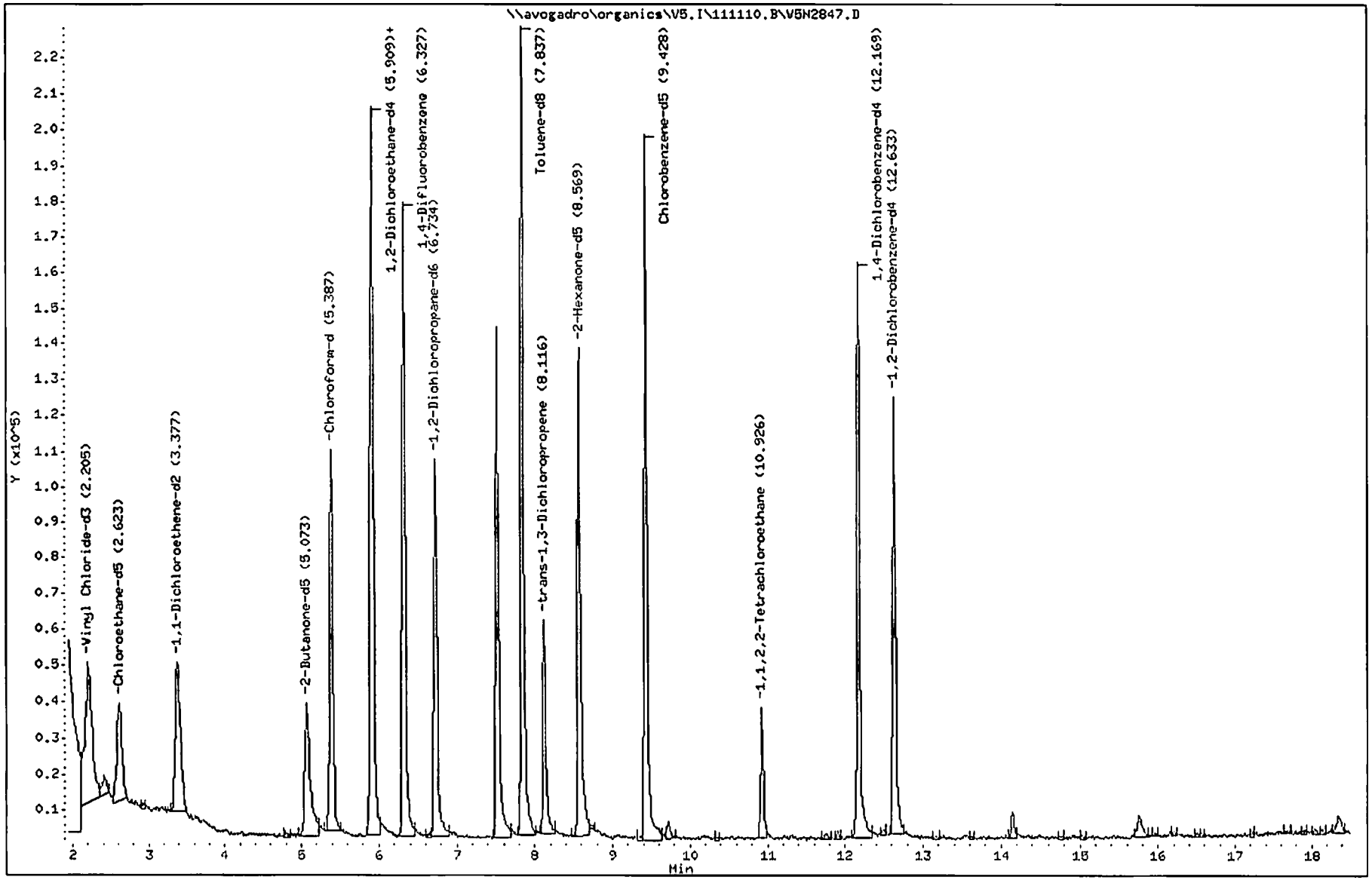
Data file	: \\avogadro\organics\V5.I\111110.B\V5N2847.D		
Lab Smp Id	: K2213-02B	Client Smp ID:	H30Y7
Inj Date	: 10-NOV-2011 07:55		
Operator	: SRC: LIMS	Inst ID:	V5.i
Smp Info	: 25ML,K2213-02B,,62892		
Misc Info	:		
Comment	:		
Method	: \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m		
Meth Date	: 14-Nov-2011 21:20 V5.i	Quant Type:	ISTD
Cal Date	: 09-NOV-2011 20:26	Cal File:	V5N2823.D
Als bottle	: 28		
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\111110.B\V5N2847.D
Date : 10-NOV-2011 07:55
Client ID: H30Y7
Sample Info: 25ML,K2213-02B,,62892
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.

H30Z2

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-11B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2870.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H3022

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-11B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2870.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30Z2

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-11B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2870.D

Level: (TRACE or LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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\111110A.B\V5N2870.D
Report Date: 15-Nov-2011 09:36

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110A.B\V5N2870.D
Lab Smp Id: K2213-11B Client Smp ID: H30Z2
Inj Date : 10-NOV-2011 18:54
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-11B,,62893
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111110A.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 15:34 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 51
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	2.216	2.214	(0.350)	140028	6.27973	6.3
$ 80 Chloroethane-d5	69	2.611	2.609	(0.413)	94247	6.22531	6.2
$ 81 1,1-Dichloroethene-d2	65	3.389	3.364	(0.536)	30767	5.32782	5.3(QR)
$ 82 2-Butanone-d5	46	5.073	5.071	(0.802)	139844	52.2861	52(AQ)
$ 83 Chloroform-d	84	5.386	5.384	(0.851)	132443	4.95985	5.0(Q)
$ 23 1,2-Dichloroethane-d4	65	5.897	5.895	(0.932)	50845	4.84167	4.8
$ 84 Benzene-d6	84	5.909	5.918	(0.627)	260171	4.74614	4.7
* 26 1,4-Difluorobenzene	114	6.327	6.325	(1.000)	245108	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.733	6.731	(0.714)	87956	4.62261	4.6
$ 33 Toluene-d8	98	7.848	7.846	(0.832)	227134	4.61716	4.6
$ 86 trans-1,3-Dichloropropene-d4	79	8.127	8.113	(0.862)	56364	5.16972	5.2
$ 87 2-Hexanone-d5	63	8.568	8.566	(0.909)	89406	47.3484	47(A)
* 42 Chlorobenzene-d5	117	9.428	9.426	(1.000)	186887	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.926	10.924	(1.159)	34854	4.94779	4.9
* 78 1,4-Dichlorobenzene-d4	152	12.180	12.166	(1.000)	78016	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.633	12.631	(1.037)	57568	4.69397	4.7(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\111110A.B\V5N2870.D
Report Date: 15-Nov-2011 09:36

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\V5.I\111110A.B\V5N2870.D
Report Date: 15-Nov-2011 09:36

Spectrum Analytical, Inc. RI Division

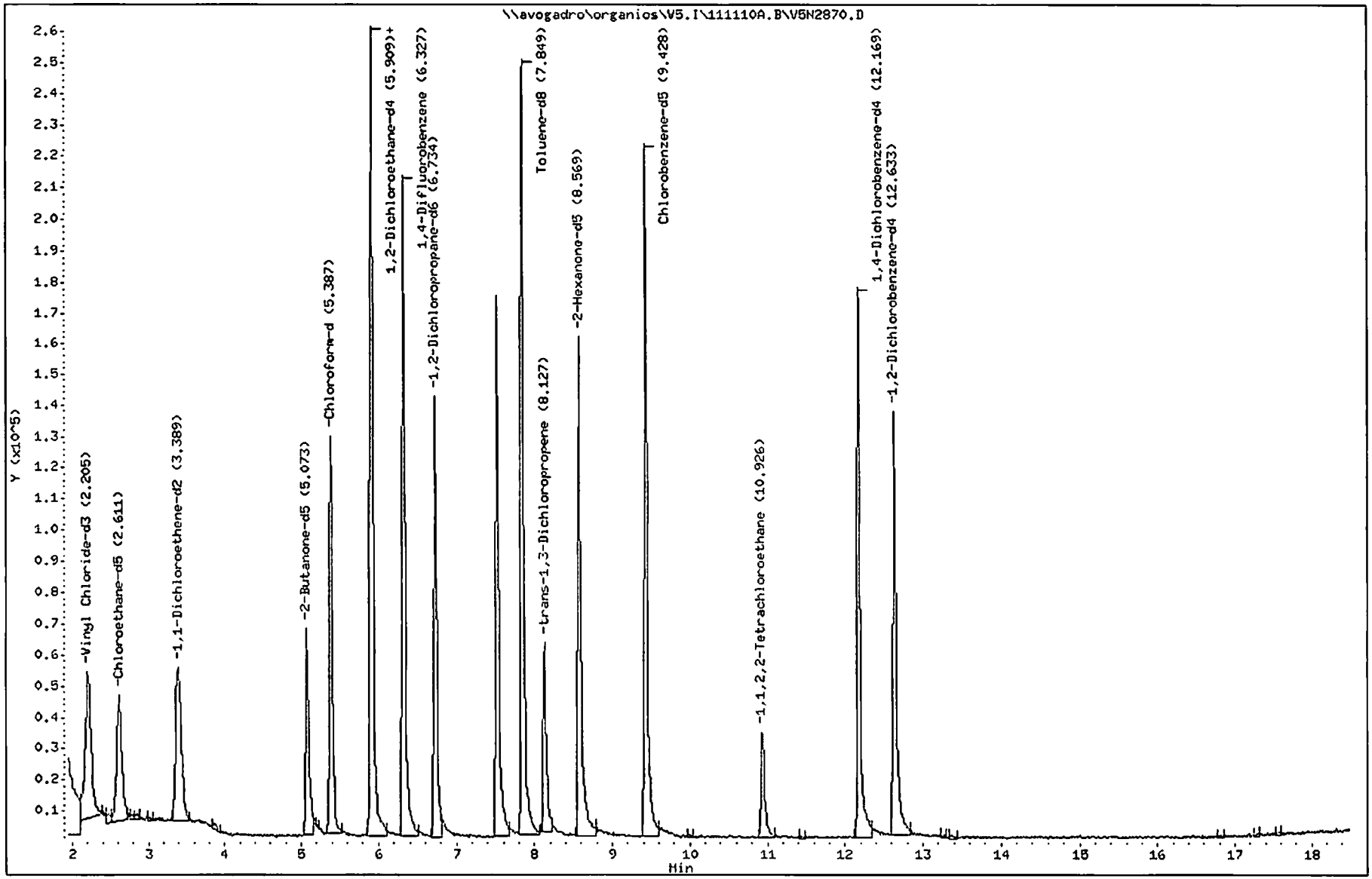
SOM01.0 - Trace Water Volatiles

Data file	: \\avogadro\organics\V5.I\111110A.B\V5N2870.D		
Lab Smp Id	: K2213-11B	Client Smp ID:	H30Z2
Inj Date	: 10-NOV-2011 18:54		
Operator	: SRC: LIMS	Inst ID:	V5.i
Smp Info	: 25ML,K2213-11B,,62893		
Misc Info	:		
Comment	:		
Method	: \\avogadro\organics\V5.I\111110A.B\V5_TVOA1359.m		
Meth Date	: 14-Nov-2011 15:34 V5.i	Quant Type:	ISTD
Cal Date	: 09-NOV-2011 20:26	Cal File:	V5N2823.D
Als bottle	: 51		
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\111110A.B\V5N2870.D
Date : 10-NOV-2011 18:54
Client ID: H30Z2
Sample Info: 25ML,K2213-11B,,62893
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.

H3023

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-12B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2860.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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. H30Z3

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-12B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2860.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H3023

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-12B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2860.D

Level: (TRACE or LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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\111110.B\V5N2860.D
Report Date: 15-Nov-2011 09:36

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2860.D
Lab Smp Id: K2213-12B Client Smp ID: H30Z3
Inj Date : 10-NOV-2011 13:38
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-12B,,62892
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 41
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	2.202	2.216	(0.348)	140268	6.30054	6.3
$ 80 Chloroethane-d5	69	2.609	2.600	(0.412)	98592	6.52272	6.5
$ 81 1,1-Dichloroethene-d2	65	3.387	3.378	(0.535)	31690	5.49642	5.5(QR)
$ 82 2-Butanone-d5	46	5.071	5.062	(0.802)	136504	51.1189	51(AQ)
$ 83 Chloroform-d	84	5.384	5.387	(0.851)	130031	4.87730	4.9(Q)
$ 23 1,2-Dichloroethane-d4	65	5.895	5.898	(0.932)	49835	4.75308	4.8(Q)
$ 84 Benzene-d6	84	5.907	5.909	(0.627)	259114	4.68417	4.7
* 26 1,4-Difluorobenzene	114	6.325	6.327	(1.000)	244717	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.731	6.734	(0.714)	85804	4.46878	4.5
$ 33 Toluene-d8	98	7.846	7.837	(0.832)	227090	4.57458	4.6
$ 86 trans-1,3-Dichloropropene-d4	79	8.125	8.116	(0.862)	58431	5.31091	5.3
$ 87 2-Hexanone-d5	63	8.566	8.569	(0.909)	93569	49.1056	49(AQ)
* 42 Chlorobenzene-d5	117	9.425	9.428	(1.000)	188590	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.935	10.926	(1.160)	32493	4.57097	4.6
* 78 1,4-Dichlorobenzene-d4	152	12.178	12.169	(1.000)	73822	5.00000	(Q)
$ 90 1,2-Dichlorobenzene-d4	152	12.631	12.633	(1.037)	62273	5.36608	5.4(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\111110.B\V5N2860.D
Report Date: 15-Nov-2011 09:36

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\V5.I\111110.B\V5N2860.D
Report Date: 15-Nov-2011 09:36

Spectrum Analytical, Inc. RI Division

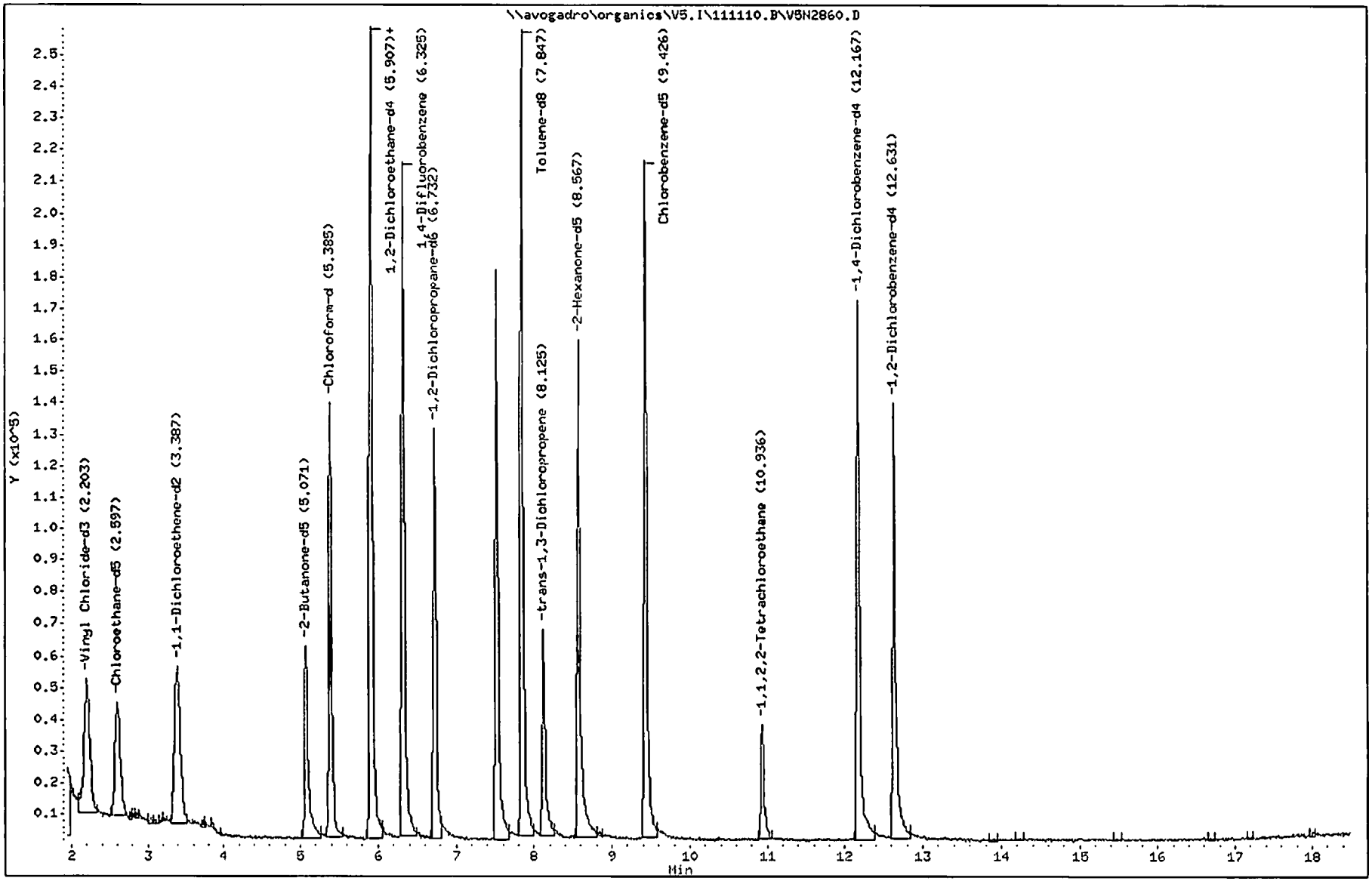
SOM01.0 - Trace Water Volatiles

Data file :	\\avogadro\organics\V5.I\111110.B\V5N2860.D		
Lab Smp Id:	K2213-12B	Client Smp ID:	H30Z3
Inj Date :	10-NOV-2011 13:38		
Operator :	SRC: LIMS	Inst ID:	V5.i
Smp Info :	25ML,K2213-12B,,62892		
Misc Info :			
Comment :			
Method :	\\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m		
Meth Date :	14-Nov-2011 21:20 V5.i	Quant Type:	ISTD
Cal Date :	09-NOV-2011 21:52	Cal File:	V5N2826.D
Als bottle:	41		
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\111110.B\V5N2860.D
Date : 10-NOV-2011 13:38
Client ID: H30Z3
Sample Info: 25ML,K2213-12B,,62892
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.

H30Z4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-13B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2861.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30Z4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-13B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2861.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30Z4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-13B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2861.D

Level: (TRACE or LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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\111110.B\V5N2861.D
Report Date: 15-Nov-2011 09:36

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2861.D
Lab Smp Id: K2213-13B Client Smp ID: H30Z4
Inj Date : 10-NOV-2011 14:06
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-13B,,62892
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 42
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	2.214	2.216	(0.350)	129942	6.07165	6.1
$ 80 Chloroethane-d5	69	2.608	2.600	(0.412)	89476	6.15789	6.2
$ 81 1,1-Dichloroethene-d2	65	3.398	3.378	(0.537)	27911	5.03583	5.0(Q)
$ 82 2-Butanone-d5	46	5.070	5.062	(0.802)	141578	55.1531	55(AQ)
$ 83 Chloroform-d	84	5.384	5.387	(0.851)	124684	4.86498	4.9(Q)
$ 23 1,2-Dichloroethane-d4	65	5.895	5.898	(0.932)	49119	4.87336	4.9(Q)
$ 84 Benzene-d6	84	5.918	5.909	(0.628)	248811	4.76172	4.8
* 26 1,4-Difluorobenzene	114	6.325	6.327	(1.000)	235248	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.731	6.734	(0.714)	80349	4.43011	4.4
$ 33 Toluene-d8	98	7.846	7.837	(0.832)	213954	4.56274	4.6
$ 86 trans-1,3-Dichloropropene-d4	79	8.125	8.116	(0.862)	53633	5.16072	5.2
$ 87 2-Hexanone-d5	63	8.566	8.569	(0.909)	92250	51.2529	51(AQ)
* 42 Chlorobenzene-d5	117	9.425	9.428	(1.000)	178142	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.935	10.926	(1.160)	33886	5.04651	5.0
* 78 1,4-Dichlorobenzene-d4	152	12.178	12.169	(1.000)	74931	5.00000	(Q)
$ 90 1,2-Dichlorobenzene-d4	152	12.631	12.633	(1.037)	57895	4.91499	4.9(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\111110.B\V5N2861.D
Report Date: 15-Nov-2011 09:36

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

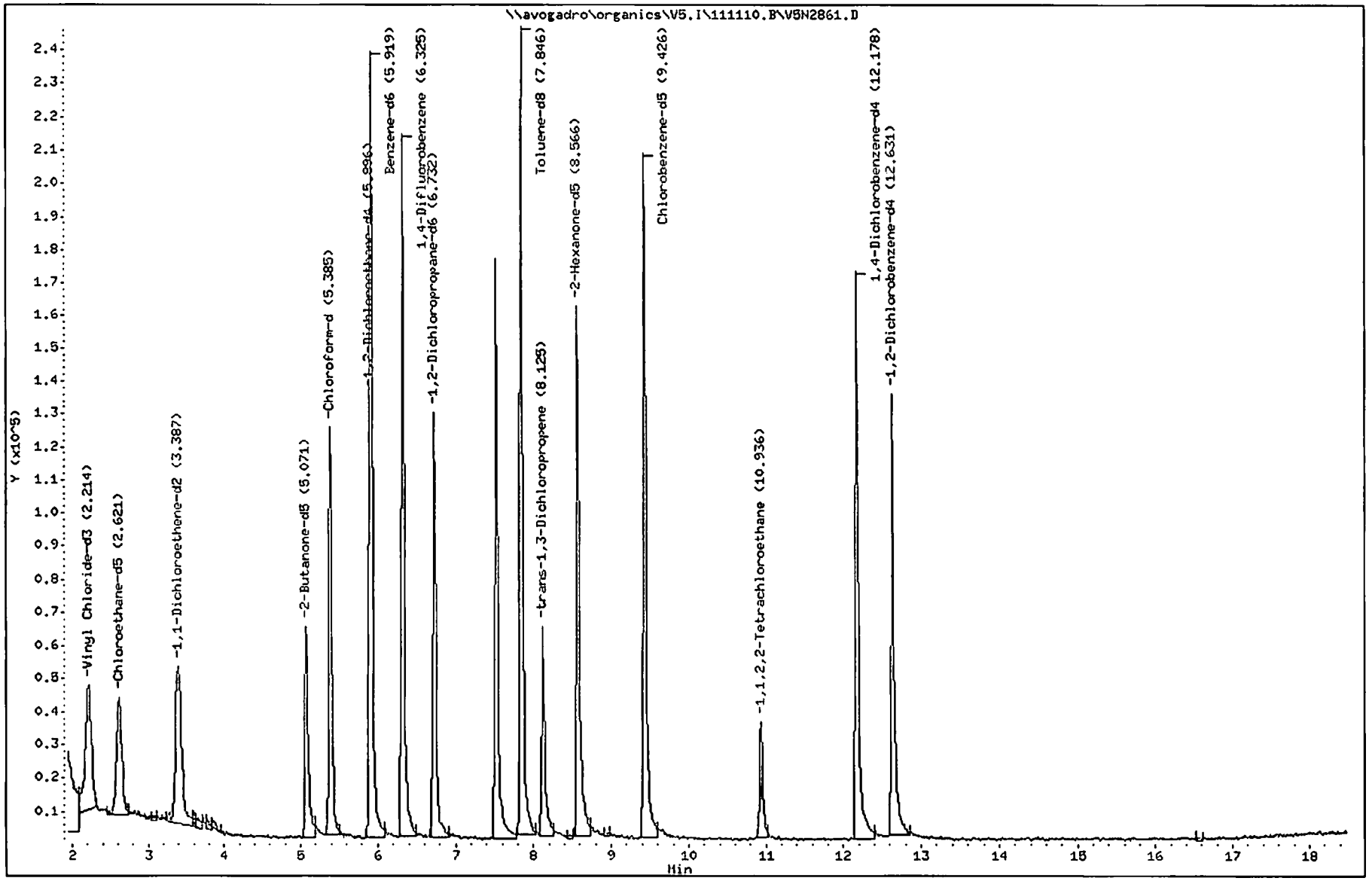
Data file :	\\avogadro\organics\V5.I\111110.B\V5N2861.D		
Lab Smp Id:	K2213-13B	Client Smp ID:	H30Z4
Inj Date :	10-NOV-2011 14:06		
Operator :	SRC: LIMS	Inst ID:	V5.i
Smp Info :	25ML,K2213-13B,,62892		
Misc Info :			
Comment :			
Method :	\\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m		
Meth Date :	14-Nov-2011 21:20 V5.i	Quant Type:	ISTD
Cal Date :	09-NOV-2011 21:52	Cal File:	V5N2826.D
Als bottle:	42		
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\111110.B\V5N2861.D
Date : 10-NOV-2011 14:06
Client ID: H3024
Sample Info: 25ML,K2213-13B,,62892
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.

H30Z5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-14B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2862.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H3025

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-14B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2862.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30Z5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-14B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2862.D

Level: (TRACE or LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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\111110.B\V5N2862.D
Report Date: 15-Nov-2011 09:36

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2862.D
Lab Smp Id: K2213-14B Client Smp ID: H30Z5
Inj Date : 10-NOV-2011 14:35
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-14B,,62892
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 43
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	2.208	2.216	(0.350)	136225	6.23222	6.2
$	80 Chloroethane-d5	69	2.615	2.600	(0.414)	93015	6.26767	6.3
$	81 1,1-Dichloroethene-d2	65	3.381	3.378	(0.535)	28081	4.96063	5.0(Q)
$	82 2-Butanone-d5	46	5.065	5.062	(0.802)	136443	52.0420	52(AQ)
$	83 Chloroform-d	84	5.390	5.387	(0.853)	126784	4.84355	4.8(Q)
$	23 1,2-Dichloroethane-d4	65	5.890	5.898	(0.932)	50589	4.91431	4.9(Q)
$	84 Benzene-d6	84	5.913	5.909	(0.627)	255095	4.79816	4.8
*	26 1,4-Difluorobenzene	114	6.319	6.327	(1.000)	240269	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.726	6.734	(0.713)	85616	4.63946	4.6
$	33 Toluene-d8	98	7.841	7.837	(0.831)	229267	4.80535	4.8
$	86 trans-1,3-Dichloropropene-d4	79	8.119	8.116	(0.861)	52996	5.01187	5.0
$	87 2-Hexanone-d5	63	8.572	8.569	(0.909)	93036	50.8021	51(AQ)
*	42 Chlorobenzene-d5	117	9.432	9.428	(1.000)	181254	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.930	10.926	(1.159)	35889	5.25304	5.3
*	78 1,4-Dichlorobenzene-d4	152	12.172	12.169	(1.000)	75724	5.00000	(Q)
$	90 1,2-Dichlorobenzene-d4	152	12.637	12.633	(1.038)	55635	4.67367	4.7(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\111110.B\V5N2862.D
Report Date: 15-Nov-2011 09:36

Spectrum Analytical, Inc. RI Division

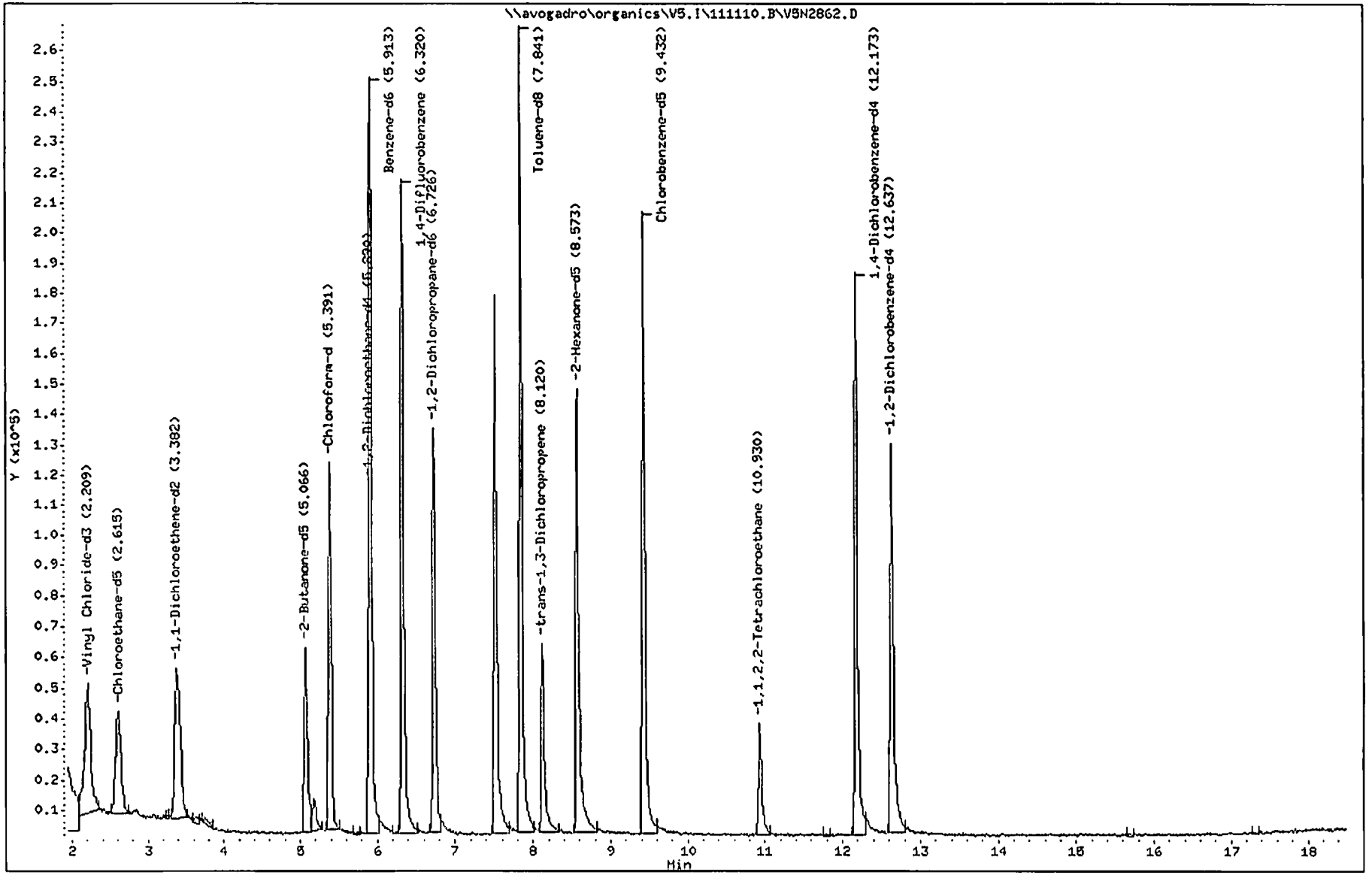
SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2862.D
Lab Smp Id: K2213-14B Client Smp ID: H30Z5
Inj Date : 10-NOV-2011 14:35
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-14B,,62892
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 43
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\111110.B\V5N2862.D
Date : 10-NOV-2011 14:35
Client ID: H3025
Sample Info: 25ML,K2213-14B,,62892
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.

H30Z7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-15B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2863.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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	0.56	
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.

H30Z7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-15B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2863.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30Z7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-15B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2863.D

Level: (TRACE or LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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	74-93-1	Methanethiol	2.406	1.3	NJ
	E96679[1]	Total Alkanes	N/A		

[1] EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111110.B\V5N2863.D
Report Date: 15-Nov-2011 09:36

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2863.D
Lab Smp Id: K2213-15B Client Smp ID: H30Z7
Inj Date : 10-NOV-2011 15:04
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-15B,,62892
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 44
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	2.208	2.216	(0.349)	146795	6.39795	6.4
S	80 Chloroethane-d5	69	2.615	2.600	(0.414)	100279	6.43735	6.4
S	81 1,1-Dichloroethene-d2	65	3.381	3.378	(0.535)	31808	5.35309	5.4(QR)
	10 Carbon Disulfide	76	3.613	3.622	(0.572)	38667	0.56487	0.56(H)
S	82 2-Butanone-d5	46	5.065	5.062	(0.802)	144486	52.5016	53(AQ)
S	83 Chloroform-d	84	5.378	5.387	(0.851)	133721	4.86679	4.9(Q)
S	23 1,2-Dichloroethane-d4	65	5.901	5.898	(0.934)	53117	4.91569	4.9
S	84 Benzene-d6	84	5.913	5.909	(0.627)	263512	4.69339	4.7
*	26 1,4-Difluorobenzene	114	6.319	6.327	(1.000)	252205	5.00000	
S	85 1,2-Dichloropropane-d6	67	6.726	6.734	(0.713)	89420	4.58840	4.6
S	33 Toluene-d8	98	7.840	7.837	(0.831)	237592	4.71552	4.7
S	86 trans-1,3-Dichloropropene-d4	79	8.119	8.116	(0.861)	50704	4.54060	4.5
S	87 2-Hexanone-d5	63	8.560	8.569	(0.908)	100726	52.0818	52(A)
*	42 Chlorobenzene-d5	117	9.431	9.428	(1.000)	191414	5.00000	
S	89 1,1,2,2-Tetrachloroethane-d2	84	10.929	10.926	(1.159)	37124	5.14539	5.1
*	78 1,4-Dichlorobenzene-d4	152	12.172	12.169	(1.000)	78900	5.00000	
S	90 1,2-Dichlorobenzene-d4	152	12.637	12.633	(1.038)	60609	4.88656	4.9(Q)

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111110.B\V5N2863.D
Report Date: 15-Nov-2011 09:36

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\V5.I\111110.B\V5N2863.D
Report Date: 15-Nov-2011 09:36

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2863.D
Lab Smp Id: K2213-15B Client Smp ID: H30Z7
Inj Date : 10-NOV-2011 15:04
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-15B,,62892
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 44
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

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

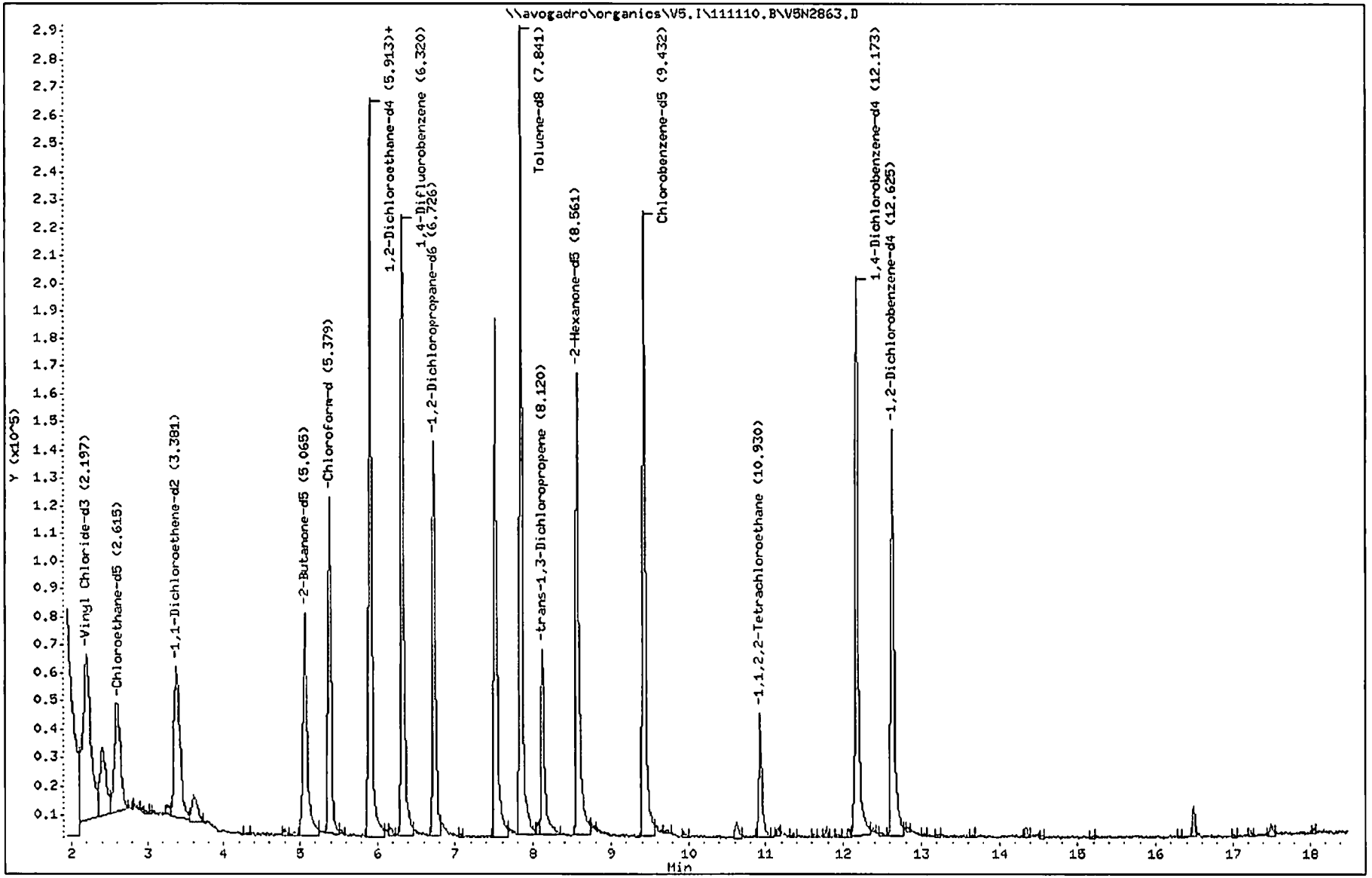
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 26 1,4-Difluorobenzene	6.320	559675	5.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Methanethiol					CAS #: 74-93-1		
2.406	149462	1.33525137	1.3	86	NIST2002.L	108	26

Data File: \\avogadro\organics\V5.I\111110.B\V5N2863.D
Date : 10-NOV-2011 15:04
Client ID: H3027
Sample Info: 25ML,K2213-15B,,62892
Purge Volume: 25.0
Column phase: DB-624

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



Data File: \\avogadro\organics\V5.i\111110.B\V5N2863.D

Date : 10-NOV-2011 15:04

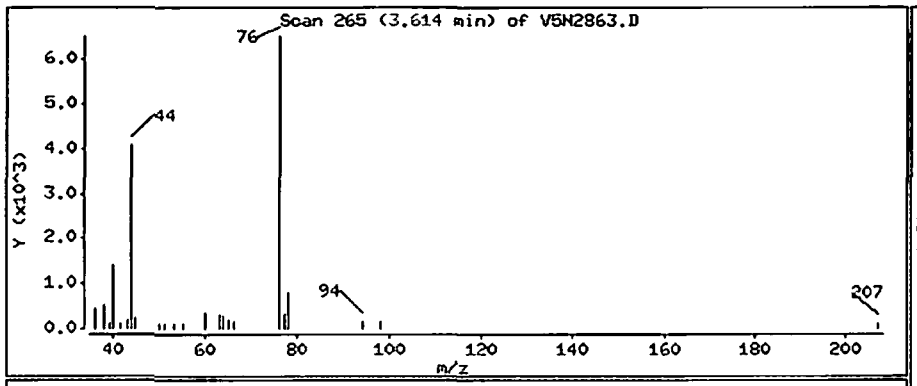
Client ID: H3027 Instrument: V5.i

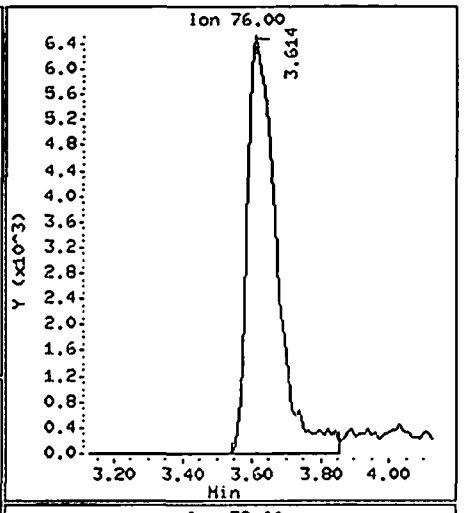
Sample Info: 25ML,K2213-15B,,62892

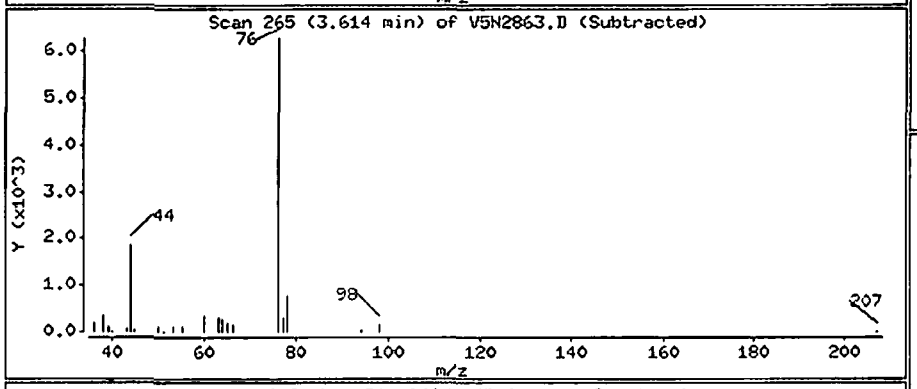
Purge Volume: 25.0 Operator: SRC: LIMS

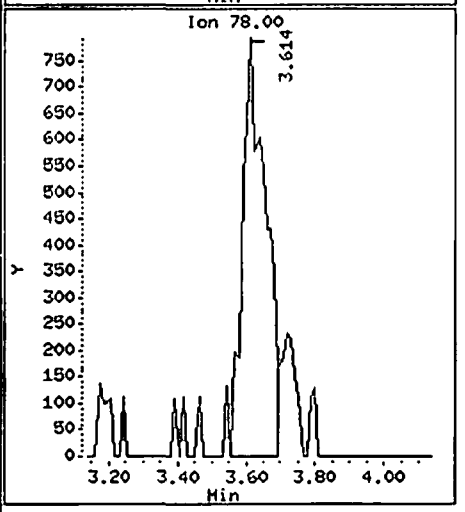
Column phase: DB-624 Column diameter: 0.25

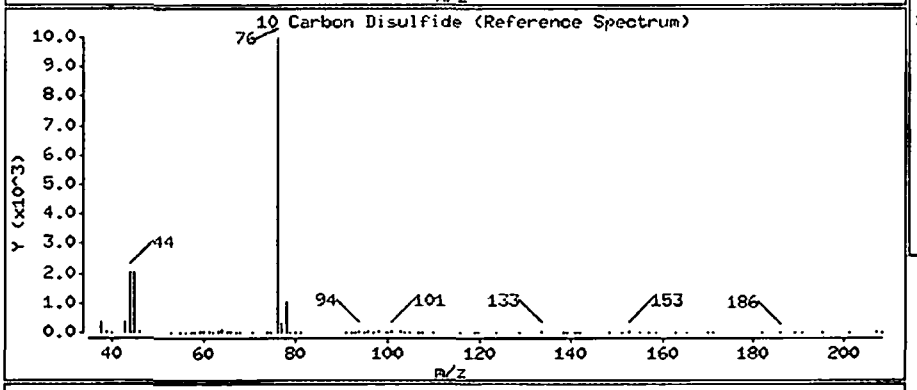
10 Carbon Disulfide Concentration: 0.56 ug/L

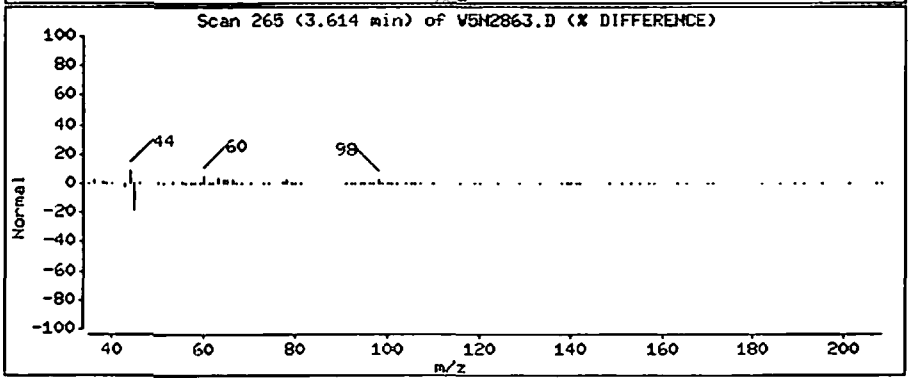












Data File: \\avogadro\organics\V5.I\111110.B\V5N2863.D

Date : 10-NOV-2011 15:04

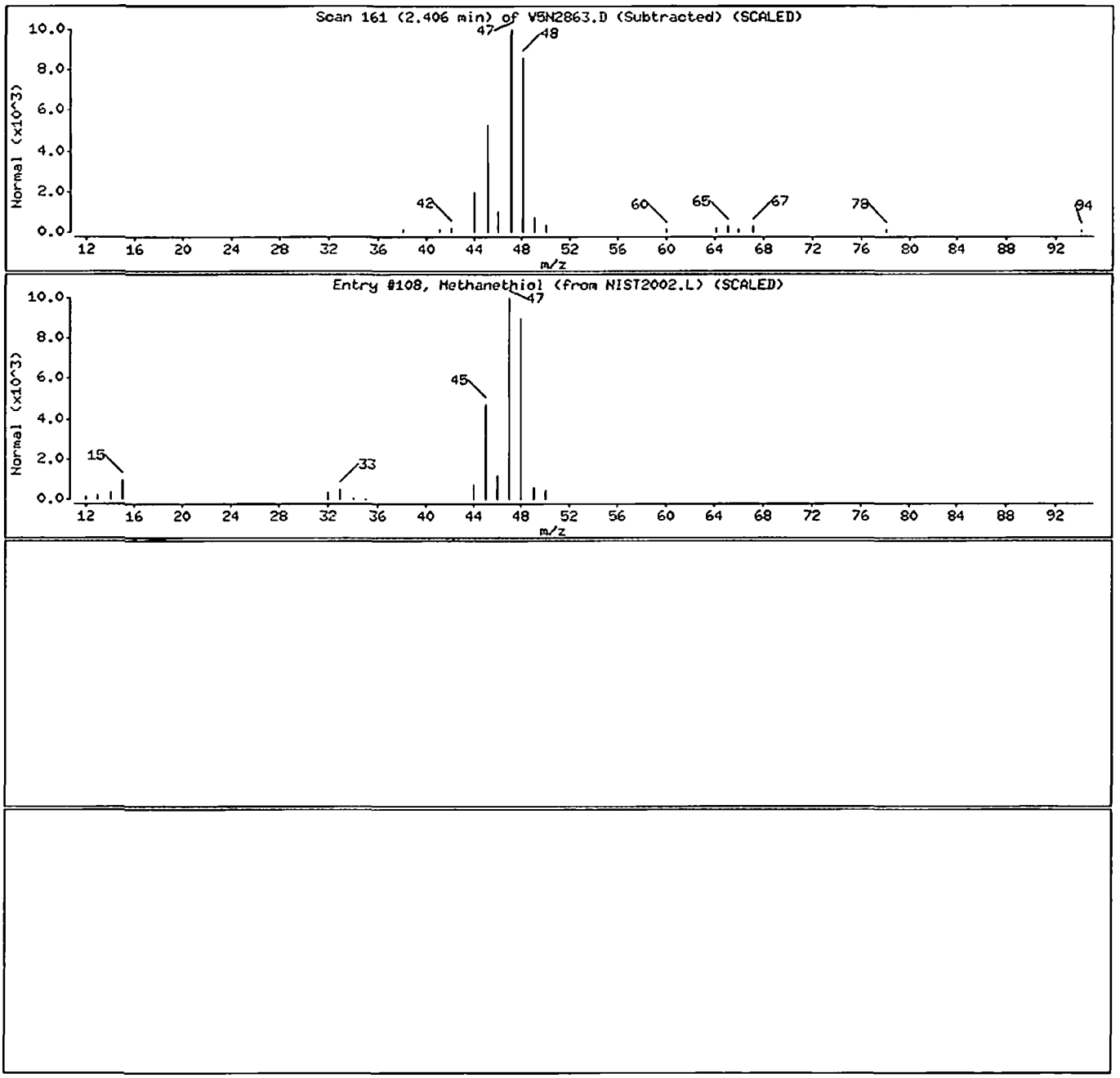
Client ID: H3027 Instrument: V5.i

Sample Info: 25ML,K2213-15B,,62892

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
Methanethiol	74-93-1	NIST2002.L	108	86	CH4S	48



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Z8

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-16B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2864.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30Z8

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-16B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2864.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30Z8

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-16B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2864.D

Level: (TRACE or LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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\111110.B\V5N2864.D
Report Date: 15-Nov-2011 09:36

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2864.D
Lab Smp Id: K2213-16B Client Smp ID: H30Z8
Inj Date : 10-NOV-2011 15:33
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-16B,,62892
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 45
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	2.214	2.216	(0.350)	147694	6.43410	6.4
$ 80 Chloroethane-d5	69	2.621	2.600	(0.414)	101011	6.48129	6.5
$ 81 1,1-Dichloroethene-d2	65	3.399	3.378	(0.537)	32218	5.41953	5.4(QR)
$ 82 2-Butanone-d5	46	5.071	5.062	(0.802)	143833	52.2396	52(AQ)
$ 83 Chloroform-d	84	5.384	5.387	(0.851)	132220	4.80989	4.8(Q)
$ 23 1,2-Dichloroethane-d4	65	5.895	5.898	(0.932)	52939	4.89691	4.9
$ 84 Benzene-d6	84	5.919	5.909	(0.628)	268089	4.85739	4.9
* 26 1,4-Difluorobenzene	114	6.325	6.327	(1.000)	252324	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.732	6.734	(0.714)	87835	4.58492	4.6
$ 33 Toluene-d8	98	7.846	7.837	(0.832)	230842	4.66068	4.7
$ 86 trans-1,3-Dichloropropene-d4	79	8.125	8.116	(0.862)	55570	5.06230	5.1
$ 87 2-Hexanone-d5	63	8.566	8.569	(0.909)	92657	48.7371	49(AQ)
* 42 Chlorobenzene-d5	117	9.426	9.428	(1.000)	188164	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.924	10.926	(1.159)	36036	5.08086	5.1
* 78 1,4-Dichlorobenzene-d4	152	12.178	12.169	(1.000)	77053	5.00000	(Q)
$ 90 1,2-Dichlorobenzene-d4	152	12.631	12.633	(1.037)	60650	5.00708	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\111110.B\V5N2864.D
Report Date: 15-Nov-2011 09:36

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\V5.I\111110.B\V5N2864.D
Report Date: 15-Nov-2011 09:36

Spectrum Analytical, Inc. RI Division

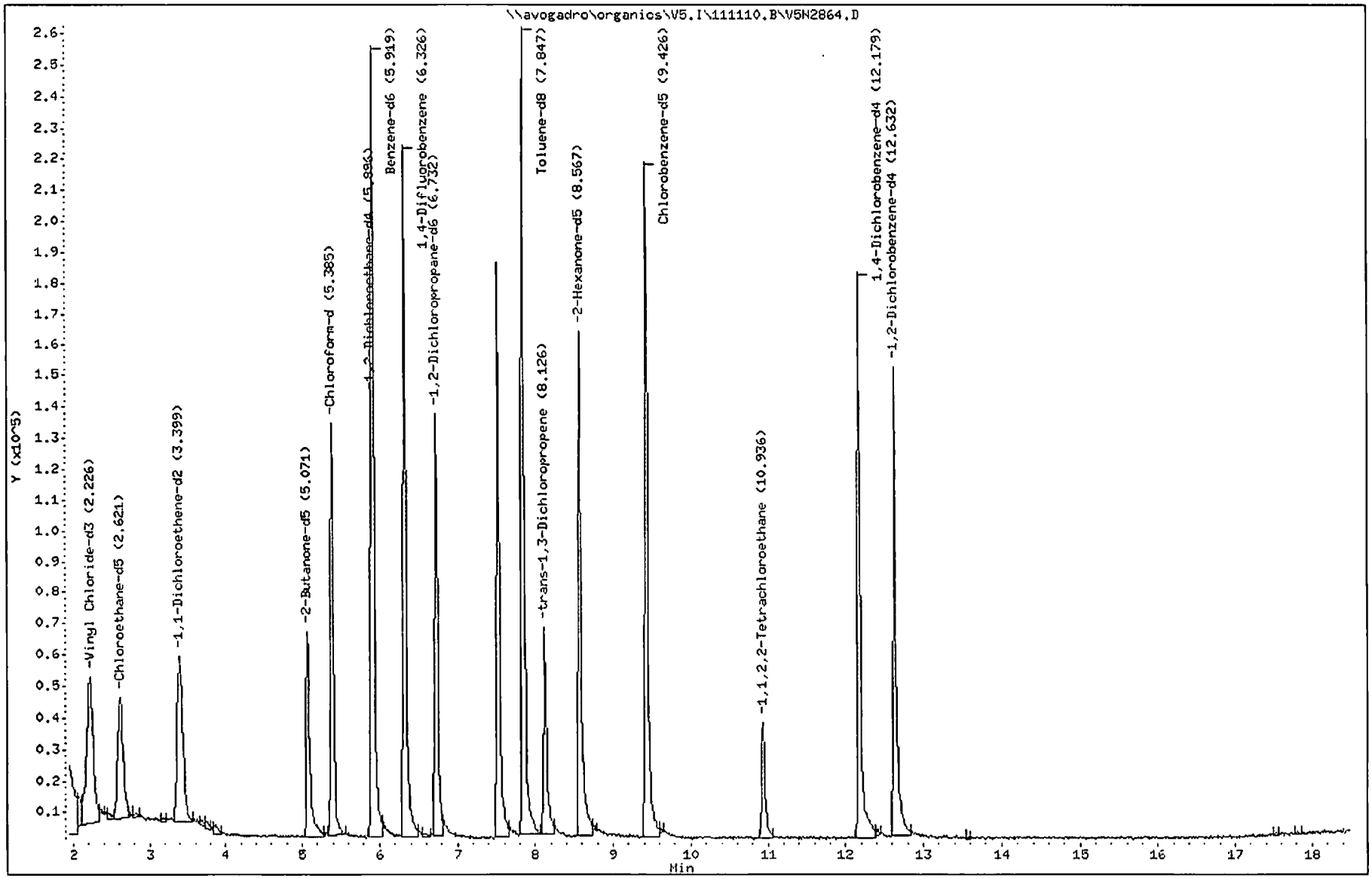
SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2864.D
Lab Smp Id: K2213-16B Client Smp ID: H30Z8
Inj Date : 10-NOV-2011 15:33
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-16B,,62892
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 45
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\111110.B\V5N2864.D
Date : 10-NOV-2011 15:33
Client ID: H3028
Sample Info: 25ML,K2213-16B,,62892
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.

H3BA1

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-17A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2865.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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	0.39	J
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.

H3BA1

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-17A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2865.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H3BA1

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-17A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2865.D

Level: (TRACE or LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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\111110.B\V5N2865.D
Report Date: 15-Nov-2011 09:36

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2865.D
Lab Smp Id: K2213-17A Client Smp ID: H3BA1
Inj Date : 10-NOV-2011 16:02
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-17A,,62892
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 46
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	2.207	2.216	(0.349)	148350	6.39360	6.4
$ 80 Chloroethane-d5	69	2.613	2.600	(0.414)	98142	6.22989	6.2
$ 81 1,1-Dichloroethene-d2	65	3.391	3.378	(0.537)	32628	5.42984	5.4(QR)
$ 82 2-Butanone-d5	46	5.075	5.062	(0.803)	144534	51.9332	52(AQ)
$ 83 Chloroform-d	84	5.389	5.387	(0.853)	133685	4.81121	4.8(Q)
19 Chloroform	83	5.401	5.410	(0.855)	11274	0.39042	0.39
$ 23 1,2-Dichloroethane-d4	65	5.900	5.898	(0.934)	52263	4.78271	4.8
$ 84 Benzene-d6	84	5.912	5.909	(0.627)	266754	4.64932	4.6
* 26 1,4-Difluorobenzene	114	6.318	6.327	(1.000)	255050	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.724	6.734	(0.713)	87263	4.38176	4.4
$ 33 Toluene-d8	98	7.839	7.837	(0.831)	237429	4.61130	4.6
$ 86 trans-1,3-Dichloropropene-d4	79	8.118	8.116	(0.861)	56216	4.92631	4.9
$ 87 2-Hexanone-d5	63	8.571	8.569	(0.909)	94150	47.6383	48(A)
* 42 Chlorobenzene-d5	117	9.430	9.428	(1.000)	195606	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.928	10.926	(1.159)	37231	5.04963	5.0
* 78 1,4-Dichlorobenzene-d4	152	12.171	12.169	(1.000)	82786	5.00000	(Q)
$ 90 1,2-Dichlorobenzene-d4	152	12.635	12.633	(1.038)	62318	4.78850	4.8(Q)

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111110.B\V5N2865.D
Report Date: 15-Nov-2011 09:36

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\V5.I\111110.B\V5N2865.D
Report Date: 15-Nov-2011 09:36

Spectrum Analytical, Inc. RI Division

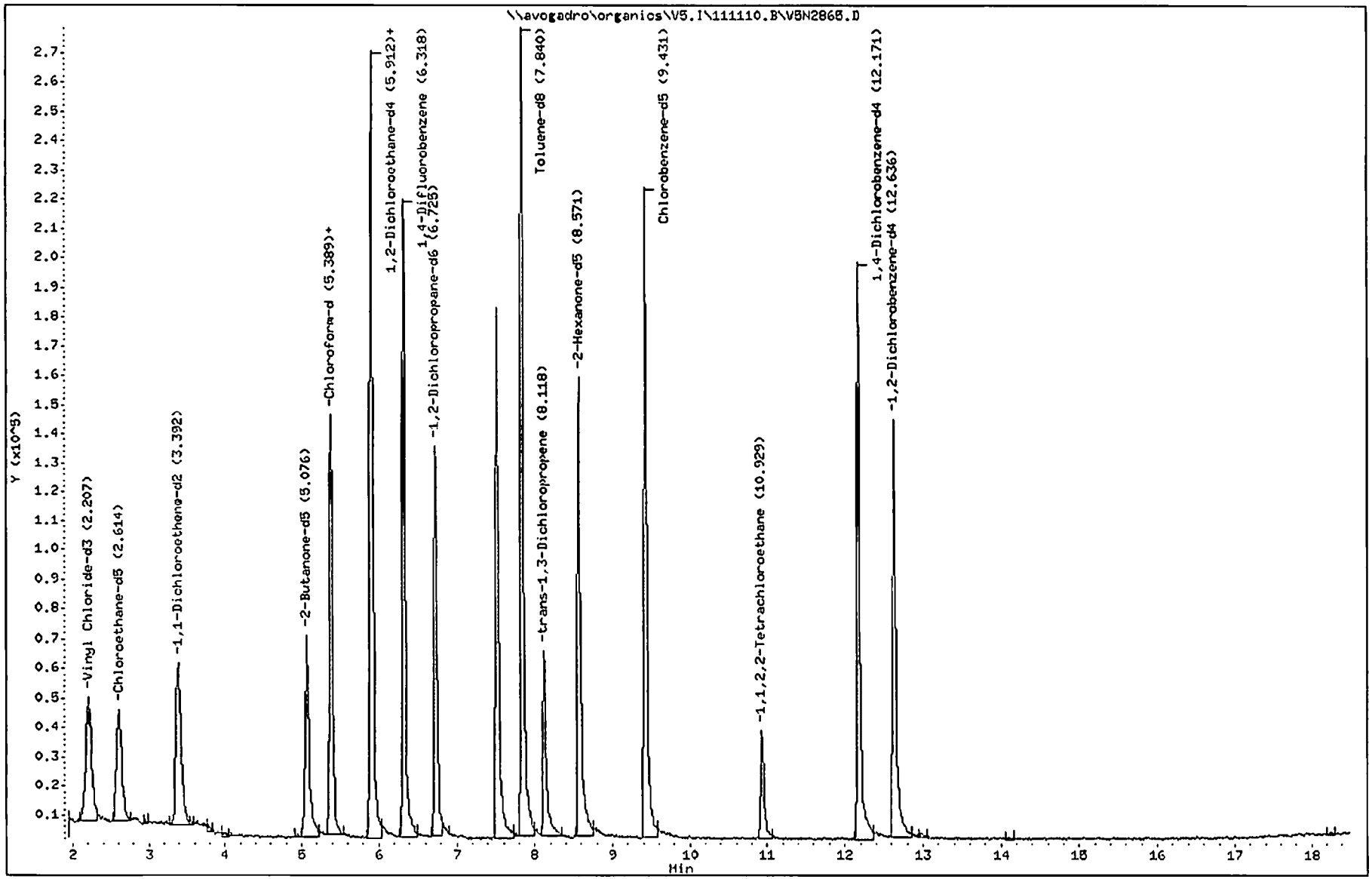
SOM01.0 - Trace Water Volatiles

Data file	: \\avogadro\organics\V5.I\111110.B\V5N2865.D		
Lab Smp Id	: K2213-17A	Client Smp ID	: H3BA1
Inj Date	: 10-NOV-2011 16:02		
Operator	: SRC: LIMS	Inst ID	: V5.i
Smp Info	: 25ML,K2213-17A,,62892		
Misc Info	:		
Comment	:		
Method	: \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m		
Meth Date	: 14-Nov-2011 21:20 V5.i	Quant Type	: ISTD
Cal Date	: 09-NOV-2011 20:26	Cal File	: V5N2823.D
Als bottle	: 46		
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\111110.B\V5N2865.D
Date : 10-NOV-2011 16:02
Client ID: H3BA1
Sample Info: 25ML,K2213-17A,,62892
Purge Volume: 25.0
Column phase: DB-624

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



Data File: \\avogadro\organics\V5.I\111110.B\V5N2865.D

Date : 10-NOV-2011 16:02

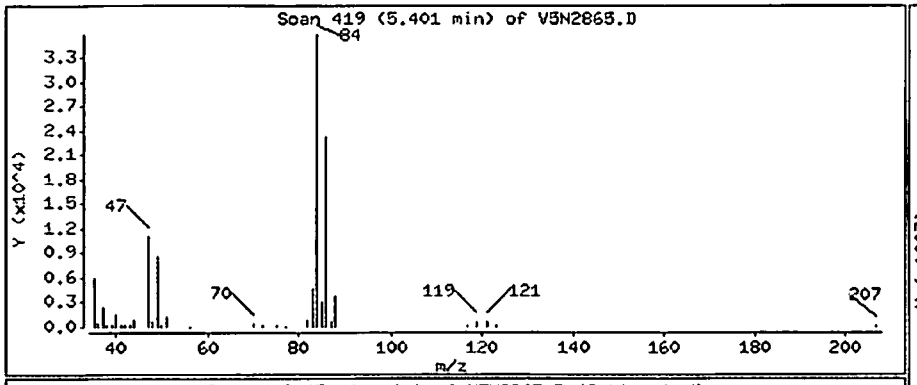
Client ID: H3BA1 Instrument: V5.i

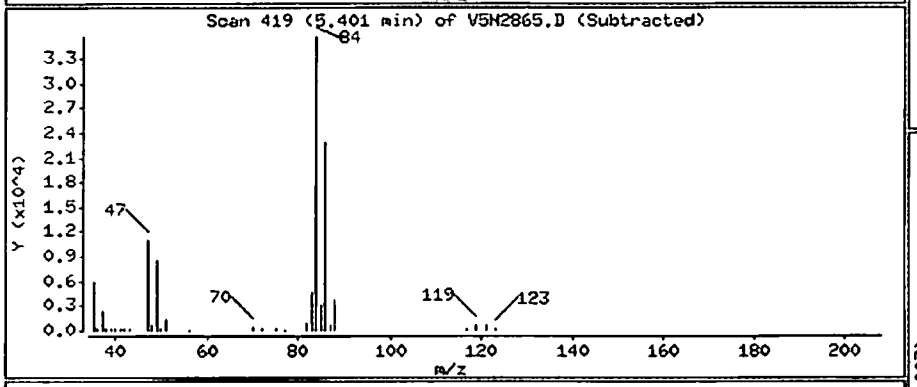
Sample Info: 25ML,K2213-17A,,62892

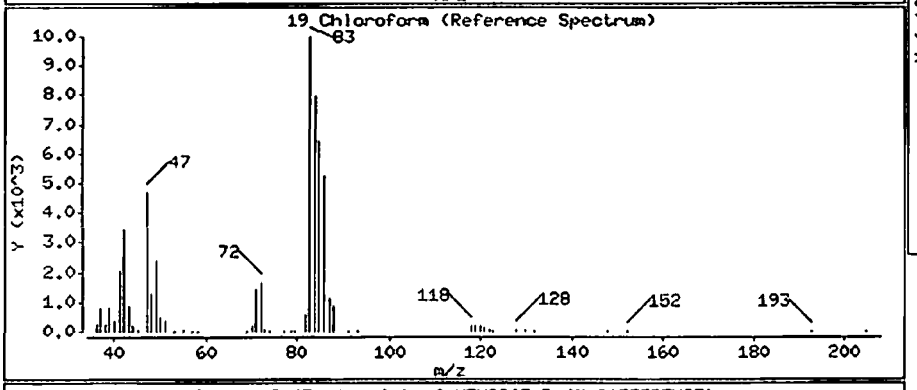
Purge Volume: 25.0 Operator: SRC: LIMS

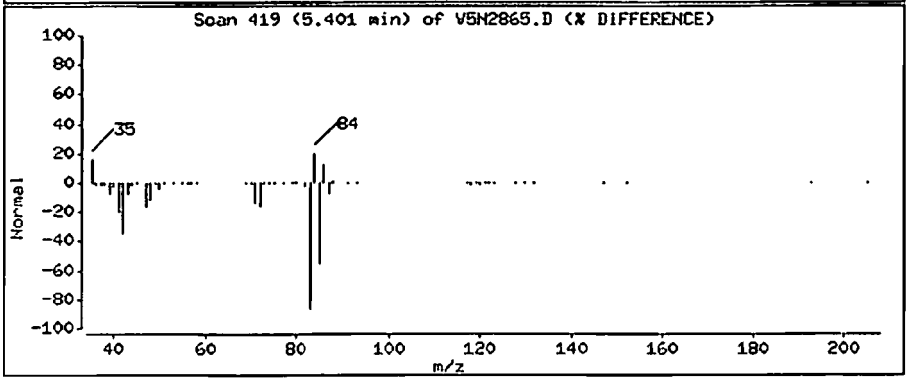
Column phase: DB-624 Column diameter: 0.25

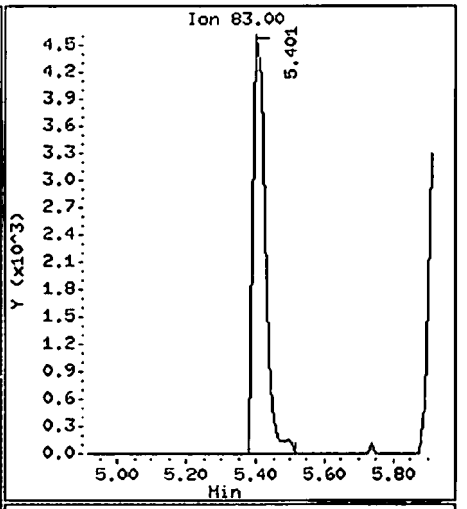
19 Chloroform Concentration: 0.39 ug/L

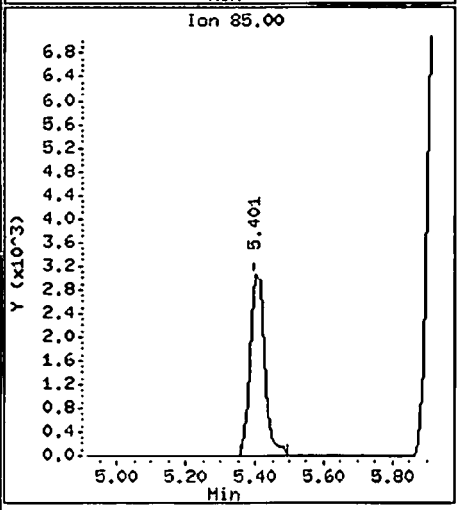












6A - FORM VI VOA-1

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.: H30X4

Instrument ID: V5 Calibration Date(s): 11/09/2011 11/09/2011

Heated Purge: (Y/N) N Calibration Time(s): 19:57 21:52

Purge Volume: 25.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: RRF0.5 = V5N2823.D RRF001 = V5N2826.D

RRF005 = V5N2822.D RRF010 = V5N2825.D RRF020 = V5N2824.D

COMPOUND	RRF0.5	RRF001	RRF005	RRF010	RRF020	$\overline{RRF}$	%RSD
Dichlorodifluoromethane	0.319	0.331	0.316	0.338	0.334	0.328	3.0
Chloromethane	0.877	0.680	0.726	0.712	0.741	0.747	10.2
Vinyl chloride	0.670	0.539	0.563	0.553	0.567	0.578	9.0
Bromomethane	0.369	0.359	0.361	0.346	0.323	0.351	5.1
Chloroethane	0.443	0.289	0.294	0.288	0.282	0.319	21.6
Trichlorofluoromethane	0.733	0.726	0.627	0.723	0.681	0.698	6.4
1,1-Dichloroethene	0.438	0.340	0.324	0.346	0.329	0.356	13.3
1,1,2-Trichloro-1,2,2-trifluoroethane	0.441	0.414	0.358	0.375	0.374	0.392	8.7
Acetone	0.050	0.035	0.038	0.038	0.037	0.040	14.4
Carbon disulfide	1.666	1.322	1.283	1.272	1.242	1.357	12.9
Methyl acetate	0.142	0.105	0.129	0.107	0.097	0.116	16.1
Methylene chloride	0.415	0.331	0.296	0.299	0.301	0.328	15.4
trans-1,2-Dichloroethene	0.409	0.379	0.370	0.371	0.352	0.376	5.5
Methyl tert-butyl ether	0.501	0.424	0.393	0.420	0.400	0.428	10.0
1,1-Dichloroethane	0.792	0.656	0.715	0.684	0.689	0.707	7.3
cis-1,2-Dichloroethene	0.389	0.337	0.349	0.341	0.330	0.349	6.7
2-Butanone	0.071	0.050	0.056	0.051	0.054	0.057	15.1
Bromochloromethane	0.133	0.127	0.133	0.134	0.132	0.132	1.9
Chloroform	0.632	0.541	0.567	0.553	0.537	0.566	6.8
1,1,1-Trichloroethane	0.748	0.725	0.698	0.731	0.662	0.713	4.7
Cyclohexane	0.983	0.907	0.860	0.843	0.817	0.882	7.4
Carbon tetrachloride	0.708	0.708	0.635	0.676	0.625	0.671	5.8
Benzene	1.767	1.685	1.600	1.544	1.510	1.621	6.5
1,2-Dichloroethane	0.292	0.264	0.243	0.252	0.256	0.262	7.1
Trichloroethene	0.498	0.511	0.485	0.503	0.458	0.491	4.2
Methylcyclohexane	0.765	0.715	0.710	0.676	0.679	0.709	5.1

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.: H30X4

Instrument ID: V5 Calibration Date(s): 11/09/2011 11/09/2011

Heated Purge: (Y/N) N Calibration Time(s): 19:57 21:52

Purge Volume: 25.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: RRF0.5 = V5N2823.D RRF001 = V5N2826.D

RRF005 = V5N2822.D RRF010 = V5N2825.D RRF020 = V5N2824.D

COMPOUND	RRF0.5	RRF001	RRF005	RRF010	RRF020	$\overline{RRF}$	%RSD
1,2-Dichloropropane	0.532	0.457	0.423	0.409	0.388	0.442	12.8
Bromodichloromethane	0.479	0.429	0.458	0.451	0.425	0.448	4.9
cis-1,3-Dichloropropene	0.536	0.482	0.520	0.523	0.492	0.511	4.4
4-Methyl-2-pentanone	0.209	0.171	0.168	0.163	0.153	0.173	12.2
Toluene	1.795	1.727	1.614	1.624	1.504	1.653	6.8
trans-1,3-Dichloropropene	0.326	0.287	0.347	0.358	0.331	0.330	8.2
1,1,2-Trichloroethane	0.193	0.194	0.196	0.193	0.176	0.191	4.2
Tetrachloroethene	0.318	0.447	0.379	0.366	0.339	0.370	13.3
2-Hexanone	0.128	0.093	0.117	0.113	0.109	0.112	11.2
Dibromochloromethane	0.273	0.272	0.282	0.292	0.277	0.279	2.9
1,2-Dibromoethane	0.196	0.182	0.208	0.210	0.206	0.200	5.7
Chlorobenzene	1.126	1.145	1.080	1.078	1.042	1.094	3.8
Ethylbenzene	2.027	1.842	1.774	1.783	1.690	1.823	6.9
m,p-Xylene	0.833	0.827	0.772	0.742	0.717	0.778	6.6
o-Xylene	0.728	0.774	0.710	0.695	0.651	0.712	6.3
Styrene	1.051	1.015	1.051	1.067	1.014	1.039	2.3
Bromoform	0.245	0.295	0.302	0.317	0.299	0.292	9.4
Isopropylbenzene	2.088	1.973	1.875	1.931	1.821	1.937	5.3
1,1,2,2-Tetrachloroethane	0.202	0.198	0.204	0.195	0.180	0.196	4.9
1,3-Dichlorobenzene	1.630	1.629	1.635	1.745	1.603	1.648	3.4
1,4-Dichlorobenzene	1.967	1.689	1.708	1.780	1.615	1.752	7.6
1,2-Dichlorobenzene	1.436	1.350	1.378	1.387	1.292	1.369	3.8
1,2-Dibromo-3-chloropropane	0.021	0.067	0.050	0.069	0.059	0.054	36.4
1,2,4-Trichlorobenzene	0.851	0.938	0.942	1.100	0.978	0.962	9.4
1,2,3-Trichlorobenzene	0.713	0.809	0.730	0.772	0.684	0.742	6.6

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Instrument ID: V5 Calibration Date(s): 11/09/2011 11/09/2011

Heated Purge: (Y/N) N Calibration Time(s): 19:57 21:52

Purge Volume: 25.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: RRF0.5 = V5N2823.D RRF001 = V5N2826.D

RRF005 = V5N2822.D RRF010 = V5N2825.D RRF020 = V5N2824.D

COMPOUND	RRF0.5	RRF001	RRF005	RRF010	RRF020	$\overline{RRF}$	%RSD
Vinyl chloride-d3	0.529	0.435	0.447	0.423	0.440	0.455	9.3
Chloroethane-d5	0.382	0.294	0.297	0.287	0.285	0.309	13.3
1,1-Dichloroethene-d2	0.140	0.125	0.107	0.108	0.109	0.118	12.4
2-Butanone-d5	0.066	0.048	0.054	0.053	0.053	0.055	12.2
Chloroform-d	0.587	0.545	0.536	0.535	0.521	0.545	4.6
1,2-Dichloroethane-d4	0.216	0.212	0.217	0.213	0.212	0.214	1.2
Benzene-d6	1.624	1.510	1.445	1.389	1.365	1.467	7.1
1,2-Dichloropropane-d6	0.519	0.502	0.526	0.517	0.482	0.509	3.5
Toluene-d8	1.448	1.263	1.299	1.328	1.243	1.316	6.1
trans-1,3-Dichloropropene-d4	0.265	0.280	0.317	0.307	0.289	0.292	7.3
2-Hexanone-d5	0.056	0.038	0.055	0.053	0.050	0.051	14.7
1,1,2,2-Tetrachloroethane-d2	0.206	0.178	0.190	0.191	0.178	0.188	6.2
1,2-Dichlorobenzene-d4	0.802	0.826	0.762	0.794	0.746	0.786	4.1

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only SOM01.2 (6/2007)

Data File: \\avogadro\organics\V5.I\111109.B\V5N2822.D
Report Date: 15-Nov-2011 09:34

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111109.B\V5N2822.D
Lab Smp Id: VSTD005O5 Client Smp ID: VSTD005O5
Inj Date : 09-NOV-2011 19:57
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD005O5,VSTD005O5
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111109.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 14:30 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 19:57 Cal File: V5N2822.D
Als bottle: 3 Calibration Sample, Level: 3
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	1.902	(0.300)	74197	5.00000	4.8
2	Chloromethane	50	2.027	2.042	(0.321)	170387	5.00000	4.9
$ 79	Vinyl Chloride-d3	65	2.167	2.169	(0.343)	104893	5.00000	4.9
3	Vinyl Chloride	62	2.178	2.181	(0.345)	131957	5.00000	4.9
4	Bromomethane	94	2.515	2.518	(0.398)	84641	5.00000	5.1
$ 80	Chloroethane-d5	69	2.585	2.587	(0.409)	69544	5.00000	4.8
5	Chloroethane	64	2.608	2.611	(0.412)	68956	5.00000	4.6
6	Trichlorofluoromethane	101	2.898	2.913	(0.458)	147008	5.00000	4.5
$ 81	1,1-Dichloroethene-d2	65	3.363	3.366	(0.532)	25101	5.00000	4.5
7	1,1-Dichloroethene	96	3.375	3.377	(0.534)	75972	5.00000	4.6
8	1,1,2-Trichloro-1,2,2-trifluo	101	3.421	3.424	(0.541)	84077	5.00000	4.6
9	Acetone	43	3.444	3.447	(0.545)	90116	50.0000	49
10	Carbon Disulfide	76	3.607	3.598	(0.570)	300959	5.00000	4.7
11	Methyl Acetate	43	3.769	3.760	(0.596)	30158	5.00000	5.6
12	Methylene Chloride	84	3.862	3.853	(0.611)	69439	5.00000	4.5
13	trans-1,2-Dichloroethene	96	4.118	4.120	(0.651)	86733	5.00000	4.9
14	Methyl tert-Butyl Ether	73	4.129	4.132	(0.653)	92256	5.00000	4.6
15	1,1-Dichloroethane	63	4.536	4.527	(0.717)	167811	5.00000	5.1
$ 82	2-Butanone-d5	46	5.070	5.061	(0.802)	127495	50.0000	50(A)
17	cis-1,2-Dichloroethene	96	5.093	5.096	(0.805)	81891	5.00000	5.0
16	2-Butanone	43	5.128	5.119	(0.811)	131861	50.0000	50
18	Bromochloromethane	128	5.337	5.328	(0.844)	31106	5.00000	5.0(Q)

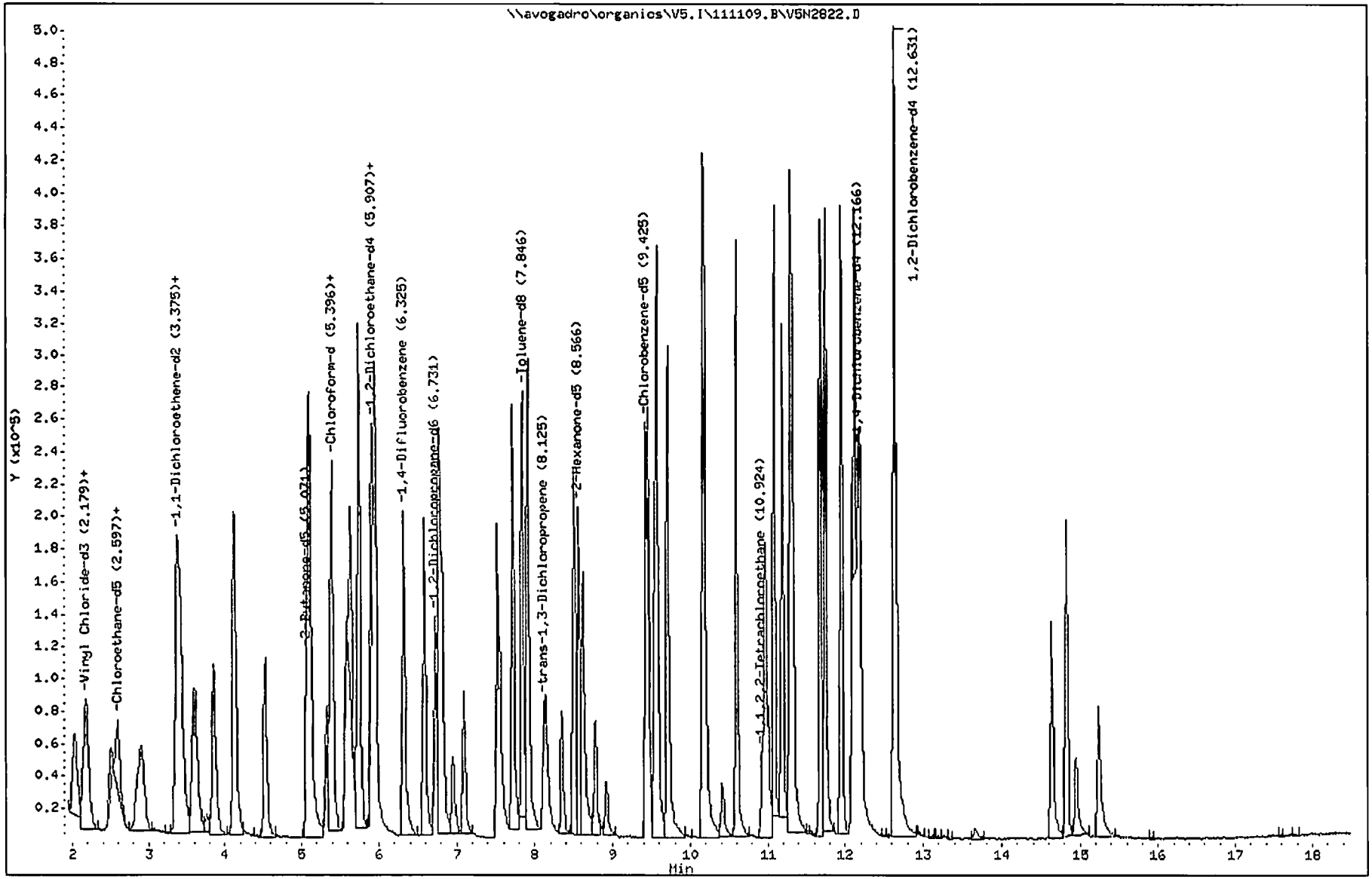
Data File: \\avogadro\organics\V5.I\111109.B\V5N2822.D
Report Date: 15-Nov-2011 09:34

		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	5.386	(0.851)	125708	5.00000	4.9
	19	Chloroform	83	5.407	5.398	(0.855)	133070	5.00000	5.0
	20	1,1,1-Trichloroethane	97	5.593	5.584	(0.593)	120194	5.00000	4.9
	21	Cyclohexane	56	5.639	5.642	(0.598)	148121	5.00000	4.9
	22	Carbon Tetrachloride	117	5.744	5.746	(0.609)	109436	5.00000	4.7
$	23	1,2-Dichloroethane-d4	65	5.895	5.897	(0.932)	50997	5.00000	5.1
$	84	Benzene-d6	84	5.906	5.909	(0.627)	248943	5.00000	4.9
	25	Benzene	78	5.953	5.944	(0.632)	275573	5.00000	4.9
	24	1,2-Dichloroethane	62	5.964	5.967	(0.943)	57060	5.00000	4.7
*	26	1,4-Difluorobenzene	114	6.324	6.327	(1.000)	234545	5.00000	
	27	Trichloroethene	95	6.591	6.594	(0.699)	83611	5.00000	4.9
$	85	1,2-Dichloropropane-d6	67	6.731	6.733	(0.714)	90535	5.00000	5.2
	28	Methylcyclohexane	83	6.777	6.780	(0.719)	122241	5.00000	5.0
	29	1,2-Dichloropropane	63	6.812	6.815	(0.723)	72782	5.00000	4.8
	30	Bromodichloromethane	83	7.091	7.093	(0.752)	78890	5.00000	5.1
	31	cis-1,3-Dichloropropene	75	7.555	7.558	(0.802)	89498	5.00000	5.1
	32	4-Methyl-2-Pentanone	43	7.718	7.720	(0.819)	289543	50.0000	49
$	33	Toluene-d8	98	7.846	7.837	(0.832)	223683	5.00000	4.9
	34	Toluene	91	7.915	7.918	(0.840)	278098	5.00000	4.9
$	86	trans-1,3-Dichloropropene-d4	79	8.124	8.115	(0.862)	54684	5.00000	5.4
	35	trans-1,3-Dichloropropene	75	8.148	8.150	(0.864)	59815	5.00000	5.3
	36	1,1,2-Trichloroethane	97	8.345	8.348	(0.885)	33737	5.00000	5.1
	37	Tetrachloroethene	164	8.496	8.498	(0.901)	65322	5.00000	5.1
$	87	2-Hexanone-d5	63	8.566	8.568	(0.909)	95415	50.0000	55(A)
	38	2-Hexanone	43	8.624	8.626	(0.915)	202266	50.0000	52
	39	Dibromochloromethane	129	8.775	8.777	(0.931)	48610	5.00000	5.1
	40	1,2-Dibromoethane	107	8.926	8.917	(0.947)	35825	5.00000	5.2
*	42	Chlorobenzene-d5	117	9.425	9.428	(1.000)	172253	5.00000	
	43	Chlorobenzene	112	9.460	9.462	(1.004)	186046	5.00000	4.9
	44	Ethylbenzene	91	9.576	9.579	(1.016)	305564	5.00000	4.9
	45	m,p-Xylene	106	9.715	9.706	(1.031)	132978	5.00000	5.0
	46	o-Xylene	106	10.168	10.171	(1.079)	122339	5.00000	5.0
	47	Styrene	104	10.191	10.194	(1.081)	180966	5.00000	5.1
	48	Bromoform	173	10.412	10.415	(0.856)	21883	5.00000	5.2
	49	Isopropylbenzene	105	10.598	10.600	(1.124)	322981	5.00000	4.8
$	89	1,1,2,2-Tetrachloroethane-d2	84	10.923	10.926	(1.159)	32757	5.00000	5.0
	51	1,1,2,2-Tetrachloroethane	83	10.958	10.949	(1.163)	35151	5.00000	5.2
M	41	Xylene (total)	106				255317	5.00000	10
	52	1,3-Dichlorobenzene	146	12.096	12.087	(0.994)	118551	5.00000	5.0
*	78	1,4-Dichlorobenzene-d4	152	12.166	12.168	(1.000)	72503	5.00000	
	53	1,4-Dichlorobenzene	146	12.201	12.203	(1.003)	123869	5.00000	4.9
$	90	1,2-Dichlorobenzene-d4	152	12.630	12.633	(1.038)	55231	5.00000	4.8(Q)
	54	1,2-Dichlorobenzene	146	12.653	12.656	(1.040)	99879	5.00000	5.0
	55	1,2-Dibromo-3-chloropropane	75	13.652	13.666	(1.122)	3642	5.00000	4.7(Q)
	56	1,2,4-Trichlorobenzene	180	14.639	14.642	(1.203)	68319	5.00000	4.9
	77	1,2,3-Trichlorobenzene	180	15.243	15.246	(1.253)	52896	5.00000	4.9

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\111109.B\V5N2822.D
Date : 09-NOV-2011 19:57
Client ID: VSTD00505 Instrument: V5.I
Sample Info: 25ML,VSTD00505,VSTD00505
Purge Volume: 25.0 Operator: SRC:
Column phase: DB-624 Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111109.B\V5N2823.D
Report Date: 15-Nov-2011 09:34

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111109.B\V5N2823.D
Lab Smp Id: VSTD0.5O5 Client Smp ID: VSTD0.5O5
Inj Date : 09-NOV-2011 20:26
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD0.5O5,VSTD0.5O5
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111109.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 14:30 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 49 Calibration Sample, Level: 1
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	1.902	(0.302)	8184	0.50000	0.49
	2	Chloromethane	50	2.092	2.042	(0.331)	22493	0.50000	0.59
S	79	Vinyl Chloride-d3	65	2.197	2.169	(0.348)	13570	0.50000	0.58
	3	Vinyl Chloride	62	2.220	2.181	(0.351)	17182	0.50000	0.58
	4	Bromomethane	94	2.568	2.518	(0.406)	9453	0.50000	0.52
S	80	Chloroethane-d5	69	2.603	2.587	(0.412)	9797	0.50000	0.62
	5	Chloroethane	64	2.626	2.611	(0.416)	11351	0.50000	0.69
	6	Trichlorofluoromethane	101	2.905	2.913	(0.460)	18794	0.50000	0.52
S	81	1,1-Dichloroethene-d2	65	3.381	3.366	(0.535)	3597	0.50000	0.60
	7	1,1-Dichloroethene	96	3.416	3.377	(0.541)	11244	0.50000	0.62
	8	1,1,2-Trichloro-1,2,2-trifluo	101	3.428	3.424	(0.542)	11321	0.50000	0.56
	9	Acetone	43	3.462	3.447	(0.548)	12711	5.00000	6.3
	10	Carbon Disulfide	76	3.625	3.596	(0.574)	42732	0.50000	0.61
	11	Methyl Acetate	43	3.776	3.760	(0.598)	3639	0.50000	0.61(T)
	12	Methylene Chloride	84	3.869	3.853	(0.612)	10641	0.50000	0.63
	13	trans-1,2-Dichloroethene	96	4.124	4.120	(0.653)	10486	0.50000	0.54
	14	Methyl tert-Butyl Ether	73	4.136	4.132	(0.655)	12841	0.50000	0.59
	15	1,1-Dichloroethane	63	4.542	4.527	(0.719)	20306	0.50000	0.56
S	82	2-Butanone-d5	46	5.077	5.061	(0.803)	16833	5.00000	6.0
	17	cis-1,2-Dichloroethene	96	5.100	5.096	(0.807)	9989	0.50000	0.56
	16	2-Butanone	43	5.146	5.119	(0.814)	18309	5.00000	6.3
	18	Bromochloromethane	128	5.344	5.328	(0.846)	3405	0.50000	0.50

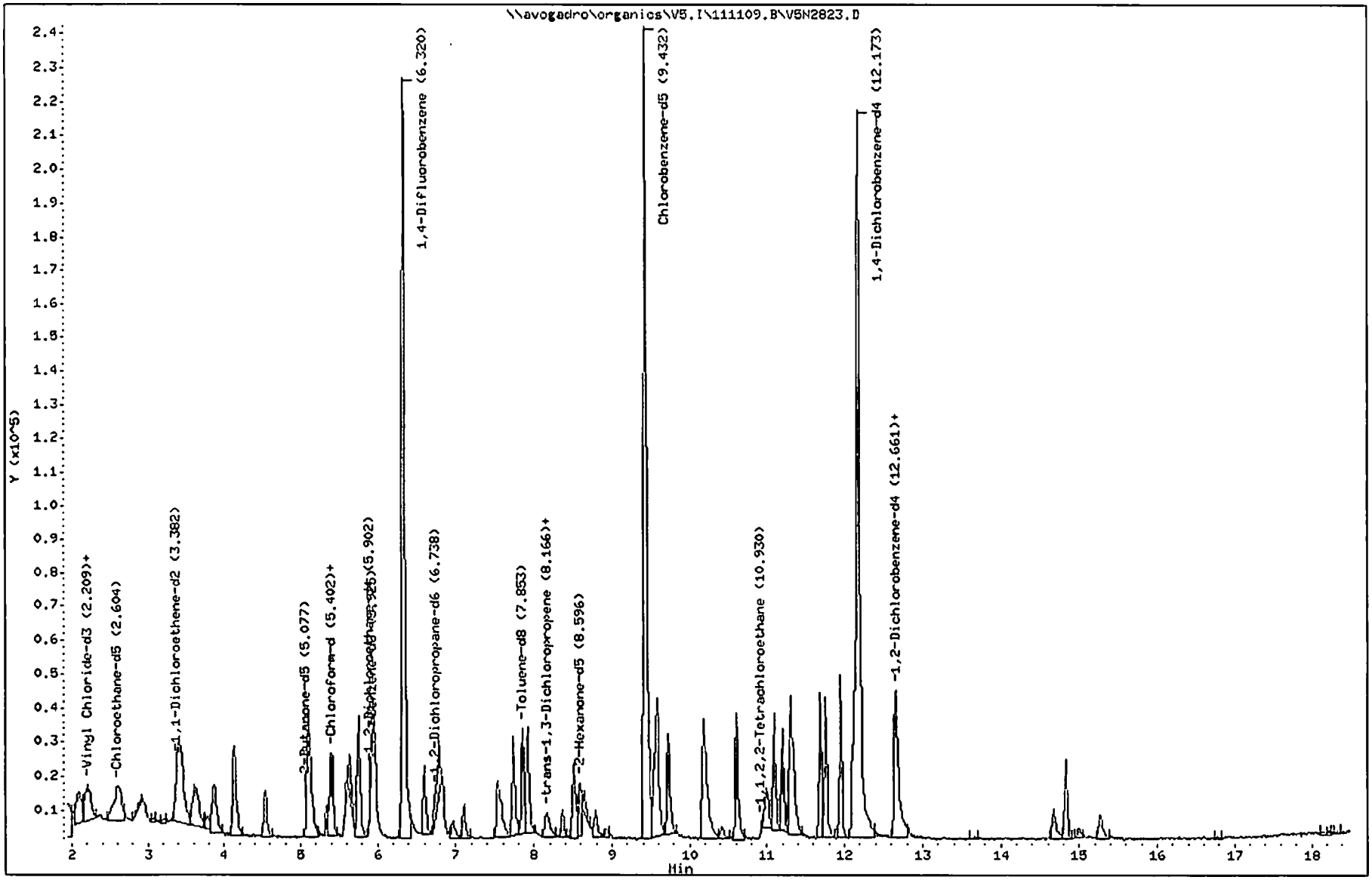
Data File: \\avogadro\organics\V5.I\111109.B\V5N2823.D
Report Date: 15-Nov-2011 09:34

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	83	Chloroform-d	84	5.390	5.386	(0.853)	15049	0.50000	0.54
	19	Chloroform	83	5.413	5.398	(0.857)	16202	0.50000	0.56
	20	1,1,1-Trichloroethane	97	5.599	5.584	(0.594)	14014	0.50000	0.52
	21	Cyclohexane	56	5.646	5.642	(0.599)	18405	0.50000	0.56
	22	Carbon Tetrachloride	117	5.750	5.746	(0.610)	13268	0.50000	0.53
$	23	1,2-Dichloroethane-d4	65	5.901	5.897	(0.934)	5547	0.50000	0.50
$	84	Benzene-d6	84	5.924	5.909	(0.628)	30410	0.50000	0.55
	25	Benzene	78	5.959	5.944	(0.632)	33091	0.50000	0.54
	24	1,2-Dichloroethane	62	5.983	5.967	(0.947)	7482	0.50000	0.56(T)
*	26	1,4-Difluorobenzene	114	6.319	6.327	(1.000)	256492	5.00000	
	27	Trichloroethene	95	6.598	6.594	(0.700)	9334	0.50000	0.51
$	85	1,2-Dichloropropane-d6	67	6.737	6.733	(0.714)	9724	0.50000	0.51
	28	Methylcyclohexane	83	6.784	6.780	(0.719)	14335	0.50000	0.54
	29	1,2-Dichloropropane	63	6.830	6.815	(0.724)	9970	0.50000	0.60(T)
	30	Bromodichloromethane	83	7.109	7.093	(0.754)	8971	0.50000	0.53
	31	cis-1,3-Dichloropropene	75	7.573	7.558	(0.803)	10039	0.50000	0.52
	32	4-Methyl-2-Pentanone	43	7.736	7.720	(0.820)	39086	5.00000	6.0
$	33	Toluene-d8	98	7.852	7.837	(0.833)	27125	0.50000	0.55
	34	Toluene	91	7.922	7.918	(0.840)	33622	0.50000	0.54
$	86	trans-1,3-Dichloropropene-d4	79	8.154	8.115	(0.865)	4956	0.50000	0.45
	35	trans-1,3-Dichloropropene	75	8.177	8.150	(0.867)	6113	0.50000	0.49
	36	1,1,2-Trichloroethane	97	8.363	8.348	(0.887)	3619	0.50000	0.51
	37	Tetrachloroethene	164	8.514	8.498	(0.903)	5961	0.50000	0.43
$	87	2-Hexanone-d5	63	8.595	8.568	(0.911)	10467	5.00000	5.5
	38	2-Hexanone	43	8.642	8.626	(0.916)	23903	5.00000	5.7
	39	Dibromochloromethane	129	8.793	8.777	(0.932)	5116	0.50000	0.49
	40	1,2-Dibromoethane	107	8.932	8.917	(0.947)	3675	0.50000	0.49(T)
*	42	Chlorobenzene-d5	117	9.432	9.428	(1.000)	187284	5.00000	
	43	Chlorobenzene	112	9.466	9.462	(1.004)	21081	0.50000	0.51
	44	Ethylbenzene	91	9.583	9.579	(1.016)	37966	0.50000	0.56
	45	m,p-Xylene	106	9.722	9.706	(1.031)	15594	0.50000	0.54
	46	o-Xylene	106	10.175	10.171	(1.079)	13633	0.50000	0.51
	47	Styrene	104	10.210	10.194	(1.082)	19684	0.50000	0.51
	48	Bromoform	173	10.419	10.415	(0.856)	2032	0.50000	0.42
	49	Isopropylbenzene	105	10.605	10.600	(1.124)	39101	0.50000	0.54
$	89	1,1,2,2-Tetrachloroethane-d2	84	10.930	10.926	(1.159)	3857	0.50000	0.55
	51	1,1,2,2-Tetrachloroethane	83	10.965	10.949	(1.163)	3783	0.50000	0.52(T)
M	41	Xylene (total)	106				29227	0.50000	1.0
	52	1,3-Dichlorobenzene	146	12.103	12.087	(0.994)	13520	0.50000	0.49
*	78	1,4-Dichlorobenzene-d4	152	12.172	12.168	(1.000)	82960	5.00000	(Q)
	53	1,4-Dichlorobenzene	146	12.207	12.203	(1.003)	16315	0.50000	0.56
$	90	1,2-Dichlorobenzene-d4	152	12.648	12.633	(1.039)	6650	0.50000	0.51
	54	1,2-Dichlorobenzene	146	12.672	12.656	(1.041)	11912	0.50000	0.52
	55	1,2-Dibromo-3-chloropropane	75	13.670	13.666	(1.123)	178	0.50000	0.20(T)
	56	1,2,4-Trichlorobenzene	180	14.669	14.642	(1.205)	7063	0.50000	0.44
	77	1,2,3-Trichlorobenzene	180	15.261	15.246	(1.254)	5919	0.50000	0.48

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111109.B\V5N2823.D
Date : 09-NOV-2011 20:26
Client ID: VSTD0.505
Instrument: V5.I
Sample Info: 25ML,VSTD0.505,VSTD0.505
Purge Volume: 25.0
Operator: SRC:
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111109.B\V5N2824.D
Report Date: 15-Nov-2011 09:34

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111109.B\V5N2824.D
Lab Smp Id: VSTD02005 Client Smp ID: VSTD02005
Inj Date : 09-NOV-2011 20:55
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD02005,VSTD02005
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111109.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 14:30 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:55 Cal File: V5N2824.D
Als bottle: 5 Calibration Sample, Level: 5
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	1.902	(0.300)	305466	20.0000	20(A)
	2	Chloromethane	50	2.045	2.042	(0.324)	676916	20.0000	20
$	79	Vinyl Chloride-d3	65	2.184	2.169	(0.346)	401961	20.0000	19
	3	Vinyl Chloride	62	2.184	2.181	(0.346)	517584	20.0000	20
	4	Bromomethane	94	2.509	2.518	(0.397)	294931	20.0000	18
$	80	Chloroethane-d5	69	2.579	2.587	(0.408)	260135	20.0000	18
	5	Chloroethane	64	2.614	2.611	(0.414)	257585	20.0000	18
	6	Trichlorofluoromethane	101	2.893	2.913	(0.458)	621788	20.0000	20
$	81	1,1-Dichloroethene-d2	65	3.357	3.366	(0.531)	99733	20.0000	19
	7	1,1-Dichloroethene	96	3.369	3.377	(0.533)	300692	20.0000	19
	8	1,1,2-Trichloro-1,2,2-trifluo	101	3.415	3.424	(0.541)	341365	20.0000	19
	9	Acetone	43	3.438	3.447	(0.544)	337348	200.000	190
	10	Carbon Disulfide	76	3.601	3.598	(0.570)	1134588	20.0000	18
	11	Methyl Acetate	43	3.752	3.760	(0.594)	88812	20.0000	17
	12	Methylene Chloride	84	3.845	3.853	(0.609)	274749	20.0000	18
	13	trans-1,2-Dichloroethene	96	4.112	4.120	(0.651)	321104	20.0000	19
	14	Methyl tert-Butyl Ether	73	4.135	4.132	(0.654)	365091	20.0000	19
	15	1,1-Dichloroethane	63	4.518	4.527	(0.715)	629350	20.0000	19
$	82	2-Butanone-d5	46	5.053	5.061	(0.800)	480201	200.000	190(A)
	17	cis-1,2-Dichloroethene	96	5.087	5.096	(0.805)	301355	20.0000	19
	16	2-Butanone	43	5.111	5.119	(0.809)	494694	200.000	190
	18	Bromochloromethane	128	5.331	5.328	(0.844)	120269	20.0000	20(Q)

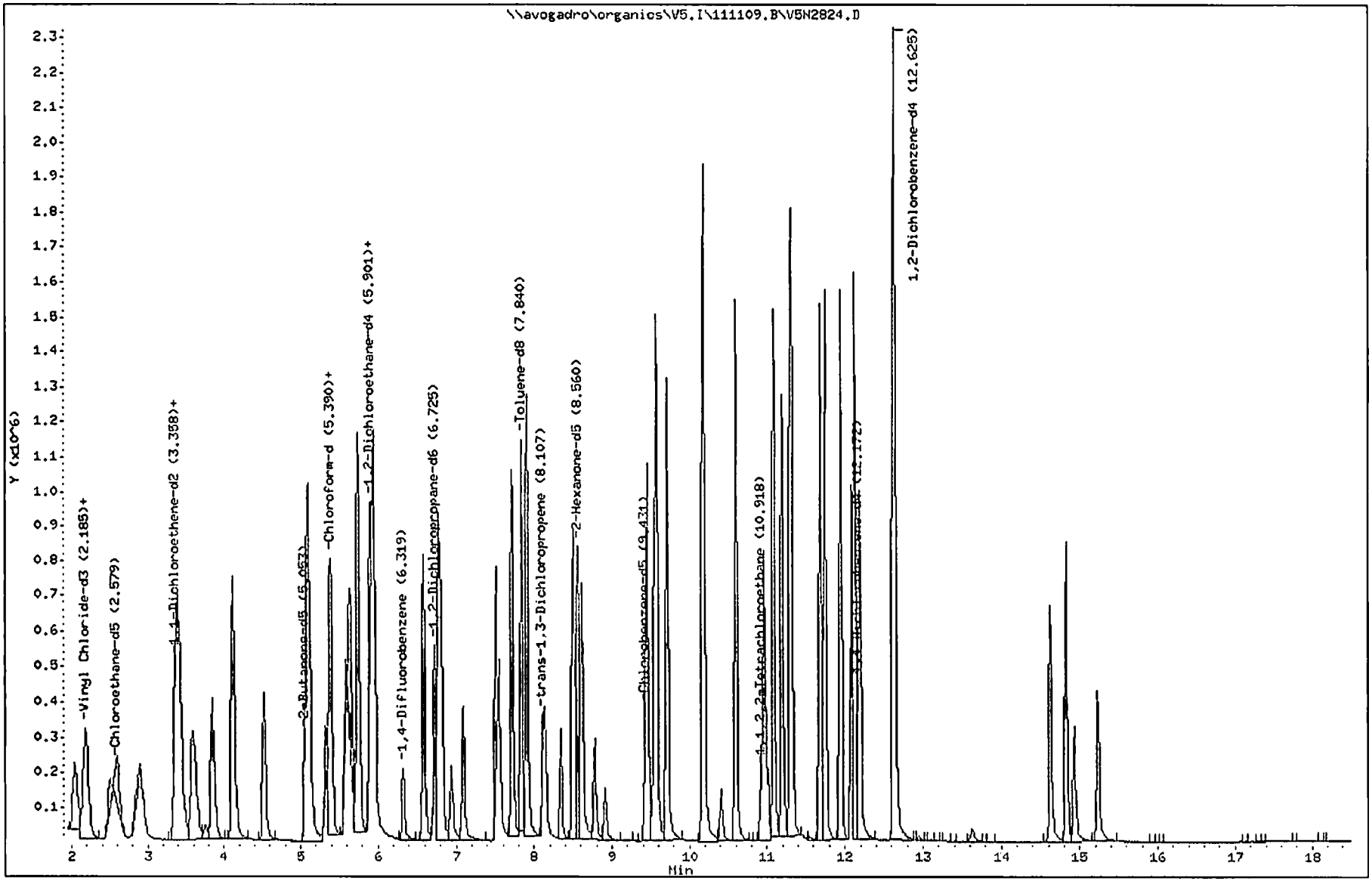
Data File: \\avogadro\organics\V5.I\111109.B\V5N2824.D
Report Date: 15-Nov-2011 09:34

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
$	83	Chloroform-d	84	5.378	5.386	(0.851)	475964	20.0000	19	
	19	Chloroform	83	5.401	5.398	(0.855)	490650	20.0000	19	
	20	1,1,1-Trichloroethane	97	5.587	5.584	(0.592)	463107	20.0000	19	
	21	Cyclohexane	56	5.645	5.642	(0.599)	571484	20.0000	19	
	22	Carbon Tetrachloride	117	5.749	5.746	(0.610)	437464	20.0000	19	
$	23	1,2-Dichloroethane-d4	65	5.889	5.897	(0.932)	193614	20.0000	20	
$	84	Benzene-d6	84	5.912	5.909	(0.627)	954910	20.0000	19	
	25	Benzene	78	5.947	5.944	(0.631)	1056621	20.0000	19	
	24	1,2-Dichloroethane	62	5.970	5.967	(0.945)	233847	20.0000	20	
*	26	1,4-Difluorobenzene	114	6.318	6.327	(1.000)	228309	5.00000		
	27	Trichloroethene	95	6.586	6.594	(0.698)	320187	20.0000	19	
$	85	1,2-Dichloropropane-d6	67	6.725	6.733	(0.713)	337147	20.0000	19	
	28	Methylcyclohexane	83	6.783	6.780	(0.719)	474934	20.0000	19	
	29	1,2-Dichloropropane	63	6.818	6.815	(0.723)	271325	20.0000	18	
	30	Bromodichloromethane	83	7.096	7.093	(0.752)	297486	20.0000	19	
	31	cis-1,3-Dichloropropene	75	7.549	7.558	(0.801)	344560	20.0000	19	
	32	4-Methyl-2-Pentanone	43	7.712	7.720	(0.818)	1073778	200.000	180	
$	33	Toluene-d8	98	7.840	7.837	(0.831)	869807	20.0000	19	
	34	Toluene	91	7.909	7.918	(0.839)	1052309	20.0000	18	
$	86	trans-1,3-Dichloropropene-d4	79	8.107	8.115	(0.860)	202505	20.0000	20	
	35	trans-1,3-Dichloropropene	75	8.142	8.150	(0.863)	231285	20.0000	20(A)	
	36	1,1,2-Trichloroethane	97	8.339	8.348	(0.884)	123439	20.0000	19	
	37	Tetrachloroethene	164	8.502	8.498	(0.901)	236880	20.0000	18(Q)	
$	87	2-Hexanone-d5	63	8.560	8.568	(0.908)	349290	200.000	200(A)	
	38	2-Hexanone	43	8.618	8.626	(0.914)	762589	200.000	190	
	39	Dibromochloromethane	129	8.780	8.777	(0.931)	194023	20.0000	20	
	40	1,2-Dibromoethane	107	8.908	8.917	(0.945)	144255	20.0000	21(A)	
*	42	Chlorobenzene-d5	117	9.431	9.428	(1.000)	174915	5.00000		
	43	Chlorobenzene	112	9.454	9.462	(1.002)	728898	20.0000	19	
	44	Ethylbenzene	91	9.570	9.579	(1.015)	1182315	20.0000	19	
	45	m,p-Xylene	106	9.709	9.706	(1.030)	501885	20.0000	18	
	46	o-Xylene	106	10.162	10.171	(1.078)	455732	20.0000	18	
	47	Styrene	104	10.186	10.194	(1.080)	709349	20.0000	20	
	48	Bromoform	173	10.406	10.415	(0.855)	89914	20.0000	21(A)	
	49	Isopropylbenzene	105	10.592	10.600	(1.123)	1273920	20.0000	19	
$	89	1,1,2,2-Tetrachloroethane-d2	84	10.917	10.926	(1.158)	124261	20.0000	19	
	51	1,1,2,2-Tetrachloroethane	83	10.952	10.949	(1.161)	125894	20.0000	18	
M	41	Xylene (total)	106				957617	20.0000	37	
	52	1,3-Dichlorobenzene	146	12.090	12.087	(0.993)	481720	20.0000	19	
*	78	1,4-Dichlorobenzene-d4	152	12.171	12.168	(1.000)	75125	5.00000	(Q)	
	53	1,4-Dichlorobenzene	146	12.195	12.203	(1.002)	485239	20.0000	18	
$	90	1,2-Dichlorobenzene-d4	152	12.624	12.633	(1.037)	224188	20.0000	19(Q)	
	54	1,2-Dichlorobenzene	146	12.648	12.656	(1.039)	388372	20.0000	19	
	55	1,2-Dibromo-3-chloropropane	75	13.623	13.666	(1.119)	17847	20.0000	22(AQ)	
	56	1,2,4-Trichlorobenzene	180	14.622	14.642	(1.201)	294006	20.0000	20(A)	
	77	1,2,3-Trichlorobenzene	180	15.226	15.246	(1.251)	205605	20.0000	18	

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\111109.B\V5N2824.D
Date : 09-NOV-2011 20:55
Client ID: VSTD02005 Instrument: V5.I
Sample Info: 25ML,VSTD02005,VSTD02005
Purge Volume: 25.0 Operator: SRC:
Column phase: DB-624 Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111109.B\V5N2825.D
Report Date: 15-Nov-2011 09:34

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111109.B\V5N2825.D
Lab Smp Id: VSTD010O5 Client Smp ID: VSTD010O5
Inj Date : 09-NOV-2011 21:23
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD010O5,VSTD010O5
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111109.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 14:30 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:23 Cal File: V5N2825.D
Als bottle: 6 Calibration Sample, Level: 4
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	1.902	1.902	(0.301)	164792	10.0000	10
2	Chloromethane	50	2.053	2.042	(0.325)	346643	10.0000	9.5
$ 79	Vinyl Chloride-d3	65	2.181	2.169	(0.345)	205852	10.0000	9.3
3	Vinyl Chloride	62	2.193	2.181	(0.347)	269527	10.0000	9.6
4	Bromomethane	94	2.518	2.518	(0.398)	168420	10.0000	9.8
$ 80	Chloroethane-d5	69	2.588	2.587	(0.409)	139752	10.0000	9.3
5	Chloroethane	64	2.623	2.611	(0.415)	140195	10.0000	9.0
6	Trichlorofluoromethane	101	2.913	2.913	(0.460)	351952	10.0000	10
$ 81	1,1-Dichloroethene-d2	65	3.366	3.366	(0.532)	52396	10.0000	9.1(Q)
7	1,1-Dichloroethene	96	3.377	3.377	(0.534)	168366	10.0000	9.7
8	1,1,2-Trichloro-1,2,2-trifluo	101	3.424	3.424	(0.541)	182462	10.0000	9.5
9	Acetone	43	3.447	3.447	(0.545)	183618	100.000	95
10	Carbon Disulfide	76	3.610	3.598	(0.571)	619196	10.0000	9.4
11	Methyl Acetate	43	3.761	3.760	(0.594)	51964	10.0000	9.2
12	Methylene Chloride	84	3.853	3.853	(0.609)	145394	10.0000	9.1
13	trans-1,2-Dichloroethene	96	4.121	4.120	(0.651)	180879	10.0000	9.9
14	Methyl tert-Butyl Ether	73	4.132	4.132	(0.653)	204623	10.0000	9.8
15	1,1-Dichloroethane	63	4.527	4.527	(0.716)	332948	10.0000	9.7
$ 82	2-Butanone-d5	46	5.061	5.061	(0.800)	255833	100.000	96(A)
17	cis-1,2-Dichloroethene	96	5.096	5.096	(0.805)	166242	10.0000	9.8
16	2-Butanone	43	5.119	5.119	(0.809)	250533	100.000	91
18	Bromochloromethane	128	5.328	5.328	(0.842)	65276	10.0000	10(Q)

Data File: \\avogadro\organics\V5.I\111109.B\V5N2825.D
Report Date: 15-Nov-2011 09:34

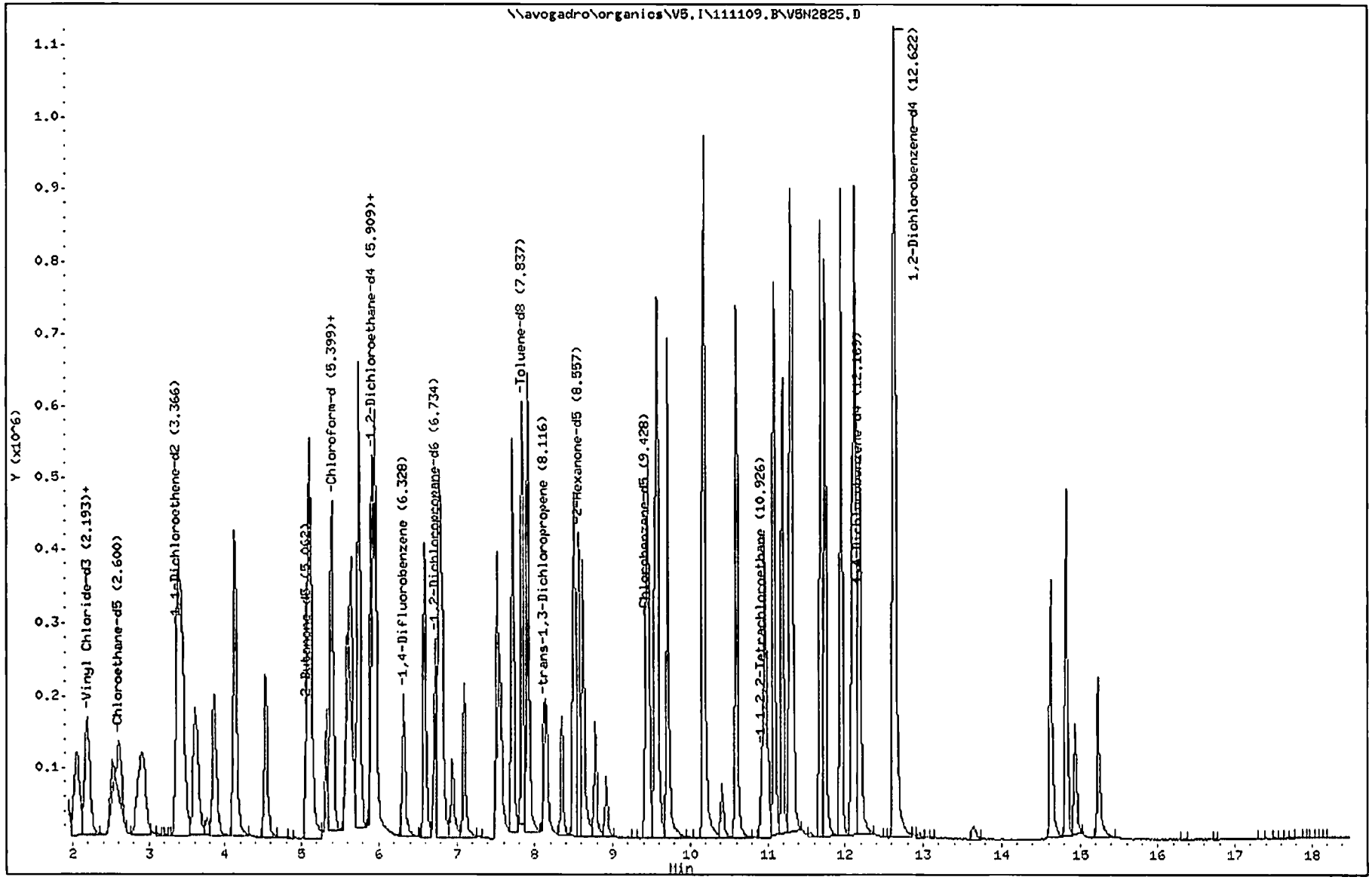
		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	83	Chloroform-d	84	5.386	5.386	(0.851)	260619	10.0000	9.8
	19	Chloroform	83	5.398	5.398	(0.853)	269268	10.0000	9.8
	20	1,1,1-Trichloroethane	97	5.584	5.584	(0.592)	255749	10.0000	10
	21	Cyclohexane	56	5.642	5.642	(0.598)	294996	10.0000	9.6
	22	Carbon Tetrachloride	117	5.746	5.746	(0.610)	236421	10.0000	10
$	23	1,2-Dichloroethane-d4	65	5.897	5.897	(0.932)	103806	10.0000	10
$	84	Benzene-d6	84	5.909	5.909	(0.627)	485996	10.0000	9.5
	25	Benzene	78	5.944	5.944	(0.630)	540352	10.0000	9.5
	24	1,2-Dichloroethane	62	5.967	5.967	(0.943)	122750	10.0000	9.6
*	26	1,4-Difluorobenzene	114	6.327	6.327	(1.000)	243489	5.00000	
	27	Trichloroethene	95	6.583	6.594	(0.698)	176036	10.0000	10
$	85	1,2-Dichloropropane-d6	67	6.734	6.733	(0.714)	180923	10.0000	10
	28	Methylcyclohexane	83	6.780	6.780	(0.719)	236625	10.0000	9.5
	29	1,2-Dichloropropane	63	6.815	6.815	(0.723)	143043	10.0000	9.3
	30	Bromodichloromethane	83	7.094	7.093	(0.752)	157661	10.0000	10
	31	cis-1,3-Dichloropropene	75	7.558	7.558	(0.802)	183121	10.0000	10
	32	4-Methyl-2-Pentanone	43	7.721	7.720	(0.819)	570616	100.000	94
$	33	Toluene-d8	98	7.837	7.837	(0.831)	464673	10.0000	10
	34	Toluene	91	7.906	7.918	(0.839)	568452	10.0000	9.8
$	86	trans-1,3-Dichloropropene-d4	79	8.115	8.115	(0.861)	107573	10.0000	11
	35	trans-1,3-Dichloropropene	75	8.150	8.150	(0.865)	125272	10.0000	11
	36	1,1,2-Trichloroethane	97	8.348	8.348	(0.885)	67659	10.0000	10
	37	Tetrachloroethene	164	8.499	8.498	(0.901)	128192	10.0000	9.9
$	87	2-Hexanone-d5	63	8.557	8.568	(0.908)	187201	100.000	110(A)
	38	2-Hexanone	43	8.615	8.626	(0.914)	394906	100.000	100
	39	Dibromochloromethane	129	8.777	8.777	(0.931)	102062	10.0000	10
	40	1,2-Dibromoethane	107	8.917	8.917	(0.946)	73339	10.0000	10
*	42	Chlorobenzene-d5	117	9.428	9.428	(1.000)	174972	5.00000	
	43	Chlorobenzene	112	9.463	9.462	(1.004)	377322	10.0000	9.9
	44	Ethylbenzene	91	9.579	9.579	(1.016)	623786	10.0000	9.8
	45	m,p-Xylene	106	9.706	9.706	(1.030)	259532	10.0000	9.5
	46	o-Xylene	106	10.171	10.171	(1.079)	243297	10.0000	9.8
	47	Styrene	104	10.183	10.194	(1.080)	373469	10.0000	10
	48	Bromoform	173	10.415	10.415	(0.856)	47360	10.0000	11
	49	Isopropylbenzene	105	10.601	10.600	(1.124)	675583	10.0000	10
$	89	1,1,2,2-Tetrachloroethane-d2	84	10.926	10.926	(1.159)	66768	10.0000	10
	51	1,1,2,2-Tetrachloroethane	83	10.949	10.949	(1.161)	68116	10.0000	9.9
M	41	Xylene (total)	106				502829	10.0000	19
	52	1,3-Dichlorobenzene	146	12.087	12.087	(0.993)	260417	10.0000	11
*	78	1,4-Dichlorobenzene-d4	152	12.168	12.168	(1.000)	74632	5.00000	
	53	1,4-Dichlorobenzene	146	12.192	12.203	(1.002)	265741	10.0000	10
$	90	1,2-Dichlorobenzene-d4	152	12.621	12.633	(1.037)	118559	10.0000	10(Q)
	54	1,2-Dichlorobenzene	146	12.645	12.656	(1.039)	207070	10.0000	10
	55	1,2-Dibromo-3-chloropropane	75	13.632	13.666	(1.120)	10370	10.0000	13(Q)
	56	1,2,4-Trichlorobenzene	180	14.630	14.642	(1.202)	164204	10.0000	11
	77	1,2,3-Trichlorobenzene	180	15.234	15.246	(1.252)	115206	10.0000	10

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\111109.B\V5N2825.D
Date : 09-NOV-2011 21:23
Client ID: VSTD01005
Sample Info: 25ML,VSTD01005,VSTD01005
Purge Volume: 25.0
Column phase: DB-624

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



Data File: \\avogadro\organics\V5.I\111109.B\V5N2826.D
Report Date: 15-Nov-2011 09:34

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111109.B\V5N2826.D
Lab Smp Id: VSTD001O5 Client Smp ID: VSTD001O5
Inj Date : 09-NOV-2011 21:52
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD001O5,VSTD001O5
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111109.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 14:30 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 7 Calibration Sample, Level: 2
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	1.902	(0.300)	16320	1.00000	1.0
2	Chloromethane	50	2.016	2.042	(0.319)	33509	1.00000	0.91
$ 79	Vinyl Chloride-d3	65	2.167	2.169	(0.343)	21460	1.00000	0.96
3	Vinyl Chloride	62	2.156	2.181	(0.341)	26601	1.00000	0.93
4	Bromomethane	94	2.493	2.518	(0.394)	17686	1.00000	1.0
$ 80	Chloroethane-d5	69	2.574	2.587	(0.407)	14490	1.00000	0.95(Q)
5	Chloroethane	64	2.597	2.611	(0.411)	14275	1.00000	0.91
6	Trichlorofluoromethane	101	2.911	2.913	(0.460)	35807	1.00000	1.0
$ 81	1,1-Dichloroethene-d2	65	3.364	3.366	(0.532)	6161	1.00000	1.1(Q)
7	1,1-Dichloroethene	96	3.387	3.377	(0.535)	16779	1.00000	0.96
8	1,1,2-Trichloro-1,2,2-trifluo	101	3.410	3.424	(0.539)	20407	1.00000	1.1
9	Acetone	43	3.456	3.447	(0.547)	17413	10.0000	8.9
10	Carbon Disulfide	76	3.596	3.598	(0.569)	65208	1.00000	0.97
11	Methyl Acetate	43	3.770	3.760	(0.596)	5165	1.00000	0.90
12	Methylene Chloride	84	3.851	3.853	(0.609)	16336	1.00000	1.0
13	trans-1,2-Dichloroethene	96	4.130	4.120	(0.653)	18672	1.00000	1.0
14	Methyl tert-Butyl Ether	73	4.142	4.132	(0.655)	20923	1.00000	0.99
15	1,1-Dichloroethane	63	4.537	4.527	(0.717)	32343	1.00000	0.93
$ 82	2-Butanone-d5	46	5.082	5.061	(0.804)	23518	10.0000	8.7
17	cis-1,2-Dichloroethene	96	5.106	5.096	(0.807)	16604	1.00000	0.96
16	2-Butanone	43	5.140	5.119	(0.813)	24714	10.0000	8.8
18	Bromochloromethane	128	5.338	5.328	(0.844)	6281	1.00000	0.97(Q)

Data File: \\avogadro\organics\V5.I\111109.B\V5N2826.D
Report Date: 15-Nov-2011 09:34

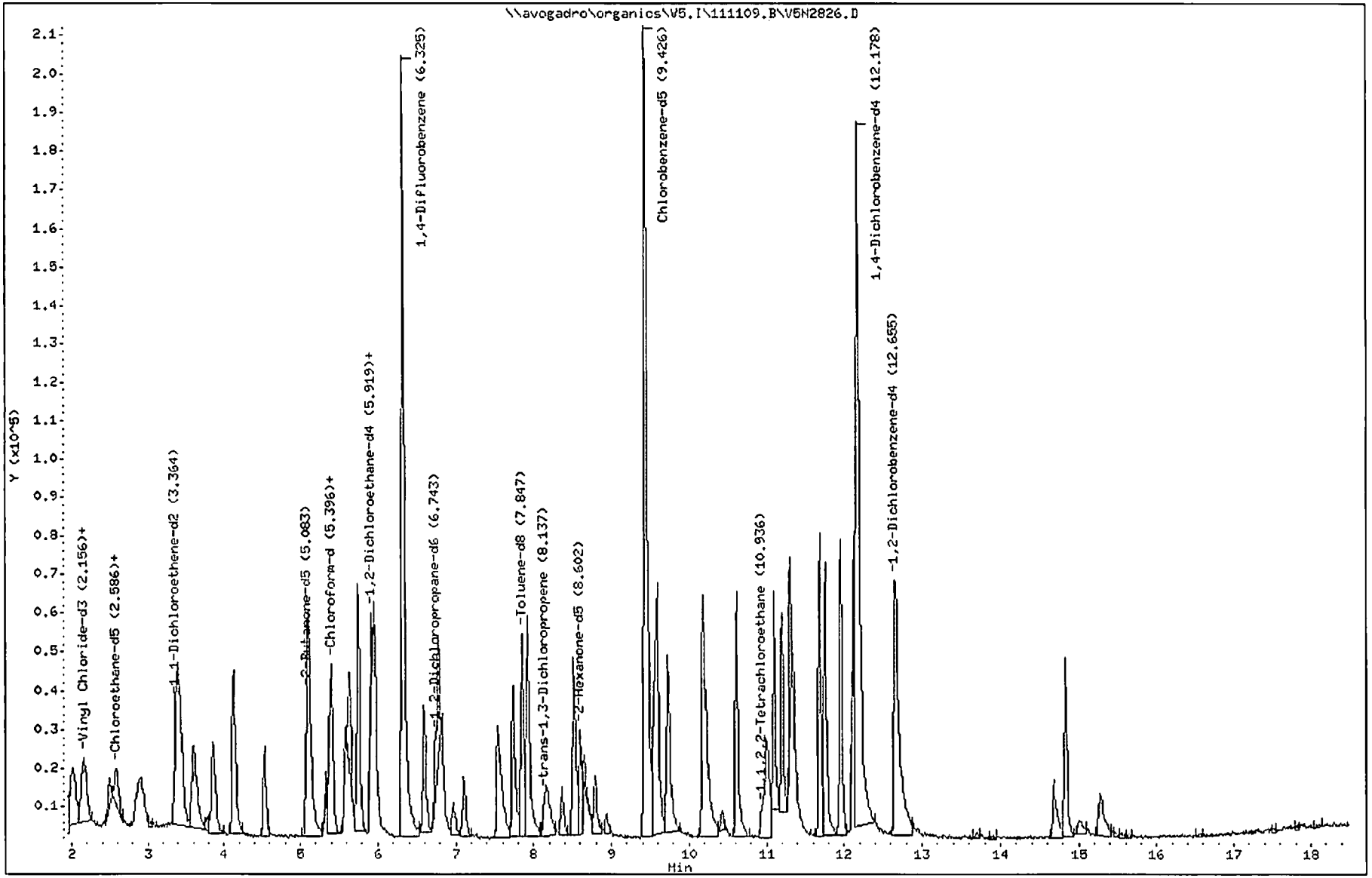
		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	83	Chloroform-d	84	5.384	5.386	(0.851)	26852	1.00000	1.00
	19	Chloroform	83	5.407	5.398	(0.855)	26690	1.00000	0.96
	20	1,1,1-Trichloroethane	97	5.593	5.584	(0.593)	25101	1.00000	1.0
	21	Cyclohexane	56	5.640	5.642	(0.598)	31387	1.00000	1.0
	22	Carbon Tetrachloride	117	5.744	5.746	(0.609)	24503	1.00000	1.1
$	23	1,2-Dichloroethane-d4	65	5.907	5.897	(0.934)	10466	1.00000	0.99(Q)
$	84	Benzene-d6	84	5.918	5.909	(0.628)	52281	1.00000	1.0
	25	Benzene	78	5.953	5.944	(0.632)	58334	1.00000	1.0
	24	1,2-Dichloroethane	62	5.977	5.967	(0.945)	13042	1.00000	1.0
*	26	1,4-Difluorobenzene	114	6.325	6.327	(1.000)	246552	5.00000	
	27	Trichloroethene	95	6.604	6.594	(0.701)	17683	1.00000	1.0
$	85	1,2-Dichloropropane-d6	67	6.743	6.733	(0.715)	17363	1.00000	0.99
	28	Methylcyclohexane	83	6.778	6.780	(0.719)	24757	1.00000	1.0
	29	1,2-Dichloropropane	63	6.824	6.815	(0.724)	15824	1.00000	1.0(T)
	30	Bromodichloromethane	83	7.103	7.093	(0.754)	14859	1.00000	0.96
	31	cis-1,3-Dichloropropene	75	7.579	7.558	(0.804)	16693	1.00000	0.94
	32	4-Methyl-2-Pentanone	43	7.730	7.720	(0.820)	59220	10.0000	9.9
$	33	Toluene-d8	98	7.846	7.837	(0.832)	43707	1.00000	0.96
	34	Toluene	91	7.916	7.918	(0.840)	59762	1.00000	1.0
$	86	trans-1,3-Dichloropropene-d4	79	8.137	8.115	(0.863)	9676	1.00000	0.96
	35	trans-1,3-Dichloropropene	75	8.171	8.150	(0.867)	9931	1.00000	0.87
	36	1,1,2-Trichloroethane	97	8.357	8.348	(0.887)	6719	1.00000	1.0
	37	Tetrachloroethene	164	8.508	8.498	(0.903)	15467	1.00000	1.2(Q)
$	87	2-Hexanone-d5	63	8.601	8.568	(0.913)	13117	10.0000	7.5(Q)
	38	2-Hexanone	43	8.659	8.626	(0.919)	32333	10.0000	8.3(H)
	39	Dibromochloromethane	129	8.787	8.777	(0.932)	9404	1.00000	0.97
	40	1,2-Dibromoethane	107	8.938	8.917	(0.948)	6303	1.00000	0.91(T)
*	42	Chlorobenzene-d5	117	9.426	9.428	(1.000)	173069	5.00000	
	43	Chlorobenzene	112	9.460	9.462	(1.004)	39620	1.00000	1.0
	44	Ethylbenzene	91	9.588	9.579	(1.017)	63763	1.00000	1.0
	45	m,p-Xylene	106	9.728	9.706	(1.032)	28613	1.00000	1.1
	46	o-Xylene	106	10.180	10.171	(1.080)	26785	1.00000	1.1
	47	Styrene	104	10.227	10.194	(1.085)	35117	1.00000	0.98
	48	Bromoform	173	10.436	10.415	(0.857)	4441	1.00000	1.0
	49	Isopropylbenzene	105	10.610	10.600	(1.126)	68289	1.00000	1.0
$	89	1,1,2,2-Tetrachloroethane-d2	84	10.935	10.926	(1.160)	6155	1.00000	0.94
	51	1,1,2,2-Tetrachloroethane	83	10.970	10.949	(1.164)	6847	1.00000	1.0
M	41	Xylene (total)	106				55398	1.00000	2.1
	52	1,3-Dichlorobenzene	146	12.108	12.087	(0.994)	24545	1.00000	0.99
*	78	1,4-Dichlorobenzene-d4	152	12.178	12.168	(1.000)	75333	5.00000	(Q)
	53	1,4-Dichlorobenzene	146	12.213	12.203	(1.003)	25451	1.00000	0.96
$	90	1,2-Dichlorobenzene-d4	152	12.642	12.633	(1.038)	12450	1.00000	1.1(Q)
	54	1,2-Dichlorobenzene	146	12.677	12.656	(1.041)	20347	1.00000	0.99
	55	1,2-Dibromo-3-chloropropane	75	13.699	13.666	(1.125)	1014	1.00000	1.3(T)
	56	1,2,4-Trichlorobenzene	180	14.686	14.642	(1.206)	14136	1.00000	0.98
	77	1,2,3-Trichlorobenzene	180	15.279	15.246	(1.255)	12188	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\111109.B\V5N2826.D
Date : 09-NOV-2011 21:52
Client ID: VSTD00105
Sample Info: 25ML,VSTD00105,VSTD00105
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i
Operator: SRC:
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.: H30X4

Instrument ID: V5 Calibration Date: 11/10/2011 Time: 6:28

Lab File ID: V5N2844.D Init. Calib. Date(s): 11/09/2011 11/09/2011

EPA Sample No.(VSTD#####) VSTD005P5 Init. Calib. Time(s): 19:57 21:52

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	0.328	0.290	0.010	-11.6	40.0
Chloromethane	0.747	0.771	0.010	3.1	40.0
Vinyl chloride	0.578	0.581	0.100	0.5	30.0
Bromomethane	0.351	0.369	0.100	5.1	30.0
Chloroethane	0.319	0.316	0.010	-1.0	40.0
Trichlorofluoromethane	0.698	0.662	0.010	-5.1	40.0
1,1-Dichloroethene	0.356	0.354	0.100	-0.5	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.392	0.348	0.010	-11.4	40.0
Acetone	0.040	0.033	0.010	-16.1	40.0
Carbon disulfide	1.357	1.338	0.010	-1.4	40.0
Methyl acetate	0.116	0.087	0.010	-24.6	40.0
Methylene chloride	0.328	0.313	0.010	-4.7	40.0
trans-1,2-Dichloroethene	0.376	0.389	0.010	3.5	40.0
Methyl tert-butyl ether	0.428	0.420	0.010	-1.8	40.0
1,1-Dichloroethane	0.707	0.743	0.200	5.0	30.0
cis-1,2-Dichloroethene	0.349	0.365	0.010	4.4	40.0
2-Butanone	0.057	0.055	0.010	-2.6	40.0
Bromochloromethane	0.132	0.138	0.050	5.0	40.0
Chloroform	0.566	0.578	0.200	2.0	30.0
1,1,1-Trichloroethane	0.713	0.759	0.100	6.5	30.0
Cyclohexane	0.882	0.853	0.010	-3.3	40.0
Carbon tetrachloride	0.671	0.688	0.100	2.6	30.0
Benzene	1.621	1.690	0.400	4.3	30.0
1,2-Dichloroethane	0.262	0.279	0.100	6.7	30.0
Trichloroethene	0.491	0.539	0.300	9.8	30.0
Methylcyclohexane	0.709	0.617	0.010	-12.9	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.: H30X4

Instrument ID: V5 Calibration Date: 11/10/2011 Time: 6:28

Lab File ID: V5N2844.D Init. Calib. Date(s): 11/09/2011 11/09/2011

EPA Sample No.(VSTD#####) VSTD005P5 Init. Calib. Time(s): 19:57 21:52

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	0.442	0.454	0.010	2.7	40.0
Bromodichloromethane	0.448	0.446	0.200	-0.5	30.0
cis-1,3-Dichloropropene	0.511	0.530	0.200	3.8	30.0
4-Methyl-2-pentanone	0.173	0.170	0.010	-1.4	40.0
Toluene	1.653	1.725	0.400	4.3	30.0
trans-1,3-Dichloropropene	0.330	0.334	0.100	1.2	30.0
1,1,2-Trichloroethane	0.191	0.200	0.100	4.8	30.0
Tetrachloroethene	0.370	0.374	0.100	1.1	30.0
2-Hexanone	0.112	0.114	0.010	1.9	40.0
Dibromochloromethane	0.279	0.280	0.100	0.1	30.0
1,2-Dibromoethane	0.200	0.208	0.010	3.6	40.0
Chlorobenzene	1.094	1.126	0.500	2.9	30.0
Ethylbenzene	1.823	1.865	0.100	2.3	30.0
m,p-Xylene	0.778	0.782	0.300	0.4	30.0
o-Xylene	0.712	0.704	0.300	-1.1	30.0
Styrene	1.039	1.073	0.300	3.2	30.0
Bromoform	0.292	0.335	0.050	14.7	30.0
Isopropylbenzene	1.937	2.026	0.010	4.6	40.0
1,1,2,2-Tetrachloroethane	0.196	0.193	0.100	-1.4	30.0
1,3-Dichlorobenzene	1.648	1.786	0.400	8.3	30.0
1,4-Dichlorobenzene	1.752	1.872	0.400	6.8	30.0
1,2-Dichlorobenzene	1.369	1.478	0.400	8.0	30.0
1,2-Dibromo-3-chloropropane	0.054	0.058	0.010	7.9	40.0
1,2,4-Trichlorobenzene	0.962	1.042	0.200	8.3	30.0
1,2,3-Trichlorobenzene	0.742	0.736	0.200	-0.7	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.: H30X4

Instrument ID: V5 Calibration Date: 11/10/2011 Time: 6:28

Lab File ID: V5N2844.D Init. Calib. Date(s): 11/09/2011 11/09/2011

EPA Sample No.(VSTD#####) VSTD005P5 Init. Calib. Time(s): 19:57 21:52

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	0.455	0.454	0.010	-0.2	30.0
Chloroethane-d5	0.309	0.297	0.010	-3.7	40.0
1,1-Dichloroethene-d2	0.118	0.105	0.010	-10.7	30.0
2-Butanone-d5	0.055	0.052	0.010	-4.1	40.0
Chloroform-d	0.545	0.551	0.010	1.2	30.0
1,2-Dichloroethane-d4	0.214	0.213	0.010	-0.8	30.0
Benzene-d6	1.467	1.503	0.010	2.5	30.0
1,2-Dichloropropane-d6	0.509	0.525	0.010	3.2	40.0
Toluene-d8	1.316	1.395	0.010	6.0	30.0
trans-1,3-Dichloropropene-d4	0.292	0.290	0.010	-0.8	30.0
2-Hexanone-d5	0.051	0.053	0.010	5.9	40.0
1,1,2,2-Tetrachloroethane-d2	0.188	0.186	0.010	-1.1	30.0
1,2-Dichlorobenzene-d4	0.786	0.830	0.010	5.5	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.: H30X4

Instrument ID: V5 Calibration Date: 11/10/2011 Time: 17:28

Lab File ID: V5N2868.D Init. Calib. Date(s): 11/09/2011 11/09/2011

EPA Sample No.(VSTD#####) VSTD005Q5 Init. Calib. Time(s): 19:57 21:52

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	0.328	0.342	0.010	4.4	40.0
Chloromethane	0.747	0.825	0.010	10.5	40.0
Vinyl chloride	0.578	0.635	0.100	9.7	30.0
Bromomethane	0.351	0.349	0.100	-0.6	30.0
Chloroethane	0.319	0.367	0.010	15.0	40.0
Trichlorofluoromethane	0.698	0.691	0.010	-0.9	40.0
1,1-Dichloroethene	0.356	0.391	0.100	9.9	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.392	0.428	0.010	8.9	40.0
Acetone	0.040	0.041	0.010	4.1	40.0
Carbon disulfide	1.357	1.533	0.010	13.0	40.0
Methyl acetate	0.116	0.131	0.010	13.3	40.0
Methylene chloride	0.328	0.346	0.010	5.4	40.0
trans-1,2-Dichloroethene	0.376	0.383	0.010	1.9	40.0
Methyl tert-butyl ether	0.428	0.478	0.010	11.9	40.0
1,1-Dichloroethane	0.707	0.744	0.200	5.2	30.0
cis-1,2-Dichloroethene	0.349	0.359	0.010	2.9	40.0
2-Butanone	0.057	0.066	0.010	17.1	40.0
Bromochloromethane	0.132	0.134	0.050	1.7	40.0
Chloroform	0.566	0.592	0.200	4.5	30.0
1,1,1-Trichloroethane	0.713	0.706	0.100	-0.9	30.0
Cyclohexane	0.882	0.932	0.010	5.6	40.0
Carbon tetrachloride	0.671	0.632	0.100	-5.7	30.0
Benzene	1.621	1.618	0.400	-0.2	30.0
1,2-Dichloroethane	0.262	0.288	0.100	10.0	30.0
Trichloroethene	0.491	0.463	0.300	-5.8	30.0
Methylcyclohexane	0.709	0.763	0.010	7.7	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.: H30X4

Instrument ID: V5 Calibration Date: 11/10/2011 Time: 17:28

Lab File ID: V5N2868.D Init. Calib. Date(s): 11/09/2011 11/09/2011

EPA Sample No.(VSTD#####) VSTD005Q5 Init. Calib. Time(s): 19:57 21:52

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	0.442	0.444	0.010	0.5	40.0
Bromodichloromethane	0.448	0.441	0.200	-1.6	30.0
cis-1,3-Dichloropropene	0.511	0.522	0.200	2.2	30.0
4-Methyl-2-pentanone	0.173	0.189	0.010	9.3	40.0
Toluene	1.653	1.597	0.400	-3.4	30.0
trans-1,3-Dichloropropene	0.330	0.352	0.100	6.7	30.0
1,1,2-Trichloroethane	0.191	0.197	0.100	3.2	30.0
Tetrachloroethene	0.370	0.338	0.100	-8.6	30.0
2-Hexanone	0.112	0.133	0.010	18.6	40.0
Dibromochloromethane	0.279	0.273	0.100	-2.3	30.0
1,2-Dibromoethane	0.200	0.208	0.010	4.0	40.0
Chlorobenzene	1.094	1.031	0.500	-5.7	30.0
Ethylbenzene	1.823	1.731	0.100	-5.1	30.0
m,p-Xylene	0.778	0.717	0.300	-7.8	30.0
o-Xylene	0.712	0.686	0.300	-3.6	30.0
Styrene	1.039	1.028	0.300	-1.1	30.0
Bromoform	0.292	0.283	0.050	-2.8	30.0
Isopropylbenzene	1.937	1.852	0.010	-4.4	40.0
1,1,2,2-Tetrachloroethane	0.196	0.212	0.100	8.4	30.0
1,3-Dichlorobenzene	1.648	1.663	0.400	0.9	30.0
1,4-Dichlorobenzene	1.752	1.627	0.400	-7.1	30.0
1,2-Dichlorobenzene	1.369	1.361	0.400	-0.5	30.0
1,2-Dibromo-3-chloropropane	0.054	0.061	0.010	13.9	40.0
1,2,4-Trichlorobenzene	0.962	1.002	0.200	4.1	30.0
1,2,3-Trichlorobenzene	0.742	0.735	0.200	-0.8	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.: H30X4

Instrument ID: V5 Calibration Date: 11/10/2011 Time: 17:28

Lab File ID: V5N2868.D Init. Calib. Date(s): 11/09/2011 11/09/2011

EPA Sample No.(VSTD#####) VSTD005Q5 Init. Calib. Time(s): 19:57 21:52

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	0.455	0.491	0.010	7.9	30.0
Chloroethane-d5	0.309	0.355	0.010	14.8	40.0
1,1-Dichloroethene-d2	0.118	0.127	0.010	8.2	30.0
2-Butanone-d5	0.055	0.063	0.010	15.7	40.0
Chloroform-d	0.545	0.567	0.010	4.1	30.0
1,2-Dichloroethane-d4	0.214	0.227	0.010	6.1	30.0
Benzene-d6	1.467	1.450	0.010	-1.1	30.0
1,2-Dichloropropane-d6	0.509	0.539	0.010	5.8	40.0
Toluene-d8	1.316	1.295	0.010	-1.6	30.0
trans-1,3-Dichloropropene-d4	0.292	0.318	0.010	8.9	30.0
2-Hexanone-d5	0.051	0.060	0.010	18.4	40.0
1,1,2,2-Tetrachloroethane-d2	0.188	0.208	0.010	10.4	30.0
1,2-Dichlorobenzene-d4	0.786	0.812	0.010	3.4	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.: H30X4

Instrument ID: V5 Calibration Date: 11/11/2011 Time: 5:25

Lab File ID: V5N2892.D Init. Calib. Date(s): 11/09/2011 11/09/2011

EPA Sample No.(VSTD#####) VSTD005R5 Init. Calib. Time(s): 19:57 21:52

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	0.328	0.285	0.010	-13.1	50.0
Chloromethane	0.747	0.849	0.010	13.6	50.0
Vinyl chloride	0.578	0.628	0.010	8.6	50.0
Bromomethane	0.351	0.329	0.010	-6.4	50.0
Chloroethane	0.319	0.380	0.010	19.0	50.0
Trichlorofluoromethane	0.698	0.662	0.010	-5.1	50.0
1,1-Dichloroethene	0.356	0.386	0.010	8.7	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.392	0.361	0.010	-8.1	50.0
Acetone	0.040	0.046	0.010	15.2	50.0
Carbon disulfide	1.357	1.481	0.010	9.1	50.0
Methyl acetate	0.116	0.124	0.010	7.2	50.0
Methylene chloride	0.328	0.354	0.010	7.7	50.0
trans-1,2-Dichloroethene	0.376	0.390	0.010	3.6	50.0
Methyl tert-butyl ether	0.428	0.477	0.010	11.6	50.0
1,1-Dichloroethane	0.707	0.784	0.010	10.8	50.0
cis-1,2-Dichloroethene	0.349	0.363	0.010	3.9	50.0
2-Butanone	0.057	0.066	0.010	16.8	50.0
Bromochloromethane	0.132	0.142	0.010	7.9	50.0
Chloroform	0.566	0.625	0.010	10.5	50.0
1,1,1-Trichloroethane	0.713	0.744	0.010	4.4	50.0
Cyclohexane	0.882	0.887	0.010	0.6	50.0
Carbon tetrachloride	0.671	0.659	0.010	-1.8	50.0
Benzene	1.621	1.717	0.010	5.9	50.0
1,2-Dichloroethane	0.262	0.284	0.010	8.7	50.0
Trichloroethene	0.491	0.518	0.010	5.4	50.0
Methylcyclohexane	0.709	0.690	0.010	-2.7	50.0

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.: H30X4

Instrument ID: V5 Calibration Date: 11/11/2011 Time: 5:25

Lab File ID: V5N2892.D Init. Calib. Date(s): 11/09/2011 11/09/2011

EPA Sample No.(VSTD#####) VSTD005R5 Init. Calib. Time(s): 19:57 21:52

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	0.442	0.480	0.010	8.7	50.0
Bromodichloromethane	0.448	0.468	0.010	4.3	50.0
cis-1,3-Dichloropropene	0.511	0.529	0.010	3.5	50.0
4-Methyl-2-pentanone	0.173	0.204	0.010	17.9	50.0
Toluene	1.653	1.697	0.010	2.7	50.0
trans-1,3-Dichloropropene	0.330	0.356	0.010	7.8	50.0
1,1,2-Trichloroethane	0.191	0.207	0.010	8.6	50.0
Tetrachloroethene	0.370	0.353	0.010	-4.7	50.0
2-Hexanone	0.112	0.136	0.010	21.6	50.0
Dibromochloromethane	0.279	0.293	0.010	5.0	50.0
1,2-Dibromoethane	0.200	0.221	0.010	10.4	50.0
Chlorobenzene	1.094	1.085	0.010	-0.8	50.0
Ethylbenzene	1.823	1.876	0.010	2.9	50.0
m,p-Xylene	0.778	0.799	0.010	2.7	50.0
o-Xylene	0.712	0.719	0.010	1.1	50.0
Styrene	1.039	1.104	0.010	6.2	50.0
Bromoform	0.292	0.299	0.010	2.5	50.0
Isopropylbenzene	1.937	1.954	0.010	0.9	50.0
1,1,2,2-Tetrachloroethane	0.196	0.229	0.010	16.9	50.0
1,3-Dichlorobenzene	1.648	1.741	0.010	5.7	50.0
1,4-Dichlorobenzene	1.752	1.747	0.010	-0.3	50.0
1,2-Dichlorobenzene	1.369	1.396	0.010	2.0	50.0
1,2-Dibromo-3-chloropropane	0.054	0.061	0.010	14.3	50.0
1,2,4-Trichlorobenzene	0.962	0.992	0.010	3.2	50.0
1,2,3-Trichlorobenzene	0.742	0.727	0.010	-2.0	50.0

7C - FORM VII VOA-3

VOLATILE CONTINUING CALIBRATION DATA

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Instrument ID: V5 Calibration Date: 11/11/2011 Time: 5:25

Lab File ID: V5N2892.D Init. Calib. Date(s): 11/09/2011 11/09/2011

EPA Sample No.(VSTD#####) VSTD005R5 Init. Calib. Time(s): 19:57 21:52

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	0.455	0.482	0.010	6.0	50.0
Chloroethane-d5	0.309	0.352	0.010	14.1	50.0
1,1-Dichloroethene-d2	0.118	0.122	0.010	3.7	50.0
2-Butanone-d5	0.055	0.063	0.010	14.7	50.0
Chloroform-d	0.545	0.578	0.010	6.1	50.0
1,2-Dichloroethane-d4	0.214	0.241	0.010	12.3	50.0
Benzene-d6	1.467	1.535	0.010	4.7	50.0
1,2-Dichloropropane-d6	0.509	0.564	0.010	10.9	50.0
Toluene-d8	1.316	1.364	0.010	3.6	50.0
trans-1,3-Dichloropropene-d4	0.292	0.320	0.010	9.6	50.0
2-Hexanone-d5	0.051	0.060	0.010	19.1	50.0
1,1,2,2-Tetrachloroethane-d2	0.188	0.212	0.010	12.7	50.0
1,2-Dichlorobenzene-d4	0.786	0.851	0.010	8.3	50.0

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only SOM01.2 (6/2007)

Data File: \\avogadro\organics\V5.I\111109.B\V5N2844.D
Report Date: 15-Nov-2011 09:35

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111109.B\V5N2844.D
Lab Smp Id: VSTD005P5 Client Smp ID: VSTD005P5
Inj Date : 10-NOV-2011 06:28
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD005P5,VSTD005P5
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111109.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 14:30 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 25 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	1.902	1.902	(0.301)	66354	5.00000	4.4
2	Chloromethane	50	2.042	2.042	(0.323)	176347	5.00000	5.2
$ 79	Vinyl Chloride-d3	65	2.169	2.169	(0.343)	103941	5.00000	5.0
3	Vinyl Chloride	62	2.181	2.181	(0.345)	133004	5.00000	5.0
4	Bromomethane	94	2.518	2.518	(0.398)	84523	5.00000	5.3
$ 80	Chloroethane-d5	69	2.587	2.587	(0.409)	68060	5.00000	4.8
5	Chloroethane	64	2.611	2.611	(0.413)	72321	5.00000	5.0
6	Trichlorofluoromethane	101	2.913	2.913	(0.460)	151517	5.00000	4.7
$ 81	1,1-Dichloroethene-d2	65	3.366	3.366	(0.532)	24073	5.00000	4.5(Q)
7	1,1-Dichloroethene	96	3.377	3.377	(0.534)	80962	5.00000	5.0
8	1,1,2-Trichloro-1,2,2-trifluo	101	3.424	3.424	(0.541)	79581	5.00000	4.4
9	Acetone	43	3.447	3.447	(0.545)	75967	50.0000	42
10	Carbon Disulfide	76	3.598	3.598	(0.569)	306168	5.00000	4.9
11	Methyl Acetate	43	3.760	3.760	(0.594)	19992	5.00000	3.8
12	Methylene Chloride	84	3.853	3.853	(0.609)	71583	5.00000	4.8
13	trans-1,2-Dichloroethene	96	4.120	4.120	(0.651)	89109	5.00000	5.2
14	Methyl tert-Butyl Ether	73	4.132	4.132	(0.653)	96072	5.00000	4.9
15	1,1-Dichloroethane	63	4.527	4.527	(0.716)	169933	5.00000	5.3
$ 82	2-Butanone-d5	46	5.061	5.061	(0.800)	119769	50.0000	48(A)
17	cis-1,2-Dichloroethene	96	5.096	5.096	(0.805)	83434	5.00000	5.2
16	2-Butanone	43	5.119	5.119	(0.809)	126262	50.0000	49
18	Bromochloromethane	128	5.328	5.328	(0.842)	31645	5.00000	5.2(Q)

Data File: \\avogadro\organics\V5.I\111109.B\V5N2844.D
Report Date: 15-Nov-2011 09:35

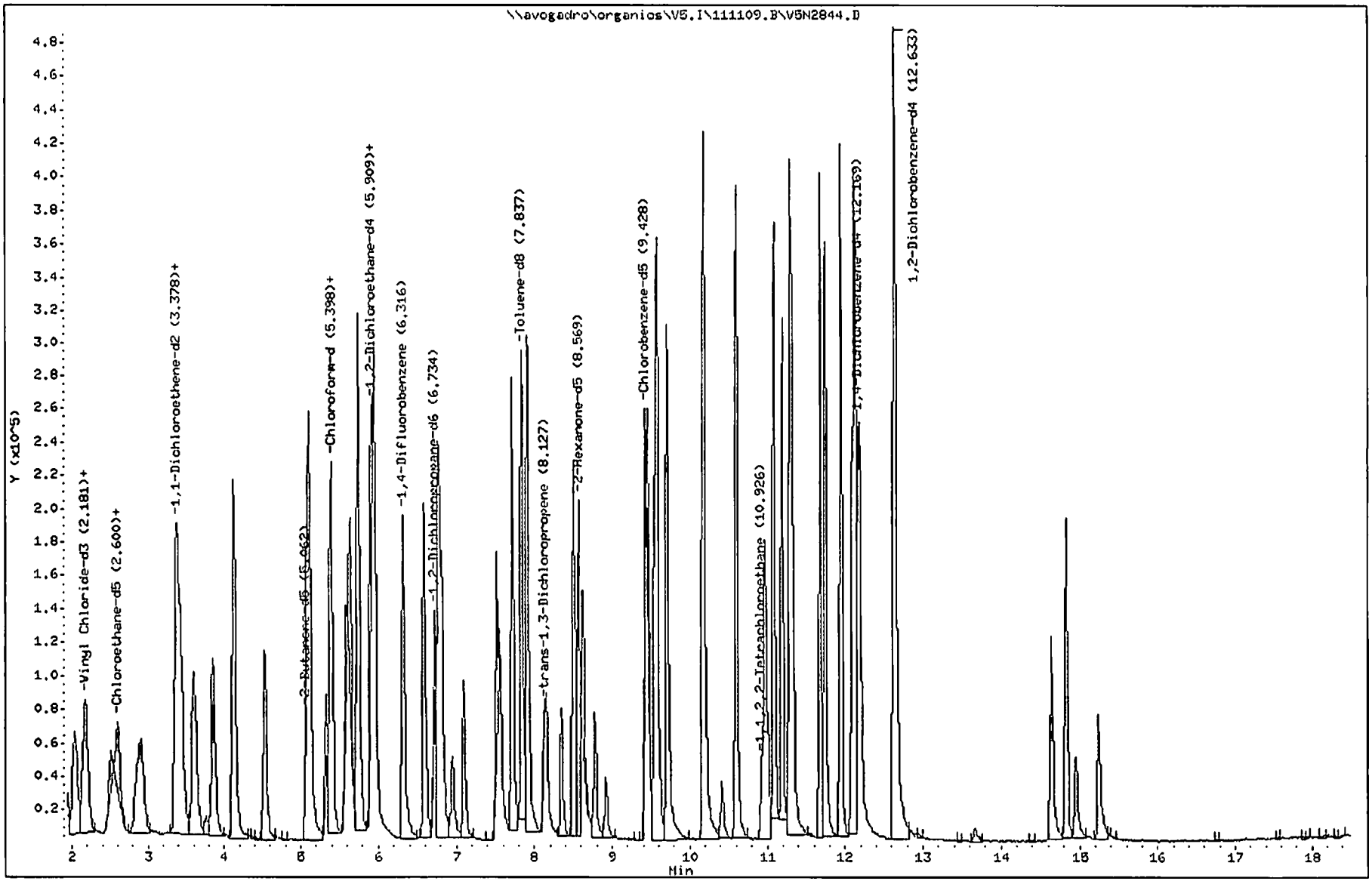
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	83 Chloroform-d	84	5.386	5.386	(0.851)	126176	5.00000	5.1
	19 Chloroform	83	5.398	5.398	(0.853)	132197	5.00000	5.1
	20 1,1,1-Trichloroethane	97	5.584	5.584	(0.592)	127276	5.00000	5.3
	21 Cyclohexane	56	5.642	5.642	(0.598)	142998	5.00000	4.8
	22 Carbon Tetrachloride	117	5.746	5.746	(0.610)	115354	5.00000	5.1
$	23 1,2-Dichloroethane-d4	65	5.897	5.897	(0.932)	48638	5.00000	5.0
$	84 Benzene-d6	84	5.909	5.909	(0.627)	252015	5.00000	5.1
	25 Benzene	78	5.944	5.944	(0.630)	283486	5.00000	5.2
	24 1,2-Dichloroethane	62	5.967	5.967	(0.943)	63846	5.00000	5.3
*	26 1,4-Difluorobenzene	114	6.327	6.327	(1.000)	228852	5.00000	
	27 Trichloroethene	95	6.594	6.594	(0.699)	90454	5.00000	5.5
$	85 1,2-Dichloropropane-d6	67	6.733	6.733	(0.714)	88105	5.00000	5.2
	28 Methylcyclohexane	83	6.780	6.780	(0.719)	103534	5.00000	4.4
	29 1,2-Dichloropropane	63	6.815	6.815	(0.723)	76070	5.00000	5.1
	30 Bromodichloromethane	83	7.093	7.093	(0.752)	74804	5.00000	5.0
	31 cis-1,3-Dichloropropene	75	7.558	7.558	(0.802)	88919	5.00000	5.2
	32 4-Methyl-2-Pentanone	43	7.720	7.720	(0.819)	285798	50.0000	49
$	33 Toluene-d8	98	7.837	7.837	(0.831)	233949	5.00000	5.3
	34 Toluene	91	7.918	7.918	(0.840)	289215	5.00000	5.2
$	86 trans-1,3-Dichloropropene-d4	79	8.115	8.115	(0.861)	48551	5.00000	5.0
	35 trans-1,3-Dichloropropene	75	8.150	8.150	(0.865)	55971	5.00000	5.1
	36 1,1,2-Trichloroethane	97	8.348	8.348	(0.885)	33484	5.00000	5.2
	37 Tetrachloroethene	164	8.498	8.498	(0.901)	62731	5.00000	5.1(Q)
$	87 2-Hexanone-d5	63	8.568	8.568	(0.909)	89717	50.0000	53(A)
	38 2-Hexanone	43	8.626	8.626	(0.915)	191583	50.0000	51
	39 Dibromochloromethane	129	8.777	8.777	(0.931)	46885	5.00000	5.0
	40 1,2-Dibromoethane	107	8.917	8.917	(0.946)	34811	5.00000	5.2
*	42 Chlorobenzene-d5	117	9.428	9.428	(1.000)	167705	5.00000	
	43 Chlorobenzene	112	9.462	9.462	(1.004)	188786	5.00000	5.1
	44 Ethylbenzene	91	9.579	9.579	(1.016)	312720	5.00000	5.1
	45 m,p-Xylene	106	9.706	9.706	(1.030)	131063	5.00000	5.0
	46 o-Xylene	106	10.171	10.171	(1.079)	118011	5.00000	4.9
	47 Styrene	104	10.194	10.194	(1.081)	179912	5.00000	5.2
	48 Bromoform	173	10.415	10.415	(0.856)	22234	5.00000	5.7
	49 Isopropylbenzene	105	10.600	10.600	(1.124)	339745	5.00000	5.2
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.926	10.926	(1.159)	31257	5.00000	4.9
	51 1,1,2,2-Tetrachloroethane	83	10.949	10.949	(1.161)	32366	5.00000	4.9
	52 1,3-Dichlorobenzene	146	12.087	12.087	(0.993)	118669	5.00000	5.4
*	78 1,4-Dichlorobenzene-d4	152	12.168	12.168	(1.000)	66458	5.00000	
	53 1,4-Dichlorobenzene	146	12.203	12.203	(1.003)	124401	5.00000	5.3
$	90 1,2-Dichlorobenzene-d4	152	12.633	12.633	(1.038)	55133	5.00000	5.3(Q)
	54 1,2-Dichlorobenzene	146	12.656	12.656	(1.040)	98235	5.00000	5.4
	55 1,2-Dibromo-3-chloropropane	75	13.666	13.666	(1.123)	3843	5.00000	5.4(Q)
	56 1,2,4-Trichlorobenzene	180	14.642	14.642	(1.203)	69235	5.00000	5.4
	77 1,2,3-Trichlorobenzene	180	15.246	15.246	(1.253)	48931	5.00000	5.0

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\111109.B\V5N2844.D
Date : 10-NOV-2011 06:28
Client ID: VSTD005P5
Sample Info: 25ML,VSTD005P5,VSTD005P5
Purge Volume: 25.0
Column phase: DB-624

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



Data File: \\avogadro\organics\V5.I\111110A.B\V5N2868.D
Report Date: 15-Nov-2011 09:36

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110A.B\V5N2868.D
Lab Smp Id: VSTD005Q5 Client Smp ID: VSTD005Q5
Inj Date : 10-NOV-2011 17:28
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD005Q5,VSTD005Q5
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111110A.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 15:34 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 49 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	1.900	(0.299)	65324	5.00000	5.2
2	Chloromethane	50	2.100	2.098	(0.332)	157503	5.00000	5.5
$ 79	Vinyl Chloride-d3	65	2.216	2.214	(0.350)	93697	5.00000	5.4
3	Vinyl Chloride	62	2.216	2.214	(0.350)	121090	5.00000	5.5
4	Bromomethane	94	2.565	2.562	(0.405)	66657	5.00000	5.0
$ 80	Chloroethane-d5	69	2.600	2.609	(0.411)	67650	5.00000	5.7
5	Chloroethane	64	2.635	2.632	(0.416)	70065	5.00000	5.8
6	Trichlorofluoromethane	101	2.913	2.911	(0.460)	131925	5.00000	5.0
$ 81	1,1-Dichloroethene-d2	65	3.378	3.364	(0.534)	24319	5.00000	5.4
7	1,1-Dichloroethene	96	3.401	3.387	(0.538)	74562	5.00000	5.5
8	1,1,2-Trichloro-1,2,2-trifluo	101	3.436	3.422	(0.543)	81582	5.00000	5.4
9	Acetone	43	3.447	3.445	(0.545)	78643	50.0000	52
10	Carbon Disulfide	76	3.622	3.607	(0.572)	292564	5.00000	5.6
11	Methyl Acetate	43	3.773	3.770	(0.596)	25048	5.00000	5.7
12	Methylene Chloride	84	3.854	3.863	(0.609)	66062	5.00000	5.3
13	trans-1,2-Dichloroethene	96	4.121	4.130	(0.651)	73125	5.00000	5.1
14	Methyl tert-Butyl Ether	73	4.133	4.142	(0.653)	91283	5.00000	5.6
15	1,1-Dichloroethane	63	4.539	4.536	(0.717)	141909	5.00000	5.3
$ 82	2-Butanone-d5	46	5.062	5.071	(0.800)	120446	50.0000	58(A)
17	cis-1,2-Dichloroethene	96	5.096	5.094	(0.805)	68577	5.00000	5.1
16	2-Butanone	43	5.120	5.129	(0.809)	126638	50.0000	59
18	Bromochloromethane	128	5.340	5.338	(0.844)	25553	5.00000	5.1(Q)

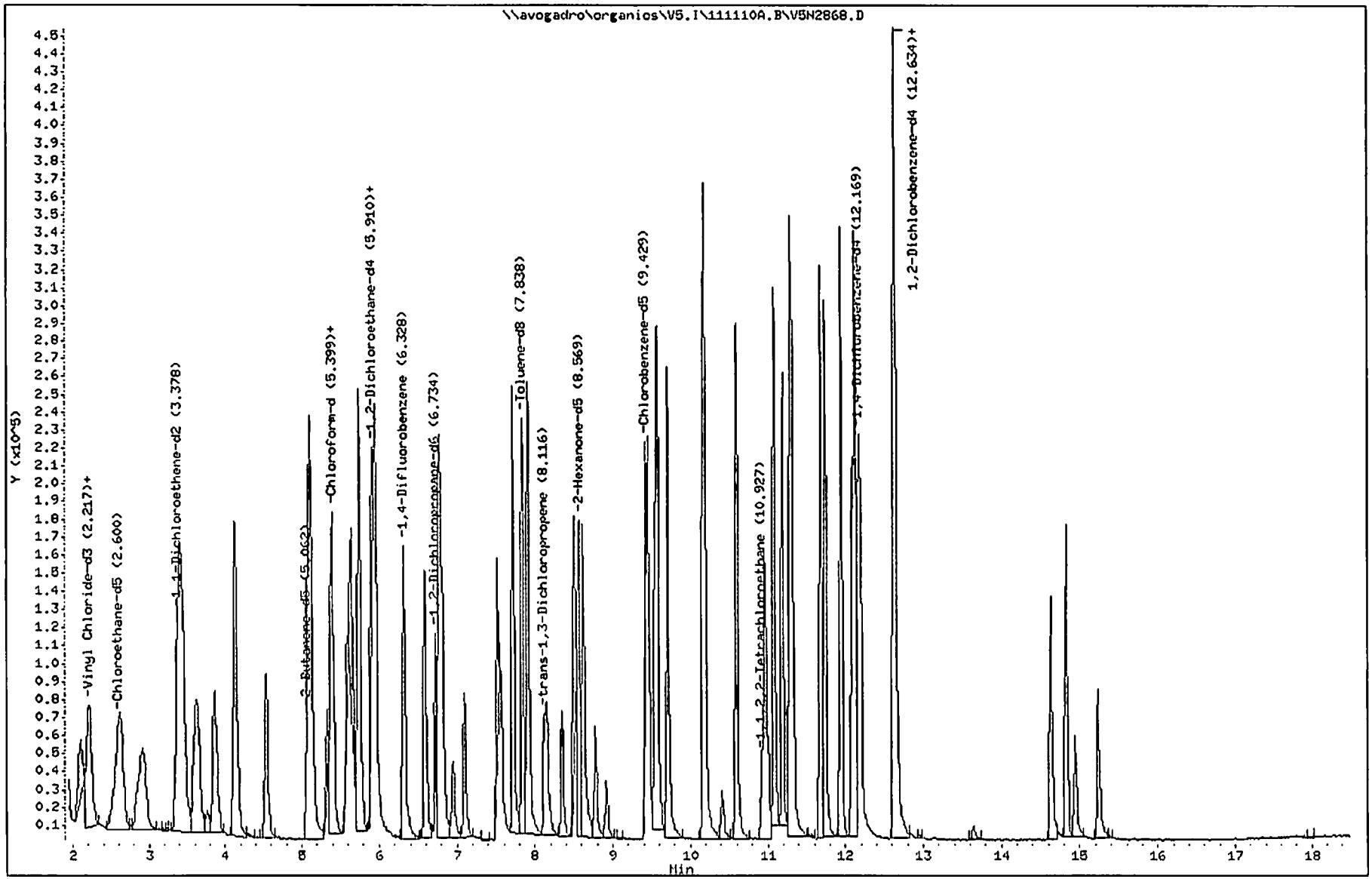
Data File: \\avogadro\organics\V5.I\111110A.B\V5N2868.D
Report Date: 15-Nov-2011 09:36

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	83 Chloroform-d	84	5.387	5.384	(0.851)	108203	5.00000	5.2
	19 Chloroform	83	5.410	5.407	(0.855)	112897	5.00000	5.2
	20 1,1,1-Trichloroethane	97	5.596	5.593	(0.594)	101939	5.00000	5.0
	21 Cyclohexane	56	5.642	5.640	(0.598)	134455	5.00000	5.3
	22 Carbon Tetrachloride	117	5.747	5.756	(0.610)	91212	5.00000	4.7
$	23 1,2-Dichloroethane-d4	65	5.898	5.895	(0.932)	43363	5.00000	5.3
$	84 Benzene-d6	84	5.909	5.918	(0.627)	209294	5.00000	4.9
	25 Benzene	78	5.956	5.953	(0.632)	233479	5.00000	5.0
	24 1,2-Dichloroethane	62	5.967	5.976	(0.943)	54869	5.00000	5.5
*	26 1,4-Difluorobenzene	114	6.327	6.325	(1.000)	190819	5.00000	
	27 Trichloroethene	95	6.583	6.592	(0.698)	66780	5.00000	4.7
$	85 1,2-Dichloropropane-d6	67	6.734	6.731	(0.714)	77745	5.00000	5.3
	28 Methylcyclohexane	83	6.780	6.778	(0.719)	110187	5.00000	5.4
	29 1,2-Dichloropropane	63	6.815	6.824	(0.723)	64048	5.00000	5.0
	30 Bromodichloromethane	83	7.094	7.091	(0.752)	63683	5.00000	4.9
	31 cis-1,3-Dichloropropene	75	7.558	7.556	(0.802)	75339	5.00000	5.1
	32 4-Methyl-2-Pentanone	43	7.721	7.718	(0.819)	272775	50.0000	55
$	33 Toluene-d8	98	7.837	7.846	(0.831)	186955	5.00000	4.9
	34 Toluene	91	7.907	7.916	(0.839)	230489	5.00000	4.8
$	86 trans-1,3-Dichloropropene-d4	79	8.116	8.113	(0.861)	45860	5.00000	5.4
	35 trans-1,3-Dichloropropene	75	8.151	8.148	(0.865)	50804	5.00000	5.3
	36 1,1,2-Trichloroethane	97	8.348	8.346	(0.885)	28394	5.00000	5.2
	37 Tetrachloroethene	164	8.499	8.508	(0.901)	48780	5.00000	4.6
$	87 2-Hexanone-d5	63	8.569	8.566	(0.909)	86363	50.0000	59(A)
	38 2-Hexanone	43	8.615	8.613	(0.914)	191763	50.0000	59
	39 Dibromochloromethane	129	8.778	8.787	(0.931)	39391	5.00000	4.9
	40 1,2-Dibromoethane	107	8.917	8.915	(0.946)	30078	5.00000	5.2
*	42 Chlorobenzene-d5	117	9.428	9.426	(1.000)	144332	5.00000	
	43 Chlorobenzene	112	9.463	9.460	(1.004)	148844	5.00000	4.7
	44 Ethylbenzene	91	9.579	9.577	(1.016)	249779	5.00000	4.7
	45 m,p-Xylene	106	9.707	9.716	(1.030)	103500	5.00000	4.6
	46 o-Xylene	106	10.171	10.169	(1.079)	99005	5.00000	4.8
	47 Styrene	104	10.183	10.192	(1.080)	148334	5.00000	4.9
	48 Bromoform	173	10.415	10.413	(0.856)	17957	5.00000	4.9
	49 Isopropylbenzene	105	10.601	10.598	(1.124)	267310	5.00000	4.8
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.926	10.924	(1.159)	30024	5.00000	5.5
	51 1,1,2,2-Tetrachloroethane	83	10.949	10.956	(1.161)	30613	5.00000	5.4
	52 1,3-Dichlorobenzene	146	12.088	12.097	(0.993)	105402	5.00000	5.0
*	78 1,4-Dichlorobenzene-d4	152	12.169	12.166	(1.000)	63377	5.00000	
	53 1,4-Dichlorobenzene	146	12.192	12.201	(1.002)	103138	5.00000	4.6
$	90 1,2-Dichlorobenzene-d4	152	12.633	12.631	(1.038)	51486	5.00000	5.2(Q)
	54 1,2-Dichlorobenzene	146	12.645	12.654	(1.039)	86276	5.00000	5.0
	55 1,2-Dibromo-3-chloropropane	75	13.644	13.641	(1.121)	3867	5.00000	5.7(Q)
	56 1,2,4-Trichlorobenzene	180	14.631	14.640	(1.202)	63489	5.00000	5.2
	77 1,2,3-Trichlorobenzene	180	15.235	15.232	(1.252)	46605	5.00000	5.0

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\111110A.B\V5N2868.D
Date : 10-NOV-2011 17:28
Client ID: VSTD005Q5 Instrument: V5.i
Sample Info: 25ML,VSTD005Q5,VSTD005Q5
Purge Volume: 25.0 Operator: SRC:
Column phase: DB-624 Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111110A.B\V5N2892.D
Report Date: 15-Nov-2011 09:37

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110A.B\V5N2892.D
Lab Smp Id: VSTD005R5 Client Smp ID: VSTD005R5
Inj Date : 11-NOV-2011 05:25
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD005R5,VSTD005R5
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111110A.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 15:34 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 73 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)	51546	5.00000	4.3
	2 Chloromethane	50	2.098	2.098	(0.332)	153656	5.00000	5.7
$	79 Vinyl Chloride-d3	65	2.214	2.214	(0.350)	87290	5.00000	5.3
	3 Vinyl Chloride	62	2.214	2.214	(0.350)	113646	5.00000	5.4
	4 Bromomethane	94	2.562	2.562	(0.405)	59547	5.00000	4.7
$	80 Chloroethane-d5	69	2.609	2.609	(0.412)	63744	5.00000	5.7
	5 Chloroethane	64	2.632	2.632	(0.416)	68765	5.00000	6.0
	6 Trichlorofluoromethane	101	2.911	2.911	(0.460)	119850	5.00000	4.7
$	81 1,1-Dichloroethene-d2	65	3.364	3.364	(0.532)	22113	5.00000	5.2(Q)
	7 1,1-Dichloroethene	96	3.387	3.387	(0.535)	69911	5.00000	5.4
	8 1,1,2-Trichloro-1,2,2-trifluo	101	3.422	3.422	(0.541)	65269	5.00000	4.6
	9 Acetone	43	3.445	3.445	(0.545)	82519	50.0000	58
	10 Carbon Disulfide	76	3.607	3.607	(0.570)	268070	5.00000	5.5
	11 Methyl Acetate	43	3.770	3.770	(0.596)	22462	5.00000	5.4
	12 Methylene Chloride	84	3.863	3.863	(0.611)	64021	5.00000	5.4
	13 trans-1,2-Dichloroethene	96	4.130	4.130	(0.653)	70534	5.00000	5.2
	14 Methyl tert-Butyl Ether	73	4.142	4.142	(0.655)	86355	5.00000	5.6
	15 1,1-Dichloroethane	63	4.536	4.536	(0.717)	141848	5.00000	5.5
$	82 2-Butanone-d5	46	5.071	5.071	(0.802)	113259	50.0000	57(A)
	17 cis-1,2-Dichloroethene	96	5.094	5.094	(0.805)	65704	5.00000	5.2
	16 2-Butanone	43	5.129	5.129	(0.811)	119829	50.0000	58
	18 Bromochloromethane	128	5.338	5.338	(0.844)	25728	5.00000	5.4(Q)

Data File: \\avogadro\organics\V5.I\111110A.B\V5N2892.D
Report Date: 15-Nov-2011 09:37

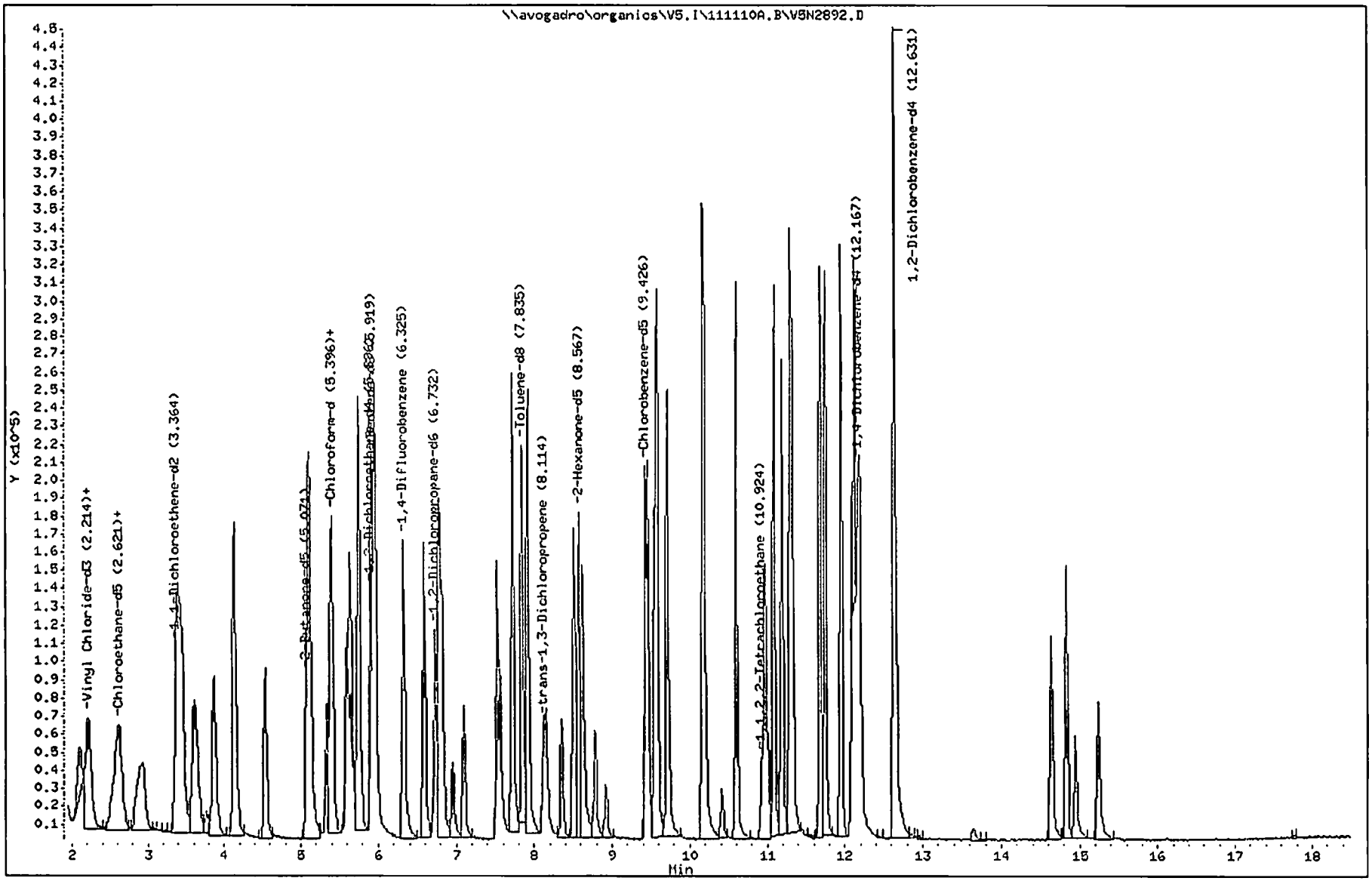
		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
S	83	Chloroform-d	84	5.384	5.384	(0.851)	104574	5.00000	5.3
	19	Chloroform	83	5.407	5.407	(0.855)	113179	5.00000	5.5
	20	1,1,1-Trichloroethane	97	5.593	5.593	(0.593)	98793	5.00000	5.2
	21	Cyclohexane	56	5.640	5.640	(0.598)	117788	5.00000	5.0
	22	Carbon Tetrachloride	117	5.756	5.756	(0.611)	87428	5.00000	4.9
S	23	1,2-Dichloroethane-d4	65	5.895	5.895	(0.932)	43533	5.00000	5.6
S	84	Benzene-d6	84	5.918	5.918	(0.628)	203750	5.00000	5.2
	25	Benzene	78	5.953	5.953	(0.632)	227831	5.00000	5.3
	24	1,2-Dichloroethane	62	5.976	5.976	(0.945)	51454	5.00000	5.4
*	26	1,4-Difluorobenzene	114	6.325	6.325	(1.000)	180977	5.00000	
	27	Trichloroethene	95	6.592	6.592	(0.699)	68709	5.00000	5.3
S	85	1,2-Dichloropropane-d6	67	6.731	6.731	(0.714)	74896	5.00000	5.5
	28	Methylcyclohexane	83	6.778	6.778	(0.719)	91545	5.00000	4.9
	29	1,2-Dichloropropane	63	6.824	6.824	(0.724)	63703	5.00000	5.4
	30	Bromodichloromethane	83	7.091	7.091	(0.752)	62089	5.00000	5.2
	31	cis-1,3-Dichloropropene	75	7.556	7.556	(0.802)	70187	5.00000	5.2
	32	4-Methyl-2-Pentanone	43	7.718	7.718	(0.819)	270607	50.0000	59
S	33	Toluene-d8	98	7.846	7.846	(0.832)	181045	5.00000	5.2
	34	Toluene	91	7.916	7.916	(0.840)	225268	5.00000	5.1
S	86	trans-1,3-Dichloropropene-d4	79	8.113	8.113	(0.861)	42424	5.00000	5.5
	35	trans-1,3-Dichloropropene	75	8.148	8.148	(0.864)	47199	5.00000	5.4
	36	1,1,2-Trichloroethane	97	8.346	8.346	(0.885)	27477	5.00000	5.4
	37	Tetrachloroethene	164	8.508	8.508	(0.903)	46791	5.00000	4.8
S	87	2-Hexanone-d5	63	8.566	8.566	(0.909)	79843	50.0000	60(A)
	38	2-Hexanone	43	8.613	8.613	(0.914)	180808	50.0000	61
	39	Dibromochloromethane	129	8.787	8.787	(0.932)	38905	5.00000	5.2
	40	1,2-Dibromoethane	107	8.915	8.915	(0.946)	29354	5.00000	5.5
*	42	Chlorobenzene-d5	117	9.426	9.426	(1.000)	132722	5.00000	
	43	Chlorobenzene	112	9.460	9.460	(1.004)	143979	5.00000	5.0
	44	Ethylbenzene	91	9.577	9.577	(1.016)	249017	5.00000	5.1
	45	m,p-Xylene	106	9.716	9.716	(1.031)	106020	5.00000	5.1
	46	o-Xylene	106	10.169	10.169	(1.079)	95462	5.00000	5.1
	47	Styrene	104	10.192	10.192	(1.081)	146537	5.00000	5.3
	48	Bromoform	173	10.413	10.413	(0.856)	17188	5.00000	5.1
	49	Isopropylbenzene	105	10.598	10.598	(1.124)	259346	5.00000	5.0
S	89	1,1,2,2-Tetrachloroethane-d2	84	10.924	10.924	(1.159)	28200	5.00000	5.6
	51	1,1,2,2-Tetrachloroethane	83	10.958	10.958	(1.163)	30360	5.00000	5.8
	52	1,3-Dichlorobenzene	146	12.097	12.097	(0.994)	100166	5.00000	5.3
*	78	1,4-Dichlorobenzene-d4	152	12.166	12.166	(1.000)	57518	5.00000	
	53	1,4-Dichlorobenzene	146	12.201	12.201	(1.003)	100480	5.00000	5.0
S	90	1,2-Dichlorobenzene-d4	152	12.631	12.631	(1.038)	48959	5.00000	5.4(Q)
	54	1,2-Dichlorobenzene	146	12.654	12.654	(1.040)	80279	5.00000	5.1
	55	1,2-Dibromo-3-chloropropane	75	13.641	13.641	(1.121)	3521	5.00000	5.7(Q)
	56	1,2,4-Trichlorobenzene	180	14.640	14.640	(1.203)	57083	5.00000	5.2
	77	1,2,3-Trichlorobenzene	180	15.232	15.232	(1.252)	41823	5.00000	4.9

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\111110A.B\V5N2892.D
Date : 11-NOV-2011 05:25
Client ID: VSTD005R5
Sample Info: 25ML,VSTD005R5,VSTD005R5
Purge Volume: 25.0
Column phase: DB-624

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



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\V5.I\111109.B\V5N2820.D
Lab Smp Id: BFBO5 Client Smp ID: BFBO5
Inj Date : 09-NOV-2011 19:00
Operator : SRC: Inst ID: V5.i
Smp Info : 2UL,BFBO5,BFBO5
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111109.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		
10.790	10.800	(0.000)	95	30352			0.00- 100.00	100.00
10.790	10.800	(0.000)	50	6705			15.00- 40.00	22.09
10.790	10.800	(0.000)	75	13049			30.00- 80.00	42.99
10.790	10.800	(0.000)	96	2134			5.00- 9.00	7.03
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	22512			50.00- 120.00	74.17
10.790	10.800	(0.000)	175	1518			5.00- 9.00	6.74
10.790	10.800	(0.000)	176	21896			95.00- 101.00	97.26
10.790	10.800	(0.000)	177	1400			5.00- 9.00	6.39

Data File: \\avogadro\organics\V5.I\111109.B\V5N2820.D

Date : 09-NOV-2011 19:00

Client ID: BFB05

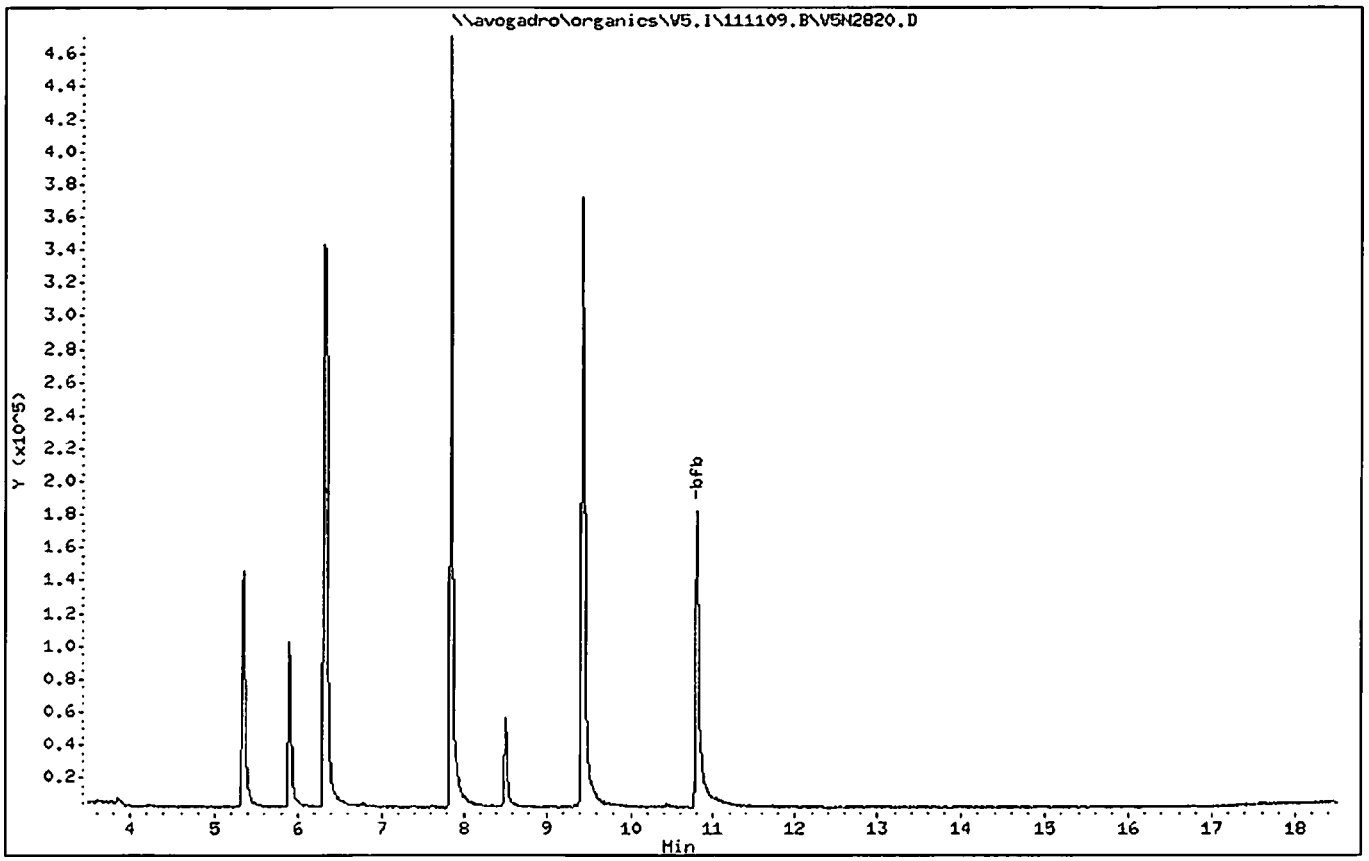
Instrument: V5.i

Sample Info: 2UL,BFB05,BFB05

Operator: SRC:

Column phase: DB-624

Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111109.B\V5N2820.D

Page 3

Date : 09-NOV-2011 19:00

Client ID: BFB05

Instrument: V5.i

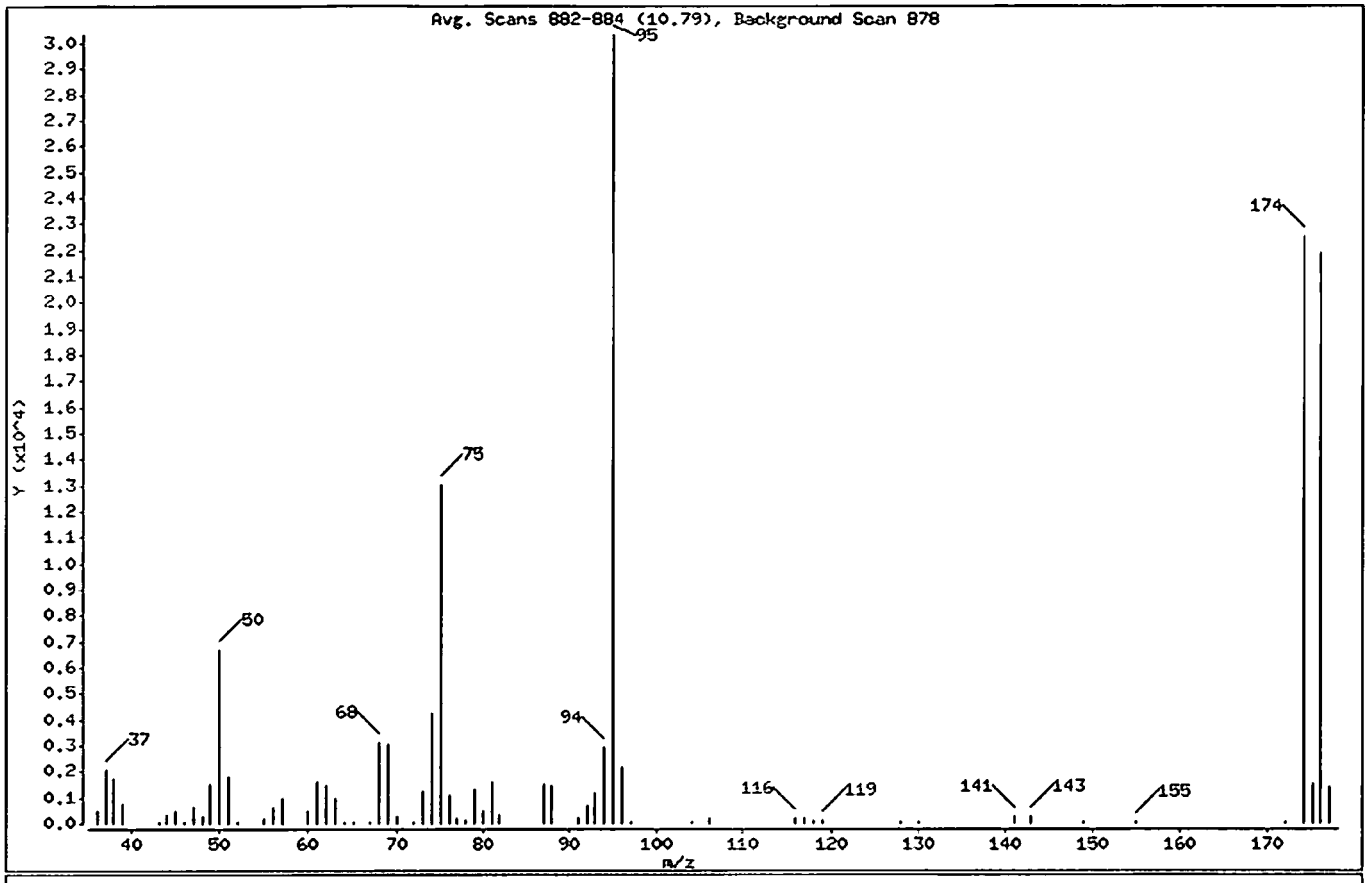
Sample Info: 2UL,BFB05,BFB05

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	22.09
75	30.00 - 80.00% of mass 95	42.99
96	5.00 - 9.00% of mass 95	7.03
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 120.00% of mass 95	74.17
175	5.00 - 9.00% of mass 174	5.00 (6.74)
176	95.00 - 101.00% of mass 174	72.14 (97.26)
177	5.00 - 9.00% of mass 176	4.61 (6.39)

Date : 09-NOV-2011 19:00

Client ID: BFB05 Instrument: V5.i

Sample Info: 2UL,BFB05,BFB05

Operator: SRC:

Column phase: DB-624 Column diameter: 0.25

Data File: V5N2820.D

Spectrum: Avg. Scans 882-884 (10.79), Background Scan 878

Location of Maximum: 95.00

Number of points: 64

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	465	60.00	465	79.00	1345	118.00	172
37.00	2084	61.00	1587	80.00	487	119.00	142
38.00	1777	62.00	1445	81.00	1630	128.00	39
39.00	785	63.00	1008	82.00	346	130.00	81
43.00	35	64.00	52	87.00	1516	141.00	285
44.00	347	65.00	39	88.00	1488	143.00	301
45.00	481	67.00	43	91.00	212	149.00	38
46.00	38	68.00	3114	92.00	676	155.00	50
47.00	601	69.00	3054	93.00	1190	172.00	97
48.00	271	70.00	275	94.00	2939	174.00	22512
49.00	1533	72.00	99	95.00	30352	175.00	1518
50.00	6705	73.00	1265	96.00	2134	176.00	21896
51.00	1844	74.00	4274	97.00	52	177.00	1400
52.00	40	75.00	13049	104.00	50		
55.00	201	76.00	1137	106.00	191		
56.00	658	77.00	178	116.00	218		
57.00	974	78.00	137	117.00	202		

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKP5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-62892

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2845.D

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

VBLKP5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-62892

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2845.D

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

VBLKP5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-62892

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2845.D

Level: (TRACE or LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 11/10/2011

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\111110.B\V5N2845.D
Report Date: 15-Nov-2011 09:35

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2845.D
Lab Smp Id: MB-62892 Client Smp ID: VBLKP5
Inj Date : 10-NOV-2011 06:57
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,MB-62892,VBLKP5,62892
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 26 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	2.184	2.216	(0.345)	148838	5.63938	5.6
$ 80 Chloroethane-d5	69	2.603	2.600	(0.411)	97758	5.45554	5.5
$ 81 1,1-Dichloroethene-d2	65	3.381	3.378	(0.534)	34651	5.06958	5.1(Q)
$ 82 2-Butanone-d5	46	5.076	5.062	(0.802)	143616	45.3667	45(AQ)
$ 83 Chloroform-d	84	5.390	5.387	(0.851)	146077	4.62182	4.6(Q)
$ 23 1,2-Dichloroethane-d4	65	5.901	5.898	(0.932)	54273	4.36639	4.4(Q)
$ 84 Benzene-d6	84	5.912	5.909	(0.627)	300858	4.77520	4.8
* 26 1,4-Difluorobenzene	114	6.330	6.327	(1.000)	290112	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.737	6.734	(0.714)	95732	4.37751	4.4
$ 33 Toluene-d8	98	7.840	7.837	(0.831)	267240	4.72653	4.7
$ 86 trans-1,3-Dichloropropene-d4	79	8.130	8.116	(0.862)	61112	4.87686	4.9
$ 87 2-Hexanone-d5	63	8.572	8.569	(0.909)	89310	41.1517	41(AQ)
* 42 Chlorobenzene-d5	117	9.431	9.428	(1.000)	214798	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.941	10.926	(1.160)	36341	4.48853	4.5
* 78 1,4-Dichlorobenzene-d4	152	12.183	12.169	(1.000)	84648	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.636	12.633	(1.037)	60916	4.57781	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\111110.B\V5N2845.D
Report Date: 15-Nov-2011 09:35

Spectrum Analytical, Inc. RI Division

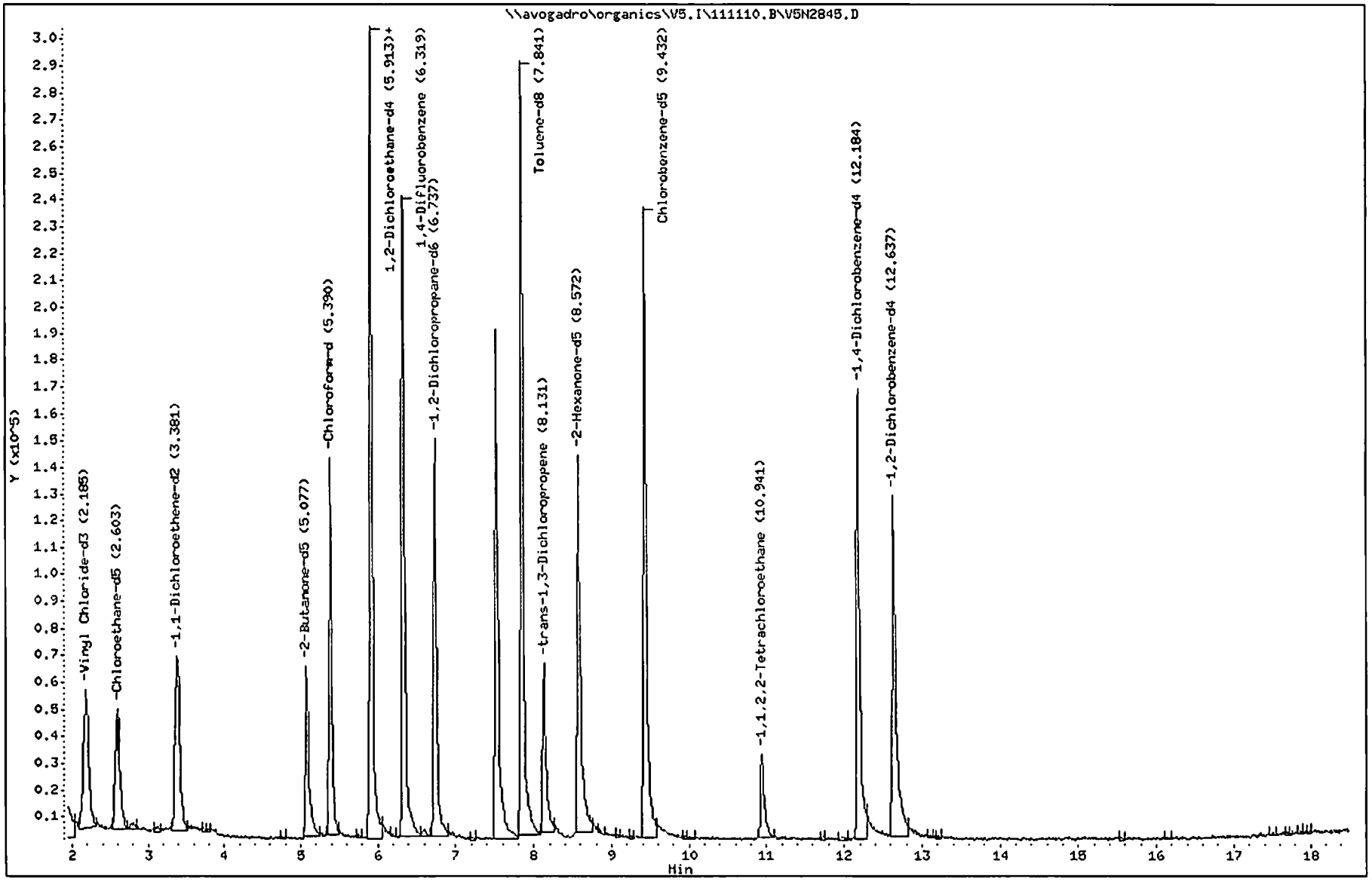
SOM01.0 - Trace Water Volatiles

Data file	: \\avogadro\organics\V5.I\111110.B\V5N2845.D		
Lab Smp Id	: MB-62892	Client Smp ID	: VBLKP5
Inj Date	: 10-NOV-2011 06:57		
Operator	: SRC: LIMS	Inst ID	: V5.i
Smp Info	: 25ML,MB-62892,VBLKP5,62892		
Misc Info	:		
Comment	:		
Method	: \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m		
Meth Date	: 14-Nov-2011 21:20 V5.i	Quant Type	: ISTD
Cal Date	: 09-NOV-2011 20:26	Cal File	: V5N2823.D
Als bottle	: 26	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\111110.B\V5N2845.D
Date : 10-NOV-2011 06:57
Client ID: VBLKP5
Sample Info: 25ML,MB-62892,VBLKP5,62892
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.

VBLKQ5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-62893

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2869.D

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

VBLKQ5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-62893

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2869.D

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

VBLKQ5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-62893

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2869.D

Level: (TRACE or LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 11/10/2011

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\111110A.B\V5N2869.D
Report Date: 15-Nov-2011 09:36

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110A.B\V5N2869.D
Lab Smp Id: MB-62893 Client Smp ID: VBLKQ5
Inj Date : 10-NOV-2011 18:26
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,MB-62893,VBLKQ5,62893
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111110A.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 15:34 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 50 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	2.209	2.214	(0.350)	136141	6.53393	6.5
$ 80 Chloroethane-d5	69	2.603	2.609	(0.412)	92242	6.52051	6.5
$ 81 1,1-Dichloroethene-d2	65	3.381	3.364	(0.535)	27755	5.14357	5.1(Q)
$ 82 2-Butanone-d5	46	5.077	5.071	(0.803)	139878	55.9695	56(AQ)
$ 83 Chloroform-d	84	5.391	5.384	(0.853)	122929	4.92666	4.9(Q)
$ 23 1,2-Dichloroethane-d4	65	5.902	5.895	(0.934)	48177	4.90960	4.9
$ 84 Benzene-d6	84	5.913	5.918	(0.627)	239841	4.68563	4.7
* 26 1,4-Difluorobenzene	114	6.320	6.325	(1.000)	229033	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.726	6.731	(0.713)	77930	4.38621	4.4
$ 33 Toluene-d8	98	7.841	7.846	(0.831)	216922	4.72237	4.7
$ 86 trans-1,3-Dichloropropene-d4	79	8.120	8.113	(0.861)	52972	5.20326	5.2
$ 87 2-Hexanone-d5	63	8.573	8.566	(0.909)	91178	51.7122	52(A)
* 42 Chlorobenzene-d5	117	9.432	9.426	(1.000)	174508	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.930	10.924	(1.159)	32306	4.91140	4.9
* 78 1,4-Dichlorobenzene-d4	152	12.173	12.166	(1.000)	73311	5.00000	(Q)
$ 90 1,2-Dichlorobenzene-d4	152	12.637	12.631	(1.038)	58584	5.08339	5.1(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\111110A.B\V5N2869.D
Report Date: 15-Nov-2011 09:36

Spectrum Analytical, Inc. RI Division

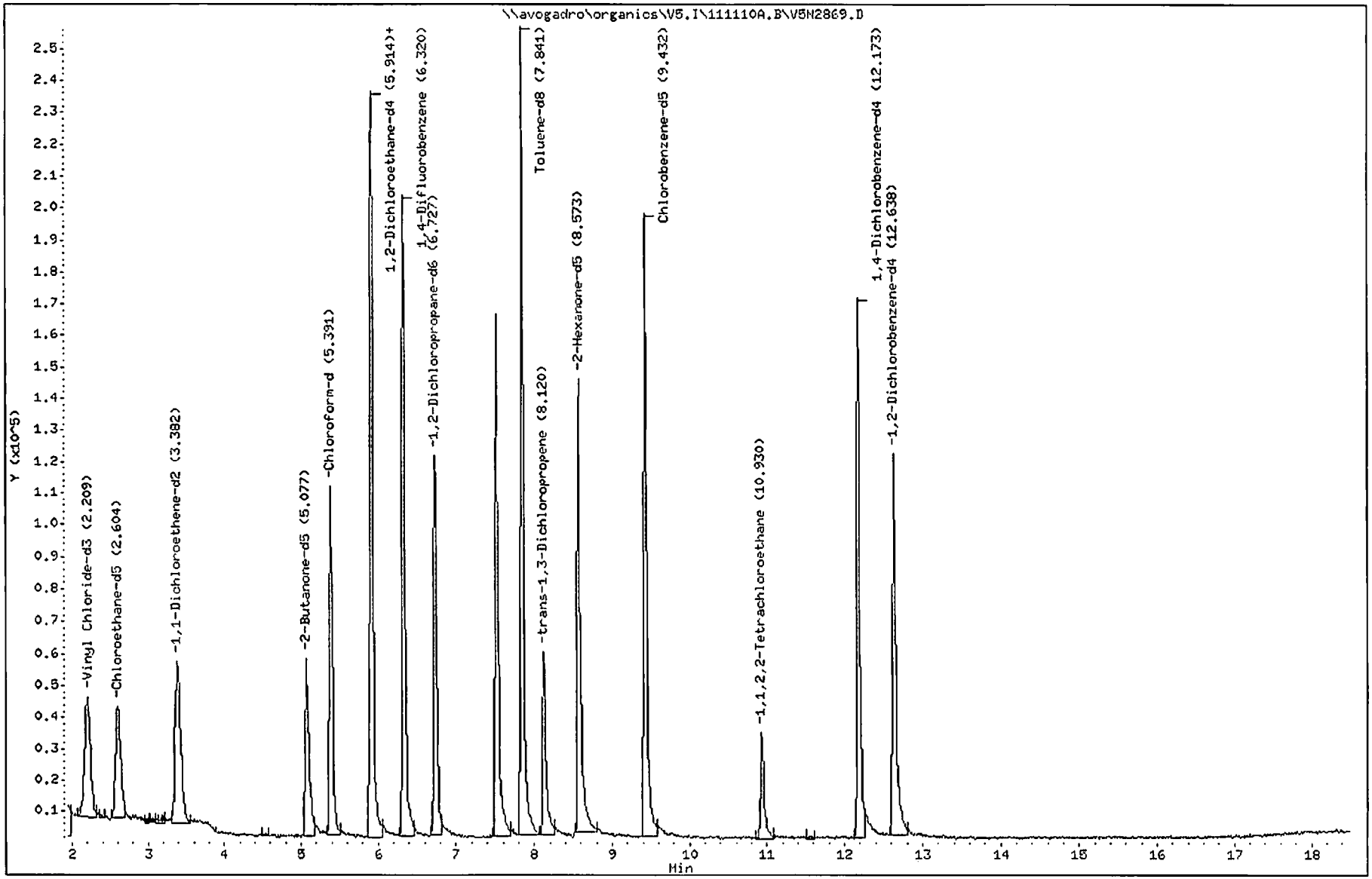
SOM01.0 - Trace Water Volatiles

Data file :	\\avogadro\organics\V5.I\111110A.B\V5N2869.D		
Lab Smp Id:	MB-62893	Client Smp ID:	VBLKQ5
Inj Date :	10-NOV-2011 18:26		
Operator :	SRC: LIMS	Inst ID:	V5.i
Smp Info :	25ML,MB-62893,VBLKQ5,62893		
Misc Info :			
Comment :			
Method :	\\avogadro\organics\V5.I\111110A.B\V5_TVOA1359.m		
Meth Date :	14-Nov-2011 15:34 V5.i	Quant Type:	ISTD
Cal Date :	09-NOV-2011 20:26	Cal File:	V5N2823.D
Als bottle:	50	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\111110A.B\V5N2869.D
Date : 10-NOV-2011 18:26
Client ID: VBLKQ5
Sample Info: 25ML,MB-62893,VBLKQ5,62893
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.

VHBLKQ5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: VHBLKQ5

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2891.D

Level: (TRACE/LOW/MED) TRACE Date Received:

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

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.

VHBLKQ5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: VHBLKQ5

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2891.D

Level: (TRACE/LOW/MED) TRACE Date Received:

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

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.

VHBLKQ5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: VHBLKQ5

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2891.D

Level: (TRACE or LOW/MED) TRACE Date Received:

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

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\111110A.B\V5N2891.D
Report Date: 15-Nov-2011 09:37

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110A.B\V5N2891.D
Lab Smp Id: VHBLKQ5 Client Smp ID: VHBLKQ5
Inj Date : 11-NOV-2011 04:56
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VHBLKQ5,VHBLKQ5,62893
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111110A.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 15:34 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 72 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)
S	79 Vinyl Chloride-d3	65	2.203	2.214	(0.348)	134836	6.28574	6.3
S	80 Chloroethane-d5	69	2.609	2.609	(0.413)	90311	6.20096	6.2
S	81 1,1-Dichloroethene-d2	65	3.376	3.364	(0.534)	28750	5.17520	5.2(Q)
S	82 2-Butanone-d5	46	5.071	5.071	(0.802)	131747	51.2045	51(AQ)
S	83 Chloroform-d	84	5.385	5.384	(0.851)	125514	4.88603	4.9(Q)
S	23 1,2-Dichloroethane-d4	65	5.896	5.895	(0.932)	48665	4.81713	4.8
S	84 Benzene-d6	84	5.919	5.918	(0.628)	249295	4.75297	4.8
I	26 1,4-Difluorobenzene	114	6.325	6.325	(1.000)	235794	5.00000	
S	85 1,2-Dichloropropane-d6	67	6.732	6.731	(0.714)	83185	4.56916	4.6
S	33 Toluene-d8	98	7.847	7.846	(0.832)	222356	4.72402	4.7
S	86 trans-1,3-Dichloropropene-d4	79	8.125	8.113	(0.862)	49312	4.72703	4.7
S	87 2-Hexanone-d5	63	8.567	8.566	(0.909)	88258	48.8499	49(A)
I	42 Chlorobenzene-d5	117	9.426	9.426	(1.000)	178817	5.00000	
S	89 1,1,2,2-Tetrachloroethane-d2	84	10.936	10.924	(1.160)	33383	4.95283	5.0
T	78 1,4-Dichlorobenzene-d4	152	12.178	12.166	(1.000)	71040	5.00000	(Q)
S	90 1,2-Dichlorobenzene-d4	152	12.631	12.631	(1.037)	53540	4.79423	4.8(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\111110A.B\V5N2891.D
Report Date: 15-Nov-2011 09:37

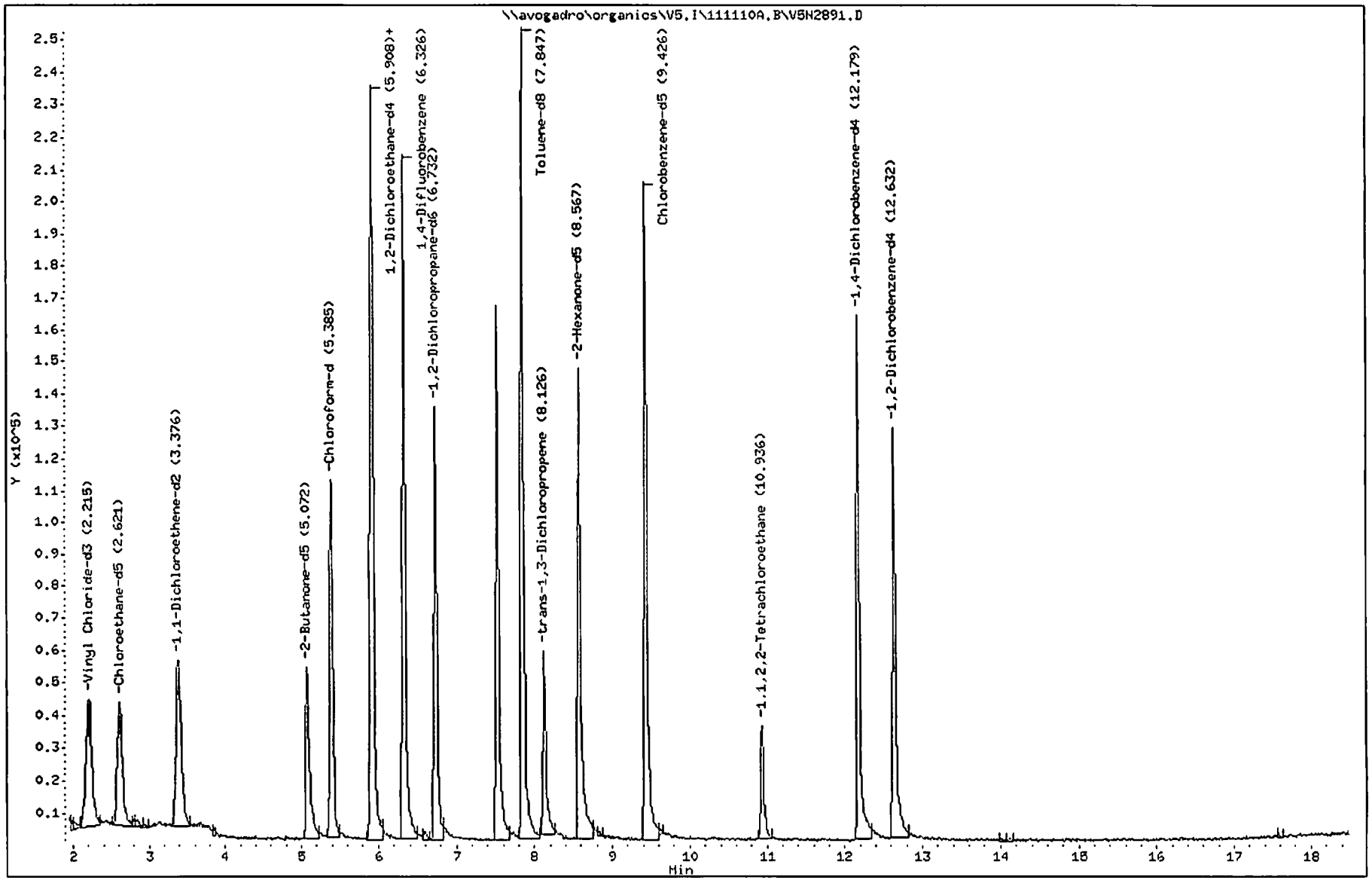
Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file	: \\avogadro\organics\V5.I\111110A.B\V5N2891.D		
Lab Smp Id	: VHBLKQ5	Client Smp ID:	VHBLKQ5
Inj Date	: 11-NOV-2011 04:56		
Operator	: SRC:	Inst ID:	V5.i
Smp Info	: 25ML,VHBLKQ5,VHBLKQ5,62893		
Misc Info	:		
Comment	:		
Method	: \\avogadro\organics\V5.I\111110A.B\V5_TVOA1359.m		
Meth Date	: 14-Nov-2011 15:34 V5.i	Quant Type:	ISTD
Cal Date	: 09-NOV-2011 20:26	Cal File:	V5N2823.D
Als bottle	: 72	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\111110A.B\V5N2891.D
Date : 11-NOV-2011 04:56
Client ID: VHBLKQ5
Instrument: V5.I
Sample Info: 25ML,VHBLKQ5,VHBLKQ5,62893
Purge Volume: 25.0
Operator: SRC:
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.: H30Z2MS

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

Lab Code: MITKEM | Case No.: 41926 | Mod. Ref No.: | SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER | Lab Sample ID: K2213-11BMS

Sample wt/vol: 25.0 (g/mL) ML | Lab File ID: V5N2871.D

Level: (TRACE/LOW/MED) TRACE | Date Received: 11/03/2011

% Moisture: not dec. | Date Analyzed: 11/10/2011

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	4.2	
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	4.1	
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.

H30Z2MS

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-11BMS

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2871.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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	4.0	
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	4.0	
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	4.1	
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

Data File: \\avogadro\organics\V5.I\111110A.B\V5N2871.D
Report Date: 15-Nov-2011 09:36

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110A.B\V5N2871.D
Lab Smp Id: K2213-11BMS Client Smp ID: H30Z2MS
Inj Date : 10-NOV-2011 19:23
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-11BMS,,62893
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111110A.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 15:34 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 52 QC Sample: MS
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	2.214	2.214	(0.350)	124056	6.23626	6.2
$	80 Chloroethane-d5	69	2.609	2.609	(0.413)	84352	6.24553	6.2
$	81 1,1-Dichloroethene-d2	65	3.387	3.364	(0.536)	28134	5.46105	5.5(QR)
	7 1,1-Dichloroethene	96	3.399	3.387	(0.537)	66057	4.24872	4.2(Q)
$	82 2-Butanone-d5	46	5.071	5.071	(0.802)	122266	51.2423	51(AQ)
$	83 Chloroform-d	84	5.385	5.384	(0.851)	114510	4.80687	4.8(Q)
$	23 1,2-Dichloroethane-d4	65	5.896	5.895	(0.932)	44609	4.76157	4.8
$	84 Benzene-d6	84	5.919	5.918	(0.628)	233200	4.71478	4.7
	25 Benzene	78	5.954	5.953	(0.632)	225475	4.12372	4.1
*	26 1,4-Difluorobenzene	114	6.325	6.325	(1.000)	218664	5.00000	
	27 Trichloroethene	95	6.592	6.592	(0.699)	66692	4.02697	4.0
$	85 1,2-Dichloropropane-d6	67	6.732	6.731	(0.714)	74945	4.36532	4.4
$	33 Toluene-d8	98	7.847	7.846	(0.832)	200616	4.51970	4.5
	34 Toluene	91	7.916	7.916	(0.840)	223719	4.01319	4.0
$	86 trans-1,3-Dichloropropene-d4	79	8.125	8.113	(0.862)	49293	5.01075	5.0
$	87 2-Hexanone-d5	63	8.567	8.566	(0.909)	83403	48.9522	49(A)
*	42 Chlorobenzene-d5	117	9.426	9.426	(1.000)	168627	5.00000	
	43 Chlorobenzene	112	9.461	9.460	(1.004)	149851	4.06123	4.1
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.936	10.924	(1.160)	30491	4.79713	4.8
*	78 1,4-Dichlorobenzene-d4	152	12.178	12.166	(1.000)	69384	5.00000	
$	90 1,2-Dichlorobenzene-d4	152	12.631	12.631	(1.037)	52721	4.83356	4.8(Q)

Data File: \\avogadro\organics\V5.I\111110A.B\V5N2871.D
Report Date: 15-Nov-2011 09:36

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\V5.I\111110A.B\V5N2871.D
Report Date: 15-Nov-2011 09:36

Spectrum Analytical, Inc. RI Division

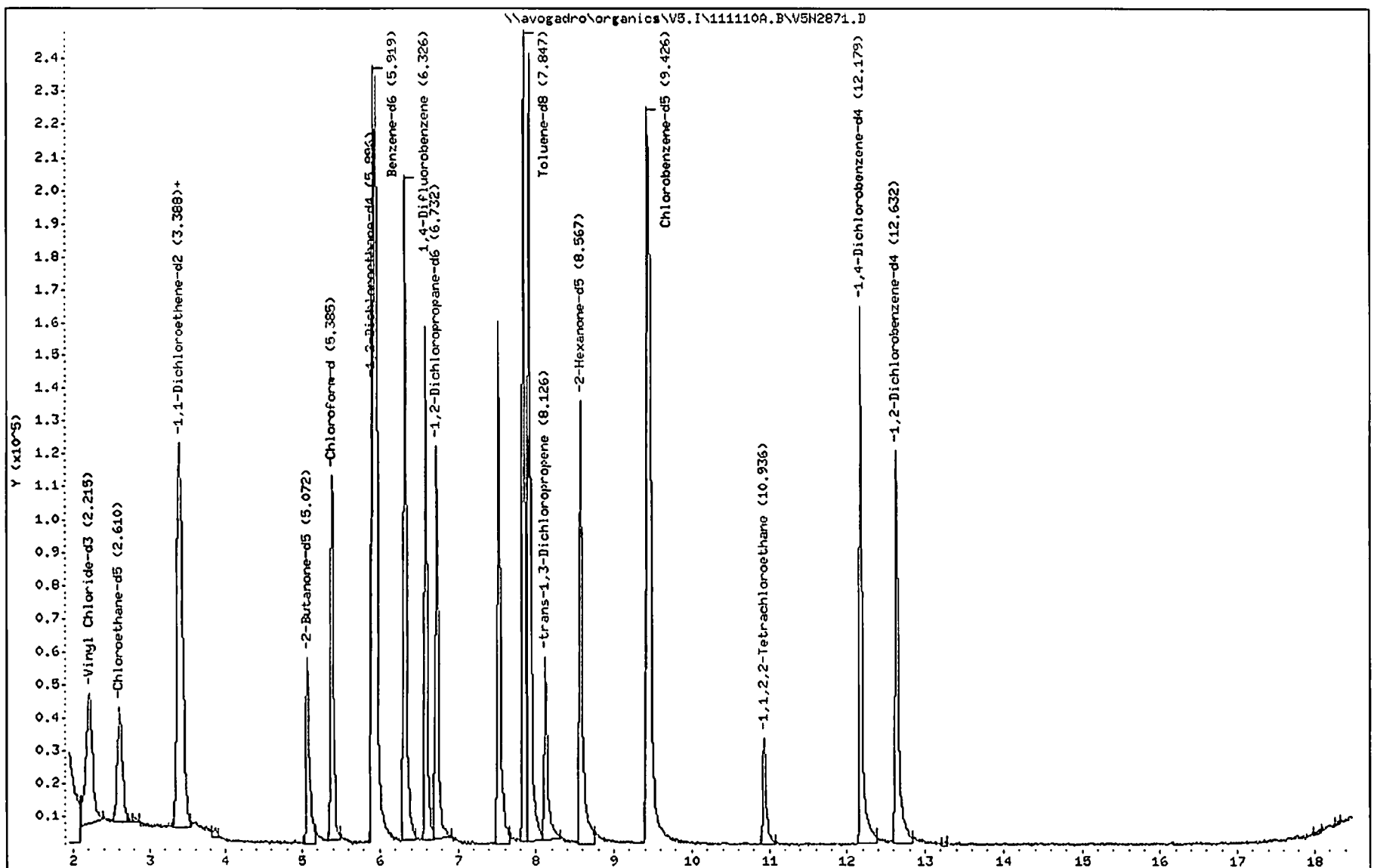
SOM01.0 - Trace Water Volatiles

Data file :	\\avogadro\organics\V5.I\111110A.B\V5N2871.D		
Lab Smp Id:	K2213-11BMS	Client Smp ID:	H30Z2MS
Inj Date :	10-NOV-2011 19:23		
Operator :	SRC: LIMS	Inst ID:	V5.i
Smp Info :	25ML,K2213-11BMS,,62893		
Misc Info :			
Comment :			
Method :	\\avogadro\organics\V5.I\111110A.B\V5_TVOA1359.m		
Meth Date :	14-Nov-2011 15:34 V5.i	Quant Type:	ISTD
Cal Date :	09-NOV-2011 20:26	Cal File:	V5N2823.D
Als bottle:	52	QC Sample:	MS
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\111110A.B\V5N2871.D
Date : 10-NOV-2011 19:23
Client ID: H30Z2HS
Sample Info: 25ML,K2213-11BHS,,62893
Purge Volume: 25.0
Column phase: DB-624

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



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Date : 10-NOV-2011 19:23

Client ID: H3022MS

Instrument: V5.i

Sample Info: 25ML,K2213-11BMS,,62893

Purge Volume: 25.0

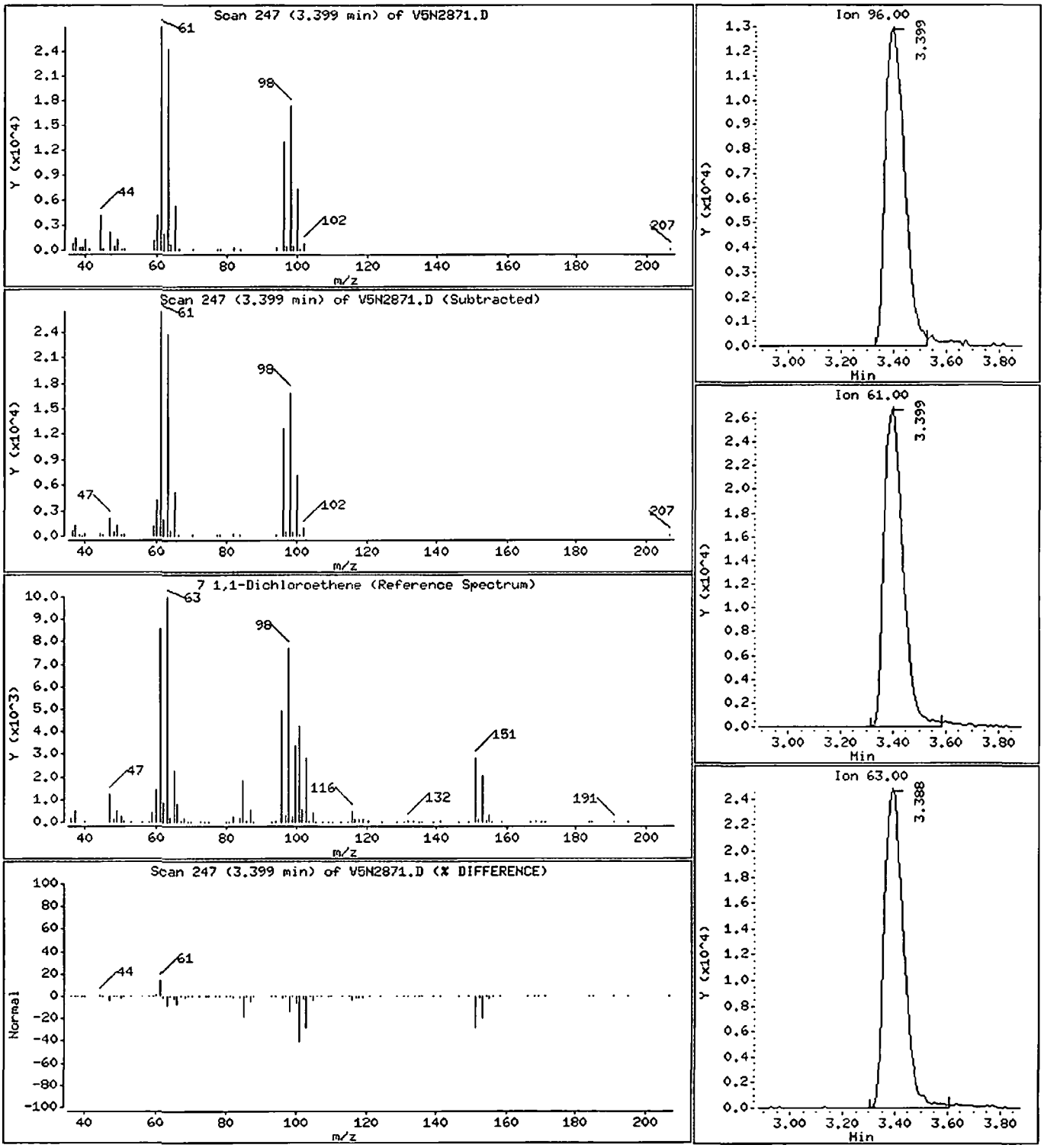
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

7 1,1-Dichloroethene

Concentration: 4.2 ug/L



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Date : 10-NOV-2011 19:23

Client ID: H30Z2MS

Instrument: V5.i

Sample Info: 25ML,K2213-11BMS,,62893

Purge Volume: 25.0

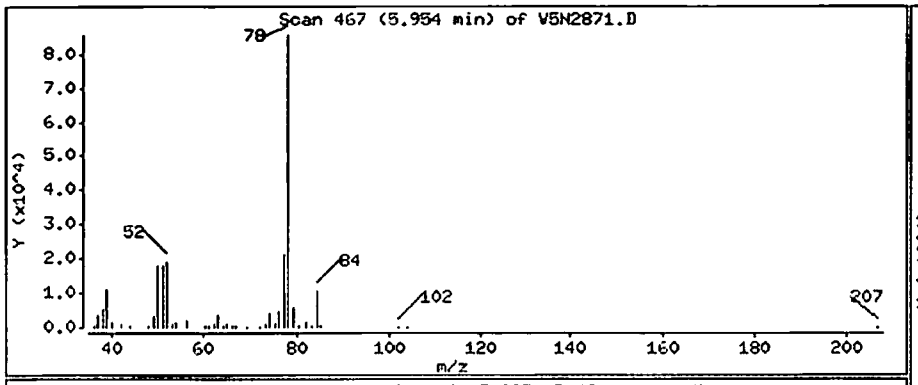
Operator: SRC: LIMS

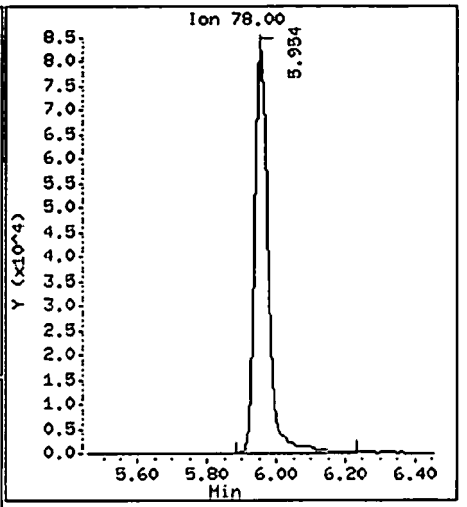
Column phase: DB-624

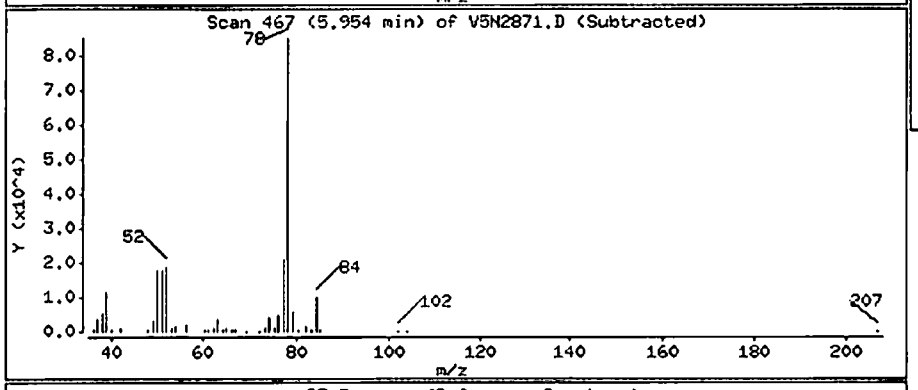
Column diameter: 0.25

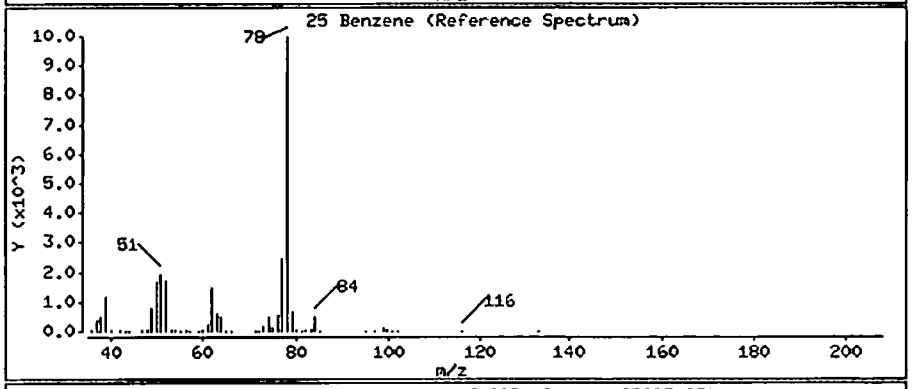
25 Benzene

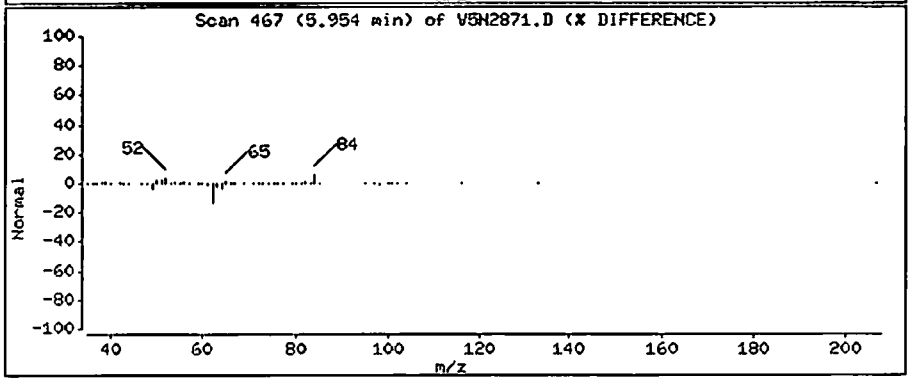
Concentration: 4.1 ug/L











Data File: \\avogadro\organics\V5.I\111110A.B\V5N2871.D

Date : 10-NOV-2011 19:23

Client ID: H30Z2HS

Instrument: V5.i

Sample Info: 25ML,K2213-11BHS,,62893

Purge Volume: 25.0

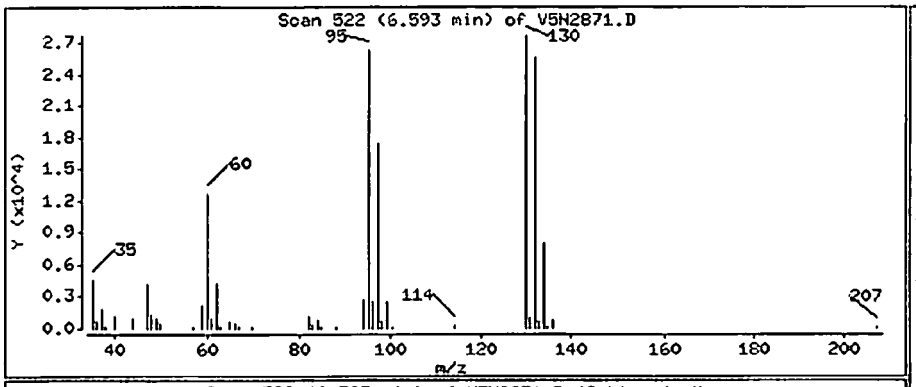
Operator: SRC: LIMS

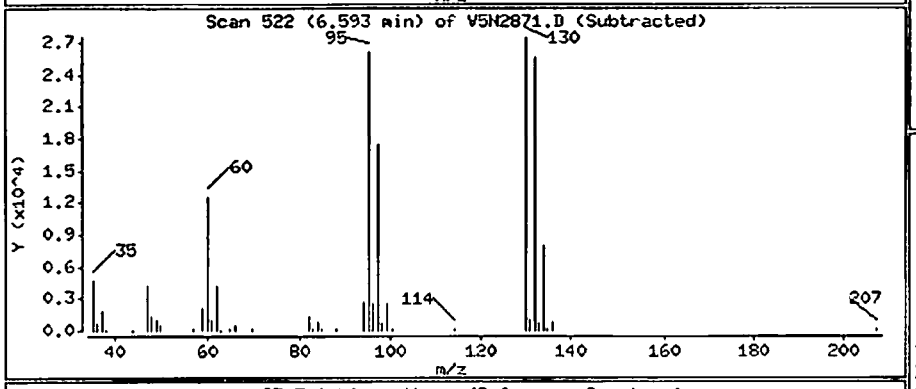
Column phase: DB-624

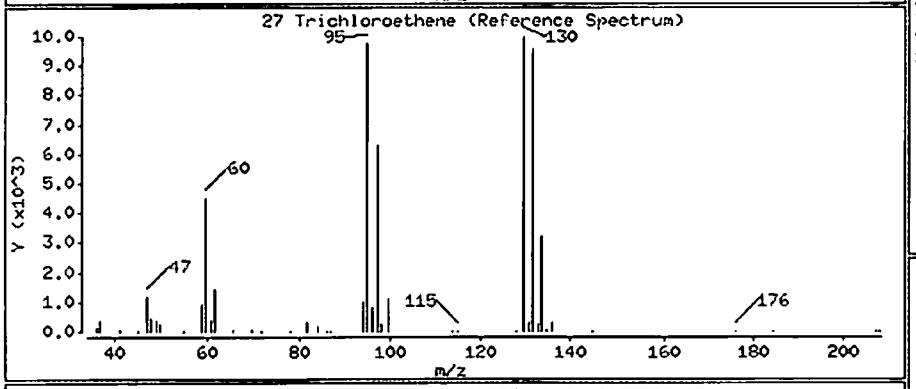
Column diameter: 0.25

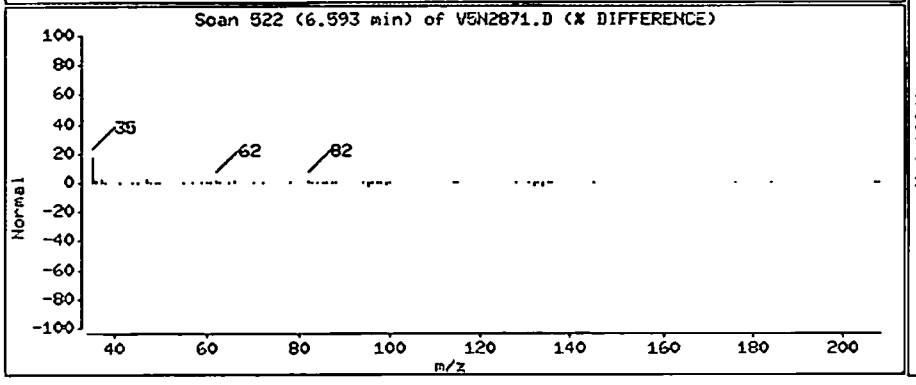
27 Trichloroethene

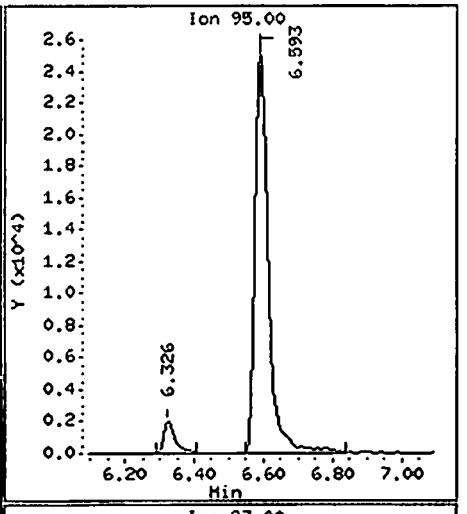
Concentration: 4.0 ug/L

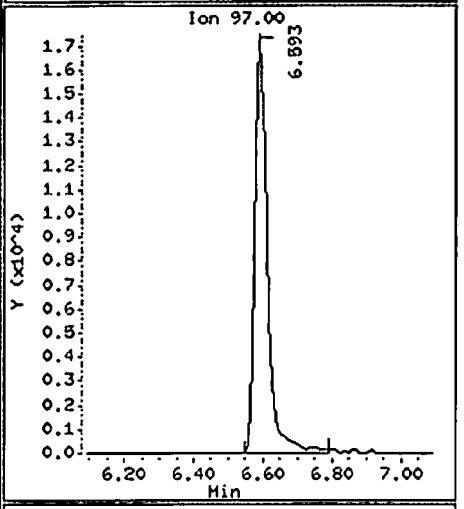


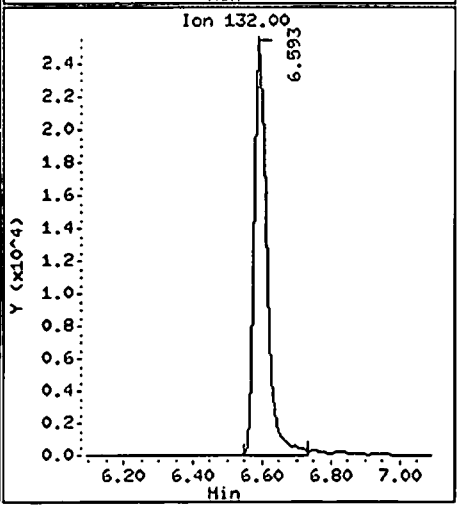












Data File: \\avogadro\organics\V5.I\111110A.B\V5N2871.D

Date : 10-NOV-2011 19:23

Client ID: H30Z2HS

Instrument: V5.i

Sample Info: 25ML,K2213-11BMS,,62893

Purge Volume: 25.0

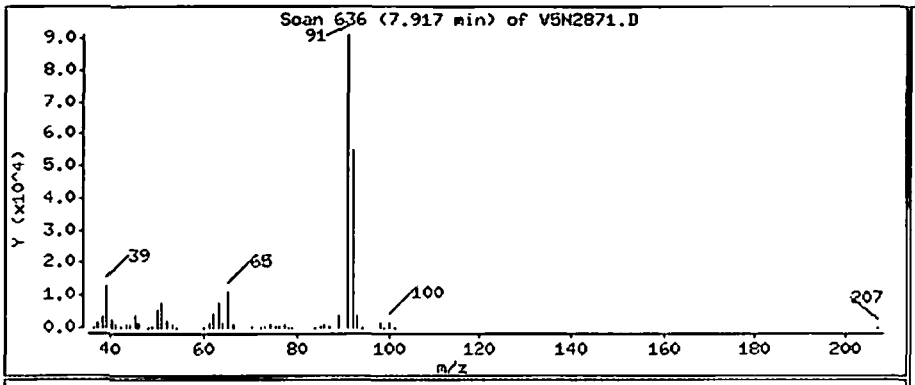
Operator: SRC: LIMS

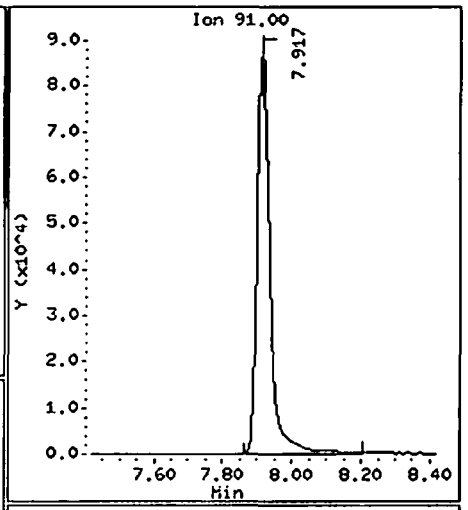
Column phase: DB-624

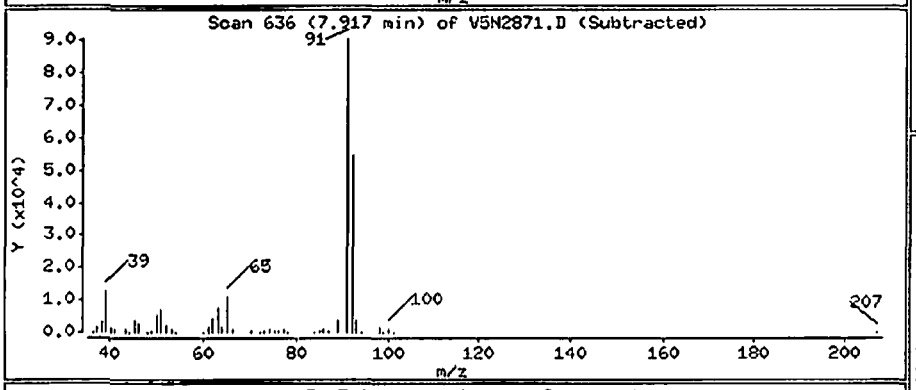
Column diameter: 0.25

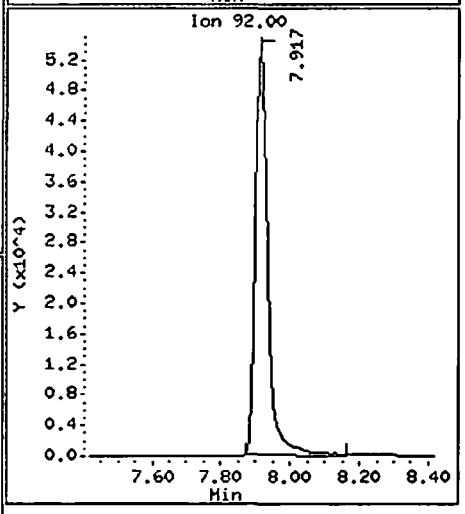
34 Toluene

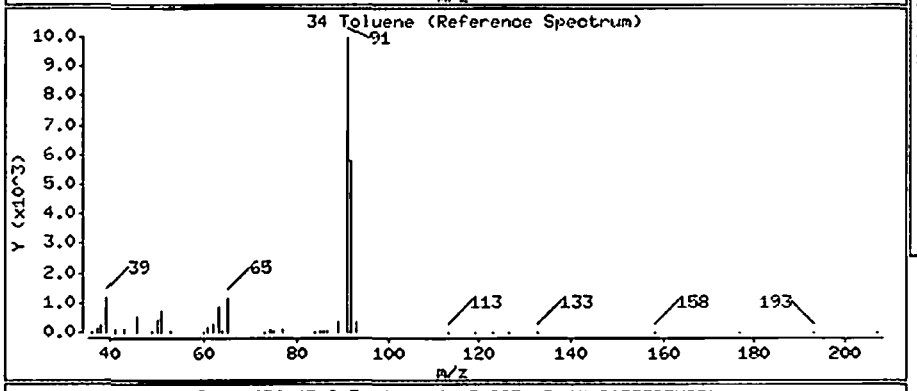
Concentration: 4.0 ug/L

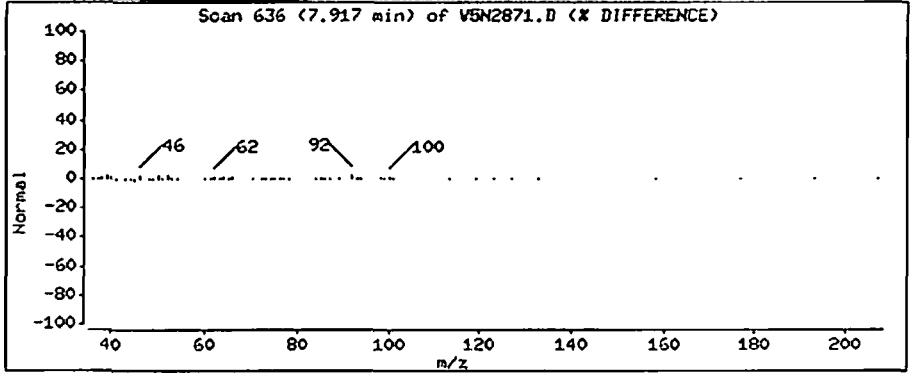












Data File: \\avogadro\organics\V5.i\111110A.B\V5N2871.D

Date : 10-NOV-2011 19:23

Client ID: H30Z2HS

Instrument: V5.i

Sample Info: 25ML,K2213-11BMS,,62893

Purge Volume: 25.0

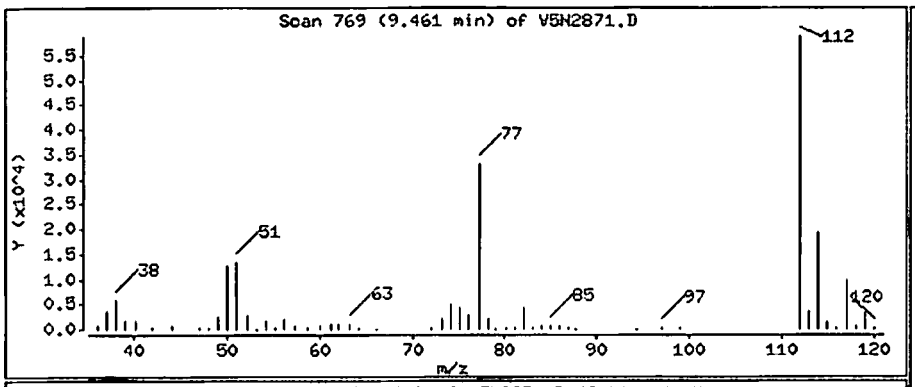
Operator: SRC: LIMS

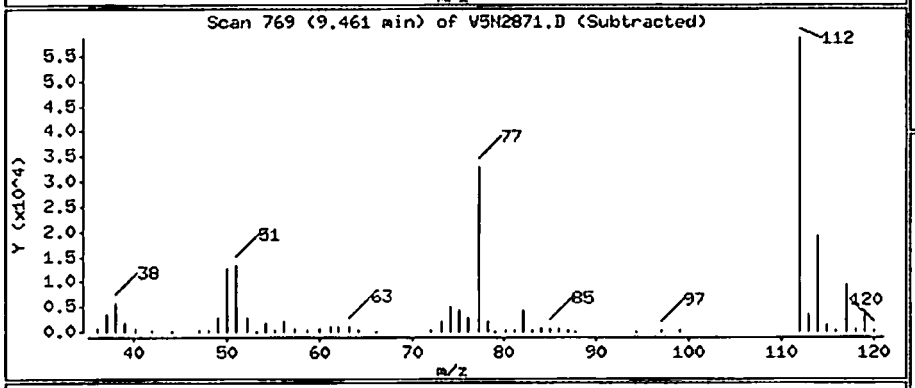
Column phase: DB-624

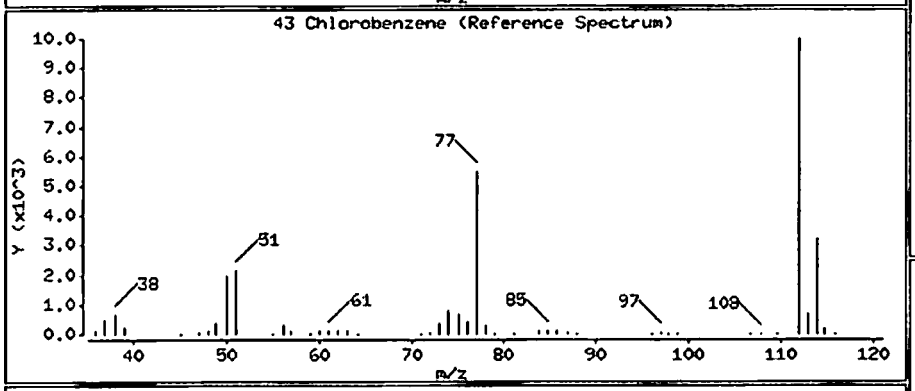
Column diameter: 0.25

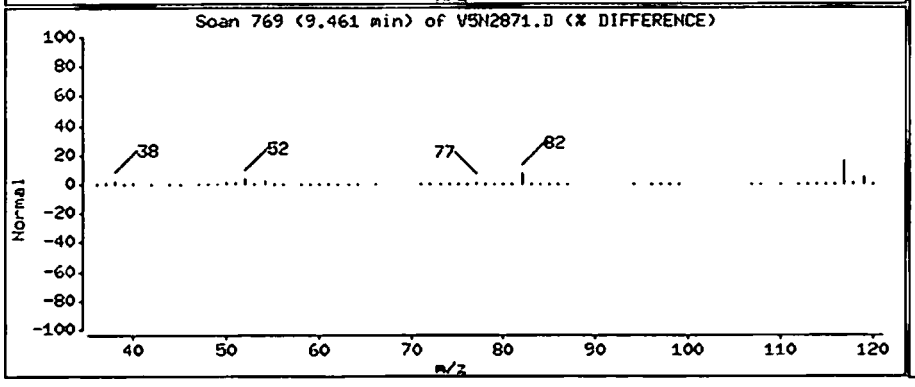
43 Chlorobenzene

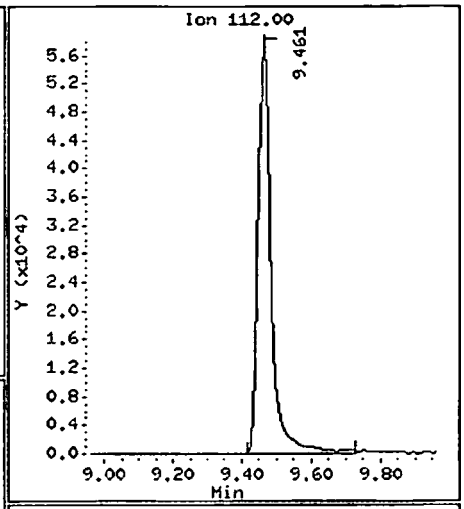
Concentration: 4.1 ug/L

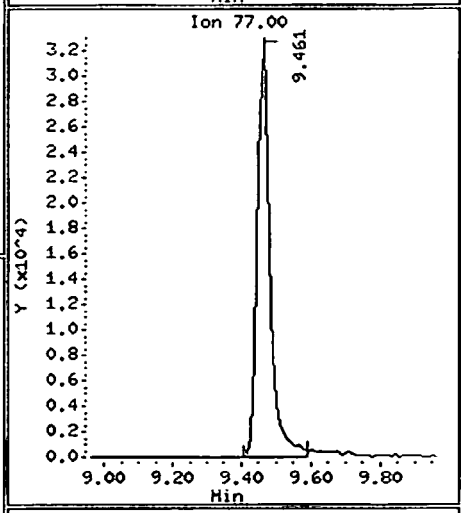


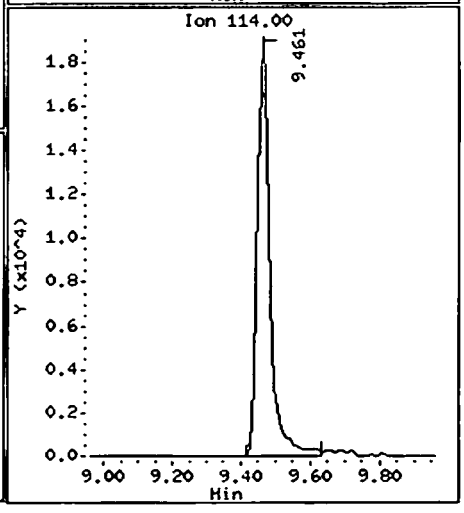












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Z2MSD

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-11BMSD

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2872.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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	4.0	
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	4.2	
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.

H30Z2MSD

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-11BMSD

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2872.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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	4.0	
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	4.1	
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	4.1	
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

Data File: \\avogadro\organics\V5.I\111110A.B\V5N2872.D
Report Date: 15-Nov-2011 09:36

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110A.B\V5N2872.D
Lab Smp Id: K2213-11BMSD Client Smp ID: H30Z2MSD
Inj Date : 10-NOV-2011 19:52
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-11BMSD,,62893
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111110A.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 15:34 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 53 QC Sample: MSD
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	2.215	2.214	(0.350)	126196	6.37465	6.4
$	80	Chloroethane-d5	69	2.621	2.609	(0.414)	84718	6.30310	6.3
$	81	1,1-Dichloroethene-d2	65	3.388	3.364	(0.536)	27146	5.29486	5.3(QR)
	7	1,1-Dichloroethene	96	3.399	3.387	(0.537)	62359	4.03035	4.0(Q)
$	82	2-Butanone-d5	46	5.072	5.071	(0.802)	116927	49.2427	49(AQ)
$	83	Chloroform-d	84	5.385	5.384	(0.851)	113099	4.77071	4.8(Q)
$	23	1,2-Dichloroethane-d4	65	5.896	5.895	(0.932)	43106	4.62349	4.6
$	84	Benzene-d6	84	5.919	5.918	(0.628)	228742	4.86161	4.9
	25	Benzene	78	5.954	5.953	(0.632)	219988	4.22952	4.2
*	26	1,4-Difluorobenzene	114	6.326	6.325	(1.000)	217607	5.00000	
	27	Trichloroethene	95	6.593	6.592	(0.699)	62246	3.95109	4.0
$	85	1,2-Dichloropropane-d6	67	6.732	6.731	(0.714)	74047	4.53400	4.5
$	33	Toluene-d8	98	7.847	7.846	(0.832)	203269	4.81412	4.8
	34	Toluene	91	7.917	7.916	(0.840)	214936	4.05319	4.1
$	86	trans-1,3-Dichloropropene-d4	79	8.126	8.113	(0.862)	48019	5.13135	5.1
$	87	2-Hexanone-d5	63	8.567	8.566	(0.909)	79977	49.3466	49(A)
*	42	Chlorobenzene-d5	117	9.427	9.426	(1.000)	160408	5.00000	
	43	Chlorobenzene	112	9.461	9.460	(1.004)	143643	4.09245	4.1
$	89	1,1,2,2-Tetrachloroethane-d2	84	10.936	10.924	(1.160)	30676	5.07353	5.1
*	78	1,4-Dichlorobenzene-d4	152	12.179	12.166	(1.000)	66987	5.00000	(Q)
$	90	1,2-Dichlorobenzene-d4	152	12.632	12.631	(1.037)	52809	5.01488	5.0(Q)

Data File: \\avogadro\organics\V5.I\111110A.B\V5N2872.D
Report Date: 15-Nov-2011 09:36

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\V5.I\111110A.B\V5N2872.D
Report Date: 15-Nov-2011 09:36

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

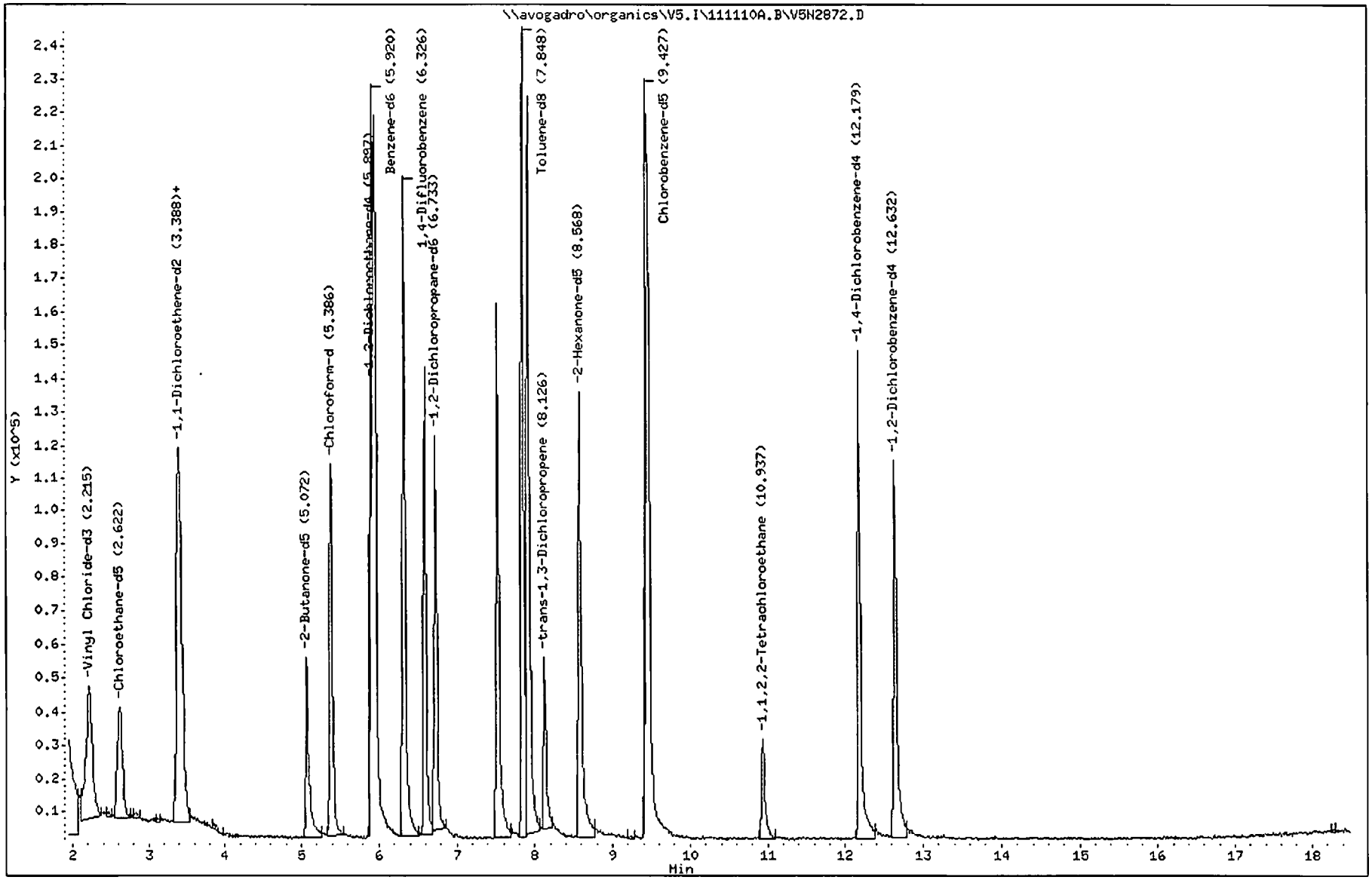
Data file	: \\avogadro\organics\V5.I\111110A.B\V5N2872.D		
Lab Smp Id	: K2213-11BMSD	Client Smp ID:	H30Z2MSD
Inj Date	: 10-NOV-2011 19:52		
Operator	: SRC: LIMS	Inst ID:	V5.i
Smp Info	: 25ML,K2213-11BMSD,,62893		
Misc Info	:		
Comment	:		
Method	: \\avogadro\organics\V5.I\111110A.B\V5_TVOA1359.m		
Meth Date	: 14-Nov-2011 15:34 V5.i	Quant Type:	ISTD
Cal Date	: 09-NOV-2011 20:26	Cal File:	V5N2823.D
Als bottle	: 53	QC Sample:	MSD
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\111110A.B\V5N2872.D
Date : 10-NOV-2011 19:52
Client ID: H3022MSD
Sample Info: 25ML,K2213-11BMSD,,62893
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: SRC: LIMS
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111110A.B\V5N2872.D

Date : 10-NOV-2011 19:52

Client ID: H3022HSD

Instrument: V5.i

Sample Info: 25ML,K2213-11BHSD,,62893

Purge Volume: 25.0

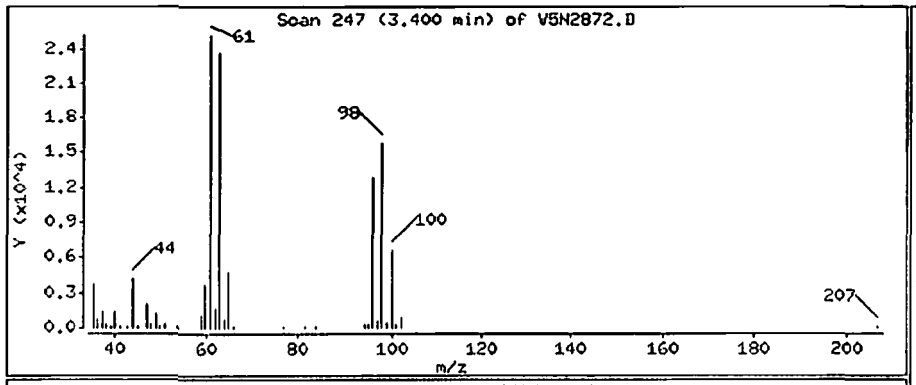
Operator: SRC: LIMS

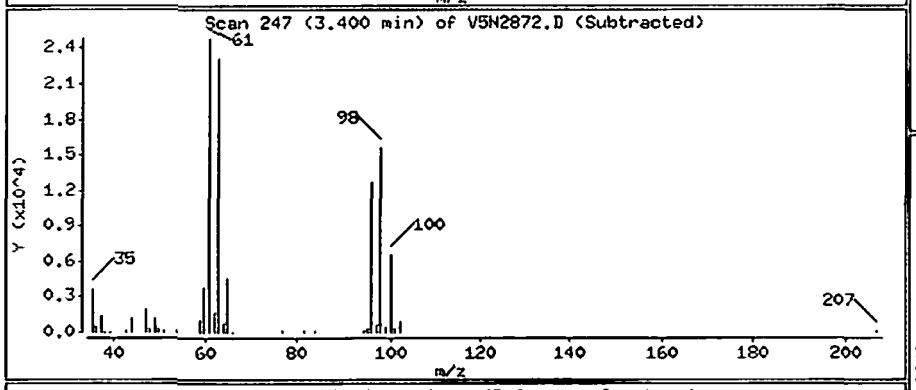
Column phase: DB-624

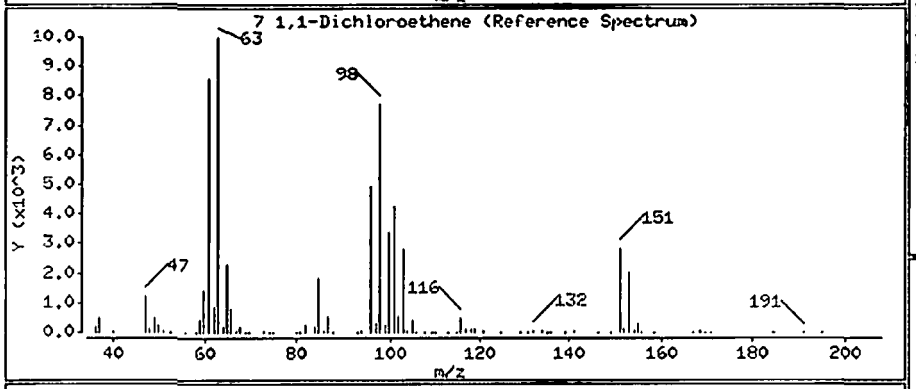
Column diameter: 0.25

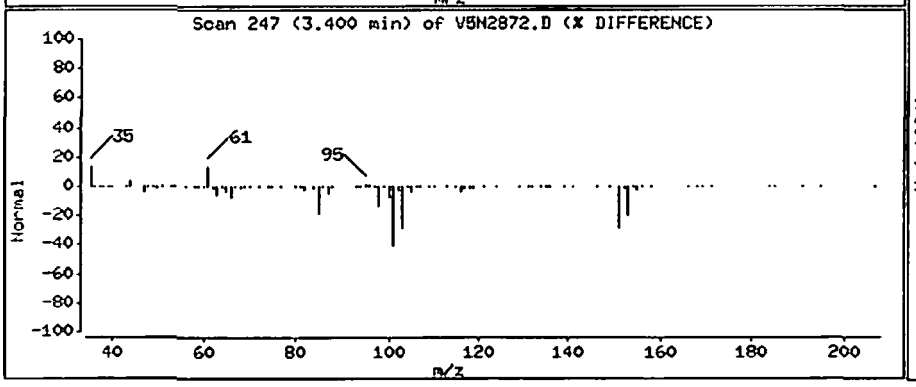
7 1,1-Dichloroethene

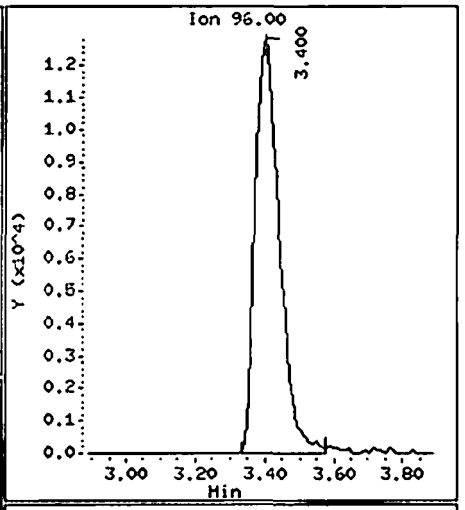
Concentration: 4.0 ug/L

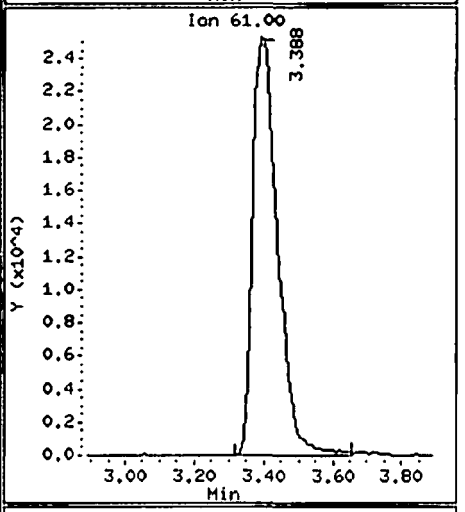


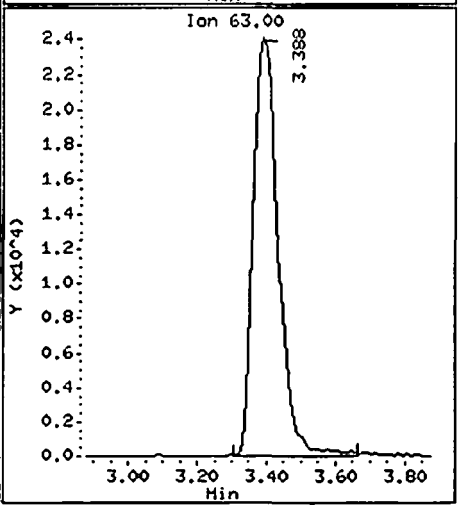












Data File: \\avogadro\organics\V5.I\111110A.B\V5N2872.D

Date : 10-NOV-2011 19:52

Client ID: H3022MSD

Instrument: V5.i

Sample Info: 25ML,K2213-11BMSD,,62893

Purge Volume: 25.0

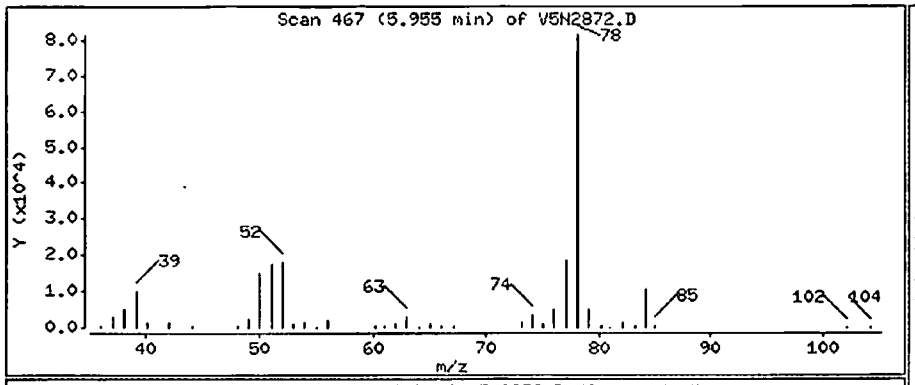
Operator: SRC: LIMS

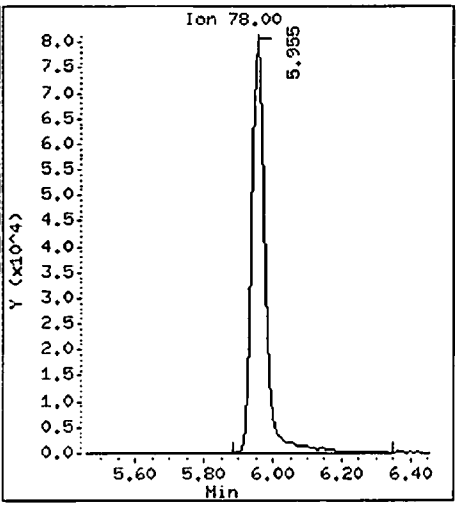
Column phase: DB-624

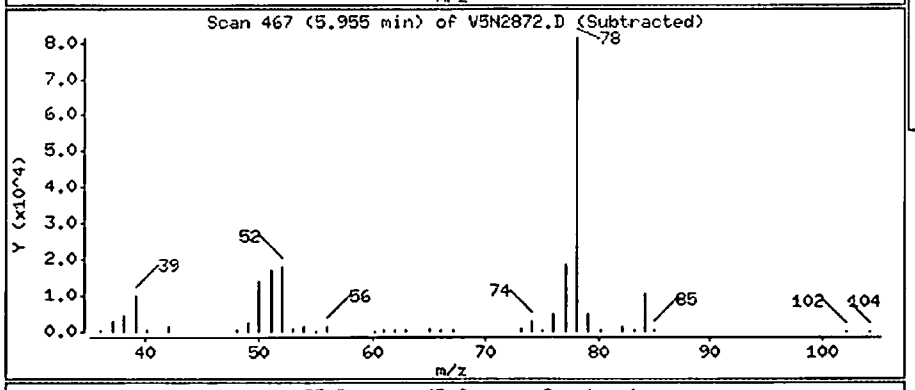
Column diameter: 0.25

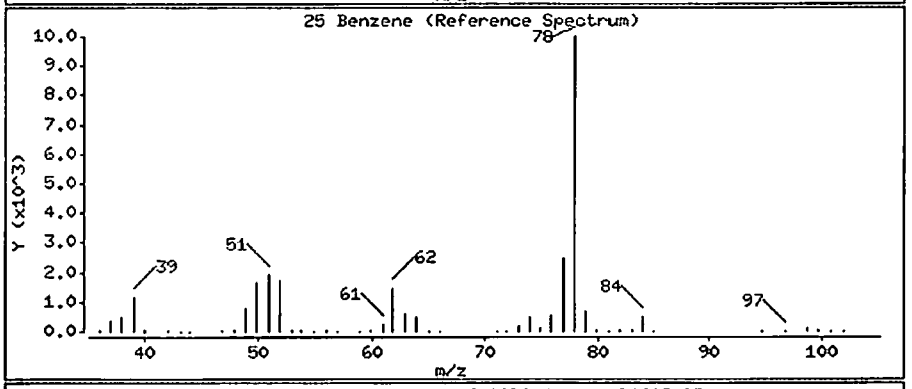
25 Benzene

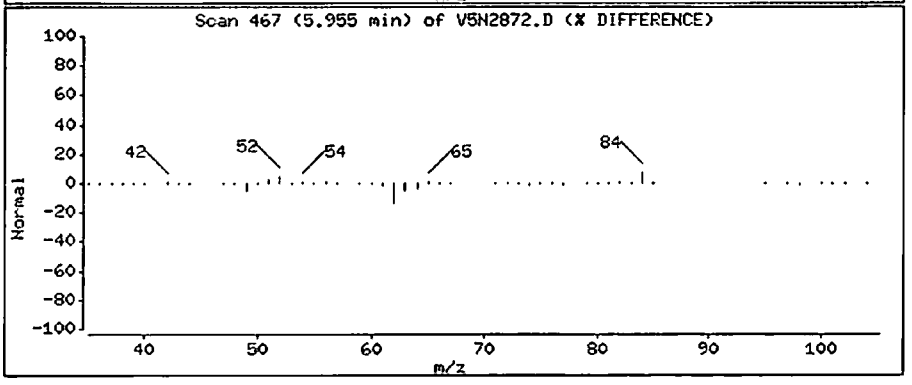
Concentration: 4.2 ug/L











Data File: \\avogadro\organics\V5.I\111110A.B\V5N2872.D

Date : 10-NOV-2011 19:52

Client ID: H30Z2MSD

Instrument: V5.i

Sample Info: 25ML,K2213-11BMSD,,62893

Purge Volume: 25.0

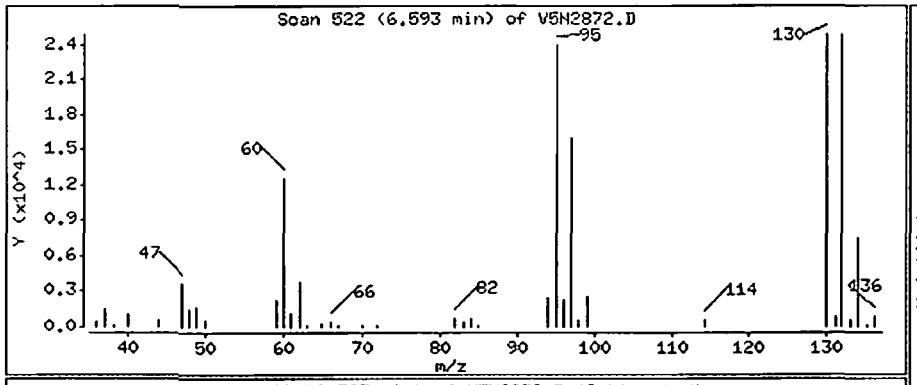
Operator: SRC: LIMS

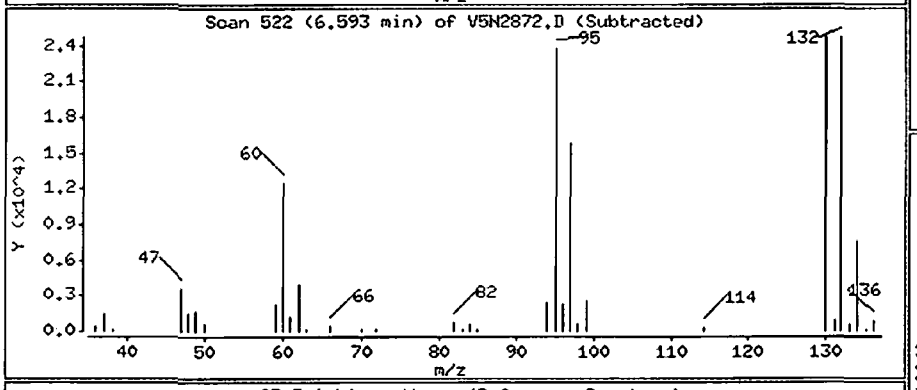
Column phase: DB-624

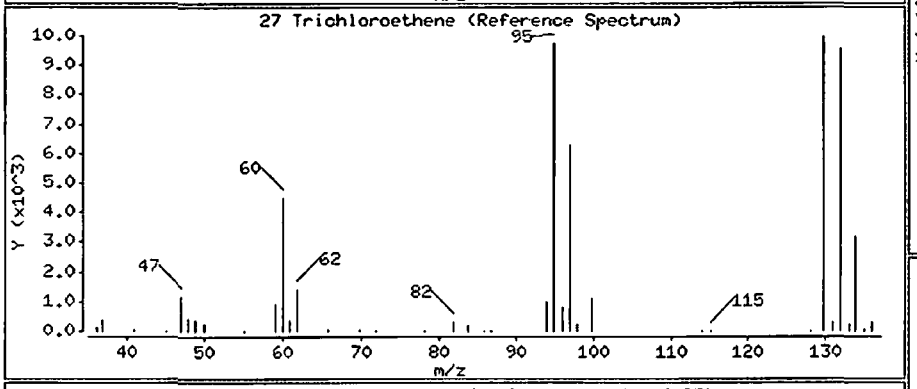
Column diameter: 0.25

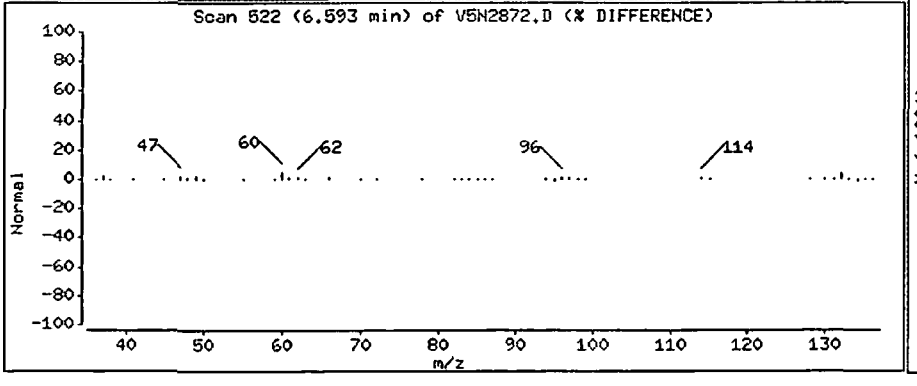
27 Trichloroethene

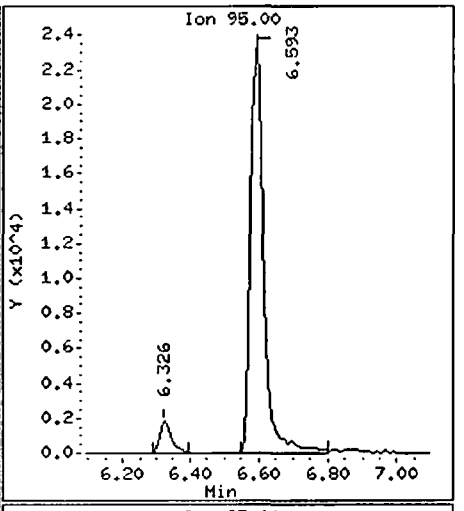
Concentration: 4.0 ug/L

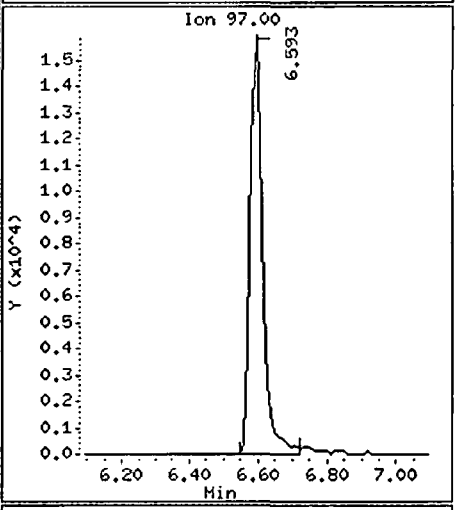


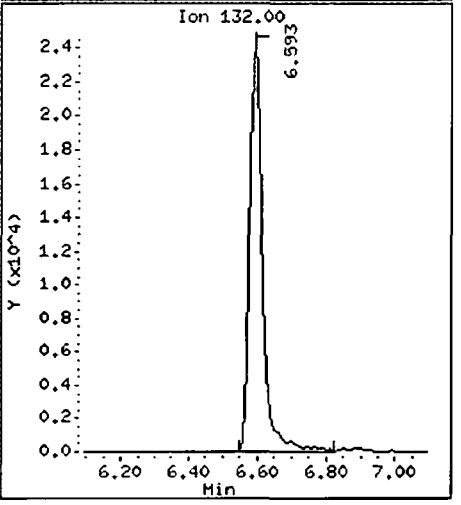












Data File: \\avogadro\organics\V5.I\111110A.B\V5N2872.D

Date : 10-NOV-2011 19:52

Client ID: H30Z2MSD

Instrument: V5.i

Sample Info: 25ML,K2213-11BMSD,,62893

Purge Volume: 25.0

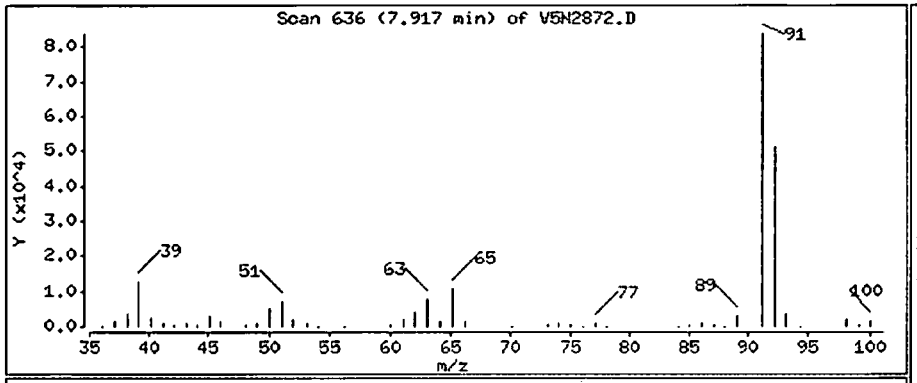
Operator: SRC: LIMS

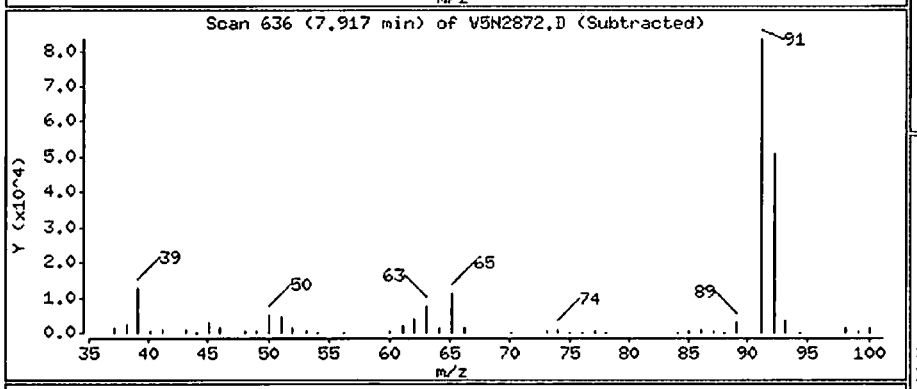
Column phase: DB-624

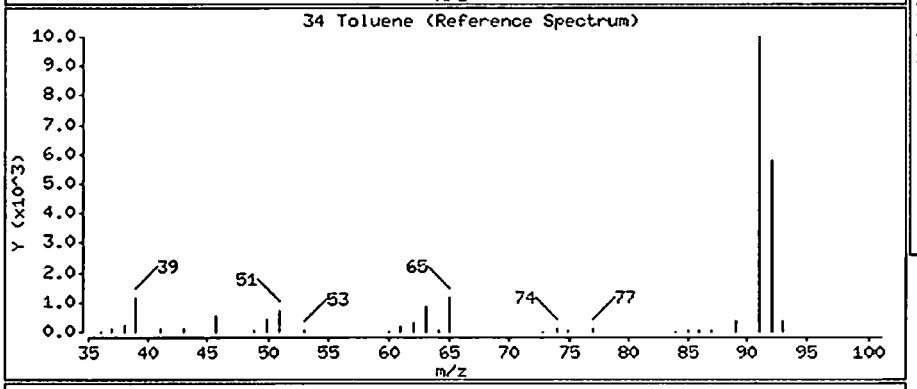
Column diameter: 0.25

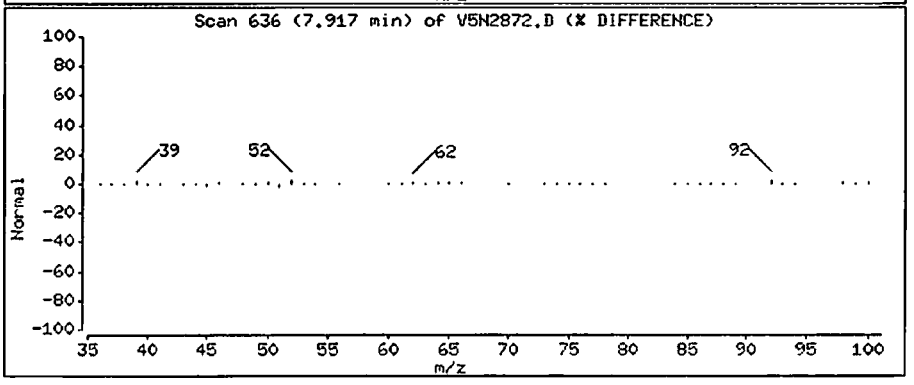
34 Toluene

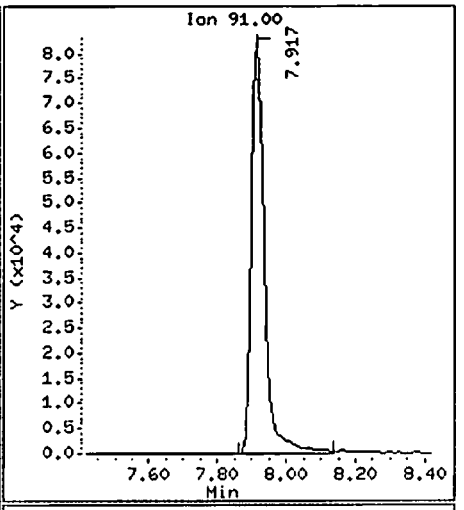
Concentration: 4.1 ug/L

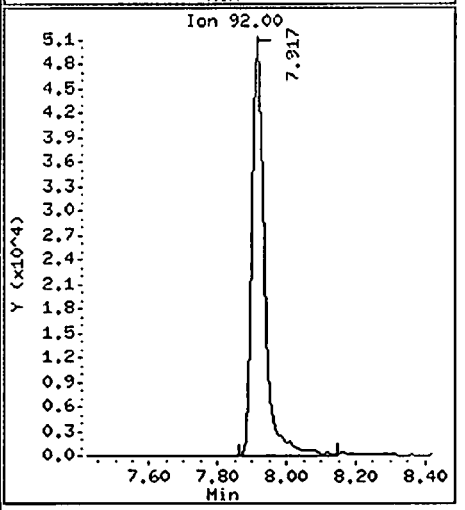












Data File: \\avogadro\organics\V5.I\111110A.B\V5N2872.D

Date : 10-NOV-2011 19:52

Client ID: H30Z2HSD

Instrument: V5.i

Sample Info: 25ML,K2213-11BMSD,,62893

Purge Volume: 25.0

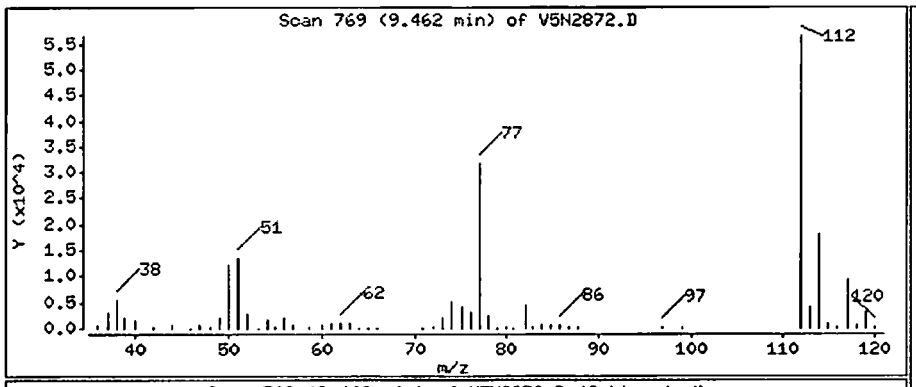
Operator: SRC: LIHS

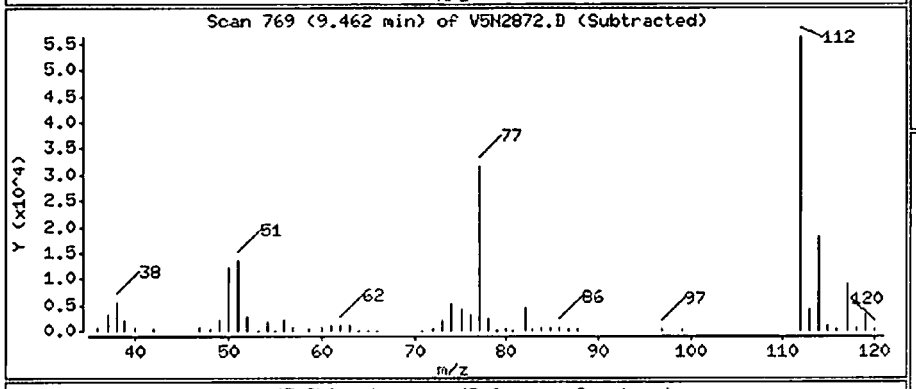
Column phase: DB-624

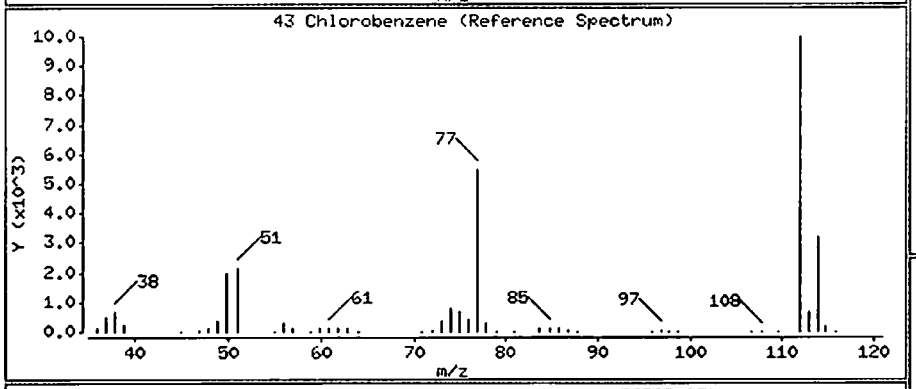
Column diameter: 0.25

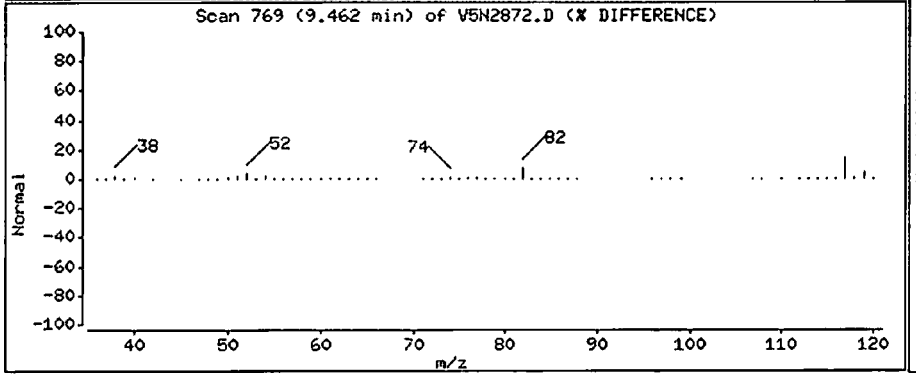
43 Chlorobenzene

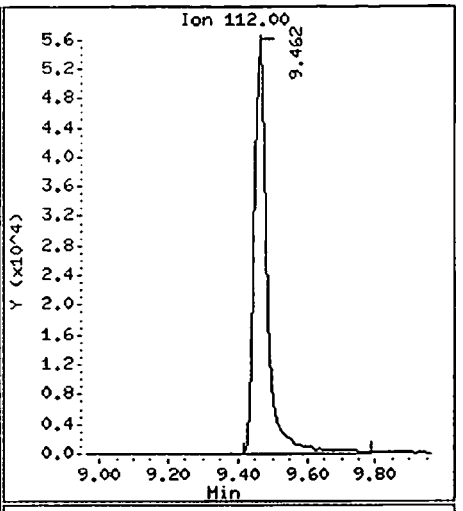
Concentration: 4.1 ug/L

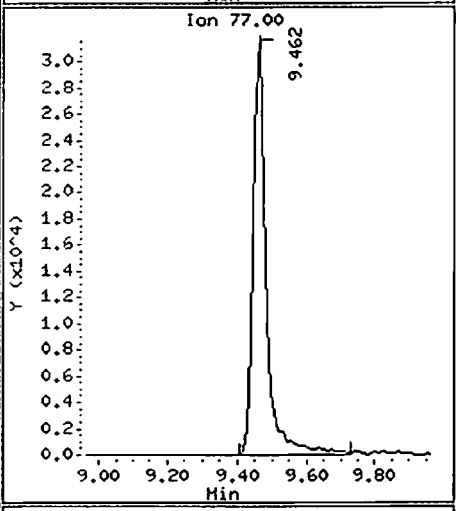


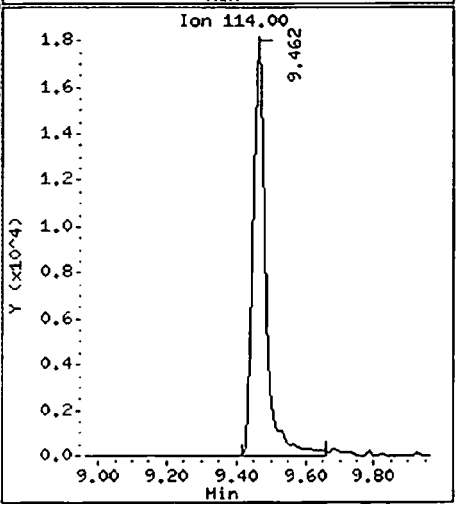












2G - FORM II SV-1

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.: H30X4

	EPA SAMPLE NO.	SDMC1 (PHL) #	SDMC2 (BCE) #	SDMC3 (2CP) #	SDMC4 (4MP) #	SDMC5 (NBZ) #	SDMC6 (2NP) #	SDMC7 (DCP) #	SDMC8 (4CA) #
01	SBLK2S	75	82	82	81	87	91	86	79
02	H30X4	75	82	88	78	78	83	79	16
03	H30Y7	77	81	90	87	88	95	92	24
04	SBLK4R	76	75	76	76	83	81	86	40
05	H30W9	107 *	92	96	98	86	85	90	59
06	H30X2	102	83	89	94	82	78	88	40
07	H30X6	97	81	87	92	86	85	93	3
08	H30X9	96	74	82	91	79	78	95	18
09	H30Y0	91	76	78	92	83	89	93	13
10	H30Y1	68	60	65	77	68	78	86	14
11	H30Z2	80	69	69	69	71	67	75	60
12	H30Z2MS	87	70	75	80	81	81	81	45
13	H30Z2MSD	87	75	71	80	73	73	85	72
14	H30Z3	87	71	78	82	80	81	81	47
15	H30Z4	88	73	68	82	82	80	85	59
16	H30Z5	91	81	82	90	93	96	89	76
17	H30Z7	105	90	92	109	90	95	97	13
18	H30Z8	92	78	75	87	91	89	93	66
19	H30X7	88	76	78	87	79	84	90	9

		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.: H30X4

	EPA SAMPLE NO.	SDMC9 (DMP) #	SDMC10 (ACY) #	SDMC11 (4NP) #	SDMC12 (FLR) #	SDMC13 (NMP) #	SDMC14 (ANC) #	SDMC15 (PYR) #	SDMC16 (BAP) #	TOT OUT
01	SBLK2S	80	85	82	77	84	86	100	81	0
02	H30X4	89	68	65	63	83	54	40 *	22 *	2
03	H30Y7	99	65	78	71	107 *	56	37 *	51	2
04	SBLK4R	80	80	88	80	75	73	79	80	0
05	H30W9	88	87	110	91	77	80	86	88	1
06	H30X2	82	78	84	78	49	72	69	29 *	1
07	H30X6	84	77	82	79	82	84	87	57	0
08	H30X9	91	66	107	64	89	46	31 *	24 *	2
09	H30Y0	93	70	103	67	88	45	30 *	21 *	2
10	H30Y1	79	63	101	57	87	48	32 *	22 *	2
11	H30Z2	74	71	94	74	79	73	86	83	0
12	H30Z2MS	72	74	93	76	67	66	76	72	0
13	H30Z2MSD	84	79	97	83	75	72	80	80	0
14	H30Z3	81	78	89	79	82	75	88	82	0
15	H30Z4	86	86	108	84	87	73	89	84	0
16	H30Z5	90	90	113	91	94	87	83	90	0
17	H30Z7	96	69	111	59	85	41 *	26 *	19 *	3
18	H30Z8	84	86	110	85	88	83	89	87	0
19	H30X7	90	62	104	67	90	48	32 *	20 *	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.: H30X4

Matrix Spike - EPA Sample No.: H30Z2

COMPOUND	SPIKE ADDED (µg/L)	SAMPLE CONCENTRATION (µg/L)	MS CONCENTRATION (µg/L)	MS %REC	#	QC. LIMITS REC.
Phenol	40.0000	0.0000	27.6644	69		12-110
2-Chlorophenol	40.0000	0.0000	28.9979	72		27-123
N-Nitroso-di-n-propylamine	40.0000	0.0000	28.7455	72		41-116
4-Chloro-3-methylphenol	40.0000	0.0000	36.2584	91		23-97
Acenaphthene	40.0000	0.0000	28.0461	70		46-118
4-Nitrophenol	40.0000	0.0000	41.2340	103	*	10-80
2,4-Dinitrotoluene	40.0000	0.0000	29.1552	73		24-96
Pentachlorophenol	40.0000	0.0000	30.6867	77		9-103
Pyrene	40.0000	0.0000	20.4543	51		26-127

COMPOUND	SPIKE ADDED (µg/L)	MSD CONCENTRATION (µg/L)	MSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Phenol	40.0000	28.6294	72		3		0-42	12-110
2-Chlorophenol	40.0000	28.1113	70		3		0-40	27-123
N-Nitroso-di-n-propylamine	40.0000	26.9677	67		6		0-38	41-116
4-Chloro-3-methylphenol	40.0000	36.6058	92		1		0-42	23-97
Acenaphthene	40.0000	28.6339	72		2		0-31	46-118
4-Nitrophenol	40.0000	44.3652	111	*	7		0-50	10-80
2,4-Dinitrotoluene	40.0000	31.6304	79		8		0-38	24-96
Pentachlorophenol	40.0000	31.0140	78		1		0-50	9-103
Pyrene	40.0000	22.2380	56		8		0-31	26-127

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 9 outside limits

Spike Recovery: 2 out of 18 outside limits

COMMENTS:

4C - FORM IV SV

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLK2S

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

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	H30X4	K2213-01A	S2H5231.D	11/04/2011
02	H30Y7	K2213-02A	S2H5232.D	11/04/2011

COMMENTS:

4C - FORM IV SV

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLK4R

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Lab File ID: S4E8649.D Lab Sample ID: MB-62806

Instrument ID: S4 Date Extracted: 11/08/2011

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 11/10/2011

Level: (LOW/MED) LOW Time Analyzed: 23:02

Extraction: (Type) CONT GPC Cleanup: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	H30W9	K2213-03A	S4E8650.D	11/10/2011
02	H30X2	K2213-04A	S4E8651.D	11/10/2011
03	H30X6	K2213-06A	S4E8652.D	11/11/2011
04	H30X9	K2213-08A	S4E8654.D	11/11/2011
05	H30Y0	K2213-09A	S4E8655.D	11/11/2011
06	H30Y1	K2213-10A	S4E8656.D	11/11/2011
07	H30Z2	K2213-11A	S4E8657.D	11/11/2011
08	H30Z2MS	K2213-11AMS	S4E8658.D	11/11/2011
09	H30Z2MSD	K2213-11AMSD	S4E8659.D	11/11/2011
10	H30Z3	K2213-12A	S4E8660.D	11/11/2011
11	H30Z4	K2213-13A	S4E8661.D	11/11/2011
12	H30Z5	K2213-14A	S4E8662.D	11/11/2011
13	H30Z7	K2213-15A	S4E8663.D	11/11/2011
14	H30Z8	K2213-16A	S4E8664.D	11/11/2011
15	H30X7	K2213-07A	S4E8666.D	11/11/2011

COMMENTS:

5B - FORM V SV

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPINE (DFTPP)

EPA SAMPLE NO.

DFTPP2W

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Lab File ID: S2H5052.D DFTPP Injection Date: 10/25/2011

Instrument ID: S2 DFTPP Injection Time: 9:32

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	61.0
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	83.7
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	10.0 - 80.0% of mass 198	47.1
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.8
275	10.0 - 60.0% of mass 198	15.3
365	Greater than 1.0% of mass 198	1.5
441	Present, but less than mass 443	9.2
442	50.0 - 100% of mass 198	52.5
443	15.0 - 24.0% of mass 442	10.1 (19.2)2

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD0202W	SSTD0202W	S2H5053C.D	10/25/2011	11:35
02	SSTD0052W	SSTD0052W	S2H5054.D	10/25/2011	11:58
03	SSTD0802W	SSTD0802W	S2H5055.D	10/25/2011	12:21
04	SSTD0102W	SSTD0102W	S2H5056.D	10/25/2011	12:44
05	SSTD0402W	SSTD0402W	S2H5057.D	10/25/2011	13:07

5B - FORM V SV

SEMIVOLATILE ORGANIC INSTRUMENT

PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPINE (DFTPP)

EPA SAMPLE NO.

DFTPP2S

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

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	SBLK2S	MB-62685	S2H5227.D	11/04/2011	15:14
03	H30X4	K2213-01A	S2H5231.D	11/04/2011	16:39
04	H30Y7	K2213-02A	S2H5232.D	11/04/2011	17:01
05	SSTD0202T	SSTD0202T	S2H5234.D	11/04/2011	17:43

5B - FORM V SV

SEMIVOLATILE ORGANIC INSTRUMENT

PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPINE (DFTPP)

EPA SAMPLE NO.

DFTPP4Q

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Lab File ID: S4E8634.D DFTPP Injection Date: 11/10/2011

Instrument ID: S4 DFTPP Injection Time: 16:03

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	31.1
68	Less than 2.0% of mass 69	0.9 (1.5)1
69	Mass 69 relative abundance	59.0
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	10.0 - 80.0% of mass 198	50.9
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.4
275	10.0 - 60.0% of mass 198	31.2
365	Greater than 1.0% of mass 198	6.4
441	Present, but less than mass 443	13.6
442	50.0 - 100% of mass 198	86.5
443	15.0 - 24.0% of mass 442	15.5 (17.9)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	SSTD0204Q	SSTD0204Q	S4E8635.D	11/10/2011	16:28
02	SSTD0054Q	SSTD0054Q	S4E8636.D	11/10/2011	16:57
03	SSTD0804Q	SSTD0804Q	S4E8637.D	11/10/2011	17:21
04	SSTD0104Q	SSTD0104Q	S4E8638.D	11/10/2011	17:45
05	SSTD0404Q	SSTD0404Q	S4E8639.D	11/10/2011	18:10
06	SSTD0204R	SSTD0204R	S4E8648A.D	11/10/2011	22:13
07	SBLK4R	MB-62806	S4E8649.D	11/10/2011	23:02
08	H30W9	K2213-03A	S4E8650.D	11/10/2011	23:26
09	H30X2	K2213-04A	S4E8651.D	11/10/2011	23:50
10	H30X6	K2213-06A	S4E8652.D	11/11/2011	0:15
11	H30X9	K2213-08A	S4E8654.D	11/11/2011	1:03
12	H30Y0	K2213-09A	S4E8655.D	11/11/2011	1:28
13	H30Y1	K2213-10A	S4E8656.D	11/11/2011	1:54
14	H30Z2	K2213-11A	S4E8657.D	11/11/2011	2:16
15	H30Z2MS	K2213-11AMS	S4E8658.D	11/11/2011	2:40
16	H30Z2MSD	K2213-11AMSD	S4E8659.D	11/11/2011	3:04
17	H30Z3	K2213-12A	S4E8660.D	11/11/2011	3:28
18	H30Z4	K2213-13A	S4E8661.D	11/11/2011	3:52
19	H30Z5	K2213-14A	S4E8662.D	11/11/2011	4:16

5B - FORM V SV

SEMIVOLATILE ORGANIC INSTRUMENT

PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPINE (DFTPP)

EPA SAMPLE NO.

DFTPP4Q

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Lab File ID: S4E8634.D DFTPP Injection Date: 11/10/2011

Instrument ID: S4 DFTPP Injection Time: 16:03

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	31.1
68	Less than 2.0% of mass 69	0.9 (1.5)1
69	Mass 69 relative abundance	59.0
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	10.0 - 80.0% of mass 198	50.9
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.4
275	10.0 - 60.0% of mass 198	31.2
365	Greater than 1.0% of mass 198	6.4
441	Present, but less than mass 443	13.6
442	50.0 - 100% of mass 198	86.5
443	15.0 - 24.0% of mass 442	15.5 (17.9)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	H30Z7	K2213-15A	S4E8663.D	11/11/2011	4:39
21	H30Z8	K2213-16A	S4E8664.D	11/11/2011	5:03
22	SSTD0204S	SSTD0204S	S4E8665.D	11/11/2011	5:28
23	H30X7	K2213-07A	S4E8666.D	11/11/2011	9:00
24	SSTD0204T	SSTD0204T	S4E8670.D	11/11/2011	10:37

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.: H30X4

GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 11/10/2011 11/10/2011

EPA Sample No.(SSTD020##) SSTD0204R Date Analyzed: 11/10/2011

Lab File ID (Standard): S4E8648A.D Time Analyzed: 22:13

Instrument ID: S4

		IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
	12 HOUR STD	26662		3.372		88755		4.427		75762		6.083	
	UPPER LIMIT	53324		3.872		177510		4.927		151524		6.583	
	LOWER LIMIT	13331		2.872		44378		3.927		37881		5.583	
	EPA SAMPLE NO.												
01	SBLK4R	31687		3.372		112431		4.427		102836		6.083	
02	H30W9	28987		3.372		113942		4.427		100617		6.083	
03	H30X2	39011		3.372		147054		4.427		135328		6.083	
04	H30X6	50057		3.372		168982		4.427		147998		6.084	
05	H30X9	41243		3.372		157420		4.428		138800		6.084	
06	H30Y0	37443		3.372		143000		4.427		124951		6.083	
07	H30Y1	29935		3.372		98403		4.427		100148		6.083	
08	H30Z2	32270		3.372		114058		4.427		94615		6.083	
09	H30Z2MS	28752		3.372		105974		4.428		101858		6.084	
10	H30Z2MSD	31713		3.372		116964		4.428		105153		6.084	
11	H30Z3	46243		3.372		175874		4.427		146676		6.083	
12	H30Z4	35138		3.372		123038		4.427		99899		6.083	
13	H30Z5	32032		3.372		107686		4.427		94956		6.083	
14	H30Z7	37922		3.372		149598		4.428		131962		6.084	
15	H30Z8	28348		3.372		107434		4.428		94007		6.084	

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.: H30X4

EPA Sample No.(SSTD020##) SSTD0204R Date Analyzed: 11/10/2011

Lab File ID (Standard): S4E8648A.D Time Analyzed: 22:13

Instrument ID: S4 GC Column: Rxi-5sil MS ID: 0.25 (mm)

		IS4 (PHN) AREA	#	RT	#	IS5 (CRY) AREA	#	RT	#	IS6 (PRY) AREA	#	RT	#
	12 HOUR STD	215241		7.532		467538		10.12		501844		11.818	
	UPPER LIMIT	430482		8.032		935076		10.62		1003688		12.318	
	LOWER LIMIT	107621		7.032		233769		9.62		250922		11.318	
	EPA SAMPLE NO.												
01	SBLK4R	295642		7.533		537422		10.120		572421		11.818	
02	H30W9	287706		7.532		523348		10.120		506384		11.817	
03	H30X2	370702		7.532		582942		10.130		535763		11.828	
04	H30X6	333809		7.533		494983		10.130		454654		11.828	
05	H30X9	372114		7.533		554152		10.131		484293		11.828	
06	H30Y0	341328		7.533		548515		10.130		514489		11.828	
07	H30Y1	257483		7.532		505053		10.130		525605		11.828	
08	H30Z2	241594		7.533		419598		10.130		444827		11.818	
09	H30Z2MS	279573		7.533		502943		10.120		513983		11.818	
10	H30Z2MSD	291226		7.533		493104		10.131		476547		11.818	
11	H30Z3	366166		7.532		549876		10.120		573613		11.817	
12	H30Z4	282498		7.532		481759		10.120		506329		11.817	
13	H30Z5	258903		7.532		490473		10.120		537347		11.817	
14	H30Z7	349141		7.533		550038		10.131		514809		11.828	
15	H30Z8	264607		7.533		486233		10.131		530073		11.818	

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.: H30X4

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	
	EPA SAMPLE NO.												
01	SBLK2S	92750		3.819		233872		4.881		185984		6.350	
02	H30X4	135992		3.809		373110		4.881		241143		6.351	
03	H30Y7	117939		3.810		308106		4.882		201572		6.351	

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.: H30X4

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	
	EPA SAMPLE NO.												
01	SBLK2S	279122		7.583		181671		9.835		110306		11.197	
02	H30X4	382710		7.573		317452		9.846		247361		11.208	
03	H30Y7	323631		7.574		225975		9.836		185583		11.209	

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.: H30X4

GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 11/10/2011 11/10/2011

EPA Sample No.(SSTD020##) SSTD0204S Date Analyzed: 11/11/2011

Lab File ID (Standard): S4E8665.D Time Analyzed: 5:28

Instrument ID: S4

		IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
	12 HOUR STD	32024		3.372		116754		4.428		108531		6.084	
	UPPER LIMIT	64048		3.872		233508		4.928		217062		6.584	
	LOWER LIMIT	16012		2.872		58377		3.928		54266		5.584	
	EPA SAMPLE NO.												
01	H30X7	43719		3.361		148090		4.428		113610		6.084	

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.: H30X4

EPA Sample No.(SSTD020##) SSTD0204S Date Analyzed: 11/11/2011

Lab File ID (Standard): S4E8665.D Time Analyzed: 5:28

Instrument ID: S4 GC Column: Rxi-5sil MS ID: 0.25 (mm)

		IS4 (PHN) AREA	#	RT	#	IS5 (CRY) AREA	#	RT	#	IS6 (PRY) AREA	#	RT	#
	12 HOUR STD	279095		7.533		478843		10.131		461795		11.818	
	UPPER LIMIT	558190		8.033		957686		10.631		923590		12.318	
	LOWER LIMIT	139548		7.033		239422		9.631		230898		11.318	
	EPA SAMPLE NO.												
01	H30X7	290368		7.533		430469		10.130		410025		11.828	

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = 200% of internal standard area

AREA LOWER LIMIT = 50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30W9

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-03A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8650.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/10/2011

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

EPA SAMPLE NO.

H30W9

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-03A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8650.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/10/2011

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	1.2	J
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

EPA SAMPLE NO.: H30W9

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

Lab Code: MITKEM | Case No.: 41926 | Mod. Ref No.: | SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER | Lab Sample ID: K2213-03A

Sample wt/vol: 1000 (g/mL) ML | Lab File ID: S4E8650.D

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

% Moisture: | Decanted: (Y/N) | Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) | Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) | GPC Factor: 1.00 | Date Analyzed: 11/10/2011

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	4.324	5.7	J
02		Unknown-02	4.676	3.0	J
03		Unknown-03	4.914	13	J
04		Unknown-04	5.048	5.5	J
05		Unknown-05	6.032	11	J
06		Unknown-06	7.688	2.8	J
07		Unknown-07	8.040	4.7	J
08		Unknown-08	9.551	2.2	J
09	112-84-5	13-Docosenamide, (Z)-	10.958	13	BNJ
	E96679[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8650.D
Report Date: 11-Nov-2011 14:03

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8650.D
Lab Smp Id: K2213-03A Client Smp ID: H30W9
Inj Date : 10-NOV-2011 23:26
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-03A,,62806,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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	3.050	3.050	(0.905)	66492	85.2988	43	(R)
$	4	bis(2-Chloroethyl)ether-d8	67	3.112	3.112	(0.923)	42463	73.2358	37	(Q)
$	6	2-Chlorophenol-d4	132	3.206	3.206	(0.951)	70571	77.1470	39	
•	8	1,4-Dichlorobenzene-d4	152	3.371	3.371	(1.000)	28987	40.0000		(Q)
$	11	4-Methylphenol-d8	113	3.609	3.609	(1.071)	64921	78.6435	39	
$	16	Nitrobenzene-d5	128	3.796	3.796	(0.857)	32831	68.8340	34	(Q)
$	19	2-Nitrophenol-d4	143	4.075	4.075	(0.921)	41572	68.3816	34	
$	23	2,4-Dichlorophenol-d3	165	4.282	4.282	(0.967)	81974	71.9598	36	
•	25	Naphthalene-d8	136	4.427	4.427	(1.000)	113942	40.0000		
$	27	4-Chloroaniline-d4	131	4.468	4.468	(1.009)	53441	47.5484	24	(Q)
$	40	Dimethylphthalate-d6	166	5.772	5.772	(0.949)	279776	70.3221	35	
$	43	Acenaphthylene-d8	160	5.938	5.938	(0.976)	305379	69.3221	35	
•	46	Acenaphthene-d10	164	6.083	6.083	(1.000)	100617	40.0000		
$	49	4-Nitrophenol-d4	143	6.166	6.166	(1.014)	66116	88.2723	44	
	53	Diethylphthalate	149	6.476	6.487	(1.065)	9496	2.32510	1.2	(a)
$	54	Fluorene-d10	176	6.590	6.590	(1.083)	259121	73.0516	37	
$	58	4,6-Dinitro-2-methylphenol-d2	200	6.642	6.642	(0.882)	70815	61.3624	31	
•	65	Phenanthrene-d10	188	7.532	7.532	(1.000)	287706	40.0000		
$	67	Anthracene-d10	188	7.584	7.584	(1.007)	503860	63.7666	32	
$	72	Pyrene-d10	212	8.929	8.929	(0.882)	699920	68.6155	34	
•	77	Chrysene-d12	240	10.119	10.120	(1.000)	523348	40.0000		(Q)

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8650.D
Report Date: 11-Nov-2011 14:03

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)
$ 83 Benzo(a)pyrene-d12	264	11.703	11.703	(0.990)	791462	70.5350	35
* 85 Perylene-d12	264	11.817	11.817	(1.000)	506384	40.0000	

QC Flag Legend

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

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8650.D
Report Date: 11-Nov-2011 14:03

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8650.D
Lab Smp Id: K2213-03A Client Smp ID: H30W9
Inj Date : 10-NOV-2011 23:26
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-03A,,62806,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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	4.427	349192	40.000
* 46 Acenaphthene-d10	6.083	566510	40.000
* 65 Phenanthrene-d10	7.532	772946	40.000
* 77 Chrysene-d12	10.120	1394589	40.000

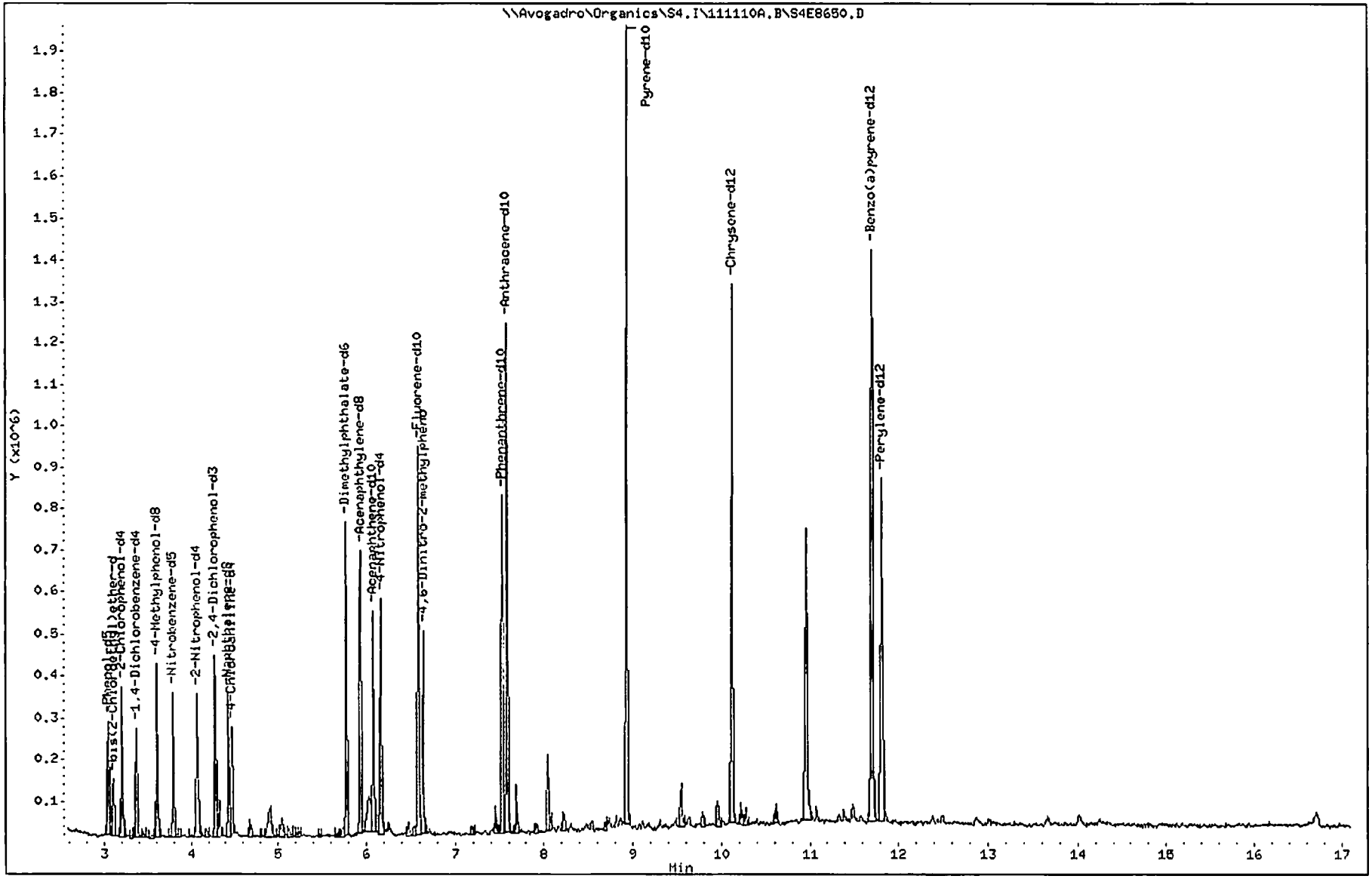
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.324	99158	11.3585639	5.7	0		0	25
Unknown				CAS #:			
4.676	53094	6.08194456	3.0	0		0	25
Unknown				CAS #:			
4.914	229384	26.2758956	13	0		0	25

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8650.D
Report Date: 11-Nov-2011 14:03

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
5.048	95544	10.9445552	5.5	0		0	25
Unknown				CAS #:			
6.032	303125	21.4029513	11	0		0	46
Unknown				CAS #:			
7.688	107509	5.56361027	2.8	0		0	65
Unknown				CAS #:			
8.040	183548	9.49859442	4.7	0		0	65
Unknown				CAS #:			
9.551	151769	4.35307133	2.2	0		0	77
13-Docosenamide, (Z)-				CAS #: 112-84-5			
10.958	874535	25.0836576	13	91	NIST2002.L	135943	77

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8650.D
Date : 10-NOV-2011 23:26
Client ID: H30W9
Sample Info: K2213-03A,,62806,,
Volume Injected (uL): 2.0
Column phase: RXI-5SILMS

Instrument: S4.i
Operator: MMS SRC: LIMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8650.D

Date : 10-NOV-2011 23:26

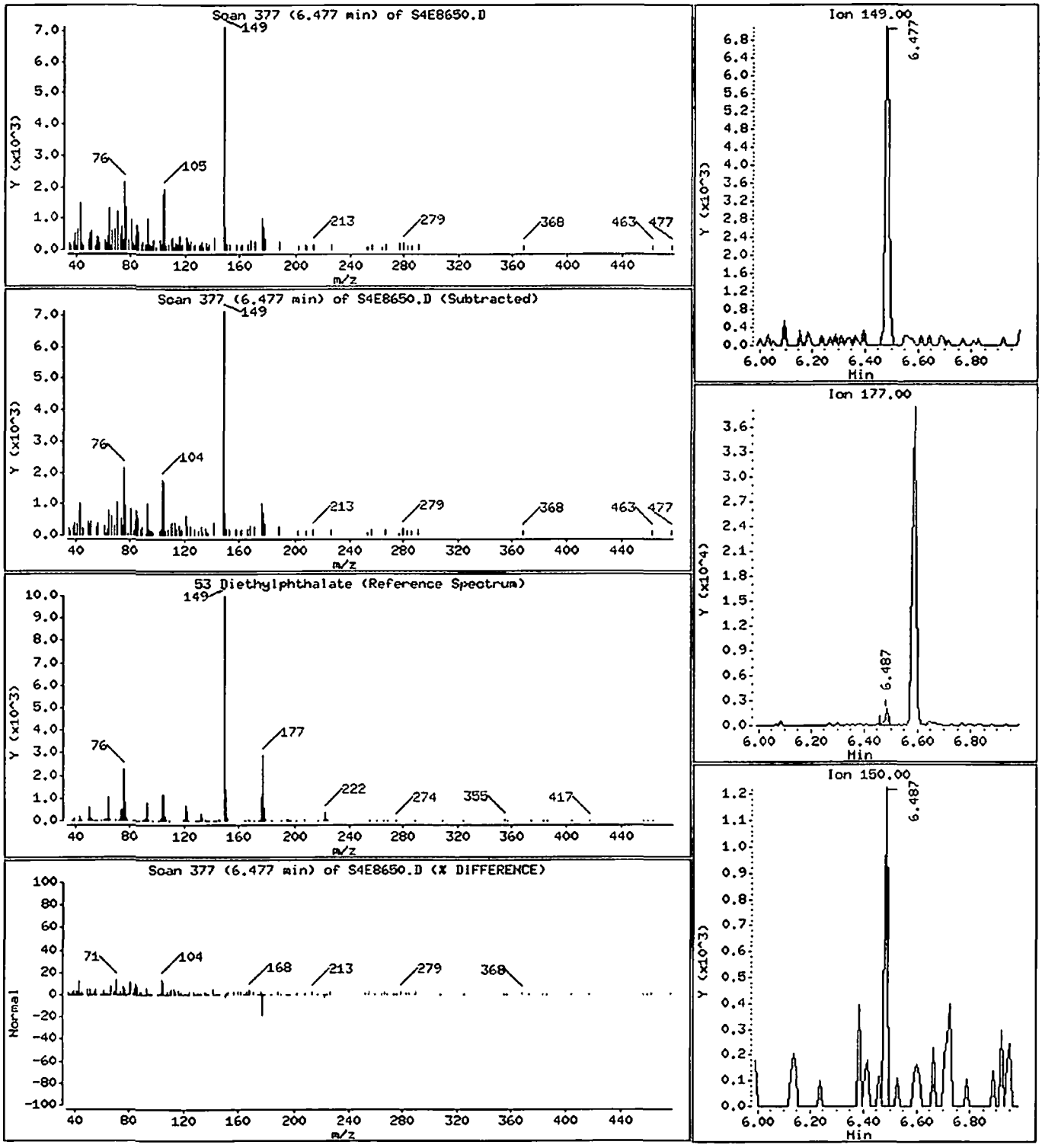
Client ID: M3OW9 Instrument: S4.i

Sample Info: K2213-03A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

53 Diethylphthalate Concentration: 1.2 ug/L



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8650.D

Date : 10-NOV-2011 23:26

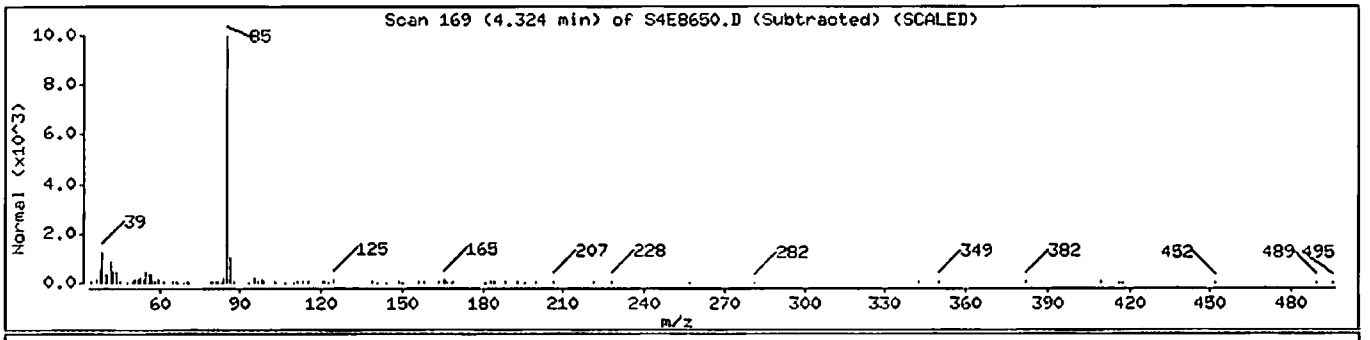
Client ID: H30W9 Instrument: S4.i

Sample Info: K2213-03A,,62806,,

Volume Injected (uL): 2.0 Operator: MHS 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\S4.I\111110A.B\S4E8650.D

Date : 10-NOV-2011 23:26

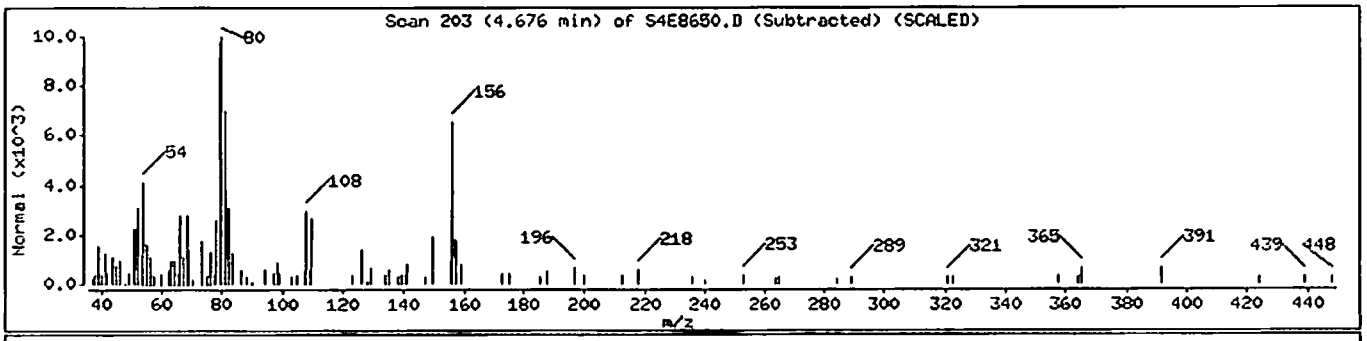
Client ID: H30W9 Instrument: S4.i

Sample Info: K2213-03A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8650.D

Date : 10-NOV-2011 23:26

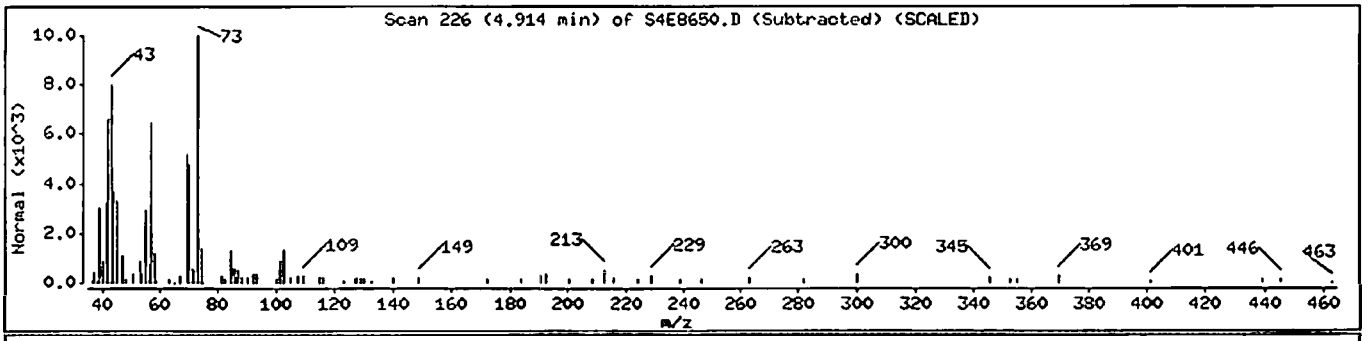
Client ID: H30W9 Instrument: S4.i

Sample Info: K2213-03A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8650.D

Date : 10-NOV-2011 23:26

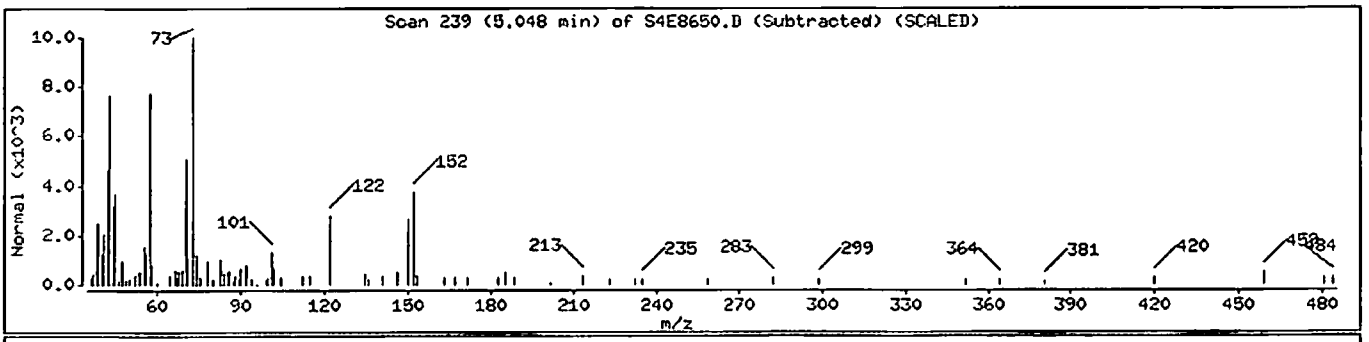
Client ID: H30W9 Instrument: S4.i

Sample Info: K2213-03A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8650.D

Date : 10-NOV-2011 23:26

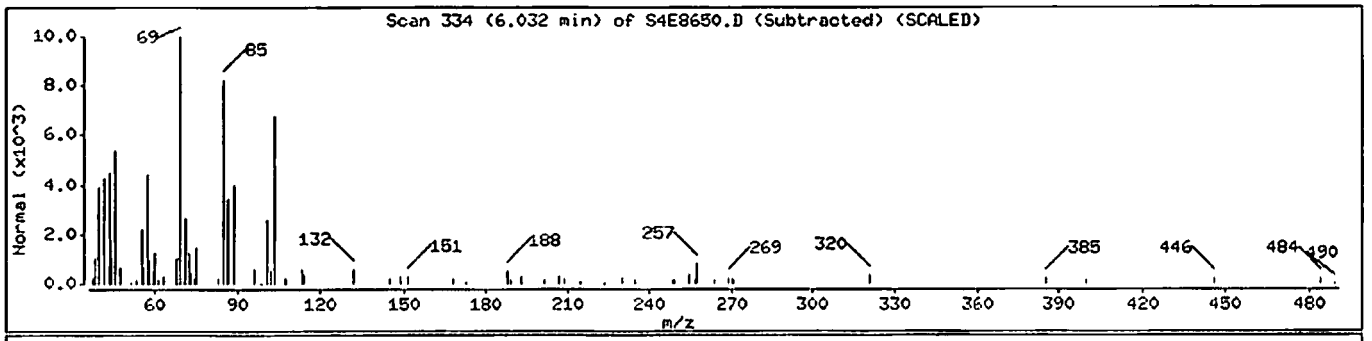
Client ID: H30W9 Instrument: S4.i

Sample Info: K2213-03A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8650.D

Date : 10-NOV-2011 23:26

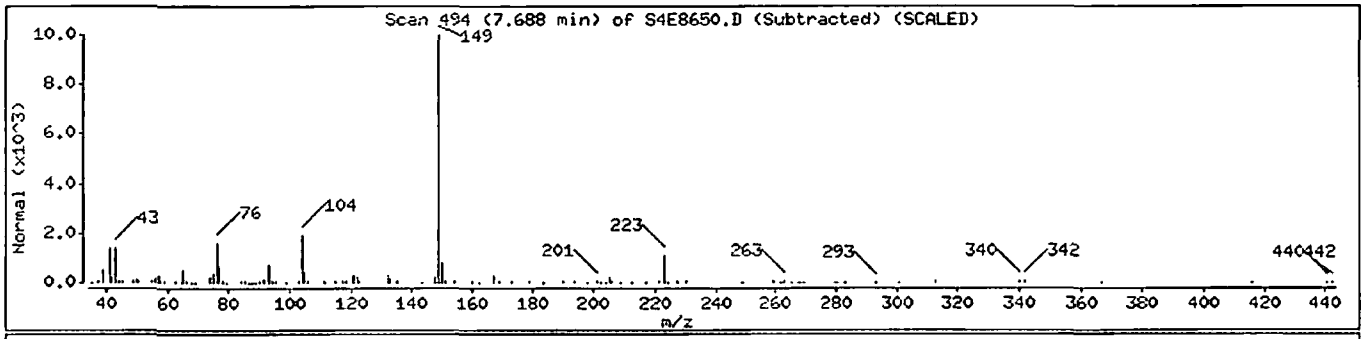
Client ID: H30W9 Instrument: S4.i

Sample Info: K2213-03A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8650.D

Date : 10-NOV-2011 23:26

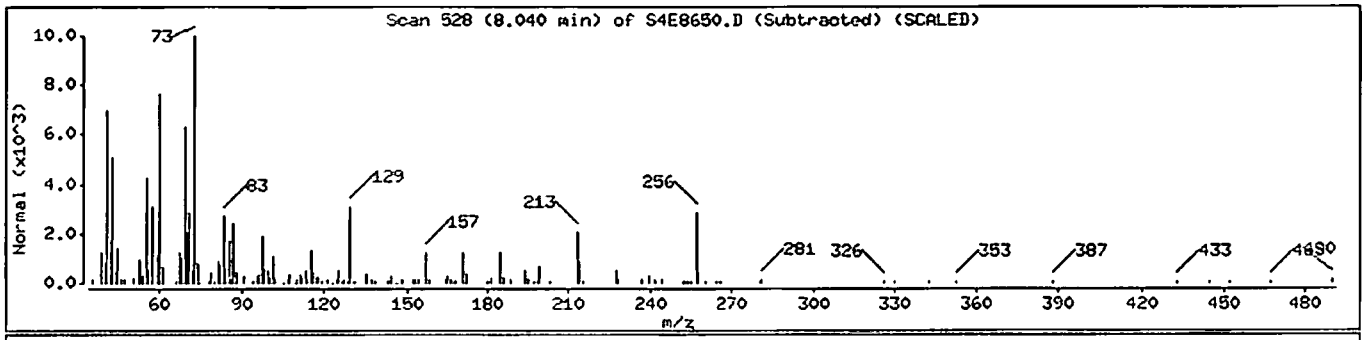
Client ID: H30W9 Instrument: S4.i

Sample Info: K2213-03A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8650.D

Date : 10-NOV-2011 23:26

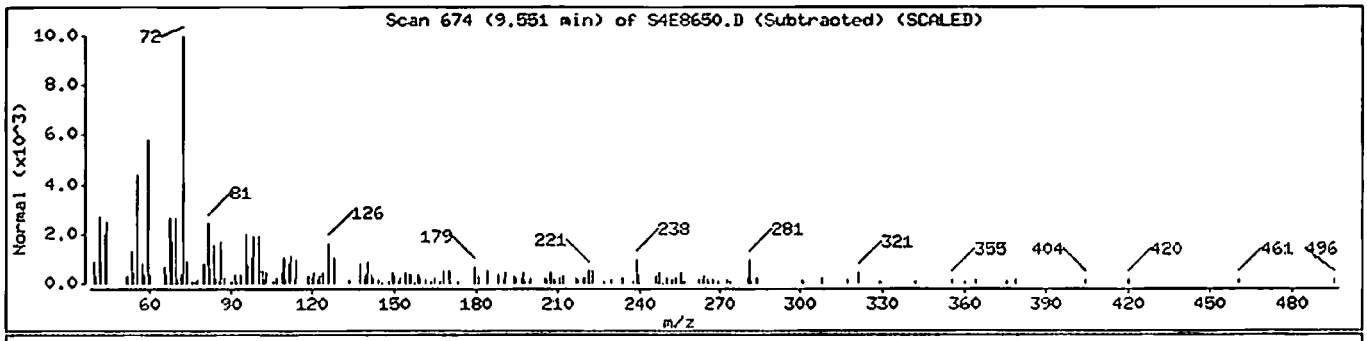
Client ID: H30W9 Instrument: S4.i

Sample Info: K2213-03A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8650.D

Date : 10-NOV-2011 23:26

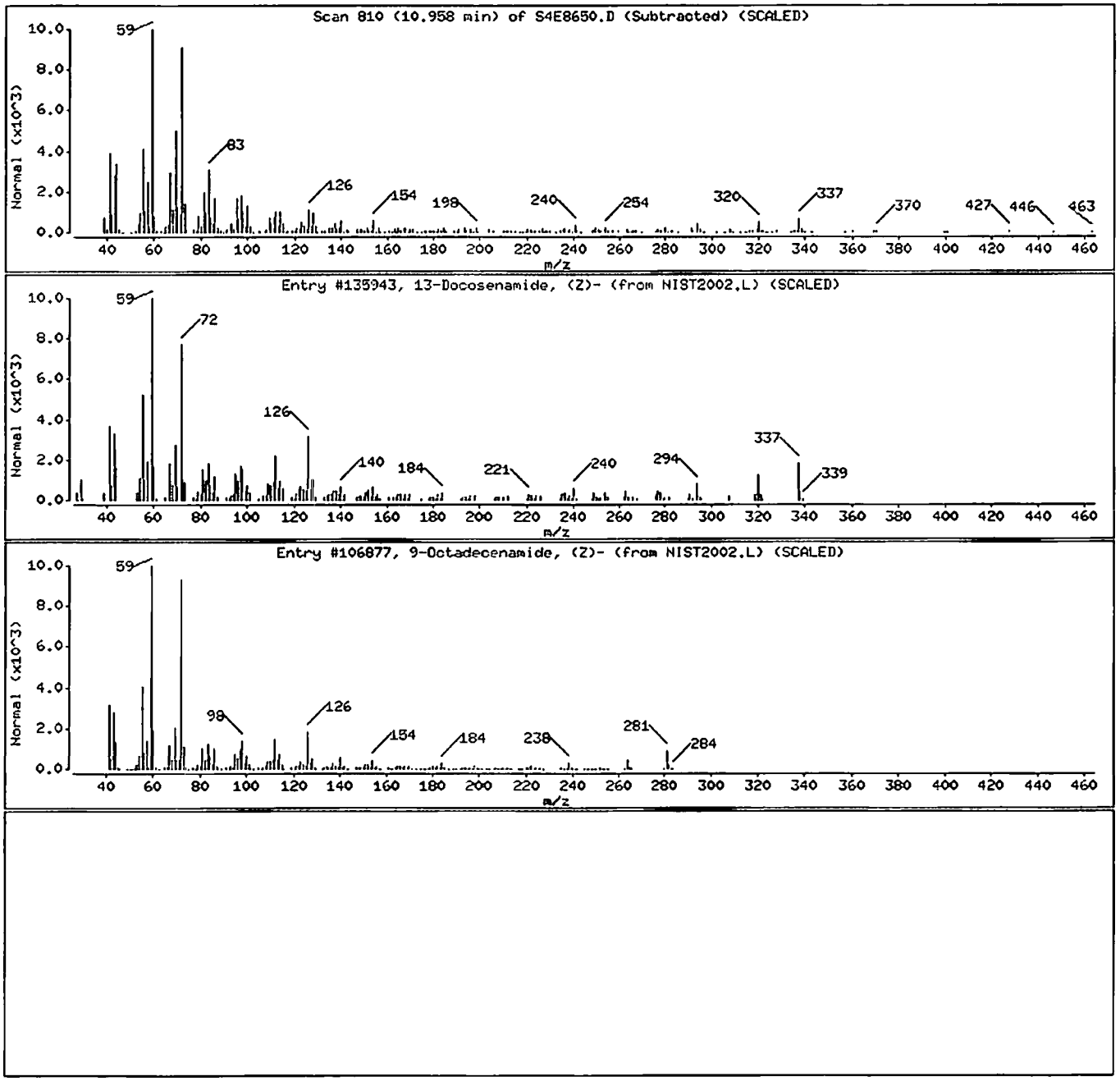
Client ID: M30W9 Instrument: S4.i

Sample Info: K2213-03A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS 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
9-Octadecenamide, (Z)-	301-02-0	NIST2002.L	106877	87	C18H35NO	281



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30X2

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-04A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8651.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/10/2011

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

EPA SAMPLE NO.

H30X2

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-04A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8651.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/10/2011

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	1.1	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	11	
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

EPA SAMPLE NO.: H30X2

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

Lab Code: MITKEM | Case No.: 41926 | Mod. Ref No.: | SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER | Lab Sample ID: K2213-04A

Sample wt/vol: 1000 (g/mL) ML | Lab File ID: S4E8651.D

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

% Moisture: | Decanted: (Y/N) | Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) | Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) | GPC Factor: 1.00 | Date Analyzed: 11/10/2011

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	2.678	7.9	J
02		Unknown-02	2.885	8.3	J
03		Unknown-03	3.009	9.5	J
04		Unknown-04	3.144	4.1	J
05		Unknown-05	3.268	26	J
06		Unknown-06	3.330	2.7	J
07	527-84-4	Benzene, 1-methyl-2-(1-methy	3.413	3.8	NJ
08		Unknown-07	3.465	17	J
09		Unknown-08	3.506	4.5	J
10		Unknown-09	3.548	8.9	J
11	30434-65-2	2-Cyclopenten-1-one, 3,4,4-t	3.599	51	NJ
12		Unknown-10	3.713	4.4	J
13		Unknown-11	3.775	27	J
14		Unknown-12	3.827	180	J
15		Unknown-13	3.868	15	J
16		Unknown-14	3.941	3.9	J
17		Unknown-15	4.127	130	J
18	21368-68-3	Bicyclo[2.2.1]heptan-2-one,	4.200	200	NJ
19		Unknown-16	4.251	30	J
20		Unknown-17	4.365	21	J
21		Unknown-18	4.603	15	J
22		Unknown-19	4.717	7.4	J
23		Unknown-20	4.810	10	J
24		Unknown-21	4.872	140	J
25		Unknown-22	4.986	170	J
26		Unknown-23	5.079	30	J
27		Unknown-24	5.286	14	J
28		Unknown-25	5.307	34	J
29		Unknown-26	5.400	37	J
30		Unknown-27	5.535	12	J
	E96679[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D
Report Date: 11-Nov-2011 14:03

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D
Lab Smp Id: K2213-04A Client Smp ID: H30X2
Inj Date : 10-NOV-2011 23:50
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-04A,,62806,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * (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	3.061	3.050	(0.908)	85562	81.5588	41
$	4 bis(2-Chloroethyl)ether-d8	67	3.112	3.112	(0.923)	52011	66.6537	33
$	6 2-Chlorophenol-d4	132	3.206	3.206	(0.951)	87715	71.2497	36
*	8 1,4-Dichlorobenzene-d4	152	3.371	3.371	(1.000)	39011	40.0000	(Q)
$	11 4-Methylphenol-d8	113	3.620	3.609	(1.074)	83871	75.4928	38
$	16 Nitrobenzene-d5	128	3.795	3.796	(0.857)	40253	65.3920	33(Q)
$	19 2-Nitrophenol-d4	143	4.075	4.075	(0.921)	49044	62.5074	31
$	23 2,4-Dichlorophenol-d3	165	4.292	4.282	(0.970)	103636	70.4906	35
*	25 Naphthalene-d8	136	4.427	4.427	(1.000)	147054	40.0000	
$	27 4-Chloroaniline-d4	131	4.468	4.468	(1.009)	46434	32.0114	16(Q)
$	40 Dimethylphthalate-d6	166	5.783	5.772	(0.951)	349328	65.2828	33
$	43 Acenaphthylene-d8	160	5.938	5.938	(0.976)	368715	62.2310	31
*	46 Acenaphthene-d10	164	6.083	6.083	(1.000)	135328	40.0000	
$	49 4-Nitrophenol-d4	143	6.186	6.166	(1.017)	67710	67.2132	34
$	54 Fluorene-d10	176	6.590	6.590	(1.083)	296683	62.1875	31
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.642	6.642	(0.882)	58493	39.3373	20
*	65 Phenanthrene-d10	188	7.532	7.532	(1.000)	370702	40.0000	
$	67 Anthracene-d10	188	7.594	7.584	(1.008)	585067	57.4662	29
	70 Di-n-butylphthalate	149	8.080	8.081	(1.073)	22832	2.11955	1.1(a)
$	72 Pyrene-d10	212	8.929	8.929	(0.881)	622791	54.8127	27
	79 bis(2-Ethylhexyl)phthalate	149	10.099	10.099	(0.997)	180531	21.1211	11

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D
Report Date: 11-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	10.130	10.120	(1.000)	582942	40.0000	(Q)
$ 83 Benzo(a)pyrene-d12	264	11.713	11.703	(0.990)	271101	22.8356	11(R)
* 85 Perylene-d12	264	11.827	11.817	(1.000)	535763	40.0000	

QC Flag Legend

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

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D
Report Date: 11-Nov-2011 14:03

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D
Lab Smp Id: K2213-04A Client Smp ID: H30X2
Inj Date : 10-NOV-2011 23:50
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-04A,,62806,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * (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	3.372	397584	40.000
* 25 Naphthalene-d8	4.427	598936	40.000
* 46 Acenaphthene-d10	6.083	702176	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.678	157055	15.8008972	7.9	0		0	8
Unknown				CAS #:			
2.885	165590	16.6595859	8.3	0		0	8
Unknown				CAS #:			
3.009	189459	19.0610279	9.5	0		0	8
Unknown				CAS #:			
3.144	81628	8.21236789	4.1	0		0	8

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D
Report Date: 11-Nov-2011 14:03

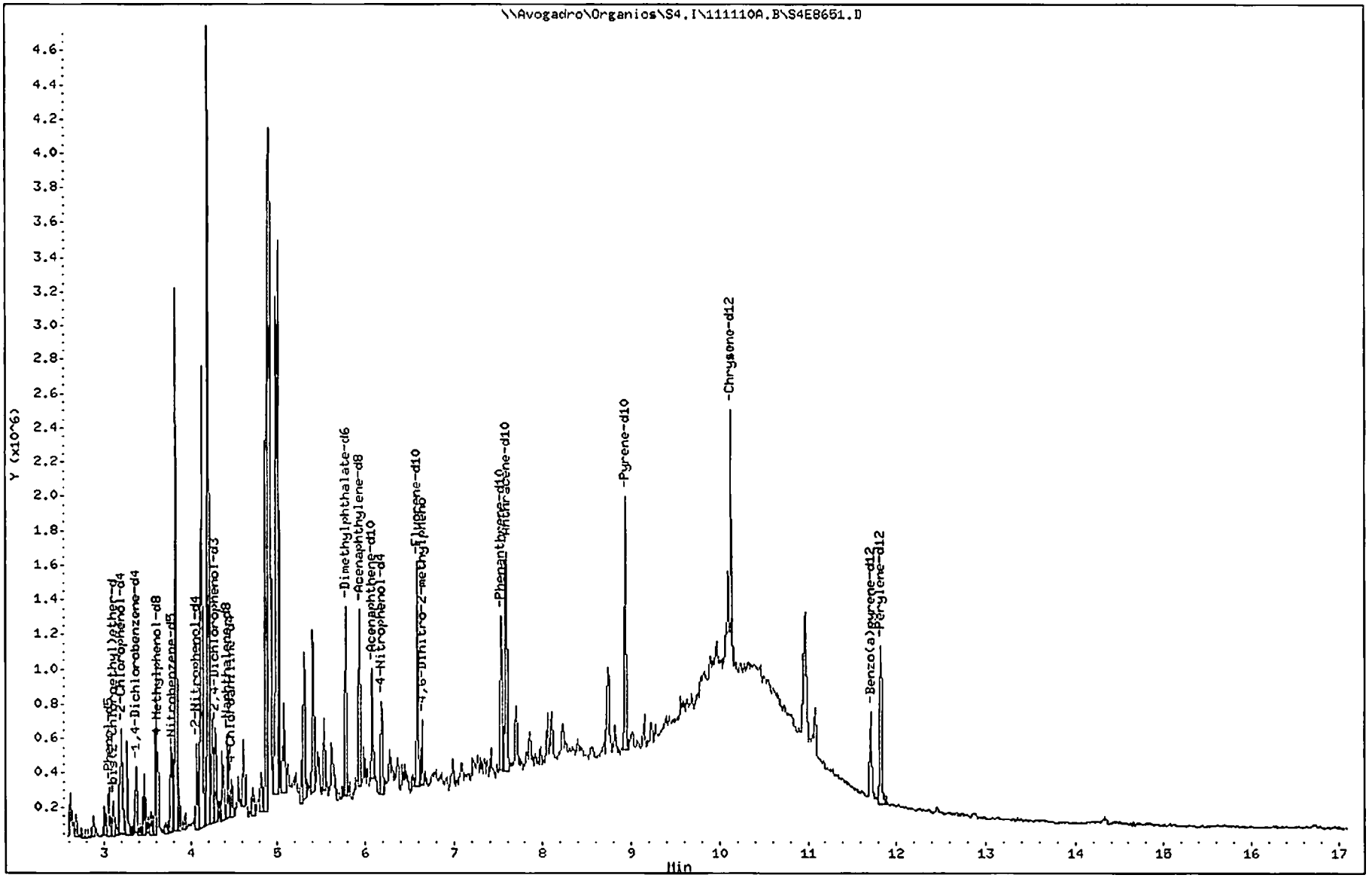
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
3.268	526610	52.9810444	26	0		0	8
Unknown				CAS #:			
3.330	53983	5.43109373	2.7	0		0	8
Benzene, 1-methyl-2-(1-methylethyl)-				CAS #: 527-84-4			
3.413	74978	7.54332804	3.8	90	NIST2002.L	14395	8
Unknown				CAS #:			
3.465	337420	33.9470692	17	0		0	8
Unknown				CAS #:			
3.506	90444	9.09938897	4.5	0		0	8
Unknown				CAS #:			
3.548	177220	17.8297242	8.9	0		0	8
2-Cyclopenten-1-one, 3,4,4-trimethyl-				CAS #: 30434-65-2			
3.599	1018148	102.433493	51	86	NIST2002.L	10230	8
Unknown				CAS #:			
3.713	87167	8.76963351	4.4	0		0	8
Unknown				CAS #:			
3.775	532517	53.5753289	27	0		0	8
Unknown				CAS #:			
3.827	3633596	365.567544	180	0		0	8
Unknown				CAS #:			
3.868	293378	29.5160568	15	0		0	8
Unknown				CAS #:			
3.941	116249	7.76367161	3.9	0		0	25
Unknown				CAS #:			
4.127	3979560	265.774924	130	0		0	25
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet				CAS #: 21368-68-3			
4.200	5853407	390.919835	200	94	NIST2002.L	24227	25
Unknown				CAS #:			
4.251	912139	60.9172381	30	0		0	25
Unknown				CAS #:			
4.365	626403	41.8343310	21	0		0	25
Unknown				CAS #:			
4.603	453806	30.3074171	15	0		0	25
Unknown				CAS #:			
4.717	223026	14.8947895	7.4	0		0	25

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D
Report Date: 11-Nov-2011 14:03

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.810	305226	20.3845111	10	0		0	25
Unknown				CAS #:			
4.872	4123104	275.361543	140	0		0	25
Unknown				CAS #:			
4.986	4987989	333.122876	170	0		0	25
Unknown				CAS #:			
5.079	896306	59.8598092	30	0		0	25
Unknown				CAS #:			
5.286	481316	27.4185473	14	0		0	46
Unknown				CAS #:			
5.307	1200912	68.4108607	34	0		0	46
Unknown				CAS #:			
5.400	1289852	73.4773538	37	0		0	46
Unknown				CAS #:			
5.535	432443	24.6344140	12	0		0	46

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D
Date : 10-NOV-2011 23:50
Client ID: H30X2
Sample Info: K2213-04A,,62806,,
Volume Injected (uL): 2.0
Column phase: RXI-5SILMS

Instrument: S4.i
Operator: MMS SRC: LIMS
Column diameter: 0.25



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Date : 10-NOV-2011 23:50

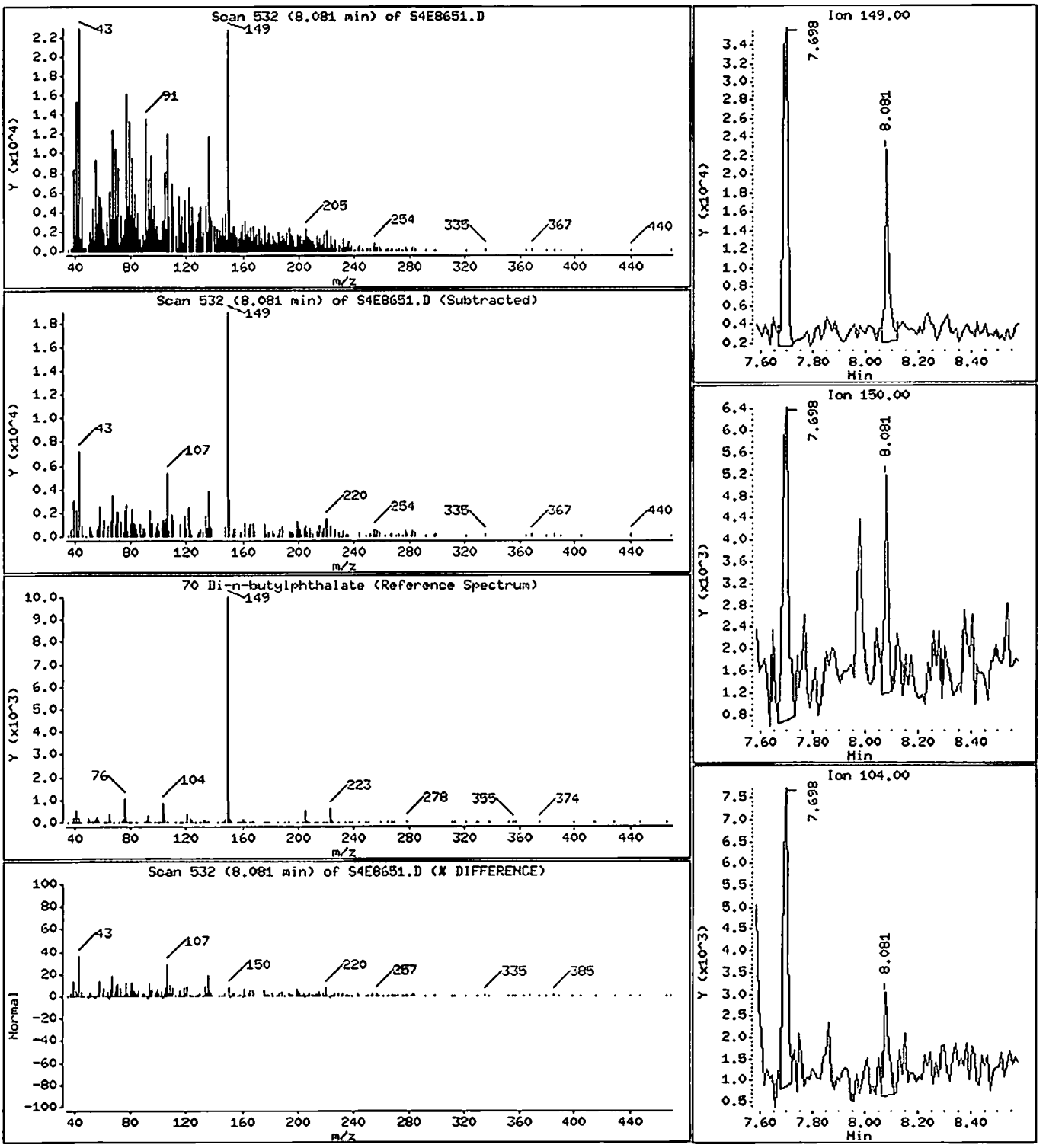
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

70 Di-n-butylphthalate Concentration: 1.1 ug/L



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Date : 10-NOV-2011 23:50

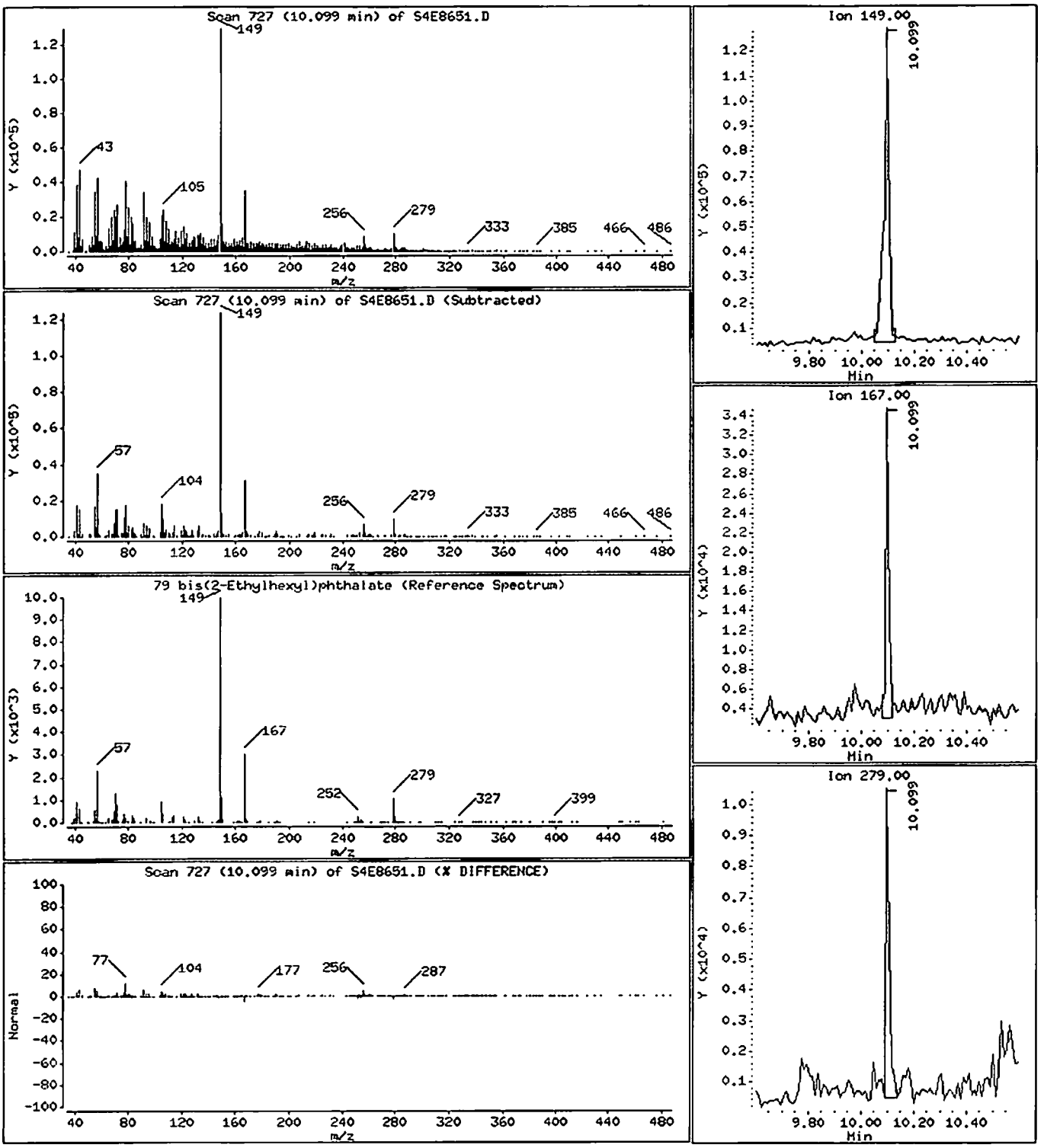
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

79 bis(2-Ethylhexyl)phthalate Concentration: 11 ug/L



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Date : 10-NOV-2011 23:50

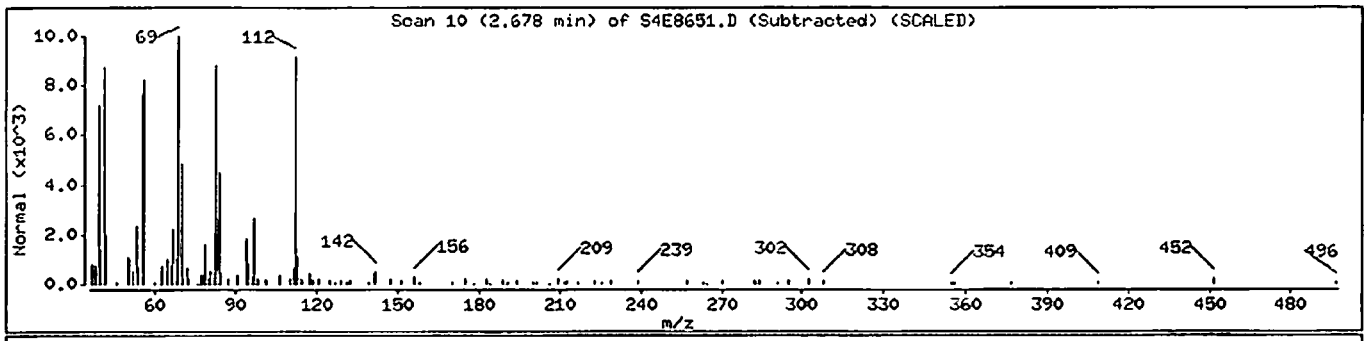
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 10-NOV-2011 23:50

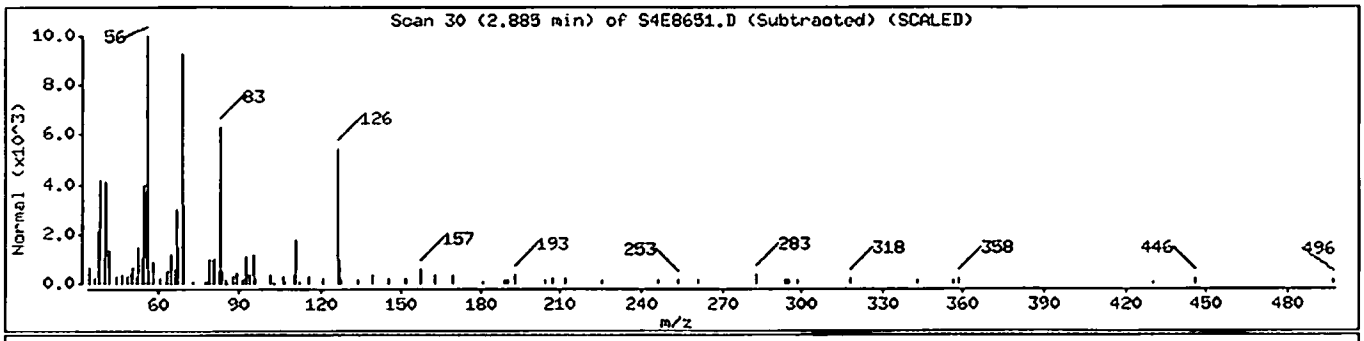
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 10-NOV-2011 23:50

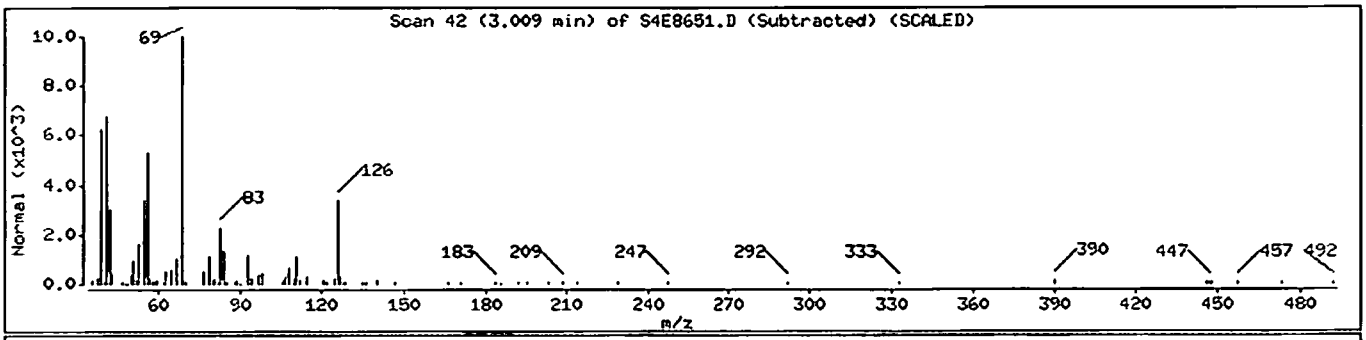
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 10-NOV-2011 23:50

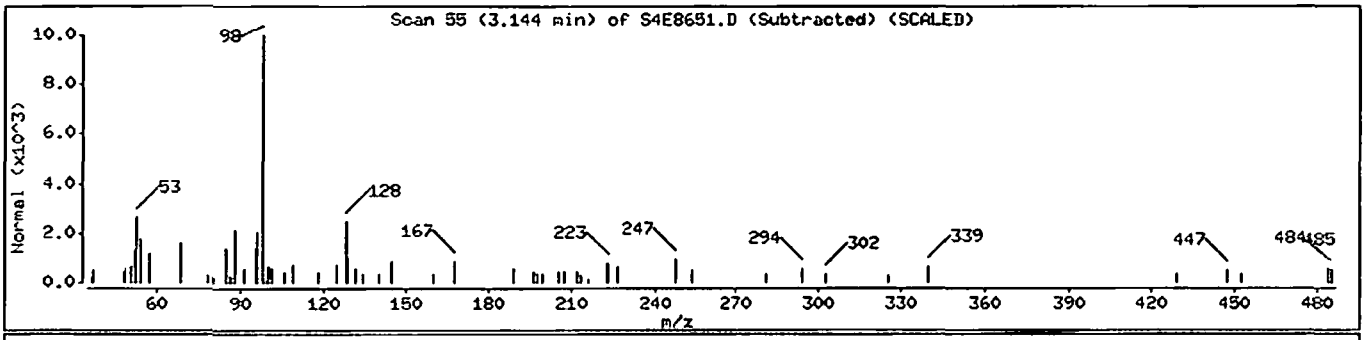
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 10-NOV-2011 23:50

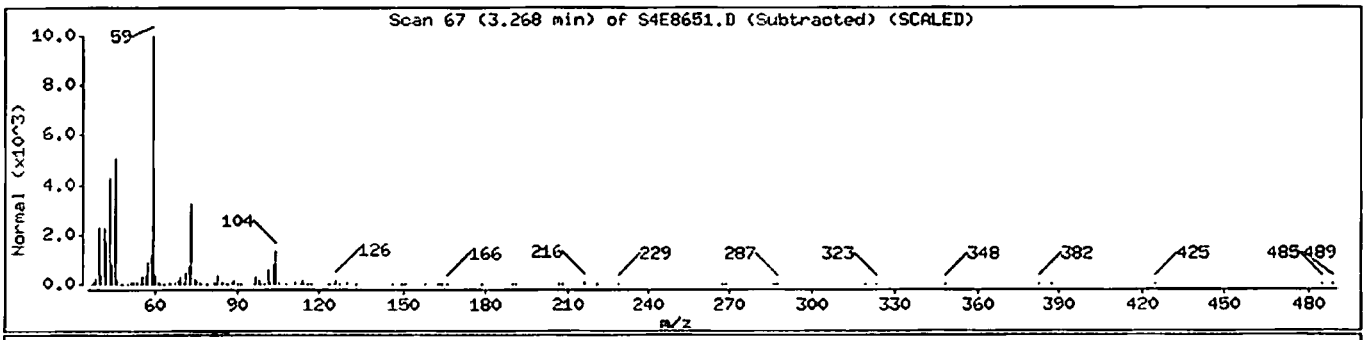
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 10-NOV-2011 23:50

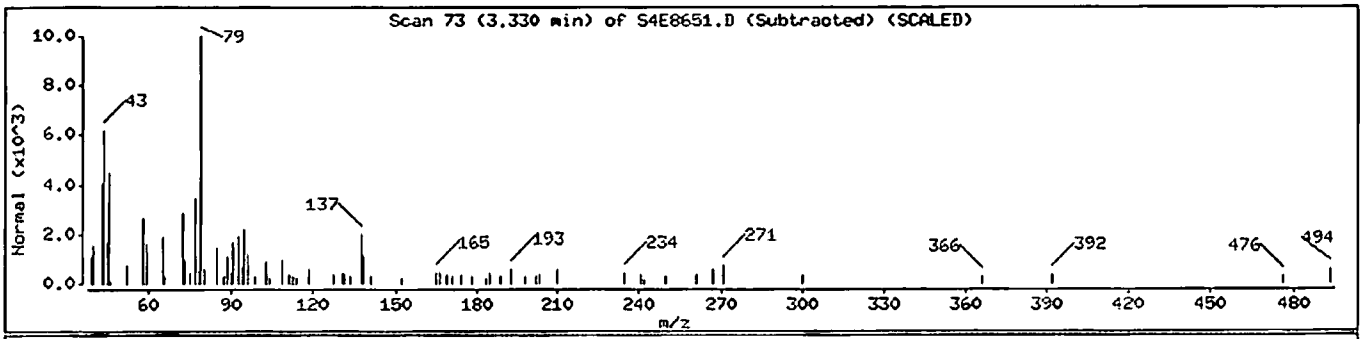
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 10-NOV-2011 23:50

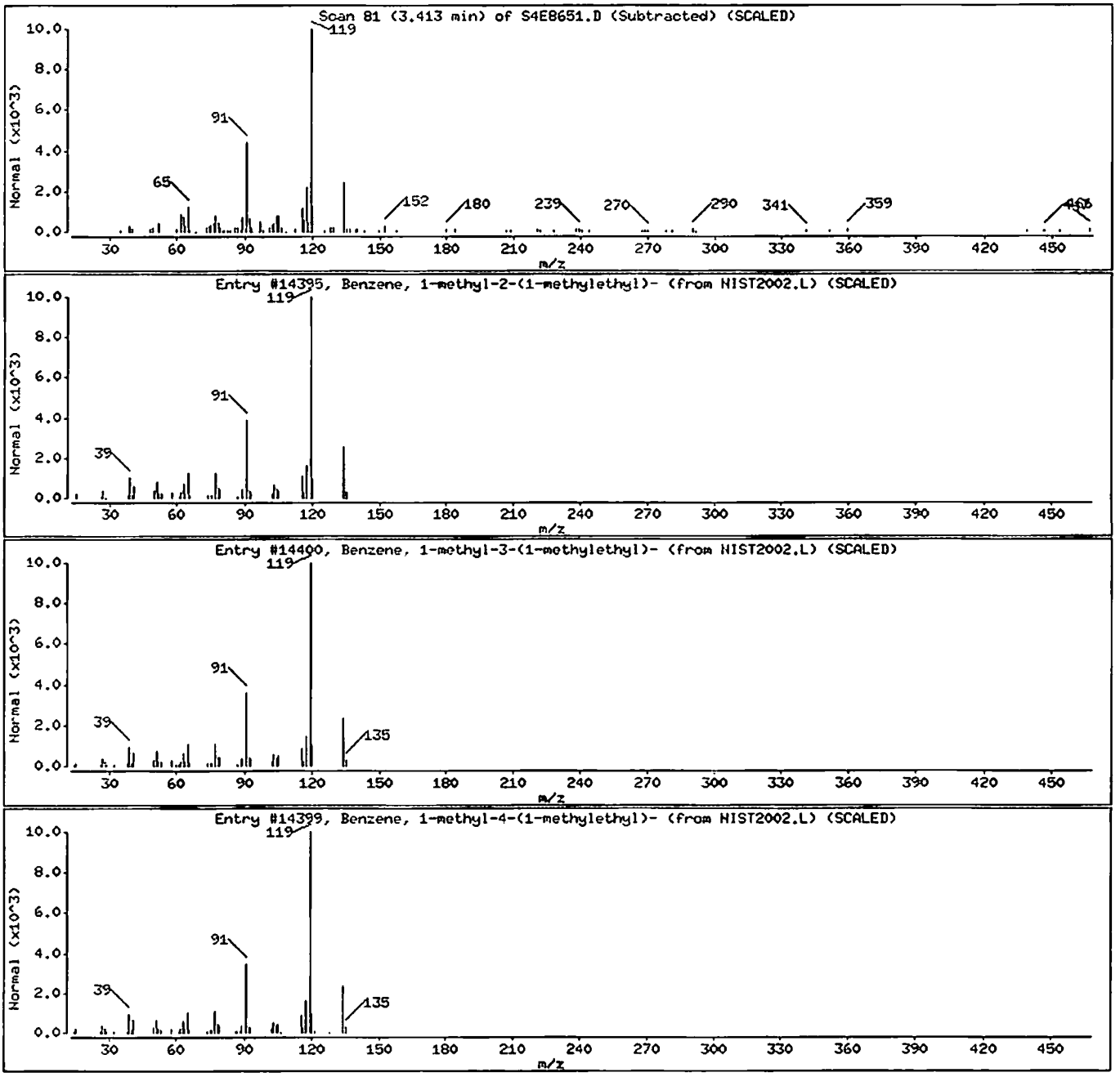
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS 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	90	C10H14	134
Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	NIST2002.L	14400	90	C10H14	134
Benzene, 1-methyl-4-(1-methylethyl)-	99-87-6	NIST2002.L	14399	90	C10H14	134



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D

Date : 10-NOV-2011 23:50

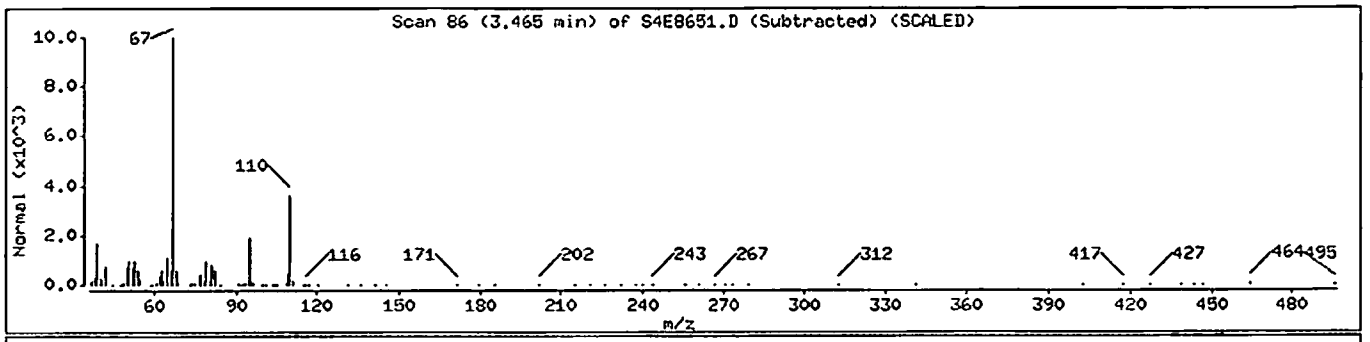
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 10-NOV-2011 23:50

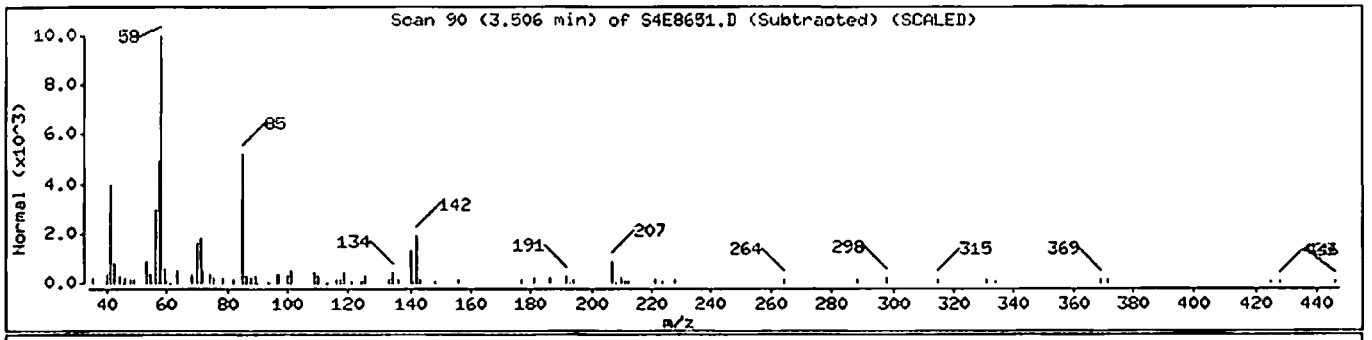
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 10-NOV-2011 23:50

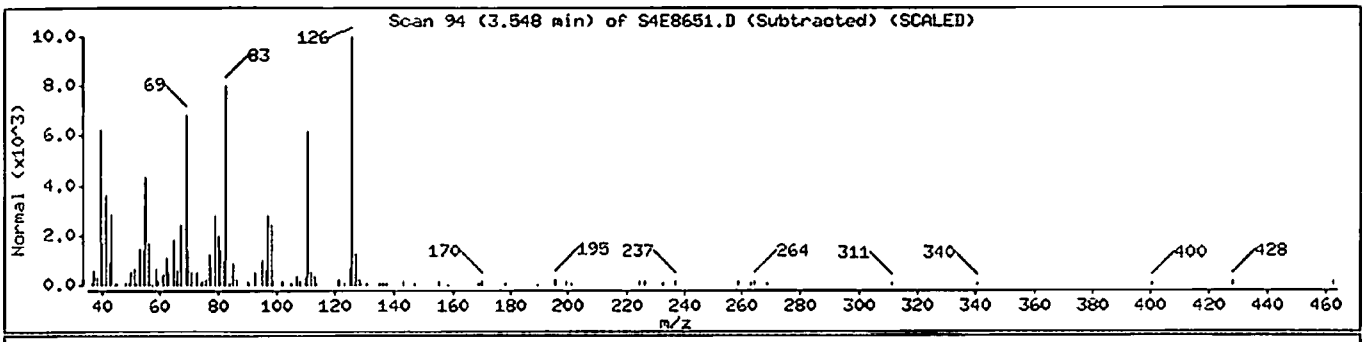
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 10-NOV-2011 23:50

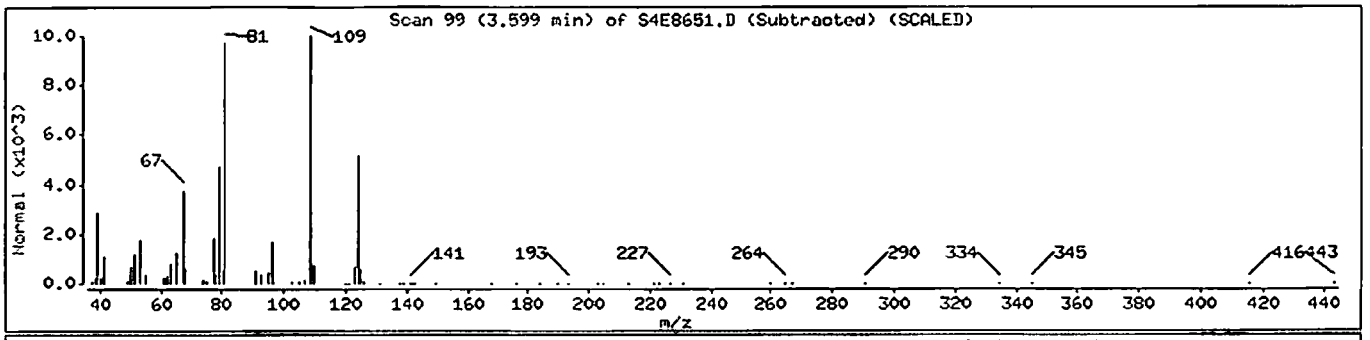
Client ID: H30X2 Instrument: S4.i

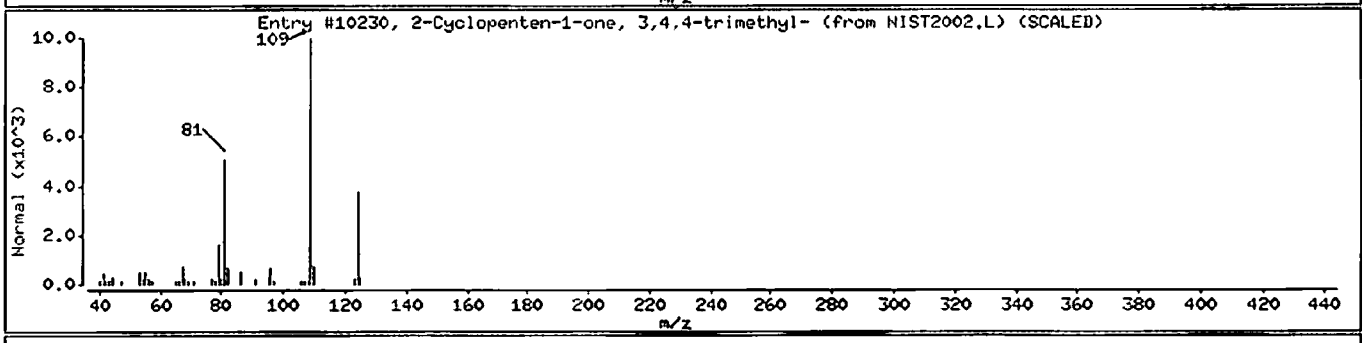
Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Cyclopenten-1-one, 3,4,4-trimethyl-	30434-65-2	NIST2002.L	10230	86	C8H12O	124





Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D

Date : 10-NOV-2011 23:50

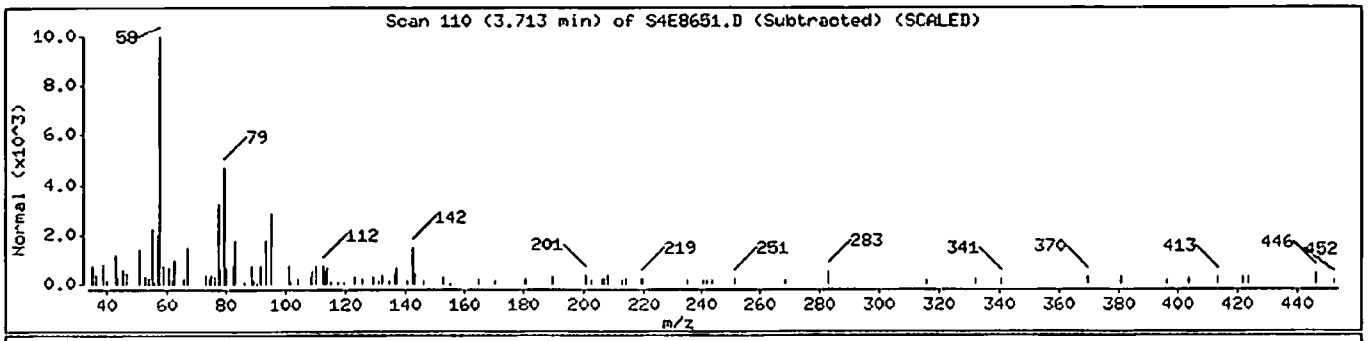
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D

Date : 10-NOV-2011 23:50

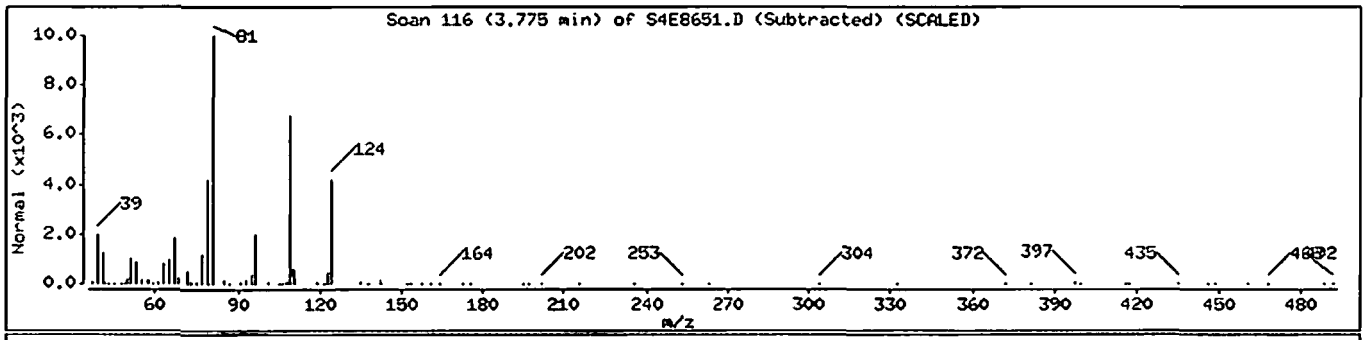
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 10-NOV-2011 23:50

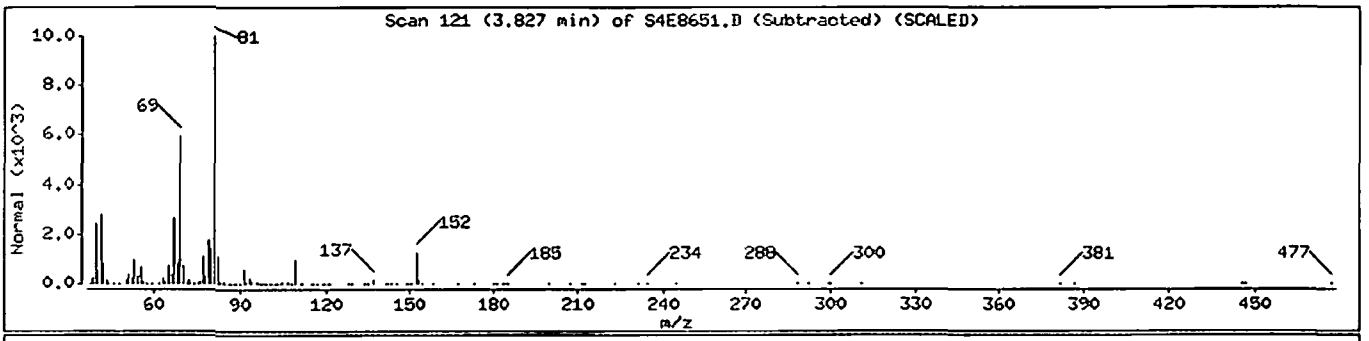
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 10-NOV-2011 23:50

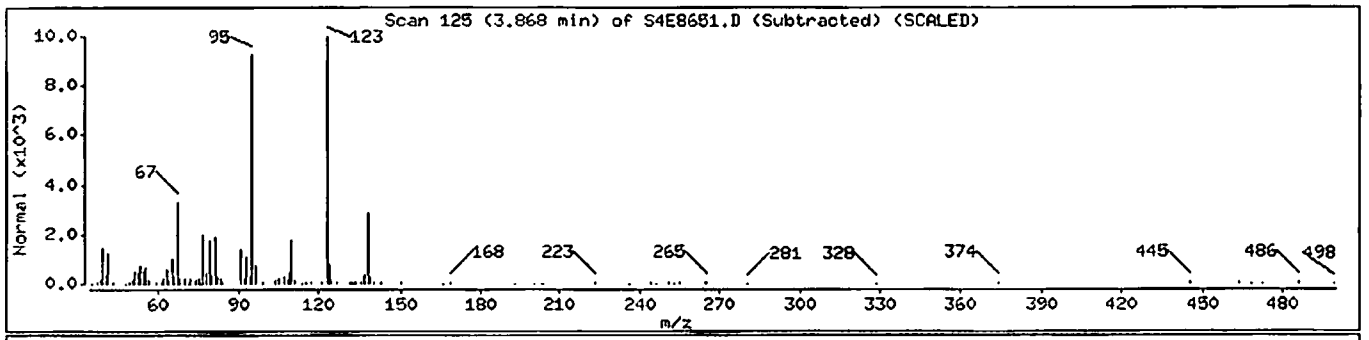
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D

Date : 10-NOV-2011 23:50

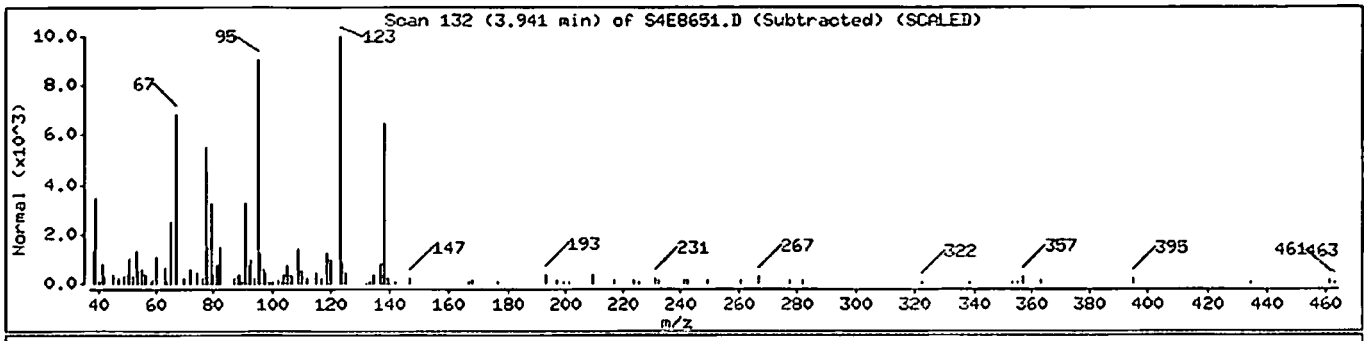
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D

Date : 10-NOV-2011 23:50

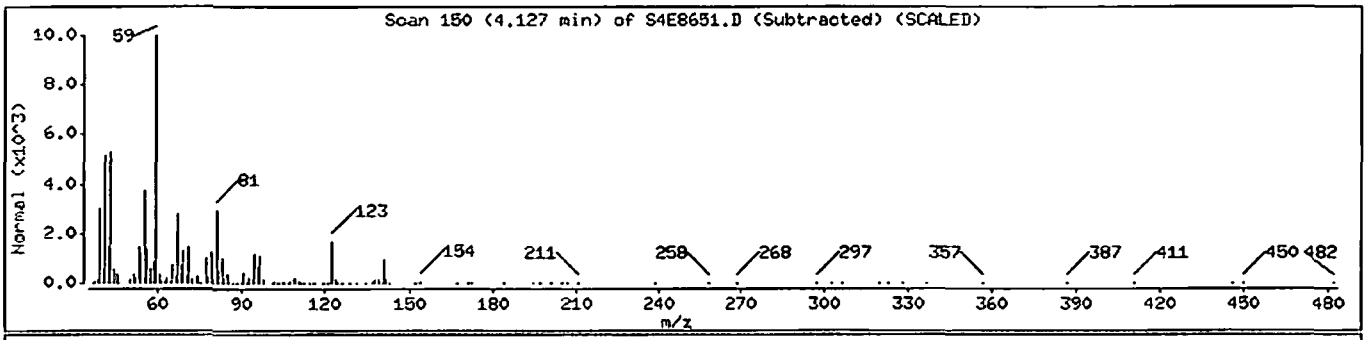
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 10-NOV-2011 23:50

Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
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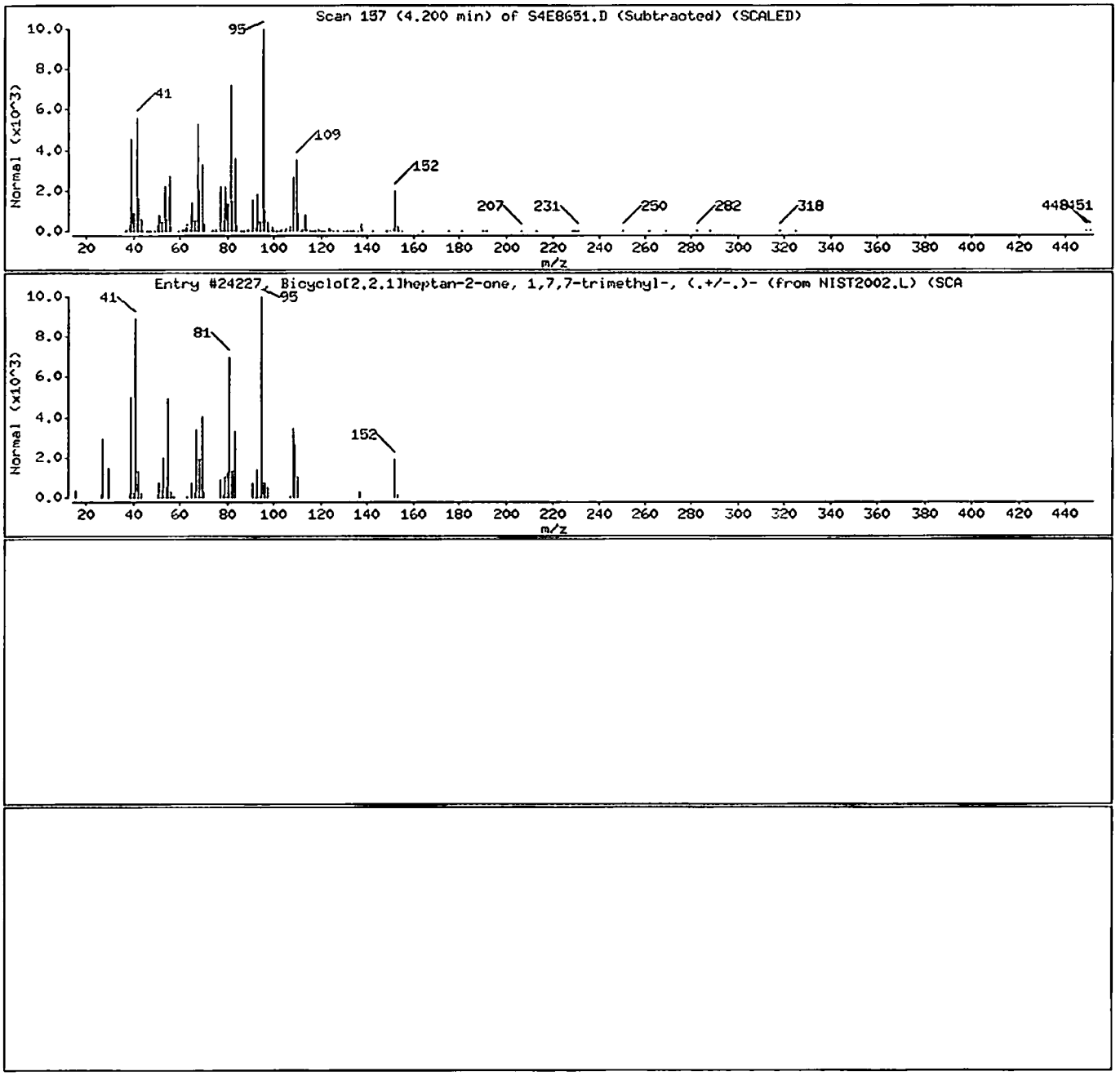

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Date : 10-NOV-2011 23:50

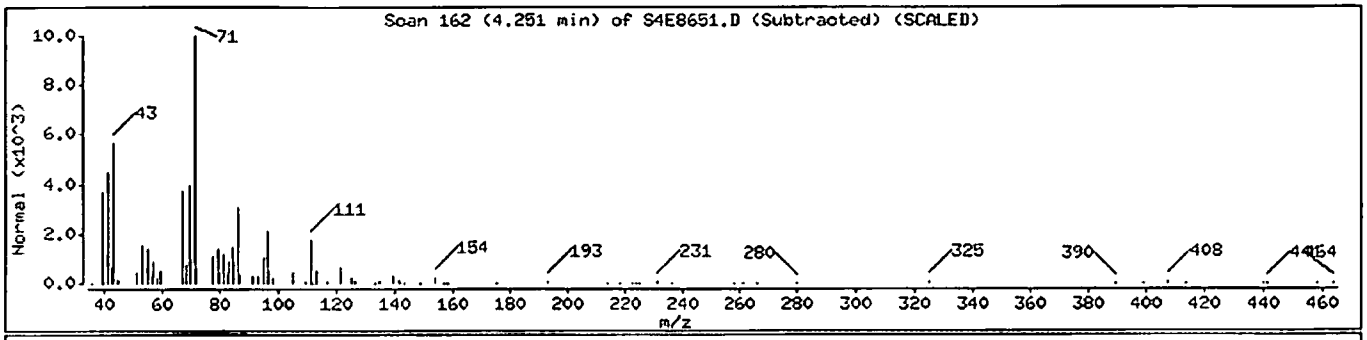
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 10-NOV-2011 23:50

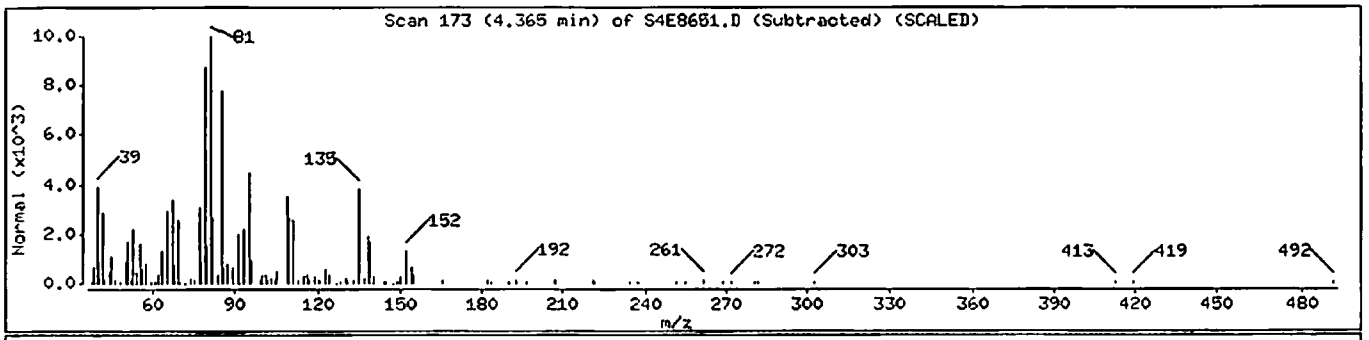
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 10-NOV-2011 23:50

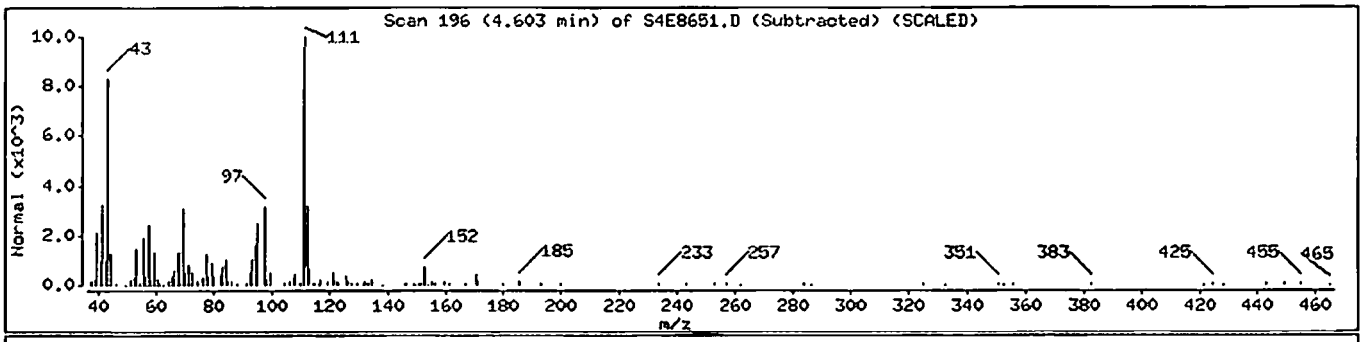
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 10-NOV-2011 23:50

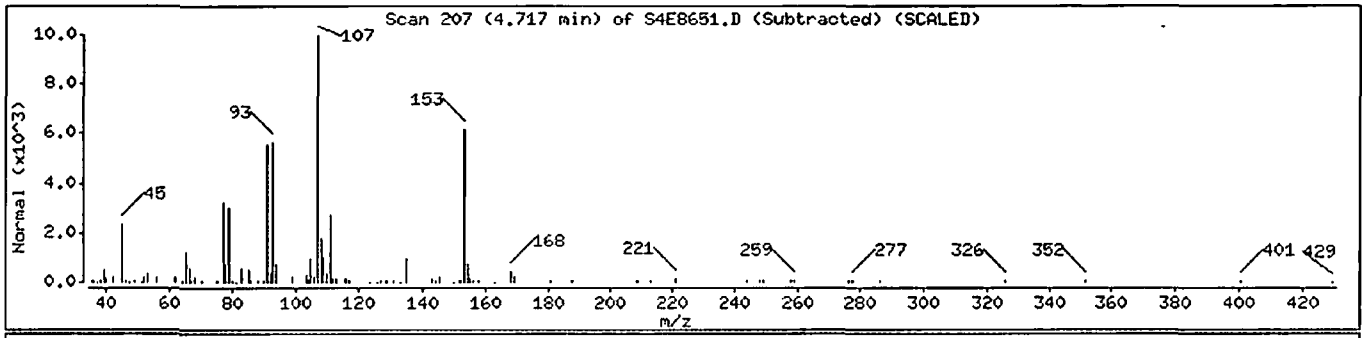
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D

Date : 10-NOV-2011 23:50

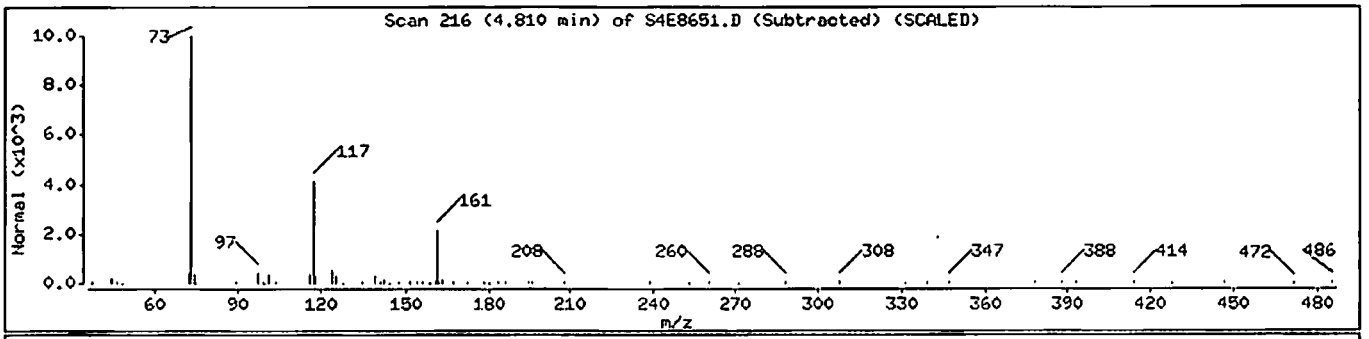
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D

Date : 10-NOV-2011 23:50

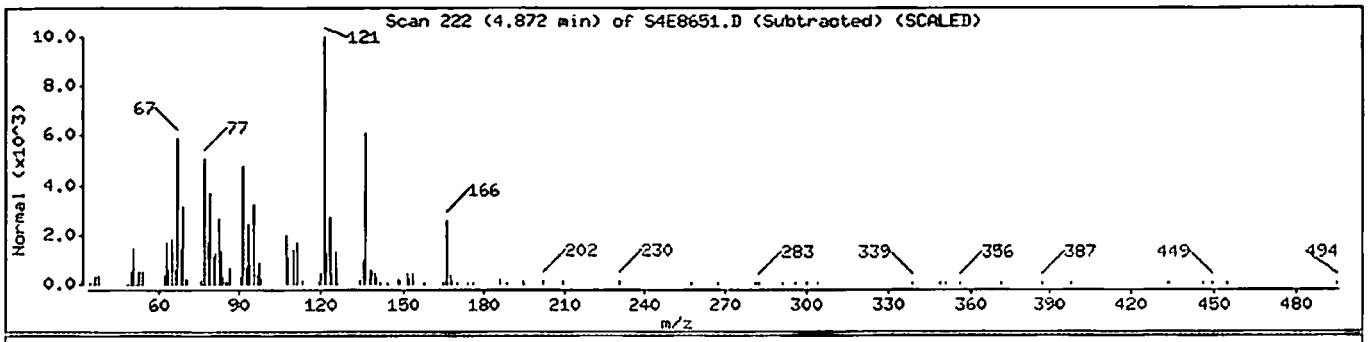
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D

Date : 10-NOV-2011 23:50

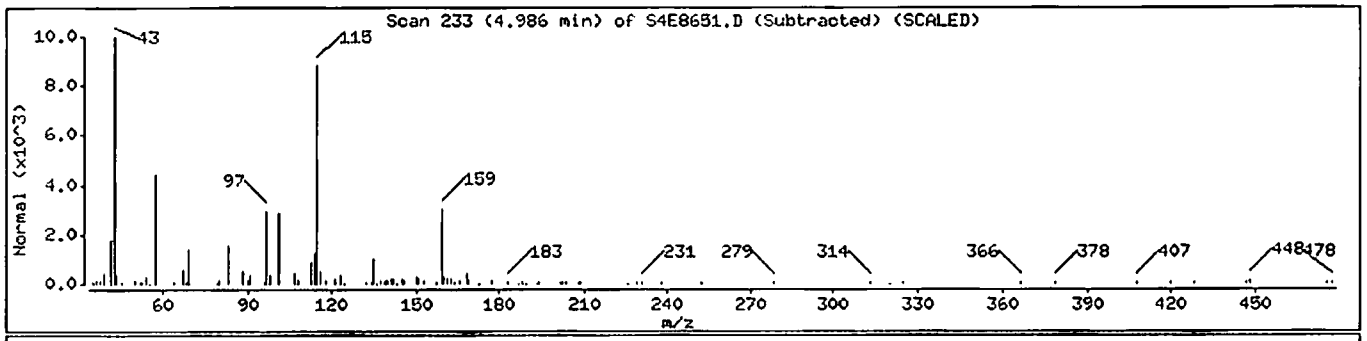
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D

Date : 10-NOV-2011 23:50

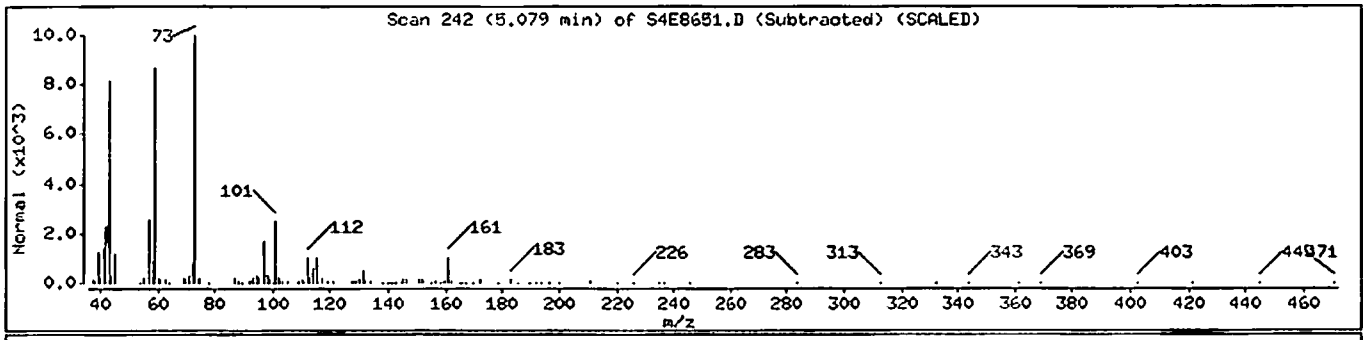
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.i\111110A.B\S4E8651.D

Date : 10-NOV-2011 23:50

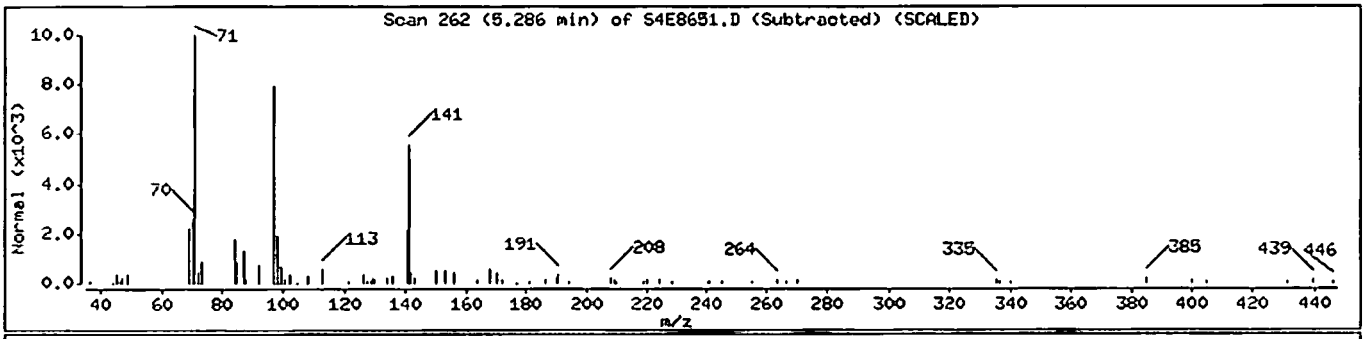
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D

Date : 10-NOV-2011 23:50

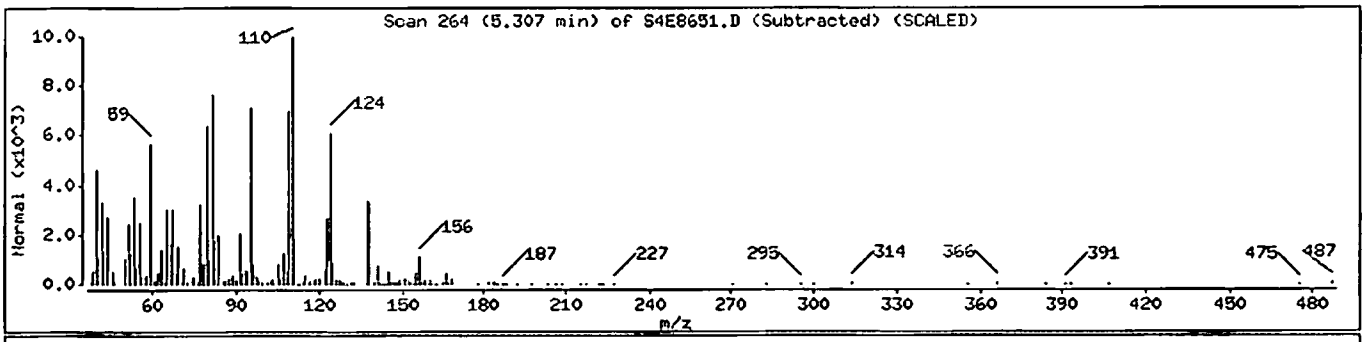
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D

Date : 10-NOV-2011 23:50

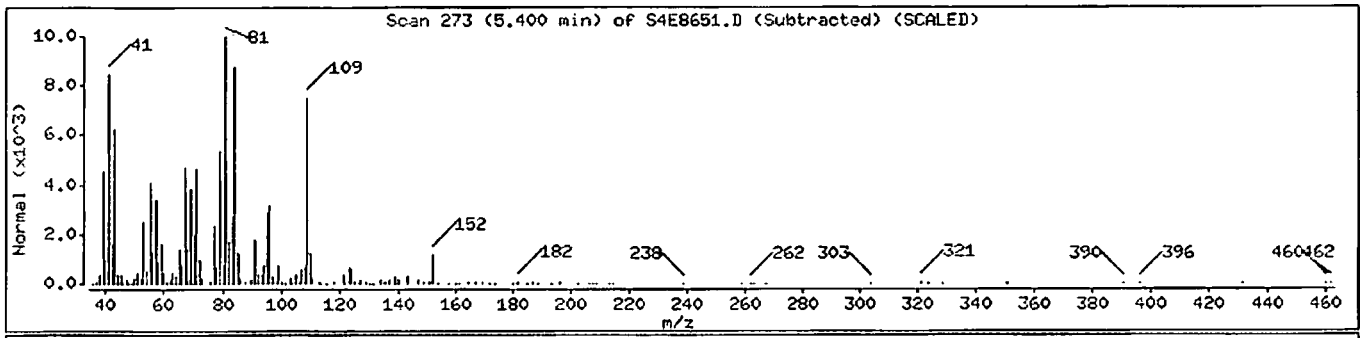
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D

Date : 10-NOV-2011 23:50

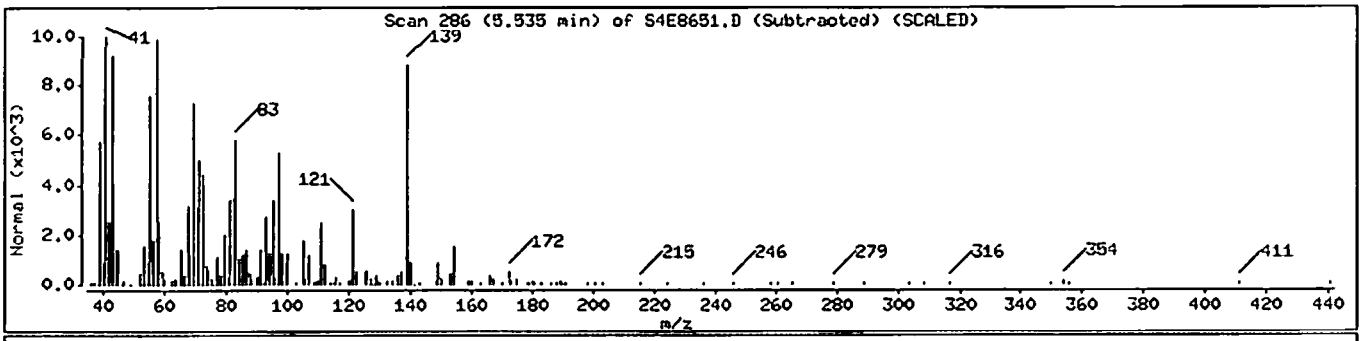
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30X4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-01A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5231.D

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

% Moisture: Decanted: (Y/N) Date Received: 10/29/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/03/2011

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	12	
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

EPA SAMPLE NO.

H30X4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-01A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5231.D

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

% Moisture: Decanted: (Y/N) Date Received: 10/29/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/03/2011

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

EPA SAMPLE NO.

H30X4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-01A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5231.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: 11/03/2011

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) pG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	3.005	2.3	J
02	98-82-8	Benzene, (1-methylethyl)-	3.155	3.9	NJ
03		Unknown-02	3.380	7.6	J
04	622-96-8	Benzene, 1-ethyl-4-methyl-	3.434	20	NJ
05	108-67-8	Benzene, 1,3,5-trimethyl-	3.670	24	NJ
06	526-73-8	Benzene, 1,2,3-trimethyl-	3.863	8.1	NJ
07		Unknown-03	3.938	2.8	J
08		Unknown-04	4.045	3.7	J
09		Unknown-05	4.088	7.3	J
10		Unknown-06	4.206	2.4	J
11	126-21-6	L-Fenchone	4.313	41	NJ
12		Unknown-07	4.345	4.2	J
13		Unknown-08	4.410	2.7	J
14		Unknown-09	4.485	4.1	J
15		Unknown-10	4.613	30	J
16	464-48-2	Bicyclo[2.2.1]heptan-2-one,	4.667	26	NJ
17		Unknown-11	4.721	12	J
18		Unknown-12	5.010	6.1	J
19		Unknown-13	5.396	4.4	J
20		Unknown-14	5.450	4.6	J
21		Unknown-15	5.686	15	J
22		Unknown-16	5.954	13	J
23		Unknown-17	6.533	8.0	J
24		Unknown-18	6.565	27	J
25		Unknown-19	6.897	9.7	J
26		Unknown-20	7.090	8.7	J
27		Unknown-21	9.664	49	J
	E966796[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5231.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\S2H5231.D
Lab Smp Id: K2213-01A Client Smp ID: H30X4
Inj Date : 04-NOV-2011 16:39
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2213-01A,,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: 7
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	3.498	3.500	(0.918)	256715	59.9469	30
$ 4	bis(2-Chloroethyl)ether-d8	67	3.551	3.554	(0.932)	385595	65.3439	33
$ 6	2-Chlorophenol-d4	132	3.626	3.629	(0.952)	260696	70.3725	35
* 8	1,4-Dichlorobenzene-d4	152	3.809	3.822	(1.000)	135992	40.0000	(Q)
$ 11	4-Methylphenol-d8	113	4.130	4.133	(1.084)	364490	62.7811	31
$ 16	Nitrobenzene-d5	128	4.270	4.283	(0.875)	120533	62.0320	31
$ 19	2-Nitrophenol-d4	143	4.548	4.551	(0.932)	141970	66.1855	33
$ 23	2,4-Dichlorophenol-d3	165	4.752	4.755	(0.974)	248060	63.3488	32
* 25	Naphthalene-d8	136	4.881	4.884	(1.000)	373110	40.0000	
$ 27	4-Chloroaniline-d4	131	4.935	4.937	(1.011)	44467	12.7894	6.4(Q)
30	Caprolactam	113	5.246	5.205	(1.075)	35286	24.5913	12
$ 40	Dimethylphthalate-d6	166	6.103	6.106	(0.961)	628740	70.9128	35
$ 43	Acenaphthylene-d8	160	6.221	6.224	(0.980)	626742	54.3589	27
* 46	Acenaphthene-d10	164	6.350	6.353	(1.000)	241143	40.0000	
$ 49	4-Nitrophenol-d4	143	6.457	6.449	(1.017)	66236	51.8376	26(Q)
$ 54	Fluorene-d10	176	6.779	6.782	(1.068)	412485	50.6464	25
$ 58	4,6-Dinitro-2-methylphenol-d2	200	6.833	6.835	(0.902)	99450	66.5921	33
* 65	Phenanthrene-d10	188	7.573	7.575	(1.000)	382710	40.0000	
$ 67	Anthracene-d10	188	7.626	7.629	(1.007)	474996	43.4492	22
$ 72	Pyrene-d10	212	8.763	8.776	(0.890)	320384	32.0369	16(R)
* 77	Chrysene-d12	240	9.846	9.881	(1.000)	317452	40.0000	(Q)

Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5231.D
Report Date: 07-Nov-2011 13:26

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)
$ 83 Benzo(a)pyrene-d12	264	11.122	11.189	(0.983)	107169	17.6559	8.8(RH)
* 85 Perylene-d12	264	11.208	11.275	(1.000)	247361	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\111104.B\S2H5231.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\S2H5231.D
Lab Smp Id: K2213-01A Client Smp ID: H30X4
Inj Date : 04-NOV-2011 16:39
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2213-01A,,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: 7
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	3.809	1528694	40.000
* 25 Naphthalene-d8	4.881	1891574	40.000
* 46 Acenaphthene-d10	6.351	1386292	40.000
* 65 Phenanthrene-d10	7.573	1446831	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
3.005	173562	4.54143393	2.3	0		0	8
Benzene, (1-methylethyl)-				CAS #: 98-82-8			
3.155	297915	7.79527254	3.9	90	NIST2002.L	9118	8
Unknown				CAS #:			
3.380	582520	15.2422730	7.6	0		0	8

Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5231.D
Report Date: 07-Nov-2011 13:26

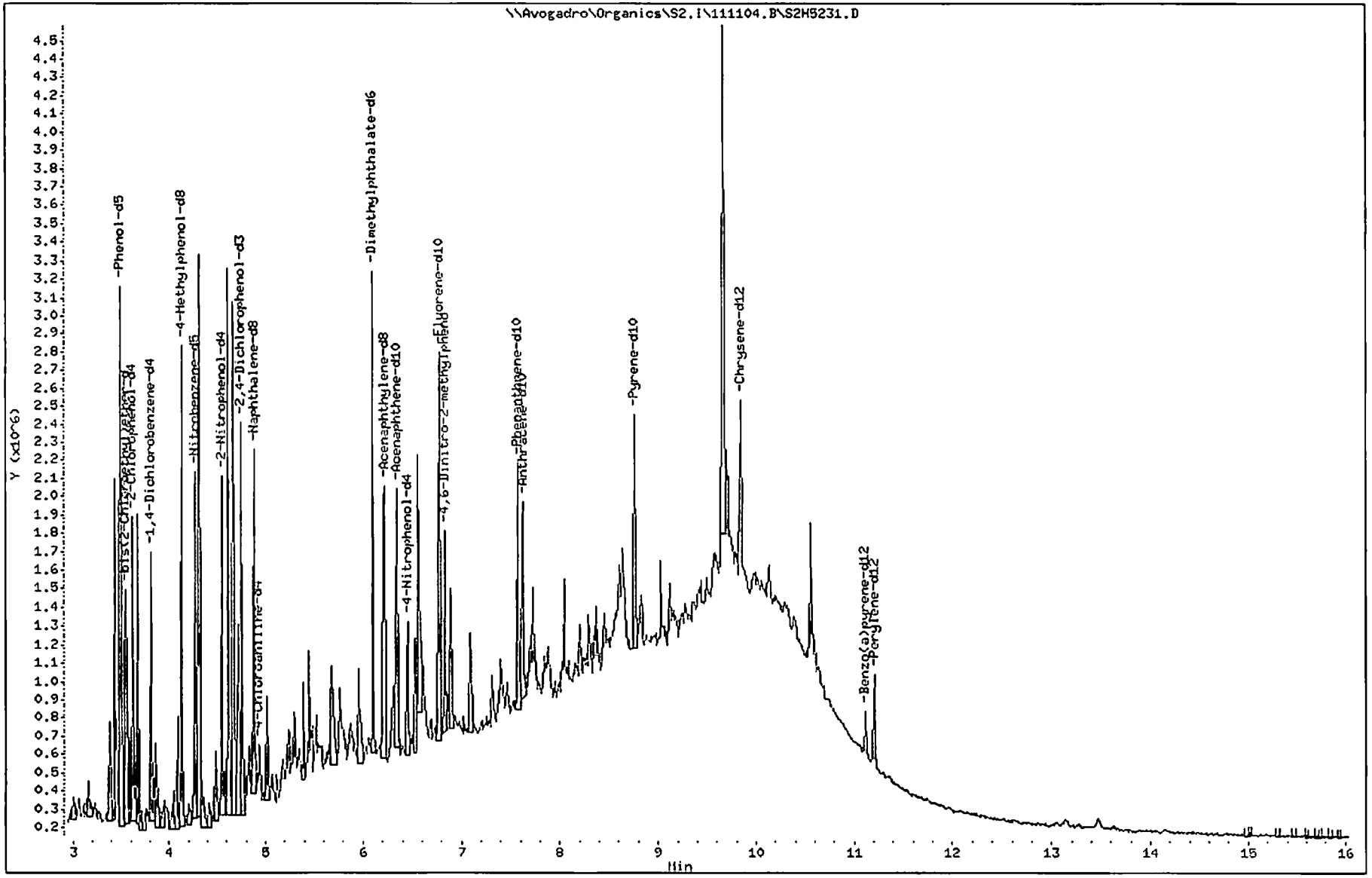
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Benzene, 1-ethyl-4-methyl-				CAS #: 622-96-8			
3.434	1553748	40.6555577	20	94	NIST2002.L	9134	8
Benzene, 1,3,5-trimethyl-				CAS #: 108-67-8			
3.670	1802166	47.1556867	24	94	NIST2002.L	9121	8
Benzene, 1,2,3-trimethyl-				CAS #: 526-73-8			
3.863	616949	16.1431457	8.1	91	NIST2002.L	9113	8
Unknown				CAS #:			
3.938	217623	5.69434739	2.8	0		0	8
Unknown				CAS #:			
4.045	282019	7.37934953	3.7	0		0	8
Unknown				CAS #:			
4.088	558322	14.6091125	7.3	0		0	8
Unknown				CAS #:			
4.206	180207	4.71530867	2.4	0		0	8
L-Fenchone				CAS #: 126-21-6			
4.313	3095904	81.0077847	41	91	NIST2002.L	23928	8
Unknown				CAS #:			
4.345	399308	8.44392511	4.2	0		0	25
Unknown				CAS #:			
4.410	252385	5.33702605	2.7	0		0	25
Unknown				CAS #:			
4.485	385014	8.14165697	4.1	0		0	25
Unknown				CAS #:			
4.613	2880149	60.9047880	30	0		0	25
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet				CAS #: 464-48-2			
4.667	2463680	52.0979670	26	94	NIST2002.L	24202	25
Unknown				CAS #:			
4.721	1099551	23.2515567	12	0		0	25
Unknown				CAS #:			
5.010	575519	12.1701519	6.1	0		0	25
Unknown				CAS #:			
5.396	417463	8.82783856	4.4	0		0	25
Unknown				CAS #:			
5.450	436663	9.23384191	4.6	0		0	25
Unknown				CAS #:			
5.686	1045102	30.1553202	15	0		0	46

Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5231.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 #:			
5.954	875206	25.2531438	13	0		0	46
Unknown				CAS #:			
6.533	555554	16.0299317	8.0	0		0	46
Unknown				CAS #:			
6.565	1851176	53.4137291	27	0		0	46
Unknown				CAS #:			
6.897	673537	19.4341894	9.7	0		0	46
Unknown				CAS #:			
7.090	629021	17.3902941	8.7	0		0	65
Unknown				CAS #:			
9.664	3510205	97.0452874	49	0		0	65

Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5231.D
Date : 04-NOV-2011 16:39
Client ID: H30X4
Sample Info: K2213-01A,,62685,,
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\S2H5231.D

Date : 04-NOV-2011 16:39

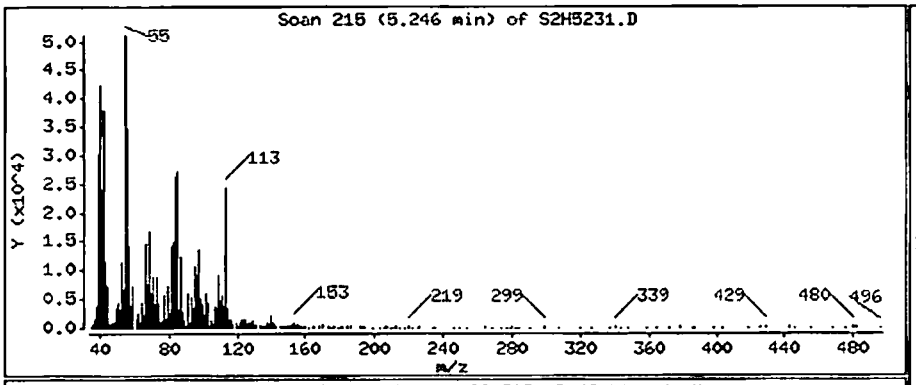
Client ID: H30X4 Instrument: S2.i

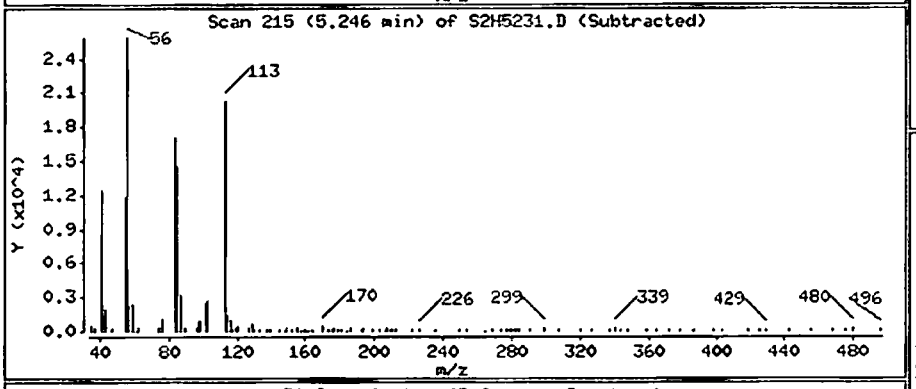
Sample Info: K2213-01A,,62685,,

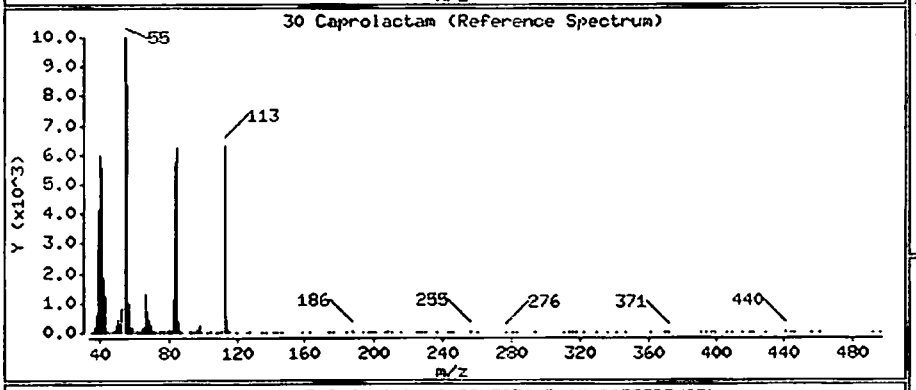
Volume Injected (uL): 2.0 Operator: SRC: LIMS

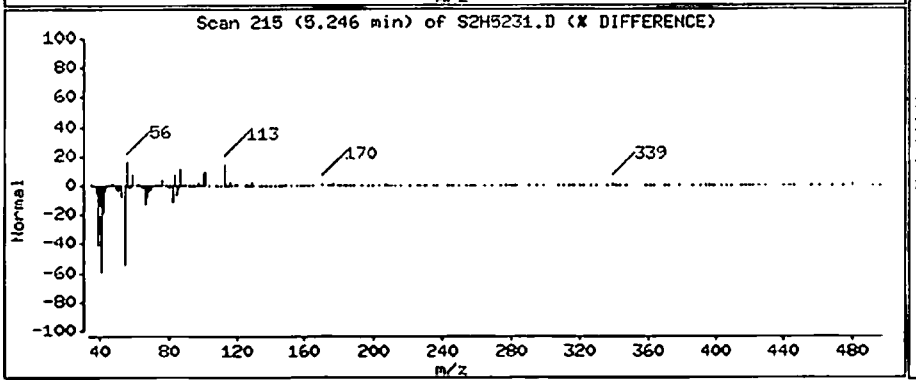
Column phase: RXI-5SILMS Column diameter: 0.25

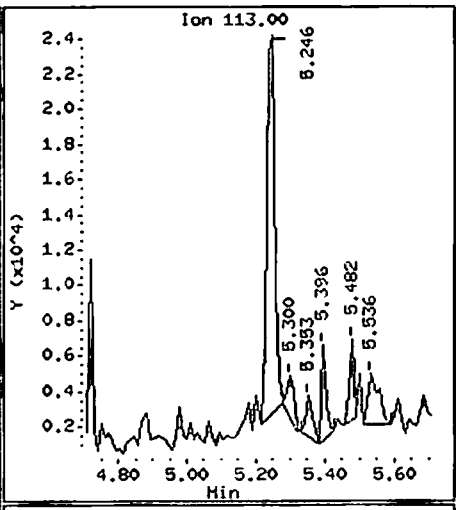
30 Caprolactam Concentration: 12 ug/L

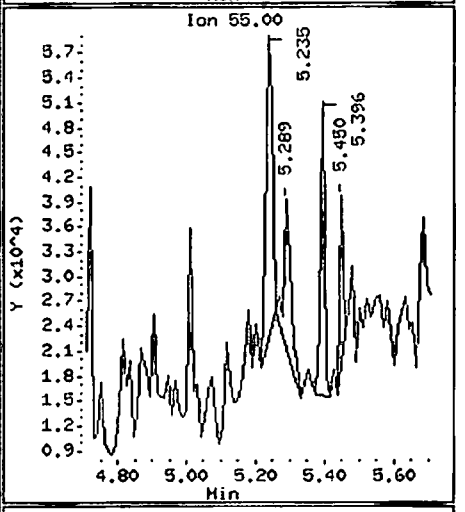


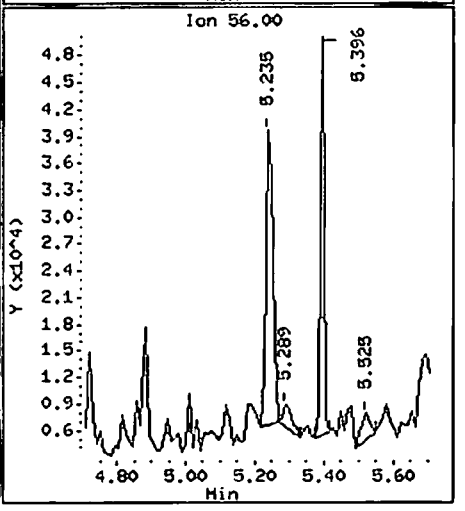












Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5231.D

Date : 04-NOV-2011 16:39

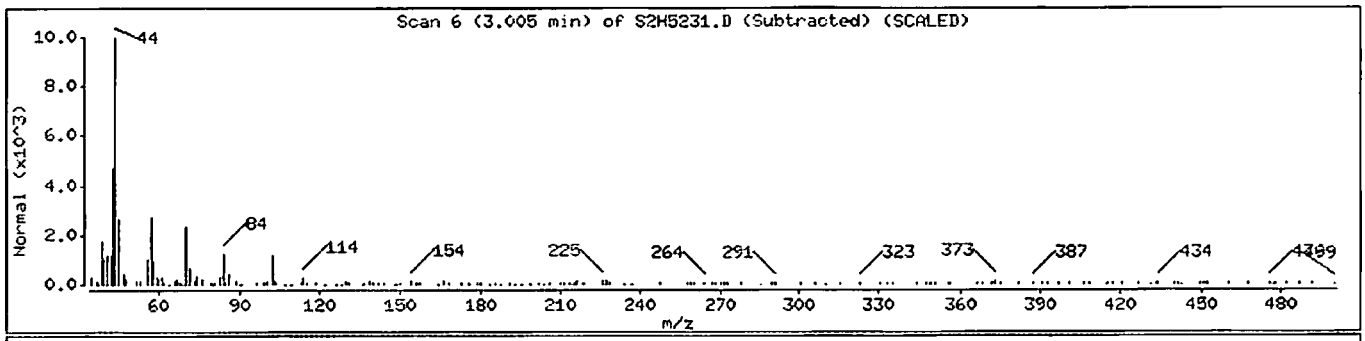
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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\S2H5231.D

Date : 04-NOV-2011 16:39

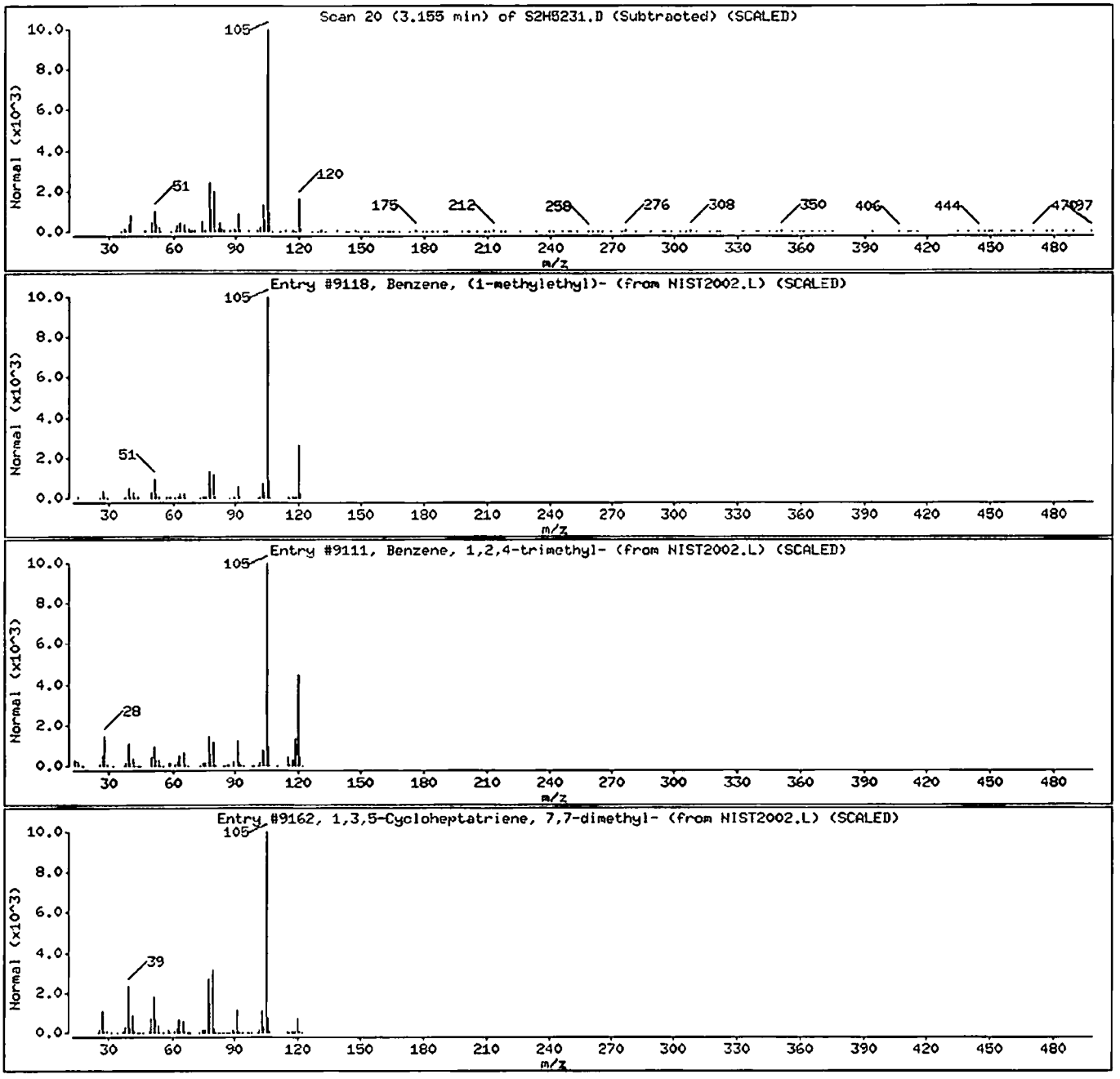
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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
Benzene, (1-methylethyl)-	98-82-8	NIST2002.L	9118	90	C9H12	120
Benzene, 1,2,4-trimethyl-	95-63-6	NIST2002.L	9111	86	C9H12	120
1,3,5-Cycloheptatriene, 7,7-dimethyl-	7557-11-1	NIST2002.L	9162	86	C9H12	120



Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5231.D

Date : 04-NOV-2011 16:39

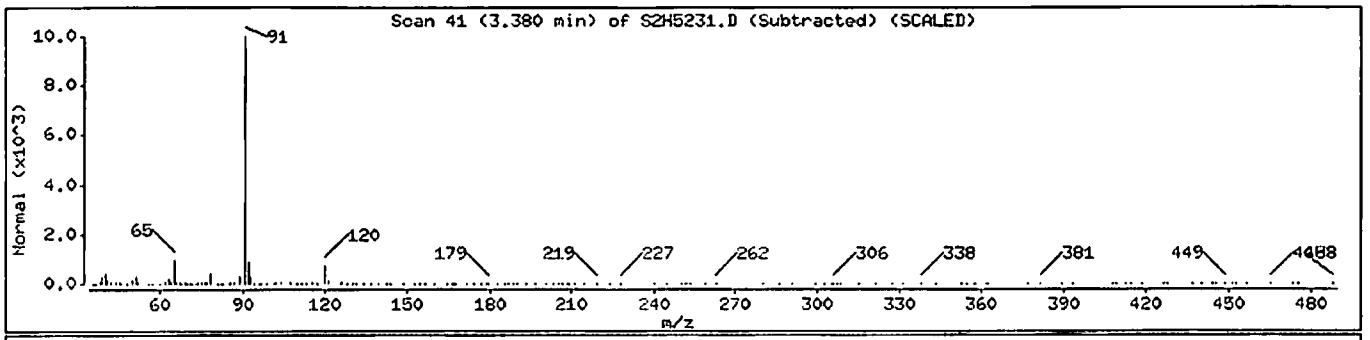
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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



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Date : 04-NOV-2011 16:39

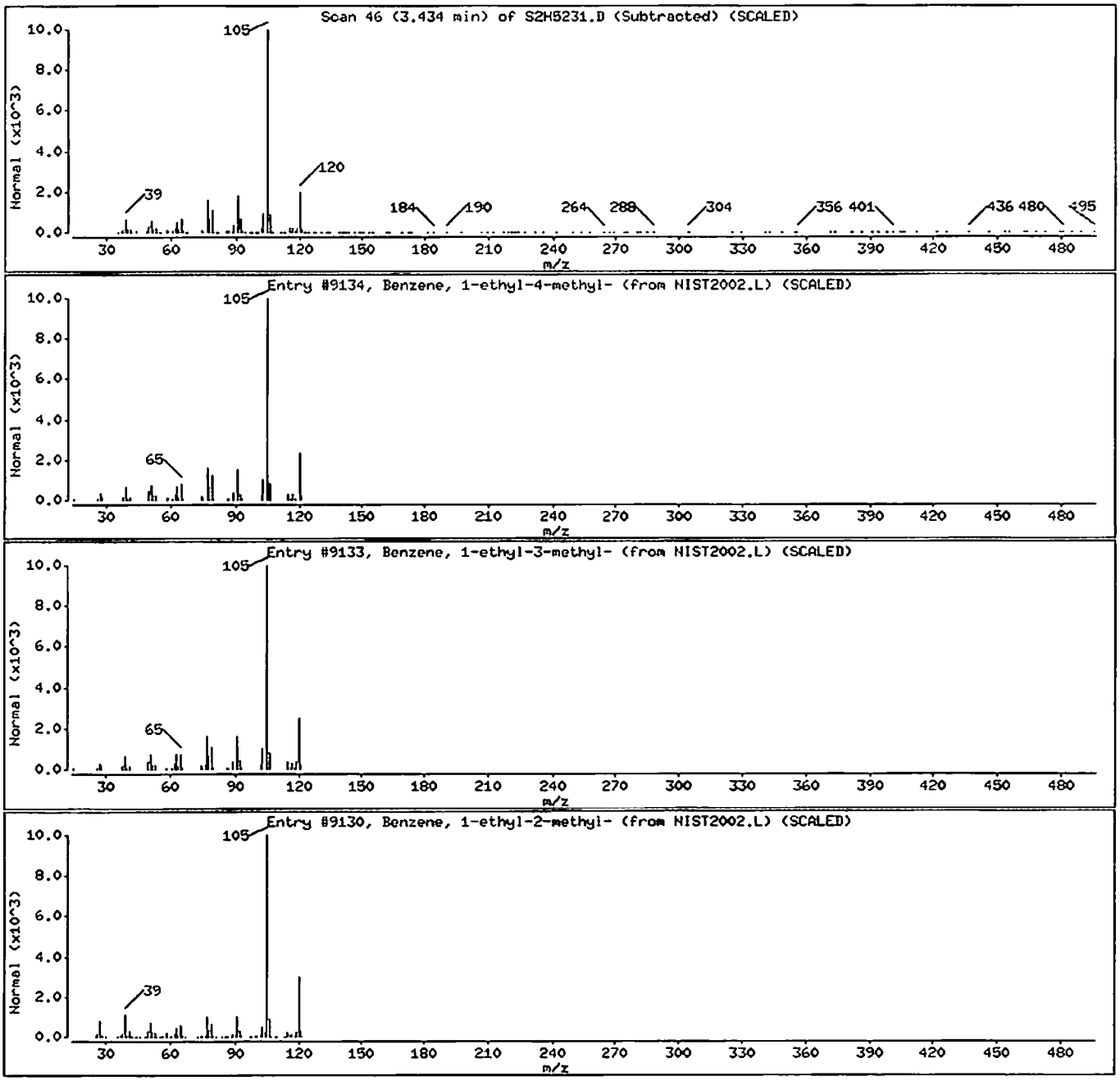
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,.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
Benzene, 1-ethyl-4-methyl-	622-96-8	NIST2002.L	9134	94	C9H12	120
Benzene, 1-ethyl-3-methyl-	620-14-4	NIST2002.L	9133	94	C9H12	120
Benzene, 1-ethyl-2-methyl-	611-14-3	NIST2002.L	9130	91	C9H12	120



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Date : 04-NOV-2011 16:39

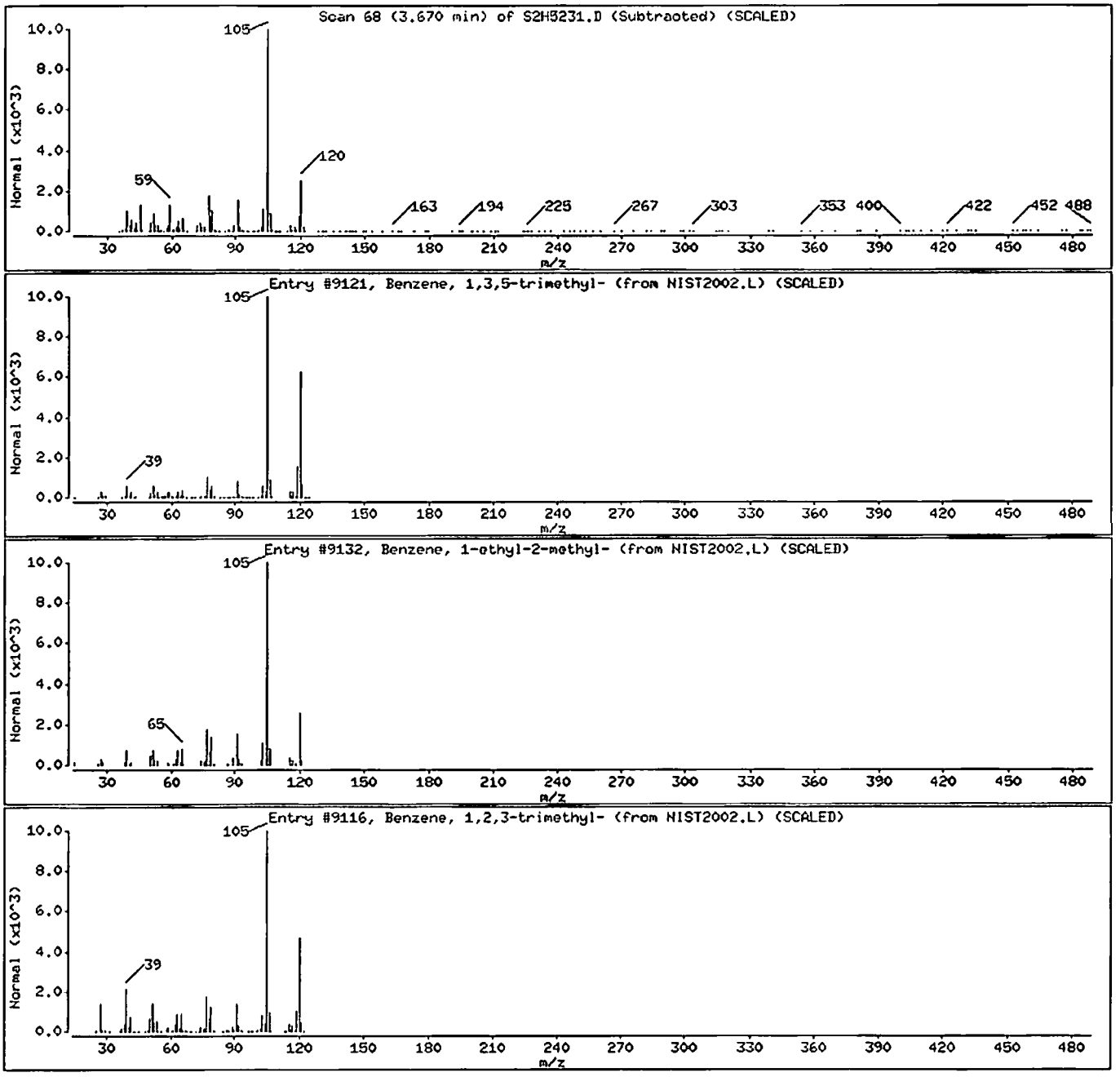
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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
Benzene, 1,3,5-trimethyl-	108-67-8	NIST2002.L	9121	94	C9H12	120
Benzene, 1-ethyl-2-methyl-	611-14-3	NIST2002.L	9132	93	C9H12	120
Benzene, 1,2,3-trimethyl-	526-73-8	NIST2002.L	9116	93	C9H12	120



Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5231.D

Date : 04-NOV-2011 16:39

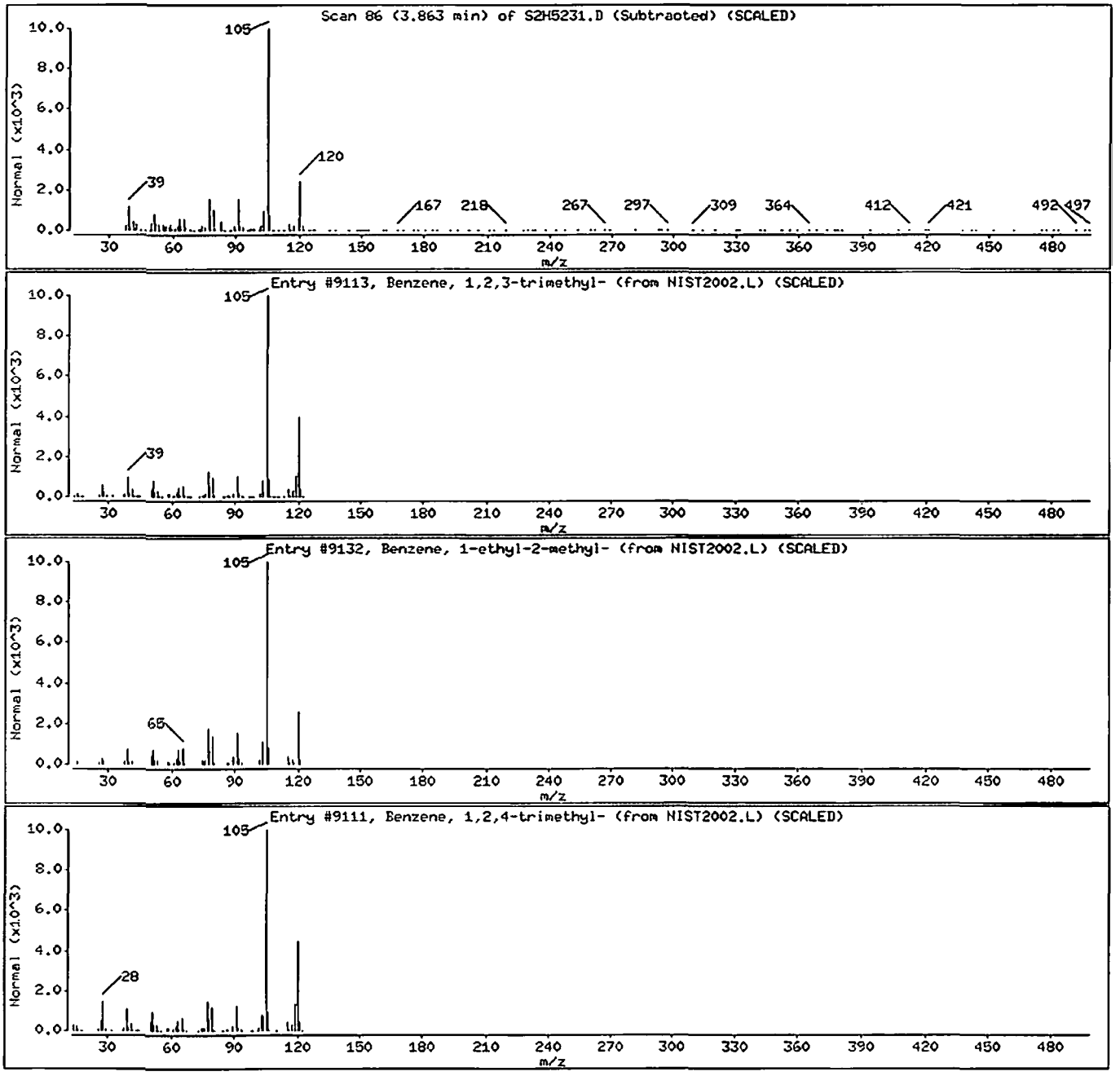
Client ID: M30X4 Instrument: S2.i

Sample Info: K2213-01A,,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
Benzene, 1,2,3-trimethyl-	526-73-8	NIST2002.L	9113	91	C9H12	120
Benzene, 1-ethyl-2-methyl-	611-14-3	NIST2002.L	9132	91	C9H12	120
Benzene, 1,2,4-trimethyl-	95-63-6	NIST2002.L	9111	91	C9H12	120



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Date : 04-NOV-2011 16:39

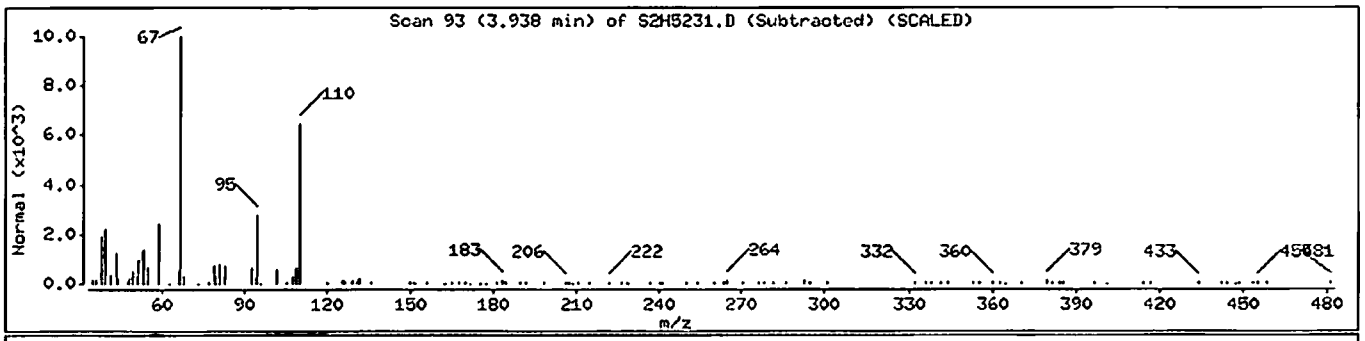
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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\S2H5231.D

Date : 04-NOV-2011 16:39

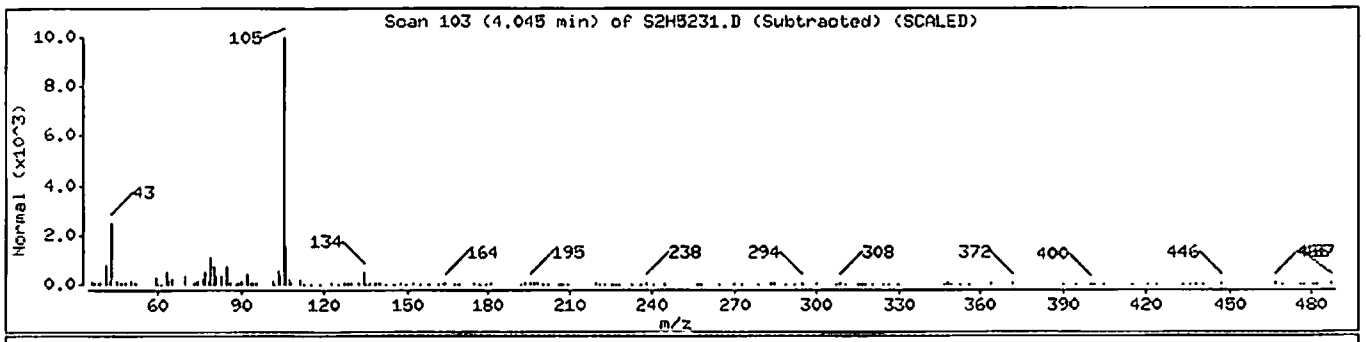
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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\S2H5231.D

Date : 04-NOV-2011 16:39

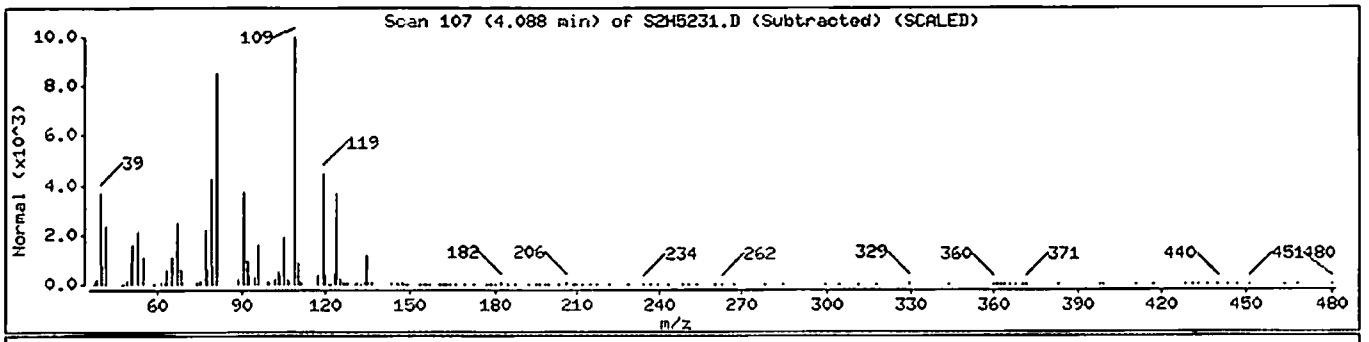
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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\S2H5231.D

Date : 04-NOV-2011 16:39

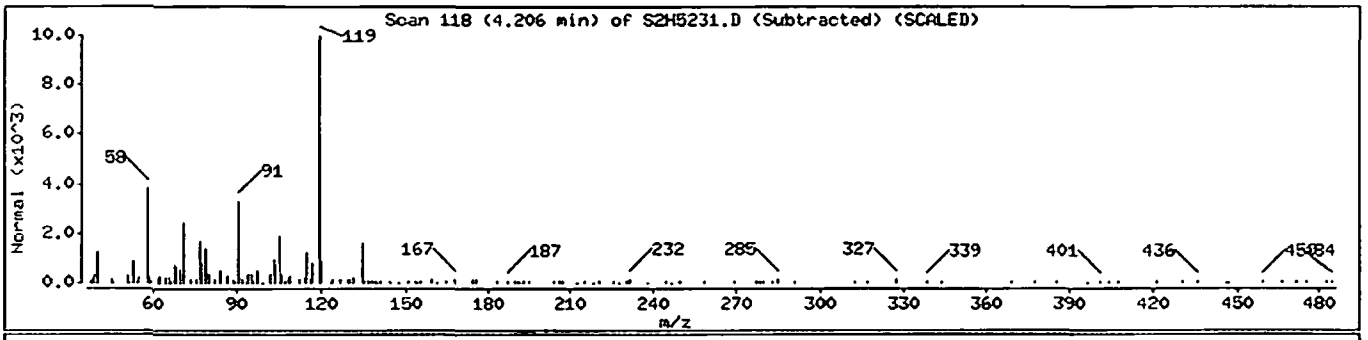
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,62685,,

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\111104.B\S2H5231.D

Date : 04-NOV-2011 16:39

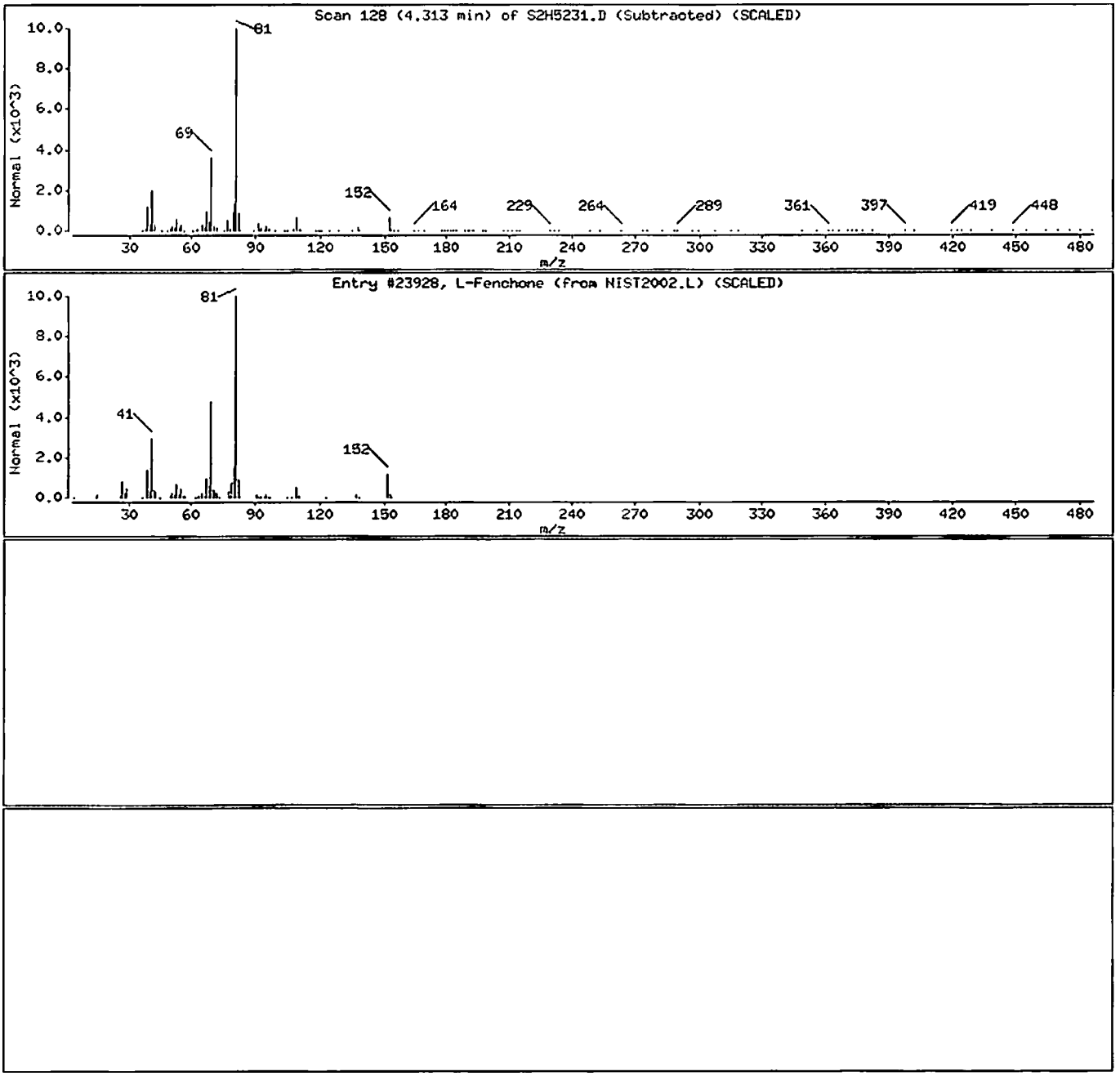
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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
L-Fenchone	126-21-6	NIST2002.L	23928	91	C10H16O	152



Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5231.D

Date : 04-NOV-2011 16:39

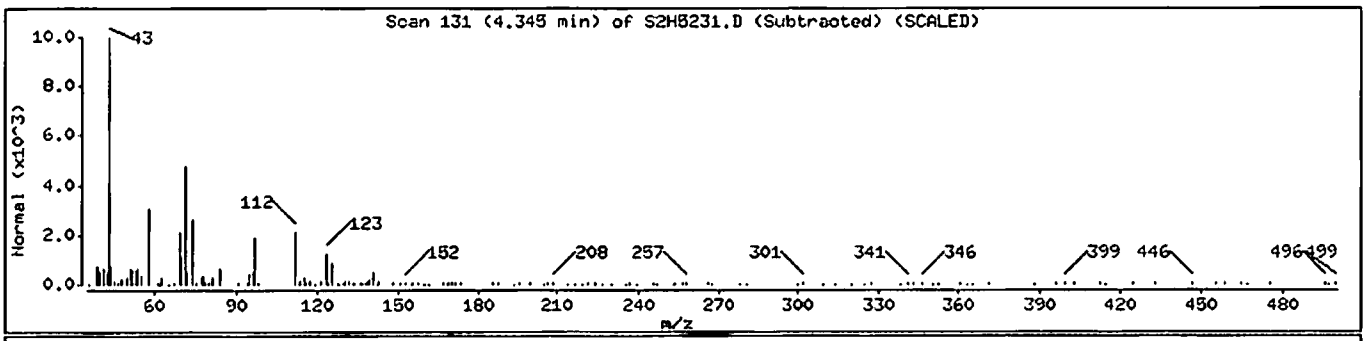
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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\S2H5231.D

Date : 04-NOV-2011 16:39

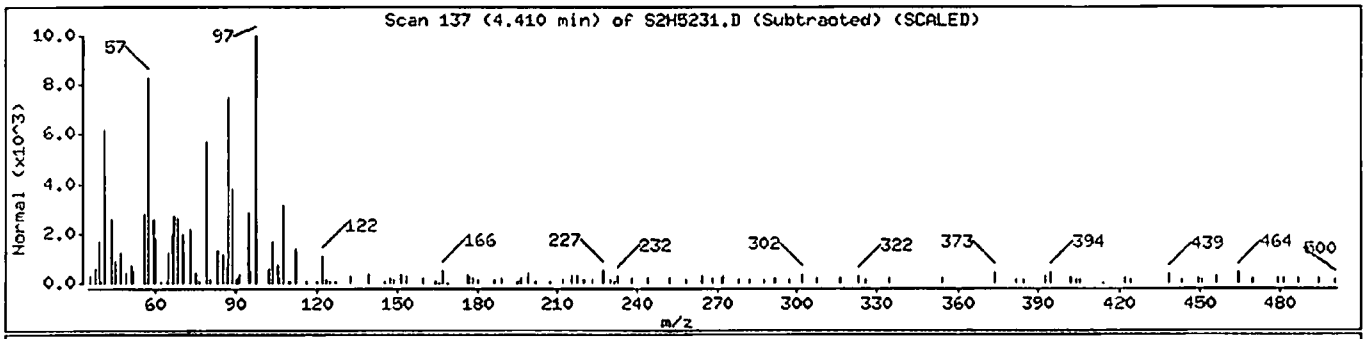
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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\S2H5231.D

Date : 04-NOV-2011 16:39

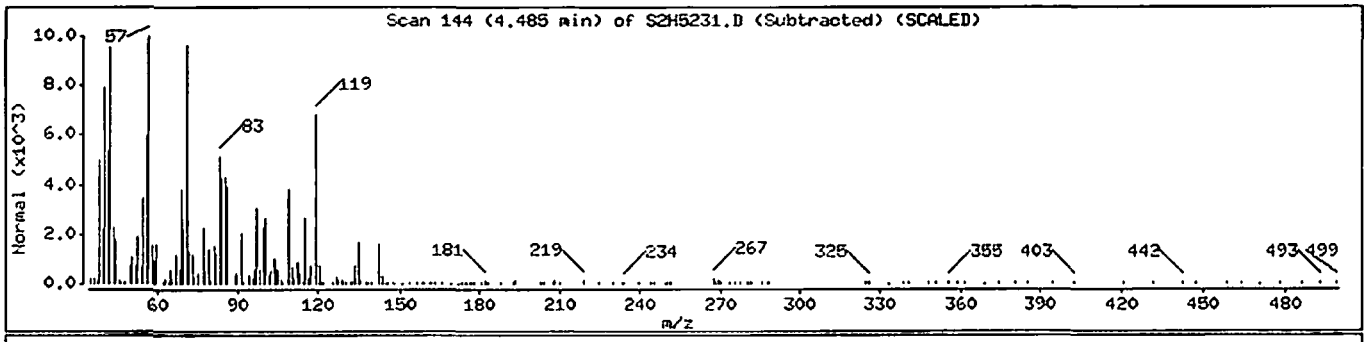
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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\S2H5231.D

Date : 04-NOV-2011 16:39

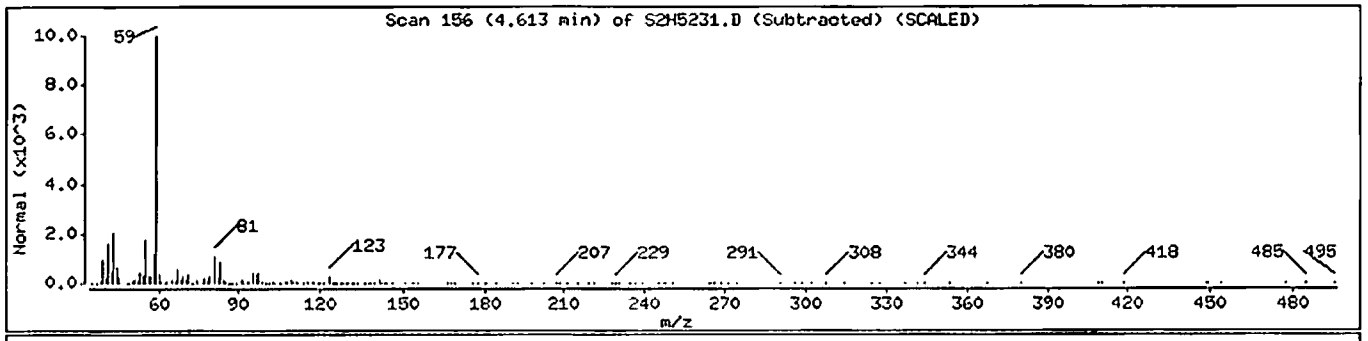
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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\S2H5231.D

Date : 04-NOV-2011 16:39

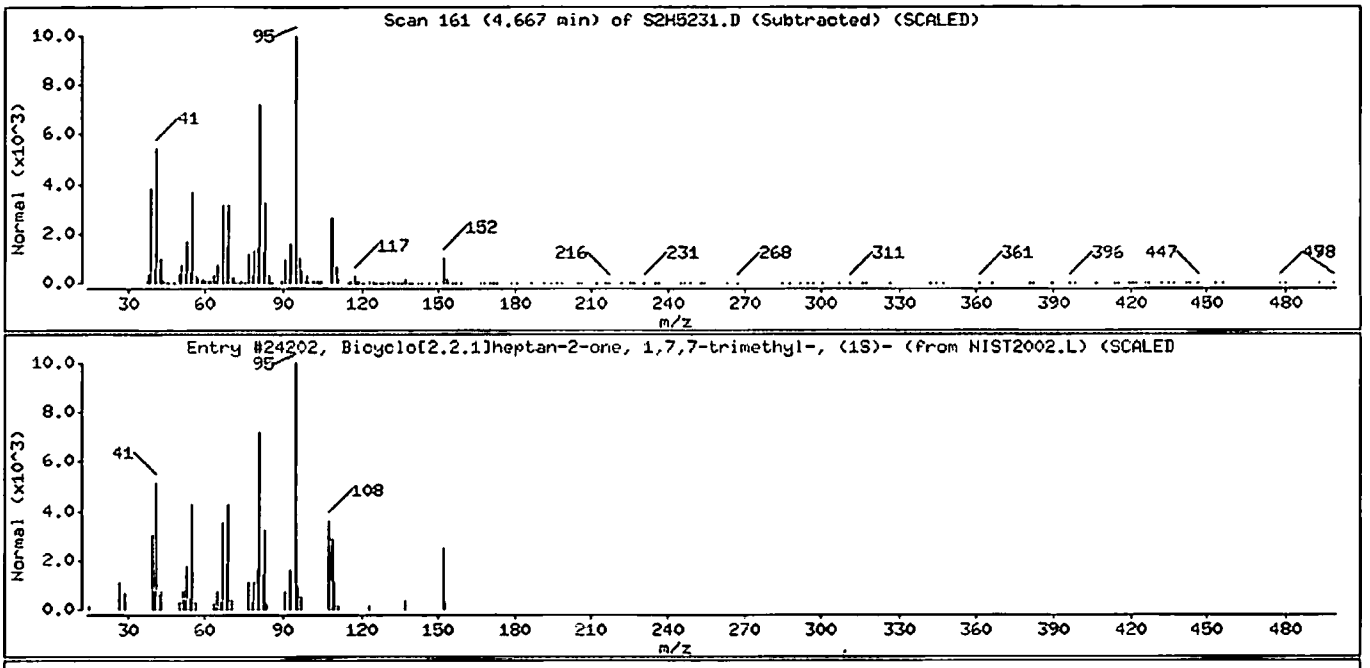
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet	464-48-2	NIST2002.L	24202	94	C10H16O	152



Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5231.D

Date : 04-NOV-2011 16:39

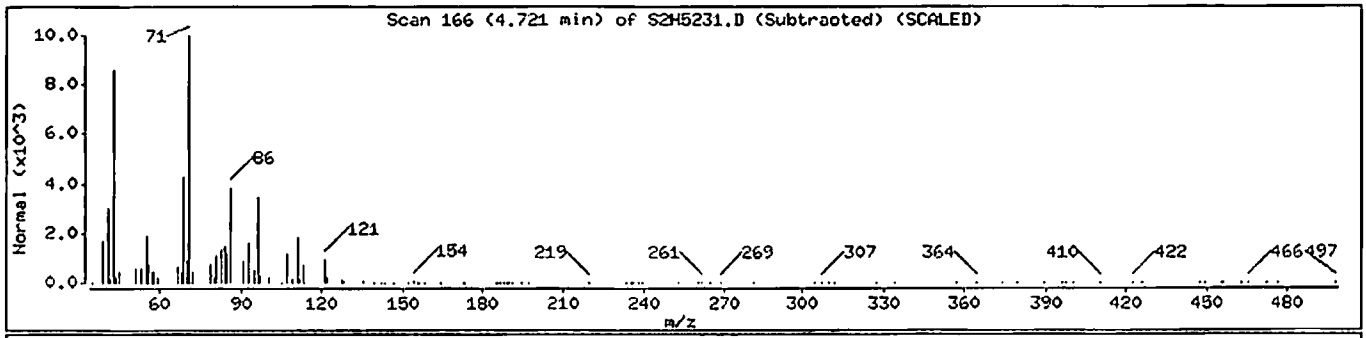
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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



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Date : 04-NOV-2011 16:39

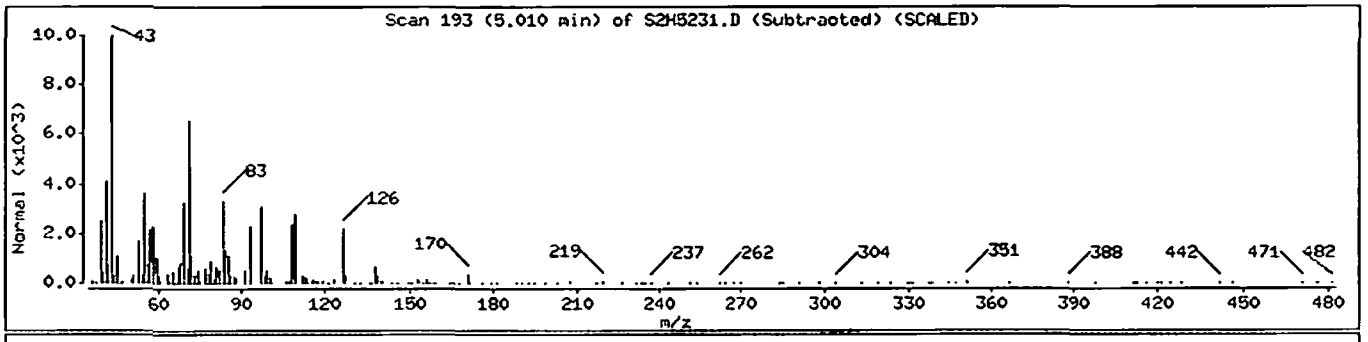
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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



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Date : 04-NOV-2011 16:39

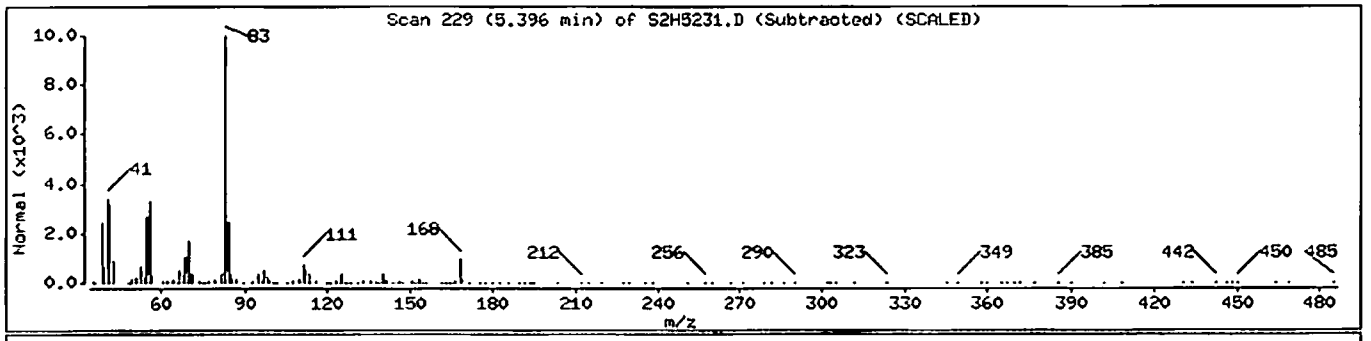
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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\S2H5231.D

Date : 04-NOV-2011 16:39

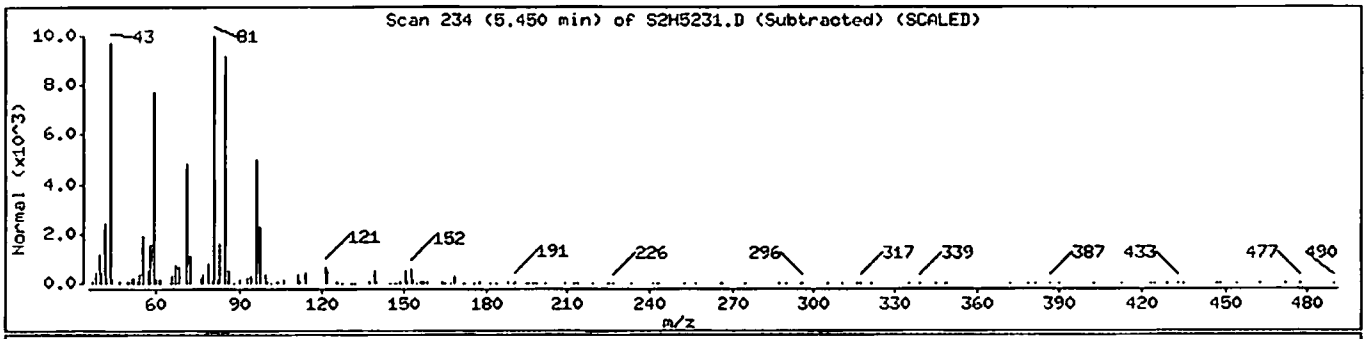
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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\S2H5231.D

Date : 04-NOV-2011 16:39

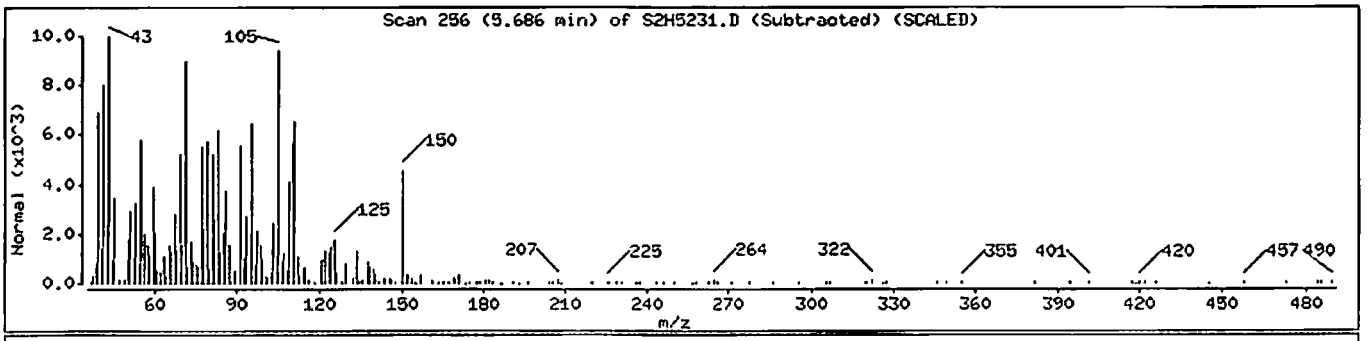
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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\S2H5231.D

Date : 04-NOV-2011 16:39

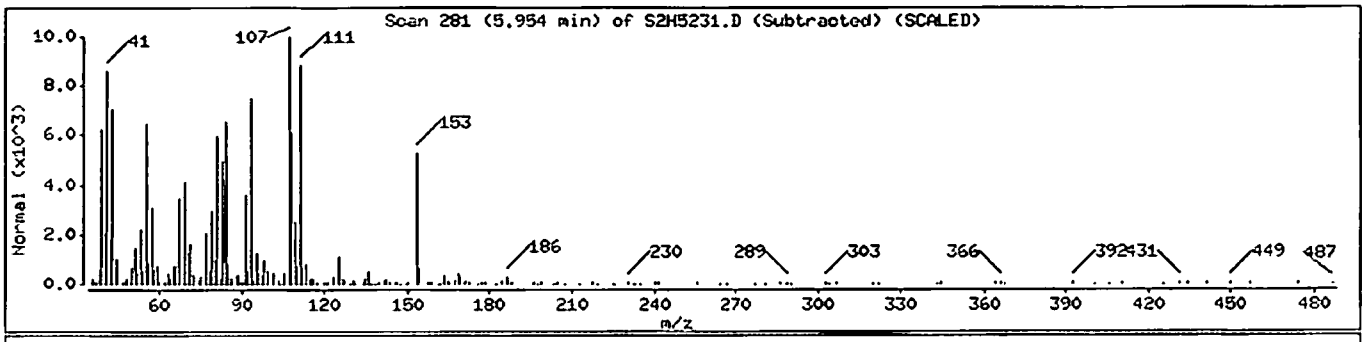
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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\S2H5231.D

Date : 04-NOV-2011 16:39

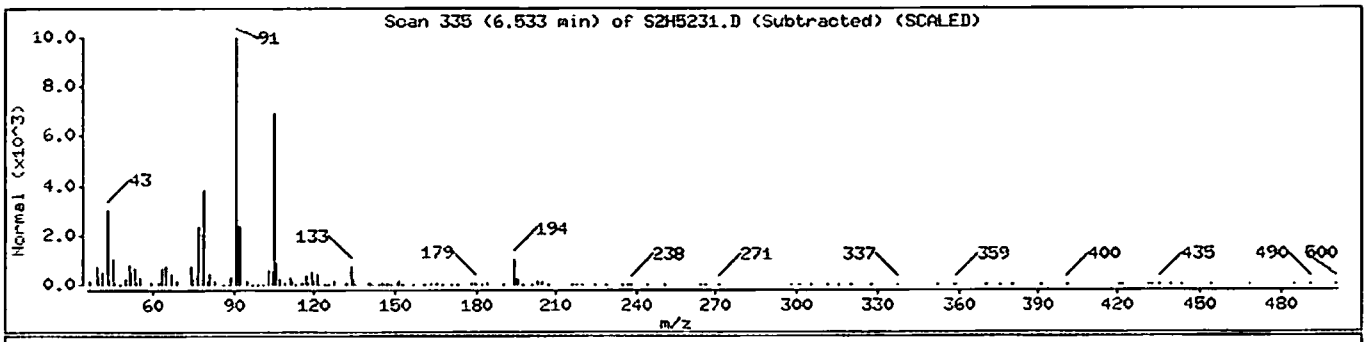
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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\S2H5231.D

Date : 04-NOV-2011 16:39

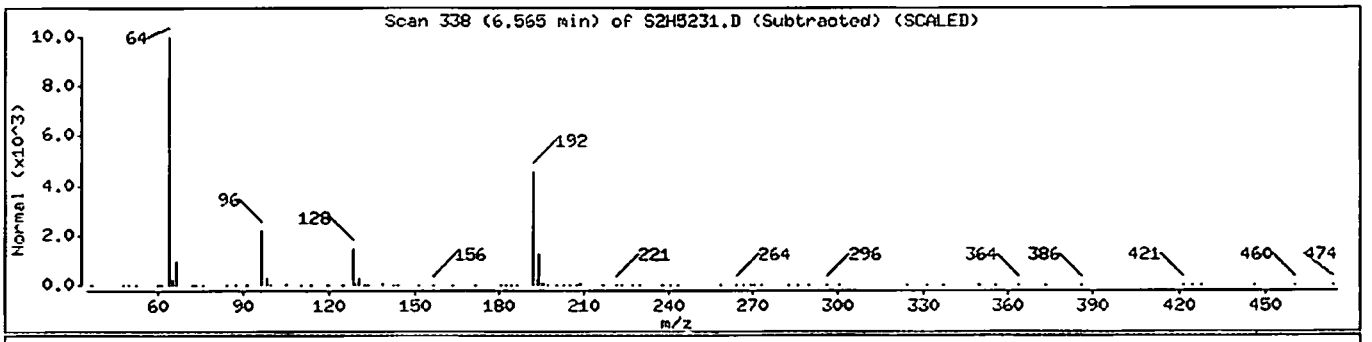
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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\S2H5231.D

Date : 04-NOV-2011 16:39

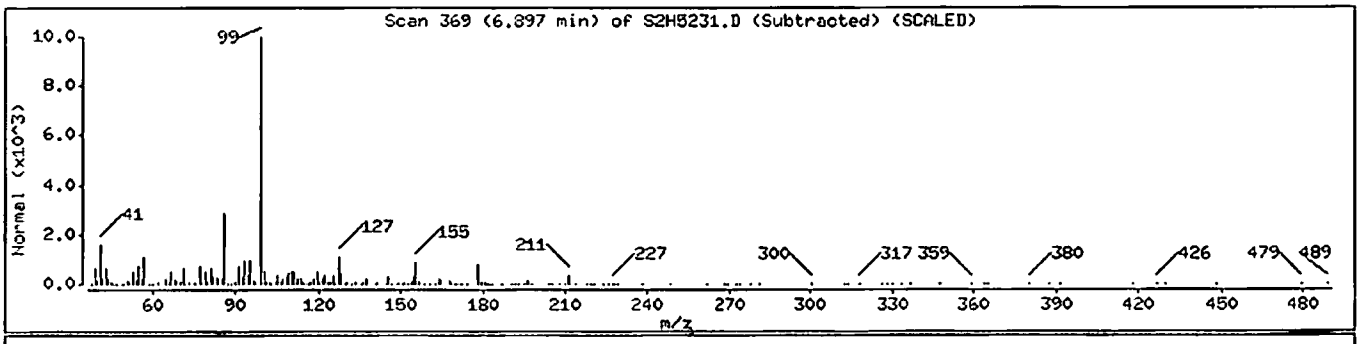
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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\S2H5231.D

Date : 04-NOV-2011 16:39

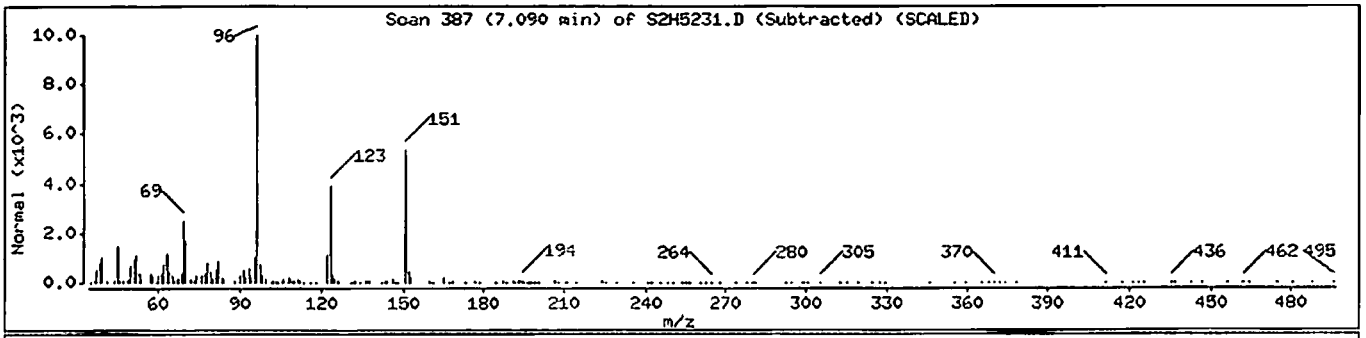
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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\S2H5231.D

Date : 04-NOV-2011 16:39

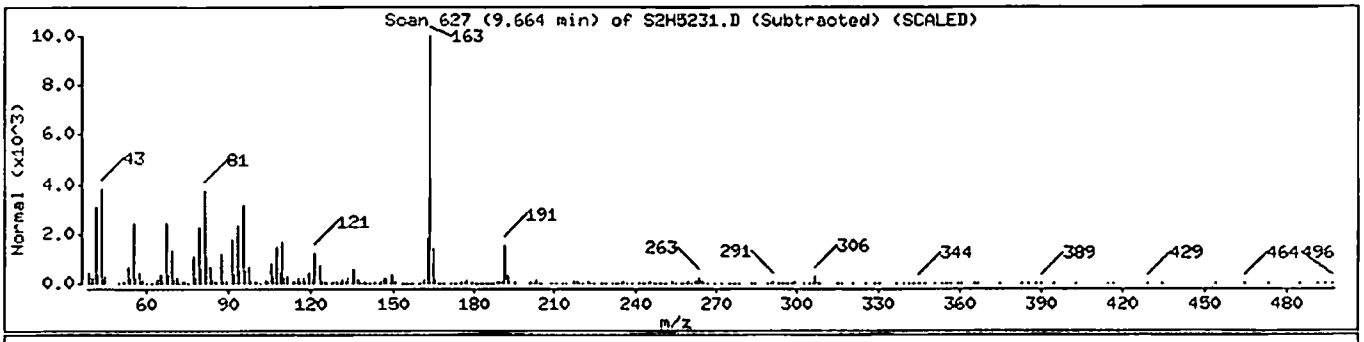
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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

EPA SAMPLE NO.

H30X6

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-06A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8652.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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

EPA SAMPLE NO.

H30X6

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-06A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8652.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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	1.2	J
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	1.2	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	1.0	J
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

EPA SAMPLE NO.

H30X6

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-06A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8652.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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	2.885	3.3	J
02	1000162-25-4	Cyclopentene, 3-isopropenyl-	3.020	8.5	NJ
03		Unknown-02	3.268	11	J
04		Unknown-03	3.330	2.7	J
05		Unknown-04	3.475	2.6	J
06		Unknown-05	3.548	2.2	J
07		Unknown-06	3.775	10	J
08	76-22-2	Camphor	4.200	40	NJ
09		Unknown-07	4.252	8.9	J
10		Unknown-08	4.883	59	J
11		Unknown-09	4.976	40	J
12		Unknown-10	5.069	5.1	J
13		Unknown-11	5.297	18	J
	E966796[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8652.D
Report Date: 11-Nov-2011 14:03

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8652.D
Lab Smp Id: K2213-06A Client Smp ID: H30X6
Inj Date : 11-NOV-2011 00:15
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-06A,,62806,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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	3.050	3.050	(0.905)	104651	77.7420	39
$	4 bis(2-Chloroethyl)ether-d8	67	3.113	3.112	(0.923)	64694	64.6123	32
$	6 2-Chlorophenol-d4	132	3.206	3.206	(0.951)	110334	69.8458	35
•	8 1,4-Dichlorobenzene-d4	152	3.371	3.371	(1.000)	50057	40.0000	(Q)
$	11 4-Methylphenol-d8	113	3.609	3.609	(1.071)	104560	73.3469	37
$	16 Nitrobenzene-d5	128	3.796	3.796	(0.657)	48492	68.5540	34(Q)
$	19 2-Nitrophenol-d4	143	4.075	4.075	(0.921)	61004	67.6613	34
$	23 2,4-Dichlorophenol-d3	165	4.282	4.282	(0.967)	126036	74.6022	37
•	25 Naphthalene-d8	136	4.427	4.427	(1.000)	168982	40.0000	
$	27 4-Chloroaniline-d4	131	4.520	4.468	(1.021)	4324	2.59412	1.3(aQH)
$	40 Dimethylphthalate-d6	166	5.783	5.772	(0.951)	391553	66.9094	33
$	43 Acenaphthylene-d8	160	5.938	5.938	(0.976)	399714	61.6875	31
-	46 Acenaphthene-d10	164	6.083	6.083	(1.000)	147998	40.0000	
$	49 4-Nitrophenol-d4	143	6.187	6.166	(1.017)	72502	65.8087	33
	53 Diethylphthalate	149	6.487	6.487	(1.066)	14576	2.42636	1.2(a)
$	54 Fluorene-d10	176	6.590	6.590	(1.083)	328485	62.9590	31
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.642	6.642	(0.882)	88039	65.7511	33
•	65 Phenanthrene-d10	188	7.532	7.532	(1.000)	333809	40.0000	
$	67 Anthracene-d10	188	7.594	7.584	(1.008)	618762	67.4926	34
	70 Di-n-butylphthalate	149	8.081	8.081	(1.073)	24227	2.49762	1.2(a)
$	72 Pyrene-d10	212	8.929	8.929	(0.881)	674589	69.9219	35

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8652.D
Report Date: 11-Nov-2011 14:03

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
	79 bis(2-Ethylhexyl)phthalate	149	10.099	10.099	(0.997)	14749	2.03219	1.0(a)
*	77 Chrysene-d12	240	10.130	10.120	(1.000)	494983	40.0000	(Q)
$	83 Benzo(a)pyrene-d12	264	11.714	11.703	(0.990)	462466	45.9043	23
*	85 Perylene-d12	264	11.827	11.817	(1.000)	454654	40.0000	

QC Flag Legend

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

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8652.D
Report Date: 11-Nov-2011 14:03

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8652.D
Lab Smp Id: K2213-06A Client Smp ID: H30X6
Inj Date : 11-NOV-2011 00:15
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-06A,,62806,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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
* 8 1,4-Dichlorobenzene-d4	3.372	406055	40.000
* 25 Naphthalene-d8	4.427	585085	40.000
* 46 Acenaphthene-d10	6.084	710748	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.885	67340	6.63357161	3.3	0		0	8
Cyclopentene, 3-isopropenyl-5,5-dimethyl				CAS #: 1000162-25-4			
3.020	172937	17.0357592	8.5	87	NIST2002.L	15283	8
Unknown				CAS #:			
3.268	221330	21.8029162	11	0		0	8
Unknown				CAS #:			
3.330	54759	5.39418909	2.7	0		0	8

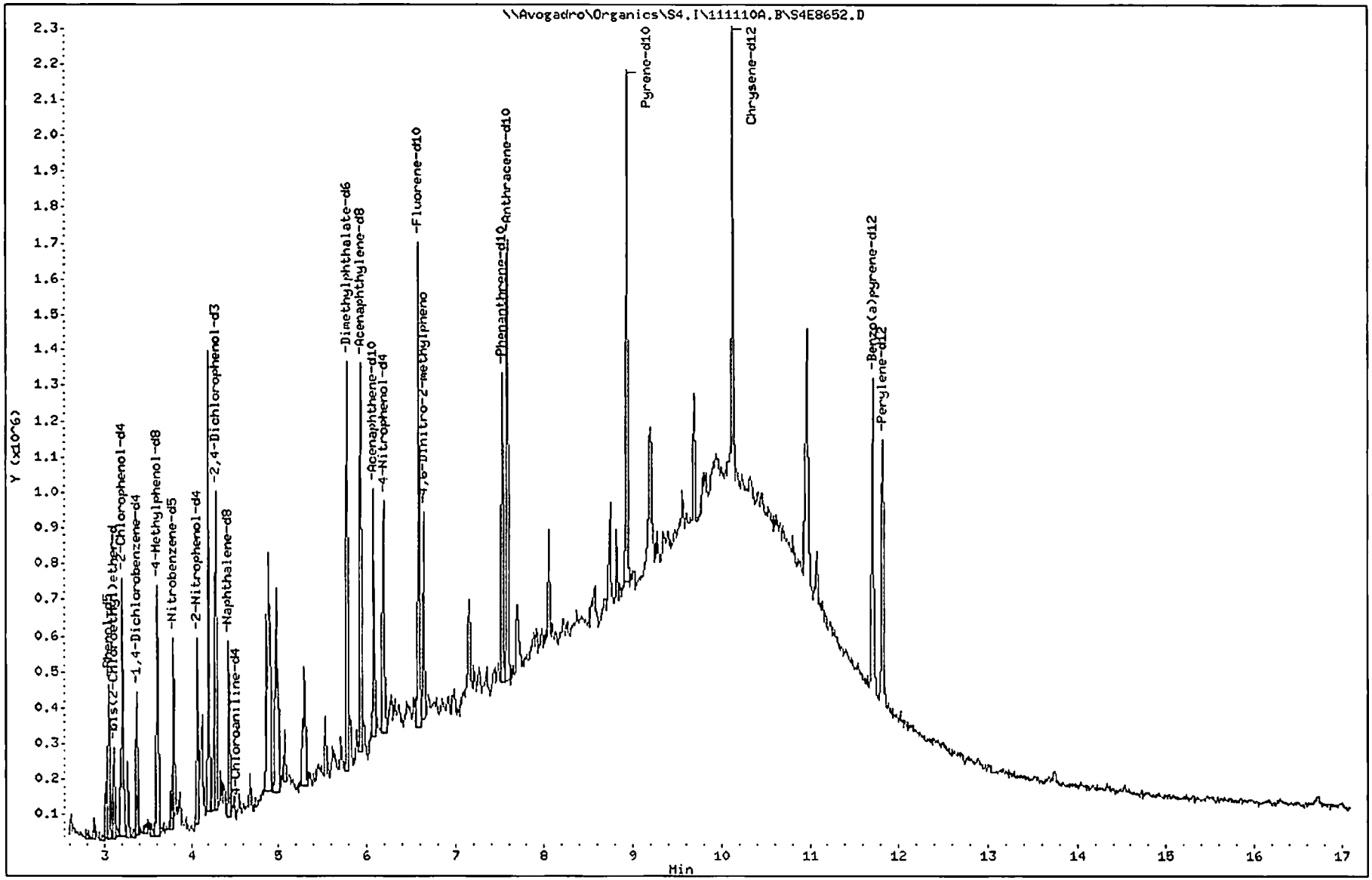
Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8652.D
Report Date: 11-Nov-2011 14:03

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
3.475	53099	5.23067135	2.6	0		0	8
Unknown				CAS #:			
3.548	44381	4.37191263	2.2	0		0	8
Unknown				CAS #:			
3.775	205730	20.2662287	10	0		0	8
Camphor				CAS #: 76-22-2			
4.200	1181932	80.8041046	40	96	NIST2002.L	23919	25
Unknown				CAS #:			
4.252	261053	17.8472159	8.9	0		0	25
Unknown				CAS #:			
4.883	1713649	117.155533	59	0		0	25
Unknown				CAS #:			
4.976	1179150	80.6139046	40	0		0	25
Unknown				CAS #:			
5.069	149976	10.2532489	5.1	0		0	25
Unknown				CAS #:			
5.297	655472	36.8891118	18	0		0	46

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8652.D
Date : 11-NOV-2011 00:15
Client ID: H30X6
Sample Info: K2213-06A,,62806,,
Volume Injected (uL): 2.0
Column phase: RXI-5SILMS

Instrument: S4.i

Operator: MMS SRC: LIMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8652.D

Date : 11-NOV-2011 00:15

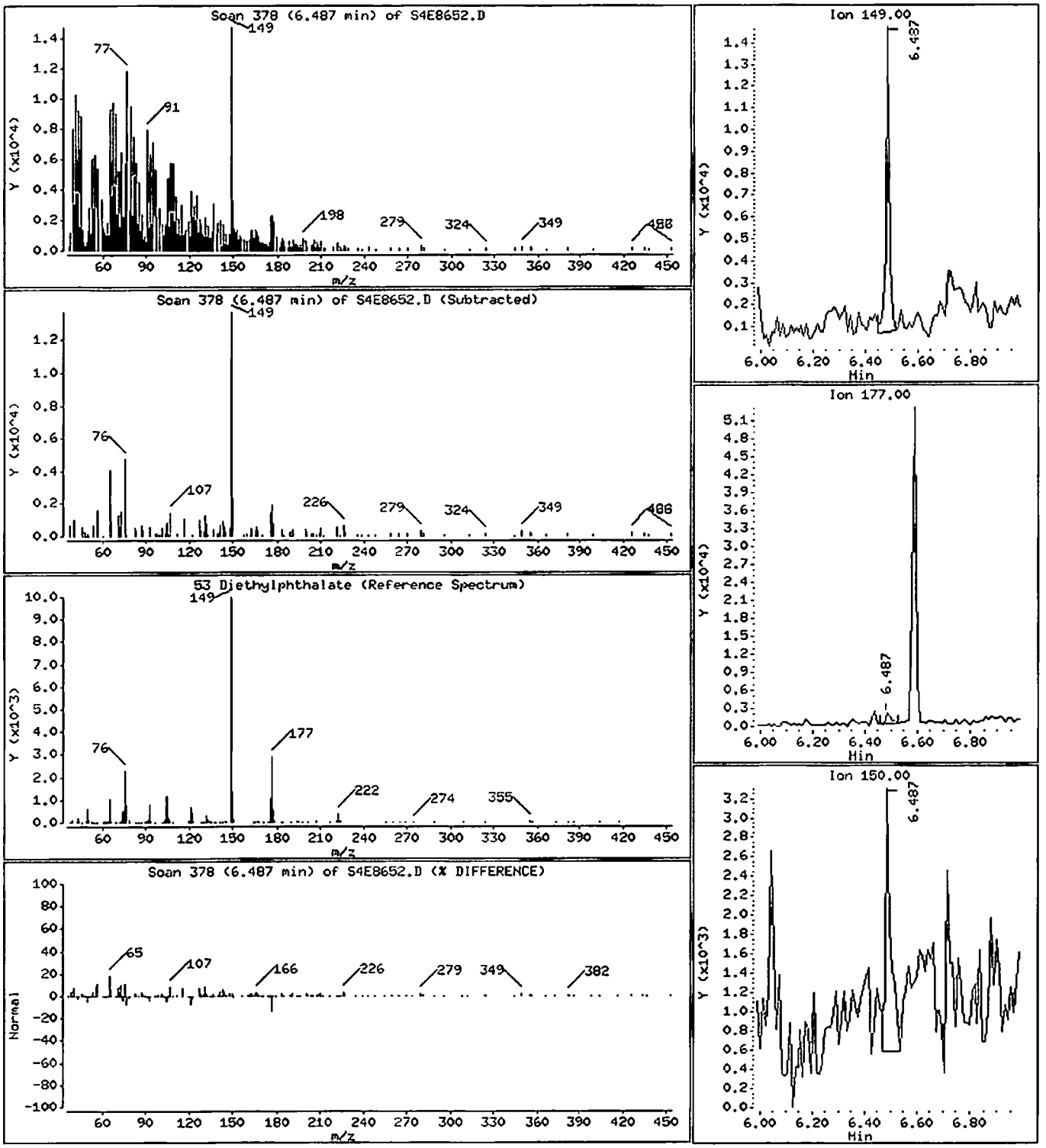
Client ID: H30X6 Instrument: S4.i

Sample Info: K2213-06A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

53 Diethylphthalate Concentration: 1.2 ug/L



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Date : 11-NOV-2011 00:15

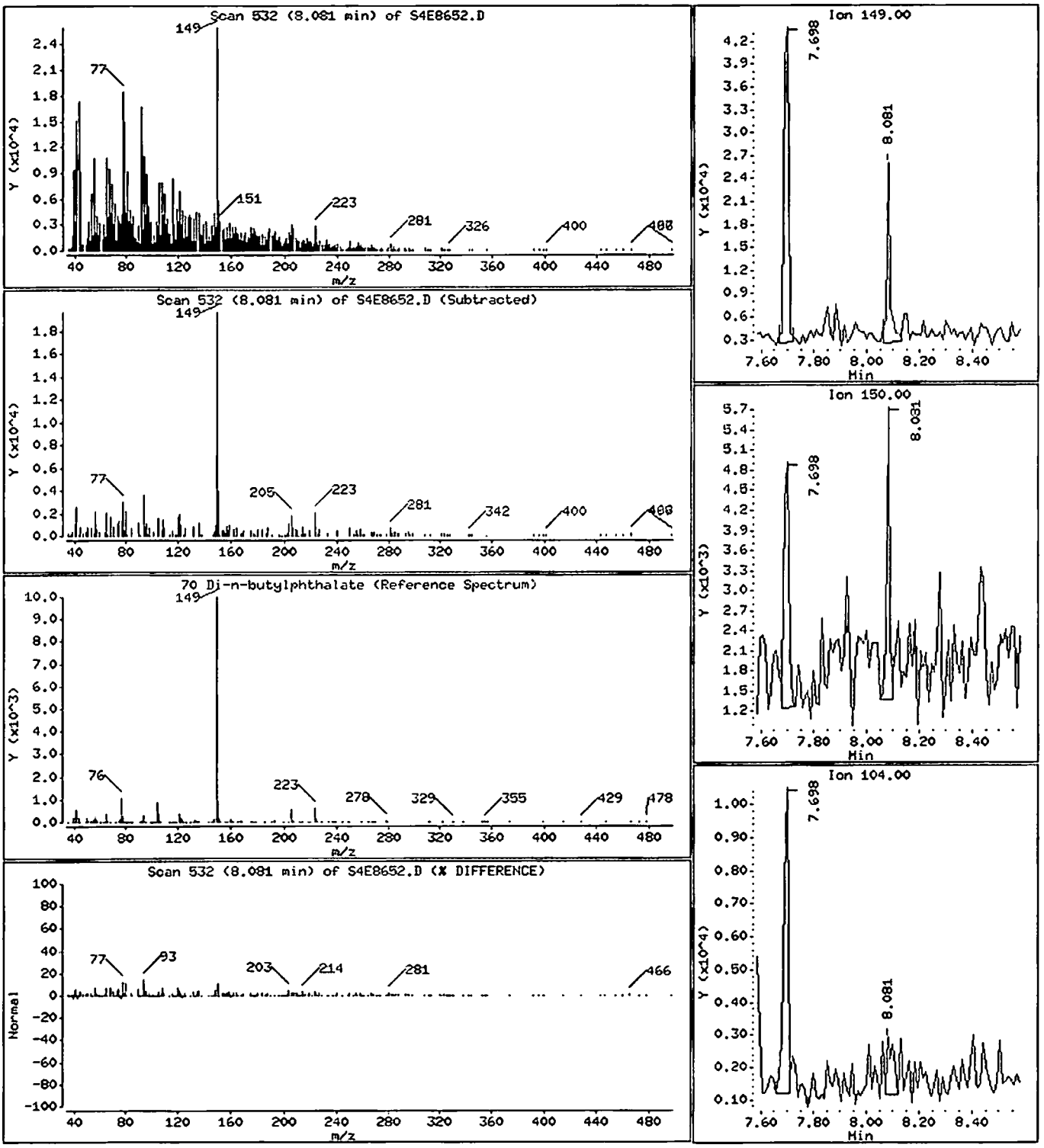
Client ID: H30X6 Instrument: S4.i

Sample Info: K2213-06A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

70 Di-n-butylphthalate Concentration: 1.2 ug/L



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Date : 11-NOV-2011 00:15

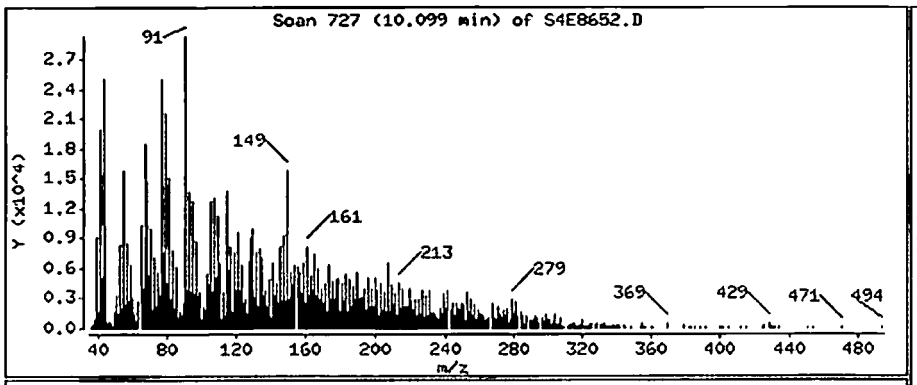
Client ID: H30X6 Instrument: S4.i

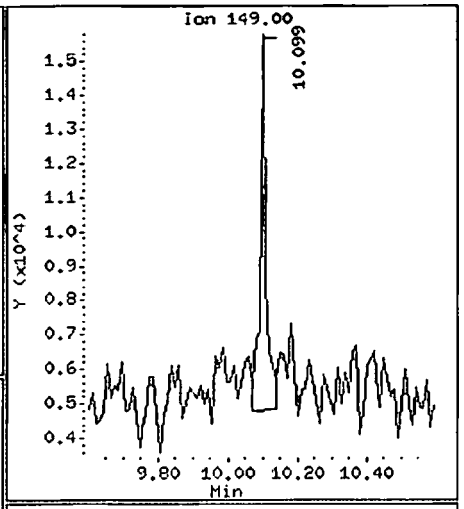
Sample Info: K2213-06A,,62806,,

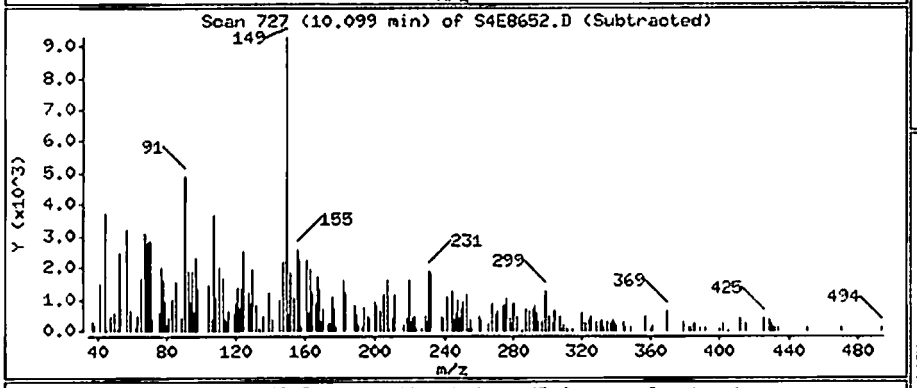
Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

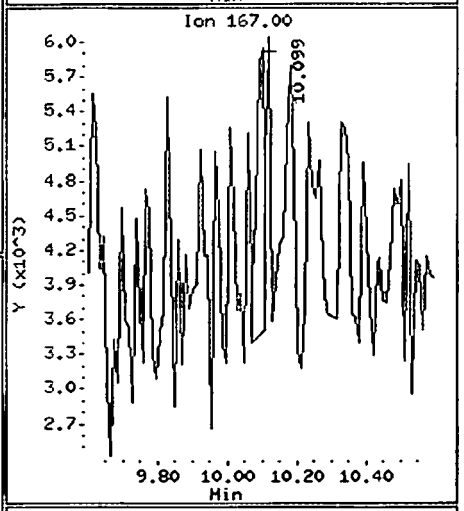
Column phase: RXI-5SILMS Column diameter: 0.25

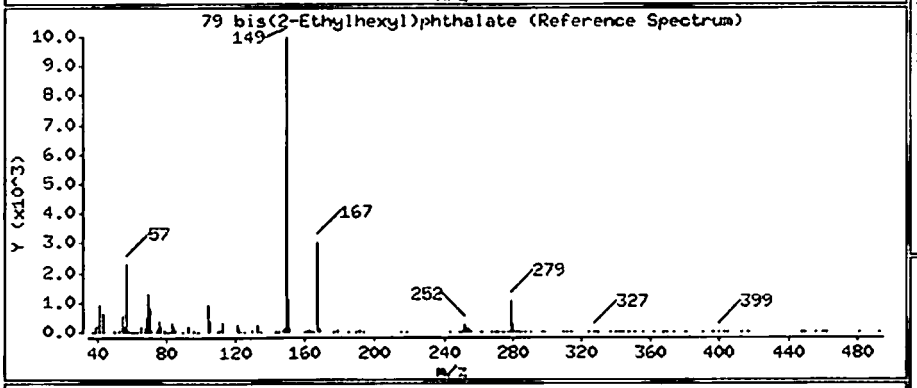
79 bis(2-Ethylhexyl)phthalate Concentration: 1.0 ug/L

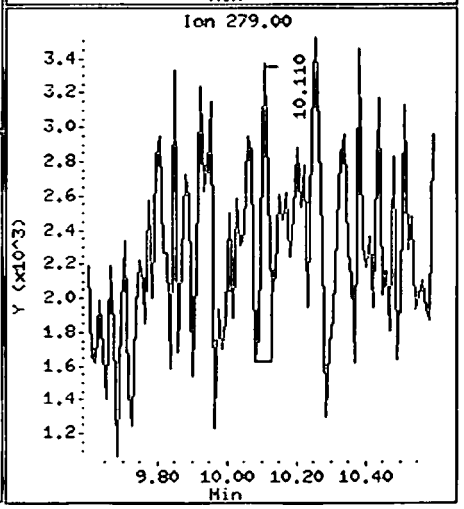


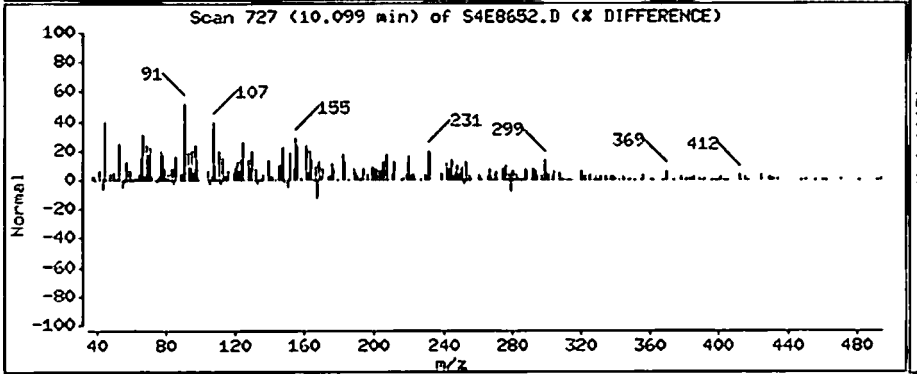












Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8652.D

Date : 11-NOV-2011 00:15

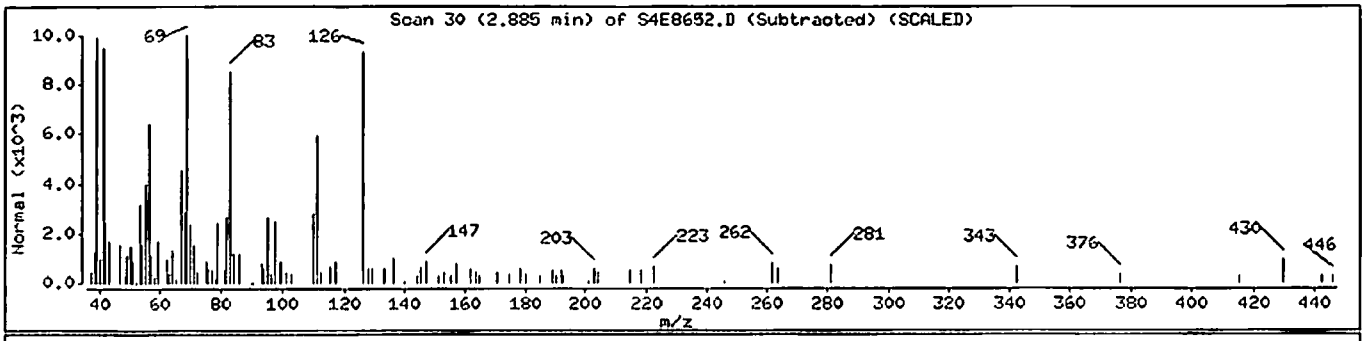
Client ID: H30X6 Instrument: S4.i

Sample Info: K2213-06A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 11-NOV-2011 00:15

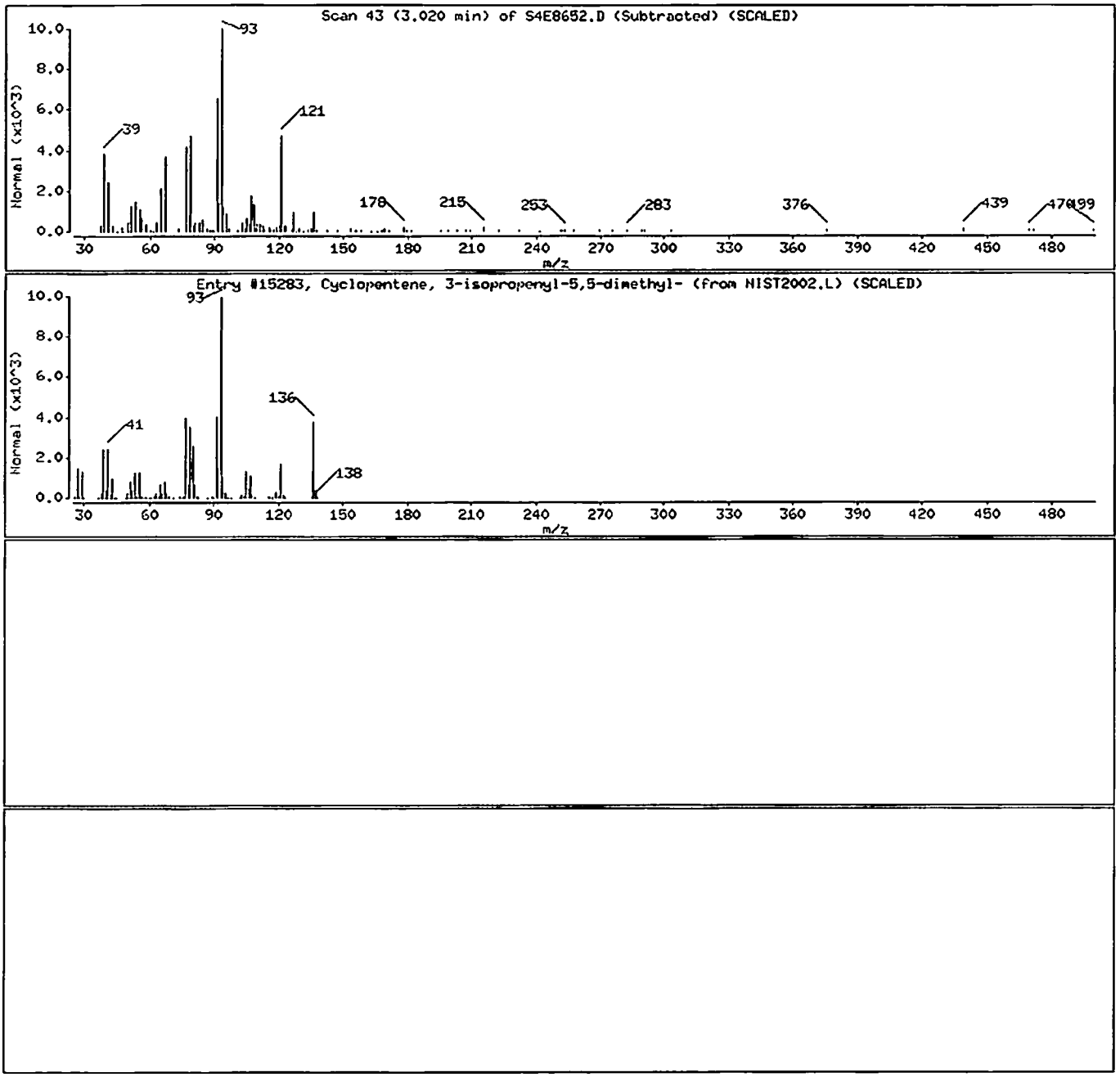
Client ID: H30X6 Instrument: S4.i

Sample Info: K2213-06A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclopentene, 3-isopropenyl-5,5-dimethyl	1000162-25-4	NIST2002.L	15283	87	C10H16	136



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8652.D

Date : 11-NOV-2011 00:15

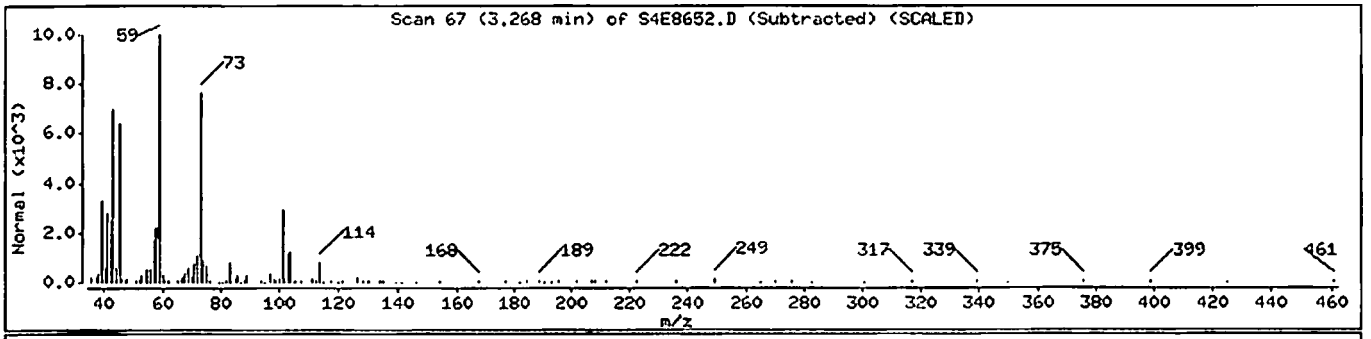
Client ID: H30X6 Instrument: S4.i

Sample Info: K2213-06A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 11-NOV-2011 00:15

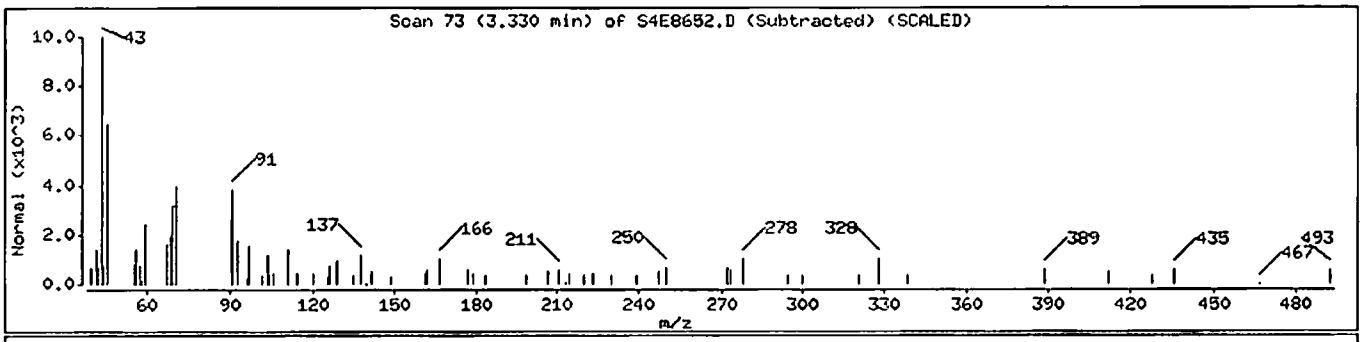
Client ID: H30X6 Instrument: S4.i

Sample Info: K2213-06A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 11-NOV-2011 00:15

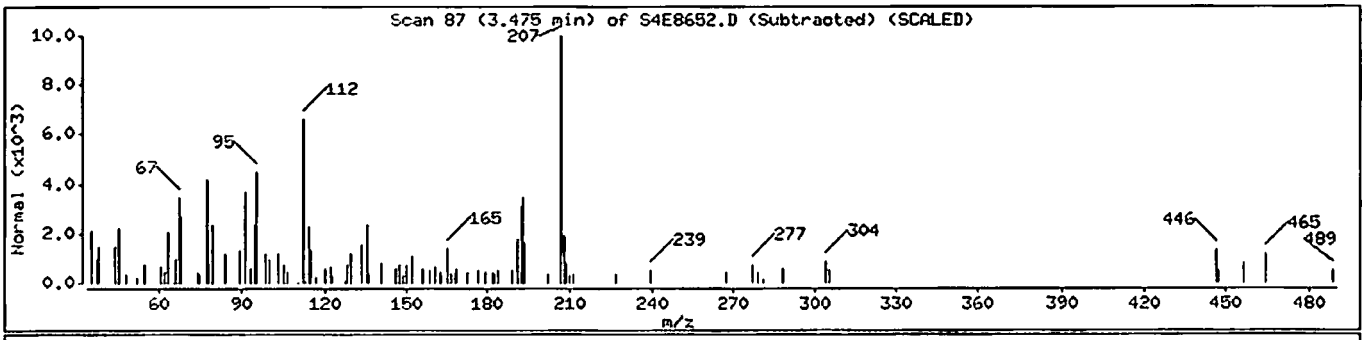
Client ID: H30X6 Instrument: S4.i

Sample Info: K2213-06A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8652.D

Date : 11-NOV-2011 00:15

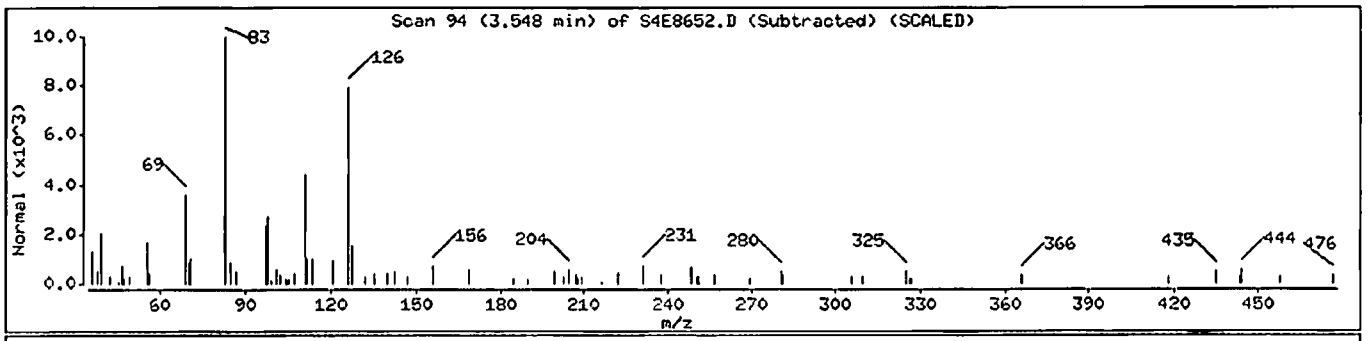
Client ID: H30X6 Instrument: S4.i

Sample Info: K2213-06A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 11-NOV-2011 00:15

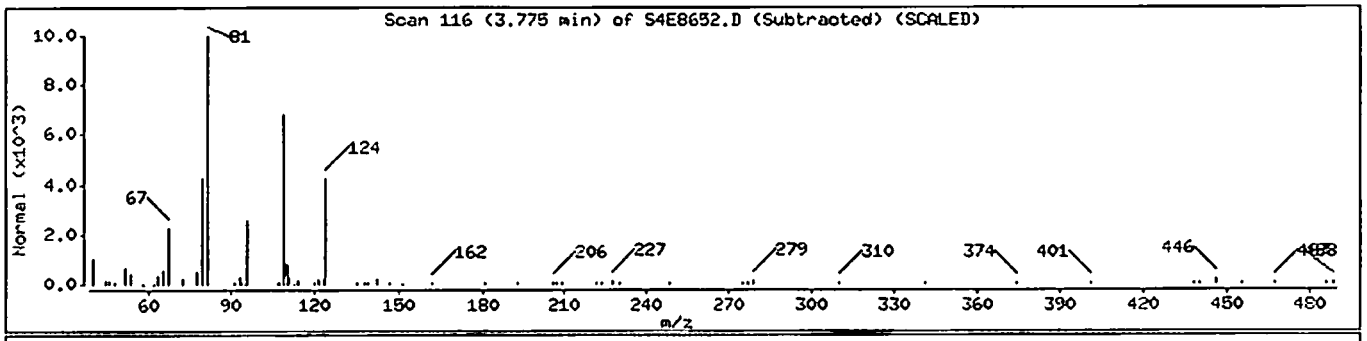
Client ID: H30X6 Instrument: S4.i

Sample Info: K2213-06A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 11-NOV-2011 00:15

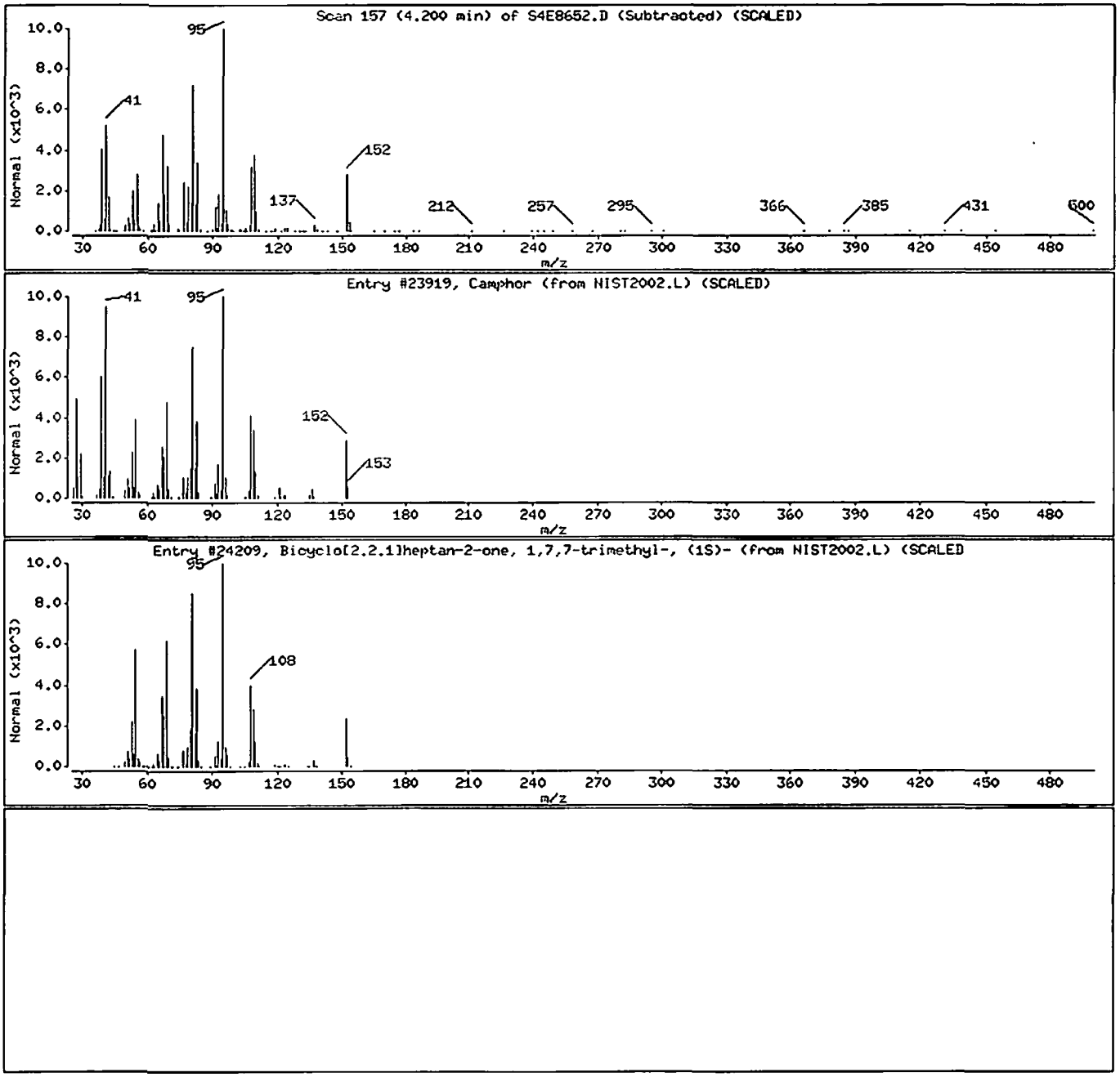
Client ID: H30X6 Instrument: S4.i

Sample Info: K2213-06A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Camphor	76-22-2	NIST2002.L	23919	96	C10H16O	152
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet	464-48-2	NIST2002.L	24209	94	C10H16O	152



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8652.D

Date : 11-NOV-2011 00:15

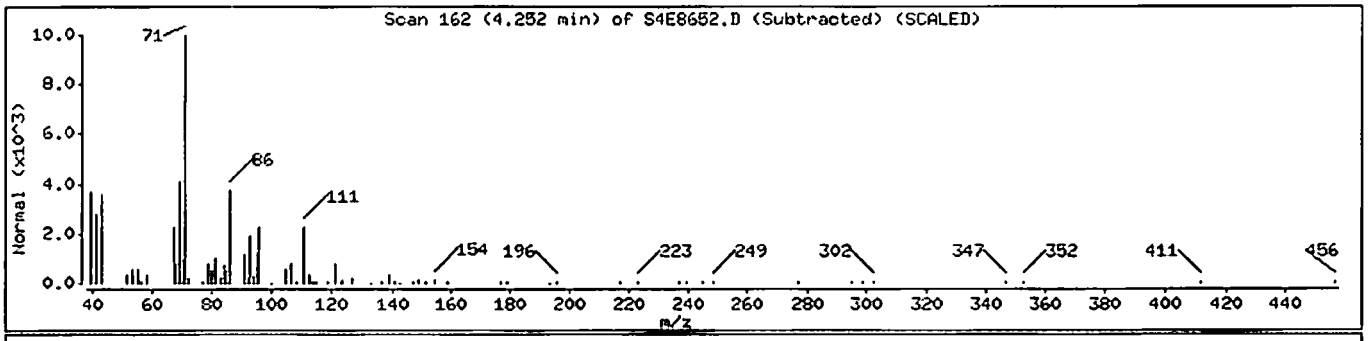
Client ID: H30X6 Instrument: S4.i

Sample Info: K2213-06A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8652.D

Date : 11-NOV-2011 00:15

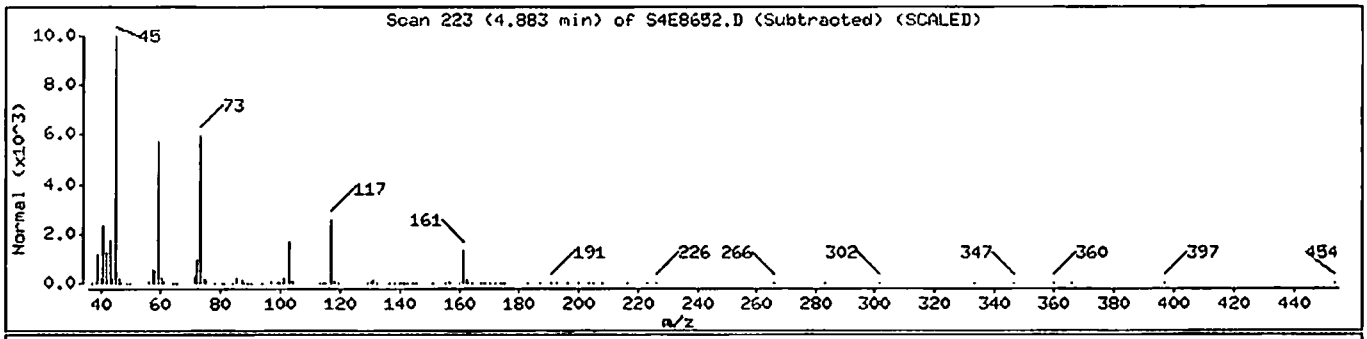
Client ID: H30X6 Instrument: S4.i

Sample Info: K2213-06A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.i\111110A.B\S4E8652.D

Date : 11-NOV-2011 00:15

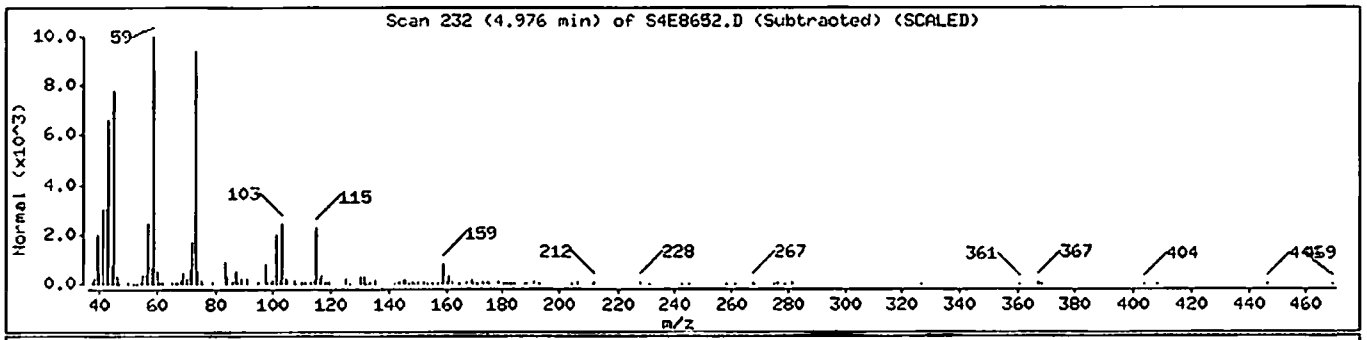
Client ID: H30X6 Instrument: S4.i

Sample Info: K2213-06A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 11-NOV-2011 00:15

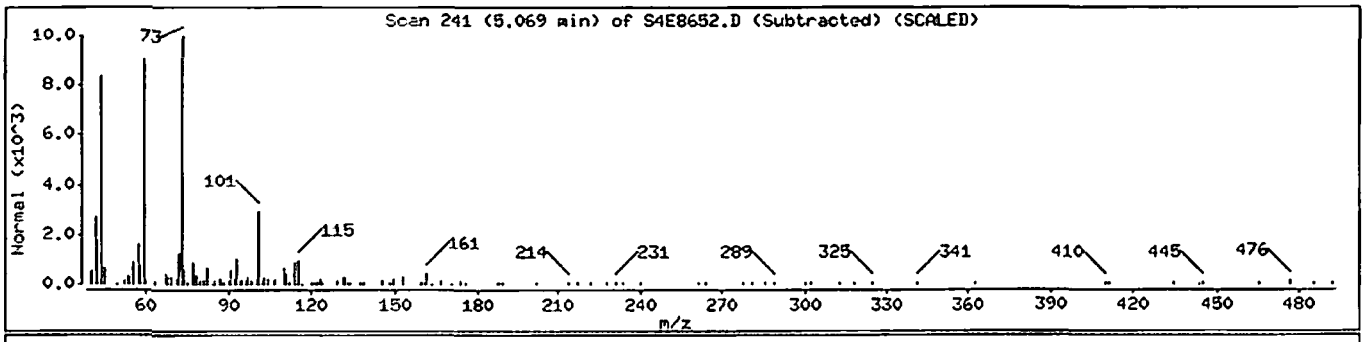
Client ID: H30X6 Instrument: S4.i

Sample Info: K2213-06A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 11-NOV-2011 00:15

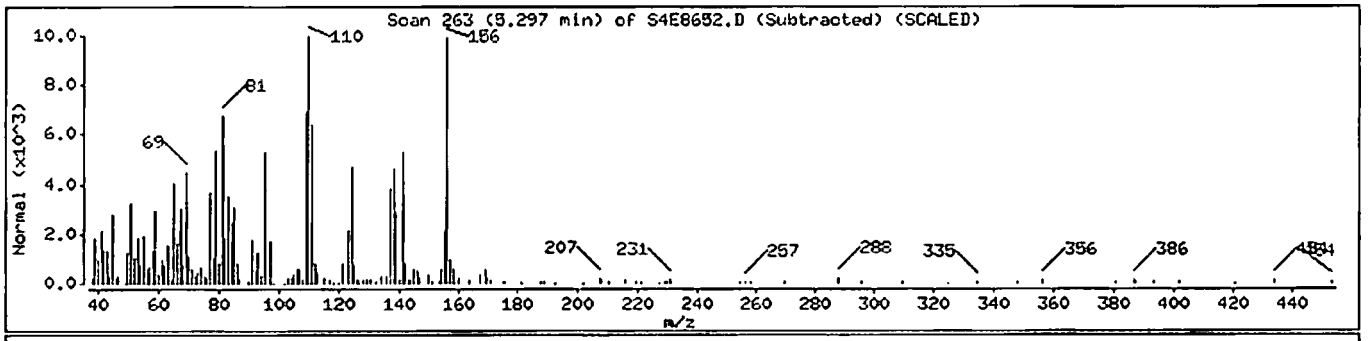
Client ID: H30X6 Instrument: S4.i

Sample Info: K2213-06A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30X7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-07A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8666.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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

EPA SAMPLE NO.

H30X7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-07A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8666.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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	1.2	J
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	1.3	J
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

EPA SAMPLE NO.: H30X7

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

Lab Code: MITKEM | Case No.: 41926 | Mod. Ref No.: | SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER | Lab Sample ID: K2213-07A

Sample wt/vol: 1000 (g/mL) ML | Lab File ID: S4E8666.D

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

% Moisture: | Decanted: (Y/N) | Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) | Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) | GPC Factor: 1.00 | Date Analyzed: 11/11/2011

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	2.813	5.5	J
02		Unknown-02	3.010	3.1	J
03		Unknown-03	3.465	4.0	J
04		Unknown-04	3.858	3.4	J
05		Unknown-05	4.334	4.5	J
06		Unknown-06	4.676	2.2	J
07		Unknown-07	9.696	21	J
	E966796[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8666.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8666.D
Lab Smp Id: K2213-07A Client Smp ID: H30X7
Inj Date : 11-NOV-2011 09:00
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-07A,,62806,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:04 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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)	CONCENTRATIONS FINAL (ug/L)
$	2	Phenol-d5	71	3.050	3.050	(0.908)	83075	70.6606	35
$	4	bis(2-Chloroethyl)ether-d8	67	3.102	3.113	(0.923)	53445	61.1157	31
$	6	2-Chlorophenol-d4	132	3.206	3.206	(0.954)	85888	62.2527	31
*	8	1,4-Dichlorobenzene-d4	152	3.361	3.371	(1.000)	43719	40.0000	(Q)
$	11	4-Methylphenol-d8	113	3.609	3.620	(1.074)	87139	69.9879	35
$	16	Nitrobenzene-d5	128	3.796	3.796	(0.857)	39415	63.5827	32(Q)
$	19	2-Nitrophenol-d4	143	4.065	4.075	(0.918)	53235	67.3742	34
$	23	2,4-Dichlorophenol-d3	165	4.272	4.282	(0.965)	106766	72.1115	36
*	25	Naphthalene-d8	136	4.427	4.427	(1.000)	148090	40.0000	
$	27	4-Chloroaniline-d4	131	4.468	4.468	(1.009)	10962	7.50428	3.8(aQ)
$	40	Dimethylphthalate-d6	166	5.773	5.783	(0.949)	324171	72.1623	36
$	43	Acenaphthylene-d8	160	5.928	5.938	(0.974)	246392	49.5352	25
*	46	Acenaphthene-d10	164	6.083	6.083	(1.000)	113610	40.0000	
$	49	4-Nitrophenol-d4	143	6.197	6.187	(1.019)	70605	83.4849	42
	53	Diethylphthalate	149	6.476	6.487	(1.065)	10733	2.32744	1.2(a)
$	54	Fluorene-d10	176	6.580	6.590	(1.082)	214740	53.6160	27
$	58	4,6-Dinitro-2-methylphenol-d2	200	6.642	6.652	(0.882)	83664	71.8316	36(Q)
*	65	Phenanthrene-d10	188	7.532	7.532	(1.000)	290368	40.0000	
$	67	Anthracene-d10	188	7.584	7.584	(1.007)	309140	38.7649	19
	70	Di-n-butylphthalate	149	8.081	8.081	(1.073)	17368	2.05838	1.0(a)
$	72	Pyrene-d10	212	8.929	8.929	(0.881)	217375	25.9079	13(R)

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8666.D
Report Date: 11-Nov-2011 14:04

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
	79 bis(2-Ethylhexyl)phthalate	149	10.099	10.099	(0.997)	16294	2.58153	1.3(a)
*	77 Chrysene-d12	240	10.130	10.130	(1.000)	430469	40.0000	(Q)
$	83 Benzo(a)pyrene-d12	264	11.714	11.714	(0.990)	145788	16.0460	8.0(R)
*	85 Perylene-d12	264	11.827	11.817	(1.000)	410025	40.0000	

QC Flag Legend

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

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8666.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8666.D
Lab Smp Id: K2213-07A Client Smp ID: H30X7
Inj Date : 11-NOV-2011 09:00
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-07A,,62806,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:04 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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
* 8 1,4-Dichlorobenzene-d4	3.361	336605	40.000
* 25 Naphthalene-d8	4.428	448944	40.000
* 65 Phenanthrene-d10	7.533	773002	40.000

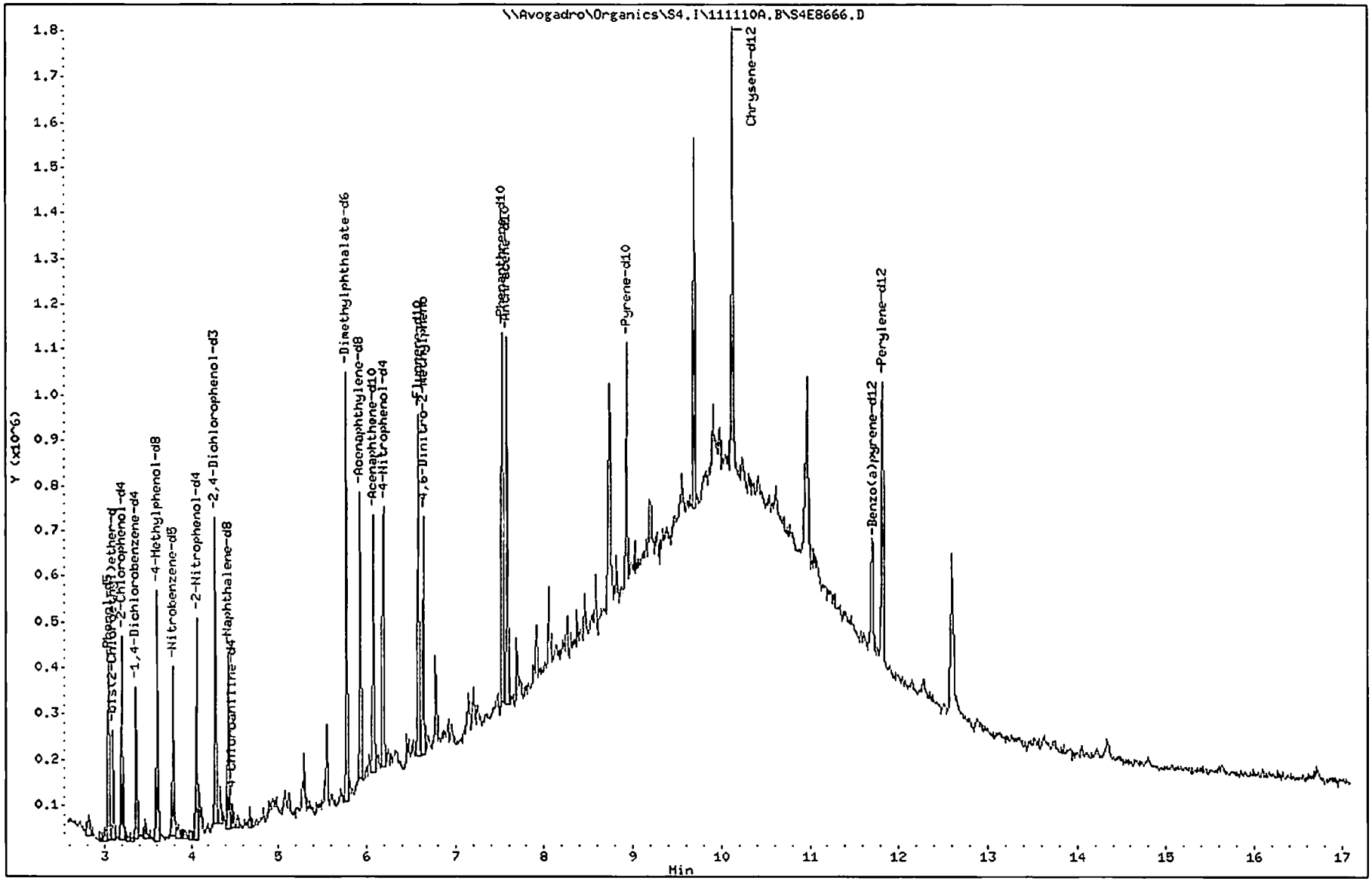
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.813	92900	11.0396688	5.5	0	0		8
Unknown				CAS #:			
3.010	52196	6.20259096	3.1	0	0		8
Unknown				CAS #:			
3.465	67430	8.01294374	4.0	0	0		8
Unknown				CAS #:			
3.858	57662	6.85213952	3.4	0	0		8

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8666.D
Report Date: 11-Nov-2011 14:04

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.334	100128	8.92115230	4.5	0		0	25
Unknown				CAS #:			
4.676	50246	4.47684310	2.2	0		0	25
Unknown				CAS #:			
9.696	828667	42.8804013	21	0		0	65

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8666.D
Date : 11-NOV-2011 09:00
Client ID: H30X7
Sample Info: K2213-07A,,62806,,
Volume Injected (uL): 2.0
Column phase: RXI-5SILMS

Instrument: S4.I
Operator: MMS SRC: LIMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8666.D

Date : 11-NOV-2011 09:00

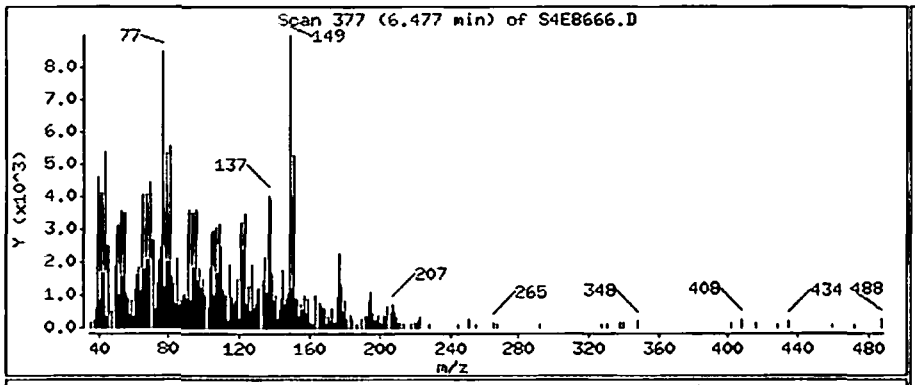
Client ID: H30X7 Instrument: S4.i

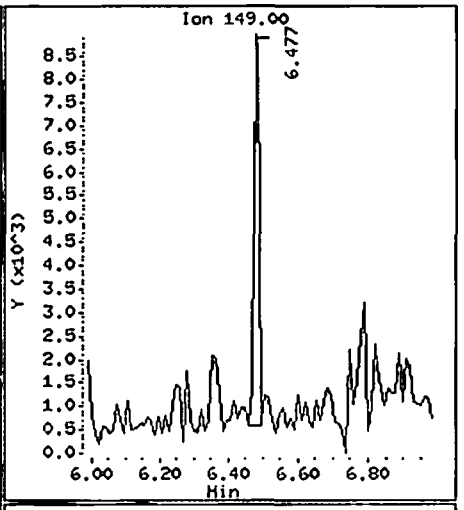
Sample Info: K2213-07A,,62806,,

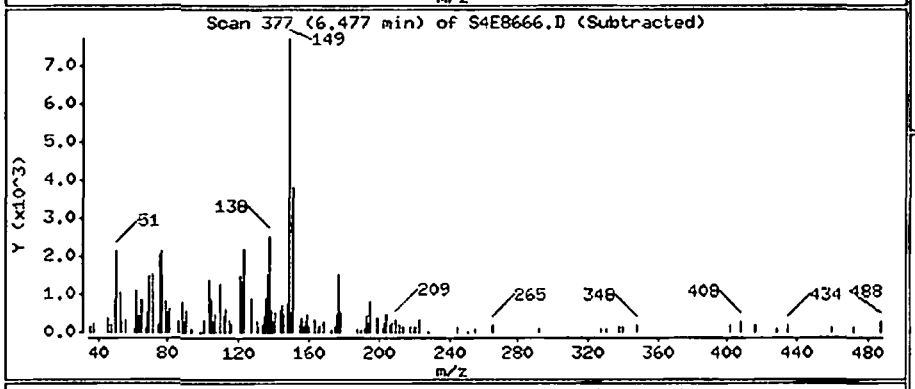
Volume Injected (uL): 2.0 Operator: MHS SRC: LIMS

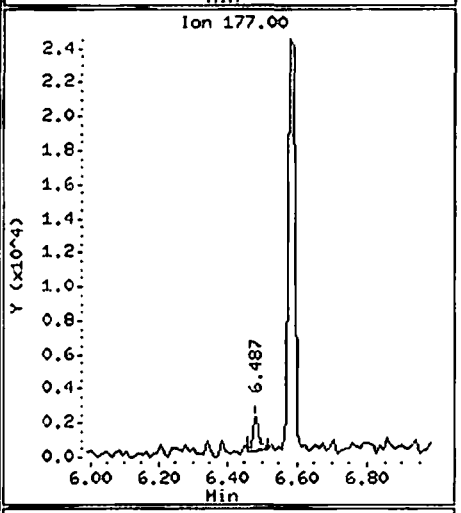
Column phase: RXI-5SILMS Column diameter: 0.25

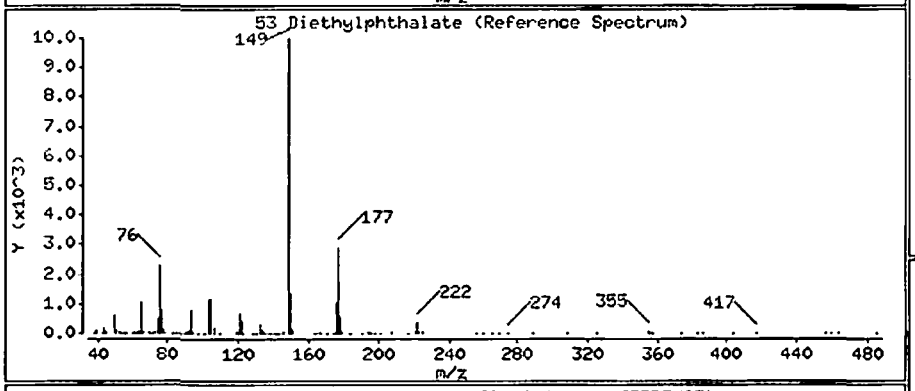
53 Diethylphthalate Concentration: 1.2 ug/L

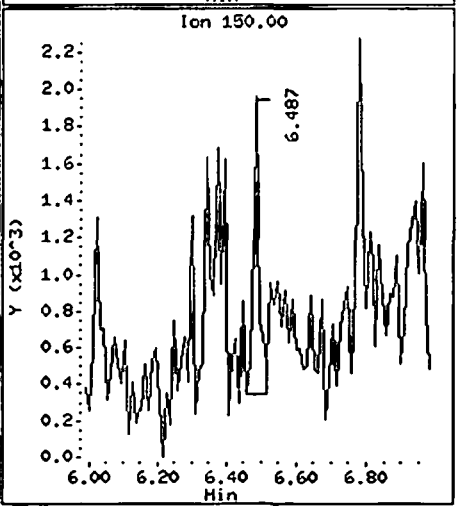


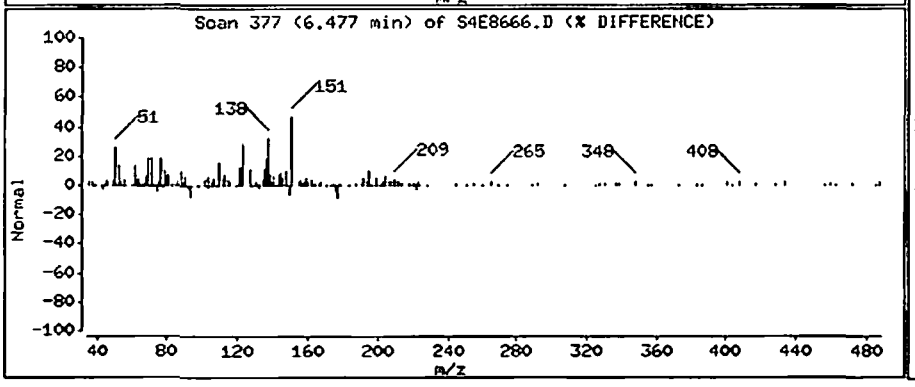












Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8666.D

Date : 11-NOV-2011 09:00

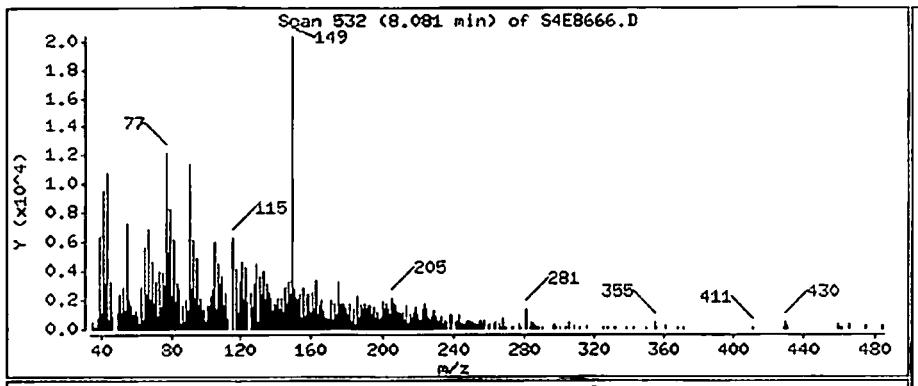
Client ID: H30X7 Instrument: S4.i

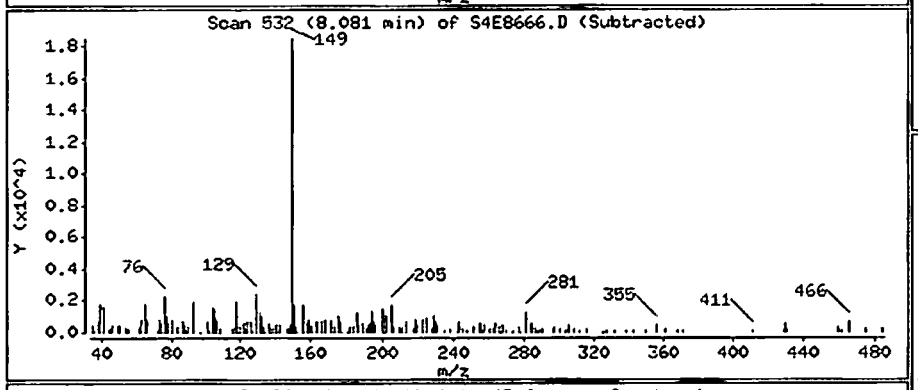
Sample Info: K2213-07A,,62806,,

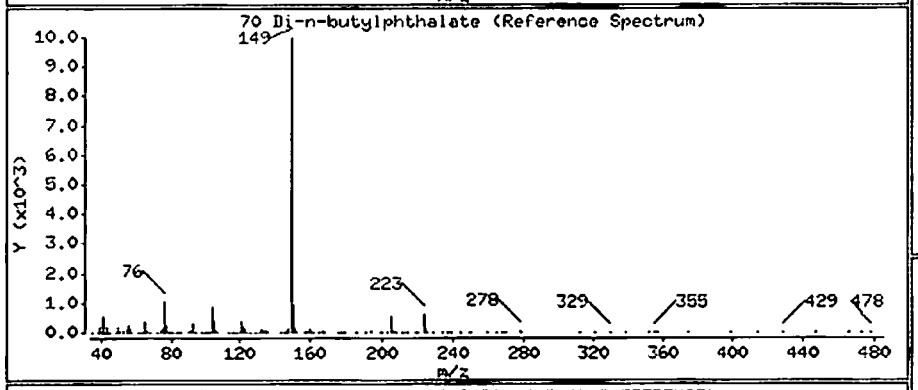
Volume Injected (uL): 2.0 Operator: HMS SRC: LIMS

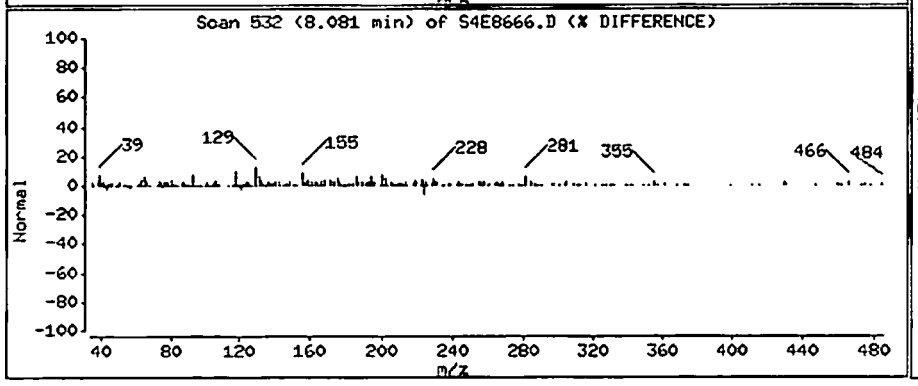
Column phase: RXI-5SILMS Column diameter: 0.25

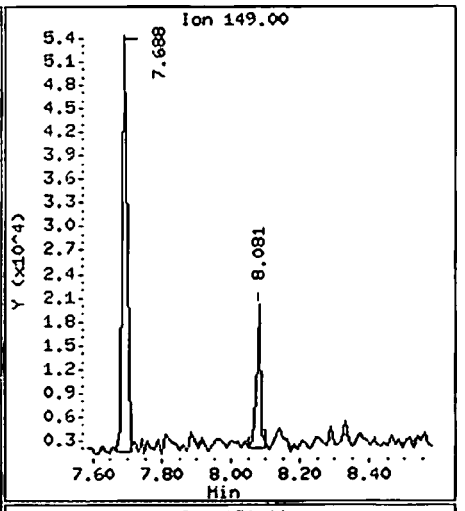
70 Di-n-butylphthalate Concentration: 1.0 ug/L

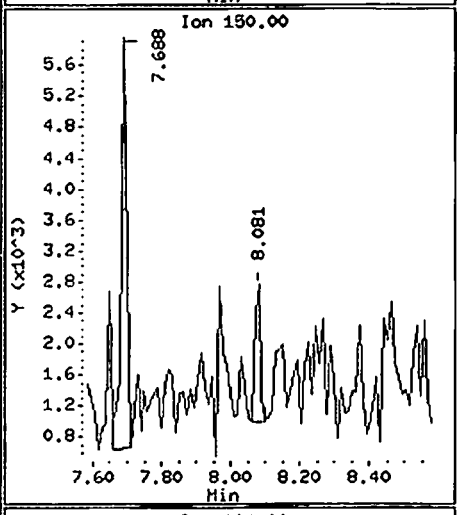


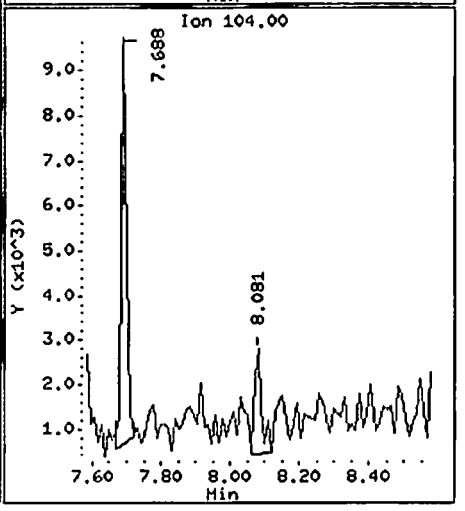












Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8666.D

Date : 11-NOV-2011 09:00

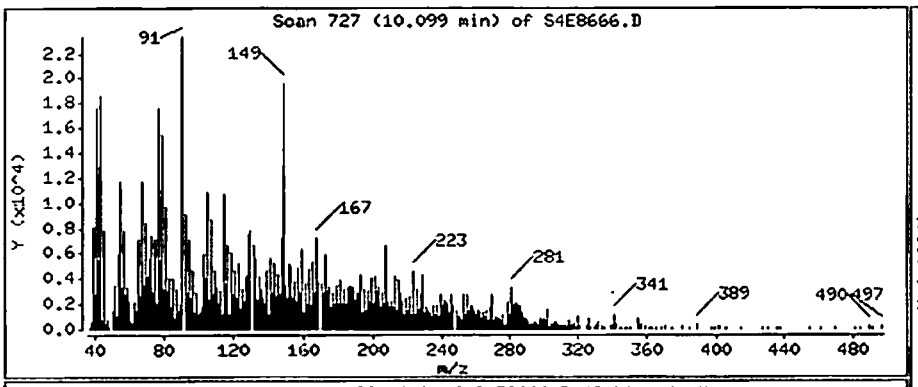
Client ID: H30X7 Instrument: S4.i

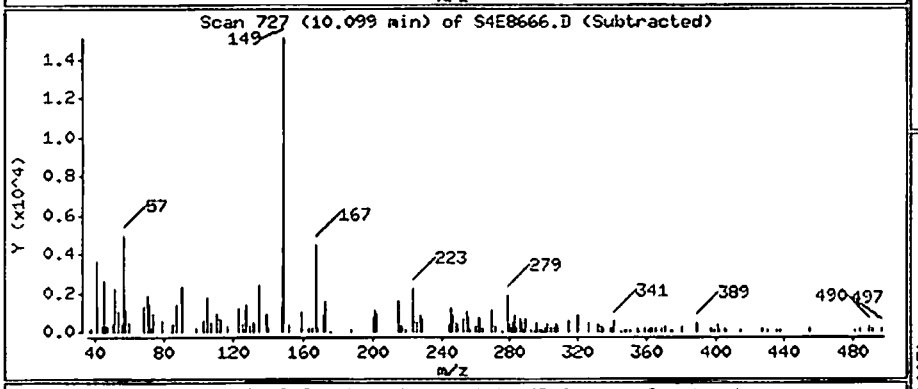
Sample Info: K2213-07A,.62806,,

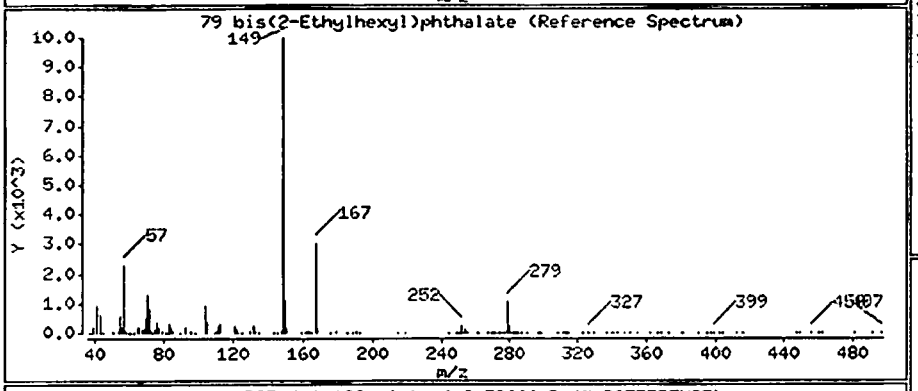
Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

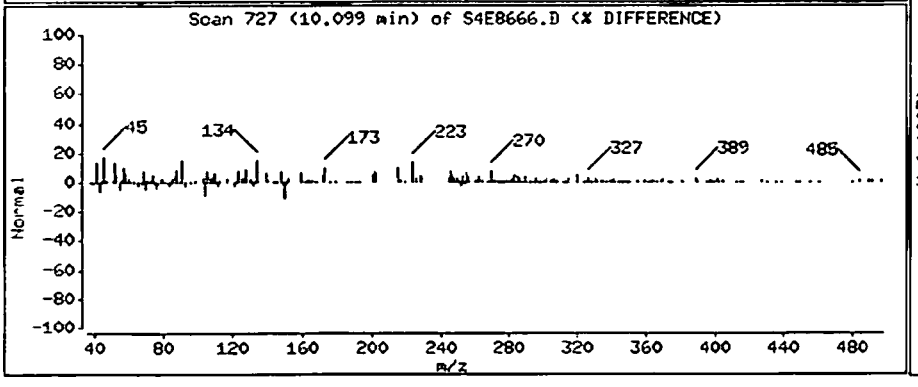
Column phase: RXI-5SILMS Column diameter: 0.25

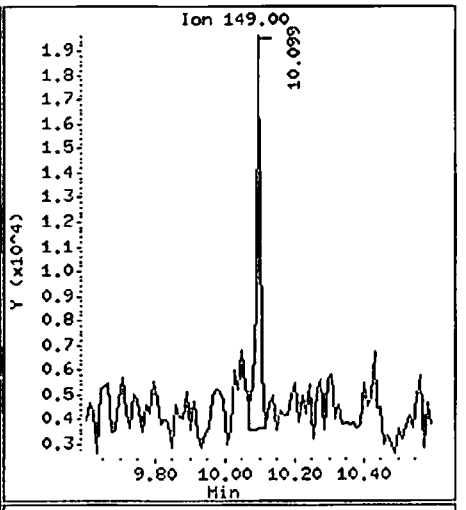
79 bis(2-Ethylhexyl)phthalate Concentration: 1.3 ug/L

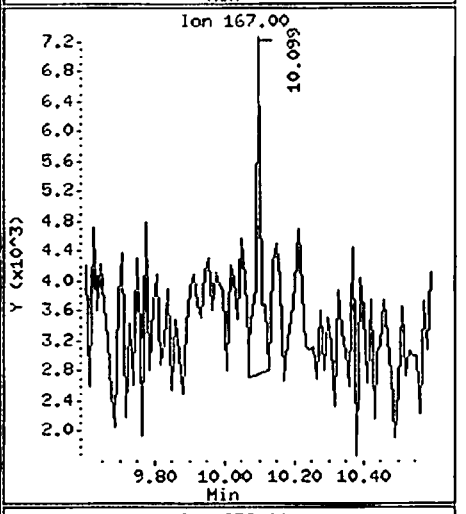


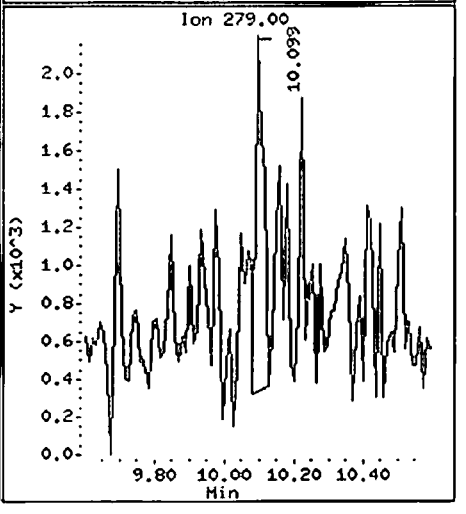












Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8666.D

Date : 11-NOV-2011 09:00

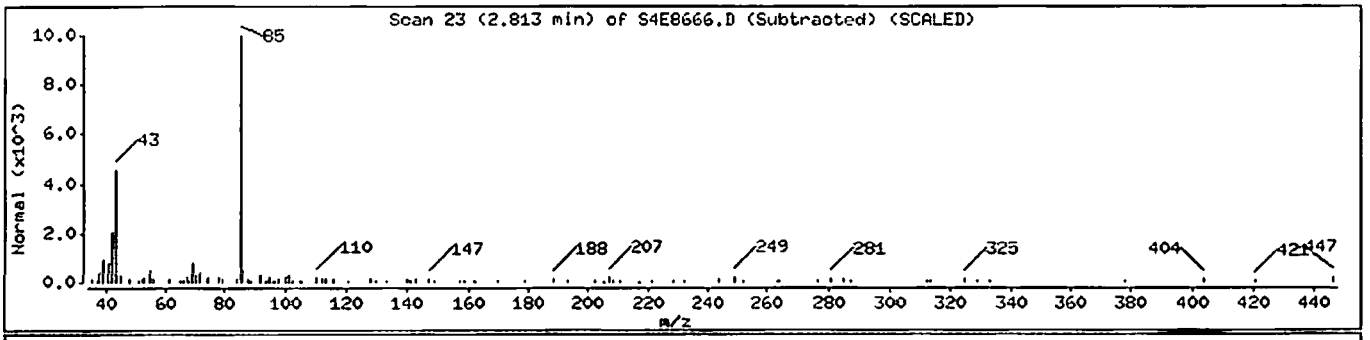
Client ID: H30X7 Instrument: S4.i

Sample Info: K2213-07A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 11-NOV-2011 09:00

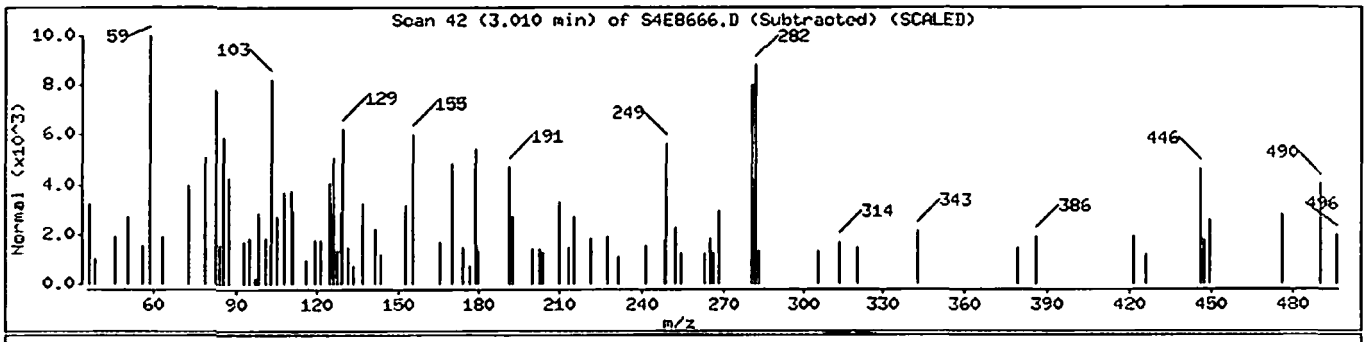
Client ID: H30X7 Instrument: S4.i

Sample Info: K2213-07A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8666.D

Date : 11-NOV-2011 09:00

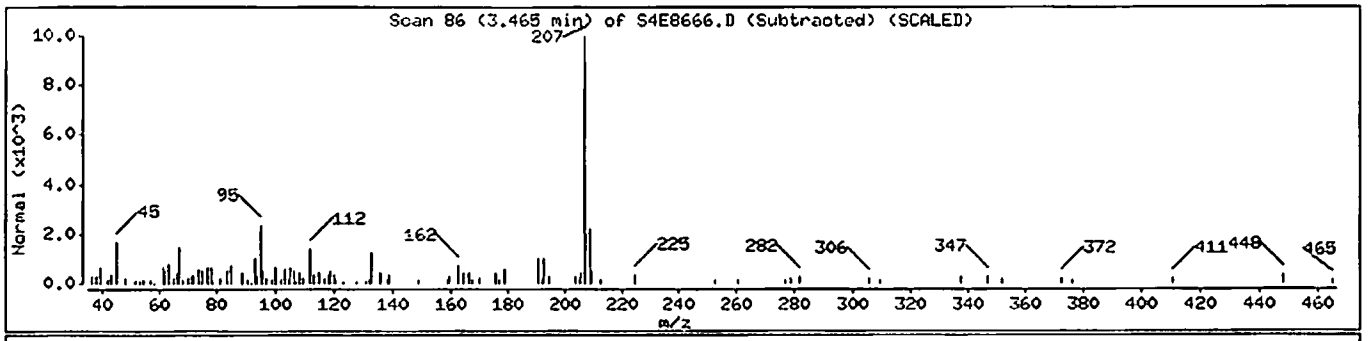
Client ID: H30X7 Instrument: S4.i

Sample Info: K2213-07A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8666.D

Date : 11-NOV-2011 09:00

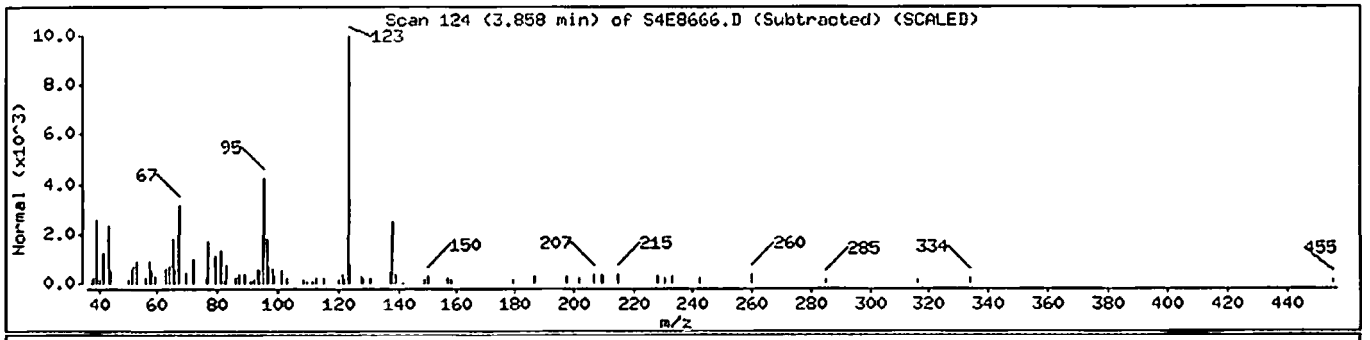
Client ID: H30X7 Instrument: S4.i

Sample Info: K2213-07A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 11-NOV-2011 09:00

Client ID: H30X7 Instrument: S4.i

Sample Info: K2213-07A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
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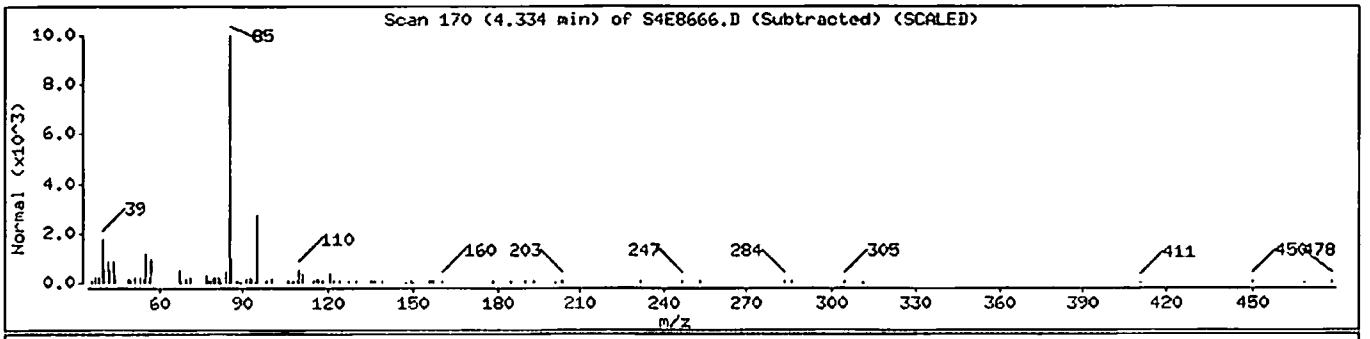

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Date : 11-NOV-2011 09:00

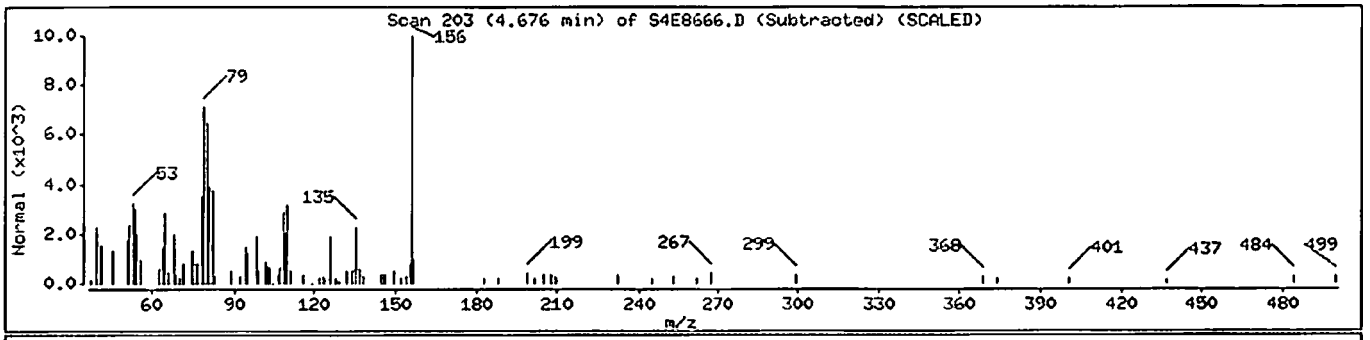
Client ID: H30X7 Instrument: S4.i

Sample Info: K2213-07A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8666.D

Date : 11-NOV-2011 09:00

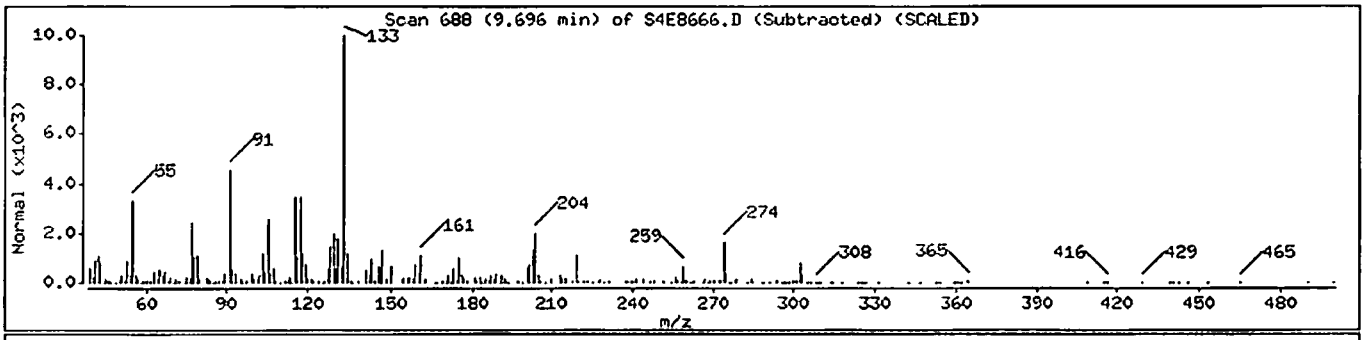
Client ID: H30X7 Instrument: S4.i

Sample Info: K2213-07A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30X9

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-08A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8654.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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

EPA SAMPLE NO.

H30X9

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-08A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8654.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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	1.3	J
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	1.4	J
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

EPA SAMPLE NO.

H30X9

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-08A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8654.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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	2.885	2.1	J
02		Unknown-02	3.020	2.3	J
03		Unknown-03	3.268	2.7	J
04		Unknown-04	3.330	2.4	J
05		Unknown-05	3.413	2.2	J
06		Unknown-06	3.475	4.9	J
07		Unknown-07	3.775	5.7	J
08	54458-61-6	2-Cyclopenten-1-one, 2,3,4,5	3.869	5.0	NJ
09		Unknown-08	4.334	4.8	J
10		Unknown-09	4.541	2.7	J
11		Unknown-10	4.676	2.1	J
12		Unknown-11	4.904	11	J
	E96679[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8654.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8654.D
Lab Smp Id: K2213-08A Client Smp ID: H30X9
Inj Date : 11-NOV-2011 01:03
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-08A,,62806,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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	3.050	3.050	(0.905)	84805	76.4625	38
$	4	bis(2-Chloroethyl)ether-d8	67	3.113	3.112	(0.923)	49096	59.5130	30
$	6	2-Chlorophenol-d4	132	3.206	3.206	(0.951)	85637	65.7972	33
*	8	1,4-Dichlorobenzene-d4	152	3.371	3.371	(1.000)	41243	40.0000	(Q)
$	11	4-Methylphenol-d8	113	3.620	3.609	(1.074)	85829	73.0743	37
$	16	Nitrobenzene-d5	128	3.796	3.796	(0.857)	41884	63.5611	32(Q)
$	19	2-Nitrophenol-d4	143	4.075	4.075	(0.921)	52741	62.7929	31
$	23	2,4-Dichlorophenol-d3	165	4.282	4.282	(0.967)	119083	75.6637	38
*	25	Naphthalene-d8	136	4.427	4.427	(1.000)	157420	40.0000	
$	27	4-Chloroaniline-d4	131	4.479	4.468	(1.012)	22187	14.2884	7.1(Q)
$	40	Dimethylphthalate-d6	166	5.783	5.772	(0.951)	401286	73.1168	37
$	43	Acenaphthylene-d8	160	5.938	5.938	(0.976)	323182	53.1816	27
*	46	Acenaphthene-d10	164	6.083	6.083	(1.000)	136800	40.0000	
$	49	4-Nitrophenol-d4	143	6.197	6.166	(1.019)	88323	85.4818	43
	53	Diethylphthalate	149	6.487	6.487	(1.066)	14356	2.54810	1.3(a)
$	54	Fluorene-d10	176	6.590	6.590	(1.083)	249160	50.9199	25
$	58	4,6-Dinitro-2-methylphenol-d2	200	6.652	6.642	(0.883)	105236	71.1740	36
*	65	Phenanthrene-d10	188	7.532	7.532	(1.000)	372114	40.0000	
$	67	Anthracene-d10	188	7.594	7.584	(1.008)	373417	36.5385	18
$	72	Pyrene-d10	212	8.940	8.929	(0.883)	268080	24.8199	12(R)
	79	bis(2-Ethylhexyl)phthalate	149	10.099	10.099	(0.997)	23340	2.87252	1.4(a)

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8654.D
Report Date: 11-Nov-2011 14:04

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)
* 77 Chrysene-d12	240	10.130	10.120	(1.000)	554152	40.0000	(Q)
$ 83 Benzo(a)pyrene-d12	264	11.714	11.703	(0.990)	208875	19.4640	9.7(R)
* 85 Perylene-d12	264	11.827	11.817	(1.000)	484293	40.0000	

QC Flag Legend

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

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8654.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8654.D
Lab Smp Id: K2213-08A Client Smp ID: H30X9
Inj Date : 11-NOV-2011 01:03
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-08A,,62806,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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
* 8 1,4-Dichlorobenzene-d4	3.372	344500	40.000
* 25 Naphthalene-d8	4.428	517412	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.885	36577	4.24700433	2.1	0		0	8
Unknown				CAS #:			
3.020	39306	4.56384114	2.3	0		0	8
Unknown				CAS #:			
3.268	46246	5.36967870	2.7	0		0	8
Unknown				CAS #:			
3.330	41259	4.79060914	2.4	0		0	8

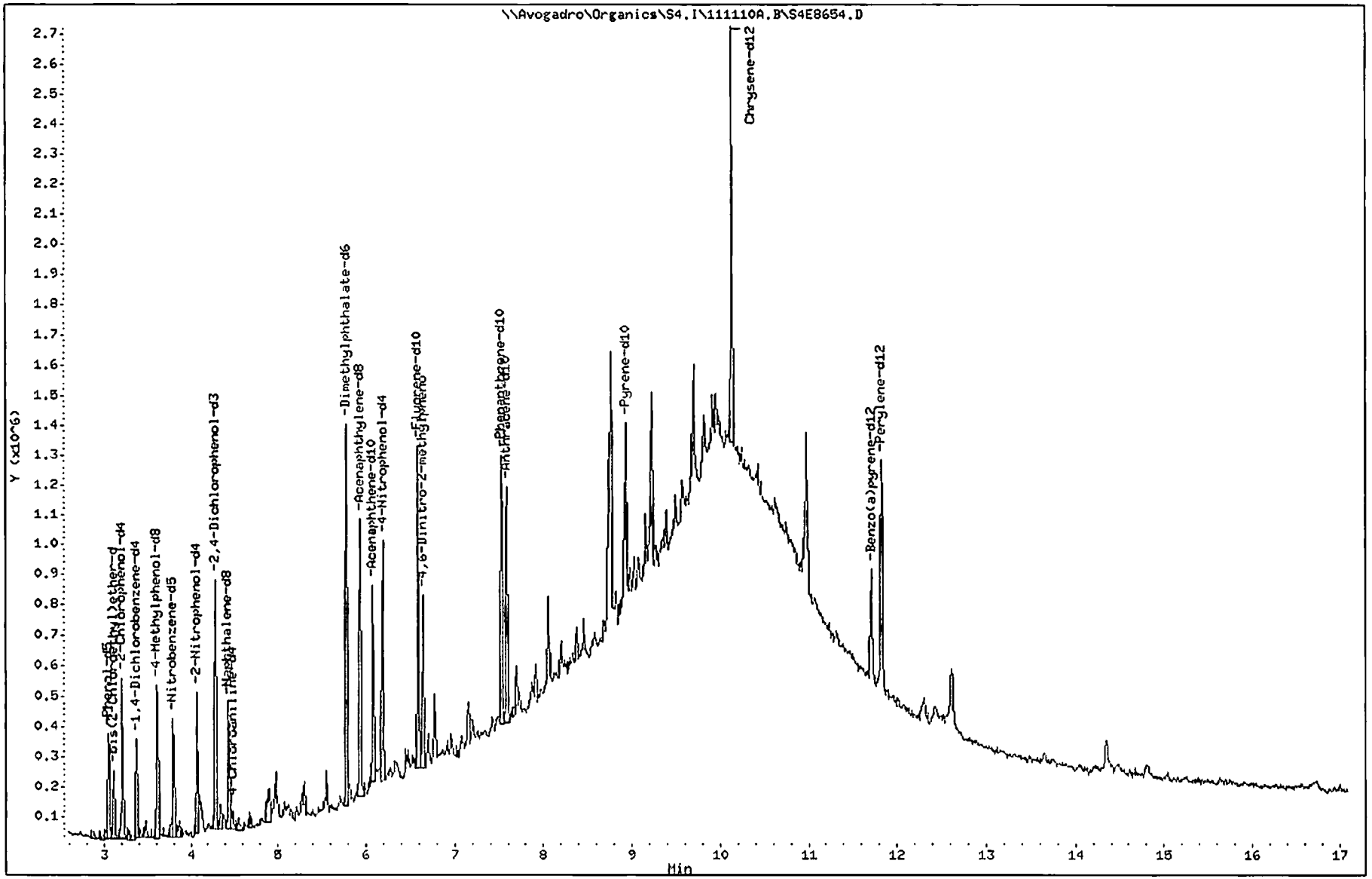
Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8654.D
Report Date: 11-Nov-2011 14:04

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
3.413	37090	4.30650092	2.2	0		0	8
Unknown				CAS #:			
3.475	84164	9.77229465	4.9	0		0	8
Unknown				CAS #:			
3.775	98389	11.4239156	5.7	0		0	8
2-Cyclopenten-1-one, 2,3,4,5-tetramethyl				CAS #: 54458-61-6			
3.869	86840	10.0829560	5.0	87	NIST2002.L	16989	8
Unknown				CAS #:			
4.334	123537	9.55040375	4.8	0		0	25
Unknown				CAS #:			
4.541	70470	5.44791597	2.7	0		0	25
Unknown				CAS #:			
4.676	55193	4.26681965	2.1	0		0	25
Unknown				CAS #:			
4.904	284089	21.9622848	11	0		0	25

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8654.D
Date : 11-NOV-2011 01:03
Client ID: H30X9
Sample Info: K2213-08A,,62806,,
Volume Injected (uL): 2.0
Column phase: RXI-5SILMS

Instrument: S4.i

Operator: MHS SRC: LIMS
Column diameter: 0.25



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Date : 11-NOV-2011 01:03

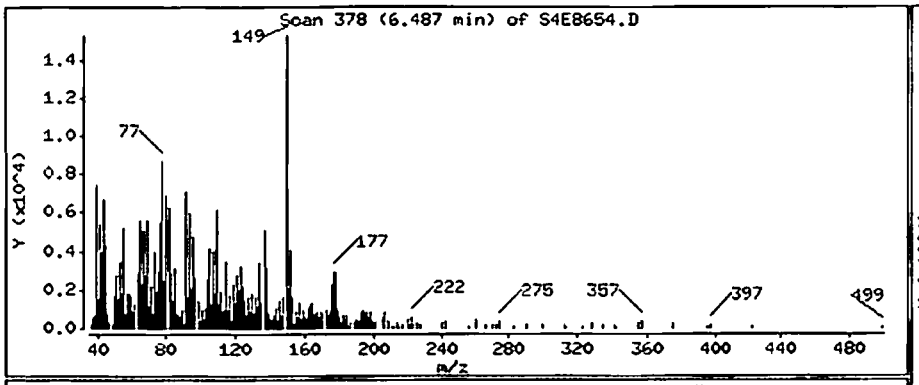
Client ID: H30X9 Instrument: S4.i

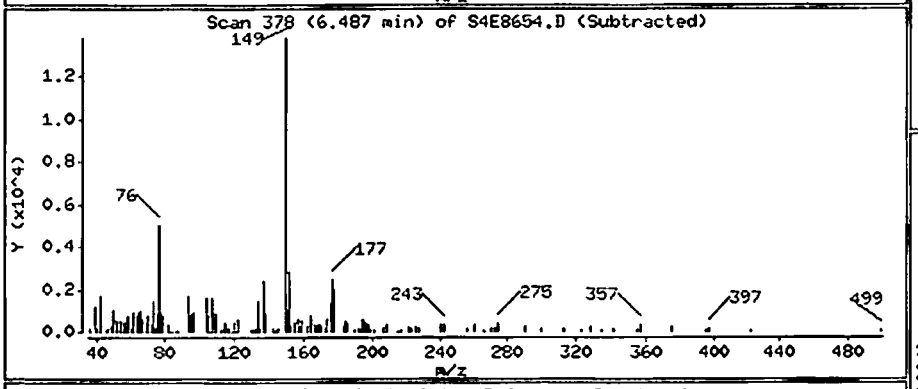
Sample Info: K2213-08A,,62806,,

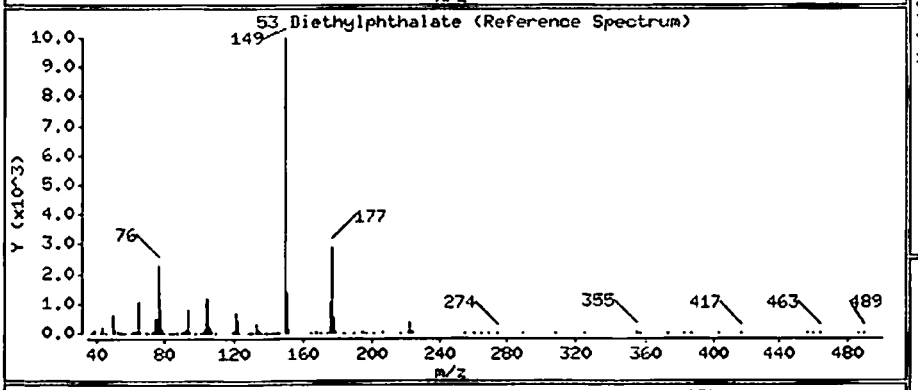
Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

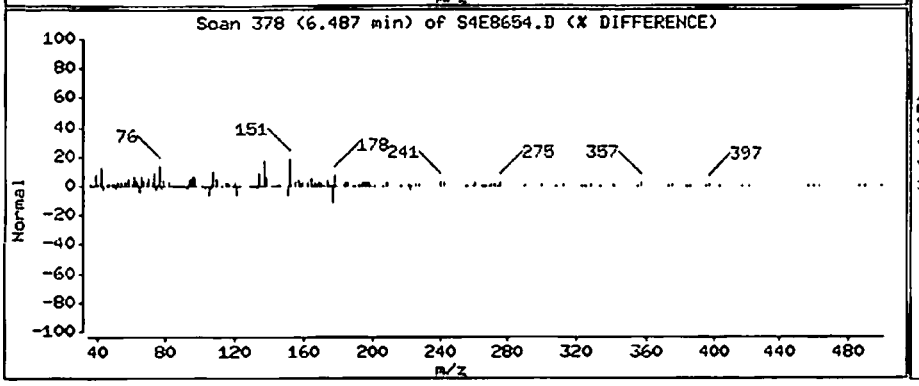
Column phase: RXI-5SILMS Column diameter: 0.25

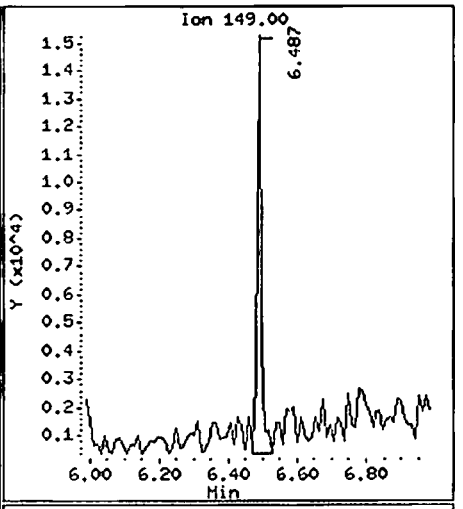
53 Diethylphthalate Concentration: 1.3 ug/L

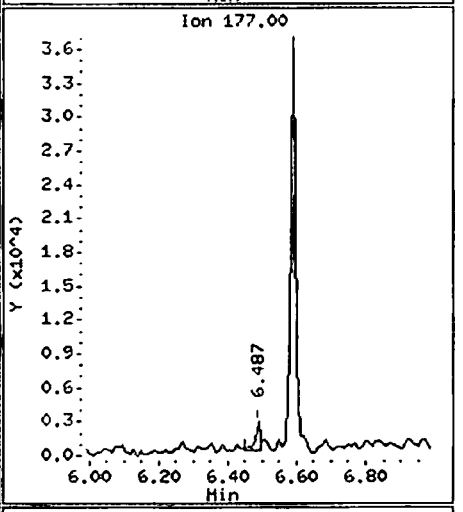


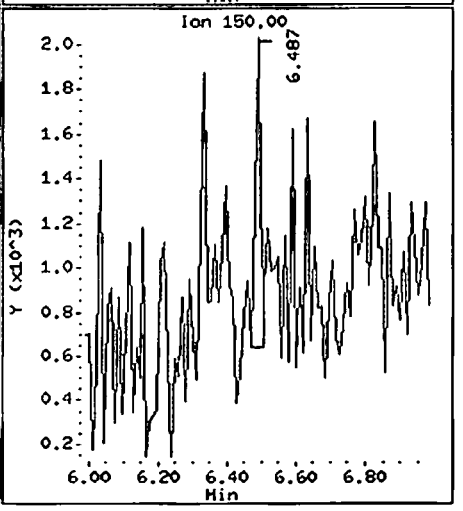












Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8654.D

Date : 11-NOV-2011 01:03

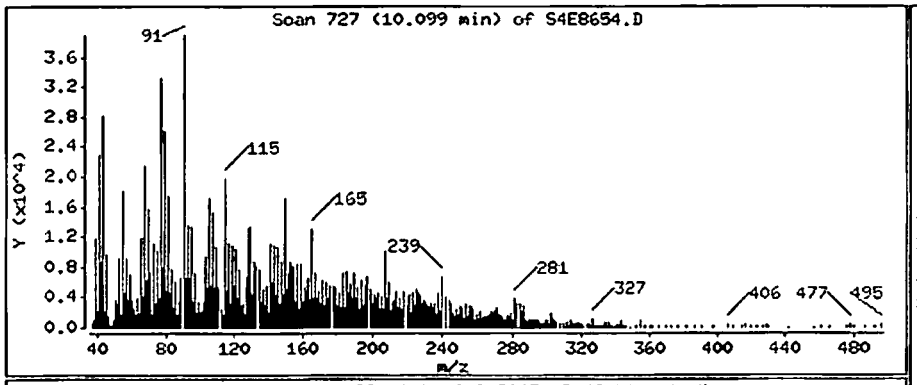
Client ID: H30X9 Instrument: S4.i

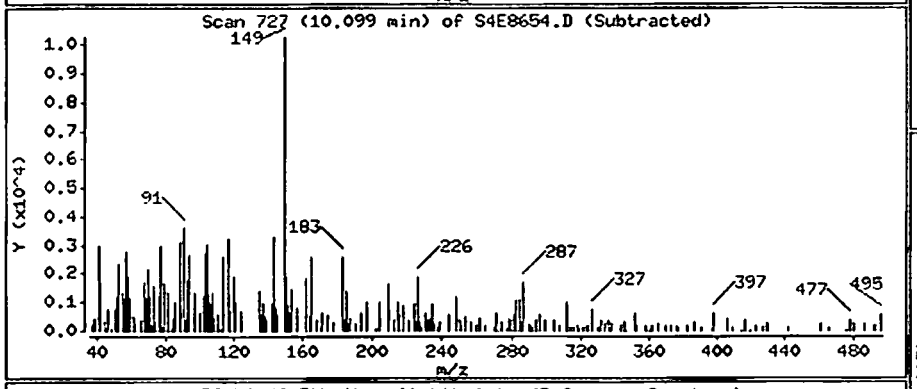
Sample Info: K2213-08A,,62806,,

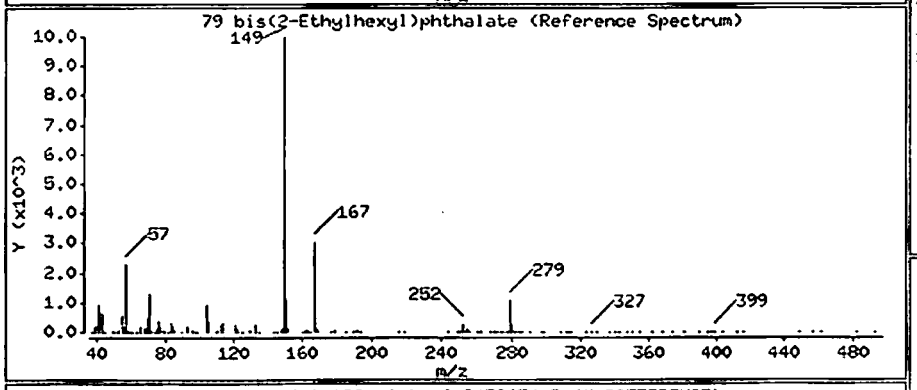
Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

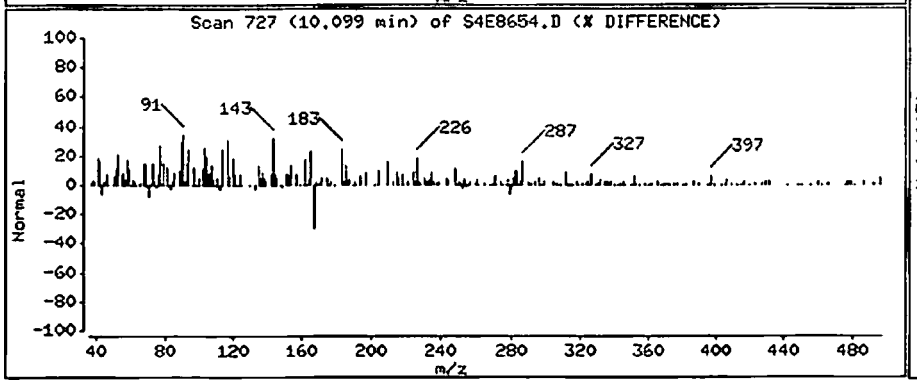
Column phase: RXI-5SILMS Column diameter: 0.25

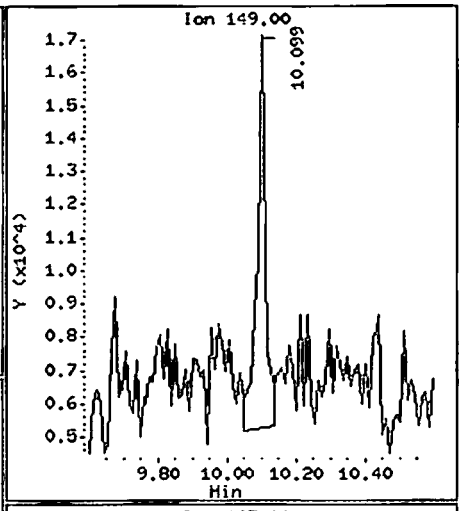
79 bis(2-Ethylhexyl)phthalate Concentration: 1.4 ug/L

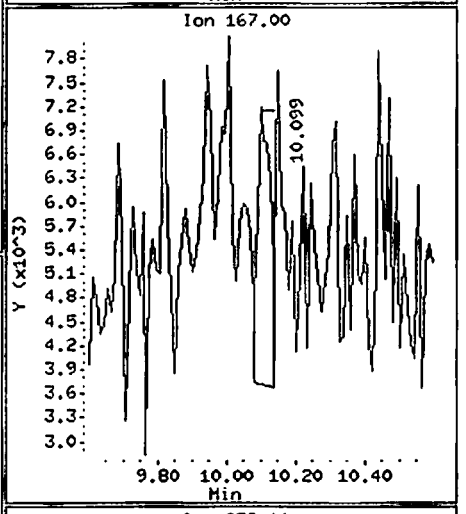


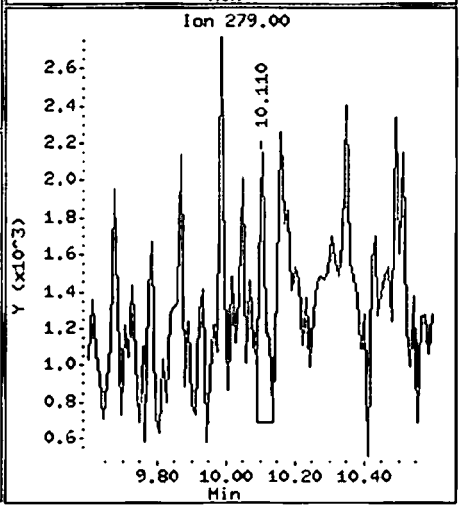












Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8654.D

Date : 11-NOV-2011 01:03

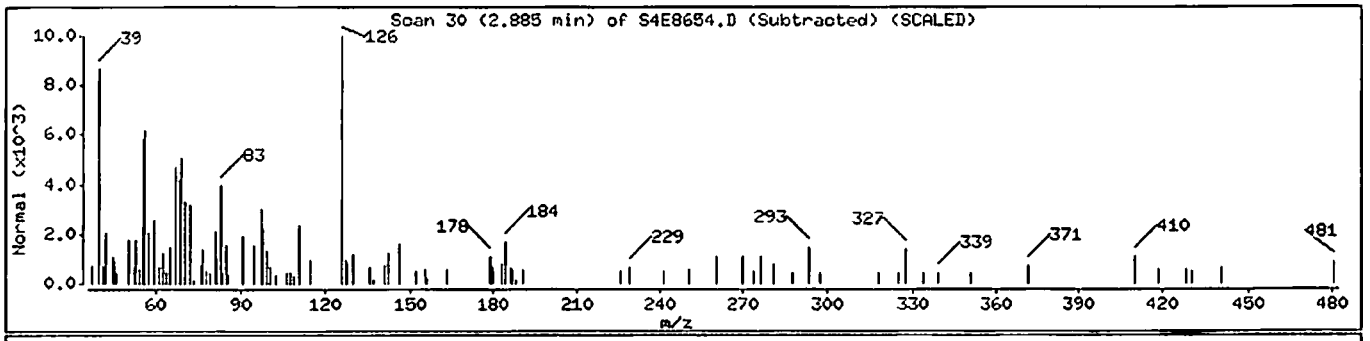
Client ID: H30X9 Instrument: S4.i

Sample Info: K2213-08A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8654.D

Date : 11-NOV-2011 01:03

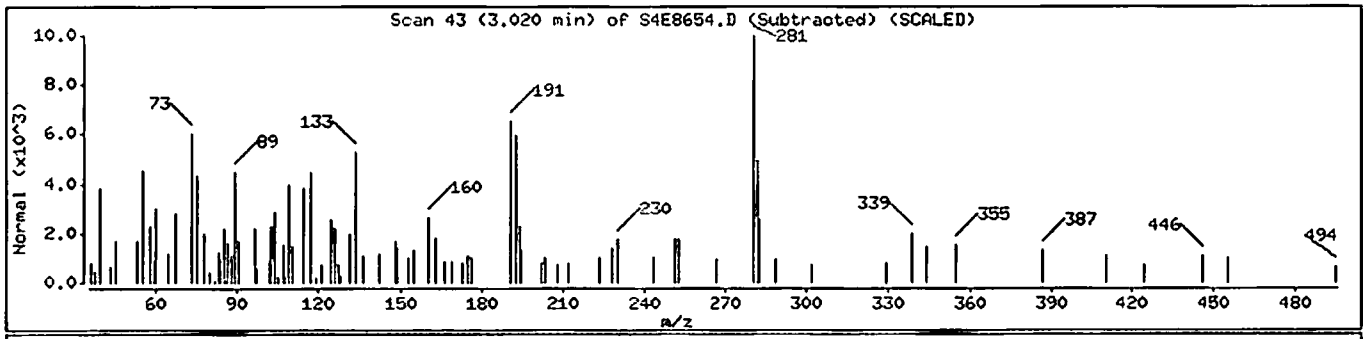
Client ID: H30X9 Instrument: S4.i

Sample Info: K2213-08A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8654.D

Date : 11-NOV-2011 01:03

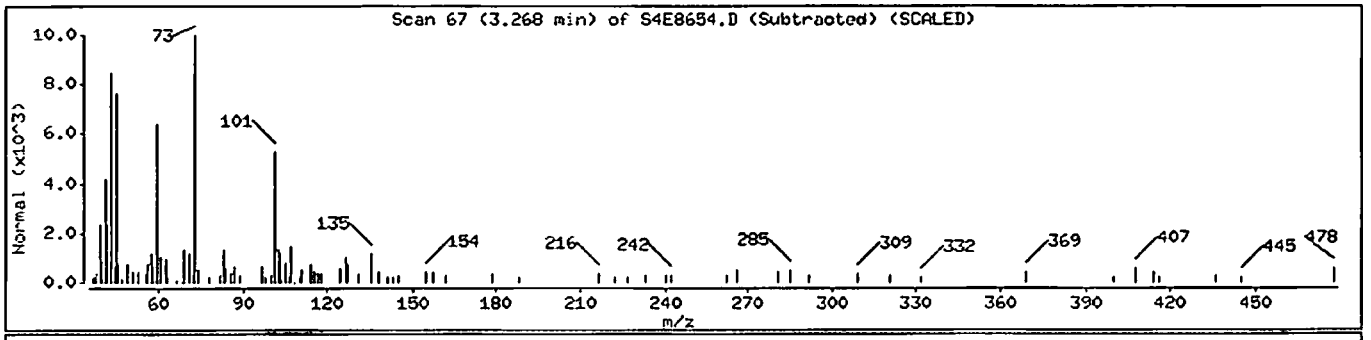
Client ID: H30X9 Instrument: S4.i

Sample Info: K2213-08A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8654.D

Date : 11-NOV-2011 01:03

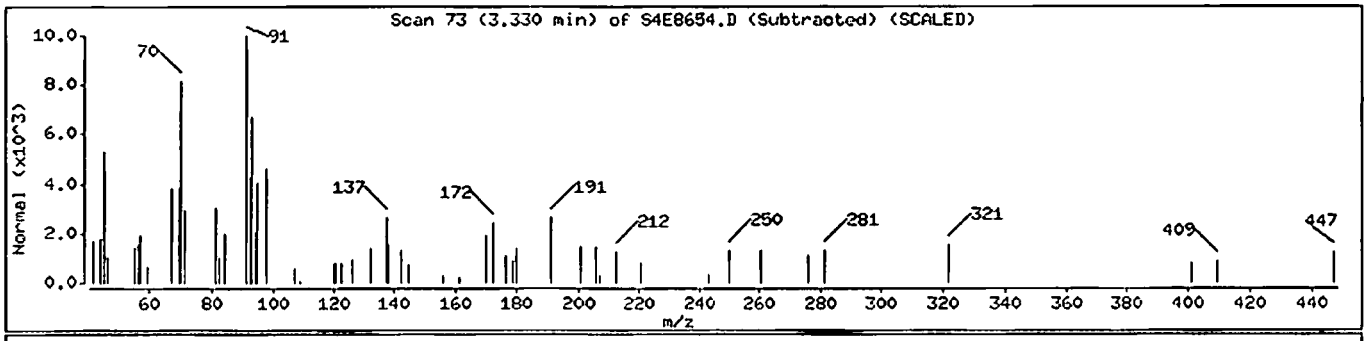
Client ID: H30X9 Instrument: S4.i

Sample Info: K2213-08A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8654.D

Date : 11-NOV-2011 01:03

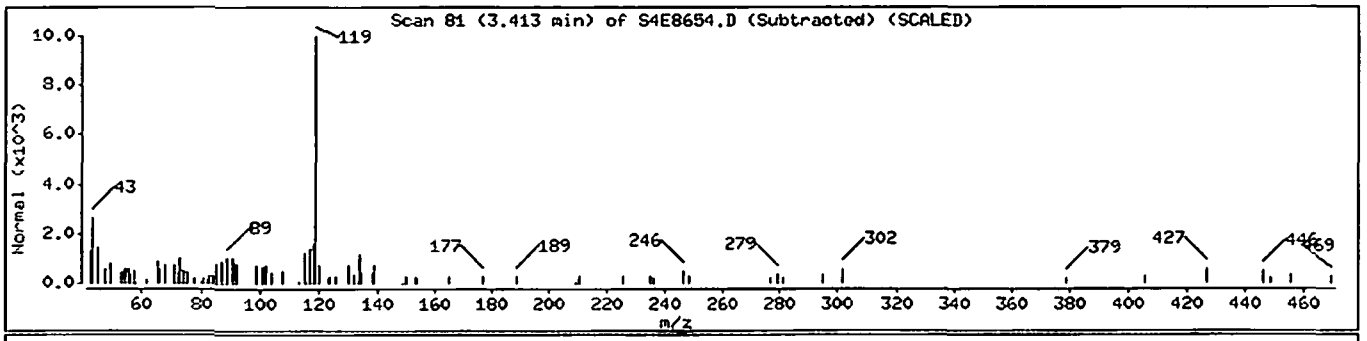
Client ID: H30X9 Instrument: S4.i

Sample Info: K2213-08A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 11-NOV-2011 01:03

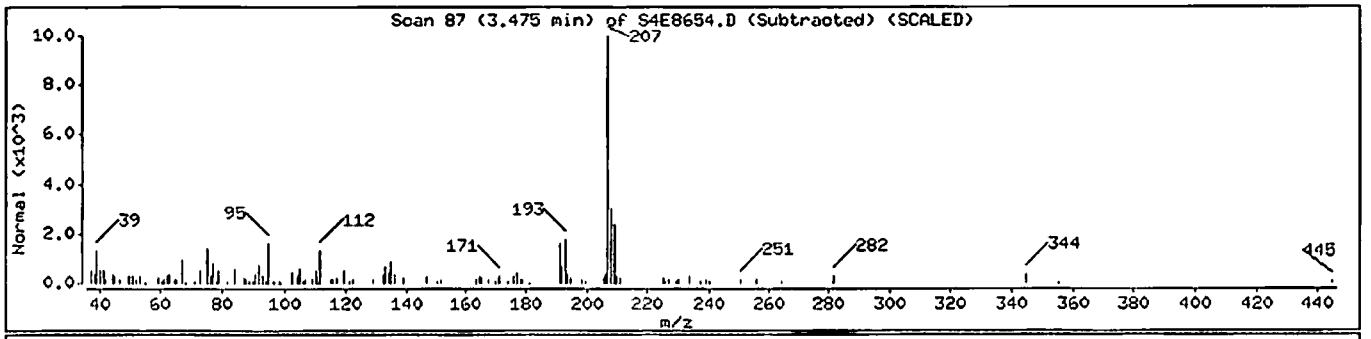
Client ID: H30X9 Instrument: S4.i

Sample Info: K2213-08A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8654.D

Date : 11-NOV-2011 01:03

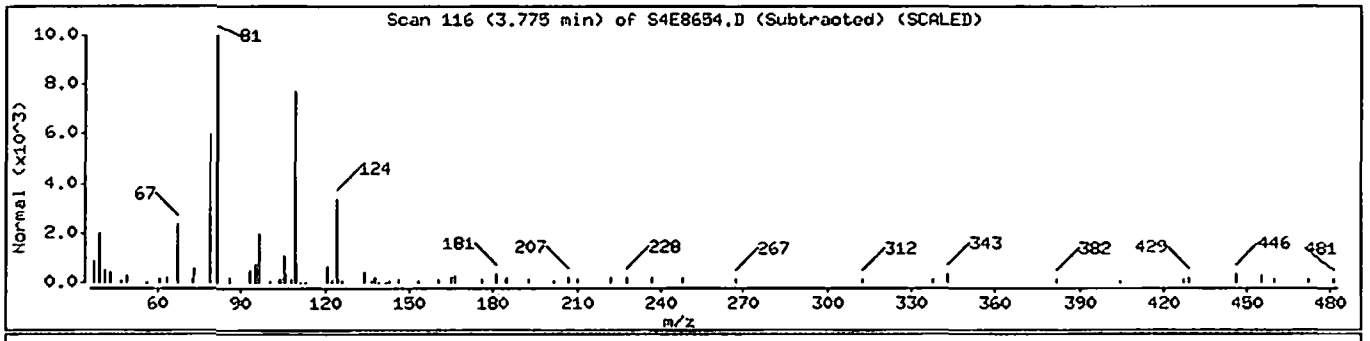
Client ID: H30X9 Instrument: S4.i

Sample Info: K2213-08A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8654.D

Date : 11-NOV-2011 01:03

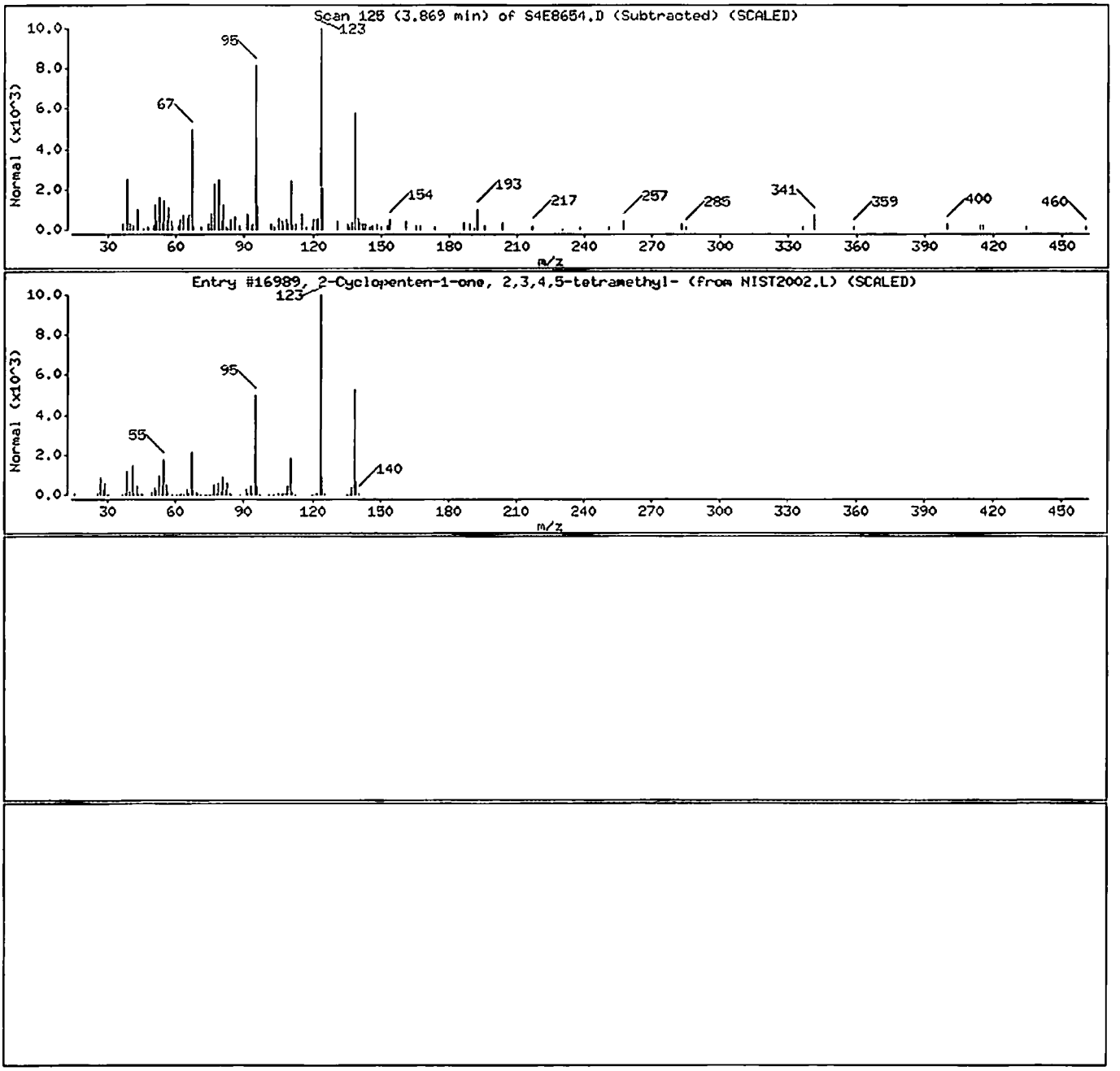
Client ID: H30X9 Instrument: S4.i

Sample Info: K2213-08A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Cyclopenten-1-one, 2,3,4,5-tetramethyl	54458-61-6	NIST2002.L	16989	87	C9H14O	138



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8654.D

Date : 11-NOV-2011 01:03

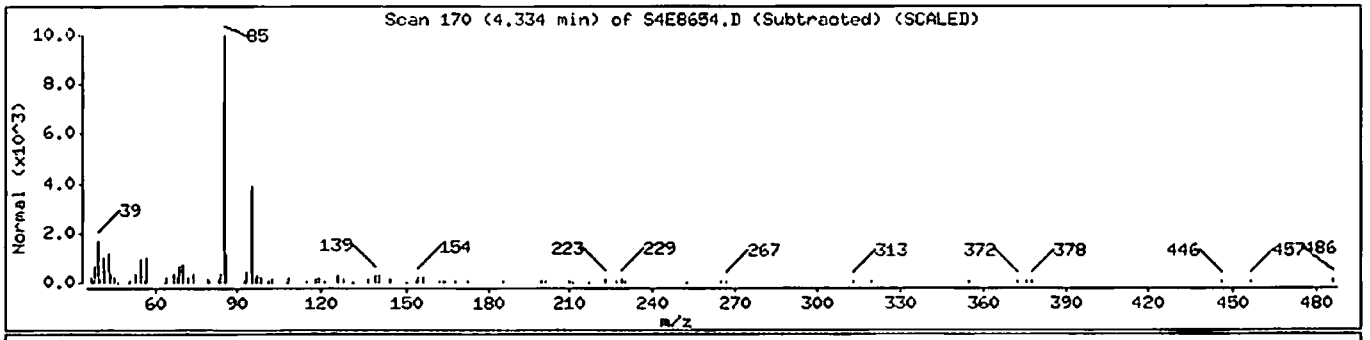
Client ID: H30X9 Instrument: S4.i

Sample Info: K2213-08A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8654.D

Date : 11-NOV-2011 01:03

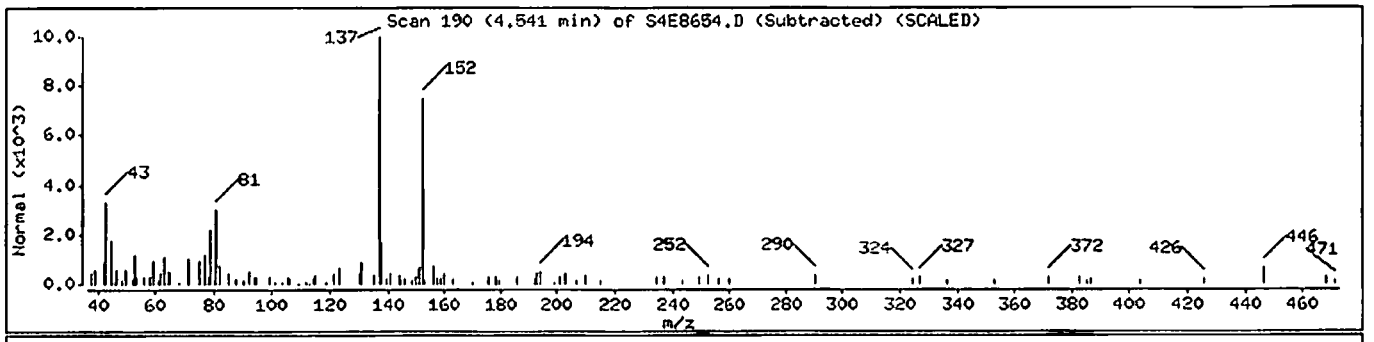
Client ID: H30X9 Instrument: S4.i

Sample Info: K2213-08A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8654.D

Date : 11-NOV-2011 01:03

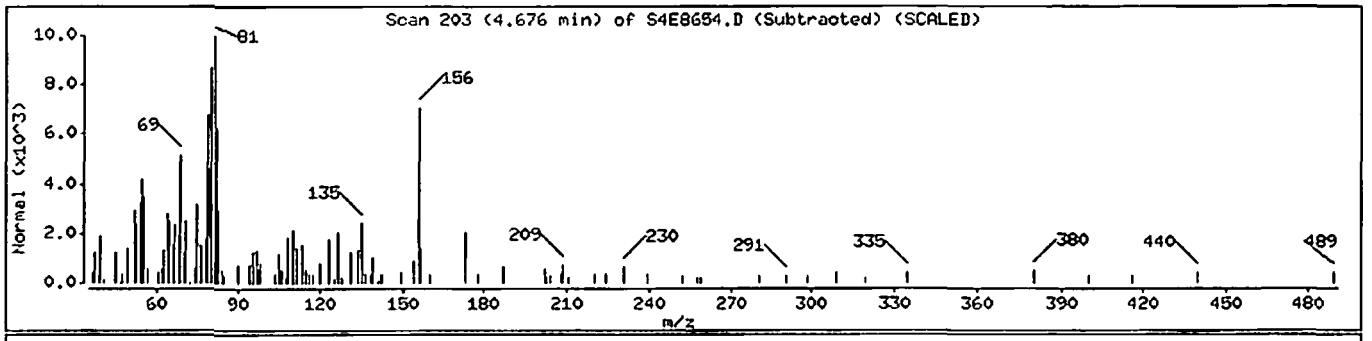
Client ID: H30X9 Instrument: S4.i

Sample Info: K2213-08A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8654.D

Date : 11-NOV-2011 01:03

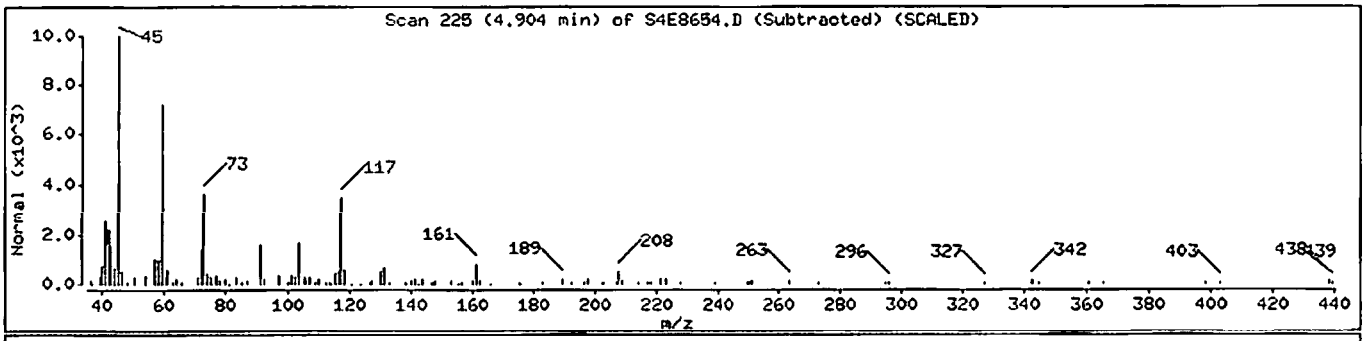
Client ID: H30X9 Instrument: S4.i

Sample Info: K2213-08A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Y0

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-09A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8655.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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

EPA SAMPLE NO.

H30Y0

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-09A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8655.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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	1.1	J
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	1.0	J
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

EPA SAMPLE NO.

H30Y0

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-09A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8655.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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	2.885	2.7	J
02		Unknown-02	3.020	3.0	J
03	54458-61-6	2-Cyclopenten-1-one, 2,3,4,5	3.869	7.0	NJ
04		Unknown-03	4.345	4.0	J
05		Unknown-04	4.676	2.3	J
06		Unknown-05	8.733	21	J
07		Unknown-06	9.696	13	J
	E966796[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8655.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8655.D
Lab Smp Id: K2213-09A Client Smp ID: H30Y0
Inj Date : 11-NOV-2011 01:28
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-09A,,62806,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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	3.061	3.050	(0.908)	73323	72.8193	36
$	4	bis(2-Chloroethyl)ether-d8	67	3.112	3.112	(0.923)	45585	60.8650	30
$	6	2-Chlorophenol-d4	132	3.206	3.206	(0.951)	74027	62.6492	31
*	8	1,4-Dichlorobenzene-d4	152	3.371	3.371	(1.000)	37443	40.0000	(Q)
$	11	4-Methylphenol-d8	113	3.620	3.609	(1.074)	78667	73.7739	37
$	16	Nitrobenzene-d5	128	3.806	3.796	(0.860)	39516	66.0146	33(Q)
$	19	2-Nitrophenol-d4	143	4.075	4.075	(0.921)	54435	71.3451	36
$	23	2,4-Dichlorophenol-d3	165	4.282	4.282	(0.967)	105848	74.0362	37
*	25	Naphthalene-d8	136	4.427	4.427	(1.000)	143000	40.0000	
$	27	4-Chloroaniline-d4	131	4.479	4.468	(1.012)	14372	10.1889	5.1(Q)
$	40	Dimethylphthalate-d6	166	5.783	5.772	(0.951)	366333	74.1462	37
$	43	Acenaphthylene-d8	160	5.938	5.938	(0.976)	306202	55.9721	28
*	46	Acenaphthene-d10	164	6.083	6.083	(1.000)	124951	40.0000	
$	49	4-Nitrophenol-d4	143	6.197	6.166	(1.019)	77010	82.7935	41
	53	Diethylphthalate	149	6.487	6.487	(1.066)	11030	2.17475	1.1(a)
$	54	Fluorene-d10	176	6.590	6.590	(1.083)	236722	53.7399	27
$	58	4,6-Dinitro-2-methylphenol-d2	200	6.652	6.642	(0.883)	95917	70.0567	35
*	65	Phenanthrene-d10	188	7.532	7.532	(1.000)	341328	40.0000	
$	67	Anthracene-d10	188	7.594	7.584	(1.008)	337206	35.9712	18
$	72	Pyrene-d10	212	8.929	8.929	(0.981)	256191	23.9629	12(R)
	79	bis(2-Ethylhexyl)phthalate	149	10.099	10.099	(0.997)	16798	2.08862	1.0(a)

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8655.D
Report Date: 11-Nov-2011 14:04

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
*	77 Chrysene-d12	240	10.130	10.120	(1.000)	548515	40.0000	(Q)
S	83 Benzo(a)pyrene-d12	264	11.714	11.703	(0.990)	188907	16.5701	8.3(R)
*	85 Perylene-d12	264	11.827	11.817	(1.000)	514489	40.0000	

QC Flag Legend

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

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8655.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8655.D
Lab Smp Id: K2213-09A Client Smp ID: H30Y0
Inj Date : 11-NOV-2011 01:28
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-09A,,62806,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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
* 8 1,4-Dichlorobenzene-d4	3.372	314763	40.000
* 25 Naphthalene-d8	4.427	503568	40.000
* 65 Phenanthrene-d10	7.533	954353	40.000
* 77 Chrysene-d12	10.130	1491894	40.000

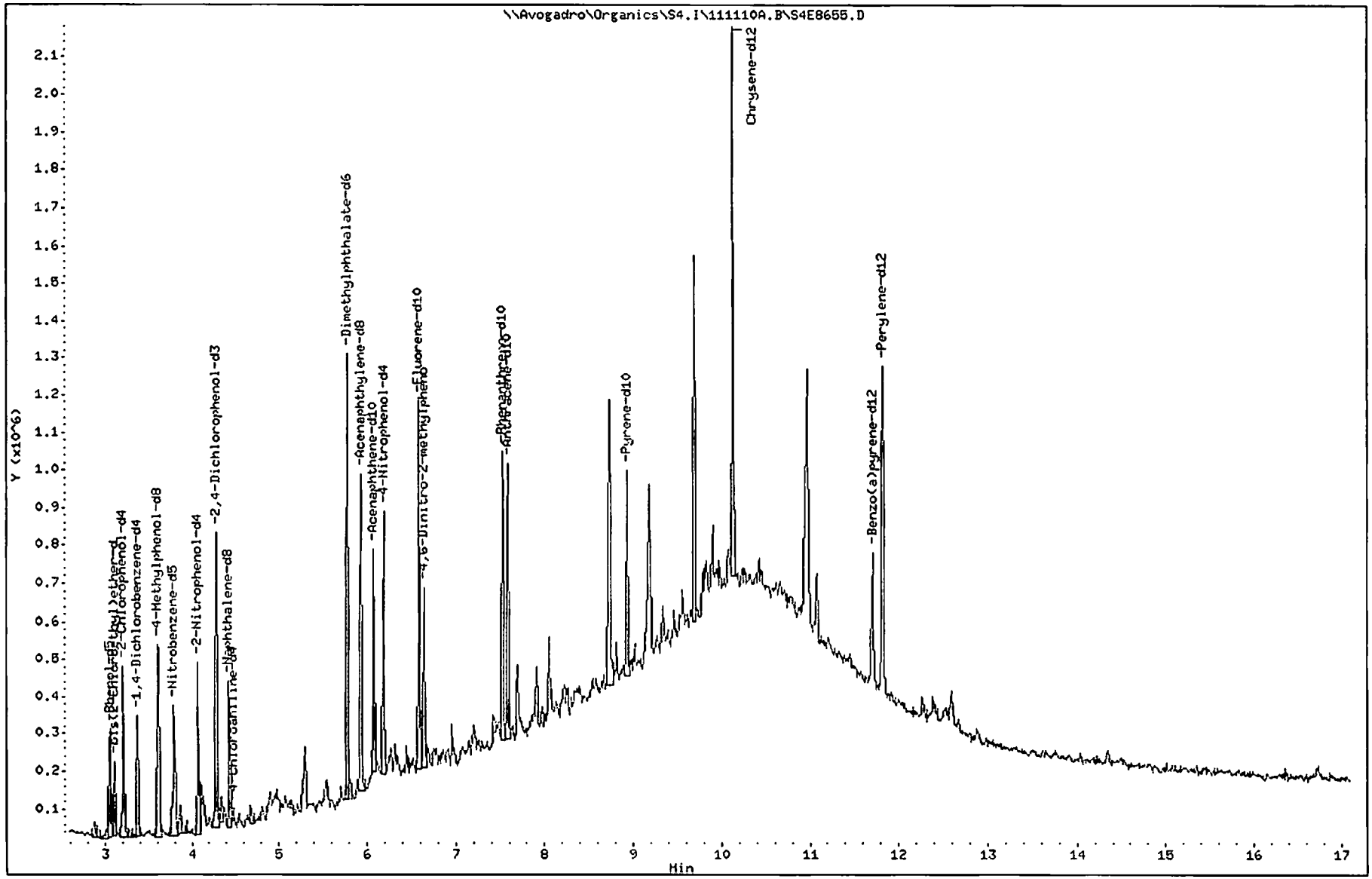
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.685	43033	5.46858539	2.7	0		0	8
Unknown				CAS #:			
3.020	47358	6.01823756	3.0	0		0	8
2-Cyclopenten-1-one, 2,3,4,5-tetramethyl				CAS #: 54458-61-6			
3.869	110833	14.0845479	7.0	91	NIST2002.L	16989	8

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8655.D
Report Date: 11-Nov-2011 14:04

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.345	101221	8.04030090	4.0	0		0	25
Unknown				CAS #:			
4.676	56799	4.51167838	2.3	0		0	25
Unknown				CAS #:			
8.733	1010692	42.3613467	21	0		0	65
Unknown				CAS #:			
9.696	947021	25.3911121	13	0		0	77

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8655.D
Date : 11-NOV-2011 01:28
Client ID: H30Y0
Sample Info: K2213-09A,,62806,,
Volume Injected (uL): 2.0
Column phase: RXI-5SILMS

Instrument: S4.I
Operator: MMS SRC: LIMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8655.D

Date : 11-NOV-2011 01:28

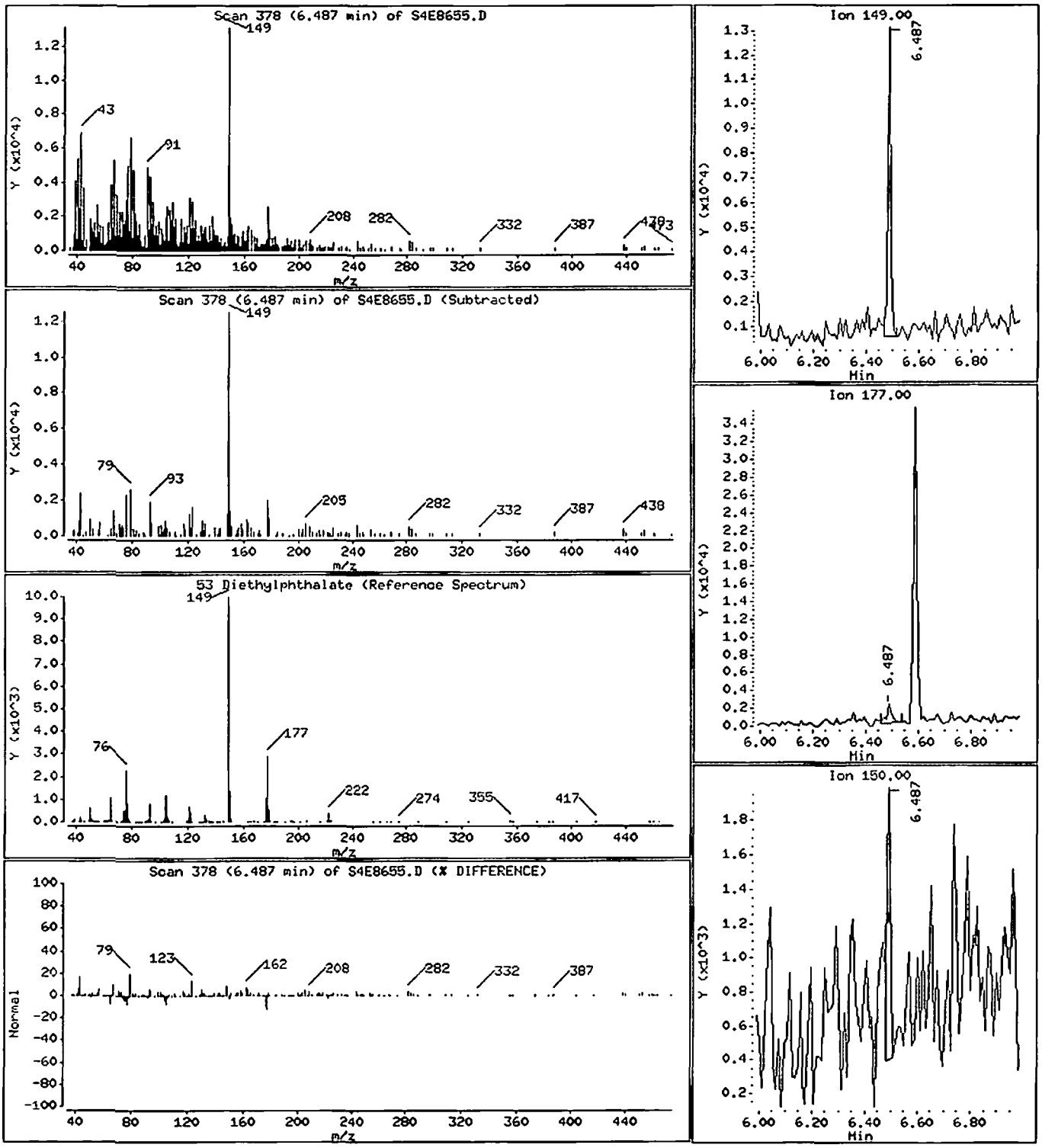
Client ID: H30Y0 Instrument: S4.i

Sample Info: K2213-09A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

53 Diethylphthalate Concentration: 1.1 ug/L



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Date : 11-NOV-2011 01:28

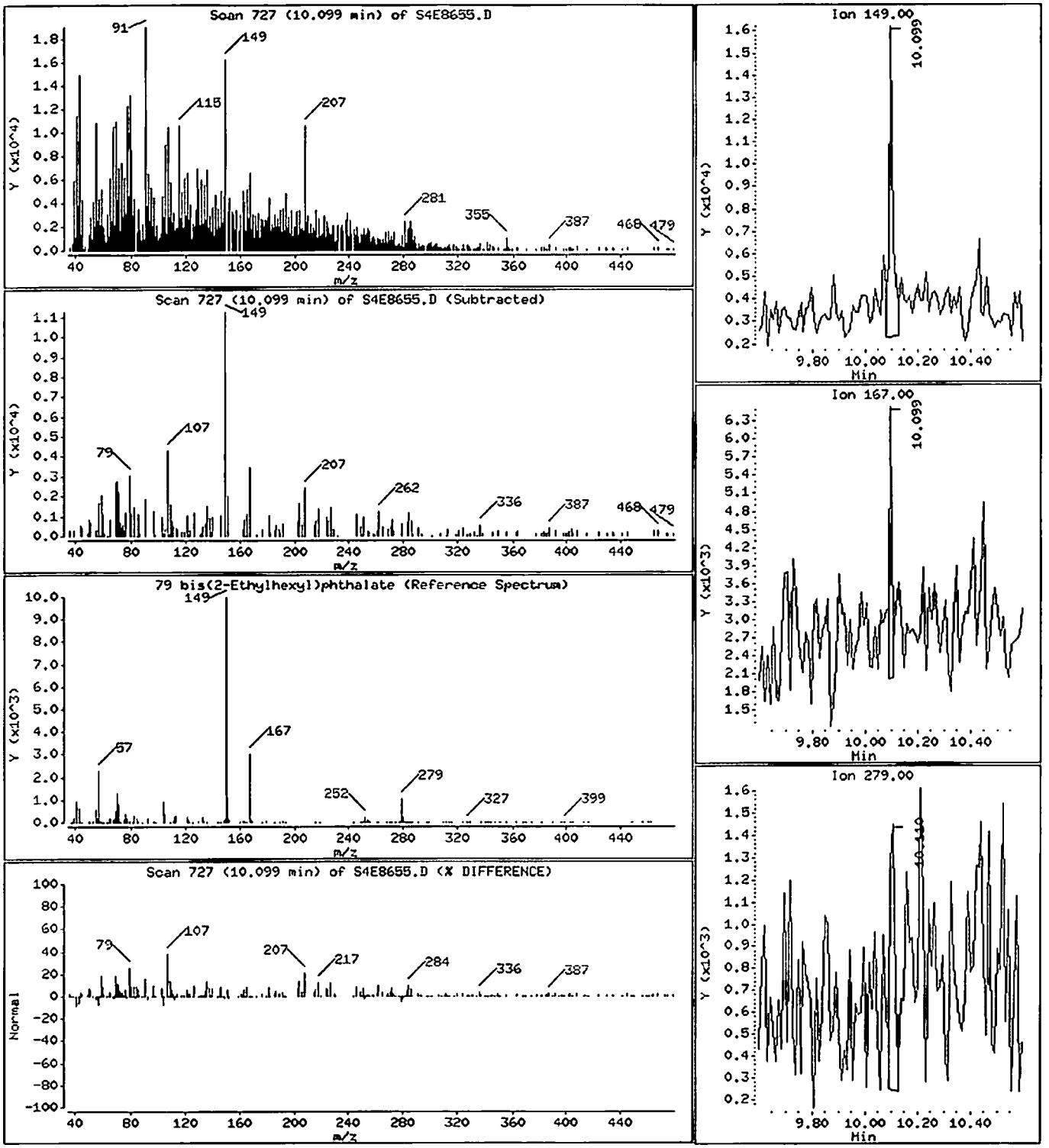
Client ID: H30Y0 Instrument: S4.i

Sample Info: K2213-09A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

79 bis(2-Ethylhexyl)phthalate Concentration: 1.0 ug/L



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Date : 11-NOV-2011 01:28

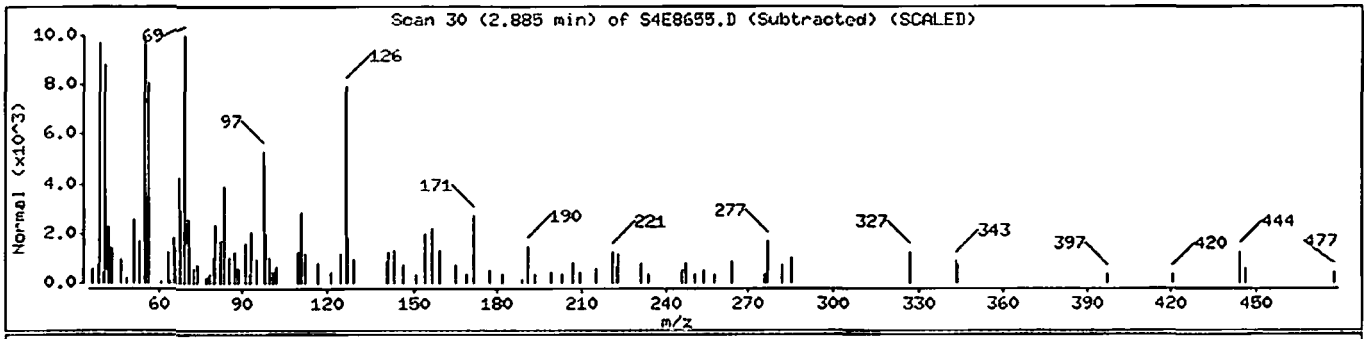
Client ID: H30Y0 Instrument: S4.i

Sample Info: K2213-09A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 11-NOV-2011 01:28

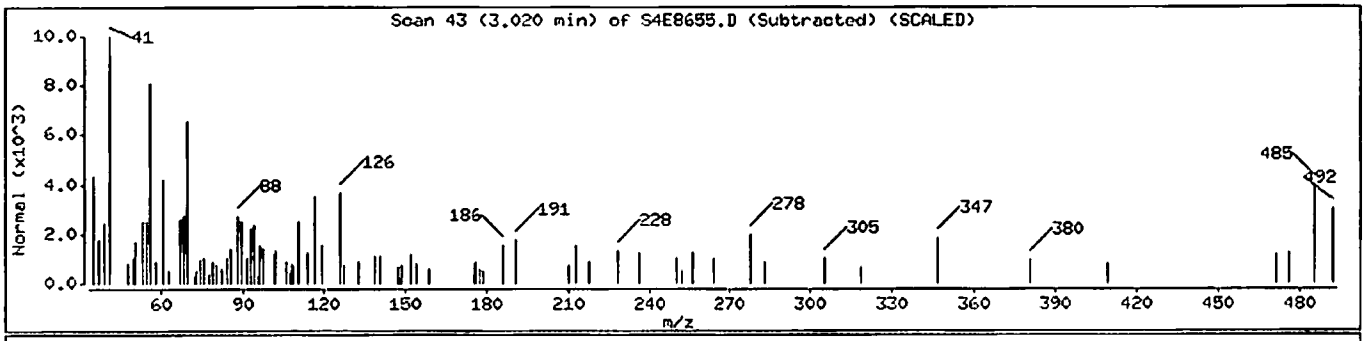
Client ID: H30Y0 Instrument: S4.i

Sample Info: K2213-09A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 11-NOV-2011 01:28

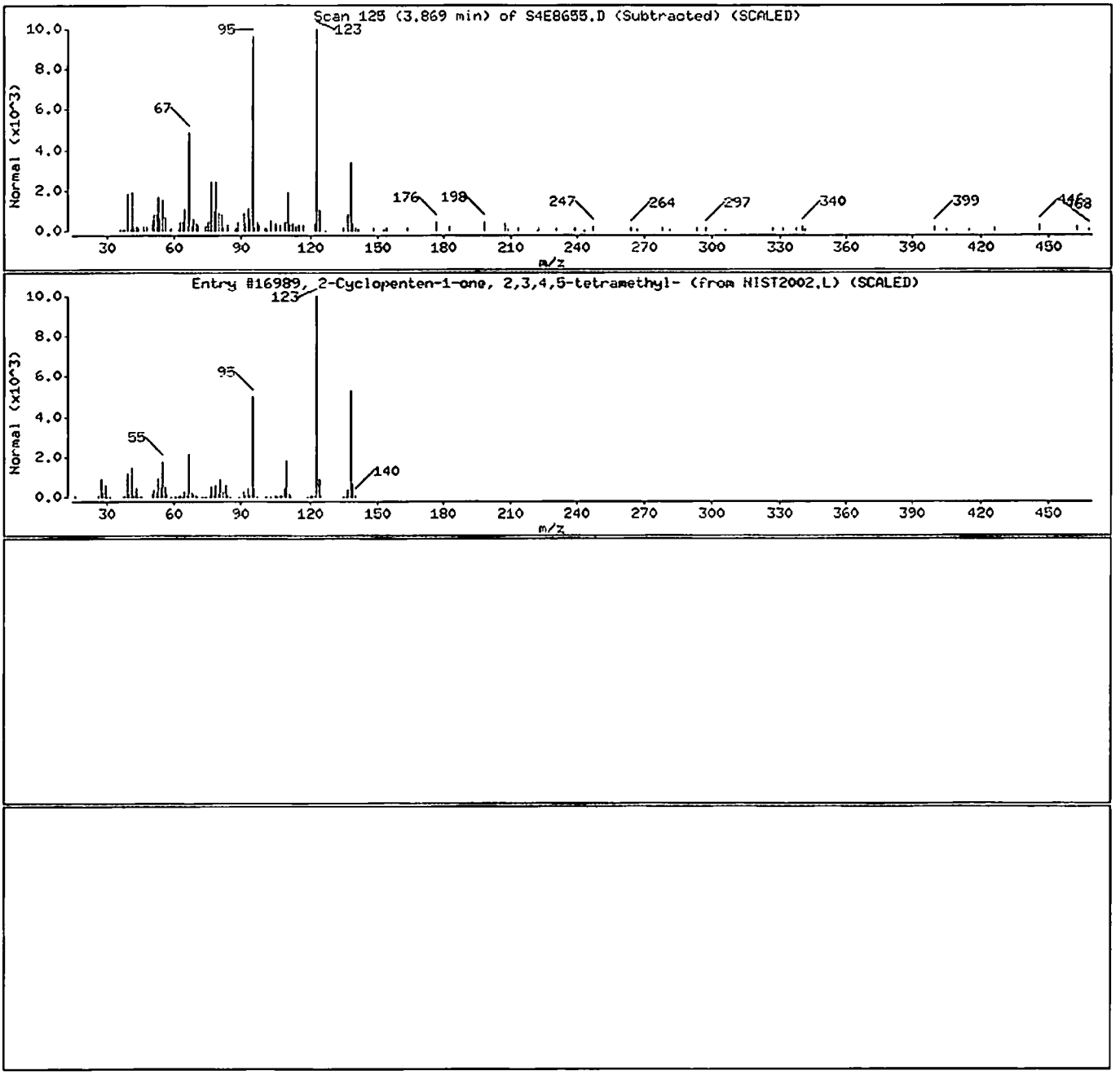
Client ID: H30Y0 Instrument: S4.i

Sample Info: K2213-09A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Cyclopenten-1-one, 2,3,4,5-tetramethyl	54458-61-6	NIST2002.L	16989	91	C9H14O	138



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8655.D

Date : 11-NOV-2011 01:28

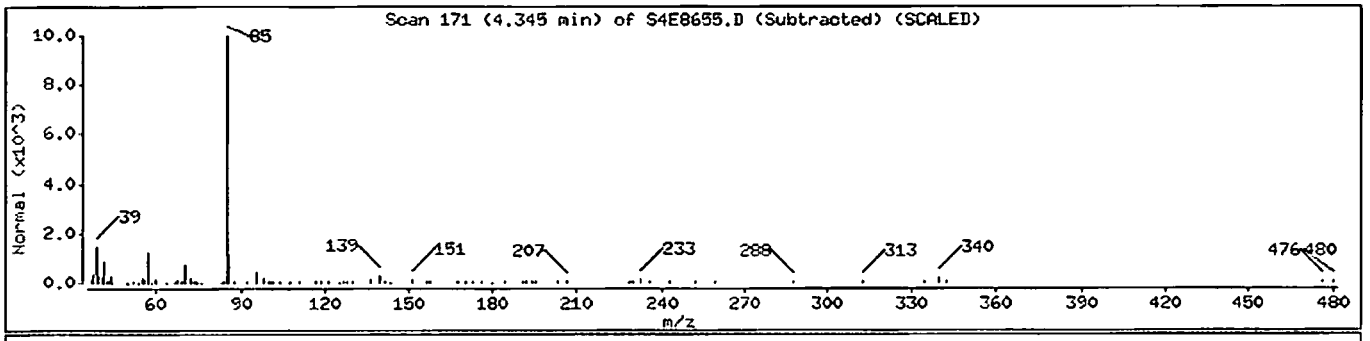
Client ID: H30Y0 Instrument: S4.i

Sample Info: K2213-09A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 11-NOV-2011 01:28

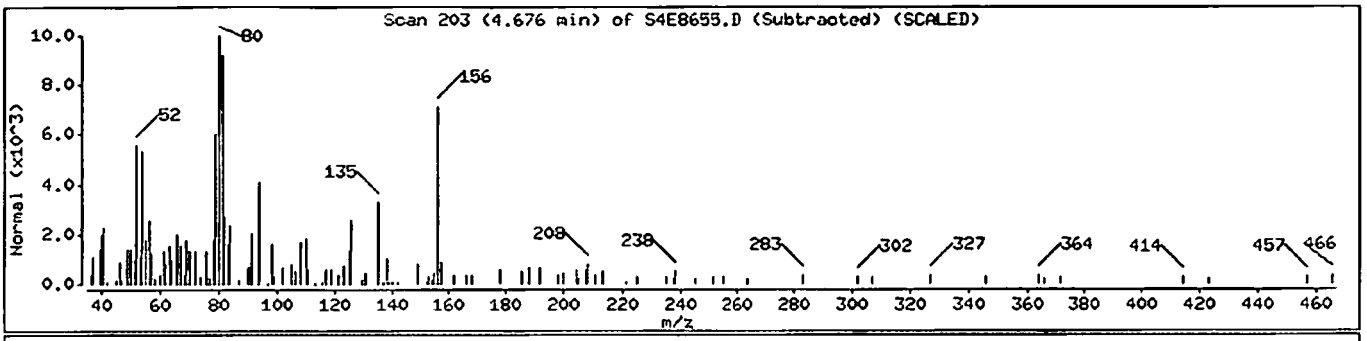
Client ID: H30Y0 Instrument: S4.i

Sample Info: K2213-09A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 11-NOV-2011 01:28

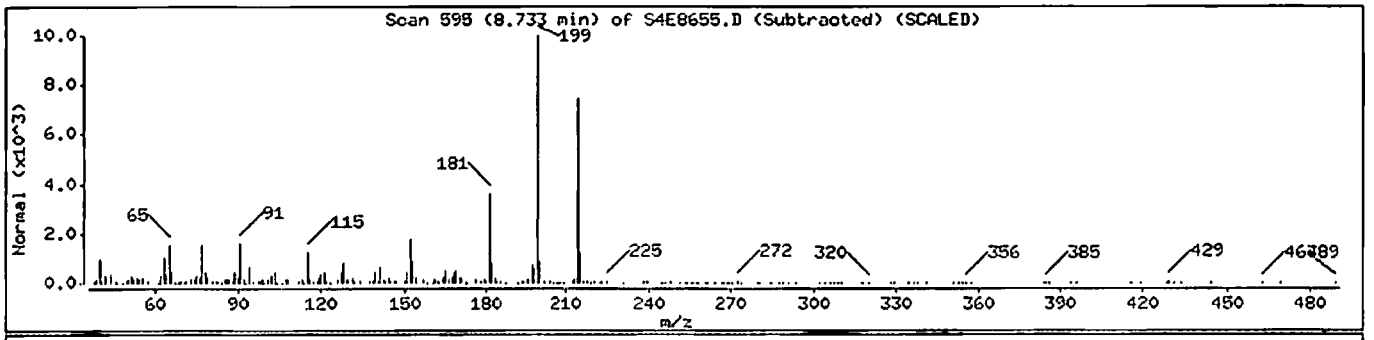
Client ID: H30Y0 Instrument: S4.i

Sample Info: K2213-09A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 11-NOV-2011 01:28

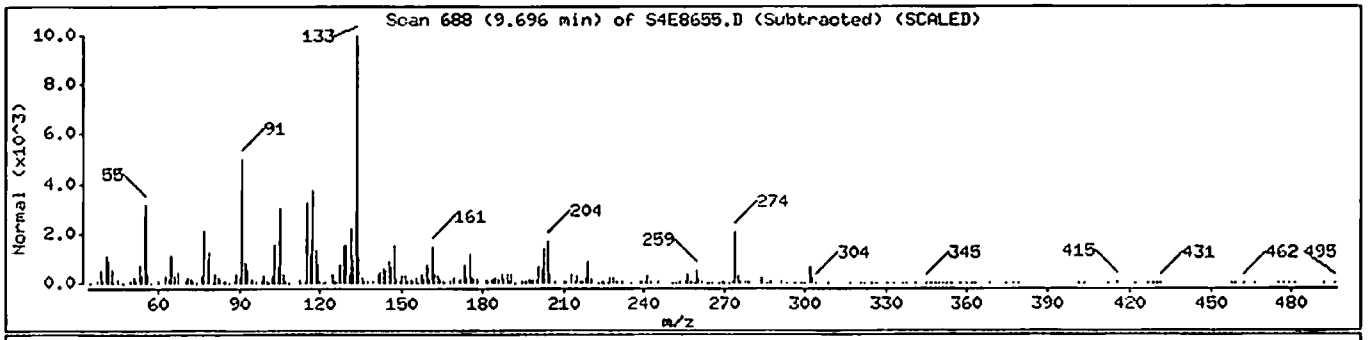
Client ID: H30Y0 Instrument: S4.i

Sample Info: K2213-09A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Y1

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-10A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8656.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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

EPA SAMPLE NO.

H30Y1

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-10A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8656.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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

EPA SAMPLE NO.: H30Y1

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

Lab Code: MITKEM | Case No.: 41926 | Mod. Ref No.: | SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER | Lab Sample ID: K2213-10A

Sample wt/vol: 1000 (g/mL) ML | Lab File ID: S4E8656.D

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

% Moisture: | Decanted: (Y/N) | Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) | Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) | GPC Factor: 1.00 | Date Analyzed: 11/11/2011

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	3.268	3.2	J
02		Unknown-02	3.931	2.6	J
03		Unknown-03	4.334	4.6	J
04		Unknown-04	4.386	3.3	J
05		Unknown-05	5.307	4.6	J
06		Unknown-06	6.187	25	J
07		Unknown-07	9.696	12	J
	E966796[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8656.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8656.D
Lab Smp Id: K2213-10A Client Smp ID: H30Y1
Inj Date : 11-NOV-2011 01:54
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-10A,,62806,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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	3.050	3.050	(0.905)	43897	54.5296	27
$	4 bis(2-Chloroethyl)ether-d8	67	3.112	3.112	(0.923)	28594	47.7542	24
$	6 2-Chlorophenol-d4	132	3.206	3.206	(0.951)	49188	52.0686	26
*	8 1,4-Dichlorobenzene-d4	152	3.371	3.371	(1.000)	29935	40.0000	(Q)
$	11 4-Methylphenol-d8	113	3.620	3.609	(1.074)	52448	61.5220	31
$	16 Nitrobenzene-d5	128	3.796	3.796	(0.857)	22501	54.6256	27(Q)
$	19 2-Nitrophenol-d4	143	4.075	4.075	(0.921)	32891	62.6457	31
$	23 2,4-Dichlorophenol-d3	165	4.282	4.282	(0.967)	67872	68.9890	34
*	25 Naphthalene-d8	136	4.427	4.427	(1.000)	98403	40.0000	
$	27 4-Chloroaniline-d4	131	4.479	4.468	(1.012)	11019	11.3522	5.7(Q)
$	40 Dimethylphthalate-d6	166	5.783	5.772	(0.951)	251521	63.5162	32
$	43 Acenaphthylene-d8	160	5.938	5.938	(0.976)	220559	50.3021	25
*	46 Acenaphthene-d10	164	6.083	6.083	(1.000)	100148	40.0000	
$	49 4-Nitrophenol-d4	143	6.197	6.166	(1.019)	60450	81.0855	41(H)
$	54 Fluorene-d10	176	6.590	6.590	(1.083)	160005	45.3200	23
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.652	6.642	(0.883)	72281	69.9844	35
*	65 Phenanthrene-d10	188	7.532	7.532	(1.000)	257483	40.0000	
$	67 Anthracene-d10	188	7.594	7.584	(1.008)	273122	38.6225	19
$	72 Pyrene-d10	212	8.929	8.929	(0.881)	248131	25.2063	13(R)
*	77 Chrysene-d12	240	10.130	10.120	(1.000)	505053	40.0000	(Q)
$	83 Benzo(a)pyrene-d12	264	11.713	11.703	(0.990)	209228	17.9645	9.0(R)

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8656.D
Report Date: 11-Nov-2011 14:04

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
* 85 Perylene-d12	264	11.827	11.817	(1.000)	525605	40.0000	

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\S4.I\111110A.B\S4E8656.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8656.D
Lab Smp Id: K2213-10A Client Smp ID: H30Y1
Inj Date : 11-NOV-2011 01:54
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-10A,,62806,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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
* 8 1,4-Dichlorobenzene-d4	3.372	243925	40.000
* 25 Naphthalene-d8	4.427	305507	40.000
* 46 Acenaphthene-d10	6.083	513571	40.000
* 77 Chrysene-d12	10.130	1341910	40.000

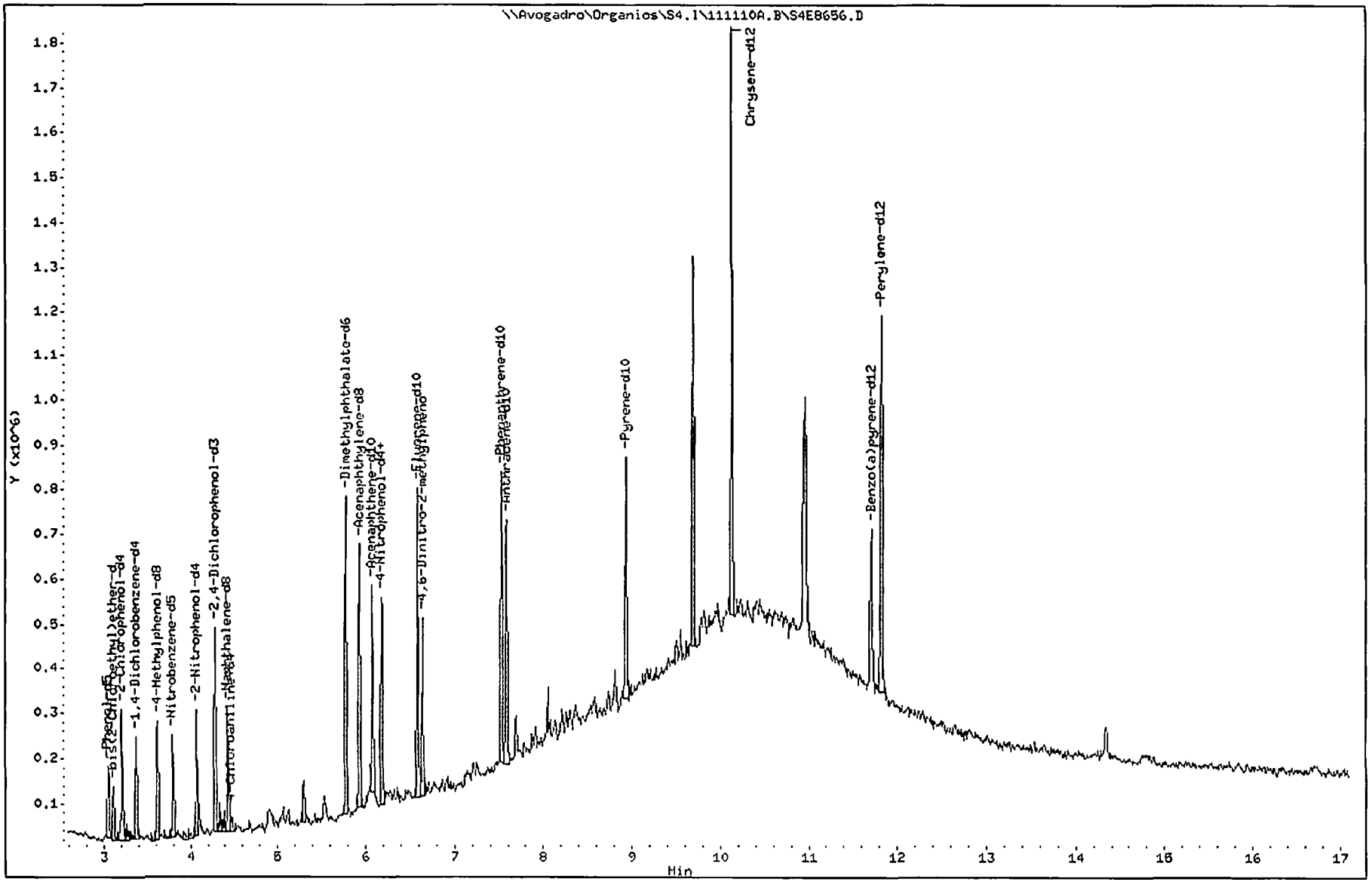
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
3.268	39440	6.46754136	3.2	0		0	8
Unknown				CAS #:			
3.931	40366	5.28505973	2.6	0		0	25
Unknown				CAS #:			
4.334	69773	9.13533621	4.6	0		0	25

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8656.D
Report Date: 11-Nov-2011 14:04

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.386	49868	6.52927067	3.3	0		0	25
Unknown				CAS #:			
5.307	118488	9.22855259	4.6	0		0	46
Unknown				CAS #:			
6.187	641977	50.0009636	25	0		0	46
Unknown				CAS #:			
9.696	830508	24.7559821	12	0		0	77

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8656.D
Date : 11-NOV-2011 01:54
Client ID: H30Y1
Sample Info: K2213-10A,,62806,,
Volume Injected (uL): 2.0
Column phase: RXI-5SILMS

Instrument: S4.i
Operator: MMS SRC: LIMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8656.D

Date : 11-NOV-2011 01:54

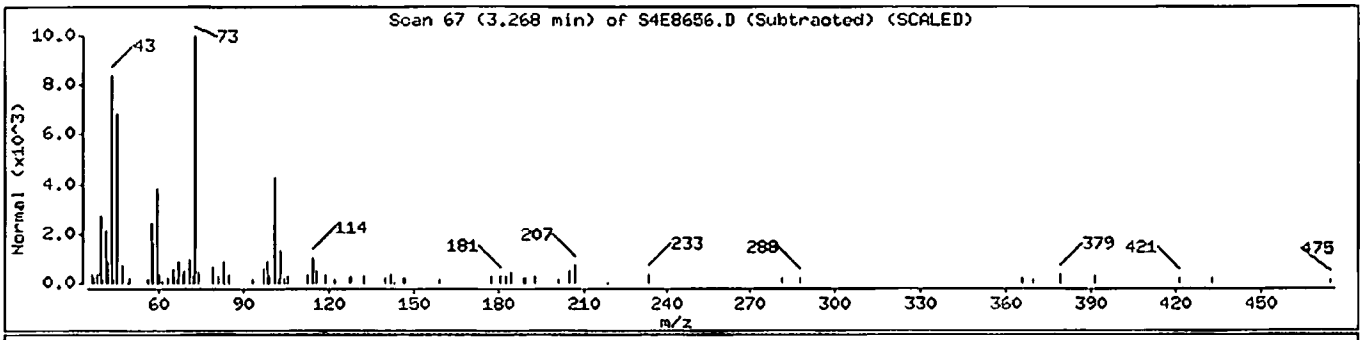
Client ID: H30Y1 Instrument: S4.i

Sample Info: K2213-10A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8656.D

Date : 11-NOV-2011 01:54

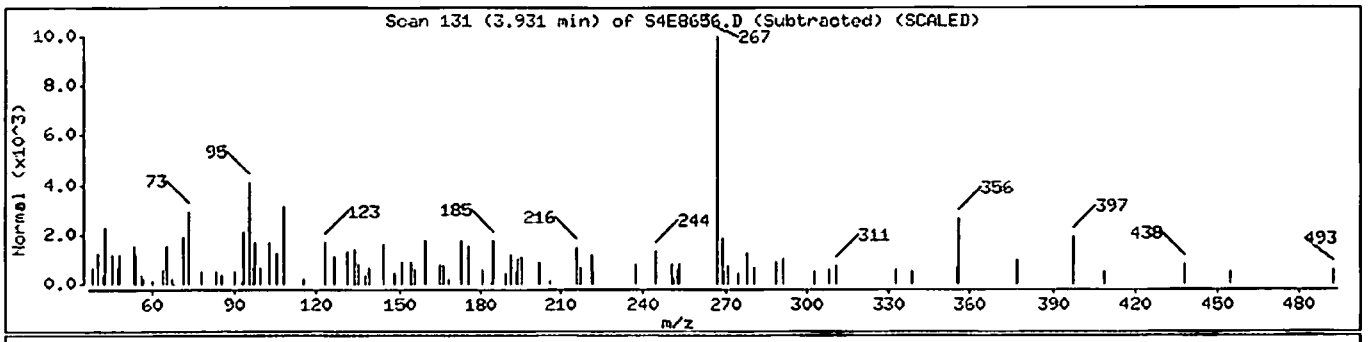
Client ID: H30Y1 Instrument: S4.i

Sample Info: K2213-10A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8656.D

Date : 11-NOV-2011 01:54

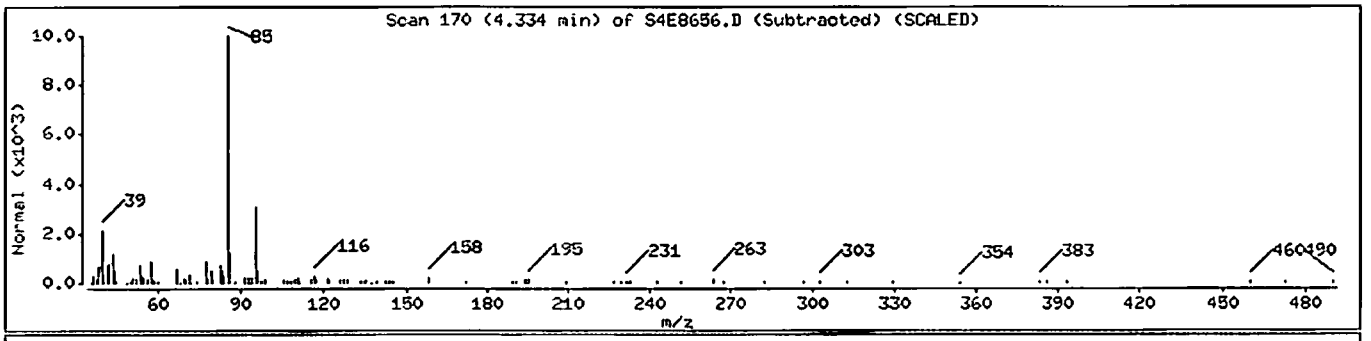
Client ID: H30Y1 Instrument: S4.i

Sample Info: K2213-10A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8656.D

Date : 11-NOV-2011 01:54

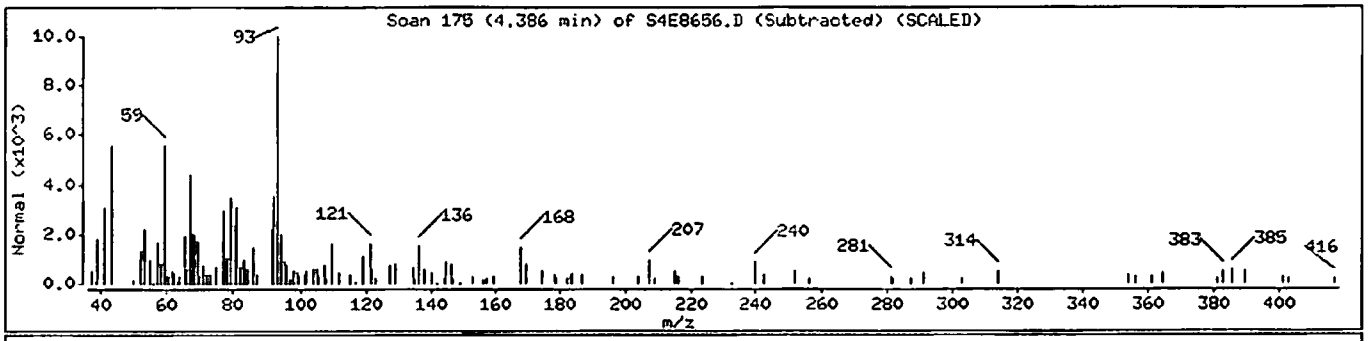
Client ID: H30Y1 Instrument: S4.i

Sample Info: K2213-10A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8656.D

Date : 11-NOV-2011 01:54

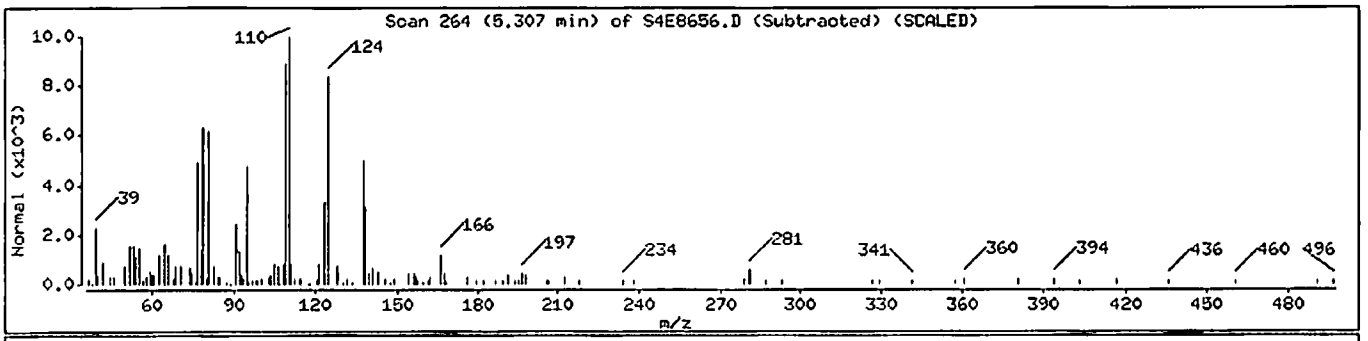
Client ID: H30Y1 Instrument: S4.i

Sample Info: K2213-10A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 11-NOV-2011 01:54

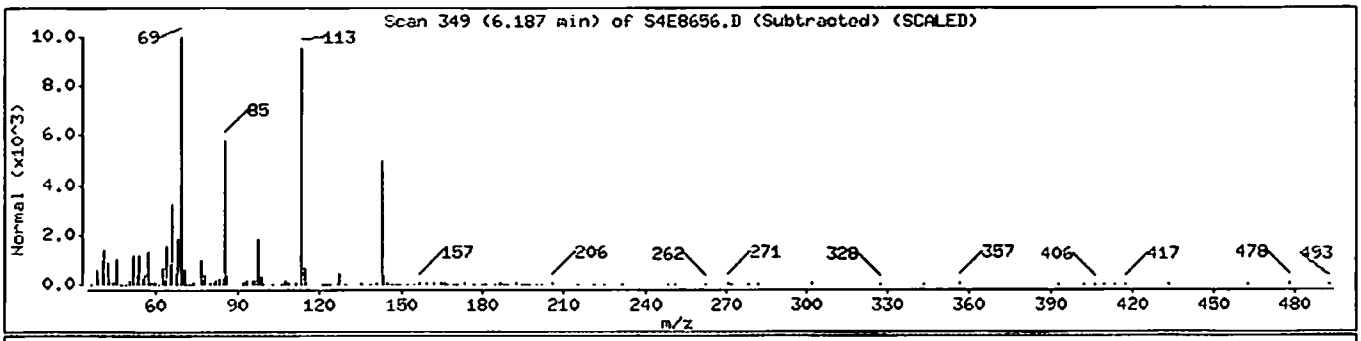
Client ID: H30Y1 Instrument: S4.i

Sample Info: K2213-10A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8656.D

Date : 11-NOV-2011 01:54

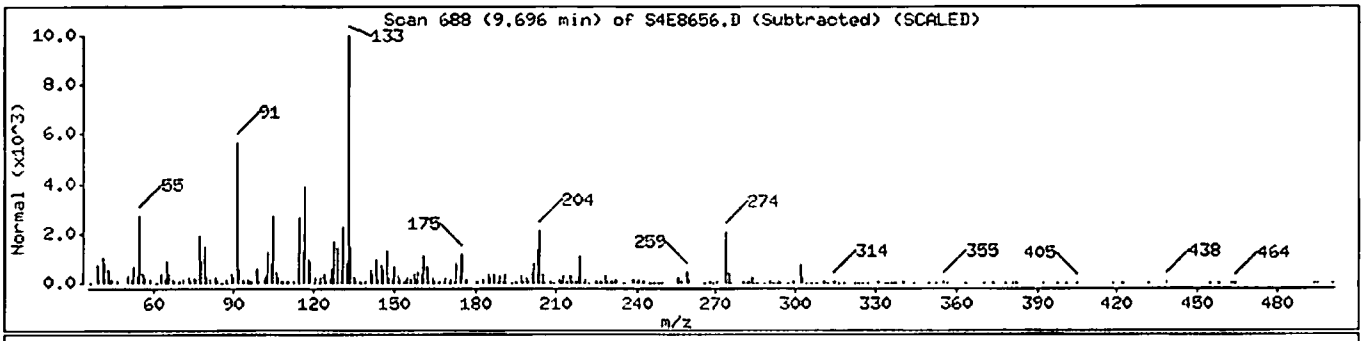
Client ID: M30Y1 Instrument: S4.i

Sample Info: K2213-10A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Y7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-02A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5232.D

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

% Moisture: Decanted: (Y/N) Date Received: 10/29/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/03/2011

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

EPA SAMPLE NO.

H30Y7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-02A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5232.D

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

% Moisture: Decanted: (Y/N) Date Received: 10/29/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/03/2011

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

EPA SAMPLE NO.: H30Y7

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

Lab Code: MITKEM | Case No.: 41926 | Mod. Ref No.: | SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER | Lab Sample ID: K2213-02A

Sample wt/vol: 1000 (g/mL) ML | Lab File ID: S2H5232.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: 11/03/2011

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	3.670	2.8	J
02		Unknown-02	4.346	2.1	J
03		Unknown-03	4.485	2.1	J
04		Unknown-04	4.603	5.8	J
05		Unknown-05	5.118	3.8	J
06		Unknown-06	5.182	2.6	J
07		Unknown-07	5.322	4.4	J
08		Unknown-08	5.482	4.0	J
09		Unknown-09	5.675	8.8	J
10		Unknown-10	5.901	3.3	J
11		Unknown-11	8.153	21	J
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5232.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\S2H5232.D
Lab Smp Id: K2213-02A Client Smp ID: H30Y7
Inj Date : 04-NOV-2011 17:01
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2213-02A,,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: 8
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)
S	2 Phenol-d5	71	3.498	3.500	(0.918)	229570	61.8139	31
S	4 bis(2-Chloroethyl)ether-d8	67	3.552	3.554	(0.932)	330374	64.5558	32
S	6 2-Chlorophenol-d4	132	3.627	3.629	(0.952)	231203	71.9644	36
*	8 1,4-Dichlorobenzene-d4	152	3.809	3.822	(1.000)	117939	40.0000	(Q)
S	11 4-Methylphenol-d8	113	4.131	4.133	(1.084)	348523	69.2198	35
S	16 Nitrobenzene-d5	128	4.270	4.283	(0.875)	112644	70.2028	35
S	19 2-Nitrophenol-d4	143	4.549	4.551	(0.932)	134940	76.1805	38
S	23 2,4-Dichlorophenol-d3	165	4.753	4.755	(0.974)	237808	73.5436	37
*	25 Naphthalene-d8	136	4.881	4.884	(1.000)	308106	40.0000	
S	27 4-Chloroaniline-d4	131	4.935	4.937	(1.011)	54674	19.0427	9.5(Q)
S	40 Dimethylphthalate-d6	166	6.104	6.106	(0.961)	588666	79.4268	40
S	43 Acenaphthylene-d8	160	6.211	6.224	(0.978)	500518	51.9333	26
*	46 Acenaphthene-d10	164	6.351	6.353	(1.000)	201572	40.0000	
S	49 4-Nitrophenol-d4	143	6.447	6.449	(1.015)	66646	62.3978	31(Q)
S	54 Fluorene-d10	176	6.779	6.782	(1.068)	386400	56.7574	28
S	58 4,6-Dinitro-2-methylphenol-d2	200	6.833	6.835	(0.902)	107674	85.2607	43(QR)
*	65 Phenanthrene-d10	188	7.573	7.575	(1.000)	323631	40.0000	
S	67 Anthracene-d10	188	7.616	7.629	(1.006)	410888	44.4462	22
S	72 Pyrene-d10	212	8.763	8.776	(0.887)	210973	29.6363	15(R)
*	77 Chrysene-d12	240	9.836	9.881	(1.000)	225975	40.0000	(QH)
S	83 Benzo(a)pyrene-d12	264	11.208	11.189	(0.996)	184126	40.4324	20(H)

Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5232.D
Report Date: 07-Nov-2011 13:27

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)	
‘ 85 Perylene-d12	264	11.208	11.275	(1.000)	185583	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\111104.B\S2H5232.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\S2H5232.D
Lab Smp Id: K2213-02A Client Smp ID: H30Y7
Inj Date : 04-NOV-2011 17:01
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2213-02A,,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: 8
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	3.810	1003461	40.000
* 25 Naphthalene-d8	4.882	1043087	40.000
* 46 Acenaphthene-d10	6.351	1087794	40.000
* 65 Phenanthrene-d10	7.574	1016135	40.000

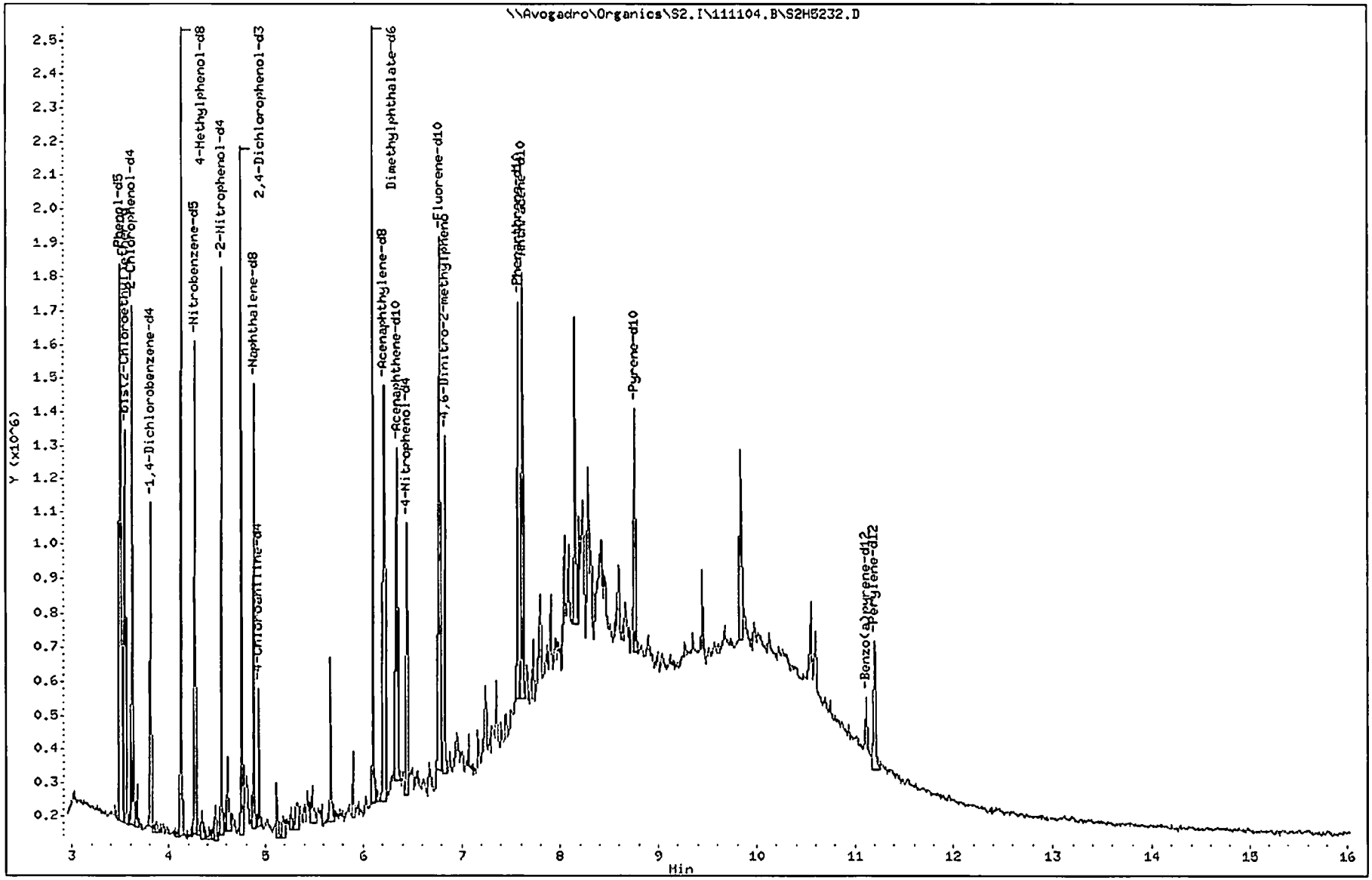
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
3.670	139165	5.54740473	2.8	0		0	8
Unknown				CAS #:			
4.346	106667	4.25197407	2.1	0		0	8
Unknown				CAS #:			
4.485	110465	4.23606463	2.1	0		0	25

Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5232.D
Report Date: 07-Nov-2011 13:27

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.603	301510	11.5622100	5.8	0		0	25
Unknown				CAS #:			
5.118	200361	7.68338779	3.8	0		0	25
Unknown				CAS #:			
5.182	137329	5.26623312	2.6	0		0	25
Unknown				CAS #:			
5.322	227482	8.72340879	4.4	0		0	25
Unknown				CAS #:			
5.482	206935	7.93549502	4.0	0		0	25
Unknown				CAS #:			
5.675	479767	17.6418163	8.8	0		0	46
Unknown				CAS #:			
5.901	177673	6.53334060	3.3	0		0	46
Unknown				CAS #:			
8.153	1059311	41.6995826	21	0		0	65

Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5232.D
Date : 04-NOV-2011 17:01
Client ID: H30Y7
Sample Info: K2213-02A,,62685,,
Volume Injected (uL): 2.0
Column phase: RXI-5SILMS

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



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Date : 04-NOV-2011 17:01

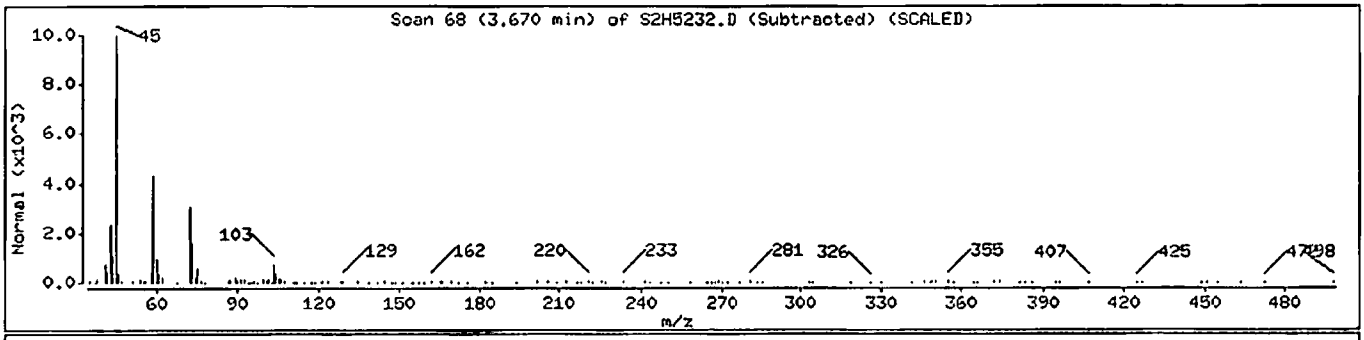
Client ID: H30Y7 Instrument: S2.i

Sample Info: K2213-02A,,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



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Date : 04-NOV-2011 17:01

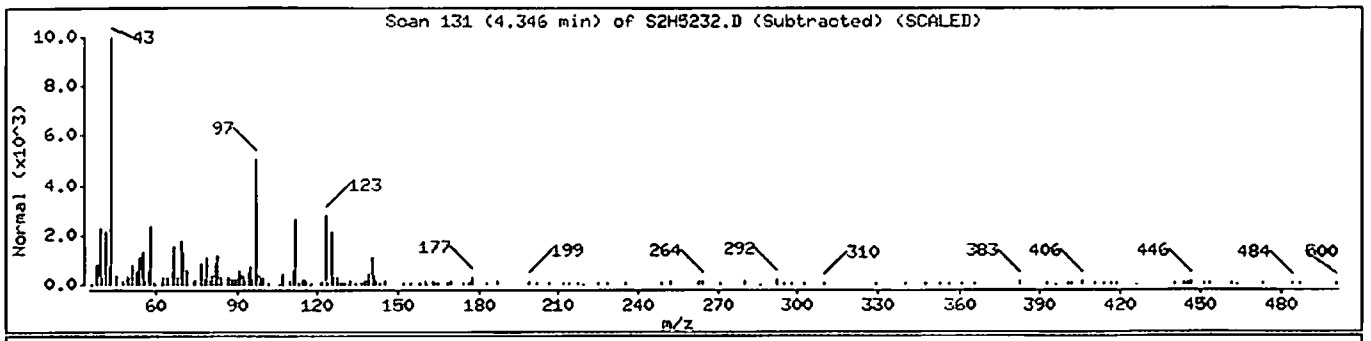
Client ID: H30Y7 Instrument: S2.i

Sample Info: K2213-02A,,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\S2H5232.D

Date : 04-NOV-2011 17:01

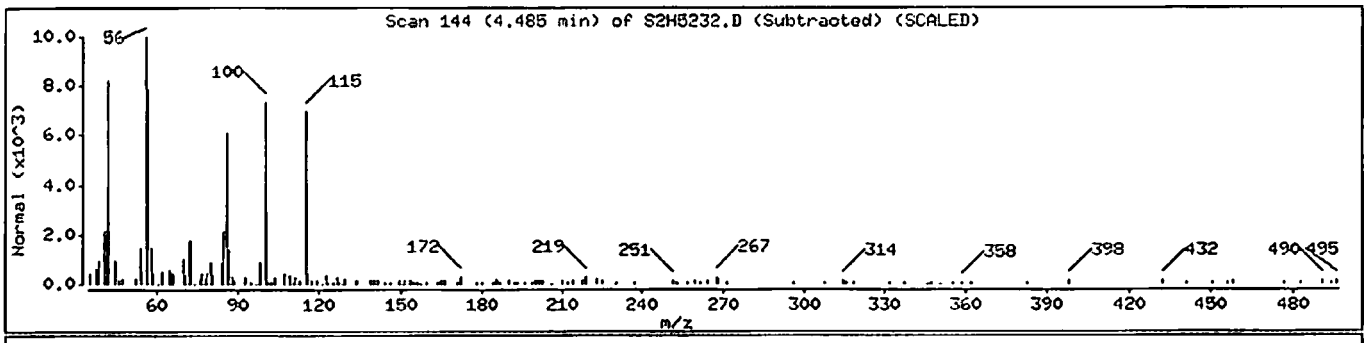
Client ID: H30Y7 Instrument: S2.i

Sample Info: K2213-02A,,62685,,

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\111104.B\S2H5232.D

Date : 04-NOV-2011 17:01

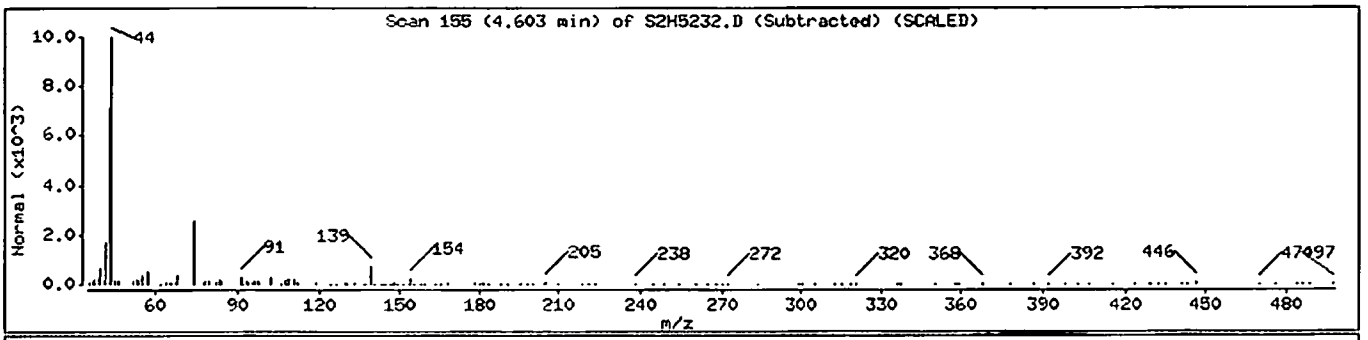
Client ID: H30Y7 Instrument: S2.i

Sample Info: K2213-02A,,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\S2H5232.D

Date : 04-NOV-2011 17:01

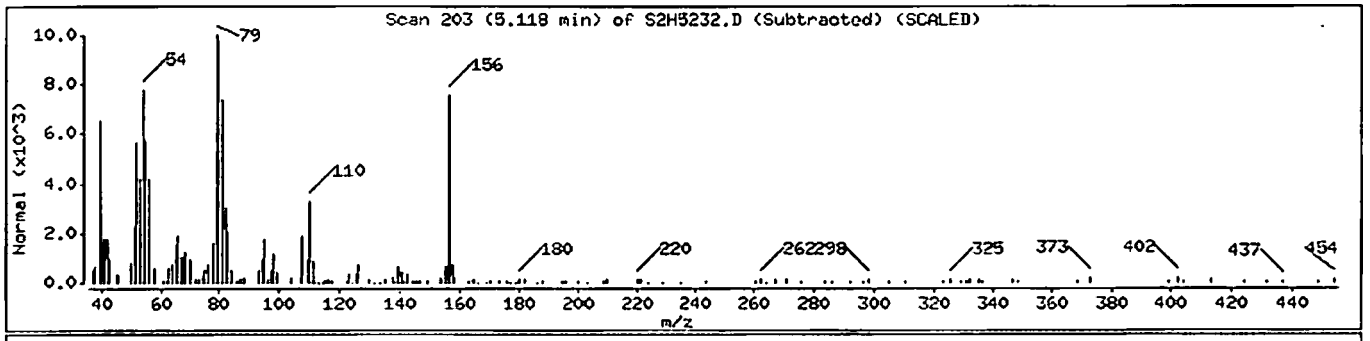
Client ID: H30Y7 Instrument: S2.i

Sample Info: K2213-02A,,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\S2H5232.D

Date : 04-NOV-2011 17:01

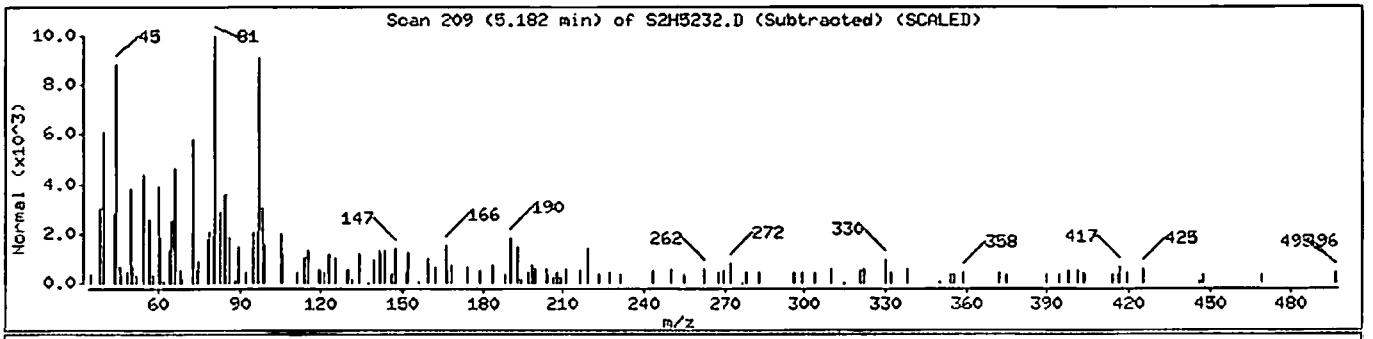
Client ID: H30Y7 Instrument: S2.i

Sample Info: K2213-02A,,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



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Date : 04-NOV-2011 17:01

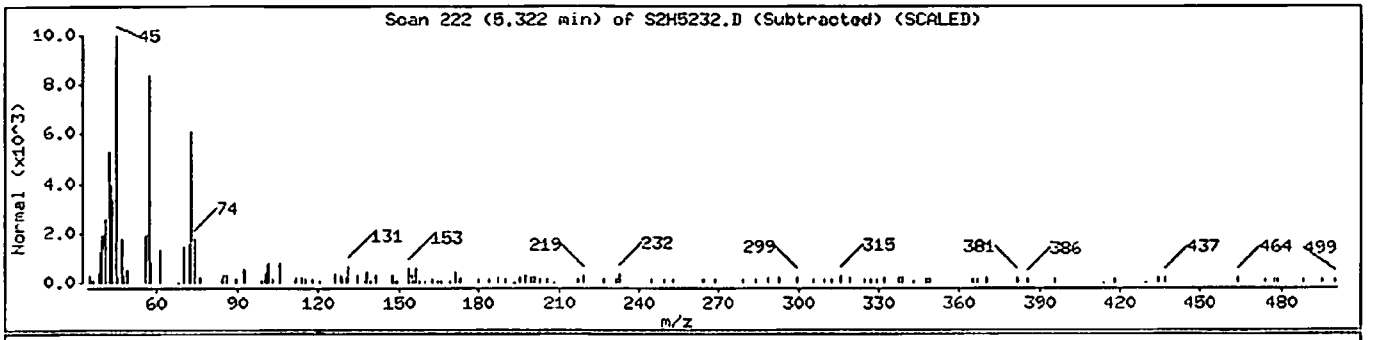
Client ID: H30Y7 Instrument: S2.i

Sample Info: K2213-02A,,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\S2H5232.D

Date : 04-NOV-2011 17:01

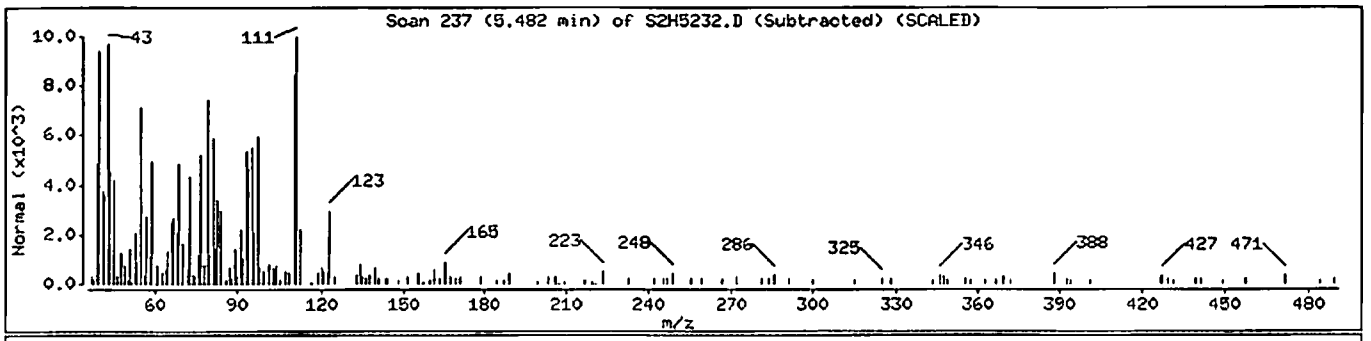
Client ID: H30Y7 Instrument: S2.i

Sample Info: K2213-02A,,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



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Date : 04-NOV-2011 17:01

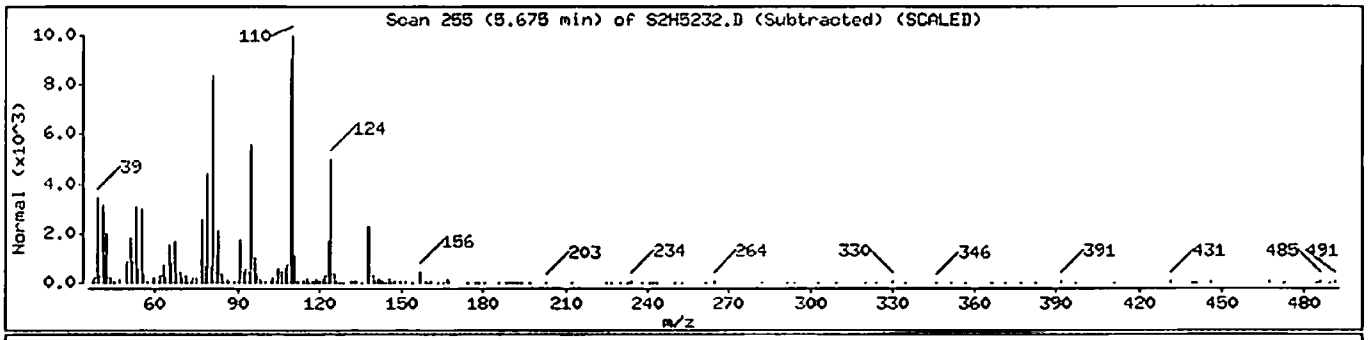
Client ID: H30Y7 Instrument: S2.i

Sample Info: K2213-02A,,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



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Date : 04-NOV-2011 17:01

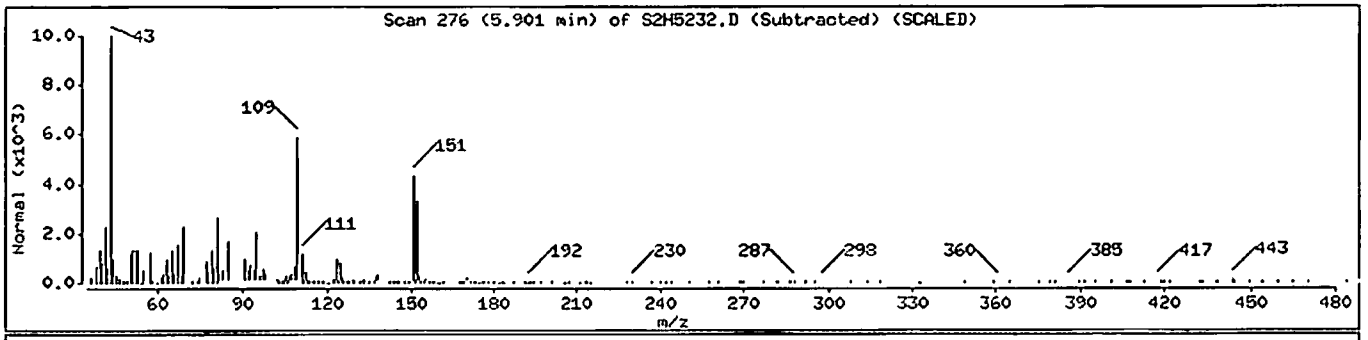
Client ID: H30Y7 Instrument: S2.i

Sample Info: K2213-02A,,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\S2H5232.D

Date : 04-NOV-2011 17:01

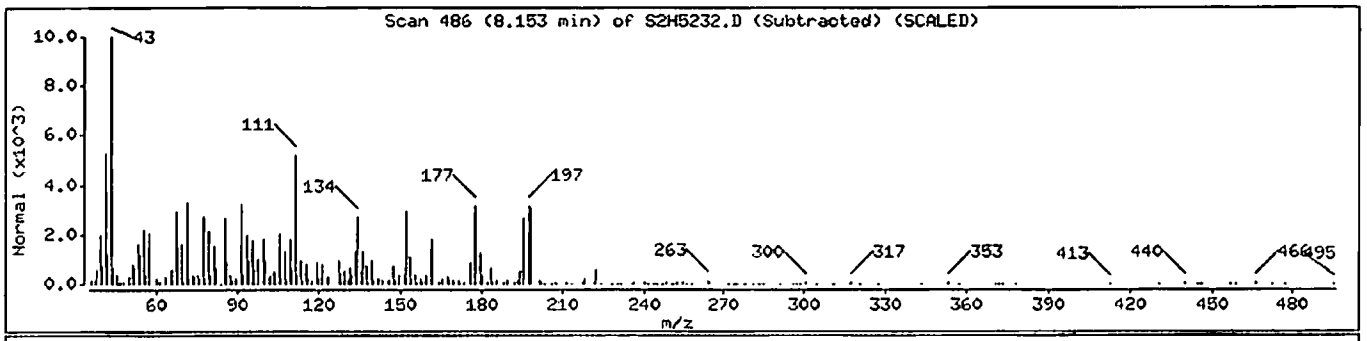
Client ID: H30Y7 Instrument: S2.i

Sample Info: K2213-02A,,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

EPA SAMPLE NO.

H30Z2

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-11A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8657.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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

EPA SAMPLE NO.

H30Z2

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-11A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8657.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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	1.1	J
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

EPA SAMPLE NO.: H30Z2

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

Lab Code: MITKEM | Case No.: 41926 | Mod. Ref No.: | SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER | Lab Sample ID: K2213-11A

Sample wt/vol: 1000 (g/mL) ML | Lab File ID: S4E8657.D

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

% Moisture: | Decanted: (Y/N) | Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) | Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) | GPC Factor: 1.00 | Date Analyzed: 11/11/2011

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	4.334	3.6	J
02		Unknown-02	4.676	2.3	J
03		Unknown-03	4.914	8.1	J
04		Unknown-04	5.048	3.5	J
05		Unknown-05	7.460	3.5	J
06		Unknown-06	7.688	2.4	J
07		Unknown-07	9.685	3.5	J
08	301-02-0	9-Octadecenamide, (Z)-	10.958	10	NJ
	E96679[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8657.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8657.D
Lab Smp Id: K2213-11A Client Smp ID: H30Z2
Inj Date : 11-NOV-2011 02:16
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-11A,,62806,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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	3.050	3.050	(0.905)	55524	63.9821	32	
$	4 bis(2-Chloroethyl)ether-d8	67	3.112	3.112	(0.923)	35501	54.9994	27	
$	6 2-Chlorophenol-d4	132	3.206	3.206	(0.951)	56027	55.0167	28	
*	8 1,4-Dichlorobenzene-d4	152	3.371	3.371	(1.000)	32270	40.0000		(Q)
$	11 4-Methylphenol-d8	113	3.609	3.609	(1.071)	50938	55.4273	28	
$	16 Nitrobenzene-d5	128	3.796	3.796	(0.857)	27248	57.0705	29	(Q)
$	19 2-Nitrophenol-d4	143	4.075	4.075	(0.921)	32852	53.9832	27	
$	23 2,4-Dichlorophenol-d3	165	4.282	4.282	(0.967)	68194	59.8023	30	
*	25 Naphthalene-d8	136	4.427	4.427	(1.000)	114058	40.0000		
$	27 4-Chloroaniline-d4	131	4.468	4.468	(1.009)	54178	48.1551	24	(Q)
$	40 Dimethylphthalate-d6	166	5.783	5.772	(0.951)	222753	59.5410	30	
$	43 Acenaphthylene-d8	160	5.938	5.938	(0.976)	236449	57.0796	29	
*	46 Acenaphthene-d10	164	6.083	6.083	(1.000)	94615	40.0000		
$	49 4-Nitrophenol-d4	143	6.186	6.166	(1.017)	53197	75.5294	38	
	53 Diethylphthalate	149	6.487	6.487	(1.066)	8245	2.14686	1.1	(a)
$	54 Fluorene-d10	176	6.590	6.590	(1.083)	198130	59.4003	30	
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.642	6.642	(0.882)	61290	63.2454	32	
*	65 Phenanthrene-d10	188	7.532	7.532	(1.000)	241594	40.0000		
$	67 Anthracene-d10	188	7.584	7.584	(1.007)	386173	58.2006	29	
$	72 Pyrene-d10	212	8.929	8.929	(0.881)	565101	69.0967	35	
*	77 Chrysene-d12	240	10.130	10.120	(1.000)	419598	40.0000		(Q)

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8657.D
Report Date: 11-Nov-2011 14:04

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
$ 83 Benzo(a)pyrene-d12	264	11.714	11.703	(0.991)	656470	66.6006	33
* 85 Perylene-d12	264	11.817	11.817	(1.000)	444827	40.0000	

QC Flag Legend

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

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8657.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8657.D
Lab Smp Id: K2213-11A Client Smp ID: H30Z2
Inj Date : 11-NOV-2011 02:16
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-11A,,62806,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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	4.427	334030	40.000
* 65 Phenanthrene-d10	7.533	656396	40.000
* 77 Chrysene-d12	10.130	1086923	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.334	60612	7.25826002	3.6	0		0	25
Unknown				CAS #:			
4.676	38709	4.63535431	2.3	0		0	25
Unknown				CAS #:			
4.914	134892	16.1532055	8.1	0		0	25
Unknown				CAS #:			
5.048	57927	6.93670848	3.5	0		0	25

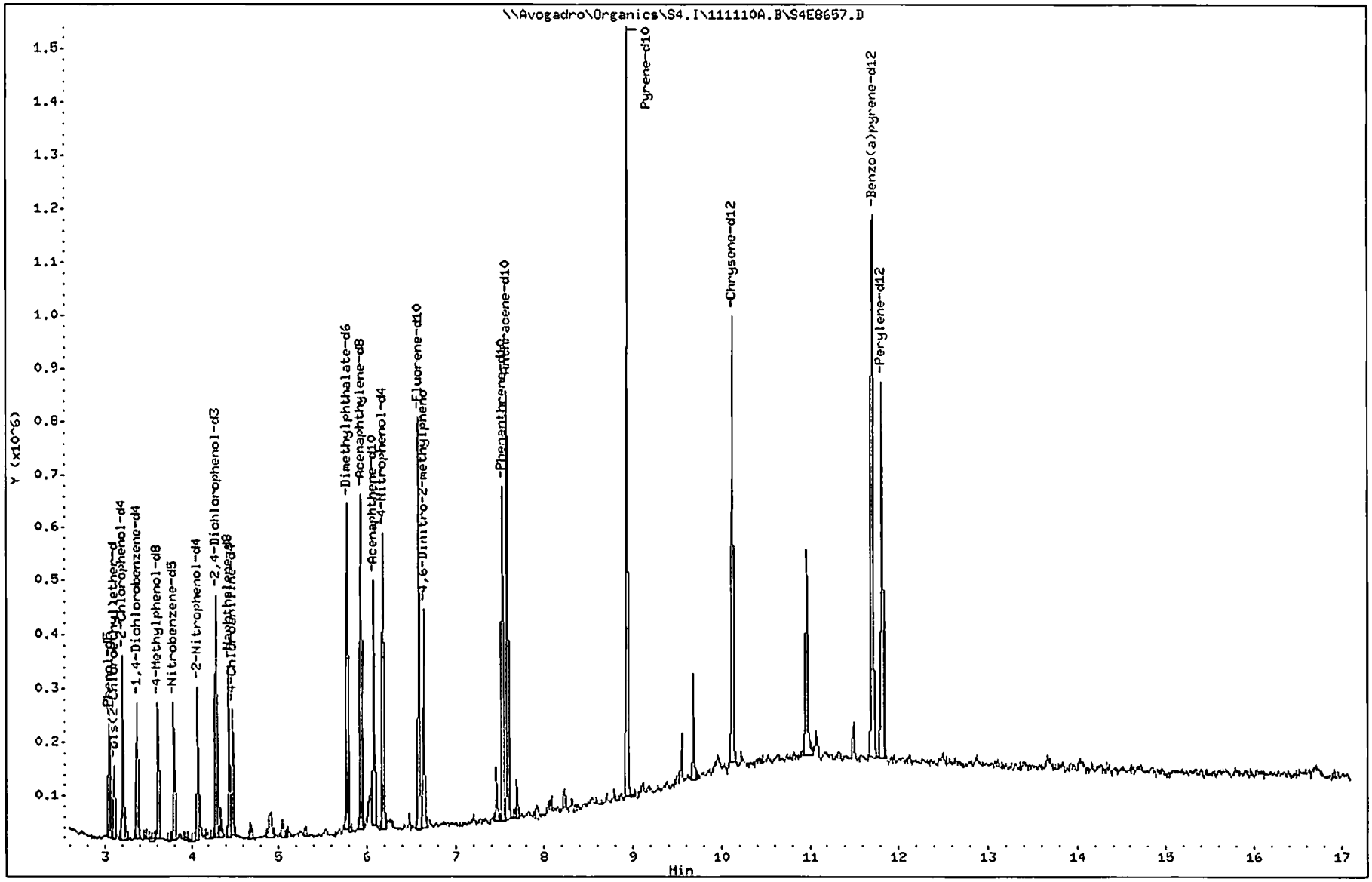
Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8657.D
Report Date: 11-Nov-2011 14:04

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
7.460	114814	6.99660075	3.5	0		0	65
Unknown				CAS #:			
7.688	80393	4.89907748	2.4	0		0	65
Unknown				CAS #:			
9.685	189164	6.96144617	3.5	0		0	77
9-Octadecenamide, (Z)-				CAS #: 301-02-0			
10.958	551310	20.2888109	10	93	NIST2002.L	106874	77

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8657.D
Date : 11-NOV-2011 02:16
Client ID: H3022
Sample Info: K2213-11A,,62806,,
Volume Injected (uL): 2.0
Column phase: RXI-5SILMS

Instrument: S4.i

Operator: MMS SRC: LIMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8657.D

Date : 11-NOV-2011 02:16

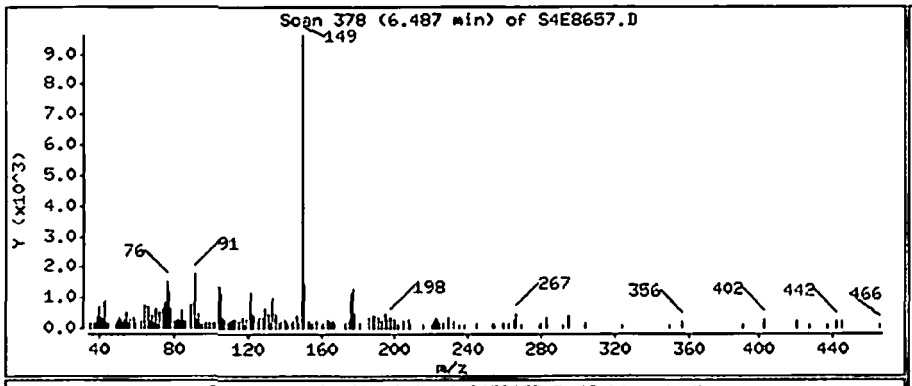
Client ID: H30Z2 Instrument: S4.i

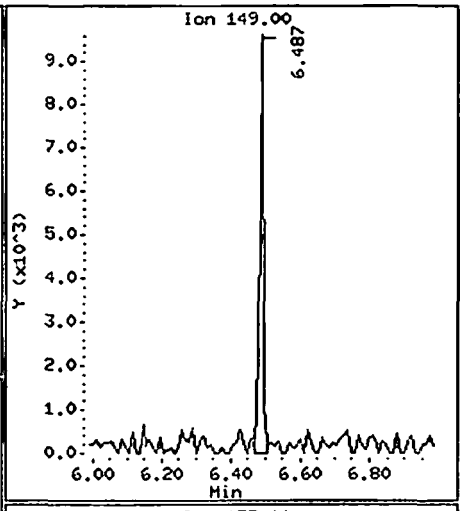
Sample Info: K2213-11A,,62806,,

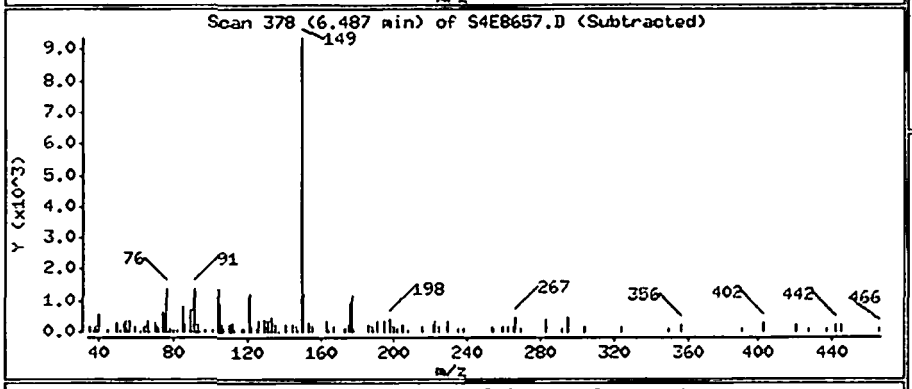
Volume Injected (uL): 2.0 Operator: MHS SRC: LIHS

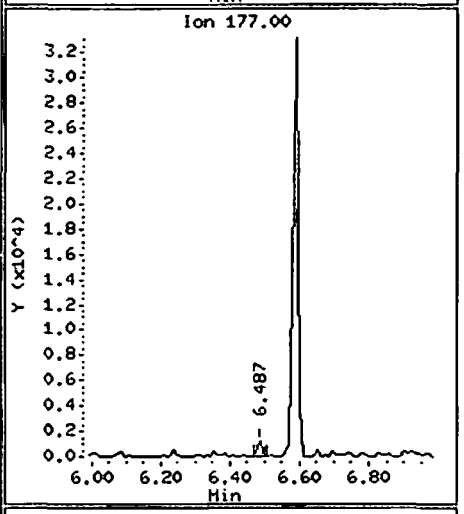
Column phase: RXI-5SILMS Column diameter: 0.25

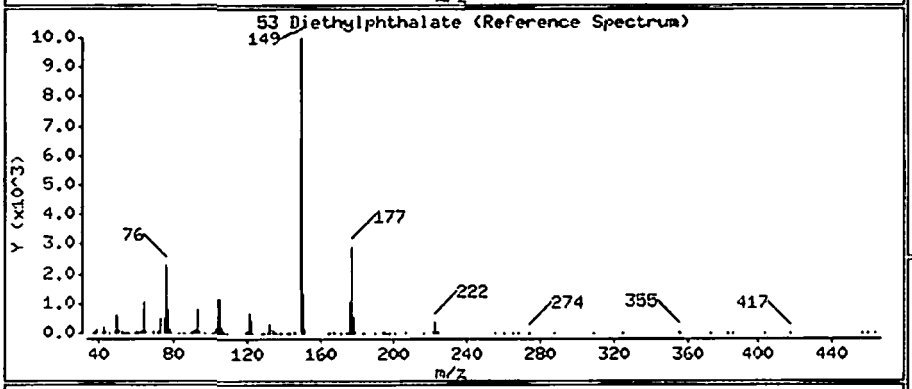
53 Diethylphthalate Concentration: 1.1 ug/L

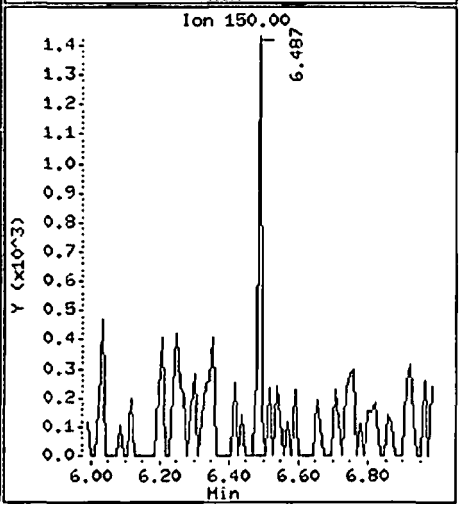


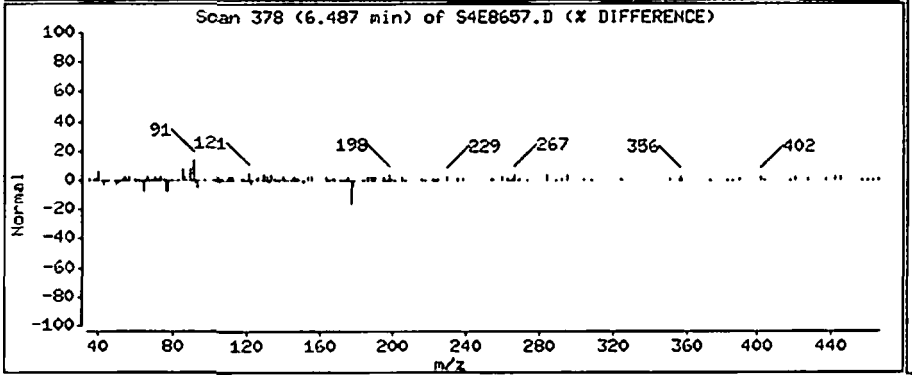












Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8657.D

Date : 11-NOV-2011 02:16

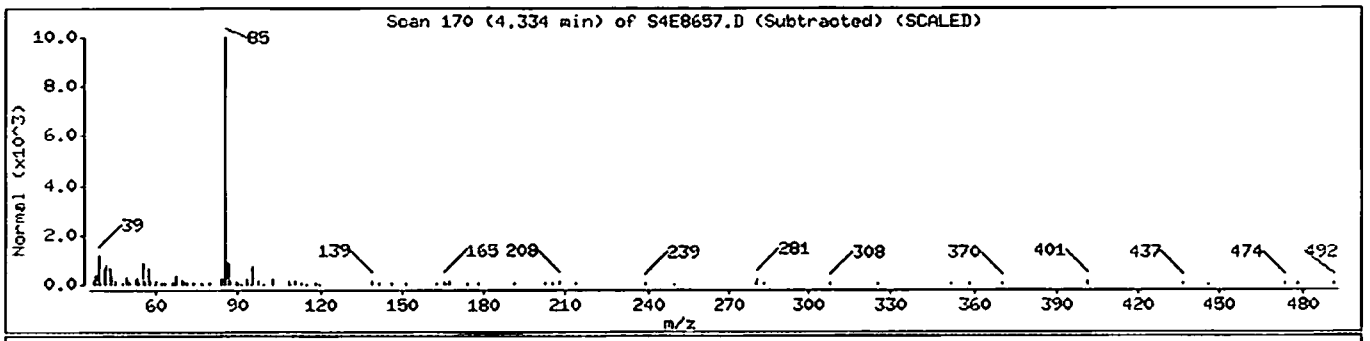
Client ID: H3022 Instrument: S4.i

Sample Info: K2213-11A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8657.D

Date : 11-NOV-2011 02:16

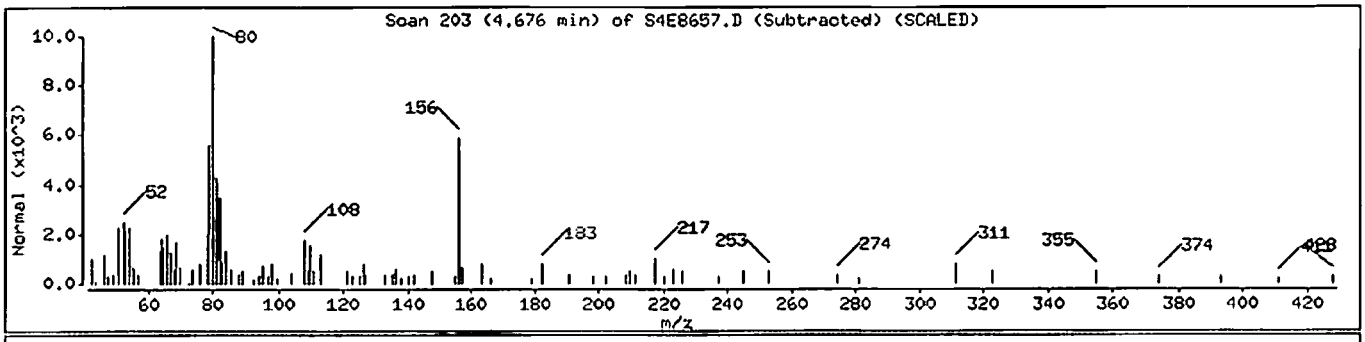
Client ID: H30Z2 Instrument: S4.i

Sample Info: K2213-11A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8657.D

Date : 11-NOV-2011 02:16

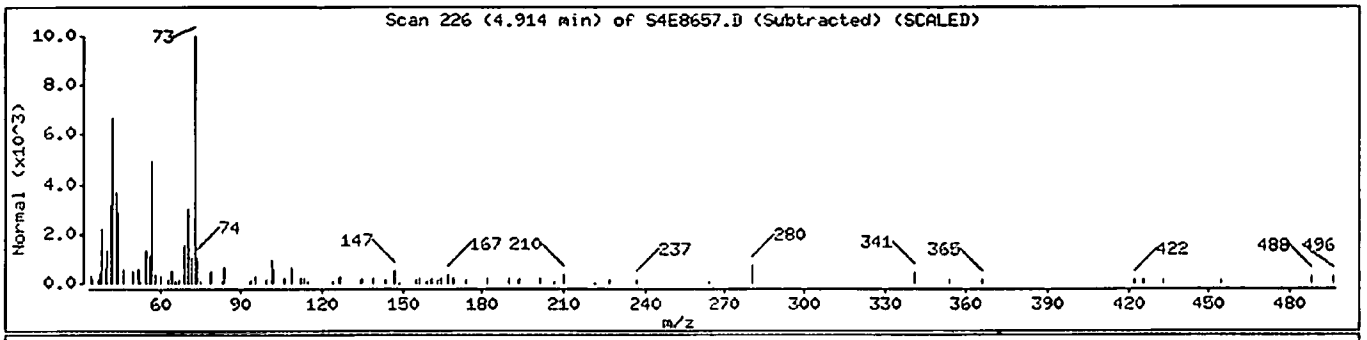
Client ID: H3022 Instrument: S4.i

Sample Info: K2213-11A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.i\111110A.B\S4E8657.D

Date : 11-NOV-2011 02:16

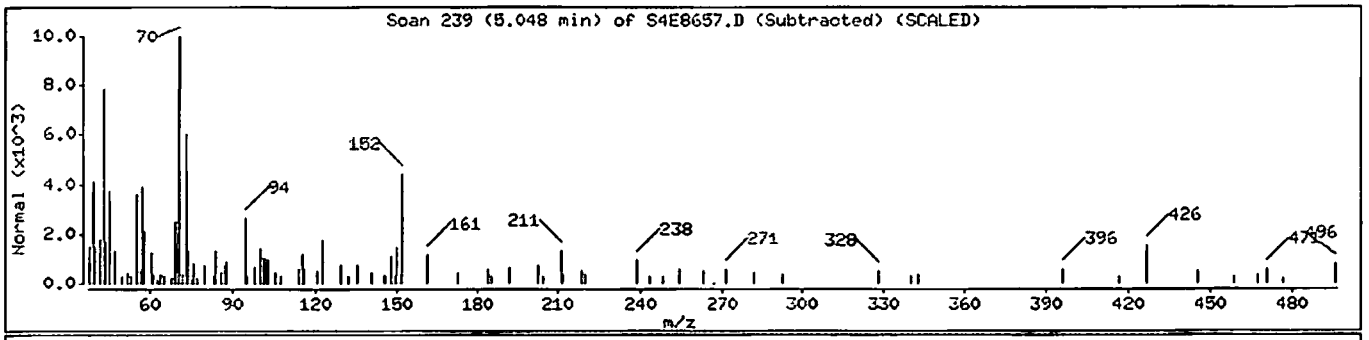
Client ID: H3022 Instrument: S4.i

Sample Info: K2213-11A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8657.D

Date : 11-NOV-2011 02:16

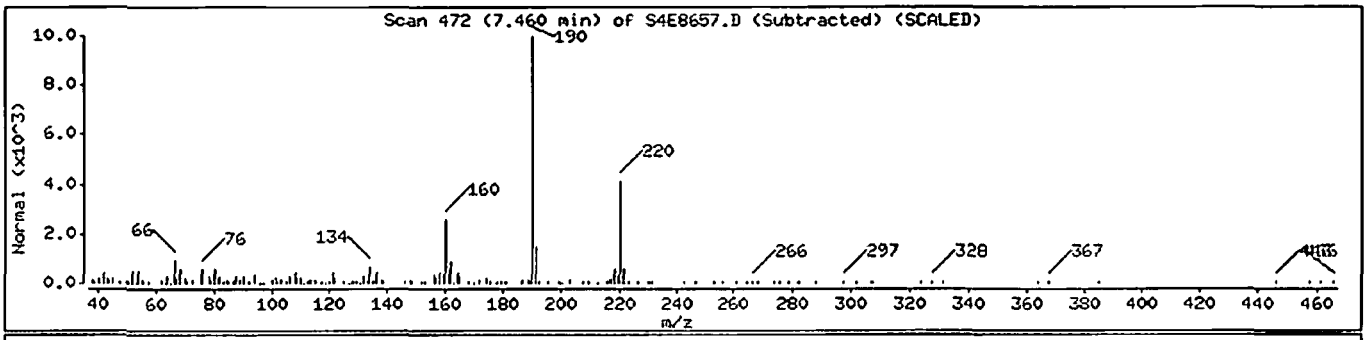
Client ID: H30Z2 Instrument: S4.i

Sample Info: K2213-11A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8657.D

Date : 11-NOV-2011 02:16

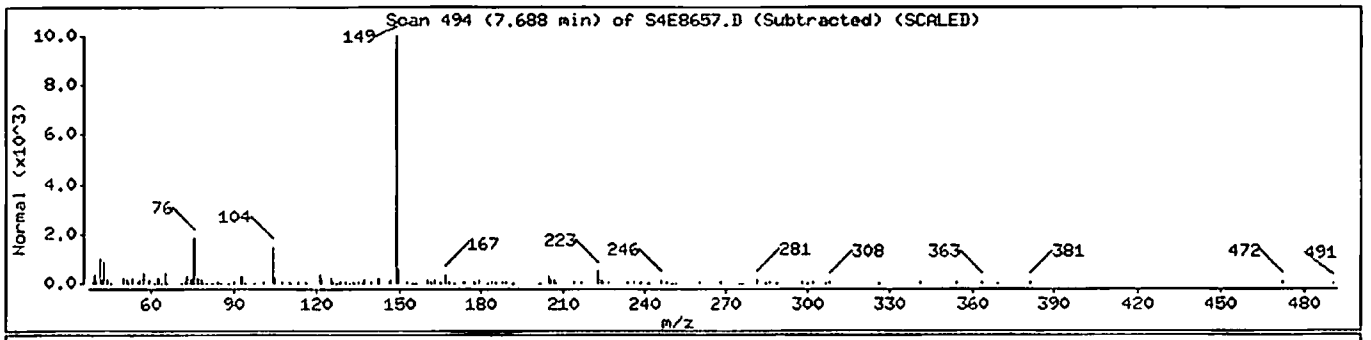
Client ID: H3OZ2 Instrument: S4.i

Sample Info: K2213-11A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8657.D

Date : 11-NOV-2011 02:16

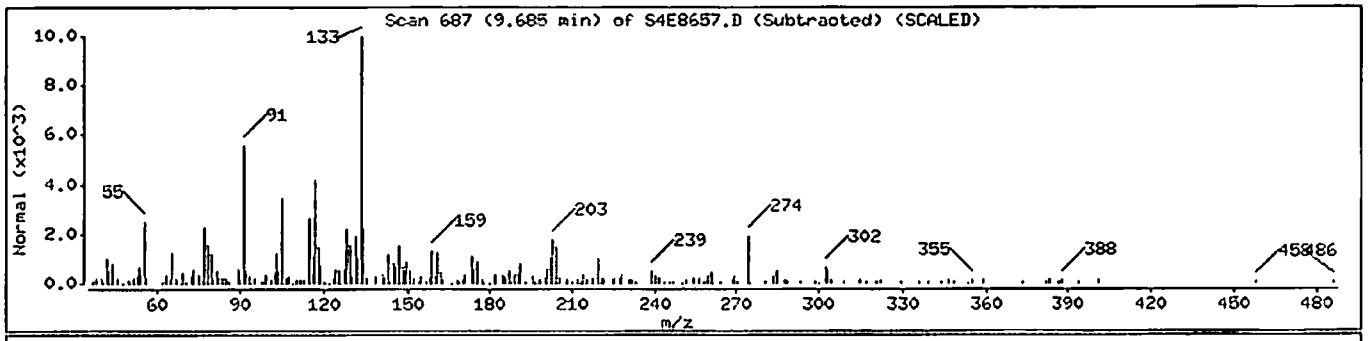
Client ID: H3022 Instrument: S4.i

Sample Info: K2213-11A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8657.D

Date : 11-NOV-2011 02:16

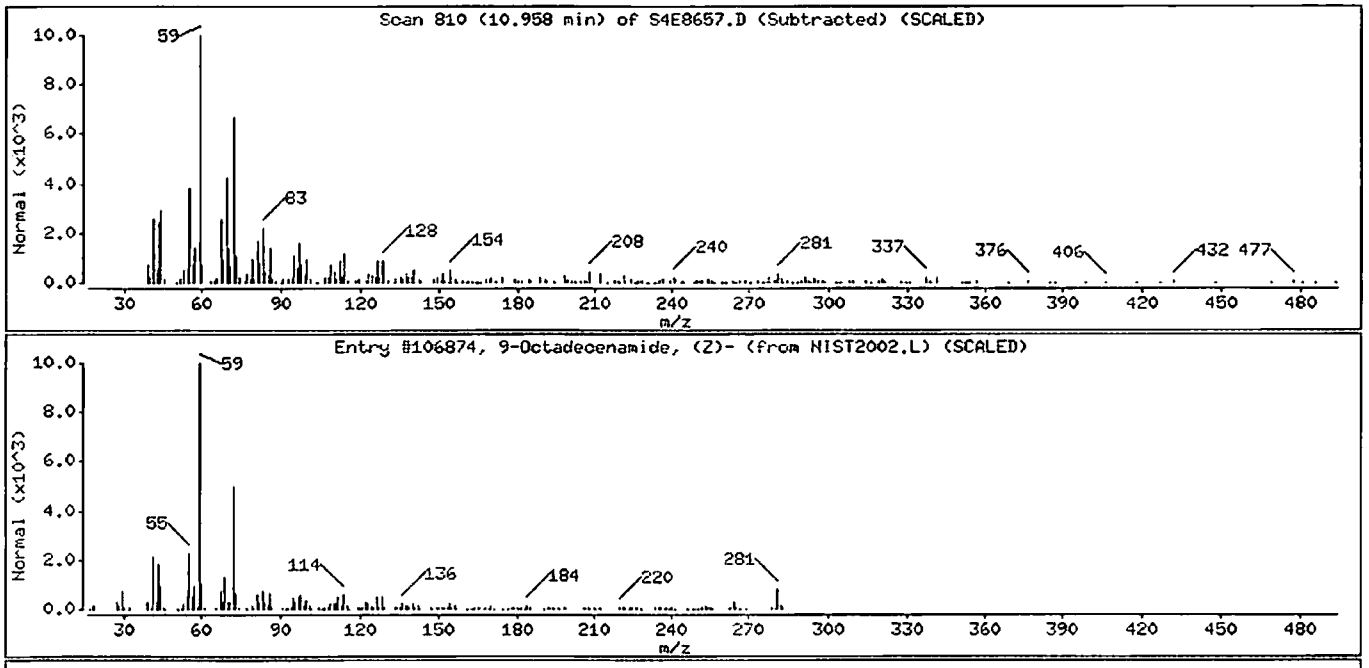
Client ID: H30Z2 Instrument: S4.i

Sample Info: K2213-11A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Z3

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-12A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8660.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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

EPA SAMPLE NO.: H30Z3

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

Lab Code: MITKEM | Case No.: 41926 | Mod. Ref No.: | SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER | Lab Sample ID: K2213-12A

Sample wt/vol: 1000 (g/mL) ML | Lab File ID: S4E8660.D

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

% Moisture: | Decanted: (Y/N) | Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) | Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) | GPC Factor: 1.00 | Date Analyzed: 11/11/2011

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

EPA SAMPLE NO.

H30Z3

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-12A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8660.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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	4.334	3.5	J
02		Unknown-02	4.676	2.8	J
03		Unknown-03	4.914	5.4	J
04		Unknown-04	6.052	6.2	J
05		Unknown-05	7.460	2.5	J
06		Unknown-06	8.547	3.9	J
07		Unknown-07	8.588	5.0	J
08		Unknown-08	9.282	3.5	J
09	112-84-5	13-Docosenamide, (Z)-	10.958	7.5	BNJ
	E96679[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8660.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8660.D
Lab Smp Id: K2213-12A Client Smp ID: H30Z3
Inj Date : 11-NOV-2011 03:28
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-12A,,62806,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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	3.050	3.050	(0.905)	86284	69.3843	35	
$	4 bis(2-Chloroethyl)ether-d8	67	3.112	3.112	(0.923)	52610	56.8772	28	
$	6 2-Chlorophenol-d4	132	3.206	3.206	(0.951)	91475	62.6834	31	
*	8 1,4-Dichlorobenzene-d4	152	3.371	3.371	(1.000)	46243	40.0000		(Q)
$	11 4-Methylphenol-d8	113	3.609	3.609	(1.071)	86422	65.6235	33	
$	16 Nitrobenzene-d5	128	3.795	3.796	(0.857)	46984	63.8192	32	(Q)
$	19 2-Nitrophenol-d4	143	4.075	4.075	(0.921)	61121	65.1345	33	
$	23 2,4-Dichlorophenol-d3	165	4.282	4.282	(0.967)	114613	65.1823	33	
*	25 Naphthalene-d8	136	4.427	4.427	(1.000)	175874	40.0000		
$	27 4-Chloroaniline-d4	131	4.468	4.468	(1.009)	64574	37.2221	19	(Q)
$	40 Dimethylphthalate-d6	166	5.783	5.772	(0.951)	376373	64.8951	32	
$	43 Acenaphthylene-d8	160	5.938	5.938	(0.976)	400345	62.3418	31	
*	46 Acenaphthene-d10	164	6.083	6.083	(1.000)	146676	40.0000		
$	49 4-Nitrophenol-d4	143	6.186	6.166	(1.017)	77467	70.9491	35	
$	54 Fluorene-d10	176	6.590	6.590	(1.083)	326439	63.1308	32	
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.642	6.642	(0.382)	96700	65.8376	33	
*	65 Phenanthrene-d10	188	7.532	7.532	(1.000)	366166	40.0000		
$	67 Anthracene-d10	188	7.584	7.584	(1.007)	602232	59.8850	30	
$	72 Pyrene-d10	212	8.929	8.929	(0.882)	755480	70.4892	35	
*	77 Chrysene-d12	240	10.119	10.120	(1.000)	549876	40.0000		(Q)
$	83 Benzo(a)pyrene-d12	264	11.713	11.703	(0.991)	833706	65.5916	33	

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8660.D
Report Date: 11-Nov-2011 14:04

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)
* 85 Perylene-d12	264	11.817	11.817	(1.000)	573613	40.0000	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8660.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8660.D
Lab Smp Id: K2213-12A Client Smp ID: H30Z3
Inj Date : 11-NOV-2011 03:28
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-12A,,62806,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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	4.427	509316	40.000
* 46 Acenaphthene-d10	6.083	744982	40.000
* 65 Phenanthrene-d10	7.532	950401	40.000
* 77 Chrysene-d12	10.120	1409337	40.000

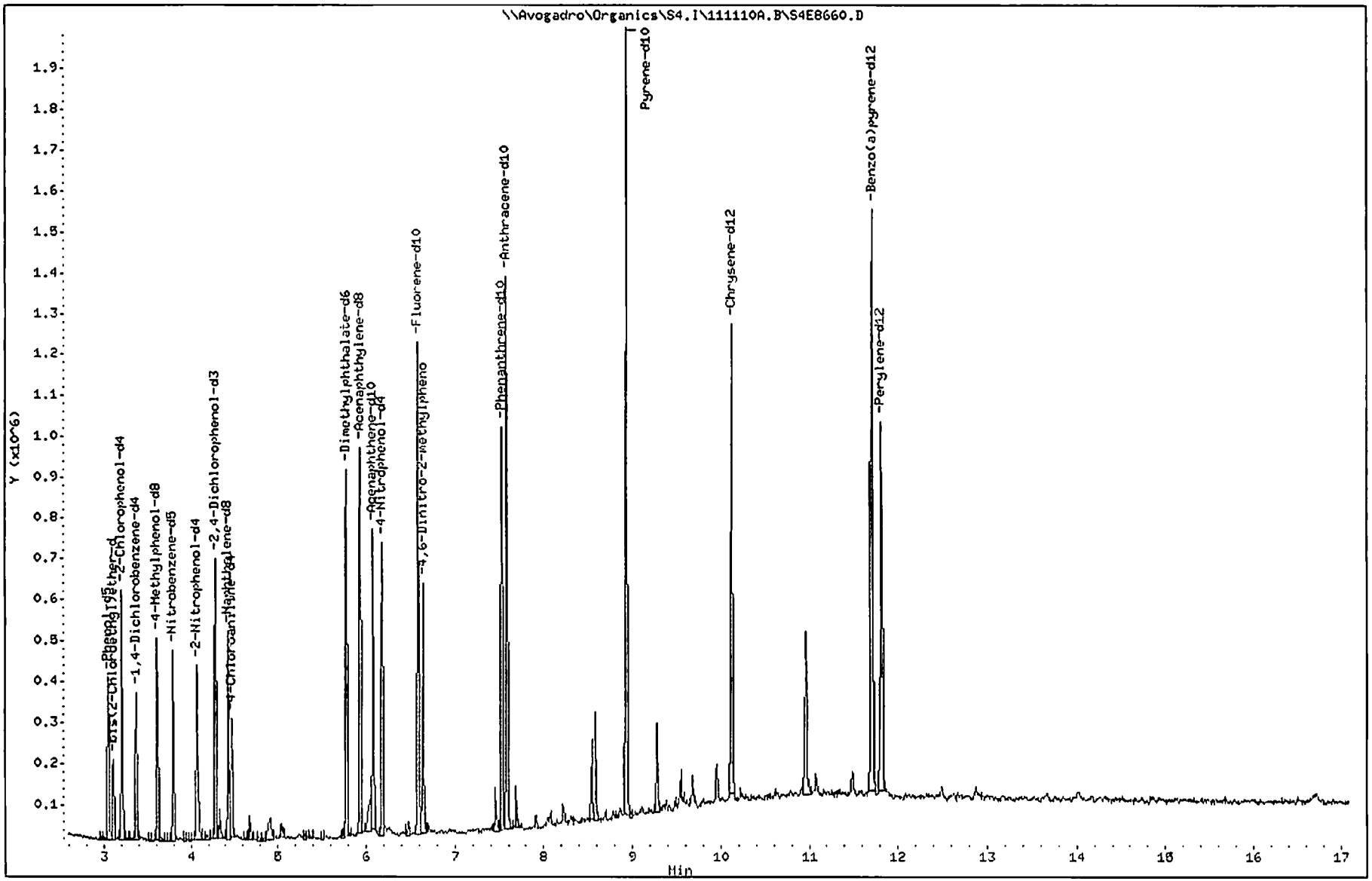
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.334	89887	7.05944603	3.5	0		0	25
Unknown				CAS #:			
4.676	70404	5.52929629	2.8	0		0	25
Unknown				CAS #:			
4.914	138336	10.8644829	5.4	0		0	25

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8660.D
Report Date: 11-Nov-2011 14:04

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
6.052	231162	12.4116971	6.2	0		0	46
Unknown				CAS #:			
7.460	120971	5.09135460	2.5	0		0	65
Unknown				CAS #:			
8.547	183307	7.71494426	3.9	0		0	65
Unknown				CAS #:			
8.588	237328	9.98854249	5.0	0		0	65
Unknown				CAS #:			
9.282	247200	7.01607076	3.5	0		0	77
13-Docosenamide, (Z)-				CAS #: 112-84-5			
10.958	525665	14.9194876	7.5	87	NIST2002.L	135945	77

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8660.D
Date : 11-NOV-2011 03:28
Client ID: H3023
Sample Info: K2213-12A,,62806,,
Volume Injected (uL): 2.0
Column phase: RXI-5SILMS

Instrument: S4.I
Operator: MMS SRC: LIMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8660.D

Date : 11-NOV-2011 03:28

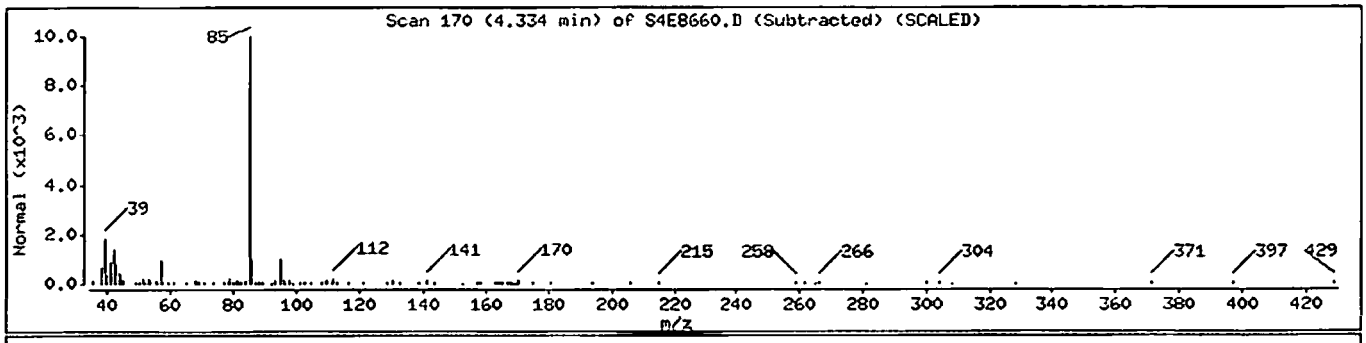
Client ID: H30Z3 Instrument: S4.i

Sample Info: K2213-12A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8660.D

Date : 11-NOV-2011 03:28

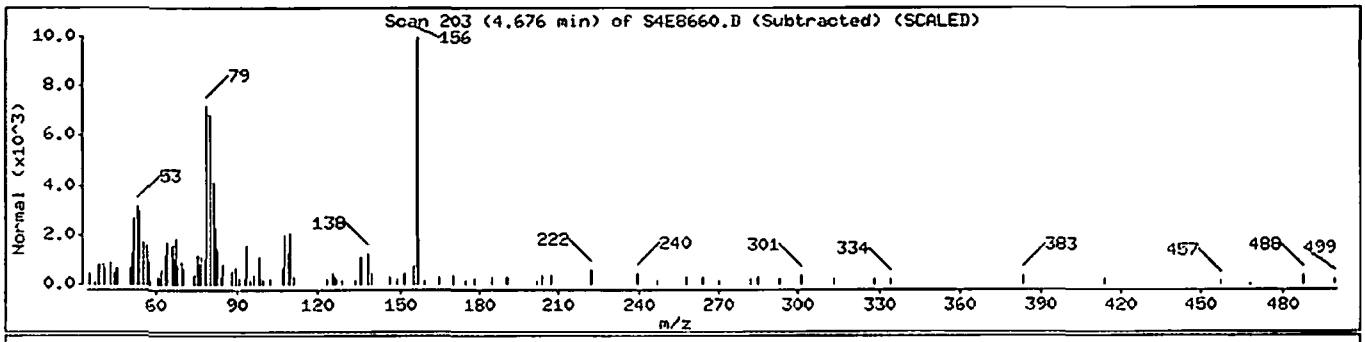
Client ID: H30Z3 Instrument: S4.i

Sample Info: K2213-12A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8660.D

Date : 11-NOV-2011 03:28

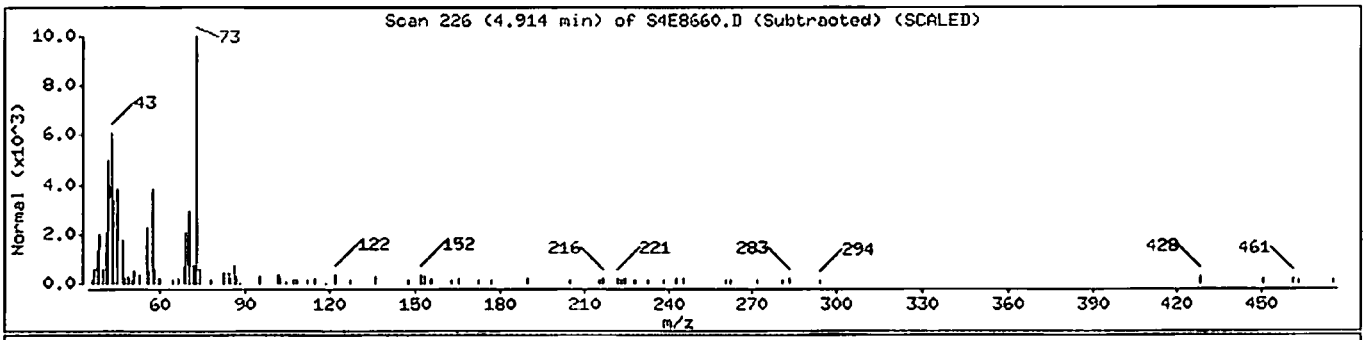
Client ID: H3023 Instrument: S4.i

Sample Info: K2213-12A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8660.D

Date : 11-NOV-2011 03:28

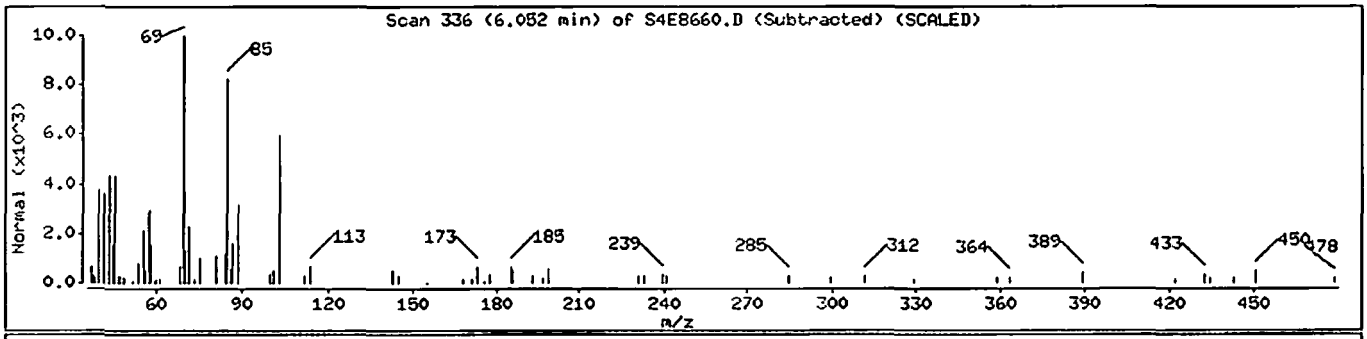
Client ID: H30Z3 Instrument: S4.i

Sample Info: K2213-12A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8660.D

Date : 11-NOV-2011 03:28

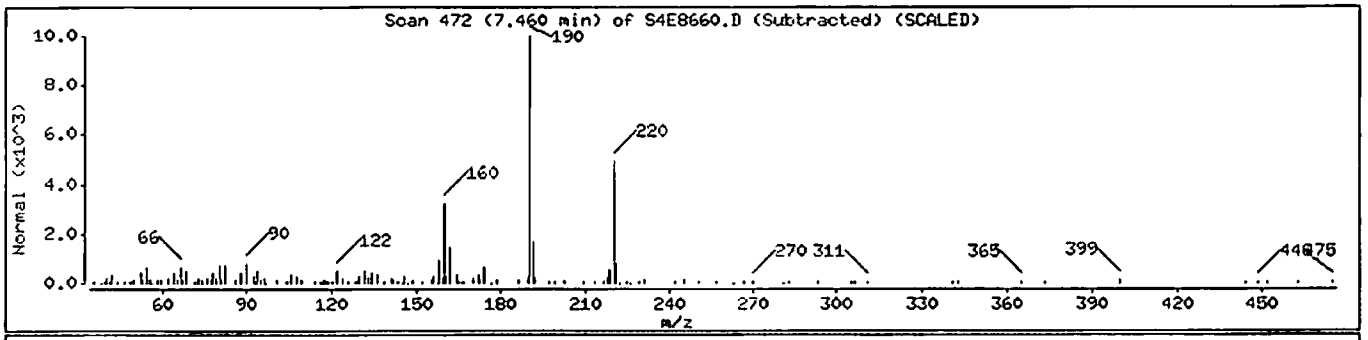
Client ID: H30Z3 Instrument: S4.i

Sample Info: K2213-12A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8660.D

Date : 11-NOV-2011 03:28

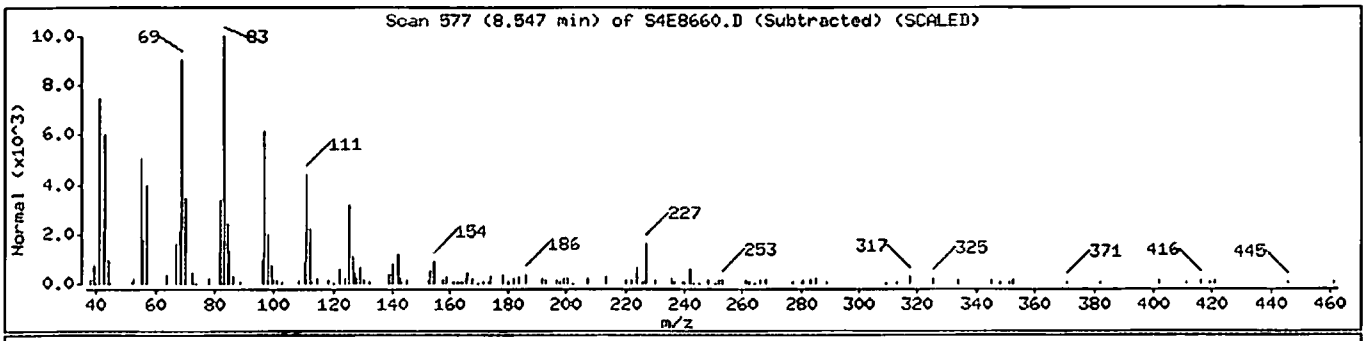
Client ID: H30Z3 Instrument: S4.i

Sample Info: K2213-12A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 11-NOV-2011 03:28

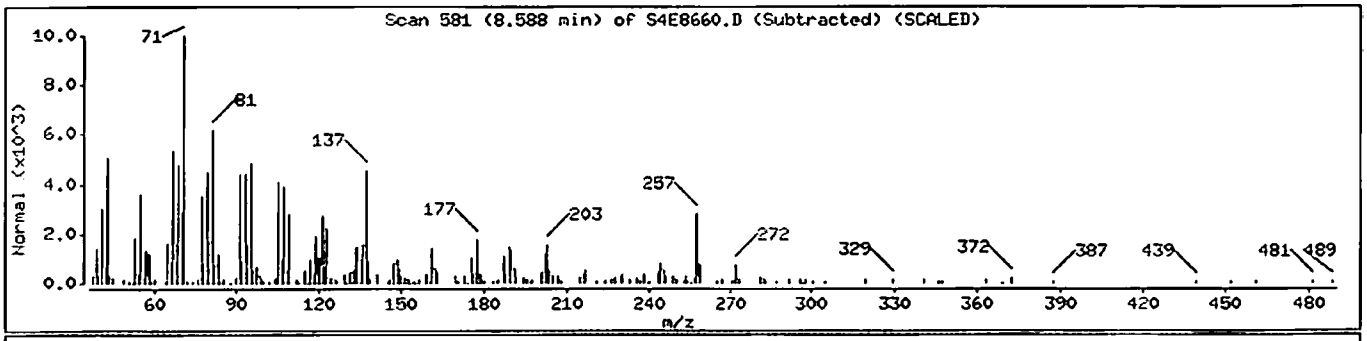
Client ID: H3OZ3 Instrument: S4.i

Sample Info: K2213-12A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8660.D

Date : 11-NOV-2011 03:28

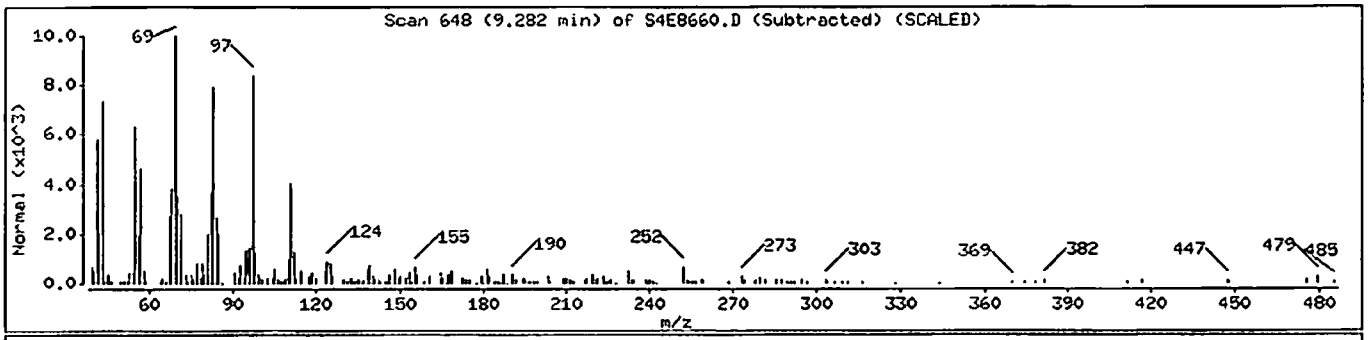
Client ID: H30Z3 Instrument: S4.i

Sample Info: K2213-12A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8660.D

Date : 11-NOV-2011 03:28

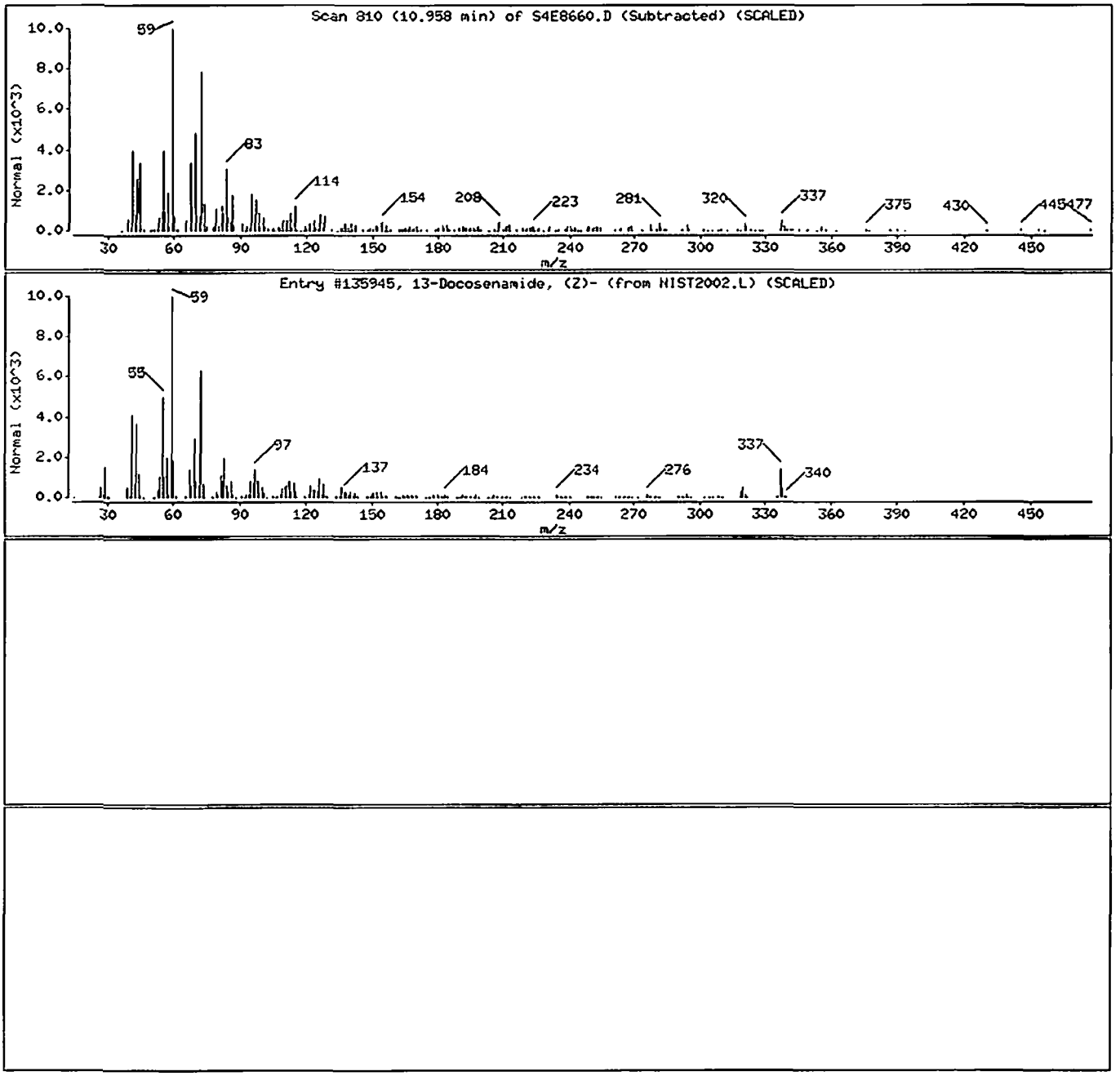
Client ID: H30Z3 Instrument: S4.i

Sample Info: K2213-12A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS 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	135945	87	C22H43NO	337



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Z4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-13A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8661.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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

EPA SAMPLE NO.

H30Z4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-13A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8661.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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	1.1	J
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

EPA SAMPLE NO.: H30Z4

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

Lab Code: MITKEM | Case No.: 41926 | Mod. Ref No.: | SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER | Lab Sample ID: K2213-13A

Sample wt/vol: 1000 (g/mL) ML | Lab File ID: S4E8661.D

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

% Moisture: | Decanted: (Y/N) | Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) | Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) | GPC Factor: 1.00 | Date Analyzed: 11/11/2011

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	4.334	5.5	J
02		Unknown-02	4.676	3.2	J
03		Unknown-03	4.914	9.7	J
04		Unknown-04	7.460	4.2	J
05		Unknown-05	7.688	2.5	J
06		Unknown-06	8.226	2.1	J
07		Unknown-07	9.685	2.5	J
08		Unknown-08	10.958	10	J
	E966796[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8661.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8661.D
Lab Smp Id: K2213-13A Client Smp ID: H30Z4
Inj Date : 11-NOV-2011 03:52
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-13A,,62806,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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	3.050	3.050	(0.905)	66209	70.0676	35
$	4 bis(2-Chloroethyl)ether-d8	67	3.102	3.112	(0.920)	41244	58.6813	29
$	6 2-Chlorophenol-d4	132	3.206	3.206	(0.951)	60685	54.7268	27
*	8 1,4-Dichlorobenzene-d4	152	3.371	3.371	(1.000)	35138	40.0000	(Q)
$	11 4-Methylphenol-d8	113	3.609	3.609	(1.071)	65274	65.2295	33
$	16 Nitrobenzene-d5	128	3.796	3.796	(0.857)	33754	65.5374	33(Q)
$	19 2-Nitrophenol-d4	143	4.075	4.075	(0.921)	42264	64.3804	32
$	23 2,4-Dichlorophenol-d3	165	4.282	4.282	(0.967)	83977	68.2682	34
*	25 Naphthalene-d8	136	4.427	4.427	(1.000)	123038	40.0000	
$	27 4-Chloroaniline-d4	131	4.468	4.468	(1.009)	57411	47.3043	24(Q)
$	40 Dimethylphthalate-d6	166	5.783	5.772	(0.951)	271016	68.6099	34
$	43 Acenaphthylene-d8	160	5.938	5.938	(0.976)	301064	68.8337	34
*	46 Acenaphthene-d10	164	6.083	6.083	(1.000)	99899	40.0000	
$	49 4-Nitrophenol-d4	143	6.186	6.166	(1.017)	64532	86.7767	43
	53 Diethylphthalate	149	6.487	6.487	(1.066)	9036	2.22837	1.1(a)
$	54 Fluorene-d10	176	6.590	6.590	(1.083)	237888	67.5476	34
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.642	6.642	(0.882)	78444	69.2261	35
*	65 Phenanthrene-d10	188	7.532	7.532	(1.000)	282498	40.0000	
$	67 Anthracene-d10	188	7.584	7.584	(1.007)	450798	58.1030	29
$	72 Pyrene-d10	212	8.929	8.929	(0.882)	670512	71.4071	36
*	77 Chrysene-d12	240	10.120	10.120	(1.000)	481759	40.0000	(Q)

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8661.D
Report Date: 11-Nov-2011 14:04

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
S 83 Benzo(a)pyrene-d12	264	11.713	11.703	(0.991)	751112	66.9463	33
* 85 Perylene-d12	264	11.817	11.817	(1.000)	506329	40.0000	

QC Flag Legend

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

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8661.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8661.D
Lab Smp Id: K2213-13A Client Smp ID: H30Z4
Inj Date : 11-NOV-2011 03:52
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-13A,,62806,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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	4.427	365054	40.000
* 65 Phenanthrene-d10	7.532	752255	40.000
* 77 Chrysene-d12	10.120	1257188	40.000

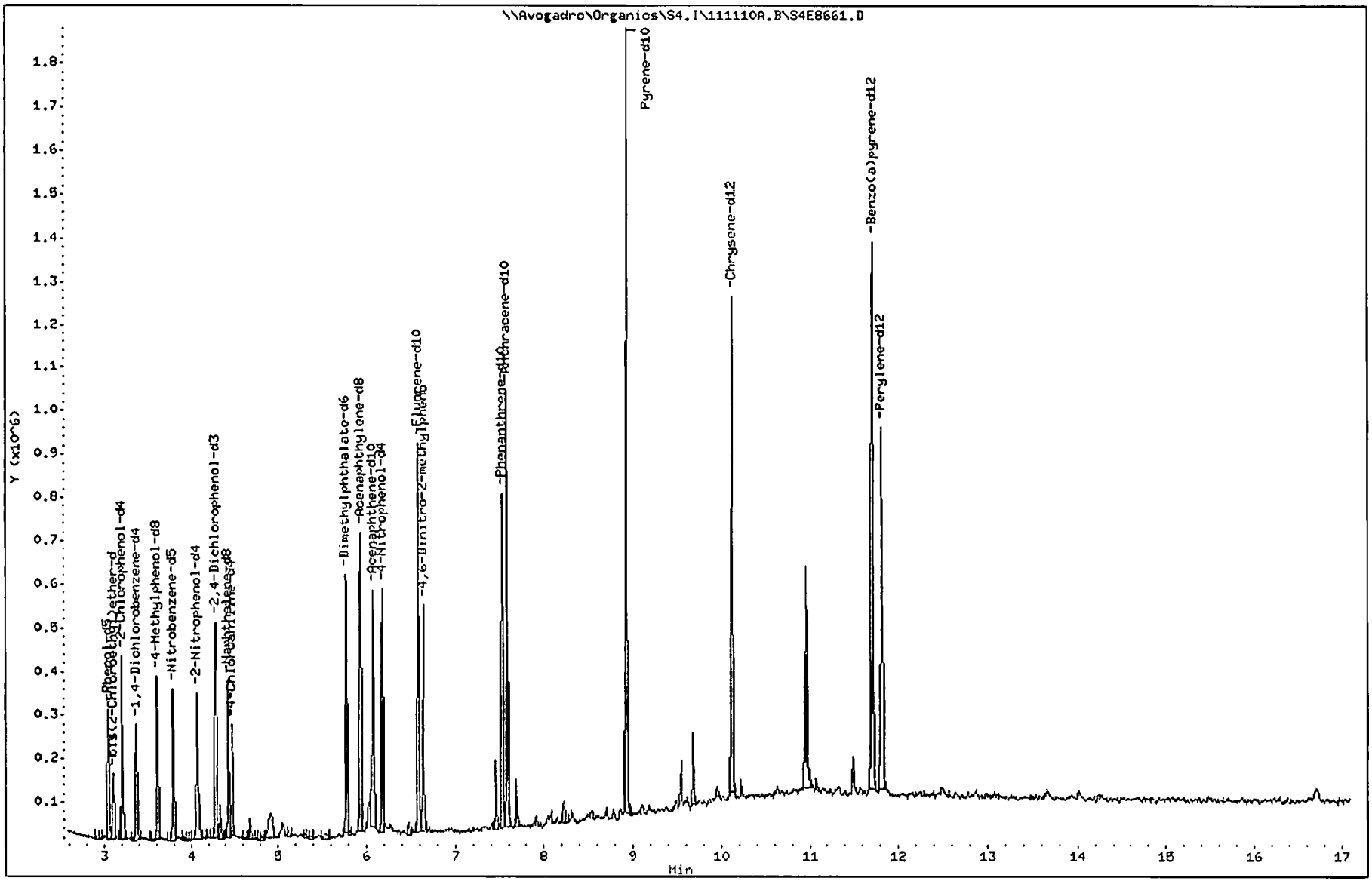
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.334	100187	10.9777860	5.5	0		0	25
Unknown				CAS #:			
4.676	57780	6.33113890	3.2	0		0	25
Unknown				CAS #:			
4.914	177533	19.4527856	9.7	0		0	25
Unknown				CAS #:			
7.460	158947	8.45178275	4.2	0		0	65

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8661.D
Report Date: 11-Nov-2011 14:04

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
7.688	93563	4.97506524	2.5	0		0	65
Unknown				CAS #:			
8.226	78688	4.18408715	2.1	0		0	65
Unknown				CAS #:			
9.685	154028	4.90072899	2.5	0		0	77
Unknown				CAS #:			
10.958	648304	20.6271111	10	0		0	77

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8661.D
Date : 11-NOV-2011 03:52
Client ID: H3024
Sample Info: K2213-13A,,62806,,
Volume Injected (uL): 2.0
Column phase: RXI-5SILMS

Instrument: S4.i
Operator: MMS SRC: LIMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8661.D

Date : 11-NOV-2011 03:52

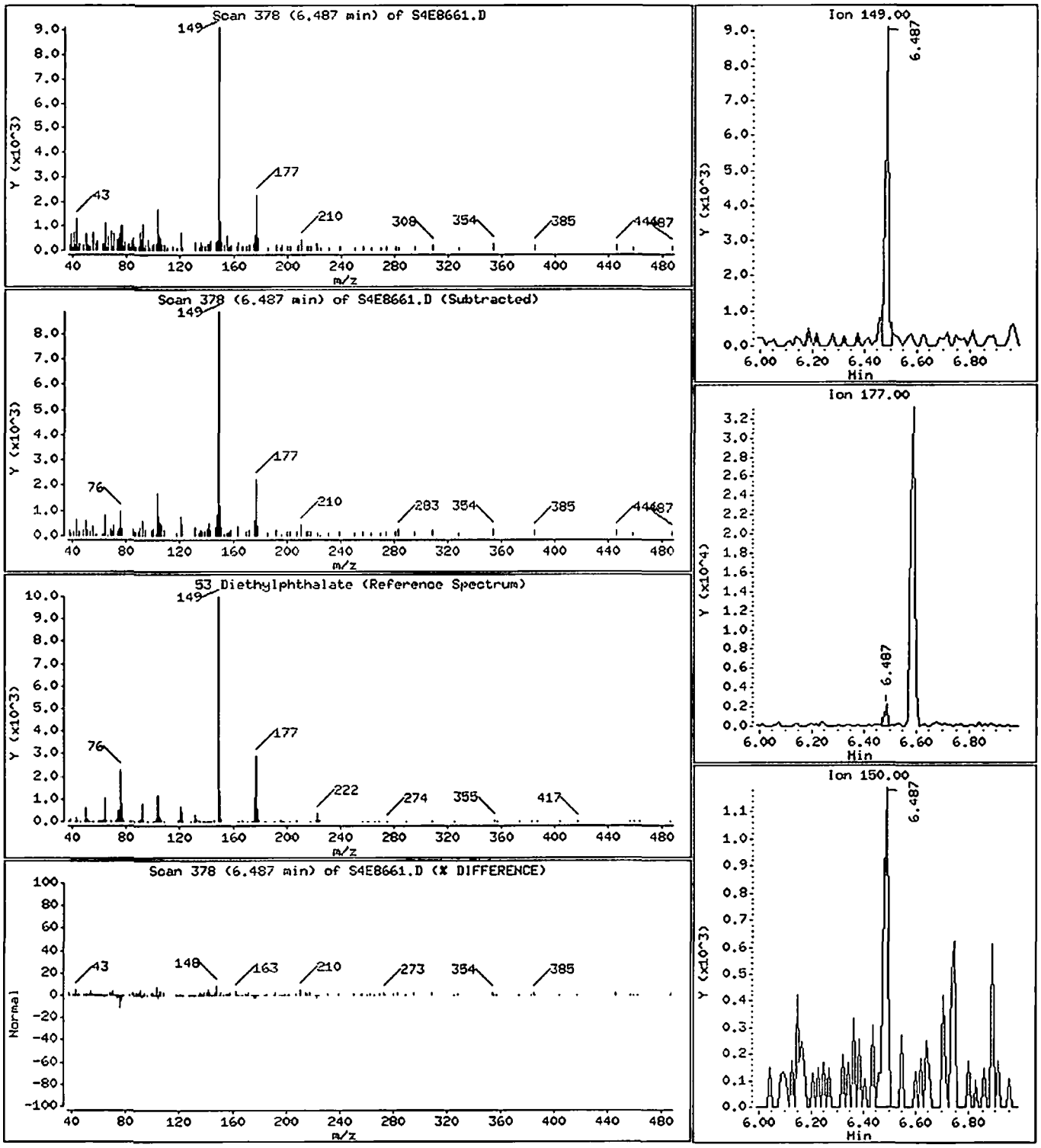
Client ID: H3024 Instrument: S4.i

Sample Info: K2213-13A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

53 Diethylphthalate Concentration: 1.1 ug/L



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8661.D

Date : 11-NOV-2011 03:52

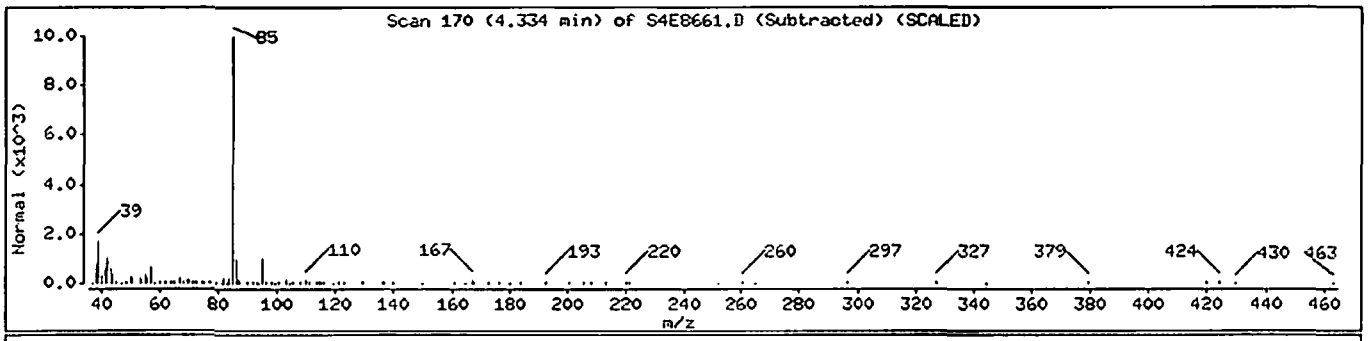
Client ID: H3024 Instrument: S4.i

Sample Info: K2213-13A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8661.D

Date : 11-NOV-2011 03:52

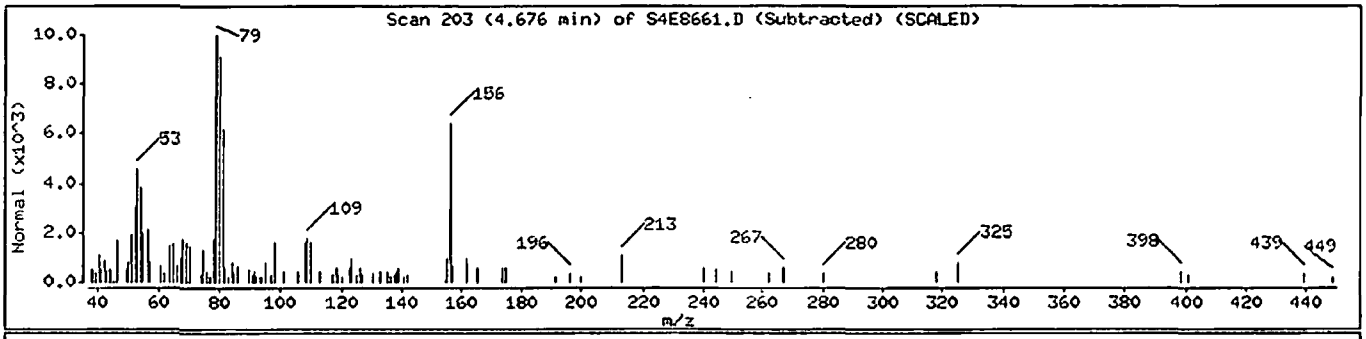
Client ID: H3024 Instrument: S4.i

Sample Info: K2213-13A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8661.D

Date : 11-NOV-2011 03:52

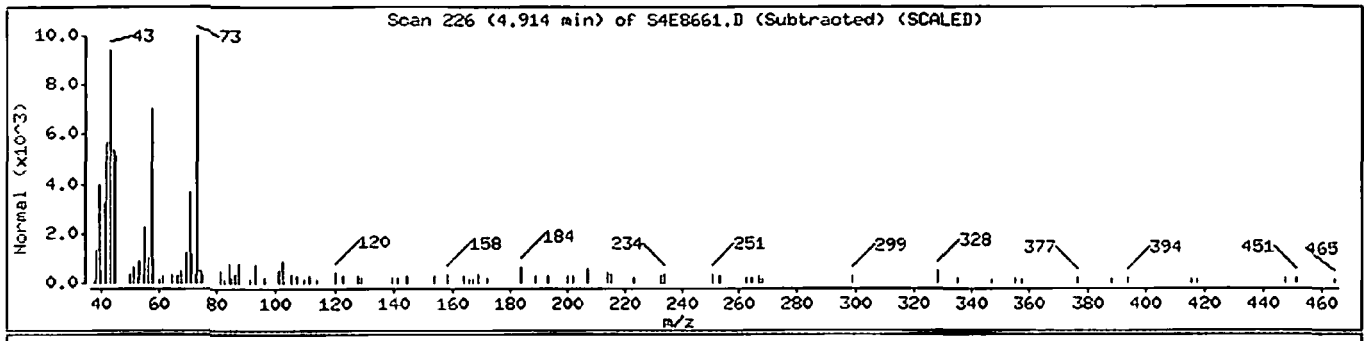
Client ID: H3QZ4 Instrument: S4.i

Sample Info: K2213-13A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8661.D

Date : 11-NOV-2011 03:52

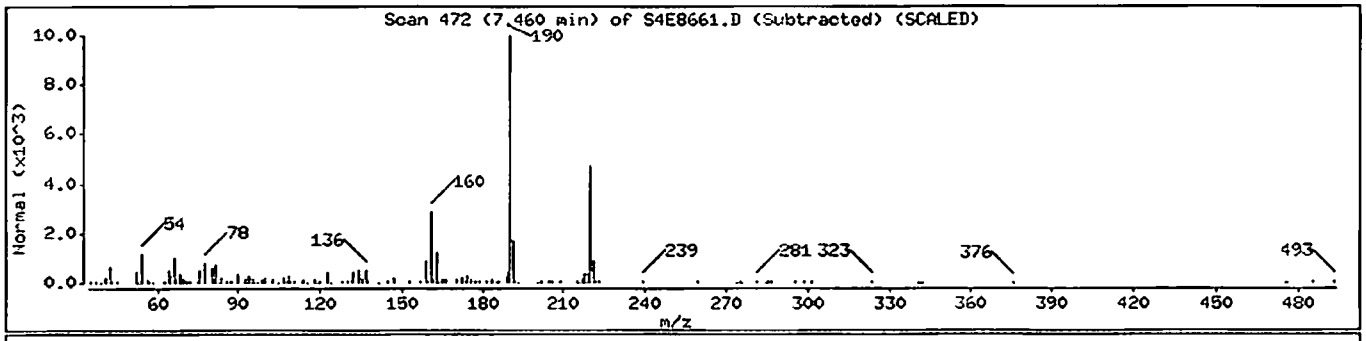
Client ID: H3024 Instrument: S4.i

Sample Info: K2213-13A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8661.D

Date : 11-NOV-2011 03:52

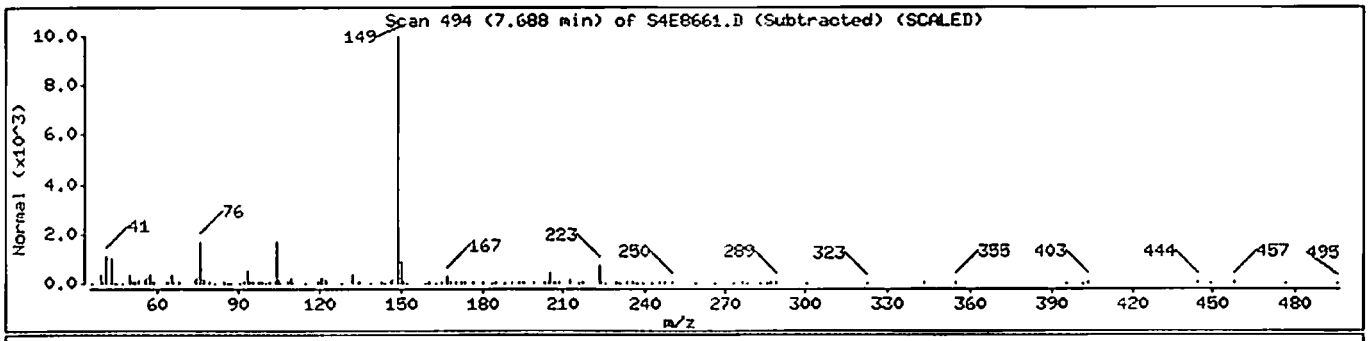
Client ID: H3024 Instrument: S4.i

Sample Info: K2213-13A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8661.D

Date : 11-NOV-2011 03:52

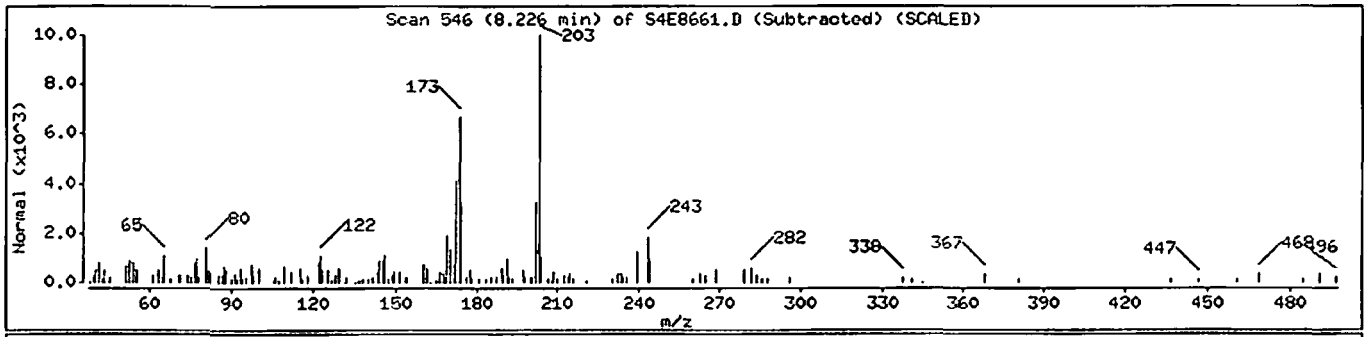
Client ID: H3024 Instrument: S4.i

Sample Info: K2213-13A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8661.D

Date : 11-NOV-2011 03:52

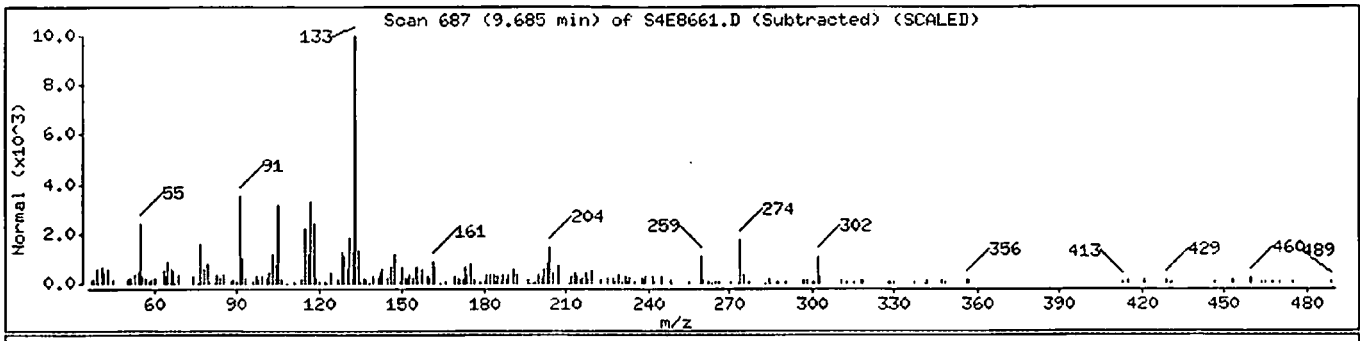
Client ID: H30Z4 Instrument: S4.i

Sample Info: K2213-13A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8661.D

Date : 11-NOV-2011 03:52

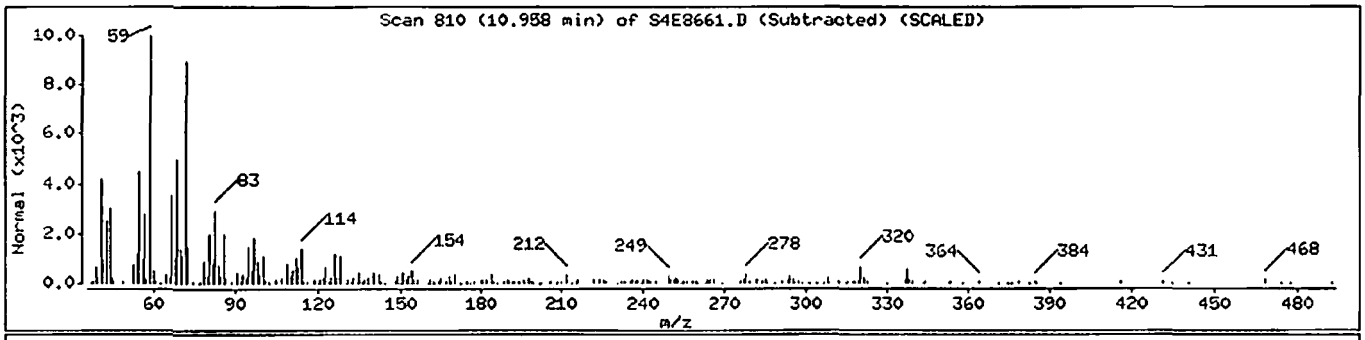
Client ID: H30Z4 Instrument: S4.i

Sample Info: K2213-13A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Z5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-14A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8662.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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

EPA SAMPLE NO.

H30Z5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-14A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8662.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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

EPA SAMPLE NO.: H30Z5

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

Lab Code: MITKEM | Case No.: 41926 | Mod. Ref No.: | SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER | Lab Sample ID: K2213-14A

Sample wt/vol: 1000 (g/mL) ML | Lab File ID: S4E8662.D

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

% Moisture: | Decanted: (Y/N) | Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) | Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) | GPC Factor: 1.00 | Date Analyzed: 11/11/2011

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	4.334	3.5	J
02		Unknown-02	4.676	3.3	J
03		Unknown-03	4.904	9.5	J
04		Unknown-04	5.048	4.1	J
05		Unknown-05	6.042	10	J
06		Unknown-06	7.688	2.5	J
07		Unknown-07	8.588	3.7	J
08		Unknown-08	10.958	11	J
	E96679([2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8662.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8662.D
Lab Smp Id: K2213-14A Client Smp ID: H30Z5
Inj Date : 11-NOV-2011 04:16
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-14A,,62806,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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)	FINAL (ug/L)	
$ 2	Phenol-d5	71	3.050	3.050	(0.905)	62525	72.5850	36	
$ 4	bis(2-Chloroethyl)ether-d8	67	3.102	3.112	(0.920)	41302	64.4619	32	
$ 6	2-Chlorophenol-d4	132	3.206	3.206	(0.951)	66681	65.9651	33	
* 8	1,4-Dichlorobenzene-d4	152	3.371	3.371	(1.000)	32032	40.0000		(Q)
$ 11	4-Methylphenol-d8	113	3.609	3.609	(1.071)	65522	71.8264	36	
$ 16	Nitrobenzene-d5	128	3.796	3.796	(0.857)	33568	74.4679	37	(Q)
$ 19	2-Nitrophenol-d4	143	4.075	4.075	(0.921)	43984	76.5522	38	
$ 23	2,4-Dichlorophenol-d3	165	4.282	4.282	(0.967)	76658	71.2026	36	
* 25	Naphthalene-d8	136	4.427	4.427	(1.000)	107686	40.0000		
$ 27	4-Chloroaniline-d4	131	4.468	4.468	(1.009)	64851	61.0524	31	(Q)
$ 40	Dimethylphthalate-d6	166	5.783	5.772	(0.951)	270286	71.9870	36	
$ 43	Acenaphthylene-d8	160	5.938	5.938	(0.976)	298092	71.7020	36	
* 46	Acenaphthene-d10	164	6.083	6.083	(1.000)	94956	40.0000		
$ 49	4-Nitrophenol-d4	143	6.186	6.166	(1.017)	64157	90.7634	45	(Q)
$ 54	Fluorene-d10	176	6.590	6.590	(1.083)	242833	72.5410	36	
$ 58	4,6-Dinitro-2-methylphenol-d2	200	6.642	6.642	(0.882)	77875	74.9871	37	
* 65	Phenanthrene-d10	188	7.532	7.532	(1.000)	258903	40.0000		
$ 67	Anthracene-d10	188	7.584	7.584	(1.007)	494363	69.5250	35	
$ 72	Pyrene-d10	212	8.929	8.929	(0.882)	634152	66.3350	33	
* 77	Chrysene-d12	240	10.120	10.120	(1.000)	490473	40.0000		(Q)
$ 83	Benzo(a)pyrene-d12	264	11.713	11.703	(0.991)	857568	72.0225	36	

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8662.D
Report Date: 11-Nov-2011 14:04

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)
* 85 Perylene-d12	264	11.817	11.817	(1.000)	537347	40.0000	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8662.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8662.D
Lab Smp Id: K2213-14A Client Smp ID: H30Z5
Inj Date : 11-NOV-2011 04:16
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-14A,,62806,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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
* 25 Naphthalene-d8	4.427	336688	40.000
* 46 Acenaphthene-d10	6.083	522970	40.000
* 65 Phenanthrene-d10	7.532	686399	40.000
* 77 Chrysene-d12	10.120	1266415	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.334	58835	6.98989802	3.5	0		0	25
Unknown				CAS #:			
4.676	55861	6.63657776	3.3	0		0	25
Unknown				CAS #:			
4.904	160342	19.0493405	9.5	0		0	25

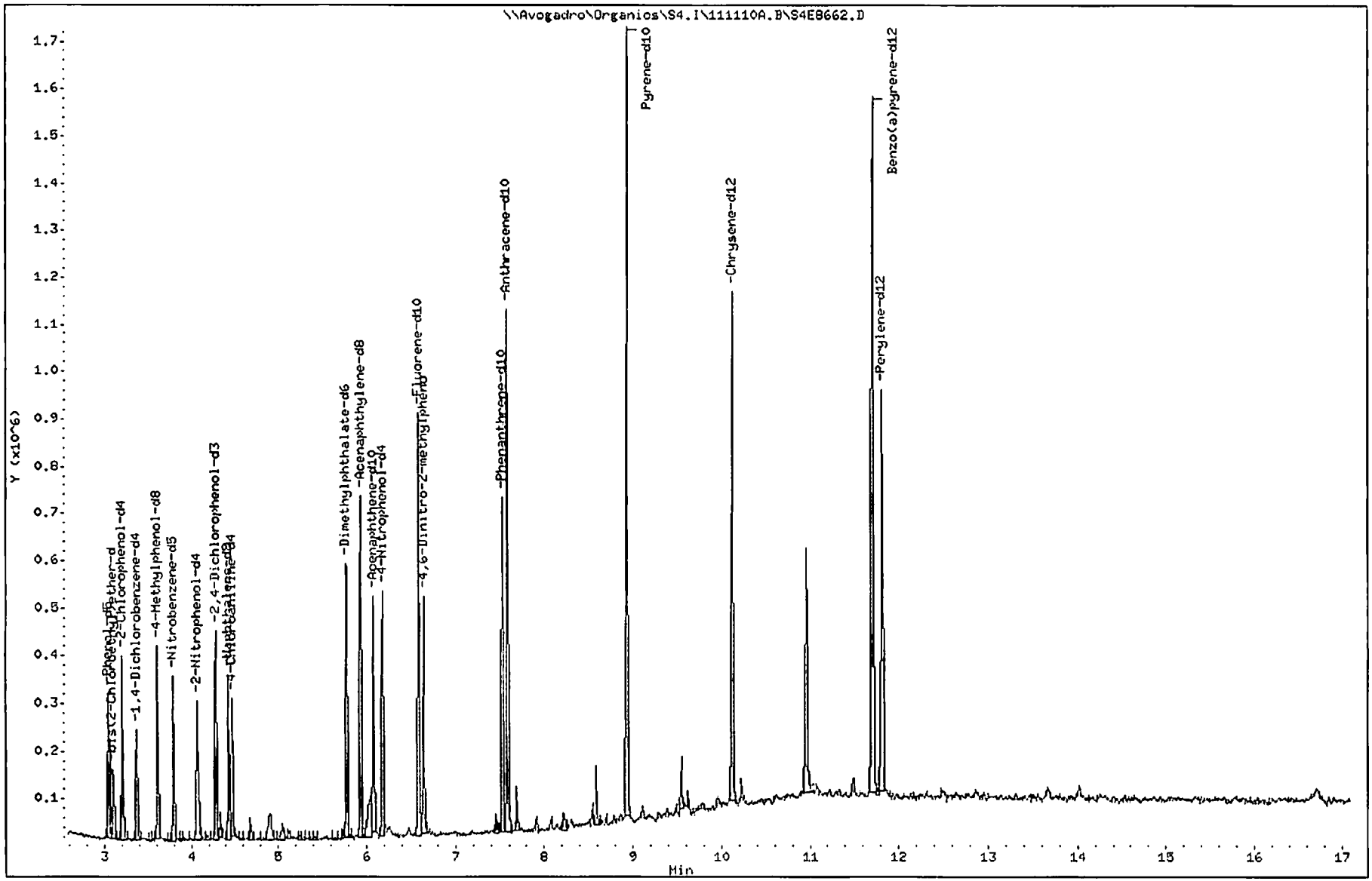
Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8662.D
Report Date: 11-Nov-2011 14:04

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
5.048	69712	8.28203648	4.1	0		0	25
Unknown				CAS #:			
6.042	269510	20.6138157	10	0		0	46
Unknown				CAS #:			
7.688	84289	4.91194580	2.5	0		0	65
Unknown				CAS #:			
8.588	125390	7.30713956	3.7	0		0	65
Unknown				CAS #:			
10.958	668891	21.1270582	11	0		0	77

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8662.D
Date : 11-NOV-2011 04:16
Client ID: H3025
Sample Info: K2213-14A,,62806,,
Volume Injected (uL): 2.0
Column phase: RXI-5SILMS

Instrument: S4.i

Operator: MMS SRC: LIMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8662.D

Date : 11-NOV-2011 04:16

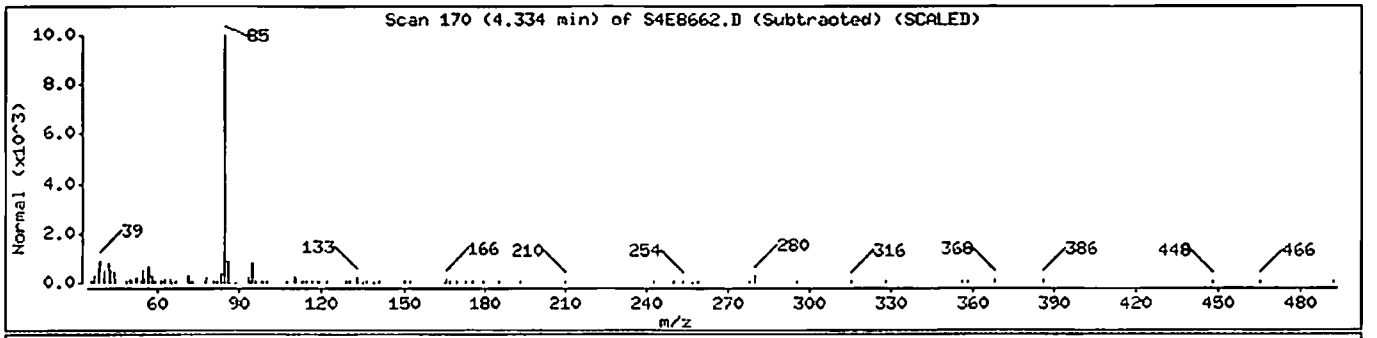
Client ID: H3025 Instrument: S4.i

Sample Info: K2213-14A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8662.D

Date : 11-NOV-2011 04:16

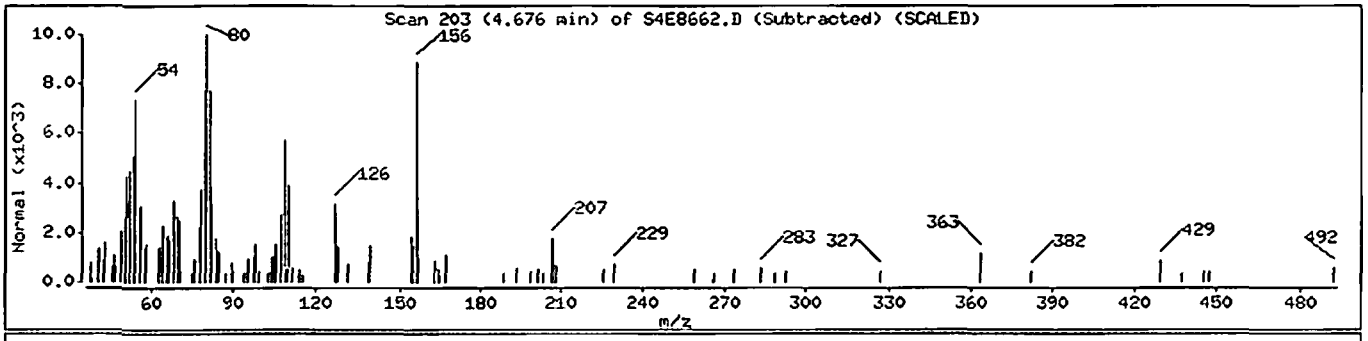
Client ID: H30Z5 Instrument: S4.i

Sample Info: K2213-14A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8662.D

Date : 11-NOV-2011 04:16

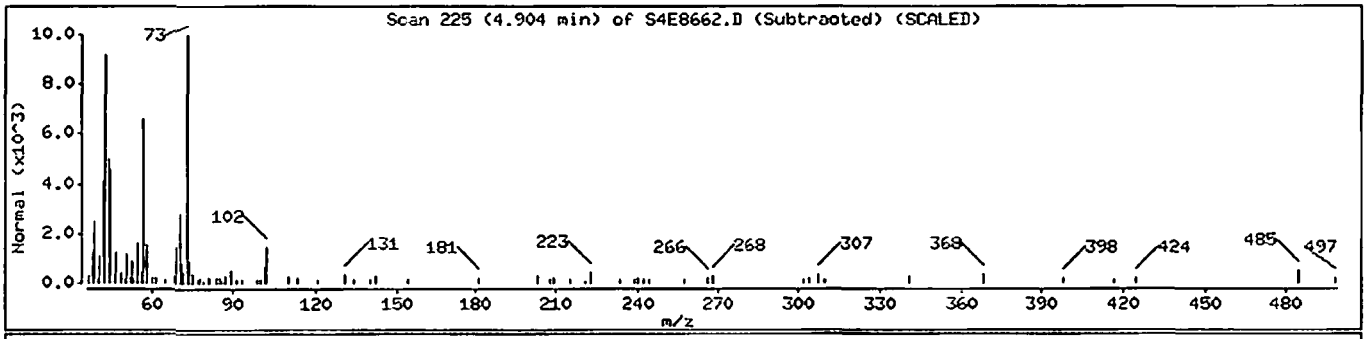
Client ID: M30Z5 Instrument: S4.i

Sample Info: K2213-14A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.i\111110A.B\S4E8662.D

Date : 11-NOV-2011 04:16

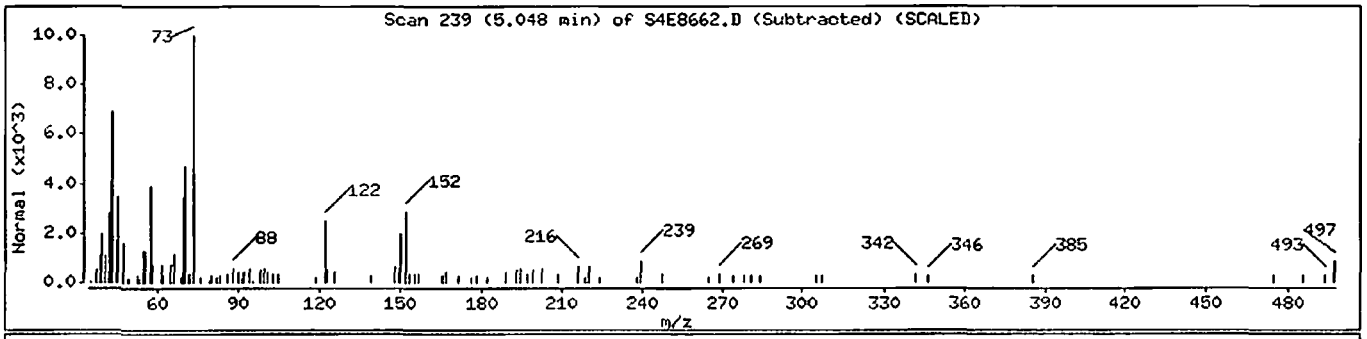
Client ID: H30Z5 Instrument: S4.i

Sample Info: K2213-14A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8662.D

Date : 11-NOV-2011 04:16

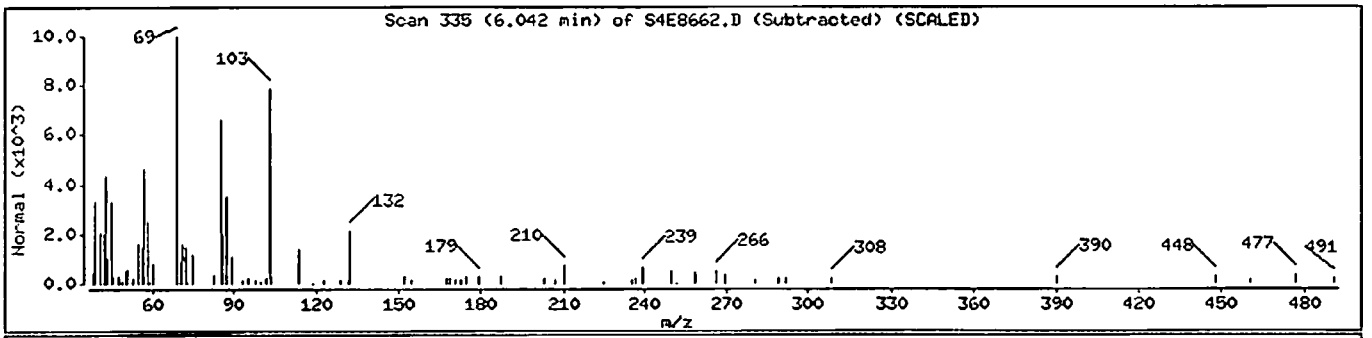
Client ID: H3025 Instrument: S4.i

Sample Info: K2213-14A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8662.D

Date : 11-NOV-2011 04:16

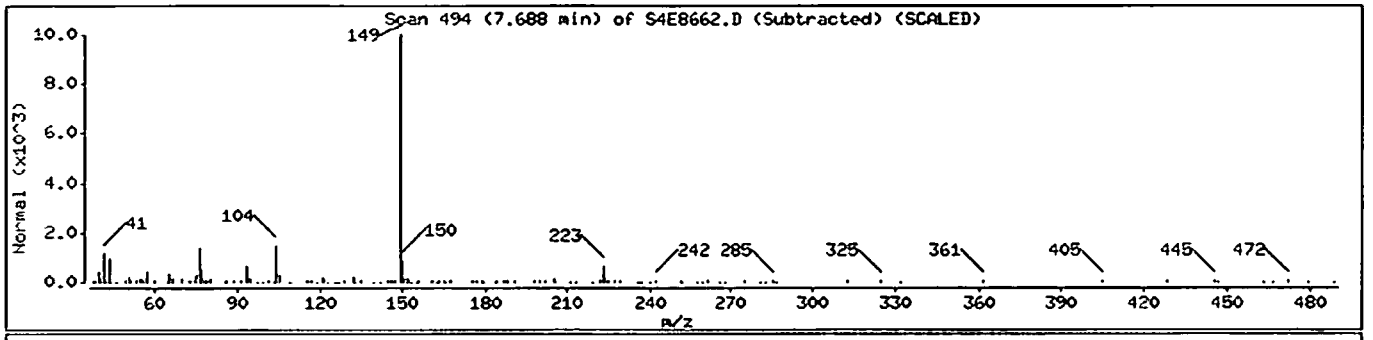
Client ID: H3025 Instrument: S4.i

Sample Info: K2213-14A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8662.D

Date : 11-NOV-2011 04:16

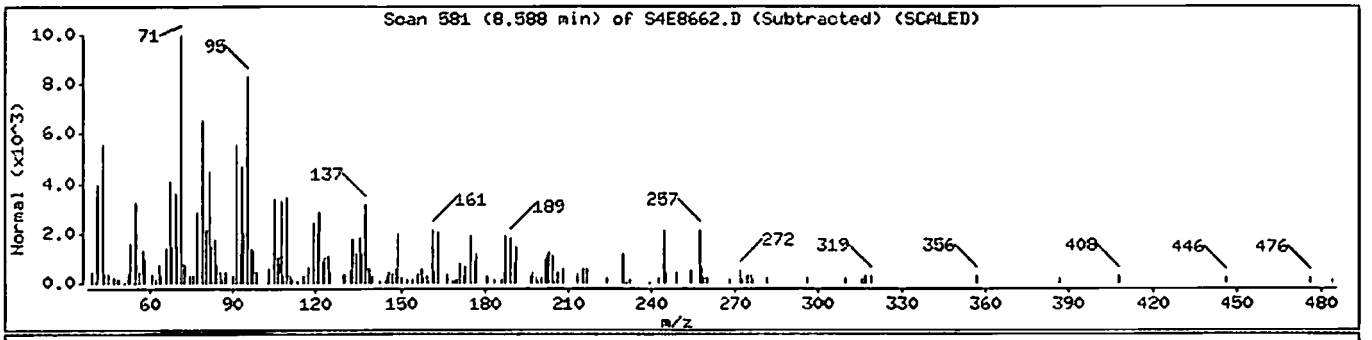
Client ID: H3025 Instrument: S4.i

Sample Info: K2213-14A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8662.D

Date : 11-NOV-2011 04:16

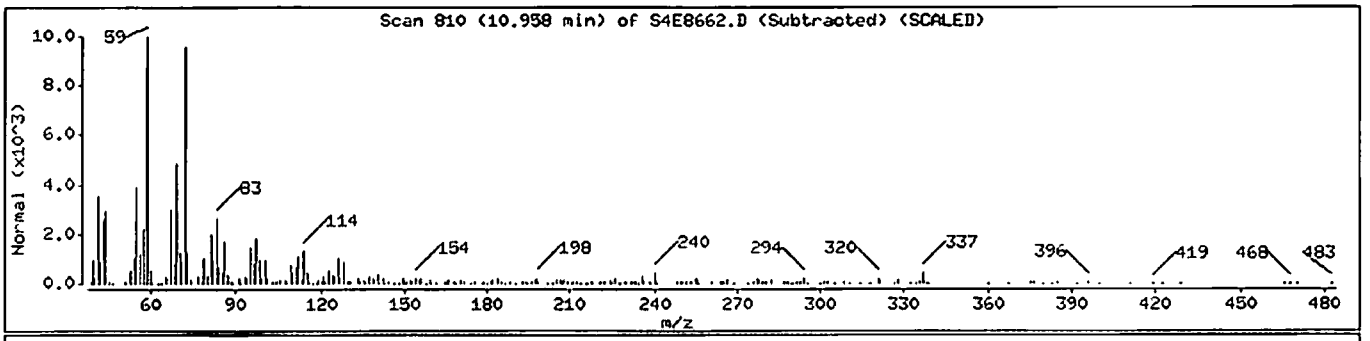
Client ID: H3025 Instrument: S4.i

Sample Info: K2213-14A,,62806,,

Volume Injected (uL): 2.0 Operator: HMS 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

EPA SAMPLE NO.

H3027

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-15A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8663.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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

EPA SAMPLE NO.

H3027

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-15A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8663.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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	2.0	J
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

EPA SAMPLE NO.

H30Z7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-15A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8663.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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	3.020	2.3	J
02		Unknown-02	3.268	3.3	J
03		Unknown-03	3.475	3.9	J
04		Unknown-04	3.848	3.1	J
05		Unknown-05	4.334	4.5	J
06		Unknown-06	4.676	2.6	J
07		Unknown-07	4.883	9.5	J
08		Unknown-08	5.814	2.3	J
09		Unknown-09	8.733	20	J
	E96679[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8663.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8663.D
Lab Smp Id: K2213-15A Client Smp ID: H30Z7
Inj Date : 11-NOV-2011 04:39
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-15A,,62806,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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	3.050	3.050	(0.905)	85572	83.9107	42
$	4 bis(2-Chloroethyl)ether-d8	67	3.113	3.112	(0.923)	54398	71.7146	36
$	6 2-Chlorophenol-d4	132	3.206	3.206	(0.951)	87914	73.4620	37
*	8 1,4-Dichlorobenzene-d4	152	3.371	3.371	(1.000)	37922	40.0000	(Q)
$	11 4-Methylphenol-d8	113	3.609	3.609	(1.071)	94255	87.2758	44
$	16 Nitrobenzene-d5	128	3.796	3.796	(0.857)	44973	71.8173	36(Q)
$	19 2-Nitrophenol-d4	143	4.075	4.075	(0.921)	60685	76.0287	38
$	23 2,4-Dichlorophenol-d3	165	4.282	4.282	(0.967)	116466	77.8701	39
*	25 Naphthalene-d8	136	4.427	4.427	(1.000)	149598	40.0000	
$	27 4-Chloroaniline-d4	131	4.479	4.468	(1.012)	15511	10.5114	5.3(Q)
$	40 Dimethylphthalate-d6	166	5.783	5.772	(0.951)	400372	76.7304	38
$	43 Acenaphthylene-d8	160	5.938	5.938	(0.976)	317581	54.9679	27
*	46 Acenaphthene-d10	164	6.083	6.083	(1.000)	131962	40.0000	
$	49 4-Nitrophenol-d4	143	6.197	6.166	(1.019)	87182	88.7497	44
$	54 Fluorene-d10	176	6.590	6.590	(1.083)	218189	46.9010	23
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.642	6.642	(0.882)	95322	68.0641	34
*	65 Phenanthrene-d10	188	7.532	7.532	(1.000)	349141	40.0000	
$	67 Anthracene-d10	188	7.594	7.584	(1.008)	313169	32.6595	16(R)
$	72 Pyrene-d10	212	8.929	8.929	(0.881)	218775	20.4065	10(R)
	79 bis(2-Ethylhexyl)phthalate	149	10.099	10.099	(0.997)	31883	3.95328	2.0(a)
*	77 Chrysene-d12	240	10.130	10.120	(1.000)	550038	40.0000	(Q)

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8663.D
Report Date: 11-Nov-2011 14:04

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
$ 83 Benzo(a)pyrene-d12	264	11.714	11.703	(0.990)	175373	15.3734	7.7(R)
* 85 Perylene-d12	264	11.827	11.817	(1.000)	514809	40.0000	

QC Flag Legend

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

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8663.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8663.D
Lab Smp Id: K2213-15A Client Smp ID: H30Z7
Inj Date : 11-NOV-2011 04:39
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-15A,,62806,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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

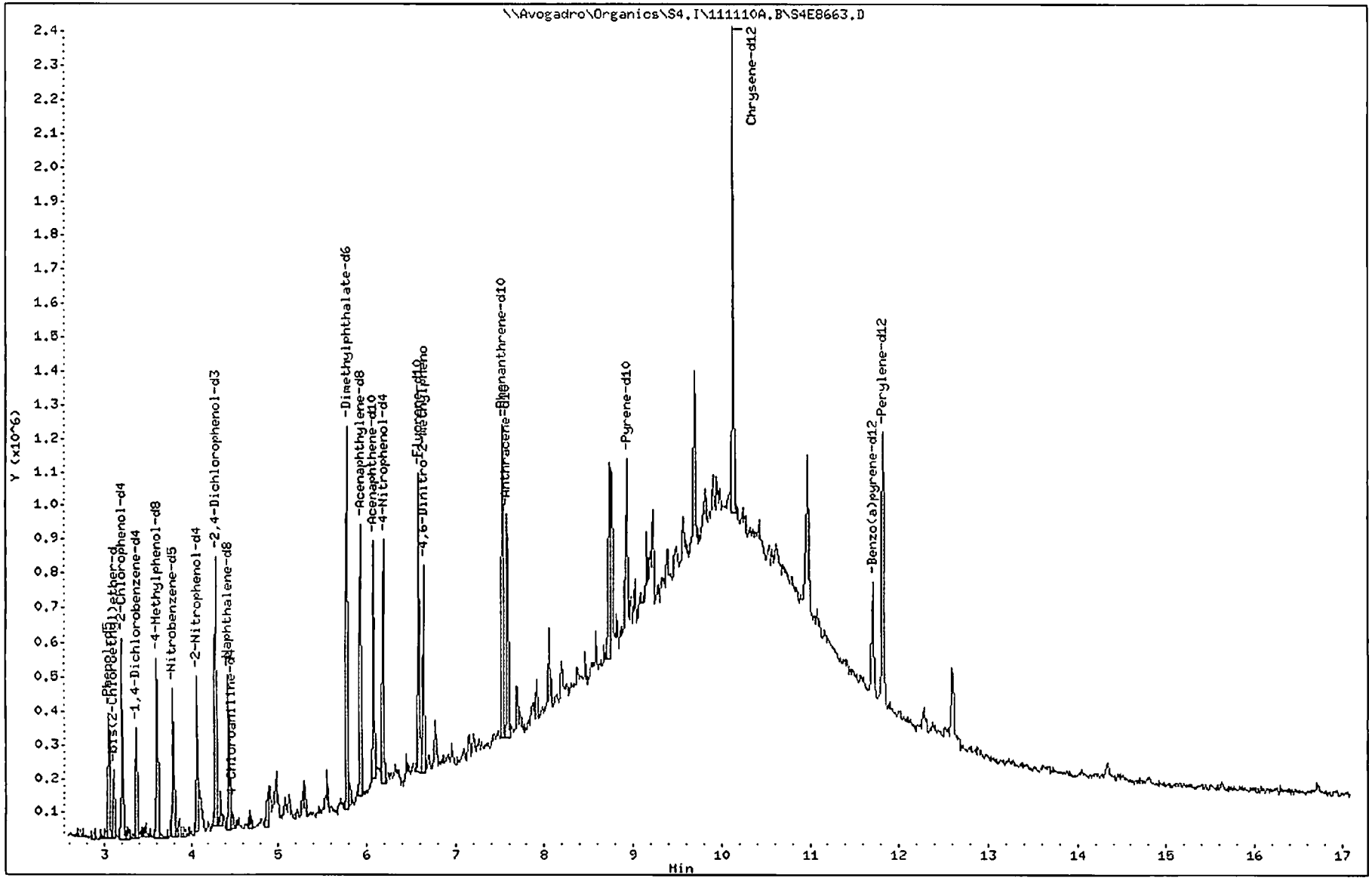
ISTD	RT	AREA	AMOUNT
* 8 1,4-Dichlorobenzene-d4	3.372	331782	40.000
* 25 Naphthalene-d8	4.428	503809	40.000
* 46 Acenaphthene-d10	6.084	707302	40.000
* 65 Phenanthrene-d10	7.533	949764	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
3.020	38744	4.67095412	2.3	0		0	8
Unknown				CAS #:			
3.268	54113	6.52394286	3.3	0		0	8
Unknown				CAS #:			
3.475	64031	7.71966339	3.9	0		0	8

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8663.D
Report Date: 11-Nov-2011 14:04

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
3.848	51745	6.23847029	3.1	0		0	8
Unknown				CAS #:			
4.334	113603	9.01953437	4.5	0		0	25
Unknown				CAS #:			
4.676	65650	5.21230439	2.6	0		0	25
Unknown				CAS #:			
4.883	238547	18.9394642	9.5	0		0	25
Unknown				CAS #:			
5.814	82476	4.66423290	2.3	0		0	46
Unknown				CAS #:			
8.733	932034	39.2532812	20	0		0	65

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8663.D
Date : 11-NOV-2011 04:39
Client ID: H30Z7
Instrument: S4.i
Sample Info: K2213-15A,,62806,,
Volume Injected (uL): 2.0
Operator: MMS SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



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Date : 11-NOV-2011 04:39

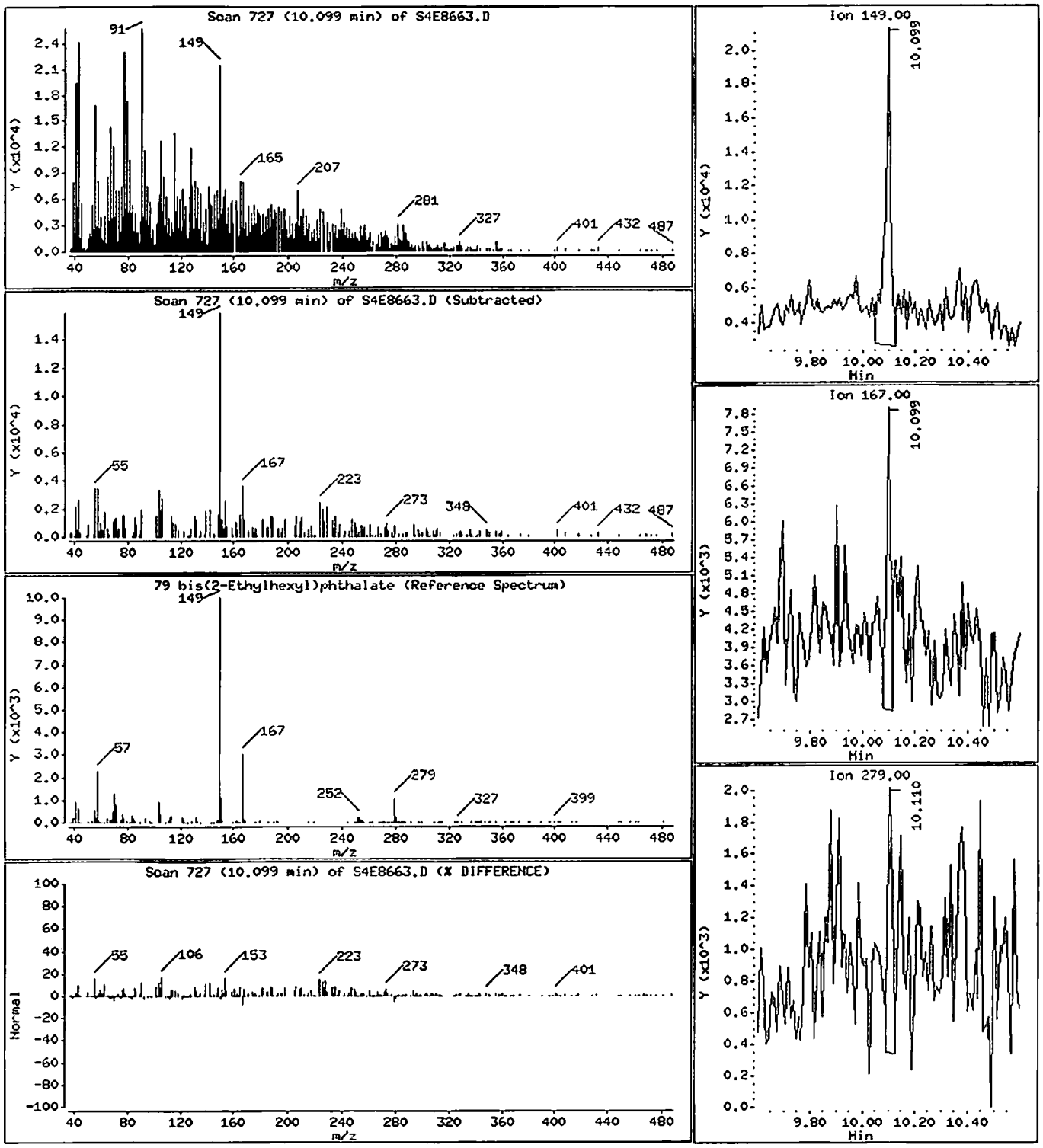
Client ID: H3027 Instrument: S4.i

Sample Info: K2213-15A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

79 bis(2-Ethylhexyl)phthalate Concentration: 2.0 ug/L



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Date : 11-NOV-2011 04:39

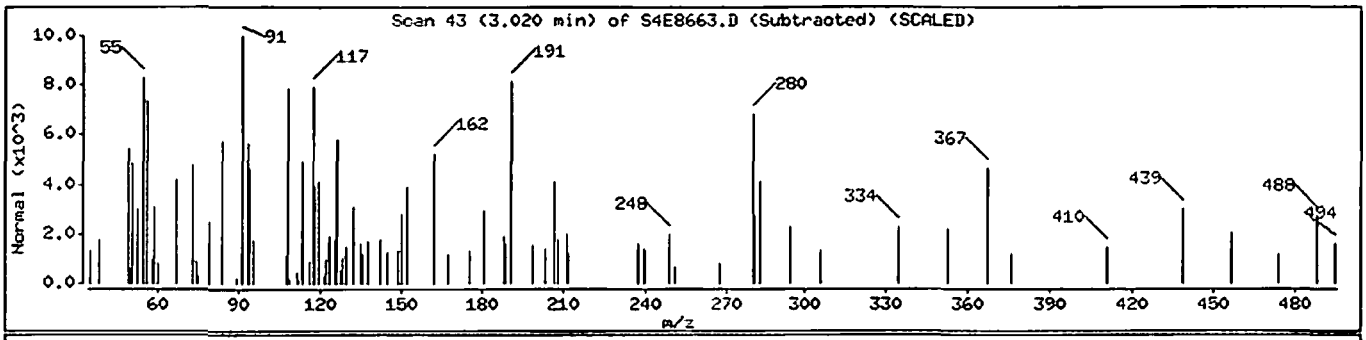
Client ID: H30Z7 Instrument: S4.i

Sample Info: K2213-15A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 11-NOV-2011 04:39

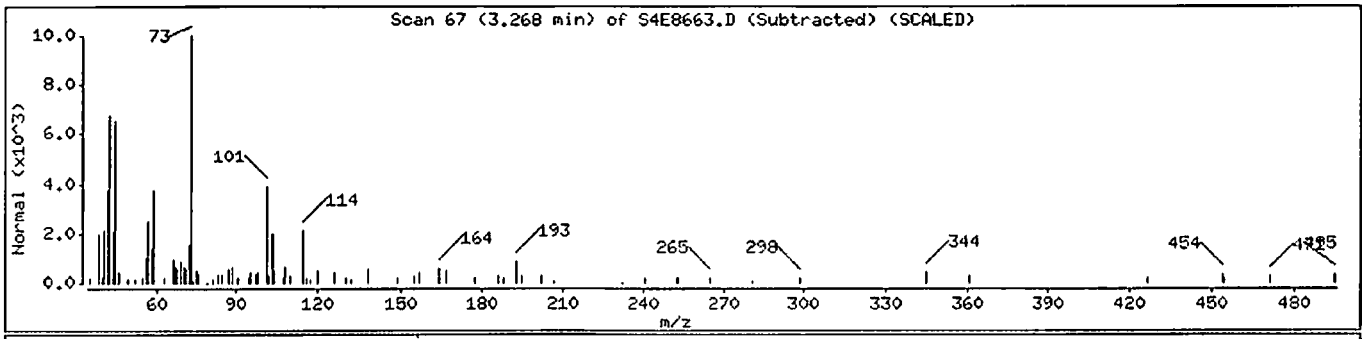
Client ID: H30Z7 Instrument: S4.i

Sample Info: K2213-15A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 11-NOV-2011 04:39

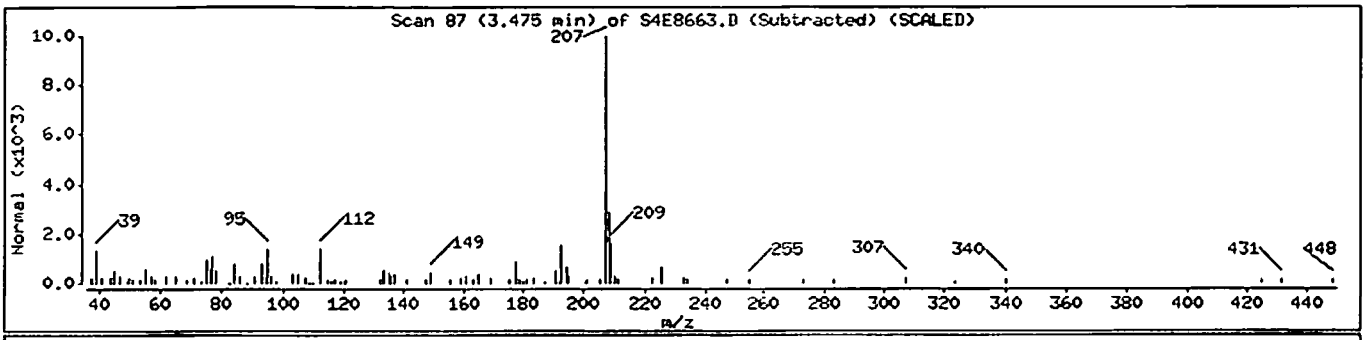
Client ID: H30Z7 Instrument: S4.i

Sample Info: K2213-15A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 11-NOV-2011 04:39

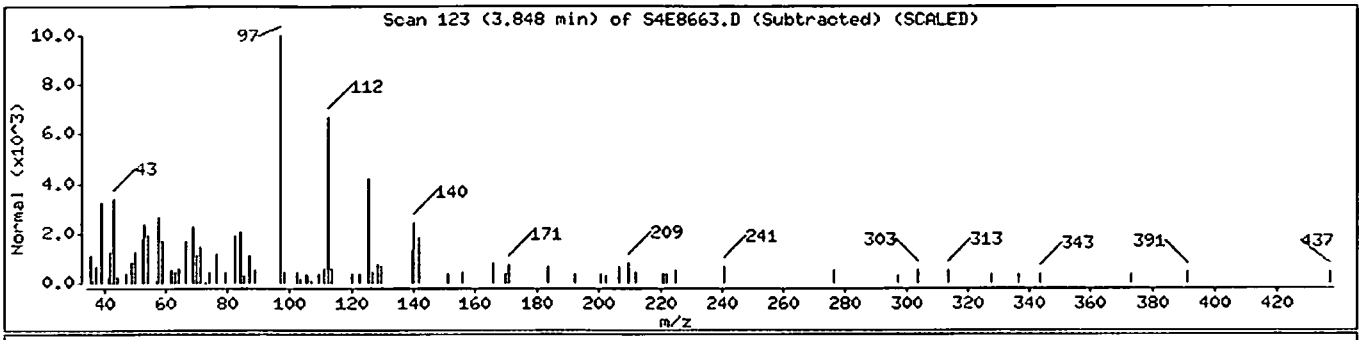
Client ID: H30Z7 Instrument: S4.i

Sample Info: K2213-15A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 11-NOV-2011 04:39

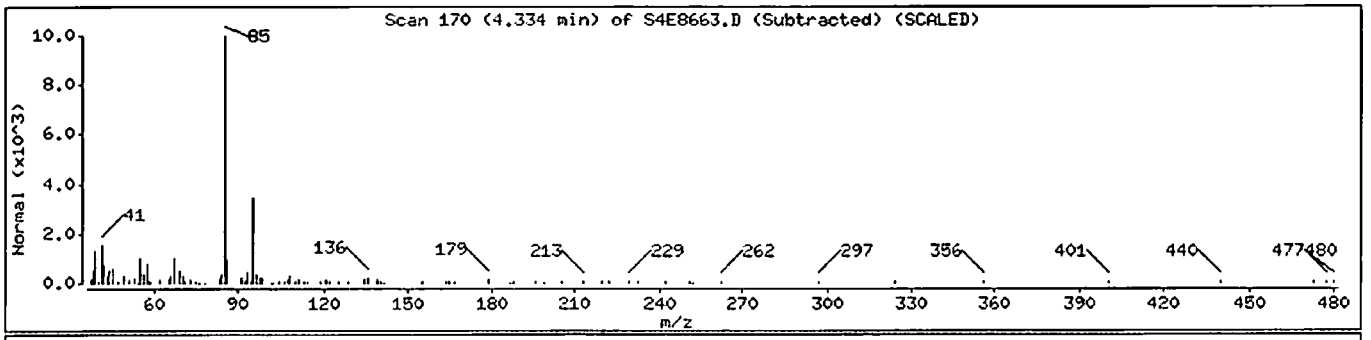
Client ID: H3027 Instrument: S4.i

Sample Info: K2213-15A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 11-NOV-2011 04:39

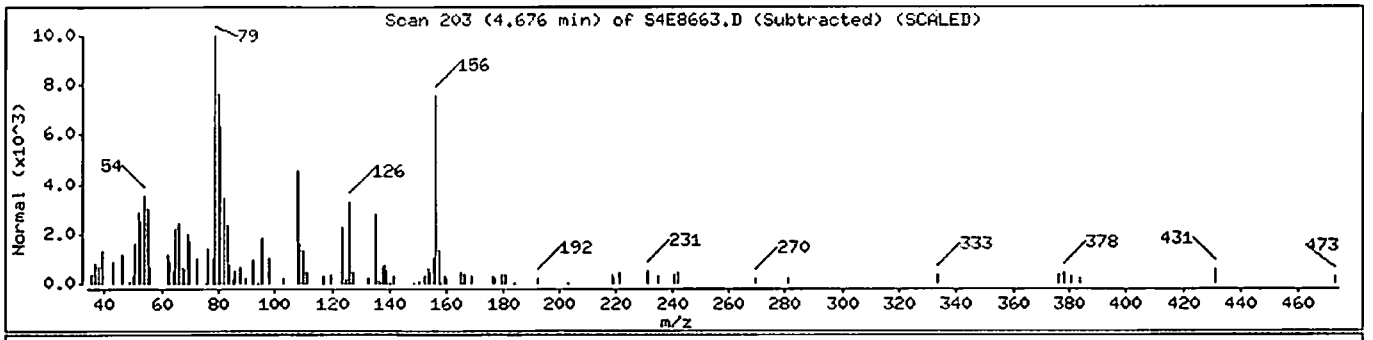
Client ID: H3027 Instrument: S4.i

Sample Info: K2213-15A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8663.D

Date : 11-NOV-2011 04:39

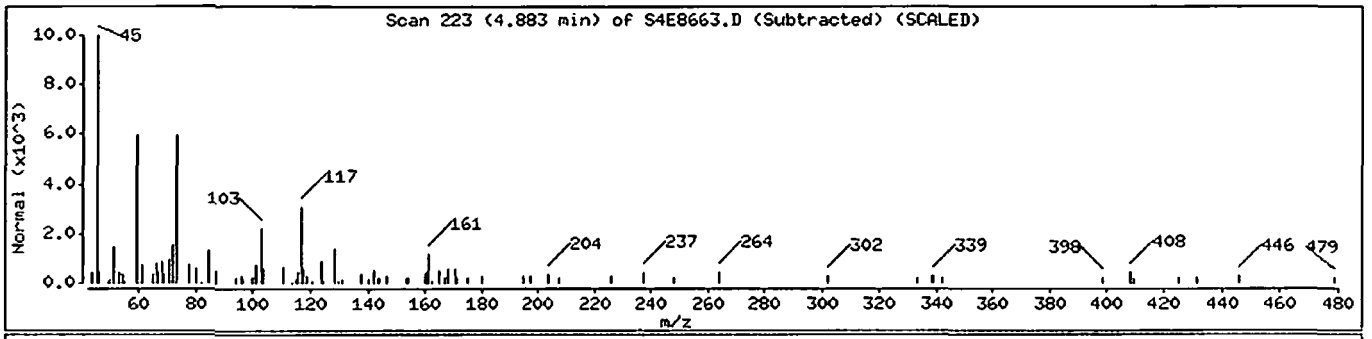
Client ID: H3027 Instrument: S4.i

Sample Info: K2213-15A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8663.D

Date : 11-NOV-2011 04:39

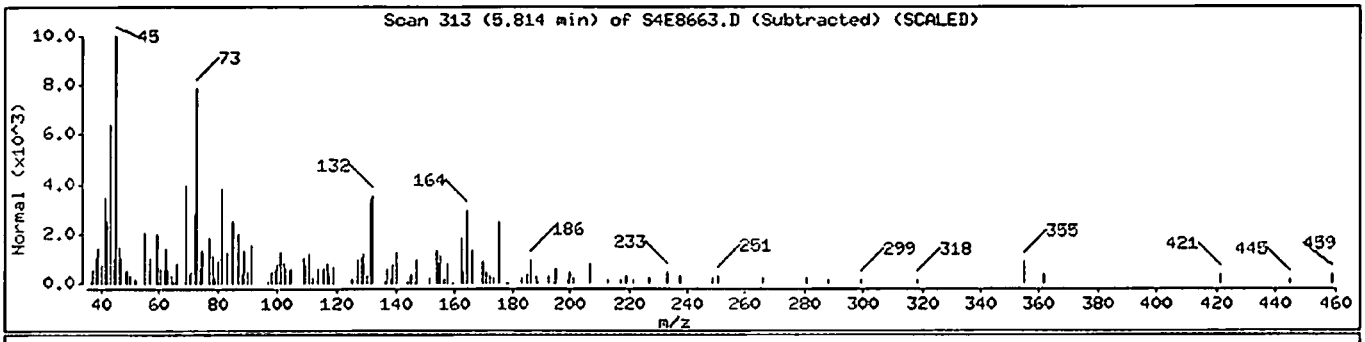
Client ID: H3027 Instrument: S4.i

Sample Info: K2213-15A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8663.D

Date : 11-NOV-2011 04:39

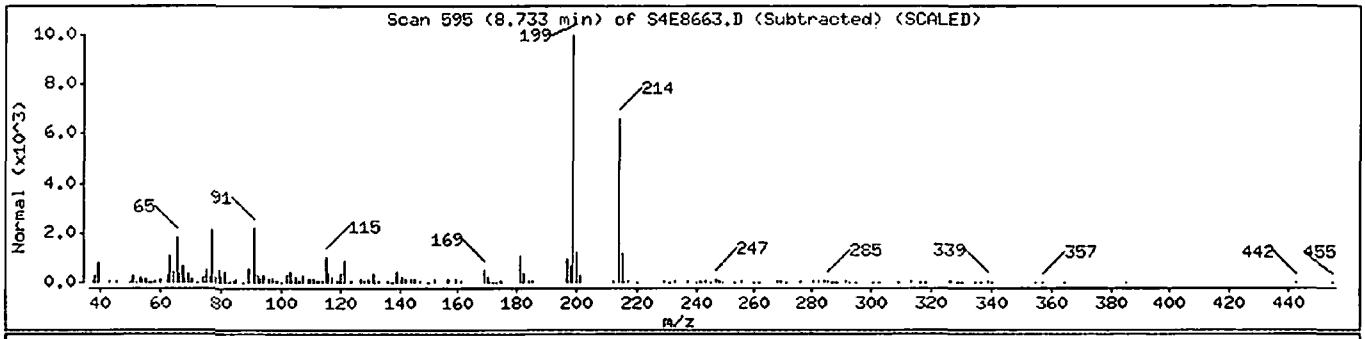
Client ID: H3027 Instrument: S4.i

Sample Info: K2213-15A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Z8

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-16A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8664.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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

EPA SAMPLE NO.

H30Z8

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-16A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8664.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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	1.1	J
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

EPA SAMPLE NO. H30Z8

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-16A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8664.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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	4.334	5.8	J
02		Unknown-02	4.676	3.0	J
03		Unknown-03	4.924	12	J
04		Unknown-04	5.059	5.1	J
05		Unknown-05	6.032	4.2	J
06		Unknown-06	7.688	2.6	J
07	112-84-5	13-Docosenamide, (Z)-	10.959	12	BNJ
	E96679[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8664.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8664.D
Lab Smp Id: K2213-16A Client Smp ID: H30Z8
Inj Date : 11-NOV-2011 05:03
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-16A,,62806,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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	3.050	3.050	(0.905)	56307	73.8613	37	
$	4 bis(2-Chloroethyl)ether-d8	67	3.113	3.112	(0.923)	35370	62.3776	31	
$	6 2-Chlorophenol-d4	132	3.206	3.206	(0.951)	53322	59.6046	30	
*	8 1,4-Dichlorobenzene-d4	152	3.371	3.371	(1.000)	28348	40.0000		(Q)
$	11 4-Methylphenol-d8	113	3.609	3.609	(1.071)	55914	69.2594	35	
$	16 Nitrobenzene-d5	128	3.796	3.796	(0.857)	32791	72.9148	36	(Q)
$	19 2-Nitrophenol-d4	143	4.075	4.075	(0.921)	40789	71.1580	36	
$	23 2,4-Dichlorophenol-d3	165	4.282	4.282	(0.967)	79608	74.1161	37	
*	25 Naphthalene-d8	136	4.427	4.427	(1.000)	107434	40.0000		
$	27 4-Chloroaniline-d4	131	4.468	4.468	(1.009)	55626	52.4906	26	(Q)
$	40 Dimethylphthalate-d6	166	5.783	5.772	(0.951)	251120	67.5575	34	
$	43 Acenaphthylene-d8	160	5.938	5.938	(0.976)	283001	68.7593	34	
*	46 Acenaphthene-d10	164	6.083	6.083	(1.000)	94007	40.0000		
$	49 4-Nitrophenol-d4	143	6.187	6.166	(1.017)	61819	88.3387	44	(H)
	53 Diethylphthalate	149	6.487	6.487	(1.066)	8663	2.27029	1.1	(a)
$	54 Fluorene-d10	176	6.590	6.590	(1.083)	224285	67.6766	34	
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.642	6.642	(0.882)	74475	70.1673	35	
*	65 Phenanthrene-d10	188	7.532	7.532	(1.000)	264607	40.0000		
$	67 Anthracene-d10	188	7.584	7.584	(1.007)	483662	66.5538	33	
	70 Di-n-butylphthalate	149	8.081	8.081	(1.073)	15404	2.00335	1.0	(a)
$	72 Pyrene-d10	212	8.929	8.929	(0.881)	671023	70.8039	35	

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8664.D
Report Date: 11-Nov-2011 14:04

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
* 77 Chrysene-d12	240	10.130	10.120	(1.000)	486233	40.0000	(Q)
$ 83 Benzo(a)pyrene-d12	264	11.714	11.703	(0.991)	814091	69.3093	35
* 85 Perylene-d12	264	11.817	11.817	(1.000)	530073	40.0000	

QC Flag Legend

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

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8664.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8664.D
Lab Smp Id: K2213-16A Client Smp ID: H30Z8
Inj Date : 11-NOV-2011 05:03
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-16A,,62806,,
Misc Info :
Comment :
Method : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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
* 25 Naphthalene-d8	4.428	324312	40.000
* 46 Acenaphthene-d10	6.084	637611	40.000
* 65 Phenanthrene-d10	7.533	714252	40.000
* 77 Chrysene-d12	10.131	1322724	40.000

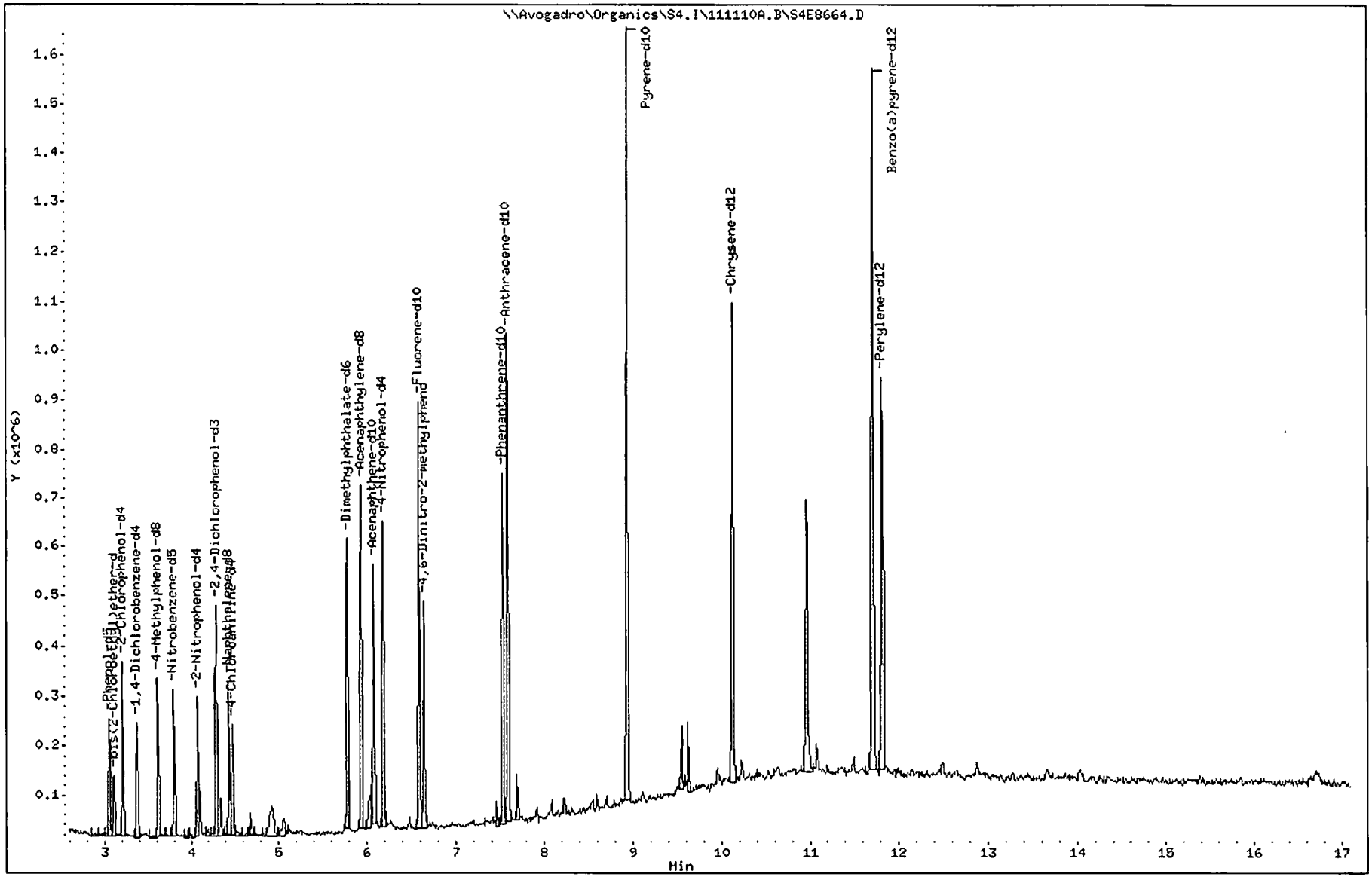
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.334	94224	11.6213445	5.8	0		0	25
Unknown				CAS #:			
4.676	48141	5.93758647	3.0	0		0	25
Unknown				CAS #:			
4.924	196445	24.2290847	12	0		0	25

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8664.D
Report Date: 11-Nov-2011 14:04

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
5.059	83025	10.2400705	5.1	0		0	25
Unknown				CAS #:			
6.032	134023	8.40781105	4.2	0		0	46
Unknown				CAS #:			
7.688	93030	5.20989824	2.6	0		0	65
13-Docosenamide, (Z)-				CAS #: 112-84-5			
10.959	804648	24.3330418	12	91	NIST2002.L	135943	77

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8664.D
Date : 11-NOV-2011 05:03
Client ID: H3028
Sample Info: K2213-16A,,62806,,
Volume Injected (uL): 2.0
Column phase: RXI-5SILMS

Instrument: S4.i
Operator: MMS SRC: LIMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8664.D

Date : 11-NOV-2011 05:03

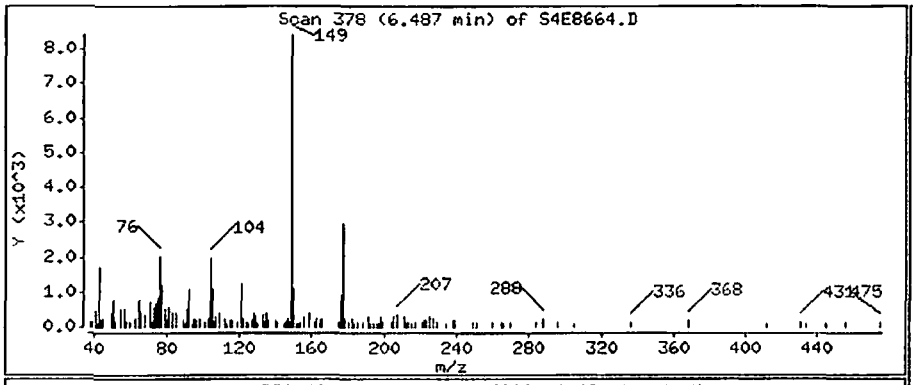
Client ID: H30Z8 Instrument: S4.i

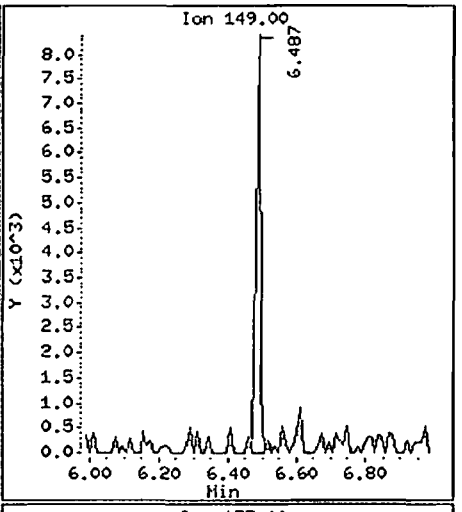
Sample Info: K2213-16A,,62806,,

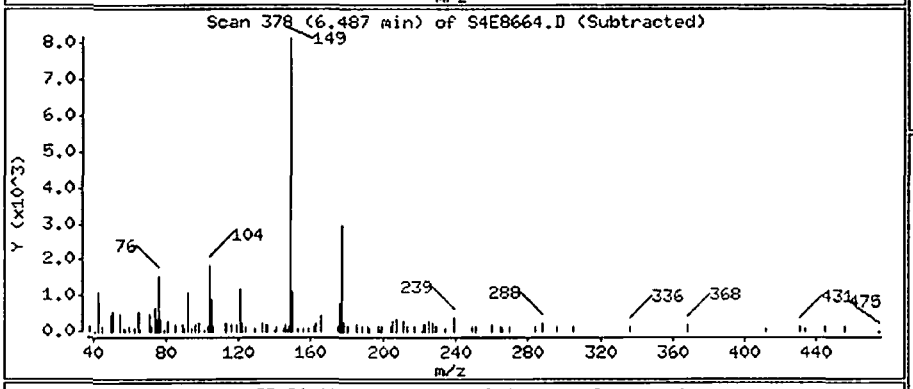
Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

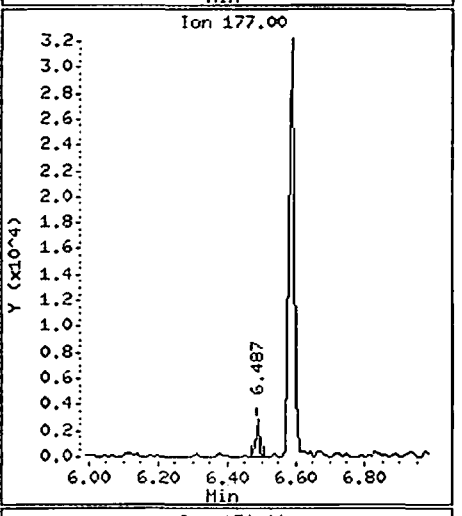
Column phase: RXI-5SILMS Column diameter: 0.25

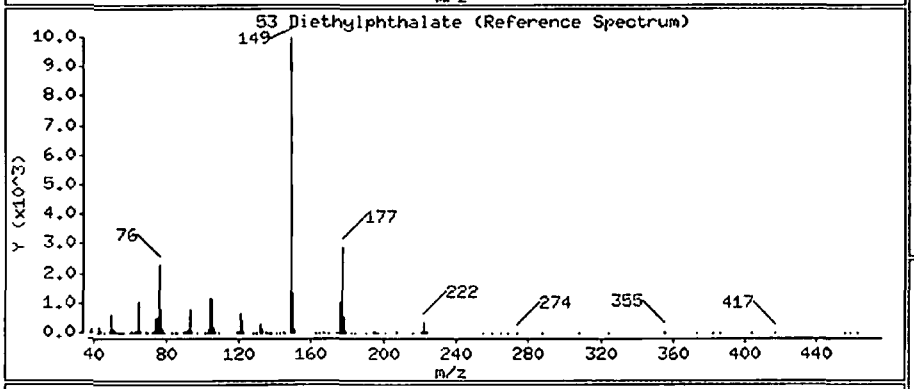
53 Diethylphthalate Concentration: 1.1 ug/L

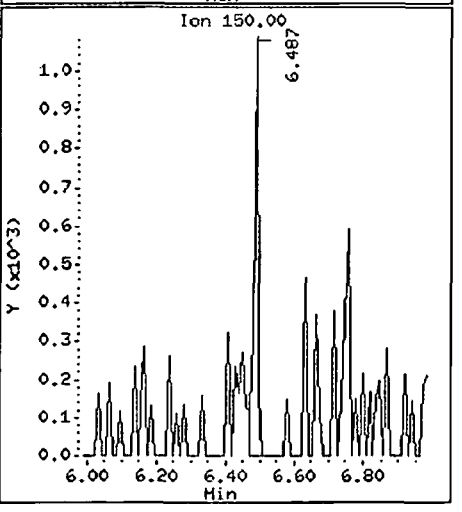


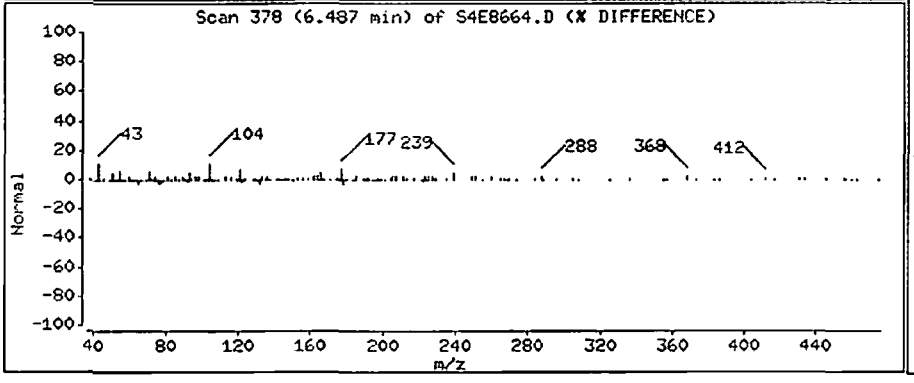












Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8664.D

Date : 11-NOV-2011 05:03

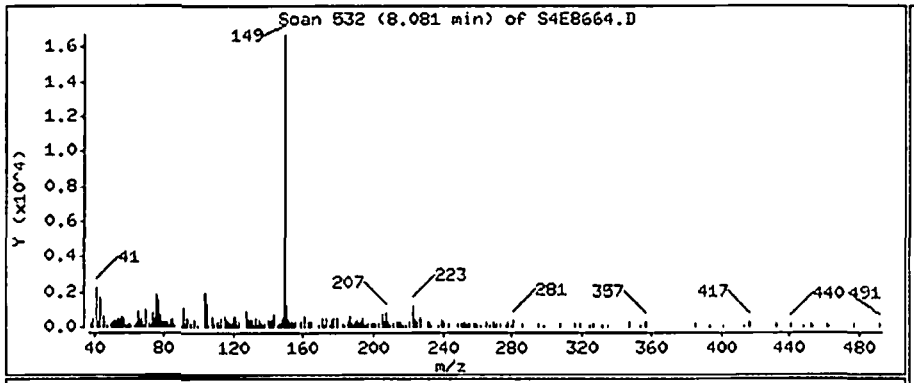
Client ID: H3028 Instrument: S4.i

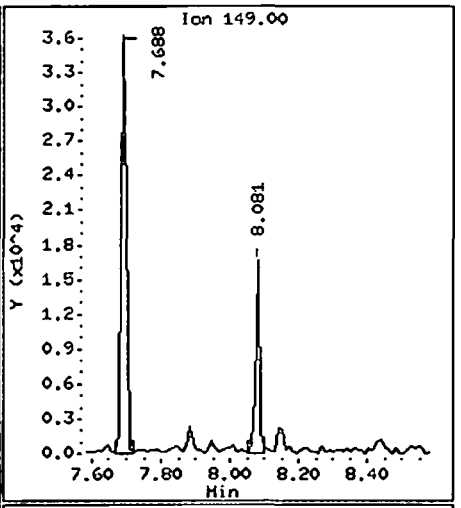
Sample Info: K2213-16A,,62806,,

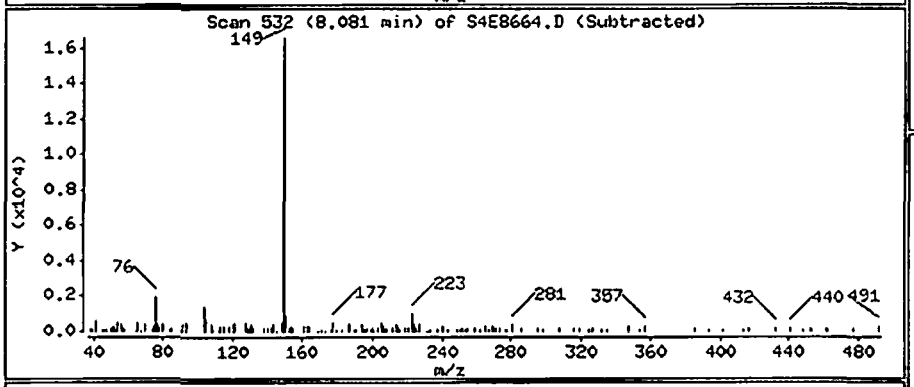
Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

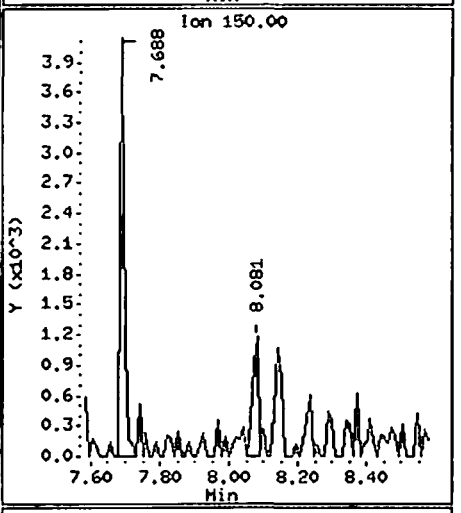
Column phase: RXI-5SILMS Column diameter: 0.25

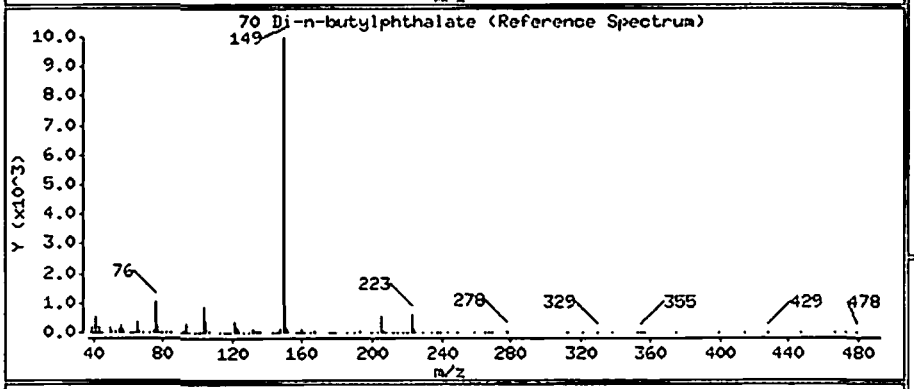
70 Di-n-butylphthalate Concentration: 1.0 ug/L

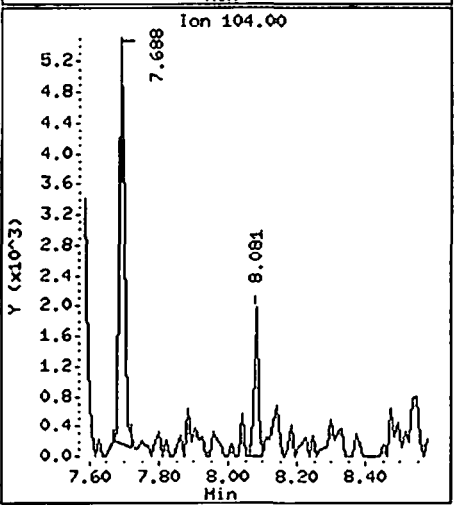


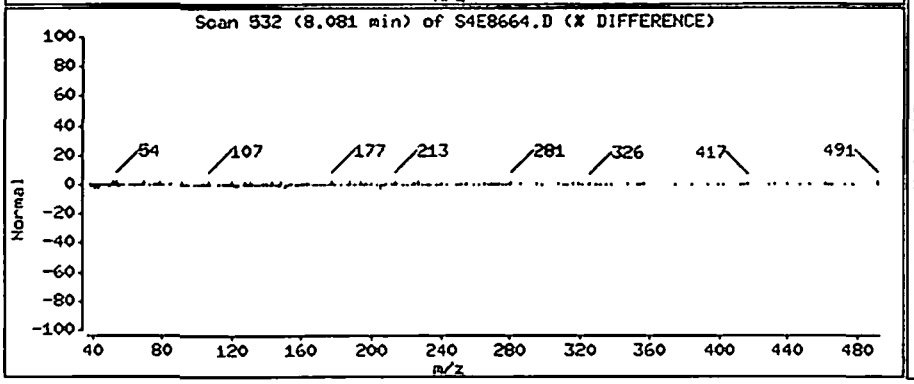












Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8664.D

Date : 11-NOV-2011 05:03

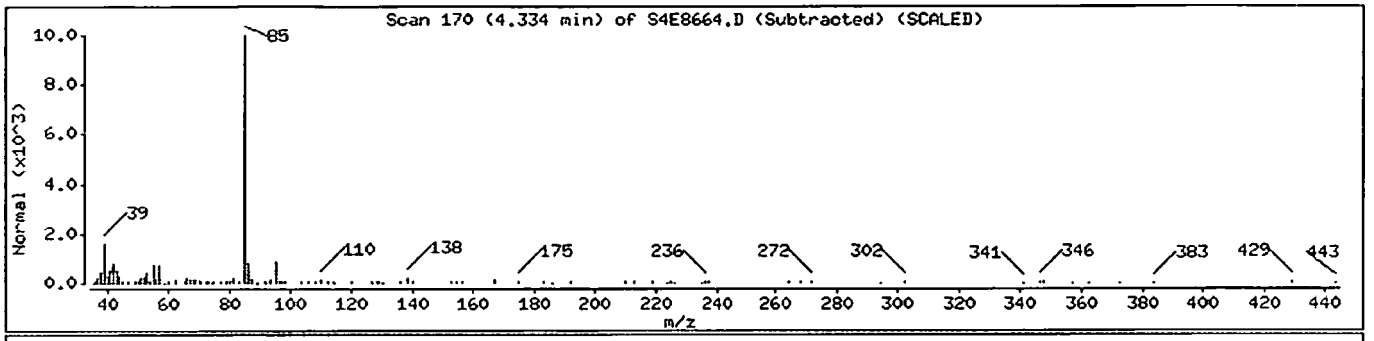
Client ID: H30Z8 Instrument: S4.i

Sample Info: K2213-16A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.i\111110A.B\S4E8664.D

Date : 11-NOV-2011 05:03

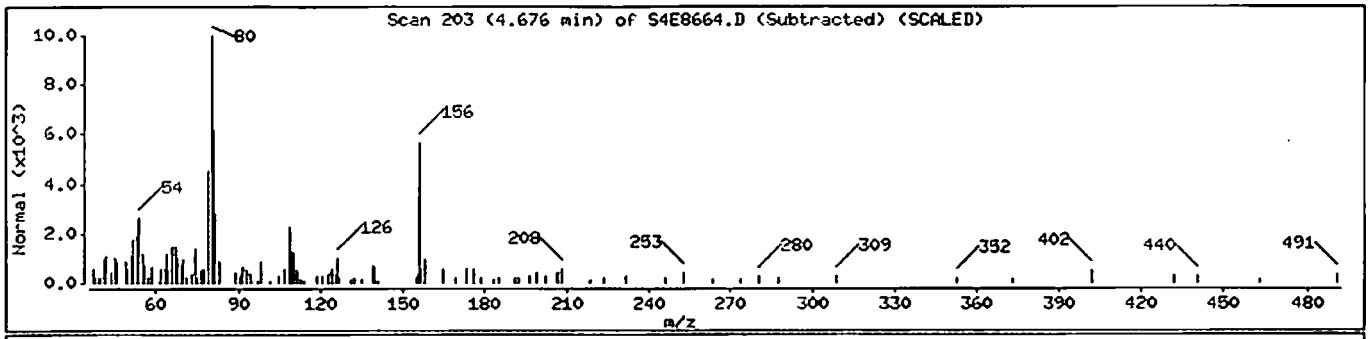
Client ID: H30Z8 Instrument: S4.i

Sample Info: K2213-16A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8664.D

Date : 11-NOV-2011 05:03

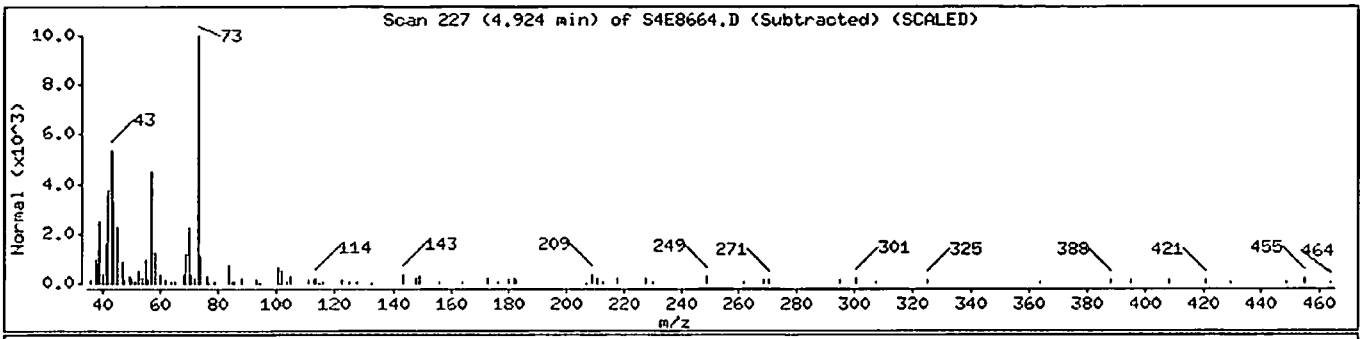
Client ID: H3028 Instrument: S4.i

Sample Info: K2213-16A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8664.D

Date : 11-NOV-2011 05:03

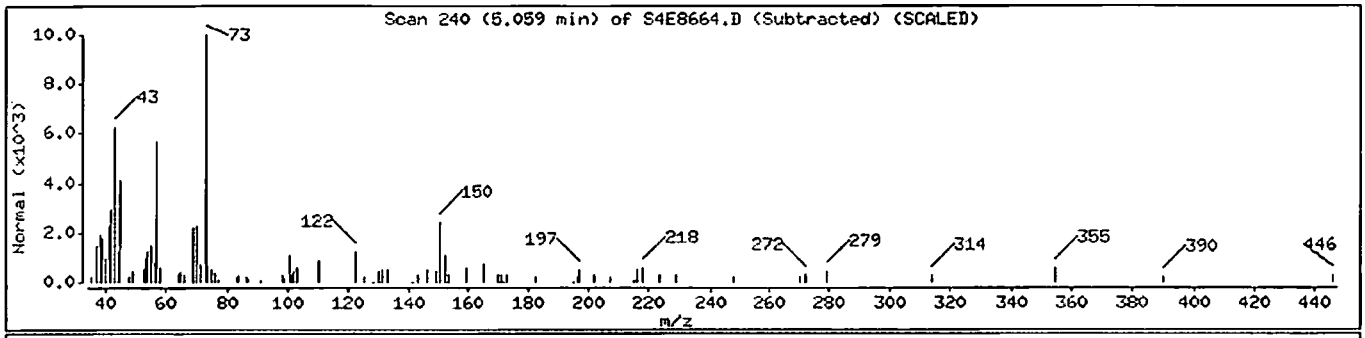
Client ID: H3028 Instrument: S4.i

Sample Info: K2213-16A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8664.D

Date : 11-NOV-2011 05:03

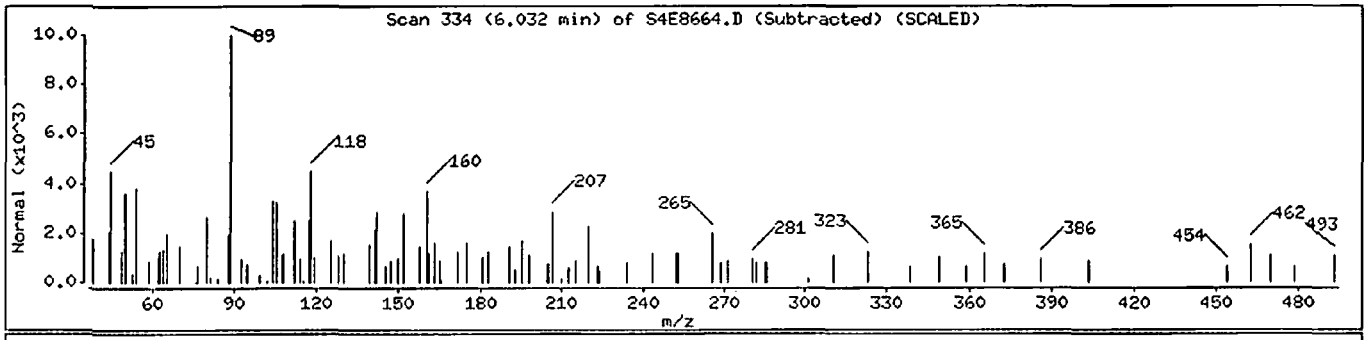
Client ID: H30Z8 Instrument: S4.i

Sample Info: K2213-16A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8664.D

Date : 11-NOV-2011 05:03

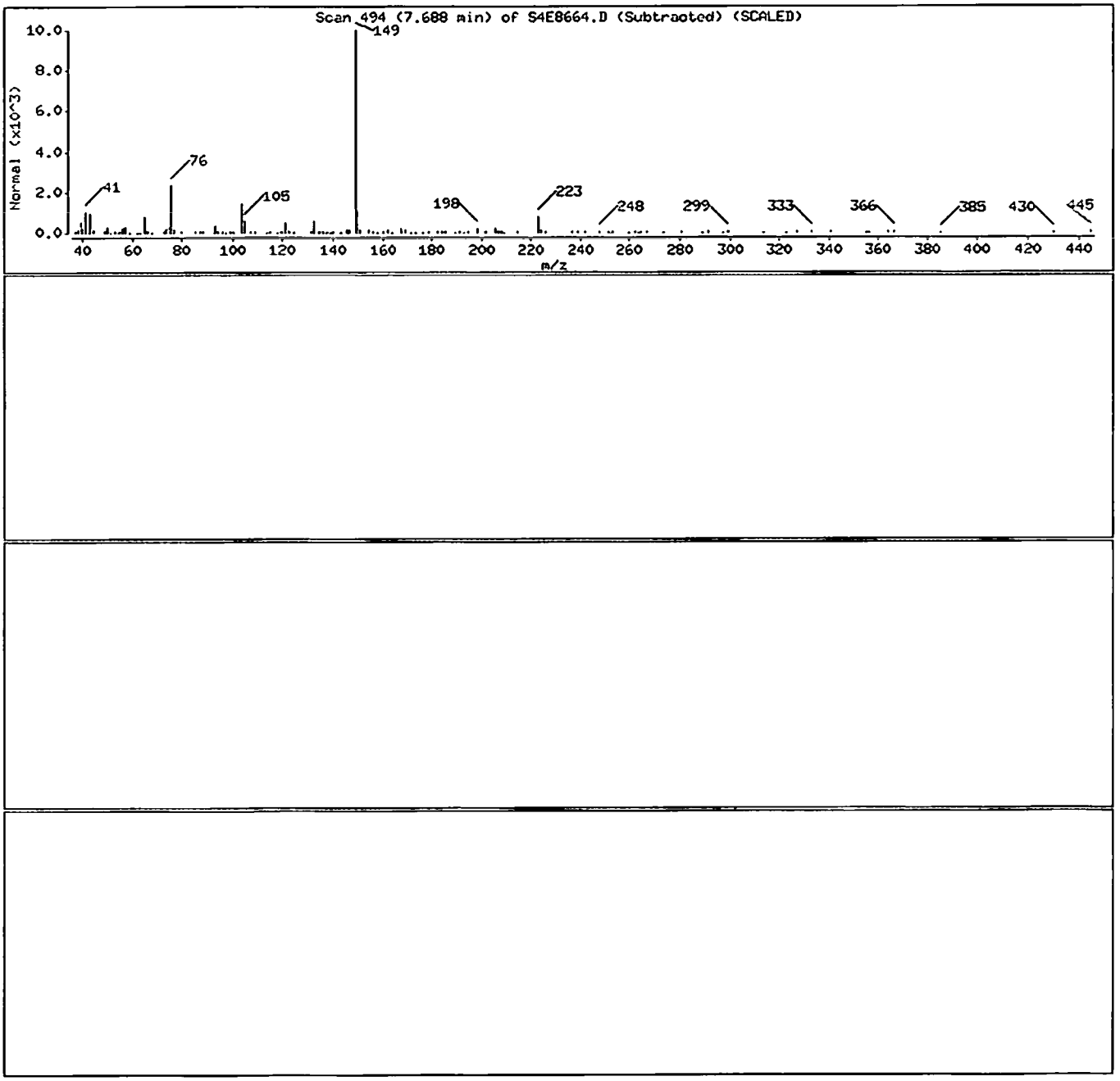
Client ID: H3028 Instrument: S4.i

Sample Info: K2213-16A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8664.D

Date : 11-NOV-2011 08:03

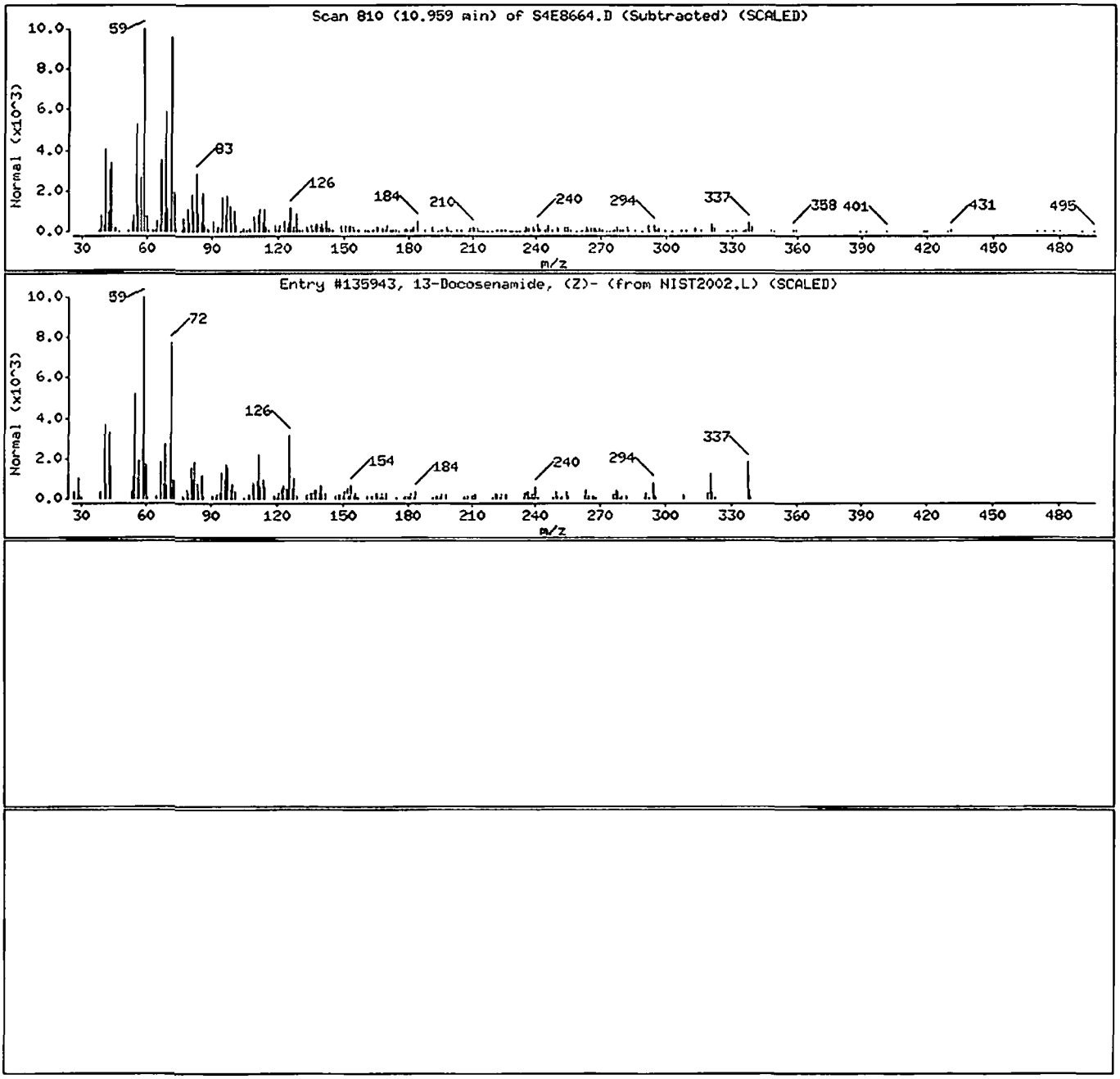
Client ID: H3028 Instrument: S4.i

Sample Info: K2213-16A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS 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



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.: H30X4

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.: H30X4

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.: H30X4

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

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

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

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

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

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.: H30X4

Instrument ID: S4 Calibration Date(s): 11/10/2011 11/10/2011

Calibration Time(s): 16:28 18:10

LAB FILE ID: RRF005 = S4E8636.D RRF010 = S4E8638.D

RRF020 = S4E8635.D RRF040 = S4E8639.D RRF080 = S4E8637.D

COMPOUND	RRF005	RRF010	RRF020	RRF040	RRF080	RRF	%RSD
Benzaldehyde	1.154	0.966	1.269	1.282	0.830	1.100	17.9
Phenol	1.416	1.303	1.554	1.828	1.631	1.546	13.0
Bis(2-chloroethyl)ether	1.043	0.891	1.077	1.185	1.062	1.052	10.0
2-Chlorophenol	1.253	1.142	1.217	1.337	1.270	1.244	5.7
2-Methylphenol	1.089	0.907	1.024	1.281	1.108	1.082	12.6
2,2'-Oxybis(1-chloropropane)	0.206	0.174	0.183	0.212	0.202	0.195	8.3
Acetophenone	1.716	1.675	1.868	2.159	1.903	1.864	10.3
4-Methylphenol	1.131	1.026	1.144	1.310	1.230	1.168	9.2
N-Nitroso-di-n-propylamine	1.142	1.014	1.149	1.290	1.139	1.147	8.5
Hexachloroethane	0.647	0.616	0.658	0.698	0.672	0.658	4.6
Nitrobenzene	0.567	0.582	0.547	0.586	0.568	0.570	2.7
Isophorone	0.963	0.788	0.890	0.924	0.864	0.886	7.4
2-Nitrophenol	0.215	0.209	0.214	0.231	0.222	0.218	4.0
2,4-Dimethylphenol	0.472	0.434	0.470	0.508	0.495	0.476	5.9
Bis(2-chloroethoxy)methane	0.417	0.395	0.377	0.382	0.383	0.391	4.1
2,4-Dichlorophenol	0.417	0.361	0.403	0.418	0.396	0.399	5.8
Naphthalene	1.116	1.037	1.026	1.071	1.043	1.058	3.4
4-Chloroaniline	0.335	0.363	0.469	0.461	0.414	0.409	14.4
Hexachlorobutadiene	0.407	0.401	0.377	0.403	0.397	0.397	3.0
Caprolactam	0.149	0.122	0.136	0.164	0.131	0.140	11.7
4-Chloro-3-methylphenol	0.441	0.349	0.373	0.453	0.407	0.405	10.8
2-Methylnaphthalene	0.811	0.833	0.753	0.851	0.809	0.811	4.6
Hexachlorocyclopentadiene	0.683	0.655	0.562	0.628	0.656	0.637	7.2
2,4,6-Trichlorophenol	0.547	0.541	0.451	0.529	0.530	0.520	7.5
2,4,5-Trichlorophenol	0.544	0.566	0.547	0.616	0.586	0.572	5.2
1,1'-Biphenyl	1.410	1.373	1.325	1.459	1.427	1.399	3.7
2-Chloronaphthalene	1.213	1.219	1.068	1.205	1.138	1.169	5.6
2-Nitroaniline		0.415	0.388	0.449	0.409	0.415	6.1
Dimethylphthalate	1.613	1.436	1.443	1.809	1.547	1.570	9.8
2,6-Dinitrotoluene	0.320	0.358	0.343	0.403	0.359	0.357	8.6
Acenaphthylene	1.879	1.824	1.760	1.918	1.800	1.836	3.4
3-Nitroaniline		0.298	0.297	0.332	0.248	0.294	11.7
Acenaphthene	1.211	1.222	1.148	1.268	1.181	1.206	3.7
2,4-Dinitrophenol		0.276	0.281	0.348	0.296	0.300	11.0
4-Nitrophenol		0.485	0.485	0.628	0.505	0.526	13.1
Dibenzofuran	1.813	1.810	1.663	1.866	1.716	1.773	4.6

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.: H30X4

Instrument ID: S4 Calibration Date(s): 11/10/2011 11/10/2011

Calibration Time(s): 16:28 18:10

LAB FILE ID: RRF005 = S4E8636.D RRF010 = S4E8638.D

RRF020 = S4E8635.D RRF040 = S4E8639.D RRF080 = S4E8637.D

COMPOUND	RRF005	RRF010	RRF020	RRF040	RRF080	$\overline{RRF}$	%RSD
2,4-Dinitrotoluene	0.571	0.572	0.508	0.625	0.513	0.558	8.7
Diethylphthalate	1.628	1.622	1.519	1.806	1.543	1.624	6.9
Fluorene	1.652	1.608	1.471	1.730	1.516	1.595	6.5
4-Chlorophenyl-phenylether	0.954	0.996	0.942	1.127	0.974	0.999	7.5
4-Nitroaniline		0.351	0.338	0.432	0.291	0.353	16.7
4,6-Dinitro-2-methylphenol		0.181	0.180	0.185	0.175	0.180	2.4
N-Nitrosodiphenylamine (1)	0.608	0.547	0.536	0.530	0.534	0.551	5.8
1,2,4,5-Tetrachlorobenzene	0.850	0.883	0.772	0.852	0.812	0.834	5.1
4-Bromophenyl-phenylether	0.265	0.248	0.245	0.250	0.244	0.251	3.5
Hexachlorobenzene	0.292	0.234	0.242	0.235	0.243	0.249	9.8
Atrazine	0.282	0.253	0.279	0.290	0.277	0.276	5.1
Pentachlorophenol		0.178	0.180	0.191	0.178	0.182	3.5
Phenanthrene	1.161	1.037	1.045	1.059	1.010	1.063	5.4
Anthracene	1.190	1.098	1.087	1.104	1.045	1.105	4.8
Carbazole	1.035	0.995	0.926	0.973	0.898	0.965	5.6
Di-n-butylphthalate	1.189	1.120	1.164	1.222	1.117	1.162	3.9
Fluoranthene	1.626	1.543	1.430	1.601	1.411	1.522	6.4
Pyrene	1.012	0.947	0.978	0.930	0.924	0.958	3.8
Butylbenzylphthalate	0.410	0.374	0.394	0.403	0.401	0.396	3.5
3,3´-Dichlorobenzidine	0.417	0.408	0.382	0.393	0.301	0.380	12.1
Benzo(a)anthracene	1.142	1.118	1.082	1.170	1.057	1.114	4.1
Chrysene	1.093	1.090	1.094	1.030	0.970	1.055	5.2
Bis(2-ethylhexyl)phthalate	0.619	0.559	0.589	0.593	0.573	0.587	3.9
Di-n-octylphthalate	1.021	0.916	1.019	1.045	0.985	0.997	5.0
Benzo(b)fluoranthene	1.243	1.172	1.190	1.388	1.231	1.245	6.8
Benzo(k)fluoranthene	1.456	1.326	1.254	1.176	1.182	1.279	9.1
Benzo(a)pyrene	1.233	1.170	1.105	1.165	1.097	1.154	4.8
Indeno(1,2,3-cd)pyrene	1.450	1.410	1.300	1.413	1.378	1.390	4.0
Dibenzo(a,h)anthracene	1.163	1.191	1.109	1.137	1.129	1.146	2.8
Benzo(g,h,i)perylene	1.171	1.141	1.114	1.154	1.141	1.144	1.8
2,3,4,6-Tetrachlorophenol	0.514	0.523	0.509	0.596	0.528	0.534	6.7

(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.: H30X4

Instrument ID: S4 Calibration Date(s): 11/10/2011 11/10/2011

Calibration Time(s): 16:28 18:10

LAB FILE ID: RRF005 = S4E8636.D RRF010 = S4E8638.D

RRF020 = S4E8635.D RRF040 = S4E8639.D RRF080 = S4E8637.D

COMPOUND	RRF005	RRF010	RRF020	RRF040	RRF080	$\overline{RRF}$	%RSD
Phenol-d5	1.023	0.972	0.970	1.270	1.143	1.076	12.0
Bis(2-chloroethyl)ether-d8	0.910	0.691	0.734	0.879	0.788	0.800	11.6
2-Chlorophenol-d4	1.353	1.082	1.181	1.408	1.287	1.262	10.4
4-Methylphenol-d8	1.083	0.922	1.157	1.362	1.171	1.139	14.0
Nitrobenzene-d5	0.176	0.150	0.157	0.181	0.173	0.167	7.9
2-Nitrophenol-d4	0.219	0.205	0.213	0.213	0.217	0.213	2.5
2,4-Dichlorophenol-d3	0.372	0.404	0.384	0.426	0.414	0.400	5.5
4-Chloroaniline-d4	0.395	0.339	0.418	0.440	0.380	0.395	9.8
Dimethylphthalate-d6	1.559	1.724	1.427	1.683	1.515	1.582	7.7
Acenaphthylene-d8	1.822	1.777	1.612	1.842	1.703	1.751	5.4
4-Nitrophenol-d4		0.292	0.283	0.330	0.286	0.298	7.4
Fluorene-d10	1.436	1.450	1.292	1.523	1.349	1.410	6.4
4,6-Dinitro-2-methylphenol-d2		0.151	0.155	0.171	0.164	0.160	5.6
Anthracene-d10	1.208	1.084	1.064	1.106	1.030	1.099	6.1
Pyrene-d10	0.798	0.810	0.774	0.758	0.758	0.780	3.0
Benzo(a)pyrene-d12	0.916	0.857	0.848	0.921	0.890	0.886	3.7

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

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

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

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

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

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

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

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
	22	bis(2-Chloroethoxy)methane	93	4.923	4.923	(0.958)	294797	40.0000	40
$	23	2,4-Dichlorophenol-d3	165	5.009	5.009	(0.975)	125497	40.0000	40
	24	2,4-Dichlorophenol	162	5.020	5.020	(0.977)	112143	40.0000	39
*	25	Naphthalene-d8	136	5.138	5.138	(1.000)	300917	40.0000	
	26	Naphthalene	128	5.159	5.159	(1.004)	310657	40.0000	40
$	27	4-Chloroaniline-d4	131	5.191	5.191	(1.010)	99425	40.0000	35(Q)
	28	4-Chloroaniline	127	5.191	5.191	(1.010)	115019	40.0000	37
	29	Hexachlorobutadiene	225	5.267	5.267	(1.025)	80580	40.0000	37
	30	Caprolactam	113	5.460	5.460	(1.063)	44349	40.0000	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

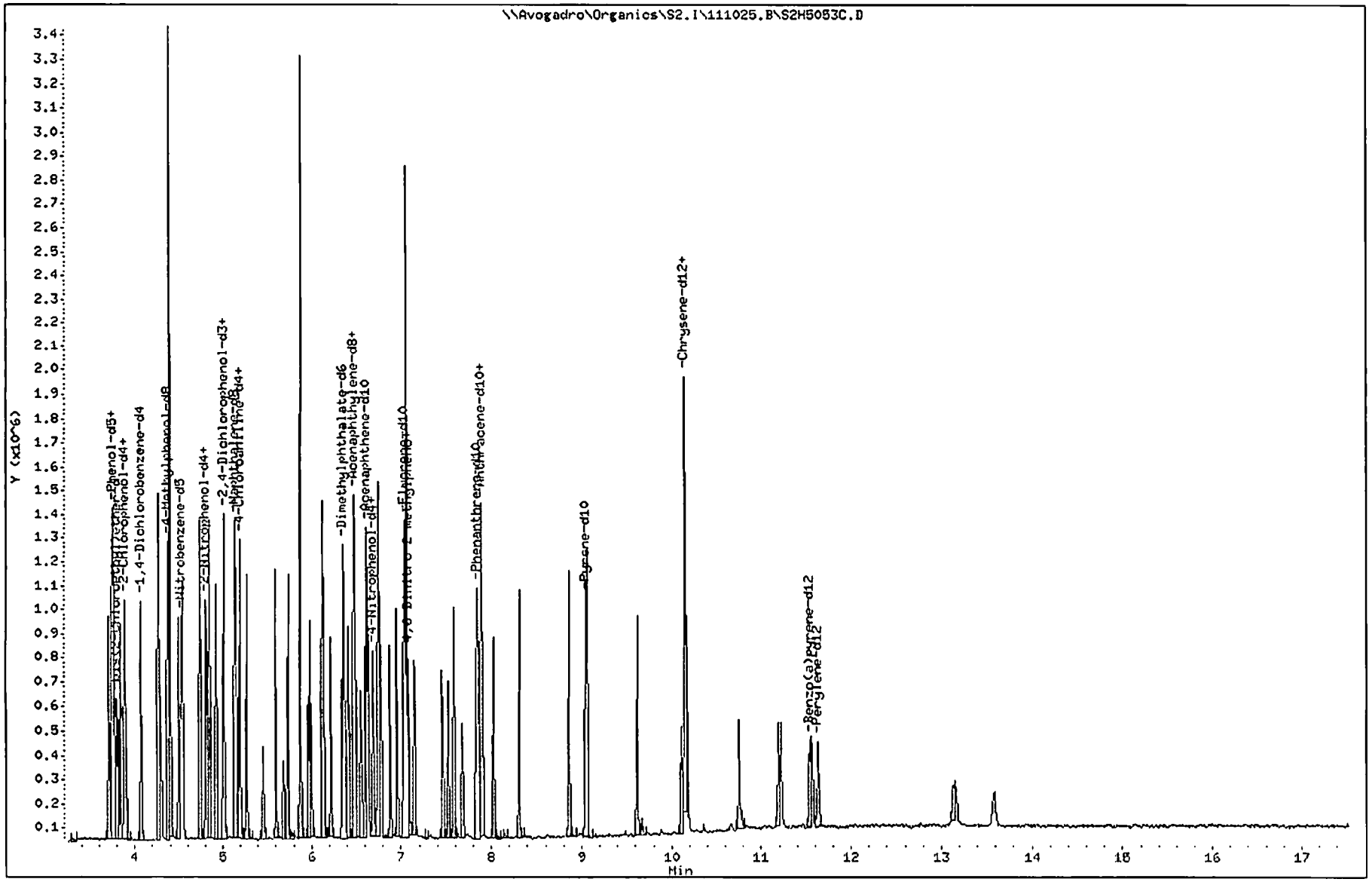
Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5053C.D
Report Date: 26-Oct-2011 09:59

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

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

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

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

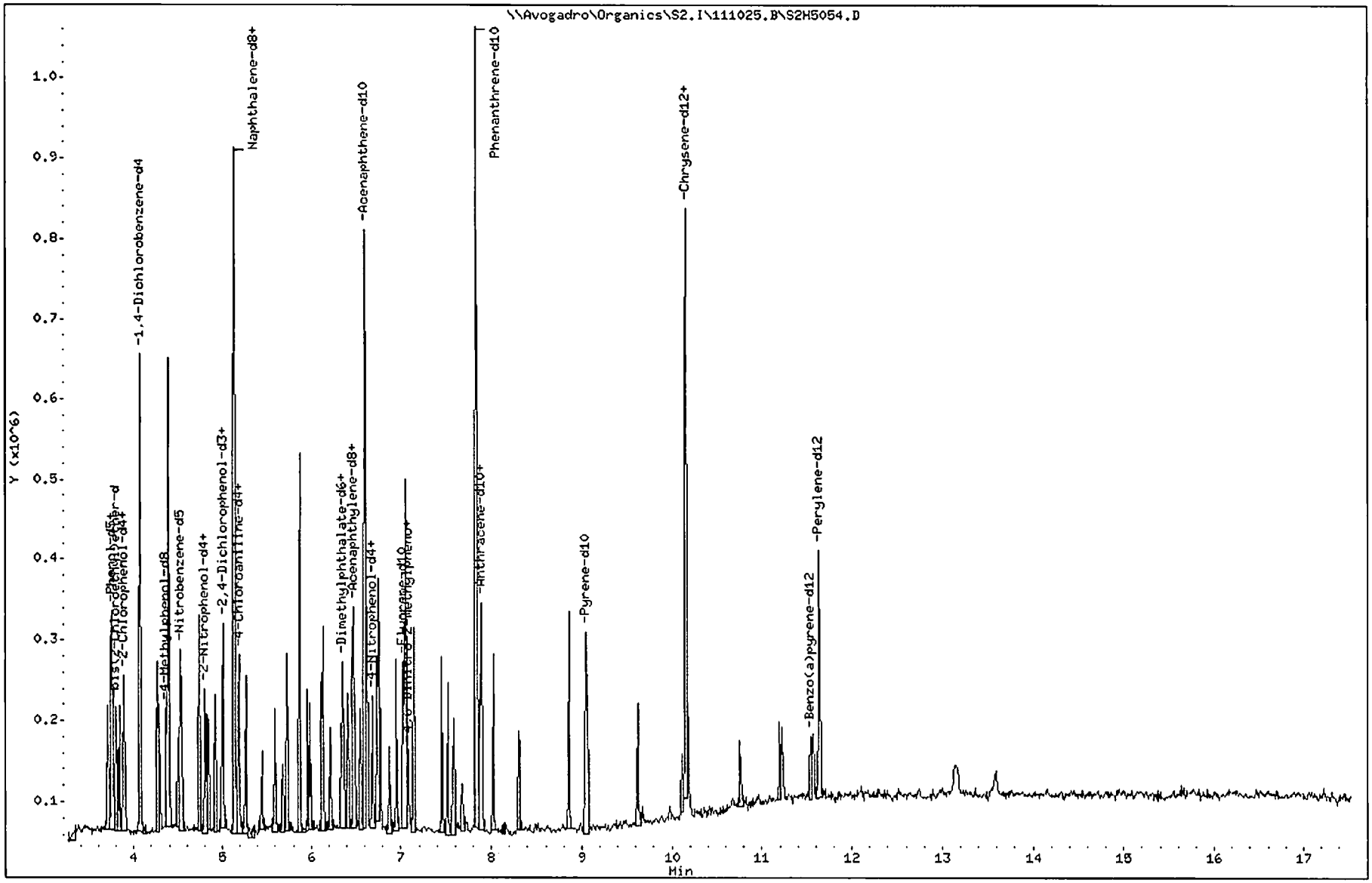
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	
	75 3,3'-Dichlorobenzidine	252	10.114	10.114	(0.996)	14684	10.0000	8.6	
	76 Benzo(a)anthracene	228	10.146	10.146	(0.999)	72341	10.0000	11	
*	77 Chrysene-d12	240	10.157	10.156	(1.000)	229879	40.0000		(Q)
	78 Chrysene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

QC Flag Legend

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

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

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



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

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

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

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

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

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

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

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
	22	bis(2-Chloroethoxy)methane	93	4.926	4.923	(0.958)	844250	160.000	170(A)
$	23	2,4-Dichlorophenol-d3	165	5.012	5.009	(0.975)	370810	160.000	170(A)
	24	2,4-Dichlorophenol	162	5.012	5.020	(0.975)	336936	160.000	170(A)
*	25	Naphthalene-d8	136	5.141	5.138	(1.000)	202795	40.0000	
	26	Naphthalene	128	5.152	5.159	(1.002)	862863	160.000	170(A)
$	27	4-Chloroaniline-d4	131	5.184	5.191	(1.008)	301135	160.000	160(Q)
	28	4-Chloroaniline	127	5.194	5.191	(1.010)	356828	160.000	170(A)
	29	Hexachlorobutadiene	225	5.270	5.267	(1.025)	232801	160.000	160(A)
	30	Caprolactam	113	5.463	5.460	(1.063)	139061	160.000	180(A)
	31	4-Chloro-3-methylphenol	107	5.602	5.599	(1.090)	568462	160.000	180(A)
	32	2-Methylnaphthalene	142	5.731	5.738	(1.115)	598179	160.000	170(A)
	33	Hexachlorocyclopentadiene	237	5.881	5.878	(0.891)	259779	160.000	160(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	7.058	(1.070)	122002	160.000	150(Q)
$	58	4,6-Dinitro-2-methylphenol-d2	200	7.082	7.090	(0.904)	166098	160.000	190(A)
	59	4,6-Dinitro-2-methylphenol	198	7.093	7.090	(0.906)	160228	160.000	190(AQ)
	60	N-Nitrosodiphenylamine	169	7.146	7.154	(0.912)	587468	160.000	170(A)
	61	4-Bromophenyl-phenylether	248	7.457	7.465	(0.952)	203259	160.000	170(A)
	62	Hexachlorobenzene	284	7.522	7.529	(0.960)	212255	160.000	160(A)
	63	Atrazine	200	7.586	7.583	(0.969)	198672	160.000	160
	64	Pentachlorophenol	266	7.682	7.679	(0.981)	118477	160.000	190(A)
*	65	Phenanthrene-d10	188	7.832	7.840	(1.000)	226084	40.0000	
	66	Phenanthrene	178	7.854	7.862	(1.003)	1056637	160.000	170(A)
$	67	Anthracene-d10	188	7.886	7.883	(1.007)	1028619	160.000	160
	68	Anthracene	178	7.897	7.894	(1.008)	1088821	160.000	170(A)
	117	Carbazole	167	8.026	8.022	(1.025)	856417	160.000	160(A)
	70	Di-n-butylphthalate	149	8.304	8.312	(1.060)	813103	160.000	150
	71	Fluoranthene	202	8.862	8.859	(1.131)	960445	160.000	150
$	72	Pyrene-d10	212	9.044	9.041	(0.892)	745046	160.000	220(A)
	73	Pyrene	202	9.055	9.063	(0.893)	927058	160.000	210(A)
	74	Butylbenzylphthalate	149	9.613	9.620	(0.948)	254386	160.000	190(A)

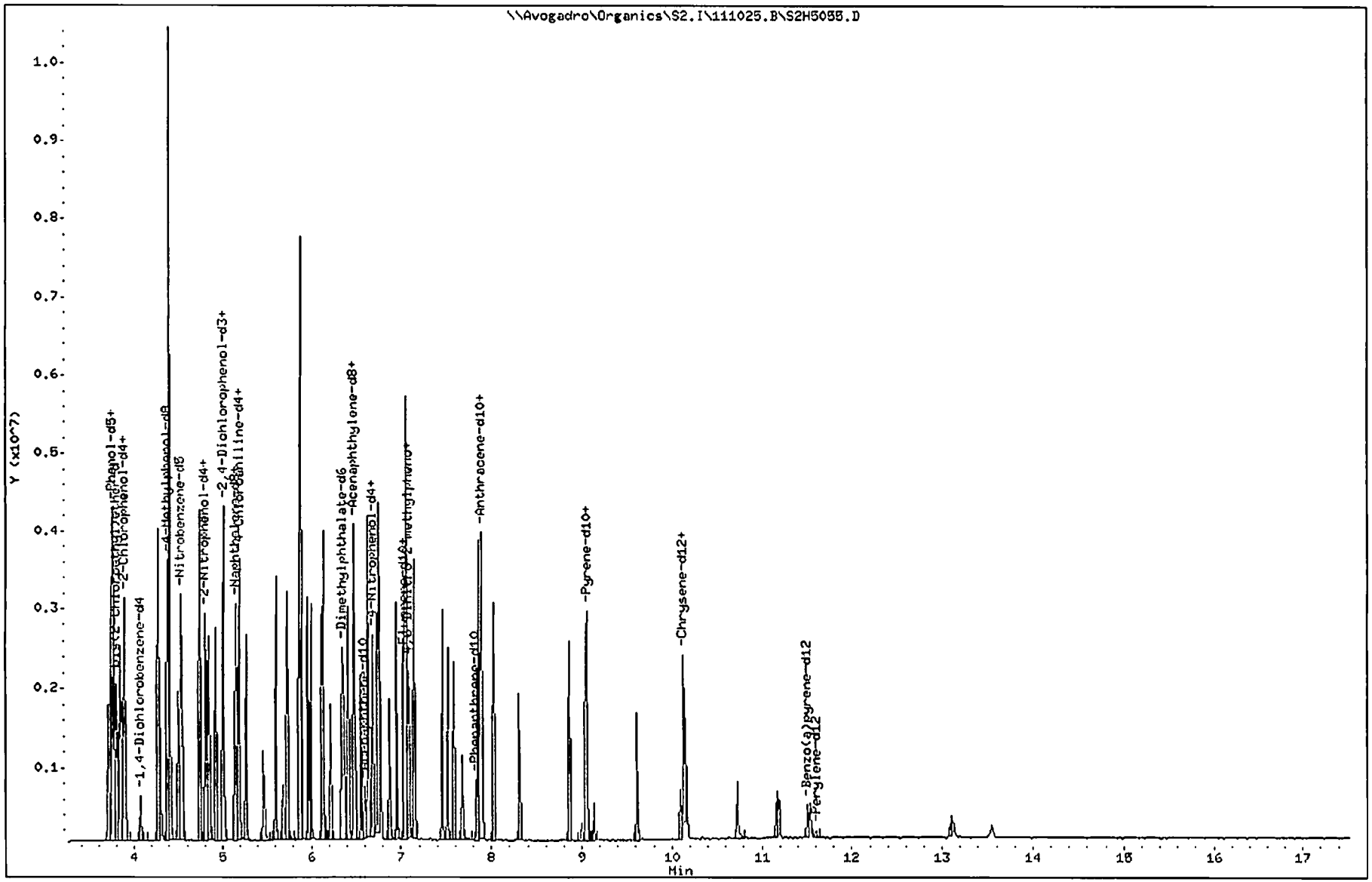
Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5055.D
Report Date: 26-Oct-2011 09:59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	75 3,3'-Dichlorobenzidine	252	10.095	10.114	(0.996)	126489	160.000	160
	76 Benzo(a)anthracene	228	10.127	10.146	(0.999)	537512	160.000	170(A)
*	77 Chrysene-d12	240	10.138	10.156	(1.000)	109544	40.0000	(Q)
	78 Chrysene	228	10.159	10.178	(1.002)	457251	160.000	160
	79 bis(2-Ethylhexyl)phthalate	149	10.138	10.146	(1.000)	283596	160.000	170(A)
	80 Di-n-octylphthalate	149	10.728	10.757	(0.924)	371034	160.000	200(A)
	81 Benzo(b)fluoranthene	252	11.168	11.197	(0.962)	280439	160.000	170(A)
	82 Benzo(k)fluoranthene	252	11.200	11.218	(0.965)	330277	160.000	170(A)
S	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

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
	22	bis(2-Chloroethoxy)methane	93	4.926	4.923	(0.958)	155215	20.0000	19
$	23	2,4-Dichlorophenol-d3	165	5.001	5.009	(0.973)	64330	20.0000	19
	24	2,4-Dichlorophenol	162	5.011	5.020	(0.975)	57855	20.0000	19
*	25	Naphthalene-d8	136	5.140	5.138	(1.000)	322412	40.0000	
	26	Naphthalene	128	5.151	5.159	(1.002)	164907	20.0000	20
$	27	4-Chloroaniline-d4	131	5.183	5.191	(1.008)	59697	20.0000	20(Q)
	28	4-Chloroaniline	127	5.194	5.191	(1.010)	66465	20.0000	20
	29	Hexachlorobutadiene	225	5.269	5.267	(1.025)	48784	20.0000	21
	30	Caprolactam	113	5.451	5.460	(1.060)	22983	20.0000	19
	31	4-Chloro-3-methylphenol	107	5.601	5.599	(1.090)	85751	20.0000	17
	32	2-Methylnaphthalene	142	5.730	5.738	(1.115)	108595	20.0000	19
	33	Hexachlorocyclopentadiene	237	5.880	5.878	(0.891)	47469	20.0000	20(Q)
	34	1,2,4,5-Tetrachlorobenzene	216	5.880	5.878	(0.891)	175138	20.0000	21
	35	2,4,6-Trichlorophenol	196	5.966	5.974	(0.904)	56712	20.0000	22
	36	2,4,5-Trichlorophenol	196	5.998	5.996	(0.909)	50977	20.0000	19(a)
	37	1,1'-Biphenyl	154	6.127	6.124	(0.928)	140310	20.0000	19
	38	2-Chloronaphthalene	162	6.137	6.146	(0.930)	135707	20.0000	21
	39	2-Nitroaniline	65	6.212	6.221	(0.941)	60092	20.0000	19
$	40	Dimethylphthalate-d6	166	6.352	6.350	(0.963)	144862	20.0000	19
	41	Dimethylphthalate	163	6.363	6.371	(0.964)	131624	20.0000	19
	42	2,6-Dinitrotoluene	165	6.416	6.414	(0.972)	33942	20.0000	19
$	43	Acenaphthylene-d8	160	6.470	6.478	(0.980)	198044	20.0000	20
	44	Acenaphthylene	152	6.481	6.489	(0.982)	173387	20.0000	19
	45	3-Nitroaniline	138	6.556	6.553	(0.993)	21927	20.0000	19
*	46	Acenaphthene-d10	164	6.599	6.607	(1.000)	206539	40.0000	
	47	Acenaphthene	153	6.631	6.628	(1.005)	117622	20.0000	20
	48	2,4-Dinitrophenol	184	6.641	6.639	(1.007)	10809	20.0000	13(Q)
	52	Dibenzofuran	168	6.770	6.779	(1.026)	174468	20.0000	20
$	49	4-Nitrophenol-d4	143	6.684	6.682	(1.013)	18648	20.0000	17
	50	4-Nitrophenol	109	6.684	6.693	(1.013)	35589	20.0000	17
	51	2,4-Dinitrotoluene	165	6.749	6.757	(1.023)	43019	20.0000	19(Q)
	118	2,3,4,6-Tetrachlorophenol	232	6.877	6.875	(1.042)	32406	20.0000	18
	53	Diethylphthalate	149	6.952	6.950	(1.054)	133920	20.0000	20
$	54	Fluorene-d10	176	7.027	7.036	(1.065)	137530	20.0000	20
	56	Fluorene	166	7.060	7.057	(1.070)	130330	20.0000	19
	55	4-Chlorophenyl-phenylether	204	7.049	7.057	(1.068)	71631	20.0000	19
	57	4-Nitroaniline	138	7.060	7.068	(1.070)	26593	20.0000	21(Q)
$	58	4,6-Dinitro-2-methylphenol-d2	200	7.081	7.090	(0.904)	22647	20.0000	17
	59	4,6-Dinitro-2-methylphenol	198	7.092	7.090	(0.906)	20088	20.0000	15(aQ)
	60	N-Nitrosodiphenylamine	169	7.145	7.154	(0.912)	107883	20.0000	21
	61	4-Bromophenyl-phenylether	248	7.456	7.465	(0.952)	38077	20.0000	20
	62	Hexachlorobenzene	284	7.521	7.529	(0.960)	40531	20.0000	20
	63	Atrazine	200	7.585	7.583	(0.969)	37213	20.0000	20
	64	Pentachlorophenol	266	7.682	7.679	(0.981)	15010	20.0000	16
*	65	Phenanthrene-d10	188	7.832	7.840	(1.000)	343680	40.0000	
	66	Phenanthrene	178	7.853	7.862	(1.003)	190037	20.0000	20
$	67	Anthracene-d10	188	7.885	7.883	(1.007)	189817	20.0000	19
	68	Anthracene	178	7.896	7.894	(1.008)	195947	20.0000	20
	117	Carbazole	167	8.025	8.022	(1.025)	160106	20.0000	20
	70	Di-n-butylphthalate	149	8.304	8.312	(1.060)	177045	20.0000	21
	71	Fluoranthene	202	8.850	8.859	(1.130)	197940	20.0000	20
$	72	Pyrene-d10	212	9.033	9.041	(0.893)	157501	20.0000	18(H)
	73	Pyrene	202	9.043	9.063	(0.894)	195088	20.0000	18
	74	Butylbenzylphthalate	149	9.590	9.620	(0.948)	63891	20.0000	19

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

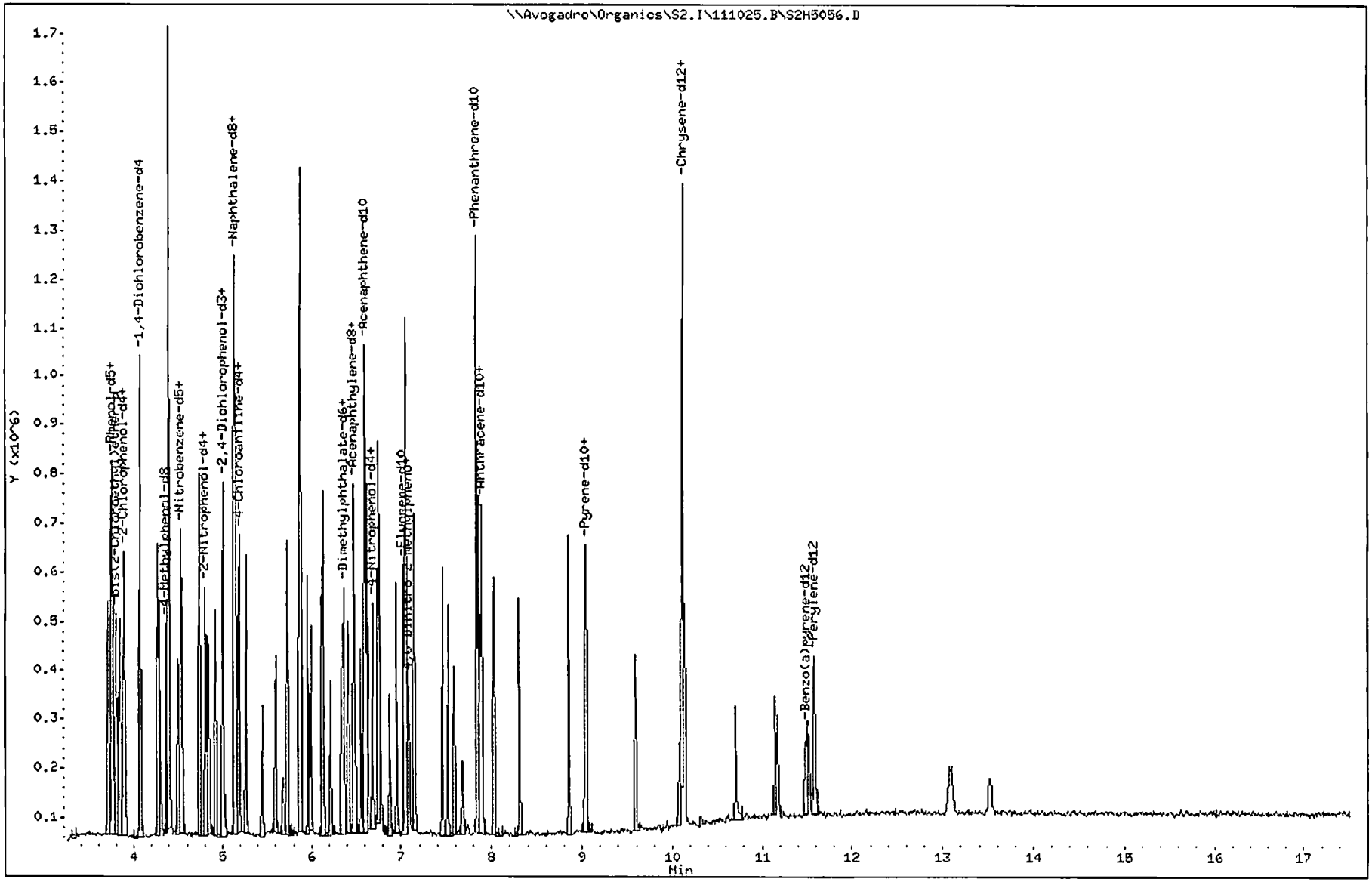
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)	
	75 3,3'-Dichlorobenzidine	252	10.073	10.114	(0.996)	40595	20.0000	20	
	76 Benzo(a)anthracene	228	10.105	10.146	(0.999)	158537	20.0000	20	
*	77 Chrysene-d12	240	10.116	10.156	(1.000)	273540	40.0000		(Q)
	78 Chrysene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

QC Flag Legend

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

Data File: \\Avogadro\Organics\S2.I\111025.B\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



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)	ON-COL (ng)
	1 Benzaldehyde	77	3.712	3.712	(0.911)	288681	80.0000	73
S	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
S	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
S	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
S	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)
S	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
S	19 2-Nitrophenol-d4	143	4.805	4.805	(0.935)	117618	80.0000	87
	20 2-Nitrophenol	139	4.816	4.816	(0.937)	110164	80.0000	83
	21 2,4-Dimethylphenol	107	4.848	4.848	(0.944)	391699	80.0000	85(Q)

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

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

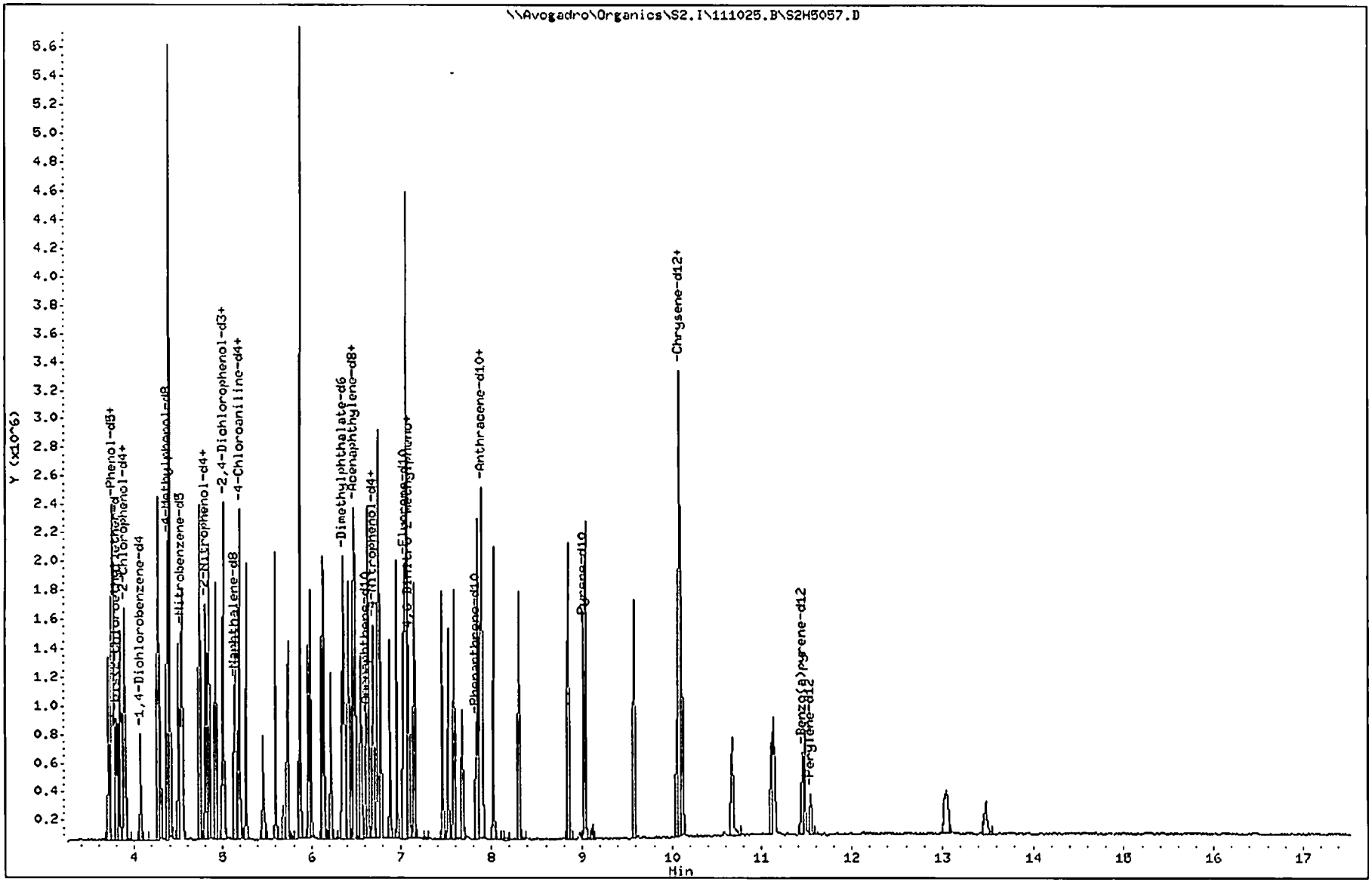
Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5057.D
Report Date: 26-Oct-2011 09:59

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

QC Flag Legend

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

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8635.D
Report Date: 11-Nov-2011 14:02

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8635.D
Lab Smp Id: SSTD0204Q Client Smp ID: SSTD0204Q
Inj Date : 10-NOV-2011 16:28
Operator : MMS SRC: MMS Inst ID: S4.i
Smp Info : SSTD0204Q,SSTD0204Q
Misc Info : 2,3
Comment :
Method : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:02 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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	3.047	3.047	(0.905)	85549	40.0000	46
$	2 Phenol-d5	71	3.037	3.037	(0.902)	65418	40.0000	36
	3 Phenol	94	3.047	3.047	(0.905)	104726	40.0000	40(Q)
$	4 bis(2-Chloroethyl)ether-d8	67	3.099	3.099	(0.920)	49454	40.0000	37
	5 bis(2-Chloroethyl)ether	93	3.130	3.130	(0.929)	72632	40.0000	41
$	6 2-Chlorophenol-d4	132	3.192	3.192	(0.948)	79616	40.0000	37
	7 2-Chlorophenol	128	3.213	3.213	(0.954)	82013	40.0000	39
*	8 1,4-Dichlorobenzene-d4	152	3.368	3.368	(1.000)	67410	40.0000	(Q)
	9 2-Methylphenol	108	3.503	3.503	(1.040)	69011	40.0000	38
	10 2,2'-oxybis(1-Chloropropane)	45	3.534	3.534	(1.049)	12332	40.0000	37(Q)
$	11 4-Methylphenol-d8	113	3.606	3.606	(1.071)	77965	40.0000	41
	12 4-Methylphenol	108	3.627	3.627	(1.077)	77131	40.0000	39
	14 N-Nitroso-di-n-propylamine	70	3.648	3.648	(1.083)	77454	40.0000	40(Q)
	13 Acetophenone	105	3.658	3.658	(1.086)	125904	40.0000	40
	15 Hexachloroethane	117	3.772	3.772	(1.120)	44389	40.0000	40(Q)
$	16 Nitrobenzene-d5	128	3.792	3.792	(0.857)	36011	40.0000	37
	17 Nitrobenzene	77	3.803	3.803	(0.860)	125618	40.0000	38
	18 Isophorone	82	3.999	3.999	(0.904)	204395	40.0000	40
$	19 2-Nitrophenol-d4	143	4.072	4.072	(0.920)	48915	40.0000	40
	20 2-Nitrophenol	139	4.082	4.082	(0.923)	49069	40.0000	39
	21 2,4-Dimethylphenol	107	4.082	4.082	(0.923)	107962	40.0000	40(Q)

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8635.D
Report Date: 11-Nov-2011 14:02

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
	22	bis(2-Chloroethoxy)methane	93	4.165	4.165	(0.942)	86664	40.0000	39
$	23	2,4-Dichlorophenol-d3	165	4.269	4.269	(0.965)	88245	40.0000	38
	24	2,4-Dichlorophenol	162	4.279	4.279	(0.967)	92579	40.0000	40
*	25	Naphthalene-d8	136	4.424	4.424	(1.000)	229623	40.0000	
	26	Naphthalene	128	4.445	4.445	(1.005)	235506	40.0000	39
$	27	4-Chloroaniline-d4	131	4.465	4.465	(1.009)	96067	40.0000	42(Q)
	28	4-Chloroaniline	127	4.476	4.476	(1.012)	107624	40.0000	46
	29	Hexachlorobutadiene	225	4.558	4.558	(1.030)	86530	40.0000	38
	30	Caprolactam	113	4.765	4.765	(1.077)	31256	40.0000	39
	31	4-Chloro-3-methylphenol	107	4.900	4.900	(1.108)	85663	40.0000	37
	32	2-Methylnaphthalene	142	5.076	5.076	(1.147)	172819	40.0000	37
	33	Hexachlorocyclopentadiene	237	5.231	5.231	(0.860)	104157	40.0000	35(Q)
	34	1,2,4,5-Tetrachlorobenzene	216	5.242	5.242	(0.862)	142999	40.0000	37
	35	2,4,6-Trichlorophenol	196	5.345	5.345	(0.879)	83495	40.0000	35
	36	2,4,5-Trichlorophenol	196	5.376	5.376	(0.884)	101387	40.0000	38
	37	1,1'-Biphenyl	154	5.521	5.521	(0.908)	245385	40.0000	38
	38	2-Chloronaphthalene	162	5.542	5.542	(0.911)	197844	40.0000	37
	39	2-Nitroaniline	65	5.624	5.624	(0.925)	71908	40.0000	37
$	40	Dimethylphthalate-d6	166	5.780	5.780	(0.951)	264349	40.0000	36
	41	Dimethylphthalate	163	5.800	5.800	(0.954)	267301	40.0000	37
	42	2,6-Dinitrotoluene	165	5.863	5.863	(0.964)	63471	40.0000	38
$	43	Acenaphthylene-d8	160	5.935	5.935	(0.976)	298645	40.0000	37
	44	Acenaphthylene	152	5.945	5.945	(0.978)	325985	40.0000	38
	45	3-Nitroaniline	138	6.028	6.028	(0.991)	54982	40.0000	40
*	46	Acenaphthene-d10	164	6.080	6.080	(1.000)	185208	40.0000	
	47	Acenaphthene	153	6.111	6.111	(1.005)	212547	40.0000	38
	48	2,4-Dinitrophenol	184	6.121	6.121	(1.007)	52017	40.0000	37
$	49	4-Nitrophenol-d4	143	6.163	6.163	(1.014)	52396	40.0000	38(Q)
	50	4-Nitrophenol	109	6.173	6.173	(1.015)	89893	40.0000	37
	51	2,4-Dinitrotoluene	165	6.245	6.245	(1.027)	94134	40.0000	36(Q)
	52	Dibenzofuran	168	6.277	6.277	(1.032)	307955	40.0000	38
	118	2,3,4,6-Tetrachlorophenol	232	6.401	6.401	(1.053)	94319	40.0000	38
	53	Diethylphthalate	149	6.484	6.484	(1.066)	281383	40.0000	37
$	54	Fluorene-d10	176	6.587	6.587	(1.083)	239241	40.0000	37
	55	4-Chlorophenyl-phenylether	204	6.608	6.608	(1.087)	174528	40.0000	38
	56	Fluorene	166	6.618	6.618	(1.089)	272399	40.0000	37
	57	4-Nitroaniline	138	6.618	6.618	(1.089)	62551	40.0000	38(Q)
$	58	4,6-Dinitro-2-methylphenol-d2	200	6.639	6.639	(0.882)	65549	40.0000	39
	59	4,6-Dinitro-2-methylphenol	198	6.649	6.649	(0.883)	75806	40.0000	40(Q)
	60	N-Nitrosodiphenylamine	169	6.722	6.722	(0.893)	226419	40.0000	39
	61	4-Bromophenyl-phenylether	248	7.084	7.084	(0.941)	103206	40.0000	39
	62	Hexachlorobenzene	284	7.167	7.167	(0.952)	102324	40.0000	39
	63	Atrazine	200	7.229	7.229	(0.960)	117950	40.0000	40
	64	Pentachlorophenol	266	7.343	7.343	(0.975)	75783	40.0000	40
*	65	Phenanthrene-d10	188	7.529	7.529	(1.000)	422051	40.0000	
	66	Phenanthrene	178	7.560	7.560	(1.004)	441096	40.0000	39
$	67	Anthracene-d10	188	7.591	7.591	(1.008)	449230	40.0000	39
	68	Anthracene	178	7.601	7.601	(1.010)	458775	40.0000	39
	117	Carbazole	167	7.757	7.757	(1.030)	390632	40.0000	38
	70	Di-n-butylphthalate	149	8.077	8.077	(1.073)	491281	40.0000	40
	71	Fluoranthene	202	8.719	8.719	(1.158)	603712	40.0000	38
$	72	Pyrene-d10	212	8.926	8.926	(0.881)	487884	40.0000	40
	73	Pyrene	202	8.947	8.947	(0.883)	616384	40.0000	41
	74	Butylbenzylphthalate	149	9.547	9.547	(0.943)	248231	40.0000	40

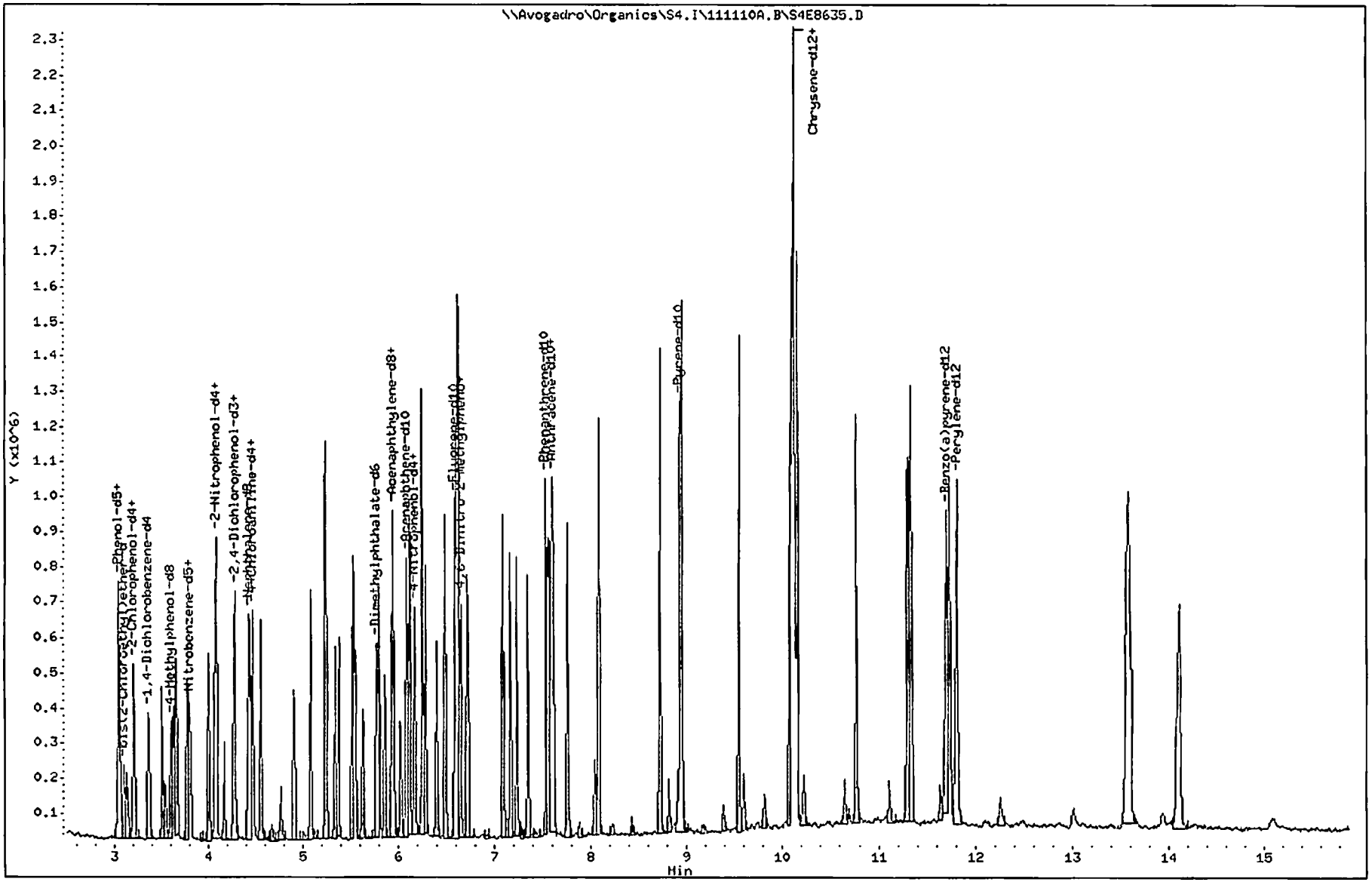
Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8635.D
Report Date: 11-Nov-2011 14:02

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)	
75	3,3'-Dichlorobenzidine	252	10.075	10.075	(0.995)	240833	40.0000	40	
79	bis(2-Ethylhexyl)phthalate	149	10.096	10.096	(0.997)	370971	40.0000	40	
76	Benzo(a)anthracene	228	10.116	10.116	(0.999)	681963	40.0000	39	
* 77	Chrysene-d12	240	10.127	10.127	(1.000)	630357	40.0000		(Q)
78	Chrysene	228	10.148	10.148	(1.002)	689900	40.0000	41	
80	Di-n-octylphthalate	149	10.769	10.769	(0.912)	611679	40.0000	41	
81	Benzo(b)fluoranthene	252	11.307	11.307	(0.957)	714546	40.0000	38	
82	Benzo(k)fluoranthene	252	11.338	11.338	(0.960)	752927	40.0000	39	
$ 83	Benzo(a)pyrene-d12	264	11.700	11.700	(0.990)	509242	40.0000	38	
84	Benzo(a)pyrene	252	11.741	11.741	(0.994)	663444	40.0000	38	
* 85	Perylene-d12	264	11.814	11.814	(1.000)	600411	40.0000		
86	Indeno(1,2,3-cd)pyrene	276	13.573	13.573	(1.149)	780784	40.0000	37	
87	Dibenzo(a,h)anthracene	278	13.594	13.594	(1.151)	665922	40.0000	39	
88	Benzo(g,h,i)perylene	276	14.112	14.112	(1.194)	668697	40.0000	39	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8635.D
Date : 10-NOV-2011 16:28
Client ID: SSTD0204Q
Instrument: S4.i
Sample Info: SSTD0204Q,SSTD0204Q
Volume Injected (uL): 2.0
Operator: MHS SRC: MHS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8636.D
Report Date: 11-Nov-2011 14:02

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8636.D
Lab Smp Id: SSTD0054Q Client Smp ID: SSTD0054Q
Inj Date : 10-NOV-2011 16:57
Operator : MMS SRC: MMS Inst ID: S4.i
Smp Info : SSTD0054Q,SSTD0054Q
Misc Info : 1,1
Comment :
Method : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:02 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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)	ON-COL (ng)
	1	Benzaldehyde	77	3.050	3.047	(0.908)	24394	10.0000	10
$	2	Phenol-d5	71	3.040	3.037	(0.905)	21622	10.0000	9.5
	3	Phenol	94	3.050	3.047	(0.908)	29925	10.0000	9.2
$	4	bis(2-Chloroethyl)ether-d8	67	3.102	3.099	(0.923)	19229	10.0000	11
	5	bis(2-Chloroethyl)ether	93	3.133	3.130	(0.932)	22044	10.0000	9.9
$	6	2-Chlorophenol-d4	132	3.195	3.192	(0.951)	28599	10.0000	11
	7	2-Chlorophenol	128	3.206	3.213	(0.954)	26494	10.0000	10
*	8	1,4-Dichlorobenzene-d4	152	3.361	3.368	(1.000)	84547	40.0000	(Q)
	9	2-Methylphenol	108	3.506	3.503	(1.043)	23019	10.0000	10
	10	2,2'-oxybis(1-Chloropropane)	45	3.537	3.534	(1.052)	4352	10.0000	11(Q)
$	11	4-Methylphenol-d8	113	3.599	3.606	(1.071)	22900	10.0000	9.5
	12	4-Methylphenol	108	3.620	3.627	(1.077)	23898	10.0000	9.7
	14	N-Nitroso-di-n-propylamine	70	3.640	3.648	(1.083)	24135	10.0000	10(Q)
	13	Acetophenone	105	3.661	3.658	(1.089)	36261	10.0000	9.2
	15	Hexachloroethane	117	3.775	3.772	(1.123)	13684	10.0000	9.8(Q)
$	16	Nitrobenzene-d5	128	3.796	3.792	(0.857)	12012	10.0000	10
	17	Nitrobenzene	77	3.806	3.803	(0.860)	38788	10.0000	10
	18	Isophorone	82	4.003	3.999	(0.904)	65823	10.0000	11
$	19	2-Nitrophenol-d4	143	4.065	4.072	(0.918)	14974	10.0000	10
	20	2-Nitrophenol	139	4.075	4.082	(0.921)	14676	10.0000	9.9
	21	2,4-Dimethylphenol	107	4.085	4.082	(0.923)	32240	10.0000	9.9(Q)

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8636.D
Report Date: 11-Nov-2011 14:02

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
	22	bis(2-Chloroethoxy)methane	93	4.168	4.165	(0.942)	28516	10.0000	11
$	23	2,4-Dichlorophenol-d3	165	4.272	4.269	(0.965)	25426	10.0000	9.3
	24	2,4-Dichlorophenol	162	4.282	4.279	(0.967)	28529	10.0000	10
*	25	Naphthalene-d8	136	4.427	4.424	(1.000)	273480	40.0000	
	26	Naphthalene	128	4.448	4.445	(1.005)	76313	10.0000	11
$	27	4-Chloroaniline-d4	131	4.468	4.465	(1.009)	27037	10.0000	10(Q)
	28	4-Chloroaniline	127	4.468	4.476	(1.009)	22934	10.0000	8.2
	29	Hexachlorobutadiene	225	4.551	4.558	(1.028)	27840	10.0000	10
	30	Caprolactam	113	4.758	4.765	(1.075)	10154	10.0000	11
	31	4-Chloro-3-methylphenol	107	4.903	4.900	(1.108)	30130	10.0000	11
	32	2-Methylnaphthalene	142	5.079	5.076	(1.147)	55421	10.0000	10
	33	Hexachlorocyclopentadiene	237	5.234	5.231	(0.860)	37579	10.0000	11(Q)
	34	1,2,4,5-Tetrachlorobenzene	216	5.245	5.242	(0.862)	46757	10.0000	10
	35	2,4,6-Trichlorophenol	196	5.338	5.345	(0.878)	30099	10.0000	11
	36	2,4,5-Trichlorophenol	196	5.369	5.376	(0.883)	29962	10.0000	9.5(a)
	37	1,1'-Biphenyl	154	5.514	5.521	(0.906)	77602	10.0000	10
	38	2-Chloronaphthalene	162	5.545	5.542	(0.912)	66746	10.0000	10
	39	2-Nitroaniline	65	5.628	5.624	(0.925)	26592	10.0000	12
$	40	Dimethylphthalate-d6	166	5.772	5.780	(0.949)	85761	10.0000	9.9
	41	Dimethylphthalate	163	5.793	5.800	(0.952)	88760	10.0000	10
	42	2,6-Dinitrotoluene	165	5.855	5.863	(0.963)	17605	10.0000	9.0
$	43	Acenaphthylene-d8	160	5.928	5.935	(0.974)	100269	10.0000	10
	44	Acenaphthylene	152	5.948	5.945	(0.978)	103384	10.0000	10
	45	3-Nitroaniline	138	6.021	6.028	(0.990)	16426	10.0000	10
*	46	Acenaphthene-d10	164	6.083	6.080	(1.000)	220109	40.0000	
	47	Acenaphthene	153	6.114	6.111	(1.005)	66613	10.0000	10
	48	2,4-Dinitrophenol	184	6.124	6.121	(1.007)	13547	10.0000	8.2(aQ)
$	49	4-Nitrophenol-d4	143	6.166	6.163	(1.014)	15462	10.0000	9.4
	50	4-Nitrophenol	109	6.166	6.173	(1.014)	26203	10.0000	9.1(a)
	51	2,4-Dinitrotoluene	165	6.249	6.245	(1.027)	31406	10.0000	10(Q)
	52	Dibenzofuran	168	6.280	6.277	(1.032)	99750	10.0000	10
	118	2,3,4,6-Tetrachlorophenol	232	6.393	6.401	(1.051)	28290	10.0000	9.6
	53	Diethylphthalate	149	6.476	6.484	(1.065)	89573	10.0000	10
$	54	Fluorene-d10	176	6.580	6.587	(1.082)	79029	10.0000	10
	55	4-Chlorophenyl-phenylether	204	6.600	6.608	(1.085)	52519	10.0000	9.6
	56	Fluorene	166	6.611	6.618	(1.087)	90878	10.0000	10
	57	4-Nitroaniline	138	6.611	6.618	(1.087)	20888	10.0000	11
$	58	4,6-Dinitro-2-methylphenol-d2	200	6.642	6.639	(0.882)	22705	10.0000	11
	59	4,6-Dinitro-2-methylphenol	198	6.642	6.649	(0.882)	25111	10.0000	11(aQ)
	60	N-Nitrosodiphenylamine	169	6.714	6.722	(0.891)	78575	10.0000	11
	61	4-Bromophenyl-phenylether	248	7.087	7.084	(0.941)	34309	10.0000	11
	62	Hexachlorobenzene	284	7.159	7.167	(0.951)	37795	10.0000	12
	63	Atrazine	200	7.221	7.229	(0.959)	36455	10.0000	10
	64	Pentachlorophenol	266	7.346	7.343	(0.975)	20753	10.0000	8.8(aQ)
*	65	Phenanthrene-d10	188	7.532	7.529	(1.000)	517224	40.0000	
	66	Phenanthrene	178	7.553	7.560	(1.003)	150143	10.0000	11
$	67	Anthracene-d10	188	7.584	7.591	(1.007)	156232	10.0000	11
	68	Anthracene	178	7.604	7.601	(1.010)	153913	10.0000	11
	117	Carbazole	167	7.749	7.757	(1.029)	133821	10.0000	11
	70	Di-n-butylphthalate	149	8.081	8.077	(1.073)	153702	10.0000	10
	71	Fluoranthene	202	8.722	8.719	(1.158)	210230	10.0000	11
$	72	Pyrene-d10	212	8.929	8.926	(0.882)	166628	10.0000	10
	73	Pyrene	202	8.950	8.947	(0.884)	211164	10.0000	11
	74	Butylbenzylphthalate	149	9.540	9.547	(0.943)	85607	10.0000	10

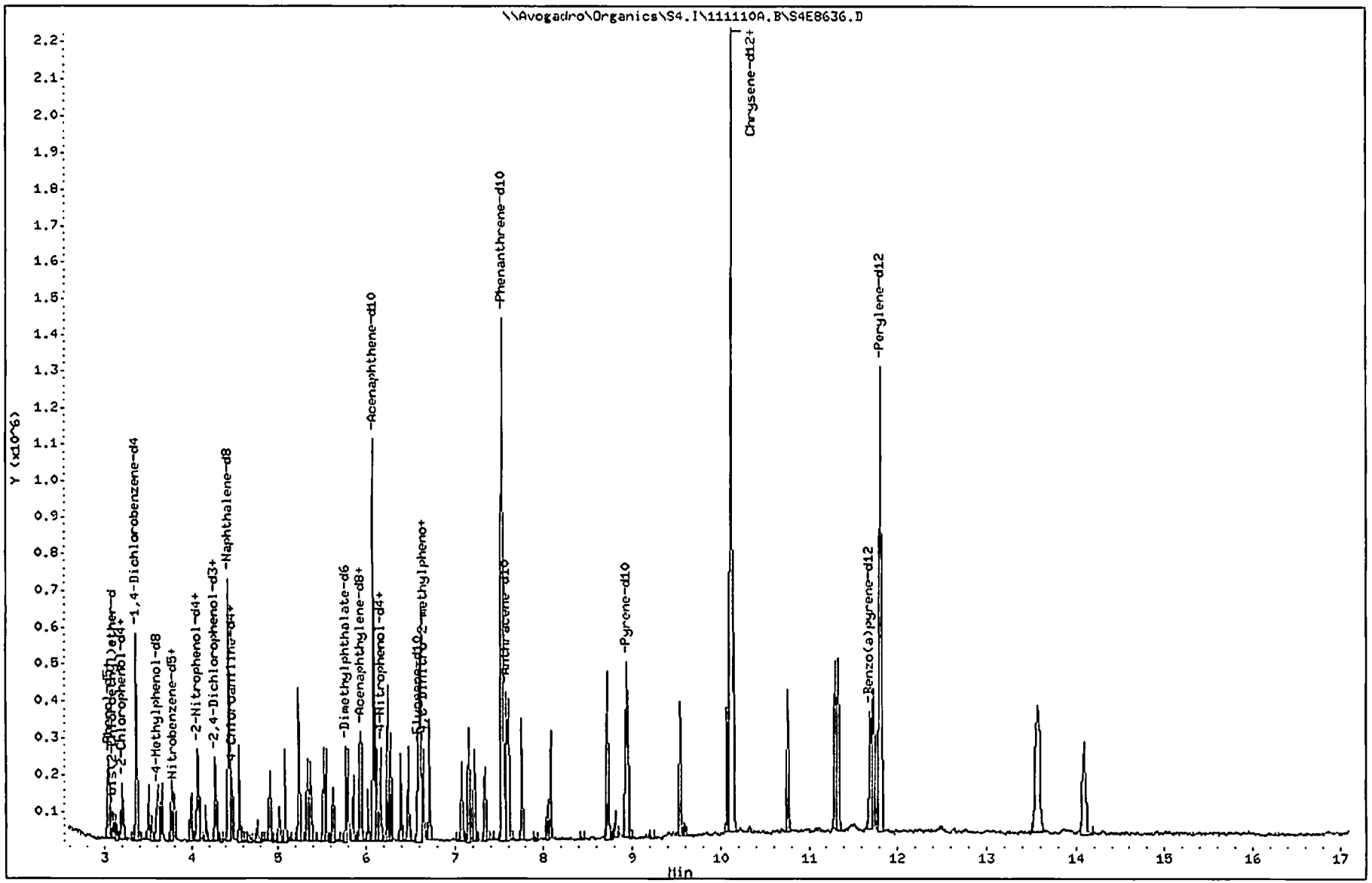
Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8636.D
Report Date: 11-Nov-2011 14:02

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)	
75	3,3'-Dichlorobenzidine	252	10.068	10.075	(0.995)	87088	10.0000	11	
79	bis(2-Ethylhexyl)phthalate	149	10.099	10.096	(0.998)	129264	10.0000	11	
76	Benzo(a)anthracene	228	10.109	10.116	(0.999)	238332	10.0000	10	
* 77	Chrysene-d12	240	10.120	10.127	(1.000)	834986	40.0000		(Q)
78	Chrysene	228	10.151	10.148	(1.003)	228067	10.0000	10	
80	Di-n-octylphthalate	149	10.761	10.769	(0.911)	212035	10.0000	10	
81	Benzo(b)fluoranthene	252	11.299	11.307	(0.956)	258144	10.0000	10	
82	Benzo(k)fluoranthene	252	11.330	11.338	(0.959)	302454	10.0000	11	
s 83	Benzo(a)pyrene-d12	264	11.693	11.700	(0.989)	190171	10.0000	10	
84	Benzo(a)pyrene	252	11.734	11.741	(0.993)	256060	10.0000	11	
* 85	Perylene-d12	264	11.817	11.814	(1.000)	830814	40.0000		
86	Indeno(1,2,3-cd)pyrene	276	13.566	13.573	(1.148)	301073	10.0000	10	
87	Dibenzo(a,h)anthracene	278	13.587	13.594	(1.150)	241518	10.0000	10	
88	Benzo(g,h,i)perylene	276	14.094	14.112	(1.193)	243230	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\S4.I\111110A.B\S4E8636.D
Date : 10-NOV-2011 16:57
Client ID: SSTD0054Q
Instrument: S4.i
Sample Info: SSTD0054Q,SSTD0054Q
Volume Injected (uL): 2.0
Operator: MMS SRC: MMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8637.D
Report Date: 11-Nov-2011 14:03

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8637.D
Lab Smp Id: SSTD0804Q Client Smp ID: SSTD0804Q
Inj Date : 10-NOV-2011 17:21
Operator : MMS SRC: MMS Inst ID: S4.i
Smp Info : SSTD0804Q,SSTD0804Q
Misc Info : 1,5
Comment :
Method : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:02 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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	3.061	3.047	(0.908)	216951	160.000	120
$	2	Phenol-d5	71	3.050	3.037	(0.905)	298855	160.000	170(A)
	3	Phenol	94	3.061	3.047	(0.908)	426468	160.000	170(A)
$	4	bis(2-Chloroethyl)ether-d8	67	3.112	3.099	(0.923)	205887	160.000	160
	5	bis(2-Chloroethyl)ether	93	3.144	3.130	(0.932)	277595	160.000	160(A)
$	6	2-Chlorophenol-d4	132	3.206	3.192	(0.951)	336527	160.000	160(A)
	7	2-Chlorophenol	128	3.216	3.213	(0.954)	331977	160.000	160(A)
*	8	1,4-Dichlorobenzene-d4	152	3.371	3.368	(1.000)	65358	40.0000	(Q)
	9	2-Methylphenol	108	3.516	3.503	(1.043)	289694	160.000	160(A)
	10	2,2'-oxybis(1-Chloropropane)	45	3.547	3.534	(1.052)	52721	160.000	170(AQ)
$	11	4-Methylphenol-d8	113	3.609	3.606	(1.071)	306197	160.000	160(A)
	12	4-Methylphenol	108	3.640	3.627	(1.080)	321453	160.000	170(A)
	14	N-Nitroso-di-n-propylamine	70	3.661	3.648	(1.086)	297863	160.000	160(Q)
	13	Acetophenone	105	3.671	3.658	(1.089)	497615	160.000	160(A)
	15	Hexachloroethane	117	3.775	3.772	(1.120)	175792	160.000	160(AQ)
$	16	Nitrobenzene-d5	128	3.796	3.792	(0.857)	155179	160.000	170(AQ)
	17	Nitrobenzene	77	3.816	3.803	(0.862)	508552	160.000	160
	18	Isophorone	82	4.013	3.999	(0.906)	773989	160.000	160
$	19	2-Nitrophenol-d4	143	4.075	4.072	(0.921)	194183	160.000	160(A)
	20	2-Nitrophenol	139	4.085	4.082	(0.923)	198978	160.000	160(A)
	21	2,4-Dimethylphenol	107	4.085	4.082	(0.923)	443174	160.000	170(AQ)

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8637.D
Report Date: 11-Nov-2011 14:03

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
	22	bis(2-Chloroethoxy)methane	93	4.179	4.165	(0.944)	343199	160.000	160
$	23	2,4-Dichlorophenol-d3	165	4.282	4.269	(0.967)	370554	160.000	170(A)
	24	2,4-Dichlorophenol	162	4.292	4.279	(0.970)	354839	160.000	160
*	25	Naphthalene-d8	136	4.427	4.424	(1.000)	223998	40.0000	
	26	Naphthalene	128	4.448	4.445	(1.005)	934233	160.000	160
$	27	4-Chloroaniline-d4	131	4.468	4.465	(1.009)	340530	160.000	150(Q)
	28	4-Chloroaniline	127	4.479	4.476	(1.012)	371200	160.000	160(A)
	29	Hexachlorobutadiene	225	4.551	4.558	(1.028)	355475	160.000	160
	30	Caprolactam	113	4.789	4.765	(1.082)	117218	160.000	150
	31	4-Chloro-3-methylphenol	107	4.913	4.900	(1.110)	364659	160.000	160(A)
	32	2-Methylnaphthalene	142	5.079	5.076	(1.147)	725301	160.000	160
	33	Hexachlorocyclopentadiene	237	5.234	5.231	(0.860)	460765	160.000	160(AQ)
	34	1,2,4,5-Tetrachlorobenzene	216	5.245	5.242	(0.862)	570256	160.000	160
	35	2,4,6-Trichlorophenol	196	5.348	5.345	(0.879)	372101	160.000	160(A)
	36	2,4,5-Trichlorophenol	196	5.379	5.376	(0.884)	411465	160.000	160(A)
	37	1,1'-Biphenyl	154	5.524	5.521	(0.908)	1001874	160.000	160(A)
	38	2-Chloronaphthalene	162	5.545	5.542	(0.912)	799091	160.000	160
	39	2-Nitroaniline	65	5.638	5.624	(0.927)	286916	160.000	160
$	40	Dimethylphthalate-d6	166	5.783	5.780	(0.951)	1063438	160.000	150
	41	Dimethylphthalate	163	5.804	5.800	(0.954)	1086151	160.000	160
	42	2,6-Dinitrotoluene	165	5.866	5.863	(0.964)	251996	160.000	160(A)
$	43	Acenaphthylene-d8	160	5.938	5.935	(0.976)	1195403	160.000	160
	44	Acenaphthylene	152	5.948	5.945	(0.978)	1263964	160.000	160
	45	3-Nitroaniline	138	6.031	6.028	(0.991)	174449	160.000	140
*	46	Acenaphthene-d10	164	6.083	6.080	(1.000)	175533	40.0000	
	47	Acenaphthene	153	6.114	6.111	(1.005)	829534	160.000	160
	48	2,4-Dinitrophenol	184	6.124	6.121	(1.007)	207949	160.000	160
$	49	4-Nitrophenol-d4	143	6.176	6.163	(1.015)	200628	160.000	150
	50	4-Nitrophenol	109	6.187	6.173	(1.017)	354884	160.000	150
	51	2,4-Dinitrotoluene	165	6.259	6.245	(1.029)	360104	160.000	150(Q)
	52	Dibenzofuran	168	6.290	6.277	(1.034)	1204577	160.000	150
	118	2,3,4,6-Tetrachlorophenol	232	6.404	6.401	(1.053)	370713	160.000	160
	53	Diethylphthalate	149	6.487	6.484	(1.066)	1083272	160.000	150
$	54	Fluorene-d10	176	6.590	6.587	(1.083)	947201	160.000	150
	55	4-Chlorophenyl-phenylether	204	6.611	6.608	(1.087)	683812	160.000	160
	56	Fluorene	166	6.621	6.618	(1.088)	1064201	160.000	150
	57	4-Nitroaniline	138	6.632	6.618	(1.090)	204125	160.000	130
$	58	4,6-Dinitro-2-methylphenol-d2	200	6.652	6.639	(0.883)	278634	160.000	160(A)
	59	4,6-Dinitro-2-methylphenol	198	6.663	6.649	(0.885)	296889	160.000	160(Q)
	60	N-Nitrosodiphenylamine	169	6.725	6.722	(0.893)	906954	160.000	160
	61	4-Bromophenyl-phenylether	248	7.087	7.084	(0.941)	414696	160.000	160
	62	Hexachlorobenzene	284	7.170	7.167	(0.952)	412100	160.000	160
	63	Atrazine	200	7.242	7.229	(0.962)	470200	160.000	160(A)
	64	Pentachlorophenol	266	7.346	7.343	(0.975)	302196	160.000	160
*	65	Phenanthrene-d10	188	7.532	7.529	(1.000)	424419	40.0000	
	66	Phenanthrene	178	7.563	7.560	(1.004)	1715034	160.000	150
$	67	Anthracene-d10	188	7.594	7.591	(1.008)	1748885	160.000	150
	68	Anthracene	178	7.615	7.601	(1.011)	1773530	160.000	150
	117	Carbazole	167	7.760	7.757	(1.030)	1524715	160.000	150
	70	Di-n-butylphthalate	149	8.081	8.077	(1.073)	1896247	160.000	150
	71	Fluoranthene	202	8.722	8.719	(1.158)	2395765	160.000	150
$	72	Pyrene-d10	212	8.940	8.926	(0.883)	1972189	160.000	160
	73	Pyrene	202	8.950	8.947	(0.884)	2402856	160.000	150
	74	Butylbenzylphthalate	149	9.550	9.547	(0.943)	1042908	160.000	160(A)

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8637.D
Report Date: 11-Nov-2011 14:03

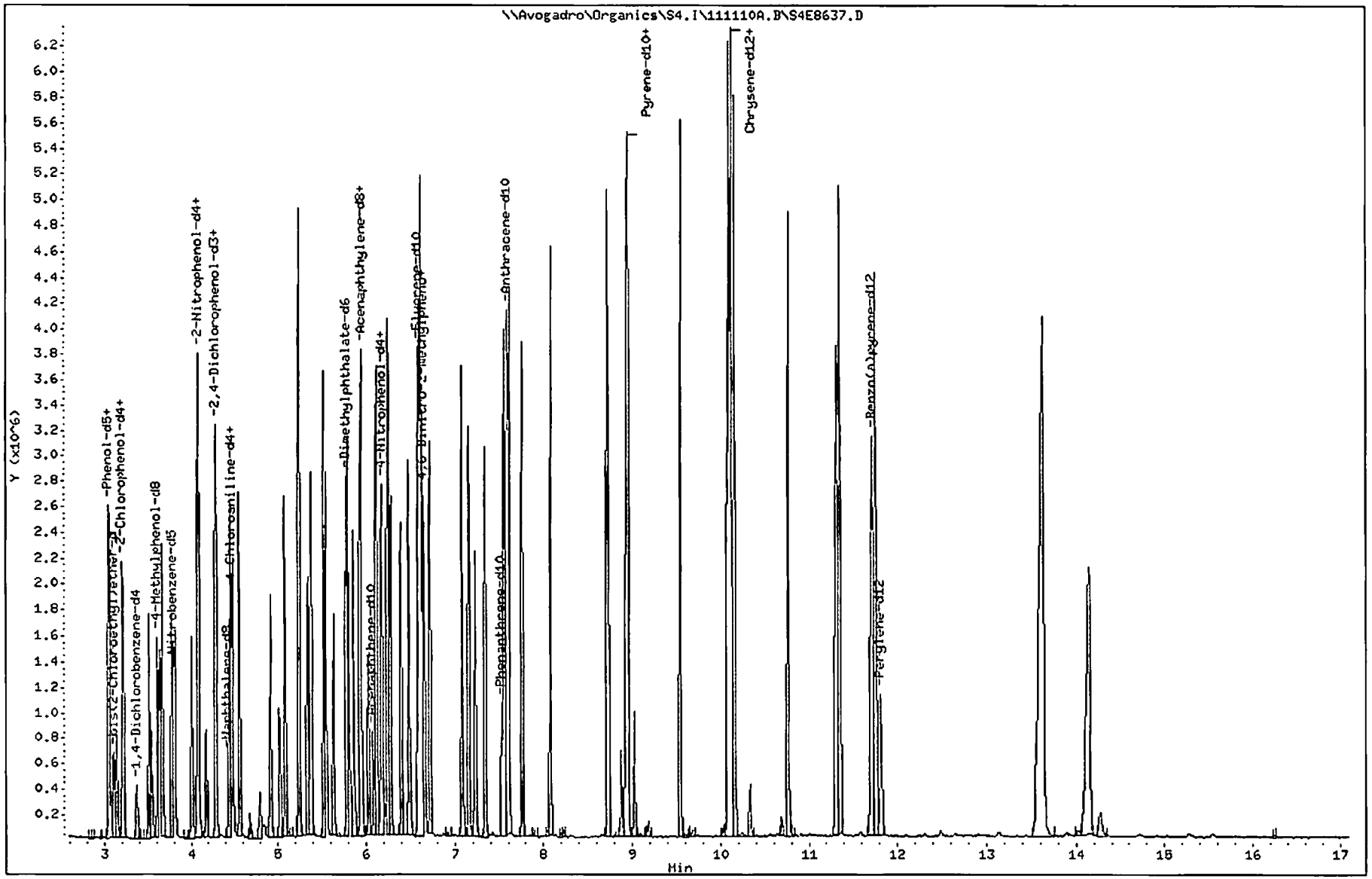
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)	
	75 3,3'-Dichlorobenzidine	252	10.078	10.075	(0.995)	783611	160.000	130	
	79 bis(2-Ethylhexyl)phthalate	149	10.099	10.096	(0.997)	1489798	160.000	160	
	76 Benzo(a)anthracene	228	10.120	10.116	(0.999)	2749303	160.000	150	
*	77 Chrysene-d12	240	10.130	10.127	(1.000)	650266	40.0000		(Q)
	78 Chrysene	228	10.161	10.148	(1.003)	2522057	160.000	150	
	80 Di-n-octylphthalate	149	10.772	10.769	(0.912)	2466484	160.000	160	
	81 Benzo(b)fluoranthene	252	11.310	11.307	(0.957)	3083589	160.000	160	
	82 Benzo(k)fluoranthene	252	11.351	11.338	(0.961)	2962292	160.000	150	
$	83 Benzo(a)pyrene-d12	264	11.714	11.700	(0.991)	2229826	160.000	160	(A)
	84 Benzo(a)pyrene	252	11.755	11.741	(0.995)	2747813	160.000	150	
*	85 Perylene-d12	264	11.817	11.814	(1.000)	626429	40.0000		
	86 Indeno(1,2,3-cd)pyrene	276	13.597	13.573	(1.151)	3452401	160.000	160	
	87 Dibenzo(a,h)anthracene	278	13.628	13.594	(1.153)	2829274	160.000	160	
	88 Benzo(g,h,i)perylene	276	14.146	14.112	(1.197)	2859514	160.000	160	

QC Flag Legend

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

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8637.D
Date : 10-NOV-2011 17:21
Client ID: SSTD0804Q
Sample Info: SSTD0804Q,SSTD0804Q
Volume Injected (uL): 2.0
Column phase: RXI-5SILMS

Instrument: S4.i
Operator: MMS SRC: MMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8638.D
Report Date: 11-Nov-2011 14:03

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8638.D
Lab Smp Id: SSTD0104Q Client Smp ID: SSTD0104Q
Inj Date : 10-NOV-2011 17:45
Operator : MMS SRC: MMS Inst ID: S4.i
Smp Info : SSTD0104Q,SSTD0104Q
Misc Info : 1,2
Comment :
Method : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:02 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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)	ON-COL (ng)
	1 Benzaldehyde	77	3.061	3.047	(0.908)	22882	20.0000	18
$	2 Phenol-d5	71	3.040	3.037	(0.902)	23012	20.0000	18
	3 Phenol	94	3.050	3.047	(0.905)	30855	20.0000	17
$	4 bis(2-Chloroethyl)ether-d8	67	3.102	3.099	(0.920)	16359	20.0000	17
	5 bis(2-Chloroethyl)ether	93	3.143	3.130	(0.932)	21102	20.0000	17
$	6 2-Chlorophenol-d4	132	3.206	3.192	(0.951)	25629	20.0000	17
	7 2-Chlorophenol	128	3.216	3.213	(0.954)	27047	20.0000	18
•	8 1,4-Dichlorobenzene-d4	152	3.371	3.368	(1.000)	47359	40.0000	(Q)
	9 2-Methylphenol	108	3.506	3.503	(1.040)	21479	20.0000	17
	10 2,2'-oxybis(1-Chloropropane)	45	3.537	3.534	(1.049)	4115	20.0000	18
$	11 4-Methylphenol-d8	113	3.599	3.606	(1.068)	21833	20.0000	16(Q)
	12 4-Methylphenol	108	3.630	3.627	(1.077)	24286	20.0000	18
	14 N-Nitroso-di-n-propylamine	70	3.651	3.648	(1.083)	24015	20.0000	18(Q)
	13 Acetophenone	105	3.661	3.658	(1.086)	39653	20.0000	18
	15 Hexachloroethane	117	3.775	3.772	(1.120)	14584	20.0000	19(Q)
$	16 Nitrobenzene-d5	128	3.795	3.792	(0.857)	11297	20.0000	18(Q)
	17 Nitrobenzene	77	3.806	3.803	(0.860)	43692	20.0000	20
	18 Isophorone	82	4.002	3.999	(0.904)	59203	20.0000	18
$	19 2-Nitrophenol-d4	143	4.075	4.072	(0.921)	15413	20.0000	19
	20 2-Nitrophenol	139	4.085	4.082	(0.923)	15665	20.0000	19(Q)
	21 2,4-Dimethylphenol	107	4.085	4.082	(0.923)	32604	20.0000	18(Q)

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8638.D
Report Date: 11-Nov-2011 14:03

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	
	22	bis(2-Chloroethoxy)methane	93	4.168	4.165	(0.942)	29656	20.0000	20	
$	23	2,4-Dichlorophenol-d3	165	4.272	4.269	(0.965)	30332	20.0000	20	
	24	2,4-Dichlorophenol	162	4.282	4.279	(0.967)	27133	20.0000	18	
*	25	Naphthalene-d8	136	4.427	4.424	(1.000)	150257	40.0000		
	26	Naphthalene	128	4.448	4.445	(1.005)	77917	20.0000	20	
$	27	4-Chloroaniline-d4	131	4.468	4.465	(1.009)	25453	20.0000	17	(Q)
	28	4-Chloroaniline	127	4.479	4.476	(1.012)	27274	20.0000	18	
	29	Hexachlorobutadiene	225	4.561	4.558	(1.030)	30158	20.0000	20	
	30	Caprolactam	113	4.758	4.765	(1.075)	9161	20.0000	17	
	31	4-Chloro-3-methylphenol	107	4.903	4.900	(1.108)	26247	20.0000	17	
	32	2-Methylnaphthalene	142	5.079	5.076	(1.147)	62558	20.0000	21	
	33	Hexachlorocyclopentadiene	237	5.234	5.231	(0.860)	36439	20.0000	21	(Q)
	34	1,2,4,5-Tetrachlorobenzene	216	5.245	5.242	(0.862)	49106	20.0000	21	
	35	2,4,6-Trichlorophenol	196	5.338	5.345	(0.877)	30091	20.0000	21	
	36	2,4,5-Trichlorophenol	196	5.369	5.376	(0.883)	31510	20.0000	20	
	37	1,1'-Biphenyl	154	5.514	5.521	(0.906)	76391	20.0000	20	
	38	2-Chloronaphthalene	162	5.545	5.542	(0.912)	67818	20.0000	21	
	39	2-Nitroaniline	65	5.627	5.624	(0.925)	23062	20.0000	20	
$	40	Dimethylphthalate-d6	166	5.772	5.780	(0.949)	95915	20.0000	22	
	41	Dimethylphthalate	163	5.793	5.800	(0.952)	79887	20.0000	18	
	42	2,6-Dinitrotoluene	165	5.855	5.863	(0.963)	19914	20.0000	20	
$	43	Acenaphthylene-d8	160	5.928	5.935	(0.974)	98871	20.0000	20	
	44	Acenaphthylene	152	5.948	5.945	(0.978)	101473	20.0000	20	
	45	3-Nitroaniline	138	6.021	6.028	(0.990)	16576	20.0000	20	
*	46	Acenaphthene-d10	164	6.083	6.080	(1.000)	111252	40.0000		
	47	Acenaphthene	153	6.114	6.111	(1.005)	67972	20.0000	20	
	48	2,4-Dinitrophenol	184	6.124	6.121	(1.007)	15333	20.0000	18	(Q)
$	49	4-Nitrophenol-d4	143	6.155	6.163	(1.012)	16242	20.0000	20	
	50	4-Nitrophenol	109	6.166	6.173	(1.014)	26971	20.0000	18	
	51	2,4-Dinitrotoluene	165	6.248	6.245	(1.027)	31822	20.0000	21	(Q)
	52	Dibenzofuran	168	6.280	6.277	(1.032)	100663	20.0000	20	
	118	2,3,4,6-Tetrachlorophenol	232	6.393	6.401	(1.051)	29117	20.0000	20	
	53	Diethylphthalate	149	6.476	6.484	(1.065)	90231	20.0000	20	
$	54	Fluorene-d10	176	6.580	6.587	(1.082)	80672	20.0000	21	
	55	4-Chlorophenyl-phenylether	204	6.600	6.608	(1.085)	55424	20.0000	20	
	56	Fluorene	166	6.611	6.618	(1.087)	89446	20.0000	20	
	57	4-Nitroaniline	138	6.611	6.618	(1.087)	19498	20.0000	20	(Q)
$	58	4,6-Dinitro-2-methylphenol-d2	200	6.642	6.639	(0.882)	20769	20.0000	19	
	59	4,6-Dinitro-2-methylphenol	198	6.642	6.649	(0.882)	24872	20.0000	20	(Q)
	60	N-Nitrosodiphenylamine	169	6.714	6.722	(0.891)	75186	20.0000	20	
	61	4-Bromophenyl-phenylether	248	7.087	7.084	(0.941)	34110	20.0000	20	
	62	Hexachlorobenzene	284	7.159	7.167	(0.951)	32201	20.0000	19	
	63	Atrazine	200	7.221	7.229	(0.959)	34730	20.0000	18	
	64	Pentachlorophenol	266	7.346	7.343	(0.975)	24417	20.0000	20	
*	65	Phenanthrene-d10	188	7.532	7.529	(1.000)	274699	40.0000		
	66	Phenanthrene	178	7.553	7.560	(1.003)	142484	20.0000	20	
$	67	Anthracene-d10	188	7.584	7.591	(1.007)	148925	20.0000	20	
	68	Anthracene	178	7.604	7.601	(1.010)	150804	20.0000	20	
	117	Carbazole	167	7.749	7.757	(1.029)	136644	20.0000	21	
	70	Di-n-butylphthalate	149	8.080	8.077	(1.073)	153827	20.0000	19	
	71	Fluoranthene	202	8.722	8.719	(1.158)	211864	20.0000	20	
$	72	Pyrene-d10	212	8.929	8.926	(0.882)	181667	20.0000	21	
	73	Pyrene	202	8.950	8.947	(0.884)	212575	20.0000	20	
	74	Butylbenzylphthalate	149	9.540	9.547	(0.943)	83890	20.0000	19	

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8638.D
Report Date: 11-Nov-2011 14:03

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)	
	75 3,3'-Dichlorobenzidine	252	10.068	10.075	(0.995)	91486	20.0000	21	
	79 bis(2-Ethylhexyl)phthalate	149	10.099	10.096	(0.998)	125420	20.0000	19	
	76 Benzo(a)anthracene	228	10.109	10.116	(0.999)	250831	20.0000	20	
*	77 Chrysene-d12	240	10.119	10.127	(1.000)	448836	40.0000		(Q)
	78 Chrysene	228	10.151	10.148	(1.003)	244524	20.0000	21	
	80 Di-n-octylphthalate	149	10.761	10.769	(0.911)	216606	20.0000	18	
	81 Benzo(b)fluoranthene	252	11.299	11.307	(0.957)	277147	20.0000	19	
	82 Benzo(k)fluoranthene	252	11.330	11.338	(0.960)	313679	20.0000	21	
$	83 Benzo(a)pyrene-d12	264	11.693	11.700	(0.990)	202636	20.0000	19	
	84 Benzo(a)pyrene	252	11.724	11.741	(0.993)	276590	20.0000	20	
*	85 Perylene-d12	264	11.807	11.814	(1.000)	472957	40.0000		
	86 Indeno(1,2,3-cd)pyrene	276	13.556	13.573	(1.148)	333546	20.0000	20	
	87 Dibenzo(a,h)anthracene	278	13.587	13.594	(1.151)	281622	20.0000	21	
	88 Benzo(g,h,i)perylene	276	14.094	14.112	(1.194)	269909	20.0000	20	

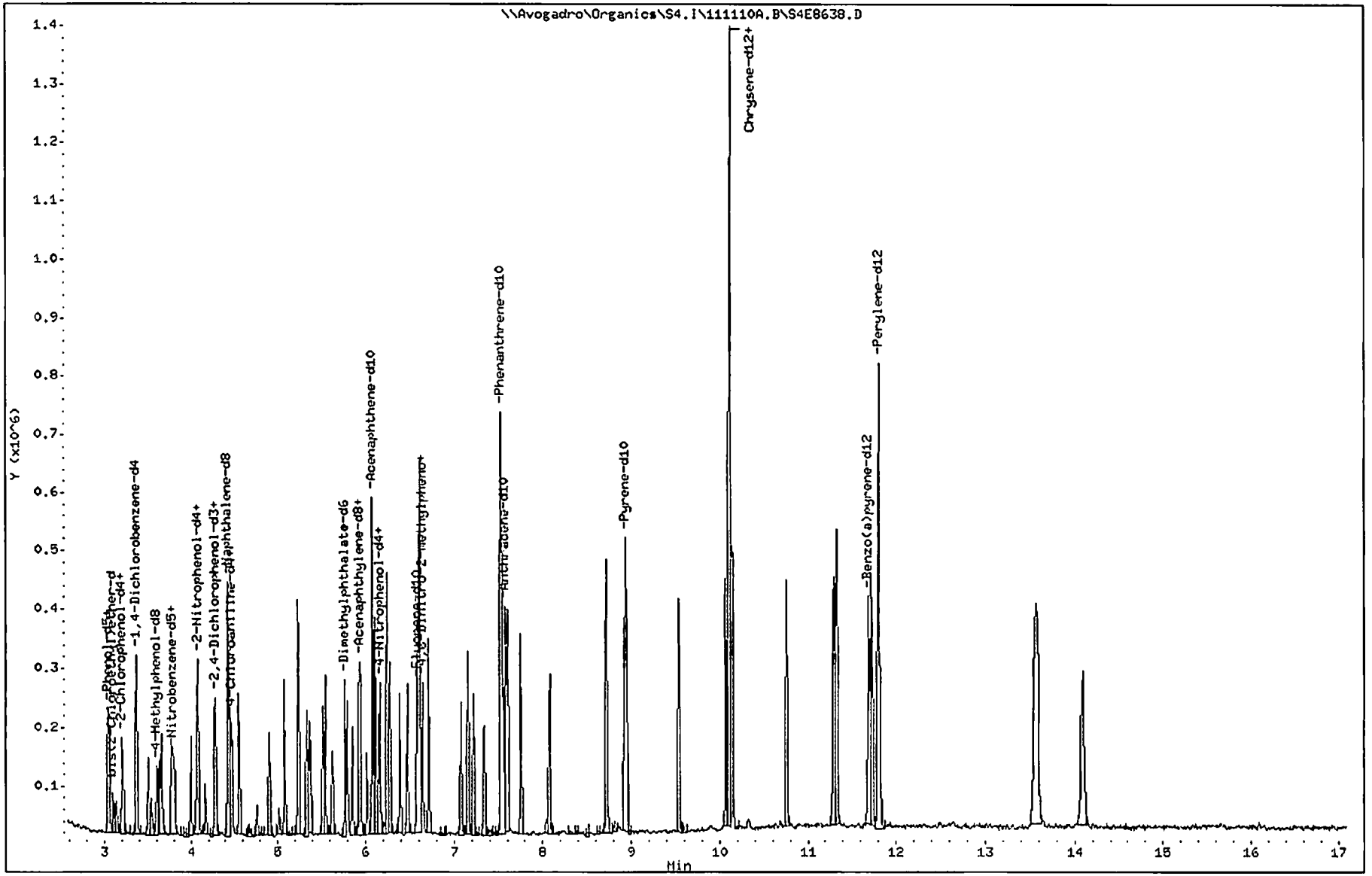
QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8638.D
Date : 10-NOV-2011 17:45
Client ID: SSTD0104Q
Sample Info: SSTD0104Q,SSTD0104Q
Volume Injected (uL): 2.0
Column phase: RXI-5SILMS

Instrument: S4.i

Operator: MMS SRC: MMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8639.D
Report Date: 11-Nov-2011 14:03

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8639.D
Lab Smp Id: SSTD0404Q Client Smp ID: SSTD0404Q
Inj Date : 10-NOV-2011 18:10
Operator : MMS SRC: MMS Inst ID: S4.i
Smp Info : SSTD0404Q,SSTD0404Q
Misc Info : 1,4
Comment :
Method : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:02 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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)	ON-COL (ng)
	1	Benzaldehyde	77	3.061	3.047	(0.908)	127122	80.0000	93
$	2	Phenol-d5	71	3.050	3.037	(0.905)	125901	80.0000	94
	3	Phenol	94	3.061	3.047	(0.908)	181174	80.0000	95
$	4	bis(2-Chloroethyl)ether-d8	67	3.112	3.099	(0.923)	87111	80.0000	88
	5	bis(2-Chloroethyl)ether	93	3.143	3.130	(0.932)	117465	80.0000	90
$	6	2-Chlorophenol-d4	132	3.206	3.192	(0.951)	139561	80.0000	89
	7	2-Chlorophenol	128	3.216	3.213	(0.954)	132504	80.0000	86
*	8	1,4-Dichlorobenzene-d4	152	3.371	3.368	(1.000)	49566	40.0000	(Q)
	9	2-Methylphenol	108	3.516	3.503	(1.043)	126976	80.0000	95
	10	2,2'-oxybis(1-Chloropropane)	45	3.547	3.534	(1.052)	21016	80.0000	87(Q)
$	11	4-Methylphenol-d8	113	3.609	3.606	(1.071)	135065	80.0000	96
	12	4-Methylphenol	108	3.630	3.627	(1.077)	129831	80.0000	90
	14	N-Nitroso-di-n-propylamine	70	3.651	3.648	(1.083)	127917	80.0000	90(Q)
	13	Acetophenone	105	3.671	3.658	(1.089)	214021	80.0000	93
	15	Hexachloroethane	117	3.775	3.772	(1.120)	69152	80.0000	85(Q)
$	16	Nitrobenzene-d5	128	3.795	3.792	(0.857)	69305	80.0000	87(Q)
	17	Nitrobenzene	77	3.816	3.803	(0.862)	224226	80.0000	82
	18	Isophorone	82	4.002	3.999	(0.904)	353400	80.0000	83
$	19	2-Nitrophenol-d4	143	4.075	4.072	(0.921)	81578	80.0000	80
	20	2-Nitrophenol	139	4.085	4.082	(0.923)	88263	80.0000	85
	21	2,4-Dimethylphenol	107	4.085	4.082	(0.923)	194326	80.0000	85(Q)

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8639.D
Report Date: 11-Nov-2011 14:03

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
	22 bis(2-Chloroethoxy)methane	93	4.178	4.165	(0.944)	146328	80.0000	78
$	23 2,4-Dichlorophenol-d3	165	4.282	4.269	(0.967)	163032	80.0000	85
	24 2,4-Dichlorophenol	162	4.282	4.279	(0.967)	160053	80.0000	84
*	25 Naphthalene-d8	136	4.427	4.424	(1.000)	191327	40.0000	
	26 Naphthalene	128	4.448	4.445	(1.005)	409671	80.0000	81
$	27 4-Chloroaniline-d4	131	4.468	4.465	(1.009)	168420	80.0000	89(Q)
	28 4-Chloroaniline	127	4.479	4.476	(1.012)	176572	80.0000	90
	29 Hexachlorobutadiene	225	4.561	4.558	(1.030)	154127	80.0000	81
	30 Caprolactam	113	4.779	4.765	(1.079)	62788	80.0000	94
	31 4-Chloro-3-methylphenol	107	4.913	4.900	(1.110)	173187	80.0000	90
	32 2-Methylnaphthalene	142	5.079	5.076	(1.147)	325775	80.0000	84
	33 Hexachlorocyclopentadiene	237	5.234	5.231	(0.860)	201548	80.0000	79(Q)
	34 1,2,4,5-Tetrachlorobenzene	216	5.245	5.242	(0.862)	273357	80.0000	82
	35 2,4,6-Trichlorophenol	196	5.348	5.345	(0.879)	169650	80.0000	81
	36 2,4,5-Trichlorophenol	196	5.379	5.376	(0.884)	197669	80.0000	86
	37 1,1'-Biphenyl	154	5.524	5.521	(0.908)	467894	80.0000	83
	38 2-Chloronaphthalene	162	5.545	5.542	(0.912)	386348	80.0000	82
	39 2-Nitroaniline	65	5.638	5.634	(0.927)	144016	80.0000	87
$	40 Dimethylphthalate-d6	166	5.783	5.780	(0.951)	539891	80.0000	85
	41 Dimethylphthalate	163	5.803	5.800	(0.954)	580290	80.0000	92
	42 2,6-Dinitrotoluene	165	5.866	5.863	(0.964)	129317	80.0000	90
$	43 Acenaphthylene-d8	160	5.938	5.935	(0.976)	590659	80.0000	84
	44 Acenaphthylene	152	5.948	5.945	(0.978)	615241	80.0000	84
	45 3-Nitroaniline	138	6.031	6.028	(0.991)	106575	80.0000	90
*	46 Acenaphthene-d10	164	6.083	6.080	(1.000)	160348	40.0000	
	47 Acenaphthene	153	6.114	6.111	(1.005)	406638	80.0000	84
	48 2,4-Dinitrophenol	184	6.124	6.121	(1.007)	111512	80.0000	93(Q)
$	49 4-Nitrophenol-d4	143	6.176	6.163	(1.015)	105965	80.0000	89(Q)
	50 4-Nitrophenol	109	6.186	6.173	(1.017)	201417	80.0000	96
	51 2,4-Dinitrotoluene	165	6.259	6.245	(1.029)	200338	80.0000	90(Q)
	52 Dibenzofuran	168	6.280	6.277	(1.032)	598332	80.0000	84
	118 2,3,4,6-Tetrachlorophenol	232	6.404	6.401	(1.053)	191240	80.0000	89
	53 Diethylphthalate	149	6.487	6.484	(1.066)	579221	80.0000	89
$	54 Fluorene-d10	176	6.590	6.587	(1.083)	488573	80.0000	86
	55 4-Chlorophenyl-phenylether	204	6.611	6.608	(1.087)	361568	80.0000	90
	56 Fluorene	166	6.621	6.618	(1.088)	554923	80.0000	87
	57 4-Nitroaniline	138	6.631	6.628	(1.090)	138609	80.0000	98
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.652	6.639	(0.883)	154771	80.0000	85
	59 4,6-Dinitro-2-methylphenol	198	6.652	6.649	(0.883)	167481	80.0000	82(Q)
	60 N-Nitrosodiphenylamine	169	6.725	6.722	(0.893)	479451	80.0000	77
	61 4-Bromophenyl-phenylether	248	7.087	7.084	(0.941)	226422	80.0000	80
	62 Hexachlorobenzene	284	7.170	7.167	(0.952)	212339	80.0000	75
	63 Atrazine	200	7.232	7.229	(0.960)	262456	80.0000	84
	64 Pentachlorophenol	266	7.346	7.343	(0.975)	172703	80.0000	84
*	65 Phenanthrene-d10	188	7.532	7.529	(1.000)	452172	40.0000	
	66 Phenanthrene	178	7.563	7.560	(1.004)	957486	80.0000	80
$	67 Anthracene-d10	188	7.594	7.591	(1.008)	1000004	80.0000	81
	68 Anthracene	178	7.615	7.601	(1.011)	998488	80.0000	80
	117 Carbazole	167	7.760	7.757	(1.030)	879489	80.0000	81
	70 Di-n-butylphthalate	149	8.080	8.077	(1.073)	1105183	80.0000	94
	71 Fluoranthene	202	8.722	8.719	(1.158)	1447910	80.0000	84
$	72 Pyrene-d10	212	8.929	8.926	(0.881)	1213790	80.0000	78
	73 Pyrene	202	8.950	8.947	(0.884)	1488571	80.0000	78
	74 Butylbenzylphthalate	149	9.550	9.547	(0.943)	644930	80.0000	81

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8639.D
Report Date: 11-Nov-2011 14:03

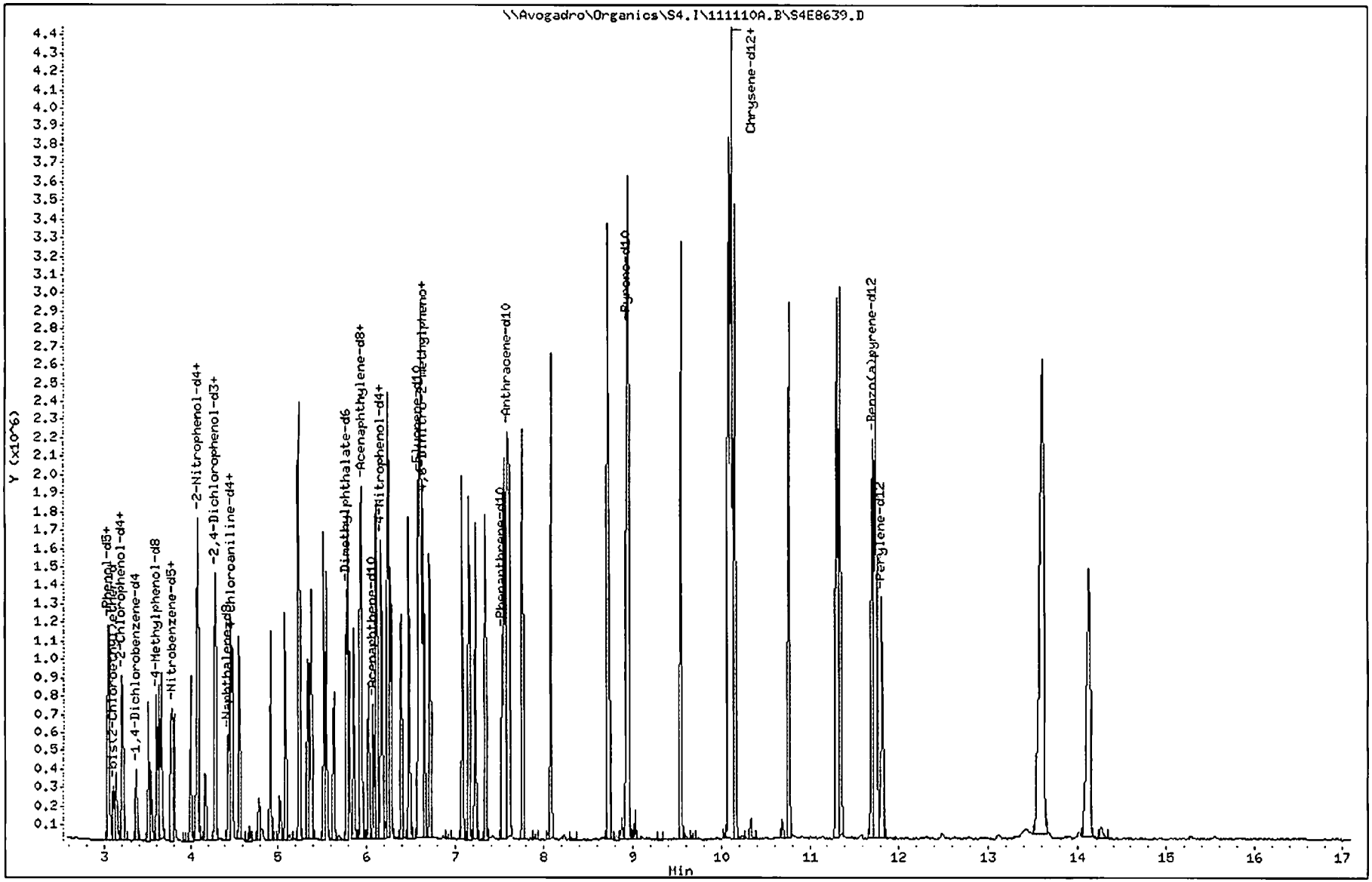
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)	
	75 3,3'-Dichlorobenzidine	252	10.078	10.075	(0.995)	629556	80.0000	83	
	79 bis(2-Ethylhexyl)phthalate	149	10.099	10.096	(0.997)	949433	80.0000	81	
	76 Benzo(a)anthracene	228	10.119	10.116	(0.999)	1873478	80.0000	84	
*	77 Chrysene-d12	240	10.130	10.127	(1.000)	800364	40.0000		(Q)
	78 Chrysene	228	10.151	10.148	(1.002)	1648524	80.0000	78	
	80 Di-n-octylphthalate	149	10.772	10.769	(0.912)	1625134	80.0000	84	
	81 Benzo(b)fluoranthene	252	11.310	11.307	(0.957)	2159347	80.0000	89	
	82 Benzo(k)fluoranthene	252	11.341	11.338	(0.960)	1829342	80.0000	74	
$	83 Benzo(a)pyrene-d12	264	11.713	11.700	(0.991)	1432915	80.0000	83	
	84 Benzo(a)pyrene	252	11.755	11.741	(0.995)	1811552	80.0000	81	
*	85 Perylene-d12	264	11.817	11.814	(1.000)	777724	40.0000		
	86 Indeno(1,2,3-cd)pyrene	276	13.597	13.573	(1.151)	2198459	80.0000	81	
	87 Dibenzo(a,h)anthracene	278	13.618	13.594	(1.152)	1768893	80.0000	79	
	88 Benzo(g,h,i)perylene	276	14.135	14.112	(1.196)	1795506	80.0000	81	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8639.D
Date : 10-NOV-2011 18:10
Client ID: SSTD0404Q
Sample Info: SSTD0404Q,SSTD0404Q
Volume Injected (uL): 2.0
Column phase: RXI-5SILMS

Instrument: S4.i
Operator: MMS SRC: MMS
Column diameter: 0.25



Report Date:
23-Nov-11 09:11

☑ 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: K2213
SDG No: H30X4
Case No: 41926

Attn: Nazy Abousaeedi

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
K2213-01	H30X4	Aqueous	27-Oct-11 17:25	29-Oct-11 08:45
K2213-01	H30X4	Aqueous	27-Oct-11 17:25	03-Nov-11 09:00
K2213-02	H30Y7	Aqueous	27-Oct-11 10:23	29-Oct-11 08:45
K2213-02	H30Y7	Aqueous	27-Oct-11 10:23	03-Nov-11 09:00
K2213-03	H30W9	Aqueous	29-Oct-11 09:00	03-Nov-11 09:00
K2213-04	H30X2	Aqueous	28-Oct-11 09:10	03-Nov-11 09:00
K2213-05	H30X3	Aqueous	27-Oct-11 14:05	03-Nov-11 09:00
K2213-06	H30X6	Aqueous	28-Oct-11 11:37	03-Nov-11 09:00
K2213-07	H30X7	Aqueous	28-Oct-11 18:50	03-Nov-11 09:00
K2213-08	H30X9	Aqueous	28-Oct-11 14:10	03-Nov-11 09:00
K2213-09	H30Y0	Aqueous	28-Oct-11 17:20	03-Nov-11 09:00
K2213-10	H30Y1	Aqueous	29-Oct-11 10:20	03-Nov-11 09:00
K2213-11	H30Z2	Aqueous	29-Oct-11 12:45	03-Nov-11 09:00
K2213-12	H30Z3	Aqueous	29-Oct-11 13:50	03-Nov-11 09:00
K2213-13	H30Z4	Aqueous	29-Oct-11 13:20	03-Nov-11 09:00
K2213-14	H30Z5	Aqueous	29-Oct-11 11:50	03-Nov-11 09:00
K2213-15	H30Z7	Aqueous	29-Oct-11 14:10	03-Nov-11 09:00
K2213-16	H30Z8	Aqueous	29-Oct-11 11:55	03-Nov-11 09:00
K2213-17	H3BA1	Aqueous	01-Nov-11 13:00	03-Nov-11 09:00

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Mitkem Laboratories.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and is certified by several States, as well as USEPA and US Department of Defense. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.mitkem.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Pennsylvania	68-00520
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED TNI LABORATORY

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

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.: H30X4
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	13	✓	
3. **SDG Cover Sheet/Traffic Report**	14	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)	21	21	✓	
Method Blank Summary (Form IV VOA)	22	23	✓	
GC/MS Instrument Performance Check (Form V VOA)	24	25	✓	
Internal Standard Area and RT Summary (Form VIII VOA)	26	28	✓	
b. Sample Data	29	199	✓	
TCL Results - Organics Analysis Data Sheet (Form I VOA-1 and VOA-2)			✓	
Tentatively Identified Compounds (Form I VOA-TIC)			✓	
Reconstructed total ion chromatograms (RIC) for each sample			✓	
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds identified			✓	
Quantitation reports			✓	
Mass Spectra of all reported TICs with three best library matches			✓	
c. Standards Data (All Instruments)	200	235		
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	236	239	✓	
Blank Data	240	257	✓	

fz 11/03/11

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

CASE NO. 41926 SDG NO. H30X4 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)	258	279	✓	
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. H30X4 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)	280	281	✓	
Matrix Spike/Matrix Spike Duplicate Recovery Summary (Form III SV-1 and SV-2) (if requested by USEPA Region)	282	282	✓	
Method Blank Summary (Form IV SV)	283	284	✓	
GC/MS Instrument Performance Check (Form V SV)	285	288	✓	
Internal Standard Area and RT Summary (Form VIII SV-1 and SV-2)	289	294	✓	
b. Sample Data	295	607		
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:	295	607		
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)	608	688		
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	689	706	✓	
Blank Data	707	738	✓	
MS/MSD Data (if requested by USEPA Region)	739	750	✓	
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. H30X4 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. H30X4 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)	751	751	✓	
Matrix Spike/Matrix Spike Duplicate Summary (Form III ARO-1 and ARO-2)	752	753	✓	
Laboratory Control Sample Recovery(Form III ARO-3 and ARO-4)	754	756	✓	
Method Blank Summary (Form IV ARO)	757	759	✓	
b. Sample Data	760	844		
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. H30X4 SDG NOS. TO FOLLOW —

— — MOD. REF. NO. —

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK USEPA
c. Standards Data	845	1127		
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	1128	1178	✓	
Matrix Spike/Matrix Spike Duplicate Data	1179	1191	✓	
Laboratory Control Sample (LCS) Data	1192	1215	✓	
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	1216	1237	✓	
Internal sample and sample extract transfer chain-of-custody records	1238	1247	✓	
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	1248	1259	✓	
—	N/A	N/A	N/A	
10. **EPA Shipping/Receiving Documents**				
Airbills (No. of shipments 2)	1260	1261	✓	
Chain of Custody Records	1262	1266	✓	
Sample Tags (in a plastic bag, if present)			N/A	
Sample Log-in Sheet (Lab & DC-1)	1267	1280	✓	
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. H30X4 SDG NOS. TO FOLLOW —

— — MOD. REF. NO. —

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK USEPA
11. **Internal Lab Sample Transfer Records and Tracking Sheets** (describe or list)				
/	N/A	N/A	N/A	
/	N/A	N/A	N/A	
12. **Other Records** (describe or list)				
Telephone Communication Log	N/A	N/A	N/A	
E-mail(s)	1281	1294	✓	
—	N/A	N/A	N/A	

13. **Comments**

/

Completed by: Jennifer Emerson (CLP Lab) (Signature) Jennifer Emerson/Data Rpt'g Specialist (Printed Name/Title) 12/11/23/11 (Date)

Verified by: Agnes Huntley (CLP Lab) (Signature) Agnes Huntley/CLP Project Manager (Printed Name/Title) 11/23/11 (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# H30X4. Analyses were performed for seventeen aqueous samples that were received on October 29 and November 3, 2011.

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

Please note that the sample-shipping cooler received on October 29 was measured at 9.0°C. Ten coolers were received on November 3. The temperature of the coolers was measured at 9.0°C, 10.0°C, 9.0°C, 9.0°C, 9.5°C, 10.0°C, 9.0°C, 8.5°C, 9.0°C and 6.0°C.

The following samples are submitted in this data package:

Client ID	Lab ID	Analysis	VOA pH
H30X4	K2213-01A	S A	
H30X4RX	K2213-01ARE	A	
H30X4	K2213-01B	TV	< 2
H30Y7	K2213-02A	S A	
H30Y7RX	K2213-02ARE	A	
H30Y7	K2213-02B	TV	< 2
H30W9	K2213-03A	S A	
H30W9	K2213-03B	TV	< 2
H30X2	K2213-04A	S A	
H30X2	K2213-04B	TV	< 2
H30X3	K2213-05A	TV	< 2
H30X6	K2213-06A	S A	
H30X6	K2213-06B	TV	< 2
H30X7	K2213-07A	S A	
H30X7	K2213-07B	TV	< 2
H30X9	K2213-08A	S A	
H30X9	K2213-08B	TV	< 2
H30Y0	K2213-09A	S A	
H30Y0	K2213-09B	TV	< 2
H30Y1	K2213-10A	S A	
H30Y1	K2213-10B	TV	< 2
H30Z2	K2213-11A	S A	
H30Z2MS	K2213-11AMS	S A	
H30Z2MSD	K2213-11AMSD	S A	
H30Z2	K2213-11B	TV	< 2
H30Z2MS	K2213-11BMS	TV	< 2
H30Z2MSD	K2213-11BMSD	TV	< 2
H30Z3	K2213-12A	S A	
H30Z3	K2213-12B	TV	< 2
H30Z4	K2213-13A	S A	

H30Z4	K2213-13B	TV	< 2
H30Z5	K2213-14A	S A	
H30Z5	K2213-14B	TV	< 2
H30Z7	K2213-15A	S A	
H30Z7	K2213-15B	TV	< 2
H30Z8	K2213-16A	S A	
H30Z8	K2213-16B	TV	< 2
H3BA1	K2213-17A	TV	< 2

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.

The TR/COC does not list samples with CLP formatted IDs. There are CLP IDs on the containers and the lab can match up the information between the TR/COC station locations and sample containers to identify the samples. Per Region 8, the lab shall use the sample IDs on the sample containers to identify the samples, note the issue in the SDG Narrative, and proceed with analysis.

The TR/COC does not list a TAT. Per Scheduling, this Case requires a 21 day TAT. In accordance with previous direction from Region 8, the laboratory will proceed with the turnaround time indicated on the Scheduling Notification Form, note the issue in the SDG Narrative, 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 turnaround time.

The laboratory received a sample (station location SSSW99B) without a CLP formatted ID. In accordance with previous direction from Region 8, the SMO coordinator will assign new sample IDs and provide the laboratory and the Region with a copy of the cross-referenced sample IDs. The laboratory will note the issue in the SDG Narrative and proceed with the analysis of the samples. CLP sample ID used for this sample H3BA1.

The laboratory received two of four 1L amber bottles broken for sample H30X2, and 1 of four 1L amber bottles broken for sample H30X9. The laboratory has sufficient sample volume for SVOA and ARO analyses; however, the laboratory will have trouble if re-extraction is required for these 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 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 with the exception of the following:

H30X4: recovery is above criteria for 1,1-Dichloroethene-d2 at 106% with criteria of (55-104).

H30X9: recovery is above criteria for 1,1-Dichloroethene-d2 at 107% with criteria of (55-104).

H30Y0: recovery is above criteria for 1,1-Dichloroethene-d2 at 110% with criteria of (55-104) and Chloroethane-d5 at 132% with criteria of (71-131).

H30Y1: recovery is above criteria for 1,1-Dichloroethene-d2 at 110% with criteria of (55-104).

H30Z2: recovery is above criteria for 1,1-Dichloroethene-d2 at 107% with criteria of (55-104).

H30Z2MS: recovery is above criteria for 1,1-Dichloroethene-d2 at 109% with criteria of (55-104).

H30Z2MSD: recovery is above criteria for 1,1-Dichloroethene-d2 at 106% with criteria of (55-104).

H30Z3: recovery is above criteria for 1,1-Dichloroethene-d2 at 110% with criteria of (55-104).

H30Z7: recovery is above criteria for 1,1-Dichloroethene-d2 at 107% with criteria of (55-104).

H30Z8: recovery is above criteria for 1,1-Dichloroethene-d2 at 108% with criteria of (55-104).

H3BA1: recovery is above criteria for 1,1-Dichloroethene-d2 at 109% with criteria of (55-104).

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

Duplicate matrix spikes were performed on sample H30Z2.

Spike recoveries were within the advisory QC limits.

Replicate RPDs were within the advisory QC limits.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

F. Dilutions:

The following sample was analyzed at dilution:

H30X4: Dilution Factor: 4

Sample H30X4 was analyzed at a 4X dilution due to foaming.

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.

Instrument Code: S4
Instrument Type: GCMS-SEMI
Description: HP6890 / HP5973
Manufacturer: Hewlett-Packard
Model: 6890N / 5973N

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:

H30X4: recovery is below criteria for Benzo(a)pyrene-d12 at 22% with criteria of (32-121) and Pyrene-d10 at 40% with criteria of (52-119).

H30Y7: recovery is above criteria for 4,6-Dinitro-2-methylphenol-d2 at 107% with criteria of (22-104) and recovery is below criteria for Pyrene-d10 at 37% with criteria of (52-119).

H30W9: recovery is above criteria for Phenol-d5 at 107% with criteria of (39-106).

H30X2: recovery is below criteria for Benzo(a)pyrene-d12 at 29% with criteria of (32-121).

H30X7: recovery is below criteria for Benzo(a)pyrene-d12 at 20% with criteria of (32-121) and Pyrene-d10 at 32% with criteria of (52-119).

H30X9: recovery is below criteria for Benzo(a)pyrene-d12 at 24% with criteria of (32-121) and Pyrene-d10 at 31% with criteria of (52-119).

H30Y0: recovery is below criteria for Benzo(a)pyrene-d12 at 21% with criteria of (32-121) and Pyrene-d10 at 30% with criteria of (52-119).

H30Y1: recovery is below criteria for Benzo(a)pyrene-d12 at 22% with criteria of (32-121) and Pyrene-d10 at 32% with criteria of (52-119).

H30Z7: recovery is below criteria for Anthracene-d10 at 41% with criteria of (44-110), Benzo(a)pyrene-d12 at 19% with criteria of (32-121) and Pyrene-d10 at 26% with criteria of (52-119).

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

Duplicate matrix spikes were performed on sample H30Z2.

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

following:

H30Z2MS: recovery is above criteria for 4-Nitrophenol at 103% with criteria of (10-80).

H30Z2MSD: recovery is above criteria for 4-Nitrophenol at 111% with criteria of (10-80).

Replicate RPDs were within the advisory QC limits.

E. Internal Standards:

Internal standard area counts were within QC criteria.

F. Dilutions:

No sample in this SDG required analysis at dilution.

G. Samples:

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 with the following exceptions:

H30X4RX exceed by-11 Days
H30Y7RX exceed by-11 Days

The samples were re-extracted to confirm matrix interference on surrogate recoveries.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

II. METHODS

Samples were analyzed following procedures in laboratory test code: EPA CLP SOM 1.2 ARO

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

$$\text{Concentration (ug/Kg)} = (\text{Amt})(\text{DF})(\text{Uf})\left(\frac{\text{Vt}}{(\text{Vi} * \text{WS} * \left(\frac{100 - \text{m}}{100}\right)}\right)$$

where: Amt = CAL - AMT on raw data
DF = Dilution factor
UF = ng unit correction factor
WS = Weight of sample extracted (g)
Vt = Volume of final extract (uL)
Vi = Volume injected (uL)
M = %moisture (not decanted)

III. PREPARATION

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 Column used: 30 m X 0.53 mm ID [0.50 um thickness] CLPPest capillary column.
GC Column used: 30 m X 0.53 mm ID [0.42 um thickness] CLPPestII capillary column.

Instrument Code: E3
Instrument Type: GC-ECD
Description: HP5890 II
Manufacturer: Hewlett-Packard
Model: 5890
GC Column used: 30 m X 0.53 mm ID [0.50 um thickness] CLPPest capillary

column.
GC Column used: 30 m X 0.53 mm ID [0.42 um thickness] CLPPestII 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:

H30X4: recovery is below criteria for Decachlorobiphenyl on rear column at 8% with criteria of (30-150), Decachlorobiphenyl on front column at 8% with criteria of (30-150), Tetrachloro-m-xylene on rear column at 14% with criteria of (30-150) and Tetrachloro-m-xylene on front column at 12% with criteria of (30-150).

H30X4RX: recovery is below criteria for Decachlorobiphenyl on rear column at 8% with criteria of (30-150), Decachlorobiphenyl on front column at 13% with criteria of (30-150), Tetrachloro-m-xylene on rear column at 26% with criteria of (30-150) and Tetrachloro-m-xylene on front column at 14% with criteria of (30-150).

H30Y7: recovery is below criteria for Decachlorobiphenyl on rear column at 7% with criteria of (30-150), Decachlorobiphenyl on front column at 8% with criteria of (30-150), Tetrachloro-m-xylene on rear column at 27% with criteria of (30-150) and Tetrachloro-m-xylene on front column at 23% with criteria of (30-150).

H30Y7RX: recovery is below criteria for Decachlorobiphenyl on rear column at 6% with criteria of (30-150), Decachlorobiphenyl on front column at 11% with criteria of (30-150), Tetrachloro-m-xylene on rear column at 30% with criteria of (30-150) and Tetrachloro-m-xylene on front column at 26% with criteria of (30-150).

H30X2: 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).

H30X6: recovery is below criteria for Decachlorobiphenyl on rear column at 26%

with criteria of (30-150) and Decachlorobiphenyl on front column at 21% with criteria of (30-150).

H30X7: recovery is below criteria for Decachlorobiphenyl on rear column at 10% with criteria of (30-150) and Decachlorobiphenyl on front column at 12% with criteria of (30-150).

H30X9: recovery is below criteria for Decachlorobiphenyl on rear column at 28% with criteria of (30-150).

H30Y0: recovery is below criteria for Decachlorobiphenyl on rear column at 30% with criteria of (30-150).

H30Y1: recovery is below criteria for Decachlorobiphenyl on rear column at 25% with criteria of (30-150) and Decachlorobiphenyl on front column at 25% with criteria of (30-150).

H30Z7: recovery is below criteria for Decachlorobiphenyl on rear column at 22% with criteria of (30-150) and Decachlorobiphenyl on front column at 23% 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 H30Z2.

Spike recoveries were within the advisory QC limits.

Replicate RPDs were within the advisory QC limits.

E. Dilutions:

No sample in this SDG required analysis at dilution.

F. Samples:

The re-extracts for samples H30X4 and H30Y7 are billable. The samples were re-extracted to demonstrate matrix interference on surrogate recoveries. Matrix interference confirmed on surrogate recoveries as the re-extracts exhibited findings similar to the initial extraction.

No other unusual observations were made for the analysis.

G. Manual Integration:

No manual integrations were performed on any sample or standard.

All of the submittals to the region are originals other than logbook pages. Photocopies of logbook pages are included, with the originals maintained on file at the laboratory. Tunes, calibration verifications and initial calibrations that are shared among several cases are photocopies indicating the location of the originals.

I certify that this Sample Data Package is in compliance with the terms and condition of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy Sample Data Package and in the electronic data deliverable has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Agnes Huntley
CLP Project Manager
11/23/11

Contract Laboratory Program

Sample Delivery Group (SDG)

Cover Sheet

SDG Number H30X4

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) H30W9	08) H30Y0	15) H30Z4	
02) H30X2	09) H30Y1	16) H30Z5	
03) H30X3	10) H30Y7	17) H30Z7	
04) H30X4	11) H30Z2	18) H30Z8	
05) H30X6	12) H30Z2MS	19) H3BA1	
06) H30X7	13) H30Z2MSD		
07) H30X9	14) H30Z3		

First Sample in SDG	Last Sample in SDG
H30X4	H3BA1

First Sample Receipt Date	Last Sample Receipt Date
10/29/2011	11/03/2011

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 H30X4

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		
	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: AMA **Date:** 10/31/11

9.0°C

SDG H30X4

USEPA
DateShipped: 11/1/2011
CarrierName: FedEx
AirbillNo:

CHAIN OF CUSTODY RECORD
Site #: 41926
Contact Name: Jeff Miller
Contact Phone: 720-810-7891

No: 8-110111-145735-0009
Cooler #:
Lab: Spectrum Analytical
Lab Phone: 401-732-3400

Lab #	Location		Analyses	Matrix	Collected	Sample Time	Preservative	MS/MSD
	SSSW89	~~H30Z7~~ H30W9	Volatiles (VOAs)	Surface Water	10/29/2011	9:00	HCl	
	SSSW89		Semivolatiles (SVOAs)	Surface Water	10/29/2011	9:00		
	SSSW89		Aroclors	Surface Water	10/29/2011	9:00		
	SSGW03		Volatiles (VOAs)	Ground Water	10/28/2011	9:10	HCl	
	SSGW03	H30X2	Semivolatiles (SVOAs)	Ground Water	10/28/2011	9:10		
	SSGW03		Aroclors	Ground Water	10/28/2011	9:10		
	SSGW04	H30X3	Volatiles (VOAs)	Ground Water	10/27/2011	14:05	HCl	
	SSGW05	H30X4	Volatiles (VOAs)	Ground Water	10/27/2011	17:25	HCl	
	SSGW07		Volatiles (VOAs)	Ground Water	10/28/2011	11:37	HCl	
	SSGW07	H30X6	Semivolatiles (SVOAs)	Ground Water	10/28/2011	11:37		
	SSGW07		Aroclors	Ground Water	10/28/2011	11:37		
	SSGW08		Volatiles (VOAs)	Ground Water	10/28/2011	18:50	HCl	
	SSGW08	H30X7	Semivolatiles (SVOAs)	Ground Water	10/28/2011	18:50		
	SSGW08		Aroclors	Ground Water	10/28/2011	18:50		
	SSGW10		Volatiles (VOAs)	Ground Water	10/28/2011	14:10	HCl	
	SSGW10	H30X9	Semivolatiles (SVOAs)	Ground Water	10/28/2011	14:10		
	SSGW10		Aroclors	Ground Water	10/28/2011	14:10		
	SSGW11		Volatiles (VOAs)	Ground Water	10/28/2011	17:20	HCl	
	SSGW11	H30Y0	Semivolatiles (SVOAs)	Ground Water	10/28/2011	17:20		
	SSGW11		Aroclors	Ground Water	10/28/2011	17:20		

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]	Nov 1, 2011	FEDEX				FedEx	11-03-11	[signature]	11-03-11	9:00

SDG H30X4

USEPA
DateShipped: 11/1/2011
CarrierName: FedEx
AirbillNo:

CHAIN OF CUSTODY RECORD
Site #: 41926
Contact Name: Jeff Miller
Contact Phone: 720-810-7891

No: 8-110111-145735-0009
Cooler #:
Lab: Spectrum Analytical
Lab Phone: 401-732-3400

Lab #	Location	Analyses	Matrix	Collected	Sample Time	Preservative	MS/MSD
	SSGW12	Volatiles (VOAs)	Ground Water	10/29/2011	10:20	HCl	
	SSGW12 H30Y1	Semivolatiles (SVOAs)	Ground Water	10/29/2011	10:20		
	SSGW12	Aroclors	Ground Water	10/29/2011	10:20		
	SSGW18 H30Y7	Volatiles (VOAs)	Ground Water	10/27/2011	10:23	HCl	
	SSGW23	Volatiles (VOAs)	Ground Water	10/29/2011	12:45	HCl	Y
	SSGW23 H30Z2	Semivolatiles (SVOAs)	Ground Water	10/29/2011	12:45		Y
	SSGW23	Aroclors	Ground Water	10/29/2011	12:45		Y
	SSGW24	Volatiles (VOAs)	Ground Water	10/29/2011	13:50	HCl	
	SSGW24 H30Z3	Semivolatiles (SVOAs)	Ground Water	10/29/2011	13:50		
	SSGW24	Aroclors	Ground Water	10/29/2011	13:50		
	SSGW25	Volatiles (VOAs)	Ground Water	10/29/2011	13:20	HCl	
	SSGW25 H30Z4	Semivolatiles (SVOAs)	Ground Water	10/29/2011	13:20		
	SSGW25	Aroclors	Ground Water	10/29/2011	13:20		
	SSGW26	Volatiles (VOAs)	Ground Water	10/29/2011	11:50	HCl	
	SSGW26 H30Z5	Semivolatiles (SVOAs)	Ground Water	10/29/2011	11:50		
	SSGW26	Aroclors	Ground Water	10/29/2011	11:50		
	SSGW89	Volatiles (VOAs)	Ground Water	10/29/2011	14:10	HCl	
	SSGW89 H30Z7	Semivolatiles (SVOAs)	Ground Water	10/29/2011	14:10		
	SSGW89	Aroclors	Ground Water	10/29/2011	14:10		
	SSGW99 H30Z8	Volatiles (VOAs)	Ground Water	10/29/2011	11:55	HCl	

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
		NOV 1, 2011	FEDEX				FedEX	11-03-11		11-03-11	9:00

SDG H30X4

USEPA
DateShipped: 11/1/2011
CarrierName: FedEx
AirbillNo:

CHAIN OF CUSTODY RECORD
Site #: 41926
Contact Name: Jeff Miller
Contact Phone: 720-810-7891

No: 8-110111-145735-0009
Cooler #:
Lab: Spectrum Analytical
Lab Phone: 401-732-3400

Lab #	Location	Analyses	Matrix	Collected	Sample Time	Preservative	MS/MSD
	SSGW99 H30Z8	Semivolatiles (SVOAs)	Ground Water	10/29/2011	11:55		
	SSGW99	Aroclors	Ground Water	10/29/2011	11:55		
	SSSW99B H3BA1	Volatiles (VOAs)	Surface Water	11/1/2011	13:00	HCl	
	↓						
	SDG - Final Sample						

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]	Nov 1 2011	FEDEX				FedEx	11-03-11	[signature]	11-03-11	9:00

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.: H30X4

Level: (TRACE or LOW) TRACE

	EPA SAMPLE NO.	VDMC1 (VCL)	#	VDMC2 (CLA)	#	VDMC3 (DCE)	#	VDMC4 (BUT)	#	VDMC5 (CLF)	#	VDMC6 (DCA)	#	VDMC7 (BEN)	#
01	VBLKP5	113		109		101		91		92		87		96	
02	H30X4	119		121		106	*	113		93		93		92	
03	H30Y7	105		105		90		92		91		90		100	
04	H30W9	111		111		96		96		95		95		96	
05	H30X2	115		106		95		107		95		101		89	
06	H30X3	118		116		100		106		93		95		97	
07	H30X6	128		127		100		111		96		95		90	
08	H30X7	125		122		104		102		96		93		93	
09	H30X9	127		125		107	*	100		96		97		91	
10	H30Y0	126		132	*	110	*	107		100		95		95	
11	H30Y1	129		127		110	*	98		97		93		92	
12	H30Z3	126		130		110	*	102		98		95		94	
13	H30Z4	121		123		101		110		97		97		95	
14	H30Z5	125		125		99		104		97		98		96	
15	H30Z7	128		129		107	*	105		97		98		94	
16	H30Z8	129		130		108	*	104		96		98		97	
17	H3BA1	128		125		109	*	104		96		96		93	
18	VBLKQ5	131		130		103		112		99		98		94	
19	H30Z2	126		125		107	*	105		99		97		95	
20	H30Z2MS	125		125		109	*	102		96		95		94	
21	H30Z2MSD	127		126		106	*	98		95		92		97	
22	VHBLKQ5	126		124		104		102		98		96		95	

		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.: H30X4

Level: (TRACE or LOW) TRACE

	SAMPLE NO.	VDMC8 (DPA) #	VDMC9 (TOL) #	VDMC10 (TDP) #	VDMC11 (HEX) #	VDMC12 (TCA) #	VDMC13 (DCZ) #	VDMC14 #	TOT OUT
01	VBLKP5	88	95	98	82	90	92		0
02	H30X4	87	94	104	122	102	99		1
03	H30Y7	90	94	99	101	94	96		0
04	H30W9	90	93	91	90	99	97		0
05	H30X2	90	90	97	119	115	102		0
06	H30X3	89	94	115	105	103	97		0
07	H30X6	90	91	108	113	102	95		0
08	H30X7	90	91	106	105	105	100		0
09	H30X9	88	94	108	98	98	98		1
10	H30Y0	89	97	99	105	108	103		2
11	H30Y1	89	90	102	93	93	99		1
12	H30Z3	89	91	106	98	91	107		1
13	H30Z4	89	91	103	103	101	98		0
14	H30Z5	93	96	100	102	105	93		0
15	H30Z7	92	94	91	104	103	98		1
16	H30Z8	92	93	101	97	102	100		1
17	H3BA1	88	92	99	95	101	96		1
18	VBLKQ5	88	94	104	103	98	102		0
19	H30Z2	92	92	103	95	99	94		1
20	H30Z2MS	87	90	100	98	96	97		1
21	H30Z2MSD	91	96	103	99	101	100		1
22	VHBLKQ5	91	94	95	98	99	96		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

3A - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix Spike - EPA Sample No.: H30Z2 Level: (TRACE or LOW) TRACE

COMPOUND	SPIKE ADDED (µg/L)	SAMPLE CONCENTRATION (µg/L)	MS CONCENTRATION (µg/L)	MS %REC	#	QC. LIMITS REC.
1,1-Dichloroethene	5.0000	0.0000	4.2487	85		61-145
Benzene	5.0000	0.0000	4.1237	82		76-127
Trichloroethene	5.0000	0.0000	4.0270	81		71-120
Toluene	5.0000	0.0000	4.0132	80		76-125
Chlorobenzene	5.0000	0.0000	4.0612	81		75-130

COMPOUND	SPIKE ADDED (µg/L)	MSD CONCENTRATION (µg/L)	MSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	5.0000	4.0303	81		5		0-14	61-145
Benzene	5.0000	4.2295	85		3		0-11	76-127
Trichloroethene	5.0000	3.9511	79		2		0-14	71-120
Toluene	5.0000	4.0532	81		1		0-13	76-125
Chlorobenzene	5.0000	4.0925	82		1		0-13	75-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:

4A - FORM IV VOA

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKP5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Lab File ID: V5N2845.D Lab Sample ID: MB-62892

Instrument ID: V5

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 11/10/2011

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 6:57

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	H30X4	K2213-01B	V5N2846.D	7:25
02	H30Y7	K2213-02B	V5N2847.D	7:55
03	H30W9	K2213-03B	V5N2848.D	8:23
04	H30X2	K2213-04B	V5N2849.D	8:52
05	H30X3	K2213-05A	V5N2853.D	10:45
06	H30X6	K2213-06B	V5N2854.D	11:14
07	H30X7	K2213-07B	V5N2855.D	11:43
08	H30X9	K2213-08B	V5N2856.D	12:11
09	H30Y0	K2213-09B	V5N2857.D	12:40
10	H30Y1	K2213-10B	V5N2858.D	13:09
11	H30Z3	K2213-12B	V5N2860.D	13:38
12	H30Z4	K2213-13B	V5N2861.D	14:06
13	H30Z5	K2213-14B	V5N2862.D	14:35
14	H30Z7	K2213-15B	V5N2863.D	15:04
15	H30Z8	K2213-16B	V5N2864.D	15:33
16	H3BA1	K2213-17A	V5N2865.D	16:02

COMMENTS:

4A - FORM IV VOA

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKQ5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Lab File ID: V5N2869.D Lab Sample ID: MB-62893

Instrument ID: V5

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 11/10/2011

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 18:26

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	H30Z2	K2213-11B	V5N2870.D	18:54
02	H30Z2MS	K2213-11BMS	V5N2871.D	19:23
03	H30Z2MSD	K2213-11BMSD	V5N2872.D	19:52
04	VHBLKQ5	VHBLKQ5	V5N2891.D	4:56

COMMENTS:

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

EPA SAMPLE NO.
BFBO5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Lab File ID: V5N2820.D BFB Injection Date: 11/09/2011

Instrument ID: V5 BFB Injection Time: 19:00

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.1
75	30.0 - 80.0% of mass 95	43.0
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	74.2
175	5.0 - 9.0% of mass 174	5.0 (6.7)1
176	95.0 - 101% of mass 174	72.1 (97.3)1
177	5.0 - 9.0% of mass 176	4.6 (6.4)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	VSTD005O5	VSTD005O5	V5N2822.D	11/09/2011	19:57
02	VSTD0.5O5	VSTD0.5O5	V5N2823.D	11/09/2011	20:26
03	VSTD020O5	VSTD020O5	V5N2824.D	11/09/2011	20:55
04	VSTD010O5	VSTD010O5	V5N2825.D	11/09/2011	21:23
05	VSTD001O5	VSTD001O5	V5N2826.D	11/09/2011	21:52
06	VSTD005P5	VSTD005P5	V5N2844.D	11/10/2011	6:28
07	VBLKP5	MB-62892	V5N2845.D	11/10/2011	6:57
08	H30X4	K2213-01B	V5N2846.D	11/10/2011	7:25
09	H30Y7	K2213-02B	V5N2847.D	11/10/2011	7:55
10	H30W9	K2213-03B	V5N2848.D	11/10/2011	8:23
11	H30X2	K2213-04B	V5N2849.D	11/10/2011	8:52
12	H30X3	K2213-05A	V5N2853.D	11/10/2011	10:45
13	H30X6	K2213-06B	V5N2854.D	11/10/2011	11:14
14	H30X7	K2213-07B	V5N2855.D	11/10/2011	11:43
15	H30X9	K2213-08B	V5N2856.D	11/10/2011	12:11
16	H30Y0	K2213-09B	V5N2857.D	11/10/2011	12:40
17	H30Y1	K2213-10B	V5N2858.D	11/10/2011	13:09
18	H30Z3	K2213-12B	V5N2860.D	11/10/2011	13:38
19	H30Z4	K2213-13B	V5N2861.D	11/10/2011	14:06
20	H30Z5	K2213-14B	V5N2862.D	11/10/2011	14:35
21	H30Z7	K2213-15B	V5N2863.D	11/10/2011	15:04
22	H30Z8	K2213-16B	V5N2864.D	11/10/2011	15:33

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

EPA SAMPLE NO.
BFB05

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Lab File ID: V5N2820.D BFB Injection Date: 11/09/2011

Instrument ID: V5 BFB Injection Time: 19:00

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.1
75	30.0 - 80.0% of mass 95	43.0
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	74.2
175	5.0 - 9.0% of mass 174	5.0 (6.7)1
176	95.0 - 101% of mass 174	72.1 (97.3)1
177	5.0 - 9.0% of mass 176	4.6 (6.4)2

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

23	H3BA1	K2213-17A	V5N2865.D	11/10/2011	16:02
24	VSTD005Q5	VSTD005Q5	V5N2868.D	11/10/2011	17:28
25	VBLKQ5	MB-62893	V5N2869.D	11/10/2011	18:26
26	H30Z2	K2213-11B	V5N2870.D	11/10/2011	18:54
27	H30Z2MS	K2213-11BMS	V5N2871.D	11/10/2011	19:23
28	H30Z2MSD	K2213-11BMSD	V5N2872.D	11/10/2011	19:52
29	VHBLKQ5	VHBLKQ5	V5N2891.D	11/11/2011	4:56
30	VSTD005R5	VSTD005R5	V5N2892.D	11/11/2011	5:25

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.: H30X4

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 11/09/2011 11/09/2011

EPA Sample No.(VSTD#####): VSTD005P5 Date Analyzed: 11/10/2011

Lab File ID (Standard): V5N2844.D Time Analyzed: 6:28

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

		IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD	167705		9.428		228852		6.327		66458		12.169	
	UPPER LIMIT	234787		9.758		320393		6.657		93041		12.499	
	LOWER LIMIT	100623		9.098		137311		5.997		39875		11.839	
	EPA SAMPLE NO.												
01	VBLKP5	214798		9.432		290112		6.331		84648		12.184	
02	H30X4	172986		9.426		224183		6.325		73942		12.166	
03	H30Y7	154610		9.428		220467		6.327		61218		12.169	
04	H30W9	151138		9.432		198847		6.320		63023		12.173	
05	H30X2	144031		9.426		186888		6.325		64734		12.167	
06	H30X3	173051		9.432		237434		6.320		73067		12.173	
07	H30X6	180150		9.430		234199		6.317		78460		12.170	
08	H30X7	170309		9.428		226089		6.327		70632		12.180	
09	H30X9	175329		9.432		232380		6.319		72134		12.172	
10	H30Y0	169027		9.430		221033		6.318		69022		12.171	
11	H30Y1	186647		9.432		242004		6.319		74584		12.172	
12	H30Z3	188590		9.426		244717		6.325		73822		12.178	
13	H30Z4	178142		9.426		235248		6.325		74931		12.178	
14	H30Z5	181254		9.432		240269		6.320		75724		12.173	
15	H30Z7	191414		9.432		252205		6.320		78900		12.173	

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.: H30X4

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 11/09/2011 11/09/2011

EPA Sample No.(VSTD#####): VSTD005P5 Date Analyzed: 11/10/2011

Lab File ID (Standard): V5N2844.D Time Analyzed: 6:28

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

		IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD	167705		9.428		228852		6.327		66458		12.169	
	UPPER LIMIT	234787		9.758		320393		6.657		93041		12.499	
	LOWER LIMIT	100623		9.098		137311		5.997		39875		11.839	
	EPA SAMPLE NO.												
16	H30Z8	188164		9.426		252324		6.326		77053		12.179	
17	H3BA1	195606		9.431		255050		6.318		82786		12.171	

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.: H30X4

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 11/09/2011 11/09/2011

EPA Sample No.(VSTD#####): VSTD005Q5 Date Analyzed: 11/10/2011

Lab File ID (Standard): V5N2868.D Time Analyzed: 17:28

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

		IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD	144332		9.429		190819		6.328		63377		12.169	
	UPPER LIMIT	202065		9.759		267147		6.658		88728		12.499	
	LOWER LIMIT	86599		9.099		114491		5.998		38026		11.839	
	EPA SAMPLE NO.												
01	VBLKQ5	174508		9.432		229033		6.320		73311		12.173	
02	H30Z2	186887		9.428		245108		6.327		78016		12.180	
03	H30Z2MS	168627		9.426		218664		6.326		69384		12.179	
04	H30Z2MSD	160408		9.427		217607		6.326		66987		12.179	
05	VHBLKQ5	178817		9.426		235794		6.326		71040		12.179	

IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4
AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area
AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area
RT UPPER LIMIT = +0.50 (Low-Medium Volatiles) and +0.33 (Trace Volatiles) minutes of internal standard RT
RT LOWER LIMIT = -0.50 (Low-Medium Volatiles) and -0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30W9

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-03B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2848.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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	0.65	
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.

H30W9

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-03B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2848.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30W9

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-03B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2848.D

Level: (TRACE or LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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\111110.B\V5N2848.D
Report Date: 15-Nov-2011 09:35

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2848.D
Lab Smp Id: K2213-03B Client Smp ID: H30W9
Inj Date : 10-NOV-2011 08:23
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-03B,,62892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 29
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	2.197	2.216	(0.348)	100440	5.55228	5.6
$	80 Chloroethane-d5	69	2.603	2.600	(0.412)	68027	5.53877	5.5
$	81 1,1-Dichloroethene-d2	65	3.369	3.378	(0.533)	22461	4.79437	4.8(Q)
$	82 2-Butanone-d5	46	5.065	5.062	(0.802)	104519	48.1700	48(AQ)
$	83 Chloroform-d	84	5.378	5.387	(0.851)	102427	4.72816	4.7(Q)
	19 Chloroform	83	5.402	5.410	(0.855)	14565	0.64695	0.65
$	23 1,2-Dichloroethane-d4	65	5.889	5.898	(0.932)	40615	4.76730	4.8(Q)
$	84 Benzene-d6	84	5.913	5.909	(0.627)	212015	4.78248	4.8
*	26 1,4-Difluorobenzene	114	6.319	6.327	(1.000)	198847	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.726	6.734	(0.713)	69485	4.51562	4.5
$	33 Toluene-d8	98	7.840	7.837	(0.831)	184074	4.62690	4.6
$	86 trans-1,3-Dichloropropene-d4	79	8.119	8.116	(0.861)	40102	4.54817	4.5
$	87 2-Hexanone-d5	63	8.560	8.569	(0.908)	68708	44.9937	45(AQ)
*	42 Chlorobenzene-d5	117	9.431	9.428	(1.000)	151138	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.930	10.926	(1.159)	28173	4.94535	4.9
*	78 1,4-Dichlorobenzene-d4	152	12.172	12.169	(1.000)	63023	5.00000	
$	90 1,2-Dichlorobenzene-d4	152	12.625	12.633	(1.037)	48247	4.86984	4.9(Q)

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111110.B\V5N2848.D
Report Date: 15-Nov-2011 09:35

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111110.B\V5N2848.D
Report Date: 15-Nov-2011 09:35

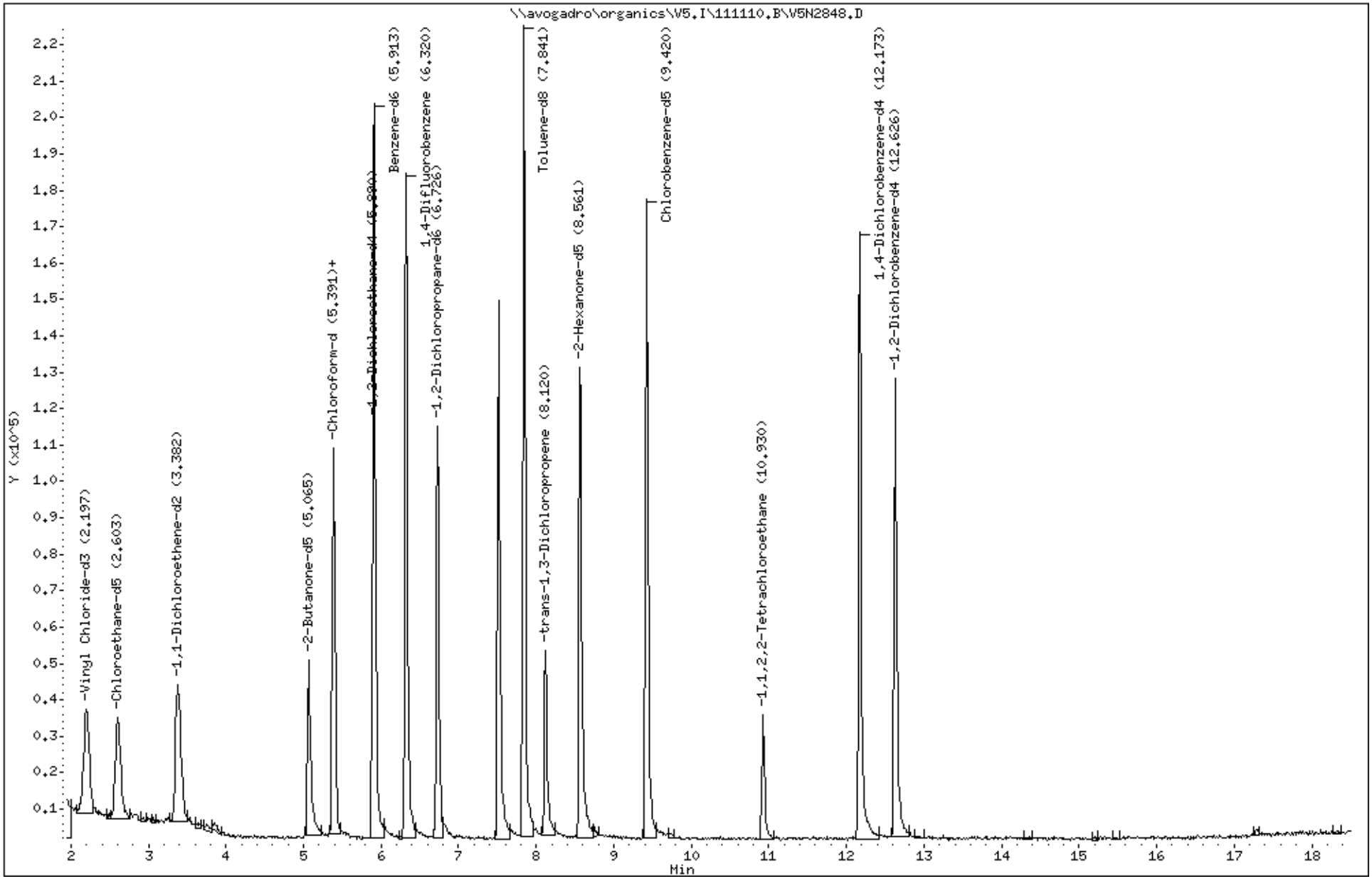
Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2848.D
Lab Smp Id: K2213-03B Client Smp ID: H30W9
Inj Date : 10-NOV-2011 08:23
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-03B,,62892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 29
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\111110.B\V5N2848.D
Date : 10-NOV-2011 08:23
Client ID: H30W9
Instrument: V5.i
Sample Info: 25ML,K2213-03B,,62892
Purge Volume: 25.0
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111110.B\V5N2848.D

Date : 10-NOV-2011 08:23

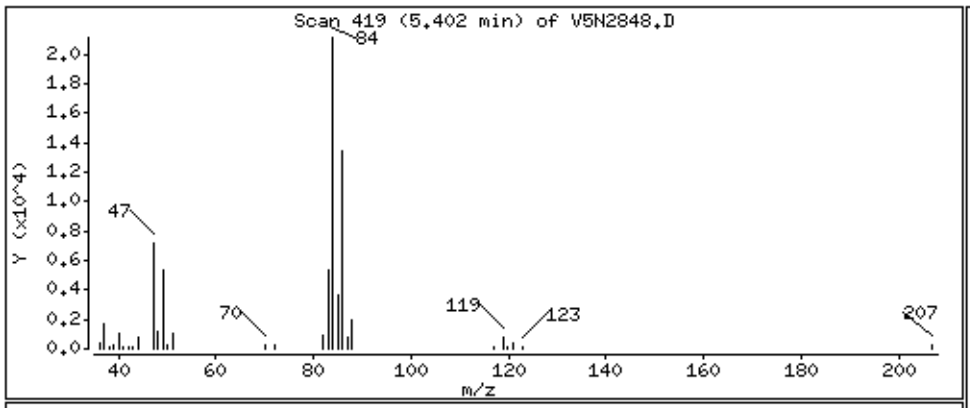
Client ID: H30W9 Instrument: V5.i

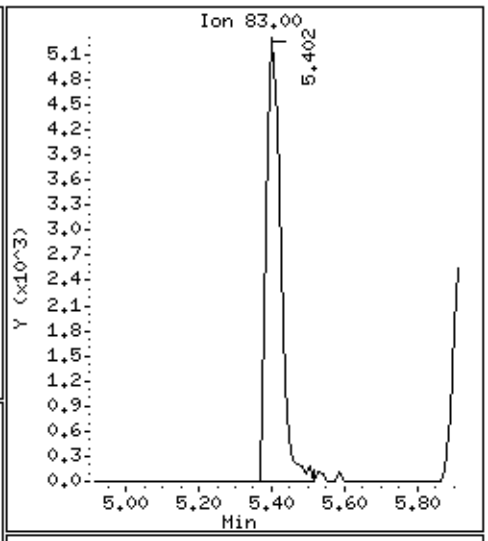
Sample Info: 25ML,K2213-03B,,62892

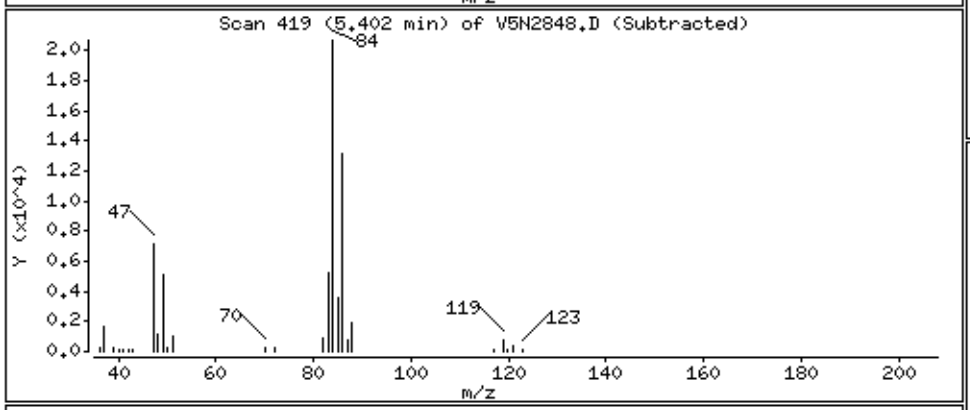
Purge Volume: 25.0 Operator: SRC: LIMS

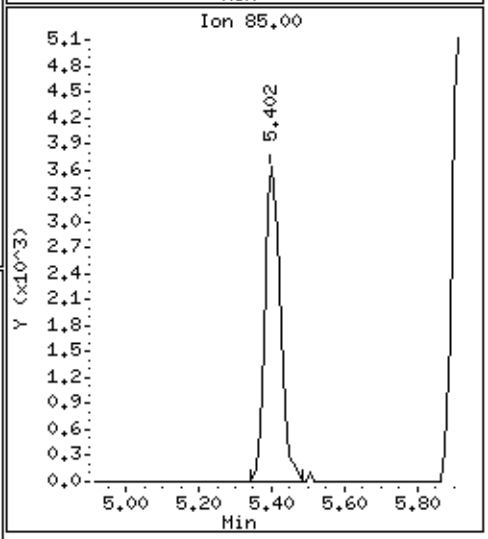
Column phase: DB-624 Column diameter: 0.25

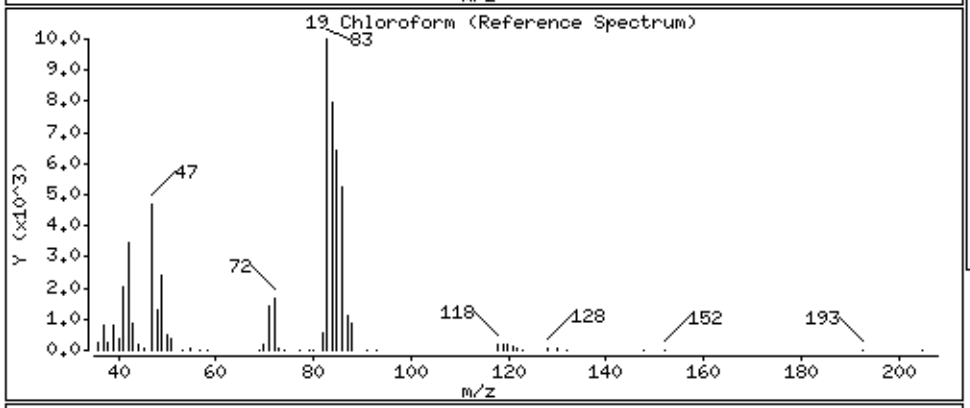
19 Chloroform Concentration: 0.65 ug/L

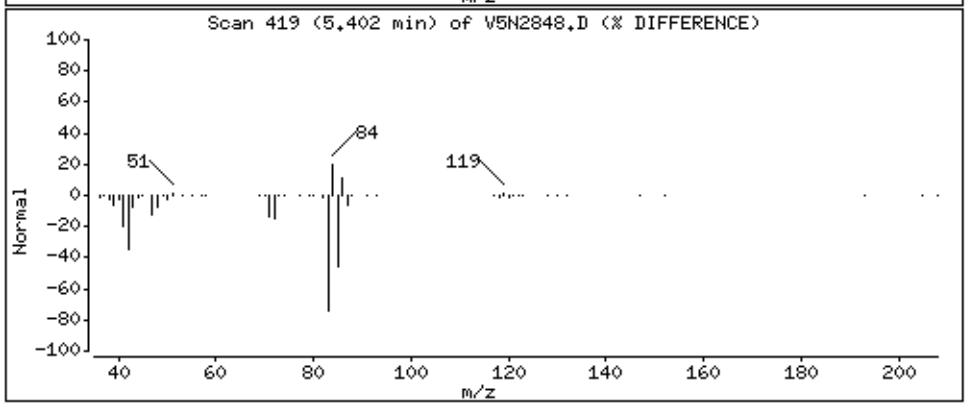












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30X2

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-04B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2849.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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	0.22	J
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30X2

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-04B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2849.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30X2

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-04B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2849.D

Level: (TRACE or LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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	4041-09-2	Cyclopentanone, 2,5-dimethyl	10.309	1.1	NJ
02		Unknown-01	11.122	1.5	J
03		Unknown-02	11.586	1.0	J
04	470-67-7	7-Oxabicyclo[2.2.1]heptane,	11.934	1.0	NJ
05	527-84-4	Benzene, 1-methyl-2-(1-methy	12.062	1.6	NJ
06		Unknown-03	12.805	0.53	J
07	4695-62-9	Bicyclo[2.2.1]heptan-2-one,	13.525	12	NJ
08		Unknown-04	14.129	15	J
09		Unknown-05	14.199	2.9	J
10		Unknown-06	14.338	2.2	J
11	464-48-2	Bicyclo[2.2.1]heptan-2-one,	14.501	7.7	NJ
	E96679€[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111110.B\V5N2849.D
Report Date: 15-Nov-2011 09:35

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2849.D
Lab Smp Id: K2213-04B Client Smp ID: H30X2
Inj Date : 10-NOV-2011 08:52
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-04B,,62892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 30
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	2.216	(0.346)	97430	5.73053	5.7
$	80 Chloroethane-d5	69	2.597	2.600	(0.411)	61450	5.32343	5.3
$	81 1,1-Dichloroethene-d2	65	3.387	3.378	(0.535)	20820	4.72847	4.7(Q)
$	82 2-Butanone-d5	46	5.071	5.062	(0.802)	109030	53.4644	53(AQ)
$	83 Chloroform-d	84	5.384	5.387	(0.851)	96607	4.74487	4.7(Q)
$	23 1,2-Dichloroethane-d4	65	5.895	5.898	(0.932)	40538	5.06274	5.1(Q)
$	84 Benzene-d6	84	5.907	5.909	(0.627)	188087	4.45208	4.5
	25 Benzene	78	5.953	5.956	(0.632)	10152	0.21738	0.22
*	26 1,4-Difluorobenzene	114	6.325	6.327	(1.000)	186888	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.731	6.734	(0.714)	65992	4.50024	4.5
$	33 Toluene-d8	98	7.835	7.837	(0.831)	171207	4.51582	4.5
$	86 trans-1,3-Dichloropropene-d4	79	8.113	8.116	(0.861)	40574	4.82877	4.8
$	87 2-Hexanone-d5	63	8.566	8.569	(0.909)	86540	59.4674	59(AQ)
*	42 Chlorobenzene-d5	117	9.426	9.428	(1.000)	144031	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.924	10.926	(1.159)	31257	5.75743	5.8
*	78 1,4-Dichlorobenzene-d4	152	12.166	12.169	(1.000)	64734	5.00000	(Q)
$	90 1,2-Dichlorobenzene-d4	152	12.631	12.633	(1.038)	52057	5.11552	5.1(Q)

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111110.B\V5N2849.D
Report Date: 15-Nov-2011 09:35

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111110.B\V5N2849.D
Report Date: 15-Nov-2011 09:35

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2849.D
Lab Smp Id: K2213-04B Client Smp ID: H30X2
Inj Date : 10-NOV-2011 08:52
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-04B,,62892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 30
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

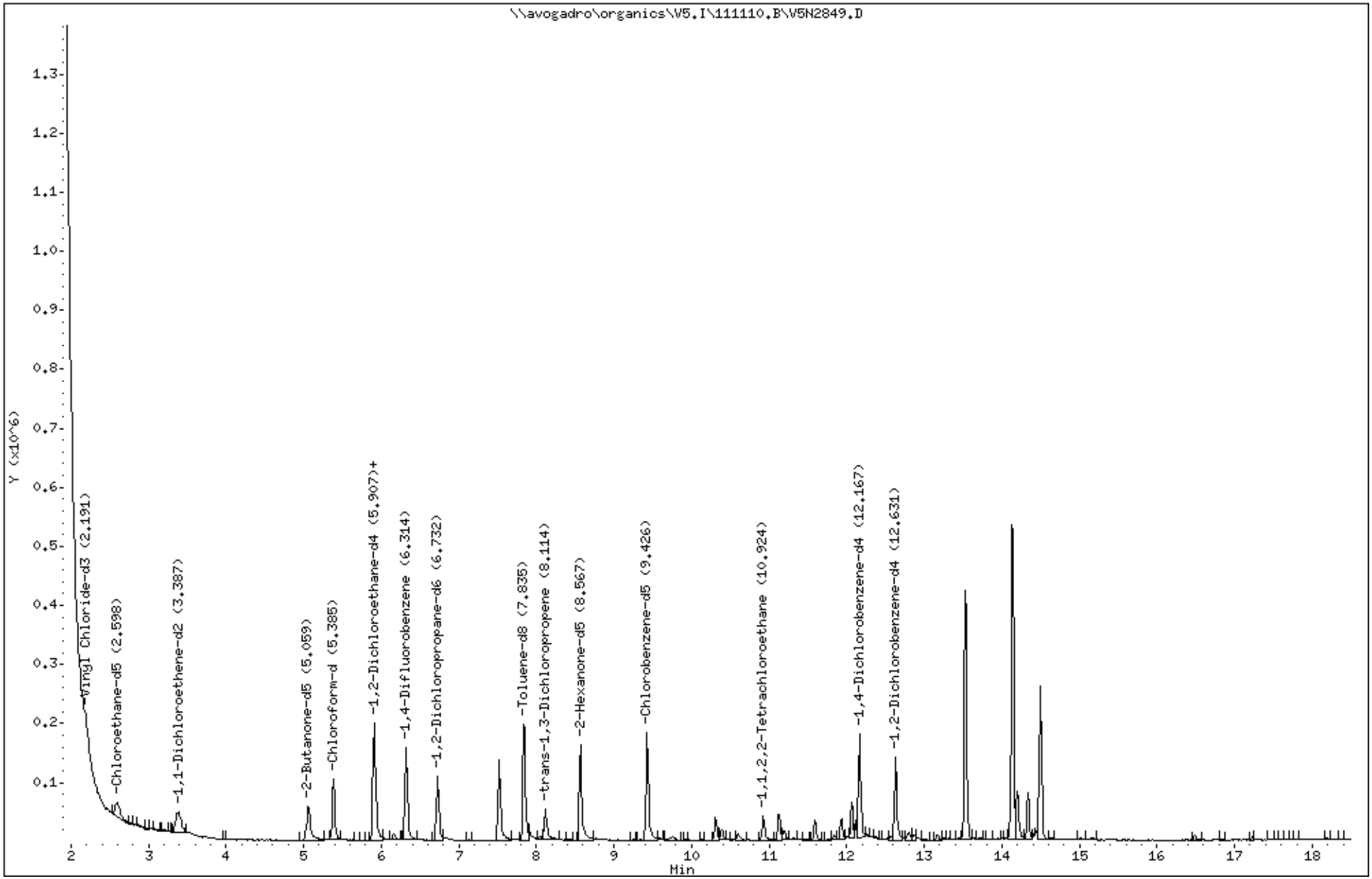
ISTD	RT	AREA	AMOUNT
* 42 Chlorobenzene-d5	9.426	429062	5.000
* 78 1,4-Dichlorobenzene-d4	12.167	394161	5.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Cyclopentanone, 2,5-dimethyl-					CAS #: 4041-09-2		
10.309	90676	1.05667346	1.1	87	NIST2002.L	6411	42
Unknown					CAS #:		
11.122	116011	1.47162237	1.5	0		0	78
Unknown					CAS #:		
11.586	80620	1.02268007	1.0	0		0	78
7-Oxabicyclo[2.2.1]heptane, 1-methyl-4-(					CAS #: 470-67-7		
11.934	78779	0.99932024	1.00	90	NIST2002.L	25723	78
Benzene, 1-methyl-2-(1-methylethyl)-					CAS #: 527-84-4		
12.062	126108	1.59970120	1.6	95	NIST2002.L	14405	78

Data File: \\avogadro\organics\V5.I\111110.B\V5N2849.D
Report Date: 15-Nov-2011 09:35

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
12.805	41498	0.52640644	0.53	0		0	78
Bicyclo[2.2.1]heptan-2-one, 1,3,3-trimet					CAS #: 4695-62-9		
13.525	914821	11.6046438	12	95	NIST2002.L	24107	78
Unknown					CAS #:		
14.129	1180708	14.9774612	15	0		0	78
Unknown					CAS #:		
14.199	230423	2.92294731	2.9	0		0	78
Unknown					CAS #:		
14.338	172073	2.18276907	2.2	0		0	78
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet					CAS #: 464-48-2		
14.501	605466	7.68042377	7.7	98	NIST2002.L	24208	78

Data File: \\avogadro\organics\V5.I\111110.B\V5N2849.D
Date : 10-NOV-2011 08:52
Client ID: H30X2
Instrument: V5.i
Sample Info: 25ML,K2213-04B,,62892
Purge Volume: 25.0
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111110.B\V5N2849.D

Date : 10-NOV-2011 08:52

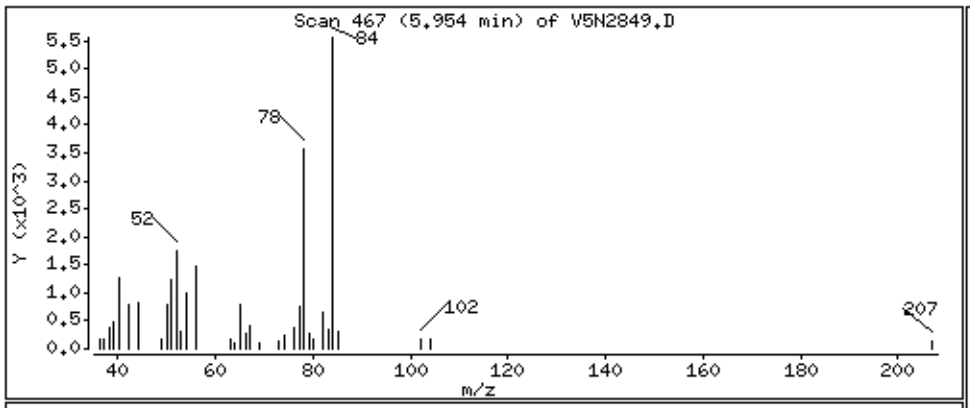
Client ID: H30X2 Instrument: V5.i

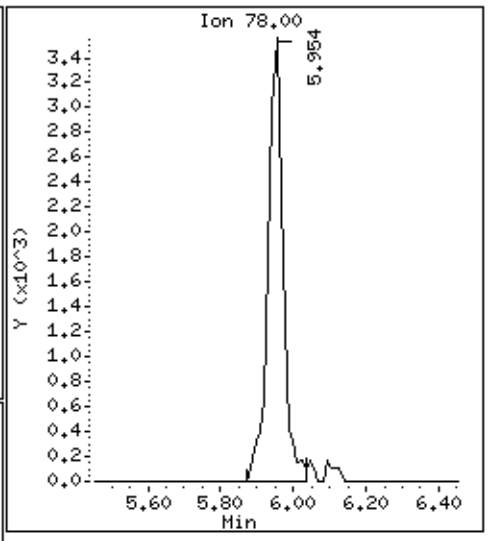
Sample Info: 25ML,K2213-04B,,62892

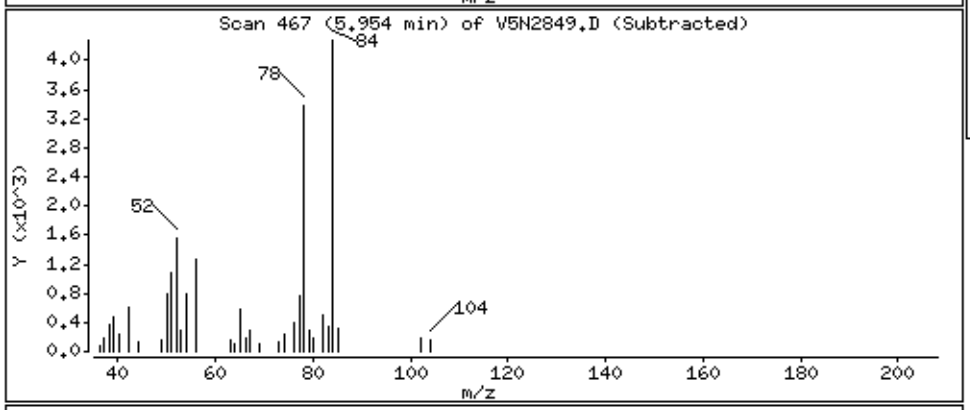
Purge Volume: 25.0 Operator: SRC: LIMS

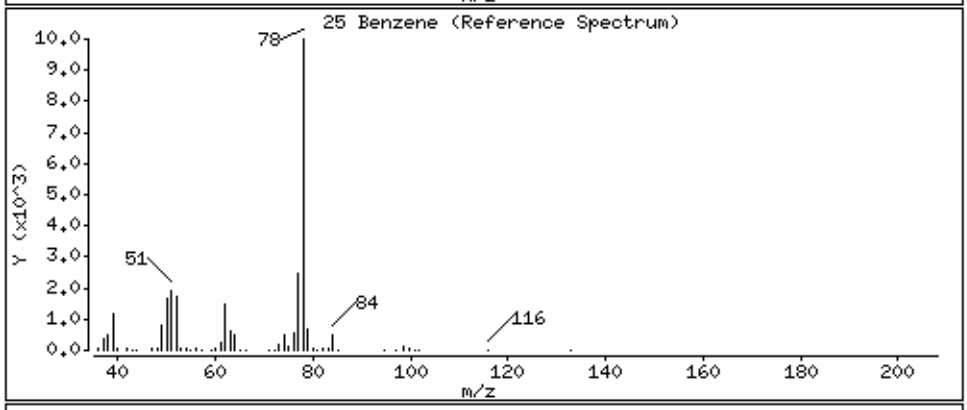
Column phase: DB-624 Column diameter: 0.25

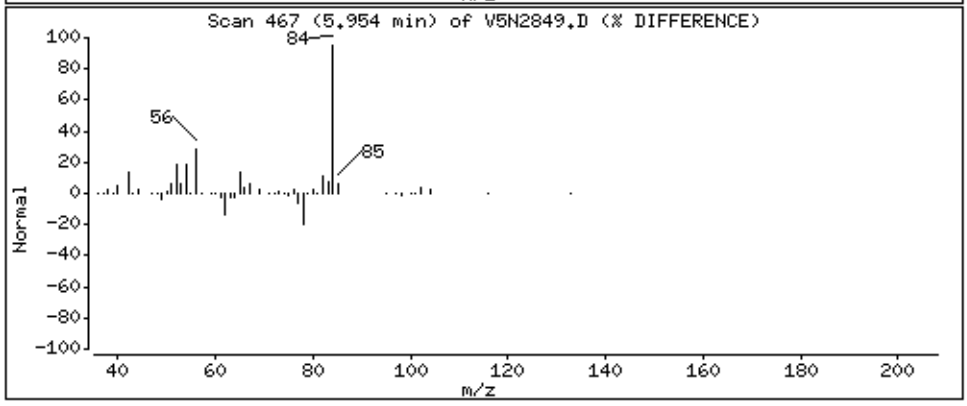
25 Benzene Concentration: 0.22 ug/L











Data File: \\avogadro\organics\V5.I\111110.B\V5N2849.D

Date : 10-NOV-2011 08:52

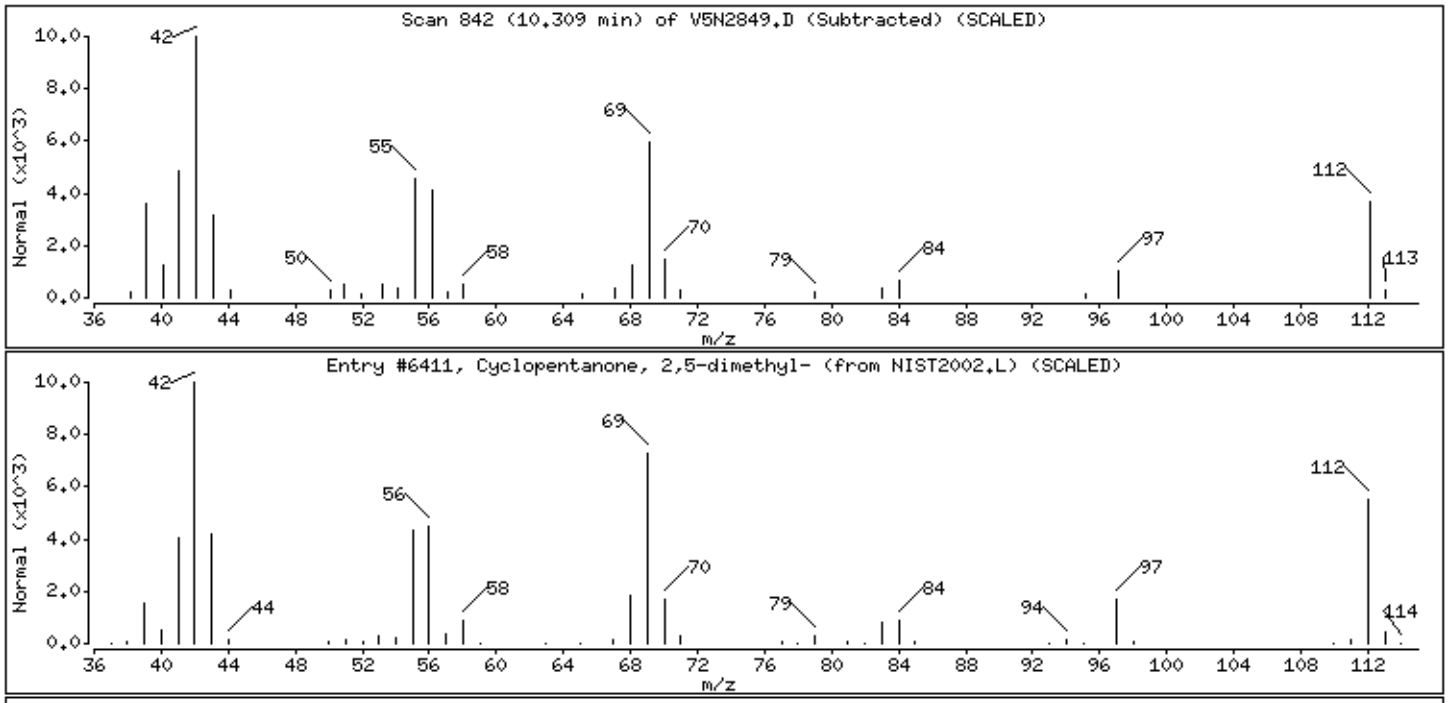
Client ID: H30X2 Instrument: V5.i

Sample Info: 25ML,K2213-04B,,62892

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
Cyclopentanone, 2,5-dimethyl-	4041-09-2	NIST2002.L	6411	87	C7H12O	112



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Date : 10-NOV-2011 08:52

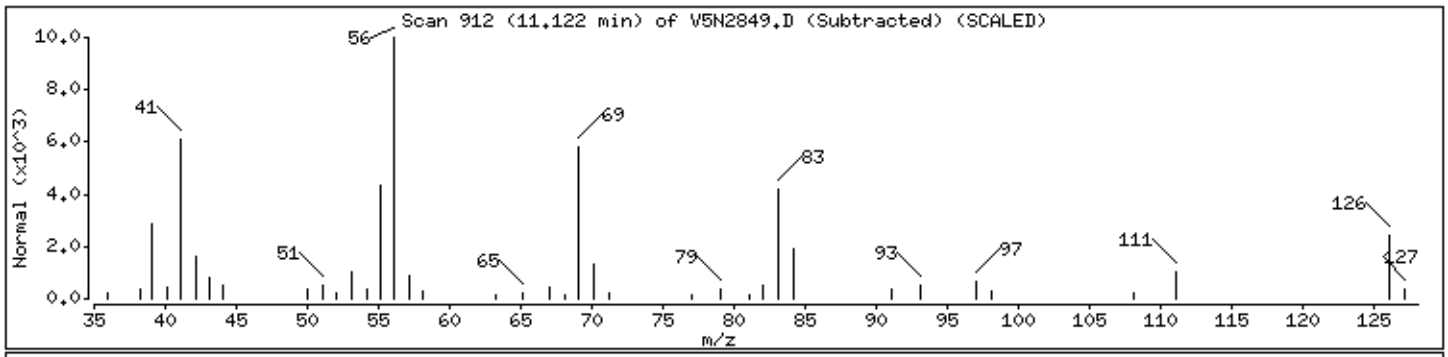
Client ID: H30X2 Instrument: V5.i

Sample Info: 25ML,K2213-04B,,62892

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



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Date : 10-NOV-2011 08:52

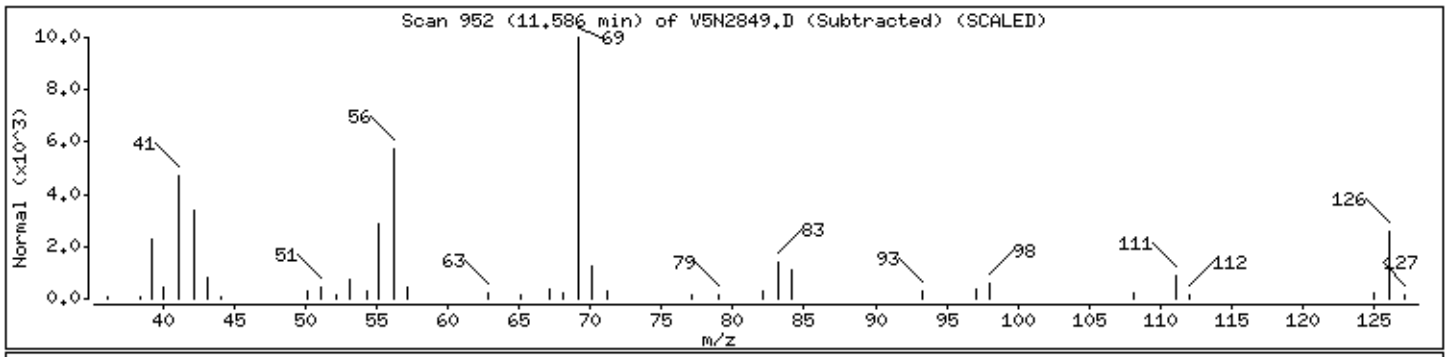
Client ID: H30X2 Instrument: V5.i

Sample Info: 25ML,K2213-04B,,62892

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



Data File: \\avogadro\organics\V5.I\111110.B\V5N2849.D

Date : 10-NOV-2011 08:52

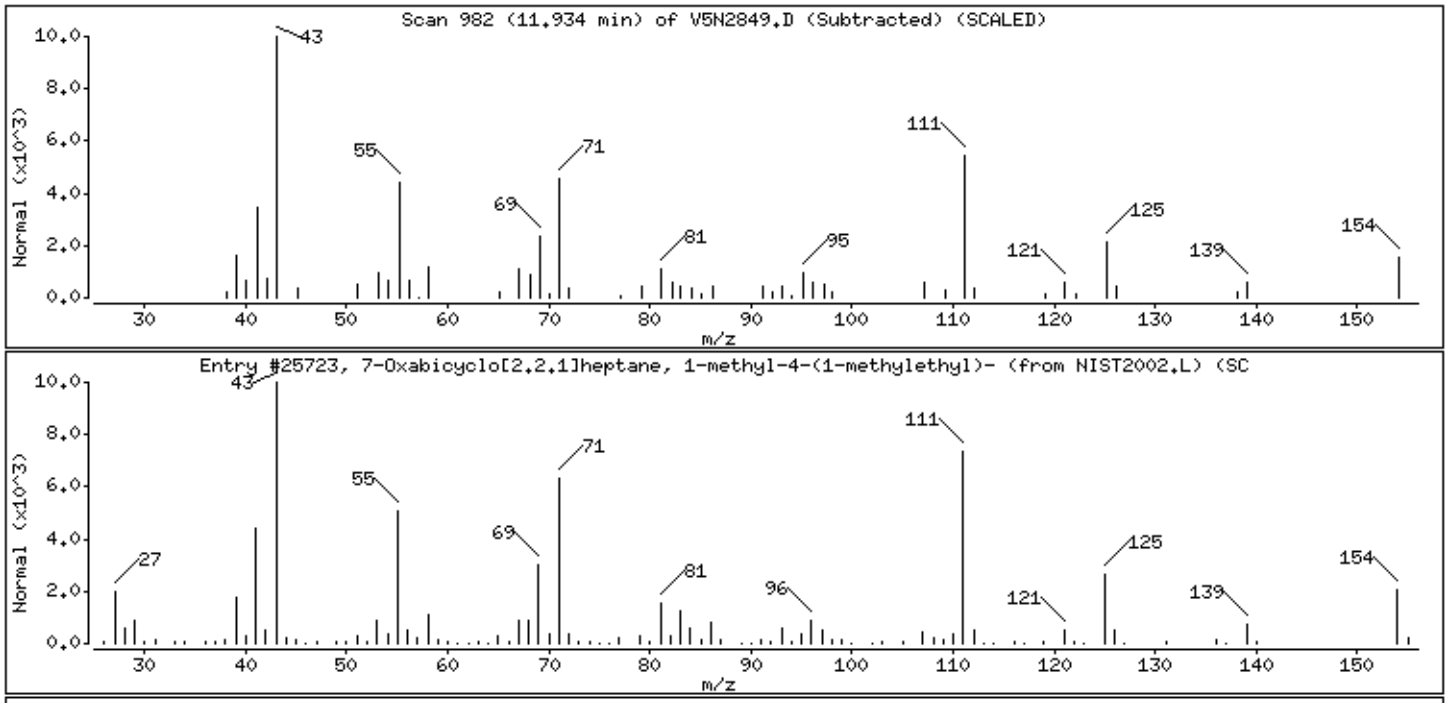
Client ID: H30X2 Instrument: V5.i

Sample Info: 25ML,K2213-04B,,62892

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
7-Oxabicyclo[2.2.1]heptane, 1-methyl-4-(	470-67-7	NIST2002.L	25723	90	C10H18O	154



Data File: \\avogadro\organics\V5.I\111110.B\V5N2849.D

Date : 10-NOV-2011 08:52

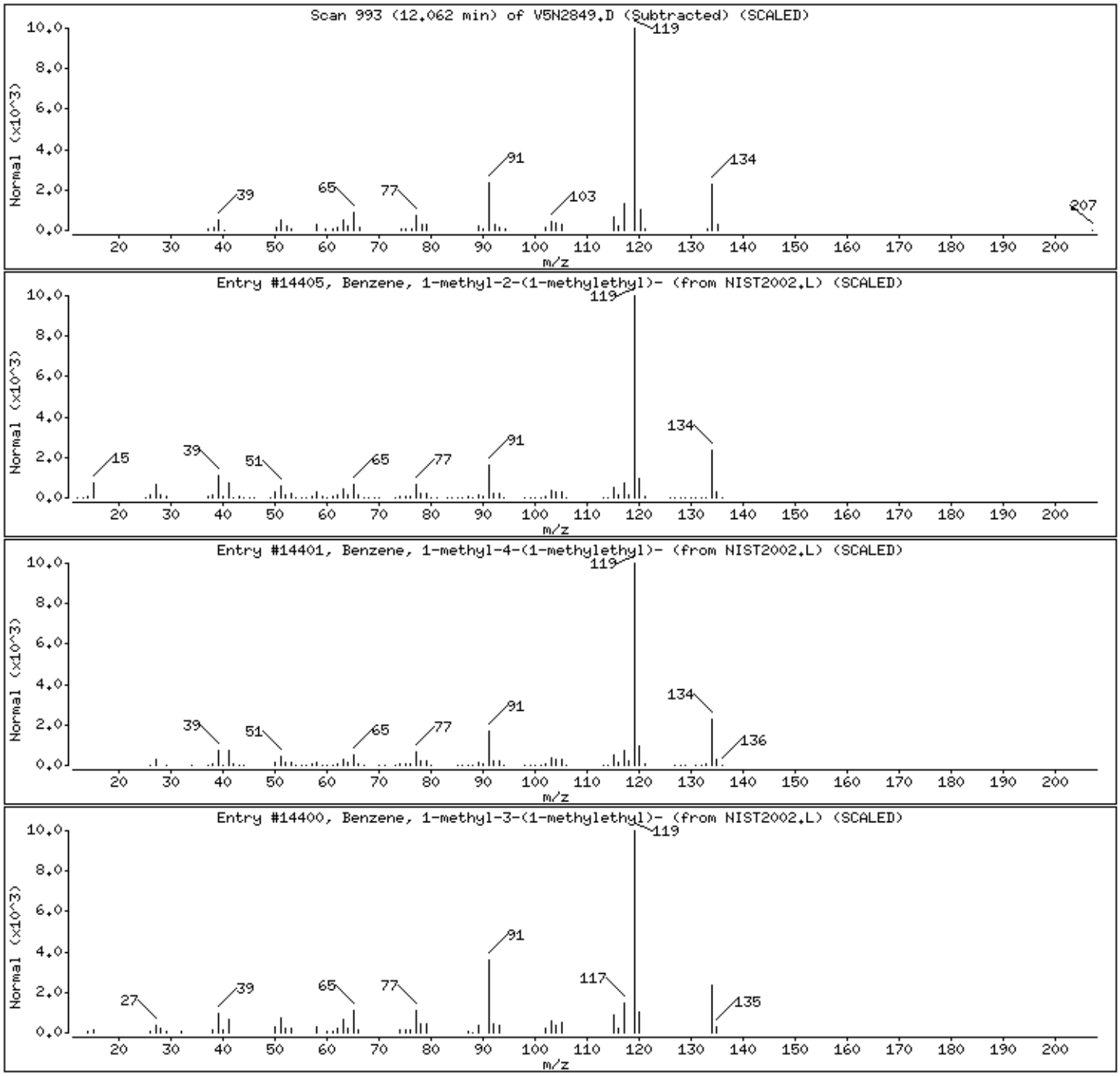
Client ID: H30X2 Instrument: V5.i

Sample Info: 25ML,K2213-04B,,62892

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
Benzene, 1-methyl-2-(1-methylethyl)-	527-84-4	NIST2002.L	14405	95	C10H14	134
Benzene, 1-methyl-4-(1-methylethyl)-	99-87-6	NIST2002.L	14401	95	C10H14	134
Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	NIST2002.L	14400	95	C10H14	134



Data File: \\avogadro\organics\V5.I\111110.B\V5N2849.D

Date : 10-NOV-2011 08:52

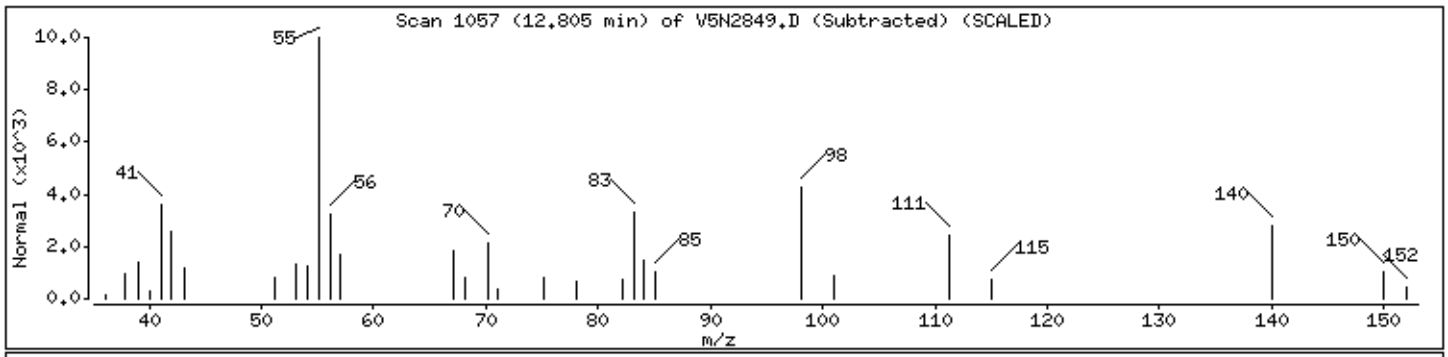
Client ID: H30X2 Instrument: V5.i

Sample Info: 25ML,K2213-04B,,62892

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



Data File: \\avogadro\organics\V5.I\111110.B\V5N2849.D

Date : 10-NOV-2011 08:52

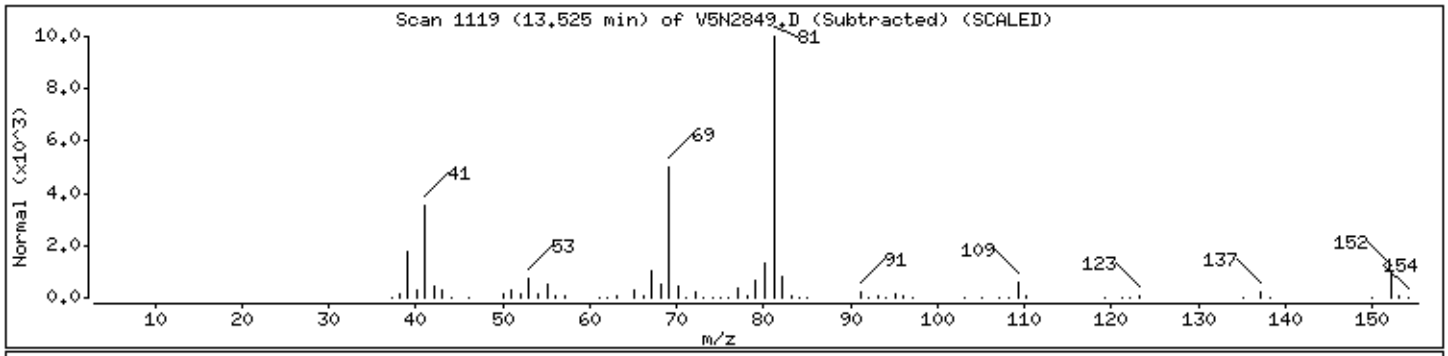
Client ID: H30X2 Instrument: V5.i

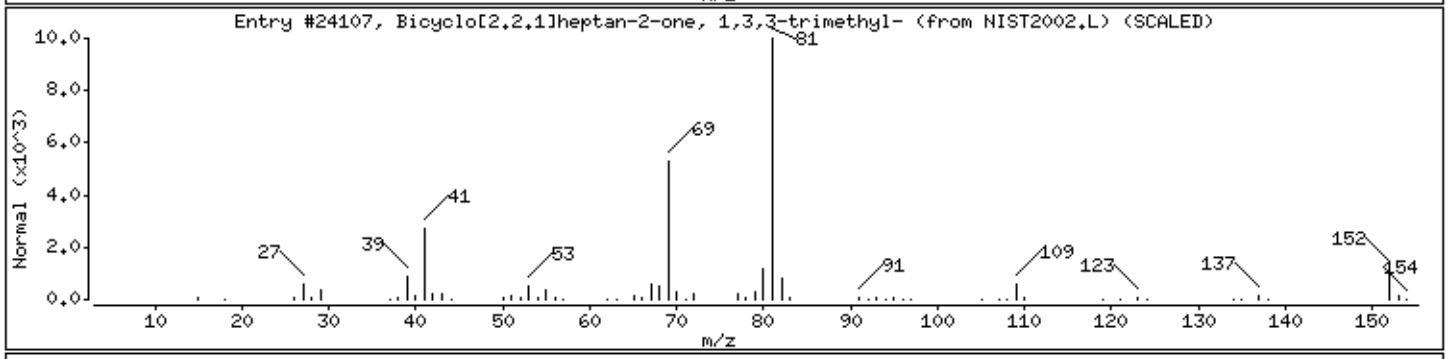
Sample Info: 25ML,K2213-04B,,62892

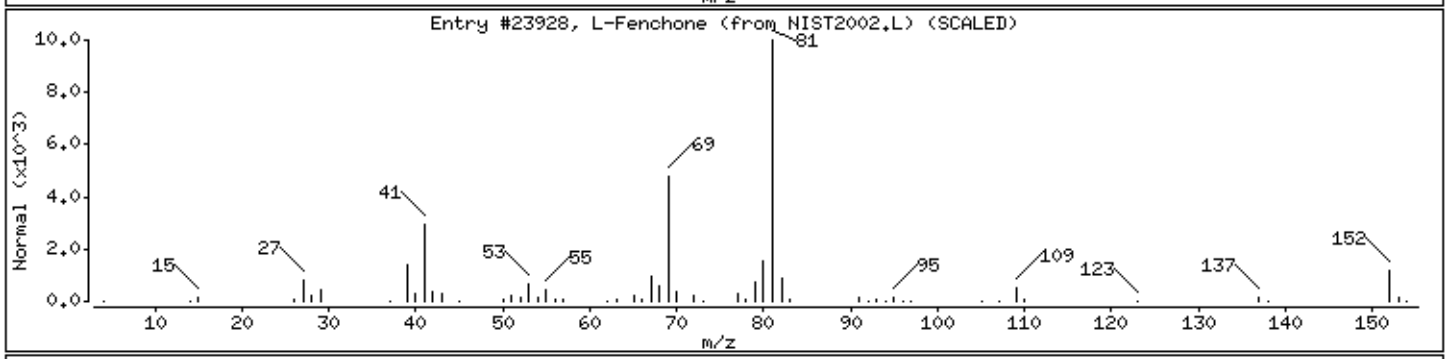
Purge Volume: 25.0 Operator: SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[2.2.1]heptan-2-one, 1,3,3-trimet	4695-62-9	NIST2002.L	24107	95	C10H160	152
L-Fenchone	126-21-6	NIST2002.L	23928	95	C10H160	152







Data File: \\avogadro\organics\V5.I\111110.B\V5N2849.D

Date : 10-NOV-2011 08:52

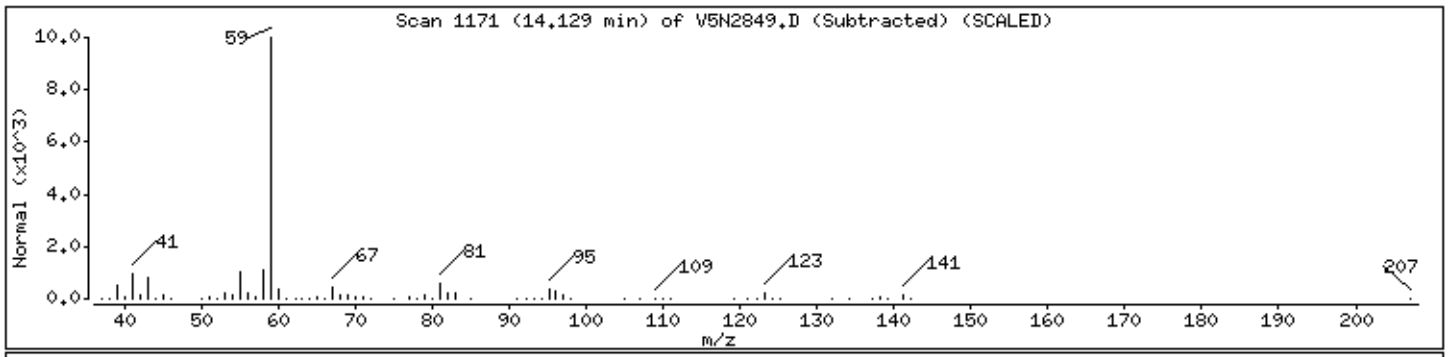
Client ID: H30X2 Instrument: V5.i

Sample Info: 25ML,K2213-04B,,62892

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



Data File: \\avogadro\organics\V5.I\111110.B\V5N2849.D

Date : 10-NOV-2011 08:52

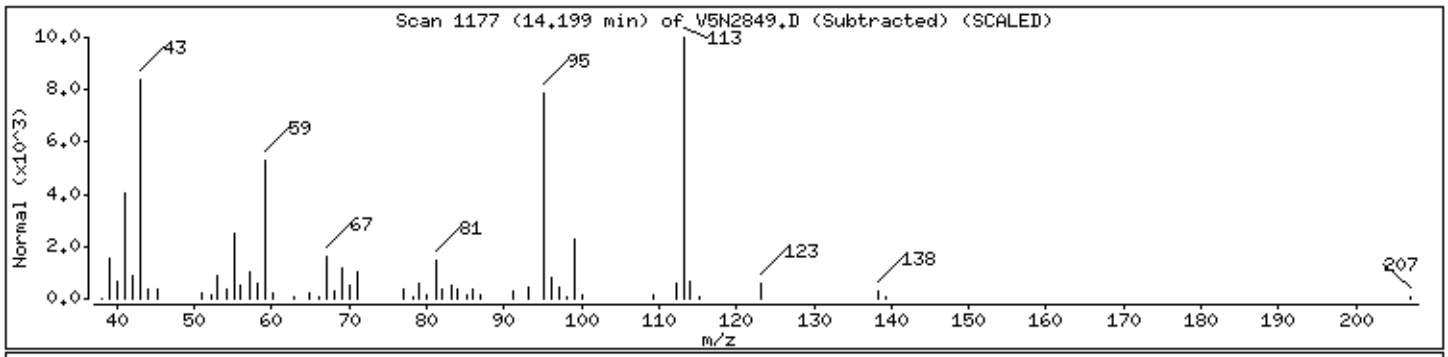
Client ID: H30X2 Instrument: V5.i

Sample Info: 25ML,K2213-04B,,62892

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



Data File: \\avogadro\organics\V5.I\111110.B\V5N2849.D

Date : 10-NOV-2011 08:52

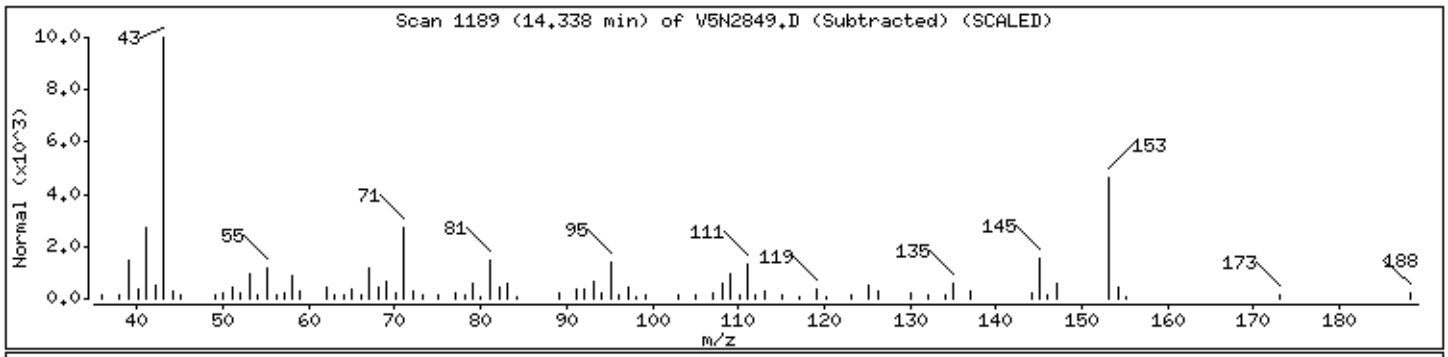
Client ID: H30X2 Instrument: V5.i

Sample Info: 25ML,K2213-04B,,62892

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



Data File: \\avogadro\organics\V5.I\111110.B\V5N2849.D

Date : 10-NOV-2011 08:52

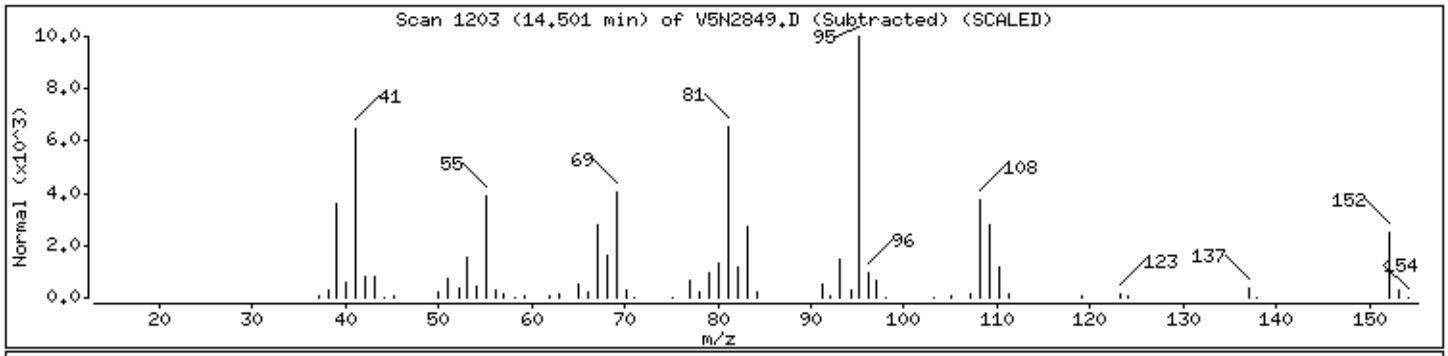
Client ID: H30X2 Instrument: V5.i

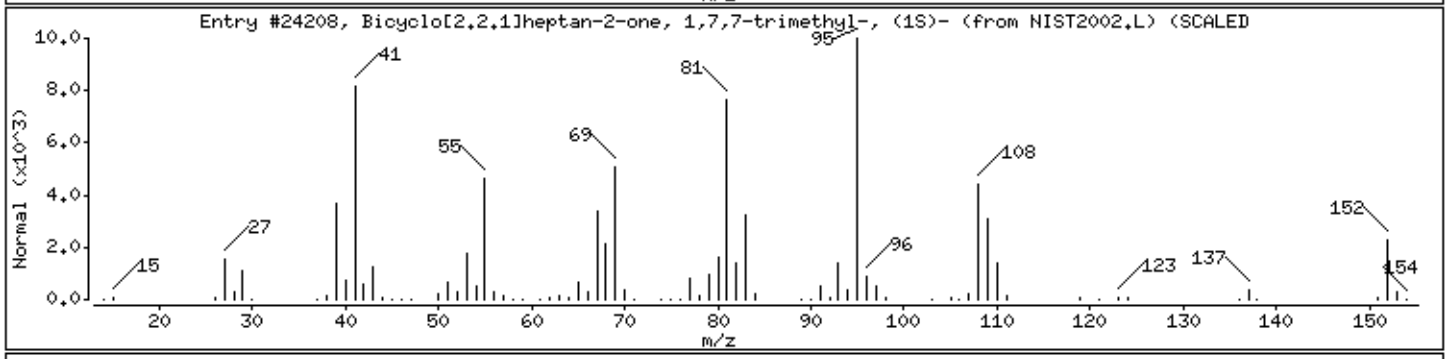
Sample Info: 25ML,K2213-04B,,62892

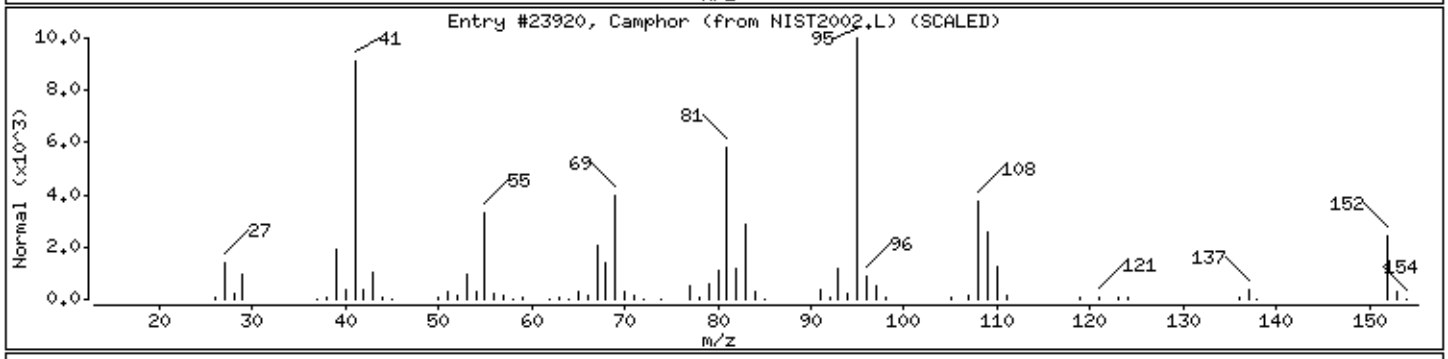
Purge Volume: 25.0 Operator: SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet	464-48-2	NIST2002.L	24208	98	C10H16O	152
Camphor	76-22-2	NIST2002.L	23920	98	C10H16O	152







1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30X3

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-05A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2853.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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	0.20	J
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.32	J
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	0.21	J
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.

H30X3

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-05A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2853.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30X3

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-05A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2853.D

Level: (TRACE or LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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	3.393	2.2	J
02	535-77-3	Benzene, 1-methyl-3-(1-methy	12.126	4.7	NJ
03	464-48-2	Bicyclo[2.2.1]heptan-2-one,	14.495	2.9	NJ
	E96679[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111110.B\V5N2853.D
Report Date: 15-Nov-2011 09:35

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2853.D
Lab Smp Id: K2213-05A Client Smp ID: H30X3
Inj Date : 10-NOV-2011 10:45
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-05A,,62892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 34
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	2.208	2.216	(0.350)	127464	5.90103	5.9
$ 80 Chloroethane-d5	69	2.615	2.600	(0.414)	84913	5.79005	5.8
$ 81 1,1-Dichloroethene-d2	65	3.370	3.378	(0.533)	28087	5.02093	5.0(Q)
9 Acetone	43	3.463	3.447	(0.548)	5081	2.70283	2.7
10 Carbon Disulfide	76	3.625	3.622	(0.574)	13147	0.20401	0.20
12 Methylene Chloride	84	3.857	3.854	(0.610)	4931	0.31627	0.32
$ 82 2-Butanone-d5	46	5.065	5.062	(0.802)	137265	52.9806	53(AQ)
$ 83 Chloroform-d	84	5.390	5.387	(0.853)	120202	4.64692	4.6(Q)
19 Chloroform	83	5.402	5.410	(0.855)	5563	0.20694	0.21(Q)
$ 23 1,2-Dichloroethane-d4	65	5.901	5.898	(0.934)	48072	4.72557	4.7(Q)
$ 84 Benzene-d6	84	5.913	5.909	(0.627)	245261	4.83186	4.8
* 26 1,4-Difluorobenzene	114	6.319	6.327	(1.000)	237434	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.726	6.734	(0.713)	78752	4.46980	4.5
$ 33 Toluene-d8	98	7.841	7.837	(0.831)	215129	4.72276	4.7
$ 86 trans-1,3-Dichloropropene-d4	79	8.119	8.116	(0.861)	58144	5.75937	5.8
$ 87 2-Hexanone-d5	63	8.561	8.569	(0.908)	91444	52.2997	52(AQ)
* 42 Chlorobenzene-d5	117	9.432	9.428	(1.000)	173051	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.930	10.926	(1.159)	33447	5.12767	5.1
* 78 1,4-Dichlorobenzene-d4	152	12.172	12.169	(1.000)	73067	5.00000	(Q)
$ 90 1,2-Dichlorobenzene-d4	152	12.625	12.633	(1.037)	55625	4.84275	4.8(Q)

Data File: \\avogadro\organics\V5.I\111110.B\V5N2853.D
Report Date: 15-Nov-2011 09:35

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\111110.B\V5N2853.D
Report Date: 15-Nov-2011 09:35

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2853.D
Lab Smp Id: K2213-05A Client Smp ID: H30X3
Inj Date : 10-NOV-2011 10:45
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-05A,,62892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 34
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

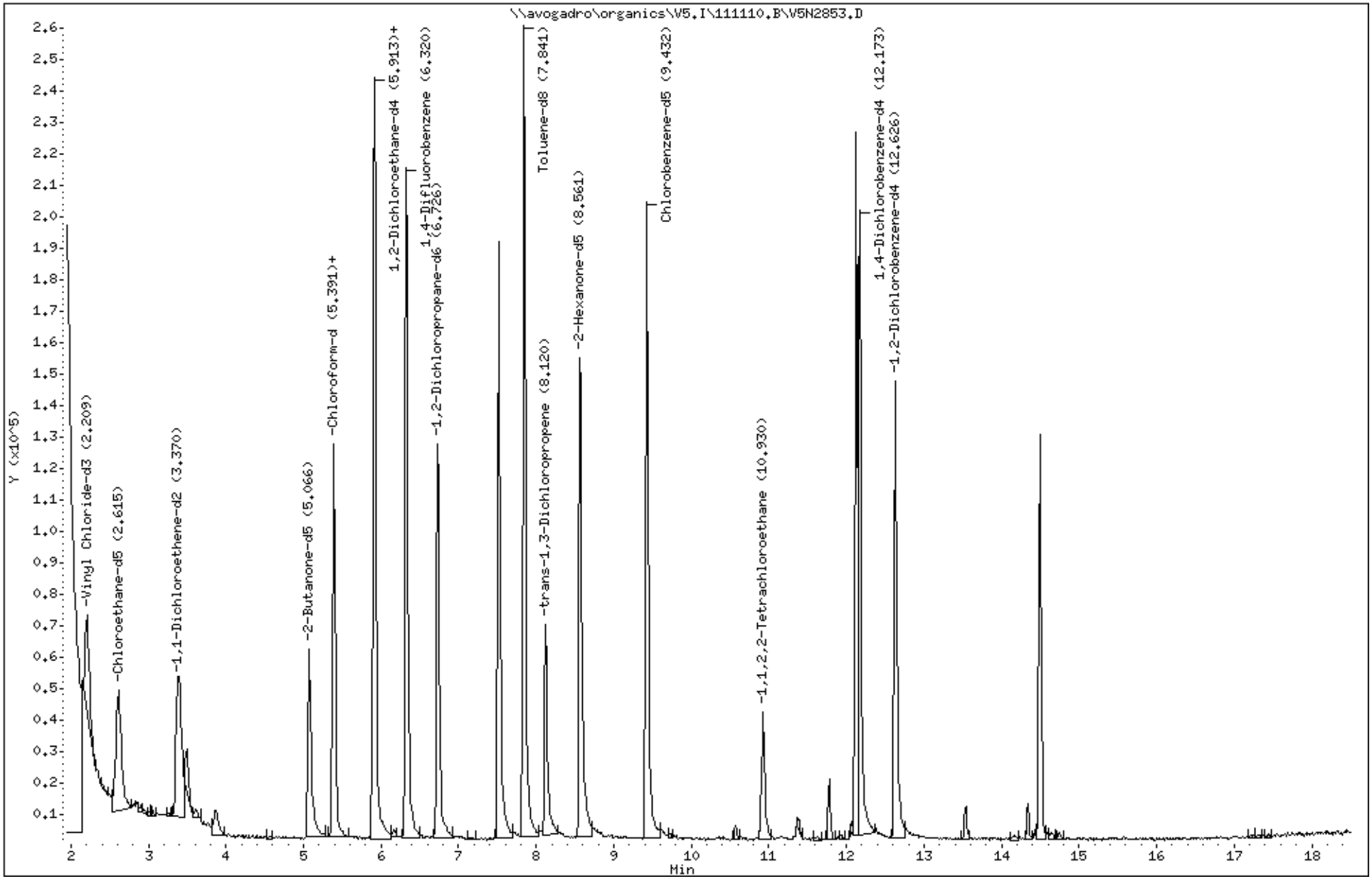
Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

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	530287	5.000
* 78 1,4-Dichlorobenzene-d4	12.173	496334	5.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
3.393	232346	2.19075725	2.2	0		0	26
Benzene, 1-methyl-3-(1-methylethyl)-				CAS #: 535-77-3			
12.126	468446	4.71905286	4.7	91	NIST2002.L	14397	78
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet				CAS #: 464-48-2			
14.495	292148	2.94304947	2.9	98	NIST2002.L	24202	78

Data File: \\avogadro\organics\V5.I\111110.B\V5N2853.D
Date : 10-NOV-2011 10:45
Client ID: H30X3
Instrument: V5.i
Sample Info: 25ML,K2213-05A,,62892
Purge Volume: 25.0
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



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Date : 10-NOV-2011 10:45

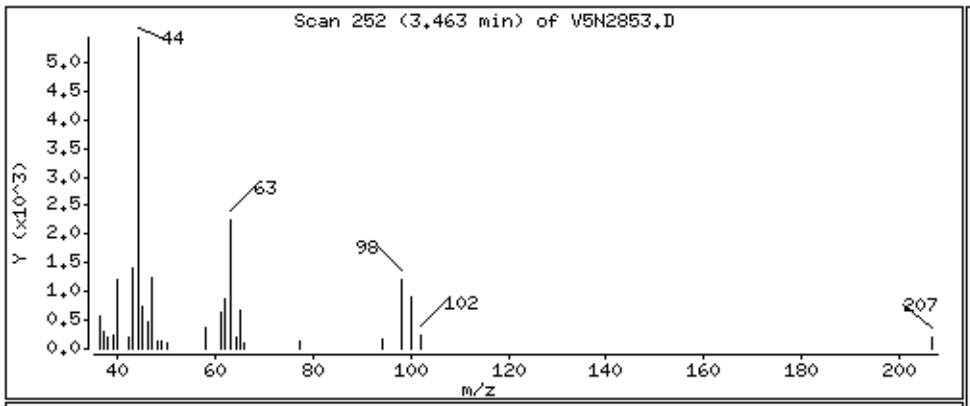
Client ID: H30X3 Instrument: V5.i

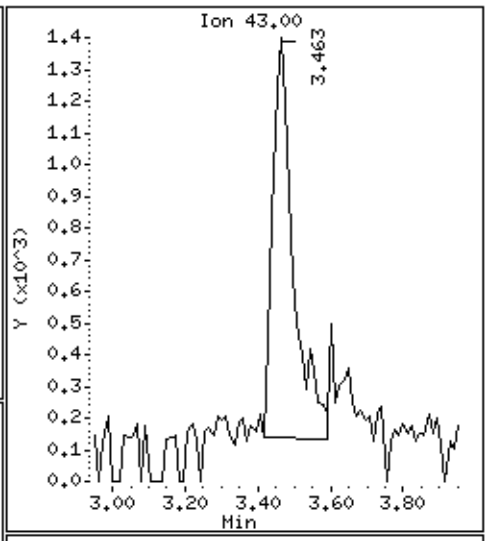
Sample Info: 25ML,K2213-05A,,62892

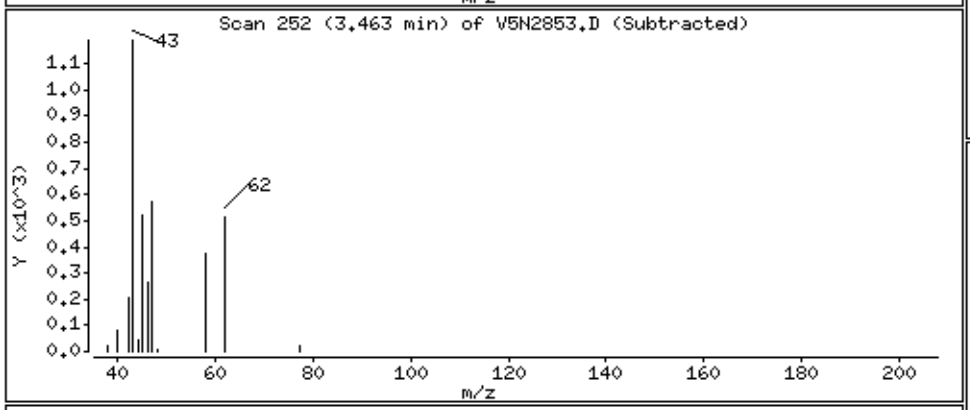
Purge Volume: 25.0 Operator: SRC: LIMS

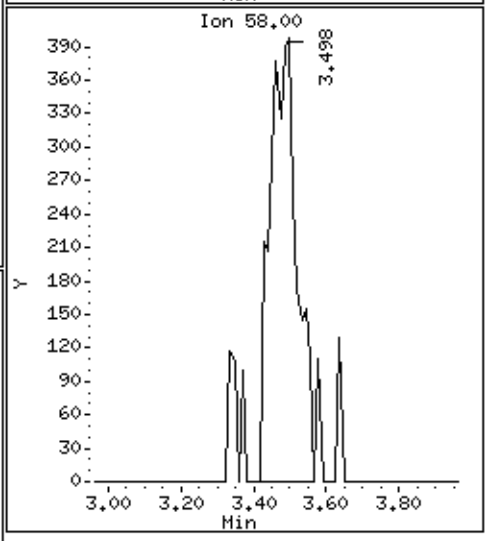
Column phase: DB-624 Column diameter: 0.25

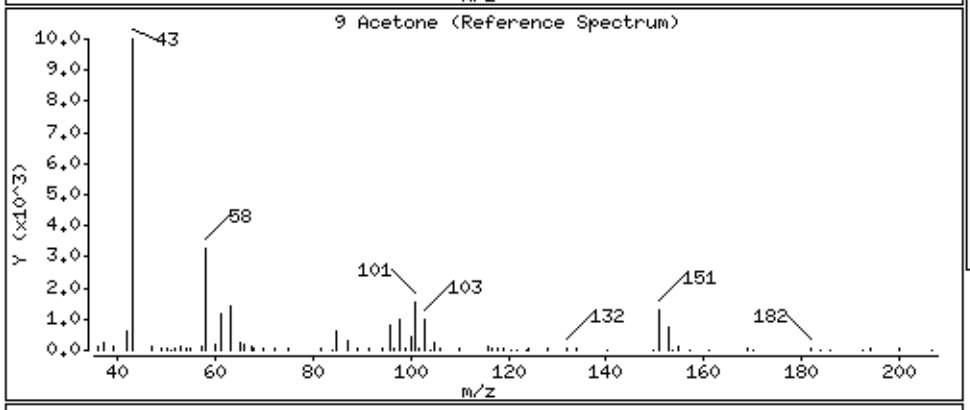
9 Acetone Concentration: 2.7 ug/L

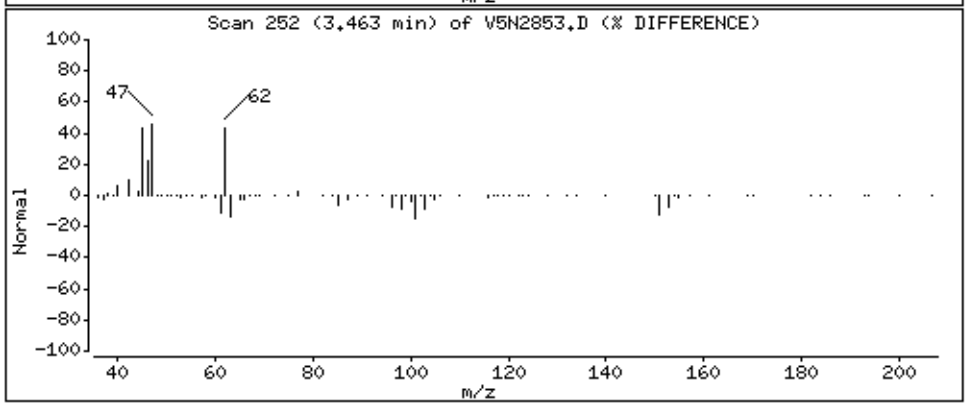












Data File: \\avogadro\organics\V5.I\111110.B\V5N2853.D

Date : 10-NOV-2011 10:45

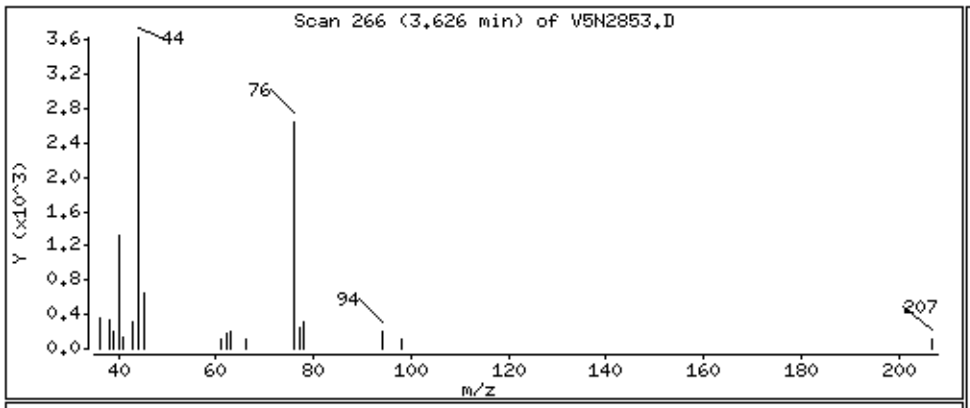
Client ID: H30X3 Instrument: V5.i

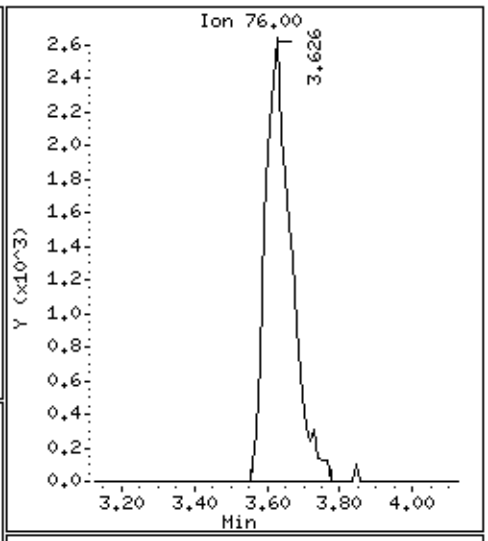
Sample Info: 25ML,K2213-05A,,62892

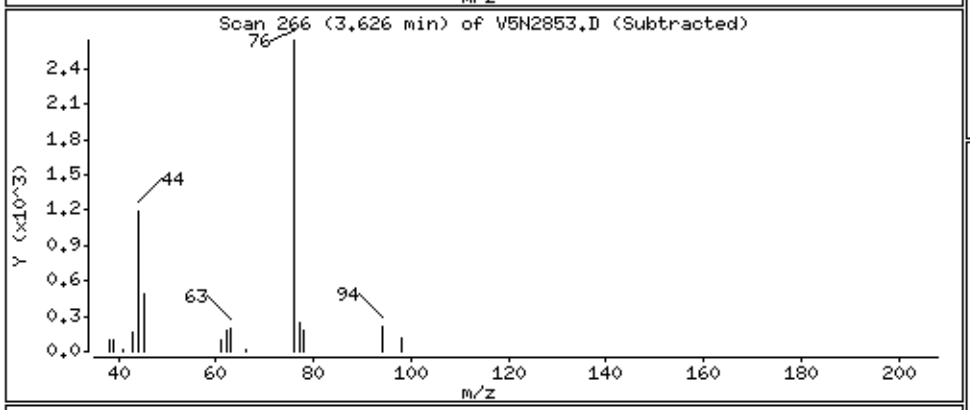
Purge Volume: 25.0 Operator: SRC: LIMS

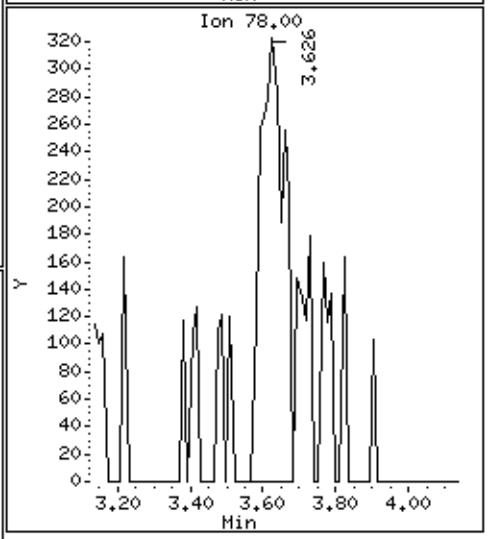
Column phase: DB-624 Column diameter: 0.25

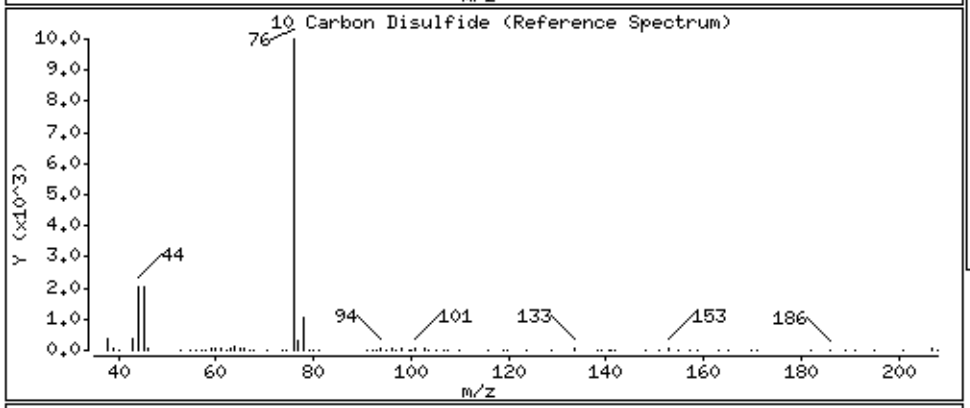
10 Carbon Disulfide Concentration: 0.20 ug/L

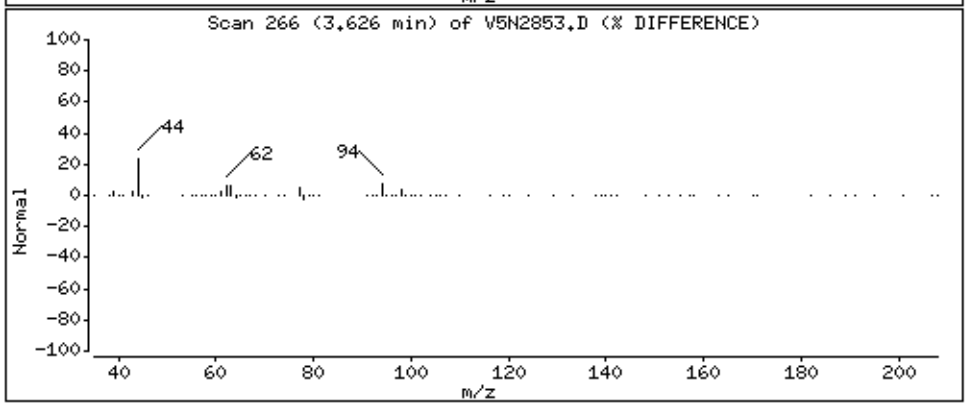












Data File: \\avogadro\organics\V5.I\111110.B\V5N2853.D

Date : 10-NOV-2011 10:45

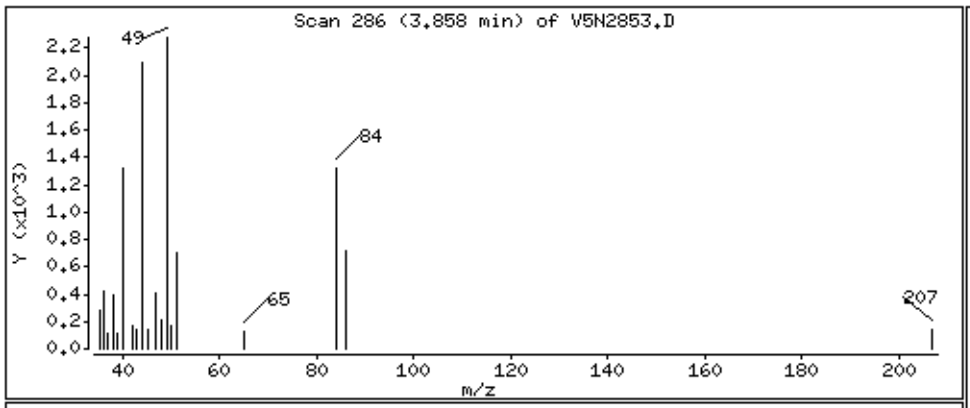
Client ID: H30X3 Instrument: V5.i

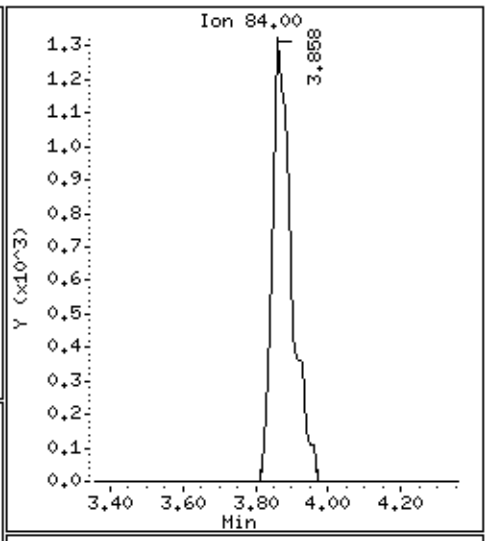
Sample Info: 25ML,K2213-05A,,62892

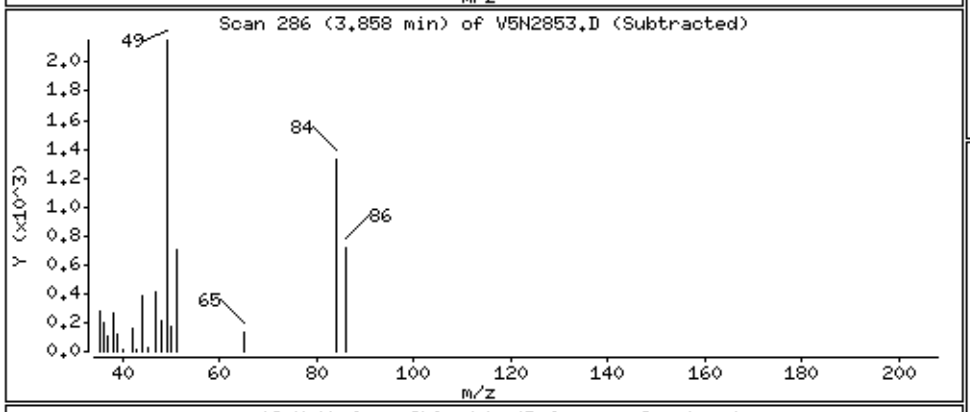
Purge Volume: 25.0 Operator: SRC: LIMS

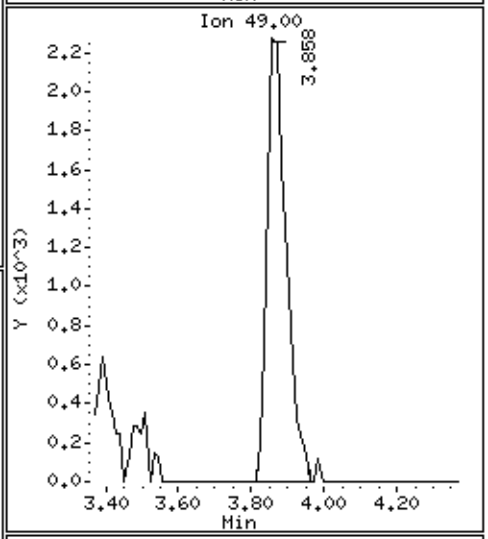
Column phase: DB-624 Column diameter: 0.25

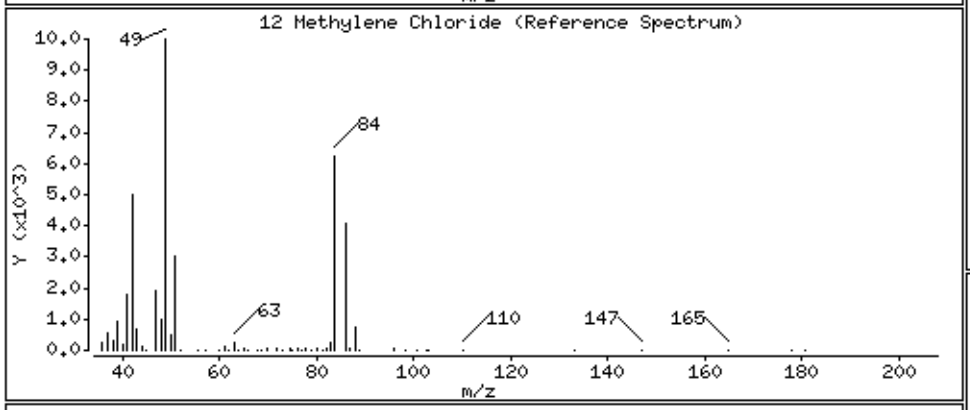
12 Methylene Chloride Concentration: 0.32 ug/L

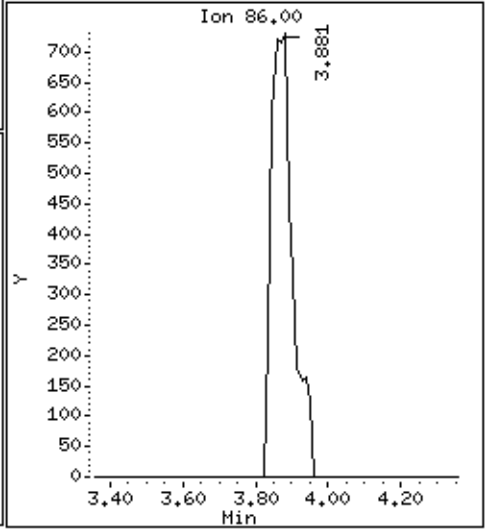


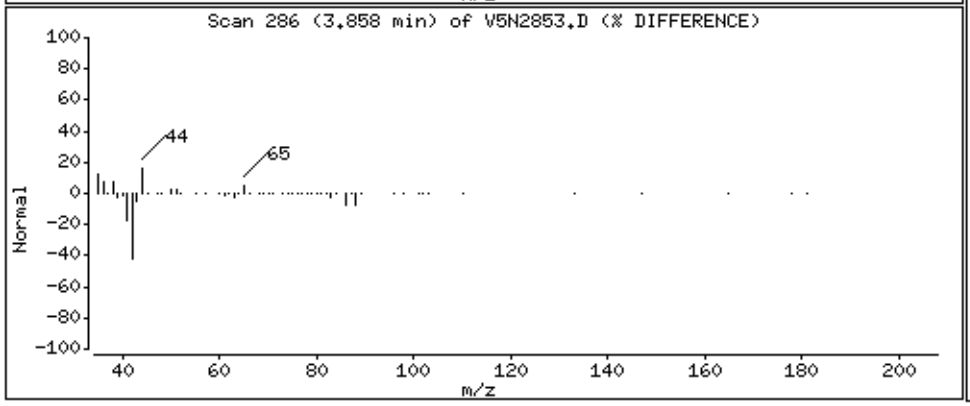












Data File: \\avogadro\organics\V5.I\111110.B\V5N2853.D

Date : 10-NOV-2011 10:45

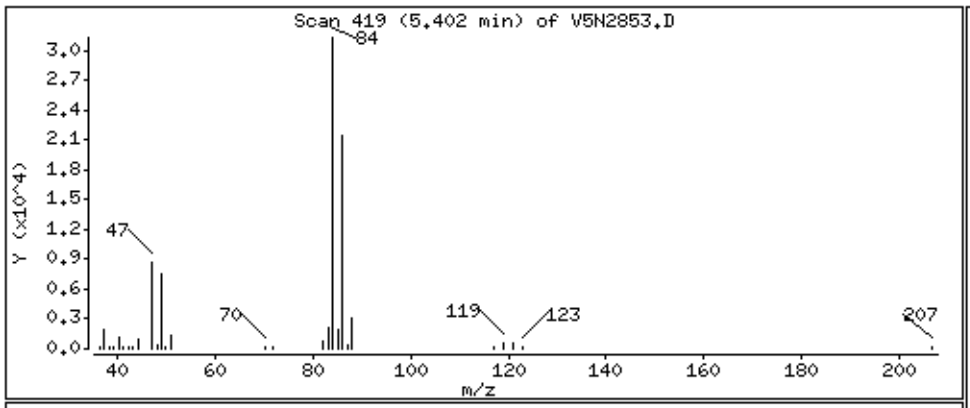
Client ID: H30X3 Instrument: V5.i

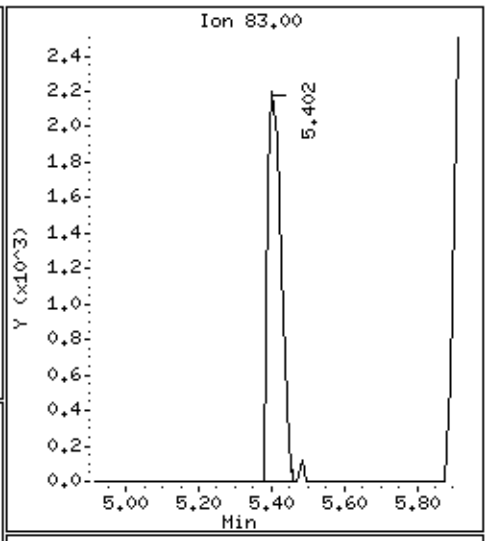
Sample Info: 25ML,K2213-05A,,62892

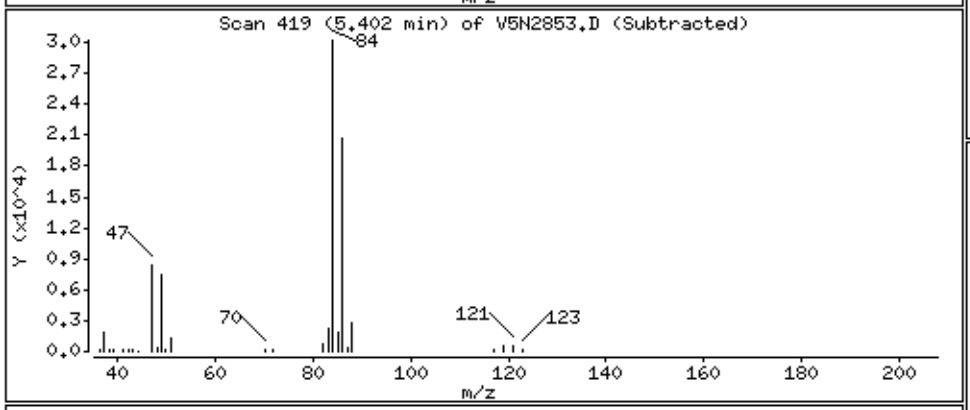
Purge Volume: 25.0 Operator: SRC: LIMS

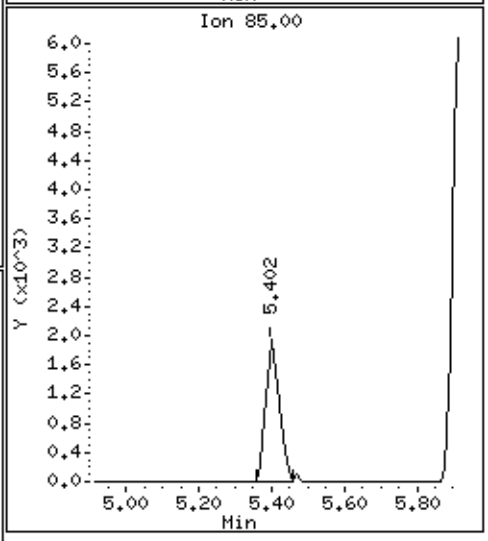
Column phase: DB-624 Column diameter: 0.25

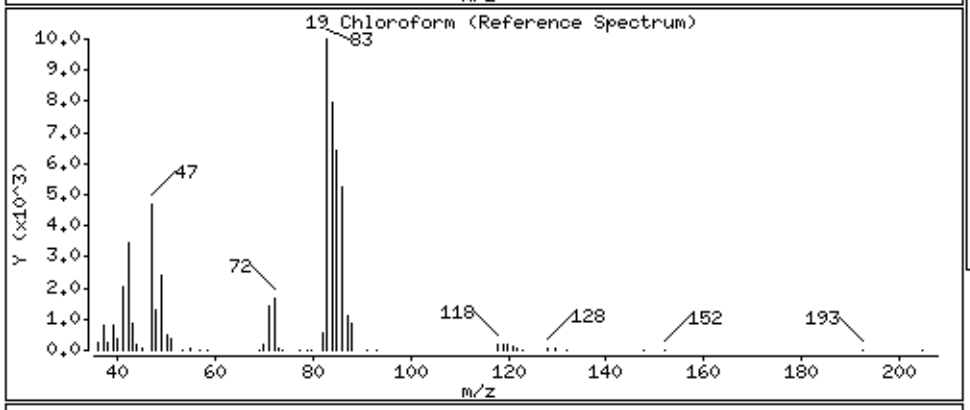
19 Chloroform Concentration: 0.21 ug/L

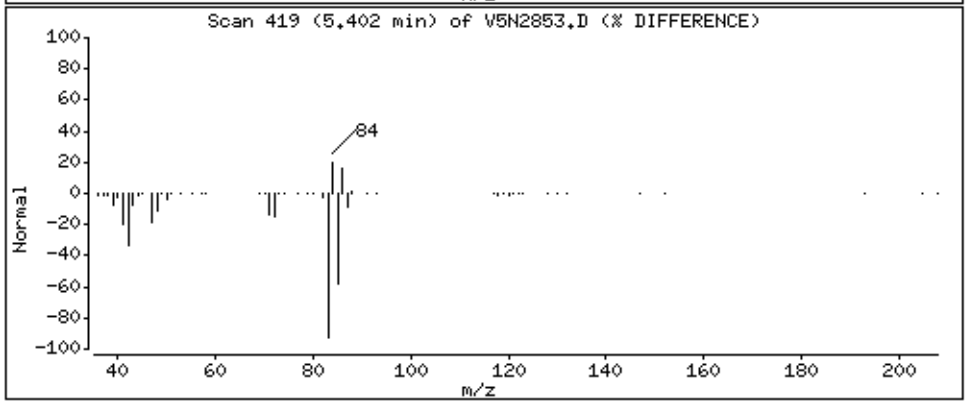












Data File: \\avogadro\organics\V5.I\111110.B\V5N2853.D

Date : 10-NOV-2011 10:45

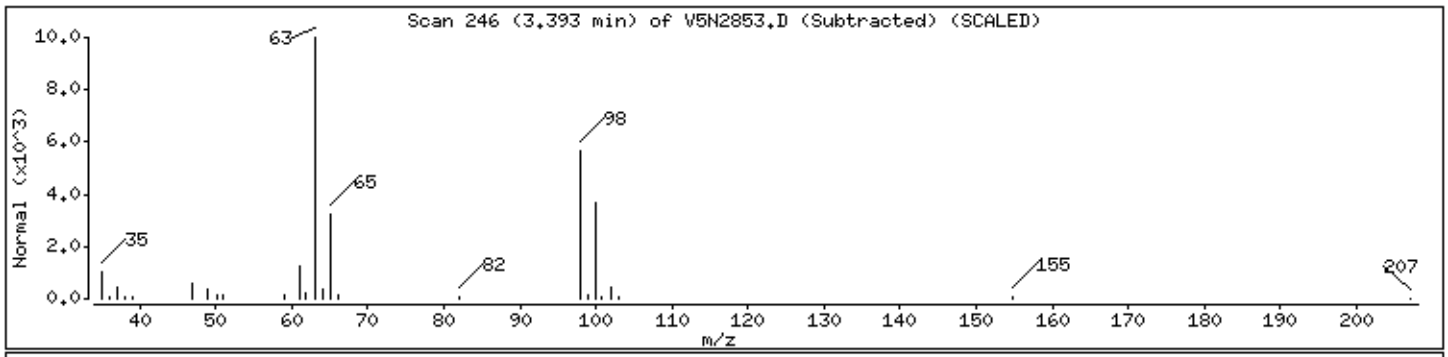
Client ID: H30X3 Instrument: V5.i

Sample Info: 25ML,K2213-05A,,62892

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



Data File: \\avogadro\organics\V5.I\111110.B\V5N2853.D

Date : 10-NOV-2011 10:45

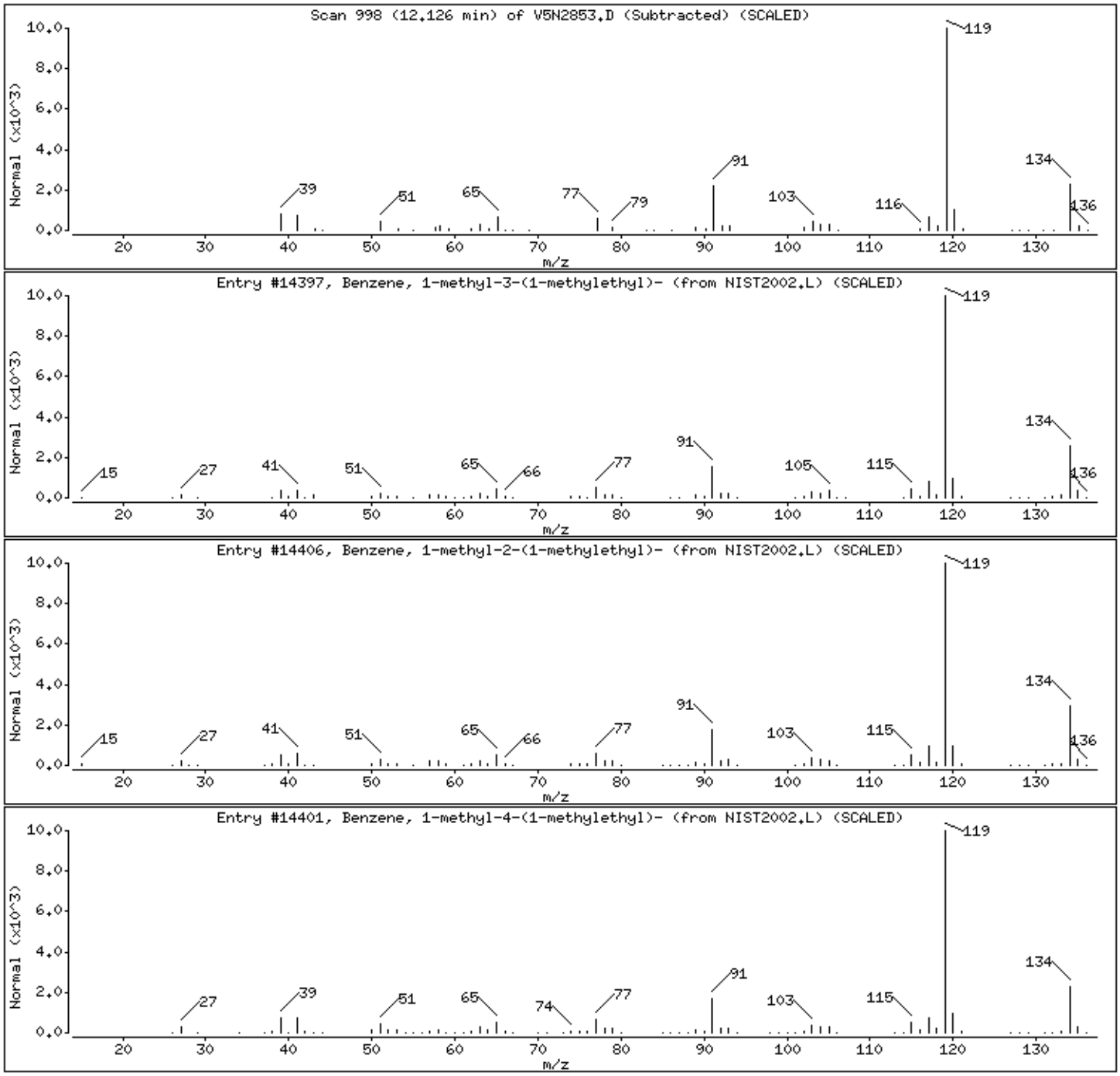
Client ID: H30X3 Instrument: V5.i

Sample Info: 25ML,K2213-05A,,62892

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
Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	NIST2002.L	14397	91	C10H14	134
Benzene, 1-methyl-2-(1-methylethyl)-	527-84-4	NIST2002.L	14406	91	C10H14	134
Benzene, 1-methyl-4-(1-methylethyl)-	99-87-6	NIST2002.L	14401	91	C10H14	134



Data File: \\avogadro\organics\V5.I\111110.B\V5N2853.D

Date : 10-NOV-2011 10:45

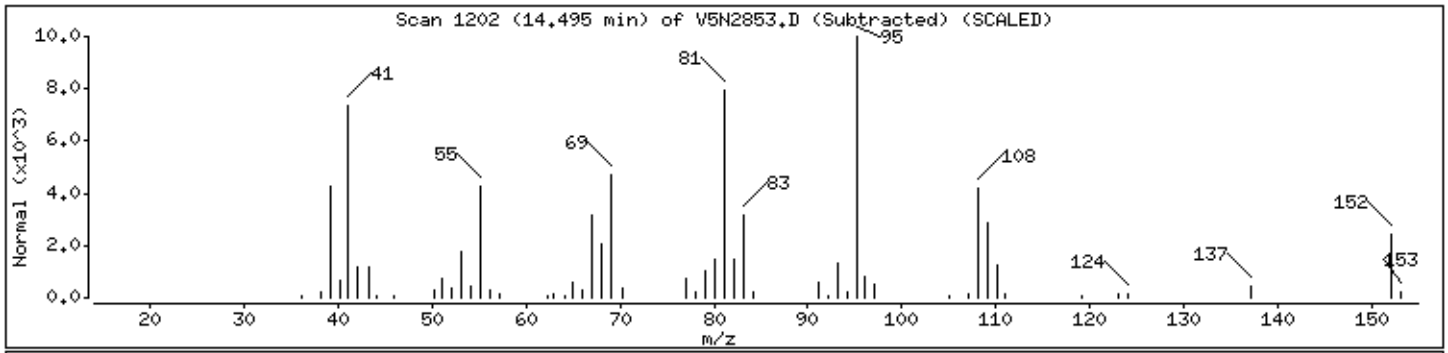
Client ID: H30X3 Instrument: V5.i

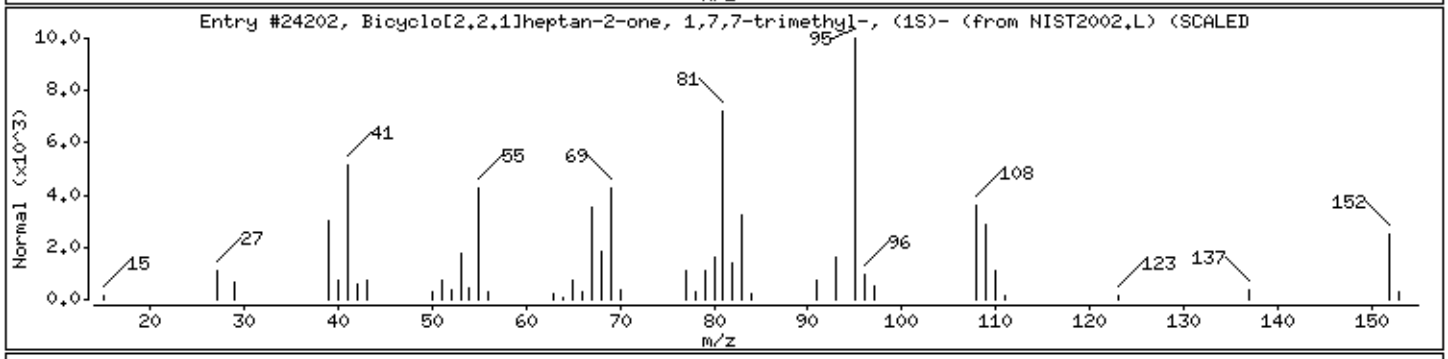
Sample Info: 25ML,K2213-05A,,62892

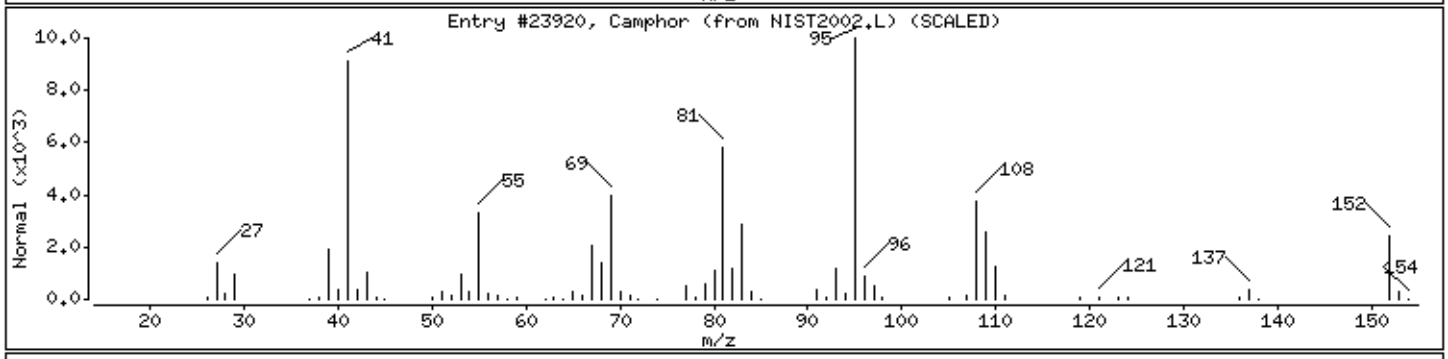
Purge Volume: 25.0 Operator: SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet	464-48-2	NIST2002.L	24202	98	C10H16O	152
Camphor	76-22-2	NIST2002.L	23920	96	C10H16O	152







1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30X4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-01B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2846.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 4.0

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	2.0	U
74-87-3	Chloromethane	2.0	U
75-01-4	Vinyl chloride	2.0	U
74-83-9	Bromomethane	2.0	U
75-00-3	Chloroethane	2.0	U
75-69-4	Trichlorofluoromethane	2.0	U
75-35-4	1,1-Dichloroethene	2.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2.0	U
67-64-1	Acetone	38	
75-15-0	Carbon disulfide	2.0	U
79-20-9	Methyl acetate	2.0	U
75-09-2	Methylene chloride	2.0	U
156-60-5	trans-1,2-Dichloroethene	2.0	U
1634-04-4	Methyl tert-butyl ether	2.0	U
75-34-3	1,1-Dichloroethane	2.0	U
156-59-2	cis-1,2-Dichloroethene	2.0	U
78-93-3	2-Butanone	20	U
74-97-5	Bromochloromethane	2.0	U
67-66-3	Chloroform	2.0	U
71-55-6	1,1,1-Trichloroethane	2.0	U
110-82-7	Cyclohexane	3.6	
56-23-5	Carbon tetrachloride	2.0	U
71-43-2	Benzene	1.3	J
107-06-2	1,2-Dichloroethane	2.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30X4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-01B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2846.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 4.0

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	2.0	U
108-87-2	Methylcyclohexane	2.2	
78-87-5	1,2-Dichloropropane	2.0	U
75-27-4	Bromodichloromethane	2.0	U
10061-01-5	cis-1,3-Dichloropropene	2.0	U
108-10-1	4-Methyl-2-pentanone	20	U
108-88-3	Toluene	1.4	J
10061-02-6	trans-1,3-Dichloropropene	2.0	U
79-00-5	1,1,2-Trichloroethane	2.0	U
127-18-4	Tetrachloroethene	2.0	U
591-78-6	2-Hexanone	20	U
124-48-1	Dibromochloromethane	2.0	U
106-93-4	1,2-Dibromoethane	2.0	U
108-90-7	Chlorobenzene	50	
100-41-4	Ethylbenzene	1.7	J
179601-23-1	m,p-Xylene	42	
95-47-6	o-Xylene	16	
100-42-5	Styrene	2.0	U
75-25-2	Bromoform	2.0	U
98-82-8	Isopropylbenzene	2.0	
79-34-5	1,1,2,2-Tetrachloroethane	2.0	U
541-73-1	1,3-Dichlorobenzene	2.0	U
106-46-7	1,4-Dichlorobenzene	2.0	U
95-50-1	1,2-Dichlorobenzene	2.0	U
96-12-8	1,2-Dibromo-3-chloropropane	2.0	U
120-82-1	1,2,4-Trichlorobenzene	2.0	U
87-61-6	1,2,3-Trichlorobenzene	2.0	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H30X4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-01B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2846.D

Level: (TRACE or LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 4.0

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	4.989	2.4	J
02	7459-71-4	3,5-Dimethylcyclopentene	7.335	3.3	NJ
03	103-65-1	Benzene, propyl-	11.086	4.9	NJ
04	611-14-3	Benzene, 1-ethyl-2-methyl-	11.191	26	NJ
05	108-67-8	Benzene, 1,3,5-trimethyl-	11.295	13	NJ
06	620-14-4	Benzene, 1-ethyl-3-methyl-	11.539	8.8	NJ
07	526-73-8	Benzene, 1,2,3-trimethyl-	11.748	22	NJ
08		Unknown-02	11.946	2.4	J
09	99-87-6	Benzene, 1-methyl-4-(1-methy	12.073	2.7	NJ
10	95-63-6	Benzene, 1,2,4-trimethyl-	12.259	6.7	NJ
11	766-90-5	cis-.beta.-Methylstyrene	12.503	3.6	NJ
12	126-21-6	L-Fenchone	13.537	7.3	NJ
13		Unknown-03	14.141	8.5	J
14	464-49-3	Bicyclo[2.2.1]heptan-2-one,	14.501	2.6	NJ
	E96679[1]	Total Alkanes	N/A		

[1] EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D
Report Date: 15-Nov-2011 09:35

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2846.D
Lab Smp Id: K2213-01B Client Smp ID: H30X4
Inj Date : 10-NOV-2011 07:25
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-01B,,62892,4
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 15
Dil Factor: 4.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

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

Name	Value	Description
DF	4.000	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	2.202	2.216	(0.348)	121339	5.94951	5.9
$	80 Chloroethane-d5	69	2.608	2.600	(0.412)	83650	6.04108	6.0
$	81 1,1-Dichloroethene-d2	65	3.386	3.378	(0.535)	27971	5.29575	5.3(QR)
	9 Acetone	43	3.468	3.447	(0.548)	16980	9.56638	38
$	82 2-Butanone-d5	46	5.070	5.062	(0.802)	137938	56.3873	56(AQ)
$	83 Chloroform-d	84	5.384	5.387	(0.851)	113860	4.66192	4.7(Q)
	21 Cyclohexane	56	5.639	5.642	(0.598)	27820	0.91186	3.6
$	23 1,2-Dichloroethane-d4	65	5.895	5.898	(0.932)	44436	4.62633	4.6
$	84 Benzene-d6	84	5.918	5.909	(0.628)	234147	4.61464	4.6
	25 Benzene	78	5.953	5.956	(0.632)	17547	0.31283	1.3
*	26 1,4-Difluorobenzene	114	6.324	6.327	(1.000)	224183	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.731	6.734	(0.714)	76562	4.34713	4.3
	28 Methylcyclohexane	83	6.777	6.780	(0.719)	13209	0.53845	2.2
$	33 Toluene-d8	98	7.846	7.837	(0.832)	214567	4.71220	4.7
	34 Toluene	91	7.927	7.907	(0.841)	19897	0.34793	1.4
$	86 trans-1,3-Dichloropropene-d4	79	8.124	8.116	(0.862)	52240	5.17650	5.2
$	87 2-Hexanone-d5	63	8.566	8.569	(0.909)	106278	60.8066	61(A)
*	42 Chlorobenzene-d5	117	9.425	9.428	(1.000)	172986	5.00000	
	43 Chlorobenzene	112	9.460	9.463	(1.004)	474767	12.5428	50
	44 Ethylbenzene	91	9.588	9.579	(1.017)	27008	0.42819	1.7
	45 m,p-Xylene	106	9.704	9.707	(1.030)	279829	10.3955	42
	46 o-Xylene	106	10.168	10.171	(1.079)	98563	4.00281	16

Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D
Report Date: 15-Nov-2011 09:35

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
	49	Isopropylbenzene	105	10.610	10.601	(1.126)	33699	0.50275	2.0
$	89	1,1,2,2-Tetrachloroethane-d2	84	10.923	10.926	(1.159)	33195	5.09095	5.1
M	41	Xylene (total)	106				378392	14.3983	58
*	78	1,4-Dichlorobenzene-d4	152	12.166	12.169	(1.000)	73942	5.00000	
$	90	1,2-Dichlorobenzene-d4	152	12.630	12.633	(1.038)	57467	4.94391	4.9(Q)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D
Report Date: 15-Nov-2011 09:35

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2846.D
Lab Smp Id: K2213-01B Client Smp ID: H30X4
Inj Date : 10-NOV-2011 07:25
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-01B,,62892,4
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 15
Dil Factor: 4.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

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

Name	Value	Description
DF	4.000	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	563010	5.000
* 78 1,4-Dichlorobenzene-d4	12.166	491660	5.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
4.989	67404	0.59860297	2.4	0		0	26
3,5-Dimethylcyclopentene					CAS #: 7459-71-4		
7.335	93414	0.82959468	3.3	90	NIST2002.L	2841	26
Benzene, propyl-					CAS #: 103-65-1		
11.086	121320	1.23377370	4.9	90	NIST2002.L	9109	78
Benzene, 1-ethyl-2-methyl-					CAS #: 611-14-3		
11.191	634275	6.45033546	26	95	NIST2002.L	9127	78
Benzene, 1,3,5-trimethyl-					CAS #: 108-67-8		
11.295	309127	3.14370839	13	95	NIST2002.L	9121	78

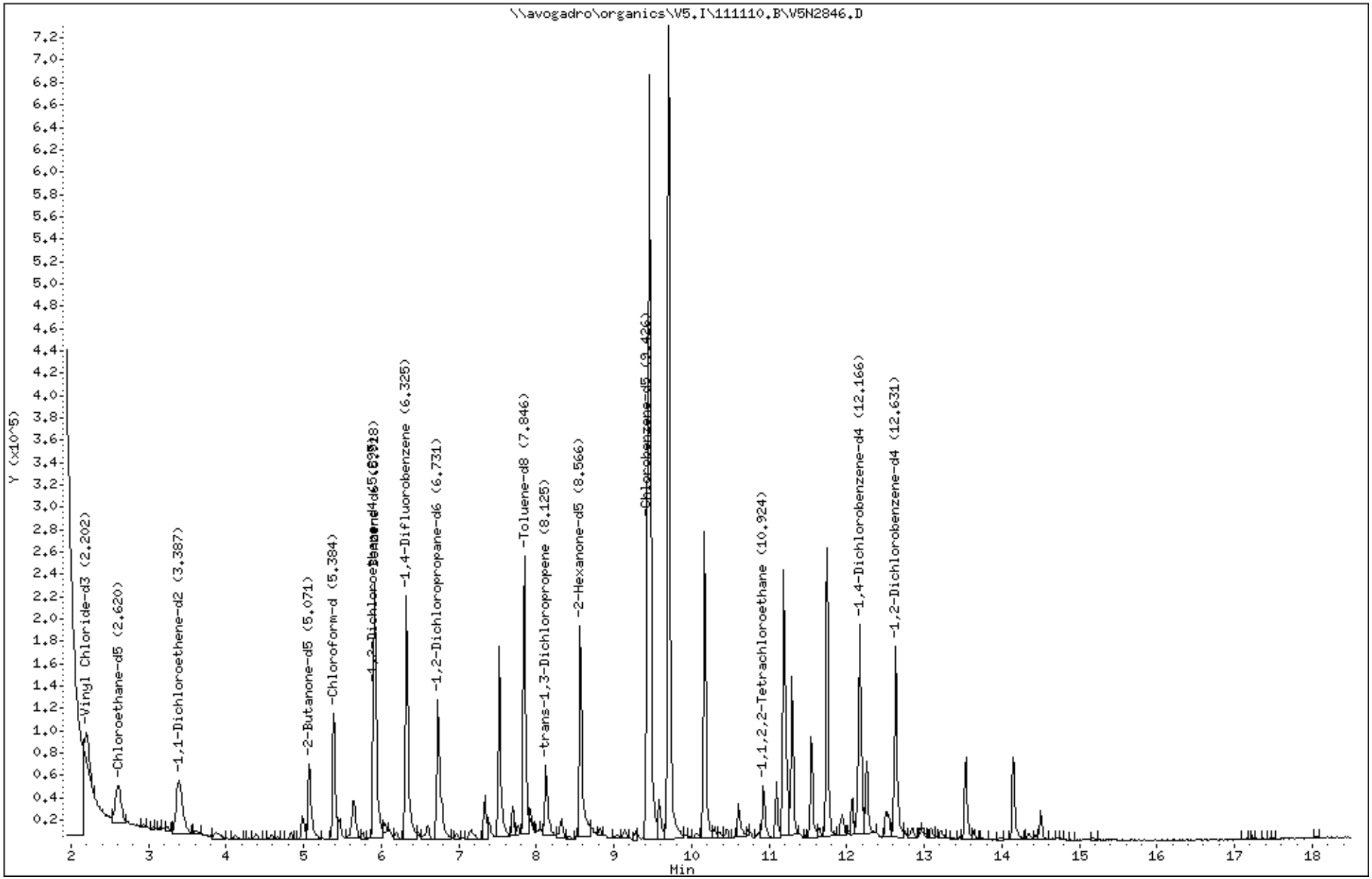
Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D
Report Date: 15-Nov-2011 09:35

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Benzene, 1-ethyl-3-methyl-					CAS #: 620-14-4		
11.539	217032	2.20713144	8.8	91	NIST2002.L	9131	78(L)
Benzene, 1,2,3-trimethyl-					CAS #: 526-73-8		
11.748	551910	5.61272086	22	97	NIST2002.L	9123	78
Unknown					CAS #:		
11.946	58686	0.59681489	2.4	0		0	78
Benzene, 1-methyl-4-(1-methylethyl)-					CAS #: 99-87-6		
12.073	67204	0.68343724	2.7	94	NIST2002.L	14401	78(L)
Benzene, 1,2,4-trimethyl-					CAS #: 95-63-6		
12.259	163507	1.66280115	6.7	95	NIST2002.L	9126	78(L)
cis-.beta.-Methylstyrene					CAS #: 766-90-5		
12.503	89137	0.90648660	3.6	91	NIST2002.L	8693	78
L-Fenchone					CAS #: 126-21-6		
13.537	179442	1.82485873	7.3	95	NIST2002.L	23928	78
Unknown					CAS #:		
14.141	208806	2.12348300	8.5	0		0	78
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet					CAS #: 464-49-3		
14.501	63111	0.64181783	2.6	97	NIST2002.L	24210	78

QC Flag Legend

L - Operator selected an alternate library search match.

Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D
Date : 10-NOV-2011 07:25
Client ID: H30X4
Instrument: V5.i
Sample Info: 25ML,K2213-01B,,62892,4
Purge Volume: 25.0
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D

Date : 10-NOV-2011 07:25

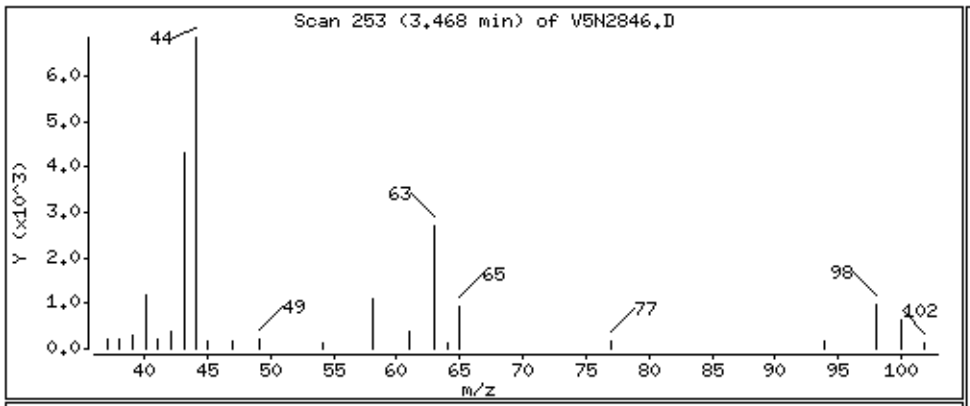
Client ID: H30X4 Instrument: V5.i

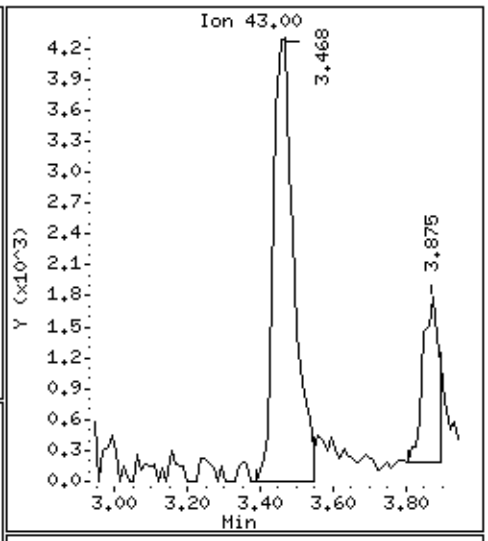
Sample Info: 25ML,K2213-01B,,62892,4

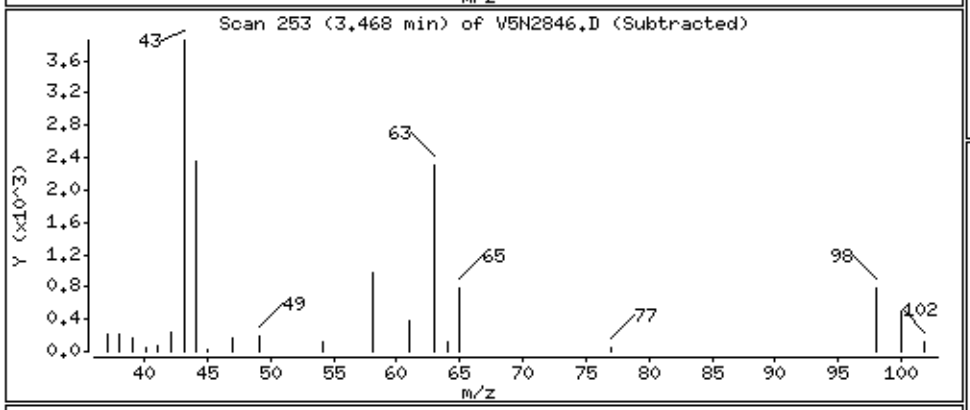
Purge Volume: 25.0 Operator: SRC: LIMS

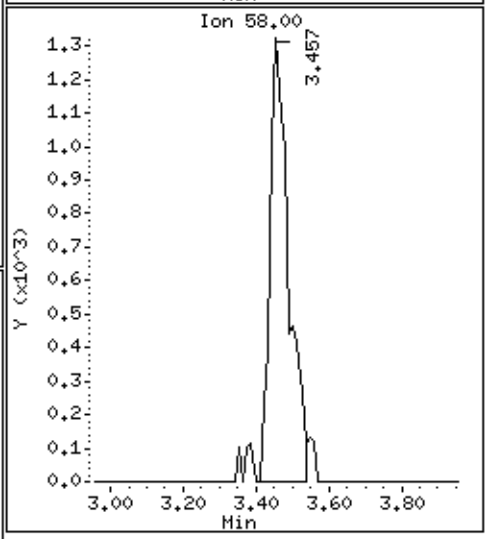
Column phase: DB-624 Column diameter: 0.25

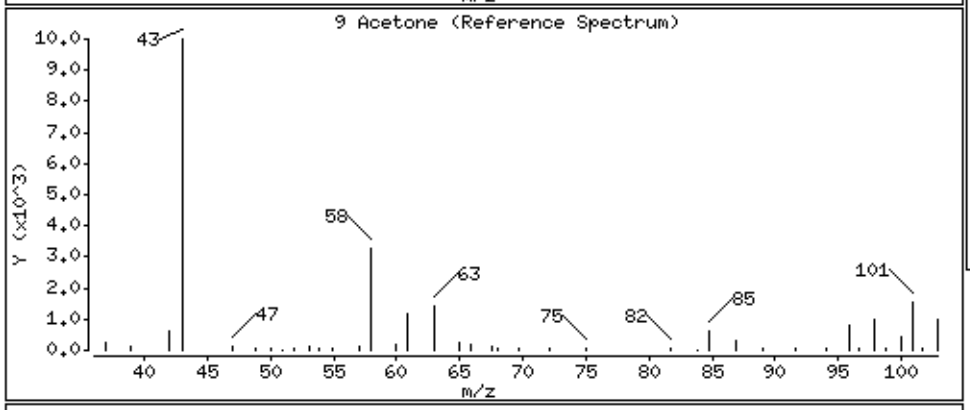
9 Acetone Concentration: 38 ug/L

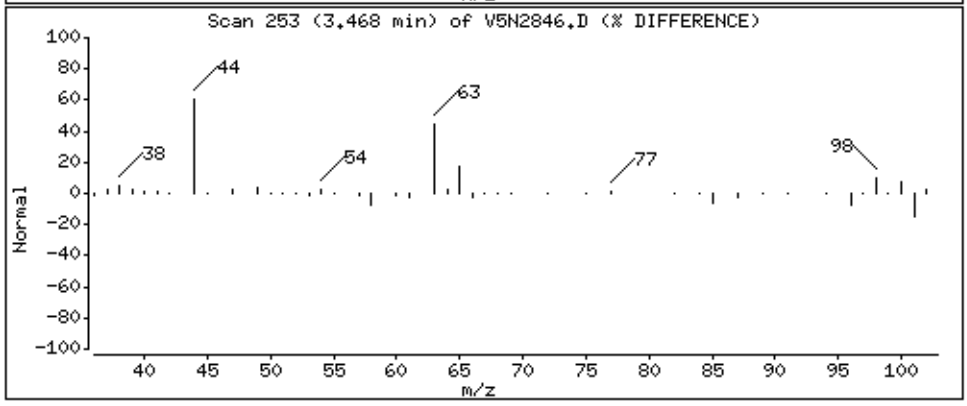












Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D

Date : 10-NOV-2011 07:25

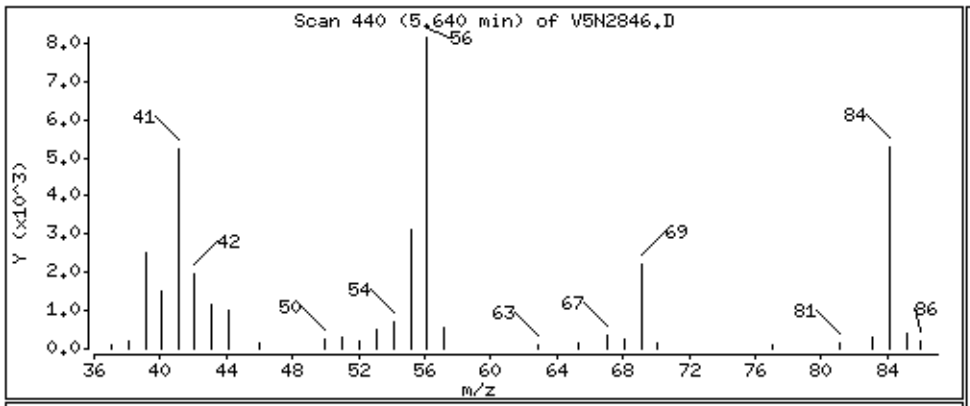
Client ID: H30X4 Instrument: V5.i

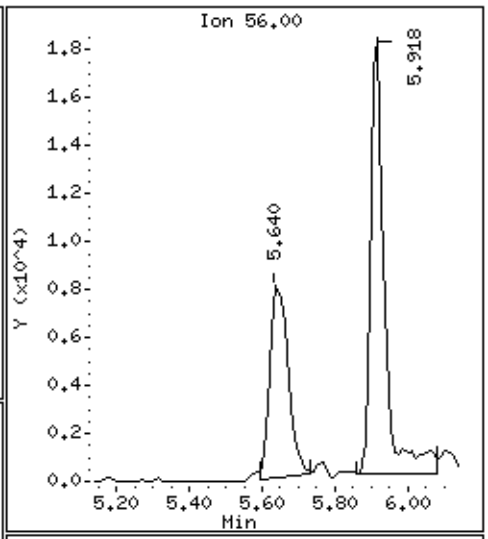
Sample Info: 25ML,K2213-01B,,62892,4

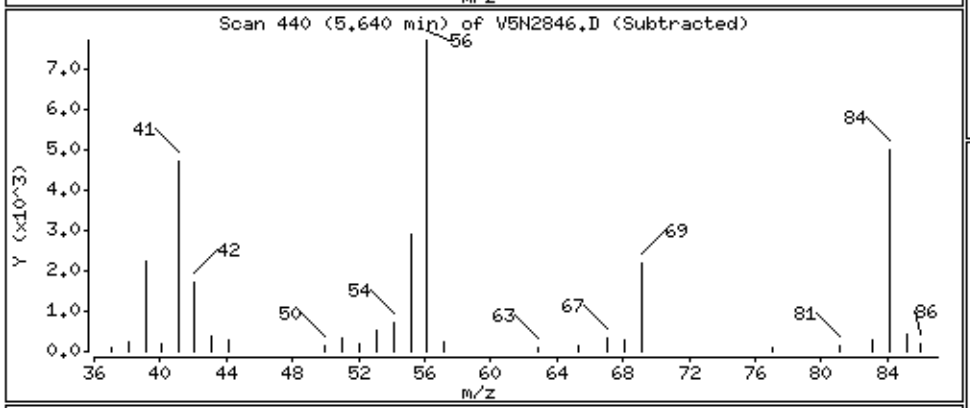
Purge Volume: 25.0 Operator: SRC: LIMS

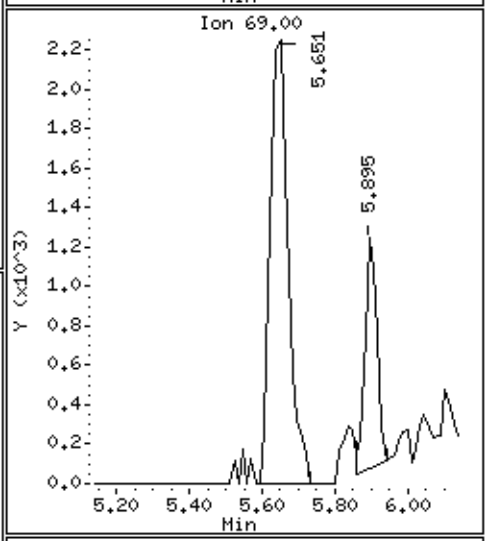
Column phase: DB-624 Column diameter: 0.25

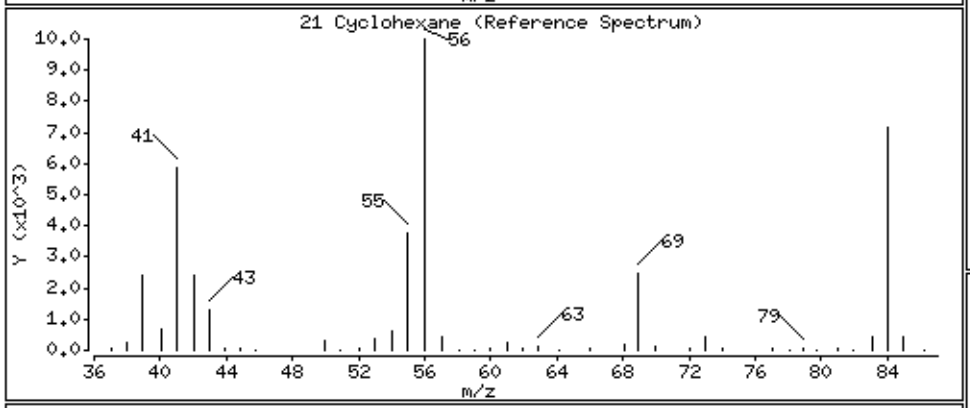
21 Cyclohexane Concentration: 3.6 ug/L

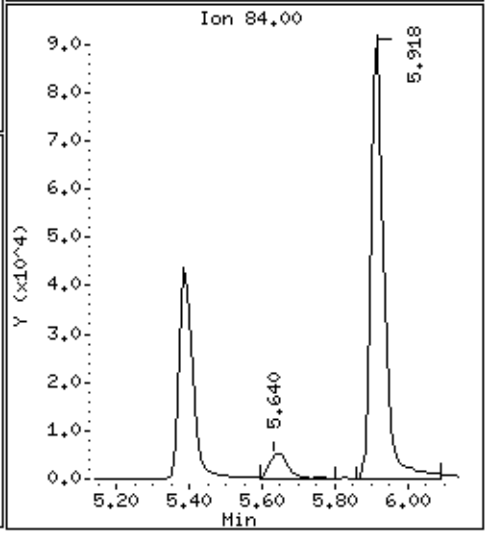


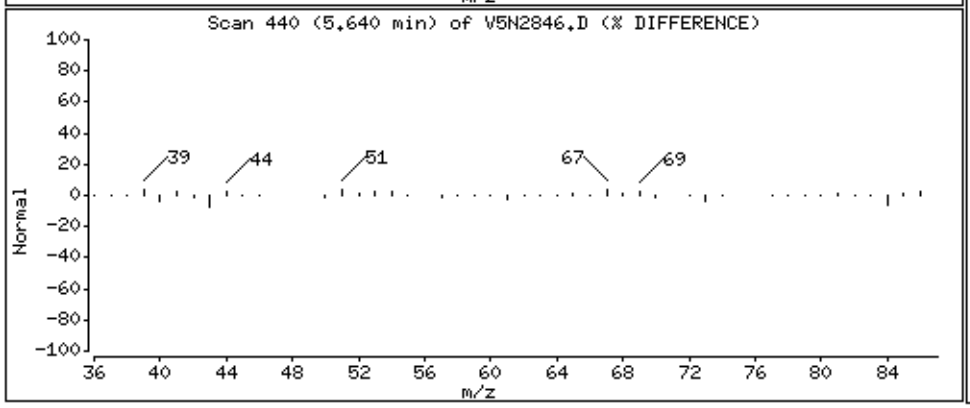












Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D

Date : 10-NOV-2011 07:25

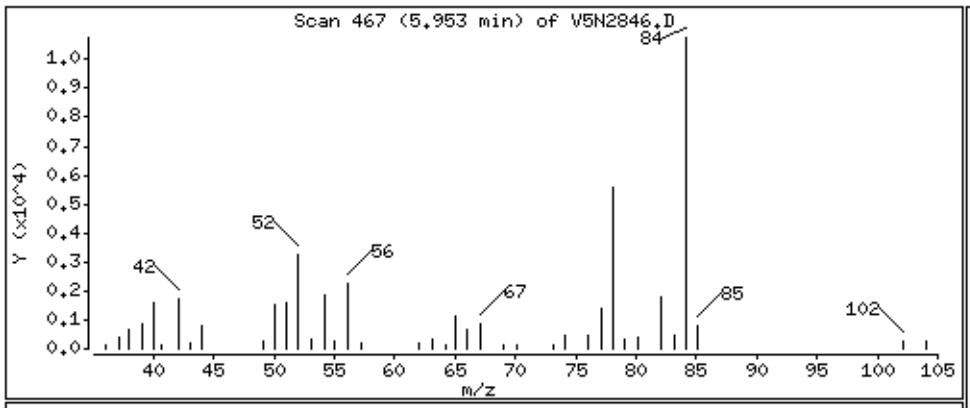
Client ID: H30X4 Instrument: V5.i

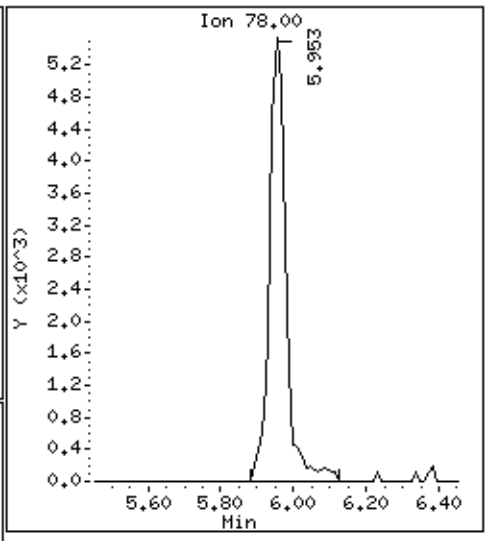
Sample Info: 25ML,K2213-01B,,62892,4

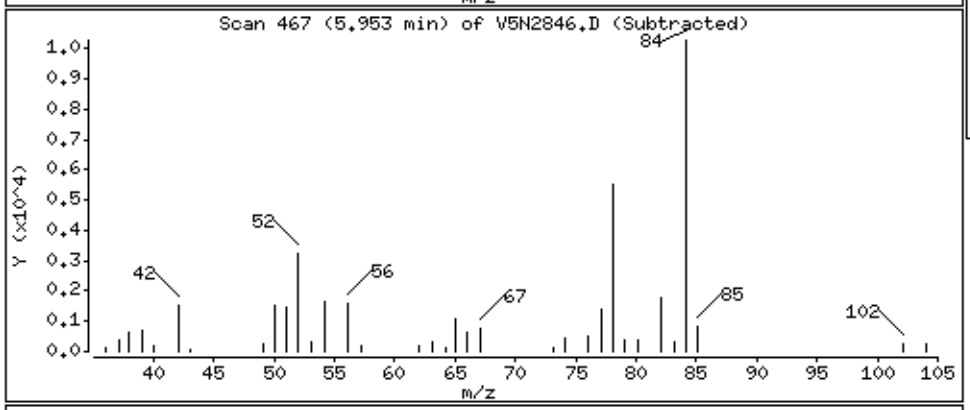
Purge Volume: 25.0 Operator: SRC: LIMS

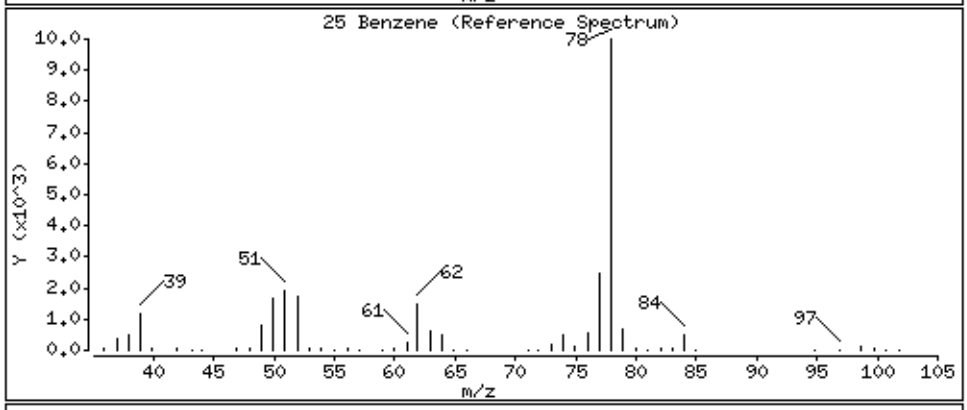
Column phase: DB-624 Column diameter: 0.25

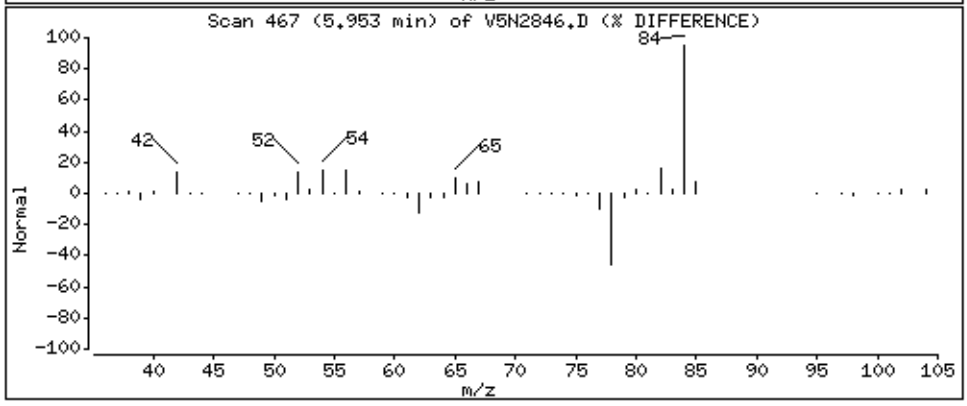
25 Benzene Concentration: 1.3 ug/L











Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D

Date : 10-NOV-2011 07:25

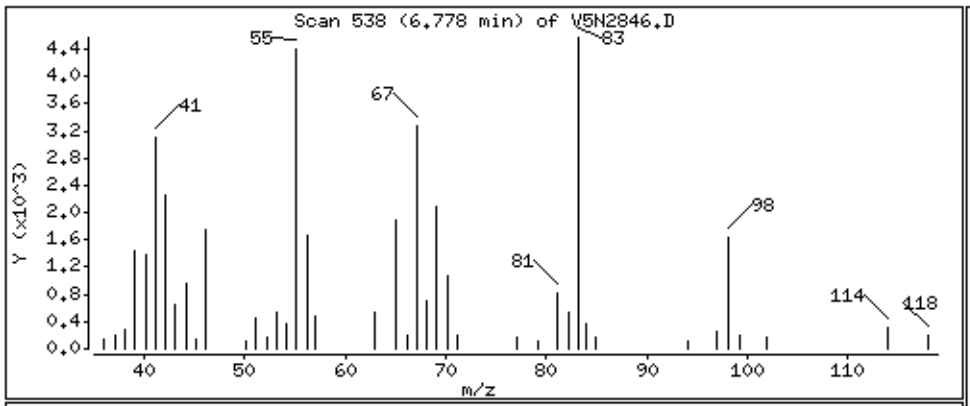
Client ID: H30X4 Instrument: V5.i

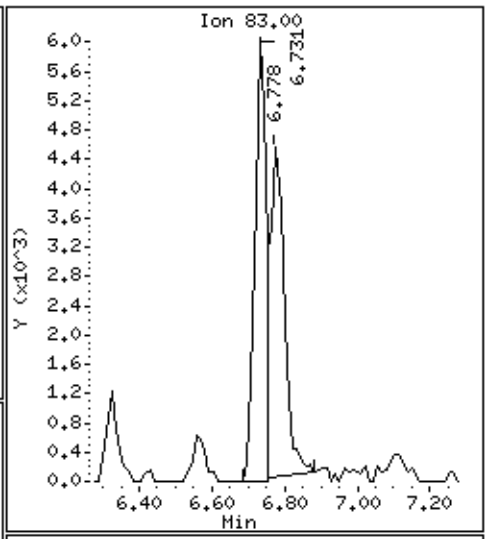
Sample Info: 25ML,K2213-01B,,62892,4

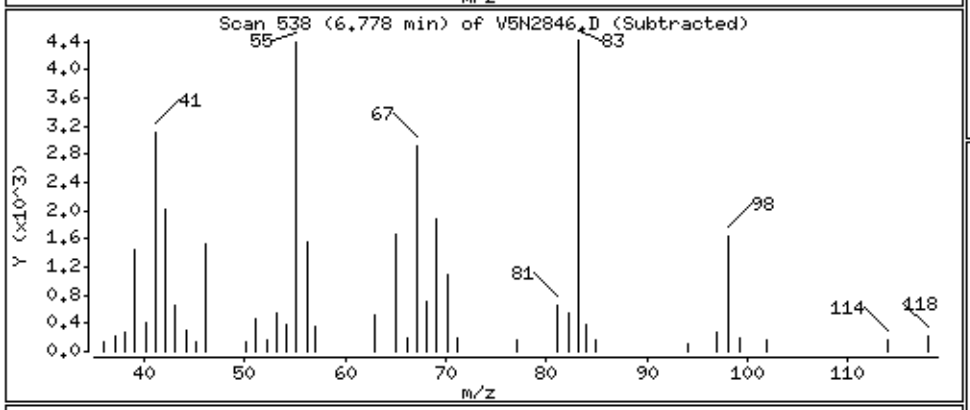
Purge Volume: 25.0 Operator: SRC: LIMS

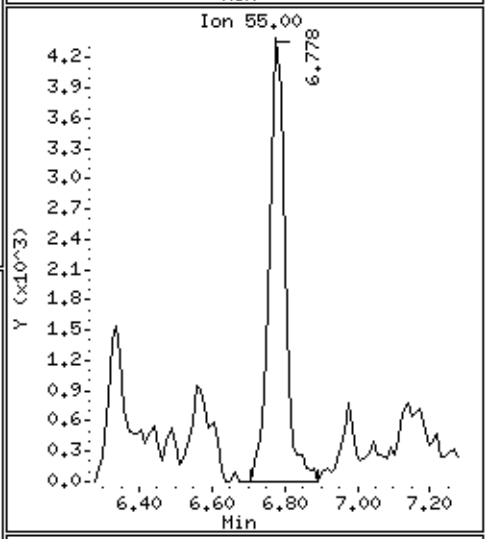
Column phase: DB-624 Column diameter: 0.25

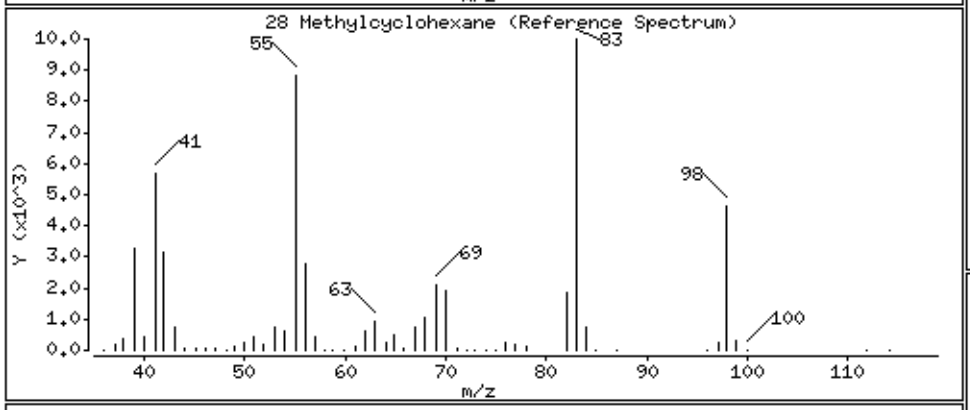
28 Methylcyclohexane Concentration: 2.2 ug/L

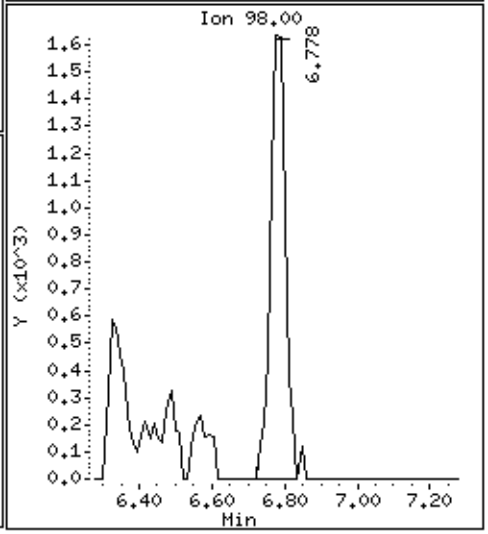


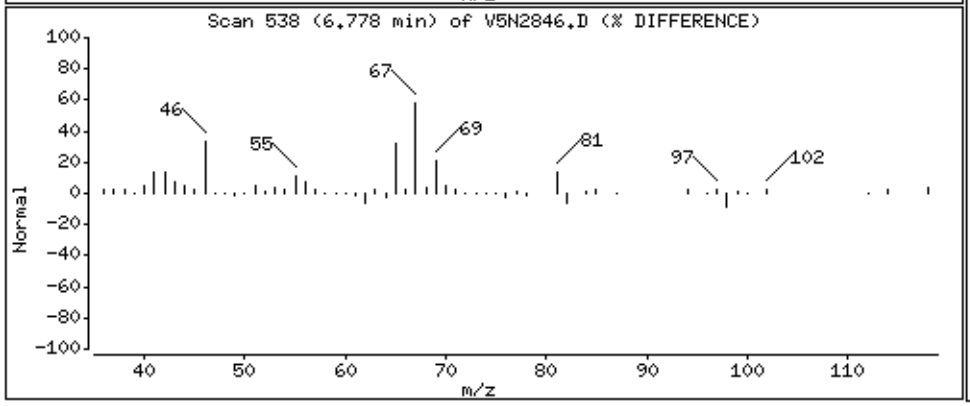












Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D

Date : 10-NOV-2011 07:25

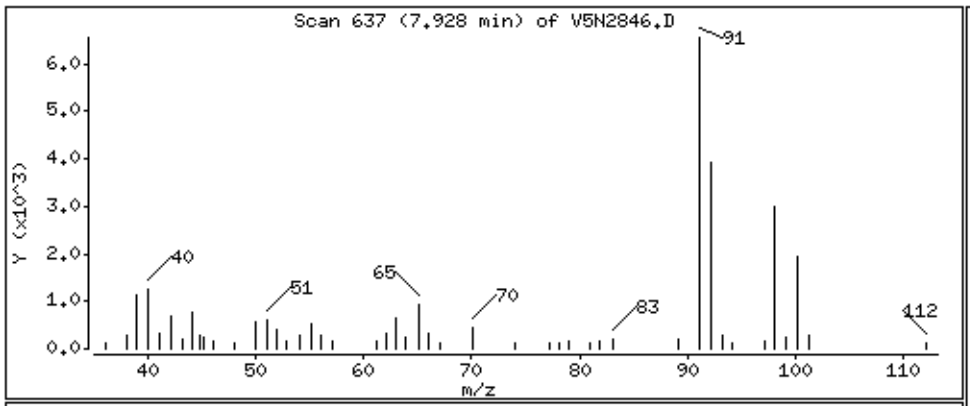
Client ID: H30X4 Instrument: V5.i

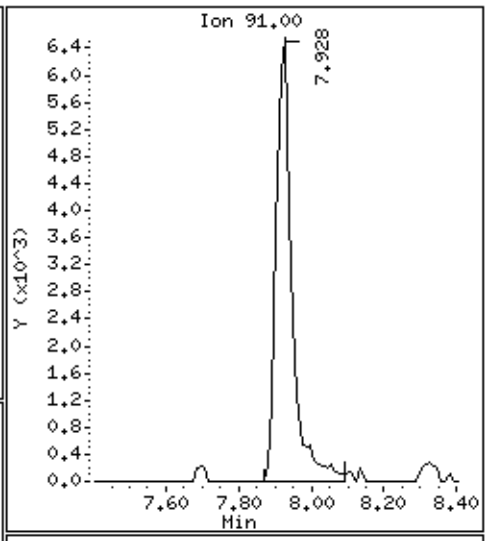
Sample Info: 25ML,K2213-01B,,62892,4

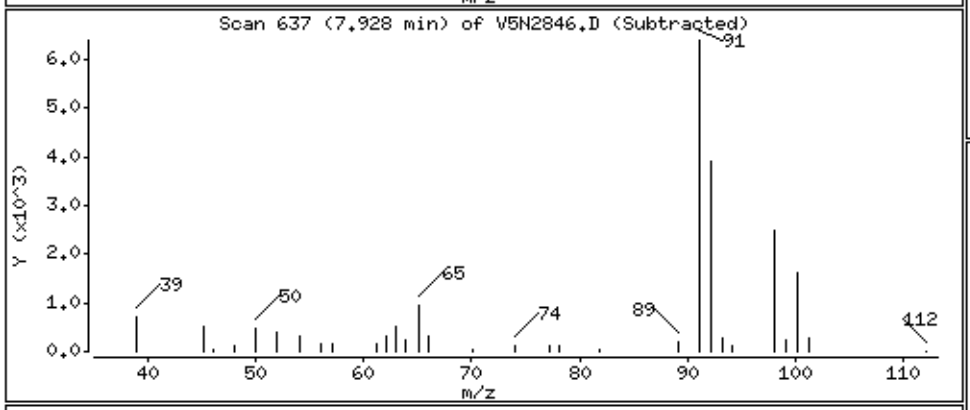
Purge Volume: 25.0 Operator: SRC: LIMS

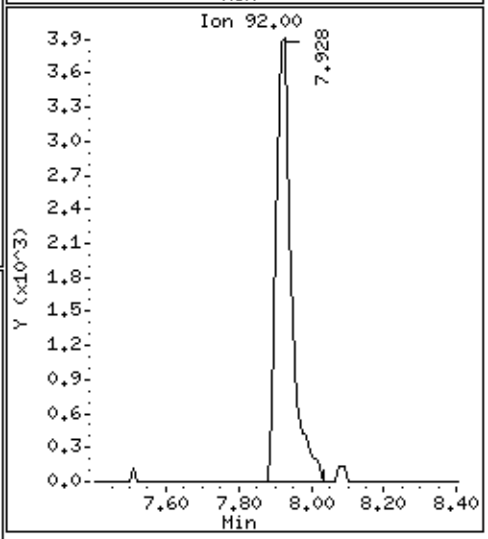
Column phase: DB-624 Column diameter: 0.25

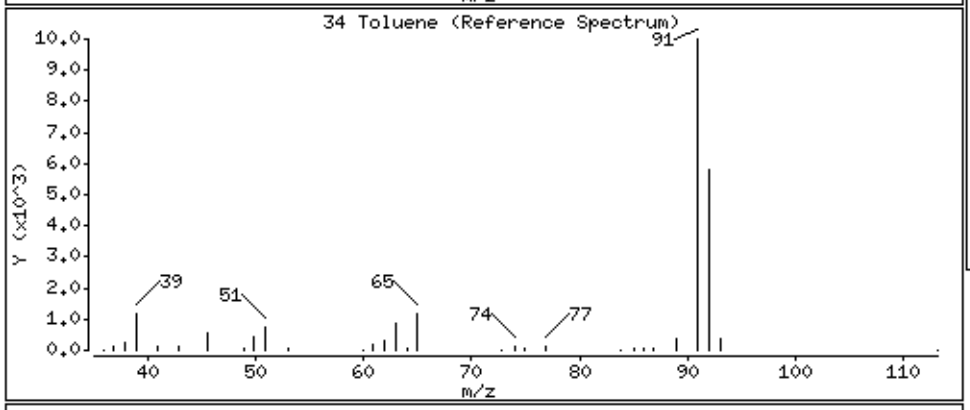
34 Toluene Concentration: 1.4 ug/L

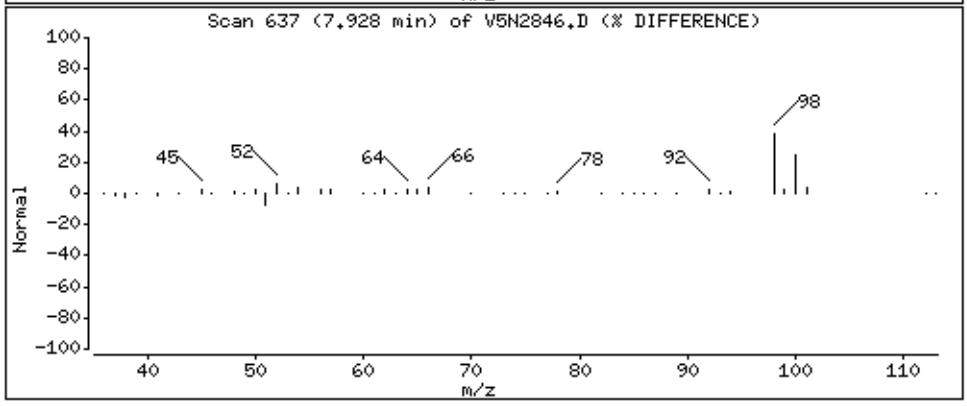












Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D

Date : 10-NOV-2011 07:25

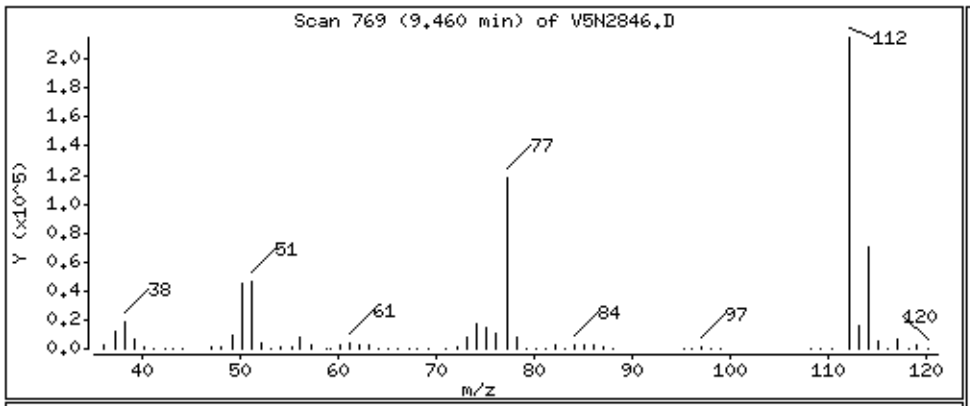
Client ID: H30X4 Instrument: V5.i

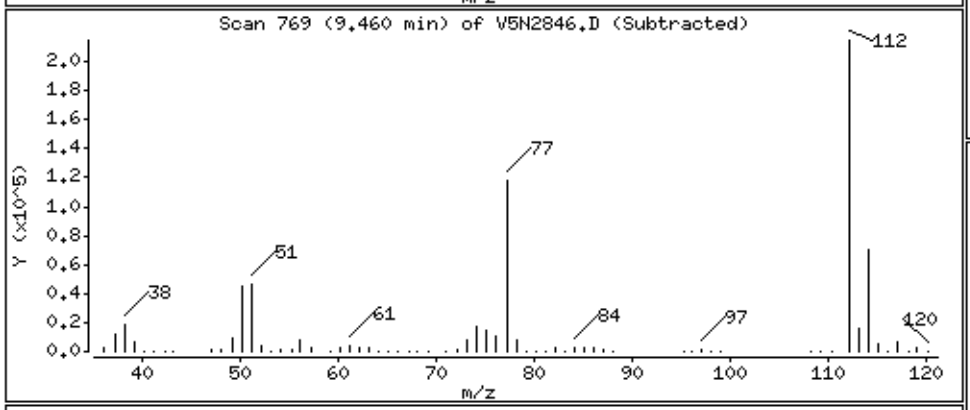
Sample Info: 25ML,K2213-01B,,62892,4

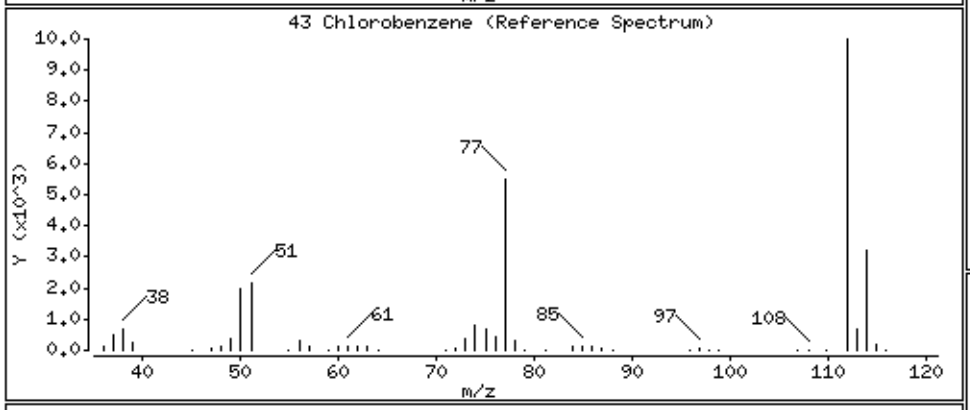
Purge Volume: 25.0 Operator: SRC: LIMS

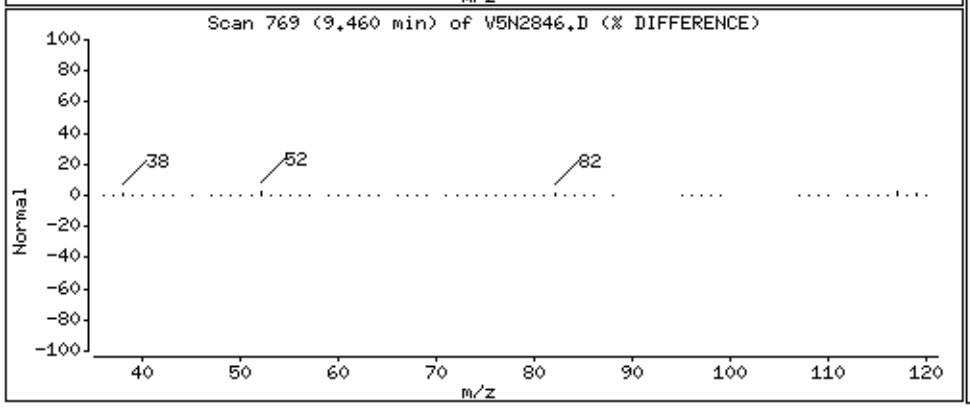
Column phase: DB-624 Column diameter: 0.25

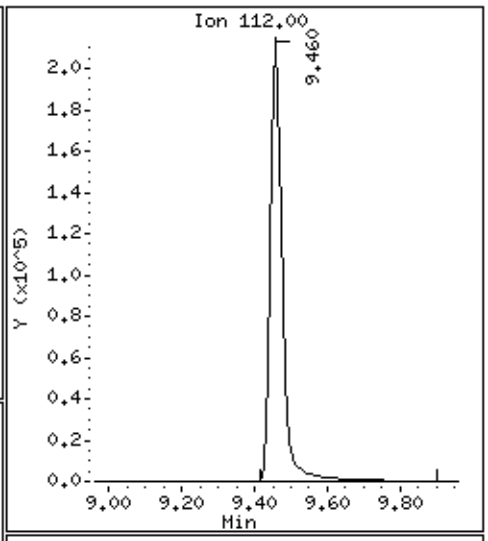
43 Chlorobenzene Concentration: 50 ug/L

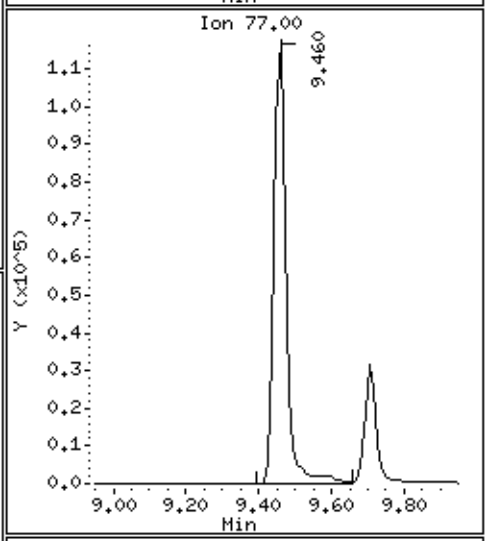


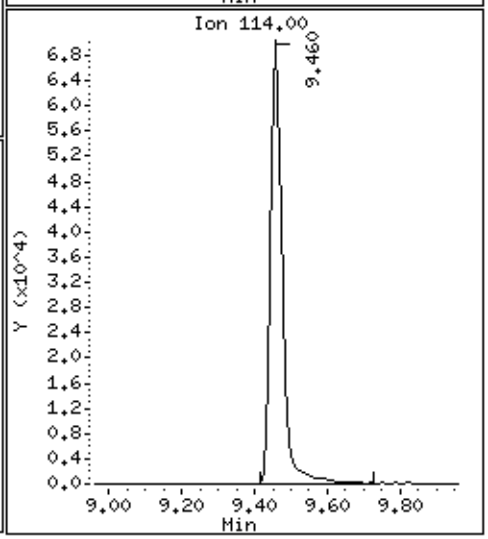












Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D

Date : 10-NOV-2011 07:25

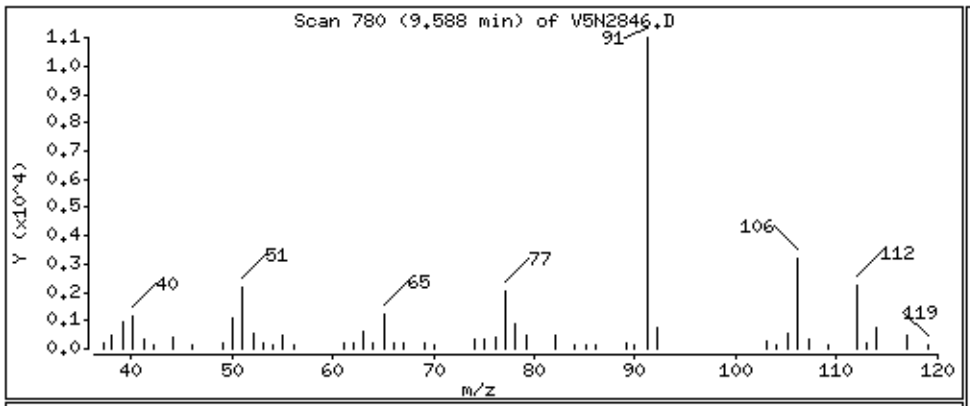
Client ID: H30X4 Instrument: V5.i

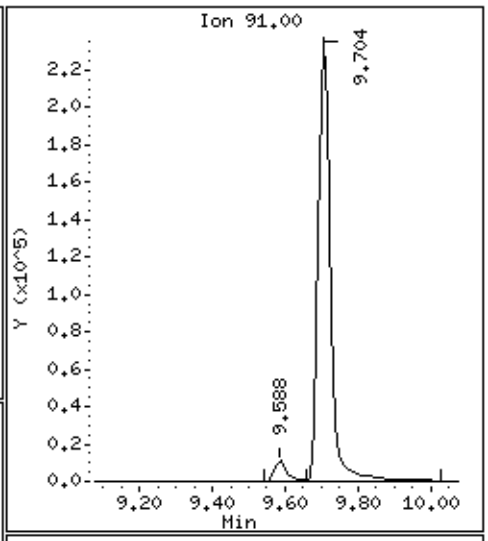
Sample Info: 25ML,K2213-01B,,62892,4

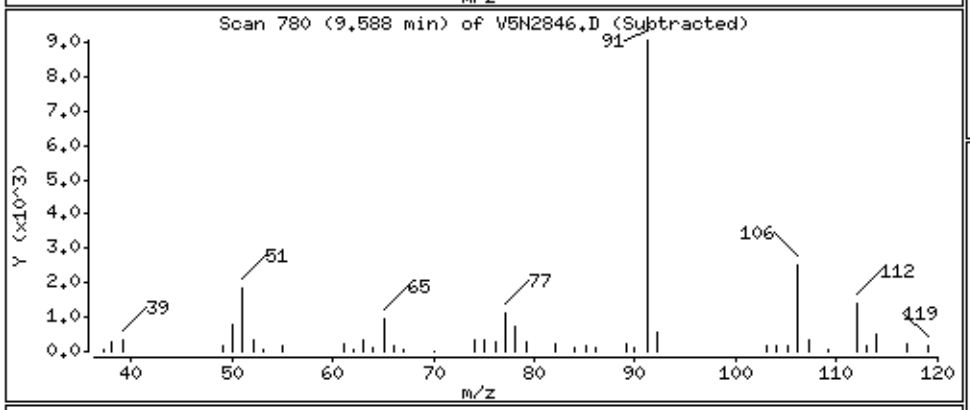
Purge Volume: 25.0 Operator: SRC: LIMS

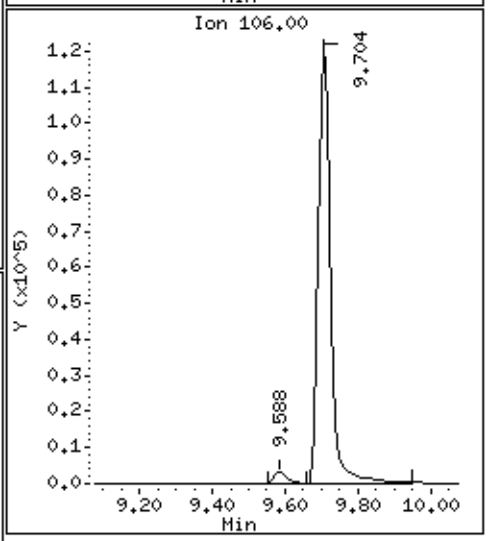
Column phase: DB-624 Column diameter: 0.25

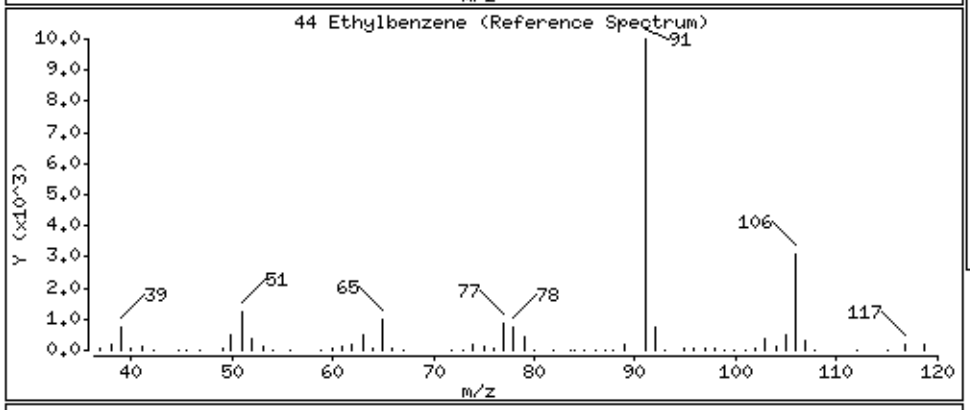
44 Ethylbenzene Concentration: 1.7 ug/L

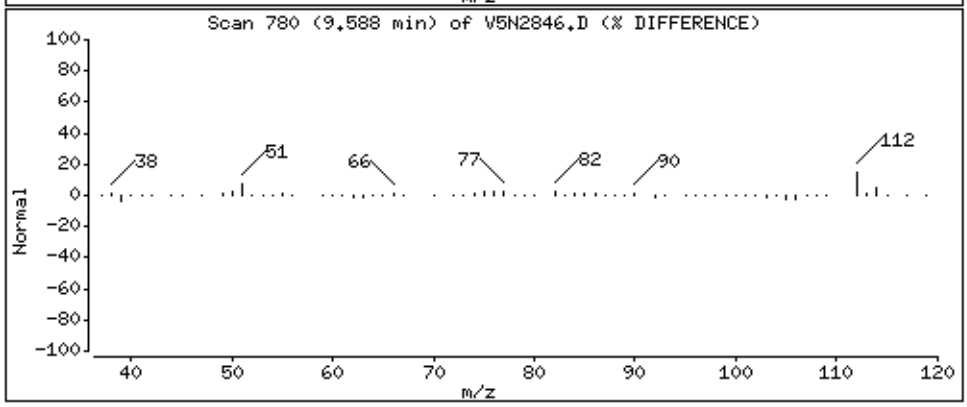












Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D

Date : 10-NOV-2011 07:25

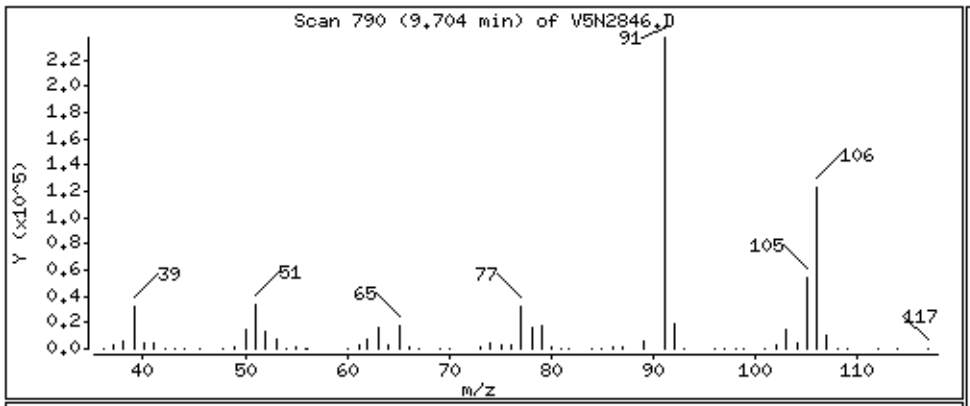
Client ID: H30X4 Instrument: V5.i

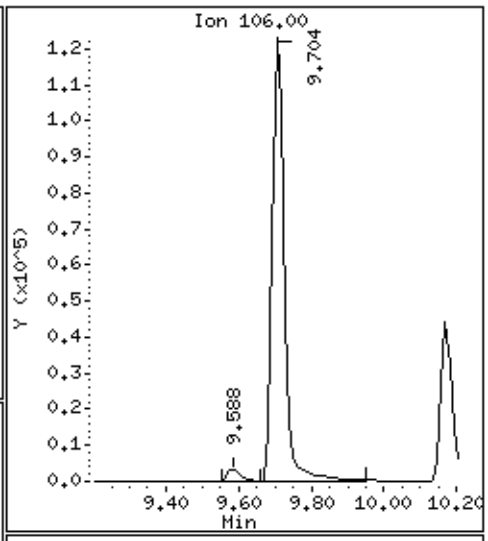
Sample Info: 25ML,K2213-01B,,62892,4

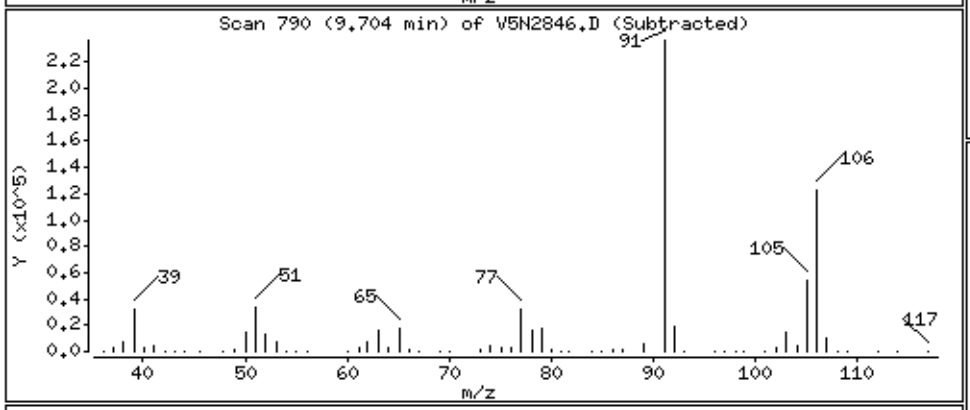
Purge Volume: 25.0 Operator: SRC: LIMS

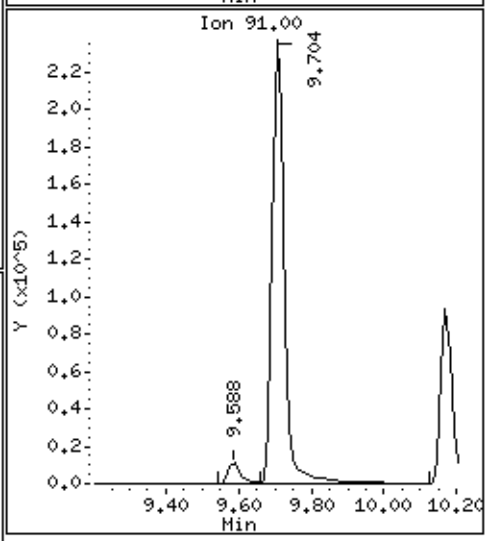
Column phase: DB-624 Column diameter: 0.25

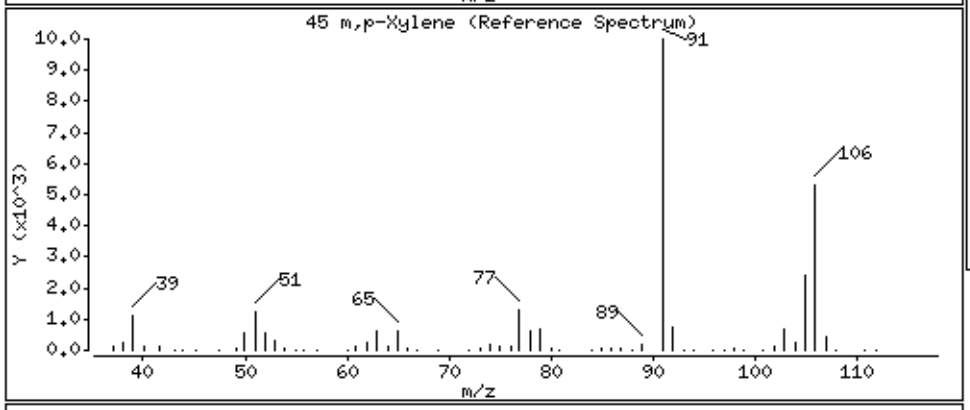
45 m,p-Xylene Concentration: 42 ug/L

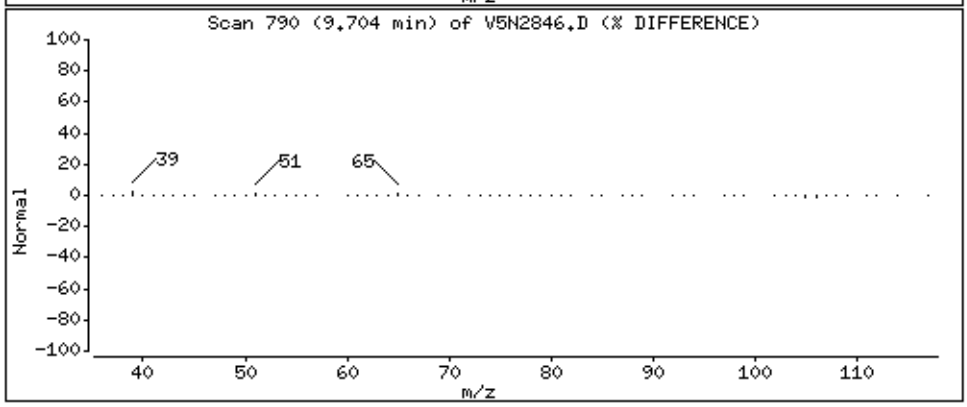












Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D

Date : 10-NOV-2011 07:25

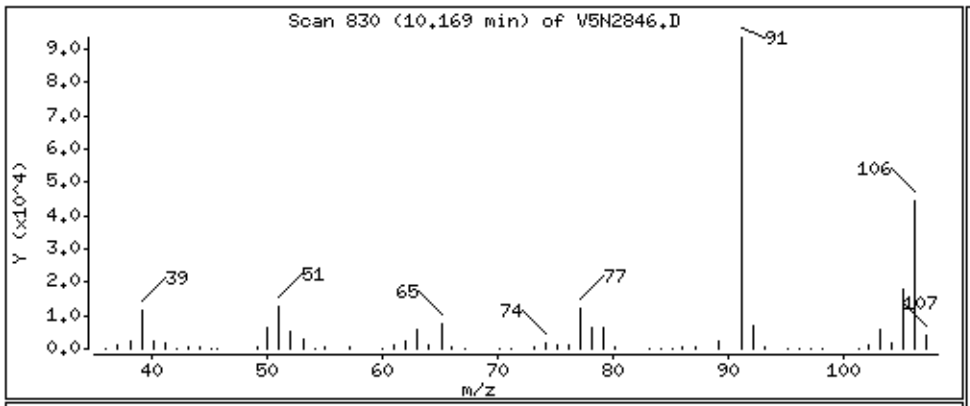
Client ID: H30X4 Instrument: V5.i

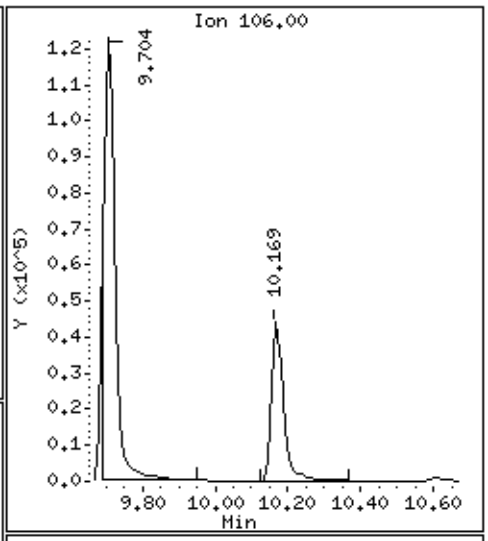
Sample Info: 25ML,K2213-01B,,62892,4

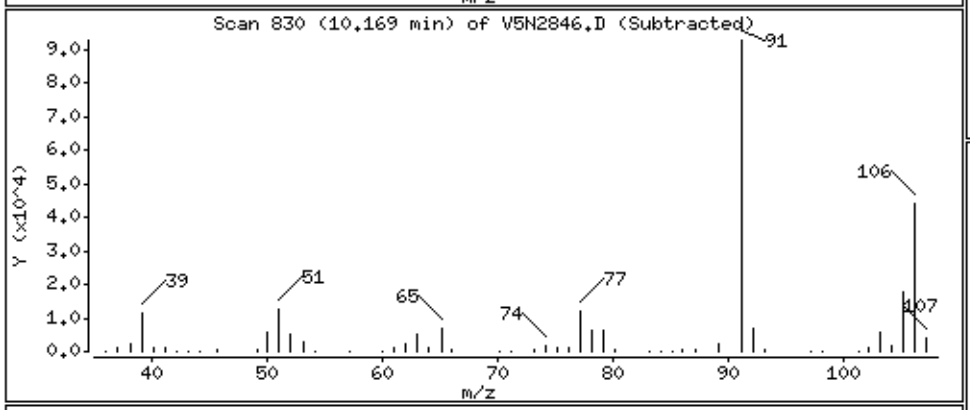
Purge Volume: 25.0 Operator: SRC: LIMS

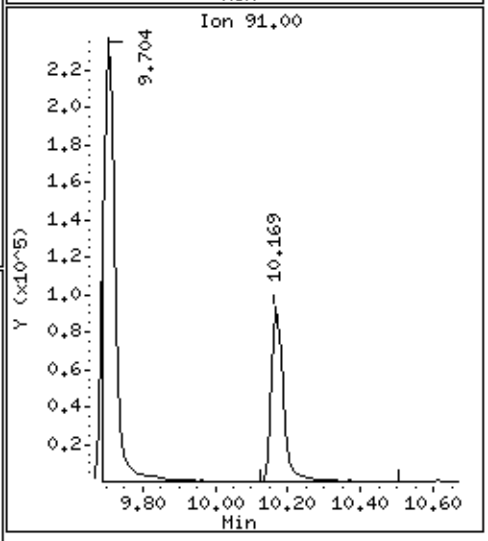
Column phase: DB-624 Column diameter: 0.25

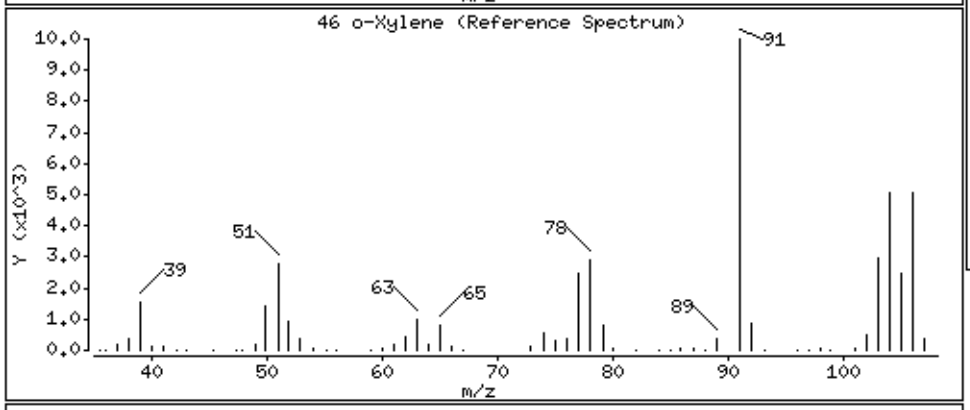
46 o-Xylene Concentration: 16 ug/L

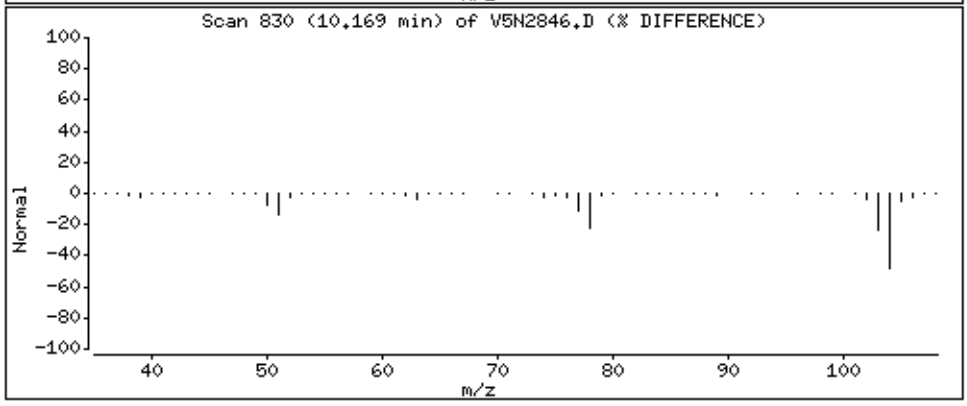












Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D

Date : 10-NOV-2011 07:25

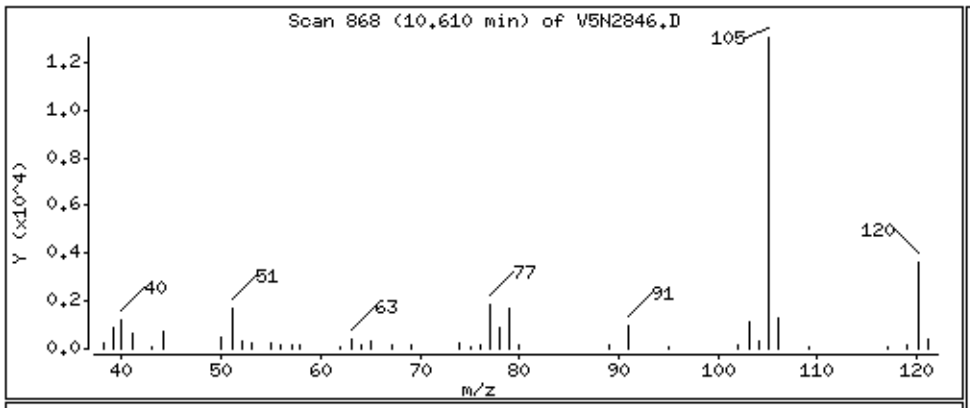
Client ID: H30X4 Instrument: V5.i

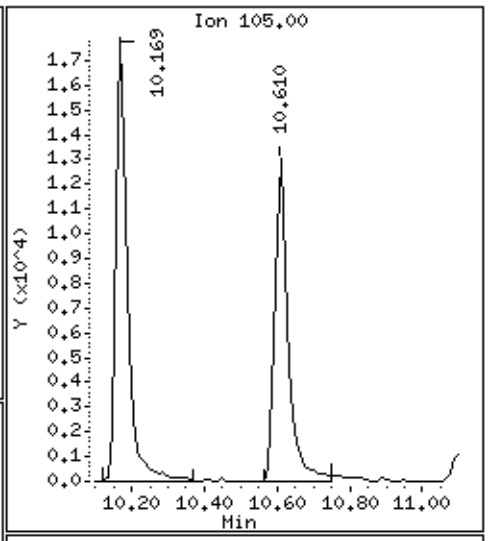
Sample Info: 25ML,K2213-01B,,62892,4

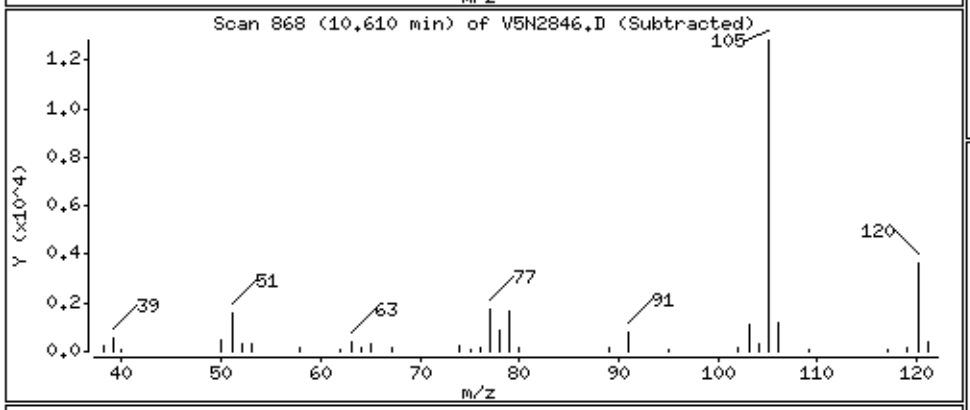
Purge Volume: 25.0 Operator: SRC: LIMS

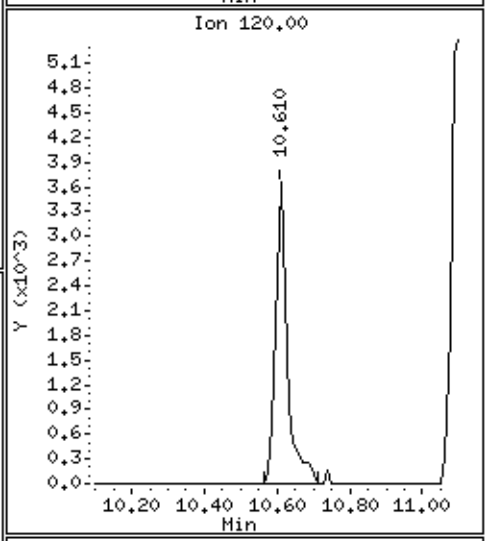
Column phase: DB-624 Column diameter: 0.25

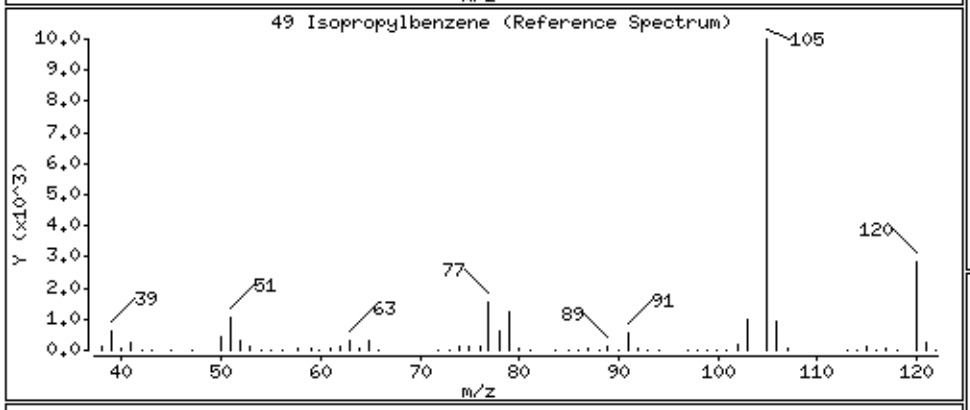
49 Isopropylbenzene Concentration: 2.0 ug/L

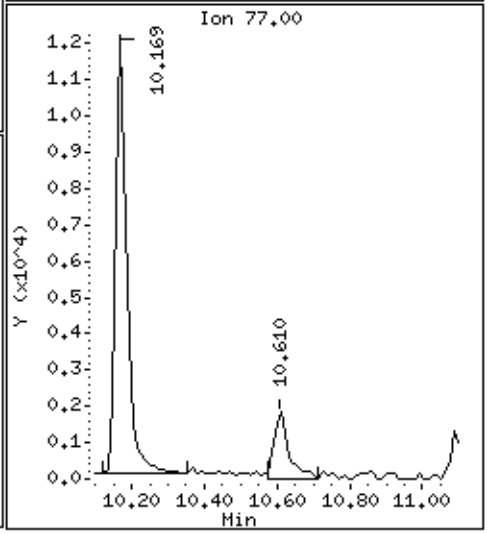


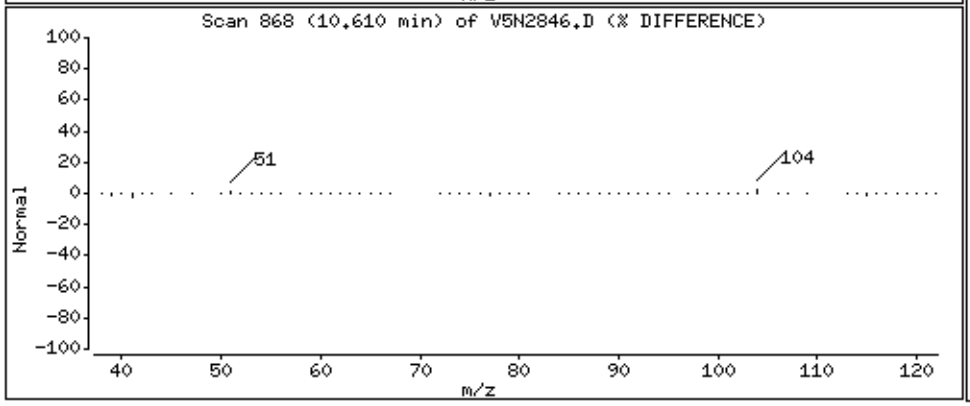












Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D

Date : 10-NOV-2011 07:25

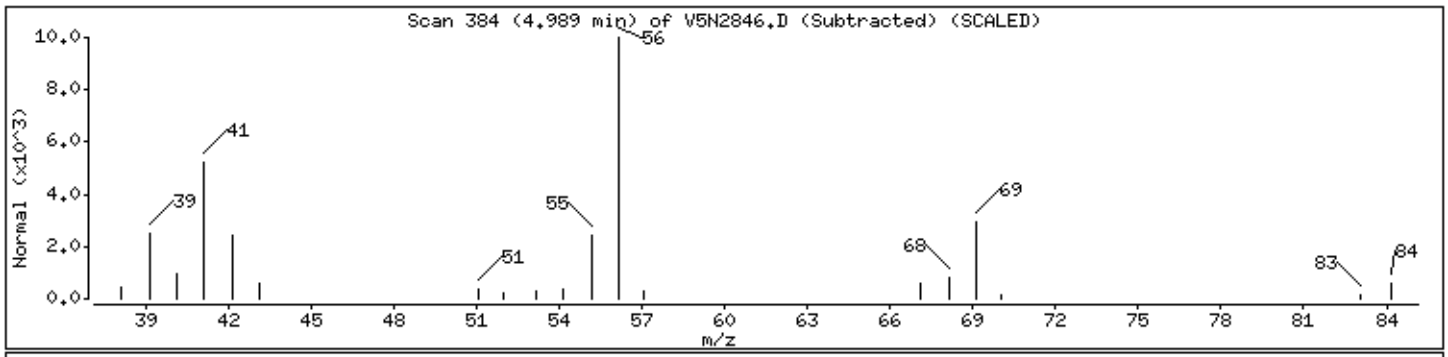
Client ID: H30X4 Instrument: V5.i

Sample Info: 25ML,K2213-01B,,62892,4

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



Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D

Date : 10-NOV-2011 07:25

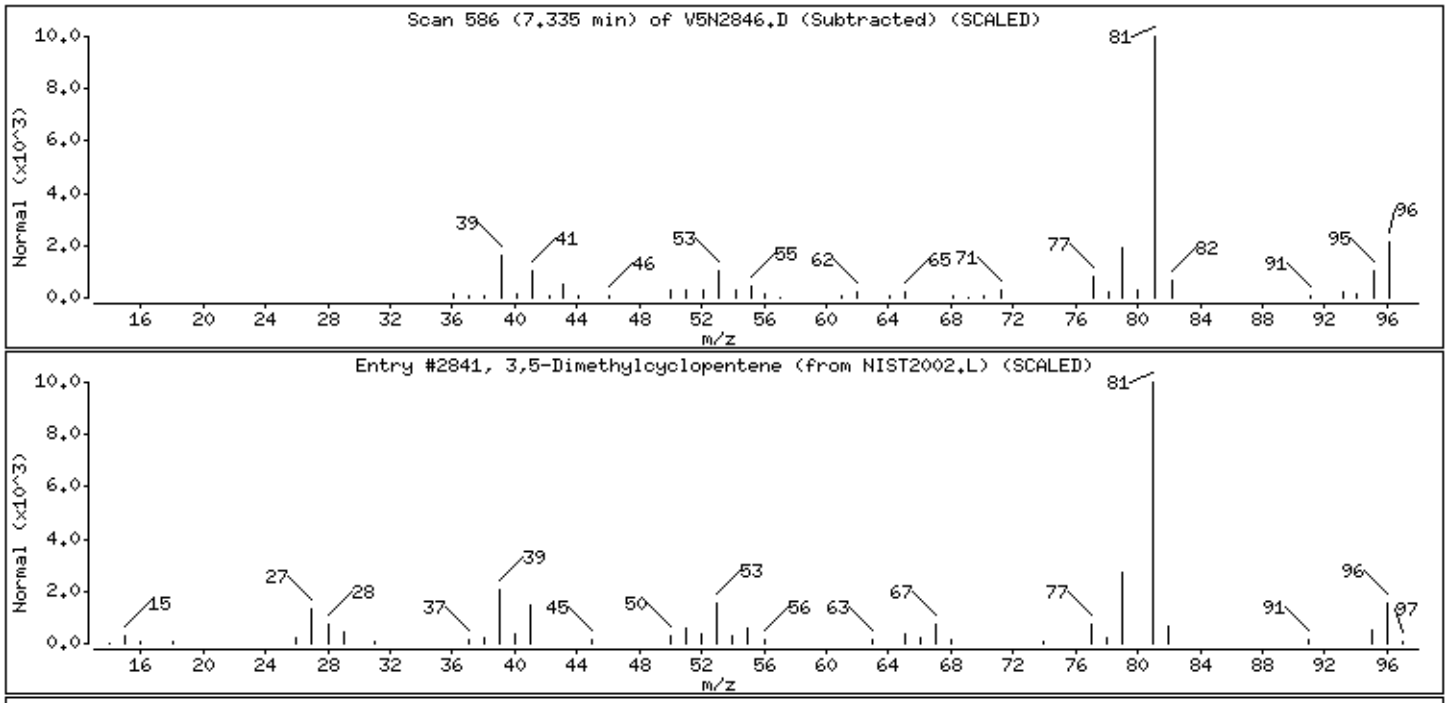
Client ID: H30X4 Instrument: V5.i

Sample Info: 25ML,K2213-01B,,62892,4

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
3,5-Dimethylcyclopentene	7459-71-4	NIST2002.L	2841	90	C7H12	96



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Date : 10-NOV-2011 07:25

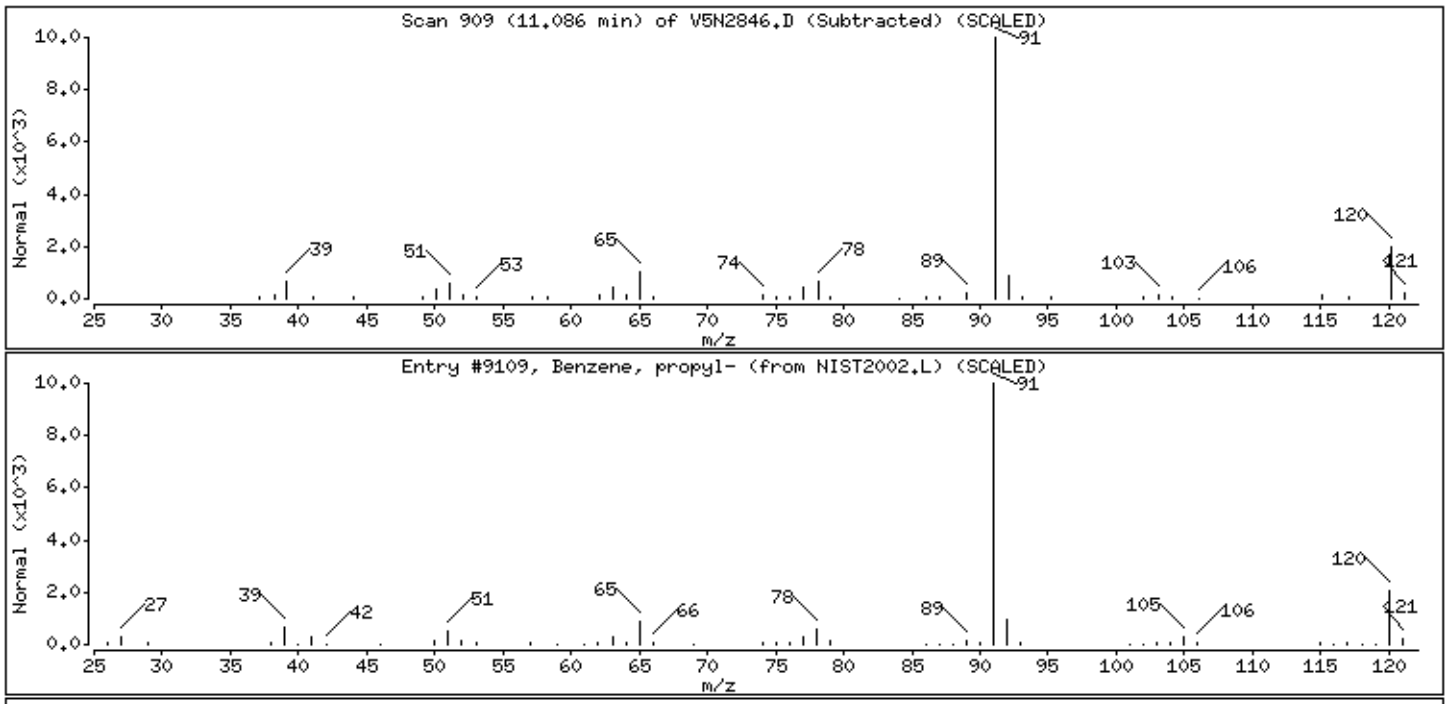
Client ID: H30X4 Instrument: V5.i

Sample Info: 25ML,K2213-01B,,62892,4

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
Benzene, propyl-	103-65-1	NIST2002.L	9109	90	C9H12	120



Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D

Date : 10-NOV-2011 07:25

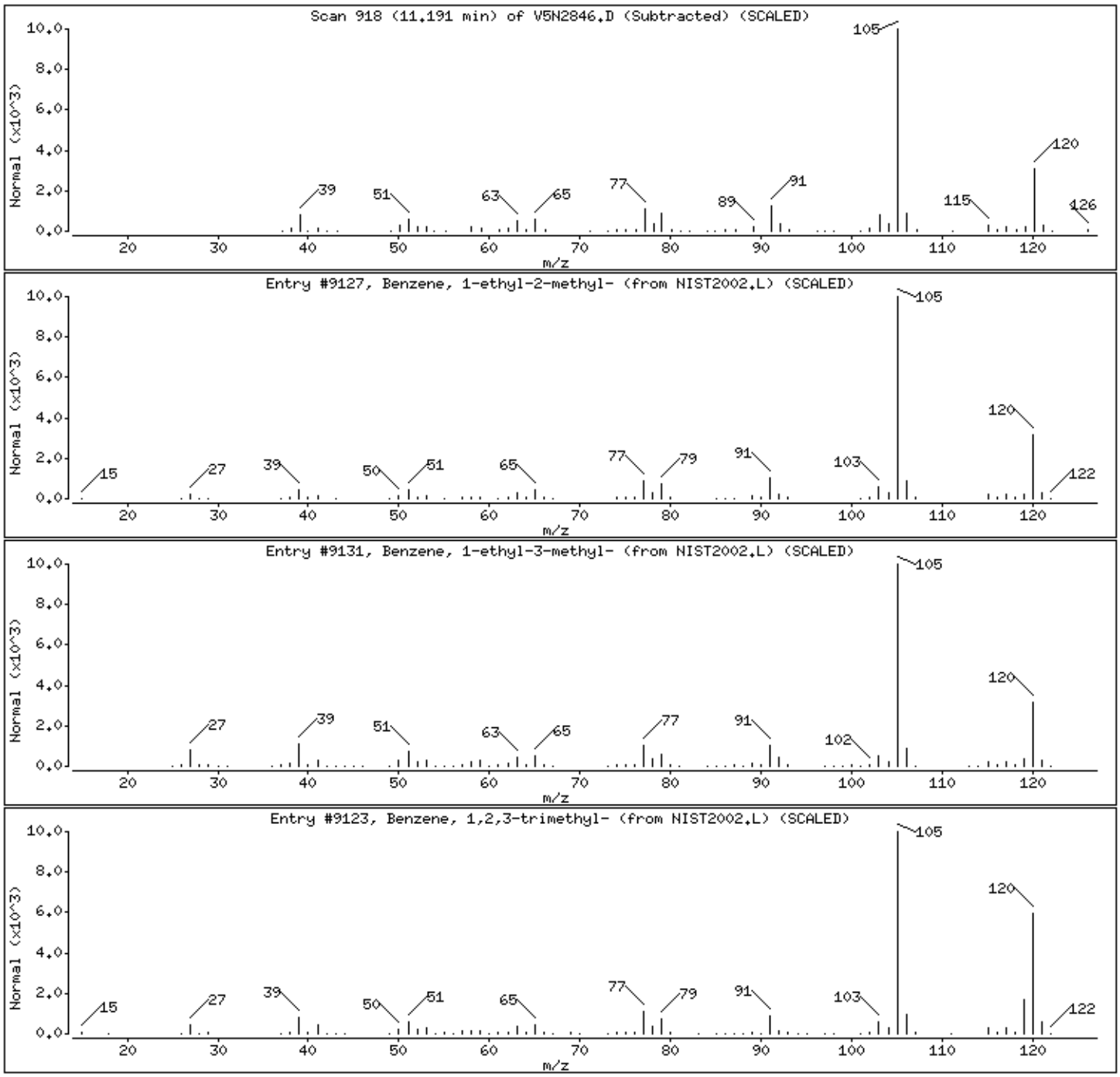
Client ID: H30X4 Instrument: V5.i

Sample Info: 25ML,K2213-01B,,62892,4

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
Benzene, 1-ethyl-2-methyl-	611-14-3	NIST2002.L	9127	95	C9H12	120
Benzene, 1-ethyl-3-methyl-	620-14-4	NIST2002.L	9131	94	C9H12	120
Benzene, 1,2,3-trimethyl-	526-73-8	NIST2002.L	9123	91	C9H12	120



Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D

Date : 10-NOV-2011 07:25

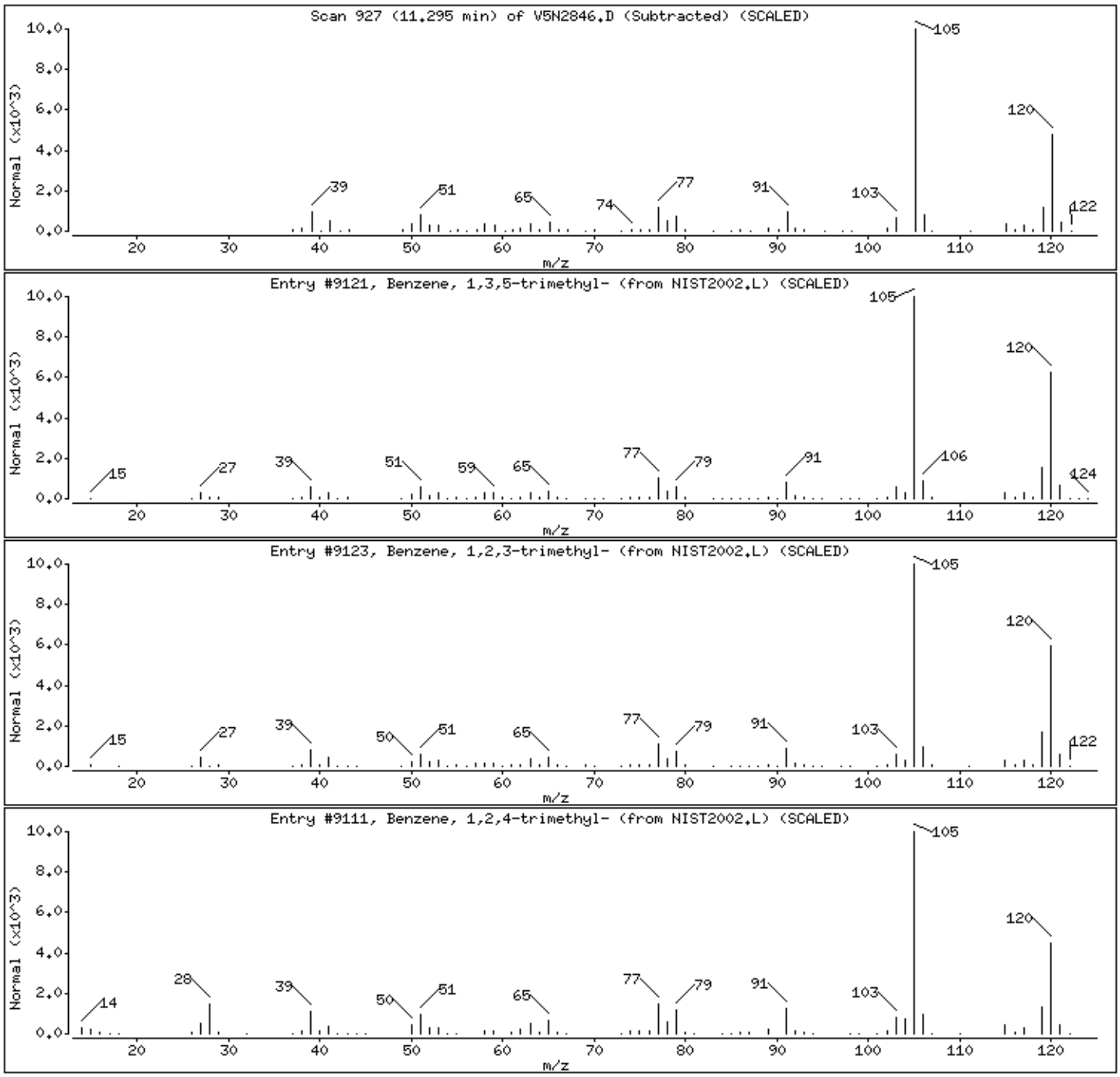
Client ID: H30X4 Instrument: V5.i

Sample Info: 25ML,K2213-01B,,62892,4

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
Benzene, 1,3,5-trimethyl-	108-67-8	NIST2002.L	9121	95	C9H12	120
Benzene, 1,2,3-trimethyl-	526-73-8	NIST2002.L	9123	95	C9H12	120
Benzene, 1,2,4-trimethyl-	95-63-6	NIST2002.L	9111	94	C9H12	120



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Date : 10-NOV-2011 07:25

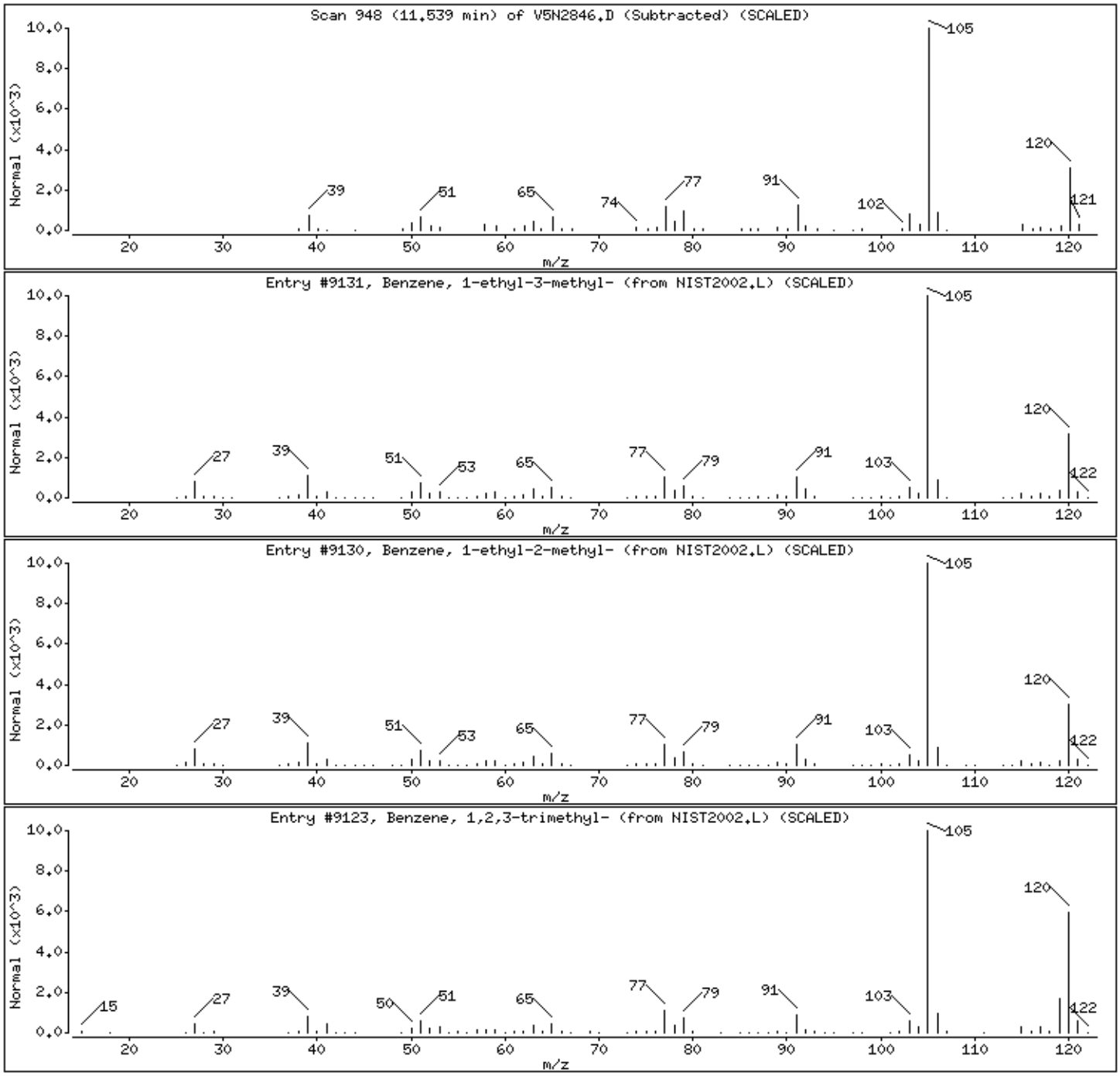
Client ID: H30X4 Instrument: V5.i

Sample Info: 25ML,K2213-01B,,62892,4

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
Benzene, 1-ethyl-3-methyl-	620-14-4	NIST2002.L	9131	91	C9H12	120
Benzene, 1-ethyl-2-methyl-	611-14-3	NIST2002.L	9130	95	C9H12	120
Benzene, 1,2,3-trimethyl-	526-73-8	NIST2002.L	9123	91	C9H12	120



Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D

Date : 10-NOV-2011 07:25

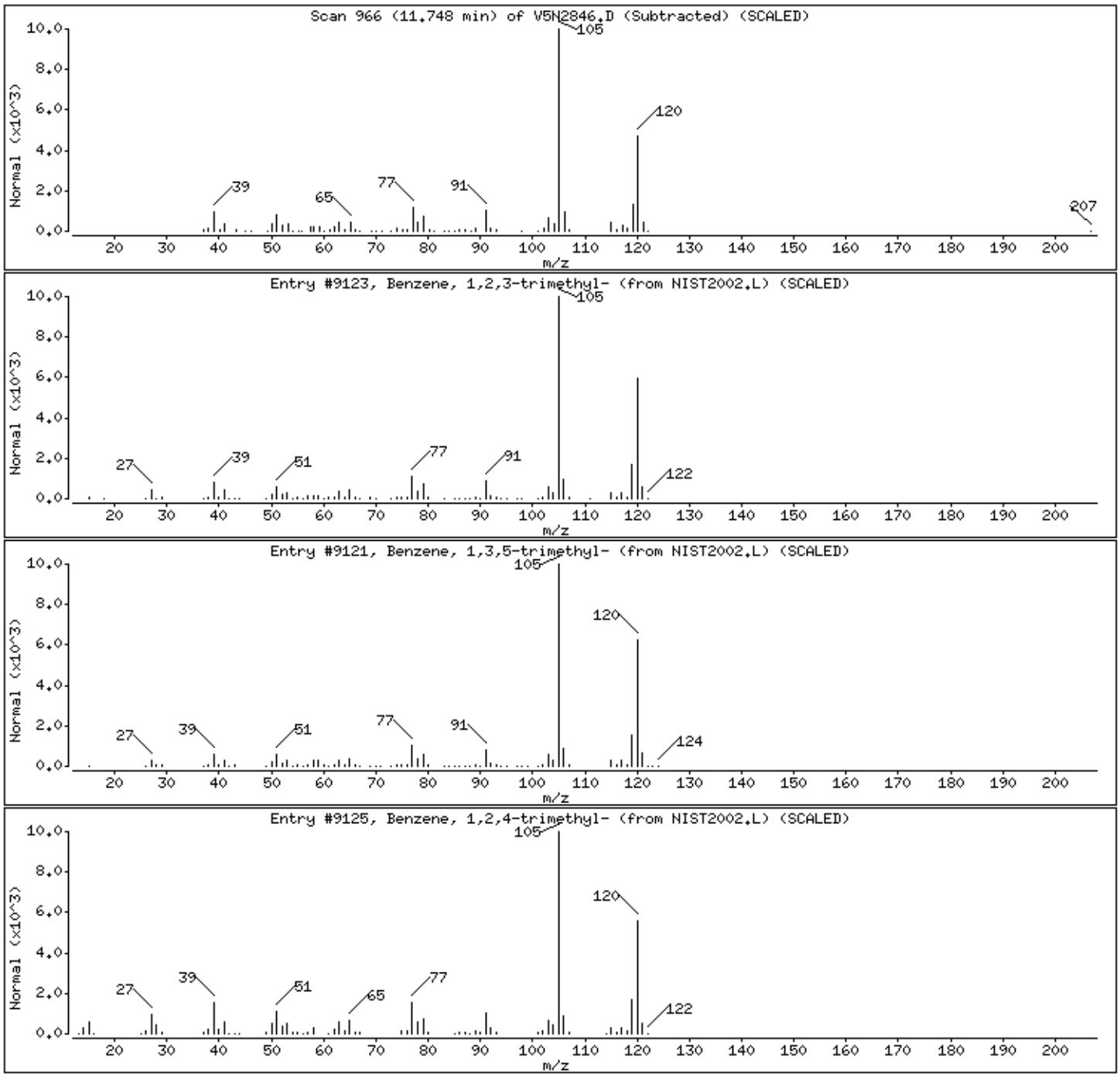
Client ID: H30X4 Instrument: V5.i

Sample Info: 25ML,K2213-01B,,62892,4

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
Benzene, 1,2,3-trimethyl-	526-73-8	NIST2002.L	9123	97	C9H12	120
Benzene, 1,3,5-trimethyl-	108-67-8	NIST2002.L	9121	97	C9H12	120
Benzene, 1,2,4-trimethyl-	95-63-6	NIST2002.L	9125	95	C9H12	120



Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D

Date : 10-NOV-2011 07:25

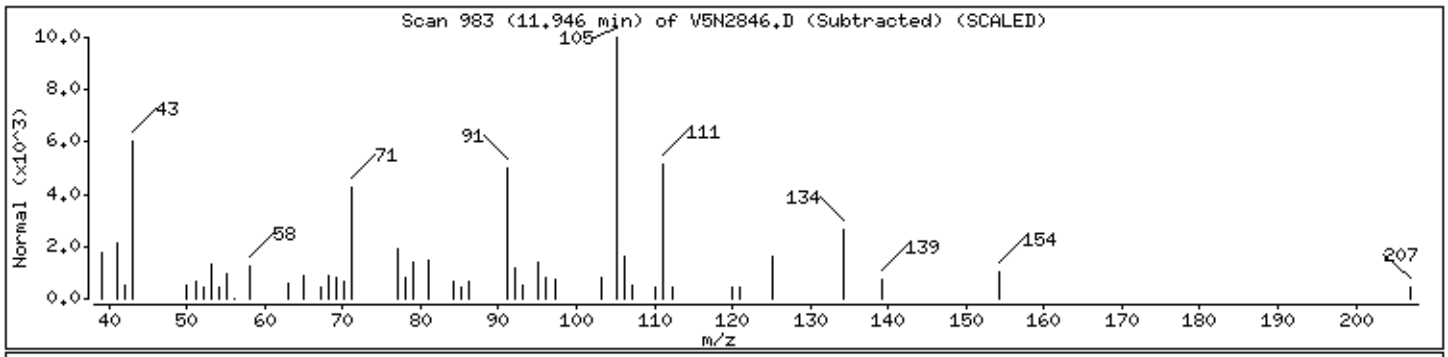
Client ID: H30X4 Instrument: V5.i

Sample Info: 25ML,K2213-01B,,62892,4

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



Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D

Date : 10-NOV-2011 07:25

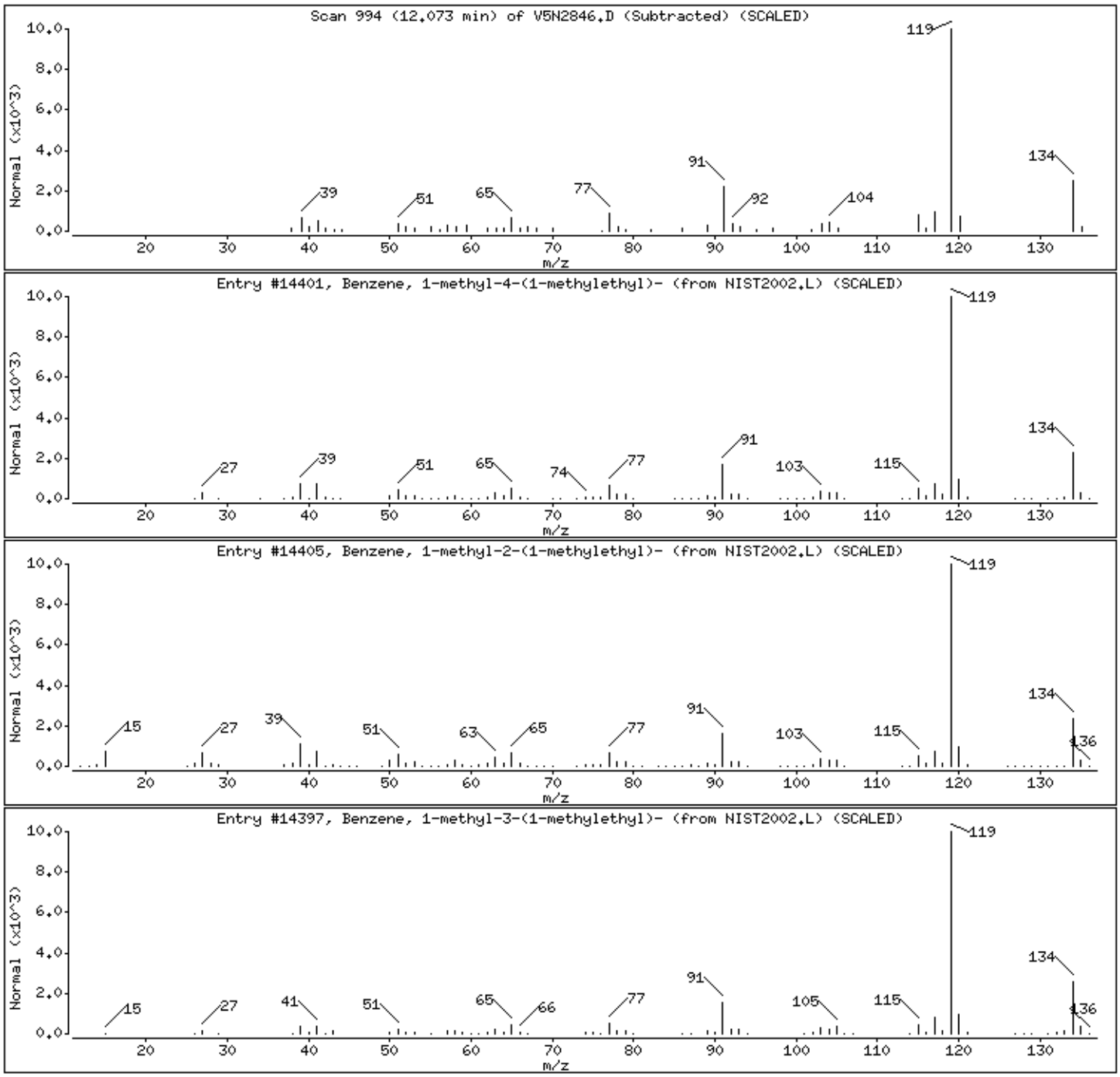
Client ID: H30X4 Instrument: V5.i

Sample Info: 25ML,K2213-01B,,62892,4

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
Benzene, 1-methyl-4-(1-methylethyl)-	99-87-6	NIST2002.L	14401	94	C10H14	134
Benzene, 1-methyl-2-(1-methylethyl)-	527-84-4	NIST2002.L	14405	94	C10H14	134
Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	NIST2002.L	14397	91	C10H14	134



Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D

Date : 10-NOV-2011 07:25

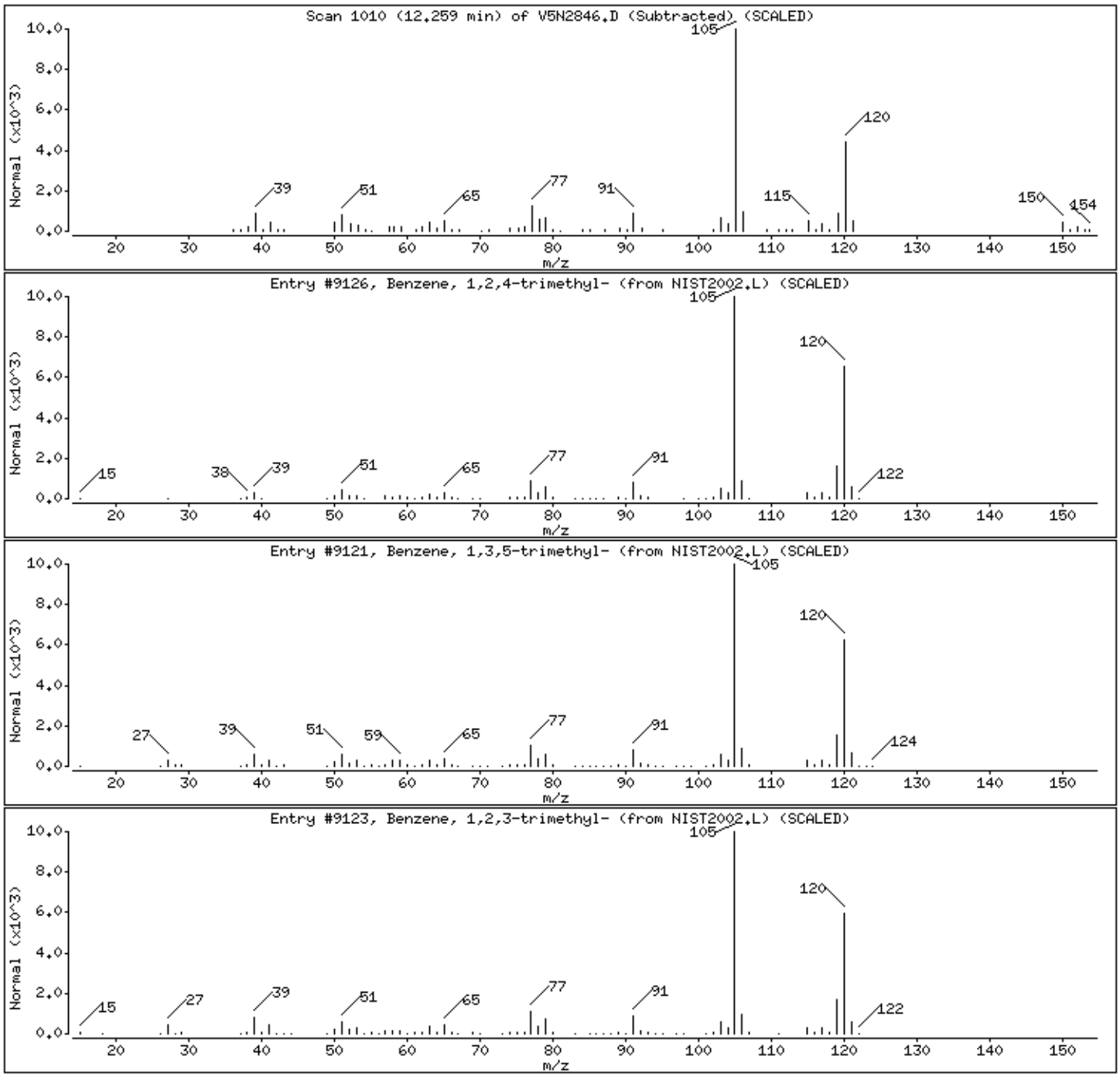
Client ID: H30X4 Instrument: V5.i

Sample Info: 25ML,K2213-01B,,62892,4

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
Benzene, 1,2,4-trimethyl-	95-63-6	NIST2002.L	9126	95	C9H12	120
Benzene, 1,3,5-trimethyl-	108-67-8	NIST2002.L	9121	95	C9H12	120
Benzene, 1,2,3-trimethyl-	526-73-8	NIST2002.L	9123	95	C9H12	120



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Date : 10-NOV-2011 07:25

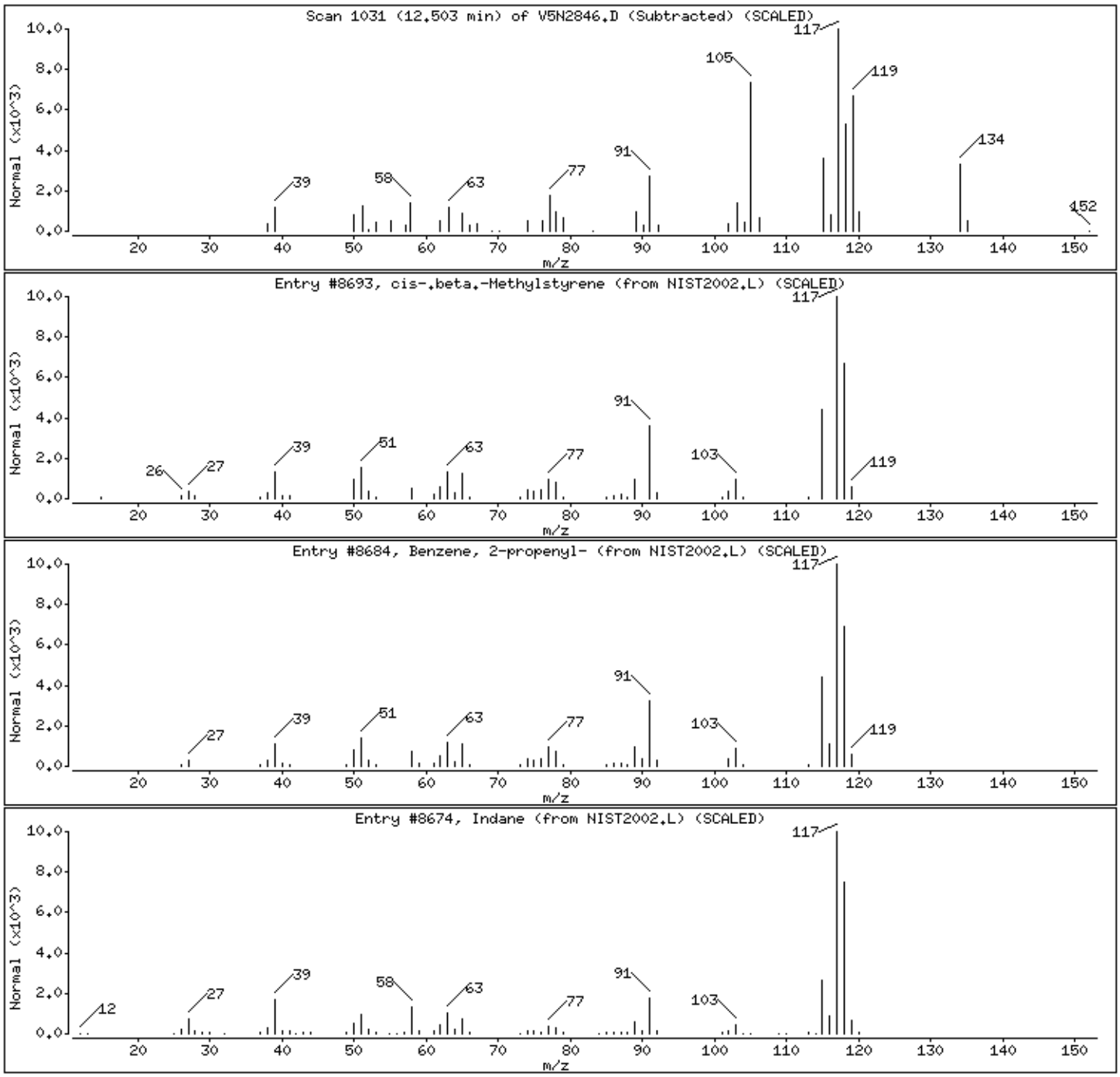
Client ID: H30X4 Instrument: V5.i

Sample Info: 25ML,K2213-01B,,62892,4

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
cis-.beta.-Methylstyrene	766-90-5	NIST2002.L	8693	91	C9H10	118
Benzene, 2-propenyl-	300-57-2	NIST2002.L	8684	90	C9H10	118
Indane	496-11-7	NIST2002.L	8674	87	C9H10	118



Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D

Date : 10-NOV-2011 07:25

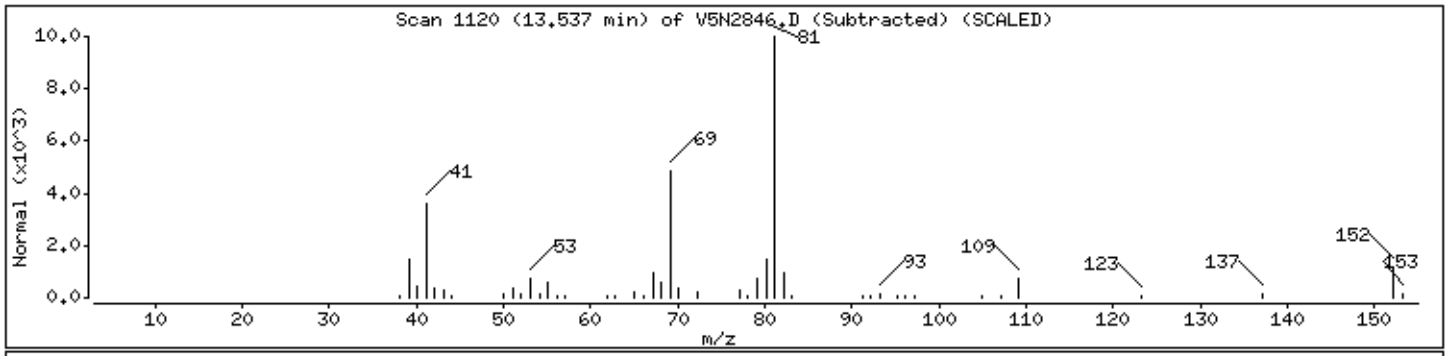
Client ID: H30X4 Instrument: V5.i

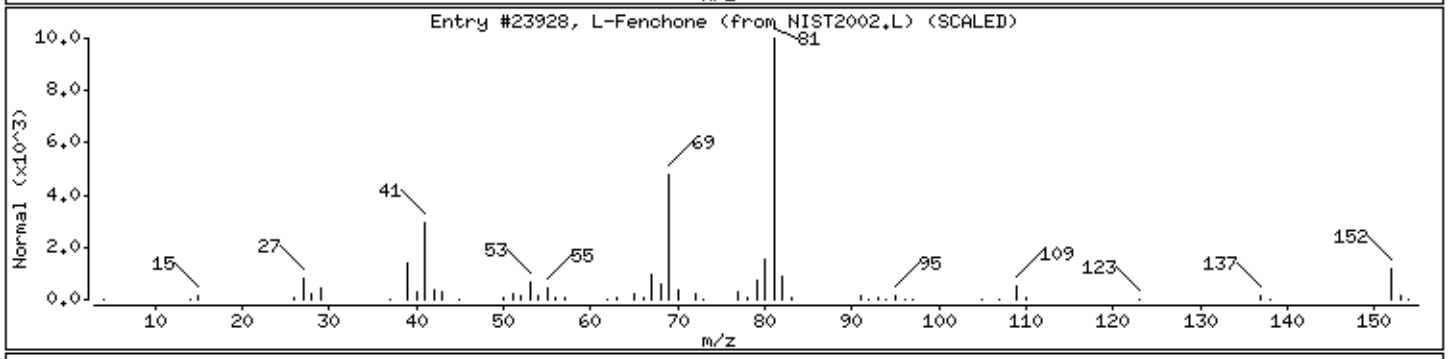
Sample Info: 25ML,K2213-01B,,62892,4

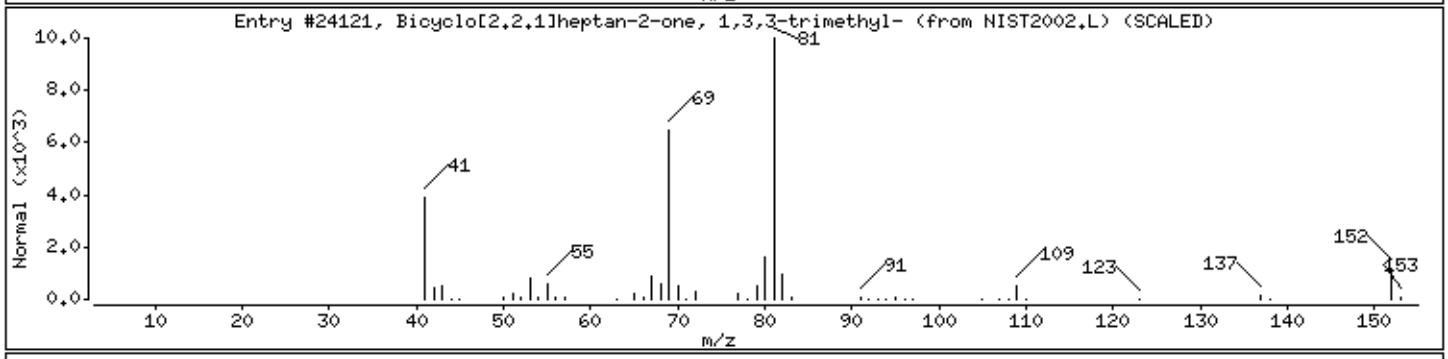
Purge Volume: 25.0 Operator: SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
L-Fenchone	126-21-6	NIST2002.L	23928	95	C10H16O	152
Bicyclo[2.2.1]heptan-2-one, 1,3,3-trimet	1195-79-5	NIST2002.L	24121	95	C10H16O	152







Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D

Date : 10-NOV-2011 07:25

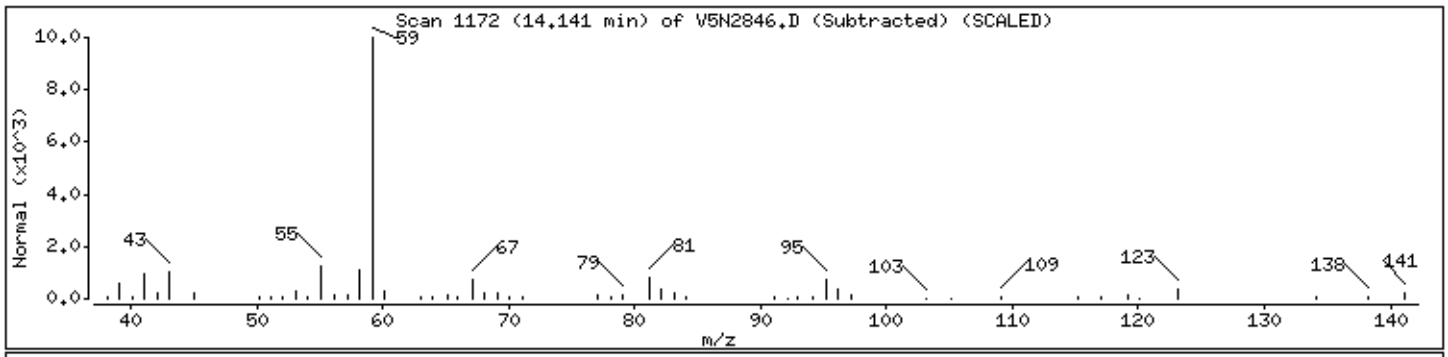
Client ID: H30X4 Instrument: V5.i

Sample Info: 25ML,K2213-01B,,62892,4

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



Data File: \\avogadro\organics\V5.I\111110.B\V5N2846.D

Date : 10-NOV-2011 07:25

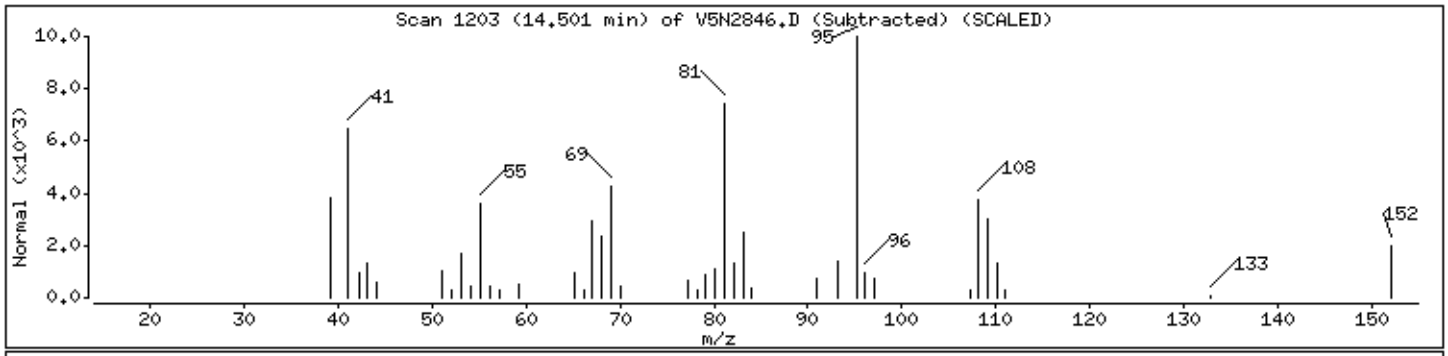
Client ID: H30X4 Instrument: V5.i

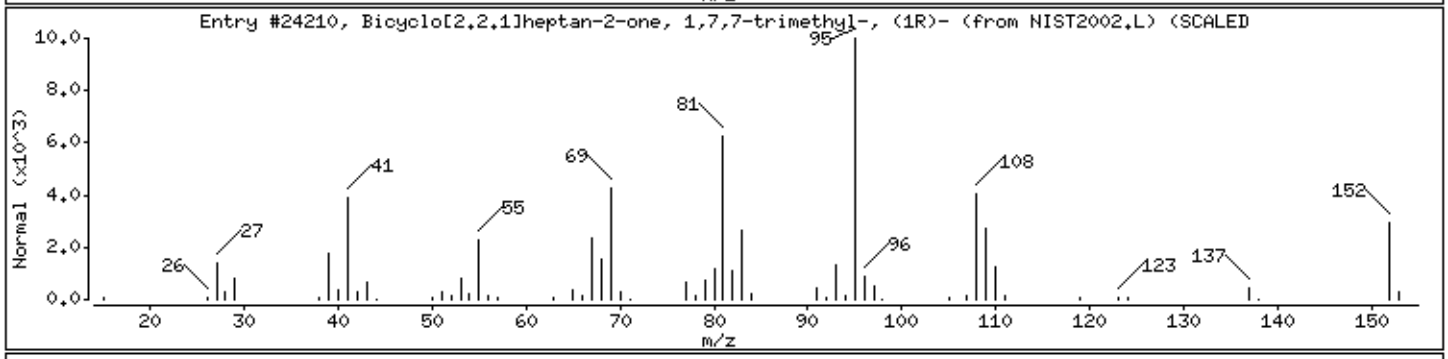
Sample Info: 25ML,K2213-01B,,62892,4

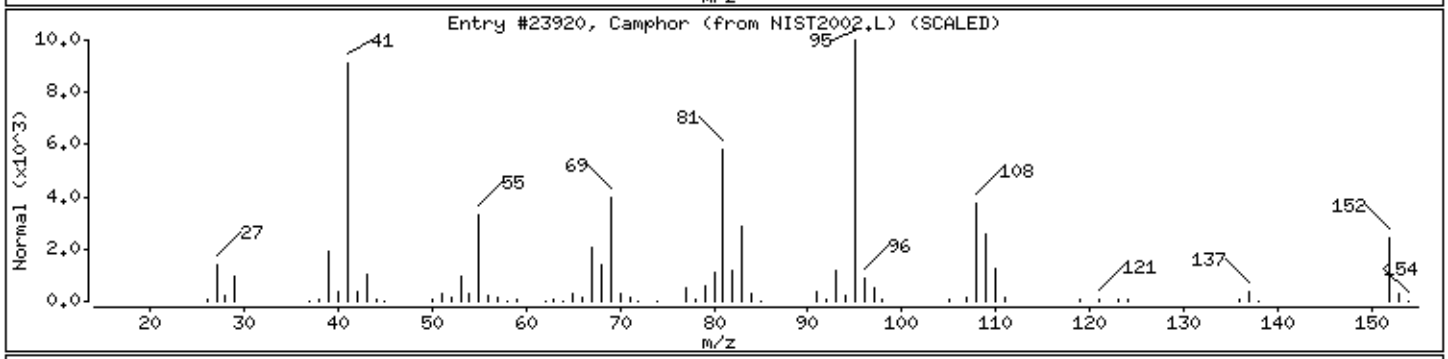
Purge Volume: 25.0 Operator: SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet	464-49-3	NIST2002.L	24210	97	C10H16O	152
Camphor	76-22-2	NIST2002.L	23920	96	C10H16O	152







1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30X6

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-06B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2854.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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	0.44	J
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.

H30X6

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-06B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2854.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30X6

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-06B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2854.D

Level: (TRACE or LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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	14.145	1.1	J
02	464-48-2	Bicyclo[2.2.1]heptan-2-one,	14.493	1.6	NJ
	E96679[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111110.B\V5N2854.D
Report Date: 15-Nov-2011 09:35

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2854.D
Lab Smp Id: K2213-06B Client Smp ID: H30X6
Inj Date : 10-NOV-2011 11:14
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-06B,,62892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 35
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	2.218	2.216	(0.351)	136009	6.38361	6.4
$	80 Chloroethane-d5	69	2.612	2.600	(0.414)	91982	6.35871	6.4
$	81 1,1-Dichloroethene-d2	65	3.379	3.378	(0.535)	27680	5.01652	5.0(Q)
	10 Carbon Disulfide	76	3.623	3.622	(0.574)	27849	0.43811	0.44
$	82 2-Butanone-d5	46	5.074	5.062	(0.803)	141262	55.2765	55(AQ)
$	83 Chloroform-d	84	5.388	5.387	(0.853)	122964	4.81936	4.8(Q)
$	23 1,2-Dichloroethane-d4	65	5.899	5.898	(0.934)	47564	4.74021	4.7(Q)
$	84 Benzene-d6	84	5.910	5.909	(0.627)	237895	4.50206	4.5
*	26 1,4-Difluorobenzene	114	6.317	6.327	(1.000)	234199	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.735	6.734	(0.714)	82374	4.49114	4.5
$	33 Toluene-d8	98	7.838	7.837	(0.831)	214902	4.53187	4.5
$	86 trans-1,3-Dichloropropene-d4	79	8.117	8.116	(0.861)	56963	5.42005	5.4
$	87 2-Hexanone-d5	63	8.570	8.569	(0.909)	102740	56.4447	56(AQ)
*	42 Chlorobenzene-d5	117	9.429	9.428	(1.000)	180150	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.927	10.926	(1.159)	34746	5.11691	5.1
*	78 1,4-Dichlorobenzene-d4	152	12.170	12.169	(1.000)	78460	5.00000	(Q)
$	90 1,2-Dichlorobenzene-d4	152	12.634	12.633	(1.038)	58350	4.73081	4.7(Q)

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111110.B\V5N2854.D
Report Date: 15-Nov-2011 09:35

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111110.B\V5N2854.D
Report Date: 15-Nov-2011 09:35

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2854.D
Lab Smp Id: K2213-06B Client Smp ID: H30X6
Inj Date : 10-NOV-2011 11:14
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-06B,,62892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 35
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

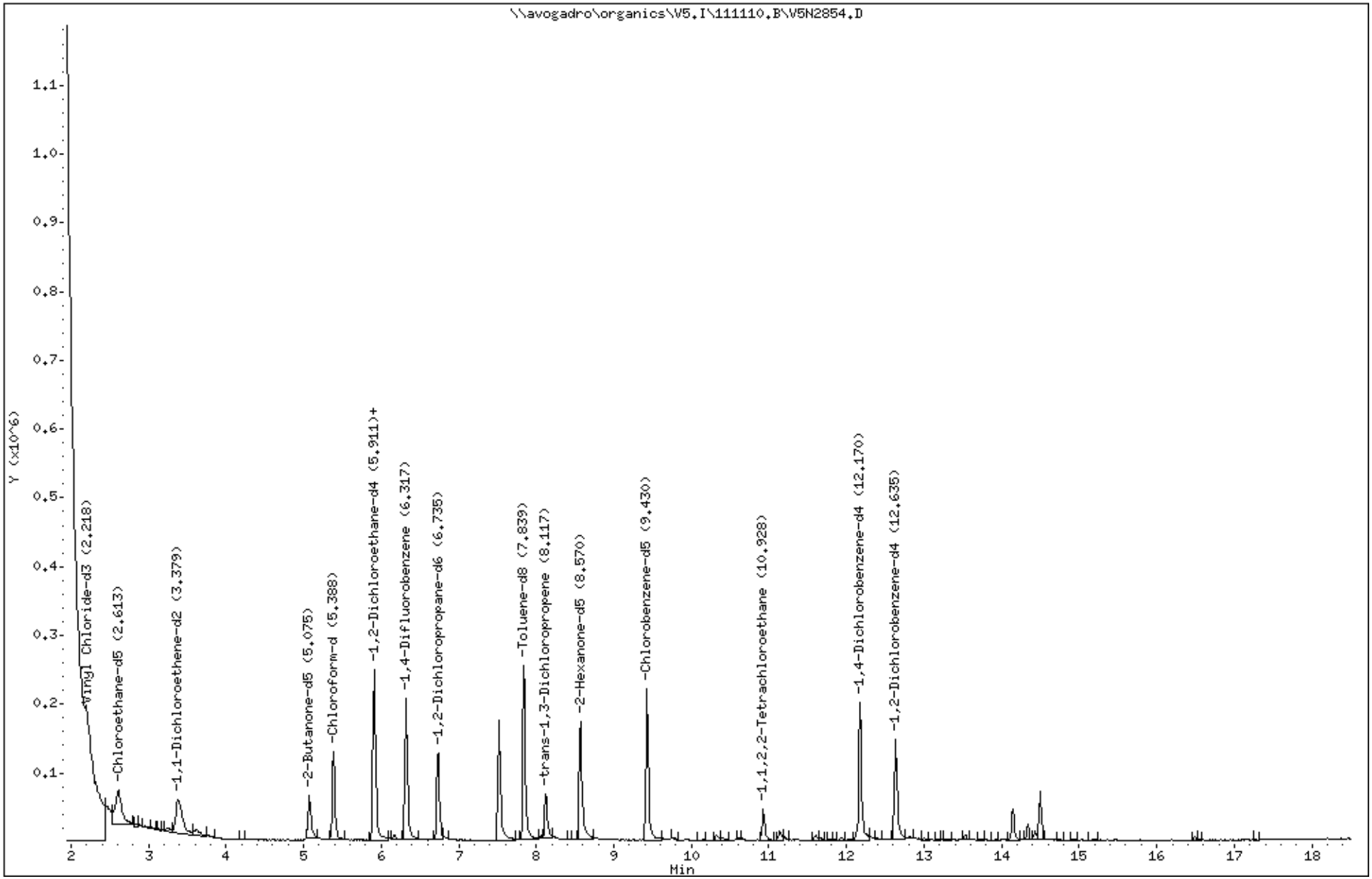
Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

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
* 78 1,4-Dichlorobenzene-d4	12.170	508831	5.000

	CONCENTRATIONS			QUANT			
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
14.145	116692	1.14666647	1.1	0		0	78
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet					CAS #: 464-48-2		
14.493	159639	1.56868122	1.6	98	NIST2002.L	24208	78

Data File: \\avogadro\organics\V5.I\111110.B\V5N2854.D
Date : 10-NOV-2011 11:14
Client ID: H30X6
Instrument: V5.i
Sample Info: 25ML,K2213-06B,,62892
Purge Volume: 25.0
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111110.B\V5N2854.D

Date : 10-NOV-2011 11:14

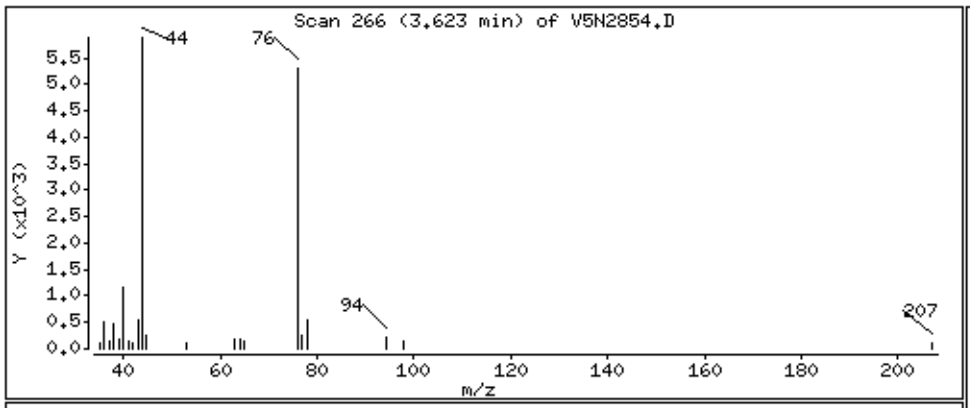
Client ID: H30X6 Instrument: V5.i

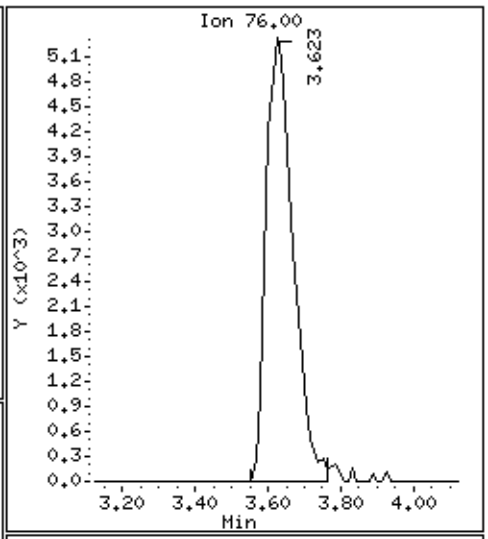
Sample Info: 25ML,K2213-06B,,62892

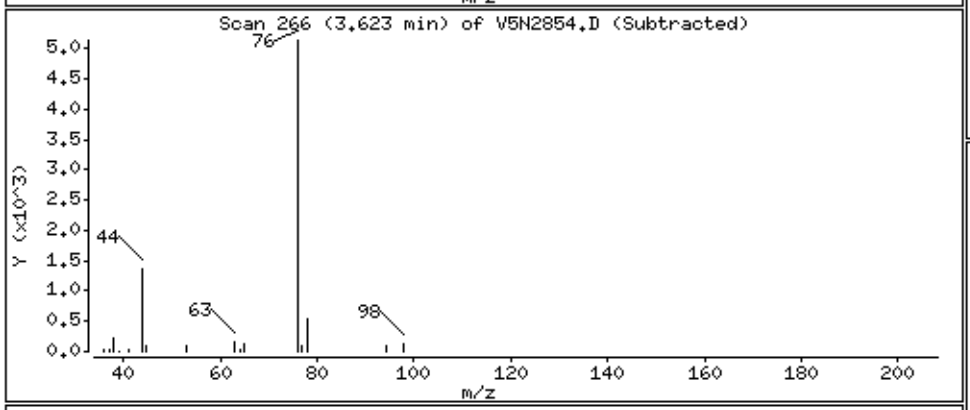
Purge Volume: 25.0 Operator: SRC: LIMS

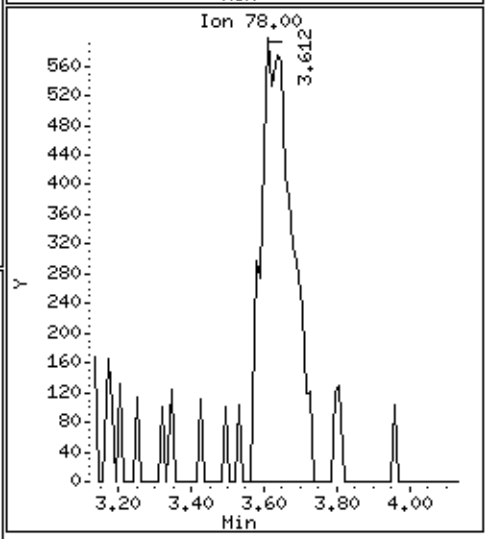
Column phase: DB-624 Column diameter: 0.25

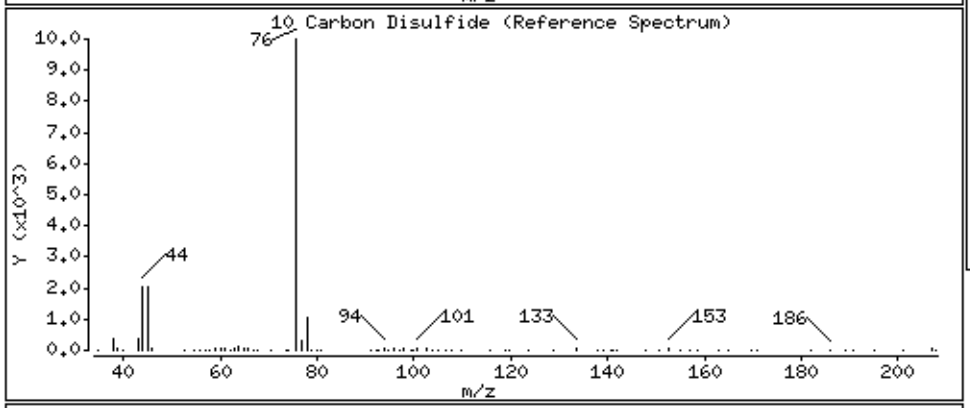
10 Carbon Disulfide Concentration: 0.44 ug/L

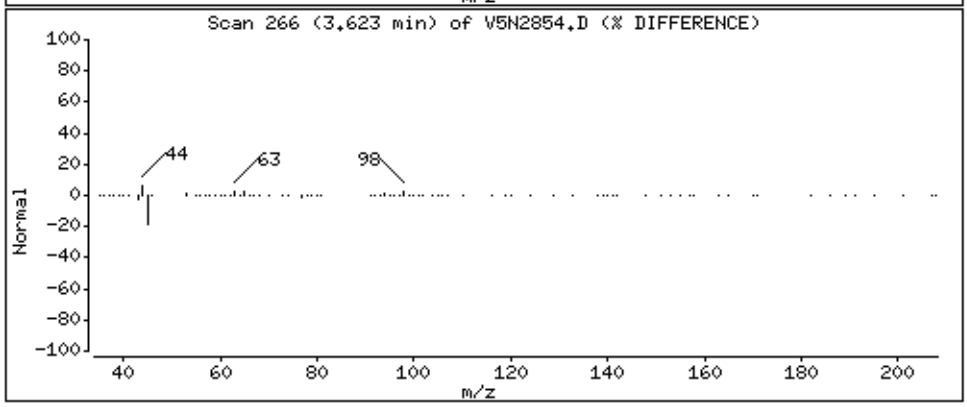












Data File: \\avogadro\organics\V5.I\111110.B\V5N2854.D

Date : 10-NOV-2011 11:14

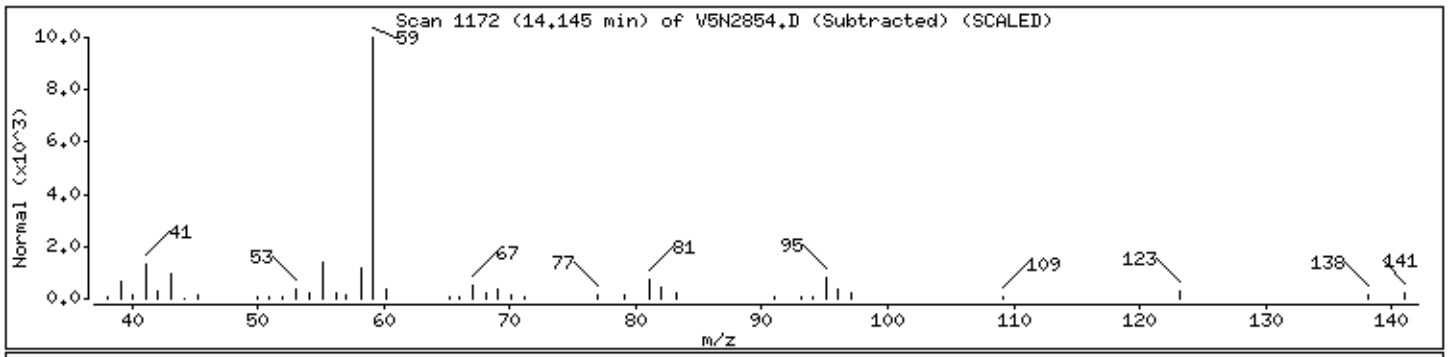
Client ID: H30X6 Instrument: V5.i

Sample Info: 25ML,K2213-06B,,62892

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



Data File: \\avogadro\organics\V5.I\111110.B\V5N2854.D

Date : 10-NOV-2011 11:14

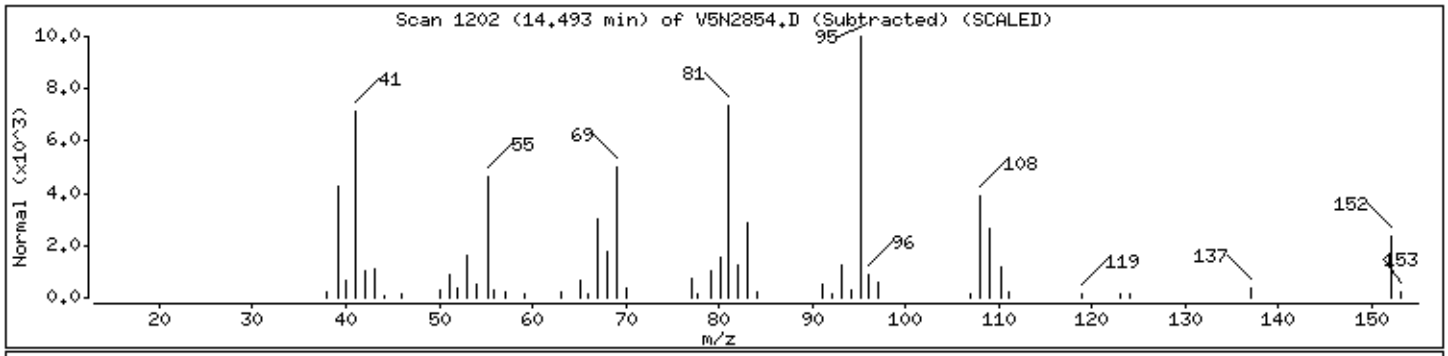
Client ID: H30X6 Instrument: V5.i

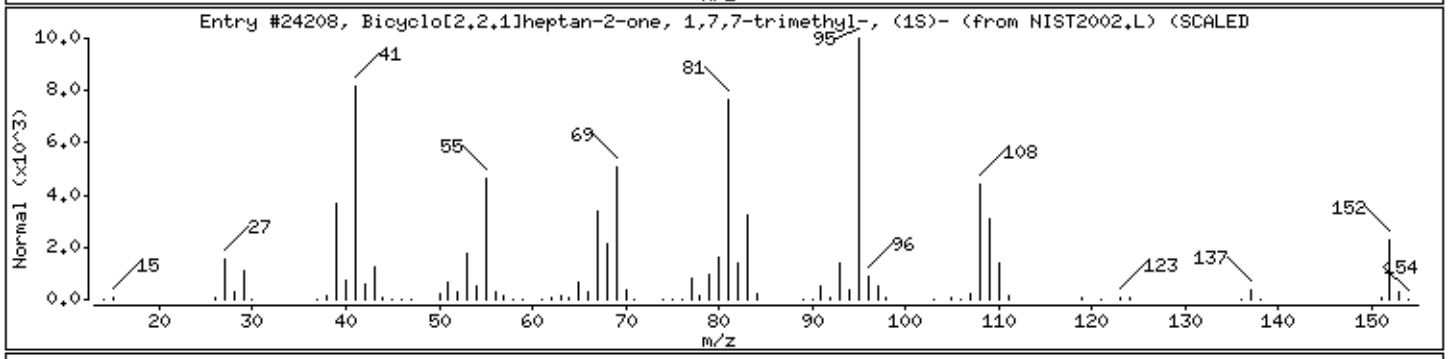
Sample Info: 25ML,K2213-06B,,62892

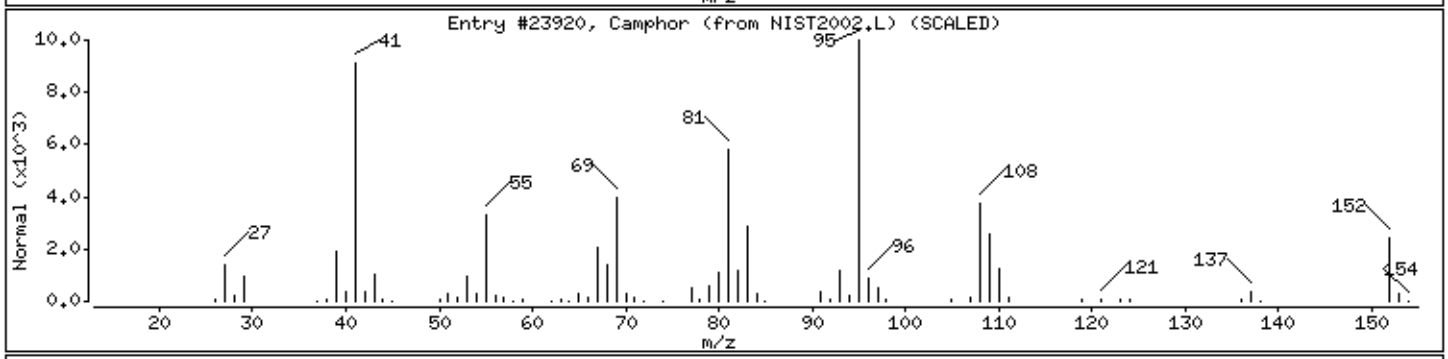
Purge Volume: 25.0 Operator: SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet	464-48-2	NIST2002.L	24208	98	C10H16O	152
Camphor	76-22-2	NIST2002.L	23920	97	C10H16O	152







1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30X7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-07B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2855.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30X7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-07B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2855.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30X7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-07B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2855.D

Level: (TRACE or LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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	74-93-1	Methanethiol	2.413	1.2	NJ
	E96679[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111110.B\V5N2855.D
Report Date: 15-Nov-2011 09:35

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2855.D
Lab Smp Id: K2213-07B Client Smp ID: H30X7
Inj Date : 10-NOV-2011 11:43
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-07B,,62892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 36
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	2.215	2.216	(0.350)	128504	6.24771	6.2
$	80 Chloroethane-d5	69	2.610	2.600	(0.413)	85187	6.10021	6.1
$	81 1,1-Dichloroethene-d2	65	3.388	3.378	(0.536)	27652	5.19121	5.2(Q)
$	82 2-Butanone-d5	46	5.072	5.062	(0.802)	125891	51.0288	51(AQ)
$	83 Chloroform-d	84	5.386	5.387	(0.851)	118067	4.79342	4.8(Q)
$	23 1,2-Dichloroethane-d4	65	5.897	5.898	(0.932)	45277	4.67415	4.7(Q)
$	84 Benzene-d6	84	5.920	5.909	(0.628)	232342	4.65104	4.7
*	26 1,4-Difluorobenzene	114	6.326	6.327	(1.000)	226089	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.733	6.734	(0.714)	78129	4.50583	4.5
$	33 Toluene-d8	98	7.848	7.837	(0.832)	205058	4.57415	4.6
$	86 trans-1,3-Dichloropropene-d4	79	8.127	8.116	(0.862)	52604	5.29451	5.3
$	87 2-Hexanone-d5	63	8.568	8.569	(0.909)	90504	52.5954	53(AQ)
*	42 Chlorobenzene-d5	117	9.427	9.428	(1.000)	170309	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.925	10.926	(1.159)	33546	5.22565	5.2
*	78 1,4-Dichlorobenzene-d4	152	12.179	12.169	(1.000)	70632	5.00000	
$	90 1,2-Dichlorobenzene-d4	152	12.632	12.633	(1.037)	55360	4.98583	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\111110.B\V5N2855.D
Report Date: 15-Nov-2011 09:35

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2855.D
Lab Smp Id: K2213-07B Client Smp ID: H30X7
Inj Date : 10-NOV-2011 11:43
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-07B,,62892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 36
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

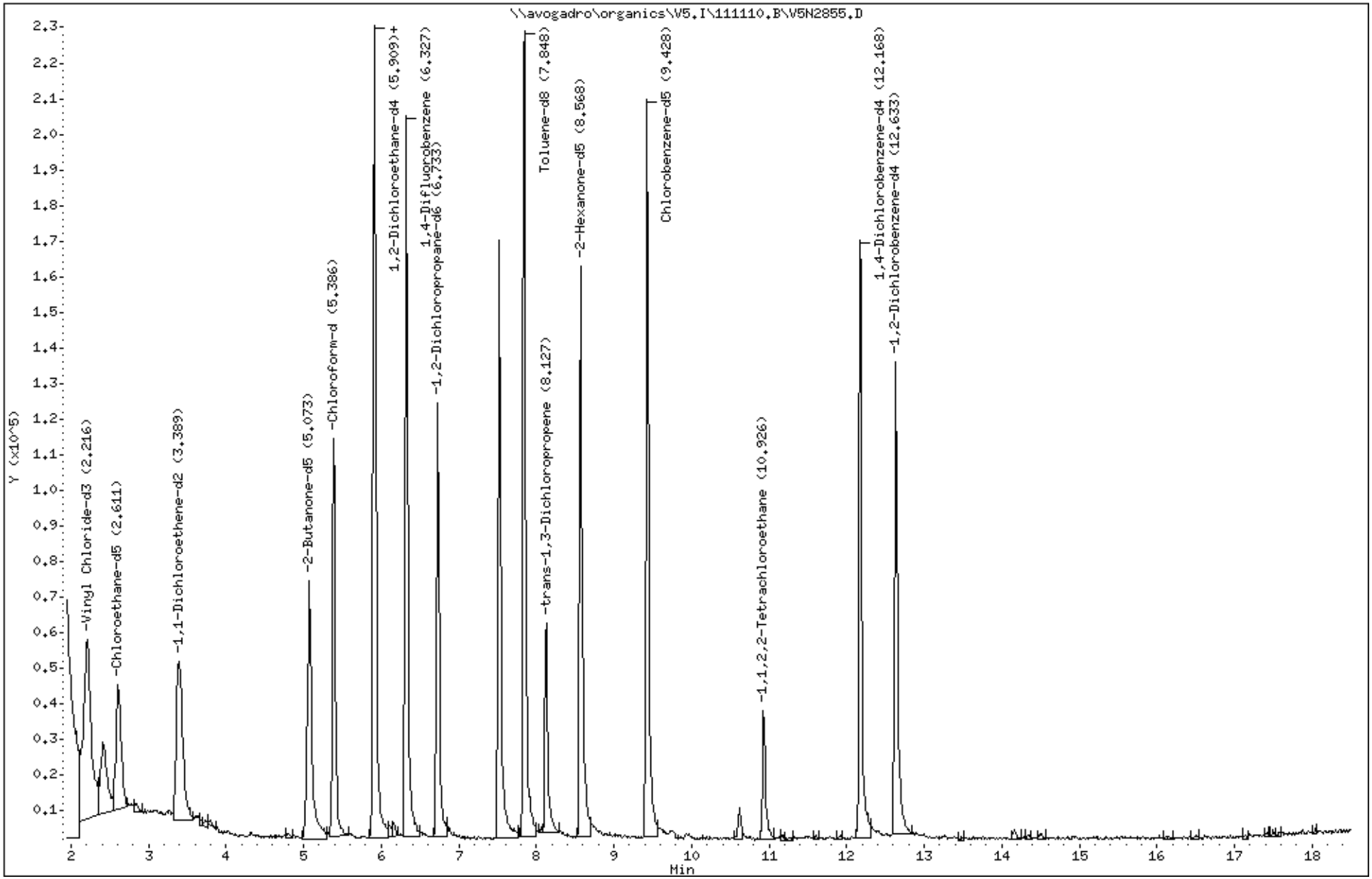
Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

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	6.327	503078	5.000

	CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Methanethiol				CAS #: 74-93-1			
2.413	123952	1.23193666	1.2	91	NIST2002.L	109	26

Data File: \\avogadro\organics\V5.I\111110.B\V5N2855.D
Date : 10-NOV-2011 11:43
Client ID: H30X7
Instrument: V5.i
Sample Info: 25ML,K2213-07B,,62892
Purge Volume: 25.0
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111110.B\V5N2855.D

Date : 10-NOV-2011 11:43

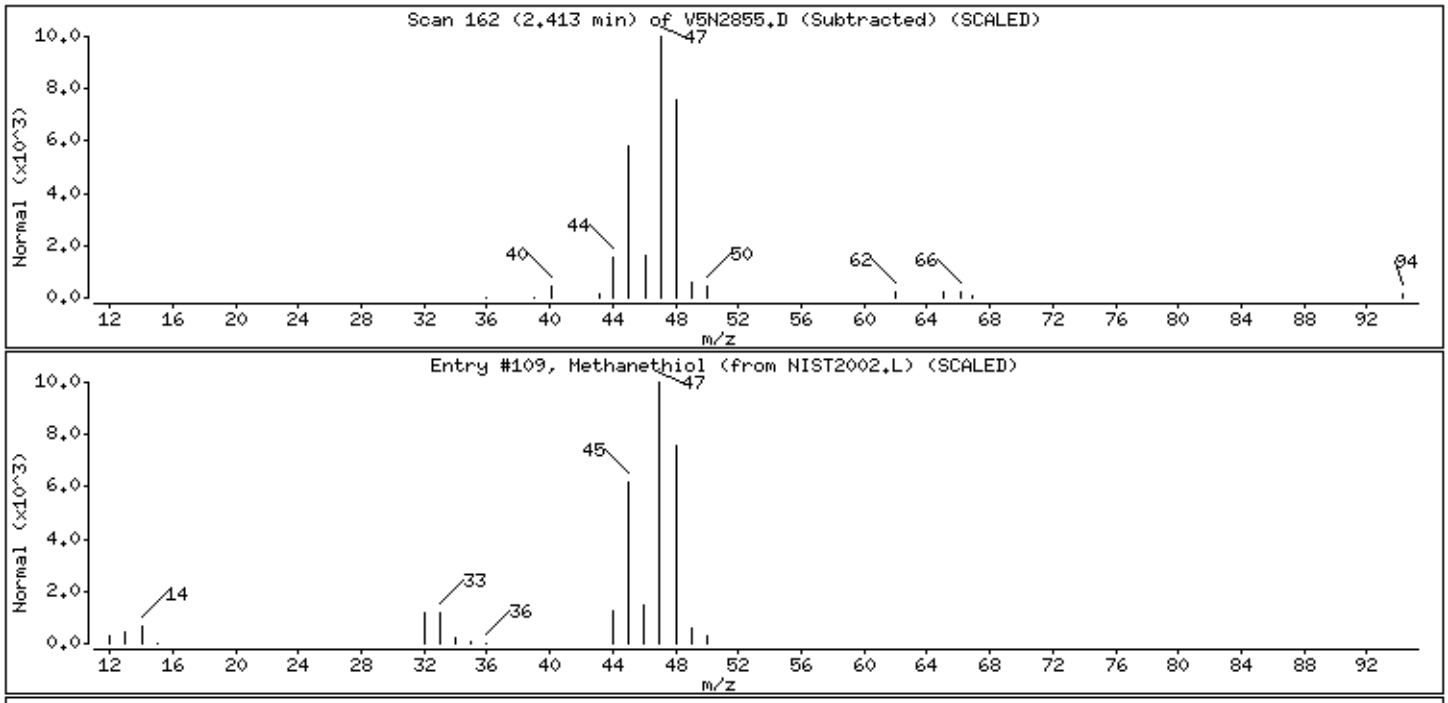
Client ID: H30X7 Instrument: V5.i

Sample Info: 25ML,K2213-07B,,62892

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
Methanethiol	74-93-1	NIST2002.L	109	91	CH4S	48



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30X9

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-08B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2856.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30X9

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-08B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2856.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30X9

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-08B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2856.D

Level: (TRACE or LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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\111110.B\V5N2856.D
Report Date: 15-Nov-2011 09:35

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2856.D
Lab Smp Id: K2213-08B Client Smp ID: H30X9
Inj Date : 10-NOV-2011 12:11
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-08B,,62892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 37
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	2.208	2.216	(0.349)	133911	6.33433	6.3
$	80 Chloroethane-d5	69	2.614	2.600	(0.414)	89852	6.26008	6.3
$	81 1,1-Dichloroethene-d2	65	3.369	3.378	(0.533)	29369	5.36429	5.4(QR)
$	82 2-Butanone-d5	46	5.076	5.062	(0.803)	126535	49.9013	50(AQ)
$	83 Chloroform-d	84	5.390	5.387	(0.853)	121034	4.78085	4.8(Q)
$	23 1,2-Dichloroethane-d4	65	5.901	5.898	(0.934)	48399	4.86119	4.9(Q)
$	84 Benzene-d6	84	5.913	5.909	(0.627)	234943	4.56845	4.6
*	26 1,4-Difluorobenzene	114	6.319	6.327	(1.000)	232380	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.725	6.734	(0.713)	78675	4.40741	4.4
$	33 Toluene-d8	98	7.840	7.837	(0.831)	216056	4.68149	4.7
$	86 trans-1,3-Dichloropropene-d4	79	8.119	8.116	(0.861)	55104	5.38733	5.4
$	87 2-Hexanone-d5	63	8.572	8.569	(0.909)	86566	48.8665	49(AQ)
*	42 Chlorobenzene-d5	117	9.431	9.428	(1.000)	175329	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.929	10.926	(1.159)	32314	4.88961	4.9
*	78 1,4-Dichlorobenzene-d4	152	12.172	12.169	(1.000)	72134	5.00000	(Q)
$	90 1,2-Dichlorobenzene-d4	152	12.636	12.633	(1.038)	55644	4.90706	4.9(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\111110.B\V5N2856.D
Report Date: 15-Nov-2011 09:35

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\V5.I\111110.B\V5N2856.D
Report Date: 15-Nov-2011 09:35

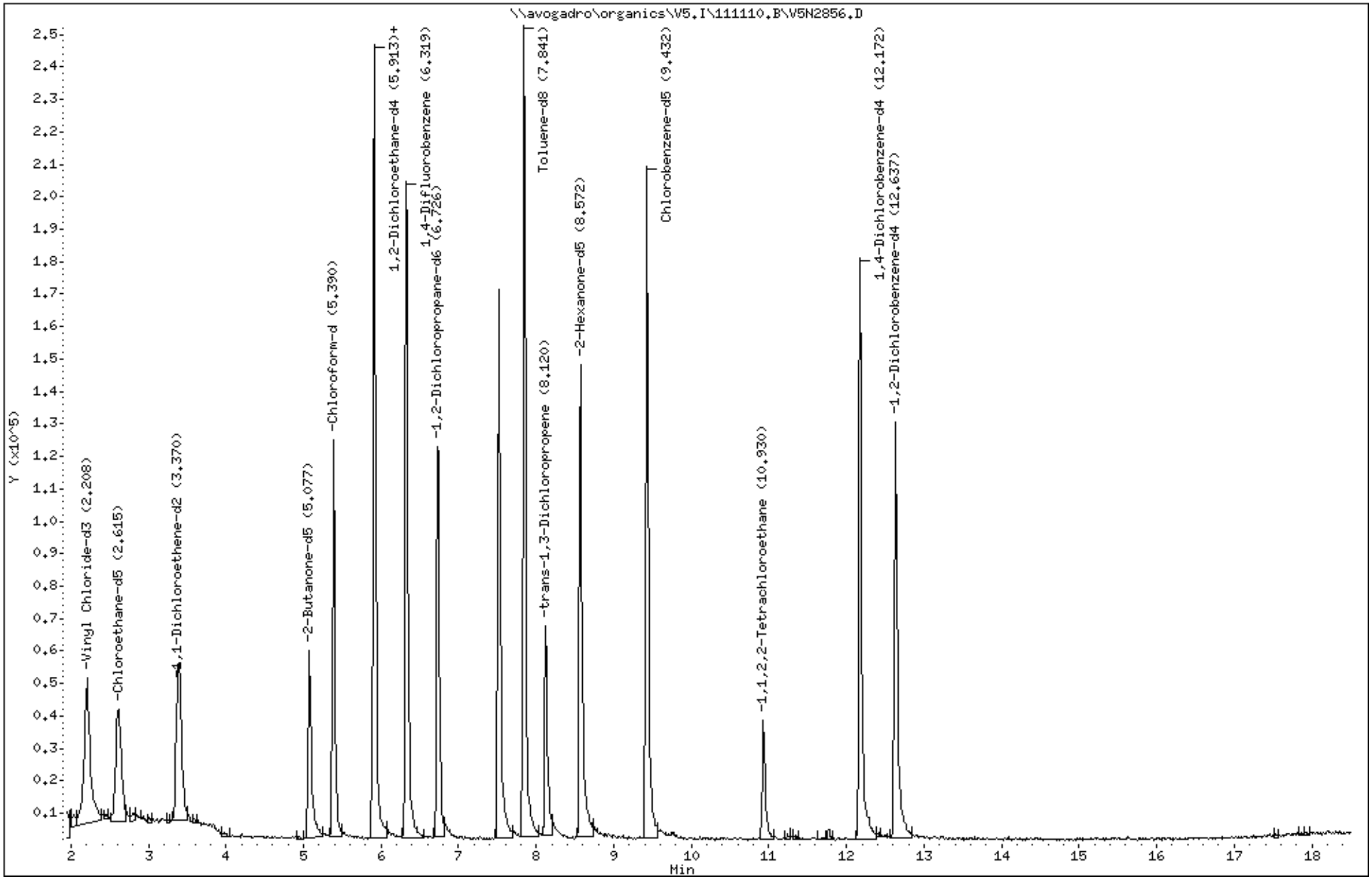
Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2856.D
Lab Smp Id: K2213-08B Client Smp ID: H30X9
Inj Date : 10-NOV-2011 12:11
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-08B,,62892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 37
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\111110.B\V5N2856.D
Date : 10-NOV-2011 12:11
Client ID: H30X9
Instrument: V5.i
Sample Info: 25ML,K2213-08B,,62892
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.

H30Y0

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-09B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2857.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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	0.83	
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.

H30Y0

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-09B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2857.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30Y0

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-09B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2857.D

Level: (TRACE or LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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	2.416	1.7	J
02		Unknown-02	11.137	0.61	J
	E96679[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111110.B\V5N2857.D
Report Date: 15-Nov-2011 09:35

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2857.D
Lab Smp Id: K2213-09B Client Smp ID: H30Y0
Inj Date : 10-NOV-2011 12:40
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-09B,,62892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 38
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	2.206	2.216	(0.349)	126261	6.27907	6.3
$	80 Chloroethane-d5	69	2.613	2.600	(0.414)	90108	6.60020	6.6(R)
$	81 1,1-Dichloroethene-d2	65	3.379	3.378	(0.535)	28575	5.48720	5.5(QR)
	10 Carbon Disulfide	76	3.623	3.622	(0.574)	49711	0.82862	0.83
$	82 2-Butanone-d5	46	5.075	5.062	(0.803)	129550	53.7131	54(AQ)
$	83 Chloroform-d	84	5.388	5.387	(0.853)	120423	5.00091	5.0(Q)
$	23 1,2-Dichloroethane-d4	65	5.899	5.898	(0.934)	44761	4.72658	4.7(Q)
$	84 Benzene-d6	84	5.911	5.909	(0.627)	234569	4.73124	4.7
*	26 1,4-Difluorobenzene	114	6.317	6.327	(1.000)	221033	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.724	6.734	(0.713)	76983	4.47341	4.5
$	33 Toluene-d8	98	7.839	7.837	(0.831)	215836	4.85109	4.9
$	86 trans-1,3-Dichloropropene-d4	79	8.117	8.116	(0.861)	48615	4.93013	4.9
$	87 2-Hexanone-d5	63	8.570	8.569	(0.909)	89458	52.3819	52(AQ)
*	42 Chlorobenzene-d5	117	9.430	9.428	(1.000)	169027	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.928	10.926	(1.159)	34372	5.39493	5.4
*	78 1,4-Dichlorobenzene-d4	152	12.170	12.169	(1.000)	69022	5.00000	(Q)
$	90 1,2-Dichlorobenzene-d4	152	12.635	12.633	(1.038)	55972	5.15854	5.2(Q)

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111110.B\V5N2857.D
Report Date: 15-Nov-2011 09:35

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\V5.I\111110.B\V5N2857.D
Report Date: 15-Nov-2011 09:35

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2857.D
Lab Smp Id: K2213-09B Client Smp ID: H30Y0
Inj Date : 10-NOV-2011 12:40
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-09B,,62892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 38
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

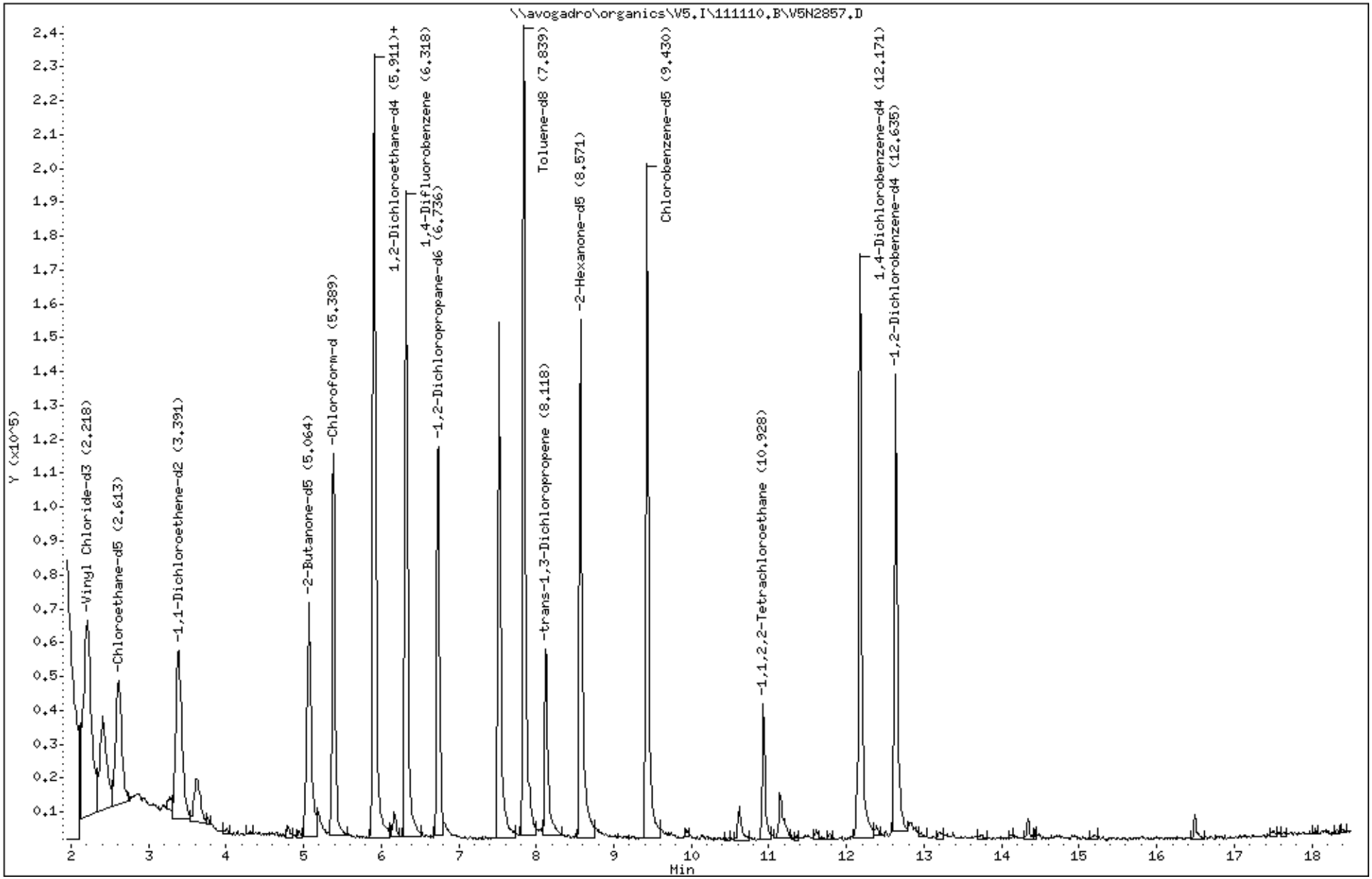
Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

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	6.318	502032	5.000
* 78 1,4-Dichlorobenzene-d4	12.171	461837	5.000

	CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.416	173650	1.72946902	1.7	0		0	26
Unknown				CAS #:			
11.137	56040	0.60670446	0.61	0		0	78

Data File: \\avogadro\organics\V5.I\111110.B\V5N2857.D
Date : 10-NOV-2011 12:40
Client ID: H30Y0
Instrument: V5.i
Sample Info: 25ML,K2213-09B,,62892
Purge Volume: 25.0
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111110.B\V5N2857.D

Date : 10-NOV-2011 12:40

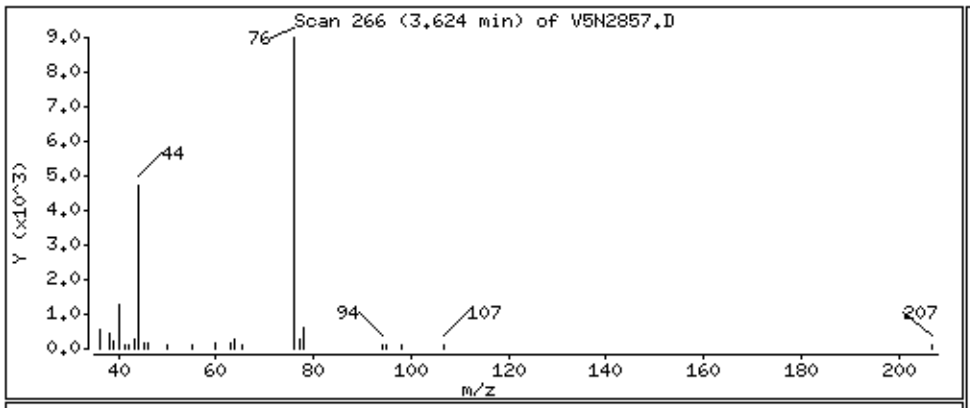
Client ID: H30Y0 Instrument: V5.i

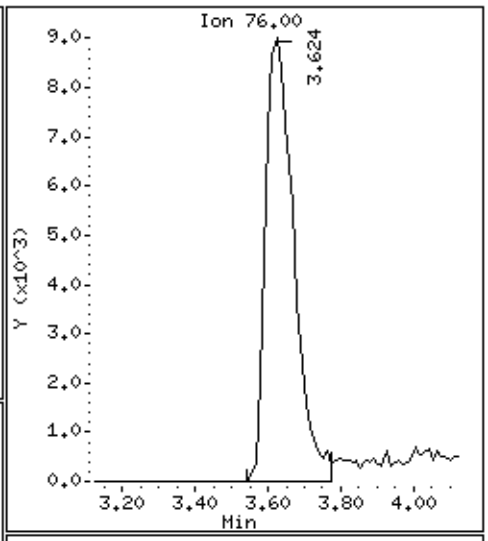
Sample Info: 25ML,K2213-09B,,62892

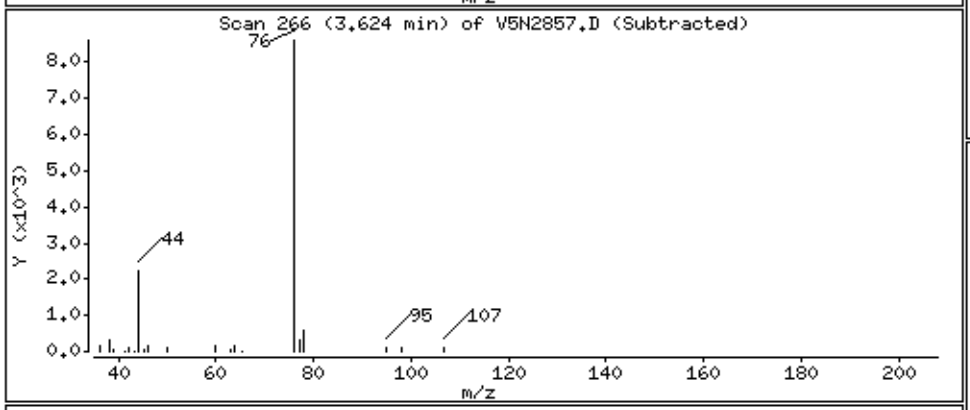
Purge Volume: 25.0 Operator: SRC: LIMS

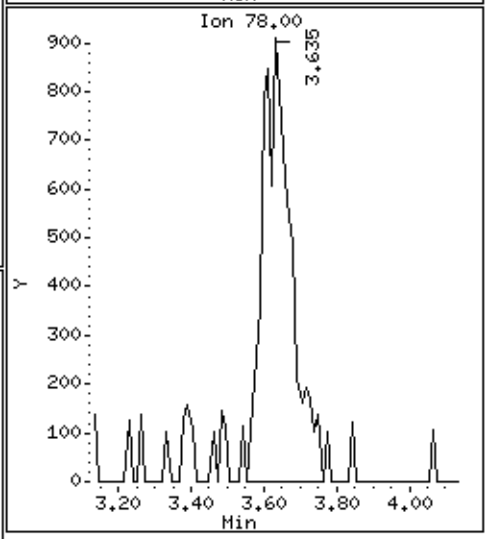
Column phase: DB-624 Column diameter: 0.25

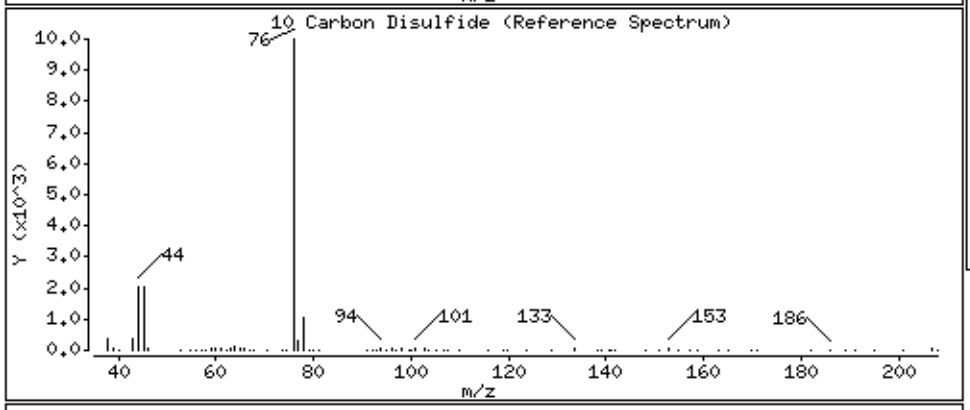
10 Carbon Disulfide Concentration: 0.83 ug/L

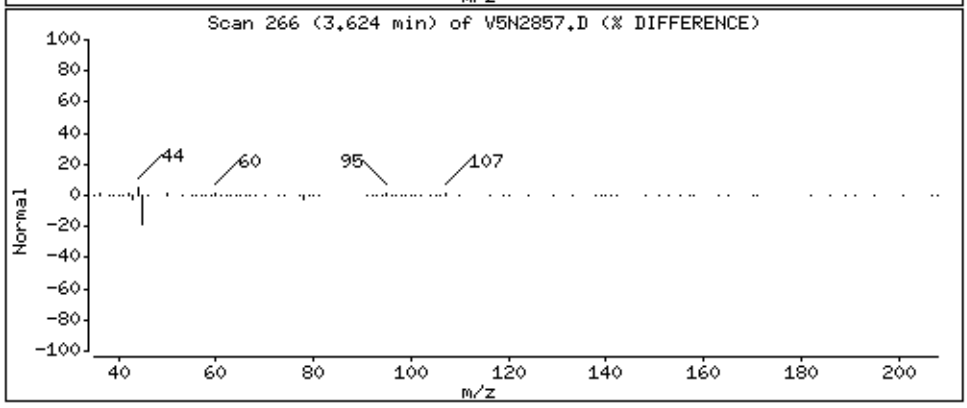












Data File: \\avogadro\organics\V5.I\111110.B\V5N2857.D

Date : 10-NOV-2011 12:40

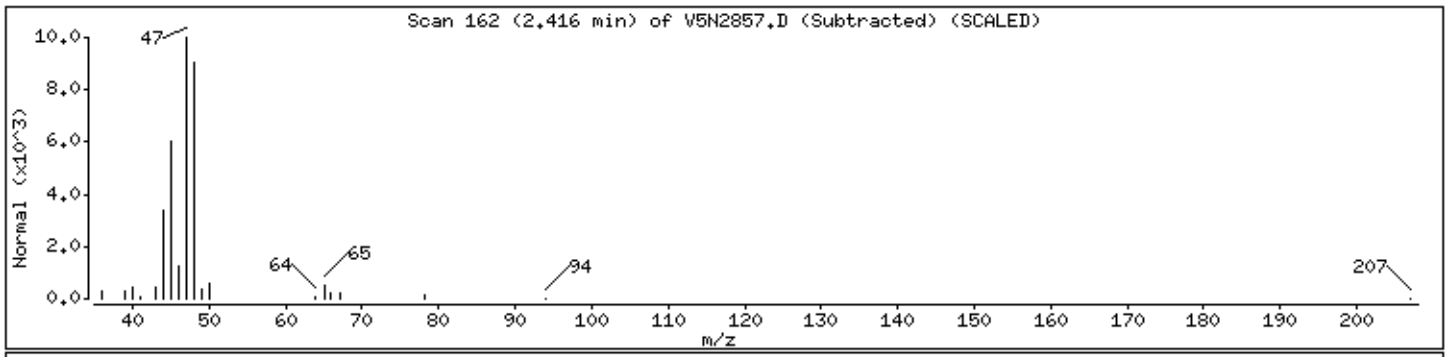
Client ID: H30Y0 Instrument: V5.i

Sample Info: 25ML,K2213-09B,,62892

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



Data File: \\avogadro\organics\V5.I\111110.B\V5N2857.D

Date : 10-NOV-2011 12:40

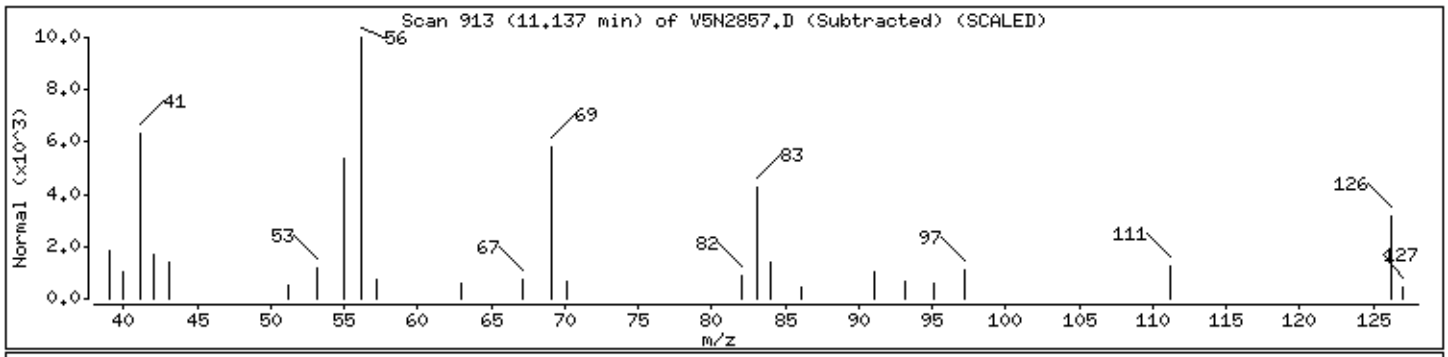
Client ID: H30Y0 Instrument: V5.i

Sample Info: 25ML,K2213-09B,,62892

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.

H30Y1

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-10B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2858.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30Y1

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-10B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2858.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30Y1

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-10B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2858.D

Level: (TRACE or LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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\111110.B\V5N2858.D
Report Date: 15-Nov-2011 09:36

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2858.D
Lab Smp Id: K2213-10B Client Smp ID: H30Y1
Inj Date : 10-NOV-2011 13:09
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-10B,,62892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 39
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	2.208	2.216	(0.349)	142477	6.47151	6.5
$	80 Chloroethane-d5	69	2.614	2.600	(0.414)	95143	6.36510	6.4
$	81 1,1-Dichloroethene-d2	65	3.392	3.378	(0.537)	31286	5.48718	5.5(QR)
$	82 2-Butanone-d5	46	5.076	5.062	(0.803)	129725	49.1249	49(AQ)
$	83 Chloroform-d	84	5.390	5.387	(0.853)	127600	4.83977	4.8(Q)
$	23 1,2-Dichloroethane-d4	65	5.901	5.898	(0.934)	47965	4.62601	4.6(Q)
$	84 Benzene-d6	84	5.912	5.909	(0.627)	252161	4.60593	4.6
*	26 1,4-Difluorobenzene	114	6.319	6.327	(1.000)	242004	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.725	6.734	(0.713)	84220	4.43195	4.4
$	33 Toluene-d8	98	7.840	7.837	(0.831)	221999	4.51857	4.5
$	86 trans-1,3-Dichloropropene-d4	79	8.119	8.116	(0.861)	55411	5.08885	5.1
$	87 2-Hexanone-d5	63	8.572	8.569	(0.909)	87945	46.6346	47(AQ)
*	42 Chlorobenzene-d5	117	9.431	9.428	(1.000)	186647	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.929	10.926	(1.159)	32818	4.66475	4.7
*	78 1,4-Dichlorobenzene-d4	152	12.172	12.169	(1.000)	74584	5.00000	(Q)
$	90 1,2-Dichlorobenzene-d4	152	12.636	12.633	(1.038)	58074	4.95313	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\111110.B\V5N2858.D
Report Date: 15-Nov-2011 09:36

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\V5.I\111110.B\V5N2858.D
Report Date: 15-Nov-2011 09:36

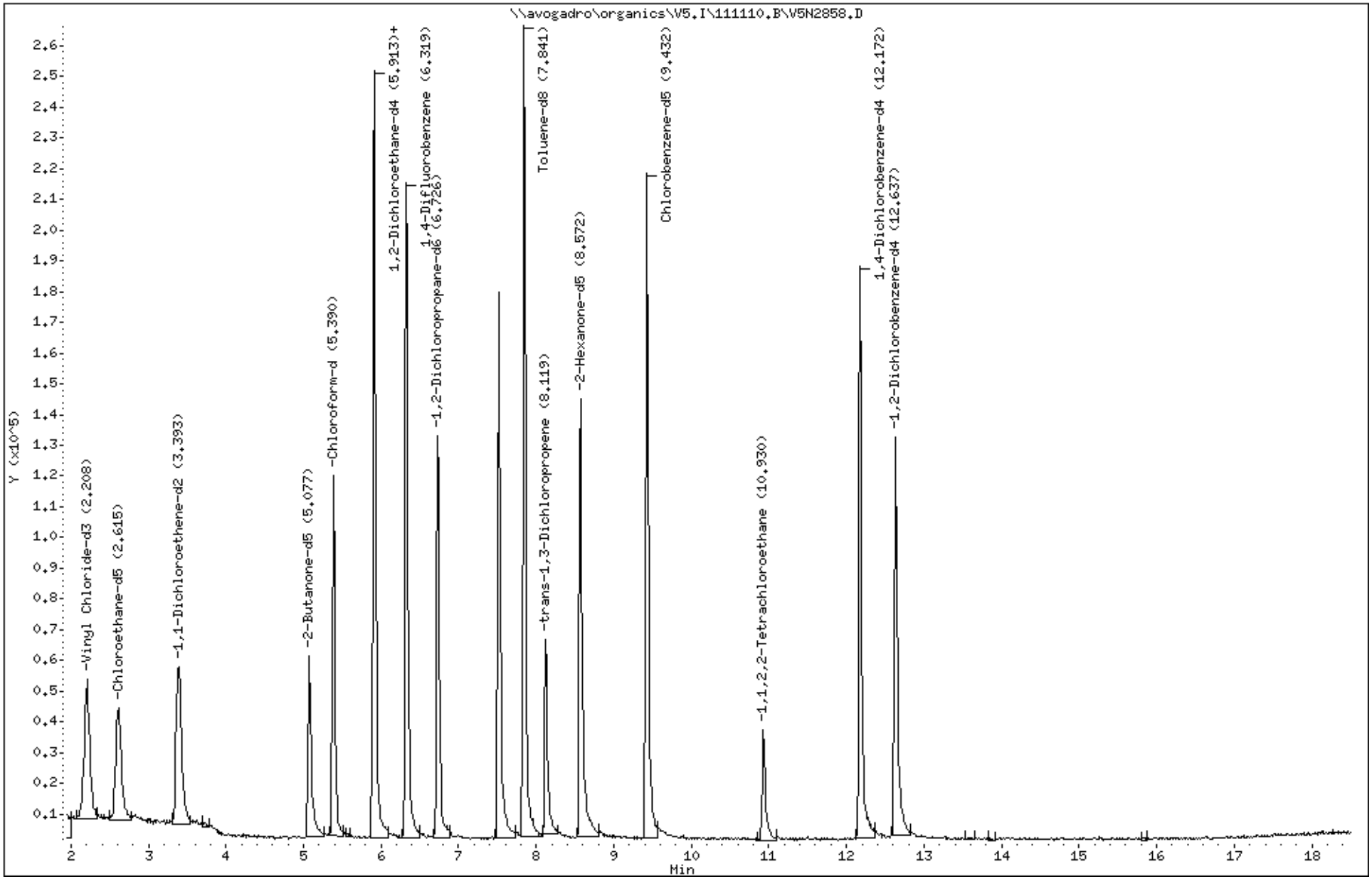
Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2858.D
Lab Smp Id: K2213-10B Client Smp ID: H30Y1
Inj Date : 10-NOV-2011 13:09
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-10B,,62892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 39
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\111110.B\V5N2858.D
Date : 10-NOV-2011 13:09
Client ID: H30Y1
Instrument: V5.i
Sample Info: 25ML,K2213-10B,,62892
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.

H30Y7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-02B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2847.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30Y7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-02B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2847.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30Y7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-02B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2847.D

Level: (TRACE or LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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\111110.B\V5N2847.D
Report Date: 15-Nov-2011 09:35

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2847.D
Lab Smp Id: K2213-02B Client Smp ID: H30Y7
Inj Date : 10-NOV-2011 07:55
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-02B,,62892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 28
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	2.216	2.216	(0.350)	105443	5.25724	5.3
$	80 Chloroethane-d5	69	2.611	2.600	(0.413)	71751	5.26909	5.3
$	81 1,1-Dichloroethene-d2	65	3.377	3.378	(0.534)	23401	4.50518	4.5(Q)
$	82 2-Butanone-d5	46	5.072	5.062	(0.802)	110673	46.0043	46(AQ)
$	83 Chloroform-d	84	5.386	5.387	(0.851)	109308	4.55098	4.6(Q)
$	23 1,2-Dichloroethane-d4	65	5.897	5.898	(0.932)	42711	4.52169	4.5(Q)
$	84 Benzene-d6	84	5.920	5.909	(0.628)	225712	4.97711	5.0
*	26 1,4-Difluorobenzene	114	6.327	6.327	(1.000)	220467	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.733	6.734	(0.714)	70698	4.49128	4.5
$	33 Toluene-d8	98	7.836	7.837	(0.831)	191351	4.70180	4.7
$	86 trans-1,3-Dichloropropene-d4	79	8.115	8.116	(0.861)	44434	4.92631	4.9
$	87 2-Hexanone-d5	63	8.568	8.569	(0.909)	78519	50.2638	50(AQ)
*	42 Chlorobenzene-d5	117	9.427	9.428	(1.000)	154610	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.925	10.926	(1.159)	27348	4.69273	4.7
*	78 1,4-Dichlorobenzene-d4	152	12.168	12.169	(1.000)	61218	5.00000	
$	90 1,2-Dichlorobenzene-d4	152	12.633	12.633	(1.038)	46221	4.80290	4.8(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\111110.B\V5N2847.D
Report Date: 15-Nov-2011 09:35

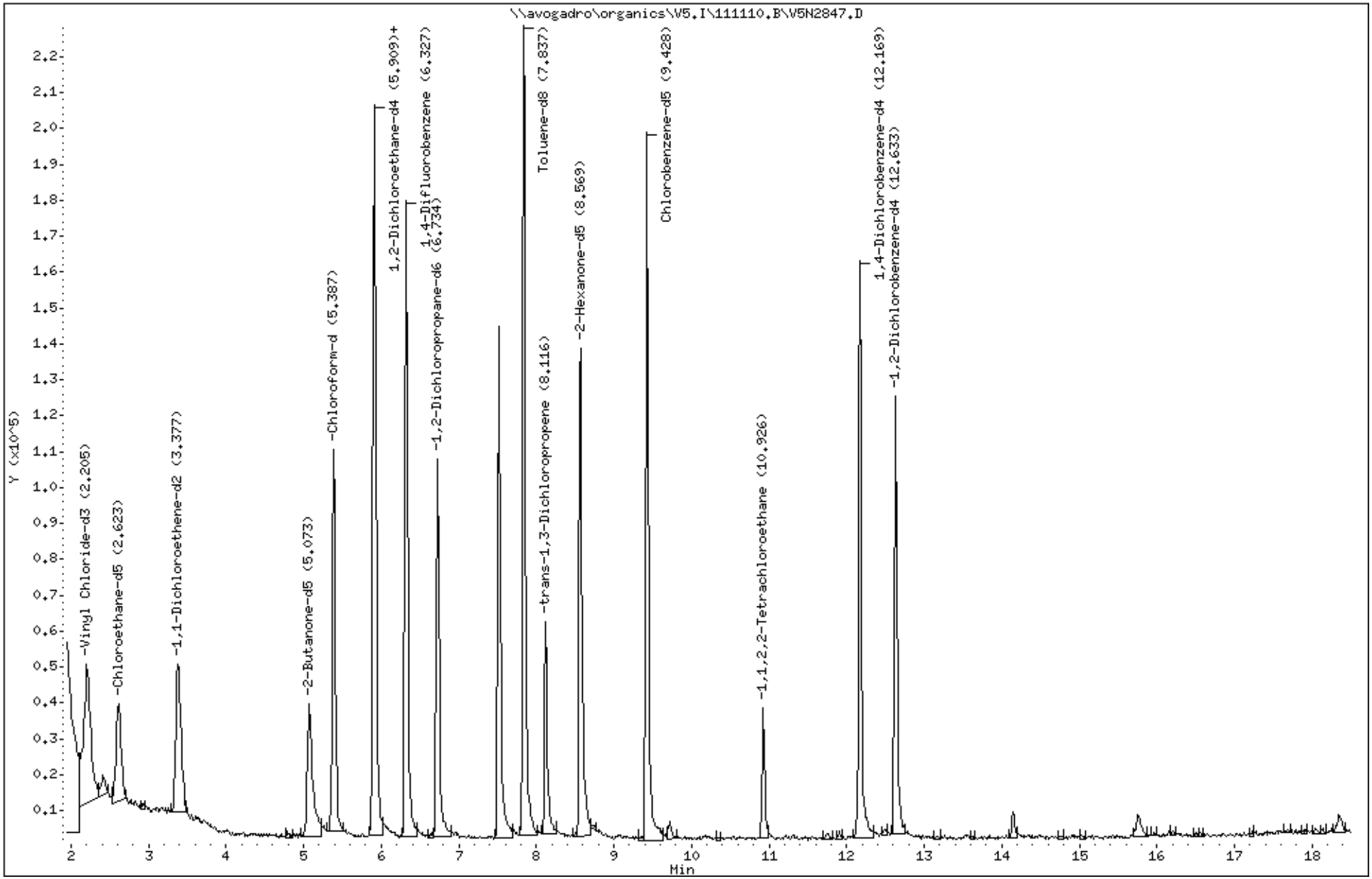
Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2847.D
Lab Smp Id: K2213-02B Client Smp ID: H30Y7
Inj Date : 10-NOV-2011 07:55
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-02B,,62892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 28
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\111110.B\V5N2847.D
Date : 10-NOV-2011 07:55
Client ID: H30Y7
Instrument: V5.i
Sample Info: 25ML,K2213-02B,,62892
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.

H30Z2

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-11B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2870.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30Z2

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-11B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2870.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30Z2

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-11B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2870.D

Level: (TRACE or LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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\111110A.B\V5N2870.D
Report Date: 15-Nov-2011 09:36

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110A.B\V5N2870.D
Lab Smp Id: K2213-11B Client Smp ID: H30Z2
Inj Date : 10-NOV-2011 18:54
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-11B,,62893
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110A.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 15:34 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 51
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	2.216	2.214	(0.350)	140028	6.27973	6.3
$	80 Chloroethane-d5	69	2.611	2.609	(0.413)	94247	6.22531	6.2
$	81 1,1-Dichloroethene-d2	65	3.389	3.364	(0.536)	30767	5.32782	5.3(QR)
$	82 2-Butanone-d5	46	5.073	5.071	(0.802)	139844	52.2861	52(AQ)
$	83 Chloroform-d	84	5.386	5.384	(0.851)	132443	4.95985	5.0(Q)
$	23 1,2-Dichloroethane-d4	65	5.897	5.895	(0.932)	50845	4.84167	4.8
$	84 Benzene-d6	84	5.909	5.918	(0.627)	260171	4.74614	4.7
*	26 1,4-Difluorobenzene	114	6.327	6.325	(1.000)	245108	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.733	6.731	(0.714)	87956	4.62261	4.6
$	33 Toluene-d8	98	7.848	7.846	(0.832)	227134	4.61716	4.6
$	86 trans-1,3-Dichloropropene-d4	79	8.127	8.113	(0.862)	56364	5.16972	5.2
$	87 2-Hexanone-d5	63	8.568	8.566	(0.909)	89406	47.3484	47(A)
*	42 Chlorobenzene-d5	117	9.428	9.426	(1.000)	186887	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.926	10.924	(1.159)	34854	4.94779	4.9
*	78 1,4-Dichlorobenzene-d4	152	12.180	12.166	(1.000)	78016	5.00000	
$	90 1,2-Dichlorobenzene-d4	152	12.633	12.631	(1.037)	57568	4.69397	4.7(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\111110A.B\V5N2870.D
Report Date: 15-Nov-2011 09:36

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\V5.I\111110A.B\V5N2870.D
Report Date: 15-Nov-2011 09:36

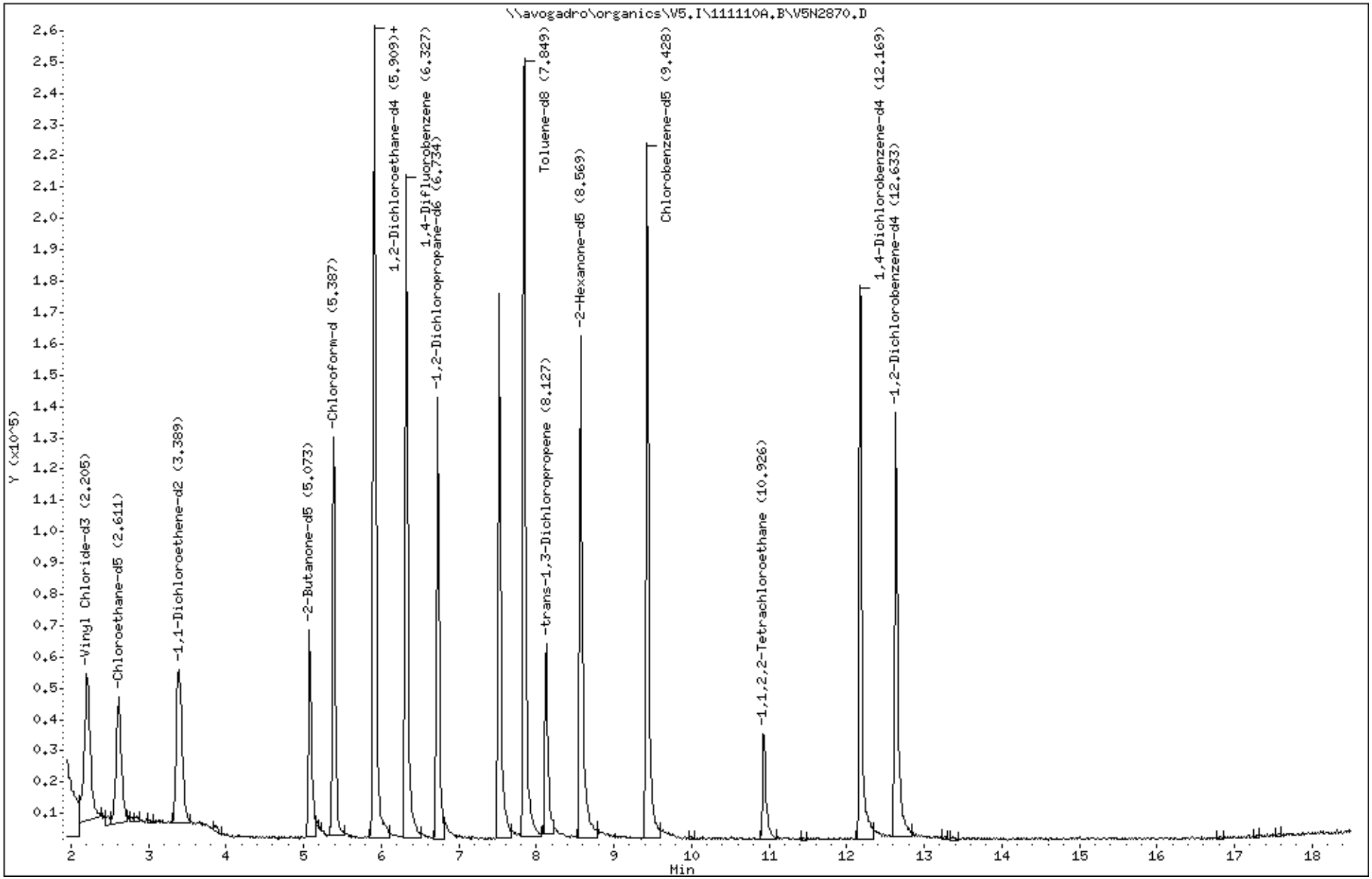
Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110A.B\V5N2870.D
Lab Smp Id: K2213-11B Client Smp ID: H30Z2
Inj Date : 10-NOV-2011 18:54
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-11B,,62893
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110A.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 15:34 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 51
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\111110A.B\V5N2870.D
Date : 10-NOV-2011 18:54
Client ID: H30Z2
Instrument: V5.i
Sample Info: 25ML,K2213-11B,,62893
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.

H30Z3

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-12B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2860.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30Z3

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-12B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2860.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30Z3

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-12B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2860.D

Level: (TRACE or LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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\111110.B\V5N2860.D
Report Date: 15-Nov-2011 09:36

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2860.D
Lab Smp Id: K2213-12B Client Smp ID: H30Z3
Inj Date : 10-NOV-2011 13:38
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-12B,,62892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 41
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	2.202	2.216	(0.348)	140268	6.30054	6.3
$	80 Chloroethane-d5	69	2.609	2.600	(0.412)	98592	6.52272	6.5
$	81 1,1-Dichloroethene-d2	65	3.387	3.378	(0.535)	31690	5.49642	5.5(QR)
$	82 2-Butanone-d5	46	5.071	5.062	(0.802)	136504	51.1189	51(AQ)
$	83 Chloroform-d	84	5.384	5.387	(0.851)	130031	4.87730	4.9(Q)
$	23 1,2-Dichloroethane-d4	65	5.895	5.898	(0.932)	49835	4.75308	4.8(Q)
$	84 Benzene-d6	84	5.907	5.909	(0.627)	259114	4.68417	4.7
*	26 1,4-Difluorobenzene	114	6.325	6.327	(1.000)	244717	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.731	6.734	(0.714)	85804	4.46878	4.5
$	33 Toluene-d8	98	7.846	7.837	(0.832)	227090	4.57458	4.6
$	86 trans-1,3-Dichloropropene-d4	79	8.125	8.116	(0.862)	58431	5.31091	5.3
$	87 2-Hexanone-d5	63	8.566	8.569	(0.909)	93569	49.1056	49(AQ)
*	42 Chlorobenzene-d5	117	9.425	9.428	(1.000)	188590	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.935	10.926	(1.160)	32493	4.57097	4.6
*	78 1,4-Dichlorobenzene-d4	152	12.178	12.169	(1.000)	73822	5.00000	(Q)
$	90 1,2-Dichlorobenzene-d4	152	12.631	12.633	(1.037)	62273	5.36608	5.4(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\111110.B\V5N2860.D
Report Date: 15-Nov-2011 09:36

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\V5.I\111110.B\V5N2860.D
Report Date: 15-Nov-2011 09:36

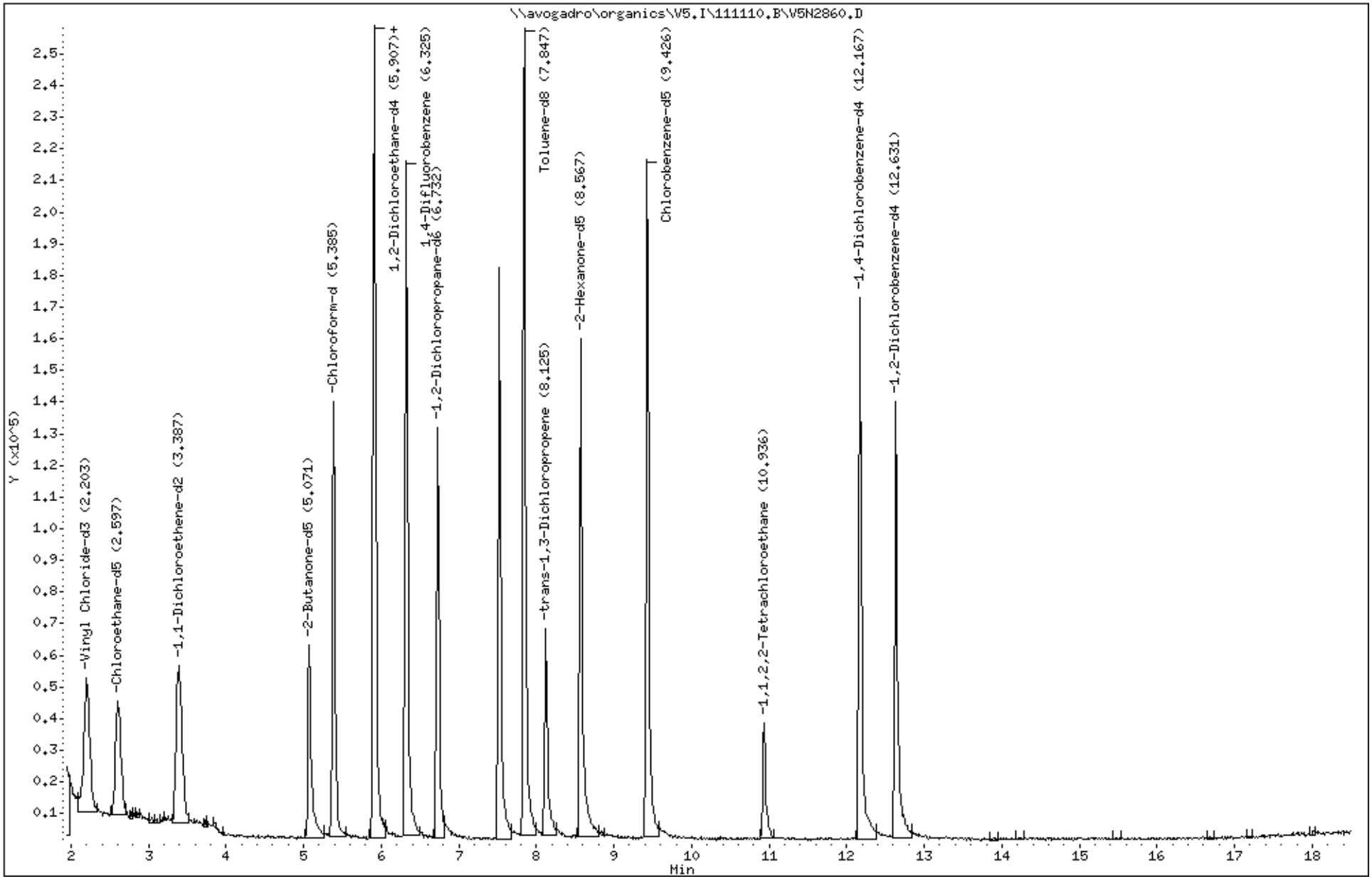
Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2860.D
Lab Smp Id: K2213-12B Client Smp ID: H30Z3
Inj Date : 10-NOV-2011 13:38
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-12B,,62892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 41
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\111110.B\V5N2860.D
Date : 10-NOV-2011 13:38
Client ID: H30Z3
Instrument: V5.i
Sample Info: 25ML,K2213-12B,,62892
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.

H30Z4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-13B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2861.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30Z4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-13B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2861.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30Z4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-13B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2861.D

Level: (TRACE or LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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\111110.B\V5N2861.D
Report Date: 15-Nov-2011 09:36

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2861.D
Lab Smp Id: K2213-13B Client Smp ID: H30Z4
Inj Date : 10-NOV-2011 14:06
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-13B,,62892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 42
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	2.214	2.216	(0.350)	129942	6.07165	6.1
$	80 Chloroethane-d5	69	2.608	2.600	(0.412)	89476	6.15789	6.2
$	81 1,1-Dichloroethene-d2	65	3.398	3.378	(0.537)	27911	5.03583	5.0(Q)
$	82 2-Butanone-d5	46	5.070	5.062	(0.802)	141578	55.1531	55(AQ)
$	83 Chloroform-d	84	5.384	5.387	(0.851)	124684	4.86498	4.9(Q)
$	23 1,2-Dichloroethane-d4	65	5.895	5.898	(0.932)	49119	4.87336	4.9(Q)
$	84 Benzene-d6	84	5.918	5.909	(0.628)	248811	4.76172	4.8
*	26 1,4-Difluorobenzene	114	6.325	6.327	(1.000)	235248	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.731	6.734	(0.714)	80349	4.43011	4.4
$	33 Toluene-d8	98	7.846	7.837	(0.832)	213954	4.56274	4.6
$	86 trans-1,3-Dichloropropene-d4	79	8.125	8.116	(0.862)	53633	5.16072	5.2
$	87 2-Hexanone-d5	63	8.566	8.569	(0.909)	92250	51.2529	51(AQ)
*	42 Chlorobenzene-d5	117	9.425	9.428	(1.000)	178142	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.935	10.926	(1.160)	33886	5.04651	5.0
*	78 1,4-Dichlorobenzene-d4	152	12.178	12.169	(1.000)	74931	5.00000	(Q)
$	90 1,2-Dichlorobenzene-d4	152	12.631	12.633	(1.037)	57895	4.91499	4.9(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\111110.B\V5N2861.D
Report Date: 15-Nov-2011 09:36

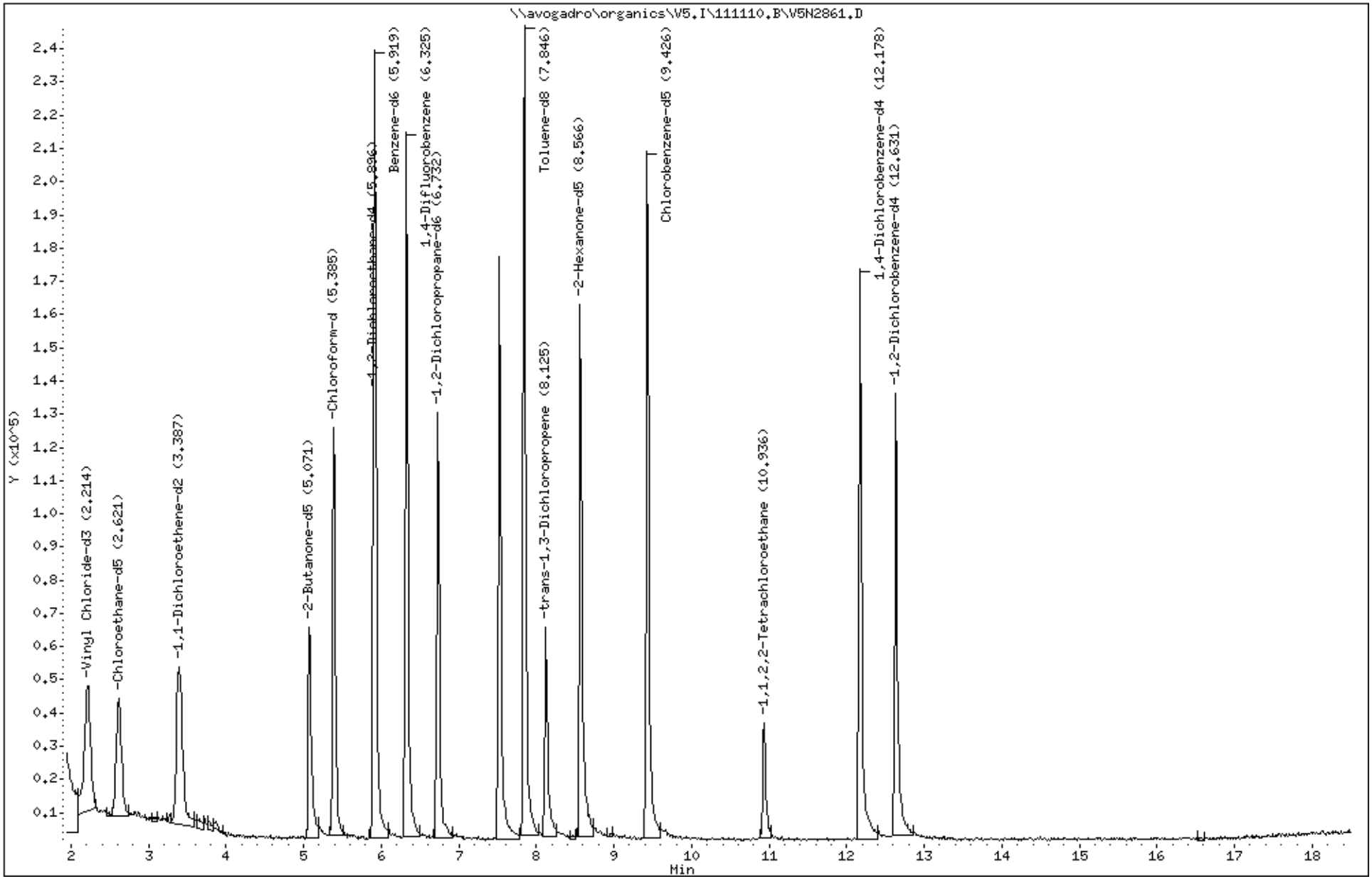
Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2861.D
Lab Smp Id: K2213-13B Client Smp ID: H30Z4
Inj Date : 10-NOV-2011 14:06
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-13B,,62892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 42
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\111110.B\V5N2861.D
Date : 10-NOV-2011 14:06
Client ID: H30Z4
Instrument: V5.i
Sample Info: 25ML,K2213-13B,,62892
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.

H30Z5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-14B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2862.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30Z5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-14B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2862.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30Z5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-14B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2862.D

Level: (TRACE or LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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\111110.B\V5N2862.D
Report Date: 15-Nov-2011 09:36

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2862.D
Lab Smp Id: K2213-14B Client Smp ID: H30Z5
Inj Date : 10-NOV-2011 14:35
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-14B,,62892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 43
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	2.208	2.216	(0.350)	136225	6.23222	6.2
$	80 Chloroethane-d5	69	2.615	2.600	(0.414)	93015	6.26767	6.3
$	81 1,1-Dichloroethene-d2	65	3.381	3.378	(0.535)	28081	4.96063	5.0(Q)
$	82 2-Butanone-d5	46	5.065	5.062	(0.802)	136443	52.0420	52(AQ)
$	83 Chloroform-d	84	5.390	5.387	(0.853)	126784	4.84355	4.8(Q)
$	23 1,2-Dichloroethane-d4	65	5.890	5.898	(0.932)	50589	4.91431	4.9(Q)
$	84 Benzene-d6	84	5.913	5.909	(0.627)	255095	4.79816	4.8
*	26 1,4-Difluorobenzene	114	6.319	6.327	(1.000)	240269	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.726	6.734	(0.713)	85616	4.63946	4.6
$	33 Toluene-d8	98	7.841	7.837	(0.831)	229267	4.80535	4.8
$	86 trans-1,3-Dichloropropene-d4	79	8.119	8.116	(0.861)	52996	5.01187	5.0
$	87 2-Hexanone-d5	63	8.572	8.569	(0.909)	93036	50.8021	51(AQ)
*	42 Chlorobenzene-d5	117	9.432	9.428	(1.000)	181254	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.930	10.926	(1.159)	35889	5.25304	5.3
*	78 1,4-Dichlorobenzene-d4	152	12.172	12.169	(1.000)	75724	5.00000	(Q)
$	90 1,2-Dichlorobenzene-d4	152	12.637	12.633	(1.038)	55635	4.67367	4.7(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\111110.B\V5N2862.D
Report Date: 15-Nov-2011 09:36

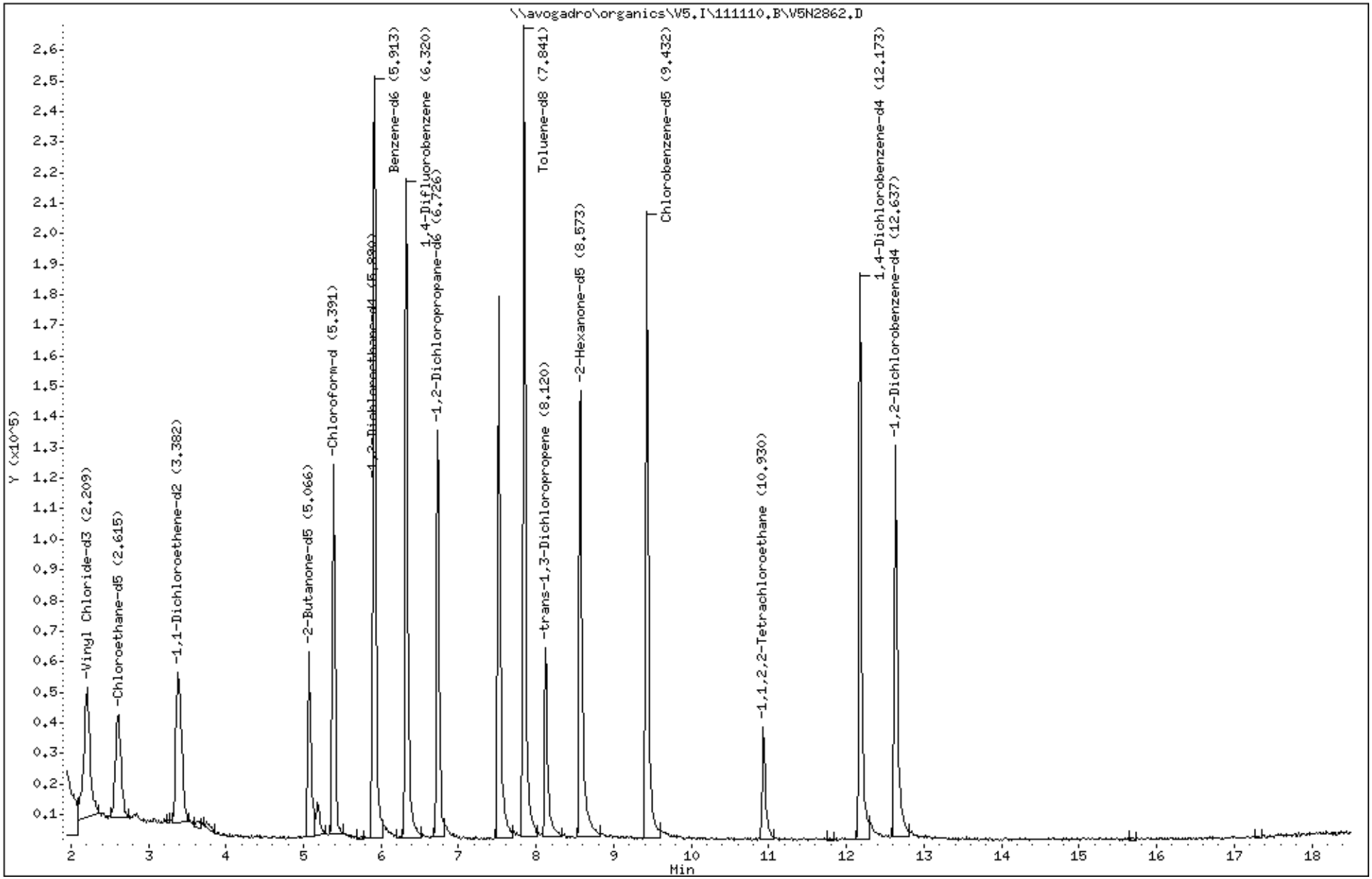
Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2862.D
Lab Smp Id: K2213-14B Client Smp ID: H30Z5
Inj Date : 10-NOV-2011 14:35
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-14B,,62892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 43
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\111110.B\V5N2862.D
Date : 10-NOV-2011 14:35
Client ID: H30Z5
Instrument: V5.i
Sample Info: 25ML,K2213-14B,,62892
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.

H30Z7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-15B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2863.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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	0.56	
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.

H30Z7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-15B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2863.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30Z7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-15B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2863.D

Level: (TRACE or LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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	74-93-1	Methanethiol	2.406	1.3	NJ
	E96679[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V5.I\111110.B\V5N2863.D
Report Date: 15-Nov-2011 09:36

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2863.D
Lab Smp Id: K2213-15B Client Smp ID: H30Z7
Inj Date : 10-NOV-2011 15:04
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-15B,,62892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 44
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	2.208	2.216	(0.349)	146795	6.39795	6.4
$	80 Chloroethane-d5	69	2.615	2.600	(0.414)	100279	6.43735	6.4
$	81 1,1-Dichloroethene-d2	65	3.381	3.378	(0.535)	31808	5.35309	5.4(QR)
	10 Carbon Disulfide	76	3.613	3.622	(0.572)	38667	0.56487	0.56(H)
$	82 2-Butanone-d5	46	5.065	5.062	(0.802)	144486	52.5016	53(AQ)
$	83 Chloroform-d	84	5.378	5.387	(0.851)	133721	4.86679	4.9(Q)
$	23 1,2-Dichloroethane-d4	65	5.901	5.898	(0.934)	53117	4.91569	4.9
$	84 Benzene-d6	84	5.913	5.909	(0.627)	263512	4.69339	4.7
*	26 1,4-Difluorobenzene	114	6.319	6.327	(1.000)	252205	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.726	6.734	(0.713)	89420	4.58840	4.6
$	33 Toluene-d8	98	7.840	7.837	(0.831)	237592	4.71552	4.7
$	86 trans-1,3-Dichloropropene-d4	79	8.119	8.116	(0.861)	50704	4.54060	4.5
$	87 2-Hexanone-d5	63	8.560	8.569	(0.908)	100726	52.0818	52(A)
*	42 Chlorobenzene-d5	117	9.431	9.428	(1.000)	191414	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.929	10.926	(1.159)	37124	5.14539	5.1
*	78 1,4-Dichlorobenzene-d4	152	12.172	12.169	(1.000)	78900	5.00000	
$	90 1,2-Dichlorobenzene-d4	152	12.637	12.633	(1.038)	60609	4.88656	4.9(Q)

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111110.B\V5N2863.D
Report Date: 15-Nov-2011 09:36

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\V5.I\111110.B\V5N2863.D
Report Date: 15-Nov-2011 09:36

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2863.D
Lab Smp Id: K2213-15B Client Smp ID: H30Z7
Inj Date : 10-NOV-2011 15:04
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-15B,,62892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 44
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

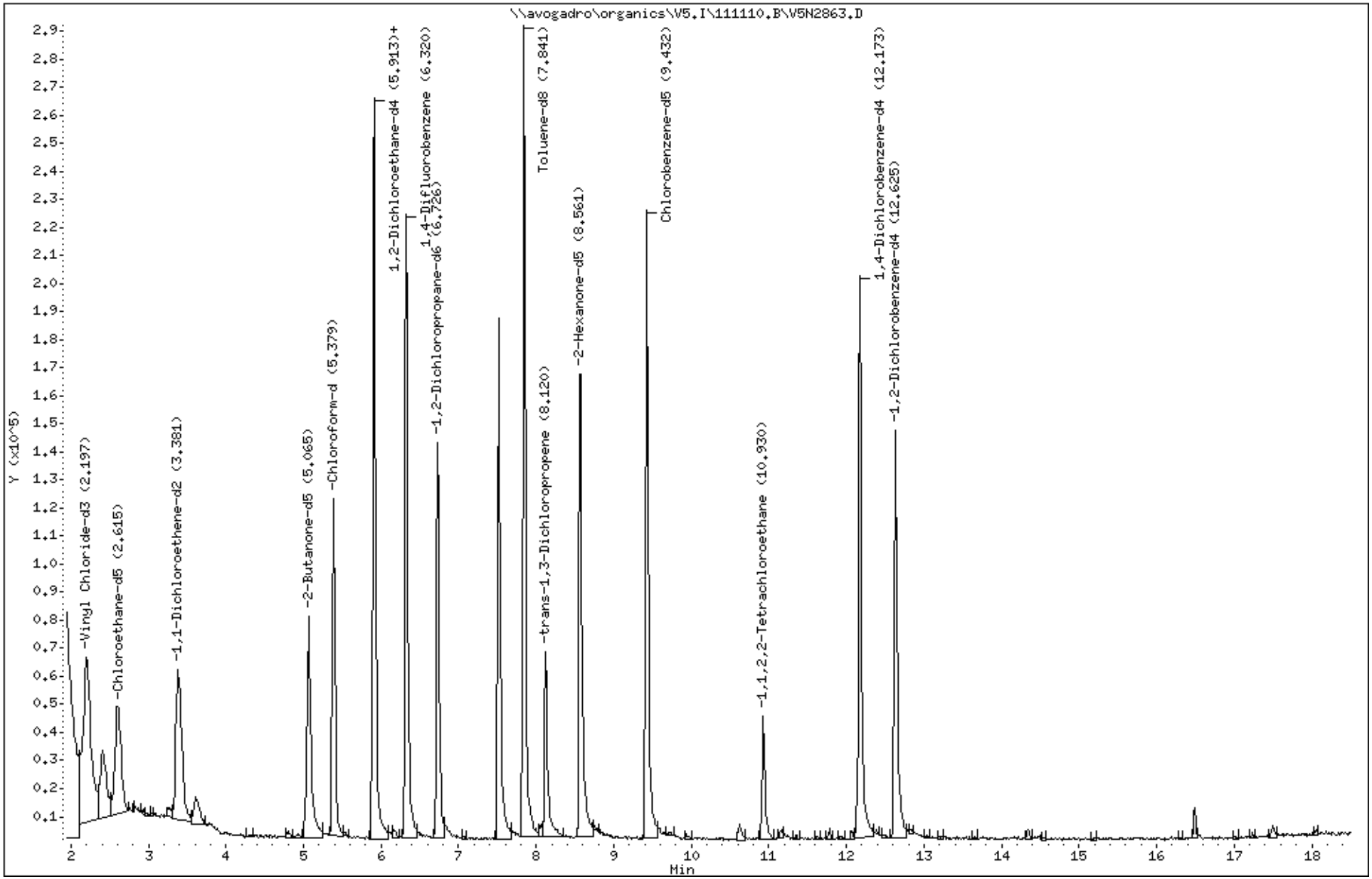
Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

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	559675	5.000

	CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Methanethiol				CAS #: 74-93-1			
2.406	149462	1.33525137	1.3	86	NIST2002.L	108	26

Data File: \\avogadro\organics\V5.I\111110.B\V5N2863.D
Date : 10-NOV-2011 15:04
Client ID: H30Z7
Instrument: V5.i
Sample Info: 25ML,K2213-15B,,62892
Purge Volume: 25.0
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111110.B\V5N2863.D

Date : 10-NOV-2011 15:04

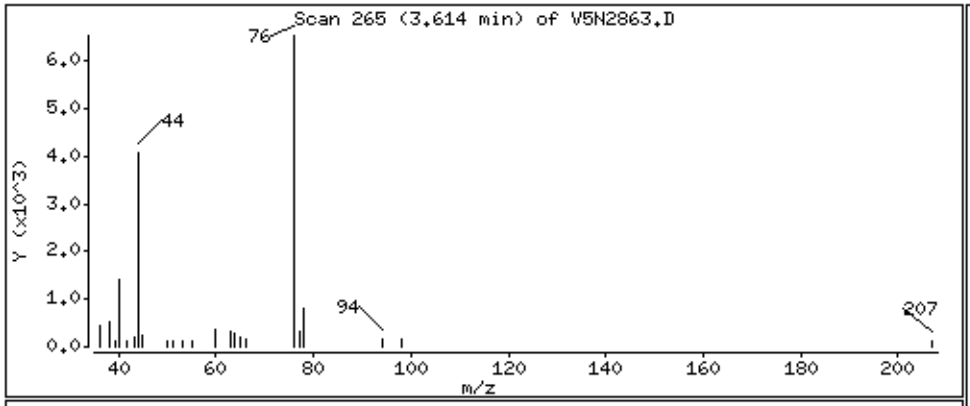
Client ID: H30Z7 Instrument: V5.i

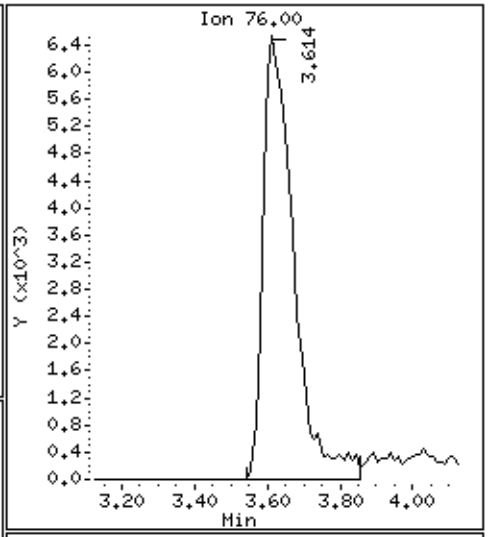
Sample Info: 25ML,K2213-15B,,62892

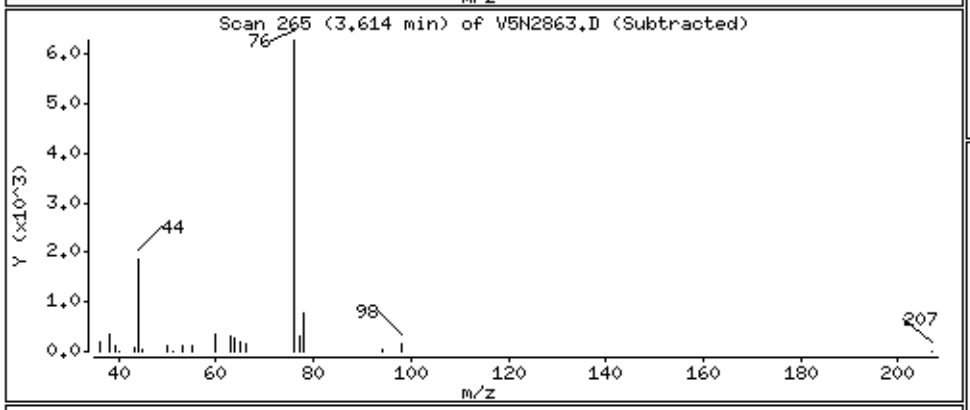
Purge Volume: 25.0 Operator: SRC: LIMS

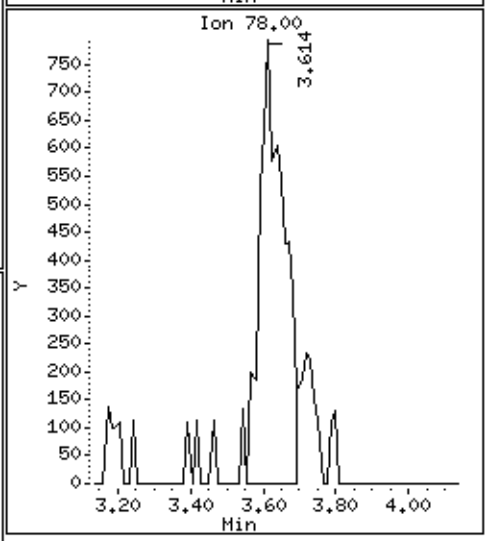
Column phase: DB-624 Column diameter: 0.25

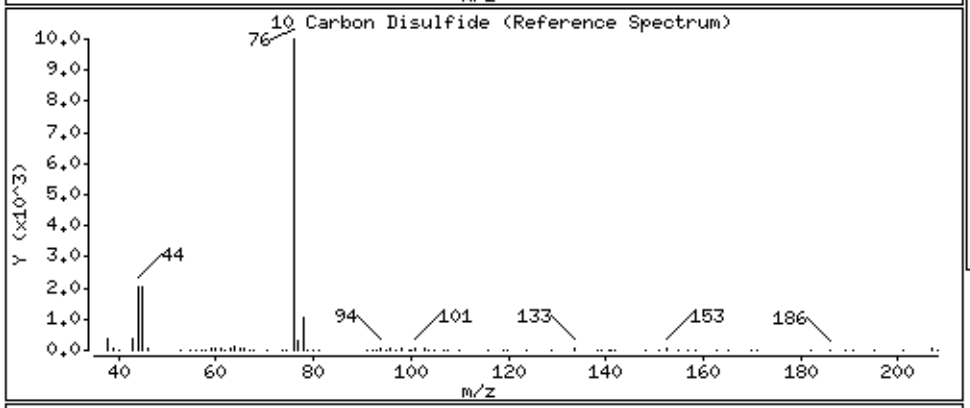
10 Carbon Disulfide Concentration: 0.56 ug/L

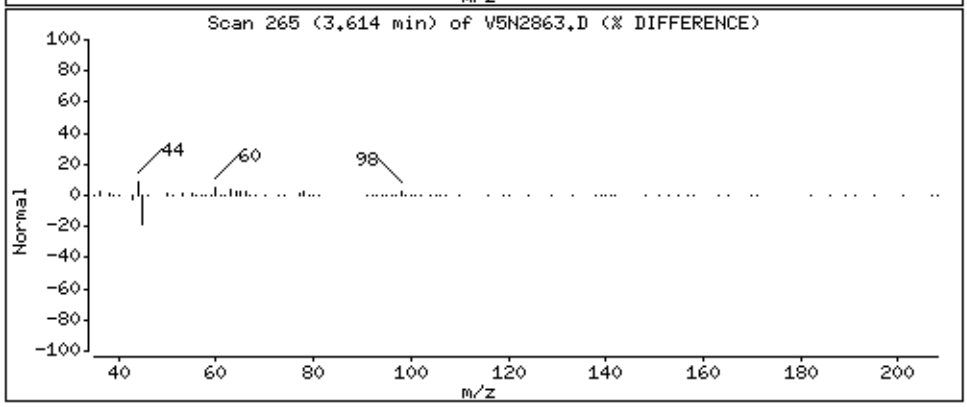












Data File: \\avogadro\organics\V5.I\111110.B\V5N2863.D

Date : 10-NOV-2011 15:04

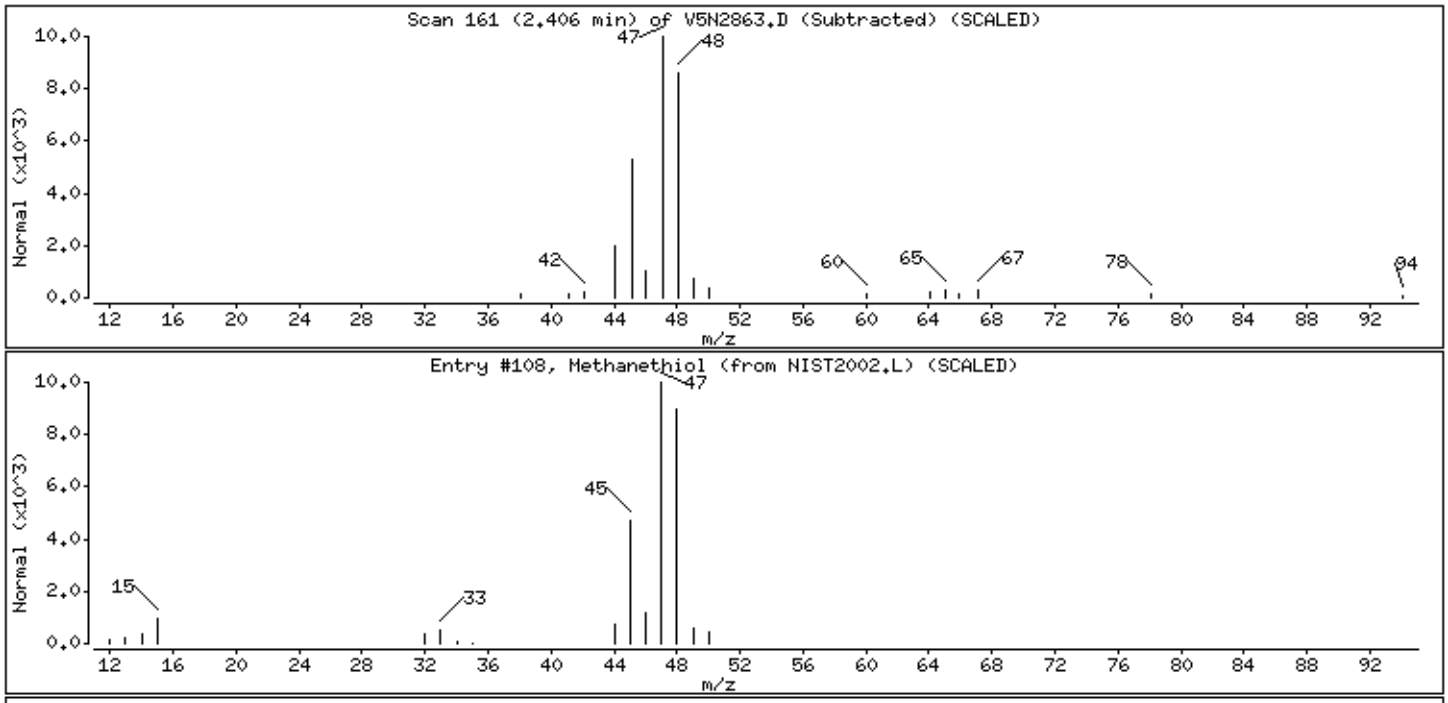
Client ID: H30Z7 Instrument: V5.i

Sample Info: 25ML,K2213-15B,,62892

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
Methanethiol	74-93-1	NIST2002.L	108	86	CH4S	48



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Z8

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-16B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2864.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30Z8

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-16B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2864.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H30Z8

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-16B

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2864.D

Level: (TRACE or LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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\111110.B\V5N2864.D
Report Date: 15-Nov-2011 09:36

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2864.D
Lab Smp Id: K2213-16B Client Smp ID: H30Z8
Inj Date : 10-NOV-2011 15:33
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-16B,,62892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 45
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	2.214	2.216	(0.350)	147694	6.43410	6.4
$	80 Chloroethane-d5	69	2.621	2.600	(0.414)	101011	6.48129	6.5
$	81 1,1-Dichloroethene-d2	65	3.399	3.378	(0.537)	32218	5.41953	5.4(QR)
$	82 2-Butanone-d5	46	5.071	5.062	(0.802)	143833	52.2396	52(AQ)
$	83 Chloroform-d	84	5.384	5.387	(0.851)	132220	4.80989	4.8(Q)
$	23 1,2-Dichloroethane-d4	65	5.895	5.898	(0.932)	52939	4.89691	4.9
$	84 Benzene-d6	84	5.919	5.909	(0.628)	268089	4.85739	4.9
*	26 1,4-Difluorobenzene	114	6.325	6.327	(1.000)	252324	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.732	6.734	(0.714)	87835	4.58492	4.6
$	33 Toluene-d8	98	7.846	7.837	(0.832)	230842	4.66068	4.7
$	86 trans-1,3-Dichloropropene-d4	79	8.125	8.116	(0.862)	55570	5.06230	5.1
$	87 2-Hexanone-d5	63	8.566	8.569	(0.909)	92657	48.7371	49(AQ)
*	42 Chlorobenzene-d5	117	9.426	9.428	(1.000)	188164	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.924	10.926	(1.159)	36036	5.08086	5.1
*	78 1,4-Dichlorobenzene-d4	152	12.178	12.169	(1.000)	77053	5.00000	(Q)
$	90 1,2-Dichlorobenzene-d4	152	12.631	12.633	(1.037)	60650	5.00708	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\111110.B\V5N2864.D
Report Date: 15-Nov-2011 09:36

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\V5.I\111110.B\V5N2864.D
Report Date: 15-Nov-2011 09:36

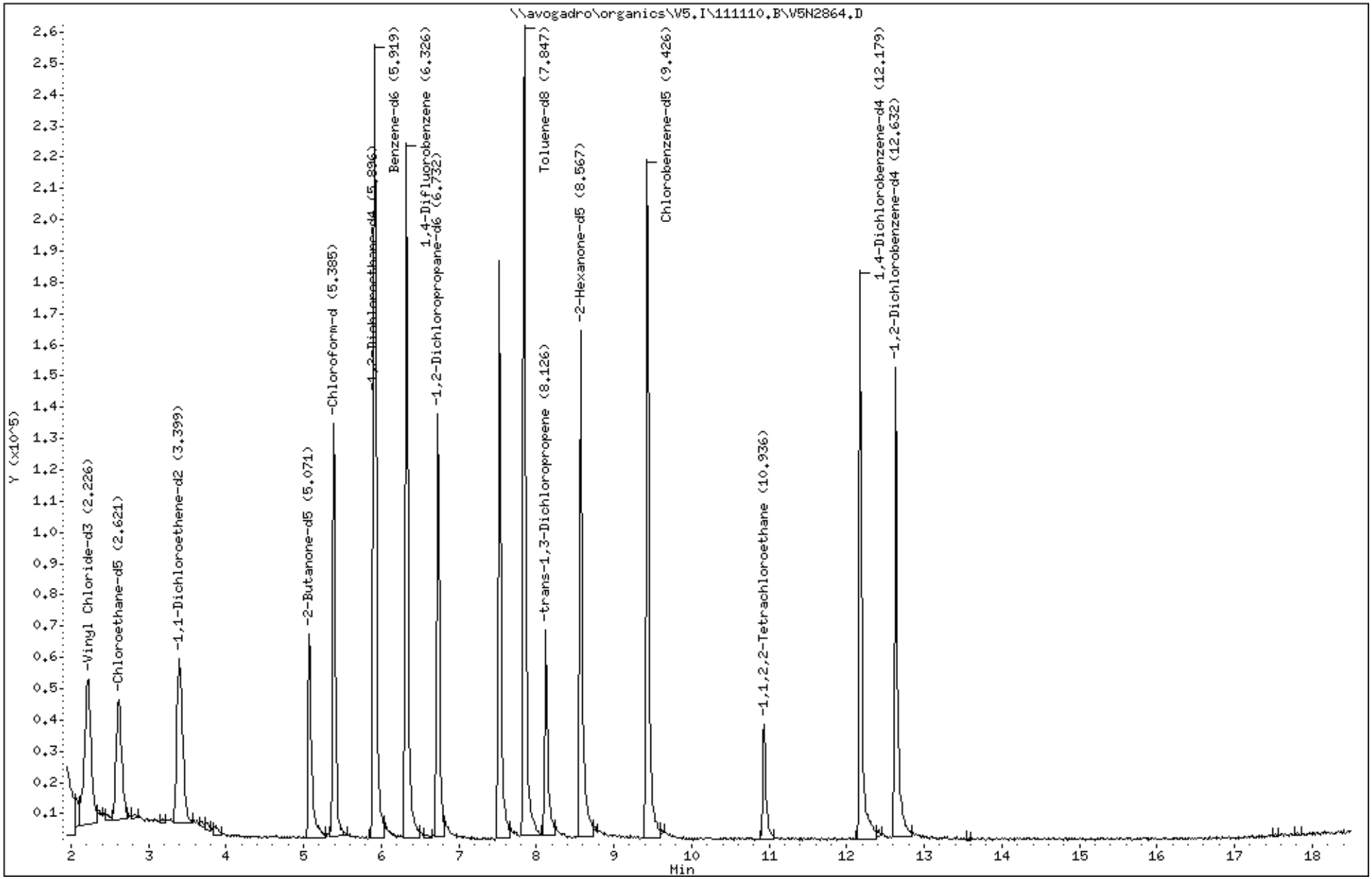
Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2864.D
Lab Smp Id: K2213-16B Client Smp ID: H30Z8
Inj Date : 10-NOV-2011 15:33
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-16B,,62892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 45
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\111110.B\V5N2864.D
Date : 10-NOV-2011 15:33
Client ID: H30Z8
Instrument: V5.i
Sample Info: 25ML,K2213-16B,,62892
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.

H3BA1

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-17A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2865.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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	0.39	J
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.

H3BA1

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-17A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2865.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

H3BA1

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-17A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2865.D

Level: (TRACE or LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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\111110.B\V5N2865.D
Report Date: 15-Nov-2011 09:36

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2865.D
Lab Smp Id: K2213-17A Client Smp ID: H3BA1
Inj Date : 10-NOV-2011 16:02
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-17A,,62892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 46
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	2.207	2.216	(0.349)	148350	6.39360	6.4
$	80 Chloroethane-d5	69	2.613	2.600	(0.414)	98142	6.22989	6.2
$	81 1,1-Dichloroethene-d2	65	3.391	3.378	(0.537)	32628	5.42984	5.4(QR)
$	82 2-Butanone-d5	46	5.075	5.062	(0.803)	144534	51.9332	52(AQ)
$	83 Chloroform-d	84	5.389	5.387	(0.853)	133685	4.81121	4.8(Q)
	19 Chloroform	83	5.401	5.410	(0.855)	11274	0.39042	0.39
$	23 1,2-Dichloroethane-d4	65	5.900	5.898	(0.934)	52263	4.78271	4.8
$	84 Benzene-d6	84	5.912	5.909	(0.627)	266754	4.64932	4.6
*	26 1,4-Difluorobenzene	114	6.318	6.327	(1.000)	255050	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.724	6.734	(0.713)	87263	4.38176	4.4
$	33 Toluene-d8	98	7.839	7.837	(0.831)	237429	4.61130	4.6
$	86 trans-1,3-Dichloropropene-d4	79	8.118	8.116	(0.861)	56216	4.92631	4.9
$	87 2-Hexanone-d5	63	8.571	8.569	(0.909)	94150	47.6383	48(A)
*	42 Chlorobenzene-d5	117	9.430	9.428	(1.000)	195606	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.928	10.926	(1.159)	37231	5.04963	5.0
*	78 1,4-Dichlorobenzene-d4	152	12.171	12.169	(1.000)	82786	5.00000	(Q)
$	90 1,2-Dichlorobenzene-d4	152	12.635	12.633	(1.038)	62318	4.78850	4.8(Q)

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\111110.B\V5N2865.D
Report Date: 15-Nov-2011 09:36

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\V5.I\111110.B\V5N2865.D
Report Date: 15-Nov-2011 09:36

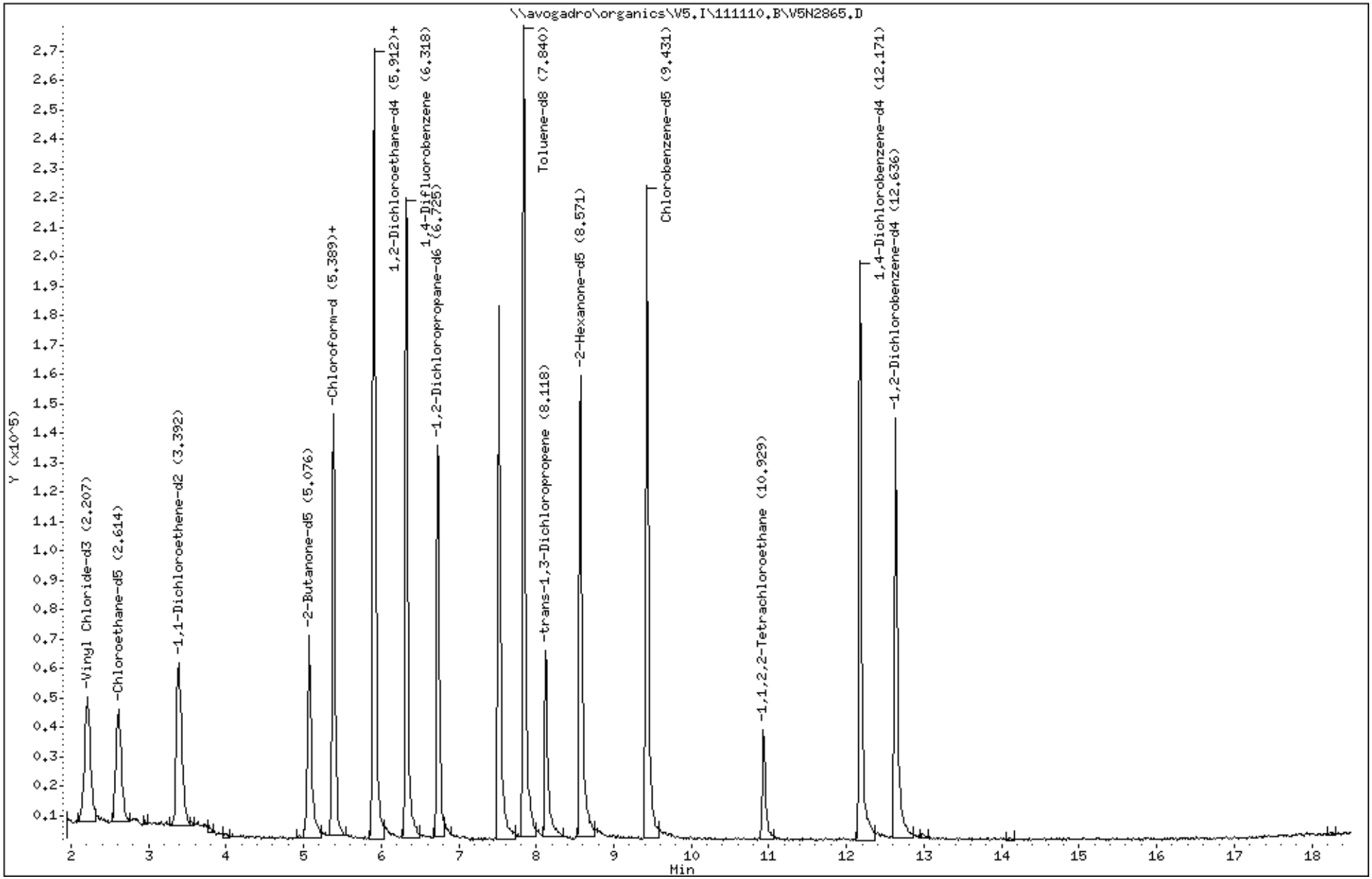
Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2865.D
Lab Smp Id: K2213-17A Client Smp ID: H3BA1
Inj Date : 10-NOV-2011 16:02
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-17A,,62892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 46
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\111110.B\V5N2865.D
Date : 10-NOV-2011 16:02
Client ID: H3BA1
Instrument: V5.i
Sample Info: 25ML,K2213-17A,,62892
Purge Volume: 25.0
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111110.B\V5N2865.D

Date : 10-NOV-2011 16:02

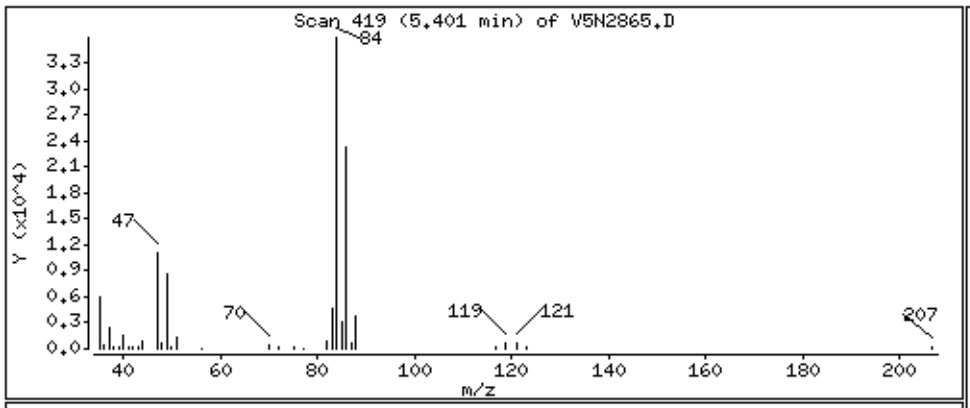
Client ID: H3BA1 Instrument: V5.i

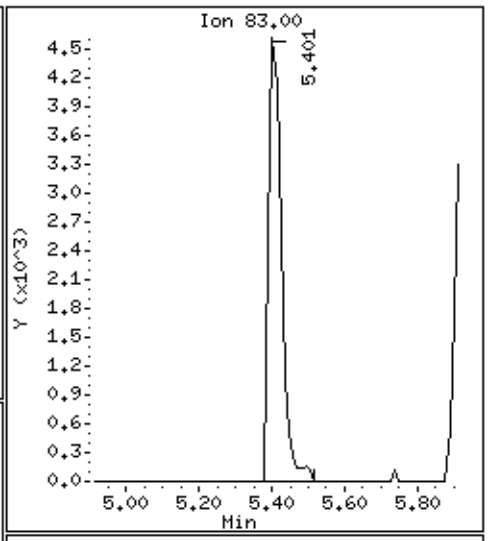
Sample Info: 25ML,K2213-17A,,62892

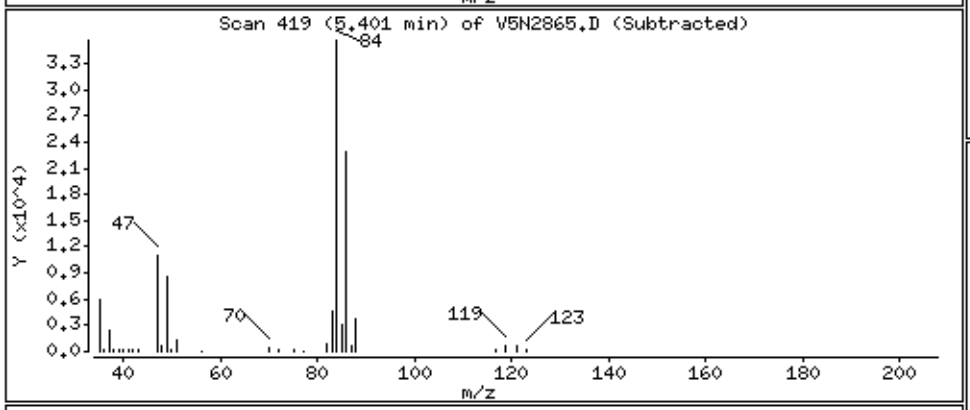
Purge Volume: 25.0 Operator: SRC: LIMS

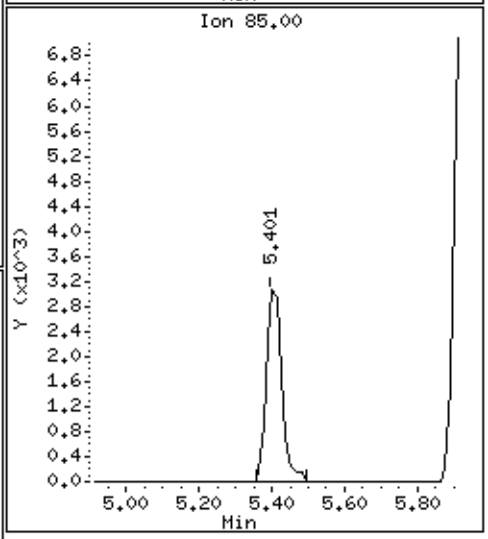
Column phase: DB-624 Column diameter: 0.25

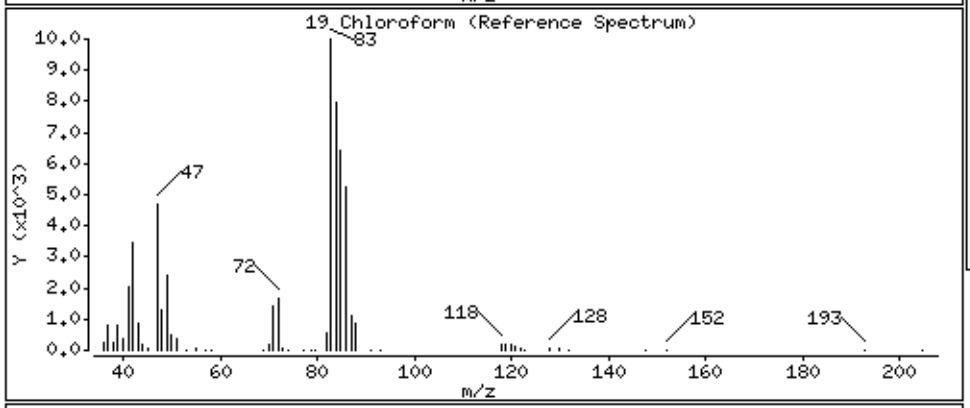
19 Chloroform Concentration: 0.39 ug/L

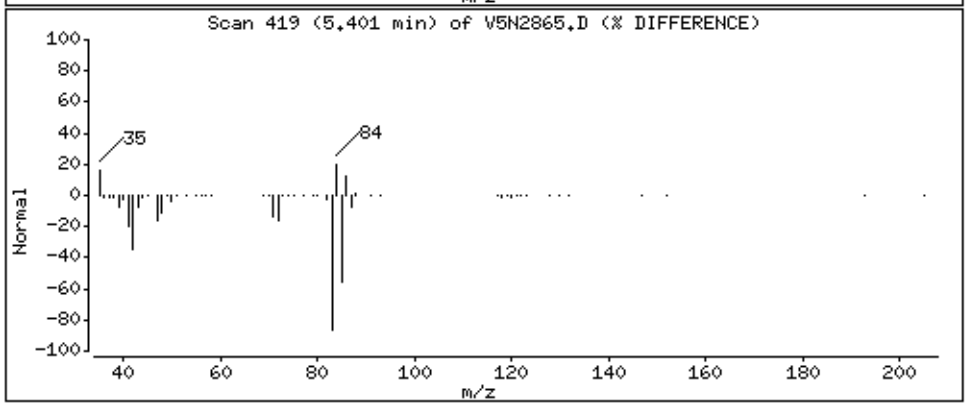












6A - FORM VI VOA-1

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.: H30X4

Instrument ID: V5 Calibration Date(s): 11/09/2011 11/09/2011

Heated Purge: (Y/N) N Calibration Time(s): 19:57 21:52

Purge Volume: 25.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: RRF0.5 = V5N2823.D RRF001 = V5N2826.D

RRF005 = V5N2822.D RRF010 = V5N2825.D RRF020 = V5N2824.D

COMPOUND	RRF0.5	RRF001	RRF005	RRF010	RRF020	$\overline{RRF}$	%RSD
Dichlorodifluoromethane	0.319	0.331	0.316	0.338	0.334	0.328	3.0
Chloromethane	0.877	0.680	0.726	0.712	0.741	0.747	10.2
Vinyl chloride	0.670	0.539	0.563	0.553	0.567	0.578	9.0
Bromomethane	0.369	0.359	0.361	0.346	0.323	0.351	5.1
Chloroethane	0.443	0.289	0.294	0.288	0.282	0.319	21.6
Trichlorofluoromethane	0.733	0.726	0.627	0.723	0.681	0.698	6.4
1,1-Dichloroethene	0.438	0.340	0.324	0.346	0.329	0.356	13.3
1,1,2-Trichloro-1,2,2-trifluoroethane	0.441	0.414	0.358	0.375	0.374	0.392	8.7
Acetone	0.050	0.035	0.038	0.038	0.037	0.040	14.4
Carbon disulfide	1.666	1.322	1.283	1.272	1.242	1.357	12.9
Methyl acetate	0.142	0.105	0.129	0.107	0.097	0.116	16.1
Methylene chloride	0.415	0.331	0.296	0.299	0.301	0.328	15.4
trans-1,2-Dichloroethene	0.409	0.379	0.370	0.371	0.352	0.376	5.5
Methyl tert-butyl ether	0.501	0.424	0.393	0.420	0.400	0.428	10.0
1,1-Dichloroethane	0.792	0.656	0.715	0.684	0.689	0.707	7.3
cis-1,2-Dichloroethene	0.389	0.337	0.349	0.341	0.330	0.349	6.7
2-Butanone	0.071	0.050	0.056	0.051	0.054	0.057	15.1
Bromochloromethane	0.133	0.127	0.133	0.134	0.132	0.132	1.9
Chloroform	0.632	0.541	0.567	0.553	0.537	0.566	6.8
1,1,1-Trichloroethane	0.748	0.725	0.698	0.731	0.662	0.713	4.7
Cyclohexane	0.983	0.907	0.860	0.843	0.817	0.882	7.4
Carbon tetrachloride	0.708	0.708	0.635	0.676	0.625	0.671	5.8
Benzene	1.767	1.685	1.600	1.544	1.510	1.621	6.5
1,2-Dichloroethane	0.292	0.264	0.243	0.252	0.256	0.262	7.1
Trichloroethene	0.498	0.511	0.485	0.503	0.458	0.491	4.2
Methylcyclohexane	0.765	0.715	0.710	0.676	0.679	0.709	5.1

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.: H30X4

Instrument ID: V5 Calibration Date(s): 11/09/2011 11/09/2011

Heated Purge: (Y/N) N Calibration Time(s): 19:57 21:52

Purge Volume: 25.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: RRF0.5 = V5N2823.D RRF001 = V5N2826.D

RRF005 = V5N2822.D RRF010 = V5N2825.D RRF020 = V5N2824.D

COMPOUND	RRF0.5	RRF001	RRF005	RRF010	RRF020	$\overline{RRF}$	%RSD
1,2-Dichloropropane	0.532	0.457	0.423	0.409	0.388	0.442	12.8
Bromodichloromethane	0.479	0.429	0.458	0.451	0.425	0.448	4.9
cis-1,3-Dichloropropene	0.536	0.482	0.520	0.523	0.492	0.511	4.4
4-Methyl-2-pentanone	0.209	0.171	0.168	0.163	0.153	0.173	12.2
Toluene	1.795	1.727	1.614	1.624	1.504	1.653	6.8
trans-1,3-Dichloropropene	0.326	0.287	0.347	0.358	0.331	0.330	8.2
1,1,2-Trichloroethane	0.193	0.194	0.196	0.193	0.176	0.191	4.2
Tetrachloroethene	0.318	0.447	0.379	0.366	0.339	0.370	13.3
2-Hexanone	0.128	0.093	0.117	0.113	0.109	0.112	11.2
Dibromochloromethane	0.273	0.272	0.282	0.292	0.277	0.279	2.9
1,2-Dibromoethane	0.196	0.182	0.208	0.210	0.206	0.200	5.7
Chlorobenzene	1.126	1.145	1.080	1.078	1.042	1.094	3.8
Ethylbenzene	2.027	1.842	1.774	1.783	1.690	1.823	6.9
m,p-Xylene	0.833	0.827	0.772	0.742	0.717	0.778	6.6
o-Xylene	0.728	0.774	0.710	0.695	0.651	0.712	6.3
Styrene	1.051	1.015	1.051	1.067	1.014	1.039	2.3
Bromoform	0.245	0.295	0.302	0.317	0.299	0.292	9.4
Isopropylbenzene	2.088	1.973	1.875	1.931	1.821	1.937	5.3
1,1,2,2-Tetrachloroethane	0.202	0.198	0.204	0.195	0.180	0.196	4.9
1,3-Dichlorobenzene	1.630	1.629	1.635	1.745	1.603	1.648	3.4
1,4-Dichlorobenzene	1.967	1.689	1.708	1.780	1.615	1.752	7.6
1,2-Dichlorobenzene	1.436	1.350	1.378	1.387	1.292	1.369	3.8
1,2-Dibromo-3-chloropropane	0.021	0.067	0.050	0.069	0.059	0.054	36.4
1,2,4-Trichlorobenzene	0.851	0.938	0.942	1.100	0.978	0.962	9.4
1,2,3-Trichlorobenzene	0.713	0.809	0.730	0.772	0.684	0.742	6.6

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Instrument ID: V5 Calibration Date(s): 11/09/2011 11/09/2011

Heated Purge: (Y/N) N Calibration Time(s): 19:57 21:52

Purge Volume: 25.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: RRF0.5 = V5N2823.D RRF001 = V5N2826.D

RRF005 = V5N2822.D RRF010 = V5N2825.D RRF020 = V5N2824.D

COMPOUND	RRF0.5	RRF001	RRF005	RRF010	RRF020	$\overline{RRF}$	%RSD
Vinyl chloride-d3	0.529	0.435	0.447	0.423	0.440	0.455	9.3
Chloroethane-d5	0.382	0.294	0.297	0.287	0.285	0.309	13.3
1,1-Dichloroethene-d2	0.140	0.125	0.107	0.108	0.109	0.118	12.4
2-Butanone-d5	0.066	0.048	0.054	0.053	0.053	0.055	12.2
Chloroform-d	0.587	0.545	0.536	0.535	0.521	0.545	4.6
1,2-Dichloroethane-d4	0.216	0.212	0.217	0.213	0.212	0.214	1.2
Benzene-d6	1.624	1.510	1.445	1.389	1.365	1.467	7.1
1,2-Dichloropropane-d6	0.519	0.502	0.526	0.517	0.482	0.509	3.5
Toluene-d8	1.448	1.263	1.299	1.328	1.243	1.316	6.1
trans-1,3-Dichloropropene-d4	0.265	0.280	0.317	0.307	0.289	0.292	7.3
2-Hexanone-d5	0.056	0.038	0.055	0.053	0.050	0.051	14.7
1,1,2,2-Tetrachloroethane-d2	0.206	0.178	0.190	0.191	0.178	0.188	6.2
1,2-Dichlorobenzene-d4	0.802	0.826	0.762	0.794	0.746	0.786	4.1

Data File: \\avogadro\organics\V5.I\111109.B\V5N2822.D
Report Date: 15-Nov-2011 09:34

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111109.B\V5N2822.D
Lab Smp Id: VSTD005O5 Client Smp ID: VSTD005O5
Inj Date : 09-NOV-2011 19:57
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD005O5,VSTD005O5
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111109.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 14:30 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 19:57 Cal File: V5N2822.D
Als bottle: 3 Calibration Sample, Level: 3
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	1.902	(0.300)	74197	5.00000	4.8
	2 Chloromethane	50	2.027	2.042	(0.321)	170387	5.00000	4.9
$	79 Vinyl Chloride-d3	65	2.167	2.169	(0.343)	104893	5.00000	4.9
	3 Vinyl Chloride	62	2.178	2.181	(0.345)	131957	5.00000	4.9
	4 Bromomethane	94	2.515	2.518	(0.398)	84641	5.00000	5.1
$	80 Chloroethane-d5	69	2.585	2.587	(0.409)	69544	5.00000	4.8
	5 Chloroethane	64	2.608	2.611	(0.412)	68956	5.00000	4.6
	6 Trichlorofluoromethane	101	2.898	2.913	(0.458)	147008	5.00000	4.5
$	81 1,1-Dichloroethene-d2	65	3.363	3.366	(0.532)	25101	5.00000	4.5
	7 1,1-Dichloroethene	96	3.375	3.377	(0.534)	75972	5.00000	4.6
	8 1,1,2-Trichloro-1,2,2-trifluo	101	3.421	3.424	(0.541)	84077	5.00000	4.6
	9 Acetone	43	3.444	3.447	(0.545)	90116	50.0000	49
	10 Carbon Disulfide	76	3.607	3.598	(0.570)	300959	5.00000	4.7
	11 Methyl Acetate	43	3.769	3.760	(0.596)	30158	5.00000	5.6
	12 Methylene Chloride	84	3.862	3.853	(0.611)	69439	5.00000	4.5
	13 trans-1,2-Dichloroethene	96	4.118	4.120	(0.651)	86733	5.00000	4.9
	14 Methyl tert-Butyl Ether	73	4.129	4.132	(0.653)	92256	5.00000	4.6
	15 1,1-Dichloroethane	63	4.536	4.527	(0.717)	167811	5.00000	5.1
$	82 2-Butanone-d5	46	5.070	5.061	(0.802)	127495	50.0000	50(A)
	17 cis-1,2-Dichloroethene	96	5.093	5.096	(0.805)	81891	5.00000	5.0
	16 2-Butanone	43	5.128	5.119	(0.811)	131861	50.0000	50
	18 Bromochloromethane	128	5.337	5.328	(0.844)	31106	5.00000	5.0(Q)

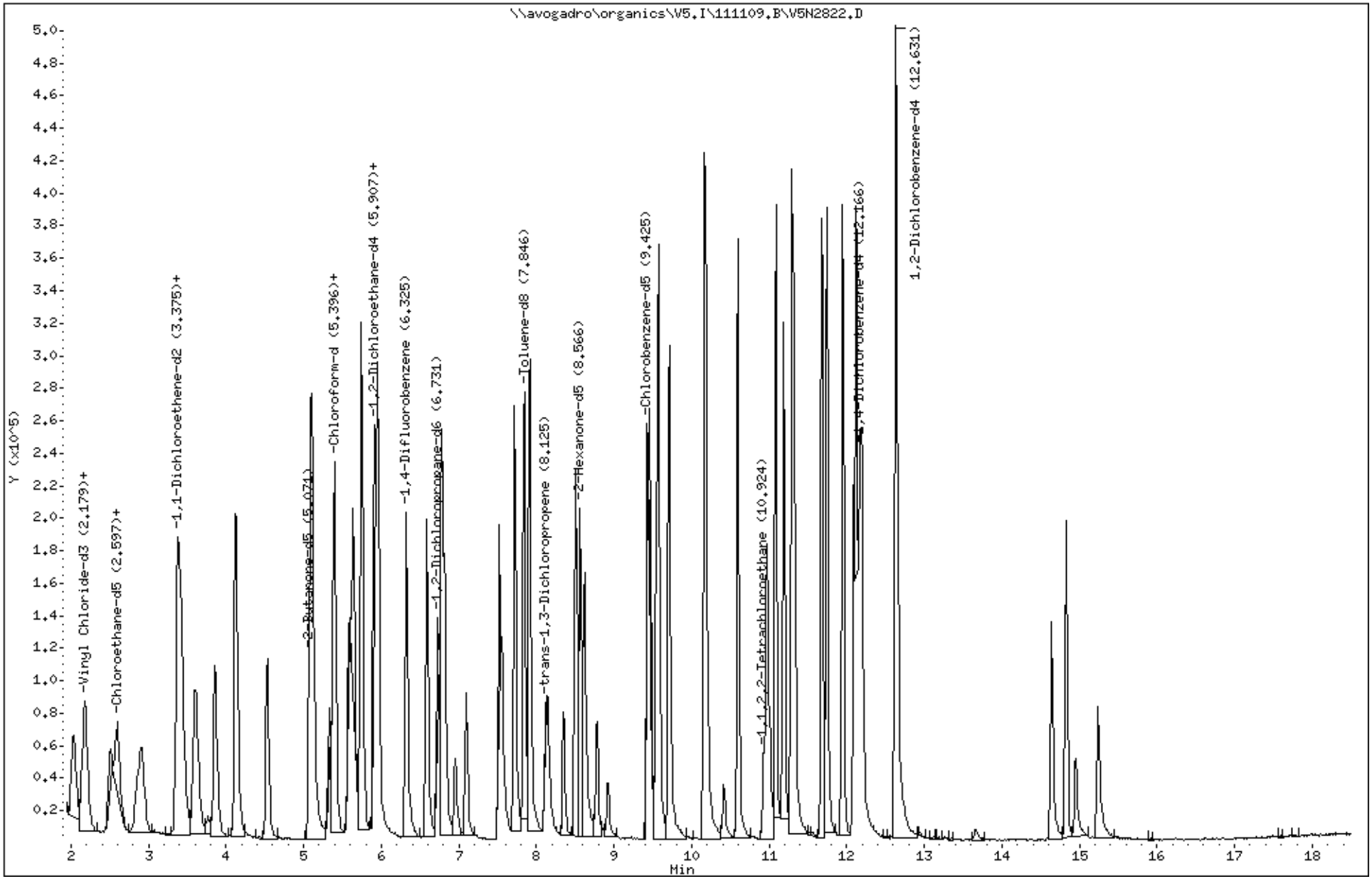
Data File: \\avogadro\organics\V5.I\111109.B\V5N2822.D
Report Date: 15-Nov-2011 09:34

		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	5.386	(0.851)	125708	5.00000	4.9
	19	Chloroform	83	5.407	5.398	(0.855)	133070	5.00000	5.0
	20	1,1,1-Trichloroethane	97	5.593	5.584	(0.593)	120194	5.00000	4.9
	21	Cyclohexane	56	5.639	5.642	(0.598)	148121	5.00000	4.9
	22	Carbon Tetrachloride	117	5.744	5.746	(0.609)	109436	5.00000	4.7
$	23	1,2-Dichloroethane-d4	65	5.895	5.897	(0.932)	50997	5.00000	5.1
$	84	Benzene-d6	84	5.906	5.909	(0.627)	248943	5.00000	4.9
	25	Benzene	78	5.953	5.944	(0.632)	275573	5.00000	4.9
	24	1,2-Dichloroethane	62	5.964	5.967	(0.943)	57060	5.00000	4.7
*	26	1,4-Difluorobenzene	114	6.324	6.327	(1.000)	234545	5.00000	
	27	Trichloroethene	95	6.591	6.594	(0.699)	83611	5.00000	4.9
$	85	1,2-Dichloropropane-d6	67	6.731	6.733	(0.714)	90535	5.00000	5.2
	28	Methylcyclohexane	83	6.777	6.780	(0.719)	122241	5.00000	5.0
	29	1,2-Dichloropropane	63	6.812	6.815	(0.723)	72782	5.00000	4.8
	30	Bromodichloromethane	83	7.091	7.093	(0.752)	78890	5.00000	5.1
	31	cis-1,3-Dichloropropene	75	7.555	7.558	(0.802)	89498	5.00000	5.1
	32	4-Methyl-2-Pentanone	43	7.718	7.720	(0.819)	289543	50.0000	49
$	33	Toluene-d8	98	7.846	7.837	(0.832)	223683	5.00000	4.9
	34	Toluene	91	7.915	7.918	(0.840)	278098	5.00000	4.9
$	86	trans-1,3-Dichloropropene-d4	79	8.124	8.115	(0.862)	54684	5.00000	5.4
	35	trans-1,3-Dichloropropene	75	8.148	8.150	(0.864)	59815	5.00000	5.3
	36	1,1,2-Trichloroethane	97	8.345	8.348	(0.885)	33737	5.00000	5.1
	37	Tetrachloroethene	164	8.496	8.498	(0.901)	65322	5.00000	5.1
$	87	2-Hexanone-d5	63	8.566	8.568	(0.909)	95415	50.0000	55(A)
	38	2-Hexanone	43	8.624	8.626	(0.915)	202266	50.0000	52
	39	Dibromochloromethane	129	8.775	8.777	(0.931)	48610	5.00000	5.1
	40	1,2-Dibromoethane	107	8.926	8.917	(0.947)	35825	5.00000	5.2
*	42	Chlorobenzene-d5	117	9.425	9.428	(1.000)	172253	5.00000	
	43	Chlorobenzene	112	9.460	9.462	(1.004)	186046	5.00000	4.9
	44	Ethylbenzene	91	9.576	9.579	(1.016)	305564	5.00000	4.9
	45	m,p-Xylene	106	9.715	9.706	(1.031)	132978	5.00000	5.0
	46	o-Xylene	106	10.168	10.171	(1.079)	122339	5.00000	5.0
	47	Styrene	104	10.191	10.194	(1.081)	180966	5.00000	5.1
	48	Bromoform	173	10.412	10.415	(0.856)	21883	5.00000	5.2
	49	Isopropylbenzene	105	10.598	10.600	(1.124)	322981	5.00000	4.8
$	89	1,1,2,2-Tetrachloroethane-d2	84	10.923	10.926	(1.159)	32757	5.00000	5.0
	51	1,1,2,2-Tetrachloroethane	83	10.958	10.949	(1.163)	35151	5.00000	5.2
M	41	Xylene (total)	106				255317	5.00000	10
	52	1,3-Dichlorobenzene	146	12.096	12.087	(0.994)	118551	5.00000	5.0
*	78	1,4-Dichlorobenzene-d4	152	12.166	12.168	(1.000)	72503	5.00000	
	53	1,4-Dichlorobenzene	146	12.201	12.203	(1.003)	123869	5.00000	4.9
$	90	1,2-Dichlorobenzene-d4	152	12.630	12.633	(1.038)	55231	5.00000	4.8(Q)
	54	1,2-Dichlorobenzene	146	12.653	12.656	(1.040)	99879	5.00000	5.0
	55	1,2-Dibromo-3-chloropropane	75	13.652	13.666	(1.122)	3642	5.00000	4.7(Q)
	56	1,2,4-Trichlorobenzene	180	14.639	14.642	(1.203)	68319	5.00000	4.9
	77	1,2,3-Trichlorobenzene	180	15.243	15.246	(1.253)	52896	5.00000	4.9

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\111109.B\V5N2822.D
Date : 09-NOV-2011 19:57
Client ID: VSTD00505
Instrument: V5.i
Sample Info: 25ML,VSTD00505,VSTD00505
Purge Volume: 25.0
Operator: SRC:
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111109.B\V5N2823.D
Report Date: 15-Nov-2011 09:34

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111109.B\V5N2823.D
Lab Smp Id: VSTD0.5O5 Client Smp ID: VSTD0.5O5
Inj Date : 09-NOV-2011 20:26
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD0.5O5,VSTD0.5O5
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111109.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 14:30 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 49 Calibration Sample, Level: 1
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	1.906	1.902	(0.302)	8184	0.50000	0.49
2	Chloromethane	50	2.092	2.042	(0.331)	22493	0.50000	0.59
$ 79	Vinyl Chloride-d3	65	2.197	2.169	(0.348)	13570	0.50000	0.58
3	Vinyl Chloride	62	2.220	2.181	(0.351)	17182	0.50000	0.58
4	Bromomethane	94	2.568	2.518	(0.406)	9453	0.50000	0.52
$ 80	Chloroethane-d5	69	2.603	2.587	(0.412)	9797	0.50000	0.62
5	Chloroethane	64	2.626	2.611	(0.416)	11351	0.50000	0.69
6	Trichlorofluoromethane	101	2.905	2.913	(0.460)	18794	0.50000	0.52
$ 81	1,1-Dichloroethene-d2	65	3.381	3.366	(0.535)	3597	0.50000	0.60
7	1,1-Dichloroethene	96	3.416	3.377	(0.541)	11244	0.50000	0.62
8	1,1,2-Trichloro-1,2,2-trifluo	101	3.428	3.424	(0.542)	11321	0.50000	0.56
9	Acetone	43	3.462	3.447	(0.548)	12711	5.00000	6.3
10	Carbon Disulfide	76	3.625	3.598	(0.574)	42732	0.50000	0.61
11	Methyl Acetate	43	3.776	3.760	(0.598)	3639	0.50000	0.61(T)
12	Methylene Chloride	84	3.869	3.853	(0.612)	10641	0.50000	0.63
13	trans-1,2-Dichloroethene	96	4.124	4.120	(0.653)	10486	0.50000	0.54
14	Methyl tert-Butyl Ether	73	4.136	4.132	(0.655)	12841	0.50000	0.59
15	1,1-Dichloroethane	63	4.542	4.527	(0.719)	20306	0.50000	0.56
$ 82	2-Butanone-d5	46	5.077	5.061	(0.803)	16833	5.00000	6.0
17	cis-1,2-Dichloroethene	96	5.100	5.096	(0.807)	9989	0.50000	0.56
16	2-Butanone	43	5.146	5.119	(0.814)	18309	5.00000	6.3
18	Bromochloromethane	128	5.344	5.328	(0.846)	3405	0.50000	0.50

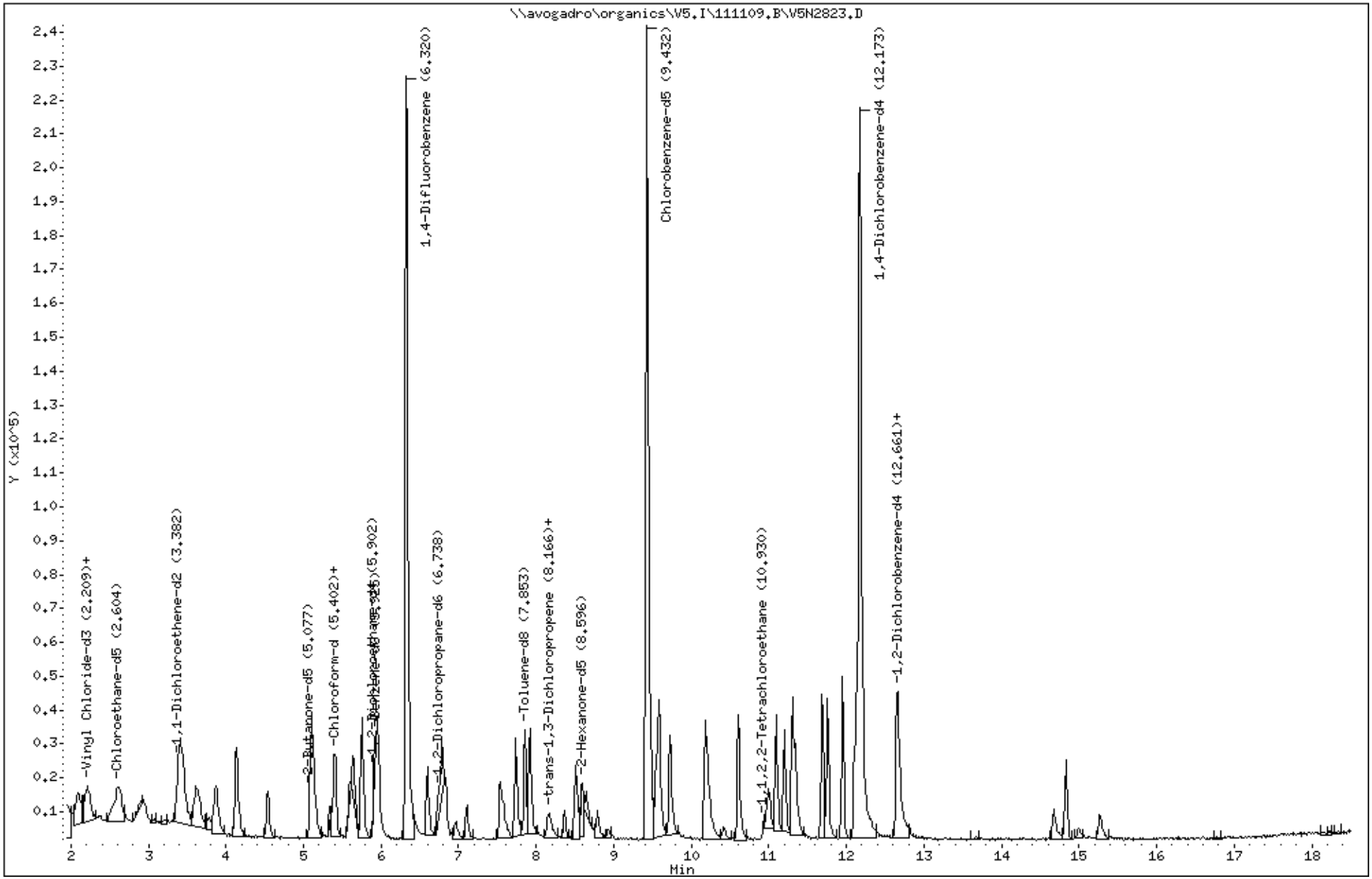
Data File: \\avogadro\organics\V5.I\111109.B\V5N2823.D
Report Date: 15-Nov-2011 09:34

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	83	Chloroform-d	84	5.390	5.386	(0.853)	15049	0.50000	0.54
	19	Chloroform	83	5.413	5.398	(0.857)	16202	0.50000	0.56
	20	1,1,1-Trichloroethane	97	5.599	5.584	(0.594)	14014	0.50000	0.52
	21	Cyclohexane	56	5.646	5.642	(0.599)	18405	0.50000	0.56
	22	Carbon Tetrachloride	117	5.750	5.746	(0.610)	13268	0.50000	0.53
$	23	1,2-Dichloroethane-d4	65	5.901	5.897	(0.934)	5547	0.50000	0.50
$	84	Benzene-d6	84	5.924	5.909	(0.628)	30410	0.50000	0.55
	25	Benzene	78	5.959	5.944	(0.632)	33091	0.50000	0.54
	24	1,2-Dichloroethane	62	5.983	5.967	(0.947)	7482	0.50000	0.56(T)
*	26	1,4-Difluorobenzene	114	6.319	6.327	(1.000)	256492	5.00000	
	27	Trichloroethene	95	6.598	6.594	(0.700)	9334	0.50000	0.51
$	85	1,2-Dichloropropane-d6	67	6.737	6.733	(0.714)	9724	0.50000	0.51
	28	Methylcyclohexane	83	6.784	6.780	(0.719)	14335	0.50000	0.54
	29	1,2-Dichloropropane	63	6.830	6.815	(0.724)	9970	0.50000	0.60(T)
	30	Bromodichloromethane	83	7.109	7.093	(0.754)	8971	0.50000	0.53
	31	cis-1,3-Dichloropropene	75	7.573	7.558	(0.803)	10039	0.50000	0.52
	32	4-Methyl-2-Pentanone	43	7.736	7.720	(0.820)	39086	5.00000	6.0
$	33	Toluene-d8	98	7.852	7.837	(0.833)	27125	0.50000	0.55
	34	Toluene	91	7.922	7.918	(0.840)	33622	0.50000	0.54
$	86	trans-1,3-Dichloropropene-d4	79	8.154	8.115	(0.865)	4956	0.50000	0.45
	35	trans-1,3-Dichloropropene	75	8.177	8.150	(0.867)	6113	0.50000	0.49
	36	1,1,2-Trichloroethane	97	8.363	8.348	(0.887)	3619	0.50000	0.51
	37	Tetrachloroethene	164	8.514	8.498	(0.903)	5961	0.50000	0.43
$	87	2-Hexanone-d5	63	8.595	8.568	(0.911)	10467	5.00000	5.5
	38	2-Hexanone	43	8.642	8.626	(0.916)	23903	5.00000	5.7
	39	Dibromochloromethane	129	8.793	8.777	(0.932)	5116	0.50000	0.49
	40	1,2-Dibromoethane	107	8.932	8.917	(0.947)	3675	0.50000	0.49(T)
*	42	Chlorobenzene-d5	117	9.432	9.428	(1.000)	187284	5.00000	
	43	Chlorobenzene	112	9.466	9.462	(1.004)	21081	0.50000	0.51
	44	Ethylbenzene	91	9.583	9.579	(1.016)	37966	0.50000	0.56
	45	m,p-Xylene	106	9.722	9.706	(1.031)	15594	0.50000	0.54
	46	o-Xylene	106	10.175	10.171	(1.079)	13633	0.50000	0.51
	47	Styrene	104	10.210	10.194	(1.082)	19684	0.50000	0.51
	48	Bromoform	173	10.419	10.415	(0.856)	2032	0.50000	0.42
	49	Isopropylbenzene	105	10.605	10.600	(1.124)	39101	0.50000	0.54
$	89	1,1,2,2-Tetrachloroethane-d2	84	10.930	10.926	(1.159)	3857	0.50000	0.55
	51	1,1,2,2-Tetrachloroethane	83	10.965	10.949	(1.163)	3783	0.50000	0.52(T)
M	41	Xylene (total)	106				29227	0.50000	1.0
	52	1,3-Dichlorobenzene	146	12.103	12.087	(0.994)	13520	0.50000	0.49
*	78	1,4-Dichlorobenzene-d4	152	12.172	12.168	(1.000)	82960	5.00000	(Q)
	53	1,4-Dichlorobenzene	146	12.207	12.203	(1.003)	16315	0.50000	0.56
$	90	1,2-Dichlorobenzene-d4	152	12.648	12.633	(1.039)	6650	0.50000	0.51
	54	1,2-Dichlorobenzene	146	12.672	12.656	(1.041)	11912	0.50000	0.52
	55	1,2-Dibromo-3-chloropropane	75	13.670	13.666	(1.123)	178	0.50000	0.20(T)
	56	1,2,4-Trichlorobenzene	180	14.669	14.642	(1.205)	7063	0.50000	0.44
	77	1,2,3-Trichlorobenzene	180	15.261	15.246	(1.254)	5919	0.50000	0.48

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\111109.B\V5N2823.D
Date : 09-NOV-2011 20:26
Client ID: VSTD0.505
Instrument: V5.i
Sample Info: 25ML,VSTD0.505,VSTD0.505
Purge Volume: 25.0
Operator: SRC:
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111109.B\V5N2824.D
Report Date: 15-Nov-2011 09:34

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111109.B\V5N2824.D
Lab Smp Id: VSTD020O5 Client Smp ID: VSTD020O5
Inj Date : 09-NOV-2011 20:55
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD020O5,VSTD020O5
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111109.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 14:30 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:55 Cal File: V5N2824.D
Als bottle: 5 Calibration Sample, Level: 5
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	1.902	(0.300)	305466	20.0000	20(A)
	2 Chloromethane	50	2.045	2.042	(0.324)	676916	20.0000	20
$	79 Vinyl Chloride-d3	65	2.184	2.169	(0.346)	401961	20.0000	19
	3 Vinyl Chloride	62	2.184	2.181	(0.346)	517584	20.0000	20
	4 Bromomethane	94	2.509	2.518	(0.397)	294931	20.0000	18
$	80 Chloroethane-d5	69	2.579	2.587	(0.408)	260135	20.0000	18
	5 Chloroethane	64	2.614	2.611	(0.414)	257585	20.0000	18
	6 Trichlorofluoromethane	101	2.893	2.913	(0.458)	621788	20.0000	20
$	81 1,1-Dichloroethene-d2	65	3.357	3.366	(0.531)	99733	20.0000	19
	7 1,1-Dichloroethene	96	3.369	3.377	(0.533)	300692	20.0000	19
	8 1,1,2-Trichloro-1,2,2-trifluo	101	3.415	3.424	(0.541)	341365	20.0000	19
	9 Acetone	43	3.438	3.447	(0.544)	337348	200.000	190
	10 Carbon Disulfide	76	3.601	3.598	(0.570)	1134588	20.0000	18
	11 Methyl Acetate	43	3.752	3.760	(0.594)	88812	20.0000	17
	12 Methylene Chloride	84	3.845	3.853	(0.609)	274749	20.0000	18
	13 trans-1,2-Dichloroethene	96	4.112	4.120	(0.651)	321104	20.0000	19
	14 Methyl tert-Butyl Ether	73	4.135	4.132	(0.654)	365091	20.0000	19
	15 1,1-Dichloroethane	63	4.518	4.527	(0.715)	629350	20.0000	19
$	82 2-Butanone-d5	46	5.053	5.061	(0.800)	480201	200.000	190(A)
	17 cis-1,2-Dichloroethene	96	5.087	5.096	(0.805)	301355	20.0000	19
	16 2-Butanone	43	5.111	5.119	(0.809)	494694	200.000	190
	18 Bromochloromethane	128	5.331	5.328	(0.844)	120269	20.0000	20(Q)

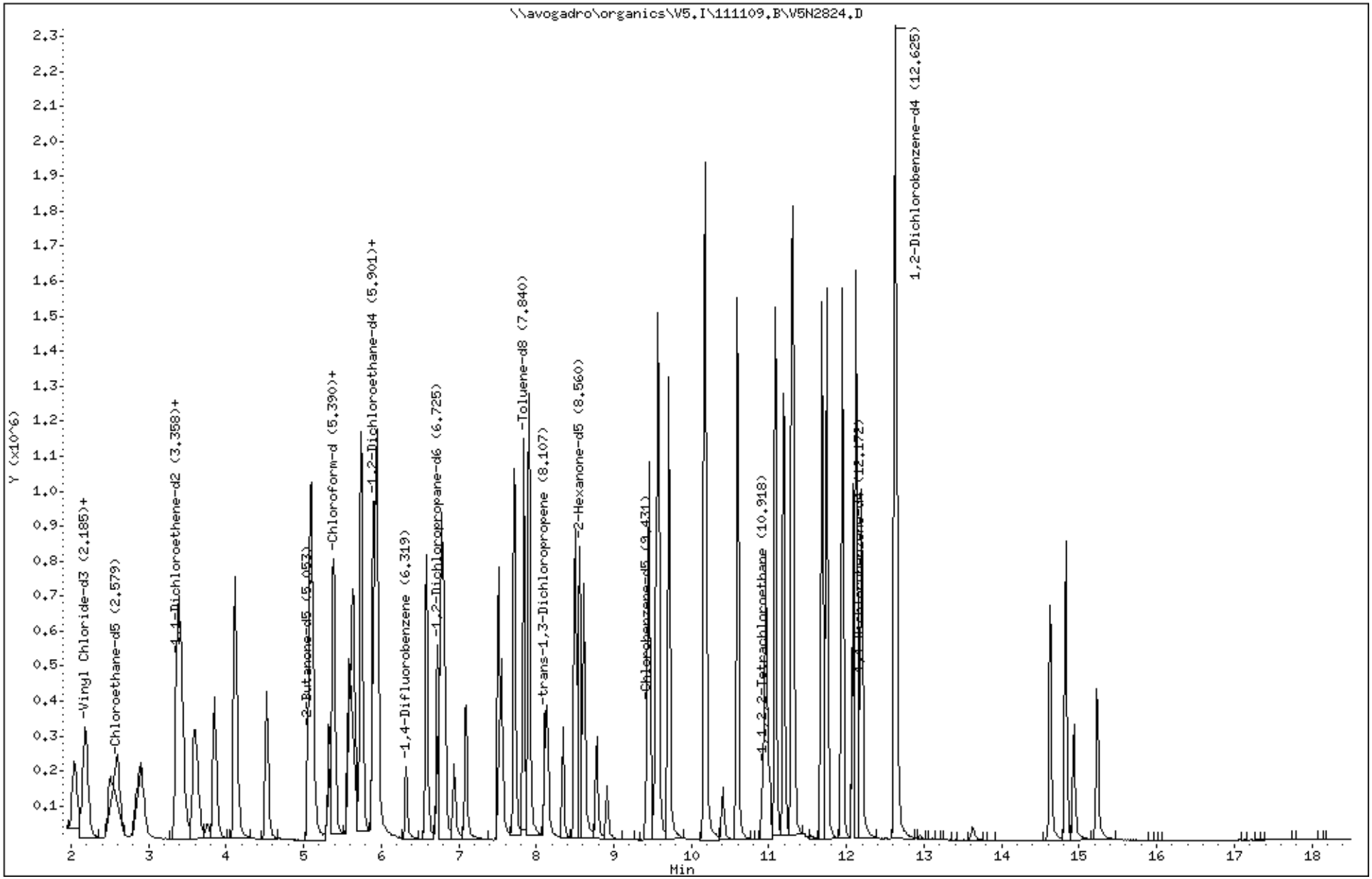
Data File: \\avogadro\organics\V5.I\111109.B\V5N2824.D
Report Date: 15-Nov-2011 09:34

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
$	83	Chloroform-d	84	5.378	5.386	(0.851)	475964	20.0000	19
	19	Chloroform	83	5.401	5.398	(0.855)	490650	20.0000	19
	20	1,1,1-Trichloroethane	97	5.587	5.584	(0.592)	463107	20.0000	19
	21	Cyclohexane	56	5.645	5.642	(0.599)	571484	20.0000	19
	22	Carbon Tetrachloride	117	5.749	5.746	(0.610)	437464	20.0000	19
$	23	1,2-Dichloroethane-d4	65	5.889	5.897	(0.932)	193614	20.0000	20
$	84	Benzene-d6	84	5.912	5.909	(0.627)	954910	20.0000	19
	25	Benzene	78	5.947	5.944	(0.631)	1056621	20.0000	19
	24	1,2-Dichloroethane	62	5.970	5.967	(0.945)	233847	20.0000	20
*	26	1,4-Difluorobenzene	114	6.318	6.327	(1.000)	228309	5.00000	
	27	Trichloroethene	95	6.586	6.594	(0.698)	320187	20.0000	19
$	85	1,2-Dichloropropane-d6	67	6.725	6.733	(0.713)	337147	20.0000	19
	28	Methylcyclohexane	83	6.783	6.780	(0.719)	474934	20.0000	19
	29	1,2-Dichloropropane	63	6.818	6.815	(0.723)	271325	20.0000	18
	30	Bromodichloromethane	83	7.096	7.093	(0.752)	297486	20.0000	19
	31	cis-1,3-Dichloropropene	75	7.549	7.558	(0.801)	344560	20.0000	19
	32	4-Methyl-2-Pentanone	43	7.712	7.720	(0.818)	1073778	200.000	180
$	33	Toluene-d8	98	7.840	7.837	(0.831)	869807	20.0000	19
	34	Toluene	91	7.909	7.918	(0.839)	1052309	20.0000	18
$	86	trans-1,3-Dichloropropene-d4	79	8.107	8.115	(0.860)	202505	20.0000	20
	35	trans-1,3-Dichloropropene	75	8.142	8.150	(0.863)	231285	20.0000	20(A)
	36	1,1,2-Trichloroethane	97	8.339	8.348	(0.884)	123439	20.0000	19
	37	Tetrachloroethene	164	8.502	8.498	(0.901)	236880	20.0000	18(Q)
$	87	2-Hexanone-d5	63	8.560	8.568	(0.908)	349290	200.000	200(A)
	38	2-Hexanone	43	8.618	8.626	(0.914)	762589	200.000	190
	39	Dibromochloromethane	129	8.780	8.777	(0.931)	194023	20.0000	20
	40	1,2-Dibromoethane	107	8.908	8.917	(0.945)	144255	20.0000	21(A)
*	42	Chlorobenzene-d5	117	9.431	9.428	(1.000)	174915	5.00000	
	43	Chlorobenzene	112	9.454	9.462	(1.002)	728898	20.0000	19
	44	Ethylbenzene	91	9.570	9.579	(1.015)	1182315	20.0000	19
	45	m,p-Xylene	106	9.709	9.706	(1.030)	501885	20.0000	18
	46	o-Xylene	106	10.162	10.171	(1.078)	455732	20.0000	18
	47	Styrene	104	10.186	10.194	(1.080)	709349	20.0000	20
	48	Bromoform	173	10.406	10.415	(0.855)	89914	20.0000	21(A)
	49	Isopropylbenzene	105	10.592	10.600	(1.123)	1273920	20.0000	19
$	89	1,1,2,2-Tetrachloroethane-d2	84	10.917	10.926	(1.158)	124261	20.0000	19
	51	1,1,2,2-Tetrachloroethane	83	10.952	10.949	(1.161)	125894	20.0000	18
M	41	Xylene (total)	106				957617	20.0000	37
	52	1,3-Dichlorobenzene	146	12.090	12.087	(0.993)	481720	20.0000	19
*	78	1,4-Dichlorobenzene-d4	152	12.171	12.168	(1.000)	75125	5.00000	(Q)
	53	1,4-Dichlorobenzene	146	12.195	12.203	(1.002)	485239	20.0000	18
$	90	1,2-Dichlorobenzene-d4	152	12.624	12.633	(1.037)	224188	20.0000	19(Q)
	54	1,2-Dichlorobenzene	146	12.648	12.656	(1.039)	388372	20.0000	19
	55	1,2-Dibromo-3-chloropropane	75	13.623	13.666	(1.119)	17847	20.0000	22(AQ)
	56	1,2,4-Trichlorobenzene	180	14.622	14.642	(1.201)	294006	20.0000	20(A)
	77	1,2,3-Trichlorobenzene	180	15.226	15.246	(1.251)	205605	20.0000	18

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\111109.B\V5N2824.D
Date : 09-NOV-2011 20:55
Client ID: VSTD02005 Instrument: V5.i
Sample Info: 25ML,VSTD02005,VSTD02005
Purge Volume: 25.0 Operator: SRC:
Column phase: DB-624 Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111109.B\V5N2825.D
Report Date: 15-Nov-2011 09:34

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111109.B\V5N2825.D
Lab Smp Id: VSTD010O5 Client Smp ID: VSTD010O5
Inj Date : 09-NOV-2011 21:23
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD010O5,VSTD010O5
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111109.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 14:30 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:23 Cal File: V5N2825.D
Als bottle: 6 Calibration Sample, Level: 4
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	1.902	1.902	(0.301)	164792	10.0000	10
	2 Chloromethane	50	2.053	2.042	(0.325)	346643	10.0000	9.5
$	79 Vinyl Chloride-d3	65	2.181	2.169	(0.345)	205852	10.0000	9.3
	3 Vinyl Chloride	62	2.193	2.181	(0.347)	269527	10.0000	9.6
	4 Bromomethane	94	2.518	2.518	(0.398)	168420	10.0000	9.8
$	80 Chloroethane-d5	69	2.588	2.587	(0.409)	139752	10.0000	9.3
	5 Chloroethane	64	2.623	2.611	(0.415)	140195	10.0000	9.0
	6 Trichlorofluoromethane	101	2.913	2.913	(0.460)	351952	10.0000	10
$	81 1,1-Dichloroethene-d2	65	3.366	3.366	(0.532)	52396	10.0000	9.1(Q)
	7 1,1-Dichloroethene	96	3.377	3.377	(0.534)	168366	10.0000	9.7
	8 1,1,2-Trichloro-1,2,2-trifluo	101	3.424	3.424	(0.541)	182462	10.0000	9.5
	9 Acetone	43	3.447	3.447	(0.545)	183618	100.000	95
	10 Carbon Disulfide	76	3.610	3.598	(0.571)	619196	10.0000	9.4
	11 Methyl Acetate	43	3.761	3.760	(0.594)	51964	10.0000	9.2
	12 Methylene Chloride	84	3.853	3.853	(0.609)	145394	10.0000	9.1
	13 trans-1,2-Dichloroethene	96	4.121	4.120	(0.651)	180879	10.0000	9.9
	14 Methyl tert-Butyl Ether	73	4.132	4.132	(0.653)	204623	10.0000	9.8
	15 1,1-Dichloroethane	63	4.527	4.527	(0.716)	332948	10.0000	9.7
$	82 2-Butanone-d5	46	5.061	5.061	(0.800)	255833	100.000	96(A)
	17 cis-1,2-Dichloroethene	96	5.096	5.096	(0.805)	166242	10.0000	9.8
	16 2-Butanone	43	5.119	5.119	(0.809)	250533	100.000	91
	18 Bromochloromethane	128	5.328	5.328	(0.842)	65276	10.0000	10(Q)

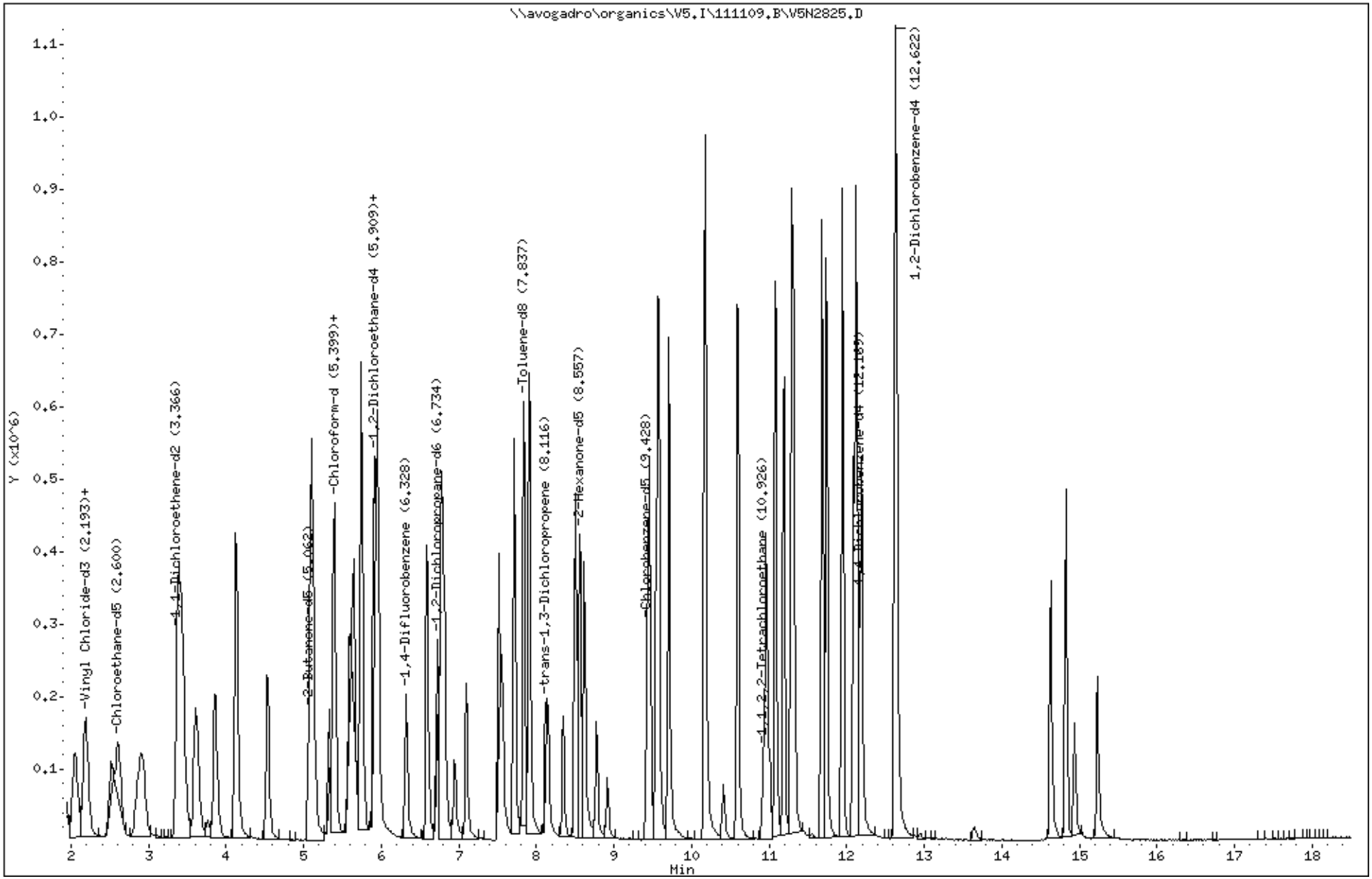
Data File: \\avogadro\organics\V5.I\111109.B\V5N2825.D
Report Date: 15-Nov-2011 09:34

		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)	260619	10.0000	9.8
	19	Chloroform	83	5.398	5.398	(0.853)	269268	10.0000	9.8
	20	1,1,1-Trichloroethane	97	5.584	5.584	(0.592)	255749	10.0000	10
	21	Cyclohexane	56	5.642	5.642	(0.598)	294996	10.0000	9.6
	22	Carbon Tetrachloride	117	5.746	5.746	(0.610)	236421	10.0000	10
$	23	1,2-Dichloroethane-d4	65	5.897	5.897	(0.932)	103806	10.0000	10
$	84	Benzene-d6	84	5.909	5.909	(0.627)	485996	10.0000	9.5
	25	Benzene	78	5.944	5.944	(0.630)	540352	10.0000	9.5
	24	1,2-Dichloroethane	62	5.967	5.967	(0.943)	122750	10.0000	9.6
*	26	1,4-Difluorobenzene	114	6.327	6.327	(1.000)	243489	5.00000	
	27	Trichloroethene	95	6.583	6.594	(0.698)	176036	10.0000	10
$	85	1,2-Dichloropropane-d6	67	6.734	6.733	(0.714)	180923	10.0000	10
	28	Methylcyclohexane	83	6.780	6.780	(0.719)	236625	10.0000	9.5
	29	1,2-Dichloropropane	63	6.815	6.815	(0.723)	143043	10.0000	9.3
	30	Bromodichloromethane	83	7.094	7.093	(0.752)	157661	10.0000	10
	31	cis-1,3-Dichloropropene	75	7.558	7.558	(0.802)	183121	10.0000	10
	32	4-Methyl-2-Pentanone	43	7.721	7.720	(0.819)	570616	100.000	94
$	33	Toluene-d8	98	7.837	7.837	(0.831)	464673	10.0000	10
	34	Toluene	91	7.906	7.918	(0.839)	568452	10.0000	9.8
$	86	trans-1,3-Dichloropropene-d4	79	8.115	8.115	(0.861)	107573	10.0000	11
	35	trans-1,3-Dichloropropene	75	8.150	8.150	(0.865)	125272	10.0000	11
	36	1,1,2-Trichloroethane	97	8.348	8.348	(0.885)	67659	10.0000	10
	37	Tetrachloroethene	164	8.499	8.498	(0.901)	128192	10.0000	9.9
$	87	2-Hexanone-d5	63	8.557	8.568	(0.908)	187201	100.000	110(A)
	38	2-Hexanone	43	8.615	8.626	(0.914)	394906	100.000	100
	39	Dibromochloromethane	129	8.777	8.777	(0.931)	102062	10.0000	10
	40	1,2-Dibromoethane	107	8.917	8.917	(0.946)	73339	10.0000	10
*	42	Chlorobenzene-d5	117	9.428	9.428	(1.000)	174972	5.00000	
	43	Chlorobenzene	112	9.463	9.462	(1.004)	377322	10.0000	9.9
	44	Ethylbenzene	91	9.579	9.579	(1.016)	623786	10.0000	9.8
	45	m,p-Xylene	106	9.706	9.706	(1.030)	259532	10.0000	9.5
	46	o-Xylene	106	10.171	10.171	(1.079)	243297	10.0000	9.8
	47	Styrene	104	10.183	10.194	(1.080)	373469	10.0000	10
	48	Bromoform	173	10.415	10.415	(0.856)	47360	10.0000	11
	49	Isopropylbenzene	105	10.601	10.600	(1.124)	675583	10.0000	10
$	89	1,1,2,2-Tetrachloroethane-d2	84	10.926	10.926	(1.159)	66768	10.0000	10
	51	1,1,2,2-Tetrachloroethane	83	10.949	10.949	(1.161)	68116	10.0000	9.9
M	41	Xylene (total)	106				502829	10.0000	19
	52	1,3-Dichlorobenzene	146	12.087	12.087	(0.993)	260417	10.0000	11
*	78	1,4-Dichlorobenzene-d4	152	12.168	12.168	(1.000)	74632	5.00000	
	53	1,4-Dichlorobenzene	146	12.192	12.203	(1.002)	265741	10.0000	10
$	90	1,2-Dichlorobenzene-d4	152	12.621	12.633	(1.037)	118559	10.0000	10(Q)
	54	1,2-Dichlorobenzene	146	12.645	12.656	(1.039)	207070	10.0000	10
	55	1,2-Dibromo-3-chloropropane	75	13.632	13.666	(1.120)	10370	10.0000	13(Q)
	56	1,2,4-Trichlorobenzene	180	14.630	14.642	(1.202)	164204	10.0000	11
	77	1,2,3-Trichlorobenzene	180	15.234	15.246	(1.252)	115206	10.0000	10

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\111109.B\V5N2825.D
Date : 09-NOV-2011 21:23
Client ID: VSTD01005 Instrument: V5.i
Sample Info: 25ML,VSTD01005,VSTD01005
Purge Volume: 25.0 Operator: SRC:
Column phase: DB-624 Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111109.B\V5N2826.D
Report Date: 15-Nov-2011 09:34

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111109.B\V5N2826.D
Lab Smp Id: VSTD001O5 Client Smp ID: VSTD001O5
Inj Date : 09-NOV-2011 21:52
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD001O5,VSTD001O5
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111109.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 14:30 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 7 Calibration Sample, Level: 2
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	1.902	(0.300)	16320	1.00000	1.0
	2 Chloromethane	50	2.016	2.042	(0.319)	33509	1.00000	0.91
$	79 Vinyl Chloride-d3	65	2.167	2.169	(0.343)	21460	1.00000	0.96
	3 Vinyl Chloride	62	2.156	2.181	(0.341)	26601	1.00000	0.93
	4 Bromomethane	94	2.493	2.518	(0.394)	17686	1.00000	1.0
$	80 Chloroethane-d5	69	2.574	2.587	(0.407)	14490	1.00000	0.95(Q)
	5 Chloroethane	64	2.597	2.611	(0.411)	14275	1.00000	0.91
	6 Trichlorofluoromethane	101	2.911	2.913	(0.460)	35807	1.00000	1.0
$	81 1,1-Dichloroethene-d2	65	3.364	3.366	(0.532)	6161	1.00000	1.1(Q)
	7 1,1-Dichloroethene	96	3.387	3.377	(0.535)	16779	1.00000	0.96
	8 1,1,2-Trichloro-1,2,2-trifluo	101	3.410	3.424	(0.539)	20407	1.00000	1.1
	9 Acetone	43	3.456	3.447	(0.547)	17413	10.0000	8.9
	10 Carbon Disulfide	76	3.596	3.598	(0.569)	65208	1.00000	0.97
	11 Methyl Acetate	43	3.770	3.760	(0.596)	5165	1.00000	0.90
	12 Methylene Chloride	84	3.851	3.853	(0.609)	16336	1.00000	1.0
	13 trans-1,2-Dichloroethene	96	4.130	4.120	(0.653)	18672	1.00000	1.0
	14 Methyl tert-Butyl Ether	73	4.142	4.132	(0.655)	20923	1.00000	0.99
	15 1,1-Dichloroethane	63	4.537	4.527	(0.717)	32343	1.00000	0.93
$	82 2-Butanone-d5	46	5.082	5.061	(0.804)	23518	10.0000	8.7
	17 cis-1,2-Dichloroethene	96	5.106	5.096	(0.807)	16604	1.00000	0.96
	16 2-Butanone	43	5.140	5.119	(0.813)	24714	10.0000	8.8
	18 Bromochloromethane	128	5.338	5.328	(0.844)	6281	1.00000	0.97(Q)

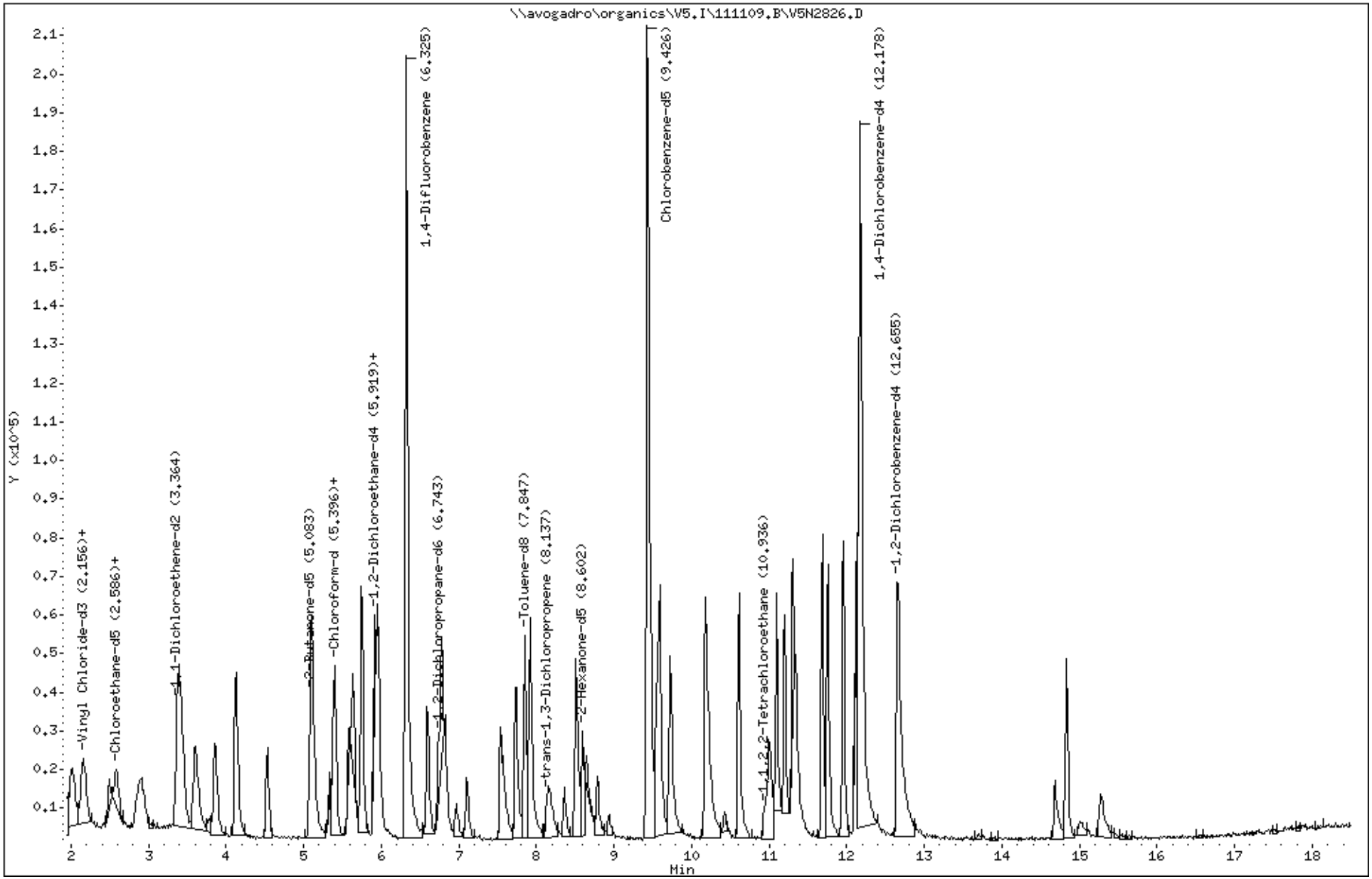
Data File: \\avogadro\organics\V5.I\111109.B\V5N2826.D
Report Date: 15-Nov-2011 09:34

		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	5.386	(0.851)	26852	1.00000	1.00
	19	Chloroform	83	5.407	5.398	(0.855)	26690	1.00000	0.96
	20	1,1,1-Trichloroethane	97	5.593	5.584	(0.593)	25101	1.00000	1.0
	21	Cyclohexane	56	5.640	5.642	(0.598)	31387	1.00000	1.0
	22	Carbon Tetrachloride	117	5.744	5.746	(0.609)	24503	1.00000	1.1
$	23	1,2-Dichloroethane-d4	65	5.907	5.897	(0.934)	10466	1.00000	0.99(Q)
$	84	Benzene-d6	84	5.918	5.909	(0.628)	52281	1.00000	1.0
	25	Benzene	78	5.953	5.944	(0.632)	58334	1.00000	1.0
	24	1,2-Dichloroethane	62	5.977	5.967	(0.945)	13042	1.00000	1.0
*	26	1,4-Difluorobenzene	114	6.325	6.327	(1.000)	246552	5.00000	
	27	Trichloroethene	95	6.604	6.594	(0.701)	17683	1.00000	1.0
$	85	1,2-Dichloropropane-d6	67	6.743	6.733	(0.715)	17363	1.00000	0.99
	28	Methylcyclohexane	83	6.778	6.780	(0.719)	24757	1.00000	1.0
	29	1,2-Dichloropropane	63	6.824	6.815	(0.724)	15824	1.00000	1.0(T)
	30	Bromodichloromethane	83	7.103	7.093	(0.754)	14859	1.00000	0.96
	31	cis-1,3-Dichloropropene	75	7.579	7.558	(0.804)	16693	1.00000	0.94
	32	4-Methyl-2-Pentanone	43	7.730	7.720	(0.820)	59220	10.0000	9.9
$	33	Toluene-d8	98	7.846	7.837	(0.832)	43707	1.00000	0.96
	34	Toluene	91	7.916	7.918	(0.840)	59762	1.00000	1.0
$	86	trans-1,3-Dichloropropene-d4	79	8.137	8.115	(0.863)	9676	1.00000	0.96
	35	trans-1,3-Dichloropropene	75	8.171	8.150	(0.867)	9931	1.00000	0.87
	36	1,1,2-Trichloroethane	97	8.357	8.348	(0.887)	6719	1.00000	1.0
	37	Tetrachloroethene	164	8.508	8.498	(0.903)	15467	1.00000	1.2(Q)
$	87	2-Hexanone-d5	63	8.601	8.568	(0.913)	13117	10.0000	7.5(Q)
	38	2-Hexanone	43	8.659	8.626	(0.919)	32333	10.0000	8.3(H)
	39	Dibromochloromethane	129	8.787	8.777	(0.932)	9404	1.00000	0.97
	40	1,2-Dibromoethane	107	8.938	8.917	(0.948)	6303	1.00000	0.91(T)
*	42	Chlorobenzene-d5	117	9.426	9.428	(1.000)	173069	5.00000	
	43	Chlorobenzene	112	9.460	9.462	(1.004)	39620	1.00000	1.0
	44	Ethylbenzene	91	9.588	9.579	(1.017)	63763	1.00000	1.0
	45	m,p-Xylene	106	9.728	9.706	(1.032)	28613	1.00000	1.1
	46	o-Xylene	106	10.180	10.171	(1.080)	26785	1.00000	1.1
	47	Styrene	104	10.227	10.194	(1.085)	35117	1.00000	0.98
	48	Bromoform	173	10.436	10.415	(0.857)	4441	1.00000	1.0
	49	Isopropylbenzene	105	10.610	10.600	(1.126)	68289	1.00000	1.0
$	89	1,1,2,2-Tetrachloroethane-d2	84	10.935	10.926	(1.160)	6155	1.00000	0.94
	51	1,1,2,2-Tetrachloroethane	83	10.970	10.949	(1.164)	6847	1.00000	1.0
M	41	Xylene (total)	106				55398	1.00000	2.1
	52	1,3-Dichlorobenzene	146	12.108	12.087	(0.994)	24545	1.00000	0.99
*	78	1,4-Dichlorobenzene-d4	152	12.178	12.168	(1.000)	75333	5.00000	(Q)
	53	1,4-Dichlorobenzene	146	12.213	12.203	(1.003)	25451	1.00000	0.96
$	90	1,2-Dichlorobenzene-d4	152	12.642	12.633	(1.038)	12450	1.00000	1.1(Q)
	54	1,2-Dichlorobenzene	146	12.677	12.656	(1.041)	20347	1.00000	0.99
	55	1,2-Dibromo-3-chloropropane	75	13.699	13.666	(1.125)	1014	1.00000	1.3(T)
	56	1,2,4-Trichlorobenzene	180	14.686	14.642	(1.206)	14136	1.00000	0.98
	77	1,2,3-Trichlorobenzene	180	15.279	15.246	(1.255)	12188	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\111109.B\V5N2826.D
Date : 09-NOV-2011 21:52
Client ID: VSTD00105
Instrument: V5.i
Sample Info: 25ML,VSTD00105,VSTD00105
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.: H30X4

Instrument ID: V5 Calibration Date: 11/10/2011 Time: 6:28

Lab File ID: V5N2844.D Init. Calib. Date(s): 11/09/2011 11/09/2011

EPA Sample No.(VSTD#####) VSTD005P5 Init. Calib. Time(s): 19:57 21:52

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	0.328	0.290	0.010	-11.6	40.0
Chloromethane	0.747	0.771	0.010	3.1	40.0
Vinyl chloride	0.578	0.581	0.100	0.5	30.0
Bromomethane	0.351	0.369	0.100	5.1	30.0
Chloroethane	0.319	0.316	0.010	-1.0	40.0
Trichlorofluoromethane	0.698	0.662	0.010	-5.1	40.0
1,1-Dichloroethene	0.356	0.354	0.100	-0.5	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.392	0.348	0.010	-11.4	40.0
Acetone	0.040	0.033	0.010	-16.1	40.0
Carbon disulfide	1.357	1.338	0.010	-1.4	40.0
Methyl acetate	0.116	0.087	0.010	-24.6	40.0
Methylene chloride	0.328	0.313	0.010	-4.7	40.0
trans-1,2-Dichloroethene	0.376	0.389	0.010	3.5	40.0
Methyl tert-butyl ether	0.428	0.420	0.010	-1.8	40.0
1,1-Dichloroethane	0.707	0.743	0.200	5.0	30.0
cis-1,2-Dichloroethene	0.349	0.365	0.010	4.4	40.0
2-Butanone	0.057	0.055	0.010	-2.6	40.0
Bromochloromethane	0.132	0.138	0.050	5.0	40.0
Chloroform	0.566	0.578	0.200	2.0	30.0
1,1,1-Trichloroethane	0.713	0.759	0.100	6.5	30.0
Cyclohexane	0.882	0.853	0.010	-3.3	40.0
Carbon tetrachloride	0.671	0.688	0.100	2.6	30.0
Benzene	1.621	1.690	0.400	4.3	30.0
1,2-Dichloroethane	0.262	0.279	0.100	6.7	30.0
Trichloroethene	0.491	0.539	0.300	9.8	30.0
Methylcyclohexane	0.709	0.617	0.010	-12.9	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.: H30X4

Instrument ID: V5 Calibration Date: 11/10/2011 Time: 6:28

Lab File ID: V5N2844.D Init. Calib. Date(s): 11/09/2011 11/09/2011

EPA Sample No.(VSTD#####) VSTD005P5 Init. Calib. Time(s): 19:57 21:52

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	0.442	0.454	0.010	2.7	40.0
Bromodichloromethane	0.448	0.446	0.200	-0.5	30.0
cis-1,3-Dichloropropene	0.511	0.530	0.200	3.8	30.0
4-Methyl-2-pentanone	0.173	0.170	0.010	-1.4	40.0
Toluene	1.653	1.725	0.400	4.3	30.0
trans-1,3-Dichloropropene	0.330	0.334	0.100	1.2	30.0
1,1,2-Trichloroethane	0.191	0.200	0.100	4.8	30.0
Tetrachloroethene	0.370	0.374	0.100	1.1	30.0
2-Hexanone	0.112	0.114	0.010	1.9	40.0
Dibromochloromethane	0.279	0.280	0.100	0.1	30.0
1,2-Dibromoethane	0.200	0.208	0.010	3.6	40.0
Chlorobenzene	1.094	1.126	0.500	2.9	30.0
Ethylbenzene	1.823	1.865	0.100	2.3	30.0
m,p-Xylene	0.778	0.782	0.300	0.4	30.0
o-Xylene	0.712	0.704	0.300	-1.1	30.0
Styrene	1.039	1.073	0.300	3.2	30.0
Bromoform	0.292	0.335	0.050	14.7	30.0
Isopropylbenzene	1.937	2.026	0.010	4.6	40.0
1,1,2,2-Tetrachloroethane	0.196	0.193	0.100	-1.4	30.0
1,3-Dichlorobenzene	1.648	1.786	0.400	8.3	30.0
1,4-Dichlorobenzene	1.752	1.872	0.400	6.8	30.0
1,2-Dichlorobenzene	1.369	1.478	0.400	8.0	30.0
1,2-Dibromo-3-chloropropane	0.054	0.058	0.010	7.9	40.0
1,2,4-Trichlorobenzene	0.962	1.042	0.200	8.3	30.0
1,2,3-Trichlorobenzene	0.742	0.736	0.200	-0.7	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.: H30X4

Instrument ID: V5 Calibration Date: 11/10/2011 Time: 6:28

Lab File ID: V5N2844.D Init. Calib. Date(s): 11/09/2011 11/09/2011

EPA Sample No.(VSTD#####) VSTD005P5 Init. Calib. Time(s): 19:57 21:52

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	0.455	0.454	0.010	-0.2	30.0
Chloroethane-d5	0.309	0.297	0.010	-3.7	40.0
1,1-Dichloroethene-d2	0.118	0.105	0.010	-10.7	30.0
2-Butanone-d5	0.055	0.052	0.010	-4.1	40.0
Chloroform-d	0.545	0.551	0.010	1.2	30.0
1,2-Dichloroethane-d4	0.214	0.213	0.010	-0.8	30.0
Benzene-d6	1.467	1.503	0.010	2.5	30.0
1,2-Dichloropropane-d6	0.509	0.525	0.010	3.2	40.0
Toluene-d8	1.316	1.395	0.010	6.0	30.0
trans-1,3-Dichloropropene-d4	0.292	0.290	0.010	-0.8	30.0
2-Hexanone-d5	0.051	0.053	0.010	5.9	40.0
1,1,2,2-Tetrachloroethane-d2	0.188	0.186	0.010	-1.1	30.0
1,2-Dichlorobenzene-d4	0.786	0.830	0.010	5.5	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.: H30X4

Instrument ID: V5 Calibration Date: 11/10/2011 Time: 17:28

Lab File ID: V5N2868.D Init. Calib. Date(s): 11/09/2011 11/09/2011

EPA Sample No.(VSTD#####) VSTD005Q5 Init. Calib. Time(s): 19:57 21:52

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	0.328	0.342	0.010	4.4	40.0
Chloromethane	0.747	0.825	0.010	10.5	40.0
Vinyl chloride	0.578	0.635	0.100	9.7	30.0
Bromomethane	0.351	0.349	0.100	-0.6	30.0
Chloroethane	0.319	0.367	0.010	15.0	40.0
Trichlorofluoromethane	0.698	0.691	0.010	-0.9	40.0
1,1-Dichloroethene	0.356	0.391	0.100	9.9	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.392	0.428	0.010	8.9	40.0
Acetone	0.040	0.041	0.010	4.1	40.0
Carbon disulfide	1.357	1.533	0.010	13.0	40.0
Methyl acetate	0.116	0.131	0.010	13.3	40.0
Methylene chloride	0.328	0.346	0.010	5.4	40.0
trans-1,2-Dichloroethene	0.376	0.383	0.010	1.9	40.0
Methyl tert-butyl ether	0.428	0.478	0.010	11.9	40.0
1,1-Dichloroethane	0.707	0.744	0.200	5.2	30.0
cis-1,2-Dichloroethene	0.349	0.359	0.010	2.9	40.0
2-Butanone	0.057	0.066	0.010	17.1	40.0
Bromochloromethane	0.132	0.134	0.050	1.7	40.0
Chloroform	0.566	0.592	0.200	4.5	30.0
1,1,1-Trichloroethane	0.713	0.706	0.100	-0.9	30.0
Cyclohexane	0.882	0.932	0.010	5.6	40.0
Carbon tetrachloride	0.671	0.632	0.100	-5.7	30.0
Benzene	1.621	1.618	0.400	-0.2	30.0
1,2-Dichloroethane	0.262	0.288	0.100	10.0	30.0
Trichloroethene	0.491	0.463	0.300	-5.8	30.0
Methylcyclohexane	0.709	0.763	0.010	7.7	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.: H30X4

Instrument ID: V5 Calibration Date: 11/10/2011 Time: 17:28

Lab File ID: V5N2868.D Init. Calib. Date(s): 11/09/2011 11/09/2011

EPA Sample No.(VSTD#####) VSTD005Q5 Init. Calib. Time(s): 19:57 21:52

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	0.442	0.444	0.010	0.5	40.0
Bromodichloromethane	0.448	0.441	0.200	-1.6	30.0
cis-1,3-Dichloropropene	0.511	0.522	0.200	2.2	30.0
4-Methyl-2-pentanone	0.173	0.189	0.010	9.3	40.0
Toluene	1.653	1.597	0.400	-3.4	30.0
trans-1,3-Dichloropropene	0.330	0.352	0.100	6.7	30.0
1,1,2-Trichloroethane	0.191	0.197	0.100	3.2	30.0
Tetrachloroethene	0.370	0.338	0.100	-8.6	30.0
2-Hexanone	0.112	0.133	0.010	18.6	40.0
Dibromochloromethane	0.279	0.273	0.100	-2.3	30.0
1,2-Dibromoethane	0.200	0.208	0.010	4.0	40.0
Chlorobenzene	1.094	1.031	0.500	-5.7	30.0
Ethylbenzene	1.823	1.731	0.100	-5.1	30.0
m,p-Xylene	0.778	0.717	0.300	-7.8	30.0
o-Xylene	0.712	0.686	0.300	-3.6	30.0
Styrene	1.039	1.028	0.300	-1.1	30.0
Bromoform	0.292	0.283	0.050	-2.8	30.0
Isopropylbenzene	1.937	1.852	0.010	-4.4	40.0
1,1,2,2-Tetrachloroethane	0.196	0.212	0.100	8.4	30.0
1,3-Dichlorobenzene	1.648	1.663	0.400	0.9	30.0
1,4-Dichlorobenzene	1.752	1.627	0.400	-7.1	30.0
1,2-Dichlorobenzene	1.369	1.361	0.400	-0.5	30.0
1,2-Dibromo-3-chloropropane	0.054	0.061	0.010	13.9	40.0
1,2,4-Trichlorobenzene	0.962	1.002	0.200	4.1	30.0
1,2,3-Trichlorobenzene	0.742	0.735	0.200	-0.8	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.: H30X4

Instrument ID: V5 Calibration Date: 11/10/2011 Time: 17:28

Lab File ID: V5N2868.D Init. Calib. Date(s): 11/09/2011 11/09/2011

EPA Sample No.(VSTD#####) VSTD005Q5 Init. Calib. Time(s): 19:57 21:52

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	0.455	0.491	0.010	7.9	30.0
Chloroethane-d5	0.309	0.355	0.010	14.8	40.0
1,1-Dichloroethene-d2	0.118	0.127	0.010	8.2	30.0
2-Butanone-d5	0.055	0.063	0.010	15.7	40.0
Chloroform-d	0.545	0.567	0.010	4.1	30.0
1,2-Dichloroethane-d4	0.214	0.227	0.010	6.1	30.0
Benzene-d6	1.467	1.450	0.010	-1.1	30.0
1,2-Dichloropropane-d6	0.509	0.539	0.010	5.8	40.0
Toluene-d8	1.316	1.295	0.010	-1.6	30.0
trans-1,3-Dichloropropene-d4	0.292	0.318	0.010	8.9	30.0
2-Hexanone-d5	0.051	0.060	0.010	18.4	40.0
1,1,2,2-Tetrachloroethane-d2	0.188	0.208	0.010	10.4	30.0
1,2-Dichlorobenzene-d4	0.786	0.812	0.010	3.4	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.: H30X4

Instrument ID: V5 Calibration Date: 11/11/2011 Time: 5:25

Lab File ID: V5N2892.D Init. Calib. Date(s): 11/09/2011 11/09/2011

EPA Sample No.(VSTD#####) VSTD005R5 Init. Calib. Time(s): 19:57 21:52

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	0.328	0.285	0.010	-13.1	50.0
Chloromethane	0.747	0.849	0.010	13.6	50.0
Vinyl chloride	0.578	0.628	0.010	8.6	50.0
Bromomethane	0.351	0.329	0.010	-6.4	50.0
Chloroethane	0.319	0.380	0.010	19.0	50.0
Trichlorofluoromethane	0.698	0.662	0.010	-5.1	50.0
1,1-Dichloroethene	0.356	0.386	0.010	8.7	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.392	0.361	0.010	-8.1	50.0
Acetone	0.040	0.046	0.010	15.2	50.0
Carbon disulfide	1.357	1.481	0.010	9.1	50.0
Methyl acetate	0.116	0.124	0.010	7.2	50.0
Methylene chloride	0.328	0.354	0.010	7.7	50.0
trans-1,2-Dichloroethene	0.376	0.390	0.010	3.6	50.0
Methyl tert-butyl ether	0.428	0.477	0.010	11.6	50.0
1,1-Dichloroethane	0.707	0.784	0.010	10.8	50.0
cis-1,2-Dichloroethene	0.349	0.363	0.010	3.9	50.0
2-Butanone	0.057	0.066	0.010	16.8	50.0
Bromochloromethane	0.132	0.142	0.010	7.9	50.0
Chloroform	0.566	0.625	0.010	10.5	50.0
1,1,1-Trichloroethane	0.713	0.744	0.010	4.4	50.0
Cyclohexane	0.882	0.887	0.010	0.6	50.0
Carbon tetrachloride	0.671	0.659	0.010	-1.8	50.0
Benzene	1.621	1.717	0.010	5.9	50.0
1,2-Dichloroethane	0.262	0.284	0.010	8.7	50.0
Trichloroethene	0.491	0.518	0.010	5.4	50.0
Methylcyclohexane	0.709	0.690	0.010	-2.7	50.0

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Instrument ID: V5 Calibration Date: 11/11/2011 Time: 5:25

Lab File ID: V5N2892.D Init. Calib. Date(s): 11/09/2011 11/09/2011

EPA Sample No.(VSTD#####) VSTD005R5 Init. Calib. Time(s): 19:57 21:52

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	0.442	0.480	0.010	8.7	50.0
Bromodichloromethane	0.448	0.468	0.010	4.3	50.0
cis-1,3-Dichloropropene	0.511	0.529	0.010	3.5	50.0
4-Methyl-2-pentanone	0.173	0.204	0.010	17.9	50.0
Toluene	1.653	1.697	0.010	2.7	50.0
trans-1,3-Dichloropropene	0.330	0.356	0.010	7.8	50.0
1,1,2-Trichloroethane	0.191	0.207	0.010	8.6	50.0
Tetrachloroethene	0.370	0.353	0.010	-4.7	50.0
2-Hexanone	0.112	0.136	0.010	21.6	50.0
Dibromochloromethane	0.279	0.293	0.010	5.0	50.0
1,2-Dibromoethane	0.200	0.221	0.010	10.4	50.0
Chlorobenzene	1.094	1.085	0.010	-0.8	50.0
Ethylbenzene	1.823	1.876	0.010	2.9	50.0
m,p-Xylene	0.778	0.799	0.010	2.7	50.0
o-Xylene	0.712	0.719	0.010	1.1	50.0
Styrene	1.039	1.104	0.010	6.2	50.0
Bromoform	0.292	0.299	0.010	2.5	50.0
Isopropylbenzene	1.937	1.954	0.010	0.9	50.0
1,1,2,2-Tetrachloroethane	0.196	0.229	0.010	16.9	50.0
1,3-Dichlorobenzene	1.648	1.741	0.010	5.7	50.0
1,4-Dichlorobenzene	1.752	1.747	0.010	-0.3	50.0
1,2-Dichlorobenzene	1.369	1.396	0.010	2.0	50.0
1,2-Dibromo-3-chloropropane	0.054	0.061	0.010	14.3	50.0
1,2,4-Trichlorobenzene	0.962	0.992	0.010	3.2	50.0
1,2,3-Trichlorobenzene	0.742	0.727	0.010	-2.0	50.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Instrument ID: V5 Calibration Date: 11/11/2011 Time: 5:25

Lab File ID: V5N2892.D Init. Calib. Date(s): 11/09/2011 11/09/2011

EPA Sample No.(VSTD#####) VSTD005R5 Init. Calib. Time(s): 19:57 21:52

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	0.455	0.482	0.010	6.0	50.0
Chloroethane-d5	0.309	0.352	0.010	14.1	50.0
1,1-Dichloroethene-d2	0.118	0.122	0.010	3.7	50.0
2-Butanone-d5	0.055	0.063	0.010	14.7	50.0
Chloroform-d	0.545	0.578	0.010	6.1	50.0
1,2-Dichloroethane-d4	0.214	0.241	0.010	12.3	50.0
Benzene-d6	1.467	1.535	0.010	4.7	50.0
1,2-Dichloropropane-d6	0.509	0.564	0.010	10.9	50.0
Toluene-d8	1.316	1.364	0.010	3.6	50.0
trans-1,3-Dichloropropene-d4	0.292	0.320	0.010	9.6	50.0
2-Hexanone-d5	0.051	0.060	0.010	19.1	50.0
1,1,2,2-Tetrachloroethane-d2	0.188	0.212	0.010	12.7	50.0
1,2-Dichlorobenzene-d4	0.786	0.851	0.010	8.3	50.0

Data File: \\avogadro\organics\V5.I\111109.B\V5N2844.D
Report Date: 15-Nov-2011 09:35

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111109.B\V5N2844.D
Lab Smp Id: VSTD005P5 Client Smp ID: VSTD005P5
Inj Date : 10-NOV-2011 06:28
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD005P5,VSTD005P5
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111109.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 14:30 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 21:52 Cal File: V5N2826.D
Als bottle: 25 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	1.902	1.902	(0.301)	66354	5.00000	4.4
	2 Chloromethane	50	2.042	2.042	(0.323)	176347	5.00000	5.2
$	79 Vinyl Chloride-d3	65	2.169	2.169	(0.343)	103941	5.00000	5.0
	3 Vinyl Chloride	62	2.181	2.181	(0.345)	133004	5.00000	5.0
	4 Bromomethane	94	2.518	2.518	(0.398)	84523	5.00000	5.3
$	80 Chloroethane-d5	69	2.587	2.587	(0.409)	68060	5.00000	4.8
	5 Chloroethane	64	2.611	2.611	(0.413)	72321	5.00000	5.0
	6 Trichlorofluoromethane	101	2.913	2.913	(0.460)	151517	5.00000	4.7
$	81 1,1-Dichloroethene-d2	65	3.366	3.366	(0.532)	24073	5.00000	4.5(Q)
	7 1,1-Dichloroethene	96	3.377	3.377	(0.534)	80962	5.00000	5.0
	8 1,1,2-Trichloro-1,2,2-trifluo	101	3.424	3.424	(0.541)	79581	5.00000	4.4
	9 Acetone	43	3.447	3.447	(0.545)	75967	50.0000	42
	10 Carbon Disulfide	76	3.598	3.598	(0.569)	306188	5.00000	4.9
	11 Methyl Acetate	43	3.760	3.760	(0.594)	19992	5.00000	3.8
	12 Methylene Chloride	84	3.853	3.853	(0.609)	71583	5.00000	4.8
	13 trans-1,2-Dichloroethene	96	4.120	4.120	(0.651)	89109	5.00000	5.2
	14 Methyl tert-Butyl Ether	73	4.132	4.132	(0.653)	96072	5.00000	4.9
	15 1,1-Dichloroethane	63	4.527	4.527	(0.716)	169933	5.00000	5.3
$	82 2-Butanone-d5	46	5.061	5.061	(0.800)	119769	50.0000	48(A)
	17 cis-1,2-Dichloroethene	96	5.096	5.096	(0.805)	83434	5.00000	5.2
	16 2-Butanone	43	5.119	5.119	(0.809)	126262	50.0000	49
	18 Bromochloromethane	128	5.328	5.328	(0.842)	31645	5.00000	5.2(Q)

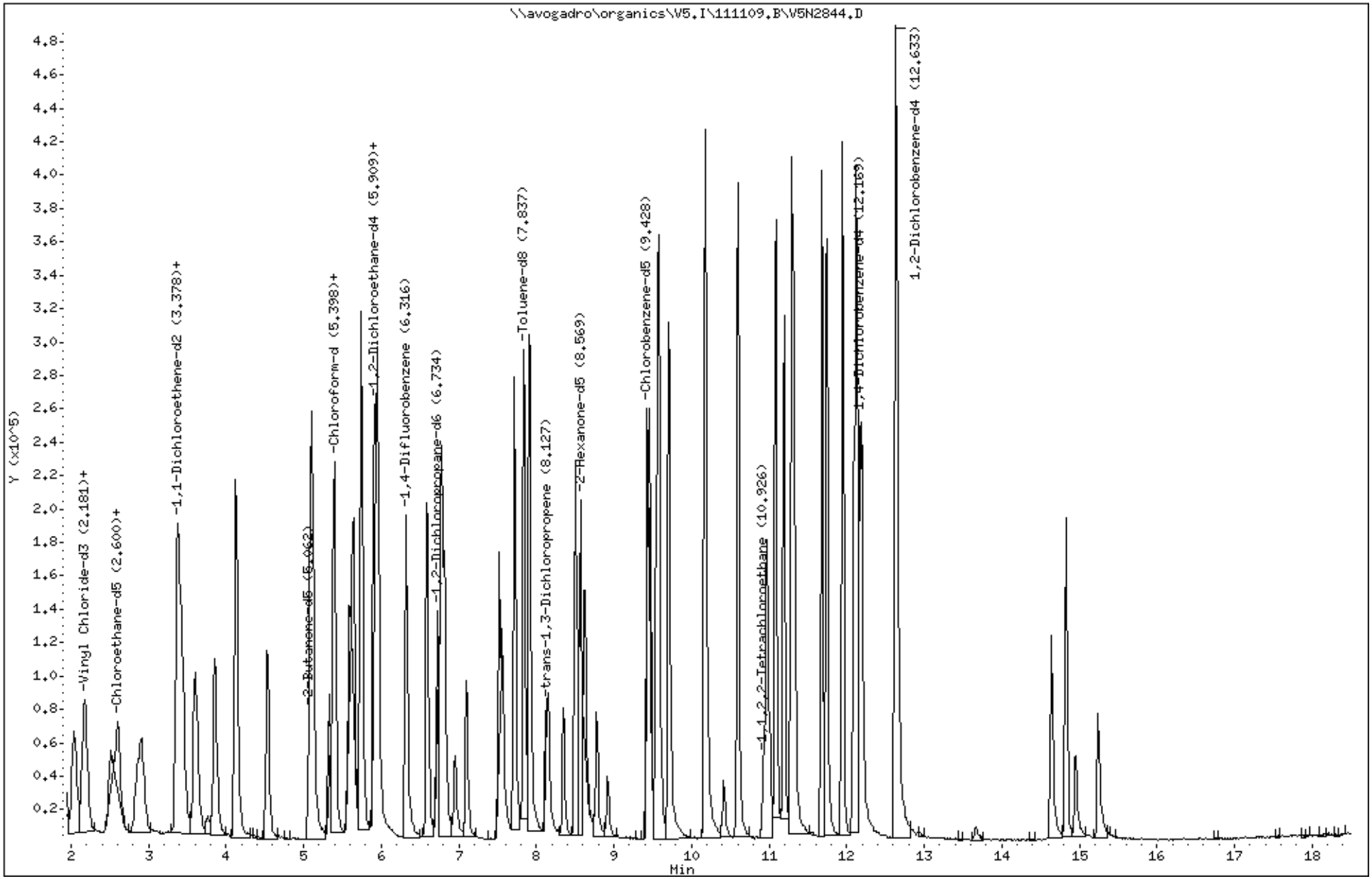
Data File: \\avogadro\organics\V5.I\111109.B\V5N2844.D
Report Date: 15-Nov-2011 09:35

	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)	126176	5.00000	5.1
	19 Chloroform	83	5.398	5.398	(0.853)	132197	5.00000	5.1
	20 1,1,1-Trichloroethane	97	5.584	5.584	(0.592)	127276	5.00000	5.3
	21 Cyclohexane	56	5.642	5.642	(0.598)	142998	5.00000	4.8
	22 Carbon Tetrachloride	117	5.746	5.746	(0.610)	115354	5.00000	5.1
$	23 1,2-Dichloroethane-d4	65	5.897	5.897	(0.932)	48638	5.00000	5.0
$	84 Benzene-d6	84	5.909	5.909	(0.627)	252015	5.00000	5.1
	25 Benzene	78	5.944	5.944	(0.630)	283486	5.00000	5.2
	24 1,2-Dichloroethane	62	5.967	5.967	(0.943)	63846	5.00000	5.3
*	26 1,4-Difluorobenzene	114	6.327	6.327	(1.000)	228852	5.00000	
	27 Trichloroethene	95	6.594	6.594	(0.699)	90454	5.00000	5.5
$	85 1,2-Dichloropropane-d6	67	6.733	6.733	(0.714)	88105	5.00000	5.2
	28 Methylcyclohexane	83	6.780	6.780	(0.719)	103534	5.00000	4.4
	29 1,2-Dichloropropane	63	6.815	6.815	(0.723)	76070	5.00000	5.1
	30 Bromodichloromethane	83	7.093	7.093	(0.752)	74804	5.00000	5.0
	31 cis-1,3-Dichloropropene	75	7.558	7.558	(0.802)	88919	5.00000	5.2
	32 4-Methyl-2-Pentanone	43	7.720	7.720	(0.819)	285798	50.0000	49
$	33 Toluene-d8	98	7.837	7.837	(0.831)	233949	5.00000	5.3
	34 Toluene	91	7.918	7.918	(0.840)	289215	5.00000	5.2
$	86 trans-1,3-Dichloropropene-d4	79	8.115	8.115	(0.861)	48551	5.00000	5.0
	35 trans-1,3-Dichloropropene	75	8.150	8.150	(0.865)	55971	5.00000	5.1
	36 1,1,2-Trichloroethane	97	8.348	8.348	(0.885)	33484	5.00000	5.2
	37 Tetrachloroethene	164	8.498	8.498	(0.901)	62731	5.00000	5.1(Q)
$	87 2-Hexanone-d5	63	8.568	8.568	(0.909)	89717	50.0000	53(A)
	38 2-Hexanone	43	8.626	8.626	(0.915)	191583	50.0000	51
	39 Dibromochloromethane	129	8.777	8.777	(0.931)	46885	5.00000	5.0
	40 1,2-Dibromoethane	107	8.917	8.917	(0.946)	34811	5.00000	5.2
*	42 Chlorobenzene-d5	117	9.428	9.428	(1.000)	167705	5.00000	
	43 Chlorobenzene	112	9.462	9.462	(1.004)	188786	5.00000	5.1
	44 Ethylbenzene	91	9.579	9.579	(1.016)	312720	5.00000	5.1
	45 m,p-Xylene	106	9.706	9.706	(1.030)	131063	5.00000	5.0
	46 o-Xylene	106	10.171	10.171	(1.079)	118011	5.00000	4.9
	47 Styrene	104	10.194	10.194	(1.081)	179912	5.00000	5.2
	48 Bromoform	173	10.415	10.415	(0.856)	22234	5.00000	5.7
	49 Isopropylbenzene	105	10.600	10.600	(1.124)	339745	5.00000	5.2
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.926	10.926	(1.159)	31257	5.00000	4.9
	51 1,1,2,2-Tetrachloroethane	83	10.949	10.949	(1.161)	32366	5.00000	4.9
	52 1,3-Dichlorobenzene	146	12.087	12.087	(0.993)	118669	5.00000	5.4
*	78 1,4-Dichlorobenzene-d4	152	12.168	12.168	(1.000)	66458	5.00000	
	53 1,4-Dichlorobenzene	146	12.203	12.203	(1.003)	124401	5.00000	5.3
$	90 1,2-Dichlorobenzene-d4	152	12.633	12.633	(1.038)	55133	5.00000	5.3(Q)
	54 1,2-Dichlorobenzene	146	12.656	12.656	(1.040)	98235	5.00000	5.4
	55 1,2-Dibromo-3-chloropropane	75	13.666	13.666	(1.123)	3843	5.00000	5.4(Q)
	56 1,2,4-Trichlorobenzene	180	14.642	14.642	(1.203)	69235	5.00000	5.4
	77 1,2,3-Trichlorobenzene	180	15.246	15.246	(1.253)	48931	5.00000	5.0

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\111109.B\V5N2844.D
Date : 10-NOV-2011 06:28
Client ID: VSTD005P5
Instrument: V5.i
Sample Info: 25ML,VSTD005P5,VSTD005P5
Purge Volume: 25.0
Operator: SRC:
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111110A.B\V5N2868.D
Report Date: 15-Nov-2011 09:36

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110A.B\V5N2868.D
Lab Smp Id: VSTD005Q5 Client Smp ID: VSTD005Q5
Inj Date : 10-NOV-2011 17:28
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD005Q5,VSTD005Q5
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110A.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 15:34 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 49 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	1.900	(0.299)	65324	5.00000	5.2
2 Chloromethane	50	2.100	2.098	(0.332)	157503	5.00000	5.5
$ 79 Vinyl Chloride-d3	65	2.216	2.214	(0.350)	93697	5.00000	5.4
3 Vinyl Chloride	62	2.216	2.214	(0.350)	121090	5.00000	5.5
4 Bromomethane	94	2.565	2.562	(0.405)	66657	5.00000	5.0
$ 80 Chloroethane-d5	69	2.600	2.609	(0.411)	67650	5.00000	5.7
5 Chloroethane	64	2.635	2.632	(0.416)	70065	5.00000	5.8
6 Trichlorofluoromethane	101	2.913	2.911	(0.460)	131925	5.00000	5.0
$ 81 1,1-Dichloroethene-d2	65	3.378	3.364	(0.534)	24319	5.00000	5.4
7 1,1-Dichloroethene	96	3.401	3.387	(0.538)	74562	5.00000	5.5
8 1,1,2-Trichloro-1,2,2-trifluo	101	3.436	3.422	(0.543)	81582	5.00000	5.4
9 Acetone	43	3.447	3.445	(0.545)	78643	50.0000	52
10 Carbon Disulfide	76	3.622	3.607	(0.572)	292564	5.00000	5.6
11 Methyl Acetate	43	3.773	3.770	(0.596)	25048	5.00000	5.7
12 Methylene Chloride	84	3.854	3.863	(0.609)	66062	5.00000	5.3
13 trans-1,2-Dichloroethene	96	4.121	4.130	(0.651)	73125	5.00000	5.1
14 Methyl tert-Butyl Ether	73	4.133	4.142	(0.653)	91283	5.00000	5.6
15 1,1-Dichloroethane	63	4.539	4.536	(0.717)	141909	5.00000	5.3
$ 82 2-Butanone-d5	46	5.062	5.071	(0.800)	120446	50.0000	58(A)
17 cis-1,2-Dichloroethene	96	5.096	5.094	(0.805)	68577	5.00000	5.1
16 2-Butanone	43	5.120	5.129	(0.809)	126638	50.0000	59
18 Bromochloromethane	128	5.340	5.338	(0.844)	25553	5.00000	5.1(Q)

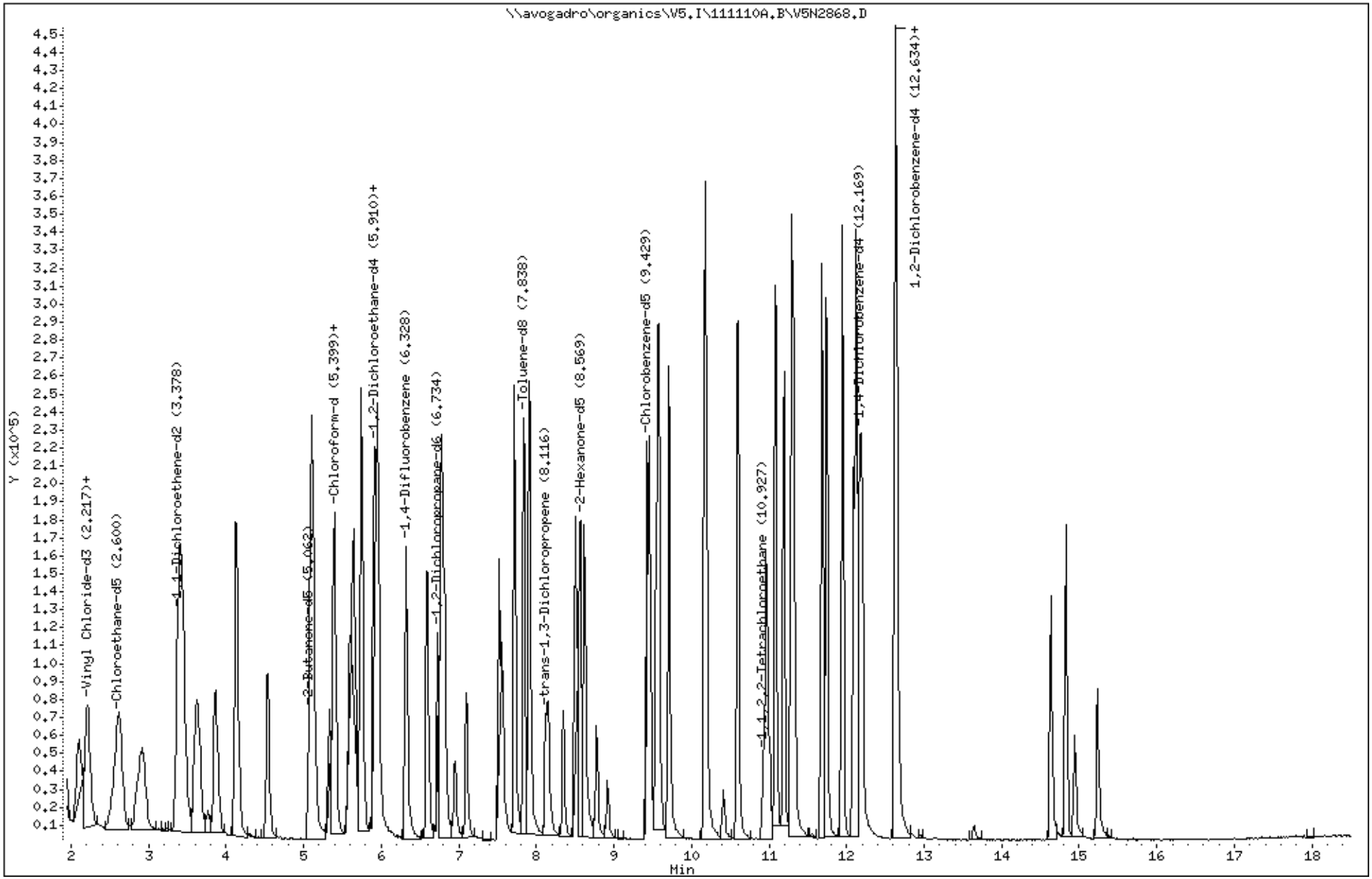
Data File: \\avogadro\organics\V5.I\111110A.B\V5N2868.D
Report Date: 15-Nov-2011 09:36

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
$	83 Chloroform-d	84	5.387	5.384	(0.851)	108203	5.00000	5.2
	19 Chloroform	83	5.410	5.407	(0.855)	112897	5.00000	5.2
	20 1,1,1-Trichloroethane	97	5.596	5.593	(0.594)	101939	5.00000	5.0
	21 Cyclohexane	56	5.642	5.640	(0.598)	134455	5.00000	5.3
	22 Carbon Tetrachloride	117	5.747	5.756	(0.610)	91212	5.00000	4.7
$	23 1,2-Dichloroethane-d4	65	5.898	5.895	(0.932)	43363	5.00000	5.3
$	84 Benzene-d6	84	5.909	5.918	(0.627)	209294	5.00000	4.9
	25 Benzene	78	5.956	5.953	(0.632)	233479	5.00000	5.0
	24 1,2-Dichloroethane	62	5.967	5.976	(0.943)	54869	5.00000	5.5
*	26 1,4-Difluorobenzene	114	6.327	6.325	(1.000)	190819	5.00000	
	27 Trichloroethene	95	6.583	6.592	(0.698)	66780	5.00000	4.7
$	85 1,2-Dichloropropane-d6	67	6.734	6.731	(0.714)	77745	5.00000	5.3
	28 Methylcyclohexane	83	6.780	6.778	(0.719)	110187	5.00000	5.4
	29 1,2-Dichloropropane	63	6.815	6.824	(0.723)	64048	5.00000	5.0
	30 Bromodichloromethane	83	7.094	7.091	(0.752)	63683	5.00000	4.9
	31 cis-1,3-Dichloropropene	75	7.558	7.556	(0.802)	75339	5.00000	5.1
	32 4-Methyl-2-Pentanone	43	7.721	7.718	(0.819)	272775	50.0000	55
$	33 Toluene-d8	98	7.837	7.846	(0.831)	186955	5.00000	4.9
	34 Toluene	91	7.907	7.916	(0.839)	230489	5.00000	4.8
$	86 trans-1,3-Dichloropropene-d4	79	8.116	8.113	(0.861)	45860	5.00000	5.4
	35 trans-1,3-Dichloropropene	75	8.151	8.148	(0.865)	50804	5.00000	5.3
	36 1,1,2-Trichloroethane	97	8.348	8.346	(0.885)	28394	5.00000	5.2
	37 Tetrachloroethene	164	8.499	8.508	(0.901)	48780	5.00000	4.6
$	87 2-Hexanone-d5	63	8.569	8.566	(0.909)	86363	50.0000	59(A)
	38 2-Hexanone	43	8.615	8.613	(0.914)	191763	50.0000	59
	39 Dibromochloromethane	129	8.778	8.787	(0.931)	39391	5.00000	4.9
	40 1,2-Dibromoethane	107	8.917	8.915	(0.946)	30078	5.00000	5.2
*	42 Chlorobenzene-d5	117	9.428	9.426	(1.000)	144332	5.00000	
	43 Chlorobenzene	112	9.463	9.460	(1.004)	148844	5.00000	4.7
	44 Ethylbenzene	91	9.579	9.577	(1.016)	249779	5.00000	4.7
	45 m,p-Xylene	106	9.707	9.716	(1.030)	103500	5.00000	4.6
	46 o-Xylene	106	10.171	10.169	(1.079)	99005	5.00000	4.8
	47 Styrene	104	10.183	10.192	(1.080)	148334	5.00000	4.9
	48 Bromoform	173	10.415	10.413	(0.856)	17957	5.00000	4.9
	49 Isopropylbenzene	105	10.601	10.598	(1.124)	267310	5.00000	4.8
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.926	10.924	(1.159)	30024	5.00000	5.5
	51 1,1,2,2-Tetrachloroethane	83	10.949	10.958	(1.161)	30613	5.00000	5.4
	52 1,3-Dichlorobenzene	146	12.088	12.097	(0.993)	105402	5.00000	5.0
*	78 1,4-Dichlorobenzene-d4	152	12.169	12.166	(1.000)	63377	5.00000	
	53 1,4-Dichlorobenzene	146	12.192	12.201	(1.002)	103138	5.00000	4.6
$	90 1,2-Dichlorobenzene-d4	152	12.633	12.631	(1.038)	51486	5.00000	5.2(Q)
	54 1,2-Dichlorobenzene	146	12.645	12.654	(1.039)	86276	5.00000	5.0
	55 1,2-Dibromo-3-chloropropane	75	13.644	13.641	(1.121)	3867	5.00000	5.7(Q)
	56 1,2,4-Trichlorobenzene	180	14.631	14.640	(1.202)	63489	5.00000	5.2
	77 1,2,3-Trichlorobenzene	180	15.235	15.232	(1.252)	46605	5.00000	5.0

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\111110A.B\V5N2868.D
Date : 10-NOV-2011 17:28
Client ID: VSTD005Q5
Instrument: V5.i
Sample Info: 25ML,VSTD005Q5,VSTD005Q5
Purge Volume: 25.0
Operator: SRC:
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111110A.B\V5N2892.D
Report Date: 15-Nov-2011 09:37

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110A.B\V5N2892.D
Lab Smp Id: VSTD005R5 Client Smp ID: VSTD005R5
Inj Date : 11-NOV-2011 05:25
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD005R5,VSTD005R5
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110A.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 15:34 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 73 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)	51546	5.00000	4.3
2	Chloromethane	50	2.098	2.098	(0.332)	153656	5.00000	5.7
$ 79	Vinyl Chloride-d3	65	2.214	2.214	(0.350)	87290	5.00000	5.3
3	Vinyl Chloride	62	2.214	2.214	(0.350)	113646	5.00000	5.4
4	Bromomethane	94	2.562	2.562	(0.405)	59547	5.00000	4.7
$ 80	Chloroethane-d5	69	2.609	2.609	(0.412)	63744	5.00000	5.7
5	Chloroethane	64	2.632	2.632	(0.416)	68765	5.00000	6.0
6	Trichlorofluoromethane	101	2.911	2.911	(0.460)	119850	5.00000	4.7
$ 81	1,1-Dichloroethene-d2	65	3.364	3.364	(0.532)	22113	5.00000	5.2(Q)
7	1,1-Dichloroethene	96	3.387	3.387	(0.535)	69911	5.00000	5.4
8	1,1,2-Trichloro-1,2,2-trifluo	101	3.422	3.422	(0.541)	65269	5.00000	4.6
9	Acetone	43	3.445	3.445	(0.545)	82519	50.0000	58
10	Carbon Disulfide	76	3.607	3.607	(0.570)	268070	5.00000	5.5
11	Methyl Acetate	43	3.770	3.770	(0.596)	22462	5.00000	5.4
12	Methylene Chloride	84	3.863	3.863	(0.611)	64021	5.00000	5.4
13	trans-1,2-Dichloroethene	96	4.130	4.130	(0.653)	70534	5.00000	5.2
14	Methyl tert-Butyl Ether	73	4.142	4.142	(0.655)	86355	5.00000	5.6
15	1,1-Dichloroethane	63	4.536	4.536	(0.717)	141848	5.00000	5.5
$ 82	2-Butanone-d5	46	5.071	5.071	(0.802)	113259	50.0000	57(A)
17	cis-1,2-Dichloroethene	96	5.094	5.094	(0.805)	65704	5.00000	5.2
16	2-Butanone	43	5.129	5.129	(0.811)	119829	50.0000	58
18	Bromochloromethane	128	5.338	5.338	(0.844)	25728	5.00000	5.4(Q)

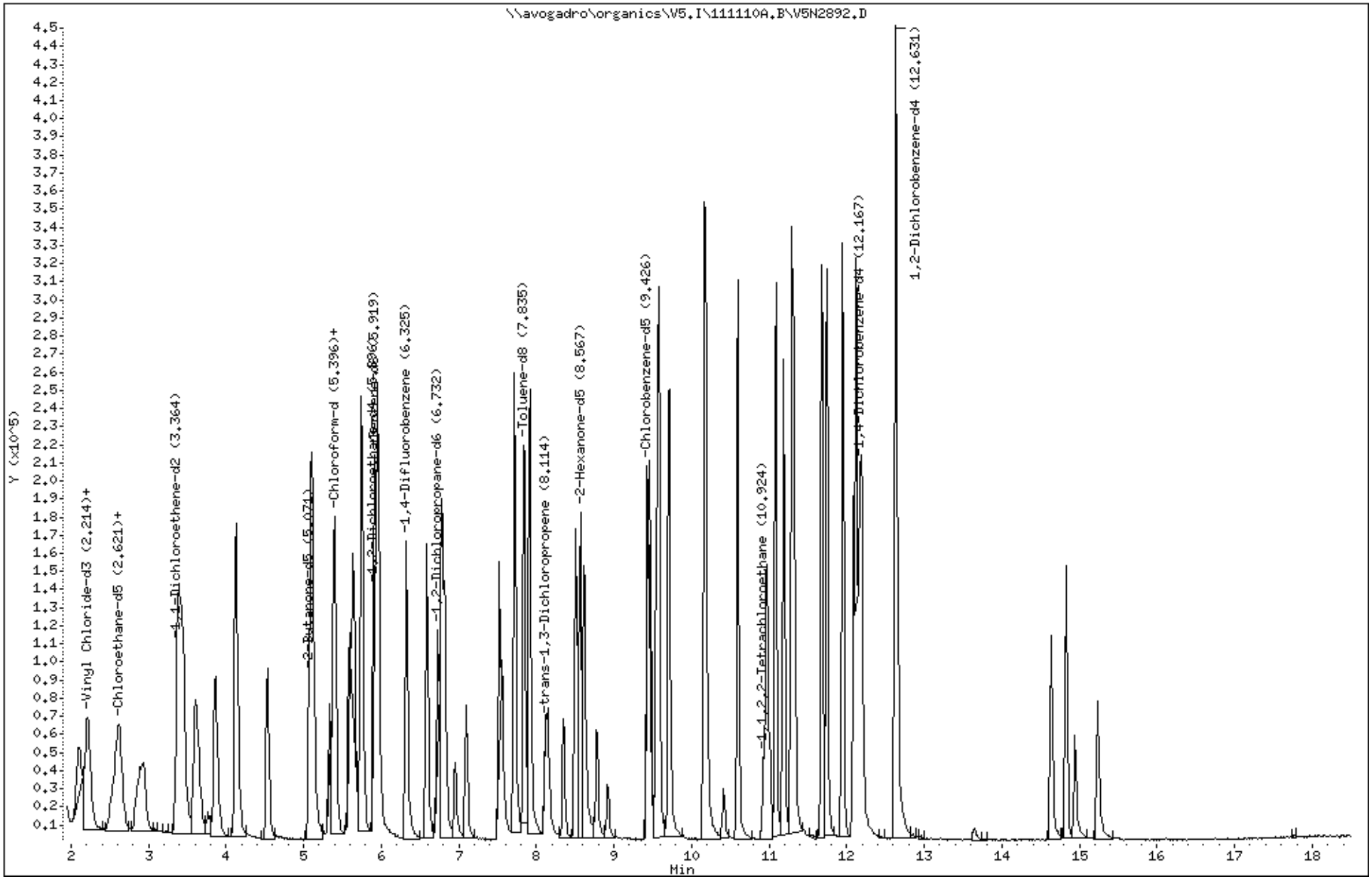
Data File: \\avogadro\organics\V5.I\111110A.B\V5N2892.D
Report Date: 15-Nov-2011 09:37

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
$	83	Chloroform-d	84	5.384	5.384	(0.851)	104574	5.00000	5.3
	19	Chloroform	83	5.407	5.407	(0.855)	113179	5.00000	5.5
	20	1,1,1-Trichloroethane	97	5.593	5.593	(0.593)	98793	5.00000	5.2
	21	Cyclohexane	56	5.640	5.640	(0.598)	117788	5.00000	5.0
	22	Carbon Tetrachloride	117	5.756	5.756	(0.611)	87428	5.00000	4.9
$	23	1,2-Dichloroethane-d4	65	5.895	5.895	(0.932)	43533	5.00000	5.6
$	84	Benzene-d6	84	5.918	5.918	(0.628)	203750	5.00000	5.2
	25	Benzene	78	5.953	5.953	(0.632)	227831	5.00000	5.3
	24	1,2-Dichloroethane	62	5.976	5.976	(0.945)	51454	5.00000	5.4
*	26	1,4-Difluorobenzene	114	6.325	6.325	(1.000)	180977	5.00000	
	27	Trichloroethene	95	6.592	6.592	(0.699)	68709	5.00000	5.3
$	85	1,2-Dichloropropane-d6	67	6.731	6.731	(0.714)	74896	5.00000	5.5
	28	Methylcyclohexane	83	6.778	6.778	(0.719)	91545	5.00000	4.9
	29	1,2-Dichloropropane	63	6.824	6.824	(0.724)	63703	5.00000	5.4
	30	Bromodichloromethane	83	7.091	7.091	(0.752)	62089	5.00000	5.2
	31	cis-1,3-Dichloropropene	75	7.556	7.556	(0.802)	70187	5.00000	5.2
	32	4-Methyl-2-Pentanone	43	7.718	7.718	(0.819)	270607	50.0000	59
$	33	Toluene-d8	98	7.846	7.846	(0.832)	181045	5.00000	5.2
	34	Toluene	91	7.916	7.916	(0.840)	225268	5.00000	5.1
$	86	trans-1,3-Dichloropropene-d4	79	8.113	8.113	(0.861)	42424	5.00000	5.5
	35	trans-1,3-Dichloropropene	75	8.148	8.148	(0.864)	47199	5.00000	5.4
	36	1,1,2-Trichloroethane	97	8.346	8.346	(0.885)	27477	5.00000	5.4
	37	Tetrachloroethene	164	8.508	8.508	(0.903)	46791	5.00000	4.8
$	87	2-Hexanone-d5	63	8.566	8.566	(0.909)	79843	50.0000	60(A)
	38	2-Hexanone	43	8.613	8.613	(0.914)	180808	50.0000	61
	39	Dibromochloromethane	129	8.787	8.787	(0.932)	38905	5.00000	5.2
	40	1,2-Dibromoethane	107	8.915	8.915	(0.946)	29354	5.00000	5.5
*	42	Chlorobenzene-d5	117	9.426	9.426	(1.000)	132722	5.00000	
	43	Chlorobenzene	112	9.460	9.460	(1.004)	143979	5.00000	5.0
	44	Ethylbenzene	91	9.577	9.577	(1.016)	249017	5.00000	5.1
	45	m,p-Xylene	106	9.716	9.716	(1.031)	106020	5.00000	5.1
	46	o-Xylene	106	10.169	10.169	(1.079)	95462	5.00000	5.1
	47	Styrene	104	10.192	10.192	(1.081)	146537	5.00000	5.3
	48	Bromoform	173	10.413	10.413	(0.856)	17188	5.00000	5.1
	49	Isopropylbenzene	105	10.598	10.598	(1.124)	259346	5.00000	5.0
$	89	1,1,2,2-Tetrachloroethane-d2	84	10.924	10.924	(1.159)	28200	5.00000	5.6
	51	1,1,2,2-Tetrachloroethane	83	10.958	10.958	(1.163)	30360	5.00000	5.8
	52	1,3-Dichlorobenzene	146	12.097	12.097	(0.994)	100166	5.00000	5.3
*	78	1,4-Dichlorobenzene-d4	152	12.166	12.166	(1.000)	57518	5.00000	
	53	1,4-Dichlorobenzene	146	12.201	12.201	(1.003)	100480	5.00000	5.0
$	90	1,2-Dichlorobenzene-d4	152	12.631	12.631	(1.038)	48959	5.00000	5.4(Q)
	54	1,2-Dichlorobenzene	146	12.654	12.654	(1.040)	80279	5.00000	5.1
	55	1,2-Dibromo-3-chloropropane	75	13.641	13.641	(1.121)	3521	5.00000	5.7(Q)
	56	1,2,4-Trichlorobenzene	180	14.640	14.640	(1.203)	57083	5.00000	5.2
	77	1,2,3-Trichlorobenzene	180	15.232	15.232	(1.252)	41823	5.00000	4.9

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\111110A.B\V5N2892.D
Date : 11-NOV-2011 05:25
Client ID: VSTD005R5 Instrument: V5.i
Sample Info: 25ML,VSTD005R5,VSTD005R5
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\111109.B\V5N2820.D
Lab Smp Id: BFBO5 Client Smp ID: BFBO5
Inj Date : 09-NOV-2011 19:00
Operator : SRC: Inst ID: V5.i
Smp Info : 2UL,BFBO5,BFBO5
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\111109.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	30352			0.00- 100.00	100.00
10.790	10.800	(0.000)	50	6705			15.00- 40.00	22.09
10.790	10.800	(0.000)	75	13049			30.00- 80.00	42.99
10.790	10.800	(0.000)	96	2134			5.00- 9.00	7.03
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	22512			50.00- 120.00	74.17
10.790	10.800	(0.000)	175	1518			5.00- 9.00	6.74
10.790	10.800	(0.000)	176	21896			95.00- 101.00	97.26
10.790	10.800	(0.000)	177	1400			5.00- 9.00	6.39

Data File: \\avogadro\organics\V5.I\111109.B\V5N2820.D

Date : 09-NOV-2011 19:00

Client ID: BFB05

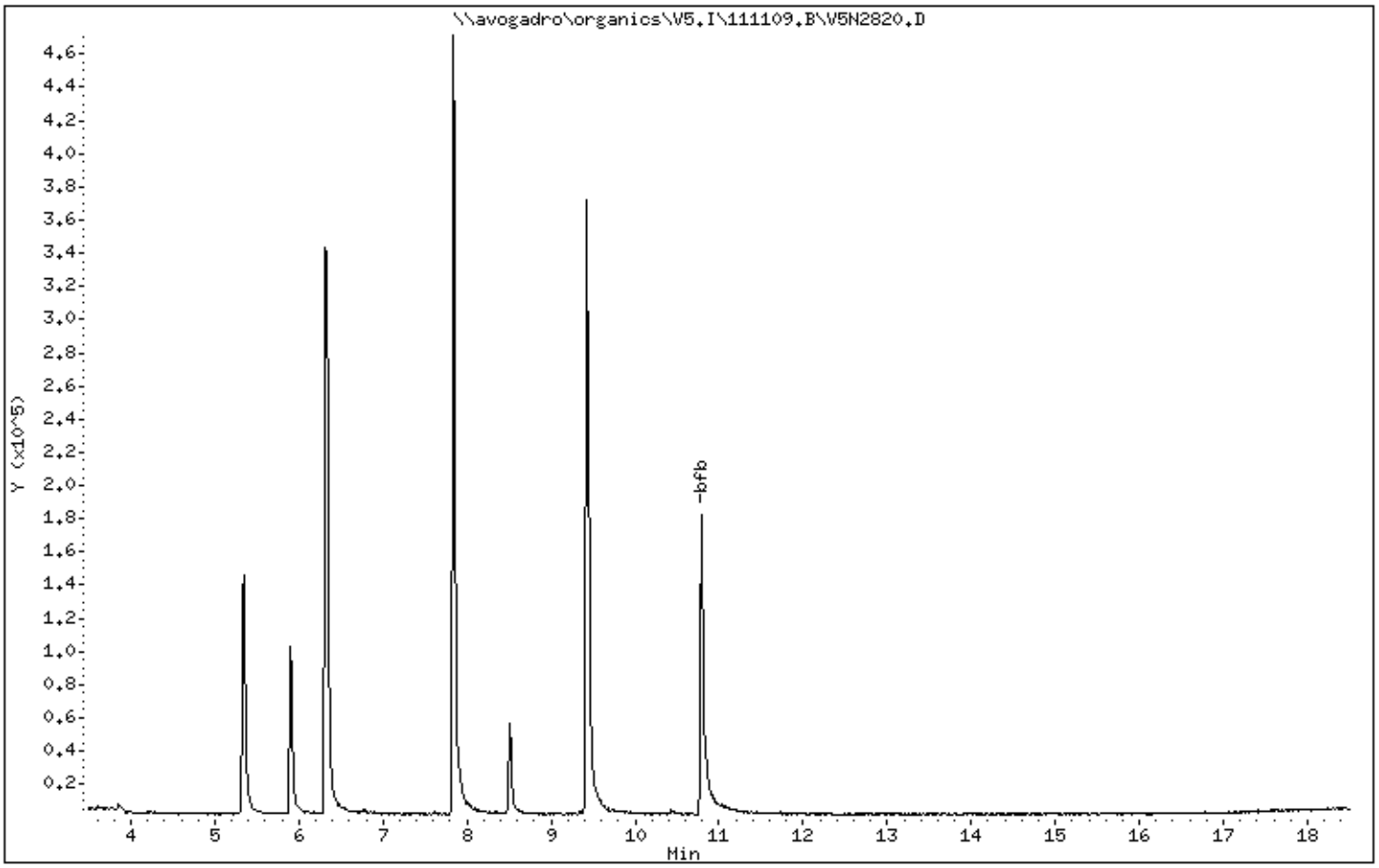
Instrument: V5.i

Sample Info: 2UL,BFB05,BFB05

Operator: SRC:

Column phase: DB-624

Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111109.B\V5N2820.D

Date : 09-NOV-2011 19:00

Client ID: BFB05

Instrument: V5.i

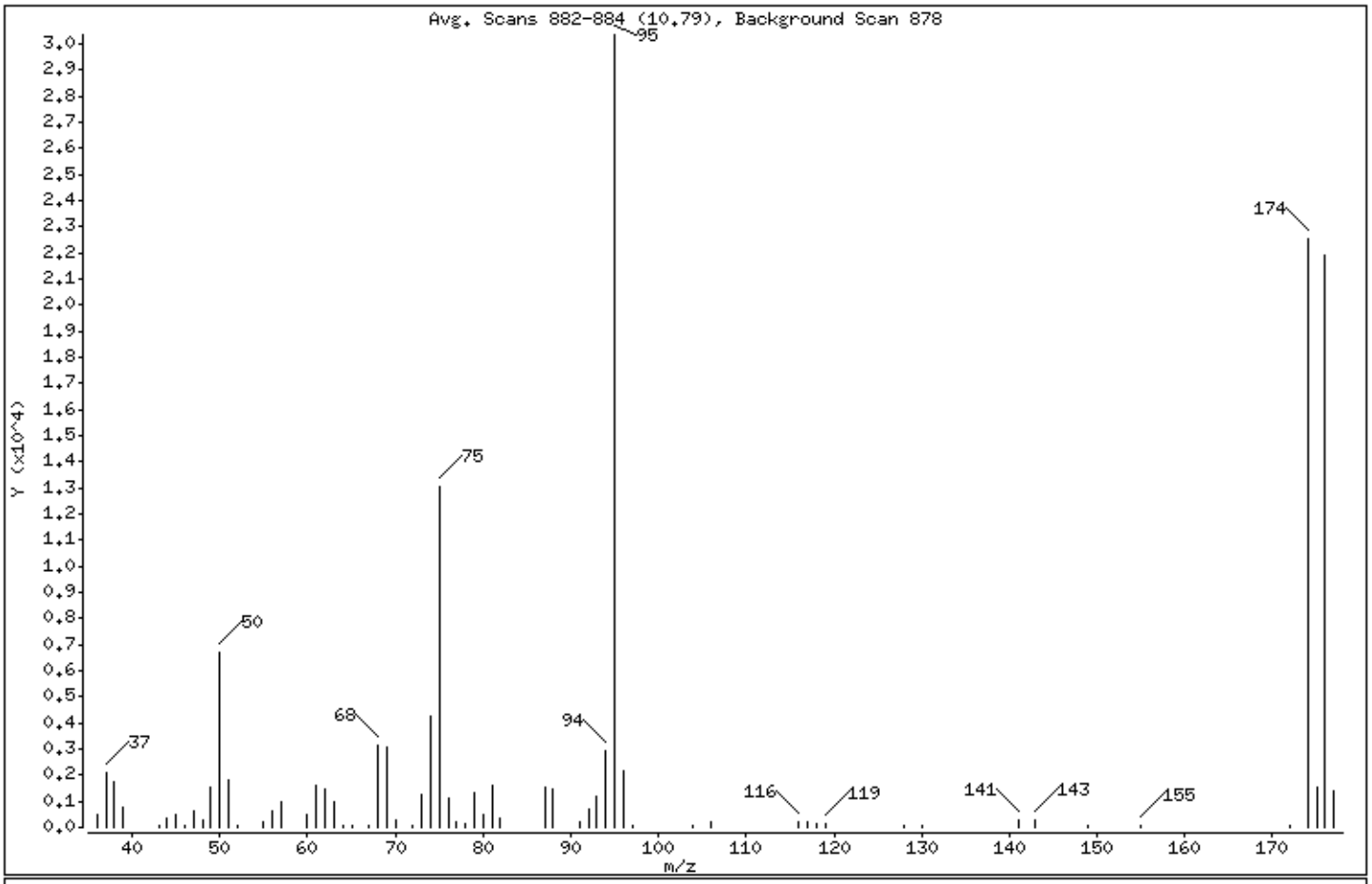
Sample Info: 2UL,BFB05,BFB05

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	22.09
75	30.00 - 80.00% of mass 95	42.99
96	5.00 - 9.00% of mass 95	7.03
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 120.00% of mass 95	74.17
175	5.00 - 9.00% of mass 174	5.00 (6.74)
176	95.00 - 101.00% of mass 174	72.14 (97.26)
177	5.00 - 9.00% of mass 176	4.61 (6.39)

Date : 09-NOV-2011 19:00

Client ID: BFB05 Instrument: V5.i

Sample Info: 2UL,BFB05,BFB05

Operator: SRC:

Column phase: DB-624 Column diameter: 0.25

Data File: V5N2820.D
Spectrum: Avg. Scans 882-884 (10.79), Background Scan 878
Location of Maximum: 95.00
Number of points: 64

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	465	60.00	465	79.00	1345	118.00	172
37.00	2084	61.00	1587	80.00	487	119.00	142
38.00	1777	62.00	1445	81.00	1630	128.00	39
39.00	785	63.00	1008	82.00	346	130.00	81
43.00	35	64.00	52	87.00	1516	141.00	285
44.00	347	65.00	39	88.00	1488	143.00	301
45.00	481	67.00	43	91.00	212	149.00	38
46.00	38	68.00	3114	92.00	676	155.00	50
47.00	601	69.00	3054	93.00	1190	172.00	97
48.00	271	70.00	275	94.00	2939	174.00	22512
49.00	1533	72.00	99	95.00	30352	175.00	1518
50.00	6705	73.00	1265	96.00	2134	176.00	21896
51.00	1844	74.00	4274	97.00	52	177.00	1400
52.00	40	75.00	13049	104.00	50		
55.00	201	76.00	1137	106.00	191		
56.00	658	77.00	178	116.00	218		
57.00	974	78.00	137	117.00	202		

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKP5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-62892

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2845.D

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

VBLKP5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-62892

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2845.D

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

VBLKP5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-62892

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2845.D

Level: (TRACE or LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 11/10/2011

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\111110.B\V5N2845.D
Report Date: 15-Nov-2011 09:35

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2845.D
Lab Smp Id: MB-62892 Client Smp ID: VBLKP5
Inj Date : 10-NOV-2011 06:57
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,MB-62892,VBLKP5,62892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 26 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	2.184	2.216	(0.345)	148838	5.63938	5.6
$	80 Chloroethane-d5	69	2.603	2.600	(0.411)	97758	5.45554	5.5
$	81 1,1-Dichloroethene-d2	65	3.381	3.378	(0.534)	34651	5.06958	5.1(Q)
$	82 2-Butanone-d5	46	5.076	5.062	(0.802)	143616	45.3667	45(AQ)
$	83 Chloroform-d	84	5.390	5.387	(0.851)	146077	4.62182	4.6(Q)
$	23 1,2-Dichloroethane-d4	65	5.901	5.898	(0.932)	54273	4.36639	4.4(Q)
$	84 Benzene-d6	84	5.912	5.909	(0.627)	300858	4.77520	4.8
*	26 1,4-Difluorobenzene	114	6.330	6.327	(1.000)	290112	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.737	6.734	(0.714)	95732	4.37751	4.4
$	33 Toluene-d8	98	7.840	7.837	(0.831)	267240	4.72653	4.7
$	86 trans-1,3-Dichloropropene-d4	79	8.130	8.116	(0.862)	61112	4.87686	4.9
$	87 2-Hexanone-d5	63	8.572	8.569	(0.909)	89310	41.1517	41(AQ)
*	42 Chlorobenzene-d5	117	9.431	9.428	(1.000)	214798	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.941	10.926	(1.160)	36341	4.48853	4.5
*	78 1,4-Dichlorobenzene-d4	152	12.183	12.169	(1.000)	84648	5.00000	
$	90 1,2-Dichlorobenzene-d4	152	12.636	12.633	(1.037)	60916	4.57781	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\111110.B\V5N2845.D
Report Date: 15-Nov-2011 09:35

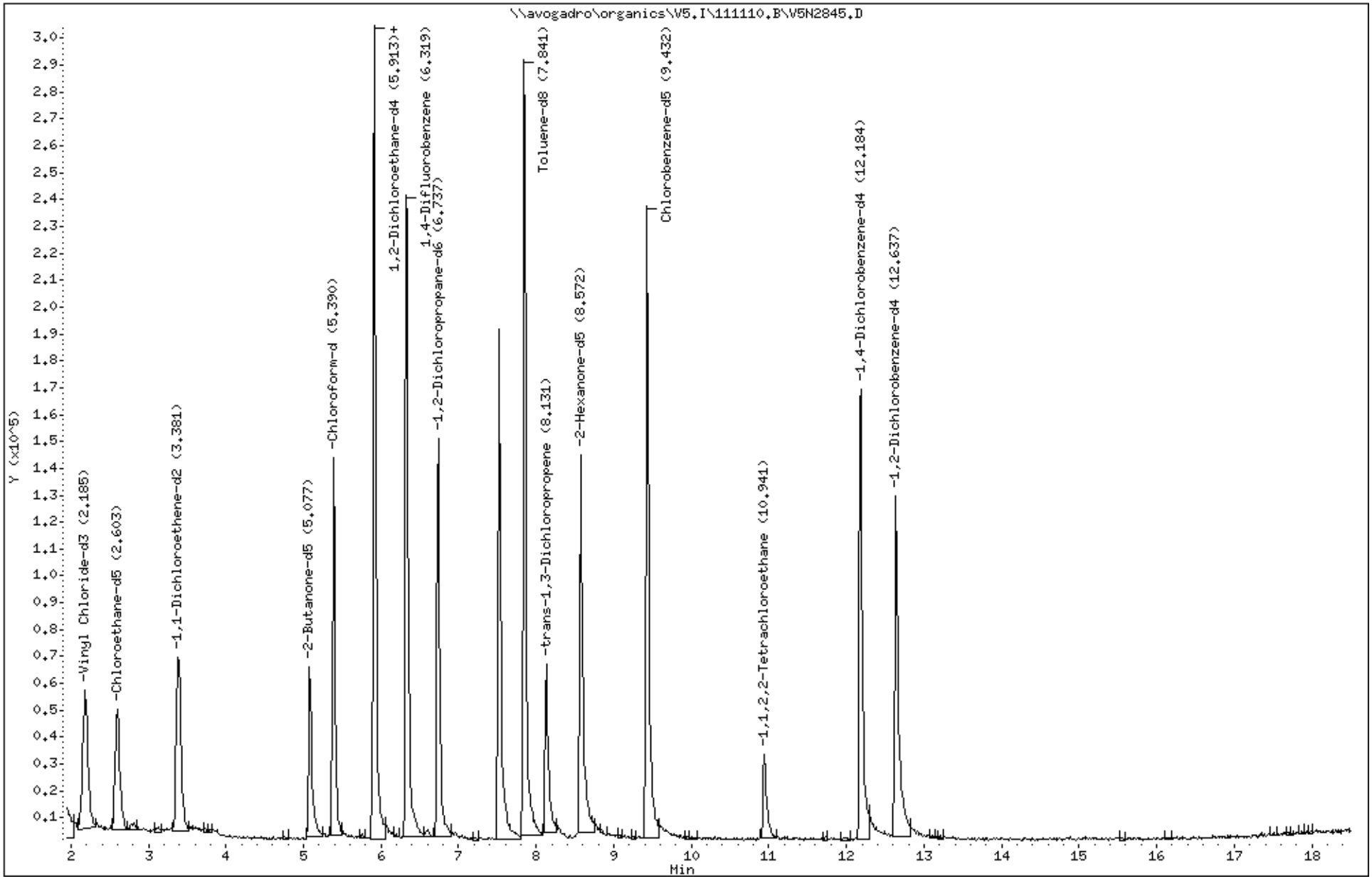
Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110.B\V5N2845.D
Lab Smp Id: MB-62892 Client Smp ID: VBLKP5
Inj Date : 10-NOV-2011 06:57
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,MB-62892,VBLKP5,62892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 21:20 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 26 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\111110.B\V5N2845.D
Date : 10-NOV-2011 06:57
Client ID: VBLKP5
Instrument: V5.i
Sample Info: 25ML,MB-62892,VBLKP5,62892
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.

VBLKQ5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-62893

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2869.D

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

VBLKQ5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-62893

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2869.D

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 11/10/2011

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.

VBLKQ5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-62893

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2869.D

Level: (TRACE or LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 11/10/2011

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\111110A.B\V5N2869.D
Report Date: 15-Nov-2011 09:36

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110A.B\V5N2869.D
Lab Smp Id: MB-62893 Client Smp ID: VBLKQ5
Inj Date : 10-NOV-2011 18:26
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,MB-62893,VBLKQ5,62893
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110A.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 15:34 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 50 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	2.209	2.214	(0.350)	136141	6.53393	6.5
$	80 Chloroethane-d5	69	2.603	2.609	(0.412)	92242	6.52051	6.5
$	81 1,1-Dichloroethene-d2	65	3.381	3.364	(0.535)	27755	5.14357	5.1(Q)
$	82 2-Butanone-d5	46	5.077	5.071	(0.803)	139878	55.9695	56(AQ)
$	83 Chloroform-d	84	5.391	5.384	(0.853)	122929	4.92666	4.9(Q)
$	23 1,2-Dichloroethane-d4	65	5.902	5.895	(0.934)	48177	4.90960	4.9
$	84 Benzene-d6	84	5.913	5.918	(0.627)	239841	4.68563	4.7
*	26 1,4-Difluorobenzene	114	6.320	6.325	(1.000)	229033	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.726	6.731	(0.713)	77930	4.38621	4.4
$	33 Toluene-d8	98	7.841	7.846	(0.831)	216922	4.72237	4.7
$	86 trans-1,3-Dichloropropene-d4	79	8.120	8.113	(0.861)	52972	5.20326	5.2
$	87 2-Hexanone-d5	63	8.573	8.566	(0.909)	91178	51.7122	52(A)
*	42 Chlorobenzene-d5	117	9.432	9.426	(1.000)	174508	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.930	10.924	(1.159)	32306	4.91140	4.9
*	78 1,4-Dichlorobenzene-d4	152	12.173	12.166	(1.000)	73311	5.00000	(Q)
$	90 1,2-Dichlorobenzene-d4	152	12.637	12.631	(1.038)	58584	5.08339	5.1(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\111110A.B\V5N2869.D
Report Date: 15-Nov-2011 09:36

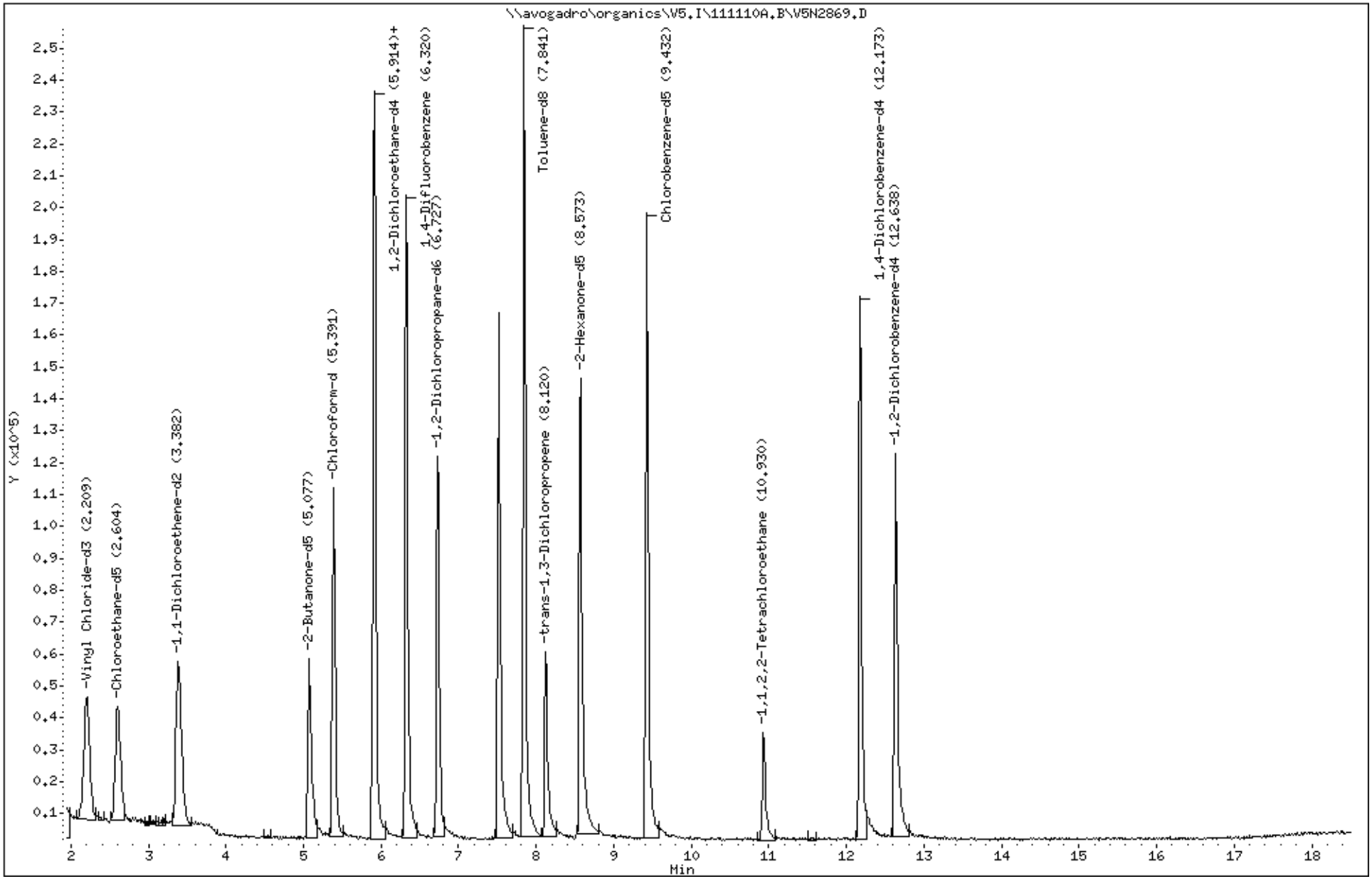
Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110A.B\V5N2869.D
Lab Smp Id: MB-62893 Client Smp ID: VBLKQ5
Inj Date : 10-NOV-2011 18:26
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,MB-62893,VBLKQ5,62893
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110A.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 15:34 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 50 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\111110A.B\V5N2869.D
Date : 10-NOV-2011 18:26
Client ID: VBLKQ5
Instrument: V5.i
Sample Info: 25ML,MB-62893,VBLKQ5,62893
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.

VHBLKQ5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: VHBLKQ5

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2891.D

Level: (TRACE/LOW/MED) TRACE Date Received:

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

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.

VHBLKQ5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: VHBLKQ5

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2891.D

Level: (TRACE/LOW/MED) TRACE Date Received:

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

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.

VHBLKQ5

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: VHBLKQ5

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2891.D

Level: (TRACE or LOW/MED) TRACE Date Received:

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

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\111110A.B\V5N2891.D
Report Date: 15-Nov-2011 09:37

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110A.B\V5N2891.D
Lab Smp Id: VHBLKQ5 Client Smp ID: VHBLKQ5
Inj Date : 11-NOV-2011 04:56
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VHBLKQ5,VHBLKQ5,62893
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110A.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 15:34 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 72 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	2.203	2.214	(0.348)	134836	6.28574	6.3
$	80 Chloroethane-d5	69	2.609	2.609	(0.413)	90311	6.20096	6.2
$	81 1,1-Dichloroethene-d2	65	3.376	3.364	(0.534)	28750	5.17520	5.2(Q)
$	82 2-Butanone-d5	46	5.071	5.071	(0.802)	131747	51.2045	51(AQ)
$	83 Chloroform-d	84	5.385	5.384	(0.851)	125514	4.88603	4.9(Q)
$	23 1,2-Dichloroethane-d4	65	5.896	5.895	(0.932)	48665	4.81713	4.8
$	84 Benzene-d6	84	5.919	5.918	(0.628)	249295	4.75297	4.8
*	26 1,4-Difluorobenzene	114	6.325	6.325	(1.000)	235794	5.00000	
$	85 1,2-Dichloropropane-d6	67	6.732	6.731	(0.714)	83185	4.56916	4.6
$	33 Toluene-d8	98	7.847	7.846	(0.832)	222356	4.72402	4.7
$	86 trans-1,3-Dichloropropene-d4	79	8.125	8.113	(0.862)	49312	4.72703	4.7
$	87 2-Hexanone-d5	63	8.567	8.566	(0.909)	88258	48.8499	49(A)
*	42 Chlorobenzene-d5	117	9.426	9.426	(1.000)	178817	5.00000	
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.936	10.924	(1.160)	33383	4.95283	5.0
*	78 1,4-Dichlorobenzene-d4	152	12.178	12.166	(1.000)	71040	5.00000	(Q)
$	90 1,2-Dichlorobenzene-d4	152	12.631	12.631	(1.037)	53540	4.79423	4.8(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\111110A.B\V5N2891.D
Report Date: 15-Nov-2011 09:37

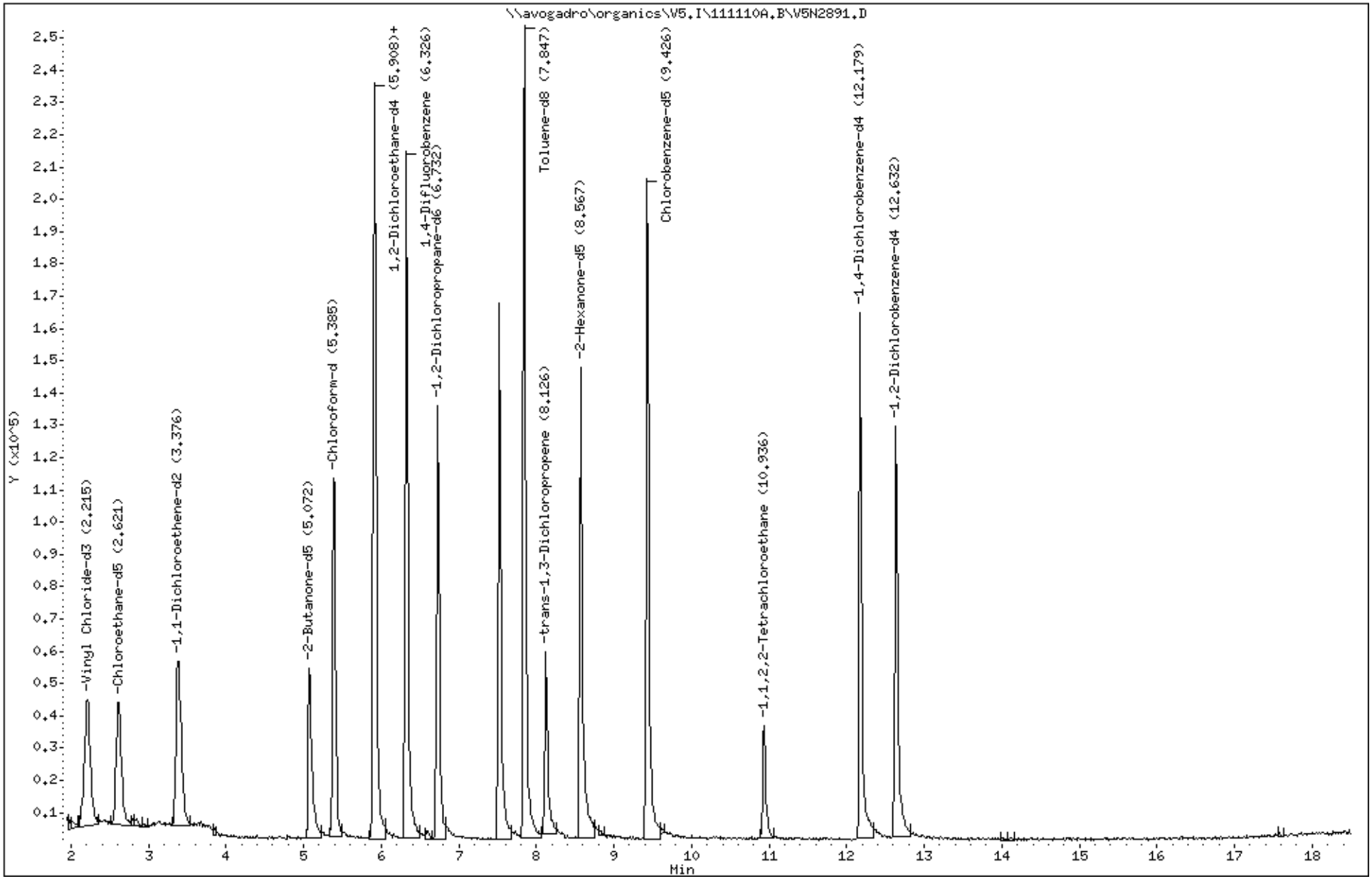
Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110A.B\V5N2891.D
Lab Smp Id: VHBLKQ5 Client Smp ID: VHBLKQ5
Inj Date : 11-NOV-2011 04:56
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VHBLKQ5,VHBLKQ5,62893
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110A.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 15:34 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 72 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\111110A.B\V5N2891.D
Date : 11-NOV-2011 04:56
Client ID: VHBLKQ5
Instrument: V5.i
Sample Info: 25ML,VHBLKQ5,VHBLKQ5,62893
Purge Volume: 25.0
Operator: SRC:
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Z2MS

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-11BMS

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2871.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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	4.2	
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	4.1	
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Z2MS

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-11BMS

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2871.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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	4.0	
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	4.0	
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	4.1	
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

Data File: \\avogadro\organics\V5.I\111110A.B\V5N2871.D
Report Date: 15-Nov-2011 09:36

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110A.B\V5N2871.D
Lab Smp Id: K2213-11BMS Client Smp ID: H30Z2MS
Inj Date : 10-NOV-2011 19:23
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-11BMS,,62893
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110A.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 15:34 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 52 QC Sample: MS
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	2.214	2.214	(0.350)	124056	6.23626	6.2
$	80 Chloroethane-d5	69	2.609	2.609	(0.413)	84352	6.24553	6.2
$	81 1,1-Dichloroethene-d2	65	3.387	3.364	(0.536)	28134	5.46105	5.5(QR)
	7 1,1-Dichloroethene	96	3.399	3.387	(0.537)	66057	4.24872	4.2(Q)
$	82 2-Butanone-d5	46	5.071	5.071	(0.802)	122266	51.2423	51(AQ)
$	83 Chloroform-d	84	5.385	5.384	(0.851)	114510	4.80687	4.8(Q)
$	23 1,2-Dichloroethane-d4	65	5.896	5.895	(0.932)	44609	4.76157	4.8
$	84 Benzene-d6	84	5.919	5.918	(0.628)	233200	4.71478	4.7
	25 Benzene	78	5.954	5.953	(0.632)	225475	4.12372	4.1
*	26 1,4-Difluorobenzene	114	6.325	6.325	(1.000)	218664	5.00000	
	27 Trichloroethene	95	6.592	6.592	(0.699)	66692	4.02697	4.0
$	85 1,2-Dichloropropane-d6	67	6.732	6.731	(0.714)	74945	4.36532	4.4
$	33 Toluene-d8	98	7.847	7.846	(0.832)	200616	4.51970	4.5
	34 Toluene	91	7.916	7.916	(0.840)	223719	4.01319	4.0
$	86 trans-1,3-Dichloropropene-d4	79	8.125	8.113	(0.862)	49293	5.01075	5.0
$	87 2-Hexanone-d5	63	8.567	8.566	(0.909)	83403	48.9522	49(A)
*	42 Chlorobenzene-d5	117	9.426	9.426	(1.000)	168627	5.00000	
	43 Chlorobenzene	112	9.461	9.460	(1.004)	149851	4.06123	4.1
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.936	10.924	(1.160)	30491	4.79713	4.8
*	78 1,4-Dichlorobenzene-d4	152	12.178	12.166	(1.000)	69384	5.00000	
$	90 1,2-Dichlorobenzene-d4	152	12.631	12.631	(1.037)	52721	4.83356	4.8(Q)

Data File: \\avogadro\organics\V5.I\111110A.B\V5N2871.D
Report Date: 15-Nov-2011 09:36

QC Flag Legend

A - Target compound detected but, quantitated amount
    exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\V5.I\111110A.B\V5N2871.D
Report Date: 15-Nov-2011 09:36

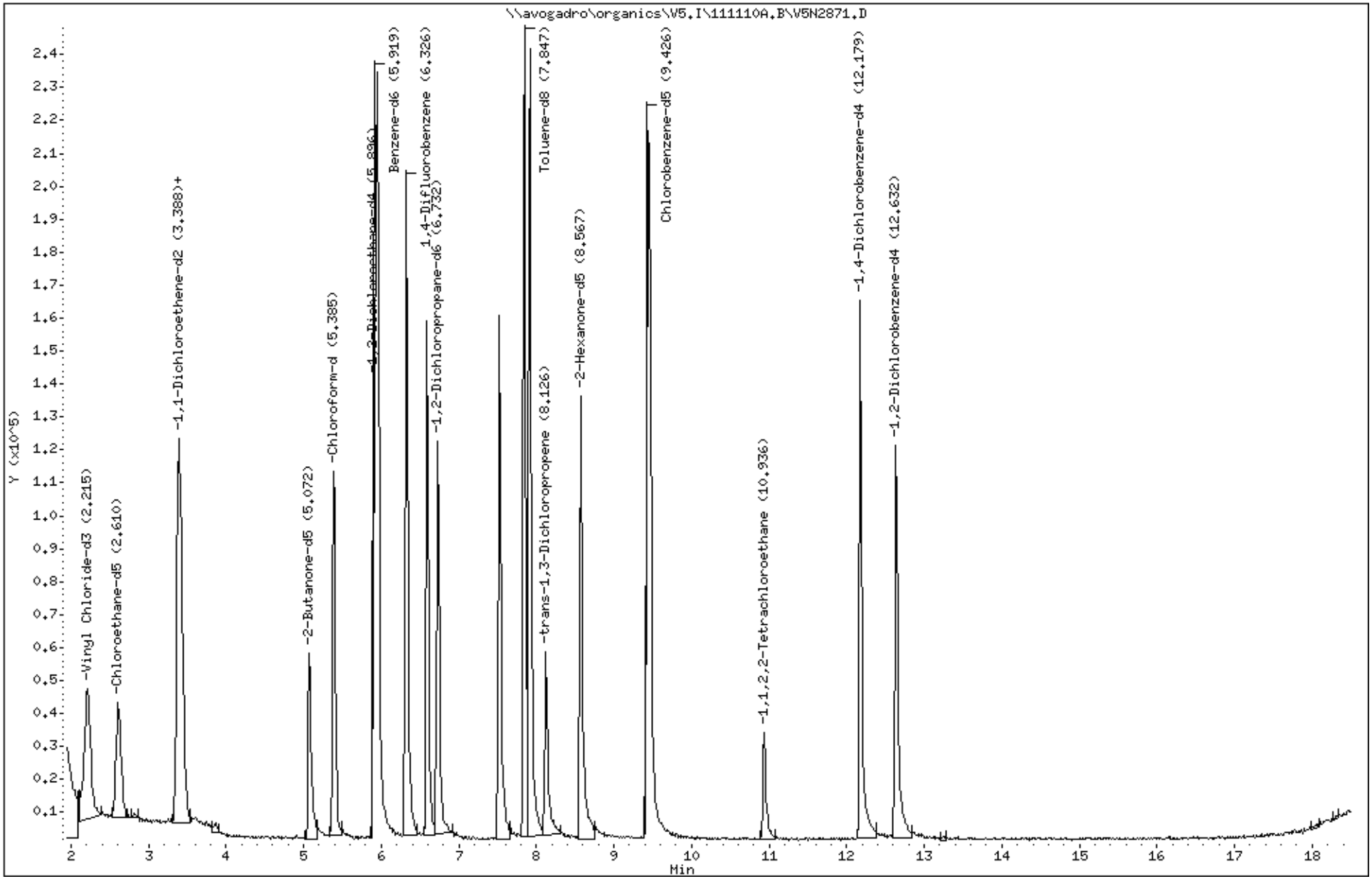
Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110A.B\V5N2871.D
Lab Smp Id: K2213-11BMS Client Smp ID: H30Z2MS
Inj Date : 10-NOV-2011 19:23
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-11BMS,,62893
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110A.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 15:34 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 52 QC Sample: MS
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\111110A.B\V5N2871.D
Date : 10-NOV-2011 19:23
Client ID: H30Z2MS
Instrument: V5.i
Sample Info: 25ML,K2213-11BMS,,62893
Purge Volume: 25.0
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111110A.B\V5N2871.D

Date : 10-NOV-2011 19:23

Client ID: H30Z2MS

Instrument: V5.i

Sample Info: 25ML,K2213-11BMS,,62893

Purge Volume: 25.0

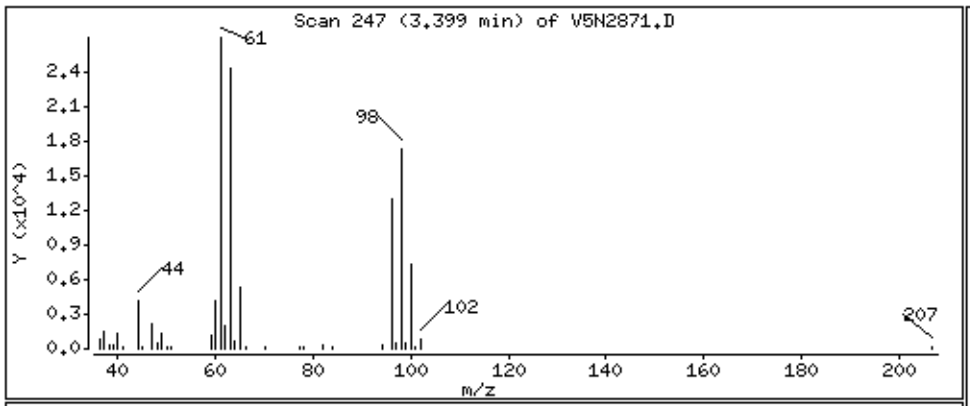
Operator: SRC: LIMS

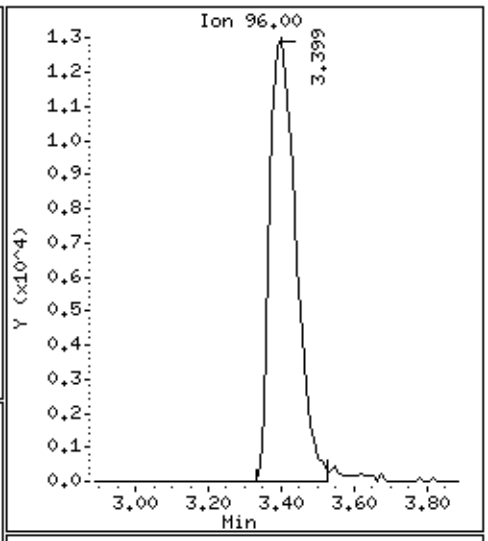
Column phase: DB-624

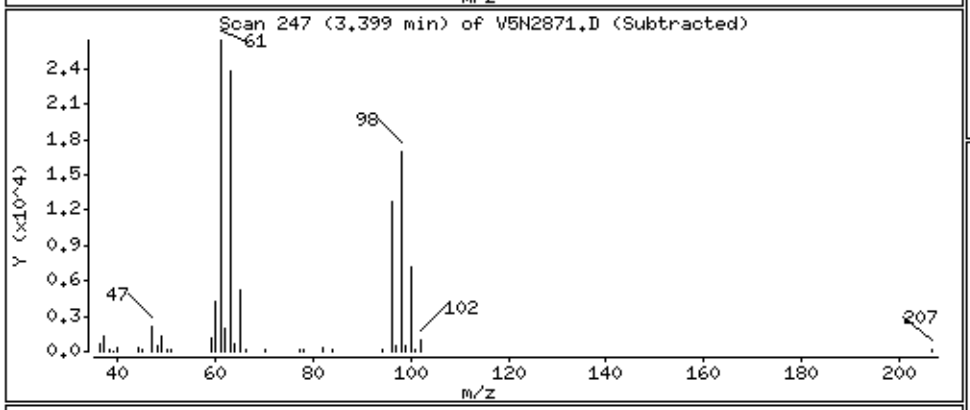
Column diameter: 0.25

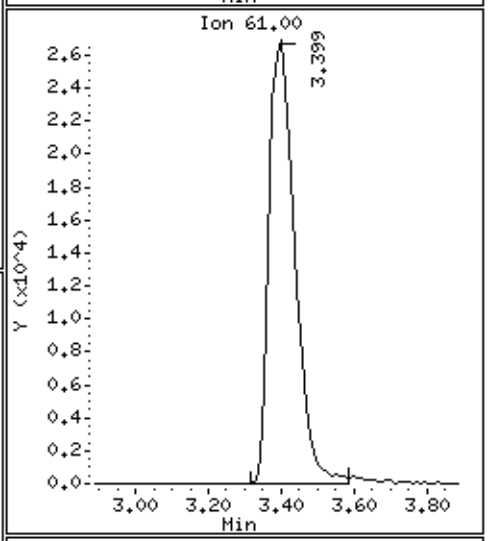
7 1,1-Dichloroethene

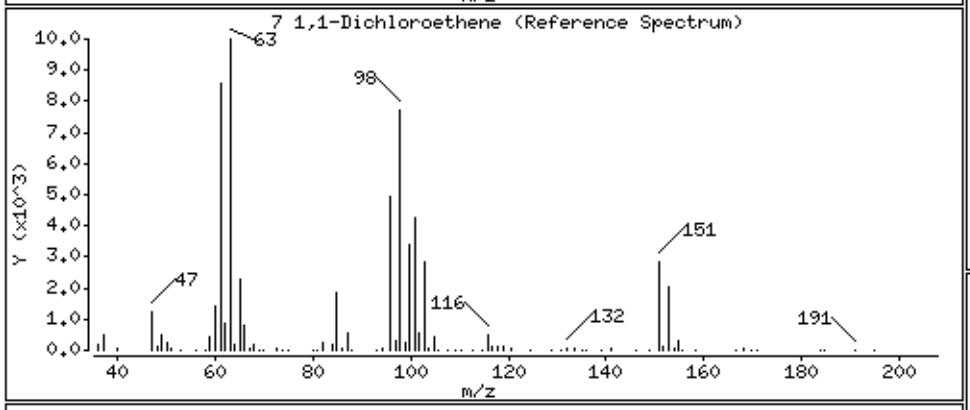
Concentration: 4.2 ug/L

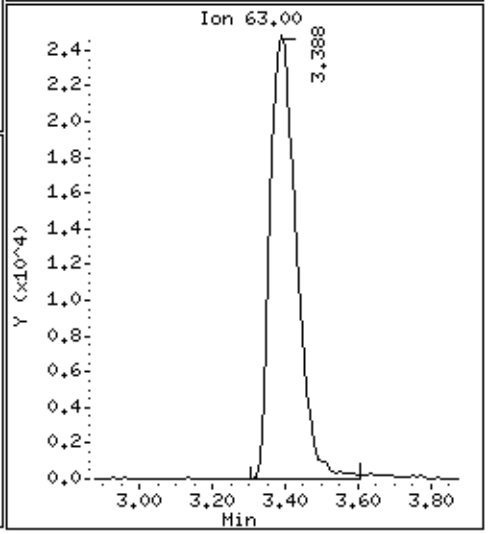


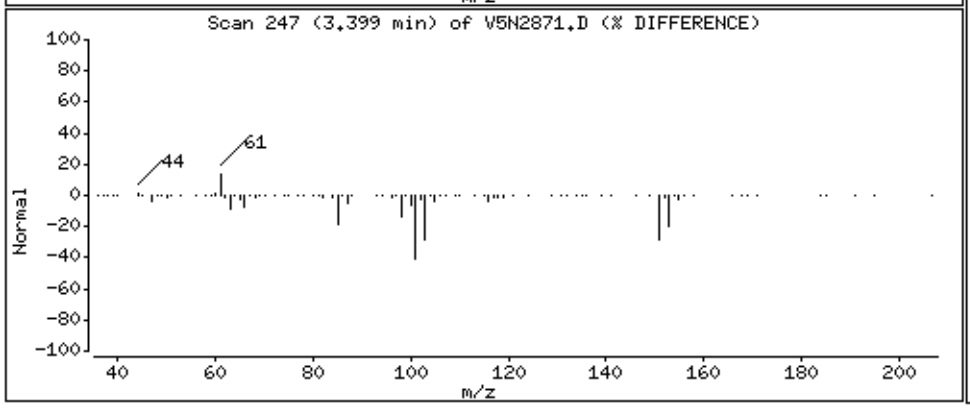












Data File: \\avogadro\organics\V5.I\111110A.B\V5N2871.D

Date : 10-NOV-2011 19:23

Client ID: H30Z2MS

Instrument: V5.i

Sample Info: 25ML,K2213-11BMS,,62893

Purge Volume: 25.0

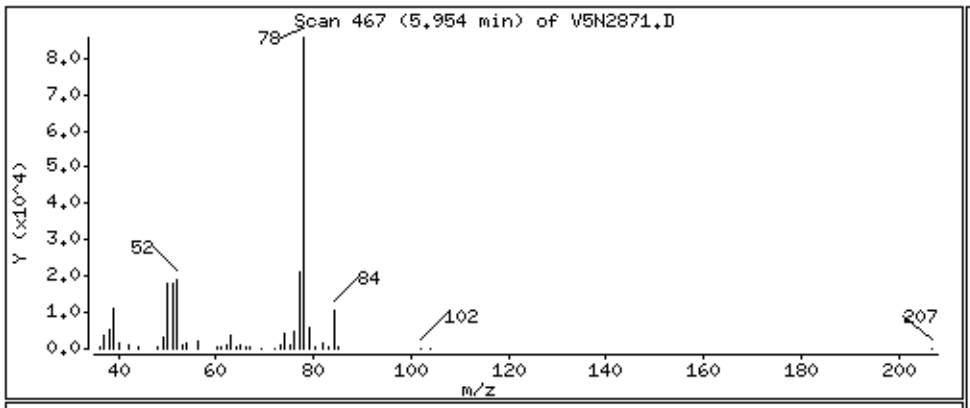
Operator: SRC: LIMS

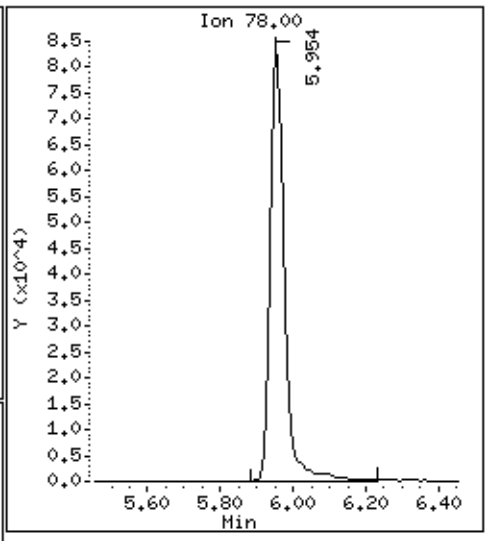
Column phase: DB-624

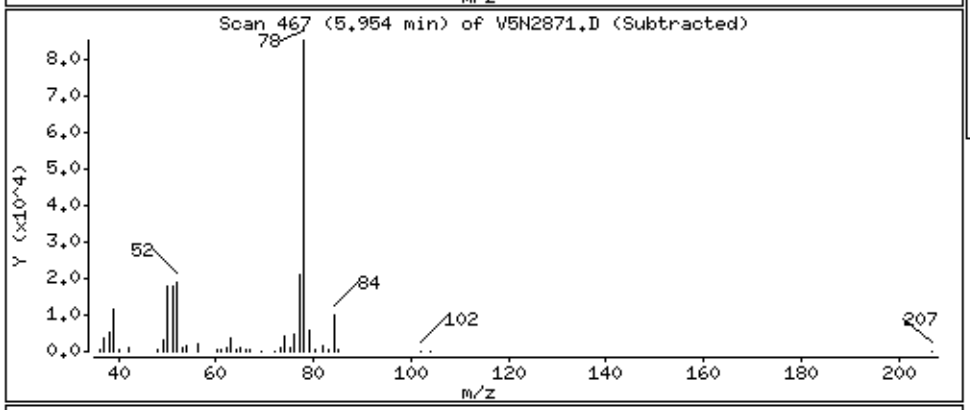
Column diameter: 0.25

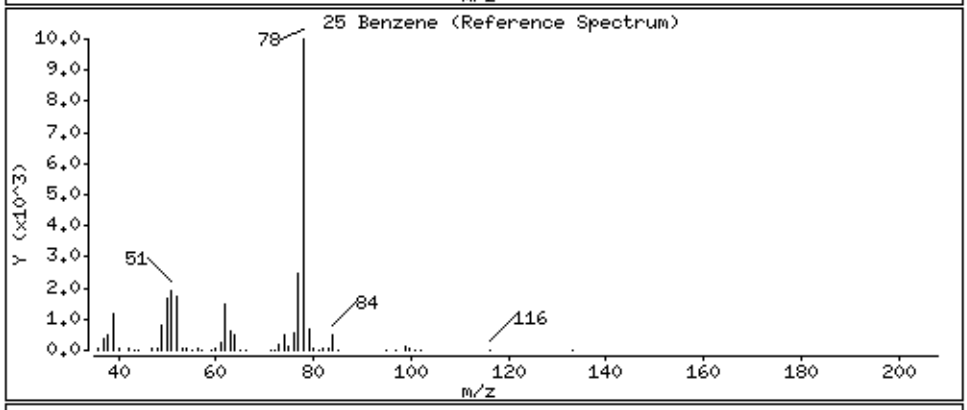
25 Benzene

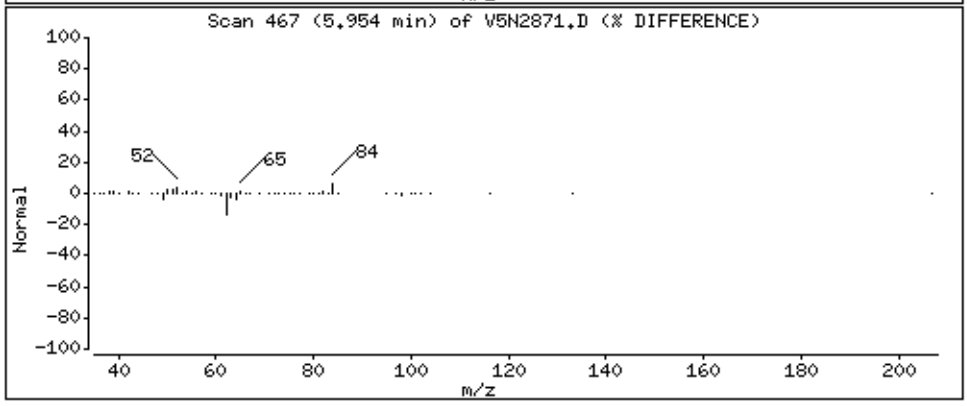
Concentration: 4.1 ug/L











Data File: \\avogadro\organics\V5.I\111110A.B\V5N2871.D

Date : 10-NOV-2011 19:23

Client ID: H30Z2MS

Instrument: V5.i

Sample Info: 25ML,K2213-11BMS,,62893

Purge Volume: 25.0

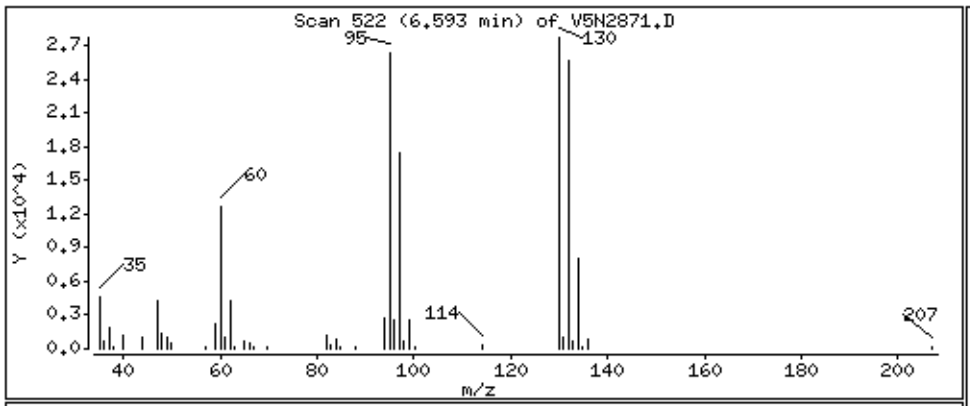
Operator: SRC: LIMS

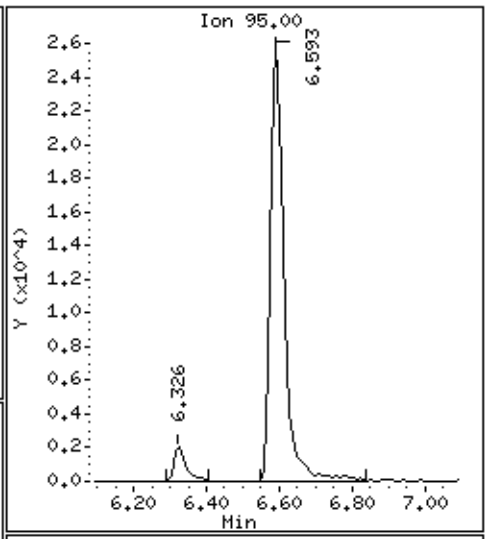
Column phase: DB-624

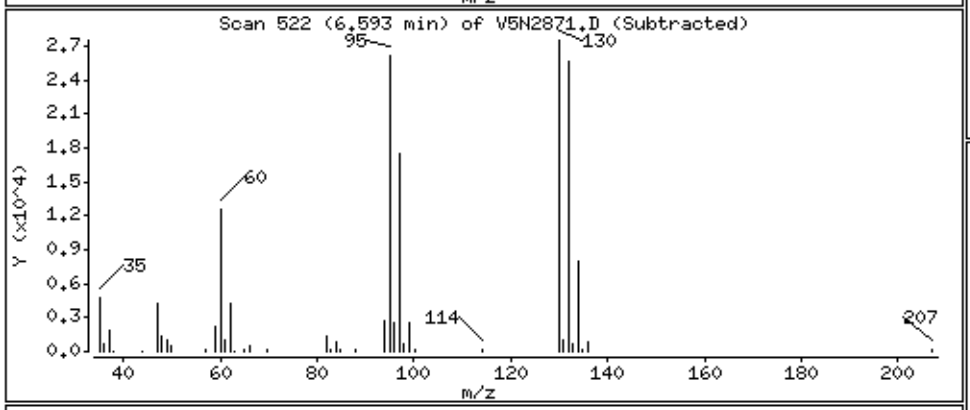
Column diameter: 0.25

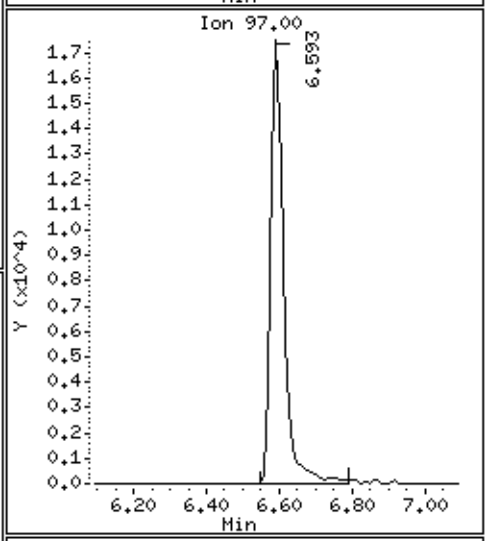
27 Trichloroethene

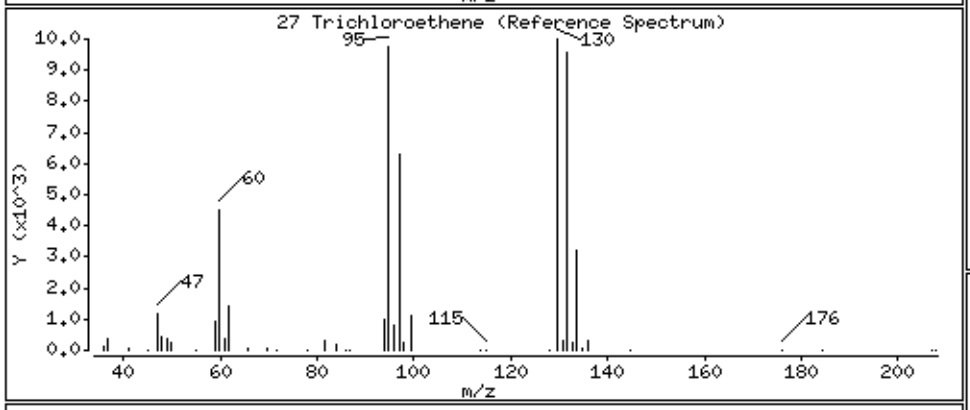
Concentration: 4.0 ug/L

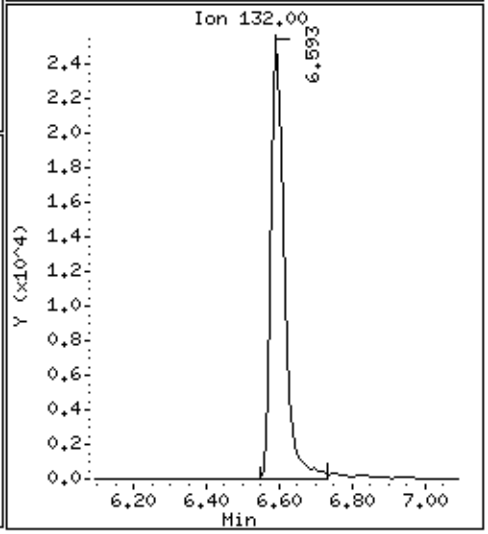


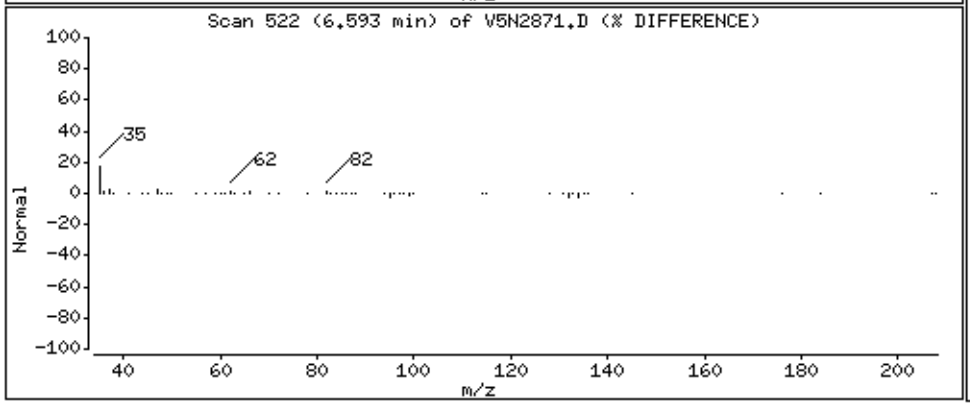












Data File: \\avogadro\organics\V5.I\111110A.B\V5N2871.D

Date : 10-NOV-2011 19:23

Client ID: H30Z2MS

Instrument: V5.i

Sample Info: 25ML,K2213-11BMS,,62893

Purge Volume: 25.0

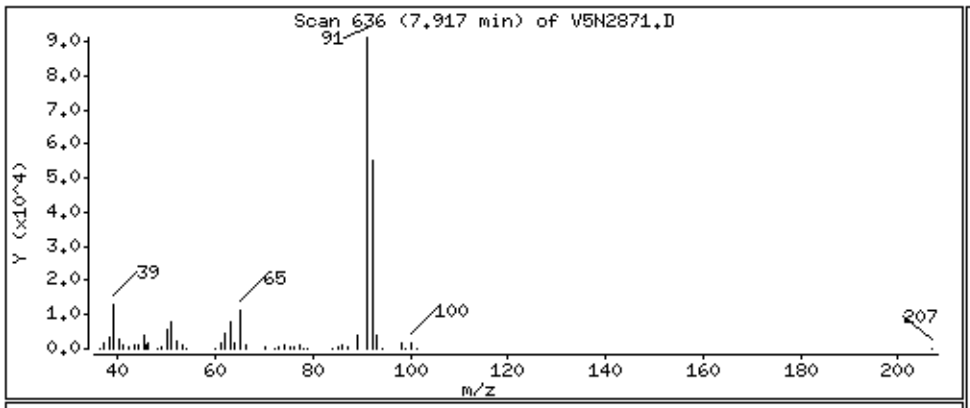
Operator: SRC: LIMS

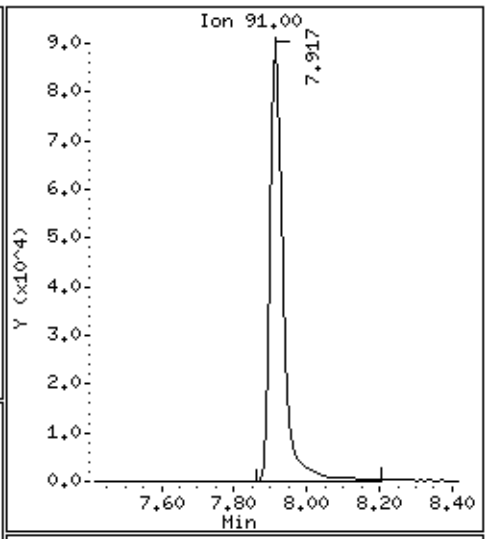
Column phase: DB-624

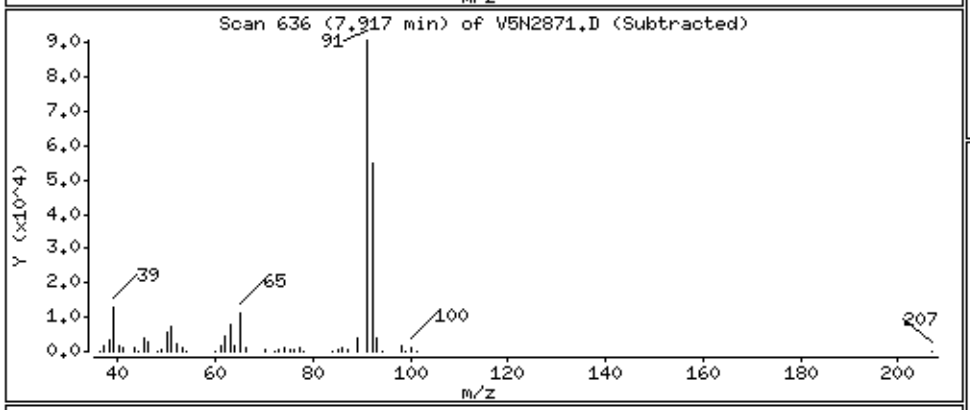
Column diameter: 0.25

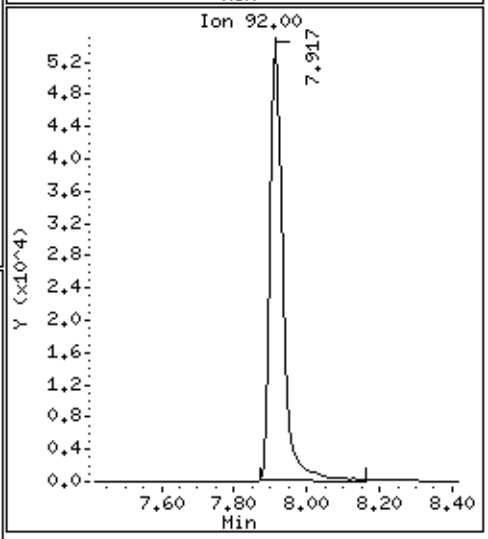
34 Toluene

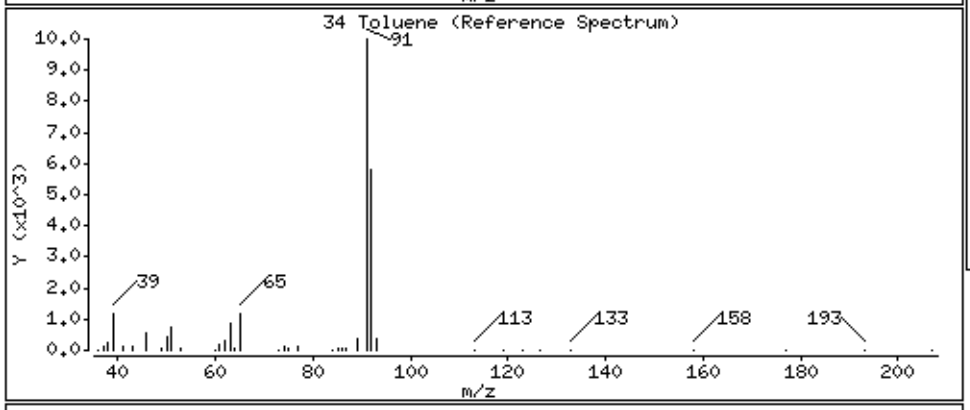
Concentration: 4.0 ug/L

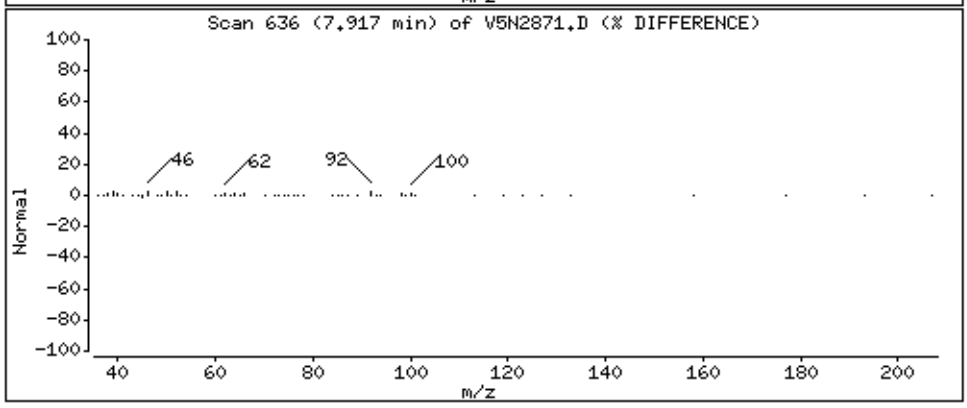












Data File: \\avogadro\organics\V5.I\111110A.B\V5N2871.D

Date : 10-NOV-2011 19:23

Client ID: H30Z2MS

Instrument: V5.i

Sample Info: 25ML,K2213-11BMS,,62893

Purge Volume: 25.0

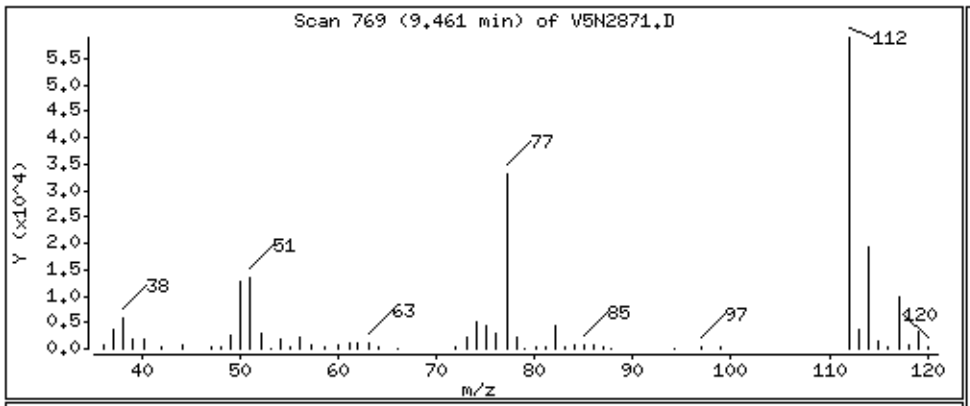
Operator: SRC: LIMS

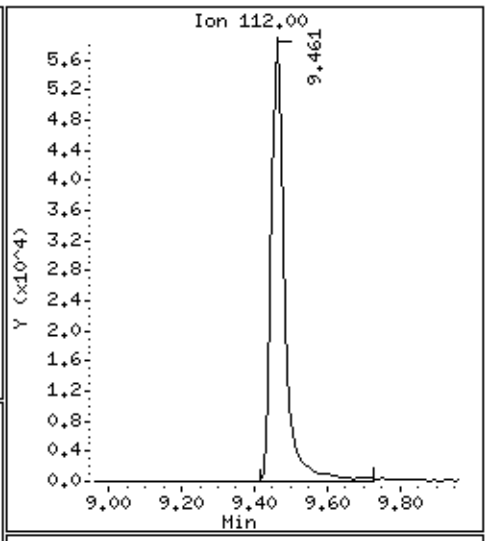
Column phase: DB-624

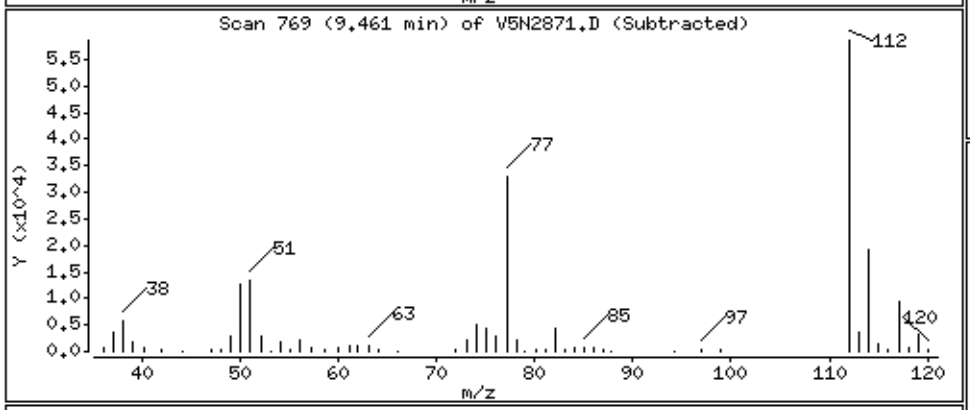
Column diameter: 0.25

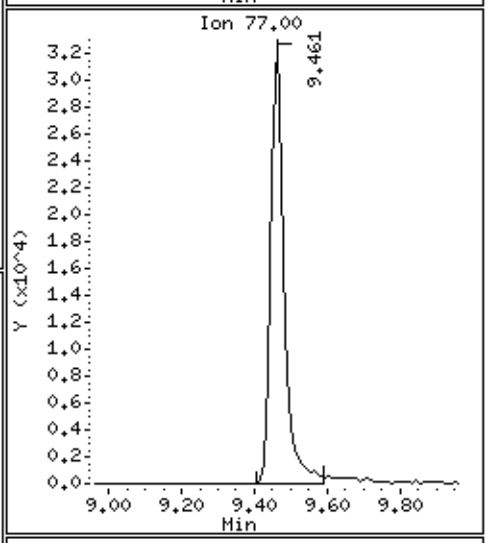
43 Chlorobenzene

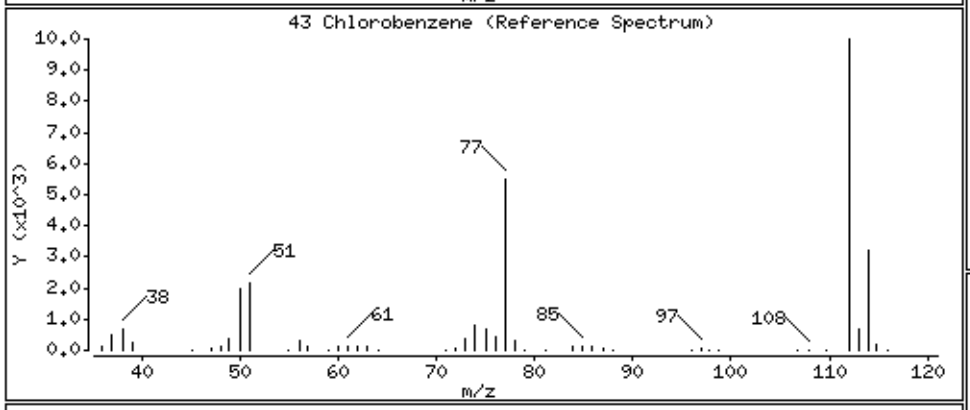
Concentration: 4.1 ug/L

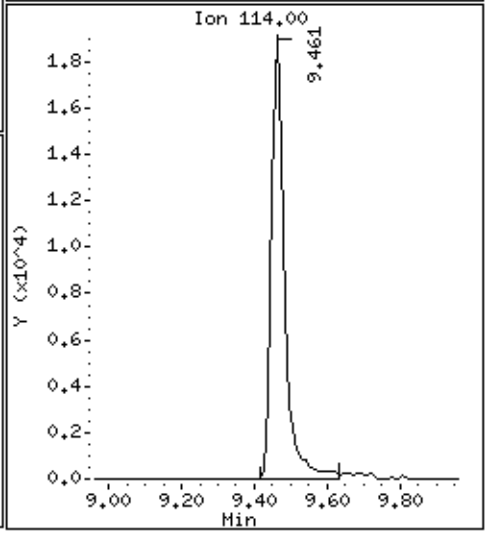


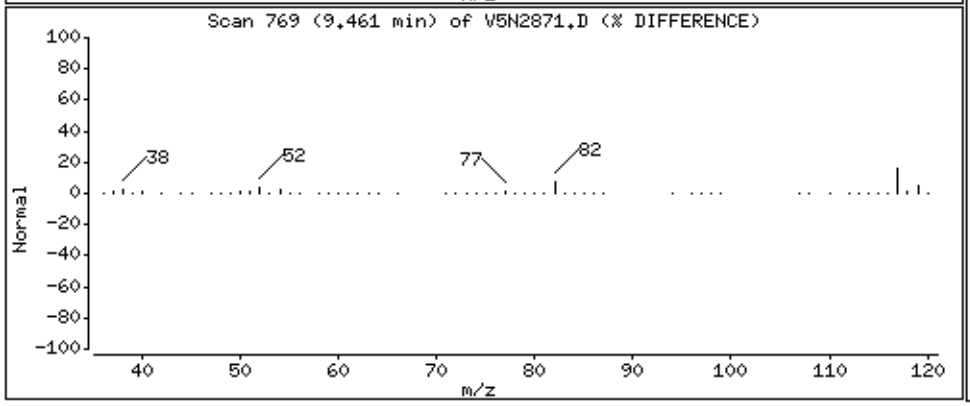












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Z2MSD

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-11BMSD

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2872.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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	4.0	
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	4.2	
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Z2MSD

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-11BMSD

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5N2872.D

Level: (TRACE/LOW/MED) TRACE Date Received: 11/03/2011

% Moisture: not dec. Date Analyzed: 11/10/2011

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	4.0	
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	4.1	
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	4.1	
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

Data File: \\avogadro\organics\V5.I\111110A.B\V5N2872.D
Report Date: 15-Nov-2011 09:36

Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110A.B\V5N2872.D
Lab Smp Id: K2213-11BMSD Client Smp ID: H30Z2MSD
Inj Date : 10-NOV-2011 19:52
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-11BMSD,,62893
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110A.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 15:34 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 53 QC Sample: MSD
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

		QUANT SIG					CONCENTRATIONS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/L)	FINAL (ug/L)
$	79 Vinyl Chloride-d3	65	2.215	2.214	(0.350)	126196	6.37465	6.4
$	80 Chloroethane-d5	69	2.621	2.609	(0.414)	84718	6.30310	6.3
$	81 1,1-Dichloroethene-d2	65	3.388	3.364	(0.536)	27146	5.29486	5.3(QR)
	7 1,1-Dichloroethene	96	3.399	3.387	(0.537)	62359	4.03035	4.0(Q)
$	82 2-Butanone-d5	46	5.072	5.071	(0.802)	116927	49.2427	49(AQ)
$	83 Chloroform-d	84	5.385	5.384	(0.851)	113099	4.77071	4.8(Q)
$	23 1,2-Dichloroethane-d4	65	5.896	5.895	(0.932)	43106	4.62349	4.6
$	84 Benzene-d6	84	5.919	5.918	(0.628)	228742	4.86161	4.9
	25 Benzene	78	5.954	5.953	(0.632)	219988	4.22952	4.2
*	26 1,4-Difluorobenzene	114	6.326	6.325	(1.000)	217607	5.00000	
	27 Trichloroethene	95	6.593	6.592	(0.699)	62246	3.95109	4.0
$	85 1,2-Dichloropropane-d6	67	6.732	6.731	(0.714)	74047	4.53400	4.5
$	33 Toluene-d8	98	7.847	7.846	(0.832)	203269	4.81412	4.8
	34 Toluene	91	7.917	7.916	(0.840)	214936	4.05319	4.1
$	86 trans-1,3-Dichloropropene-d4	79	8.126	8.113	(0.862)	48019	5.13135	5.1
$	87 2-Hexanone-d5	63	8.567	8.566	(0.909)	79977	49.3466	49(A)
*	42 Chlorobenzene-d5	117	9.427	9.426	(1.000)	160408	5.00000	
	43 Chlorobenzene	112	9.461	9.460	(1.004)	143643	4.09245	4.1
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.936	10.924	(1.160)	30676	5.07353	5.1
*	78 1,4-Dichlorobenzene-d4	152	12.179	12.166	(1.000)	66987	5.00000	(Q)
$	90 1,2-Dichlorobenzene-d4	152	12.632	12.631	(1.037)	52809	5.01488	5.0(Q)

Data File: \\avogadro\organics\V5.I\111110A.B\V5N2872.D
Report Date: 15-Nov-2011 09:36

QC Flag Legend

A - Target compound detected but, quantitated amount
    exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\V5.I\111110A.B\V5N2872.D
Report Date: 15-Nov-2011 09:36

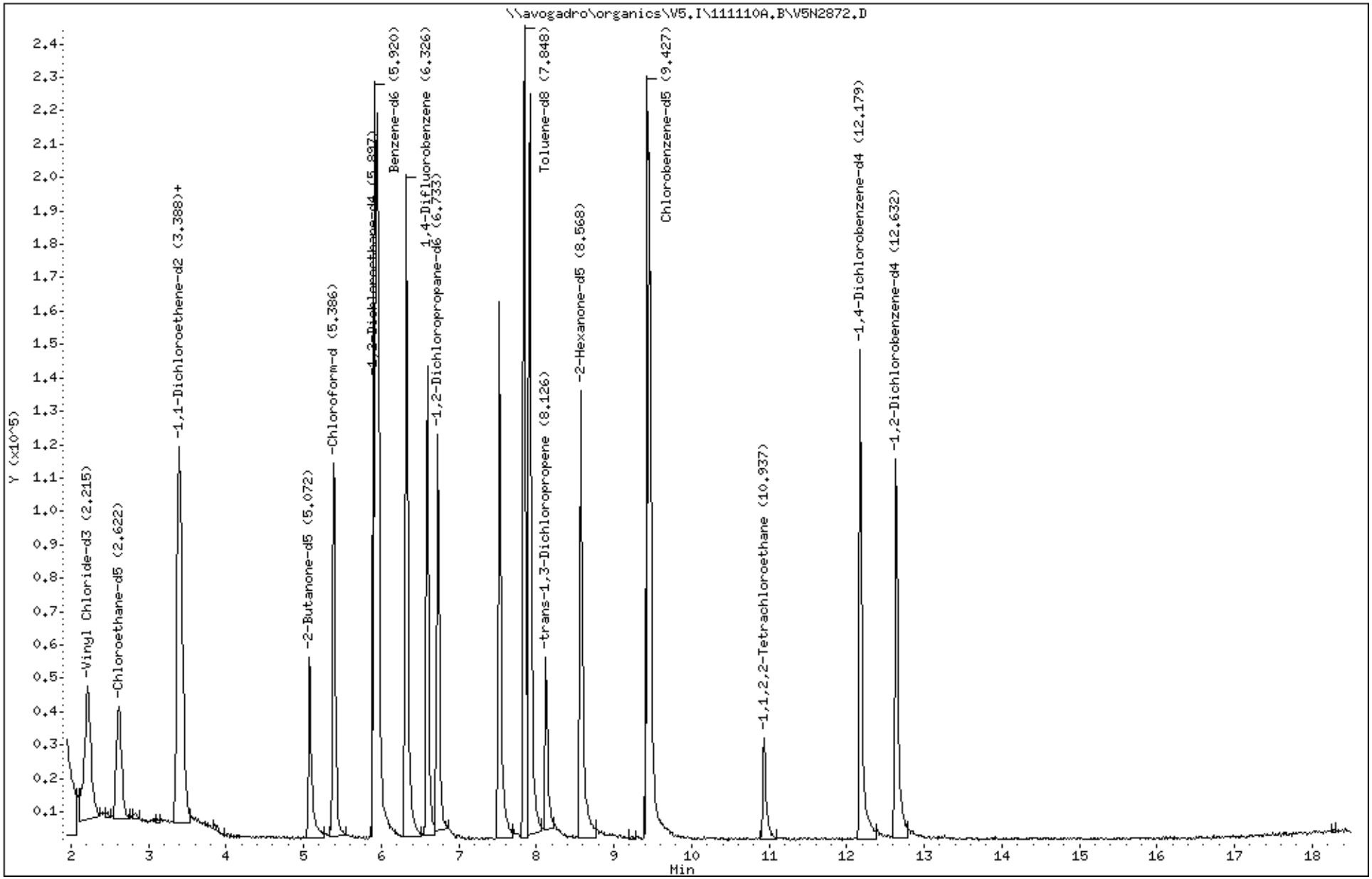
Spectrum Analytical, Inc. RI Division

SOM01.0 - Trace Water Volatiles

Data file : \\avogadro\organics\V5.I\111110A.B\V5N2872.D
Lab Smp Id: K2213-11BMSD Client Smp ID: H30Z2MSD
Inj Date : 10-NOV-2011 19:52
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,K2213-11BMSD,,62893
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\111110A.B\V5_TVOA1359.m
Meth Date : 14-Nov-2011 15:34 V5.i Quant Type: ISTD
Cal Date : 09-NOV-2011 20:26 Cal File: V5N2823.D
Als bottle: 53 QC Sample: MSD
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\111110A.B\V5N2872.D
Date : 10-NOV-2011 19:52
Client ID: H30Z2MSD
Instrument: V5.i
Sample Info: 25ML,K2213-11BMSD,,62893
Purge Volume: 25.0
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\111110A.B\V5N2872.D

Date : 10-NOV-2011 19:52

Client ID: H30Z2MSD

Instrument: V5.i

Sample Info: 25ML,K2213-11BMSD,,62893

Purge Volume: 25.0

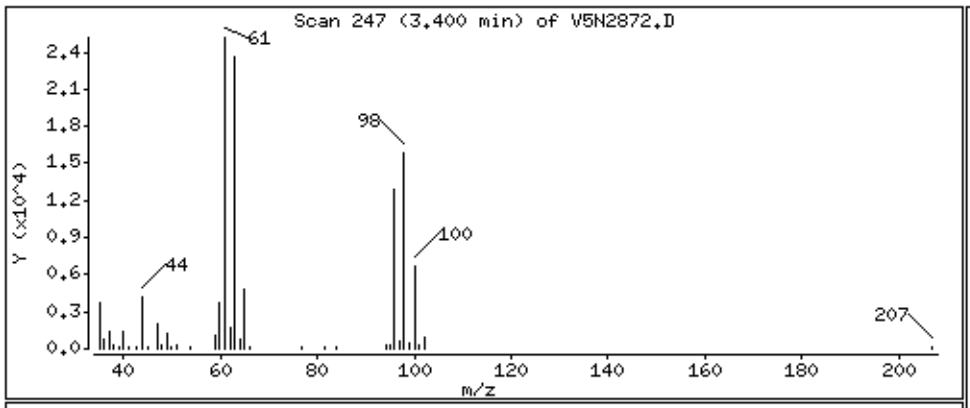
Operator: SRC: LIMS

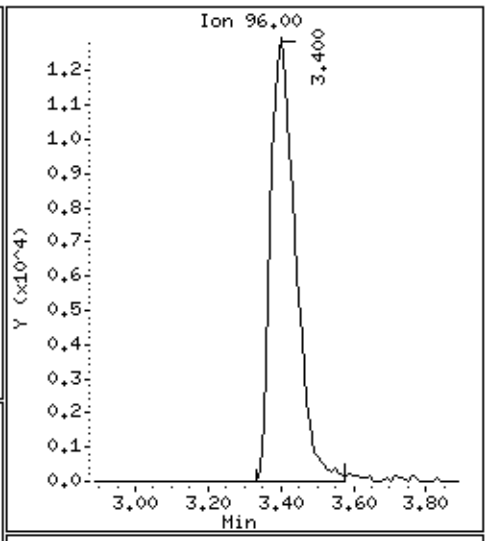
Column phase: DB-624

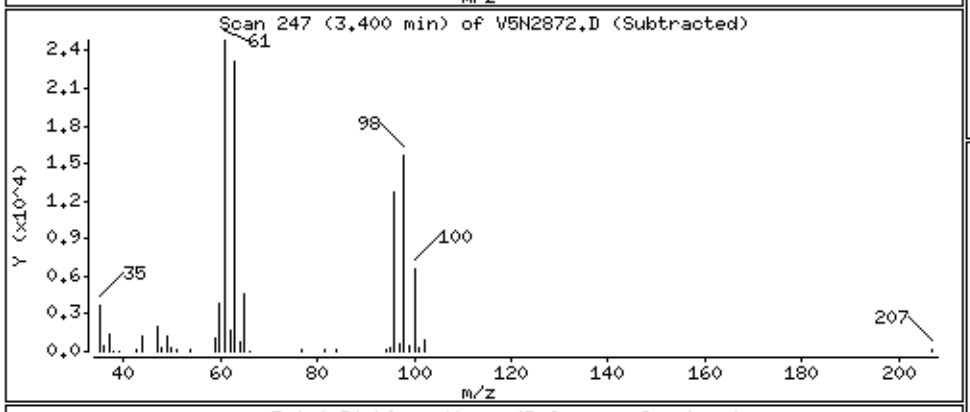
Column diameter: 0.25

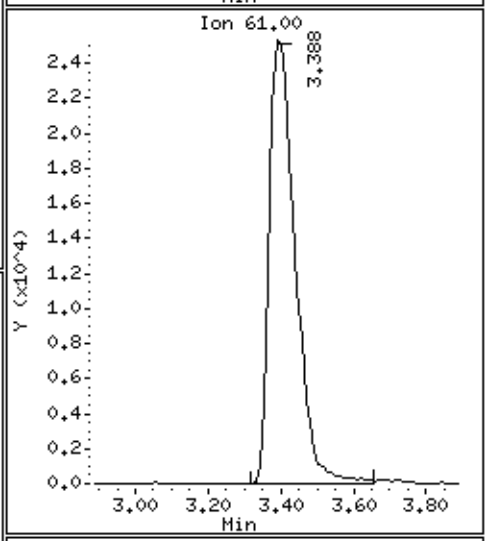
7 1,1-Dichloroethene

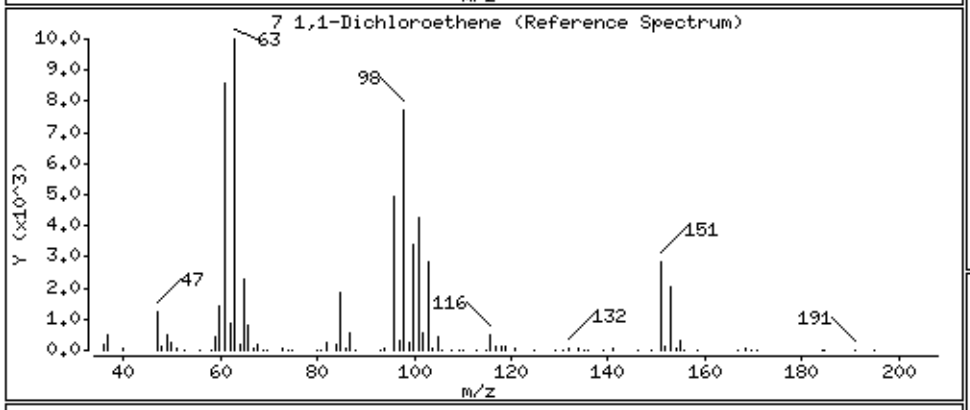
Concentration: 4.0 ug/L

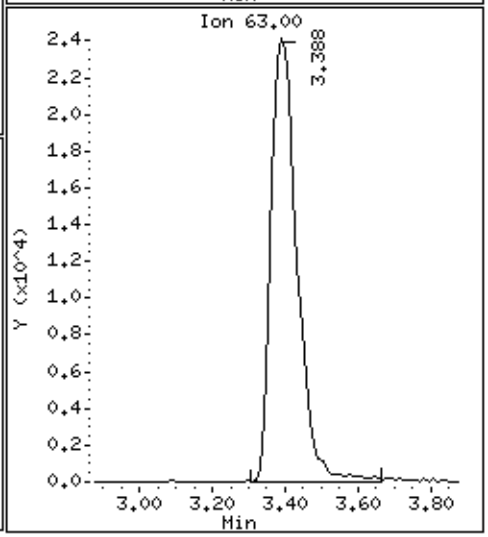


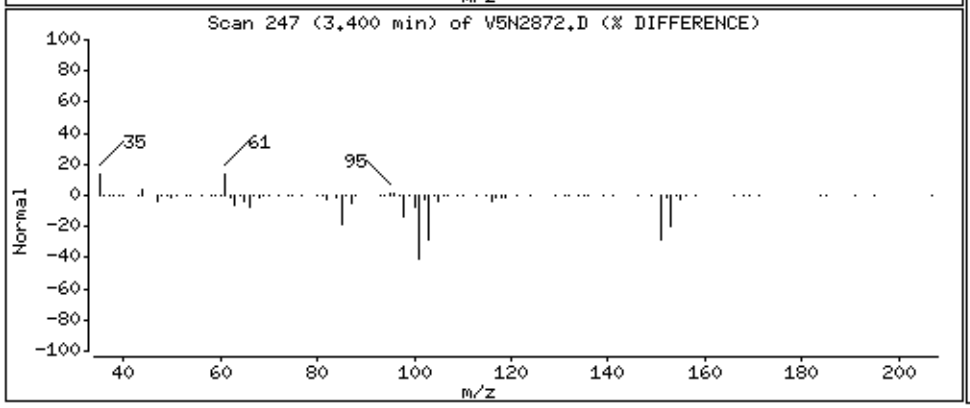












Data File: \\avogadro\organics\V5.I\111110A.B\V5N2872.D

Date : 10-NOV-2011 19:52

Client ID: H30Z2MSD

Instrument: V5.i

Sample Info: 25ML,K2213-11BMSD,,62893

Purge Volume: 25.0

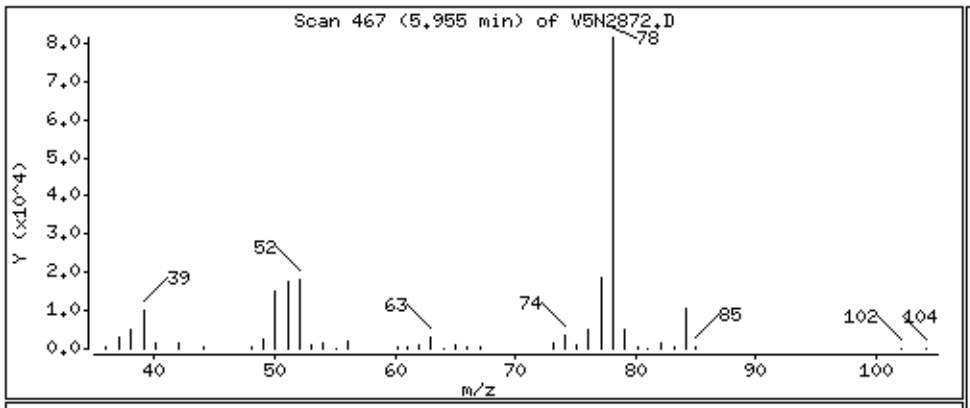
Operator: SRC: LIMS

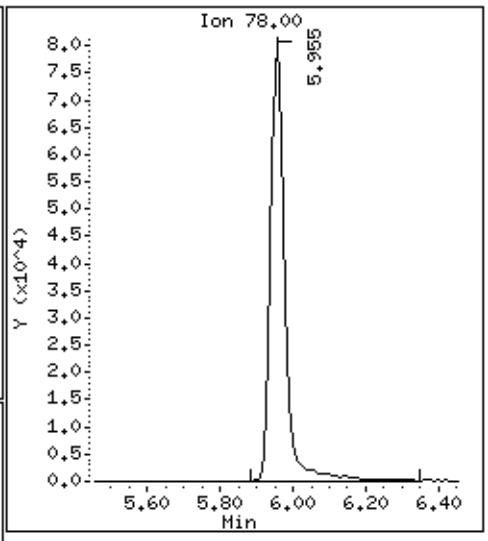
Column phase: DB-624

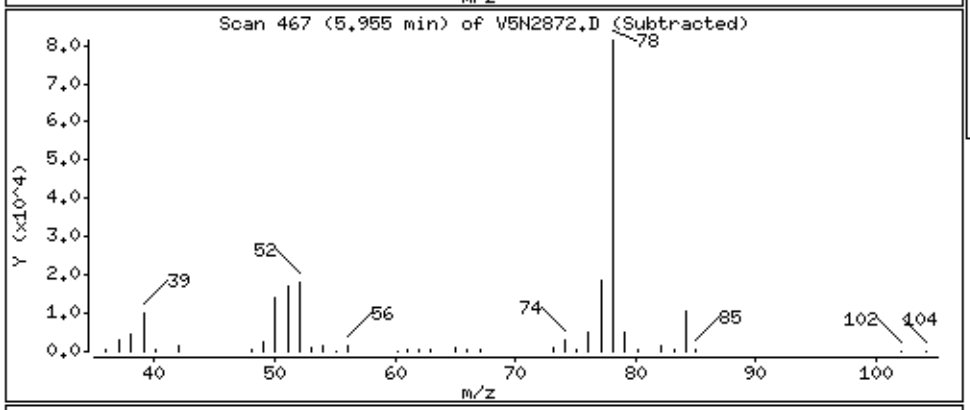
Column diameter: 0.25

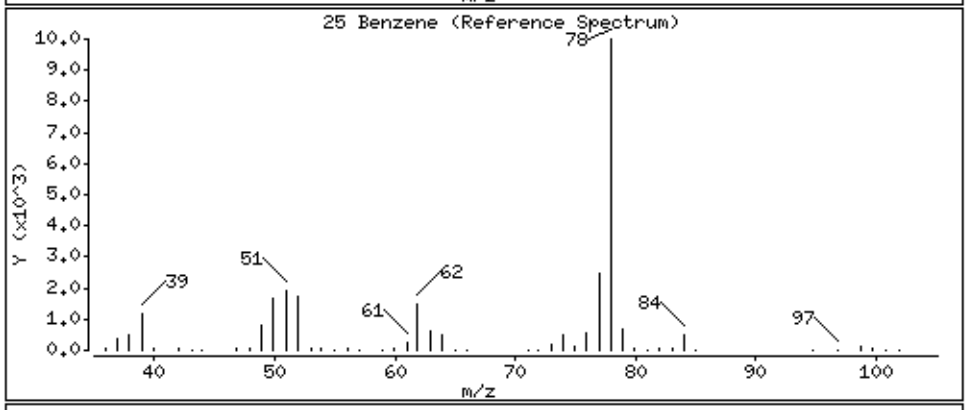
25 Benzene

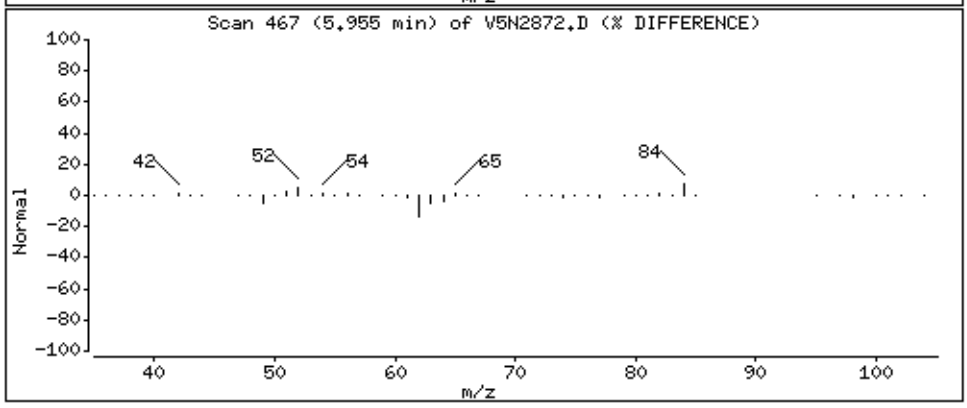
Concentration: 4.2 ug/L











Data File: \\avogadro\organics\V5.I\111110A.B\V5N2872.D

Date : 10-NOV-2011 19:52

Client ID: H30Z2MSD

Instrument: V5.i

Sample Info: 25ML,K2213-11BMSD,,62893

Purge Volume: 25.0

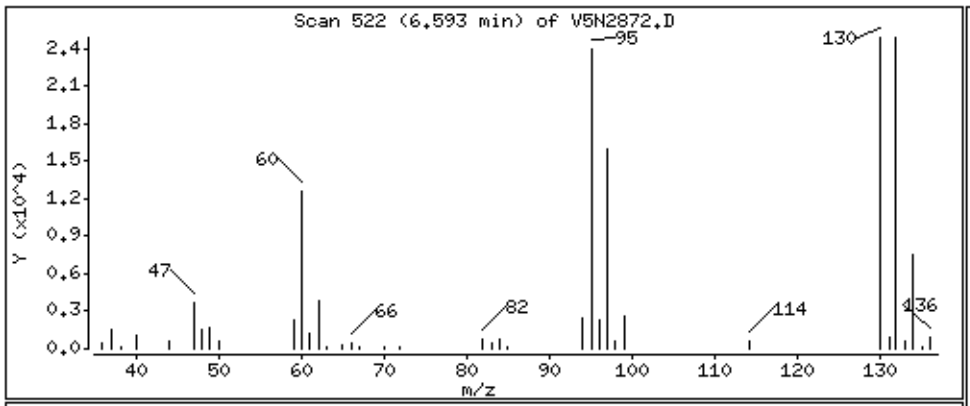
Operator: SRC: LIMS

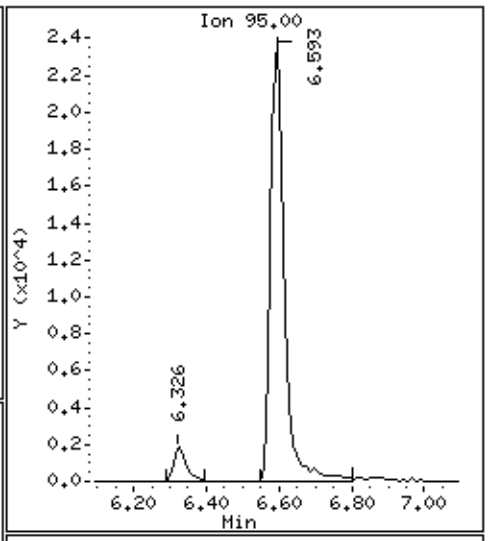
Column phase: DB-624

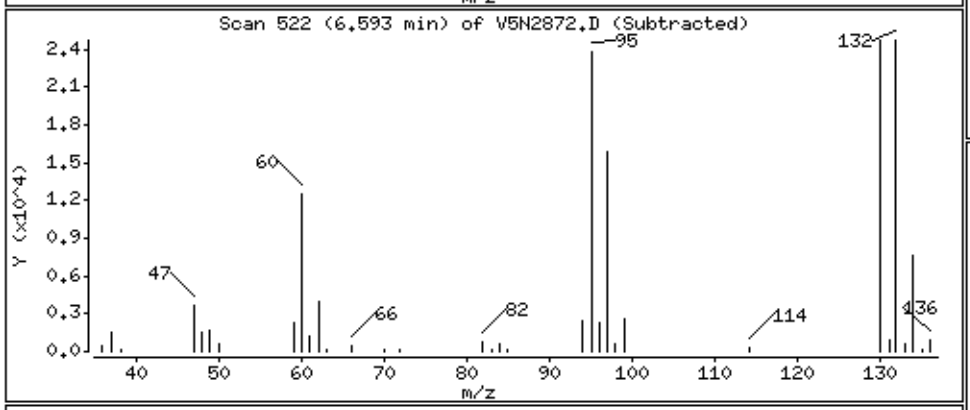
Column diameter: 0.25

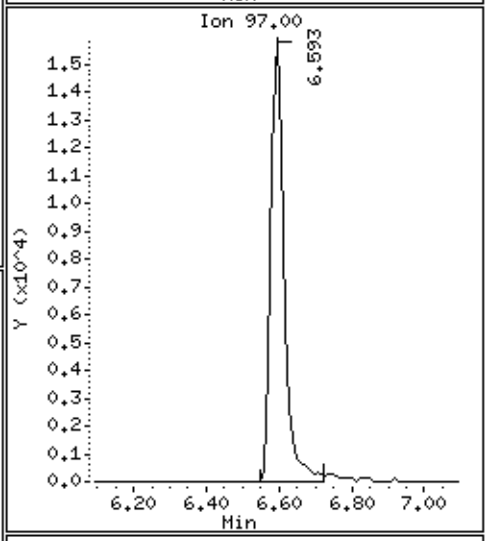
27 Trichloroethene

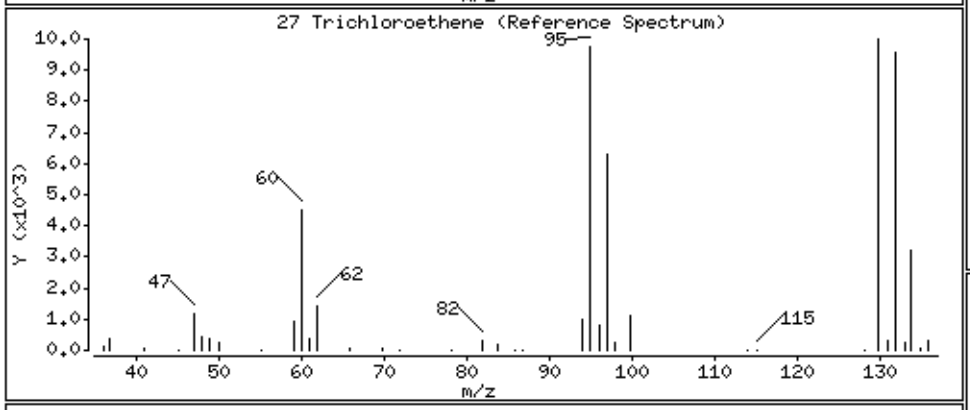
Concentration: 4.0 ug/L

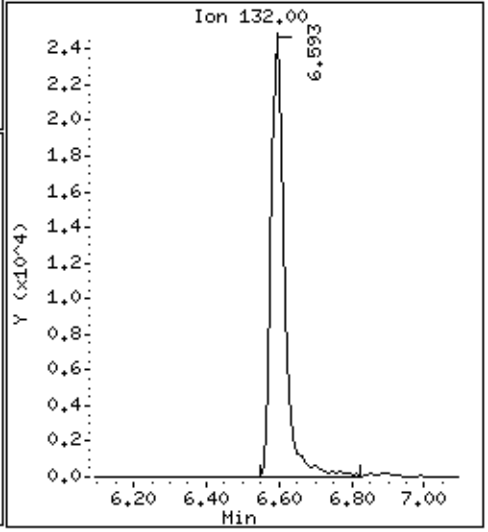


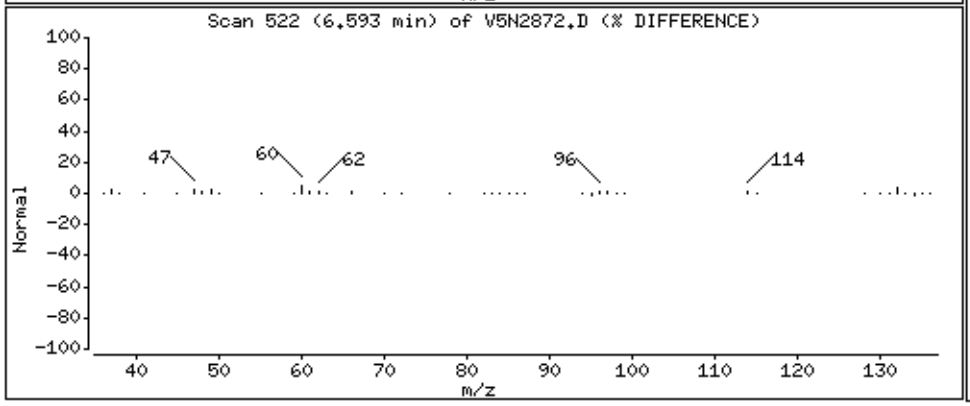












Data File: \\avogadro\organics\V5.I\111110A.B\V5N2872.D

Date : 10-NOV-2011 19:52

Client ID: H30Z2MSD

Instrument: V5.i

Sample Info: 25ML,K2213-11BMSD,,62893

Purge Volume: 25.0

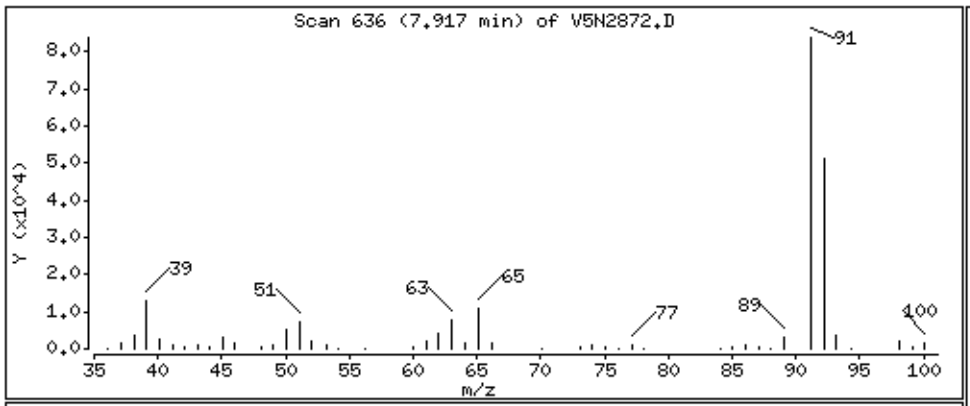
Operator: SRC: LIMS

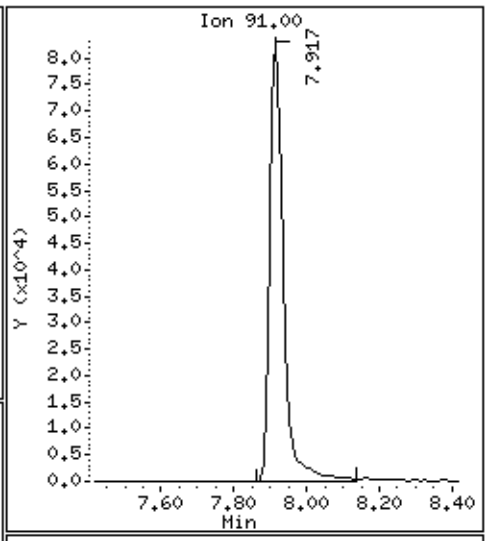
Column phase: DB-624

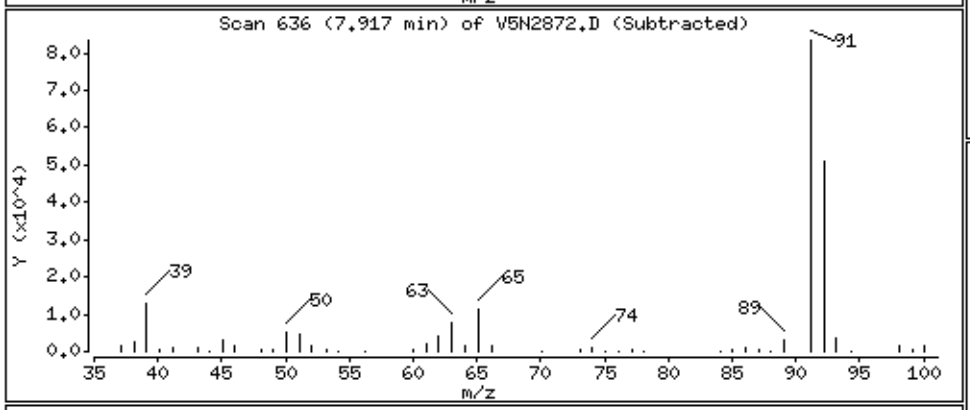
Column diameter: 0.25

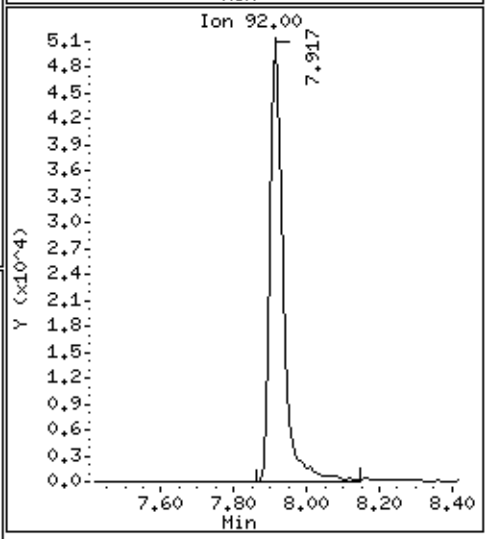
34 Toluene

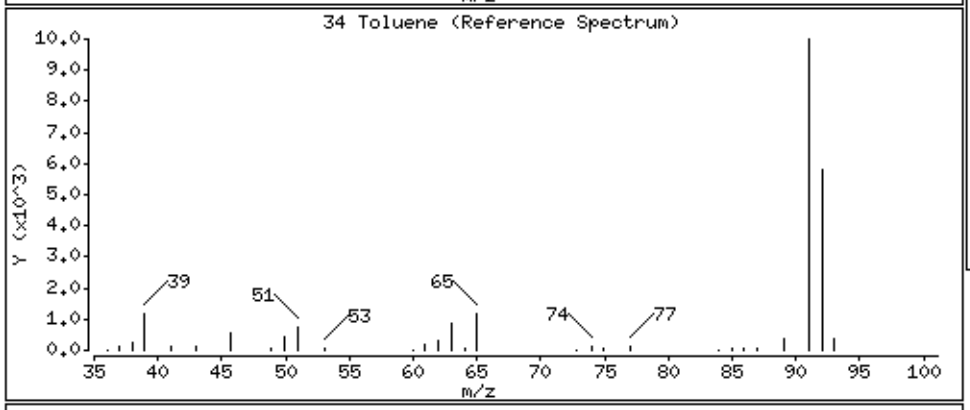
Concentration: 4.1 ug/L

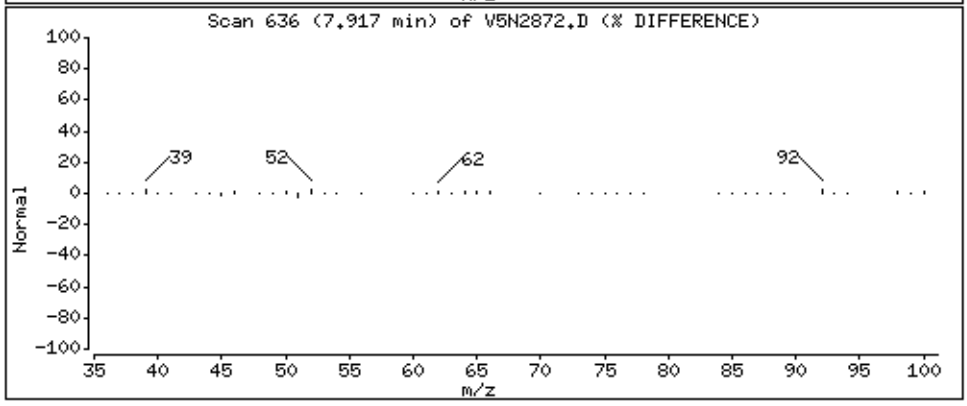












Data File: \\avogadro\organics\V5.I\111110A.B\V5N2872.D

Date : 10-NOV-2011 19:52

Client ID: H30Z2MSD

Instrument: V5.i

Sample Info: 25ML,K2213-11BMSD,,62893

Purge Volume: 25.0

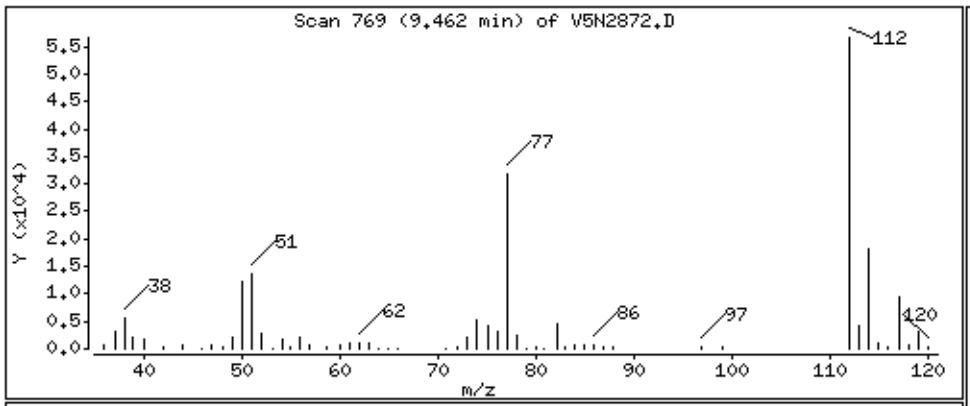
Operator: SRC: LIMS

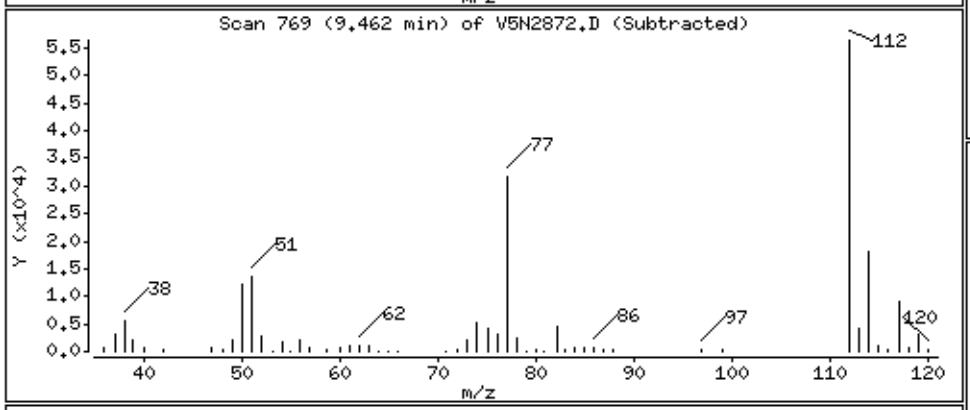
Column phase: DB-624

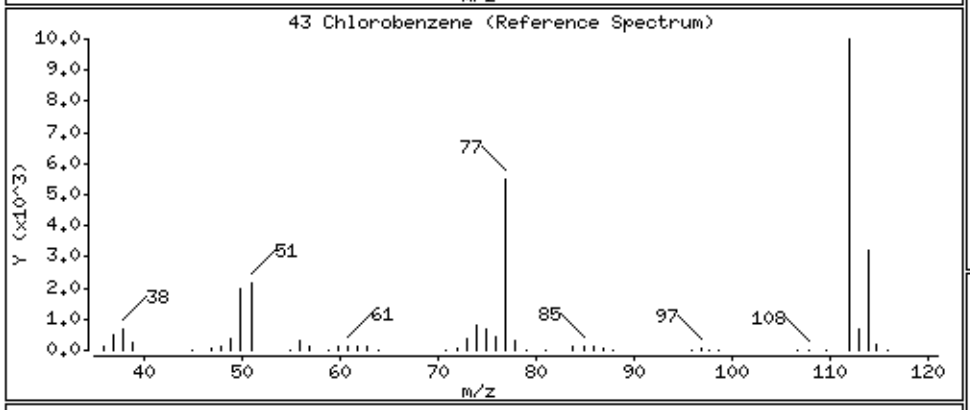
Column diameter: 0.25

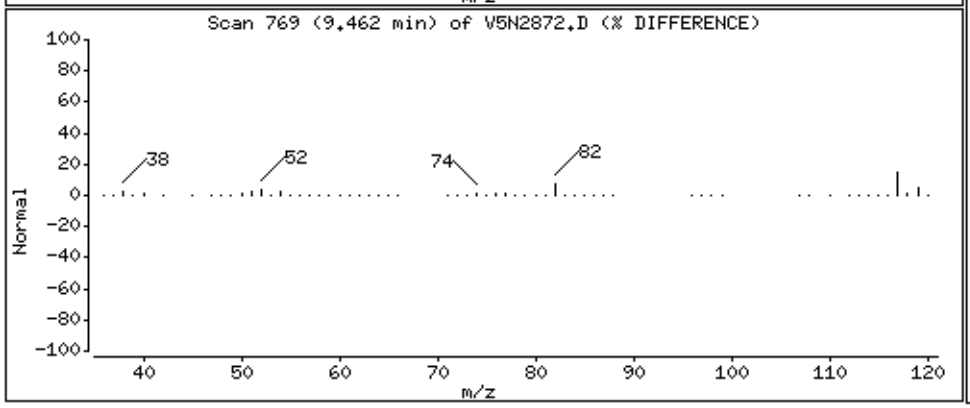
43 Chlorobenzene

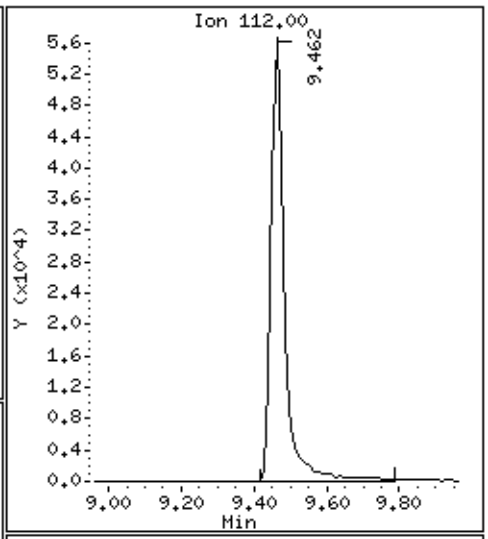
Concentration: 4.1 ug/L

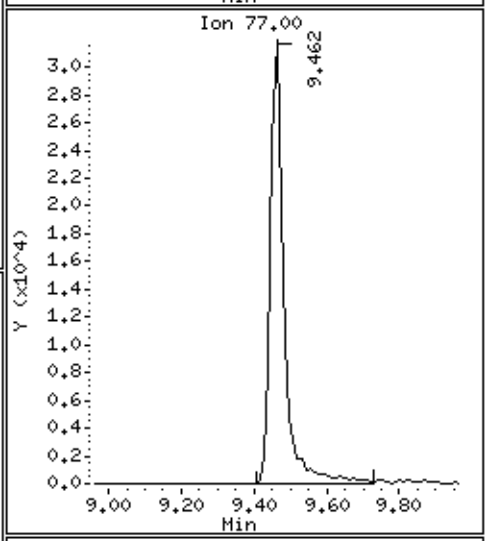


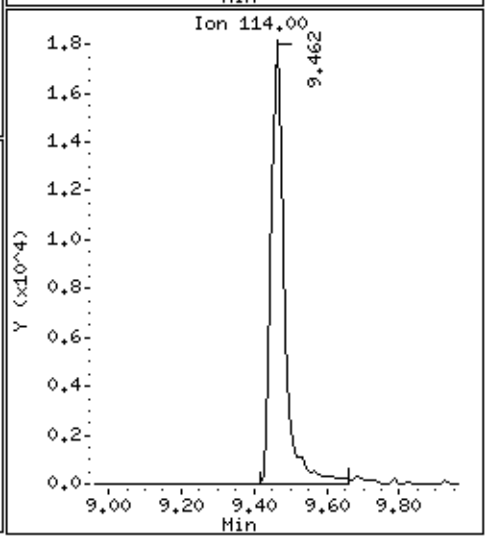












2G - FORM II SV-1

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.: H30X4

	EPA SAMPLE NO.	SDMC1 (PHL) #	SDMC2 (BCE) #	SDMC3 (2CP) #	SDMC4 (4MP) #	SDMC5 (NBZ) #	SDMC6 (2NP) #	SDMC7 (DCP) #	SDMC8 (4CA) #
01	SBLK2S	75	82	82	81	87	91	86	79
02	H30X4	75	82	88	78	78	83	79	16
03	H30Y7	77	81	90	87	88	95	92	24
04	SBLK4R	76	75	76	76	83	81	86	40
05	H30W9	107 *	92	96	98	86	85	90	59
06	H30X2	102	83	89	94	82	78	88	40
07	H30X6	97	81	87	92	86	85	93	3
08	H30X9	96	74	82	91	79	78	95	18
09	H30Y0	91	76	78	92	83	89	93	13
10	H30Y1	68	60	65	77	68	78	86	14
11	H30Z2	80	69	69	69	71	67	75	60
12	H30Z2MS	87	70	75	80	81	81	81	45
13	H30Z2MSD	87	75	71	80	73	73	85	72
14	H30Z3	87	71	78	82	80	81	81	47
15	H30Z4	88	73	68	82	82	80	85	59
16	H30Z5	91	81	82	90	93	96	89	76
17	H30Z7	105	90	92	109	90	95	97	13
18	H30Z8	92	78	75	87	91	89	93	66
19	H30X7	88	76	78	87	79	84	90	9

		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.: H30X4

	EPA SAMPLE NO.	SDMC9 (DMP) #	SDMC10 (ACY) #	SDMC11 (4NP) #	SDMC12 (FLR) #	SDMC13 (NMP) #	SDMC14 (ANC) #	SDMC15 (PYR) #	SDMC16 (BAP) #	TOT OUT
01	SBLK2S	80	85	82	77	84	86	100	81	0
02	H30X4	89	68	65	63	83	54	40 *	22 *	2
03	H30Y7	99	65	78	71	107 *	56	37 *	51	2
04	SBLK4R	80	80	88	80	75	73	79	80	0
05	H30W9	88	87	110	91	77	80	86	88	1
06	H30X2	82	78	84	78	49	72	69	29 *	1
07	H30X6	84	77	82	79	82	84	87	57	0
08	H30X9	91	66	107	64	89	46	31 *	24 *	2
09	H30Y0	93	70	103	67	88	45	30 *	21 *	2
10	H30Y1	79	63	101	57	87	48	32 *	22 *	2
11	H30Z2	74	71	94	74	79	73	86	83	0
12	H30Z2MS	72	74	93	76	67	66	76	72	0
13	H30Z2MSD	84	79	97	83	75	72	80	80	0
14	H30Z3	81	78	89	79	82	75	88	82	0
15	H30Z4	86	86	108	84	87	73	89	84	0
16	H30Z5	90	90	113	91	94	87	83	90	0
17	H30Z7	96	69	111	59	85	41 *	26 *	19 *	3
18	H30Z8	84	86	110	85	88	83	89	87	0
19	H30X7	90	62	104	67	90	48	32 *	20 *	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.: H30X4

Matrix Spike - EPA Sample No.: H30Z2

COMPOUND	SPIKE ADDED (µg/L)	SAMPLE CONCENTRATION (µg/L)	MS CONCENTRATION (µg/L)	MS %REC	#	QC. LIMITS REC.
Phenol	40.0000	0.0000	27.6644	69		12-110
2-Chlorophenol	40.0000	0.0000	28.9979	72		27-123
N-Nitroso-di-n-propylamine	40.0000	0.0000	28.7455	72		41-116
4-Chloro-3-methylphenol	40.0000	0.0000	36.2584	91		23-97
Acenaphthene	40.0000	0.0000	28.0461	70		46-118
4-Nitrophenol	40.0000	0.0000	41.2340	103	*	10-80
2,4-Dinitrotoluene	40.0000	0.0000	29.1552	73		24-96
Pentachlorophenol	40.0000	0.0000	30.6867	77		9-103
Pyrene	40.0000	0.0000	20.4543	51		26-127

COMPOUND	SPIKE ADDED (µg/L)	MSD CONCENTRATION (µg/L)	MSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Phenol	40.0000	28.6294	72		3		0-42	12-110
2-Chlorophenol	40.0000	28.1113	70		3		0-40	27-123
N-Nitroso-di-n-propylamine	40.0000	26.9677	67		6		0-38	41-116
4-Chloro-3-methylphenol	40.0000	36.6058	92		1		0-42	23-97
Acenaphthene	40.0000	28.6339	72		2		0-31	46-118
4-Nitrophenol	40.0000	44.3652	111	*	7		0-50	10-80
2,4-Dinitrotoluene	40.0000	31.6304	79		8		0-38	24-96
Pentachlorophenol	40.0000	31.0140	78		1		0-50	9-103
Pyrene	40.0000	22.2380	56		8		0-31	26-127

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 9 outside limits

Spike Recovery: 2 out of 18 outside limits

COMMENTS:

4C - FORM IV SV
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
SBLK2S

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

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	H30X4	K2213-01A	S2H5231.D	11/04/2011
02	H30Y7	K2213-02A	S2H5232.D	11/04/2011

COMMENTS:

4C - FORM IV SV
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
SBLK4R

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

Lab Code: MITKEM | Case No.: 41926 | Mod. Ref No.: | SDG No.: H30X4

Lab File ID: S4E8649.D | Lab Sample ID: MB-62806

Instrument ID: S4 | Date Extracted: 11/08/2011

Matrix: (SOIL/SED/WATER) WATER | Date Analyzed: 11/10/2011

Level: (LOW/MED) LOW | Time Analyzed: 23:02

Extraction: (Type) CONT | GPC Cleanup: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	H30W9	K2213-03A	S4E8650.D	11/10/2011
02	H30X2	K2213-04A	S4E8651.D	11/10/2011
03	H30X6	K2213-06A	S4E8652.D	11/11/2011
04	H30X9	K2213-08A	S4E8654.D	11/11/2011
05	H30Y0	K2213-09A	S4E8655.D	11/11/2011
06	H30Y1	K2213-10A	S4E8656.D	11/11/2011
07	H30Z2	K2213-11A	S4E8657.D	11/11/2011
08	H30Z2MS	K2213-11AMS	S4E8658.D	11/11/2011
09	H30Z2MSD	K2213-11AMSD	S4E8659.D	11/11/2011
10	H30Z3	K2213-12A	S4E8660.D	11/11/2011
11	H30Z4	K2213-13A	S4E8661.D	11/11/2011
12	H30Z5	K2213-14A	S4E8662.D	11/11/2011
13	H30Z7	K2213-15A	S4E8663.D	11/11/2011
14	H30Z8	K2213-16A	S4E8664.D	11/11/2011
15	H30X7	K2213-07A	S4E8666.D	11/11/2011

COMMENTS:

5B - FORM V SV
SEMIVOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPINE (DFTPP)

EPA SAMPLE NO.
DFTPP2W

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Lab File ID: S2H5052.D DFTPP Injection Date: 10/25/2011

Instrument ID: S2 DFTPP Injection Time: 9:32

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	61.0
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	83.7
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	10.0 - 80.0% of mass 198	47.1
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.8
275	10.0 - 60.0% of mass 198	15.3
365	Greater than 1.0% of mass 198	1.5
441	Present, but less than mass 443	9.2
442	50.0 - 100% of mass 198	52.5
443	15.0 - 24.0% of mass 442	10.1 (19.2)2

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD0202W	SSTD0202W	S2H5053C.D	10/25/2011	11:35
02	SSTD0052W	SSTD0052W	S2H5054.D	10/25/2011	11:58
03	SSTD0802W	SSTD0802W	S2H5055.D	10/25/2011	12:21
04	SSTD0102W	SSTD0102W	S2H5056.D	10/25/2011	12:44
05	SSTD0402W	SSTD0402W	S2H5057.D	10/25/2011	13:07

5B - FORM V SV
SEMIVOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPINE (DFTPP)

EPA SAMPLE NO.
DFTPP2S

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

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	SBLK2S	MB-62685	S2H5227.D	11/04/2011	15:14
03	H30X4	K2213-01A	S2H5231.D	11/04/2011	16:39
04	H30Y7	K2213-02A	S2H5232.D	11/04/2011	17:01
05	SSTD0202T	SSTD0202T	S2H5234.D	11/04/2011	17:43

5B - FORM V SV
SEMIVOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPINE (DFTPP)

EPA SAMPLE NO.
DFTPP4Q

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Lab File ID: S4E8634.D DFTPP Injection Date: 11/10/2011

Instrument ID: S4 DFTPP Injection Time: 16:03

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	31.1
68	Less than 2.0% of mass 69	0.9 (1.5)1
69	Mass 69 relative abundance	59.0
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	10.0 - 80.0% of mass 198	50.9
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.4
275	10.0 - 60.0% of mass 198	31.2
365	Greater than 1.0% of mass 198	6.4
441	Present, but less than mass 443	13.6
442	50.0 - 100% of mass 198	86.5
443	15.0 - 24.0% of mass 442	15.5 (17.9)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	SSTD0204Q	SSTD0204Q	S4E8635.D	11/10/2011	16:28
02	SSTD0054Q	SSTD0054Q	S4E8636.D	11/10/2011	16:57
03	SSTD0804Q	SSTD0804Q	S4E8637.D	11/10/2011	17:21
04	SSTD0104Q	SSTD0104Q	S4E8638.D	11/10/2011	17:45
05	SSTD0404Q	SSTD0404Q	S4E8639.D	11/10/2011	18:10
06	SSTD0204R	SSTD0204R	S4E8648A.D	11/10/2011	22:13
07	SBLK4R	MB-62806	S4E8649.D	11/10/2011	23:02
08	H30W9	K2213-03A	S4E8650.D	11/10/2011	23:26
09	H30X2	K2213-04A	S4E8651.D	11/10/2011	23:50
10	H30X6	K2213-06A	S4E8652.D	11/11/2011	0:15
11	H30X9	K2213-08A	S4E8654.D	11/11/2011	1:03
12	H30Y0	K2213-09A	S4E8655.D	11/11/2011	1:28
13	H30Y1	K2213-10A	S4E8656.D	11/11/2011	1:54
14	H30Z2	K2213-11A	S4E8657.D	11/11/2011	2:16
15	H30Z2MS	K2213-11AMS	S4E8658.D	11/11/2011	2:40
16	H30Z2MSD	K2213-11AMSD	S4E8659.D	11/11/2011	3:04
17	H30Z3	K2213-12A	S4E8660.D	11/11/2011	3:28
18	H30Z4	K2213-13A	S4E8661.D	11/11/2011	3:52
19	H30Z5	K2213-14A	S4E8662.D	11/11/2011	4:16

5B - FORM V SV
SEMIVOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPINE (DFTPP)

EPA SAMPLE NO.
DFTPP4Q

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Lab File ID: S4E8634.D DFTPP Injection Date: 11/10/2011

Instrument ID: S4 DFTPP Injection Time: 16:03

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	31.1
68	Less than 2.0% of mass 69	0.9 (1.5)1
69	Mass 69 relative abundance	59.0
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	10.0 - 80.0% of mass 198	50.9
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.4
275	10.0 - 60.0% of mass 198	31.2
365	Greater than 1.0% of mass 198	6.4
441	Present, but less than mass 443	13.6
442	50.0 - 100% of mass 198	86.5
443	15.0 - 24.0% of mass 442	15.5 (17.9)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	H30Z7	K2213-15A	S4E8663.D	11/11/2011	4:39
21	H30Z8	K2213-16A	S4E8664.D	11/11/2011	5:03
22	SSTD0204S	SSTD0204S	S4E8665.D	11/11/2011	5:28
23	H30X7	K2213-07A	S4E8666.D	11/11/2011	9:00
24	SSTD0204T	SSTD0204T	S4E8670.D	11/11/2011	10:37

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.: H30X4

GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 11/10/2011 11/10/2011

EPA Sample No.(SSTD020##) SSTD0204R Date Analyzed: 11/10/2011

Lab File ID (Standard): S4E8648A.D Time Analyzed: 22:13

Instrument ID: S4

		IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
	12 HOUR STD	26662		3.372		88755		4.427		75762		6.083	
	UPPER LIMIT	53324		3.872		177510		4.927		151524		6.583	
	LOWER LIMIT	13331		2.872		44378		3.927		37881		5.583	
	EPA SAMPLE NO.												
01	SBLK4R	31687		3.372		112431		4.427		102836		6.083	
02	H30W9	28987		3.372		113942		4.427		100617		6.083	
03	H30X2	39011		3.372		147054		4.427		135328		6.083	
04	H30X6	50057		3.372		168982		4.427		147998		6.084	
05	H30X9	41243		3.372		157420		4.428		138800		6.084	
06	H30Y0	37443		3.372		143000		4.427		124951		6.083	
07	H30Y1	29935		3.372		98403		4.427		100148		6.083	
08	H30Z2	32270		3.372		114058		4.427		94615		6.083	
09	H30Z2MS	28752		3.372		105974		4.428		101858		6.084	
10	H30Z2MSD	31713		3.372		116964		4.428		105153		6.084	
11	H30Z3	46243		3.372		175874		4.427		146676		6.083	
12	H30Z4	35138		3.372		123038		4.427		99899		6.083	
13	H30Z5	32032		3.372		107686		4.427		94956		6.083	
14	H30Z7	37922		3.372		149598		4.428		131962		6.084	
15	H30Z8	28348		3.372		107434		4.428		94007		6.084	

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.: H30X4

EPA Sample No.(SSTD020##) SSTD0204R Date Analyzed: 11/10/2011

Lab File ID (Standard): S4E8648A.D Time Analyzed: 22:13

Instrument ID: S4 GC Column: Rxi-5sil MS ID: 0.25 (mm)

		IS4 (PHN) AREA	#	RT	#	IS5 (CRY) AREA	#	RT	#	IS6 (PRY) AREA	#	RT	#
	12 HOUR STD	215241		7.532		467538		10.12		501844		11.818	
	UPPER LIMIT	430482		8.032		935076		10.62		1003688		12.318	
	LOWER LIMIT	107621		7.032		233769		9.62		250922		11.318	
	EPA SAMPLE NO.												
01	SBLK4R	295642		7.533		537422		10.120		572421		11.818	
02	H30W9	287706		7.532		523348		10.120		506384		11.817	
03	H30X2	370702		7.532		582942		10.130		535763		11.828	
04	H30X6	333809		7.533		494983		10.130		454654		11.828	
05	H30X9	372114		7.533		554152		10.131		484293		11.828	
06	H30Y0	341328		7.533		548515		10.130		514489		11.828	
07	H30Y1	257483		7.532		505053		10.130		525605		11.828	
08	H30Z2	241594		7.533		419598		10.130		444827		11.818	
09	H30Z2MS	279573		7.533		502943		10.120		513983		11.818	
10	H30Z2MSD	291226		7.533		493104		10.131		476547		11.818	
11	H30Z3	366166		7.532		549876		10.120		573613		11.817	
12	H30Z4	282498		7.532		481759		10.120		506329		11.817	
13	H30Z5	258903		7.532		490473		10.120		537347		11.817	
14	H30Z7	349141		7.533		550038		10.131		514809		11.828	
15	H30Z8	264607		7.533		486233		10.131		530073		11.818	

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.: H30X4

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	
	EPA SAMPLE NO.												
01	SBLK2S	92750		3.819		233872		4.881		185984		6.350	
02	H30X4	135992		3.809		373110		4.881		241143		6.351	
03	H30Y7	117939		3.810		308106		4.882		201572		6.351	

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.: H30X4

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	
	EPA SAMPLE NO.												
01	SBLK2S	279122		7.583		181671		9.835		110306		11.197	
02	H30X4	382710		7.573		317452		9.846		247361		11.208	
03	H30Y7	323631		7.574		225975		9.836		185583		11.209	

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.: H30X4

GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 11/10/2011 11/10/2011

EPA Sample No.(SSTD020##) SSTD0204S Date Analyzed: 11/11/2011

Lab File ID (Standard): S4E8665.D Time Analyzed: 5:28

Instrument ID: S4

		IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
	12 HOUR STD	32024		3.372		116754		4.428		108531		6.084	
	UPPER LIMIT	64048		3.872		233508		4.928		217062		6.584	
	LOWER LIMIT	16012		2.872		58377		3.928		54266		5.584	
	EPA SAMPLE NO.												
01	H30X7	43719		3.361		148090		4.428		113610		6.084	

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.: H30X4

EPA Sample No.(SSTD020##) SSTD0204S Date Analyzed: 11/11/2011

Lab File ID (Standard): S4E8665.D Time Analyzed: 5:28

Instrument ID: S4 GC Column: Rxi-5sil MS ID: 0.25 (mm)

		IS4 (PHN) AREA	#	RT	#	IS5 (CRY) AREA	#	RT	#	IS6 (PRY) AREA	#	RT	#
	12 HOUR STD	279095		7.533		478843		10.131		461795		11.818	
	UPPER LIMIT	558190		8.033		957686		10.631		923590		12.318	
	LOWER LIMIT	139548		7.033		239422		9.631		230898		11.318	
	EPA SAMPLE NO.												
01	H30X7	290368		7.533		430469		10.130		410025		11.828	

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12
AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30W9

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-03A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8650.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/10/2011

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

EPA SAMPLE NO.

H30W9

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-03A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8650.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/10/2011

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	1.2	J
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

EPA SAMPLE NO.

H30W9

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-03A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8650.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/10/2011

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	4.324	5.7	J
02		Unknown-02	4.676	3.0	J
03		Unknown-03	4.914	13	J
04		Unknown-04	5.048	5.5	J
05		Unknown-05	6.032	11	J
06		Unknown-06	7.688	2.8	J
07		Unknown-07	8.040	4.7	J
08		Unknown-08	9.551	2.2	J
09	112-84-5	13-Docosenamide, (Z)-	10.958	13	BNJ
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8650.D
Report Date: 11-Nov-2011 14:03

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8650.D
Lab Smp Id: K2213-03A Client Smp ID: H30W9
Inj Date : 10-NOV-2011 23:26
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-03A,,62806,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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	3.050	3.050	(0.905)	66492	85.2988	43(R)
$	4 bis(2-Chloroethyl)ether-d8	67	3.112	3.112	(0.923)	42463	73.2358	37(Q)
$	6 2-Chlorophenol-d4	132	3.206	3.206	(0.951)	70571	77.1470	39
*	8 1,4-Dichlorobenzene-d4	152	3.371	3.371	(1.000)	28987	40.0000	(Q)
$	11 4-Methylphenol-d8	113	3.609	3.609	(1.071)	64921	78.6435	39
$	16 Nitrobenzene-d5	128	3.796	3.796	(0.857)	32831	68.8340	34(Q)
$	19 2-Nitrophenol-d4	143	4.075	4.075	(0.921)	41572	68.3816	34
$	23 2,4-Dichlorophenol-d3	165	4.282	4.282	(0.967)	81974	71.9598	36
*	25 Naphthalene-d8	136	4.427	4.427	(1.000)	113942	40.0000	
$	27 4-Chloroaniline-d4	131	4.468	4.468	(1.009)	53441	47.5484	24(Q)
$	40 Dimethylphthalate-d6	166	5.772	5.772	(0.949)	279776	70.3221	35
$	43 Acenaphthylene-d8	160	5.938	5.938	(0.976)	305379	69.3221	35
*	46 Acenaphthene-d10	164	6.083	6.083	(1.000)	100617	40.0000	
$	49 4-Nitrophenol-d4	143	6.166	6.166	(1.014)	66116	88.2723	44
	53 Diethylphthalate	149	6.476	6.487	(1.065)	9496	2.32510	1.2(a)
$	54 Fluorene-d10	176	6.590	6.590	(1.083)	259121	73.0516	37
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.642	6.642	(0.882)	70815	61.3624	31
*	65 Phenanthrene-d10	188	7.532	7.532	(1.000)	287706	40.0000	
$	67 Anthracene-d10	188	7.584	7.584	(1.007)	503860	63.7666	32
$	72 Pyrene-d10	212	8.929	8.929	(0.882)	699920	68.6155	34
*	77 Chrysene-d12	240	10.119	10.120	(1.000)	523348	40.0000	(Q)

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8650.D
Report Date: 11-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	11.703	11.703	(0.990)	791462	70.5350	35
* 85 Perylene-d12	264	11.817	11.817	(1.000)	506384	40.0000	

QC Flag Legend

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

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8650.D
Report Date: 11-Nov-2011 14:03

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8650.D
Lab Smp Id: K2213-03A Client Smp ID: H30W9
Inj Date : 10-NOV-2011 23:26
Operator : MMS   SRC: LIMS Inst ID: S4.i
Smp Info : K2213-03A,,62806,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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

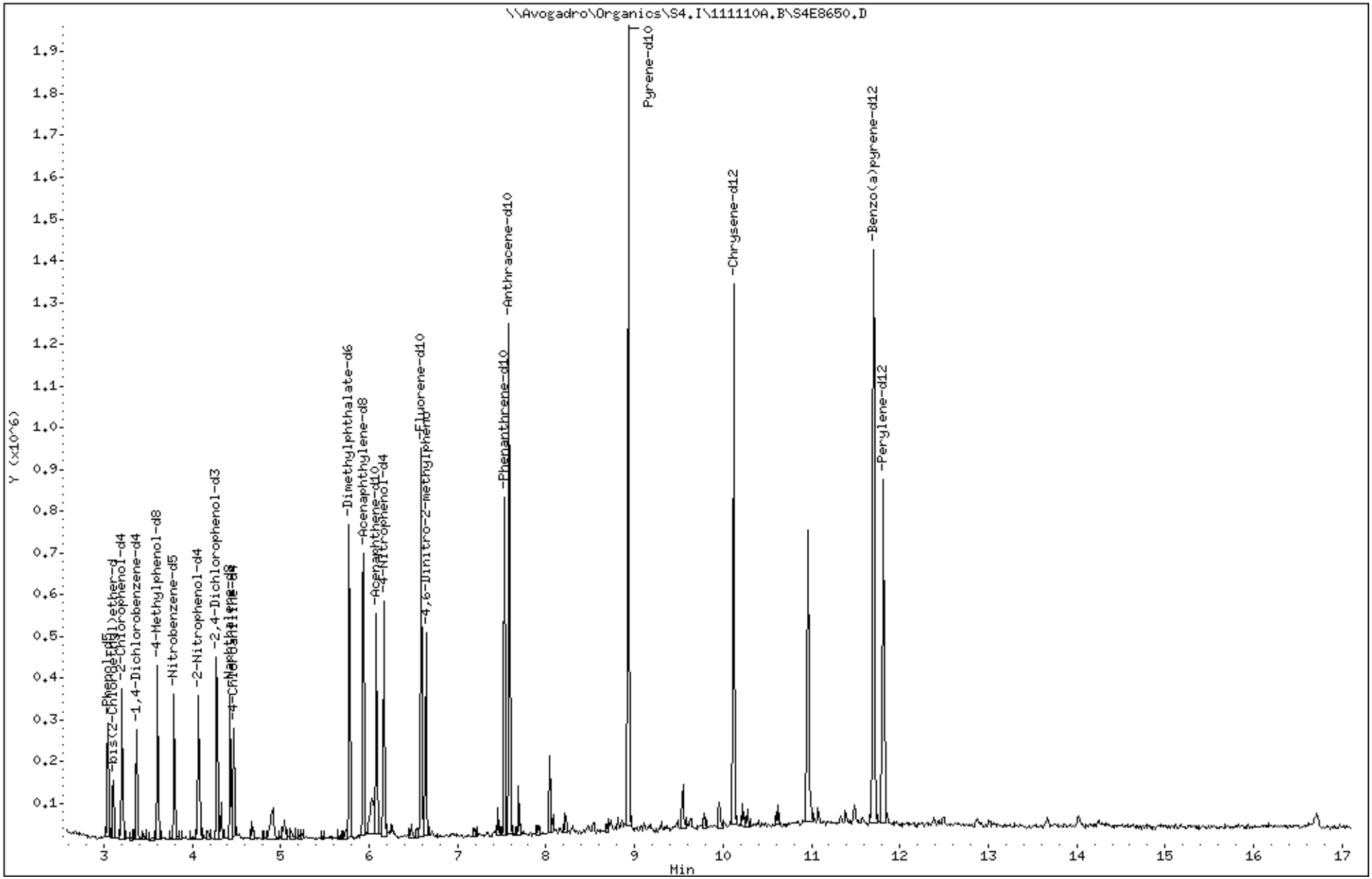
ISTD	RT	AREA	AMOUNT
* 25 Naphthalene-d8	4.427	349192	40.000
* 46 Acenaphthene-d10	6.083	566510	40.000
* 65 Phenanthrene-d10	7.532	772946	40.000
* 77 Chrysene-d12	10.120	1394589	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.324	99158	11.3585639	5.7	0		0	25
Unknown				CAS #:			
4.676	53094	6.08194456	3.0	0		0	25
Unknown				CAS #:			
4.914	229384	26.2758956	13	0		0	25

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8650.D
Report Date: 11-Nov-2011 14:03

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
5.048	95544	10.9445552	5.5	0		0	25
Unknown				CAS #:			
6.032	303125	21.4029513	11	0		0	46
Unknown				CAS #:			
7.688	107509	5.56361027	2.8	0		0	65
Unknown				CAS #:			
8.040	183548	9.49859442	4.7	0		0	65
Unknown				CAS #:			
9.551	151769	4.35307133	2.2	0		0	77
13-Docosenamide, (Z)-				CAS #: 112-84-5			
10.958	874535	25.0836576	13	91	NIST2002.L	135943	77

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8650.D
Date : 10-NOV-2011 23:26
Client ID: H30W9
Instrument: S4.i
Sample Info: K2213-03A,,62806,,
Volume Injected (uL): 2.0
Operator: MMS SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8650.D

Date : 10-NOV-2011 23:26

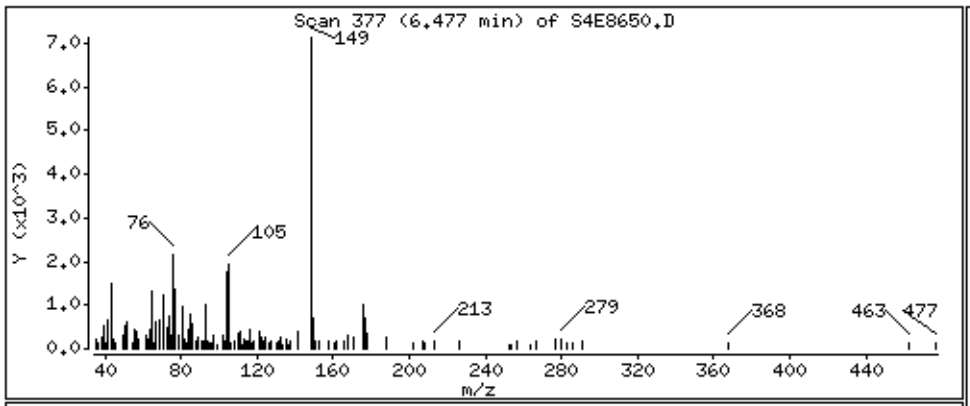
Client ID: H30W9 Instrument: S4.i

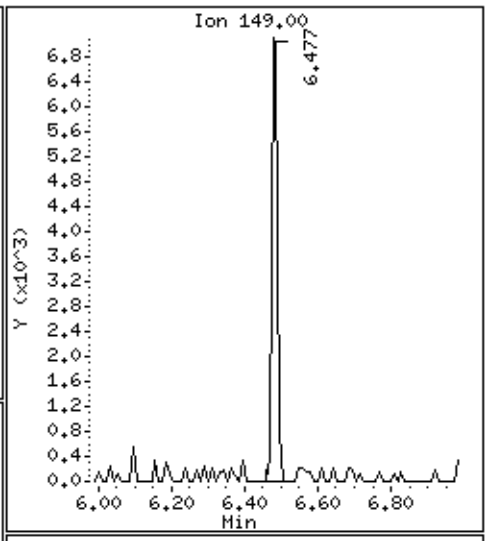
Sample Info: K2213-03A,,62806,,

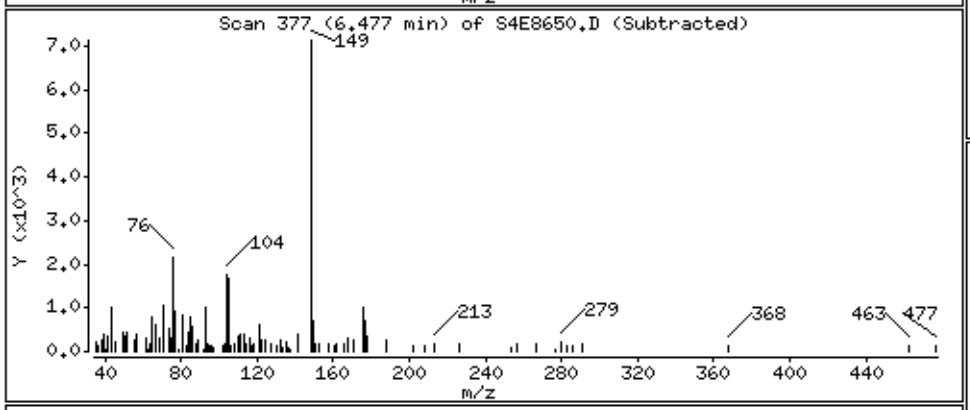
Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

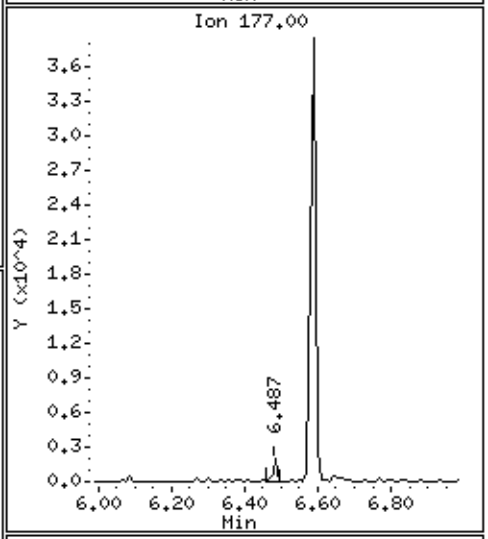
Column phase: RXI-5SILMS Column diameter: 0.25

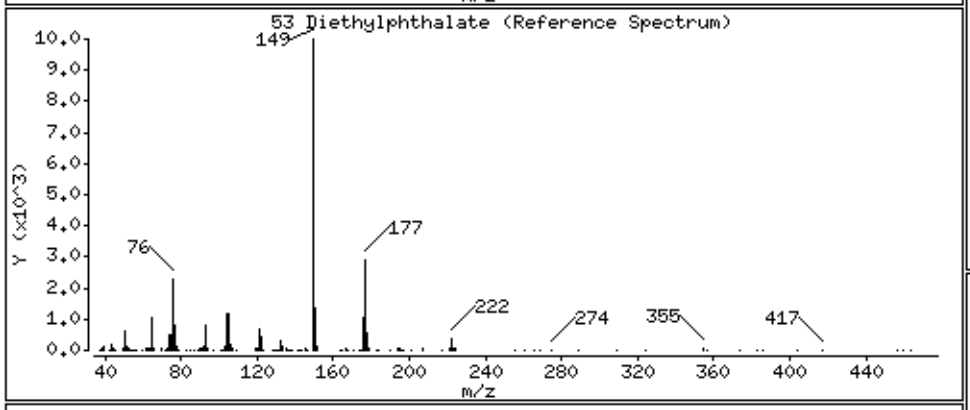
53 Diethylphthalate Concentration: 1.2 ug/L

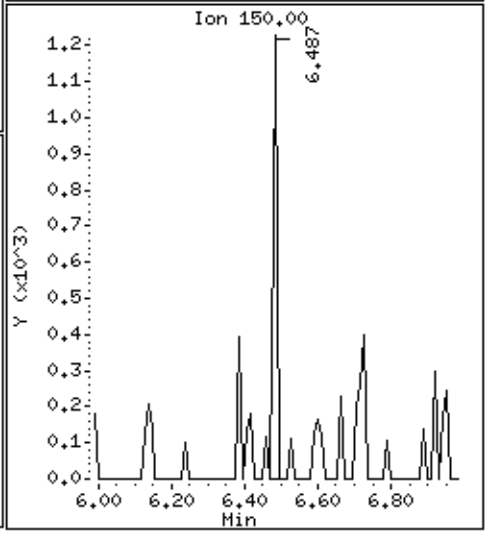


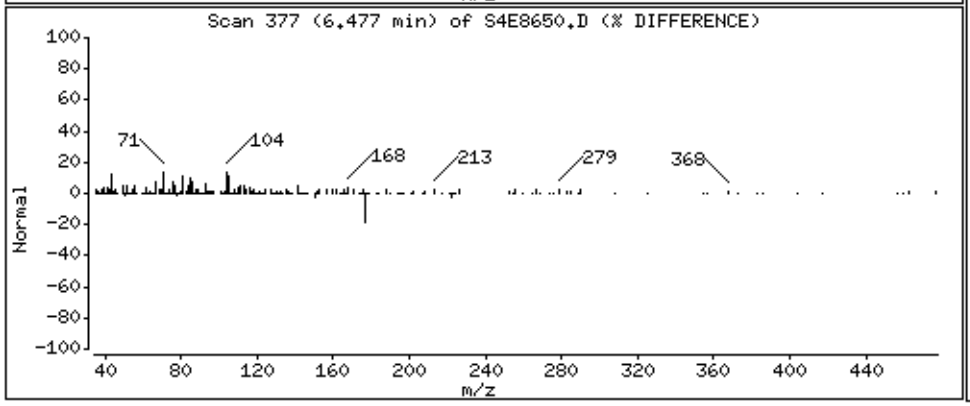












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Date : 10-NOV-2011 23:26

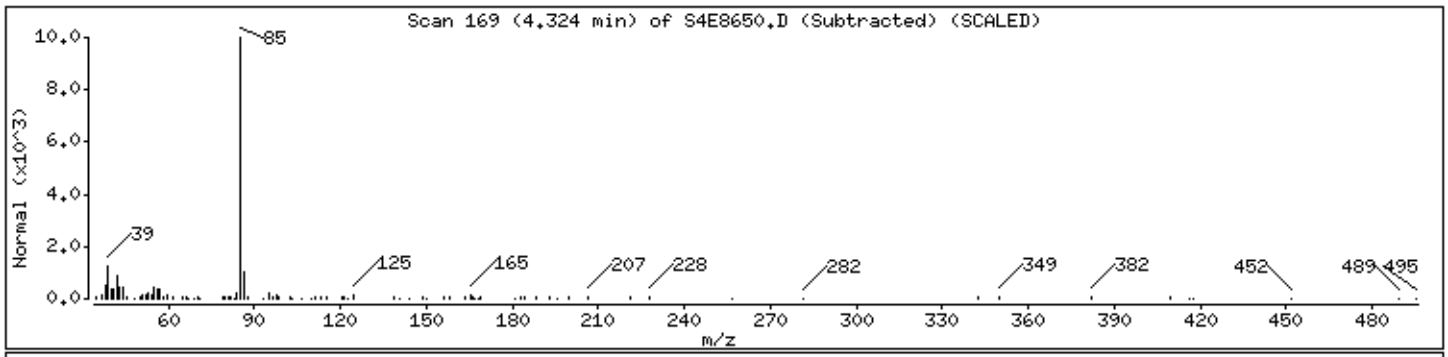
Client ID: H30W9 Instrument: S4.i

Sample Info: K2213-03A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 10-NOV-2011 23:26

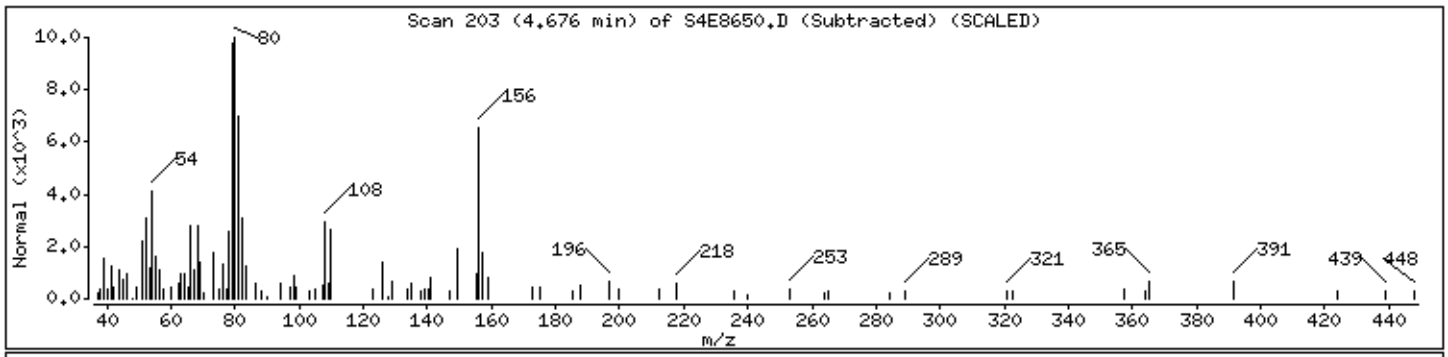
Client ID: H30W9 Instrument: S4.i

Sample Info: K2213-03A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 10-NOV-2011 23:26

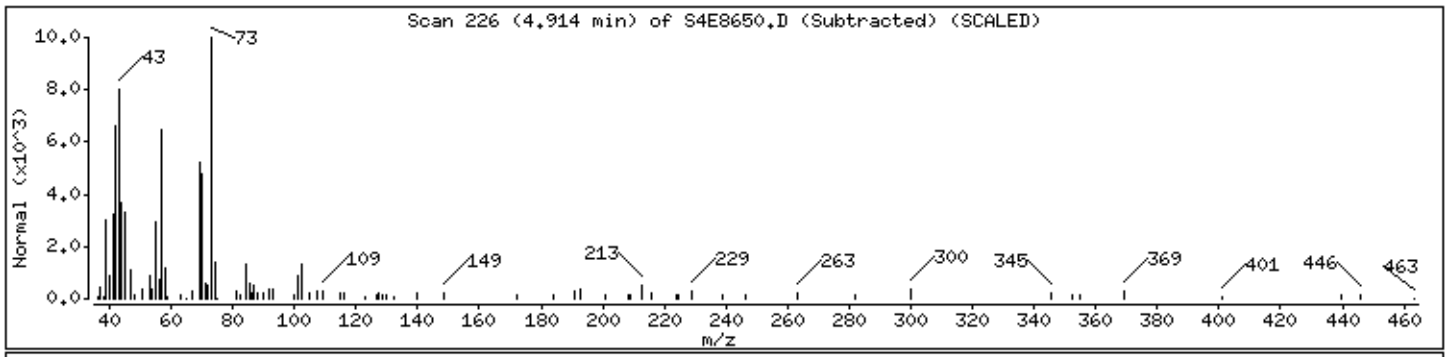
Client ID: H30W9 Instrument: S4.i

Sample Info: K2213-03A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 10-NOV-2011 23:26

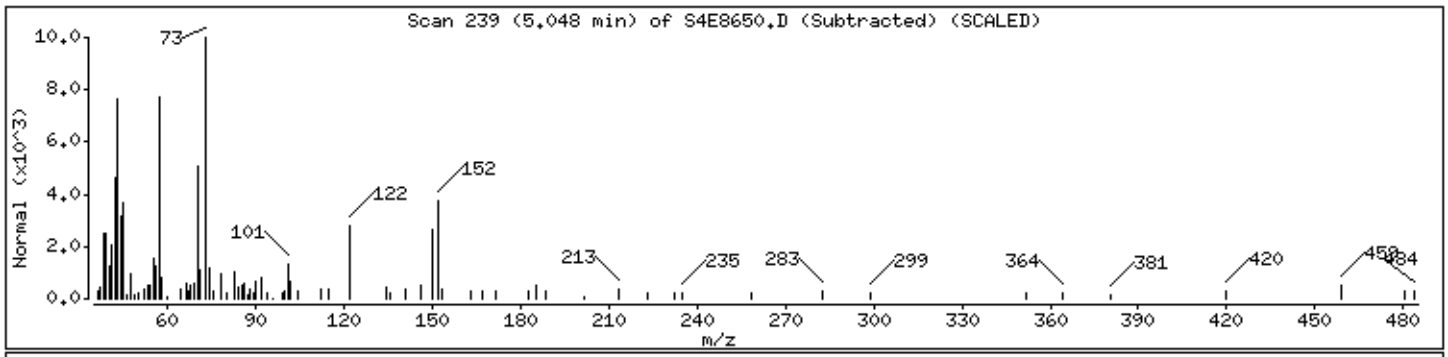
Client ID: H30W9 Instrument: S4.i

Sample Info: K2213-03A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 10-NOV-2011 23:26

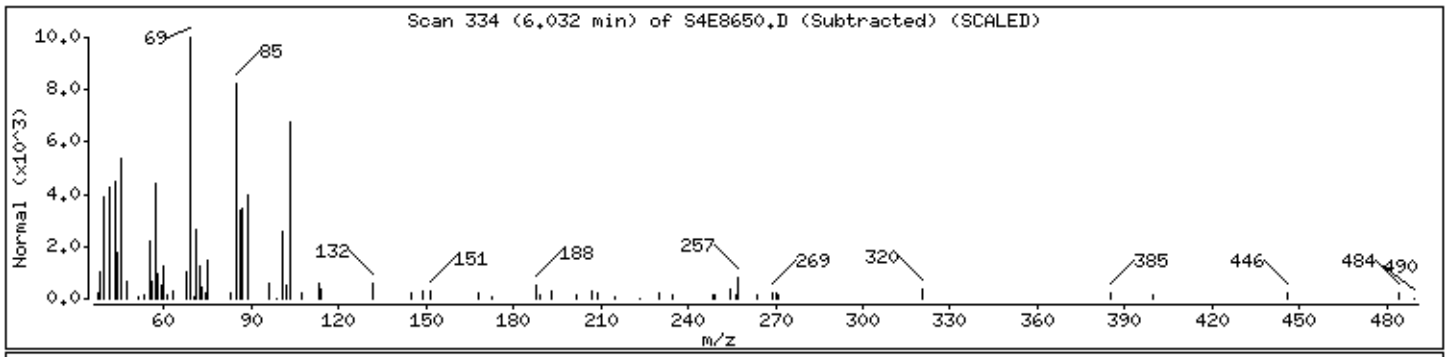
Client ID: H30W9 Instrument: S4.i

Sample Info: K2213-03A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8650.D

Date : 10-NOV-2011 23:26

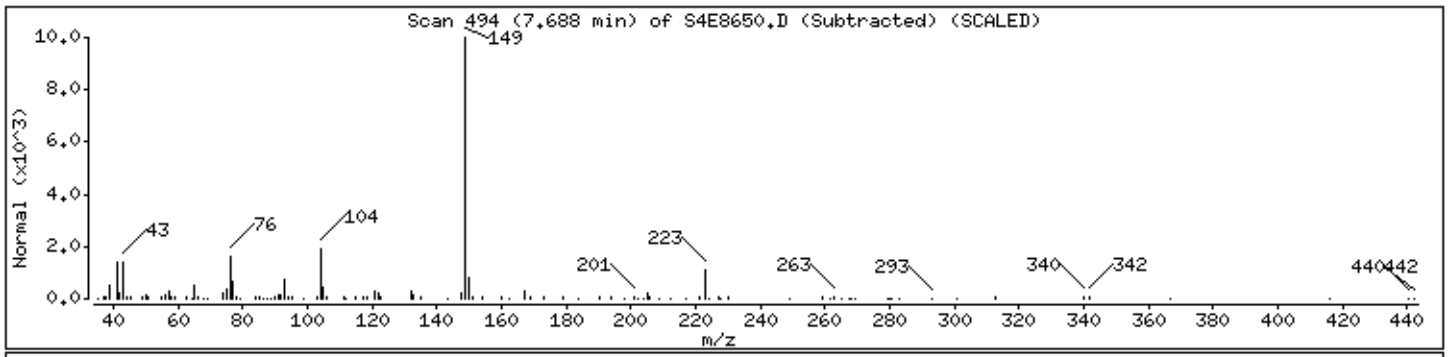
Client ID: H30W9 Instrument: S4.i

Sample Info: K2213-03A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8650.D

Date : 10-NOV-2011 23:26

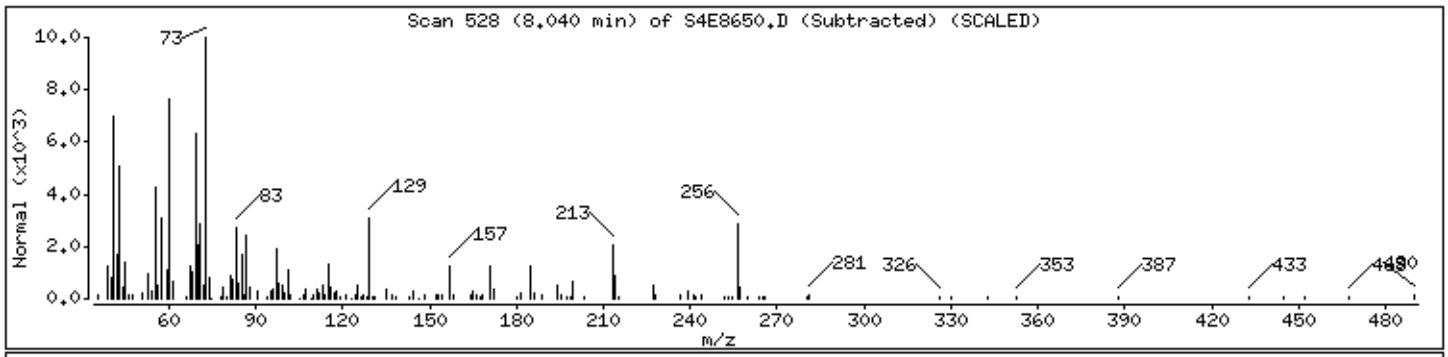
Client ID: H30W9 Instrument: S4.i

Sample Info: K2213-03A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 10-NOV-2011 23:26

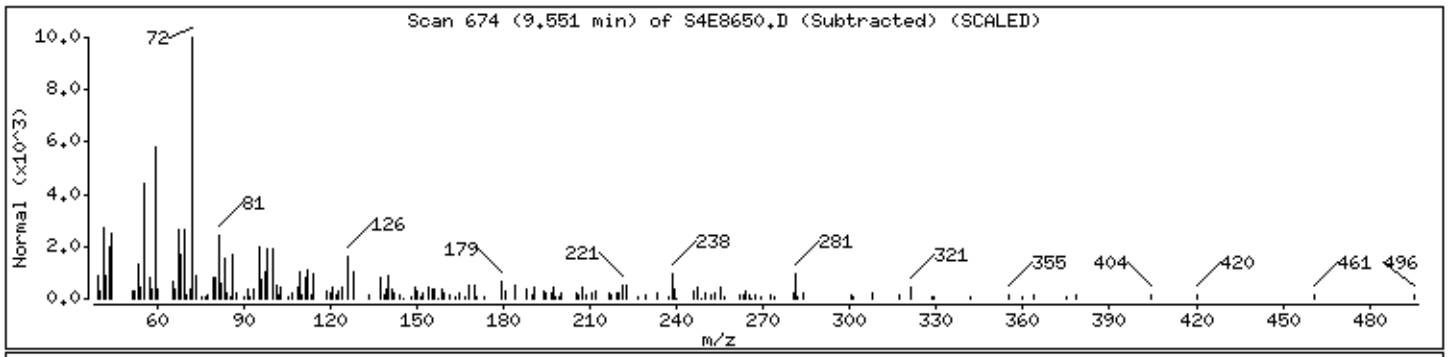
Client ID: H30W9 Instrument: S4.i

Sample Info: K2213-03A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8650.D

Date : 10-NOV-2011 23:26

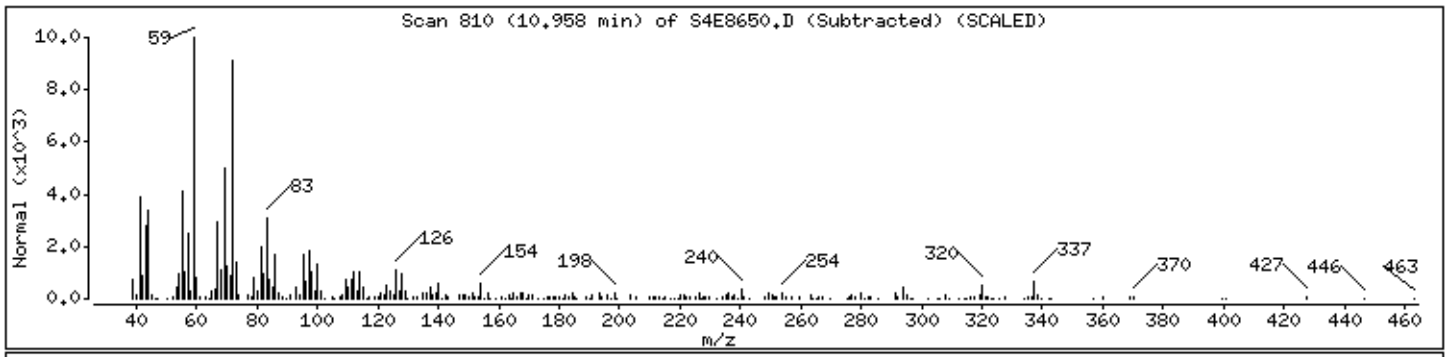
Client ID: H30W9 Instrument: S4.i

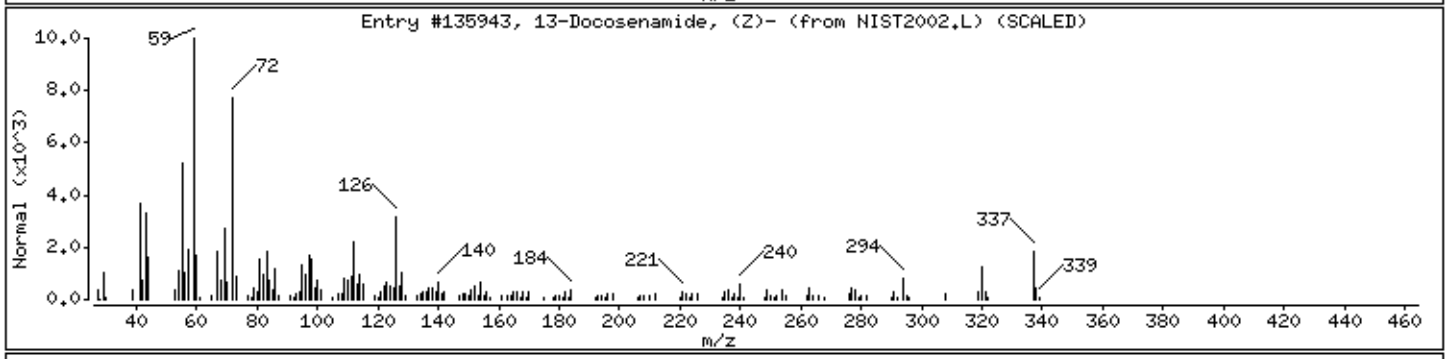
Sample Info: K2213-03A,,62806,,

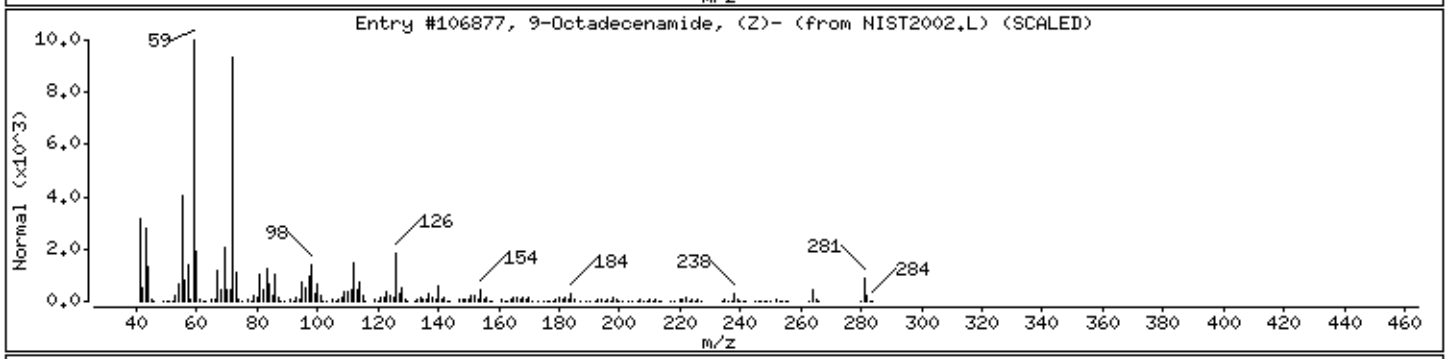
Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

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
9-Octadecenamide, (Z)-	301-02-0	NIST2002.L	106877	87	C18H35NO	281







1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30X2

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-04A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8651.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/10/2011

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

EPA SAMPLE NO.

H30X2

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-04A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8651.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/10/2011

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	1.1	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	11	
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

EPA SAMPLE NO.

H30X2

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-04A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8651.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/10/2011

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	2.678	7.9	J
02		Unknown-02	2.885	8.3	J
03		Unknown-03	3.009	9.5	J
04		Unknown-04	3.144	4.1	J
05		Unknown-05	3.268	26	J
06		Unknown-06	3.330	2.7	J
07	527-84-4	Benzene, 1-methyl-2-(1-methy	3.413	3.8	NJ
08		Unknown-07	3.465	17	J
09		Unknown-08	3.506	4.5	J
10		Unknown-09	3.548	8.9	J
11	30434-65-2	2-Cyclopenten-1-one, 3,4,4-t	3.599	51	NJ
12		Unknown-10	3.713	4.4	J
13		Unknown-11	3.775	27	J
14		Unknown-12	3.827	180	J
15		Unknown-13	3.868	15	J
16		Unknown-14	3.941	3.9	J
17		Unknown-15	4.127	130	J
18	21368-68-3	Bicyclo[2.2.1]heptan-2-one,	4.200	200	NJ
19		Unknown-16	4.251	30	J
20		Unknown-17	4.365	21	J
21		Unknown-18	4.603	15	J
22		Unknown-19	4.717	7.4	J
23		Unknown-20	4.810	10	J
24		Unknown-21	4.872	140	J
25		Unknown-22	4.986	170	J
26		Unknown-23	5.079	30	J
27		Unknown-24	5.286	14	J
28		Unknown-25	5.307	34	J
29		Unknown-26	5.400	37	J
30		Unknown-27	5.535	12	J
	E96679[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D
Report Date: 11-Nov-2011 14:03

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D
Lab Smp Id: K2213-04A Client Smp ID: H30X2
Inj Date : 10-NOV-2011 23:50
Operator : MMS   SRC: LIMS Inst ID: S4.i
Smp Info : K2213-04A,,62806,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * (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	3.061	3.050	(0.908)	85562	81.5588	41
$	4 bis(2-Chloroethyl)ether-d8	67	3.112	3.112	(0.923)	52011	66.6537	33
$	6 2-Chlorophenol-d4	132	3.206	3.206	(0.951)	87715	71.2497	36
*	8 1,4-Dichlorobenzene-d4	152	3.371	3.371	(1.000)	39011	40.0000	(Q)
$	11 4-Methylphenol-d8	113	3.620	3.609	(1.074)	83871	75.4928	38
$	16 Nitrobenzene-d5	128	3.795	3.796	(0.857)	40253	65.3920	33(Q)
$	19 2-Nitrophenol-d4	143	4.075	4.075	(0.921)	49044	62.5074	31
$	23 2,4-Dichlorophenol-d3	165	4.292	4.282	(0.970)	103636	70.4906	35
*	25 Naphthalene-d8	136	4.427	4.427	(1.000)	147054	40.0000	
$	27 4-Chloroaniline-d4	131	4.468	4.468	(1.009)	46434	32.0114	16(Q)
$	40 Dimethylphthalate-d6	166	5.783	5.772	(0.951)	349328	65.2828	33
$	43 Acenaphthylene-d8	160	5.938	5.938	(0.976)	368715	62.2310	31
*	46 Acenaphthene-d10	164	6.083	6.083	(1.000)	135328	40.0000	
$	49 4-Nitrophenol-d4	143	6.186	6.166	(1.017)	67710	67.2132	34
$	54 Fluorene-d10	176	6.590	6.590	(1.083)	296683	62.1875	31
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.642	6.642	(0.882)	58493	39.3373	20
*	65 Phenanthrene-d10	188	7.532	7.532	(1.000)	370702	40.0000	
$	67 Anthracene-d10	188	7.594	7.584	(1.008)	585067	57.4662	29
	70 Di-n-butylphthalate	149	8.080	8.081	(1.073)	22832	2.11955	1.1(a)
$	72 Pyrene-d10	212	8.929	8.929	(0.881)	622791	54.8127	27
	79 bis(2-Ethylhexyl)phthalate	149	10.099	10.099	(0.997)	180531	21.1211	11

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D
Report Date: 11-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	10.130	10.120	(1.000)	582942	40.0000	(Q)
$ 83 Benzo(a)pyrene-d12	264	11.713	11.703	(0.990)	271101	22.8356	11(R)
* 85 Perylene-d12	264	11.827	11.817	(1.000)	535763	40.0000	

QC Flag Legend

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

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D
Report Date: 11-Nov-2011 14:03

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D
Lab Smp Id: K2213-04A Client Smp ID: H30X2
Inj Date : 10-NOV-2011 23:50
Operator : MMS   SRC: LIMS Inst ID: S4.i
Smp Info : K2213-04A,,62806,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * (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	3.372	397584	40.000
* 25 Naphthalene-d8	4.427	598936	40.000
* 46 Acenaphthene-d10	6.083	702176	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.678	157055	15.8008972	7.9	0	0		8
Unknown				CAS #:			
2.885	165590	16.6595859	8.3	0	0		8
Unknown				CAS #:			
3.009	189459	19.0610279	9.5	0	0		8
Unknown				CAS #:			
3.144	81628	8.21236789	4.1	0	0		8

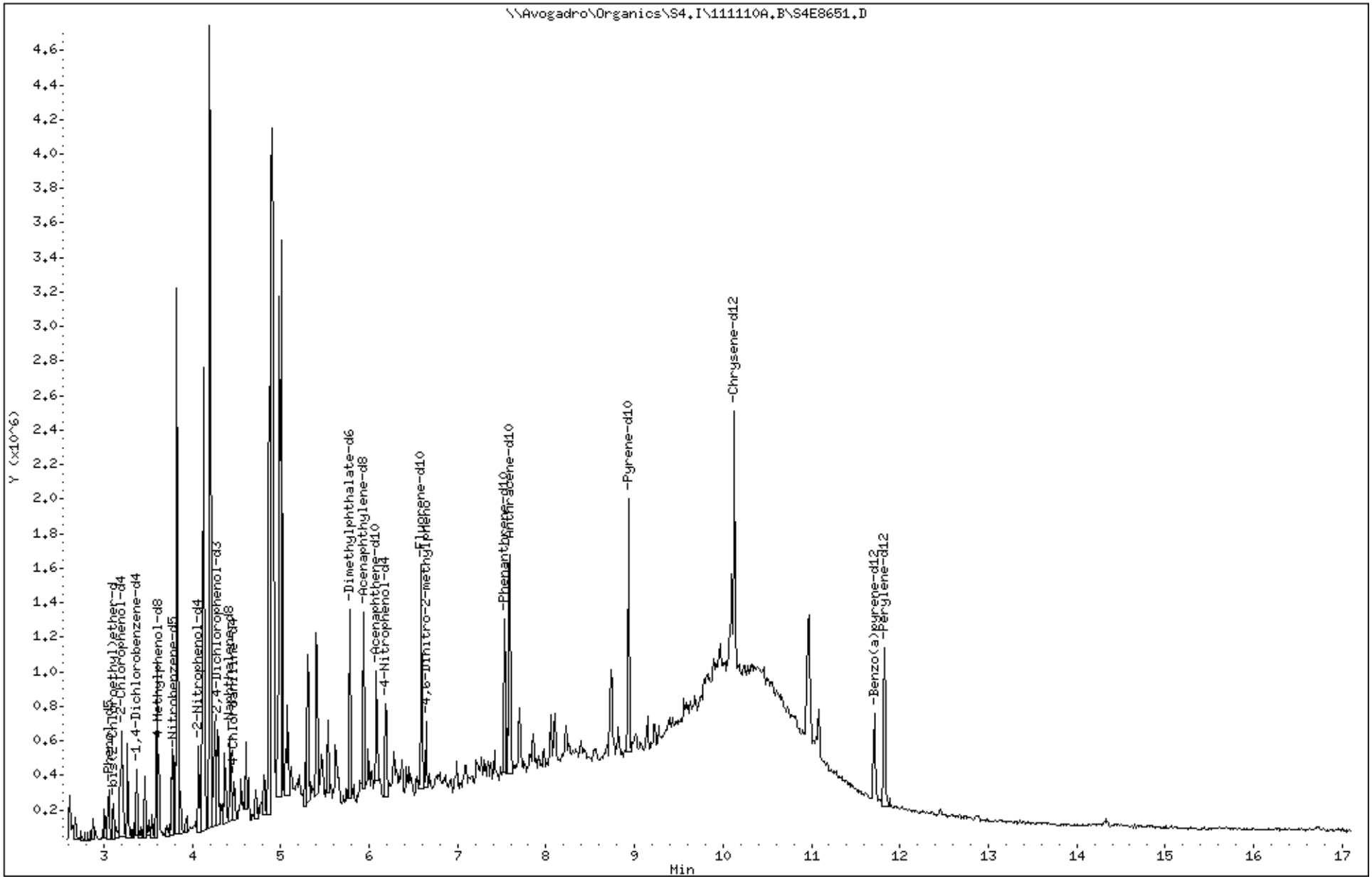
Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D
Report Date: 11-Nov-2011 14:03

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
3.268	526610	52.9810444	26	0		0	8
Unknown				CAS #:			
3.330	53983	5.43109373	2.7	0		0	8
Benzene, 1-methyl-2-(1-methylethyl)-				CAS #: 527-84-4			
3.413	74978	7.54332804	3.8	90	NIST2002.L	14395	8
Unknown				CAS #:			
3.465	337420	33.9470692	17	0		0	8
Unknown				CAS #:			
3.506	90444	9.09938897	4.5	0		0	8
Unknown				CAS #:			
3.548	177220	17.8297242	8.9	0		0	8
2-Cyclopenten-1-one, 3,4,4-trimethyl-				CAS #: 30434-65-2			
3.599	1018148	102.433493	51	86	NIST2002.L	10230	8
Unknown				CAS #:			
3.713	87167	8.76963351	4.4	0		0	8
Unknown				CAS #:			
3.775	532517	53.5753289	27	0		0	8
Unknown				CAS #:			
3.827	3633596	365.567544	180	0		0	8
Unknown				CAS #:			
3.868	293378	29.5160568	15	0		0	8
Unknown				CAS #:			
3.941	116249	7.76367161	3.9	0		0	25
Unknown				CAS #:			
4.127	3979560	265.774924	130	0		0	25
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet				CAS #: 21368-68-3			
4.200	5853407	390.919835	200	94	NIST2002.L	24227	25
Unknown				CAS #:			
4.251	912139	60.9172381	30	0		0	25
Unknown				CAS #:			
4.365	626403	41.8343310	21	0		0	25
Unknown				CAS #:			
4.603	453806	30.3074171	15	0		0	25
Unknown				CAS #:			
4.717	223026	14.8947895	7.4	0		0	25

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D
Report Date: 11-Nov-2011 14:03

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.810	305226	20.3845111	10	0		0	25
Unknown				CAS #:			
4.872	4123104	275.361543	140	0		0	25
Unknown				CAS #:			
4.986	4987989	333.122876	170	0		0	25
Unknown				CAS #:			
5.079	896306	59.8598092	30	0		0	25
Unknown				CAS #:			
5.286	481316	27.4185473	14	0		0	46
Unknown				CAS #:			
5.307	1200912	68.4108607	34	0		0	46
Unknown				CAS #:			
5.400	1289852	73.4773538	37	0		0	46
Unknown				CAS #:			
5.535	432443	24.6344140	12	0		0	46

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D
Date : 10-NOV-2011 23:50
Client ID: H30X2
Instrument: S4.i
Sample Info: K2213-04A,,62806,,
Volume Injected (uL): 2.0
Operator: MMS SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D

Date : 10-NOV-2011 23:50

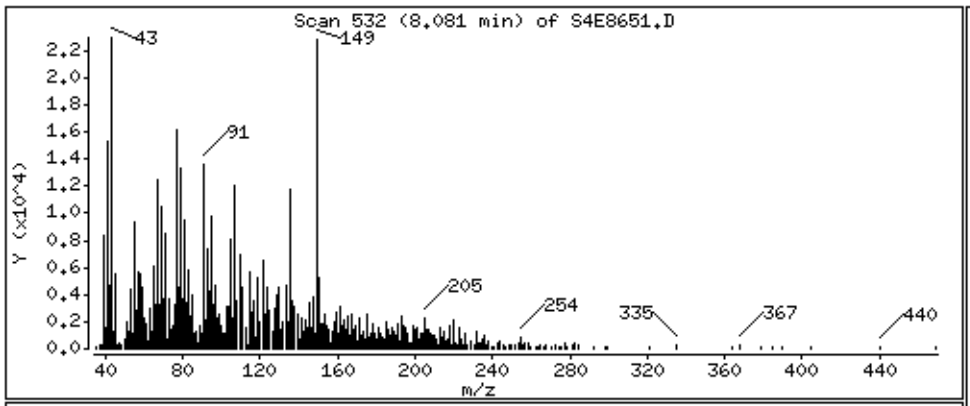
Client ID: H30X2 Instrument: S4.i

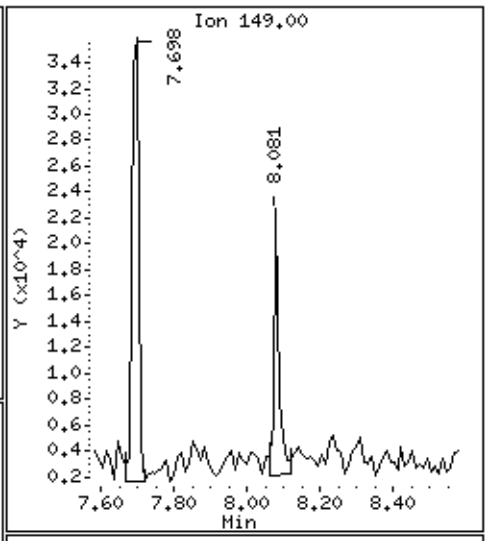
Sample Info: K2213-04A,,62806,,

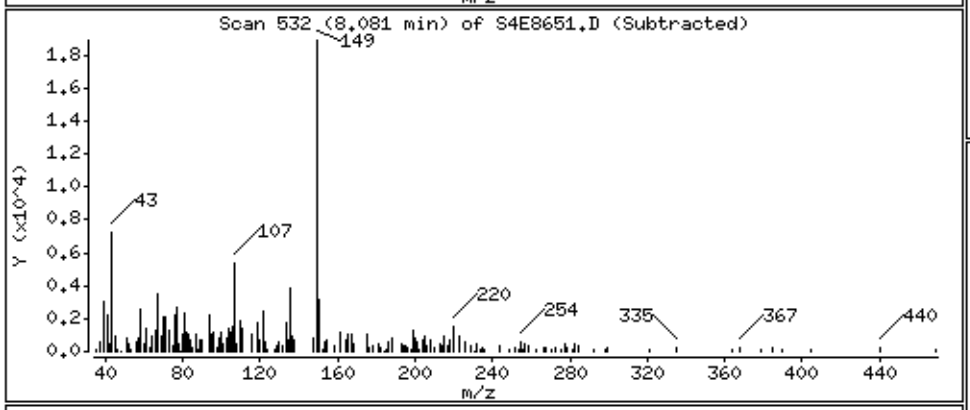
Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

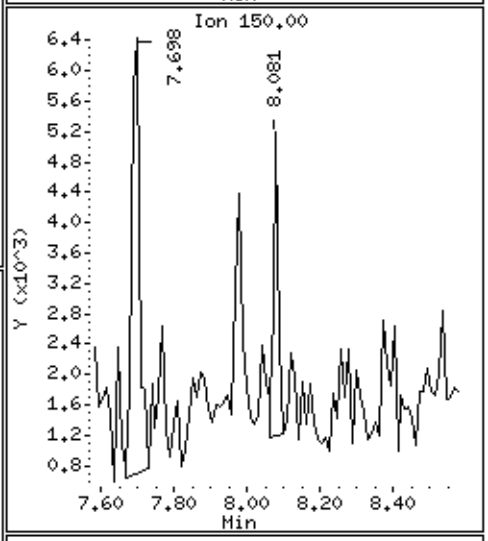
Column phase: RXI-5SILMS Column diameter: 0.25

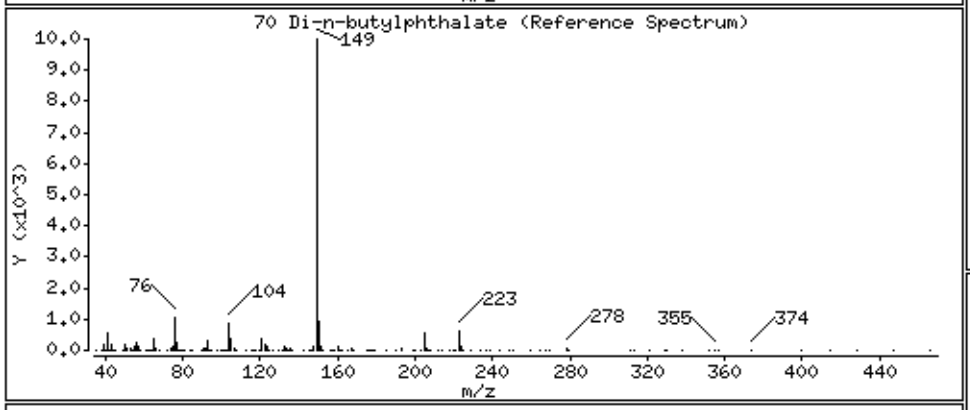
70 Di-n-butylphthalate Concentration: 1.1 ug/L

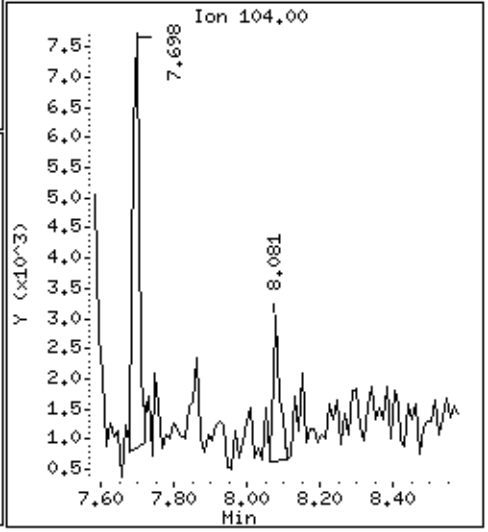


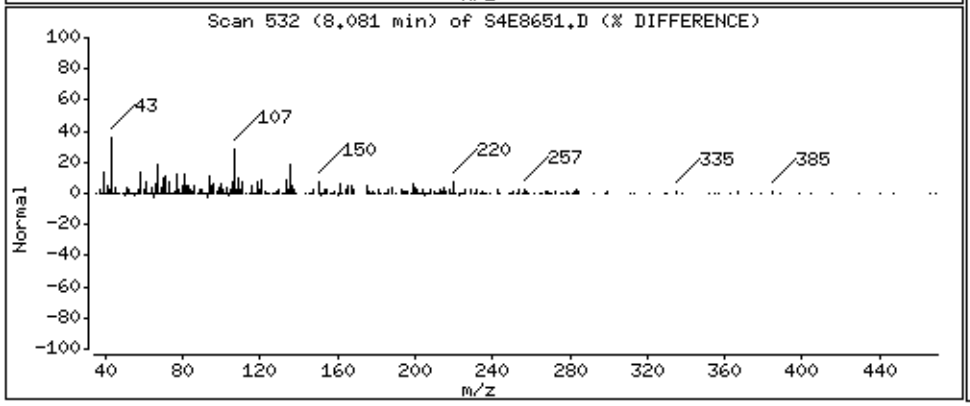












Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D

Date : 10-NOV-2011 23:50

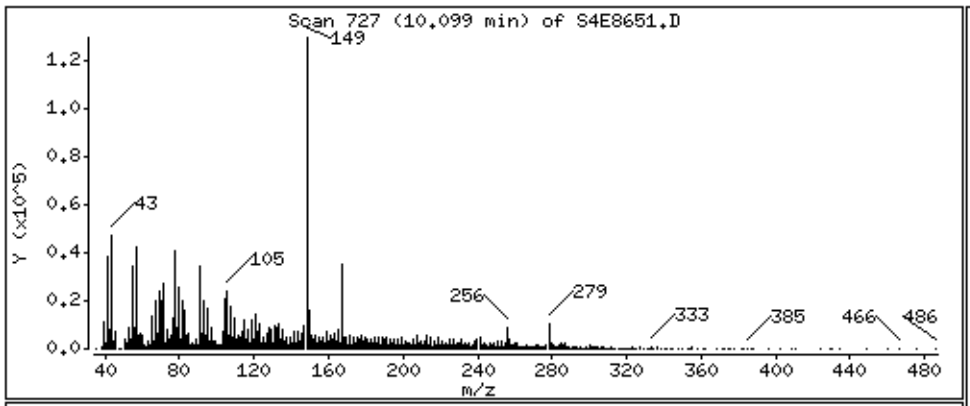
Client ID: H30X2 Instrument: S4.i

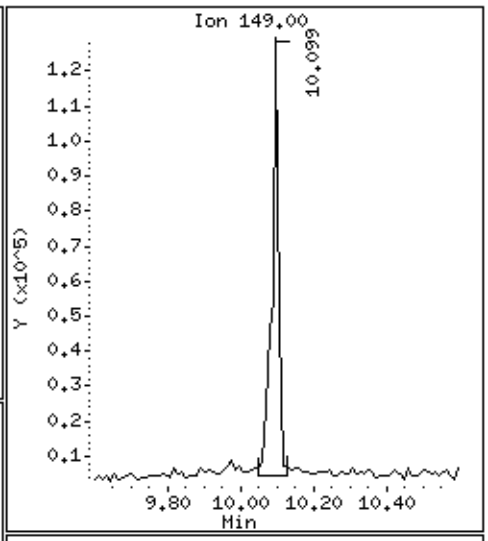
Sample Info: K2213-04A,,62806,,

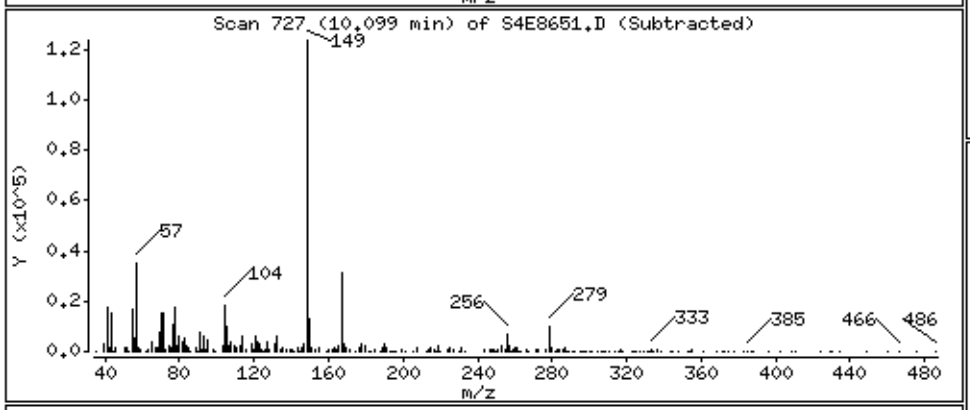
Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

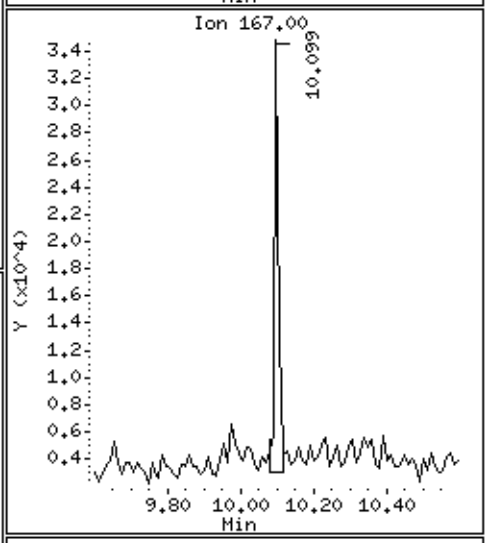
Column phase: RXI-5SILMS Column diameter: 0.25

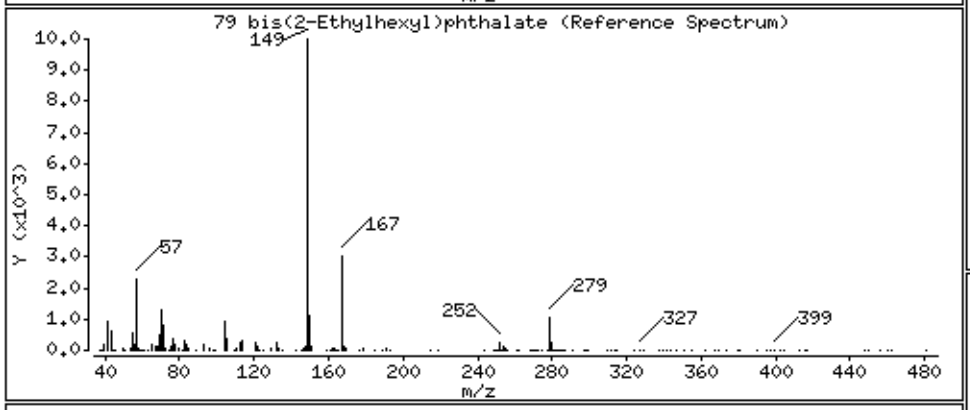
79 bis(2-Ethylhexyl)phthalate Concentration: 11 ug/L

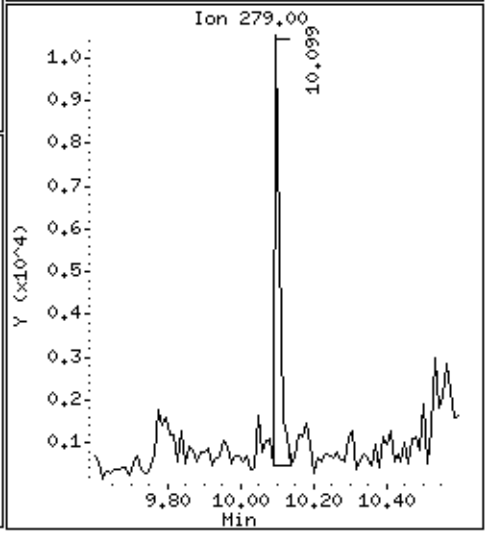


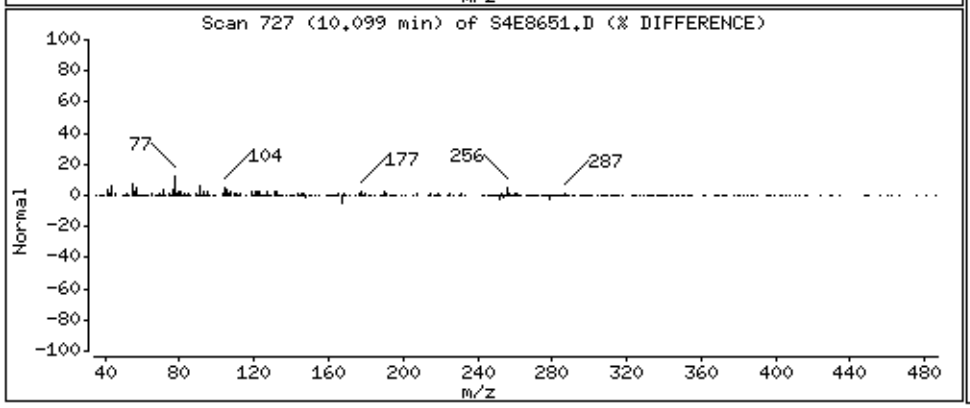












Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D

Date : 10-NOV-2011 23:50

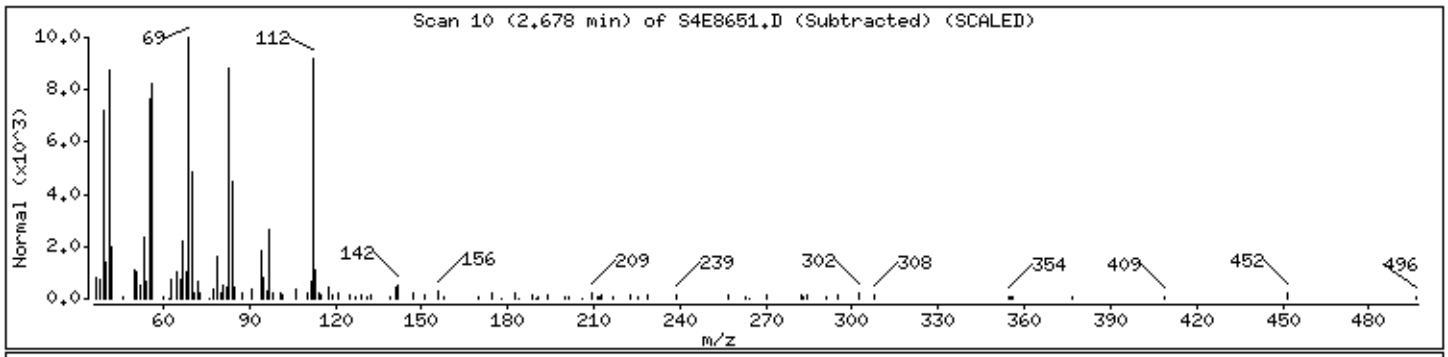
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D

Date : 10-NOV-2011 23:50

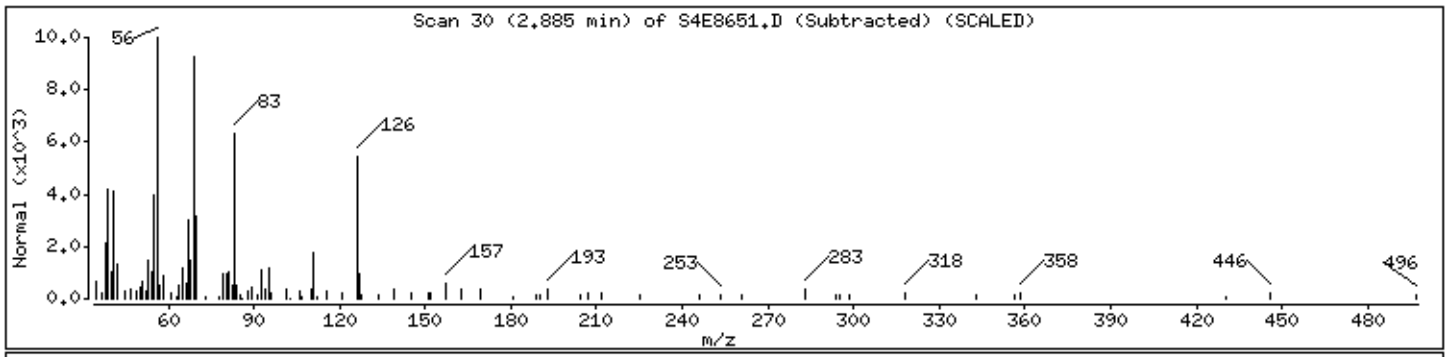
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 10-NOV-2011 23:50

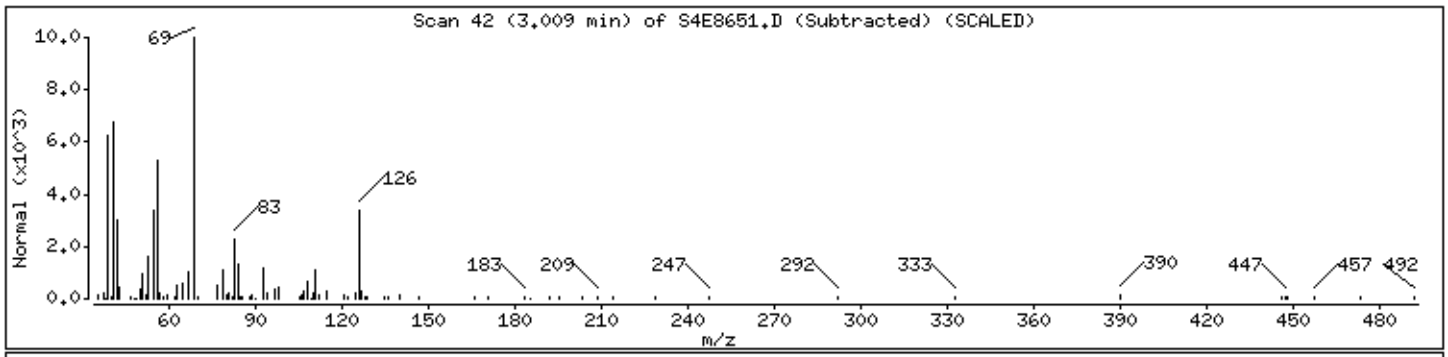
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 10-NOV-2011 23:50

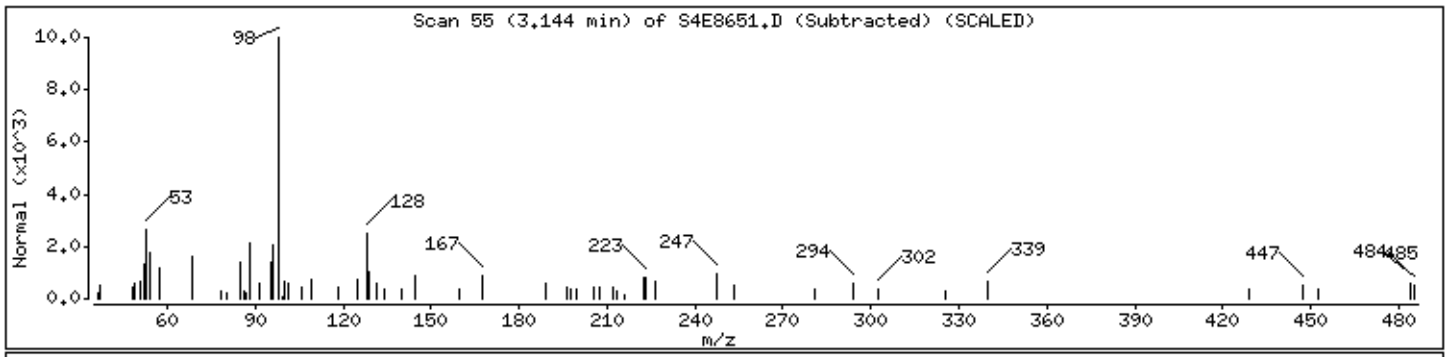
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 10-NOV-2011 23:50

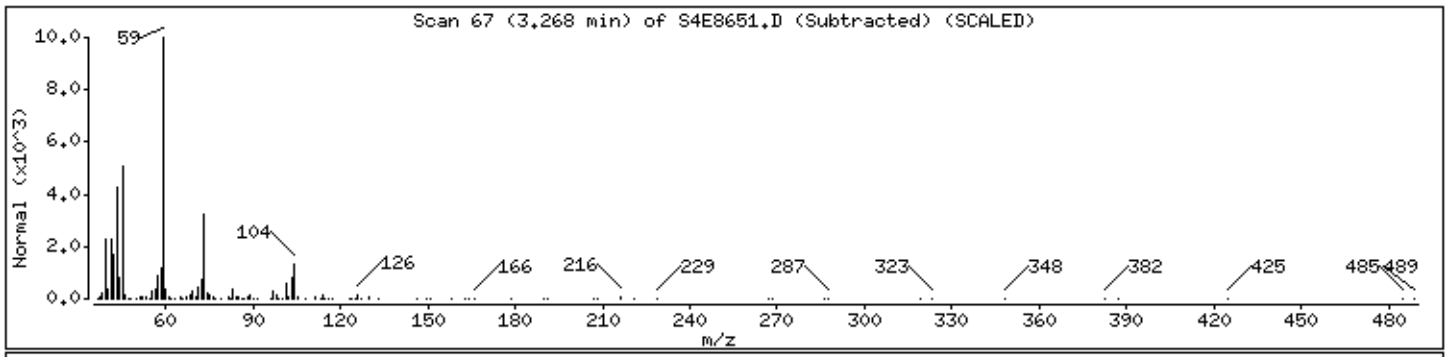
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D

Date : 10-NOV-2011 23:50

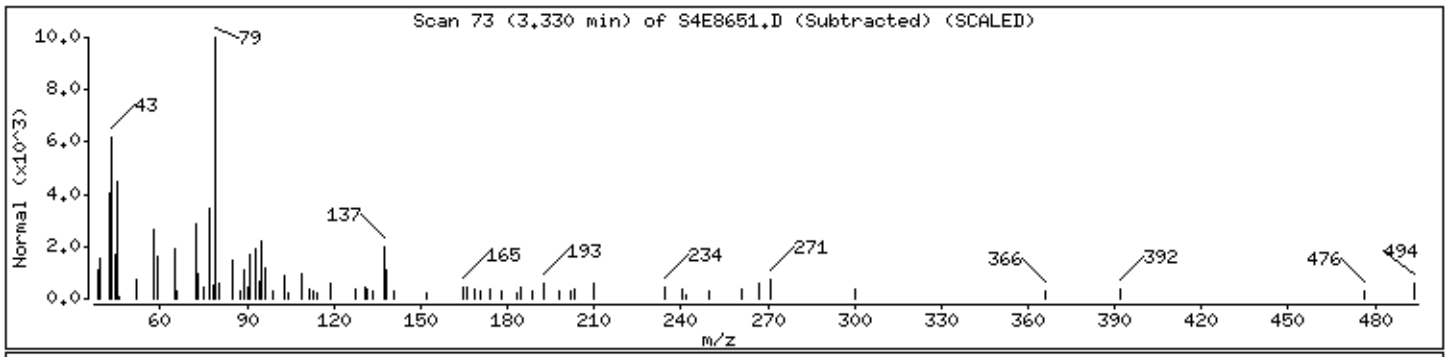
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 10-NOV-2011 23:50

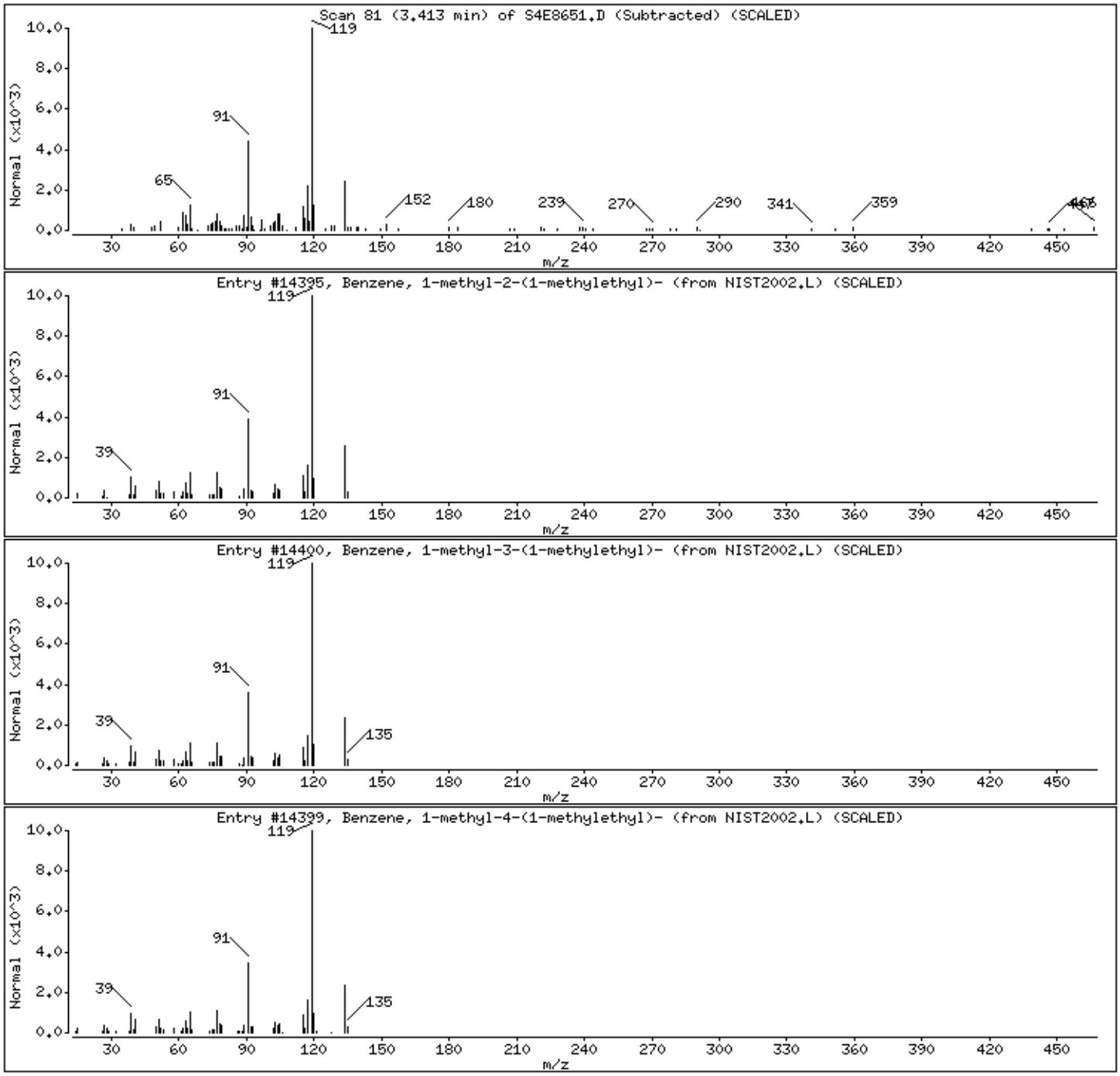
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS 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	90	C10H14	134
Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	NIST2002.L	14400	90	C10H14	134
Benzene, 1-methyl-4-(1-methylethyl)-	99-87-6	NIST2002.L	14399	90	C10H14	134



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D

Date : 10-NOV-2011 23:50

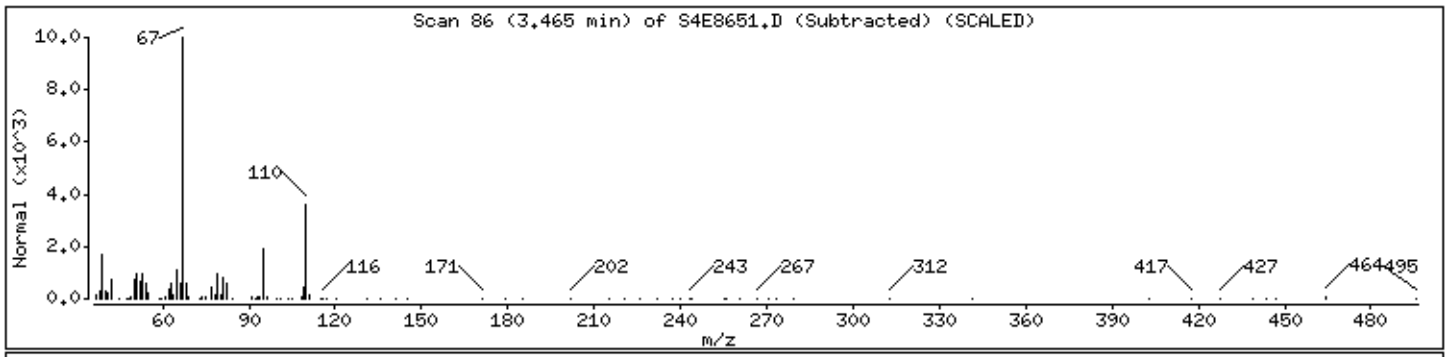
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 10-NOV-2011 23:50

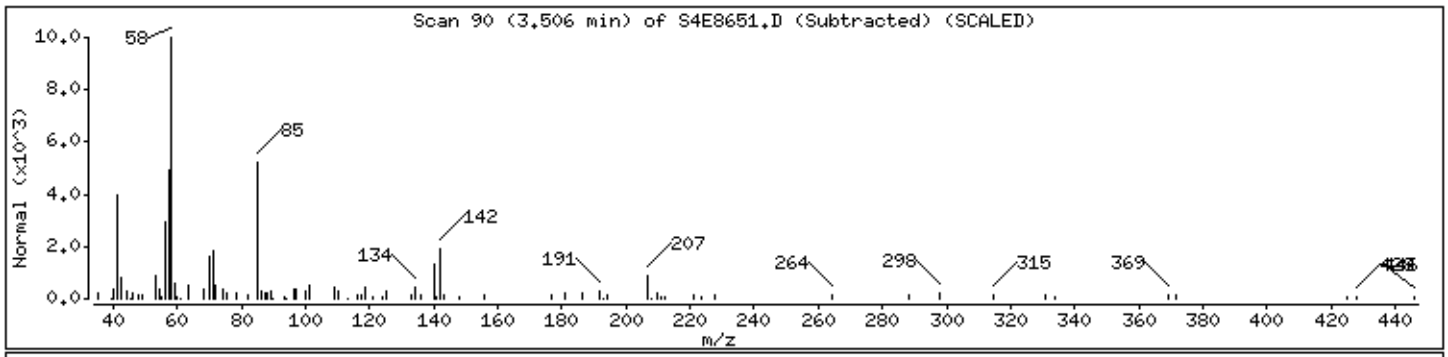
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 10-NOV-2011 23:50

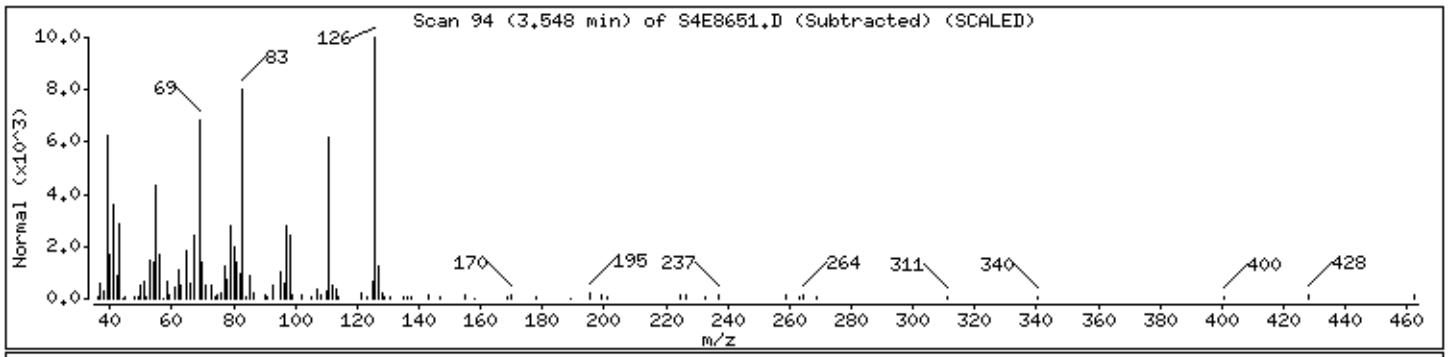
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 10-NOV-2011 23:50

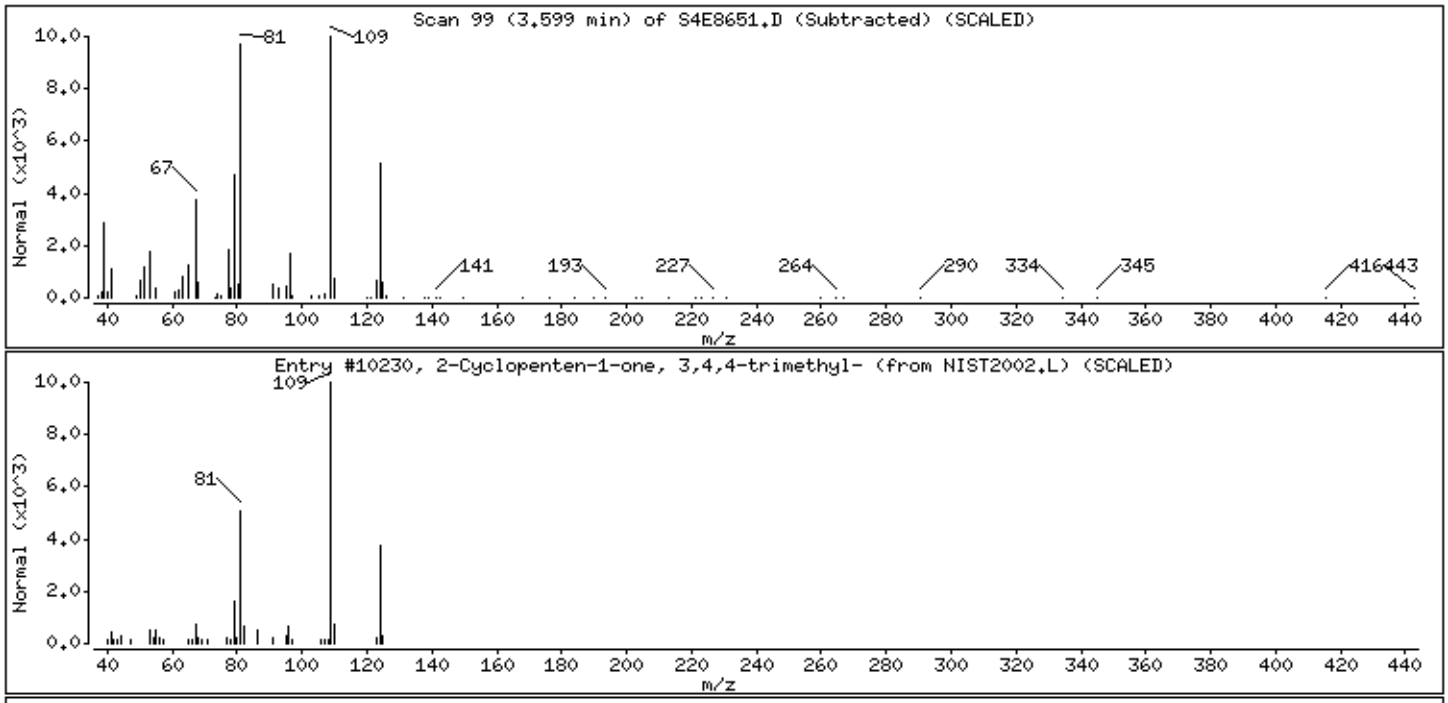
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Cyclopenten-1-one, 3,4,4-trimethyl-	30434-65-2	NIST2002.L	10230	86	C8H12O	124



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Date : 10-NOV-2011 23:50

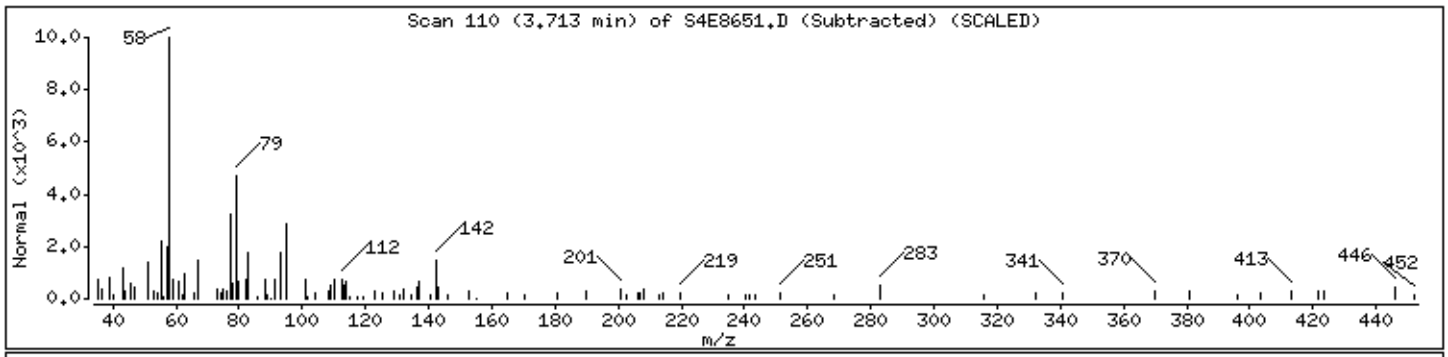
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 10-NOV-2011 23:50

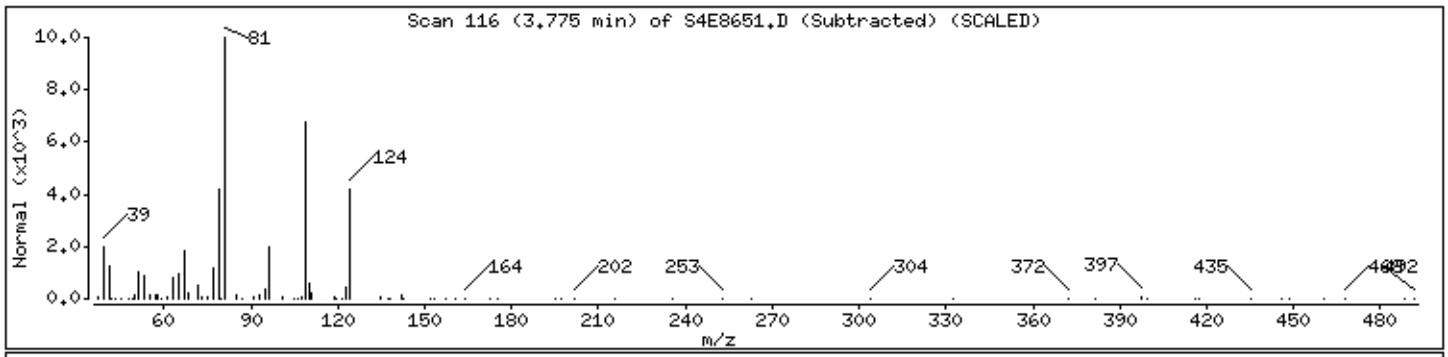
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D

Date : 10-NOV-2011 23:50

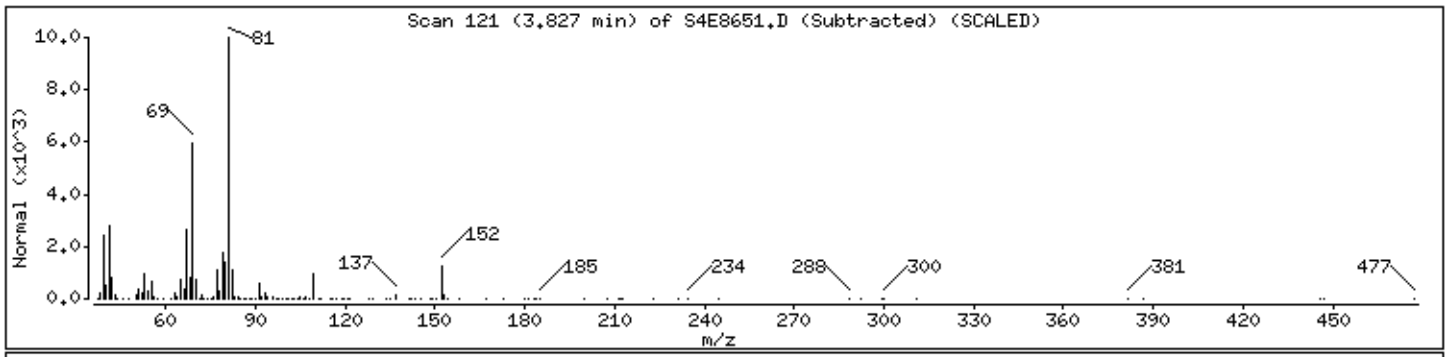
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D

Date : 10-NOV-2011 23:50

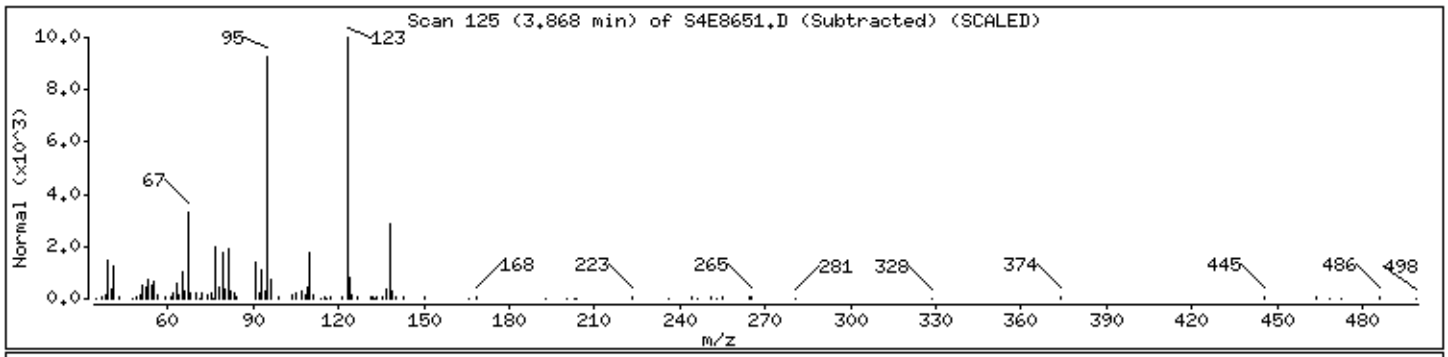
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 10-NOV-2011 23:50

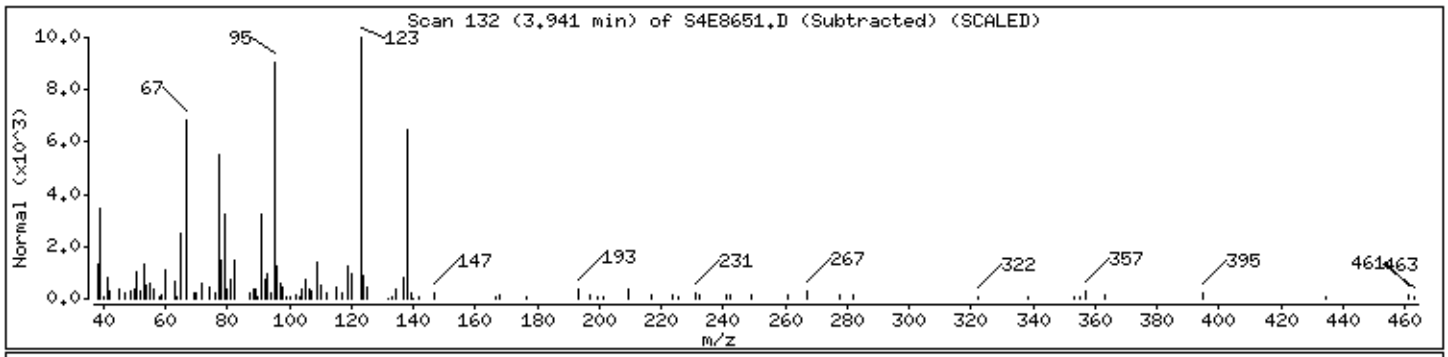
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D

Date : 10-NOV-2011 23:50

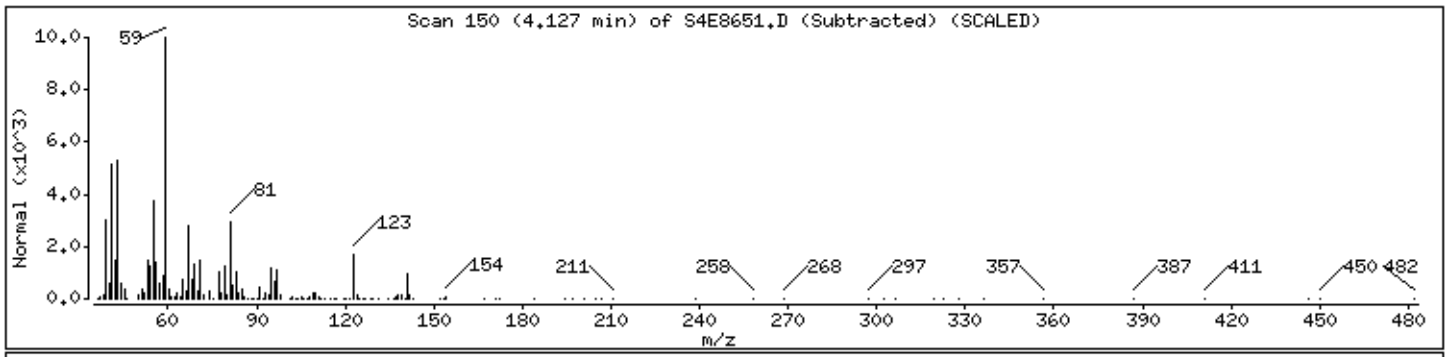
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D

Date : 10-NOV-2011 23:50

Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
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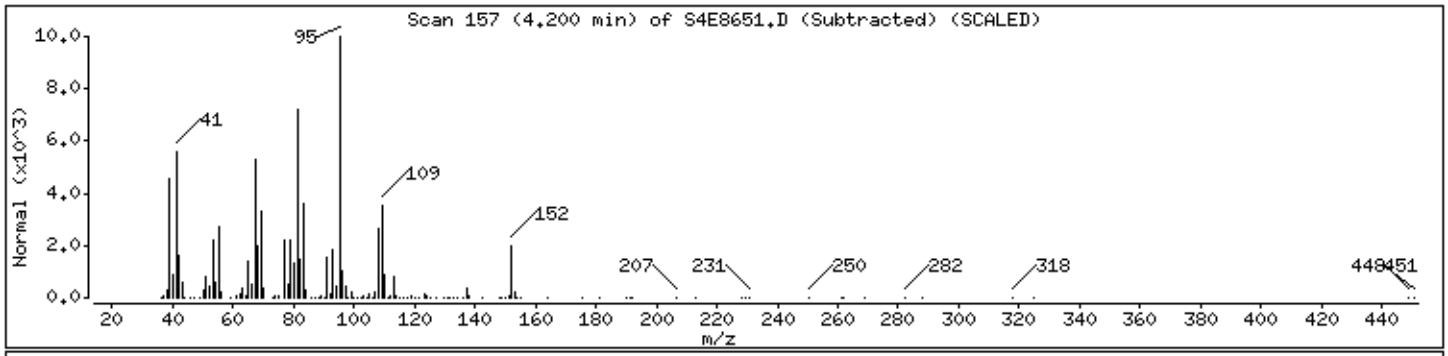
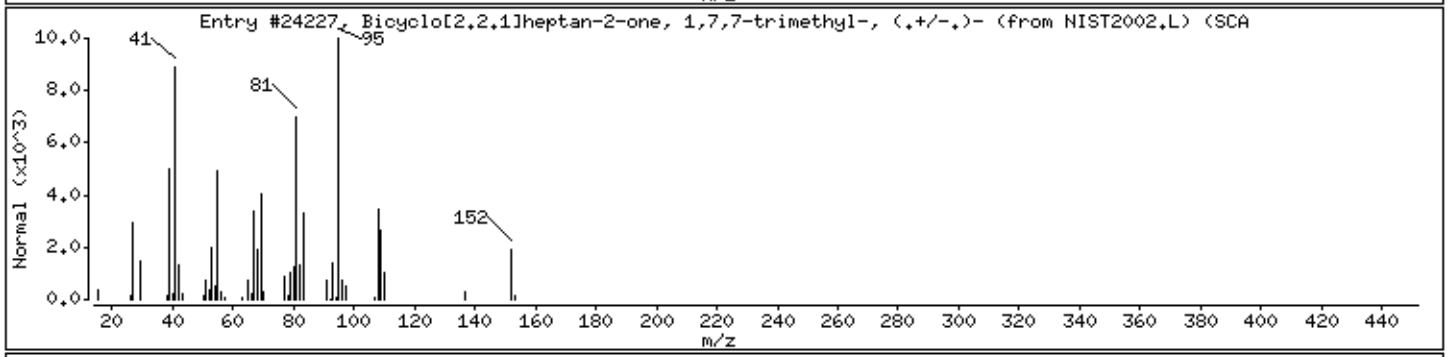




Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D

Date : 10-NOV-2011 23:50

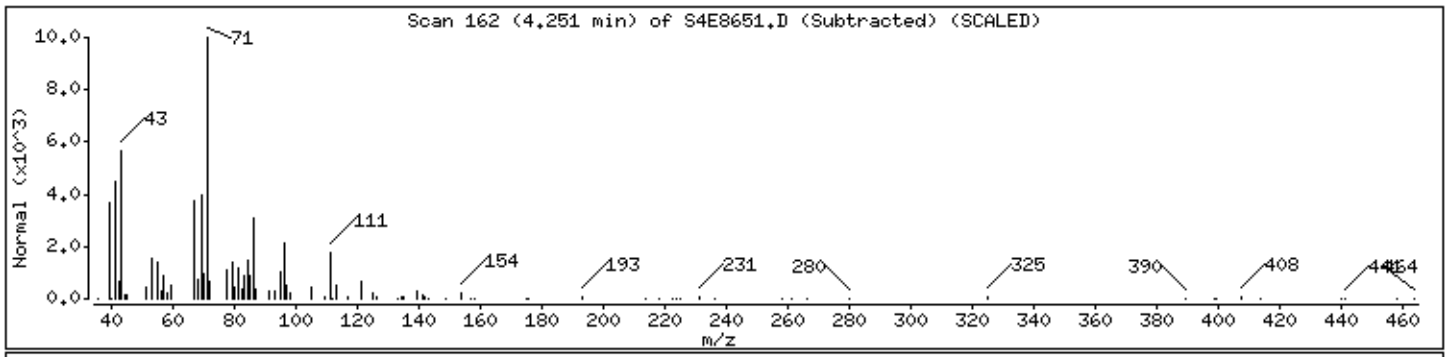
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 10-NOV-2011 23:50

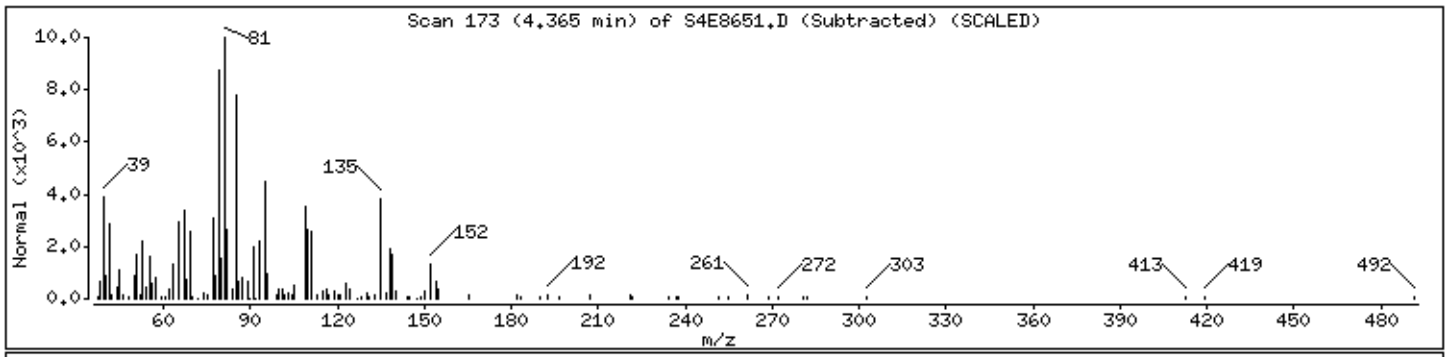
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D

Date : 10-NOV-2011 23:50

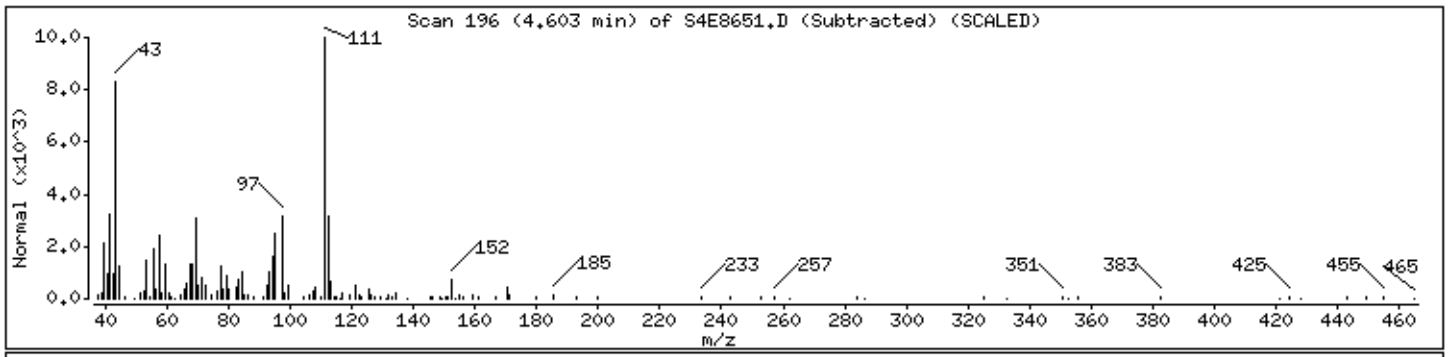
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 10-NOV-2011 23:50

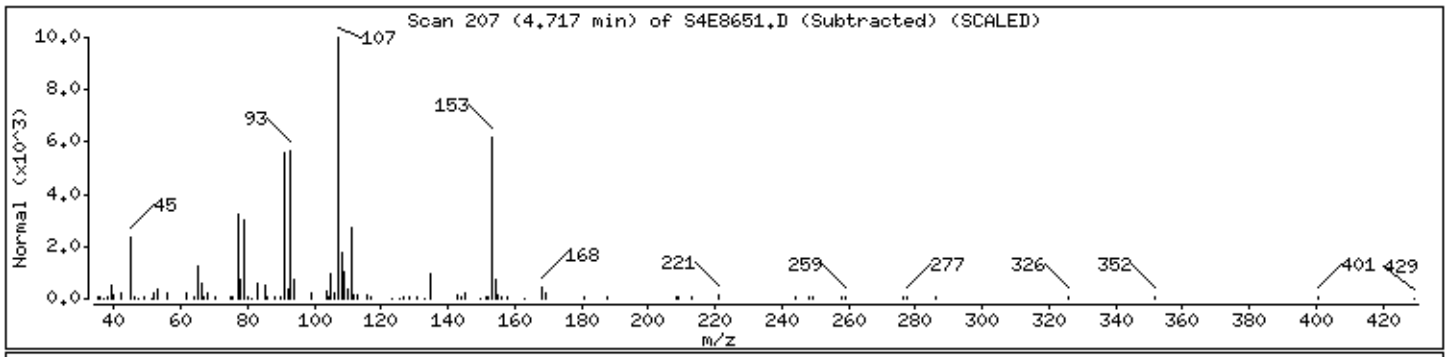
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D

Date : 10-NOV-2011 23:50

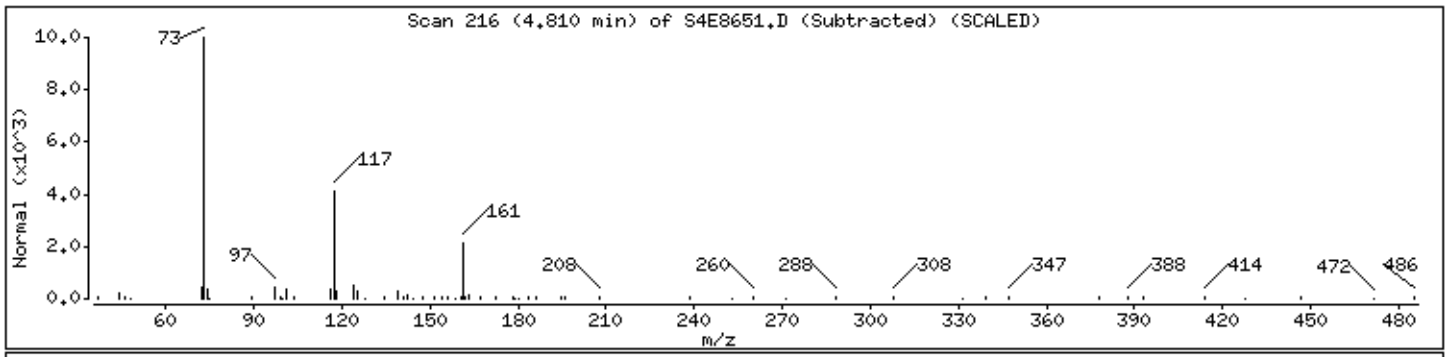
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D

Date : 10-NOV-2011 23:50

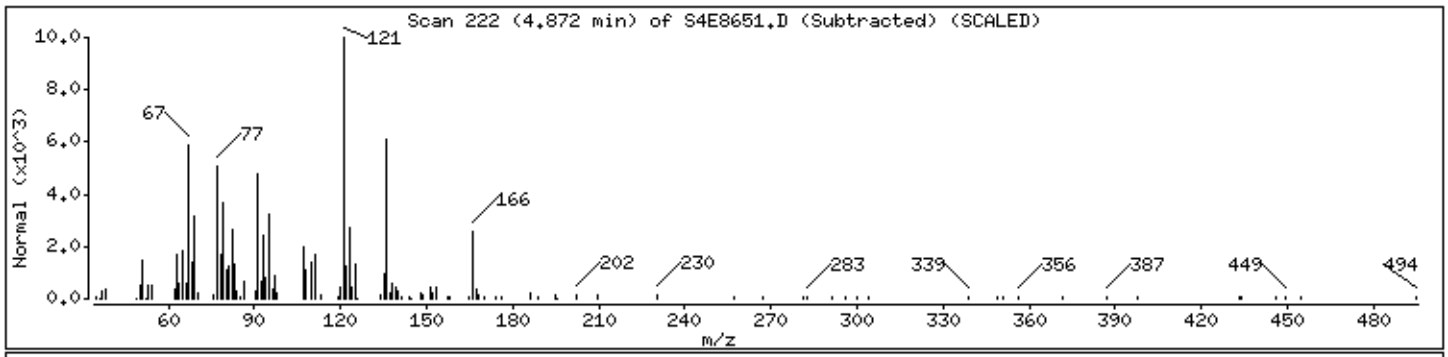
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D

Date : 10-NOV-2011 23:50

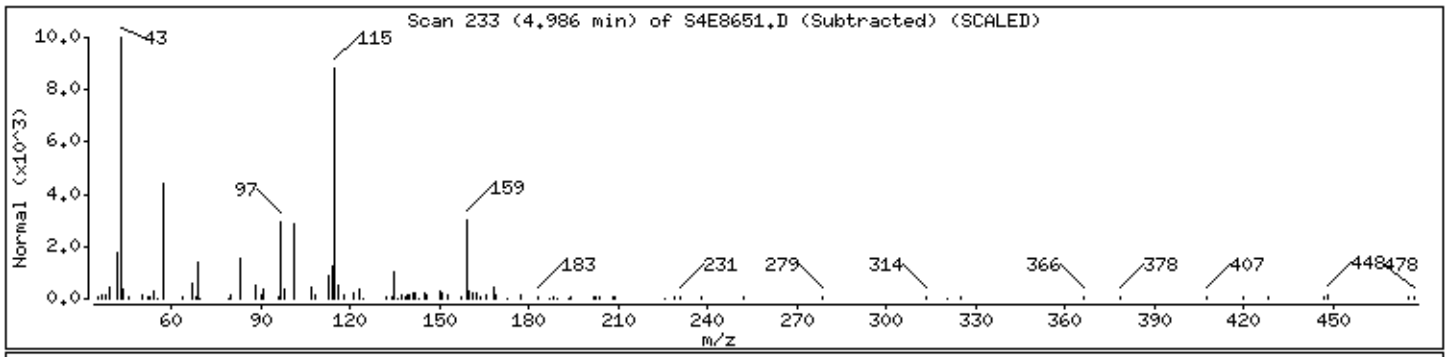
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D

Date : 10-NOV-2011 23:50

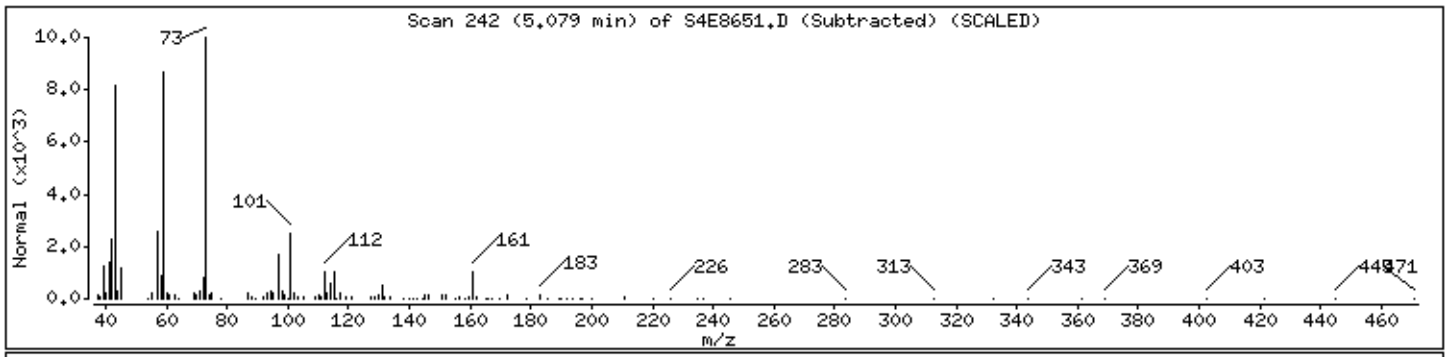
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D

Date : 10-NOV-2011 23:50

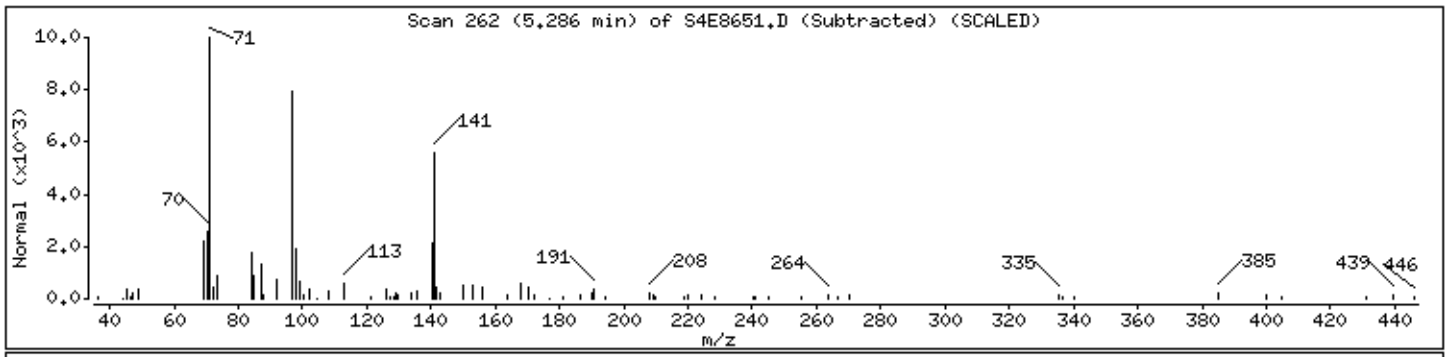
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D

Date : 10-NOV-2011 23:50

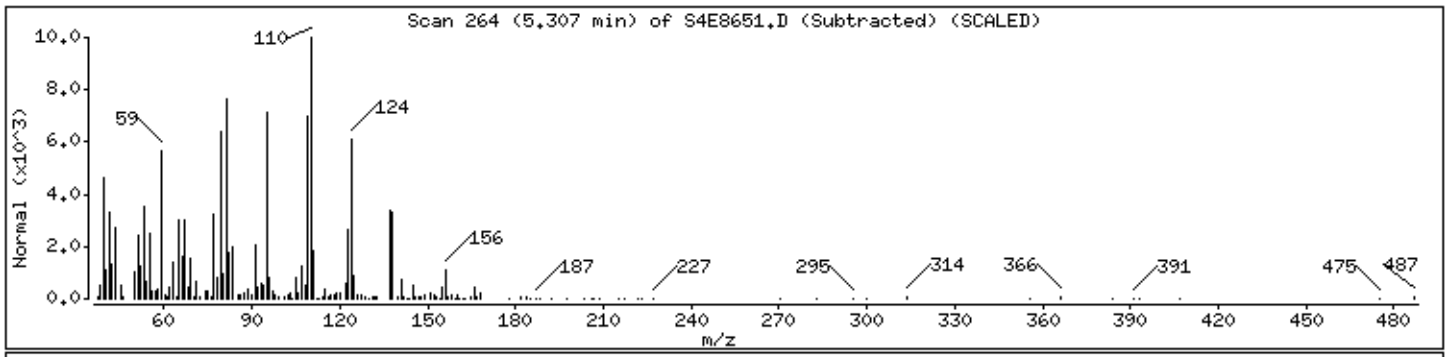
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D

Date : 10-NOV-2011 23:50

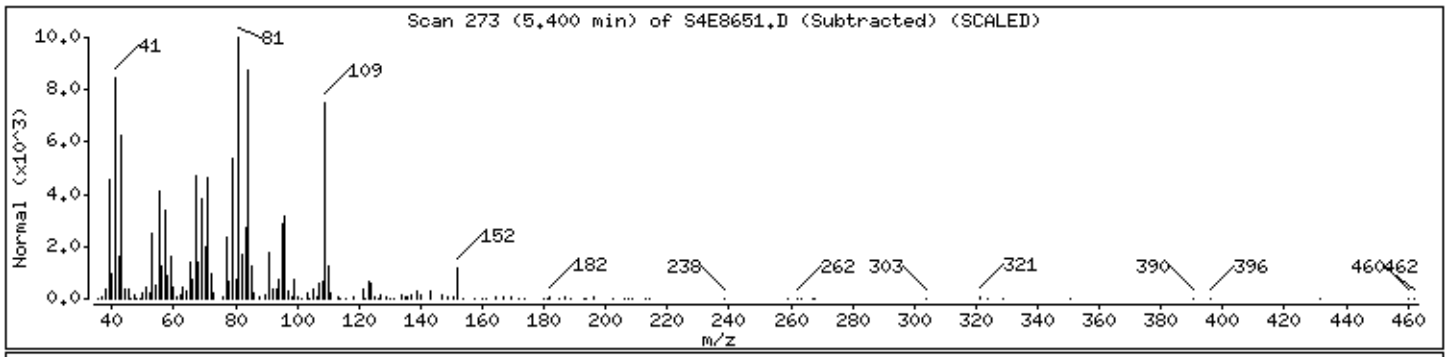
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8651.D

Date : 10-NOV-2011 23:50

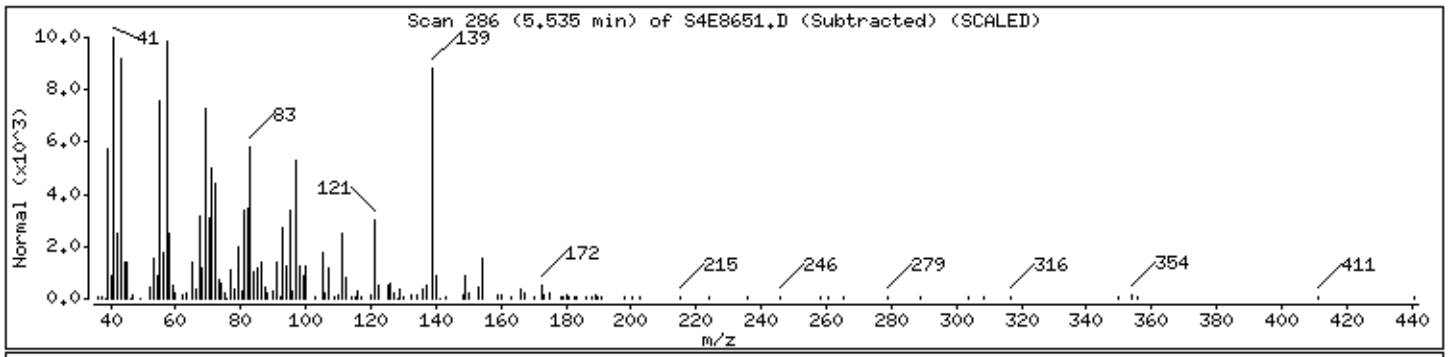
Client ID: H30X2 Instrument: S4.i

Sample Info: K2213-04A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30X4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-01A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5231.D

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

% Moisture: Decanted: (Y/N) Date Received: 10/29/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/03/2011

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	12	
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

EPA SAMPLE NO.

H30X4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-01A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5231.D

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

% Moisture: Decanted: (Y/N) Date Received: 10/29/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/03/2011

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

EPA SAMPLE NO.

H30X4

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-01A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5231.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: 11/03/2011

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	3.005	2.3	J
02	98-82-8	Benzene, (1-methylethyl)-	3.155	3.9	NJ
03		Unknown-02	3.380	7.6	J
04	622-96-8	Benzene, 1-ethyl-4-methyl-	3.434	20	NJ
05	108-67-8	Benzene, 1,3,5-trimethyl-	3.670	24	NJ
06	526-73-8	Benzene, 1,2,3-trimethyl-	3.863	8.1	NJ
07		Unknown-03	3.938	2.8	J
08		Unknown-04	4.045	3.7	J
09		Unknown-05	4.088	7.3	J
10		Unknown-06	4.206	2.4	J
11	126-21-6	L-Fenchone	4.313	41	NJ
12		Unknown-07	4.345	4.2	J
13		Unknown-08	4.410	2.7	J
14		Unknown-09	4.485	4.1	J
15		Unknown-10	4.613	30	J
16	464-48-2	Bicyclo[2.2.1]heptan-2-one,	4.667	26	NJ
17		Unknown-11	4.721	12	J
18		Unknown-12	5.010	6.1	J
19		Unknown-13	5.396	4.4	J
20		Unknown-14	5.450	4.6	J
21		Unknown-15	5.686	15	J
22		Unknown-16	5.954	13	J
23		Unknown-17	6.533	8.0	J
24		Unknown-18	6.565	27	J
25		Unknown-19	6.897	9.7	J
26		Unknown-20	7.090	8.7	J
27		Unknown-21	9.664	49	J
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5231.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\S2H5231.D
Lab Smp Id: K2213-01A Client Smp ID: H30X4
Inj Date : 04-NOV-2011 16:39
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2213-01A,,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: 7
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	3.498	3.500	(0.918)	256715	59.9469	30
$	4 bis(2-Chloroethyl)ether-d8	67	3.551	3.554	(0.932)	385595	65.3439	33
$	6 2-Chlorophenol-d4	132	3.626	3.629	(0.952)	260696	70.3725	35
*	8 1,4-Dichlorobenzene-d4	152	3.809	3.822	(1.000)	135992	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.130	4.133	(1.084)	364490	62.7811	31
$	16 Nitrobenzene-d5	128	4.270	4.283	(0.875)	120533	62.0320	31
$	19 2-Nitrophenol-d4	143	4.548	4.551	(0.932)	141970	66.1855	33
$	23 2,4-Dichlorophenol-d3	165	4.752	4.755	(0.974)	248060	63.3488	32
*	25 Naphthalene-d8	136	4.881	4.884	(1.000)	373110	40.0000	
$	27 4-Chloroaniline-d4	131	4.935	4.937	(1.011)	44467	12.7894	6.4(Q)
	30 Caprolactam	113	5.246	5.205	(1.075)	35286	24.5913	12
$	40 Dimethylphthalate-d6	166	6.103	6.106	(0.961)	628740	70.9128	35
$	43 Acenaphthylene-d8	160	6.221	6.224	(0.980)	626742	54.3589	27
*	46 Acenaphthene-d10	164	6.350	6.353	(1.000)	241143	40.0000	
$	49 4-Nitrophenol-d4	143	6.457	6.449	(1.017)	66236	51.8376	26(Q)
$	54 Fluorene-d10	176	6.779	6.782	(1.068)	412485	50.6464	25
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.833	6.835	(0.902)	99450	66.5921	33
*	65 Phenanthrene-d10	188	7.573	7.575	(1.000)	382710	40.0000	
$	67 Anthracene-d10	188	7.626	7.629	(1.007)	474996	43.4492	22
$	72 Pyrene-d10	212	8.763	8.776	(0.890)	320384	32.0369	16(R)
*	77 Chrysene-d12	240	9.846	9.881	(1.000)	317452	40.0000	(Q)

Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5231.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)
$ 83 Benzo(a)pyrene-d12	264	11.122	11.189	(0.983)	107169	17.6559	8.8(RH)
* 85 Perylene-d12	264	11.208	11.275	(1.000)	247361	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\111104.B\S2H5231.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\S2H5231.D
Lab Smp Id: K2213-01A Client Smp ID: H30X4
Inj Date : 04-NOV-2011 16:39
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2213-01A,,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: 7
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	3.809	1528694	40.000
* 25	Naphthalene-d8	4.881	1891574	40.000
* 46	Acenaphthene-d10	6.351	1386292	40.000
* 65	Phenanthrene-d10	7.573	1446831	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
3.005	173562	4.54143393	2.3	0		0	8
Benzene, (1-methylethyl)-				CAS #: 98-82-8			
3.155	297915	7.79527254	3.9	90	NIST2002.L	9118	8
Unknown				CAS #:			
3.380	582520	15.2422730	7.6	0		0	8

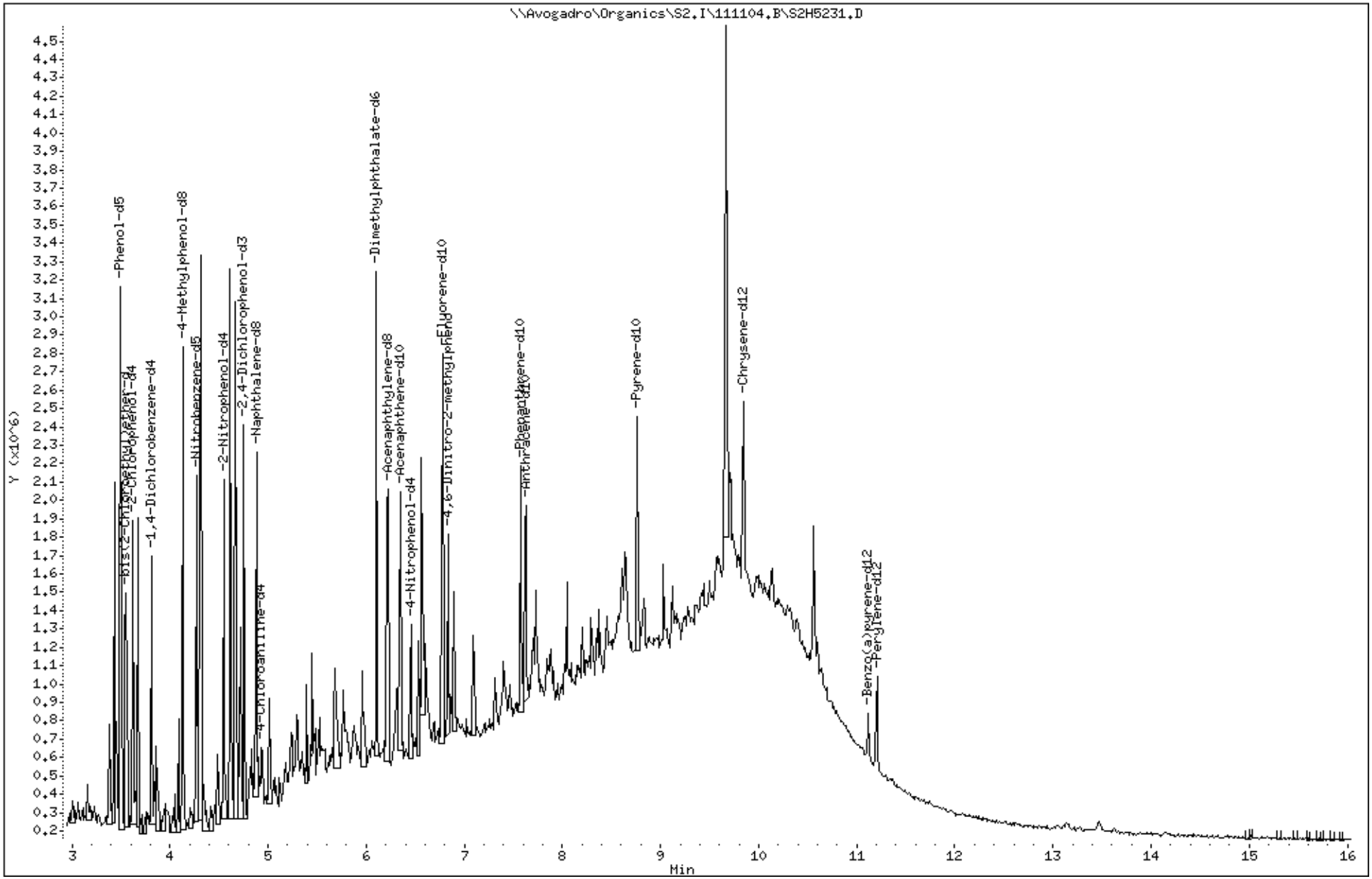
Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5231.D
Report Date: 07-Nov-2011 13:26

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Benzene, 1-ethyl-4-methyl-					CAS #: 622-96-8		
3.434	1553748	40.6555577	20	94	NIST2002.L	9134	8
Benzene, 1,3,5-trimethyl-					CAS #: 108-67-8		
3.670	1802166	47.1556867	24	94	NIST2002.L	9121	8
Benzene, 1,2,3-trimethyl-					CAS #: 526-73-8		
3.863	616949	16.1431457	8.1	91	NIST2002.L	9113	8
Unknown					CAS #:		
3.938	217623	5.69434739	2.8	0		0	8
Unknown					CAS #:		
4.045	282019	7.37934953	3.7	0		0	8
Unknown					CAS #:		
4.088	558322	14.6091125	7.3	0		0	8
Unknown					CAS #:		
4.206	180207	4.71530867	2.4	0		0	8
L-Fenchone					CAS #: 126-21-6		
4.313	3095904	81.0077847	41	91	NIST2002.L	23928	8
Unknown					CAS #:		
4.345	399308	8.44392511	4.2	0		0	25
Unknown					CAS #:		
4.410	252385	5.33702605	2.7	0		0	25
Unknown					CAS #:		
4.485	385014	8.14165697	4.1	0		0	25
Unknown					CAS #:		
4.613	2880149	60.9047880	30	0		0	25
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet					CAS #: 464-48-2		
4.667	2463680	52.0979670	26	94	NIST2002.L	24202	25
Unknown					CAS #:		
4.721	1099551	23.2515567	12	0		0	25
Unknown					CAS #:		
5.010	575519	12.1701519	6.1	0		0	25
Unknown					CAS #:		
5.396	417463	8.82783856	4.4	0		0	25
Unknown					CAS #:		
5.450	436663	9.23384191	4.6	0		0	25
Unknown					CAS #:		
5.686	1045102	30.1553202	15	0		0	46

Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5231.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 #:			
5.954	875206	25.2531438	13	0		0	46
Unknown				CAS #:			
6.533	555554	16.0299317	8.0	0		0	46
Unknown				CAS #:			
6.565	1851176	53.4137291	27	0		0	46
Unknown				CAS #:			
6.897	673537	19.4341894	9.7	0		0	46
Unknown				CAS #:			
7.090	629021	17.3902941	8.7	0		0	65
Unknown				CAS #:			
9.664	3510205	97.0452874	49	0		0	65

Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5231.D
Date : 04-NOV-2011 16:39
Client ID: H30X4
Instrument: S2.i
Sample Info: K2213-01A,,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\S2H5231.D

Date : 04-NOV-2011 16:39

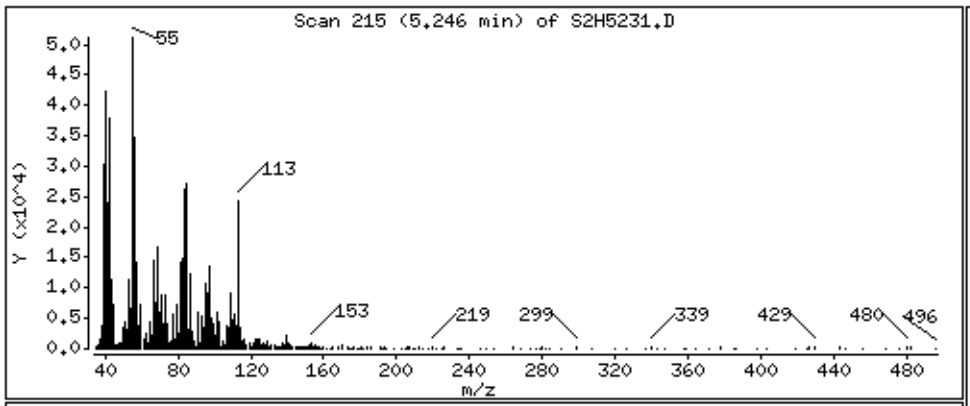
Client ID: H30X4 Instrument: S2.i

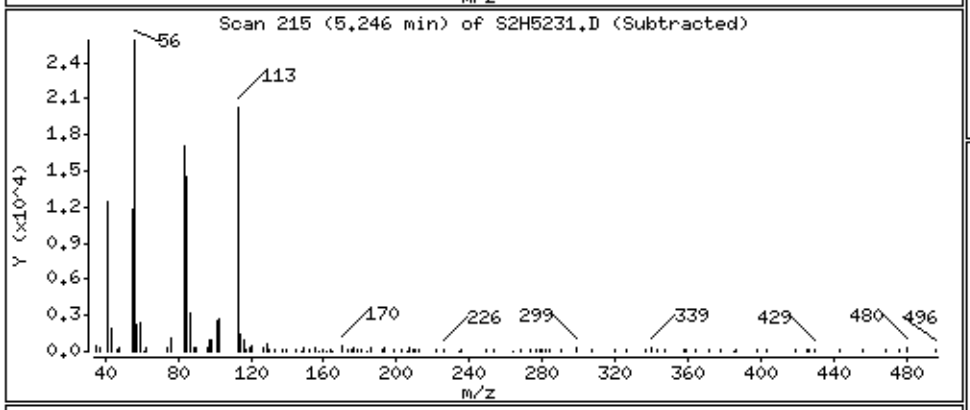
Sample Info: K2213-01A,,62685,,

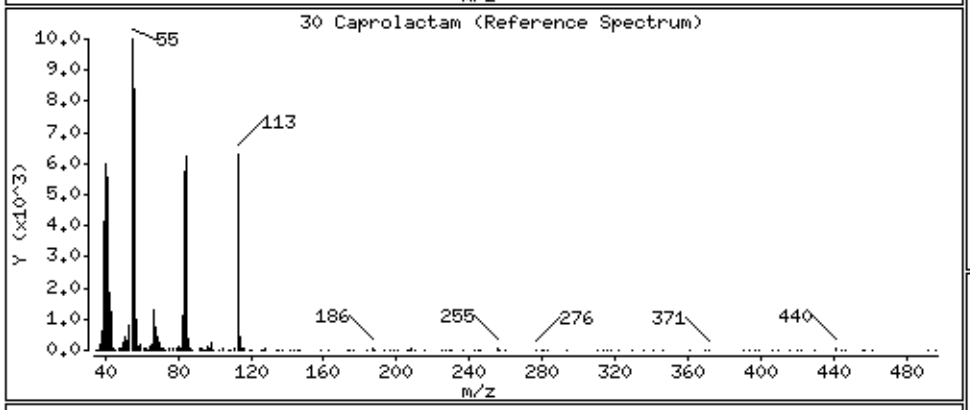
Volume Injected (uL): 2.0 Operator: SRC: LIMS

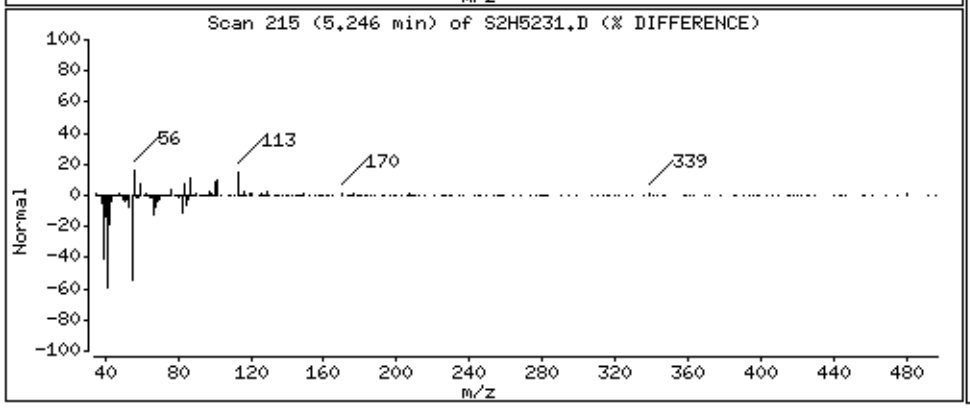
Column phase: RXI-5SILMS Column diameter: 0.25

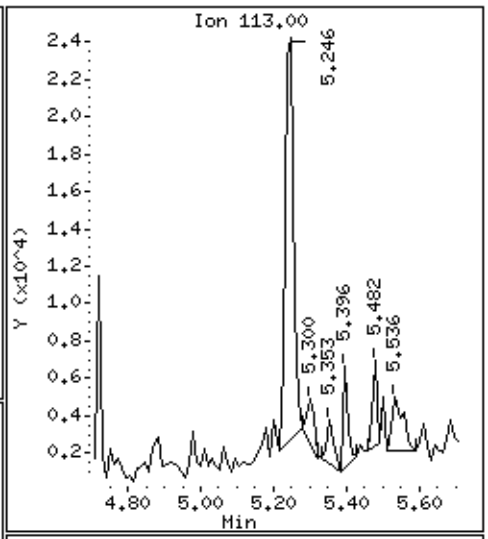
30 Caprolactam Concentration: 12 ug/L

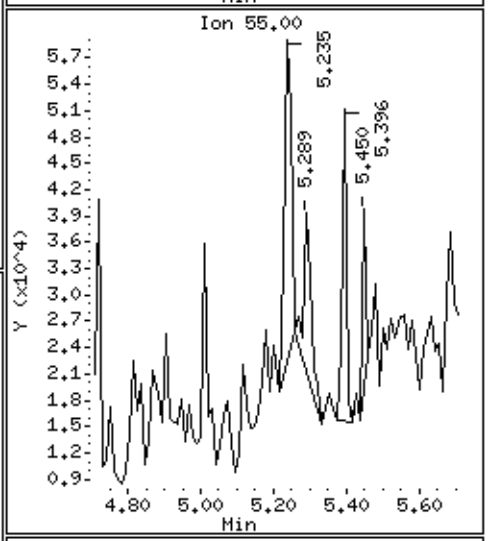


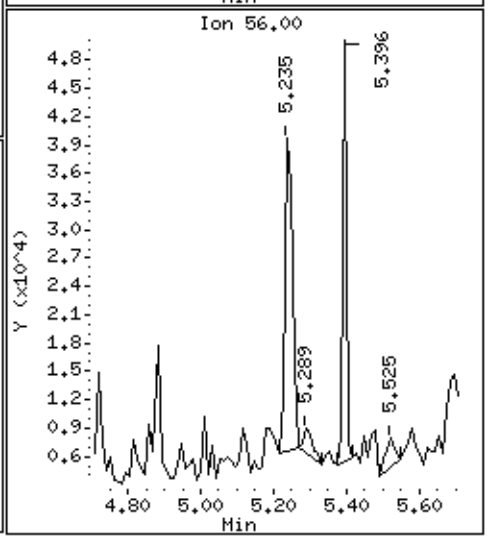












Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5231.D

Date : 04-NOV-2011 16:39

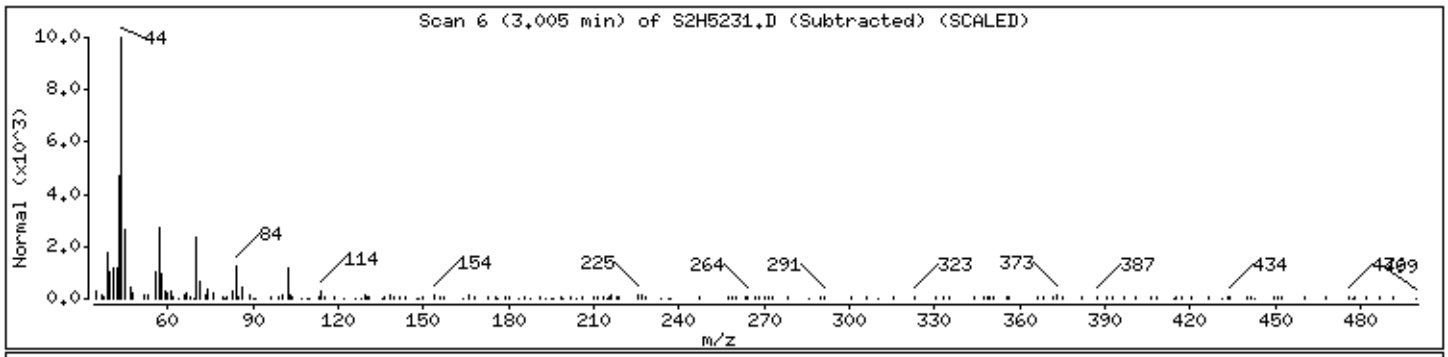
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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



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Date : 04-NOV-2011 16:39

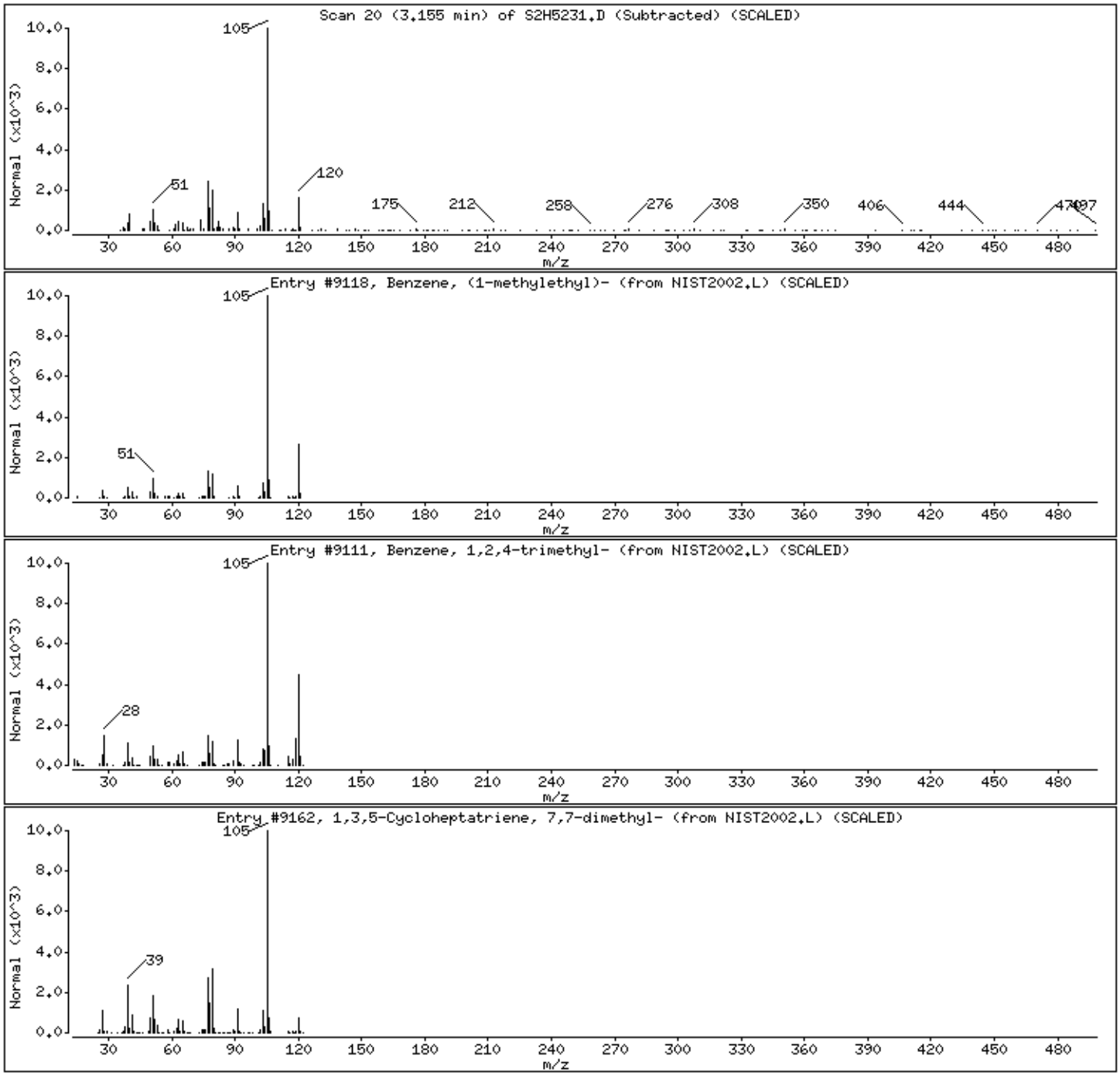
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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
Benzene, (1-methylethyl)-	98-82-8	NIST2002.L	9118	90	C9H12	120
Benzene, 1,2,4-trimethyl-	95-63-6	NIST2002.L	9111	86	C9H12	120
1,3,5-Cycloheptatriene, 7,7-dimethyl-	7557-11-1	NIST2002.L	9162	86	C9H12	120



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Date : 04-NOV-2011 16:39

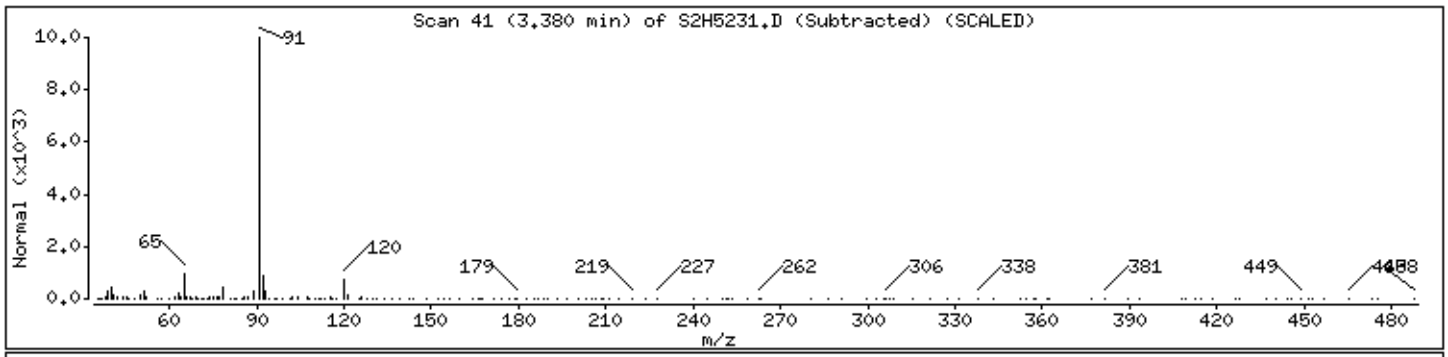
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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



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Date : 04-NOV-2011 16:39

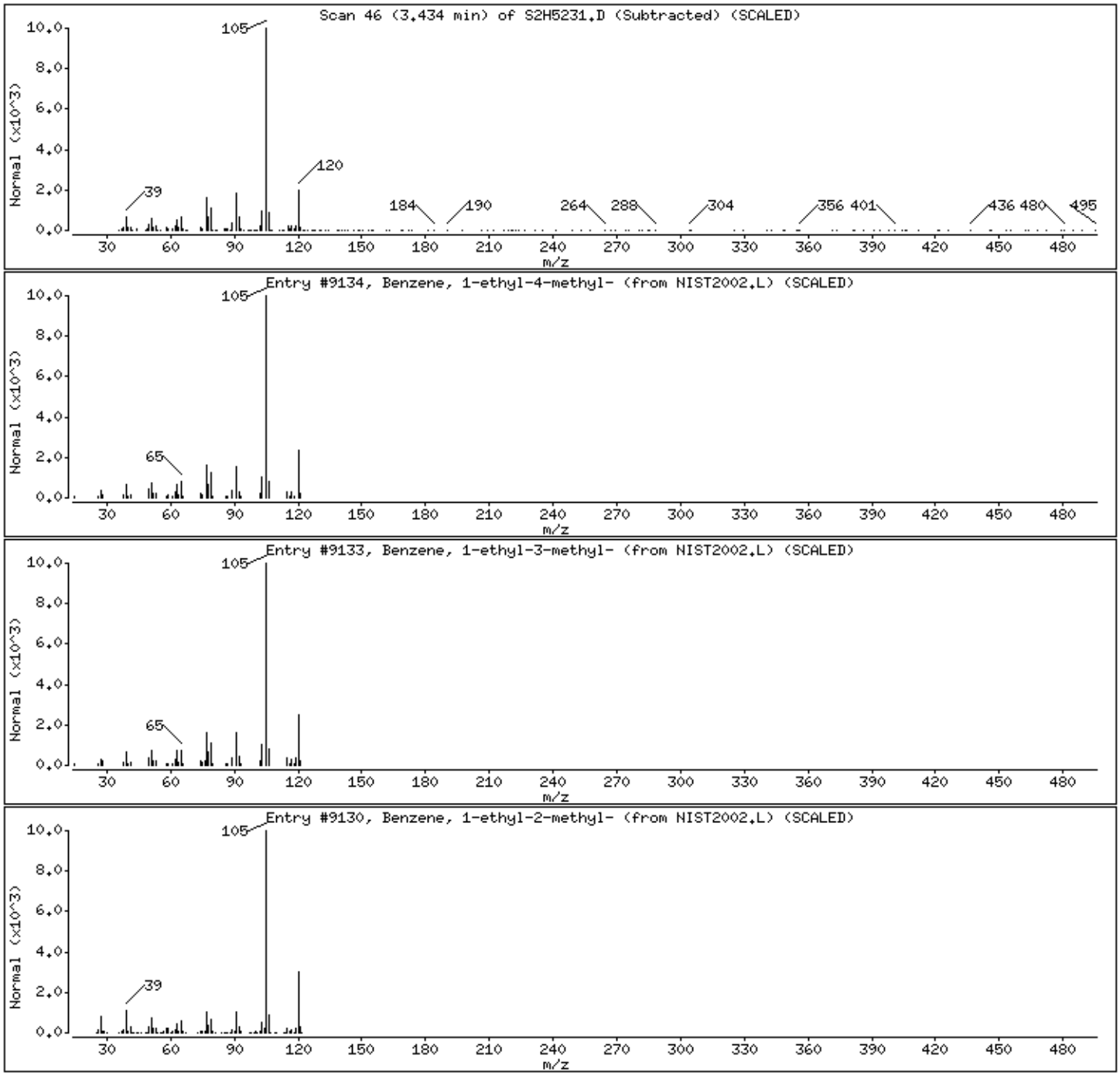
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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
Benzene, 1-ethyl-4-methyl-	622-96-8	NIST2002.L	9134	94	C9H12	120
Benzene, 1-ethyl-3-methyl-	620-14-4	NIST2002.L	9133	94	C9H12	120
Benzene, 1-ethyl-2-methyl-	611-14-3	NIST2002.L	9130	91	C9H12	120



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Date : 04-NOV-2011 16:39

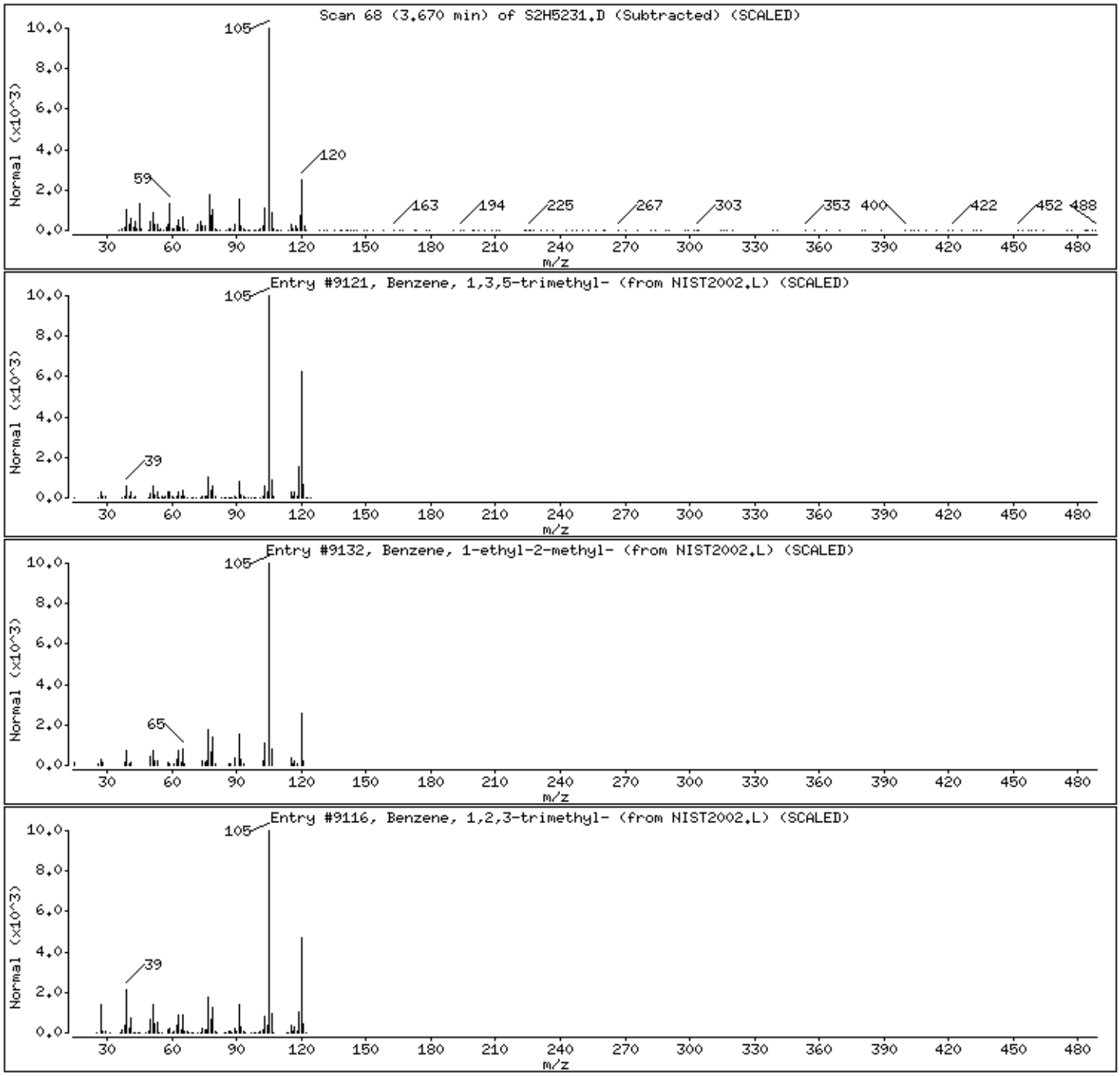
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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
Benzene, 1,3,5-trimethyl-	108-67-8	NIST2002.L	9121	94	C9H12	120
Benzene, 1-ethyl-2-methyl-	611-14-3	NIST2002.L	9132	93	C9H12	120
Benzene, 1,2,3-trimethyl-	526-73-8	NIST2002.L	9116	93	C9H12	120



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Date : 04-NOV-2011 16:39

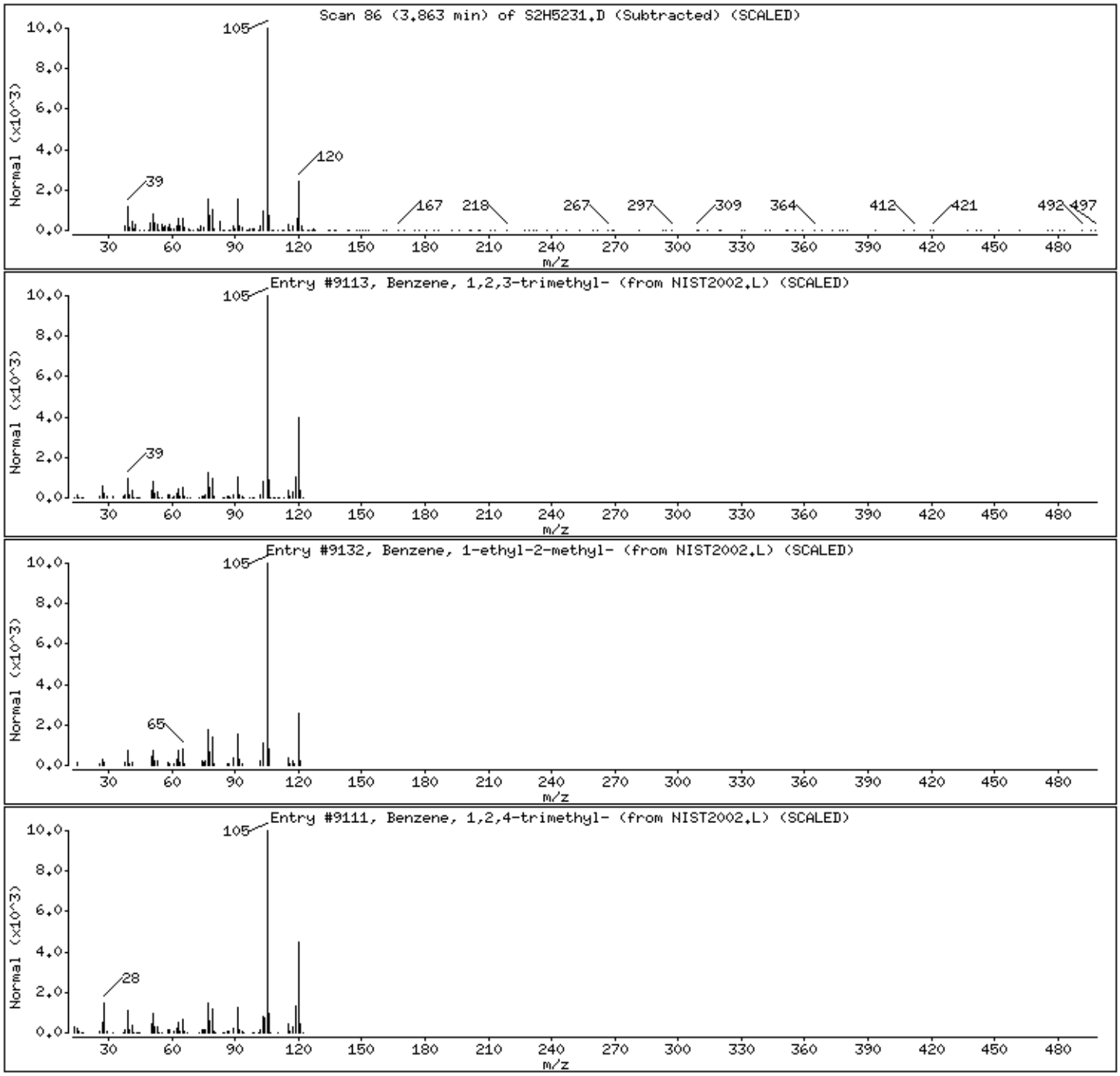
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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
Benzene, 1,2,3-trimethyl-	526-73-8	NIST2002.L	9113	91	C9H12	120
Benzene, 1-ethyl-2-methyl-	611-14-3	NIST2002.L	9132	91	C9H12	120
Benzene, 1,2,4-trimethyl-	95-63-6	NIST2002.L	9111	91	C9H12	120



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Date : 04-NOV-2011 16:39

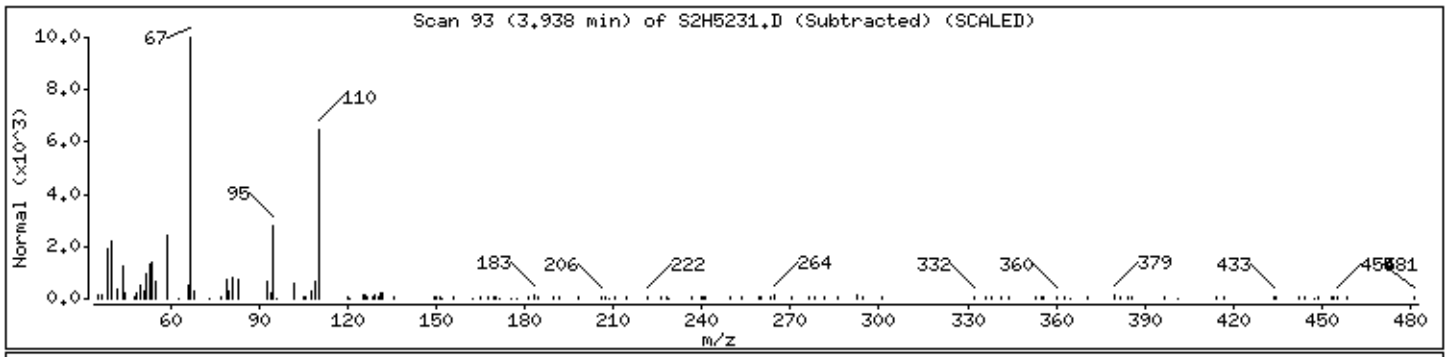
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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



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Date : 04-NOV-2011 16:39

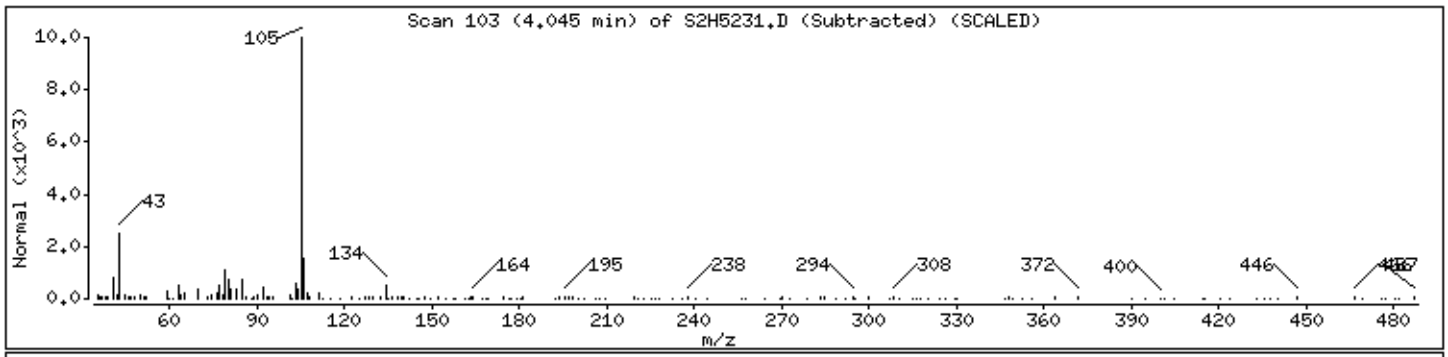
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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



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Date : 04-NOV-2011 16:39

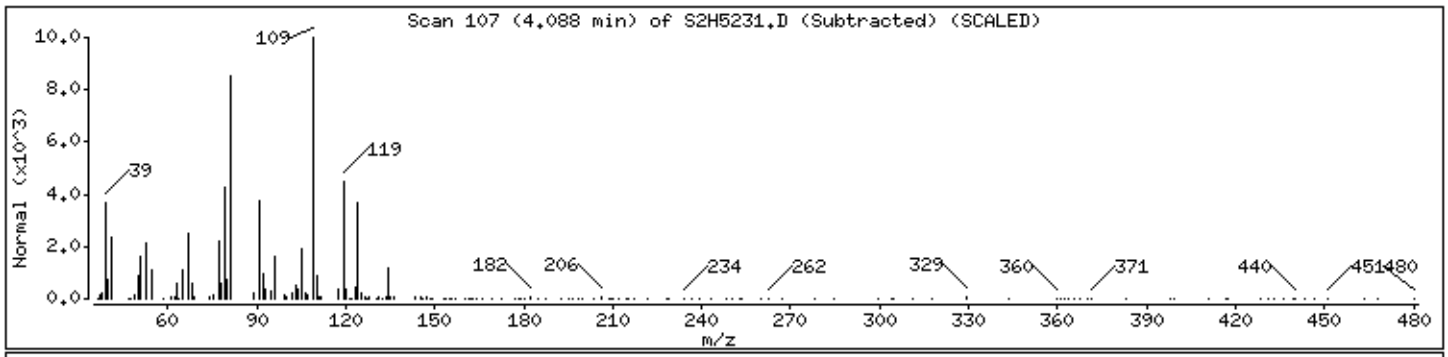
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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\S2H5231.D

Date : 04-NOV-2011 16:39

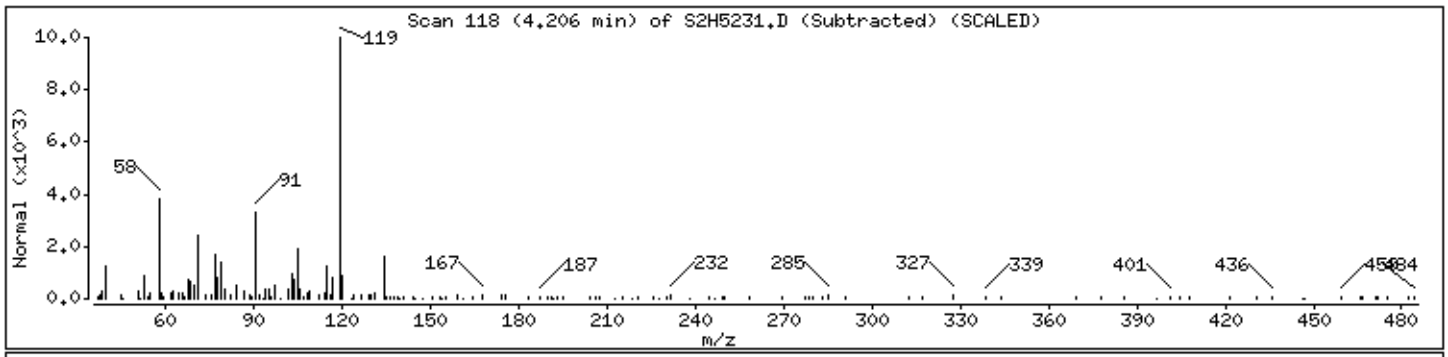
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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



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Date : 04-NOV-2011 16:39

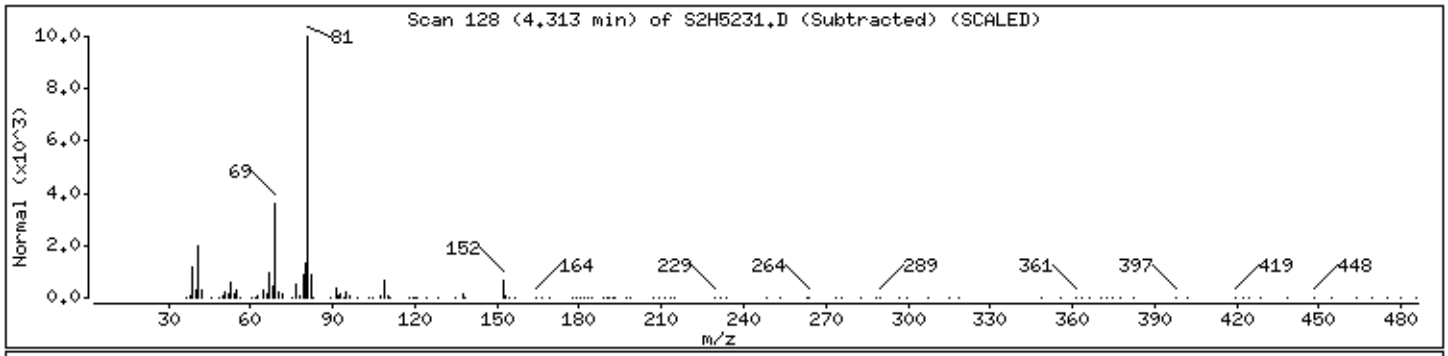
Client ID: H30X4 Instrument: S2.i

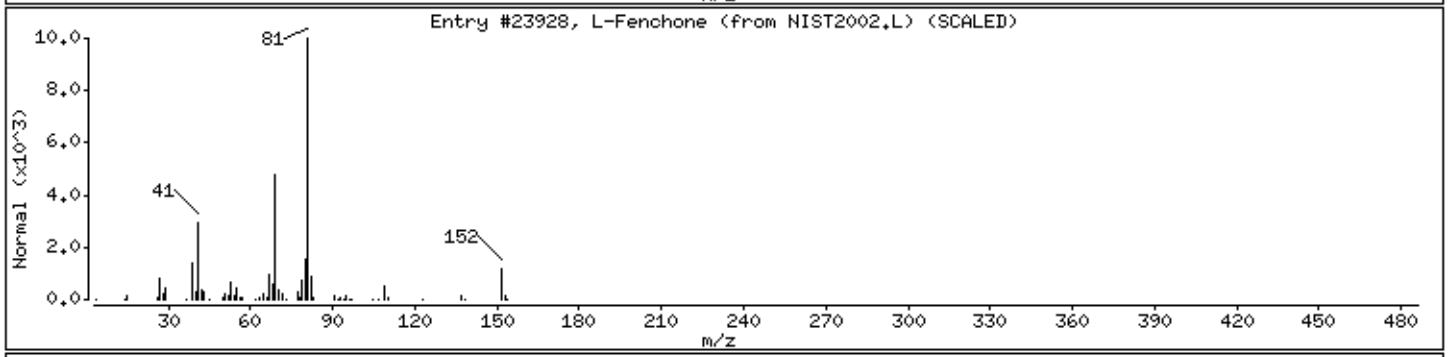
Sample Info: K2213-01A,,62685,,

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
L-Fenchone	126-21-6	NIST2002.L	23928	91	C10H16O	152





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Date : 04-NOV-2011 16:39

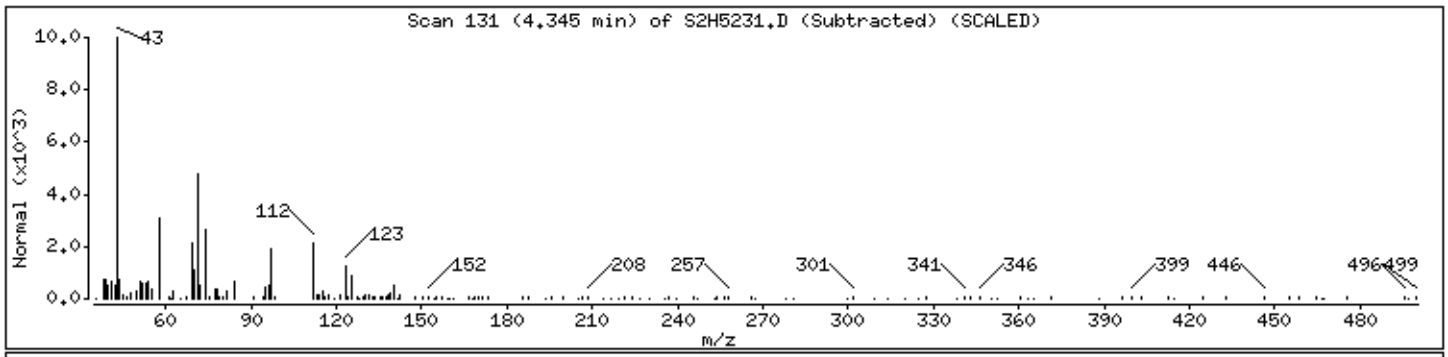
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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



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Date : 04-NOV-2011 16:39

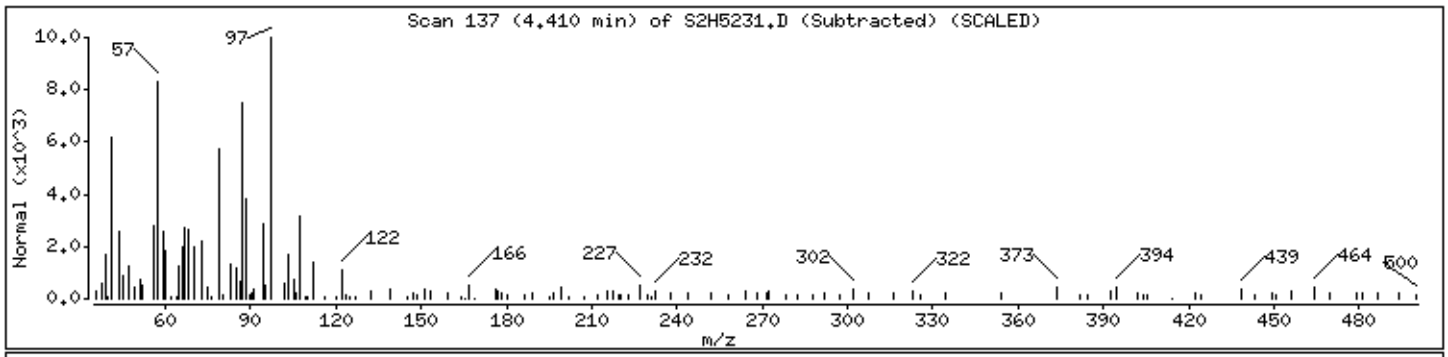
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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\S2H5231.D

Date : 04-NOV-2011 16:39

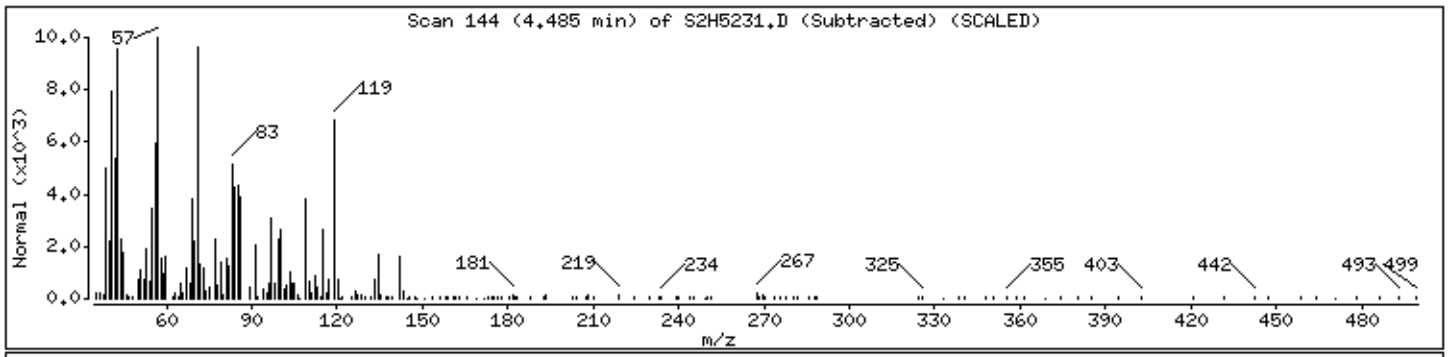
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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\S2H5231.D

Date : 04-NOV-2011 16:39

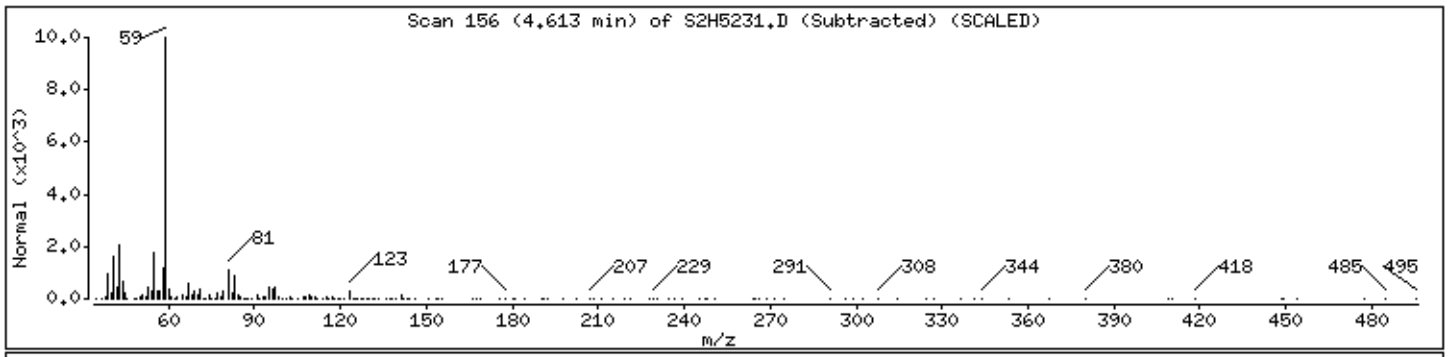
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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\S2H5231.D

Date : 04-NOV-2011 16:39

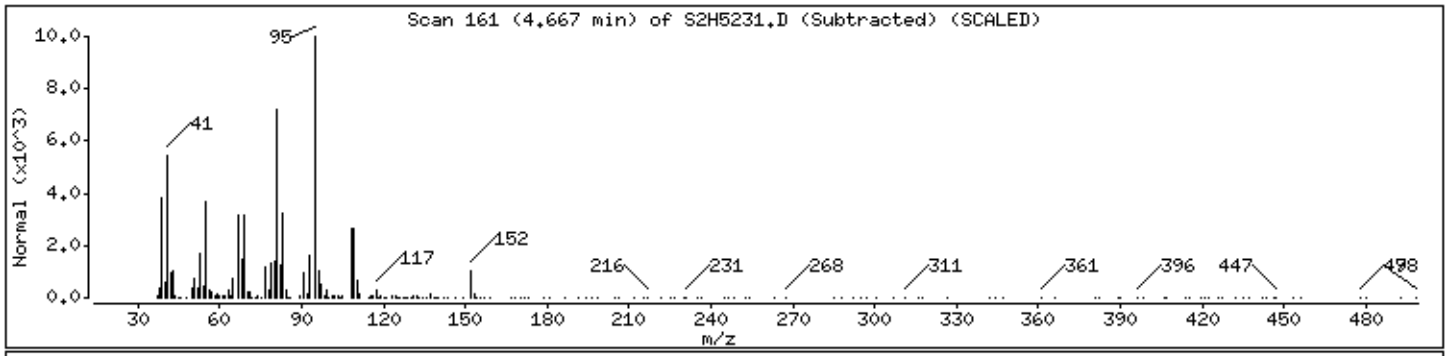
Client ID: H30X4 Instrument: S2.i

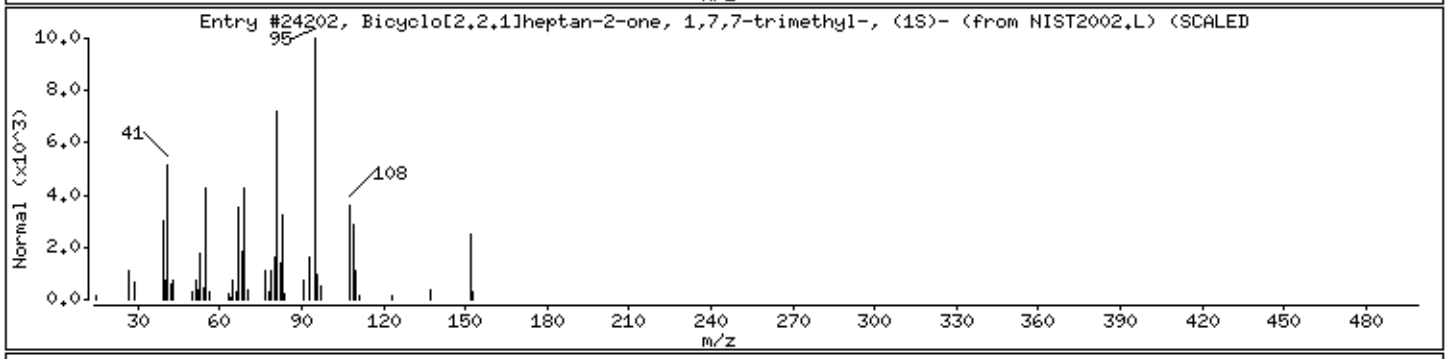
Sample Info: K2213-01A,,62685,,

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
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet	464-48-2	NIST2002.L	24202	94	C10H16O	152





Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5231.D

Date : 04-NOV-2011 16:39

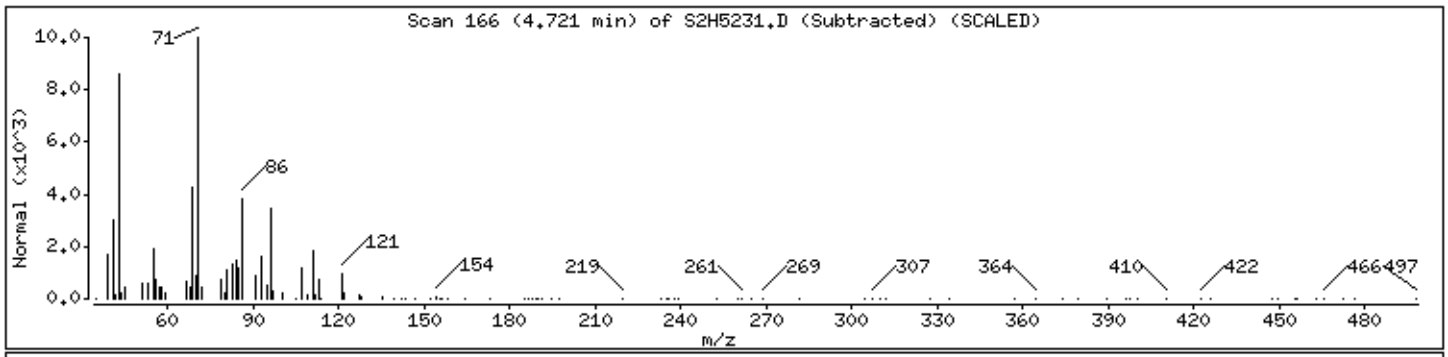
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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



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Date : 04-NOV-2011 16:39

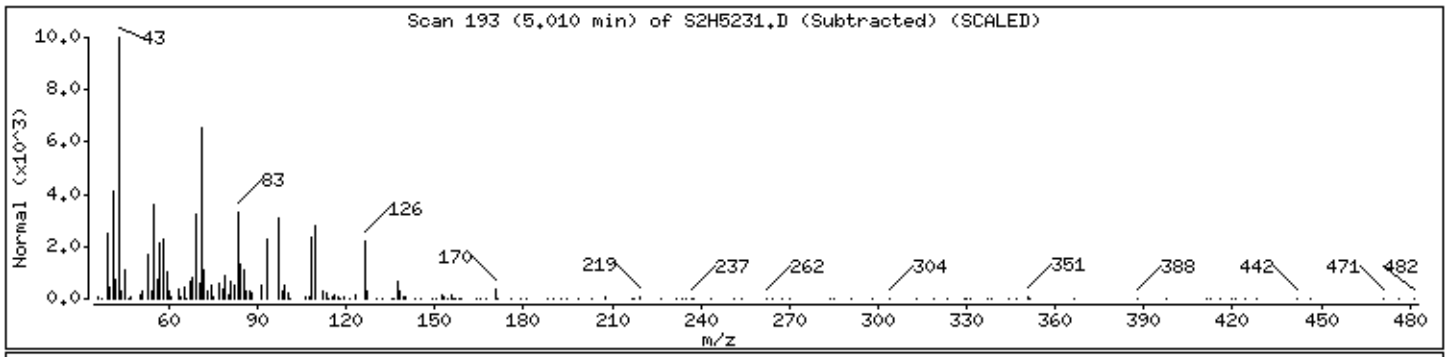
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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



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Date : 04-NOV-2011 16:39

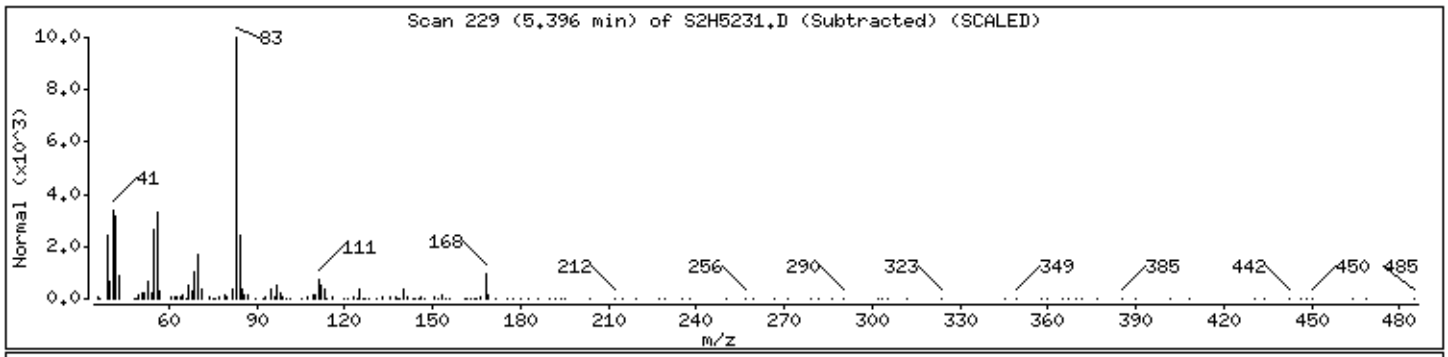
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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\S2H5231.D

Date : 04-NOV-2011 16:39

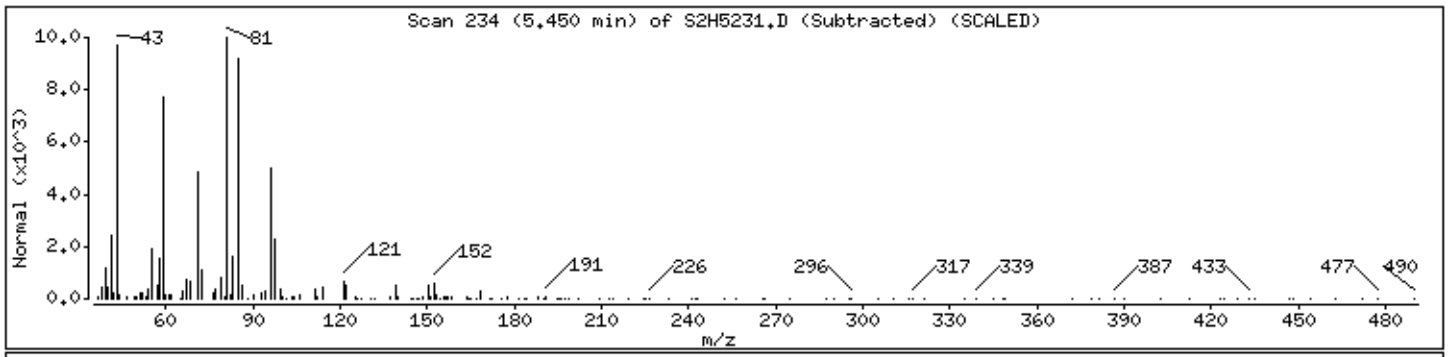
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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\S2H5231.D

Date : 04-NOV-2011 16:39

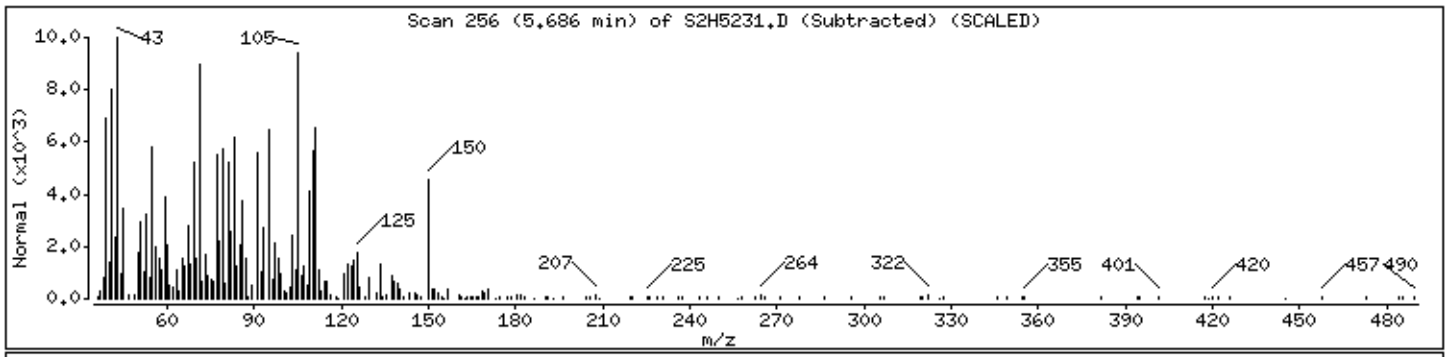
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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\S2H5231.D

Date : 04-NOV-2011 16:39

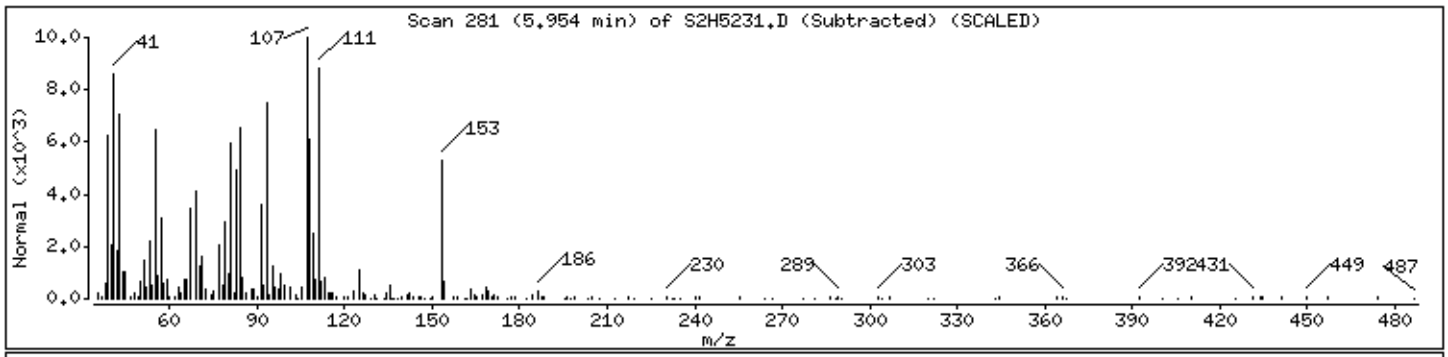
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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\S2H5231.D

Date : 04-NOV-2011 16:39

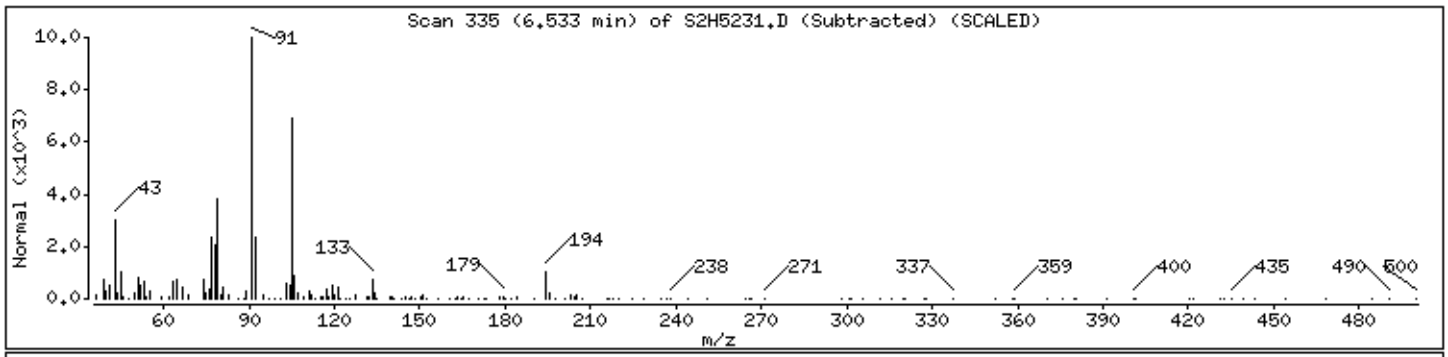
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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\S2H5231.D

Date : 04-NOV-2011 16:39

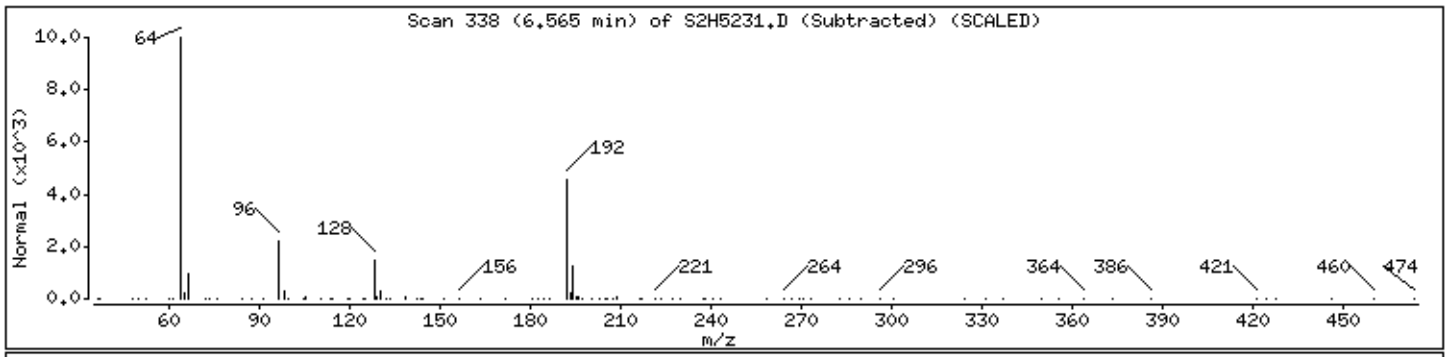
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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\S2H5231.D

Date : 04-NOV-2011 16:39

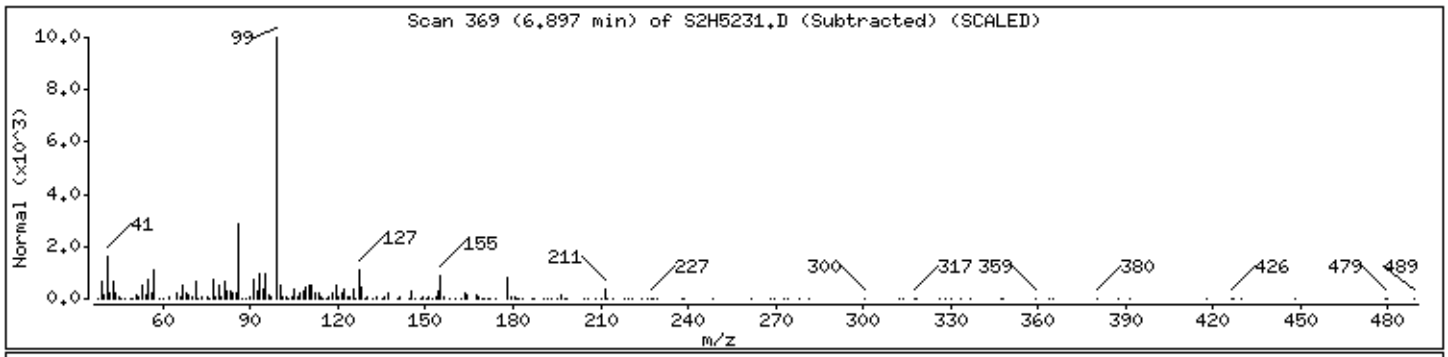
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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\S2H5231.D

Date : 04-NOV-2011 16:39

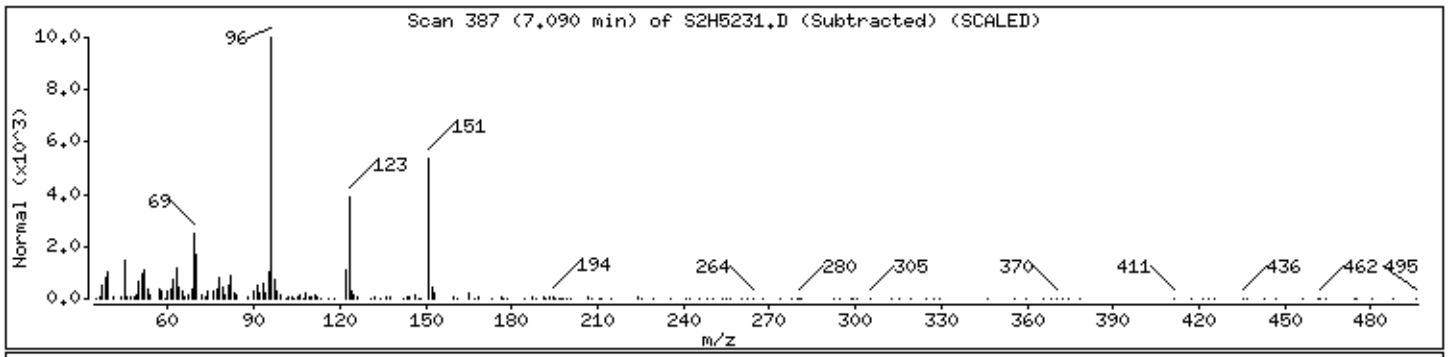
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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\S2H5231.D

Date : 04-NOV-2011 16:39

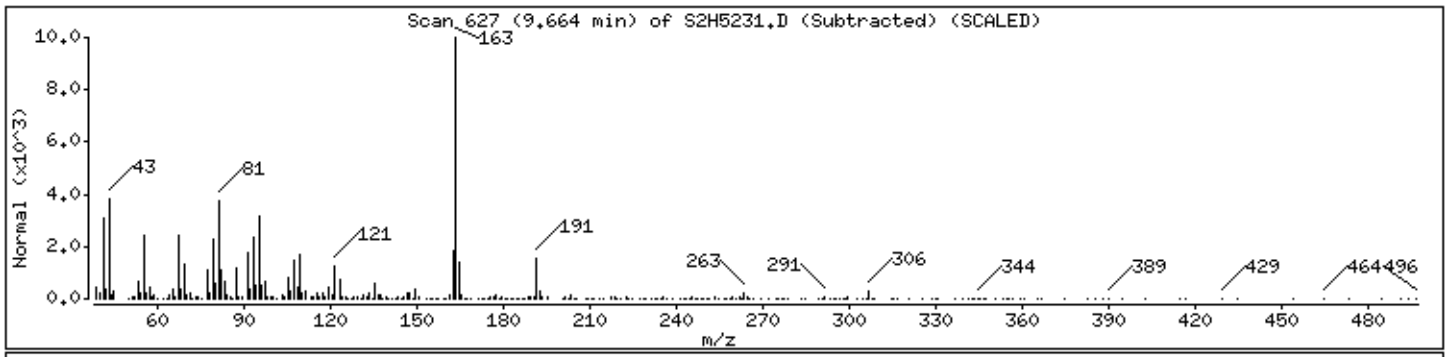
Client ID: H30X4 Instrument: S2.i

Sample Info: K2213-01A,,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

EPA SAMPLE NO.

H30X6

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-06A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8652.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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

EPA SAMPLE NO.

H30X6

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-06A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8652.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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	1.2	J
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	1.2	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	1.0	J
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

EPA SAMPLE NO.

H30X6

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-06A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8652.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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	2.885	3.3	J
02	1000162-25-4	Cyclopentene, 3-isopropenyl-	3.020	8.5	NJ
03		Unknown-02	3.268	11	J
04		Unknown-03	3.330	2.7	J
05		Unknown-04	3.475	2.6	J
06		Unknown-05	3.548	2.2	J
07		Unknown-06	3.775	10	J
08	76-22-2	Camphor	4.200	40	NJ
09		Unknown-07	4.252	8.9	J
10		Unknown-08	4.883	59	J
11		Unknown-09	4.976	40	J
12		Unknown-10	5.069	5.1	J
13		Unknown-11	5.297	18	J
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8652.D
Report Date: 11-Nov-2011 14:03

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8652.D
Lab Smp Id: K2213-06A Client Smp ID: H30X6
Inj Date : 11-NOV-2011 00:15
Operator : MMS   SRC: LIMS Inst ID: S4.i
Smp Info : K2213-06A,,62806,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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	3.050	3.050	(0.905)	104651	77.7420	39
$	4 bis(2-Chloroethyl)ether-d8	67	3.113	3.112	(0.923)	64694	64.6123	32
$	6 2-Chlorophenol-d4	132	3.206	3.206	(0.951)	110334	69.8458	35
*	8 1,4-Dichlorobenzene-d4	152	3.371	3.371	(1.000)	50057	40.0000	(Q)
$	11 4-Methylphenol-d8	113	3.609	3.609	(1.071)	104560	73.3469	37
$	16 Nitrobenzene-d5	128	3.796	3.796	(0.857)	48492	68.5540	34(Q)
$	19 2-Nitrophenol-d4	143	4.075	4.075	(0.921)	61004	67.6613	34
$	23 2,4-Dichlorophenol-d3	165	4.282	4.282	(0.967)	126036	74.6022	37
*	25 Naphthalene-d8	136	4.427	4.427	(1.000)	168982	40.0000	
$	27 4-Chloroaniline-d4	131	4.520	4.468	(1.021)	4324	2.59412	1.3(aQH)
$	40 Dimethylphthalate-d6	166	5.783	5.772	(0.951)	391553	66.9094	33
$	43 Acenaphthylene-d8	160	5.938	5.938	(0.976)	399714	61.6875	31
*	46 Acenaphthene-d10	164	6.083	6.083	(1.000)	147998	40.0000	
$	49 4-Nitrophenol-d4	143	6.187	6.166	(1.017)	72502	65.8087	33
	53 Diethylphthalate	149	6.487	6.487	(1.066)	14576	2.42636	1.2(a)
$	54 Fluorene-d10	176	6.590	6.590	(1.083)	328485	62.9590	31
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.642	6.642	(0.882)	88039	65.7511	33
*	65 Phenanthrene-d10	188	7.532	7.532	(1.000)	333809	40.0000	
$	67 Anthracene-d10	188	7.594	7.584	(1.008)	618762	67.4928	34
	70 Di-n-butylphthalate	149	8.081	8.081	(1.073)	24227	2.49762	1.2(a)
$	72 Pyrene-d10	212	8.929	8.929	(0.881)	674589	69.9219	35

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8652.D
Report Date: 11-Nov-2011 14:03

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
79	bis(2-Ethylhexyl)phthalate	149	10.099	10.099	(0.997)	14749	2.03219	1.0(a)
* 77	Chrysene-d12	240	10.130	10.120	(1.000)	494983	40.0000	(Q)
$ 83	Benzo(a)pyrene-d12	264	11.714	11.703	(0.990)	462466	45.9043	23
* 85	Perylene-d12	264	11.827	11.817	(1.000)	454654	40.0000	

QC Flag Legend

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

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8652.D
Report Date: 11-Nov-2011 14:03

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8652.D
Lab Smp Id: K2213-06A Client Smp ID: H30X6
Inj Date : 11-NOV-2011 00:15
Operator : MMS   SRC: LIMS Inst ID: S4.i
Smp Info : K2213-06A,,62806,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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
* 8	1,4-Dichlorobenzene-d4	3.372	406055	40.000
* 25	Naphthalene-d8	4.427	585085	40.000
* 46	Acenaphthene-d10	6.084	710748	40.000

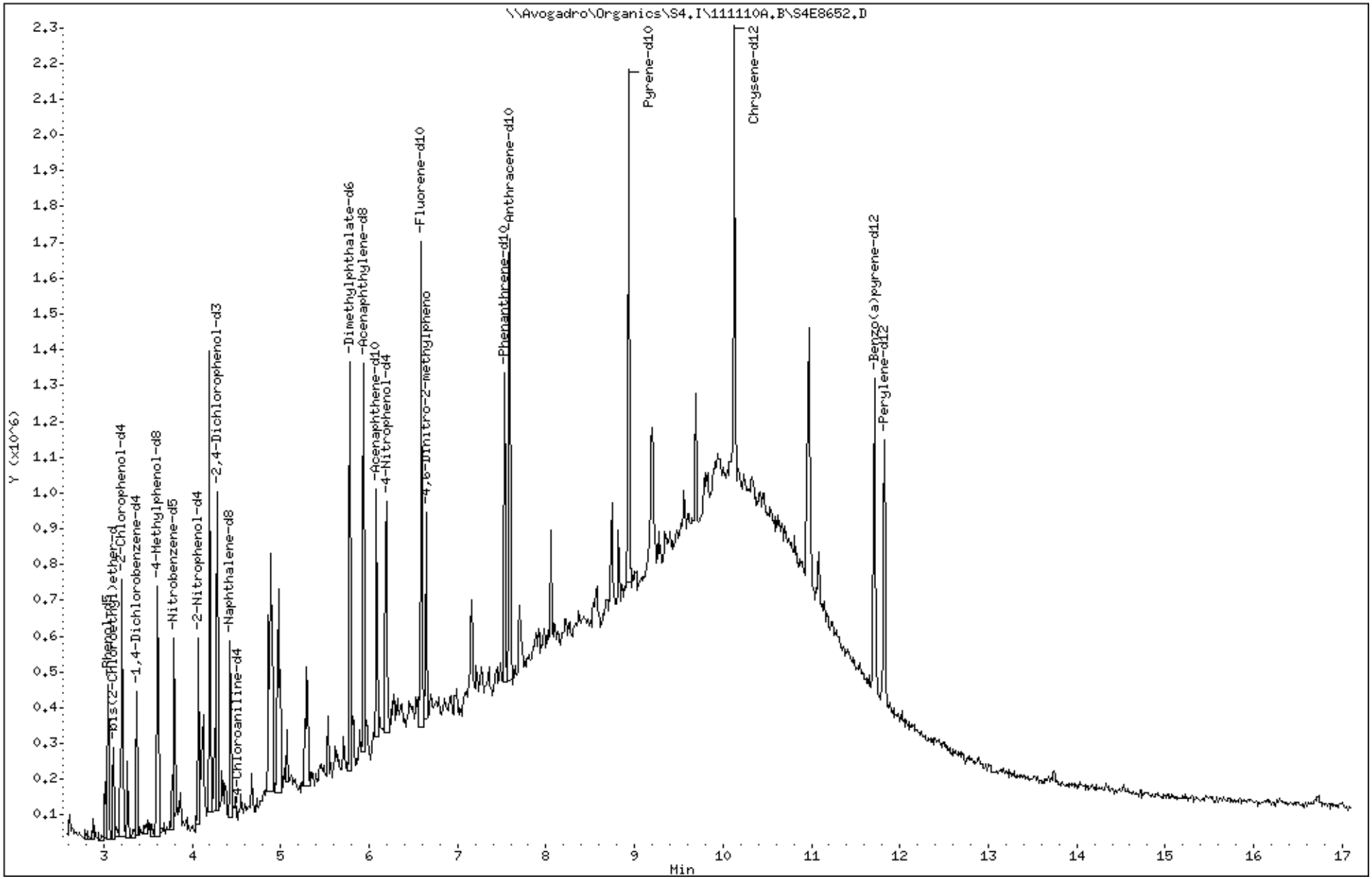
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.885	67340	6.63357161	3.3	0		0	8
Cyclopentene, 3-isopropenyl-5,5-dimethyl				CAS #: 1000162-25-4			
3.020	172937	17.0357592	8.5	87	NIST2002.L	15283	8
Unknown				CAS #:			
3.268	221330	21.8029162	11	0		0	8
Unknown				CAS #:			
3.330	54759	5.39418909	2.7	0		0	8

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8652.D
Report Date: 11-Nov-2011 14:03

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
3.475	53099	5.23067135	2.6	0		0	8
Unknown				CAS #:			
3.548	44381	4.37191263	2.2	0		0	8
Unknown				CAS #:			
3.775	205730	20.2662287	10	0		0	8
Camphor				CAS #: 76-22-2			
4.200	1181932	80.8041046	40	96	NIST2002.L	23919	25
Unknown				CAS #:			
4.252	261053	17.8472159	8.9	0		0	25
Unknown				CAS #:			
4.883	1713649	117.155533	59	0		0	25
Unknown				CAS #:			
4.976	1179150	80.6139046	40	0		0	25
Unknown				CAS #:			
5.069	149976	10.2532489	5.1	0		0	25
Unknown				CAS #:			
5.297	655472	36.8891118	18	0		0	46

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8652.D
Date : 11-NOV-2011 00:15
Client ID: H30X6
Sample Info: K2213-06A,,62806,,
Volume Injected (uL): 2.0
Column phase: RXI-5SILMS

Instrument: S4.i
Operator: MMS SRC: LIMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8652.D

Date : 11-NOV-2011 00:15

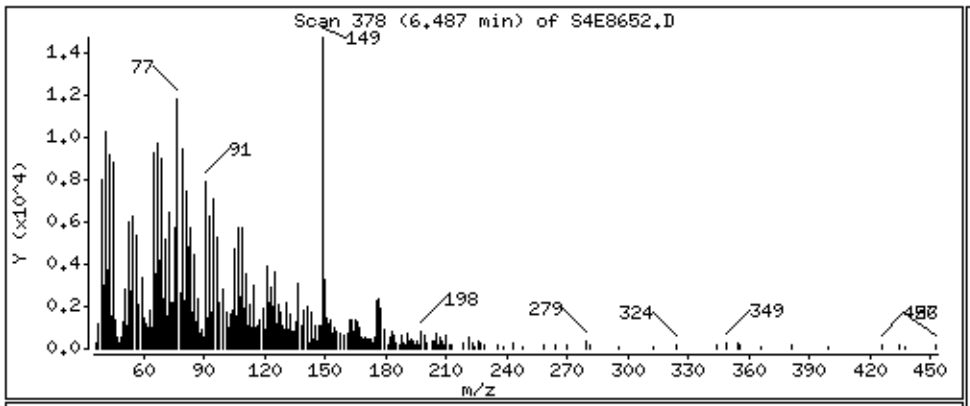
Client ID: H30X6 Instrument: S4.i

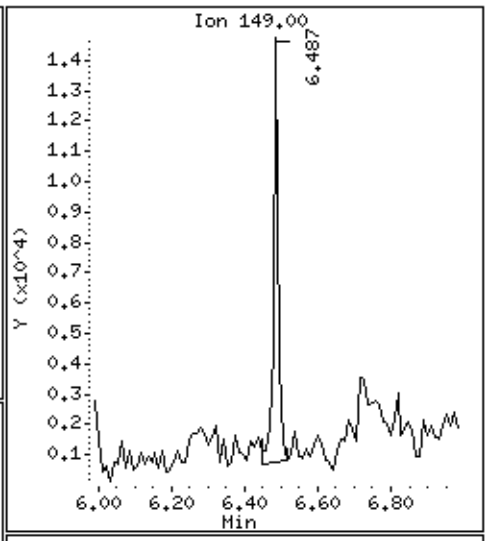
Sample Info: K2213-06A,,62806,,

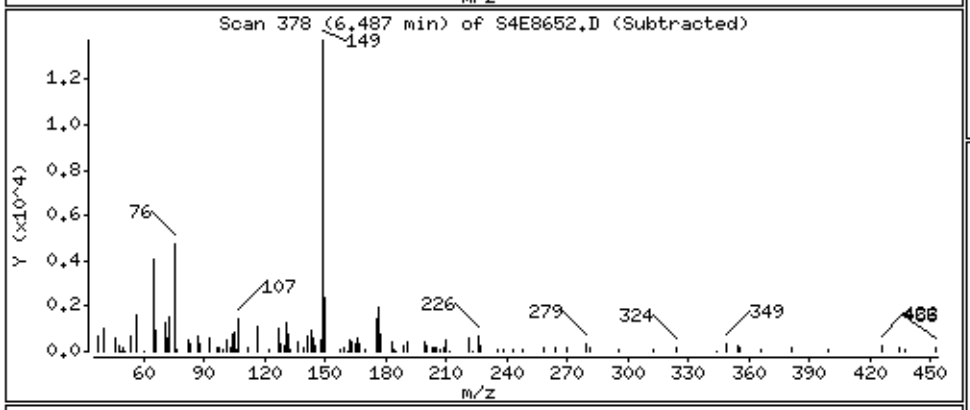
Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

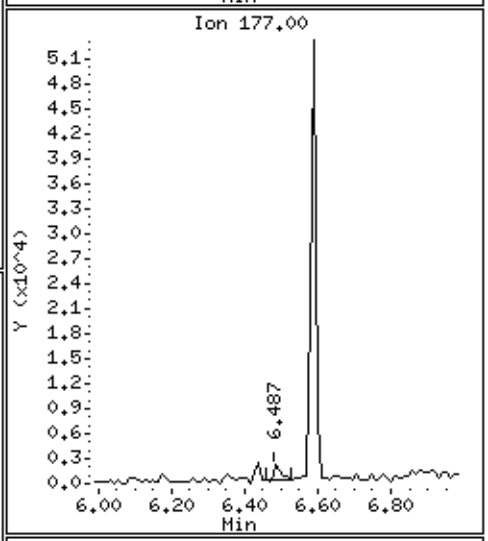
Column phase: RXI-5SILMS Column diameter: 0.25

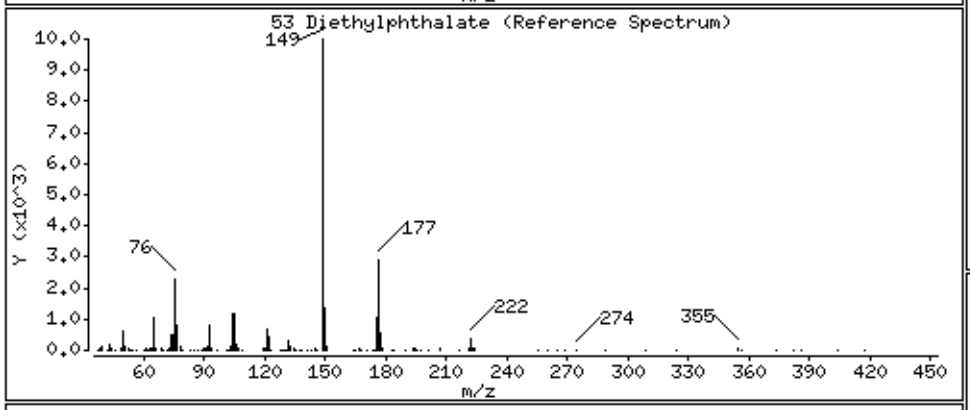
53 Diethylphthalate Concentration: 1.2 ug/L

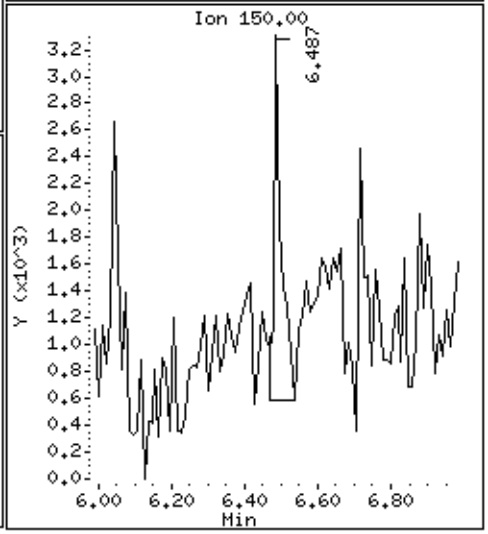


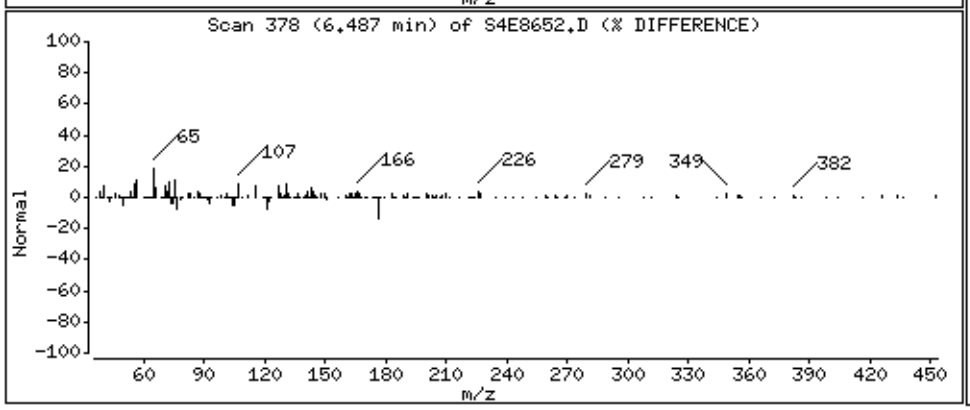












Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8652.D

Date : 11-NOV-2011 00:15

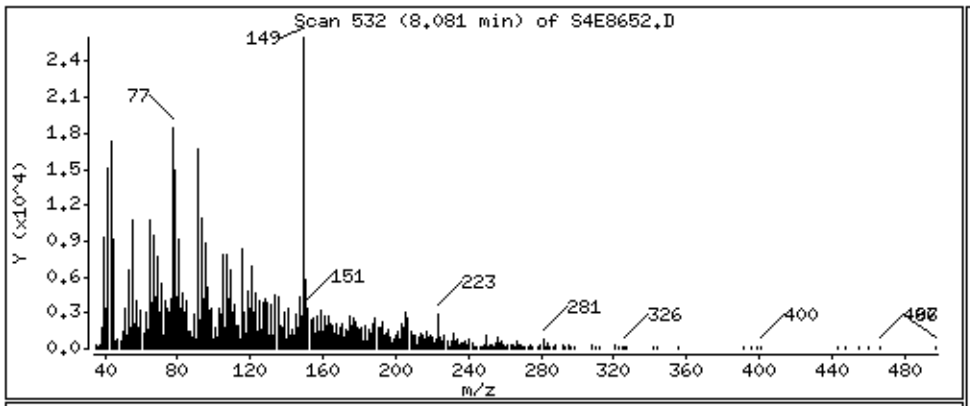
Client ID: H30X6 Instrument: S4.i

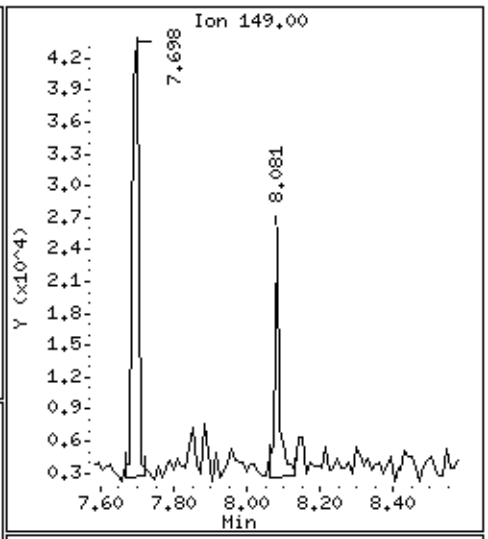
Sample Info: K2213-06A,,62806,,

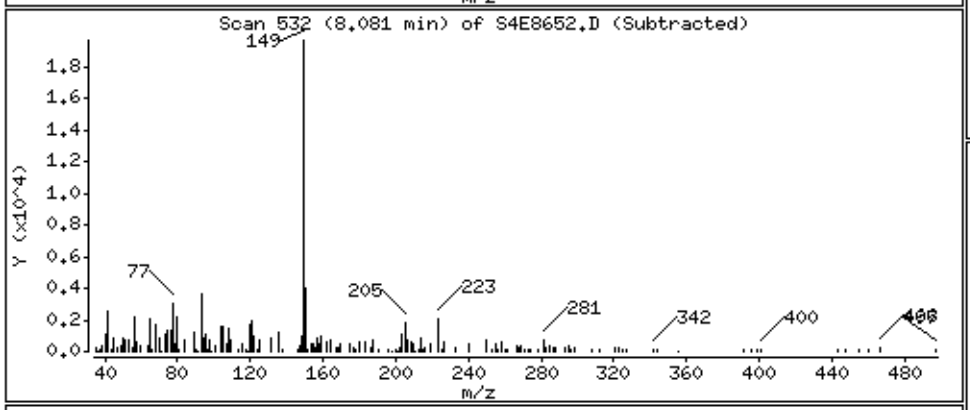
Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

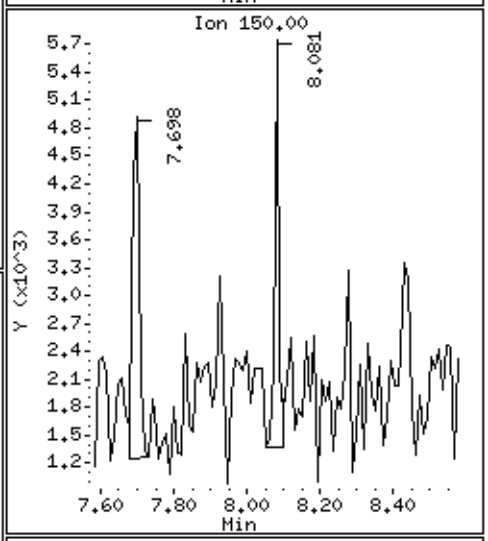
Column phase: RXI-5SILMS Column diameter: 0.25

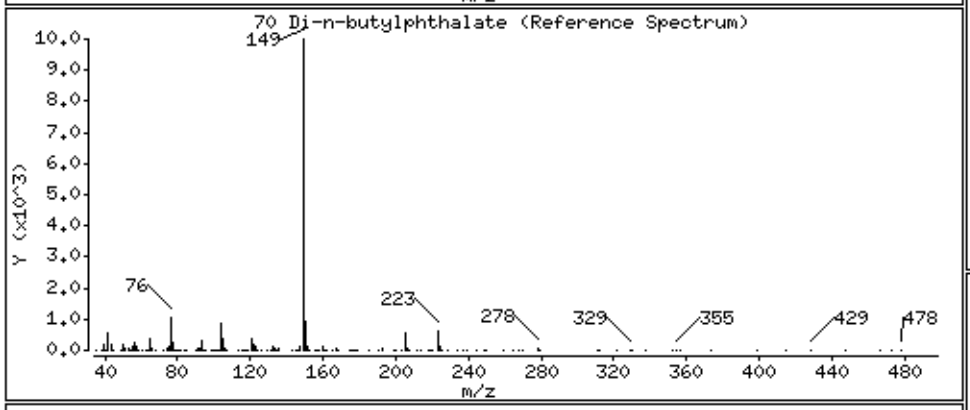
70 Di-n-butylphthalate Concentration: 1.2 ug/L

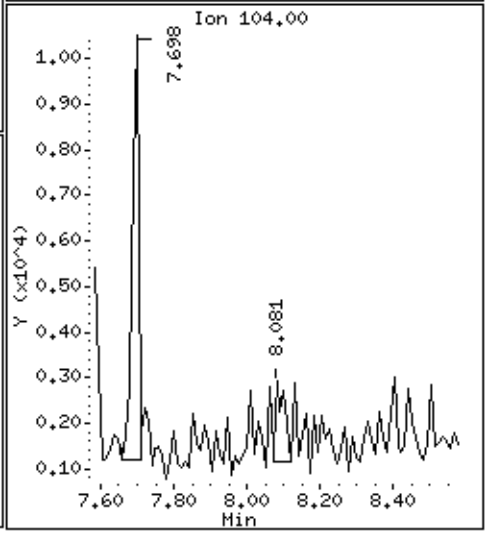


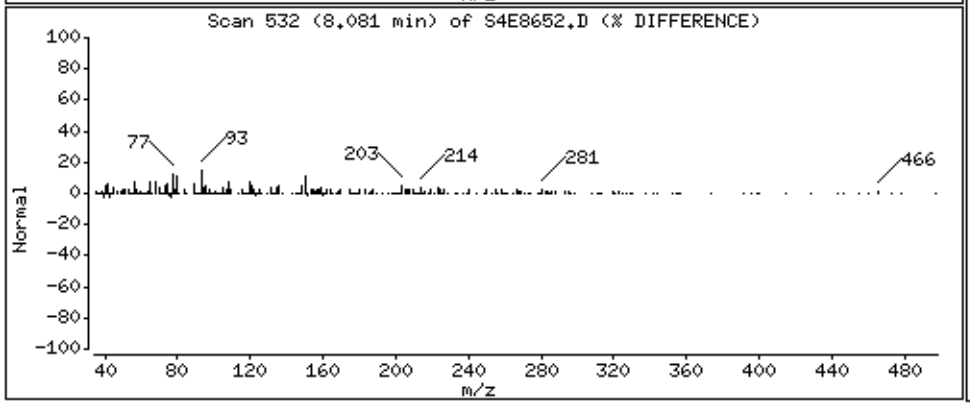












Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8652.D

Date : 11-NOV-2011 00:15

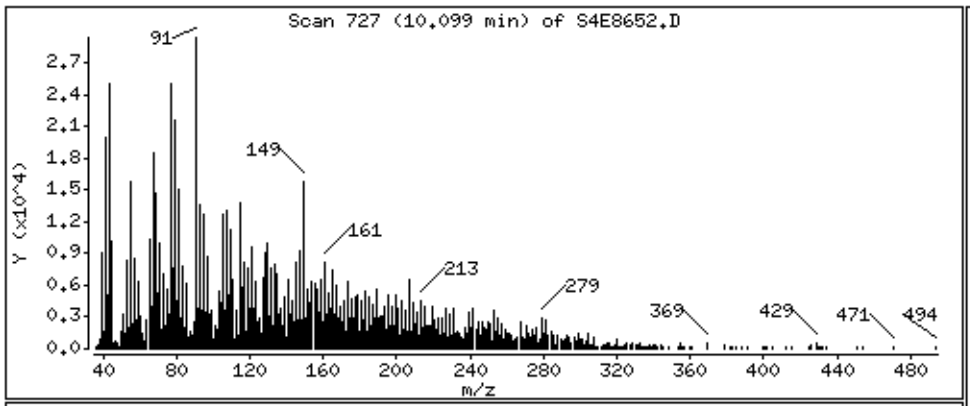
Client ID: H30X6 Instrument: S4.i

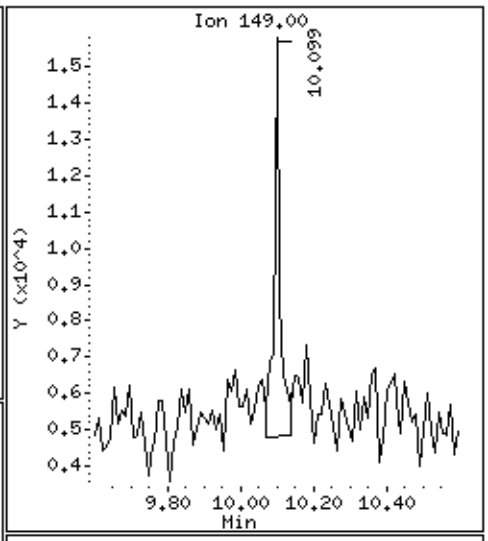
Sample Info: K2213-06A,,62806,,

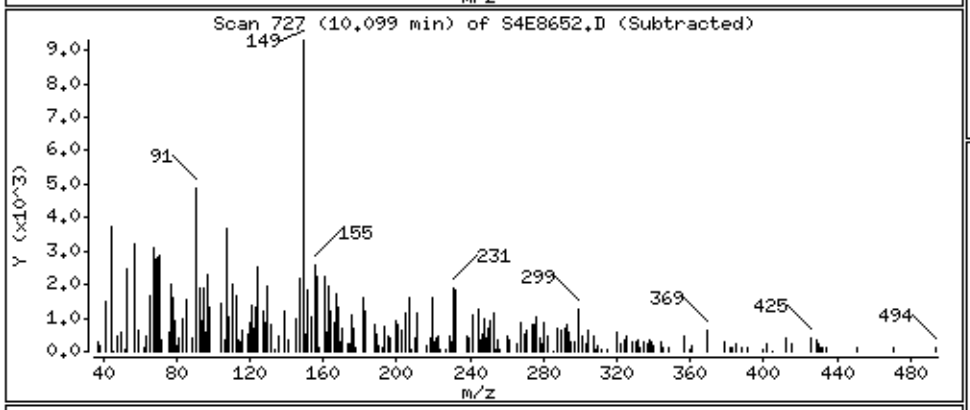
Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

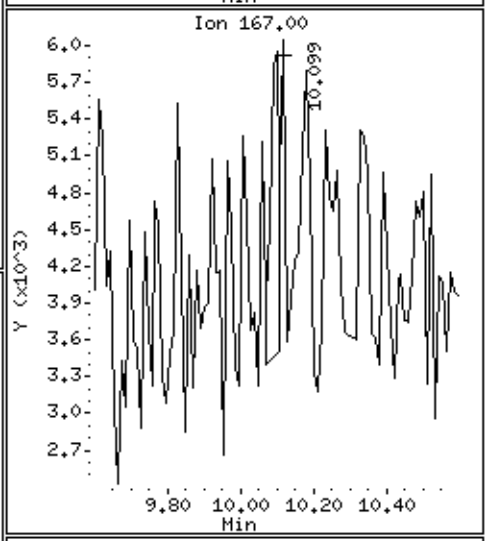
Column phase: RXI-5SILMS Column diameter: 0.25

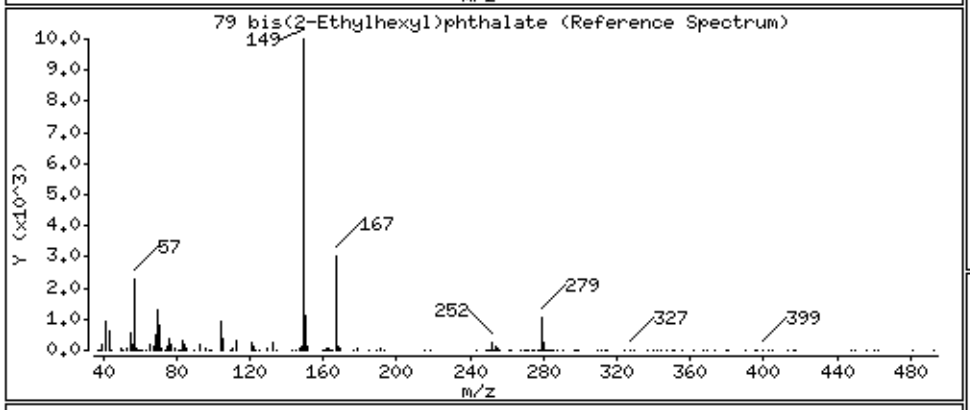
79 bis(2-Ethylhexyl)phthalate Concentration: 1.0 ug/L

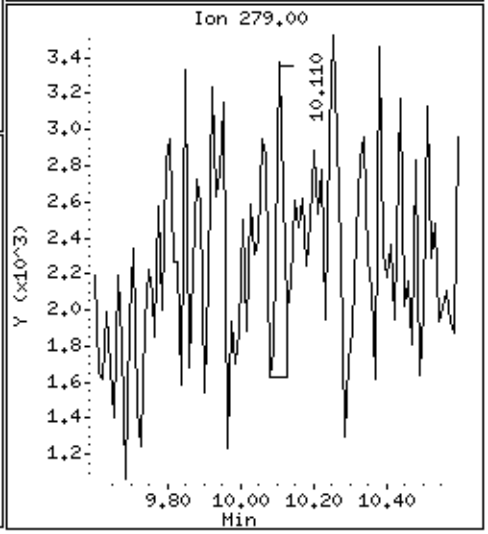


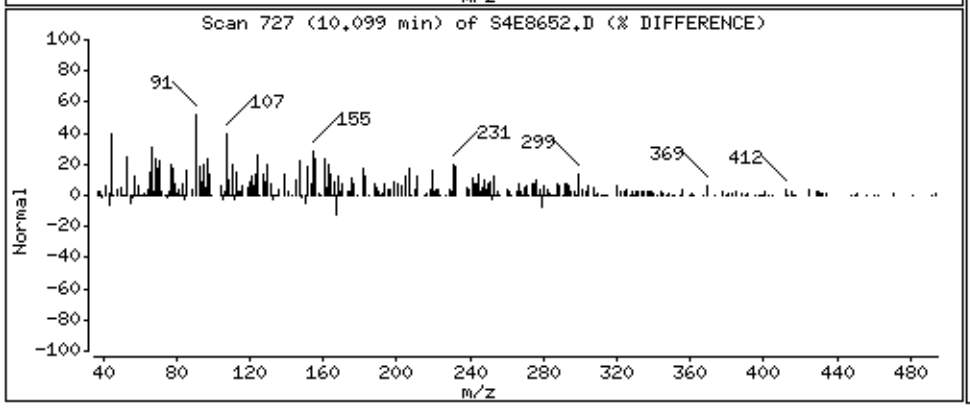












Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8652.D

Date : 11-NOV-2011 00:15

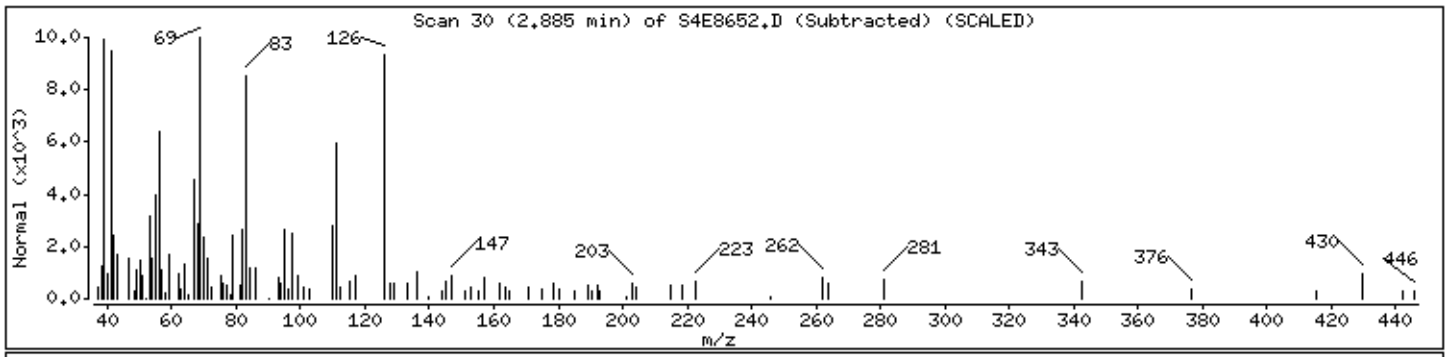
Client ID: H30X6 Instrument: S4.i

Sample Info: K2213-06A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8652.D

Date : 11-NOV-2011 00:15

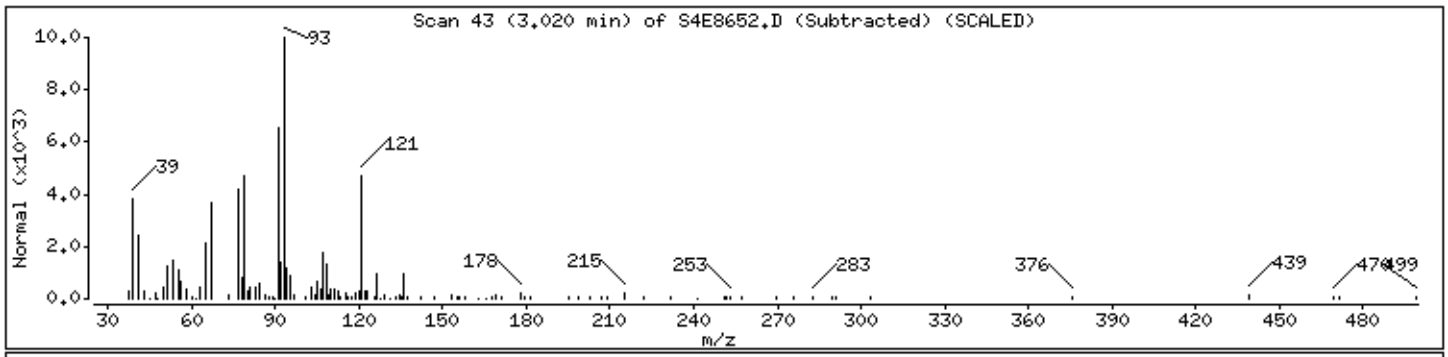
Client ID: H30X6 Instrument: S4.i

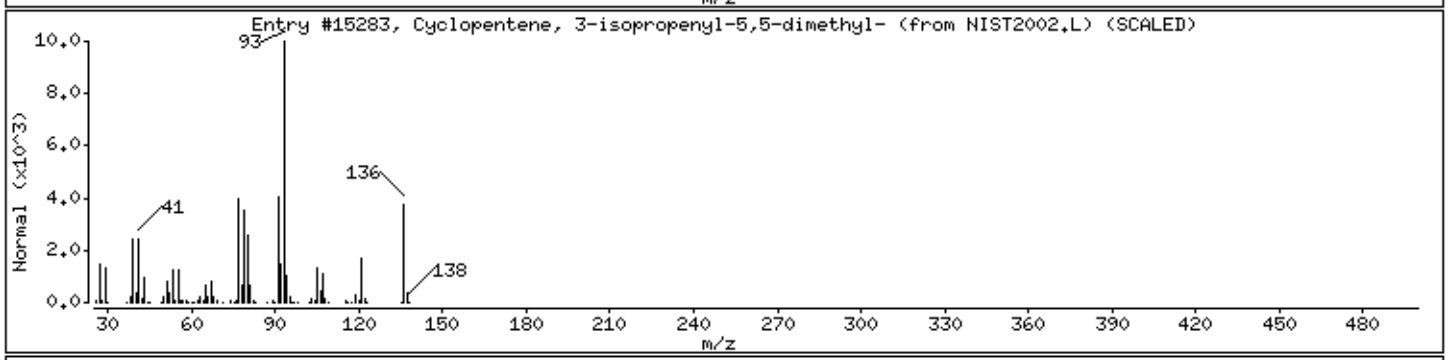
Sample Info: K2213-06A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclopentene, 3-isopropenyl-5,5-dimethyl	1000162-25-4	NIST2002.L	15283	87	C10H16	136





Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8652.D

Date : 11-NOV-2011 00:15

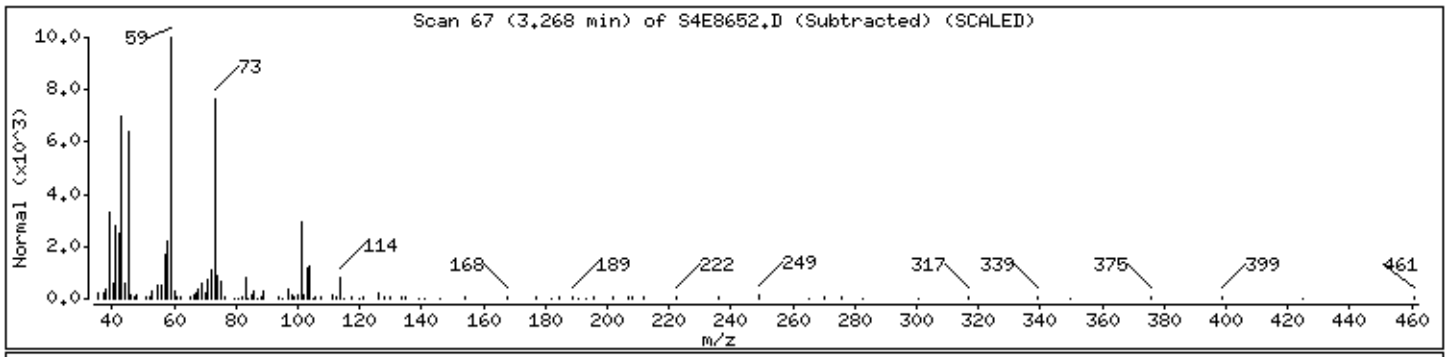
Client ID: H30X6 Instrument: S4.i

Sample Info: K2213-06A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8652.D

Date : 11-NOV-2011 00:15

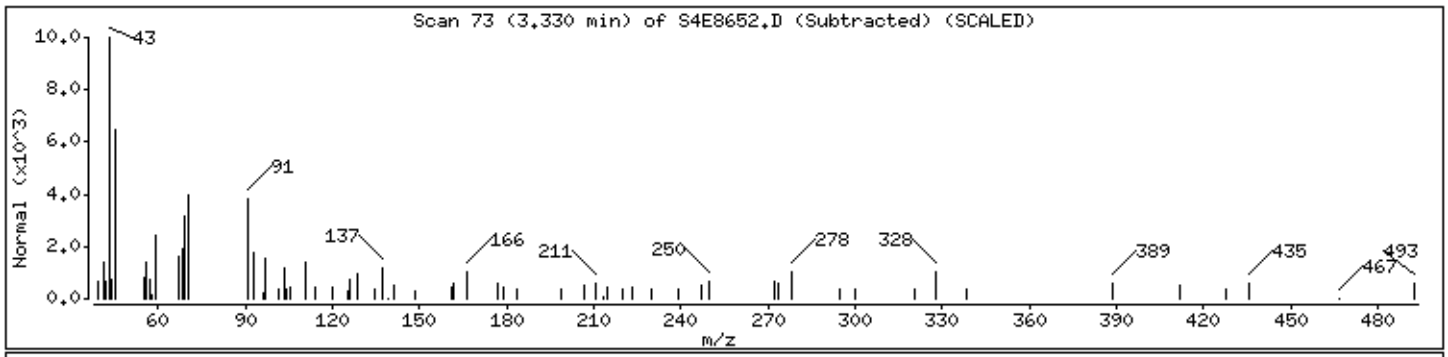
Client ID: H30X6 Instrument: S4.i

Sample Info: K2213-06A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 11-NOV-2011 00:15

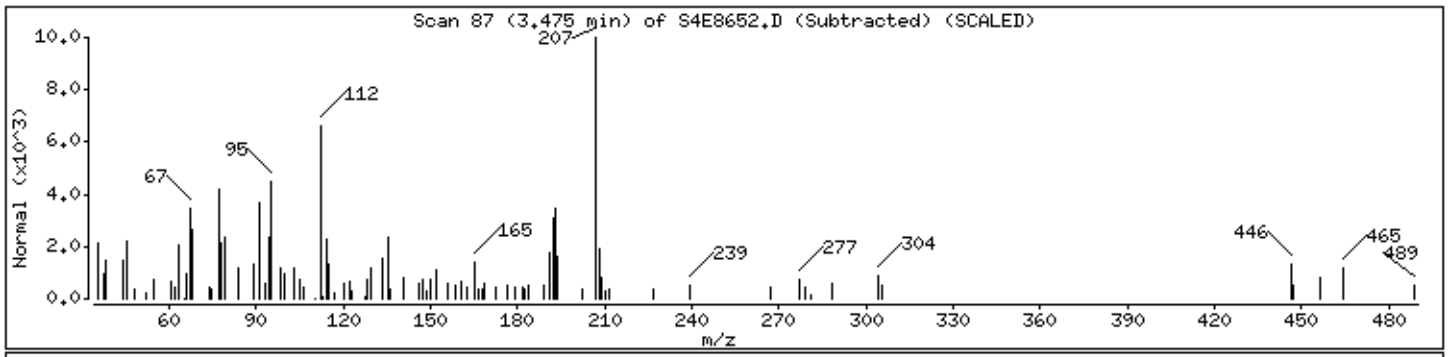
Client ID: H30X6 Instrument: S4.i

Sample Info: K2213-06A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8652.D

Date : 11-NOV-2011 00:15

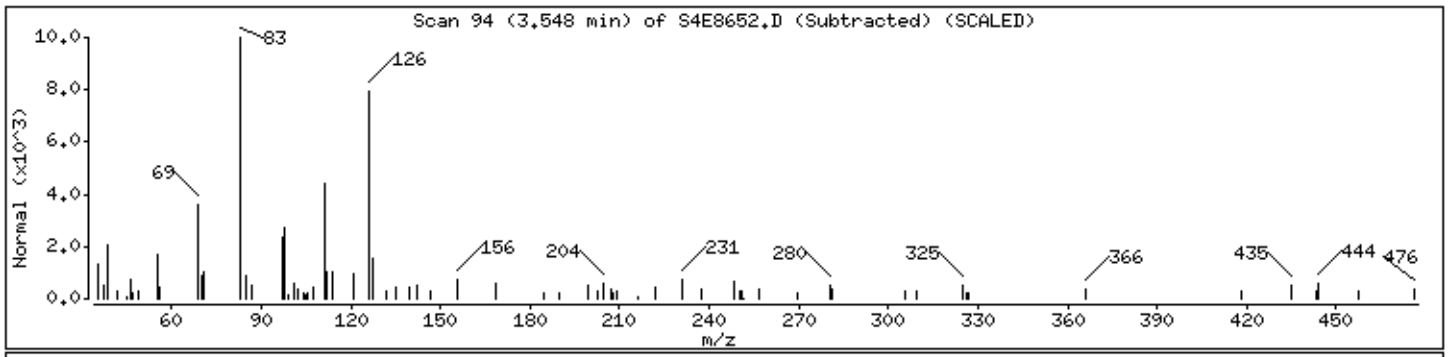
Client ID: H30X6 Instrument: S4.i

Sample Info: K2213-06A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 11-NOV-2011 00:15

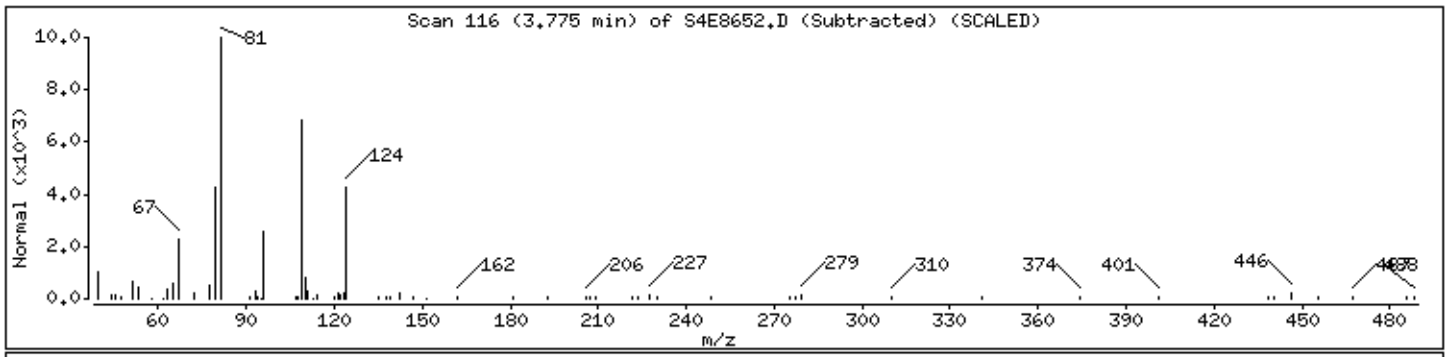
Client ID: H30X6 Instrument: S4.i

Sample Info: K2213-06A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 11-NOV-2011 00:15

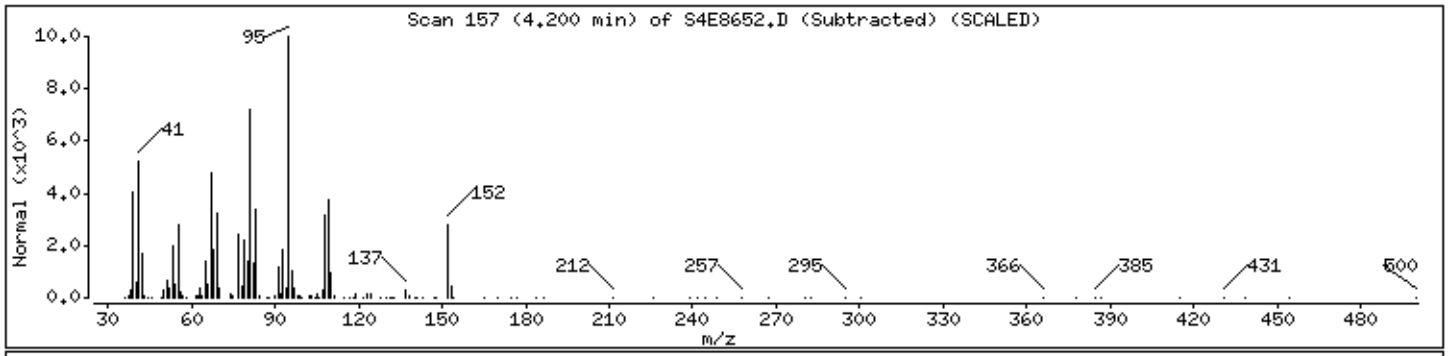
Client ID: H30X6 Instrument: S4.i

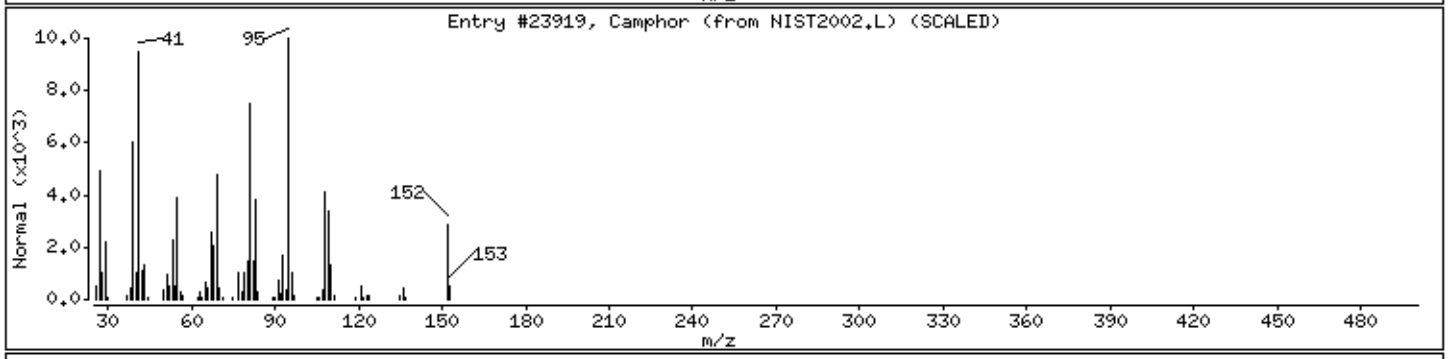
Sample Info: K2213-06A,,62806,,

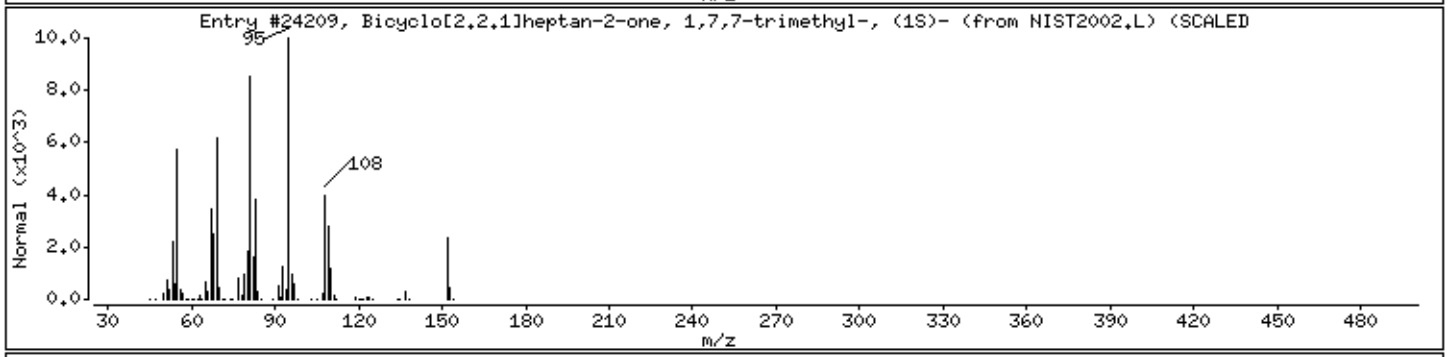
Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Camphor	76-22-2	NIST2002.L	23919	96	C10H16O	152
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimet	464-48-2	NIST2002.L	24209	94	C10H16O	152







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Date : 11-NOV-2011 00:15

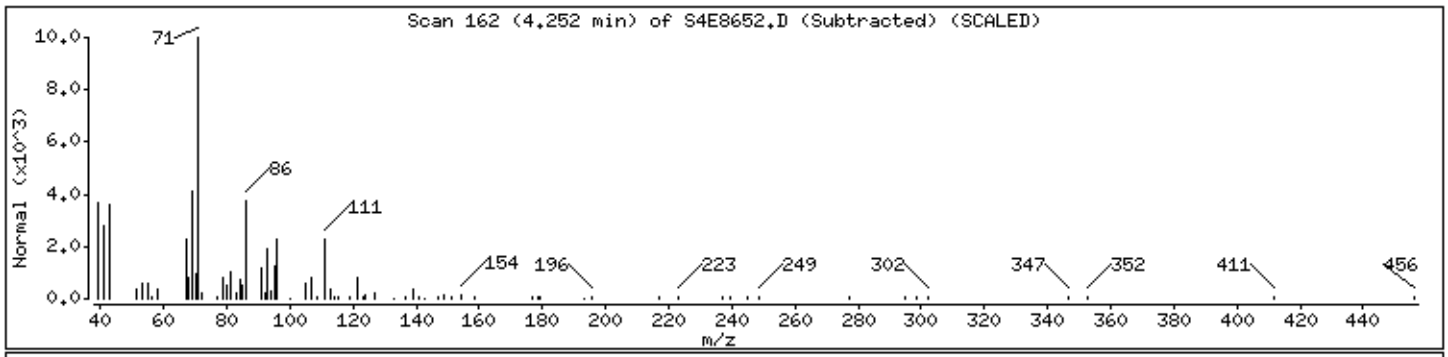
Client ID: H30X6 Instrument: S4.i

Sample Info: K2213-06A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 11-NOV-2011 00:15

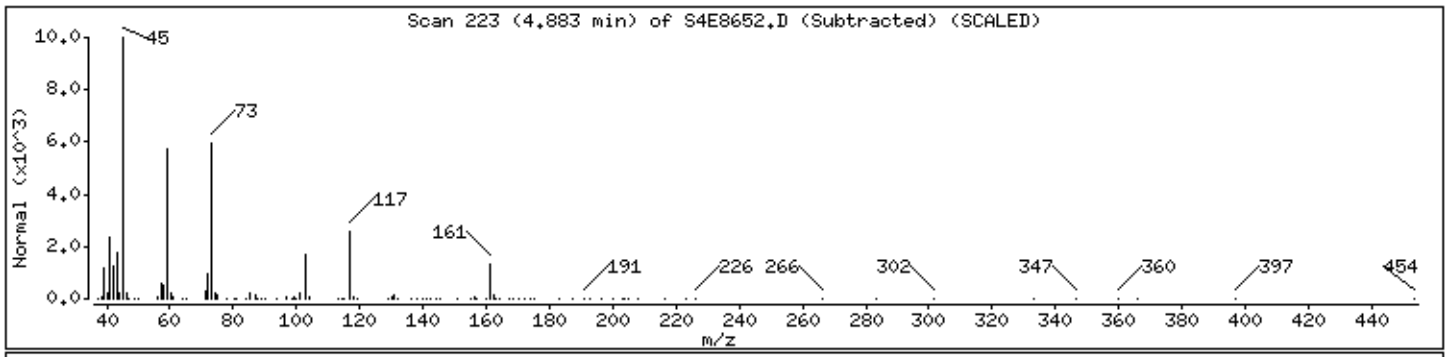
Client ID: H30X6 Instrument: S4.i

Sample Info: K2213-06A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8652.D

Date : 11-NOV-2011 00:15

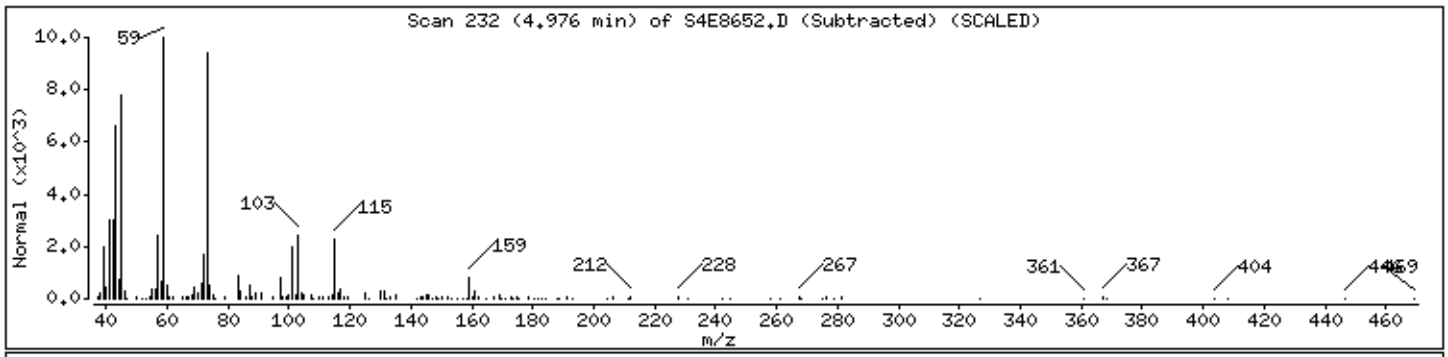
Client ID: H30X6 Instrument: S4.i

Sample Info: K2213-06A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8652.D

Date : 11-NOV-2011 00:15

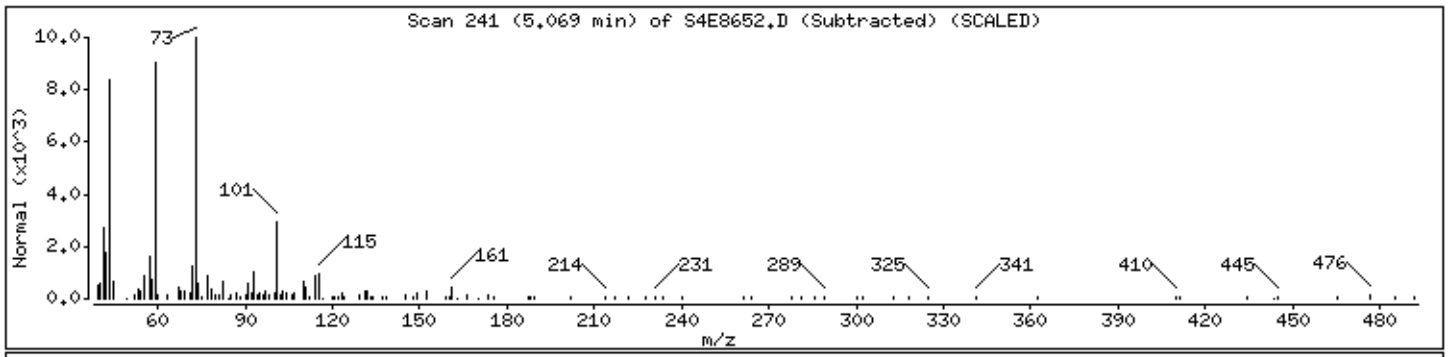
Client ID: H30X6 Instrument: S4.i

Sample Info: K2213-06A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8652.D

Date : 11-NOV-2011 00:15

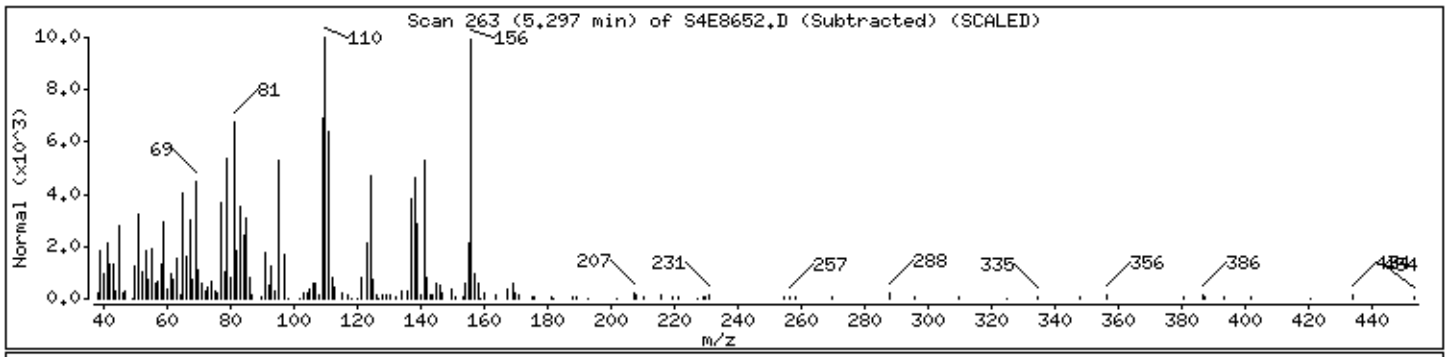
Client ID: H30X6 Instrument: S4.i

Sample Info: K2213-06A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30X7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-07A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8666.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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

EPA SAMPLE NO.

H30X7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-07A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8666.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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	1.2	J
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	1.3	J
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

EPA SAMPLE NO.

H30X7

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-07A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8666.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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	2.813	5.5	J
02		Unknown-02	3.010	3.1	J
03		Unknown-03	3.465	4.0	J
04		Unknown-04	3.858	3.4	J
05		Unknown-05	4.334	4.5	J
06		Unknown-06	4.676	2.2	J
07		Unknown-07	9.696	21	J
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8666.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8666.D
Lab Smp Id: K2213-07A Client Smp ID: H30X7
Inj Date : 11-NOV-2011 09:00
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-07A,,62806,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:04 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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)	CONCENTRATIONS FINAL (ug/L)
$	2 Phenol-d5	71	3.050	3.050	(0.908)	83075	70.6606	35
$	4 bis(2-Chloroethyl)ether-d8	67	3.102	3.113	(0.923)	53445	61.1157	31
$	6 2-Chlorophenol-d4	132	3.206	3.206	(0.954)	85888	62.2527	31
*	8 1,4-Dichlorobenzene-d4	152	3.361	3.371	(1.000)	43719	40.0000	(Q)
$	11 4-Methylphenol-d8	113	3.609	3.620	(1.074)	87139	69.9879	35
$	16 Nitrobenzene-d5	128	3.796	3.796	(0.857)	39415	63.5827	32(Q)
$	19 2-Nitrophenol-d4	143	4.065	4.075	(0.918)	53235	67.3742	34
$	23 2,4-Dichlorophenol-d3	165	4.272	4.282	(0.965)	106766	72.1115	36
*	25 Naphthalene-d8	136	4.427	4.427	(1.000)	148090	40.0000	
$	27 4-Chloroaniline-d4	131	4.468	4.468	(1.009)	10962	7.50428	3.8(aQ)
$	40 Dimethylphthalate-d6	166	5.773	5.783	(0.949)	324171	72.1623	36
$	43 Acenaphthylene-d8	160	5.928	5.938	(0.974)	246392	49.5352	25
*	46 Acenaphthene-d10	164	6.083	6.083	(1.000)	113610	40.0000	
$	49 4-Nitrophenol-d4	143	6.197	6.187	(1.019)	70605	83.4849	42
	53 Diethylphthalate	149	6.476	6.487	(1.065)	10733	2.32744	1.2(a)
$	54 Fluorene-d10	176	6.580	6.590	(1.082)	214740	53.6160	27
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.642	6.652	(0.882)	83664	71.8316	36(Q)
*	65 Phenanthrene-d10	188	7.532	7.532	(1.000)	290368	40.0000	
$	67 Anthracene-d10	188	7.584	7.584	(1.007)	309140	38.7649	19
	70 Di-n-butylphthalate	149	8.081	8.081	(1.073)	17368	2.05838	1.0(a)
$	72 Pyrene-d10	212	8.929	8.929	(0.881)	217375	25.9079	13(R)

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8666.D
Report Date: 11-Nov-2011 14:04

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
	79 bis(2-Ethylhexyl)phthalate	149	10.099	10.099	(0.997)	16294	2.58153	1.3(a)
*	77 Chrysene-d12	240	10.130	10.130	(1.000)	430469	40.0000	(Q)
$	83 Benzo(a)pyrene-d12	264	11.714	11.714	(0.990)	145788	16.0460	8.0(R)
*	85 Perylene-d12	264	11.827	11.817	(1.000)	410025	40.0000	

QC Flag Legend

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

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8666.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8666.D
Lab Smp Id: K2213-07A Client Smp ID: H30X7
Inj Date : 11-NOV-2011 09:00
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-07A,,62806,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:04 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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

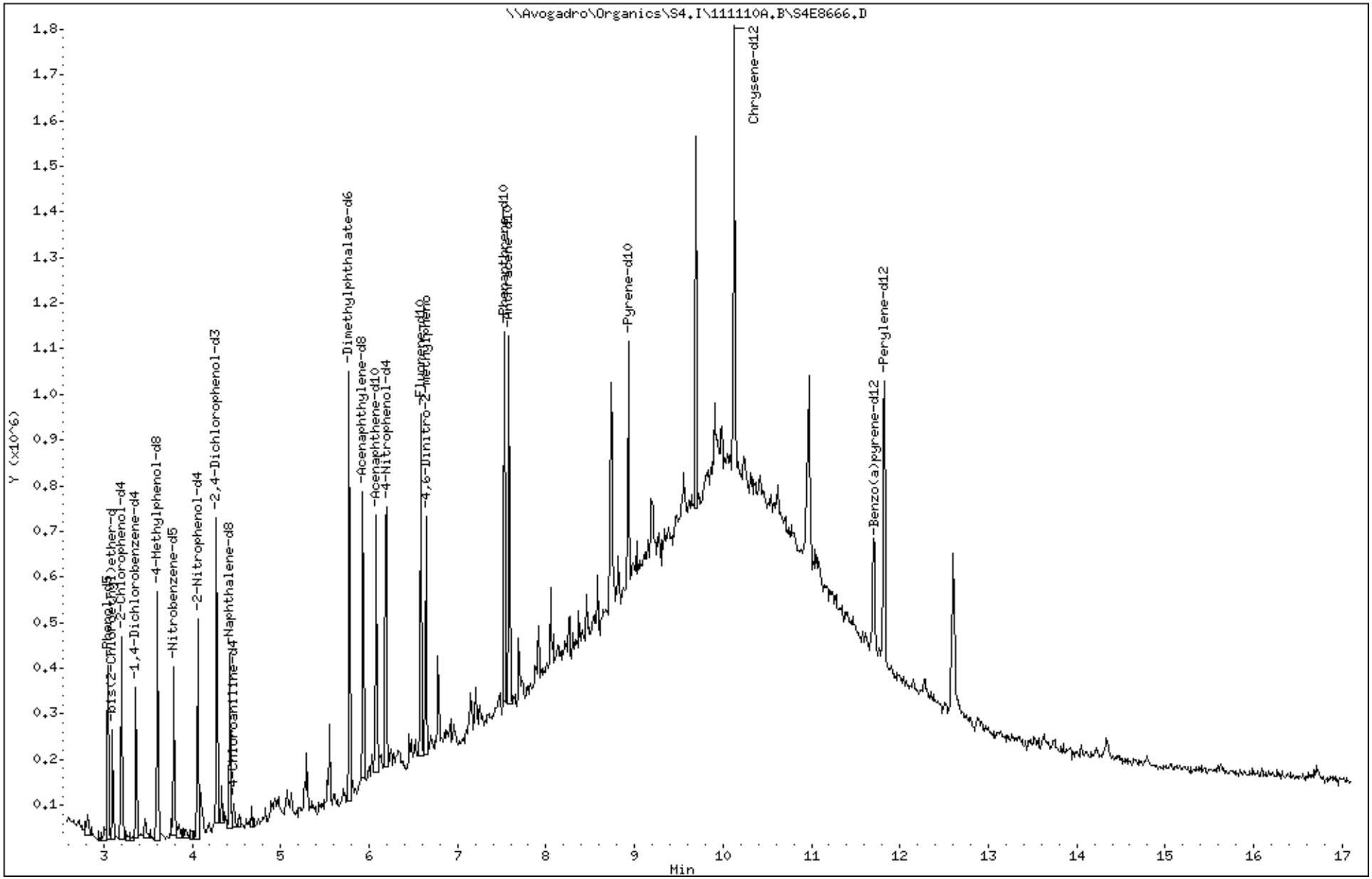
ISTD	RT	AREA	AMOUNT
* 8 1,4-Dichlorobenzene-d4	3.361	336605	40.000
* 25 Naphthalene-d8	4.428	448944	40.000
* 65 Phenanthrene-d10	7.533	773002	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.813	92900	11.0396688	5.5	0	0		8
Unknown				CAS #:			
3.010	52196	6.20259096	3.1	0	0		8
Unknown				CAS #:			
3.465	67430	8.01294374	4.0	0	0		8
Unknown				CAS #:			
3.858	57662	6.85213952	3.4	0	0		8

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8666.D
Report Date: 11-Nov-2011 14:04

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.334	100128	8.92115230	4.5	0		0	25
Unknown				CAS #:			
4.676	50246	4.47684310	2.2	0		0	25
Unknown				CAS #:			
9.696	828667	42.8804013	21	0		0	65

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8666.D
Date : 11-NOV-2011 09:00
Client ID: H30X7
Instrument: S4.i
Sample Info: K2213-07A,,62806,,
Volume Injected (uL): 2.0
Operator: MMS SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



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Date : 11-NOV-2011 09:00

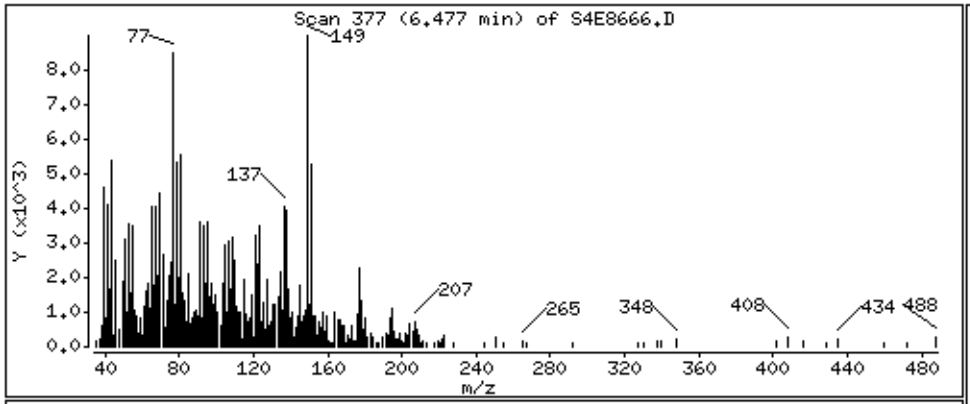
Client ID: H30X7 Instrument: S4.i

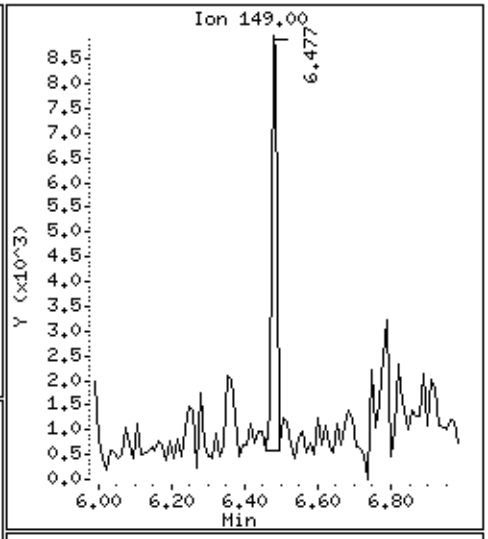
Sample Info: K2213-07A,,62806,,

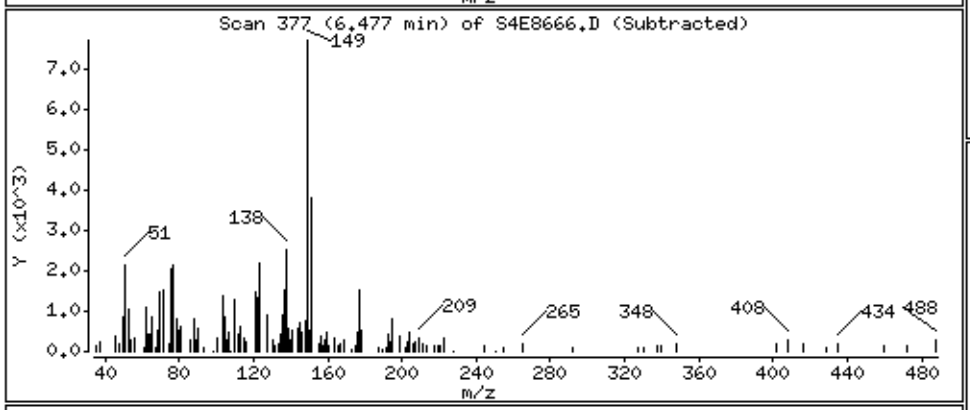
Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

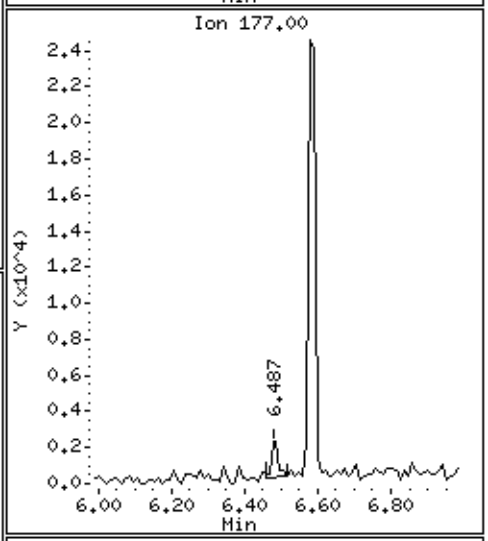
Column phase: RXI-5SILMS Column diameter: 0.25

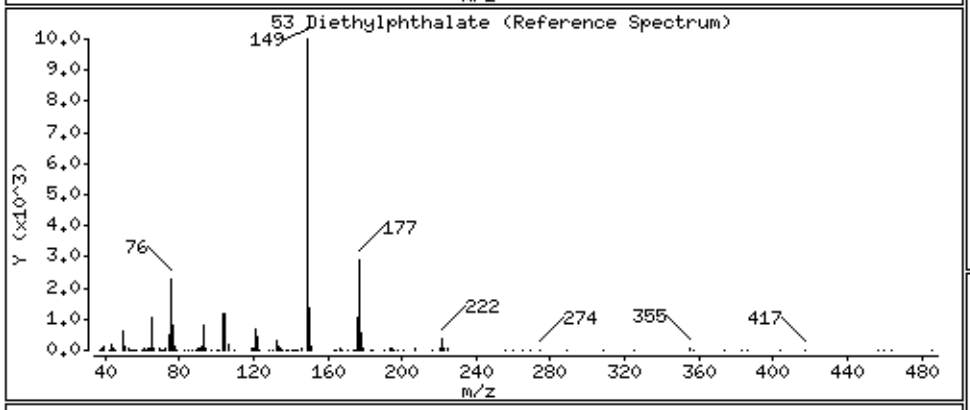
53 Diethylphthalate Concentration: 1.2 ug/L

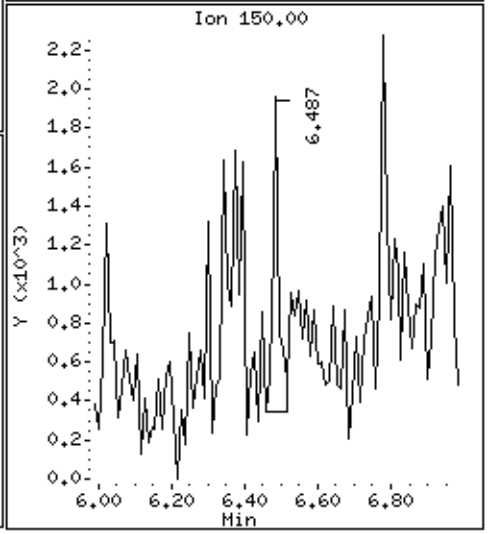


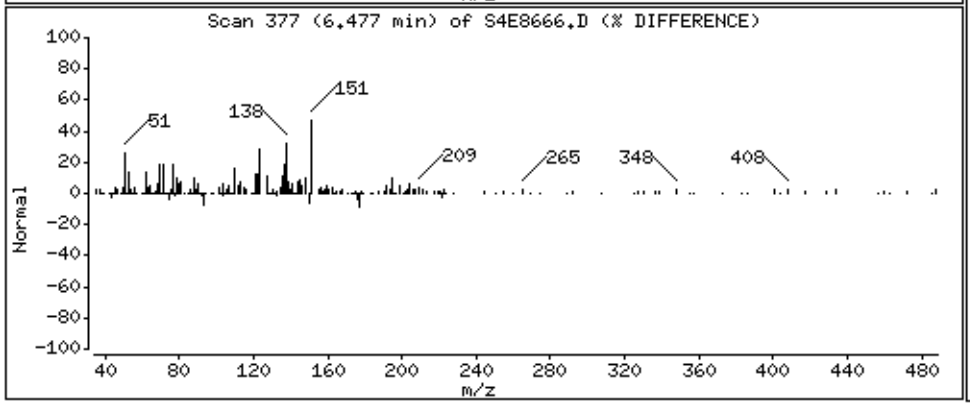












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Date : 11-NOV-2011 09:00

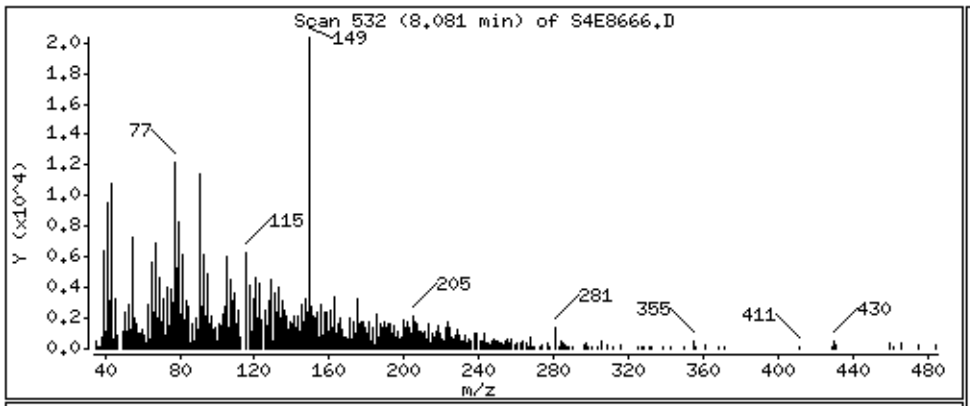
Client ID: H30X7 Instrument: S4.i

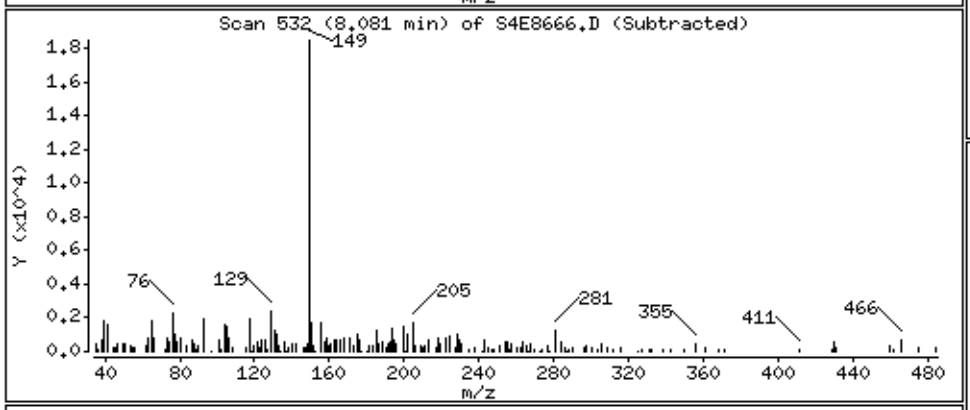
Sample Info: K2213-07A,,62806,,

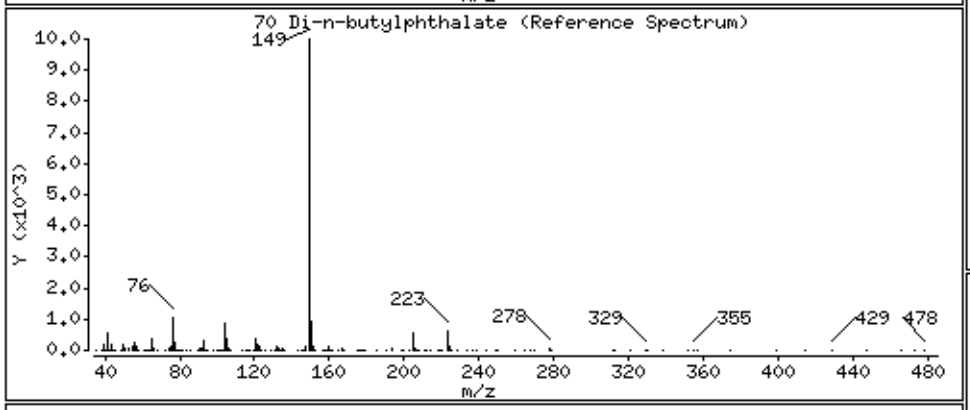
Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

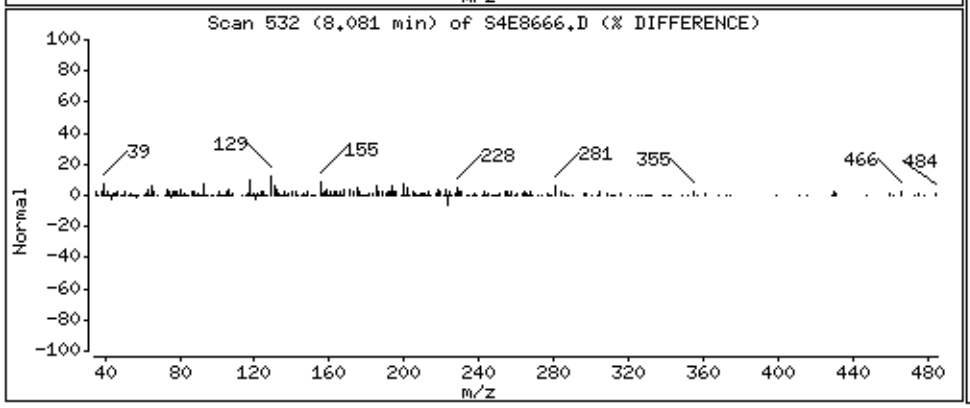
Column phase: RXI-5SILMS Column diameter: 0.25

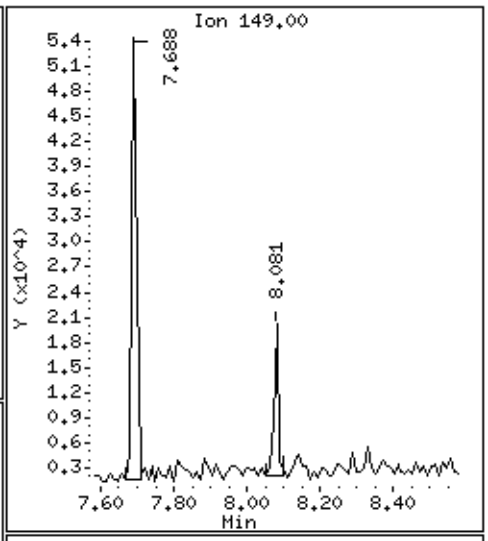
70 Di-n-butylphthalate Concentration: 1.0 ug/L

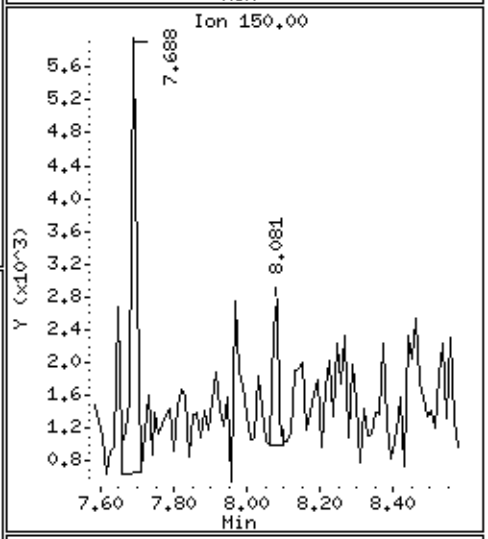


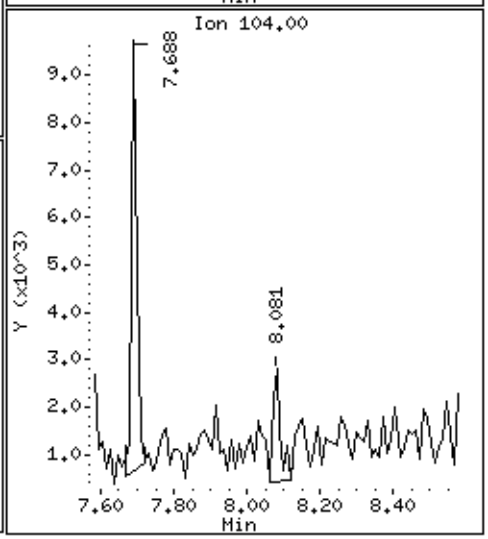












Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8666.D

Date : 11-NOV-2011 09:00

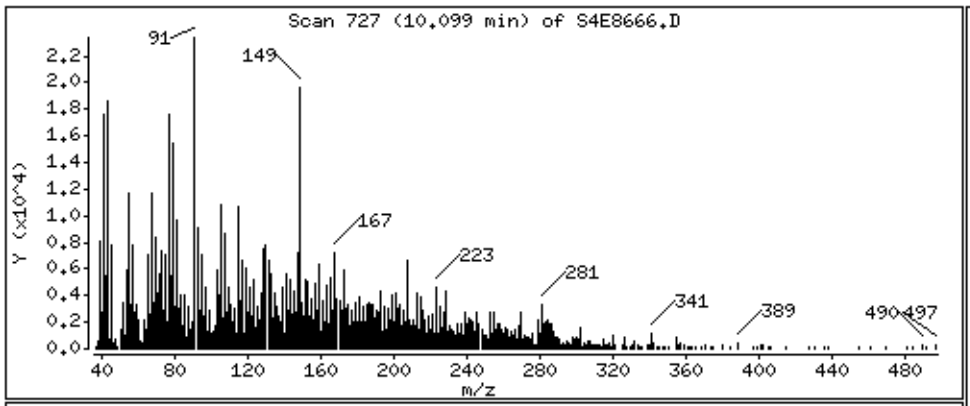
Client ID: H30X7 Instrument: S4.i

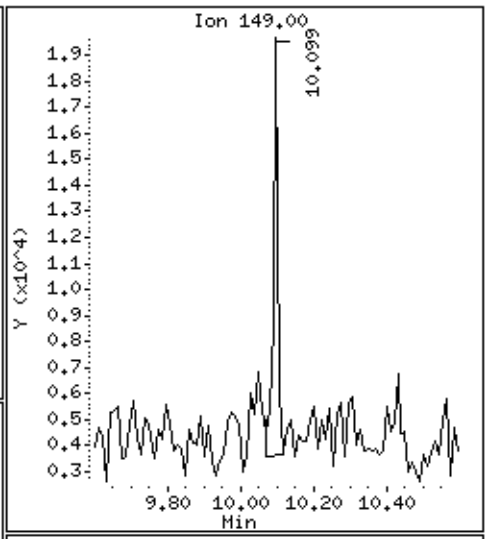
Sample Info: K2213-07A,,62806,,

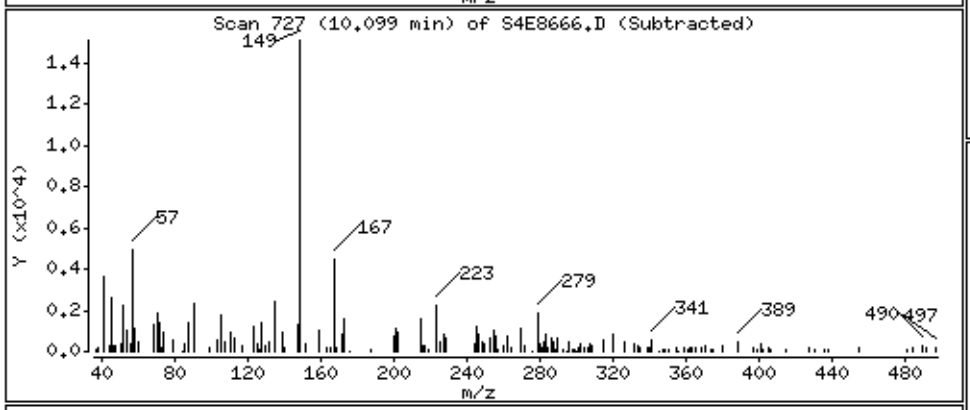
Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

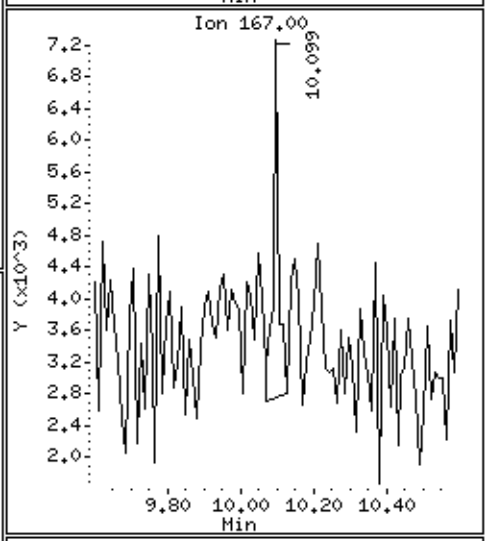
Column phase: RXI-5SILMS Column diameter: 0.25

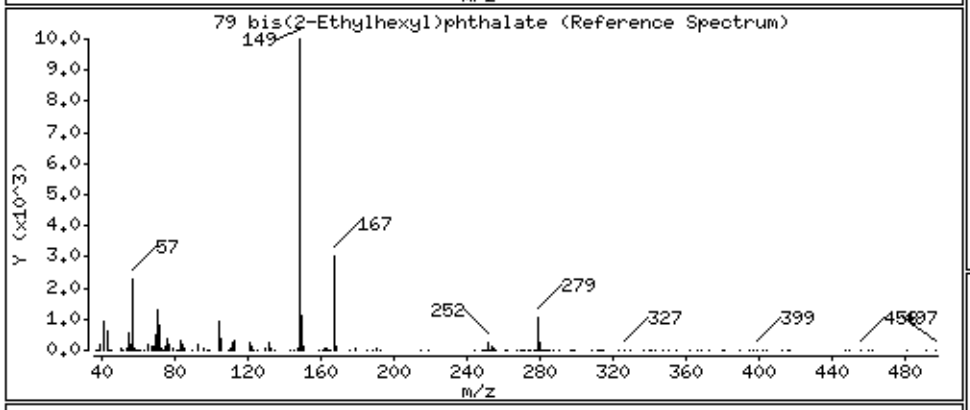
79 bis(2-Ethylhexyl)phthalate Concentration: 1.3 ug/L

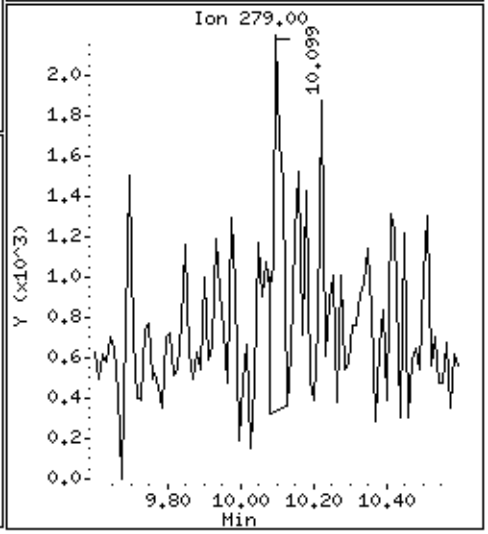


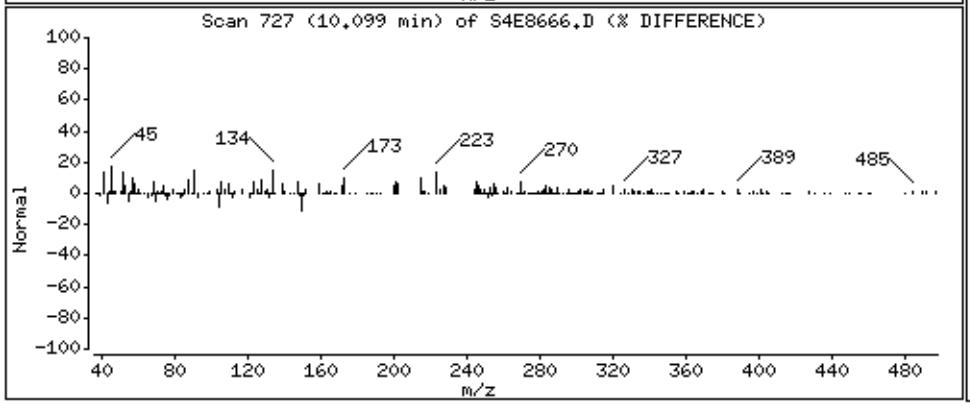












Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8666.D

Date : 11-NOV-2011 09:00

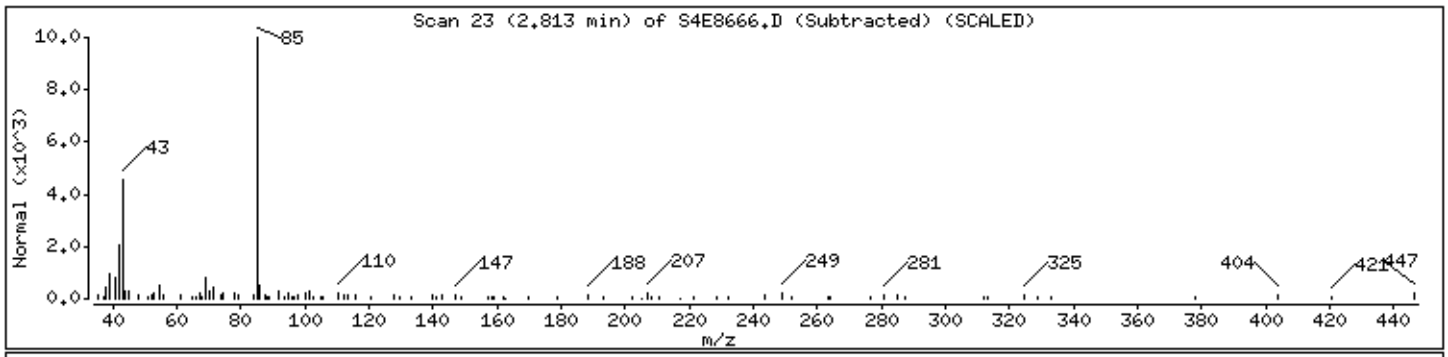
Client ID: H30X7 Instrument: S4.i

Sample Info: K2213-07A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8666.D

Date : 11-NOV-2011 09:00

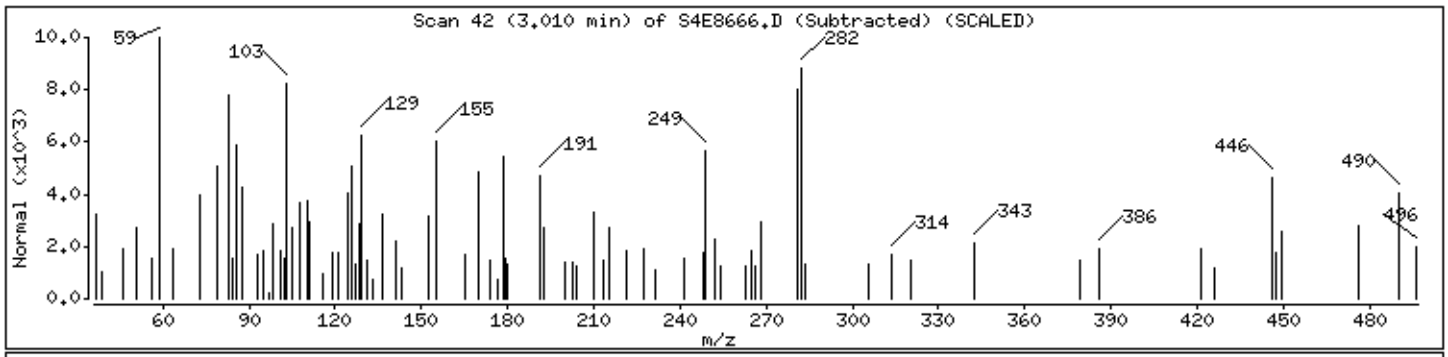
Client ID: H30X7 Instrument: S4.i

Sample Info: K2213-07A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8666.D

Date : 11-NOV-2011 09:00

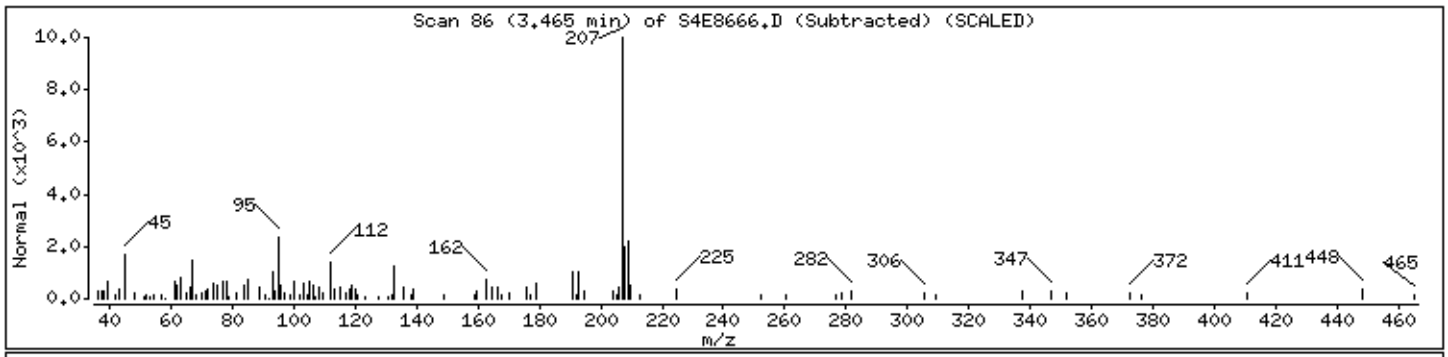
Client ID: H30X7 Instrument: S4.i

Sample Info: K2213-07A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 11-NOV-2011 09:00

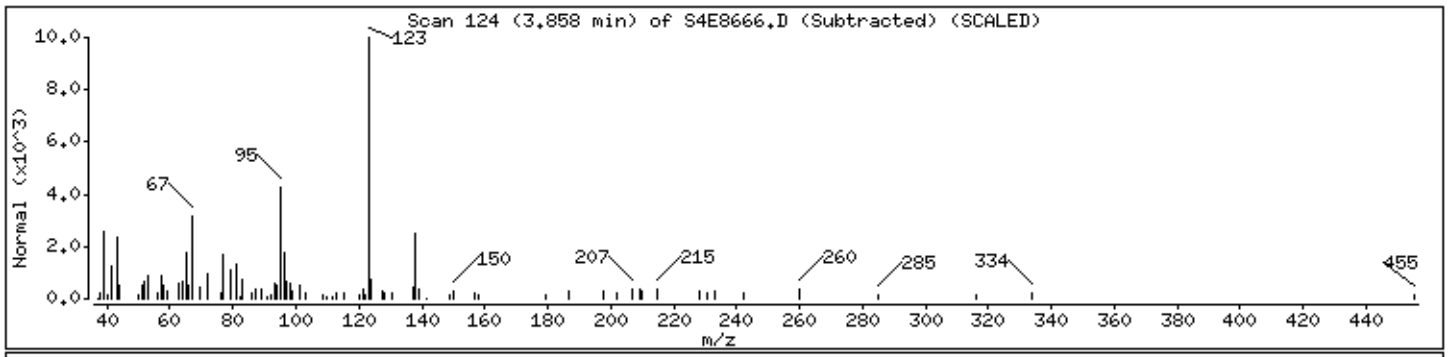
Client ID: H30X7 Instrument: S4.i

Sample Info: K2213-07A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8666.D

Date : 11-NOV-2011 09:00

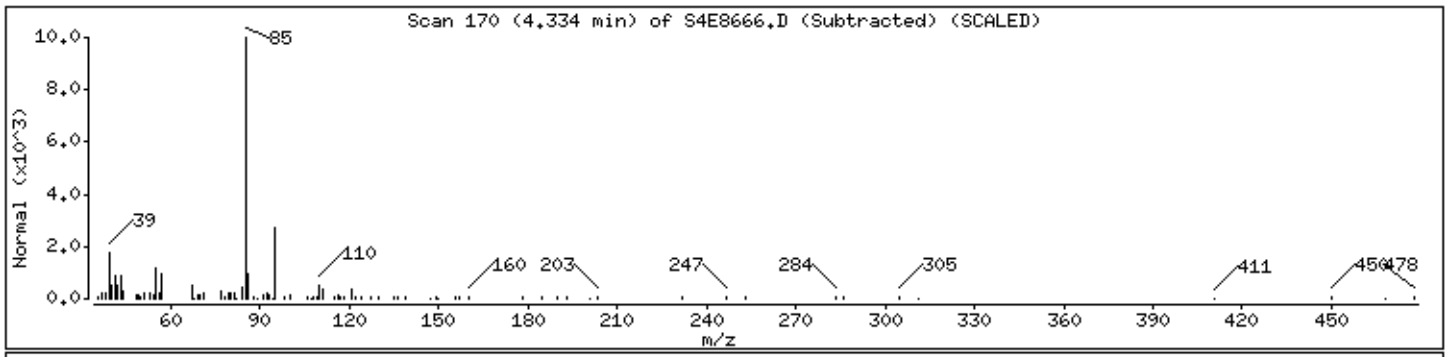
Client ID: H30X7 Instrument: S4.i

Sample Info: K2213-07A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8666.D

Date : 11-NOV-2011 09:00

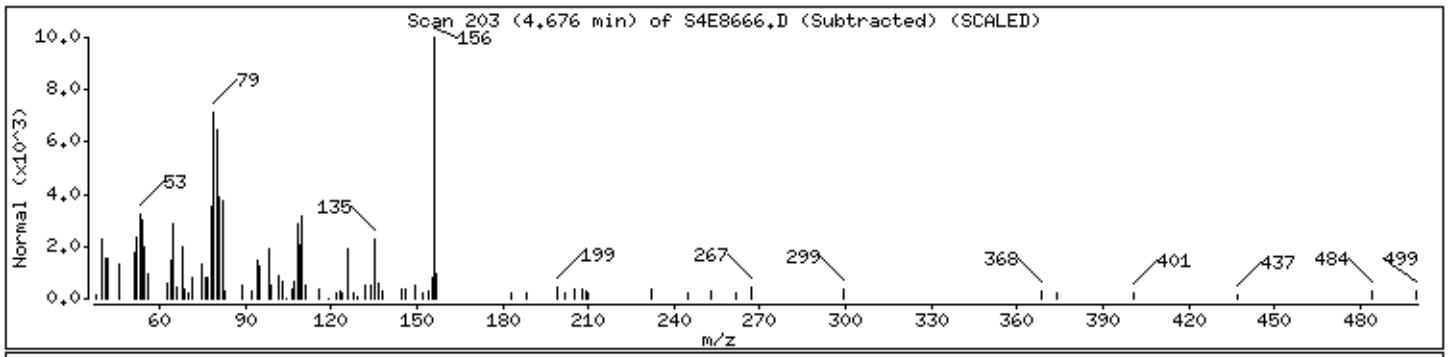
Client ID: H30X7 Instrument: S4.i

Sample Info: K2213-07A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8666.D

Date : 11-NOV-2011 09:00

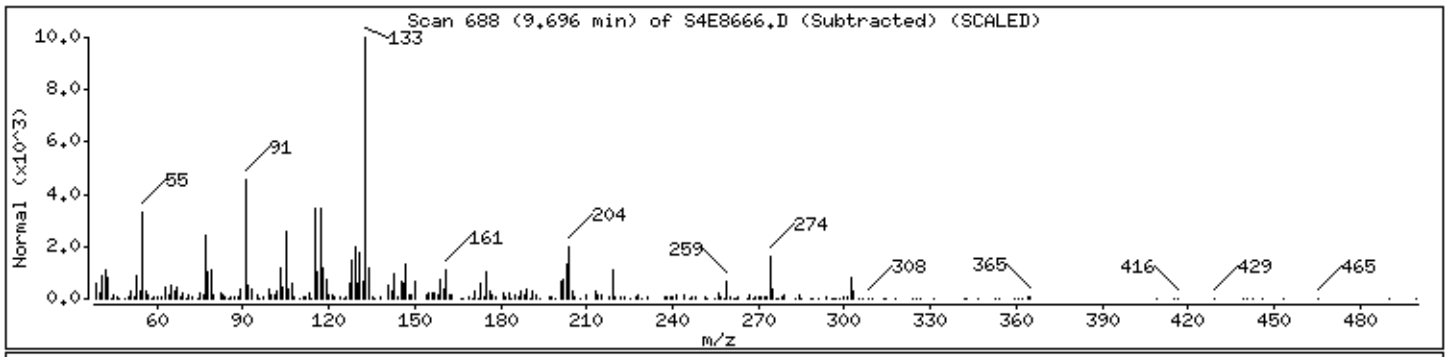
Client ID: H30X7 Instrument: S4.i

Sample Info: K2213-07A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30X9

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-08A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8654.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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

EPA SAMPLE NO.

H30X9

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-08A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8654.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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	1.3	J
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	1.4	J
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

EPA SAMPLE NO.

H30X9

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

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-08A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8654.D

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

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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	2.885	2.1	J
02		Unknown-02	3.020	2.3	J
03		Unknown-03	3.268	2.7	J
04		Unknown-04	3.330	2.4	J
05		Unknown-05	3.413	2.2	J
06		Unknown-06	3.475	4.9	J
07		Unknown-07	3.775	5.7	J
08	54458-61-6	2-Cyclopenten-1-one, 2,3,4,5	3.869	5.0	NJ
09		Unknown-08	4.334	4.8	J
10		Unknown-09	4.541	2.7	J
11		Unknown-10	4.676	2.1	J
12		Unknown-11	4.904	11	J
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8654.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8654.D
Lab Smp Id: K2213-08A Client Smp ID: H30X9
Inj Date : 11-NOV-2011 01:03
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-08A,,62806,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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	3.050	3.050	(0.905)	84805	76.4625	38
$	4 bis(2-Chloroethyl)ether-d8	67	3.113	3.112	(0.923)	49096	59.5130	30
$	6 2-Chlorophenol-d4	132	3.206	3.206	(0.951)	85637	65.7972	33
*	8 1,4-Dichlorobenzene-d4	152	3.371	3.371	(1.000)	41243	40.0000	(Q)
$	11 4-Methylphenol-d8	113	3.620	3.609	(1.074)	85829	73.0743	37
$	16 Nitrobenzene-d5	128	3.796	3.796	(0.857)	41884	63.5611	32(Q)
$	19 2-Nitrophenol-d4	143	4.075	4.075	(0.921)	52741	62.7929	31
$	23 2,4-Dichlorophenol-d3	165	4.282	4.282	(0.967)	119083	75.6637	38
*	25 Naphthalene-d8	136	4.427	4.427	(1.000)	157420	40.0000	
$	27 4-Chloroaniline-d4	131	4.479	4.468	(1.012)	22187	14.2884	7.1(Q)
$	40 Dimethylphthalate-d6	166	5.783	5.772	(0.951)	401286	73.1168	37
$	43 Acenaphthylene-d8	160	5.938	5.938	(0.976)	323182	53.1816	27
*	46 Acenaphthene-d10	164	6.083	6.083	(1.000)	138800	40.0000	
$	49 4-Nitrophenol-d4	143	6.197	6.166	(1.019)	88323	85.4818	43
	53 Diethylphthalate	149	6.487	6.487	(1.066)	14356	2.54810	1.3(a)
$	54 Fluorene-d10	176	6.590	6.590	(1.083)	249160	50.9199	25
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.652	6.642	(0.883)	106236	71.1740	36
*	65 Phenanthrene-d10	188	7.532	7.532	(1.000)	372114	40.0000	
$	67 Anthracene-d10	188	7.594	7.584	(1.008)	373417	36.5385	18
$	72 Pyrene-d10	212	8.940	8.929	(0.883)	268080	24.8199	12(R)
	79 bis(2-Ethylhexyl)phthalate	149	10.099	10.099	(0.997)	23340	2.87252	1.4(a)

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8654.D
Report Date: 11-Nov-2011 14:04

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
* 77 Chrysene-d12	240	10.130	10.120	(1.000)	554152	40.0000	(Q)
$ 83 Benzo(a)pyrene-d12	264	11.714	11.703	(0.990)	208875	19.4640	9.7(R)
* 85 Perylene-d12	264	11.827	11.817	(1.000)	484293	40.0000	

QC Flag Legend

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

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8654.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8654.D
Lab Smp Id: K2213-08A Client Smp ID: H30X9
Inj Date : 11-NOV-2011 01:03
Operator : MMS   SRC: LIMS Inst ID: S4.i
Smp Info : K2213-08A,,62806,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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

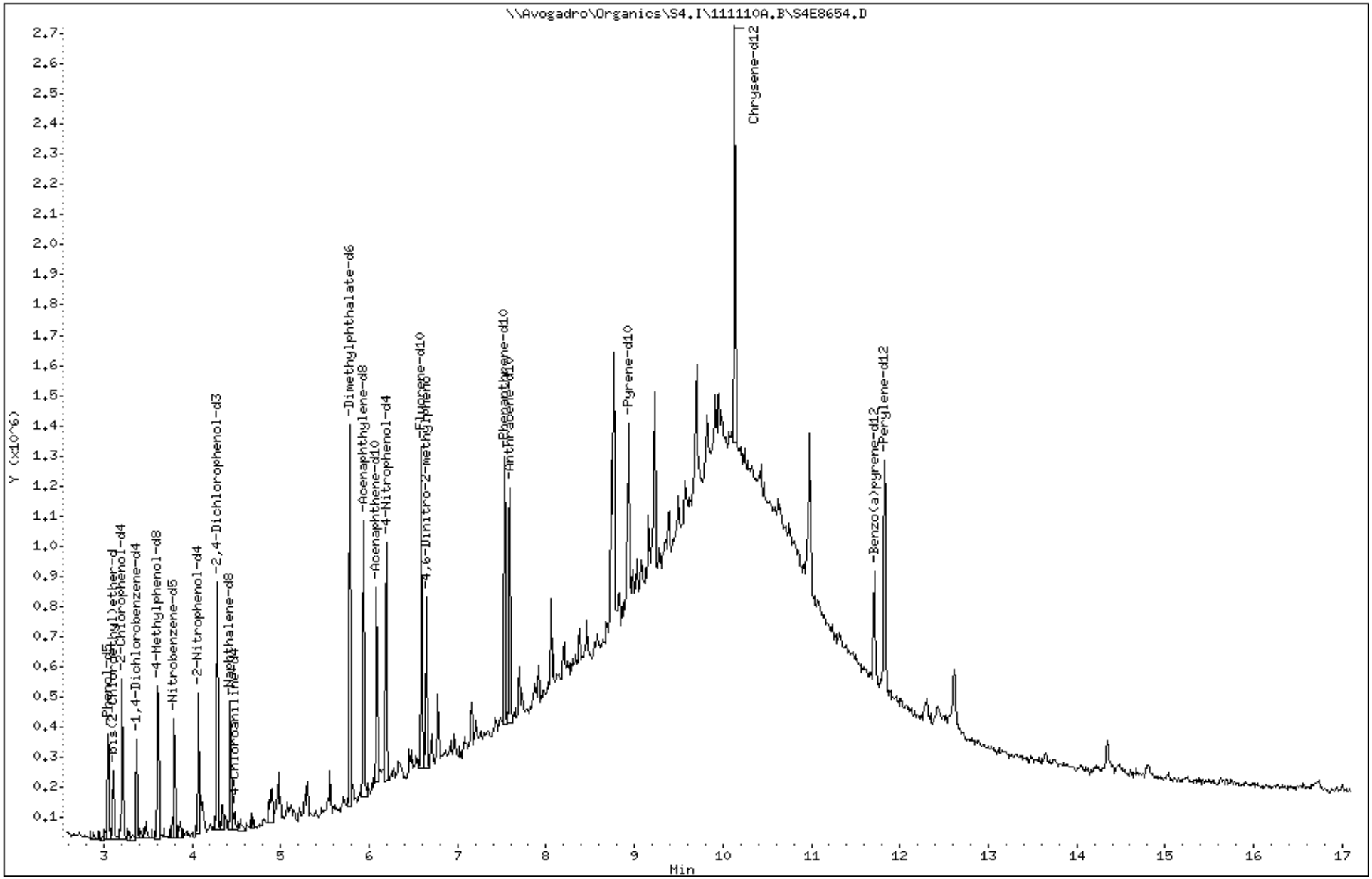
ISTD	RT	AREA	AMOUNT
* 8 1,4-Dichlorobenzene-d4	3.372	344500	40.000
* 25 Naphthalene-d8	4.428	517412	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.885	36577	4.24700433	2.1	0	0		8
Unknown				CAS #:			
3.020	39306	4.56384114	2.3	0	0		8
Unknown				CAS #:			
3.268	46246	5.36967870	2.7	0	0		8
Unknown				CAS #:			
3.330	41259	4.79060914	2.4	0	0		8

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8654.D
Report Date: 11-Nov-2011 14:04

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
3.413	37090	4.30650092	2.2	0		0	8
Unknown					CAS #:		
3.475	84164	9.77229465	4.9	0		0	8
Unknown					CAS #:		
3.775	98389	11.4239156	5.7	0		0	8
2-Cyclopenten-1-one, 2,3,4,5-tetramethyl					CAS #: 54458-61-6		
3.869	86840	10.0829560	5.0	87	NIST2002.L	16989	8
Unknown					CAS #:		
4.334	123537	9.55040375	4.8	0		0	25
Unknown					CAS #:		
4.541	70470	5.44791597	2.7	0		0	25
Unknown					CAS #:		
4.676	55193	4.26681965	2.1	0		0	25
Unknown					CAS #:		
4.904	284089	21.9622848	11	0		0	25

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8654.D
Date : 11-NOV-2011 01:03
Client ID: H30X9
Instrument: S4.i
Sample Info: K2213-08A,,62806,,
Volume Injected (uL): 2.0
Operator: MMS SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8654.D

Date : 11-NOV-2011 01:03

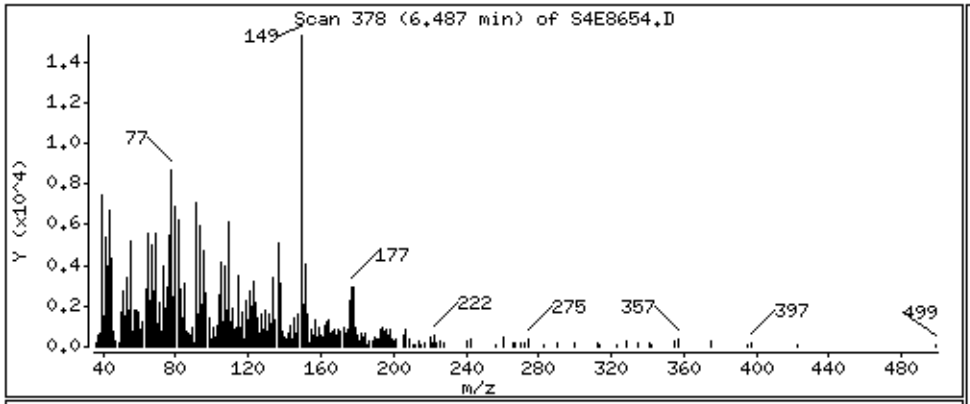
Client ID: H30X9 Instrument: S4.i

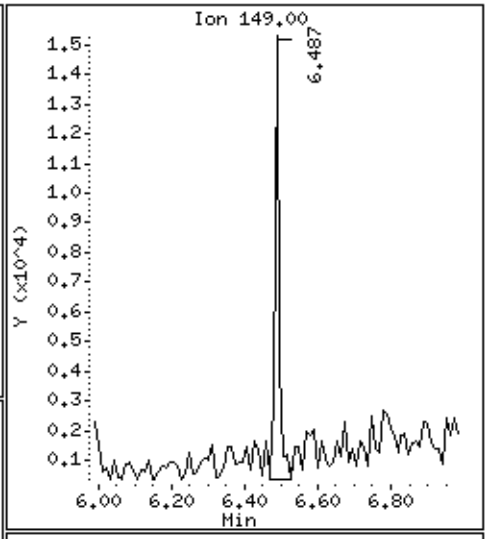
Sample Info: K2213-08A,,62806,,

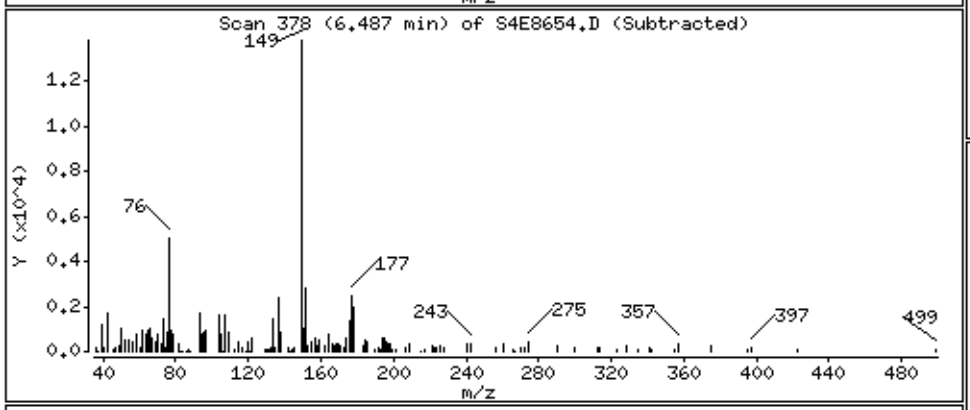
Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

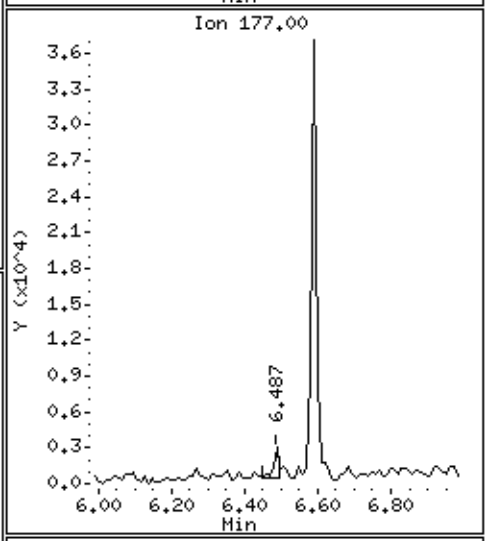
Column phase: RXI-5SILMS Column diameter: 0.25

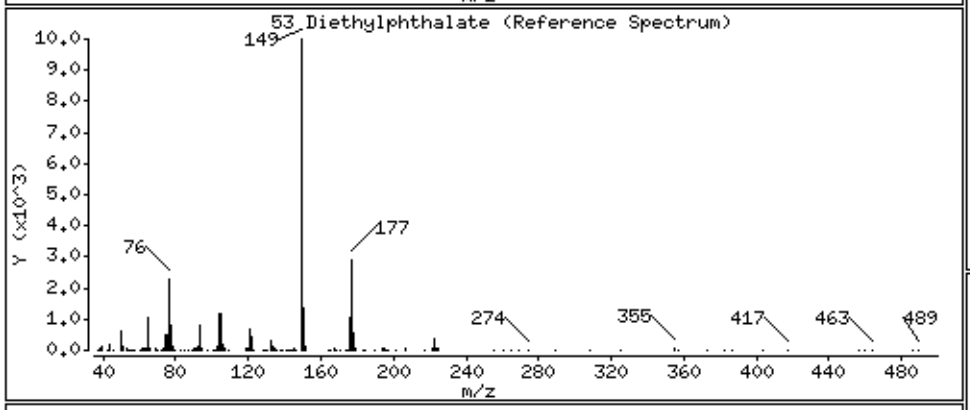
53 Diethylphthalate Concentration: 1.3 ug/L

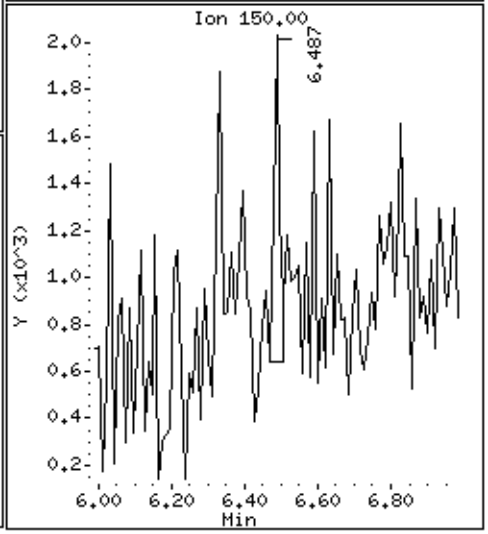


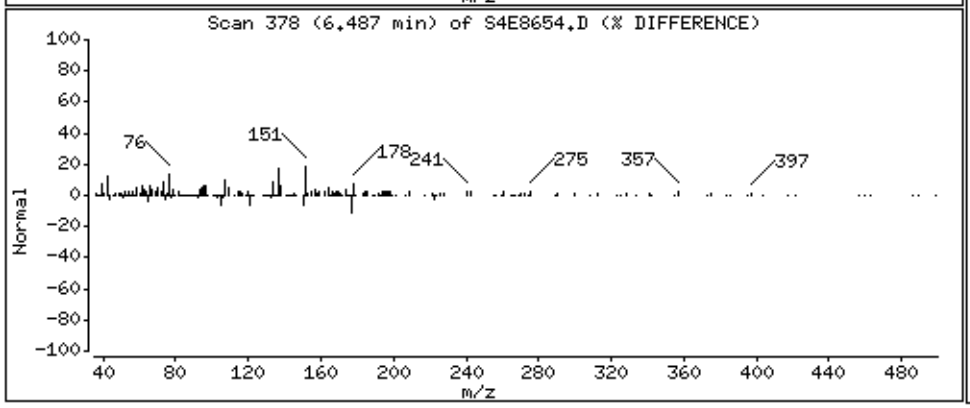












Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8654.D

Date : 11-NOV-2011 01:03

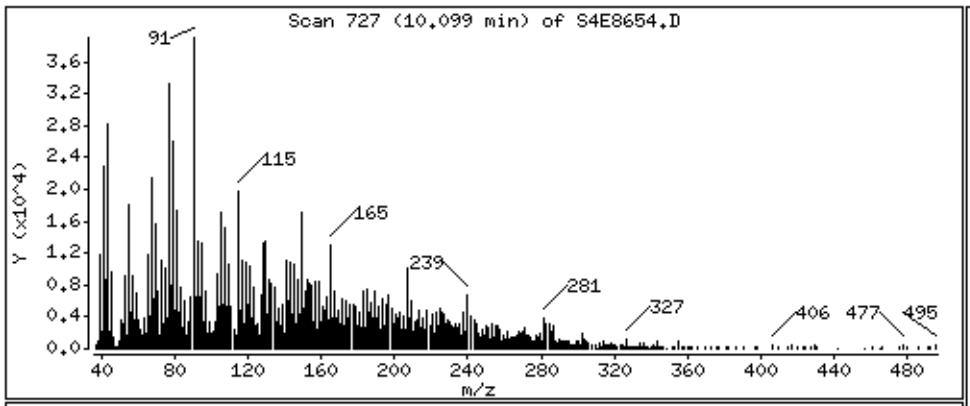
Client ID: H30X9 Instrument: S4.i

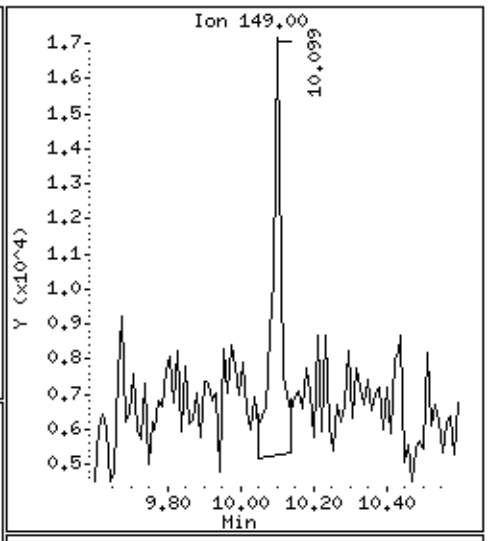
Sample Info: K2213-08A,,62806,,

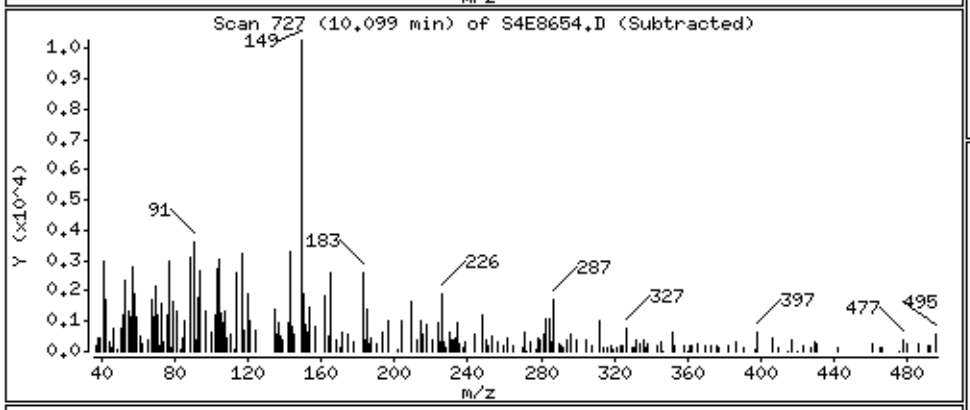
Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

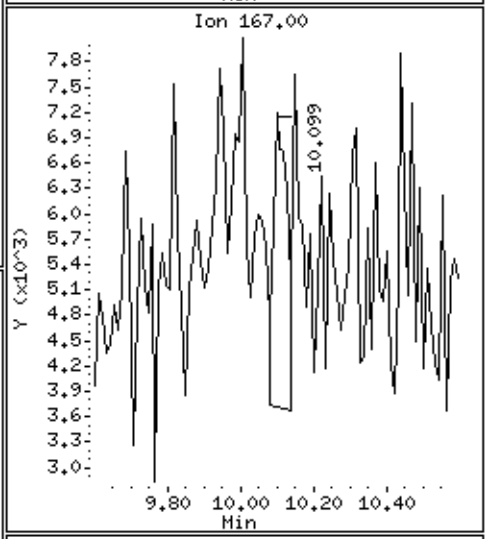
Column phase: RXI-5SILMS Column diameter: 0.25

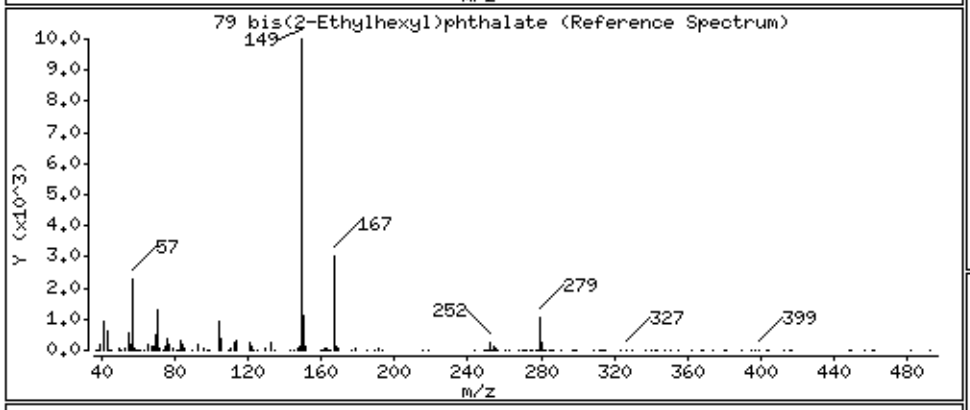
79 bis(2-Ethylhexyl)phthalate Concentration: 1.4 ug/L

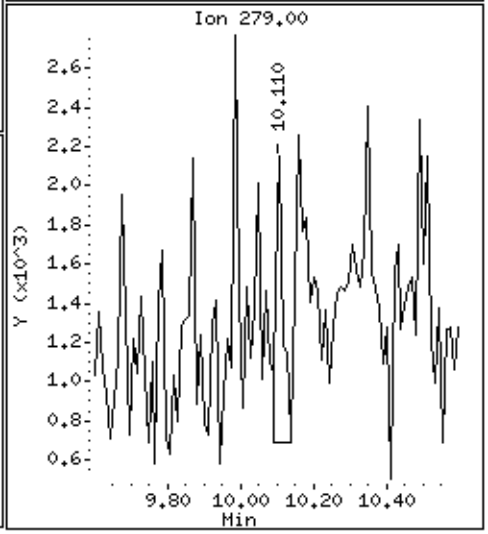


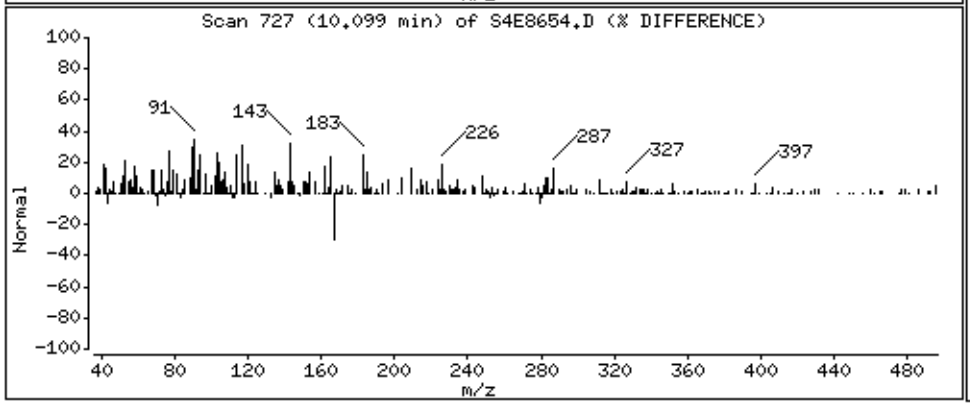












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Date : 11-NOV-2011 01:03

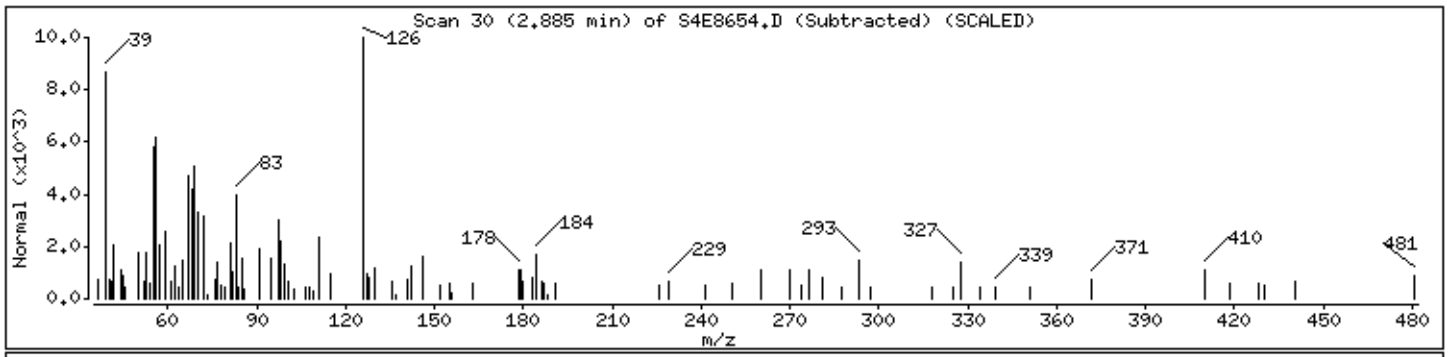
Client ID: H30X9 Instrument: S4.i

Sample Info: K2213-08A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8654.D

Date : 11-NOV-2011 01:03

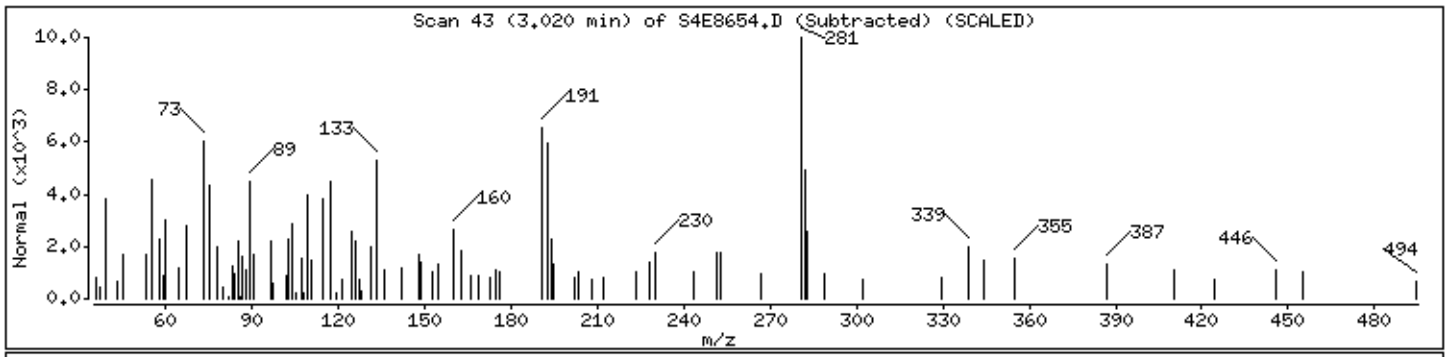
Client ID: H30X9 Instrument: S4.i

Sample Info: K2213-08A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 11-NOV-2011 01:03

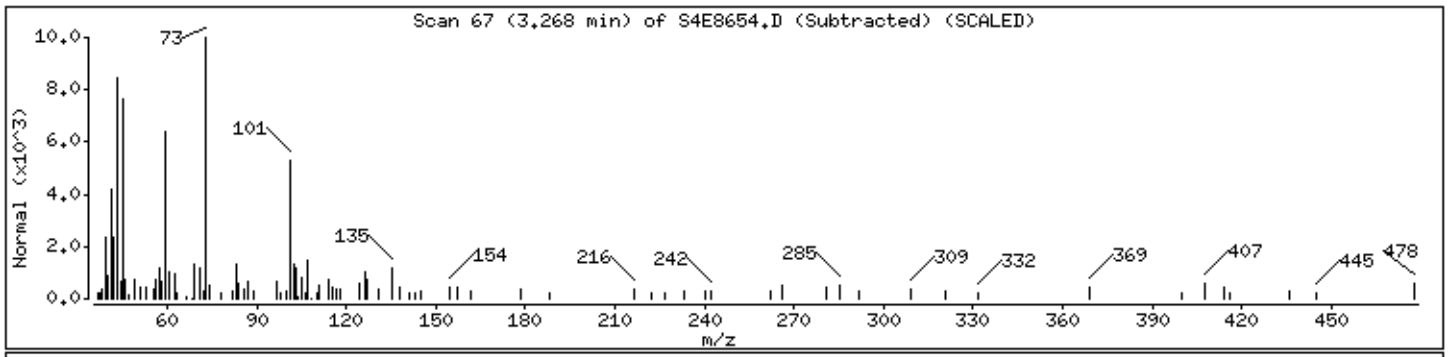
Client ID: H30X9 Instrument: S4.i

Sample Info: K2213-08A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

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



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Date : 11-NOV-2011 01:03

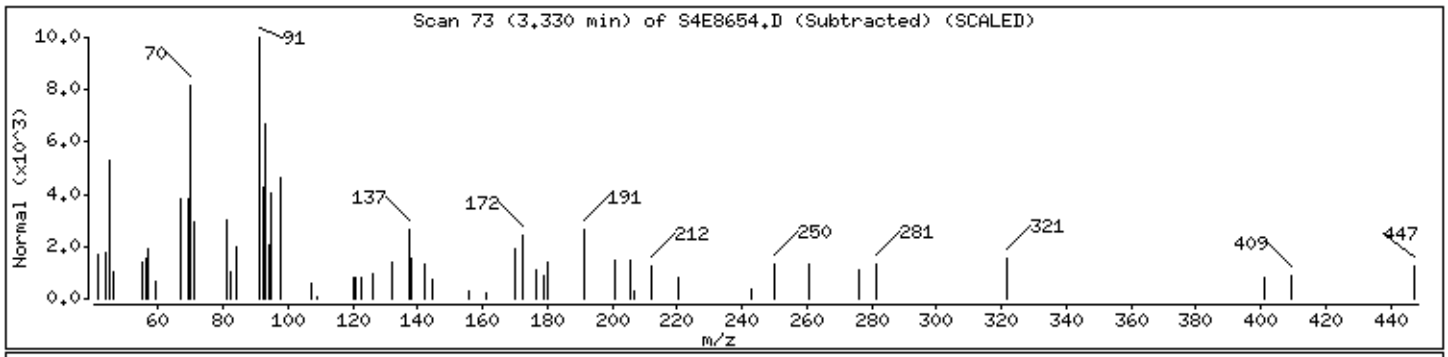
Client ID: H30X9 Instrument: S4.i

Sample Info: K2213-08A,,62806,,

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

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 11-NOV-2011 01:03

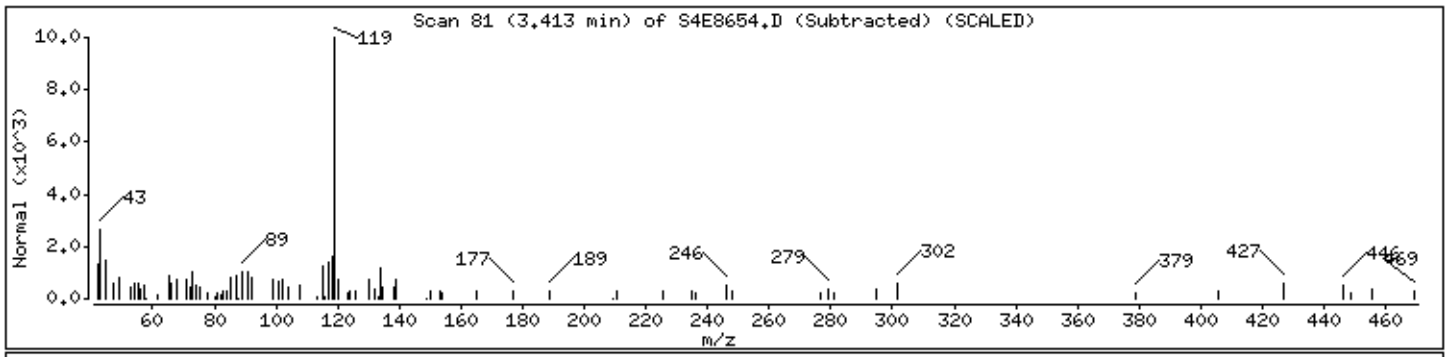
Client ID: H30X9 Instrument: S4.i

Sample Info: K2213-08A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8654.D

Date : 11-NOV-2011 01:03

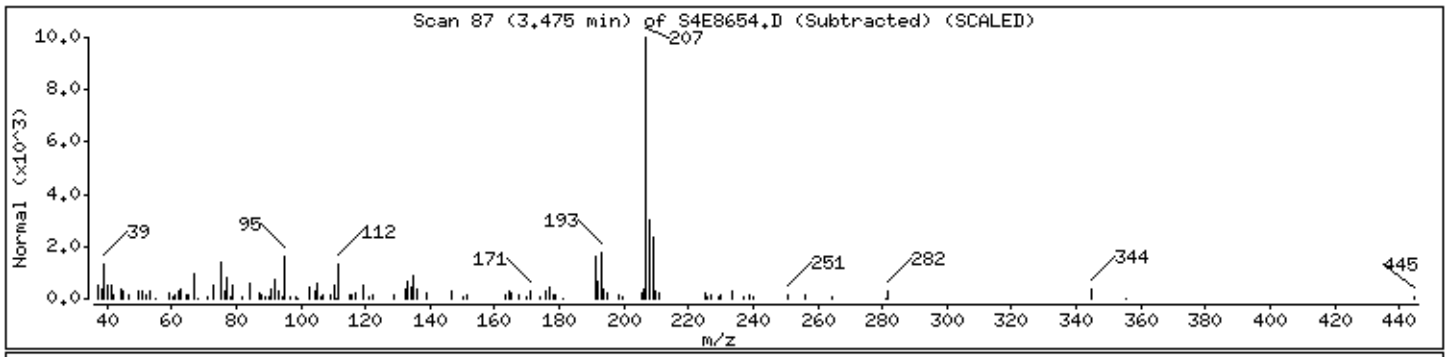
Client ID: H30X9 Instrument: S4.i

Sample Info: K2213-08A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 11-NOV-2011 01:03

Client ID: H30X9 Instrument: S4.i

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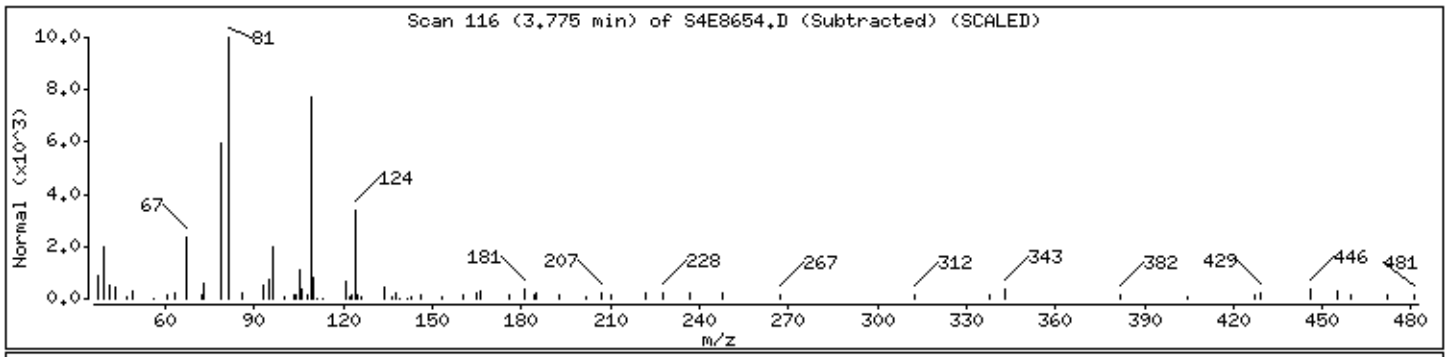
Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 11-NOV-2011 01:03

Client ID: H30X9 Instrument: S4.i

Sample Info: K2213-08A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
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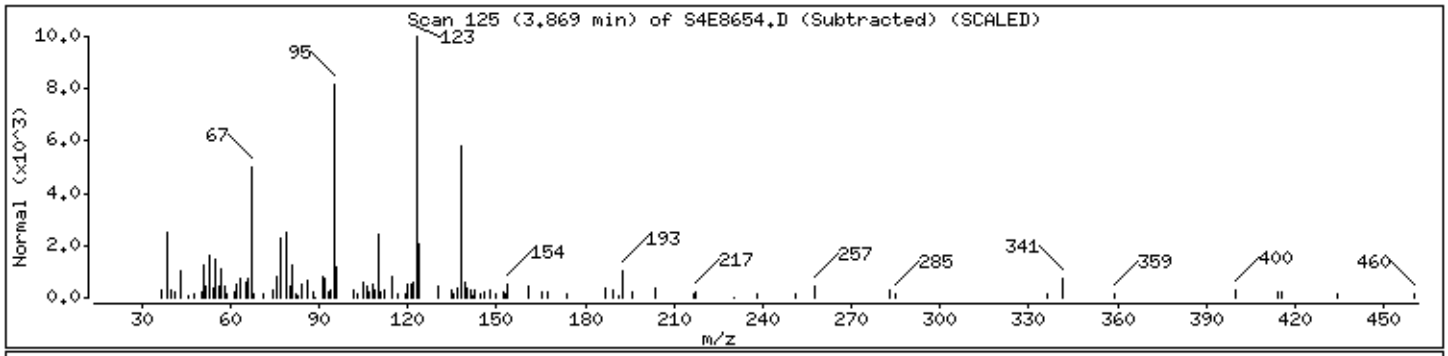
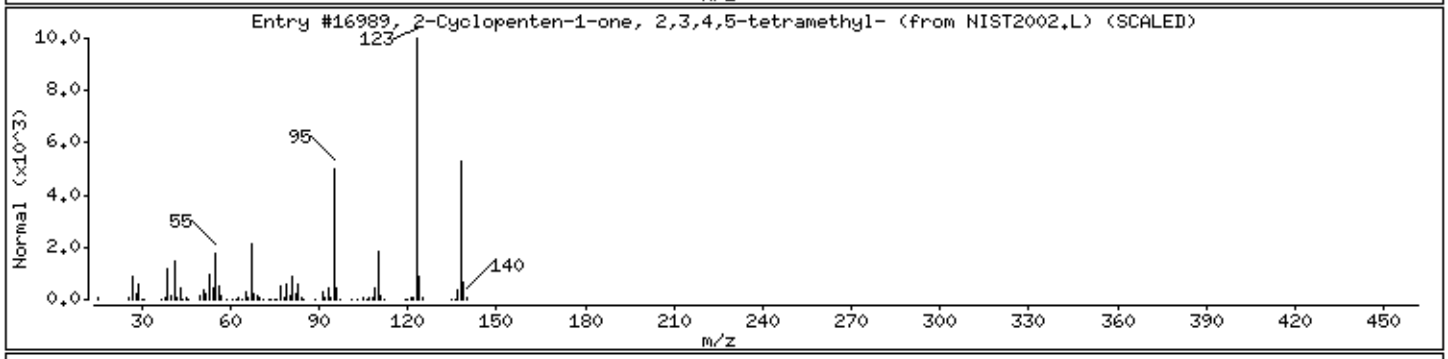




Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8654.D

Date : 11-NOV-2011 01:03

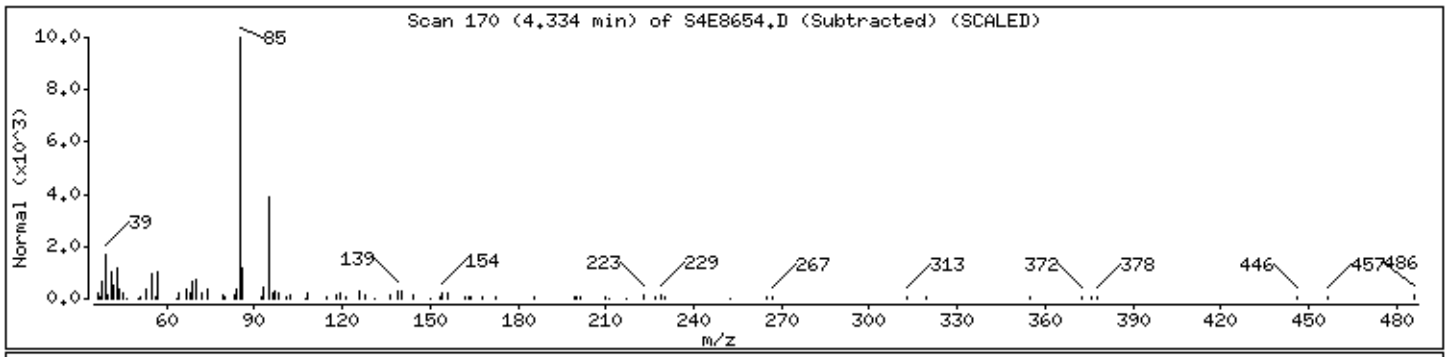
Client ID: H30X9 Instrument: S4.i

Sample Info: K2213-08A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 11-NOV-2011 01:03

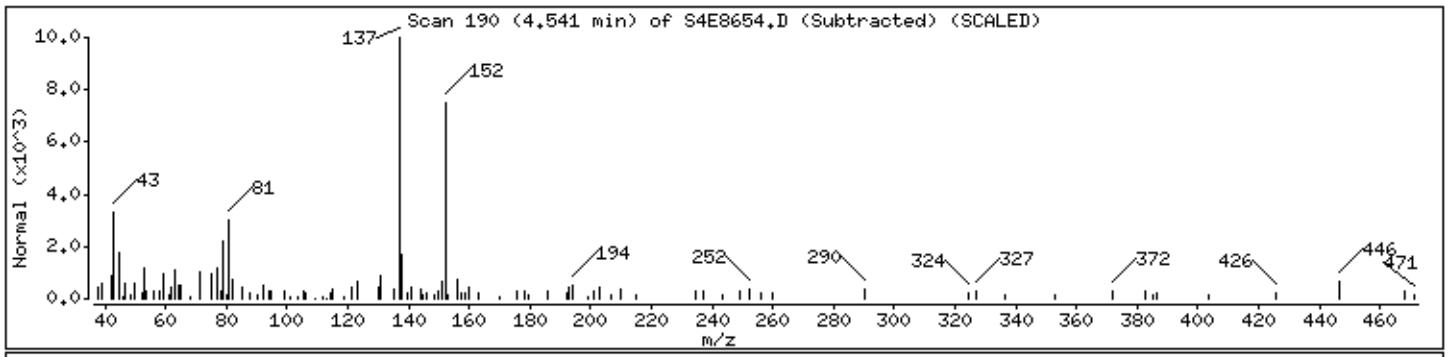
Client ID: H30X9 Instrument: S4.i

Sample Info: K2213-08A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8654.D

Date : 11-NOV-2011 01:03

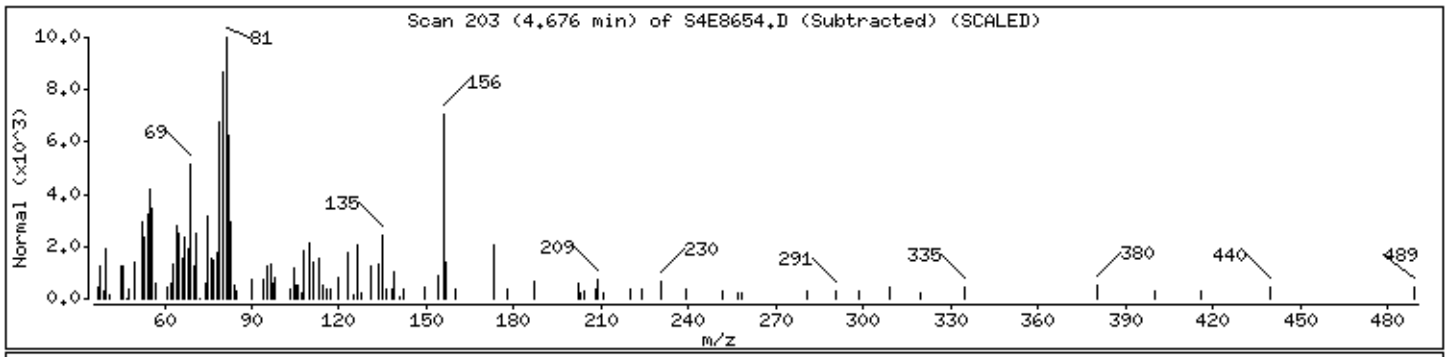
Client ID: H30X9 Instrument: S4.i

Sample Info: K2213-08A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 11-NOV-2011 01:03

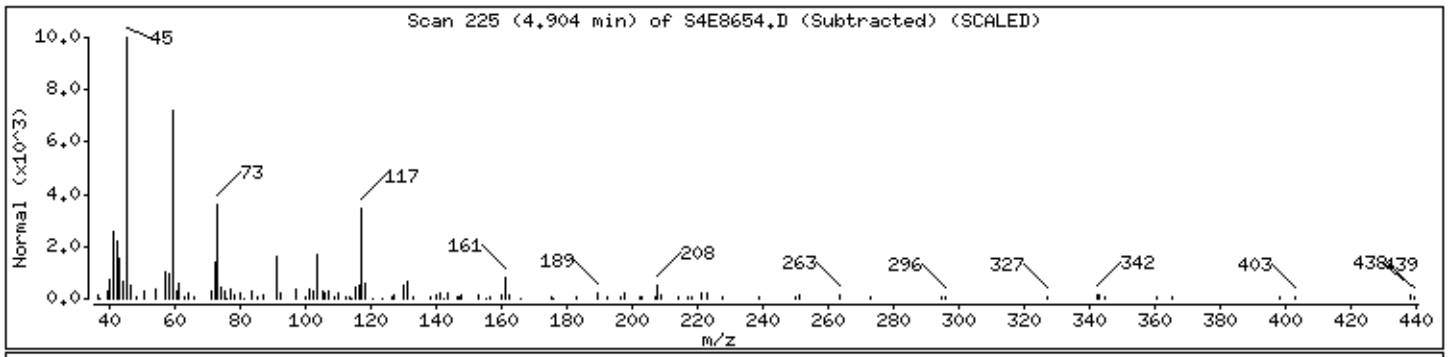
Client ID: H30X9 Instrument: S4.i

Sample Info: K2213-08A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Y0

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-09A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8655.D

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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

EPA SAMPLE NO.

H30Y0

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-09A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8655.D

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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	1.1	J
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	1.0	J
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

EPA SAMPLE NO.

H30Y0

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-09A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8655.D

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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	2.885	2.7	J
02		Unknown-02	3.020	3.0	J
03	54458-61-6	2-Cyclopenten-1-one, 2,3,4,5	3.869	7.0	NJ
04		Unknown-03	4.345	4.0	J
05		Unknown-04	4.676	2.3	J
06		Unknown-05	8.733	21	J
07		Unknown-06	9.696	13	J
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8655.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8655.D
Lab Smp Id: K2213-09A Client Smp ID: H30Y0
Inj Date : 11-NOV-2011 01:28
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-09A,,62806,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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	3.061	3.050	(0.908)	73323	72.8193	36
$	4 bis(2-Chloroethyl)ether-d8	67	3.112	3.112	(0.923)	45585	60.8650	30
$	6 2-Chlorophenol-d4	132	3.206	3.206	(0.951)	74027	62.6492	31
*	8 1,4-Dichlorobenzene-d4	152	3.371	3.371	(1.000)	37443	40.0000	(Q)
$	11 4-Methylphenol-d8	113	3.620	3.609	(1.074)	78667	73.7739	37
$	16 Nitrobenzene-d5	128	3.806	3.796	(0.860)	39516	66.0146	33(Q)
$	19 2-Nitrophenol-d4	143	4.075	4.075	(0.921)	54435	71.3451	36
$	23 2,4-Dichlorophenol-d3	165	4.282	4.282	(0.967)	105848	74.0362	37
*	25 Naphthalene-d8	136	4.427	4.427	(1.000)	143000	40.0000	
$	27 4-Chloroaniline-d4	131	4.479	4.468	(1.012)	14372	10.1889	5.1(Q)
$	40 Dimethylphthalate-d6	166	5.783	5.772	(0.951)	366333	74.1462	37
$	43 Acenaphthylene-d8	160	5.938	5.938	(0.976)	306202	55.9721	28
*	46 Acenaphthene-d10	164	6.083	6.083	(1.000)	124951	40.0000	
$	49 4-Nitrophenol-d4	143	6.197	6.166	(1.019)	77010	82.7935	41
	53 Diethylphthalate	149	6.487	6.487	(1.066)	11030	2.17475	1.1(a)
$	54 Fluorene-d10	176	6.590	6.590	(1.083)	236722	53.7399	27
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.652	6.642	(0.883)	95917	70.0567	35
*	65 Phenanthrene-d10	188	7.532	7.532	(1.000)	341328	40.0000	
$	67 Anthracene-d10	188	7.594	7.584	(1.008)	337206	35.9712	18
$	72 Pyrene-d10	212	8.929	8.929	(0.881)	256191	23.9629	12(R)
	79 bis(2-Ethylhexyl)phthalate	149	10.099	10.099	(0.997)	16798	2.08862	1.0(a)

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8655.D
Report Date: 11-Nov-2011 14:04

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
* 77 Chrysene-d12	240	10.130	10.120	(1.000)	548515	40.0000	(Q)
$ 83 Benzo(a)pyrene-d12	264	11.714	11.703	(0.990)	188907	16.5701	8.3(R)
* 85 Perylene-d12	264	11.827	11.817	(1.000)	514489	40.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8655.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8655.D
Lab Smp Id: K2213-09A Client Smp ID: H30Y0
Inj Date : 11-NOV-2011 01:28
Operator : MMS   SRC: LIMS Inst ID: S4.i
Smp Info : K2213-09A,,62806,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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

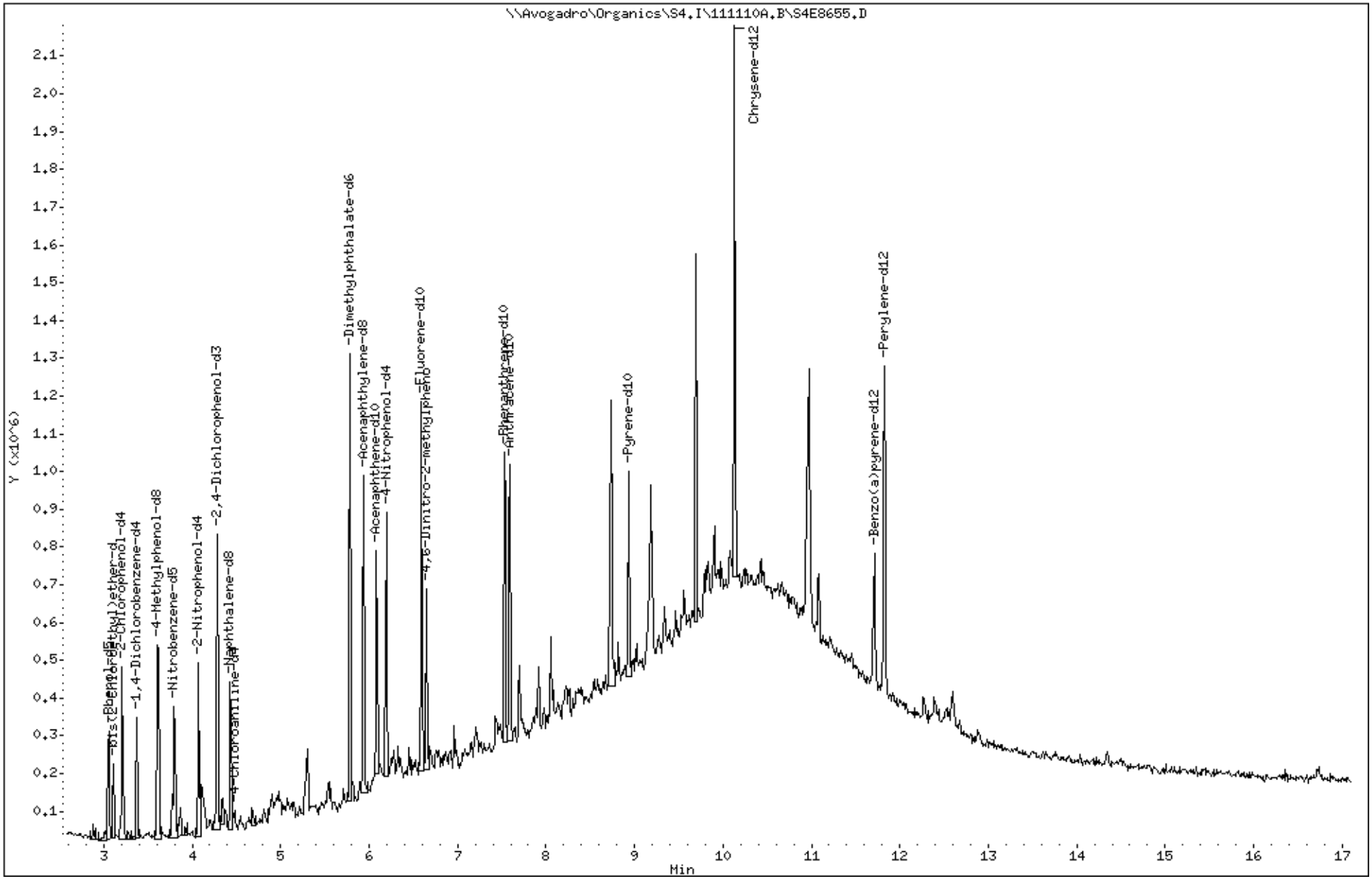
ISTD		RT	AREA	AMOUNT
* 8	1,4-Dichlorobenzene-d4	3.372	314763	40.000
* 25	Naphthalene-d8	4.427	503568	40.000
* 65	Phenanthrene-d10	7.533	954353	40.000
* 77	Chrysene-d12	10.130	1491894	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.885	43033	5.46858539	2.7	0		0	8
Unknown				CAS #:			
3.020	47358	6.01823756	3.0	0		0	8
2-Cyclopenten-1-one, 2,3,4,5-tetramethyl				CAS #: 54458-61-6			
3.869	110833	14.0845479	7.0	91	NIST2002.L	16989	8

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8655.D
Report Date: 11-Nov-2011 14:04

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.345	101221	8.04030090	4.0	0		0	25
Unknown				CAS #:			
4.676	56799	4.51167838	2.3	0		0	25
Unknown				CAS #:			
8.733	1010692	42.3613467	21	0		0	65
Unknown				CAS #:			
9.696	947021	25.3911121	13	0		0	77

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8655.D
Date : 11-NOV-2011 01:28
Client ID: H30Y0
Instrument: S4.i
Sample Info: K2213-09A,,62806,,
Volume Injected (uL): 2.0
Operator: MMS SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



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Date : 11-NOV-2011 01:28

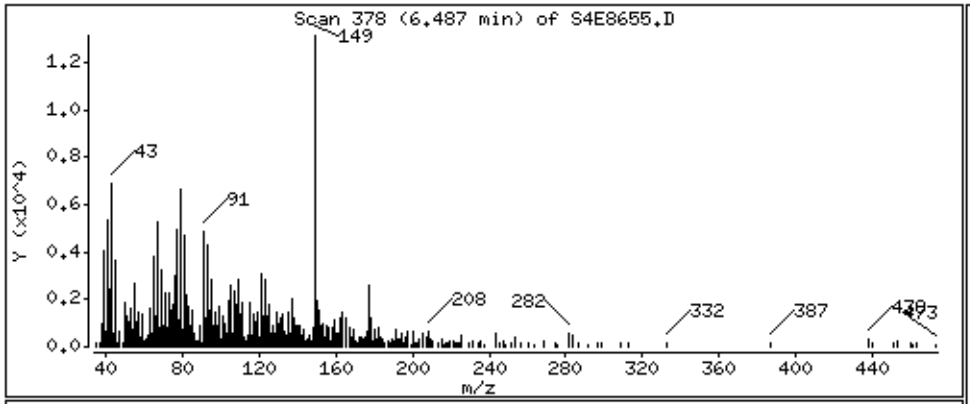
Client ID: H30Y0 Instrument: S4.i

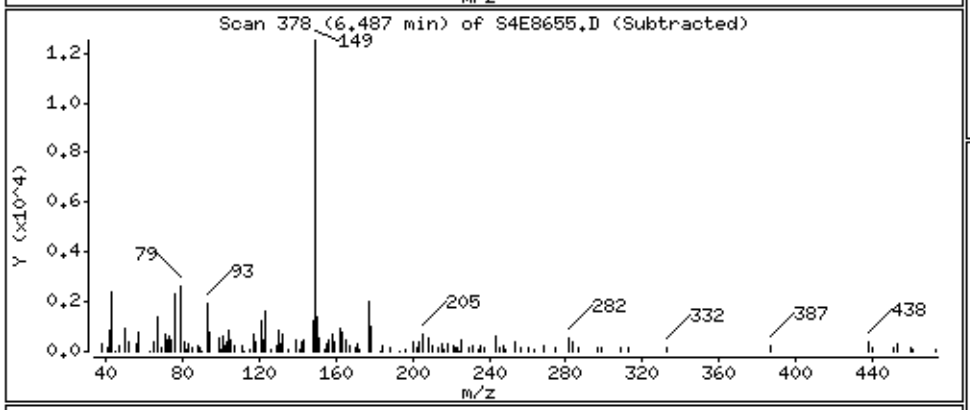
Sample Info: K2213-09A,,62806,,

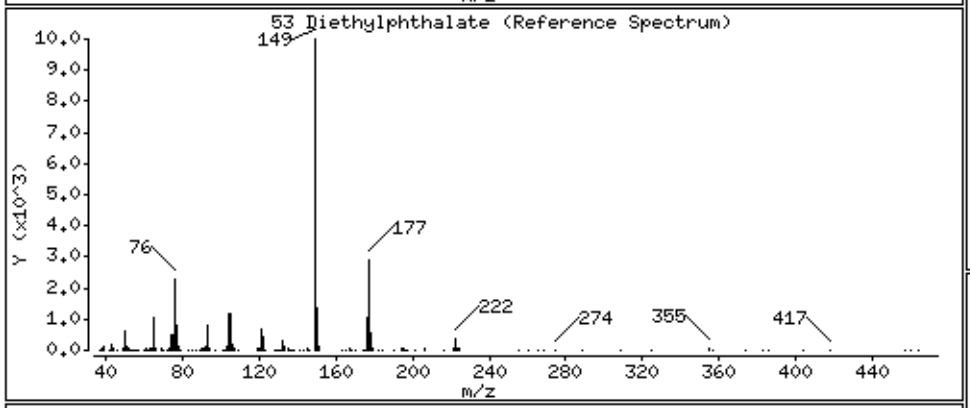
Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

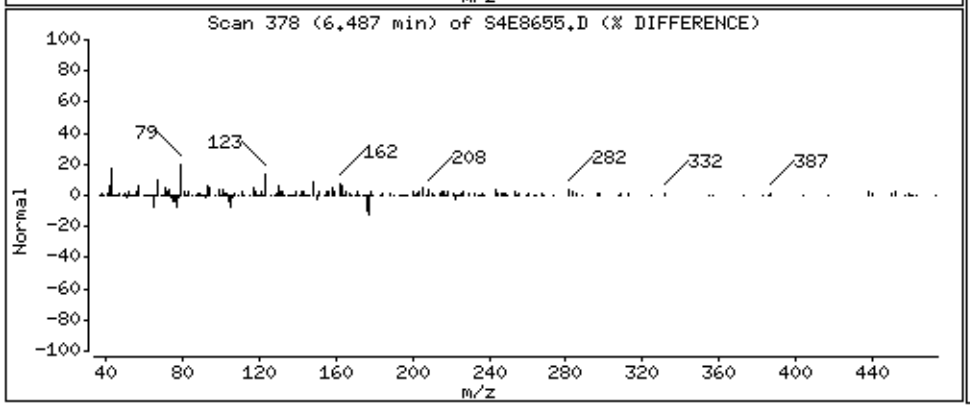
Column phase: RXI-5SILMS Column diameter: 0.25

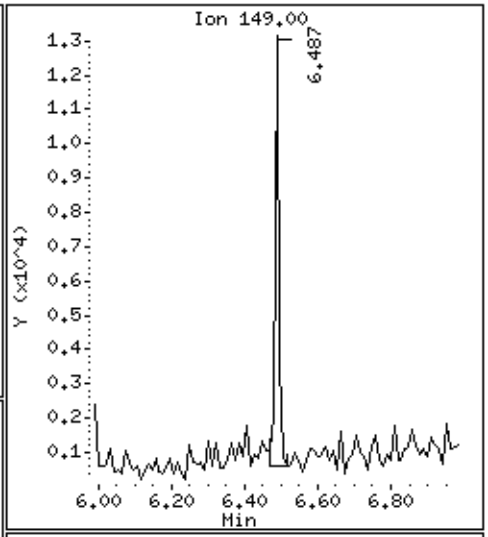
53 Diethylphthalate Concentration: 1.1 ug/L

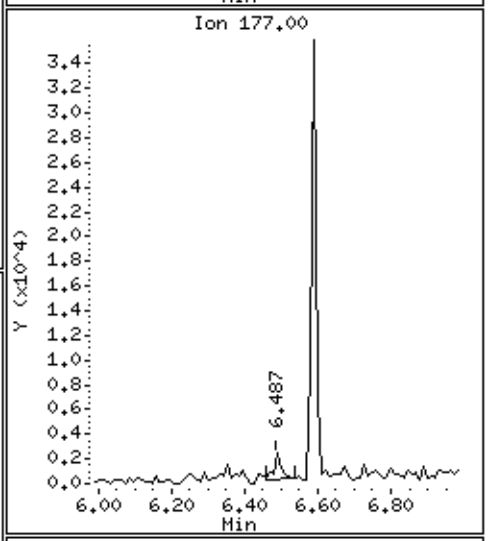


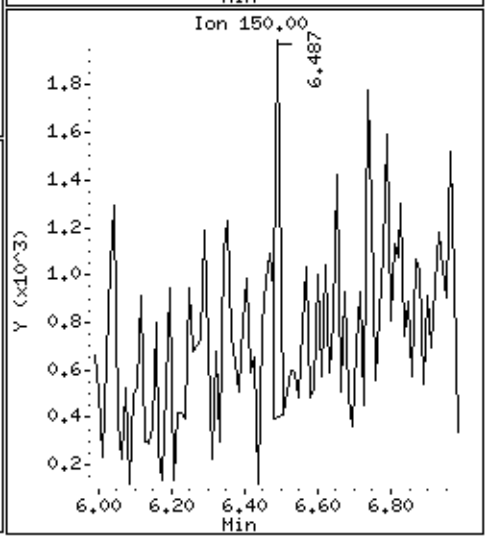












Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8655.D

Date : 11-NOV-2011 01:28

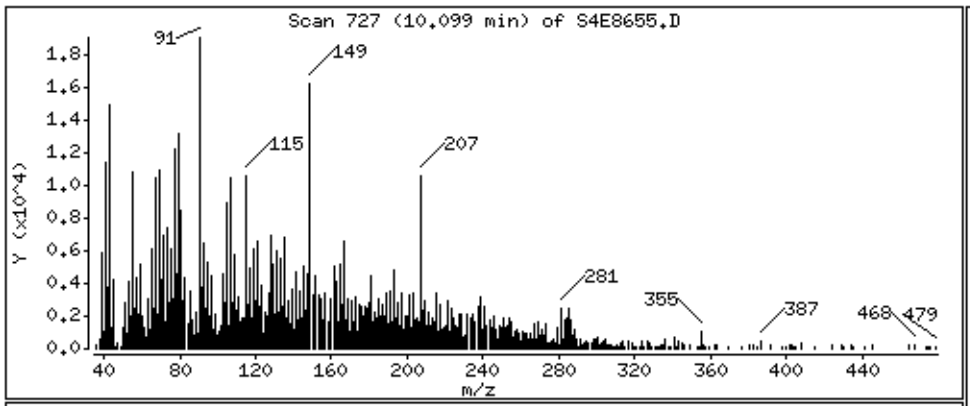
Client ID: H30Y0 Instrument: S4.i

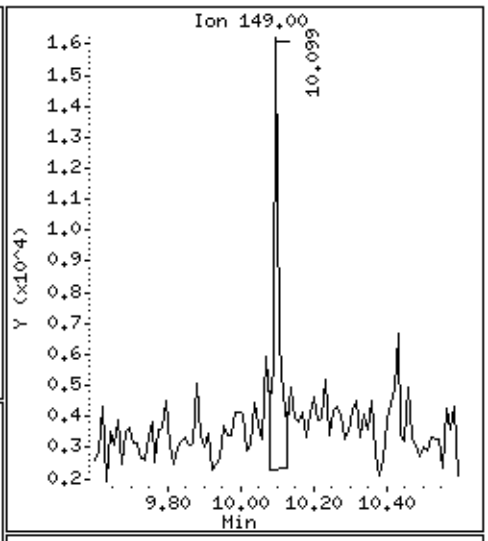
Sample Info: K2213-09A,,62806,,

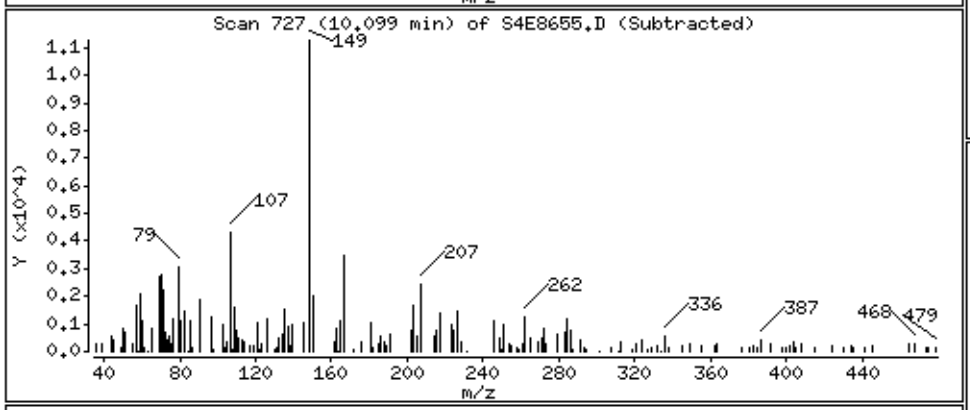
Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

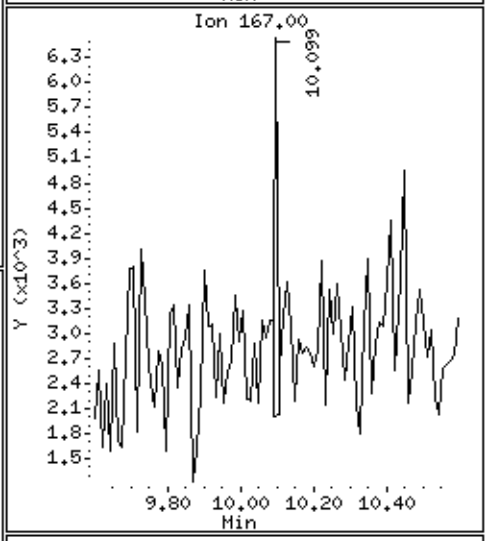
Column phase: RXI-5SILMS Column diameter: 0.25

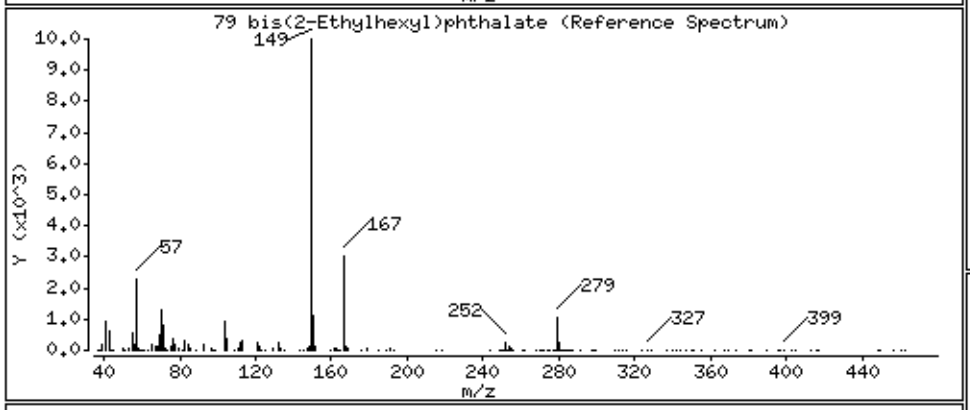
79 bis(2-Ethylhexyl)phthalate Concentration: 1.0 ug/L

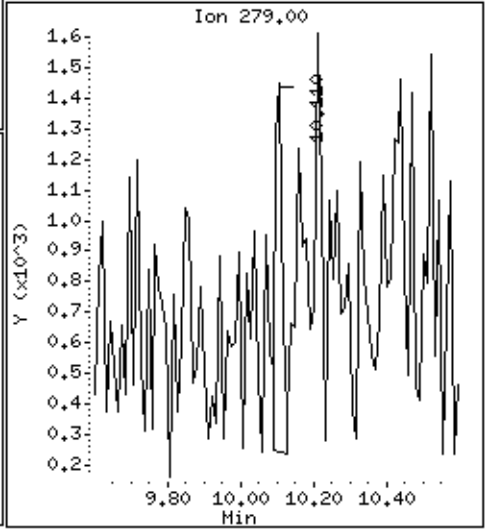


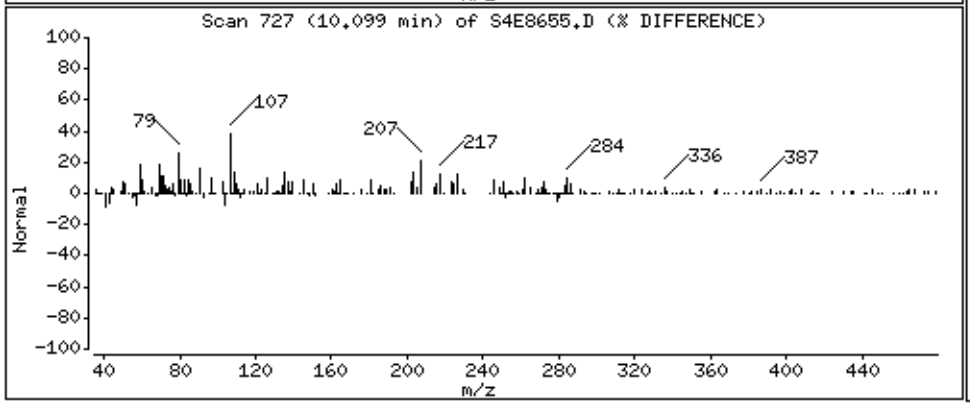












Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8655.D

Date : 11-NOV-2011 01:28

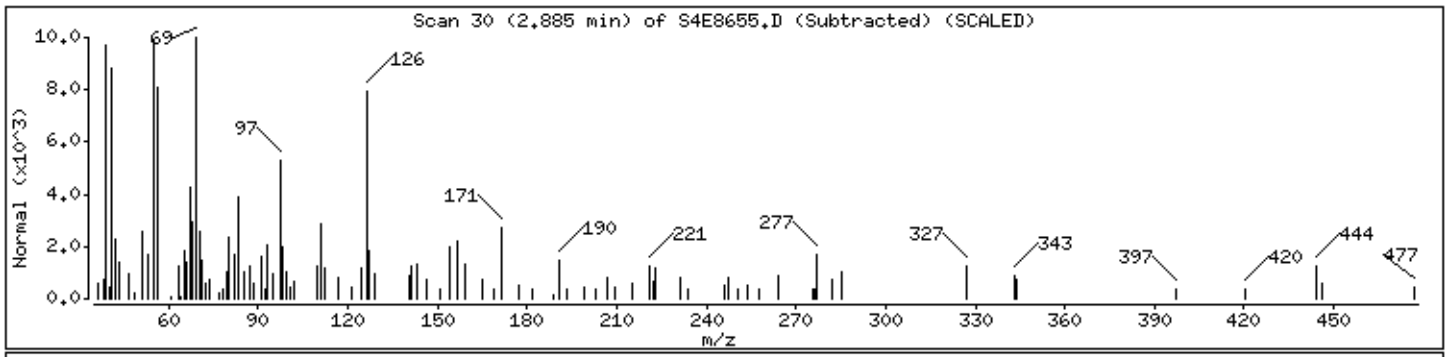
Client ID: H30Y0 Instrument: S4.i

Sample Info: K2213-09A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 11-NOV-2011 01:28

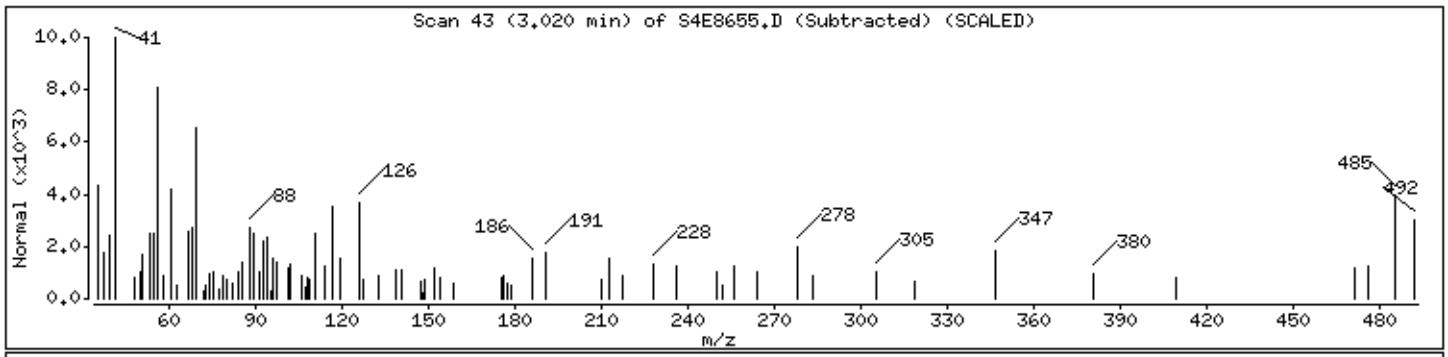
Client ID: H30Y0 Instrument: S4.i

Sample Info: K2213-09A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 11-NOV-2011 01:28

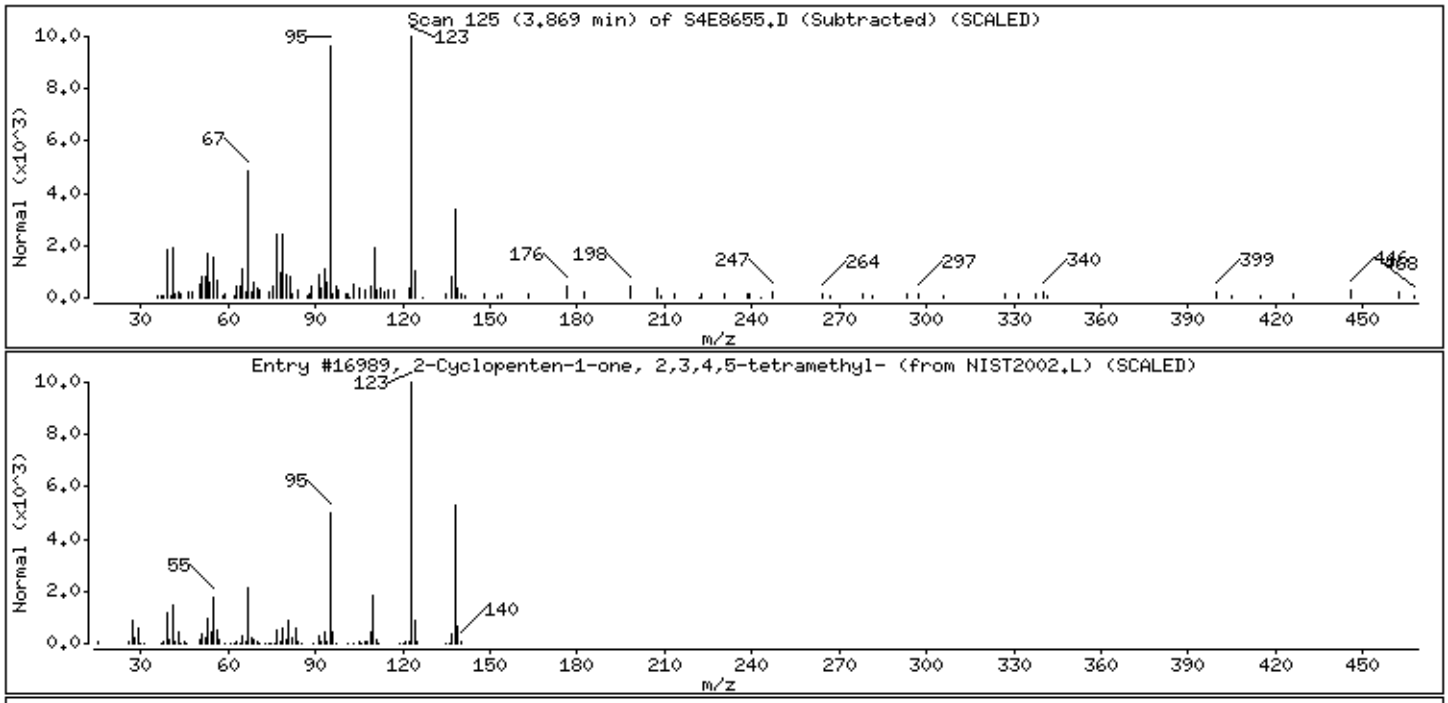
Client ID: H30Y0 Instrument: S4.i

Sample Info: K2213-09A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Cyclopenten-1-one, 2,3,4,5-tetramethyl	54458-61-6	NIST2002.L	16989	91	C9H14O	138



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Date : 11-NOV-2011 01:28

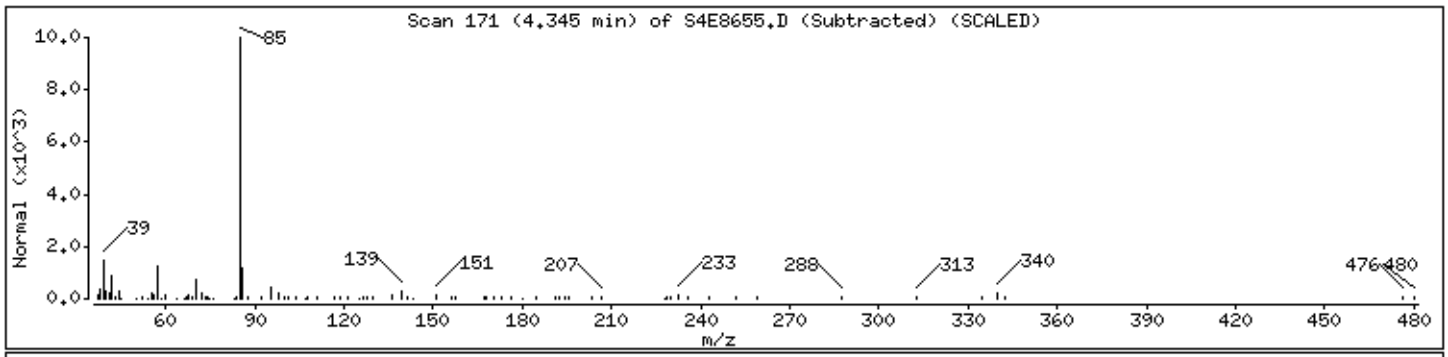
Client ID: H30Y0 Instrument: S4.i

Sample Info: K2213-09A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 11-NOV-2011 01:28

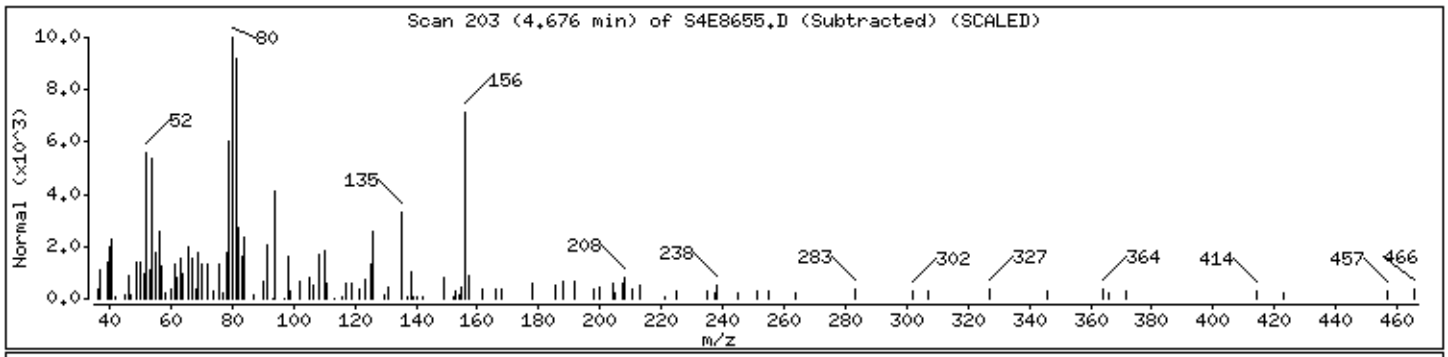
Client ID: H30Y0 Instrument: S4.i

Sample Info: K2213-09A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8655.D

Date : 11-NOV-2011 01:28

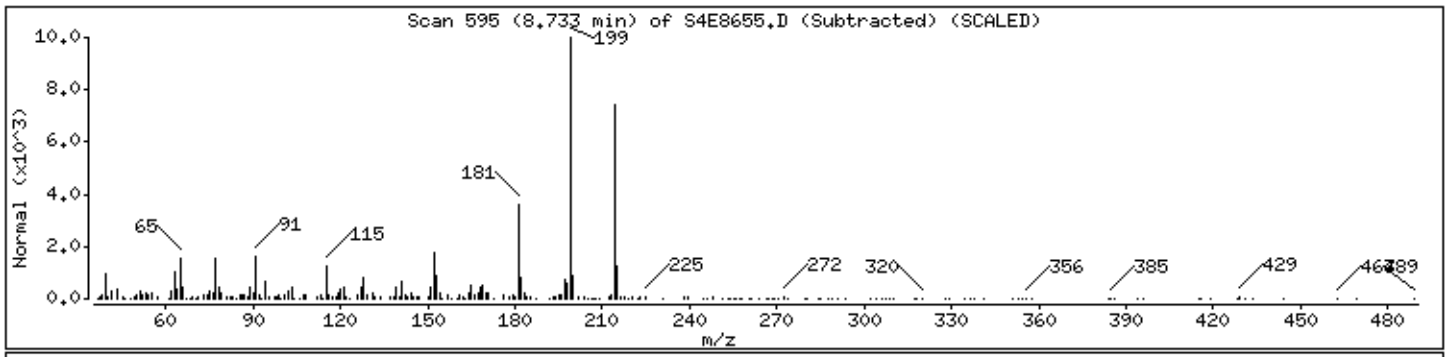
Client ID: H30Y0 Instrument: S4.i

Sample Info: K2213-09A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8655.D

Date : 11-NOV-2011 01:28

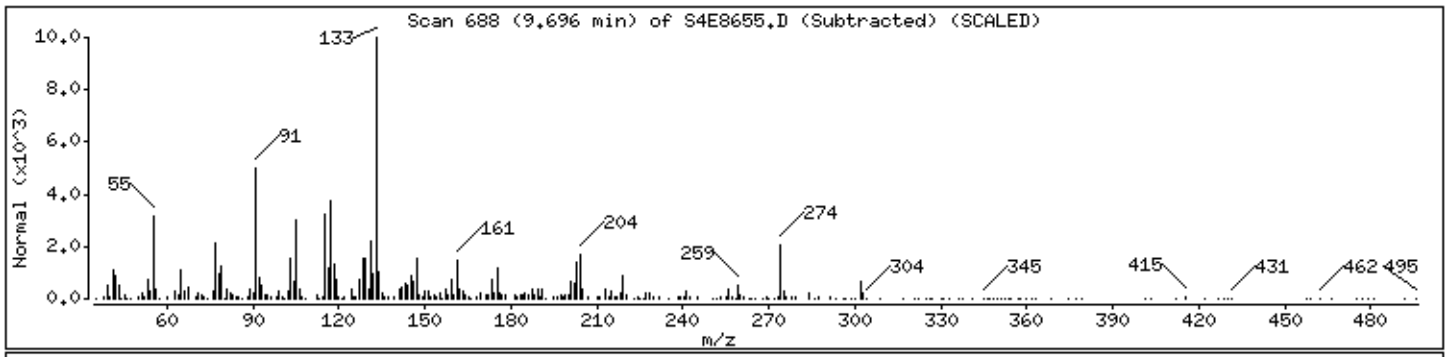
Client ID: H30Y0 Instrument: S4.i

Sample Info: K2213-09A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Y1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-10A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8656.D

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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

EPA SAMPLE NO.

H30Y1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-10A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8656.D

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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

EPA SAMPLE NO.

H30Y1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-10A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8656.D

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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	3.268	3.2	J
02		Unknown-02	3.931	2.6	J
03		Unknown-03	4.334	4.6	J
04		Unknown-04	4.386	3.3	J
05		Unknown-05	5.307	4.6	J
06		Unknown-06	6.187	25	J
07		Unknown-07	9.696	12	J
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8656.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8656.D
Lab Smp Id: K2213-10A Client Smp ID: H30Y1
Inj Date : 11-NOV-2011 01:54
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-10A,,62806,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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)	CONCENTRATIONS FINAL (ug/L)
$	2 Phenol-d5	71	3.050	3.050	(0.905)	43897	54.5296	27
$	4 bis(2-Chloroethyl)ether-d8	67	3.112	3.112	(0.923)	28594	47.7542	24
$	6 2-Chlorophenol-d4	132	3.206	3.206	(0.951)	49188	52.0686	26
*	8 1,4-Dichlorobenzene-d4	152	3.371	3.371	(1.000)	29935	40.0000	(Q)
$	11 4-Methylphenol-d8	113	3.620	3.609	(1.074)	52448	61.5220	31
$	16 Nitrobenzene-d5	128	3.796	3.796	(0.857)	22501	54.6256	27(Q)
$	19 2-Nitrophenol-d4	143	4.075	4.075	(0.921)	32891	62.6457	31
$	23 2,4-Dichlorophenol-d3	165	4.282	4.282	(0.967)	67872	68.9890	34
*	25 Naphthalene-d8	136	4.427	4.427	(1.000)	98403	40.0000	
$	27 4-Chloroaniline-d4	131	4.479	4.468	(1.012)	11019	11.3522	5.7(Q)
$	40 Dimethylphthalate-d6	166	5.783	5.772	(0.951)	251521	63.5162	32
$	43 Acenaphthylene-d8	160	5.938	5.938	(0.976)	220559	50.3021	25
*	46 Acenaphthene-d10	164	6.083	6.083	(1.000)	100148	40.0000	
$	49 4-Nitrophenol-d4	143	6.197	6.166	(1.019)	60450	81.0855	41(H)
$	54 Fluorene-d10	176	6.590	6.590	(1.083)	160005	45.3200	23
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.652	6.642	(0.883)	72281	69.9844	35
*	65 Phenanthrene-d10	188	7.532	7.532	(1.000)	257483	40.0000	
$	67 Anthracene-d10	188	7.594	7.584	(1.008)	273122	38.6225	19
$	72 Pyrene-d10	212	8.929	8.929	(0.881)	248131	25.2063	13(R)
*	77 Chrysene-d12	240	10.130	10.120	(1.000)	505053	40.0000	(Q)
$	83 Benzo(a)pyrene-d12	264	11.713	11.703	(0.990)	209228	17.9645	9.0(R)

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8656.D
Report Date: 11-Nov-2011 14:04

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
* 85 Perylene-d12	264	11.827	11.817	(1.000)	525605	40.0000	

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\S4.I\111110A.B\S4E8656.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8656.D
Lab Smp Id: K2213-10A Client Smp ID: H30Y1
Inj Date : 11-NOV-2011 01:54
Operator : MMS   SRC: LIMS Inst ID: S4.i
Smp Info : K2213-10A,,62806,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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

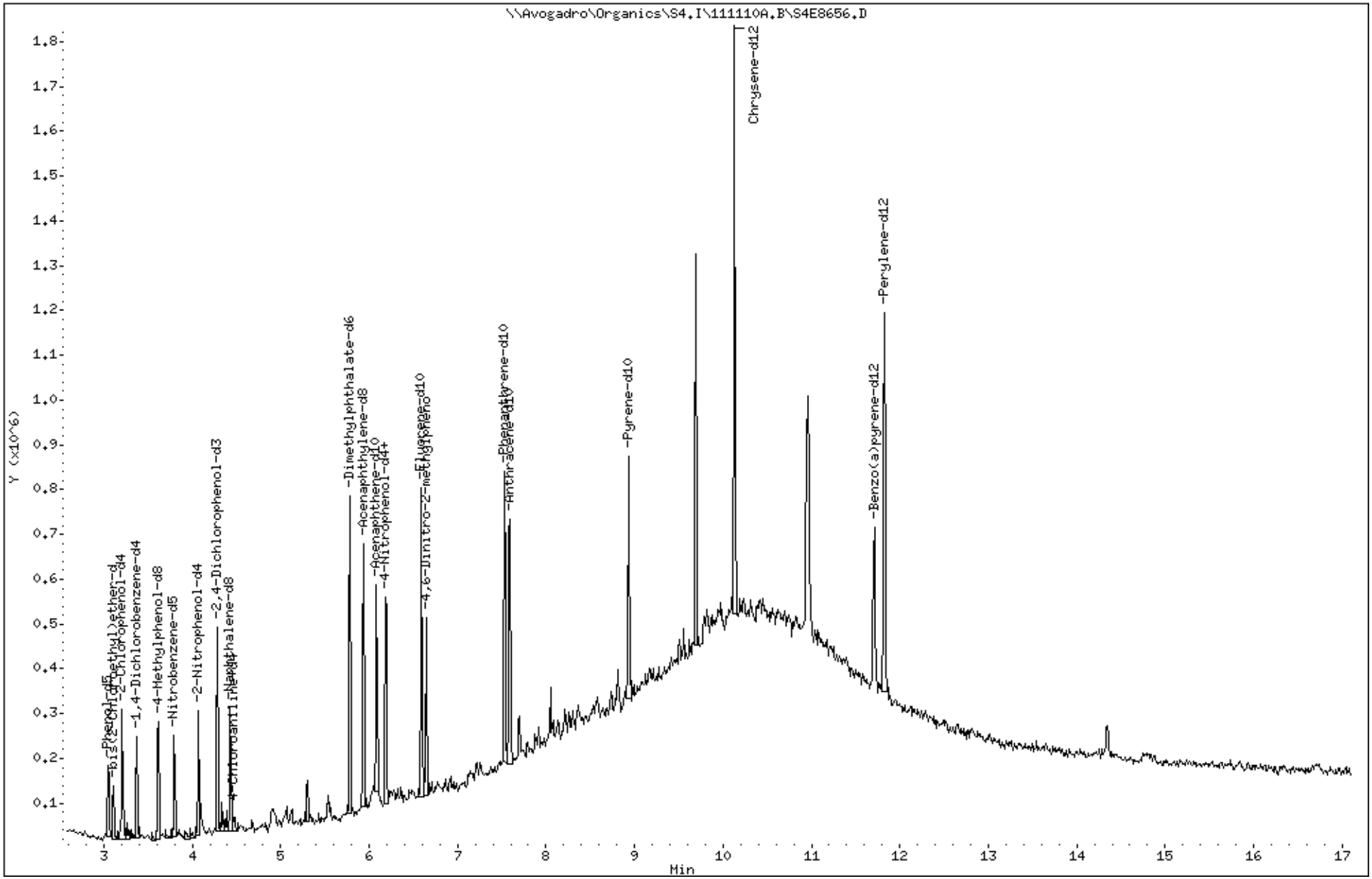
ISTD		RT	AREA	AMOUNT
* 8	1,4-Dichlorobenzene-d4	3.372	243925	40.000
* 25	Naphthalene-d8	4.427	305507	40.000
* 46	Acenaphthene-d10	6.083	513571	40.000
* 77	Chrysene-d12	10.130	1341910	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
3.268	39440	6.46754136	3.2	0	0		8
Unknown					CAS #:		
3.931	40366	5.28505973	2.6	0	0		25
Unknown					CAS #:		
4.334	69773	9.13533621	4.6	0	0		25

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8656.D
Report Date: 11-Nov-2011 14:04

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.386	49868	6.52927067	3.3	0		0	25
Unknown				CAS #:			
5.307	118488	9.22855259	4.6	0		0	46
Unknown				CAS #:			
6.187	641977	50.0009636	25	0		0	46
Unknown				CAS #:			
9.696	830508	24.7559821	12	0		0	77

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8656.D
Date : 11-NOV-2011 01:54
Client ID: H30Y1
Instrument: S4.i
Sample Info: K2213-10A,,62806,,
Volume Injected (uL): 2.0
Operator: MMS SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8656.D

Date : 11-NOV-2011 01:54

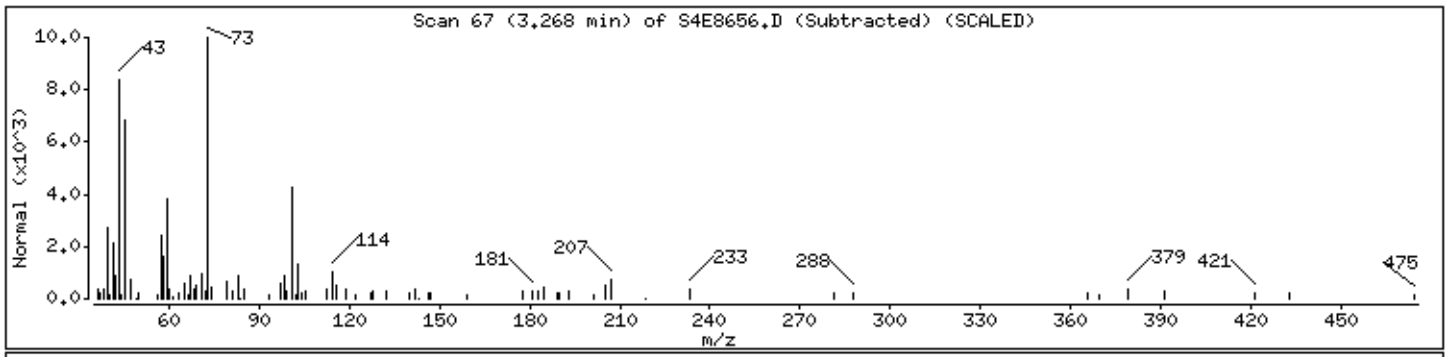
Client ID: H30Y1 Instrument: S4.i

Sample Info: K2213-10A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8656.D

Date : 11-NOV-2011 01:54

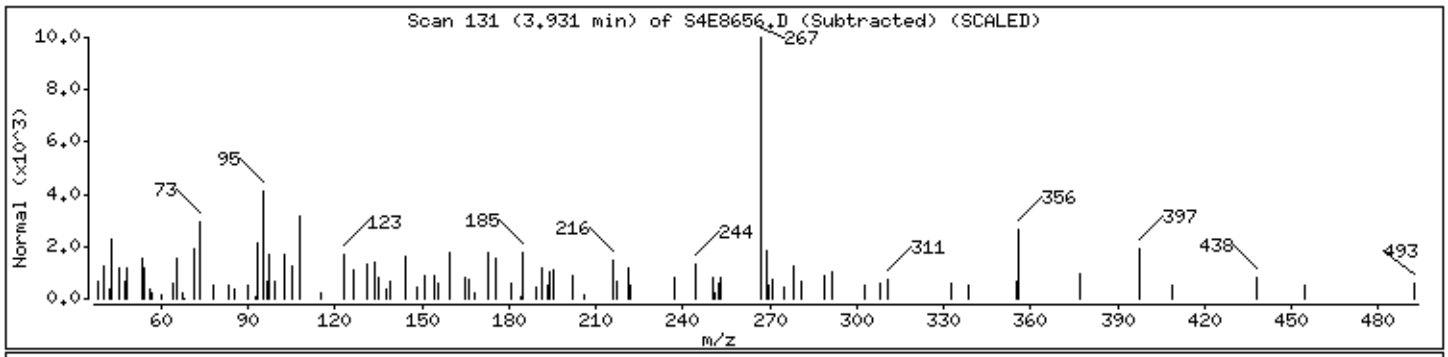
Client ID: H30Y1 Instrument: S4.i

Sample Info: K2213-10A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8656.D

Date : 11-NOV-2011 01:54

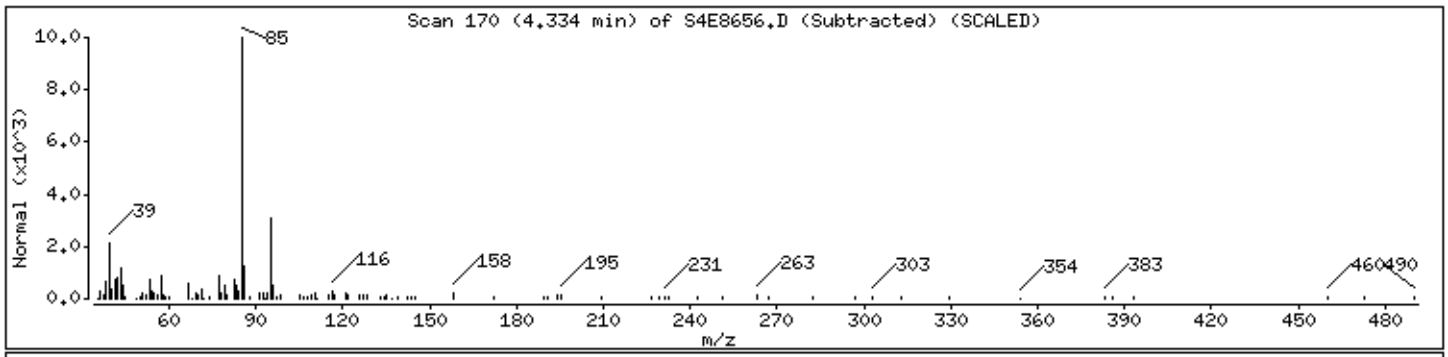
Client ID: H30Y1 Instrument: S4.i

Sample Info: K2213-10A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8656.D

Date : 11-NOV-2011 01:54

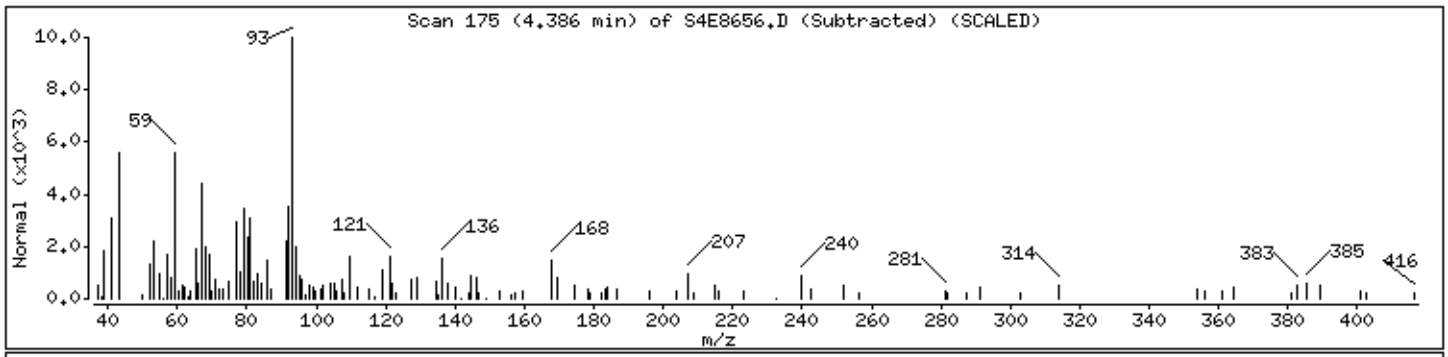
Client ID: H30Y1 Instrument: S4.i

Sample Info: K2213-10A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8656.D

Date : 11-NOV-2011 01:54

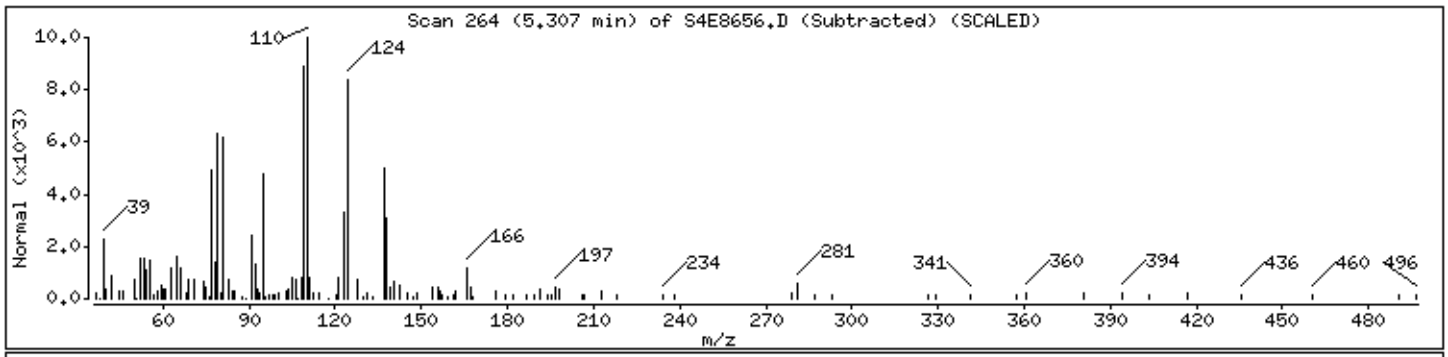
Client ID: H30Y1 Instrument: S4.i

Sample Info: K2213-10A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8656.D

Date : 11-NOV-2011 01:54

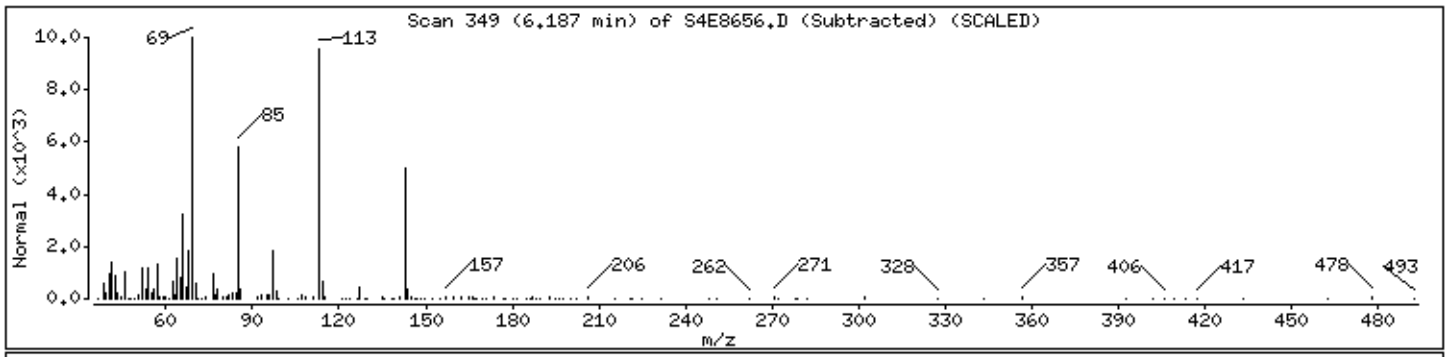
Client ID: H30Y1 Instrument: S4.i

Sample Info: K2213-10A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8656.D

Date : 11-NOV-2011 01:54

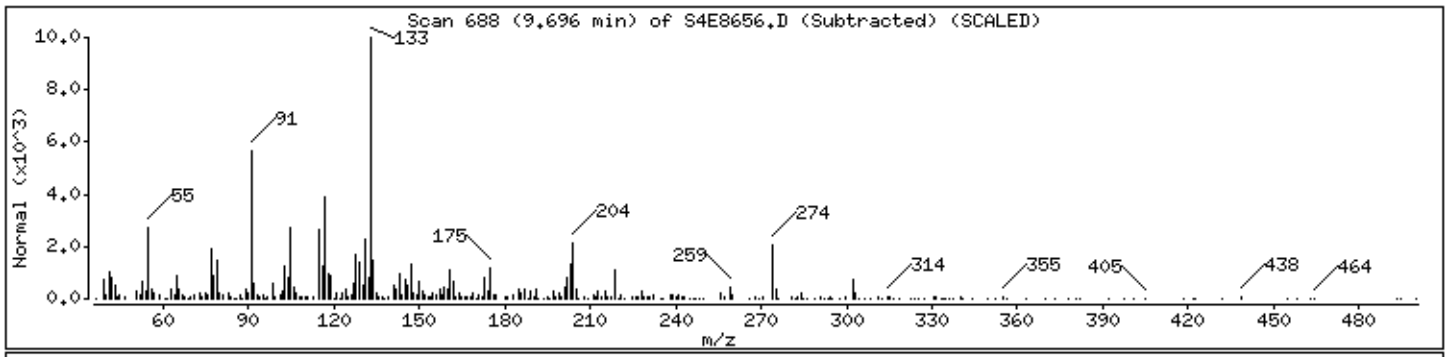
Client ID: H30Y1 Instrument: S4.i

Sample Info: K2213-10A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Y7

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-02A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5232.D

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received: 10/29/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/03/2011

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

EPA SAMPLE NO.

H30Y7

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-02A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5232.D

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received: 10/29/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/03/2011

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

EPA SAMPLE NO.

H30Y7

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-02A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S2H5232.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: 11/03/2011

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	3.670	2.8	J
02		Unknown-02	4.346	2.1	J
03		Unknown-03	4.485	2.1	J
04		Unknown-04	4.603	5.8	J
05		Unknown-05	5.118	3.8	J
06		Unknown-06	5.182	2.6	J
07		Unknown-07	5.322	4.4	J
08		Unknown-08	5.482	4.0	J
09		Unknown-09	5.675	8.8	J
10		Unknown-10	5.901	3.3	J
11		Unknown-11	8.153	21	J
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5232.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\S2H5232.D
Lab Smp Id: K2213-02A Client Smp ID: H30Y7
Inj Date : 04-NOV-2011 17:01
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2213-02A,,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: 8
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	3.498	3.500	(0.918)	229570	61.8139	31
$	4 bis(2-Chloroethyl)ether-d8	67	3.552	3.554	(0.932)	330374	64.5558	32
$	6 2-Chlorophenol-d4	132	3.627	3.629	(0.952)	231203	71.9644	36
*	8 1,4-Dichlorobenzene-d4	152	3.809	3.822	(1.000)	117939	40.0000	(Q)
$	11 4-Methylphenol-d8	113	4.131	4.133	(1.084)	348523	69.2198	35
$	16 Nitrobenzene-d5	128	4.270	4.283	(0.875)	112644	70.2028	35
$	19 2-Nitrophenol-d4	143	4.549	4.551	(0.932)	134940	76.1805	38
$	23 2,4-Dichlorophenol-d3	165	4.753	4.755	(0.974)	237808	73.5436	37
*	25 Naphthalene-d8	136	4.881	4.884	(1.000)	308106	40.0000	
$	27 4-Chloroaniline-d4	131	4.935	4.937	(1.011)	54674	19.0427	9.5(Q)
$	40 Dimethylphthalate-d6	166	6.104	6.106	(0.961)	588666	79.4268	40
$	43 Acenaphthylene-d8	160	6.211	6.224	(0.978)	500518	51.9333	26
*	46 Acenaphthene-d10	164	6.351	6.353	(1.000)	201572	40.0000	
$	49 4-Nitrophenol-d4	143	6.447	6.449	(1.015)	66646	62.3978	31(Q)
$	54 Fluorene-d10	176	6.779	6.782	(1.068)	386400	56.7574	28
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.833	6.835	(0.902)	107674	85.2607	43(QR)
*	65 Phenanthrene-d10	188	7.573	7.575	(1.000)	323631	40.0000	
$	67 Anthracene-d10	188	7.616	7.629	(1.006)	410888	44.4462	22
$	72 Pyrene-d10	212	8.763	8.776	(0.887)	210973	29.6363	15(R)
*	77 Chrysene-d12	240	9.836	9.881	(1.000)	225975	40.0000	(QH)
$	83 Benzo(a)pyrene-d12	264	11.208	11.189	(0.996)	184126	40.4324	20(H)

Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5232.D
Report Date: 07-Nov-2011 13:27

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)	
* 85 Perylene-d12	264	11.208	11.275	(1.000)	185583	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\111104.B\S2H5232.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\S2H5232.D
Lab Smp Id: K2213-02A Client Smp ID: H30Y7
Inj Date : 04-NOV-2011 17:01
Operator : SRC: LIMS Inst ID: S2.i
Smp Info : K2213-02A,,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: 8
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

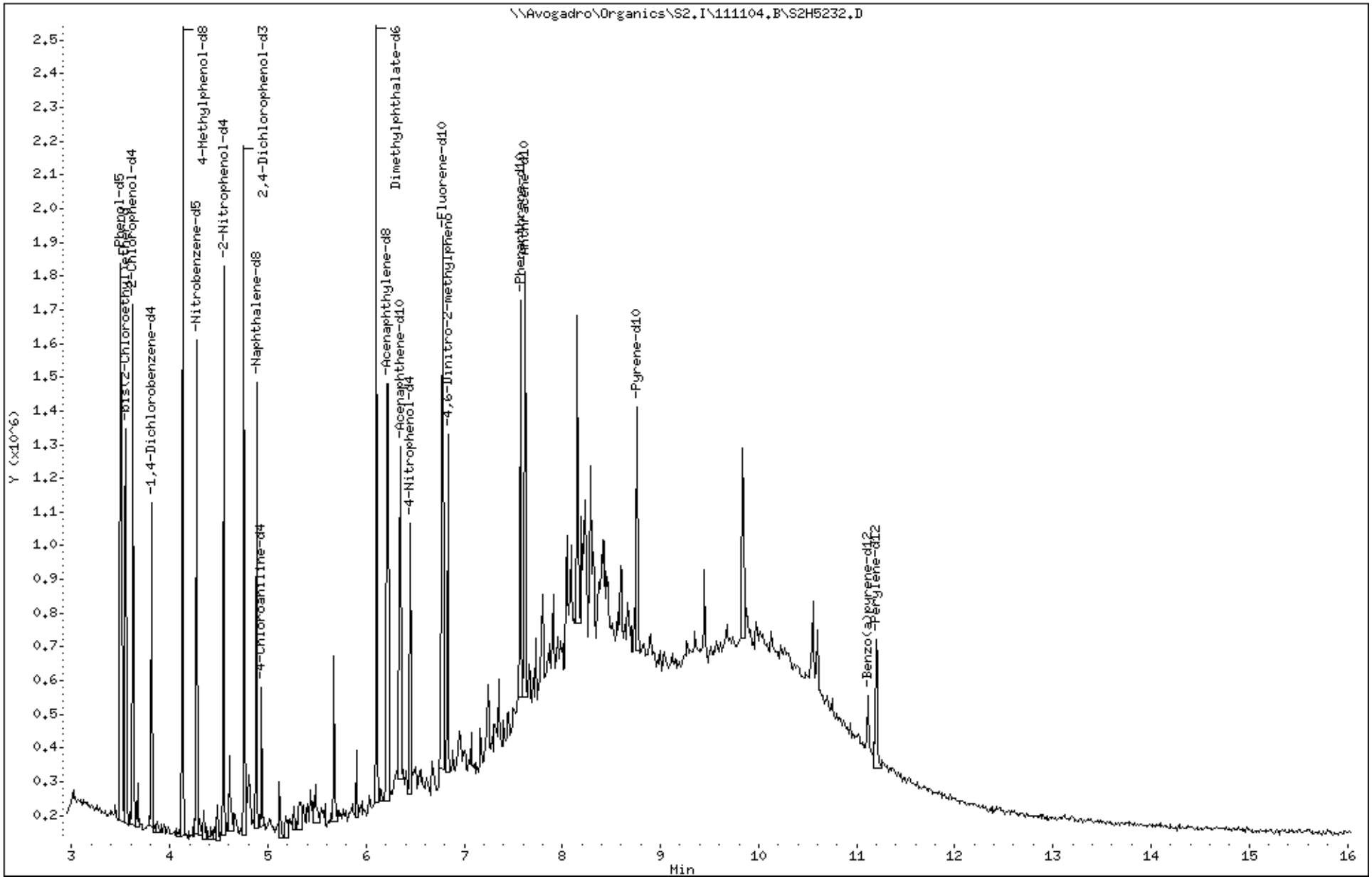
ISTD		RT	AREA	AMOUNT
* 8	1,4-Dichlorobenzene-d4	3.810	1003461	40.000
* 25	Naphthalene-d8	4.882	1043087	40.000
* 46	Acenaphthene-d10	6.351	1087794	40.000
* 65	Phenanthrene-d10	7.574	1016135	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
3.670	139165	5.54740473	2.8	0	0		8
Unknown					CAS #:		
4.346	106667	4.25197407	2.1	0	0		8
Unknown					CAS #:		
4.485	110465	4.23606463	2.1	0	0		25

Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5232.D
Report Date: 07-Nov-2011 13:27

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.603	301510	11.5622100	5.8	0		0	25
Unknown				CAS #:			
5.118	200361	7.68338779	3.8	0		0	25
Unknown				CAS #:			
5.182	137329	5.26623312	2.6	0		0	25
Unknown				CAS #:			
5.322	227482	8.72340879	4.4	0		0	25
Unknown				CAS #:			
5.482	206935	7.93549502	4.0	0		0	25
Unknown				CAS #:			
5.675	479767	17.6418163	8.8	0		0	46
Unknown				CAS #:			
5.901	177673	6.53334060	3.3	0		0	46
Unknown				CAS #:			
8.153	1059311	41.6995826	21	0		0	65

Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5232.D
Date : 04-NOV-2011 17:01
Client ID: H30Y7
Instrument: S2.i
Sample Info: K2213-02A,,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\S2H5232.D

Date : 04-NOV-2011 17:01

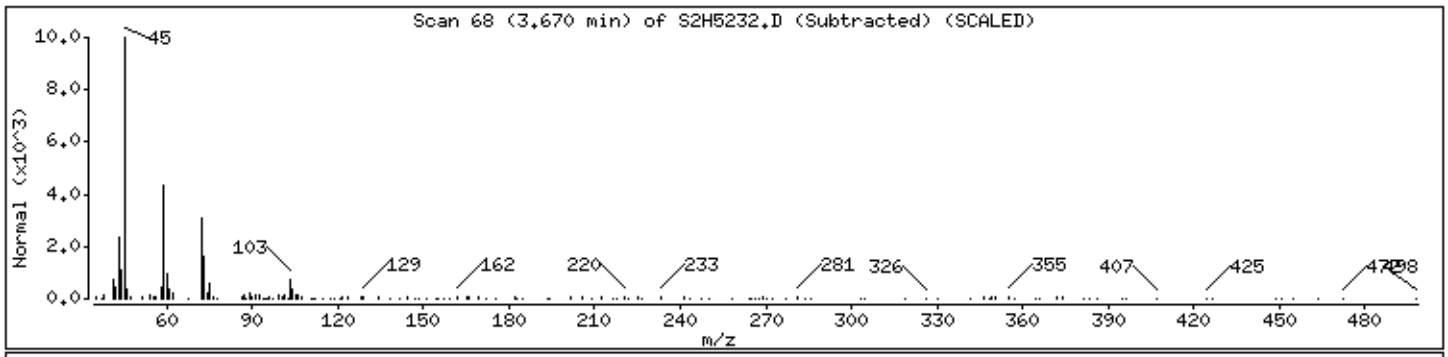
Client ID: H30Y7 Instrument: S2.i

Sample Info: K2213-02A,,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\S2H5232.D

Date : 04-NOV-2011 17:01

Client ID: H30Y7 Instrument: S2.i

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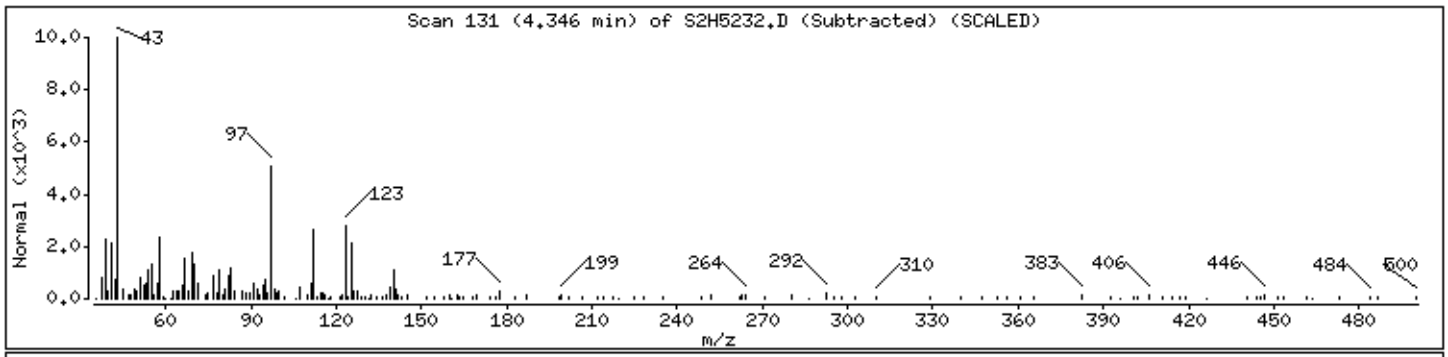
Volume Injected (uL): 2.0 Operator: SRC: LIMS

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\111104.B\S2H5232.D

Date : 04-NOV-2011 17:01

Client ID: H30Y7 Instrument: S2.i

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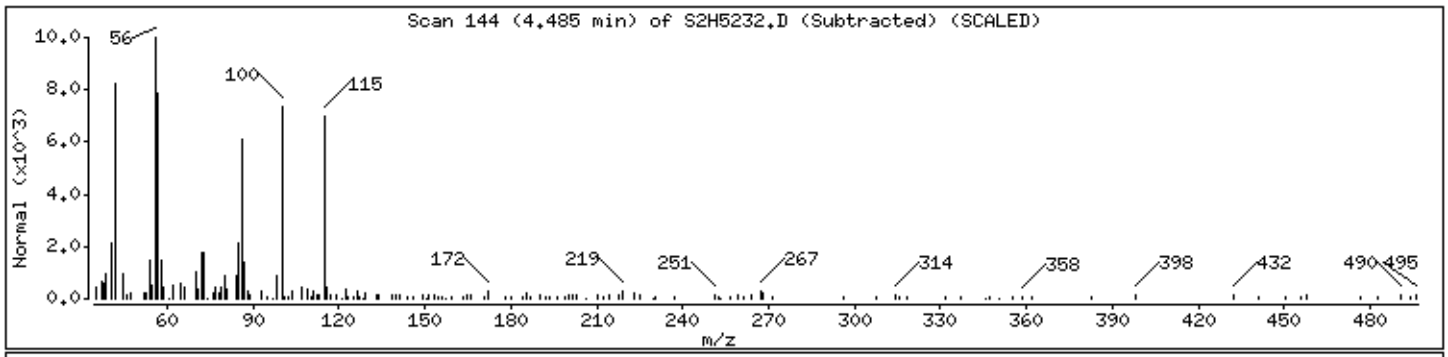
Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5232.D

Date : 04-NOV-2011 17:01

Client ID: H30Y7 Instrument: S2.i

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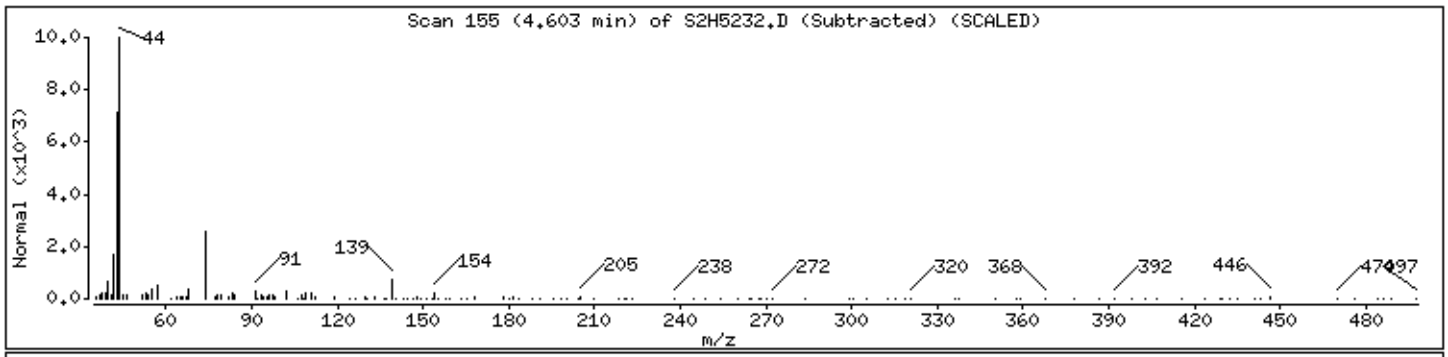
Volume Injected (uL): 2.0 Operator: SRC: LIMS

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\111104.B\S2H5232.D

Date : 04-NOV-2011 17:01

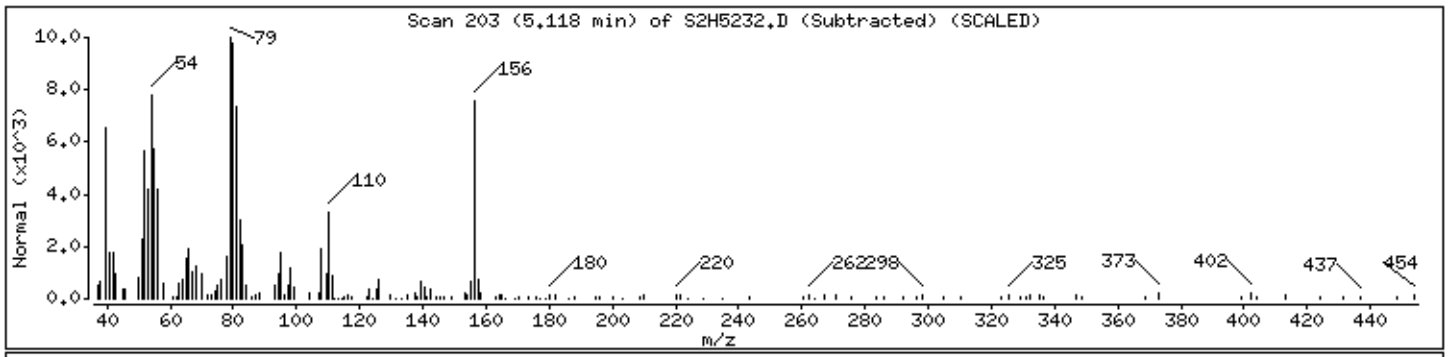
Client ID: H30Y7 Instrument: S2.i

Sample Info: K2213-02A,,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\S2H5232.D

Date : 04-NOV-2011 17:01

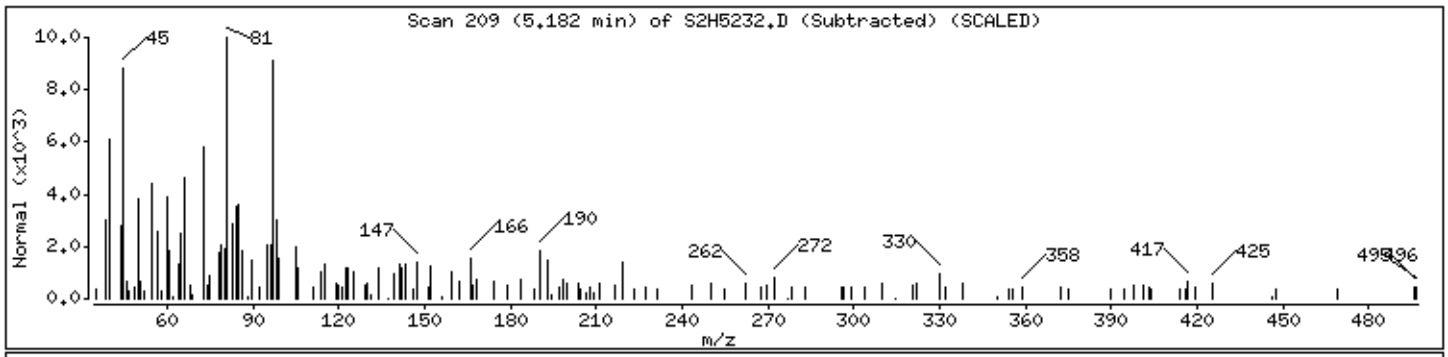
Client ID: H30Y7 Instrument: S2.i

Sample Info: K2213-02A,,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\S2H5232.D

Date : 04-NOV-2011 17:01

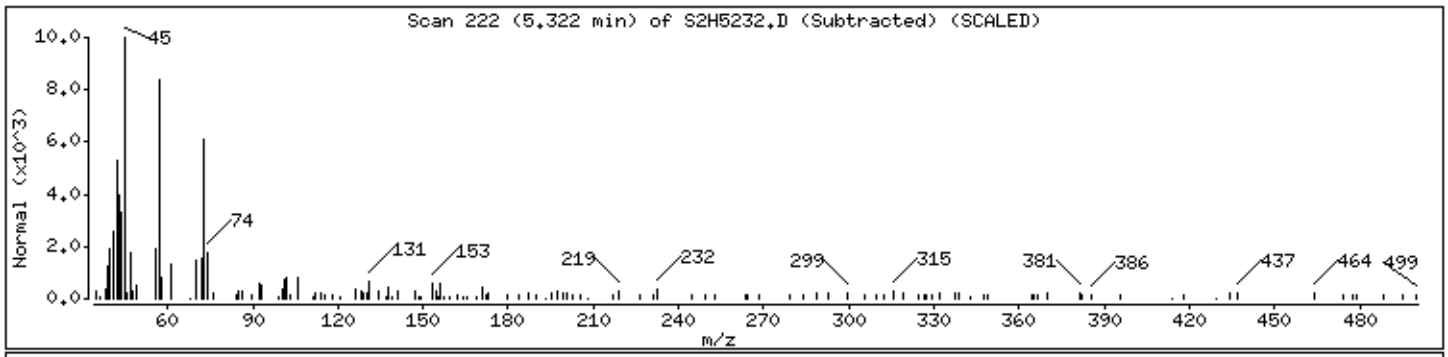
Client ID: H30Y7 Instrument: S2.i

Sample Info: K2213-02A,,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\S2H5232.D

Date : 04-NOV-2011 17:01

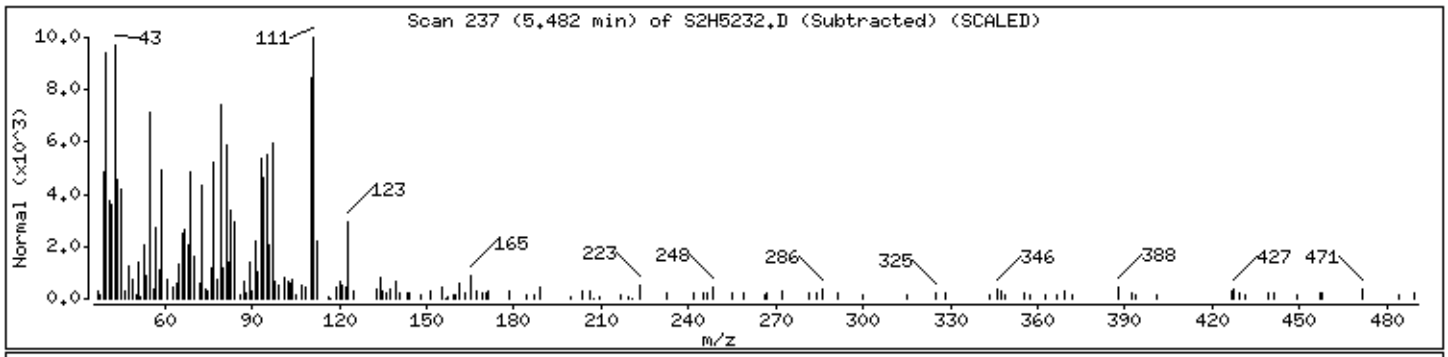
Client ID: H30Y7 Instrument: S2.i

Sample Info: K2213-02A,,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\S2H5232.D

Date : 04-NOV-2011 17:01

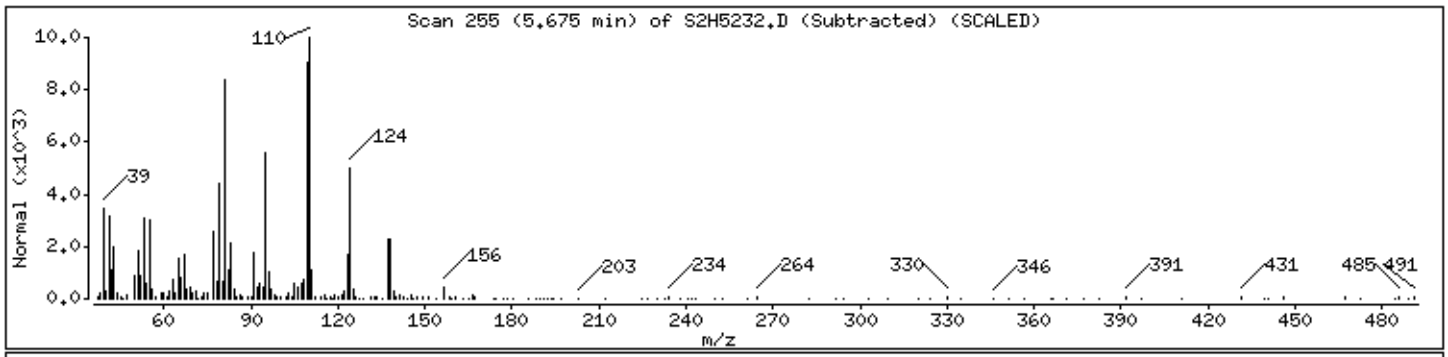
Client ID: H30Y7 Instrument: S2.i

Sample Info: K2213-02A,,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\S2H5232.D

Date : 04-NOV-2011 17:01

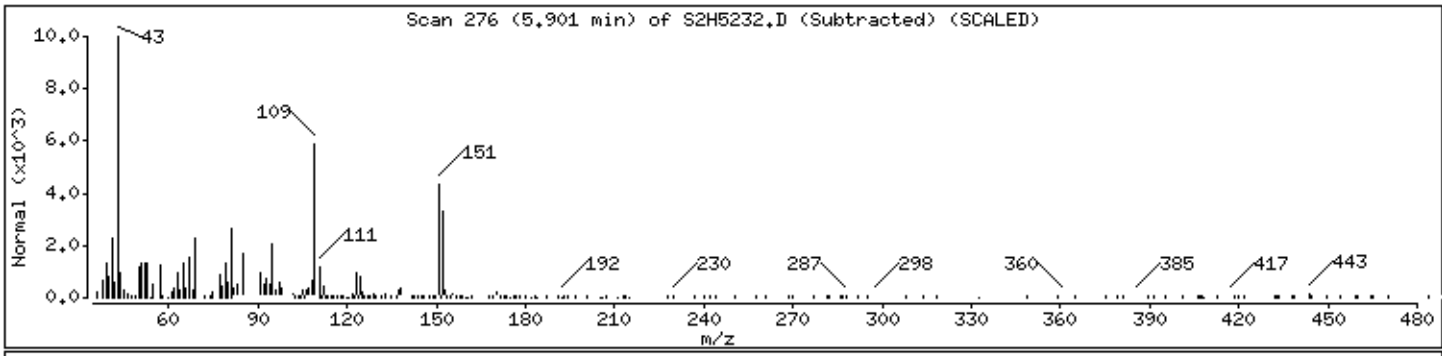
Client ID: H30Y7 Instrument: S2.i

Sample Info: K2213-02A,,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\S2H5232.D

Date : 04-NOV-2011 17:01

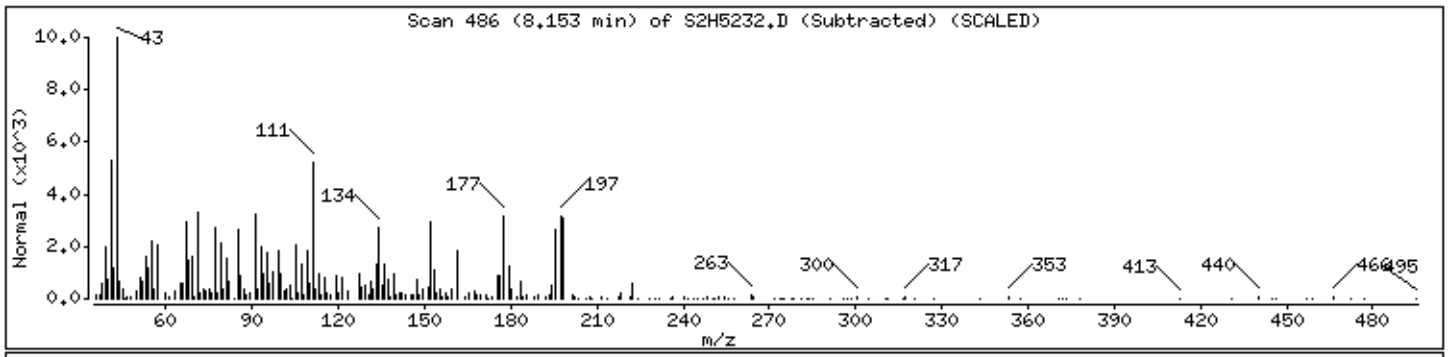
Client ID: H30Y7 Instrument: S2.i

Sample Info: K2213-02A,,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

EPA SAMPLE NO.

H30Z2

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-11A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8657.D

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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

EPA SAMPLE NO.

H30Z2

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-11A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8657.D

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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	1.1	J
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

EPA SAMPLE NO.

H30Z2

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-11A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8657.D

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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	4.334	3.6	J
02		Unknown-02	4.676	2.3	J
03		Unknown-03	4.914	8.1	J
04		Unknown-04	5.048	3.5	J
05		Unknown-05	7.460	3.5	J
06		Unknown-06	7.688	2.4	J
07		Unknown-07	9.685	3.5	J
08	301-02-0	9-Octadecenamide, (Z)-	10.958	10	NJ
	E96679€ [2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8657.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8657.D
Lab Smp Id: K2213-11A Client Smp ID: H30Z2
Inj Date : 11-NOV-2011 02:16
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-11A,,62806,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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	3.050	3.050	(0.905)	55524	63.9821	32
$	4 bis(2-Chloroethyl)ether-d8	67	3.112	3.112	(0.923)	35501	54.9994	27
$	6 2-Chlorophenol-d4	132	3.206	3.206	(0.951)	56027	55.0167	28
*	8 1,4-Dichlorobenzene-d4	152	3.371	3.371	(1.000)	32270	40.0000	(Q)
$	11 4-Methylphenol-d8	113	3.609	3.609	(1.071)	50938	55.4273	28
$	16 Nitrobenzene-d5	128	3.796	3.796	(0.857)	27248	57.0705	29(Q)
$	19 2-Nitrophenol-d4	143	4.075	4.075	(0.921)	32852	53.9832	27
$	23 2,4-Dichlorophenol-d3	165	4.282	4.282	(0.967)	68194	59.8023	30
*	25 Naphthalene-d8	136	4.427	4.427	(1.000)	114058	40.0000	
$	27 4-Chloroaniline-d4	131	4.468	4.468	(1.009)	54178	48.1551	24(Q)
$	40 Dimethylphthalate-d6	166	5.783	5.772	(0.951)	222753	59.5410	30
$	43 Acenaphthylene-d8	160	5.938	5.938	(0.976)	236449	57.0796	29
*	46 Acenaphthene-d10	164	6.083	6.083	(1.000)	94615	40.0000	
$	49 4-Nitrophenol-d4	143	6.186	6.166	(1.017)	53197	75.5294	38
	53 Diethylphthalate	149	6.487	6.487	(1.066)	8245	2.14686	1.1(a)
$	54 Fluorene-d10	176	6.590	6.590	(1.083)	198130	59.4003	30
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.642	6.642	(0.882)	61290	63.2454	32
*	65 Phenanthrene-d10	188	7.532	7.532	(1.000)	241594	40.0000	
$	67 Anthracene-d10	188	7.584	7.584	(1.007)	386173	58.2006	29
$	72 Pyrene-d10	212	8.929	8.929	(0.881)	565101	69.0967	35
*	77 Chrysene-d12	240	10.130	10.120	(1.000)	419598	40.0000	(Q)

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8657.D
Report Date: 11-Nov-2011 14:04

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
$ 83 Benzo(a)pyrene-d12	264	11.714	11.703	(0.991)	656470	66.6006	33
* 85 Perylene-d12	264	11.817	11.817	(1.000)	444827	40.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8657.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8657.D
Lab Smp Id: K2213-11A Client Smp ID: H30Z2
Inj Date : 11-NOV-2011 02:16
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-11A,,62806,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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

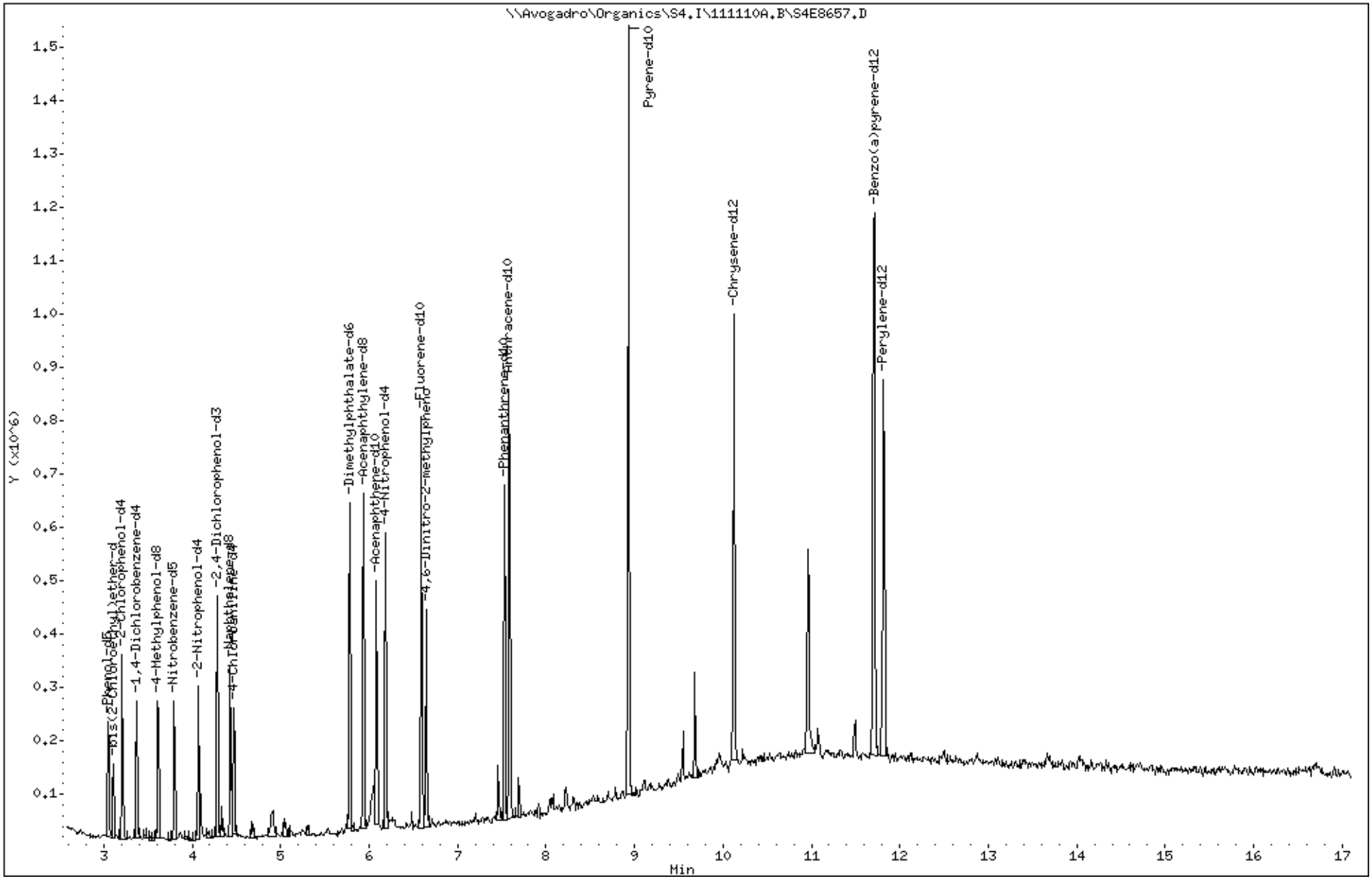
ISTD	RT	AREA	AMOUNT
* 25 Naphthalene-d8	4.427	334030	40.000
* 65 Phenanthrene-d10	7.533	656396	40.000
* 77 Chrysene-d12	10.130	1086923	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.334	60612	7.25826002	3.6	0		0	25
Unknown				CAS #:			
4.676	38709	4.63535431	2.3	0		0	25
Unknown				CAS #:			
4.914	134892	16.1532055	8.1	0		0	25
Unknown				CAS #:			
5.048	57927	6.93670848	3.5	0		0	25

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8657.D
Report Date: 11-Nov-2011 14:04

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
7.460	114814	6.99660075	3.5	0		0	65
Unknown				CAS #:			
7.688	80393	4.89907748	2.4	0		0	65
Unknown				CAS #:			
9.685	189164	6.96144617	3.5	0		0	77
9-Octadecenamide, (Z)-				CAS #: 301-02-0			
10.958	551310	20.2888109	10	93	NIST2002.L	106874	77

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8657.D
Date : 11-NOV-2011 02:16
Client ID: H30Z2
Instrument: S4.i
Sample Info: K2213-11A,,62806,,
Volume Injected (uL): 2.0
Operator: MMS SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



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Date : 11-NOV-2011 02:16

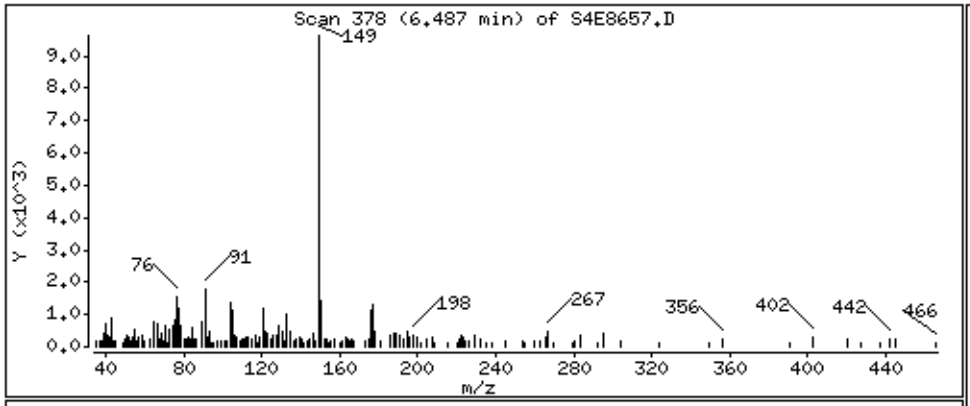
Client ID: H30Z2 Instrument: S4.i

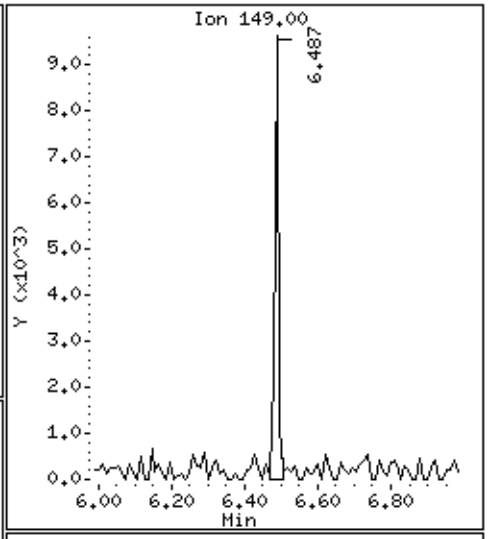
Sample Info: K2213-11A,,62806,,

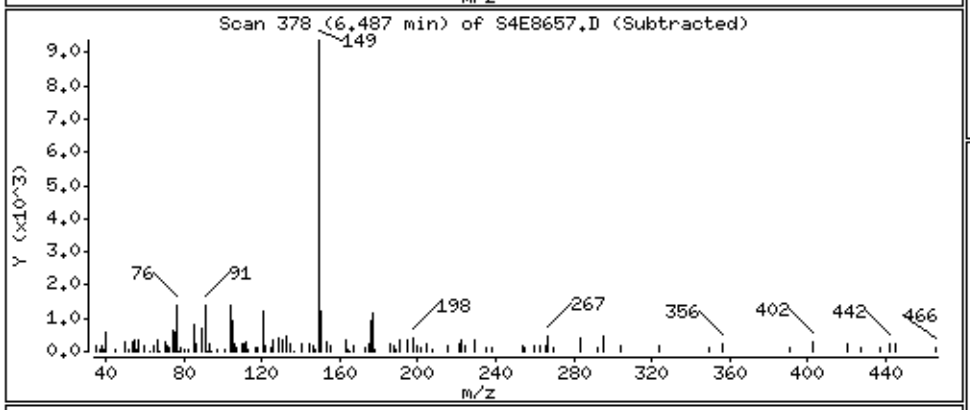
Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

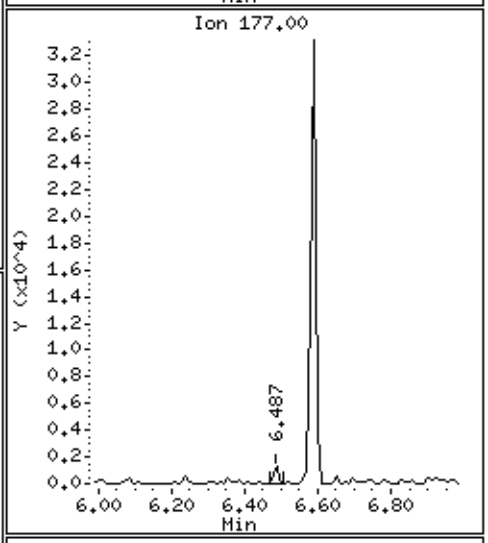
Column phase: RXI-5SILMS Column diameter: 0.25

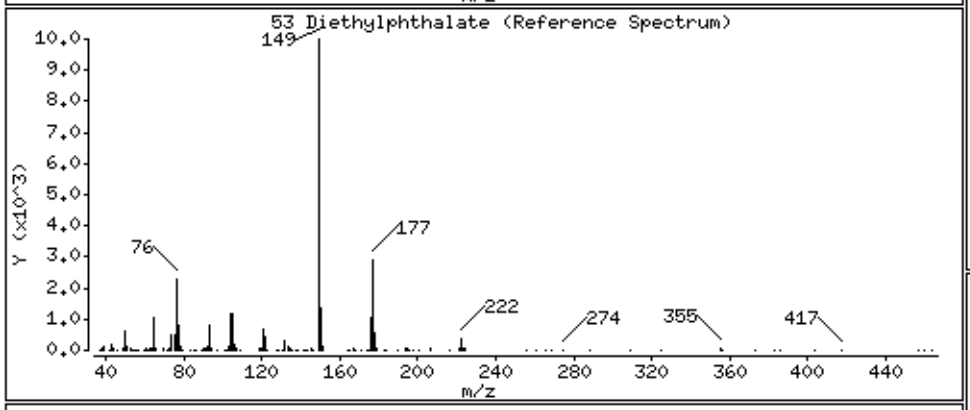
53 Diethylphthalate Concentration: 1.1 ug/L

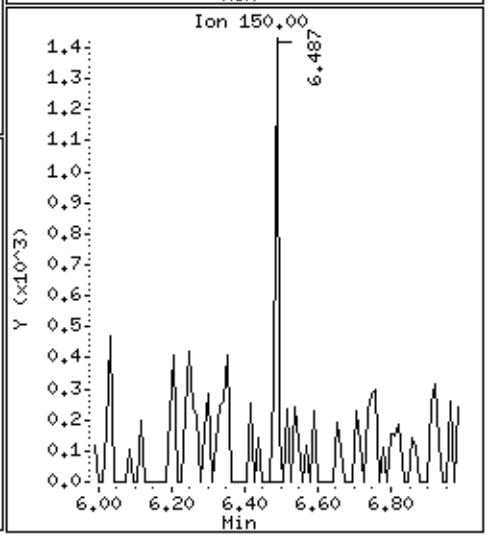


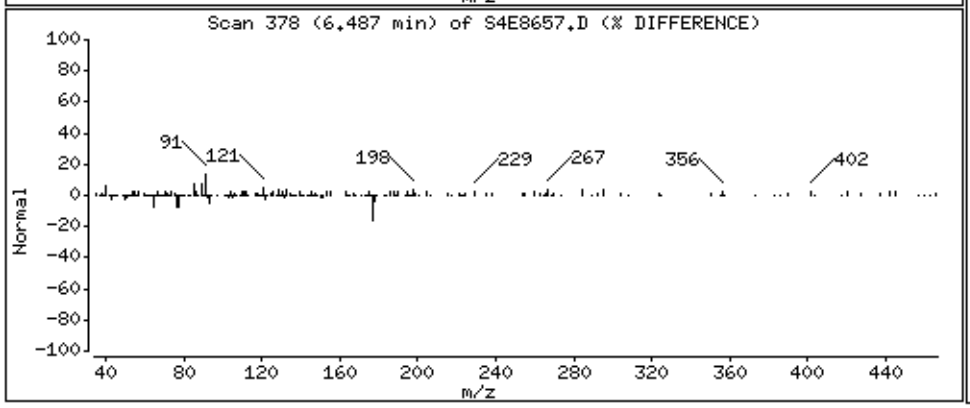












Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8657.D

Date : 11-NOV-2011 02:16

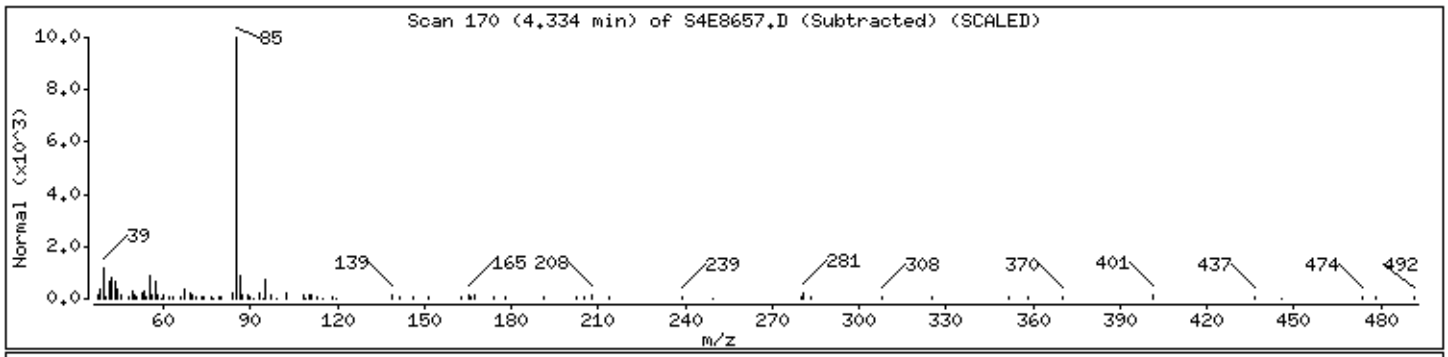
Client ID: H30Z2 Instrument: S4.i

Sample Info: K2213-11A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 11-NOV-2011 02:16

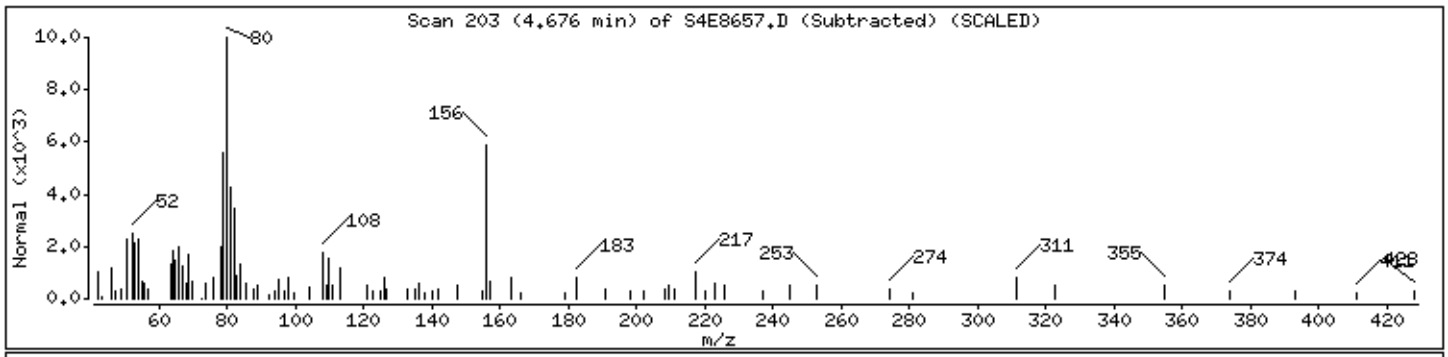
Client ID: H30Z2 Instrument: S4.i

Sample Info: K2213-11A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 11-NOV-2011 02:16

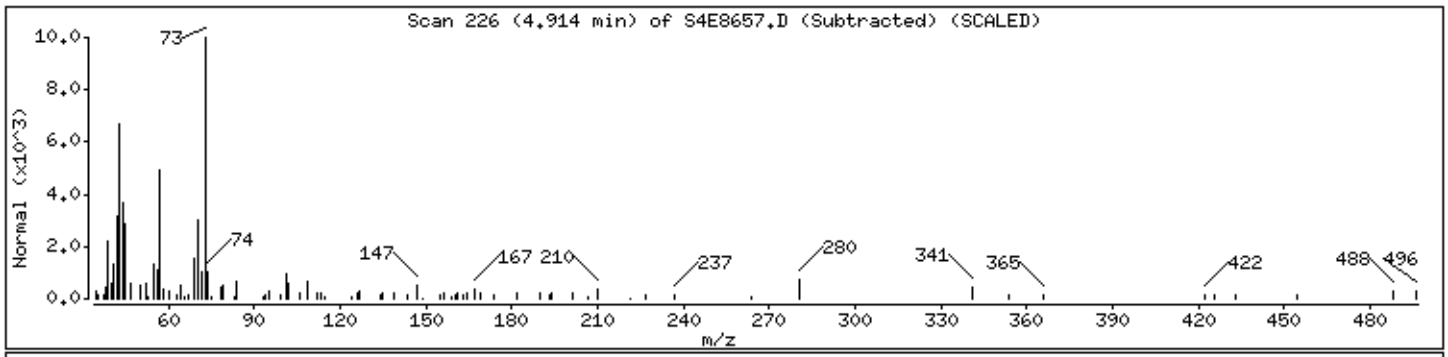
Client ID: H30Z2 Instrument: S4.i

Sample Info: K2213-11A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 11-NOV-2011 02:16

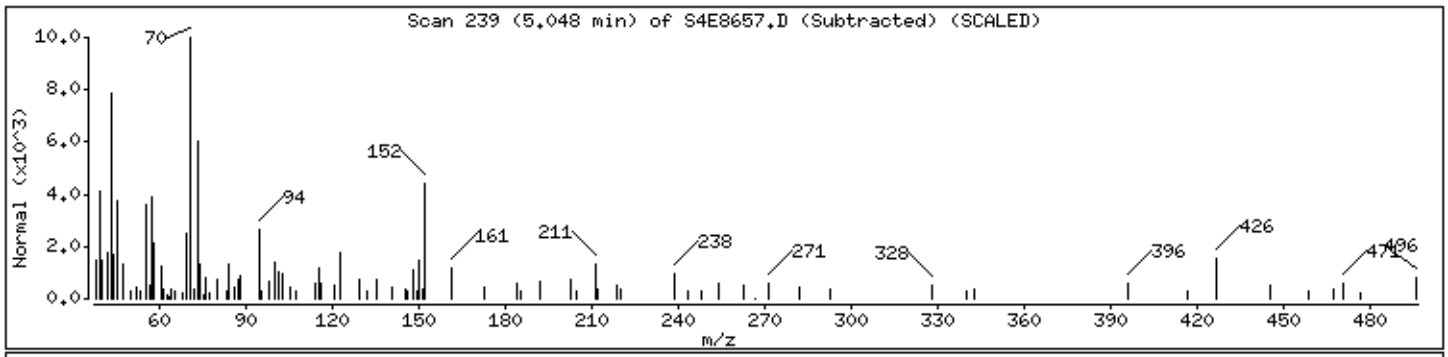
Client ID: H30Z2 Instrument: S4.i

Sample Info: K2213-11A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 11-NOV-2011 02:16

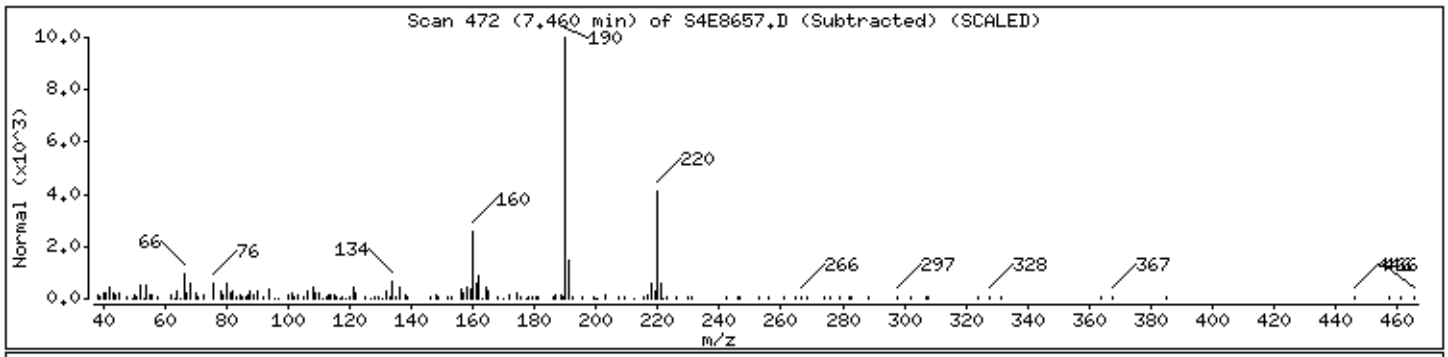
Client ID: H30Z2 Instrument: S4.i

Sample Info: K2213-11A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 11-NOV-2011 02:16

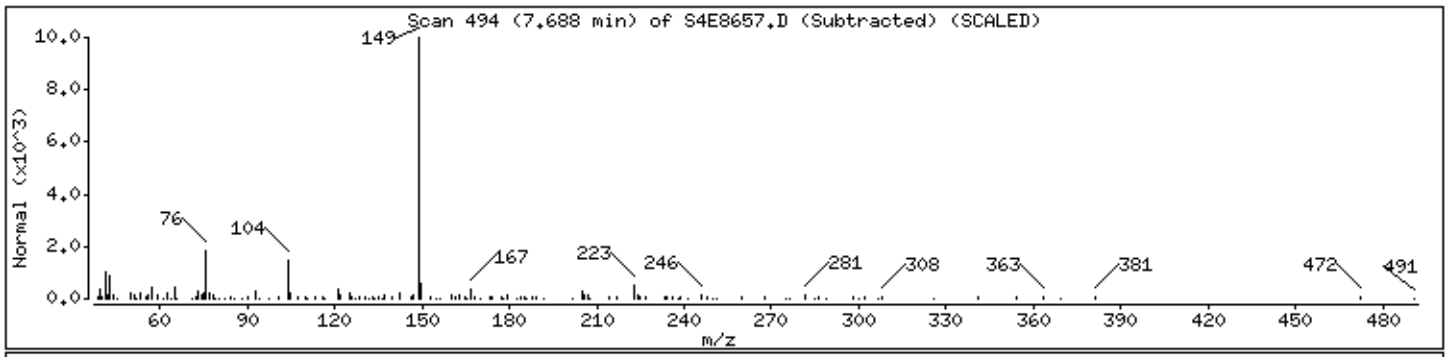
Client ID: H30Z2 Instrument: S4.i

Sample Info: K2213-11A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 11-NOV-2011 02:16

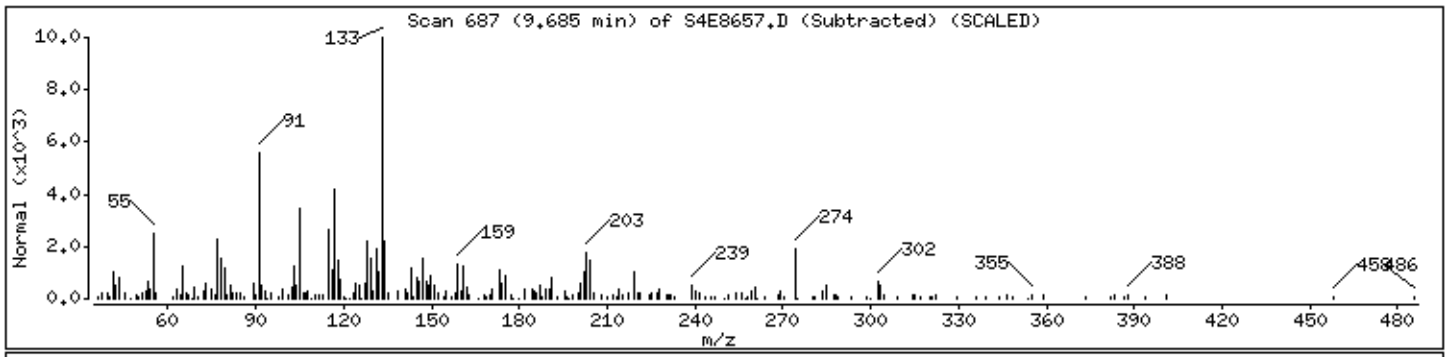
Client ID: H30Z2 Instrument: S4.i

Sample Info: K2213-11A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8657.D

Date : 11-NOV-2011 02:16

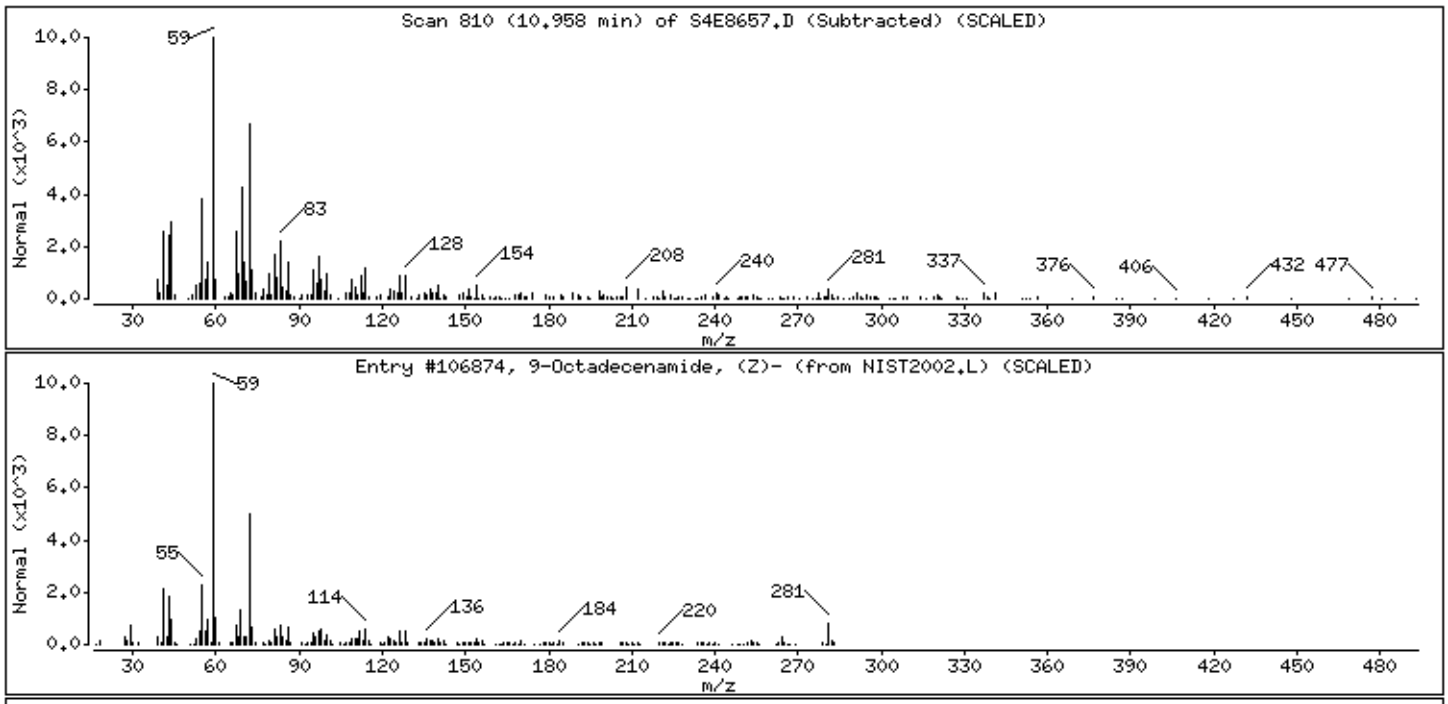
Client ID: H30Z2 Instrument: S4.i

Sample Info: K2213-11A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST2002.L	106874	93	C18H35NO	281



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Z3

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-12A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8660.D

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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

EPA SAMPLE NO.

H30Z3

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-12A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8660.D

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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

EPA SAMPLE NO.

H30Z3

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-12A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8660.D

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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	4.334	3.5	J
02		Unknown-02	4.676	2.8	J
03		Unknown-03	4.914	5.4	J
04		Unknown-04	6.052	6.2	J
05		Unknown-05	7.460	2.5	J
06		Unknown-06	8.547	3.9	J
07		Unknown-07	8.588	5.0	J
08		Unknown-08	9.282	3.5	J
09	112-84-5	13-Docosenamide, (Z)-	10.958	7.5	BNJ
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8660.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8660.D
Lab Smp Id: K2213-12A Client Smp ID: H30Z3
Inj Date : 11-NOV-2011 03:28
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-12A,,62806,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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	3.050	3.050	(0.905)	86284	69.3843	35
$	4 bis(2-Chloroethyl)ether-d8	67	3.112	3.112	(0.923)	52610	56.8772	28
$	6 2-Chlorophenol-d4	132	3.206	3.206	(0.951)	91475	62.6834	31
*	8 1,4-Dichlorobenzene-d4	152	3.371	3.371	(1.000)	46243	40.0000	(Q)
$	11 4-Methylphenol-d8	113	3.609	3.609	(1.071)	86422	65.6235	33
$	16 Nitrobenzene-d5	128	3.795	3.796	(0.857)	46984	63.8192	32(Q)
$	19 2-Nitrophenol-d4	143	4.075	4.075	(0.921)	61121	65.1345	33
$	23 2,4-Dichlorophenol-d3	165	4.282	4.282	(0.967)	114613	65.1823	33
*	25 Naphthalene-d8	136	4.427	4.427	(1.000)	175874	40.0000	
$	27 4-Chloroaniline-d4	131	4.468	4.468	(1.009)	64574	37.2221	19(Q)
$	40 Dimethylphthalate-d6	166	5.783	5.772	(0.951)	376373	64.8951	32
$	43 Acenaphthylene-d8	160	5.938	5.938	(0.976)	400345	62.3418	31
*	46 Acenaphthene-d10	164	6.083	6.083	(1.000)	146676	40.0000	
$	49 4-Nitrophenol-d4	143	6.186	6.166	(1.017)	77467	70.9491	35
$	54 Fluorene-d10	176	6.590	6.590	(1.083)	326439	63.1308	32
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.642	6.642	(0.882)	96700	65.8376	33
*	65 Phenanthrene-d10	188	7.532	7.532	(1.000)	366166	40.0000	
$	67 Anthracene-d10	188	7.584	7.584	(1.007)	602232	59.8850	30
$	72 Pyrene-d10	212	8.929	8.929	(0.882)	755480	70.4892	35
*	77 Chrysene-d12	240	10.119	10.120	(1.000)	549876	40.0000	(Q)
$	83 Benzo(a)pyrene-d12	264	11.713	11.703	(0.991)	833706	65.5916	33

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8660.D
Report Date: 11-Nov-2011 14:04

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
* 85 Perylene-d12	264	11.817	11.817	(1.000)	573613	40.0000	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8660.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8660.D
Lab Smp Id: K2213-12A Client Smp ID: H30Z3
Inj Date : 11-NOV-2011 03:28
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-12A,,62806,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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

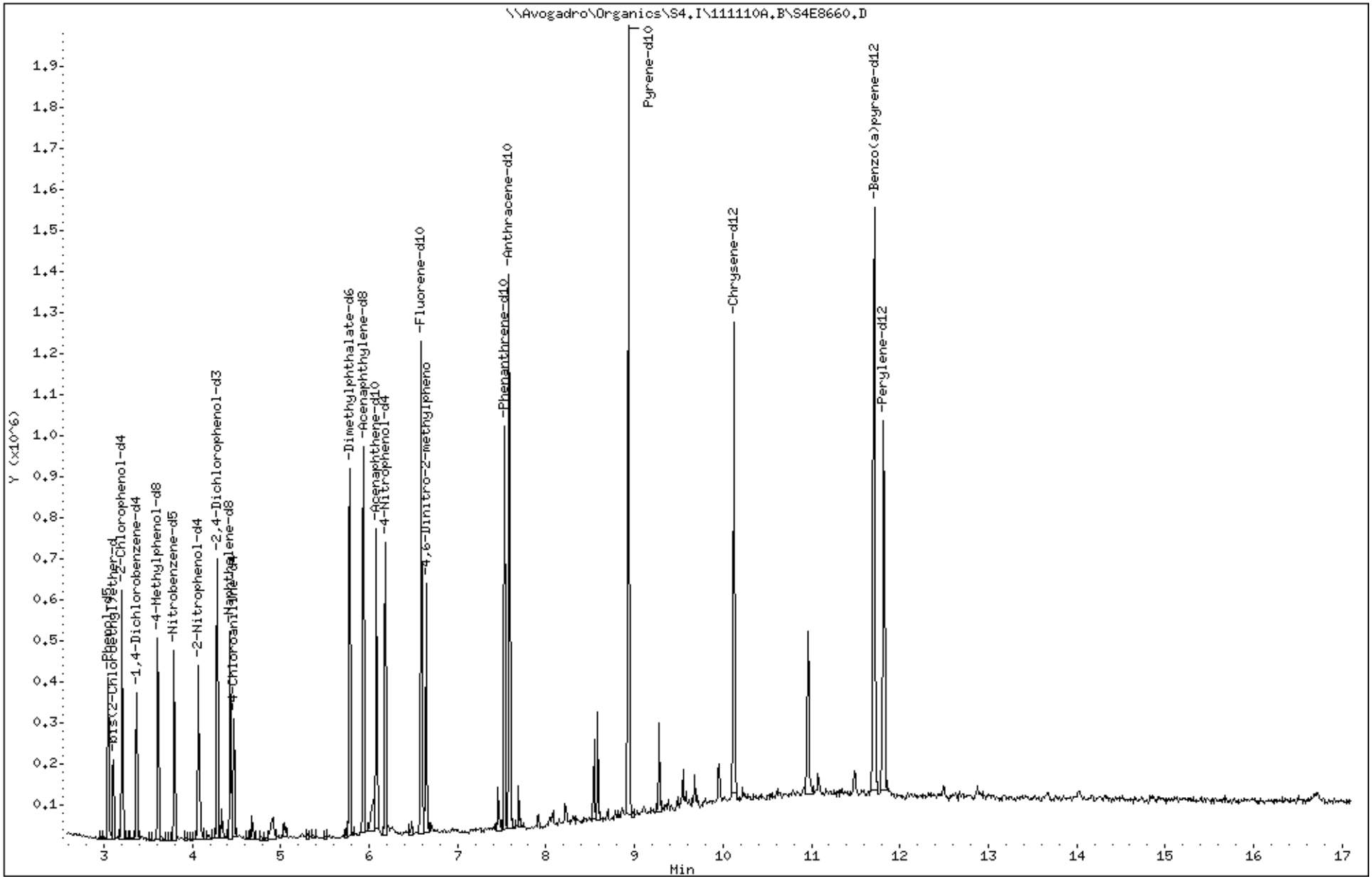
ISTD	RT	AREA	AMOUNT
* 25 Naphthalene-d8	4.427	509316	40.000
* 46 Acenaphthene-d10	6.083	744982	40.000
* 65 Phenanthrene-d10	7.532	950401	40.000
* 77 Chrysene-d12	10.120	1409337	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.334	89887	7.05944608	3.5	0	0		25
Unknown				CAS #:			
4.676	70404	5.52929629	2.8	0	0		25
Unknown				CAS #:			
4.914	138336	10.8644829	5.4	0	0		25

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8660.D
Report Date: 11-Nov-2011 14:04

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
6.052	231162	12.4116971	6.2	0		0	46
Unknown				CAS #:			
7.460	120971	5.09135460	2.5	0		0	65
Unknown				CAS #:			
8.547	183307	7.71494426	3.9	0		0	65
Unknown				CAS #:			
8.588	237328	9.98854249	5.0	0		0	65
Unknown				CAS #:			
9.282	247200	7.01607076	3.5	0		0	77
13-Docosenamide, (Z)-				CAS #: 112-84-5			
10.958	525665	14.9194876	7.5	87	NIST2002.L	135945	77

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8660.D
Date : 11-NOV-2011 03:28
Client ID: H30Z3
Instrument: S4.i
Sample Info: K2213-12A,,62806,,
Volume Injected (uL): 2.0
Operator: MMS SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



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Date : 11-NOV-2011 03:28

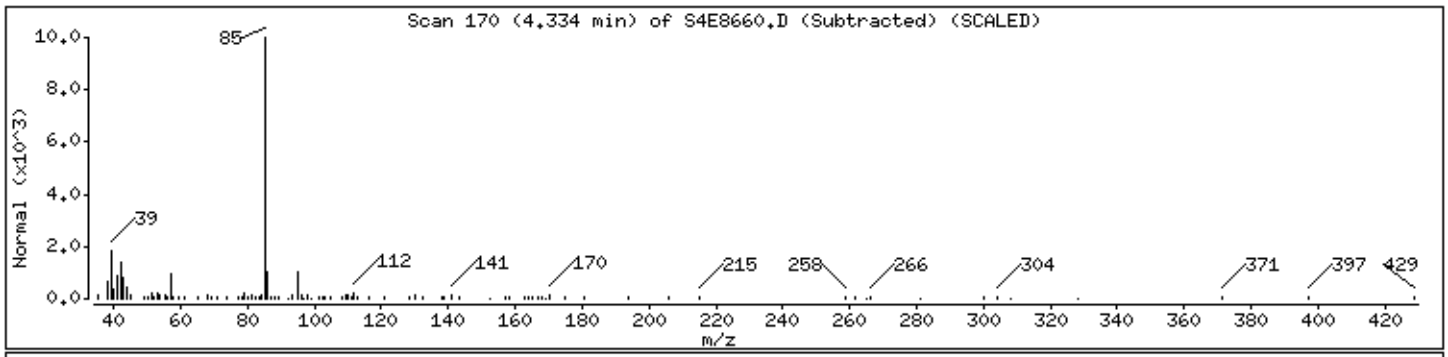
Client ID: H30Z3 Instrument: S4.i

Sample Info: K2213-12A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 11-NOV-2011 03:28

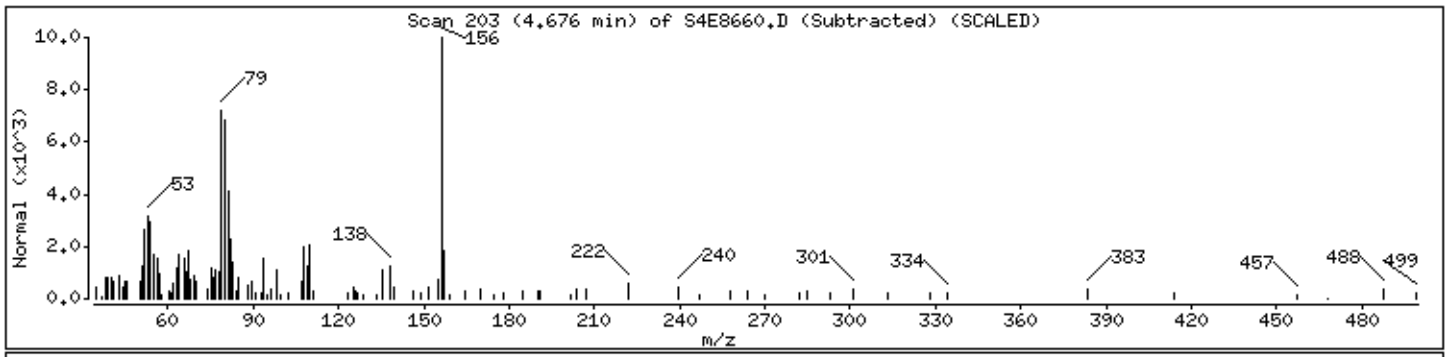
Client ID: H30Z3 Instrument: S4.i

Sample Info: K2213-12A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8660.D

Date : 11-NOV-2011 03:28

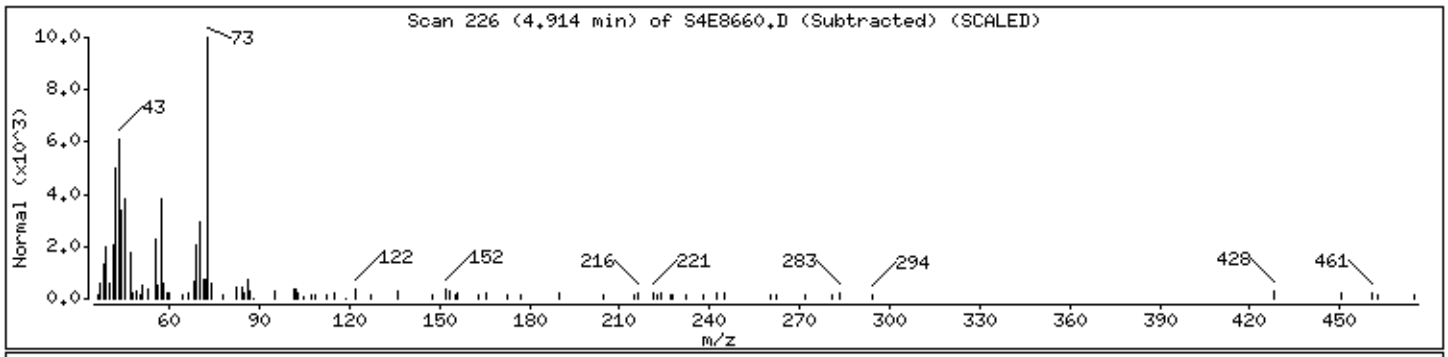
Client ID: H30Z3 Instrument: S4.i

Sample Info: K2213-12A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8660.D

Date : 11-NOV-2011 03:28

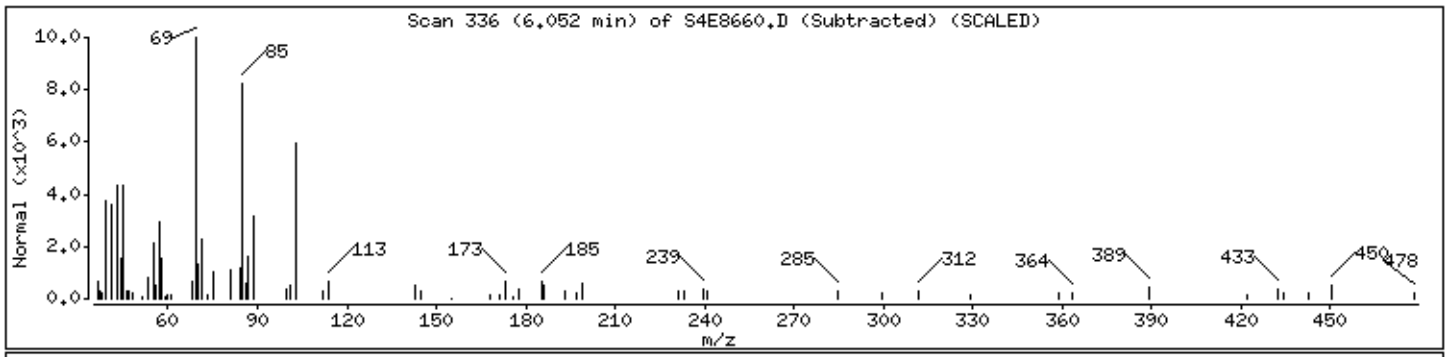
Client ID: H30Z3 Instrument: S4.i

Sample Info: K2213-12A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8660.D

Date : 11-NOV-2011 03:28

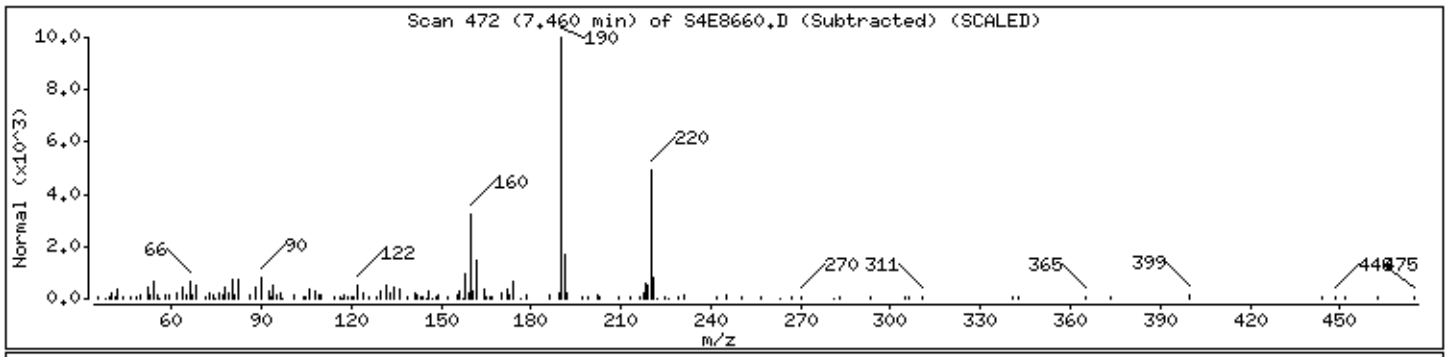
Client ID: H30Z3 Instrument: S4.i

Sample Info: K2213-12A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8660.D

Date : 11-NOV-2011 03:28

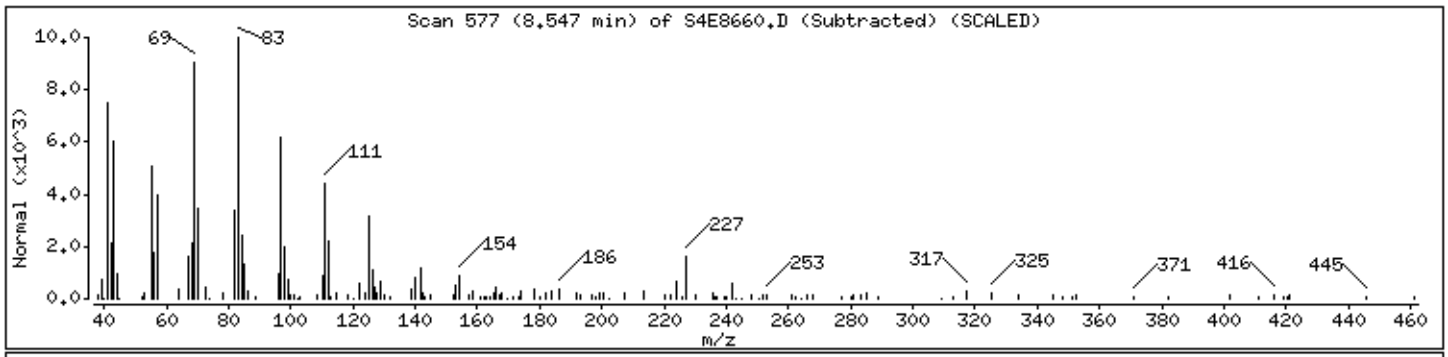
Client ID: H30Z3 Instrument: S4.i

Sample Info: K2213-12A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8660.D

Date : 11-NOV-2011 03:28

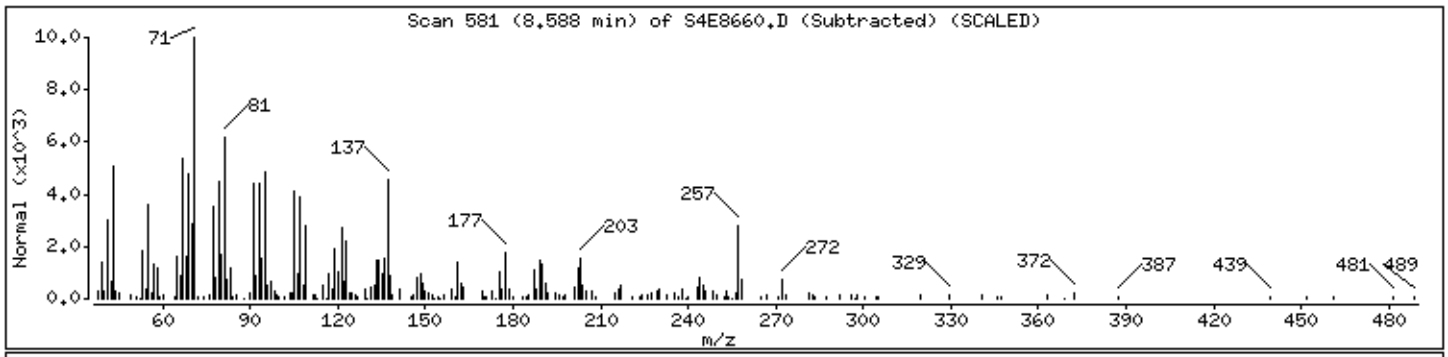
Client ID: H30Z3 Instrument: S4.i

Sample Info: K2213-12A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8660.D

Date : 11-NOV-2011 03:28

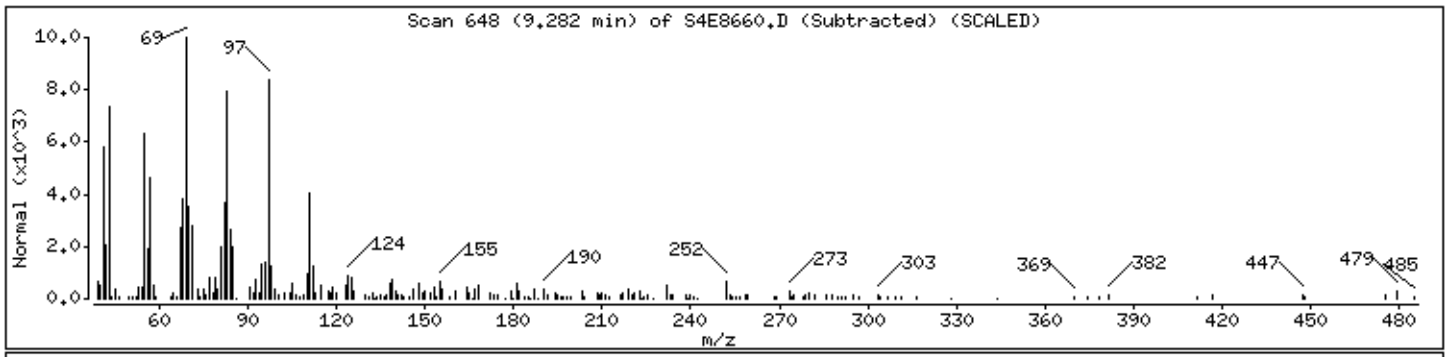
Client ID: H30Z3 Instrument: S4.i

Sample Info: K2213-12A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8660.D

Date : 11-NOV-2011 03:28

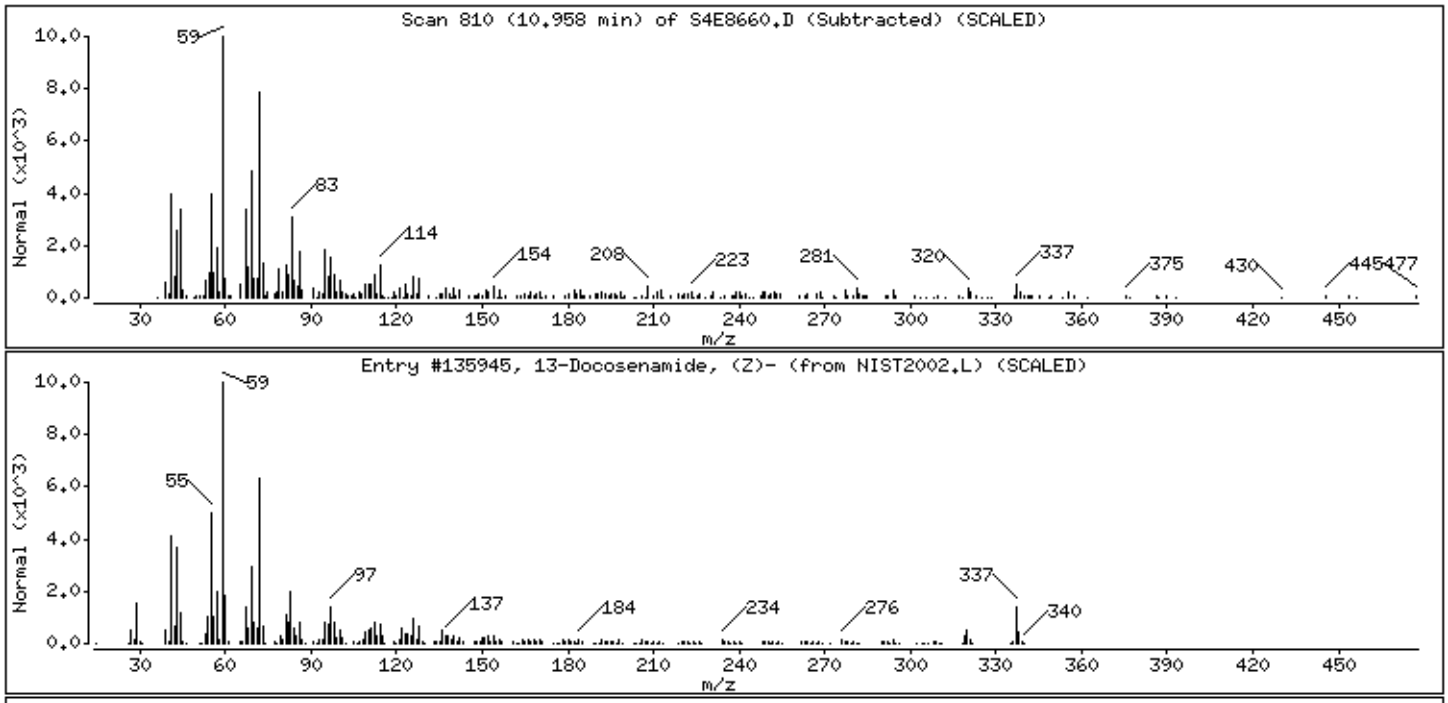
Client ID: H30Z3 Instrument: S4.i

Sample Info: K2213-12A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS 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	135945	87	C22H43NO	337



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Z4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-13A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8661.D

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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

EPA SAMPLE NO.

H30Z4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-13A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8661.D

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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	1.1	J
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

EPA SAMPLE NO.

H30Z4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-13A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8661.D

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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	4.334	5.5	J
02		Unknown-02	4.676	3.2	J
03		Unknown-03	4.914	9.7	J
04		Unknown-04	7.460	4.2	J
05		Unknown-05	7.688	2.5	J
06		Unknown-06	8.226	2.1	J
07		Unknown-07	9.685	2.5	J
08		Unknown-08	10.958	10	J
	E96679€ [2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8661.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8661.D
Lab Smp Id: K2213-13A Client Smp ID: H30Z4
Inj Date : 11-NOV-2011 03:52
Operator : MMS   SRC: LIMS Inst ID: S4.i
Smp Info : K2213-13A,,62806,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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	3.050	3.050	(0.905)	66209	70.0676	35
$	4 bis(2-Chloroethyl)ether-d8	67	3.102	3.112	(0.920)	41244	58.6813	29
$	6 2-Chlorophenol-d4	132	3.206	3.206	(0.951)	60685	54.7268	27
*	8 1,4-Dichlorobenzene-d4	152	3.371	3.371	(1.000)	35138	40.0000	(Q)
$	11 4-Methylphenol-d8	113	3.609	3.609	(1.071)	65274	65.2295	33
$	16 Nitrobenzene-d5	128	3.796	3.796	(0.857)	33754	65.5374	33(Q)
$	19 2-Nitrophenol-d4	143	4.075	4.075	(0.921)	42264	64.3804	32
$	23 2,4-Dichlorophenol-d3	165	4.282	4.282	(0.967)	83977	68.2682	34
*	25 Naphthalene-d8	136	4.427	4.427	(1.000)	123038	40.0000	
$	27 4-Chloroaniline-d4	131	4.468	4.468	(1.009)	57411	47.3043	24(Q)
$	40 Dimethylphthalate-d6	166	5.783	5.772	(0.951)	271016	68.6099	34
$	43 Acenaphthylene-d8	160	5.938	5.938	(0.976)	301064	68.8337	34
*	46 Acenaphthene-d10	164	6.083	6.083	(1.000)	99899	40.0000	
$	49 4-Nitrophenol-d4	143	6.186	6.166	(1.017)	64532	86.7767	43
	53 Diethylphthalate	149	6.487	6.487	(1.066)	9036	2.22837	1.1(a)
$	54 Fluorene-d10	176	6.590	6.590	(1.083)	237888	67.5476	34
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.642	6.642	(0.882)	78444	69.2261	35
*	65 Phenanthrene-d10	188	7.532	7.532	(1.000)	282498	40.0000	
$	67 Anthracene-d10	188	7.584	7.584	(1.007)	450798	58.1030	29
$	72 Pyrene-d10	212	8.929	8.929	(0.882)	670512	71.4071	36
*	77 Chrysene-d12	240	10.120	10.120	(1.000)	481759	40.0000	(Q)

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8661.D
Report Date: 11-Nov-2011 14:04

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
$ 83 Benzo(a)pyrene-d12	264	11.713	11.703	(0.991)	751112	66.9463	33
* 85 Perylene-d12	264	11.817	11.817	(1.000)	506329	40.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8661.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8661.D
Lab Smp Id: K2213-13A Client Smp ID: H30Z4
Inj Date : 11-NOV-2011 03:52
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-13A,,62806,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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	4.427	365054	40.000
* 65 Phenanthrene-d10	7.532	752255	40.000
* 77 Chrysene-d12	10.120	1257188	40.000

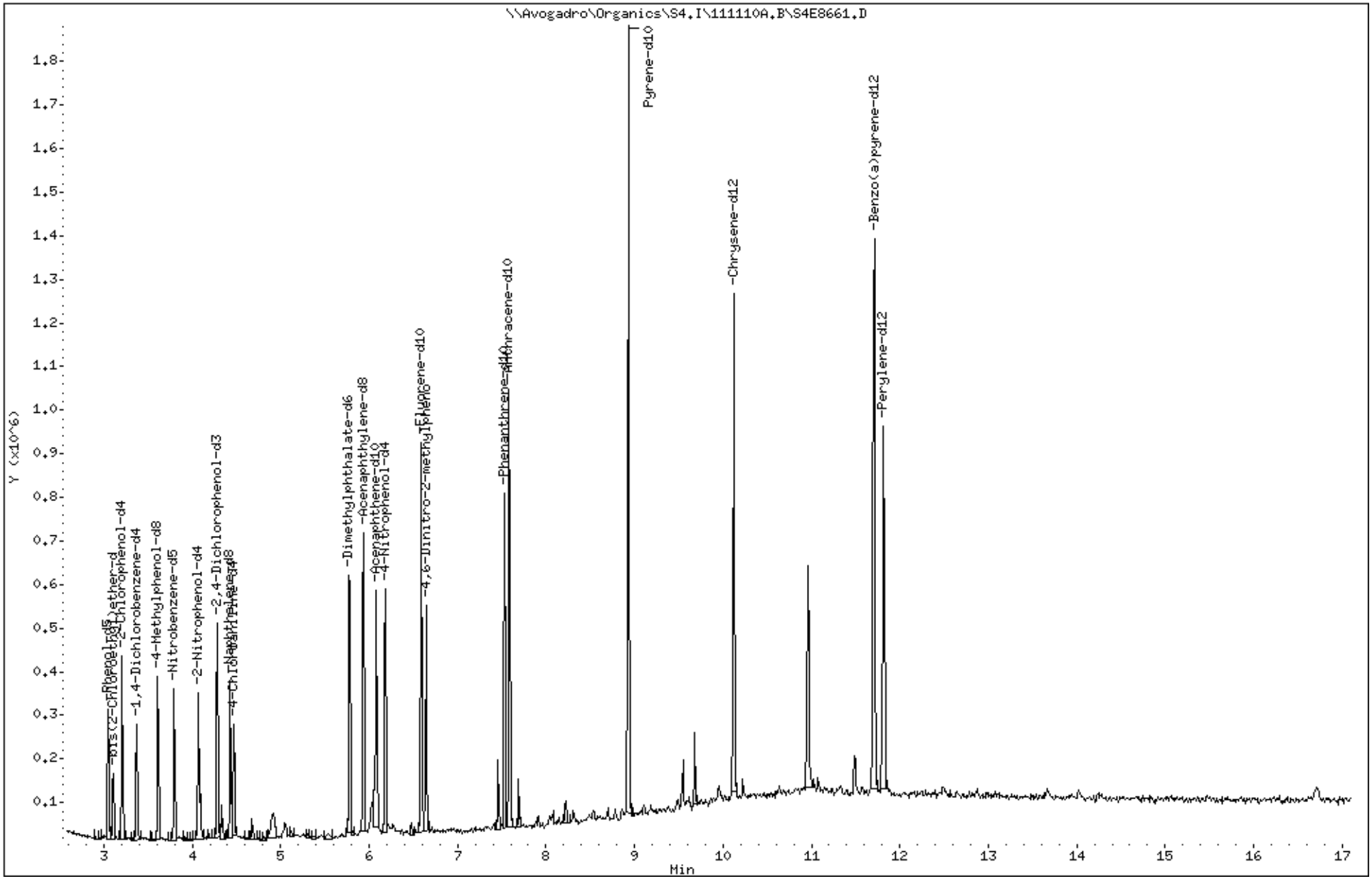
	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.334	100187	10.9777860	5.5	0	0		25
Unknown				CAS #:			
4.676	57780	6.33113890	3.2	0	0		25
Unknown				CAS #:			
4.914	177533	19.4527856	9.7	0	0		25
Unknown				CAS #:			
7.460	158947	8.45178275	4.2	0	0		65

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8661.D
Report Date: 11-Nov-2011 14:04

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
7.688	93563	4.97506524	2.5	0		0	65
Unknown				CAS #:			
8.226	78688	4.18408715	2.1	0		0	65
Unknown				CAS #:			
9.685	154028	4.90072899	2.5	0		0	77
Unknown				CAS #:			
10.958	648304	20.6271111	10	0		0	77

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8661.D
Date : 11-NOV-2011 03:52
Client ID: H30Z4
Sample Info: K2213-13A,,62806,,
Volume Injected (uL): 2.0
Column phase: RXI-5SILMS

Instrument: S4.i
Operator: MMS SRC: LIMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8661.D

Date : 11-NOV-2011 03:52

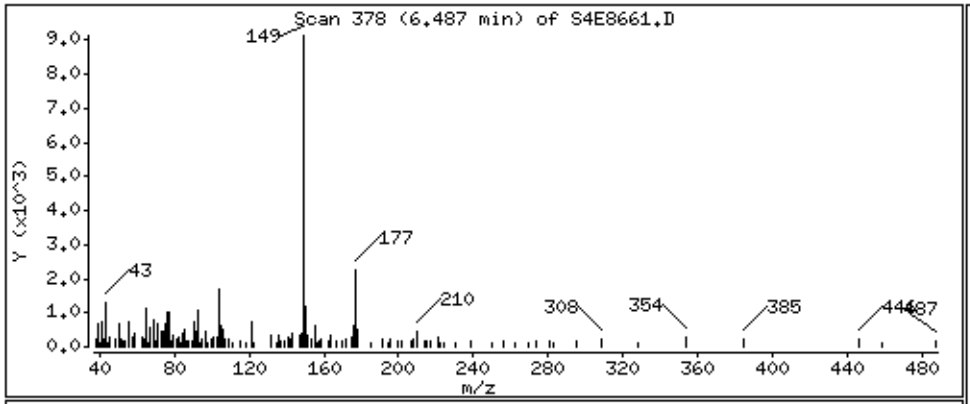
Client ID: H30Z4 Instrument: S4.i

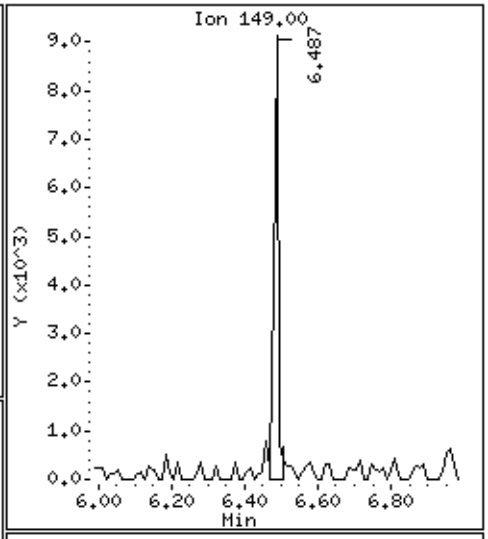
Sample Info: K2213-13A,,62806,,

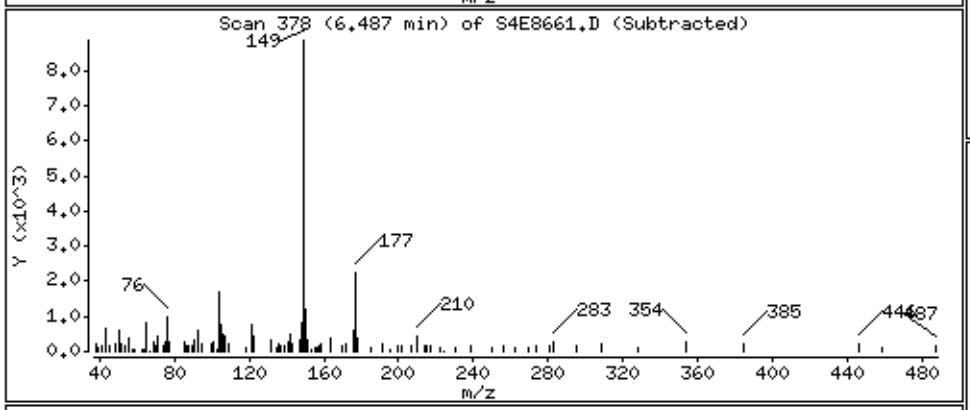
Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

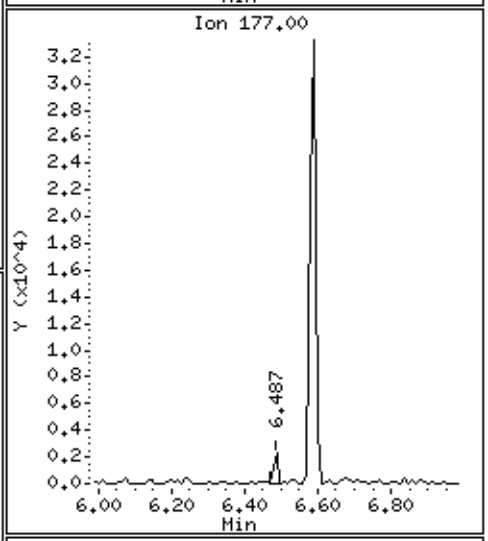
Column phase: RXI-5SILMS Column diameter: 0.25

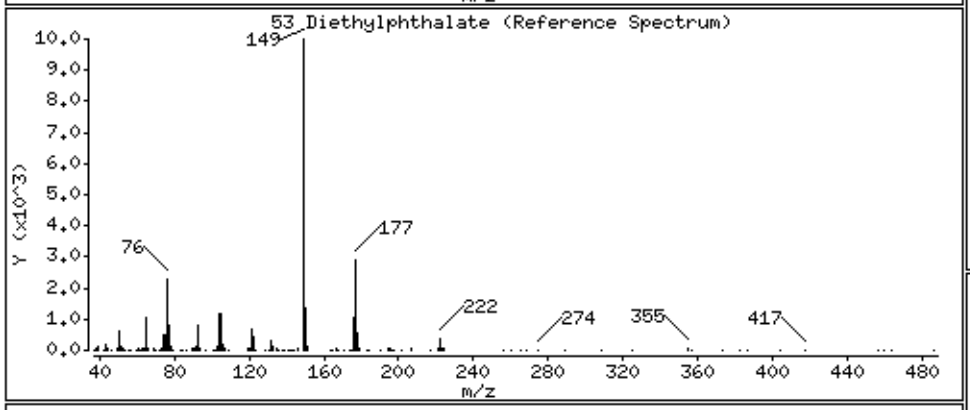
53 Diethylphthalate Concentration: 1.1 ug/L

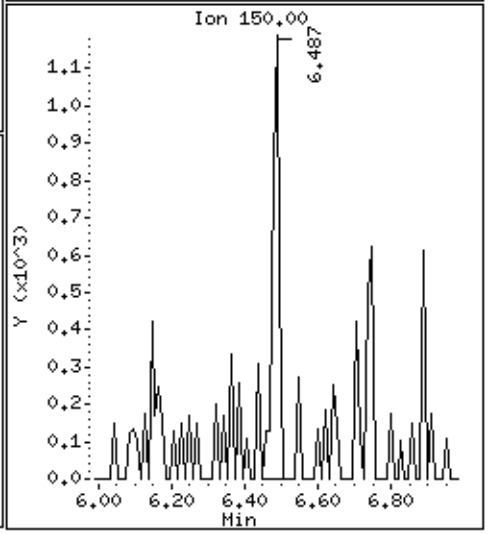


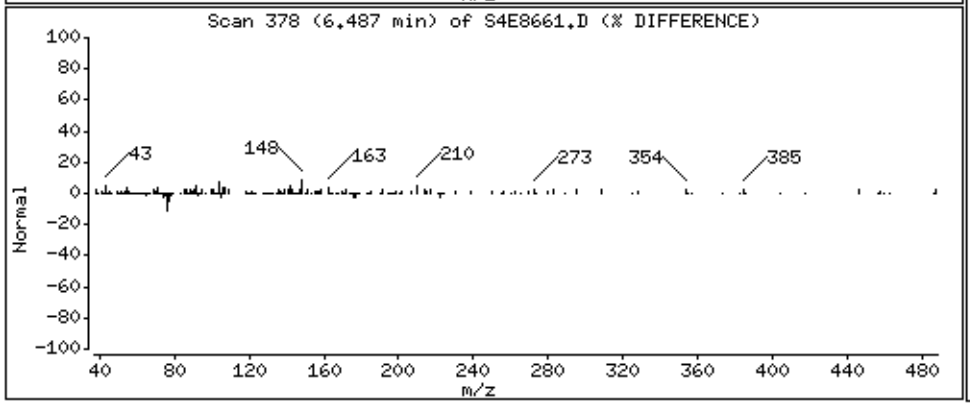












Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8661.D

Date : 11-NOV-2011 03:52

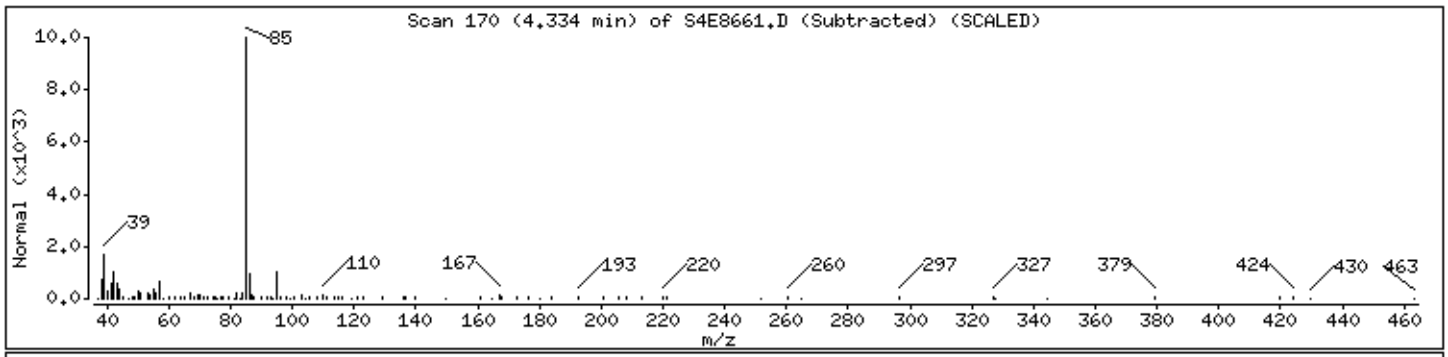
Client ID: H30Z4 Instrument: S4.i

Sample Info: K2213-13A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 11-NOV-2011 03:52

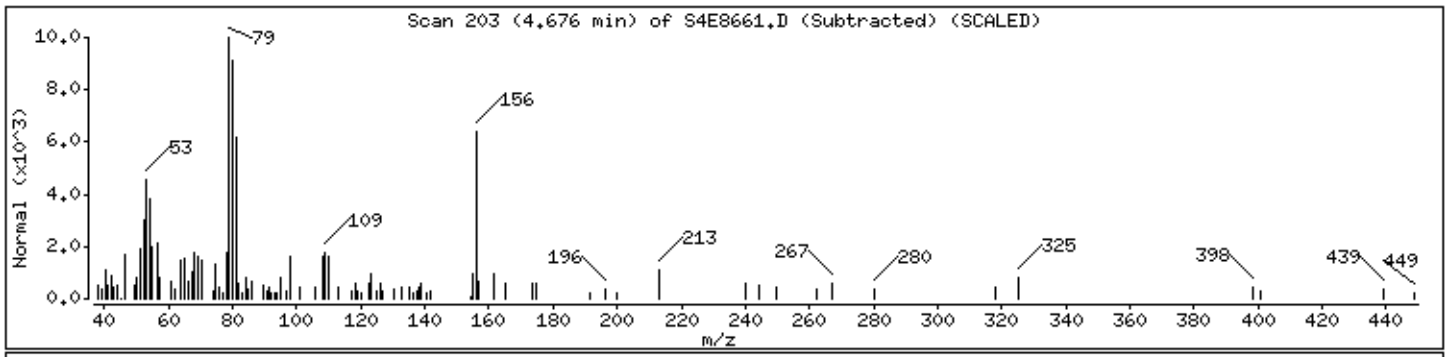
Client ID: H30Z4 Instrument: S4.i

Sample Info: K2213-13A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 11-NOV-2011 03:52

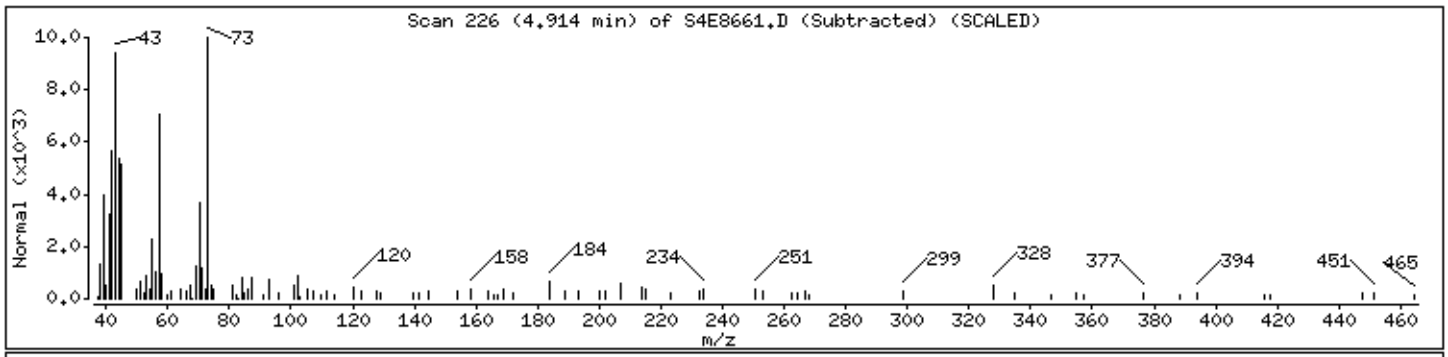
Client ID: H30Z4 Instrument: S4.i

Sample Info: K2213-13A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 11-NOV-2011 03:52

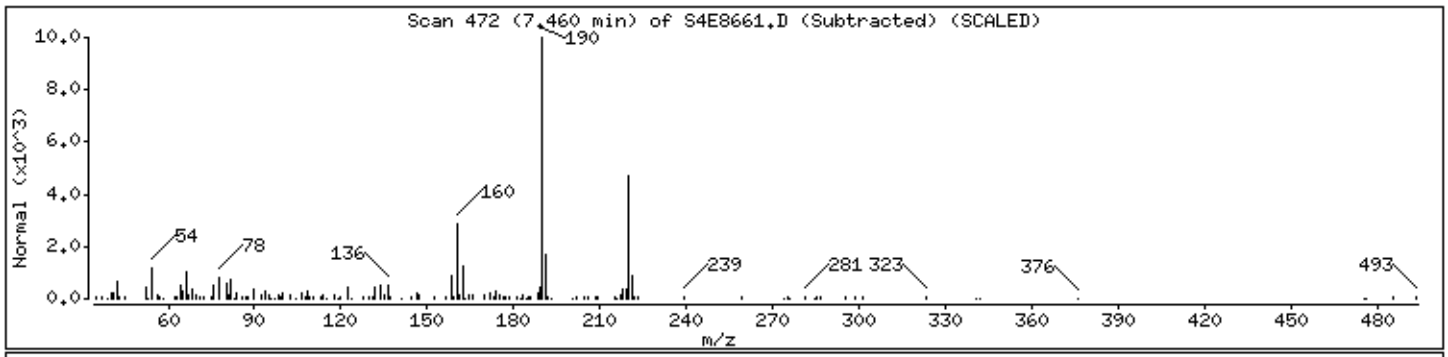
Client ID: H30Z4 Instrument: S4.i

Sample Info: K2213-13A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 11-NOV-2011 03:52

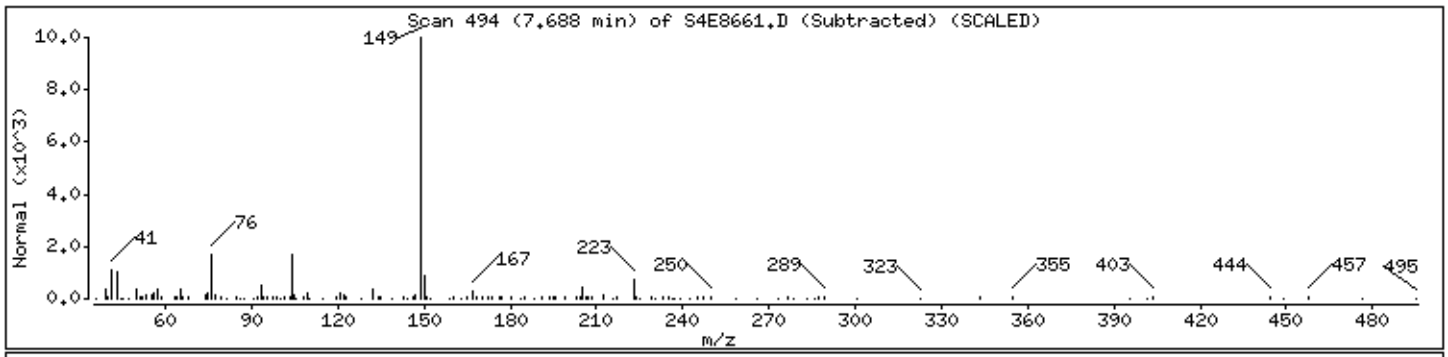
Client ID: H30Z4 Instrument: S4.i

Sample Info: K2213-13A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8661.D

Date : 11-NOV-2011 03:52

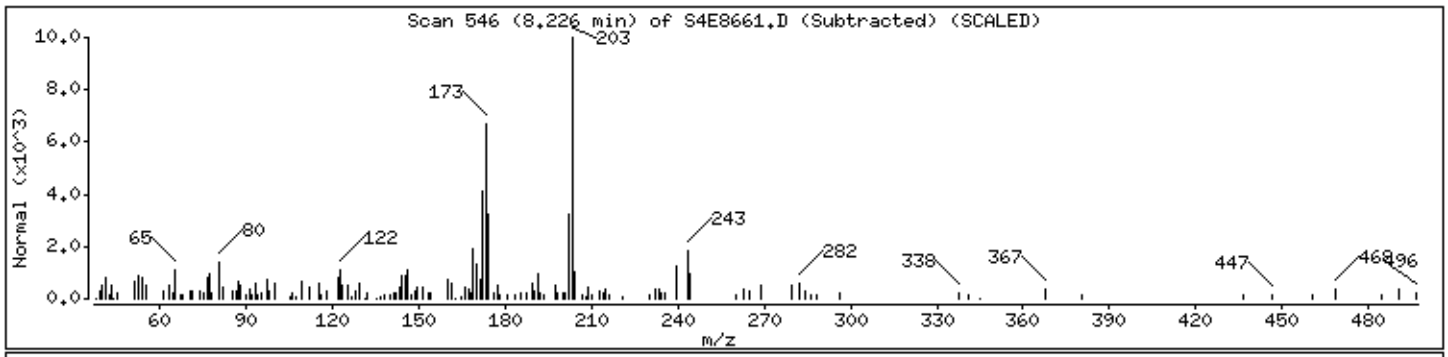
Client ID: H30Z4 Instrument: S4.i

Sample Info: K2213-13A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8661.D

Date : 11-NOV-2011 03:52

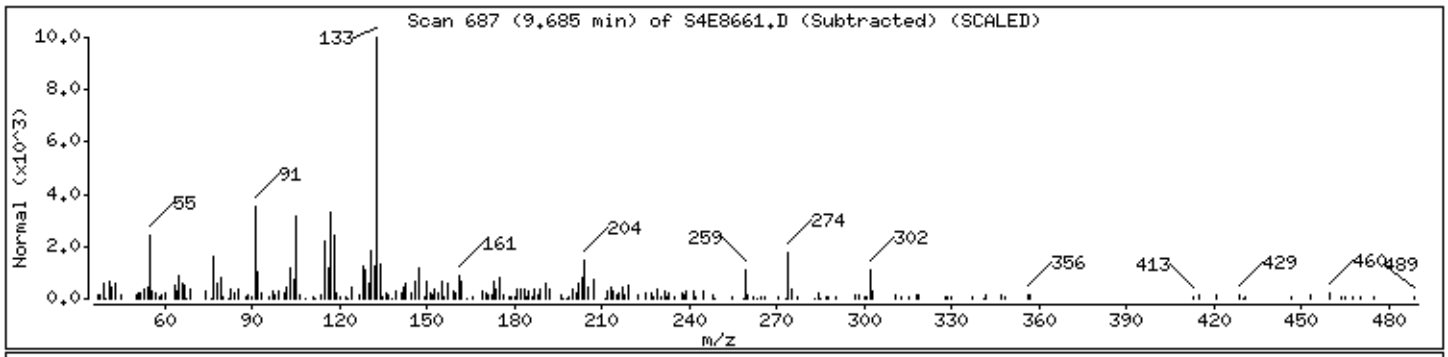
Client ID: H30Z4 Instrument: S4.i

Sample Info: K2213-13A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8661.D

Date : 11-NOV-2011 03:52

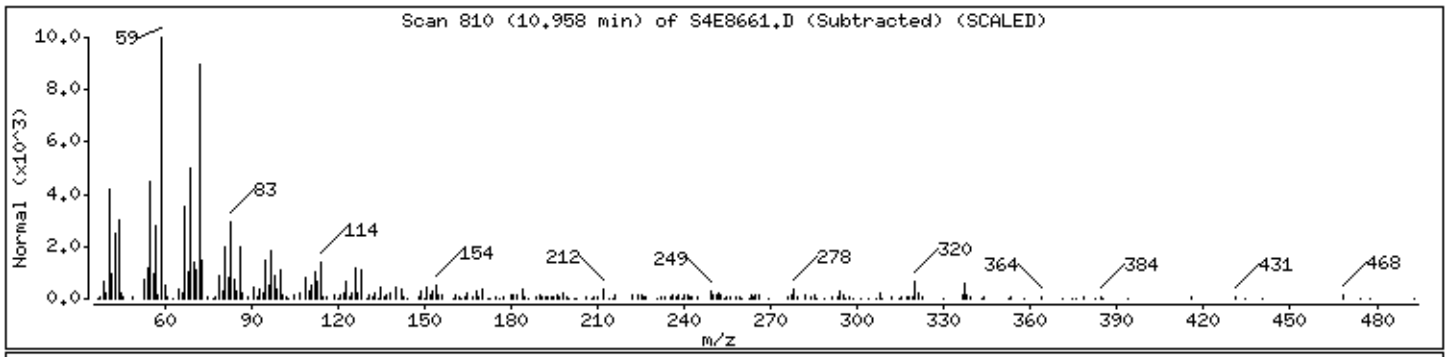
Client ID: H30Z4 Instrument: S4.i

Sample Info: K2213-13A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Z5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-14A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8662.D

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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

EPA SAMPLE NO.

H30Z5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-14A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8662.D

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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

EPA SAMPLE NO.

H30Z5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-14A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8662.D

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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	4.334	3.5	J
02		Unknown-02	4.676	3.3	J
03		Unknown-03	4.904	9.5	J
04		Unknown-04	5.048	4.1	J
05		Unknown-05	6.042	10	J
06		Unknown-06	7.688	2.5	J
07		Unknown-07	8.588	3.7	J
08		Unknown-08	10.958	11	J
	E96679€ [2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8662.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8662.D
Lab Smp Id: K2213-14A Client Smp ID: H30Z5
Inj Date : 11-NOV-2011 04:16
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-14A,,62806,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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	3.050	3.050	(0.905)	62525	72.5850	36
$	4 bis(2-Chloroethyl)ether-d8	67	3.102	3.112	(0.920)	41302	64.4619	32
$	6 2-Chlorophenol-d4	132	3.206	3.206	(0.951)	66681	65.9651	33
*	8 1,4-Dichlorobenzene-d4	152	3.371	3.371	(1.000)	32032	40.0000	(Q)
$	11 4-Methylphenol-d8	113	3.609	3.609	(1.071)	65522	71.8264	36
$	16 Nitrobenzene-d5	128	3.796	3.796	(0.857)	33568	74.4679	37(Q)
$	19 2-Nitrophenol-d4	143	4.075	4.075	(0.921)	43984	76.5522	38
$	23 2,4-Dichlorophenol-d3	165	4.282	4.282	(0.967)	76658	71.2026	36
*	25 Naphthalene-d8	136	4.427	4.427	(1.000)	107686	40.0000	
$	27 4-Chloroaniline-d4	131	4.468	4.468	(1.009)	64851	61.0524	31(Q)
$	40 Dimethylphthalate-d6	166	5.783	5.772	(0.951)	270286	71.9870	36
$	43 Acenaphthylene-d8	160	5.938	5.938	(0.976)	298092	71.7020	36
*	46 Acenaphthene-d10	164	6.083	6.083	(1.000)	94956	40.0000	
$	49 4-Nitrophenol-d4	143	6.186	6.166	(1.017)	64157	90.7634	45(Q)
$	54 Fluorene-d10	176	6.590	6.590	(1.083)	242833	72.5410	36
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.642	6.642	(0.882)	77875	74.9871	37
*	65 Phenanthrene-d10	188	7.532	7.532	(1.000)	258903	40.0000	
$	67 Anthracene-d10	188	7.584	7.584	(1.007)	494363	69.5250	35
$	72 Pyrene-d10	212	8.929	8.929	(0.882)	634152	66.3350	33
*	77 Chrysene-d12	240	10.120	10.120	(1.000)	490473	40.0000	(Q)
$	83 Benzo(a)pyrene-d12	264	11.713	11.703	(0.991)	857568	72.0225	36

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8662.D
Report Date: 11-Nov-2011 14:04

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
* 85 Perylene-d12	264	11.817	11.817	(1.000)	537347	40.0000	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8662.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8662.D
Lab Smp Id: K2213-14A Client Smp ID: H30Z5
Inj Date : 11-NOV-2011 04:16
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-14A,,62806,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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

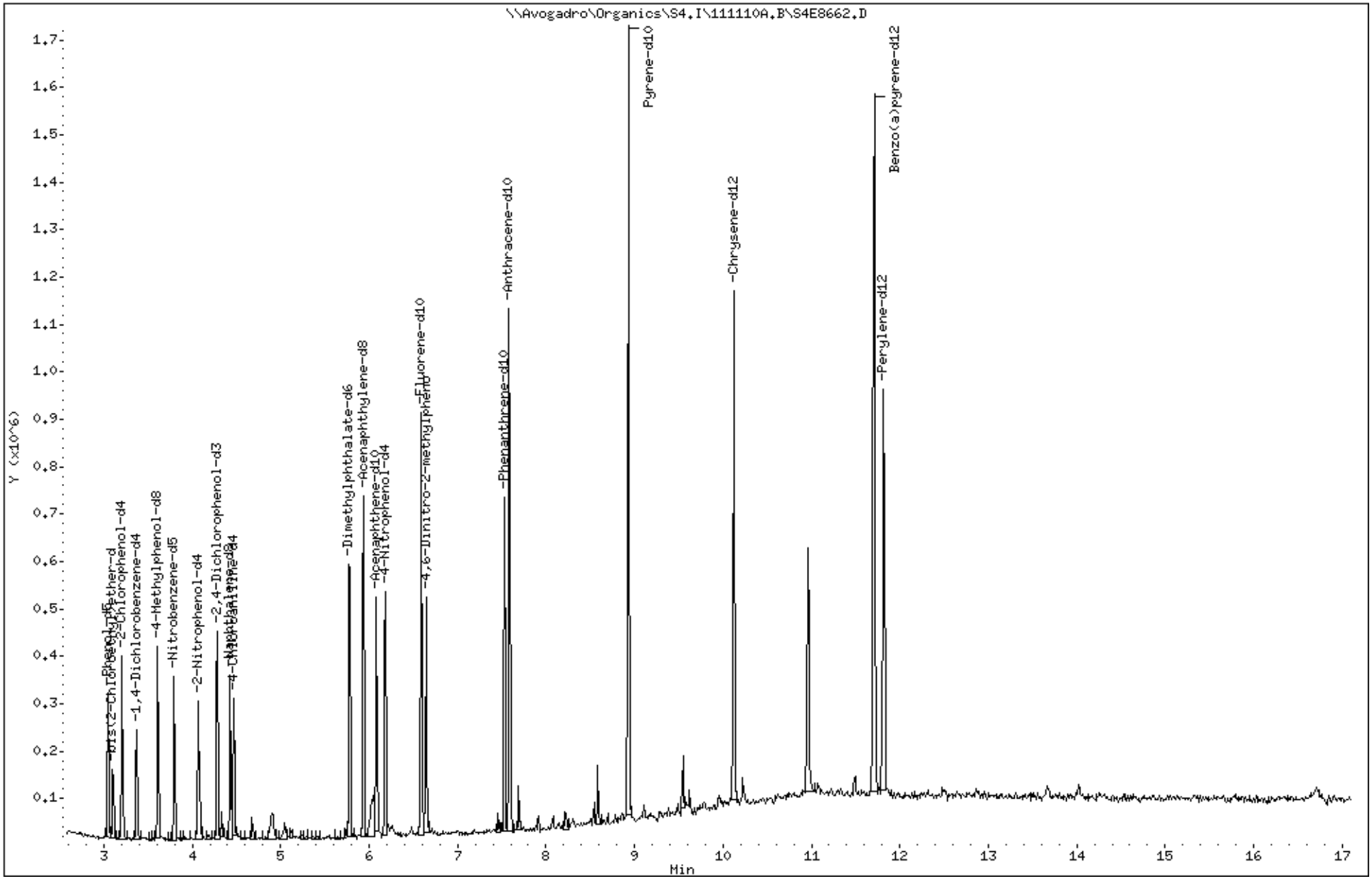
ISTD	RT	AREA	AMOUNT
* 25 Naphthalene-d8	4.427	336688	40.000
* 46 Acenaphthene-d10	6.083	522970	40.000
* 65 Phenanthrene-d10	7.532	686399	40.000
* 77 Chrysene-d12	10.120	1266415	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.334	58835	6.98989802	3.5	0	0		25
Unknown				CAS #:			
4.676	55861	6.63657776	3.3	0	0		25
Unknown				CAS #:			
4.904	160342	19.0493405	9.5	0	0		25

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8662.D
Report Date: 11-Nov-2011 14:04

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
5.048	69712	8.28203648	4.1	0		0	25
Unknown				CAS #:			
6.042	269510	20.6138157	10	0		0	46
Unknown				CAS #:			
7.688	84289	4.91194580	2.5	0		0	65
Unknown				CAS #:			
8.588	125390	7.30713956	3.7	0		0	65
Unknown				CAS #:			
10.958	668891	21.1270582	11	0		0	77

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8662.D
Date : 11-NOV-2011 04:16
Client ID: H30Z5
Instrument: S4.i
Sample Info: K2213-14A,,62806,,
Volume Injected (uL): 2.0
Operator: MMS SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8662.D

Date : 11-NOV-2011 04:16

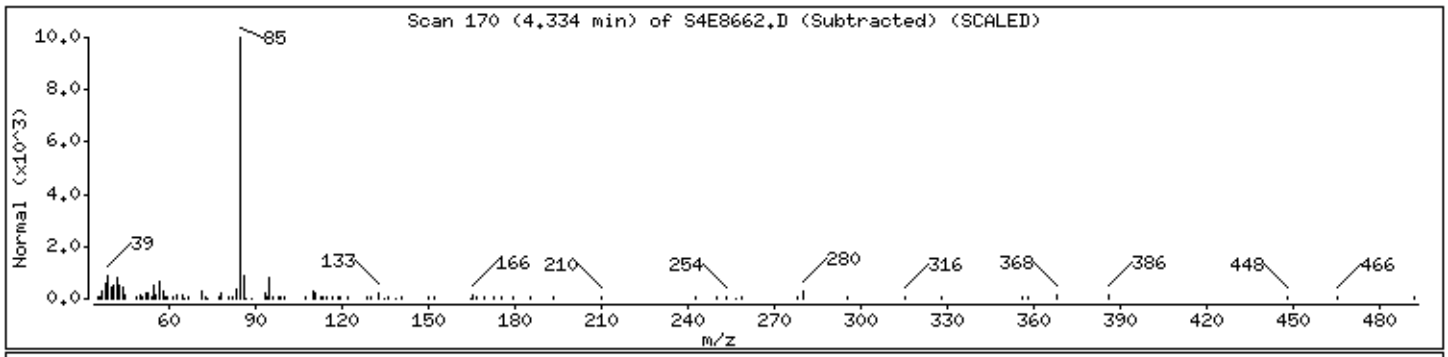
Client ID: H30Z5 Instrument: S4.i

Sample Info: K2213-14A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8662.D

Date : 11-NOV-2011 04:16

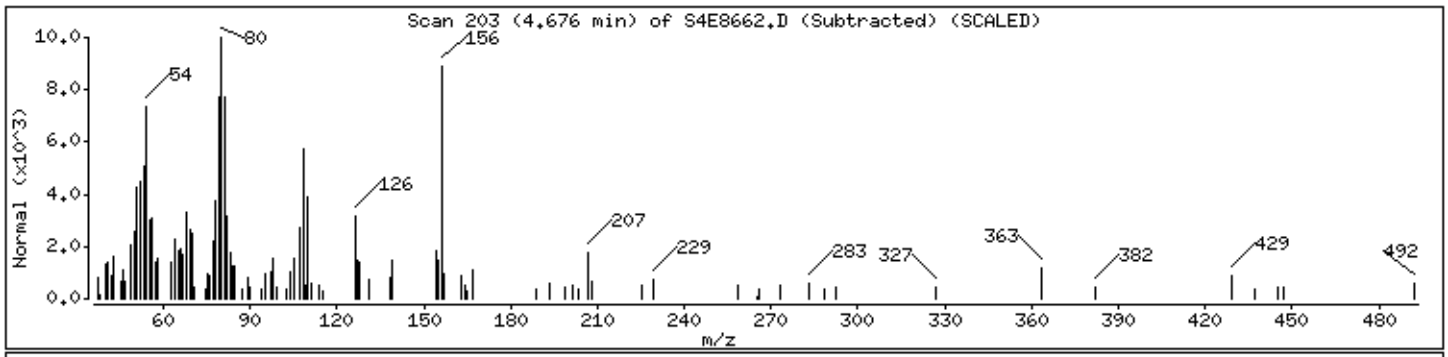
Client ID: H30Z5 Instrument: S4.i

Sample Info: K2213-14A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8662.D

Date : 11-NOV-2011 04:16

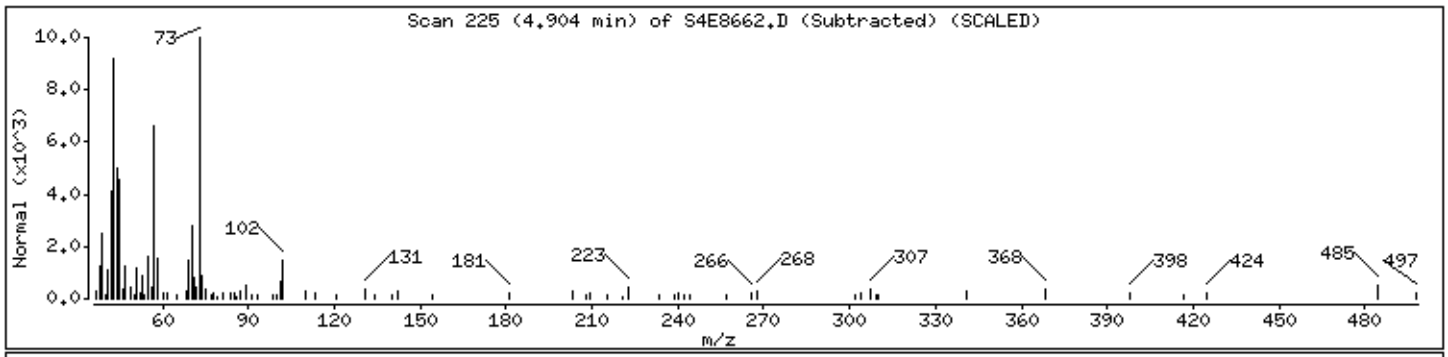
Client ID: H30Z5 Instrument: S4.i

Sample Info: K2213-14A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8662.D

Date : 11-NOV-2011 04:16

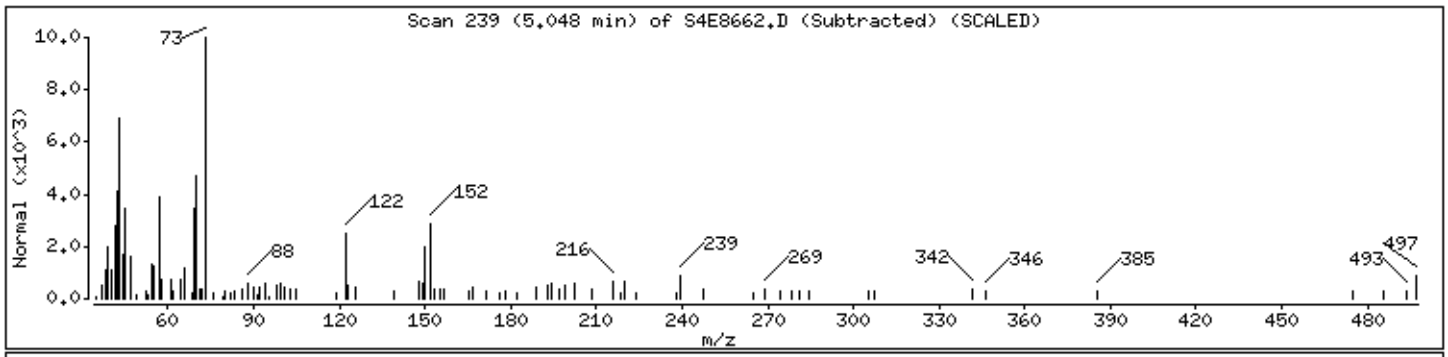
Client ID: H30Z5 Instrument: S4.i

Sample Info: K2213-14A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8662.D

Date : 11-NOV-2011 04:16

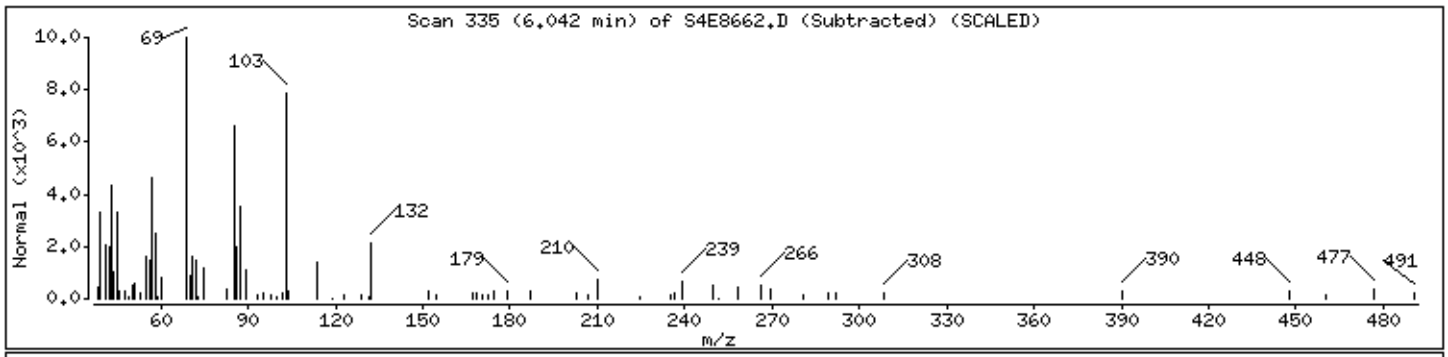
Client ID: H30Z5 Instrument: S4.i

Sample Info: K2213-14A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8662.D

Date : 11-NOV-2011 04:16

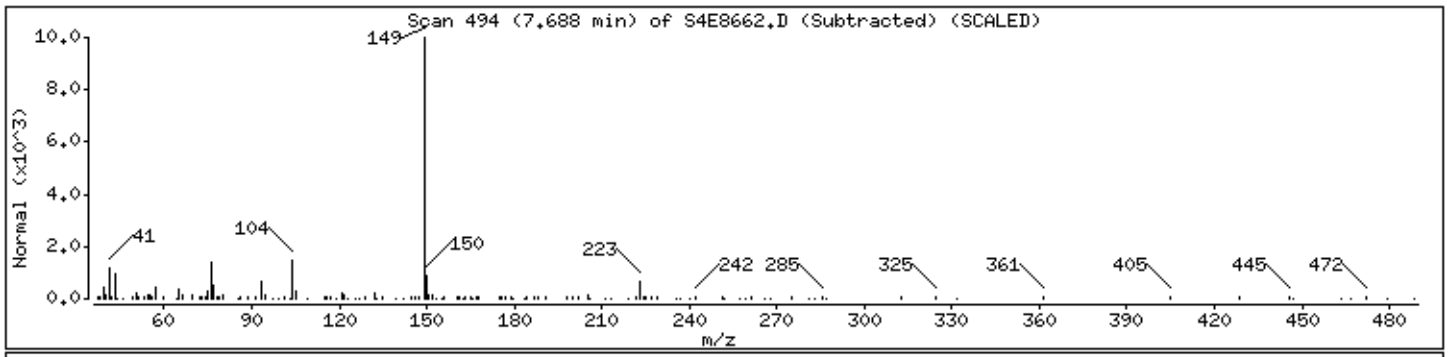
Client ID: H30Z5 Instrument: S4.i

Sample Info: K2213-14A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8662.D

Date : 11-NOV-2011 04:16

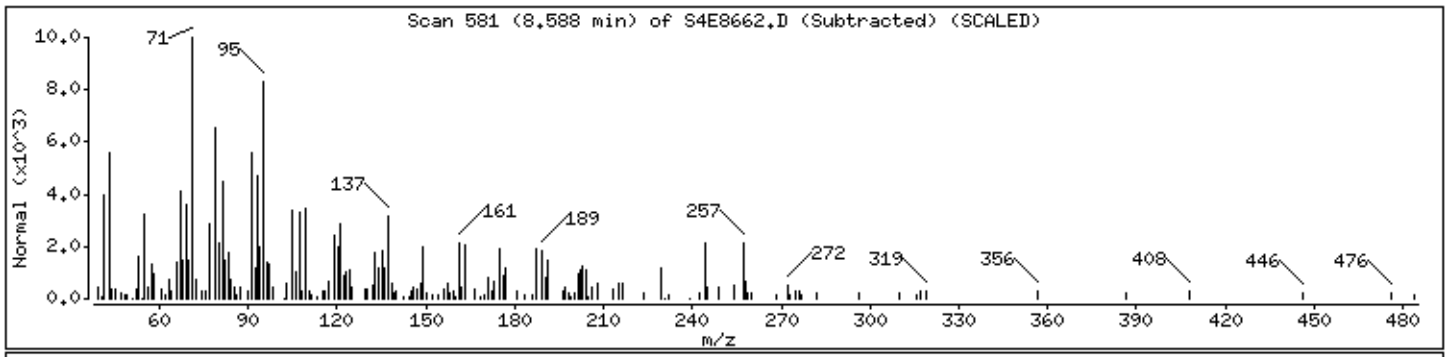
Client ID: H30Z5 Instrument: S4.i

Sample Info: K2213-14A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8662.D

Date : 11-NOV-2011 04:16

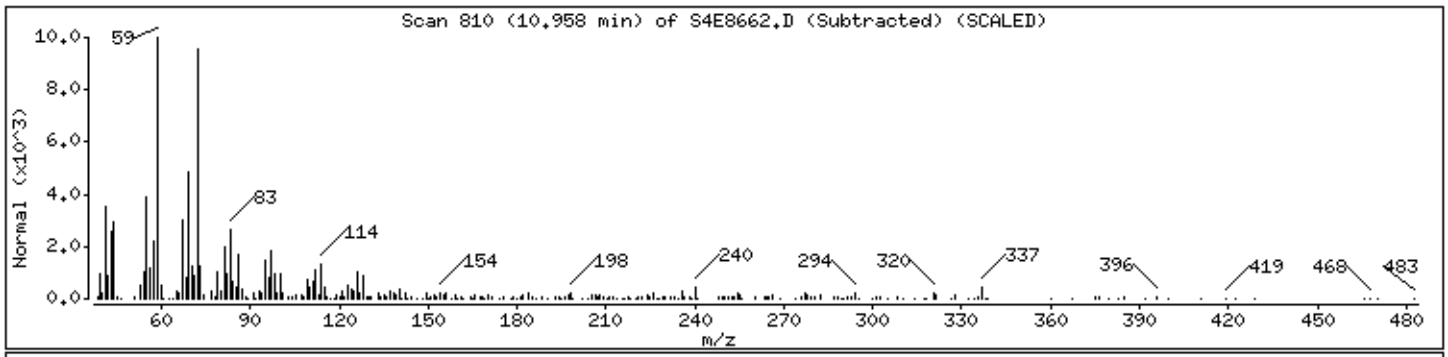
Client ID: H30Z5 Instrument: S4.i

Sample Info: K2213-14A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Z7

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-15A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8663.D

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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

EPA SAMPLE NO.

H30Z7

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-15A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8663.D

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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	2.0	J
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

EPA SAMPLE NO.

H30Z7

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-15A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8663.D

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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	3.020	2.3	J
02		Unknown-02	3.268	3.3	J
03		Unknown-03	3.475	3.9	J
04		Unknown-04	3.848	3.1	J
05		Unknown-05	4.334	4.5	J
06		Unknown-06	4.676	2.6	J
07		Unknown-07	4.883	9.5	J
08		Unknown-08	5.814	2.3	J
09		Unknown-09	8.733	20	J
	E96679€ [2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8663.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8663.D
Lab Smp Id: K2213-15A Client Smp ID: H30Z7
Inj Date : 11-NOV-2011 04:39
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-15A,,62806,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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	3.050	3.050	(0.905)	85572	83.9107	42
$	4 bis(2-Chloroethyl)ether-d8	67	3.113	3.112	(0.923)	54398	71.7146	36
$	6 2-Chlorophenol-d4	132	3.206	3.206	(0.951)	87914	73.4620	37
*	8 1,4-Dichlorobenzene-d4	152	3.371	3.371	(1.000)	37922	40.0000	(Q)
$	11 4-Methylphenol-d8	113	3.609	3.609	(1.071)	94255	87.2758	44
$	16 Nitrobenzene-d5	128	3.796	3.796	(0.857)	44973	71.8173	36(Q)
$	19 2-Nitrophenol-d4	143	4.075	4.075	(0.921)	60685	76.0287	38
$	23 2,4-Dichlorophenol-d3	165	4.282	4.282	(0.967)	116466	77.8701	39
*	25 Naphthalene-d8	136	4.427	4.427	(1.000)	149598	40.0000	
$	27 4-Chloroaniline-d4	131	4.479	4.468	(1.012)	15511	10.5114	5.3(Q)
$	40 Dimethylphthalate-d6	166	5.783	5.772	(0.951)	400372	76.7304	38
$	43 Acenaphthylene-d8	160	5.938	5.938	(0.976)	317581	54.9679	27
*	46 Acenaphthene-d10	164	6.083	6.083	(1.000)	131962	40.0000	
$	49 4-Nitrophenol-d4	143	6.197	6.166	(1.019)	87182	88.7497	44
$	54 Fluorene-d10	176	6.590	6.590	(1.083)	218189	46.9010	23
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.642	6.642	(0.882)	95322	68.0641	34
*	65 Phenanthrene-d10	188	7.532	7.532	(1.000)	349141	40.0000	
$	67 Anthracene-d10	188	7.594	7.584	(1.008)	313169	32.6595	16(R)
$	72 Pyrene-d10	212	8.929	8.929	(0.881)	218775	20.4065	10(R)
	79 bis(2-Ethylhexyl)phthalate	149	10.099	10.099	(0.997)	31883	3.95328	2.0(a)
*	77 Chrysene-d12	240	10.130	10.120	(1.000)	550038	40.0000	(Q)

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8663.D
Report Date: 11-Nov-2011 14:04

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
$ 83 Benzo(a)pyrene-d12	264	11.714	11.703	(0.990)	175373	15.3734	7.7(R)
* 85 Perylene-d12	264	11.827	11.817	(1.000)	514809	40.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8663.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8663.D
Lab Smp Id: K2213-15A Client Smp ID: H30Z7
Inj Date : 11-NOV-2011 04:39
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-15A,,62806,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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

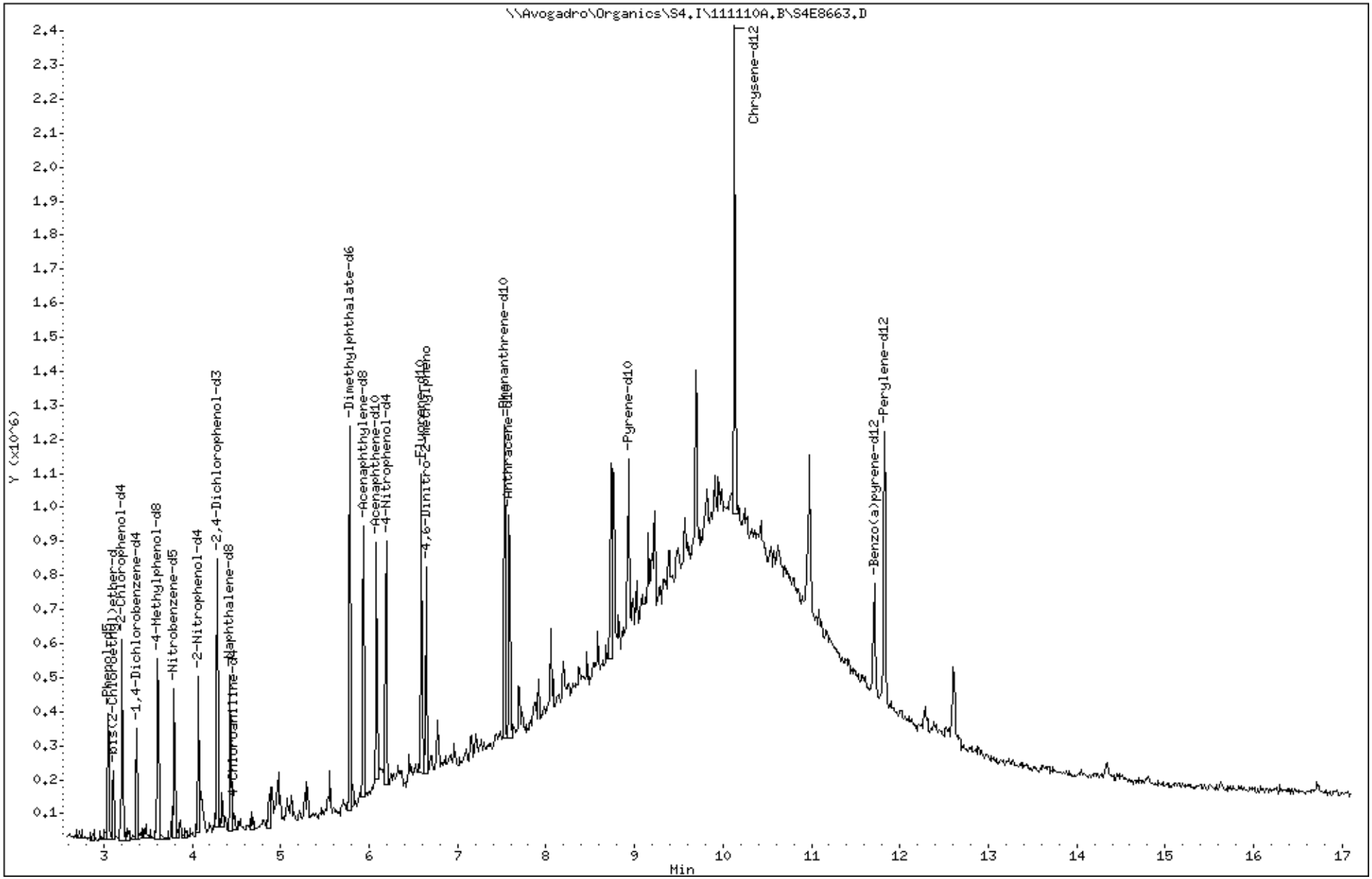
ISTD	RT	AREA	AMOUNT
* 8 1,4-Dichlorobenzene-d4	3.372	331782	40.000
* 25 Naphthalene-d8	4.428	503809	40.000
* 46 Acenaphthene-d10	6.084	707302	40.000
* 65 Phenanthrene-d10	7.533	949764	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
3.020	38744	4.67095412	2.3	0	0		8
Unknown				CAS #:			
3.268	54113	6.52394286	3.3	0	0		8
Unknown				CAS #:			
3.475	64031	7.71966339	3.9	0	0		8

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8663.D
Report Date: 11-Nov-2011 14:04

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
3.848	51745	6.23847029	3.1	0		0	8
Unknown				CAS #:			
4.334	113603	9.01953437	4.5	0		0	25
Unknown				CAS #:			
4.676	65650	5.21230439	2.6	0		0	25
Unknown				CAS #:			
4.883	238547	18.9394642	9.5	0		0	25
Unknown				CAS #:			
5.814	82476	4.66423290	2.3	0		0	46
Unknown				CAS #:			
8.733	932034	39.2532812	20	0		0	65

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8663.D
Date : 11-NOV-2011 04:39
Client ID: H30Z7
Instrument: S4.i
Sample Info: K2213-15A,,62806,,
Volume Injected (uL): 2.0
Operator: MMS SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



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Date : 11-NOV-2011 04:39

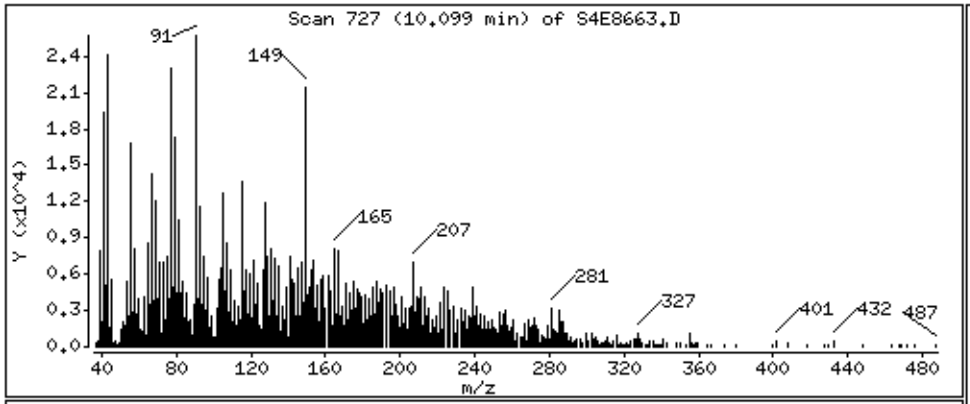
Client ID: H30Z7 Instrument: S4.i

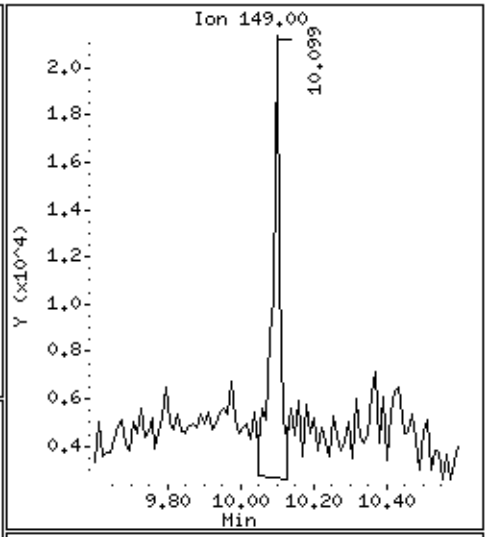
Sample Info: K2213-15A,,62806,,

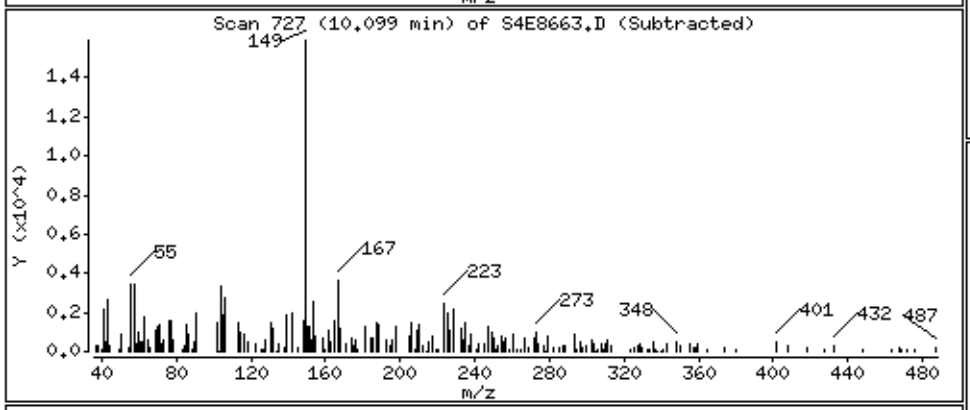
Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

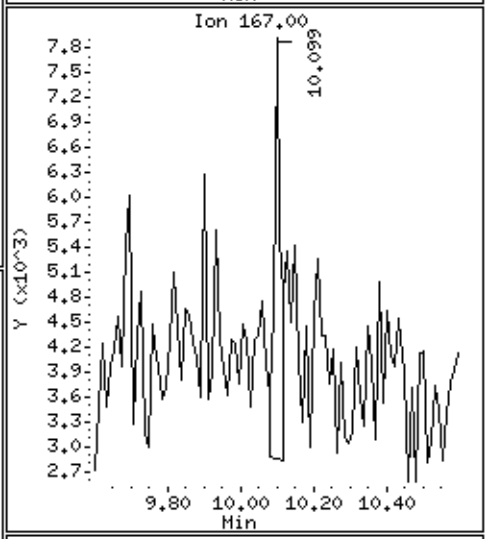
Column phase: RXI-5SILMS Column diameter: 0.25

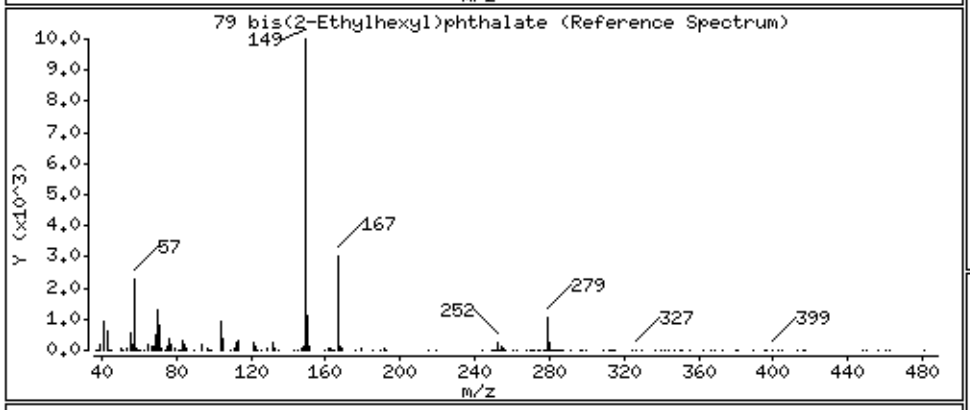
79 bis(2-Ethylhexyl)phthalate Concentration: 2.0 ug/L

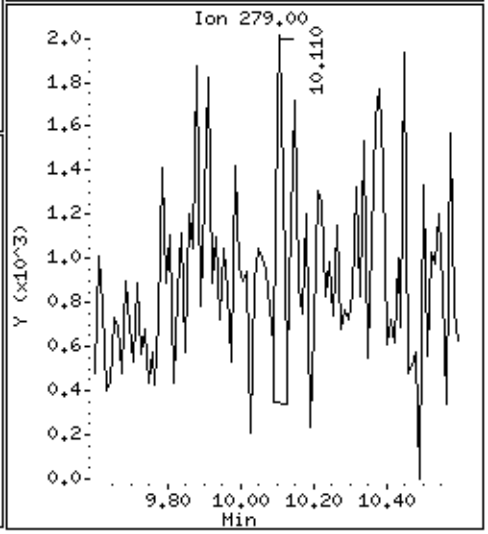


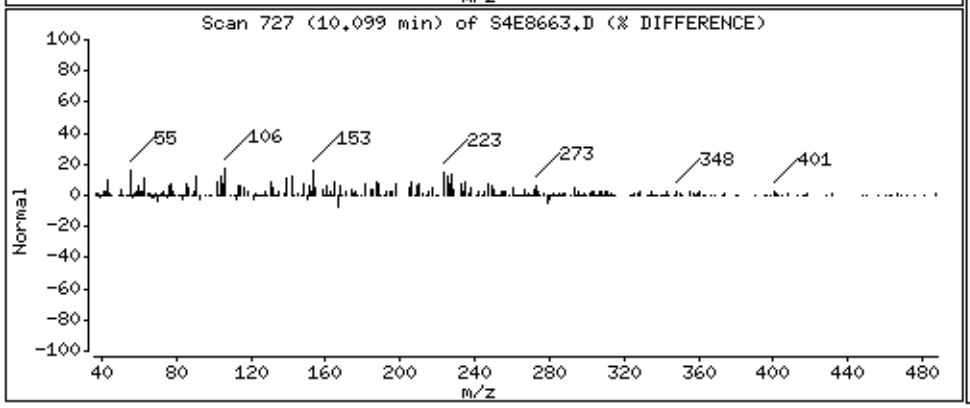












Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8663.D

Date : 11-NOV-2011 04:39

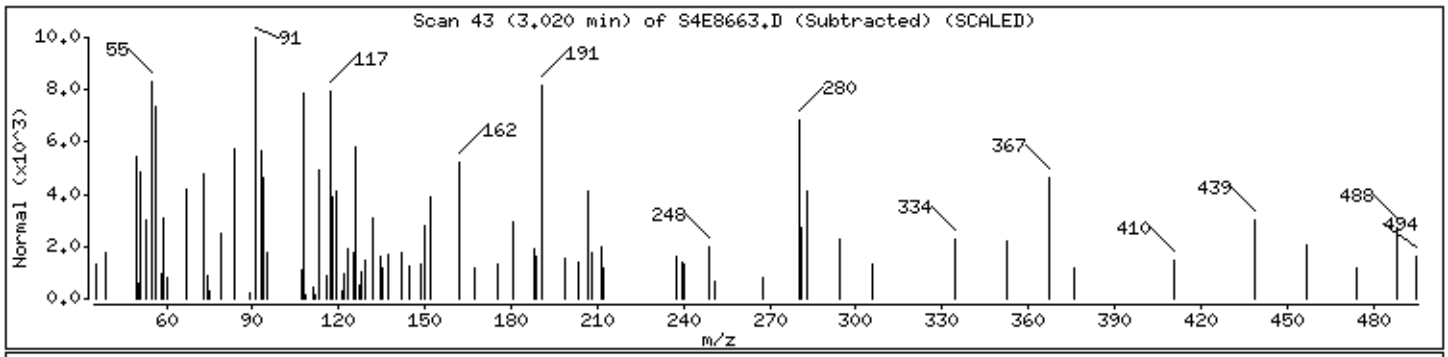
Client ID: H30Z7 Instrument: S4.i

Sample Info: K2213-15A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 11-NOV-2011 04:39

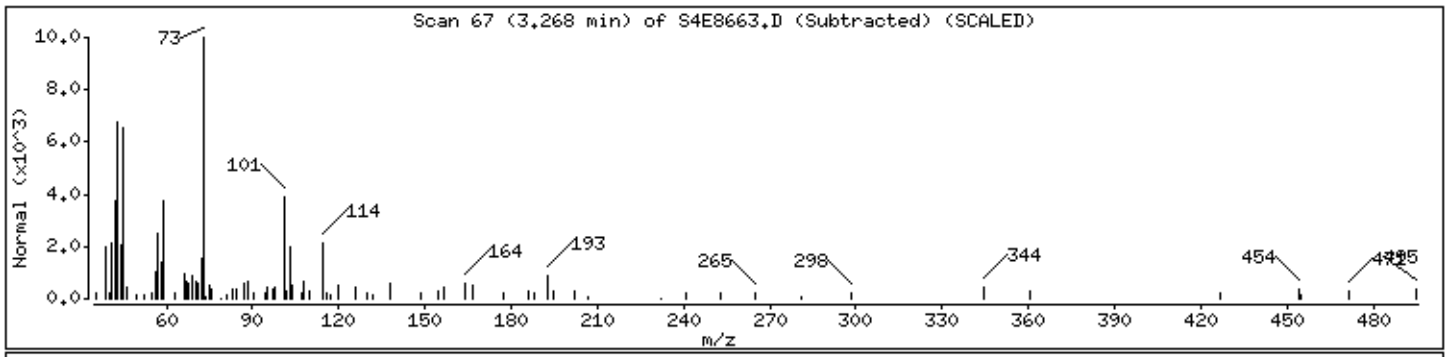
Client ID: H30Z7 Instrument: S4.i

Sample Info: K2213-15A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 11-NOV-2011 04:39

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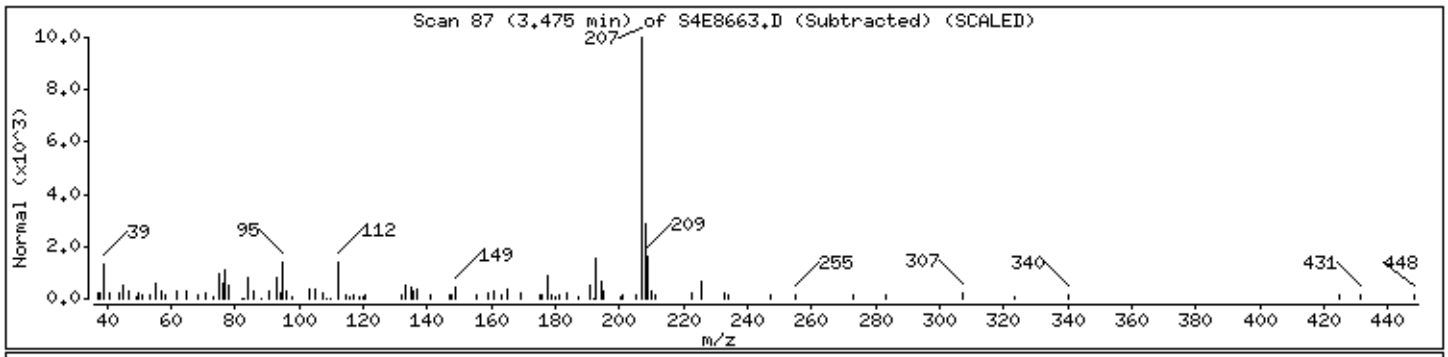
Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 11-NOV-2011 04:39

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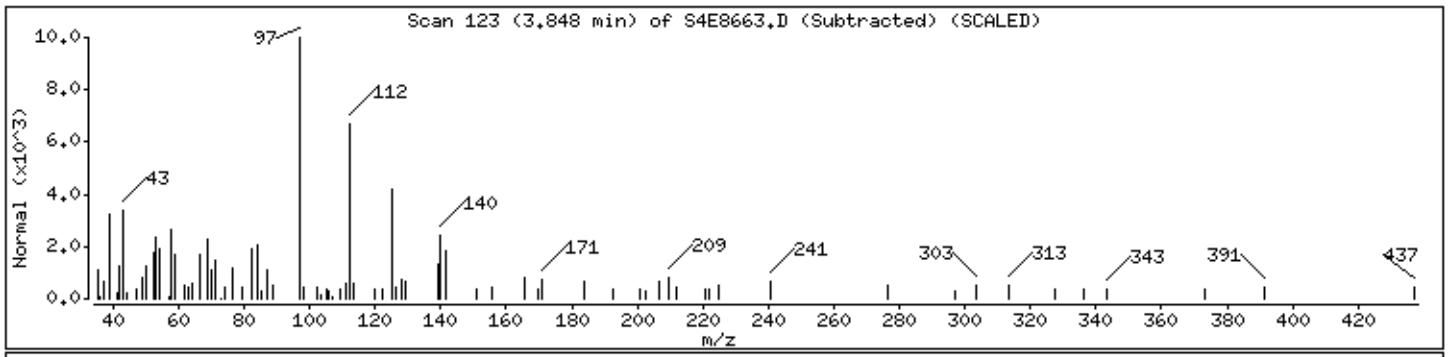
Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 11-NOV-2011 04:39

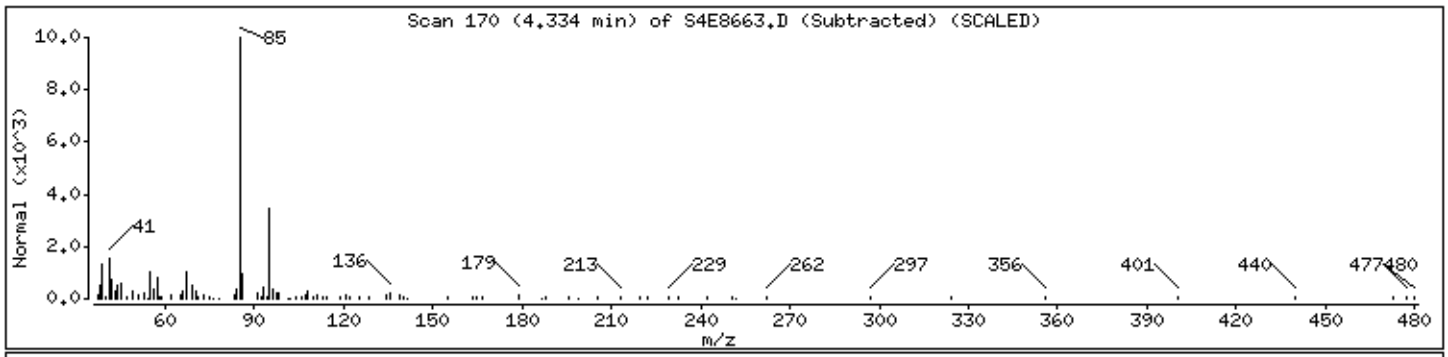
Client ID: H30Z7 Instrument: S4.i

Sample Info: K2213-15A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8663.D

Date : 11-NOV-2011 04:39

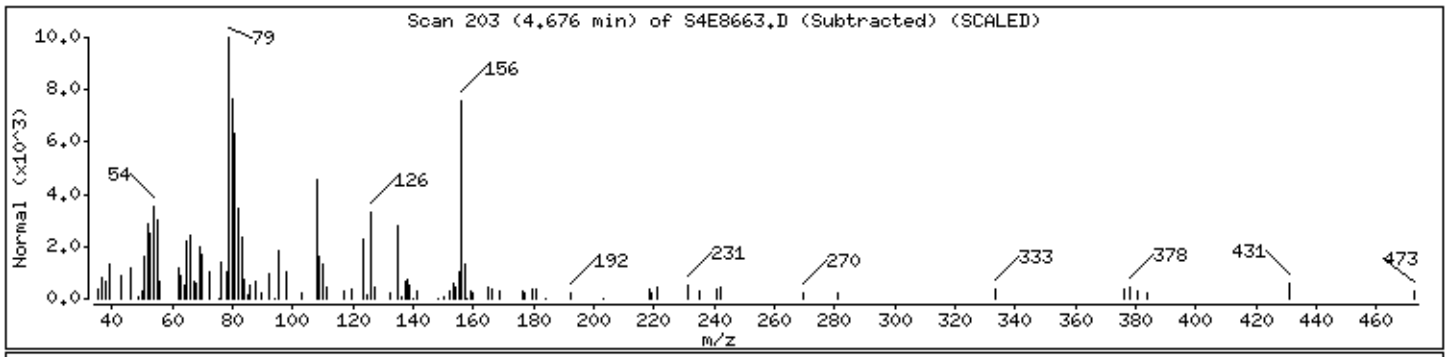
Client ID: H30Z7 Instrument: S4.i

Sample Info: K2213-15A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 11-NOV-2011 04:39

Client ID: H30Z7 Instrument: S4.i

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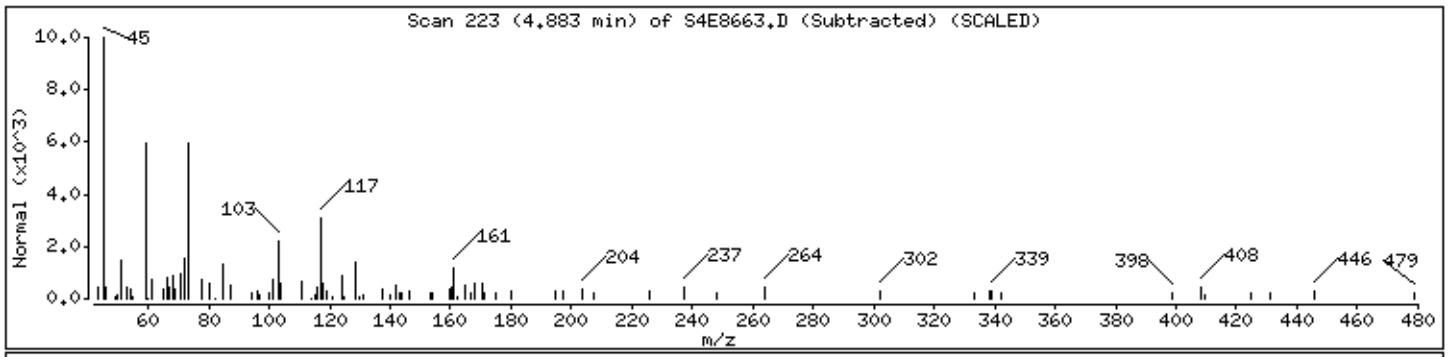
Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 11-NOV-2011 04:39

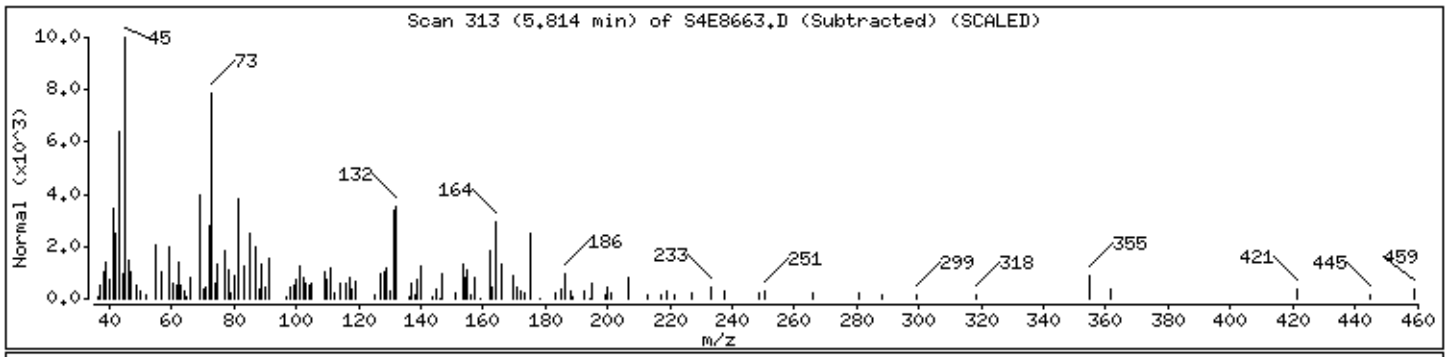
Client ID: H30Z7 Instrument: S4.i

Sample Info: K2213-15A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8663.D

Date : 11-NOV-2011 04:39

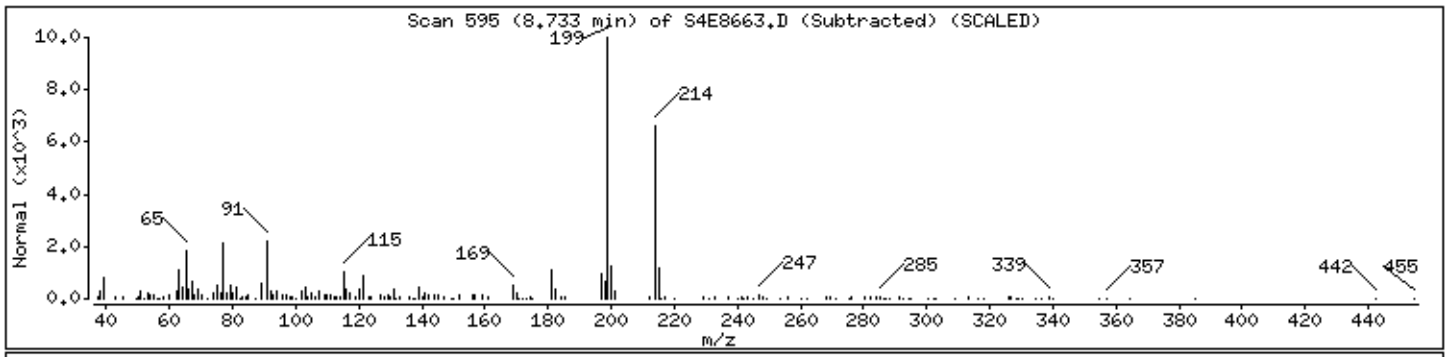
Client ID: H30Z7 Instrument: S4.i

Sample Info: K2213-15A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Z8

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-16A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8664.D

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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

EPA SAMPLE NO.

H30Z8

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-16A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8664.D

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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	1.1	J
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

EPA SAMPLE NO.

H30Z8

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-16A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8664.D

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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	4.334	5.8	J
02		Unknown-02	4.676	3.0	J
03		Unknown-03	4.924	12	J
04		Unknown-04	5.059	5.1	J
05		Unknown-05	6.032	4.2	J
06		Unknown-06	7.688	2.6	J
07	112-84-5	13-Docosenamide, (Z)-	10.959	12	BNJ
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8664.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8664.D
Lab Smp Id: K2213-16A Client Smp ID: H30Z8
Inj Date : 11-NOV-2011 05:03
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : K2213-16A,,62806,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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	3.050	3.050	(0.905)	56307	73.8613	37
$ 4 bis(2-Chloroethyl)ether-d8	67	3.113	3.112	(0.923)	35370	62.3776	31
$ 6 2-Chlorophenol-d4	132	3.206	3.206	(0.951)	53322	59.6046	30
* 8 1,4-Dichlorobenzene-d4	152	3.371	3.371	(1.000)	28348	40.0000	(Q)
$ 11 4-Methylphenol-d8	113	3.609	3.609	(1.071)	55914	69.2594	35
$ 16 Nitrobenzene-d5	128	3.796	3.796	(0.857)	32791	72.9148	36(Q)
$ 19 2-Nitrophenol-d4	143	4.075	4.075	(0.921)	40789	71.1580	36
$ 23 2,4-Dichlorophenol-d3	165	4.282	4.282	(0.967)	79608	74.1161	37
* 25 Naphthalene-d8	136	4.427	4.427	(1.000)	107434	40.0000	
$ 27 4-Chloroaniline-d4	131	4.468	4.468	(1.009)	55626	52.4906	26(Q)
$ 40 Dimethylphthalate-d6	166	5.783	5.772	(0.951)	251120	67.5575	34
$ 43 Acenaphthylene-d8	160	5.938	5.938	(0.976)	283001	68.7593	34
* 46 Acenaphthene-d10	164	6.083	6.083	(1.000)	94007	40.0000	
$ 49 4-Nitrophenol-d4	143	6.187	6.166	(1.017)	61819	88.3387	44(H)
53 Diethylphthalate	149	6.487	6.487	(1.066)	8663	2.27029	1.1(a)
$ 54 Fluorene-d10	176	6.590	6.590	(1.083)	224285	67.6766	34
$ 58 4,6-Dinitro-2-methylphenol-d2	200	6.642	6.642	(0.882)	74475	70.1673	35
* 65 Phenanthrene-d10	188	7.532	7.532	(1.000)	264607	40.0000	
$ 67 Anthracene-d10	188	7.584	7.584	(1.007)	483662	66.5538	33
70 Di-n-butylphthalate	149	8.081	8.081	(1.073)	15404	2.00335	1.0(a)
$ 72 Pyrene-d10	212	8.929	8.929	(0.881)	671023	70.8039	35

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8664.D
Report Date: 11-Nov-2011 14:04

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)	
* 77 Chrysene-d12	240	10.130	10.120	(1.000)	486233	40.0000		(Q)
$ 83 Benzo(a)pyrene-d12	264	11.714	11.703	(0.991)	814091	69.3093	35	
* 85 Perylene-d12	264	11.817	11.817	(1.000)	530073	40.0000		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8664.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8664.D
Lab Smp Id: K2213-16A Client Smp ID: H30Z8
Inj Date : 11-NOV-2011 05:03
Operator : MMS   SRC: LIMS Inst ID: S4.i
Smp Info : K2213-16A,,62806,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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

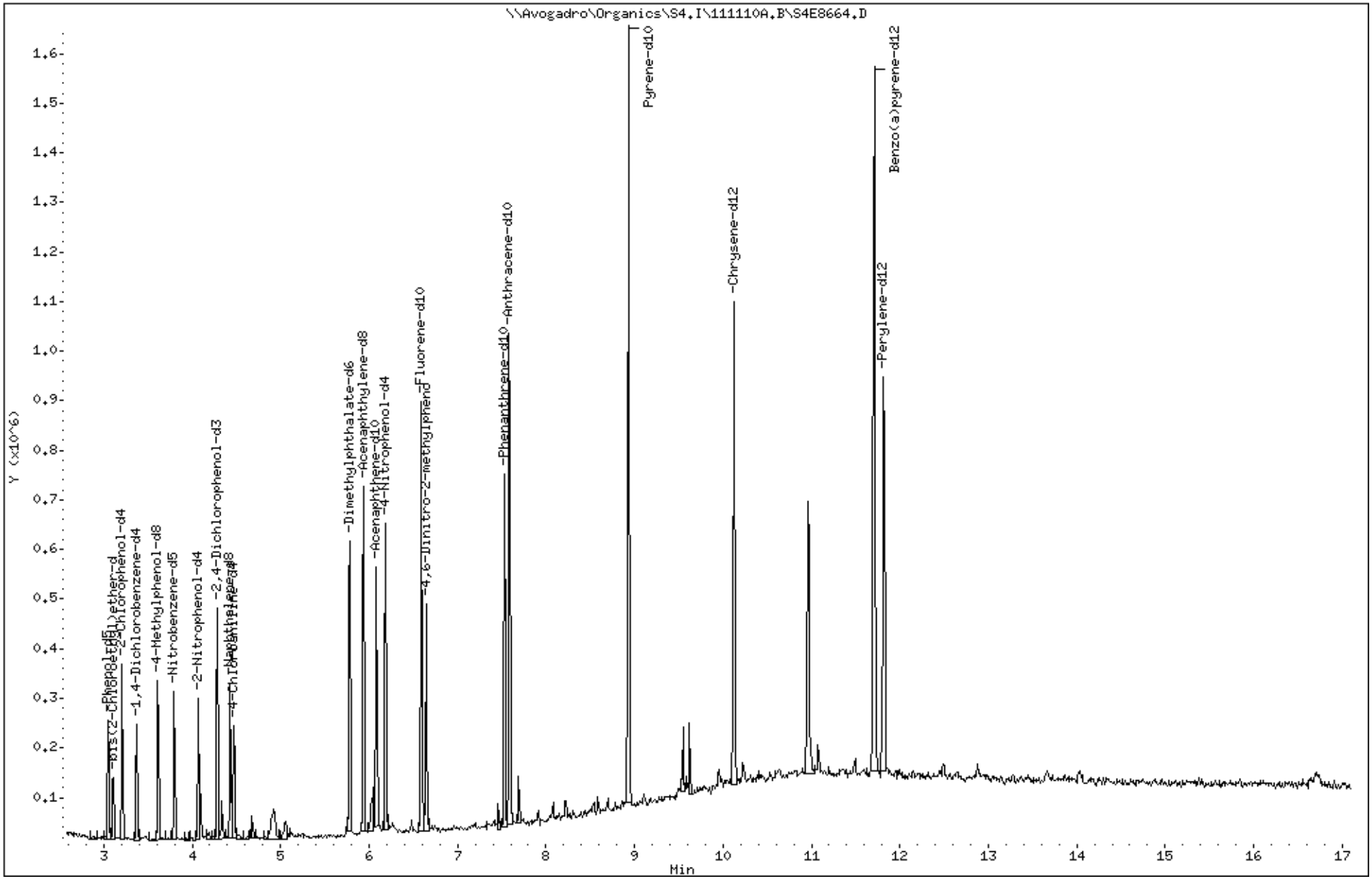
ISTD	RT	AREA	AMOUNT
* 25 Naphthalene-d8	4.428	324312	40.000
* 46 Acenaphthene-d10	6.084	637611	40.000
* 65 Phenanthrene-d10	7.533	714252	40.000
* 77 Chrysene-d12	10.131	1322724	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.334	94224	11.6213445	5.8	0	0		25
Unknown				CAS #:			
4.676	48141	5.93758647	3.0	0	0		25
Unknown				CAS #:			
4.924	196445	24.2290847	12	0	0		25

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8664.D
Report Date: 11-Nov-2011 14:04

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
5.059	83025	10.2400705	5.1	0		0	25
Unknown				CAS #:			
6.032	134023	8.40781105	4.2	0		0	46
Unknown				CAS #:			
7.688	93030	5.20989824	2.6	0		0	65
13-Docosenamide, (Z)-				CAS #: 112-84-5			
10.959	804648	24.3330418	12	91	NIST2002.L	135943	77

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8664.D
Date : 11-NOV-2011 05:03
Client ID: H30Z8
Instrument: S4.i
Sample Info: K2213-16A,,62806,,
Volume Injected (uL): 2.0
Operator: MMS SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



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Date : 11-NOV-2011 05:03

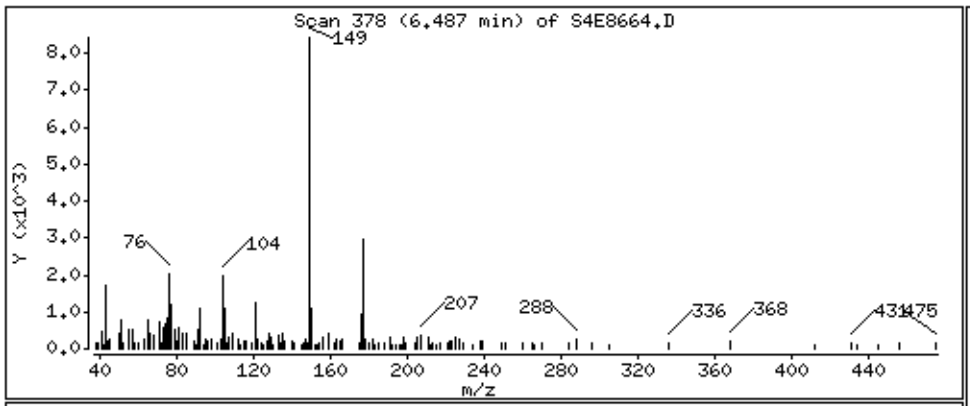
Client ID: H30Z8 Instrument: S4.i

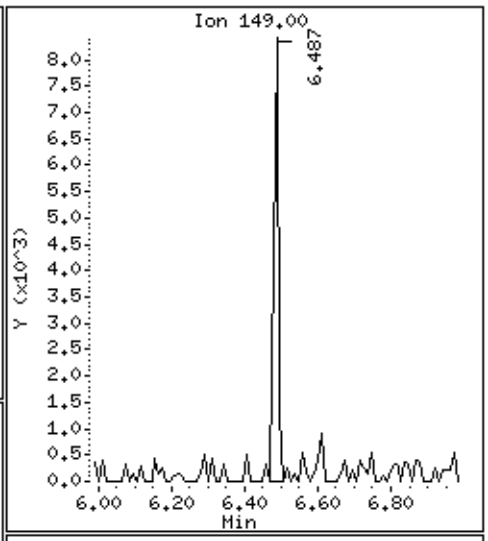
Sample Info: K2213-16A,,62806,,

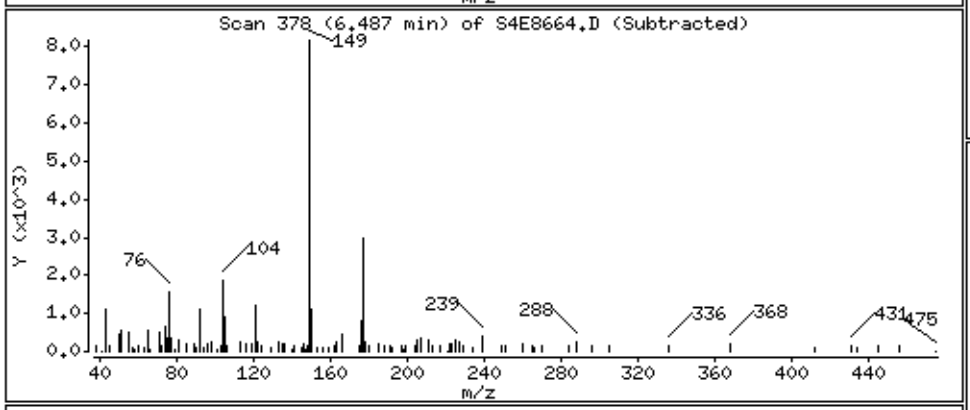
Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

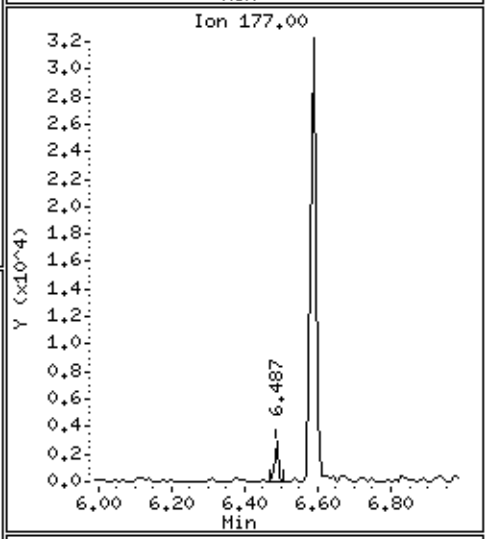
Column phase: RXI-5SILMS Column diameter: 0.25

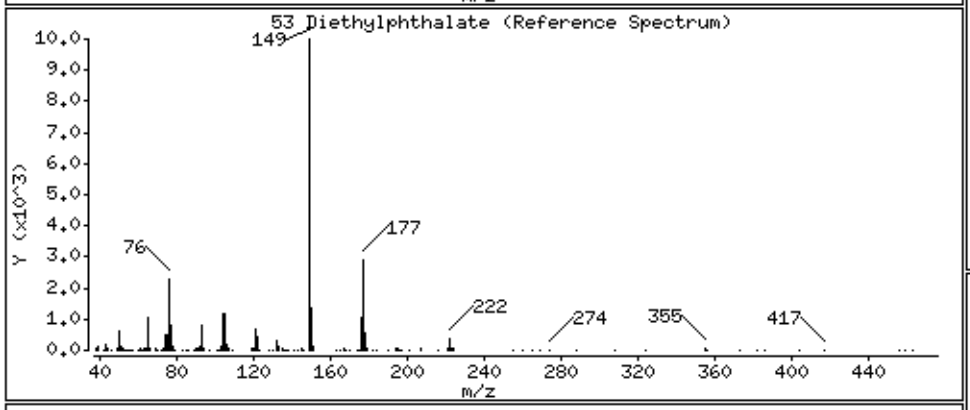
53 Diethylphthalate Concentration: 1.1 ug/L

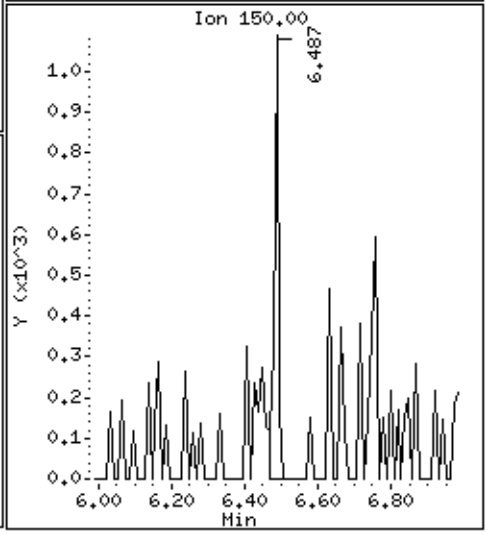


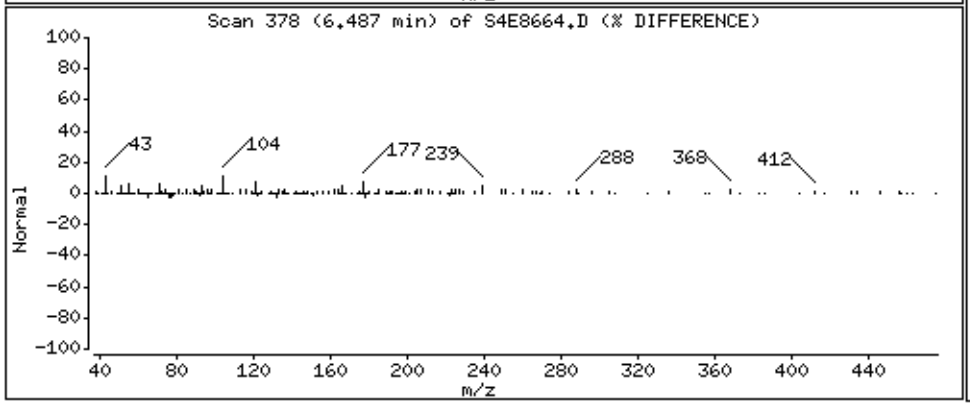












Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8664.D

Date : 11-NOV-2011 05:03

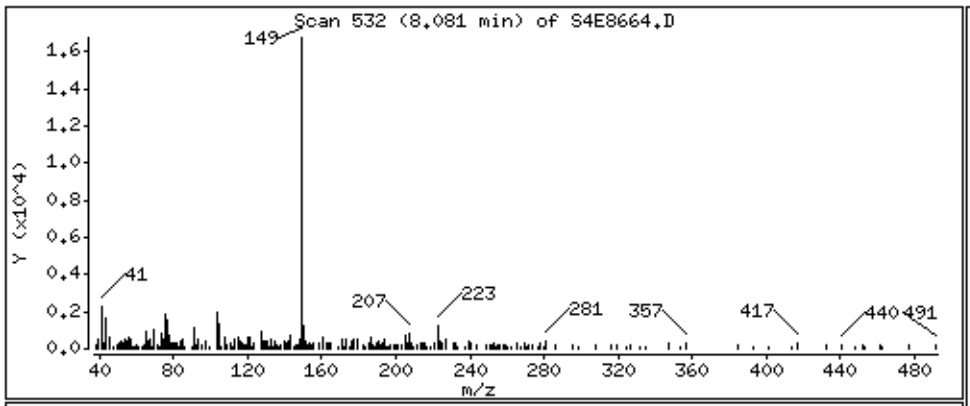
Client ID: H30Z8 Instrument: S4.i

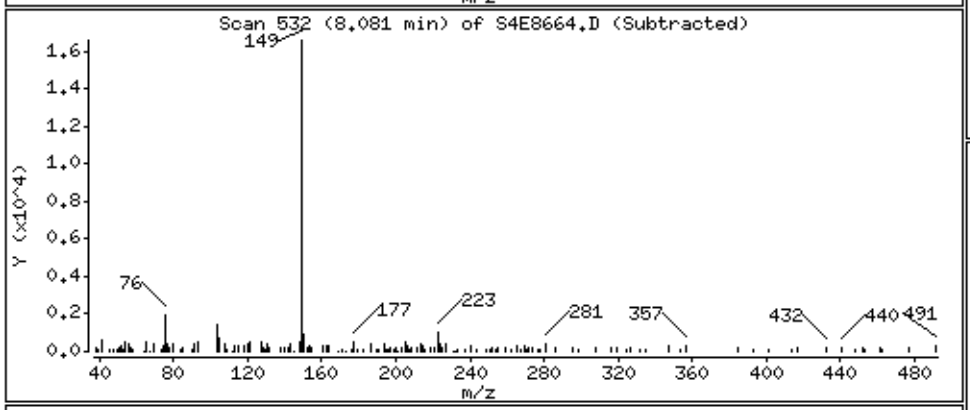
Sample Info: K2213-16A,,62806,,

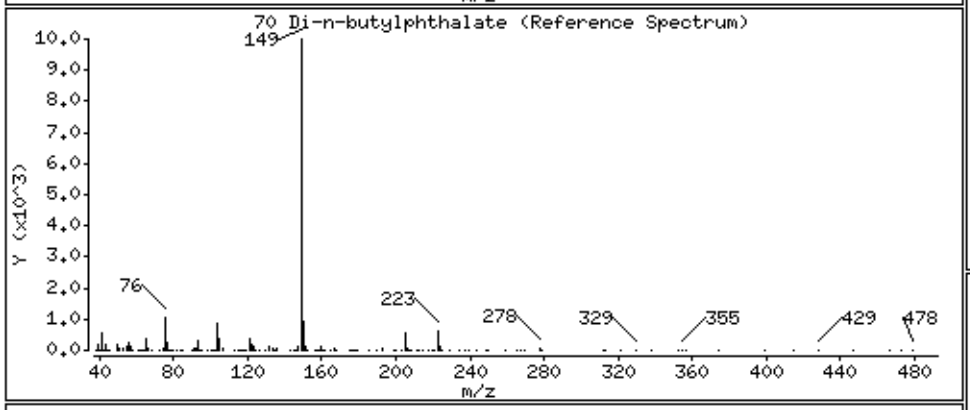
Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

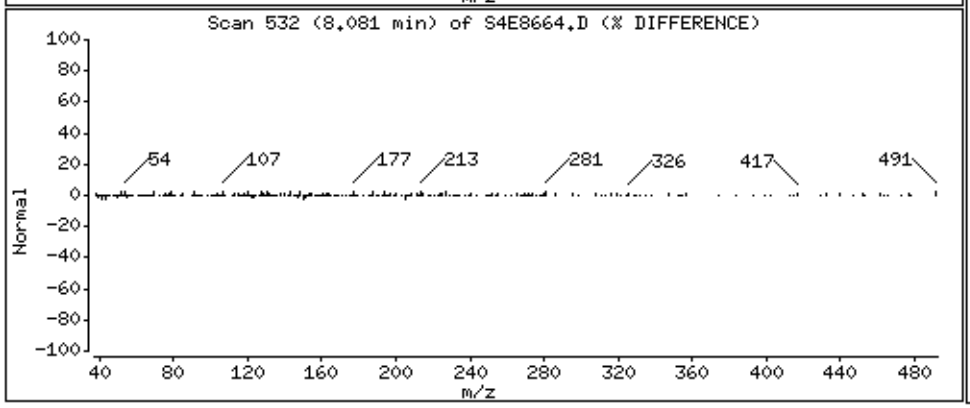
Column phase: RXI-5SILMS Column diameter: 0.25

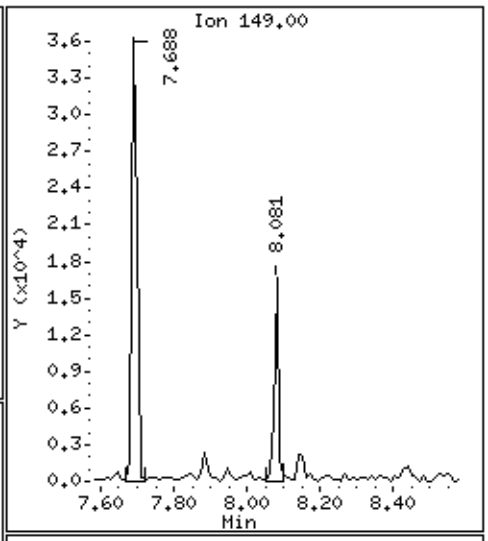
70 Di-n-butylphthalate Concentration: 1.0 ug/L

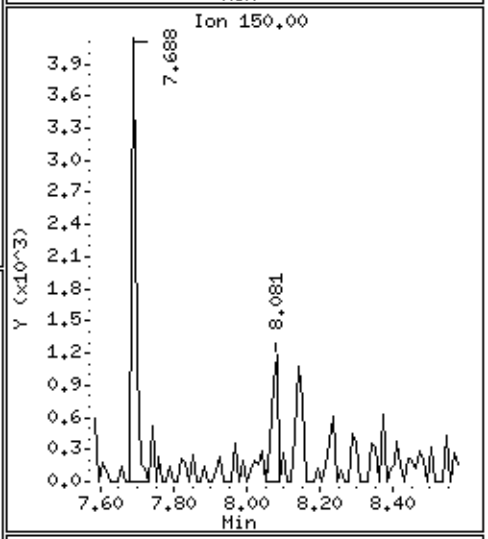


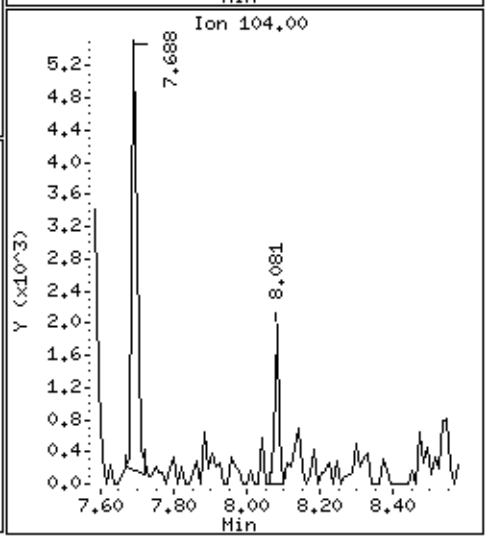












Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8664.D

Date : 11-NOV-2011 05:03

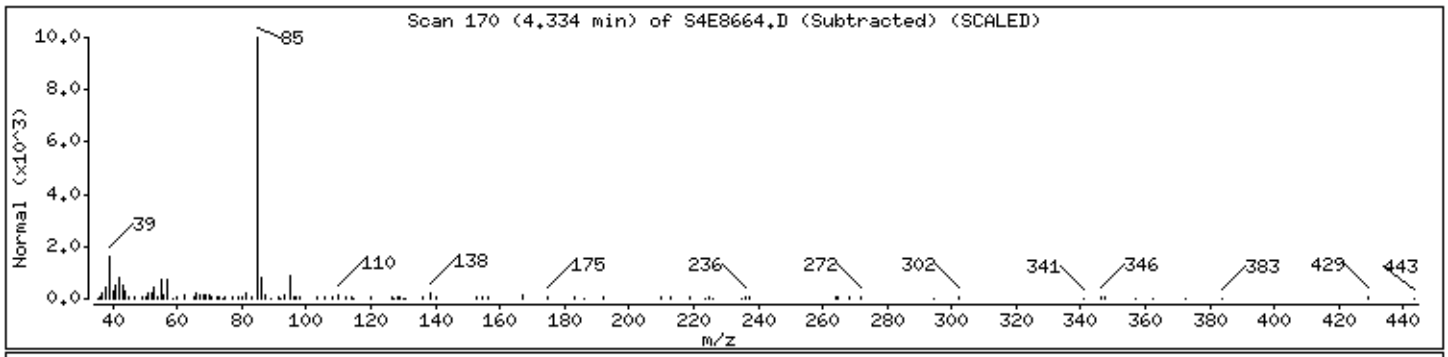
Client ID: H30Z8 Instrument: S4.i

Sample Info: K2213-16A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 11-NOV-2011 05:03

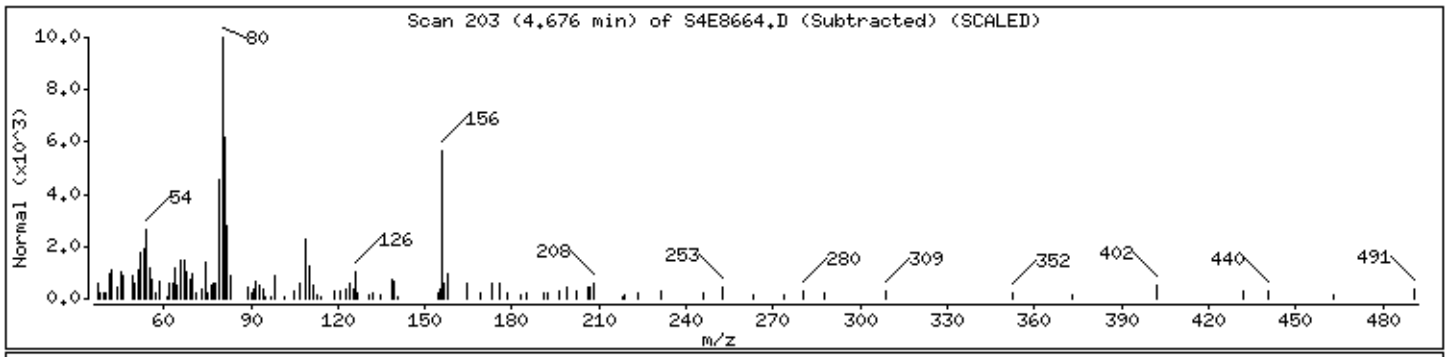
Client ID: H30Z8 Instrument: S4.i

Sample Info: K2213-16A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 11-NOV-2011 05:03

Client ID: H30Z8 Instrument: S4.i

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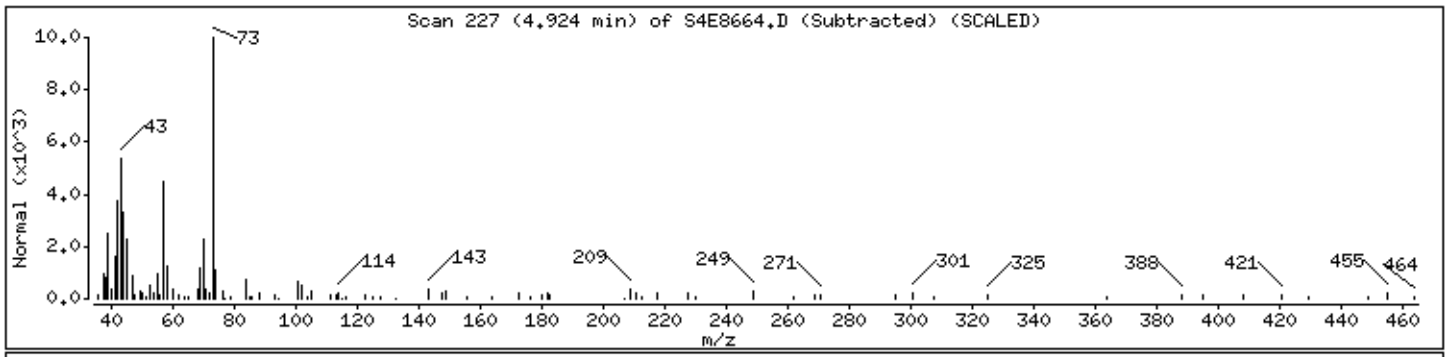
Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8664.D

Date : 11-NOV-2011 05:03

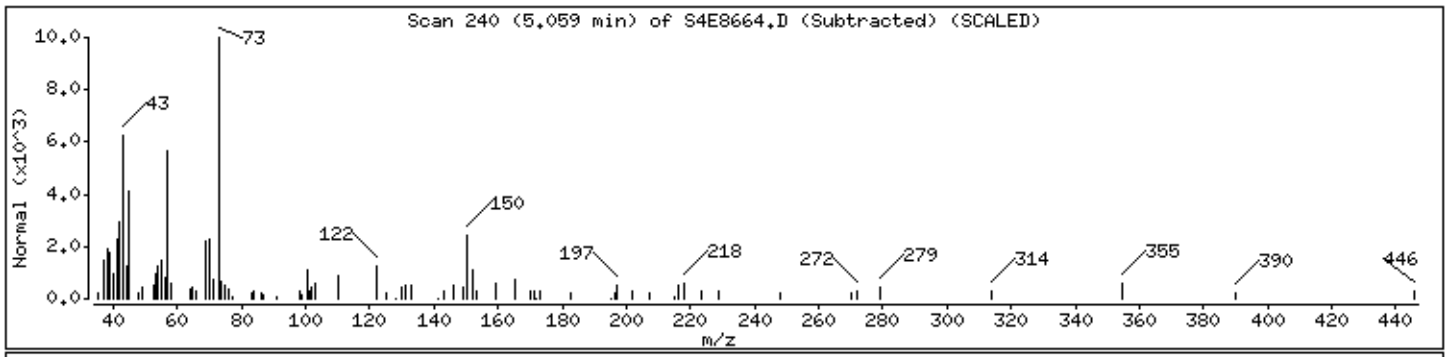
Client ID: H30Z8 Instrument: S4.i

Sample Info: K2213-16A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



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Date : 11-NOV-2011 05:03

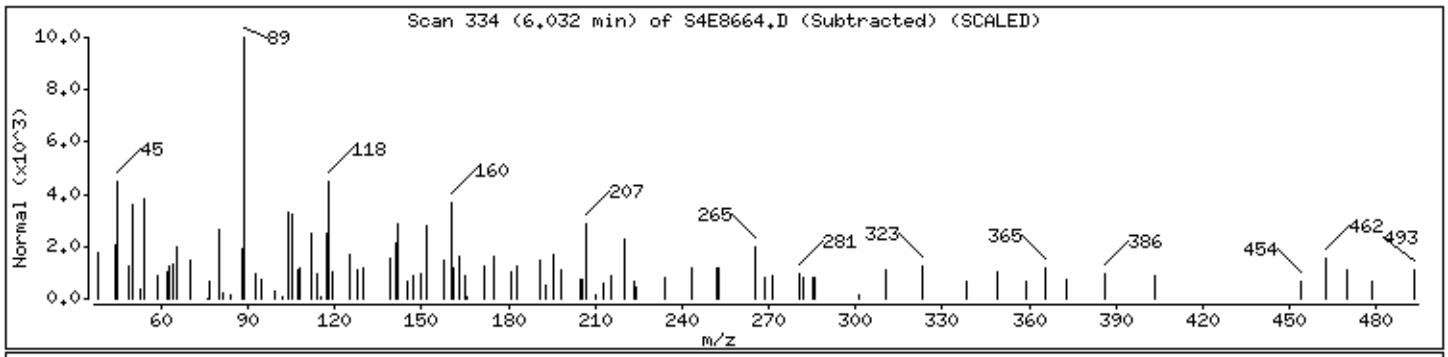
Client ID: H30Z8 Instrument: S4.i

Sample Info: K2213-16A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8664.D

Date : 11-NOV-2011 05:03

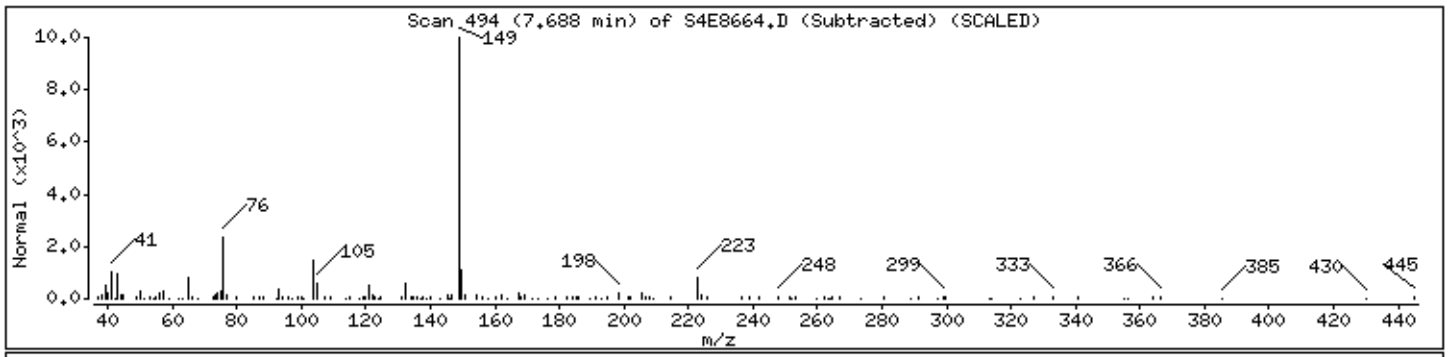
Client ID: H30Z8 Instrument: S4.i

Sample Info: K2213-16A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8664.D

Date : 11-NOV-2011 05:03

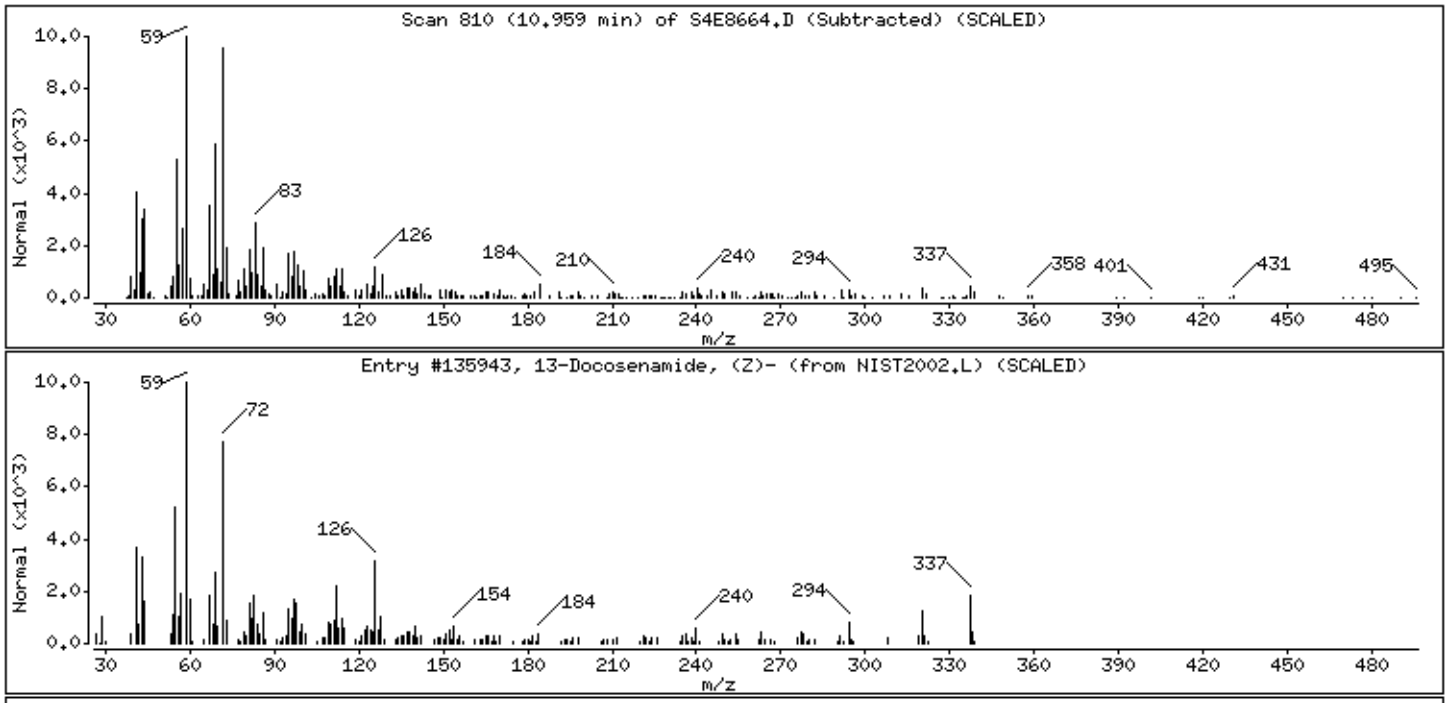
Client ID: H30Z8 Instrument: S4.i

Sample Info: K2213-16A,,62806,,

Volume Injected (uL): 2.0 Operator: MMS 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



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.: H30X4

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.: H30X4

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.: H30X4

Instrument ID: S2 Calibration Date(s): 10/25/2011 10/25/2011

Calibration Time(s): 11:35 13:07

LAB FILE ID: RRF005 = S2H5054.D RRF010 = S2H5056.D

RRF020 = S2H5053C.D RRF040 = S2H5057.D RRF080 = S2H5055.D

COMPOUND	RRF005	RRF010	RRF020	RRF040	RRF080	$\overline{RRF}$	%RSD
Phenol-d5	1.119	1.199	1.190	1.325	1.463	1.260	10.8
Bis(2-chloroethyl)ether-d8	1.729	1.678	1.652	1.774	1.846	1.736	4.5
2-Chlorophenol-d4	1.053	1.045	1.043	1.088	1.219	1.090	6.8
4-Methylphenol-d8	1.514	1.507	1.637	1.859	2.021	1.708	13.2
Nitrobenzene-d5	0.232	0.204	0.190	0.205	0.212	0.208	7.4
2-Nitrophenol-d4	0.214	0.212	0.229	0.250	0.244	0.230	7.4
2,4-Dichlorophenol-d3	0.378	0.399	0.417	0.448	0.457	0.420	7.9
4-Chloroaniline-d4	0.397	0.370	0.330	0.395	0.371	0.373	7.2
Dimethylphthalate-d6	1.405	1.403	1.441	1.557	1.548	1.471	5.2
Acenaphthylene-d8	1.920	1.918	1.803	1.882	2.039	1.913	4.5
4-Nitrophenol-d4		0.181	0.200	0.229	0.239	0.212	12.6
Fluorene-d10	1.387	1.332	1.283	1.356	1.397	1.351	3.4
4,6-Dinitro-2-methylphenol-d2		0.132	0.142	0.167	0.184	0.156	15.1
Anthracene-d10	1.157	1.104	1.133	1.182	1.137	1.143	2.5
Pyrene-d10	1.190	1.152	1.087	1.171	1.700	1.260	19.8
Benzo(a)pyrene-d12	0.972	0.972	0.944	1.039	0.980	0.982	3.6

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.: H30X4

Instrument ID: S4 Calibration Date(s): 11/10/2011 11/10/2011

Calibration Time(s): 16:28 18:10

LAB FILE ID: RRF005 = S4E8636.D RRF010 = S4E8638.D

RRF020 = S4E8635.D RRF040 = S4E8639.D RRF080 = S4E8637.D

COMPOUND	RRF005	RRF010	RRF020	RRF040	RRF080	$\overline{RRF}$	%RSD
Benzaldehyde	1.154	0.966	1.269	1.282	0.830	1.100	17.9
Phenol	1.416	1.303	1.554	1.828	1.631	1.546	13.0
Bis(2-chloroethyl)ether	1.043	0.891	1.077	1.185	1.062	1.052	10.0
2-Chlorophenol	1.253	1.142	1.217	1.337	1.270	1.244	5.7
2-Methylphenol	1.089	0.907	1.024	1.281	1.108	1.082	12.6
2,2´-Oxybis(1-chloropropane)	0.206	0.174	0.183	0.212	0.202	0.195	8.3
Acetophenone	1.716	1.675	1.868	2.159	1.903	1.864	10.3
4-Methylphenol	1.131	1.026	1.144	1.310	1.230	1.168	9.2
N-Nitroso-di-n-propylamine	1.142	1.014	1.149	1.290	1.139	1.147	8.5
Hexachloroethane	0.647	0.616	0.658	0.698	0.672	0.658	4.6
Nitrobenzene	0.567	0.582	0.547	0.586	0.568	0.570	2.7
Isophorone	0.963	0.788	0.890	0.924	0.864	0.886	7.4
2-Nitrophenol	0.215	0.209	0.214	0.231	0.222	0.218	4.0
2,4-Dimethylphenol	0.472	0.434	0.470	0.508	0.495	0.476	5.9
Bis(2-chloroethoxy)methane	0.417	0.395	0.377	0.382	0.383	0.391	4.1
2,4-Dichlorophenol	0.417	0.361	0.403	0.418	0.396	0.399	5.8
Naphthalene	1.116	1.037	1.026	1.071	1.043	1.058	3.4
4-Chloroaniline	0.335	0.363	0.469	0.461	0.414	0.409	14.4
Hexachlorobutadiene	0.407	0.401	0.377	0.403	0.397	0.397	3.0
Caprolactam	0.149	0.122	0.136	0.164	0.131	0.140	11.7
4-Chloro-3-methylphenol	0.441	0.349	0.373	0.453	0.407	0.405	10.8
2-Methylnaphthalene	0.811	0.833	0.753	0.851	0.809	0.811	4.6
Hexachlorocyclopentadiene	0.683	0.655	0.562	0.628	0.656	0.637	7.2
2,4,6-Trichlorophenol	0.547	0.541	0.451	0.529	0.530	0.520	7.5
2,4,5-Trichlorophenol	0.544	0.566	0.547	0.616	0.586	0.572	5.2
1,1´-Biphenyl	1.410	1.373	1.325	1.459	1.427	1.399	3.7
2-Chloronaphthalene	1.213	1.219	1.068	1.205	1.138	1.169	5.6
2-Nitroaniline		0.415	0.388	0.449	0.409	0.415	6.1
Dimethylphthalate	1.613	1.436	1.443	1.809	1.547	1.570	9.8
2,6-Dinitrotoluene	0.320	0.358	0.343	0.403	0.359	0.357	8.6
Acenaphthylene	1.879	1.824	1.760	1.918	1.800	1.836	3.4
3-Nitroaniline		0.298	0.297	0.332	0.248	0.294	11.7
Acenaphthene	1.211	1.222	1.148	1.268	1.181	1.206	3.7
2,4-Dinitrophenol		0.276	0.281	0.348	0.296	0.300	11.0
4-Nitrophenol		0.485	0.485	0.628	0.505	0.526	13.1
Dibenzofuran	1.813	1.810	1.663	1.866	1.716	1.773	4.6

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.: H30X4

Instrument ID: S4 Calibration Date(s): 11/10/2011 11/10/2011

Calibration Time(s): 16:28 18:10

LAB FILE ID: RRF005 = S4E8636.D RRF010 = S4E8638.D

RRF020 = S4E8635.D RRF040 = S4E8639.D RRF080 = S4E8637.D

COMPOUND	RRF005	RRF010	RRF020	RRF040	RRF080	$\overline{RRF}$	%RSD
2,4-Dinitrotoluene	0.571	0.572	0.508	0.625	0.513	0.558	8.7
Diethylphthalate	1.628	1.622	1.519	1.806	1.543	1.624	6.9
Fluorene	1.652	1.608	1.471	1.730	1.516	1.595	6.5
4-Chlorophenyl-phenylether	0.954	0.996	0.942	1.127	0.974	0.999	7.5
4-Nitroaniline		0.351	0.338	0.432	0.291	0.353	16.7
4,6-Dinitro-2-methylphenol		0.181	0.180	0.185	0.175	0.180	2.4
N-Nitrosodiphenylamine (1)	0.608	0.547	0.536	0.530	0.534	0.551	5.8
1,2,4,5-Tetrachlorobenzene	0.850	0.883	0.772	0.852	0.812	0.834	5.1
4-Bromophenyl-phenylether	0.265	0.248	0.245	0.250	0.244	0.251	3.5
Hexachlorobenzene	0.292	0.234	0.242	0.235	0.243	0.249	9.8
Atrazine	0.282	0.253	0.279	0.290	0.277	0.276	5.1
Pentachlorophenol		0.178	0.180	0.191	0.178	0.182	3.5
Phenanthrene	1.161	1.037	1.045	1.059	1.010	1.063	5.4
Anthracene	1.190	1.098	1.087	1.104	1.045	1.105	4.8
Carbazole	1.035	0.995	0.926	0.973	0.898	0.965	5.6
Di-n-butylphthalate	1.189	1.120	1.164	1.222	1.117	1.162	3.9
Fluoranthene	1.626	1.543	1.430	1.601	1.411	1.522	6.4
Pyrene	1.012	0.947	0.978	0.930	0.924	0.958	3.8
Butylbenzylphthalate	0.410	0.374	0.394	0.403	0.401	0.396	3.5
3,3´-Dichlorobenzidine	0.417	0.408	0.382	0.393	0.301	0.380	12.1
Benzo(a)anthracene	1.142	1.118	1.082	1.170	1.057	1.114	4.1
Chrysene	1.093	1.090	1.094	1.030	0.970	1.055	5.2
Bis(2-ethylhexyl)phthalate	0.619	0.559	0.589	0.593	0.573	0.587	3.9
Di-n-octylphthalate	1.021	0.916	1.019	1.045	0.985	0.997	5.0
Benzo(b)fluoranthene	1.243	1.172	1.190	1.388	1.231	1.245	6.8
Benzo(k)fluoranthene	1.456	1.326	1.254	1.176	1.182	1.279	9.1
Benzo(a)pyrene	1.233	1.170	1.105	1.165	1.097	1.154	4.8
Indeno(1,2,3-cd)pyrene	1.450	1.410	1.300	1.413	1.378	1.390	4.0
Dibenzo(a,h)anthracene	1.163	1.191	1.109	1.137	1.129	1.146	2.8
Benzo(g,h,i)perylene	1.171	1.141	1.114	1.154	1.141	1.144	1.8
2,3,4,6-Tetrachlorophenol	0.514	0.523	0.509	0.596	0.528	0.534	6.7

(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.: H30X4

Instrument ID: S4 Calibration Date(s): 11/10/2011 11/10/2011

Calibration Time(s): 16:28 18:10

LAB FILE ID: RRF005 = S4E8636.D RRF010 = S4E8638.D

RRF020 = S4E8635.D RRF040 = S4E8639.D RRF080 = S4E8637.D

COMPOUND	RRF005	RRF010	RRF020	RRF040	RRF080	$\overline{RRF}$	%RSD
Phenol-d5	1.023	0.972	0.970	1.270	1.143	1.076	12.0
Bis(2-chloroethyl)ether-d8	0.910	0.691	0.734	0.879	0.788	0.800	11.6
2-Chlorophenol-d4	1.353	1.082	1.181	1.408	1.287	1.262	10.4
4-Methylphenol-d8	1.083	0.922	1.157	1.362	1.171	1.139	14.0
Nitrobenzene-d5	0.176	0.150	0.157	0.181	0.173	0.167	7.9
2-Nitrophenol-d4	0.219	0.205	0.213	0.213	0.217	0.213	2.5
2,4-Dichlorophenol-d3	0.372	0.404	0.384	0.426	0.414	0.400	5.5
4-Chloroaniline-d4	0.395	0.339	0.418	0.440	0.380	0.395	9.8
Dimethylphthalate-d6	1.559	1.724	1.427	1.683	1.515	1.582	7.7
Acenaphthylene-d8	1.822	1.777	1.612	1.842	1.703	1.751	5.4
4-Nitrophenol-d4		0.292	0.283	0.330	0.286	0.298	7.4
Fluorene-d10	1.436	1.450	1.292	1.523	1.349	1.410	6.4
4,6-Dinitro-2-methylphenol-d2		0.151	0.155	0.171	0.164	0.160	5.6
Anthracene-d10	1.208	1.084	1.064	1.106	1.030	1.099	6.1
Pyrene-d10	0.798	0.810	0.774	0.758	0.758	0.780	3.0
Benzo(a)pyrene-d12	0.916	0.857	0.848	0.921	0.890	0.886	3.7

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

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
	22 bis(2-Chloroethoxy)methane	93	4.923	4.923	(0.958)	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

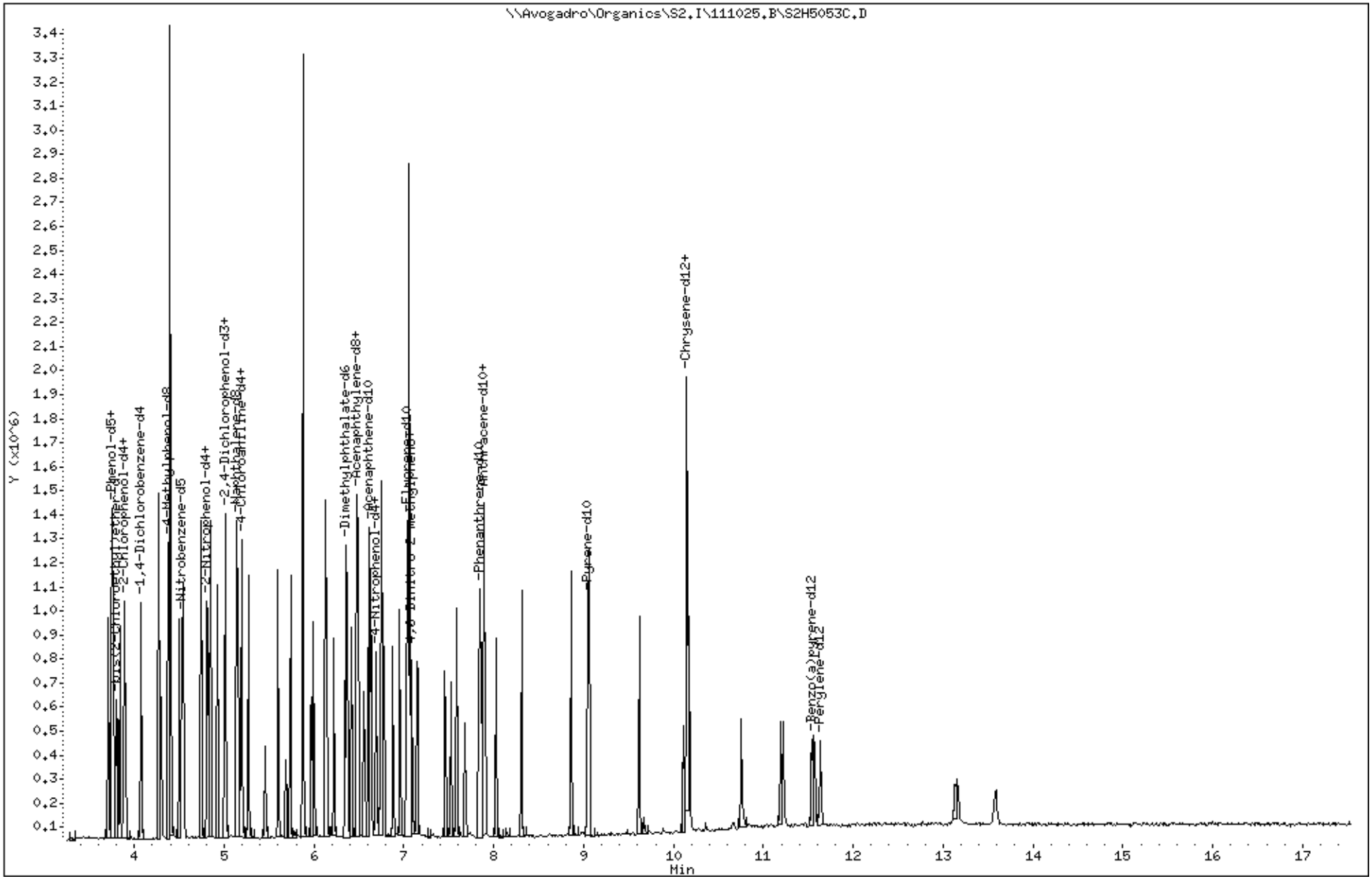
Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5053C.D
Report Date: 26-Oct-2011 09:59

	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

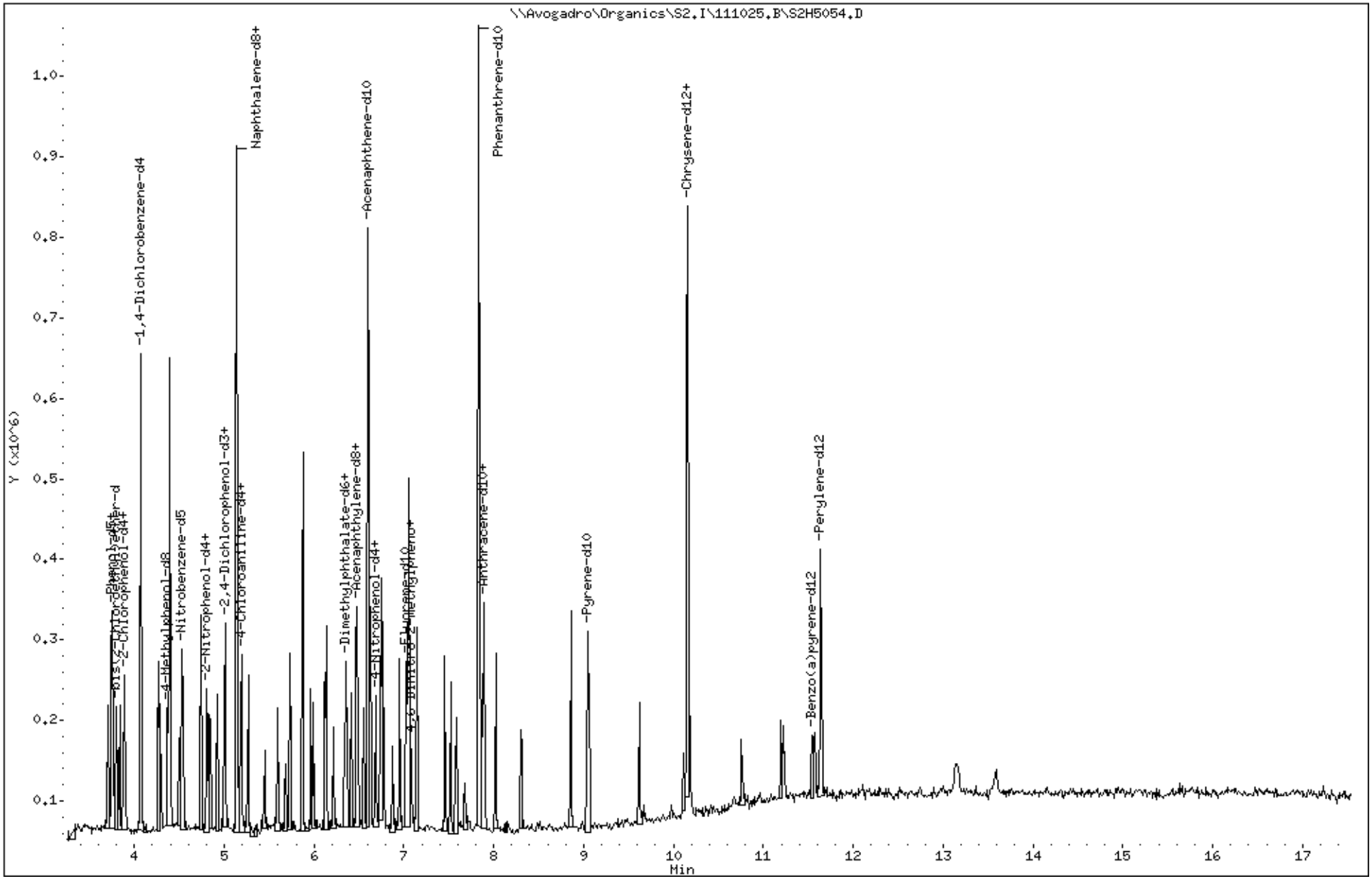
Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5054.D
Report Date: 26-Oct-2011 09:59

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
	75 3,3'-Dichlorobenzidine	252	10.114	10.114	(0.996)	14684	10.0000	8.6
	76 Benzo(a)anthracene	228	10.146	10.146	(0.999)	72341	10.0000	11
*	77 Chrysene-d12	240	10.157	10.156	(1.000)	229879	40.0000	(Q)
	78 Chrysene	228	10.178	10.178	(1.002)	59445	10.0000	9.9
	79 bis(2-Ethylhexyl)phthalate	149	10.157	10.146	(1.000)	32662	10.0000	9.4
	80 Di-n-octylphthalate	149	10.757	10.757	(0.924)	43628	10.0000	8.2
	81 Benzo(b)fluoranthene	252	11.197	11.197	(0.962)	43681	10.0000	9.3
	82 Benzo(k)fluoranthene	252	11.229	11.218	(0.965)	58547	10.0000	11
$	83 Benzo(a)pyrene-d12	264	11.540	11.540	(0.992)	35368	10.0000	9.9
	84 Benzo(a)pyrene	252	11.572	11.572	(0.994)	41382	10.0000	10
*	85 Perylene-d12	264	11.637	11.636	(1.000)	145535	40.0000	
	86 Indeno(1,2,3-cd)pyrene	276	13.138	13.127	(1.129)	32547	10.0000	10
	87 Dibenzo(a,h)anthracene	278	13.160	13.159	(1.131)	26928	10.0000	10
	88 Benzo(g,h,i)perylene	276	13.588	13.588	(1.168)	26705	10.0000	10

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5054.D
Date : 25-OCT-2011 11:58
Client ID: SSTD0052W
Instrument: S2.i
Sample Info: SSTD0052W,SSTD0052W
Volume Injected (uL): 2.0
Operator: SRC:
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5055.D
Report Date: 26-Oct-2011 09:59

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111025.B\S2H5055.D
Lab Smp Id: SSTD0802W Client Smp ID: SSTD0802W
Inj Date : 25-OCT-2011 12:21
Operator : SRC: Inst ID: S2.i
Smp Info : SSTD0802W,SSTD0802W
Misc Info : 1,5
Comment   :
Method   : \\Avogadro\Organics\S2.I\111025.B\S2_SOM.m
Meth Date : 26-Oct-2011 09:59 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 3 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * (Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vi	2.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	1 Benzaldehyde	77	3.704	3.712	(0.910)	451731	160.000	140
$	2 Phenol-d5	71	3.747	3.754	(0.921)	389542	160.000	190(A)
	3 Phenol	94	3.768	3.765	(0.926)	1061024	160.000	180(A)
$	4 bis(2-Chloroethyl)ether-d8	67	3.800	3.797	(0.934)	491270	160.000	170(A)
	5 bis(2-Chloroethyl)ether	93	3.843	3.840	(0.945)	739408	160.000	180(A)
$	6 2-Chlorophenol-d4	132	3.886	3.883	(0.955)	324350	160.000	180(A)
	7 2-Chlorophenol	128	3.897	3.894	(0.958)	331093	160.000	180(A)
*	8 1,4-Dichlorobenzene-d4	152	4.069	4.076	(1.000)	66544	40.0000	(Q)
	9 2-Methylphenol	108	4.272	4.269	(1.050)	576248	160.000	180(A)
	10 2,2'-oxybis(1-Chloropropane)	45	4.294	4.291	(1.055)	713521	160.000	170(A)
$	11 4-Methylphenol-d8	113	4.379	4.376	(1.076)	538063	160.000	190(A)
	13 Acetophenone	105	4.401	4.398	(1.082)	993466	160.000	180(A)
	14 N-Nitroso-di-n-propylamine	70	4.401	4.398	(1.082)	463610	160.000	180(AQ)
	12 4-Methylphenol	108	4.401	4.398	(1.082)	634982	160.000	200(A)
	15 Hexachloroethane	117	4.497	4.505	(1.105)	238653	160.000	160(AQ)
$	16 Nitrobenzene-d5	128	4.530	4.527	(0.881)	171606	160.000	160(A)
	17 Nitrobenzene	77	4.551	4.548	(0.885)	864223	160.000	160(A)
	18 Isophorone	82	4.744	4.741	(0.923)	1523694	160.000	170(A)
$	19 2-Nitrophenol-d4	143	4.808	4.805	(0.935)	198212	160.000	170(A)
	20 2-Nitrophenol	139	4.819	4.816	(0.937)	184702	160.000	160(A)
	21 2,4-Dimethylphenol	107	4.851	4.848	(0.944)	676917	160.000	170(AQ)

Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5055.D
Report Date: 26-Oct-2011 09:59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	22 bis(2-Chloroethoxy)methane	93	4.926	4.923	(0.958)	844250	160.000	170(A)
$	23 2,4-Dichlorophenol-d3	165	5.012	5.009	(0.975)	370810	160.000	170(A)
	24 2,4-Dichlorophenol	162	5.012	5.020	(0.975)	336936	160.000	170(A)
*	25 Naphthalene-d8	136	5.141	5.138	(1.000)	202795	40.0000	
	26 Naphthalene	128	5.152	5.159	(1.002)	862863	160.000	170(A)
$	27 4-Chloroaniline-d4	131	5.184	5.191	(1.008)	301135	160.000	160(Q)
	28 4-Chloroaniline	127	5.194	5.191	(1.010)	356828	160.000	170(A)
	29 Hexachlorobutadiene	225	5.270	5.267	(1.025)	232801	160.000	160(A)
	30 Caprolactam	113	5.463	5.460	(1.063)	139061	160.000	180(A)
	31 4-Chloro-3-methylphenol	107	5.602	5.599	(1.090)	568462	160.000	180(A)
	32 2-Methylnaphthalene	142	5.731	5.738	(1.115)	598179	160.000	170(A)
	33 Hexachlorocyclopentadiene	237	5.881	5.878	(0.891)	259779	160.000	180(AQ)
	34 1,2,4,5-Tetrachlorobenzene	216	5.881	5.878	(0.891)	954196	160.000	180(A)
	35 2,4,6-Trichlorophenol	196	5.967	5.974	(0.904)	297313	160.000	180(A)
	36 2,4,5-Trichlorophenol	196	5.999	5.996	(0.909)	308771	160.000	190(A)
	37 1,1'-Biphenyl	154	6.117	6.124	(0.927)	767912	160.000	170(A)
	38 2-Chloronaphthalene	162	6.138	6.146	(0.930)	726576	160.000	180(A)
	39 2-Nitroaniline	65	6.213	6.221	(0.942)	353321	160.000	180(A)
$	40 Dimethylphthalate-d6	166	6.353	6.350	(0.963)	813301	160.000	170(A)
	41 Dimethylphthalate	163	6.374	6.371	(0.966)	731022	160.000	160(A)
	42 2,6-Dinitrotoluene	165	6.417	6.414	(0.972)	198638	160.000	180(A)
$	43 Acenaphthylene-d8	160	6.471	6.478	(0.981)	1071404	160.000	170(A)
	44 Acenaphthylene	152	6.481	6.489	(0.982)	964311	160.000	170(A)
	45 3-Nitroaniline	138	6.556	6.553	(0.994)	124790	160.000	170(A)
*	46 Acenaphthene-d10	164	6.599	6.607	(1.000)	131332	40.0000	
	47 Acenaphthene	153	6.631	6.628	(1.005)	650871	160.000	180(A)
	48 2,4-Dinitrophenol	184	6.642	6.639	(1.007)	113177	160.000	220(AQ)
	52 Dibenzofuran	168	6.771	6.779	(1.026)	904327	160.000	170(A)
$	49 4-Nitrophenol-d4	143	6.685	6.682	(1.013)	125573	160.000	180(A)
	50 4-Nitrophenol	109	6.696	6.693	(1.015)	247914	160.000	180(A)
	51 2,4-Dinitrotoluene	165	6.749	6.757	(1.023)	242541	160.000	170(AQ)
	118 2,3,4,6-Tetrachlorophenol	232	6.878	6.875	(1.042)	204288	160.000	180(A)
	53 Diethylphthalate	149	6.953	6.950	(1.054)	679754	160.000	160(A)
$	54 Fluorene-d10	176	7.039	7.036	(1.067)	733898	160.000	170(A)
	56 Fluorene	166	7.060	7.057	(1.070)	773517	160.000	170(A)
	55 4-Chlorophenyl-phenylether	204	7.050	7.057	(1.068)	386824	160.000	160(A)
	57 4-Nitroaniline	138	7.060	7.068	(1.070)	122002	160.000	150(Q)
$	58 4,6-Dinitro-2-methylphenol-d2	200	7.082	7.090	(0.904)	166098	160.000	190(A)
	59 4,6-Dinitro-2-methylphenol	198	7.093	7.090	(0.906)	160228	160.000	190(AQ)
	60 N-Nitrosodiphenylamine	169	7.146	7.154	(0.912)	587468	160.000	170(A)
	61 4-Bromophenyl-phenylether	248	7.457	7.465	(0.952)	203259	160.000	170(A)
	62 Hexachlorobenzene	284	7.522	7.529	(0.960)	212255	160.000	160(A)
	63 Atrazine	200	7.586	7.583	(0.969)	198672	160.000	160
	64 Pentachlorophenol	266	7.682	7.679	(0.981)	118477	160.000	190(A)
*	65 Phenanthrene-d10	188	7.832	7.840	(1.000)	226084	40.0000	
	66 Phenanthrene	178	7.854	7.862	(1.003)	1056637	160.000	170(A)
$	67 Anthracene-d10	188	7.886	7.883	(1.007)	1028619	160.000	160
	68 Anthracene	178	7.897	7.894	(1.008)	1088821	160.000	170(A)
	117 Carbazole	167	8.026	8.022	(1.025)	856417	160.000	160(A)
	70 Di-n-butylphthalate	149	8.304	8.312	(1.060)	813103	160.000	150
	71 Fluoranthene	202	8.862	8.859	(1.131)	960445	160.000	150
$	72 Pyrene-d10	212	9.044	9.041	(0.892)	745046	160.000	220(A)
	73 Pyrene	202	9.055	9.063	(0.893)	927058	160.000	210(A)
	74 Butylbenzylphthalate	149	9.613	9.620	(0.948)	254386	160.000	190(A)

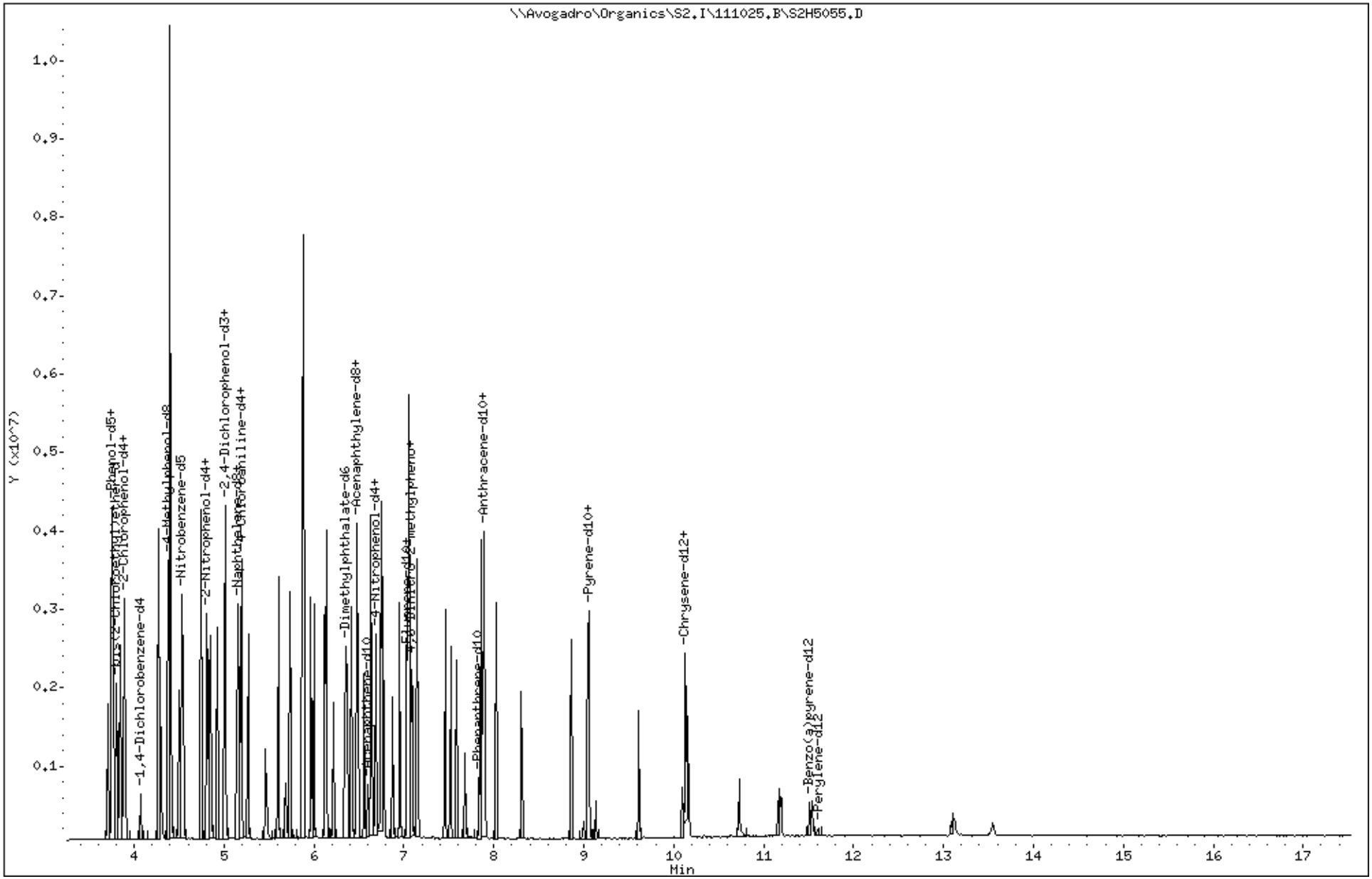
Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5055.D
Report Date: 26-Oct-2011 09:59

							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

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
	22 bis(2-Chloroethoxy)methane	93	4.926	4.923	(0.958)	155215	20.0000	19
$	23 2,4-Dichlorophenol-d3	165	5.001	5.009	(0.973)	64330	20.0000	19
	24 2,4-Dichlorophenol	162	5.011	5.020	(0.975)	57855	20.0000	19
*	25 Naphthalene-d8	136	5.140	5.138	(1.000)	322412	40.0000	
	26 Naphthalene	128	5.151	5.159	(1.002)	164907	20.0000	20
$	27 4-Chloroaniline-d4	131	5.183	5.191	(1.008)	59697	20.0000	20(Q)
	28 4-Chloroaniline	127	5.194	5.191	(1.010)	66465	20.0000	20
	29 Hexachlorobutadiene	225	5.269	5.267	(1.025)	48784	20.0000	21
	30 Caprolactam	113	5.451	5.460	(1.060)	22983	20.0000	19
	31 4-Chloro-3-methylphenol	107	5.601	5.599	(1.090)	85751	20.0000	17
	32 2-Methylnaphthalene	142	5.730	5.738	(1.115)	108595	20.0000	19
	33 Hexachlorocyclopentadiene	237	5.880	5.878	(0.891)	47469	20.0000	20(Q)
	34 1,2,4,5-Tetrachlorobenzene	216	5.880	5.878	(0.891)	175138	20.0000	21
	35 2,4,6-Trichlorophenol	196	5.966	5.974	(0.904)	56712	20.0000	22
	36 2,4,5-Trichlorophenol	196	5.998	5.996	(0.909)	50977	20.0000	19(a)
	37 1,1'-Biphenyl	154	6.127	6.124	(0.928)	140310	20.0000	19
	38 2-Chloronaphthalene	162	6.137	6.146	(0.930)	135707	20.0000	21
	39 2-Nitroaniline	65	6.212	6.221	(0.941)	60092	20.0000	19
$	40 Dimethylphthalate-d6	166	6.352	6.350	(0.963)	144862	20.0000	19
	41 Dimethylphthalate	163	6.363	6.371	(0.964)	131624	20.0000	19
	42 2,6-Dinitrotoluene	165	6.416	6.414	(0.972)	33942	20.0000	19
$	43 Acenaphthylene-d8	160	6.470	6.478	(0.980)	198044	20.0000	20
	44 Acenaphthylene	152	6.481	6.489	(0.982)	173387	20.0000	19
	45 3-Nitroaniline	138	6.556	6.553	(0.993)	21927	20.0000	19
*	46 Acenaphthene-d10	164	6.599	6.607	(1.000)	206539	40.0000	
	47 Acenaphthene	153	6.631	6.628	(1.005)	117622	20.0000	20
	48 2,4-Dinitrophenol	184	6.641	6.639	(1.007)	10809	20.0000	13(Q)
	52 Dibenzofuran	168	6.770	6.779	(1.026)	174468	20.0000	20
$	49 4-Nitrophenol-d4	143	6.684	6.682	(1.013)	18648	20.0000	17
	50 4-Nitrophenol	109	6.684	6.693	(1.013)	35589	20.0000	17
	51 2,4-Dinitrotoluene	165	6.749	6.757	(1.023)	43019	20.0000	19(Q)
	118 2,3,4,6-Tetrachlorophenol	232	6.877	6.875	(1.042)	32406	20.0000	18
	53 Diethylphthalate	149	6.952	6.950	(1.054)	133920	20.0000	20
$	54 Fluorene-d10	176	7.027	7.036	(1.065)	137530	20.0000	20
	56 Fluorene	166	7.060	7.057	(1.070)	130330	20.0000	19
	55 4-Chlorophenyl-phenylether	204	7.049	7.057	(1.068)	71631	20.0000	19
	57 4-Nitroaniline	138	7.060	7.068	(1.070)	26593	20.0000	21(Q)
$	58 4,6-Dinitro-2-methylphenol-d2	200	7.081	7.090	(0.904)	22647	20.0000	17
	59 4,6-Dinitro-2-methylphenol	198	7.092	7.090	(0.906)	20088	20.0000	15(aQ)
	60 N-Nitrosodiphenylamine	169	7.145	7.154	(0.912)	107883	20.0000	21
	61 4-Bromophenyl-phenylether	248	7.456	7.465	(0.952)	38077	20.0000	20
	62 Hexachlorobenzene	284	7.521	7.529	(0.960)	40531	20.0000	20
	63 Atrazine	200	7.585	7.583	(0.969)	37213	20.0000	20
	64 Pentachlorophenol	266	7.682	7.679	(0.981)	15010	20.0000	16
*	65 Phenanthrene-d10	188	7.832	7.840	(1.000)	343880	40.0000	
	66 Phenanthrene	178	7.853	7.862	(1.003)	190037	20.0000	20
$	67 Anthracene-d10	188	7.885	7.883	(1.007)	189817	20.0000	19
	68 Anthracene	178	7.896	7.894	(1.008)	195947	20.0000	20
	117 Carbazole	167	8.025	8.022	(1.025)	160106	20.0000	20
	70 Di-n-butylphthalate	149	8.304	8.312	(1.060)	177045	20.0000	21
	71 Fluoranthene	202	8.850	8.859	(1.130)	197940	20.0000	20
$	72 Pyrene-d10	212	9.033	9.041	(0.893)	157501	20.0000	18(H)
	73 Pyrene	202	9.043	9.063	(0.894)	195088	20.0000	18
	74 Butylbenzylphthalate	149	9.590	9.620	(0.948)	63891	20.0000	19

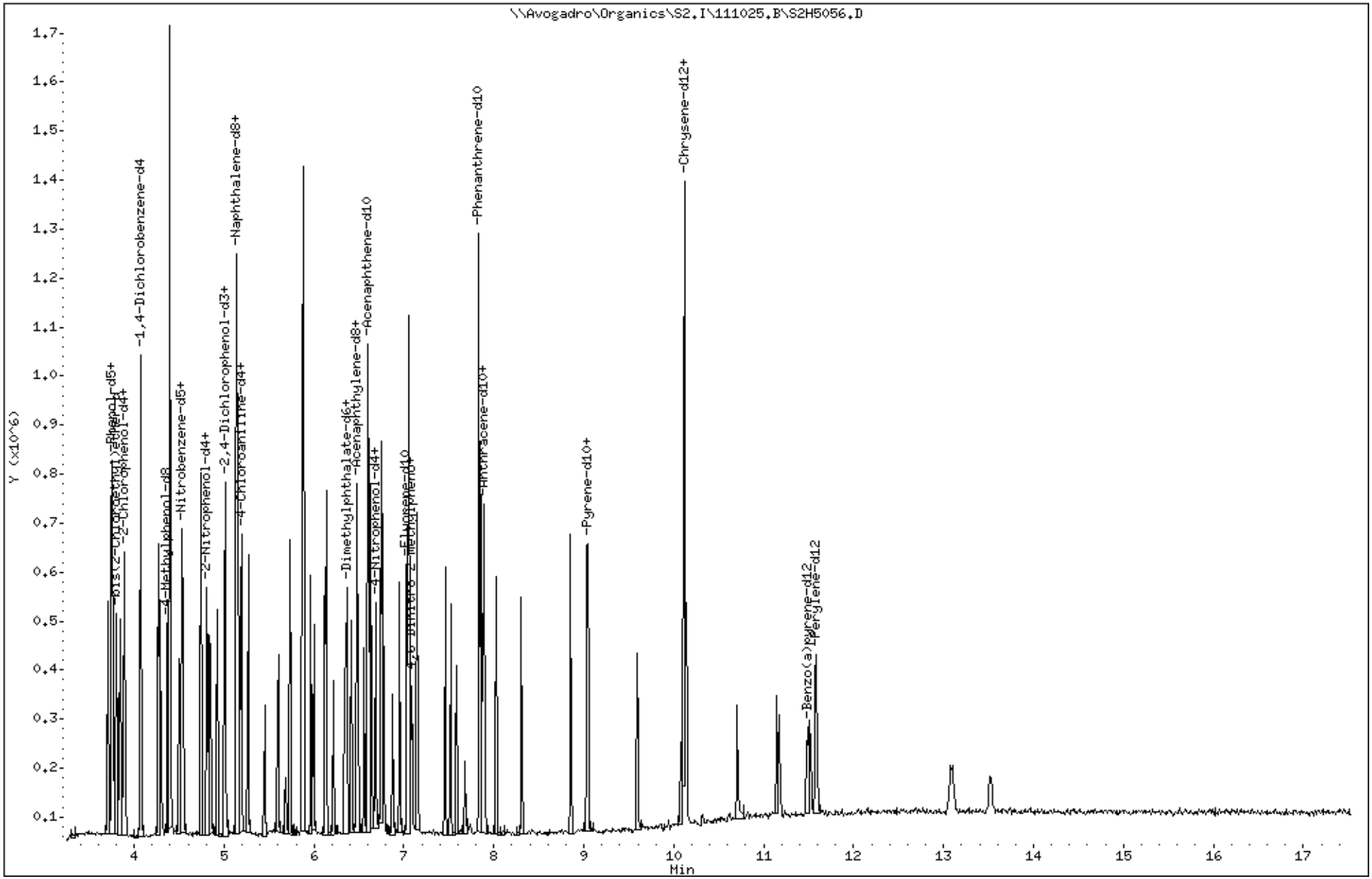
Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5056.D
Report Date: 26-Oct-2011 09:59

		QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)	
Compounds									
75	3,3'-Dichlorobenzidine	252	10.073	10.114	(0.996)	40595	20.0000	20	
76	Benzo(a)anthracene	228	10.105	10.146	(0.999)	158537	20.0000	20	
* 77	Chrysene-d12	240	10.116	10.156	(1.000)	273540	40.0000		(Q)
78	Chrysene	228	10.137	10.178	(1.002)	143301	20.0000	20	
79	bis(2-Ethylhexyl)phthalate	149	10.116	10.146	(1.000)	81805	20.0000	20	
80	Di-n-octylphthalate	149	10.706	10.757	(0.924)	120856	20.0000	18	
81	Benzo(b)fluoranthene	252	11.145	11.197	(0.962)	110449	20.0000	18	
82	Benzo(k)fluoranthene	252	11.177	11.218	(0.965)	135076	20.0000	20	
$ 83	Benzo(a)pyrene-d12	264	11.488	11.540	(0.992)	89501	20.0000	20	
84	Benzo(a)pyrene	252	11.510	11.572	(0.994)	101587	20.0000	19	
* 85	Perylene-d12	264	11.585	11.636	(1.000)	184086	40.0000		
86	Indeno(1,2,3-cd)pyrene	276	13.076	13.127	(1.129)	83072	20.0000	21	
87	Dibenzo(a,h)anthracene	278	13.097	13.159	(1.131)	68344	20.0000	21	
88	Benzo(g,h,i)perylene	276	13.526	13.588	(1.168)	71594	20.0000	21	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5056.D
Date : 25-OCT-2011 12:44
Client ID: SSTD0102W
Instrument: S2.i
Sample Info: SSTD0102W,SSTD0102W
Volume Injected (uL): 2.0
Operator: SRC:
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5057.D
Report Date: 26-Oct-2011 09:59

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S2.I\111025.B\S2H5057.D
Lab Smp Id: SSTD0402W Client Smp ID: SSTD0402W
Inj Date : 25-OCT-2011 13:07
Operator : SRC: Inst ID: S2.i
Smp Info : SSTD0402W,SSTD0402W
Misc Info : 1,4
Comment   :
Method   : \\Avogadro\Organics\S2.I\111025.B\S2_SOM.m
Meth Date : 26-Oct-2011 09:59 S2.i Quant Type: ISTD
Cal Date : 25-OCT-2011 13:07 Cal File: S2H5057.D
Als bottle: 5 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * (Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vi	2.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	1 Benzaldehyde	77	3.712	3.712	(0.911)	288681	80.0000	73
$	2 Phenol-d5	71	3.754	3.754	(0.921)	212629	80.0000	84
	3 Phenol	94	3.765	3.765	(0.924)	586212	80.0000	85
$	4 bis(2-Chloroethyl)ether-d8	67	3.797	3.797	(0.932)	284521	80.0000	82
	5 bis(2-Chloroethyl)ether	93	3.840	3.840	(0.942)	426615	80.0000	84
$	6 2-Chlorophenol-d4	132	3.883	3.883	(0.953)	174526	80.0000	80
	7 2-Chlorophenol	128	3.894	3.894	(0.955)	184166	80.0000	82
*	8 1,4-Dichlorobenzene-d4	152	4.076	4.076	(1.000)	80213	40.0000	(Q)
	9 2-Methylphenol	108	4.269	4.269	(1.047)	315832	80.0000	83
	10 2,2'-oxybis(1-Chloropropane)	45	4.291	4.291	(1.053)	417484	80.0000	81
$	11 4-Methylphenol-d8	113	4.376	4.376	(1.074)	298167	80.0000	87
	13 Acetophenone	105	4.398	4.398	(1.079)	535739	80.0000	82
	14 N-Nitroso-di-n-propylamine	70	4.398	4.398	(1.079)	263946	80.0000	83(Q)
	12 4-Methylphenol	108	4.398	4.398	(1.079)	337112	80.0000	87
	15 Hexachloroethane	117	4.505	4.505	(1.105)	142345	80.0000	81(Q)
$	16 Nitrobenzene-d5	128	4.527	4.527	(0.881)	96319	80.0000	79(Q)
	17 Nitrobenzene	77	4.548	4.548	(0.885)	518558	80.0000	85
	18 Isophorone	82	4.741	4.741	(0.923)	882963	80.0000	84
$	19 2-Nitrophenol-d4	143	4.805	4.805	(0.935)	117618	80.0000	87
	20 2-Nitrophenol	139	4.816	4.816	(0.937)	110164	80.0000	83
	21 2,4-Dimethylphenol	107	4.848	4.848	(0.944)	391699	80.0000	85(Q)

Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5057.D
Report Date: 26-Oct-2011 09:59

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
	22 bis(2-Chloroethoxy)methane	93	4.923	4.923	(0.958)	494082	80.0000	85
$	23 2,4-Dichlorophenol-d3	165	5.009	5.009	(0.975)	210720	80.0000	85
	24 2,4-Dichlorophenol	162	5.020	5.020	(0.977)	193773	80.0000	85
*	25 Naphthalene-d8	136	5.138	5.138	(1.000)	235234	40.0000	
	26 Naphthalene	128	5.159	5.159	(1.004)	482017	80.0000	80
$	27 4-Chloroaniline-d4	131	5.191	5.191	(1.010)	185866	80.0000	85(Q)
	28 4-Chloroaniline	127	5.191	5.191	(1.010)	205320	80.0000	85
	29 Hexachlorobutadiene	225	5.266	5.267	(1.025)	137369	80.0000	81
	30 Caprolactam	113	5.459	5.460	(1.063)	81646	80.0000	90
	31 4-Chloro-3-methylphenol	107	5.599	5.599	(1.090)	319912	80.0000	87
	32 2-Methylnaphthalene	142	5.738	5.738	(1.117)	341151	80.0000	82
	33 Hexachlorocyclopentadiene	237	5.878	5.878	(0.890)	166402	80.0000	88(Q)
	34 1,2,4,5-Tetrachlorobenzene	216	5.878	5.878	(0.890)	542388	80.0000	80
	35 2,4,6-Trichlorophenol	196	5.963	5.974	(0.903)	154742	80.0000	74
	36 2,4,5-Trichlorophenol	196	5.996	5.996	(0.907)	175026	80.0000	82
	37 1,1'-Biphenyl	154	6.124	6.124	(0.927)	480034	80.0000	80
	38 2-Chloronaphthalene	162	6.135	6.146	(0.929)	402180	80.0000	75
	39 2-Nitroaniline	65	6.221	6.221	(0.942)	200029	80.0000	78
$	40 Dimethylphthalate-d6	166	6.350	6.350	(0.961)	526305	80.0000	85
	41 Dimethylphthalate	163	6.371	6.371	(0.964)	476639	80.0000	82
	42 2,6-Dinitrotoluene	165	6.414	6.414	(0.971)	115289	80.0000	81
$	43 Acenaphthylene-d8	160	6.478	6.478	(0.981)	636418	80.0000	79
	44 Acenaphthylene	152	6.489	6.489	(0.982)	590360	80.0000	80
	45 3-Nitroaniline	138	6.553	6.553	(0.992)	80117	80.0000	85
*	46 Acenaphthene-d10	164	6.607	6.607	(1.000)	169053	40.0000	
	47 Acenaphthene	153	6.628	6.628	(1.003)	370943	80.0000	78
	48 2,4-Dinitrophenol	184	6.639	6.639	(1.005)	62664	80.0000	96(Q)
	52 Dibenzofuran	168	6.768	6.779	(1.024)	551983	80.0000	79
$	49 4-Nitrophenol-d4	143	6.682	6.682	(1.011)	77295	80.0000	86
	50 4-Nitrophenol	109	6.693	6.693	(1.013)	147800	80.0000	85
	51 2,4-Dinitrotoluene	165	6.746	6.757	(1.021)	147926	80.0000	81(Q)
	118 2,3,4,6-Tetrachlorophenol	232	6.875	6.875	(1.041)	126259	80.0000	86
	53 Diethylphthalate	149	6.950	6.950	(1.052)	434279	80.0000	80
$	54 Fluorene-d10	176	7.036	7.036	(1.065)	458533	80.0000	80
	56 Fluorene	166	7.057	7.057	(1.068)	476393	80.0000	83
	55 4-Chlorophenyl-phenylether	204	7.057	7.057	(1.068)	245071	80.0000	81
	57 4-Nitroaniline	138	7.057	7.068	(1.068)	85579	80.0000	82
$	58 4,6-Dinitro-2-methylphenol-d2	200	7.079	7.090	(0.904)	97757	80.0000	85(Q)
	59 4,6-Dinitro-2-methylphenol	198	7.089	7.090	(0.906)	96645	80.0000	86(Q)
	60 N-Nitrosodiphenylamine	169	7.143	7.154	(0.912)	357175	80.0000	80
	61 4-Bromophenyl-phenylether	248	7.454	7.465	(0.952)	125318	80.0000	79
	62 Hexachlorobenzene	284	7.518	7.529	(0.960)	133889	80.0000	79
	63 Atrazine	200	7.583	7.583	(0.969)	144690	80.0000	90
	64 Pentachlorophenol	266	7.679	7.679	(0.981)	78593	80.0000	95
*	65 Phenanthrene-d10	188	7.829	7.840	(1.000)	293271	40.0000	
	66 Phenanthrene	178	7.851	7.862	(1.003)	666621	80.0000	81
$	67 Anthracene-d10	188	7.883	7.883	(1.007)	693154	80.0000	83
	68 Anthracene	178	7.894	7.894	(1.008)	686895	80.0000	82
	117 Carbazole	167	8.022	8.022	(1.025)	567776	80.0000	84
	70 Di-n-butylphthalate	149	8.301	8.312	(1.060)	624097	80.0000	86
	71 Fluoranthene	202	8.848	8.859	(1.130)	735264	80.0000	87
$	72 Pyrene-d10	212	9.020	9.041	(0.888)	551098	80.0000	74
	73 Pyrene	202	9.041	9.063	(0.890)	739941	80.0000	78
	74 Butylbenzylphthalate	149	9.577	9.620	(0.943)	248048	80.0000	85

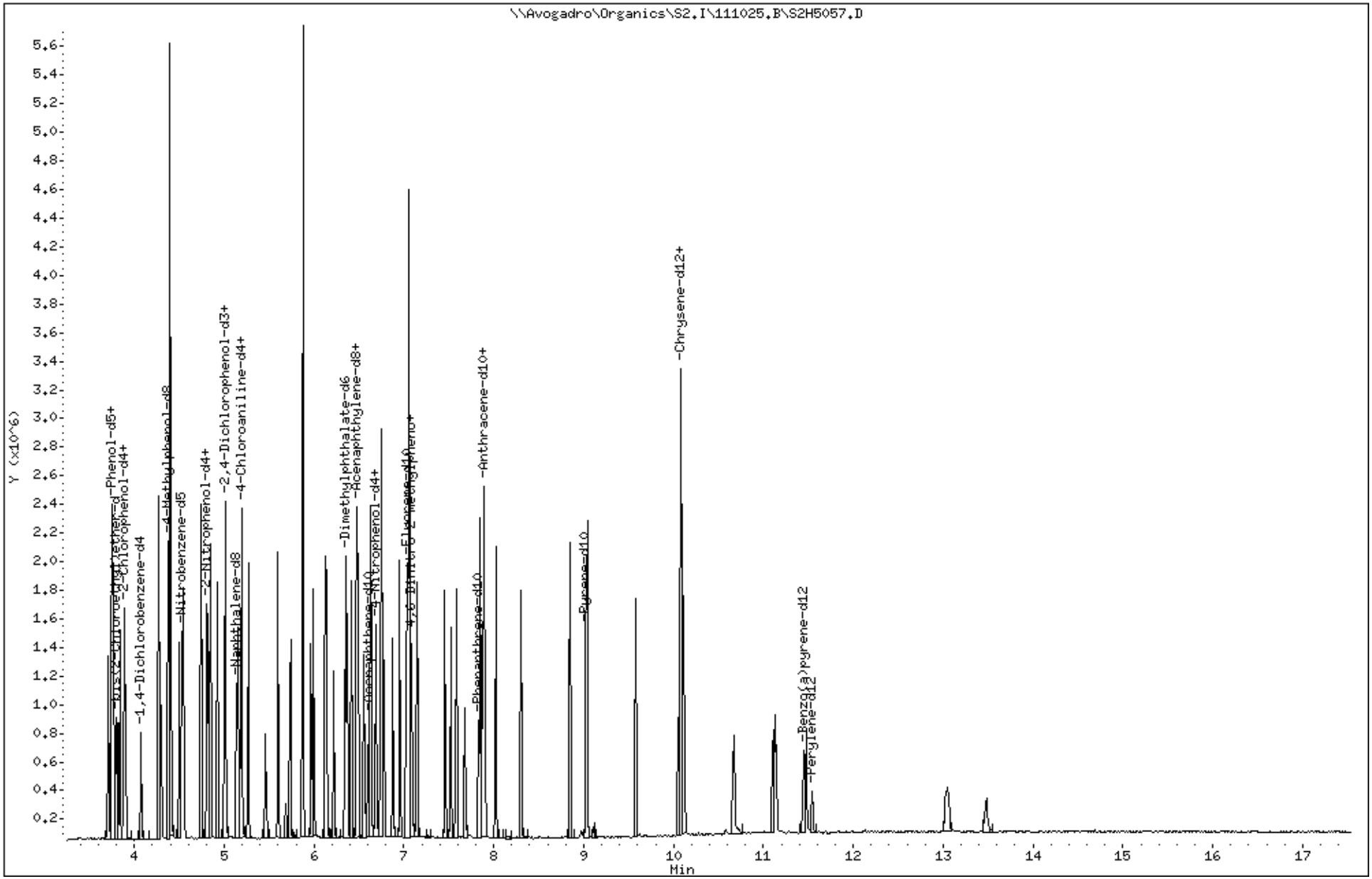
Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5057.D
Report Date: 26-Oct-2011 09:59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
75	3,3'-Dichlorobenzidine	252	10.049	10.114	(0.989)	156205	80.0000	90
76	Benzo(a)anthracene	228	10.081	10.146	(0.993)	567091	80.0000	81(H)
* 77	Chrysene-d12	240	10.092	10.156	(1.000)	235322	40.0000	(QH)
78	Chrysene	228	10.114	10.178	(0.996)	494156	80.0000	80(H)
79	bis(2-Ethylhexyl)phthalate	149	10.081	10.146	(0.993)	295783	80.0000	83
80	Di-n-octylphthalate	149	10.671	10.757	(0.925)	431178	80.0000	88
81	Benzo(b)fluoranthene	252	11.111	11.197	(0.963)	399407	80.0000	92
82	Benzo(k)fluoranthene	252	11.132	11.218	(0.965)	397379	80.0000	79
$ 83	Benzo(a)pyrene-d12	264	11.443	11.540	(0.992)	279187	80.0000	85
84	Benzo(a)pyrene	252	11.475	11.572	(0.994)	328830	80.0000	86
* 85	Perylene-d12	264	11.540	11.636	(1.000)	134320	40.0000	
86	Indeno(1,2,3-cd)pyrene	276	13.030	13.127	(1.129)	243524	80.0000	83
87	Dibenzo(a,h)anthracene	278	13.052	13.159	(1.131)	204038	80.0000	84
88	Benzo(g,h,i)perylene	276	13.481	13.588	(1.168)	204085	80.0000	84

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5057.D
Date : 25-OCT-2011 13:07
Client ID: SSTD0402W
Instrument: S2.i
Sample Info: SSTD0402W,SSTD0402W
Volume Injected (uL): 2.0
Operator: SRC:
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8635.D
Report Date: 11-Nov-2011 14:02

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8635.D
Lab Smp Id: SSTD0204Q Client Smp ID: SSTD0204Q
Inj Date : 10-NOV-2011 16:28
Operator : MMS   SRC: MMS Inst ID: S4.i
Smp Info : SSTD0204Q,SSTD0204Q
Misc Info : 2,3
Comment   :
Method   : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:02 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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	3.047	3.047	(0.905)	85549	40.0000	46
$	2 Phenol-d5	71	3.037	3.037	(0.902)	65418	40.0000	36
	3 Phenol	94	3.047	3.047	(0.905)	104726	40.0000	40(Q)
$	4 bis(2-Chloroethyl)ether-d8	67	3.099	3.099	(0.920)	49454	40.0000	37
	5 bis(2-Chloroethyl)ether	93	3.130	3.130	(0.929)	72632	40.0000	41
$	6 2-Chlorophenol-d4	132	3.192	3.192	(0.948)	79616	40.0000	37
	7 2-Chlorophenol	128	3.213	3.213	(0.954)	82013	40.0000	39
*	8 1,4-Dichlorobenzene-d4	152	3.368	3.368	(1.000)	67410	40.0000	(Q)
	9 2-Methylphenol	108	3.503	3.503	(1.040)	69011	40.0000	38
	10 2,2'-oxybis(1-Chloropropane)	45	3.534	3.534	(1.049)	12332	40.0000	37(Q)
$	11 4-Methylphenol-d8	113	3.606	3.606	(1.071)	77965	40.0000	41
	12 4-Methylphenol	108	3.627	3.627	(1.077)	77131	40.0000	39
	14 N-Nitroso-di-n-propylamine	70	3.648	3.648	(1.083)	77454	40.0000	40(Q)
	13 Acetophenone	105	3.658	3.658	(1.086)	125904	40.0000	40
	15 Hexachloroethane	117	3.772	3.772	(1.120)	44389	40.0000	40(Q)
$	16 Nitrobenzene-d5	128	3.792	3.792	(0.857)	36011	40.0000	37
	17 Nitrobenzene	77	3.803	3.803	(0.860)	125618	40.0000	38
	18 Isophorone	82	3.999	3.999	(0.904)	204395	40.0000	40
$	19 2-Nitrophenol-d4	143	4.072	4.072	(0.920)	48915	40.0000	40
	20 2-Nitrophenol	139	4.082	4.082	(0.923)	49069	40.0000	39
	21 2,4-Dimethylphenol	107	4.082	4.082	(0.923)	107962	40.0000	40(Q)

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8635.D
Report Date: 11-Nov-2011 14:02

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	22 bis(2-Chloroethoxy)methane	93	4.165	4.165	(0.942)	86664	40.0000	39
$	23 2,4-Dichlorophenol-d3	165	4.269	4.269	(0.965)	88245	40.0000	38
	24 2,4-Dichlorophenol	162	4.279	4.279	(0.967)	92579	40.0000	40
*	25 Naphthalene-d8	136	4.424	4.424	(1.000)	229623	40.0000	
	26 Naphthalene	128	4.445	4.445	(1.005)	235506	40.0000	39
$	27 4-Chloroaniline-d4	131	4.465	4.465	(1.009)	96067	40.0000	42(Q)
	28 4-Chloroaniline	127	4.476	4.476	(1.012)	107624	40.0000	46
	29 Hexachlorobutadiene	225	4.558	4.558	(1.030)	86530	40.0000	38
	30 Caprolactam	113	4.765	4.765	(1.077)	31256	40.0000	39
	31 4-Chloro-3-methylphenol	107	4.900	4.900	(1.108)	85663	40.0000	37
	32 2-Methylnaphthalene	142	5.076	5.076	(1.147)	172819	40.0000	37
	33 Hexachlorocyclopentadiene	237	5.231	5.231	(0.860)	104157	40.0000	35(Q)
	34 1,2,4,5-Tetrachlorobenzene	216	5.242	5.242	(0.862)	142999	40.0000	37
	35 2,4,6-Trichlorophenol	196	5.345	5.345	(0.879)	83495	40.0000	35
	36 2,4,5-Trichlorophenol	196	5.376	5.376	(0.884)	101387	40.0000	38
	37 1,1'-Biphenyl	154	5.521	5.521	(0.908)	245385	40.0000	38
	38 2-Chloronaphthalene	162	5.542	5.542	(0.911)	197844	40.0000	37
	39 2-Nitroaniline	65	5.624	5.624	(0.925)	71908	40.0000	37
$	40 Dimethylphthalate-d6	166	5.780	5.780	(0.951)	264349	40.0000	36
	41 Dimethylphthalate	163	5.800	5.800	(0.954)	267301	40.0000	37
	42 2,6-Dinitrotoluene	165	5.863	5.863	(0.964)	63471	40.0000	38
$	43 Acenaphthylene-d8	160	5.935	5.935	(0.976)	298645	40.0000	37
	44 Acenaphthylene	152	5.945	5.945	(0.978)	325985	40.0000	38
	45 3-Nitroaniline	138	6.028	6.028	(0.991)	54982	40.0000	40
*	46 Acenaphthene-d10	164	6.080	6.080	(1.000)	185208	40.0000	
	47 Acenaphthene	153	6.111	6.111	(1.005)	212547	40.0000	38
	48 2,4-Dinitrophenol	184	6.121	6.121	(1.007)	52017	40.0000	37
$	49 4-Nitrophenol-d4	143	6.163	6.163	(1.014)	52396	40.0000	38(Q)
	50 4-Nitrophenol	109	6.173	6.173	(1.015)	89893	40.0000	37
	51 2,4-Dinitrotoluene	165	6.245	6.245	(1.027)	94134	40.0000	36(Q)
	52 Dibenzofuran	168	6.277	6.277	(1.032)	307955	40.0000	38
	118 2,3,4,6-Tetrachlorophenol	232	6.401	6.401	(1.053)	94319	40.0000	38
	53 Diethylphthalate	149	6.484	6.484	(1.066)	281383	40.0000	37
$	54 Fluorene-d10	176	6.587	6.587	(1.083)	239241	40.0000	37
	55 4-Chlorophenyl-phenylether	204	6.608	6.608	(1.087)	174528	40.0000	38
	56 Fluorene	166	6.618	6.618	(1.089)	272399	40.0000	37
	57 4-Nitroaniline	138	6.618	6.618	(1.089)	62551	40.0000	38(Q)
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.639	6.639	(0.882)	65549	40.0000	39
	59 4,6-Dinitro-2-methylphenol	198	6.649	6.649	(0.883)	75806	40.0000	40(Q)
	60 N-Nitrosodiphenylamine	169	6.722	6.722	(0.893)	226419	40.0000	39
	61 4-Bromophenyl-phenylether	248	7.084	7.084	(0.941)	103206	40.0000	39
	62 Hexachlorobenzene	284	7.167	7.167	(0.952)	102324	40.0000	39
	63 Atrazine	200	7.229	7.229	(0.960)	117950	40.0000	40
	64 Pentachlorophenol	266	7.343	7.343	(0.975)	75783	40.0000	40
*	65 Phenanthrene-d10	188	7.529	7.529	(1.000)	422051	40.0000	
	66 Phenanthrene	178	7.560	7.560	(1.004)	441098	40.0000	39
$	67 Anthracene-d10	188	7.591	7.591	(1.008)	449230	40.0000	39
	68 Anthracene	178	7.601	7.601	(1.010)	458775	40.0000	39
	117 Carbazole	167	7.757	7.757	(1.030)	390632	40.0000	38
	70 Di-n-butylphthalate	149	8.077	8.077	(1.073)	491281	40.0000	40
	71 Fluoranthene	202	8.719	8.719	(1.158)	603712	40.0000	38
$	72 Pyrene-d10	212	8.926	8.926	(0.881)	487884	40.0000	40
	73 Pyrene	202	8.947	8.947	(0.883)	616384	40.0000	41
	74 Butylbenzylphthalate	149	9.547	9.547	(0.943)	248231	40.0000	40

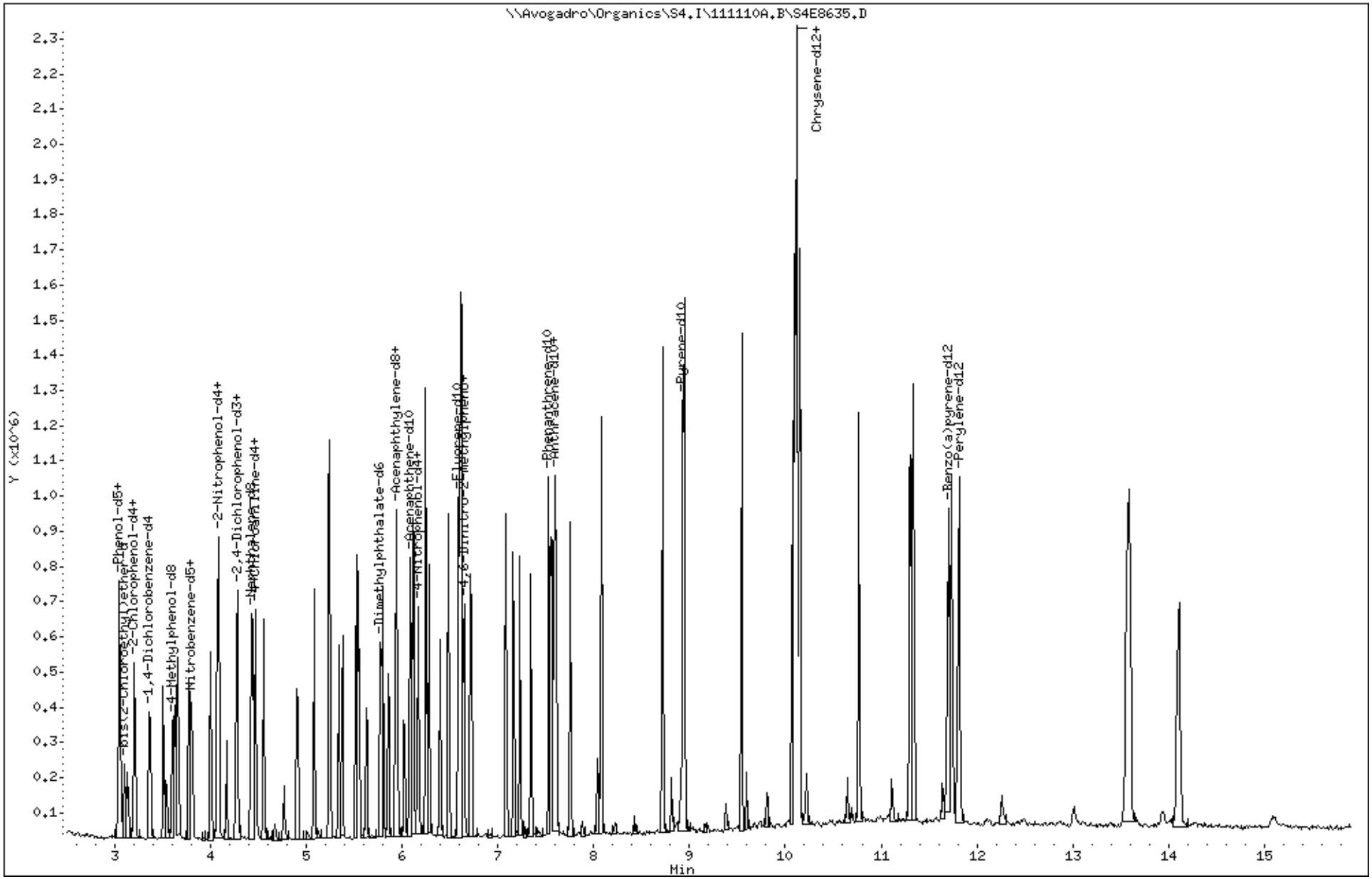
Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8635.D
Report Date: 11-Nov-2011 14:02

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	
	75 3,3'-Dichlorobenzidine	252	10.075	10.075	(0.995)	240833	40.0000	40	
	79 bis(2-Ethylhexyl)phthalate	149	10.096	10.096	(0.997)	370971	40.0000	40	
	76 Benzo(a)anthracene	228	10.116	10.116	(0.999)	681963	40.0000	39	
*	77 Chrysene-d12	240	10.127	10.127	(1.000)	630357	40.0000		(Q)
	78 Chrysene	228	10.148	10.148	(1.002)	689900	40.0000	41	
	80 Di-n-octylphthalate	149	10.769	10.769	(0.912)	611679	40.0000	41	
	81 Benzo(b)fluoranthene	252	11.307	11.307	(0.957)	714546	40.0000	38	
	82 Benzo(k)fluoranthene	252	11.338	11.338	(0.960)	752927	40.0000	39	
$	83 Benzo(a)pyrene-d12	264	11.700	11.700	(0.990)	509242	40.0000	38	
	84 Benzo(a)pyrene	252	11.741	11.741	(0.994)	663444	40.0000	38	
*	85 Perylene-d12	264	11.814	11.814	(1.000)	600411	40.0000		
	86 Indeno(1,2,3-cd)pyrene	276	13.573	13.573	(1.149)	780784	40.0000	37	
	87 Dibenzo(a,h)anthracene	278	13.594	13.594	(1.151)	665922	40.0000	39	
	88 Benzo(g,h,i)perylene	276	14.112	14.112	(1.194)	668697	40.0000	39	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8635.D
Date : 10-NOV-2011 16:28
Client ID: SSTD0204Q
Instrument: S4.i
Sample Info: SSTD0204Q,SSTD0204Q
Volume Injected (uL): 2.0
Operator: MMS SRC: MMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8636.D
Report Date: 11-Nov-2011 14:02

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8636.D
Lab Smp Id: SSTD0054Q Client Smp ID: SSTD0054Q
Inj Date : 10-NOV-2011 16:57
Operator : MMS   SRC: MMS Inst ID: S4.i
Smp Info : SSTD0054Q,SSTD0054Q
Misc Info : 1,1
Comment   :
Method   : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:02 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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	3.050	3.047	(0.908)	24394	10.0000	10
$	2 Phenol-d5	71	3.040	3.037	(0.905)	21622	10.0000	9.5
	3 Phenol	94	3.050	3.047	(0.908)	29925	10.0000	9.2
$	4 bis(2-Chloroethyl)ether-d8	67	3.102	3.099	(0.923)	19229	10.0000	11
	5 bis(2-Chloroethyl)ether	93	3.133	3.130	(0.932)	22044	10.0000	9.9
$	6 2-Chlorophenol-d4	132	3.195	3.192	(0.951)	28599	10.0000	11
	7 2-Chlorophenol	128	3.206	3.213	(0.954)	26494	10.0000	10
*	8 1,4-Dichlorobenzene-d4	152	3.361	3.368	(1.000)	84547	40.0000	(Q)
	9 2-Methylphenol	108	3.506	3.503	(1.043)	23019	10.0000	10
	10 2,2'-oxybis(1-Chloropropane)	45	3.537	3.534	(1.052)	4352	10.0000	11(Q)
$	11 4-Methylphenol-d8	113	3.599	3.606	(1.071)	22900	10.0000	9.5
	12 4-Methylphenol	108	3.620	3.627	(1.077)	23898	10.0000	9.7
	14 N-Nitroso-di-n-propylamine	70	3.640	3.648	(1.083)	24135	10.0000	10(Q)
	13 Acetophenone	105	3.661	3.658	(1.089)	36261	10.0000	9.2
	15 Hexachloroethane	117	3.775	3.772	(1.123)	13684	10.0000	9.8(Q)
$	16 Nitrobenzene-d5	128	3.796	3.792	(0.857)	12012	10.0000	10
	17 Nitrobenzene	77	3.806	3.803	(0.860)	38788	10.0000	10
	18 Isophorone	82	4.003	3.999	(0.904)	65823	10.0000	11
$	19 2-Nitrophenol-d4	143	4.065	4.072	(0.918)	14974	10.0000	10
	20 2-Nitrophenol	139	4.075	4.082	(0.921)	14676	10.0000	9.9
	21 2,4-Dimethylphenol	107	4.085	4.082	(0.923)	32240	10.0000	9.9(Q)

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8636.D
Report Date: 11-Nov-2011 14:02

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	22 bis(2-Chloroethoxy)methane	93	4.168	4.165	(0.942)	28516	10.0000	11
$	23 2,4-Dichlorophenol-d3	165	4.272	4.269	(0.965)	25426	10.0000	9.3
	24 2,4-Dichlorophenol	162	4.282	4.279	(0.967)	28529	10.0000	10
*	25 Naphthalene-d8	136	4.427	4.424	(1.000)	273480	40.0000	
	26 Naphthalene	128	4.448	4.445	(1.005)	76313	10.0000	11
$	27 4-Chloroaniline-d4	131	4.468	4.465	(1.009)	27037	10.0000	10(Q)
	28 4-Chloroaniline	127	4.468	4.476	(1.009)	22934	10.0000	8.2
	29 Hexachlorobutadiene	225	4.551	4.558	(1.028)	27840	10.0000	10
	30 Caprolactam	113	4.758	4.765	(1.075)	10154	10.0000	11
	31 4-Chloro-3-methylphenol	107	4.903	4.900	(1.108)	30130	10.0000	11
	32 2-Methylnaphthalene	142	5.079	5.076	(1.147)	55421	10.0000	10
	33 Hexachlorocyclopentadiene	237	5.234	5.231	(0.860)	37579	10.0000	11(Q)
	34 1,2,4,5-Tetrachlorobenzene	216	5.245	5.242	(0.862)	46757	10.0000	10
	35 2,4,6-Trichlorophenol	196	5.338	5.345	(0.878)	30099	10.0000	11
	36 2,4,5-Trichlorophenol	196	5.369	5.376	(0.883)	29962	10.0000	9.5(a)
	37 1,1'-Biphenyl	154	5.514	5.521	(0.906)	77602	10.0000	10
	38 2-Chloronaphthalene	162	5.545	5.542	(0.912)	66746	10.0000	10
	39 2-Nitroaniline	65	5.628	5.624	(0.925)	26592	10.0000	12
$	40 Dimethylphthalate-d6	166	5.772	5.780	(0.949)	85761	10.0000	9.9
	41 Dimethylphthalate	163	5.793	5.800	(0.952)	88760	10.0000	10
	42 2,6-Dinitrotoluene	165	5.855	5.863	(0.963)	17605	10.0000	9.0
$	43 Acenaphthylene-d8	160	5.928	5.935	(0.974)	100269	10.0000	10
	44 Acenaphthylene	152	5.948	5.945	(0.978)	103384	10.0000	10
	45 3-Nitroaniline	138	6.021	6.028	(0.990)	16426	10.0000	10
*	46 Acenaphthene-d10	164	6.083	6.080	(1.000)	220109	40.0000	
	47 Acenaphthene	153	6.114	6.111	(1.005)	66613	10.0000	10
	48 2,4-Dinitrophenol	184	6.124	6.121	(1.007)	13547	10.0000	8.2(aQ)
$	49 4-Nitrophenol-d4	143	6.166	6.163	(1.014)	15462	10.0000	9.4
	50 4-Nitrophenol	109	6.166	6.173	(1.014)	26203	10.0000	9.1(a)
	51 2,4-Dinitrotoluene	165	6.249	6.245	(1.027)	31406	10.0000	10(Q)
	52 Dibenzofuran	168	6.280	6.277	(1.032)	99750	10.0000	10
	118 2,3,4,6-Tetrachlorophenol	232	6.393	6.401	(1.051)	28280	10.0000	9.6
	53 Diethylphthalate	149	6.476	6.484	(1.065)	89573	10.0000	10
$	54 Fluorene-d10	176	6.580	6.587	(1.082)	79029	10.0000	10
	55 4-Chlorophenyl-phenylether	204	6.600	6.608	(1.085)	52519	10.0000	9.6
	56 Fluorene	166	6.611	6.618	(1.087)	90878	10.0000	10
	57 4-Nitroaniline	138	6.611	6.618	(1.087)	20888	10.0000	11
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.642	6.639	(0.882)	22705	10.0000	11
	59 4,6-Dinitro-2-methylphenol	198	6.642	6.649	(0.882)	25111	10.0000	11(aQ)
	60 N-Nitrosodiphenylamine	169	6.714	6.722	(0.891)	78575	10.0000	11
	61 4-Bromophenyl-phenylether	248	7.087	7.084	(0.941)	34309	10.0000	11
	62 Hexachlorobenzene	284	7.159	7.167	(0.951)	37795	10.0000	12
	63 Atrazine	200	7.221	7.229	(0.959)	36455	10.0000	10
	64 Pentachlorophenol	266	7.346	7.343	(0.975)	20753	10.0000	8.8(aQ)
*	65 Phenanthrene-d10	188	7.532	7.529	(1.000)	517224	40.0000	
	66 Phenanthrene	178	7.553	7.560	(1.003)	150143	10.0000	11
$	67 Anthracene-d10	188	7.584	7.591	(1.007)	156232	10.0000	11
	68 Anthracene	178	7.604	7.601	(1.010)	153913	10.0000	11
	117 Carbazole	167	7.749	7.757	(1.029)	133821	10.0000	11
	70 Di-n-butylphthalate	149	8.081	8.077	(1.073)	153702	10.0000	10
	71 Fluoranthene	202	8.722	8.719	(1.158)	210230	10.0000	11
$	72 Pyrene-d10	212	8.929	8.926	(0.882)	166628	10.0000	10
	73 Pyrene	202	8.950	8.947	(0.884)	211164	10.0000	11
	74 Butylbenzylphthalate	149	9.540	9.547	(0.943)	85607	10.0000	10

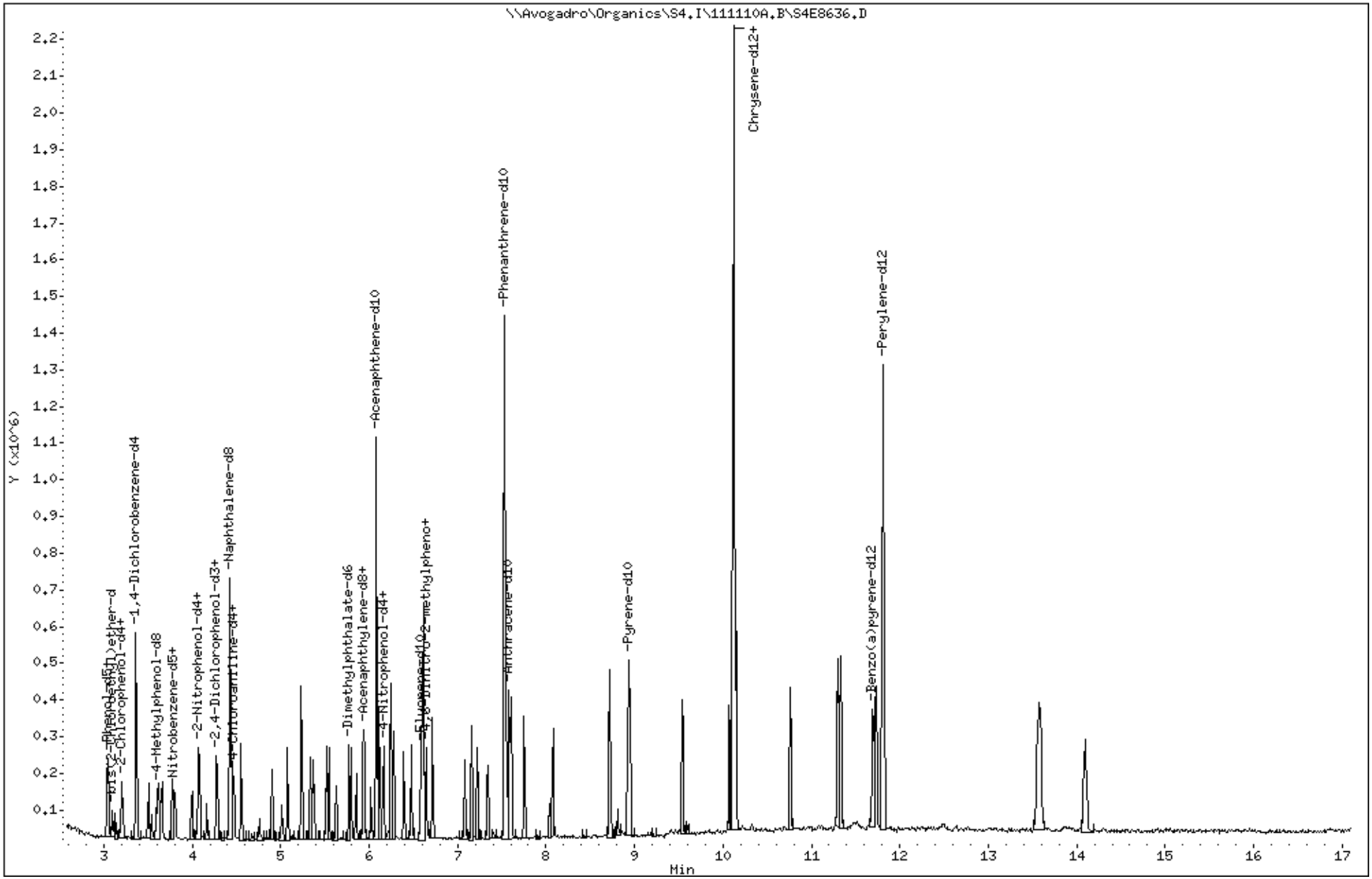
Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8636.D
Report Date: 11-Nov-2011 14:02

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
75	3,3'-Dichlorobenzidine	252	10.068	10.075	(0.995)	87088	10.0000	11
79	bis(2-Ethylhexyl)phthalate	149	10.099	10.096	(0.998)	129264	10.0000	11
76	Benzo(a)anthracene	228	10.109	10.116	(0.999)	238332	10.0000	10
* 77	Chrysene-d12	240	10.120	10.127	(1.000)	834986	40.0000	(Q)
78	Chrysene	228	10.151	10.148	(1.003)	228067	10.0000	10
80	Di-n-octylphthalate	149	10.761	10.769	(0.911)	212035	10.0000	10
81	Benzo(b)fluoranthene	252	11.299	11.307	(0.956)	258144	10.0000	10
82	Benzo(k)fluoranthene	252	11.330	11.338	(0.959)	302454	10.0000	11
$ 83	Benzo(a)pyrene-d12	264	11.693	11.700	(0.989)	190171	10.0000	10
84	Benzo(a)pyrene	252	11.734	11.741	(0.993)	256060	10.0000	11
* 85	Perylene-d12	264	11.817	11.814	(1.000)	830814	40.0000	
86	Indeno(1,2,3-cd)pyrene	276	13.566	13.573	(1.148)	301073	10.0000	10
87	Dibenzo(a,h)anthracene	278	13.587	13.594	(1.150)	241518	10.0000	10
88	Benzo(g,h,i)perylene	276	14.094	14.112	(1.193)	243230	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\S4.I\111110A.B\S4E8636.D
Date : 10-NOV-2011 16:57
Client ID: SSTD0054Q
Instrument: S4.i
Sample Info: SSTD0054Q,SSTD0054Q
Volume Injected (uL): 2.0
Operator: MMS SRC: MMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8637.D
Report Date: 11-Nov-2011 14:03

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8637.D
Lab Smp Id: SSTD0804Q Client Smp ID: SSTD0804Q
Inj Date : 10-NOV-2011 17:21
Operator : MMS   SRC: MMS Inst ID: S4.i
Smp Info : SSTD0804Q,SSTD0804Q
Misc Info : 1,5
Comment   :
Method   : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:02 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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	3.061	3.047	(0.908)	216951	160.000	120
$	2 Phenol-d5	71	3.050	3.037	(0.905)	298855	160.000	170(A)
	3 Phenol	94	3.061	3.047	(0.908)	426468	160.000	170(A)
$	4 bis(2-Chloroethyl)ether-d8	67	3.112	3.099	(0.923)	205887	160.000	160
	5 bis(2-Chloroethyl)ether	93	3.144	3.130	(0.932)	277595	160.000	160(A)
$	6 2-Chlorophenol-d4	132	3.206	3.192	(0.951)	336527	160.000	160(A)
	7 2-Chlorophenol	128	3.216	3.213	(0.954)	331977	160.000	160(A)
*	8 1,4-Dichlorobenzene-d4	152	3.371	3.368	(1.000)	65358	40.0000	(Q)
	9 2-Methylphenol	108	3.516	3.503	(1.043)	289694	160.000	160(A)
	10 2,2'-oxybis(1-Chloropropane)	45	3.547	3.534	(1.052)	52721	160.000	170(AQ)
$	11 4-Methylphenol-d8	113	3.609	3.606	(1.071)	306197	160.000	160(A)
	12 4-Methylphenol	108	3.640	3.627	(1.080)	321453	160.000	170(A)
	14 N-Nitroso-di-n-propylamine	70	3.661	3.648	(1.086)	297863	160.000	160(Q)
	13 Acetophenone	105	3.671	3.658	(1.089)	497615	160.000	160(A)
	15 Hexachloroethane	117	3.775	3.772	(1.120)	175792	160.000	160(AQ)
$	16 Nitrobenzene-d5	128	3.796	3.792	(0.857)	155179	160.000	170(AQ)
	17 Nitrobenzene	77	3.816	3.803	(0.862)	508552	160.000	160
	18 Isophorone	82	4.013	3.999	(0.906)	773989	160.000	160
$	19 2-Nitrophenol-d4	143	4.075	4.072	(0.921)	194183	160.000	160(A)
	20 2-Nitrophenol	139	4.085	4.082	(0.923)	198978	160.000	160(A)
	21 2,4-Dimethylphenol	107	4.085	4.082	(0.923)	443174	160.000	170(AQ)

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8637.D
Report Date: 11-Nov-2011 14:03

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	22 bis(2-Chloroethoxy)methane	93	4.179	4.165	(0.944)	343199	160.000	160
$	23 2,4-Dichlorophenol-d3	165	4.282	4.269	(0.967)	370554	160.000	170(A)
	24 2,4-Dichlorophenol	162	4.292	4.279	(0.970)	354839	160.000	160
*	25 Naphthalene-d8	136	4.427	4.424	(1.000)	223998	40.0000	
	26 Naphthalene	128	4.448	4.445	(1.005)	934233	160.000	160
$	27 4-Chloroaniline-d4	131	4.468	4.465	(1.009)	340530	160.000	150(Q)
	28 4-Chloroaniline	127	4.479	4.476	(1.012)	371200	160.000	160(A)
	29 Hexachlorobutadiene	225	4.551	4.558	(1.028)	355475	160.000	160
	30 Caprolactam	113	4.789	4.765	(1.082)	117218	160.000	150
	31 4-Chloro-3-methylphenol	107	4.913	4.900	(1.110)	364659	160.000	160(A)
	32 2-Methylnaphthalene	142	5.079	5.076	(1.147)	725301	160.000	160
	33 Hexachlorocyclopentadiene	237	5.234	5.231	(0.860)	460765	160.000	160(AQ)
	34 1,2,4,5-Tetrachlorobenzene	216	5.245	5.242	(0.862)	570256	160.000	160
	35 2,4,6-Trichlorophenol	196	5.348	5.345	(0.879)	372101	160.000	160(A)
	36 2,4,5-Trichlorophenol	196	5.379	5.376	(0.884)	411465	160.000	160(A)
	37 1,1'-Biphenyl	154	5.524	5.521	(0.908)	1001874	160.000	160(A)
	38 2-Chloronaphthalene	162	5.545	5.542	(0.912)	799091	160.000	160
	39 2-Nitroaniline	65	5.638	5.624	(0.927)	286916	160.000	160
$	40 Dimethylphthalate-d6	166	5.783	5.780	(0.951)	1063438	160.000	150
	41 Dimethylphthalate	163	5.804	5.800	(0.954)	1086151	160.000	160
	42 2,6-Dinitrotoluene	165	5.866	5.863	(0.964)	251996	160.000	160(A)
$	43 Acenaphthylene-d8	160	5.938	5.935	(0.976)	1195403	160.000	160
	44 Acenaphthylene	152	5.948	5.945	(0.978)	1263964	160.000	160
	45 3-Nitroaniline	138	6.031	6.028	(0.991)	174449	160.000	140
*	46 Acenaphthene-d10	164	6.083	6.080	(1.000)	175533	40.0000	
	47 Acenaphthene	153	6.114	6.111	(1.005)	829534	160.000	160
	48 2,4-Dinitrophenol	184	6.124	6.121	(1.007)	207949	160.000	160
$	49 4-Nitrophenol-d4	143	6.176	6.163	(1.015)	200628	160.000	150
	50 4-Nitrophenol	109	6.187	6.173	(1.017)	354884	160.000	150
	51 2,4-Dinitrotoluene	165	6.259	6.245	(1.029)	360104	160.000	150(Q)
	52 Dibenzofuran	168	6.290	6.277	(1.034)	1204577	160.000	150
	118 2,3,4,6-Tetrachlorophenol	232	6.404	6.401	(1.053)	370713	160.000	160
	53 Diethylphthalate	149	6.487	6.484	(1.066)	1083272	160.000	150
$	54 Fluorene-d10	176	6.590	6.587	(1.083)	947201	160.000	150
	55 4-Chlorophenyl-phenylether	204	6.611	6.608	(1.087)	683812	160.000	160
	56 Fluorene	166	6.621	6.618	(1.088)	1064201	160.000	150
	57 4-Nitroaniline	138	6.632	6.618	(1.090)	204125	160.000	130
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.652	6.639	(0.883)	278634	160.000	160(A)
	59 4,6-Dinitro-2-methylphenol	198	6.663	6.649	(0.885)	296889	160.000	160(Q)
	60 N-Nitrosodiphenylamine	169	6.725	6.722	(0.893)	906954	160.000	160
	61 4-Bromophenyl-phenylether	248	7.087	7.084	(0.941)	414696	160.000	160
	62 Hexachlorobenzene	284	7.170	7.167	(0.952)	412100	160.000	160
	63 Atrazine	200	7.242	7.229	(0.962)	470200	160.000	160(A)
	64 Pentachlorophenol	266	7.346	7.343	(0.975)	302196	160.000	160
*	65 Phenanthrene-d10	188	7.532	7.529	(1.000)	424419	40.0000	
	66 Phenanthrene	178	7.563	7.560	(1.004)	1715034	160.000	150
$	67 Anthracene-d10	188	7.594	7.591	(1.008)	1748885	160.000	150
	68 Anthracene	178	7.615	7.601	(1.011)	1773530	160.000	150
	117 Carbazole	167	7.760	7.757	(1.030)	1524715	160.000	150
	70 Di-n-butylphthalate	149	8.081	8.077	(1.073)	1896247	160.000	150
	71 Fluoranthene	202	8.722	8.719	(1.158)	2395765	160.000	150
$	72 Pyrene-d10	212	8.940	8.926	(0.883)	1972189	160.000	160
	73 Pyrene	202	8.950	8.947	(0.884)	2402856	160.000	150
	74 Butylbenzylphthalate	149	9.550	9.547	(0.943)	1042908	160.000	160(A)

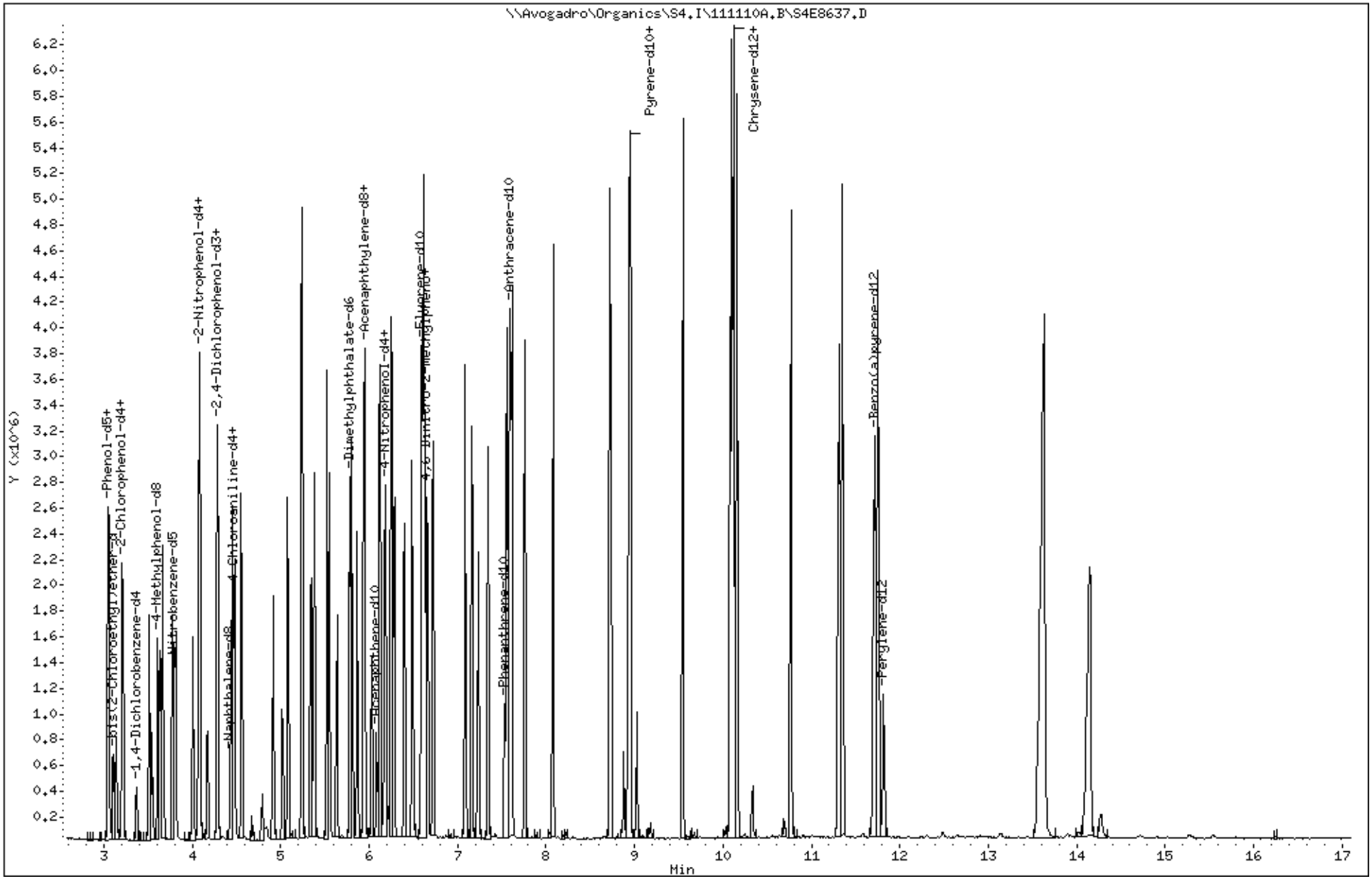
Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8637.D
Report Date: 11-Nov-2011 14:03

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
	75 3,3'-Dichlorobenzidine	252	10.078	10.075	(0.995)	783611	160.000	130
	79 bis(2-Ethylhexyl)phthalate	149	10.099	10.096	(0.997)	1489798	160.000	160
	76 Benzo(a)anthracene	228	10.120	10.116	(0.999)	2749303	160.000	150
*	77 Chrysene-d12	240	10.130	10.127	(1.000)	650266	40.0000	(Q)
	78 Chrysene	228	10.161	10.148	(1.003)	2522057	160.000	150
	80 Di-n-octylphthalate	149	10.772	10.769	(0.912)	2468484	160.000	160
	81 Benzo(b)fluoranthene	252	11.310	11.307	(0.957)	3083589	160.000	160
	82 Benzo(k)fluoranthene	252	11.351	11.338	(0.961)	2962292	160.000	150
$	83 Benzo(a)pyrene-d12	264	11.714	11.700	(0.991)	2229826	160.000	160(A)
	84 Benzo(a)pyrene	252	11.755	11.741	(0.995)	2747813	160.000	150
*	85 Perylene-d12	264	11.817	11.814	(1.000)	626429	40.0000	
	86 Indeno(1,2,3-cd)pyrene	276	13.597	13.573	(1.151)	3452401	160.000	160
	87 Dibenzo(a,h)anthracene	278	13.628	13.594	(1.153)	2829274	160.000	160
	88 Benzo(g,h,i)perylene	276	14.146	14.112	(1.197)	2859514	160.000	160

QC Flag Legend

A - Target compound detected but, quantitated amount
exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8637.D
Date : 10-NOV-2011 17:21
Client ID: SSTD0804Q
Instrument: S4.i
Sample Info: SSTD0804Q,SSTD0804Q
Volume Injected (uL): 2.0
Operator: MMS SRC: MMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8638.D
Report Date: 11-Nov-2011 14:03

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8638.D
Lab Smp Id: SSTD0104Q Client Smp ID: SSTD0104Q
Inj Date : 10-NOV-2011 17:45
Operator : MMS   SRC: MMS Inst ID: S4.i
Smp Info : SSTD0104Q,SSTD0104Q
Misc Info : 1,2
Comment   :
Method   : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:02 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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	3.061	3.047	(0.908)	22882	20.0000	18
$ 2	Phenol-d5	71	3.040	3.037	(0.902)	23012	20.0000	18
3	Phenol	94	3.050	3.047	(0.905)	30855	20.0000	17
$ 4	bis(2-Chloroethyl)ether-d8	67	3.102	3.099	(0.920)	16359	20.0000	17
5	bis(2-Chloroethyl)ether	93	3.143	3.130	(0.932)	21102	20.0000	17
$ 6	2-Chlorophenol-d4	132	3.206	3.192	(0.951)	25629	20.0000	17
7	2-Chlorophenol	128	3.216	3.213	(0.954)	27047	20.0000	18
* 8	1,4-Dichlorobenzene-d4	152	3.371	3.368	(1.000)	47359	40.0000	(Q)
9	2-Methylphenol	108	3.506	3.503	(1.040)	21479	20.0000	17
10	2,2'-oxybis(1-Chloropropane)	45	3.537	3.534	(1.049)	4115	20.0000	18
$ 11	4-Methylphenol-d8	113	3.599	3.606	(1.068)	21833	20.0000	16(Q)
12	4-Methylphenol	108	3.630	3.627	(1.077)	24286	20.0000	18
14	N-Nitroso-di-n-propylamine	70	3.651	3.648	(1.083)	24015	20.0000	18(Q)
13	Acetophenone	105	3.661	3.658	(1.086)	39653	20.0000	18
15	Hexachloroethane	117	3.775	3.772	(1.120)	14584	20.0000	19(Q)
$ 16	Nitrobenzene-d5	128	3.795	3.792	(0.857)	11297	20.0000	18(Q)
17	Nitrobenzene	77	3.806	3.803	(0.860)	43692	20.0000	20
18	Isophorone	82	4.002	3.999	(0.904)	59203	20.0000	18
$ 19	2-Nitrophenol-d4	143	4.075	4.072	(0.921)	15413	20.0000	19
20	2-Nitrophenol	139	4.085	4.082	(0.923)	15665	20.0000	19(Q)
21	2,4-Dimethylphenol	107	4.085	4.082	(0.923)	32604	20.0000	18(Q)

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8638.D
Report Date: 11-Nov-2011 14:03

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	22 bis(2-Chloroethoxy)methane	93	4.168	4.165	(0.942)	29656	20.0000	20
$	23 2,4-Dichlorophenol-d3	165	4.272	4.269	(0.965)	30332	20.0000	20
	24 2,4-Dichlorophenol	162	4.282	4.279	(0.967)	27133	20.0000	18
*	25 Naphthalene-d8	136	4.427	4.424	(1.000)	150257	40.0000	
	26 Naphthalene	128	4.448	4.445	(1.005)	77917	20.0000	20
$	27 4-Chloroaniline-d4	131	4.468	4.465	(1.009)	25453	20.0000	17(Q)
	28 4-Chloroaniline	127	4.479	4.476	(1.012)	27274	20.0000	18
	29 Hexachlorobutadiene	225	4.561	4.558	(1.030)	30158	20.0000	20
	30 Caprolactam	113	4.758	4.765	(1.075)	9161	20.0000	17
	31 4-Chloro-3-methylphenol	107	4.903	4.900	(1.108)	26247	20.0000	17
	32 2-Methylnaphthalene	142	5.079	5.076	(1.147)	62558	20.0000	21
	33 Hexachlorocyclopentadiene	237	5.234	5.231	(0.860)	36439	20.0000	21(Q)
	34 1,2,4,5-Tetrachlorobenzene	216	5.245	5.242	(0.862)	49106	20.0000	21
	35 2,4,6-Trichlorophenol	196	5.338	5.345	(0.877)	30091	20.0000	21
	36 2,4,5-Trichlorophenol	196	5.369	5.376	(0.883)	31510	20.0000	20
	37 1,1'-Biphenyl	154	5.514	5.521	(0.906)	76391	20.0000	20
	38 2-Chloronaphthalene	162	5.545	5.542	(0.912)	67818	20.0000	21
	39 2-Nitroaniline	65	5.627	5.624	(0.925)	23062	20.0000	20
$	40 Dimethylphthalate-d6	166	5.772	5.780	(0.949)	95915	20.0000	22
	41 Dimethylphthalate	163	5.793	5.800	(0.952)	79887	20.0000	18
	42 2,6-Dinitrotoluene	165	5.855	5.863	(0.963)	19914	20.0000	20
$	43 Acenaphthylene-d8	160	5.928	5.935	(0.974)	98871	20.0000	20
	44 Acenaphthylene	152	5.948	5.945	(0.978)	101473	20.0000	20
	45 3-Nitroaniline	138	6.021	6.028	(0.990)	16576	20.0000	20
*	46 Acenaphthene-d10	164	6.083	6.080	(1.000)	111252	40.0000	
	47 Acenaphthene	153	6.114	6.111	(1.005)	67972	20.0000	20
	48 2,4-Dinitrophenol	184	6.124	6.121	(1.007)	15333	20.0000	18(Q)
$	49 4-Nitrophenol-d4	143	6.155	6.163	(1.012)	16242	20.0000	20
	50 4-Nitrophenol	109	6.166	6.173	(1.014)	26971	20.0000	18
	51 2,4-Dinitrotoluene	165	6.248	6.245	(1.027)	31822	20.0000	21(Q)
	52 Dibenzofuran	168	6.280	6.277	(1.032)	100663	20.0000	20
	118 2,3,4,6-Tetrachlorophenol	232	6.393	6.401	(1.051)	29117	20.0000	20
	53 Diethylphthalate	149	6.476	6.484	(1.065)	90231	20.0000	20
$	54 Fluorene-d10	176	6.580	6.587	(1.082)	80672	20.0000	21
	55 4-Chlorophenyl-phenylether	204	6.600	6.608	(1.085)	55424	20.0000	20
	56 Fluorene	166	6.611	6.618	(1.087)	89446	20.0000	20
	57 4-Nitroaniline	138	6.611	6.618	(1.087)	19498	20.0000	20(Q)
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.642	6.639	(0.882)	20769	20.0000	19
	59 4,6-Dinitro-2-methylphenol	198	6.642	6.649	(0.882)	24872	20.0000	20(Q)
	60 N-Nitrosodiphenylamine	169	6.714	6.722	(0.891)	75186	20.0000	20
	61 4-Bromophenyl-phenylether	248	7.087	7.084	(0.941)	34110	20.0000	20
	62 Hexachlorobenzene	284	7.159	7.167	(0.951)	32201	20.0000	19
	63 Atrazine	200	7.221	7.229	(0.959)	34730	20.0000	18
	64 Pentachlorophenol	266	7.346	7.343	(0.975)	24417	20.0000	20
*	65 Phenanthrene-d10	188	7.532	7.529	(1.000)	274699	40.0000	
	66 Phenanthrene	178	7.553	7.560	(1.003)	142484	20.0000	20
$	67 Anthracene-d10	188	7.584	7.591	(1.007)	148925	20.0000	20
	68 Anthracene	178	7.604	7.601	(1.010)	150804	20.0000	20
	117 Carbazole	167	7.749	7.757	(1.029)	136644	20.0000	21
	70 Di-n-butylphthalate	149	8.080	8.077	(1.073)	153827	20.0000	19
	71 Fluoranthene	202	8.722	8.719	(1.158)	211864	20.0000	20
$	72 Pyrene-d10	212	8.929	8.926	(0.882)	181667	20.0000	21
	73 Pyrene	202	8.950	8.947	(0.884)	212575	20.0000	20
	74 Butylbenzylphthalate	149	9.540	9.547	(0.943)	83890	20.0000	19

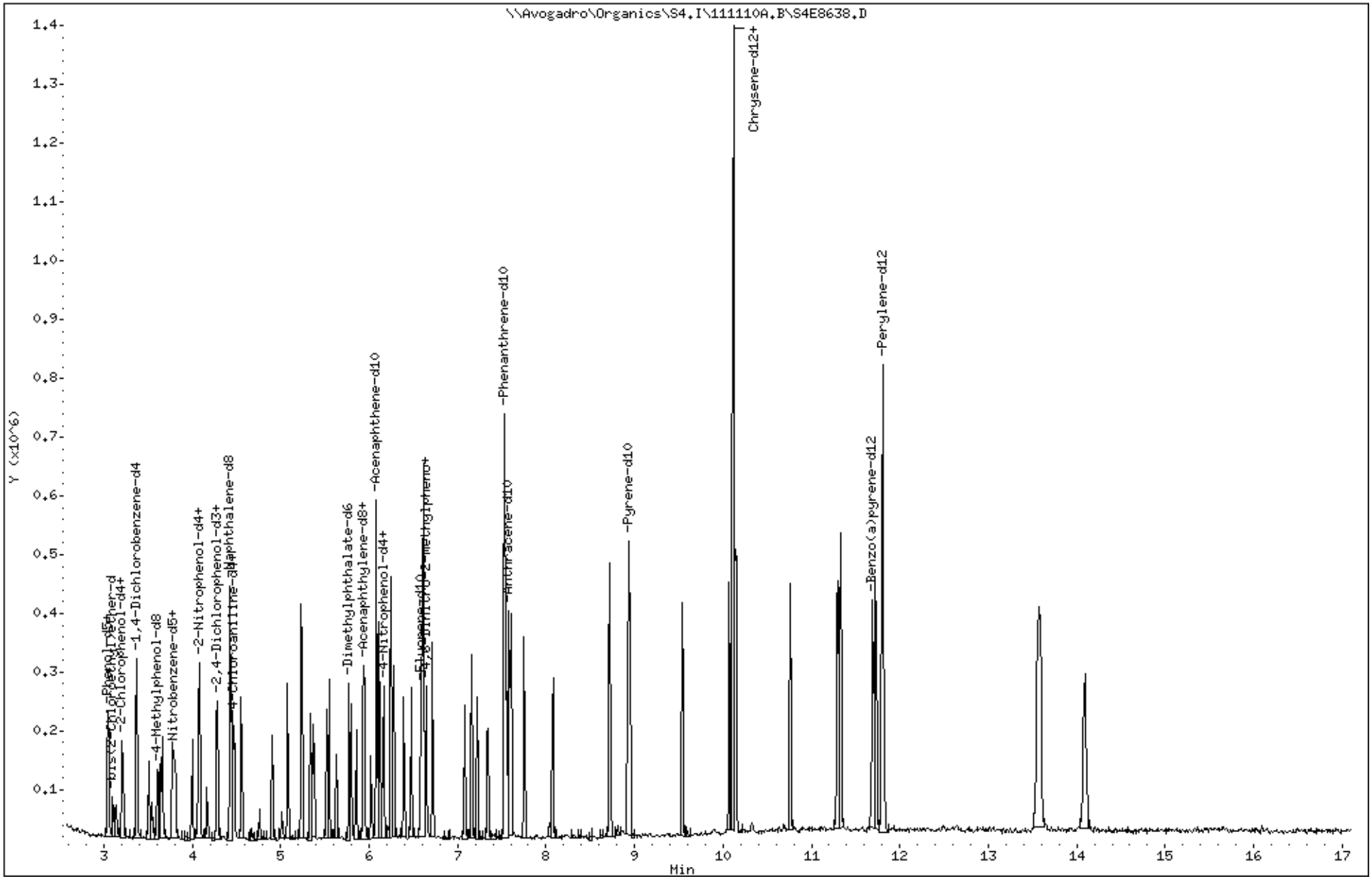
Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8638.D
Report Date: 11-Nov-2011 14:03

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
	75 3,3'-Dichlorobenzidine	252	10.068	10.075	(0.995)	91486	20.0000	21
	79 bis(2-Ethylhexyl)phthalate	149	10.099	10.096	(0.998)	125420	20.0000	19
	76 Benzo(a)anthracene	228	10.109	10.116	(0.999)	250831	20.0000	20
*	77 Chrysene-d12	240	10.119	10.127	(1.000)	448836	40.0000	(Q)
	78 Chrysene	228	10.151	10.148	(1.003)	244524	20.0000	21
	80 Di-n-octylphthalate	149	10.761	10.769	(0.911)	216606	20.0000	18
	81 Benzo(b)fluoranthene	252	11.299	11.307	(0.957)	277147	20.0000	19
	82 Benzo(k)fluoranthene	252	11.330	11.338	(0.960)	313679	20.0000	21
$	83 Benzo(a)pyrene-d12	264	11.693	11.700	(0.990)	202636	20.0000	19
	84 Benzo(a)pyrene	252	11.724	11.741	(0.993)	276590	20.0000	20
*	85 Perylene-d12	264	11.807	11.814	(1.000)	472957	40.0000	
	86 Indeno(1,2,3-cd)pyrene	276	13.556	13.573	(1.148)	333546	20.0000	20
	87 Dibenzo(a,h)anthracene	278	13.587	13.594	(1.151)	281622	20.0000	21
	88 Benzo(g,h,i)perylene	276	14.094	14.112	(1.194)	269909	20.0000	20

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8638.D
Date : 10-NOV-2011 17:45
Client ID: SSTD0104Q
Instrument: S4.i
Sample Info: SSTD0104Q,SSTD0104Q
Volume Injected (uL): 2.0
Operator: MMS SRC: MMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8639.D
Report Date: 11-Nov-2011 14:03

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8639.D
Lab Smp Id: SSTD0404Q Client Smp ID: SSTD0404Q
Inj Date : 10-NOV-2011 18:10
Operator : MMS   SRC: MMS Inst ID: S4.i
Smp Info : SSTD0404Q,SSTD0404Q
Misc Info : 1,4
Comment   :
Method   : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:02 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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	3.061	3.047	(0.908)	127122	80.0000	93
$	2 Phenol-d5	71	3.050	3.037	(0.905)	125901	80.0000	94
	3 Phenol	94	3.061	3.047	(0.908)	181174	80.0000	95
$	4 bis(2-Chloroethyl)ether-d8	67	3.112	3.099	(0.923)	87111	80.0000	88
	5 bis(2-Chloroethyl)ether	93	3.143	3.130	(0.932)	117465	80.0000	90
$	6 2-Chlorophenol-d4	132	3.206	3.192	(0.951)	139561	80.0000	89
	7 2-Chlorophenol	128	3.216	3.213	(0.954)	132504	80.0000	86
*	8 1,4-Dichlorobenzene-d4	152	3.371	3.368	(1.000)	49566	40.0000	(Q)
	9 2-Methylphenol	108	3.516	3.503	(1.043)	126976	80.0000	95
	10 2,2'-oxybis(1-Chloropropane)	45	3.547	3.534	(1.052)	21016	80.0000	87(Q)
$	11 4-Methylphenol-d8	113	3.609	3.606	(1.071)	135065	80.0000	96
	12 4-Methylphenol	108	3.630	3.627	(1.077)	129831	80.0000	90
	14 N-Nitroso-di-n-propylamine	70	3.651	3.648	(1.083)	127917	80.0000	90(Q)
	13 Acetophenone	105	3.671	3.658	(1.089)	214021	80.0000	93
	15 Hexachloroethane	117	3.775	3.772	(1.120)	69152	80.0000	85(Q)
$	16 Nitrobenzene-d5	128	3.795	3.792	(0.857)	69305	80.0000	87(Q)
	17 Nitrobenzene	77	3.816	3.803	(0.862)	224226	80.0000	82
	18 Isophorone	82	4.002	3.999	(0.904)	353400	80.0000	83
$	19 2-Nitrophenol-d4	143	4.075	4.072	(0.921)	81578	80.0000	80
	20 2-Nitrophenol	139	4.085	4.082	(0.923)	88263	80.0000	85
	21 2,4-Dimethylphenol	107	4.085	4.082	(0.923)	194326	80.0000	85(Q)

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8639.D
Report Date: 11-Nov-2011 14:03

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
	22 bis(2-Chloroethoxy)methane	93	4.178	4.165	(0.944)	146328	80.0000	78
$	23 2,4-Dichlorophenol-d3	165	4.282	4.269	(0.967)	163032	80.0000	85
	24 2,4-Dichlorophenol	162	4.282	4.279	(0.967)	160053	80.0000	84
*	25 Naphthalene-d8	136	4.427	4.424	(1.000)	191327	40.0000	
	26 Naphthalene	128	4.448	4.445	(1.005)	409671	80.0000	81
$	27 4-Chloroaniline-d4	131	4.468	4.465	(1.009)	168420	80.0000	89(Q)
	28 4-Chloroaniline	127	4.479	4.476	(1.012)	176572	80.0000	90
	29 Hexachlorobutadiene	225	4.561	4.558	(1.030)	154127	80.0000	81
	30 Caprolactam	113	4.779	4.765	(1.079)	62788	80.0000	94
	31 4-Chloro-3-methylphenol	107	4.913	4.900	(1.110)	173187	80.0000	90
	32 2-Methylnaphthalene	142	5.079	5.076	(1.147)	325775	80.0000	84
	33 Hexachlorocyclopentadiene	237	5.234	5.231	(0.860)	201548	80.0000	79(Q)
	34 1,2,4,5-Tetrachlorobenzene	216	5.245	5.242	(0.862)	273357	80.0000	82
	35 2,4,6-Trichlorophenol	196	5.348	5.345	(0.879)	169650	80.0000	81
	36 2,4,5-Trichlorophenol	196	5.379	5.376	(0.884)	197669	80.0000	86
	37 1,1'-Biphenyl	154	5.524	5.521	(0.908)	467894	80.0000	83
	38 2-Chloronaphthalene	162	5.545	5.542	(0.912)	386348	80.0000	82
	39 2-Nitroaniline	65	5.638	5.624	(0.927)	144016	80.0000	87
$	40 Dimethylphthalate-d6	166	5.783	5.780	(0.951)	539891	80.0000	85
	41 Dimethylphthalate	163	5.803	5.800	(0.954)	580290	80.0000	92
	42 2,6-Dinitrotoluene	165	5.866	5.863	(0.964)	129317	80.0000	90
$	43 Acenaphthylene-d8	160	5.938	5.935	(0.976)	590659	80.0000	84
	44 Acenaphthylene	152	5.948	5.945	(0.978)	615241	80.0000	84
	45 3-Nitroaniline	138	6.031	6.028	(0.991)	106575	80.0000	90
*	46 Acenaphthene-d10	164	6.083	6.080	(1.000)	160348	40.0000	
	47 Acenaphthene	153	6.114	6.111	(1.005)	406638	80.0000	84
	48 2,4-Dinitrophenol	184	6.124	6.121	(1.007)	111512	80.0000	93(Q)
$	49 4-Nitrophenol-d4	143	6.176	6.163	(1.015)	105965	80.0000	89(Q)
	50 4-Nitrophenol	109	6.186	6.173	(1.017)	201417	80.0000	96
	51 2,4-Dinitrotoluene	165	6.259	6.245	(1.029)	200338	80.0000	90(Q)
	52 Dibenzofuran	168	6.280	6.277	(1.032)	598332	80.0000	84
	118 2,3,4,6-Tetrachlorophenol	232	6.404	6.401	(1.053)	191240	80.0000	89
	53 Diethylphthalate	149	6.487	6.484	(1.066)	579221	80.0000	89
$	54 Fluorene-d10	176	6.590	6.587	(1.083)	488573	80.0000	86
	55 4-Chlorophenyl-phenylether	204	6.611	6.608	(1.087)	361568	80.0000	90
	56 Fluorene	166	6.621	6.618	(1.088)	554923	80.0000	87
	57 4-Nitroaniline	138	6.631	6.618	(1.090)	138609	80.0000	98
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.652	6.639	(0.883)	154771	80.0000	85
	59 4,6-Dinitro-2-methylphenol	198	6.652	6.649	(0.883)	167481	80.0000	82(Q)
	60 N-Nitrosodiphenylamine	169	6.725	6.722	(0.893)	479451	80.0000	77
	61 4-Bromophenyl-phenylether	248	7.087	7.084	(0.941)	226422	80.0000	80
	62 Hexachlorobenzene	284	7.170	7.167	(0.952)	212339	80.0000	75
	63 Atrazine	200	7.232	7.229	(0.960)	262456	80.0000	84
	64 Pentachlorophenol	266	7.346	7.343	(0.975)	172703	80.0000	84
*	65 Phenanthrene-d10	188	7.532	7.529	(1.000)	452172	40.0000	
	66 Phenanthrene	178	7.563	7.560	(1.004)	957486	80.0000	80
$	67 Anthracene-d10	188	7.594	7.591	(1.008)	1000004	80.0000	81
	68 Anthracene	178	7.615	7.601	(1.011)	998488	80.0000	80
	117 Carbazole	167	7.760	7.757	(1.030)	879489	80.0000	81
	70 Di-n-butylphthalate	149	8.080	8.077	(1.073)	1105183	80.0000	84
	71 Fluoranthene	202	8.722	8.719	(1.158)	1447910	80.0000	84
$	72 Pyrene-d10	212	8.929	8.926	(0.881)	1213790	80.0000	78
	73 Pyrene	202	8.950	8.947	(0.884)	1488571	80.0000	78
	74 Butylbenzylphthalate	149	9.550	9.547	(0.943)	644930	80.0000	81

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8639.D
Report Date: 11-Nov-2011 14:03

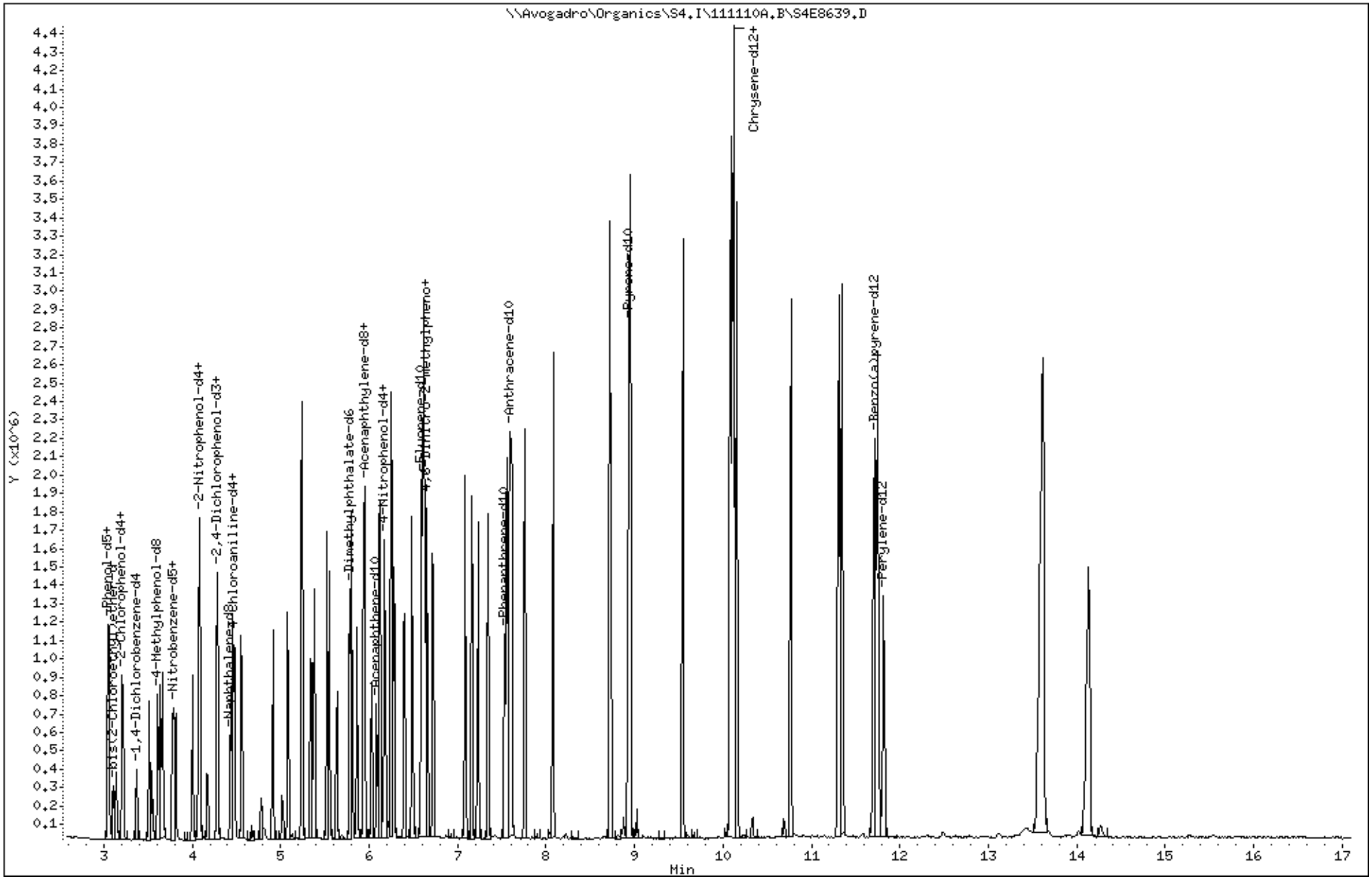
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
75	3,3'-Dichlorobenzidine	252	10.078	10.075	(0.995)	629556	80.0000	83
79	bis(2-Ethylhexyl)phthalate	149	10.099	10.096	(0.997)	949433	80.0000	81
76	Benzo(a)anthracene	228	10.119	10.116	(0.999)	1873478	80.0000	84
* 77	Chrysene-d12	240	10.130	10.127	(1.000)	800364	40.0000	(Q)
78	Chrysene	228	10.151	10.148	(1.002)	1648524	80.0000	78
80	Di-n-octylphthalate	149	10.772	10.769	(0.912)	1625134	80.0000	84
81	Benzo(b)fluoranthene	252	11.310	11.307	(0.957)	2159347	80.0000	89
82	Benzo(k)fluoranthene	252	11.341	11.338	(0.960)	1829342	80.0000	74
$ 83	Benzo(a)pyrene-d12	264	11.713	11.700	(0.991)	1432915	80.0000	83
84	Benzo(a)pyrene	252	11.755	11.741	(0.995)	1811552	80.0000	81
* 85	Perylene-d12	264	11.817	11.814	(1.000)	777724	40.0000	
86	Indeno(1,2,3-cd)pyrene	276	13.597	13.573	(1.151)	2198459	80.0000	81
87	Dibenzo(a,h)anthracene	278	13.618	13.594	(1.152)	1768893	80.0000	79
88	Benzo(g,h,i)perylene	276	14.135	14.112	(1.196)	1795506	80.0000	81

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8639.D
Date : 10-NOV-2011 18:10
Client ID: SSTD0404Q
Sample Info: SSTD0404Q,SSTD0404Q
Volume Injected (uL): 2.0
Column phase: RXI-5SILMS

Instrument: S4.i
Operator: MMS SRC: MMS
Column diameter: 0.25



7E - FORM VII SV-1
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

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
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.: H30X4

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
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.: H30X4

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
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.: H30X4

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.: H30X4

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
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.: H30X4

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

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.: H30X4

Instrument ID: S4 Calibration Date: 11/10/2011 Time: 22:13

Lab File ID: S4E8648A.D Init. Calib. Date(s): 11/10/2011 11/10/2011

EPA Sample No.(SSTD020##) SSTD0204R Init. Calib. Time(s): 16:28 18:10

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{\text{RRF}}$	RRF020	MIN RRF	%D	MAX %D
Benzaldehyde	1.100	1.249	0.010	13.5	40.0
Phenol	1.546	1.322	0.800	-14.5	25.0
Bis(2-chloroethyl)ether	1.052	0.898	0.700	-14.6	25.0
2-Chlorophenol	1.244	1.067	0.800	-14.2	25.0
2-Methylphenol	1.082	1.000	0.700	-7.5	25.0
2,2´-Oxybis(1-chloropropane)	0.195	0.188	0.010	-3.5	40.0
Acetophenone	1.864	1.768	0.010	-5.1	40.0
4-Methylphenol	1.168	1.034	0.600	-11.4	25.0
N-Nitroso-di-n-propylamine	1.147	1.081	0.500	-5.7	25.0
Hexachloroethane	0.658	0.675	0.300	2.5	25.0
Nitrobenzene	0.570	0.550	0.200	-3.4	25.0
Isophorone	0.886	0.865	0.400	-2.3	25.0
2-Nitrophenol	0.218	0.207	0.100	-4.9	25.0
2,4-Dimethylphenol	0.476	0.464	0.200	-2.5	25.0
Bis(2-chloroethoxy)methane	0.391	0.327	0.300	-16.4	25.0
2,4-Dichlorophenol	0.399	0.395	0.200	-1.1	25.0
Naphthalene	1.058	0.991	0.700	-6.4	25.0
4-Chloroaniline	0.409	0.455	0.010	11.4	40.0
Hexachlorobutadiene	0.397	0.478	0.010	20.5	40.0
Caprolactam	0.140	0.129	0.010	-8.4	40.0
4-Chloro-3-methylphenol	0.405	0.398	0.200	-1.5	25.0
2-Methylnaphthalene	0.811	0.824	0.400	1.6	25.0
Hexachlorocyclopentadiene	0.637	0.392	0.010	-38.4	40.0
2,4,6-Trichlorophenol	0.520	0.497	0.200	-4.4	25.0
2,4,5-Trichlorophenol	0.572	0.581	0.200	1.6	25.0
1,1´-Biphenyl	1.399	1.324	0.010	-5.3	40.0
2-Chloronaphthalene	1.169	1.112	0.800	-4.8	25.0
2-Nitroaniline	0.415	0.446	0.010	7.5	25.0
Dimethylphthalate	1.570	1.660	0.010	5.8	40.0
2,6-Dinitrotoluene	0.357	0.386	0.200	8.2	25.0
Acenaphthylene	1.836	1.892	0.900	3.0	25.0
3-Nitroaniline	0.294	0.285	0.010	-2.9	40.0
Acenaphthene	1.206	1.138	0.900	-5.6	25.0

7F - FORM VII SV-2

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Instrument ID: S4 Calibration Date: 11/10/2011 Time: 22:13

Lab File ID: S4E8648A.D Init. Calib. Date(s): 11/10/2011 11/10/2011

EPA Sample No.(SSTD020##) SSTD0204R Init. Calib. Time(s): 16:28 18:10

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
2,4-Dinitrophenol	0.300	0.324	0.010	7.9	40.0
4-Nitrophenol	0.526	0.667	0.010	26.8	40.0
Dibenzofuran	1.773	1.751	0.800	-1.3	25.0
2,4-Dinitrotoluene	0.558	0.576	0.200	3.2	25.0
Diethylphthalate	1.624	1.618	0.010	-0.3	40.0
Fluorene	1.595	1.518	0.900	-4.8	25.0
4-Chlorophenyl-phenylether	0.999	0.976	0.400	-2.3	25.0
4-Nitroaniline	0.353	0.379	0.010	7.5	40.0
4,6-Dinitro-2-methylphenol	0.180	0.187	0.010	3.5	40.0
N-Nitrosodiphenylamine [1]	0.551	0.504	0.010	-8.6	40.0
1,2,4,5-Tetrachlorobenzene	0.834	0.765	0.010	-8.3	40.0
4-Bromophenyl-phenylether	0.251	0.227	0.100	-9.5	25.0
Hexachlorobenzene	0.249	0.237	0.100	-5.1	25.0
Atrazine	0.276	0.236	0.010	-14.4	40.0
Pentachlorophenol	0.182	0.204	0.050	12.2	25.0
Phenanthrene	1.063	1.005	0.700	-5.4	25.0
Anthracene	1.105	1.078	0.700	-2.4	25.0
Carbazole	0.965	1.015	0.010	5.2	40.0
Di-n-butylphthalate	1.162	1.144	0.010	-1.6	40.0
Fluoranthene	1.522	1.721	0.600	13.0	25.0
Pyrene	0.958	0.838	0.600	-12.5	25.0
Butylbenzylphthalate	0.396	0.319	0.010	-19.5	40.0
3,3´-Dichlorobenzidine	0.380	0.405	0.010	6.5	40.0
Benzo(a)anthracene	1.114	1.099	0.800	-1.3	25.0
Chrysene	1.055	1.092	0.700	3.5	25.0
Bis(2-ethylhexyl)phthalate	0.587	0.489	0.010	-16.7	40.0
Di-n-octylphthalate	0.997	0.826	0.010	-17.2	40.0
Benzo(b)fluoranthene	1.245	1.232	0.700	-1.0	25.0
Benzo(k)fluoranthene	1.279	1.232	0.700	-3.7	25.0
Benzo(a)pyrene	1.154	1.129	0.700	-2.1	25.0
Indeno(1,2,3-cd)pyrene	1.390	1.299	0.500	-6.6	25.0
Dibenzo(a,h)anthracene	1.146	1.086	0.400	-5.2	25.0
Benzo(g,h,i)perylene	1.144	1.055	0.500	-7.8	25.0
2,3,4,6-Tetrachlorophenol	0.534	0.597	0.100	11.8	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.: H30X4

Instrument ID: S4 Calibration Date: 11/10/2011 Time: 22:13

Lab File ID: S4E8648A.D Init. Calib. Date(s): 11/10/2011 11/10/2011

EPA Sample No.(SSTD020##) SSTD0204R Init. Calib. Time(s): 16:28 18:10

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{\text{RRF}}$	RRF020	MIN RRF	%D	MAX %D
Phenol-d5	1.076	1.038	0.010	-3.5	25.0
Bis(2-chloroethyl)ether-d8	0.800	0.660	0.010	-17.5	25.0
2-Chlorophenol-d4	1.262	1.071	0.010	-15.2	25.0
4-Methylphenol-d8	1.139	1.145	0.010	0.5	25.0
Nitrobenzene-d5	0.167	0.165	0.010	-1.6	40.0
2-Nitrophenol-d4	0.213	0.213	0.010	-0.4	25.0
2,4-Dichlorophenol-d3	0.400	0.374	0.010	-6.5	25.0
4-Chloroaniline-d4	0.395	0.380	0.010	-3.7	40.0
Dimethylphthalate-d6	1.582	1.490	0.010	-5.8	40.0
Acenaphthylene-d8	1.751	1.676	0.010	-4.3	25.0
4-Nitrophenol-d4	0.298	0.324	0.010	8.7	40.0
Fluorene-d10	1.410	1.399	0.010	-0.8	25.0
4,6-Dinitro-2-methylphenol-d2	0.160	0.169	0.010	5.3	25.0
Anthracene-d10	1.099	1.050	0.010	-4.4	25.0
Pyrene-d10	0.780	0.662	0.010	-15.0	25.0
Benzo(a)pyrene-d12	0.886	0.862	0.010	-2.7	25.0

7E - FORM VII SV-1

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Instrument ID: S4 Calibration Date: 11/11/2011 Time: 5:28

Lab File ID: S4E8665.D Init. Calib. Date(s): 11/10/2011 11/10/2011

EPA Sample No.(SSTD020##) SSTD0204S Init. Calib. Time(s): 16:28 18:10

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{\text{RRF}}$	RRF020	MIN RRF	%D	MAX %D
Benzaldehyde	1.100	1.176	0.010	6.9	40.0
Phenol	1.546	1.400	0.800	-9.5	25.0
Bis(2-chloroethyl)ether	1.052	0.872	0.700	-17.1	25.0
2-Chlorophenol	1.244	1.163	0.800	-6.5	25.0
2-Methylphenol	1.082	1.026	0.700	-5.2	25.0
2,2´-Oxybis(1-chloropropane)	0.195	0.214	0.010	9.6	40.0
Acetophenone	1.864	1.862	0.010	-0.1	40.0
4-Methylphenol	1.168	1.308	0.600	12.0	25.0
N-Nitroso-di-n-propylamine	1.147	1.133	0.500	-1.2	25.0
Hexachloroethane	0.658	0.698	0.300	6.0	25.0
Nitrobenzene	0.570	0.558	0.200	-2.0	25.0
Isophorone	0.886	0.840	0.400	-5.2	25.0
2-Nitrophenol	0.218	0.232	0.100	6.6	25.0
2,4-Dimethylphenol	0.476	0.465	0.200	-2.2	25.0
Bis(2-chloroethoxy)methane	0.391	0.346	0.300	-11.4	25.0
2,4-Dichlorophenol	0.399	0.407	0.200	1.9	25.0
Naphthalene	1.058	1.070	0.700	1.1	25.0
4-Chloroaniline	0.409	0.464	0.010	13.6	40.0
Hexachlorobutadiene	0.397	0.432	0.010	8.9	40.0
Caprolactam	0.140	0.149	0.010	6.2	40.0
4-Chloro-3-methylphenol	0.405	0.419	0.200	3.6	25.0
2-Methylnaphthalene	0.811	0.837	0.400	3.1	25.0
Hexachlorocyclopentadiene	0.637	0.484	0.010	-24.0	40.0
2,4,6-Trichlorophenol	0.520	0.535	0.200	2.9	25.0
2,4,5-Trichlorophenol	0.572	0.594	0.200	3.8	25.0
1,1´-Biphenyl	1.399	1.311	0.010	-6.3	40.0
2-Chloronaphthalene	1.169	1.062	0.800	-9.2	25.0
2-Nitroaniline	0.415	0.415	0.010	-0.1	25.0
Dimethylphthalate	1.570	1.476	0.010	-6.0	40.0
2,6-Dinitrotoluene	0.357	0.321	0.200	-9.9	25.0
Acenaphthylene	1.836	1.728	0.900	-5.9	25.0
3-Nitroaniline	0.294	0.302	0.010	2.7	40.0
Acenaphthene	1.206	1.115	0.900	-7.6	25.0

7F - FORM VII SV-2

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Instrument ID: S4 Calibration Date: 11/11/2011 Time: 5:28

Lab File ID: S4E8665.D Init. Calib. Date(s): 11/10/2011 11/10/2011

EPA Sample No.(SSTD020##) SSTD0204S Init. Calib. Time(s): 16:28 18:10

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
2,4-Dinitrophenol	0.300	0.263	0.010	-12.5	40.0
4-Nitrophenol	0.526	0.556	0.010	5.7	40.0
Dibenzofuran	1.773	1.736	0.800	-2.1	25.0
2,4-Dinitrotoluene	0.558	0.558	0.200	0.1	25.0
Diethylphthalate	1.624	1.553	0.010	-4.3	40.0
Fluorene	1.595	1.510	0.900	-5.4	25.0
4-Chlorophenyl-phenylether	0.999	0.991	0.400	-0.8	25.0
4-Nitroaniline	0.353	0.368	0.010	4.3	40.0
4,6-Dinitro-2-methylphenol	0.180	0.159	0.010	-11.5	40.0
N-Nitrosodiphenylamine [1]	0.551	0.532	0.010	-3.5	40.0
1,2,4,5-Tetrachlorobenzene	0.834	0.744	0.010	-10.8	40.0
4-Bromophenyl-phenylether	0.251	0.234	0.100	-6.6	25.0
Hexachlorobenzene	0.249	0.231	0.100	-7.2	25.0
Atrazine	0.276	0.273	0.010	-1.3	40.0
Pentachlorophenol	0.182	0.147	0.050	-19.0	25.0
Phenanthrene	1.063	1.055	0.700	-0.7	25.0
Anthracene	1.105	1.084	0.700	-1.8	25.0
Carbazole	0.965	0.932	0.010	-3.5	40.0
Di-n-butylphthalate	1.162	1.091	0.010	-6.1	40.0
Fluoranthene	1.522	1.537	0.600	1.0	25.0
Pyrene	0.958	0.945	0.600	-1.4	25.0
Butylbenzylphthalate	0.396	0.343	0.010	-13.4	40.0
3,3´-Dichlorobenzidine	0.380	0.405	0.010	6.6	40.0
Benzo(a)anthracene	1.114	1.067	0.800	-4.2	25.0
Chrysene	1.055	1.083	0.700	2.6	25.0
Bis(2-ethylhexyl)phthalate	0.587	0.475	0.010	-19.0	40.0
Di-n-octylphthalate	0.997	0.911	0.010	-8.6	40.0
Benzo(b)fluoranthene	1.245	1.154	0.700	-7.3	25.0
Benzo(k)fluoranthene	1.279	1.261	0.700	-1.4	25.0
Benzo(a)pyrene	1.154	1.111	0.700	-3.7	25.0
Indeno(1,2,3-cd)pyrene	1.390	1.286	0.500	-7.5	25.0
Dibenzo(a,h)anthracene	1.146	1.072	0.400	-6.4	25.0
Benzo(g,h,i)perylene	1.144	1.046	0.500	-8.6	25.0
2,3,4,6-Tetrachlorophenol	0.534	0.508	0.100	-4.9	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.: H30X4

Instrument ID: S4 Calibration Date: 11/11/2011 Time: 5:28

Lab File ID: S4E8665.D Init. Calib. Date(s): 11/10/2011 11/10/2011

EPA Sample No.(SSTD020##) SSTD0204S Init. Calib. Time(s): 16:28 18:10

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
Phenol-d5	1.076	1.284	0.010	19.4	25.0
Bis(2-chloroethyl)ether-d8	0.800	0.778	0.010	-2.8	25.0
2-Chlorophenol-d4	1.262	1.136	0.010	-10.0	25.0
4-Methylphenol-d8	1.139	1.066	0.010	-6.4	25.0
Nitrobenzene-d5	0.167	0.177	0.010	5.9	40.0
2-Nitrophenol-d4	0.213	0.215	0.010	0.6	25.0
2,4-Dichlorophenol-d3	0.400	0.429	0.010	7.4	25.0
4-Chloroaniline-d4	0.395	0.411	0.010	4.3	40.0
Dimethylphthalate-d6	1.582	1.497	0.010	-5.3	40.0
Acenaphthylene-d8	1.751	1.639	0.010	-6.4	25.0
4-Nitrophenol-d4	0.298	0.315	0.010	5.7	40.0
Fluorene-d10	1.410	1.405	0.010	-0.3	25.0
4,6-Dinitro-2-methylphenol-d2	0.160	0.155	0.010	-3.3	25.0
Anthracene-d10	1.099	1.064	0.010	-3.1	25.0
Pyrene-d10	0.780	0.717	0.010	-8.0	25.0
Benzo(a)pyrene-d12	0.886	0.897	0.010	1.2	25.0

7E - FORM VII SV-1
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Instrument ID: S4 Calibration Date: 11/11/2011 Time: 10:37

Lab File ID: S4E8670.D Init. Calib. Date(s): 11/10/2011 11/10/2011

EPA Sample No.(SSTD020##) SSTD0204T Init. Calib. Time(s): 16:28 18:10

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{\text{RRF}}$	RRF020	MIN RRF	%D	MAX %D
Benzaldehyde	1.100	1.049	0.010	-4.6	50.0
Phenol	1.546	1.216	0.010	-21.4	50.0
Bis(2-chloroethyl)ether	1.052	0.854	0.010	-18.8	50.0
2-Chlorophenol	1.244	1.039	0.010	-16.5	50.0
2-Methylphenol	1.082	0.999	0.010	-7.6	50.0
2,2´-Oxybis(1-chloropropane)	0.195	0.168	0.010	-13.9	50.0
Acetophenone	1.864	1.750	0.010	-6.1	50.0
4-Methylphenol	1.168	1.048	0.010	-10.3	50.0
N-Nitroso-di-n-propylamine	1.147	1.073	0.010	-6.5	50.0
Hexachloroethane	0.658	0.657	0.010	-0.2	50.0
Nitrobenzene	0.570	0.547	0.010	-4.1	50.0
Isophorone	0.886	0.788	0.010	-11.0	50.0
2-Nitrophenol	0.218	0.224	0.010	2.8	50.0
2,4-Dimethylphenol	0.476	0.437	0.010	-8.1	50.0
Bis(2-chloroethoxy)methane	0.391	0.318	0.010	-18.5	50.0
2,4-Dichlorophenol	0.399	0.361	0.010	-9.5	50.0
Naphthalene	1.058	0.971	0.010	-8.3	50.0
4-Chloroaniline	0.409	0.391	0.010	-4.4	50.0
Hexachlorobutadiene	0.397	0.393	0.010	-1.0	50.0
Caprolactam	0.140	0.142	0.010	1.1	50.0
4-Chloro-3-methylphenol	0.405	0.350	0.010	-13.4	50.0
2-Methylnaphthalene	0.811	0.765	0.010	-5.7	50.0
Hexachlorocyclopentadiene	0.637	0.347	0.010	-45.5	50.0
2,4,6-Trichlorophenol	0.520	0.544	0.010	4.7	50.0
2,4,5-Trichlorophenol	0.572	0.570	0.010	-0.4	50.0
1,1´-Biphenyl	1.399	1.378	0.010	-1.5	50.0
2-Chloronaphthalene	1.169	1.087	0.010	-7.0	50.0
2-Nitroaniline	0.415	0.393	0.010	-5.4	50.0
Dimethylphthalate	1.570	1.567	0.010	-0.2	50.0
2,6-Dinitrotoluene	0.357	0.344	0.010	-3.6	50.0
Acenaphthylene	1.836	1.698	0.010	-7.5	50.0
3-Nitroaniline	0.294	0.291	0.010	-0.9	50.0
Acenaphthene	1.206	1.102	0.010	-8.6	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.: H30X4

Instrument ID: S4 Calibration Date: 11/11/2011 Time: 10:37

Lab File ID: S4E8670.D Init. Calib. Date(s): 11/10/2011 11/10/2011

EPA Sample No.(SSTD020##) SSTD0204T Init. Calib. Time(s): 16:28 18:10

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
2,4-Dinitrophenol	0.300	0.265	0.010	-11.7	50.0
4-Nitrophenol	0.526	0.579	0.010	10.2	50.0
Dibenzofuran	1.773	1.732	0.010	-2.3	50.0
2,4-Dinitrotoluene	0.558	0.462	0.010	-17.1	50.0
Diethylphthalate	1.624	1.461	0.010	-10.0	50.0
Fluorene	1.595	1.569	0.010	-1.6	50.0
4-Chlorophenyl-phenylether	0.999	0.952	0.010	-4.7	50.0
4-Nitroaniline	0.353	0.375	0.010	6.4	50.0
4,6-Dinitro-2-methylphenol	0.180	0.175	0.010	-3.0	50.0
N-Nitrosodiphenylamine [1]	0.551	0.555	0.010	0.7	50.0
1,2,4,5-Tetrachlorobenzene	0.834	0.764	0.010	-8.4	50.0
4-Bromophenyl-phenylether	0.251	0.240	0.010	-4.3	50.0
Hexachlorobenzene	0.249	0.228	0.010	-8.4	50.0
Atrazine	0.276	0.277	0.010	0.4	50.0
Pentachlorophenol	0.182	0.177	0.010	-2.6	50.0
Phenanthrene	1.063	1.073	0.010	1.0	50.0
Anthracene	1.105	1.142	0.010	3.3	50.0
Carbazole	0.965	1.012	0.010	4.9	50.0
Di-n-butylphthalate	1.162	1.129	0.010	-2.9	50.0
Fluoranthene	1.522	1.709	0.010	12.3	50.0
Pyrene	0.958	0.859	0.010	-10.4	50.0
Butylbenzylphthalate	0.396	0.293	0.010	-26.1	50.0
3,3´-Dichlorobenzidine	0.380	0.407	0.010	7.1	50.0
Benzo(a)anthracene	1.114	1.128	0.010	1.3	50.0
Chrysene	1.055	0.991	0.010	-6.0	50.0
Bis(2-ethylhexyl)phthalate	0.587	0.437	0.010	-25.6	50.0
Di-n-octylphthalate	0.997	0.806	0.010	-19.2	50.0
Benzo(b)fluoranthene	1.245	1.320	0.010	6.1	50.0
Benzo(k)fluoranthene	1.279	1.130	0.010	-11.6	50.0
Benzo(a)pyrene	1.154	1.088	0.010	-5.7	50.0
Indeno(1,2,3-cd)pyrene	1.390	1.281	0.010	-7.9	50.0
Dibenzo(a,h)anthracene	1.146	1.042	0.010	-9.1	50.0
Benzo(g,h,i)perylene	1.144	1.065	0.010	-6.9	50.0
2,3,4,6-Tetrachlorophenol	0.534	0.581	0.010	8.7	50.0

(1) Cannot be separated from Diphenylamine

7G - FORM VII SV-3

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Instrument ID: S4 Calibration Date: 11/11/2011 Time: 10:37

Lab File ID: S4E8670.D Init. Calib. Date(s): 11/10/2011 11/10/2011

EPA Sample No.(SSTD020##) SSTD0204T Init. Calib. Time(s): 16:28 18:10

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF020	MIN RRF	%D	MAX %D
Phenol-d5	1.076	1.032	0.010	-4.1	50.0
Bis(2-chloroethyl)ether-d8	0.800	0.633	0.010	-20.9	50.0
2-Chlorophenol-d4	1.262	1.075	0.010	-14.9	50.0
4-Methylphenol-d8	1.139	1.112	0.010	-2.4	50.0
Nitrobenzene-d5	0.167	0.154	0.010	-8.3	50.0
2-Nitrophenol-d4	0.213	0.201	0.010	-5.7	50.0
2,4-Dichlorophenol-d3	0.400	0.401	0.010	0.2	50.0
4-Chloroaniline-d4	0.395	0.391	0.010	-0.8	50.0
Dimethylphthalate-d6	1.582	1.407	0.010	-11.1	50.0
Acenaphthylene-d8	1.751	1.682	0.010	-4.0	50.0
4-Nitrophenol-d4	0.298	0.277	0.010	-6.8	50.0
Fluorene-d10	1.410	1.393	0.010	-1.2	50.0
4,6-Dinitro-2-methylphenol-d2	0.160	0.190	0.010	18.5	50.0
Anthracene-d10	1.099	1.137	0.010	3.5	50.0
Pyrene-d10	0.780	0.659	0.010	-15.5	50.0
Benzo(a)pyrene-d12	0.886	0.867	0.010	-2.2	50.0

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

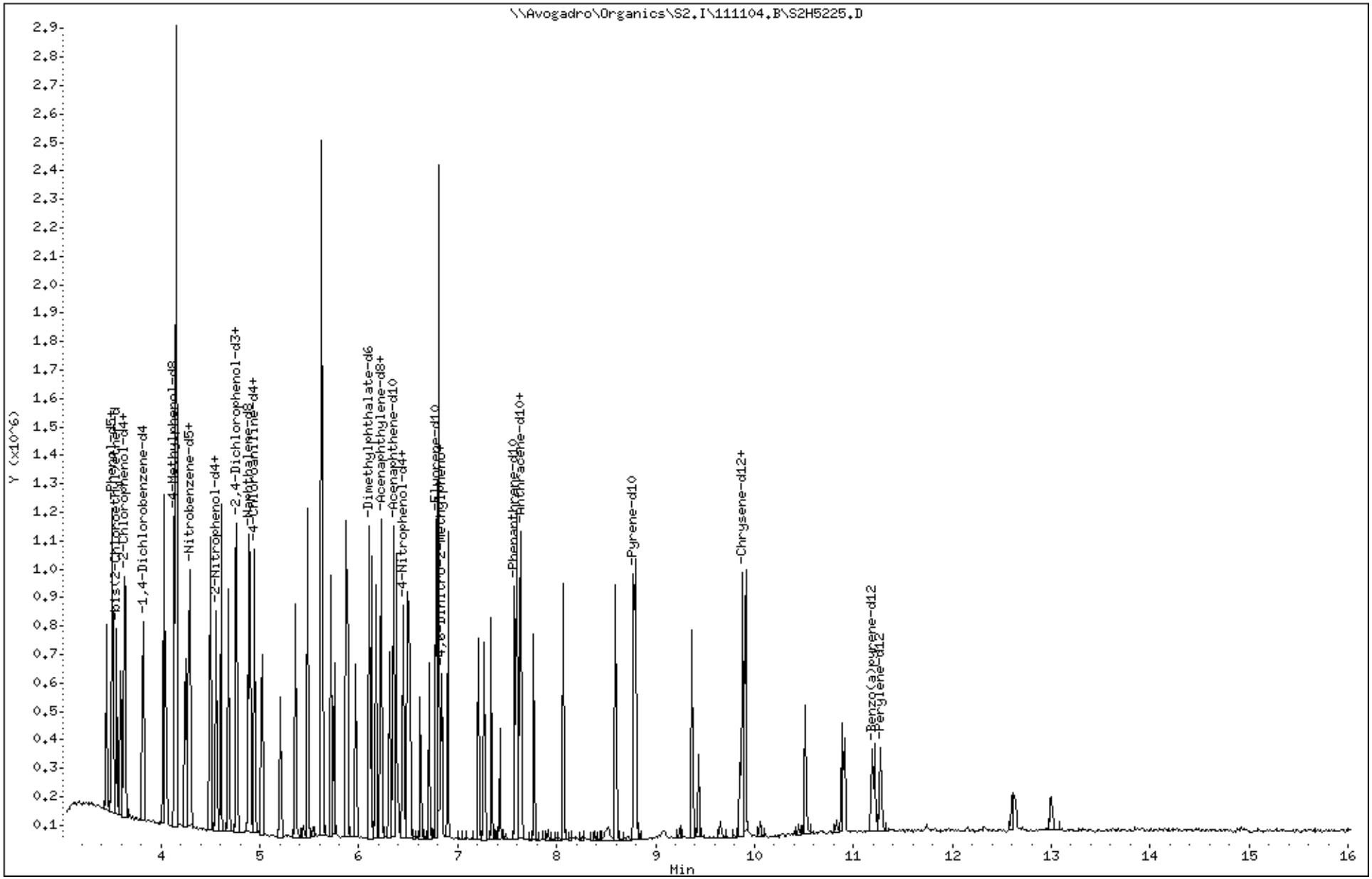
Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5225.D
Report Date: 07-Nov-2011 13:26

	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

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(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

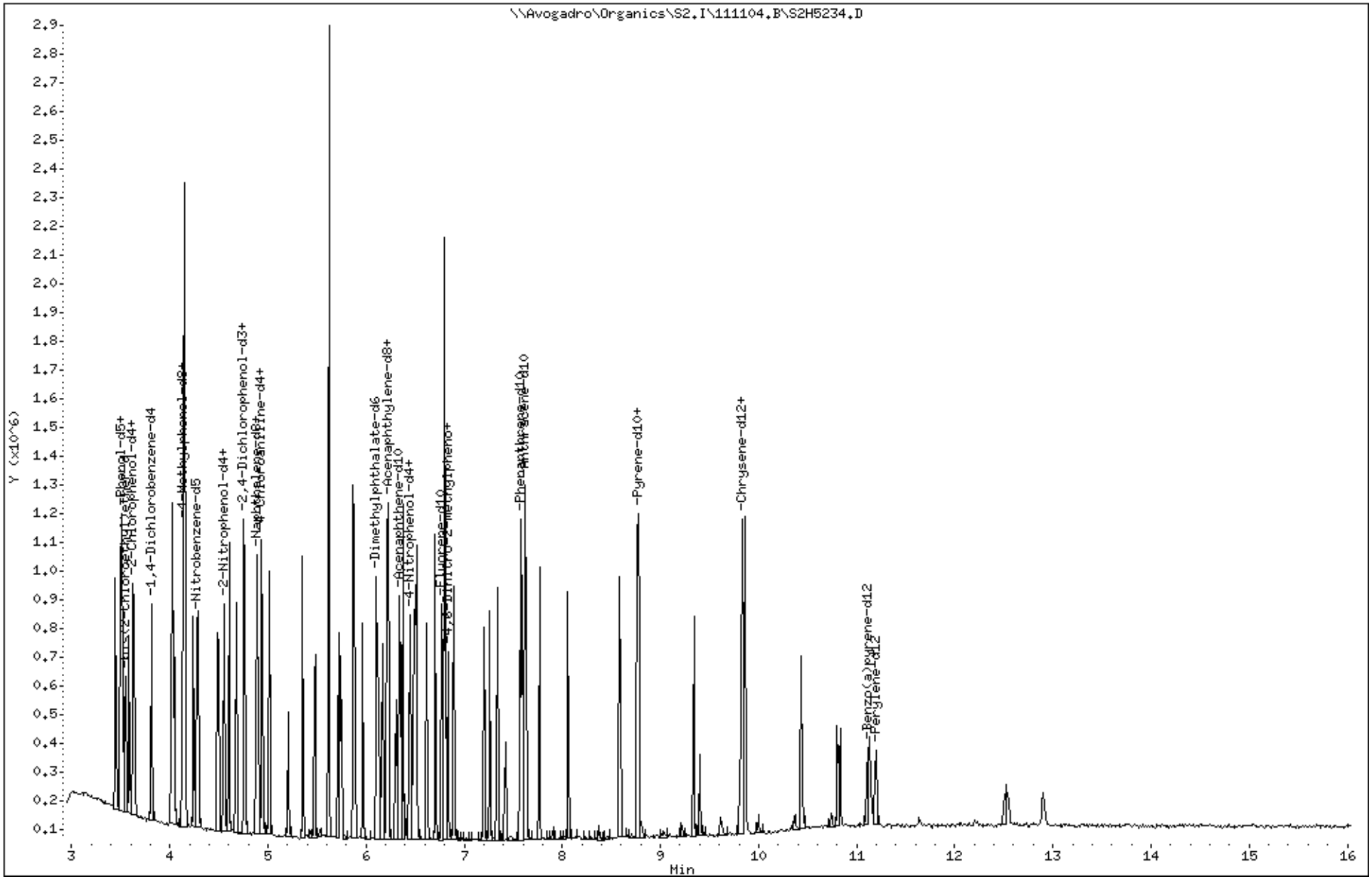
Data File: \\Avogadro\Organics\S2.I\111104.B\S2H5234.D
Report Date: 07-Nov-2011 13:27

	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



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8648A.D
Report Date: 11-Nov-2011 14:03

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8648A.D
Lab Smp Id: SSTD0204R Client Smp ID: SSTD0204R
Inj Date : 10-NOV-2011 22:13
Operator : MMS   SRC: MMS Inst ID: S4.i
Smp Info : SSTD0204R,SSTD0204R
Misc Info : 2,3
Comment   :
Method   : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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	3.061	3.061	(0.908)	33302	40.0000	45
$	2 Phenol-d5	71	3.050	3.050	(0.905)	27683	40.0000	39(Q)
	3 Phenol	94	3.061	3.061	(0.908)	35252	40.0000	34(Q)
$	4 bis(2-Chloroethyl)ether-d8	67	3.112	3.112	(0.923)	17593	40.0000	33
	5 bis(2-Chloroethyl)ether	93	3.143	3.143	(0.932)	23936	40.0000	34
$	6 2-Chlorophenol-d4	132	3.206	3.206	(0.951)	28552	40.0000	34
	7 2-Chlorophenol	128	3.216	3.216	(0.954)	28441	40.0000	34
*	8 1,4-Dichlorobenzene-d4	152	3.371	3.371	(1.000)	26662	40.0000	(Q)
	9 2-Methylphenol	108	3.516	3.516	(1.043)	26671	40.0000	37
	10 2,2'-oxybis(1-Chloropropane)	45	3.547	3.547	(1.052)	5025	40.0000	39
$	11 4-Methylphenol-d8	113	3.609	3.609	(1.071)	30519	40.0000	40
	12 4-Methylphenol	108	3.630	3.630	(1.077)	27577	40.0000	35
	14 N-Nitroso-di-n-propylamine	70	3.651	3.651	(1.083)	28826	40.0000	38(Q)
	13 Acetophenone	105	3.661	3.661	(1.086)	47140	40.0000	38
	15 Hexachloroethane	117	3.775	3.775	(1.120)	17989	40.0000	41(Q)
$	16 Nitrobenzene-d5	128	3.796	3.796	(0.857)	14624	40.0000	39
	17 Nitrobenzene	77	3.816	3.816	(0.862)	48842	40.0000	39
	18 Isophorone	82	4.003	4.003	(0.904)	76766	40.0000	39
$	19 2-Nitrophenol-d4	143	4.075	4.075	(0.921)	18865	40.0000	40
	20 2-Nitrophenol	139	4.085	4.085	(0.923)	18395	40.0000	38(Q)
	21 2,4-Dimethylphenol	107	4.085	4.085	(0.923)	41167	40.0000	39(Q)

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8648A.D
Report Date: 11-Nov-2011 14:03

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	22 bis(2-Chloroethoxy)methane	93	4.168	4.168	(0.942)	29022	40.0000	33
$	23 2,4-Dichlorophenol-d3	165	4.282	4.282	(0.967)	33204	40.0000	37
	24 2,4-Dichlorophenol	162	4.292	4.292	(0.970)	35042	40.0000	40
*	25 Naphthalene-d8	136	4.427	4.427	(1.000)	88755	40.0000	
	26 Naphthalene	128	4.448	4.448	(1.005)	87929	40.0000	37
$	27 4-Chloroaniline-d4	131	4.468	4.468	(1.009)	33721	40.0000	39(Q)
	28 4-Chloroaniline	127	4.479	4.479	(1.012)	40391	40.0000	45
	29 Hexachlorobutadiene	225	4.561	4.561	(1.030)	42459	40.0000	48
	30 Caprolactam	113	4.768	4.768	(1.077)	11411	40.0000	37
	31 4-Chloro-3-methylphenol	107	4.913	4.913	(1.110)	35351	40.0000	39
	32 2-Methylnaphthalene	142	5.079	5.079	(1.147)	73161	40.0000	41
	33 Hexachlorocyclopentadiene	237	5.234	5.234	(0.860)	29714	40.0000	25(Q)
	34 1,2,4,5-Tetrachlorobenzene	216	5.245	5.245	(0.862)	57959	40.0000	37
	35 2,4,6-Trichlorophenol	196	5.348	5.348	(0.879)	37629	40.0000	38
	36 2,4,5-Trichlorophenol	196	5.379	5.379	(0.884)	44023	40.0000	41
	37 1,1'-Biphenyl	154	5.524	5.524	(0.908)	100332	40.0000	38
	38 2-Chloronaphthalene	162	5.545	5.545	(0.912)	84245	40.0000	38
	39 2-Nitroaniline	65	5.628	5.628	(0.925)	33821	40.0000	43
$	40 Dimethylphthalate-d6	166	5.772	5.772	(0.949)	112908	40.0000	38
	41 Dimethylphthalate	163	5.804	5.804	(0.954)	125801	40.0000	42
	42 2,6-Dinitrotoluene	165	5.855	5.855	(0.963)	29220	40.0000	43
$	43 Acenaphthylene-d8	160	5.938	5.938	(0.976)	127000	40.0000	38
	44 Acenaphthylene	152	5.948	5.948	(0.978)	143322	40.0000	41
	45 3-Nitroaniline	138	6.021	6.021	(0.990)	21628	40.0000	39
*	46 Acenaphthene-d10	164	6.083	6.083	(1.000)	75762	40.0000	
	47 Acenaphthene	153	6.114	6.114	(1.005)	86225	40.0000	38
	48 2,4-Dinitrophenol	184	6.124	6.124	(1.007)	24522	40.0000	43(Q)
$	49 4-Nitrophenol-d4	143	6.166	6.166	(1.014)	24512	40.0000	43(Q)
	50 4-Nitrophenol	109	6.176	6.176	(1.015)	50534	40.0000	51
	51 2,4-Dinitrotoluene	165	6.249	6.249	(1.027)	43614	40.0000	41(Q)
	52 Dibenzofuran	168	6.280	6.280	(1.032)	132626	40.0000	39
	118 2,3,4,6-Tetrachlorophenol	232	6.393	6.393	(1.051)	45228	40.0000	45
	53 Diethylphthalate	149	6.487	6.487	(1.066)	122580	40.0000	40
$	54 Fluorene-d10	176	6.590	6.590	(1.083)	106017	40.0000	40
	55 4-Chlorophenyl-phenylether	204	6.611	6.611	(1.087)	73946	40.0000	39
	56 Fluorene	166	6.611	6.611	(1.087)	115041	40.0000	38
	57 4-Nitroaniline	138	6.621	6.621	(1.088)	28739	40.0000	43(Q)
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.642	6.642	(0.882)	36352	40.0000	42
	59 4,6-Dinitro-2-methylphenol	198	6.652	6.652	(0.883)	40143	40.0000	41(Q)
	60 N-Nitrosodiphenylamine	169	6.714	6.714	(0.891)	108441	40.0000	37
	61 4-Bromophenyl-phenylether	248	7.087	7.087	(0.941)	48797	40.0000	36
	62 Hexachlorobenzene	284	7.159	7.159	(0.951)	50946	40.0000	38
	63 Atrazine	200	7.232	7.232	(0.960)	50895	40.0000	34
	64 Pentachlorophenol	266	7.346	7.346	(0.975)	43837	40.0000	45
*	65 Phenanthrene-d10	188	7.532	7.532	(1.000)	215241	40.0000	
	66 Phenanthrene	178	7.553	7.553	(1.003)	216347	40.0000	38
$	67 Anthracene-d10	188	7.584	7.584	(1.007)	226048	40.0000	38
	68 Anthracene	178	7.604	7.604	(1.010)	232061	40.0000	39
	117 Carbazole	167	7.760	7.760	(1.030)	218547	40.0000	42
	70 Di-n-butylphthalate	149	8.081	8.081	(1.073)	246261	40.0000	39
	71 Fluoranthene	202	8.722	8.722	(1.158)	370351	40.0000	45
$	72 Pyrene-d10	212	8.929	8.929	(0.882)	309703	40.0000	34
	73 Pyrene	202	8.950	8.950	(0.884)	391749	40.0000	35
	74 Butylbenzylphthalate	149	9.550	9.550	(0.944)	149158	40.0000	32

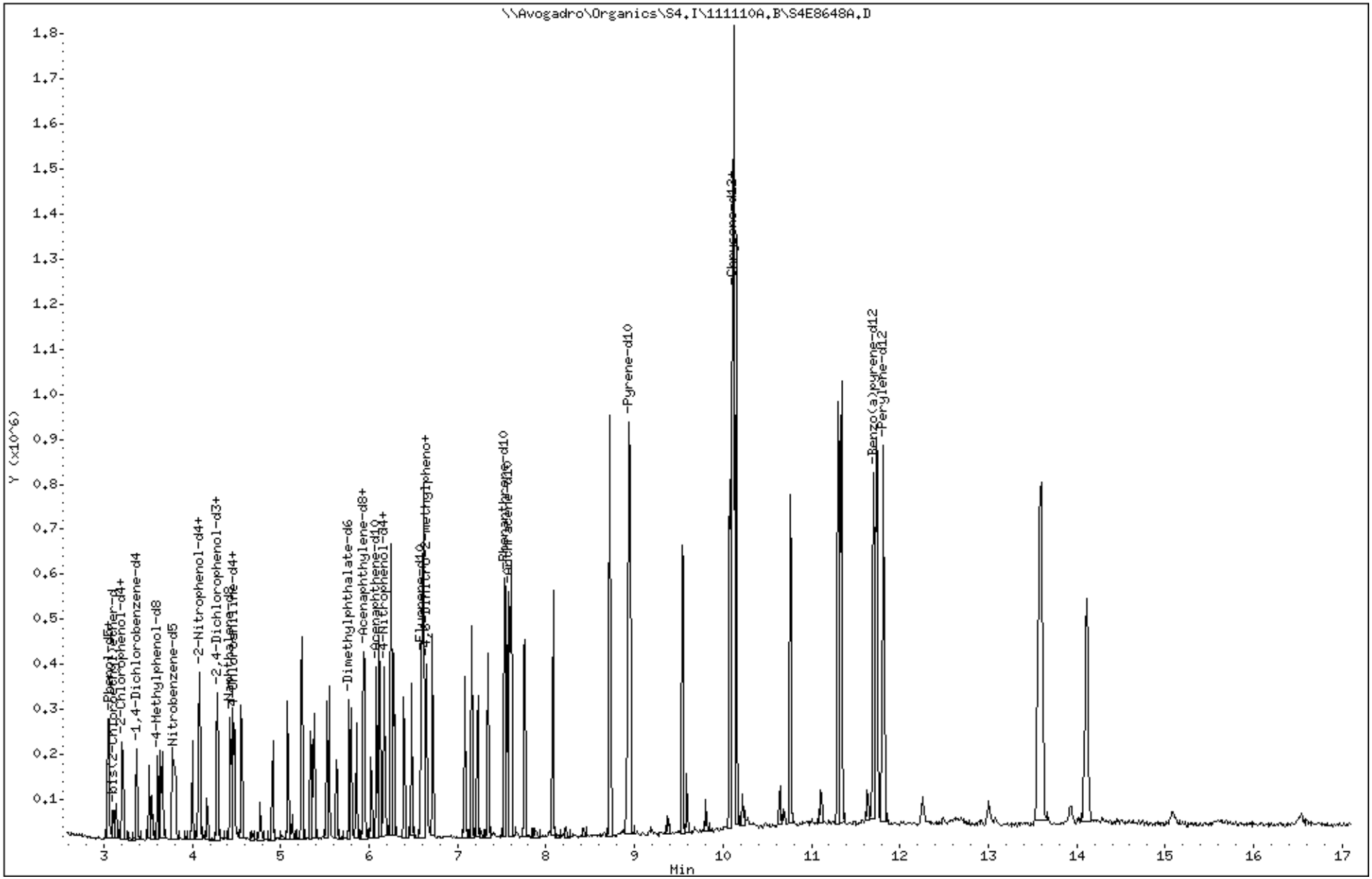
Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8648A.D
Report Date: 11-Nov-2011 14:03

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
75	3,3'-Dichlorobenzidine	252	10.078	10.078	(0.996)	189389	40.0000	43
79	bis(2-Ethylhexyl)phthalate	149	10.099	10.099	(0.998)	228536	40.0000	33
76	Benzo(a)anthracene	228	10.109	10.109	(0.999)	514056	40.0000	39
* 77	Chrysene-d12	240	10.120	10.120	(1.000)	467538	40.0000	(Q)
78	Chrysene	228	10.151	10.151	(1.003)	510566	40.0000	41
80	Di-n-octylphthalate	149	10.761	10.761	(0.911)	414457	40.0000	33
81	Benzo(b)fluoranthene	252	11.299	11.299	(0.956)	618391	40.0000	40
82	Benzo(k)fluoranthene	252	11.341	11.341	(0.960)	618339	40.0000	39
$ 83	Benzo(a)pyrene-d12	264	11.703	11.703	(0.990)	432632	40.0000	39
84	Benzo(a)pyrene	252	11.745	11.745	(0.994)	566661	40.0000	39
* 85	Perylene-d12	264	11.817	11.817	(1.000)	501844	40.0000	
86	Indeno(1,2,3-cd)pyrene	276	13.577	13.577	(1.149)	651730	40.0000	37
87	Dibenzo(a,h)anthracene	278	13.597	13.597	(1.151)	544985	40.0000	38
88	Benzo(g,h,i)perylene	276	14.115	14.115	(1.194)	529446	40.0000	37

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8648A.D
Date : 10-NOV-2011 22:13
Client ID: SSTD0204R
Instrument: S4.i
Sample Info: SSTD0204R,SSTD0204R
Volume Injected (uL): 2.0
Operator: MMS SRC: MMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8665.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8665.D
Lab Smp Id: SSTD0204S Client Smp ID: SSTD0204S
Inj Date : 11-NOV-2011 05:28
Operator : MMS   SRC: MMS Inst ID: S4.i
Smp Info : SSTD0204S,SSTD0204S
Misc Info : 2,3
Comment   :
Method   : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:04 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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	3.061	3.061	(0.908)	37669	40.0000	43
$	2 Phenol-d5	71	3.050	3.050	(0.905)	41131	40.0000	48
	3 Phenol	94	3.061	3.061	(0.908)	44820	40.0000	36
$	4 bis(2-Chloroethyl)ether-d8	67	3.113	3.113	(0.923)	24906	40.0000	39(Q)
	5 bis(2-Chloroethyl)ether	93	3.144	3.144	(0.932)	27922	40.0000	33
$	6 2-Chlorophenol-d4	132	3.206	3.206	(0.951)	36367	40.0000	36
	7 2-Chlorophenol	128	3.216	3.216	(0.954)	37228	40.0000	37
*	8 1,4-Dichlorobenzene-d4	152	3.371	3.371	(1.000)	32024	40.0000	(Q)
	9 2-Methylphenol	108	3.516	3.516	(1.043)	32852	40.0000	38
	10 2,2'-oxybis(1-Chloropropane)	45	3.547	3.547	(1.052)	6856	40.0000	44(Q)
$	11 4-Methylphenol-d8	113	3.620	3.620	(1.074)	34129	40.0000	37
	12 4-Methylphenol	108	3.640	3.640	(1.080)	41878	40.0000	45
	14 N-Nitroso-di-n-propylamine	70	3.651	3.651	(1.083)	36298	40.0000	40(Q)
	13 Acetophenone	105	3.671	3.671	(1.089)	59626	40.0000	40
	15 Hexachloroethane	117	3.775	3.775	(1.120)	22339	40.0000	42(Q)
$	16 Nitrobenzene-d5	128	3.796	3.796	(0.857)	20696	40.0000	42(Q)
	17 Nitrobenzene	77	3.816	3.816	(0.862)	65204	40.0000	39
	18 Isophorone	82	4.003	4.003	(0.904)	98078	40.0000	38
$	19 2-Nitrophenol-d4	143	4.075	4.075	(0.921)	25056	40.0000	40
	20 2-Nitrophenol	139	4.085	4.085	(0.923)	27131	40.0000	43
	21 2,4-Dimethylphenol	107	4.096	4.096	(0.925)	54305	40.0000	39(Q)

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8665.D
Report Date: 11-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	4.168	4.168	(0.942)	40446	40.0000	35
$	23 2,4-Dichlorophenol-d3	165	4.282	4.282	(0.967)	50133	40.0000	43
	24 2,4-Dichlorophenol	162	4.292	4.292	(0.970)	47495	40.0000	41
*	25 Naphthalene-d8	136	4.427	4.427	(1.000)	116754	40.0000	
	26 Naphthalene	128	4.448	4.448	(1.005)	124949	40.0000	40
$	27 4-Chloroaniline-d4	131	4.468	4.468	(1.009)	48031	40.0000	42(Q)
	28 4-Chloroaniline	127	4.479	4.479	(1.012)	54192	40.0000	45
	29 Hexachlorobutadiene	225	4.551	4.551	(1.028)	50491	40.0000	44
	30 Caprolactam	113	4.789	4.789	(1.082)	17402	40.0000	42
	31 4-Chloro-3-methylphenol	107	4.924	4.924	(1.112)	48950	40.0000	41
	32 2-Methylnaphthalene	142	5.079	5.079	(1.147)	97690	40.0000	41
	33 Hexachlorocyclopentadiene	237	5.234	5.234	(0.860)	52527	40.0000	30(Q)
	34 1,2,4,5-Tetrachlorobenzene	216	5.245	5.245	(0.862)	80723	40.0000	36
	35 2,4,6-Trichlorophenol	196	5.348	5.348	(0.879)	58030	40.0000	41
	36 2,4,5-Trichlorophenol	196	5.379	5.379	(0.884)	64444	40.0000	42
	37 1,1'-Biphenyl	154	5.524	5.524	(0.908)	142241	40.0000	37
	38 2-Chloronaphthalene	162	5.545	5.545	(0.912)	115225	40.0000	36
	39 2-Nitroaniline	65	5.638	5.638	(0.927)	45005	40.0000	40
$	40 Dimethylphthalate-d6	166	5.783	5.783	(0.951)	162482	40.0000	38
	41 Dimethylphthalate	163	5.804	5.804	(0.954)	160209	40.0000	38
	42 2,6-Dinitrotoluene	165	5.866	5.866	(0.964)	34873	40.0000	36
$	43 Acenaphthylene-d8	160	5.938	5.938	(0.976)	177832	40.0000	37
	44 Acenaphthylene	152	5.949	5.949	(0.978)	187548	40.0000	38
	45 3-Nitroaniline	138	6.031	6.031	(0.991)	32772	40.0000	41(Q)
*	46 Acenaphthene-d10	164	6.083	6.083	(1.000)	108531	40.0000	
	47 Acenaphthene	153	6.114	6.114	(1.005)	120971	40.0000	37
	48 2,4-Dinitrophenol	184	6.135	6.135	(1.009)	28509	40.0000	35(Q)
$	49 4-Nitrophenol-d4	143	6.187	6.187	(1.017)	34153	40.0000	42
	50 4-Nitrophenol	109	6.197	6.197	(1.019)	60331	40.0000	42
	51 2,4-Dinitrotoluene	165	6.259	6.259	(1.029)	60606	40.0000	40(Q)
	52 Dibenzofuran	168	6.280	6.280	(1.032)	188356	40.0000	39
	118 2,3,4,6-Tetrachlorophenol	232	6.404	6.404	(1.053)	55149	40.0000	38
	53 Diethylphthalate	149	6.487	6.487	(1.066)	168577	40.0000	38
$	54 Fluorene-d10	176	6.590	6.590	(1.083)	152528	40.0000	40
	55 4-Chlorophenyl-phenylether	204	6.611	6.611	(1.087)	107565	40.0000	40
	56 Fluorene	166	6.621	6.621	(1.088)	163868	40.0000	38
	57 4-Nitroaniline	138	6.632	6.632	(1.090)	39918	40.0000	42(Q)
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.652	6.652	(0.883)	43308	40.0000	39(Q)
	59 4,6-Dinitro-2-methylphenol	198	6.652	6.652	(0.883)	44503	40.0000	35(Q)
	60 N-Nitrosodiphenylamine	169	6.714	6.714	(0.891)	148406	40.0000	39
	61 4-Bromophenyl-phenylether	248	7.087	7.087	(0.941)	65348	40.0000	37
	62 Hexachlorobenzene	284	7.160	7.160	(0.951)	64567	40.0000	37
	63 Atrazine	200	7.232	7.232	(0.960)	76128	40.0000	39
	64 Pentachlorophenol	266	7.346	7.346	(0.975)	41041	40.0000	32
*	65 Phenanthrene-d10	188	7.532	7.532	(1.000)	279095	40.0000	
	66 Phenanthrene	178	7.553	7.553	(1.003)	294569	40.0000	40
$	67 Anthracene-d10	188	7.584	7.584	(1.007)	296977	40.0000	39
	68 Anthracene	178	7.605	7.605	(1.010)	302664	40.0000	39
	117 Carbazole	167	7.760	7.760	(1.030)	260062	40.0000	39
	70 Di-n-butylphthalate	149	8.081	8.081	(1.073)	304572	40.0000	38
	71 Fluoranthene	202	8.722	8.722	(1.158)	428906	40.0000	40
$	72 Pyrene-d10	212	8.929	8.929	(0.881)	343560	40.0000	37
	73 Pyrene	202	8.950	8.950	(0.884)	452449	40.0000	39
	74 Butylbenzylphthalate	149	9.550	9.550	(0.943)	164425	40.0000	35

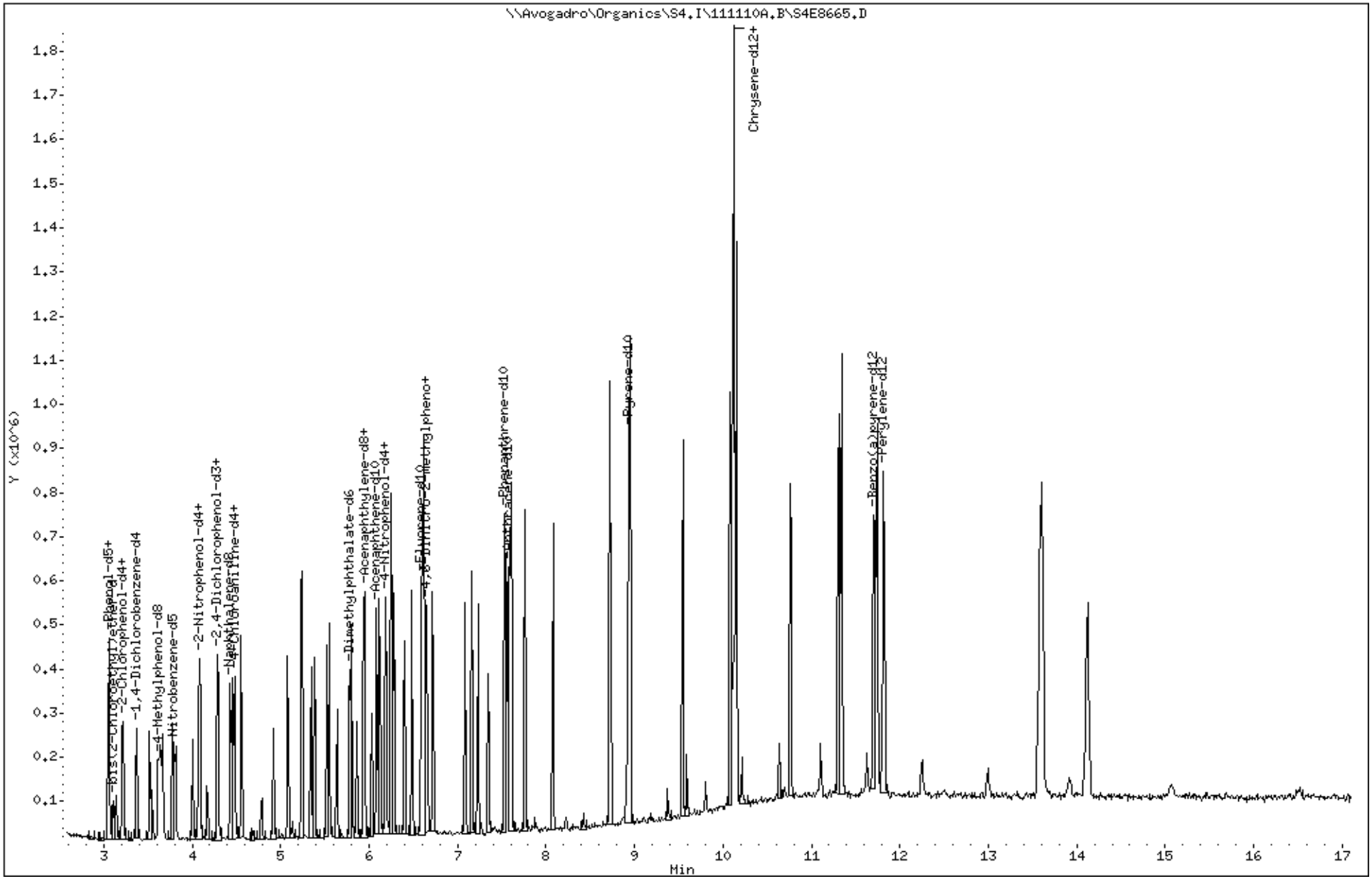
Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8665.D
Report Date: 11-Nov-2011 14:04

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
	75 3,3'-Dichlorobenzidine	252	10.078	10.078	(0.995)	194091	40.0000	43
	79 bis(2-Ethylhexyl)phthalate	149	10.099	10.099	(0.997)	227487	40.0000	32
	76 Benzo(a)anthracene	228	10.120	10.120	(0.999)	510827	40.0000	38
*	77 Chrysene-d12	240	10.130	10.130	(1.000)	478843	40.0000	(Q)
	78 Chrysene	228	10.151	10.151	(1.002)	518349	40.0000	41
	80 Di-n-octylphthalate	149	10.761	10.761	(0.911)	420756	40.0000	37
	81 Benzo(b)fluoranthene	252	11.310	11.310	(0.957)	533076	40.0000	37
	82 Benzo(k)fluoranthene	252	11.341	11.341	(0.960)	582383	40.0000	39
$	83 Benzo(a)pyrene-d12	264	11.714	11.714	(0.991)	414420	40.0000	40
	84 Benzo(a)pyrene	252	11.745	11.745	(0.994)	513161	40.0000	39
*	85 Perylene-d12	264	11.817	11.817	(1.000)	461795	40.0000	
	86 Indeno(1,2,3-cd)pyrene	276	13.587	13.587	(1.150)	593851	40.0000	37
	87 Dibenzo(a,h)anthracene	278	13.608	13.608	(1.152)	495060	40.0000	37
	88 Benzo(g,h,i)perylene	276	14.125	14.125	(1.195)	483086	40.0000	37

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8665.D
Date : 11-NOV-2011 05:28
Client ID: SSTD0204S
Instrument: S4.i
Sample Info: SSTD0204S,SSTD0204S
Volume Injected (uL): 2.0
Operator: MMS SRC: MMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8670.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8670.D
Lab Smp Id: SSTD0204T Client Smp ID: SSTD0204T
Inj Date : 11-NOV-2011 10:37
Operator : MMS   SRC: MMS Inst ID: S4.i
Smp Info : SSTD0204T,SSTD0204T
Misc Info : 2,3
Comment   :
Method   : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:04 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.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	3.061	3.061	(0.908)	26334	40.0000	38
$	2 Phenol-d5	71	3.061	3.061	(0.908)	25891	40.0000	38
	3 Phenol	94	3.061	3.061	(0.908)	30514	40.0000	31
$	4 bis(2-Chloroethyl)ether-d8	67	3.112	3.112	(0.923)	15885	40.0000	32
	5 bis(2-Chloroethyl)ether	93	3.143	3.143	(0.932)	21431	40.0000	32
$	6 2-Chlorophenol-d4	132	3.206	3.206	(0.951)	26971	40.0000	34
	7 2-Chlorophenol	128	3.216	3.216	(0.954)	26065	40.0000	33
*	8 1,4-Dichlorobenzene-d4	152	3.371	3.371	(1.000)	25097	40.0000	(Q)
	9 2-Methylphenol	108	3.516	3.516	(1.043)	25077	40.0000	37
	10 2,2'-oxybis(1-Chloropropane)	45	3.547	3.547	(1.052)	4217	40.0000	34(Q)
$	11 4-Methylphenol-d8	113	3.620	3.620	(1.074)	27916	40.0000	39
	12 4-Methylphenol	108	3.640	3.640	(1.080)	26303	40.0000	36
	14 N-Nitroso-di-n-propylamine	70	3.651	3.651	(1.083)	26919	40.0000	37(Q)
	13 Acetophenone	105	3.671	3.671	(1.089)	43908	40.0000	38
	15 Hexachloroethane	117	3.775	3.775	(1.120)	16484	40.0000	40(Q)
$	16 Nitrobenzene-d5	128	3.795	3.795	(0.857)	14179	40.0000	37(Q)
	17 Nitrobenzene	77	3.816	3.816	(0.862)	50483	40.0000	38
	18 Isophorone	82	4.002	4.002	(0.904)	72768	40.0000	36
$	19 2-Nitrophenol-d4	143	4.075	4.075	(0.921)	18596	40.0000	38
	20 2-Nitrophenol	139	4.085	4.085	(0.923)	20681	40.0000	41
	21 2,4-Dimethylphenol	107	4.096	4.096	(0.925)	40371	40.0000	37(Q)

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8670.D
Report Date: 11-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	4.168	4.168	(0.942)	29411	40.0000	33
$	23 2,4-Dichlorophenol-d3	165	4.282	4.282	(0.967)	37020	40.0000	40
	24 2,4-Dichlorophenol	162	4.292	4.292	(0.970)	33356	40.0000	36
*	25 Naphthalene-d8	136	4.427	4.427	(1.000)	92354	40.0000	
	26 Naphthalene	128	4.448	4.448	(1.005)	89647	40.0000	37
$	27 4-Chloroaniline-d4	131	4.468	4.468	(1.009)	36140	40.0000	40(Q)
	28 4-Chloroaniline	127	4.479	4.479	(1.012)	36091	40.0000	38
	29 Hexachlorobutadiene	225	4.551	4.551	(1.028)	36286	40.0000	40
	30 Caprolactam	113	4.779	4.779	(1.079)	13104	40.0000	40
	31 4-Chloro-3-methylphenol	107	4.924	4.924	(1.112)	32354	40.0000	35
	32 2-Methylnaphthalene	142	5.079	5.079	(1.147)	70675	40.0000	38
	33 Hexachlorocyclopentadiene	237	5.234	5.234	(0.860)	27442	40.0000	22(Q)
	34 1,2,4,5-Tetrachlorobenzene	216	5.245	5.245	(0.862)	60375	40.0000	37
	35 2,4,6-Trichlorophenol	196	5.348	5.348	(0.879)	42974	40.0000	42
	36 2,4,5-Trichlorophenol	196	5.379	5.379	(0.884)	45035	40.0000	40
	37 1,1'-Biphenyl	154	5.524	5.524	(0.908)	108909	40.0000	39
	38 2-Chloronaphthalene	162	5.545	5.545	(0.912)	85926	40.0000	37
	39 2-Nitroaniline	65	5.638	5.638	(0.927)	31051	40.0000	38
$	40 Dimethylphthalate-d6	166	5.783	5.783	(0.951)	111161	40.0000	36
	41 Dimethylphthalate	163	5.803	5.803	(0.954)	123844	40.0000	40
	42 2,6-Dinitrotoluene	165	5.866	5.866	(0.964)	27157	40.0000	39
$	43 Acenaphthylene-d8	160	5.938	5.938	(0.976)	132908	40.0000	38
	44 Acenaphthylene	152	5.948	5.948	(0.978)	134214	40.0000	37
	45 3-Nitroaniline	138	6.031	6.031	(0.991)	23016	40.0000	40
*	46 Acenaphthene-d10	164	6.083	6.083	(1.000)	79032	40.0000	
	47 Acenaphthene	153	6.114	6.114	(1.005)	87124	40.0000	37
	48 2,4-Dinitrophenol	184	6.135	6.135	(1.009)	20951	40.0000	35
$	49 4-Nitrophenol-d4	143	6.186	6.186	(1.017)	21929	40.0000	37(Q)
	50 4-Nitrophenol	109	6.197	6.197	(1.019)	45795	40.0000	44
	51 2,4-Dinitrotoluene	165	6.259	6.259	(1.029)	36536	40.0000	33(Q)
	52 Dibenzofuran	168	6.280	6.280	(1.032)	136910	40.0000	39
	118 2,3,4,6-Tetrachlorophenol	232	6.404	6.404	(1.053)	45890	40.0000	43
	53 Diethylphthalate	149	6.487	6.487	(1.066)	115441	40.0000	36
$	54 Fluorene-d10	176	6.590	6.590	(1.083)	110120	40.0000	40
	55 4-Chlorophenyl-phenylether	204	6.611	6.611	(1.087)	75204	40.0000	38
	56 Fluorene	166	6.621	6.621	(1.088)	124028	40.0000	39
	57 4-Nitroaniline	138	6.621	6.621	(1.088)	29654	40.0000	43(Q)
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.652	6.652	(0.883)	37391	40.0000	47
	59 4,6-Dinitro-2-methylphenol	198	6.652	6.652	(0.883)	34385	40.0000	39(Q)
	60 N-Nitrosodiphenylamine	169	6.725	6.725	(0.893)	109178	40.0000	40
	61 4-Bromophenyl-phenylether	248	7.087	7.087	(0.941)	47179	40.0000	38
	62 Hexachlorobenzene	284	7.159	7.159	(0.951)	44893	40.0000	37
	63 Atrazine	200	7.232	7.232	(0.960)	54550	40.0000	40
	64 Pentachlorophenol	266	7.356	7.356	(0.977)	34784	40.0000	39
*	65 Phenanthrene-d10	188	7.532	7.532	(1.000)	196652	40.0000	
	66 Phenanthrene	178	7.563	7.563	(1.004)	211086	40.0000	40
$	67 Anthracene-d10	188	7.584	7.584	(1.007)	223571	40.0000	41
	68 Anthracene	178	7.604	7.604	(1.010)	224483	40.0000	41
	117 Carbazole	167	7.760	7.760	(1.030)	199090	40.0000	42
	70 Di-n-butylphthalate	149	8.080	8.080	(1.073)	222057	40.0000	39
	71 Fluoranthene	202	8.722	8.722	(1.158)	336120	40.0000	45
$	72 Pyrene-d10	212	8.929	8.929	(0.881)	276423	40.0000	34
	73 Pyrene	202	8.950	8.950	(0.884)	360278	40.0000	36
	74 Butylbenzylphthalate	149	9.550	9.550	(0.943)	122893	40.0000	30

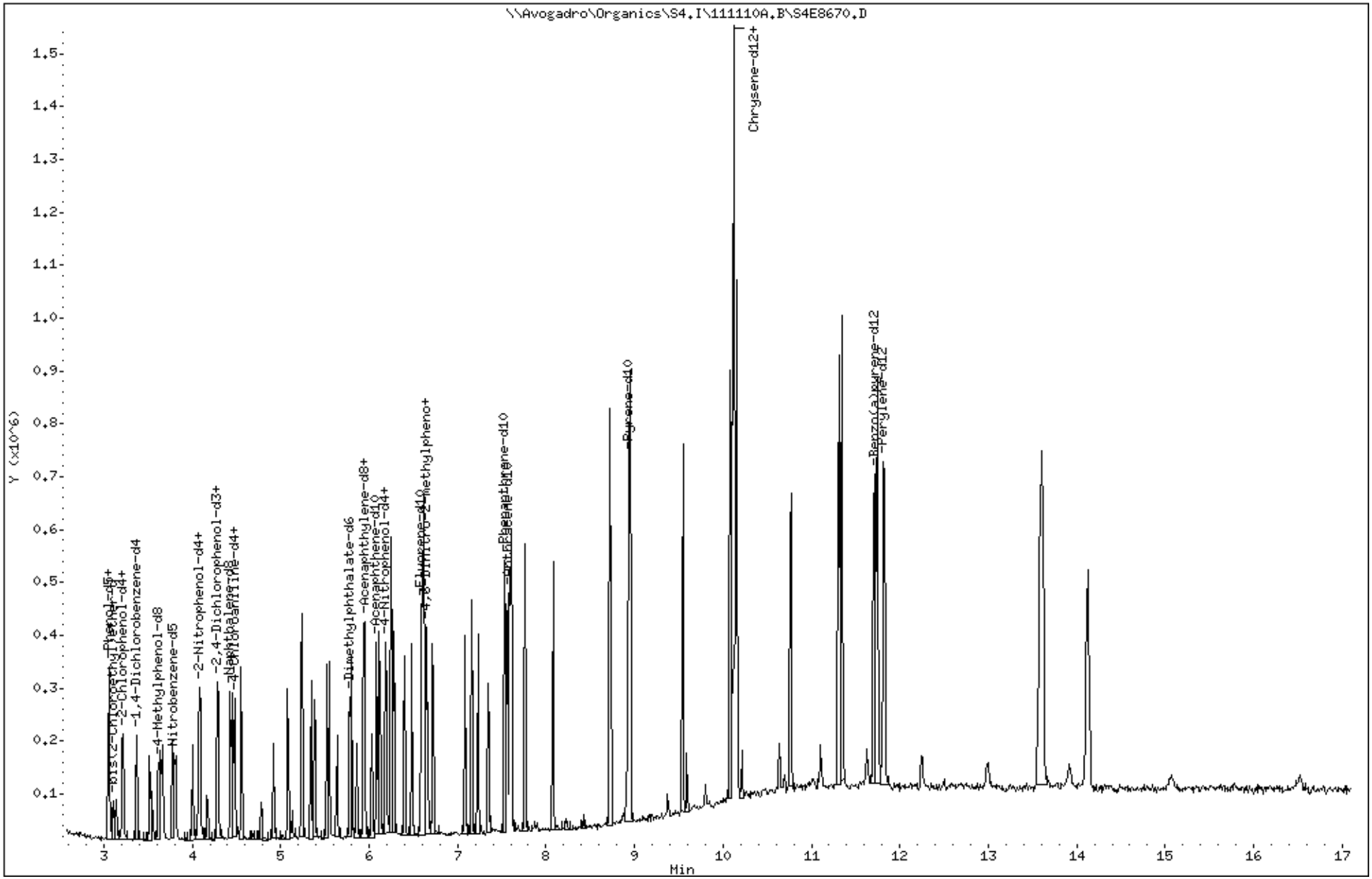
Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8670.D
Report Date: 11-Nov-2011 14:04

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
75	3,3'-Dichlorobenzidine	252	10.078	10.078	(0.995)	170887	40.0000	43
79	bis(2-Ethylhexyl)phthalate	149	10.099	10.099	(0.997)	183145	40.0000	30
76	Benzo(a)anthracene	228	10.119	10.119	(0.999)	473134	40.0000	41
* 77	Chrysene-d12	240	10.130	10.130	(1.000)	419501	40.0000	(Q)
78	Chrysene	228	10.151	10.151	(1.002)	415928	40.0000	38
80	Di-n-octylphthalate	149	10.772	10.772	(0.911)	339547	40.0000	32
81	Benzo(b)fluoranthene	252	11.310	11.310	(0.956)	556444	40.0000	42
82	Benzo(k)fluoranthene	252	11.341	11.341	(0.959)	476402	40.0000	35
$ 83	Benzo(a)pyrene-d12	264	11.713	11.713	(0.990)	365501	40.0000	39
84	Benzo(a)pyrene	252	11.744	11.744	(0.993)	458586	40.0000	38
* 85	Perylene-d12	264	11.827	11.827	(1.000)	421433	40.0000	
86	Indeno(1,2,3-cd)pyrene	276	13.587	13.587	(1.149)	539850	40.0000	37
87	Dibenzo(a,h)anthracene	278	13.608	13.608	(1.151)	438954	40.0000	36
88	Benzo(g,h,i)perylene	276	14.125	14.125	(1.194)	448786	40.0000	37

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8670.D
Date : 11-NOV-2011 10:37
Client ID: SSTD0204T
Instrument: S4.i
Sample Info: SSTD0204T,SSTD0204T
Volume Injected (uL): 2.0
Operator: MMS SRC: MMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\Avogadro\Organics\S2.I\111025.B\S2H5052.D
Lab Smp Id: DFTPP2W Client Smp ID: DFTPP2W
Inj Date : 25-OCT-2011 09:32
Operator : SRC: Inst ID: S2.i
Smp Info : DFTPP2W,DFTPP2W
Misc Info : 3,3
Comment :
Method : \\Avogadro\Organics\S2.I\111025.B\S2_dftppSOM.m
Meth Date : 19-Oct-2011 10:51 mscarpaci Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 100 QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf * Vf/Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 dftpp						CAS #: 5074-71-5		
5.674	6.035	-0.361	198	237696			0.00- 100.00	100.00
5.674	6.035	-0.361	51	145024			10.00- 80.00	61.01
5.674	6.035	-0.361	68	0	0.0	0.0	0.00- 2.00	0.00
5.674	6.035	-0.361	69	199040			0.00- 0.00	83.74
5.674	6.035	-0.361	70	0	0.0	0.0	0.00- 2.00	0.00
5.674	6.035	-0.361	127	111936			10.00- 80.00	47.09
5.674	6.035	-0.361	197	0	0.0	0.0	0.00- 2.00	0.00
5.674	6.035	-0.361	199	16123			5.00- 9.00	6.78
5.674	6.035	-0.361	275	36352			10.00- 60.00	15.29
5.674	6.035	-0.361	365	3657			1.00- 0.00	1.54
5.674	6.035	-0.361	441	21896			0.01- 99.99	91.26
5.674	6.035	-0.361	442	124880			50.00- 100.00	52.54
5.674	6.035	-0.361	443	23992			15.00- 24.00	19.21

Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5052.D

Date : 25-OCT-2011 09:32

Client ID: DFTPP2W

Instrument: S2.i

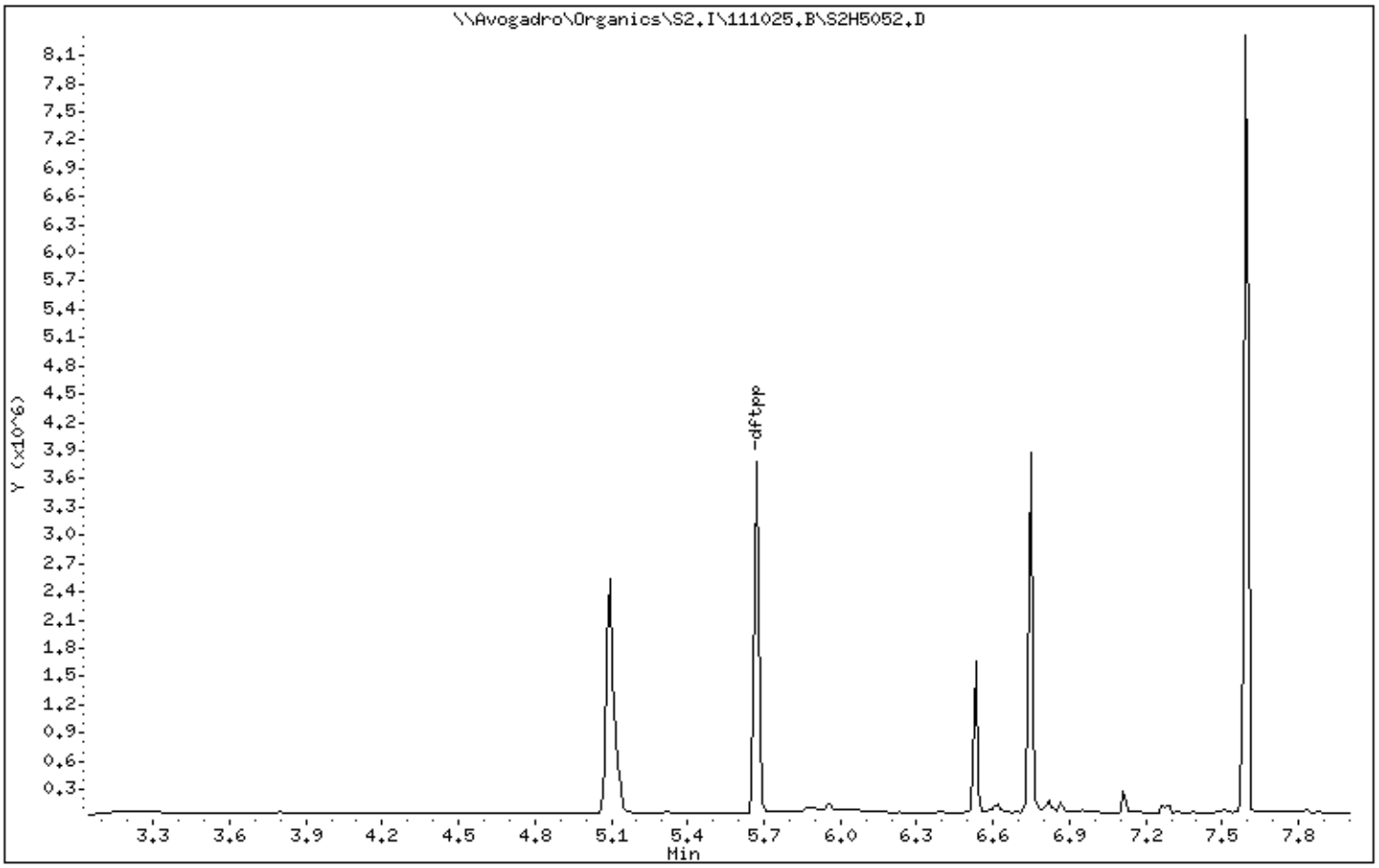
Sample Info: DFTPP2W,DFTPP2W

Volume Injected (uL): 2.0

Operator: SRC:

Column phase: RXi-5SILMS

Column diameter: 0.25



Data File: \\Avogadro\Organics\S2.I\111025.B\S2H5052.D

Date : 25-OCT-2011 09:32

Client ID: DFTPP2W

Instrument: S2.i

Sample Info: DFTPP2W,DFTPP2W

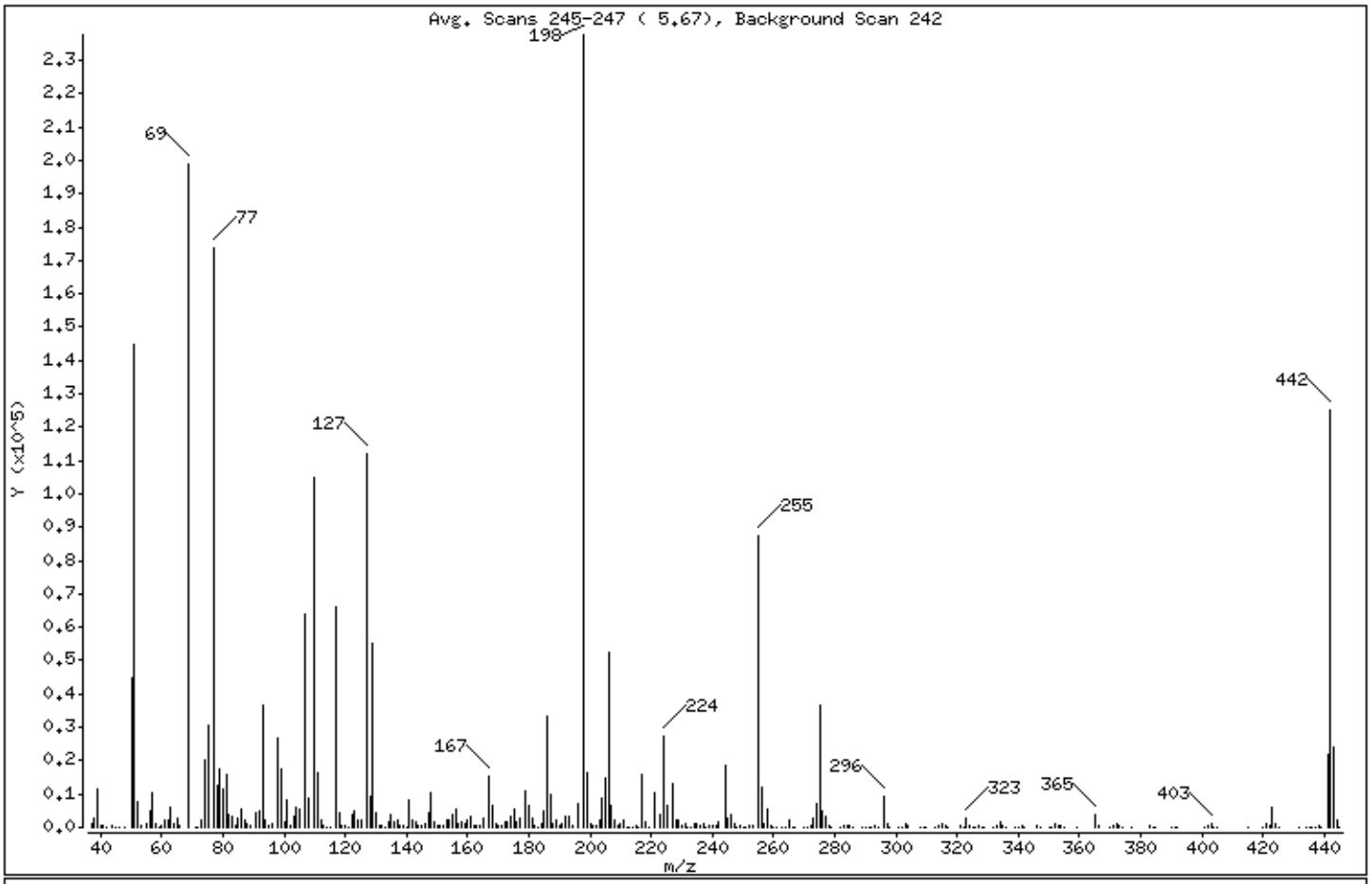
Volume Injected (uL): 2.0

Operator: SRC:

Column phase: RXi-5SILMS

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	61.01
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	83.74
70	Less than 2.00% of mass 69	0.00 (0.00)
127	10.00 - 80.00% of mass 198	47.09
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.78
275	10.00 - 60.00% of mass 198	15.29
365	Greater than 1.00% of mass 198	1.54
441	Present, but less than mass 443	9.21
442	50.00 - 100.00% of mass 198	52.54
443	15.00 - 24.00% of mass 442	10.09 (19.21)

Date : 25-OCT-2011 09:32

Client ID: DFTPP2W Instrument: S2.i

Sample Info: DFTPP2W,DFTPP2W

Volume Injected (uL): 2.0 Operator: SRC:

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S2H5052.D
Spectrum: Avg. Scans 245-247 (5.67), Background Scan 242
Location of Maximum: 198.00
Number of points: 308

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	887	129.00	55200	211.00	2362	304.00	325
38.00	2682	130.00	4483	212.00	249	308.00	115
39.00	11719	131.00	688	213.00	204	309.00	150
40.00	670	132.00	462	214.00	54	310.00	214
41.00	474	133.00	266	215.00	751	313.00	76
42.00	44	134.00	1630	216.00	214	314.00	451
44.00	751	135.00	4058	217.00	15846	315.00	1039
45.00	234	136.00	1797	218.00	1851	316.00	552
46.00	13	137.00	2009	219.00	177	317.00	85
48.00	258	138.00	395	221.00	10424	321.00	313
50.00	44544	139.00	300	223.00	3644	322.00	130
51.00	145024	140.00	182	224.00	27192	323.00	2631
52.00	7590	141.00	7964	225.00	6722	324.00	519
53.00	381	142.00	2409	227.00	13254	325.00	37
55.00	1128	143.00	1757	228.00	2001	326.00	98
56.00	4760	144.00	504	229.00	2299	327.00	634
57.00	10599	145.00	371	230.00	331	328.00	257
58.00	1020	146.00	1300	231.00	1171	329.00	49
59.00	161	147.00	4174	232.00	184	332.00	229
60.00	329	148.00	10447	233.00	240	333.00	319
61.00	1915	149.00	1650	234.00	824	334.00	1692
62.00	2253	150.00	478	235.00	916	335.00	429
63.00	5846	151.00	736	236.00	602	336.00	79
64.00	821	152.00	575	237.00	822	339.00	49
65.00	2558	153.00	2419	238.00	198	340.00	37
66.00	563	154.00	2046	239.00	394	341.00	290
69.00	199040	155.00	4043	240.00	393	342.00	77
71.00	245	156.00	5410	241.00	656	346.00	590
72.00	208	157.00	887	242.00	1412	347.00	111
73.00	2001	158.00	1385	244.00	18744	350.00	110
74.00	20192	159.00	1170	245.00	2688	351.00	46
75.00	30352	160.00	2326	246.00	3874	352.00	849
77.00	174016	161.00	3402	247.00	881	353.00	585
78.00	12544	162.00	728	248.00	240	354.00	692
79.00	17224	163.00	287	249.00	609	355.00	166

Date : 25-OCT-2011 09:32

Client ID: DFTPP2W Instrument: S2.i

Sample Info: DFTPP2W,DFTPP2W

Volume Injected (uL): 2.0 Operator: SRC:

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S2H5052.D
Spectrum: Avg. Scans 245-247 (5.67), Background Scan 242
Location of Maximum: 198.00
Number of points: 308

m/z	Y	m/z	Y	m/z	Y	m/z	Y
80.00	11731	164.00	338	250.00	191	359.00	53
81.00	15941	165.00	2925	251.00	247	365.00	3657
82.00	3577	167.00	15178	252.00	277	366.00	483
83.00	3265	168.00	6390	253.00	665	370.00	76
84.00	392	169.00	1228	255.00	87624	371.00	292
85.00	2597	170.00	748	256.00	12126	372.00	1311
86.00	5634	171.00	687	257.00	1136	373.00	408
87.00	2359	172.00	1391	258.00	5533	374.00	39
88.00	938	173.00	1693	259.00	811	377.00	35
89.00	466	174.00	3059	260.00	115	383.00	340
91.00	4110	175.00	5272	261.00	156	384.00	123
92.00	4915	176.00	1474	263.00	34	385.00	44
93.00	36536	177.00	2827	264.00	20	390.00	160
94.00	2070	179.00	10743	265.00	2216	391.00	95
95.00	414	180.00	6612	266.00	251	392.00	76
96.00	1266	181.00	2975	267.00	33	401.00	76
98.00	26712	182.00	563	270.00	175	402.00	578
99.00	17696	183.00	219	271.00	208	403.00	938
100.00	1505	184.00	1034	272.00	325	404.00	257
101.00	8423	185.00	4935	273.00	2525	405.00	42
102.00	455	186.00	33544	274.00	7031	415.00	38
103.00	3136	187.00	9632	275.00	36352	420.00	35
104.00	5860	188.00	998	276.00	5041	421.00	836
105.00	5248	189.00	2373	277.00	3128	422.00	577
107.00	63784	190.00	553	278.00	567	423.00	6131
108.00	8919	191.00	1015	279.00	59	424.00	1267
110.00	105016	192.00	3252	282.00	36	425.00	58
111.00	16381	193.00	3405	283.00	413	432.00	36
112.00	2021	194.00	680	284.00	279	434.00	107
113.00	640	196.00	7359	285.00	598	435.00	65
114.00	45	198.00	237696	286.00	126	436.00	164
115.00	111	199.00	16123	289.00	175	437.00	252
117.00	66072	200.00	1299	290.00	85	438.00	342
118.00	4481	201.00	293	291.00	34	439.00	241
119.00	473	202.00	776	292.00	139	441.00	21896

Date : 25-OCT-2011 09:32

Client ID: DFTPP2W Instrument: S2.i

Sample Info: DFTPP2W,DFTPP2W

Volume Injected (uL): 2.0 Operator: SRC:

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S2H5052.D
Spectrum: Avg. Scans 245-247 (5.67), Background Scan 242
Location of Maximum: 198.00
Number of points: 308

m/z	Y	m/z	Y	m/z	Y	m/z	Y
120.00	702	203.00	1974	293.00	630	442.00	124880
121.00	106	204.00	8596	294.00	211	443.00	23992
122.00	3904	205.00	14687	296.00	9424	444.00	2149
123.00	5097	206.00	52392	297.00	1327	445.00	154
124.00	2427	207.00	6769	298.00	51		
125.00	1989	208.00	2114	301.00	80		
127.00	111936	209.00	770	302.00	203		
128.00	9377	210.00	914	303.00	1040		

Spectrum Analytical, Inc. RI Division

Data file : \\Avogadro\Organics\S2.I\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

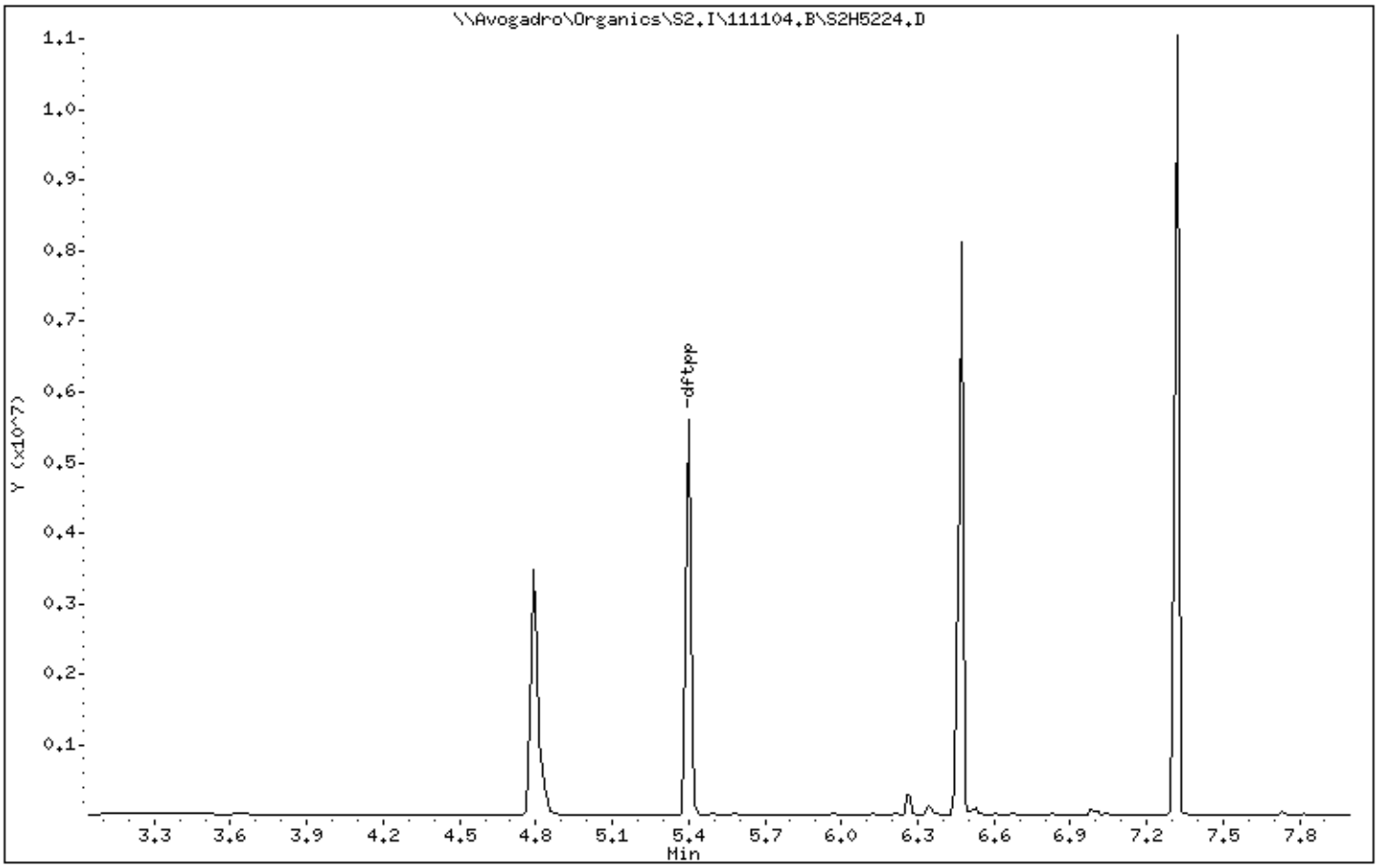
Sample Info: DFTPP2S,DFTPP2S

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

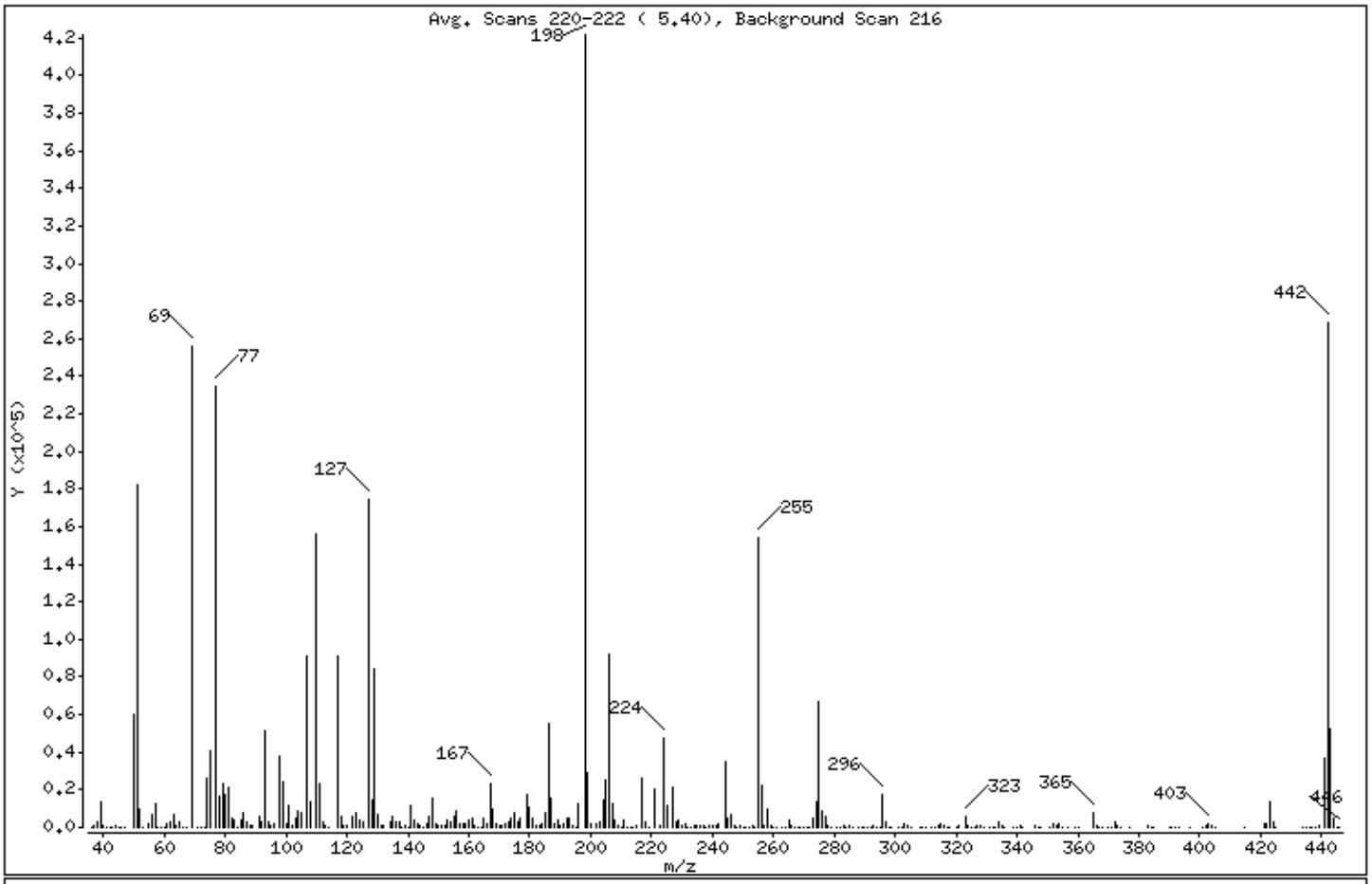
Volume Injected (uL): 2.0

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		

Spectrum Analytical, Inc. RI Division

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8634.D
Lab Smp Id: DFTPP4Q Client Smp ID: DFTPP4Q
Inj Date : 10-NOV-2011 16:03
Operator : MMS SRC: MMS Inst ID: S4.i
Smp Info : DFTPP4Q,DFTPP4Q
Misc Info : 3
Comment :
Method : \\Avogadro\Organics\S4.I\111110A.B\S4_dftppSOM.m
Meth Date : 14-Nov-2011 14:48 bmaczewska 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

Concentration Formula: Amt * DF * Uf * Vf/Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume (uL)
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
1 dftpp						CAS #: 5074-71-5		
4.793	4.794	-0.001	198	141120			0.00- 100.00	100.00
4.793	4.794	-0.001	51	43920			10.00- 80.00	31.12
4.793	4.794	-0.001	68	1264			0.00- 2.00	1.52
4.793	4.794	-0.001	69	83232			0.00- 0.00	58.98
4.793	4.794	-0.001	70	0	0.0	0.0	0.00- 2.00	0.00
4.793	4.794	-0.001	127	71792			10.00- 80.00	50.87
4.793	4.794	-0.001	197	0	0.0	0.0	0.00- 2.00	0.00
4.793	4.794	-0.001	199	10414			5.00- 9.00	7.38
4.793	4.794	-0.001	275	44040			10.00- 60.00	31.21
4.793	4.794	-0.001	365	9006			1.00- 0.00	6.38
4.793	4.794	-0.001	441	19152			0.01- 99.99	87.50
4.793	4.794	-0.001	442	122008			50.00- 100.00	86.46
4.793	4.794	-0.001	443	21888			15.00- 24.00	17.94

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8634.D

Date : 10-NOV-2011 16:03

Client ID: DFTPP4Q

Instrument: S4.i

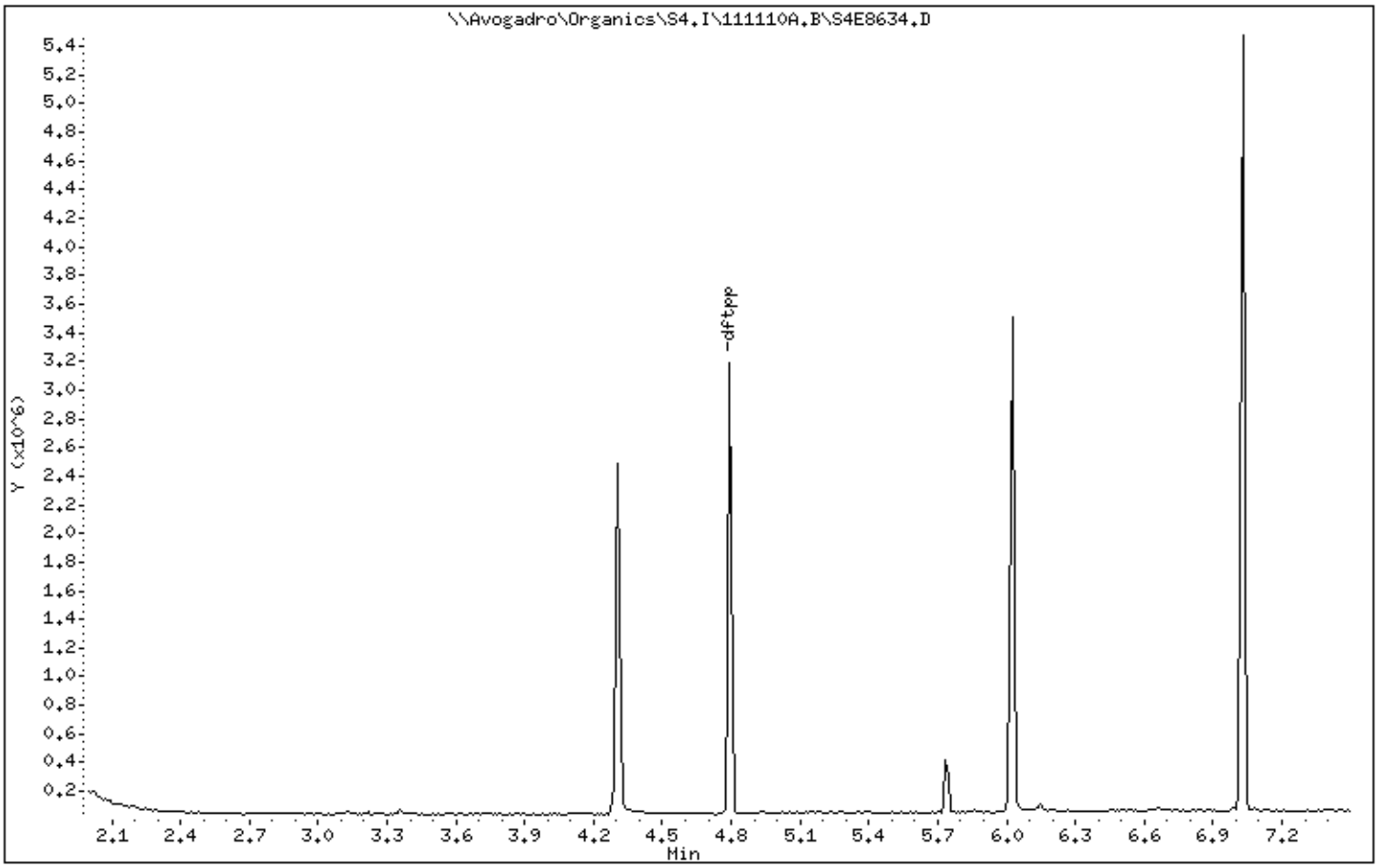
Sample Info: DFTPP4Q,DFTPP4Q

Volume Injected (uL): 2.0

Operator: MMS SRC: MMS

Column phase: RXi-5SILMS

Column diameter: 0.25



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8634.D

Date : 10-NOV-2011 16:03

Client ID: DFTPP4Q

Instrument: S4.i

Sample Info: DFTPP4Q,DFTPP4Q

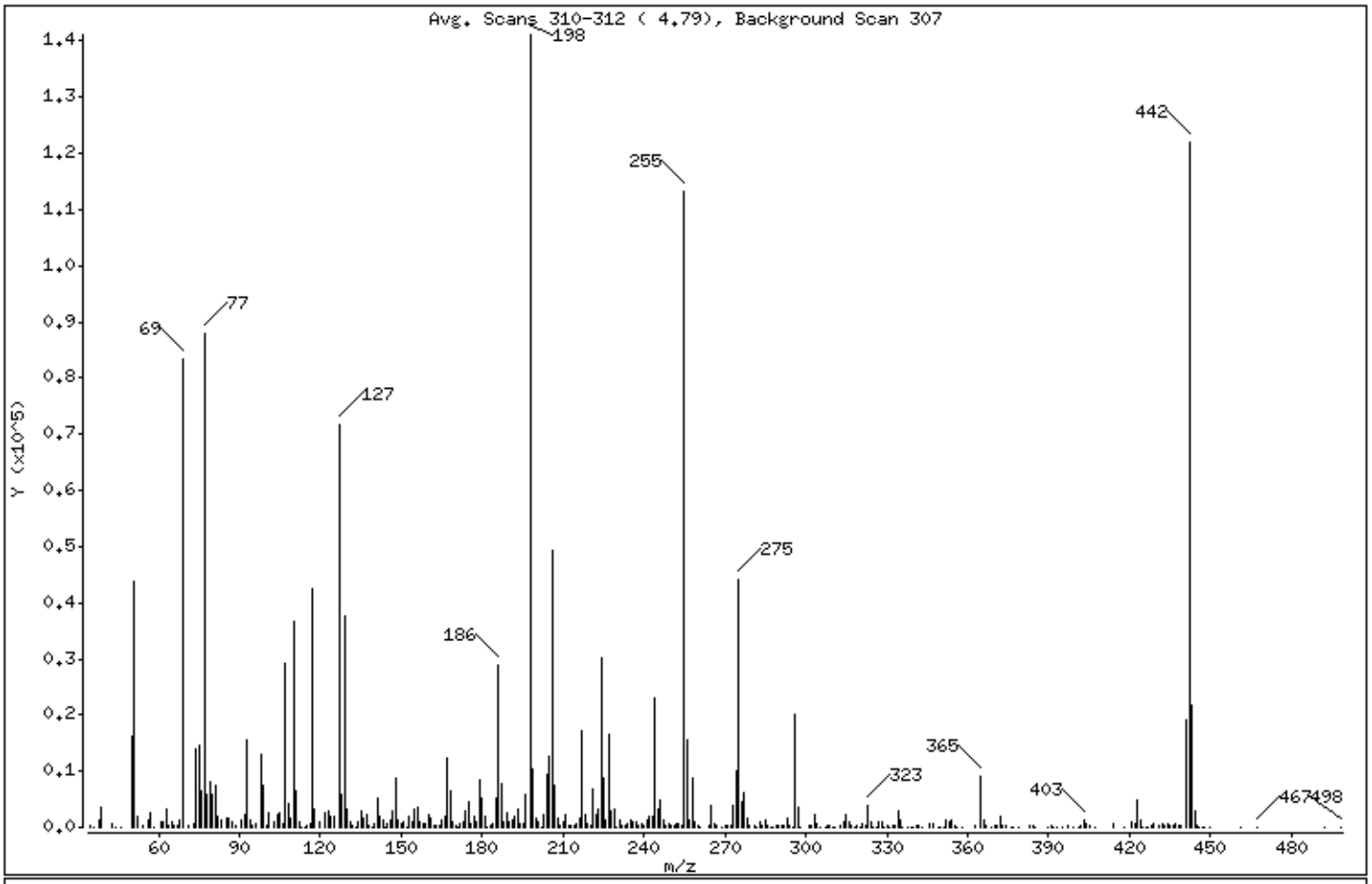
Volume Injected (uL): 2.0

Operator: MMS SRC: MMS

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	31.12
68	Less than 2.00% of mass 69	0.90 (1.52)
69	Mass 69 relative abundance	58.98
70	Less than 2.00% of mass 69	0.00 (0.00)
127	10.00 - 80.00% of mass 198	50.87
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	7.38
275	10.00 - 60.00% of mass 198	31.21
365	Greater than 1.00% of mass 198	6.38
441	Present, but less than mass 443	13.57
442	50.00 - 100.00% of mass 198	86.46
443	15.00 - 24.00% of mass 442	15.51 (17.94)

Date : 10-NOV-2011 16:03

Client ID: DFTPP4Q Instrument: S4.i

Sample Info: DFTPP4Q,DFTPP4Q

Volume Injected (uL): 2.0 Operator: MMS SRC: MMS

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S4E8634.D
Spectrum: Avg. Scans 310-312 (4.79), Background Scan 307
Location of Maximum: 198.00
Number of points: 350

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	319	145.00	630	234.00	744	330.00	226
36.00	108	146.00	1231	235.00	1240	331.00	154
38.00	1224	147.00	2912	236.00	972	332.00	347
39.00	3545	148.00	8730	237.00	928	333.00	463
43.00	504	149.00	1418	238.00	191	334.00	2847
44.00	69	150.00	712	239.00	792	335.00	1207
46.00	104	151.00	1135	240.00	193	336.00	42
50.00	16254	152.00	97	241.00	1247	338.00	67
51.00	43920	153.00	2069	242.00	1816	339.00	97
52.00	1942	154.00	964	243.00	1904	340.00	39
54.00	305	155.00	3137	244.00	23040	341.00	435
56.00	1310	156.00	3460	245.00	3253	342.00	179
57.00	2730	157.00	1046	246.00	4968	343.00	104
58.00	159	158.00	700	247.00	1300	346.00	801
61.00	1118	159.00	633	248.00	163	347.00	663
62.00	1040	160.00	2295	249.00	790	349.00	132
63.00	3137	161.00	1706	250.00	188	350.00	60
64.00	213	162.00	303	251.00	400	351.00	42
65.00	871	163.00	399	252.00	488	352.00	1156
66.00	226	164.00	307	253.00	770	353.00	891
67.00	479	165.00	1279	254.00	292	354.00	1270
68.00	1264	166.00	1990	255.00	113112	355.00	186
69.00	83232	167.00	12482	256.00	15495	356.00	36
71.00	308	168.00	6432	257.00	1417	358.00	39
73.00	494	169.00	817	258.00	8914	363.00	269
74.00	13960	170.00	403	259.00	1002	365.00	9006
75.00	14691	171.00	133	260.00	215	366.00	1323
76.00	6329	172.00	806	261.00	157	367.00	183
77.00	87928	173.00	1071	264.00	310	369.00	39
78.00	5766	174.00	2960	265.00	3881	370.00	207
79.00	8175	175.00	4480	266.00	592	371.00	462
80.00	5964	176.00	589	267.00	375	372.00	2004
81.00	7395	177.00	1803	269.00	77	373.00	187
82.00	1847	178.00	990	270.00	271	374.00	190
83.00	1284	179.00	8507	271.00	473	376.00	98

Date : 10-NOV-2011 16:03

Client ID: DFTPP4Q Instrument: S4.i

Sample Info: DFTPP4Q,DFTPP4Q

Volume Injected (uL): 2.0 Operator: MMS SRC: MMS

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S4E8634.D
Spectrum: Avg. Scans 310-312 (4.79), Background Scan 307
Location of Maximum: 198.00
Number of points: 350

m/z	Y	m/z	Y	m/z	Y	m/z	Y
85.00	1474	180.00	5076	272.00	351	377.00	155
86.00	1713	181.00	2088	273.00	3967	379.00	40
87.00	1034	182.00	143	274.00	10171	383.00	200
89.00	326	183.00	324	275.00	44040	384.00	289
91.00	1303	184.00	808	276.00	4473	385.00	57
92.00	2127	185.00	5103	277.00	6219	390.00	130
93.00	15477	186.00	28952	278.00	1579	391.00	373
94.00	1171	187.00	7798	279.00	232	392.00	143
95.00	486	188.00	880	281.00	451	393.00	93
96.00	800	189.00	2679	282.00	84	395.00	35
98.00	12916	190.00	874	283.00	995	397.00	231
99.00	7559	191.00	1427	284.00	351	399.00	71
100.00	384	192.00	2079	285.00	1341	401.00	143
101.00	2464	193.00	3225	286.00	186	402.00	454
103.00	962	194.00	811	287.00	115	403.00	1359
104.00	2220	195.00	739	288.00	78	404.00	556
105.00	2506	196.00	5763	289.00	300	405.00	186
106.00	771	198.00	141120	290.00	323	407.00	50
107.00	29312	199.00	10414	291.00	187	414.00	487
108.00	4072	200.00	1674	292.00	221	418.00	99
109.00	1472	201.00	1083	293.00	1537	421.00	845
110.00	36632	202.00	25	294.00	454	422.00	696
111.00	6405	203.00	2380	295.00	111	423.00	4953
112.00	1004	204.00	9273	296.00	20128	424.00	1394
113.00	112	205.00	12756	297.00	3508	425.00	145
114.00	90	206.00	49320	298.00	40	426.00	35
115.00	332	207.00	7474	301.00	188	427.00	88
116.00	572	208.00	1734	302.00	440	428.00	306
117.00	42520	209.00	296	303.00	2428	429.00	512
118.00	3109	210.00	1094	304.00	658	431.00	194
120.00	831	211.00	2339	305.00	98	432.00	588
122.00	2741	212.00	310	307.00	46	433.00	384
123.00	2987	213.00	279	308.00	312	434.00	576
124.00	2071	214.00	164	309.00	284	435.00	459
125.00	1979	215.00	729	310.00	121	436.00	310

Date : 10-NOV-2011 16:03

Client ID: DFTPP4Q Instrument: S4.i

Sample Info: DFTPP4Q,DFTPP4Q

Volume Injected (uL): 2.0 Operator: MMS SRC: MMS

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S4E8634.D
Spectrum: Avg. Scans 310-312 (4.79), Background Scan 307
Location of Maximum: 198.00
Number of points: 350

m/z	Y	m/z	Y	m/z	Y	m/z	Y
127.00	71792	216.00	1493	311.00	54	437.00	560
128.00	5841	217.00	17096	313.00	383	438.00	411
129.00	37680	218.00	2389	314.00	879	439.00	321
130.00	3228	219.00	629	315.00	2380	441.00	19152
131.00	1043	220.00	363	316.00	992	442.00	122008
132.00	282	221.00	6973	317.00	183	443.00	21888
133.00	11	222.00	2311	318.00	51	444.00	2992
134.00	1069	223.00	3119	319.00	229	445.00	275
135.00	3063	224.00	30064	320.00	94	446.00	90
136.00	1580	225.00	8731	321.00	562	447.00	75
137.00	2236	226.00	1442	322.00	203	448.00	92
138.00	478	227.00	16440	323.00	4044	450.00	33
139.00	85	228.00	3029	324.00	909	461.00	80
140.00	579	229.00	3240	325.00	51	467.00	160
141.00	5251	230.00	9	326.00	44	492.00	34
142.00	2107	231.00	1159	327.00	867	498.00	49
143.00	1252	232.00	371	328.00	923		
144.00	59	233.00	197	329.00	42		

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK2S

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

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

EPA SAMPLE NO.

SBLK2S

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

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

EPA SAMPLE NO.

SBLK2S

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

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

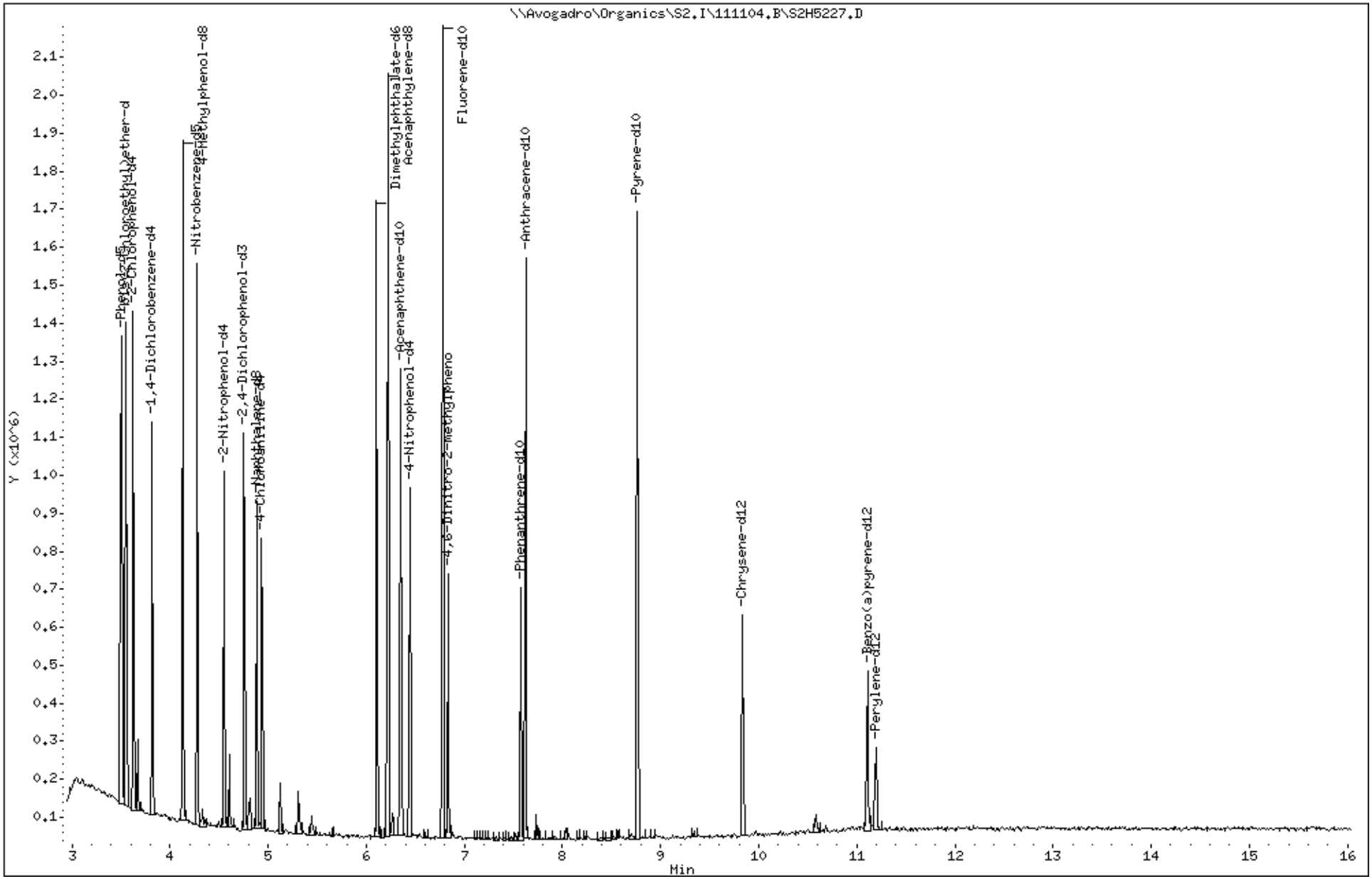
ISTD	RT	AREA	AMOUNT
* 8 1,4-Dichlorobenzene-d4	3.819	850993	40.000
* 25 Naphthalene-d8	4.881	840065	40.000
* 85 Perylene-d12	11.197	290846	40.000

	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

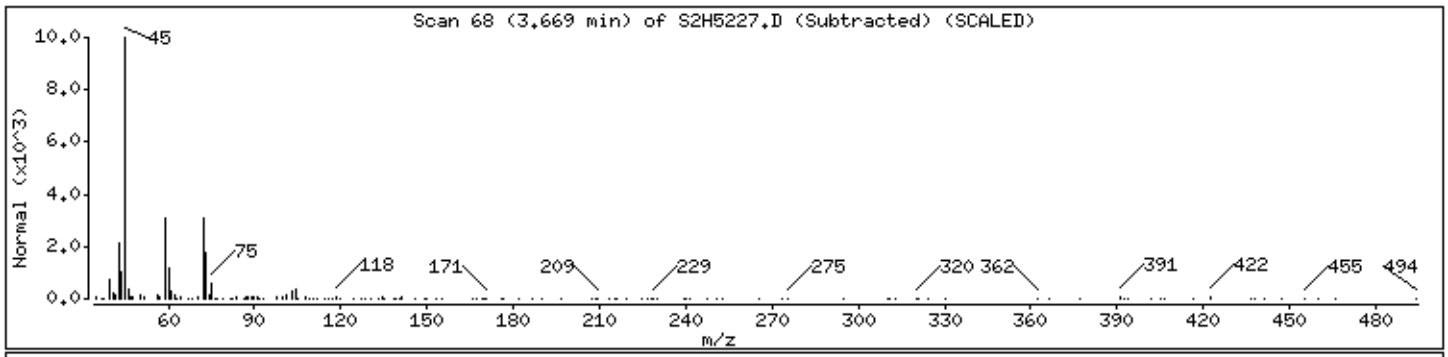
Client ID: SBLK2S Instrument: S2.i

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

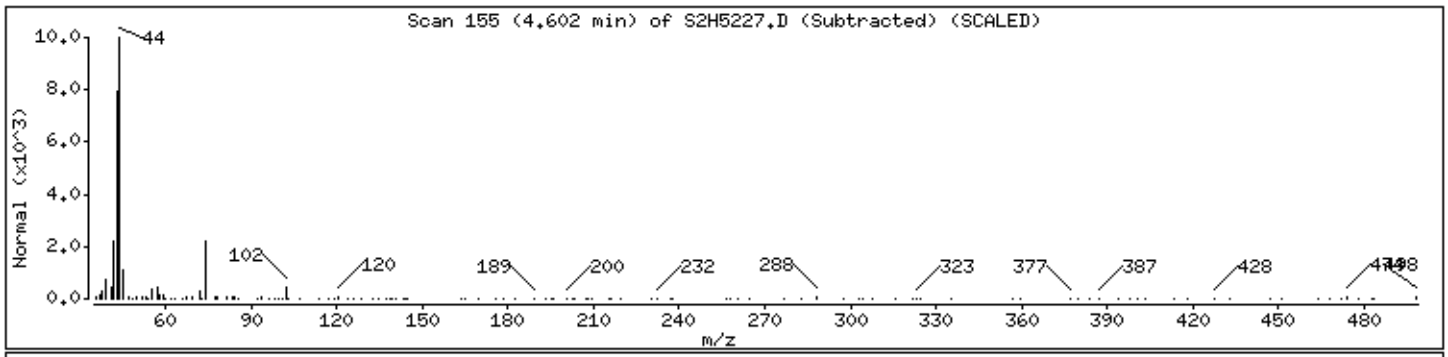
Client ID: SBLK2S Instrument: S2.i

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

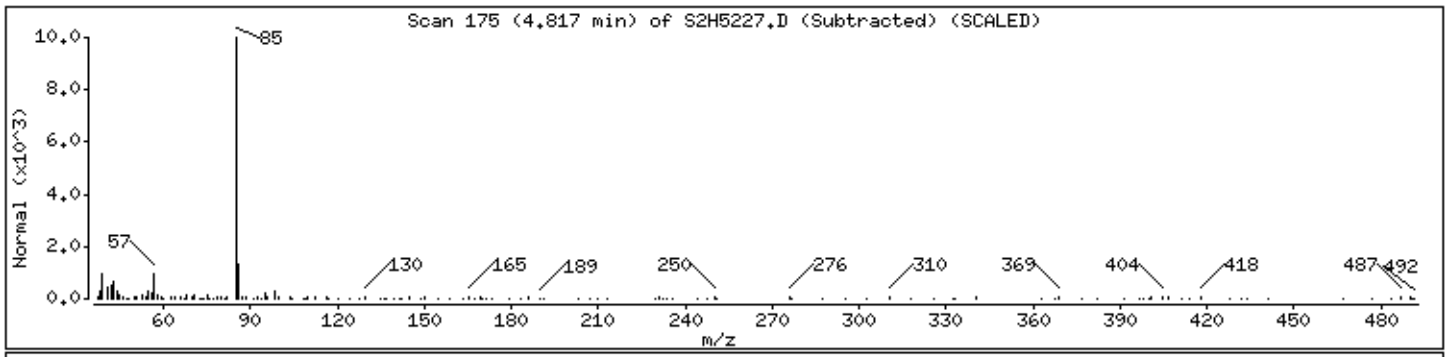
Client ID: SBLK2S Instrument: S2.i

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

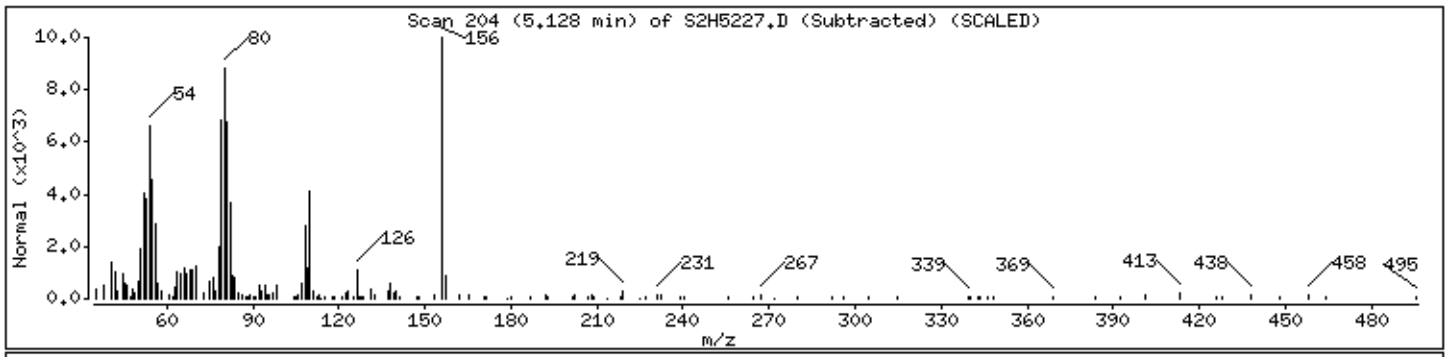
Client ID: SBLK2S Instrument: S2.i

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



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Date : 04-NOV-2011 15:14

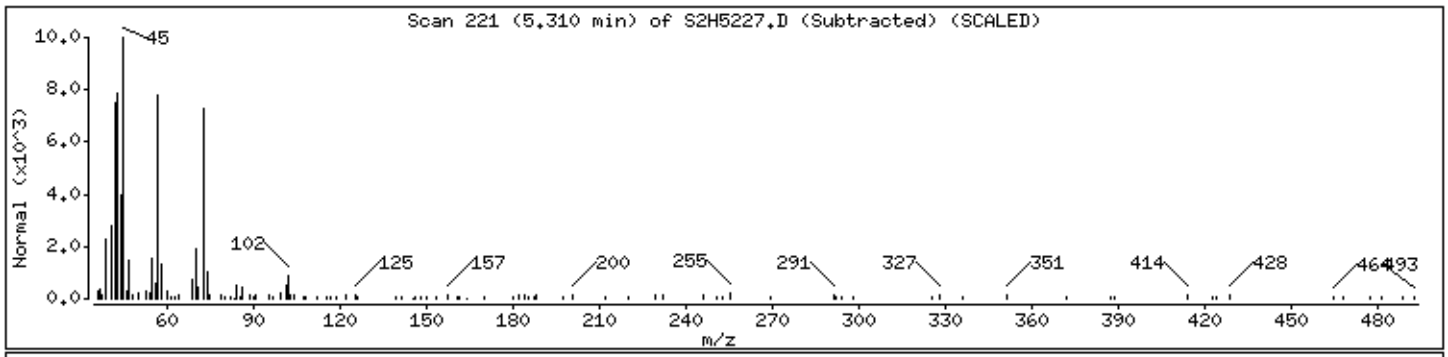
Client ID: SBLK2S Instrument: S2.i

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

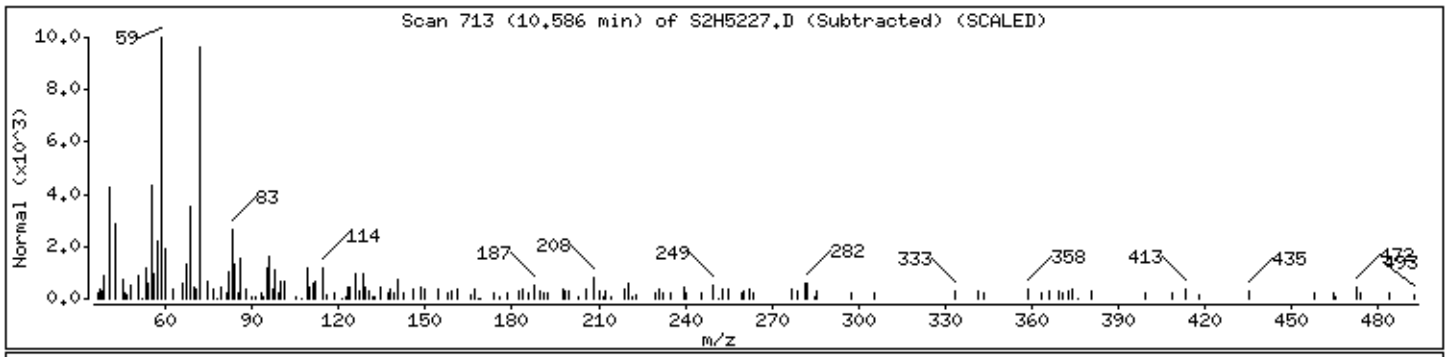
Client ID: SBLK2S Instrument: S2.i

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

EPA SAMPLE NO.

SBLK4R

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-62806

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8649.D

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/10/2011

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

EPA SAMPLE NO.

SBLK4R

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-62806

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8649.D

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/10/2011

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

EPA SAMPLE NO.

SBLK4R

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-62806

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8649.D

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/10/2011

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	4.324	2.9	J
02		Unknown-02	4.676	3.4	J
03		Unknown-03	4.893	7.2	J
04		Unknown-04	5.028	3.3	J
05		Unknown-05	6.011	6.1	J
06		Unknown-06	7.688	2.4	J
07		Unknown-07	8.040	3.3	J
08	34303-81-6	3-Hexadecene, (Z)-	8.547	2.7	NJ
09		Unknown-08	8.588	5.2	J
10	112-84-5	13-Docosenamide, (Z)-	10.958	5.9	NJ
	E96679[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8649.D
Report Date: 11-Nov-2011 14:03

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8649.D
Lab Smp Id: MB-62806 Client Smp ID: SBLK4R
Inj Date : 10-NOV-2011 23:02
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : MB-62806,SBLK4R,62806
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.D
Als bottle: 14 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	3.050	3.050	(0.905)	51745	60.7245	30(Q)
$	4 bis(2-Chloroethyl)ether-d8	67	3.112	3.112	(0.923)	38238	60.3296	30
$	6 2-Chlorophenol-d4	132	3.206	3.206	(0.951)	60722	60.7241	30
*	8 1,4-Dichlorobenzene-d4	152	3.371	3.371	(1.000)	31687	40.0000	(Q)
$	11 4-Methylphenol-d8	113	3.609	3.609	(1.071)	55144	61.1080	31
$	16 Nitrobenzene-d5	128	3.796	3.796	(0.857)	31270	66.4423	33(Q)
$	19 2-Nitrophenol-d4	143	4.075	4.075	(0.921)	38840	64.7464	32
$	23 2,4-Dichlorophenol-d3	165	4.282	4.282	(0.967)	77329	68.7945	34
*	25 Naphthalene-d8	136	4.427	4.427	(1.000)	112431	40.0000	
$	27 4-Chloroaniline-d4	131	4.468	4.468	(1.009)	35713	32.2022	16(Q)
$	40 Dimethylphthalate-d6	166	5.772	5.772	(0.949)	261244	64.2472	32
$	43 Acenaphthylene-d8	160	5.938	5.938	(0.976)	286385	63.6076	32
*	46 Acenaphthene-d10	164	6.083	6.083	(1.000)	102836	40.0000	
$	49 4-Nitrophenol-d4	143	6.166	6.166	(1.014)	54093	70.6619	35
$	54 Fluorene-d10	176	6.590	6.590	(1.083)	230904	63.6920	32
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.642	6.642	(0.882)	70992	59.8645	30(Q)
*	65 Phenanthrene-d10	188	7.532	7.532	(1.000)	295642	40.0000	
$	67 Anthracene-d10	188	7.584	7.584	(1.007)	472297	58.1676	29
$	72 Pyrene-d10	212	8.929	8.929	(0.882)	663581	63.3495	32
*	77 Chrysene-d12	240	10.120	10.120	(1.000)	537422	40.0000	(Q)
$	83 Benzo(a)pyrene-d12	264	11.703	11.703	(0.990)	809582	63.8263	32

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8649.D
Report Date: 11-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	11.817	11.817	(1.000)	572421	40.0000	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8649.D
Report Date: 11-Nov-2011 14:03

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8649.D
Lab Smp Id: MB-62806 Client Smp ID: SBLK4R
Inj Date : 10-NOV-2011 23:02
Operator : MMS SRC: LIMS Inst ID: S4.i
Smp Info : MB-62806,SBLK4R,62806
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.D
Als bottle: 14 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

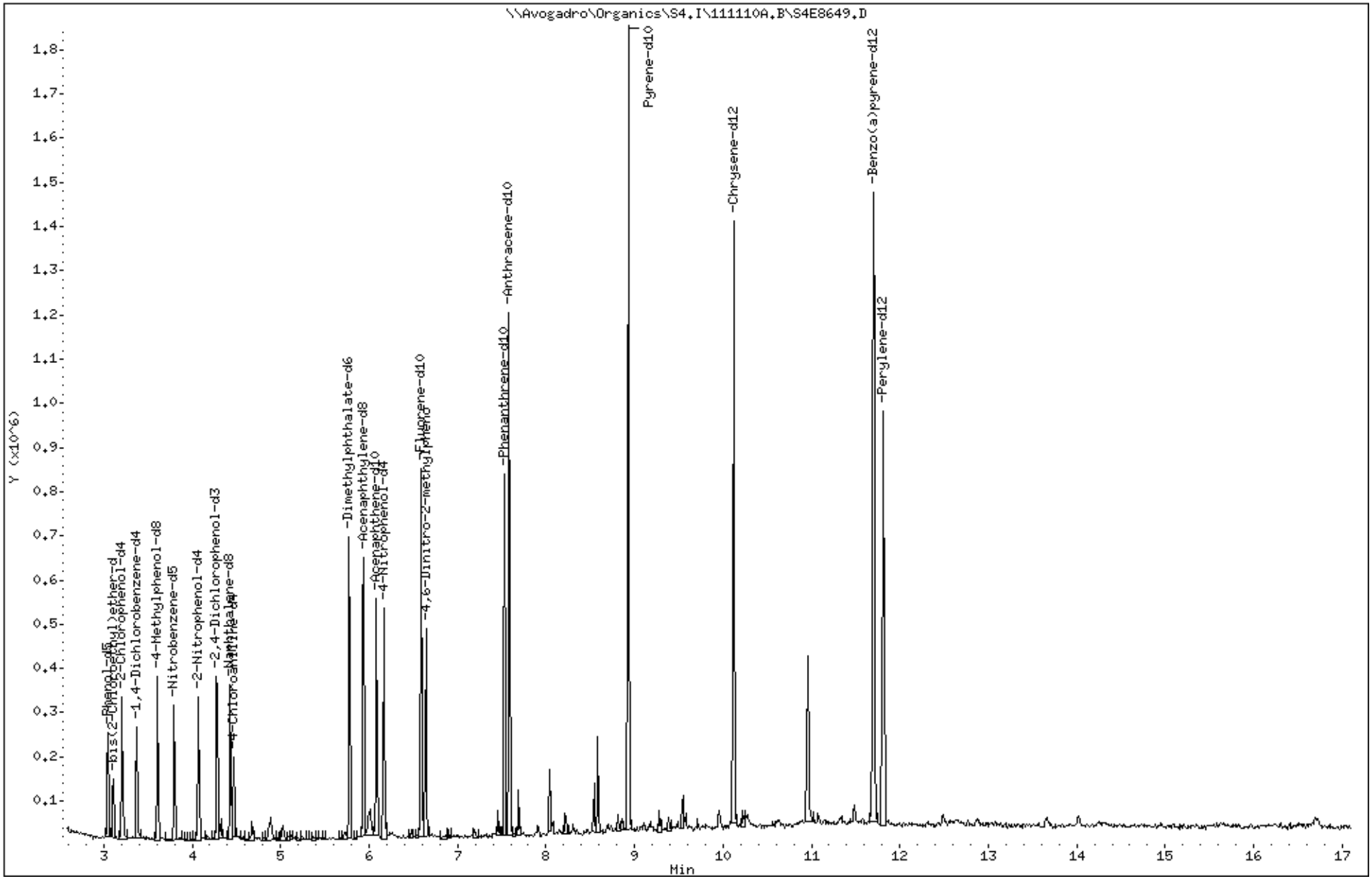
ISTD	RT	AREA	AMOUNT
* 25 Naphthalene-d8	4.427	347399	40.000
* 46 Acenaphthene-d10	6.083	534396	40.000
* 65 Phenanthrene-d10	7.533	784866	40.000
* 77 Chrysene-d12	10.120	1455443	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.324	50475	5.81176819	2.9	0	0		25
Unknown				CAS #:			
4.676	59435	6.84344366	3.4	0	0		25
Unknown				CAS #:			
4.893	124529	14.3383476	7.2	0	0		25

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8649.D
Report Date: 11-Nov-2011 14:03

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
5.028	56903	6.55192750	3.3	0		0	25
Unknown					CAS #:		
6.011	163894	12.2675709	6.1	0		0	46
Unknown					CAS #:		
7.688	94185	4.80003165	2.4	0		0	65
Unknown					CAS #:		
8.040	129645	6.60723568	3.3	0		0	65
3-Hexadecene, (Z)-					CAS #: 34303-81-6		
8.547	107096	5.45803976	2.7	91	NIST2002.L	72495	65
Unknown					CAS #:		
8.588	203073	10.3494096	5.2	0		0	65
13-Docosenamide, (Z)-					CAS #: 112-84-5		
10.958	430771	11.8388879	5.9	89	NIST2002.L	135943	77

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8649.D
Date : 10-NOV-2011 23:02
Client ID: SBLK4R
Instrument: S4.i
Sample Info: MB-62806,SBLK4R,62806
Volume Injected (uL): 2.0
Operator: MMS SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8649.D

Date : 10-NOV-2011 23:02

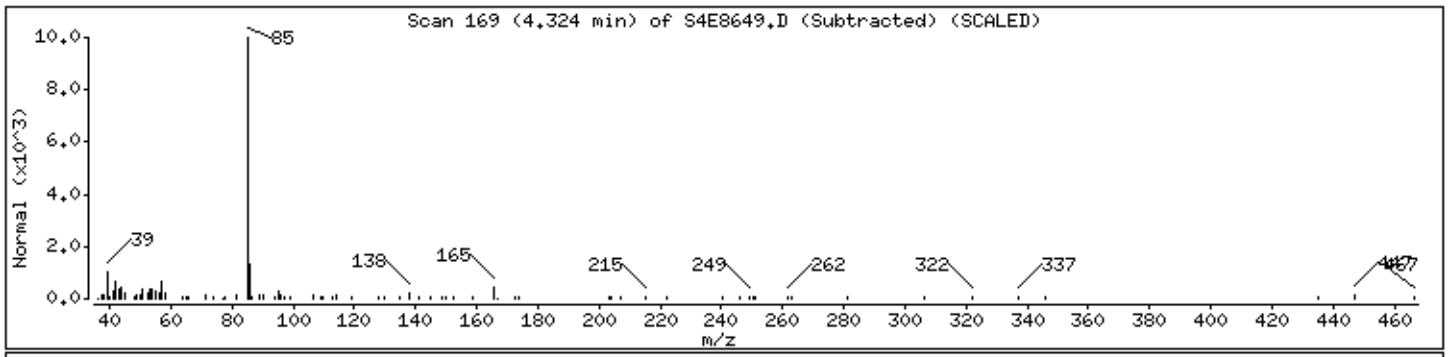
Client ID: SBLK4R Instrument: S4.i

Sample Info: MB-62806,SBLK4R,62806

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8649.D

Date : 10-NOV-2011 23:02

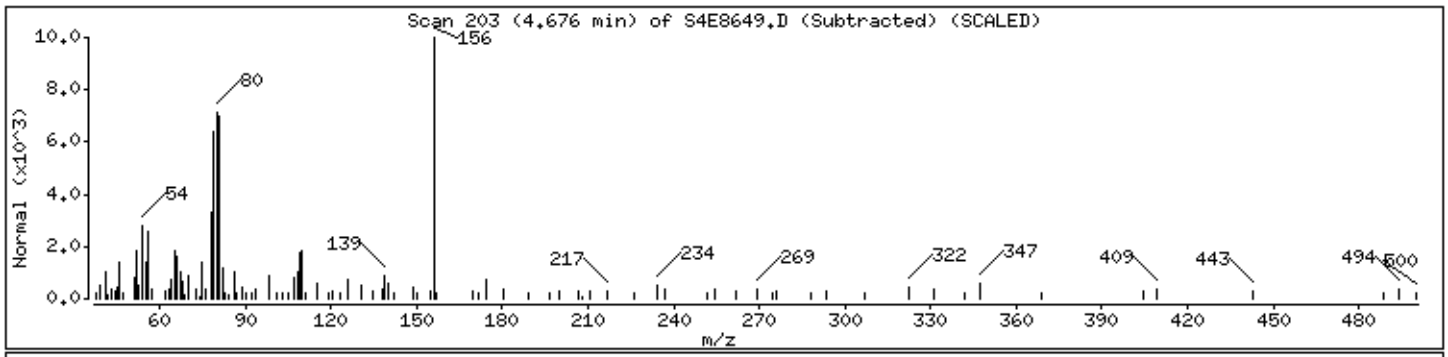
Client ID: SBLK4R Instrument: S4.i

Sample Info: MB-62806,SBLK4R,62806

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8649.D

Date : 10-NOV-2011 23:02

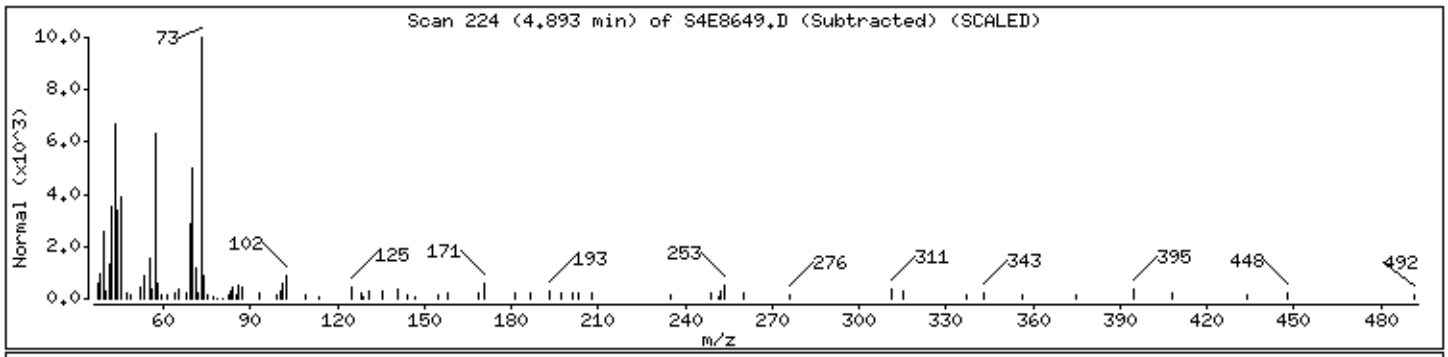
Client ID: SBLK4R Instrument: S4.i

Sample Info: MB-62806,SBLK4R,62806

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8649.D

Date : 10-NOV-2011 23:02

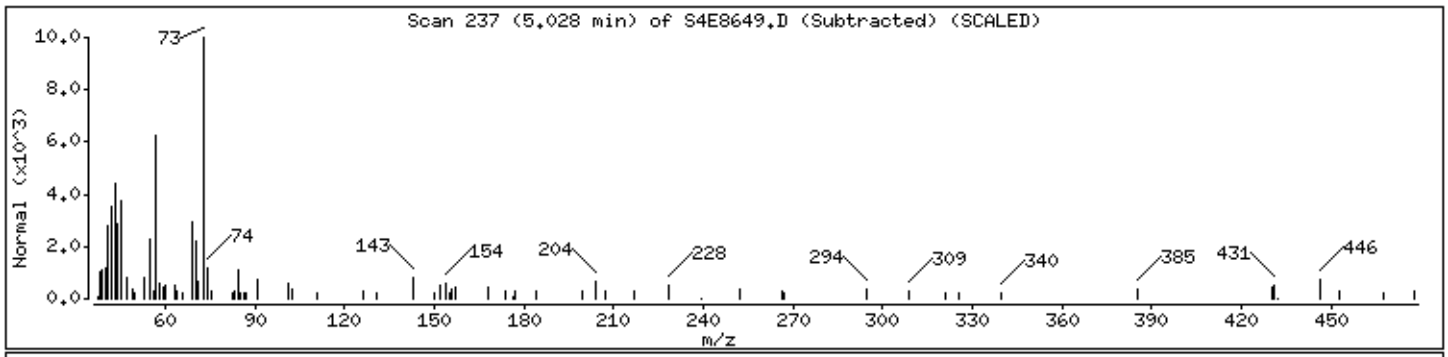
Client ID: SBLK4R Instrument: S4.i

Sample Info: MB-62806,SBLK4R,62806

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8649.D

Date : 10-NOV-2011 23:02

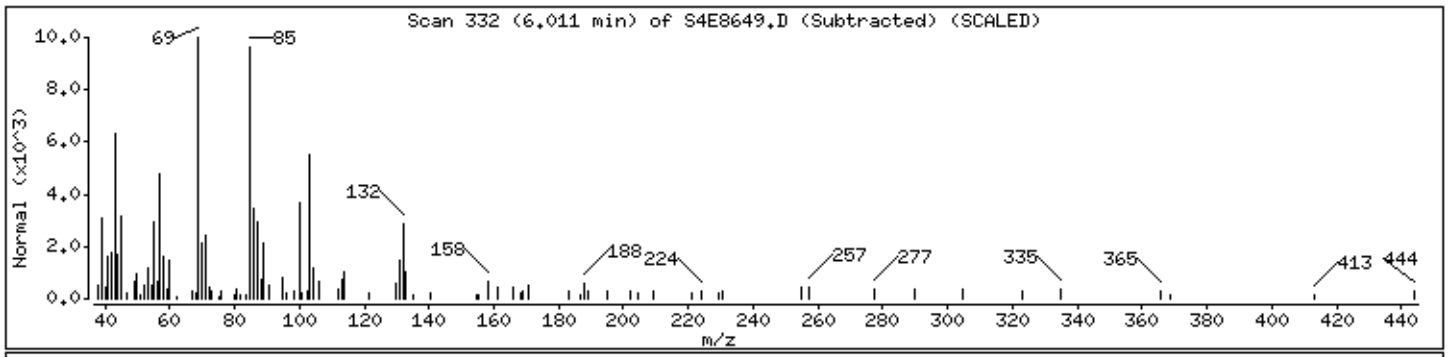
Client ID: SBLK4R Instrument: S4.i

Sample Info: MB-62806,SBLK4R,62806

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8649.D

Date : 10-NOV-2011 23:02

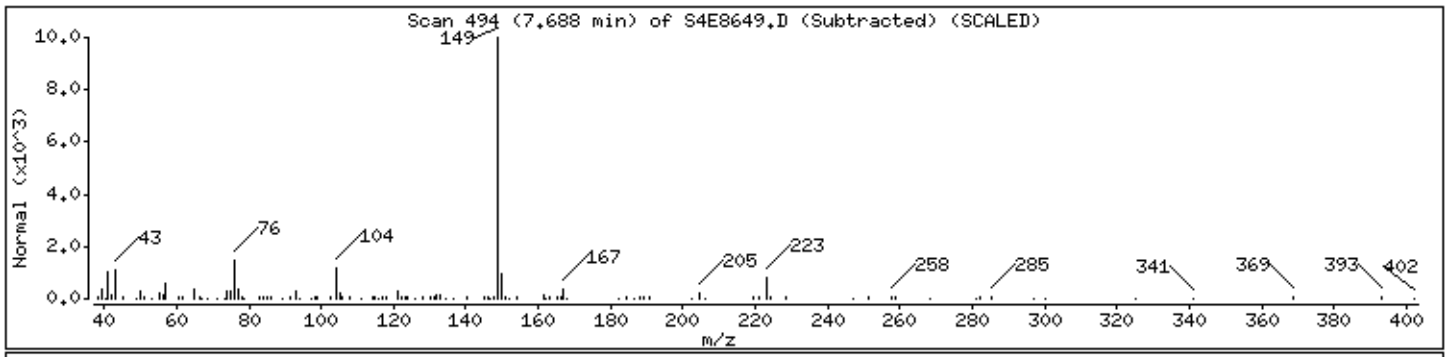
Client ID: SBLK4R Instrument: S4.i

Sample Info: MB-62806,SBLK4R,62806

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8649.D

Date : 10-NOV-2011 23:02

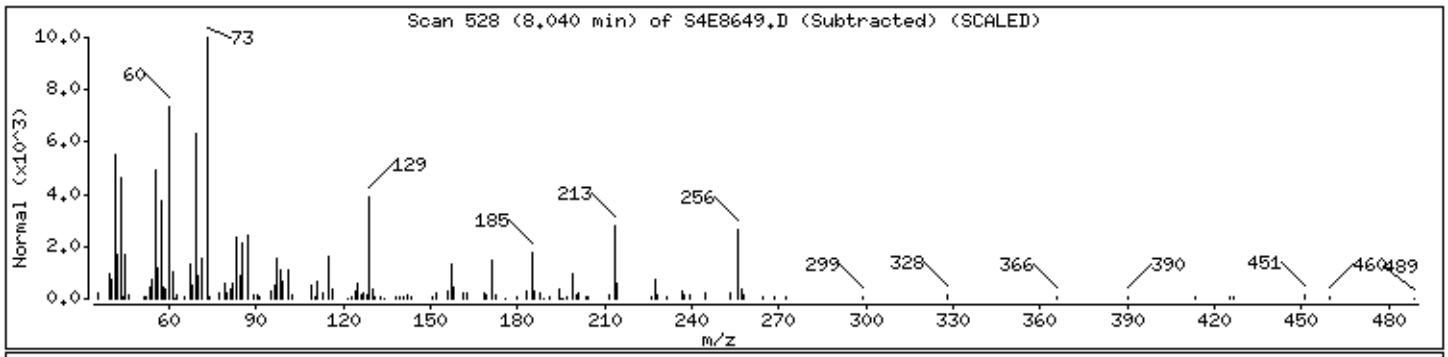
Client ID: SBLK4R Instrument: S4.i

Sample Info: MB-62806,SBLK4R,62806

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8649.D

Date : 10-NOV-2011 23:02

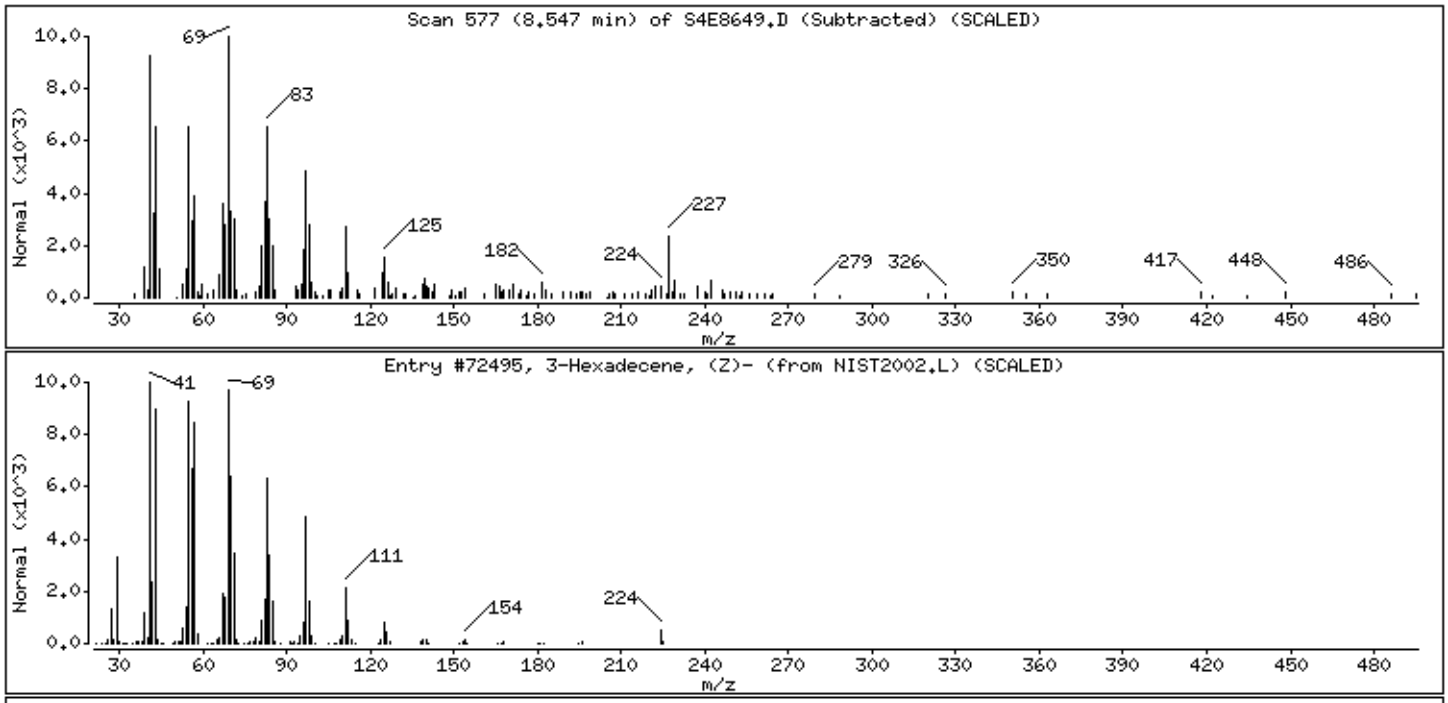
Client ID: SBLK4R Instrument: S4.i

Sample Info: MB-62806,SBLK4R,62806

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
3-Hexadecene, (Z)-	34303-81-6	NIST2002.L	72495	91	C16H32	224



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8649.D

Date : 10-NOV-2011 23:02

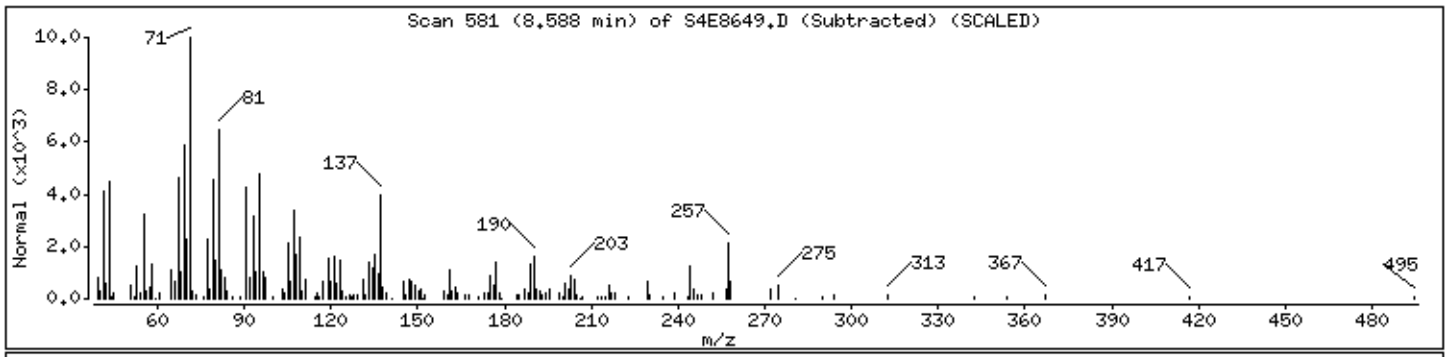
Client ID: SBLK4R Instrument: S4.i

Sample Info: MB-62806,SBLK4R,62806

Volume Injected (uL): 2.0 Operator: MMS SRC: LIMS

Column phase: RXI-5SILMS Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8649.D

Date : 10-NOV-2011 23:02

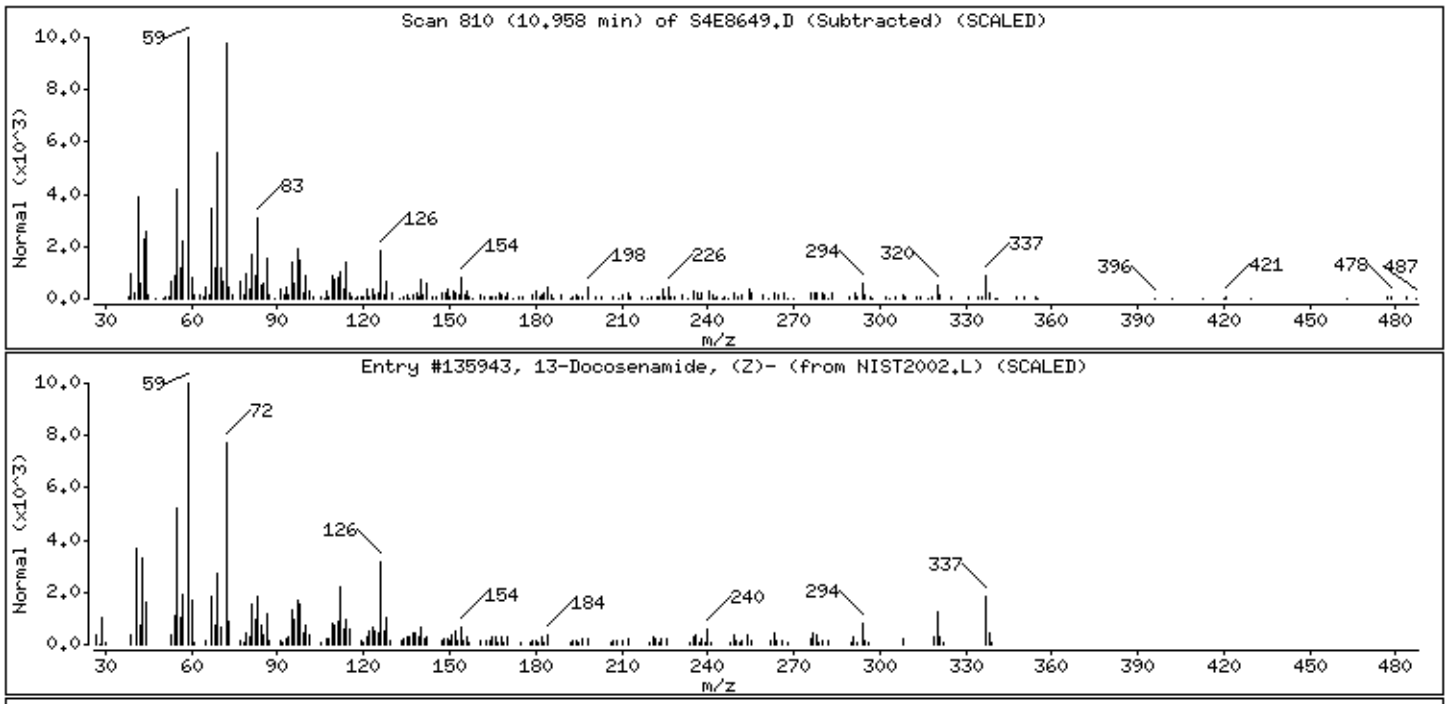
Client ID: SBLK4R Instrument: S4.i

Sample Info: MB-62806,SBLK4R,62806

Volume Injected (uL): 2.0 Operator: MMS 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	89	C22H43NO	337



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Z2MS

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-11AMS

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8658.D

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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	28	
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	29	
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	29	
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	36	
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

EPA SAMPLE NO.

H30Z2MS

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-11AMS

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8658.D

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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	41	
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	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	31	
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	20	
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\S4.I\111110A.B\S4E8658.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8658.D
Lab Smp Id: K2213-11AMS Client Smp ID: H30Z2MS
Inj Date : 11-NOV-2011 02:40
Operator : MMS   SRC: LIMS Inst ID: S4.i
Smp Info : K2213-11AMS,,62806,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.D
Als bottle: 23 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	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	3.050	3.050	(0.905)	54099	69.9678	35
	3 Phenol	94	3.061	3.061	(0.908)	61495	55.3289	28
$	4 bis(2-Chloroethyl)ether-d8	67	3.113	3.112	(0.923)	32060	55.7457	28
$	6 2-Chlorophenol-d4	132	3.206	3.206	(0.951)	54708	60.2946	30
	7 2-Chlorophenol	128	3.216	3.216	(0.954)	51849	57.9959	29
*	8 1,4-Dichlorobenzene-d4	152	3.371	3.371	(1.000)	28752	40.0000	(Q)
$	11 4-Methylphenol-d8	113	3.620	3.609	(1.074)	52684	64.3415	32
	14 N-Nitroso-di-n-propylamine	70	3.651	3.651	(1.083)	47397	57.4909	29(Q)
$	16 Nitrobenzene-d5	128	3.796	3.796	(0.857)	28711	64.7220	32(Q)
$	19 2-Nitrophenol-d4	143	4.075	4.075	(0.921)	36488	64.5317	32
$	23 2,4-Dichlorophenol-d3	165	4.282	4.282	(0.967)	68505	64.6577	32
*	25 Naphthalene-d8	136	4.427	4.427	(1.000)	105974	40.0000	
$	27 4-Chloroaniline-d4	131	4.468	4.468	(1.009)	37574	35.9446	18(Q)
	31 4-Chloro-3-methylphenol	107	4.914	4.913	(1.110)	77721	72.5168	36
$	40 Dimethylphthalate-d6	166	5.783	5.772	(0.951)	233464	57.9666	29
$	43 Acenaphthylene-d8	160	5.938	5.938	(0.976)	264822	59.3831	30
*	46 Acenaphthene-d10	164	6.083	6.083	(1.000)	101858	40.0000	
	47 Acenaphthene	153	6.114	6.114	(1.005)	172247	56.0922	28(Q)
$	49 4-Nitrophenol-d4	143	6.187	6.166	(1.017)	56550	74.5807	37
	50 4-Nitrophenol	109	6.197	6.176	(1.019)	110446	82.4681	41(R)
	51 2,4-Dinitrotoluene	165	6.259	6.249	(1.029)	82814	58.3105	29(Q)

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8658.D
Report Date: 11-Nov-2011 14:04

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)	
$	54 Fluorene-d10	176	6.590	6.590	(1.083)	219091	61.0137	31	
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.642	6.642	(0.882)	60351	53.8164	27	
	64 Pentachlorophenol	266	7.346	7.346	(0.975)	77889	61.3734	31	
*	65 Phenanthrene-d10	188	7.532	7.532	(1.000)	279573	40.0000		
$	67 Anthracene-d10	188	7.584	7.584	(1.007)	407871	53.1202	27	
$	72 Pyrene-d10	212	8.929	8.929	(0.882)	598607	61.0643	31	
	73 Pyrene	202	8.950	8.950	(0.884)	492803	40.9087	20	
*	77 Chrysene-d12	240	10.120	10.120	(1.000)	502943	40.0000		(Q)
$	83 Benzo(a)pyrene-d12	264	11.714	11.703	(0.991)	653359	57.3664	29	
*	85 Perylene-d12	264	11.817	11.817	(1.000)	513983	40.0000		

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8658.D
Report Date: 11-Nov-2011 14:04

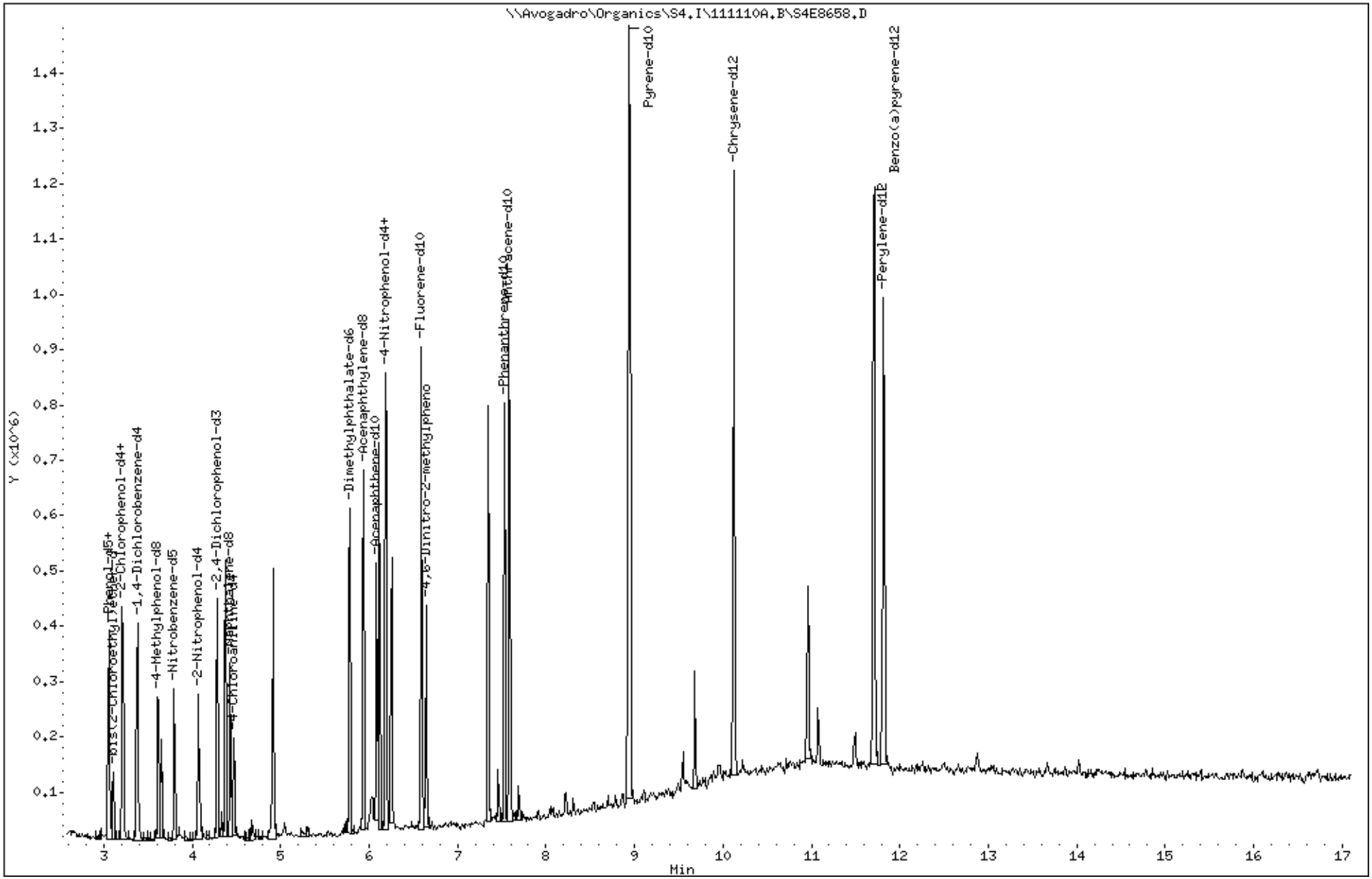
Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8658.D
Lab Smp Id: K2213-11AMS Client Smp ID: H30Z2MS
Inj Date : 11-NOV-2011 02:40
Operator : MMS   SRC: LIMS Inst ID: S4.i
Smp Info : K2213-11AMS,,62806,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.D
Als bottle: 23 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\S4.I\111110A.B\S4E8658.D
Date : 11-NOV-2011 02:40
Client ID: H30Z2MS
Instrument: S4.i
Sample Info: K2213-11AMS,,62806,,
Volume Injected (uL): 2.0
Operator: MMS SRC: LIMS
Column phase: RXI-5SILMS
Column diameter: 0.25



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Z2MSD

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-11AMSD

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8659.D

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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	29	
111-44-4	Bis(2-chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	28	
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	27	
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	29	

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Z2MSD

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-11AMSD

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4E8659.D

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/08/2011

Injection Volume: 2.0 (uL) GPC Factor: 1.00 Date Analyzed: 11/11/2011

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	32	
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	31	
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	22	
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\S4.I\111110A.B\S4E8659.D
Report Date: 11-Nov-2011 14:04

Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8659.D
Lab Smp Id: K2213-11AMSD Client Smp ID: H30Z2MSD
Inj Date : 11-NOV-2011 03:04
Operator : MMS   SRC: LIMS Inst ID: S4.i
Smp Info : K2213-11AMSD,,62806,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.D
Als bottle: 24 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	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	3.050	3.050	(0.905)	59201	69.4175	35
	3 Phenol	94	3.061	3.061	(0.908)	70194	57.2589	29
$	4 bis(2-Chloroethyl)ether-d8	67	3.113	3.112	(0.923)	38278	60.3432	30(Q)
$	6 2-Chlorophenol-d4	132	3.206	3.206	(0.951)	56766	56.7214	28
	7 2-Chlorophenol	128	3.216	3.216	(0.954)	55440	56.2226	28
*	8 1,4-Dichlorobenzene-d4	152	3.371	3.371	(1.000)	31713	40.0000	(Q)
$	11 4-Methylphenol-d8	113	3.609	3.609	(1.071)	57666	63.8503	32
	14 N-Nitroso-di-n-propylamine	70	3.651	3.651	(1.083)	49045	53.9354	27(Q)
$	16 Nitrobenzene-d5	128	3.796	3.796	(0.857)	28725	58.6693	29(Q)
$	19 2-Nitrophenol-d4	143	4.075	4.075	(0.921)	36329	58.2135	29
$	23 2,4-Dichlorophenol-d3	165	4.282	4.282	(0.967)	79057	67.6060	34
*	25 Naphthalene-d8	136	4.427	4.427	(1.000)	116964	40.0000	
$	27 4-Chloroaniline-d4	131	4.468	4.468	(1.009)	66168	57.3510	29(Q)
	31 4-Chloro-3-methylphenol	107	4.914	4.913	(1.110)	86603	73.2117	37
$	40 Dimethylphthalate-d6	166	5.783	5.772	(0.951)	278752	67.0423	34
$	43 Acenaphthylene-d8	160	5.938	5.938	(0.976)	290051	63.0023	32
*	46 Acenaphthene-d10	164	6.083	6.083	(1.000)	105153	40.0000	
	47 Acenaphthene	153	6.114	6.114	(1.005)	181546	57.2678	29
$	49 4-Nitrophenol-d4	143	6.187	6.166	(1.017)	60586	77.3998	39
	50 4-Nitrophenol	109	6.197	6.176	(1.019)	122677	88.7304	44(R)
	51 2,4-Dinitrotoluene	165	6.259	6.249	(1.029)	92751	63.2608	32(Q)

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8659.D
Report Date: 11-Nov-2011 14:04

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)	
$	54 Fluorene-d10	176	6.590	6.590	(1.083)	247336	66.7212	33	
$	58 4,6-Dinitro-2-methylphenol-d2	200	6.642	6.642	(0.882)	70457	60.3142	30	
	64 Pentachlorophenol	266	7.346	7.346	(0.975)	82001	62.0281	31	
*	65 Phenanthrene-d10	188	7.532	7.532	(1.000)	291226	40.0000		
$	67 Anthracene-d10	188	7.584	7.584	(1.007)	461356	57.6817	29	
$	72 Pyrene-d10	212	8.929	8.929	(0.881)	616795	64.1751	32	
	73 Pyrene	202	8.950	8.950	(0.884)	525296	44.4760	22	
*	77 Chrysene-d12	240	10.130	10.120	(1.000)	493104	40.0000		(Q)
$	83 Benzo(a)pyrene-d12	264	11.714	11.703	(0.991)	674891	63.9120	32	
*	85 Perylene-d12	264	11.817	11.817	(1.000)	476547	40.0000		

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\Avogadro\Organics\S4.I\111110A.B\S4E8659.D
Report Date: 11-Nov-2011 14:04

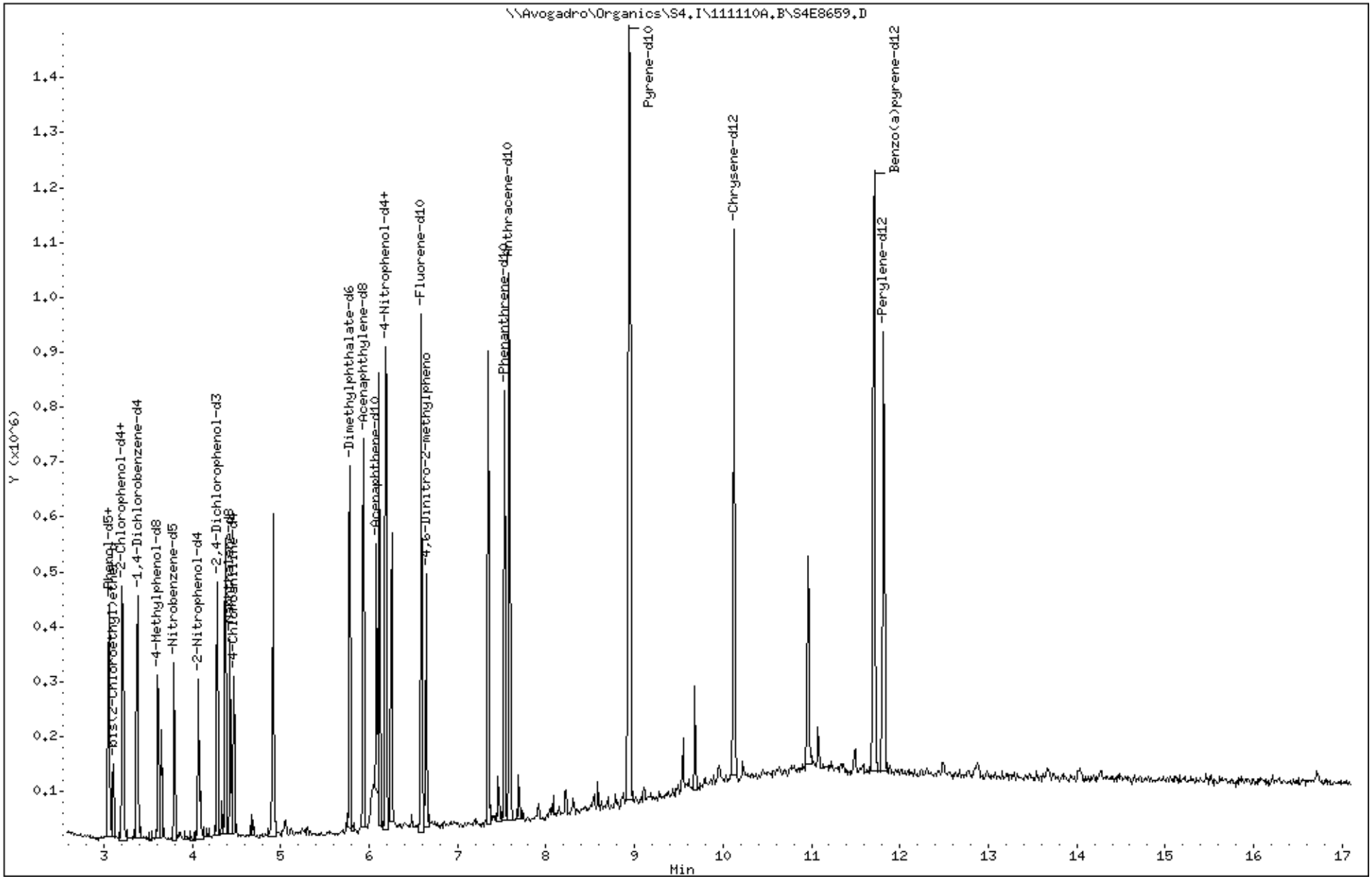
Spectrum Analytical, Inc. RI Division

CLP SOM QUANTITATION REPORT

Data file : \\Avogadro\Organics\S4.I\111110A.B\S4E8659.D
Lab Smp Id: K2213-11AMSD Client Smp ID: H30Z2MSD
Inj Date : 11-NOV-2011 03:04
Operator : MMS   SRC: LIMS Inst ID: S4.i
Smp Info : K2213-11AMSD,,62806,,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\S4.I\111110A.B\S4_SOM.m
Meth Date : 11-Nov-2011 14:03 S4.i Quant Type: ISTD
Cal Date : 10-NOV-2011 18:10 Cal File: S4E8639.D
Als bottle: 24 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\S4.I\111110A.B\S4E8659.D
Date : 11-NOV-2011 03:04
Client ID: H30Z2MSD
Instrument: S4.i
Sample Info: K2213-11AMSD,,62806,,
Volume Injected (uL): 2.0
Operator: MMS 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.: H30X4

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	ABLK2G	72		84		83		87				0
02	ALCS2G	76		86		83		88				0
03	H30X4	12	*	14	*	8	*	8	*			4
04	H30Y7	23	*	27	*	8	*	7	*			4
05	ABLK3A	68		74		70		76				0
06	ALCS3A	71		78		72		77				0
07	H30W9	64		70		40		42				0
08	H30X2	32		41		19	*	18	*			2
09	H30X6	60		77		21	*	26	*			2
10	H30X7	30		32		12	*	10	*			2
11	H30Y1	36		43		25	*	25	*			2
12	H30Z2	62		69		51		53				0
13	H30Z2MS	65		70		50		53				0
14	H30Z2MSD	67		73		56		59				0
15	H30Z3	66		73		53		56				0
16	H30Z4	62		68		46		48				0
17	H30Z5	61		68		45		48				0
18	H30Z8	63		70		52		53				0
19	ABLK3B	71		80		73		79				0
20	ALCS3B	68		76		73		80				0
21	H30X4RX	14	*	26	*	13	*	8	*			4
22	H30Y7RX	26	*	30	*	11	*	6	*			4
23	H30X9	33		46		32		28	*			1
24	H30Y0	44		49		31		30	*			1
25	H30Z7	33		47		23	*	22	*			2

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

SOM01.2 (6/2007)

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.: H30X4

Matrix Spike - EPA Sample No.: H30Z2

Instrument ID: E3 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	3.0089	75		29-135
AR1260	4.0000	0.0000	2.7470	69		29-135

COMPOUND	SPIKE ADDED (µg/L)	MSD CONCENTRATION (µg/L)	MSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
AR1016	4.0000	3.0969	77		3		0-15	29-135
AR1260	4.0000	2.9692	74		8		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.: H30X4

Matrix Spike - EPA Sample No.: H30Z2

Instrument ID: E3 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	3.0019	75		29-135
AR1260	4.0000	0.0000	2.6287	66		29-135

COMPOUND	SPIKE ADDED (µg/L)	MSD CONCENTRATION (µg/L)	MSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
AR1016	4.0000	3.1184	78		4		0-15	29-135
AR1260	4.0000	2.8603	72		8		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:

3N - FORM III ARO-3
WATER AROCLOR LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
ALCS2G

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Lab Sample ID: LCS-62678 LCS Lot No.:

Date Extracted: 11/02/2011 Date Analyzed (1): 11/09/2011

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	0.9360	94	50-150
Aroclor-1260	1.0000	1.0112	101	50-150

Instrument ID (2): E2 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 11/09/2011

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC #	QC LIMITS
Aroclor-1016	1.0000	0.8830	88	50-150
Aroclor-1260	1.0000	0.9056	91	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.
ALCS3A

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Lab Sample ID: LCS-62802 LCS Lot No.:

Date Extracted: 11/08/2011 Date Analyzed (1): 11/16/2011

Instrument ID (1): E3 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC #	QC LIMITS
Aroclor-1016	1.0000	1.0204	102	50-150
Aroclor-1260	1.0000	1.0282	103	50-150

Instrument ID (2): E3 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	0.9657	97	50-150
Aroclor-1260	1.0000	0.9820	98	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.
ALCS3B

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Lab Sample ID: LCS-63016 LCS Lot No.:

Date Extracted: 11/14/2011 Date Analyzed (1): 11/16/2011

Instrument ID (1): E3 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC #	QC LIMITS
Aroclor-1016	1.0000	0.9725	97	50-150
Aroclor-1260	1.0000	1.0705	107	50-150

Instrument ID (2): E3 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	0.9356	94	50-150
Aroclor-1260	1.0000	0.9795	98	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.

ABLK2G

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Lab File ID: E2K7618F.D / E2K7618R.D Lab Sample ID: MB-62678

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): 11/09/2011 Date Analyzed (2): 11/09/2011

Time Analyzed (1): 10:43 Time Analyzed (2): 10:43

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	ALCS2G	LCS-62678	11/09/2011	11/09/2011
02	H30X4	K2213-01A	11/09/2011	11/09/2011
03	H30Y7	K2213-02A	11/09/2011	11/09/2011

COMMENTS:

4F - FORM IV ARO

AROCLOR METHOD BLANK SUMMARY

EPA SAMPLE NO.

ABLK3A

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Lab File ID: E3I6745F.D / E3I6745R.D Lab Sample ID: MB-62802

Matrix: (SOIL/SED/WATER) WATER Extraction: (Type) SEPF Date Extracted: 11/08/2011

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): 17:25 Time Analyzed (2): 17:25

Instrument ID (1): E3 Instrument ID (2): E3

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	ALCS3A	LCS-62802	11/16/2011	11/16/2011
02	H30W9	K2213-03A	11/16/2011	11/16/2011
03	H30X2	K2213-04A	11/16/2011	11/16/2011
04	H30X6	K2213-06A	11/16/2011	11/16/2011
05	H30X7	K2213-07A	11/16/2011	11/16/2011
06	H30Y1	K2213-10A	11/16/2011	11/16/2011
07	H30Z2	K2213-11A	11/16/2011	11/16/2011
08	H30Z2MS	K2213-11AMS	11/16/2011	11/16/2011
09	H30Z2MSD	K2213-11AMSD	11/16/2011	11/16/2011
10	H30Z3	K2213-12A	11/16/2011	11/16/2011
11	H30Z4	K2213-13A	11/16/2011	11/16/2011
12	H30Z5	K2213-14A	11/16/2011	11/16/2011
13	H30Z8	K2213-16A	11/16/2011	11/16/2011
14	H30X9	K2213-08A	11/17/2011	11/17/2011
15	H30Y0	K2213-09A	11/17/2011	11/17/2011
16	H30Z7	K2213-15A	11/17/2011	11/17/2011

COMMENTS:

4F - FORM IV ARO

AROCLOR METHOD BLANK SUMMARY

EPA SAMPLE NO.

ABLK3B

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Lab File ID: E3I6764F.D / E3I6764R.D Lab Sample ID: MB-63016

Matrix: (SOIL/SED/WATER) WATER Extraction: (Type) SEPF Date Extracted: 11/14/2011

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): 23:23 Time Analyzed (2): 23:23

Instrument ID (1): E3 Instrument ID (2): E3

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	ALCS3B	LCS-63016	11/16/2011	11/16/2011
02	H30X4RX	K2213-01ARE	11/17/2011	11/17/2011
03	H30Y7RX	K2213-02ARE	11/17/2011	11/17/2011

COMMENTS:

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30X4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-01A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2K7622F.D/E2K7622R.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: 11/09/2011

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\111109F.B\E2K7622F.D
Report Date: 21-Nov-2011 10:40

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111109F.B\E2K7622F.D
Lab Smp Id: K2213-01A Client Smp ID: H30X4
Inj Date : 09-NOV-2011 12:07
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2213-01A,,62678,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111109F.B\E2_ARO_5_F.m
Meth Date : 10-Nov-2011 09:09 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 9
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

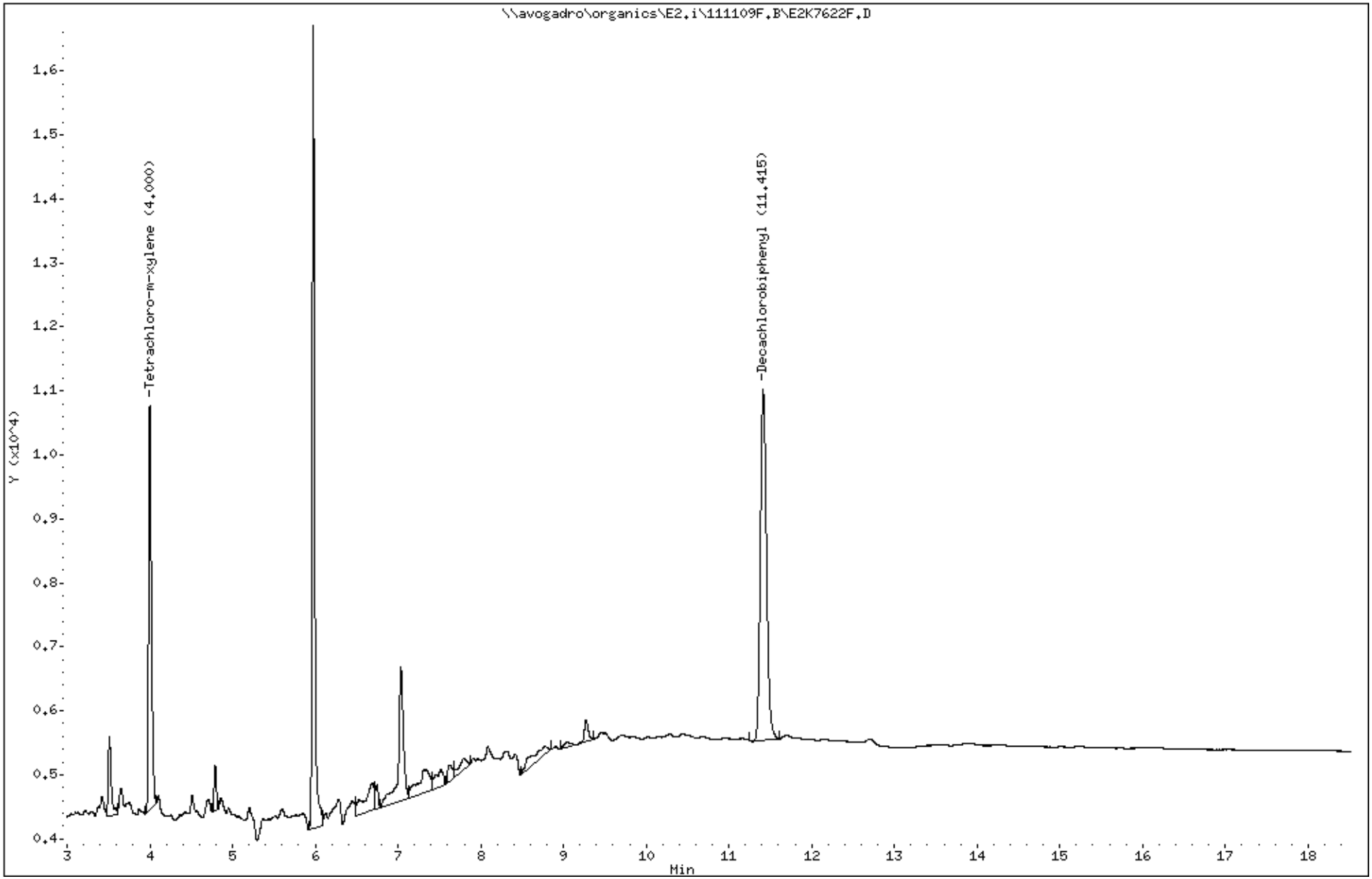
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

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		
4.000	3.999	0.001	149770	0.00721	0.072			(R)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.415	11.417	-0.002	279122	0.00974	0.097			(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E2.i\111109F.B\E2K7622F.D
Date : 09-NOV-2011 12:07
Client ID: H30X4
Instrument: E2.i
Sample Info: K2213-01A,,62678,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111109R.B\E2K7622R.D
Report Date: 21-Nov-2011 10:41

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111109R.B\E2K7622R.D
Lab Smp Id: K2213-01A Client Smp ID: H30X4
Inj Date : 09-NOV-2011 12:07
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2213-01A,,62678,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111109R.B\E2_ARO_5_R.m
Meth Date : 10-Nov-2011 09:10 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 9
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

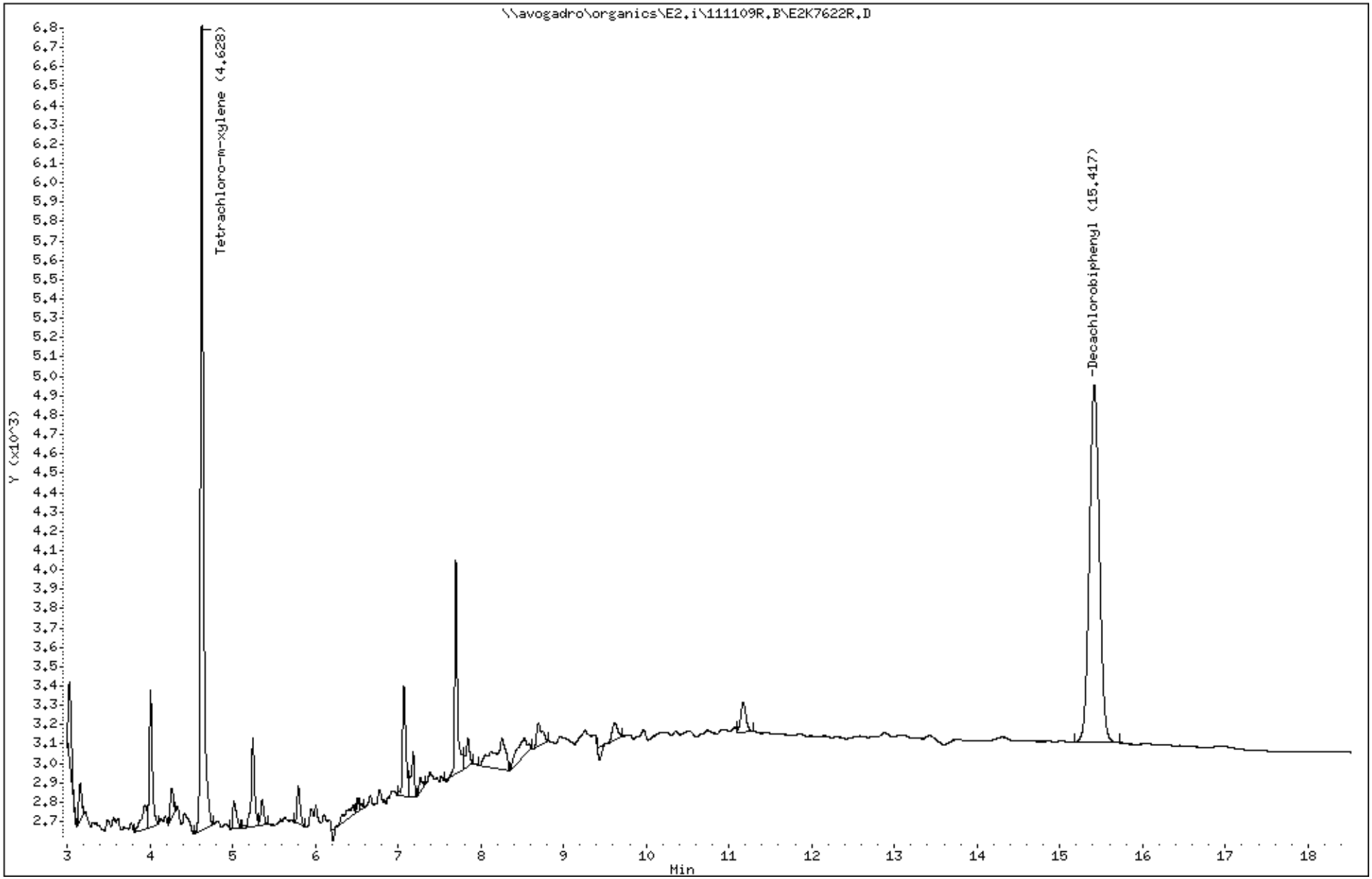
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				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		
4.627	4.627	0.000	104181	0.00828	0.083		(R)
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.417	15.423	-0.006	154718	0.00913	0.091		(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E2.i\111109R.B\E2K7622R.D
Date : 09-NOV-2011 12:07
Client ID: H30X4
Instrument: E2.i
Sample Info: K2213-01A,,62678,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.

H30X4RX

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-01ARE

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E3I6766F.D/E3I6766R.D

% Moisture: Decanted: (Y/N) Date Received: 10/29/2011

Extraction: (Type) SEPF Date Extracted: 11/14/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/17/2011

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\E3.I\111116BF.B\E3I6766F.D
Report Date: 22-Nov-2011 12:24

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111116BF.B\E3I6766F.D
Lab Smp Id: K2213-01ARE Client Smp ID: H30X4RX
Inj Date : 17-NOV-2011 00:00
Operator : DL   SRC: LIMS Inst ID: E3.i
Smp Info : K2213-01ARE,,63016,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BF.B\E3_ARO_5_F.m
Meth Date : 17-Nov-2011 08:16 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699F.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

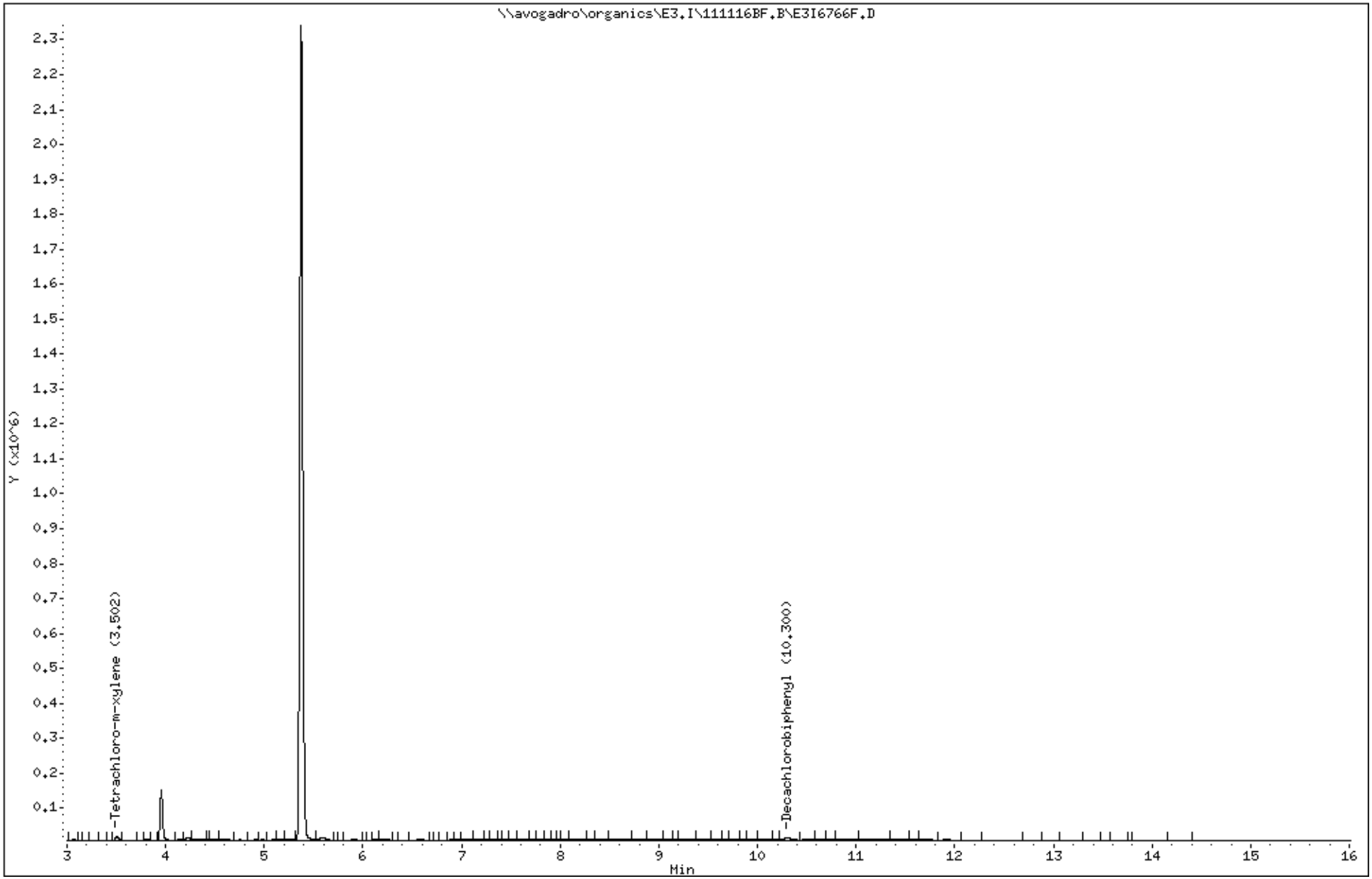
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

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		
3.502	3.492	0.010	266430	0.00833	0.083			(R)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.300	10.281	0.019	531276	0.01558	0.16			(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E3.i\111116BF.B\E3I6766F.D
Date : 17-NOV-2011 00:00
Client ID: H30X4RX
Instrument: E3.i
Sample Info: K2213-01ARE,,63016,somaro.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6766R.D
Report Date: 22-Nov-2011 12:25

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111116BR.B\E3I6766R.D
Lab Smp Id: K2213-01ARE Client Smp ID: H30X4RX
Inj Date : 17-NOV-2011 00:00
Operator : DL   SRC: LIMS Inst ID: E3.i
Smp Info : K2213-01ARE,,63016,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BR.B\E3_ARO_5_R.m
Meth Date : 17-Nov-2011 08:19 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699R.D
Als bottle: 26
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

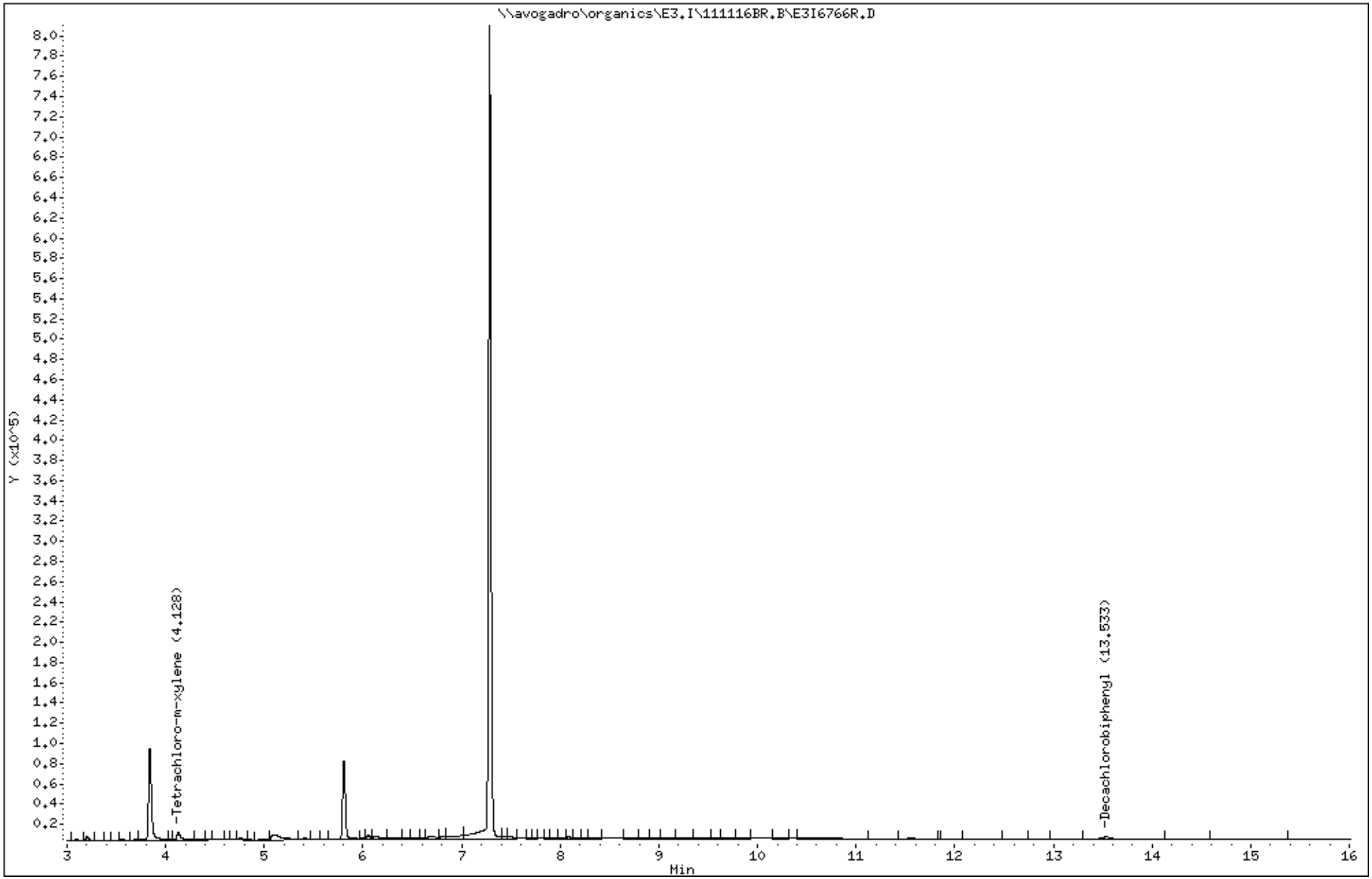
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

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		
4.127	4.116	0.011	248775	0.01537	0.15			(R)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
13.532	13.497	0.035	190253	0.00910	0.091			(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6766R.D
Date : 17-NOV-2011 00:00
Client ID: H30X4RX
Instrument: E3.i
Sample Info: K2213-01ARE,,63016,somaro.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.53



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Y7

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-02A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2K7623F.D/E2K7623R.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: 11/09/2011

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\111109F.B\E2K7623F.D
Report Date: 21-Nov-2011 10:40

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111109F.B\E2K7623F.D
Lab Smp Id: K2213-02A Client Smp ID: H30Y7
Inj Date : 09-NOV-2011 14:51
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2213-02A,,62678,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111109F.B\E2_ARO_5_F.m
Meth Date : 10-Nov-2011 09:09 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 10
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

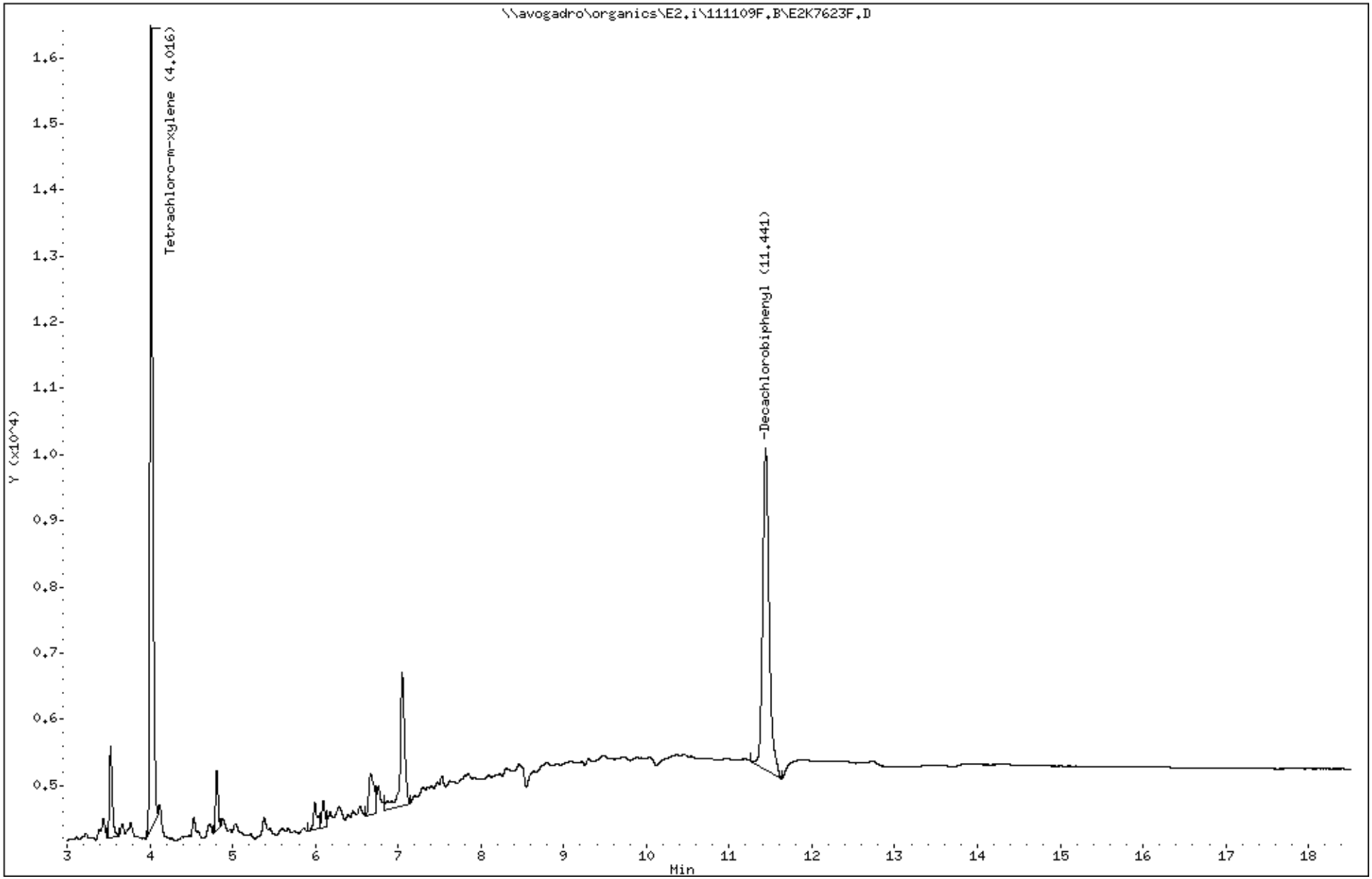
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

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		
4.015	3.999	0.016	288324	0.01388	0.14			(R)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.440	11.417	0.023	265083	0.00925	0.092			(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E2.i\111109F.B\E2K7623F.D
Date : 09-NOV-2011 14:51
Client ID: H30Y7
Instrument: E2.i
Sample Info: K2213-02A,,62678,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111109R.B\E2K7623R.D
Report Date: 21-Nov-2011 10:41

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111109R.B\E2K7623R.D
Lab Smp Id: K2213-02A Client Smp ID: H30Y7
Inj Date : 09-NOV-2011 14:51
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : K2213-02A,,62678,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111109R.B\E2_ARO_5_R.m
Meth Date : 10-Nov-2011 09:10 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 10
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

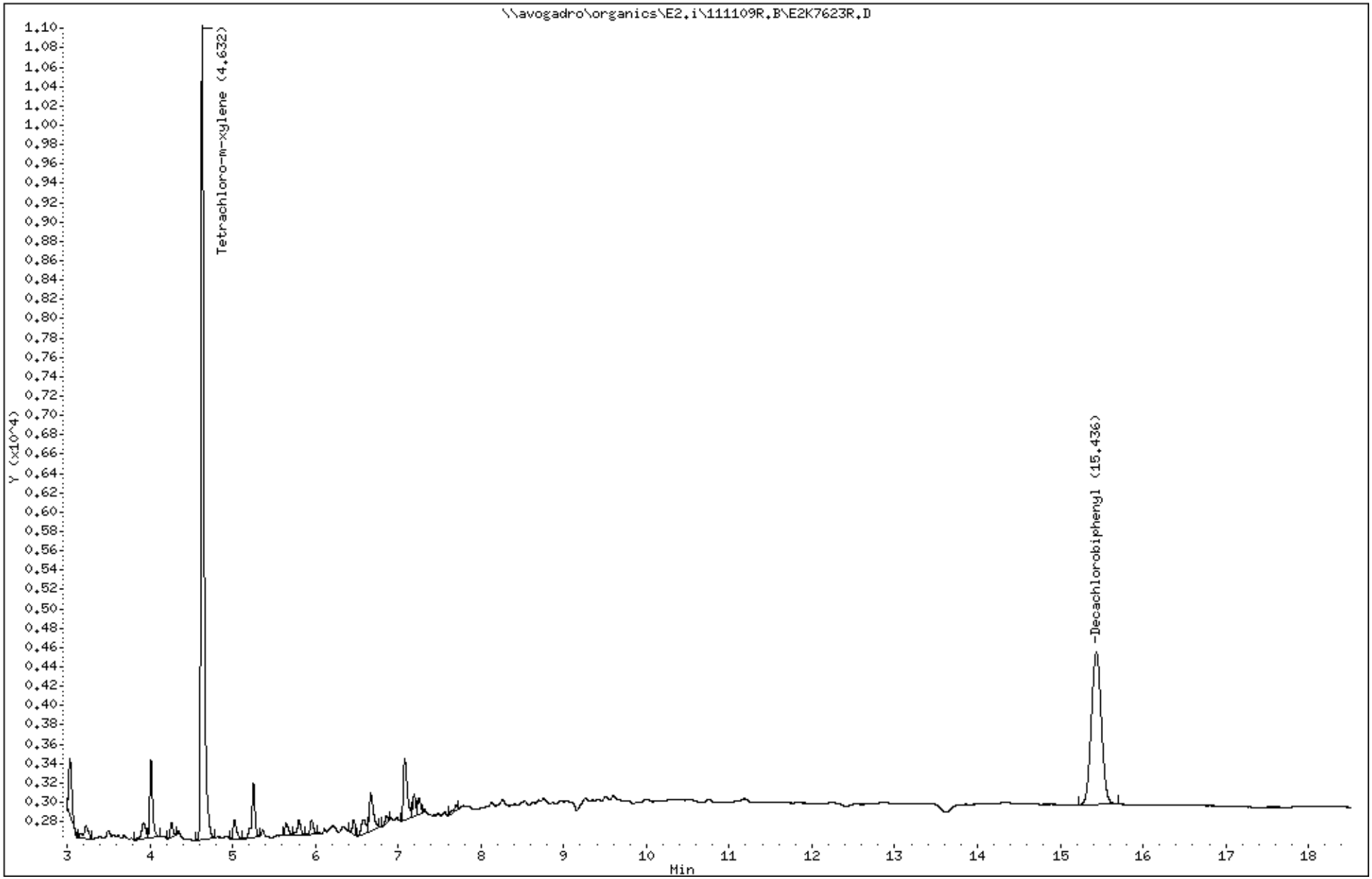
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

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	4.627	0.005	201355	0.01601	0.16			(R)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.435	15.423	0.012	132249	0.00780	0.078			(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E2.i\111109R.B\E2K7623R.D
Date : 09-NOV-2011 14:51
Client ID: H30Y7 Instrument: E2.i
Sample Info: K2213-02A,,62678,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.

H30Y7RX

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-02ARE

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E3I6767F.D/E3I6767R.D

% Moisture: Decanted: (Y/N) Date Received: 10/29/2011

Extraction: (Type) SEPF Date Extracted: 11/14/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/17/2011

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\E3.I\111116BF.B\E3I6767F.D
Report Date: 22-Nov-2011 12:24

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111116BF.B\E3I6767F.D
Lab Smp Id: K2213-02ARE Client Smp ID: H30Y7RX
Inj Date : 17-NOV-2011 00:19
Operator : DL   SRC: LIMS Inst ID: E3.i
Smp Info : K2213-02ARE,,63016,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BF.B\E3_ARO_5_F.m
Meth Date : 17-Nov-2011 08:16 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699F.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

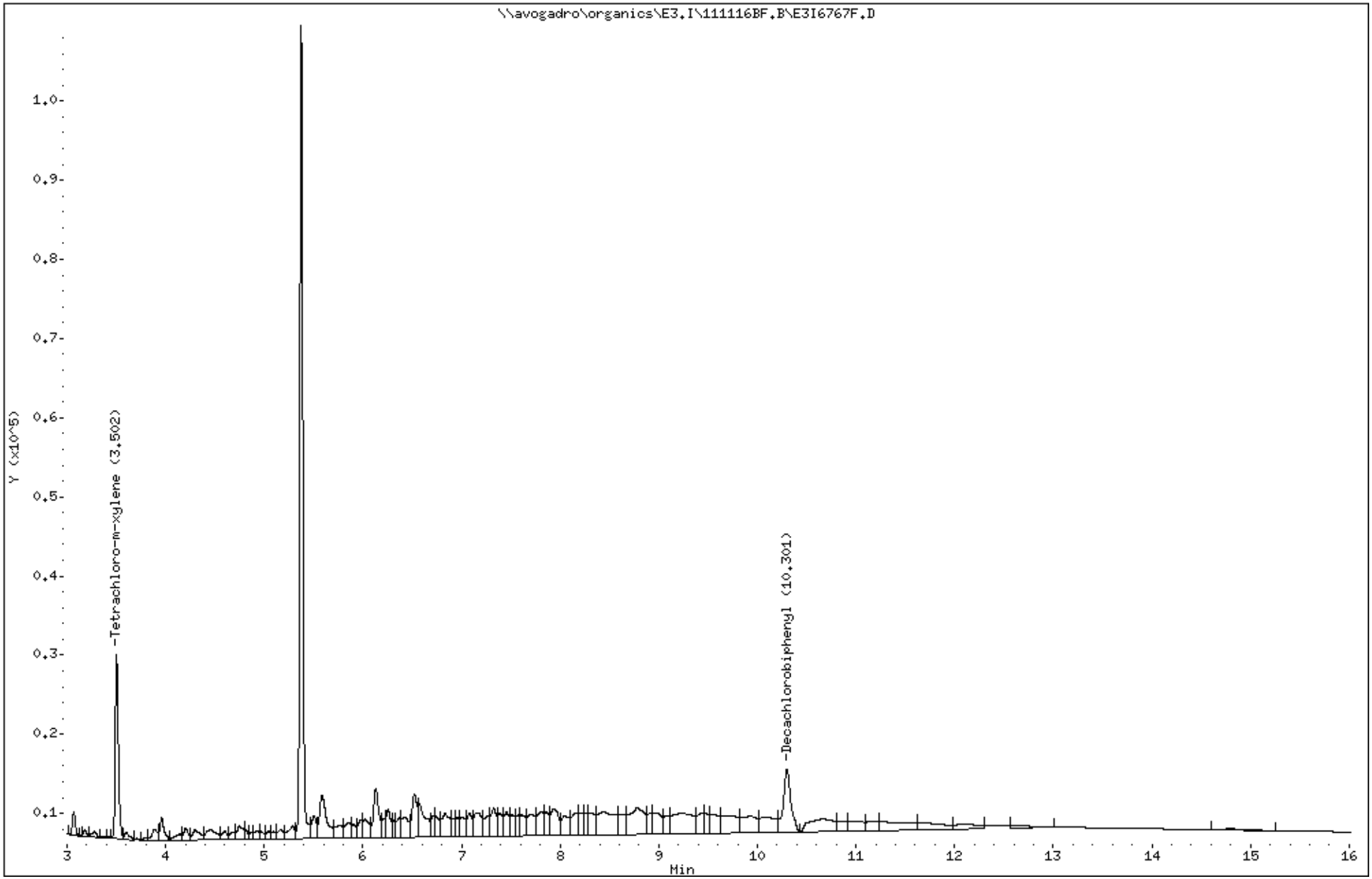
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

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		
3.502	3.492	0.010	499546	0.01561	0.16			(R)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.300	10.281	0.019	436880	0.01281	0.13			(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E3.i\111116BF.B\E3I6767F.D
Date : 17-NOV-2011 00:19
Client ID: H30Y7RX
Instrument: E3.i
Sample Info: K2213-02ARE,,63016,somaro.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6767R.D
Report Date: 22-Nov-2011 12:25

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111116BR.B\E3I6767R.D
Lab Smp Id: K2213-02ARE Client Smp ID: H30Y7RX
Inj Date : 17-NOV-2011 00:19
Operator : DL   SRC: LIMS Inst ID: E3.i
Smp Info : K2213-02ARE,,63016,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BR.B\E3_ARO_5_R.m
Meth Date : 17-Nov-2011 08:19 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699R.D
Als bottle: 27
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

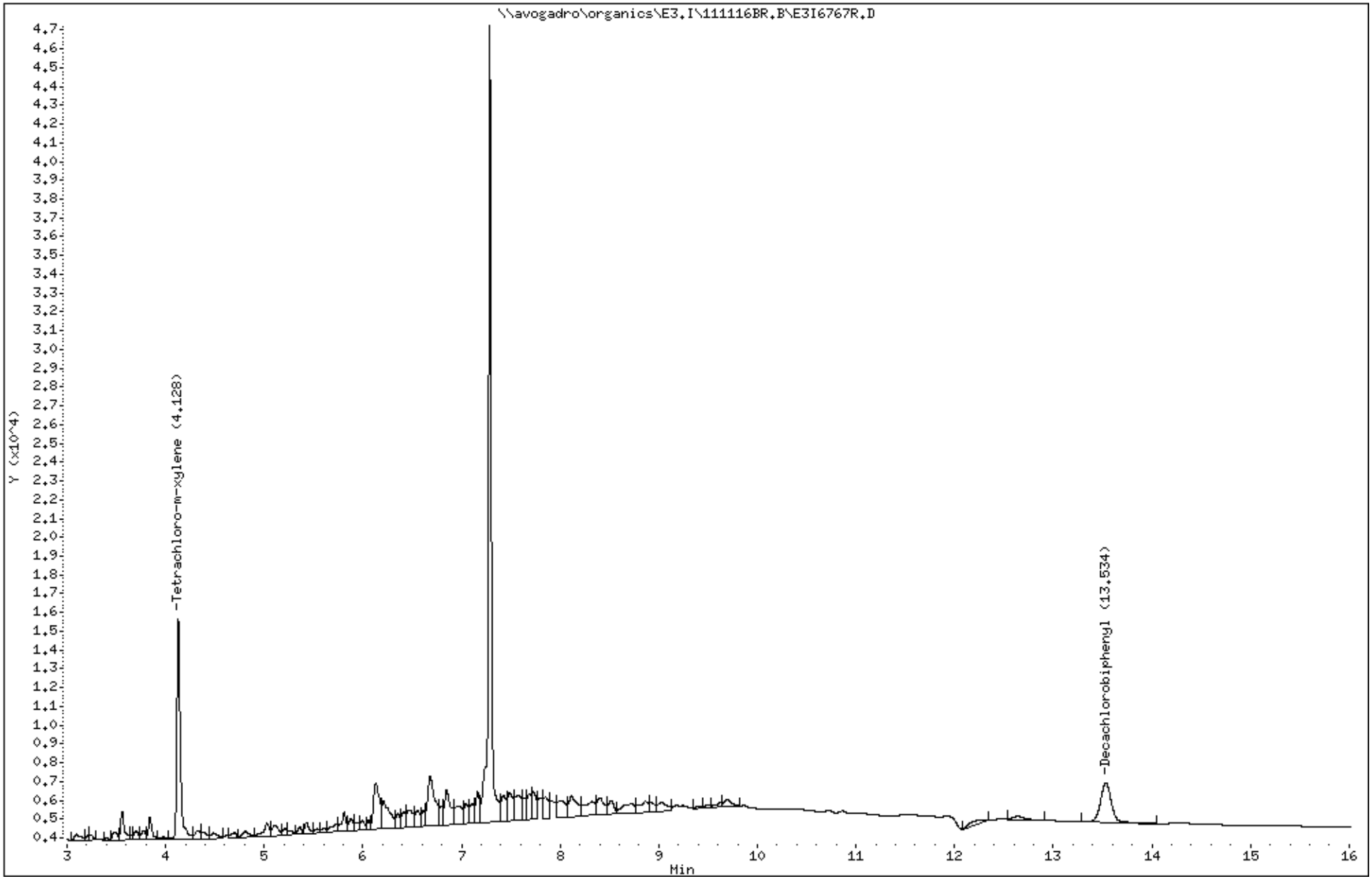
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

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		
4.127	4.116	0.011	290617	0.01796	0.18			(R)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
13.533	13.497	0.036	162211	0.00776	0.078			(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E3.i\111116BR.B\E3I6767R.D
Date : 17-NOV-2011 00:19
Client ID: H30Y7RX
Instrument: E3.i
Sample Info: K2213-02ARE,,63016,somaro.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.53



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30W9

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-03A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E3I6747F.D/E3I6747R.D

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Extraction: (Type) SEPF Date Extracted: 11/08/2011

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\E3.I\111116BF.B\E3I6747F.D
Report Date: 22-Nov-2011 12:24

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

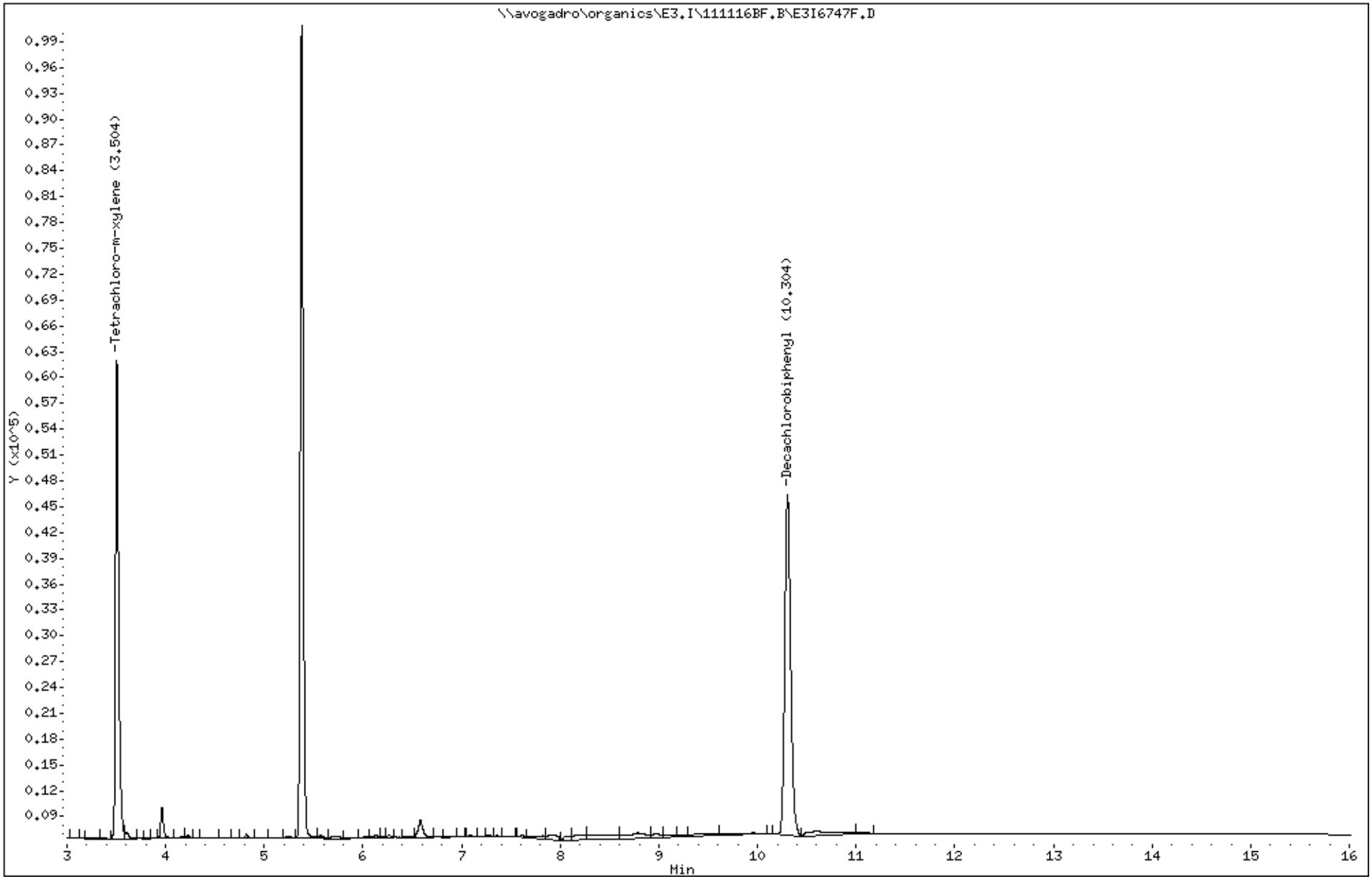
Data file : \\avogadro\organics\E3.I\111116BF.B\E3I6747F.D
Lab Smp Id: K2213-03A Client Smp ID: H30W9
Inj Date : 16-NOV-2011 18:02
Operator : DL   SRC: LIMS Inst ID: E3.i
Smp Info : K2213-03A,,62802,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BF.B\E3_ARO_5_F.m
Meth Date : 17-Nov-2011 08:16 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699F.D
Als bottle: 7
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	
3.504	3.492	0.012	1223868	0.03824		0.38	
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
10.303	10.281	0.022	1639316	0.04806		0.48	

Data File: \\avogadro\organics\E3.I\111116BF.B\E3I6747F.D
Date : 16-NOV-2011 18:02
Client ID: H30W9
Instrument: E3.i
Sample Info: K2213-03A,,62802,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6747R.D
Report Date: 22-Nov-2011 12:25

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

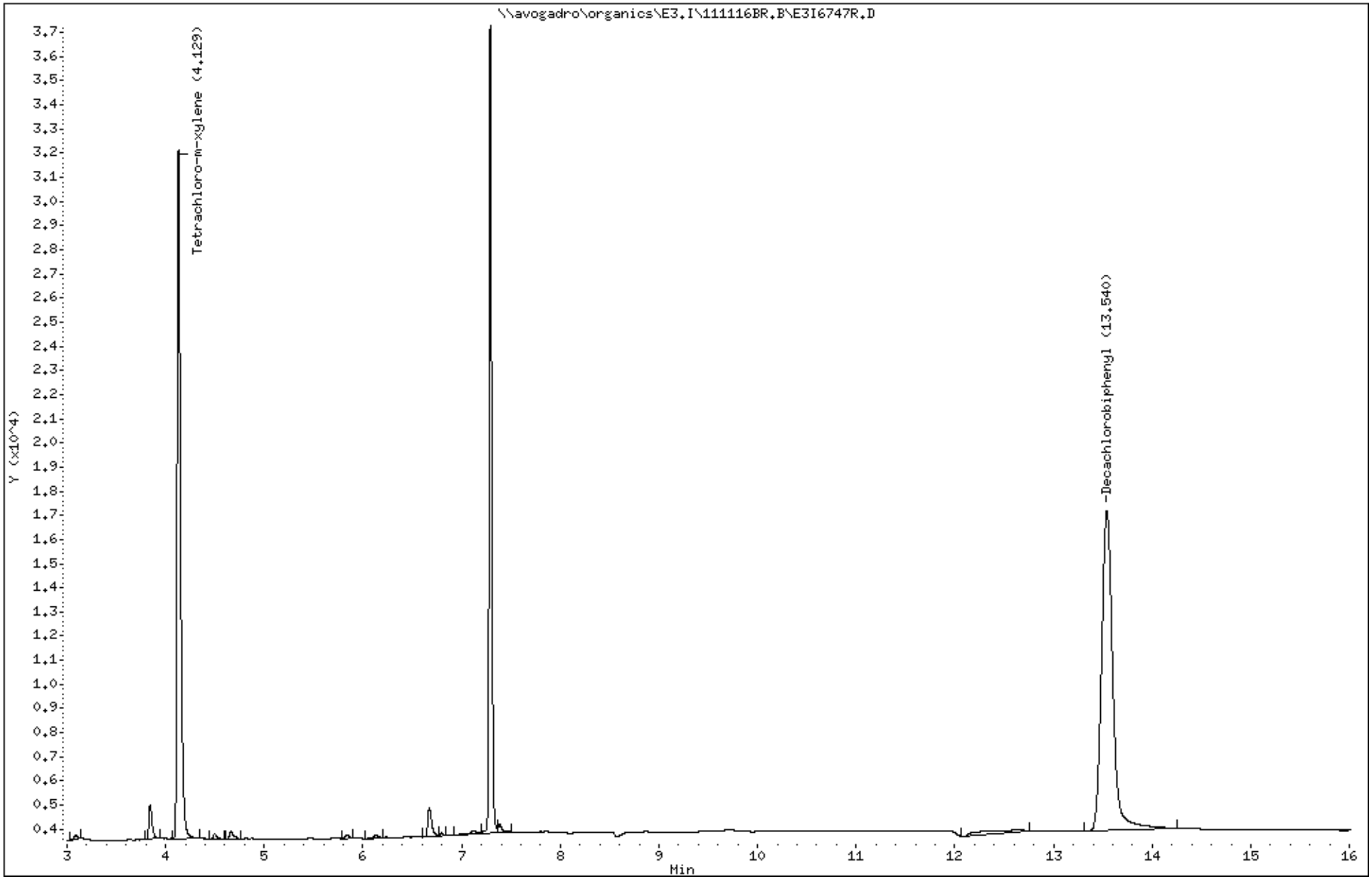
Data file : \\avogadro\organics\E3.I\111116BR.B\E3I6747R.D
Lab Smp Id: K2213-03A Client Smp ID: H30W9
Inj Date : 16-NOV-2011 18:02
Operator : DL   SRC: LIMS Inst ID: E3.i
Smp Info : K2213-03A,,62802,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BR.B\E3_ARO_5_R.m
Meth Date : 17-Nov-2011 08:19 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699R.D
Als bottle: 7
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	
4.129	4.116	0.013	675602	0.04174	0.42		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
13.540	13.497	0.043	1050054	0.05021	0.50		

Data File: \\avogadro\organics\E3.i\111116BR.B\E3I6747R.D
Date : 16-NOV-2011 18:02
Client ID: H30W9
Instrument: E3.i
Sample Info: K2213-03A,,62802,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.53



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30X2

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-04A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E3I6748F.D/E3I6748R.D

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Extraction: (Type) SEPF Date Extracted: 11/08/2011

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\E3.I\111116BF.B\E3I6748F.D
Report Date: 22-Nov-2011 12:24

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111116BF.B\E3I6748F.D
Lab Smp Id: K2213-04A Client Smp ID: H30X2
Inj Date : 16-NOV-2011 18:21
Operator : DL   SRC: LIMS Inst ID: E3.i
Smp Info : K2213-04A,,62802,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BF.B\E3_ARO_5_F.m
Meth Date : 17-Nov-2011 08:16 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699F.D
Als bottle: 8
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

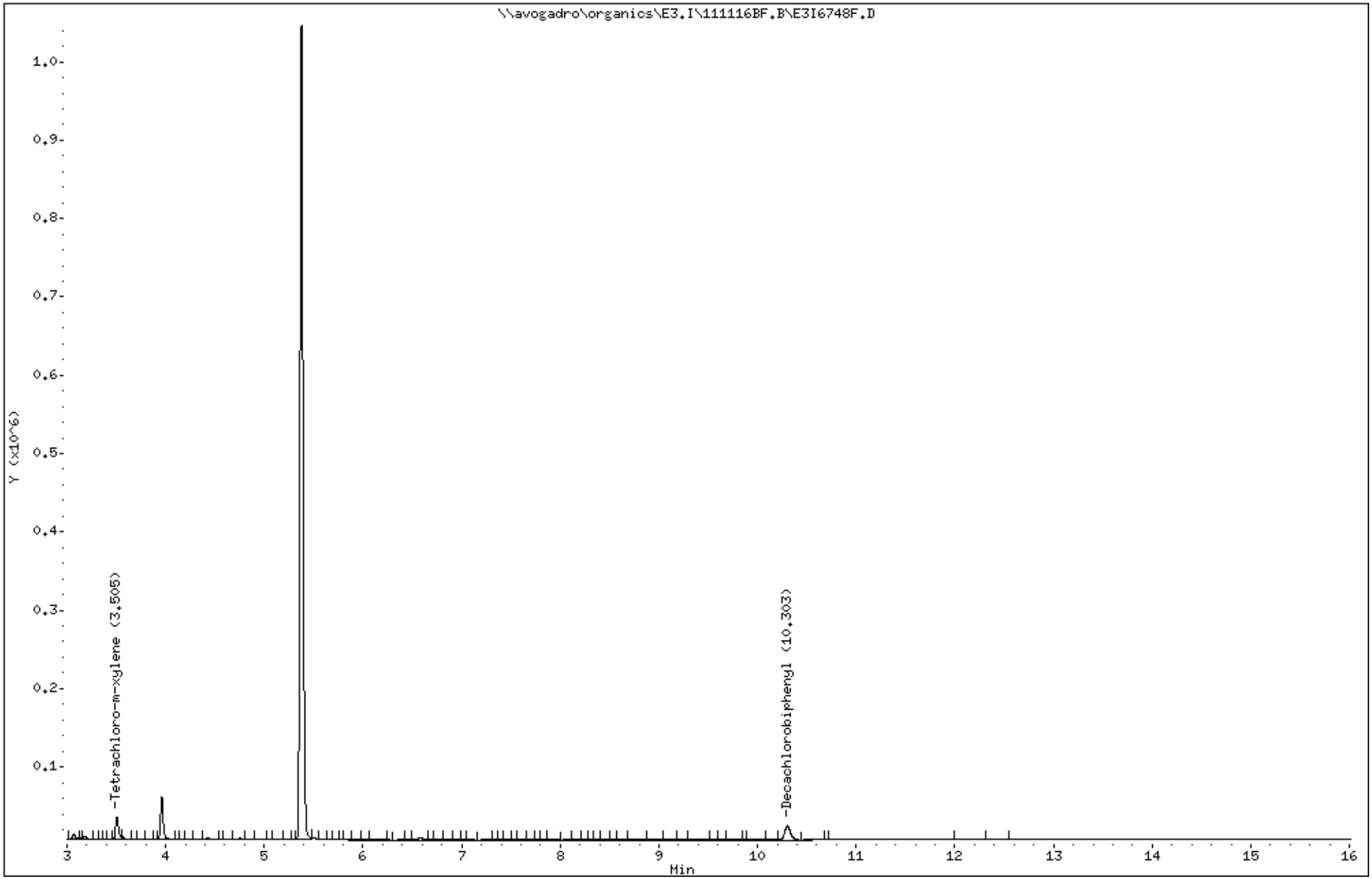
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

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		
3.504	3.492	0.012	610072	0.01906	0.19			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.302	10.281	0.021	797133	0.02337	0.23			(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E3.I\111116BF.B\E3I6748F.D
Date : 16-NOV-2011 18:21
Client ID: H30X2 Instrument: E3.i
Sample Info: K2213-04A,,62802,somaro,sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPest Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6748R.D
Report Date: 22-Nov-2011 12:25

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111116BR.B\E3I6748R.D
Lab Smp Id: K2213-04A Client Smp ID: H30X2
Inj Date : 16-NOV-2011 18:21
Operator : DL   SRC: LIMS Inst ID: E3.i
Smp Info : K2213-04A,,62802,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BR.B\E3_ARO_5_R.m
Meth Date : 17-Nov-2011 08:19 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699R.D
Als bottle: 8
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

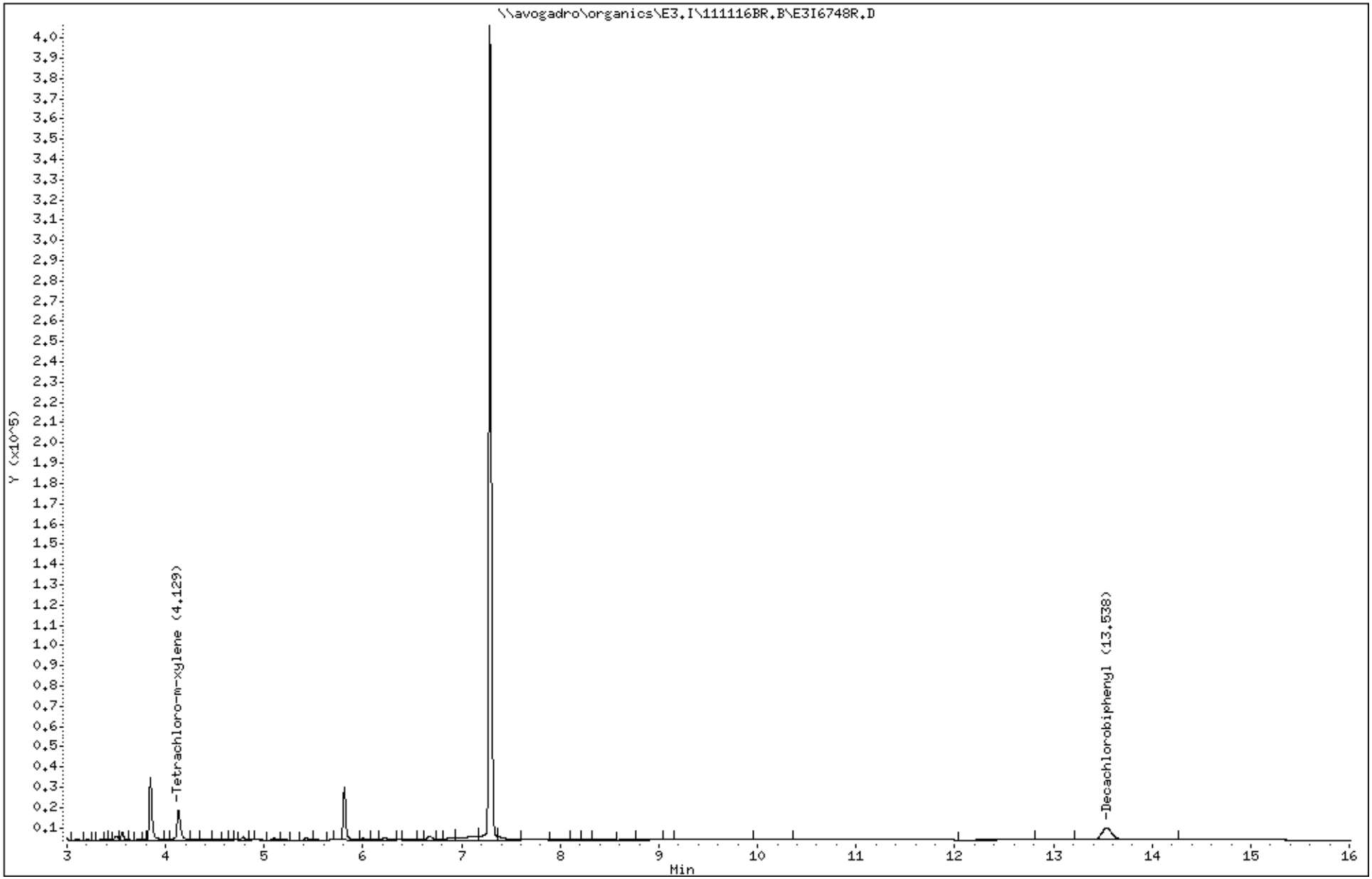
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

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		
4.129	4.116	0.013	395973	0.02446	0.24			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
13.538	13.497	0.041	445071	0.02128	0.21			(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6748R.D
Date : 16-NOV-2011 18:21
Client ID: H30X2 Instrument: E3.i
Sample Info: K2213-04A,,62802,somaro,sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPestII Column diameter: 0.53



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30X6

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-06A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E3I6749F.D/E3I6749R.D

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Extraction: (Type) SEPF Date Extracted: 11/08/2011

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\E3.I\111116BF.B\E3I6749F.D
Report Date: 22-Nov-2011 12:24

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111116BF.B\E3I6749F.D
Lab Smp Id: K2213-06A Client Smp ID: H30X6
Inj Date : 16-NOV-2011 18:40
Operator : DL   SRC: LIMS Inst ID: E3.i
Smp Info : K2213-06A,,62802,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BF.B\E3_ARO_5_F.m
Meth Date : 17-Nov-2011 08:16 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699F.D
Als bottle: 9
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

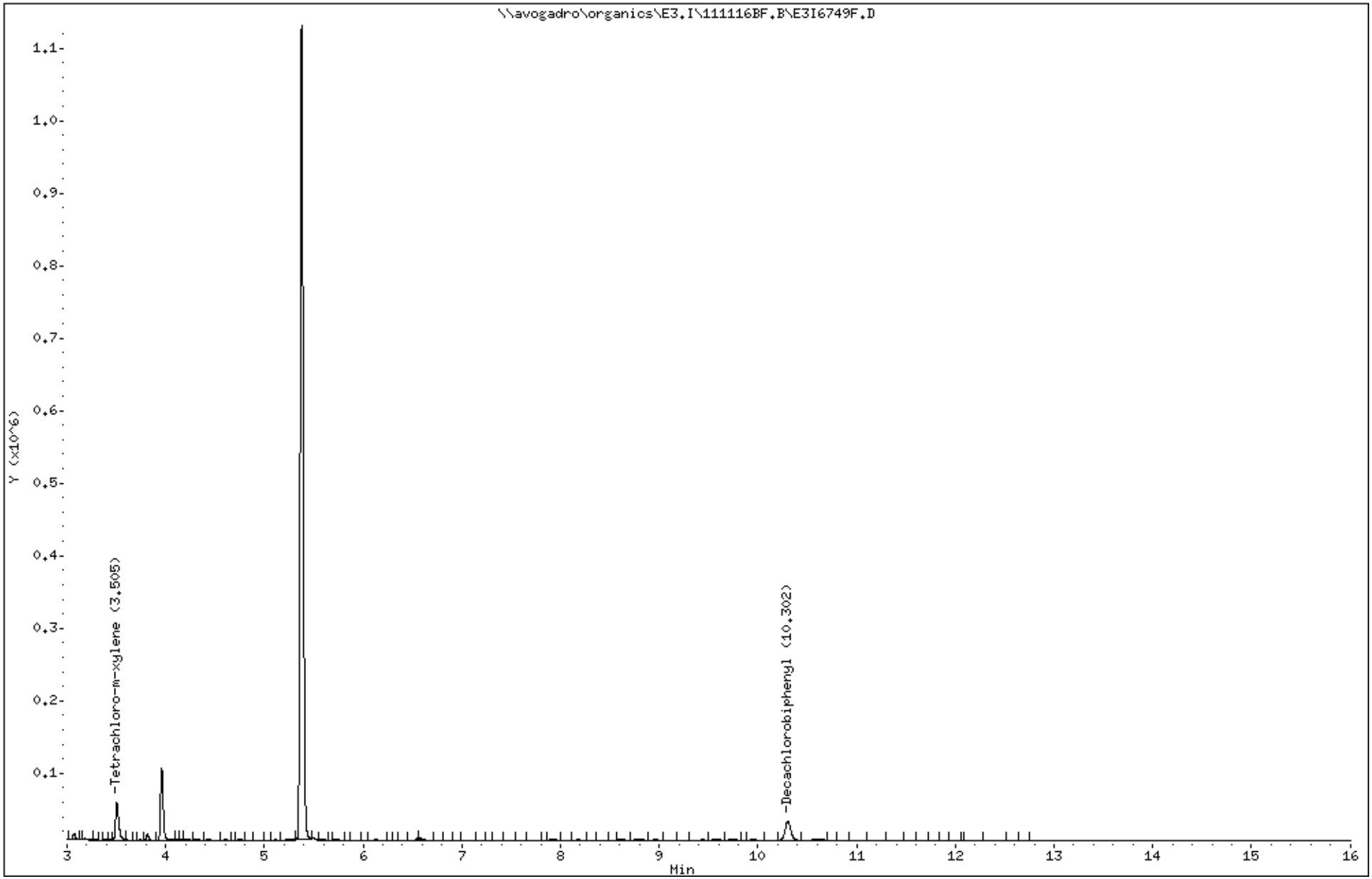
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

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		
3.505	3.492	0.013	1146115	0.03581	0.36			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.302	10.281	0.021	867397	0.02543	0.25			(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E3.I\111116BF.B\E3I6749F.D
Date : 16-NOV-2011 18:40
Client ID: H30X6
Instrument: E3.i
Sample Info: K2213-06A,,62802,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6749R.D
Report Date: 22-Nov-2011 12:25

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111116BR.B\E3I6749R.D
Lab Smp Id: K2213-06A Client Smp ID: H30X6
Inj Date : 16-NOV-2011 18:40
Operator : DL   SRC: LIMS Inst ID: E3.i
Smp Info : K2213-06A,,62802,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BR.B\E3_ARO_5_R.m
Meth Date : 17-Nov-2011 08:19 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699R.D
Als bottle: 9
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

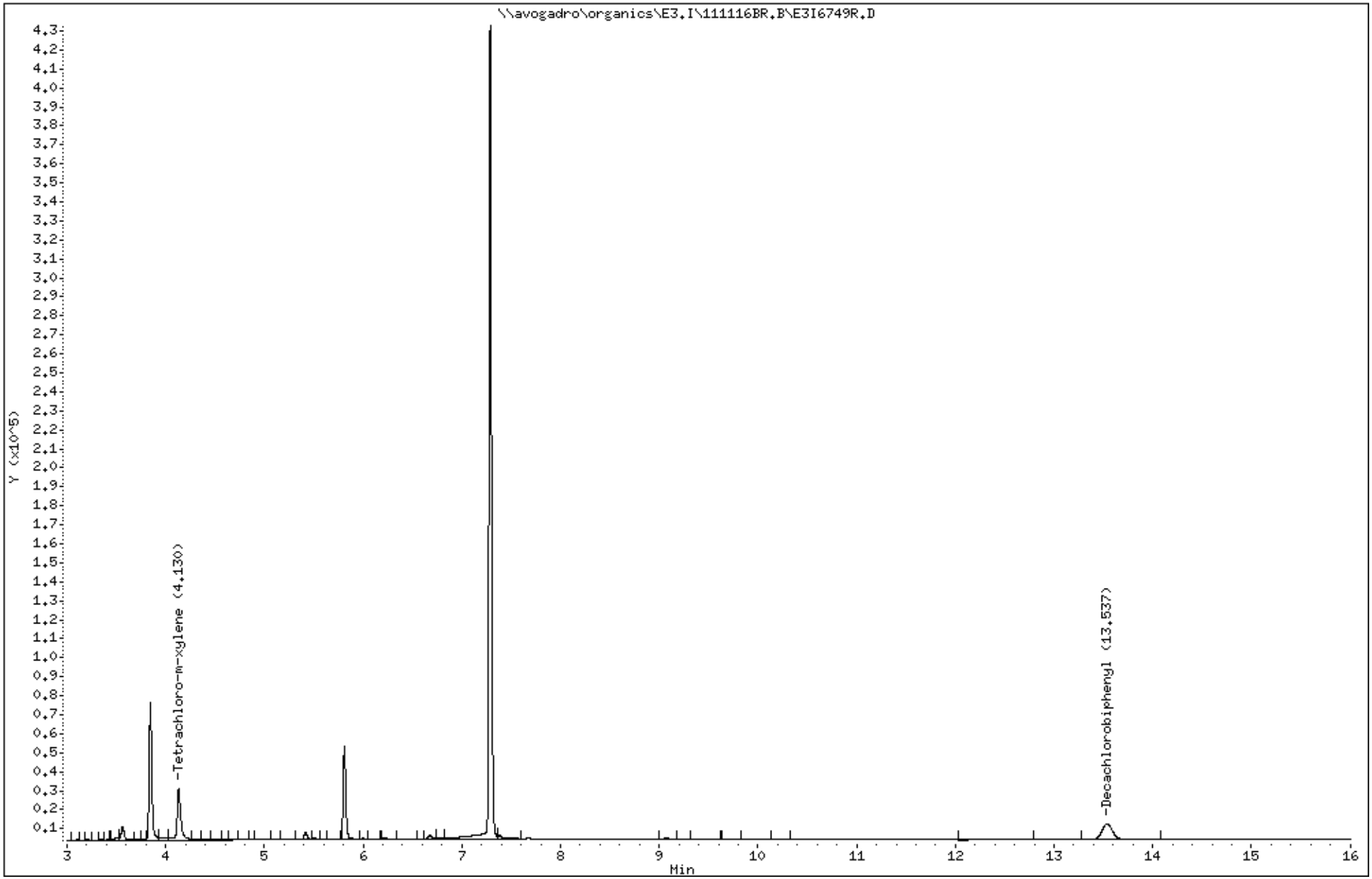
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

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		
4.130	4.116	0.014	743199	0.04592	0.46			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
13.537	13.497	0.040	643623	0.03078	0.31			(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6749R.D
Date : 16-NOV-2011 18:40
Client ID: H30X6 Instrument: E3.i
Sample Info: K2213-06A,,62802,somaro,sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPestII Column diameter: 0.53



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30X7

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-07A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E3I6750F.D/E3I6750R.D

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Extraction: (Type) SEPF Date Extracted: 11/08/2011

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\E3.I\111116BF.B\E3I6750F.D
Report Date: 22-Nov-2011 12:24

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111116BF.B\E3I6750F.D
Lab Smp Id: K2213-07A Client Smp ID: H30X7
Inj Date : 16-NOV-2011 18:59
Operator : DL   SRC: LIMS Inst ID: E3.i
Smp Info : K2213-07A,,62802,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BF.B\E3_ARO_5_F.m
Meth Date : 17-Nov-2011 08:16 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699F.D
Als bottle: 10
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

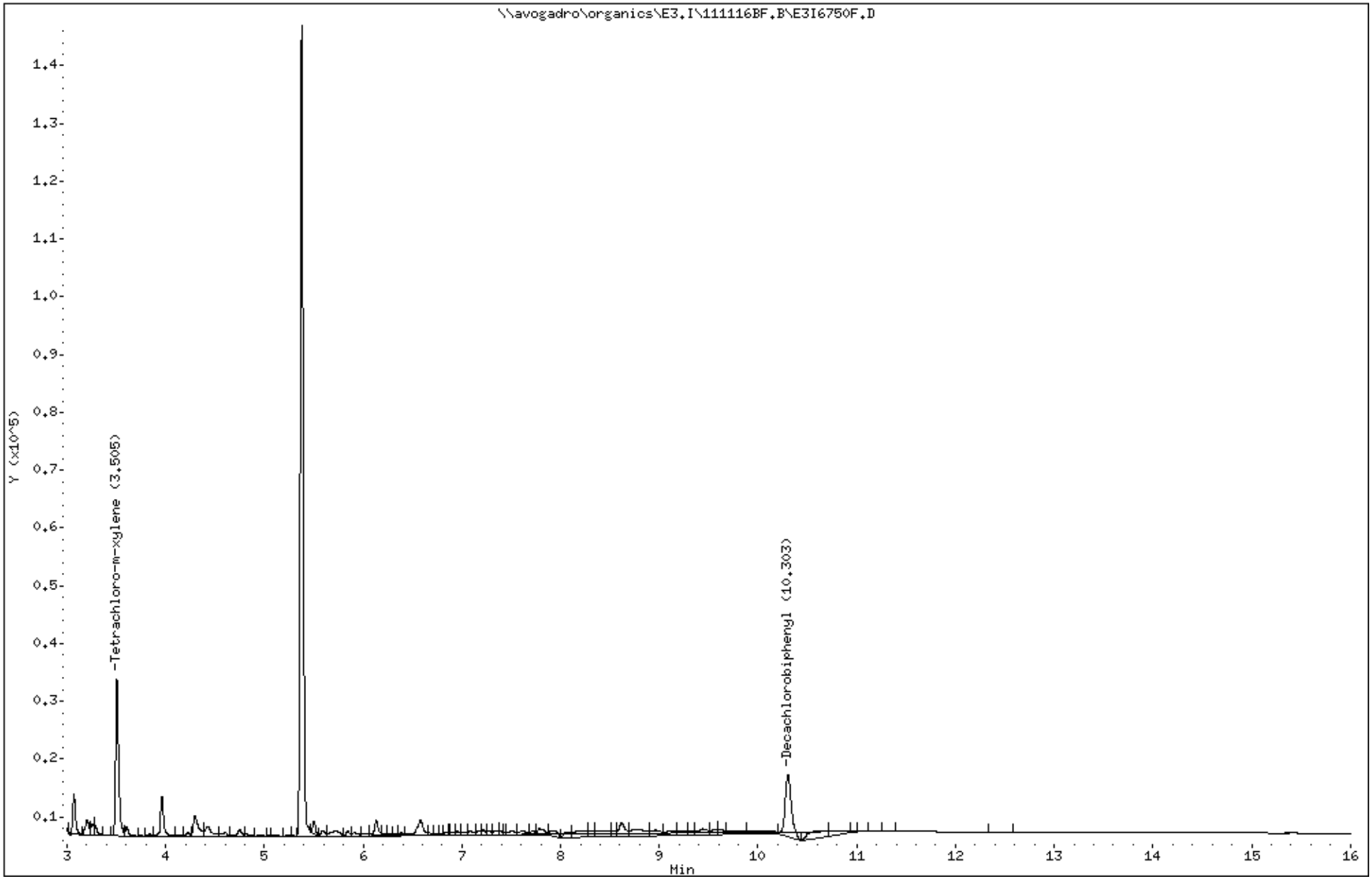
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

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		
3.504	3.492	0.012	578165	0.01807	0.18			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.303	10.281	0.022	475583	0.01394	0.14			(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E3.i\111116BF.B\E3I6750F.D
Date : 16-NOV-2011 18:59
Client ID: H30X7 Instrument: E3.i
Sample Info: K2213-07A,,62802,somaro,sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPest Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6750R.D
Report Date: 22-Nov-2011 12:25

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111116BR.B\E3I6750R.D
Lab Smp Id: K2213-07A Client Smp ID: H30X7
Inj Date : 16-NOV-2011 18:59
Operator : DL   SRC: LIMS Inst ID: E3.i
Smp Info : K2213-07A,,62802,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BR.B\E3_ARO_5_R.m
Meth Date : 17-Nov-2011 08:19 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699R.D
Als bottle: 10
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

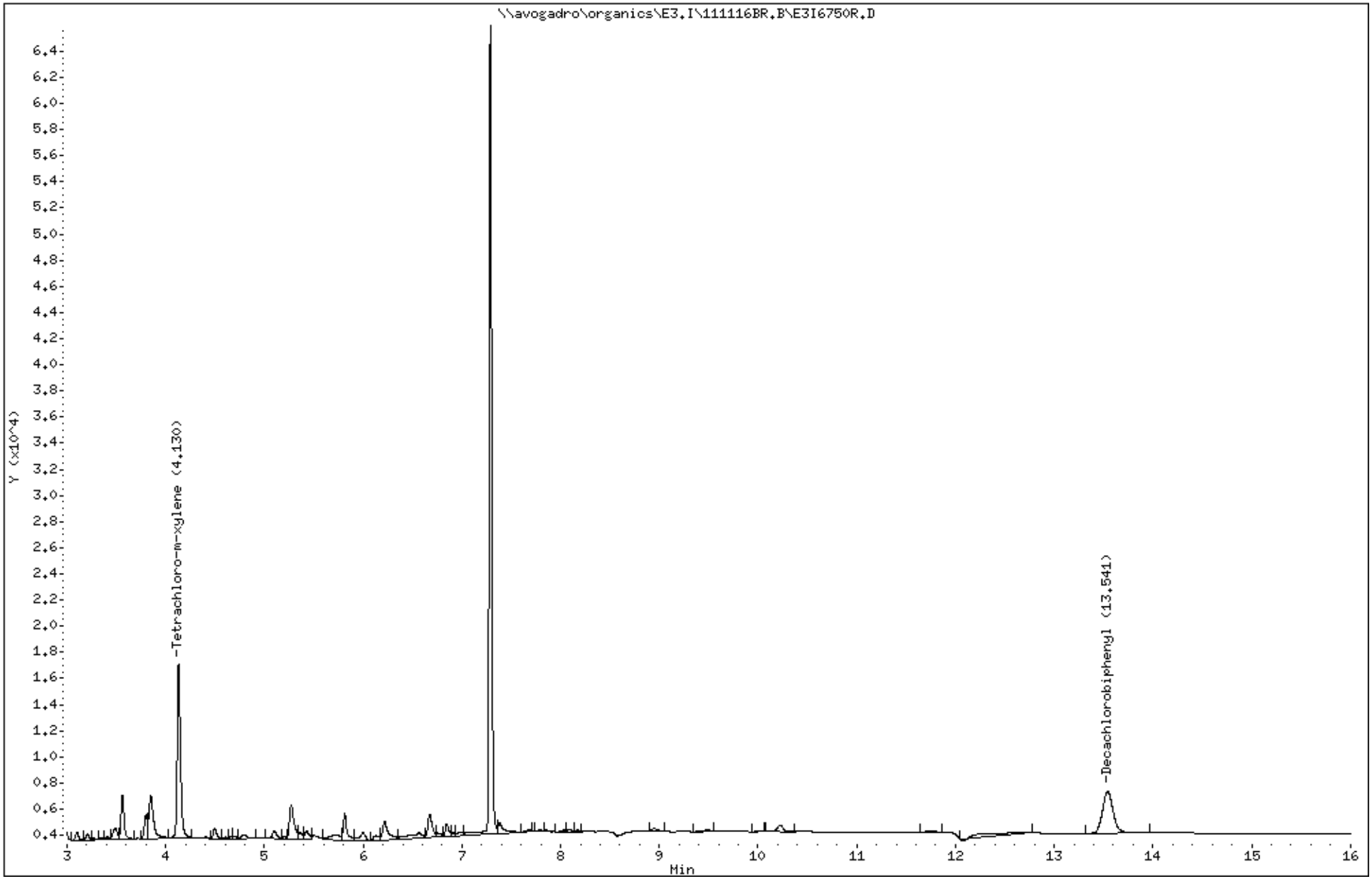
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

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		
4.129	4.116	0.013	310231	0.01917	0.19			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
13.541	13.497	0.044	240126	0.01148	0.11			(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E3.i\111116BR.B\E3I6750R.D
Date : 16-NOV-2011 18:59
Client ID: H30X7
Instrument: E3.i
Sample Info: K2213-07A,,62802,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.53



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30X9

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-08A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E3I6792F.D/E3I6792R.D

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Extraction: (Type) SEPF Date Extracted: 11/08/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/17/2011

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\E3.I\111117F.B\E3I6792F.D
Report Date: 22-Nov-2011 12:26

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

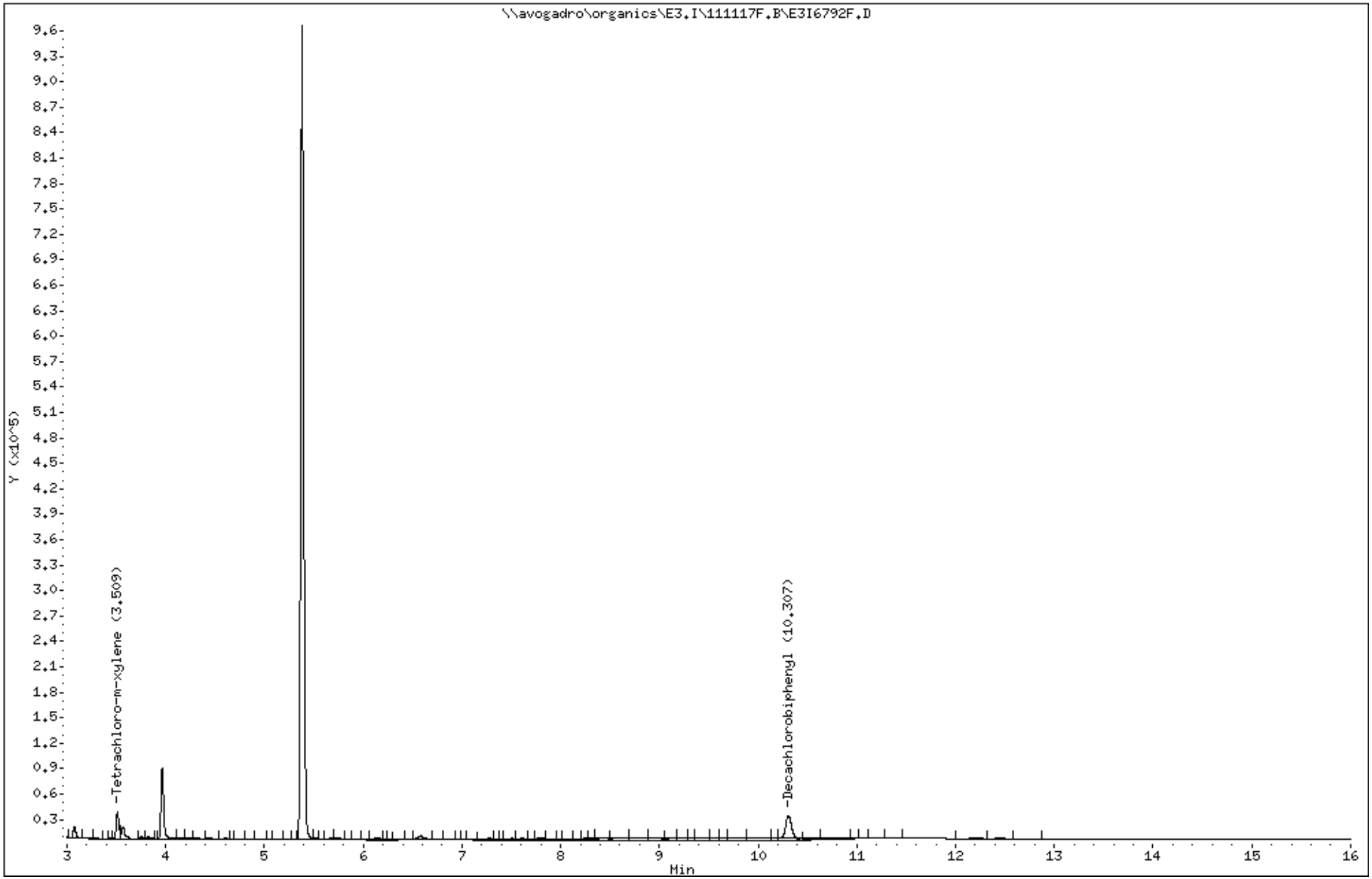
Data file : \\avogadro\organics\E3.I\111117F.B\E3I6792F.D
Lab Smp Id: K2213-08A Client Smp ID: H30X9
Inj Date : 17-NOV-2011 12:22
Operator : DL   SRC: LIMS Inst ID: E3.i
Smp Info : K2213-08A,,62802,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111117F.B\E3_ARO_5_F.m
Meth Date : 18-Nov-2011 09:11 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699F.D
Als bottle: 7
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	
3.509	3.492	0.017	643079	0.02010	0.20		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
10.306	10.281	0.025	1324493	0.03883	0.39		

Data File: \\avogadro\organics\E3.I\111117F.B\E3I6792F.D
Date : 17-NOV-2011 12:22
Client ID: H30X9 Instrument: E3.i
Sample Info: K2213-08A,,62802,somaro,sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPest Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111117R.B\E3I6792R.D
Report Date: 22-Nov-2011 12:27

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111117R.B\E3I6792R.D
Lab Smp Id: K2213-08A Client Smp ID: H30X9
Inj Date : 17-NOV-2011 12:22
Operator : DL   SRC: LIMS Inst ID: E3.i
Smp Info : K2213-08A,,62802,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111117R.B\E3_ARO_5_R.m
Meth Date : 18-Nov-2011 09:12 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699R.D
Als bottle: 7
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

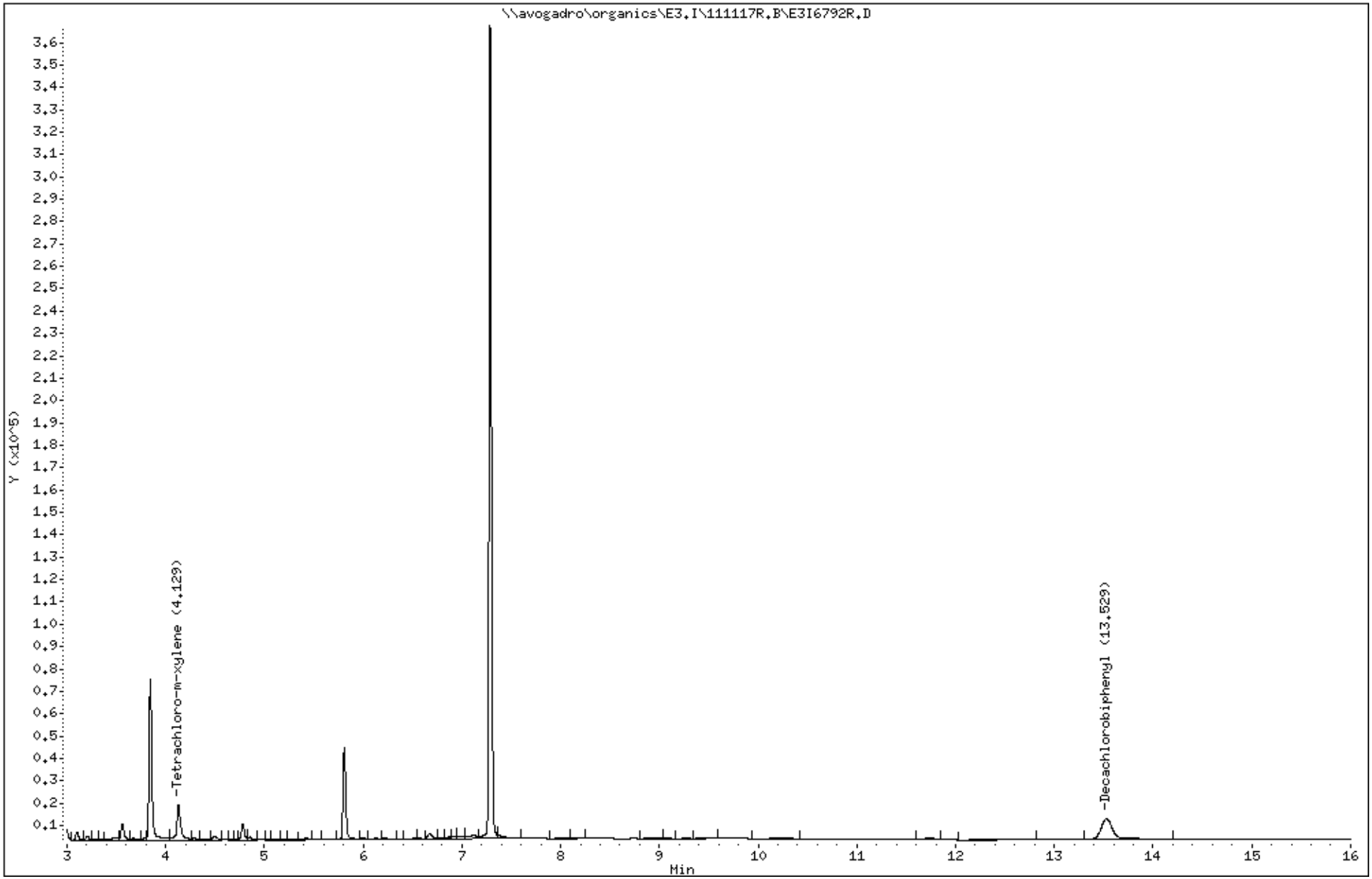
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				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		
4.128	4.116	0.012	451401	0.02789	0.28			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
13.529	13.497	0.032	705660	0.03374	0.34			(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E3.i\111117R.B\E3I6792R.D
Date : 17-NOV-2011 12:22
Client ID: H30X9
Instrument: E3.i
Sample Info: K2213-08A,,62802,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.53



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Y0

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-09A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E3I6793F.D/E3I6793R.D

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Extraction: (Type) SEPF Date Extracted: 11/08/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/17/2011

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\E3.I\111117F.B\E3I6793F.D
Report Date: 22-Nov-2011 12:26

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

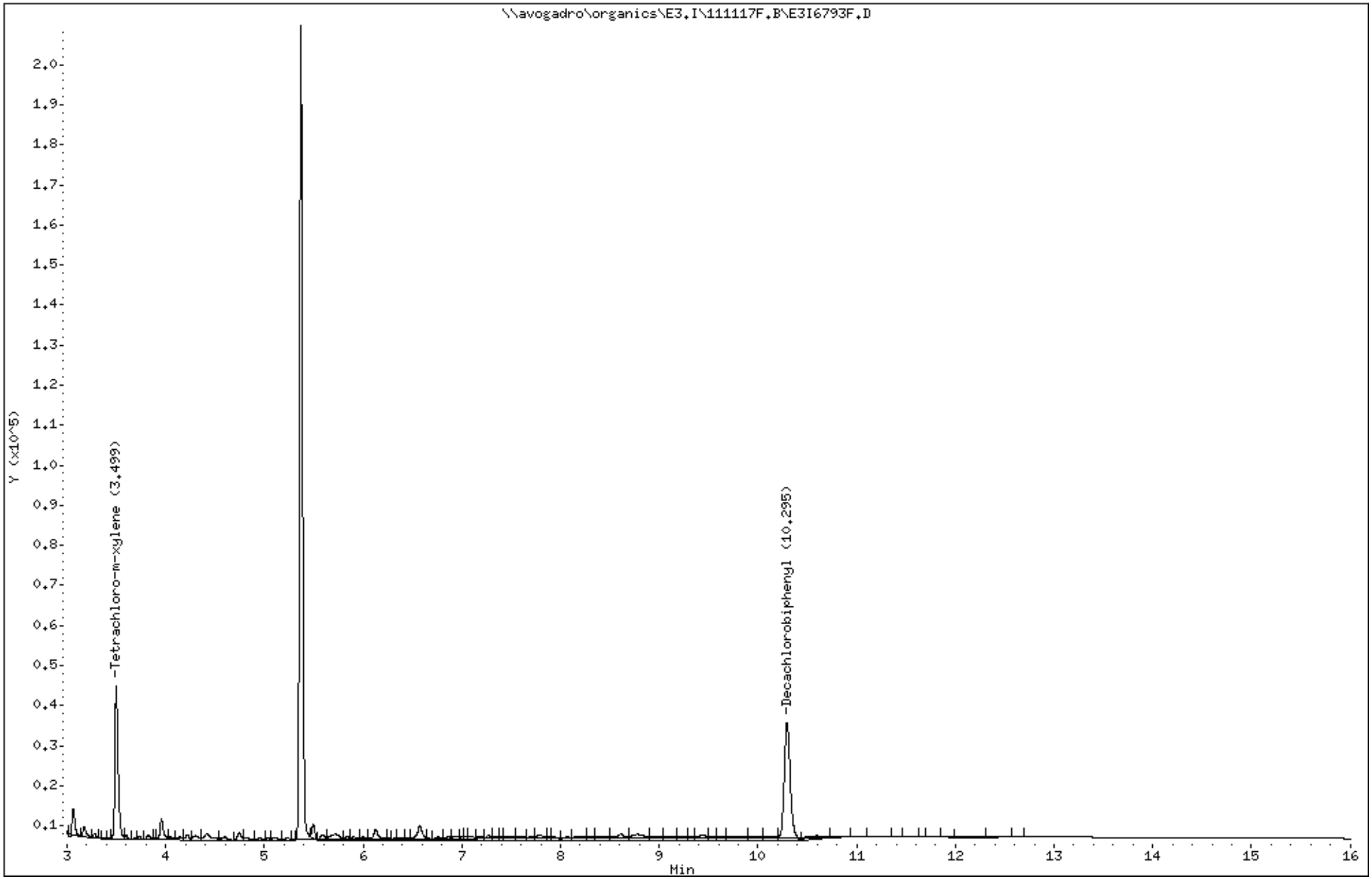
Data file : \\avogadro\organics\E3.I\111117F.B\E3I6793F.D
Lab Smp Id: K2213-09A Client Smp ID: H30Y0
Inj Date : 17-NOV-2011 12:41
Operator : DL   SRC: LIMS Inst ID: E3.i
Smp Info : K2213-09A,,62802,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111117F.B\E3_ARO_5_F.m
Meth Date : 18-Nov-2011 09:11 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699F.D
Als bottle: 8
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		
3.498	3.492	0.006	836566	0.02614	0.26		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
10.295	10.281	0.014	1260158	0.03695	0.37		

Data File: \\avogadro\organics\E3.I\111117F.B\E3I6793F.D
Date : 17-NOV-2011 12:41
Client ID: H30Y0
Instrument: E3.i
Sample Info: K2213-09A,,62802,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111117R.B\E3I6793R.D
Report Date: 22-Nov-2011 12:27

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111117R.B\E3I6793R.D
Lab Smp Id: K2213-09A Client Smp ID: H30Y0
Inj Date : 17-NOV-2011 12:41
Operator : DL   SRC: LIMS Inst ID: E3.i
Smp Info : K2213-09A,,62802,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111117R.B\E3_ARO_5_R.m
Meth Date : 18-Nov-2011 09:12 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699R.D
Als bottle: 8
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

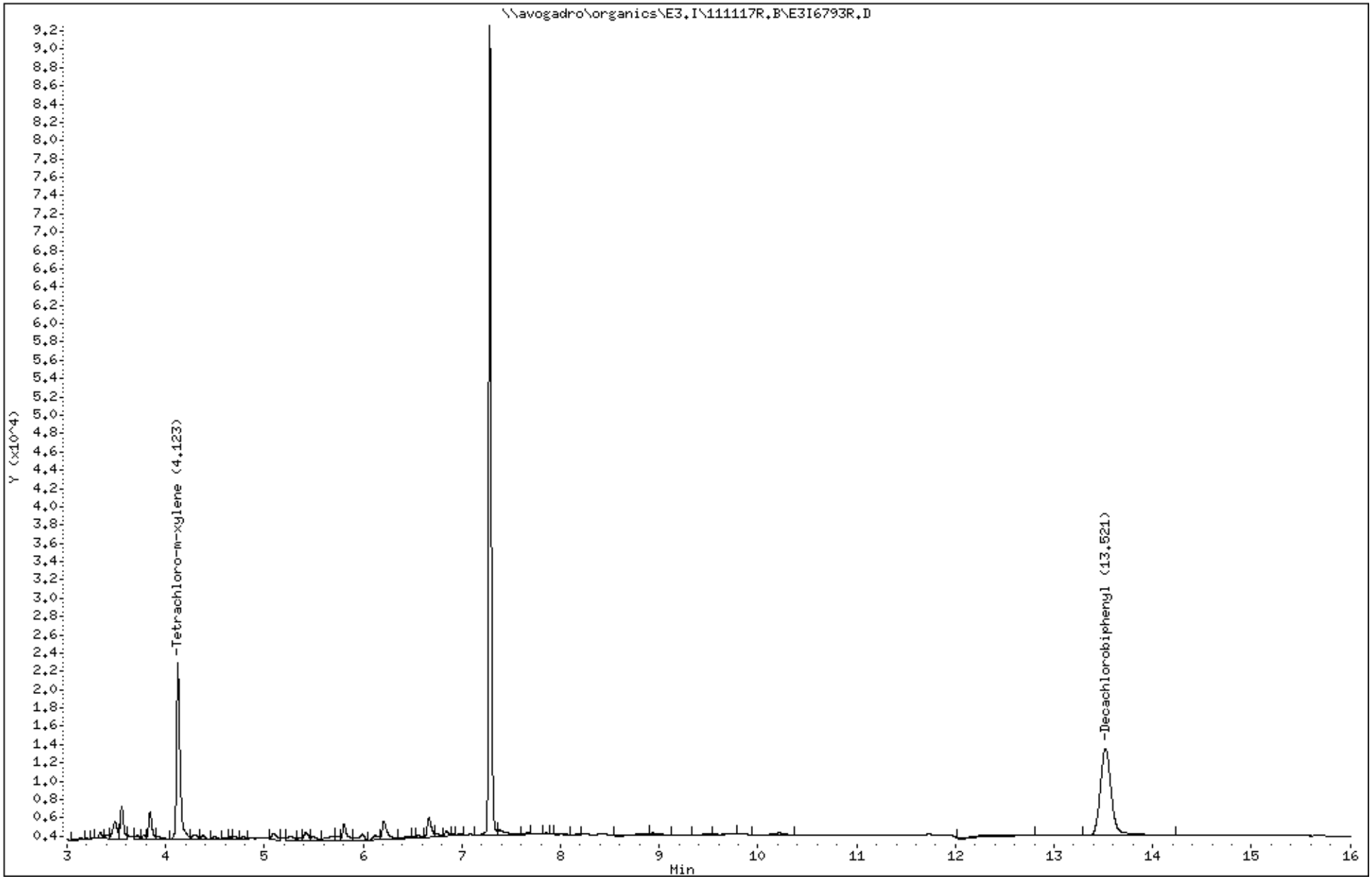
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

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		
4.123	4.116	0.007	475139	0.02936	0.29			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
13.520	13.497	0.023	746887	0.03572	0.36			(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E3.I\111117R.B\E3I6793R.D
Date : 17-NOV-2011 12:41
Client ID: H30Y0
Instrument: E3.i
Sample Info: K2213-09A,,62802,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.53



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Y1

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-10A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E3I6753F.D/E3I6753R.D

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Extraction: (Type) SEPF Date Extracted: 11/08/2011

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\E3.I\111116BF.B\E3I6753F.D
Report Date: 22-Nov-2011 12:24

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111116BF.B\E3I6753F.D
Lab Smp Id: K2213-10A Client Smp ID: H30Y1
Inj Date : 16-NOV-2011 19:55
Operator : DL   SRC: LIMS Inst ID: E3.i
Smp Info : K2213-10A,,62802,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BF.B\E3_ARO_5_F.m
Meth Date : 17-Nov-2011 08:16 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699F.D
Als bottle: 13
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

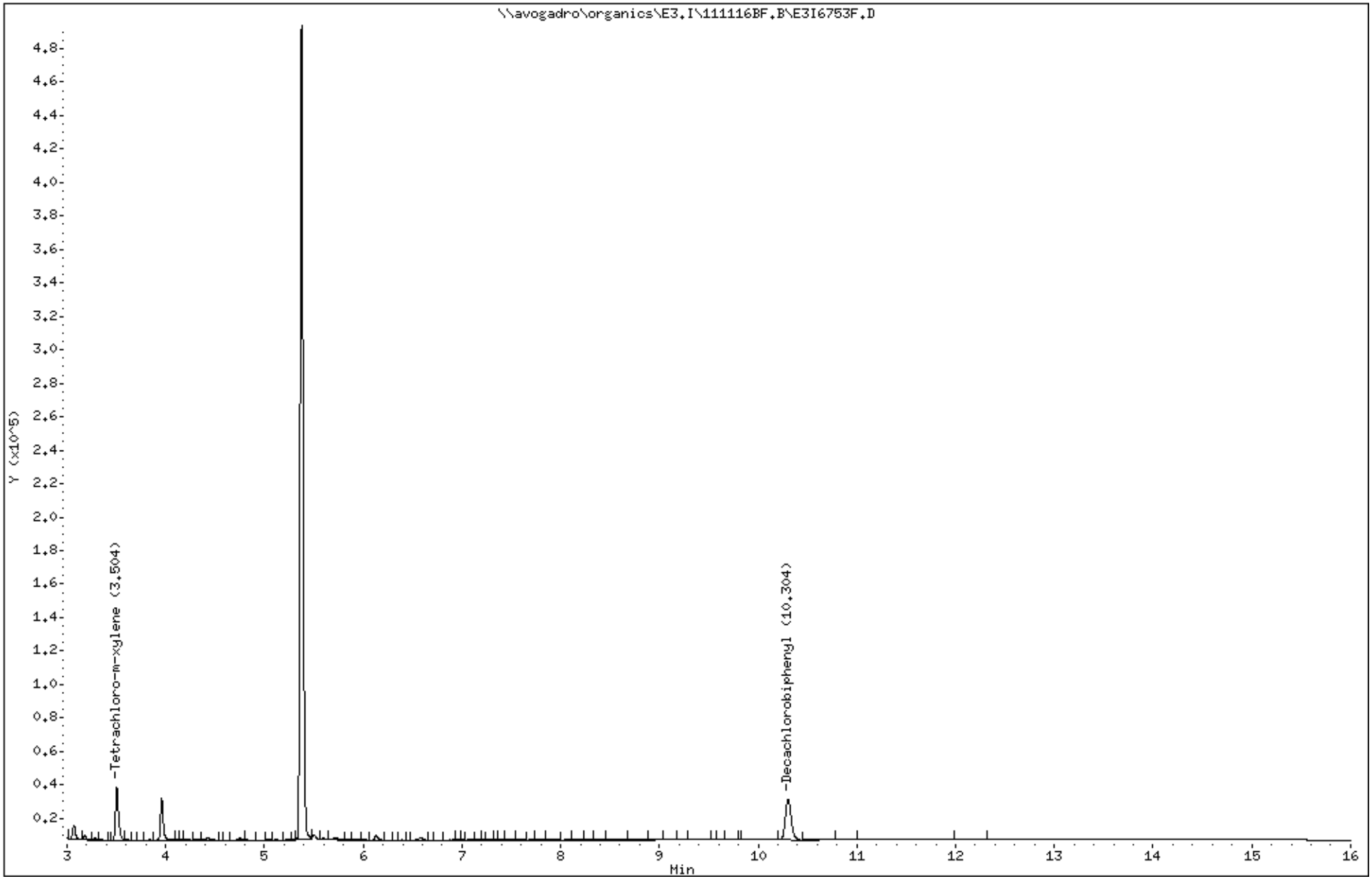
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

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		
3.503	3.492	0.011	691603	0.02161	0.22			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.303	10.281	0.022	1005683	0.02948	0.29			(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E3.I\111116BF.B\E3I6753F.D
Date : 16-NOV-2011 19:55
Client ID: H30Y1 Instrument: E3.i
Sample Info: K2213-10A,,62802,somaro,sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPest Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6753R.D
Report Date: 22-Nov-2011 12:25

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111116BR.B\E3I6753R.D
Lab Smp Id: K2213-10A Client Smp ID: H30Y1
Inj Date : 16-NOV-2011 19:55
Operator : DL   SRC: LIMS Inst ID: E3.i
Smp Info : K2213-10A,,62802,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BR.B\E3_ARO_5_R.m
Meth Date : 17-Nov-2011 08:19 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699R.D
Als bottle: 13
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

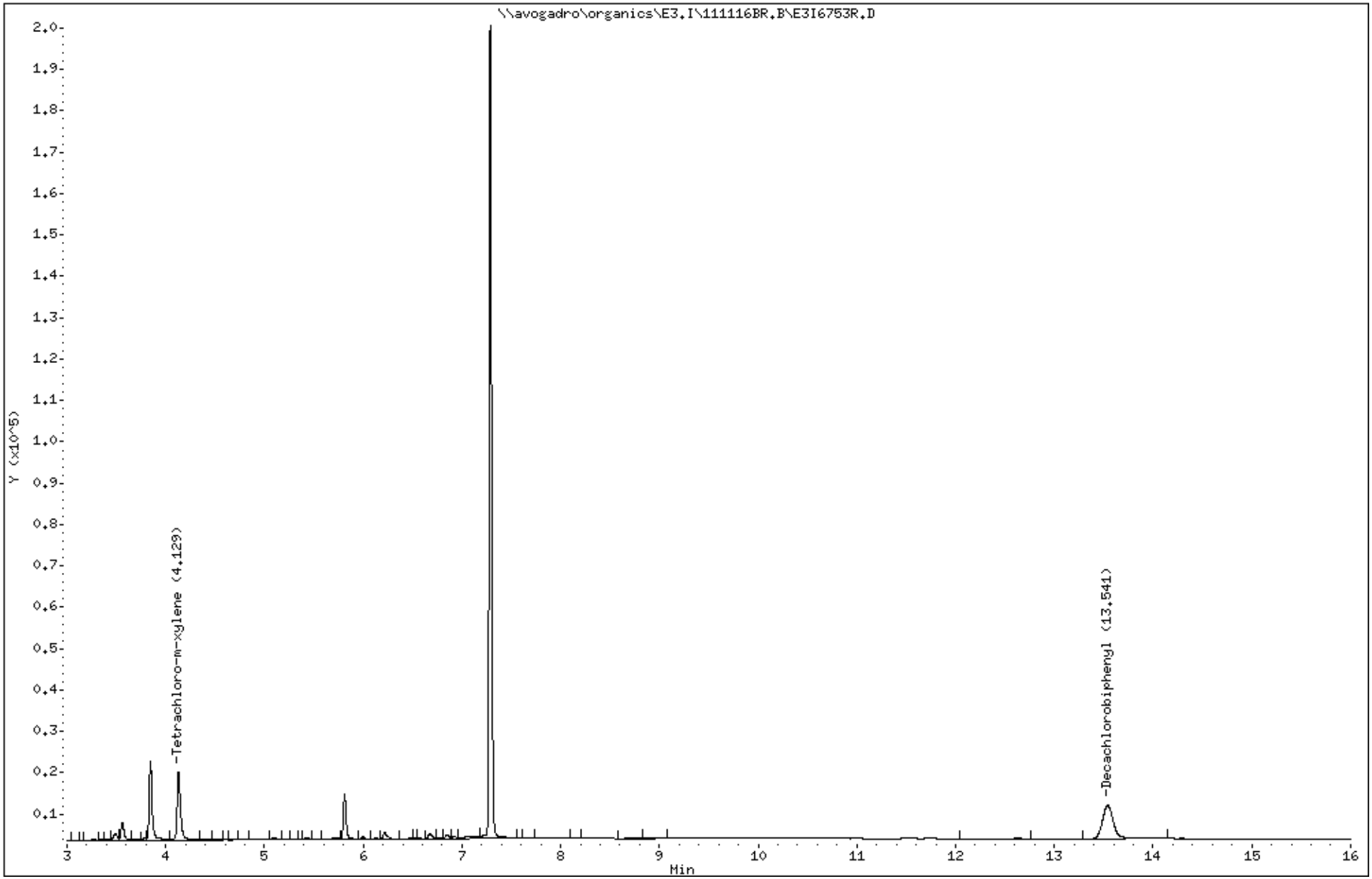
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

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		
4.129	4.116	0.013	419970	0.02595	0.26			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
13.540	13.497	0.043	625439	0.02991	0.30			(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E3.i\111116BR.B\E3I6753R.D
Date : 16-NOV-2011 19:55
Client ID: H30Y1
Instrument: E3.i
Sample Info: K2213-10A,,62802,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.53



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Z2

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-11A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E3I6754F.D/E3I6754R.D

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Extraction: (Type) SEPF Date Extracted: 11/08/2011

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\E3.I\111116BF.B\E3I6754F.D
Report Date: 22-Nov-2011 12:24

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

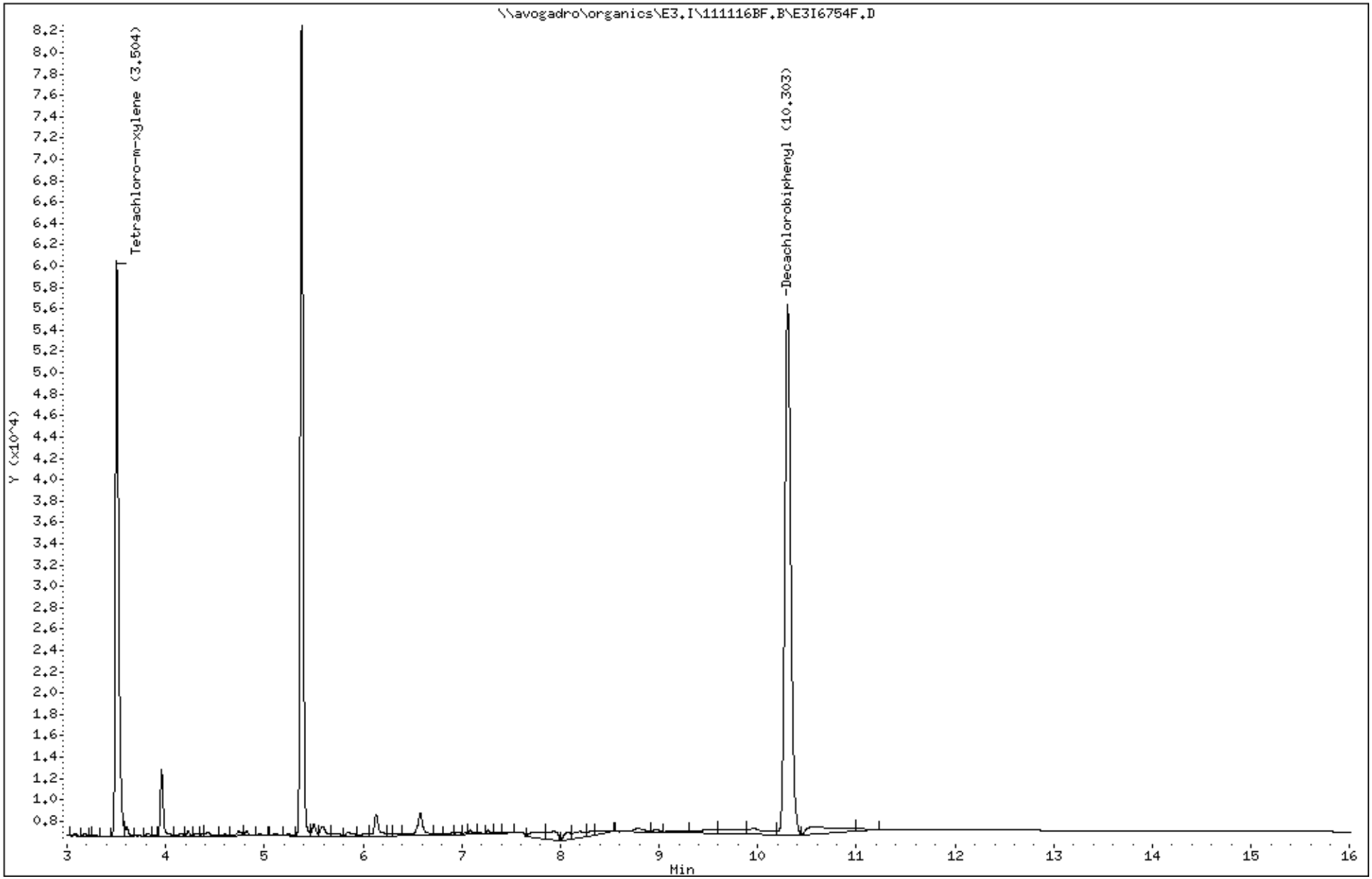
Data file : \\avogadro\organics\E3.I\111116BF.B\E3I6754F.D
Lab Smp Id: K2213-11A Client Smp ID: H30Z2
Inj Date : 16-NOV-2011 20:14
Operator : DL   SRC: LIMS Inst ID: E3.i
Smp Info : K2213-11A,,62802,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BF.B\E3_ARO_5_F.m
Meth Date : 17-Nov-2011 08:16 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699F.D
Als bottle: 14
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		
3.503	3.492	0.011	1196290	0.03738	0.37		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
10.302	10.281	0.021	2092528	0.06135	0.61		

Data File: \\avogadro\organics\E3.i\111116BF.B\E3I6754F.D
Date : 16-NOV-2011 20:14
Client ID: H30Z2
Instrument: E3.i
Sample Info: K2213-11A,,62802,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6754R.D
Report Date: 22-Nov-2011 12:25

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

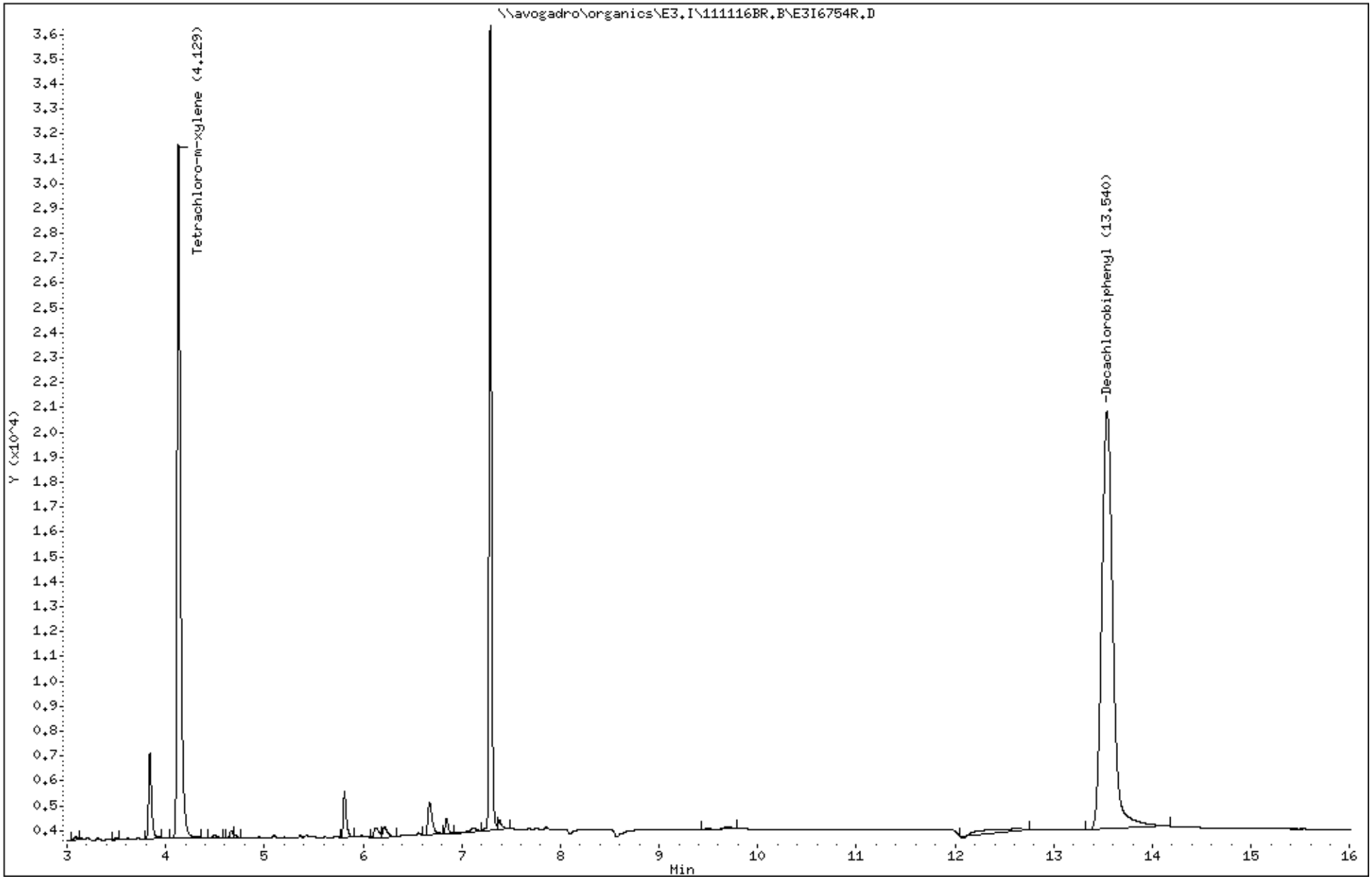
Data file : \\avogadro\organics\E3.I\111116BR.B\E3I6754R.D
Lab Smp Id: K2213-11A Client Smp ID: H30Z2
Inj Date : 16-NOV-2011 20:14
Operator : DL   SRC: LIMS Inst ID: E3.i
Smp Info : K2213-11A,,62802,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BR.B\E3_ARO_5_R.m
Meth Date : 17-Nov-2011 08:19 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699R.D
Als bottle: 14
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	
4.129	4.116	0.013	670680	0.04144	0.41		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
13.539	13.497	0.042	1323997	0.06331	0.63		

Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6754R.D
Date : 16-NOV-2011 20:14
Client ID: H30Z2
Instrument: E3.i
Sample Info: K2213-11A,,62802,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.53



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Z3

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-12A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E3I6757F.D/E3I6757R.D

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Extraction: (Type) SEPF Date Extracted: 11/08/2011

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\E3.I\111116BF.B\E3I6757F.D
Report Date: 22-Nov-2011 12:24

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

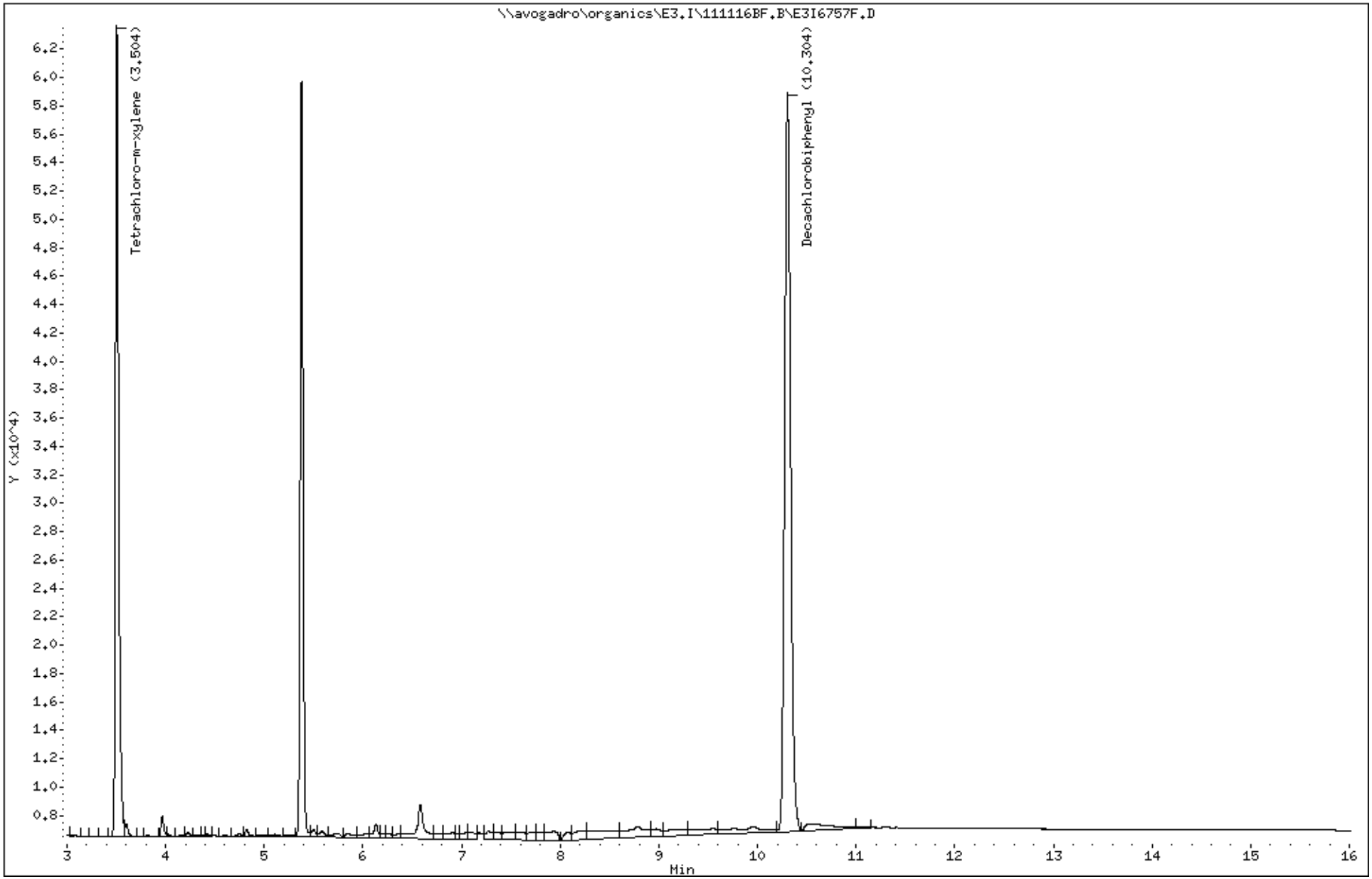
Data file : \\avogadro\organics\E3.I\111116BF.B\E3I6757F.D
Lab Smp Id: K2213-12A Client Smp ID: H30Z3
Inj Date : 16-NOV-2011 21:11
Operator : DL   SRC: LIMS Inst ID: E3.i
Smp Info : K2213-12A,,62802,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BF.B\E3_ARO_5_F.m
Meth Date : 17-Nov-2011 08:16 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699F.D
Als bottle: 17
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	
3.504	3.492	0.012	1266941	0.03959		0.40	
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
10.303	10.281	0.022	2178354	0.06387		0.64	

Data File: \\avogadro\organics\E3.i\111116BF.B\E3I6757F.D
Date : 16-NOV-2011 21:11
Client ID: H30Z3
Instrument: E3.i
Sample Info: K2213-12A,,62802,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6757R.D
Report Date: 22-Nov-2011 12:25

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

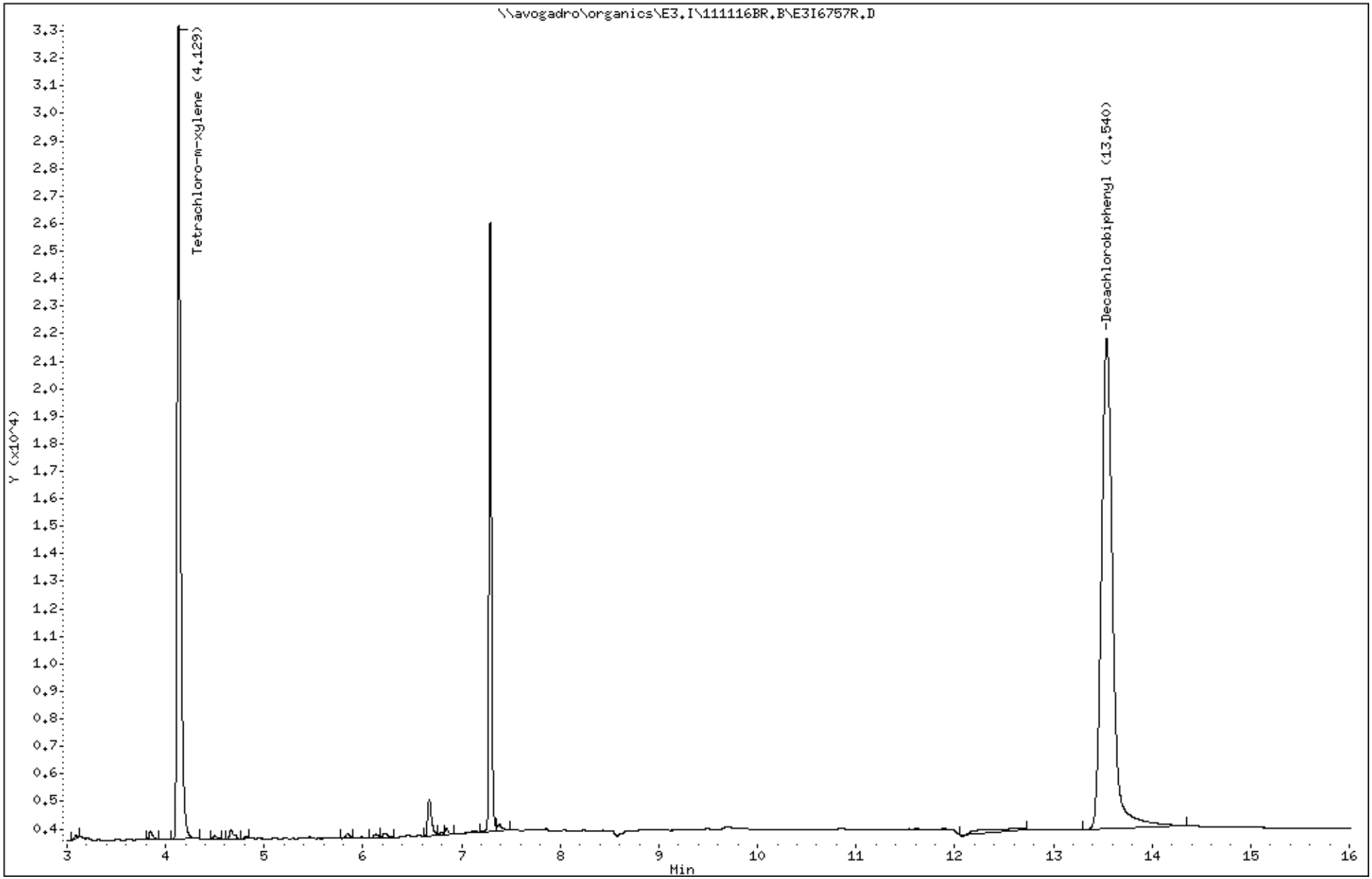
Data file : \\avogadro\organics\E3.I\111116BR.B\E3I6757R.D
Lab Smp Id: K2213-12A Client Smp ID: H30Z3
Inj Date : 16-NOV-2011 21:11
Operator : DL   SRC: LIMS Inst ID: E3.i
Smp Info : K2213-12A,,62802,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BR.B\E3_ARO_5_R.m
Meth Date : 17-Nov-2011 08:19 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699R.D
Als bottle: 17
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	
4.129	4.116	0.013	708396	0.04377	0.44		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
13.540	13.497	0.043	1415421	0.06768	0.68		

Data File: \\avogadro\organics\E3.i\111116BR.B\E3I6757R.D
Date : 16-NOV-2011 21:11
Client ID: H30Z3
Instrument: E3.i
Sample Info: K2213-12A,,62802,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.53



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Z4

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-13A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E3I6758F.D/E3I6758R.D

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Extraction: (Type) SEPF Date Extracted: 11/08/2011

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\E3.I\111116BF.B\E3I6758F.D
Report Date: 22-Nov-2011 12:24

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

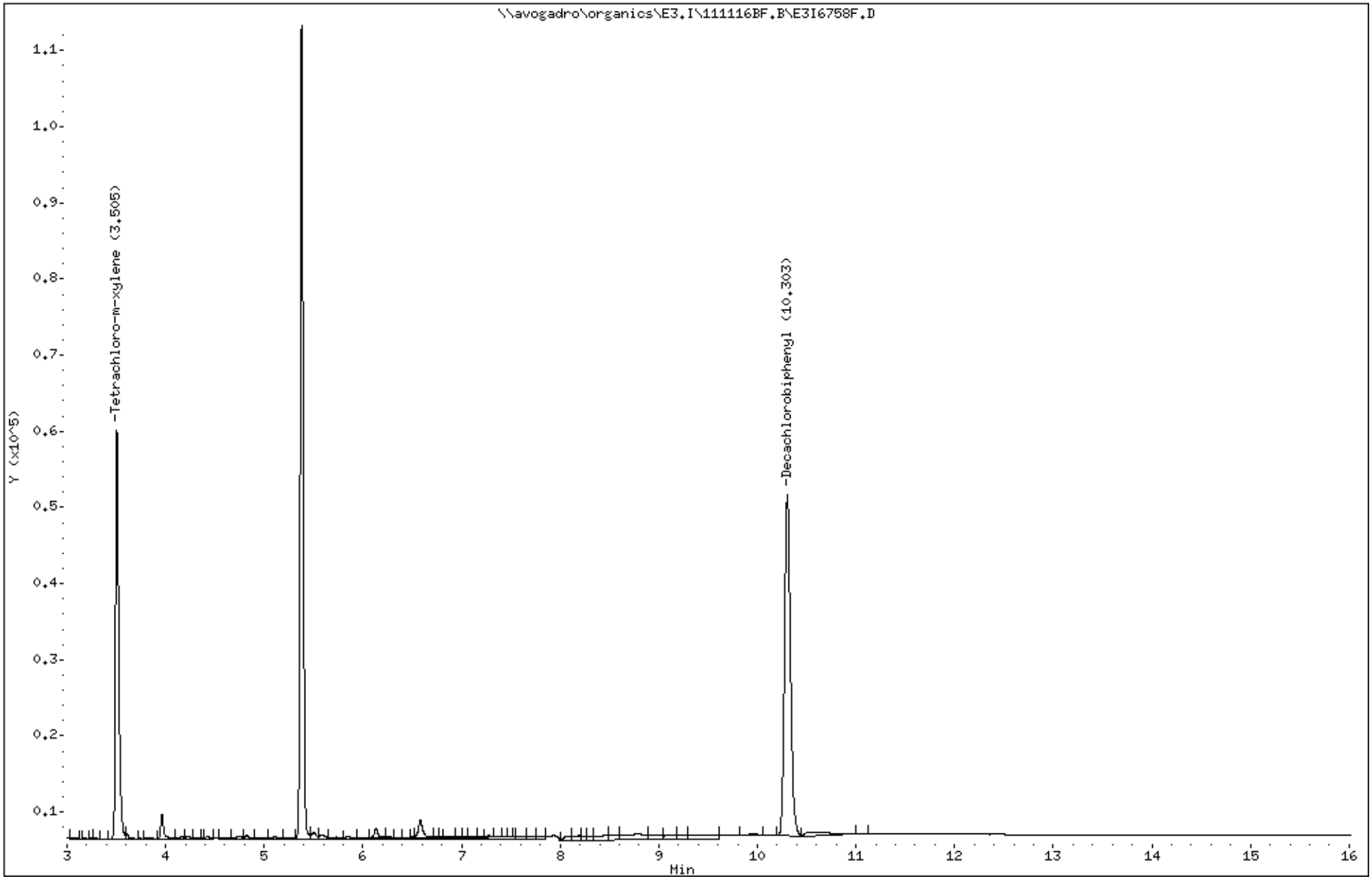
Data file : \\avogadro\organics\E3.I\111116BF.B\E3I6758F.D
Lab Smp Id: K2213-13A Client Smp ID: H30Z4
Inj Date : 16-NOV-2011 21:30
Operator : DL   SRC: LIMS Inst ID: E3.i
Smp Info : K2213-13A,,62802,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BF.B\E3_ARO_5_F.m
Meth Date : 17-Nov-2011 08:16 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699F.D
Als bottle: 18
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		
3.505	3.492	0.013	1187623	0.03711	0.37		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
10.303	10.281	0.022	1867982	0.05477	0.55		

Data File: \\avogadro\organics\E3.I\111116BF.B\E3I6758F.D
Date : 16-NOV-2011 21:30
Client ID: H30Z4
Instrument: E3.i
Sample Info: K2213-13A,,62802,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6758R.D
Report Date: 22-Nov-2011 12:25

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

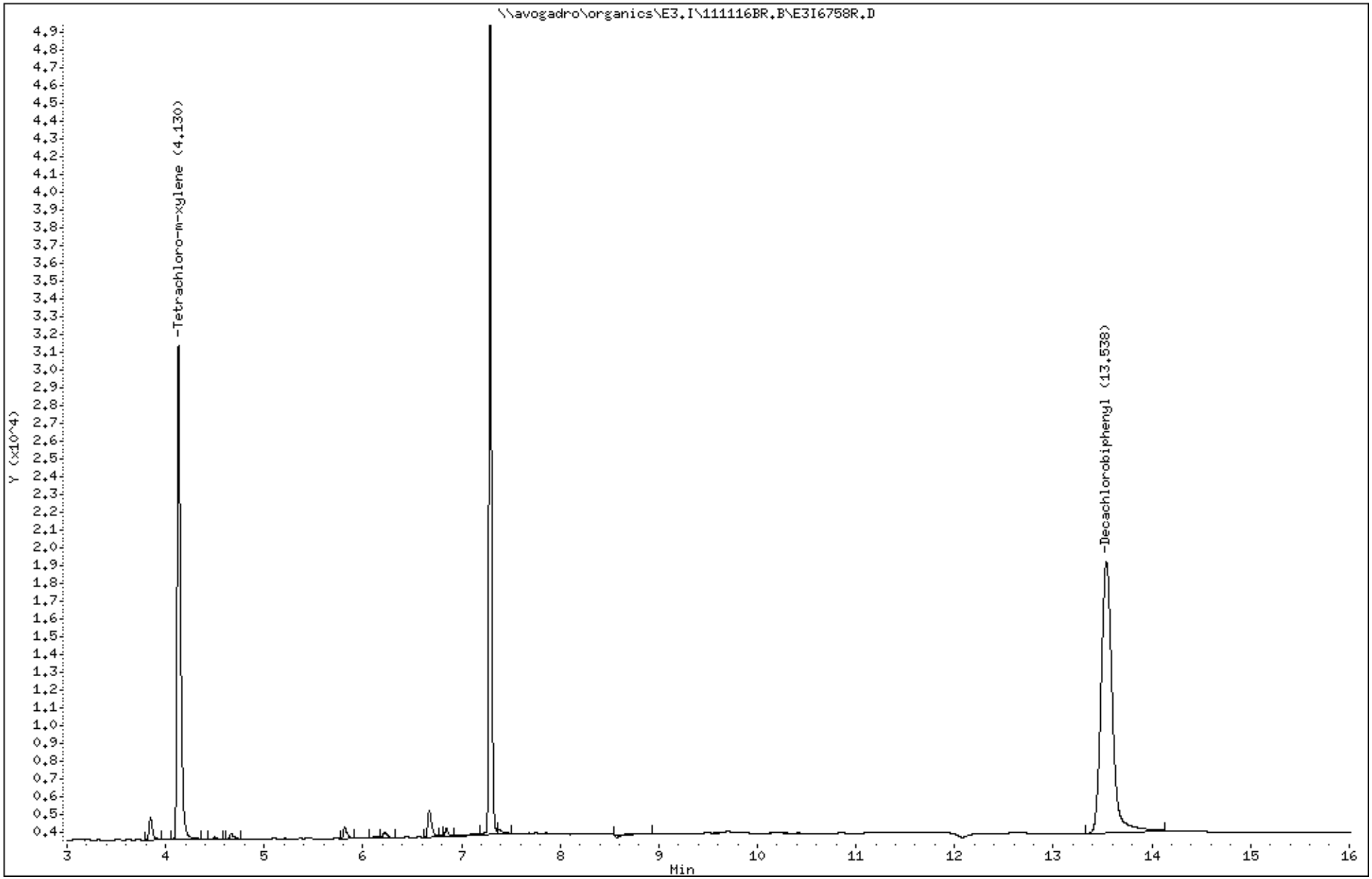
Data file : \\avogadro\organics\E3.I\111116BR.B\E3I6758R.D
Lab Smp Id: K2213-13A Client Smp ID: H30Z4
Inj Date : 16-NOV-2011 21:30
Operator : DL   SRC: LIMS Inst ID: E3.i
Smp Info : K2213-13A,,62802,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BR.B\E3_ARO_5_R.m
Meth Date : 17-Nov-2011 08:19 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699R.D
Als bottle: 18
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	
4.130	4.116	0.014	664638	0.04106	0.41		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
13.538	13.497	0.041	1194934	0.05714	0.57		

Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6758R.D
Date : 16-NOV-2011 21:30
Client ID: H30Z4
Instrument: E3.i
Sample Info: K2213-13A,,62802,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.53



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Z5

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-14A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E3I6759F.D/E3I6759R.D

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Extraction: (Type) SEPF Date Extracted: 11/08/2011

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\E3.I\111116BF.B\E3I6759F.D
Report Date: 22-Nov-2011 12:24

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

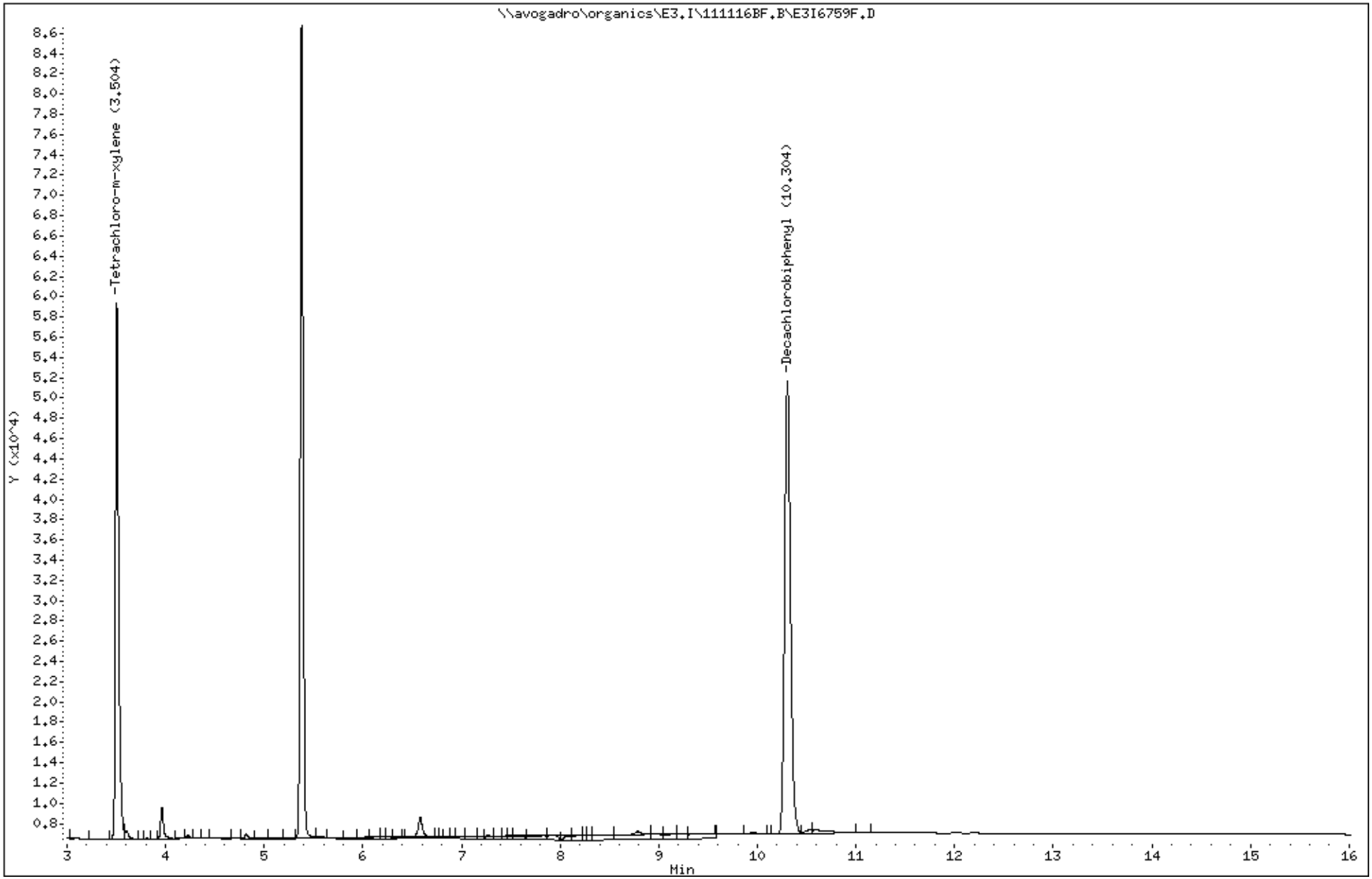
Data file : \\avogadro\organics\E3.I\111116BF.B\E3I6759F.D
Lab Smp Id: K2213-14A Client Smp ID: H30Z5
Inj Date : 16-NOV-2011 21:48
Operator : DL   SRC: LIMS Inst ID: E3.i
Smp Info : K2213-14A,,62802,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BF.B\E3_ARO_5_F.m
Meth Date : 17-Nov-2011 08:16 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699F.D
Als bottle: 19
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	
3.504	3.492	0.012	1176604	0.03677	0.37		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
10.304	10.281	0.023	1854029	0.05436	0.54		

Data File: \\avogadro\organics\E3.I\111116BF.B\E3I6759F.D
Date : 16-NOV-2011 21:48
Client ID: H30Z5
Instrument: E3.i
Sample Info: K2213-14A,,62802,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6759R.D
Report Date: 22-Nov-2011 12:25

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

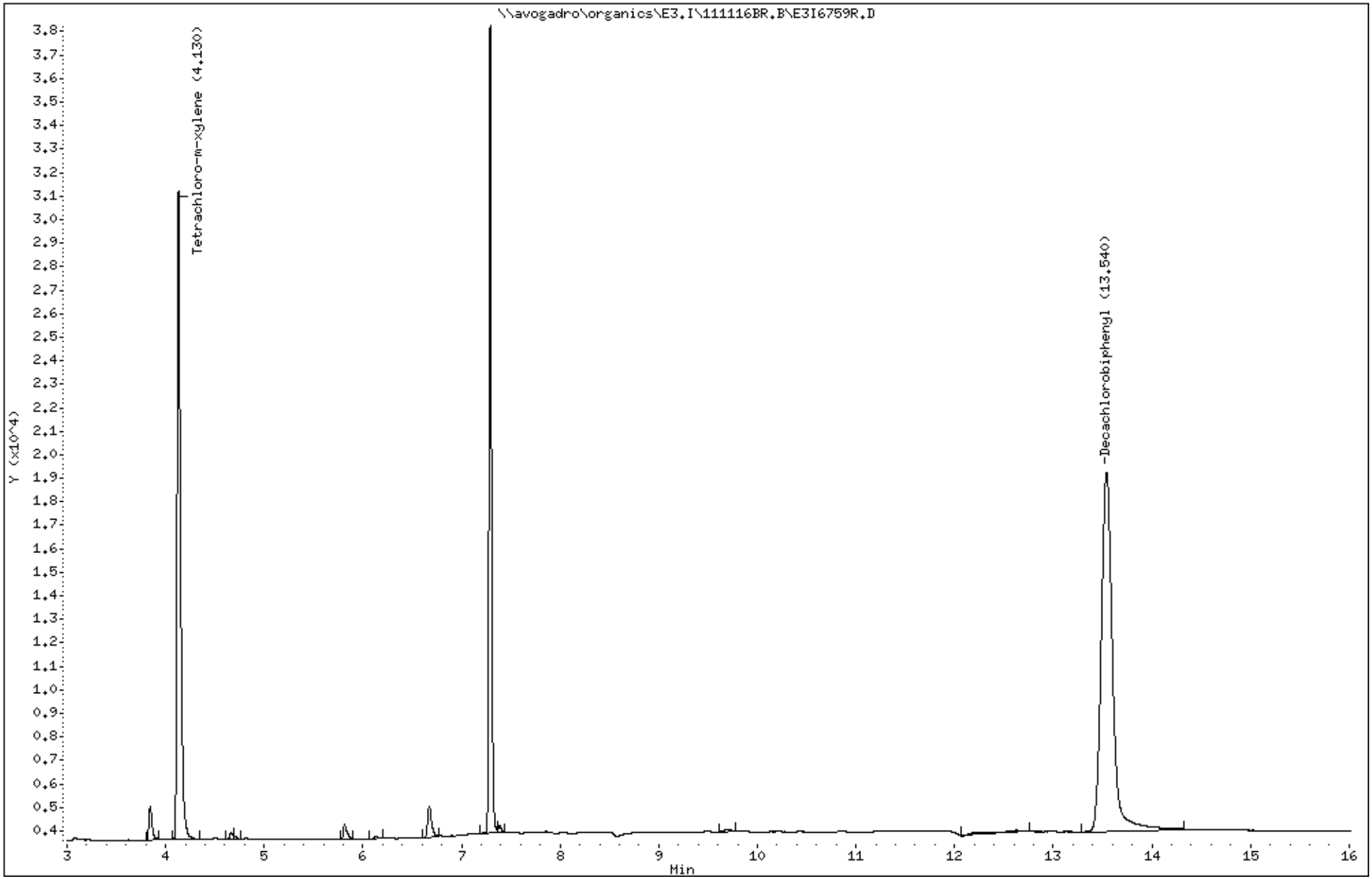
Data file : \\avogadro\organics\E3.I\111116BR.B\E3I6759R.D
Lab Smp Id: K2213-14A Client Smp ID: H30Z5
Inj Date : 16-NOV-2011 21:48
Operator : DL   SRC: LIMS Inst ID: E3.i
Smp Info : K2213-14A,,62802,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BR.B\E3_ARO_5_R.m
Meth Date : 17-Nov-2011 08:19 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699R.D
Als bottle: 19
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	
4.129	4.116	0.013	658966	0.04071	0.41		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
13.539	13.497	0.042	1213081	0.05801	0.58		

Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6759R.D
Date : 16-NOV-2011 21:48
Client ID: H30Z5
Instrument: E3.i
Sample Info: K2213-14A,,62802,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.53



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Z7

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-15A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E3I6794F.D/E3I6794R.D

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Extraction: (Type) SEPF Date Extracted: 11/08/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/17/2011

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\E3.I\111117F.B\E3I6794F.D
Report Date: 22-Nov-2011 12:26

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111117F.B\E3I6794F.D
Lab Smp Id: K2213-15A Client Smp ID: H30Z7
Inj Date : 17-NOV-2011 12:59
Operator : DL   SRC: LIMS Inst ID: E3.i
Smp Info : K2213-15A,,62802,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111117F.B\E3_ARO_5_F.m
Meth Date : 18-Nov-2011 09:11 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699F.D
Als bottle: 9
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

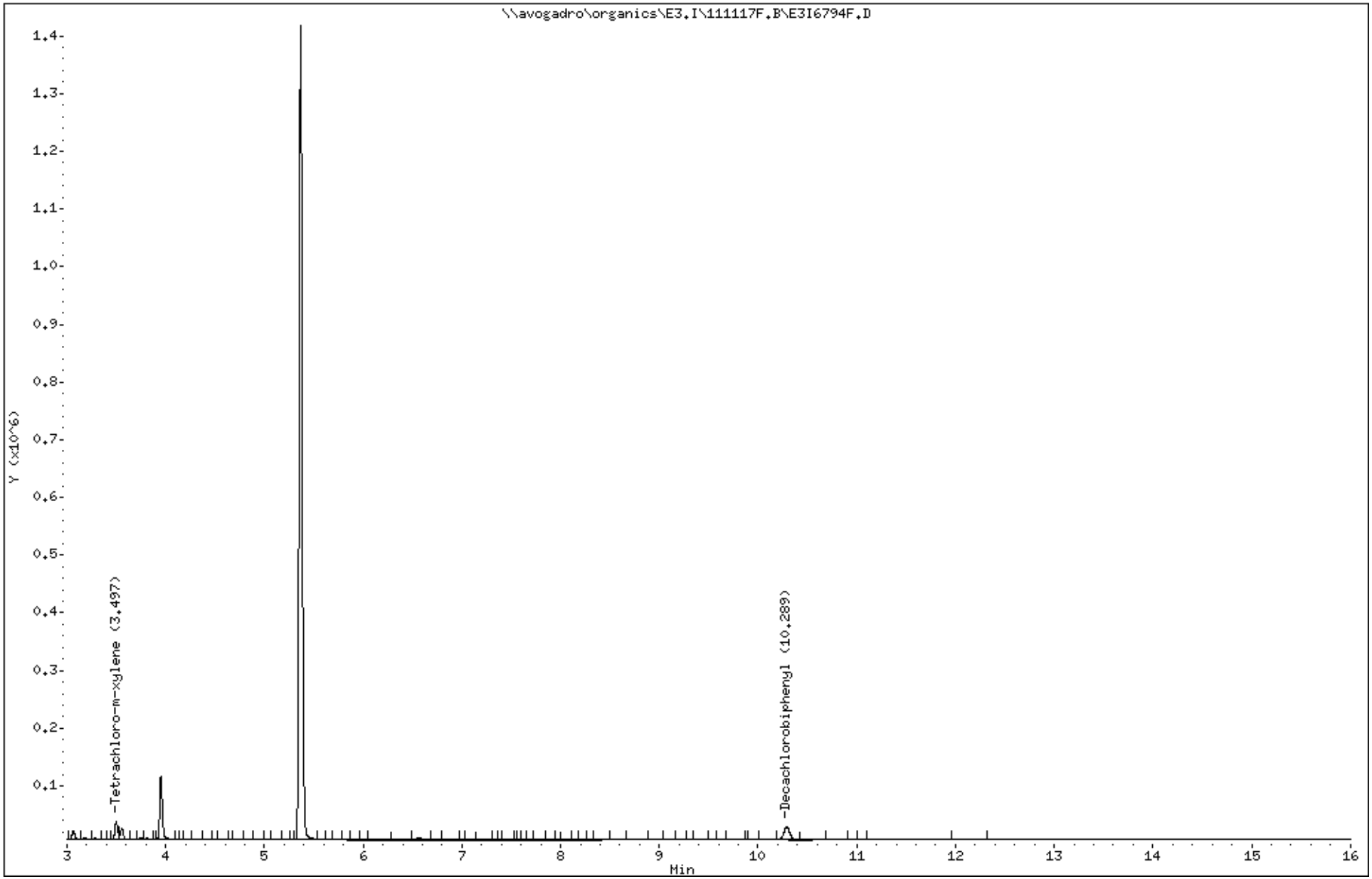
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

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		
3.497	3.492	0.005	634692	0.01983	0.20			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.289	10.281	0.008	956693	0.02805	0.28			(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E3.I\111117F.B\E3I6794F.D
Date : 17-NOV-2011 12:59
Client ID: H30Z7 Instrument: E3.i
Sample Info: K2213-15A,,62802,somaro,sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: LIMS
Column phase: CLPPest Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111117R.B\E3I6794R.D
Report Date: 22-Nov-2011 12:27

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111117R.B\E3I6794R.D
Lab Smp Id: K2213-15A Client Smp ID: H30Z7
Inj Date : 17-NOV-2011 12:59
Operator : DL   SRC: LIMS Inst ID: E3.i
Smp Info : K2213-15A,,62802,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111117R.B\E3_ARO_5_R.m
Meth Date : 18-Nov-2011 09:12 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699R.D
Als bottle: 9
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

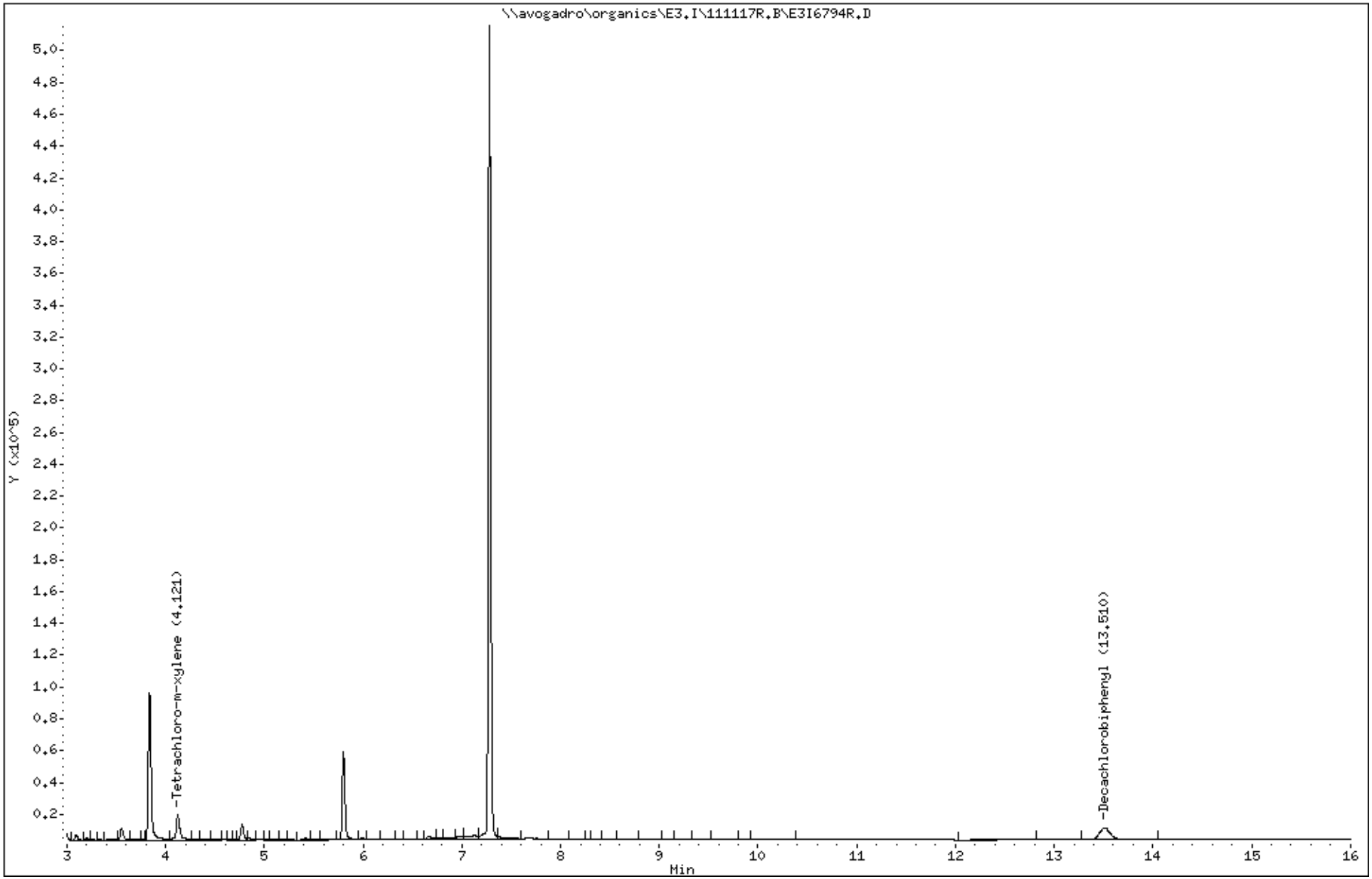
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (ug/L)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.121	4.116	0.005	454355	0.02807	0.28			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
13.510	13.497	0.013	561043	0.02683	0.27			(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E3.i\111117R.B\E3I6794R.D
Date : 17-NOV-2011 12:59
Client ID: H30Z7
Instrument: E3.i
Sample Info: K2213-15A,,62802,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.53



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Z8

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-16A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E3I6761F.D/E3I6761R.D

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Extraction: (Type) SEPF Date Extracted: 11/08/2011

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\E3.I\111116BF.B\E3I6761F.D
Report Date: 22-Nov-2011 12:24

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

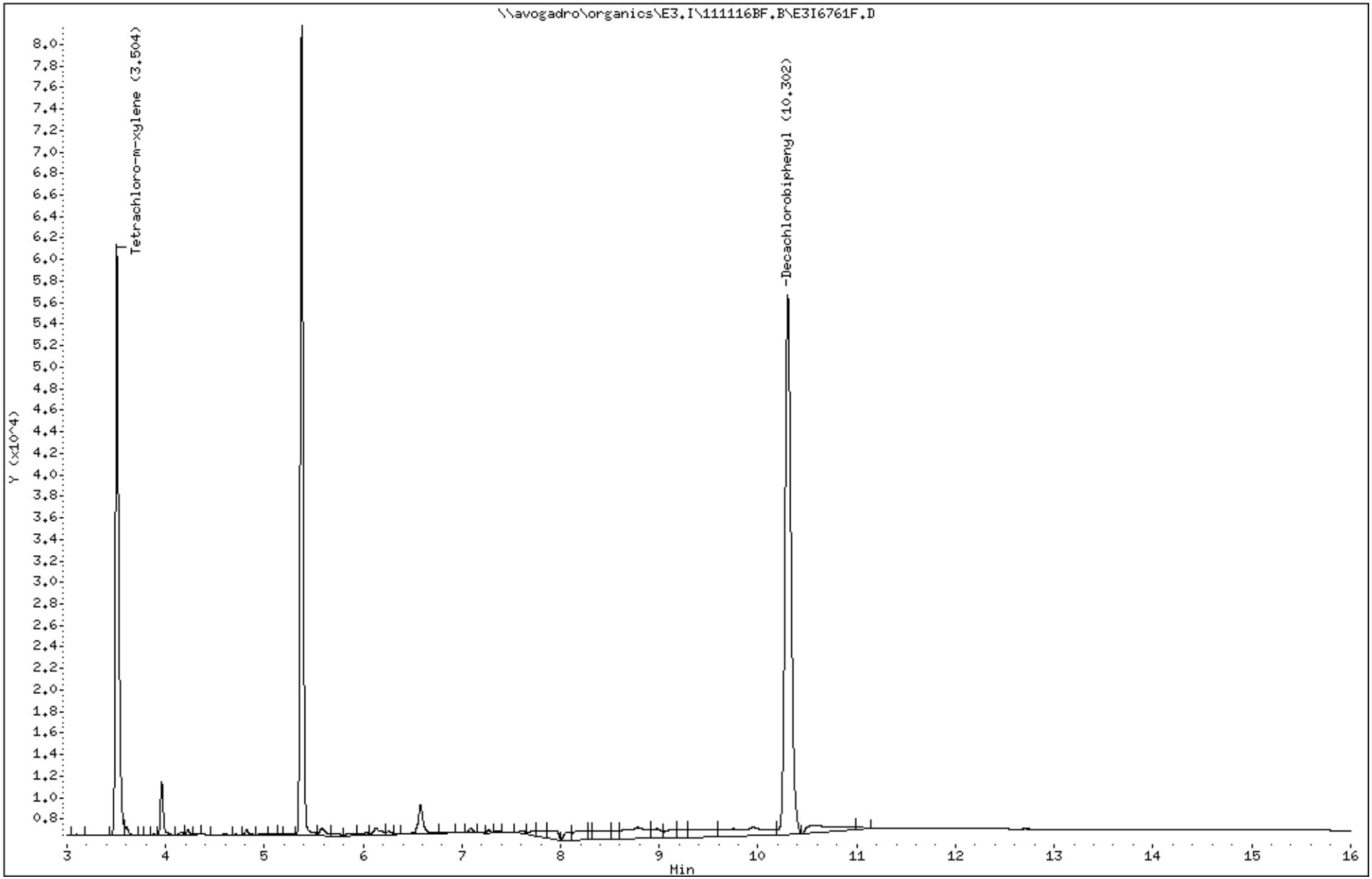
Data file : \\avogadro\organics\E3.I\111116BF.B\E3I6761F.D
Lab Smp Id: K2213-16A Client Smp ID: H30Z8
Inj Date : 16-NOV-2011 22:26
Operator : DL   SRC: LIMS Inst ID: E3.i
Smp Info : K2213-16A,,62802,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BF.B\E3_ARO_5_F.m
Meth Date : 17-Nov-2011 08:16 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699F.D
Als bottle: 21
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	
3.503	3.492	0.011	1214178	0.03794	0.38		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
10.301	10.281	0.020	2121481	0.06220	0.62		

Data File: \\avogadro\organics\E3.i\111116BF.B\E3I6761F.D
Date : 16-NOV-2011 22:26
Client ID: H30Z8
Instrument: E3.i
Sample Info: K2213-16A,,62802,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6761R.D
Report Date: 22-Nov-2011 12:25

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

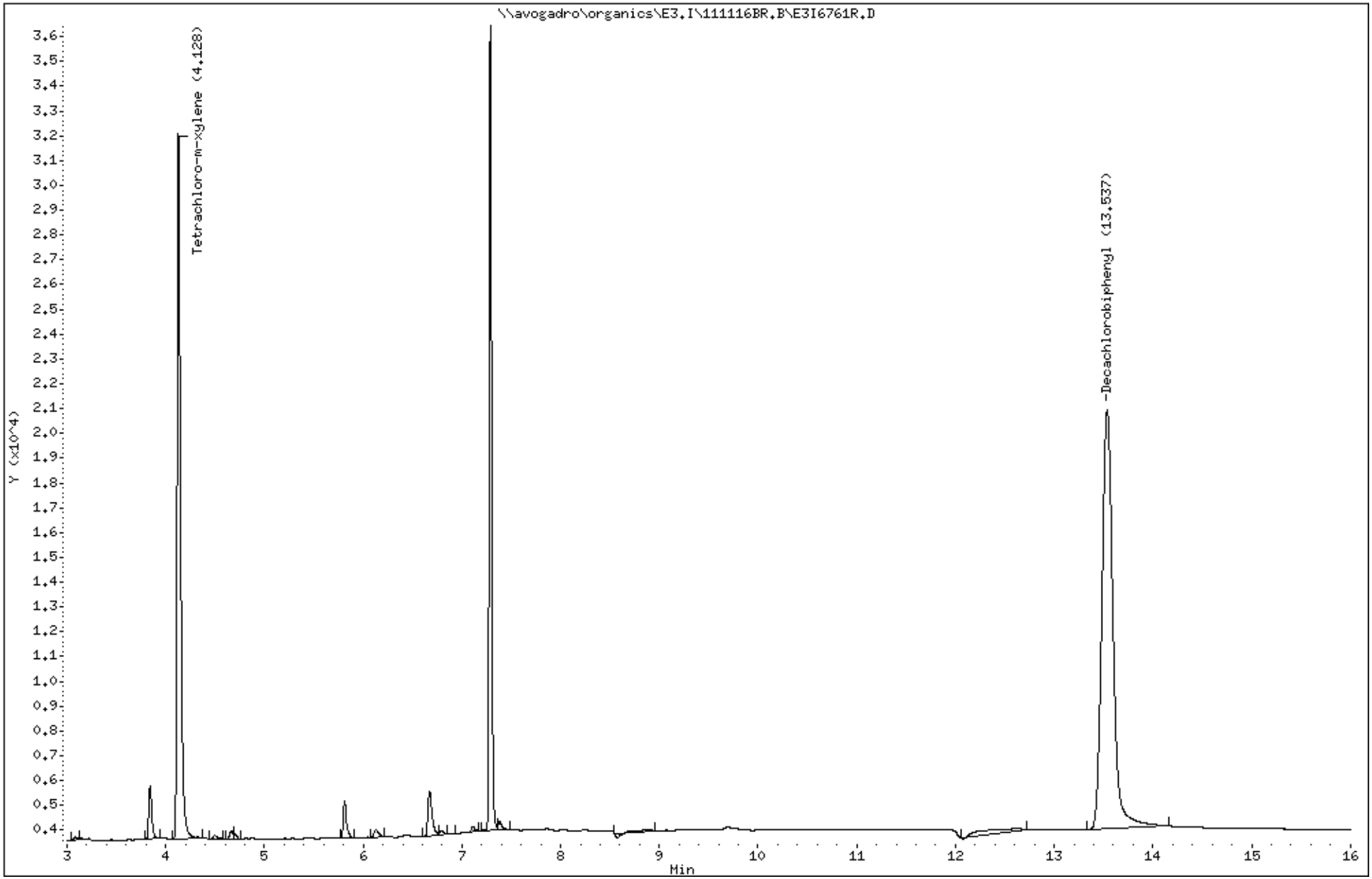
Data file : \\avogadro\organics\E3.I\111116BR.B\E3I6761R.D
Lab Smp Id: K2213-16A Client Smp ID: H30Z8
Inj Date : 16-NOV-2011 22:26
Operator : DL   SRC: LIMS Inst ID: E3.i
Smp Info : K2213-16A,,62802,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BR.B\E3_ARO_5_R.m
Meth Date : 17-Nov-2011 08:19 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699R.D
Als bottle: 21
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	
4.128	4.116	0.012	682655	0.04218	0.42		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
13.536	13.497	0.039	1330397	0.06362	0.64		

Data File: \\avogadro\organics\E3.i\111116BR.B\E3I6761R.D
Date : 16-NOV-2011 22:26
Client ID: H30Z8
Instrument: E3.i
Sample Info: K2213-16A,,62802,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.53



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.: H30X4

Instrument ID: E2

Level (x CS1): CS1 1.0 CS2 2.0 CS3 4.0 CS4 8.0 CS5 16.0

GC Column: CLPPest ID: 0.53 (mm) Date(s) Analyzed (1): 11/04/2011 11/05/2011

COMPOUND	PEAK*	RT OF STANDARDS					__	RT WINDOW **	
		CS1	CS2	CS3	CS4	CS5	RT	FROM	TO
AR1016	1	5.606	5.606	5.605	5.606	5.605	5.605	5.535	5.675
	2	5.784	5.784	5.783	5.783	5.782	5.783	5.713	5.853
	3	6.040	6.040	6.040	6.040	6.039	6.040	5.970	6.110
AR1260	1	7.799	7.799	7.798	7.798	7.797	7.798	7.728	7.868
	2	8.093	8.093	8.092	8.092	8.092	8.093	8.023	8.163
	3	8.504	8.504	8.503	8.504	8.503	8.503	8.433	8.573
AR1242	1	5.241	5.241	5.240	5.239	5.238	5.240	5.170	5.310
	2	5.860	5.860	5.859	5.858	5.858	5.859	5.789	5.929
	3	6.416	6.416	6.415	6.414	6.413	6.415	6.345	6.485
AR1248	1	6.281	6.283	6.282	6.282	6.281	6.282	6.212	6.352
	2	6.377	6.378	6.378	6.378	6.377	6.377	6.307	6.447
	3	6.761	6.762	6.763	6.762	6.762	6.762	6.692	6.832
AR1254	1	6.967	6.966	6.964	6.965	6.963	6.965	6.895	7.035
	2	7.348	7.348	7.346	7.347	7.346	7.347	7.277	7.417
	3	7.615	7.615	7.613	7.614	7.612	7.614	7.544	7.684
TCX		4.000	4.001	3.999	4.001	4.000	4.000	3.950	4.050
DCB		11.417	11.418	11.417	11.418	11.417	11.417	11.317	11.517

* At least three peaks for each column are required for identification of Aroclors.

**Retention Time windows are ± 0.07 minutes for each Aroclor peak; 0.05 minutes for tetrachloro-m-xylene; ± 0.10 minutes for decachlorobiphenyl.

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

6N - FORM VI ARO-1

AROCLORS INITIAL CALIBRATION (MULTIPOINT)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Instrument ID: E2

Level (x CS1): CS1 1.0 CS2 2.0 CS3 4.0 CS4 8.0 CS5 16.0

GC Column: CLPPestII ID: 0.53 (mm) Date(s) Analyzed (1): 11/04/2011 11/05/2011

COMPOUND	PEAK*	RT OF STANDARDS					__	RT WINDOW **	
		CS1	CS2	CS3	CS4	CS5	RT	FROM	TO
AR1016	1	6.252	6.252	6.252	6.252	6.251	6.252	6.182	6.322
	2	6.504	6.504	6.504	6.504	6.504	6.504	6.434	6.574
	3	6.660	6.659	6.659	6.659	6.658	6.659	6.589	6.729
AR1260	1	9.256	9.255	9.255	9.256	9.256	9.256	9.186	9.326
	2	9.400	9.399	9.399	9.399	9.399	9.399	9.329	9.469
	3	9.885	9.885	9.884	9.885	9.884	9.884	9.814	9.954
AR1242	1	5.951	5.952	5.950	5.949	5.949	5.950	5.880	6.020
	2	6.252	6.253	6.252	6.251	6.251	6.252	6.182	6.322
	3	6.770	6.771	6.770	6.769	6.769	6.770	6.700	6.840
AR1248	1	7.151	7.151	7.151	7.150	7.149	7.151	7.081	7.221
	2	7.273	7.273	7.273	7.273	7.271	7.272	7.202	7.342
	3	7.457	7.457	7.457	7.457	7.456	7.457	7.387	7.527
AR1254	1	7.755	7.755	7.754	7.753	7.752	7.754	7.684	7.824
	2	8.258	8.258	8.257	8.257	8.255	8.257	8.187	8.327
	3	8.529	8.529	8.529	8.528	8.527	8.528	8.458	8.598
TCX		4.628	4.628	4.627	4.627	4.627	4.628	4.578	4.678
DCB		15.421	15.421	15.421	15.423	15.424	15.422	15.322	15.522

* At least three peaks for each column are required for identification of Aroclors.

**Retention Time windows are ± 0.07 minutes for each Aroclor peak; 0.05 minutes for tetrachloro-m-xylene; ± 0.10 minutes for decachlorobiphenyl.

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

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.: H30X4

Instrument ID: E3

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): 11/14/2011 11/15/2011

COMPOUND	PEAK*	RT OF STANDARDS					__	RT WINDOW **	
		CS1	CS2	CS3	CS4	CS5	RT	FROM	TO
AR1016	1	4.367	4.368	4.365	4.366	4.365	4.366	4.296	4.436
	2	4.626	4.628	4.625	4.626	4.624	4.626	4.556	4.696
	3	4.976	4.978	4.976	4.976	4.976	4.977	4.907	5.047
AR1260	1	7.081	7.083	7.080	7.080	7.079	7.081	7.011	7.151
	2	7.345	7.346	7.344	7.343	7.343	7.344	7.274	7.414
	3	7.604	7.605	7.603	7.602	7.602	7.603	7.533	7.673
AR1242	1	5.160	5.160	5.160	5.160	5.160	5.160	5.090	5.230
	2	5.451	5.452	5.451	5.451	5.451	5.451	5.381	5.521
	3	5.720	5.721	5.720	5.720	5.720	5.720	5.650	5.790
AR1248	1	6.137	6.138	6.137	6.138	6.138	6.137	6.067	6.207
	2	6.263	6.264	6.264	6.264	6.265	6.264	6.194	6.334
	3	6.486	6.487	6.487	6.486	6.487	6.486	6.416	6.556
AR1254	1	6.775	6.774	6.774	6.774	6.773	6.774	6.704	6.844
	2	6.900	6.898	6.898	6.899	6.897	6.899	6.829	6.969
	3	7.173	7.171	7.171	7.171	7.169	7.171	7.101	7.241
TCX		3.494	3.495	3.493	3.494	3.493	3.494	3.444	3.544
DCB		10.283	10.284	10.283	10.281	10.281	10.283	10.183	10.383

* 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.: H30X4

Instrument ID: E3

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): 11/14/2011 11/15/2011

COMPOUND	PEAK*	RT OF STANDARDS					__	RT WINDOW **	
		CS1	CS2	CS3	CS4	CS5	RT	FROM	TO
AR1016	1	5.419	5.421	5.417	5.417	5.416	5.418	5.348	5.488
	2	6.035	6.037	6.034	6.035	6.034	6.035	5.965	6.105
	3	6.205	6.207	6.203	6.204	6.203	6.204	6.134	6.274
AR1260	1	8.410	8.411	8.409	8.408	8.408	8.409	8.339	8.479
	2	8.645	8.646	8.644	8.643	8.643	8.644	8.574	8.714
	3	8.766	8.767	8.765	8.764	8.763	8.765	8.695	8.835
AR1242	1	6.325	6.326	6.326	6.325	6.325	6.325	6.255	6.395
	2	6.491	6.492	6.491	6.490	6.490	6.491	6.421	6.561
	3	6.738	6.738	6.738	6.737	6.737	6.737	6.667	6.807
AR1248	1	6.867	6.867	6.867	6.867	6.867	6.867	6.797	6.937
	2	7.169	7.168	7.167	7.168	7.168	7.168	7.098	7.238
	3	7.387	7.387	7.386	7.387	7.386	7.387	7.317	7.457
AR1254	1	7.678	7.676	7.676	7.677	7.675	7.676	7.606	7.746
	2	7.794	7.792	7.792	7.792	7.791	7.792	7.722	7.862
	3	8.027	8.026	8.025	8.026	8.024	8.026	7.956	8.096
TCX		4.118	4.119	4.117	4.117	4.116	4.117	4.067	4.167
DCB		13.501	13.501	13.502	13.496	13.497	13.499	13.399	13.599

* 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.: H30X4

Instrument ID: E2 Date(s) Analyzed: 11/04/2011 11/05/2011

GC Column: CLPPest ID: 0.53 (mm)

Level (x CS1): CS1 1.0 CS2 2.0 CS3 4.0 CS4 8.0 CS5 16.0

COMPOUND	PEAK [1]	CALIBRATION FACTORS (CFs)					% RSD
		CS1	CS2	CS3	CS4	CS5	
AR1016	1	2352670	2098610	2086390	1928969	1782733	10.4
	2	890520	786840	795198	725274	678734	10.3
	3	1589370	1420650	1395743	1291368	1183862	11.0
AR1260	1	2844030	2476720	2414708	2205755	2005208	13.2
	2	2126670	1873750	1869350	1772705	1645746	9.5
	3	2350260	2079220	2087110	1983990	1853849	8.8
AR1242	1	562830	544365	542323	571053	487556	6.0
	2	447170	426820	427223	458434	401683	5.0
	3	773230	738205	730928	771896	666716	5.9
AR1248	1	1223890	1136335	1080685	1013635	894194	11.7
	2	1048630	997430	987973	968959	891123	5.8
	3	2236250	2322680	2240783	1876371	1650019	14.0
AR1254	1	2611200	2498175	2321008	2091419	1875726	13.1
	2	1740330	1708515	1631425	1495668	1376551	9.6
	3	1422980	1409165	1342780	1213521	1124626	9.9
TCX		20485600	19940900	21080550	21207125	21121838	2.6
DCB		31577100	29458600	29514050	27374463	25415444	8.2

[1]At least three peaks for each column are required for identification of Aroclors.

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

6P - FORM VI ARO-2

AROCLOR INITIAL CALIBRATION (MULTIPOINT)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Instrument ID: E2 Date(s) Analyzed: 11/04/2011 11/05/2011

GC Column: CLPPestII ID: 0.53 (mm)

Level (x CS1): CS1 1.0 CS2 2.0 CS3 4.0 CS4 8.0 CS5 16.0

COMPOUND	PEAK [1]	CALIBRATION FACTORS (CFs)					% RSD
		CS1	CS2	CS3	CS4	CS5	
AR1016	1	326940	302990	310628	302709	295544	3.9
	2	1225290	1129870	1205005	1173018	1147013	3.4
	3	563220	514000	532413	513773	500824	4.6
AR1260	1	1273100	1160920	1238890	1221516	1204447	3.4
	2	815950	734350	754660	723844	691482	6.2
	3	843670	763725	796823	781670	769545	4.0
AR1242	1	734610	685425	665475	679505	570207	9.0
	2	258100	251655	254350	272938	239547	4.7
	3	287310	277210	280933	311851	283469	4.8
AR1248	1	799240	774425	767833	757853	698626	4.9
	2	593960	594525	602585	608309	574827	2.1
	3	301730	297275	299598	301028	284277	2.4
AR1254	1	853070	814230	769410	702884	640330	11.3
	2	1216470	1184505	1154710	1091033	1037933	6.3
	3	1368340	1356155	1319160	1227664	1175775	6.5
TCX		11461200	11491500	12675600	13297275	13962813	8.8
DCB		17496700	16633350	17258700	16846038	16521238	2.4

[1]At least three peaks for each column are required for identification of Aroclors.

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

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.: H30X4

Instrument ID: E3 Date(s) Analyzed: 11/14/2011 11/15/2011

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	1718170	1444520	1389308	1221205	1081511	17.6
	2	1094660	936825	926215	838616	768314	13.4
	3	2949040	2510000	2519295	2283639	2218531	11.5
AR1260	1	1883120	1592690	1534728	1378344	1234619	16.0
	2	3255150	2762935	2653665	2391793	2106123	16.3
	3	2724380	2367760	2350938	2198194	1985857	11.6
AR1242	1	996770	933055	917570	829421	746794	11.0
	2	1048930	971510	930238	817783	721977	14.4
	3	1038170	972045	954470	864904	784011	10.7
AR1248	1	687710	669860	587823	541028	527381	12.1
	2	2647500	2602895	2307778	2125179	2066958	11.4
	3	1608150	1586040	1411588	1312205	1292328	10.3
AR1254	1	1793500	1592625	1519185	1558771	1460527	8.0
	2	2440320	2137280	1999235	2008519	1843631	10.7
	3	1891390	1664185	1554980	1565900	1448451	10.3
TCX		34679600	31089000	33484850	31204825	29549025	6.4
DCB		38445600	35447700	33689300	31715075	31245494	8.6

[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.: H30X4

Instrument ID: E3 Date(s) Analyzed: 11/14/2011 11/15/2011

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	1011530	859205	840793	747778	661563	15.9
	2	1557850	1353680	1400918	1293595	1177049	10.3
	3	710070	617255	638315	590429	540526	10.1
AR1260	1	1040090	922930	970270	920035	838645	7.9
	2	1493080	1330095	1379738	1315084	1196496	8.0
	3	890010	778385	778160	721048	641126	12.0
AR1242	1	334240	328300	347803	337185	326344	2.5
	2	321360	301090	299683	269580	239819	11.1
	3	364640	339305	344753	309918	280978	10.0
AR1248	1	734630	724880	662633	626736	627953	7.7
	2	946080	930090	843323	874024	863288	5.0
	3	1327710	1242815	1101853	1018821	1017103	12.2
AR1254	1	658390	573710	550723	570819	540763	8.0
	2	1405180	1233055	1176985	1190508	1103453	9.2
	3	1601220	1409150	1338720	1349598	1249738	9.4
TCX		15907000	15211500	17444600	16259825	16105425	5.0
DCB		22850600	21610550	21006500	20321600	18770825	7.2

[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.: H30X4

Instrument ID: E2 Date(s) Analyzed: 11/04/2011 11/05/2011

GC Column: CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT (ng)	PEAK [1]	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR
Aroclor-1221	0.4	1	3.36	3.29	3.43	231755
		2	3.84	3.77	3.91	86535
		3	4.23	4.16	4.30	261795
		4				
		5				
Aroclor-1232	0.4	1	4.22	4.15	4.29	177788
		2	4.47	4.40	4.54	719540
		3	4.96	4.89	5.03	506223
		4				
		5				
Aroclor-1262	0.4	1	8.90	8.83	8.97	3087075
		2	9.35	9.28	9.42	1360215
		3	9.87	9.80	9.94	508595
		4				
		5				
Aroclor-1268	0.4	1	9.71	9.64	9.78	2949570
		2	10.35	10.28	10.42	1278423
		3	10.96	10.89	11.03	9297535
		4				
		5				

[1] At least three peaks for each column are required for identification of multicomponent analytes.

6Q - FORM VI ARO-3

AROCLOR INITIAL CALIBRATION (SINGLE POINT)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Instrument ID: E2 Date(s) Analyzed: 11/04/2011 11/05/2011

GC Column: CLPPestII ID: 0.53 (mm)

COMPOUND	AMOUNT (ng)	PEAK [1]	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR
Aroclor-1221	0.4	1	3.97	3.90	4.04	193565
		2	4.49	4.42	4.56	71775
		3	5.06	4.99	5.13	169120
		4				
		5				
Aroclor-1232	0.4	1	5.06	4.99	5.13	115775
		2	5.28	5.21	5.35	96073
		3	5.37	5.30	5.44	397935
		4				
		5				
Aroclor-1262	0.4	1	11.17	11.10	11.24	1313125
		2	11.30	11.23	11.37	786835
		3	12.35	12.28	12.42	262003
		4				
		5				
Aroclor-1268	0.4	1	11.98	11.91	12.05	1723658
		2	12.93	12.86	13.00	679578
		3	14.22	14.15	14.29	5639533
		4				
		5				

[1] At least three peaks for each column are required for identification of multicomponent analytes.

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.: H30X4

Instrument ID: E3 Date(s) Analyzed: 11/14/2011 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	3.35	3.28	3.42	107368
		2	3.71	3.64	3.78	374978
		3	3.88	3.81	3.95	214130
		4				
		5				
Aroclor-1232	0.4	1	3.71	3.64	3.78	323138
		2	3.93	3.86	4.00	864480
		3	4.38	4.31	4.45	677678
		4				
		5				
Aroclor-1262	0.4	1	8.29	8.22	8.36	3818795
		2	8.66	8.59	8.73	1531995
		3	9.08	9.01	9.15	753605
		4				
		5				
Aroclor-1268	0.4	1	8.71	8.64	8.78	4779325
		2	9.47	9.40	9.54	1632948
		3	9.93	9.86	10.00	10918640
		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.: H30X4

Instrument ID: E3 Date(s) Analyzed: 11/14/2011 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	3.52	3.45	3.59	197948
		2	4.53	4.46	4.60	195628
		3	4.74	4.67	4.81	144708
		4				
		5				
Aroclor-1232	0.4	1	4.82	4.75	4.89	464188
		2	5.43	5.36	5.50	351450
		3	5.77	5.70	5.84	153670
		4				
		5				
Aroclor-1262	0.4	1	9.56	9.49	9.63	2086073
		2	10.20	10.13	10.27	1522598
		3	11.57	11.50	11.64	885915
		4				
		5				
Aroclor-1268	0.4	1	10.29	10.22	10.36	2688628
		2	10.83	10.76	10.90	2091195
		3	12.57	12.50	12.64	6998443
		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.: H30X4

GC Column: CLPPest ID: 0.53 (mm) Calibration Date(s): 11/04/2011 11/05/2011

EPA Sample No. (AR####3##): AR16603JF Date Analyzed: 11/09/2011

Lab Sample ID: AR16603JF Time Analyzed: 9:12

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

AROCLOR COMPOUND	PEAK	RETENTION RT	RT WINDOW FROM	RT WINDOW TO	__ CF	CF	%D
AR1016	1	5.608	5.535	5.675	2049874.375	1948685	-4.9
	2	5.786	5.713	5.853	775313	749947.5	-3.3
	3	6.042	5.970	6.110	1376198.375	1340475	-2.6
AR1260	1	7.800	7.728	7.868	2389284	2329032.5	-2.5
	2	8.095	8.023	8.163	1857644.25	1795717.5	-3.3
	3	8.505	8.433	8.573	2070885.75	2095045	1.2
TCX		4.003	3.950	4.050	20767202.5	20499550	-1.3
DCB		11.420	11.317	11.517	28667931.25	28079125	-2.1

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

7N - FORM VII ARO

AROCLOR CALIBRATION VERIFICATION SUMMARY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

GC Column: CLPPestII ID: 0.53 (mm) Calibration Date(s): 11/04/2011 11/05/2011

EPA Sample No. (AR####3##): AR16603JF Date Analyzed: 11/09/2011

Lab Sample ID: AR16603JF Time Analyzed: 9:12

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

AROCLOR COMPOUND	PEAK	RETENTION RT	RT WINDOW FROM	RT WINDOW TO	__ CF	CF	%D
AR1016	1	6.254	6.182	6.322	307762.125	305905	-0.6
	2	6.505	6.434	6.574	1176039.125	1135595	-3.4
	3	6.660	6.589	6.729	524845.75	510857.5	-2.7
AR1260	1	9.256	9.186	9.326	1219774.625	1211227.5	-0.7
	2	9.400	9.329	9.469	744057.125	752020	1.1
	3	9.886	9.814	9.954	791086.5	791922.5	0.1
TCX		4.630	4.578	4.678	12577677.5	12430900	-1.2
DCB		15.422	15.322	15.522	16951205	16136725	-4.8

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

7N - FORM VII ARO

AROCLOR CALIBRATION VERIFICATION SUMMARY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

GC Column: CLPPest ID: 0.53 (mm) Calibration Date(s): 11/04/2011 11/05/2011

EPA Sample No. (AR####3##): AR16603JG Date Analyzed: 11/09/2011

Lab Sample ID: AR16603JG Time Analyzed: 17:02

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	5.604	5.535	5.675	2049874.375	2067837.5	0.9
	2	5.783	5.713	5.853	775313	788135	1.7
	3	6.039	5.970	6.110	1376198.375	1400702.5	1.8
AR1260	1	7.797	7.728	7.868	2389284	2431767.5	1.8
	2	8.091	8.023	8.163	1857644.25	1904012.5	2.5
	3	8.502	8.433	8.573	2070885.75	2178795	5.2
TCX		4.000	3.950	4.050	20767202.5	21298350	2.6
DCB		11.414	11.317	11.517	28667931.25	29962750	4.5

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.: H30X4

GC Column: CLPPestII ID: 0.53 (mm) Calibration Date(s): 11/04/2011 11/05/2011

EPA Sample No. (AR####3##): AR16603JG Date Analyzed: 11/09/2011

Lab Sample ID: AR16603JG Time Analyzed: 17:02

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

AROCLOR COMPOUND	PEAK	RETENTION RT	RT WINDOW FROM	RT WINDOW TO	__ CF	CF	%D
AR1016	1	6.252	6.182	6.322	307762.125	311322.5	1.2
	2	6.504	6.434	6.574	1176039.125	1177332.5	0.1
	3	6.659	6.589	6.729	524845.75	526670	0.3
AR1260	1	9.254	9.186	9.326	1219774.625	1256280	3.0
	2	9.397	9.329	9.469	744057.125	772717.5	3.9
	3	9.882	9.814	9.954	791086.5	812495	2.7
TCX		4.628	4.578	4.678	12577677.5	12671100	0.7
DCB		15.415	15.322	15.522	16951205	17265000	1.9

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.: H30X4

GC Column: CLPPest ID: 0.53 (mm) Calibration Date(s): 11/14/2011 11/15/2011

EPA Sample No. (AR####3##): AR16603WF Date Analyzed: 11/16/2011

Lab Sample ID: AR16603WF Time Analyzed: 16:09

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	4.386	4.296	4.436	1370942.75	1323877.5	-3.4
	2	4.646	4.556	4.696	912926.125	884560	-3.1
	3	4.998	4.907	5.047	2496101	2385315	-4.4
AR1260	1	7.096	7.011	7.151	1524700.125	1469377.5	-3.6
	2	7.359	7.274	7.414	2633933.125	2546020	-3.3
	3	7.619	7.533	7.673	2325425.625	2271112.5	-2.3
TCX		3.510	3.444	3.544	32001460	30891900	-3.5
DCB		10.312	10.183	10.383	34108633.75	31601925	-7.3

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

7N - FORM VII ARO

AROCLOR CALIBRATION VERIFICATION SUMMARY

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

GC Column: CLPPestII ID: 0.53 (mm) Calibration Date(s): 11/14/2011 11/15/2011

EPA Sample No. (AR####3##): AR16603WF Date Analyzed: 11/16/2011

Lab Sample ID: AR16603WF Time Analyzed: 16:09

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	5.438	5.348	5.488	824173.5	764010	-7.3
	2	6.052	5.965	6.105	1356618.25	1271432.5	-6.3
	3	6.221	6.134	6.274	619319	582637.5	-5.9
AR1260	1	8.426	8.339	8.479	938394	901340	-3.9
	2	8.662	8.574	8.714	1342898.5	1278787.5	-4.8
	3	8.784	8.695	8.835	761745.625	725970	-4.7
TCX		4.135	4.067	4.167	16185670	14920750	-7.8
DCB		13.551	13.399	13.599	20912015	18669075	-10.7

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.: H30X4

GC Column: CLPPest ID: 0.53 (mm) Calibration Date(s): 11/14/2011 11/15/2011

EPA Sample No. (AR####3##): AR16603WG Date Analyzed: 11/17/2011

Lab Sample ID: AR16603WG Time Analyzed: 0:57

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	4.377	4.296	4.436	1370942.75	1298900	-5.3
	2	4.637	4.556	4.696	912926.125	862952.5	-5.5
	3	4.988	4.907	5.047	2496101	2345637.5	-6.0
AR1260	1	7.089	7.011	7.151	1524700.125	1445667.5	-5.2
	2	7.353	7.274	7.414	2633933.125	2510957.5	-4.7
	3	7.612	7.533	7.673	2325425.625	2241422.5	-3.6
TCX		3.502	3.444	3.544	32001460	30026600	-6.2
DCB		10.301	10.183	10.383	34108633.75	32409350	-5.0

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.: H30X4

GC Column: CLPPestII ID: 0.53 (mm) Calibration Date(s): 11/14/2011 11/15/2011

EPA Sample No. (AR####3##): AR16603WG Date Analyzed: 11/17/2011

Lab Sample ID: AR16603WG Time Analyzed: 0:57

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	5.430	5.348	5.488	824173.5	773085	-6.2
	2	6.046	5.965	6.105	1356618.25	1284392.5	-5.3
	3	6.215	6.134	6.274	619319	586915	-5.2
AR1260	1	8.419	8.339	8.479	938394	904492.5	-3.6
	2	8.656	8.574	8.714	1342898.5	1287967.5	-4.1
	3	8.777	8.695	8.835	761745.625	729650	-4.2
TCX		4.127	4.067	4.167	16185670	15235200	-5.9
DCB		13.532	13.399	13.599	20912015	19782400	-5.4

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.: H30X4

GC Column: CLPPest ID: 0.53 (mm) Calibration Date(s): 11/14/2011 11/15/2011

EPA Sample No. (AR####3##): AR16603WI Date Analyzed: 11/17/2011

Lab Sample ID: AR16603WI Time Analyzed: 10:20

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	4.382	4.296	4.436	1370942.75	1361002.5	-0.7
	2	4.642	4.556	4.696	912926.125	908230	-0.5
	3	4.994	4.907	5.047	2496101	2448995	-1.9
AR1260	1	7.093	7.011	7.151	1524700.125	1500355	-1.6
	2	7.356	7.274	7.414	2633933.125	2603962.5	-1.1
	3	7.615	7.533	7.673	2325425.625	2312860	-0.5
TCX		3.507	3.444	3.544	32001460	31695800	-1.0
DCB		10.306	10.183	10.383	34108633.75	33193100	-2.7

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.: H30X4

GC Column: CLPPestII ID: 0.53 (mm) Calibration Date(s): 11/14/2011 11/15/2011

EPA Sample No. (AR####3##): AR16603WI Date Analyzed: 11/17/2011

Lab Sample ID: AR16603WI Time Analyzed: 10:20

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	5.434	5.348	5.488	824173.5	789902.5	-4.2
	2	6.049	5.965	6.105	1356618.25	1310387.5	-3.4
	3	6.218	6.134	6.274	619319	599182.5	-3.3
AR1260	1	8.422	8.339	8.479	938394	926115	-1.3
	2	8.658	8.574	8.714	1342898.5	1315312.5	-2.1
	3	8.780	8.695	8.835	761745.625	744535	-2.3
TCX		4.131	4.067	4.167	16185670	15470450	-4.4
DCB		13.537	13.399	13.599	20912015	19503625	-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.: H30X4

GC Column: CLPPest ID: 0.53 (mm) Calibration Date(s): 11/14/2011 11/15/2011

EPA Sample No. (AR####3##): AR16603WJ Date Analyzed: 11/17/2011

Lab Sample ID: AR16603WJ Time Analyzed: 15:17

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	4.380	4.296	4.436	1370942.75	1348462.5	-1.6
	2	4.640	4.556	4.696	912926.125	899565	-1.5
	3	4.991	4.907	5.047	2496101	2433700	-2.5
AR1260	1	7.092	7.011	7.151	1524700.125	1494507.5	-2.0
	2	7.355	7.274	7.414	2633933.125	2598230	-1.4
	3	7.615	7.533	7.673	2325425.625	2258715	-2.9
TCX		3.505	3.444	3.544	32001460	31272850	-2.3
DCB		10.305	10.183	10.383	34108633.75	32661500	-4.2

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.: H30X4

GC Column: CLPPestII ID: 0.53 (mm) Calibration Date(s): 11/14/2011 11/15/2011

EPA Sample No. (AR####3##): AR16603WJ Date Analyzed: 11/17/2011

Lab Sample ID: AR16603WJ Time Analyzed: 15:17

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	5.433	5.348	5.488	824173.5	781295	-5.2
	2	6.048	5.965	6.105	1356618.25	1289512.5	-4.9
	3	6.217	6.134	6.274	619319	584292.5	-5.7
AR1260	1	8.422	8.339	8.479	938394	896457.5	-4.5
	2	8.658	8.574	8.714	1342898.5	1294497.5	-3.6
	3	8.780	8.695	8.835	761745.625	734462.5	-3.6
TCX		4.130	4.067	4.167	16185670	15354500	-5.1
DCB		13.538	13.399	13.599	20912015	19695725	-5.8

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 11/04/2011 11/05/2011

Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 4.000 DCB: 11.417

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12213J2	E2K7479F.D	11/4/2011	19:17	4.000	11.418
02	AR12323J2	E2K7480F.D	11/4/2011	19:38	4.000	11.419
03	AR12421J2	E2K7481F.D	11/4/2011	19:59	4.002	11.419
04	AR12422J2	E2K7483F.D	11/4/2011	20:41	4.002	11.419
05	AR12423J2	E2K7484F.D	11/4/2011	21:01	3.999	11.418
06	AR12424J2	E2K7485F.D	11/4/2011	21:22	4.000	11.419
07	AR12425J2	E2K7486F.D	11/4/2011	21:43	3.997	11.420
08	AR12481J2	E2K7487F.D	11/4/2011	22:04	3.998	11.417
09	AR12482J2	E2K7489F.D	11/4/2011	22:46	4.002	11.418
10	AR12483J2	E2K7490F.D	11/4/2011	23:07	4.001	11.420
11	AR12484J2	E2K7491F.D	11/4/2011	23:28	4.001	11.420
12	AR12485J2	E2K7492F.D	11/4/2011	23:49	4.001	11.419
13	AR12541J2	E2K7493F.D	11/5/2011	0:10	4.002	11.418
14	AR12542J2	E2K7495F.D	11/5/2011	0:52	4.001	11.420
15	AR12543J2	E2K7496F.D	11/5/2011	1:13	4.000	11.418
16	AR12544J2	E2K7497F.D	11/5/2011	1:34	4.001	11.419
17	AR12545J2	E2K7498F.D	11/5/2011	1:54	4.000	11.418
18	AR12623J2	E2K7499F.D	11/5/2011	2:15	4.001	11.418
19	AR12683J2	E2K7500F.D	11/5/2011	2:36	4.001	11.419
20	AR16601J2	E2K7501F.D	11/5/2011	2:57	4.000	11.417
21	AR16602J2	E2K7503F.D	11/5/2011	3:39	4.001	11.418
22	AR16603J2	E2K7504F.D	11/5/2011	4:00	3.999	11.417
23	AR16604J2	E2K7505F.D	11/5/2011	4:21	4.001	11.418
24	AR16605J2	E2K7506F.D	11/5/2011	4:42	4.000	11.417
25	AIBLKJF	E2K7613F.D	11/9/2011	8:51	4.017	11.443
26	AR16603JF	E2K7614F.D	11/9/2011	9:12	4.003	11.420
27	ABLK2G	E2K7618F.D	11/9/2011	10:43	4.012	11.432

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.: H30X4

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 11/04/2011 11/05/2011

Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.000 DCB: 11.417

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	ALCS2G	E2K7619F.D	11/9/2011	11:04	4.000	11.415
29	ZZZZZ	E2K7620F.D	11/9/2011	11:25	4.000	11.415
30	ZZZZZ	E2K7621F.D	11/9/2011	11:46	4.000	11.416
31	H30X4	E2K7622F.D	11/9/2011	12:07	4.000	11.415
32	ZZZZZ	E2K7624F.D	11/9/2011	12:49	4.001	11.416
33	ZZZZZ	E2K7625F.D	11/9/2011	13:10	4.000	11.415
34	ZZZZZ	E2K7626F.D	11/9/2011	13:31	4.000	11.415
35	ZZZZZ	E2K7627F.D	11/9/2011	13:52	4.001	11.415
36	H30Y7	E2K7623F.D	11/9/2011	14:51	4.016	11.441
37	ZZZZZ	E2K7629F.D	11/9/2011	15:35	4.002	11.416
38	ZZZZZ	E2K7630F.D	11/9/2011	15:56	4.002	11.415
39	ZZZZZ	E2K7631F.D	11/9/2011	16:16	4.002	11.415
40	AIBLKJG	E2K7632F.D	11/9/2011	16:41	4.010	11.425
41	AR16603JG	E2K7633F.D	11/9/2011	17:02	4.000	11.414

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.: H30X4

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 11/04/2011 11/05/2011

Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 4.628 DCB: 15.422

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12213J2	E2K7479R.D	11/4/2011	19:17	4.628	15.421
02	AR12323J2	E2K7480R.D	11/4/2011	19:38	4.628	15.423
03	AR12421J2	E2K7481R.D	11/4/2011	19:59	4.628	15.422
04	AR12422J2	E2K7483R.D	11/4/2011	20:41	4.629	15.421
05	AR12423J2	E2K7484R.D	11/4/2011	21:01	4.628	15.422
06	AR12424J2	E2K7485R.D	11/4/2011	21:22	4.627	15.422
07	AR12425J2	E2K7486R.D	11/4/2011	21:43	4.625	15.428
08	AR12481J2	E2K7487R.D	11/4/2011	22:04	4.628	15.421
09	AR12482J2	E2K7489R.D	11/4/2011	22:46	4.629	15.421
10	AR12483J2	E2K7490R.D	11/4/2011	23:07	4.628	15.424
11	AR12484J2	E2K7491R.D	11/4/2011	23:28	4.628	15.426
12	AR12485J2	E2K7492R.D	11/4/2011	23:49	4.627	15.424
13	AR12541J2	E2K7493R.D	11/5/2011	0:10	4.629	15.422
14	AR12542J2	E2K7495R.D	11/5/2011	0:52	4.628	15.423
15	AR12543J2	E2K7496R.D	11/5/2011	1:13	4.628	15.423
16	AR12544J2	E2K7497R.D	11/5/2011	1:34	4.627	15.425
17	AR12545J2	E2K7498R.D	11/5/2011	1:54	4.626	15.425
18	AR12623J2	E2K7499R.D	11/5/2011	2:15	4.628	15.422
19	AR12683J2	E2K7500R.D	11/5/2011	2:36	4.628	15.425
20	AR16601J2	E2K7501R.D	11/5/2011	2:57	4.628	15.421
21	AR16602J2	E2K7503R.D	11/5/2011	3:39	4.628	15.421
22	AR16603J2	E2K7504R.D	11/5/2011	4:00	4.627	15.421
23	AR16604J2	E2K7505R.D	11/5/2011	4:21	4.627	15.423
24	AR16605J2	E2K7506R.D	11/5/2011	4:42	4.627	15.424
25	AIBLKJF	E2K7613R.D	11/9/2011	8:51	4.634	15.441
26	AR16603JF	E2K7614R.D	11/9/2011	9:12	4.630	15.422
27	ABLK2G	E2K7618R.D	11/9/2011	10:43	4.631	15.431

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.: H30X4

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 11/04/2011 11/05/2011

Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.628 DCB: 15.422

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	ALCS2G	E2K7619R.D	11/9/2011	11:04	4.627	15.419
29	ZZZZZ	E2K7620R.D	11/9/2011	11:25	4.627	15.417
30	ZZZZZ	E2K7621R.D	11/9/2011	11:46	4.627	15.420
31	H30X4	E2K7622R.D	11/9/2011	12:07	4.628	15.417
32	ZZZZZ	E2K7624R.D	11/9/2011	12:49	4.628	15.418
33	ZZZZZ	E2K7625R.D	11/9/2011	13:10	4.627	15.417
34	ZZZZZ	E2K7626R.D	11/9/2011	13:31	4.627	15.417
35	ZZZZZ	E2K7627R.D	11/9/2011	13:52	4.628	15.415
36	H30Y7	E2K7623R.D	11/9/2011	14:51	4.632	15.436
37	ZZZZZ	E2K7629R.D	11/9/2011	15:35	4.629	15.418
38	ZZZZZ	E2K7630R.D	11/9/2011	15:56	4.629	15.415
39	ZZZZZ	E2K7631R.D	11/9/2011	16:16	4.629	15.417
40	AIBLKJG	E2K7632R.D	11/9/2011	16:41	4.631	15.424
41	AR16603JG	E2K7633R.D	11/9/2011	17:02	4.628	15.415

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)
DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 11/14/2011 11/15/2011

Instrument ID: E3

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.494 DCB: 10.283

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12213W3	E3I6672F.D	11/14/2011	17:05	3.504	10.304
02	AR12323W3	E3I6673F.D	11/14/2011	17:24	3.502	10.300
03	AR12421W3	E3I6675F.D	11/14/2011	18:01	3.494	10.281
04	AR12422W3	E3I6676F.D	11/14/2011	18:20	3.494	10.281
05	AR12423W3	E3I6677F.D	11/14/2011	18:39	3.493	10.281
06	AR12424W3	E3I6678F.D	11/14/2011	18:58	3.493	10.283
07	AR12425W3	E3I6679F.D	11/14/2011	19:17	3.493	10.283
08	AR12481W3	E3I6681F.D	11/14/2011	19:55	3.493	10.283
09	AR12482W3	E3I6682F.D	11/14/2011	20:14	3.494	10.283
10	AR12483W3	E3I6683F.D	11/14/2011	20:33	3.494	10.284
11	AR12484W3	E3I6684F.D	11/14/2011	20:52	3.494	10.284
12	AR12485W3	E3I6685F.D	11/14/2011	21:11	3.495	10.285
13	AR12541W3	E3I6687F.D	11/14/2011	21:49	3.496	10.285
14	AR12542W3	E3I6688F.D	11/14/2011	22:08	3.494	10.283
15	AR12543W3	E3I6689F.D	11/14/2011	22:26	3.490	10.283
16	AR12544W3	E3I6690F.D	11/14/2011	22:45	3.494	10.284
17	AR12545W3	E3I6691F.D	11/14/2011	23:04	3.493	10.284
18	AR12623W3	E3I6692F.D	11/14/2011	23:23	3.494	10.282
19	AR12683W3	E3I6693F.D	11/14/2011	23:42	3.494	10.282
20	AR16601W3	E3I6695F.D	11/15/2011	0:20	3.494	10.283
21	AR16602W3	E3I6696F.D	11/15/2011	0:39	3.495	10.284
22	AR16603W3	E3I6697F.D	11/15/2011	0:58	3.493	10.283
23	AR16604W3	E3I6698F.D	11/15/2011	1:17	3.494	10.281
24	AR16605W3	E3I6699F.D	11/15/2011	1:36	3.493	10.281
25	AIBLKWF	E3I6740F.D	11/16/2011	15:50	3.525	10.336
26	AR16603WF	E3I6741F.D	11/16/2011	16:09	3.510	10.312
27	ABLK3A	E3I6745F.D	11/16/2011	17:25	3.504	10.303

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.: H30X4

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 11/14/2011 11/15/2011

Instrument ID: E3

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.494 DCB: 10.283

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	ALCS3A	E3I6746F.D	11/16/2011	17:43	3.505	10.303
29	H30W9	E3I6747F.D	11/16/2011	18:02	3.504	10.304
30	H30X2	E3I6748F.D	11/16/2011	18:21	3.505	10.303
31	H30X6	E3I6749F.D	11/16/2011	18:40	3.505	10.302
32	H30X7	E3I6750F.D	11/16/2011	18:59	3.505	10.303
33	ZZZZZ	E3I6751F.D	11/16/2011	19:18	3.505	10.304
34	ZZZZZ	E3I6752F.D	11/16/2011	19:37	3.505	10.303
35	H30Y1	E3I6753F.D	11/16/2011	19:55	3.504	10.304
36	H30Z2	E3I6754F.D	11/16/2011	20:14	3.504	10.303
37	H30Z2MS	E3I6755F.D	11/16/2011	20:33	3.504	10.304
38	H30Z2MSD	E3I6756F.D	11/16/2011	20:52	3.504	10.305
39	H30Z3	E3I6757F.D	11/16/2011	21:11	3.504	10.304
40	H30Z4	E3I6758F.D	11/16/2011	21:30	3.505	10.303
41	H30Z5	E3I6759F.D	11/16/2011	21:48	3.504	10.304
42	ZZZZZ	E3I6760F.D	11/16/2011	22:07	3.503	10.302
43	H30Z8	E3I6761F.D	11/16/2011	22:26	3.504	10.302
44	ZZZZZ	E3I6762F.D	11/16/2011	22:45	3.504	10.301
45	ZZZZZ	E3I6763F.D	11/16/2011	23:04	3.503	10.301
46	ABLK3B	E3I6764F.D	11/16/2011	23:23	3.502	10.302
47	ALCS3B	E3I6765F.D	11/16/2011	23:41	3.502	10.302
48	H30X4RX	E3I6766F.D	11/17/2011	0:00	3.502	10.300
49	H30Y7RX	E3I6767F.D	11/17/2011	0:19	3.502	10.301
50	AIBLKWG	E3I6768F.D	11/17/2011	0:38	3.502	10.299
51	AR16603WG	E3I6769F.D	11/17/2011	0:57	3.502	10.301
52	AIBLKWI	E3I6785F.D	11/17/2011	10:01	3.521	10.329
53	AR16603WI	E3I6786F.D	11/17/2011	10:20	3.507	10.306
54	H30X9	E3I6792F.D	11/17/2011	12:22	3.509	10.307

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.: H30X4

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 11/14/2011 11/15/2011

Instrument ID: E3

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 3.494 DCB: 10.283

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT	#	DCB RT	#
55	H30Y0	E3I6793F.D	11/17/2011	12:41	3.499		10.295	
56	H30Z7	E3I6794F.D	11/17/2011	12:59	3.497		10.289	
57	AIBLKWJ	E3I6795F.D	11/17/2011	14:58	3.518		10.327	
58	AR16603WJ	E3I6796F.D	11/17/2011	15:17	3.505		10.305	

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.: H30X4

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 11/14/2011 11/15/2011

Instrument ID: E3

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

	MEAN SURROGATE RT FROM INITIAL CALIBRATION TCX: 4.117 DCB: 13.499					
	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12213W3	E3I6672R.D	11/14/2011	17:05	4.129	13.537
02	AR12323W3	E3I6673R.D	11/14/2011	17:24	4.127	13.531
03	AR12421W3	E3I6675R.D	11/14/2011	18:01	4.118	13.496
04	AR12422W3	E3I6676R.D	11/14/2011	18:20	4.118	13.495
05	AR12423W3	E3I6677R.D	11/14/2011	18:39	4.117	13.496
06	AR12424W3	E3I6678R.D	11/14/2011	18:58	4.117	13.500
07	AR12425W3	E3I6679R.D	11/14/2011	19:17	4.117	13.501
08	AR12481W3	E3I6681R.D	11/14/2011	19:55	4.118	13.503
09	AR12482W3	E3I6682R.D	11/14/2011	20:14	4.119	13.502
10	AR12483W3	E3I6683R.D	11/14/2011	20:33	4.118	13.503
11	AR12484W3	E3I6684R.D	11/14/2011	20:52	4.119	13.505
12	AR12485W3	E3I6685R.D	11/14/2011	21:11	4.119	13.503
13	AR12541W3	E3I6687R.D	11/14/2011	21:49	4.119	13.504
14	AR12542W3	E3I6688R.D	11/14/2011	22:08	4.118	13.501
15	AR12543W3	E3I6689R.D	11/14/2011	22:26	4.115	13.498
16	AR12544W3	E3I6690R.D	11/14/2011	22:45	4.118	13.503
17	AR12545W3	E3I6691R.D	11/14/2011	23:04	4.116	13.503
18	AR12623W3	E3I6692R.D	11/14/2011	23:23	4.118	13.499
19	AR12683W3	E3I6693R.D	11/14/2011	23:42	4.118	13.497
20	AR16601W3	E3I6695R.D	11/15/2011	0:20	4.118	13.501
21	AR16602W3	E3I6696R.D	11/15/2011	0:39	4.119	13.501
22	AR16603W3	E3I6697R.D	11/15/2011	0:58	4.117	13.502
23	AR16604W3	E3I6698R.D	11/15/2011	1:17	4.117	13.496
24	AR16605W3	E3I6699R.D	11/15/2011	1:36	4.116	13.497
25	AIBLKWF	E3I6740R.D	11/16/2011	15:50	4.143	13.576
26	AR16603WF	E3I6741R.D	11/16/2011	16:09	4.135	13.551
27	ABLK3A	E3I6745R.D	11/16/2011	17:25	4.129	13.540

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.: H30X4

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 11/14/2011 11/15/2011

Instrument ID: E3

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.117 DCB: 13.499

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	ALCS3A	E3I6746R.D	11/16/2011	17:43	4.130	13.539
29	H30W9	E3I6747R.D	11/16/2011	18:02	4.129	13.540
30	H30X2	E3I6748R.D	11/16/2011	18:21	4.129	13.538
31	H30X6	E3I6749R.D	11/16/2011	18:40	4.130	13.537
32	H30X7	E3I6750R.D	11/16/2011	18:59	4.130	13.541
33	ZZZZZ	E3I6751R.D	11/16/2011	19:18	4.130	13.540
34	ZZZZZ	E3I6752R.D	11/16/2011	19:37	4.131	13.540
35	H30Y1	E3I6753R.D	11/16/2011	19:55	4.129	13.541
36	H30Z2	E3I6754R.D	11/16/2011	20:14	4.129	13.540
37	H30Z2MS	E3I6755R.D	11/16/2011	20:33	4.130	13.541
38	H30Z2MSD	E3I6756R.D	11/16/2011	20:52	4.129	13.543
39	H30Z3	E3I6757R.D	11/16/2011	21:11	4.129	13.540
40	H30Z4	E3I6758R.D	11/16/2011	21:30	4.130	13.538
41	H30Z5	E3I6759R.D	11/16/2011	21:48	4.130	13.540
42	ZZZZZ	E3I6760R.D	11/16/2011	22:07	4.129	13.538
43	H30Z8	E3I6761R.D	11/16/2011	22:26	4.128	13.537
44	ZZZZZ	E3I6762R.D	11/16/2011	22:45	4.129	13.534
45	ZZZZZ	E3I6763R.D	11/16/2011	23:04	4.128	13.535
46	ABLK3B	E3I6764R.D	11/16/2011	23:23	4.127	13.537
47	ALCS3B	E3I6765R.D	11/16/2011	23:41	4.127	13.535
48	H30X4RX	E3I6766R.D	11/17/2011	0:00	4.128	13.533
49	H30Y7RX	E3I6767R.D	11/17/2011	0:19	4.128	13.534
50	AIBLKWG	E3I6768R.D	11/17/2011	0:38	4.127	13.532
51	AR16603WG	E3I6769R.D	11/17/2011	0:57	4.127	13.532
52	AIBLKWI	E3I6785R.D	11/17/2011	10:01	4.140	13.563
53	AR16603WI	E3I6786R.D	11/17/2011	10:20	4.131	13.537
54	H30X9	E3I6792R.D	11/17/2011	12:22	4.129	13.529

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.: H30X4

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 11/14/2011 11/15/2011

Instrument ID: E3

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.117 DCB: 13.499

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT	#	DCB RT	#
55	H30Y0	E3I6793R.D	11/17/2011	12:41	4.123		13.521	
56	H30Z7	E3I6794R.D	11/17/2011	12:59	4.121		13.510	
57	AIBLKWJ	E3I6795R.D	11/17/2011	14:58	4.137		13.557	
58	AR16603WJ	E3I6796R.D	11/17/2011	15:17	4.130		13.538	

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.
H30Z2MSD

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Lab Sample ID: K2213-11AMSD Date(s) Analyzed: 11/16/2011 11/16/2011

Instrument ID (1): E3 Instrument ID (2): E3

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	4.380	4.296	4.436	3.1866		
	2	4.639	4.556	4.696	3.0623		
COLUMN 1	3	4.991	4.907	5.047	3.0418		
	4						
	5					3.096914	
	1	5.432	5.348	5.488	3.0808		
	2	6.048	5.965	6.105	3.0499		
COLUMN 2	3	6.217	6.134	6.274	3.2245		
	4						
	5					3.118379	0.7
Aroclor-1260	1	7.091	7.011	7.151	2.9744		
	2	7.355	7.274	7.414	2.9678		
COLUMN 1	3	7.614	7.533	7.673	2.9655		
	4						
	5					2.969227	
	1	8.422	8.339	8.479	2.9078		
	2	8.659	8.574	8.714	2.7872		
COLUMN 2	3	8.780	8.695	8.835	2.8858		
	4						
	5					2.860274	3.8

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.
H30Z2MS

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Lab Sample ID: K2213-11AMS Date(s) Analyzed: 11/16/2011 11/16/2011

Instrument ID (1): E3 Instrument ID (2): E3

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	4.380	4.296	4.436	3.1026		
	2	4.639	4.556	4.696	2.9826		
COLUMN 1	3	4.991	4.907	5.047	2.9414		
	4						
	5					3.008884	
	1	5.432	5.348	5.488	2.9998		
	2	6.048	5.965	6.105	2.9145		
COLUMN 2	3	6.217	6.134	6.274	3.0913		
	4						
	5					3.001867	0.2
Aroclor-1260	1	7.091	7.011	7.151	2.7693		
	2	7.354	7.274	7.414	2.7485		
COLUMN 1	3	7.613	7.533	7.673	2.7232		
	4						
	5					2.746999	
	1	8.422	8.339	8.479	2.6708		
	2	8.659	8.574	8.714	2.5687		
COLUMN 2	3	8.780	8.695	8.835	2.6467		
	4						
	5					2.628711	4.5

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.
ALCS2G

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Lab Sample ID: LCS-62678 Date(s) Analyzed: 11/09/2011 11/09/2011

Instrument ID (1): E2 Instrument ID (2): E2

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (MM)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION PEAK	CONCENTRATION MEAN	%D
Aroclor-1016	1	5.606	5.535	5.675	0.9478		
	2	5.784	5.713	5.853	0.9204		
COLUMN 1	3	6.040	5.970	6.110	0.9397		
	4						
	5					0.935977	
	1	6.252	6.182	6.322	0.9357		
	2	6.504	6.434	6.574	0.8198		
COLUMN 2	3	6.660	6.589	6.729	0.8935		
	4						
	5					0.882998	6.0
Aroclor-1260	1	7.799	7.728	7.868	1.0692		
	2	8.092	8.023	8.163	1.0214		
COLUMN 1	3	8.502	8.433	8.573	0.9430		
	4						
	5					1.011177	
	1	9.255	9.186	9.326	0.8949		
	2	9.399	9.329	9.469	0.9630		
COLUMN 2	3	9.884	9.814	9.954	0.8589		
	4						
	5					0.905621	11.7

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.
ALCS3A

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Lab Sample ID: LCS-62802 Date(s) Analyzed: 11/16/2011 11/16/2011

Instrument ID (1): E3 Instrument ID (2): E3

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	4.381	4.296	4.436	1.0470		
	2	4.640	4.556	4.696	0.9968		
COLUMN 1	3	4.991	4.907	5.047	1.0173		
	4						
	5					1.020353	
	1	5.435	5.348	5.488	1.0373		
	2	6.048	5.965	6.105	0.9364		
COLUMN 2	3	6.218	6.134	6.274	0.9235		
	4						
	5					0.965748	5.7
Aroclor-1260	1	7.092	7.011	7.151	1.0503		
	2	7.355	7.274	7.414	1.0486		
COLUMN 1	3	7.614	7.533	7.673	0.9858		
	4						
	5					1.028211	
	1	8.422	8.339	8.479	1.0059		
	2	8.658	8.574	8.714	0.9058		
COLUMN 2	3	8.780	8.695	8.835	1.0342		
	4						
	5					0.981970	4.7

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.
ALCS3B

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Lab Sample ID: LCS-63016 Date(s) Analyzed: 11/16/2011 11/16/2011

Instrument ID (1): E3 Instrument ID (2): E3

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	4.378	4.296	4.436	1.0217		
	2	4.637	4.556	4.696	0.9455		
COLUMN 1	3	4.989	4.907	5.047	0.9504		
	4						
	5					0.972521	
	1	5.432	5.348	5.488	0.9674		
	2	6.045	5.965	6.105	0.8175		
COLUMN 2	3	6.216	6.134	6.274	1.0219		
	4						
	5					0.935609	3.9
Aroclor-1260	1	7.090	7.011	7.151	1.1374		
	2	7.354	7.274	7.414	1.0702		
COLUMN 1	3	7.613	7.533	7.673	1.0040		
	4						
	5					1.070525	
	1	8.421	8.339	8.479	0.9965		
	2	8.657	8.574	8.714	0.9138		
COLUMN 2	3	8.779	8.695	8.835	1.0282		
	4						
	5					0.979536	9.3

At least 3 peaks for each column are required for identification of multicomponent analytes

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7479F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7479F.D
Lab Smp Id: AR12213J2 Client Smp ID: AR12213J2
Inj Date : 04-NOV-2011 19:17
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12213J2,AR12213J2,,ar1221.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1221.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

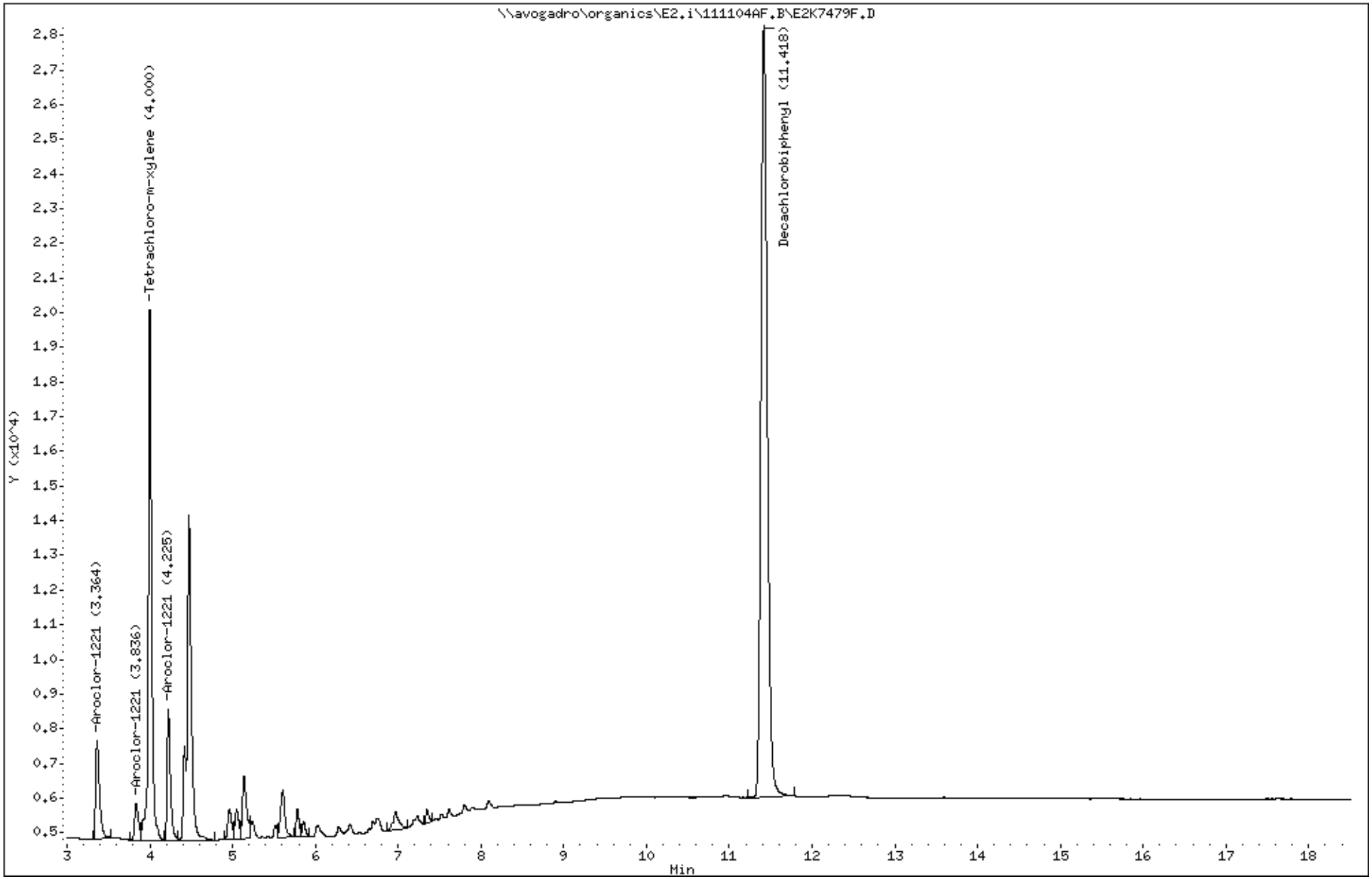
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.000	3.999	0.001	434796	0.02000	0.021			(a)
3 Aroclor-1221					CAS #: 11104-28-2			
3.363	3.363	0.000	92702	0.40000	0.40	80.00- 120.00	100.00	(a)
3.835	3.835	0.000	34614	0.40000	0.40	17.34- 57.34	37.34	
4.225	4.225	0.000	104718	0.40000	0.40	92.96- 132.96	112.96	
Average of Peak Amounts =				0.40000				
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.418	11.417	0.001	1188633	0.04000	0.041			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7479F.D
Date : 04-NOV-2011 19:17
Client ID: AR12213J2
Instrument: E2.i
Sample Info: AR12213J2,AR12213J2,,ar1221.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7479R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7479R.D
Lab Smp Id: AR12213J2 Client Smp ID: AR12213J2
Inj Date : 04-NOV-2011 19:17
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12213J2,AR12213J2,,ar1221.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:00 Cal File: E2K7504R.D
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1221.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

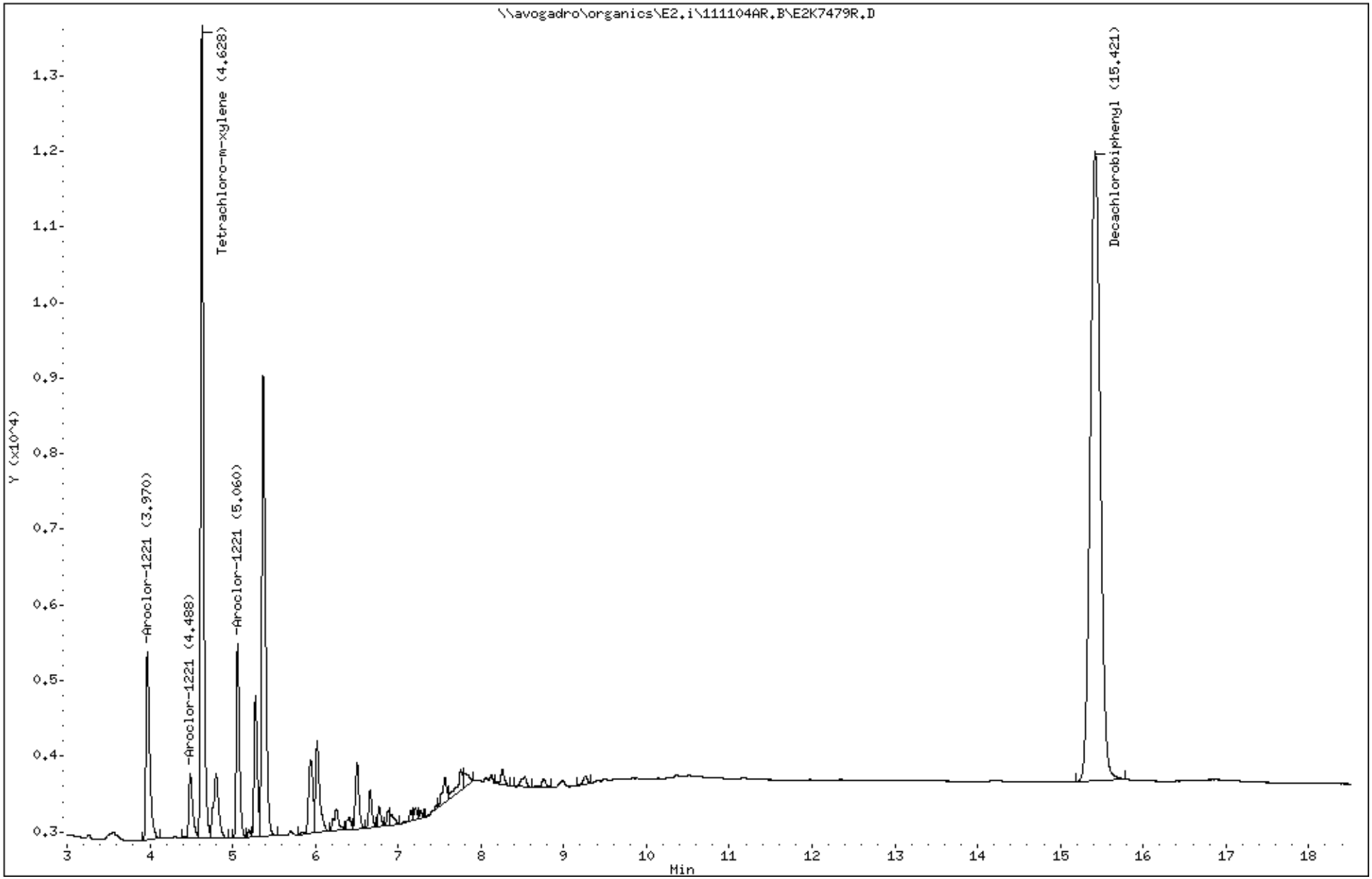
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.628	4.627	0.001	254149	0.02000	0.020			(a)
2 Aroclor-1221					CAS #: 11104-28-2			
3.969	3.969	0.000	77426	0.40000	0.40	80.00- 120.00	100.00	(a)
4.487	4.487	0.000	28710	0.40000	0.40	17.08- 57.08	37.08	
5.060	5.060	0.000	67648	0.40000	0.40	67.37- 107.37	87.37	
Average of Peak Amounts =				0.40000				
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.420	15.423	-0.003	700038	0.04000	0.040			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7479R.D
Date : 04-NOV-2011 19:17
Client ID: AR12213J2 Instrument: E2.i
Sample Info: AR12213J2,AR12213J2,,ar1221.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPestII Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7480F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7480F.D
Lab Smp Id: AR12323J2 Client Smp ID: AR12323J2
Inj Date : 04-NOV-2011 19:38
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12323J2,AR12323J2,,ar1232.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 2 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1232.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

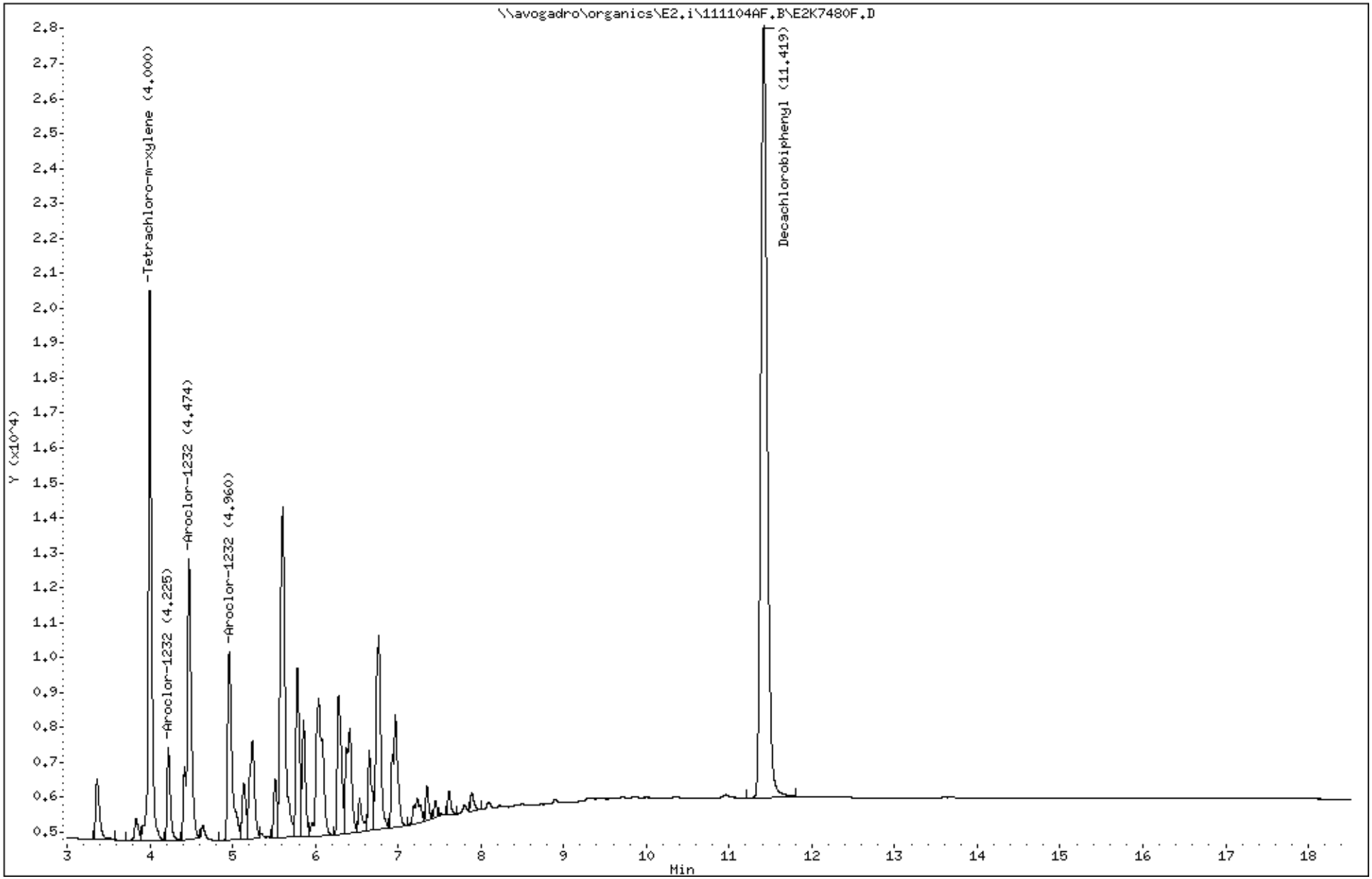
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
3.999	3.999	0.000	428035	0.02000	0.021			(a)
4 Aroclor-1232					CAS #: 11141-16-5			
4.224	4.224	0.000	71115	0.40000	0.40	80.00- 120.00	100.00	(a)
4.473	4.473	0.000	287816	0.40000	0.40	384.72- 424.72	404.72	
4.960	4.960	0.000	202489	0.40000	0.40	264.73- 304.73	284.73	
Average of Peak Amounts =				0.40000				
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.418	11.417	0.001	1185977	0.04000	0.041			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7480F.D
Date : 04-NOV-2011 19:38
Client ID: AR12323J2
Instrument: E2.i
Sample Info: AR12323J2,AR12323J2,,ar1232.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7480R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7480R.D
Lab Smp Id: AR12323J2 Client Smp ID: AR12323J2
Inj Date : 04-NOV-2011 19:38
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12323J2,AR12323J2,,ar1232.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:00 Cal File: E2K7504R.D
Als bottle: 2 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1232.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

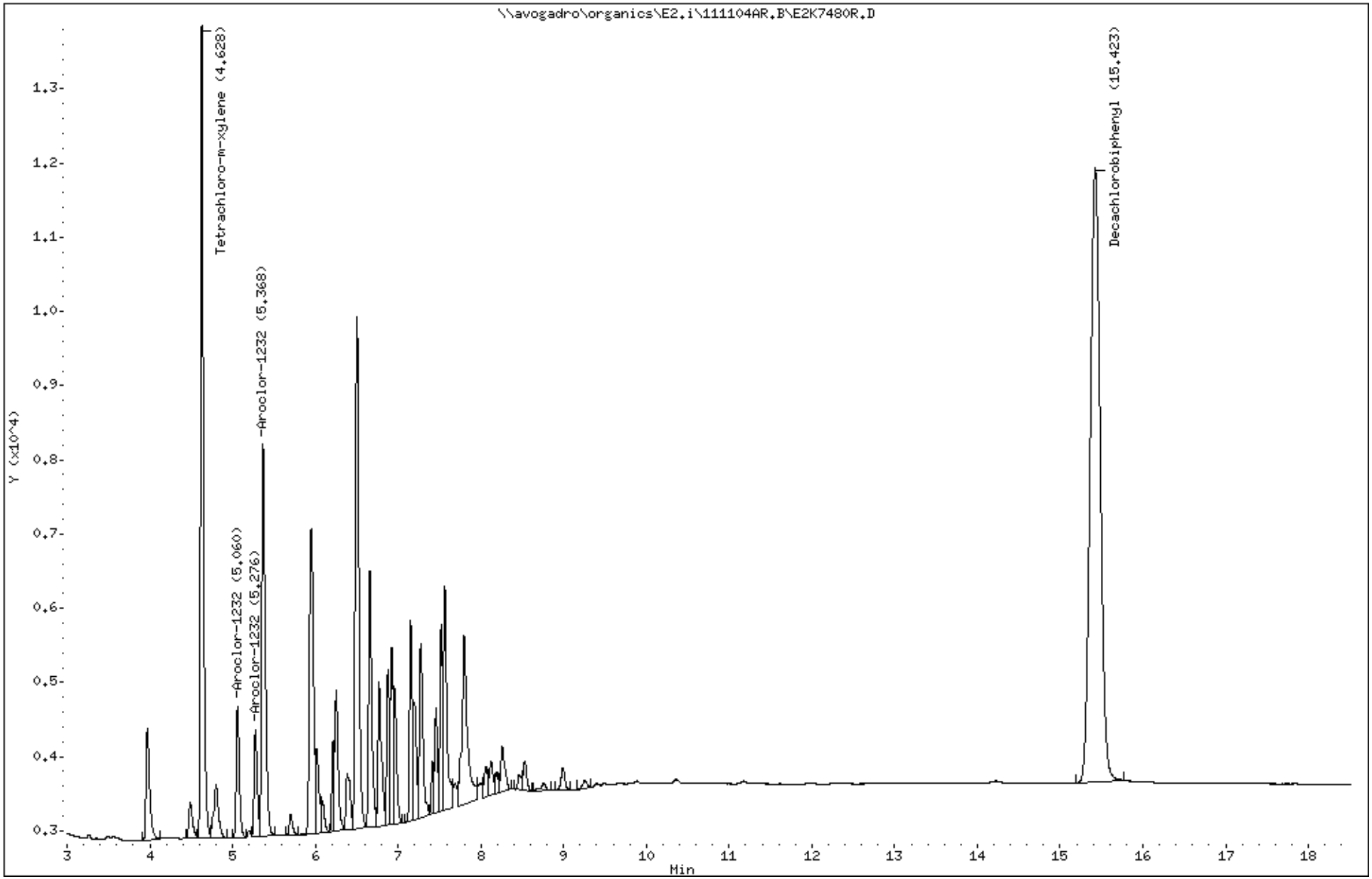
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.627	4.627	0.000	254882	0.02000	0.020			(a)
3 Aroclor-1232					CAS #: 11141-16-5			
5.059	5.059	0.000	46310	0.40000	0.40	80.00- 120.00	100.00	(a)
5.275	5.275	0.000	38429	0.40000	0.40	62.98- 102.98	82.98	
5.368	5.368	0.000	159174	0.40000	0.40	323.71- 363.71	343.71	
Average of Peak Amounts =				0.40000				
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.423	15.423	0.000	697053	0.04000	0.040			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7480R.D
Date : 04-NOV-2011 19:38
Client ID: AR12323J2 Instrument: E2.i
Sample Info: AR12323J2,AR12323J2,,ar1232.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPestII Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7481F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7481F.D
Lab Smp Id: AR12421J2 Client Smp ID: AR12421J2
Inj Date : 04-NOV-2011 19:59
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12421J2,AR12421J2,,ar1242.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

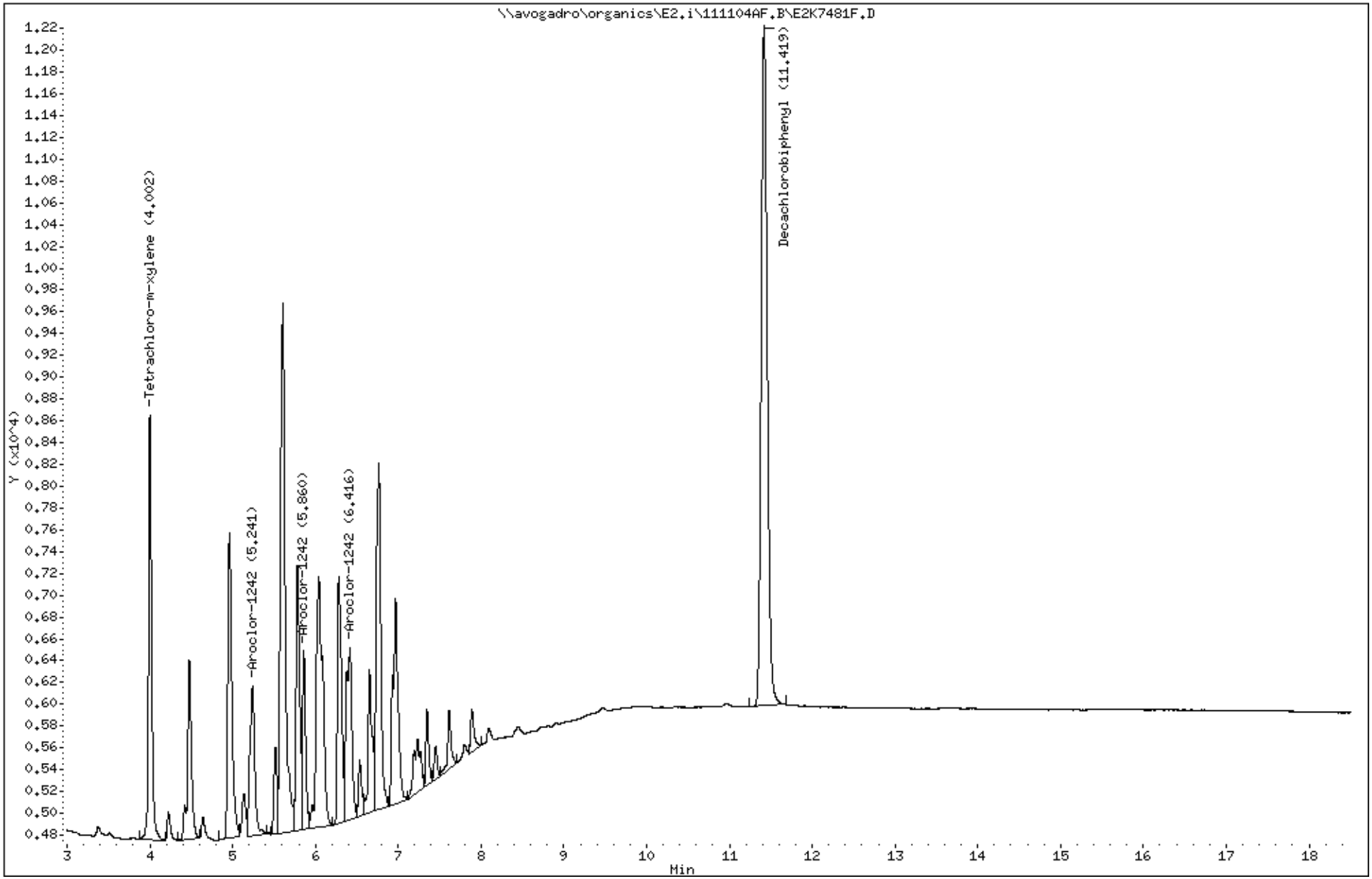
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.001	3.999	0.002	100505	0.00500	0.0048			(a)
6 Aroclor-1242						CAS #: 53469-21-9		
5.241	5.237	0.004	56283	0.10000	0.10	80.00- 120.00	100.00	(a)
5.859	5.858	0.001	44717	0.10000	0.10	62.39- 102.39	79.45	
6.416	6.412	0.004	77323	0.10000	0.10	116.75- 156.75	137.38	
Average of Peak Amounts =					0.10000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.418	11.417	0.001	316615	0.01000	0.011			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7481F.D
Date : 04-NOV-2011 19:59
Client ID: AR12421J2
Instrument: E2.i
Sample Info: AR12421J2,AR12421J2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7481R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7481R.D
Lab Smp Id: AR12421J2 Client Smp ID: AR12421J2
Inj Date : 04-NOV-2011 19:59
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12421J2,AR12421J2,,ar1242.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 04-NOV-2011 19:59 Cal File: E2K7481R.D
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

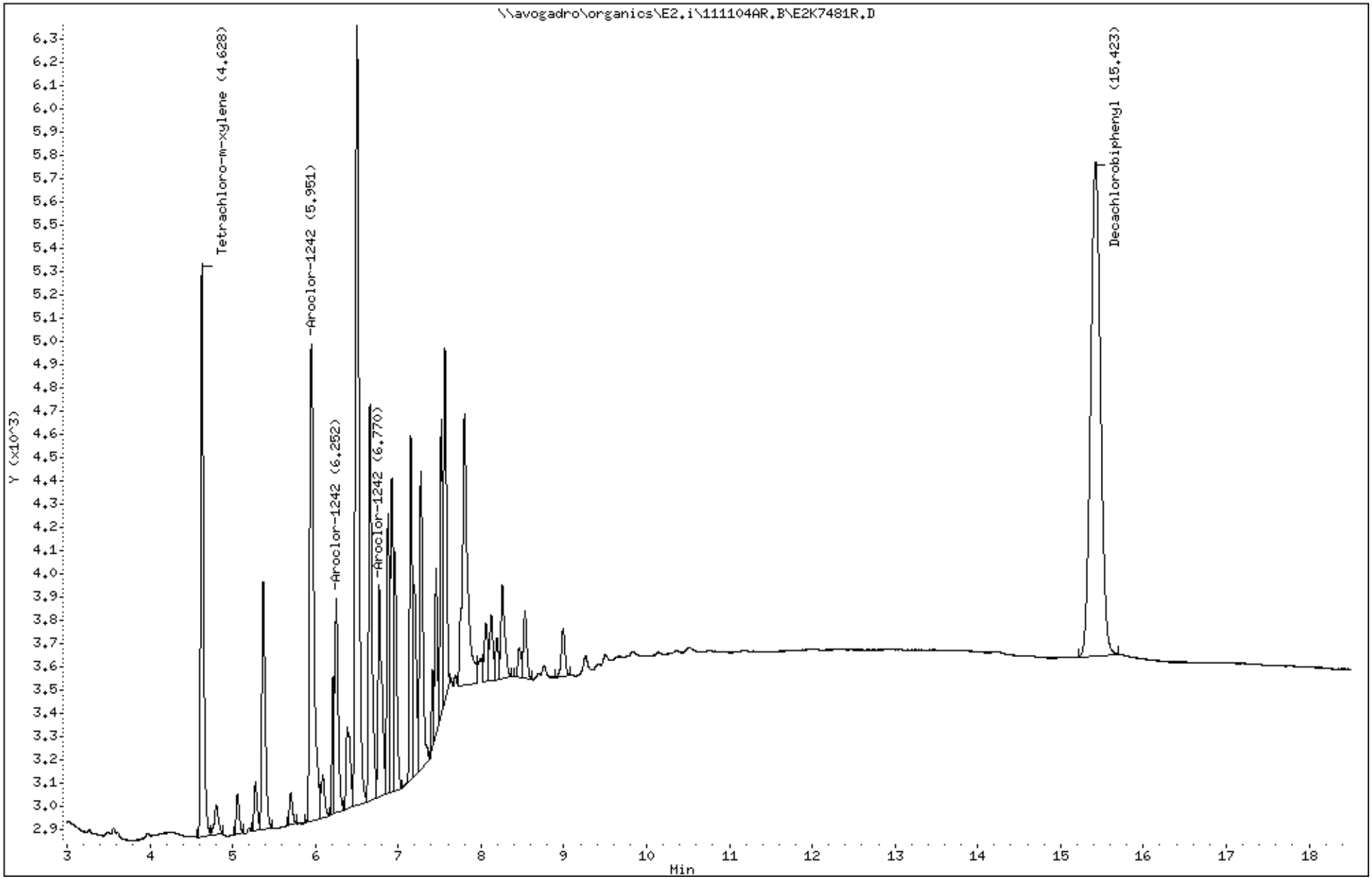
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.628	4.627	0.001	58298	0.00500	0.0048			(a)
4 Aroclor-1242					CAS #: 53469-21-9			
5.951	5.948	0.003	73461	0.10000	0.10	80.00- 120.00	100.00	(a)
6.252	6.250	0.002	25810	0.10000	0.10	22.01- 62.01	35.13	
6.769	6.769	0.000	28731	0.10000	0.10	29.71- 69.71	39.11	
Average of Peak Amounts =					0.10000			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.422	15.423	-0.001	176282	0.01000	0.010			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7481R.D
Date : 04-NOV-2011 19:59
Client ID: AR12421J2 Instrument: E2.i
Sample Info: AR12421J2,AR12421J2,,ar1242.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPestII Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7483F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7483F.D
Lab Smp Id: AR12422J2 Client Smp ID: AR12422J2
Inj Date : 04-NOV-2011 20:41
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12422J2,AR12422J2,,ar1242.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 5 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

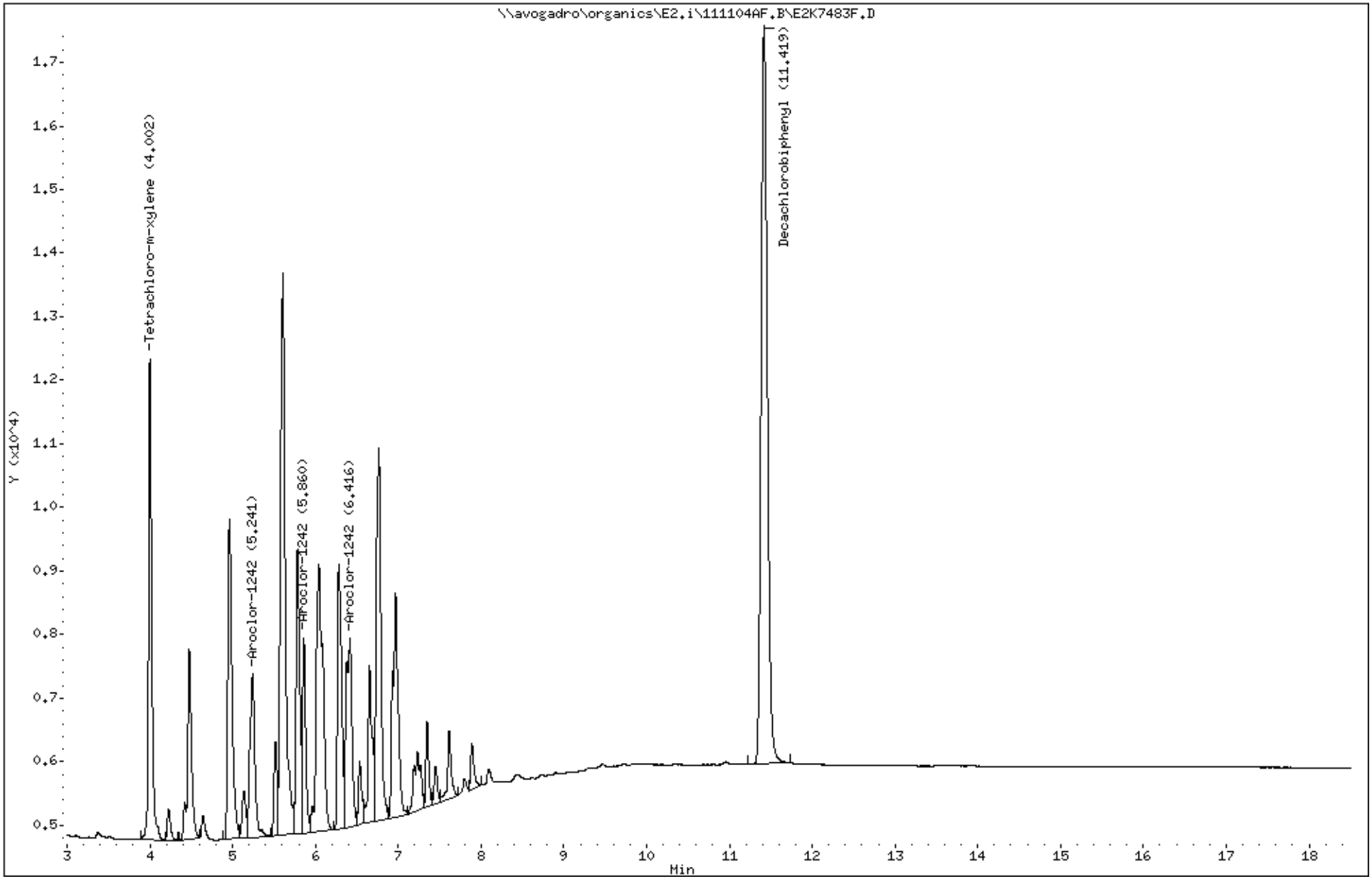
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.001	3.999	0.002	199999	0.01000	0.0096			(a)
6 Aroclor-1242						CAS #: 53469-21-9		
5.241	5.237	0.004	108873	0.20000	0.20	80.00- 120.00	100.00	(a)
5.860	5.858	0.002	85364	0.20000	0.20	62.39- 102.39	78.41	
6.416	6.412	0.004	147641	0.20000	0.20	116.75- 156.75	135.61	
Average of Peak Amounts =				0.20000				
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.418	11.417	0.001	607170	0.02000	0.021			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7483F.D
Date : 04-NOV-2011 20:41
Client ID: AR12422J2
Instrument: E2.i
Sample Info: AR12422J2,AR12422J2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7483R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report
Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7483R.D
Lab Smp Id: AR12422J2 Client Smp ID: AR12422J2
Inj Date : 04-NOV-2011 20:41
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12422J2,AR12422J2,,ar1242.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 04-NOV-2011 20:41 Cal File: E2K7483R.D
Als bottle: 5 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

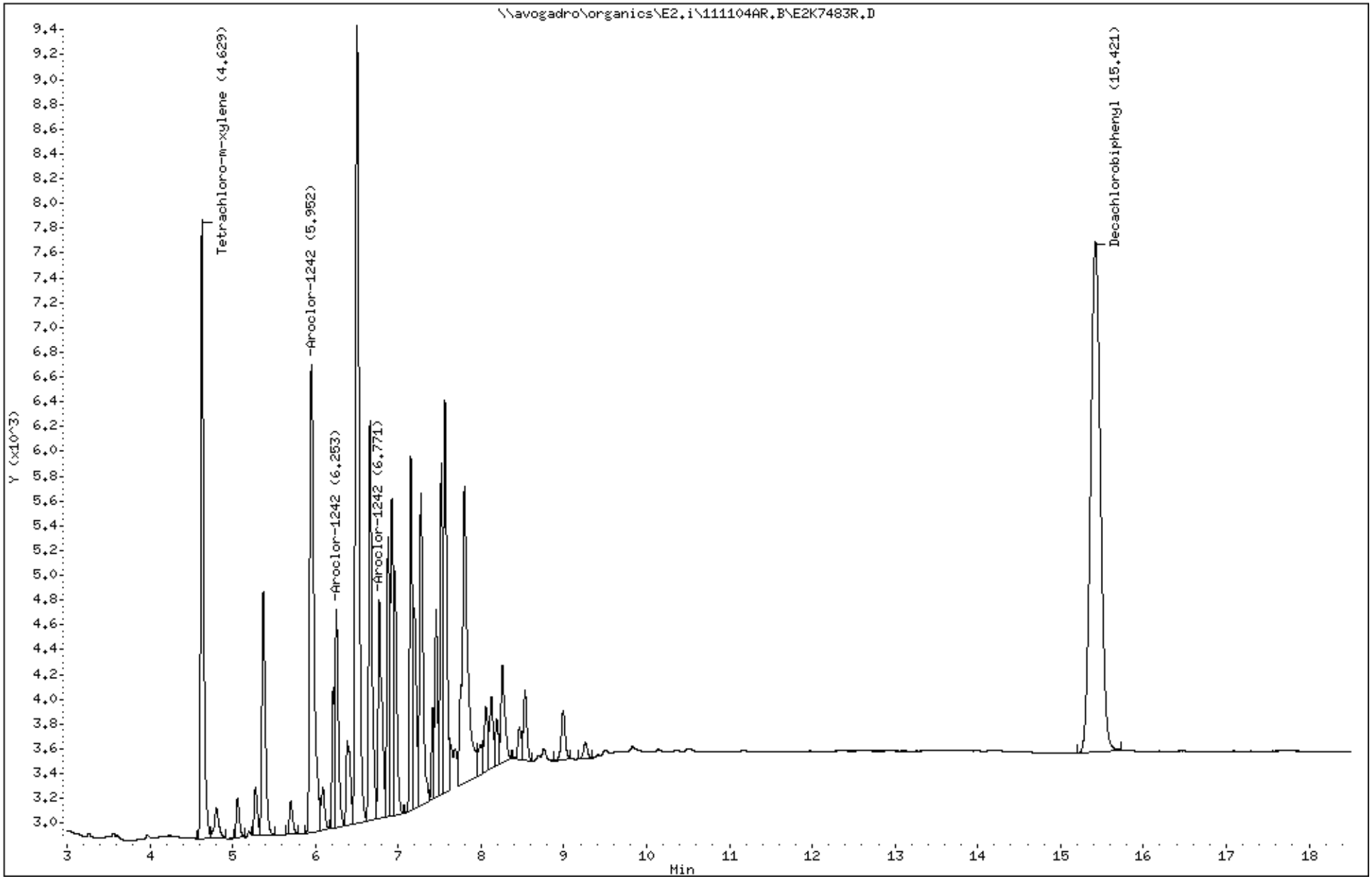
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.628	4.627	0.001	119092	0.01000	0.0098			(a)
4 Aroclor-1242					CAS #: 53469-21-9			
5.951	5.948	0.003	137085	0.20000	0.20	80.00- 120.00	100.00	(a)
6.253	6.250	0.003	50331	0.20000	0.20	22.01- 62.01	36.72	
6.770	6.769	0.001	55442	0.20000	0.20	29.71- 69.71	40.44	
Average of Peak Amounts =				0.20000				
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.421	15.423	-0.002	343043	0.02000	0.020			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7483R.D
Date : 04-NOV-2011 20:41
Client ID: AR12422J2
Instrument: E2.i
Sample Info: AR12422J2,AR12422J2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7484F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7484F.D
Lab Smp Id: AR12423J2 Client Smp ID: AR12423J2
Inj Date : 04-NOV-2011 21:01
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12423J2,AR12423J2,,ar1242.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 6 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

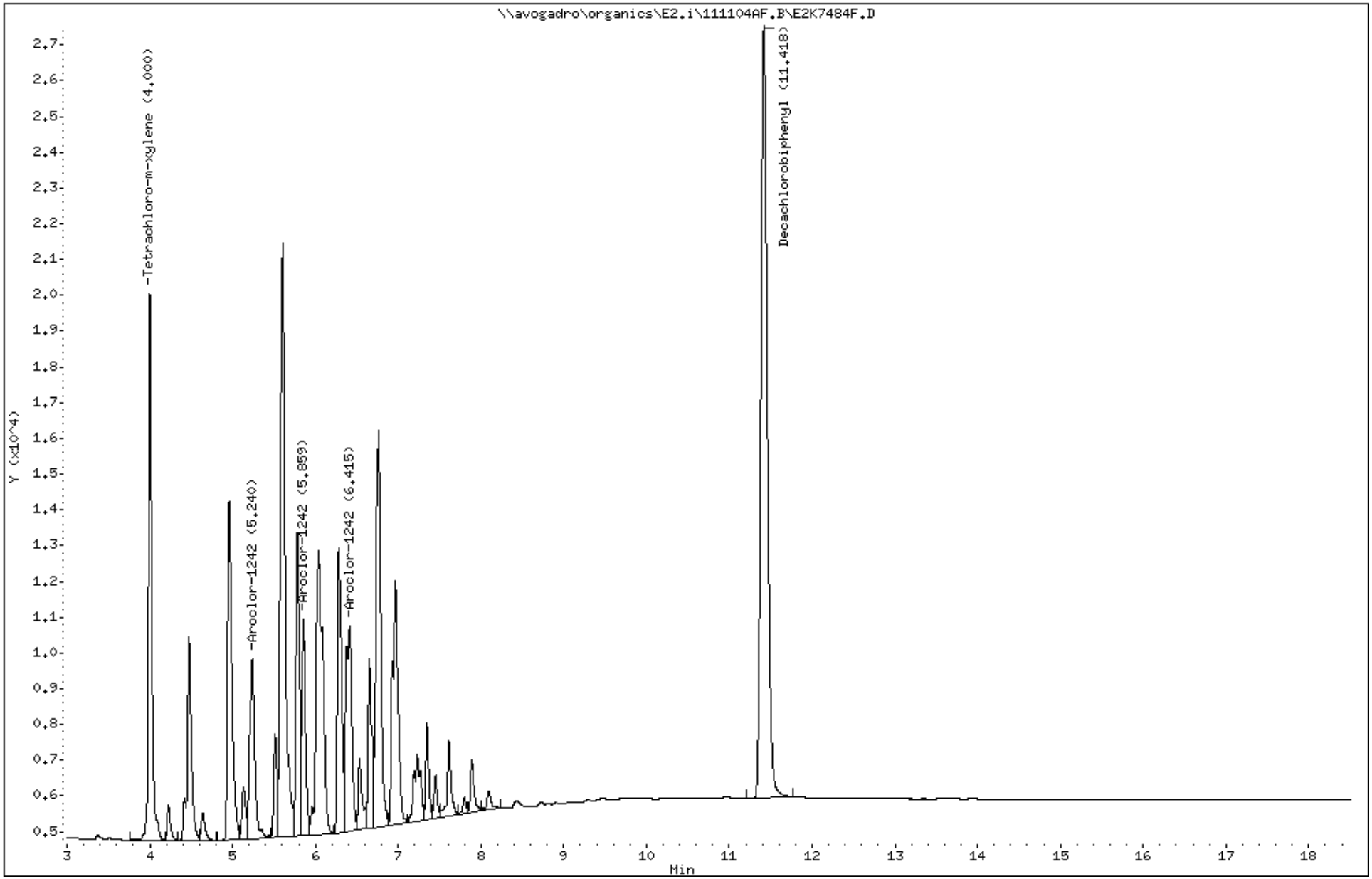
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
3.999	3.999	0.000	416464	0.02000	0.020			(a)
6 Aroclor-1242					CAS #: 53469-21-9			
5.239	5.237	0.002	216929	0.40000	0.40	80.00- 120.00	100.00	(a)
5.858	5.858	0.000	170889	0.40000	0.40	62.39- 102.39	78.78	
6.414	6.412	0.002	292371	0.40000	0.40	116.75- 156.75	134.78	
Average of Peak Amounts =				0.40000				
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.418	11.417	0.001	1153664	0.04000	0.040			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7484F.D
Date : 04-NOV-2011 21:01
Client ID: AR12423J2
Instrument: E2.i
Sample Info: AR12423J2,AR12423J2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7484R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7484R.D
Lab Smp Id: AR12423J2 Client Smp ID: AR12423J2
Inj Date : 04-NOV-2011 21:01
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12423J2,AR12423J2,,ar1242.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:00 Cal File: E2K7504R.D
Als bottle: 6 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

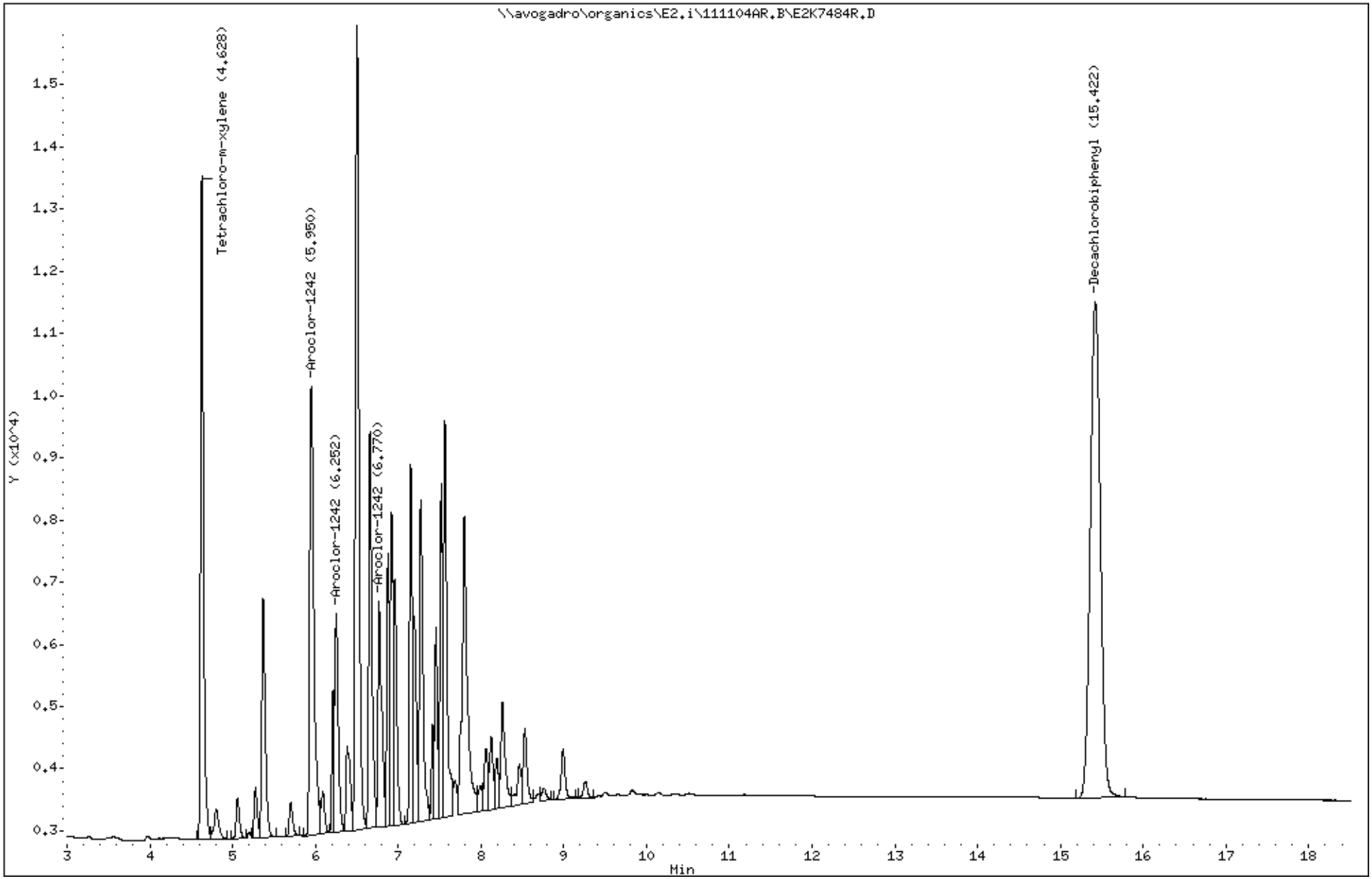
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.627	4.627	0.000	255597	0.02000	0.021			(a)
4 Aroclor-1242						CAS #: 53469-21-9		
5.950	5.948	0.002	266190	0.40000	0.38	80.00- 120.00	100.00	(a)
6.252	6.250	0.002	101740	0.40000	0.40	22.01- 62.01	38.22	
6.770	6.769	0.001	112373	0.40000	0.40	29.71- 69.71	42.22	
Average of Peak Amounts =					0.39333			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.421	15.423	-0.002	675680	0.04000	0.039			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7484R.D
Date : 04-NOV-2011 21:01
Client ID: AR12423J2
Instrument: E2.i
Sample Info: AR12423J2,AR12423J2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7485F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7485F.D
Lab Smp Id: AR12424J2 Client Smp ID: AR12424J2
Inj Date : 04-NOV-2011 21:22
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12424J2,AR12424J2,,ar1242.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 7 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

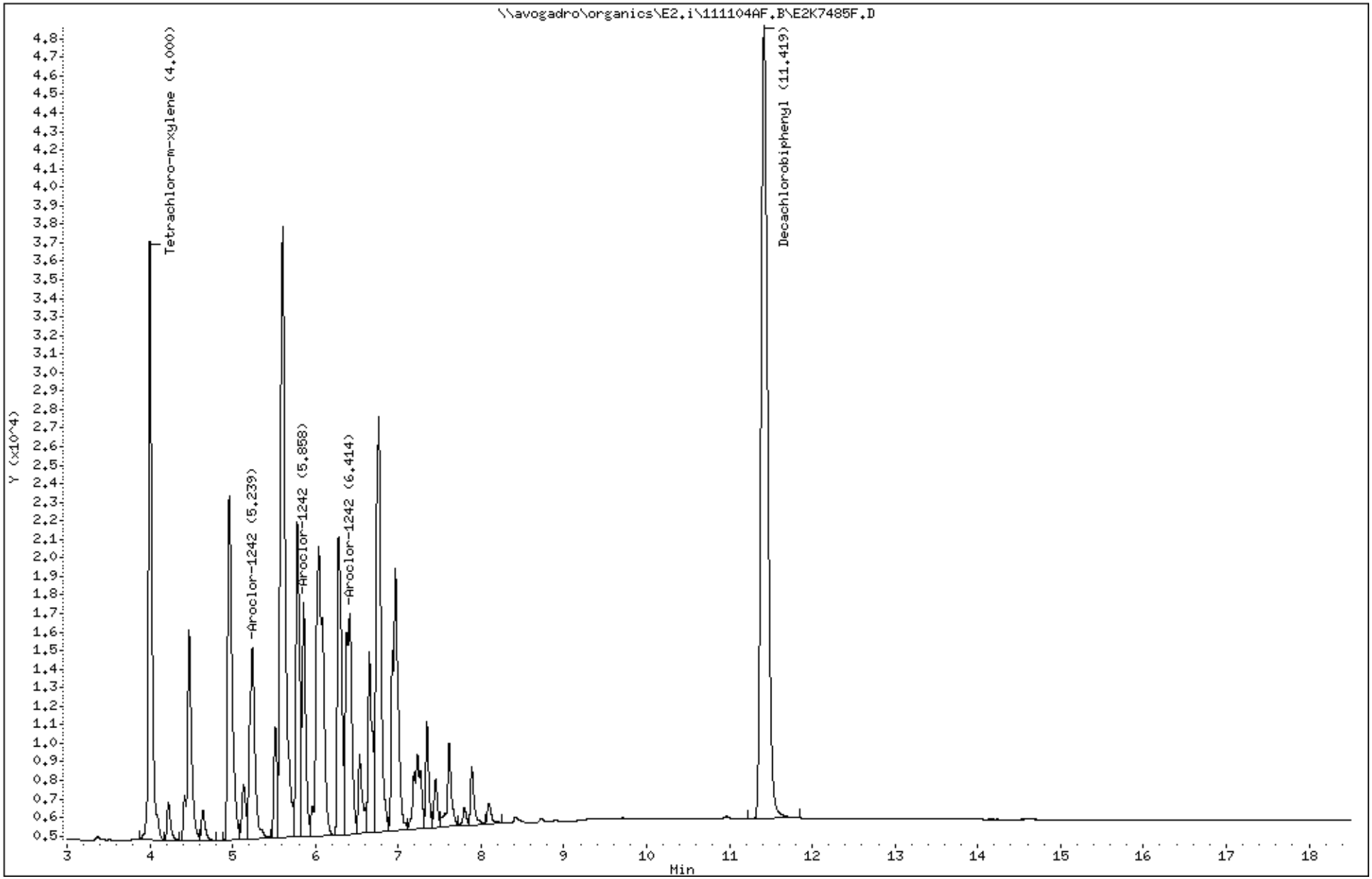
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.000	3.999	0.001	915474	0.04000	0.044			(a)
6 Aroclor-1242					CAS #: 53469-21-9			
5.239	5.237	0.002	456842	0.80000	0.84	80.00- 120.00	100.00	(a)
5.858	5.858	0.000	366747	0.80000	0.85	62.39- 102.39	80.28	
6.413	6.412	0.001	617517	0.80000	0.84	116.75- 156.75	135.17	
Average of Peak Amounts =					0.84333			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.418	11.417	0.001	2355215	0.08000	0.082			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7485F.D
Date : 04-NOV-2011 21:22
Client ID: AR12424J2
Instrument: E2.i
Sample Info: AR12424J2,AR12424J2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7485R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7485R.D
Lab Smp Id: AR12424J2 Client Smp ID: AR12424J2
Inj Date : 04-NOV-2011 21:22
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12424J2,AR12424J2,,ar1242.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 04-NOV-2011 21:22 Cal File: E2K7485R.D
Als bottle: 7 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

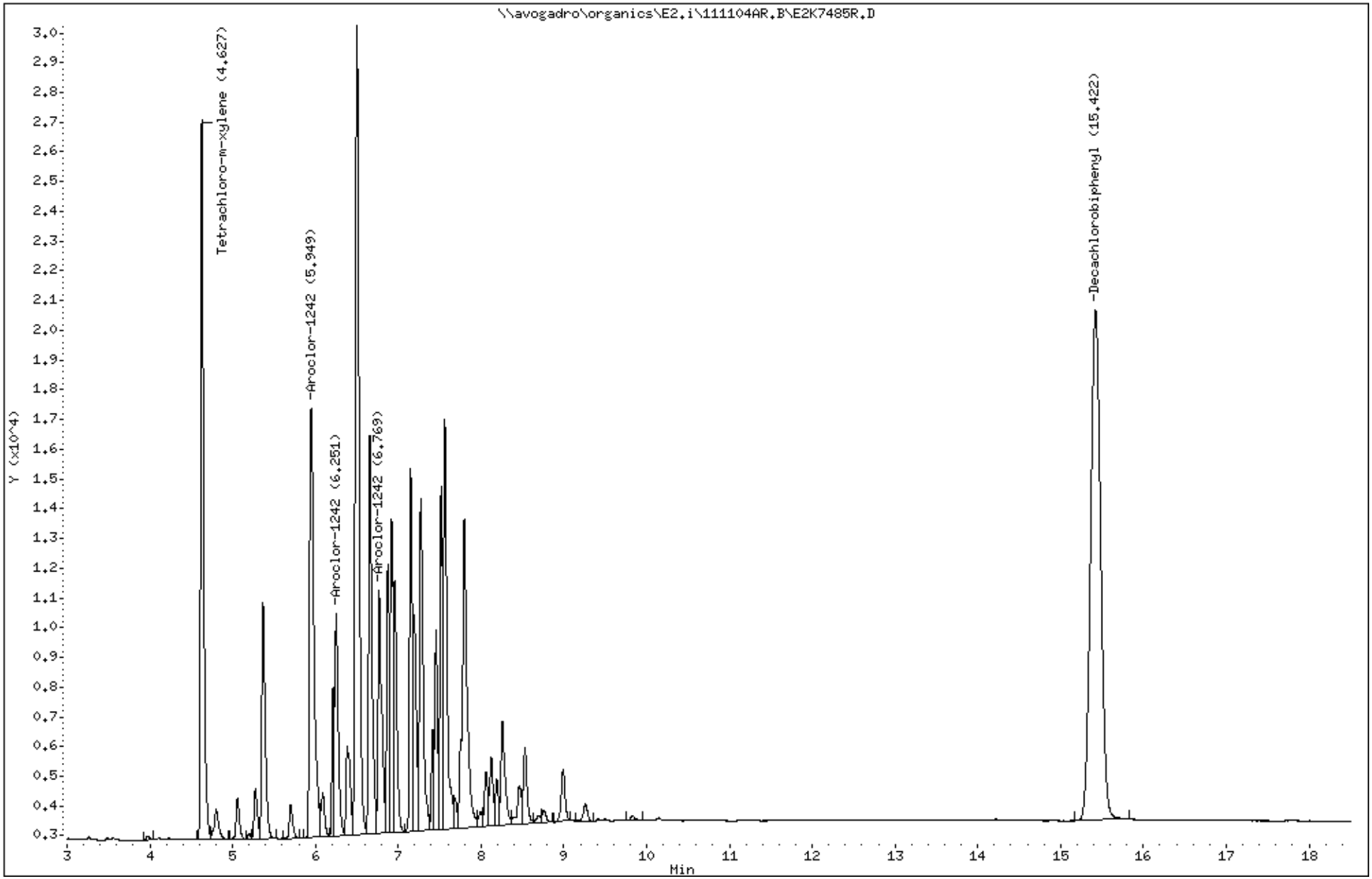
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.627	4.627	0.000	597554	0.04000	0.047			(a)
4 Aroclor-1242					CAS #: 53469-21-9			
5.949	5.948	0.001	543604	0.80000	0.79	80.00- 120.00	100.00	(a)
6.250	6.250	0.000	218350	0.80000	0.84	22.01- 62.01	40.17	
6.769	6.769	0.000	249481	0.80000	0.86	29.71- 69.71	45.89	
Average of Peak Amounts =					0.83000			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.422	15.423	-0.001	1458586	0.08000	0.083			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7485R.D
Date : 04-NOV-2011 21:22
Client ID: AR12424J2
Instrument: E2.i
Sample Info: AR12424J2,AR12424J2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7486F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

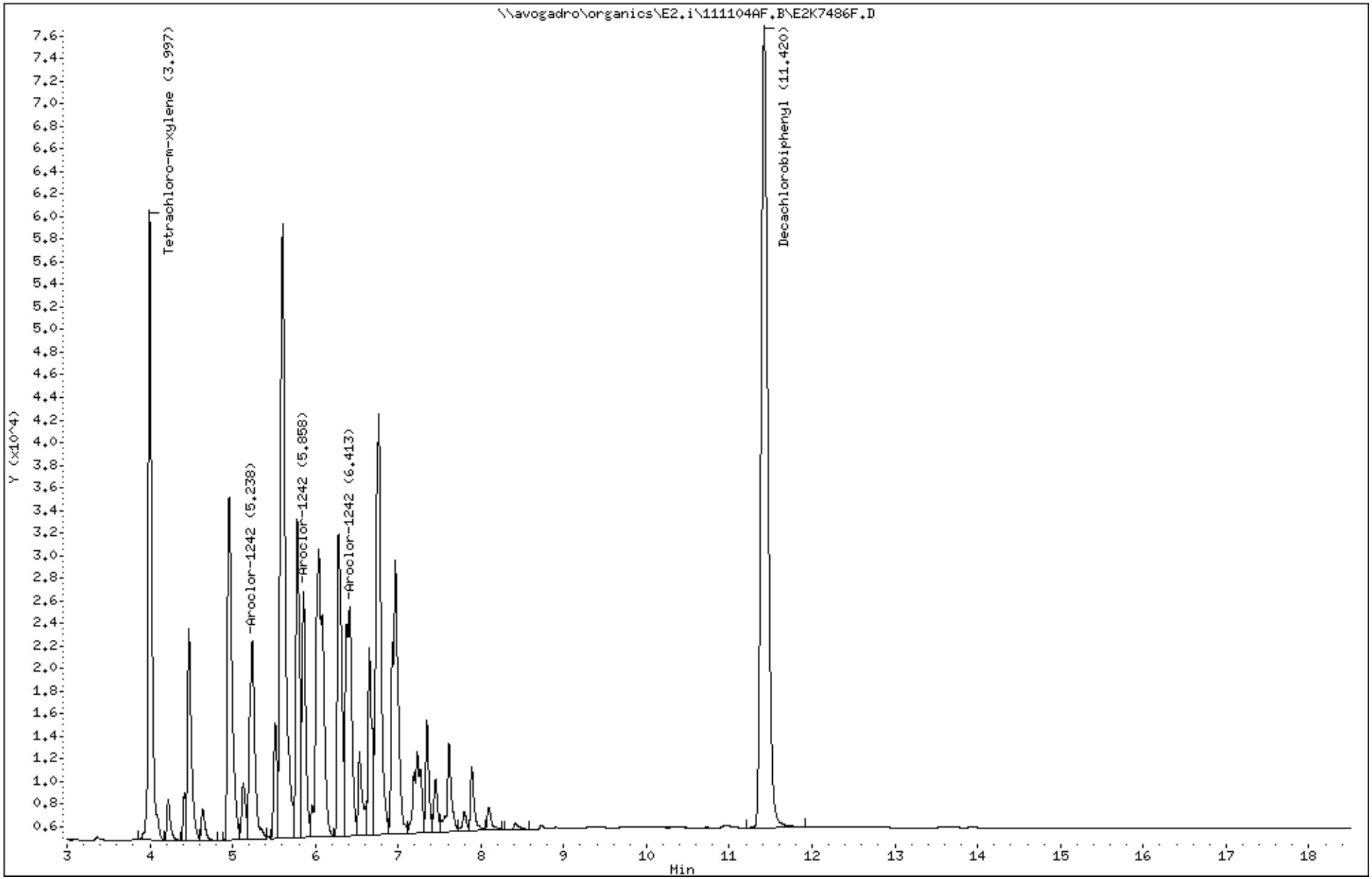
Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7486F.D
Lab Smp Id: AR12425J2 Client Smp ID: AR12425J2
Inj Date : 04-NOV-2011 21:43
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12425J2,AR12425J2,,ar1242.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 8 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
3.997	3.999	-0.002	1619653	0.08000	0.078			
6 Aroclor-1242						CAS #: 53469-21-9		
5.237	5.237	0.000	780090	1.60000	1.4	80.00- 120.00		100.00
5.858	5.858	0.000	642692	1.60000	1.5	62.39- 102.39		82.39
6.412	6.412	0.000	1066746	1.60000	1.4	116.75- 156.75		136.75
Average of Peak Amounts =					1.43333			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.420	11.417	0.003	3965418	0.16000	0.14			

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7486F.D
Date : 04-NOV-2011 21:43
Client ID: AR12425J2
Instrument: E2.i
Sample Info: AR12425J2,AR12425J2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7486R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

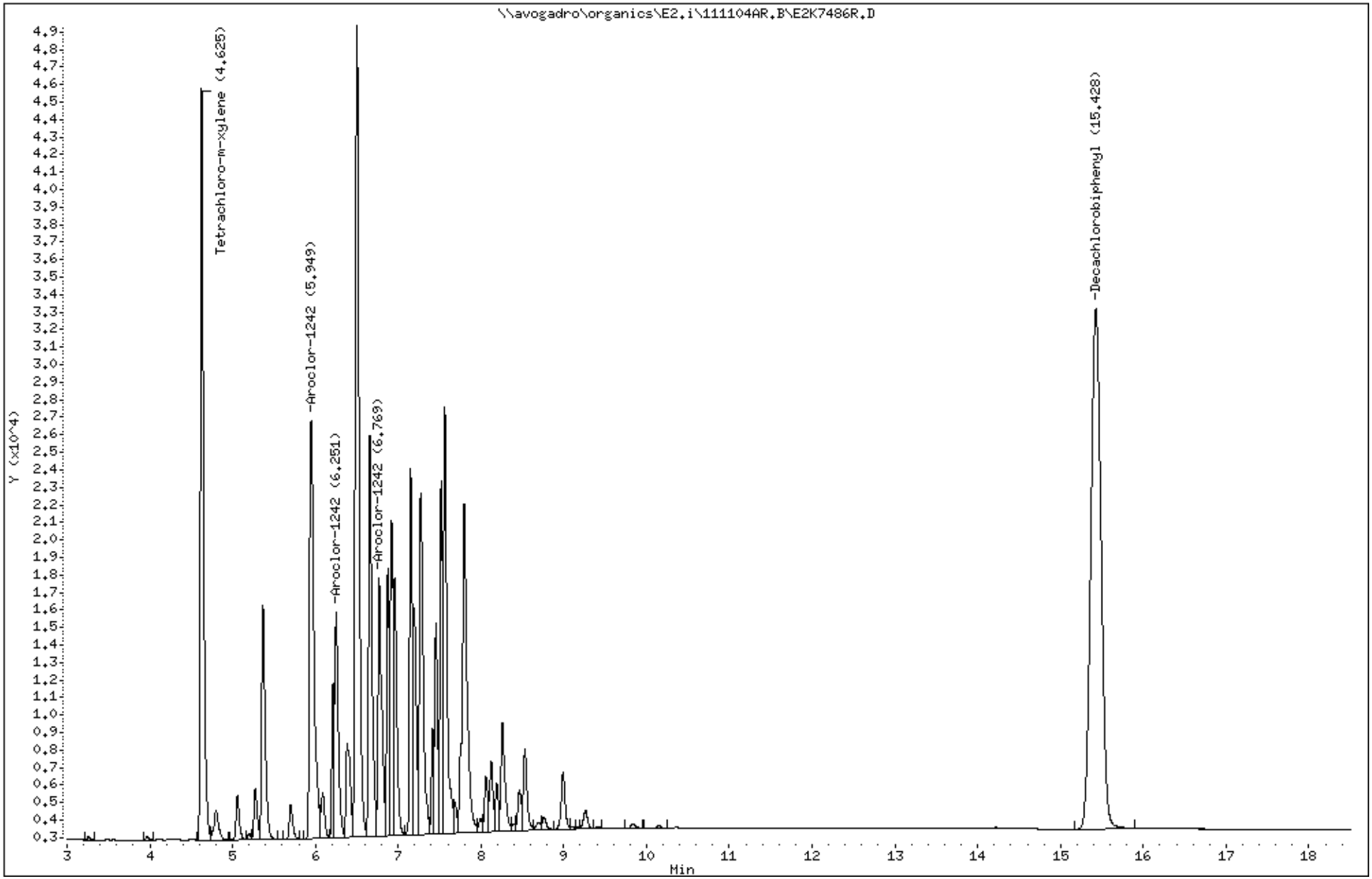
8080/8081PCB Quantitation Report
Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7486R.D
Lab Smp Id: AR12425J2 Client Smp ID: AR12425J2
Inj Date : 04-NOV-2011 21:43
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12425J2,AR12425J2,,ar1242.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 04-NOV-2011 21:43 Cal File: E2K7486R.D
Als bottle: 8 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.625	4.627	-0.002	1100411	0.08000	0.084			
4 Aroclor-1242						CAS #: 53469-21-9		
5.948	5.948	0.000	912331	1.60000	1.4	80.00- 120.00		100.00
6.250	6.250	0.000	383275	1.60000	1.5	22.01- 62.01		42.01
6.769	6.769	0.000	453551	1.60000	1.6	29.71- 69.71		49.71
		Average of Peak Amounts =			1.50000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.427	15.423	0.004	2566319	0.16000	0.15			

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7486R.D
Date : 04-NOV-2011 21:43
Client ID: AR12425J2
Instrument: E2.i
Sample Info: AR12425J2,AR12425J2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7487F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7487F.D
Lab Smp Id: AR12481J2 Client Smp ID: AR12481J2
Inj Date : 04-NOV-2011 22:04
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12481J2,AR12481J2,,ar1248.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 9 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

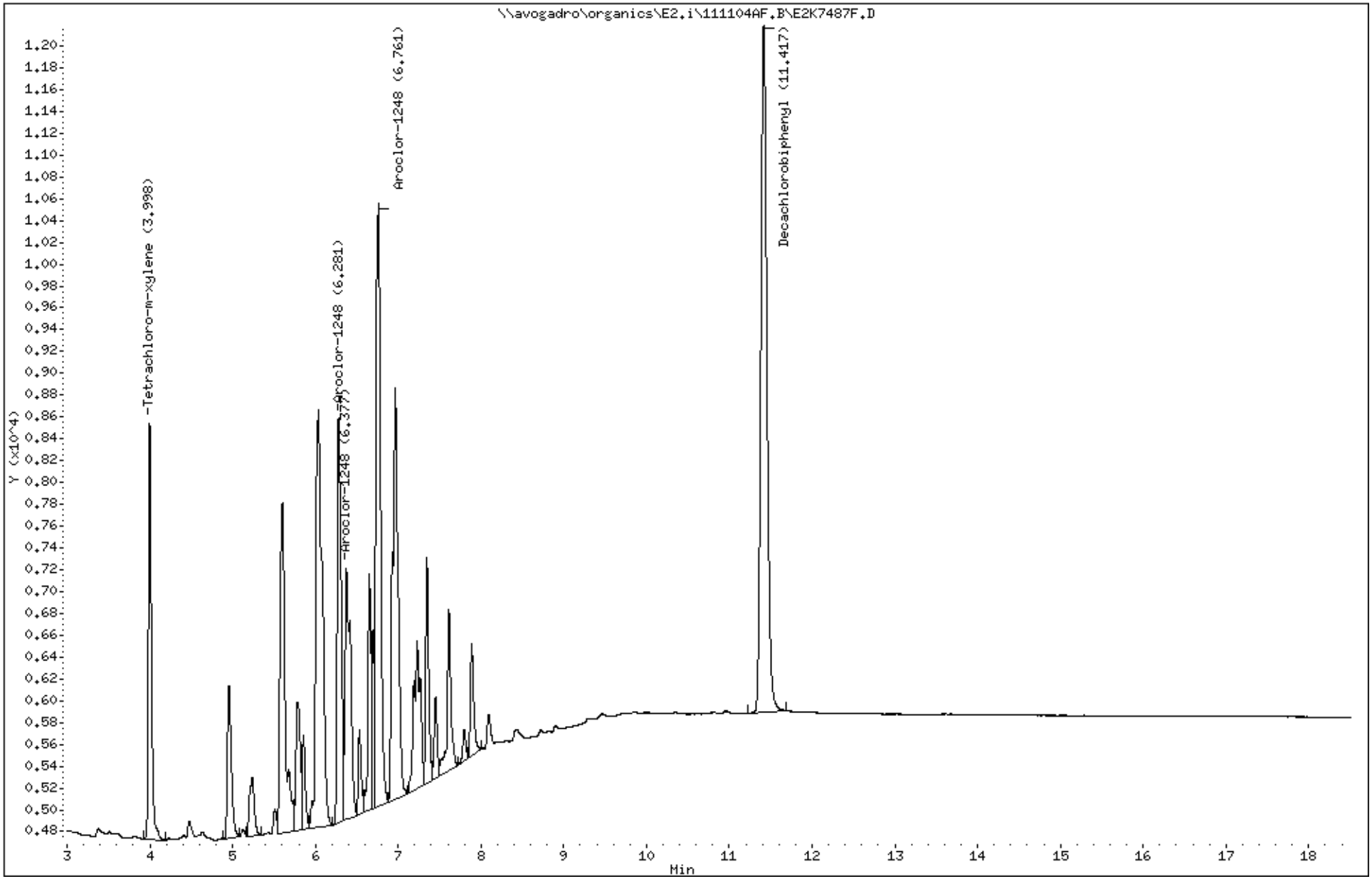
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
3.998	3.999	-0.001	95918	0.00500	0.0046			(a)
7 Aroclor-1248						CAS #: 12672-29-6		
6.280	6.280	0.000	122389	0.10000	0.11	80.00- 120.00	100.00	(a)
6.376	6.376	0.000	104863	0.10000	0.11	79.66- 119.66	85.68	
6.760	6.762	-0.002	223625	0.10000	0.11	164.53- 204.53	182.72	
Average of Peak Amounts =				0.11000				
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.416	11.417	-0.001	320773	0.01000	0.011			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7487F.D
Date : 04-NOV-2011 22:04
Client ID: AR12481J2
Instrument: E2.i
Sample Info: AR12481J2,AR12481J2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7487R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report
Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7487R.D
Lab Smp Id: AR12481J2 Client Smp ID: AR12481J2
Inj Date : 04-NOV-2011 22:04
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12481J2,AR12481J2,,ar1248.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 04-NOV-2011 22:04 Cal File: E2K7487R.D
Als bottle: 9 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

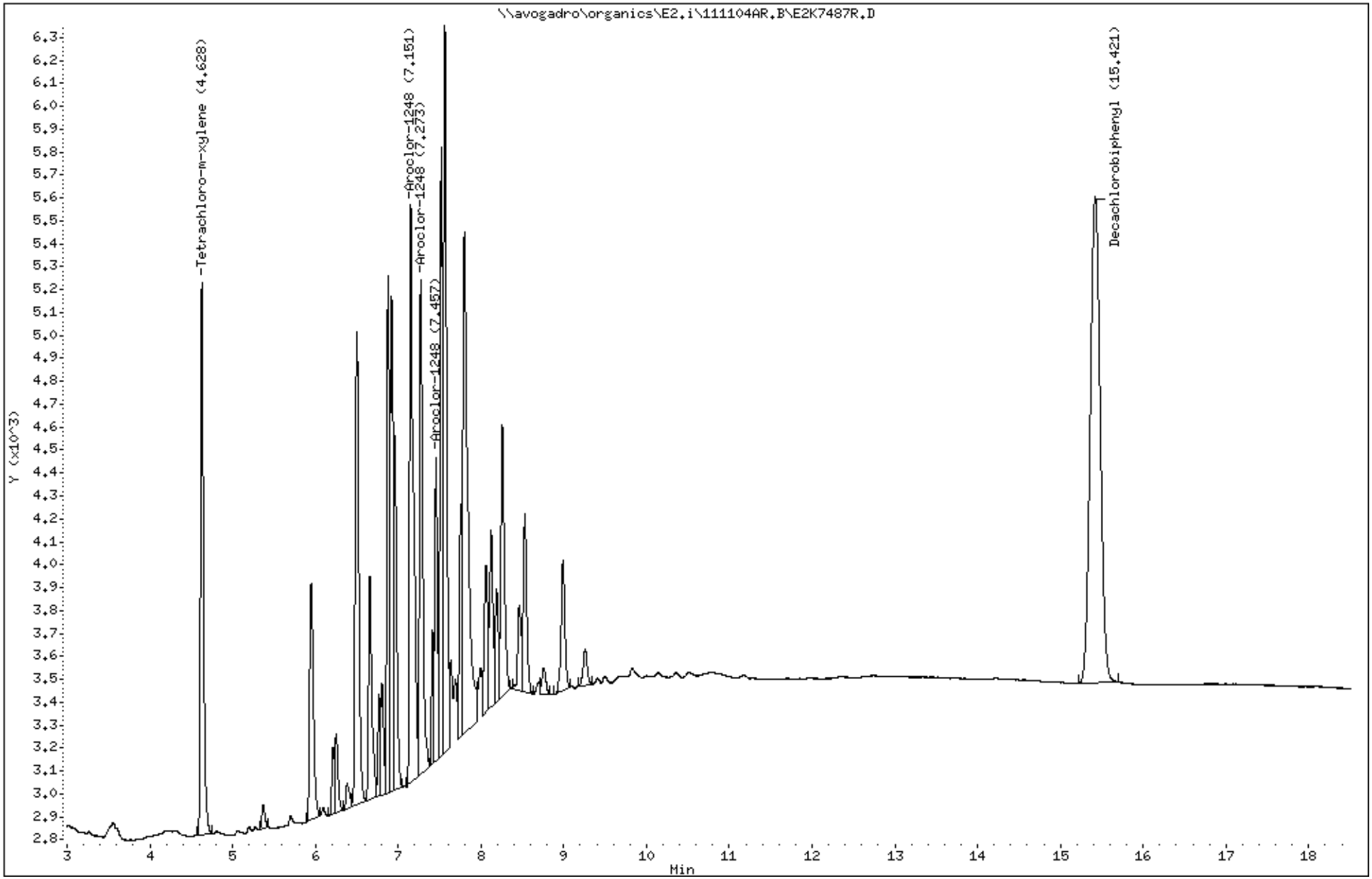
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.627	4.627	0.000	57813	0.00500	0.0044			(a)
5 Aroclor-1248						CAS #: 12672-29-6		
7.151	7.149	0.002	79924	0.10000	0.10	80.00- 120.00	100.00	(a)
7.272	7.271	0.001	59396	0.10000	0.099	62.28- 102.28	74.32	
7.457	7.455	0.002	30173	0.10000	0.10	20.69- 60.69	37.75	
Average of Peak Amounts =					0.09967			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.420	15.423	-0.003	177547	0.01000	0.010			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7487R.D
Date : 04-NOV-2011 22:04
Client ID: AR12481J2
Instrument: E2.i
Sample Info: AR12481J2,AR12481J2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7489F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7489F.D
Lab Smp Id: AR12482J2 Client Smp ID: AR12482J2
Inj Date : 04-NOV-2011 22:46
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12482J2,AR12482J2,,ar1248.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 11 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

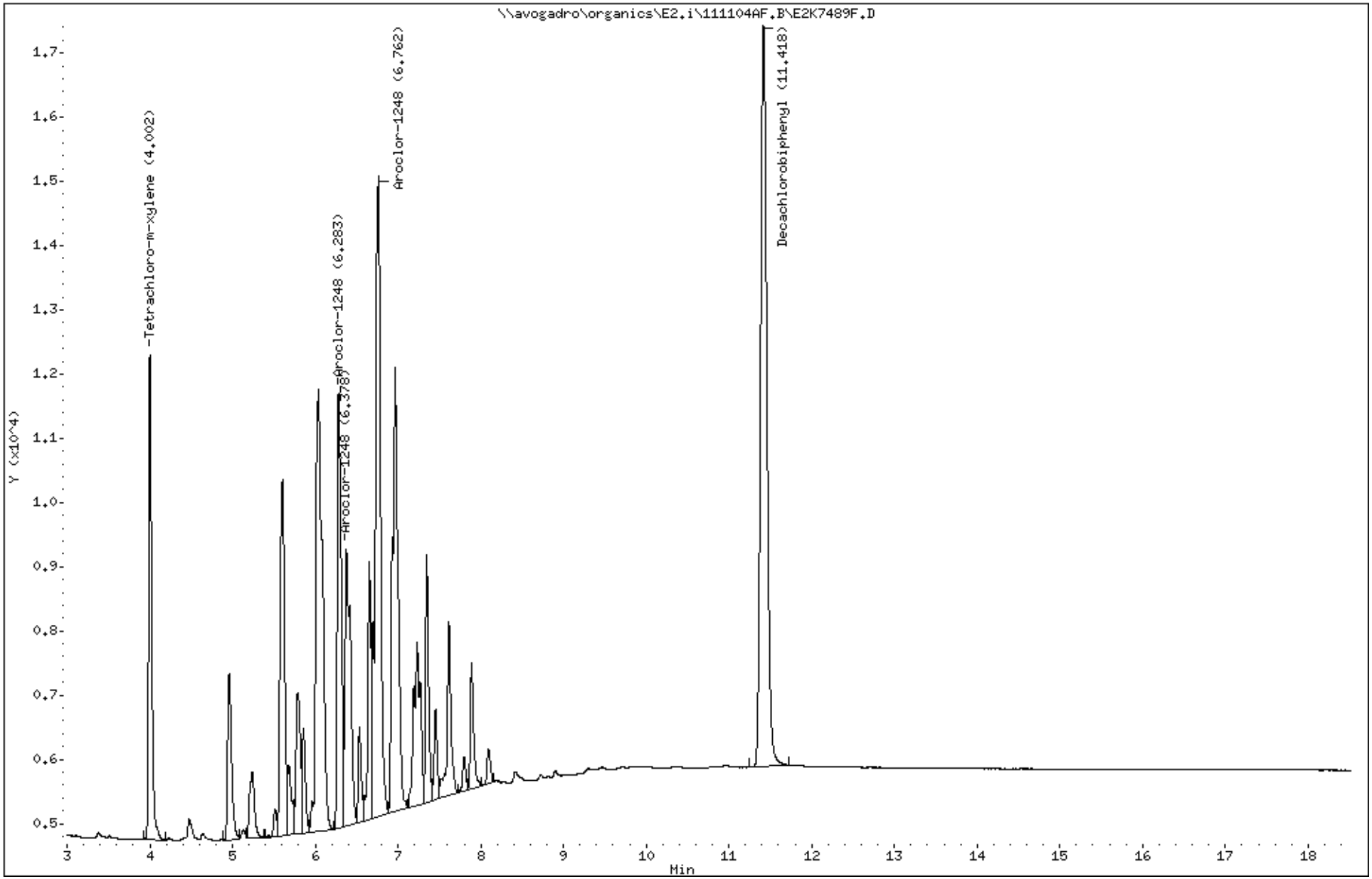
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.001	3.999	0.002	190934	0.01000	0.0092			(a)
7 Aroclor-1248						CAS #: 12672-29-6		
6.282	6.280	0.002	227267	0.20000	0.21	80.00- 120.00	100.00	(a)
6.378	6.376	0.002	199486	0.20000	0.20	79.66- 119.66	87.78	
6.761	6.762	-0.001	464536	0.20000	0.22	164.53- 204.53	204.40	
Average of Peak Amounts =					0.21000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.418	11.417	0.001	600896	0.02000	0.021			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7489F.D
Date : 04-NOV-2011 22:46
Client ID: AR12482J2
Instrument: E2.i
Sample Info: AR12482J2,AR12482J2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7489R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7489R.D
Lab Smp Id: AR12482J2 Client Smp ID: AR12482J2
Inj Date : 04-NOV-2011 22:46
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12482J2,AR12482J2,,ar1248.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 04-NOV-2011 22:46 Cal File: E2K7489R.D
Als bottle: 11 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

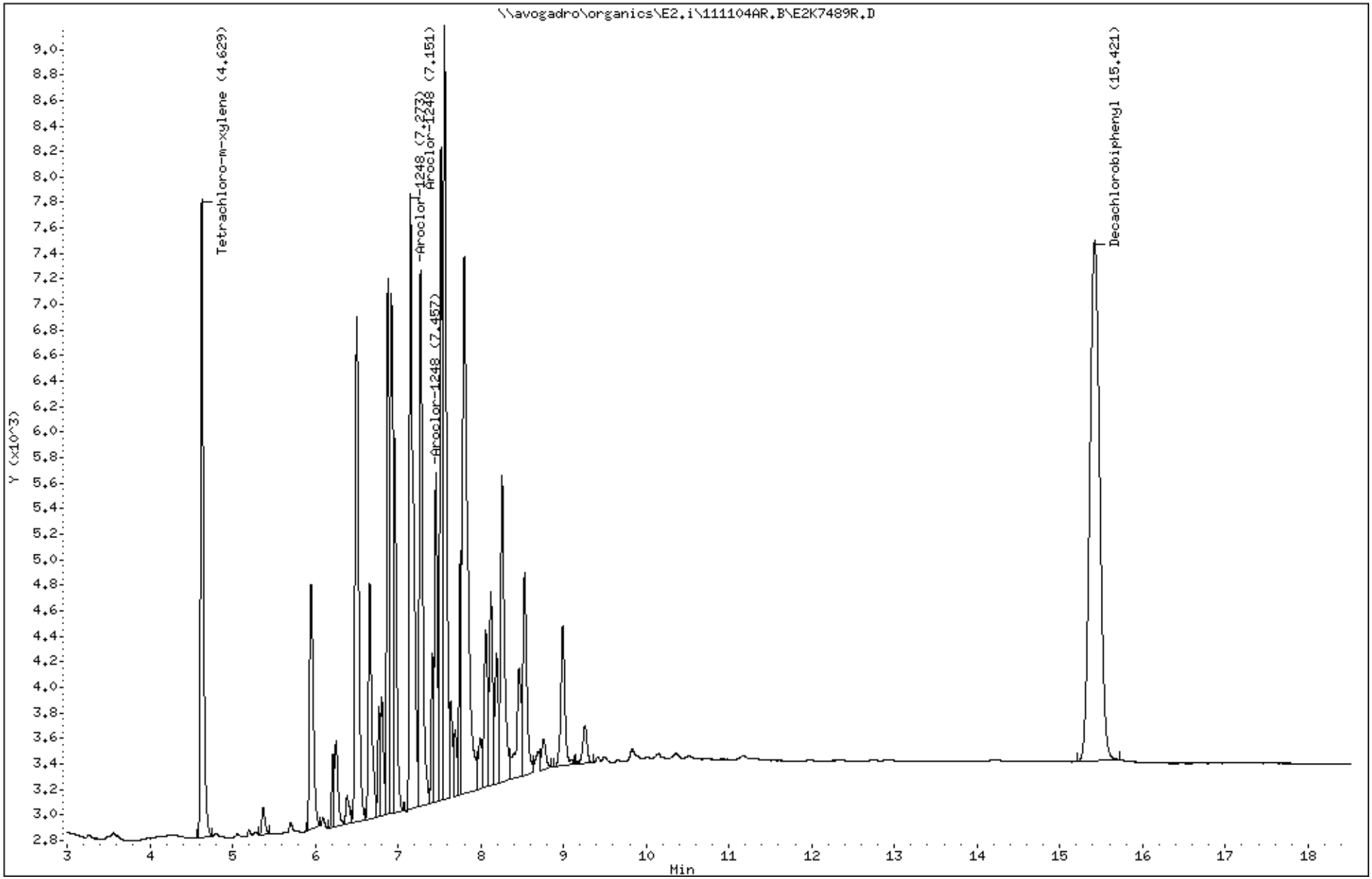
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT	AMOUNTS ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.628	4.627	0.001	118224	0.01000	0.0091			(a)
5 Aroclor-1248						CAS #: 12672-29-6		
7.151	7.149	0.002	154885	0.20000	0.20	80.00- 120.00	100.00	(a)
7.272	7.271	0.001	118905	0.20000	0.20	62.28- 102.28	76.77	
7.457	7.455	0.002	59455	0.20000	0.20	20.69- 60.69	38.39	
Average of Peak Amounts =				0.20000				
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.421	15.423	-0.002	339380	0.02000	0.020			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7489R.D
Date : 04-NOV-2011 22:46
Client ID: AR12482J2
Instrument: E2.i
Sample Info: AR12482J2,AR12482J2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7490F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7490F.D
Lab Smp Id: AR12483J2 Client Smp ID: AR12483J2
Inj Date : 04-NOV-2011 23:07
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12483J2,AR12483J2,,ar1248.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 12 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

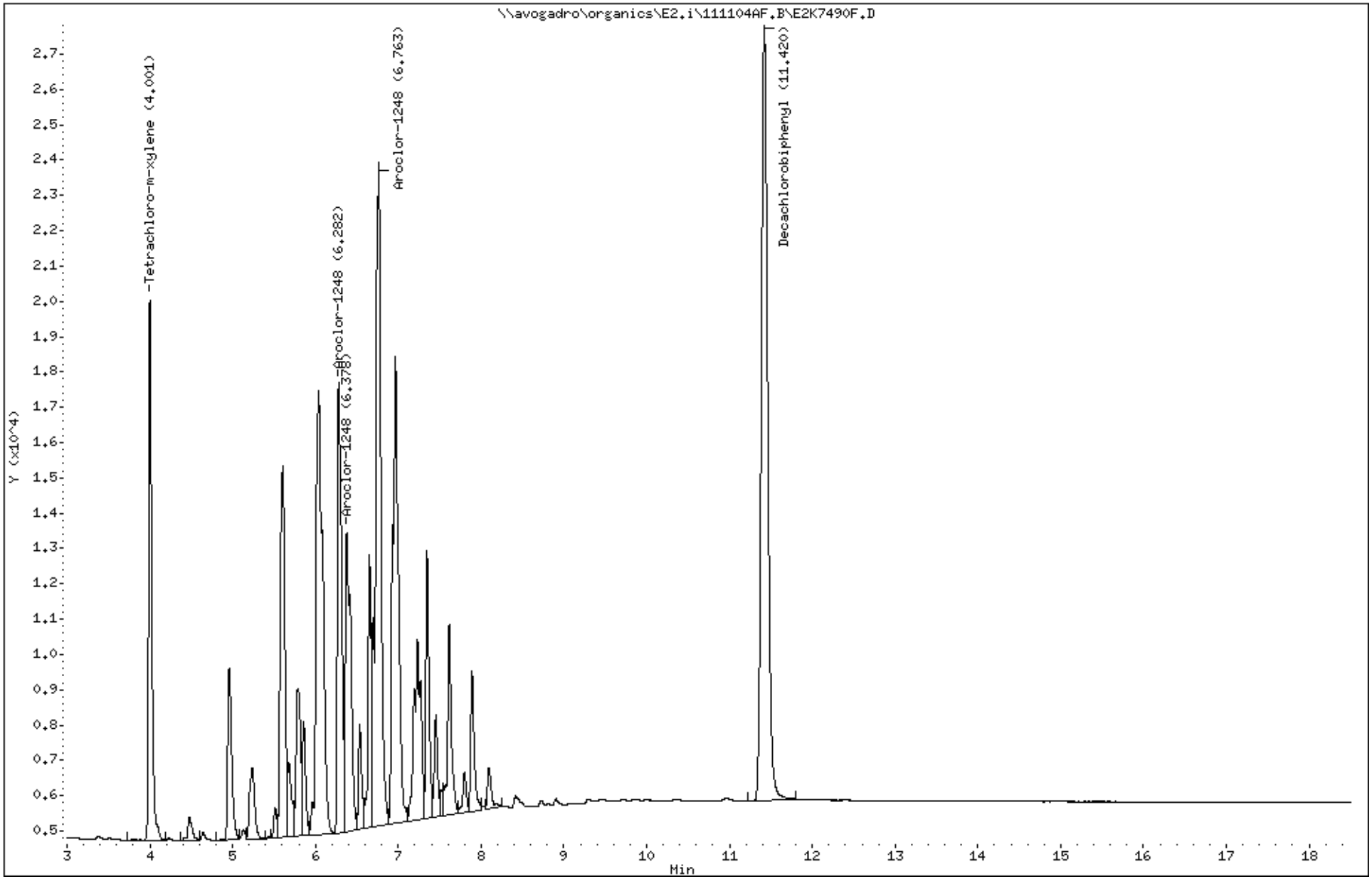
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.001	3.999	0.002	394001	0.02000	0.019			(a)
7 Aroclor-1248					CAS #: 12672-29-6			
6.282	6.280	0.002	432274	0.40000	0.40	80.00- 120.00	100.00	(a)
6.377	6.376	0.001	395189	0.40000	0.40	79.66- 119.66	91.42	
6.762	6.762	0.000	896313	0.40000	0.43	164.53- 204.53	207.35	
Average of Peak Amounts =					0.41000			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.420	11.417	0.003	1175181	0.04000	0.041			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7490F.D
Date : 04-NOV-2011 23:07
Client ID: AR12483J2
Instrument: E2.i
Sample Info: AR12483J2,AR12483J2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7490R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7490R.D
Lab Smp Id: AR12483J2 Client Smp ID: AR12483J2
Inj Date : 04-NOV-2011 23:07
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12483J2,AR12483J2,,ar1248.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:00 Cal File: E2K7504R.D
Als bottle: 12 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

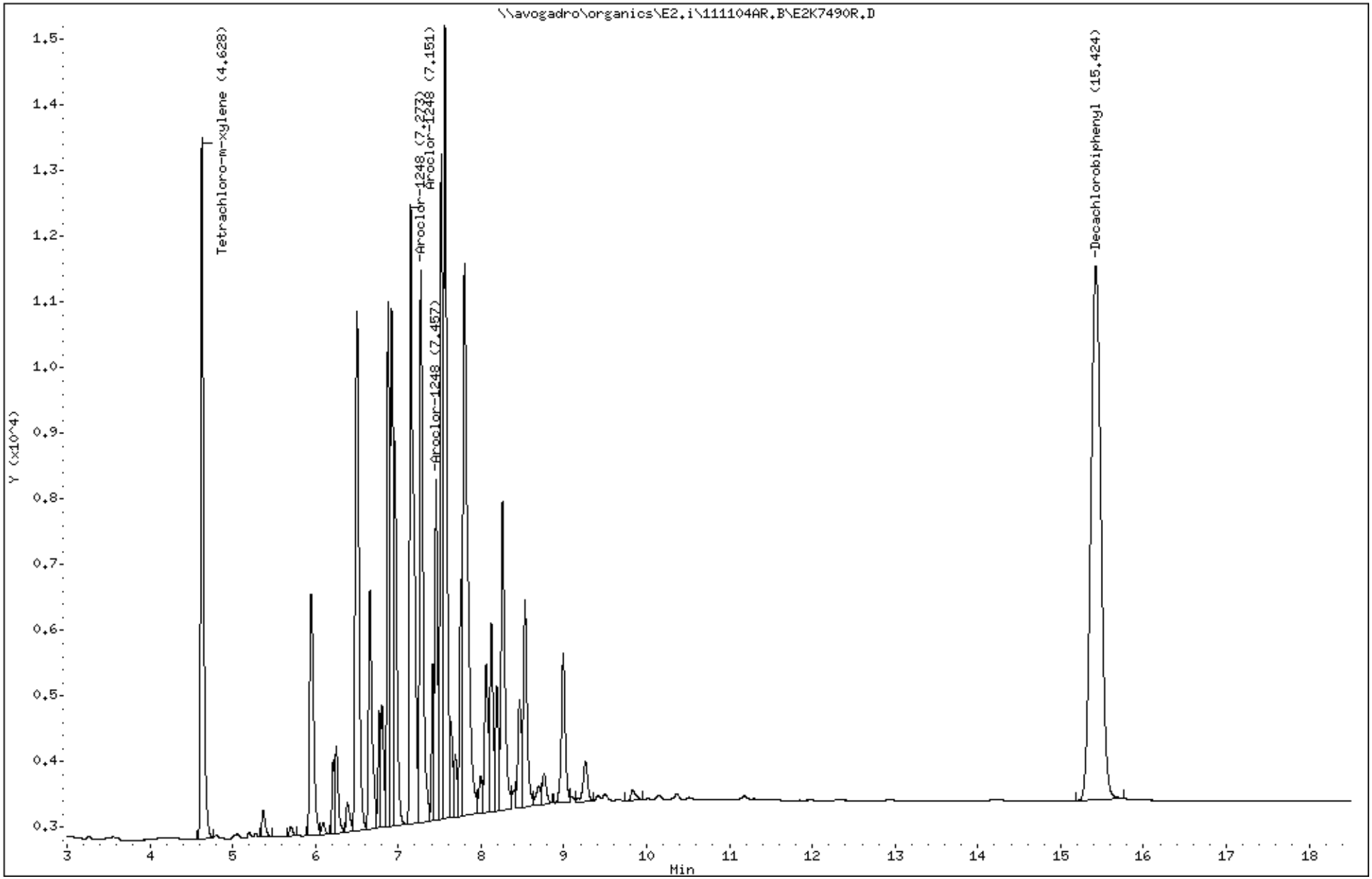
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.628	4.627	0.001	252067	0.02000	0.019			(a)
5 Aroclor-1248					CAS #: 12672-29-6			
7.151	7.149	0.002	307133	0.40000	0.39	80.00- 120.00	100.00	(a)
7.272	7.271	0.001	241034	0.40000	0.40	62.28- 102.28	78.48	
7.457	7.455	0.002	119839	0.40000	0.40	20.69- 60.69	39.02	
Average of Peak Amounts =					0.39667			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.423	15.423	0.000	688747	0.04000	0.040			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7490R.D
Date : 04-NOV-2011 23:07
Client ID: AR12483J2
Instrument: E2.i
Sample Info: AR12483J2,AR12483J2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7491F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7491F.D
Lab Smp Id: AR12484J2 Client Smp ID: AR12484J2
Inj Date : 04-NOV-2011 23:28
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12484J2,AR12484J2,,ar1248.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 13 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

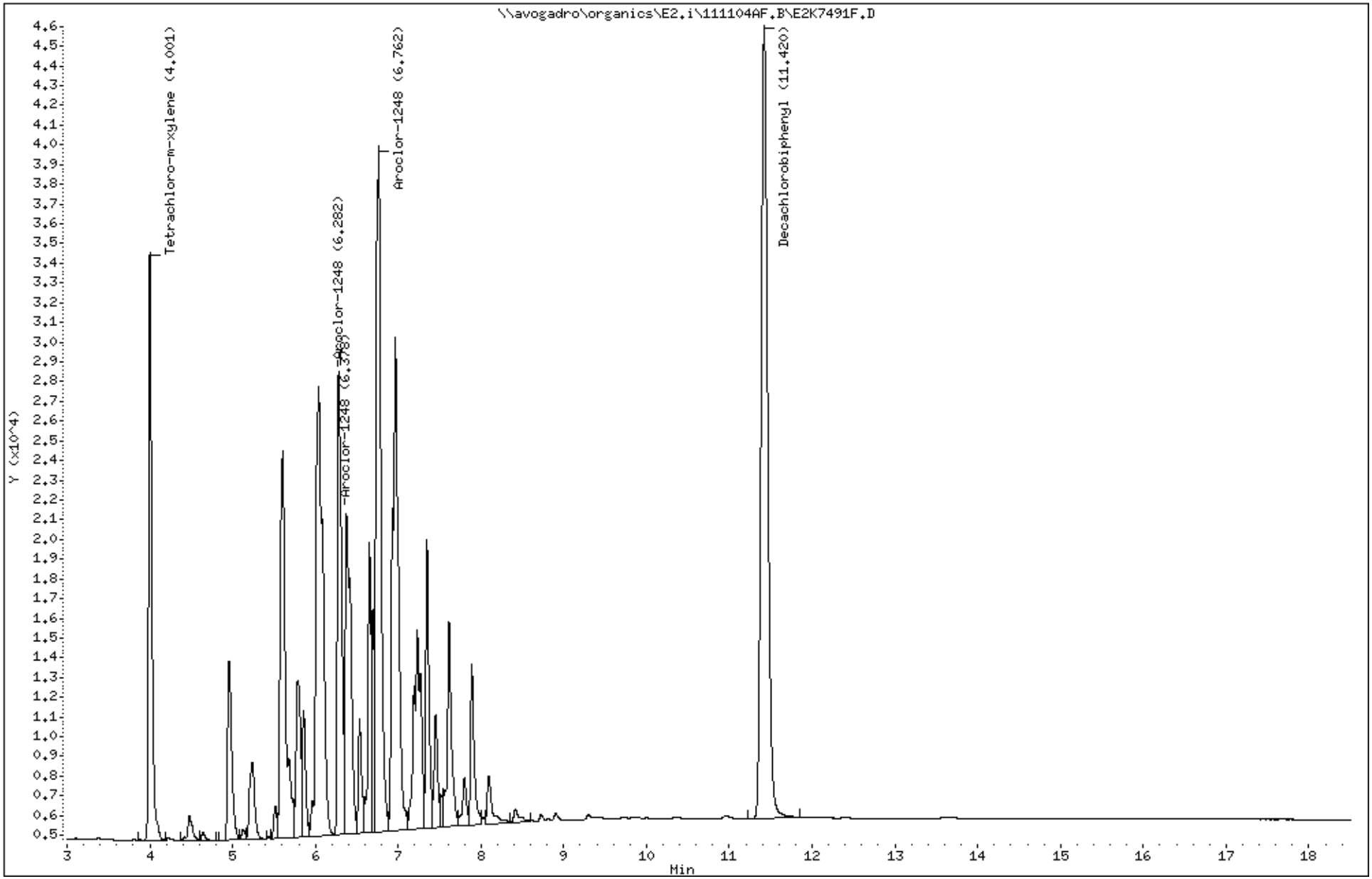
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT	AMOUNTS ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.001	3.999	0.002	796726	0.04000	0.038		(a)
7 Aroclor-1248					CAS #: 12672-29-6		
6.281	6.280	0.001	810908	0.80000	0.76	80.00- 120.00	100.00(a)
6.377	6.376	0.001	775167	0.80000	0.79	79.66- 119.66	95.59
6.762	6.762	0.000	1501097	0.80000	0.73	164.53- 204.53	185.11
Average of Peak Amounts =					0.76000		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
11.420	11.417	0.003	2210267	0.08000	0.077		

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7491F.D
Date : 04-NOV-2011 23:28
Client ID: AR12484J2
Instrument: E2.i
Sample Info: AR12484J2,AR12484J2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7491R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report
Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7491R.D
Lab Smp Id: AR12484J2 Client Smp ID: AR12484J2
Inj Date : 04-NOV-2011 23:28
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12484J2,AR12484J2,,ar1248.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 04-NOV-2011 23:28 Cal File: E2K7491R.D
Als bottle: 13 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

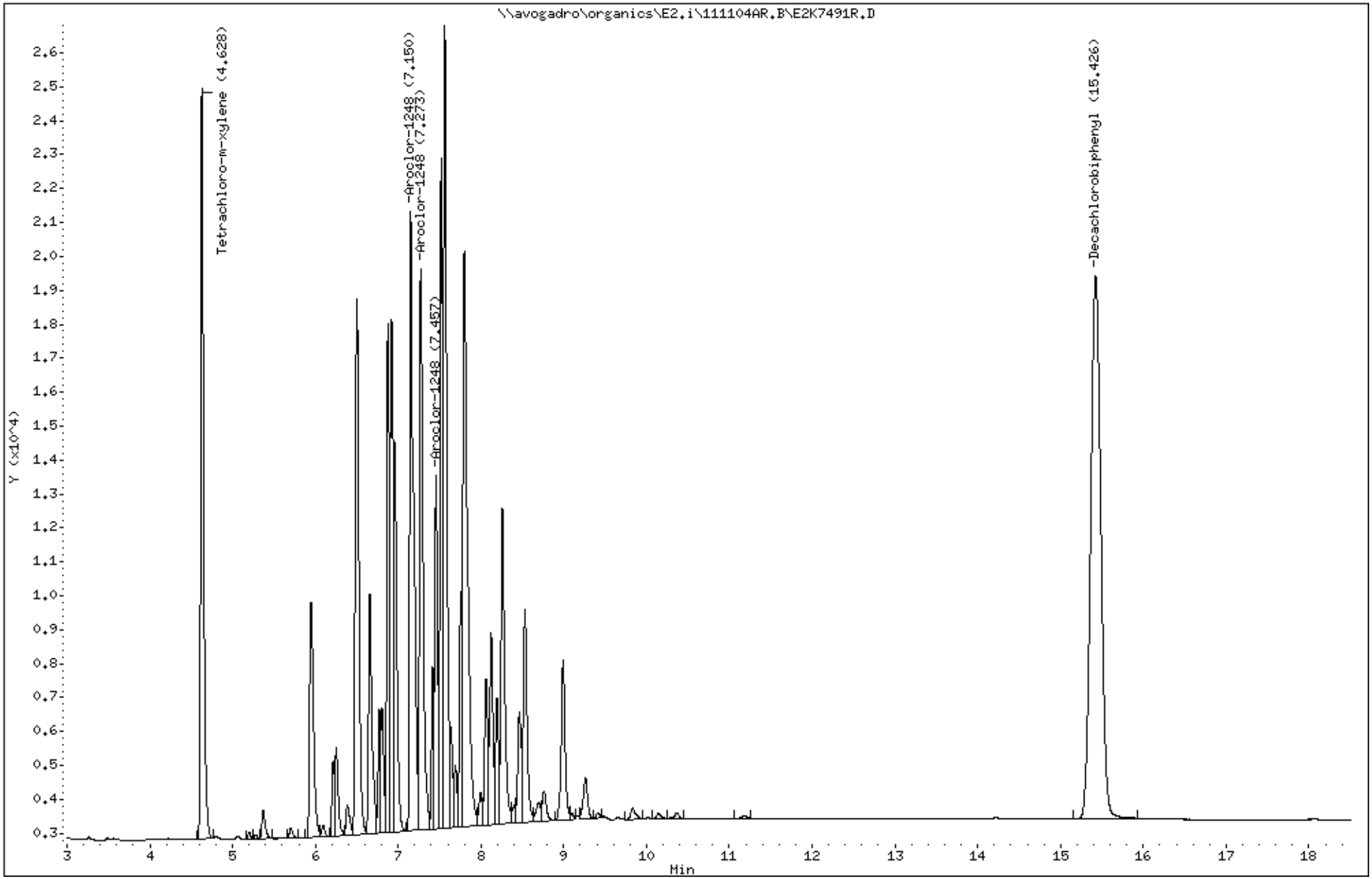
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)		
RT	EXP RT	DLT RT	RESPONSE			TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.627	4.627	0.000	536251	0.04000	0.042		(a)
5 Aroclor-1248					CAS #: 12672-29-6		
7.150	7.149	0.001	606282	0.80000	0.78	80.00- 120.00	100.00(a)
7.272	7.271	0.001	486647	0.80000	0.81	62.28- 102.28	80.27
7.456	7.455	0.001	240822	0.80000	0.80	20.69- 60.69	39.72
		Average of Peak Amounts =			0.79667		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.425	15.423	0.002	1368127	0.08000	0.080		

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7491R.D
Date : 04-NOV-2011 23:28
Client ID: AR12484J2
Instrument: E2.i
Sample Info: AR12484J2,AR12484J2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7492F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

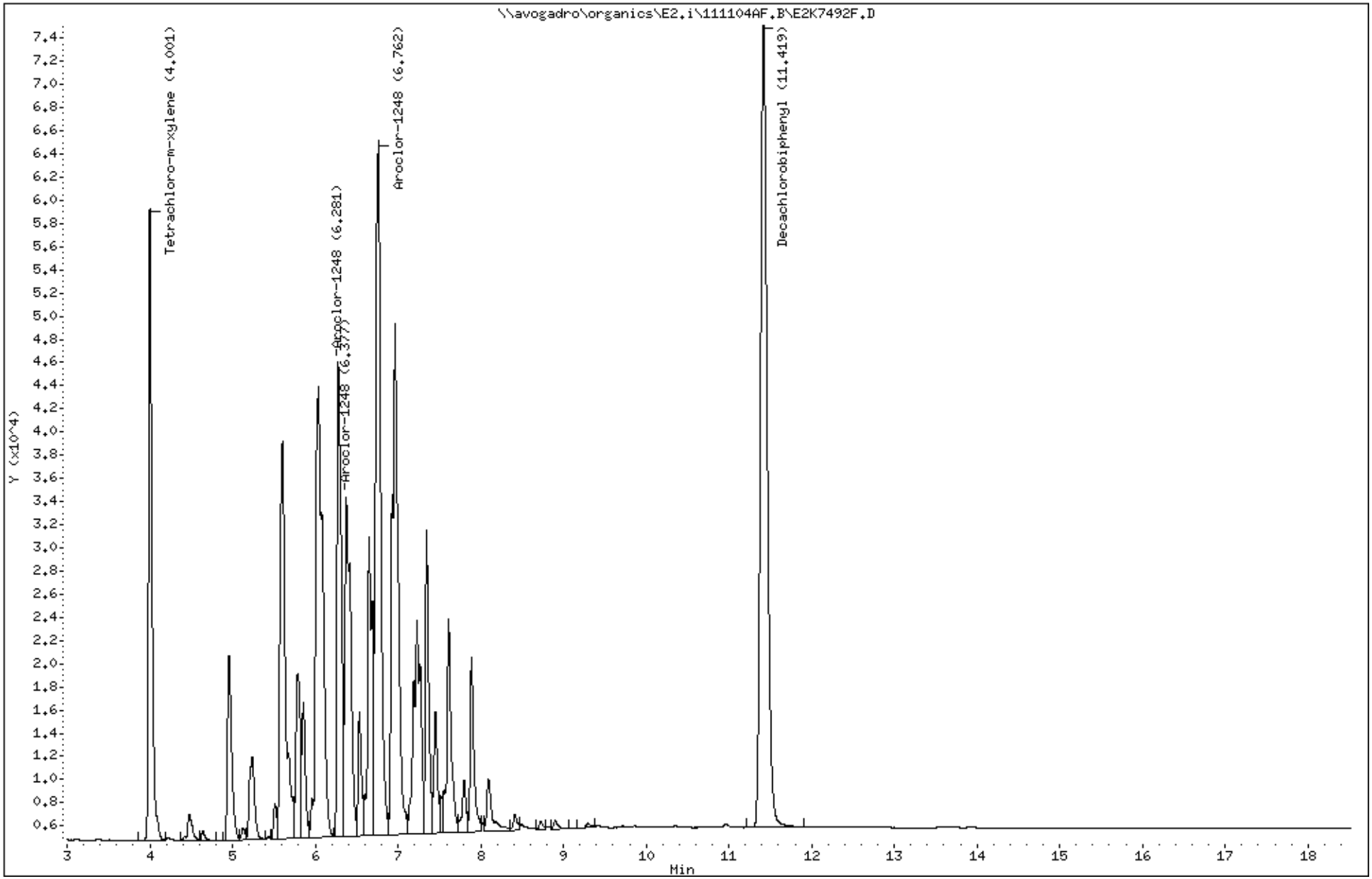
Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7492F.D
Lab Smp Id: AR12485J2 Client Smp ID: AR12485J2
Inj Date : 04-NOV-2011 23:49
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12485J2,AR12485J2,,ar1248.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 14 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.001	3.999	0.002	1512567	0.08000	0.073			
7 Aroclor-1248						CAS #: 12672-29-6		
6.280	6.280	0.000	1430710	1.60000	1.3	80.00- 120.00		100.00
6.376	6.376	0.000	1425796	1.60000	1.4	79.66- 119.66		99.66
6.762	6.762	0.000	2640030	1.60000	1.3	164.53- 204.53		184.53
Average of Peak Amounts =					1.33333			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.419	11.417	0.002	3879165	0.16000	0.14			

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7492F.D
Date : 04-NOV-2011 23:49
Client ID: AR12485J2
Instrument: E2.i
Sample Info: AR12485J2,AR12485J2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7492R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

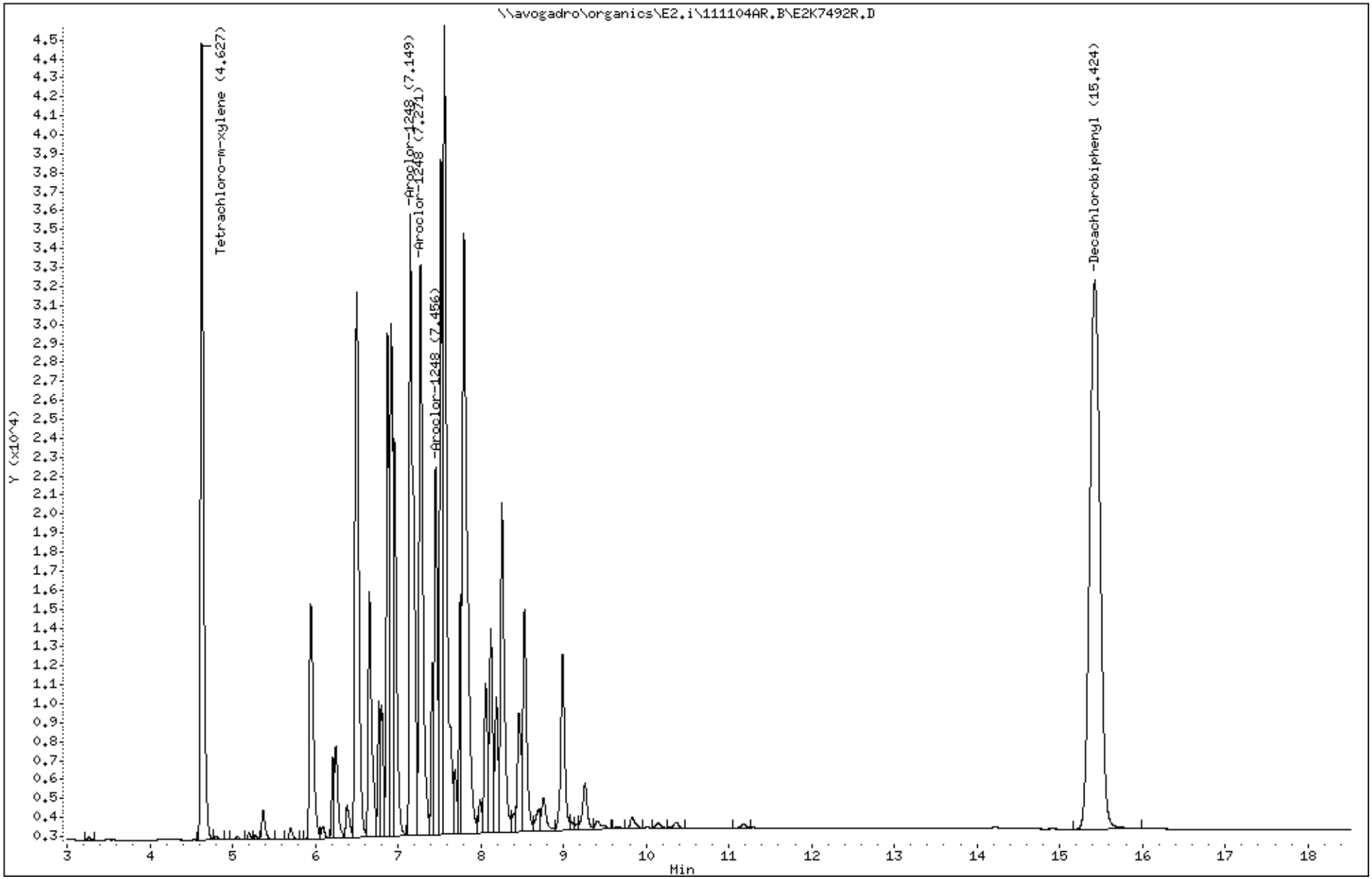
Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7492R.D
Lab Smp Id: AR12485J2 Client Smp ID: AR12485J2
Inj Date : 04-NOV-2011 23:49
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12485J2,AR12485J2,,ar1248.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 04-NOV-2011 23:49 Cal File: E2K7492R.D
Als bottle: 14 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.627	4.627	0.000	1066659	0.08000	0.085			
5 Aroclor-1248						CAS #: 12672-29-6		
7.149	7.149	0.000	1117802	1.60000	1.5	80.00- 120.00		100.00
7.271	7.271	0.000	919723	1.60000	1.5	62.28- 102.28		82.28
7.455	7.455	0.000	454843	1.60000	1.5	20.69- 60.69		40.69
Average of Peak Amounts =					1.50000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.423	15.423	0.000	2514626	0.16000	0.15			

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7492R.D
Date : 04-NOV-2011 23:49
Client ID: AR12485J2 Instrument: E2.i
Sample Info: AR12485J2,AR12485J2,,ar1248.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPestII Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7493F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7493F.D
Lab Smp Id: AR12541J2 Client Smp ID: AR12541J2
Inj Date : 05-NOV-2011 00:10
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12541J2,AR12541J2,,ar1254.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 15 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

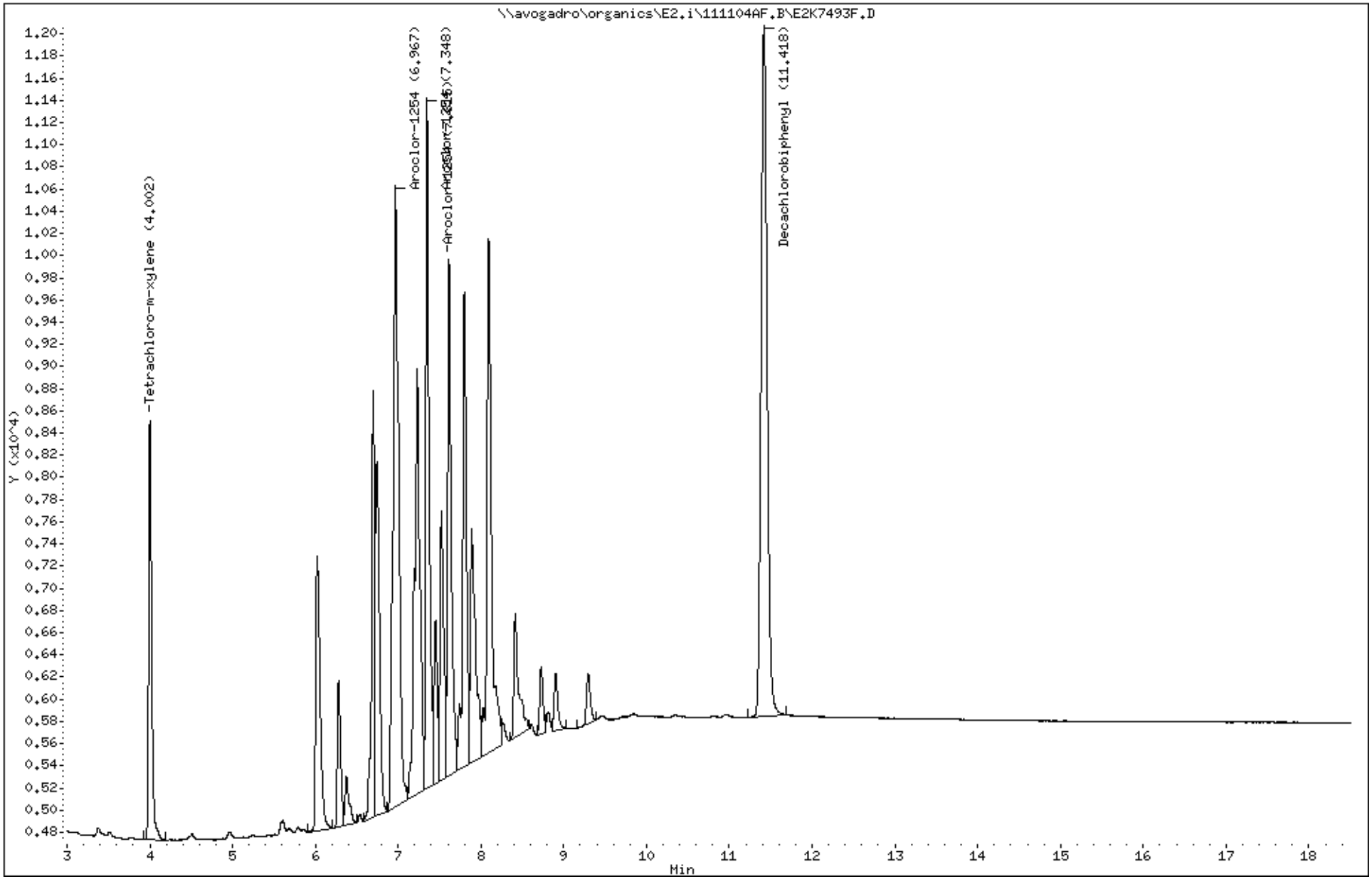
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.001	3.999	0.002	95318	0.00500	0.0046			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.417	11.417	0.000	317163	0.01000	0.011			(a)
8 Aroclor-1254						CAS #: 11097-69-1		
6.966	6.963	0.003	261120	0.10000	0.11	80.00- 120.00	100.00	(a)
7.348	7.345	0.003	174033	0.10000	0.11	53.39- 93.39	66.65	
7.615	7.612	0.003	142298	0.10000	0.11	39.96- 79.96	54.50	
Average of Peak Amounts =					0.11000			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7493F.D
Date : 05-NOV-2011 00:10
Client ID: AR12541J2
Instrument: E2.i
Sample Info: AR12541J2,AR12541J2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7493R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report
Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7493R.D
Lab Smp Id: AR12541J2 Client Smp ID: AR12541J2
Inj Date : 05-NOV-2011 00:10
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12541J2,AR12541J2,,ar1254.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 00:10 Cal File: E2K7493R.D
Als bottle: 15 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

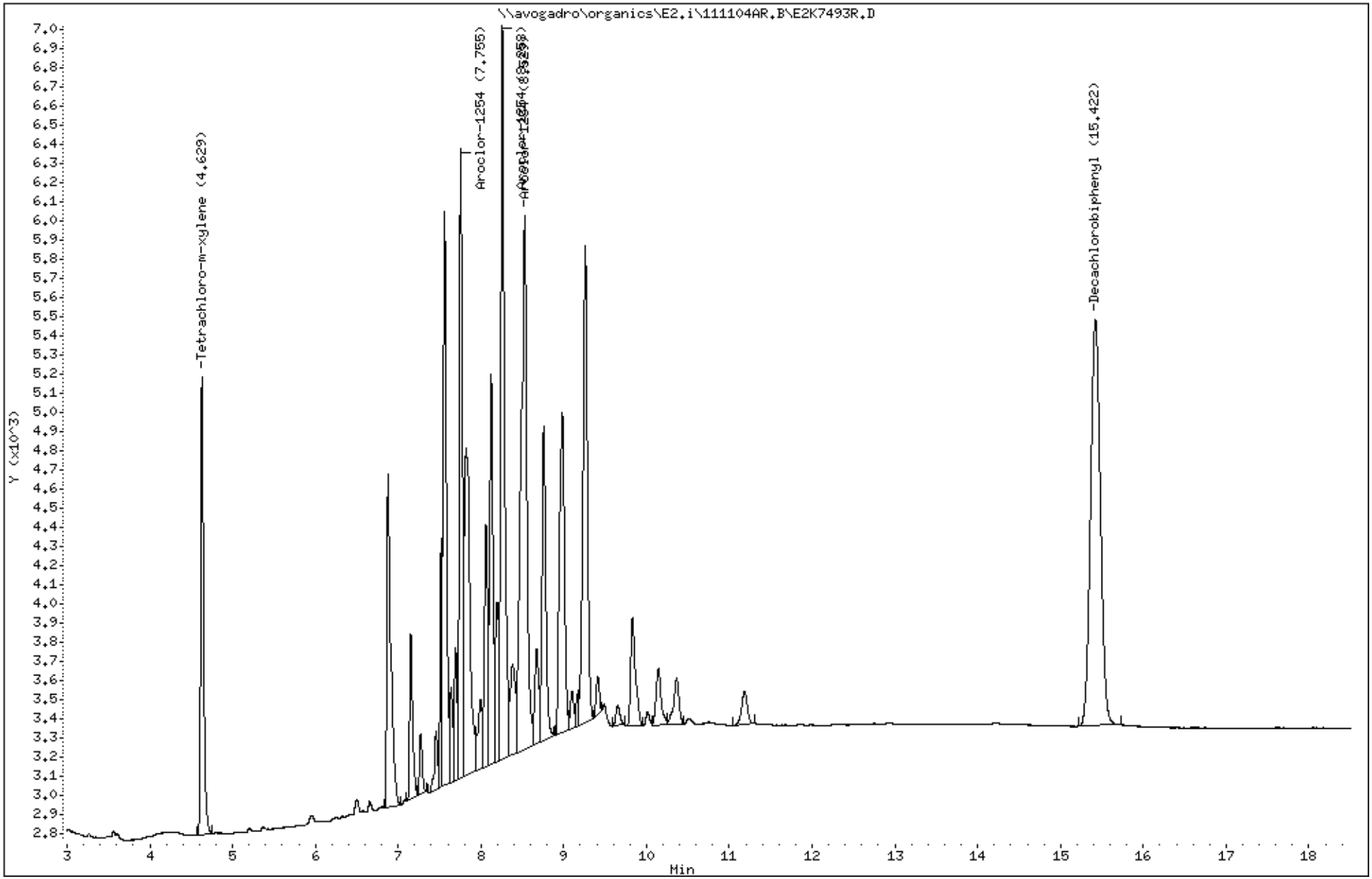
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.628	4.627	0.001	57711	0.00500	0.0046			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.422	15.423	-0.001	176170	0.01000	0.010			(a)
7 Aroclor-1254						CAS #: 11097-69-1		
7.754	7.752	0.002	85307	0.10000	0.10	80.00- 120.00	100.00	(a)
8.257	8.255	0.002	121647	0.10000	0.10	142.09- 182.09	142.60	
8.528	8.527	0.001	136834	0.10000	0.10	163.62- 203.62	160.40	
Average of Peak Amounts =				0.10000				

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7493R.D
Date : 05-NOV-2011 00:10
Client ID: AR12541J2
Instrument: E2.i
Sample Info: AR12541J2,AR12541J2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7495F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7495F.D
Lab Smp Id: AR12542J2 Client Smp ID: AR12542J2
Inj Date : 05-NOV-2011 00:52
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12542J2,AR12542J2,,ar1254.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 17 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

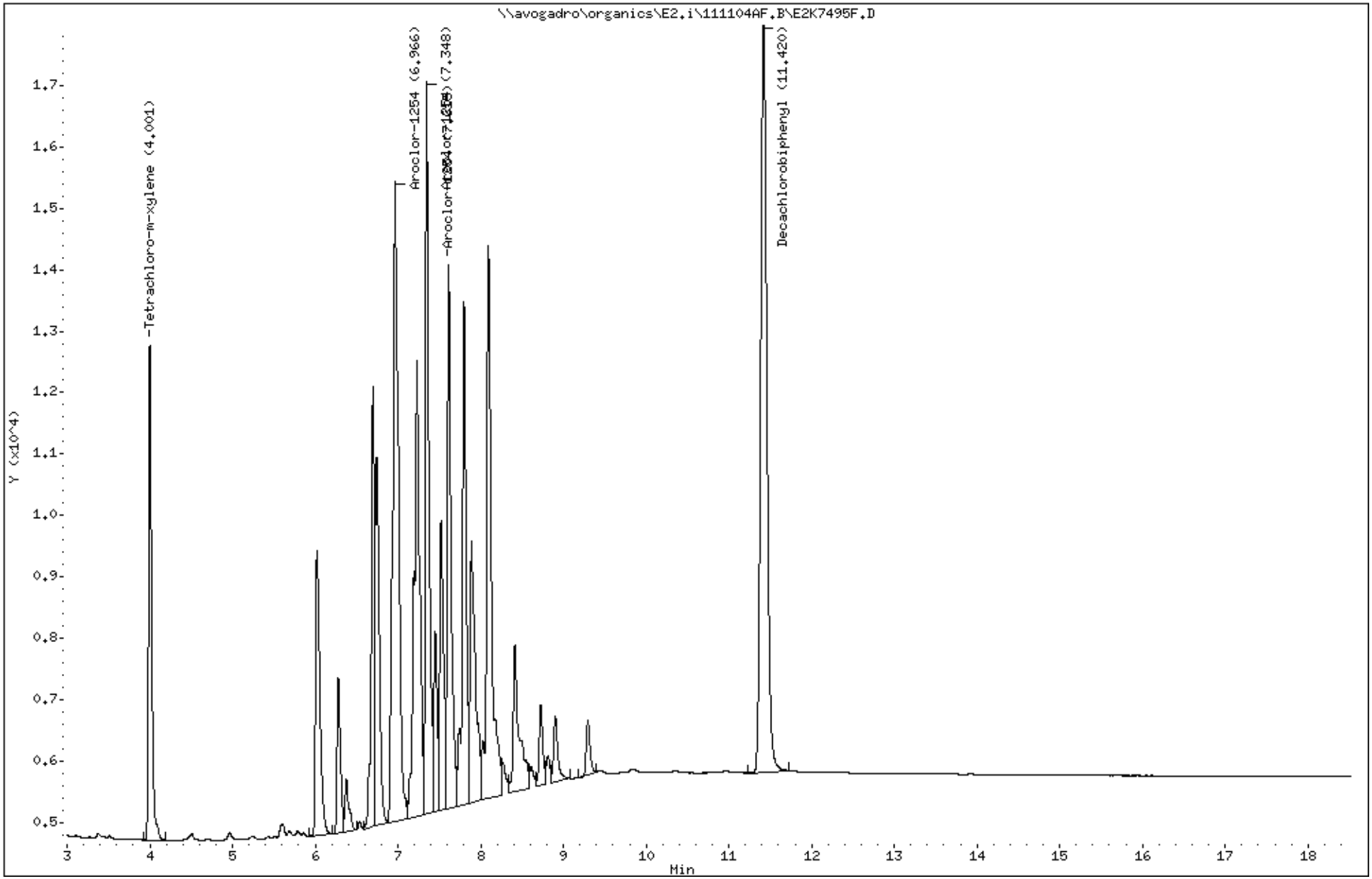
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.000	3.999	0.001	204064	0.01000	0.0098			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.419	11.417	0.002	638484	0.02000	0.022			(a)
8 Aroclor-1254						CAS #: 11097-69-1		
6.965	6.963	0.002	499635	0.20000	0.22	80.00- 120.00	100.00	(a)
7.347	7.345	0.002	341703	0.20000	0.21	53.39- 93.39	68.39	
7.614	7.612	0.002	281833	0.20000	0.22	39.96- 79.96	56.41	
Average of Peak Amounts =					0.21667			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7495F.D
Date : 05-NOV-2011 00:52
Client ID: AR12542J2
Instrument: E2.i
Sample Info: AR12542J2,AR12542J2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7495R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7495R.D
Lab Smp Id: AR12542J2 Client Smp ID: AR12542J2
Inj Date : 05-NOV-2011 00:52
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12542J2,AR12542J2,,ar1254.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 00:52 Cal File: E2K7495R.D
Als bottle: 17 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

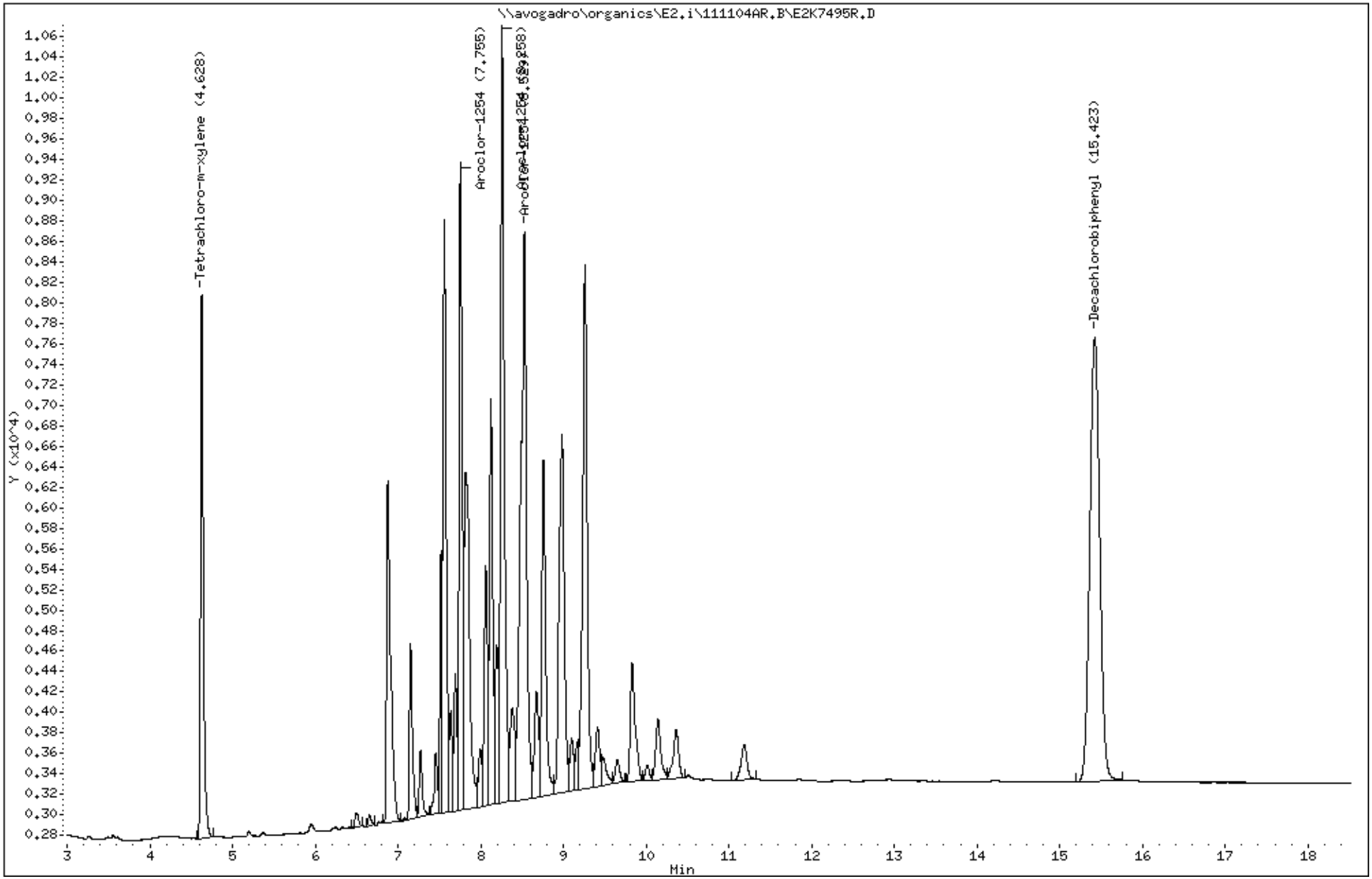
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.627	4.627	0.000	126509	0.01000	0.0100			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.423	15.423	0.000	362203	0.02000	0.021			(a)
7 Aroclor-1254						CAS #: 11097-69-1		
7.754	7.752	0.002	162846	0.20000	0.20	80.00- 120.00	100.00	(a)
8.257	8.255	0.002	236901	0.20000	0.20	142.09- 182.09	145.47	
8.529	8.527	0.002	271231	0.20000	0.20	163.62- 203.62	166.56	
Average of Peak Amounts =				0.20000				

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7495R.D
Date : 05-NOV-2011 00:52
Client ID: AR12542J2
Instrument: E2.i
Sample Info: AR12542J2,AR12542J2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7496F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7496F.D
Lab Smp Id: AR12543J2 Client Smp ID: AR12543J2
Inj Date : 05-NOV-2011 01:13
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12543J2,AR12543J2,,ar1254.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 18 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

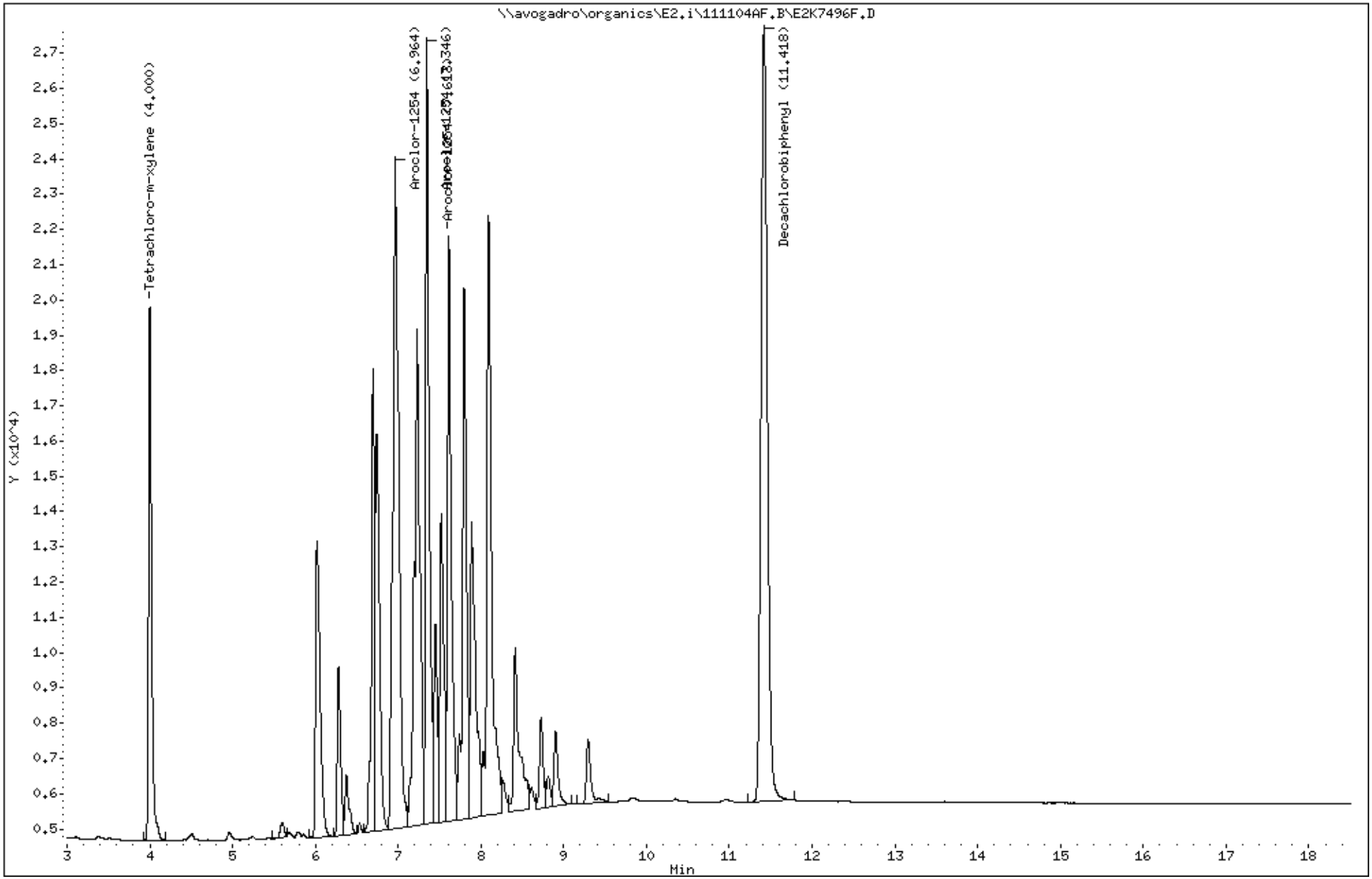
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.000	3.999	0.001	390859	0.02000	0.019			(a)
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.418	11.417	0.001	1181173	0.04000	0.041			(a)
8 Aroclor-1254					CAS #: 11097-69-1			
6.964	6.963	0.001	928403	0.40000	0.41	80.00- 120.00	100.00	(a)
7.346	7.345	0.001	652570	0.40000	0.41	53.39- 93.39	70.29	
7.613	7.612	0.001	537112	0.40000	0.41	39.96- 79.96	57.85	
Average of Peak Amounts =					0.41000			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7496F.D
Date : 05-NOV-2011 01:13
Client ID: AR12543J2
Instrument: E2.i
Sample Info: AR12543J2,AR12543J2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7496R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7496R.D
Lab Smp Id: AR12543J2 Client Smp ID: AR12543J2
Inj Date : 05-NOV-2011 01:13
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12543J2,AR12543J2,,ar1254.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:00 Cal File: E2K7504R.D
Als bottle: 18 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

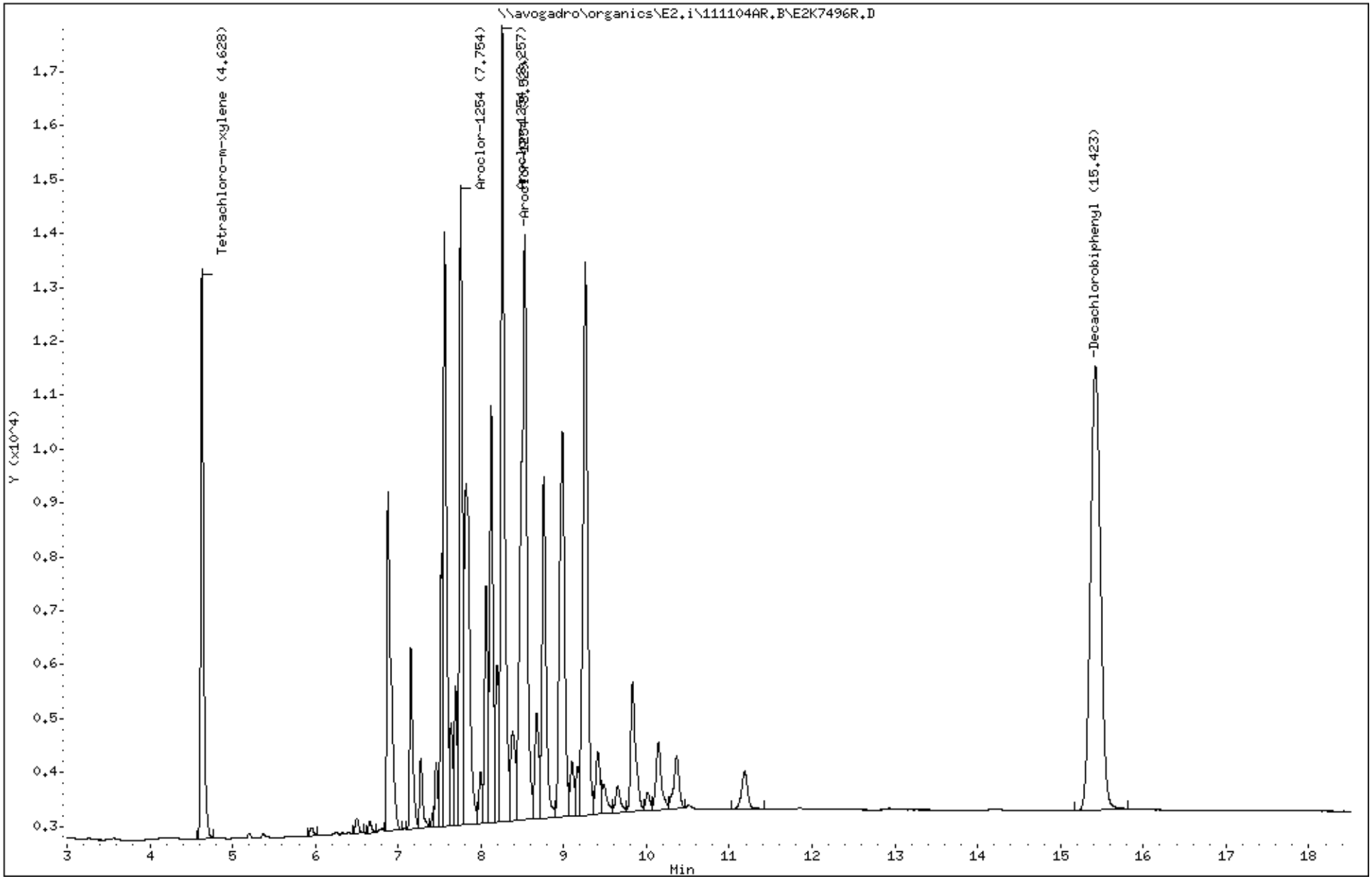
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.628	4.627	0.001	250938	0.02000	0.020			(a)
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.422	15.423	-0.001	693252	0.04000	0.040			(a)
7 Aroclor-1254					CAS #: 11097-69-1			
7.754	7.752	0.002	307764	0.40000	0.38	80.00- 120.00	100.00	(a)
8.257	8.255	0.002	461884	0.40000	0.39	142.09- 182.09	150.08	
8.528	8.527	0.001	527664	0.40000	0.39	163.62- 203.62	171.45	
Average of Peak Amounts =					0.38667			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7496R.D
Date : 05-NOV-2011 01:13
Client ID: AR12543J2
Instrument: E2.i
Sample Info: AR12543J2,AR12543J2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7497F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7497F.D
Lab Smp Id: AR12544J2 Client Smp ID: AR12544J2
Inj Date : 05-NOV-2011 01:34
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12544J2,AR12544J2,,ar1254.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 19 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

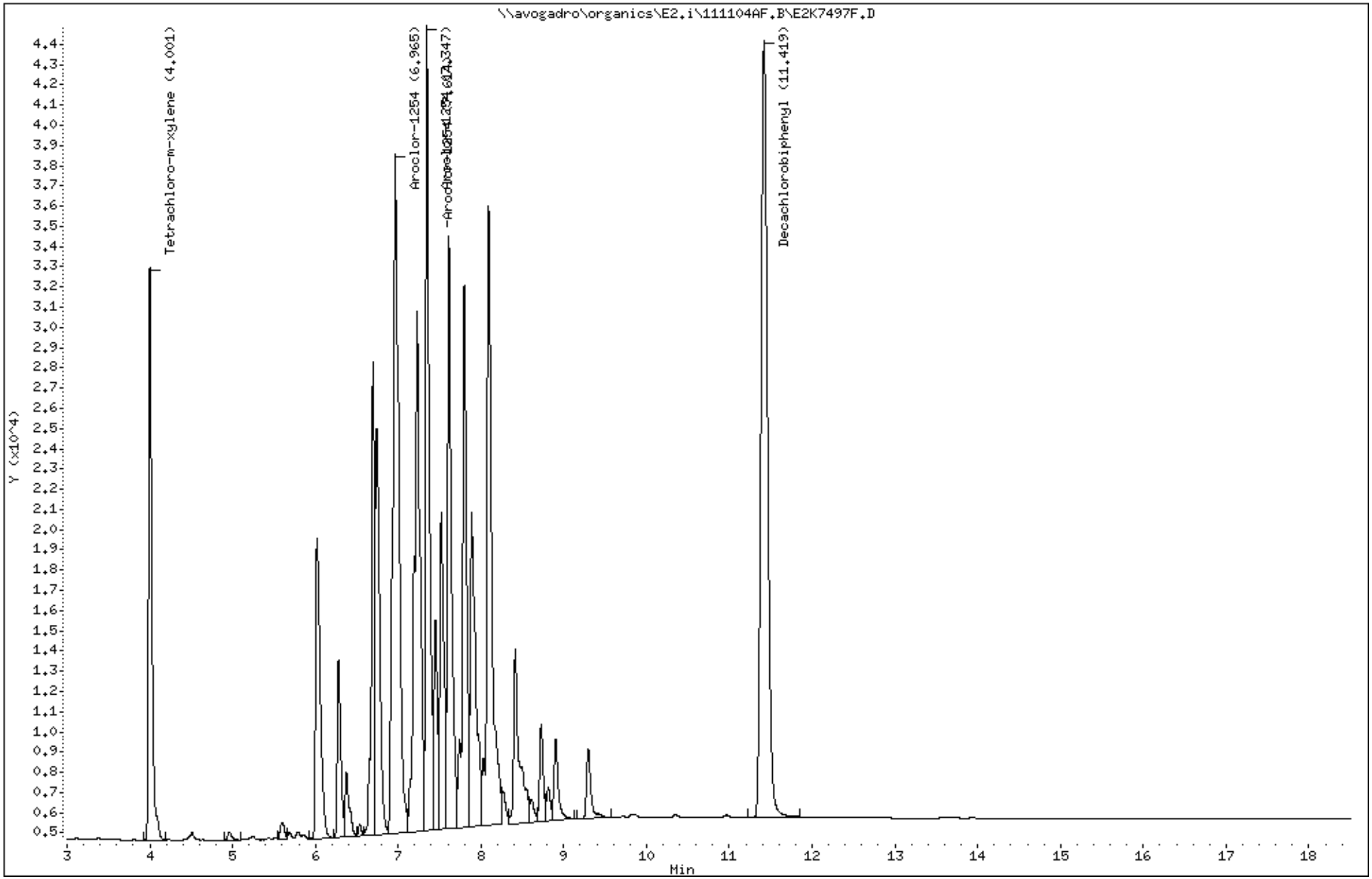
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.000	3.999	0.001	767319	0.04000	0.037			(a)
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.418	11.417	0.001	2115345	0.08000	0.074			
8 Aroclor-1254					CAS #: 11097-69-1			
6.964	6.963	0.001	1673135	0.80000	0.73	80.00- 120.00	100.00(a)	
7.346	7.345	0.001	1196534	0.80000	0.75	53.39- 93.39	71.51	
7.613	7.612	0.001	970817	0.80000	0.74	39.96- 79.96	58.02	
Average of Peak Amounts =					0.74000			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7497F.D
Date : 05-NOV-2011 01:34
Client ID: AR12544J2
Instrument: E2.i
Sample Info: AR12544J2,AR12544J2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7497R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7497R.D
Lab Smp Id: AR12544J2 Client Smp ID: AR12544J2
Inj Date : 05-NOV-2011 01:34
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12544J2,AR12544J2,,ar1254.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 01:34 Cal File: E2K7497R.D
Als bottle: 19 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

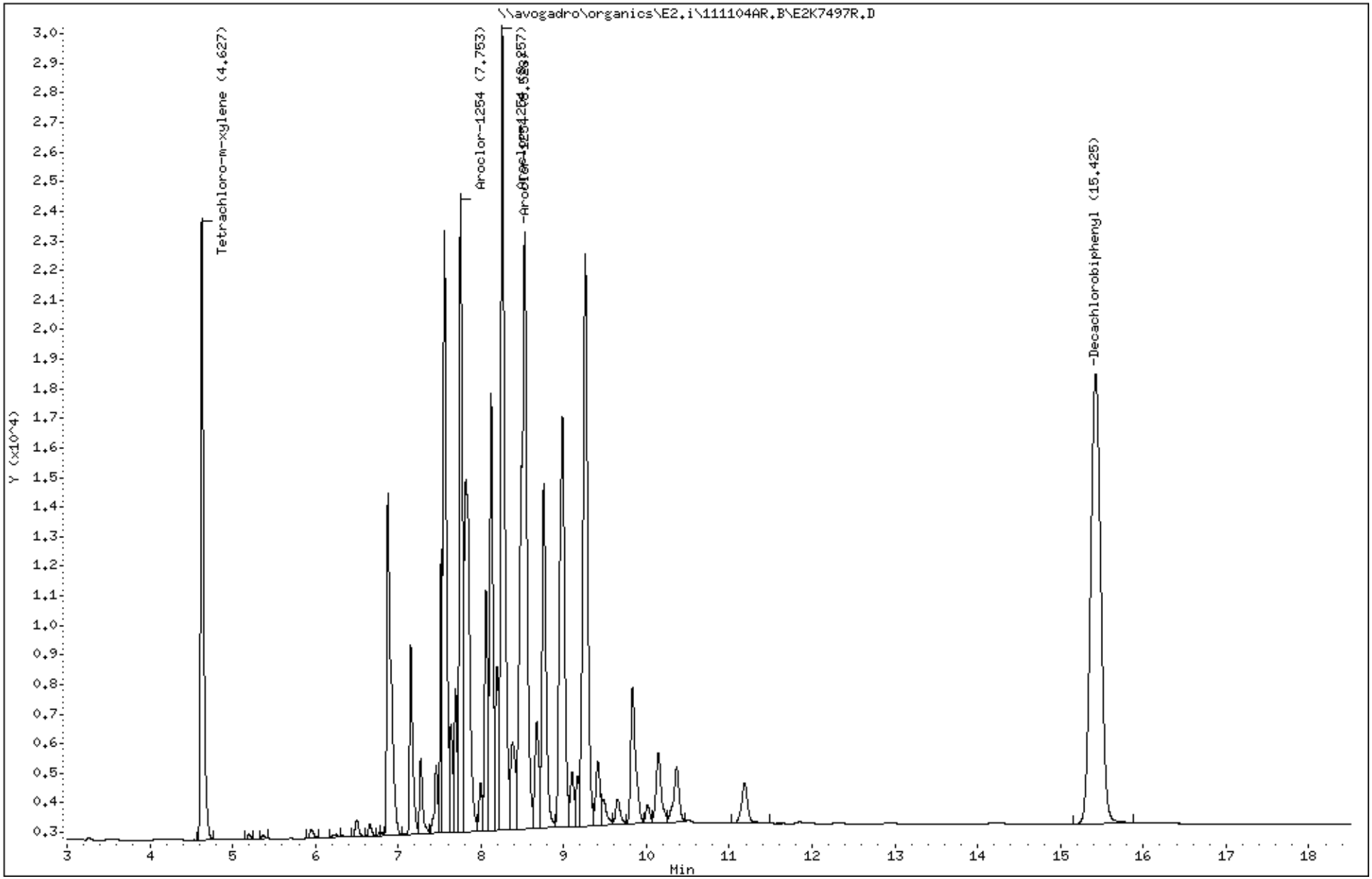
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.627	4.627	0.000	514813	0.04000	0.041			(a)
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.424	15.423	0.001	1299597	0.08000	0.076			
7 Aroclor-1254					CAS #: 11097-69-1			
7.753	7.752	0.001	562307	0.80000	0.72	80.00- 120.00	100.00	(a)
8.256	8.255	0.001	872826	0.80000	0.75	142.09- 182.09	155.22	
8.528	8.527	0.001	982131	0.80000	0.74	163.62- 203.62	174.66	
Average of Peak Amounts =					0.73667			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7497R.D
Date : 05-NOV-2011 01:34
Client ID: AR12544J2
Instrument: E2.i
Sample Info: AR12544J2,AR12544J2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7498F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

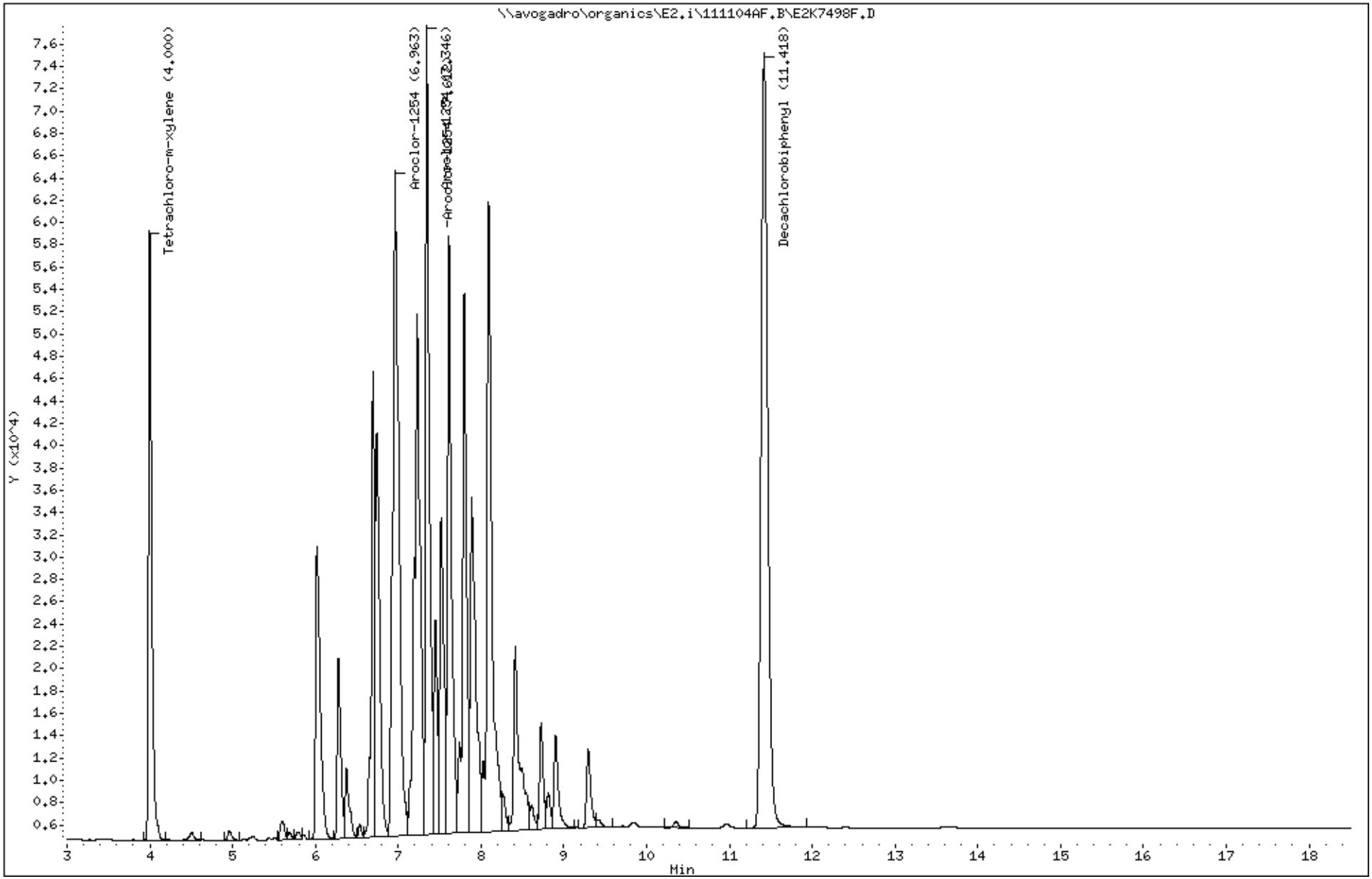
Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7498F.D
Lab Smp Id: AR12545J2 Client Smp ID: AR12545J2
Inj Date : 05-NOV-2011 01:54
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12545J2,AR12545J2,,ar1254.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 20 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
3.999	3.999	0.000	1495567	0.08000	0.072			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.417	11.417	0.000	3892433	0.16000	0.14			
8 Aroclor-1254						CAS #: 11097-69-1		
6.963	6.963	0.000	3001161	1.60000	1.3	80.00- 120.00		100.00
7.345	7.345	0.000	2202482	1.60000	1.4	53.39- 93.39		73.39
7.612	7.612	0.000	1799401	1.60000	1.4	39.96- 79.96		59.96
Average of Peak Amounts =					1.36667			

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7498F.D
Date : 05-NOV-2011 01:54
Client ID: AR12545J2
Instrument: E2.i
Sample Info: AR12545J2,AR12545J2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7498R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

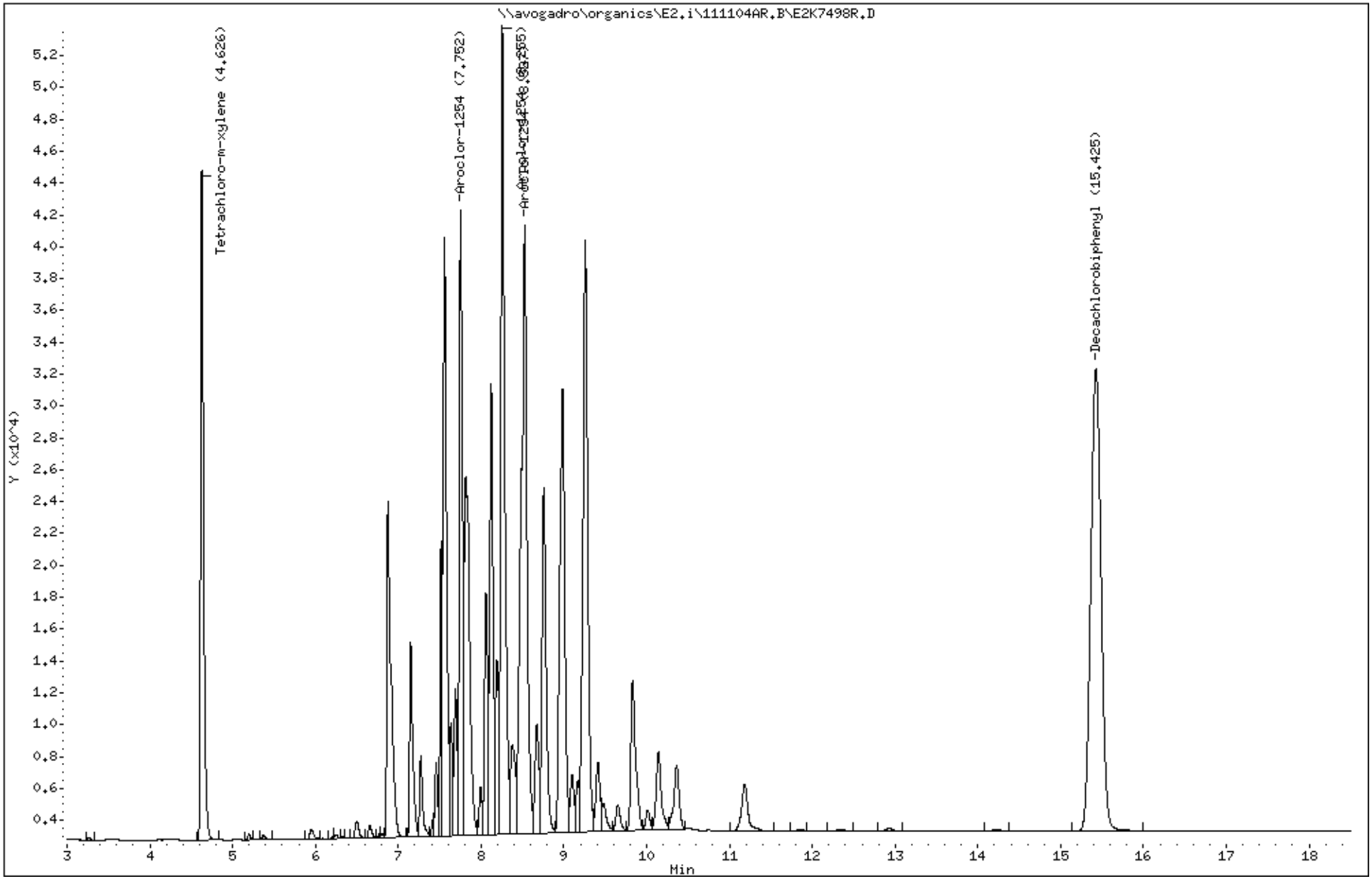
Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7498R.D
Lab Smp Id: AR12545J2 Client Smp ID: AR12545J2
Inj Date : 05-NOV-2011 01:54
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12545J2,AR12545J2,,ar1254.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 01:54 Cal File: E2K7498R.D
Als bottle: 20 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.626	4.627	-0.001	1056264	0.08000	0.084			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.425	15.423	0.002	2521189	0.16000	0.15			
7 Aroclor-1254						CAS #: 11097-69-1		
7.752	7.752	0.000	1024528	1.60000	1.4	80.00- 120.00		100.00
8.255	8.255	0.000	1660693	1.60000	1.5	142.09- 182.09		162.09
8.527	8.527	0.000	1881240	1.60000	1.4	163.62- 203.62		183.62
Average of Peak Amounts =					1.43333			

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7498R.D
Date : 05-NOV-2011 01:54
Client ID: AR12545J2
Instrument: E2.i
Sample Info: AR12545J2,AR12545J2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7499F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7499F.D
Lab Smp Id: AR12623J2 Client Smp ID: AR12623J2
Inj Date : 05-NOV-2011 02:15
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12623J2,AR12623J2,,ar1262.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 21 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1262.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

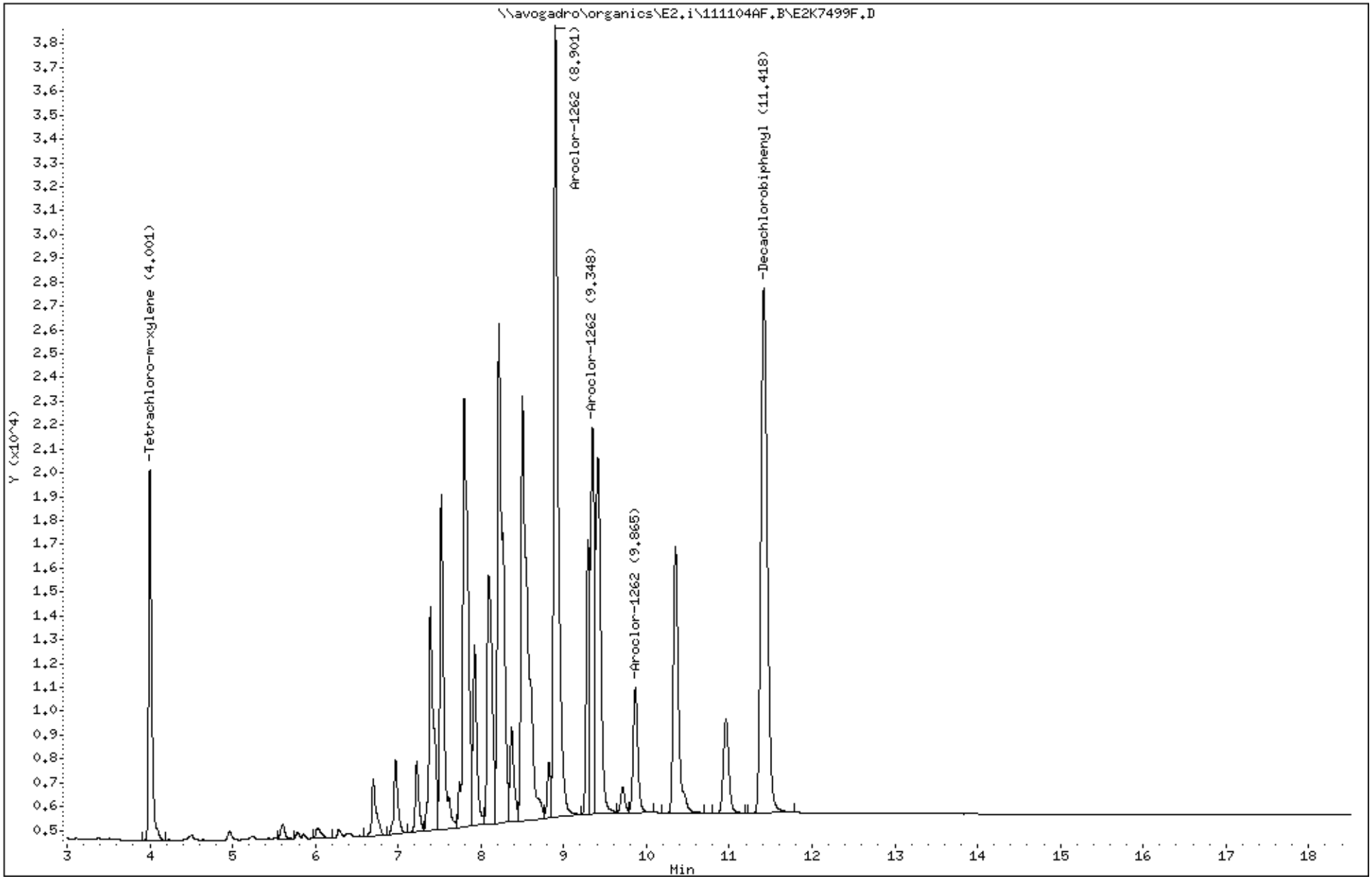
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.001	3.999	0.002	397187	0.02000	0.019			(a)
2 Aroclor-1262						CAS #: 37324-23-5		
8.901	8.901	0.000	1234830	0.40000	0.40	80.00- 120.00	100.00	
9.347	9.347	0.000	544086	0.40000	0.40	24.06- 64.06	44.06	
9.865	9.865	0.000	203438	0.40000	0.40	0.00- 36.47	16.47	
Average of Peak Amounts =					0.40000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.418	11.417	0.001	1180373	0.04000	0.041			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7499F.D
Date : 05-NOV-2011 02:15
Client ID: AR12623J2
Instrument: E2.i
Sample Info: AR12623J2,AR12623J2,,ar1262.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7499R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7499R.D
Lab Smp Id: AR12623J2 Client Smp ID: AR12623J2
Inj Date : 05-NOV-2011 02:15
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12623J2,AR12623J2,,ar1262.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:00 Cal File: E2K7504R.D
Als bottle: 21 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1262.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

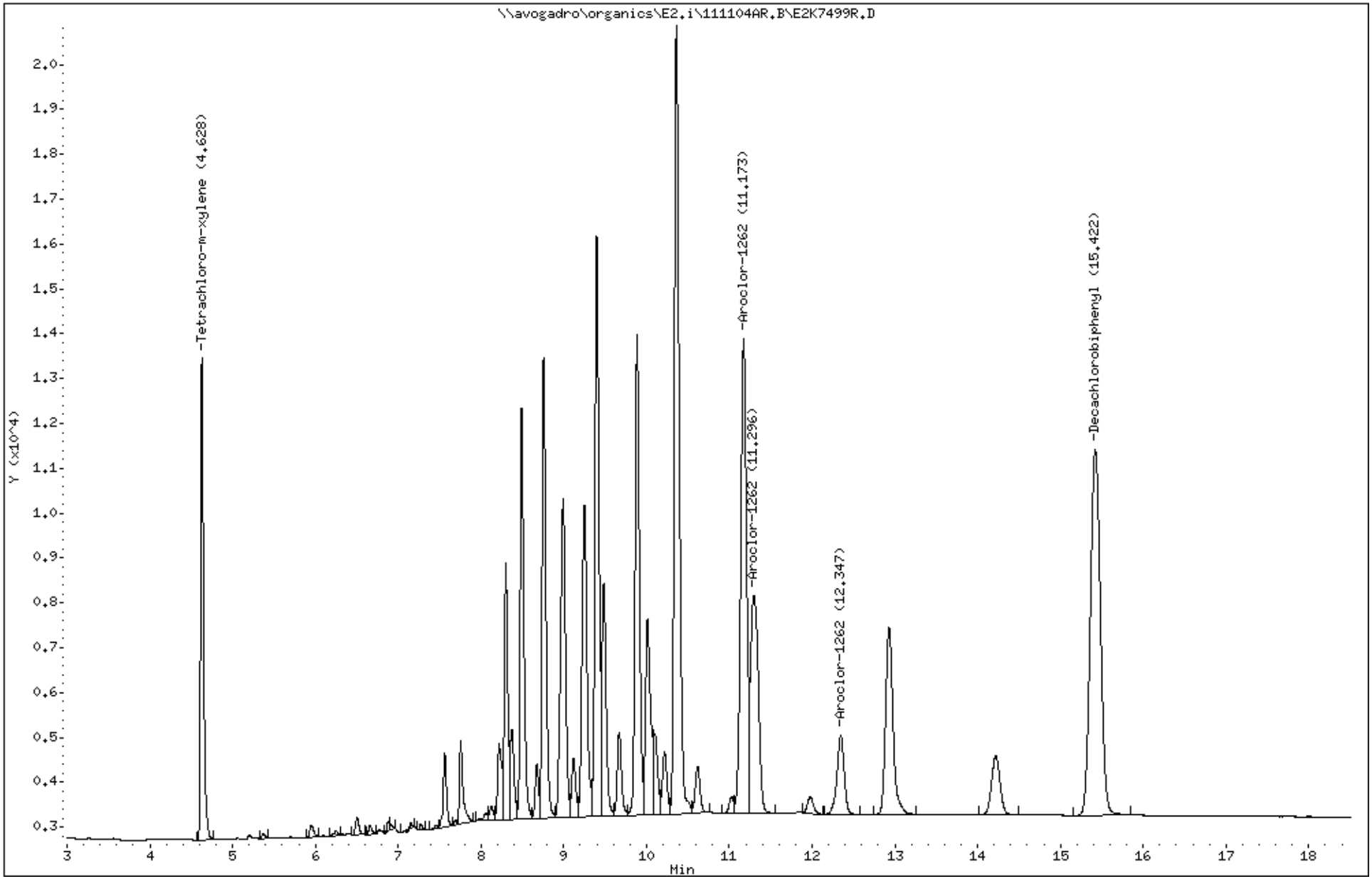
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.628	4.627	0.001	254895	0.02000	0.020			(a)
10 Aroclor-1262						CAS #: 37324-23-5		
11.173	11.173	0.000	525250	0.40000	0.40	80.00- 120.00	100.00	
11.295	11.295	0.000	314734	0.40000	0.40	39.92- 79.92	59.92	
12.346	12.346	0.000	104801	0.40000	0.40	0.00- 39.95	19.95	
Average of Peak Amounts =					0.40000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.421	15.423	-0.002	691352	0.04000	0.041			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7499R.D
Date : 05-NOV-2011 02:15
Client ID: AR12623J2
Instrument: E2.i
Sample Info: AR12623J2,AR12623J2,,ar1262.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7500F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7500F.D
Lab Smp Id: AR12683J2 Client Smp ID: AR12683J2
Inj Date : 05-NOV-2011 02:36
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12683J2,AR12683J2,,ar1268.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 22 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1268.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

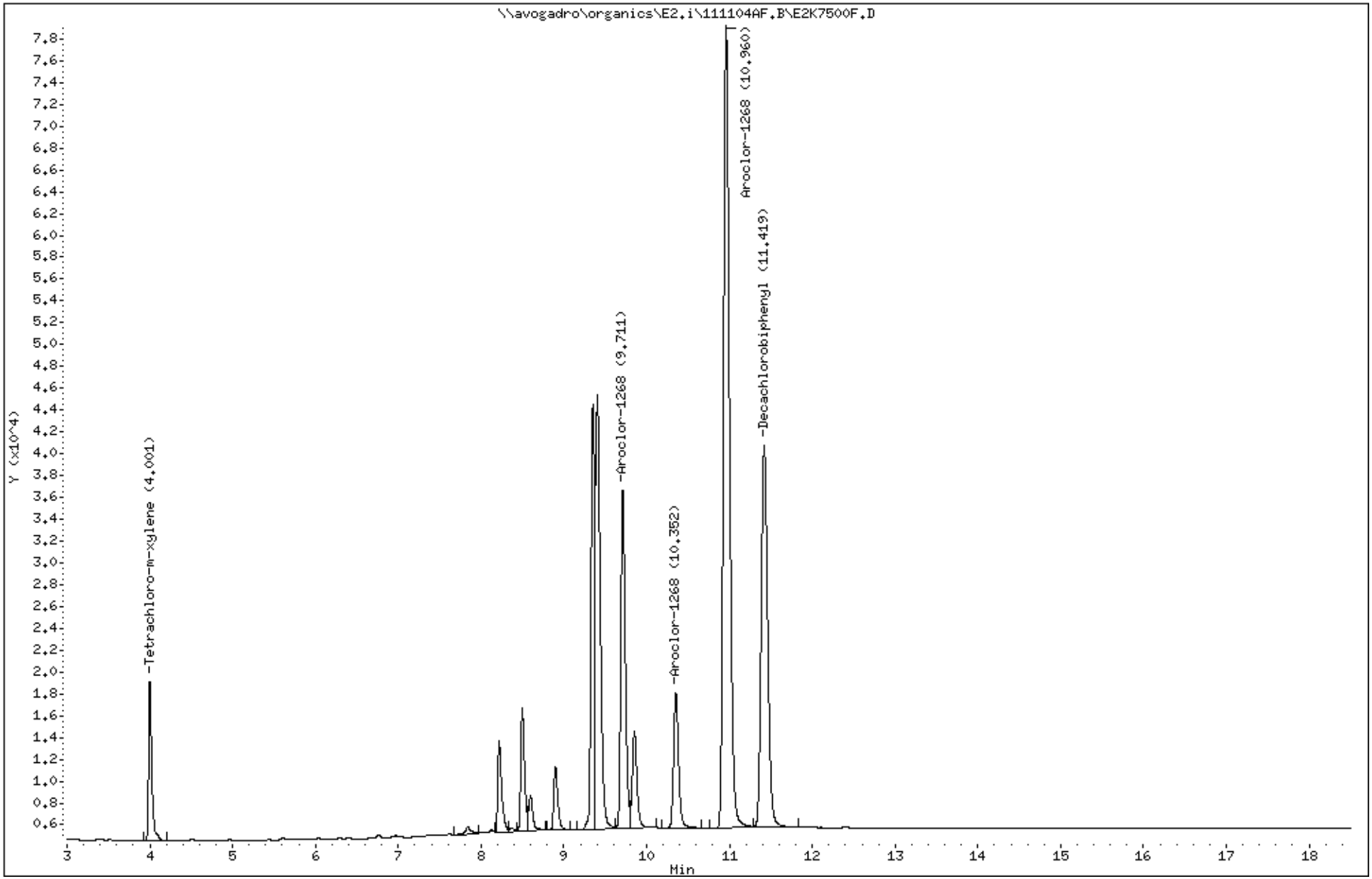
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.001	3.999	0.002	383164	0.02000	0.018			(a)
10 Aroclor-1268						CAS #: 11100-14-4		
9.711	9.711	0.000	1179828	0.40000	0.40	80.00- 120.00	100.00	(a)
10.351	10.351	0.000	511369	0.40000	0.40	23.34- 63.34	43.34	
10.960	10.960	0.000	3719014	0.40000	0.40	295.22- 335.22	315.22	
Average of Peak Amounts =				0.40000				
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.418	11.417	0.001	1924351	0.04000	0.067			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7500F.D
Date : 05-NOV-2011 02:36
Client ID: AR12683J2
Instrument: E2.i
Sample Info: AR12683J2,AR12683J2,,ar1268.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7500R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7500R.D
Lab Smp Id: AR12683J2 Client Smp ID: AR12683J2
Inj Date : 05-NOV-2011 02:36
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12683J2,AR12683J2,,ar1268.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:00 Cal File: E2K7504R.D
Als bottle: 22 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1268.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

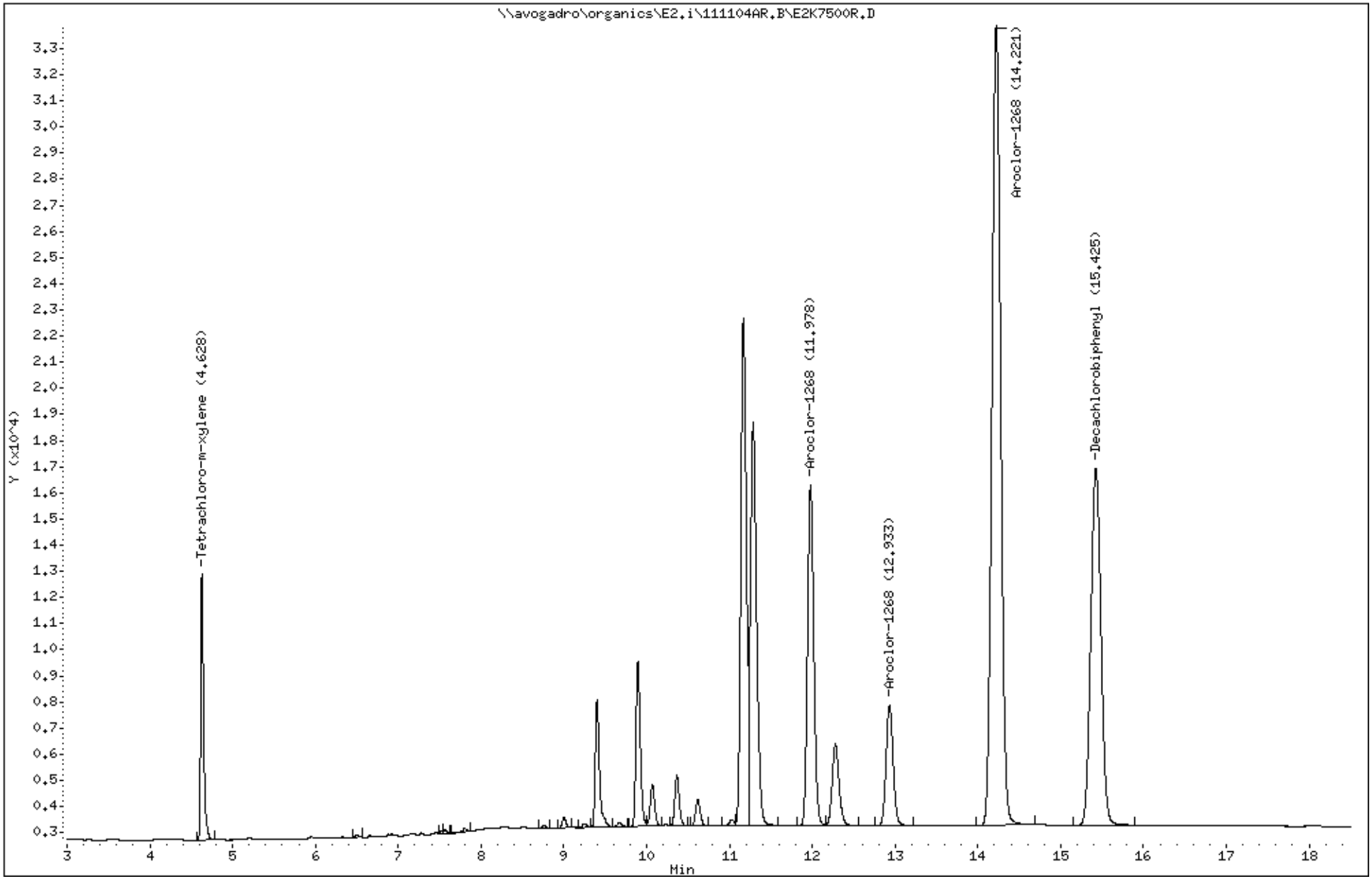
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.628	4.627	0.001	245715	0.02000	0.020			(a)
9 Aroclor-1268					CAS #: 11100-14-4			
11.978	11.978	0.000	689463	0.40000	0.40	80.00- 120.00	100.00	(a)
12.932	12.932	0.000	271831	0.40000	0.40	19.43- 59.43	39.43	
14.221	14.221	0.000	2255813	0.40000	0.40	307.18- 347.18	327.18	
Average of Peak Amounts =				0.40000				
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.424	15.423	0.001	1169692	0.04000	0.060			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7500R.D
Date : 05-NOV-2011 02:36
Client ID: AR12683J2
Instrument: E2.i
Sample Info: AR12683J2,AR12683J2,,ar1268.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7501F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7501F.D
Lab Smp Id: AR16601J2 Client Smp ID: AR16601J2
Inj Date : 05-NOV-2011 02:57
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16601J2,AR16601J2,,ar1660.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 23 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

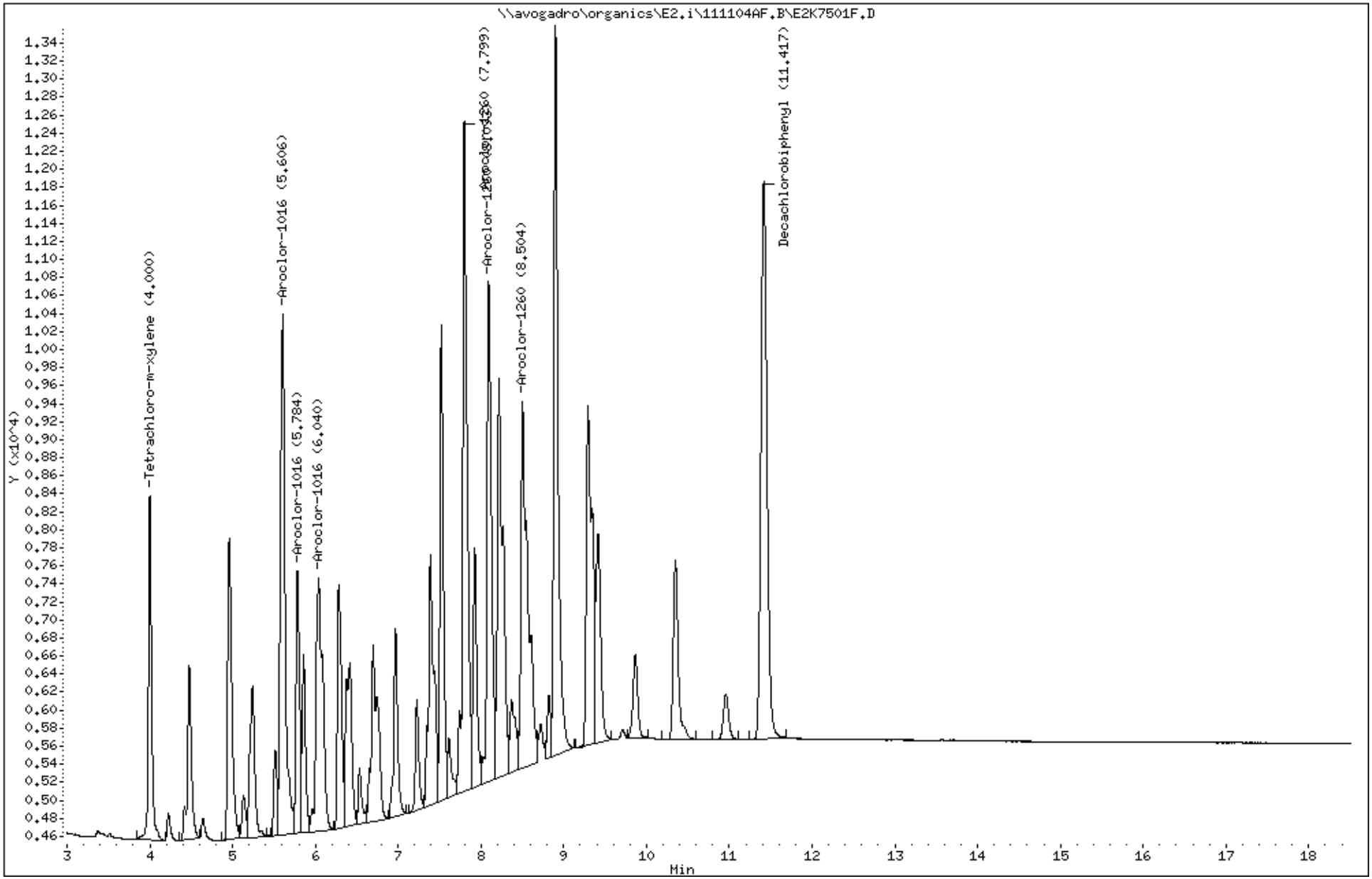
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.000	3.999	0.001	102428	0.00500	0.0049			(a)
5 Aroclor-1016						CAS #: 12674-11-2		
5.605	5.604	0.001	235267	0.10000	0.11	80.00- 120.00	100.00	(a)
5.783	5.781	0.002	89052	0.10000	0.11	17.54- 57.54	37.85	
6.039	6.039	0.000	158937	0.10000	0.12	47.65- 87.65	67.56	
Average of Peak Amounts =					0.11333			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.417	11.417	0.000	315771	0.01000	0.011			(a)
9 Aroclor-1260						CAS #: 11096-82-5		
7.799	7.797	0.002	284403	0.10000	0.12	80.00- 120.00	100.00	(a)
8.093	8.091	0.002	212667	0.10000	0.11	55.72- 95.72	74.78	
8.504	8.502	0.002	235026	0.10000	0.11	71.06- 111.06	82.64	
Average of Peak Amounts =					0.11333			

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7501F.D
Report Date: 07-Nov-2011 13:57

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7501F.D
Date : 05-NOV-2011 02:57
Client ID: AR16601J2
Instrument: E2.i
Sample Info: AR16601J2,AR16601J2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7501R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7501R.D
Lab Smp Id: AR16601J2 Client Smp ID: AR16601J2
Inj Date : 05-NOV-2011 02:57
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16601J2,AR16601J2,,ar1660.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 02:57 Cal File: E2K7501R.D
Als bottle: 23 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

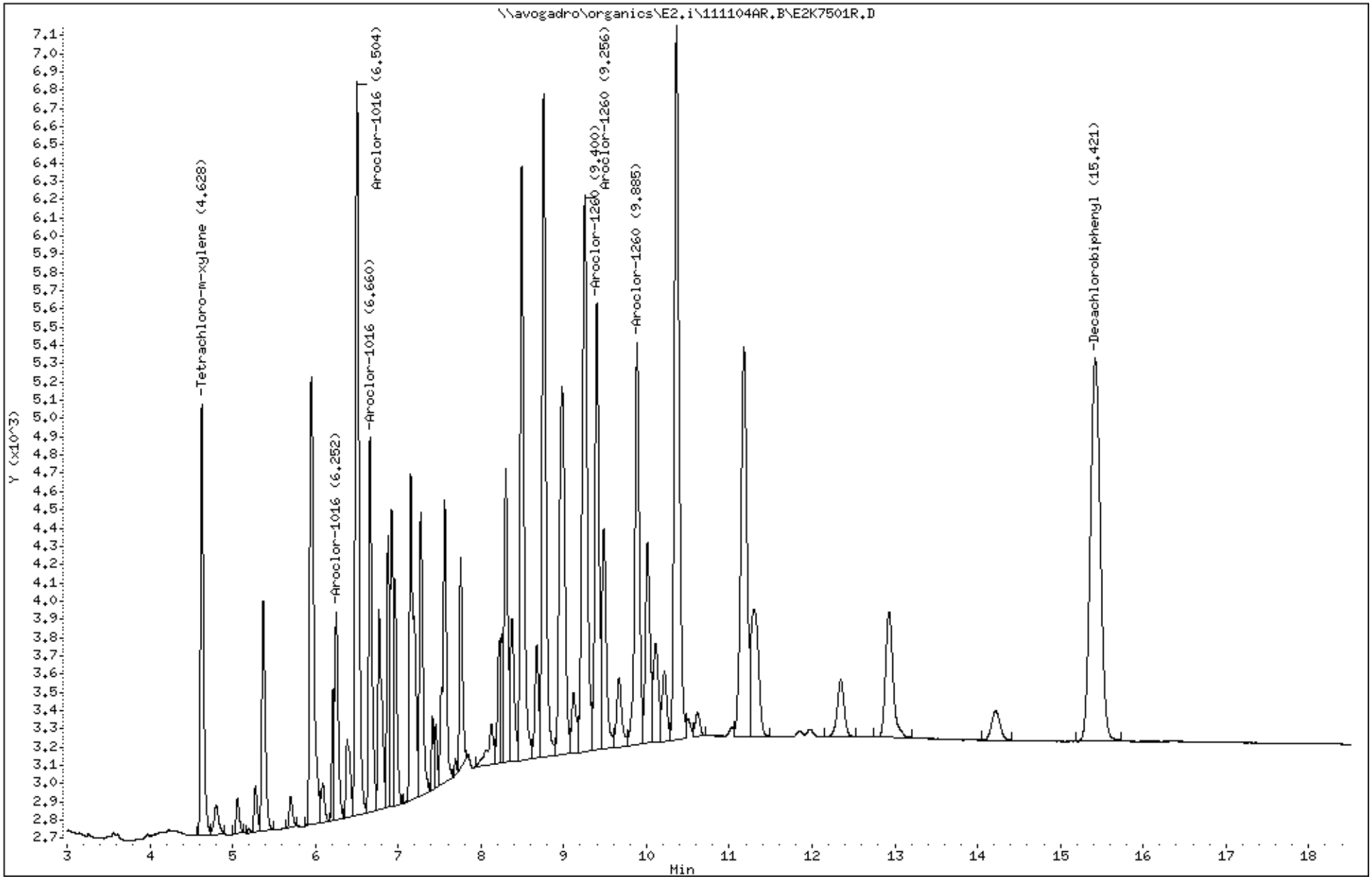
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.627	4.627	0.000	57306	0.00500	0.0046			(a)
6 Aroclor-1016						CAS #: 12674-11-2		
6.252	6.250	0.002	32694	0.10000	0.10	80.00- 120.00	100.00	(a)
6.503	6.503	0.000	122529	0.10000	0.10	366.12- 406.12	374.77	
6.659	6.657	0.002	56322	0.10000	0.10	151.11- 191.11	172.27	
Average of Peak Amounts =					0.10000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.421	15.423	-0.002	174967	0.01000	0.0090			(a)
8 Aroclor-1260						CAS #: 11096-82-5		
9.255	9.255	0.000	127310	0.10000	0.10	80.00- 120.00	100.00	(a)
9.399	9.398	0.001	81595	0.10000	0.10	43.24- 83.24	64.09	
9.885	9.883	0.002	84367	0.10000	0.10	46.46- 86.46	66.27	
Average of Peak Amounts =					0.10000			

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7501R.D
Report Date: 07-Nov-2011 13:58

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7501R.D
Date : 05-NOV-2011 02:57
Client ID: AR16601J2
Instrument: E2.i
Sample Info: AR16601J2,AR16601J2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7503F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7503F.D
Lab Smp Id: AR16602J2 Client Smp ID: AR16602J2
Inj Date : 05-NOV-2011 03:39
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16602J2,AR16602J2,,ar1660.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 25 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

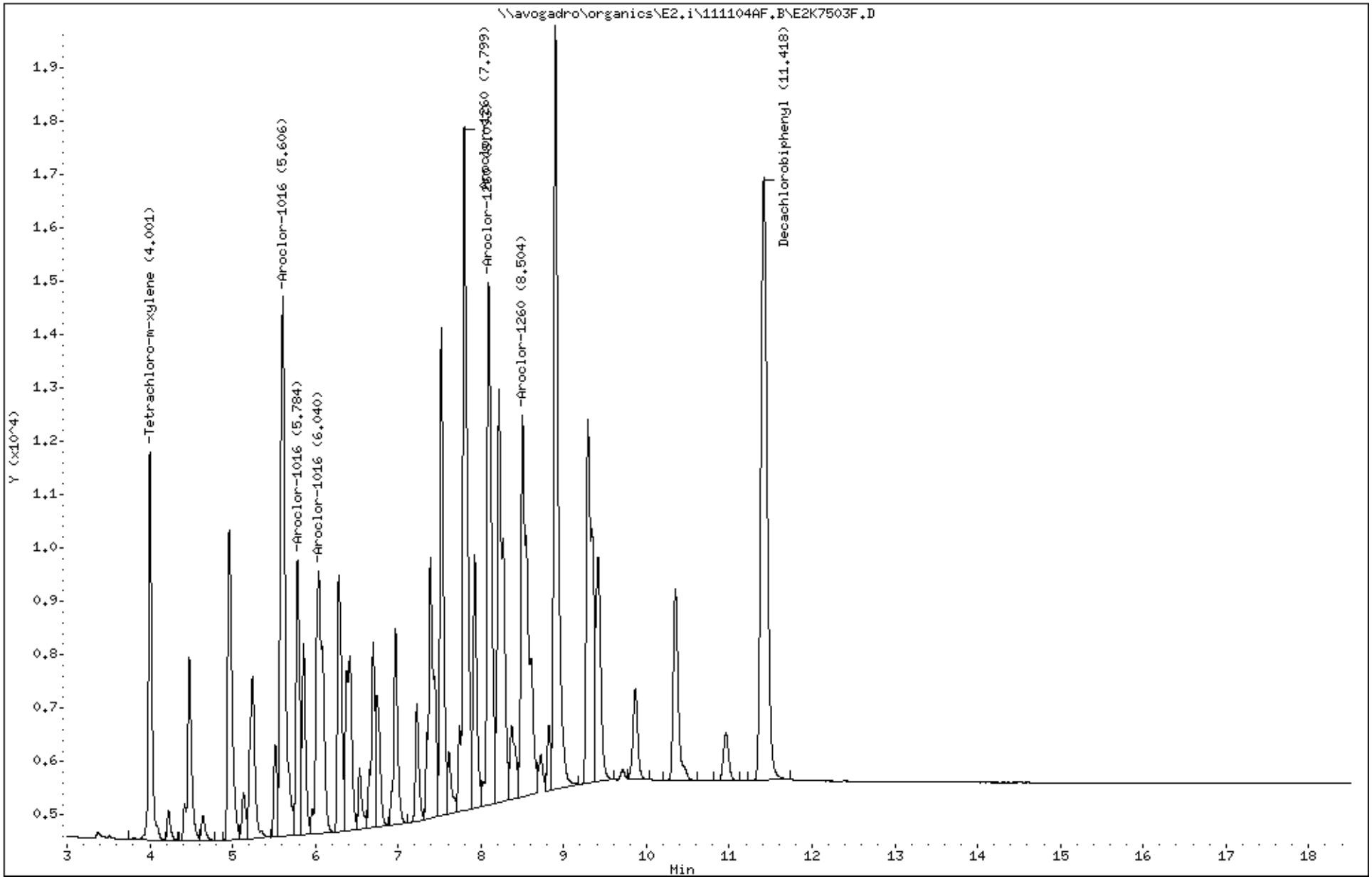
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.001	3.999	0.002	199409	0.01000	0.0096			(a)
5 Aroclor-1016						CAS #: 12674-11-2		
5.606	5.604	0.002	419722	0.20000	0.20	80.00- 120.00	100.00	(a)
5.784	5.781	0.003	157368	0.20000	0.20	17.54- 57.54	37.49	
6.040	6.039	0.001	284130	0.20000	0.21	47.65- 87.65	67.69	
Average of Peak Amounts =					0.20333			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.417	11.417	0.000	589172	0.02000	0.020			(a)
9 Aroclor-1260						CAS #: 11096-82-5		
7.798	7.797	0.001	495344	0.20000	0.21	80.00- 120.00	100.00	(a)
8.093	8.091	0.002	374750	0.20000	0.20	55.72- 95.72	75.65	
8.503	8.502	0.001	415844	0.20000	0.20	71.06- 111.06	83.95	
Average of Peak Amounts =					0.20333			

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7503F.D
Report Date: 07-Nov-2011 13:57

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7503F.D
Date : 05-NOV-2011 03:39
Client ID: AR16602J2
Instrument: E2.i
Sample Info: AR16602J2,AR16602J2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7503R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7503R.D
Lab Smp Id: AR16602J2 Client Smp ID: AR16602J2
Inj Date : 05-NOV-2011 03:39
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16602J2,AR16602J2,,ar1660.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 03:39 Cal File: E2K7503R.D
Als bottle: 25 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

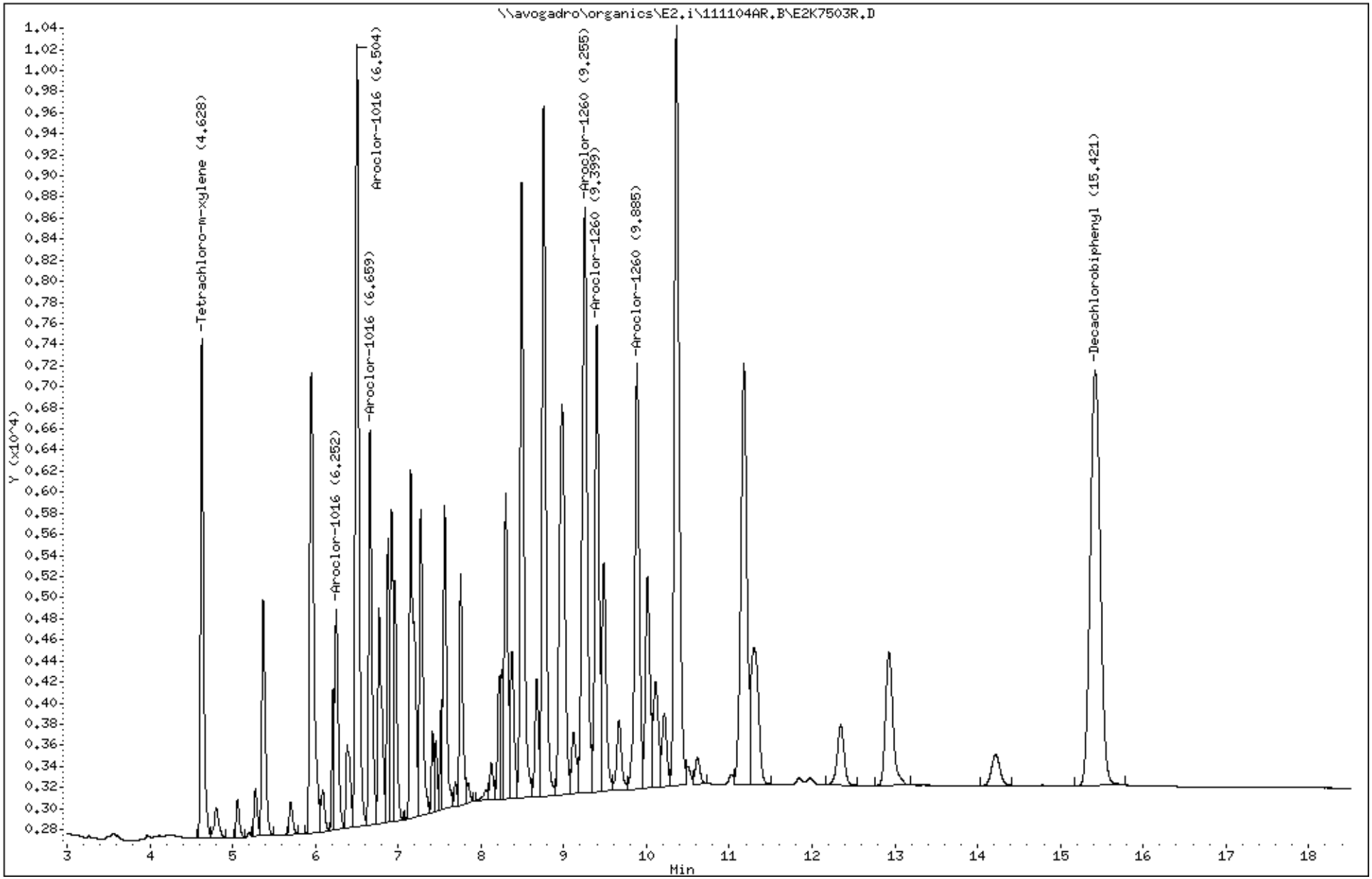
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.627	4.627	0.000	114915	0.01000	0.0094			(a)
6 Aroclor-1016						CAS #: 12674-11-2		
6.252	6.250	0.002	60598	0.20000	0.19	80.00- 120.00	100.00	(a)
6.503	6.503	0.000	225974	0.20000	0.19	366.12- 406.12	372.91	
6.659	6.657	0.002	102800	0.20000	0.19	151.11- 191.11	169.64	
Average of Peak Amounts =					0.19000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.420	15.423	-0.003	332667	0.02000	0.017			(a)
8 Aroclor-1260						CAS #: 11096-82-5		
9.255	9.255	0.000	232184	0.20000	0.19	80.00- 120.00	100.00	(a)
9.399	9.398	0.001	146870	0.20000	0.19	43.24- 83.24	63.26	
9.884	9.883	0.001	152745	0.20000	0.19	46.46- 86.46	65.79	
Average of Peak Amounts =					0.19000			

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7503R.D
Report Date: 07-Nov-2011 13:58

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7503R.D
Date : 05-NOV-2011 03:39
Client ID: AR16602J2
Instrument: E2.i
Sample Info: AR16602J2,AR16602J2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7504F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7504F.D
Lab Smp Id: AR16603J2 Client Smp ID: AR16603J2
Inj Date : 05-NOV-2011 04:00
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16603J2,AR16603J2,,ar1660.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 26 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

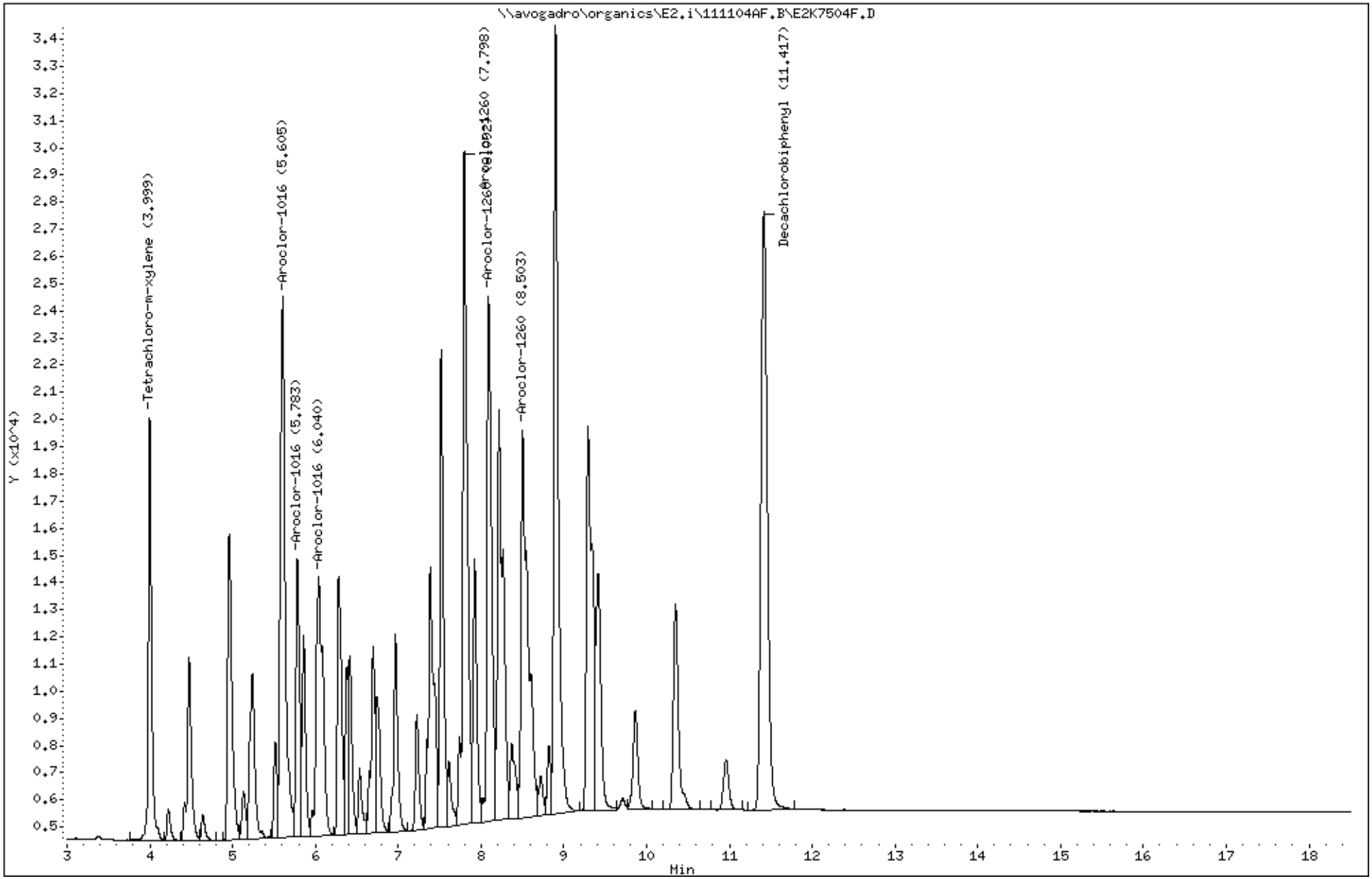
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
3.999	3.999	0.000	421611	0.02000	0.020			(a)
5 Aroclor-1016					CAS #: 12674-11-2			
5.604	5.604	0.000	834556	0.40000	0.41	80.00- 120.00	100.00	(a)
5.782	5.781	0.001	318079	0.40000	0.41	17.54- 57.54	38.11	
6.039	6.039	0.000	558297	0.40000	0.40	47.65- 87.65	66.90	
Average of Peak Amounts =					0.40667			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.417	11.417	0.000	1180562	0.04000	0.041			(a)
9 Aroclor-1260					CAS #: 11096-82-5			
7.797	7.797	0.000	965883	0.40000	0.40	80.00- 120.00	100.00	(a)
8.092	8.091	0.001	747740	0.40000	0.40	55.72- 95.72	77.42	
8.503	8.502	0.001	834844	0.40000	0.40	71.06- 111.06	86.43	
Average of Peak Amounts =					0.40000			

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7504F.D
Report Date: 07-Nov-2011 13:57

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7504F.D
Date : 05-NOV-2011 04:00
Client ID: AR16603J2
Instrument: E2.i
Sample Info: AR16603J2,AR16603J2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7504R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7504R.D
Lab Smp Id: AR16603J2 Client Smp ID: AR16603J2
Inj Date : 05-NOV-2011 04:00
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16603J2,AR16603J2,,ar1660.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:00 Cal File: E2K7504R.D
Als bottle: 26 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

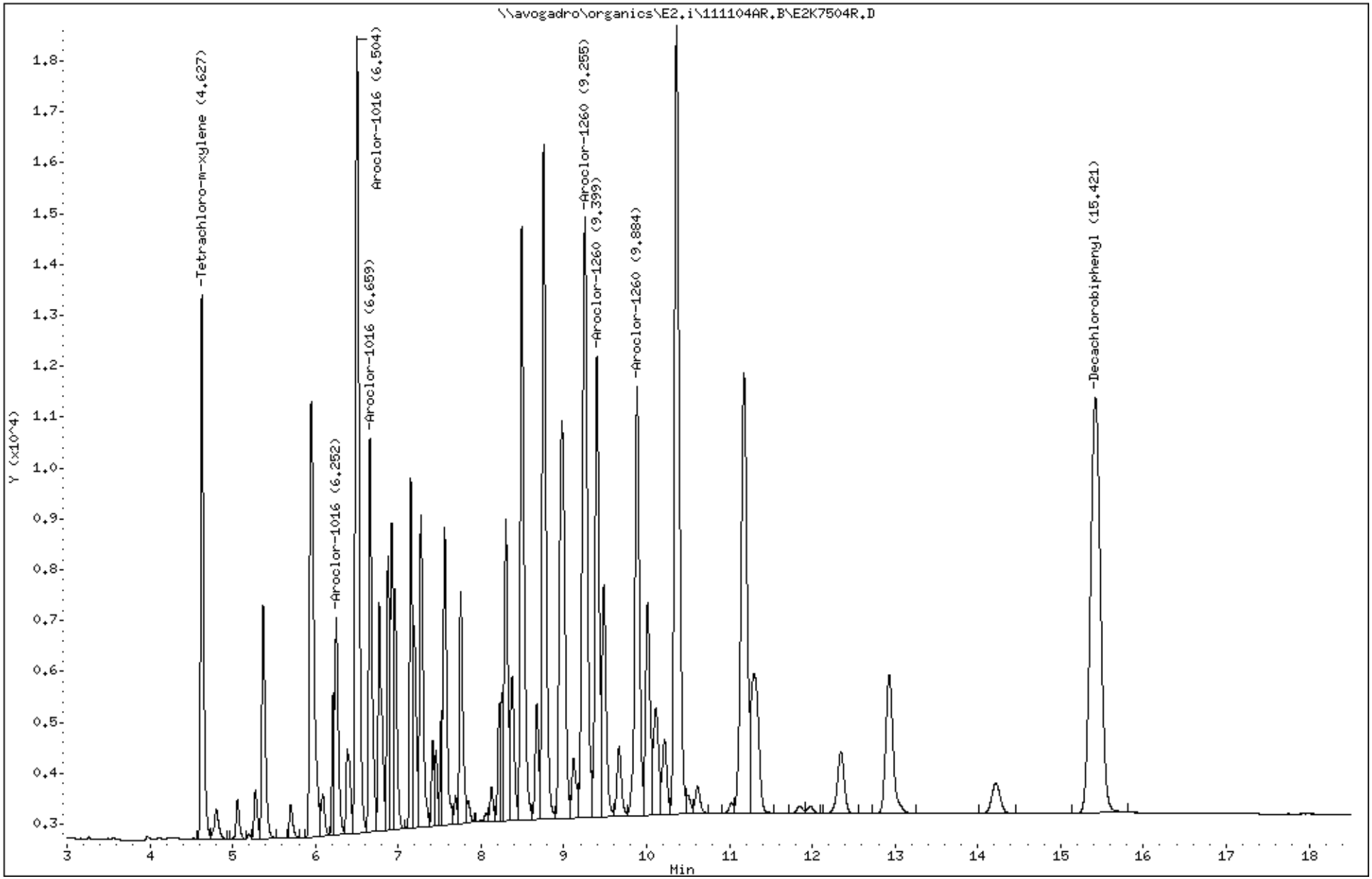
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.627	4.627	0.000	253512	0.02000	0.020			(a)
6 Aroclor-1016					CAS #: 12674-11-2			
6.251	6.250	0.001	124251	0.40000	0.40	80.00- 120.00	100.00	(a)
6.503	6.503	0.000	482002	0.40000	0.41	366.12- 406.12	387.92	
6.659	6.657	0.002	212965	0.40000	0.40	151.11- 191.11	171.40	
Average of Peak Amounts =					0.40333			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.421	15.423	-0.002	690348	0.04000	0.041			(a)
8 Aroclor-1260					CAS #: 11096-82-5			
9.254	9.255	-0.001	495556	0.40000	0.40	80.00- 120.00	100.00	(a)
9.398	9.398	0.000	301864	0.40000	0.39	43.24- 83.24	60.91	
9.883	9.883	0.000	318729	0.40000	0.40	46.46- 86.46	64.32	
Average of Peak Amounts =					0.39667			

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7504R.D
Report Date: 07-Nov-2011 13:58

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7504R.D
Date : 05-NOV-2011 04:00
Client ID: AR16603J2
Instrument: E2.i
Sample Info: AR16603J2,AR16603J2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7505F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7505F.D
Lab Smp Id: AR16604J2 Client Smp ID: AR16604J2
Inj Date : 05-NOV-2011 04:21
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16604J2,AR16604J2,,ar1660.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 27 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

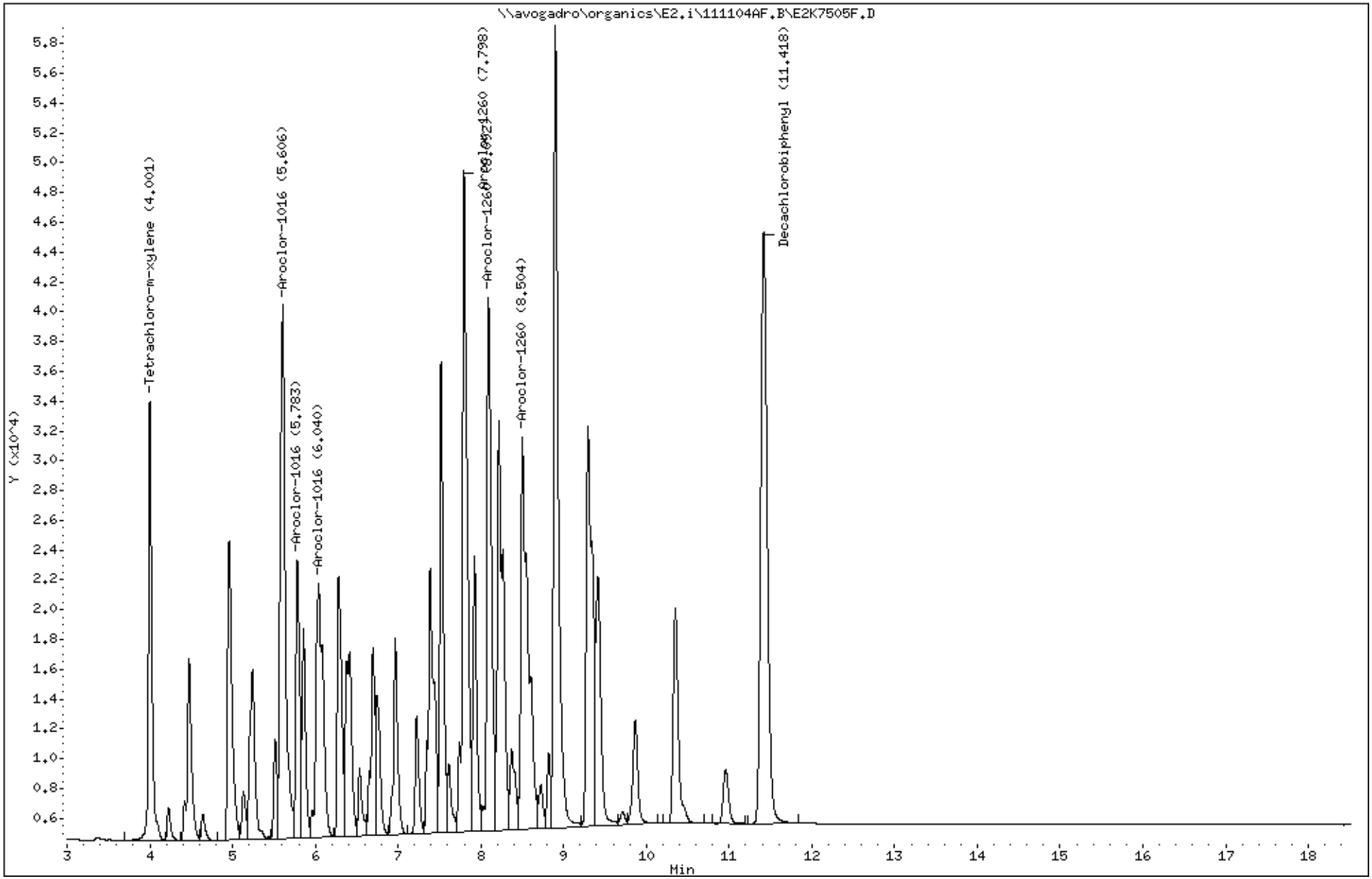
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.000	3.999	0.001	848285	0.04000	0.041			(a)
5 Aroclor-1016						CAS #: 12674-11-2		
5.605	5.604	0.001	1543175	0.80000	0.75	80.00- 120.00	100.00	(a)
5.783	5.781	0.002	580219	0.80000	0.75	17.54- 57.54	37.60	
6.040	6.039	0.001	1033094	0.80000	0.75	47.65- 87.65	66.95	
Average of Peak Amounts =					0.75000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.418	11.417	0.001	2189957	0.08000	0.076			
9 Aroclor-1260						CAS #: 11096-82-5		
7.798	7.797	0.001	1764604	0.80000	0.74	80.00- 120.00	100.00	(a)
8.092	8.091	0.001	1418164	0.80000	0.76	55.72- 95.72	80.37	
8.503	8.502	0.001	1587192	0.80000	0.77	71.06- 111.06	89.95	
Average of Peak Amounts =					0.75667			

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7505F.D
Report Date: 07-Nov-2011 13:57

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7505F.D
Date : 05-NOV-2011 04:21
Client ID: AR16604J2
Instrument: E2.i
Sample Info: AR16604J2,AR16604J2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7505R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7505R.D
Lab Smp Id: AR16604J2 Client Smp ID: AR16604J2
Inj Date : 05-NOV-2011 04:21
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16604J2,AR16604J2,,ar1660.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:21 Cal File: E2K7505R.D
Als bottle: 27 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

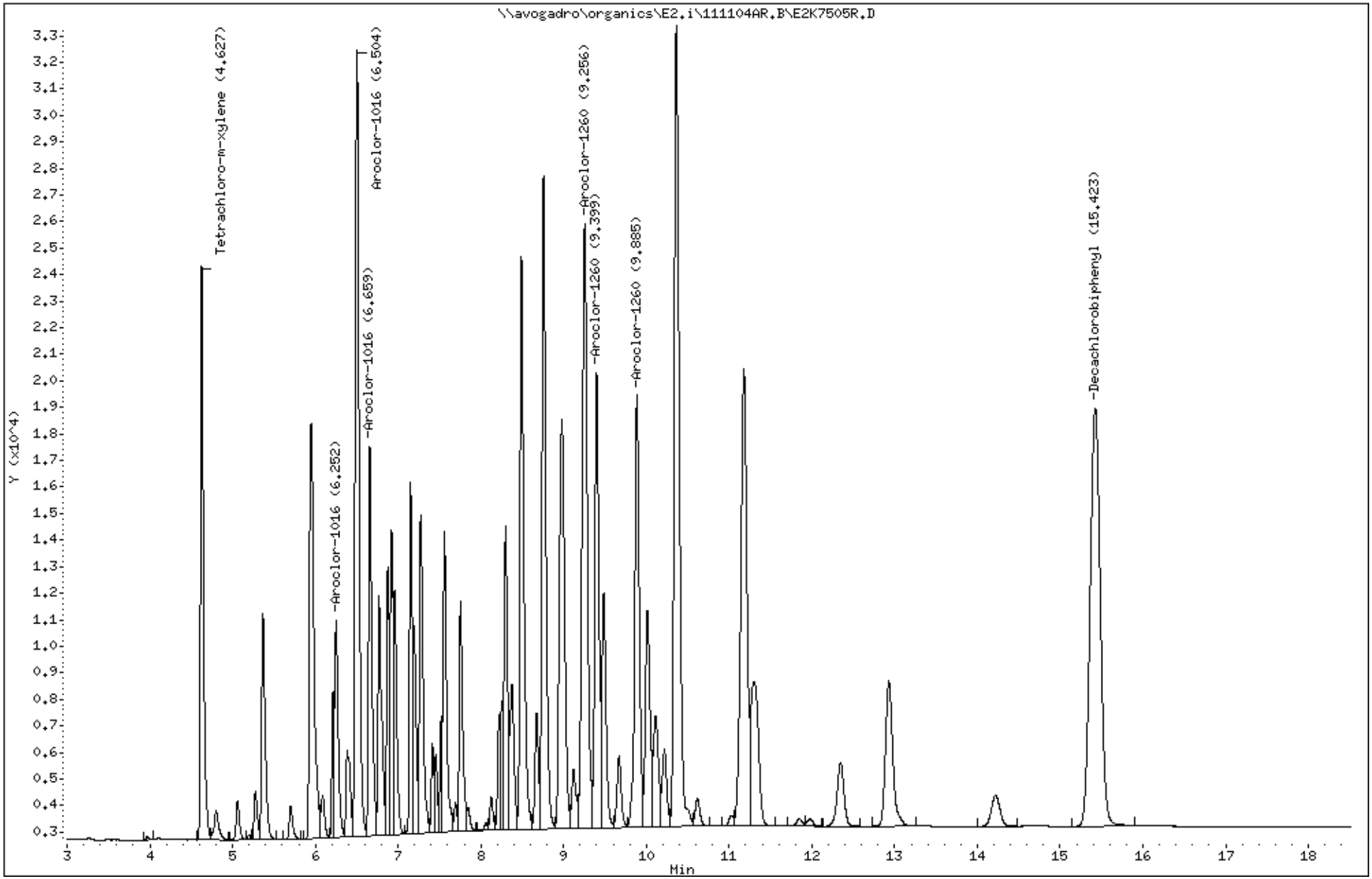
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.627	4.627	0.000	531891	0.04000	0.043			(a)
6 Aroclor-1016					CAS #: 12674-11-2			
6.251	6.250	0.001	242167	0.80000	0.78	80.00- 120.00	100.00	(a)
6.503	6.503	0.000	938414	0.80000	0.79	366.12- 406.12	387.51	
6.658	6.657	0.001	411018	0.80000	0.77	151.11- 191.11	169.72	
Average of Peak Amounts =					0.78000			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.423	15.423	0.000	1347683	0.08000	0.080			
8 Aroclor-1260					CAS #: 11096-82-5			
9.256	9.255	0.001	977213	0.80000	0.80	80.00- 120.00	100.00	(a)
9.399	9.398	0.001	579075	0.80000	0.76	43.24- 83.24	59.26	
9.884	9.883	0.001	625336	0.80000	0.78	46.46- 86.46	63.99	
Average of Peak Amounts =					0.78000			

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7505R.D
Report Date: 07-Nov-2011 13:58

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7505R.D
Date : 05-NOV-2011 04:21
Client ID: AR16604J2
Instrument: E2.i
Sample Info: AR16604J2,AR16604J2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7506F.D
Report Date: 07-Nov-2011 13:57

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

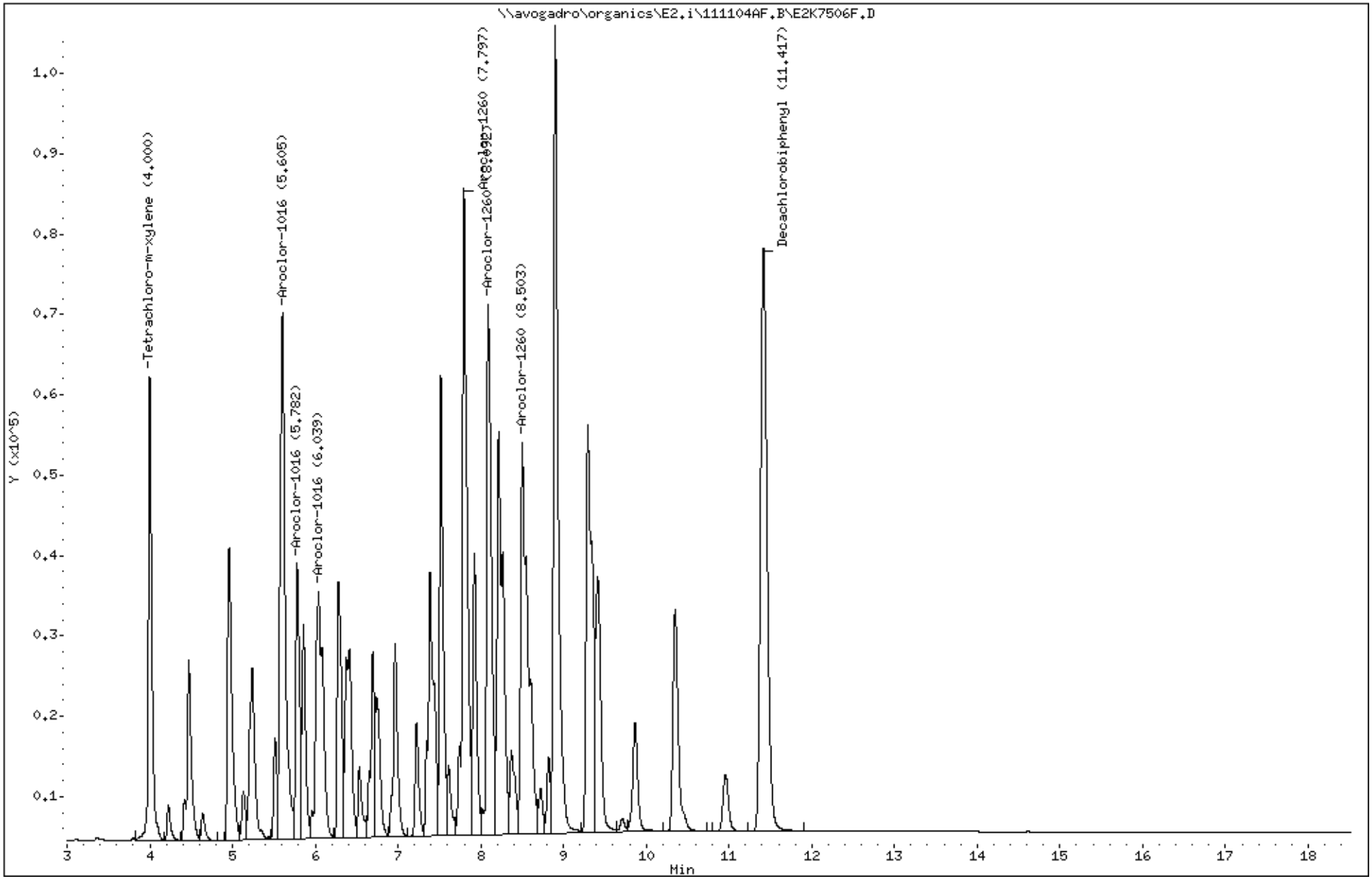
Data file : \\avogadro\organics\E2.i\111104AF.B\E2K7506F.D
Lab Smp Id: AR16605J2 Client Smp ID: AR16605J2
Inj Date : 05-NOV-2011 04:42
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16605J2,AR16605J2,,ar1660.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AF.B\E2_ARO_5_F.m
Meth Date : 07-Nov-2011 11:22 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 28 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
3.999	3.999	0.000	1689747	0.08000	0.081		
5 Aroclor-1016						CAS #: 12674-11-2	
5.604	5.604	0.000	2852373	1.60000	1.4	80.00- 120.00	100.00
5.781	5.781	0.000	1085974	1.60000	1.4	17.54- 57.54	38.07
6.039	6.039	0.000	1894179	1.60000	1.4	47.65- 87.65	66.41
Average of Peak Amounts =					1.40000		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
11.417	11.417	0.000	4066471	0.16000	0.14		
9 Aroclor-1260						CAS #: 11096-82-5	
7.797	7.797	0.000	3208332	1.60000	1.3	80.00- 120.00	100.00
8.091	8.091	0.000	2633194	1.60000	1.4	55.72- 95.72	82.07
8.502	8.502	0.000	2966158	1.60000	1.4	71.06- 111.06	92.45
Average of Peak Amounts =					1.36667		

Data File: \\avogadro\organics\E2.i\111104AF.B\E2K7506F.D
Date : 05-NOV-2011 04:42
Client ID: AR16605J2
Instrument: E2.i
Sample Info: AR16605J2,AR16605J2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7506R.D
Report Date: 07-Nov-2011 13:58

Spectrum Analytical, Inc. RI Division

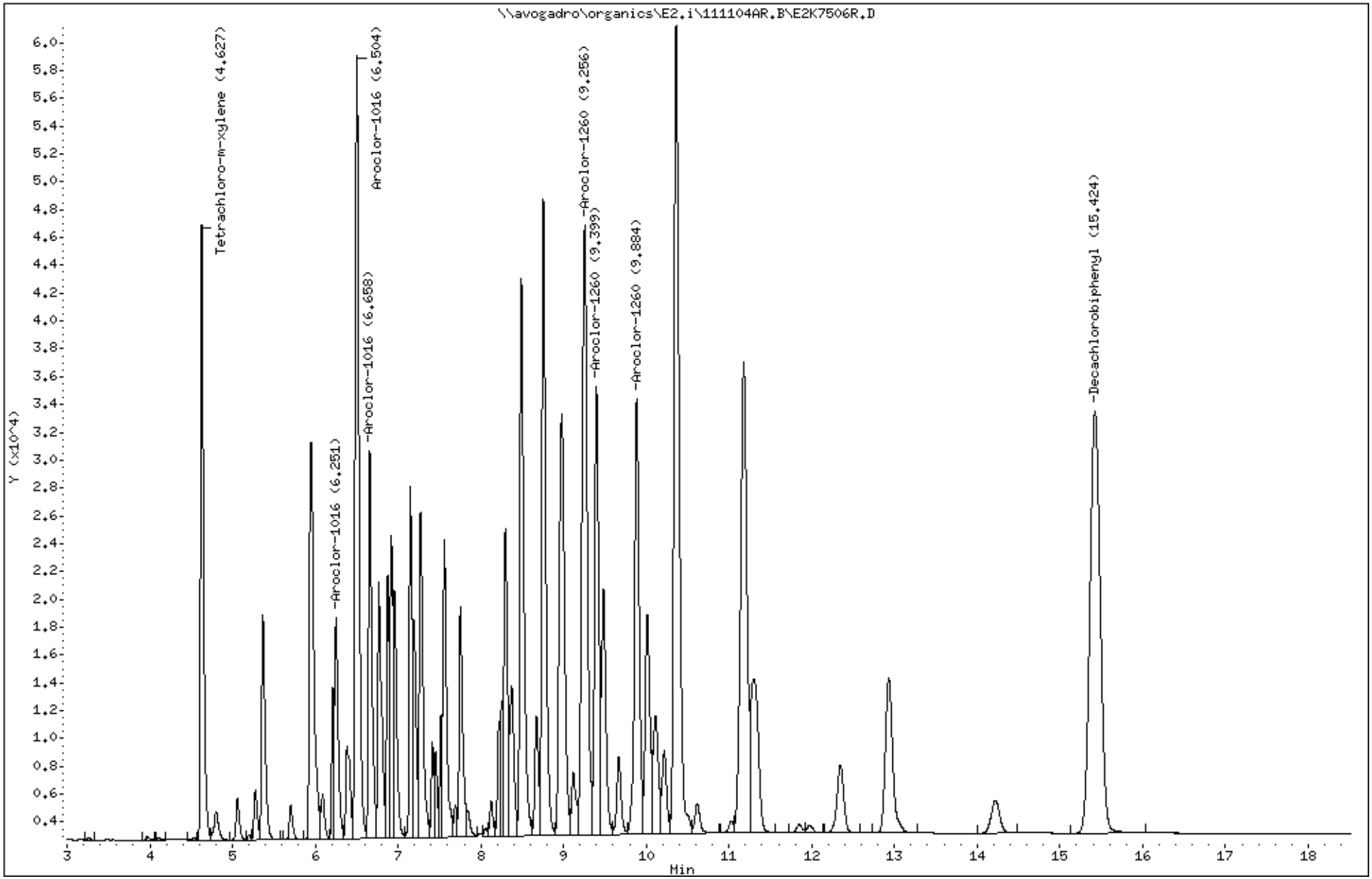
8080/8081PCB Quantitation Report
Data file : \\avogadro\organics\E2.i\111104AR.B\E2K7506R.D
Lab Smp Id: AR16605J2 Client Smp ID: AR16605J2
Inj Date : 05-NOV-2011 04:42
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16605J2,AR16605J2,,ar1660.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111104AR.B\E2_ARO_5_R.m
Meth Date : 07-Nov-2011 11:32 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 28 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.627	4.627	0.000	1117025	0.08000	0.089			
6 Aroclor-1016						CAS #: 12674-11-2		
6.250	6.250	0.000	472871	1.60000	1.5	80.00- 120.00		100.00
6.503	6.503	0.000	1835221	1.60000	1.6	366.12- 406.12		388.10
6.657	6.657	0.000	801318	1.60000	1.5	151.11- 191.11		169.46
Average of Peak Amounts =					1.53333			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.423	15.423	0.000	2643398	0.16000	0.16			
8 Aroclor-1260						CAS #: 11096-82-5		
9.255	9.255	0.000	1927115	1.60000	1.6	80.00- 120.00		100.00
9.398	9.398	0.000	1106371	1.60000	1.5	43.24- 83.24		57.41
9.883	9.883	0.000	1231272	1.60000	1.6	46.46- 86.46		63.89
Average of Peak Amounts =					1.56667			

Data File: \\avogadro\organics\E2.i\111104AR.B\E2K7506R.D
Date : 05-NOV-2011 04:42
Client ID: AR16605J2
Instrument: E2.i
Sample Info: AR16605J2,AR16605J2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E3.I\111114BF.B\E3I6672F.D
Report Date: 22-Nov-2011 16:35

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111114BF.B\E3I6672F.D
Lab Smp Id: AR12213W3 Client Smp ID: AR12213W3
Inj Date : 14-NOV-2011 17:05
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR12213W3,AR12213W3,,ar1221.sub,,
Misc Info : 1,3,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BF.B\E3_ARO_5_F.m
Meth Date : 16-Nov-2011 16:29 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 17:05 Cal File: E3I6672F.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

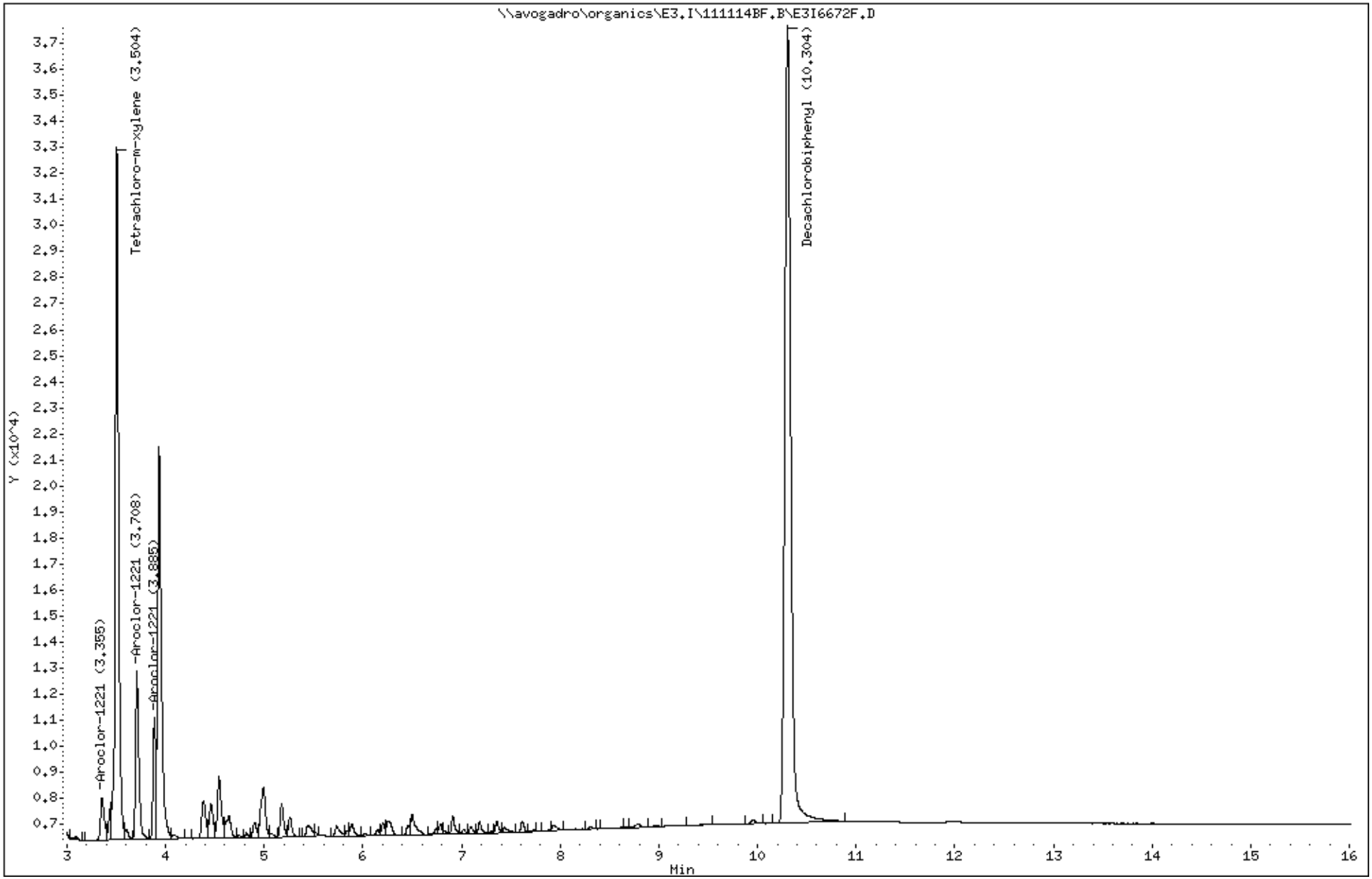
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
3.504	3.492	0.012	614582	0.02000	0.020			(a)
3 Aroclor-1221					CAS #: 11104-28-2			
3.354	3.354	0.000	42947	0.40000	0.40	80.00- 120.00	100.00	(a)
3.708	3.708	0.000	149991	0.40000	0.40	329.25- 369.25	349.24	
3.884	3.884	0.000	85652	0.40000	0.40	179.44- 219.44	199.43	
Average of Peak Amounts =				0.40000				
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.304	10.281	0.023	1297487	0.04000	0.040			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.i\111114BF.B\E3I6672F.D
Date : 14-NOV-2011 17:05
Client ID: AR12213W3 Instrument: E3.i
Sample Info: AR12213W3,AR12213W3,,ar1221.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPest Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6672R.D
Report Date: 22-Nov-2011 16:36

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report
Data file : \\avogadro\organics\E3.I\111114BR.B\E3I6672R.D
Lab Smp Id: AR12213W3 Client Smp ID: AR12213W3
Inj Date : 14-NOV-2011 17:05
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR12213W3,AR12213W3,,ar1221.sub,,
Misc Info : 1,3,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BR.B\E3_ARO_5_R.m
Meth Date : 16-Nov-2011 16:49 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 00:58 Cal File: E3I6697R.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

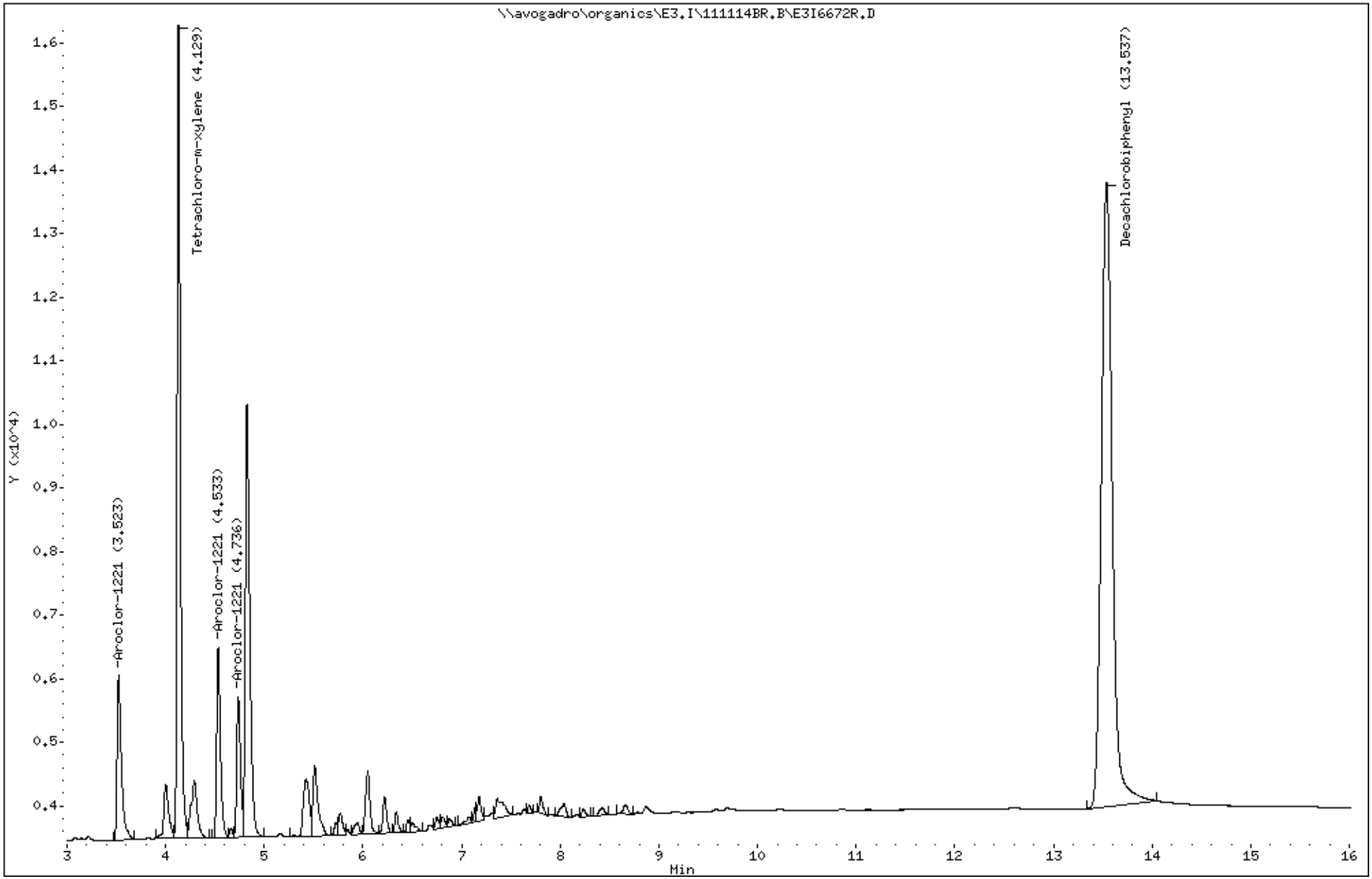
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT	AMOUNTS ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.129	4.115	0.014	294970	0.02000	0.058		
2 Aroclor-1221					CAS #: 11104-28-2		
3.522	3.522	0.000	79179	0.40000	0.40	80.00- 120.00	100.00(a)
4.532	4.532	0.000	78251	0.40000	0.40	78.83- 118.83	98.83
4.735	4.735	0.000	57883	0.40000	0.40	53.10- 93.10	73.10
Average of Peak Amounts =					0.40000		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
13.536	13.497	0.039	760876	0.04000	0.037		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.i\111114BR.B\E3I6672R.D
Date : 14-NOV-2011 17:05
Client ID: AR12213W3
Instrument: E3.i
Sample Info: AR12213W3,AR12213W3,,ar1221.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BF.B\E3I6673F.D
Report Date: 22-Nov-2011 16:35

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111114BF.B\E3I6673F.D
Lab Smp Id: AR12323W3 Client Smp ID: AR12323W3
Inj Date : 14-NOV-2011 17:24
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR12323W3,AR12323W3,,ar1232.sub,,
Misc Info : 1,3,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BF.B\E3_ARO_5_F.m
Meth Date : 16-Nov-2011 16:29 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 17:24 Cal File: E3I6673F.D
Als bottle: 2 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1232.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

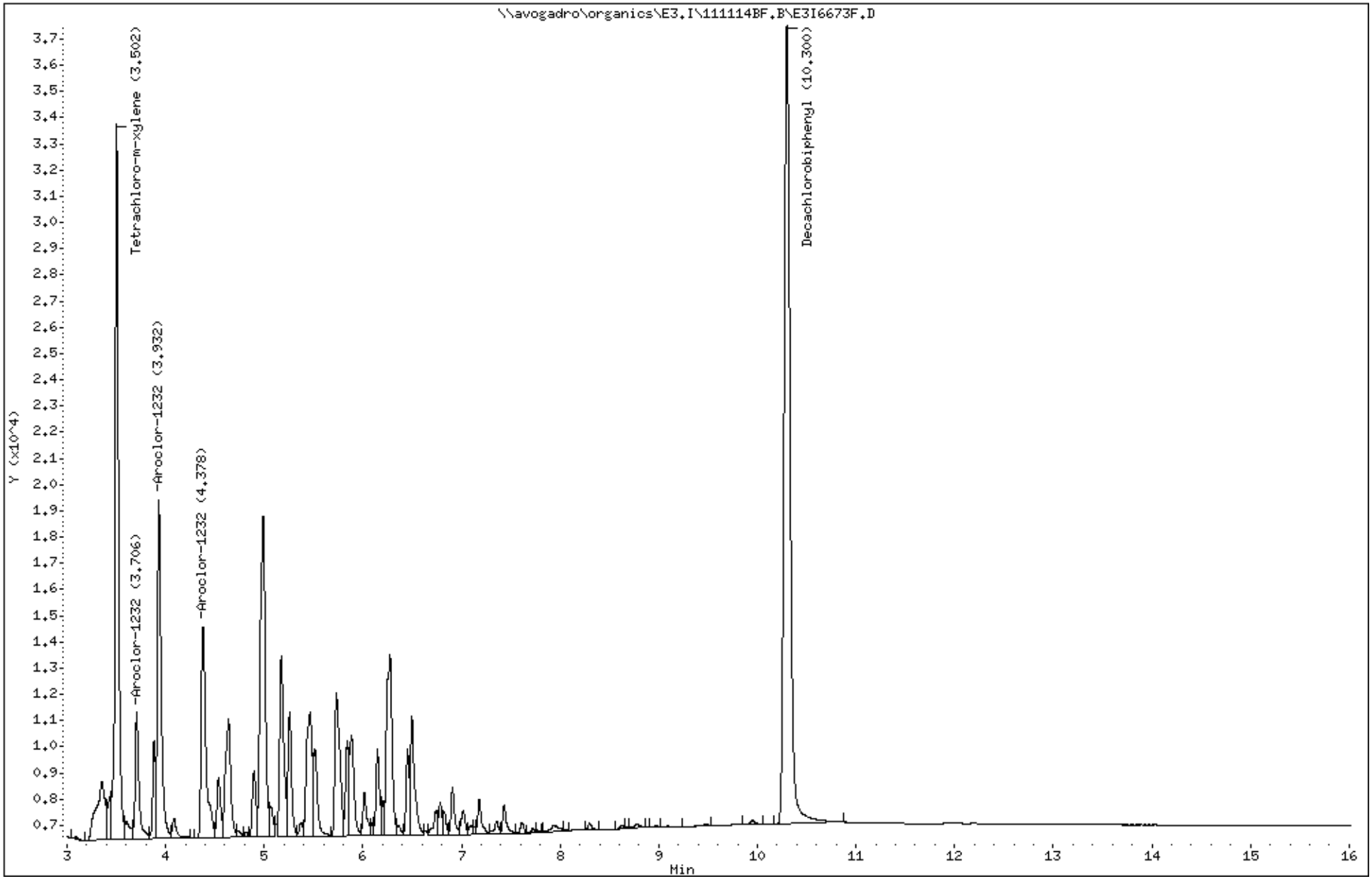
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
3.502	3.492	0.010	647029	0.02000	0.020			(a)
4 Aroclor-1232					CAS #: 11141-16-5			
3.706	3.706	0.000	129255	0.40000	0.40	80.00- 120.00	100.00	(a)
3.931	3.931	0.000	345792	0.40000	0.40	247.53- 287.53	267.53	
4.378	4.378	0.000	271071	0.40000	0.40	189.72- 229.72	209.72	
Average of Peak Amounts =					0.40000			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.300	10.281	0.019	1292985	0.04000	0.040			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.I\111114BF.B\E3I6673F.D
Date : 14-NOV-2011 17:24
Client ID: AR12323W3
Instrument: E3.i
Sample Info: AR12323W3,AR12323W3,,ar1232.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6673R.D
Report Date: 22-Nov-2011 16:36

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report
Data file : \\avogadro\organics\E3.I\111114BR.B\E3I6673R.D
Lab Smp Id: AR12323W3 Client Smp ID: AR12323W3
Inj Date : 14-NOV-2011 17:24
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR12323W3,AR12323W3,,ar1232.sub,,
Misc Info : 1,3,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BR.B\E3_ARO_5_R.m
Meth Date : 16-Nov-2011 16:49 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 00:58 Cal File: E3I6697R.D
Als bottle: 2 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1232.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

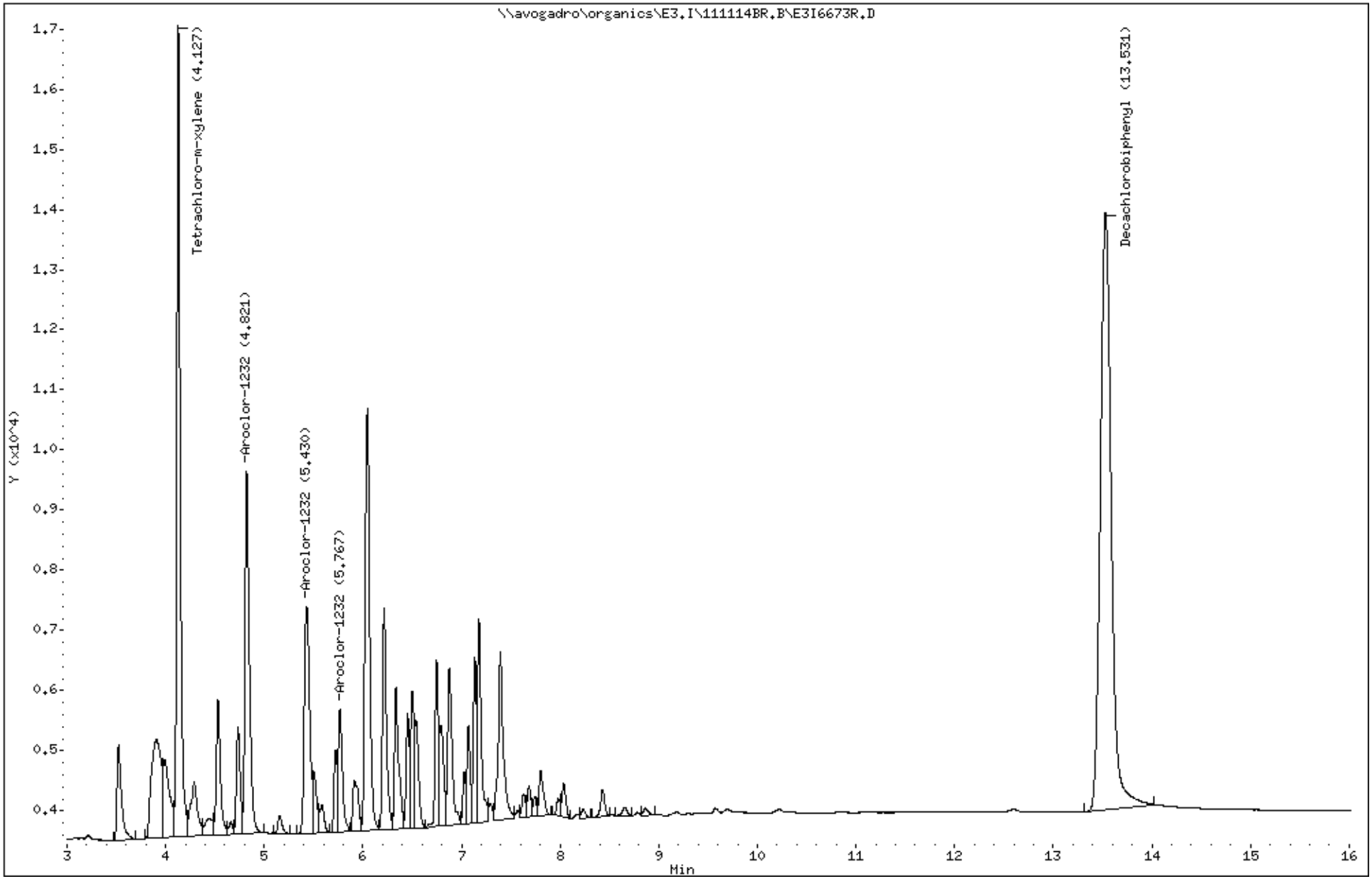
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT	AMOUNTS ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.127	4.115	0.012	326090	0.02000	0.058		
3 Aroclor-1232					CAS #: 11141-16-5		
4.821	4.821	0.000	185675	0.40000	0.40	80.00- 120.00	100.00(a)
5.429	5.429	0.000	140580	0.40000	0.40	55.71- 95.71	75.71
5.767	5.767	0.000	61468	0.40000	0.40	13.11- 53.11	33.11
Average of Peak Amounts =					0.40000		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
13.530	13.497	0.033	764705	0.04000	0.037		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6673R.D
Date : 14-NOV-2011 17:24
Client ID: AR12323W3
Instrument: E3.i
Sample Info: AR12323W3,AR12323W3,,ar1232.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BF.B\E3I6675F.D
Report Date: 22-Nov-2011 16:35

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111114BF.B\E3I6675F.D
Lab Smp Id: AR12421W3 Client Smp ID: AR12421W3
Inj Date : 14-NOV-2011 18:01
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR12421W3,AR12421W3,,ar1242.sub,,
Misc Info : 1,1,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BF.B\E3_ARO_5_F.m
Meth Date : 16-Nov-2011 16:29 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 18:01 Cal File: E3I6675F.D
Als bottle: 4 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

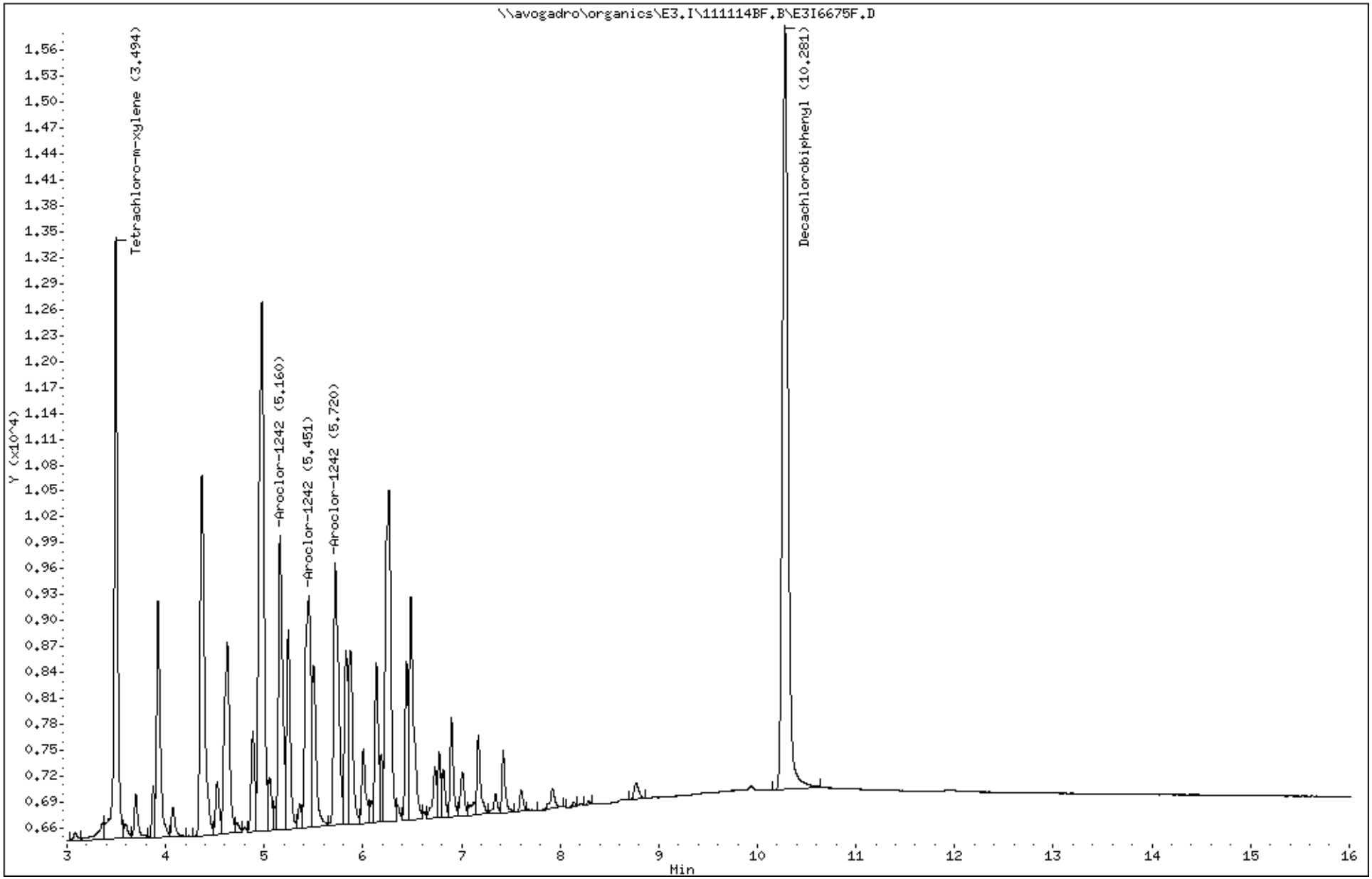
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
3.493	3.492	0.001	163677	0.00500	0.0050			(a)
6 Aroclor-1242						CAS #: 53469-21-9		
5.159	5.159	0.000	99677	0.10000	0.10	80.00- 120.00	100.00	(a)
5.451	5.451	0.000	104893	0.10000	0.10	81.04- 121.04	105.23	
5.720	5.719	0.001	103817	0.10000	0.10	83.87- 123.87	104.15	
		Average of Peak Amounts =		0.10000				
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.280	10.281	-0.001	358941	0.01000	0.010			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.i\111114BF.B\E3I6675F.D
Date : 14-NOV-2011 18:01
Client ID: AR12421W3
Instrument: E3.i
Sample Info: AR12421W3,AR12421W3,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6675R.D
Report Date: 22-Nov-2011 16:36

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111114BR.B\E3I6675R.D
Lab Smp Id: AR12421W3 Client Smp ID: AR12421W3
Inj Date : 14-NOV-2011 18:01
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR12421W3,AR12421W3,,ar1242.sub,,
Misc Info : 1,1,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BR.B\E3_ARO_5_R.m
Meth Date : 16-Nov-2011 16:49 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 00:20 Cal File: E3I6695R.D
Als bottle: 4 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

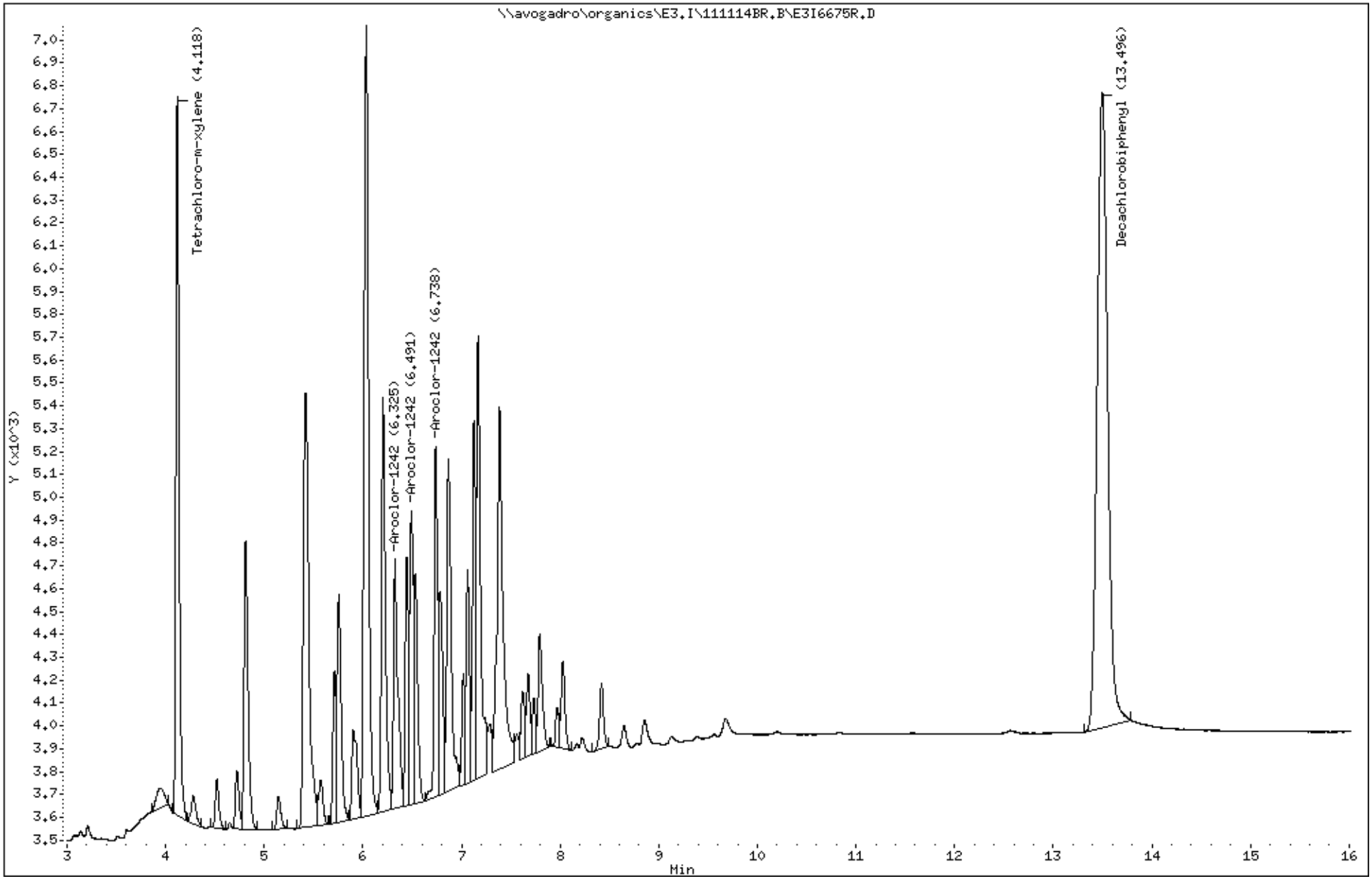
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.117	4.115	0.002	70908	0.00500	0.0092			(a)
4 Aroclor-1242					CAS #: 53469-21-9			
6.324	6.324	0.000	33424	0.10000	0.100	80.00- 120.00	100.00	(a)
6.491	6.490	0.001	32136	0.10000	0.11	64.80- 104.80	96.15	
6.737	6.736	0.001	36464	0.10000	0.11	77.13- 117.13	109.10	
Average of Peak Amounts =					0.10667			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
13.496	13.497	-0.001	204737	0.01000	0.010			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.i\111114BR.B\E3I6675R.D
Date : 14-NOV-2011 18:01
Client ID: AR12421W3
Instrument: E3.i
Sample Info: AR12421W3,AR12421W3,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BF.B\E3I6676F.D
Report Date: 22-Nov-2011 16:35

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111114BF.B\E3I6676F.D
Lab Smp Id: AR12422W3 Client Smp ID: AR12422W3
Inj Date : 14-NOV-2011 18:20
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR12422W3,AR12422W3,,ar1242.sub,,
Misc Info : 1,2,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BF.B\E3_ARO_5_F.m
Meth Date : 16-Nov-2011 16:29 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 18:20 Cal File: E3I6676F.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

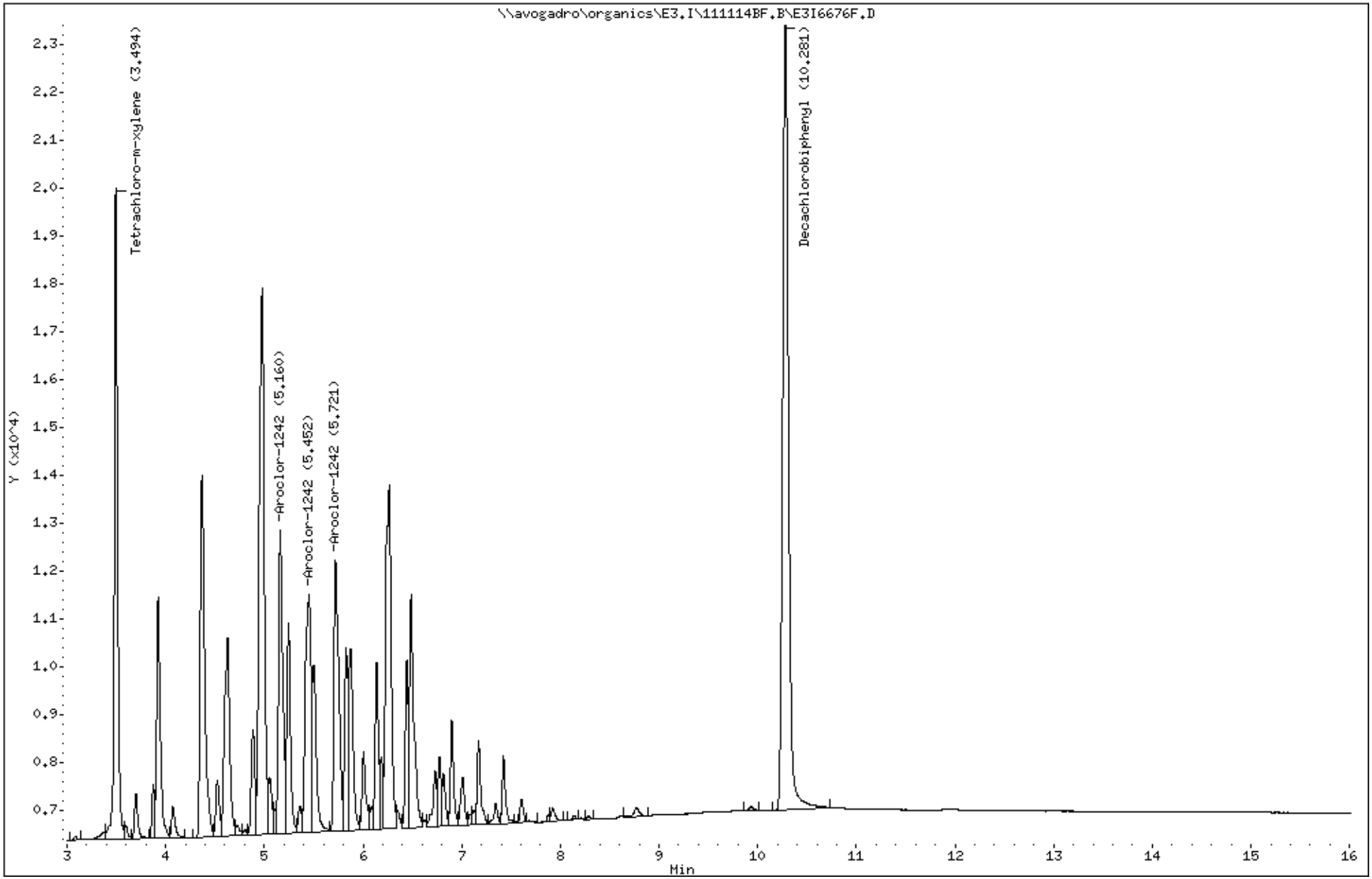
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
3.494	3.492	0.002	308984	0.01000	0.0096			(a)
6 Aroclor-1242						CAS #: 53469-21-9		
5.160	5.159	0.001	186611	0.20000	0.19	80.00- 120.00	100.00	(a)
5.451	5.451	0.000	194302	0.20000	0.19	81.04- 121.04	104.12	
5.720	5.719	0.001	194409	0.20000	0.19	83.87- 123.87	104.18	
Average of Peak Amounts =					0.19000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.281	10.281	0.000	678810	0.02000	0.020			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.I\111114BF.B\E3I6676F.D
Date : 14-NOV-2011 18:20
Client ID: AR12422W3
Instrument: E3.i
Sample Info: AR12422W3,AR12422W3,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6676R.D
Report Date: 22-Nov-2011 16:36

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111114BR.B\E3I6676R.D
Lab Smp Id: AR12422W3 Client Smp ID: AR12422W3
Inj Date : 14-NOV-2011 18:20
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR12422W3,AR12422W3,,ar1242.sub,,
Misc Info : 1,2,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BR.B\E3_ARO_5_R.m
Meth Date : 16-Nov-2011 16:49 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 00:39 Cal File: E3I6696R.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

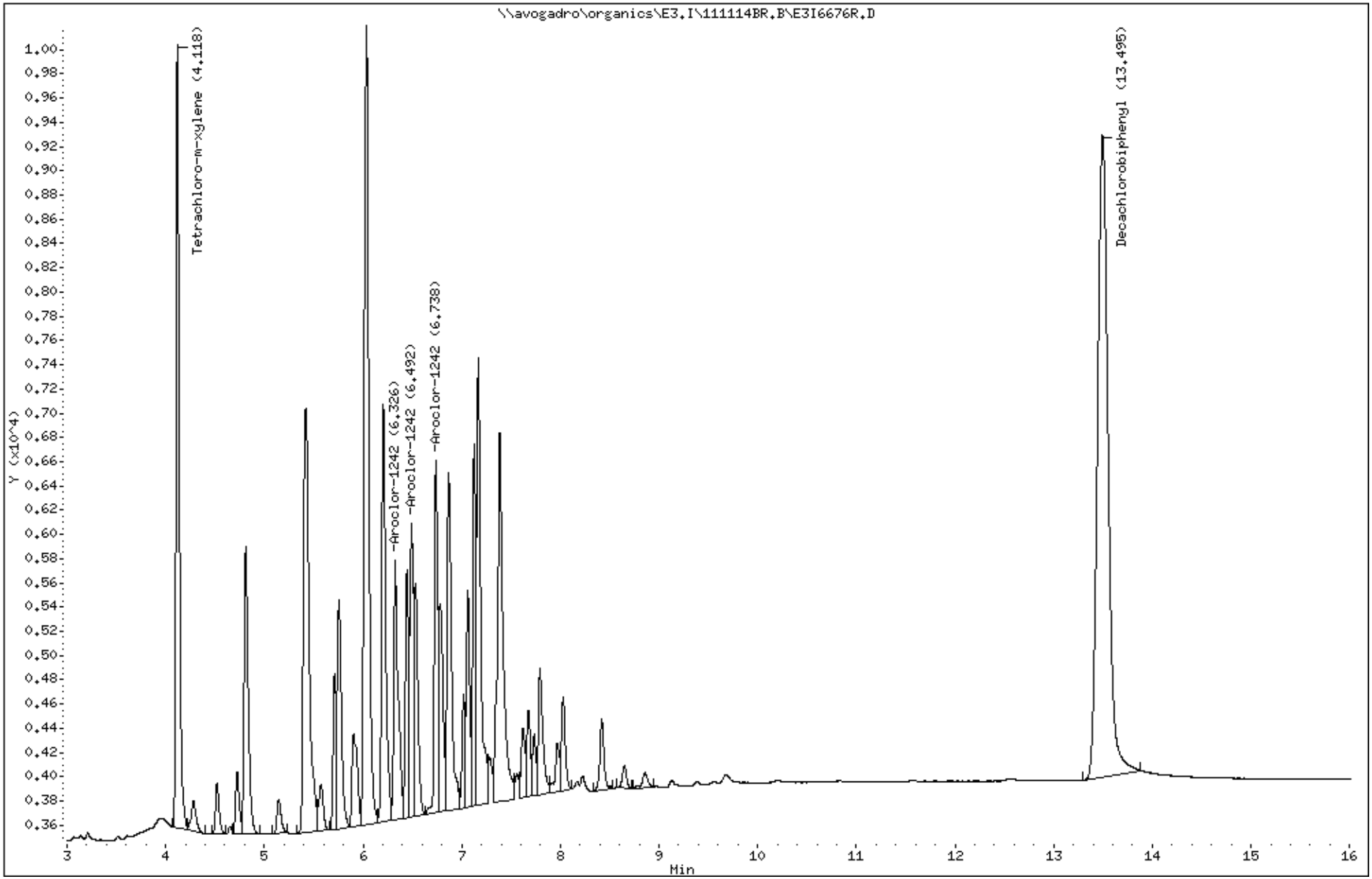
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.118	4.115	0.003	146393	0.01000	0.016			(a)
4 Aroclor-1242					CAS #: 53469-21-9			
6.326	6.324	0.002	65660	0.20000	0.20	80.00- 120.00	100.00	(a)
6.491	6.490	0.001	60218	0.20000	0.21	64.80- 104.80	91.71	
6.738	6.736	0.002	67861	0.20000	0.21	77.13- 117.13	103.35	
Average of Peak Amounts =					0.20667			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
13.495	13.497	-0.002	398463	0.02000	0.020			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6676R.D
Date : 14-NOV-2011 18:20
Client ID: AR12422W3
Instrument: E3.i
Sample Info: AR12422W3,AR12422W3,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BF.B\E3I6677F.D
Report Date: 22-Nov-2011 16:35

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111114BF.B\E3I6677F.D
Lab Smp Id: AR12423W3 Client Smp ID: AR12423W3
Inj Date : 14-NOV-2011 18:39
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR12423W3,AR12423W3,,ar1242.sub,,
Misc Info : 1,3,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BF.B\E3_ARO_5_F.m
Meth Date : 16-Nov-2011 16:29 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 18:39 Cal File: E3I6677F.D
Als bottle: 6 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

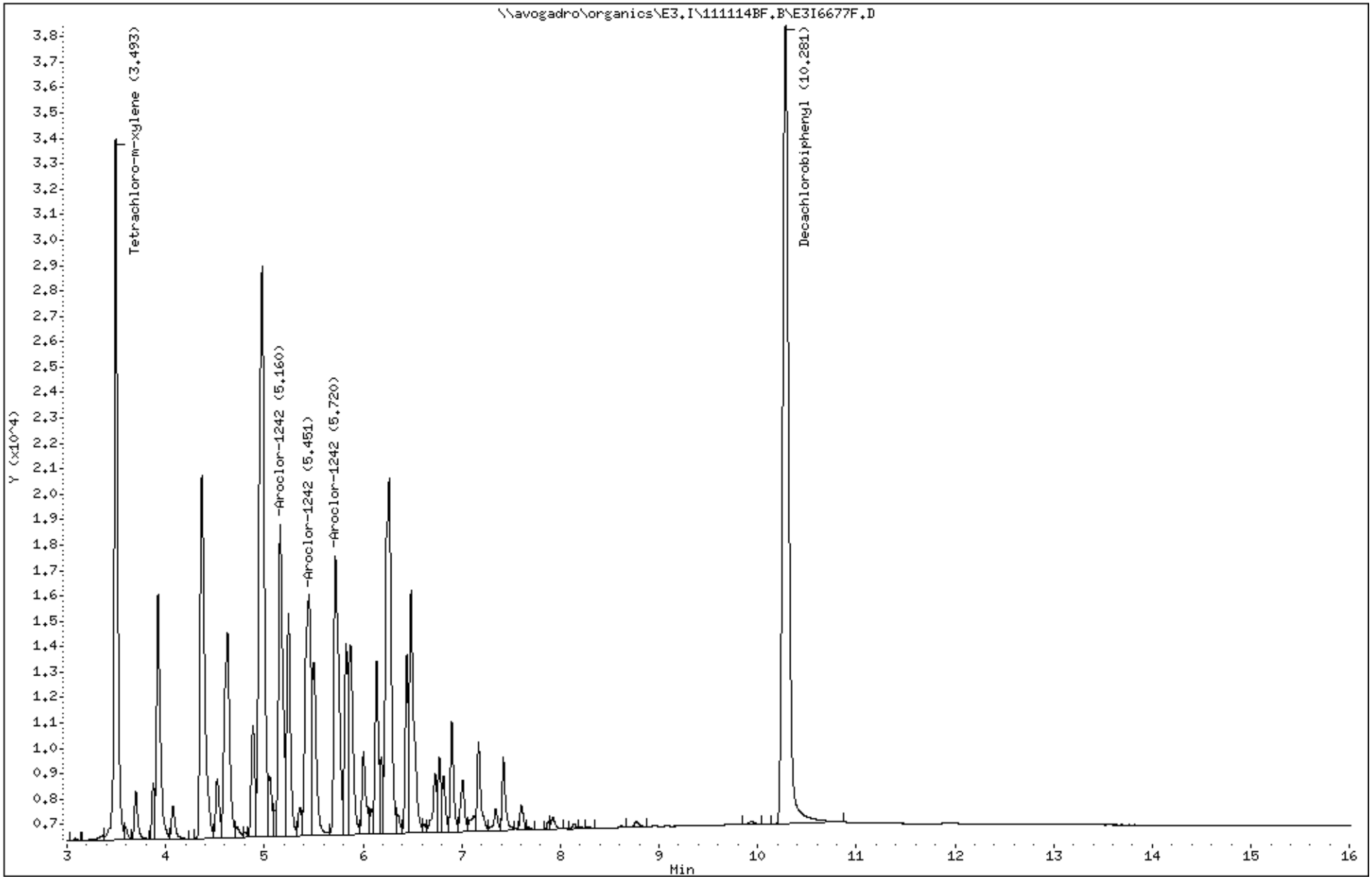
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
3.493	3.492	0.001	631530	0.02000	0.020		(a)
6 Aroclor-1242					CAS #: 53469-21-9		
5.159	5.159	0.000	367028	0.40000	0.39	80.00- 120.00	100.00(a)
5.451	5.451	0.000	372095	0.40000	0.38	81.04- 121.04	101.38
5.720	5.719	0.001	381788	0.40000	0.39	83.87- 123.87	104.02
		Average of Peak Amounts =			0.38667		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
10.281	10.281	0.000	1335243	0.04000	0.039		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.i\111114BF.B\E3I6677F.D
Date : 14-NOV-2011 18:39
Client ID: AR12423W3
Instrument: E3.i
Sample Info: AR12423W3,AR12423W3,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6677R.D
Report Date: 22-Nov-2011 16:36

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111114BR.B\E3I6677R.D
Lab Smp Id: AR12423W3 Client Smp ID: AR12423W3
Inj Date : 14-NOV-2011 18:39
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR12423W3,AR12423W3,,ar1242.sub,,
Misc Info : 1,3,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BR.B\E3_ARO_5_R.m
Meth Date : 16-Nov-2011 16:49 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 00:58 Cal File: E3I6697R.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

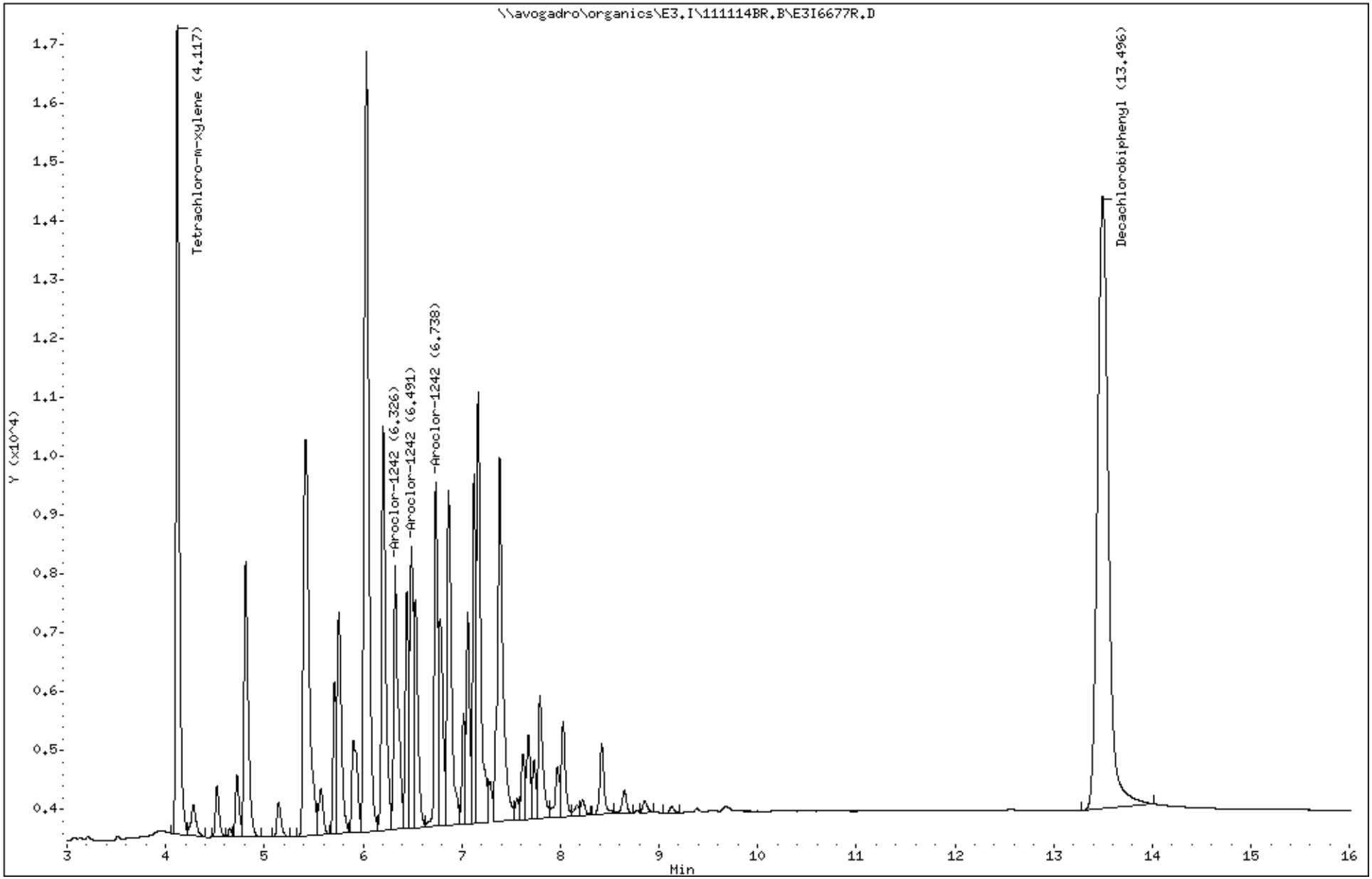
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.117	4.115	0.002	316564	0.02000	0.035			(a)
4 Aroclor-1242						CAS #: 53469-21-9		
6.325	6.324	0.001	139121	0.40000	0.42	80.00- 120.00	100.00	(a)
6.491	6.490	0.001	119873	0.40000	0.42	64.80- 104.80	86.16	
6.737	6.736	0.001	137901	0.40000	0.42	77.13- 117.13	99.12	
		Average of Peak Amounts =			0.42000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
13.496	13.497	-0.001	806372	0.04000	0.040			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6677R.D
Date : 14-NOV-2011 18:39
Client ID: AR12423W3
Instrument: E3.i
Sample Info: AR12423W3,AR12423W3,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BF.B\E3I6678F.D
Report Date: 22-Nov-2011 16:35

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111114BF.B\E3I6678F.D
Lab Smp Id: AR12424W3 Client Smp ID: AR12424W3
Inj Date : 14-NOV-2011 18:58
Operator : DL SRC: DL Inst ID: E3.i
Smp Info : AR12424W3,AR12424W3,,ar1242.sub,,
Misc Info : 1,4,,1
Comment : Column Phase: CLP PEST Column Diameter: 0.53mm
Method : \\avogadro\organics\E3.I\111114BF.B\E3_ARO_5_F.m
Meth Date : 16-Nov-2011 16:29 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 18:58 Cal File: E3I6678F.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

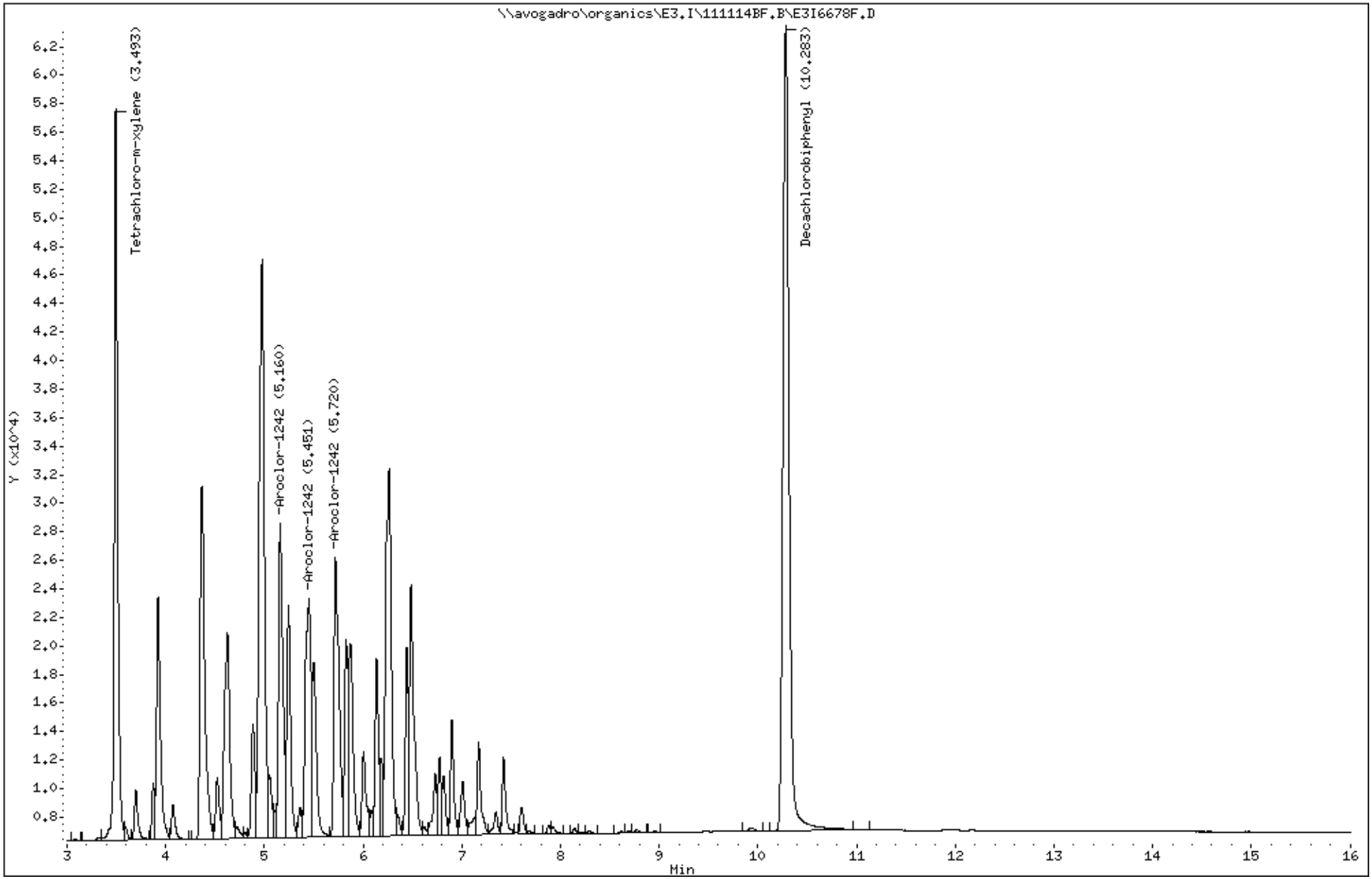
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
3.493	3.492	0.001	1200783	0.04000	0.038			(a)
6 Aroclor-1242					CAS #: 53469-21-9			
5.159	5.159	0.000	663537	0.80000	0.72	80.00- 120.00	100.00	(a)
5.451	5.451	0.000	654226	0.80000	0.69	81.04- 121.04	98.60	
5.719	5.719	0.000	691923	0.80000	0.72	83.87- 123.87	104.28	
Average of Peak Amounts =					0.71000			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.282	10.281	0.001	2442473	0.08000	0.073			

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.i\111114BF.B\E3I6678F.D
Date : 14-NOV-2011 18:58
Client ID: AR12424W3
Instrument: E3.i
Sample Info: AR12424W3,AR12424W3,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6678R.D
Report Date: 22-Nov-2011 16:36

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111114BR.B\E3I6678R.D
Lab Smp Id: AR12424W3 Client Smp ID: AR12424W3
Inj Date : 14-NOV-2011 18:58
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR12424W3,AR12424W3,,ar1242.sub,,
Misc Info : 1,4,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BR.B\E3_ARO_5_R.m
Meth Date : 16-Nov-2011 16:49 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:17 Cal File: E3I6698R.D
Als bottle: 7 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

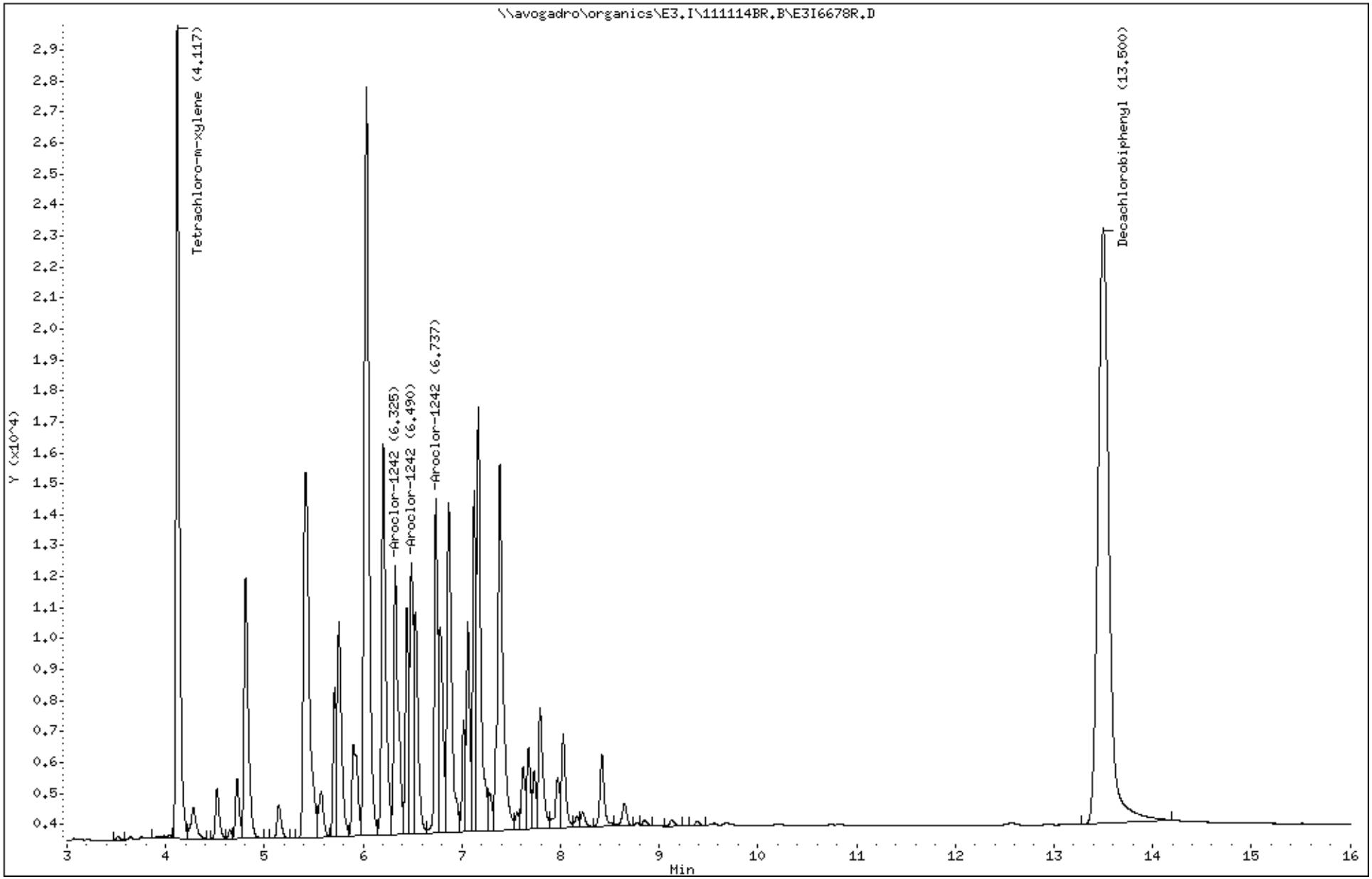
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT	AMOUNTS ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.117	4.115	0.002	628595	0.04000	0.052		
4 Aroclor-1242					CAS #: 53469-21-9		
6.325	6.324	0.001	269748	0.80000	0.80	80.00- 120.00	100.00(a)
6.490	6.490	0.000	215664	0.80000	0.75	64.80- 104.80	79.95
6.736	6.736	0.000	247934	0.80000	0.76	77.13- 117.13	91.91
Average of Peak Amounts =					0.77000		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
13.499	13.497	0.002	1517581	0.08000	0.077		

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6678R.D
Date : 14-NOV-2011 18:58
Client ID: AR12424W3
Instrument: E3.i
Sample Info: AR12424W3,AR12424W3,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BF.B\E3I6679F.D
Report Date: 22-Nov-2011 16:35

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

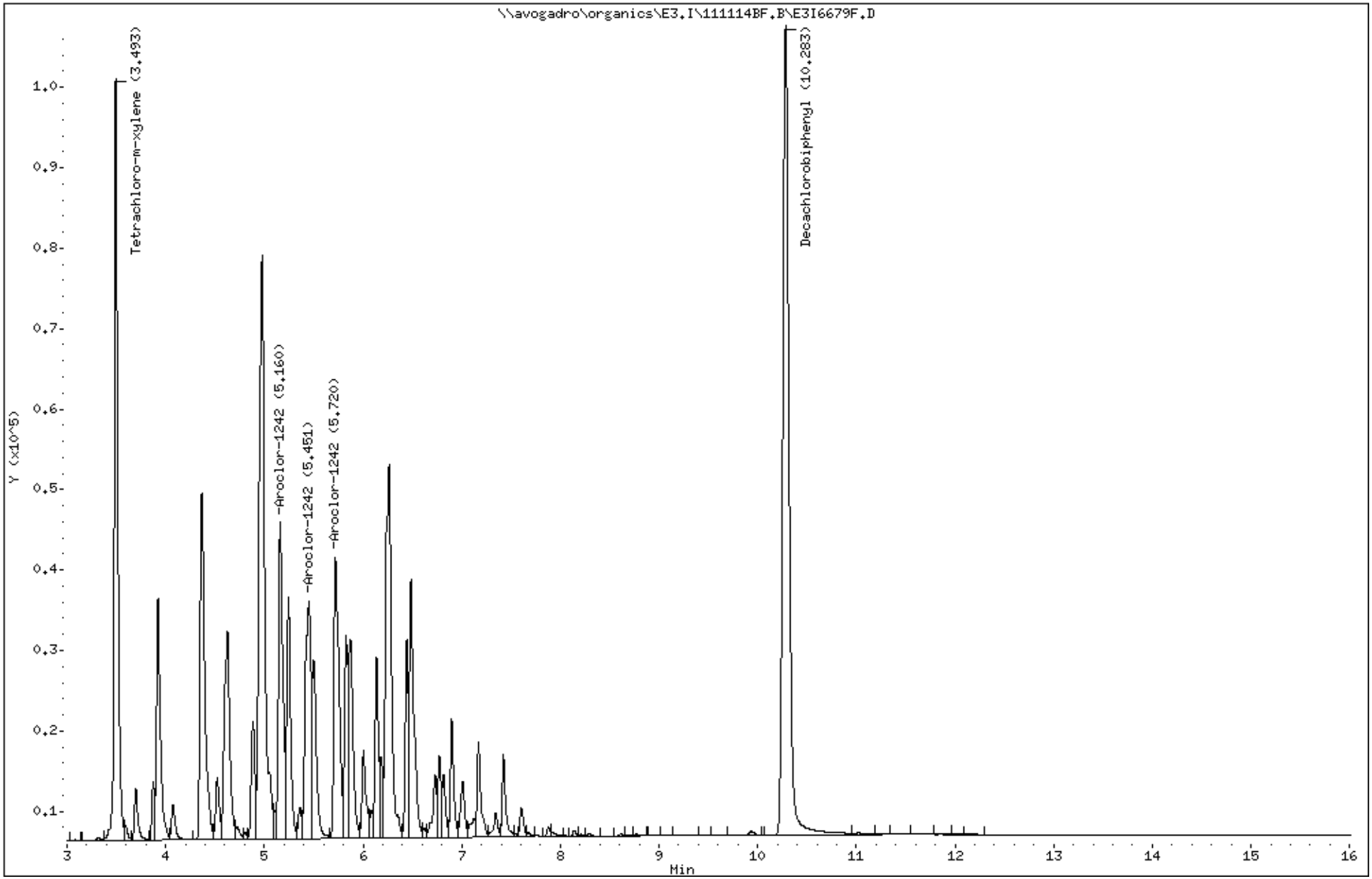
Data file : \\avogadro\organics\E3.I\111114BF.B\E3I6679F.D
Lab Smp Id: AR12425W3 Client Smp ID: AR12425W3
Inj Date : 14-NOV-2011 19:17
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR12425W3,AR12425W3,,ar1242.sub,,
Misc Info : 1,5,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BF.B\E3_ARO_5_F.m
Meth Date : 16-Nov-2011 16:29 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 19:17 Cal File: E3I6679F.D
Als bottle: 8 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
3.493	3.492	0.001	2273949	0.08000	0.074			
6 Aroclor-1242						CAS #: 53469-21-9		
5.159	5.159	0.000	1194871	1.60000	1.4	80.00- 120.00		100.00
5.451	5.451	0.000	1155163	1.60000	1.3	81.04- 121.04		96.68
5.719	5.719	0.000	1254418	1.60000	1.4	83.87- 123.87		104.98
		Average of Peak Amounts =			1.36667			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.283	10.281	0.002	4422036	0.16000	0.14			

Data File: \\avogadro\organics\E3.i\111114BF.B\E3I6679F.D
Date : 14-NOV-2011 19:17
Client ID: AR12425W3
Instrument: E3.i
Sample Info: AR12425W3,AR12425W3,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6679R.D
Report Date: 22-Nov-2011 16:36

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

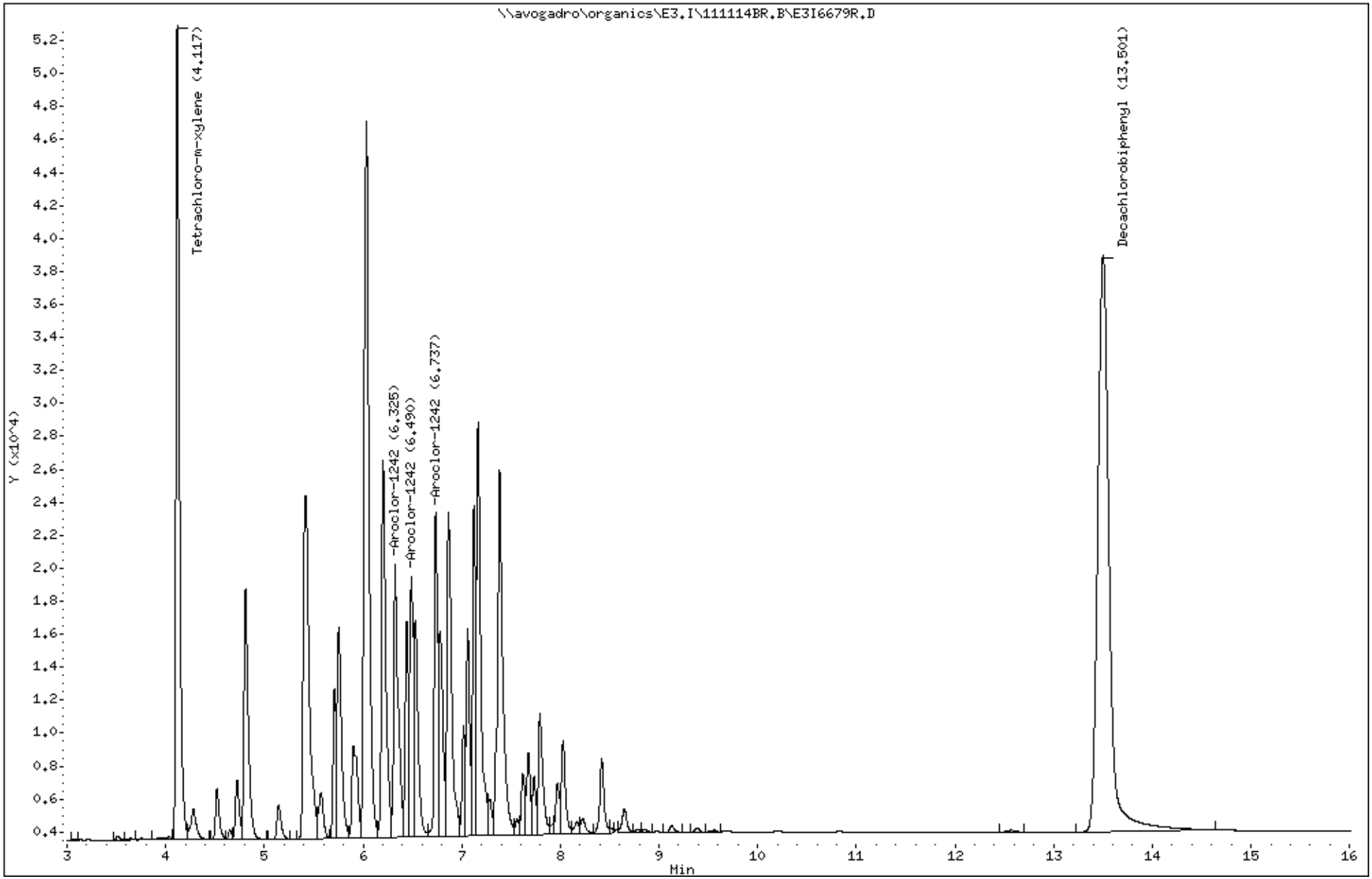
Data file : \\avogadro\organics\E3.I\111114BR.B\E3I6679R.D
Lab Smp Id: AR12425W3 Client Smp ID: AR12425W3
Inj Date : 14-NOV-2011 19:17
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR12425W3,AR12425W3,,ar1242.sub,,
Misc Info : 1,5,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BR.B\E3_ARO_5_R.m
Meth Date : 16-Nov-2011 16:49 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699R.D
Als bottle: 8 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT	AMOUNTS ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.117	4.115	0.002	1238307	0.08000	0.082		
4 Aroclor-1242					CAS #: 53469-21-9		
6.324	6.324	0.000	522150	1.60000	1.6	80.00- 120.00	100.00
6.490	6.490	0.000	383711	1.60000	1.3	64.80- 104.80	73.49
6.736	6.736	0.000	449565	1.60000	1.4	77.13- 117.13	86.10
Average of Peak Amounts =					1.43333		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
13.500	13.497	0.003	2843735	0.16000	0.15		

Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6679R.D
Date : 14-NOV-2011 19:17
Client ID: AR12425W3
Instrument: E3.i
Sample Info: AR12425W3,AR12425W3,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BF.B\E3I6681F.D
Report Date: 22-Nov-2011 16:35

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111114BF.B\E3I6681F.D
Lab Smp Id: AR12481W3 Client Smp ID: AR12481W3
Inj Date : 14-NOV-2011 19:55
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR12481W3,AR12481W3,,ar1248.sub,,
Misc Info : 1,1,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BF.B\E3_ARO_5_F.m
Meth Date : 16-Nov-2011 16:29 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 19:55 Cal File: E3I6681F.D
Als bottle: 10 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

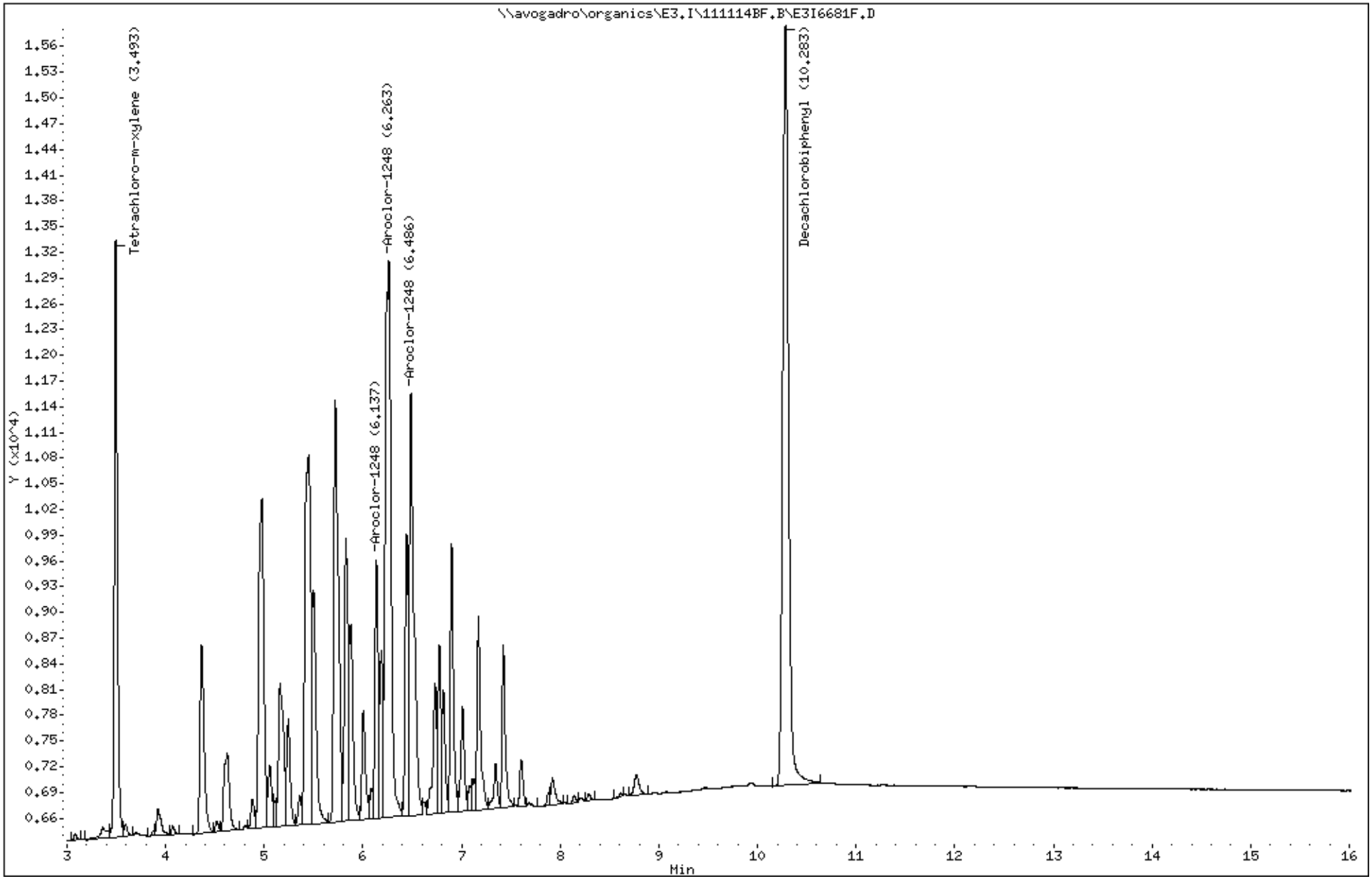
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
3.493	3.492	0.001	148009	0.00500	0.0049			(a)
7 Aroclor-1248						CAS #: 12672-29-6		
6.136	6.137	-0.001	68771	0.10000	0.10	80.00- 120.00	100.00	(a)
6.262	6.264	-0.002	264750	0.10000	0.10	371.00- 411.00	384.97	
6.486	6.486	0.000	160815	0.10000	0.10	218.89- 258.89	233.84	
Average of Peak Amounts =				0.10000				
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.283	10.281	0.002	360127	0.01000	0.011			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.i\111114BF.B\E3I6681F.D
Date : 14-NOV-2011 19:55
Client ID: AR12481W3
Instrument: E3.i
Sample Info: AR12481W3,AR12481W3,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6681R.D
Report Date: 22-Nov-2011 16:36

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111114BR.B\E3I6681R.D
Lab Smp Id: AR12481W3 Client Smp ID: AR12481W3
Inj Date : 14-NOV-2011 19:55
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR12481W3,AR12481W3,,ar1248.sub,,
Misc Info : 1,1,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BR.B\E3_ARO_5_R.m
Meth Date : 16-Nov-2011 16:49 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 00:20 Cal File: E3I6695R.D
Als bottle: 10 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

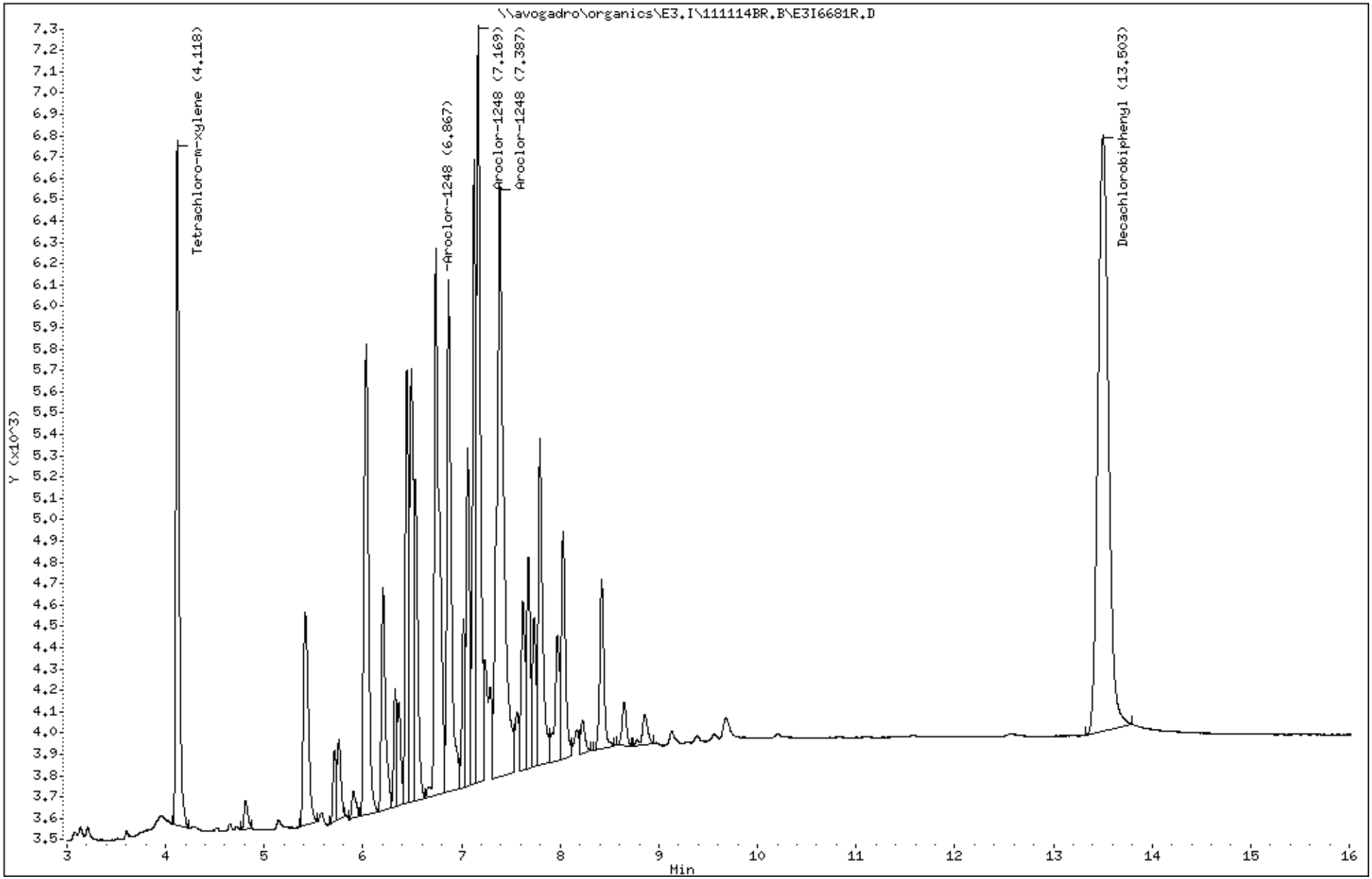
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT	AMOUNTS ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.118	4.115	0.003	73399	0.00500	0.0048		(a)
5 Aroclor-1248					CAS #: 12672-29-6		
6.867	6.866	0.001	73463	0.10000	0.11	80.00- 120.00	100.00(a)
7.168	7.167	0.001	94608	0.10000	0.11	106.72- 146.72	128.78
7.387	7.386	0.001	132771	0.10000	0.12	145.39- 185.39	180.73
Average of Peak Amounts =					0.11333		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
13.503	13.497	0.006	207371	0.01000	0.011		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6681R.D
Date : 14-NOV-2011 19:55
Client ID: AR12481W3
Instrument: E3.i
Sample Info: AR12481W3,AR12481W3,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BF.B\E3I6682F.D
Report Date: 22-Nov-2011 16:35

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111114BF.B\E3I6682F.D
Lab Smp Id: AR12482W3 Client Smp ID: AR12482W3
Inj Date : 14-NOV-2011 20:14
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR12482W3,AR12482W3,,ar1248.sub,,
Misc Info : 1,2,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BF.B\E3_ARO_5_F.m
Meth Date : 16-Nov-2011 16:29 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 20:14 Cal File: E3I6682F.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

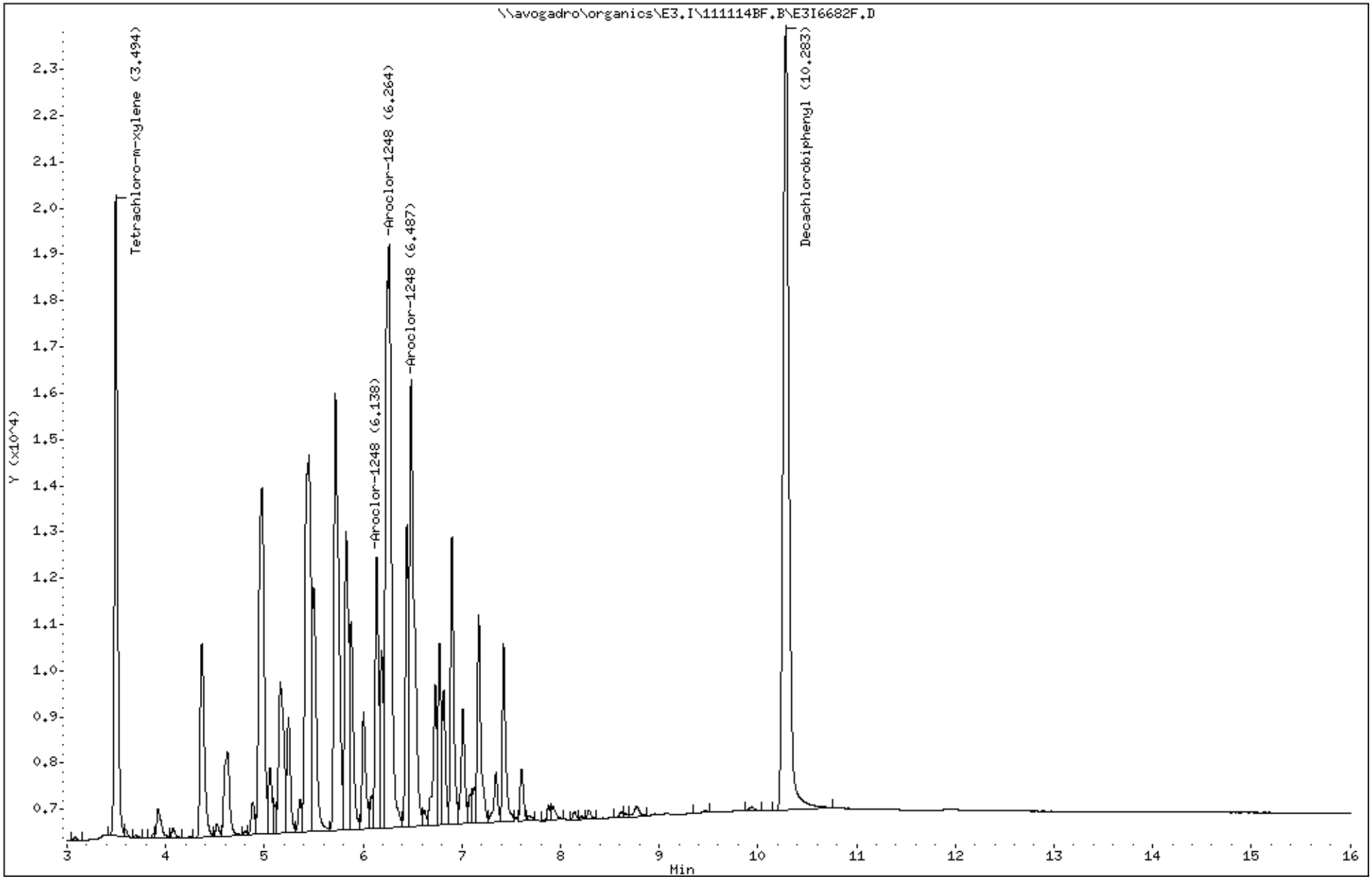
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
3.494	3.492	0.002	294289	0.01000	0.0099			(a)
7 Aroclor-1248						CAS #: 12672-29-6		
6.137	6.137	0.000	133972	0.20000	0.20	80.00- 120.00	100.00	(a)
6.264	6.264	0.000	520579	0.20000	0.20	371.00- 411.00	388.57	
6.486	6.486	0.000	317208	0.20000	0.20	218.89- 258.89	236.77	
Average of Peak Amounts =				0.20000				
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.283	10.281	0.002	705031	0.02000	0.022			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.I\111114BF.B\E3I6682F.D
Date : 14-NOV-2011 20:14
Client ID: AR12482W3
Instrument: E3.i
Sample Info: AR12482W3,AR12482W3,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6682R.D
Report Date: 22-Nov-2011 16:36

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111114BR.B\E3I6682R.D
Lab Smp Id: AR12482W3 Client Smp ID: AR12482W3
Inj Date : 14-NOV-2011 20:14
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR12482W3,AR12482W3,,ar1248.sub,,
Misc Info : 1,2,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BR.B\E3_ARO_5_R.m
Meth Date : 16-Nov-2011 16:49 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 00:39 Cal File: E3I6696R.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

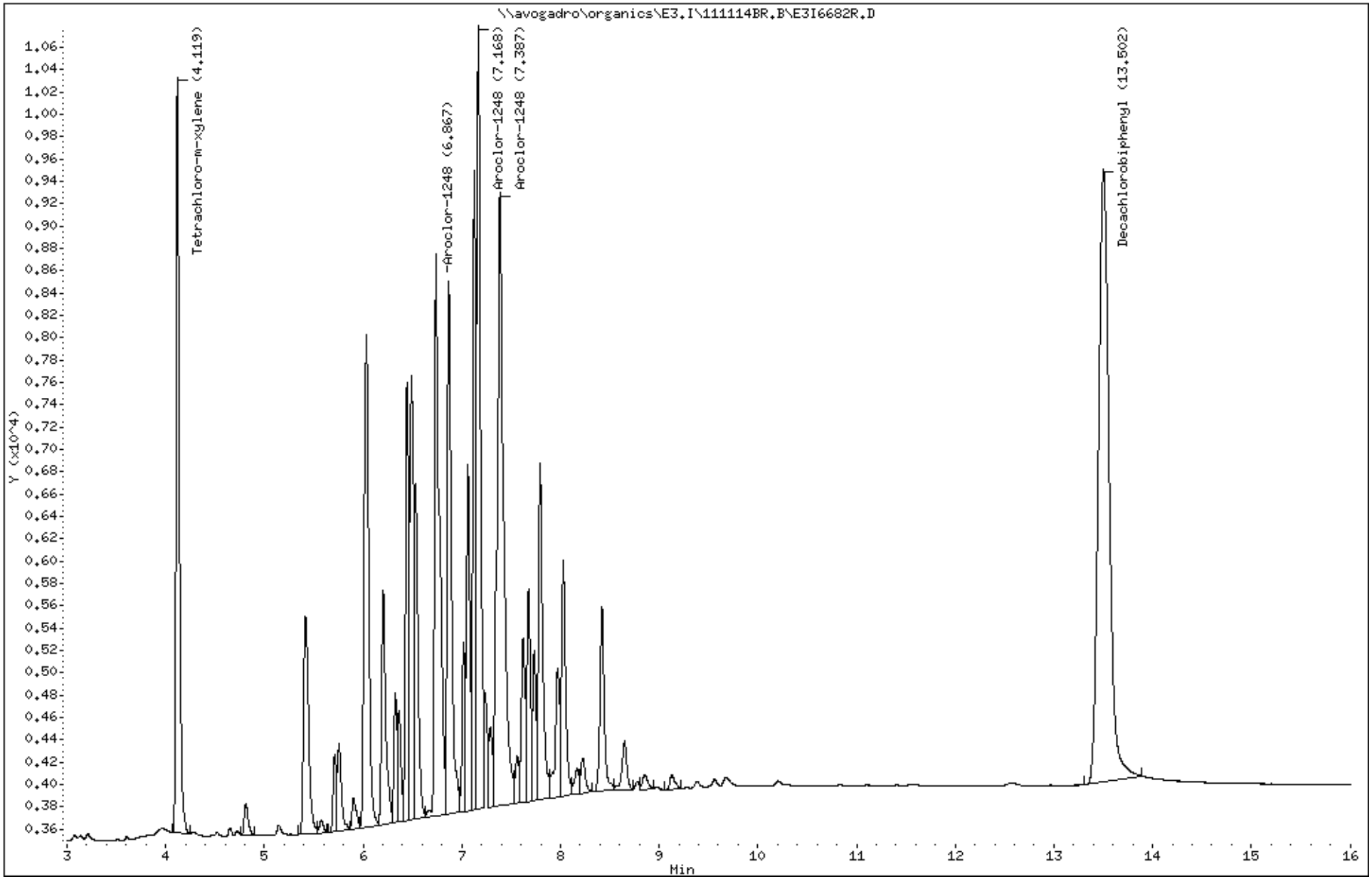
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.118	4.115	0.003	153042	0.01000	0.0099			(a)
5 Aroclor-1248						CAS #: 12672-29-6		
6.867	6.866	0.001	144976	0.20000	0.21	80.00- 120.00	100.00	(a)
7.167	7.167	0.000	186018	0.20000	0.21	106.72- 146.72	128.31	
7.386	7.386	0.000	248563	0.20000	0.22	145.39- 185.39	171.45	
Average of Peak Amounts =					0.21333			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
13.502	13.497	0.005	414460	0.02000	0.021			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6682R.D
Date : 14-NOV-2011 20:14
Client ID: AR12482W3
Instrument: E3.i
Sample Info: AR12482W3,AR12482W3,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BF.B\E3I6683F.D
Report Date: 22-Nov-2011 16:35

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111114BF.B\E3I6683F.D
Lab Smp Id: AR12483W3 Client Smp ID: AR12483W3
Inj Date : 14-NOV-2011 20:33
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR12483W3,AR12483W3,,ar1248.sub,,
Misc Info : 1,3,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BF.B\E3_ARO_5_F.m
Meth Date : 16-Nov-2011 16:29 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 20:33 Cal File: E3I6683F.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

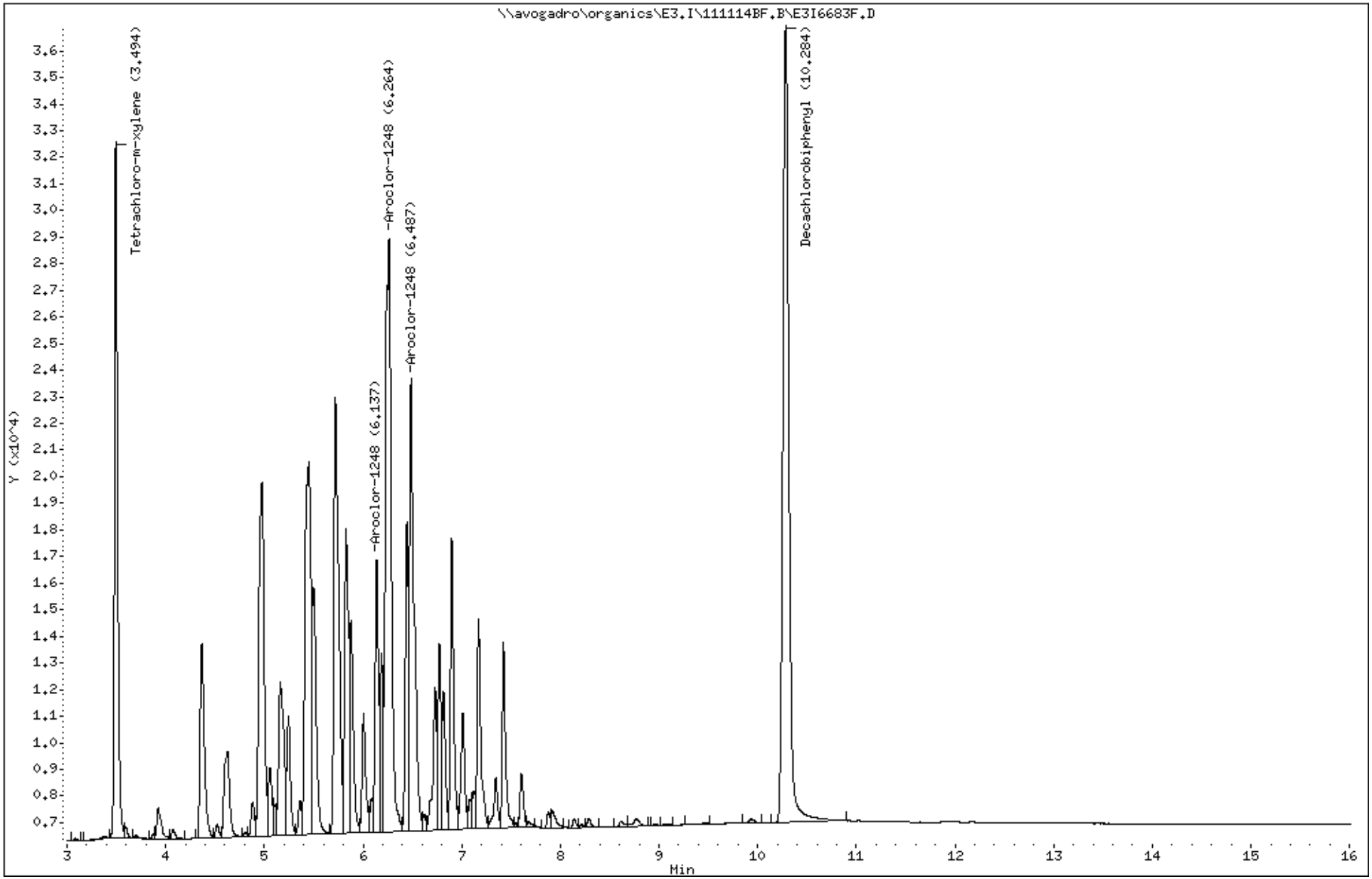
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
3.494	3.492	0.002	563837	0.02000	0.019			(a)
7 Aroclor-1248					CAS #: 12672-29-6			
6.137	6.137	0.000	235129	0.40000	0.36	80.00- 120.00	100.00	(a)
6.263	6.264	-0.001	923111	0.40000	0.37	371.00- 411.00	392.60	
6.486	6.486	0.000	564635	0.40000	0.37	218.89- 258.89	240.14	
Average of Peak Amounts =					0.36667			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.283	10.281	0.002	1272742	0.04000	0.039			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.i\111114BF.B\E3I6683F.D
Date : 14-NOV-2011 20:33
Client ID: AR12483W3
Instrument: E3.i
Sample Info: AR12483W3,AR12483W3,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6683R.D
Report Date: 22-Nov-2011 16:36

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report
Data file : \\avogadro\organics\E3.I\111114BR.B\E3I6683R.D
Lab Smp Id: AR12483W3 Client Smp ID: AR12483W3
Inj Date : 14-NOV-2011 20:33
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR12483W3,AR12483W3,,ar1248.sub,,
Misc Info : 1,3,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BR.B\E3_ARO_5_R.m
Meth Date : 16-Nov-2011 16:49 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 00:58 Cal File: E3I6697R.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

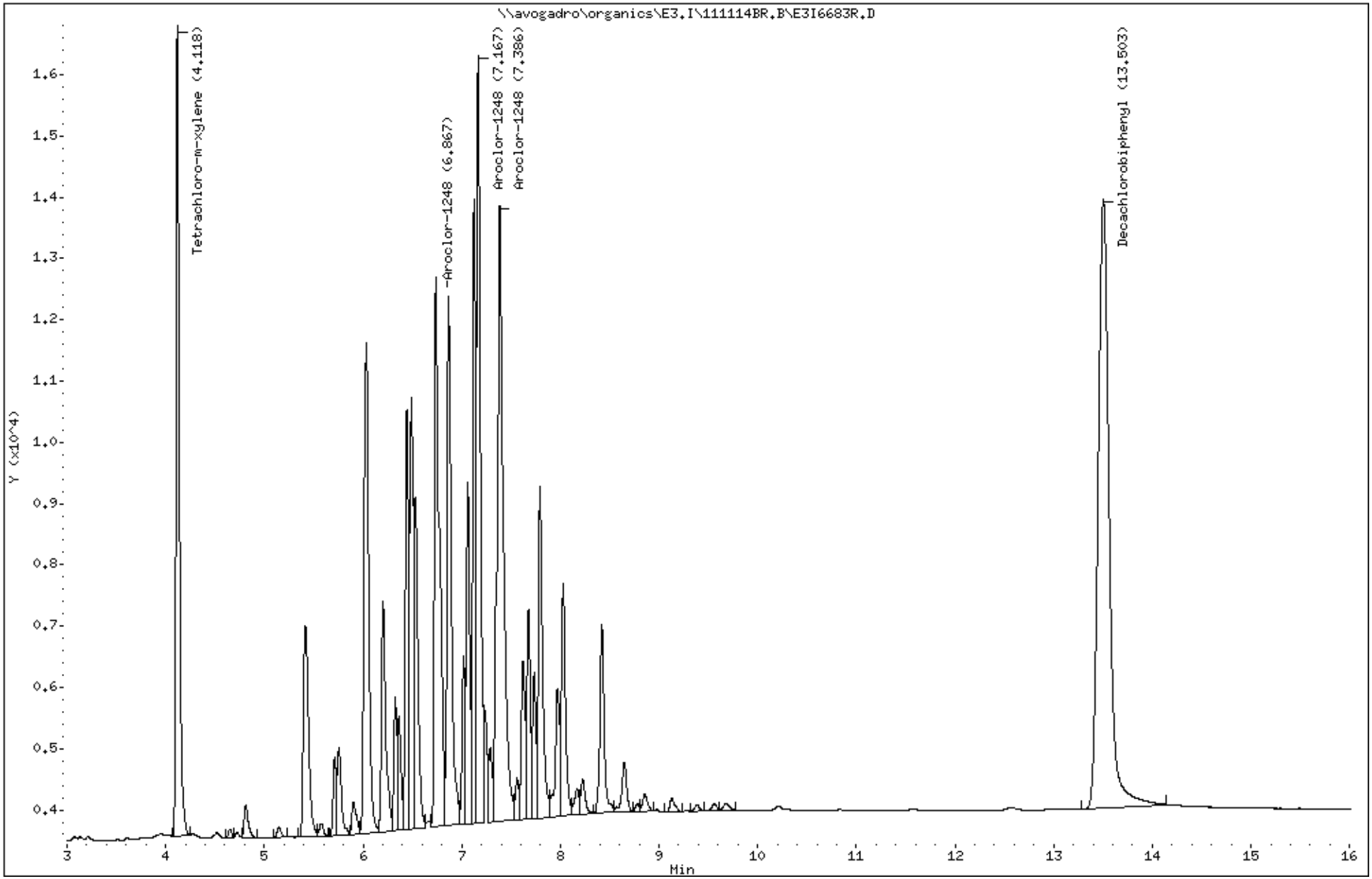
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.118	4.115	0.003	303398	0.02000	0.020			(a)
5 Aroclor-1248					CAS #: 12672-29-6			
6.866	6.866	0.000	265053	0.40000	0.39	80.00- 120.00	100.00	(a)
7.167	7.167	0.000	337329	0.40000	0.38	106.72- 146.72	127.27	
7.386	7.386	0.000	440741	0.40000	0.39	145.39- 185.39	166.28	
Average of Peak Amounts =					0.38667			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
13.503	13.497	0.006	776667	0.04000	0.040			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6683R.D
Date : 14-NOV-2011 20:33
Client ID: AR12483W3
Instrument: E3.i
Sample Info: AR12483W3,AR12483W3,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BF.B\E3I6684F.D
Report Date: 22-Nov-2011 16:35

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111114BF.B\E3I6684F.D
Lab Smp Id: AR12484W3 Client Smp ID: AR12484W3
Inj Date : 14-NOV-2011 20:52
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR12484W3,AR12484W3,,ar1248.sub,,
Misc Info : 1,4,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BF.B\E3_ARO_5_F.m
Meth Date : 16-Nov-2011 16:29 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 20:52 Cal File: E3I6684F.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

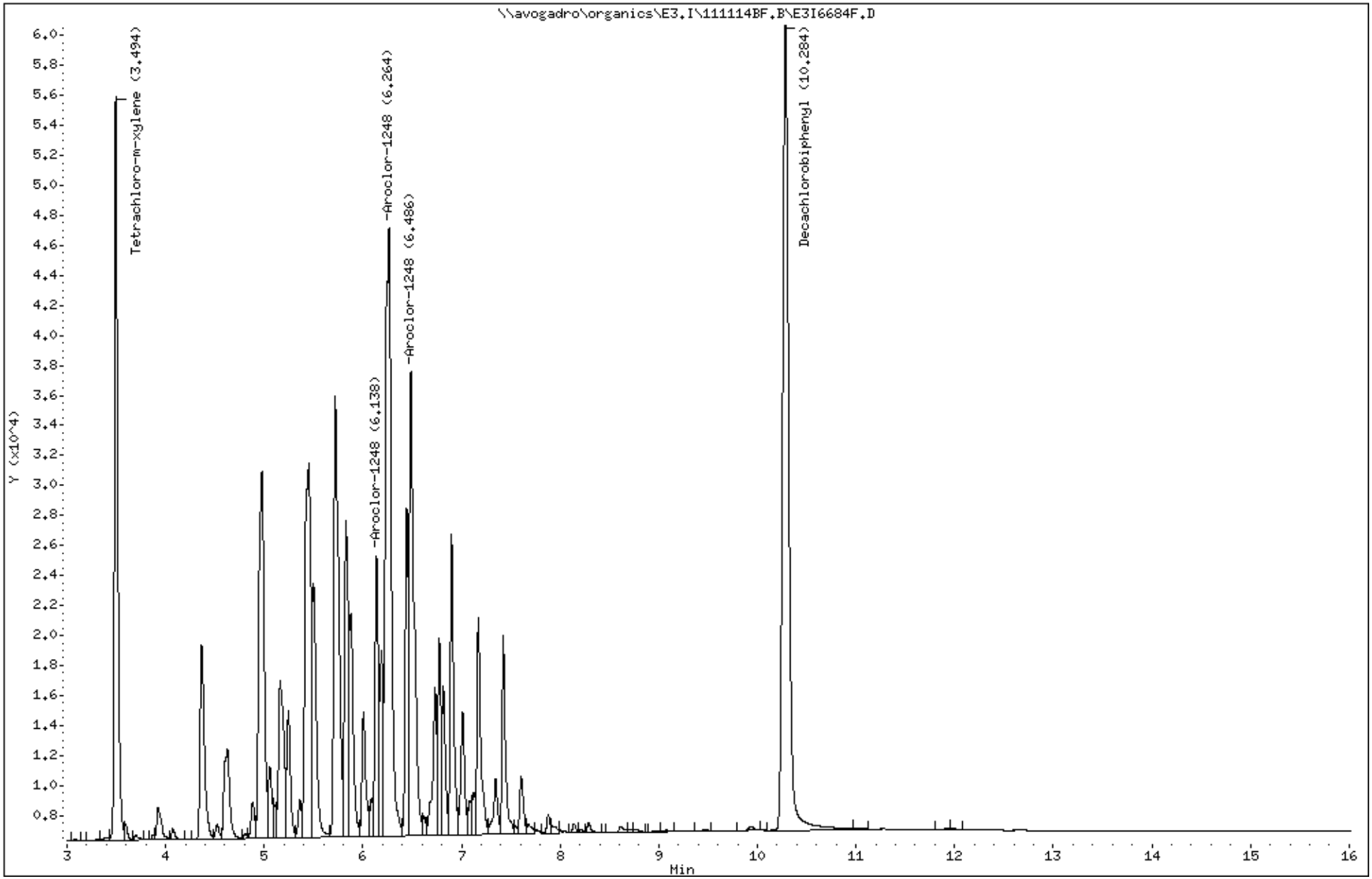
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
3.493	3.492	0.001	1107502	0.04000	0.039			(a)
7 Aroclor-1248					CAS #: 12672-29-6			
6.137	6.137	0.000	432822	0.80000	0.70	80.00- 120.00	100.00	(a)
6.264	6.264	0.000	1700143	0.80000	0.70	371.00- 411.00	392.80	
6.486	6.486	0.000	1049764	0.80000	0.71	218.89- 258.89	242.54	
Average of Peak Amounts =					0.70333			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.284	10.281	0.003	2323126	0.08000	0.073			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.I\111114BF.B\E3I6684F.D
Date : 14-NOV-2011 20:52
Client ID: AR12484W3
Instrument: E3.i
Sample Info: AR12484W3,AR12484W3,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6684R.D
Report Date: 22-Nov-2011 16:36

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111114BR.B\E3I6684R.D
Lab Smp Id: AR12484W3 Client Smp ID: AR12484W3
Inj Date : 14-NOV-2011 20:52
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR12484W3,AR12484W3,,ar1248.sub,,
Misc Info : 1,4,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BR.B\E3_ARO_5_R.m
Meth Date : 16-Nov-2011 16:49 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:17 Cal File: E3I6698R.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

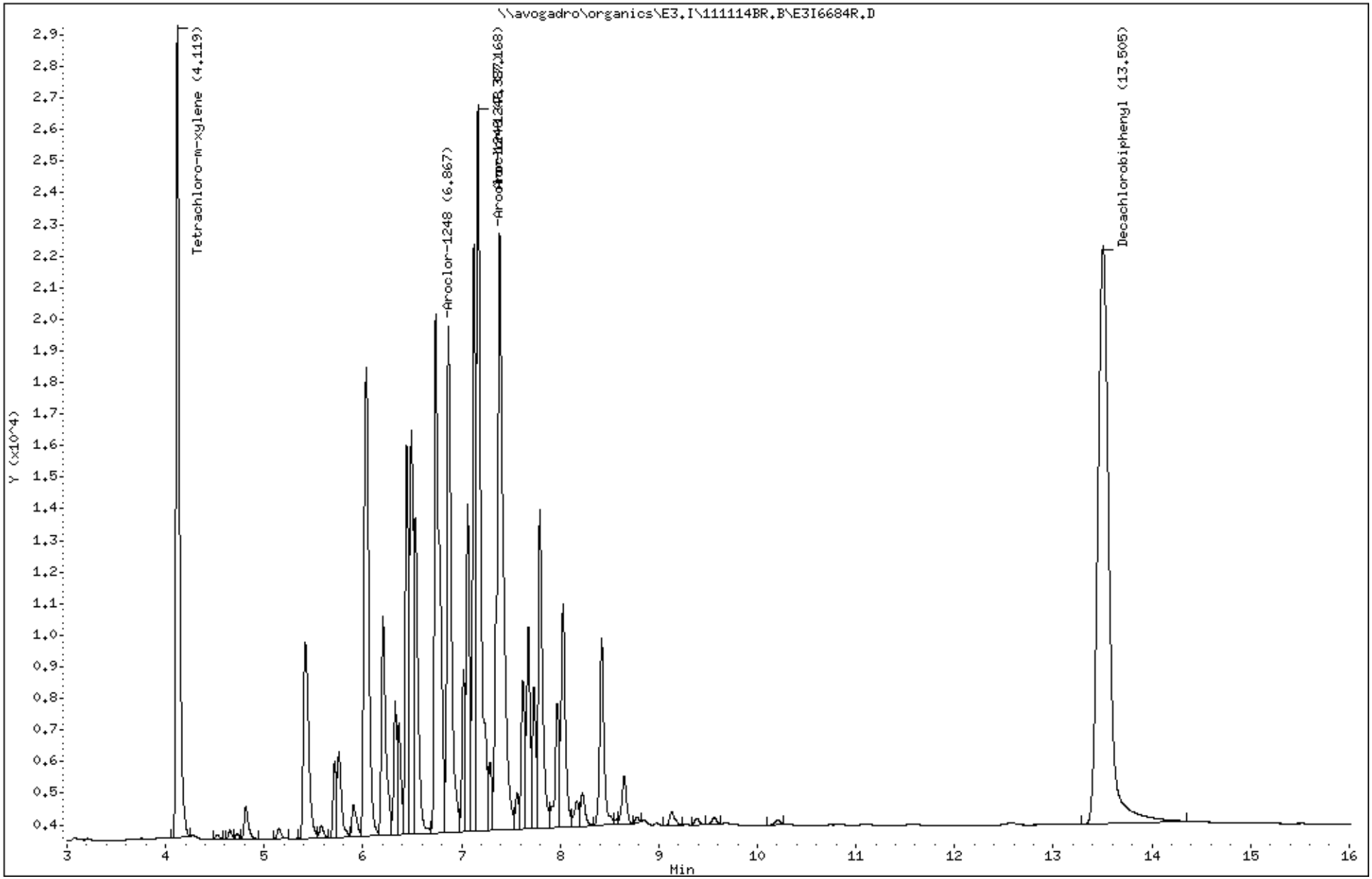
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.118	4.115	0.003	611583	0.04000	0.040			(a)
5 Aroclor-1248					CAS #: 12672-29-6			
6.867	6.866	0.001	501389	0.80000	0.74	80.00- 120.00	100.00	(a)
7.167	7.167	0.000	699219	0.80000	0.78	106.72- 146.72	139.46	
7.386	7.386	0.000	815057	0.80000	0.71	145.39- 185.39	162.56	
Average of Peak Amounts =					0.74333			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
13.504	13.497	0.007	1460111	0.08000	0.075			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6684R.D
Date : 14-NOV-2011 20:52
Client ID: AR12484W3
Instrument: E3.i
Sample Info: AR12484W3,AR12484W3,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BF.B\E3I6685F.D
Report Date: 22-Nov-2011 16:35

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

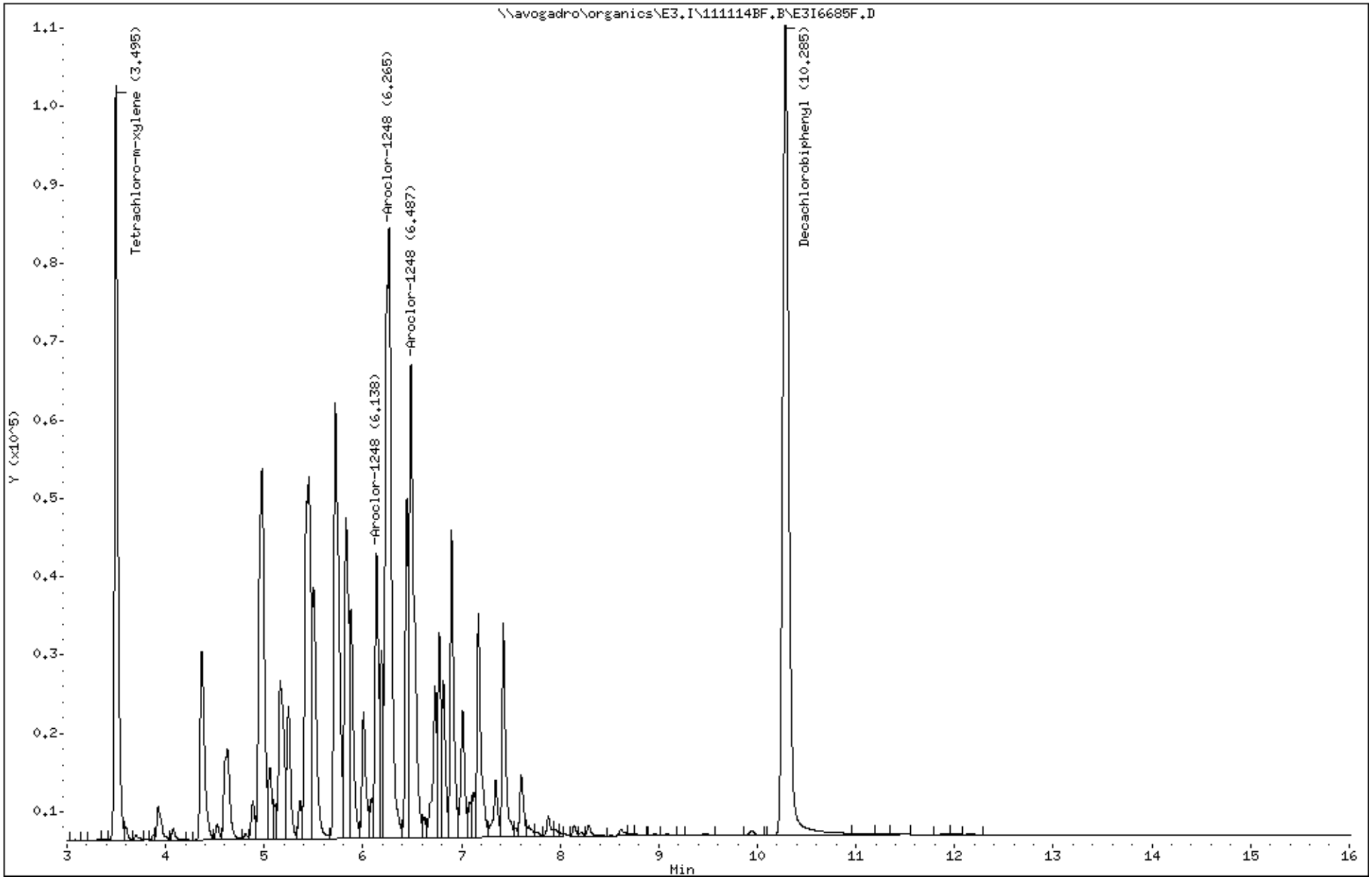
Data file : \\avogadro\organics\E3.I\111114BF.B\E3I6685F.D
Lab Smp Id: AR12485W3 Client Smp ID: AR12485W3
Inj Date : 14-NOV-2011 21:11
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR12485W3,AR12485W3,,ar1248.sub,,
Misc Info : 1,5,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BF.B\E3_ARO_5_F.m
Meth Date : 16-Nov-2011 16:29 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 21:11 Cal File: E3I6685F.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		
3.494	3.492	0.002	2229368	0.08000	0.078			
7 Aroclor-1248						CAS #: 12672-29-6		
6.137	6.137	0.000	843809	1.60000	1.4	80.00- 120.00		100.00
6.264	6.264	0.000	3307133	1.60000	1.4	371.00- 411.00		391.93
6.486	6.486	0.000	2067724	1.60000	1.4	218.89- 258.89		245.05
Average of Peak Amounts =					1.40000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.284	10.281	0.003	4547362	0.16000	0.14			

Data File: \\avogadro\organics\E3.I\111114BF.B\E3I6685F.D
Date : 14-NOV-2011 21:11
Client ID: AR12485W3
Instrument: E3.i
Sample Info: AR12485W3,AR12485W3,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6685R.D
Report Date: 22-Nov-2011 16:36

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

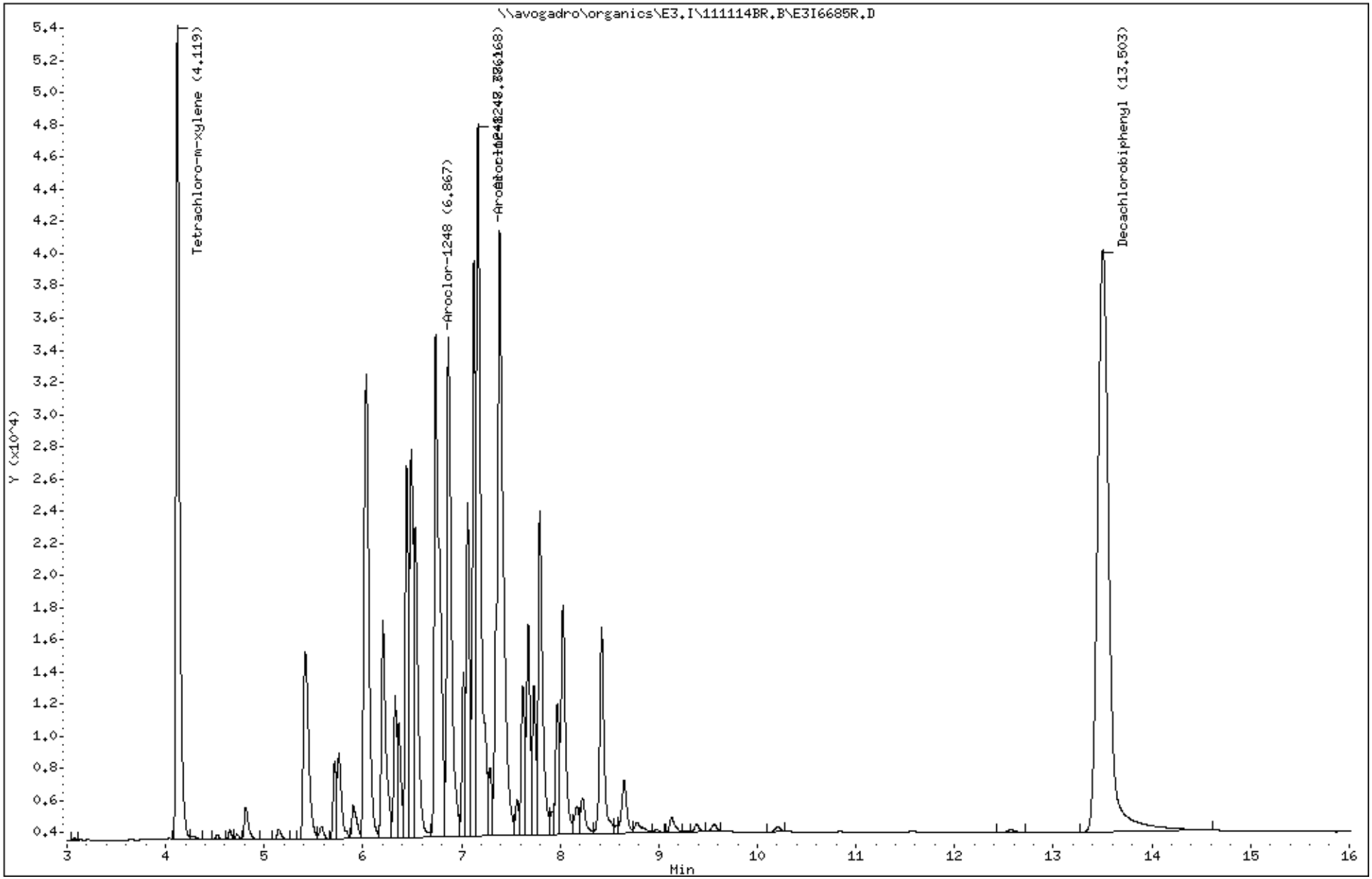
Data file : \\avogadro\organics\E3.I\111114BR.B\E3I6685R.D
Lab Smp Id: AR12485W3 Client Smp ID: AR12485W3
Inj Date : 14-NOV-2011 21:11
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR12485W3,AR12485W3,,ar1248.sub,,
Misc Info : 1,5,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BR.B\E3_ARO_5_R.m
Meth Date : 16-Nov-2011 16:49 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699R.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		
4.118	4.115	0.003	1268575	0.08000	0.083			
5 Aroclor-1248						CAS #: 12672-29-6		
6.866	6.866	0.000	1004725	1.60000	1.5	80.00- 120.00		100.00
7.167	7.167	0.000	1381260	1.60000	1.5	106.72- 146.72		137.48
7.386	7.386	0.000	1627365	1.60000	1.4	145.39- 185.39		161.97
Average of Peak Amounts =					1.46667			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
13.502	13.497	0.005	2941738	0.16000	0.15			

Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6685R.D
Date : 14-NOV-2011 21:11
Client ID: AR12485W3
Instrument: E3.i
Sample Info: AR12485W3,AR12485W3,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BF.B\E3I6687F.D
Report Date: 22-Nov-2011 16:35

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111114BF.B\E3I6687F.D
Lab Smp Id: AR12541W3 Client Smp ID: AR12541W3
Inj Date : 14-NOV-2011 21:49
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR12541W3,AR12541W3,,ar1254.sub,,
Misc Info : 1,1,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BF.B\E3_ARO_5_F.m
Meth Date : 16-Nov-2011 16:29 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 21:49 Cal File: E3I6687F.D
Als bottle: 16 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

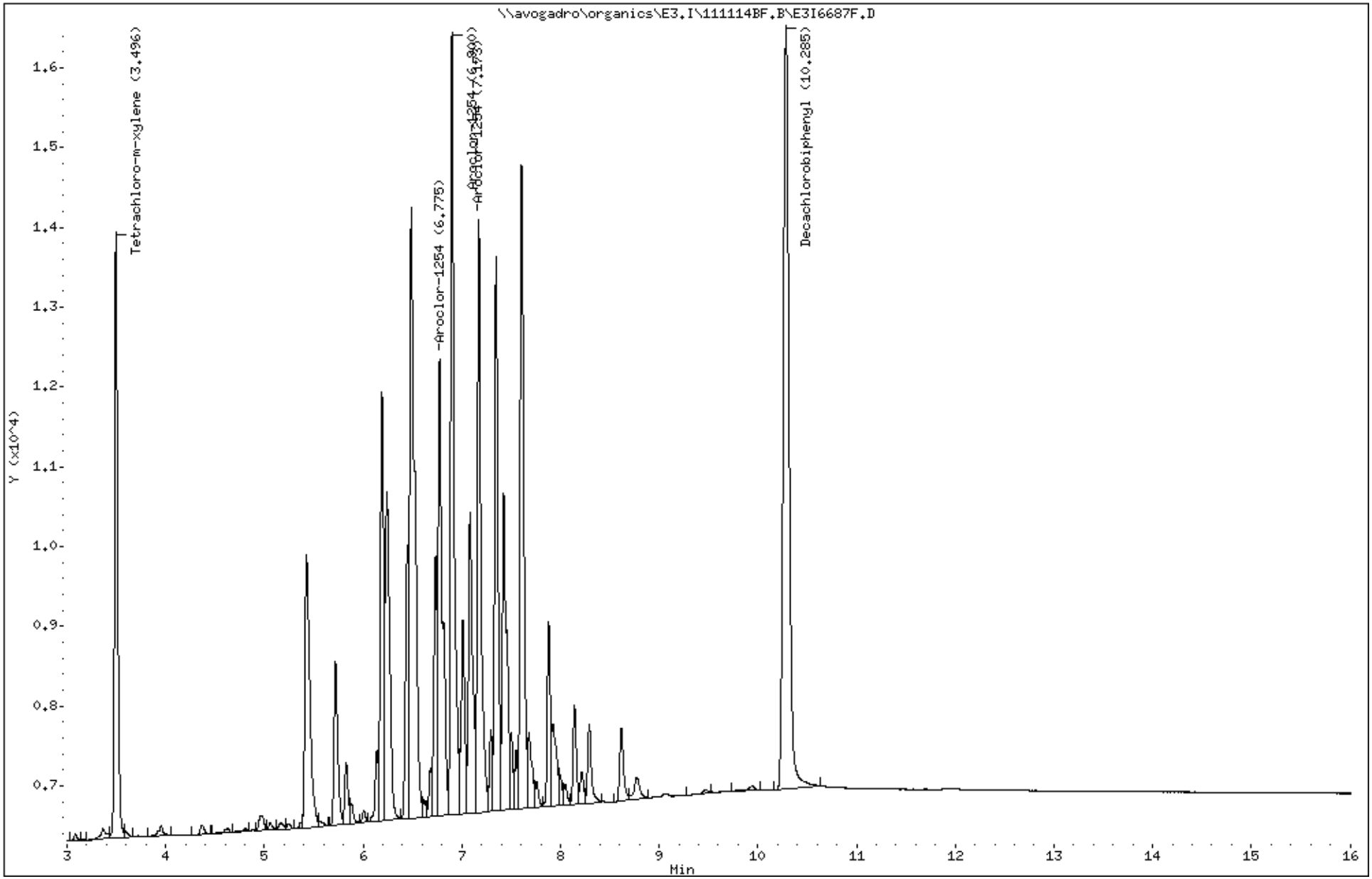
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

			AMOUNTS				
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
3.495	3.492	0.003	159726	0.00500	0.0055		(a)
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
10.285	10.281	0.004	387892	0.01000	0.012		(a)
8 Aroclor-1254					CAS #: 11097-69-1		
6.775	6.772	0.003	179350	0.10000	0.10	80.00- 120.00	100.00(a)
6.900	6.897	0.003	244032	0.10000	0.10	112.22- 152.22	136.06
7.172	7.169	0.003	189139	0.10000	0.10	83.00- 123.00	105.46
Average of Peak Amounts =				0.10000			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.i\111114BF.B\E3I6687F.D
Date : 14-NOV-2011 21:49
Client ID: AR12541W3
Instrument: E3.i
Sample Info: AR12541W3,AR12541W3,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6687R.D
Report Date: 22-Nov-2011 16:36

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report
Data file : \\avogadro\organics\E3.I\111114BR.B\E3I6687R.D
Lab Smp Id: AR12541W3 Client Smp ID: AR12541W3
Inj Date : 14-NOV-2011 21:49
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR12541W3,AR12541W3,,ar1254.sub,,
Misc Info : 1,1,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BR.B\E3_ARO_5_R.m
Meth Date : 16-Nov-2011 16:49 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 00:20 Cal File: E3I6695R.D
Als bottle: 16 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

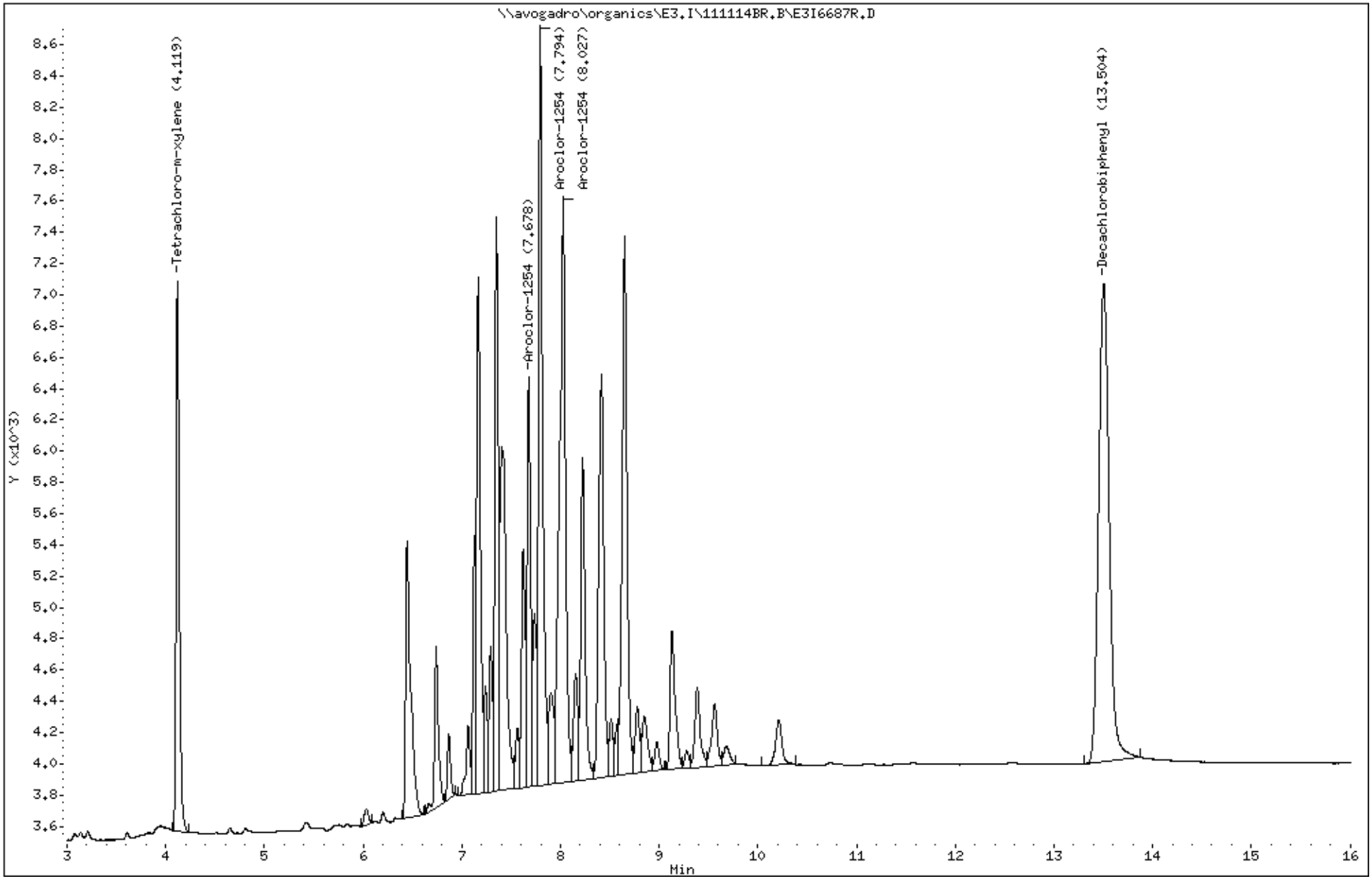
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.119	4.115	0.004	79504	0.00500	0.0051			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
13.504	13.497	0.007	228724	0.01000	0.011			(a)
7 Aroclor-1254						CAS #: 11097-69-1		
7.677	7.674	0.003	65839	0.10000	0.11	80.00- 120.00	100.00	(a)
7.794	7.790	0.004	140518	0.10000	0.12	194.29- 234.29	213.43	
8.027	8.024	0.003	160122	0.10000	0.12	224.33- 264.33	243.20	
Average of Peak Amounts =					0.11667			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.i\111114BR.B\E3I6687R.D
Date : 14-NOV-2011 21:49
Client ID: AR12541W3
Instrument: E3.i
Sample Info: AR12541W3,AR12541W3,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BF.B\E3I6688F.D
Report Date: 22-Nov-2011 16:36

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111114BF.B\E3I6688F.D
Lab Smp Id: AR12542W3 Client Smp ID: AR12542W3
Inj Date : 14-NOV-2011 22:08
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR12542W3,AR12542W3,,ar1254.sub,,
Misc Info : 1,2,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BF.B\E3_ARO_5_F.m
Meth Date : 16-Nov-2011 16:29 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 22:08 Cal File: E3I6688F.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

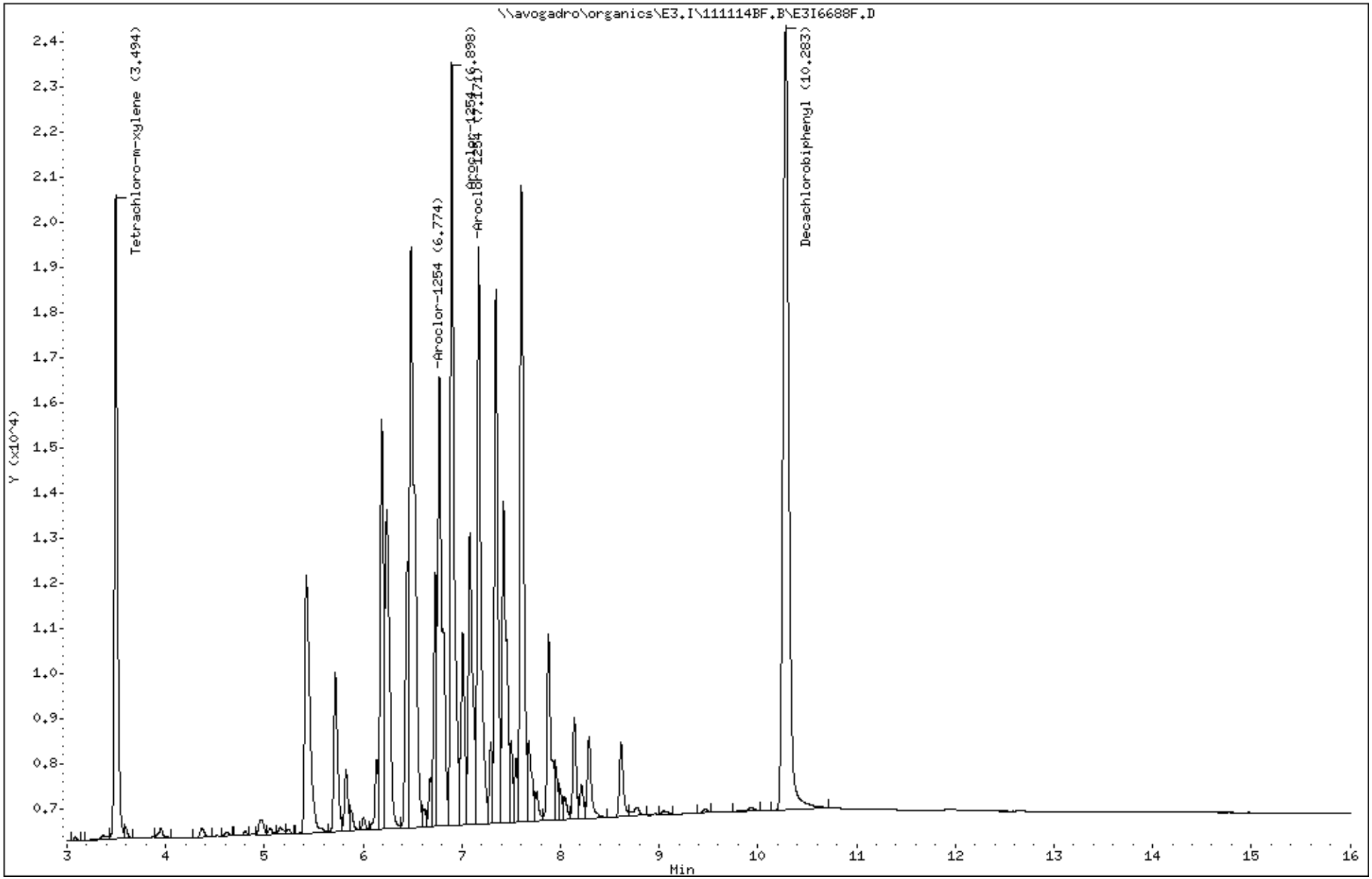
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
3.493	3.492	0.001	303833	0.01000	0.010			(a)
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.282	10.281	0.001	718260	0.02000	0.022			(a)
8 Aroclor-1254					CAS #: 11097-69-1			
6.773	6.772	0.001	318525	0.20000	0.19	80.00- 120.00	100.00	(a)
6.898	6.897	0.001	427456	0.20000	0.19	112.22- 152.22	134.20	
7.170	7.169	0.001	332837	0.20000	0.19	83.00- 123.00	104.49	
Average of Peak Amounts =					0.19000			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.i\111114BF.B\E3I6688F.D
Date : 14-NOV-2011 22:08
Client ID: AR12542W3
Instrument: E3.i
Sample Info: AR12542W3,AR12542W3,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6688R.D
Report Date: 22-Nov-2011 16:36

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111114BR.B\E3I6688R.D
Lab Smp Id: AR12542W3 Client Smp ID: AR12542W3
Inj Date : 14-NOV-2011 22:08
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR12542W3,AR12542W3,,ar1254.sub,,
Misc Info : 1,2,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BR.B\E3_ARO_5_R.m
Meth Date : 16-Nov-2011 16:49 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 00:39 Cal File: E3I6696R.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

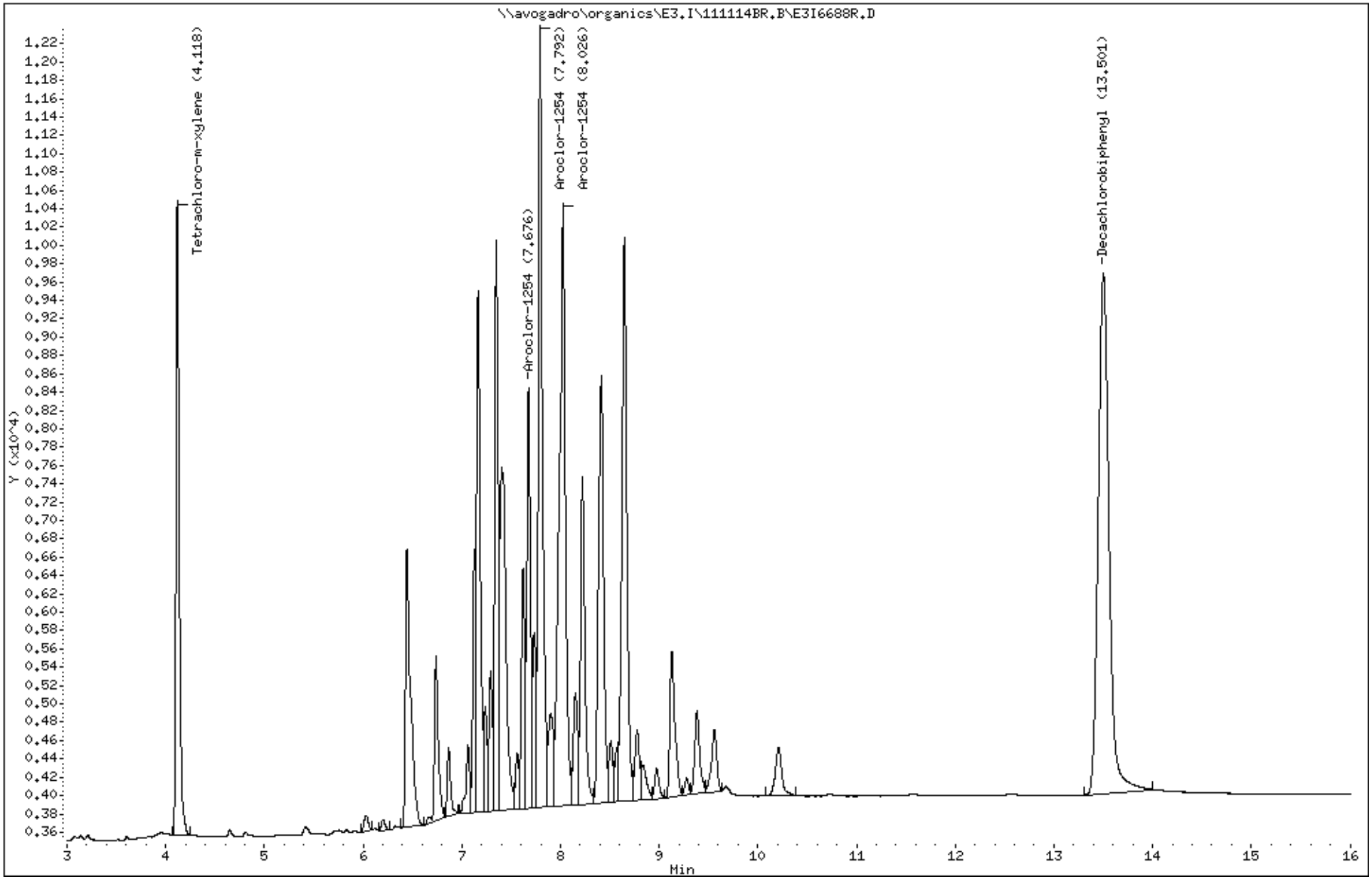
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.117	4.115	0.002	157992	0.01000	0.010			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
13.501	13.497	0.004	434495	0.02000	0.022			(a)
7 Aroclor-1254						CAS #: 11097-69-1		
7.676	7.674	0.002	114742	0.20000	0.20	80.00- 120.00	100.00	(a)
7.792	7.790	0.002	246611	0.20000	0.20	194.29- 234.29	214.93	
8.025	8.024	0.001	281830	0.20000	0.20	224.33- 264.33	245.62	
Average of Peak Amounts =				0.20000				

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6688R.D
Date : 14-NOV-2011 22:08
Client ID: AR12542W3
Instrument: E3.i
Sample Info: AR12542W3,AR12542W3,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BF.B\E3I6689F.D
Report Date: 22-Nov-2011 16:36

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111114BF.B\E3I6689F.D
Lab Smp Id: AR12543W3 Client Smp ID: AR12543W3
Inj Date : 14-NOV-2011 22:26
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR12543W3,AR12543W3,,ar1254.sub,,
Misc Info : 1,3,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BF.B\E3_ARO_5_F.m
Meth Date : 16-Nov-2011 16:29 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 22:26 Cal File: E3I6689F.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

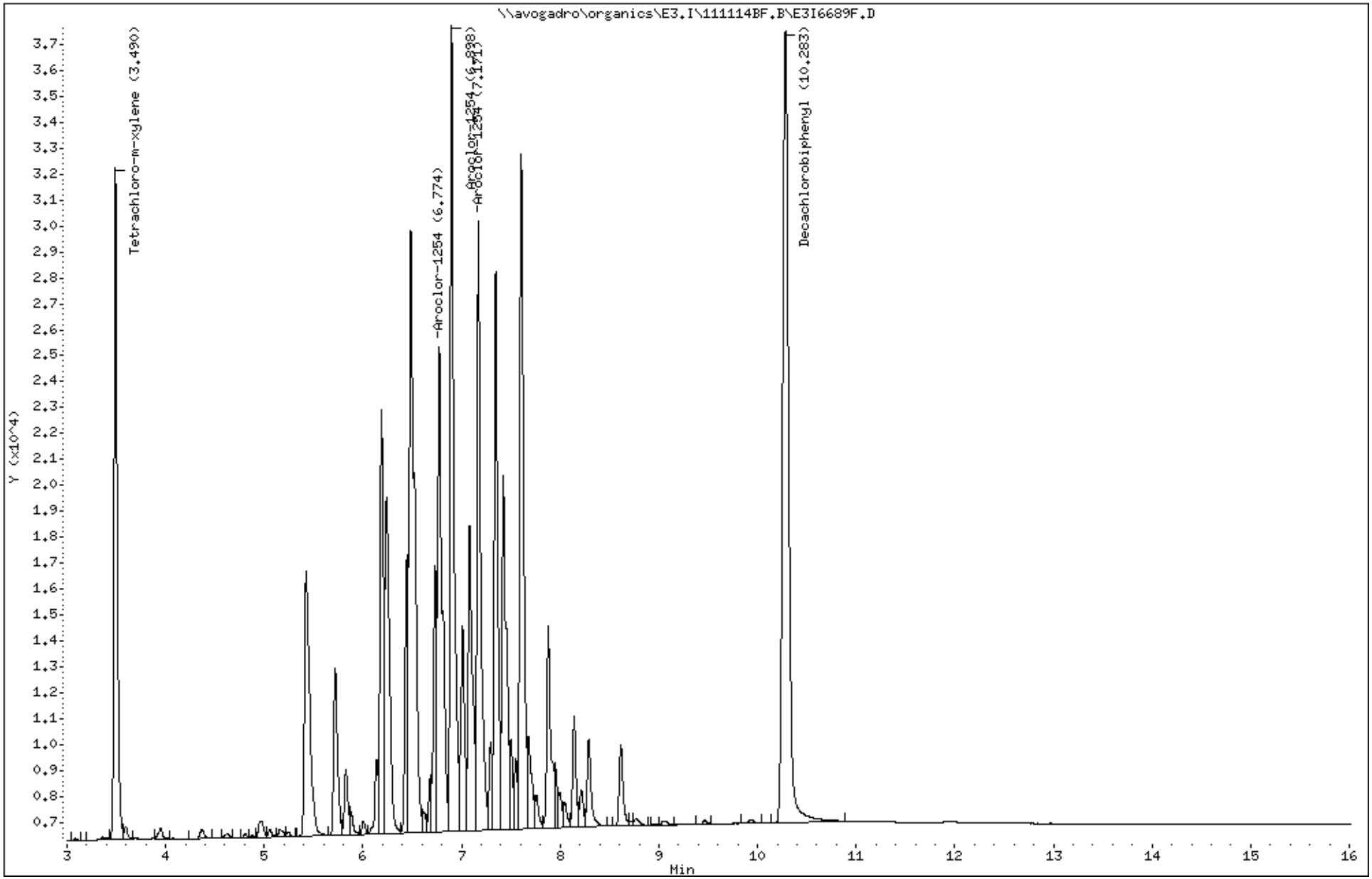
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
3.490	3.492	-0.002	565024	0.02000	0.019			(a)
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.283	10.281	0.002	1291247	0.04000	0.039			(a)
8 Aroclor-1254					CAS #: 11097-69-1			
6.773	6.772	0.001	607674	0.40000	0.37	80.00- 120.00	100.00	(a)
6.898	6.897	0.001	799694	0.40000	0.36	112.22- 152.22	131.60	
7.170	7.169	0.001	621992	0.40000	0.36	83.00- 123.00	102.36	
Average of Peak Amounts =					0.36333			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.i\111114BF.B\E3I6689F.D
Date : 14-NOV-2011 22:26
Client ID: AR12543W3
Instrument: E3.i
Sample Info: AR12543W3,AR12543W3,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6689R.D
Report Date: 22-Nov-2011 16:36

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111114BR.B\E3I6689R.D
Lab Smp Id: AR12543W3 Client Smp ID: AR12543W3
Inj Date : 14-NOV-2011 22:26
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR12543W3,AR12543W3,,ar1254.sub,,
Misc Info : 1,3,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BR.B\E3_ARO_5_R.m
Meth Date : 16-Nov-2011 16:49 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 00:58 Cal File: E3I6697R.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

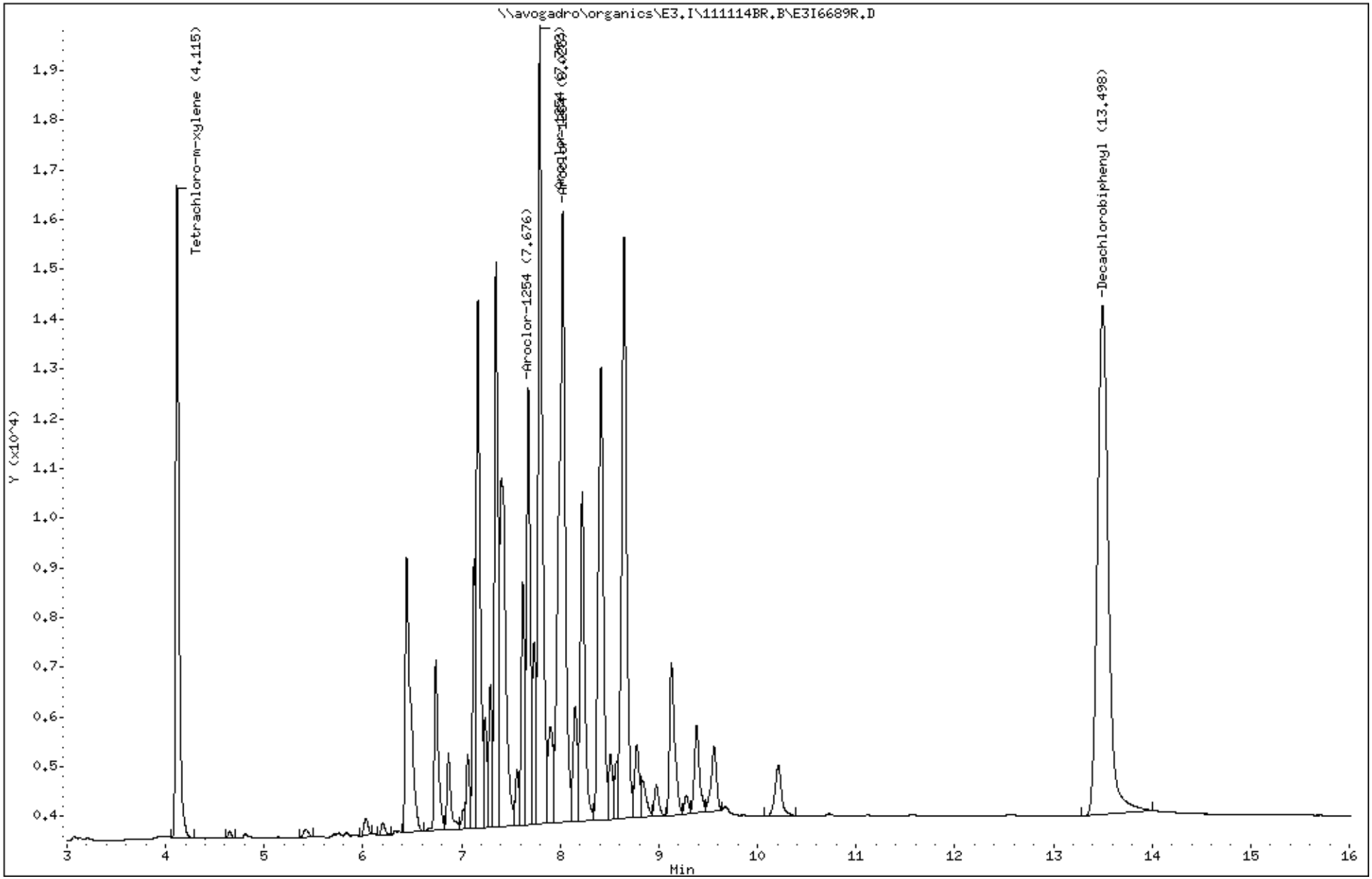
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.115	4.115	0.000	304717	0.02000	0.020			(a)
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
13.498	13.497	0.001	788303	0.04000	0.039			(a)
7 Aroclor-1254					CAS #: 11097-69-1			
7.676	7.674	0.002	220289	0.40000	0.38	80.00- 120.00	100.00	(a)
7.791	7.790	0.001	470794	0.40000	0.38	194.29- 234.29	213.72	
8.025	8.024	0.001	535488	0.40000	0.38	224.33- 264.33	243.08	
Average of Peak Amounts =					0.38000			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.i\111114BR.B\E3I6689R.D
Date : 14-NOV-2011 22:26
Client ID: AR12543W3
Instrument: E3.i
Sample Info: AR12543W3,AR12543W3,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BF.B\E3I6690F.D
Report Date: 22-Nov-2011 16:36

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111114BF.B\E3I6690F.D
Lab Smp Id: AR12544W3 Client Smp ID: AR12544W3
Inj Date : 14-NOV-2011 22:45
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR12544W3,AR12544W3,,ar1254.sub,,
Misc Info : 1,4,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BF.B\E3_ARO_5_F.m
Meth Date : 16-Nov-2011 16:29 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 22:45 Cal File: E3I6690F.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

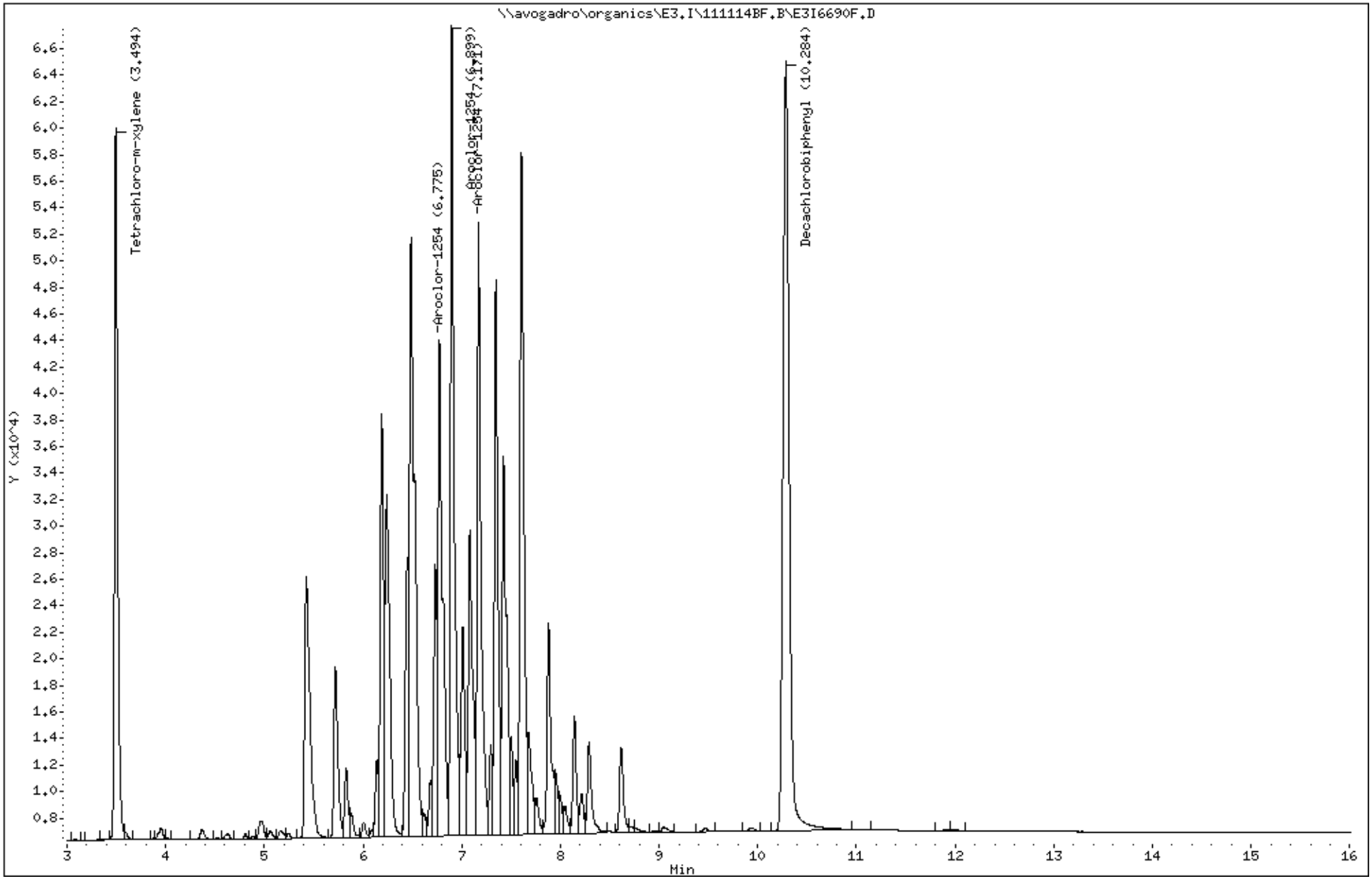
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
3.494	3.492	0.002	1194265	0.04000	0.040		(a)
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
10.284	10.281	0.003	2532136	0.08000	0.076		
8 Aroclor-1254					CAS #: 11097-69-1		
6.774	6.772	0.002	1247017	0.80000	0.77	80.00- 120.00	100.00(a)
6.898	6.897	0.001	1606815	0.80000	0.75	112.22- 152.22	128.85
7.171	7.169	0.002	1252720	0.80000	0.75	83.00- 123.00	100.46
Average of Peak Amounts =					0.75667		

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.i\111114BF.B\E3I6690F.D
Date : 14-NOV-2011 22:45
Client ID: AR12544W3
Instrument: E3.i
Sample Info: AR12544W3,AR12544W3,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6690R.D
Report Date: 22-Nov-2011 16:36

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111114BR.B\E3I6690R.D
Lab Smp Id: AR12544W3 Client Smp ID: AR12544W3
Inj Date : 14-NOV-2011 22:45
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR12544W3,AR12544W3,,ar1254.sub,,
Misc Info : 1,4,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BR.B\E3_ARO_5_R.m
Meth Date : 16-Nov-2011 16:49 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:17 Cal File: E3I6698R.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

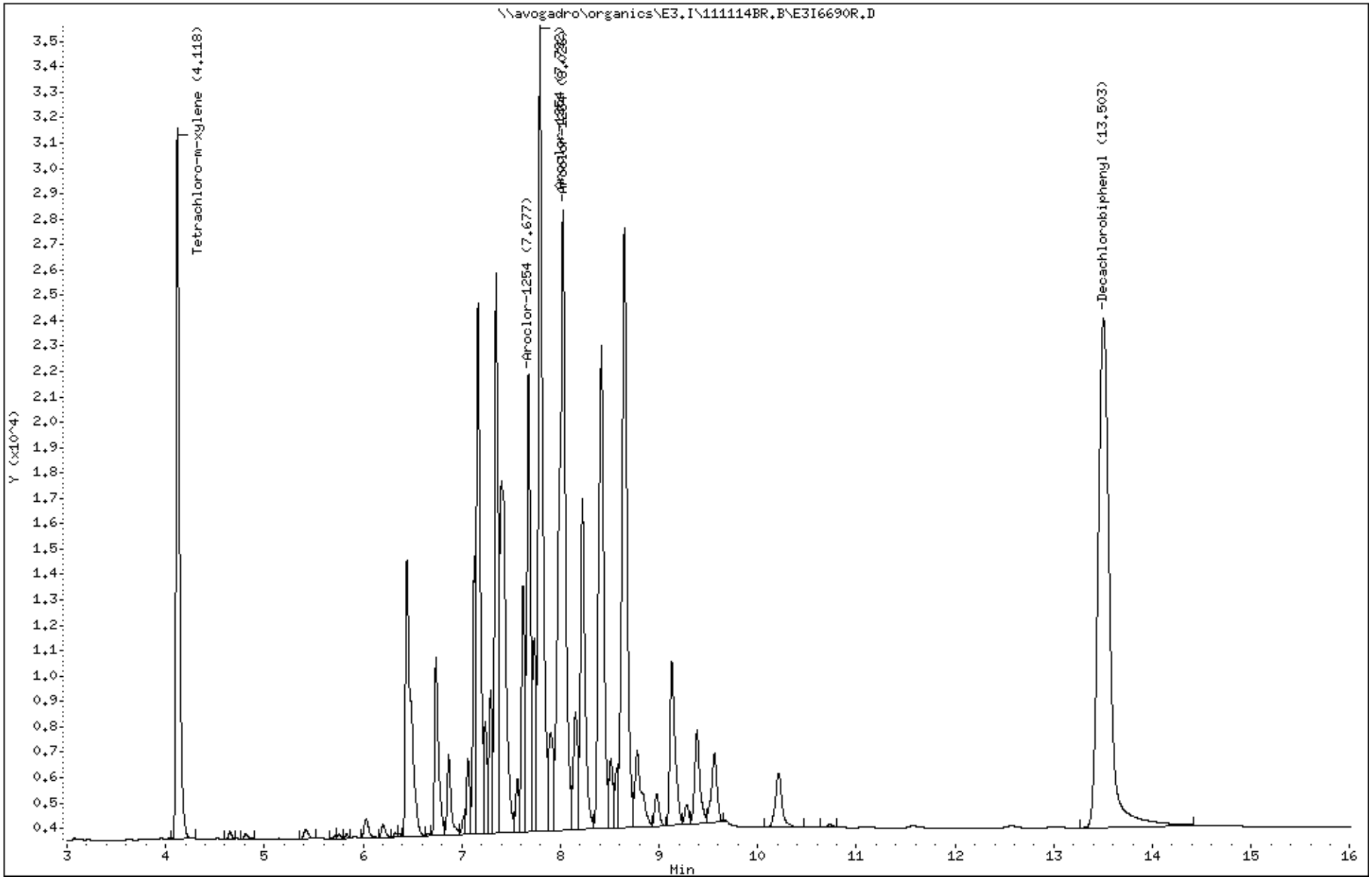
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.118	4.115	0.003	665117	0.04000	0.042			(a)
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
13.503	13.497	0.006	1614548	0.08000	0.078			
7 Aroclor-1254					CAS #: 11097-69-1			
7.676	7.674	0.002	456655	0.80000	0.79	80.00- 120.00	100.00(a)	
7.792	7.790	0.002	952406	0.80000	0.78	194.29- 234.29	208.56	
8.026	8.024	0.002	1079678	0.80000	0.78	224.33- 264.33	236.43	
Average of Peak Amounts =					0.78333			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6690R.D
Date : 14-NOV-2011 22:45
Client ID: AR12544W3
Instrument: E3.i
Sample Info: AR12544W3,AR12544W3,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BF.B\E3I6691F.D
Report Date: 22-Nov-2011 16:36

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

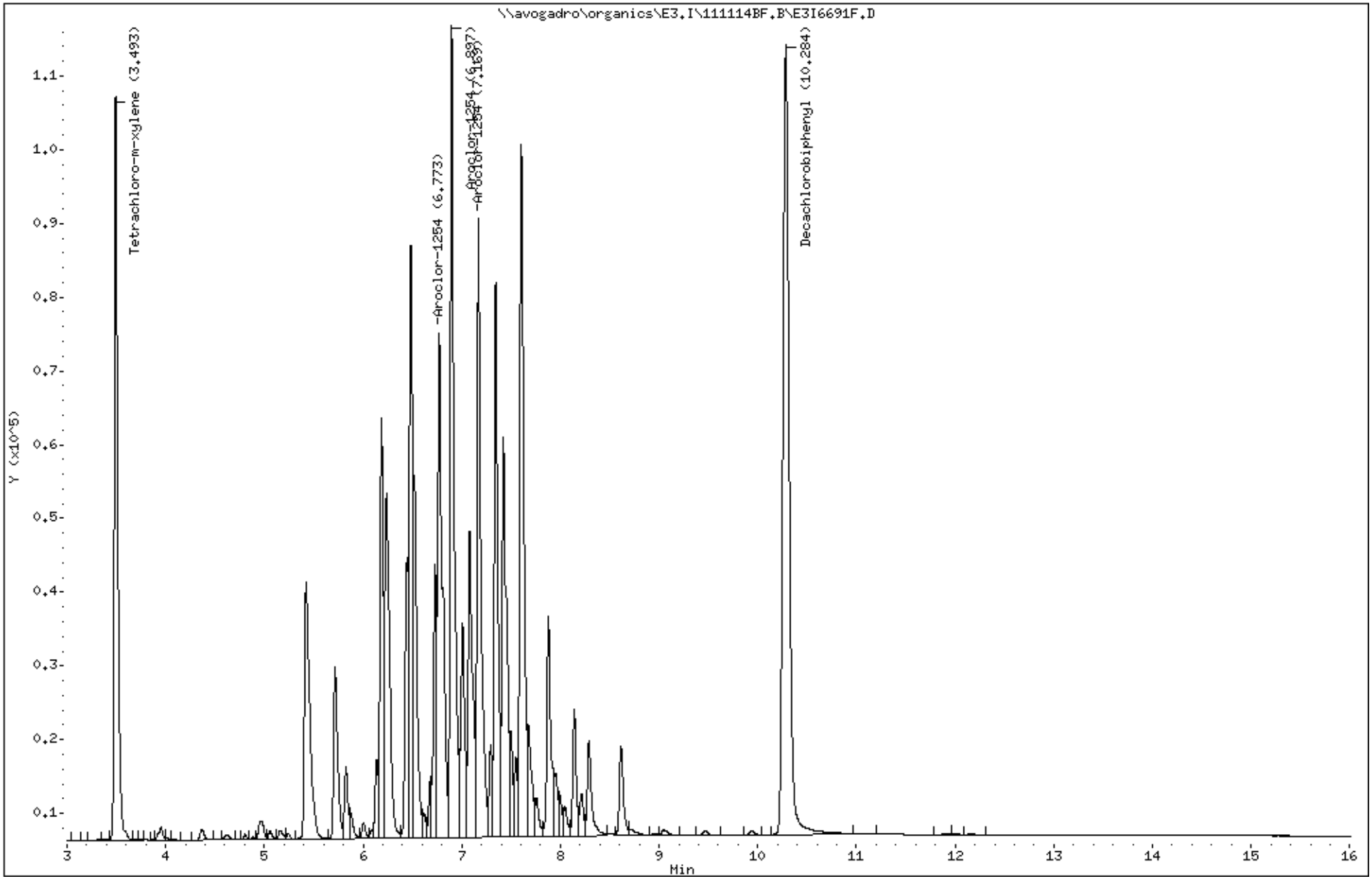
Data file : \\avogadro\organics\E3.I\111114BF.B\E3I6691F.D
Lab Smp Id: AR12545W3 Client Smp ID: AR12545W3
Inj Date : 14-NOV-2011 23:04
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR12545W3,AR12545W3,,ar1254.sub,,
Misc Info : 1,5,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BF.B\E3_ARO_5_F.m
Meth Date : 16-Nov-2011 16:29 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 23:04 Cal File: E3I6691F.D
Als bottle: 20 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
3.493	3.492	0.001	2346128	0.08000	0.078			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.283	10.281	0.002	4690623	0.16000	0.14			
8 Aroclor-1254						CAS #: 11097-69-1		
6.772	6.772	0.000	2336843	1.60000	1.5	80.00- 120.00		100.00
6.897	6.897	0.000	2949810	1.60000	1.4	112.22- 152.22		126.23
7.169	7.169	0.000	2317521	1.60000	1.4	83.00- 123.00		99.17
Average of Peak Amounts =					1.43333			

Data File: \\avogadro\organics\E3.i\111114BF.B\E3I6691F.D
Date : 14-NOV-2011 23:04
Client ID: AR12545W3
Instrument: E3.i
Sample Info: AR12545W3,AR12545W3,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6691R.D
Report Date: 22-Nov-2011 16:36

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

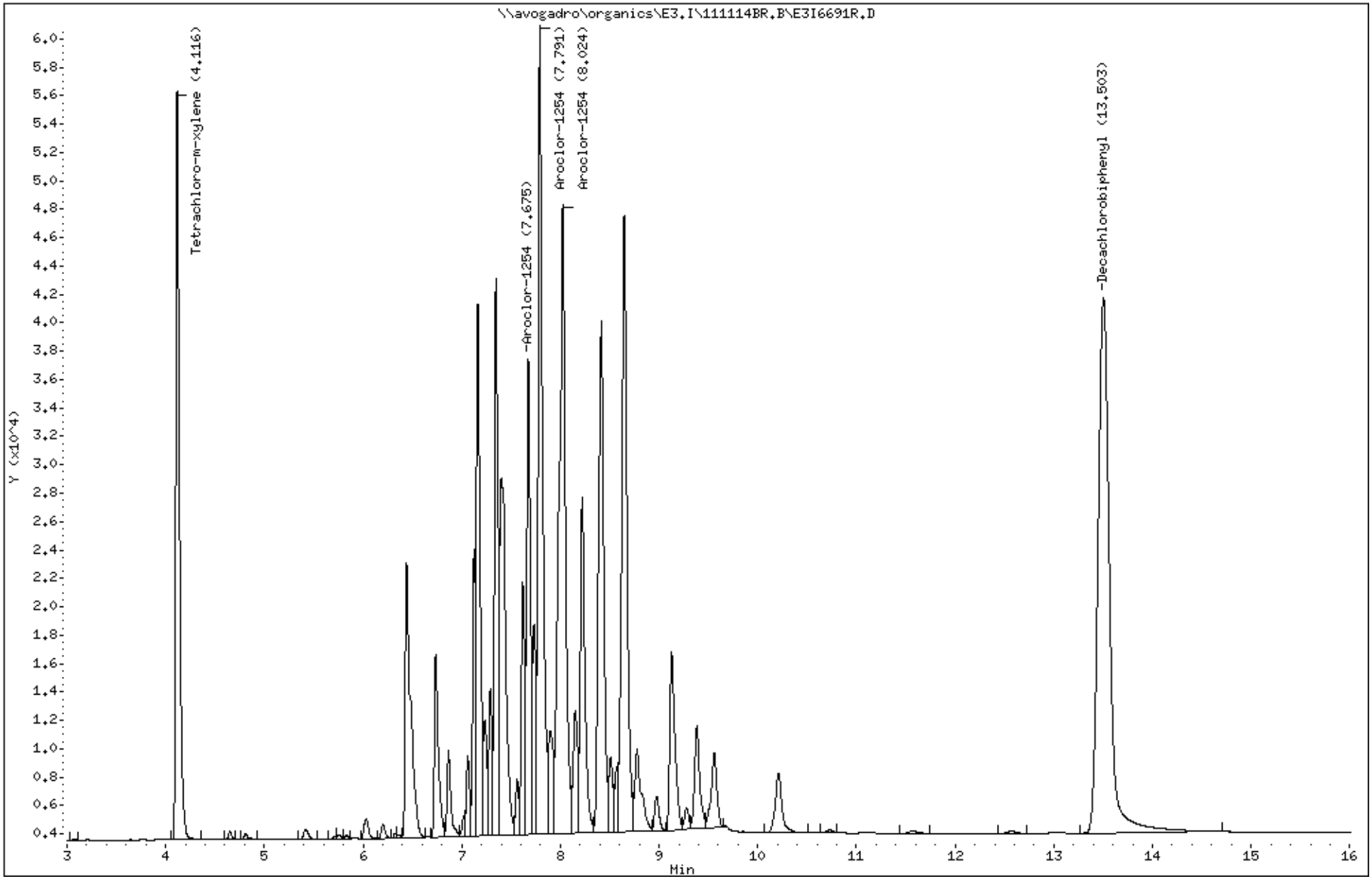
Data file : \\avogadro\organics\E3.I\111114BR.B\E3I6691R.D
Lab Smp Id: AR12545W3 Client Smp ID: AR12545W3
Inj Date : 14-NOV-2011 23:04
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR12545W3,AR12545W3,,ar1254.sub,,
Misc Info : 1,5,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BR.B\E3_ARO_5_R.m
Meth Date : 16-Nov-2011 16:49 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699R.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		
4.116	4.115	0.001	1326001	0.08000	0.083		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
13.503	13.497	0.006	3069630	0.16000	0.15		
7 Aroclor-1254					CAS #: 11097-69-1		
7.674	7.674	0.000	865221	1.60000	1.5	80.00- 120.00	100.00
7.790	7.790	0.000	1765524	1.60000	1.4	194.29- 234.29	204.05
8.024	8.024	0.000	1999581	1.60000	1.4	224.33- 264.33	231.11
Average of Peak Amounts =					1.43333		

Data File: \\avogadro\organics\E3.i\111114BR.B\E3I6691R.D
Date : 14-NOV-2011 23:04
Client ID: AR12545W3
Instrument: E3.i
Sample Info: AR12545W3,AR12545W3,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BF.B\E3I6692F.D
Report Date: 22-Nov-2011 16:36

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111114BF.B\E3I6692F.D
Lab Smp Id: AR12623W3 Client Smp ID: AR12623W3
Inj Date : 14-NOV-2011 23:23
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR12623W3,AR12623W3,,ar1262.sub,,
Misc Info : 1,3,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BF.B\E3_ARO_5_F.m
Meth Date : 16-Nov-2011 16:29 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 23:23 Cal File: E3I6692F.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

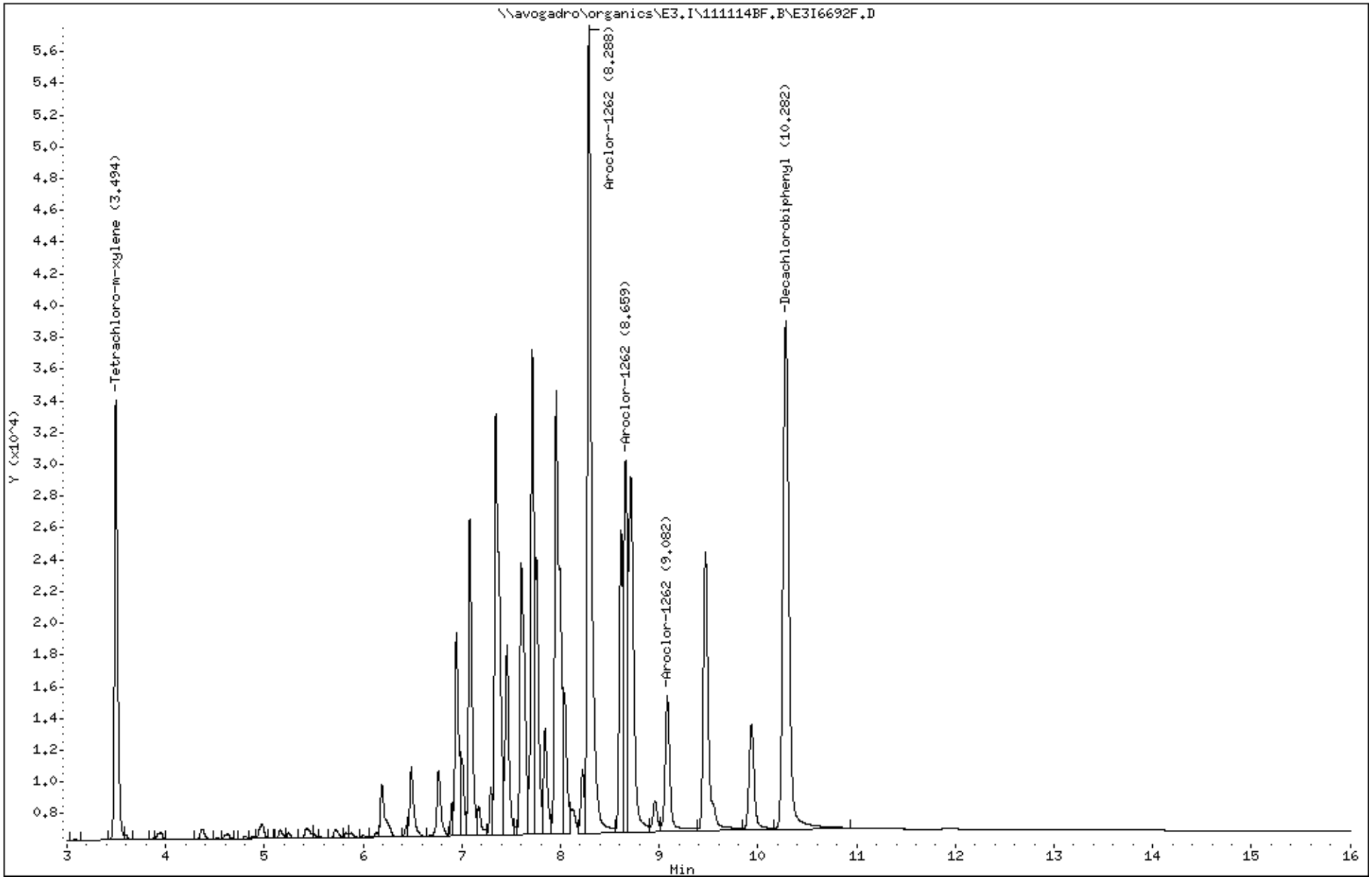
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
3.494	3.492	0.002	598209	0.02000	0.020			(a)
2 Aroclor-1262						CAS #: 37324-23-5		
8.287	8.287	0.000	1527518	0.40000	0.40	80.00- 120.00	100.00	
8.658	8.658	0.000	612798	0.40000	0.40	0.00- 20.00	40.12	
9.081	9.081	0.000	301442	0.40000	0.40	199.74- 239.74	19.73	
Average of Peak Amounts =				0.40000				
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.281	10.281	0.000	1378464	0.04000	0.040			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.i\111114BF.B\E3I6692F.D
Date : 14-NOV-2011 23:23
Client ID: AR12623W3
Instrument: E3.i
Sample Info: AR12623W3,AR12623W3,,ar1262.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6692R.D
Report Date: 22-Nov-2011 16:36

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111114BR.B\E3I6692R.D
Lab Smp Id: AR12623W3 Client Smp ID: AR12623W3
Inj Date : 14-NOV-2011 23:23
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR12623W3,AR12623W3,,ar1262.sub,,
Misc Info : 1,3,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BR.B\E3_ARO_5_R.m
Meth Date : 16-Nov-2011 16:49 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 00:58 Cal File: E3I6697R.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

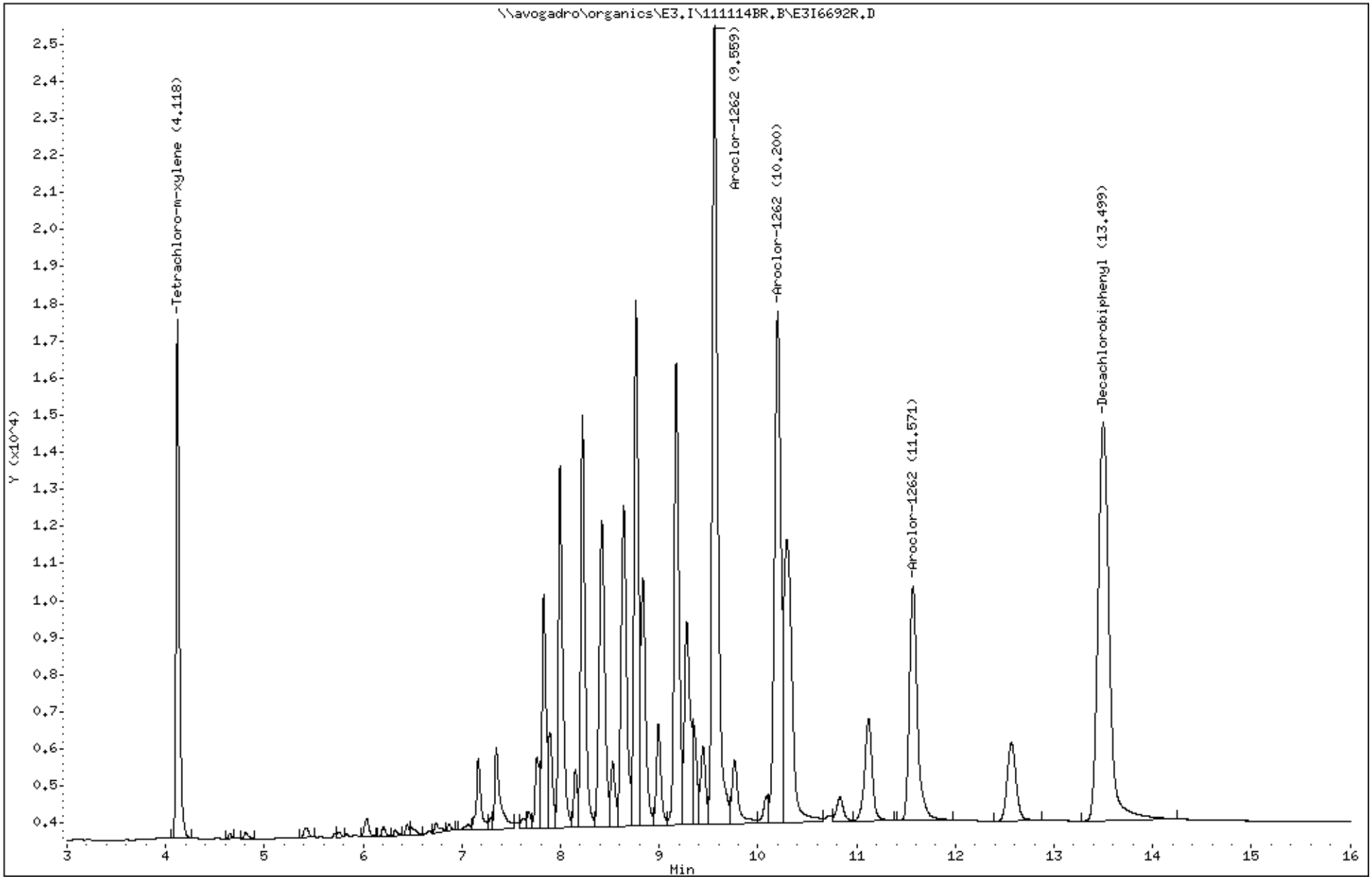
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT	AMOUNTS ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.118	4.115	0.003	321811	0.02000	0.020		(a)
10 Aroclor-1262					CAS #: 37324-23-5		
9.559	9.559	0.000	834429	0.40000	0.40	80.00- 120.00	100.00
10.199	10.199	0.000	609039	0.40000	0.40	52.99- 92.99	72.99
11.570	11.570	0.000	354366	0.40000	0.40	22.47- 62.47	42.47
Average of Peak Amounts =				0.40000			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
13.498	13.497	0.001	847152	0.04000	0.040		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.i\111114BR.B\E3I6692R.D
Date : 14-NOV-2011 23:23
Client ID: AR12623W3
Instrument: E3.i
Sample Info: AR12623W3,AR12623W3,,ar1262.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BF.B\E3I6693F.D
Report Date: 22-Nov-2011 16:36

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111114BF.B\E3I6693F.D
Lab Smp Id: AR12683W3 Client Smp ID: AR12683W3
Inj Date : 14-NOV-2011 23:42
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR12683W3,AR12683W3,,ar1268.sub,,
Misc Info : 1,3,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BF.B\E3_ARO_5_F.m
Meth Date : 16-Nov-2011 16:29 gappolonia Quant Type: ESTD
Cal Date : 14-NOV-2011 23:42 Cal File: E3I6693F.D
Als bottle: 22 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1268.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

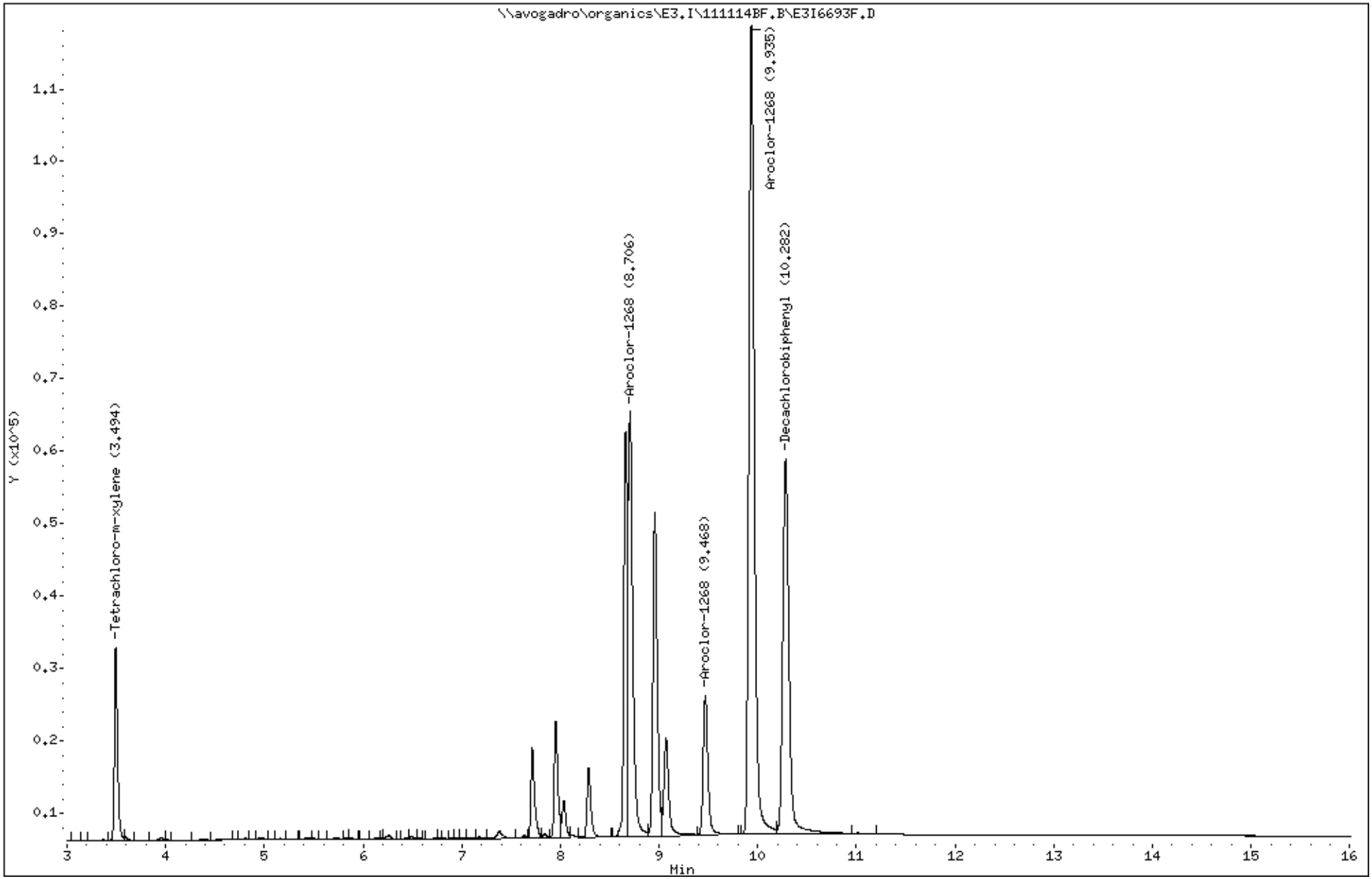
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
3.493	3.492	0.001	575145	0.02000	0.019			(a)
10 Aroclor-1268					CAS #: 11100-14-4			
8.705	8.705	0.000	1911730	0.40000	0.40	80.00- 120.00	100.00	(a)
9.468	9.468	0.000	653179	0.40000	0.40	14.17- 54.17	34.17	
9.934	9.934	0.000	4367456	0.40000	0.40	208.46- 248.46	228.46	
Average of Peak Amounts =					0.40000			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.282	10.281	0.001	2308957	0.04000	0.060			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.i\111114BF.B\E3I6693F.D
Date : 14-NOV-2011 23:42
Client ID: AR12683W3
Instrument: E3.i
Sample Info: AR12683W3,AR12683W3,,ar1268.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6693R.D
Report Date: 22-Nov-2011 16:36

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111114BR.B\E3I6693R.D
Lab Smp Id: AR12683W3 Client Smp ID: AR12683W3
Inj Date : 14-NOV-2011 23:42
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR12683W3,AR12683W3,,ar1268.sub,,
Misc Info : 1,3,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BR.B\E3_ARO_5_R.m
Meth Date : 16-Nov-2011 16:49 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 00:58 Cal File: E3I6697R.D
Als bottle: 22 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1268.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

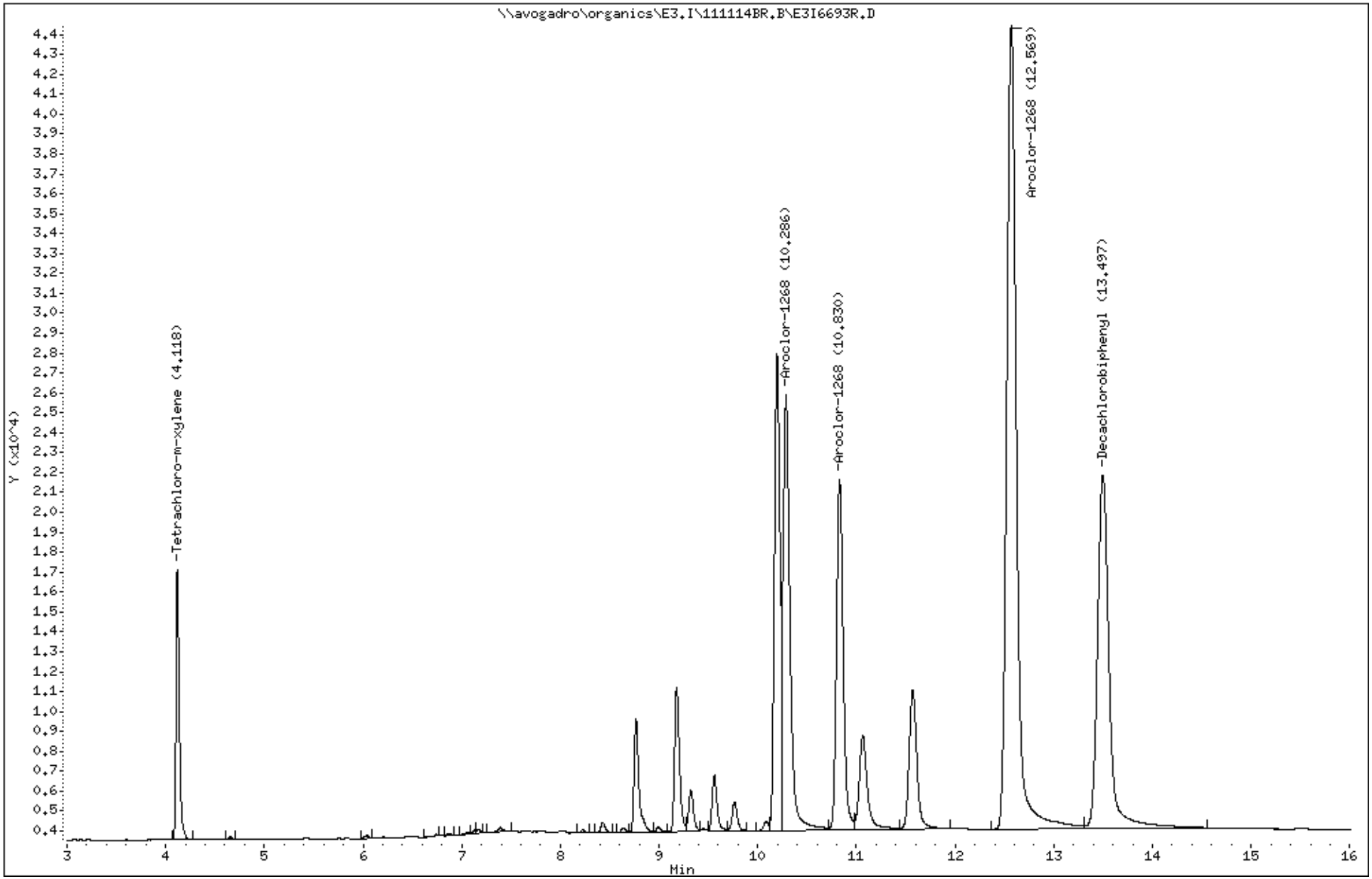
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.117	4.115	0.002	313015	0.02000	0.019			(a)
9 Aroclor-1268					CAS #: 11100-14-4			
10.286	10.286	0.000	1075451	0.40000	0.40	80.00- 120.00	100.00	(a)
10.829	10.829	0.000	836478	0.40000	0.40	57.78- 97.78	77.78	
12.569	12.569	0.000	2799377	0.40000	0.40	240.30- 280.30	260.30	
Average of Peak Amounts =				0.40000				
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
13.497	13.497	0.000	1457178	0.04000	0.060			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6693R.D
Date : 14-NOV-2011 23:42
Client ID: AR12683W3
Instrument: E3.i
Sample Info: AR12683W3,AR12683W3,,ar1268.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BF.B\E3I6695F.D
Report Date: 22-Nov-2011 16:36

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111114BF.B\E3I6695F.D
Lab Smp Id: AR16601W3 Client Smp ID: AR16601W3
Inj Date : 15-NOV-2011 00:20
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR16601W3,AR16601W3,,ar1660.sub,,
Misc Info : 1,1,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BF.B\E3_ARO_5_F.m
Meth Date : 16-Nov-2011 16:29 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 00:20 Cal File: E3I6695F.D
Als bottle: 24 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

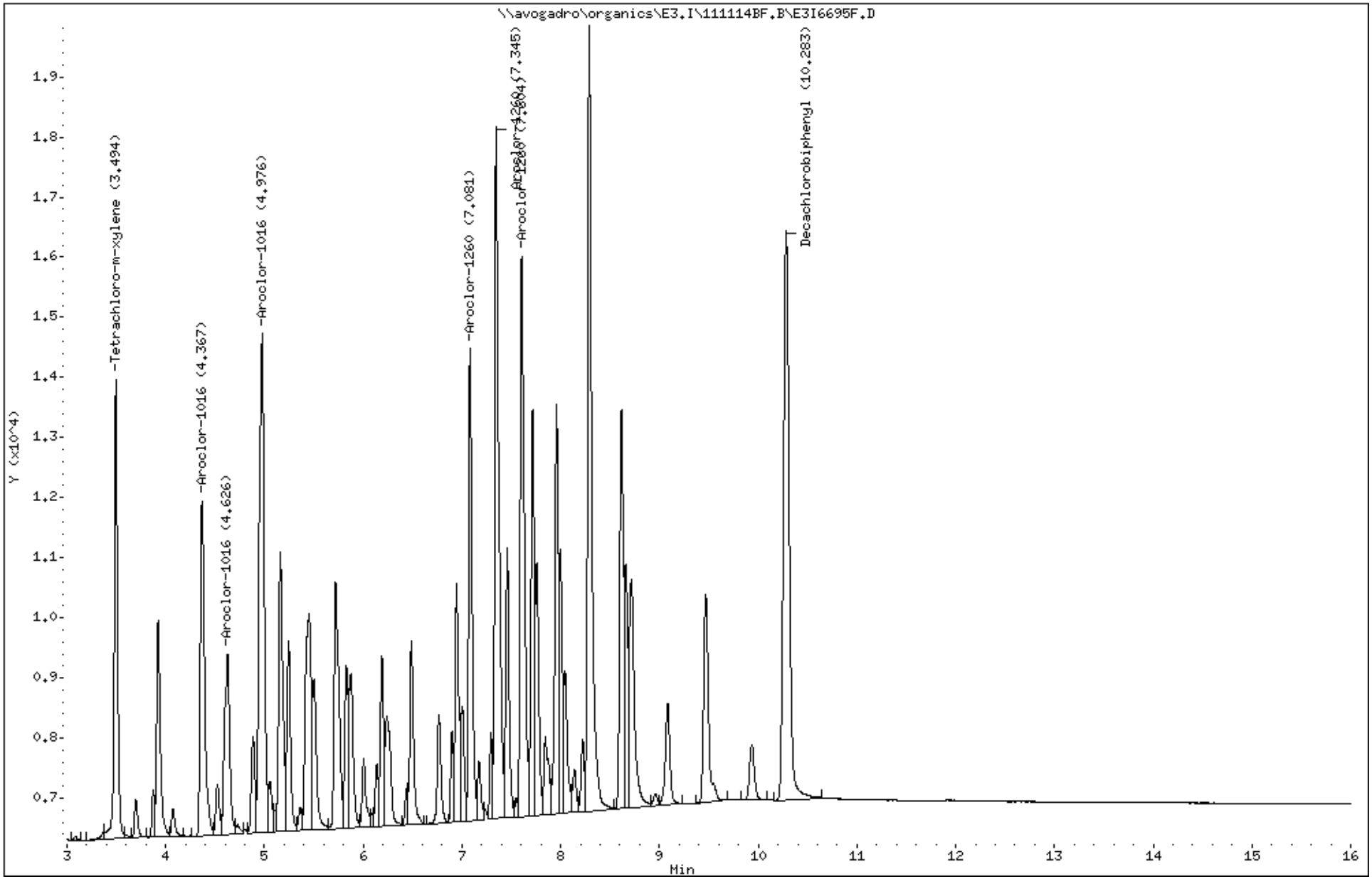
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
3.494	3.492	0.002	173398	0.00500	0.0057			(a)
5 Aroclor-1016						CAS #: 12674-11-2		
4.366	4.365	0.001	171817	0.10000	0.10	80.00- 120.00	100.00	(a)
4.626	4.624	0.002	109466	0.10000	0.10	46.68- 86.68	63.71	
4.976	4.975	0.001	294904	0.10000	0.10	160.43- 200.43	171.64	
Average of Peak Amounts =					0.10000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.283	10.281	0.002	384456	0.01000	0.0100			(a)
9 Aroclor-1260						CAS #: 11096-82-5		
7.081	7.079	0.002	188312	0.10000	0.10	80.00- 120.00	100.00	(a)
7.345	7.343	0.002	325515	0.10000	0.10	153.54- 193.54	172.86	
7.603	7.602	0.001	272438	0.10000	0.10	133.42- 173.42	144.67	
Average of Peak Amounts =					0.10000			

Data File: \\avogadro\organics\E3.I\111114BF.B\E3I6695F.D
Report Date: 22-Nov-2011 16:36

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.i\111114BF.B\E3I6695F.D
Date : 15-NOV-2011 00:20
Client ID: AR16601W3
Instrument: E3.i
Sample Info: AR16601W3,AR16601W3,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6695R.D
Report Date: 22-Nov-2011 16:36

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111114BR.B\E3I6695R.D
Lab Smp Id: AR16601W3 Client Smp ID: AR16601W3
Inj Date : 15-NOV-2011 00:20
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR16601W3,AR16601W3,,ar1660.sub,,
Misc Info : 1,1,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BR.B\E3_ARO_5_R.m
Meth Date : 16-Nov-2011 16:49 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 00:20 Cal File: E3I6695R.D
Als bottle: 24 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

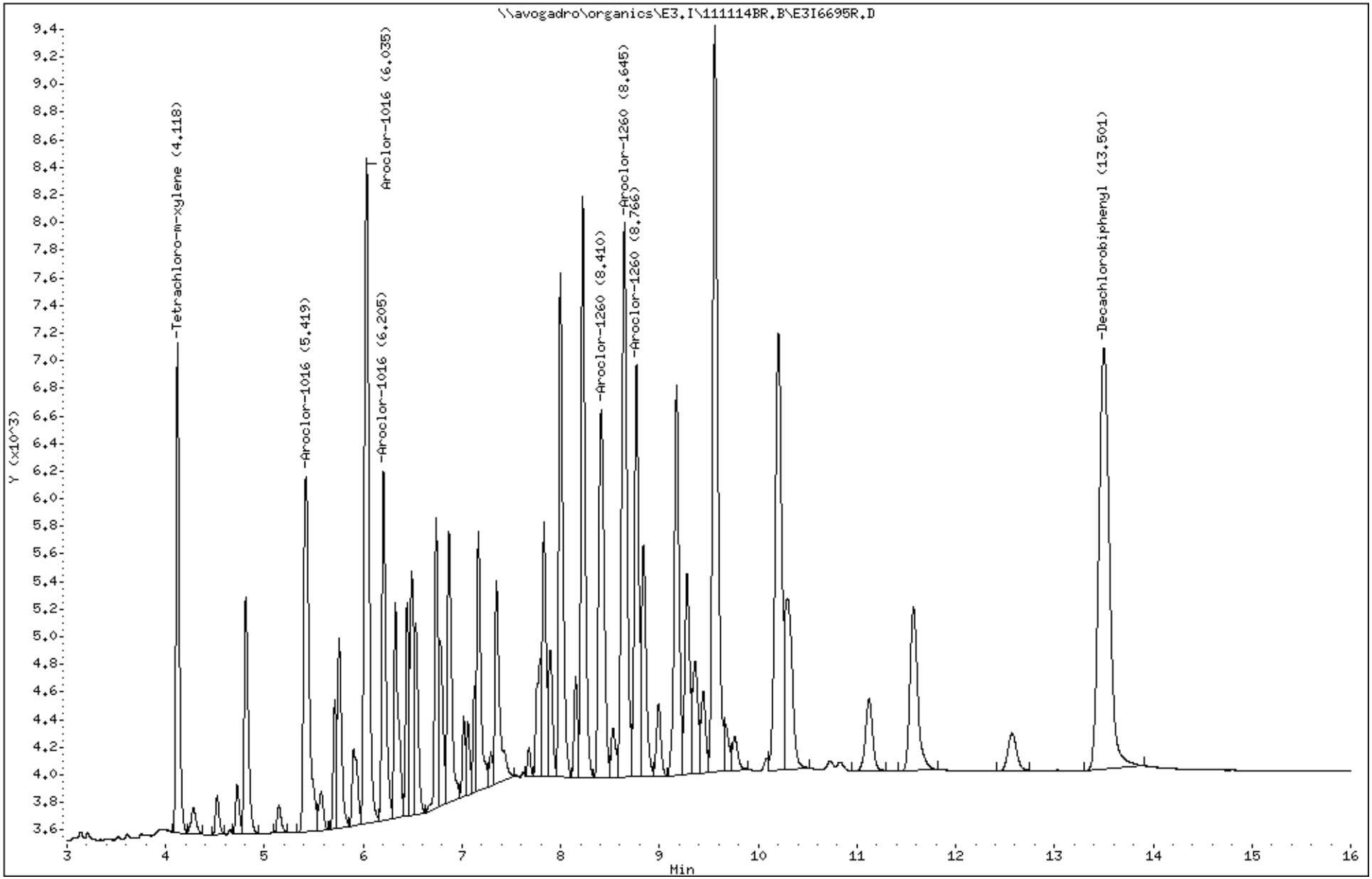
				AMOUNTS CAL-AMT	AMOUNTS ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.118	4.115	0.003	79535	0.00500	0.0049			(a)
6 Aroclor-1016						CAS #: 12674-11-2		
5.418	5.415	0.003	101153	0.10000	0.12	80.00- 120.00	100.00	(a)
6.034	6.033	0.001	155785	0.10000	0.11	145.02- 185.02	154.01	
6.204	6.202	0.002	71007	0.10000	0.11	54.77- 94.77	70.20	
	Average of Peak Amounts =				0.11333			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
13.501	13.497	0.004	228506	0.01000	0.0095			(a)
8 Aroclor-1260						CAS #: 11096-82-5		
8.409	8.407	0.002	104009	0.10000	0.11	80.00- 120.00	100.00	(a)
8.644	8.642	0.002	149308	0.10000	0.11	124.28- 164.28	143.55	
8.766	8.763	0.003	89001	0.10000	0.12	61.58- 101.58	85.57	
	Average of Peak Amounts =				0.11333			

Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6695R.D
Report Date: 22-Nov-2011 16:36

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6695R.D
Date : 15-NOV-2011 00:20
Client ID: AR16601W3
Instrument: E3.i
Sample Info: AR16601W3,AR16601W3,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BF.B\E3I6696F.D
Report Date: 22-Nov-2011 16:36

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111114BF.B\E3I6696F.D
Lab Smp Id: AR16602W3 Client Smp ID: AR16602W3
Inj Date : 15-NOV-2011 00:39
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR16602W3,AR16602W3,,ar1660.sub,,
Misc Info : 1,2,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BF.B\E3_ARO_5_F.m
Meth Date : 16-Nov-2011 16:29 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 00:39 Cal File: E3I6696F.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

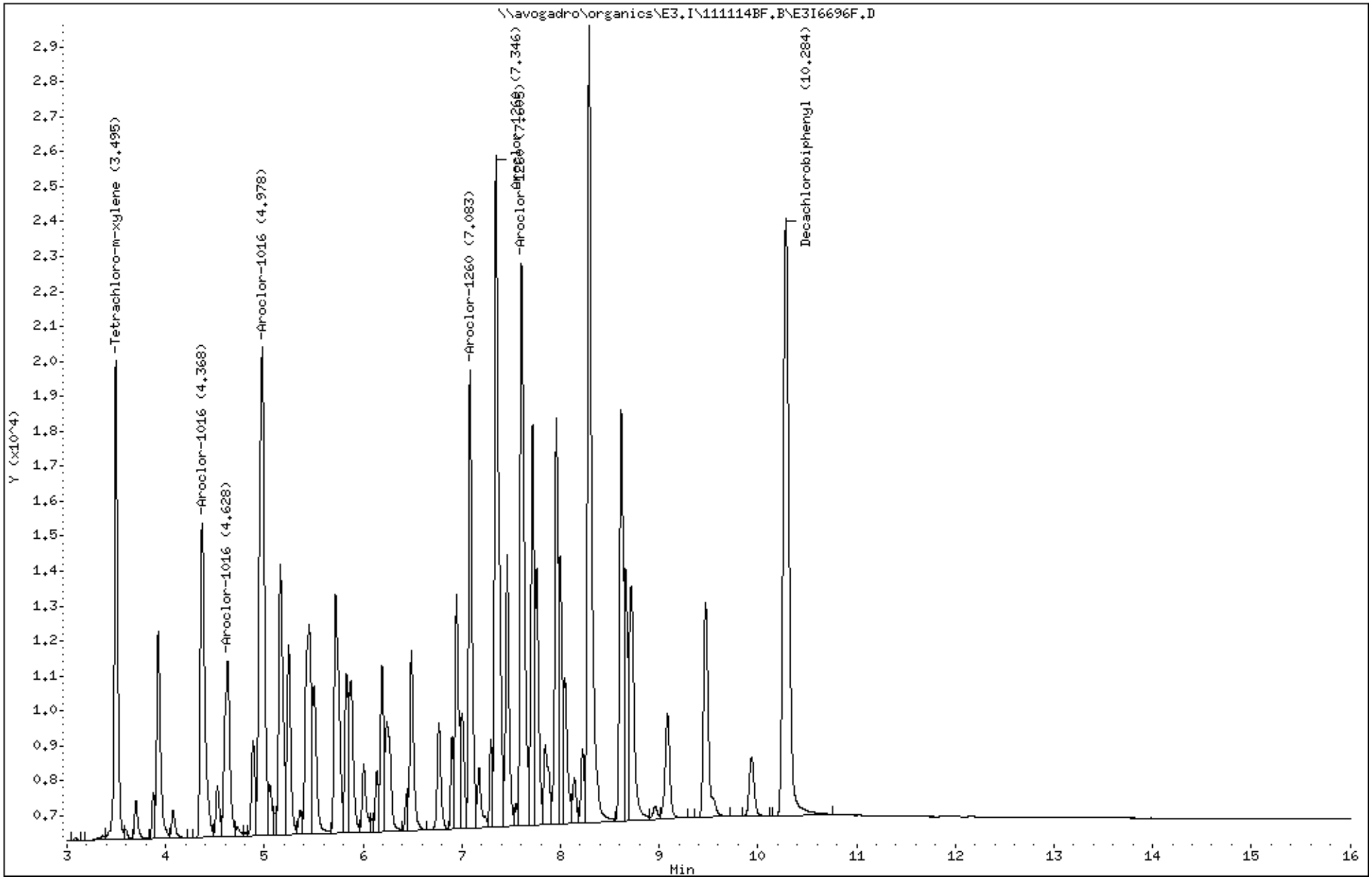
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
3.494	3.492	0.002	310890	0.01000	0.010			(a)
5 Aroclor-1016						CAS #: 12674-11-2		
4.368	4.365	0.003	288904	0.20000	0.18	80.00- 120.00	100.00	(a)
4.627	4.624	0.003	187365	0.20000	0.18	46.68- 86.68	64.85	
4.978	4.975	0.003	502000	0.20000	0.18	160.43- 200.43	173.76	
Average of Peak Amounts =					0.18000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.284	10.281	0.003	708954	0.02000	0.018			(a)
9 Aroclor-1260						CAS #: 11096-82-5		
7.082	7.079	0.003	318538	0.20000	0.18	80.00- 120.00	100.00	(a)
7.346	7.343	0.003	552587	0.20000	0.18	153.54- 193.54	173.48	
7.605	7.602	0.003	473552	0.20000	0.18	133.42- 173.42	148.66	
Average of Peak Amounts =					0.18000			

Data File: \\avogadro\organics\E3.I\111114BF.B\E3I6696F.D
Report Date: 22-Nov-2011 16:36

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.i\111114BF.B\E3I6696F.D
Date : 15-NOV-2011 00:39
Client ID: AR16602W3
Instrument: E3.i
Sample Info: AR16602W3,AR16602W3,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6696R.D
Report Date: 22-Nov-2011 16:36

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111114BR.B\E3I6696R.D
Lab Smp Id: AR16602W3 Client Smp ID: AR16602W3
Inj Date : 15-NOV-2011 00:39
Operator : DL SRC: DL Inst ID: E3.i
Smp Info : AR16602W3,AR16602W3,,ar1660.sub,,
Misc Info : 1,2,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BR.B\E3_ARO_5_R.m
Meth Date : 16-Nov-2011 16:49 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 00:39 Cal File: E3I6696R.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

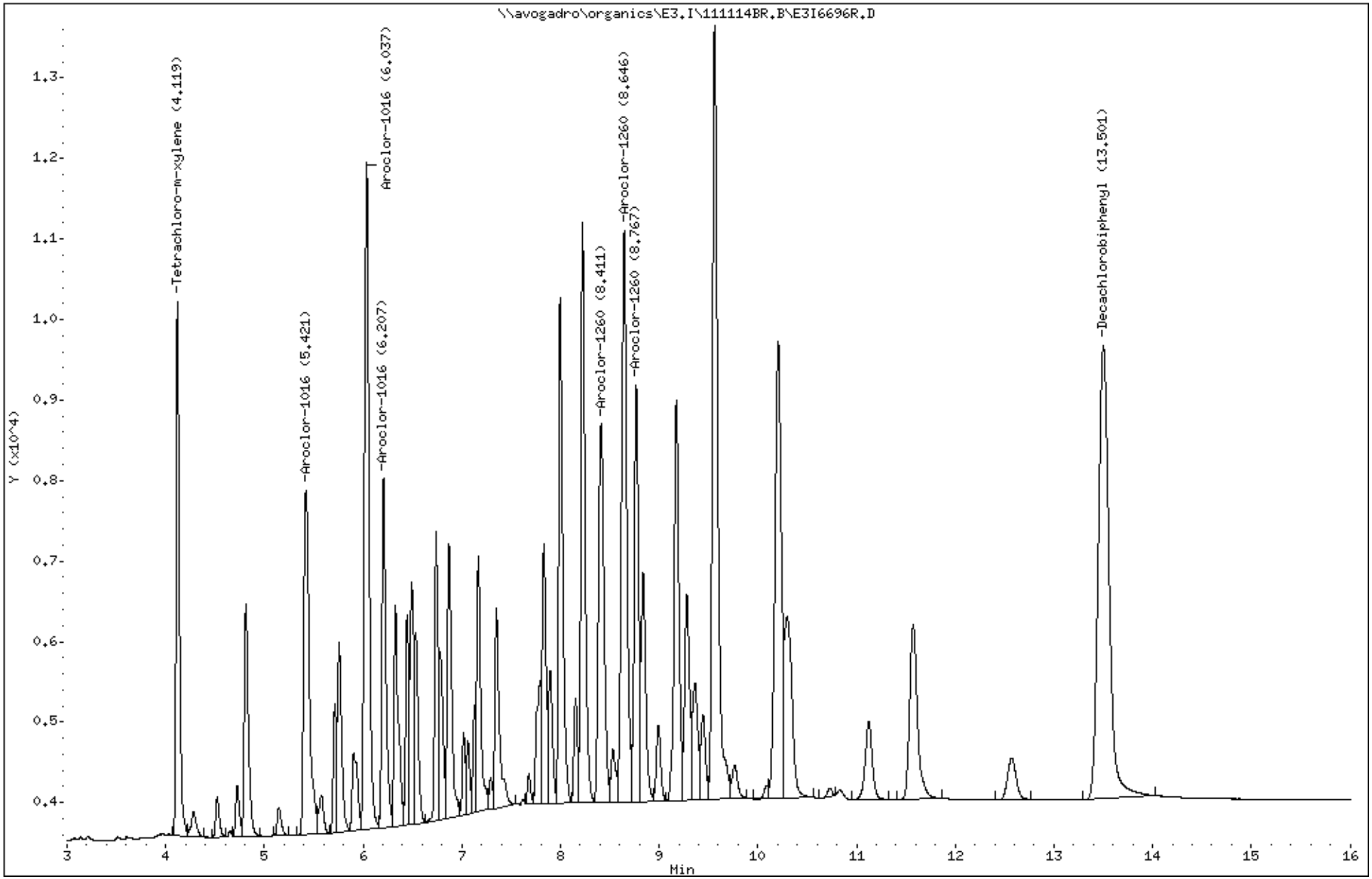
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.119	4.115	0.004	152115	0.01000	0.0095			(a)
6 Aroclor-1016						CAS #: 12674-11-2		
5.420	5.415	0.005	171841	0.20000	0.21	80.00- 120.00	100.00	(a)
6.036	6.033	0.003	270736	0.20000	0.20	145.02- 185.02	157.55	
6.206	6.202	0.004	123451	0.20000	0.20	54.77- 94.77	71.84	
Average of Peak Amounts =					0.20333			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
13.500	13.497	0.003	432211	0.02000	0.018			(a)
8 Aroclor-1260						CAS #: 11096-82-5		
8.411	8.407	0.004	184586	0.20000	0.20	80.00- 120.00	100.00	(a)
8.646	8.642	0.004	266019	0.20000	0.20	124.28- 164.28	144.12	
8.767	8.763	0.004	155677	0.20000	0.20	61.58- 101.58	84.34	
Average of Peak Amounts =					0.20000			

Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6696R.D
Report Date: 22-Nov-2011 16:36

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.i\111114BR.B\E3I6696R.D
Date : 15-NOV-2011 00:39
Client ID: AR16602W3
Instrument: E3.i
Sample Info: AR16602W3,AR16602W3,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BF.B\E3I6697F.D
Report Date: 22-Nov-2011 16:36

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111114BF.B\E3I6697F.D
Lab Smp Id: AR16603W3 Client Smp ID: AR16603W3
Inj Date : 15-NOV-2011 00:58
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR16603W3,AR16603W3,,ar1660.sub,,
Misc Info : 1,3,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BF.B\E3_ARO_5_F.m
Meth Date : 16-Nov-2011 16:29 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 00:58 Cal File: E3I6697F.D
Als bottle: 26 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

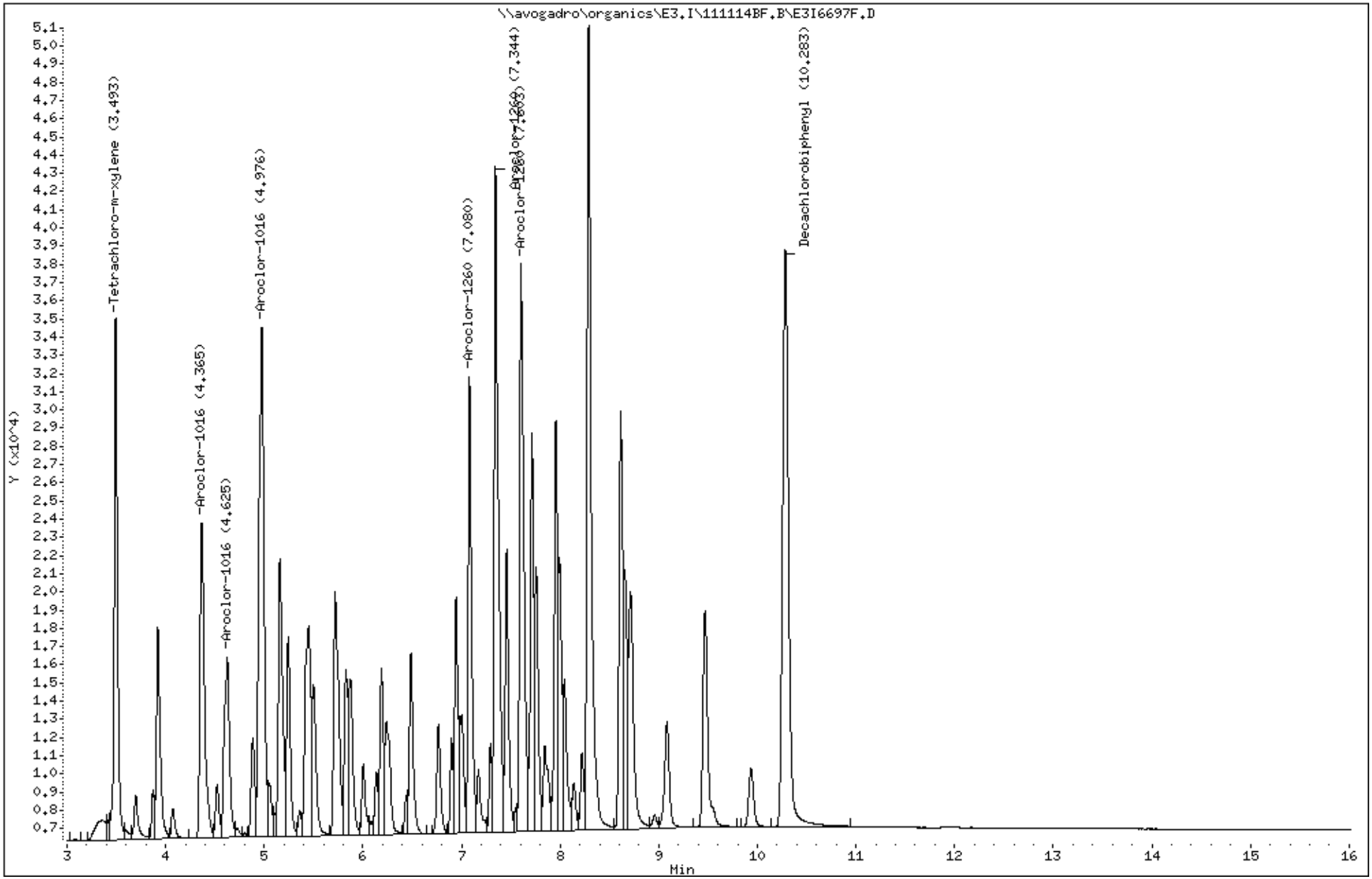
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
3.492	3.492	0.000	669697	0.02000	0.021			(a)
5 Aroclor-1016						CAS #: 12674-11-2		
4.365	4.365	0.000	555723	0.40000	0.37	80.00- 120.00	100.00	(a)
4.624	4.624	0.000	370486	0.40000	0.38	46.68- 86.68	66.67	
4.975	4.975	0.000	1007718	0.40000	0.38	160.43- 200.43	181.33	
Average of Peak Amounts =					0.37667			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.283	10.281	0.002	1347572	0.04000	0.040			(a)
9 Aroclor-1260						CAS #: 11096-82-5		
7.080	7.079	0.001	613891	0.40000	0.37	80.00- 120.00	100.00	(a)
7.344	7.343	0.001	1061466	0.40000	0.37	153.54- 193.54	172.91	
7.603	7.602	0.001	940375	0.40000	0.38	133.42- 173.42	153.18	
Average of Peak Amounts =					0.37333			

Data File: \\avogadro\organics\E3.I\111114BF.B\E3I6697F.D
Report Date: 22-Nov-2011 16:36

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.I\111114BF.B\E3I6697F.D
Date : 15-NOV-2011 00:58
Client ID: AR16603W3
Instrument: E3.i
Sample Info: AR16603W3,AR16603W3,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6697R.D
Report Date: 22-Nov-2011 16:36

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report
Data file : \\avogadro\organics\E3.I\111114BR.B\E3I6697R.D
Lab Smp Id: AR16603W3 Client Smp ID: AR16603W3
Inj Date : 15-NOV-2011 00:58
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR16603W3,AR16603W3,,ar1660.sub,,
Misc Info : 1,3,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BR.B\E3_ARO_5_R.m
Meth Date : 16-Nov-2011 16:49 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 00:58 Cal File: E3I6697R.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

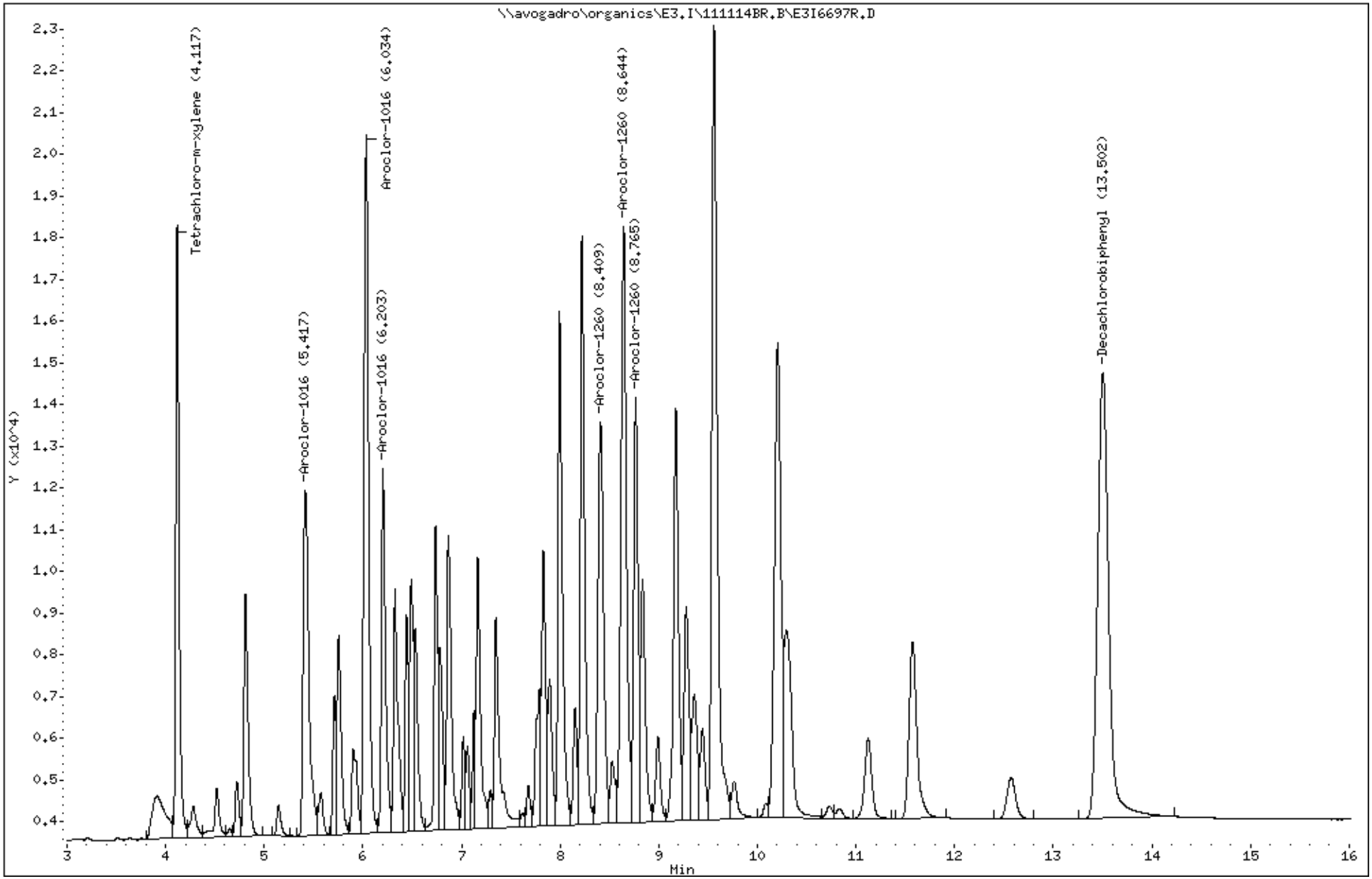
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.116	4.115	0.001	348892	0.02000	0.021			(a)
6 Aroclor-1016						CAS #: 12674-11-2		
5.416	5.415	0.001	336317	0.40000	0.41	80.00- 120.00	100.00	(a)
6.034	6.033	0.001	560367	0.40000	0.41	145.02- 185.02	166.62	
6.203	6.202	0.001	255326	0.40000	0.41	54.77- 94.77	75.92	
Average of Peak Amounts =					0.41000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
13.502	13.497	0.005	840260	0.04000	0.040			(a)
8 Aroclor-1260						CAS #: 11096-82-5		
8.409	8.407	0.002	388108	0.40000	0.41	80.00- 120.00	100.00	(a)
8.644	8.642	0.002	551895	0.40000	0.41	124.28- 164.28	142.20	
8.765	8.763	0.002	311264	0.40000	0.41	61.58- 101.58	80.20	
Average of Peak Amounts =					0.41000			

Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6697R.D
Report Date: 22-Nov-2011 16:36

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.i\111114BR.B\E3I6697R.D
Date : 15-NOV-2011 00:58
Client ID: AR16603W3
Instrument: E3.i
Sample Info: AR16603W3,AR16603W3,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BF.B\E3I6698F.D
Report Date: 22-Nov-2011 16:36

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111114BF.B\E3I6698F.D
Lab Smp Id: AR16604W3 Client Smp ID: AR16604W3
Inj Date : 15-NOV-2011 01:17
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR16604W3,AR16604W3,,ar1660.sub,,
Misc Info : 1,4,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BF.B\E3_ARO_5_F.m
Meth Date : 16-Nov-2011 16:29 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:17 Cal File: E3I6698F.D
Als bottle: 27 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

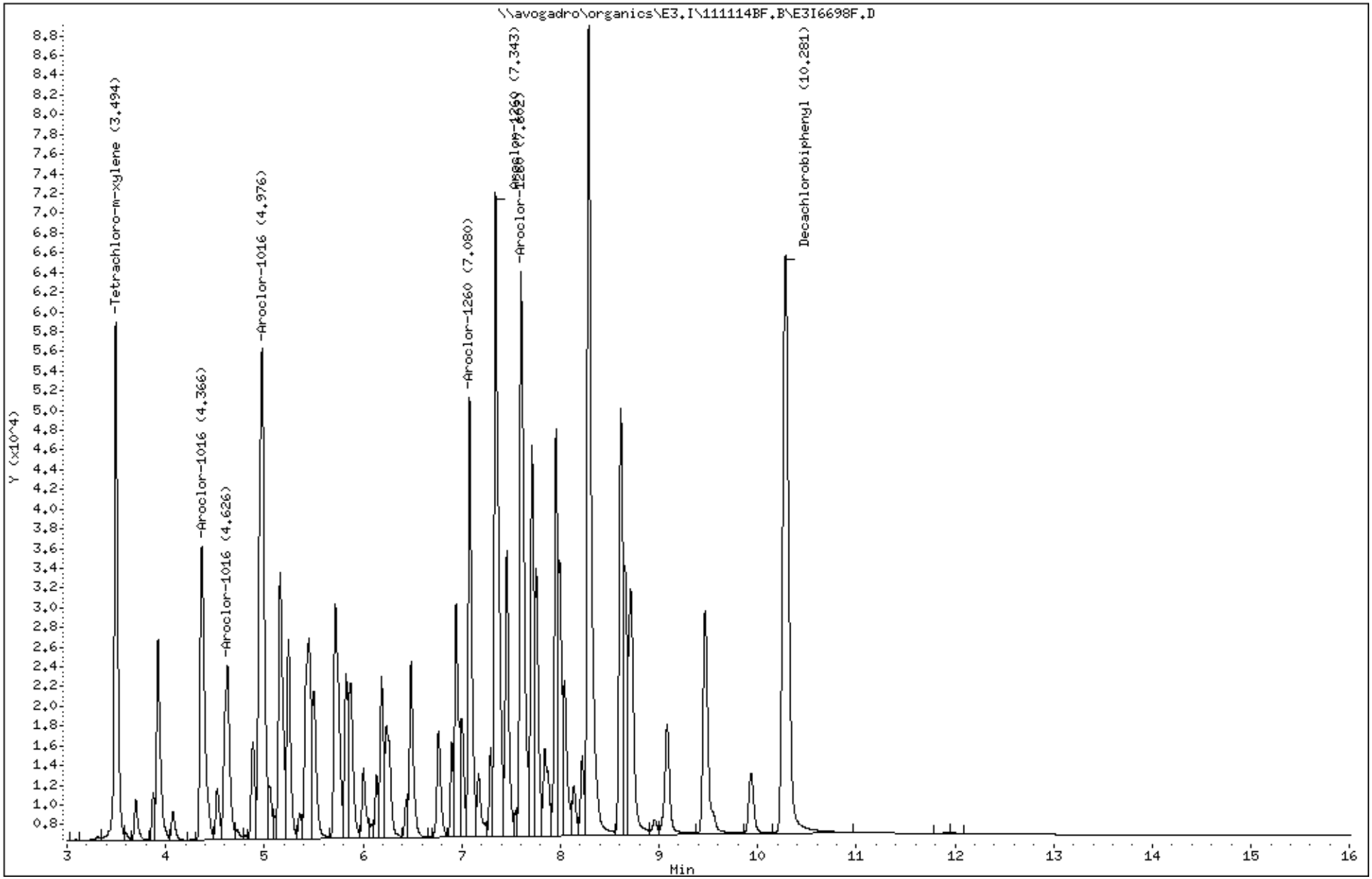
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
3.493	3.492	0.001	1248193	0.04000	0.039			(a)
5 Aroclor-1016					CAS #: 12674-11-2			
4.366	4.365	0.001	976964	0.80000	0.68	80.00- 120.00	100.00	(a)
4.625	4.624	0.001	670893	0.80000	0.71	46.68- 86.68	68.67	
4.976	4.975	0.001	1826911	0.80000	0.71	160.43- 200.43	187.00	
Average of Peak Amounts =					0.70000			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.281	10.281	0.000	2537206	0.08000	0.075			
9 Aroclor-1260					CAS #: 11096-82-5			
7.079	7.079	0.000	1102675	0.80000	0.69	80.00- 120.00	100.00	(a)
7.343	7.343	0.000	1913434	0.80000	0.69	153.54- 193.54	173.53	
7.602	7.602	0.000	1758555	0.80000	0.73	133.42- 173.42	159.48	
Average of Peak Amounts =					0.70333			

Data File: \\avogadro\organics\E3.I\111114BF.B\E3I6698F.D
Report Date: 22-Nov-2011 16:36

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.i\111114BF.B\E3I6698F.D
Date : 15-NOV-2011 01:17
Client ID: AR16604W3
Instrument: E3.i
Sample Info: AR16604W3,AR16604W3,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6698R.D
Report Date: 22-Nov-2011 16:36

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111114BR.B\E3I6698R.D
Lab Smp Id: AR16604W3 Client Smp ID: AR16604W3
Inj Date : 15-NOV-2011 01:17
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR16604W3,AR16604W3,,ar1660.sub,,
Misc Info : 1,4,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BR.B\E3_ARO_5_R.m
Meth Date : 16-Nov-2011 16:49 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:17 Cal File: E3I6698R.D
Als bottle: 27 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

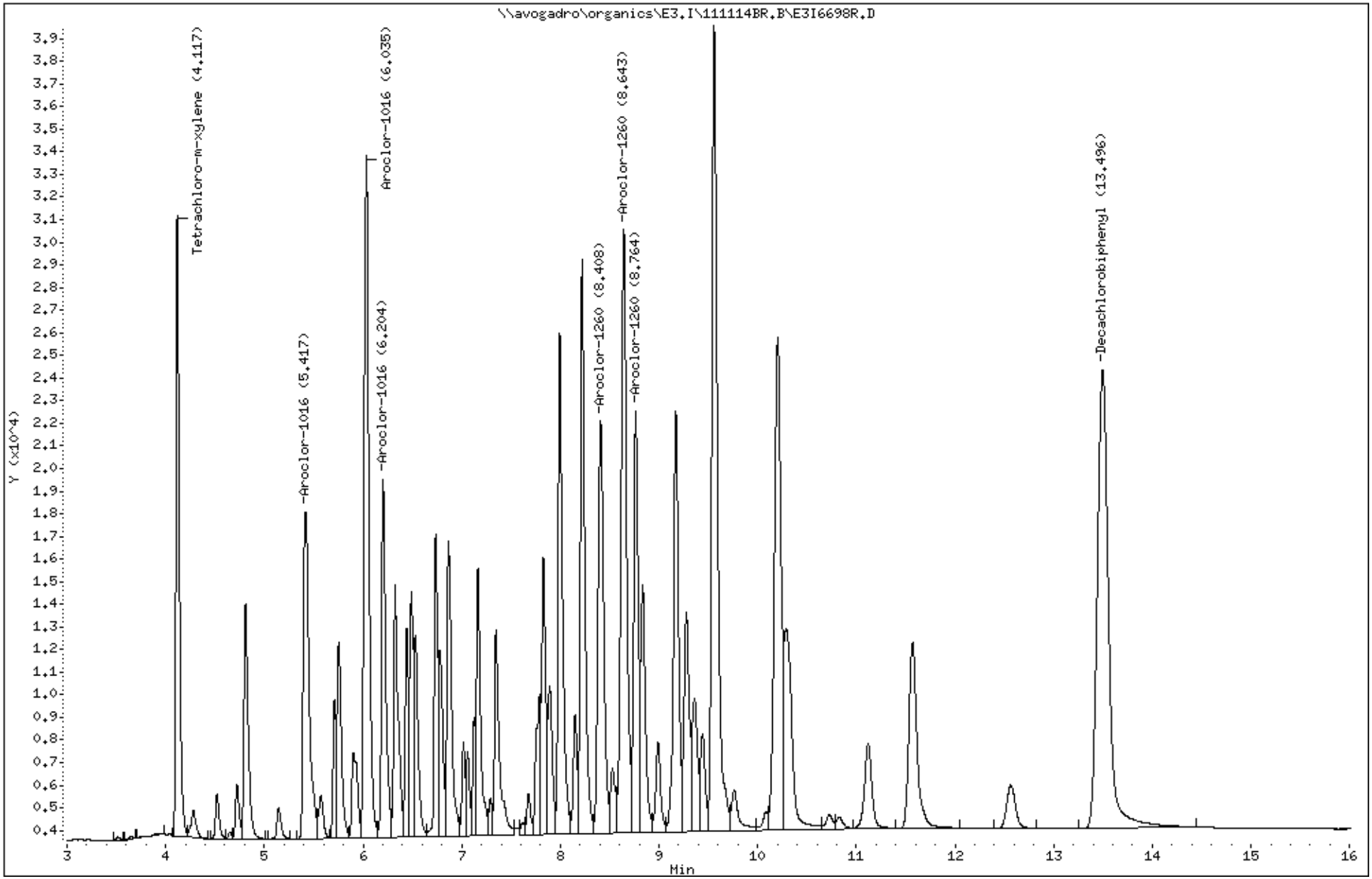
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.117	4.115	0.002	650393	0.04000	0.040			(a)
6 Aroclor-1016						CAS #: 12674-11-2		
5.417	5.415	0.002	598222	0.80000	0.72	80.00- 120.00	100.00	(a)
6.034	6.033	0.001	1034876	0.80000	0.76	145.02- 185.02	172.99	
6.203	6.202	0.001	472343	0.80000	0.76	54.77- 94.77	78.96	
		Average of Peak Amounts =			0.74667			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
13.496	13.497	-0.001	1625728	0.08000	0.077			
8 Aroclor-1260						CAS #: 11096-82-5		
8.407	8.407	0.000	736028	0.80000	0.78	80.00- 120.00	100.00	(a)
8.643	8.642	0.001	1052067	0.80000	0.78	124.28- 164.28	142.94	
8.763	8.763	0.000	576838	0.80000	0.76	61.58- 101.58	78.37	
		Average of Peak Amounts =			0.77333			

Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6698R.D
Report Date: 22-Nov-2011 16:36

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.i\111114BR.B\E3I6698R.D
Date : 15-NOV-2011 01:17
Client ID: AR16604W3
Instrument: E3.i
Sample Info: AR16604W3,AR16604W3,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BF.B\E3I6699F.D
Report Date: 22-Nov-2011 16:36

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

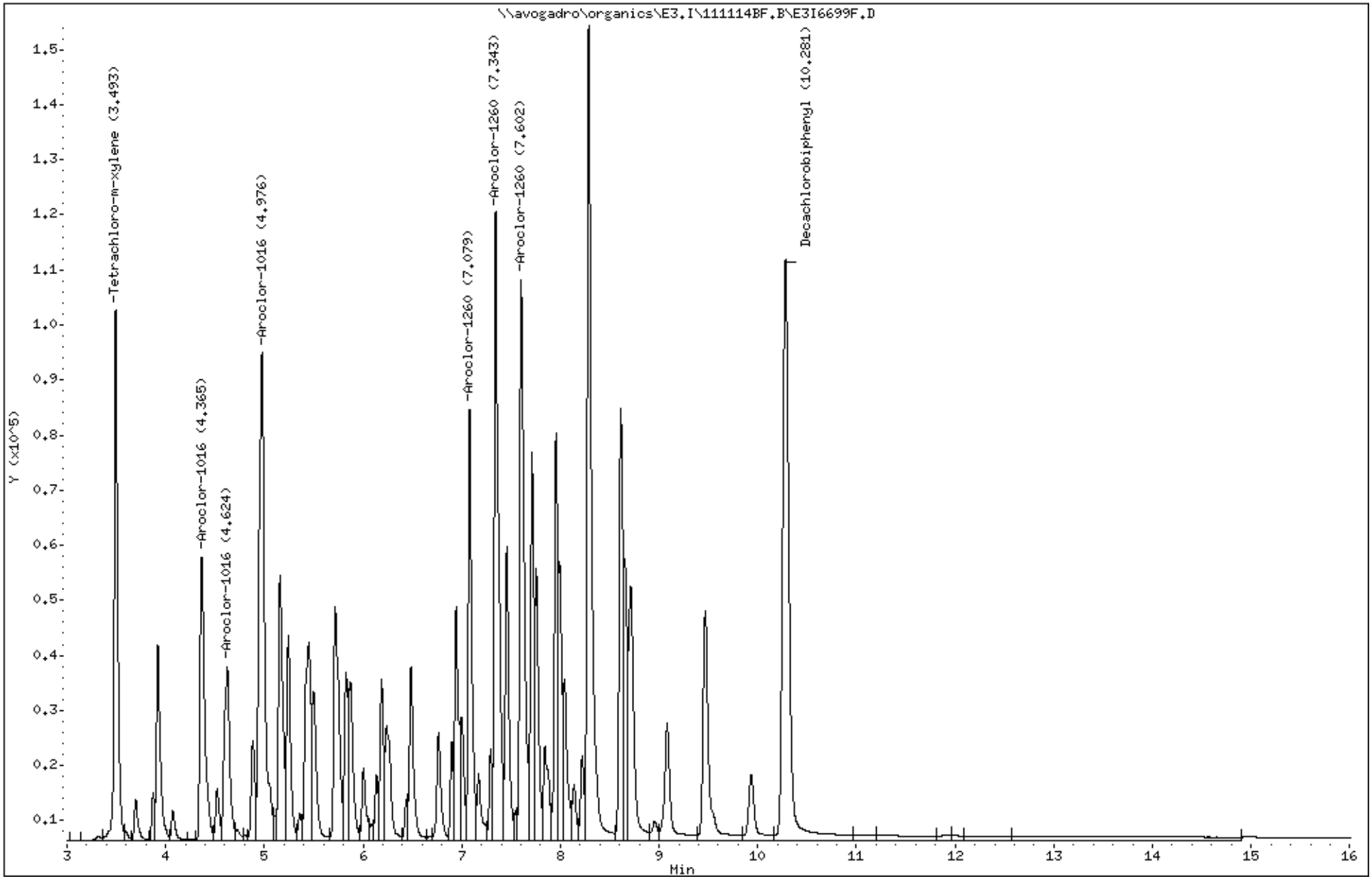
Data file : \\avogadro\organics\E3.I\111114BF.B\E3I6699F.D
Lab Smp Id: AR16605W3 Client Smp ID: AR16605W3
Inj Date : 15-NOV-2011 01:36
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR16605W3,AR16605W3,,ar1660.sub,,
Misc Info : 1,5,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BF.B\E3_ARO_5_F.m
Meth Date : 16-Nov-2011 16:29 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699F.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		
3.492	3.492	0.000	2363922	0.08000	0.074			
5 Aroclor-1016						CAS #: 12674-11-2		
4.365	4.365	0.000	1730418	1.60000	1.3	80.00- 120.00		100.00
4.624	4.624	0.000	1229303	1.60000	1.3	46.68- 86.68		71.04
4.975	4.975	0.000	3549650	1.60000	1.4	160.43- 200.43		205.13
Average of Peak Amounts =				1.33333				
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.281	10.281	0.000	4999279	0.16000	0.15			
9 Aroclor-1260						CAS #: 11096-82-5		
7.079	7.079	0.000	1975391	1.60000	1.3	80.00- 120.00		100.00
7.343	7.343	0.000	3369797	1.60000	1.3	153.54- 193.54		170.59
7.602	7.602	0.000	3177371	1.60000	1.4	133.42- 173.42		160.85
Average of Peak Amounts =				1.33333				

Data File: \\avogadro\organics\E3.I\111114BF.B\E3I6699F.D
Date : 15-NOV-2011 01:36
Client ID: AR16605W3
Instrument: E3.i
Sample Info: AR16605W3,AR16605W3,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6699R.D
Report Date: 22-Nov-2011 16:36

Spectrum Analytical, Inc. RI Division

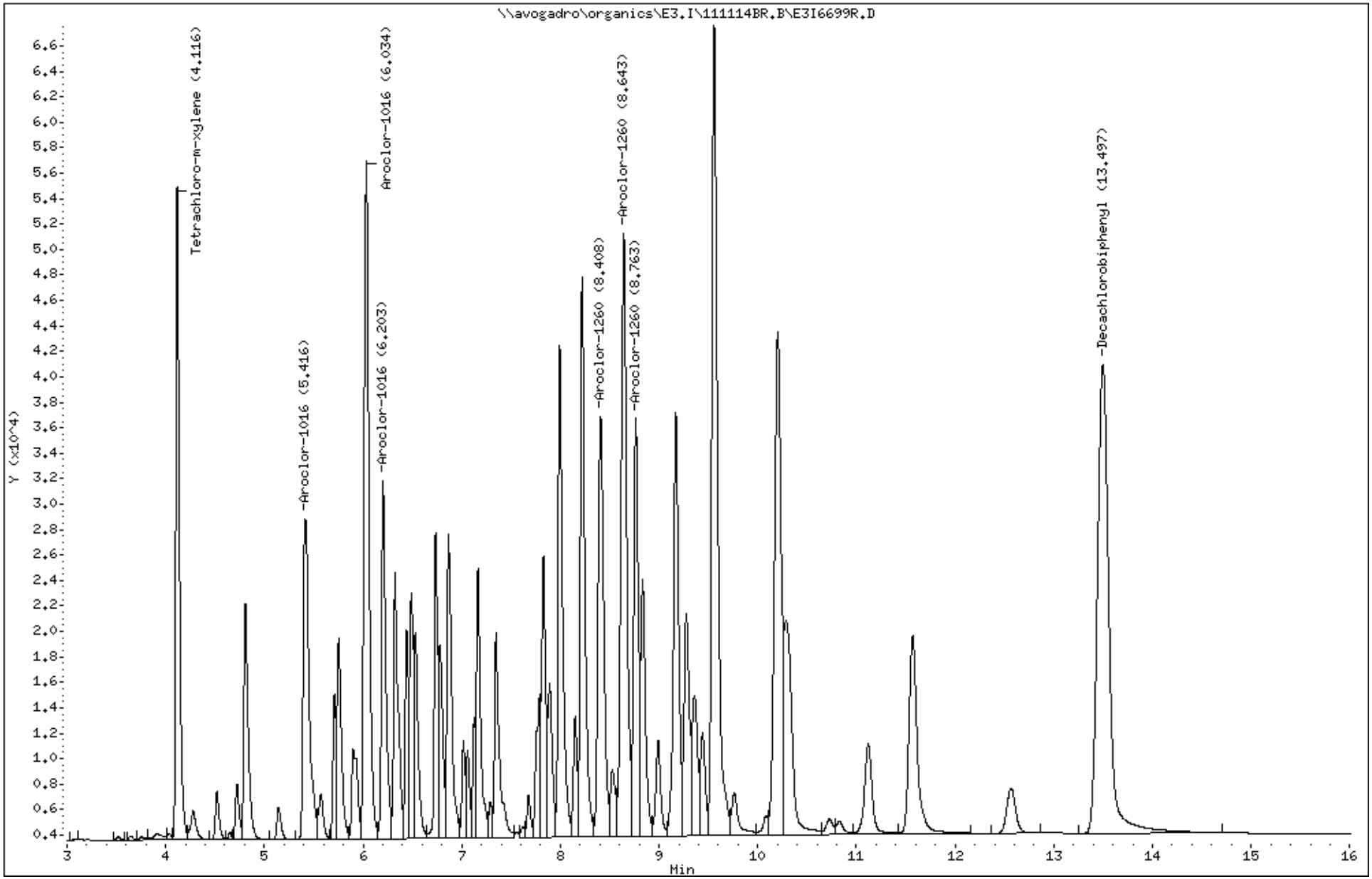
8080/8081PCB Quantitation Report
Data file : \\avogadro\organics\E3.I\111114BR.B\E3I6699R.D
Lab Smp Id: AR16605W3 Client Smp ID: AR16605W3
Inj Date : 15-NOV-2011 01:36
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR16605W3,AR16605W3,,ar1660.sub,,
Misc Info : 1,5,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111114BR.B\E3_ARO_5_R.m
Meth Date : 16-Nov-2011 16:49 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699R.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		
4.116	4.115	0.001	1288434	0.08000	0.080			
6 Aroclor-1016						CAS #: 12674-11-2		
5.415	5.415	0.000	1058500	1.60000	1.3	80.00- 120.00		100.00
6.033	6.033	0.000	1883278	1.60000	1.4	145.02- 185.02		177.92
6.202	6.202	0.000	864842	1.60000	1.4	54.77- 94.77		81.70
Average of Peak Amounts =					1.36667			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
13.497	13.497	0.000	3003332	0.16000	0.14			
8 Aroclor-1260						CAS #: 11096-82-5		
8.407	8.407	0.000	1341832	1.60000	1.4	80.00- 120.00		100.00
8.642	8.642	0.000	1914394	1.60000	1.4	124.28- 164.28		142.67
8.763	8.763	0.000	1025801	1.60000	1.3	61.58- 101.58		76.45
Average of Peak Amounts =					1.36667			

Data File: \\avogadro\organics\E3.I\111114BR.B\E3I6699R.D
Date : 15-NOV-2011 01:36
Client ID: AR16605W3
Instrument: E3.i
Sample Info: AR16605W3,AR16605W3,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111109F.B\E2K7614F.D
Report Date: 21-Nov-2011 10:40

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111109F.B\E2K7614F.D
Lab Smp Id: AR16603JF Client Smp ID: AR16603JF
Inj Date : 09-NOV-2011 09:12
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16603JF,AR16603JF,,ar1660.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111109F.B\E2_ARO_5_F.m
Meth Date : 10-Nov-2011 09:09 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

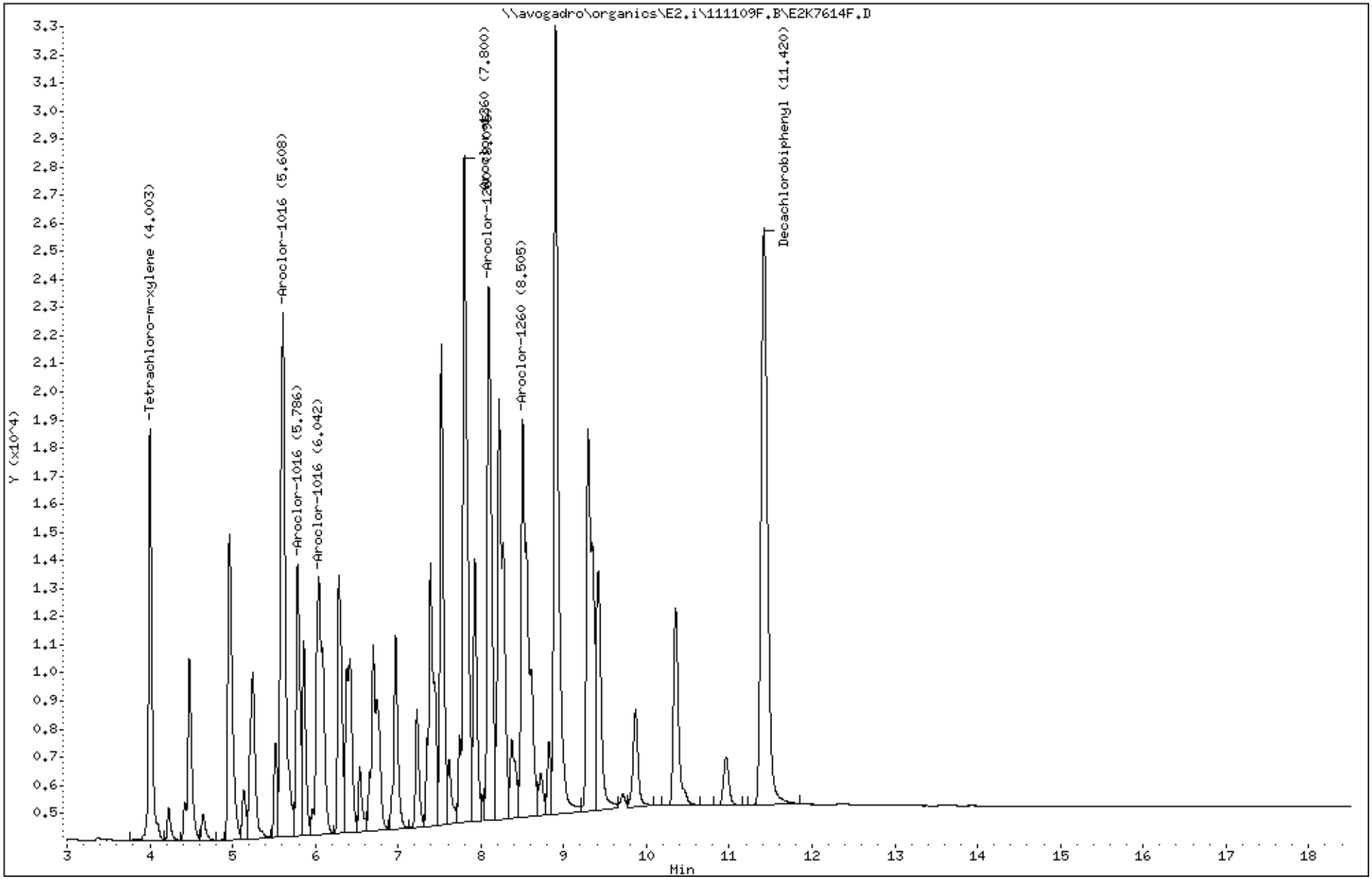
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.002	3.999	0.003	409991	0.02000	0.020			(a)
5 Aroclor-1016					CAS #: 12674-11-2			
5.608	5.604	0.004	779474	0.40000	0.38	80.00- 120.00	100.00	(a)
5.785	5.781	0.004	299979	0.40000	0.39	18.11- 58.11	38.48	
6.042	6.039	0.003	536190	0.40000	0.39	47.74- 87.74	68.79	
Average of Peak Amounts =					0.38667			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
11.419	11.417	0.002	1123165	0.04000	0.039			(a)
9 Aroclor-1260					CAS #: 11096-82-5			
7.799	7.797	0.002	931613	0.40000	0.39	80.00- 120.00	100.00	(a)
8.094	8.091	0.003	718287	0.40000	0.39	58.30- 98.30	77.10	
8.505	8.502	0.003	838018	0.40000	0.40	69.60- 109.60	89.95	
Average of Peak Amounts =					0.39333			

Data File: \\avogadro\organics\E2.i\111109F.B\E2K7614F.D
Report Date: 21-Nov-2011 10:40

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111109F.B\E2K7614F.D
Date : 09-NOV-2011 09:12
Client ID: AR16603JF
Instrument: E2.i
Sample Info: AR16603JF,AR16603JF,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111109R.B\E2K7614R.D
Report Date: 21-Nov-2011 10:41

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111109R.B\E2K7614R.D
Lab Smp Id: AR16603JF Client Smp ID: AR16603JF
Inj Date : 09-NOV-2011 09:12
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16603JF,AR16603JF,,ar1660.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111109R.B\E2_ARO_5_R.m
Meth Date : 10-Nov-2011 09:10 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

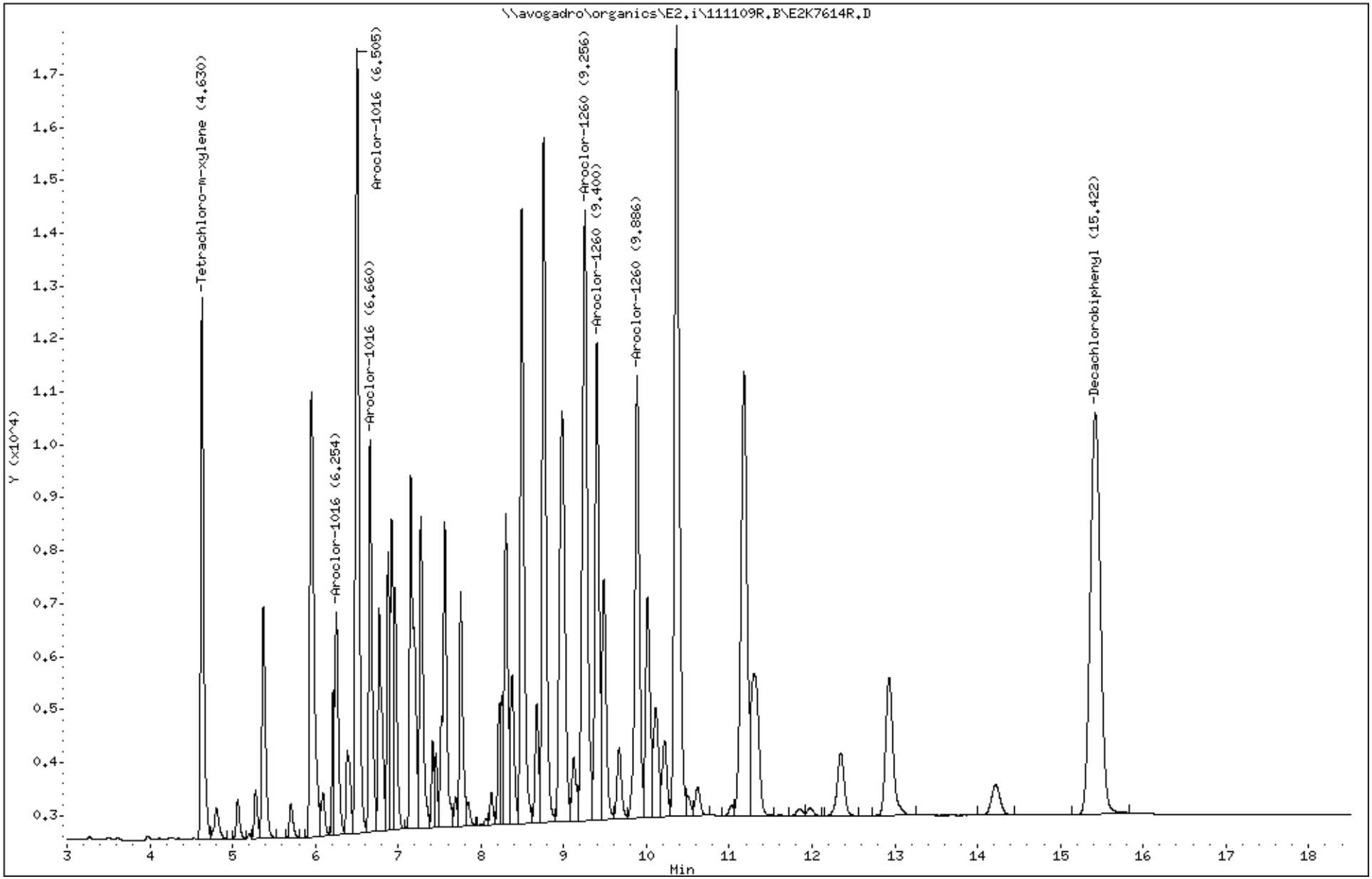
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.629	4.627	0.002	248618	0.02000	0.020			(a)
6 Aroclor-1016					CAS #: 12674-11-2			
6.253	6.250	0.003	122362	0.40000	0.40	80.00- 120.00	100.00	(a)
6.505	6.503	0.002	454238	0.40000	0.39	358.17- 398.17	371.22	
6.660	6.657	0.003	204343	0.40000	0.39	149.17- 189.17	167.00	
	Average of Peak Amounts =				0.39333			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
15.421	15.423	-0.002	645469	0.04000	0.038			(a)
8 Aroclor-1260					CAS #: 11096-82-5			
9.256	9.255	0.001	484491	0.40000	0.40	80.00- 120.00	100.00	(a)
9.400	9.398	0.002	300808	0.40000	0.40	41.51- 81.51	62.09	
9.885	9.883	0.002	316769	0.40000	0.40	44.67- 84.67	65.38	
	Average of Peak Amounts =				0.40000			

Data File: \\avogadro\organics\E2.i\111109R.B\E2K7614R.D
Report Date: 21-Nov-2011 10:41

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111109R.B\E2K7614R.D
Date : 09-NOV-2011 09:12
Client ID: AR16603JF
Instrument: E2.i
Sample Info: AR16603JF,AR16603JF,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\111109F.B\E2K7633F.D
Report Date: 21-Nov-2011 10:41

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111109F.B\E2K7633F.D
Lab Smp Id: AR16603JG Client Smp ID: AR16603JG
Inj Date : 09-NOV-2011 17:02
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16603JG,AR16603JG,,ar1660.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111109F.B\E2_ARO_5_F.m
Meth Date : 10-Nov-2011 09:09 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

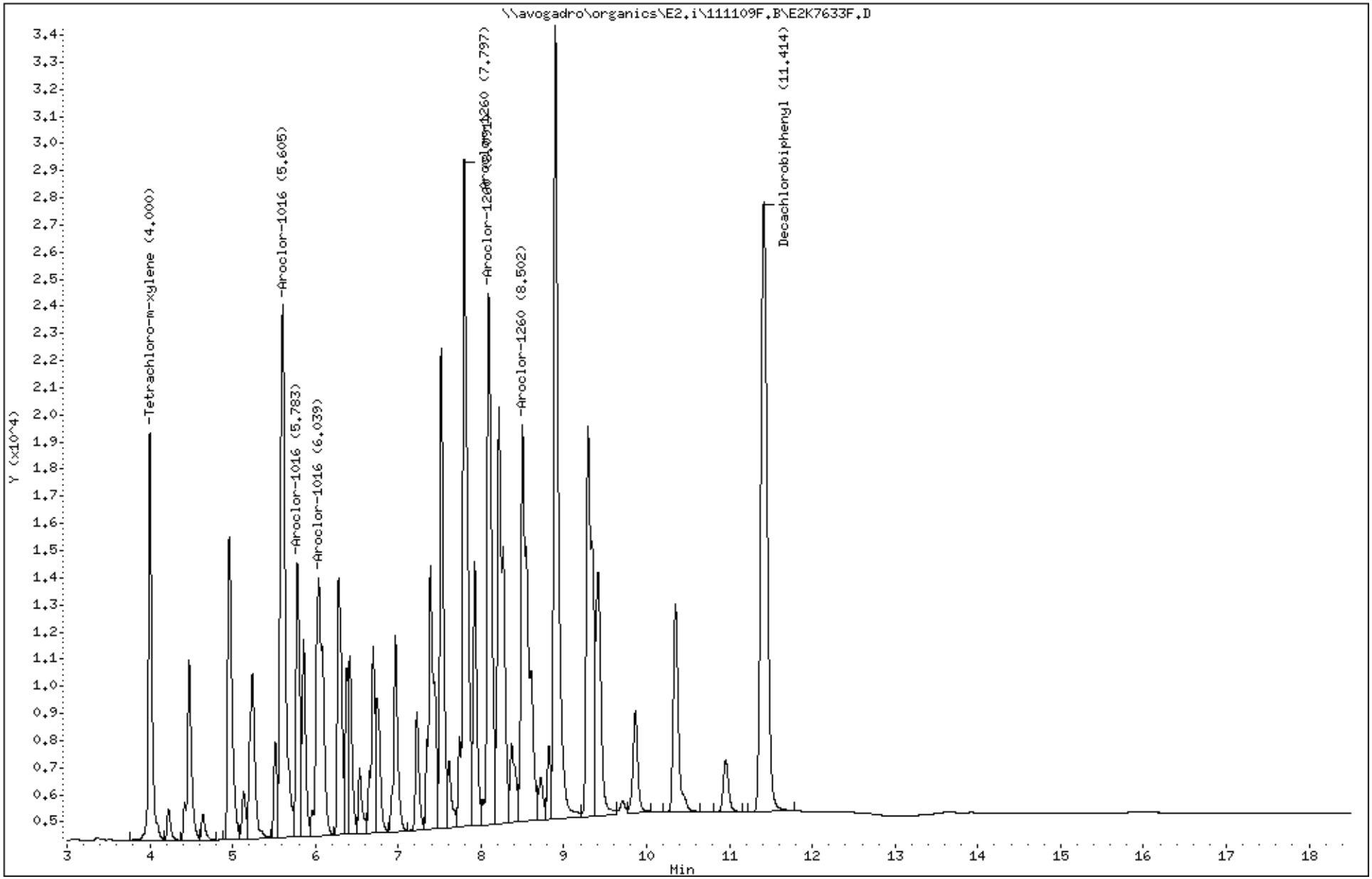
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.000	3.999	0.001	425967	0.02000	0.020			(a)
5 Aroclor-1016						CAS #: 12674-11-2		
5.604	5.604	0.000	827135	0.40000	0.40	80.00- 120.00	100.00	(a)
5.782	5.781	0.001	315254	0.40000	0.41	18.11- 58.11	38.11	
6.039	6.039	0.000	560281	0.40000	0.41	47.74- 87.74	67.74	
Average of Peak Amounts =					0.40667			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.413	11.417	-0.004	1198510	0.04000	0.042			(a)
9 Aroclor-1260						CAS #: 11096-82-5		
7.797	7.797	0.000	972707	0.40000	0.41	80.00- 120.00	100.00	(a)
8.091	8.091	0.000	761605	0.40000	0.41	58.30- 98.30	78.30	
8.502	8.502	0.000	871518	0.40000	0.42	69.60- 109.60	89.60	
Average of Peak Amounts =					0.41333			

Data File: \\avogadro\organics\E2.i\111109F.B\E2K7633F.D
Report Date: 21-Nov-2011 10:41

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111109F.B\E2K7633F.D
Date : 09-NOV-2011 17:02
Client ID: AR16603JG
Instrument: E2.i
Sample Info: AR16603JG,AR16603JG,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111109R.B\E2K7633R.D
Report Date: 21-Nov-2011 10:42

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111109R.B\E2K7633R.D
Lab Smp Id: AR16603JG Client Smp ID: AR16603JG
Inj Date : 09-NOV-2011 17:02
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16603JG,AR16603JG,,ar1660.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111109R.B\E2_ARO_5_R.m
Meth Date : 10-Nov-2011 09:10 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

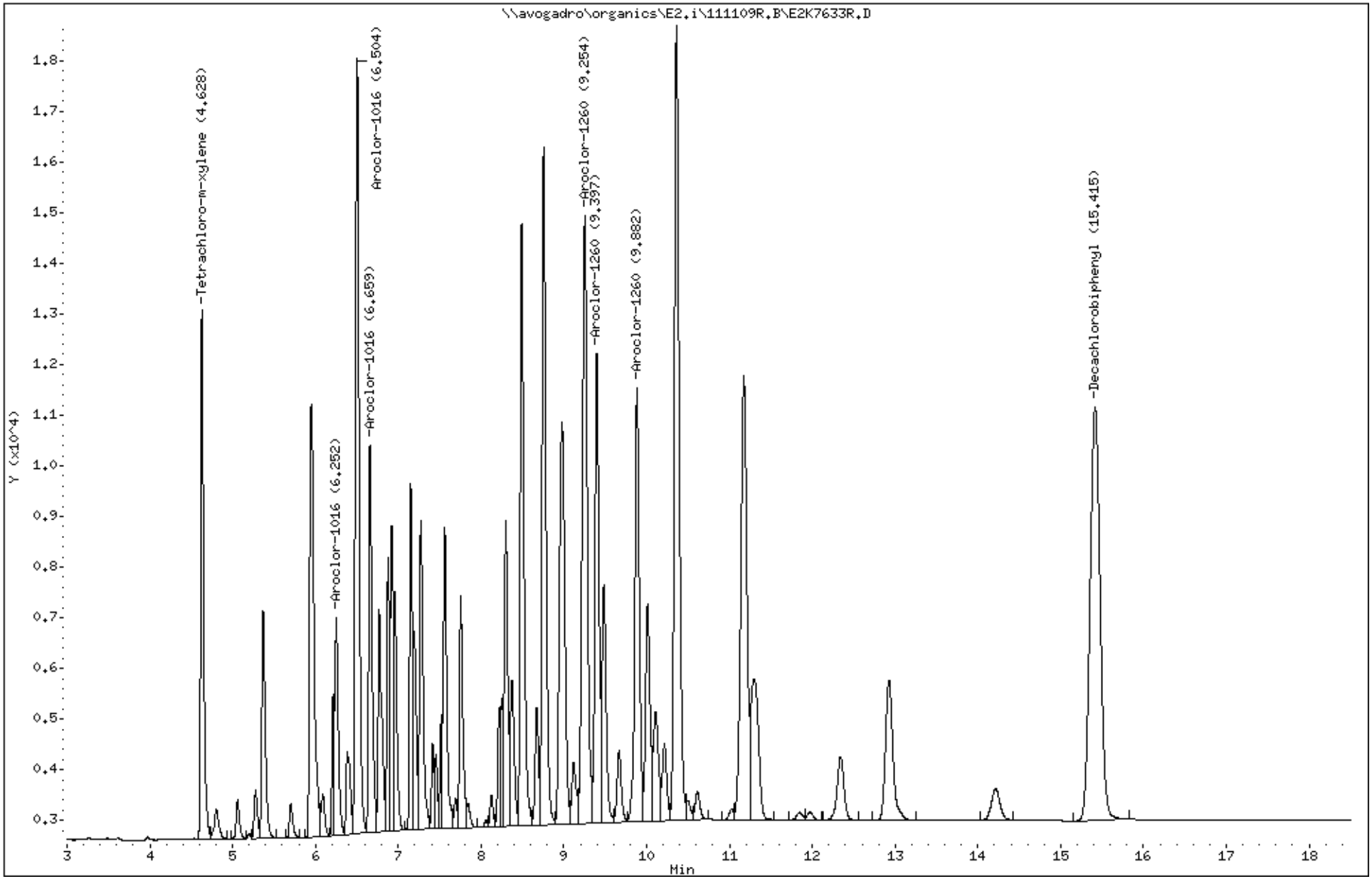
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.628	4.627	0.001	253422	0.02000	0.020			(a)
6 Aroclor-1016						CAS #: 12674-11-2		
6.252	6.250	0.002	124529	0.40000	0.40	80.00- 120.00	100.00	(a)
6.503	6.503	0.000	470933	0.40000	0.40	358.17- 398.17	378.17	
6.658	6.657	0.001	210668	0.40000	0.40	149.17- 189.17	169.17	
Average of Peak Amounts =					0.40000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.415	15.423	-0.008	690600	0.04000	0.041			(a)
8 Aroclor-1260						CAS #: 11096-82-5		
9.253	9.255	-0.002	502512	0.40000	0.41	80.00- 120.00	100.00	(a)
9.397	9.398	-0.001	309087	0.40000	0.42	41.51- 81.51	61.51	
9.882	9.883	-0.001	324998	0.40000	0.41	44.67- 84.67	64.67	
Average of Peak Amounts =					0.41333			

Data File: \\avogadro\organics\E2.i\111109R.B\E2K7633R.D
Report Date: 21-Nov-2011 10:42

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111109R.B\E2K7633R.D
Date : 09-NOV-2011 17:02
Client ID: AR16603JG
Instrument: E2.i
Sample Info: AR16603JG,AR16603JG,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E3.I\111116BF.B\E3I6741F.D
Report Date: 22-Nov-2011 12:24

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111116BF.B\E3I6741F.D
Lab Smp Id: AR16603WF Client Smp ID: AR16603WF
Inj Date : 16-NOV-2011 16:09
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR16603WF,AR16603WF,,ar1660.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BF.B\E3_ARO_5_F.m
Meth Date : 17-Nov-2011 08:16 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699F.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

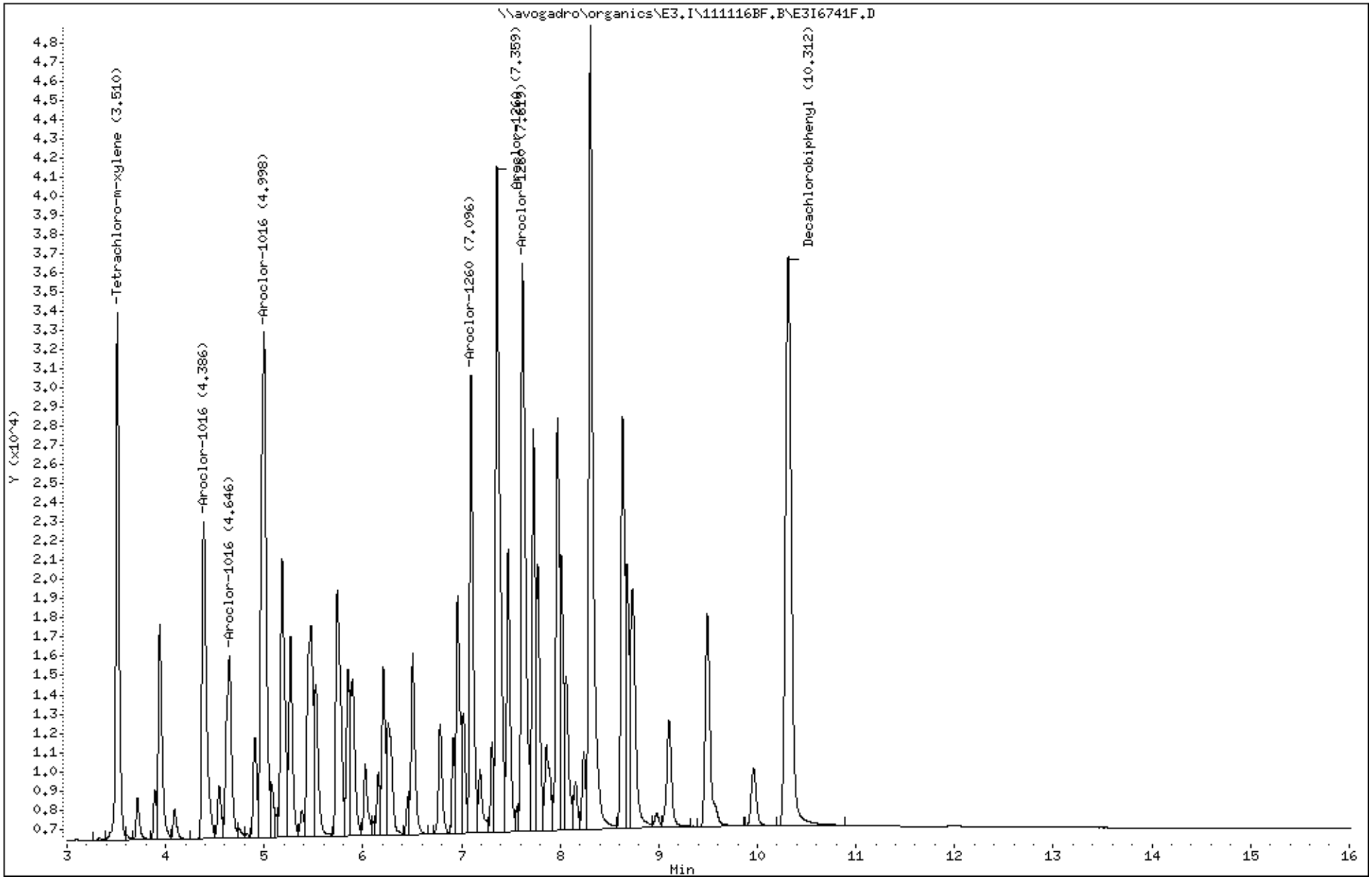
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
3.510	3.492	0.018	617838	0.02000	0.019			(a)
5 Aroclor-1016					CAS #: 12674-11-2			
4.385	4.365	0.020	529551	0.40000	0.39	80.00- 120.00	100.00	(a)
4.646	4.624	0.022	353824	0.40000	0.39	46.55- 86.55	66.82	
4.997	4.975	0.022	954126	0.40000	0.38	160.67- 200.67	180.18	
Average of Peak Amounts =					0.38667			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.312	10.281	0.031	1264077	0.04000	0.037			(a)
9 Aroclor-1260					CAS #: 11096-82-5			
7.095	7.079	0.016	587751	0.40000	0.38	80.00- 120.00	100.00	(a)
7.359	7.343	0.016	1018408	0.40000	0.39	334.96- 374.96	173.27	
7.618	7.602	0.016	908445	0.40000	0.39	19.04- 59.04	154.56	
Average of Peak Amounts =					0.38667			

Data File: \\avogadro\organics\E3.I\111116BF.B\E3I6741F.D
Report Date: 22-Nov-2011 12:24

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.I\111116BF.B\E3I6741F.D
Date : 16-NOV-2011 16:09
Client ID: AR16603WF
Instrument: E3.i
Sample Info: AR16603WF,AR16603WF,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6741R.D
Report Date: 22-Nov-2011 12:25

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111116BR.B\E3I6741R.D
Lab Smp Id: AR16603WF Client Smp ID: AR16603WF
Inj Date : 16-NOV-2011 16:09
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR16603WF,AR16603WF,,ar1660.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BR.B\E3_ARO_5_R.m
Meth Date : 17-Nov-2011 08:19 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699R.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

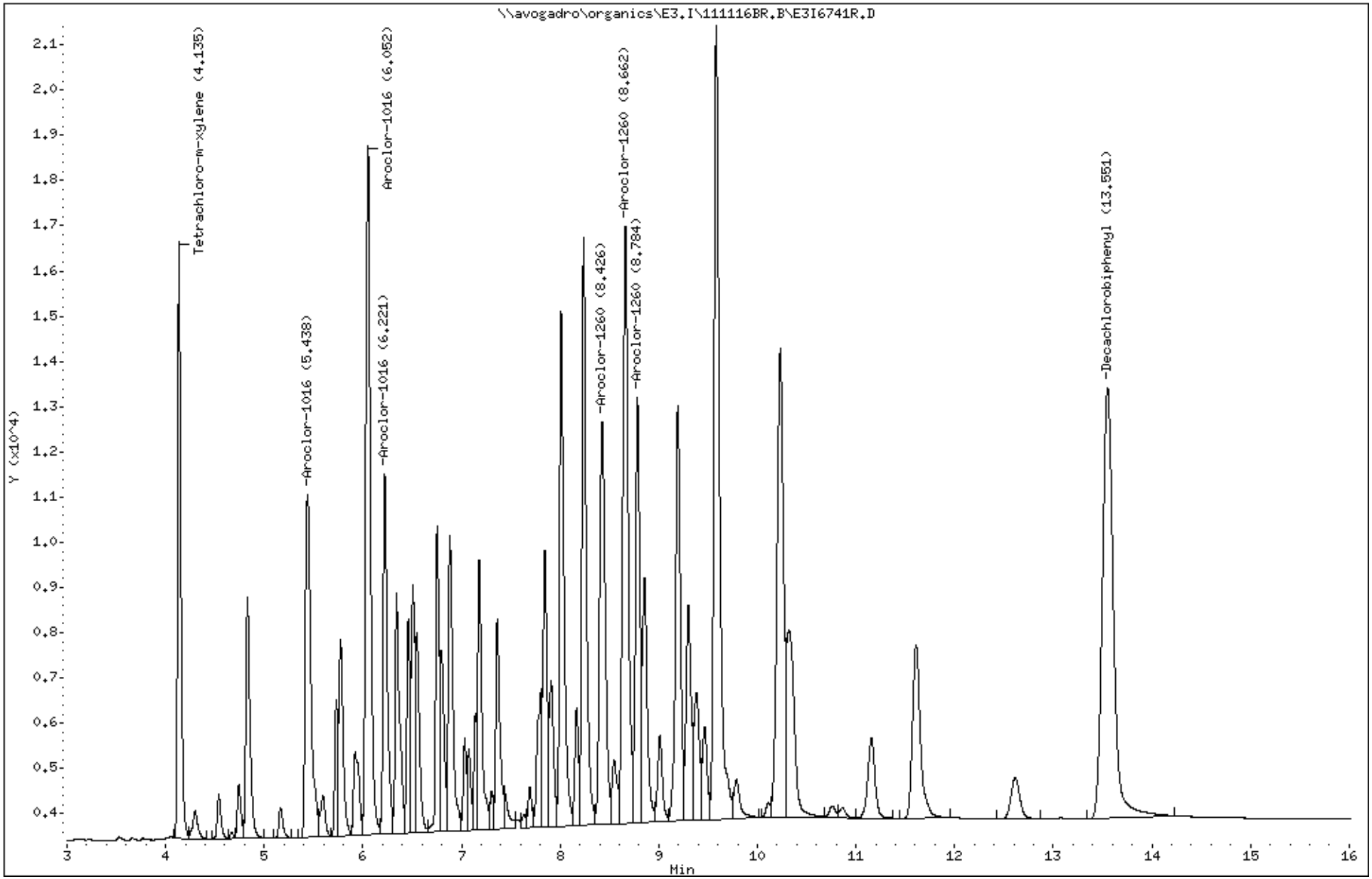
				AMOUNTS CAL-AMT	AMOUNTS ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.135	4.116	0.019	298415	0.02000	0.018		(a)
6 Aroclor-1016					CAS #: 12674-11-2		
5.437	5.415	0.022	305604	0.40000	0.37	80.00- 120.00	100.00(a)
6.052	6.033	0.019	508573	0.40000	0.37	146.03- 186.03	166.42
6.221	6.202	0.019	233055	0.40000	0.38	56.14- 96.14	76.26
Average of Peak Amounts =					0.37333		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
13.550	13.497	0.053	746763	0.04000	0.036		(a)
8 Aroclor-1260					CAS #: 11096-82-5		
8.426	8.407	0.019	360536	0.40000	0.38	80.00- 120.00	100.00(a)
8.662	8.642	0.020	511515	0.40000	0.38	121.56- 161.56	141.88
8.783	8.763	0.020	290388	0.40000	0.38	60.25- 100.25	80.54
Average of Peak Amounts =					0.38000		

Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6741R.D
Report Date: 22-Nov-2011 12:25

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6741R.D
Date : 16-NOV-2011 16:09
Client ID: AR16603WF
Instrument: E3.i
Sample Info: AR16603WF,AR16603WF,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111116BF.B\E3I6769F.D
Report Date: 22-Nov-2011 12:24

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111116BF.B\E3I6769F.D
Lab Smp Id: AR16603WG Client Smp ID: AR16603WG
Inj Date : 17-NOV-2011 00:57
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR16603WG,AR16603WG,,ar1660.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BF.B\E3_ARO_5_F.m
Meth Date : 17-Nov-2011 08:16 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699F.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

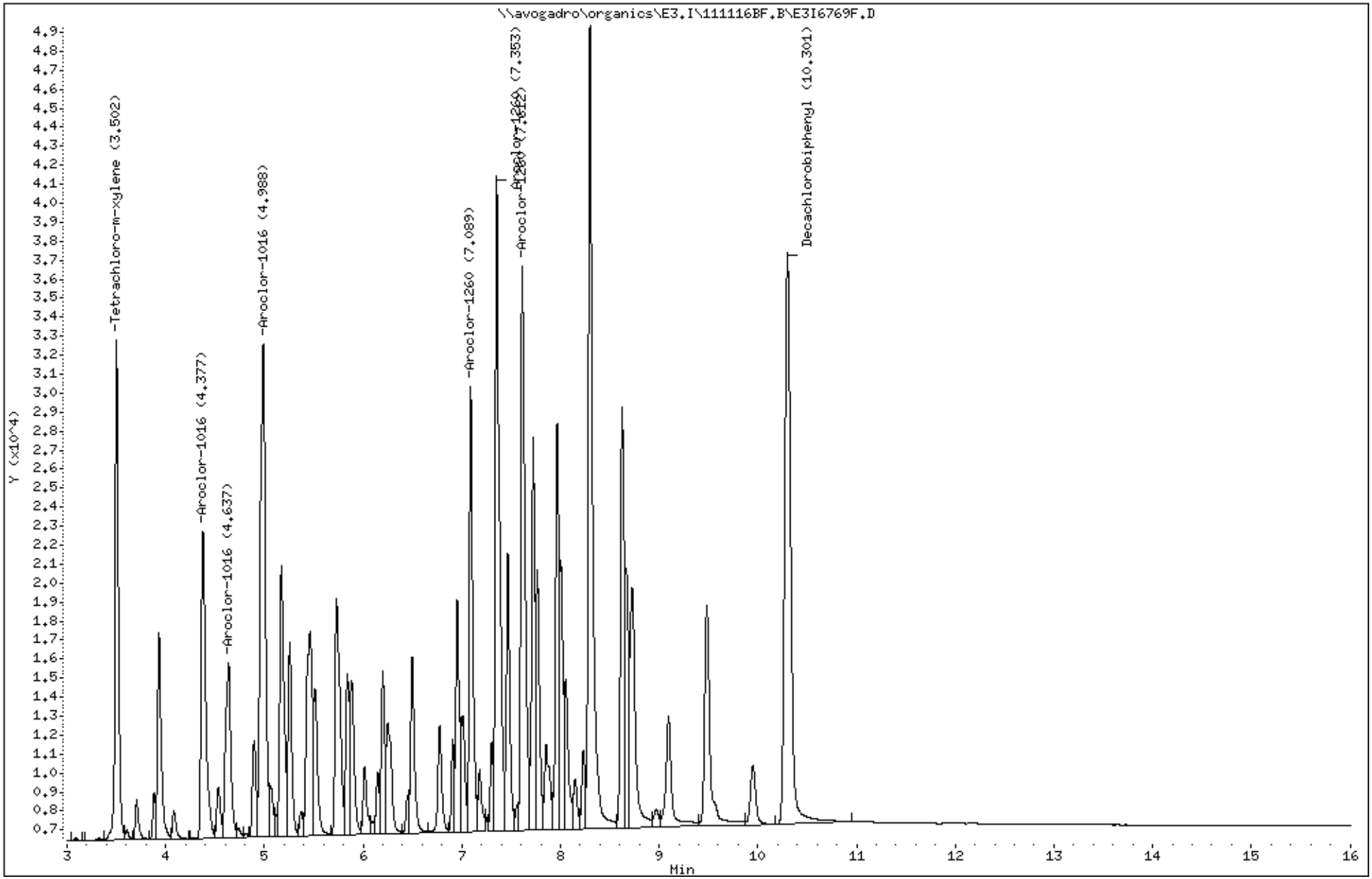
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
3.501	3.492	0.009	600532	0.02000	0.019			(a)
5 Aroclor-1016						CAS #: 12674-11-2		
4.376	4.365	0.011	519560	0.40000	0.38	80.00- 120.00	100.00	(a)
4.637	4.624	0.013	345181	0.40000	0.38	46.55- 86.55	66.44	
4.988	4.975	0.013	938255	0.40000	0.38	160.67- 200.67	180.59	
Average of Peak Amounts =					0.38000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.300	10.281	0.019	1296374	0.04000	0.038			(a)
9 Aroclor-1260						CAS #: 11096-82-5		
7.089	7.079	0.010	578267	0.40000	0.38	80.00- 120.00	100.00	(a)
7.352	7.343	0.009	1004383	0.40000	0.38	334.96- 374.96	173.69	
7.612	7.602	0.010	896569	0.40000	0.38	19.04- 59.04	155.04	
Average of Peak Amounts =					0.38000			

Data File: \\avogadro\organics\E3.I\111116BF.B\E3I6769F.D
Report Date: 22-Nov-2011 12:24

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.I\111116BF.B\E3I6769F.D
Date : 17-NOV-2011 00:57
Client ID: AR16603WG
Instrument: E3.i
Sample Info: AR16603WG,AR16603WG,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6769R.D
Report Date: 22-Nov-2011 12:25

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111116BR.B\E3I6769R.D
Lab Smp Id: AR16603WG Client Smp ID: AR16603WG
Inj Date : 17-NOV-2011 00:57
Operator : DL SRC: DL Inst ID: E3.i
Smp Info : AR16603WG,AR16603WG,,ar1660.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BR.B\E3_ARO_5_R.m
Meth Date : 17-Nov-2011 08:19 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699R.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

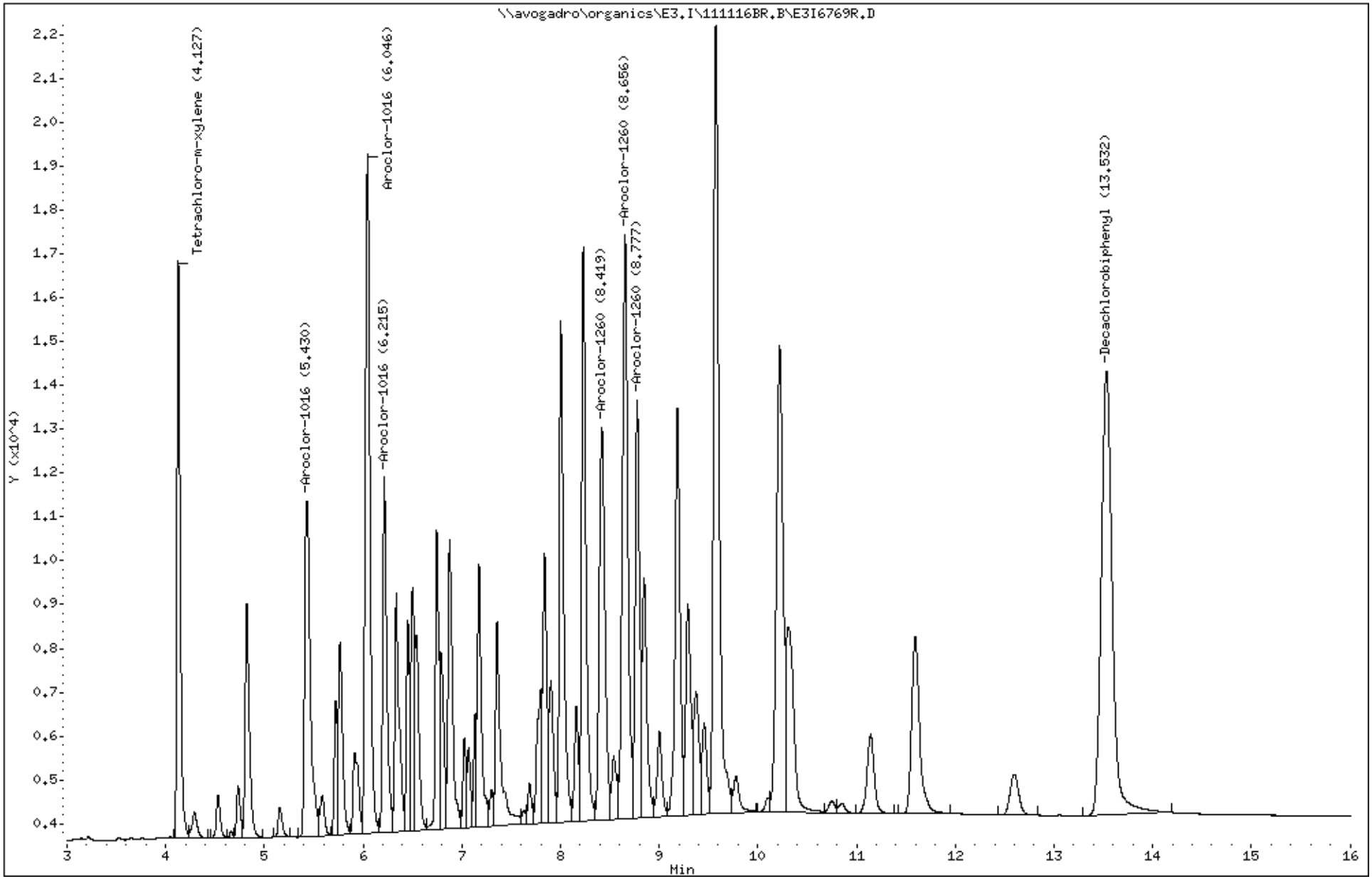
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.127	4.116	0.011	304704	0.02000	0.019			(a)
6 Aroclor-1016						CAS #: 12674-11-2		
5.429	5.415	0.014	309234	0.40000	0.38	80.00- 120.00	100.00	(a)
6.045	6.033	0.012	513757	0.40000	0.38	146.03- 186.03	166.14	
6.214	6.202	0.012	234766	0.40000	0.38	56.14- 96.14	75.92	
		Average of Peak Amounts =			0.38000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
13.532	13.497	0.035	791296	0.04000	0.038			(a)
8 Aroclor-1260						CAS #: 11096-82-5		
8.419	8.407	0.012	361797	0.40000	0.38	80.00- 120.00	100.00	(a)
8.655	8.642	0.013	515187	0.40000	0.38	121.56- 161.56	142.40	
8.776	8.763	0.013	291860	0.40000	0.38	60.25- 100.25	80.67	
		Average of Peak Amounts =			0.38000			

Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6769R.D
Report Date: 22-Nov-2011 12:25

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.i\111116BR.B\E3I6769R.D
Date : 17-NOV-2011 00:57
Client ID: AR16603WG
Instrument: E3.i
Sample Info: AR16603WG,AR16603WG,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111117F.B\E3I6786F.D
Report Date: 22-Nov-2011 12:26

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111117F.B\E3I6786F.D
Lab Smp Id: AR16603WI Client Smp ID: AR16603WI
Inj Date : 17-NOV-2011 10:20
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR16603WI,AR16603WI,,ar1660.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111117F.B\E3_ARO_5_F.m
Meth Date : 18-Nov-2011 09:11 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699F.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

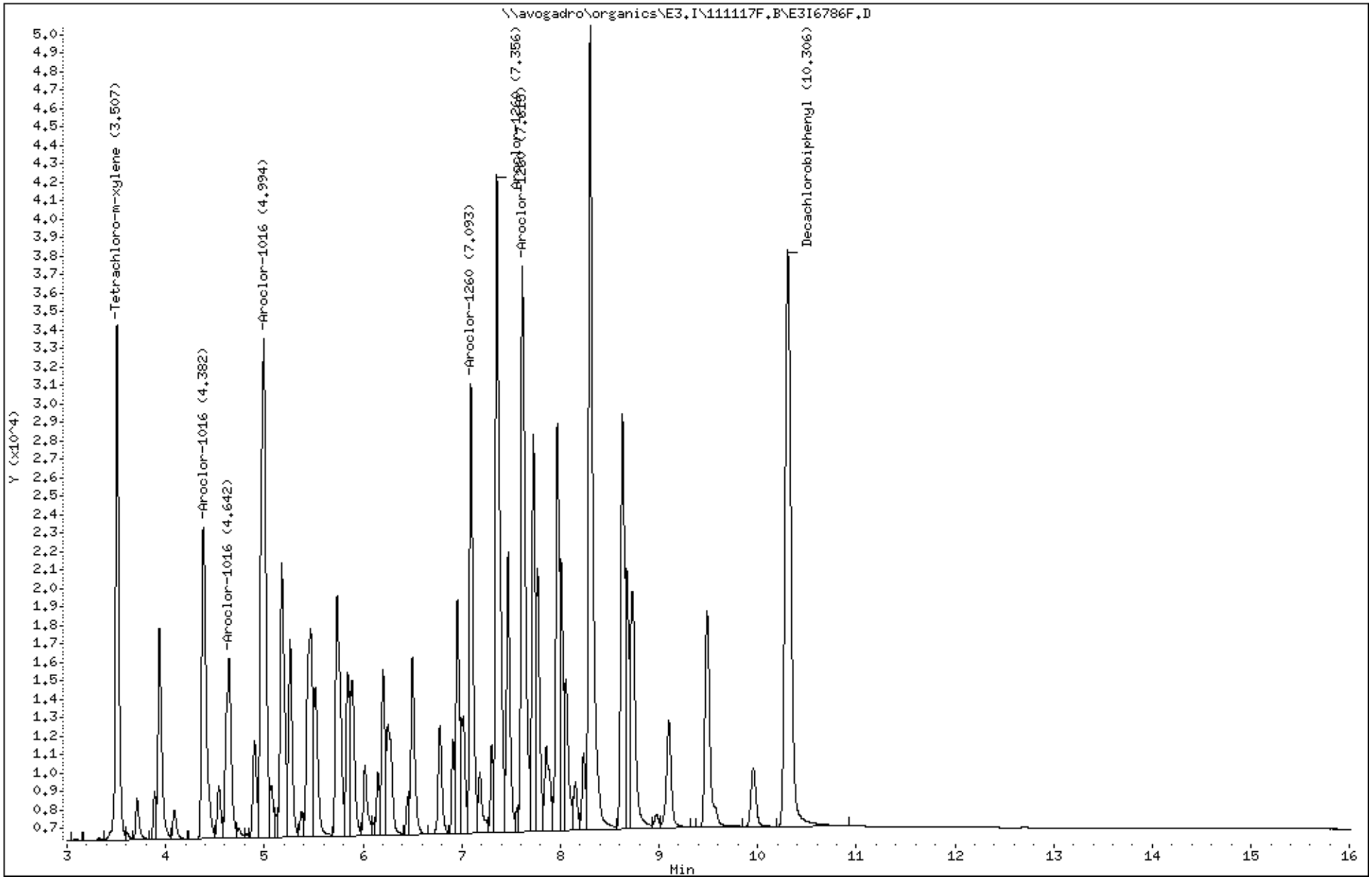
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
3.506	3.492	0.014	633916	0.02000	0.020			(a)
5 Aroclor-1016						CAS #: 12674-11-2		
4.381	4.365	0.016	544401	0.40000	0.40	80.00- 120.00	100.00	(a)
4.642	4.624	0.018	363292	0.40000	0.40	49.24- 89.24	66.73	
4.993	4.975	0.018	979598	0.40000	0.39	163.08- 203.08	179.94	
Average of Peak Amounts =					0.39667			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.305	10.281	0.024	1327724	0.04000	0.039			(a)
9 Aroclor-1260						CAS #: 11096-82-5		
7.092	7.079	0.013	600142	0.40000	0.39	80.00- 120.00	100.00	(a)
7.355	7.343	0.012	1041585	0.40000	0.40	143.02- 183.02	173.56	
7.615	7.602	0.013	925144	0.40000	0.40	117.31- 157.31	154.15	
Average of Peak Amounts =					0.39667			

Data File: \\avogadro\organics\E3.I\111117F.B\E3I6786F.D
Report Date: 22-Nov-2011 12:26

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.I\111117F.B\E3I6786F.D
Date : 17-NOV-2011 10:20
Client ID: AR16603WI
Instrument: E3.i
Sample Info: AR16603WI,AR16603WI,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111117R.B\E3I6786R.D
Report Date: 22-Nov-2011 12:27

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111117R.B\E3I6786R.D
Lab Smp Id: AR16603WI Client Smp ID: AR16603WI
Inj Date : 17-NOV-2011 10:20
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR16603WI,AR16603WI,,ar1660.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111117R.B\E3_ARO_5_R.m
Meth Date : 18-Nov-2011 09:12 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699R.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

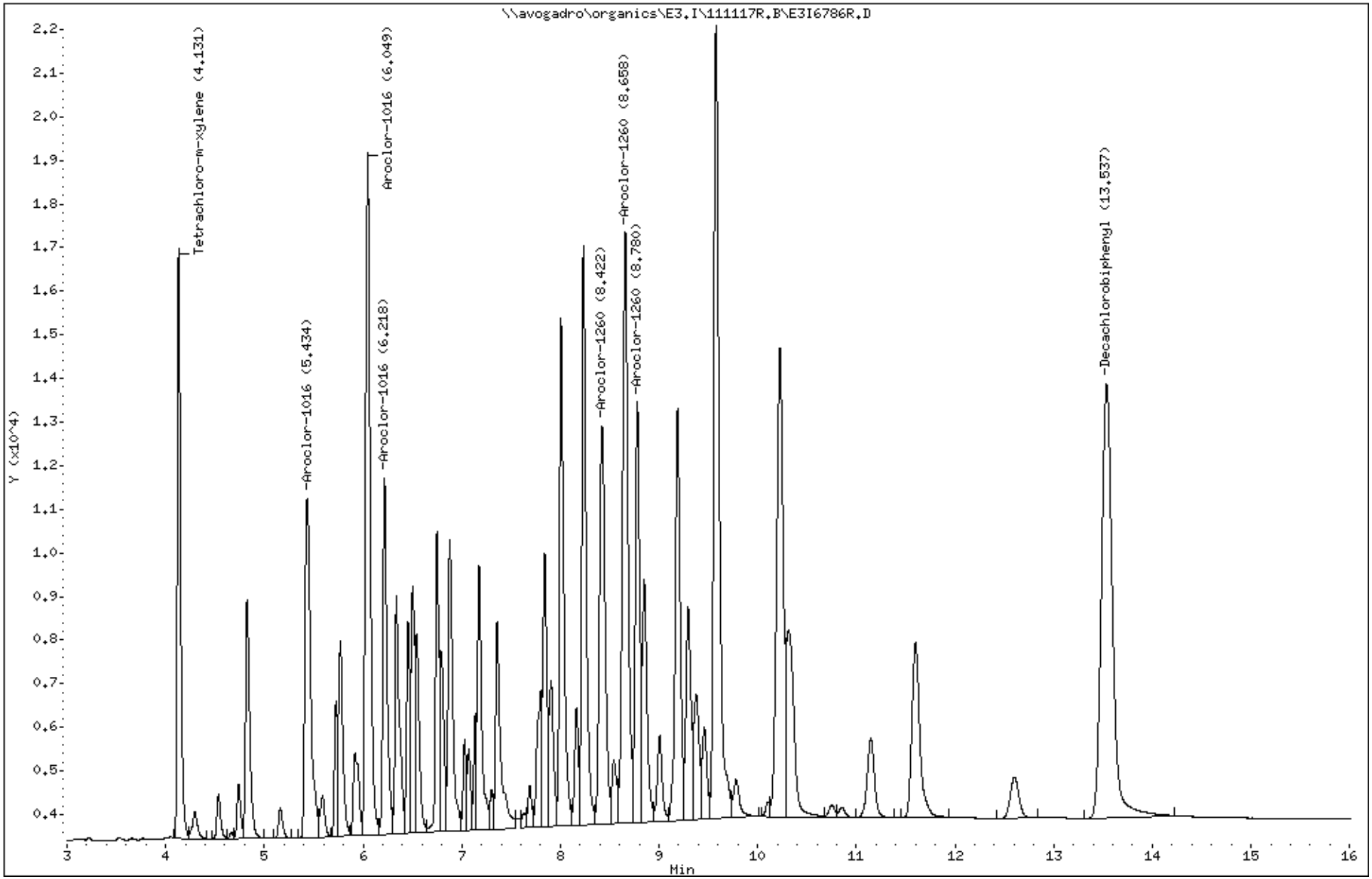
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.131	4.116	0.015	309409	0.02000	0.019			(a)
6 Aroclor-1016						CAS #: 12674-11-2		
5.433	5.415	0.018	315961	0.40000	0.38	80.00- 120.00	100.00	(a)
6.048	6.033	0.015	524155	0.40000	0.39	138.55- 178.55	165.89	
6.217	6.202	0.015	239673	0.40000	0.39	54.34- 94.34	75.86	
Average of Peak Amounts =					0.38667			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
13.537	13.497	0.040	780145	0.04000	0.037			(a)
8 Aroclor-1260						CAS #: 11096-82-5		
8.422	8.407	0.015	370446	0.40000	0.39	80.00- 120.00	100.00	(a)
8.658	8.642	0.016	526125	0.40000	0.39	125.82- 165.82	142.02	
8.779	8.763	0.016	297814	0.40000	0.39	64.50- 104.50	80.39	
Average of Peak Amounts =					0.39000			

Data File: \\avogadro\organics\E3.I\111117R.B\E3I6786R.D
Report Date: 22-Nov-2011 12:27

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.I\111117R.B\E3I6786R.D
Date : 17-NOV-2011 10:20
Client ID: AR16603WI
Instrument: E3.i
Sample Info: AR16603WI,AR16603WI,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111117F.B\E3I6796F.D
Report Date: 22-Nov-2011 12:26

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111117F.B\E3I6796F.D
Lab Smp Id: AR16603WJ Client Smp ID: AR16603WJ
Inj Date : 17-NOV-2011 15:17
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR16603WJ,AR16603WJ,,ar1660.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111117F.B\E3_ARO_5_F.m
Meth Date : 18-Nov-2011 09:11 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699F.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

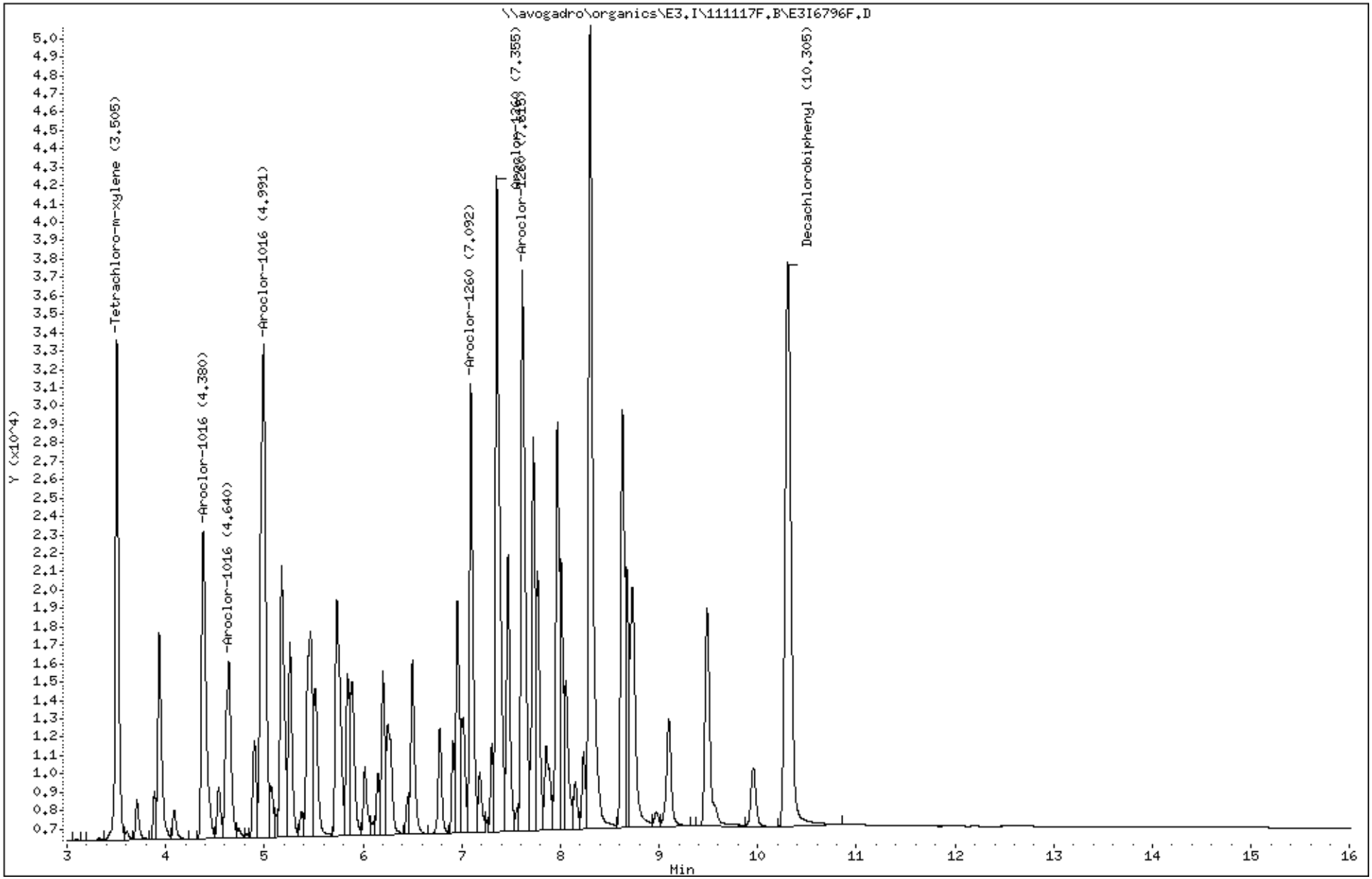
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
3.504	3.492	0.012	625457	0.02000	0.020			(a)
5 Aroclor-1016					CAS #: 12674-11-2			
4.380	4.365	0.015	539385	0.40000	0.39	80.00- 120.00	100.00	(a)
4.640	4.624	0.016	359826	0.40000	0.39	49.24- 89.24	66.71	
4.991	4.975	0.016	973480	0.40000	0.39	163.08- 203.08	180.48	
Average of Peak Amounts =					0.39000			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.305	10.281	0.024	1306460	0.04000	0.038			(a)
9 Aroclor-1260					CAS #: 11096-82-5			
7.091	7.079	0.012	597803	0.40000	0.39	80.00- 120.00	100.00	(a)
7.355	7.343	0.012	1039292	0.40000	0.39	143.02- 183.02	173.85	
7.614	7.602	0.012	903486	0.40000	0.39	117.31- 157.31	151.13	
Average of Peak Amounts =					0.39000			

Data File: \\avogadro\organics\E3.I\111117F.B\E3I6796F.D
Report Date: 22-Nov-2011 12:26

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.I\111117F.B\E3I6796F.D
Date : 17-NOV-2011 15:17
Client ID: AR16603WJ
Instrument: E3.i
Sample Info: AR16603WJ,AR16603WJ,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111117R.B\E3I6796R.D
Report Date: 22-Nov-2011 12:27

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111117R.B\E3I6796R.D
Lab Smp Id: AR16603WJ Client Smp ID: AR16603WJ
Inj Date : 17-NOV-2011 15:17
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AR16603WJ,AR16603WJ,,ar1660.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111117R.B\E3_ARO_5_R.m
Meth Date : 18-Nov-2011 09:12 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699R.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

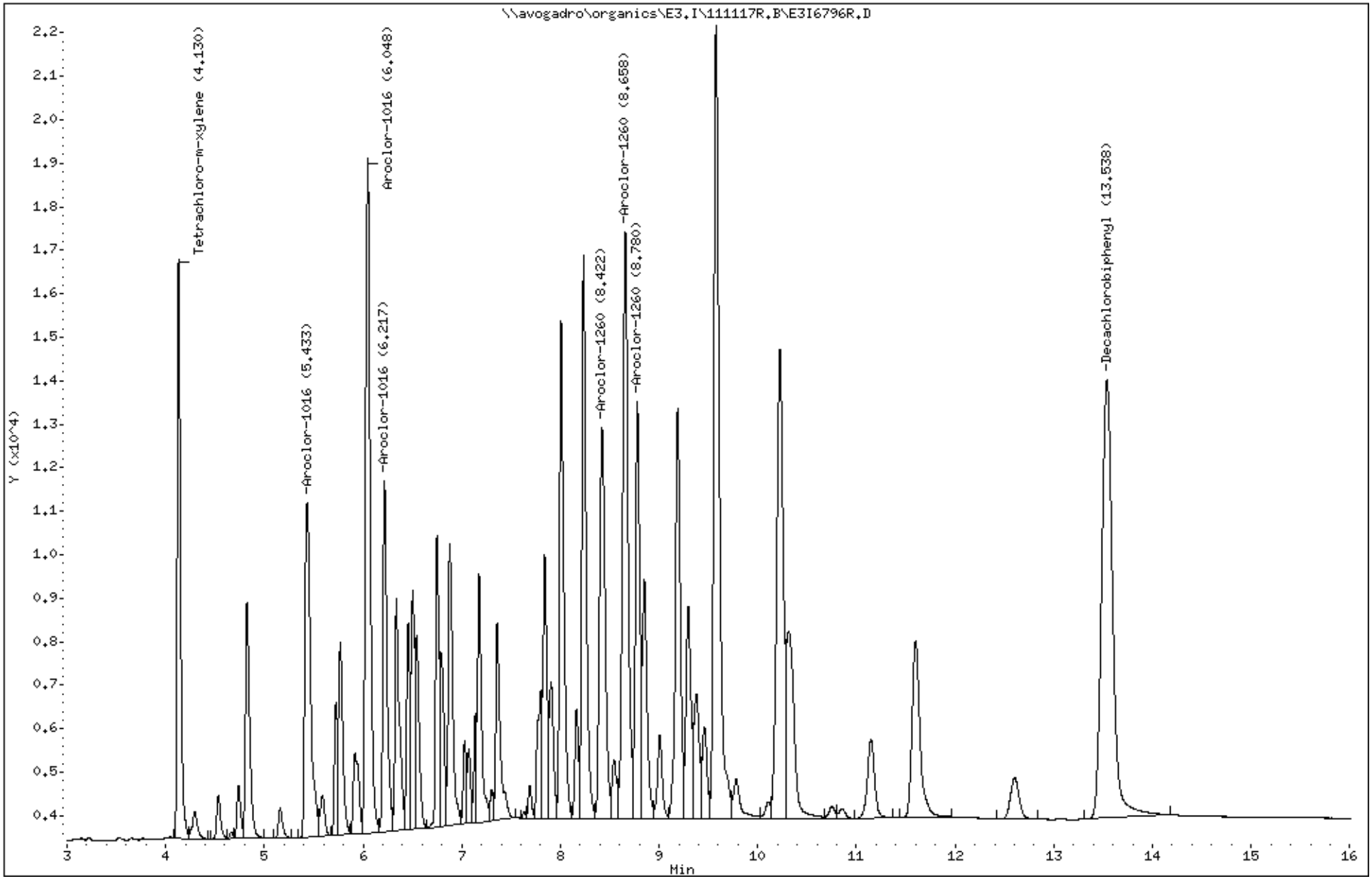
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.130	4.116	0.014	307090	0.02000	0.019			(a)
6 Aroclor-1016						CAS #: 12674-11-2		
5.433	5.415	0.018	312518	0.40000	0.38	80.00- 120.00	100.00	(a)
6.048	6.033	0.015	515805	0.40000	0.38	138.55- 178.55	165.05	
6.217	6.202	0.015	233717	0.40000	0.38	54.34- 94.34	74.79	
Average of Peak Amounts =					0.38000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
13.537	13.497	0.040	787829	0.04000	0.038			(a)
8 Aroclor-1260						CAS #: 11096-82-5		
8.422	8.407	0.015	358583	0.40000	0.38	80.00- 120.00	100.00	(a)
8.658	8.642	0.016	517799	0.40000	0.38	125.82- 165.82	144.40	
8.779	8.763	0.016	293785	0.40000	0.38	64.50- 104.50	81.93	
Average of Peak Amounts =					0.38000			

Data File: \\avogadro\organics\E3.I\111117R.B\E3I6796R.D
Report Date: 22-Nov-2011 12:27

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.i\111117R.B\E3I6796R.D
Date : 17-NOV-2011 15:17
Client ID: AR16603WJ
Instrument: E3.i
Sample Info: AR16603WJ,AR16603WJ,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.53



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ABLK2G

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-62678

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2K7618F.D/E2K7618R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 11/02/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/09/2011

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\111109F.B\E2K7618F.D
Report Date: 21-Nov-2011 10:40

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

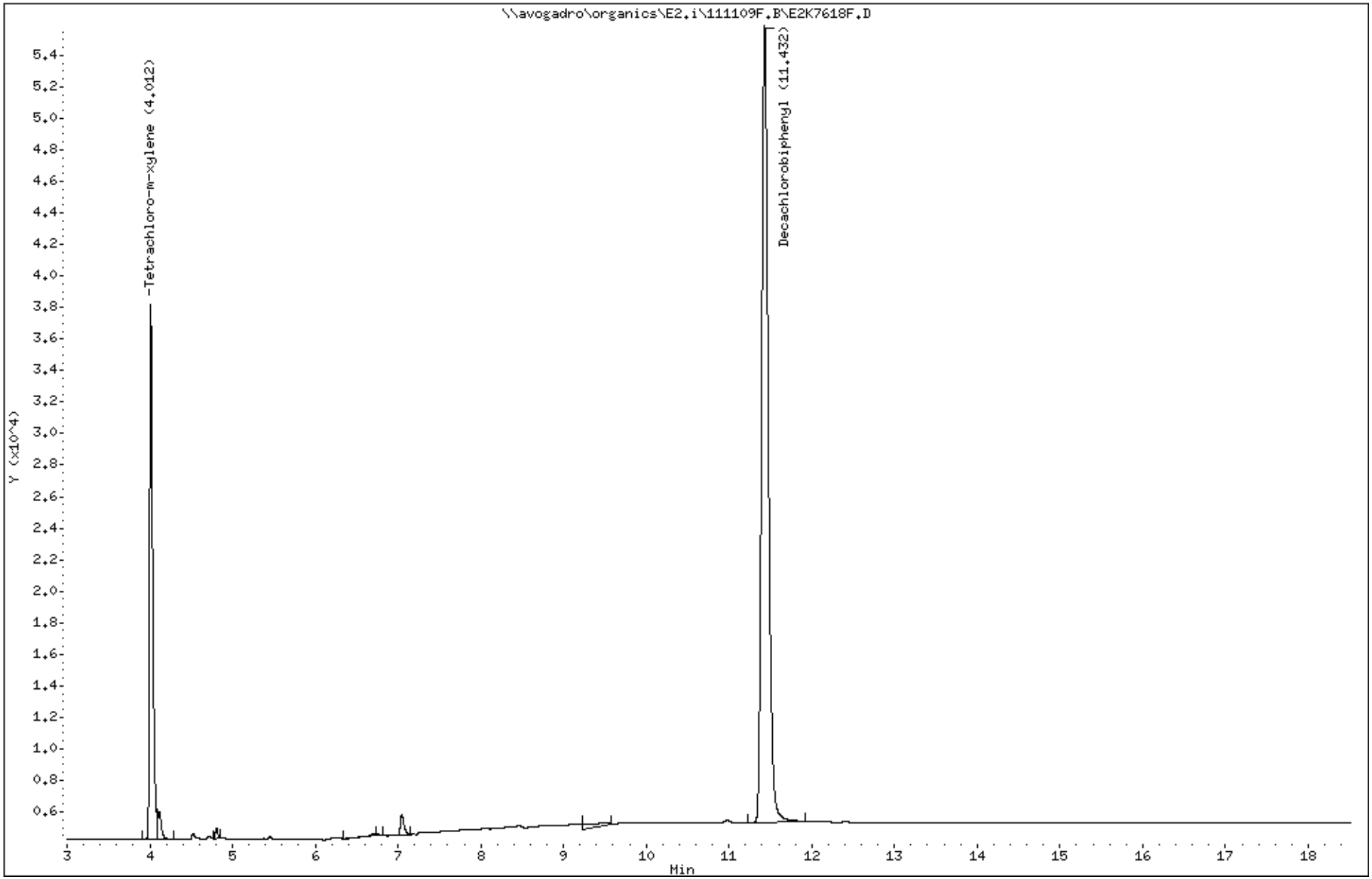
Data file : \\avogadro\organics\E2.i\111109F.B\E2K7618F.D
Lab Smp Id: MB-62678 Client Smp ID: ABLK2G
Inj Date : 09-NOV-2011 10:43
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : MB-62678,ABLK2G,62678,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111109F.B\E2_ARO_5_F.m
Meth Date : 10-Nov-2011 09:09 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 5 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	
4.012	3.999	0.013	894787	0.04309	0.43		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
11.431	11.417	0.014	2839584	0.09905	0.99		

Data File: \\avogadro\organics\E2.i\111109F.B\E2K7618F.D
Date : 09-NOV-2011 10:43
Client ID: ABLK2G
Instrument: E2.i
Sample Info: MB-62678,ABLK2G,62678,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111109R.B\E2K7618R.D
Report Date: 21-Nov-2011 10:41

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

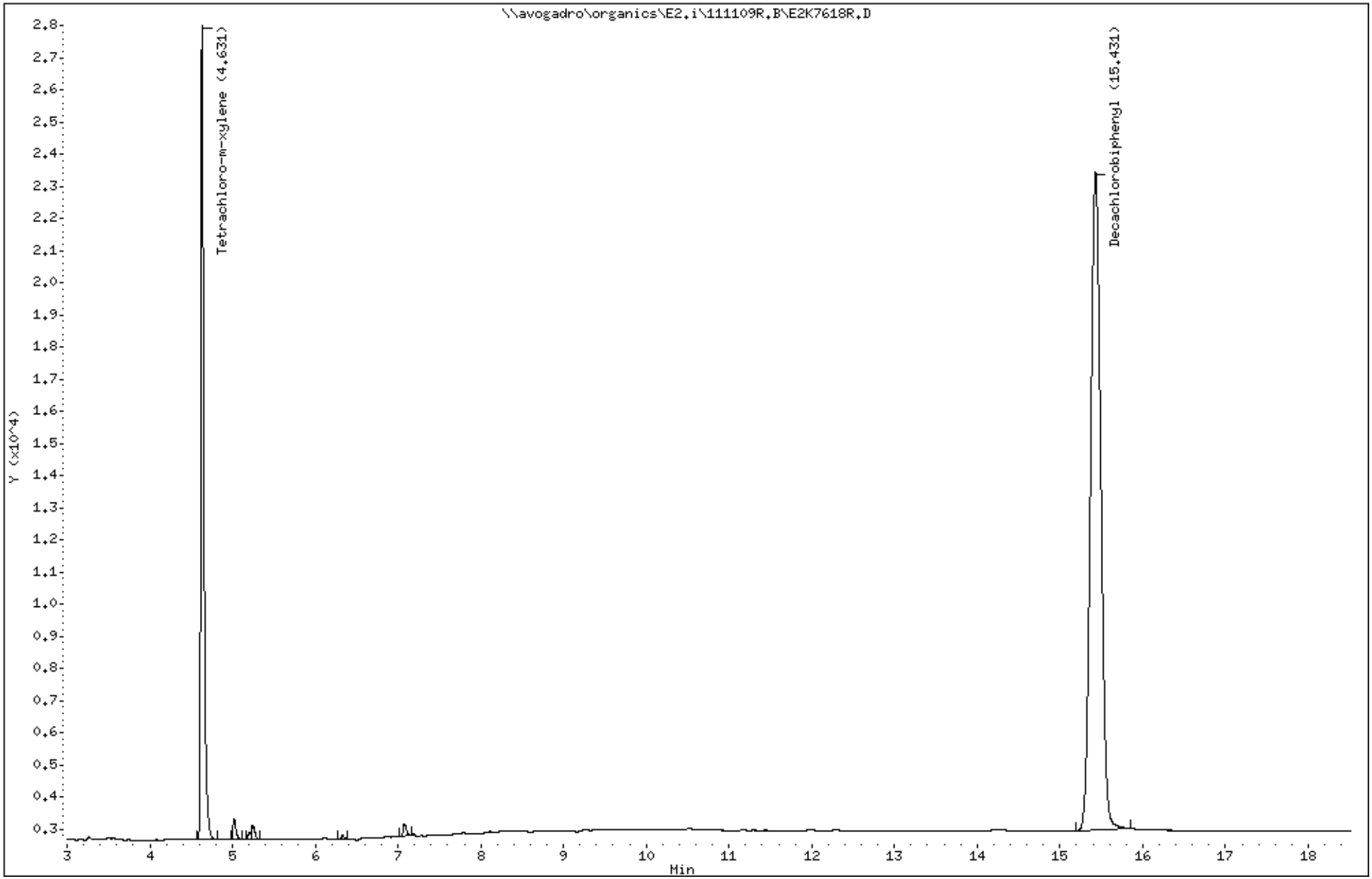
Data file : \\avogadro\organics\E2.i\111109R.B\E2K7618R.D
Lab Smp Id: MB-62678 Client Smp ID: ABLK2G
Inj Date : 09-NOV-2011 10:43
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : MB-62678,ABLK2G,62678,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111109R.B\E2_ARO_5_R.m
Meth Date : 10-Nov-2011 09:10 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 5 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		
4.630	4.627	0.003	630168	0.05010	0.50		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.430	15.423	0.007	1762431	0.10397	1.0		

Data File: \\avogadro\organics\E2.i\111109R.B\E2K7618R.D
Date : 09-NOV-2011 10:43
Client ID: ABLK2G
Instrument: E2.i
Sample Info: MB-62678,ABLK2G,62678,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.

ABLK3A

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-62802

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E3I6745F.D/E3I6745R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 11/08/2011

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\E3.I\111116BF.B\E3I6745F.D
Report Date: 22-Nov-2011 12:24

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

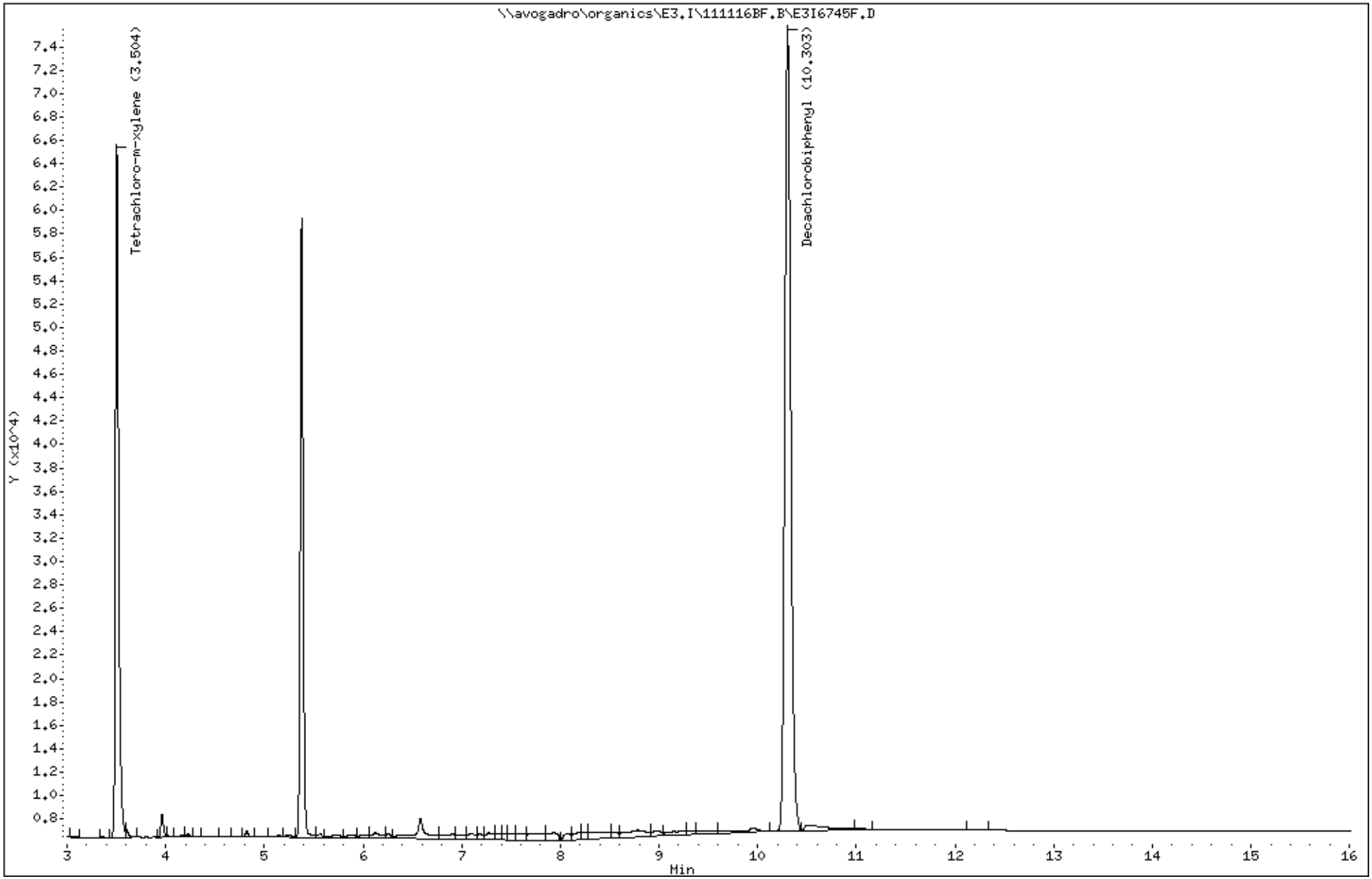
Data file : \\avogadro\organics\E3.I\111116BF.B\E3I6745F.D
Lab Smp Id: MB-62802 Client Smp ID: ABLK3A
Inj Date : 16-NOV-2011 17:25
Operator : DL   SRC: LIMS Inst ID: E3.i
Smp Info : MB-62802,ABLK3A,62802,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BF.B\E3_ARO_5_F.m
Meth Date : 17-Nov-2011 08:16 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699F.D
Als bottle: 5 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		
3.504	3.492	0.012	1311337	0.04098	0.41		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
10.303	10.281	0.022	2878898	0.08440	0.84		

Data File: \\avogadro\organics\E3.i\111116BF.B\E3I6745F.D
Date : 16-NOV-2011 17:25
Client ID: ABLK3A
Instrument: E3.i
Sample Info: MB-62802,ABLK3A,62802,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6745R.D
Report Date: 22-Nov-2011 12:25

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

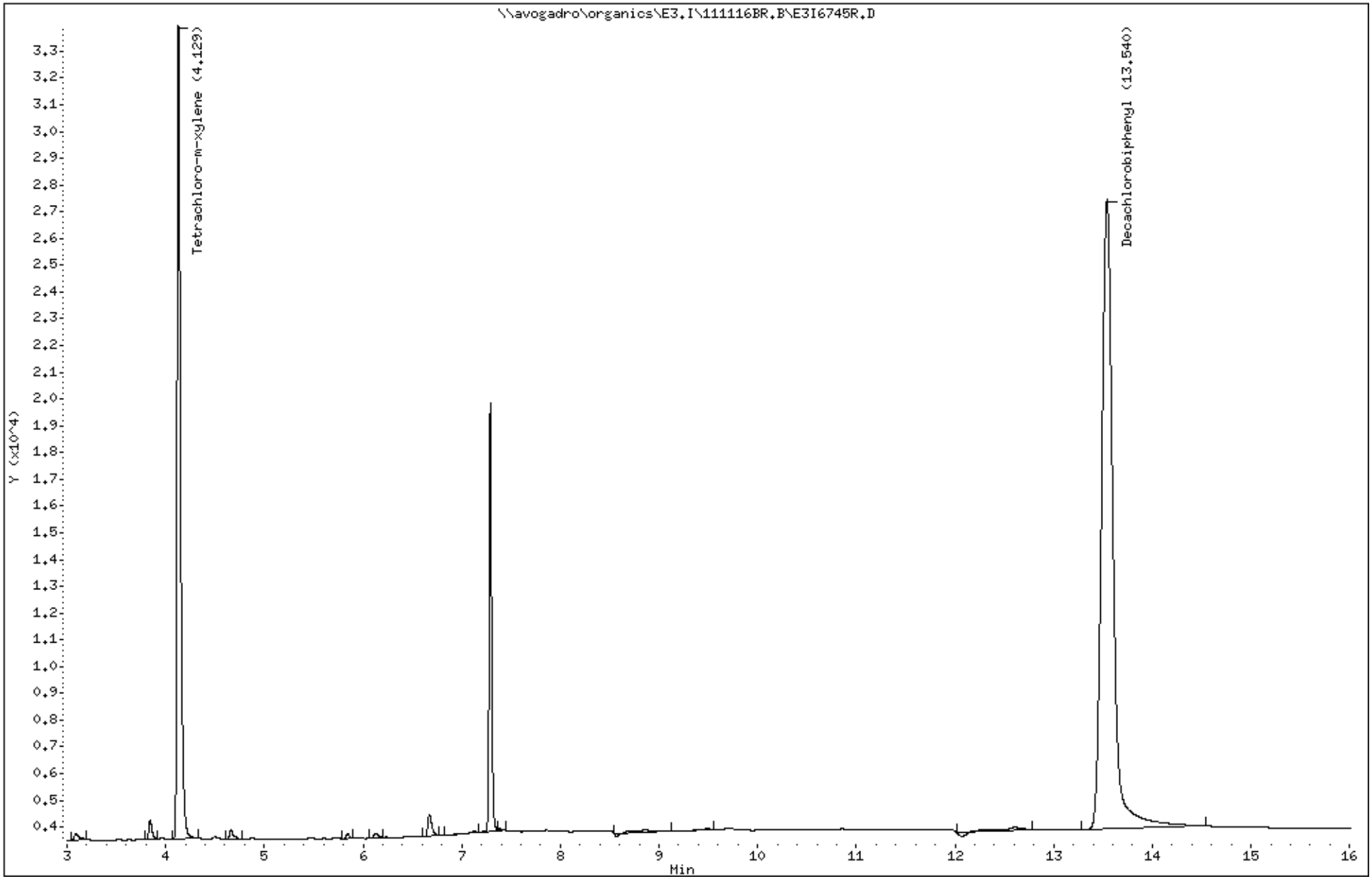
Data file : \\avogadro\organics\E3.I\111116BR.B\E3I6745R.D
Lab Smp Id: MB-62802 Client Smp ID: ABLK3A
Inj Date : 16-NOV-2011 17:25
Operator : DL   SRC: LIMS Inst ID: E3.i
Smp Info : MB-62802,ABLK3A,62802,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BR.B\E3_ARO_5_R.m
Meth Date : 17-Nov-2011 08:19 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699R.D
Als bottle: 5 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	
4.128	4.116	0.012	723156	0.04468	0.45		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
13.540	13.497	0.043	1900547	0.09088	0.91		

Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6745R.D
Date : 16-NOV-2011 17:25
Client ID: ABLK3A
Instrument: E3.i
Sample Info: MB-62802,ABLK3A,62802,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.53



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ABLK3B

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-63016

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E3I6764F.D/E3I6764R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 11/14/2011

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\E3.I\111116BF.B\E3I6764F.D
Report Date: 22-Nov-2011 12:24

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

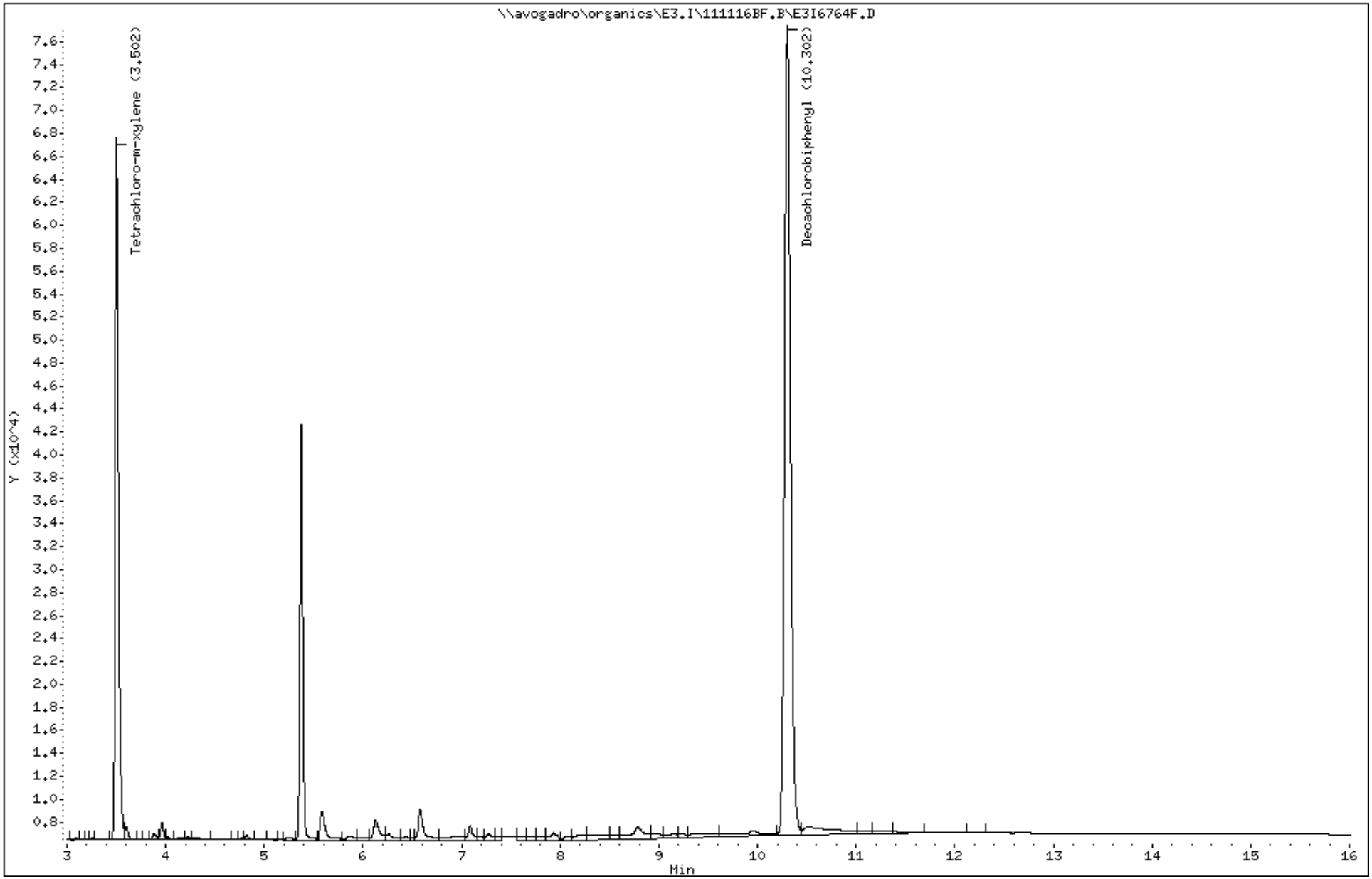
Data file : \\avogadro\organics\E3.I\111116BF.B\E3I6764F.D
Lab Smp Id: MB-63016 Client Smp ID: ABLK3B
Inj Date : 16-NOV-2011 23:23
Operator : DL   SRC: LIMS Inst ID: E3.i
Smp Info : MB-63016,ABLK3B,63016,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BF.B\E3_ARO_5_F.m
Meth Date : 17-Nov-2011 08:16 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699F.D
Als bottle: 24 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		
3.501	3.492	0.009	1368271	0.04276	0.43		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
10.301	10.281	0.020	2975794	0.08724	0.87		

Data File: \\avogadro\organics\E3.I\111116BF.B\E3I6764F.D
Date : 16-NOV-2011 23:23
Client ID: ABLK3B
Instrument: E3.i
Sample Info: MB-63016,ABLK3B,63016,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6764R.D
Report Date: 22-Nov-2011 12:25

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

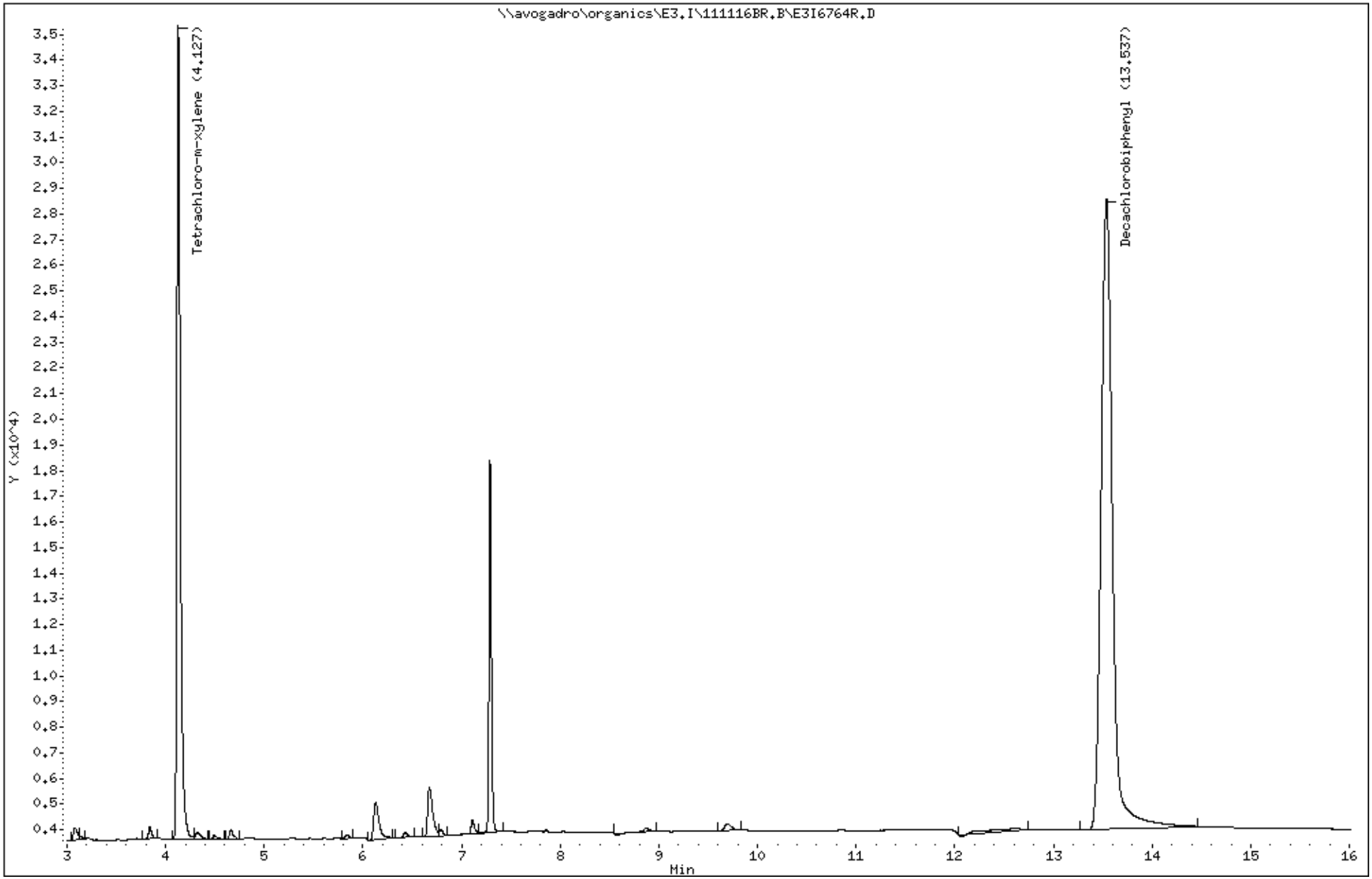
Data file : \\avogadro\organics\E3.I\111116BR.B\E3I6764R.D
Lab Smp Id: MB-63016 Client Smp ID: ABLK3B
Inj Date : 16-NOV-2011 23:23
Operator : DL SRC: LIMS Inst ID: E3.i
Smp Info : MB-63016,ABLK3B,63016,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BR.B\E3_ARO_5_R.m
Meth Date : 17-Nov-2011 08:19 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699R.D
Als bottle: 24 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

				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	
4.126	4.116	0.010	772322	0.04772	0.48		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
13.536	13.497	0.039	1975683	0.09448	0.94		

Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6764R.D
Date : 16-NOV-2011 23:23
Client ID: ABLK3B
Instrument: E3.i
Sample Info: MB-63016,ABLK3B,63016,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.53



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

1639653

EPA SAMPLE NO.

AIBLKJF(1)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: AIBLKJF

Sample wt/vol: (g/mL) ML Lab File ID: E2K7613F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) Date Extracted:

Concentrated Extract Volume: (uL) Date Analyzed: 11/09/2011

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

1639696

EPA SAMPLE NO.

AIBLKJF(2)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: AIBLKJF

Sample wt/vol: (g/mL) ML Lab File ID: E2K7613R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) Date Extracted:

Concentrated Extract Volume: (uL) Date Analyzed: 11/09/2011

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\111109F.B\E2K7613F.D
Report Date: 21-Nov-2011 10:40

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111109F.B\E2K7613F.D
Lab Smp Id: AIBLKJF Client Smp ID: AILBKJF
Inj Date : 09-NOV-2011 08:51
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AIBLKJF,AILBKJF,,AIBLK.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111109F.B\E2_ARO_5_F.m
Meth Date : 10-Nov-2011 09:09 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 100 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: AIBLK.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

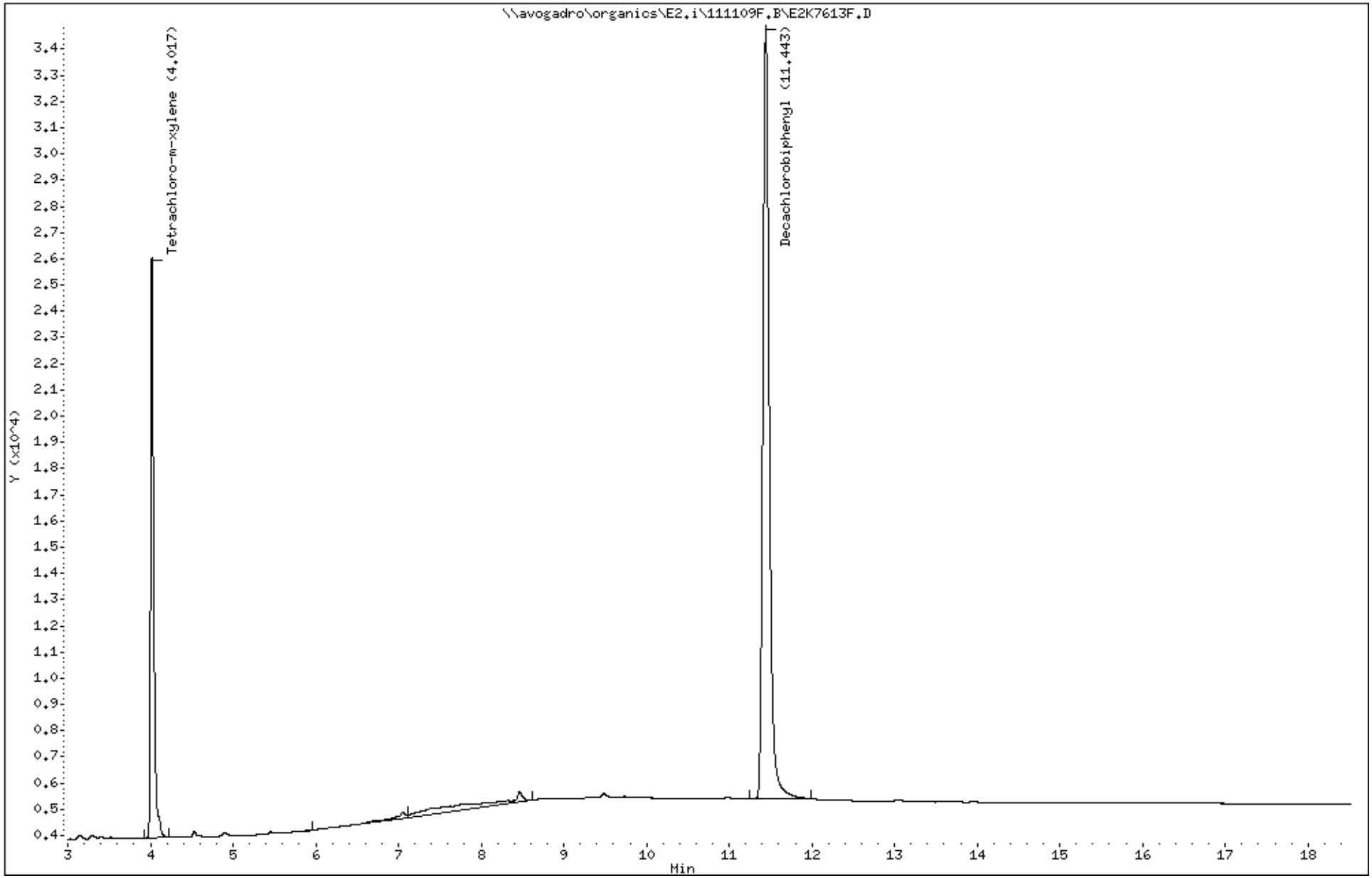
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.017	3.999	0.018	577314	0.02000	0.028		(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
11.443	11.417	0.026	1630575	0.04000	0.057		

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111109F.B\E2K7613F.D
Date : 09-NOV-2011 08:51
Client ID: AILBKJF
Instrument: E2.i
Sample Info: AIBLKJF,AILBKJF,,AIBLK.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111109R.B\E2K7613R.D
Report Date: 21-Nov-2011 10:41

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111109R.B\E2K7613R.D
Lab Smp Id: AIBLKJF Client Smp ID: AILBKJF
Inj Date : 09-NOV-2011 08:51
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AIBLKJF,AILBKJF,,AIBLK.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111109R.B\E2_ARO_5_R.m
Meth Date : 10-Nov-2011 09:10 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 100 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: AIBLK.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

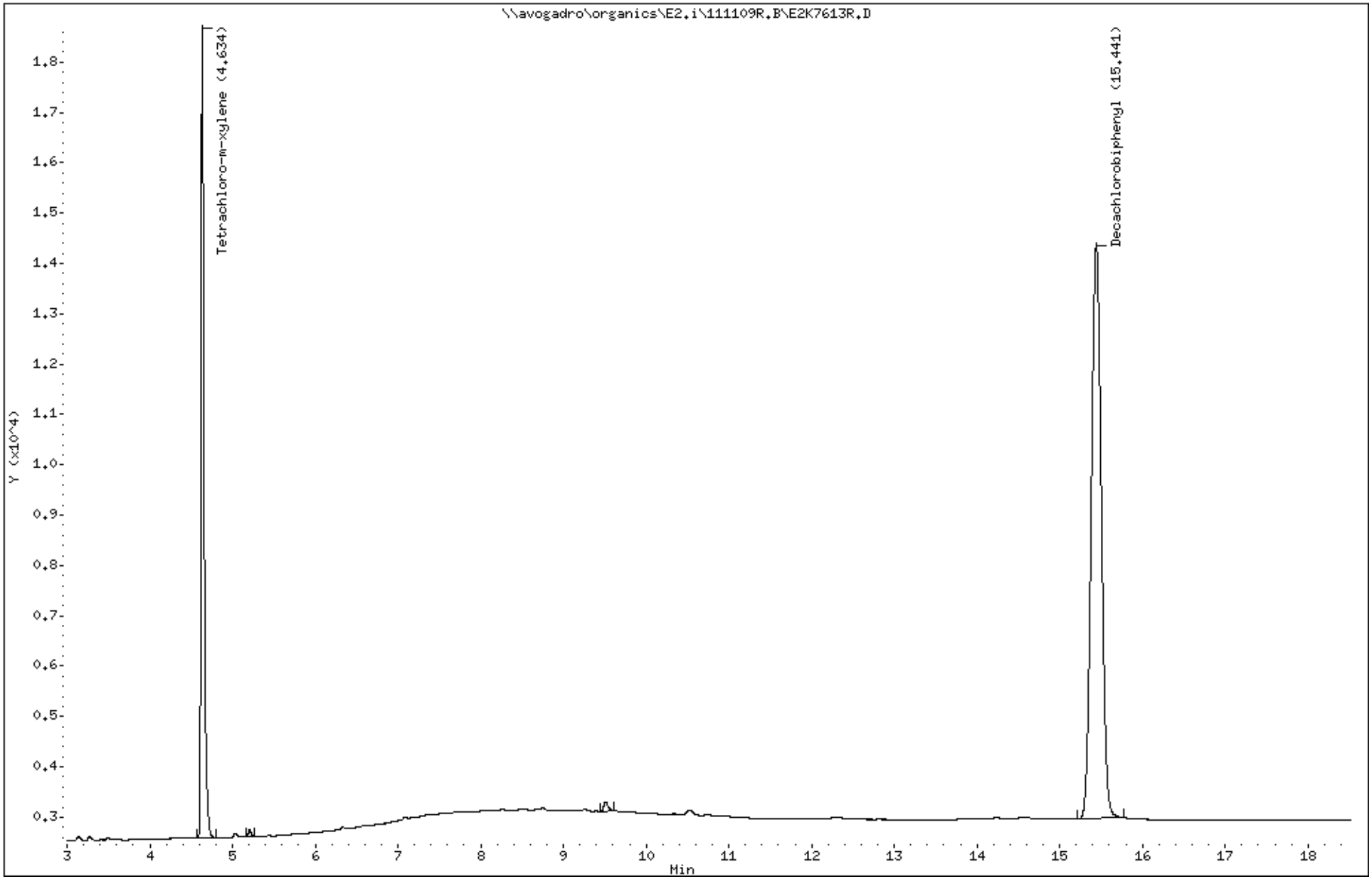
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.633	4.627	0.006	393551	0.02000	0.031		(a)
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
15.441	15.423	0.018	963080	0.04000	0.057		

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111109R.B\E2K7613R.D
Date : 09-NOV-2011 08:51
Client ID: AILBKJF
Instrument: E2.i
Sample Info: AIBLKJF,AILBKJF,,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

1639694

EPA SAMPLE NO.

AIBLKJG(1)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: AIBLKJG

Sample wt/vol: (g/mL) ML Lab File ID: E2K7632F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) Date Extracted:

Concentrated Extract Volume: (uL) Date Analyzed: 11/09/2011

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

1639714

EPA SAMPLE NO.

AIBLKJG(2)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: AIBLKJG

Sample wt/vol: (g/mL) ML Lab File ID: E2K7632R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) Date Extracted:

Concentrated Extract Volume: (uL) Date Analyzed: 11/09/2011

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\111109F.B\E2K7632F.D
Report Date: 21-Nov-2011 10:40

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111109F.B\E2K7632F.D
Lab Smp Id: AIBLKJG Client Smp ID: AILBKJG
Inj Date : 09-NOV-2011 16:41
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AIBLKJG,AILBKJG,,AIBLK.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111109F.B\E2_ARO_5_F.m
Meth Date : 10-Nov-2011 09:09 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 100 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: AIBLK.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

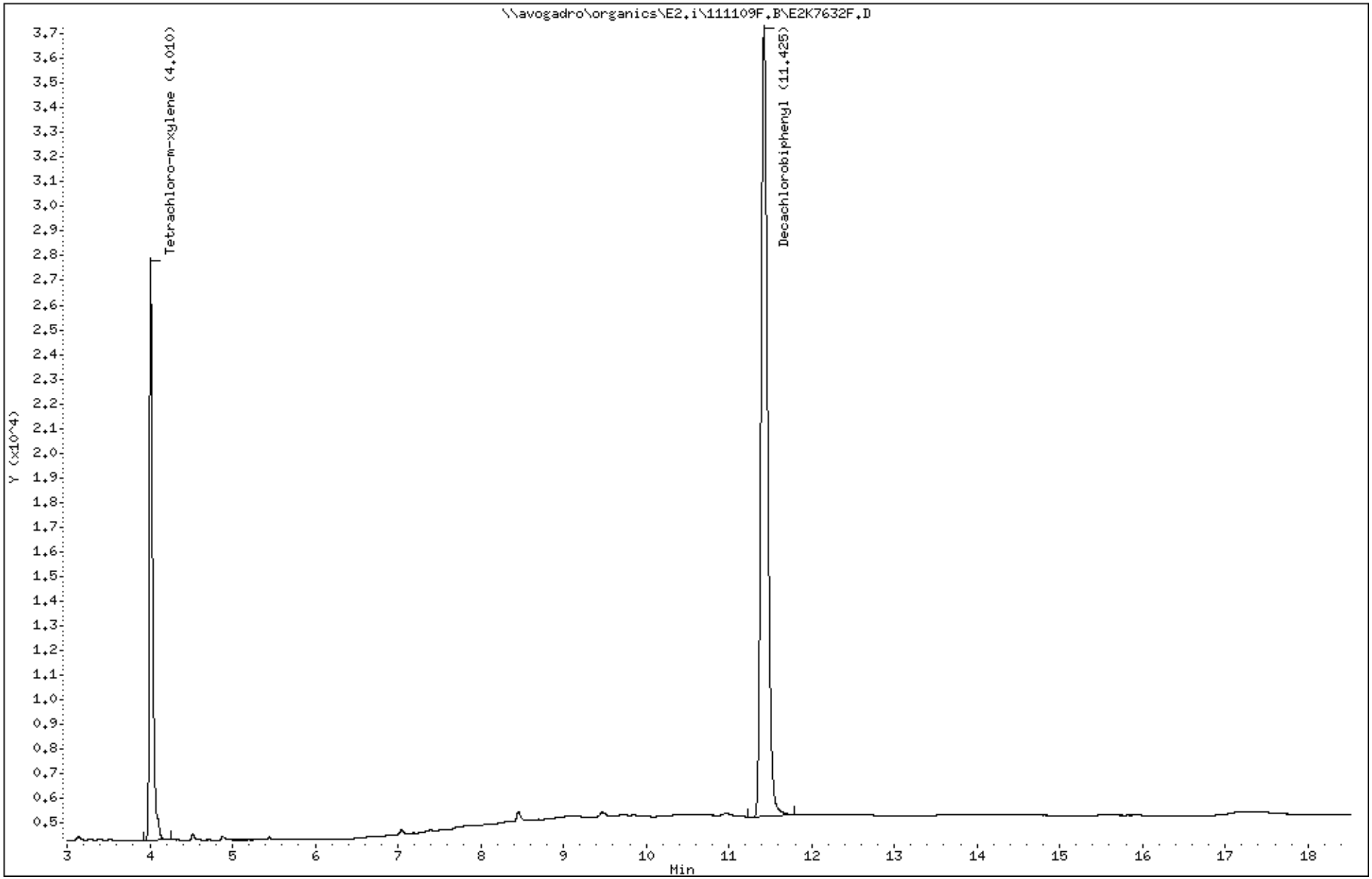
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.010	3.999	0.011	635525	0.02000	0.031			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.425	11.417	0.008	1760455	0.04000	0.061			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111109F.B\E2K7632F.D
Date : 09-NOV-2011 16:41
Client ID: AILBKJG
Instrument: E2.i
Sample Info: AIBLKJG,AILBKJG,,AIBLK,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111109R.B\E2K7632R.D
Report Date: 21-Nov-2011 10:42

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111109R.B\E2K7632R.D
Lab Smp Id: AIBLKJG Client Smp ID: AILBKJG
Inj Date : 09-NOV-2011 16:41
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AIBLKJG,AILBKJG,,AIBLK.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111109R.B\E2_ARO_5_R.m
Meth Date : 10-Nov-2011 09:10 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 100 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: AIBLK.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

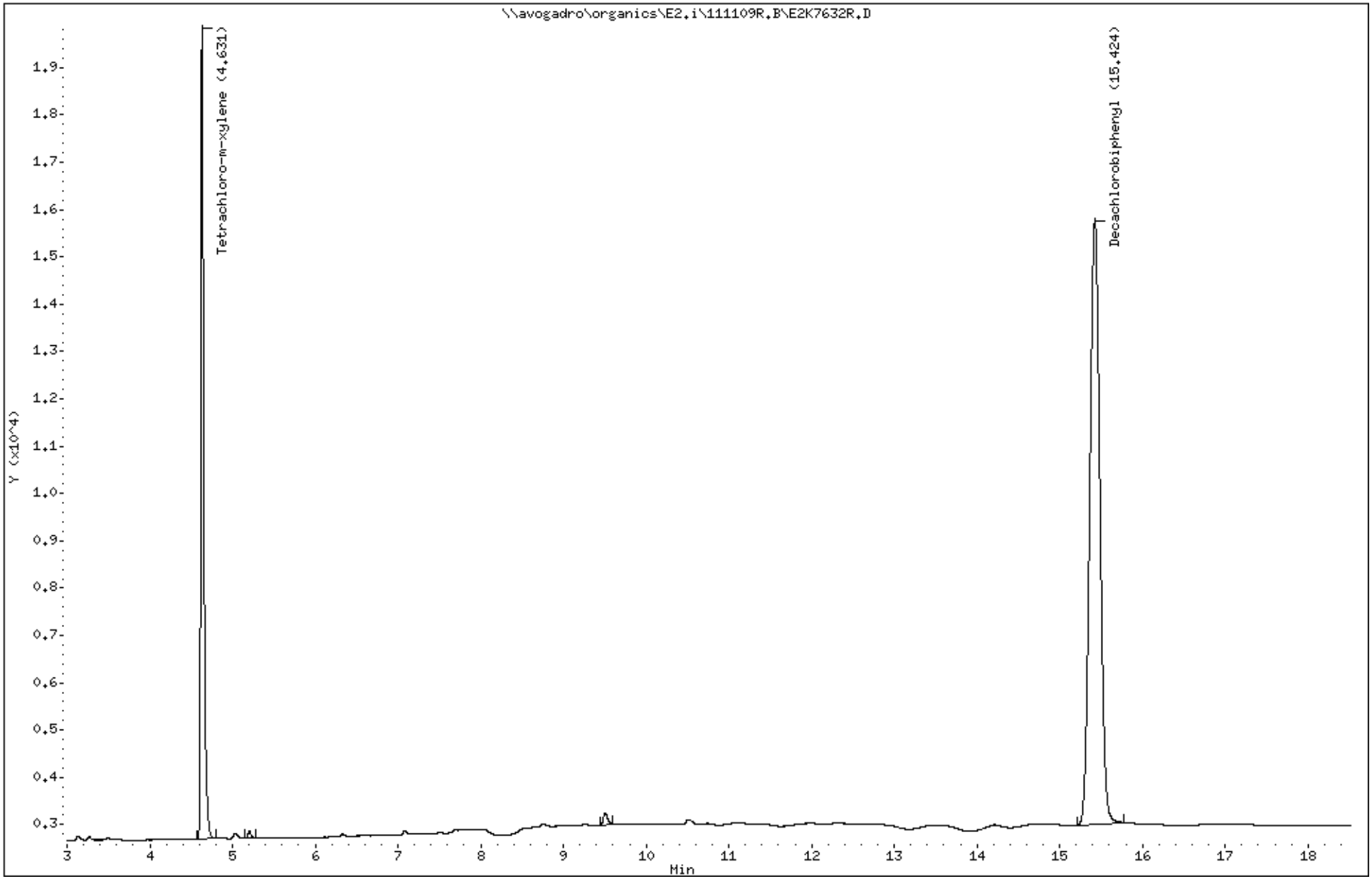
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.630	4.627	0.003	420019	0.02000	0.033			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.424	15.423	0.001	1084649	0.04000	0.064			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111109R.B\E2K7632R.D
Date : 09-NOV-2011 16:41
Client ID: AILBKJG
Instrument: E2.i
Sample Info: AIBLKJG,AILBKJG,,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

1648013

EPA SAMPLE NO.

AIBLKWF(1)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: AIBLKWF

Sample wt/vol: (g/mL) ML Lab File ID: E3I6740F.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

1648085

EPA SAMPLE NO.

AIBLKWF(2)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: AIBLKWF

Sample wt/vol: (g/mL) ML Lab File ID: E3I6740R.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\E3.I\111116BF.B\E3I6740F.D
Report Date: 22-Nov-2011 12:24

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111116BF.B\E3I6740F.D
Lab Smp Id: AIBLKWF Client Smp ID: AILBKWF
Inj Date : 16-NOV-2011 15:50
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AIBLKWF,AILBKWF,,AIBLK.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BF.B\E3_ARO_5_F.m
Meth Date : 17-Nov-2011 08:16 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699F.D
Als bottle: 100 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

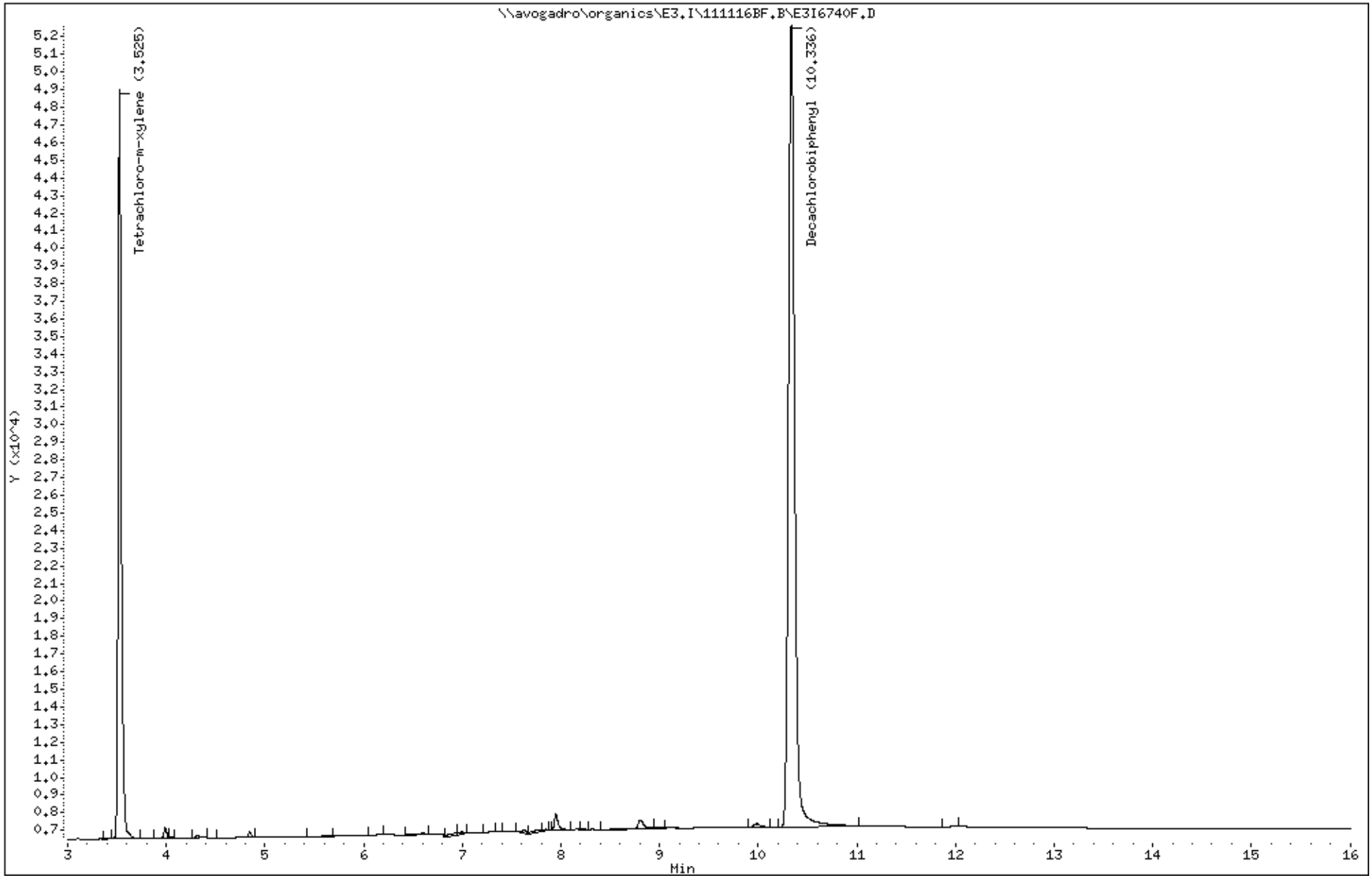
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
3.524	3.492	0.032	932394	0.02000	0.029		(a)
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
10.335	10.281	0.054	1985513	0.04000	0.058		

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.I\111116BF.B\E3I6740F.D
Date : 16-NOV-2011 15:50
Client ID: AILBKWF
Instrument: E3.i
Sample Info: AIBLKWF,AILBKWF,,AIBLK.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6740R.D
Report Date: 22-Nov-2011 12:25

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111116BR.B\E3I6740R.D
Lab Smp Id: AIBLKWF Client Smp ID: AILBKWF
Inj Date : 16-NOV-2011 15:50
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AIBLKWF,AILBKWF,,AIBLK.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BR.B\E3_ARO_5_R.m
Meth Date : 17-Nov-2011 08:19 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699R.D
Als bottle: 100 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET111

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

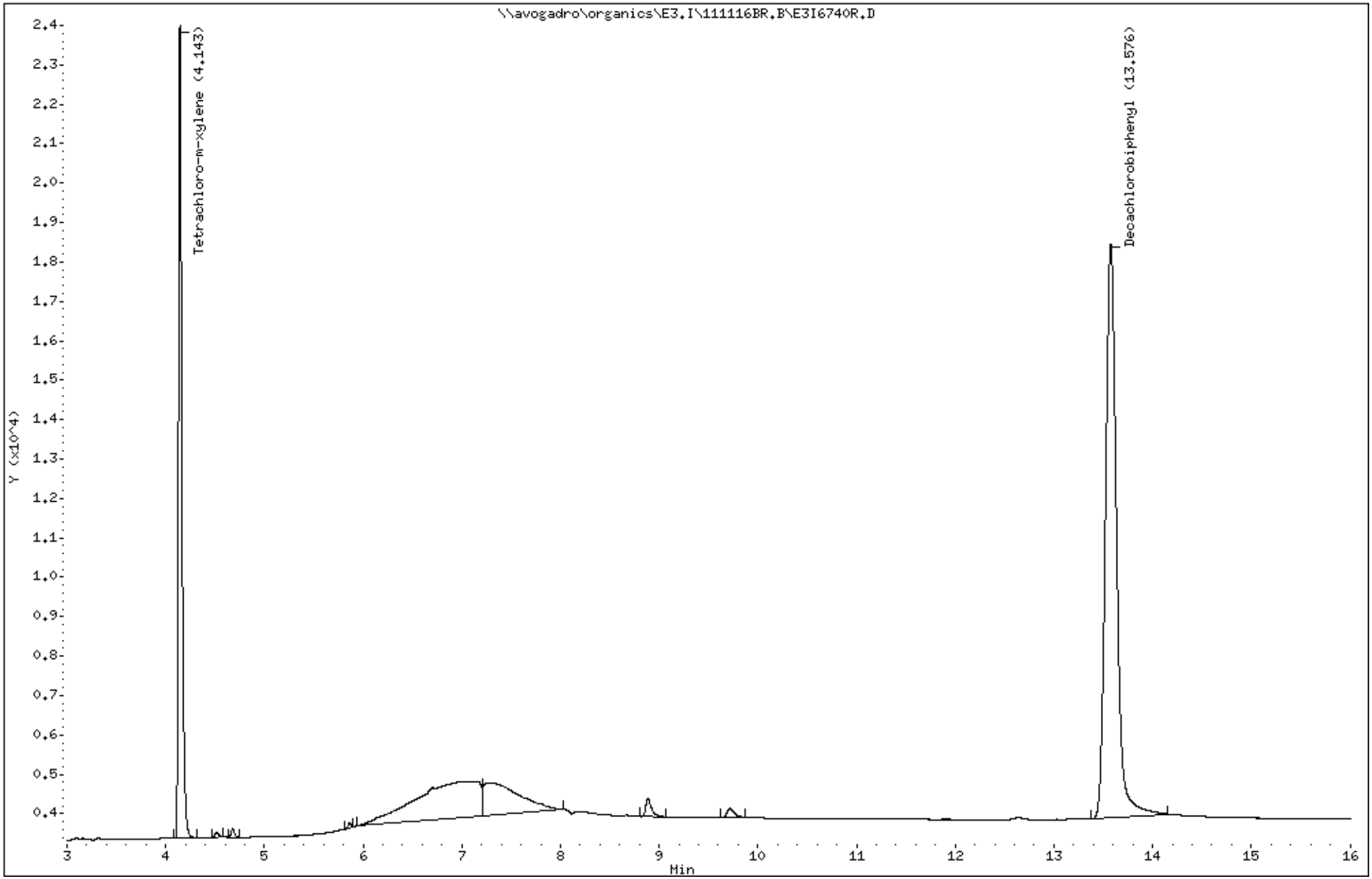
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.142	4.116	0.026	476637	0.02000	0.029			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
13.575	13.497	0.078	1132597	0.04000	0.054			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6740R.D
Date : 16-NOV-2011 15:50
Client ID: AILBKWF
Instrument: E3.i
Sample Info: AIBLKWF,AILBKWF,,AIBLK,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.53



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

1648045

EPA SAMPLE NO.

AIBLKWG(1)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: AIBLKWG

Sample wt/vol: (g/mL) ML Lab File ID: E3I6768F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) Date Extracted:

Concentrated Extract Volume: (uL) Date Analyzed: 11/17/2011

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

1648113

EPA SAMPLE NO.

AIBLKWG(2)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: AIBLKWG

Sample wt/vol: (g/mL) ML Lab File ID: E3I6768R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) Date Extracted:

Concentrated Extract Volume: (uL) Date Analyzed: 11/17/2011

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\E3.I\111116BF.B\E3I6768F.D
Report Date: 22-Nov-2011 12:24

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111116BF.B\E3I6768F.D
Lab Smp Id: AIBLKWG Client Smp ID: AILBKWG
Inj Date : 17-NOV-2011 00:38
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AIBLKWG,AILBKWG,,AIBLK.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BF.B\E3_ARO_5_F.m
Meth Date : 17-Nov-2011 08:16 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699F.D
Als bottle: 100 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

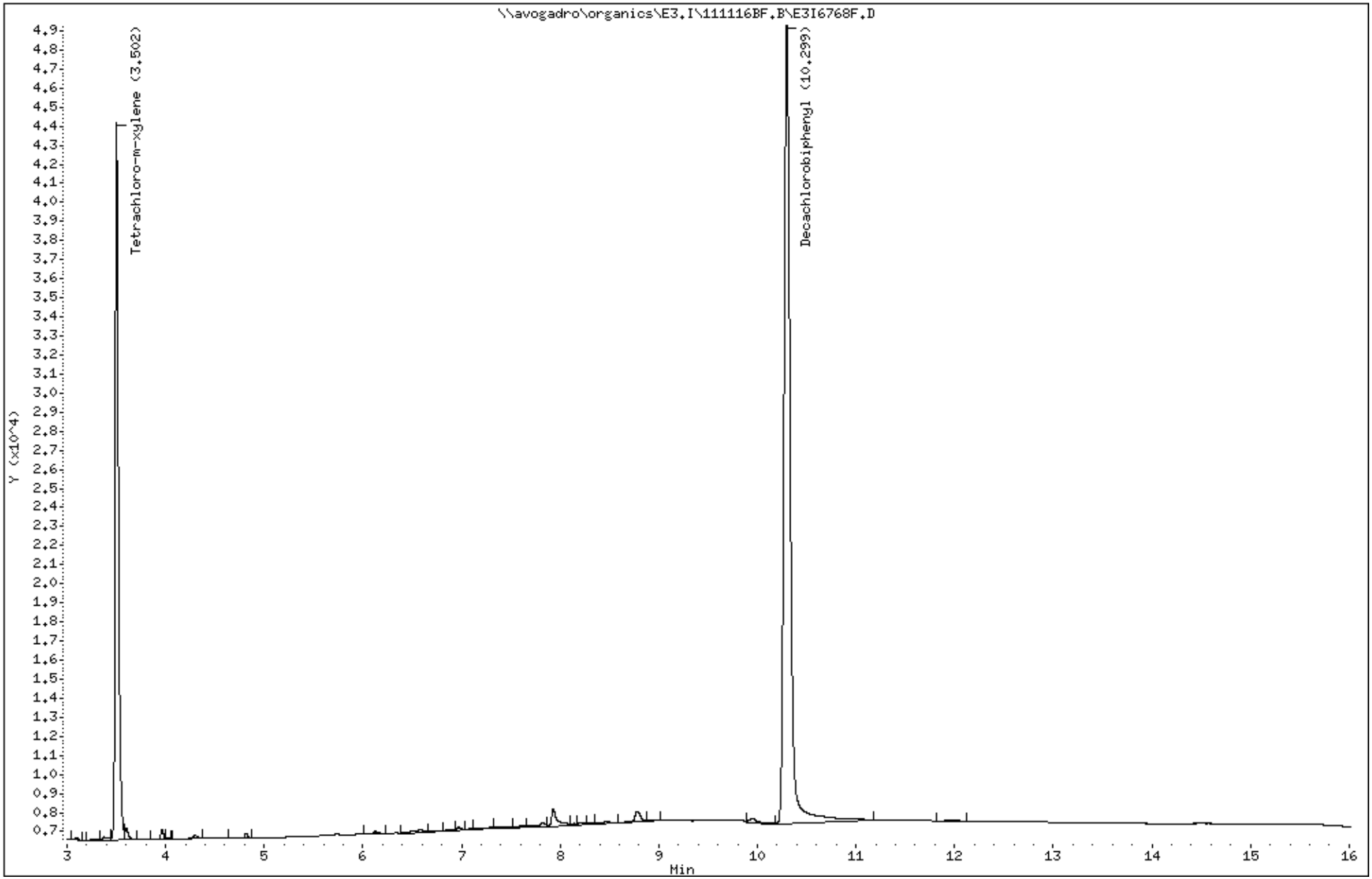
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
3.501	3.492	0.009	826095	0.02000	0.026			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.299	10.281	0.018	1844933	0.04000	0.054			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.I\111116BF.B\E3I6768F.D
Date : 17-NOV-2011 00:38
Client ID: AILBKWG
Instrument: E3.i
Sample Info: AIBLKWG,AILBKWG,,AIBLK,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6768R.D
Report Date: 22-Nov-2011 12:25

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111116BR.B\E3I6768R.D
Lab Smp Id: AIBLKWG Client Smp ID: AILBKWG
Inj Date : 17-NOV-2011 00:38
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AIBLKWG,AILBKWG,,AIBLK.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BR.B\E3_ARO_5_R.m
Meth Date : 17-Nov-2011 08:19 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699R.D
Als bottle: 100 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

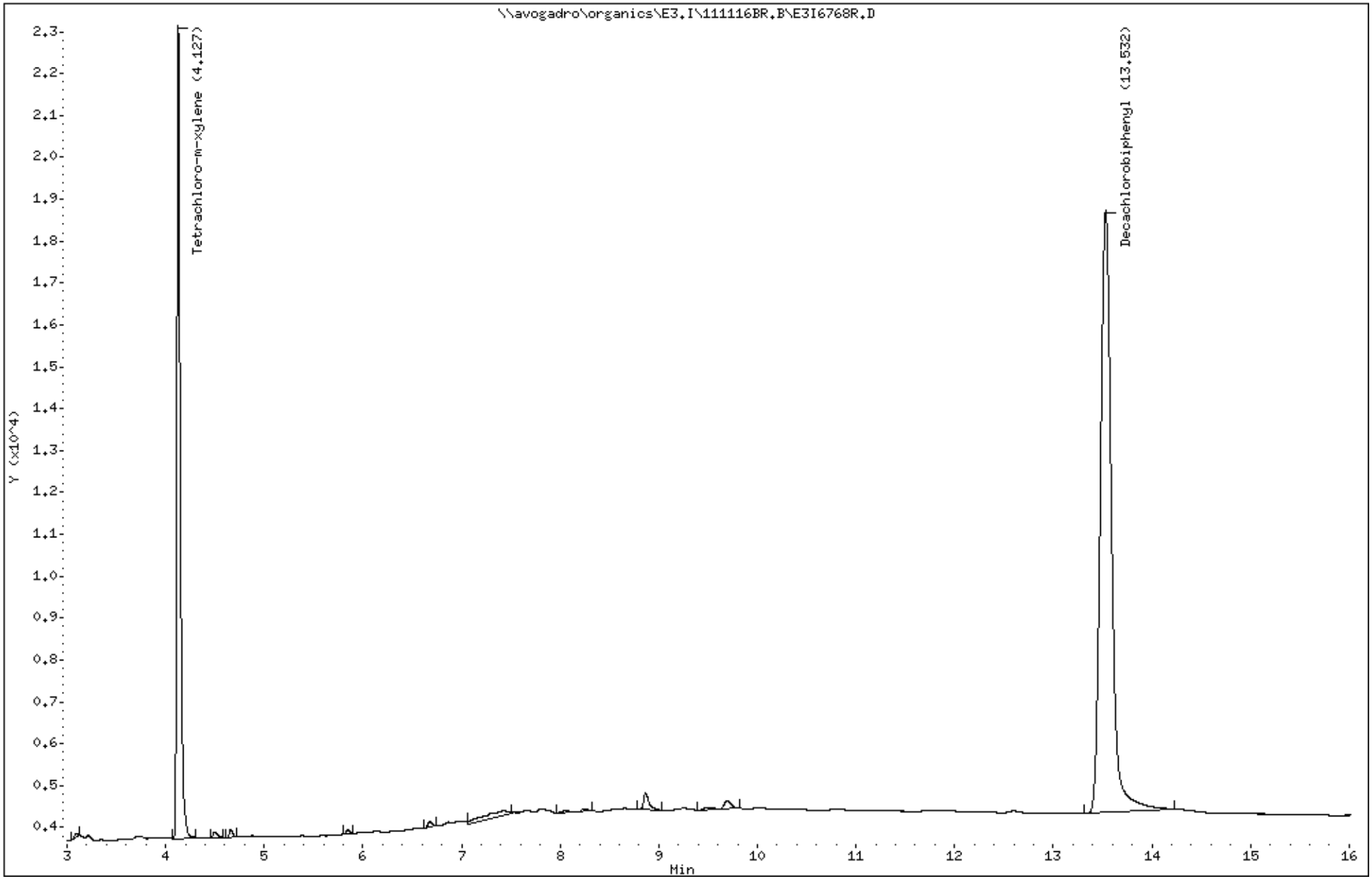
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

			AMOUNTS				
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.127	4.116	0.011	455007	0.02000	0.028		(a)
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
13.532	13.497	0.035	1126387	0.04000	0.054		

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6768R.D
Date : 17-NOV-2011 00:38
Client ID: AILBKWG
Instrument: E3.i
Sample Info: AIBLKWG,AILBKWG,,AIBLK,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.53



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

1650068

EPA SAMPLE NO.

AIBLKWI(1)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: AIBLKWI

Sample wt/vol: (g/mL) ML Lab File ID: E3I6785F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) Date Extracted:

Concentrated Extract Volume: (uL) Date Analyzed: 11/17/2011

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

1650108

EPA SAMPLE NO.

AIBLKWI(2)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: AIBLKWI

Sample wt/vol: (g/mL) ML Lab File ID: E3I6785R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) Date Extracted:

Concentrated Extract Volume: (uL) Date Analyzed: 11/17/2011

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\E3.I\111117F.B\E3I6785F.D
Report Date: 22-Nov-2011 12:26

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111117F.B\E3I6785F.D
Lab Smp Id: AIBLKWI Client Smp ID: AILBKWI
Inj Date : 17-NOV-2011 10:01
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AIBLKWI,AILBKWI,,AIBLK.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111117F.B\E3_ARO_5_F.m
Meth Date : 18-Nov-2011 09:11 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699F.D
Als bottle: 100 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

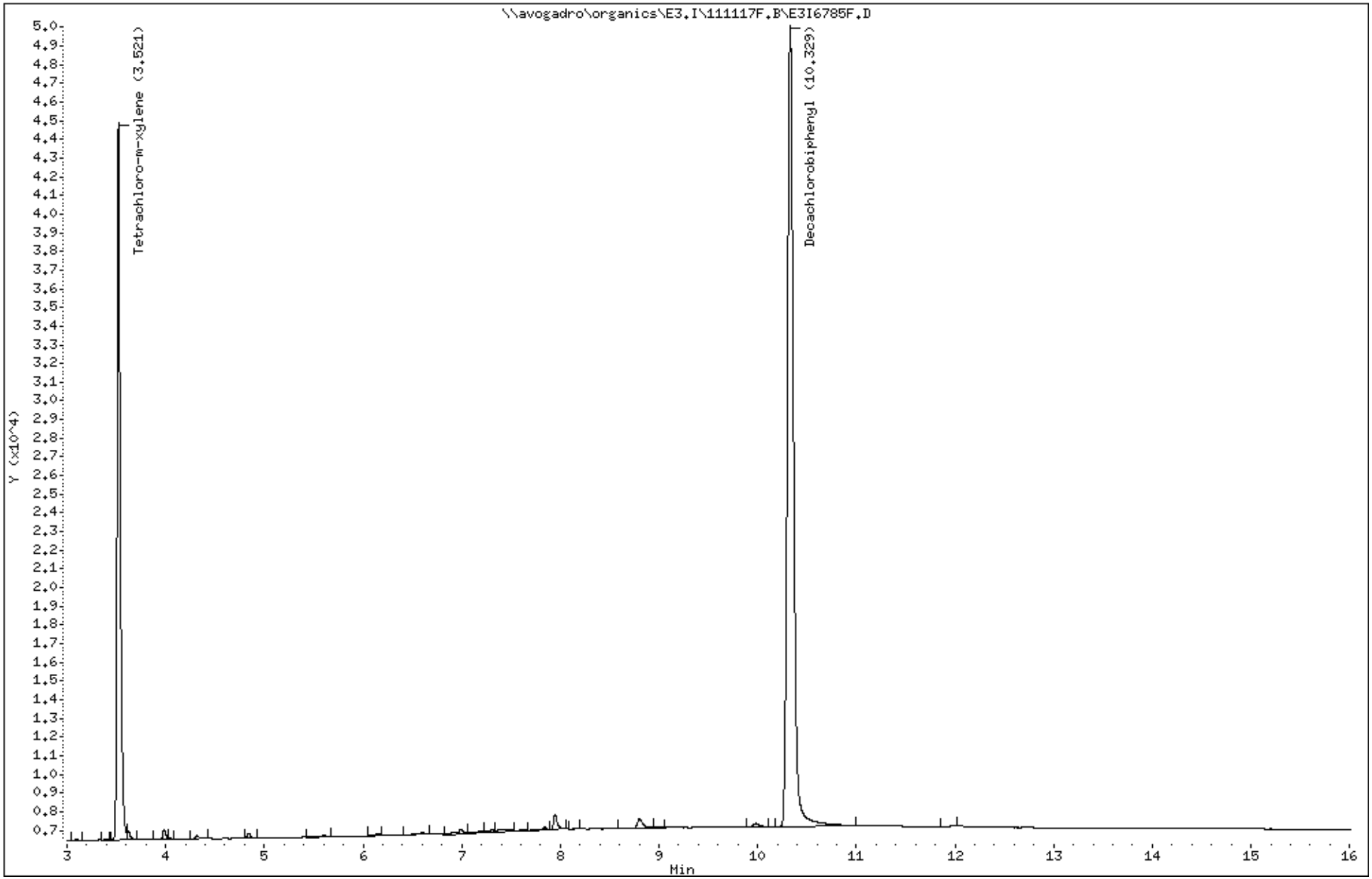
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
3.520	3.492	0.028	839066	0.02000	0.026			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.329	10.281	0.048	1852687	0.04000	0.054			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.I\111117F.B\E3I6785F.D
Date : 17-NOV-2011 10:01
Client ID: AILBKWI
Instrument: E3.i
Sample Info: AIBLKWI,AILBKWI,,AIBLK,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111117R.B\E3I6785R.D
Report Date: 22-Nov-2011 12:27

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111117R.B\E3I6785R.D
Lab Smp Id: AIBLKWI Client Smp ID: AILBKWI
Inj Date : 17-NOV-2011 10:01
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AIBLKWI,AILBKWI,,AIBLK.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111117R.B\E3_ARO_5_R.m
Meth Date : 18-Nov-2011 09:12 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699R.D
Als bottle: 100 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

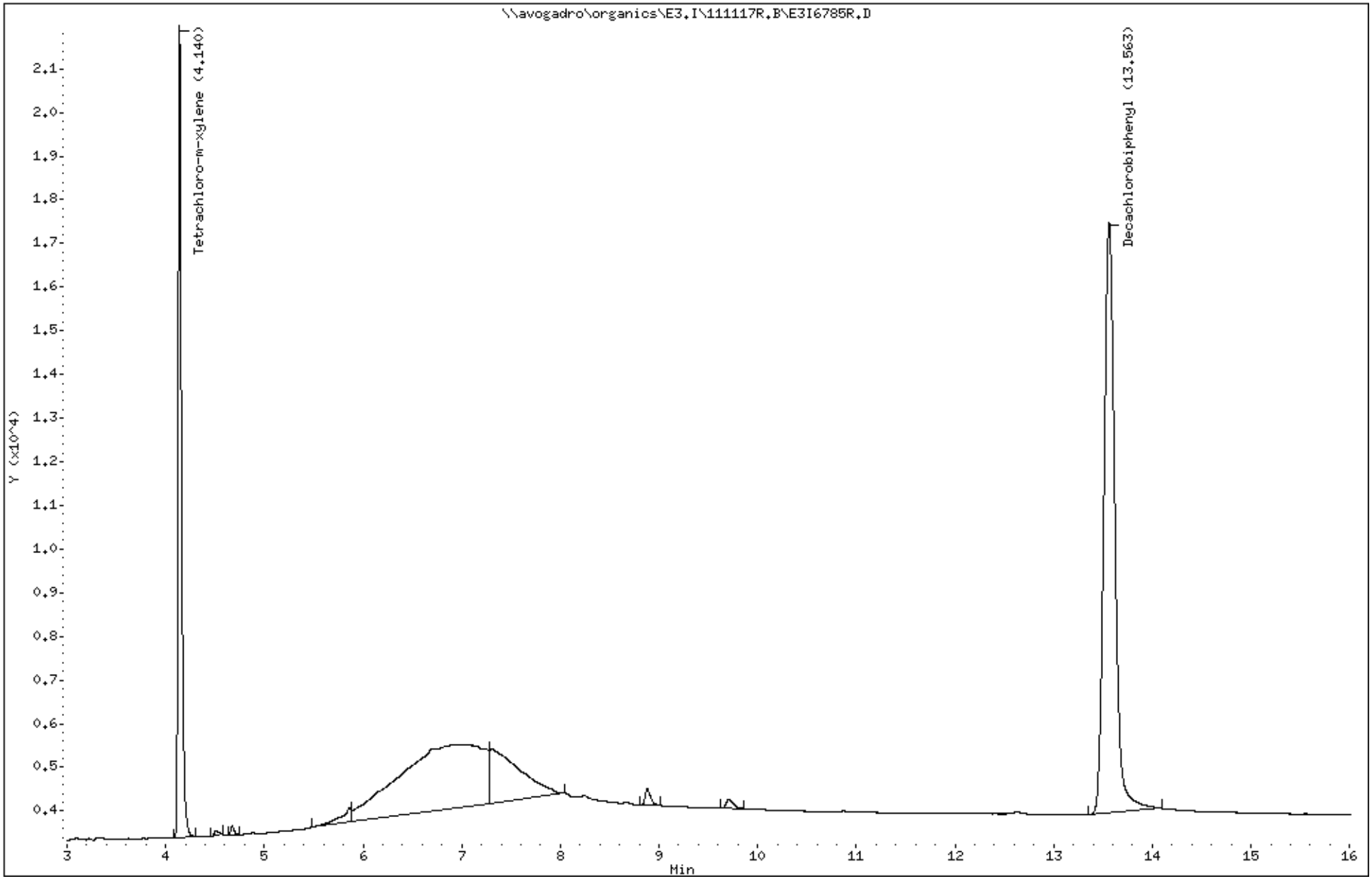
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.139	4.116	0.023	432935	0.02000	0.027			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
13.562	13.497	0.065	1043509	0.04000	0.050			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.I\111117R.B\E3I6785R.D
Date : 17-NOV-2011 10:01
Client ID: AILBKWI
Instrument: E3.i
Sample Info: AIBLKWI,AILBKWI,,AIBLK,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.53



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

1650076

EPA SAMPLE NO.

AIBLKWJ(1)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: AIBLKWJ

Sample wt/vol: (g/mL) ML Lab File ID: E3I6795F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) Date Extracted:

Concentrated Extract Volume: (uL) Date Analyzed: 11/17/2011

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

1650116

EPA SAMPLE NO.

AIBLKWJ(2)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: AIBLKWJ

Sample wt/vol: (g/mL) ML Lab File ID: E3I6795R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) Date Extracted:

Concentrated Extract Volume: (uL) Date Analyzed: 11/17/2011

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\E3.I\111117F.B\E3I6795F.D
Report Date: 22-Nov-2011 12:26

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111117F.B\E3I6795F.D
Lab Smp Id: AIBLKWJ Client Smp ID: AILBKWJ
Inj Date : 17-NOV-2011 14:58
Operator : DL   SRC: DL Inst ID: E3.i
Smp Info : AIBLKWJ,AILBKWJ,,AIBLK.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111117F.B\E3_ARO_5_F.m
Meth Date : 18-Nov-2011 09:11 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699F.D
Als bottle: 100 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

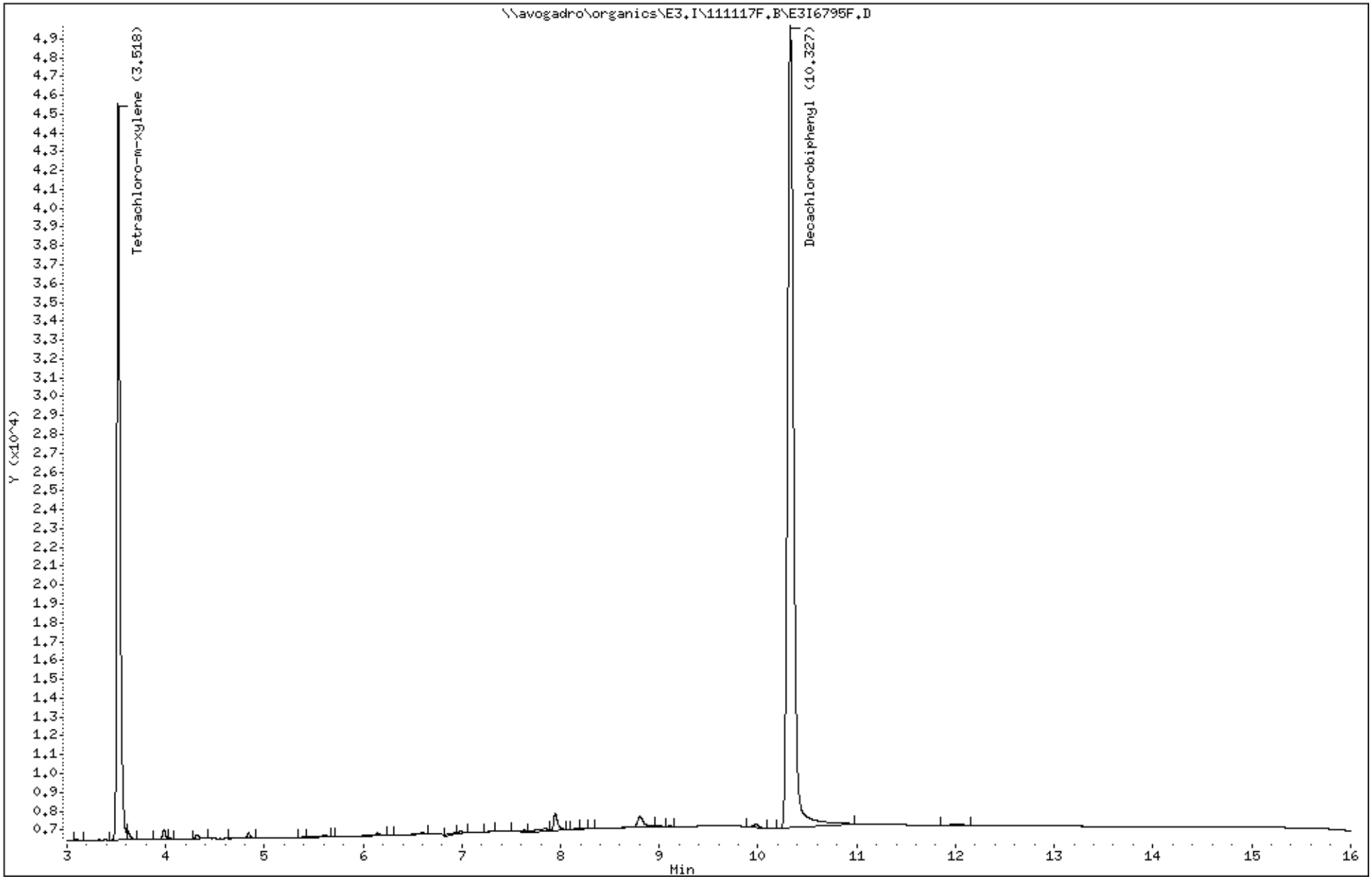
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
3.518	3.492	0.026	859350	0.02000	0.027			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.327	10.281	0.046	1848592	0.04000	0.054			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.I\111117F.B\E3I6795F.D
Date : 17-NOV-2011 14:58
Client ID: AILBKWJ
Instrument: E3.i
Sample Info: AIBLKWJ,AILBKWJ,,AIBLK,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111117R.B\E3I6795R.D
Report Date: 22-Nov-2011 12:27

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111117R.B\E3I6795R.D
Lab Smp Id: AIBLKWJ Client Smp ID: AILBKWJ
Inj Date : 17-NOV-2011 14:58
Operator : DL SRC: DL Inst ID: E3.i
Smp Info : AIBLKWJ,AILBKWJ,,AIBLK.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111117R.B\E3_ARO_5_R.m
Meth Date : 18-Nov-2011 09:12 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699R.D
Als bottle: 100 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

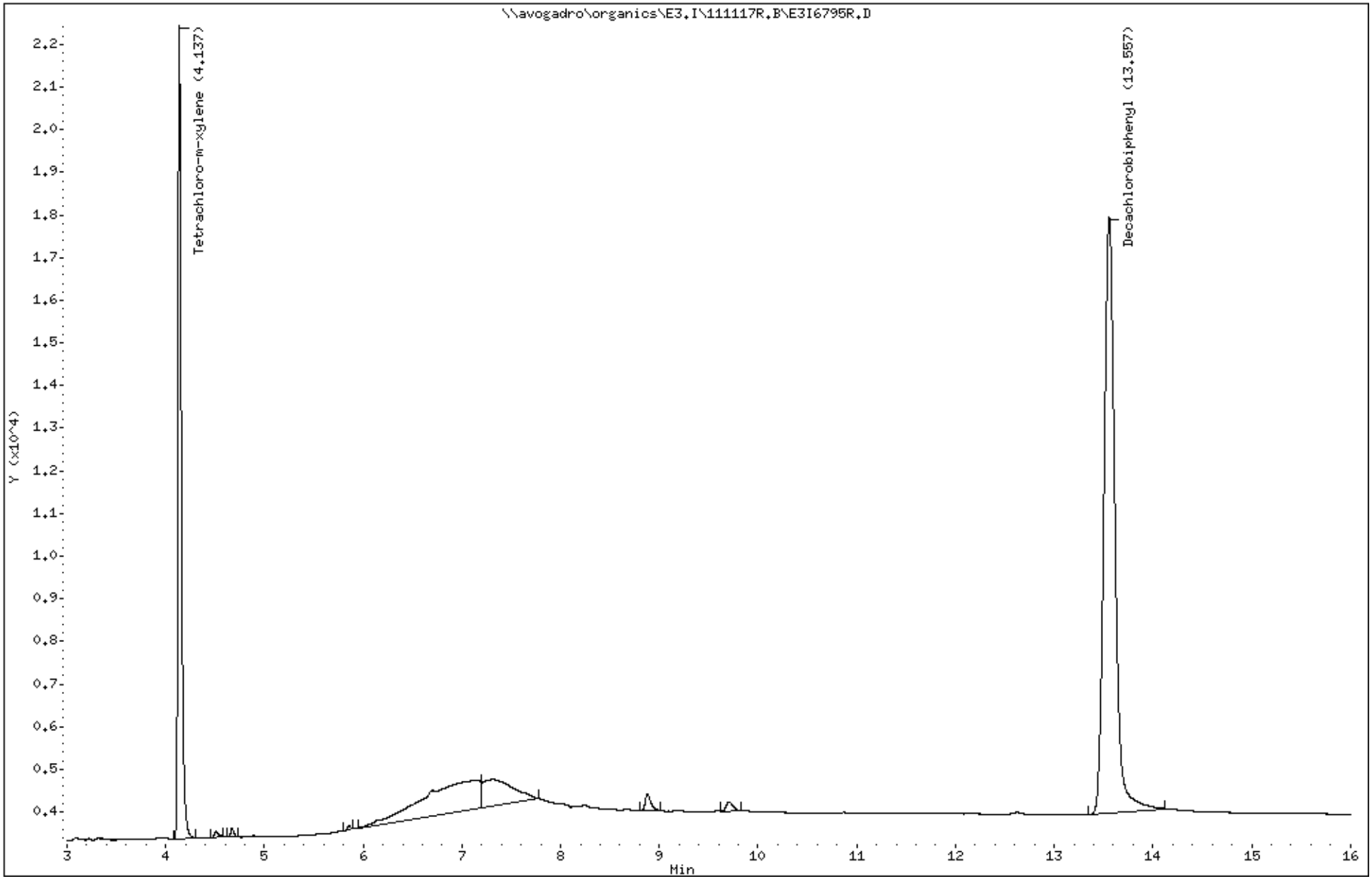
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.137	4.116	0.021	445070	0.02000	0.027		(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
13.557	13.497	0.060	1079695	0.04000	0.052		

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.i\111117R.B\E3I6795R.D
Date : 17-NOV-2011 14:58
Client ID: AILBKWJ
Instrument: E3.i
Sample Info: AIBLKWJ,AILBKWJ,,AIBLK,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.53



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Z2MS(1)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-11AMS

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E3I6755F.D

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Extraction: (Type) SEPF Date Extracted: 11/08/2011

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	3.0	
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	2.7	
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.

H30Z2MS(2)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-11AMS

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E3I6755R.D

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Extraction: (Type) SEPF Date Extracted: 11/08/2011

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	3.0	
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	2.6	
37324-23-5	Aroclor-1262	1.0	U
11100-14-4	Aroclor-1268	1.0	U

Data File: \\avogadro\organics\E3.I\111116BF.B\E3I6755F.D
Report Date: 22-Nov-2011 12:24

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

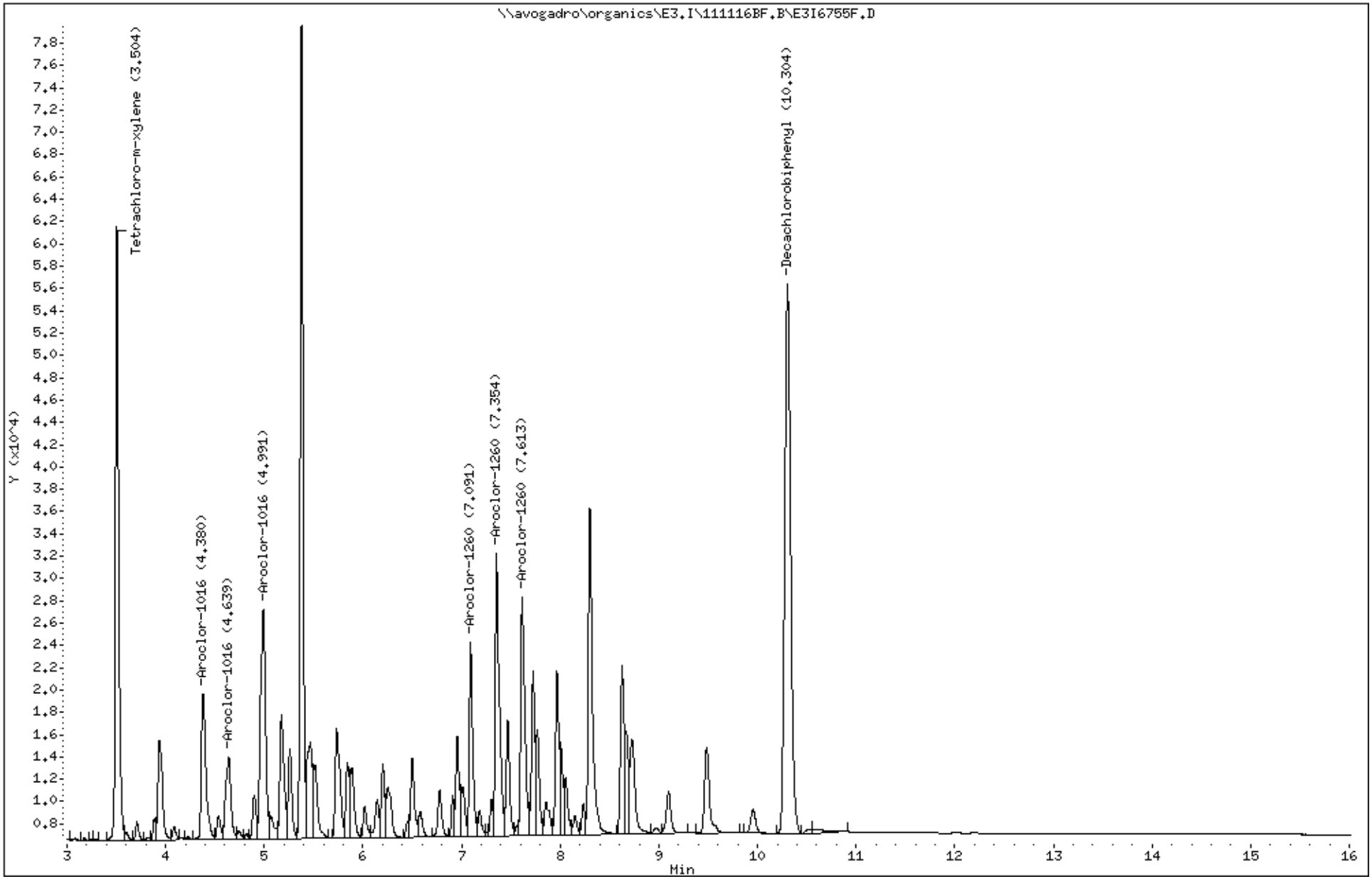
Data file : \\avogadro\organics\E3.I\111116BF.B\E3I6755F.D
Lab Smp Id: K2213-11AMS Client Smp ID: H30Z2MS
Inj Date : 16-NOV-2011 20:33
Operator : DL   SRC: LIMS Inst ID: E3.i
Smp Info : K2213-11AMS,,62802,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BF.B\E3_ARO_5_F.m
Meth Date : 17-Nov-2011 08:16 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699F.D
Als bottle: 15 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	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	
3.504	3.492	0.012	1242703	0.03883	0.39		
5 Aroclor-1016						CAS #: 12674-11-2	
4.379	4.365	0.014	425353	0.31026	3.1	80.00- 120.00	100.00
4.639	4.624	0.015	272287	0.29826	3.0	46.55- 86.55	64.01
4.990	4.975	0.015	734215	0.29414	2.9	160.67- 200.67	172.61
Average of Peak Concentrations =					3.0		
9 Aroclor-1260						CAS #: 11096-82-5	
7.091	7.079	0.012	422230	0.27693	2.8	80.00- 120.00	100.00
7.354	7.343	0.011	723938	0.27485	2.7	334.96- 374.96	171.46
7.613	7.602	0.011	633266	0.27232	2.7	19.04- 59.04	149.98
Average of Peak Concentrations =					2.7		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
10.304	10.281	0.023	2053656	0.06021	0.60		

Data File: \\avogadro\organics\E3.I\111116BF.B\E3I6755F.D
Date : 16-NOV-2011 20:33
Client ID: H30Z2MS
Instrument: E3.i
Sample Info: K2213-11AMS,,62802,somaro.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6755R.D
Report Date: 22-Nov-2011 12:25

Spectrum Analytical, Inc. RI Division

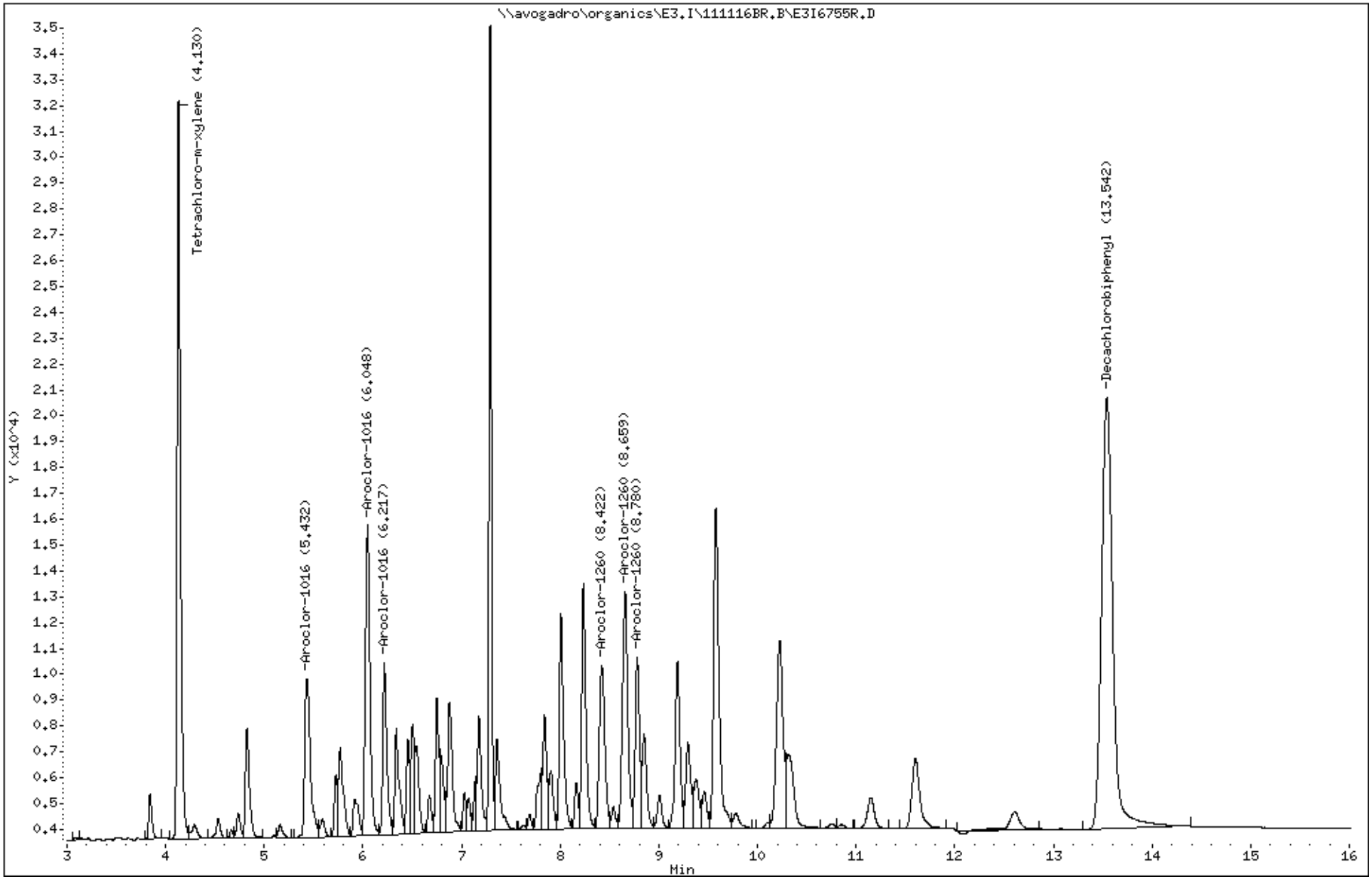
8080/8081PCB Quantitation Report
Data file : \\avogadro\organics\E3.I\111116BR.B\E3I6755R.D
Lab Smp Id: K2213-11AMS Client Smp ID: H30Z2MS
Inj Date : 16-NOV-2011 20:33
Operator : DL   SRC: LIMS Inst ID: E3.i
Smp Info : K2213-11AMS,,62802,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BR.B\E3_ARO_5_R.m
Meth Date : 17-Nov-2011 08:19 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699R.D
Als bottle: 15 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	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	
4.129	4.116	0.013	680431	0.04204	0.42		
6 Aroclor-1016						CAS #: 12674-11-2	
5.432	5.415	0.017	247239	0.29998	3.0	80.00- 120.00	100.00
6.047	6.033	0.014	395381	0.29145	2.9	146.03- 186.03	159.92
6.216	6.202	0.014	191450	0.30913	3.1	56.14- 96.14	77.44
Average of Peak Concentrations =					3.0		
8 Aroclor-1260						CAS #: 11096-82-5	
8.421	8.407	0.014	250623	0.26708	2.7	80.00- 120.00	100.00
8.658	8.642	0.016	344948	0.25687	2.6	121.56- 161.56	137.64
8.779	8.763	0.016	201610	0.26467	2.6	60.25- 100.25	80.44
Average of Peak Concentrations =					2.6		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
13.541	13.497	0.044	1328018	0.06351	0.64		

Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6755R.D
Date : 16-NOV-2011 20:33
Client ID: H30Z2MS
Instrument: E3.i
Sample Info: K2213-11AMS,,62802,somaro.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.53



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H30Z2MSD(1)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-11AMSD

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E3I6756F.D

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Extraction: (Type) SEPF Date Extracted: 11/08/2011

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	3.1	
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	3.0	
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.

H30Z2MSD(2)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K2213-11AMSD

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E3I6756R.D

% Moisture: Decanted: (Y/N) Date Received: 11/03/2011

Extraction: (Type) SEPF Date Extracted: 11/08/2011

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	3.1	
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	2.9	
37324-23-5	Aroclor-1262	1.0	U
11100-14-4	Aroclor-1268	1.0	U

Data File: \\avogadro\organics\E3.I\111116BF.B\E3I6756F.D
Report Date: 22-Nov-2011 12:24

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

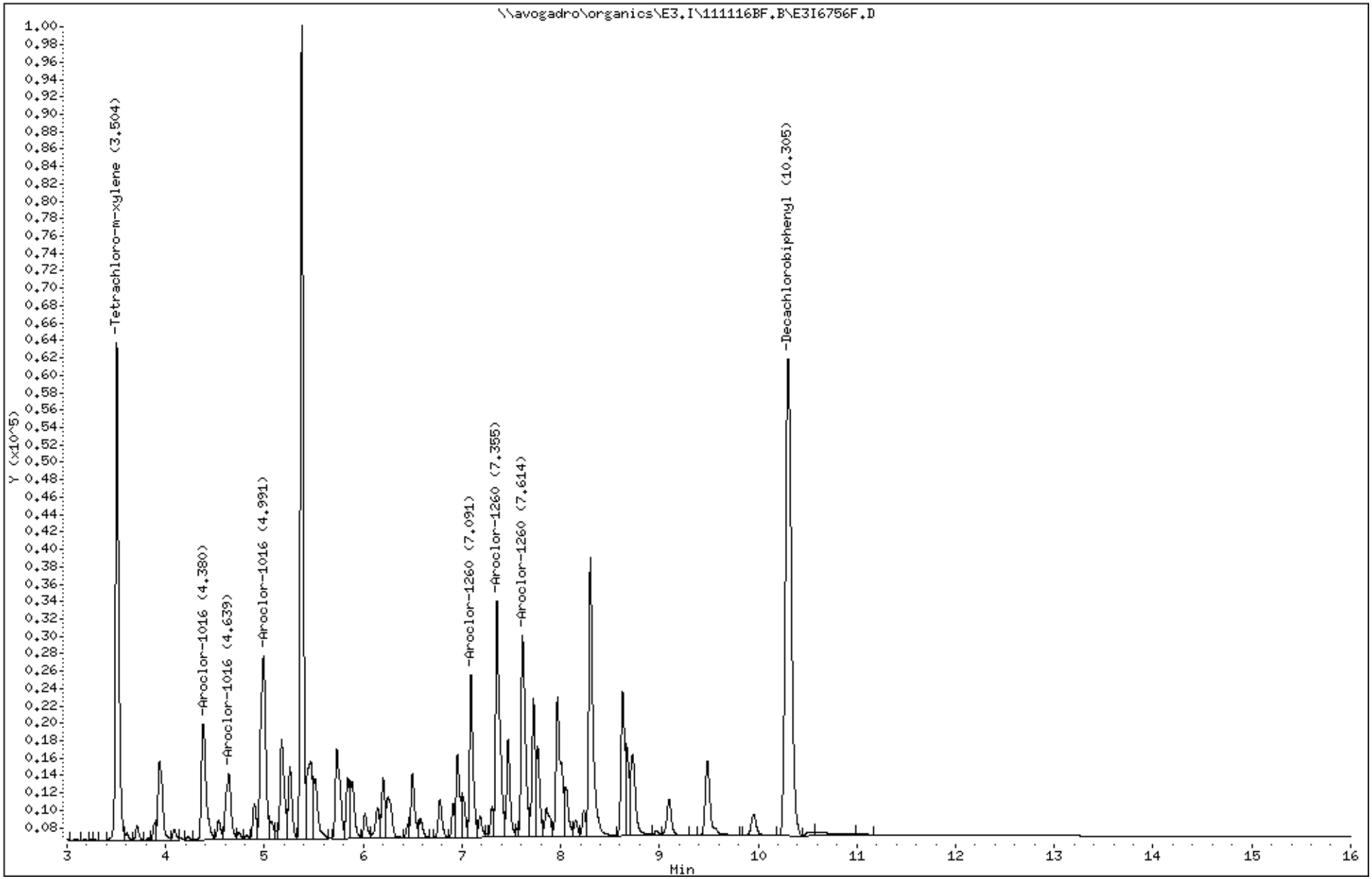
Data file : \\avogadro\organics\E3.I\111116BF.B\E3I6756F.D
Lab Smp Id: K2213-11AMSD Client Smp ID: H30Z2MSD
Inj Date : 16-NOV-2011 20:52
Operator : DL   SRC: LIMS Inst ID: E3.i
Smp Info : K2213-11AMSD,,62802,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BF.B\E3_ARO_5_F.m
Meth Date : 17-Nov-2011 08:16 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699F.D
Als bottle: 16 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	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		
3.504	3.492	0.012	1288648	0.04027	0.40		
5 Aroclor-1016					CAS #: 12674-11-2		
4.379	4.365	0.014	436861	0.31866	3.2	80.00- 120.00	100.00
4.639	4.624	0.015	279569	0.30623	3.1	46.55- 86.55	64.00
4.990	4.975	0.015	759271	0.30418	3.0	160.67- 200.67	173.80
		Average of Peak Concentrations =			3.1		
9 Aroclor-1260					CAS #: 11096-82-5		
7.091	7.079	0.012	453504	0.29744	3.0	80.00- 120.00	100.00
7.354	7.343	0.011	781709	0.29678	3.0	334.96- 374.96	172.37
7.613	7.602	0.011	689596	0.29655	3.0	19.04- 59.04	152.06
		Average of Peak Concentrations =			3.0		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
10.304	10.281	0.023	2282762	0.06693	0.67		

Data File: \\avogadro\organics\E3.I\111116BF.B\E3I6756F.D
Date : 16-NOV-2011 20:52
Client ID: H30Z2MSD
Instrument: E3.i
Sample Info: K2213-11AMSD,,62802,somaro.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6756R.D
Report Date: 22-Nov-2011 12:25

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111116BR.B\E3I6756R.D
Lab Smp Id: K2213-11AMSD Client Smp ID: H30Z2MSD
Inj Date : 16-NOV-2011 20:52
Operator : DL   SRC: LIMS Inst ID: E3.i
Smp Info : K2213-11AMSD,,62802,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BR.B\E3_ARO_5_R.m
Meth Date : 17-Nov-2011 08:19 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699R.D
Als bottle: 16 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	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

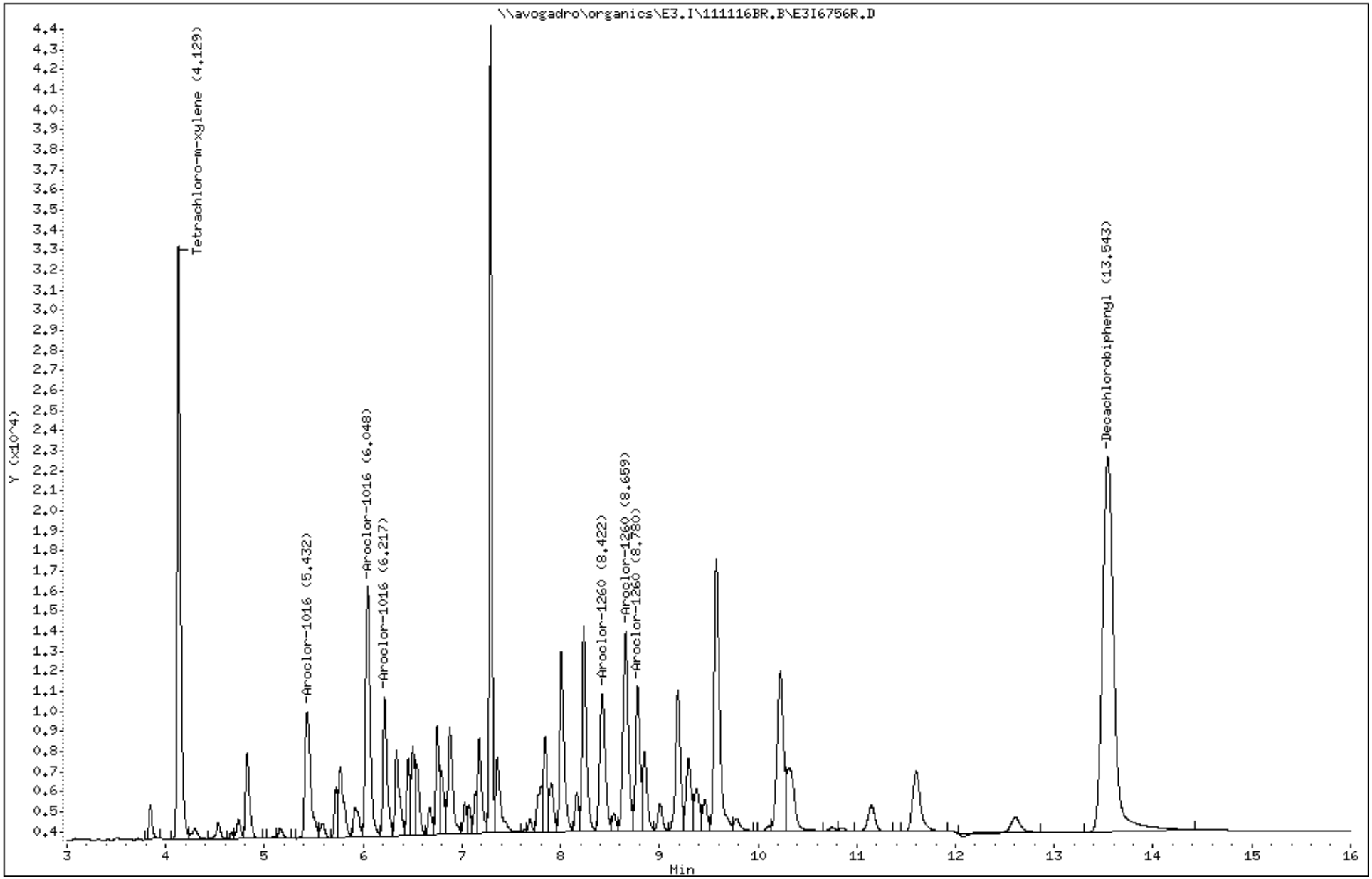
RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.129	4.116	0.013	707727	0.04373	0.44		
6 Aroclor-1016						CAS #: 12674-11-2	
5.431	5.415	0.016	253910	0.30808	3.1	80.00- 120.00	100.00(H)
6.047	6.033	0.014	413752	0.30499	3.0	146.03- 186.03	162.95
6.216	6.202	0.014	199698	0.32245	3.2	56.14- 96.14	78.65
Average of Peak Concentrations =					3.1		
8 Aroclor-1260						CAS #: 11096-82-5	
8.421	8.407	0.014	272870	0.29078	2.9	80.00- 120.00	100.00
8.658	8.642	0.016	374291	0.27872	2.8	121.56- 161.56	137.17
8.779	8.763	0.016	219824	0.28858	2.9	60.25- 100.25	80.56
Average of Peak Concentrations =					2.9		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
13.542	13.497	0.045	1492636	0.07138	0.71		

Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6756R.D
Report Date: 22-Nov-2011 12:25

QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6756R.D
Date : 16-NOV-2011 20:52
Client ID: H30Z2MSD
Instrument: E3.i
Sample Info: K2213-11AMSD,,62802,somaro.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.53



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ALCS2G(1)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-62678

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2K7619F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 11/02/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/09/2011

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	0.94	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	1.0	
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.

ALCS2G(2)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-62678

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2K7619R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 11/02/2011

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/09/2011

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	0.88	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

Data File: \\avogadro\organics\E2.i\111109F.B\E2K7619F.D
Report Date: 21-Nov-2011 10:40

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111109F.B\E2K7619F.D
Lab Smp Id: LCS-62678 Client Smp ID: ALCS2G
Inj Date : 09-NOV-2011 11:04
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : LCS-62678,ALCS2G,62678,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111109F.B\E2_ARO_5_F.m
Meth Date : 10-Nov-2011 09:09 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506F.D
Als bottle: 6 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

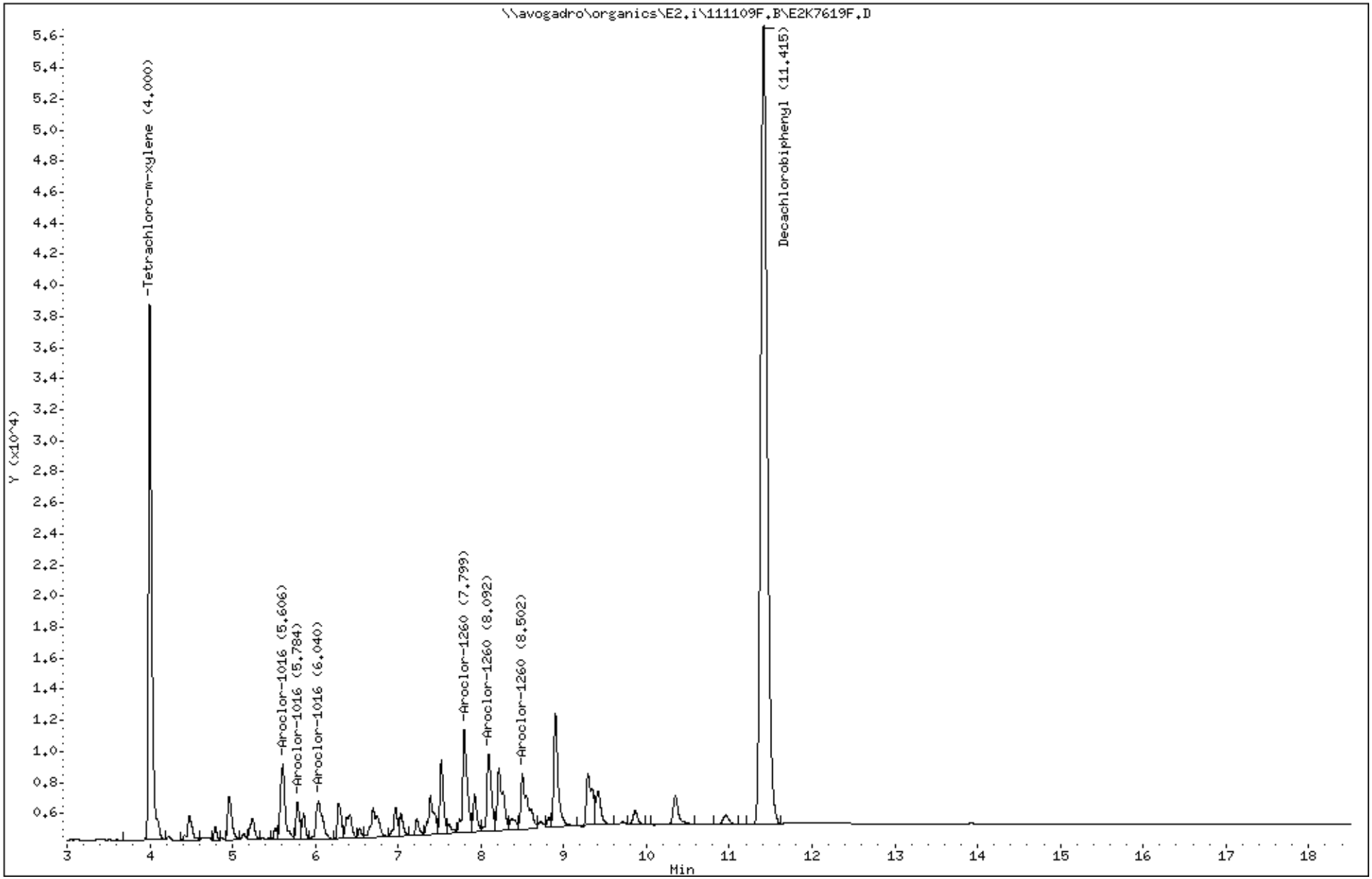
RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
3.999	3.999	0.000	949578	0.04572	0.46			
5 Aroclor-1016						CAS #: 12674-11-2		
5.605	5.604	0.001	194294	0.09478	0.95	80.00- 120.00	100.00(aH)	
5.783	5.781	0.002	71361	0.09204	0.92	18.11- 58.11	36.73	
6.040	6.039	0.001	129319	0.09397	0.94	47.74- 87.74	66.56	
		Average of Peak Concentrations =			0.94			
9 Aroclor-1260						CAS #: 11096-82-5		
7.798	7.797	0.001	255454	0.10692	1.1	80.00- 120.00	100.00	
8.092	8.091	0.001	189731	0.10214	1.0	58.30- 98.30	74.27	
8.502	8.502	0.000	195287	0.09430	0.94	69.60- 109.60	76.45	
		Average of Peak Concentrations =			1.0			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
11.415	11.417	-0.002	2842874	0.09917	0.99			

Data File: \\avogadro\organics\E2.i\111109F.B\E2K7619F.D
Report Date: 21-Nov-2011 10:40

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\E2.i\111109F.B\E2K7619F.D
Date : 09-NOV-2011 11:04
Client ID: ALCS2G
Instrument: E2.i
Sample Info: LCS-62678,ALCS2G,62678,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E2.i\111109R.B\E2K7619R.D
Report Date: 21-Nov-2011 10:41

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E2.i\111109R.B\E2K7619R.D
Lab Smp Id: LCS-62678 Client Smp ID: ALCS2G
Inj Date : 09-NOV-2011 11:04
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : LCS-62678,ALCS2G,62678,somaro.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\111109R.B\E2_ARO_5_R.m
Meth Date : 10-Nov-2011 09:10 gappolonia Quant Type: ESTD
Cal Date : 05-NOV-2011 04:42 Cal File: E2K7506R.D
Als bottle: 6 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

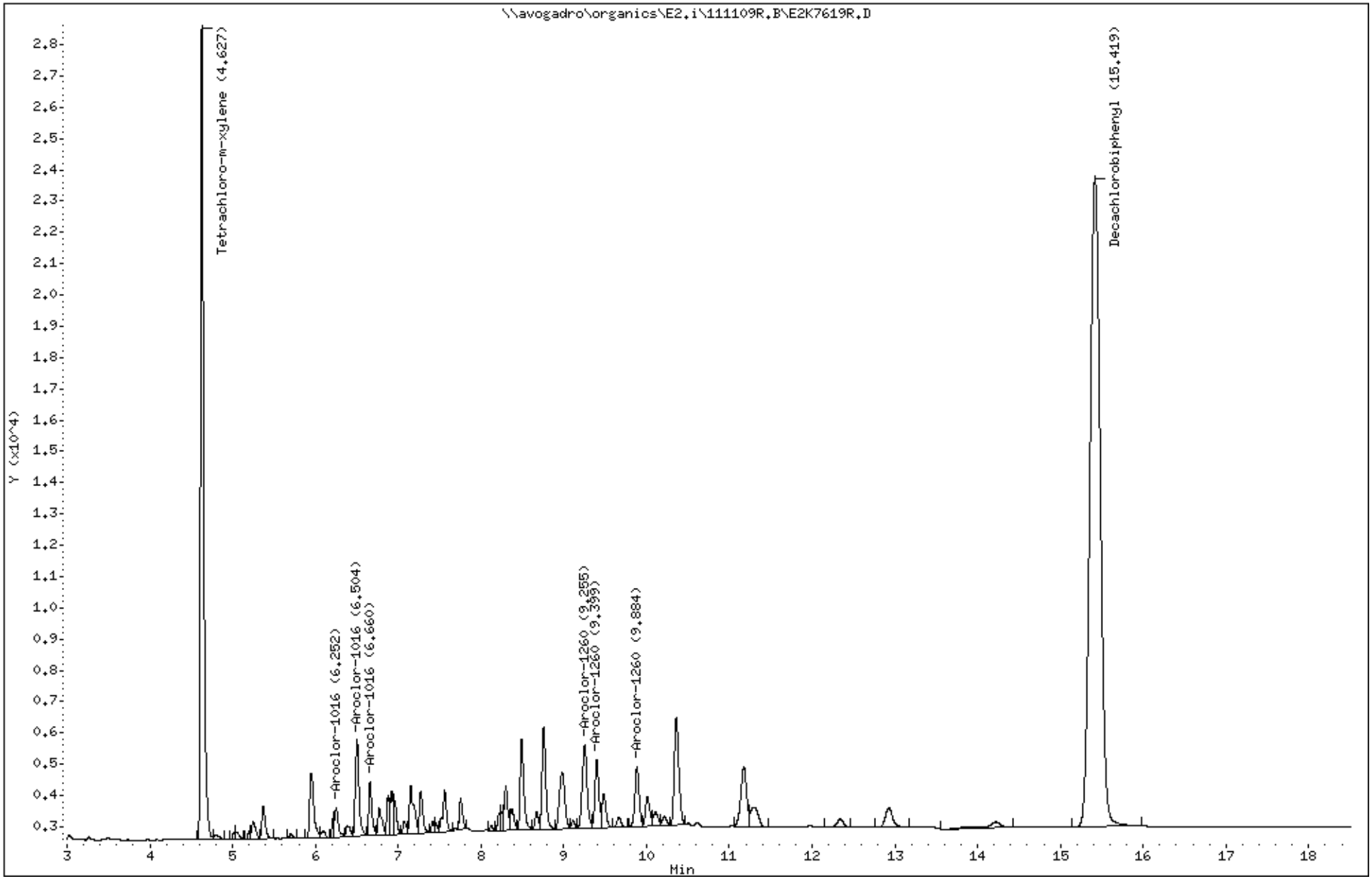
RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.627	4.627	0.000	650683	0.05173	0.52			
6 Aroclor-1016						CAS #: 12674-11-2		
6.251	6.250	0.001	28796	0.09357	0.94	80.00- 120.00	100.00(a)	
6.504	6.503	0.001	96416	0.08198	0.82	358.17- 398.17	334.82	
6.659	6.657	0.002	46895	0.08935	0.89	149.17- 189.17	162.85	
	Average of Peak Concentrations =				0.88			
8 Aroclor-1260						CAS #: 11096-82-5		
9.254	9.255	-0.001	109156	0.08949	0.89	80.00- 120.00	100.00(a)	
9.399	9.398	0.001	71656	0.09630	0.96	41.51- 81.51	65.65	
9.884	9.883	0.001	67949	0.08589	0.86	44.67- 84.67	62.25	
	Average of Peak Concentrations =				0.90			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
15.418	15.423	-0.005	1795770	0.10594	1.0			

Data File: \\avogadro\organics\E2.i\111109R.B\E2K7619R.D
Report Date: 21-Nov-2011 10:41

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\111109R.B\E2K7619R.D
Date : 09-NOV-2011 11:04
Client ID: ALCS2G
Instrument: E2.i
Sample Info: LCS-62678,ALCS2G,62678,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.

ALCS3A(1)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-62802

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E3I6746F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 11/08/2011

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	
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	
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.

ALCS3A(2)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-62802

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E3I6746R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 11/08/2011

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	0.97	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	0.98	J
37324-23-5	Aroclor-1262	1.0	U
11100-14-4	Aroclor-1268	1.0	U

Data File: \\avogadro\organics\E3.I\111116BF.B\E3I6746F.D
Report Date: 22-Nov-2011 12:24

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111116BF.B\E3I6746F.D
Lab Smp Id: LCS-62802 Client Smp ID: ALCS3A
Inj Date : 16-NOV-2011 17:43
Operator : DL   SRC: LIMS Inst ID: E3.i
Smp Info : LCS-62802,ALCS3A,62802,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BF.B\E3_ARO_5_F.m
Meth Date : 17-Nov-2011 08:16 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699F.D
Als bottle: 6 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

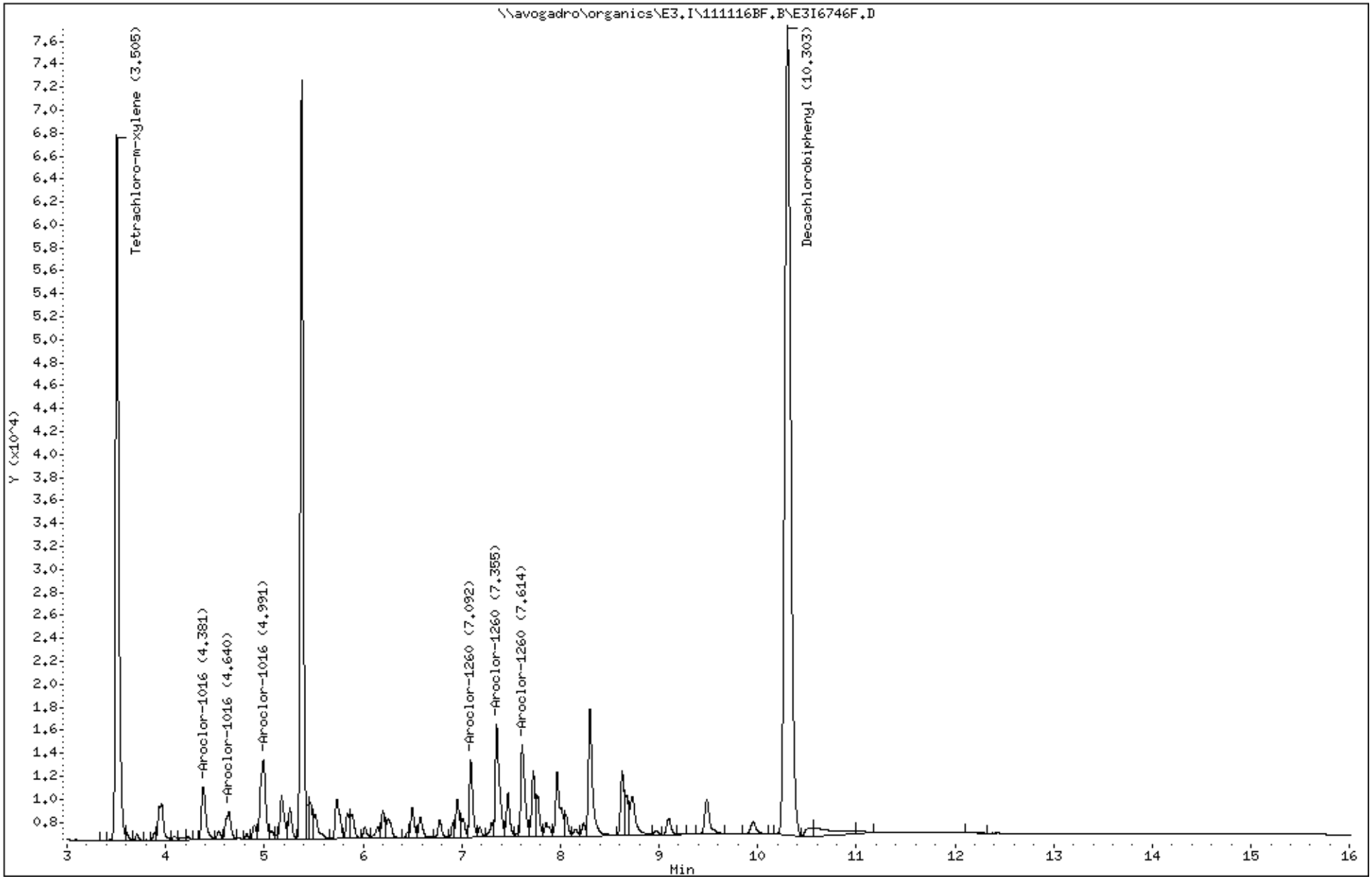
RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
3.505	3.492	0.013	1370939	0.04284	0.43		
5 Aroclor-1016						CAS #: 12674-11-2	
4.380	4.365	0.015	143533	0.10470	1.0	80.00- 120.00	100.00
4.640	4.624	0.016	91003	0.09968	1.00	46.55- 86.55	63.40
4.991	4.975	0.016	253920	0.10173	1.0	160.67- 200.67	176.91
Average of Peak Concentrations =					1.0		
9 Aroclor-1260						CAS #: 11096-82-5	
7.091	7.079	0.012	160140	0.10503	1.0	80.00- 120.00	100.00(H)
7.355	7.343	0.012	276184	0.10486	1.0	334.96- 374.96	172.46
7.613	7.602	0.011	229233	0.09858	0.98	19.04- 59.04	143.14
Average of Peak Concentrations =					1.0		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
10.302	10.281	0.021	2956118	0.08667	0.87		

Data File: \\avogadro\organics\E3.I\111116BF.B\E3I6746F.D
Report Date: 22-Nov-2011 12:24

QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\E3.i\111116BF.B\E3I6746F.D
Date : 16-NOV-2011 17:43
Client ID: ALCS3A
Instrument: E3.i
Sample Info: LCS-62802,ALCS3A,62802,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6746R.D
Report Date: 22-Nov-2011 12:25

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111116BR.B\E3I6746R.D
Lab Smp Id: LCS-62802 Client Smp ID: ALCS3A
Inj Date : 16-NOV-2011 17:43
Operator : DL SRC: LIMS Inst ID: E3.i
Smp Info : LCS-62802,ALCS3A,62802,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BR.B\E3_ARO_5_R.m
Meth Date : 17-Nov-2011 08:19 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699R.D
Als bottle: 6 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

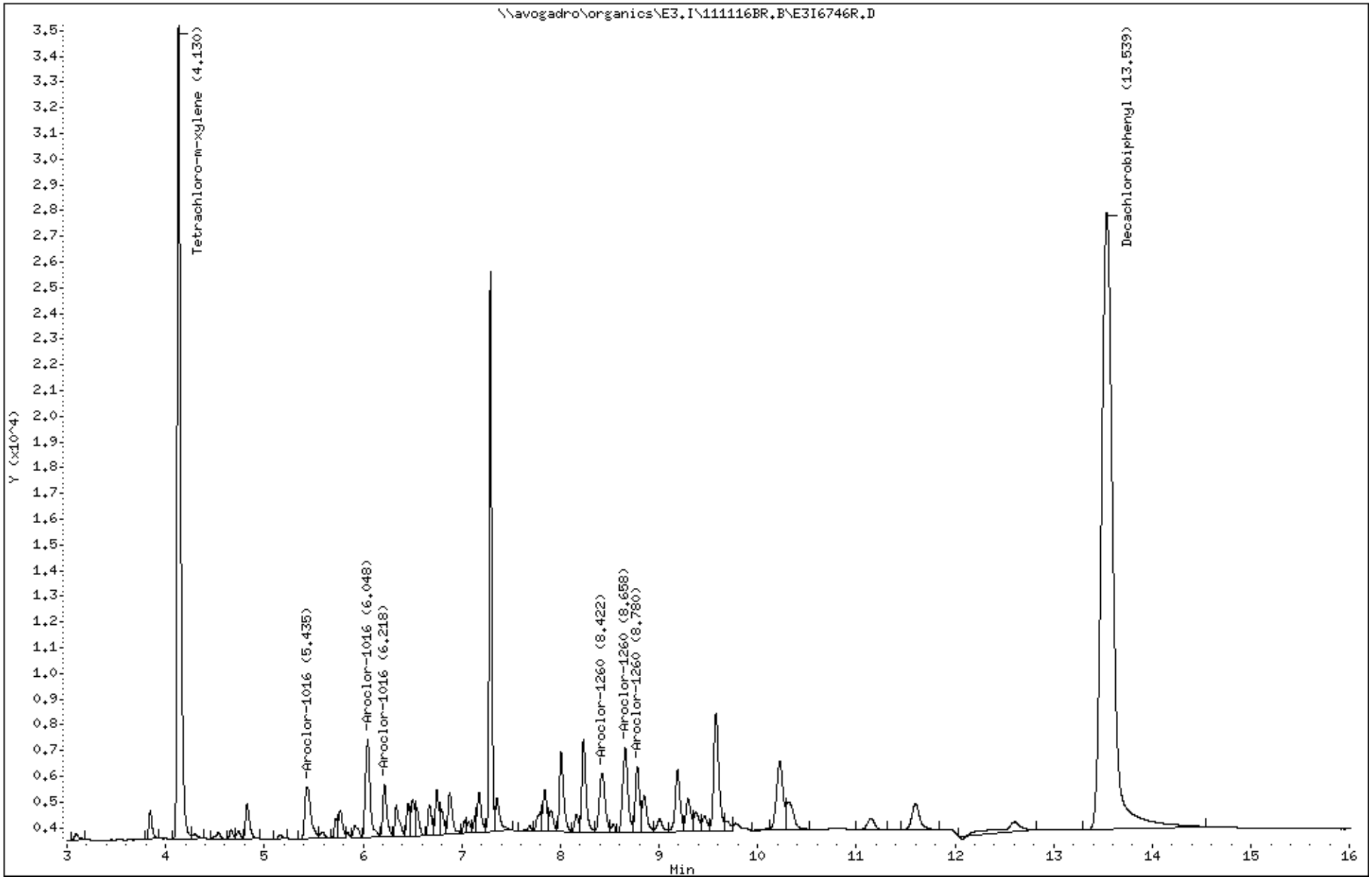
RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.129	4.116	0.013	756096	0.04671	0.47		
6 Aroclor-1016						CAS #: 12674-11-2	
5.434	5.415	0.019	85490	0.10373	1.0	80.00- 120.00	100.00(a)
6.048	6.033	0.015	127036	0.09364	0.94	146.03- 186.03	148.60
6.217	6.202	0.015	57197	0.09235	0.92	56.14- 96.14	66.90
		Average of Peak Concentrations =			0.96		
8 Aroclor-1260						CAS #: 11096-82-5	
8.422	8.407	0.015	94396	0.10059	1.0	80.00- 120.00	100.00(a)
8.658	8.642	0.016	121638	0.09058	0.90	121.56- 161.56	128.86
8.780	8.763	0.017	78779	0.10342	1.0	60.25- 100.25	83.46
		Average of Peak Concentrations =			0.98		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
13.538	13.497	0.041	1941678	0.09285	0.93		

Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6746R.D
Report Date: 22-Nov-2011 12:25

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6746R.D
Date : 16-NOV-2011 17:43
Client ID: ALCS3A
Instrument: E3.i
Sample Info: LCS-62802,ALCS3A,62802,somaro.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.53



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ALCS3B(1)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-63016

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E3I6765F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 11/14/2011

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	0.97	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	1.1	
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.

ALCS3B(2)

Lab Name: MITKEM LABORATORIES Contract: EP-W-11-033

Lab Code: MITKEM Case No.: 41926 Mod. Ref No.: SDG No.: H30X4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-63016

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E3I6765R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 11/14/2011

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	0.94	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	0.98	J
37324-23-5	Aroclor-1262	1.0	U
11100-14-4	Aroclor-1268	1.0	U

Data File: \\avogadro\organics\E3.I\111116BF.B\E3I6765F.D
Report Date: 22-Nov-2011 12:24

Spectrum Analytical, Inc. RI Division

8080 PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111116BF.B\E3I6765F.D
Lab Smp Id: LCS-63016 Client Smp ID: ALCS3B
Inj Date : 16-NOV-2011 23:41
Operator : DL SRC: LIMS Inst ID: E3.i
Smp Info : LCS-63016,ALCS3B,63016,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase: CLP PEST Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BF.B\E3_ARO_5_F.m
Meth Date : 17-Nov-2011 08:16 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699F.D
Als bottle: 25 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

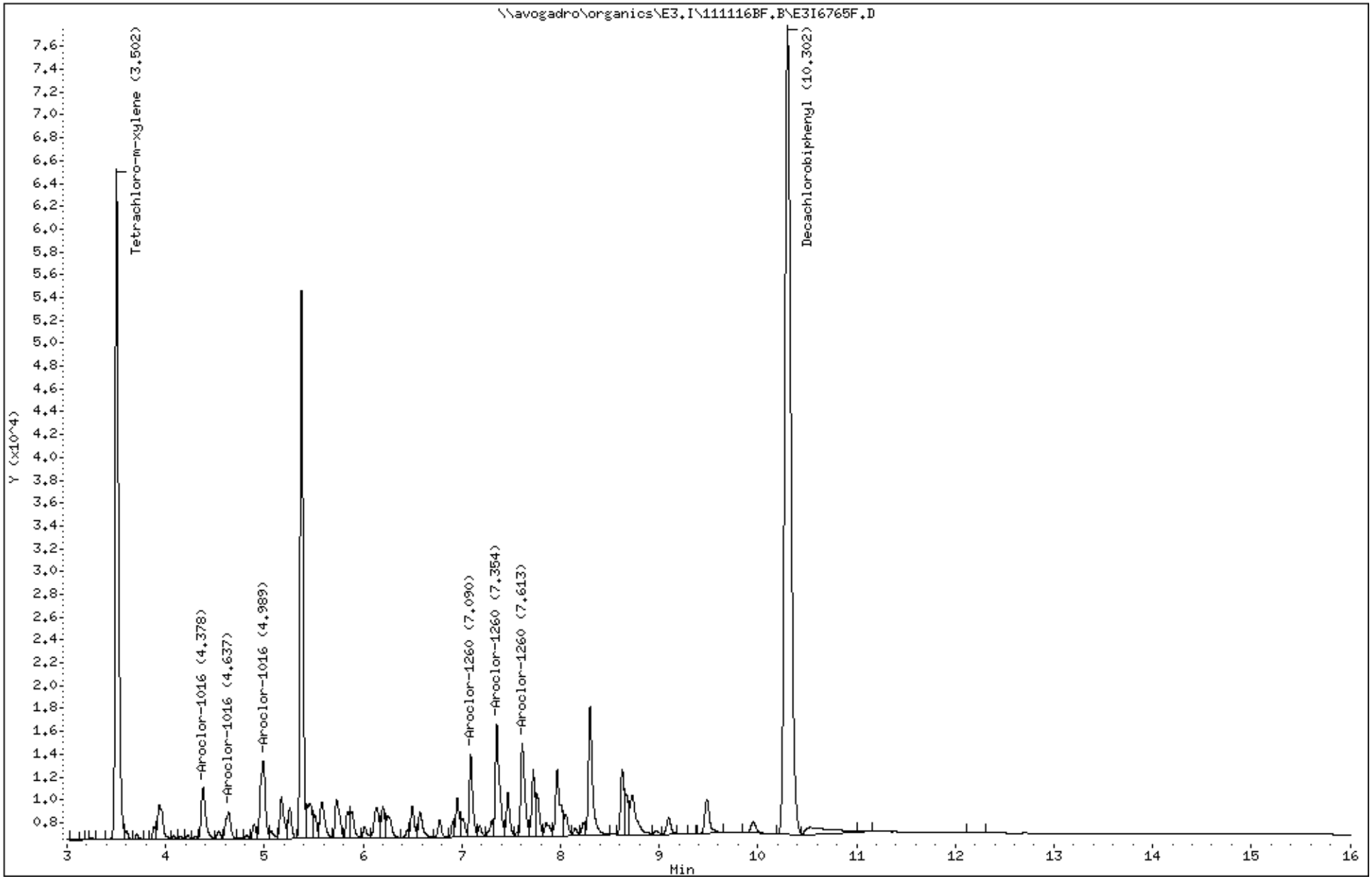
RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
3.502	3.492	0.010	1311588	0.04099	0.41		
5 Aroclor-1016						CAS #: 12674-11-2	
4.377	4.365	0.012	140073	0.10217	1.0	80.00- 120.00	100.00(a)
4.637	4.624	0.013	86314	0.09455	0.94	46.55- 86.55	61.62
4.988	4.975	0.013	237222	0.09504	0.95	160.67- 200.67	169.36
Average of Peak Concentrations =					0.97		
9 Aroclor-1260						CAS #: 11096-82-5	
7.090	7.079	0.011	173424	0.11374	1.1	80.00- 120.00	100.00
7.353	7.343	0.010	281881	0.10702	1.1	334.96- 374.96	162.54
7.612	7.602	0.010	233462	0.10040	1.0	19.04- 59.04	134.62
Average of Peak Concentrations =					1.1		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
10.301	10.281	0.020	2971509	0.08712	0.87		

Data File: \\avogadro\organics\E3.I\111116BF.B\E3I6765F.D
Report Date: 22-Nov-2011 12:24

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.i\111116BF.B\E3I6765F.D
Date : 16-NOV-2011 23:41
Client ID: ALCS3B
Instrument: E3.i
Sample Info: LCS-63016,ALCS3B,63016,somaro,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.53



Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6765R.D
Report Date: 22-Nov-2011 12:25

Spectrum Analytical, Inc. RI Division

8080/8081PCB Quantitation Report

Data file : \\avogadro\organics\E3.I\111116BR.B\E3I6765R.D
Lab Smp Id: LCS-63016 Client Smp ID: ALCS3B
Inj Date : 16-NOV-2011 23:41
Operator : DL SRC: LIMS Inst ID: E3.i
Smp Info : LCS-63016,ALCS3B,63016,somaro.sub,,
Misc Info : 2,3,,1
Comment   : Column Phase:CLP PEST(II) Column Diameter: 0.53mm
Method   : \\avogadro\organics\E3.I\111116BR.B\E3_ARO_5_R.m
Meth Date : 17-Nov-2011 08:19 gappolonia Quant Type: ESTD
Cal Date : 15-NOV-2011 01:36 Cal File: E3I6699R.D
Als bottle: 25 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

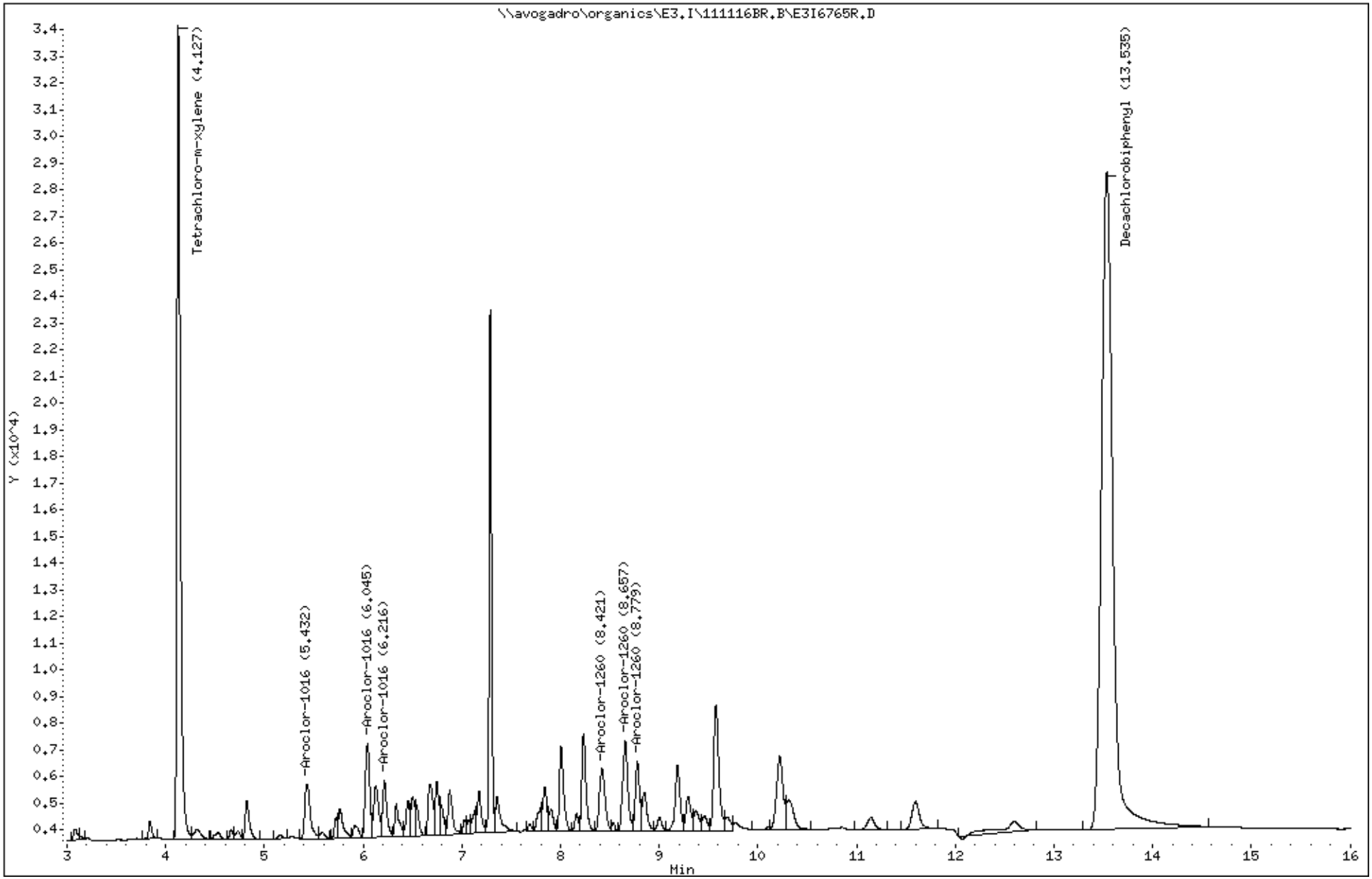
				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.127	4.116	0.011	735401	0.04544	0.45		
6 Aroclor-1016						CAS #: 12674-11-2	
5.431	5.415	0.016	79734	0.09674	0.97	80.00- 120.00	100.00(a)
6.045	6.033	0.012	110904	0.08175	0.82	146.03- 186.03	139.09
6.215	6.202	0.013	63287	0.10219	1.0	56.14- 96.14	79.37
		Average of Peak Concentrations =			0.94		
8 Aroclor-1260						CAS #: 11096-82-5	
8.421	8.407	0.014	93515	0.09965	1.00	80.00- 120.00	100.00(a)
8.657	8.642	0.015	122717	0.09138	0.91	121.56- 161.56	131.23
8.778	8.763	0.015	78326	0.10282	1.0	60.25- 100.25	83.76
		Average of Peak Concentrations =			0.98		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
13.534	13.497	0.037	2000810	0.09568	0.96		

Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6765R.D
Report Date: 22-Nov-2011 12:25

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E3.I\111116BR.B\E3I6765R.D
Date : 16-NOV-2011 23:41
Client ID: ALCS3B
Instrument: E3.i
Sample Info: LCS-63016,ALCS3B,63016,somaro.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.53



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

1216

Wednesday, November 09, 2011 14:05

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division PREP BATCH REPORT

Prep Start Date: **11/8/2011 11:00:00**
Prep End Date: **11/9/2011 2:02:00 P**
Prep Batch ID: **62806**
Prep Code: **SOM01.0_SVOA_LOW_W_PR**
Prep Type: **CONT/SW3520C**
Technician: **James Kyle Dorsey**
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?: N/A
Filter Lot: N/A
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: 11/08/2011 15:00
L/L End Time: 11/09/2011 09:00
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-62806	BatchQC		1000	1	OSW111013A	1			JKD	TM			11/09/11	JMV	R7	7.0	☐	☑	KD 1
K2213-03A	H30W9	A	1000	1	OSW111013A	1			JKD	TM	11/22/11	01	11/09/11	JMV	R7	7.0	☐	☑	KD 1
K2213-04A	H30X2	A	1000	1	OSW111013A	1			JKD	TM	11/22/11	01	11/09/11	JMV	R7	7.0	☐	☑	KD 1
K2213-06A	H30X6	A	1000	1	OSW111013A	1			JKD	TM	11/22/11	01	11/09/11	JMV	R7	7.0	☐	☑	KD 1
K2213-07A	H30X7	A	1000	1	OSW111013A	1			JKD	TM	11/22/11	01	11/09/11	JMV	R7	7.0	☐	☑	KD 1
K2213-08A	H30X9	A	1000	1	OSW111013A	1			JKD	TM	11/22/11	01	11/09/11	JMV	R7	7.0	☐	☑	KD 1
K2213-09A	H30Y0	A	1000	1	OSW111013A	1			JKD	TM	11/22/11	01	11/09/11	JMV	R7	7.0	☐	☑	KD 1
K2213-10A	H30Y1	A	1000	1	OSW111013A	1			JKD	TM	11/22/11	01	11/09/11	JMV	R7	7.0	☐	☑	KD 1
K2213-11A	H30Z2	A	1000	1	OSW111013A	1			JKD	TM	11/22/11	01	11/09/11	JMV	R7	7.0	☐	☑	KD 1
K2213-11AMS	H30Z2	A	1000	1	OSW111013A	1	OSW111025B	1	JKD	TM	11/22/11	01	11/09/11	JMV	R7	7.0	☐	☑	KD 1
K2213-11AMSD	H30Z2	A	1000	1	OSW111013A	1	OSW111025B	1	JKD	TM	11/22/11	01	11/09/11	JMV	R7	7.0	☐	☑	KD 1
K2213-12A	H30Z3	A	1000	1	OSW111013A	1			JKD	TM	11/22/11	01	11/09/11	JMV	R7	7.0	☐	☑	KD 1
K2213-13A	H30Z4	A	1000	1	OSW111013A	1			JKD	TM	11/22/11	01	11/09/11	JMV	R7	7.0	☐	☑	KD 1
K2213-14A	H30Z5	A	1000	1	OSW111013A	1			JKD	TM	11/22/11	01	11/09/11	JMV	R7	7.0	☐	☑	KD 1
K2213-15A	H30Z7	A	1000	1	OSW111013A	1			JKD	TM	11/22/11	01	11/09/11	JMV	R7	7.0	☐	☑	KD 1
K2213-16A	H30Z8	A	1000	1	OSW111013A	1			JKD	TM	11/22/11	01	11/09/11	JMV	R7	7.0	☐	☑	KD 1

Jonathan M Vales — 11/09/2011
Analyst Reviewed — Date

Timothy McDaniel — 11/09/2011
Manager Reviewed — Date

Comments:

*A = Analyst (Spiked) *W = Witnessed (Spike) *T = Transferred

JV 11/9/11

1217

Logbook ID: 50.0147-11/11

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division PREP BATCH REPOR

Prep Start Date: **11/2/2011 5:38:32 P**
Prep End Date: **11/8/2011 3:53:00 P**
Prep Batch ID: **62678**
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-62678	BatchQC		1000	10	OPW110822B	1			TM	CJA			11/08/11	JBW	R21		☐	☐	Turbo Vap 1
	CLEAN UP (MB-62678): ACID_111108c/jwarner, CU_111108C/jwarner																		
LCS-62678	BatchQC		1000	10	OPW110822B	1	OPW110606A	1	TM	CJA			11/08/11	JBW	R21		☐	☐	Turbo Vap 1
	CLEAN UP (LCS-62678): ACID_111108c/jwarner, CU_111108C/jwarner																		
K2152-10A	B9T97	A	1000	10	OPW110822B	1			TM	CJA	11/21/11	01	11/08/11	JBW	R21		☐	☐	Turbo Vap 1
	CLEAN UP (K2152-10A): ACID_111108c/jwarner, CU_111108C/jwarner																		
K2152-17B	B9TG6	A	1000	10	OPW110822B	1			TM	CJA	11/21/11	01	11/08/11	JBW	R21		☐	☐	Turbo Vap 1
	CLEAN UP (K2152-17B): ACID_111108c/jwarner, CU_111108C/jwarner																		
K2213-01A	H30X4	A	1000	10	OPW110822B	1			TM	CJA	11/22/11	01	11/08/11	JBW	R21		☐	☐	Turbo Vap 1
	CLEAN UP (K2213-01A): ACID_111108c/jwarner, CU_111108C/jwarner																		
K2213-02A	H30Y7	A	1000	10	OPW110822B	1			TM	CJA	11/22/11	01	11/08/11	JBW	R21		☐	☐	Turbo Vap 1
	CLEAN UP (K2213-02A): ACID_111108c/jwarner, CU_111108C/jwarner																		

Jodie B Warner
Analyst Reviewed
11/08/2011
Date

Timothy McDaniel
Manager Reviewed
11/08/2011
Date

Comments:

*A = Analyst (Spiked) *W = Witnessed (Spike) *T = Transferred

Solvent cleanup Copper lot #

Soxhlet Cycle/Hour:

Sonicator Tuned? Yes/No

Reviewed By:

VW 11/8/11

Logbook ID: 50.0149-10/11

Prep Start Date: **11/8/2011 9:00:00 A**
Prep End Date: **11/16/2011 1:56:00**
Prep Batch ID: **62802**

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-62802	BatchQC		1000	10	OPW110822B	1			CJA	TM			11/16/11	JBW	R21		☐	☐	Turbo Vap 1
CLEAN UP (MB-62802): ACID_111116B/jwarner, CU_111116B/jwarner																			
LCS-62802	BatchQC		1000	10	OPW110822B	1	OPW110606A	1	CJA	TM			11/16/11	JBW	R21		☐	☐	Turbo Vap 1
CLEAN UP (LCS-62802): ACID_111116B/jwarner, CU_111116B/jwarner																			
K2213-03A	H30W9	A	1000	10	OPW110822B	1			CJA	TM	11/22/11	01	11/16/11	JBW	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2213-03A): ACID_111116B/jwarner, CU_111116B/jwarner																			
K2213-04A	H30X2	A	1000	10	OPW110822B	1			CJA	TM	11/22/11	01	11/16/11	JBW	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2213-04A): ACID_111116B/jwarner, CU_111116B/jwarner																			
K2213-06A	H30X6	A	1000	10	OPW110822B	1			CJA	TM	11/22/11	01	11/16/11	JBW	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2213-06A): ACID_111116B/jwarner, CU_111116B/jwarner																			
K2213-07A	H30X7	A	1000	10	OPW110822B	1			CJA	TM	11/22/11	01	11/16/11	JBW	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2213-07A): ACID_111116B/jwarner, CU_111116B/jwarner																			
K2213-08A	H30X9	A	1000	10	OPW110822B	1			CJA	TM	11/22/11	01	11/16/11	JBW	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2213-08A): ACID_111116B/jwarner, CU_111116B/jwarner																			
K2213-09A	H30Y0	A	1000	10	OPW110822B	1			CJA	TM	11/22/11	01	11/16/11	JBW	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2213-09A): ACID_111116B/jwarner, CU_111116B/jwarner																			
K2213-10A	H30Y1	A	1000	10	OPW110822B	1			CJA	TM	11/22/11	01	11/16/11	JBW	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2213-10A): ACID_111116B/jwarner, CU_111116B/jwarner																			
K2213-11A	H30Z2	A	1000	10	OPW110822B	1			CJA	TM	11/22/11	01	11/16/11	JBW	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2213-11A): ACID_111116B/jwarner, CU_111116B/jwarner																			
K2213-11AMS	H30Z2	A	1000	10	OPW110822B	1	OPW110701A	1	CJA	TM	11/22/11	01	11/16/11	JBW	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2213-11AMS): ACID_111116B/jwarner, CU_111116B/jwarner																			
K2213-11AMSD	H30Z2	A	1000	10	OPW110822B	1	OPW110701A	1	CJA	TM	11/22/11	01	11/16/11	JBW	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2213-11AMSD): ACID_111116B/jwarner, CU_111116B/jwarner																			
K2213-12A	H30Z3	A	1000	10	OPW110822B	1			CJA	TM	11/22/11	01	11/16/11	JBW	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2213-12A): ACID_111116B/jwarner, CU_111116B/jwarner																			
K2213-13A	H30Z4	A	1000	10	OPW110822B	1			CJA	TM	11/22/11	01	11/16/11	JBW	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2213-13A): ACID_111116B/jwarner, CU_111116B/jwarner																			
K2213-14A	H30Z5	A	1000	10	OPW110822B	1			CJA	TM	11/22/11	01	11/16/11	JBW	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2213-14A): ACID_111116B/jwarner, CU_111116B/jwarner																			
K2213-15A	H30Z7	A	1000	10	OPW110822B	1			CJA	TM	11/22/11	01	11/16/11	JBW	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2213-15A): ACID_111116B/jwarner, CU_111116B/jwarner																			

Logbook ID: 50.0149-10/11

JW 11/16/11

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

PREP BATCH REPOR

Prep Start Date: **11/8/2011 9:00:00 A**
Prep End Date: **11/16/2011 1:56:00**
Prep Batch ID: **62802**
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
K2213-16A	H30Z8	A	1000	10	OPW110822B	1			CJA	TM	11/22/11	01	11/16/11	JBW	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2213-16A): ACID_111116B/jwarner, CU_111116B/jwarner																			
K2276-01A	B9TA0	A	1000	10	OPW110822B	1			CJA	TM	11/24/11	01	11/16/11	JBW	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2276-01A): ACID_111116B/jwarner, CU_111116B/jwarner																			
K2276-03A	B9TA1	A	1000	10	OPW110822B	1			CJA	TM	11/24/11	01	11/16/11	JBW	R21		☐	☐	Turbo Vap 1
CLEAN UP (K2276-03A): ACID_111116B/jwarner, CU_111116B/jwarner																			

Jodie B Warner — 11/16/2011
Analyst Reviewed — Date

Timothy McDaniel — 11/16/2011
Manager Reviewed — Date

Comments:

*A = Analyst (Spiked) *W = Witnessed (Spike) *T = Transferred

☐	PEST Surrogate Spike Std ID:	Vol. Spiked:	Sodium Sulfate lot#
☐	PCB Surrogate Spike Std ID:	Vol. Spiked:	Hexane lot #
☐	PEST LCS Spike Std ID:	Vol. Spiked:	Sulfuric Acid lot#
☐	PCB LCS Spike Std ID:	Vol. Spiked:	Sulfur cleanup Copper lot #

JW 11/16/11

L/L Drip Rate:
Soxhlet Cycle/Hour:
Sonicator Tuned? Yes/No
Reviewed By:

Logbook ID: 50.0149-10/11

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division PREP BATCH REPORT

Prep Start Date: **11/14/2011 8:46:07**
Prep End Date: **11/15/2011 8:00:00** Prep Code: **SOM01.0_ARO_W_PR** Prep Type: **SEPF/SW3510C** Prep Factor Units: **mL / mL**
Prep Batch ID: **63016** Technician: **Courtney J Anderson**

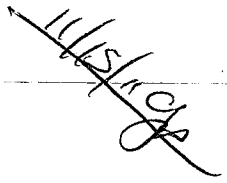
QC Matrix: NASO4	Solvent (1): MECL2	Solvent (3): N/A	Solvent (5): N/A	Clean Up (1): N/A	Clean Up (3): N/A
QC Matrix Lot: 106147	Solvent (1) Lot: DE 980	Solvent (3) Lot: N/A	Solvent (5) Lot: N/A	Clean Up (1) Lot: N/A	Clean Up (1) Lot: N/A
Filter?: FILTER	Solvent (2): HEXANE	Solvent (4): N/A	Solvent (6): N/A	Clean Up (2): N/A	Clean Up (4): N/A
Filter Lot: FC003284	Solvent (2) Lot: DA 782	Solvent (4) Lot: N/A	Solvent (6) Lot: N/A	Clean Up (2) Lot: N/A	Clean Up (4) Lot: N/A
	Start Time: N/A	Cycles/Hour 0	Sonicator Tuned?N/A	Bath Temp1 (C): N/A	Therm ID1: N/A
	End Time: N/A				

Mitkem Sample ID	Client Samp ID	M	Initial (mL/g)	Final (mL)	Surrogate Spike ID	Surr (mL)	LCS/D MS/D Spike ID	Spike (mL)	A* Init	W* Init	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11	pH <2	CNCNTR Unit
MB-63016	BatchQC		1000	10	OPW111102A	1			CJA	TM			11/15/11	CJA	R21	7	☐	☐	Turbo Vap 1
CLEAN UP (MB-63016): ACID_111115E/canderson, CU_111115G/canderson																			
LCS-63016	BatchQC		1000	10	OPW111102A	1	OPW110928A	1	CJA	TM			11/15/11	CJA	R21	7	☐	☐	Turbo Vap 1
CLEAN UP (LCS-63016): ACID_111115E/canderson, CU_111115G/canderson																			
K2213-01ARE	H30X4	A	1000	10	OPW111102A	1			CJA	TM	11/22/11	01	11/15/11	CJA	R21	7	☐	☐	Turbo Vap 1
CLEAN UP (K2213-01ARE): ACID_111115E/canderson, CU_111115G/canderson																			
K2213-02ARE	H30Y7	A	1000	10	OPW111102A	1			CJA	TM	11/22/11	01	11/15/11	CJA	R21	7	☐	☐	Turbo Vap 1
CLEAN UP (K2213-02ARE): ACID_111115E/canderson, CU_111115G/canderson																			

Courtney J Anderson 11/15/2011 Timothy McDaniel 11/15/2011
Analyst Reviewed Date Manager Reviewed Date

Commerits:

*A = Analyst (Spiked) *W = Witnessed (Spike) *T = Transferred



1221

Logbook ID: 50.0149-11/11

Spectrum Analytical, Inc. RI Division V5 Injection Log
Volatiles Laboratory

METHOD: TVOA ANALYST: WL
ICAL DATE: 11/9/11

BATCH: 111109.B 5lvl
09A.B 6lvl
Start: 09-NOV-11 19:00
End: 10-NOV-11 06:28

Comments:

Standards: IS-VW111024A ___ uL
DAL-VW111024B ___ uL
STD-VW111015A ___ uL
___ uL

Reviewed By: 11-15-11 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
V5N2820	19:00	BFB05	BFB05		AQ																			1		OK	
V5N2821	19:29	VSTD0.205	VSTD0.205		AQ		89	87	82															1		ok	
V5N2822	19:57	VSTD00505	VSTD00505		AQ		100	100	100															1		ok	
V5N2823	20:26	VSTD0.505	VSTD0.505		AQ		109	109	114															1		ok	
V5N2824	20:55	VSTD02005	VSTD02005		AQ		97	102	104															1		ok	
V5N2825	21:23	VSTD01005	VSTD01005		AQ		104	102	103															1		ok	
V5N2826	21:52	VSTD00105	VSTD00105		AQ		105	100	104															1		ok	
V5N2827	22:20	MB-62756	VBLK05	62756	AQ		132	130	120															1		ok	
V5N2828	22:48	K2260-01A	CY4N9	62756	AQ	1	133	131	122															1		ok	2
V5N2829	23:17	K2305-01A	C0AB7	62756	AQ	1	127	128	119															1		ok	2
V5N2830	23:46	K2305-02A	C0AB8	62756	AQ	1	127	124	115															1		ok	2
V5N2831	00:14	K2305-03A	C0AB9	62756	AQ	1	130	130	118															1		ok	2
V5N2832	00:43	K2305-04A	C0AC0	62756	AQ	1	125	123	113															1		ok	2
V5N2833	01:12	K2305-05A	C0AC1	62756	AQ	1	132	127	117															1		ok	2
V5N2834	01:40	K2305-06A	C0AC2	62756	AQ	1	127	127	117															1		ok	2
V5N2835	02:09	K2305-07A	C0AC3	62756	AQ	1	125	126	118															1		ok	2
V5N2836	02:38	K2305-08A	C0AC4	62756	AQ	1	123	121	113															1		ok	2
V5N2837	03:07	K2254-01A	C0579	62756	AQ	1	127	129	118															1		ok	2
V5N2838	03:35	K2254-06A	C0584	62756	AQ	1	133	129	121															1		ok	2
V5N2839	04:04	K2254-02A	C0580	62756	AQ	1	128	127	110															1		OK	2
V5N2840	04:34	K2254-03A	C0581	62756	AQ	1	120	123	108															1		ok	2
V5N2841	05:02	K2254-05A	C0583	62756	AQ	1	134	128	120															1		ok	2
V5N2842	05:31	K2254-04A	C0582	62756	AQ	1	134	131	125															1	E	CCl4=93. RRX10	2
V5N2843	06:00	VHBLK05	VHBLK05	62756	AQ		126	128	112															1		OK, clean . CK22607 CK23057	
V5N2844	06:28	VSTD005P5	VSTD005P5		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 11/14/11

[redacted] INSTRUMENT [redacted] Spectrum Analytical, Inc. Div [redacted]

INJECTION LOG

VOLATILES LABORATORY

METHOD:

Spectrum Analytical, Inc. RI Division V5 Injection Log
Volatiles Laboratory

METHOD: TVOA ANALYST: ML BATCH: 111110.B Start: 10-NOV-11 06:28
ICAL DATE: 11/9/11 End: 10-NOV-11 17:28

Comments:

Standards: IS-VW1110 24A ___ uL
DFC-VW1110 24B ___ uL
SSD-VW111015A ___ uL
___ uL

Reviewed By: [signature] Manual Integration: NA MI Review: ML

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
V5N2844	06:28	VSTD005P5	VSTD005P5		AQ		100	100	100															1		OK	
V5N2845	06:57	MB-62892	VBLKP5	62892	AQ		127	128	127															1		OK	
V5N2846	07:25	K2213-01B	H30X4	62892	AQ	2	98	103	111			*												4		OK CB=12, foaming at 1X, reported	2
V5N2847	07:55	K2213-02B	H30Y7	62892	AQ	1	96	92	92															1		OK	2
V5N2848	08:23	K2213-03B	H30W9	62892	AQ	1	87	90	95															1		OK	2
V5N2849	08:52	K2213-04B	H30X2	62892	AQ	1	82	86	97															1		OK	2
V5N2850	09:20	K2351-01A	C0AJ3	62892	AQ	1	99	105	107															1		OK	2
V5N2851	09:49	K2351-02A	C0AJ4	62892	AQ	1	104	107	115															1		OK	2
V5N2852	10:17	K2351-03A	C0AJ5	62892	AQ	1	110	112	120															1		OK	2
V5N2853	10:45	K2213-05A	H30X3	62892	AQ	1	104	103	110															1		OK	2
V5N2854	11:14	K2213-06B	H30X6	62892	AQ	1	102	107	118															1		OK	2
V5N2855	11:43	K2213-07B	H30X7	62892	AQ	1	99	102	106															1		OK	2
V5N2856	12:11	K2213-08B	H30X9	62892	AQ	1	102	105	109			*												1		OK	2
V5N2857	12:40	K2213-09B	H30Y0	62892	AQ	1	97	101	104		*	*												1		OK	2
V5N2858	13:09	K2213-10B	H30Y1	62892	AQ	1	106	111	112			*												1		OK	2
V5N2860	13:38	K2213-12B	H30Z3	62892	AQ	1	107	112	111			*												1		OK	2
V5N2861	14:06	K2213-13B	H30Z4	62892	AQ	1	103	106	113															1		OK	2
V5N2862	14:35	K2213-14B	H30Z5	62892	AQ	1	105	108	114															1		OK	2
V5N2863	15:04	K2213-15B	H30Z7	62892	AQ	1	110	114	119			*												1		OK	2
V5N2864	15:33	K2213-16B	H30Z8	62892	AQ	1	110	112	116			*												1		OK	2
V5N2865	16:02	K2213-17A	H3BA1	62892	AQ	1	111	117	125			*												10		OK CCL=10	2
V5N2866	16:31	K2254-04ADL	C0582DL	62892	AQ	2	101	104	108			*												1		OK. (K2254) (K2351)	
V5N2867	17:00	VHBLKP5	VHBLKP5	62892	AQ		105	104	112															1		OK	
V5N2868	17:28	VSTD005Q5	VSTD005Q5		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 11/14/11

Spectrum Analytical, Inc. RI Division V5 Injection Log
Volatiles Laboratory

METHOD: TVOA
ICAL DATE: 11/9/11
ANALYST: WL
BATCH: 111110A.B
Start: 10-NOV-11 17:28
End: 11-NOV-11 05:25

Comments:

Standards: IS-VW111024A ____ uL
SMC-VW111024B ____ uL
STP-VW111017A ____ uL
_____ ____ uL

Reviewed By: [signature] Manual Integration: NA MI Review: WL

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS DFB	CBZ	DCB	SURROGATES OLC-SOM A	B	C	D	E	F	G	H	I	J	K	L	M	N	DILN	FLG	COMMENTS	pH
V5N2868	17:28	VSTD005Q5	VSTD005Q5		AQ	__	100	100	100															1		OK	
V5N2869	18:26	MB-62893	VBLKQ5	62893	AQ	__	120	121	116															1		OK	
V5N2870	18:54	K2213-11B	H30Z2	62893	AQ	1	128	129	123		*													1		OK	
V5N2871	19:23	K2213-11BMS	H30Z2MS	62893	AQ	2	115	117	109		*													1		OK	2
V5N2872	19:52	K2213-11BMSD	H30Z2MSD	62893	AQ	3	114	111	106		*													1		OK	2
V5N2873	20:20	K2276-02A	B9L16	62893	AQ	1	131	127	126		*													1		OK	2
V5N2874	20:49	K2276-04A	B9TA7	62893	AQ	1	133	129	120		*													1		OK	2
V5N2875	21:18	K2276-05A	B9TC9	62893	AQ	1	125	120	115		*													1		OK	2
V5N2876	21:46	K2276-06A	B9L17	62893	AQ	1	129	132	120		*													1		OK	2
V5N2877	22:15	K2276-07A	B9TB9	62893	AQ	1	126	128	119		*													1		OK	2
V5N2878	22:43	K2276-08A	B9TC1	62893	AQ	1	131	126	119															1		OK	2
V5N2879	23:12	K2276-09A	B9TE9	62893	AQ	1	127	126	119		*													1		OK	2
V5N2880	23:41	K2276-10A	B9TF1	62893	AQ	1	126	124	111		*													1		OK	2
V5N2881	00:10	K2276-11A	B9TG3	62893	AQ	1	129	126	106															1		OK	2
V5N2882	00:39	K2293-01A	C09K6	62893	AQ	1	122	122	110		*													1		OK	2
V5N2883	01:07	K2293-02A	C09K7	62893	AQ	1	125	124	111		*													1		OK	2
V5N2884	01:35	K2293-06A	C09L1	62893	AQ	1	126	122	109															1		OK	2
V5N2885	02:04	K2293-07A	C09L2	62893	AQ	1	121	114	111		*													1		OK	2
V5N2886	02:32	K2293-09A	C09L4	62893	AQ	1	125	122	117															1		OK	2
V5N2887	03:01	K2293-10A	C09L5	62893	AQ	1	122	121	117		*													1		OK	2
V5N2888	03:30	K2293-13A	C09L8	62893	AQ	1	122	121	115															1		OK	2
V5N2889	03:59	K2293-08A	C09L3	62893	AQ	1	113	110	107		*	*												1		OK	2
V5N2890	04:27	K2293-05A	C09L0	62893	AQ	1	122	121	117		*													1		OK	2
V5N2891	04:56	VHBLKQ5	VHBLKQ5	62893	AQ	__	124	124	112															1		OK	2
V5N2892	05:25	VSTD005R5	VSTD005R5		AQ	__	100	100	100															1		OK CK2213> (K2276)	
																								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 11/14/11

Logbook ID: 70.0168- 09/11

Instrument S2
Injection Log

Spectrum Analytical, Inc. RI Div
SemiVolatiles Laboratory

Spectrum Analytical, Inc. RI Division S2 Injection Log
Semivolatiles Laboratory

METHOD: SOM1.0W ANALYST: MMS BATCH: 111025.B Start: 25-OCT-11 09:32
ICAL DATE: 10/25/11 EMV: 2801 End: 25-OCT-11 16:41

Type: SW1107ZZA
C1: SW111019A
C2: SW111019B
C3: SW111019C
C4: SW111019D
C5: SW111019E

Internal Standard: SI111019A
Comments:

Inlet Maintenance By: MMS
Liner : Cleaned
Column : Clipped
Inlet Seal: Cleaned
Septum : New

Reviewed By: 10/26/11 BM Manual Integration: MMS 10/26/11 MI Review: 10/26/11 BM

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	INTERNAL STANDARDS DCB	NPT	ANT	PHN	CRY	PRY	SURROGATES OLC-SOM A	B	C	D	E	F	G	H	I	J	K	L	M	M	O	P	DILN	FLG	COMMENTS
S2H5052	09:32	DFTPP2W	DFTPP2W		AQ																							1		OK
S2H5053C	11:35	SSTD0202W	SSTD0202W		AQ	100	100	100	100	100	100																	1		OK C3 OCCV
S2H5054	11:58	SSTD0052W	SSTD0052W		AQ	76	77	75	81	81	77																	1		C1
S2H5055	12:21	SSTD0802W	SSTD0802W		AQ	62	67	63	64	38*	27*																	1		C5
S2H5056	12:44	SSTD0102W	SSTD0102W		AQ	113	107	100	97	96	98																	1		C2
S2H5057	13:07	SSTD0402W	SSTD0402W		AQ	75	78	82	83	83	71																	1		C4
S2H5059	14:28	MB-62327	SBLK2X	62327	SL	56	51	50*	44*	39*	40*																	1		No MMS
S2H5060	14:51	K2072-16AMS	E0ZS5MS	62360	SL	69	66	62	58	57	63																	1		OK
S2H5061	15:13	MB-62327	SBLK2X	62327	SL	63	66	64	59	59	56																	1		OK
S2H5062	15:35	K2072-16AMSD	E0ZS5MSD	62360	SL	86	87	82	74	64	67																	1		OK MI_81
S2H5063	15:57	K2072-07A	E0ZR6	62327	SL	82	82	71	68	66	75																	1		OK MI_81
S2H5064	16:19	K2072-12A	E0ZS1	62327	SL	82	79	67	67	68	72																	1		OK
S2H5065	16:41	SSTD0202Y	SSTD0202Y		AQ	100	100	100	100	100	100																	1		OK FCCV

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
T - Sample was injected outside of the 12 hour sequence
D - Surrogates are diluted

Ferrule

MMS 10/26/11

1225

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
73: 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

1226

Logbook ID: 70.0193-07/11

Instrument S4
Injection Log

Spectrum Analytical, Inc. RI Division S4 Injection Log
Semivolatiles Laboratory

Spectrum Analytical, Inc. RI
SemiVolatiles Laboratory

METHOD: 524.2 SW
ICAL DATE: 11/10/11
ANALYST: MMS
EMV: 2071

BATCH: 111110A.B
Start: 10-NOV-11 16:03
End: 11-NOV-11 10:37

Tune: SW111027A
c1: SW111026A
c2: SW111026B
c3: SW111026C
c4: SW111026D
c5: SW111026E

Internal Standard: SI 111018A
Comments:

Inlet Maintenance By: MMS
Liner : Cleaned
Column : New
Inlet Seal: Cleaned
Septum : New

Reviewed By: 11/11/11 BM
Manual Integration: MMS 11/11/11
MI Review: 11/11/11 BM

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	INTERNAL STANDARDS DCB	NPT	ANT	PHN	CRY	PRY	SURROGATES OLC-SOM A	B	C	D	E	F	G	H	I	J	K	L	M	M	O	P	DILN	FLG	COMMENTS
S4E8634	16:03	DFTPP4Q	DFTPP4Q		AQ																									
S4E8635	16:28	SSTD0204Q	SSTD0204Q		AQ	100	100	100	100	100	100																	1		ok
S4E8636	16:57	SSTD0054Q	SSTD0054Q		AQ	125	119	119	123	132	138																	1		ok ccv L3
S4E8637	17:21	SSTD0804Q	SSTD0804Q		AQ	97	98	95	101	103	104																	1		L1
S4E8638	17:45	SSTD0104Q	SSTD0104Q		AQ	70	65	60	65	71	79																	1		L5
S4E8639	18:10	SSTD0404Q	SSTD0404Q		AQ	74	83	87	107	127	130																	1		L2
S4E8640	18:34	MB-62885	SBLK4Q	62885	AQ	69	64	65	73	76	85																	1		L4
S4E8641	18:58	K2276-04B	B9TA7	62885	AQ	149	162	182	197	173	146																	1		ok
S4E8642	19:22	K2276-05B	B9TC9	62885	AQ	83	81	96	113	141	152									*		*		*	*			1		! MI_81_82 Extract
S4E8643	19:47	K2276-07B	B9TB9	62885	AQ	106	105	122	132	149	153	*							*	*				*	*			1		ok
S4E8644	20:11	K2276-08B	B9TC1	62885	AQ	57	63	72	91	96	107	*							*	*				*	*			1		Extract
S4E8645	20:37	K2276-09B	B9TE9	62885	AQ	86	94	114	129	150	154								*	*				*	*			1		Extract
S4E8646	21:00	K2276-10B	B9TF1	62885	AQ	115	112	130	140	143	139																	1		ok
S4E8647	21:25	K2276-11B	B9TG3	62885	AQ	132	125	139	155	176	193																	1		ok
S4E8648A	22:13	SSTD0204R	SSTD0204R		AQ	100	100	100	100	100	100																	1		ok
S4E8649	23:02	MB-62806	SBLK4R	62806	AQ	119	127	136	137	115	114																	1		ok ccv
S4E8650	23:26	K2213-03A	H30W9	62806	AQ	109	128	133	134	112	101	*																1		ok
S4E8651	23:50	K2213-04A	H30X2	62806	AQ	146	166	179	172	125	107																	1		ok
S4E8652	00:15	K2213-06A	H30X6	62806	AQ	188	190	195	155	106	91																*	1		ok
S4E8653	00:39	K2213-07A	H30X7	62806	AQ	203*	219*	228*	193	132	113							*										1		ok
S4E8654	01:03	K2213-08A	H30X9	62806	AQ	155	177	183	173	119	97															*	*	1		Rerun ES
S4E8655	01:28	K2213-09A	H30Y0	62806	AQ	140	161	165	159	117	103															*	*	1		ok
S4E8656	01:54	K2213-10A	H30Y1	62806	AQ	112	111	132	120	108	105															*	*	1		ok
S4E8657	02:16	K2213-11A	H30Z2	62806	AQ	121	129	125	112	90	89															*	*	1		ok
S4E8658	02:40	K2213-11AMS	H30Z2MS	62806	AQ	108	119	134	130	108	102																	1		ok
S4E8659	03:04	K2213-11AMSD	H30Z2MSD	62806	AQ	119	132	139	135	105	95																	1	R	ok
S4E8660	03:28	K2213-12A	H30Z3	62806	AQ	173	198	194	170	118	114																	1	R	ok
S4E8661	03:52	K2213-13A	H30Z4	62806	AQ	132	139	132	131	103	101																	1		ok
S4E8662	04:16	K2213-14A	H30Z5	62806	AQ	120	121	125	120	105	107																	1		ok
S4E8663	04:39	K2213-15A	H30Z7	62806	AQ	142	169	174	162	118	103																	1	T	ok
S4E8664	05:03	K2213-16A	H30Z8	62806	AQ	106	121	124	123	104	106															*	*	1	T	ok
S4E8665	05:28	SSTD0204S	SSTD0204S		AQ	100	100	100	100	100	100																	1	T	ok
S4E8666	09:00	K2213-07A	H30X7	62806	AQ	137	127	105	104	90	89																	1	T	ok ccv
S4E8667	09:26	K2276-04B	B9TA7	62885	AQ	54	130	149	150	123	99	*	*	*												*	*	1	T	ok
S4E8668	09:50	K2276-07B	B9TB9	62885	AQ	3*	63	131	139	104	90	*	*	*	*	*	*			*		*		*	*	*		1	T	Don't use
S4E8669	10:14	K2276-08B	B9TC1	62885	AQ	112	116	112	118	103	105	*								*	*			*	*	*		1	T	↓
S4E8670	10:37	SSTD0204T	SSTD0204T		AQ	100	100	100	100	100	100																	1	T	ok EMV

MMS 11/11/11

Spectrum Analytical, Inc. RI Division - PEST/PCB RUN LOGBOOK: INSTRUMENT E2

Spectrum Analytical, Inc. RI Division E2 Injection Log
GC Semivolatiles Laboratory

METHOD: 8270
ICAL DATE: 10/25/11

ANALYST: CMO

START BATCH: 111104AF.B
END BATCH: 111104AF.B

Start: 04-NOV-11 18:57
End: 05-NOV-11 15:09

STPs Page 69

Comments:

Inlet Maintenance By:
Liner : yes
Column : —
Inlet Seal: —
Septum : —

Reviewed By: 10/7/11

Manual Integration: NA

MI Review: NA

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	SURROGATES FRONT TCMX	SURROGATES FRONT DCB	SURROGATES REAR TCMX	SURROGATES REAR DCB	DILN	FLAGS F	FLAGS R	ANALYST CHECK F	ANALYST CHECK R	COMMENTS
E2K7478F/R	18:57	AIBLKJA	AIBLKJA		AQ	0*	0*	0*	0*	1			✓		PW110524AC
E2K7479F/R	19:17	AR12213J2	AR12213J2		AQ					1			✓		PC110524A
E2K7480F/R	19:38	AR12323J2	AR12323J2		AQ					1			✓		PW110721A
E2K7481F/R	19:59	AR12421J2	AR12421J2		AQ					1			✓		PW110525A0
E2K7482F/R	20:20	AR12426J2	AR12426J2		AQ					1			✓		P
E2K7483F/R	20:41	AR12422J2	AR12422J2		AQ					1			✓		W
E2K7484F/R	21:01	AR12423J2	AR12423J2		AQ					1			✓		M
E2K7485F/R	21:22	AR12424J2	AR12424J2		AQ					1			✓		U
E2K7486F/R	21:43	AR12425J2	AR12425J2		AQ					1			✓		R
E2K7487F/R	22:04	AR12481J2	AR12481J2		AQ					1			✓		U
E2K7488F/R	22:25	AR12486J2	AR12486J2		AQ					1			✓		V
E2K7489F/R	22:46	AR12482J2	AR12482J2		AQ					1			✓		T
E2K7490F/R	23:07	AR12483J2	AR12483J2		AQ					1			✓		S
E2K7491F/R	23:28	AR12484J2	AR12484J2		AQ					1			✓		L
E2K7492F/R	23:49	AR12485J2	AR12485J2		AQ					1			✓		Q
E2K7493F/R	00:10	AR12541J2	AR12541J2		AQ					1			✓		AA
E2K7494F/R	00:31	AR12546J2	AR12546J2		AQ					1			✓		AB
E2K7495F/R	00:52	AR12542J2	AR12542J2		AQ					1			✓		Z
E2K7496F/R	01:13	AR12543J2	AR12543J2		AQ					1			✓		Y
E2K7497F/R	01:34	AR12544J2	AR12544J2		AQ					1			✓		X
E2K7498F/R	01:54	AR12545J2	AR12545J2		AQ					1			✓		W
E2K7499F/R	02:15	AR12623J2	AR12623J2		AQ					1			✓		C
E2K7500F/R	02:36	AR12683J2	AR12683J2		AQ					1			✓		D
E2K7501F/R	02:57	AR16601J2	AR16601J2		AQ					1			✓		I
E2K7502F/R	03:18	AR16606J2	AR16606J2		AQ					1			✓		J
E2K7503F/R	03:39	AR16602J2	AR16602J2		AQ					1			✓		H
E2K7504F/R	04:00	AR16603J2	AR16603J2		AQ					1			✓		PW110524G

E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
* - Surrogate is outside of control limits
D - Surrogate is diluted

Spectrum Analytical, Inc. RI Division - PEST/PCB RUN LOGBOOK: INSTRUMENT E2

Spectrum Analytical, Inc. RI Division E2 Injection Log
GC Semivolatiles Laboratory

METHOD: Arb
ICAL DATE: 10/25/11
ANALYST: [illegible]

START BATCH: 111104AF.B
END BATCH: 111104AF.B

Start: 04-NOV-11 18:57
End: 05-NOV-11 15:09

STDs Page 69

Inlet Maintenance By:
Liner : yes
Column : —
Inlet Seal: —
Septum : —

Comments:

Reviewed By: [illegible] 11/7/11
Manual Integration: [illegible] 10/7/11
MI Review: [illegible] 11/7/11

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	SURROGATES FRONT TCMX	FRONT DCB	REAR TCMX	REAR DCB	DILN	FLAGS F	FLAGS R	ANALYST CHECK F	ANALYST CHECK R	COMMENTS
E2K7505F/R	04:21	AR16604J2	AR16604J2		AQ					1			✓		PW110524F
E2K7506F/R	04:42	AR16605J2	AR16605J2		AQ					1			✓		PW110524E
E2K7507F/R	05:03	AR1660ICV2J	AR1660ICV2J		AQ					1			✓		PW110501A
E2K7508F/R	05:24	AIBLKJA	AILBKJA		AQ					1			✓		
E2K7509F/R	05:44	AR16603JA	AR16603JA		AQ					1			✓	✓	
E2K7510F/R	06:05	AR12423JA	AR12423JA		AQ					1			✓	✓	
E2K7511F/R	06:26	AR12483JA	AR12483JA		AQ					1			✓	✓	
E2K7512F/R	06:47	AR12543JA	AR12543JA		AQ					1			✓	✓	
E2K7513F/R	07:08	K2227-01ADL	E5N03DL [illegible] 11/7/11	62665	SL	86	143	82	114	2			✓		48
E2K7514F/R	07:28	K2227-01ADL	E5N03DL	62665	SL	0D	0D	0D	0D	20			✓		48
E2K7515F/R	07:49	K2227-02ADL	E5N04DL	62665	SL	81	113	77	93	10			~~48~~ ✓		MI R11 48
E2K7516F/R	08:10	MB-62542	ABLK2D	62542	SL	78	86	91	99	1			✓		
E2K7517F/R	08:31	LCS-62542	ALCS2D	62542	SL	76	79	86	94	1			✓		
E2K7518F/R	08:52	K2088-01ADL	C0037DL	62542	SL	71	80	76	75	5			✓		54
E2K7519F/R	09:13	K2088-02ADL	C0038DL [illegible] 11/7/11	62542	SL	0D	0D	0D	0D	20	E	E	✓		54 } need 40/400 DL
E2K7520F/R	09:34	K2088-02ADL	C0038DL	62542	SL	0D	0D	0D	0D	200			✓		RR 54
E2K7521F/R	09:55	K2088-03A	C0039	62542	SL	66	110	67	276*	1	E	E	✓		54 needs DL
E2K7522F/R	10:16	K2088-04A	C0040	62542	SL	66	128	72	112	1			✓		RR DL 2X OK
E2K7523F/R	10:37	K2088-05A	C0041	62542	SL	67	86	73	245*	1			✓		RR DL 2X OK
E2K7524F/R	10:58	K2088-06A	C0042	62542	SL	68	81	75	91	1			✓		RR
E2K7525F/R	11:19	K2088-06AMS	C0042MS	62542	SL	0*	0*	0*	58	1	R	R	✓		RR
E2K7526F/R	11:40	K2088-06AMSD	C0042MSD	62542	SL	68	70	75	72	1			✓		
E2K7527F/R	12:01	K2088-07A	C0043	62542	SL	73	73	81	83	1			✓		54
E2K7528F/R	12:22	K2088-08A	C0044	62542	SL	95	89	99	104	1			✓		54
E2K7529F/R	12:42	K2088-09A DL	C0045 DL	62542	SL	68	224D	73	207D	5			✓		54
E2K7530F/R	13:03	K2088-10A	C0046	62542	SL	66	116	77	74	1			✓		RR OK
E2K7531F/R	13:24	K2088-11A	C0047	62542	SL	62	97	69	69	1			✓		RR OK

E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
* - Surrogate is outside of control limits
D - Surrogate is diluted

[illegible] 10/7/11

Logbook ID 60.0176-08/11

Spectrum Analytical, Inc. RI Division - PEST/PCB RUN LOGBOOK: INSTRUMENT E2

Spectrum Analytical, Inc. RI Division E2 Injection Log
GC Semivolatiles Laboratory

METHOD: ARO
ICAL DATE: 10/25/11
ANALYST: [illegible]

START BATCH: 111104AF.B
END BATCH: 111104AF.B

Start: 04-NOV-11 18:57
End: 05-NOV-11 15:09

Inlet Maintenance By:
Liner : yes
Column : —
Inlet Seal: —
Septum : —

Comments: STDs Page 69

Reviewed By: _____ Manual Integration: W/A MI Review: _____

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	SURROGATES FRONT TCMX	SURROGATES FRONT DCB	SURROGATES REAR TCMX	SURROGATES REAR DCB	DILN	FLAGS F	FLAGS R	ANALYST CHECK F	ANALYST CHECK R	COMMENTS
E2K7532F/R	13:45	AIBLKJB	AILBKJB		AQ					1			✓		
E2K7533F/R	14:06	AR16603JB	AR16603JB		AQ					1			✓	✓	
E2K7534F/R	14:27	AR12423JB	AR12423JB		AQ					1			✓	✓	ok closing
E2K7535F/R	14:48	AR12483JB	AR12483JB		AQ					1			✓	✓	
E2K7536F/R	15:09	AR12543JB	AR12543JB		AQ					1			✓	✓	

E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
* - Surrogate is outside of control limits
D - Surrogate is diluted

[illegible] 10/7/11

Standard ID's

Comments

Reviewed _____

Logbook ID 60.0176-08/11

Spectrum Analytical, Inc. RI Division - PEST/PCB RUN LOGBOOK: INSTRUMENT E2

Spectrum Analytical, Inc. RI Division E2 Injection Log
GC Semivolatiles Laboratory

METHOD: AhO
ICAL DATE: 10/25/11

ANALYST: [signature]

START BATCH: 111109F.B
END BATCH: 111109F.B

Start: 09-NOV-11 08:51
End: 09-NOV-11 18:05

STDs Page 69

Comments:

Inlet Maintenance By:
Liner :
Column :
Inlet Seal:
Septum :

Reviewed By: [signature] 11/10/11

Manual Integration: [signature] 11/10/11

MI Review: [signature] 11/10/11

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
E2K7613F/R	08:51	AIBLKJF	AILBKJF		AQ					1			✓	✓	
E2K7614F/R	09:12	AR16603JF	AR16603JF		AQ					1			✓	✓	
E2K7615F/R	09:33	AR12423JF	AR12423JF		AQ					1			✓	✓	
E2K7616F/R	09:53	AR12483JF	AR12483JF		AQ					1			✓	✓	
E2K7617F/R	10:14	AR12543JF	AR12543JF		AQ					1			✓	✓	
E2K7618F/R	10:43	MB-62678	ABLK2G	62678	AQ	72	82	84	87	1			✓		
E2K7619F/R	11:04	LCS-62678	ALCS2G	62678	AQ	76	83	86	88	1			✓		
E2K7620F/R	11:25	K2152-10A	B9T97	62678	AQ	72	63	81	65	1			✓		
E2K7621F/R	11:46	K2152-17B	B9TG6	62678	AQ	73	38	82	37	1			✓		
E2K7622F/R	12:07	K2213-01A	H30X4	62678	AQ	12*	8.1*	14*	7.6*	1			—		Re-Run
E2K7623F/R	14:51	K2213-02A	H30Y7	62678	AQ	23*	7.7*	27*	6.5*	1			—		
E2K7624F/R	12:49	MB-62771	ABLK2H	62771	AQ	85	85	94	91	1			✓		
E2K7625F/R	13:10	LCS-62771	ALCS2H	62771	AQ	76	77	84	82	1			✓		
E2K7626F/R	13:31	K2152-18A	B9T98	62771	AQ	67	54	78	55	1			✓		
E2K7627F/R	13:52	K2152-19A	B9T99	62771	AQ	69	48	76	48	1			✓		MI_F11
E2K7628F/R	15:14	K2213-02A	H30Y7	62678	AQ	24*	7.6*	26*	6.4*	1			—		
E2K7629F/R	15:35	MB-62726	ABLK2I	62726	SL	7.1*	11*	+++*	+++*	1			—		Re-Run
E2K7630F/R	15:56	LCS-62726	ALCS2I	62726	SL	6.3*	10*	+++*	+++*	1	R	R	—		
E2K7631F/R	16:16	K2154-01A	B9R27	62726	SL	+++*	+++*	+++*	+++*	1			—		
E2K7632F/R	16:41	AIBLKJG	AILBKJG		AQ					1			✓		
E2K7633F/R	17:02	AR16603JG	AR16603JG		AQ					1			✓	✓	
E2K7634F/R	17:23	AR12423JG	AR12423JG		AQ					1			✓	✓	
E2K7635F/R	17:44	AR12483JG	AR12483JG		AQ					1			✓	✓	
E2K7636F/R	18:05	AR12543JG	AR12543JG		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

[signature] 11/10/11

Spectrum Analytical, Inc. RI Division E3 Injection Log
GC Semivolatiles Laboratory

METHOD: HRO
ICAL DATE: 11/14/11
ANALYST: Cwa

START BATCH: 111114BF.B
END BATCH: 111114BF.B

Start: 14-NOV-11 16:46
End: 15-NOV-11 03:29

STDs Page 24

Inlet Maintenance By:
Liner :
Column :
Inlet Seal: 5
Septum :

Comments:

Reviewed By: [illegible] 11/22/11 Manual Integration: NA MI Review: NA

5 level

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
E3I6671F/R	16:46	AIBLKU	AILBKU		AQ					1			✓		PW110524AC
E3I6672F/R	17:05	AR12213W3	AR12213W3		AQ					1			✓		PW110524A
E3I6673F/R	17:24	AR12323W3	AR12323W3		AQ					1			✓		PW110721A
E3I6674F/R	17:43	AR12426W3	AT12426W3		AQ					1			✓		PW110524O
E3I6675F/R	18:01	AR12421W3	AR12421W3		AQ					1			✓		B
E3I6676F/R	18:20	AR12422W3	AR12422W3		AQ					1			✓		W
E3I6677F/R	18:39	AR12423W3	AR12423W3		AQ					1			✓		M
E3I6678F/R	18:58	AR12424W3	AR12424W3		AQ					1			✓		L
E3I6679F/R	19:17	AR12425W3	AR12425W3		AQ					1			✓		K
E3I6680F/R	19:36	AR12486W3	AR12486W3		AQ					1			✓		Y
E3I6681F/R	19:55	AR12481W3	AR12481W3		AQ					1			✓		V
E3I6682F/R	20:14	AR12482W3	AR12482W3		AQ					1			✓		T
E3I6683F/R	20:33	AR12483W3	AR12483W3		AQ					1			✓		S
E3I6684F/R	20:52	AR12484W3	AR12484W3		AQ					1			✓		K
E3I6685F/R	21:11	AR12485W3	AR12485W3		AQ					1			✓		Q
E3I6686F/R	21:30	AR12546W3	AR12546W3		AQ					1			✓		AA
E3I6687F/R	21:49	AR12541W3	AR12541W3		AQ					1			✓		AB
E3I6688F/R	22:08	AR12542W3	AR12542W3		AQ					1			✓		N
E3I6689F/R	22:26	AR12543W3	AR12543W3		AQ					1			✓		J
E3I6690F/R	22:45	AR12544W3	AR12544W3		AQ					1			✓		V
E3I6691F/R	23:04	AR12545W3	AR12545W3		AQ					1			✓		W
E3I6692F/R	23:23	AR12623W3	AR12623W3		AQ					1			✓		C
E3I6693F/R	23:42	AR12683W3	AR12683W3		AQ					1			✓		D
E3I6694F/R	00:01	AR16606W3	AR16606W3		AQ					1			✓		I
E3I6695F/R	00:20	AR16601W3	AR16601W3		AQ					1			✓		H
E3I6696F/R	00:39	AR16602W3	AR16602W3		AQ					1			✓		G
E3I6697F/R	00:58	AR16603W3	AR16603W3		AQ					1			✓		PW110324

E - One or more target compounds are above the calibration range
P - One or more spike compounds are outside of control limits
- Surrogate is outside of control limits
- Surrogate is diluted

Cwa 11/15/11

Spectrum Analytical, Inc. RI Division E3 Injection Log
GC Semivolatiles Laboratory

METHOD: DRO
ICAL DATE: 11/29/11
ANALYST: QMP

START BATCH: 111114BF.B
END BATCH: 111114BF.B

Start: 14-NOV-11 16:46
End: 15-NOV-11 03:29

Comments: 3TDs Page 51

Inlet Maintenance By:
Liner : —
Column :
Inlet Seal: 6
Septum :

Reviewed By: _____ Manual Integration: _____ 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
E3I6698F/R	01:17	AR16604W3	AR16604W3		AQ					1			✓		pw110924E
E3I6699F/R	01:36	AR16605W3	AR16605W3		AQ					1			✓		pw110924F
E3I6700F/R	01:54	AR1660ICVW3	AR1660ICVW3		AQ					1			✓		pw110105D
E3I6701F/R	02:13	AIBLKWA	AILBKWA		AQ					1			✓		
E3I6702F/R	02:32	AR16603WA	AR16603WA		AQ					1			✓		
E3I6703F/R	02:51	AR12423WA	AR12423WA		AQ					1			✓		
E3I6704F/R	03:10	AR12483WA	AR12483WA		AQ					1			✓		
E3I6705F/R	03:29	AR12543WA	AR12543WA		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

Done
11/15/11

Spectrum Analytical, Inc. RI Division - PEST/PCB RUN LOGBOOK: INSTRUMENT E3

Spectrum Analytical, Inc. RI Division E3 Injection Log
GC Semivolatiles Laboratory

METHOD: ARO
ICAL DATE: 10/19/11

ANALYST: [illegible]

START BATCH: 111116BF.B
END BATCH: 111116BF.B

Start: 16-NOV-11 15:50
End: 17-NOV-11 05:40

Comments: STDs Page 51

Inlet Maintenance By:
Liner :
Column :
Inlet Seal: b
Septum :

Reviewed By: 11/17/11

Manual Integration: no

MI Review: 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
E3I6740F/R	15:50	AIBLKWF	AILBKWF		AQ					1			✓	✓	
E3I6741F/R	16:09	AR16603WF	AR16603WF		AQ					1			✓	✓	
E3I6742F/R	16:28	AR12423WF	AR12423WF		AQ					1			✓	✓	
E3I6743F/R	16:47	AR12483WF	AR12483WF		AQ					1			✓	✓	
E3I6744F/R	17:06	AR12543WF	AR12543WF		AQ					1			✓	✓	
E3I6745F/R	17:25	MB-62802	ABLK3A	62802	AQ	68	70	74	76	1			✓		
E3I6746F/R	17:43	LCS-62802	ALCS3A	62802	AQ	71	72	78	77	1			✓		
E3I6747F/R	18:02	K2213-03A	H30W9	62802	AQ	64	40	70	42	1			✓		
E3I6748F/R	18:21	K2213-04A	H30X2	62802	AQ	32	19*	41	18*	1			✓		
E3I6749F/R	18:40	K2213-06A	H30X6	62802	AQ	60	21*	76	26*	1			✓		
E3I6750F/R	18:59	K2213-07A	H30X7	62802	AQ	30	12*	32	9.6*	1			✓		
E3I6751F/R	19:18	K2213-08A	H30X9	62802	AQ	23*	23*	32	19*	1			—		RR
E3I6752F/R	19:37	K2213-09A	H30Y0	62802	AQ	27*	20*	31	18*	1			✓		RR
E3I6753F/R	19:55	K2213-10A	H30Y1	62802	AQ	36	24*	43	25*	1			✓		
E3I6754F/R	20:14	K2213-11A	H30Z2	62802	AQ	62	51	69	53	1			✓		
E3I6755F/R	20:33	K2213-11AMS	H30Z2MS	62802	AQ	65	50	70	53	1			✓		
E3I6756F/R	20:52	K2213-11AMSD	H30Z2MSD	62802	AQ	67	56	73	59	1			✓		
E3I6757F/R	21:11	K2213-12A	H30Z3	62802	AQ	66	53	73	56	1			✓		
E3I6758F/R	21:30	K2213-13A	H30Z4	62802	AQ	62	46	68	48	1			✓		
E3I6759F/R	21:48	K2213-14A	H30Z5	62802	AQ	61	45	68	48	1			✓		
E3I6760F/R	22:07	K2213-15A	H30Z7	62802	AQ	22*	17*	32	15*	1			—		RR
E3I6761F/R	22:26	K2213-16A	H30Z8	62802	AQ	63	52	70	53	1			✓		
E3I6762F/R	22:45	K2276-01A	B9TA0	62802	AQ	68	53	75	55	1			✓		
E3I6763F/R	23:04	K2276-03A	B9TA1	62802	AQ	62	44	69	46	1			✓		
E3I6764F/R	23:23	MB-63016	ABLK3B	63016	AQ	71	73	80	79	1			✓		
E3I6765F/R	23:41	LCS-63016	ALCS3B	63016	AQ	68	72	76	80	1			✓		
E3I6766F/R	00:00	K2213-01ARE	H30X4RE X 11/17/11	63016	AQ	14*	13*	26*	7.6*	1			✓		QC communications

E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
* - Surrogate is outside of control limits
D - Surrogate is diluted

[illegible] 11/17/11

Spectrum Analytical, Inc. RI Division - PEST/PCB RUN LOGBOOK: INSTRUMENT E3

Spectrum Analytical, Inc. RI Division E3 Injection Log
GC Semivolatiles Laboratory

METHOD: ARO
ICAL DATE: 10/14/11
ANALYST: [signature]

START BATCH: 111116BF.B
END BATCH: 111116BF.B

Start: 16-NOV-11 15:50
End: 17-NOV-11 05:40

Comments: STDs Page 51

Inlet Maintenance By:
Liner :
Column :
Inlet Seal: 6
Septum :

Reviewed By: [signature] 11/17/11
Manual Integration: W/A
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
E3I6767F/R	00:19	K2213-02ARE	H30Y7RE	63016	AQ	26*	11*	30*	6.5*	1			✓		OK Confirmation
E3I6768F/R	00:38	AIBLKWG	AILBKWG		AQ					1			✓	✓	
E3I6769F/R	00:57	AR16603WG	AR16603WG		AQ					1			✓	✓	
E3I6770F/R	01:16	AR12423WG	AR12423WG		AQ					1			✓	✓	
E3I6771F/R	01:35	AR12483WG	AR12483WG		AQ					1			✓	✓	
E3I6772F/R	01:53	AR12543WG	AR12543WG		AQ	✓	✓			1			✓	✓	
E3I6773F/R	02:12	MB-62594	ABLK3C	62594	AQ	65	75	73	76	1			✓		OK closing	not needed
E3I6774F/R	02:31	LCS-62594	ALCS3C	62594	AQ	59	65	65	67	1			✓		
E3I6775F/R	02:50	K2155-01A	B9TE7	62594	AQ	57	49	62	54	1			✓		
E3I6776F/R	03:09	K2155-03A	B9TB7	62594	AQ	74	69	84	74	1			✓		
E3I6777F/R	03:28	K2155-04A	B9TC7	62594	AQ	77	76	87	82	1			✓		
E3I6778F/R	03:47	K2155-05A	B9TF9	62594	AQ	70	71	79	78	1			✓		
E3I6779F/R	04:06	K2155-06A	B9TD9	62594	AQ	72	66	81	72	1			✓		
E3I6780F/R	04:25	AIBLKWH	AILBKWH		AQ					1			✓		
E3I6781F/R	04:43	AR16603WH	AR16603WH		AQ					1			✓	✓	
E3I6782F/R	05:02	AR12423WH	AR12423WH		AQ					1			✓	✓	
E3I6783F/R	05:21	AR12483WH	AR12483WH		AQ					1			✓	✓	
E3I6784F/R	05:40	AR12543WH	AR12543WH		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

[signature]
11/17/11

Reviewed_____

Spectrum Analytical, Inc. RI Division - PEST/PCB RUN LOGBOOK: INSTRUMENT E3

Spectrum Analytical, Inc. RI Division E3 Injection Log
GC Semivolatiles Laboratory

METHOD: Cerro
ICAL DATE: 11/14/11

ANALYST: Cerro

START BATCH: 111117F.B
END BATCH: 111117F.B

Start: 17-NOV-11 10:01
End: 18-NOV-11 01:22

Inlet Maintenance By:
Liner :
Column :
Inlet Seal: b
Septum :

STDs Page 51

Comments:

Reviewed By: 11/18/11

Manual Integration: Cerro 11/18/11

MI Review: 11/18/11

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
E3I6785F/R	10:01	AIBLKWI	AILBKWI		AQ					1			✓		
E3I6786F/R	10:20	AR16603WI	AR16603WI		AQ					1			✓	✓	
E3I6787F/R	10:39	AR12423WI	AR12423WI		AQ					1			✓	✓	
E3I6788F/R	10:58	AR12483WI	AR12483WI		AQ					1			✓	✓	
E3I6789F/R	11:16	AR12543WI	AR12543WI		AQ					1			✓	✓	
E3I6792F/R	12:22	K2213-08A	H30X9	62802	AQ	33	32	46	28*	1			✓		
E3I6793F/R	12:41	K2213-09A	H30Y0	62802	AQ	44	31	49	30*	1			✓		
E3I6794F/R	12:59	K2213-15A	H30Z7	62802	AQ	33	23*	47	22*	1			✓		
E3I6795F/R	14:58	AIBLKWJ	AILBKWJ		AQ					1			✓		
E3I6796F/R	15:17	AR16603WJ	AR16603WJ		AQ					1			✓	✓	
E3I6797F/R	15:36	AR12423WJ	AR12423WJ		AQ					1			✓	✓	
E3I6798F/R	15:55	AR12483WJ	AR12483WJ		AQ					1			✓	✓	
E3I6799F/R	16:14	AR12543WJ	AR12543WJ		AQ					1			✓	✓	MI_F8
E3I6800F/R	16:33	MB-63037	ABLK3B	63037	SL	74	83	81	82	1			✓		
E3I6801F/R	16:52	LCS-63037	ALCS3B	63037	SL	77	86	85	85	1			✓		
E3I6802F/R	17:11	K2335-01A	E03K9	63037	SL	54	58	64	67	1			✓		48/54
E3I6803F/R	17:29	K2335-01AMS	E03K9MS	63037	SL	56	55	79	70	1		R	✓		48/54
E3I6804F/R	17:48	K2335-01AMSD	E03K9MSD	63037	SL	58	59	86	76	1		R	✓		48/54
E3I6805F/R	18:07	K2335-02A	E03L0	63037	SL	55	58	97	71	1			✓		48/54
E3I6806F/R	18:26	K2335-03A	E03L1	63037	SL	55	55	73	72	1			✓		
E3I6807F/R	18:45	K2335-04A	E03L2	63037	SL	55	58	89	75	1			✓		54
E3I6808F/R	19:04	K2335-05A	E03L3	63037	SL	53	55	87	71	1			✓		48/54
E3I6809F/R	19:23	K2335-06A	E03L4	63037	SL	57	57	72	70	1			✓		
E3I6810F/R	19:42	K2335-07A	E03L5	63037	SL	58	60	72	74	1			✓		
E3I6811F/R	20:01	K2335-08A	E03L6	63037	SL	59	57	75	72	1			✓		
E3I6812F/R	20:19	K2335-09A	E03L7	63037	SL	53	71	61	70	1			✓		
E3I6813F/R	20:38	K2335-10A	E03L8	63037	SL	55	62	63	134	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

Cerro 11/18/11

Logbook ID 60.0146-10/11

1236

Spectrum Analytical, Inc. RI Division - PEST/PCB RUN LOGBOOK: INSTRUMENT E3

Spectrum Analytical, Inc. RI Division E3 Injection Log
GC Semivolatiles Laboratory

METHOD: ~~[illegible]~~ ARO ANALYST: [illegible]
ICAL DATE: 11/14/11

START BATCH: 111117F.B
END BATCH: 111117F.B

Start: 17-NOV-11 10:01
End: 18-NOV-11 01:22

STDs Page 51

Comments:

Inlet Maintenance By:
Liner :
Column :
Inlet Seal:
Septum :

Reviewed By: [illegible] 11/18/11

Manual Integration: [illegible] 11/18/11

MI Review: [illegible] 11/18/11

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
E3I6814F/R	20:57	K2335-11A	E03L9	63037	SL	53	61	60	74	1			✓		
E3I6815F/R	21:16	K2335-12A	E03M0	63037	SL	55	59*	78	76	1			✓		
E3I6816F/R	21:35	K2335-13A	E03M1	63037	SL	63	61	77	74	1			✓		
E3I6817F/R	21:54	K2335-14A	E03M2	63037	SL	64	62	67	76	1			✓		
E3I6818F/R	22:13	K2335-15A	E03M3	63037	SL	65	64	76	82	1			✓		
E3I6819F/R	22:32	K2335-16A	E03M4	63037	SL	72	68	88	75	1			✓		
E3I6820F/R	22:51	K2335-17A	E03M5	63037	SL	60	69	67	76	1			✓		
E3I6821F/R	23:10	K2335-18A	E03M6	63037	SL	70	71	76	89	1			✓		MI_R11
E3I6822F/R	23:28	K2335-19A	E03M8	63037	SL	57	73	66	79	1			✓		
E3I6823F/R	23:47	K2335-20A	E03M9	63037	SL	68	74	75	80	1			✓		MI_F11
E3I6824F/R	00:06	AIBLKWK	AILBKWK		AQ					1			✓		
E3I6825F/R	00:25	AR16603WK	AR16603WK		AQ					1			✓	✓	
E3I6826F/R	00:44	AR12423WK	AR12423WK		AQ					1			✓	✓	
E3I6827F/R	01:03	AR12483WK	AR12483WK		AQ					1			✓	✓	
E3I6828F/R	01:22	AR12543WK	AR12543WK		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

Comments

[illegible] 11/18/11

Reviewed_____

Logbook ID 60.0146-10/11

1237

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
11/3/11	K2264	Sevenson	01-04	VEB	ML	E	R16 F4 VEB 11/3/11	
	K2262	ENE	01-02	CAW	VEB	H	R9	
	K2263	Sevenson	01-02			H	R9	
	K2266	Sevenson	02			OS	R9	
	K2267	RIRRic	01			H	R9	
	K2268	EPA	01			E	F4	
11/3/11	K2269	CRA	01-02	CAW	VEB	H	R9	
11/3/11	K2279	AECOM	01-04	SW	ML	US	R9	
11-03-11	K2213	EPA	01-17	DRM		T	R4	
11-03-11	K2199	EPA	04-17	DRM		US	R9/F4	
11/4/11	K2286	EPA	01-03	CAW		H	R9	
11/4/11	K2223	D+B	16-19	CAW		H	R9	
11/4/11	K2246	CRA	16-20	CAW		H	R9	
11/4/11	K2288	Sevenson	01-10	CAW	ML	E	R9	

Logbook ID 90.0191-07/11

Reviewed By: ML 11/4/11

"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: K2213 **Profile Name:** SOM_VIII_21

MATRIX **Aqueous**

Samp #	Bottle	Test	Status	Received	Date
01A	001	SOM01.2_ARO_W	In	LOGIN: cnadeau	10/31/2011 11:08:00 AM
01A	001	SOM01.2_ARO_W	Consumed	Timothy McDaniel	11/2/2011 6:26:00 PM
01A	001	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	10/31/2011 11:08:00 AM
01A	002	SOM01.2_ARO_W	In	LOGIN: cnadeau	10/31/2011 11:08:00 AM
01A	002	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	10/31/2011 11:08:00 AM
01A	002	SOM1.2_SVOA_LOW_W	Consumed	Courtney J Anderson	11/14/2011 9:20:00 AM
01A	003	SOM01.2_ARO_W	In	LOGIN: cnadeau	10/31/2011 11:08:00 AM
01A	003	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	10/31/2011 11:08:00 AM
01A	004	SOM01.2_ARO_W	In	LOGIN: cnadeau	10/31/2011 11:08:00 AM
01A	004	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	10/31/2011 11:08:00 AM
01A	004	SOM1.2_SVOA_LOW_W	Consumed	Antonio AP Cardoso	11/3/2011 12:21:00 PM
01B	001	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
01B	002	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
01B	003	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
02A	001	SOM01.2_ARO_W	In	LOGIN: cnadeau	10/31/2011 11:08:00 AM
02A	001	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	10/31/2011 11:08:00 AM
02A	002	SOM01.2_ARO_W	In	LOGIN: cnadeau	10/31/2011 11:08:00 AM
02A	002	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	10/31/2011 11:08:00 AM
02A	002	SOM1.2_SVOA_LOW_W	Consumed	Antonio AP Cardoso	11/3/2011 12:21:00 PM
02A	003	SOM01.2_ARO_W	In	LOGIN: cnadeau	10/31/2011 11:08:00 AM
02A	003	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	10/31/2011 11:08:00 AM
02A	003	SOM1.2_SVOA_LOW_W	Consumed	Courtney J Anderson	11/14/2011 9:20:00 AM
02A	004	SOM01.2_ARO_W	In	LOGIN: cnadeau	10/31/2011 11:08:00 AM
02A	004	SOM01.2_ARO_W	Consumed	Timothy McDaniel	11/2/2011 6:26:00 PM
02A	004	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	10/31/2011 11:08:00 AM
02B	001	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
02B	002	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
02B	003	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM

Client: EPAINV

Work Order: K2213 **Profile Name:** SOM_VIII_21

MATRIX **Aqueous**

Samp #	Bottle	Test	Status	Received	Date
03A	001	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
03A	001	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
03A	002	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
03A	002	SOM01.2_ARO_W	Consumed	Courtney J Anderson	11/8/2011 8:19:00 AM
03A	002	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
03A	003	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
03A	003	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
03A	004	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
03A	004	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
03A	004	SOM1.2_SVOA_LOW_W	Consumed	James Kyle Dorsey	11/8/2011 4:31:00 PM
03B	001	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
03B	002	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
03B	003	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
04A	001	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
04A	001	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
04A	001	SOM1.2_SVOA_LOW_W	Consumed	James Kyle Dorsey	11/8/2011 4:31:00 PM
04A	002	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
04A	002	SOM01.2_ARO_W	Consumed	Courtney J Anderson	11/8/2011 8:19:00 AM
04A	002	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
04B	001	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
04B	002	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
04B	003	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
05A	001	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
05A	002	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
05A	003	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM

Client: EPAINV

Work Order: K2213 **Profile Name:** SOM_VIII_21

MATRIX **Aqueous**

Samp #	Bottle	Test	Status	Received	Date
06A	001	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
06A	001	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
06A	002	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
06A	002	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
06A	002	SOM1.2_SVOA_LOW_W	Consumed	James Kyle Dorsey	11/8/2011 4:31:00 PM
06A	003	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
06A	003	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
06A	004	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
06A	004	SOM01.2_ARO_W	Consumed	Courtney J Anderson	11/8/2011 8:25:00 AM
06A	004	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
06B	001	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
06B	002	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
06B	003	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
07A	001	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
07A	001	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
07A	002	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
07A	002	SOM01.2_ARO_W	Consumed	Courtney J Anderson	11/8/2011 8:19:00 AM
07A	002	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
07A	003	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
07A	003	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
07A	003	SOM1.2_SVOA_LOW_W	Consumed	James Kyle Dorsey	11/8/2011 4:31:00 PM
07A	004	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
07A	004	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
07B	001	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
07B	002	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
07B	003	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM

Client: EPAINV

Work Order: K2213 **Profile Name:** SOM_VIII_21

MATRIX **Aqueous**

Samp #	Bottle	Test	Status	Received	Date
08A	001	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
08A	001	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
08A	002	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
08A	002	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
08A	003	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
08A	003	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
08A	003	SOM1.2_SVOA_LOW_W	Consumed	James Kyle Dorsey	11/8/2011 4:31:00 PM
08A	004	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
08A	004	SOM01.2_ARO_W	Consumed	Courtney J Anderson	11/8/2011 8:19:00 AM
08A	004	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
08A	005	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
08A	005	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
08A	006	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
08A	006	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
08A	007	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
08A	007	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
08A	008	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
08A	008	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
08A	009	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
08A	009	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
08A	010	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
08A	010	SOM01.2_ARO_W	Consumed	Courtney J Anderson	11/8/2011 8:19:00 AM
08A	010	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
08A	011	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
08A	011	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM

Client: EPAINV

Work Order: K2213 **Profile Name:** SOM_VIII_21

MATRIX **Aqueous**

Samp #	Bottle	Test	Status	Received	Date
08B	001	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
08B	002	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
08B	003	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
08B	004	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
08B	005	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
08B	006	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
08B	007	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
08B	008	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
08B	009	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
09A	001	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
09A	001	SOM01.2_ARO_W	Consumed	Courtney J Anderson	11/8/2011 8:19:00 AM
09A	001	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
09A	002	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
09A	002	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
09A	003	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
09A	003	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
09A	003	SOM1.2_SVOA_LOW_W	Consumed	James Kyle Dorsey	11/8/2011 4:31:00 PM
09A	004	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
09A	004	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
09B	001	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
09B	002	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
09B	003	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
10A	001	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
10A	001	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
10A	002	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
10A	002	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
10A	003	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
10A	003	SOM01.2_ARO_W	Consumed	Courtney J Anderson	11/8/2011 8:19:00 AM
10A	003	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
10A	004	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
10A	004	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
10A	004	SOM1.2_SVOA_LOW_W	Consumed	James Kyle Dorsey	11/8/2011 4:31:00 PM

Client: EPAINV

Work Order: K2213 **Profile Name:** SOM_VIII_21

MATRIX **Aqueous**

Samp #	Bottle	Test	Status	Received	Date
10B	001	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
10B	002	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
10B	003	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
11A	001	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
11A	001	SOM01.2_ARO_W	Consumed	Courtney J Anderson	11/8/2011 8:19:00 AM
11A	001	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
11A	002	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
11A	002	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
11A	002	SOM1.2_SVOA_LOW_W	Consumed	James Kyle Dorsey	11/8/2011 4:31:00 PM
11A	003	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
11A	003	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
11A	004	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
11A	004	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
11A	005	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
11A	005	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
11A	006	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
11A	006	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
11A	006	SOM1.2_SVOA_LOW_W	Consumed	James Kyle Dorsey	11/8/2011 4:31:00 PM
11A	007	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
11A	007	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
11A	008	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
11A	008	SOM01.2_ARO_W	Consumed	Courtney J Anderson	11/8/2011 8:19:00 AM
11A	008	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
11A	009	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
11A	009	SOM01.2_ARO_W	Consumed	Courtney J Anderson	11/8/2011 8:19:00 AM
11A	009	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
11A	010	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
11A	010	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
11A	011	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
11A	011	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
11A	012	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
11A	012	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
11A	012	SOM1.2_SVOA_LOW_W	Consumed	James Kyle Dorsey	11/8/2011 4:31:00 PM

Client: EPAINV

Work Order: K2213 **Profile Name:** SOM_VIII_21

MATRIX **Aqueous**

Samp #	Bottle	Test	Status	Received	Date
11B	001	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
11B	002	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
11B	003	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
11B	004	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
11B	005	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
11B	006	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
11B	007	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
11B	008	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
11B	009	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
12A	001	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
12A	001	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
12A	001	SOM1.2_SVOA_LOW_W	Consumed	James Kyle Dorsey	11/8/2011 4:31:00 PM
12A	002	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
12A	002	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
12A	003	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
12A	003	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
12A	004	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
12A	004	SOM01.2_ARO_W	Consumed	Courtney J Anderson	11/8/2011 8:19:00 AM
12A	004	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
12B	001	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
12B	002	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
12B	003	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
13A	001	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
13A	001	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
13A	001	SOM1.2_SVOA_LOW_W	Consumed	James Kyle Dorsey	11/8/2011 4:31:00 PM
13A	002	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
13A	002	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
13A	003	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
13A	003	SOM01.2_ARO_W	Consumed	Courtney J Anderson	11/8/2011 8:19:00 AM
13A	003	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
13A	004	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
13A	004	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM

Client: EPAINV

Work Order: K2213 **Profile Name:** SOM_VIII_21

MATRIX **Aqueous**

Samp #	Bottle	Test	Status	Received	Date
13B	001	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
13B	002	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
13B	003	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
14A	001	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
14A	001	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
14A	002	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
14A	002	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
14A	003	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
14A	003	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
14A	003	SOM1.2_SVOA_LOW_W	Consumed	James Kyle Dorsey	11/8/2011 4:31:00 PM
14A	004	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
14A	004	SOM01.2_ARO_W	Consumed	Courtney J Anderson	11/8/2011 8:19:00 AM
14A	004	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
14B	001	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
14B	002	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
14B	003	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
15A	001	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
15A	001	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
15A	002	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
15A	002	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
15A	003	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
15A	003	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
15A	003	SOM1.2_SVOA_LOW_W	Consumed	James Kyle Dorsey	11/8/2011 4:31:00 PM
15A	004	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
15A	004	SOM01.2_ARO_W	Consumed	Courtney J Anderson	11/8/2011 8:19:00 AM
15A	004	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
15B	001	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
15B	002	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
15B	003	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM

Client: EPAINV

Work Order: K2213 **Profile Name:** SOM_VIII_21

MATRIX **Aqueous**

Samp #	Bottle	Test	Status	Received	Date
16A	001	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
16A	001	SOM01.2_ARO_W	Consumed	Courtney J Anderson	11/8/2011 8:19:00 AM
16A	001	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
16A	002	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
16A	002	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
16A	003	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
16A	003	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
16A	004	SOM01.2_ARO_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
16A	004	SOM1.2_SVOA_LOW_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
16A	004	SOM1.2_SVOA_LOW_W	Consumed	James Kyle Dorsey	11/8/2011 4:31:00 PM
16B	001	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
16B	002	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
16B	003	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
17A	001	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
17A	002	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 PM
17A	003	SOM1.2_VOA_TRACE_W	In	LOGIN: cnadeau	11/3/2011 5:12:00 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	
VP100507D	SOM LCS	05/07/10	02/01/14	2500	µg/mL	1 mL	MeOH		WL	YD
VP100604C	SOM IS	06/04/10	11/01/14	2500	µg/mL	1 mL			WL	
VP101115A	502.2 CALIBRATION MIX	11/15/10	05/30/17	2000	µg/mL	1 mL	MeOH		SMZ	YD
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

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

VW111022D	SOM LCS	10/22/11	01/20/12	100	µg/mL	1 mL			WL	

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
VP100507D	SOM LCS	2500	µg/mL	0.04	mL

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
SP110505D	CLP SVOA DMC STOCK SOLUTION	05/05/11	12/15/16	2000	µg/mL	1 mL	MeCL2		MMS	BM

STD ID	Analyte(s)	Prep Date	Exp Date	Final Conc	Conc Units	Fin Vol	Solvent	Sol Lot	Prep By	Val By
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
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

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	5000	µg/mL	80	µL
SP061226C	2,3,4,6-Tetrachlorophenol	1000	µg/mL	400	µL
SP091020E	CLP04.1 Phenols Calibration Mix	2000 - 4000	µg/mL	200	µL
SP100910E	ATRAZINE	1000	µg/mL	400	µL
SP101202A	3,3'-Dichlorobenzidine	5000	µg/mL	80	µL
SP110304C	CAPROLACTAM STANDARD	2000	µg/mL	200	µL
SP110505D	CLP SVOA DMC STOCK SOLUTION	2000	µg/mL	200	µL
SP110512A	CLP 04.1 B/N MEGAMIX A	1000	µg/mL	400	µL
SP110518B	1,2,3,4-TETRACHLOROBENZENE	1000	µg/mL	400	µL
SP110719B	1,2,4,5-TETRACHLOROBENZENE	1000	µg/mL	400	µL

STD ID	Analyte(s)	Prep Date	Exp Date	Final Conc	Conc Units	Fin Vol	Solvent	Sol Lot	Prep By	Val By
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

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
OSW111025B	SOM LOW MS	10/25/11	10/25/12	40 - 40.00005	µg/mL	50 mL	MeOH	107164	MMS	BM

Stock ID	Analyte(s)		Conc	Conc Units	Amt Added	Amt Added Units
SP110505G	B/N MATRIX SPIKE MIX		5000	µg/mL	400	µL
SP110505I	ACID MATRIX SPIKE MIX		7500	µg/mL	266.7	µL

STD ID	Analyte(s)	Prep Date	Exp Date	Final Conc	Conc Units	Fin Vol	Solvent	Sol Lot	Prep By	Val By
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		

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		
PW110721A	1232 l1	07/21/11	11/24/11	0.005 - 0.1	µg/mL	50 mL	HEX	dd640	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added		Amt Added Units		
PI110524F	ARO 1232 PI			20	µg/mL	0.25		mL		
PI110601A	SOM SURR PI			2 - 4	µg/mL	0.125		mL		
PW110721B	1232 l2	07/21/11	11/24/11	0.01 - 0.2	µg/mL	50 mL	HEX	dd640	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added		Amt Added Units		
PI110524F	ARO 1232 PI			20	µg/mL	0.5		mL		
PI110601A	SOM SURR PI			2 - 4	µg/mL	0.25		mL		
PW110721C	1232 l4	07/21/11	01/21/12	0.04 - 0.8	µg/mL	50 mL	HEX	dd640	CJT	CLM
Stock ID	Analyte(s)			Conc	Conc Units	Amt Added		Amt Added Units		
PI110524F	ARO 1232 PI			20	µg/mL	2		mL		
PI110601A	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
PW110721D	1232 I5	07/21/11	01/21/12	0.08 - 1.6	µg/mL	50 mL	HEX	dd640	CJT	CLM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
PI110524F	ARO 1232 PI	20	µg/mL	4	mL
PI110601A	SOM SURR PI	2 - 4	µg/mL	2	mL

PP110804C	Decachlorobiphenyl Mix	08/04/11	02/01/15	200	µg/mL	1 mL	ACE		GMA	CLM
PP110804D	Tetrachloro-m-xylene Mix	08/04/11	05/01/17	200	µg/mL	1 mL	ACE		GMA	CLM
OPW110822B	P/P SURROGATES	08/22/11	02/22/12	0.6 - 1.2	µg/mL	1000 mL	ACE	096250	GMA	CLM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
PP110608C	TCX MIX	200	µg/mL	3	Ml
PP110804C	Decachlorobiphenyl Mix	200	µg/mL	6	mL

OPW110928A	SOM ARO LCS	09/28/11	11/24/11	1	µg/mL	50 mL	ACE	096250	GMA	DM

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
PI110524A	ARO 1660 PI	10	µg/mL	5	Ml

PP111031B	DCB	10/31/11	12/31/16	200	µg/mL	1 mL	ACE		DJL	GMA
OPW111102A	P/P SURROGATE	11/02/11	05/01/12	0.6 - 1.2	µg/mL	1000 mL	ACE	096250	GMA	DJL

Stock ID	Analyte(s)	Conc	Conc Units	Amt Added	Amt Added Units
PP110804D	Tetrachloro-m-xylene Mix	200	µg/mL	3	mL
PP111031B	DCB	200	µg/mL	6	Ml

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 Patureau 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 36849107.00000

3 To

Recipient's Name Dawne Smart Phone 401 732-3400

Company Spectrum Analytical, Inc

Address 175 Metro Center Blvd Dept./Floor/Suite/Room

We cannot deliver to P.O. boxes or P.O. ZIP codes.

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 Hunt 10/31/11

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 65 lbs. [redacted] 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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fedex.com 1.800.GoFedEx 1.800.463.3339

fedex.com 1.800.GoFedEx 1.800.463.3339

Case 41926
SDG H30X4

COPY
Original Documents Are Included in CSF H3DT6
Signed: [signature] **Date:** 10/31/11

FedEx Express **US Airbill**

FedEx Tracking Number **8720 6114 2859**

Form ID No. **0200**

FedEx Retrieval Copy

1 From

Date 11/1/11 Sender's FedEx Account Number 1942-9093-2

Sender's Name Jen Petersen Phone 720 810-0772

Company UPS Capital Services

Address 1099 18th St, ste 710 Dept/Floor/Suite/Room

City Denver State CO ZIP 80202

2 Your Internal Billing Reference 3647910700000

3 To

Recipient's Name Duane Smart Phone 401 732-3400

Company Spectrum Analytical, Inc

Address 175 Metro Center Blvd Dept/Floor/Suite/Room

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City Warwick State RI ZIP 02886

4a Express Package Service * To most locations. *Packages up to 150 lbs.*

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

06 ☐ FedEx First Overnight — Earliest next business morning delivery to select locations.*

03 ☐ FedEx 2Day — Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

20 ☐ FedEx Express Saver — Next business afternoon.* Saturday Delivery NOT available

XX EXP SAVER

4b Express Freight Service ** To most locations. *Packages over 150 lbs.*

70 ☐ FedEx 1Day Freight — Next business day.** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected. FedEx 1Day Freight Banking No

80 ☐ FedEx 2Day Freight — Second business day.** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

83 ☐ FedEx 3Day Freight — Third business day.** Saturday Delivery NOT available

5 Packaging * Declared value limit $500.

06 ☐ FedEx Envelope* 02 ☐ FedEx Pak* — includes FedEx Small Pak and FedEx Large 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.*

HOLD Weekday — FedEx location address REQUIRED. NOT available for FedEx First Overnight. 01 ☐

HOLD Saturday — FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations. 31 ☐

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. ☐

☑ 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 4 54 lbs. Total Declared Value† 4489 $ 4489

†Our liability is limited to $100 unless you declare a higher value. See the current FedEx Service Guide for details.

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8720 6114 2859

11/3/11 ACA 11/3/11

Case 41926

SDG H30X4

COPY

Original Documents Are Included in CSF H3057

Signed: ACA **Date:** 11/3/11

Contract Laboratory Program

Sample Delivery Group (SDG)

Cover Sheet

SDG Number H30X4

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) H30W9	08) H30Y0	15) H30Z4	
02) H30X2	09) H30Y1	16) H30Z5	
03) H30X3	10) H30Y7	17) H30Z7	
04) H30X4	11) H30Z2	18) H30Z8	
05) H30X6	12) H30Z2MS	19) H3BA1	
06) H30X7	13) H30Z2MSD		
07) H30X9	14) H30Z3		

First Sample in SDG	Last Sample in SDG
H30X4	H3BA1

First Sample Receipt Date	Last Sample Receipt Date
10/29/2011	11/03/2011

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 H30X4

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		
	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: AOM **Date:** 10/31/11

9.0°C

SDG H30X4

USEPA
DateShipped: 11/1/2011
CarrierName: FedEx
AirbillNo:

CHAIN OF CUSTODY RECORD
Site #: 41926
Contact Name: Jeff Miller
Contact Phone: 720-810-7891

No: 8-110111-145735-0009
Cooler #:
Lab: Spectrum Analytical
Lab Phone: 401-732-3400

Lab #	Location		Analyses	Matrix	Collected	Sample Time	Preservative	MS/MSD
	SSSW89	~~H30Z7~~ H30W9	Volatiles (VOAs)	Surface Water	10/29/2011	9:00	HCl	
	SSSW89		Semivolatiles (SVOAs)	Surface Water	10/29/2011	9:00		
	SSSW89		Aroclors	Surface Water	10/29/2011	9:00		
	SSGW03		Volatiles (VOAs)	Ground Water	10/28/2011	9:10	HCl	
	SSGW03	H30X2	Semivolatiles (SVOAs)	Ground Water	10/28/2011	9:10		
	SSGW03		Aroclors	Ground Water	10/28/2011	9:10		
	SSGW04	H30X3	Volatiles (VOAs)	Ground Water	10/27/2011	14:05	HCl	
	SSGW05	H30X4	Volatiles (VOAs)	Ground Water	10/27/2011	17:25	HCl	
	SSGW07		Volatiles (VOAs)	Ground Water	10/28/2011	11:37	HCl	
	SSGW07	H30X6	Semivolatiles (SVOAs)	Ground Water	10/28/2011	11:37		
	SSGW07		Aroclors	Ground Water	10/28/2011	11:37		
	SSGW08		Volatiles (VOAs)	Ground Water	10/28/2011	18:50	HCl	
	SSGW08	H30X7	Semivolatiles (SVOAs)	Ground Water	10/28/2011	18:50		
	SSGW08		Aroclors	Ground Water	10/28/2011	18:50		
	SSGW10		Volatiles (VOAs)	Ground Water	10/28/2011	14:10	HCl	
	SSGW10	H30X9	Semivolatiles (SVOAs)	Ground Water	10/28/2011	14:10		
	SSGW10		Aroclors	Ground Water	10/28/2011	14:10		
	SSGW11		Volatiles (VOAs)	Ground Water	10/28/2011	17:20	HCl	
	SSGW11	H30Y0	Semivolatiles (SVOAs)	Ground Water	10/28/2011	17:20		
	SSGW11		Aroclors	Ground Water	10/28/2011	17:20		

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]	Nov 1, 2011	FEDEX				FedEx	11-03-11	[signature]	11-03-11	9:00

SDG H30X4

USEPA
DateShipped: 11/1/2011
CarrierName: FedEx
AirbillNo:

CHAIN OF CUSTODY RECORD
Site #: 41926
Contact Name: Jeff Miller
Contact Phone: 720-810-7891

No: 8-110111-145735-0009
Cooler #:
Lab: Spectrum Analytical
Lab Phone: 401-732-3400

Lab #	Location	Analyses	Matrix	Collected	Sample Time	Preservative	MS/MSD
	SSGW12	Volatiles (VOAs)	Ground Water	10/29/2011	10:20	HCl	
	SSGW12 H30Y1	Semivolatiles (SVOAs)	Ground Water	10/29/2011	10:20		
	SSGW12	Aroclors	Ground Water	10/29/2011	10:20		
	SSGW18 H30Y7	Volatiles (VOAs)	Ground Water	10/27/2011	10:23	HCl	
	SSGW23	Volatiles (VOAs)	Ground Water	10/29/2011	12:45	HCl	Y
	SSGW23 H30Z2	Semivolatiles (SVOAs)	Ground Water	10/29/2011	12:45		Y
	SSGW23	Aroclors	Ground Water	10/29/2011	12:45		Y
	SSGW24	Volatiles (VOAs)	Ground Water	10/29/2011	13:50	HCl	
	SSGW24 H30Z3	Semivolatiles (SVOAs)	Ground Water	10/29/2011	13:50		
	SSGW24	Aroclors	Ground Water	10/29/2011	13:50		
	SSGW25	Volatiles (VOAs)	Ground Water	10/29/2011	13:20	HCl	
	SSGW25 H30Z4	Semivolatiles (SVOAs)	Ground Water	10/29/2011	13:20		
	SSGW25	Aroclors	Ground Water	10/29/2011	13:20		
	SSGW26	Volatiles (VOAs)	Ground Water	10/29/2011	11:50	HCl	
	SSGW26 H30Z5	Semivolatiles (SVOAs)	Ground Water	10/29/2011	11:50		
	SSGW26	Aroclors	Ground Water	10/29/2011	11:50		
	SSGW89	Volatiles (VOAs)	Ground Water	10/29/2011	14:10	HCl	
	SSGW89 H30Z7	Semivolatiles (SVOAs)	Ground Water	10/29/2011	14:10		
	SSGW89	Aroclors	Ground Water	10/29/2011	14:10		
	SSGW99 H30Z8	Volatiles (VOAs)	Ground Water	10/29/2011	11:55	HCl	

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
		NOV 1, 2011	FEDEX				FedEX	11-03-11		11-03-11	9:00

SDG H30K4

USEPA
DateShipped: 11/1/2011
CarrierName: FedEx
AirbillNo:

CHAIN OF CUSTODY RECORD
Site #: 41926
Contact Name: Jeff Miller
Contact Phone: 720-810-7891

No: 8-110111-145735-0009
Cooler #:
Lab: Spectrum Analytical
Lab Phone: 401-732-3400

Lab #	Location	Analyses	Matrix	Collected	Sample Time	Preservative	MS/MSD
	SSGW99 H3028	Semivolatiles (SVOAs)	Ground Water	10/29/2011	11:55		
	SSGW99	Aroclors	Ground Water	10/29/2011	11:55		
	SSSW99B H3BA1	Volatiles (VOAs)	Surface Water	11/1/2011	13:00	HCl	
	↓						
	SDG - Final Sample						

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
		Nov 1 2011	FEDEX				FedEx	11-03-11		11-03-11	9:00

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: K2213

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: H30X4
PO: EP-W-11-033

HC Due: 11/22/11
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
K2213-01A	H30X4	10/27/2011 17:25	10/29/2011	Aqueous	SOM01.2_ARO_W	/					I2
K2213-01A	H30X4	10/27/2011 17:25	10/29/2011	Aqueous	SOM1.2_SVOA_LOW_W	/					I2
K2213-01B	H30X4	10/27/2011 17:25	11/03/2011	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
K2213-02A	H30Y7	10/27/2011 10:23	10/29/2011	Aqueous	SOM01.2_ARO_W	/					I2
K2213-02A	H30Y7	10/27/2011 10:23	10/29/2011	Aqueous	SOM1.2_SVOA_LOW_W	/					I2
K2213-02B	H30Y7	10/27/2011 10:23	11/03/2011	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
K2213-03A	H30W9	10/29/2011 09:00	11/03/2011	Aqueous	SOM01.2_ARO_W	/					H1
K2213-03A	H30W9	10/29/2011 09:00	11/03/2011	Aqueous	SOM1.2_SVOA_LOW_W	/					H1
K2213-03B	H30W9	10/29/2011 09:00	11/03/2011	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
K2213-04A	H30X2	10/28/2011 09:10	11/03/2011	Aqueous	SOM01.2_ARO_W	/					H1
K2213-04A	H30X2	10/28/2011 09:10	11/03/2011	Aqueous	SOM1.2_SVOA_LOW_W	/					H1
K2213-04B	H30X2	10/28/2011 09:10	11/03/2011	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
K2213-05A	H30X3	10/27/2011 14:05	11/03/2011	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
K2213-06A	H30X6	10/28/2011 11:37	11/03/2011	Aqueous	SOM01.2_ARO_W	/					H1
K2213-06A	H30X6	10/28/2011 11:37	11/03/2011	Aqueous	SOM1.2_SVOA_LOW_W	/					H1
K2213-06B	H30X6	10/28/2011 11:37	11/03/2011	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
K2213-07A	H30X7	10/28/2011 18:50	11/03/2011	Aqueous	SOM01.2_ARO_W	/					H1
K2213-07A	H30X7	10/28/2011 18:50	11/03/2011	Aqueous	SOM1.2_SVOA_LOW_W	/					H1
K2213-07B	H30X7	10/28/2011 18:50	11/03/2011	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
K2213-08A	H30X9	10/28/2011 14:10	11/03/2011	Aqueous	SOM01.2_ARO_W	/					H1

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: K2213

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: H30X4
PO: EP-W-11-033

HC Due: 11/22/11
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
K2213-08A	H30X9	10/28/2011 14:10	11/03/2011	Aqueous	SOM1.2_SVOA_LOW_W	/					H1
K2213-08B	H30X9	10/28/2011 14:10	11/03/2011	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
K2213-09A	H30Y0	10/28/2011 17:20	11/03/2011	Aqueous	SOM01.2_ARO_W	/					H1
K2213-09A	H30Y0	10/28/2011 17:20	11/03/2011	Aqueous	SOM1.2_SVOA_LOW_W	/					H1
K2213-09B	H30Y0	10/28/2011 17:20	11/03/2011	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
K2213-10A	H30Y1	10/29/2011 10:20	11/03/2011	Aqueous	SOM01.2_ARO_W	/					H1
K2213-10A	H30Y1	10/29/2011 10:20	11/03/2011	Aqueous	SOM1.2_SVOA_LOW_W	/					H1
K2213-10B	H30Y1	10/29/2011 10:20	11/03/2011	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
K2213-11A	H30Z2	10/29/2011 12:45	11/03/2011	Aqueous	SOM01.2_ARO_W	/			Y		H1
K2213-11A	H30Z2	10/29/2011 12:45	11/03/2011	Aqueous	SOM1.2_SVOA_LOW_W	/			Y		H1
K2213-11B	H30Z2	10/29/2011 12:45	11/03/2011	Aqueous	SOM1.2_VOA_TRACE_W	/			Y		VOA
K2213-12A	H30Z3	10/29/2011 13:50	11/03/2011	Aqueous	SOM01.2_ARO_W	/					H1
K2213-12A	H30Z3	10/29/2011 13:50	11/03/2011	Aqueous	SOM1.2_SVOA_LOW_W	/					H1
K2213-12B	H30Z3	10/29/2011 13:50	11/03/2011	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
K2213-13A	H30Z4	10/29/2011 13:20	11/03/2011	Aqueous	SOM01.2_ARO_W	/					H1
K2213-13A	H30Z4	10/29/2011 13:20	11/03/2011	Aqueous	SOM1.2_SVOA_LOW_W	/					H1
K2213-13B	H30Z4	10/29/2011 13:20	11/03/2011	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
K2213-14A	H30Z5	10/29/2011 11:50	11/03/2011	Aqueous	SOM01.2_ARO_W	/					H1
K2213-14A	H30Z5	10/29/2011 11:50	11/03/2011	Aqueous	SOM1.2_SVOA_LOW_W	/					H1
K2213-14B	H30Z5	10/29/2011 11:50	11/03/2011	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: K2213

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: H30X4
PO: EP-W-11-033

HC Due: 11/22/11
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
K2213-15A	H30Z7	10/29/2011 14:10	11/03/2011	Aqueous	SOM01.2_ARO_W	/					H1
K2213-15A	H30Z7	10/29/2011 14:10	11/03/2011	Aqueous	SOM1.2_SVOA_LOW_W	/					H1
K2213-15B	H30Z7	10/29/2011 14:10	11/03/2011	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
K2213-16A	H30Z8	10/29/2011 11:55	11/03/2011	Aqueous	SOM01.2_ARO_W	/					H1
K2213-16A	H30Z8	10/29/2011 11:55	11/03/2011	Aqueous	SOM1.2_SVOA_LOW_W	/					H1
K2213-16B	H30Z8	10/29/2011 11:55	11/03/2011	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
K2213-17A	H3BA1	11/01/2011 13:00	11/03/2011	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

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. H30X4	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.
H30X4	N/A	K2213-01	Good
H30Y7	N/A	K2213-02	Good

Sample Transfer

Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area #	Area # R1
By	By SN
On	On 10/31/11

* Contact SMO and attach record of resolution

Reviewed By	Logbook No.
Date 11/3/11	Logbook Page No.

SAMPLE LOG-IN SHEET

FORM DC-1

Lab Name Mitkem Laboratories	Page 01 of 01
Received By (Print Name) Daniel McKenna	Log-in Date 11/03/2011
Received By (Signature) Daniel McKenna	
Case Number 41926	Sample Delivery Group No. H30X4 / 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 8720 6114 2859
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	11/03/2011
12. Time Received	09:00

EPA Sample #	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
H30W9	N/A	K2213-03	Good
H30Z3	N/A	K2213-12	
H30Z4	N/A	K2213-13	
H30Z5	N/A	K2213-14	
H30Z7	N/A	K2213-15	
H30Z8	N/A	K2213-16	Good

Sample Transfer

Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area # /	Area # R1
By /	By DRM
On /	On 11/3/11

* Contact SMO and attach record of resolution

Reviewed By SW	Logbook No. /
Date 11/3/11	Logbook Page No. /

SAMPLE LOG-IN SHEET

FORM DC-1

Lab Name Mitkem Laboratories	Page 01 of 01
Received By (Print Name) Daniel Mercenna	Log-in Date 11/03/2011
Received By (Signature) Daniel Mercenna	
Case Number 41926	Sample Delivery Group No. H30X4 / 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 8720 6114 2859
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	11/03/2011
12. Time Received	09:00

EPA Sample #	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
H30W9	N/A	K2213-03	Good
H30Z4	N/A	K2213-13	
H30Z5	N/A	K2213-14	
H30Z7	N/A	K2213-15	
H30Z8	N/A	K2213-16	Good

Sample Transfer

Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area # /	Area # RI
By /	By DRM
On /	On 11/3/11

* Contact SMO and attach record of resolution

Reviewed By SN	Logbook No.
Date 11/3/11	Logbook Page No. /

SAMPLE LOG-IN SHEET

FORM DC-1

Lab Name Mitkem Laboratories	Page 01 of 01
Received By (Print Name) Daniel McKenna	Log-in Date 11/03/2011
Received By (Signature) Daniel McKenna	
Case Number 41926	Sample Delivery Group No. H30X4 / 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 8720 6114 2859
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	11/03/2011
12. Time Received	09:00

EPA Sample #	Corresponding: Sample Tag #	Corresponding: Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
H30X2	N/A	K2213-04	Good

Sample Transfer

Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area # /	Area # RI
By /	By DRM
On /	On 11/3/11

* Contact SMO and attach record of resolution

Reviewed By SW	Logbook No. /
Date 11/3/11	Logbook Page No. /

SAMPLE LOG-IN SHEET

FORM DC-1

Lab Name Mitkem Laboratories	Page 01 of 01
Received By (Print Name) Daniel McKenna	Log-in Date 11/03/2011
Received By (Signature) Daniel Mckenna	
Case Number 41926	Sample Delivery Group No. H30X4 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 8720 6114 2859
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	11/03/2011
12. Time Received	09:00

EPA Sample #	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
H30X2	N/A	K2213-04	RECEIVED 2 BROKEN AMBER / 2 LEFT
H30X6	N/A	K2213-06	Good
H30X7	N/A	K2213-07	Good
H30X9	N/A	K2213-08	Good

Sample Transfer

Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area # /	Area # R1
By /	By DRM
On /	On 11/3/11

* Contact SMO and attach record of resolution

Reviewed By SW	Logbook No.
Date 11/3/11	Logbook Page No. /

SAMPLE LOG-IN SHEET

FORM DC-1

Lab Name Mitkem Laboratories	Page 01 of 01
Received By (Print Name) Daniel McKenna	Log-in Date 11/03/2011
Received By (Signature) Daniel McKenna	
Case Number 41926	Sample Delivery Group No. H30X4 / 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 8720 6114 2859
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	11/03/2011
12. Time Received	09:00

EPA Sample #	Corresponding: Sample Tag #	Corresponding: Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
H30X6	N/A	K2213-06	Good
H30X7	N/A	K2213-07	
H30X9	N/A	K2213-08	
H30Z4	N/A	K2213-13	
H30Z5	N/A	K2213-14	
H30Z7	N/A	K2213-15	Good

Sample Transfer

Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area # /	Area # RI
By /	By DRM
On /	On 11/3/11

* Contact SMO and attach record of resolution

Reviewed By SW	Logbook No.
Date 11/3/11	Logbook Page No. /

SAMPLE LOG-IN SHEET

FORM DC-1

Lab Name Mitkem Laboratories	Page 01 of 01
Received By (Print Name) Daniel McKenna	Log-in Date 11/03/2011
Received By (Signature) Daniel McKenna	
Case Number 41926	Sample Delivery Group No. H30X4
	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 8720 6114 2859
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	11/03/2011
12. Time Received	09:00

EPA Sample #	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
H30X9	N/A	K2213-08	Good
H30Y0	N/A	K2213-09	Good
H30Y1	N/A	K2213-10	Good

Sample Transfer

Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area # /	Area # R1
By /	By DRM
On /	On 11/3/11

* Contact SMO and attach record of resolution

Reviewed By SW	Logbook No. /
Date 11/3/11	Logbook Page No. /

SAMPLE LOG-IN SHEET

FORM DC-1

Lab Name Mitkem Laboratories	Page 01 of 01
Received By (Print Name) Daniel McKenna	Log-in Date 11/03/2011
Received By (Signature) Daniel McKenna	
Case Number 41926	Sample Delivery Group No. H30X4
	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 8720 6114 2859
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	11/03/2011
12. Time Received	09:00

EPA Sample #	Corresponding: Sample Tag #	Corresponding: Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
H30X9	N/A	K2213-08	RECEIVED 1 AMBER BROKEN/ 3 LEFT
H30Y0	N/A	K2213-09	Good
H30Y1	N/A	K2213-10	Good
H30Z2	N/A	K2213-11	Good

Sample Transfer

Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area #	Area # R1
By	By DRM
On	On 11/3/11

* Contact SMO and attach record of resolution

Reviewed By BL	Logbook No.
Date 11/3/11	Logbook Page No.

SAMPLE LOG-IN SHEET

FORM DC-1

Lab Name Mitkem Laboratories	Page 01 of 01
Received By (Print Name) Daniel McKenna	Log-in Date 11/03/2011
Received By (Signature) Daniel McKenna	
Case Number 41926	Sample Delivery Group No. H30X4 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 8720 6114 2859
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	11/03/2011
12. Time Received	09:00

EPA Sample #	Corresponding: Sample Tag #	Corresponding: Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
H30Y1	N/A	K2213-10	Good
H30Z2	N/A	K2213-11	Good
H30Z4	N/A	K2213-13	Good

Sample Transfer

Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area # /	Area # RI
By /	By DRM
On /	On 11/3/11

* Contact SMO and attach record of resolution

Reviewed By SW	Logbook No. /
Date 11/3/11	Logbook Page No.

SAMPLE LOG-IN SHEET

FORM DC-1

Lab Name Mitkem Laboratories		Page 01 of 01
Received By (Print Name) Daniel McKenna		Log-in Date 11/03/2011
Received By (Signature) Daniel McKenna		
Case Number 41926	Sample Delivery Group No. H30X4	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*
2. Custody Seal Nos. — Intact / Broken — 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 8720 6114 2859
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	11/03/2011
12. Time Received	09:00

EPA Sample #	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
H30Y1	N/A	K2213-10	Good
H30Z2	N/A	K2213-11	Good
H30Z3	N/A	K2213-12	Good

Sample Transfer

Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area # /	Area # R1
By /	By DRM
On /	On 11/3/11

* Contact SMO and attach record of resolution

Reviewed By SW	Logbook No. /
Date 11/3/11	Logbook Page No.

SAMPLE LOG-IN SHEET

FORM DC-1

Lab Name Mitkem Laboratories	Page 01 of 01
Received By (Print Name) Daniel McKenna	Log-in Date 11/03/2011
Received By (Signature) Daniel McKenna	
Case Number 41926	Sample Delivery Group No. H30X4 / 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 8720 6114 2859
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 6.0 °C
10. Does information on TR/COCs and sample tags agree? Yes / No*
11. Date Received at Laboratory 11/03/2011
12. Time Received 09:00

Sample Transfer		
	Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area #	VOA Lab	
By	DRM	
On	11/3/11	

EPA Sample #	Corresponding: Sample Tag #	Corresponding: Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
H30W9	N/A	K2213-03	Good
H30X2	N/A	K2213-04	
H30X3	N/A	K2213-05	
H30X4	N/A	K2213-01	
H30X6	N/A	K2213-06	
H30X7	N/A	K2213-07	
H30X9	N/A	K2213-08	
H30Y0	N/A	K2213-09	
H30Y1	N/A	K2213-10	
H30Y7	N/A	K2213-02	
H30Z2	N/A	K2213-11	
H30Z3	N/A	K2213-12	
H30Z4	N/A	K2213-13	
H30Z5	N/A	K2213-14	
H30Z7	N/A	K2213-15	
H30Z8	N/A	K2213-16	
H3BA1	N/A	K2213-17	Good

* Contact SMO and attach record of resolution

Reviewed By SW	Logbook No.
Date 11/3/11	Logbook Page No.

Agnes Huntley [Warwick]

From: Mroz, Ryan [rmroz@fedcsc.com]
Sent: Thursday, November 03, 2011 8:11 AM
To: Agnes Huntley [Warwick]; Dawne Smart [Warwick]; Spectrum Analytical -- RI
Cc: Donald Goodrich
Subject: Region 08 | Case 41926 | Lab MITKEM | Issue Multiple | FINAL

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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mail for such purpose.

-----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
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 12:06 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, November 04, 2011 12:20 PM
To: Agnes Huntley [Warwick]; Dawne Smart [Warwick]
Cc: Goodrich.Donald@epamail.epa.gov
Subject: Region 08 | Case 41926 | Lab MITKEM | Issue Multiple | FINAL
Attachments: Case 41926.pdf; 41926_SOM_IDs.xls

Agnes,

Summary Start
-Discrepancies with tags, jars, and/or TR/COC-
Issue 1: The TR/COC does not list samples with CLP formatted IDs. There are CLP IDs on the containers and the lab can match up the information between the TR/COC station locations and sample containers to identify the samples.
Resolution 1: Per Region 8, the lab shall use the sample IDs on the sample containers to identify the samples, note the issue in the SDG Narrative, and proceed with analysis.

Issue 2: The TR/COC does not list a TAT. Per Scheduling, this Case requires a 21 day TAT.
Resolution 2: In accordance with previous direction from Region 8, the laboratory will proceed with the turnaround time indicated on the Scheduling Notification Form, note the issue in the SDG Narrative, 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 turnaround time.

-Sample shipped in incorrect containers-
Issue 3: The laboratory received VOA samples in unpreserved 4 oz jars.
Resolution 3: In accordance with previous direction from Region 8, the laboratory will follow the same procedure as described for the field core/storage containers (e.g., EnCoreTM or equivalent) and note the issue in the SDG Narrative.

-Laboratory problems-
Issue 4: VOA soil samples were collected on 10/27 and 10/28, received today 11/3 in 4oz jars. The laboratory is treating these as if they are "Encores", however, the samples should be "extruded" within 48 hours collection.
Resolution 4: Per Region 8, the lab shall note the collection time and extrusion time discrepancy in the SDG Narrative and proceed with analysis.

-Incorrect/duplicated sample numbers-
Issue 5: The laboratory received a sample (station location SSSW99B) without a CLP formatted ID.
Resolution 5: In accordance with previous direction from Region 8, the SMO coordinator will assign new sample IDs and provide the laboratory and the Region with a copy of the cross-referenced sample IDs. The laboratory will note the issue in the SDG Narrative and proceed with the analysis of the samples.
Summary End

Let me know if you have any additional questions or problems.
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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From: Agnes Huntley [Warwick] [mailto:agnes_ng@mitkem.com]
Sent: Friday, November 04, 2011 10:57 AM
To: Mroz, Ryan
Subject: RE: Region 08 | Case 41926 | Lab MITKEM | Issue Multiple

HI Ryan,

Attached is the spreadsheet.

Please note that sample SSSW99B did not have an EPA sample ID written on the labels on the vials (this sample is for VOA only). I had the login staff use the sample that was provided to us in the initial email, H3BA1.

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: Friday, November 04, 2011 10:48 AM
To: Agnes Huntley [Warwick]
Subject: Region 08 | Case 41926 | Lab MITKEM | Issue Multiple

Hi Agnes,

Can you let me know what the sample numbers are when you get a chance with the attached excel sheet.

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: Mroz, Ryan
Sent: Thursday, November 03, 2011 1:38 PM
To: Agnes (Ng) Huntley; 'Dawne Smart [Warwick]'
Subject: Region 08 | Case 41926 | Lab MITKEM | Issue Multiple

Agnes,

Can you fill in the sample IDs on the attached spreadsheet that correspond to the station locations for our own documentation purposes. I'll send a final with that attachment complete.

-Discrepancies with tags, jars, and/or TR/COC-
Issue 1: The TR/COC does not list samples with CLP formatted IDs. There are CLP IDs on the containers and the lab can match up the information between the TR/COC station locations and sample containers to identify the samples.
Resolution 1: Per Region 8, the lab shall use the sample IDs on the sample containers to identify the samples, note the issue in the SDG Narrative, and proceed with analysis.

Issue 2: The TR/COC does not list a TAT. Per Scheduling this Case requires a 21 day TAT.
Resolution 2: In accordance with previous direction from Region 8, the laboratory will proceed with the turnaround time indicated on the Scheduling Notification Form, note the issue in the SDG Narrative, 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 turnaround time.

-Sample shipped in incorrect containers-
Issue 3: The laboratory received VOA samples in unpreserved 4 oz jars.
Resolution 3: In accordance with previous direction from Region 8, the laboratory will follow the same procedure as described for the field core/storage containers (e.g., EnCoreTM or equivalent) and note the issue in the SDG Narrative.

Laboratory problems-
Issue 4: VOA soil samples were collected on 10/27 and 10/29, received today 11/3 in 4oz jars. The laboratory is treating these as if they are "Encores", however, the samples should be "extruded" within 48 hours collection.
Resolution 4: Per Region 8, the lab shall note the collection time and extrusion time discrepancy in the SDG Narrative and proceed with analysis.

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: Thursday, November 03, 2011 1:31 PM
To: Mroz, Ryan
Subject: Re: Region 08 | Case 41926 | Lab MITKEM | Issue Multiple

Ryan, go with the CLP IDs listed on the containers.

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: Thursday, November 03, 2011 1:26 PM
To: 'Donald Goodrich'
Subject: Region 08 | Case 41926 | Lab MITKEM | Issue Multiple

Don,

The lab unpacked the samples and noticed the CLP IDs, (although not on the TR/COC) are on the sample containers and they can match them with the TR/COC information. I have updated Issue 1. Would you like the lab to use the IDs on the containers?

-Discrepancies with tags, jars, and/or TR/COC-
Issue 1: The TR/COC does not list samples with CLP formatted IDs. There are CLP IDs on the containers and the lab can match up the information between the TR/COC station locations and sample containers to identify the samples.

Issue 2: The TR/COC does not list a TAT. Per Scheduling this Case requires a 21 day TAT.
Resolution 2: In accordance with previous direction from Region 8, the laboratory will proceed with the turnaround time indicated on the Scheduling Notification Form, note the issue in the SDG Narrative, 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 turnaround time.

-Sample shipped in incorrect containers-
Issue 3: The laboratory received VOA samples in unpreserved 4 oz jars.
Resolution 3: In accordance with previous direction from Region 8, the laboratory will follow the same procedure as described for the field core/storage containers (e.g., EnCoreTM or equivalent) and note the issue in the SDG Narrative.

Laboratory problems-
Issue 4: VOA soil samples were collected on 10/27 and 10/29, received today 11/3 in 4oz jars. The laboratory is treating these as if they are "Encores", however, the samples should be "extruded" within 48 hours collection.
Resolution 4: Per Region 8, the lab shall note the collection time and extrusion time discrepancy in the SDG Narrative and proceed with analysis.

Let me know if you have any additional 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: Mroz, Ryan
Sent: Thursday, November 03, 2011 12:26 PM
To: 'Agnes Huntley [Warwick]'
Subject: RE: Region 08 | Case 41926 | Lab MITKEM | Issue Multiple

Can you match up the information on the containers to the TR/COC?

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, November 03, 2011 12:21 PM
To: Mroz, Ryan
Subject: RE: Region 08 | Case 41926 | Lab MITKEM | Issue Multiple

Hi Ryan,

We started unpacking the samples and the labels have CLP IDs. Are we to use the IDs on the labels or the IDs you have just provided to us?

Thank you,
Agnes

Agnes Huntley
CLP Project Manager
Spectrum Analytical, featuring Hanibal Technology
Rhode Island Division
Formerly Mitkem Laboratories
(P) 401-732-3400
(F) 401-732-3499

-----Original Message-----
From: Goodrich.Donald@epamail.epa.gov [mailto:Goodrich.Donald@epamail.epa.gov]
Sent: Thursday, November 03, 2011 12:54 PM
To: Mroz, Ryan
Cc: Kent_Alexander@URSCorp.com
Subject: Re: Region 08 | Case 41926 | Lab MITKEM | Issue Multiple

Ryan, for Issue 4, have the laboratory note the issue and continue with sample analysis.

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 [mailto:rmroz@fedcsc.com]
Sent: Thursday, November 03, 2011 12:14 PM
To: Agnes Huntley [Warwick]; Dawne Smart [Warwick]
Subject: Region 08 | Case 41926 | Lab MITKEM | Issue Multiple

Agnes,

Please see the attachment for the CLP IDs, and the resolutions for Issues 1, 2, and 3. I will get back to you with a FINAL ROC when I get an answer for Issue 4.

Incorrect/duplicated sample numbers-
Issue 1: The laboratory received samples without CLP formatted IDs.
Resolution 1: In accordance with previous direction from Region 8, the SMO coordinator will assign new sample IDs and provide the laboratory and the Region with a copy of the cross-referenced sample IDs. The laboratory will note the issue in the SDG Narrative and proceed with the analysis of the samples.

-Discrepancies with tags, jars, and/or TR/COC-
Issue 2: The TR/COC does not list a TAT. Per Scheduling this Case requires a 21 day TAT.
Resolution 2: In accordance with previous direction from Region 8, the laboratory will proceed with the turnaround time indicated on the Scheduling Notification Form, note the issue in the SDG Narrative, 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 turnaround time.

-Sample shipped in incorrect containers-
Issue 3: The laboratory received VOA samples in unpreserved 4 oz jars.
Resolution 3: In accordance with previous direction from Region 8, the laboratory will follow the same procedure as described for the field core/storage containers (e.g., EnCoreTM or equivalent) and note the issue in the SDG Narrative.

Thanks,

Ryan Mroz
Environmental Coordinator - Regions 5 & 8
CSC

15000 Conference Center Drive Chantilly, VA 20151
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From: Mroz, Ryan
Sent: Thursday, November 03, 2011 12:12 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, 2 and 3 can be resolved with a standard answer, please advise the lab on Issue 4.

-Incorrect/duplicated sample numbers-
Issue 1: The laboratory received samples without CLP formatted IDs.
Resolution 1: In accordance with previous direction from Region 8, the SMO coordinator will assign new sample IDs and provide the laboratory and the Region with a copy of the cross-referenced sample IDs. The laboratory will note the issue in the SDG Narrative and proceed with the analysis of the samples.

-Discrepancies with tags, jars, and/or TR/COC-
Issue 2: The TR/COC does not list a TAT. Per Scheduling this Case requires a 21 day TAT.
Resolution 2: In accordance with previous direction from Region 8, the laboratory will proceed with the turnaround time indicated on the Scheduling Notification Form, note the issue in the SDG Narrative, 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 turnaround time.

-Sample shipped in incorrect containers-
Issue 3: The laboratory received VOA samples in unpreserved 4 oz jars.
Resolution 3: In accordance with previous direction from Region 8, the laboratory will follow the same procedure as described for the field core/storage containers (e.g., EnCoreTM or equivalent) and note the issue in the SDG Narrative.

-Laboratory problems-
Issue 4: VOA soil samples were collected on 10/27 and 10/29, received today 11/3 in 4oz jars. The laboratory is treating these as if they are "Encores", however, the samples should be "extruded" within 48 hours collection.

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: Thursday, November 03, 2011 10:58 AM
To: Mroz, Ryan
Subject: Case 41926

Hi Ryan,

I have attached the TR/COC.

The TR/COC was received with no CLP sample IDs. Please proved CLP sample IDs.

Please note that the VOA soils were collected on Oct. 27 and received today 11/3. The VOA soils were received on 4oz jars. The laboratory is treating these as if they are "Encores", however, the samples should be "extruded" within 48 hours collection. These samples were collected 6-days ago.

Thank you,
Agnes

Agnes Huntley
CLP Project Manager
Spectrum Analytical, featuring Hanibal Technology
Rhode Island Division
Formerly Mitkem Laboratories
(P) 401-732-3400
(F) 401-732-3499
****
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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Agnes Huntley [Warwick]

From: Mroz, Ryan [rmroz@fedcsc.com]
Sent: Monday, November 07, 2011 12:01 PM
To: Agnes Huntley [Warwick]; Dawne Smart [Warwick]
Cc: Goodrich.Donald@epamail.epa.gov
Subject: Region 08 | Case 41926 | Lab MITKEM | SDG H30X4 | Issue Broken samples | FINAL

Agnes,

Summary Start
Issue: The laboratory received two of four 1L amber bottles broken for sample H30X2, and 1 of four 1L amber bottles broken for sample H30X9. The laboratory has sufficient sample volume for SVOA and ARO analyses; however, the laboratory will have trouble if re-extraction is required for these samples.
Resolution: 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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From: Agnes Huntley [Warwick] [mailto:agnes_ng@mitkem.com]
Sent: Monday, November 07, 2011 10:41 AM
To: Mroz, Ryan
Subject: Case 41926 SDG H30X4

Hi Ryan,

The laboratory received two of four 1L amber bottles broken for sample H30X2. The laboratory has sufficient sample volume for SVOA and ARO analyses. There is no remaining sample volume for re-extraction if re-extraction is required.

The laboratory received one of four 1L amber bottles broken for sample H30X9. The laboratory has sufficient sample volume remaining for SVOA and ARO. The laboratory will have an issue only if both SVOA and ARO require re-extraction.

Thank you,
Agnes

Agnes Huntley
CLP Project Manager
Spectrum Analytical, featuring Hanibal Technology
Rhode Island Division
Formerly Mitkem Laboratories
(P) 401-732-3400
(F) 401-732-3499
****

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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