

Revised August 5, 2013  
July 1, 2013  
File No.: 21.0056367.50 Task 3



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Chad Staniszewski, P.E.  
New York State Dept. of Environmental Conservation (NYSDEC)  
Division of Environmental Remediation – Region 9  
270 Michigan Avenue  
Buffalo, New York 14203-2999

Re: On-Site Soil Source Evaluation Report  
Former Signore Facility (BCP Site #C905034)  
Brownfield Cleanup Program  
Ellicottville, New York

Dear Chad:

On behalf of Iskalo Ellicottville Holdings LLC (Iskalo), GZA GeoEnvironmental of New York (GZA) has prepared this report to provide results of the On-Site Soil Source Evaluation. GZA assessed soil located outside of the Signore BCP Site footprint, but within the Signore property limits (see Figure 1), for reuse as backfill during the upcoming soil excavation work that will remove additional impacted soils at the Signore BCP Site. It is estimated that approximately 3,200 cubic yards of soil may be needed for the upcoming soil removal and backfill project. Therefore, we assessed a 200 foot by 120 foot area to a depth of 4 feet (see Figure 1), or approximately 3,555 cubic yards of soil.

This work was completed in accordance with the sampling work plan<sup>1</sup> approved by the New York State Department of Environmental Conservation (NYSDEC) in a letter dated June 10, 2013.

## **PURPOSE**

Soil located north of the Signore BCP Site footprint was assessed for reuse within the Signore BCP Site. The following sections describe the scope of work completed within the area shown on Figure 1 to provide analytical data that will satisfy NYSDEC Division of Remediation (DER) guidelines outlined in DER-10<sup>2</sup> Table 5.4(e)10 for soil reuse within a BCP Site. According to Table 5.4(e)10, the recommended number of soil samples for analysis to assess 3,500 cubic yards of soil is as follows.

- Thirteen (13) discrete soil samples for volatile organic compounds (VOCs) analysis; and

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<sup>1</sup> “On-Site Soil Source for Reuse as Backfill, Former Signore Facility (C905034), Former Signore, Inc., Ellicottville, New York 14731” dated June 7, 2013.

<sup>2</sup> NYSDEC, Division of Remediation, DER-10/Technical Guidance for Site Investigation and Remediation, dated March 3, 2010.



- Five (5) composite soil samples for semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), metals and pesticides analysis.

## **SCOPE OF WORK**

### Grid Layout

Prior to soil probe sampling, the area proposed for use as a borrow source was measured in the field and marked out with stakes in a grid pattern consisting of 15 areas, each 40 feet by 40 feet. The total area marked out was 200 feet by 120 feet, and was assessed to a depth of 4 feet below ground surface (bgs). The grid was left in-place after the completion of the work.

### Soil Probes

GZA completed 15 soil probes to 4 feet bgs within the 15 grid areas (one per grid area) to collect 13 discrete and five (5) composite soil samples to assess the soil conditions for reuse. The soil probes were completed from the approximate center of each grid area. The three (3) north-south orientated grid rows were labeled 1, 2 and 3 (from west to east) and the five (5) east-west orientated grid rows were labeled A through E (from south to north, see Figure 1).

The soil probes were completed using a Geoprobe® track-mounted rig. A 2-inch diameter by 48-inch long macro-core sampler was driven continuously at 48-inch intervals to retrieve the soil samples. Dedicated and disposable acetate sampler liners were used inside of the macro-core sampler between sample intervals. Representative portions of the recovered soils were placed in zip-lock bags for further classification and headspace analysis.

GZA prepared soil probe logs summarizing the general subsurface conditions observed at each probe location. These logs provide a summary description of the soils based on our visual observations of the recovered soil's color and composition. Soil probe logs are included as Appendix A.

### Headspace Screening

A representative portion of each soil sample was placed in a zip-lock bag following initial field screening after the acetate sample liner was opened. The headspace in the zip-lock bag of each sample was screened for total organic vapors using an organic vapor meter (OVM) equipped with a photoionization detector with a 10.6 eV ultraviolet lamp. The OVM used was a MiniRae 3000 and was calibrated in accordance with manufacturer's recommendations. A gas standard of isobutylene at a concentration of 100 parts per million (ppm) was used for calibration. Ambient air at the Site was used to establish background organic vapor concentrations.

Organic vapors were not detected at the 15 soil probe locations. Headspace results were recorded on the probe logs included in Appendix B.



## **ANALYTICAL LABORATORY TESTING**

The sampling frequencies required for approximately 3,500 cubic yards of soil, according to DER-10 Table 5.4(e)10, is 13 discrete VOCs samples and five (5) composite samples for SVOCs, inorganics, and pesticides. The selected samples were packed in an ice-filled cooler and sent to Spectrum Analytical in North Kingstown, Rhode Island. Typical chain-of-custody procedures were followed. Table 1 is a summary of the analytical samples collected by GZA as part of this work and the analyses completed.

The VOC samples collected for analysis were from discrete soil samples (from specific depths shown on Table 1) from ground surface to 4 feet bgs and were not composited from the sample interval. As the OVM readings were non-detect in the soil samples field screened, the VOC samples were collected from various depths to provide depth distribution across the sampling locations. Table 1 is a summary of the samples collected for analysis.

The 5 composite samples were collected, one from each of the five (5) grid area rows, orientated in the east-west direction. Therefore, representative soil from 0 to 4 feet bgs from A-1, A-2, and A-3 were composited to make Comp-A sample. The procedure was used from rows B through E as well. Representative soil from 0 to 4 feet bgs at each of the three (3) probes in an east-west orientated row were placed in a pre-cleaned stainless steel bowl and mixed to generate one (1) composite sample.

## **SUBSURFACE CONDITIONS**

### Soil

The subsurface conditions encountered at 15 soil probes generally consisted of topsoil overlying brown silty clay with less and varying amounts of gravel. At eleven (11) of the 15 soil probes locations (i.e., A-3, B-1, B-2, C-1, C-2, C-3, D-1, D-2, E-1, E-2, E-3), brown sand and gravel with less and varying amounts of silt and clay was encountered below the brown silty clay.

### Groundwater

Groundwater was not encountered in the 15 soil probes completed to assess the soil.

## **ANALYTICAL TEST RESULTS**

Findings of the laboratory testing of the soil samples analyzed are presented below. The analytical laboratory report for the work completed by GZA is provided in Appendix B. The analytical results for the soil samples collected are summarized on Table 2.

The analytical test results for the soil samples were compared to 6 New York Code Rules and Regulation Part 375 Environmental Remediation Programs, Subparts 375-12 to 375-4 & 375-6, effective December 14, 2006 (Part 375). Specifically, the Part 375 Restricted



Residential Soil Cleanup Objectives (RRSCOs) and Protection of Groundwater Soil Cleanup Objectives (PGWSCOs) were used for comparative purposes.

Volatile Organic Compounds:

VOCs were not detected above method detection limits in the 13 soil samples analyzed.

Semi-Volatile Organic Compounds:

One SVOC, bis(2-ethylhexyl)phthalate (100 parts per billion (ppb)) was the only compound detected above method detection limits in the five (5) soil samples analyzed (see Table 2). This compound does not have a Part 375 SCO. No other SVOCs were detected in the other four (4) samples analyzed.

Polychlorinated biphenyls (PCBs):

PCBs were not detected above method detection limits in the five (5) samples analyzed.

Pesticides:

Pesticides were not detected above method detection limits in the five (5) soil analyzed.

Metals:

Twenty-two (22) different metal analytes were detected above method detection limits in the five (5) soil samples analyzed (see Table 2). Arsenic was the only analyte which slightly exceeded its respective RRSCO (16 ppm) and PGWSCO (16 ppm) in two (2) composite samples, Comp-C (17 ppm) and Comp-D (17 ppm).

Metals were not detected above the Unrestricted, RRSCO or PGWSCOs in the other three (3) composite samples analyzed.

**CONCLUSIONS**

GZA has evaluated the analytical data generated by our soil investigation. No VOCs, SVOCs, PCBs or pesticides were detected at concentrations above the Part 375 Unrestricted, RRSCO or PWG SCOs.

The results of the five (5) TAL metal samples were below the Unrestricted, RRSCO and PGW SCO with the exception of one (1) analyte in two (2) composite samples. Arsenic was detected in samples Comp-C and Comp-D at a concentration of 17 ppm in both samples, which exceeds its RRSCO and PGWSCO value of 16 ppm. The remaining analytes detected were below their respective Unrestricted SCOs, RRSCOs and PGWSCOs.



GZA recommends that this soil be allowed for use as backfill within the Signore BCP Site during upcoming Interim Remedial Measure activities. It is our opinion that the soil is acceptable for reuse since the detected concentration of arsenic in two (2) samples (i.e., Comp-C and Comp-D) is only 1 ppm above (same order of magnitude), its respective RRSCO and PGWSCO. Arsenic is not a compound of concern at the Site. Review of the concentrations of the metal analytes detected in the five (5) composite samples, including arsenic, indicate consistent concentrations among the five (5) samples and the concentrations of arsenic detected are likely representative of background concentrations.

If you need additional information or would like to discuss the project, please contact Chris Boron (GZA Project Manager) at (716) 844-7046.

Respectfully,

GZA GEOENVIRONMENTAL OF NEW YORK

A handwritten signature in blue ink that reads 'Chris Boron'.

Christopher Boron  
Senior Project Manager

A handwritten signature in blue ink that reads 'Bart A. Klettke'.

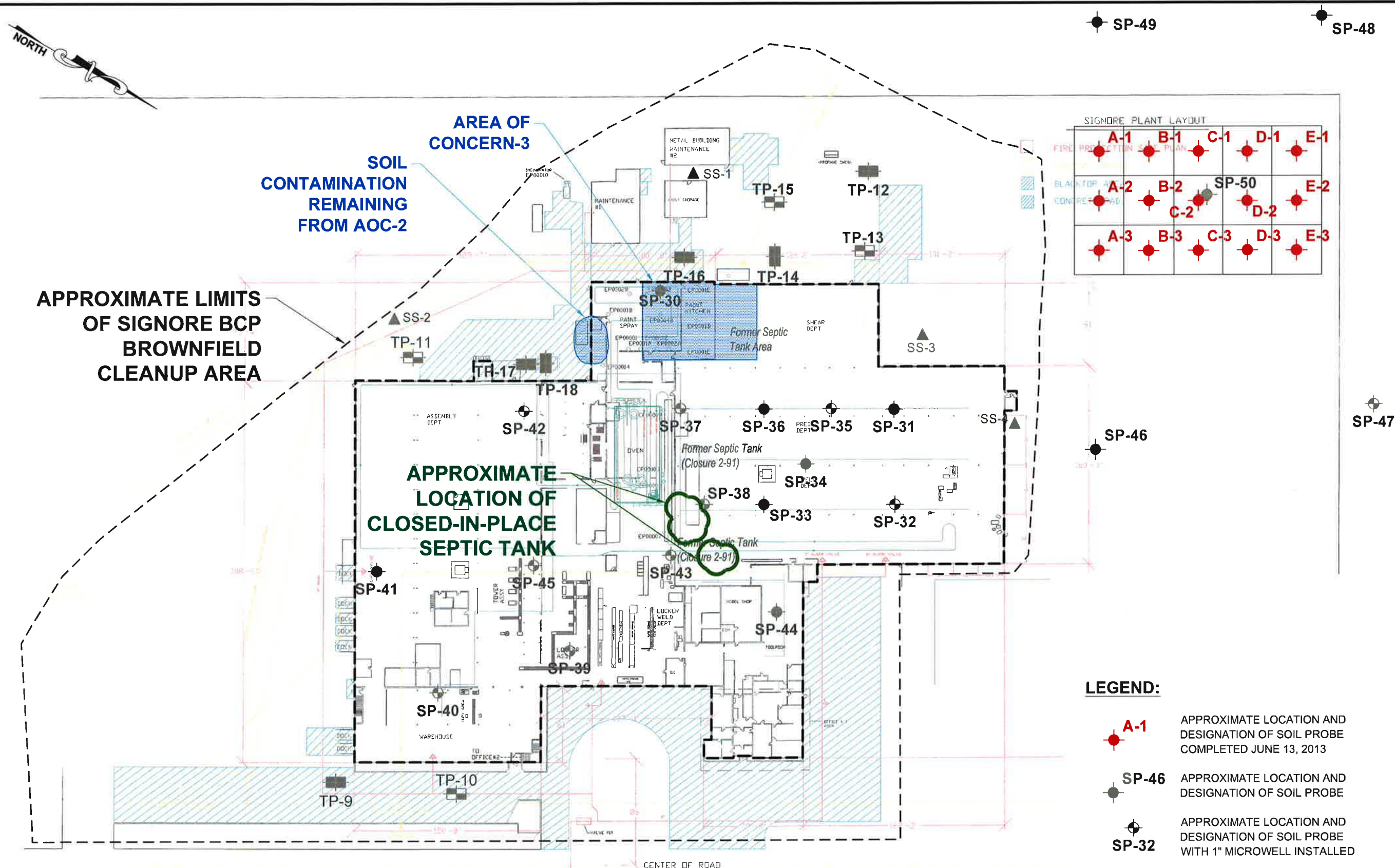
Bart A. Klettke, P.E.  
Principal

Attachments      Figure 1 – Soil Probe Figure  
                          Table 1 – GZA Analytical Summary Table  
                          Table 2 – GZA Sample Results Summary  
                          Appendix A – Soil Probe Logs  
                          Appendix B – Laboratory Report

cc:                    Matt Roland (Iskalo Development Corp., electronic copy only)

**FIGURE**





SIGNORE PLANT LAYOUT

FIRE PROTECTION PLAN	A-1	B-1	C-1	D-1	E-1
BLANK TOP	A-2	B-2	C-2	D-2	E-2
CONCRETE PAD	A-3	B-3	C-3	D-3	E-3

**NOTES:**  
 1. BASE MAP ADAPTED FROM A 2006 AERIAL PHOTOGRAPH DOWNLOADED FROM [www.cattco.org/real\\_property/parcel\\_news.asp](http://www.cattco.org/real_property/parcel_news.asp) AND FIELD OBSERVATIONS.  
 2. THE SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.

DRAWN BY: DEW  
 DATE: JUNE 2013

APPROXIMATE SCALE IN FEET  
 0 40 80 160

ONSITE BORROW SOURCE EXCAVATION  
 FORMER SIGNORE FACILITY  
 ELLICOTTVILLE, NEW YORK  
 BROWNFIELD CLEANUP PROGRAM  
 SITE NO. C905034

SOIL PROBE PLAN

PROJECT No.  
**21.0056367.50**

FIGURE No.  
**1**

GZA GeoEnvironmental of New York

## **TABLES**



**Table 1**  
Analytical Testing Program Summary  
On-Site Soil Borrow Source Evaluation  
Former Signore Facility  
Brownfield Cleanup Program  
Ellicottville, New York

Sample	Location	Sample Depth (ft bgs)	Date Collected	VOCs TCL EPA Method 8260B	SVOCs EPA Method 8270C BN	TAL Metals Method SW 846 3050/6010/7471	PCBs Method 8082	Pesticides Method 8081B
<b>Subsurface Soil Samples</b>								
A-1-3-061313	A-1	3	6/13/2013	X				
A-2-2-061313	A-2	2	6/13/2013	X				
A-3-1-061313	A-3	1	6/13/2013	X				
Comp-A-061313	Composite	0 to 4	6/13/2013		X	X	X	X
B-1-4-061313	B-1	4	6/13/2013	X				
B-2-1-061313	B-2	1	6/13/2013	X				
Comp-B-061313	Composite	0 to 4	6/13/2013		X	X	X	X
C-1-2-061313	C-1	2	6/13/2013	X				
C-2-3-061313	C-2	3	6/13/2013	X				
C-3-2-061313	C-3	2	6/13/2013	X				
Comp-C-061313	Composite	0 to 4	6/13/2013		X	X	X	X
D-1-1-061313	D-1	1	6/13/2013	X				
D-3-4-061313	D-2	4	6/13/2013	X				
Comp-D-061313	Composite	0 to 4	6/13/2013		X	X	X	X
E-1-3-061313	E-1	3	6/13/2013	X				
E-2-4-061313	E-2	4	6/13/2013	X				
E-3-2-061313	E-3	2	6/13/2013	X				
Comp-E-061313	Composite	0 to 4	6/13/2013		X	X	X	X

Notes:

1. NA = not applicable.
2. ft bgs = feet below ground surface
3. VOCs = Volatile Organic Compounds
4. SVOCs = Semi-Volatile Organic Compounds
5. TCL = Total Compound List
6. TAL = Total Analyte List





## **APPENDIX A**

CONTRACTOR <u>Matrix Environmental Technologies</u>		BORING LOCATION <u>See Location Plan</u>				
DRILLER <u>Mark Janus</u>		GROUND SURFACE ELEVATION <u>NA</u> DATUM <u>None</u>				
START DATE <u>6/13/2013</u>		END DATE <u>6-13-2013</u> GZA GEOENVIRONMENTAL REPRESENTATIVE <u>Tom Bohlen</u>				
WATER LEVEL DATA			TYPE OF DRILL RIG <u>Geoprobe Rig 540 UD</u>			
DATE	TIME	WATER	CASING			
			CASING SIZE AND DIAMETER <u>2" diameter by 48" long</u>			
			OVERBURDEN SAMPLING METHOD <u>Direct push</u>			
			ROCK DRILLING METHOD <u>NA</u>			
D E P T H	SAMPLE INFORMATION			SAMPLE DESCRIPTION	NOTES	O V M  (ppm)
	Sample Number	DEPTH (FT)	RECOVERY (%)			
1	S-1	0 - 2	80	TOPSOIL (2 inches) Brown Silty Clay, moist.		0
2						
3	S-2	2 - 4	80	End of soil probe at 4 feet bgs.		0
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S - Split Spoon Sample C - Rock Core Sample			NOTES:			
General 1) Stratification lines represent approximate boundary between soil types, transitions may be gradual. Notes: 2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.						

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DRILLER	<u>Mark Janus</u>	GROUND SURFACE ELEVATION	<u>NA</u> DATUM <u>None</u>
START DATE	<u>6/13/2013</u>	END DATE	<u>6-13-2013</u> GZA GEOENVIRONMENTAL REPRESENTATIVE <u>Tom Bohlen</u>

WATER LEVEL DATA				TYPE OF DRILL RIG <u>Geoprobe Rig 540 UD</u>	
DATE	TIME	WATER	CASING	CASING SIZE AND DIAMETER <u>2" diameter by 48" long</u>	
				OVERBURDEN SAMPLING METHOD <u>Direct push</u>	
				ROCK DRILLING METHOD <u>NA</u>	

DEPTH	SAMPLE INFORMATION			SAMPLE DESCRIPTION	NOTES	O V M <small>(ppm)</small>
	Sample Number	DEPTH (FT)	RECOVERY (%)			
1	S-1	0 - 2	80	TOPSOIL (2 inches) Brown Silty Clay, trace Gravel, moist.		0
2						
3	S-2	2 - 4	80	Brown SAND and Gravel, little Silt, little Clay, moist.		0
4						
5				End of soil probe at 4 feet bgs.		
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S - Split Spoon Sample  
C - Rock Core Sample

NOTES:

General 1) Stratification lines represent approximate boundry between soil types, transitions may be gradual.  
Notes: 2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

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## **APPENDIX B**

Report Date:  
01-Jul-13 13:08



- Final Report  
 Re-Issued Report  
 Revised Report

## Laboratory Report

GZA GeoEnvironmental of NY Buffalo  
535 Washington Street, 11th Floor  
Buffalo, NY 14203

Work Order: M0975  
Project : Former Signore Facility  
Project #:

Attn: Chris Boron

<u>Laboratory ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
M0975-01	A-1-3-061313	Soil	13-Jun-13 09:15	14-Jun-13 10:45
M0975-02	A-2-2-061313	Soil	13-Jun-13 09:30	14-Jun-13 10:45
M0975-03	A-3-1-061313	Soil	13-Jun-13 09:35	14-Jun-13 10:45
M0975-04	COMP-A-061313	Soil	13-Jun-13 09:45	14-Jun-13 10:45
M0975-05	B-1-4-061313	Soil	13-Jun-13 09:50	14-Jun-13 10:45
M0975-06	B-2-1-061313	Soil	13-Jun-13 09:55	14-Jun-13 10:45
M0975-07	COMP-B-061313	Soil	13-Jun-13 10:05	14-Jun-13 10:45
M0975-08	C-1-2-061313	Soil	13-Jun-13 10:15	14-Jun-13 10:45
M0975-09	C-2-3-061313	Soil	13-Jun-13 10:20	14-Jun-13 10:45
M0975-10	C-3-2-061313	Soil	13-Jun-13 10:25	14-Jun-13 10:45
M0975-11	COMP-C-061313	Soil	13-Jun-13 10:30	14-Jun-13 10:45
M0975-12	D-1-1-061313	Soil	13-Jun-13 10:35	14-Jun-13 10:45
M0975-13	D-3-4-061313	Soil	13-Jun-13 10:40	14-Jun-13 10:45
M0975-14	COMP-D-061313	Soil	13-Jun-13 10:45	14-Jun-13 10:45
M0975-15	E-1-3-061313	Soil	13-Jun-13 11:10	14-Jun-13 10:45
M0975-16	E-2-4-061313	Soil	13-Jun-13 11:15	14-Jun-13 10:45
M0975-17	E-3-2-061313	Soil	13-Jun-13 11:20	14-Jun-13 10:45
M0975-18	COMP-E-061313	Soil	13-Jun-13 11:25	14-Jun-13 10:45

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

All applicable NELAC or USEPA CLP requirements have been met.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at [www.spectrum-analytical.com](http://www.spectrum-analytical.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
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033



Authorized by:

Yihai Ding  
Laboratory Director

# Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

## New York State Department of Environmental Conservation Sample Identification and Analytical Requirements Summary

**Project Name :** Former Signore Facility

**SDG :** M0975

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
A-1-3-061313	M0975-01	SW8260_LOW_S				
A-2-2-061313	M0975-02	SW8260_LOW_S				
A-3-1-061313	M0975-03	SW8260_LOW_S				
COMP-A-061313	M0975-04		SW8270_S	SW8081_S	SW6010_S	
COMP-A-061313	M0975-04			SW8082_S	SW7471	
B-1-4-061313	M0975-05	SW8260_LOW_S				
B-2-1-061313	M0975-06	SW8260_LOW_S				
COMP-B-061313	M0975-07		SW8270_S	SW8081_S	SW6010_S	
COMP-B-061313	M0975-07			SW8082_S	SW7471	
C-1-2-061313	M0975-08	SW8260_LOW_S				
C-2-3-061313	M0975-09	SW8260_LOW_S				
C-3-2-061313	M0975-10	SW8260_LOW_S				
COMP-C-061313	M0975-11		SW8270_S	SW8081_S	SW6010_S	
COMP-C-061313	M0975-11			SW8082_S	SW7471	
D-1-1-061313	M0975-12	SW8260_LOW_S				
D-3-4-061313	M0975-13	SW8260_LOW_S				
COMP-D-061313	M0975-14		SW8270_S	SW8081_S	SW6010_S	
COMP-D-061313	M0975-14			SW8082_S	SW7471	
E-1-3-061313	M0975-15	SW8260_LOW_S				
E-2-4-061313	M0975-16	SW8260_LOW_S				
E-3-2-061313	M0975-17	SW8260_LOW_S				
COMP-E-061313	M0975-18		SW8270_S	SW8081_S	SW6010_S	
COMP-E-061313	M0975-18			SW8082_S	SW7471	

# Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

## New York State Department of Environmental Conservation Sample Preparation and Analysis Summary MSSEMI

Project Name : Former Signore Facility

SDG : M0975

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8270_S					
M0975-04A	SL	6/13/2013	6/14/2013	6/24/2013	6/25/2013
M0975-07A	SL	6/13/2013	6/14/2013	6/24/2013	6/25/2013
M0975-11A	SL	6/13/2013	6/14/2013	6/24/2013	6/25/2013
M0975-14A	SL	6/13/2013	6/14/2013	6/24/2013	6/25/2013
M0975-18A	SL	6/13/2013	6/14/2013	6/24/2013	6/25/2013

# Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

## New York State Department of Environmental Conservation Sample Preparation and Analysis Summary GC\*

Project Name : Former Signore Facility

SDG : M0975

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8081_S					
M0975-04A	SL	6/13/2013	6/14/2013	6/18/2013	6/20/2013
M0975-07A	SL	6/13/2013	6/14/2013	6/18/2013	6/20/2013
M0975-11A	SL	6/13/2013	6/14/2013	6/18/2013	6/20/2013
M0975-14A	SL	6/13/2013	6/14/2013	6/18/2013	6/20/2013
M0975-18A	SL	6/13/2013	6/14/2013	6/18/2013	6/20/2013
SW8082_S					
M0975-04A	SL	6/13/2013	6/14/2013	6/18/2013	6/19/2013
M0975-07A	SL	6/13/2013	6/14/2013	6/18/2013	6/19/2013
M0975-11A	SL	6/13/2013	6/14/2013	6/18/2013	6/19/2013
M0975-14A	SL	6/13/2013	6/14/2013	6/18/2013	6/19/2013
M0975-18A	SL	6/13/2013	6/14/2013	6/18/2013	6/19/2013



# Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

## New York State Department of Environmental Conservation Sample Preparation and Analysis Summary MSVOA

Project Name : Former Signore Facility

SDG : M0975

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8260_LOW_S					
M0975-01A	SL	6/13/2013	6/14/2013	NA	6/20/2013
M0975-02A	SL	6/13/2013	6/14/2013	NA	6/20/2013
M0975-03A	SL	6/13/2013	6/14/2013	NA	6/20/2013
M0975-05A	SL	6/13/2013	6/14/2013	NA	6/20/2013
M0975-06A	SL	6/13/2013	6/14/2013	NA	6/20/2013
M0975-08A	SL	6/13/2013	6/14/2013	NA	6/20/2013
M0975-09A	SL	6/13/2013	6/14/2013	NA	6/20/2013
M0975-10A	SL	6/13/2013	6/14/2013	NA	6/20/2013
M0975-12A	SL	6/13/2013	6/14/2013	NA	6/20/2013
M0975-13A	SL	6/13/2013	6/14/2013	NA	6/20/2013
M0975-15A	SL	6/13/2013	6/14/2013	NA	6/20/2013
M0975-16A	SL	6/13/2013	6/14/2013	NA	6/20/2013
M0975-17A	SL	6/13/2013	6/14/2013	NA	6/20/2013

# Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

## New York State Department of Environmental Conservation Sample Preparation and Analysis Summary MSVOA

**Project Name :** Former Signore Facility

**SDG :** M0975

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
SW8260_LOW_S					
M0975-01A	SL	SW8260_LOW_S	NA	LOW	1
M0975-02A	SL	SW8260_LOW_S	NA	LOW	1
M0975-03A	SL	SW8260_LOW_S	NA	LOW	1
M0975-05A	SL	SW8260_LOW_S	NA	LOW	1
M0975-06A	SL	SW8260_LOW_S	NA	LOW	1
M0975-08A	SL	SW8260_LOW_S	NA	LOW	1
M0975-09A	SL	SW8260_LOW_S	NA	LOW	1
M0975-10A	SL	SW8260_LOW_S	NA	LOW	1
M0975-12A	SL	SW8260_LOW_S	NA	LOW	1
M0975-13A	SL	SW8260_LOW_S	NA	LOW	1
M0975-15A	SL	SW8260_LOW_S	NA	LOW	1
M0975-16A	SL	SW8260_LOW_S	NA	LOW	1
M0975-17A	SL	SW8260_LOW_S	NA	LOW	1

# Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

## New York State Department of Environmental Conservation Sample Preparation and Analysis Summary MSSEMI

Project Name : Former Signore Facility

SDG : M0975

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
SW8270_S					
M0975-04A	SL	SW8270_S	3550B	NA	1
M0975-07A	SL	SW8270_S	3550B	NA	1
M0975-11A	SL	SW8270_S	3550B	NA	1
M0975-14A	SL	SW8270_S	3550B	NA	1
M0975-18A	SL	SW8270_S	3550B	NA	1

# Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

## New York State Department of Environmental Conservation Sample Preparation and Analysis Summary GC\*

**Project Name :** Former Signore Facility

**SDG :** M0975

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
SW8081_S					
M0975-04A	SL	SW8081_S	3550B	Sulfur	1
M0975-07A	SL	SW8081_S	3550B	Sulfur	1
M0975-11A	SL	SW8081_S	3550B	Sulfur	1
M0975-14A	SL	SW8081_S	3550B	Sulfur	1
M0975-18A	SL	SW8081_S	3550B	Sulfur	1
SW8082_S					
M0975-04A	SL	SW8082_S	3550B	Acid/Sulfur	1
M0975-07A	SL	SW8082_S	3550B	Acid/Sulfur	1
M0975-11A	SL	SW8082_S	3550B	Acid/Sulfur	1
M0975-14A	SL	SW8082_S	3550B	Acid/Sulfur	1
M0975-18A	SL	SW8082_S	3550B	Acid/Sulfur	1

# Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

## New York State Department of Environmental Conservation Sample Preparation and Analysis Summary ME

**Project Name :** Former Signore Facility

**SDG :** M0975

Laboratory Sample ID	Matrix	Metals Requested	Date Received By Lab	Date Analyzed
SW6010_S				
M0975-04A	SL	SW6010_S	6/14/2013	6/21/2013
M0975-07A	SL	SW6010_S	6/14/2013	6/21/2013
M0975-11A	SL	SW6010_S	6/14/2013	6/21/2013
M0975-14A	SL	SW6010_S	6/14/2013	6/21/2013
M0975-18A	SL	SW6010_S	6/14/2013	6/21/2013
M0975-18ADUP	SL	SW6010_S	6/14/2013	6/21/2013
M0975-18AMS	SL	SW6010_S	6/14/2013	6/21/2013
SW7471				
M0975-04A	SL	SW7471	6/14/2013	6/18/2013
M0975-07A	SL	SW7471	6/14/2013	6/18/2013
M0975-11A	SL	SW7471	6/14/2013	6/18/2013
M0975-14A	SL	SW7471	6/14/2013	6/18/2013
M0975-18A	SL	SW7471	6/14/2013	6/18/2013

# Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division WorkOrder: M0975

**Client ID:** GZA\_BUFFALO      **Case:**      **HC Due:** 06/26/13      **Report Level:** ASP-B  
**Project:** Former Signore Facility      **SDG:**      **Fax Due:** 06/21/13      **Special Program:**  
**WO Name:** Former Signore Facility      **Fax Report:**       **EDD:** CLF  
**Location:** GZA\_SINGNORE,      **PO:** 21.0056491.00      EQUJIS\_4\_NYSDEC  
**Comments:** CC pdf and EDD to John Beninati (john.beninati@gza.com). No charge for Trip Blank.

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M0975-01A	A-1-3-061313	06/13/2013 09:15	06/14/2013	Soil	PMoist	/					VOA
M0975-01A	A-1-3-061313	06/13/2013 09:15	06/14/2013	Soil	SW8260_LOW_S	/					VOA
M0975-01A	A-1-3-061313	06/13/2013 09:15	06/14/2013	Soil	SW8260_MED_S	/			Y		VOA
M0975-02A	A-2-2-061313	06/13/2013 09:30	06/14/2013	Soil	PMoist	/					VOA
M0975-02A	A-2-2-061313	06/13/2013 09:30	06/14/2013	Soil	SW8260_LOW_S	/					VOA
M0975-02A	A-2-2-061313	06/13/2013 09:30	06/14/2013	Soil	SW8260_MED_S	/			Y		VOA
M0975-03A	A-3-1-061313	06/13/2013 09:35	06/14/2013	Soil	PMoist	/					VOA
M0975-03A	A-3-1-061313	06/13/2013 09:35	06/14/2013	Soil	SW8260_LOW_S	/					VOA
M0975-03A	A-3-1-061313	06/13/2013 09:35	06/14/2013	Soil	SW8260_MED_S	/			Y		VOA
M0975-04A	COMP-A-061313	06/13/2013 09:45	06/14/2013	Soil	PMoist	/					A1
M0975-04A	COMP-A-061313	06/13/2013 09:45	06/14/2013	Soil	SW6010_S	/ TAL				Y	A1
M0975-04A	COMP-A-061313	06/13/2013 09:45	06/14/2013	Soil	SW7471	/ TAL					A1
M0975-04A	COMP-A-061313	06/13/2013 09:45	06/14/2013	Soil	SW8081_S	/					A1
M0975-04A	COMP-A-061313	06/13/2013 09:45	06/14/2013	Soil	SW8082_S	/					A1
M0975-04A	COMP-A-061313	06/13/2013 09:45	06/14/2013	Soil	SW8270_S	/					A1
M0975-05A	B-1-4-061313	06/13/2013 09:50	06/14/2013	Soil	PMoist	/					VOA
M0975-05A	B-1-4-061313	06/13/2013 09:50	06/14/2013	Soil	SW8260_LOW_S	/					VOA
M0975-05A	B-1-4-061313	06/13/2013 09:50	06/14/2013	Soil	SW8260_MED_S	/			Y		VOA
M0975-06A	B-2-1-061313	06/13/2013 09:55	06/14/2013	Soil	PMoist	/					VOA
M0975-06A	B-2-1-061313	06/13/2013 09:55	06/14/2013	Soil	SW8260_LOW_S	/					VOA
M0975-06A	B-2-1-061313	06/13/2013 09:55	06/14/2013	Soil	SW8260_MED_S	/			Y		VOA
M0975-07A	COMP-B-061313	06/13/2013 10:05	06/14/2013	Soil	PMoist	/					A1
M0975-07A	COMP-B-061313	06/13/2013 10:05	06/14/2013	Soil	SW6010_S	/ TAL				Y	A1

HT = Fraction logged in but all tests have been placed on hold  
 HF = Test logged in but has been placed on hold  
 06/17/2013 13:15      Lab Client Rep: Veronica E Brizard      Page 01 of 03

# Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division WorkOrder: M0975

**Client ID:** GZA\_BUFFALO      **Case:**      **HC Due:** 06/26/13      **Report Level:** ASP-B  
**Project:** Former Signore Facility      **SDG:**      **Fax Due:** 06/21/13      **Special Program:**  
**WO Name:** Former Signore Facility      **Fax Report:**       **EDD:** CLF  
**Location:** GZA\_SINGNORE,      **PO:** 21.0056491.00      EQUJIS\_4\_NYSDEC  
**Comments:** CC pdf and EDD to John Beninati (john.beninati@gza.com). No charge for Trip Blank.

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M0975-07A	COMP-B-061313	06/13/2013 10:05	06/14/2013	Soil	SW7471	/ TAL					A1
M0975-07A	COMP-B-061313	06/13/2013 10:05	06/14/2013	Soil	SW8081_S	/					A1
M0975-07A	COMP-B-061313	06/13/2013 10:05	06/14/2013	Soil	SW8082_S	/					A1
M0975-07A	COMP-B-061313	06/13/2013 10:05	06/14/2013	Soil	SW8270_S	/					A1
M0975-08A	C-1-2-061313	06/13/2013 10:15	06/14/2013	Soil	PMoist	/					VOA
M0975-08A	C-1-2-061313	06/13/2013 10:15	06/14/2013	Soil	SW8260_LOW_S	/					VOA
M0975-08A	C-1-2-061313	06/13/2013 10:15	06/14/2013	Soil	SW8260_MED_S	/		Y			VOA
M0975-09A	C-2-3-061313	06/13/2013 10:20	06/14/2013	Soil	PMoist	/					VOA
M0975-09A	C-2-3-061313	06/13/2013 10:20	06/14/2013	Soil	SW8260_LOW_S	/					VOA
M0975-09A	C-2-3-061313	06/13/2013 10:20	06/14/2013	Soil	SW8260_MED_S	/		Y			VOA
M0975-10A	C-3-2-061313	06/13/2013 10:25	06/14/2013	Soil	PMoist	/					VOA
M0975-10A	C-3-2-061313	06/13/2013 10:25	06/14/2013	Soil	SW8260_LOW_S	/					VOA
M0975-10A	C-3-2-061313	06/13/2013 10:25	06/14/2013	Soil	SW8260_MED_S	/		Y			VOA
M0975-11A	COMP-C-061313	06/13/2013 10:30	06/14/2013	Soil	PMoist	/					A1
M0975-11A	COMP-C-061313	06/13/2013 10:30	06/14/2013	Soil	SW6010_S	/ TAL			Y		A1
M0975-11A	COMP-C-061313	06/13/2013 10:30	06/14/2013	Soil	SW7471	/ TAL					A1
M0975-11A	COMP-C-061313	06/13/2013 10:30	06/14/2013	Soil	SW8081_S	/					A1
M0975-11A	COMP-C-061313	06/13/2013 10:30	06/14/2013	Soil	SW8082_S	/					A1
M0975-11A	COMP-C-061313	06/13/2013 10:30	06/14/2013	Soil	SW8270_S	/					A1
M0975-12A	D-1-1-061313	06/13/2013 10:35	06/14/2013	Soil	PMoist	/					VOA
M0975-12A	D-1-1-061313	06/13/2013 10:35	06/14/2013	Soil	SW8260_LOW_S	/					VOA
M0975-12A	D-1-1-061313	06/13/2013 10:35	06/14/2013	Soil	SW8260_MED_S	/			Y		VOA
M0975-13A	D-3-4-061313	06/13/2013 10:40	06/14/2013	Soil	PMoist	/					VOA

HT = Fraction logged in but all tests have been placed on hold  
 HF = Fraction logged in but all tests have been placed on hold  
 HT = Test logged in but has been placed on hold

06/17/2013 13:15      Lab Client Rep: Veronica E Brizard      Page 02 of 03

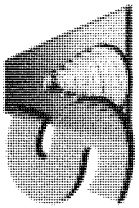
# Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division WorkOrder: M0975

**Client ID:** GZA\_BUFFALO      **Case:**      **HC Due:** 06/26/13      **Report Level:** ASP-B  
**Project:** Former Signore Facility      **SDG:**      **Fax Due:** 06/21/13      **Special Program:**  
**WO Name:** Former Signore Facility      **Fax Report:**       **EDD:** CLF  
**Location:** GZA\_SINGNORE,      **PO:** 21.0056491.00      **EQUIIS\_4\_NYSDEC**  
**Comments:** CC pdf and EDD to John Beninati (john.beninati@gza.com). No charge for Trip Blank.

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M0975-13A	D-3-4-061313	06/13/2013 10:40	06/14/2013	Soil	SW8260_LOW_S	/					VOA
M0975-13A	D-3-4-061313	06/13/2013 10:40	06/14/2013	Soil	SW8260_MED_S	/				Y	VOA
M0975-14A	COMP-D-061313	06/13/2013 10:45	06/14/2013	Soil	PMoist	/					A1
M0975-14A	COMP-D-061313	06/13/2013 10:45	06/14/2013	Soil	SW6010_S	/ TAL				Y	A1
M0975-14A	COMP-D-061313	06/13/2013 10:45	06/14/2013	Soil	SW7471	/ TAL					A1
M0975-14A	COMP-D-061313	06/13/2013 10:45	06/14/2013	Soil	SW8081_S	/					A1
M0975-14A	COMP-D-061313	06/13/2013 10:45	06/14/2013	Soil	SW8082_S	/					A1
M0975-14A	COMP-D-061313	06/13/2013 10:45	06/14/2013	Soil	SW8270_S	/					A1
M0975-15A	E-1-3-061313	06/13/2013 11:10	06/14/2013	Soil	PMoist	/					VOA
M0975-15A	E-1-3-061313	06/13/2013 11:10	06/14/2013	Soil	SW8260_LOW_S	/					VOA
M0975-15A	E-1-3-061313	06/13/2013 11:10	06/14/2013	Soil	SW8260_MED_S	/			Y		VOA
M0975-16A	E-2-4-061313	06/13/2013 11:15	06/14/2013	Soil	PMoist	/					VOA
M0975-16A	E-2-4-061313	06/13/2013 11:15	06/14/2013	Soil	SW8260_LOW_S	/					VOA
M0975-16A	E-2-4-061313	06/13/2013 11:15	06/14/2013	Soil	SW8260_MED_S	/			Y		VOA
M0975-17A	E-3-2-061313	06/13/2013 11:20	06/14/2013	Soil	PMoist	/					VOA
M0975-17A	E-3-2-061313	06/13/2013 11:20	06/14/2013	Soil	SW8260_LOW_S	/					VOA
M0975-17A	E-3-2-061313	06/13/2013 11:20	06/14/2013	Soil	SW8260_MED_S	/			Y		VOA
M0975-18A	COMP-E-061313	06/13/2013 11:25	06/14/2013	Soil	PMoist	/					A1
M0975-18A	COMP-E-061313	06/13/2013 11:25	06/14/2013	Soil	SW6010_S	/ TAL				Y	A1
M0975-18A	COMP-E-061313	06/13/2013 11:25	06/14/2013	Soil	SW7471	/ TAL					A1
M0975-18A	COMP-E-061313	06/13/2013 11:25	06/14/2013	Soil	SW8081_S	/					A1
M0975-18A	COMP-E-061313	06/13/2013 11:25	06/14/2013	Soil	SW8082_S	/					A1
M0975-18A	COMP-E-061313	06/13/2013 11:25	06/14/2013	Soil	SW8270_S	/					A1



# Sample Transmittal Documentation



SPECTRUM ANALYTICAL, INC.  
Featuring  
HANIBAL TECHNOLOGY

# CHAIN OF CUSTODY RECORD

Page 1 of 2

### Special Handling:

- TAT - Indicate Date Needed: \_\_\_\_\_
- All TATs subject to laboratory approval.
- Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: 62A Geo Environmental  
535 Washington St.  
Buffalo, NY 14203

Invoice To: \_\_\_\_\_

Project Mgr.: C. Boron

P.O. No.: \_\_\_\_\_ RQN: \_\_\_\_\_

Project No.: 56367  
Site Name: Signor  
Location: Ellicottville State: NY  
Sampler(s): T. Bohlen

1=Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub> 2=HCl 3=H<sub>2</sub>SO<sub>4</sub> 4=HNO<sub>3</sub> 5=NaOH 6=Ascorbic Acid 7=CH<sub>3</sub>OH  
8=NaHSO<sub>4</sub> 9=\_\_\_\_\_ 10=\_\_\_\_\_ 11=\_\_\_\_\_

List preservative code below:

Notes:

DW=Drinking Water GW=Groundwater WW=Wastewater  
O=Oil SW=Surface Water SO=Soil SL=Sludge A=Air  
X1=\_\_\_\_\_ X2=\_\_\_\_\_ X3=\_\_\_\_\_

Containers:

# of VOA Vials

# of Amber Glass

# of Clear Glass

# of Plastic

Analyses:

SVL 8360 TLL

SVL 8370 TLL

Meils: TAL

RBBS

Restridges

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix
M0975 - 01	A-1-3-061313	6/13/13	915	G	SO
- 02	A-2-2-061313	6/13/13	930	G	SO
- 03	A-3-1-061313	6/13/13	935	G	SO
- 04	Comp-A-061313	6/13/13	945	G	SO
- 05	B-1-4-061313		950	G	
- 06	B-2-1-061313		955	G	
- 07	Comp-B-061313		1005	G	
- 08	C-1-2-061313		1015	G	
- 09	C-2-3-061313		1020	G	
- 10	C-3-2-061313		1025	G	

QA/QC Reporting Level

- Level I
- Level II
- Level III
- Level IV
- Other \_\_\_\_\_

State specific reporting standards:

Releashed by: \_\_\_\_\_

Received by: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Releashed by: Christopher Boron@gea.com

Received by: Thomas Bohlen

Date: 6/13/13 Time: 1845

EDD Format: \_\_\_\_\_

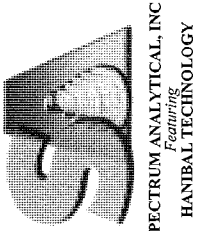
Received by: FedEx

Date: 6/14/13 Time: 10:45

Condition upon receipt:  Faxed  Ambient  °C 5

Received by: Thomas Bohlen

Date: 6/14/13 Time: 10:45



# CHAIN OF CUSTODY RECORD

SPECTRUM ANALYTICAL, INC.  
Featuring  
HANIBAL TECHNOLOGY

Page 2 of 2

### Special Handling:

- TAT- Indicate Date Needed: \_\_\_\_\_
- All TATs subject to laboratory approval.
- Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: GZA  
 Invoice To: \_\_\_\_\_  
 Project Mgr.: \_\_\_\_\_  
 P.O. No.: \_\_\_\_\_ RQN: \_\_\_\_\_

Project No.: 56367  
 Site Name: Signature  
 Location: Ellicottville State: NY  
 Sampler(s): \_\_\_\_\_

1=Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub> 2=HCl 3=H<sub>2</sub>SO<sub>4</sub> 4=HNO<sub>3</sub> 5=NaOH 6=Ascorbic Acid 7=CH<sub>3</sub>OH  
 8= NaHSO<sub>4</sub> 9= \_\_\_\_\_ 10= \_\_\_\_\_ 11= \_\_\_\_\_

DW=Drinking Water GW=Groundwater WW=Wastewater  
 O=Oil SW=Surface Water SO=Soil SL=Sludge A=Air  
 X1= \_\_\_\_\_ X2= \_\_\_\_\_ X3= \_\_\_\_\_

List preservative code below:

Containers:  
 # of VOA Vials  
 # of Amber Glass  
 # of Clear Glass  
 # of Plastic

Analyses:

Notes:

QA/QC Reporting Level  
 Level I  Level II  
 Level III  Level IV  
 Other \_\_\_\_\_

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses:	Notes:
M0975 - 11	Comp-C-061313	6/13/13	10:30	C	SO		1	1	1	VOC 807TL X Resistides X PCBs X	
- 12	D-1-1-061313		10:35	G	↓		1	1	1	VOC 807TL X	
- 13	D-3-4-061313		10:40	G	SO		1	1	1	VOC 807TL X	
- 14	Comp-D-061313	6/13/13	10:45	C	↓		1	1	1	VOC 807TL X Resistides X PCBs X	
- 15	E-1-3-061313		11:10	G	↓		1	1	1	VOC 807TL X	
- 16	E-2-4-061313		11:15	G	↓		1	1	1	VOC 807TL X	
- 17	E-3-2-061313		11:20	G	↓		1	1	1	VOC 807TL X	
- 18	Comp-E-061313		11:25	G	↓		1	1	1	VOC 807TL X Resistides X PCBs X	

Relinquished by: Christopher Baron Date: 6/13/13 Time: 1845  
 Received by: Thomas Boden Date: 6/14/13 Time: 10:45  
 Fed Ex  
 Fed Ex

FE-mail to christophoc.baron@gza.com  
 EDD Format \_\_\_\_\_  
 Condition upon receipt:  Iced  Ambient  °C 5

Received By: <u>VEB</u>		Page 01 of 01	
Reviewed By: <u>TM</u>		Log-in Date 06/14/2013	
Work Order: M0975		Client Name: GZA GeoEnvironmental, Inc.	
Project Name/Event: Former Signore Facility			
Remarks: (1/2) Please see associated sample/extract transfer logbook pages submitted with this data package.			
		Preservation (pH)	
		HNO3   H2SO4   HCl   NaOH   H3PO4	
		VOA Matrix	
		Soil HeadSpace or Air Bubble > or equal to 1/4"	
1. Custody Seal(s)		Lab Sample ID	
Present / Absent		M0975-01	US
Intact / Broken		M0975-02	US
2. Custody Seal Nos.		M0975-03	US
N/A		M0975-04	
3. Traffic Reports/ Chain of Custody Records (TR/COCs) or Packing Lists		M0975-05	US
Present / Absent		M0975-06	US
		M0975-07	
4. Airbill		M0975-08	US
AirBill / Sticker		M0975-09	US
Present / Absent		M0975-10	US
5. Airbill No.		M0975-11	
FedEx 8019 8561 7806		M0975-12	US
6. Sample Tags		M0975-13	US
Present / Absent		M0975-14	
Sample Tag Numbers		M0975-15	US
Listed /		M0975-16	US
Not Listed on Chain-of-Custody		M0975-17	US
7. Sample Condition		M0975-18	
Intact / Broken / Leaking			
8. Cooler Temperature Indicator Bottle			
Present / Absent			
9. Cooler Temperature			
5 °C			
10. Does information on TR/COCs and sample tags agree?			
Yes / No			
11. Date Received at Laboratory			
06/14/2013			
12. Time Received			
10:45			
Sample Transfer			
Fraction (1) TVOA/VOA		Fraction (2) SVOA/PEST/ARO	
Area #		Area #	
By		By	
On		On	
IR Temp Gun ID:MT-74		VOA Matrix Key: US = Unpreserved Soil      A= Air UA = Unpreserved Aqueous    H = HCl M = MeOH                        E = Encore N = NaHSO4                      F = Freeze	
Coolant Condition: ICE			
Preservative Name/Lot No:		See Sample Condition Notification/Corrective Action Form    Yes / <u>No</u>	
		Rad OK <u>Yes</u> / No	



***SPECTRUM ANALYTICAL, INC.***  
*Featuring*  
***HANIBAL TECHNOLOGY***

**\* Volatiles \***

## REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : GZA GeoEnvironmental of NY Buffalo

Project: Former Signore Facility

Laboratory Workorder / SDG #: M0975

SW846 8260C, VOC by GC-MS

### I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

### II. 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.

### III. METHODS

Samples were analyzed following procedures in laboratory test code:  
SW846 8260C

### IV. PREPARATION

Soil Samples were prepared following procedures in laboratory test code:  
SW5035

### V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: V5  
Instrument Type: GCMS-VOA

Description: HP6890 / HP6890  
Manufacturer: Hewlett-Packard  
Model: 6890 / 6890

## VI. ANALYSIS

### A. Calibration:

Calibrations met the method/SOP acceptance criteria.

### B. Blanks:

All method blanks were within the acceptance criteria.

### C. Surrogates:

Surrogate standard percent recoveries were within the QC limits with the following exceptions. Please note that the acceptance criteria allow one surrogate recovery outside of the QC limits per fraction.

D-1-1-061313 (M0975-12A), recovery is below criteria for 1,2-Dichloroethane-d4 at 87% with criteria of (88-110).

### D. Spikes:

#### 1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits with the following exceptions. Please note that most test procedures allow for several compounds outside of the QC limits for the LCS, although this may indicate a bias for this specific compound.

LCS-72200 in batch 72200, recovery is above criteria for 2-Hexanone at 146% with criteria of (45-145), Naphthalene at 155% with criteria of (40-125), trans-1,3-Dichloropropene at 126% with criteria of (65-125).

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

No client-requested MS/MSD analyses were included in this SDG.

### E. Internal Standards:

Internal standard peak areas were within the QC limits.

### F. Dilutions:

No sample in this SDG required analysis at dilution.

**G. Samples:**

No other unusual occurrences were noted during sample analysis.

**H. Manual Integration**

No manual integrations were performed on any sample or standard.

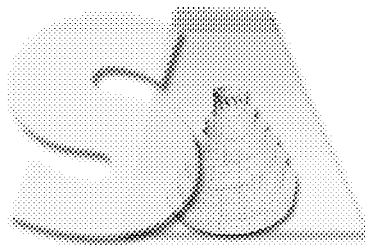
I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

A handwritten signature in black ink, appearing to be 'J. H. P.', written over a horizontal line.

Signed: \_\_\_\_\_

Date: \_\_\_\_\_ 6/27/2013 \_\_\_\_\_

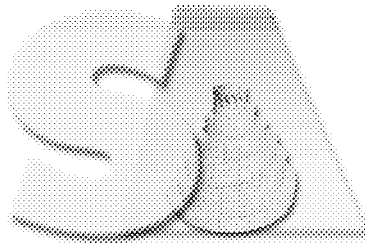




**SPECTRUM ANALYTICAL, INC.**  
*Featuring*  
**HANIBAL TECHNOLOGY**

### **Data Flag/Qualifiers:**

- U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).
- J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
  - estimated concentration for Tentatively Identified Compound
- B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a “trace” concentration below the reporting limit and equal to or above the detection limit.
- D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis
- E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.
- P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.
- A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.
- N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.
- \* For Inorganics analysis the \* flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.



**SPECTRUM ANALYTICAL, INC.**  
*Featuring*  
**HANIBAL TECHNOLOGY**

## **Sample ID Suffixes**

- DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution
- RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.
- RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.
- RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.
- MS Matrix Spike.
- MSD Matrix Spike Duplicate
- DUP Duplicate analysis
- SD Serial Dilution
- PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

2D - FORM II VOA-4  
SOIL VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Level: (LOW/MED) LOW

	EPA SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-72200	99	103	102	104				0
02	MB-72200	96	96	102	100				0
03	A-1-3-061313	100	101	100	104				0
04	A-2-2-061313	101	97	99	98				0
05	A-3-1-061313	103	103	100	96				0
06	B-1-4-061313	95	92	100	98				0
07	B-2-1-061313	102	99	100	99				0
08	C-1-2-061313	101	106	100	96				0
09	C-2-3-061313	102	106	99	99				0
10	C-3-2-061313	95	92	100	92				0
11	D-1-1-061313	95	87 *	101	93				1
12	D-3-4-061313	98	97	101	92				0
13	E-1-3-061313	95	96	99	94				0
14	E-2-4-061313	99	102	100	96				0
15	E-3-2-061313	99	102	100	102				0

VDMC1 (DBFM) Dibromofluoromethane  
 VDMC2 (DCE) = 1,2-Dichloroethane-d4  
 VDMC3 (TOL) = Toluene-d8  
 VDMC4 (BFB) = Bromofluorobenzene

QC LIMITS  
 (76-128)  
 (88-110)  
 (85-115)  
 (85-120)

# Column to be used to flag recovery values  
 \* Values outside of contract required QC limits

som13.06.03.A

3 - FORM III  
SOIL LABORATORY CONTROL  
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-72200

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Lab Sample ID: LCS-72200 LCS Lot No.: \_\_\_\_\_  
 Date Extracted: 06/20/2013 Date Analyzed (1): 06/20/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	54.0213	108		35 - 135
Chloromethane	50.0000	0.0000	56.7868	114		50 - 130
Vinyl chloride	50.0000	0.0000	58.5410	117		60 - 125
Bromomethane	50.0000	0.0000	56.6659	113		30 - 160
Chloroethane	50.0000	0.0000	55.9181	112		40 - 155
Trichlorofluoromethane	50.0000	0.0000	55.4608	111		25 - 185
1,1-Dichloroethene	50.0000	0.0000	54.3615	109		65 - 135
Acetone	50.0000	0.0000	55.6831	111		20 - 160
Iodomethane	50.0000	0.0000	54.7422	109		70 - 126
Carbon disulfide	50.0000	0.0000	56.4519	113		45 - 160
Methylene chloride	50.0000	0.0000	53.0433	106		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	56.0826	112		65 - 135
Methyl tert-butyl ether	50.0000	0.0000	60.5810	121		75 - 126
1,1-Dichloroethane	50.0000	0.0000	56.1385	112		75 - 125
Vinyl acetate	50.0000	0.0000	62.0821	124		65 - 138
2-Butanone	50.0000	0.0000	64.2629	129		30 - 160
cis-1,2-Dichloroethene	50.0000	0.0000	56.0572	112		65 - 125
2,2-Dichloropropane	50.0000	0.0000	56.2154	112		65 - 135
Bromochloromethane	50.0000	0.0000	54.6716	109		70 - 125
Chloroform	50.0000	0.0000	55.0244	110		70 - 125
1,1,1-Trichloroethane	50.0000	0.0000	55.0460	110		70 - 135
1,1-Dichloropropene	50.0000	0.0000	54.7748	110		70 - 135
Carbon tetrachloride	50.0000	0.0000	55.6117	111		65 - 135
1,2-Dichloroethane	50.0000	0.0000	56.4170	113		70 - 135
Benzene	50.0000	0.0000	55.1153	110		75 - 125
Trichloroethene	50.0000	0.0000	55.0853	110		75 - 125
1,2-Dichloropropane	50.0000	0.0000	56.9807	114		70 - 120
Dibromomethane	50.0000	0.0000	57.2187	114		75 - 130
Bromodichloromethane	50.0000	0.0000	56.8672	114		70 - 130
cis-1,3-Dichloropropene	50.0000	0.0000	60.1587	120		70 - 125
4-Methyl-2-pentanone	50.0000	0.0000	70.2141	140		45 - 145
Toluene	50.0000	0.0000	55.4366	111		70 - 125
trans-1,3-Dichloropropene	50.0000	0.0000	63.0114	126	*	65 - 125
1,1,2-Trichloroethane	50.0000	0.0000	56.4877	113		60 - 125
1,3-Dichloropropane	50.0000	0.0000	58.0961	116		75 - 125
Tetrachloroethene	50.0000	0.0000	55.1191	110		65 - 140
2-Hexanone	50.0000	0.0000	73.1921	146	*	45 - 145
Dibromochloromethane	50.0000	0.0000	59.3810	119		65 - 130
1,2-Dibromoethane	50.0000	0.0000	58.7984	118		70 - 125
Chlorobenzene	50.0000	0.0000	54.4954	109		75 - 125
1,1,1,2-Tetrachloroethane	50.0000	0.0000	57.2748	115		75 - 125
Ethylbenzene	50.0000	0.0000	56.0681	112		75 - 125
m,p-Xylene	100.0000	0.0000	111.5168	112		80 - 125
o-Xylene	50.0000	0.0000	56.5477	113		75 - 125

3 - FORM III  
 SOIL LABORATORY CONTROL  
 SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-72200

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Lab Sample ID: LCS-72200 LCS Lot No.: \_\_\_\_\_  
 Date Extracted: 06/20/2013 Date Analyzed (1): 06/20/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	168.0645	112		83 - 125
Styrene	50.0000	0.0000	58.5047	117		75 - 125
Bromoform	50.0000	0.0000	65.0620	130		55 - 135
Isopropylbenzene	50.0000	0.0000	58.1228	116		75 - 130
1,1,2,2-Tetrachloroethane	50.0000	0.0000	61.5497	123		55 - 130
Bromobenzene	50.0000	0.0000	55.3055	111		65 - 120
1,2,3-Trichloropropane	50.0000	0.0000	63.7449	127		65 - 130
n-Propylbenzene	50.0000	0.0000	55.4323	111		65 - 135
2-Chlorotoluene	50.0000	0.0000	56.5864	113		70 - 130
1,3,5-Trimethylbenzene	50.0000	0.0000	57.0959	114		65 - 135
4-Chlorotoluene	50.0000	0.0000	57.0996	114		75 - 125
tert-Butylbenzene	50.0000	0.0000	56.9215	114		65 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	58.1883	116		65 - 135
sec-Butylbenzene	50.0000	0.0000	55.8292	112		65 - 130
4-Isopropyltoluene	50.0000	0.0000	56.3038	113		75 - 135
1,3-Dichlorobenzene	50.0000	0.0000	56.2090	112		70 - 125
1,4-Dichlorobenzene	50.0000	0.0000	56.1072	112		70 - 125
n-Butylbenzene	50.0000	0.0000	55.9064	112		65 - 140
1,2-Dichlorobenzene	50.0000	0.0000	57.1225	114		75 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	66.0660	132		40 - 135
1,2,4-Trichlorobenzene	50.0000	0.0000	58.3223	117		65 - 130
Hexachlorobutadiene	50.0000	0.0000	56.1965	112		55 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	59.5613	119		60 - 135
Naphthalene	50.0000	0.0000	77.3028	155	*	40 - 125

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

\* Values outside of QC limits

Spike Recovery: 3 out of 68 outside limits

COMMENTS: \_\_\_\_\_  
 \_\_\_\_\_

4A - FORM IV VOA  
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-72200

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Lab File ID: V504282.D Lab Sample ID: MB-72200  
 Instrument ID: V5  
 Matrix: (SOIL/SED/WATER) SOIL Date Analyzed: 06/20/2013  
 Level: (TRACE or LOW/MED) LOW Time Analyzed: 17:47  
 GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-72200	LCS-72200	V504280.D	16:55
02	A-1-3-061313	M0975-01A	V504283.D	18:13
03	A-2-2-061313	M0975-02A	V504284.D	18:39
04	A-3-1-061313	M0975-03A	V504285.D	19:07
05	B-1-4-061313	M0975-05A	V504286.D	19:33
06	B-2-1-061313	M0975-06A	V504287.D	19:58
07	C-1-2-061313	M0975-08A	V504288.D	20:24
08	C-2-3-061313	M0975-09A	V504289.D	20:50
09	C-3-2-061313	M0975-10A	V504290.D	21:16
10	D-1-1-061313	M0975-12A	V504291.D	21:42
11	D-3-4-061313	M0975-13A	V504292.D	22:08
12	E-1-3-061313	M0975-15A	V504293.D	22:34
13	E-2-4-061313	M0975-16A	V504294.D	23:00
14	E-3-2-061313	M0975-17A	V504295.D	23:26

COMMENTS:

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

EPA SAMPLE NO.

BFBV5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Lab File ID: V504270.D BFB Injection Date: 06/20/2013  
 Instrument ID: V5 BFB Injection Time: 9:05  
 GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	24.0
75	30.0 - 60.0% of mass 95	48.2
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.6
173	Less than 2.0% of mass 174	0.4 (0.4)1
174	Greater than 50.0% of mass 95	92.3
175	5.0 - 9.0% of mass 174	6.3 (6.8)1
176	95.0 - 101.0% of mass 174	88.4 (95.8)1
177	5.0 - 9.0% of mass 176	6.0 (6.8)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	VSTD005V5	VSTD005V5	V504271.D	06/20/2013	9:57
02	VSTD020V5	VSTD020V5	V504272.D	06/20/2013	10:23
03	VSTD050V5	VSTD050V5	V504273.D	06/20/2013	10:49
04	VSTD100V5	VSTD100V5	V504274.D	06/20/2013	14:20
05	VSTD200V5	VSTD200V5	V504275.D	06/20/2013	14:45

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

EPA SAMPLE NO.

BFBW5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Lab File ID: V504278.D BFB Injection Date: 06/20/2013  
 Instrument ID: V5 BFB Injection Time: 15:11  
 GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	25.1
75	30.0 - 60.0% of mass 95	50.0
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.4
173	Less than 2.0% of mass 174	0.9 (1.0)1
174	Greater than 50.0% of mass 95	93.0
175	5.0 - 9.0% of mass 174	7.7 (8.2)1
176	95.0 - 101.0% of mass 174	91.6 (98.5)1
177	5.0 - 9.0% of mass 176	5.5 (6.1)2

1 - Value is % mass 174

2 - Value is % mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050W5	VSTD050W5	V504279.D	06/20/2013	16:29
02	LCS-72200	LCS-72200	V504280.D	06/20/2013	16:55
03	MB-72200	MB-72200	V504282.D	06/20/2013	17:47
04	A-1-3-061313	M0975-01A	V504283.D	06/20/2013	18:13
05	A-2-2-061313	M0975-02A	V504284.D	06/20/2013	18:39
06	A-3-1-061313	M0975-03A	V504285.D	06/20/2013	19:07
07	B-1-4-061313	M0975-05A	V504286.D	06/20/2013	19:33
08	B-2-1-061313	M0975-06A	V504287.D	06/20/2013	19:58
09	C-1-2-061313	M0975-08A	V504288.D	06/20/2013	20:24
10	C-2-3-061313	M0975-09A	V504289.D	06/20/2013	20:50
11	C-3-2-061313	M0975-10A	V504290.D	06/20/2013	21:16
12	D-1-1-061313	M0975-12A	V504291.D	06/20/2013	21:42
13	D-3-4-061313	M0975-13A	V504292.D	06/20/2013	22:08
14	E-1-3-061313	M0975-15A	V504293.D	06/20/2013	22:34
15	E-2-4-061313	M0975-16A	V504294.D	06/20/2013	23:00
16	E-3-2-061313	M0975-17A	V504295.D	06/20/2013	23:26



## VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 06/20/2013 06/20/2013  
 EPA Sample No.(VSTD#####): VSTD050W5 Date Analyzed: 06/20/2013  
 Lab File ID (Standard): V504279.D Time Analyzed: 16:29  
 Instrument ID: V5 Heated Purge: (Y/N) Y

	IS1 (S1 )		IS2 (S2 )		IS3 (S3 )						
	AREA	#	RT	#	AREA	#	RT	#			
12 HOUR STD	398124		5.593		304854		9.077		161287		12.236
UPPER LIMIT	796248		6.093		609708		9.577		322574		12.736
LOWER LIMIT	199062		5.093		152427		8.577		80644		11.736
EPA SAMPLE NO.											
01	LCS-72200	390519	5.600		303682		9.072		163277		12.243
02	MB-72200	389139	5.600		290933		9.072		151129		12.242
03	A-1-3-061313	390659	5.600		301021		9.073		158204		12.243
04	A-2-2-061313	388303	5.601		302080		9.074		152324		12.244
05	A-3-1-061313	372271	5.600		286505		9.072		143941		12.243
06	B-1-4-061313	355703	5.595		263702		9.079		133483		12.237
07	B-2-1-061313	372140	5.594		282294		9.078		145923		12.237
08	C-1-2-061313	369360	5.599		287310		9.072		146867		12.242
09	C-2-3-061313	359389	5.603		281827		9.075		139312		12.245
10	C-3-2-061313	295676	5.593		220295		9.077		101790		12.236
11	D-1-1-061313	336724	5.599		241308		9.072		119795		12.242
12	D-3-4-061313	352955	5.599		266835		9.072		136781		12.242
13	E-1-3-061313	345464	5.588		266855		9.072		128048		12.243
14	E-2-4-061313	355527	5.593		272676		9.077		137450		12.235
15	E-3-2-061313	359155	5.592		272526		9.076		140653		12.235

IS1 ( ) = Fluorobenzene

IS2 ( ) = Chlorobenzene-d5

IS3 ( ) = 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.

A-1-3-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-01A  
 Sample wt/vol: 5.10 (g/mL) G Lab File ID: V504283.D  
 Level: (TRACE/LOW/MED) LOW Date Received: 06/14/2013  
 % Moisture: not dec. 21 Date Analyzed: 06/20/2013  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
75-71-8	Dichlorodifluoromethane		6.2	U
74-87-3	Chloromethane		6.2	U
75-01-4	Vinyl chloride		6.2	U
74-83-9	Bromomethane		6.2	U
75-00-3	Chloroethane		6.2	U
75-69-4	Trichlorofluoromethane		6.2	U
75-35-4	1,1-Dichloroethene		6.2	U
67-64-1	Acetone		6.2	U
74-88-4	Iodomethane		6.2	U
75-15-0	Carbon disulfide		6.2	U
75-09-2	Methylene chloride		6.2	U
156-60-5	trans-1,2-Dichloroethene		6.2	U
1634-04-4	Methyl tert-butyl ether		6.2	U
75-34-3	1,1-Dichloroethane		6.2	U
108-05-4	Vinyl acetate		6.2	U
78-93-3	2-Butanone		6.2	U
156-59-2	cis-1,2-Dichloroethene		6.2	U
594-20-7	2,2-Dichloropropane		6.2	U
74-97-5	Bromochloromethane		6.2	U
67-66-3	Chloroform		6.2	U
71-55-6	1,1,1-Trichloroethane		6.2	U
563-58-6	1,1-Dichloropropene		6.2	U
56-23-5	Carbon tetrachloride		6.2	U
107-06-2	1,2-Dichloroethane		6.2	U
71-43-2	Benzene		6.2	U
79-01-6	Trichloroethene		6.2	U
78-87-5	1,2-Dichloropropane		6.2	U
74-95-3	Dibromomethane		6.2	U
75-27-4	Bromodichloromethane		6.2	U
10061-01-5	cis-1,3-Dichloropropene		6.2	U
108-10-1	4-Methyl-2-pentanone		6.2	U
108-88-3	Toluene		6.2	U
10061-02-6	trans-1,3-Dichloropropene		6.2	U
79-00-5	1,1,2-Trichloroethane		6.2	U
142-28-9	1,3-Dichloropropane		6.2	U

1B - FORM I VOA-2  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.  
A-1-3-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-01A  
 Sample wt/vol: 5.10 (g/mL) G Lab File ID: V504283.D  
 Level: (TRACE/LOW/MED) LOW Date Received: 06/14/2013  
 % Moisture: not dec. 21 Date Analyzed: 06/20/2013  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
127-18-4	Tetrachloroethene		6.2	U
591-78-6	2-Hexanone		6.2	U
124-48-1	Dibromochloromethane		6.2	U
106-93-4	1,2-Dibromoethane		6.2	U
108-90-7	Chlorobenzene		6.2	U
630-20-6	1,1,1,2-Tetrachloroethane		6.2	U
100-41-4	Ethylbenzene		6.2	U
179601-23-1	m,p-Xylene		6.2	U
95-47-6	o-Xylene		6.2	U
1330-20-7	Xylene (Total)		6.2	U
100-42-5	Styrene		6.2	U
75-25-2	Bromoform		6.2	U
98-82-8	Isopropylbenzene		6.2	U
79-34-5	1,1,2,2-Tetrachloroethane		6.2	U
108-86-1	Bromobenzene		6.2	U
96-18-4	1,2,3-Trichloropropane		6.2	U
103-65-1	n-Propylbenzene		6.2	U
95-49-8	2-Chlorotoluene		6.2	U
108-67-8	1,3,5-Trimethylbenzene		6.2	U
106-43-4	4-Chlorotoluene		6.2	U
98-06-6	tert-Butylbenzene		6.2	U
95-63-6	1,2,4-Trimethylbenzene		6.2	U
135-98-8	sec-Butylbenzene		6.2	U
99-87-6	4-Isopropyltoluene		6.2	U
541-73-1	1,3-Dichlorobenzene		6.2	U
106-46-7	1,4-Dichlorobenzene		6.2	U
104-51-8	n-Butylbenzene		6.2	U
95-50-1	1,2-Dichlorobenzene		6.2	U
96-12-8	1,2-Dibromo-3-chloropropane		6.2	U
120-82-1	1,2,4-Trichlorobenzene		6.2	U
87-68-3	Hexachlorobutadiene		6.2	U
87-61-6	1,2,3-Trichlorobenzene		6.2	U
91-20-3	Naphthalene		6.2	U

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil  
 Data file : \\avogadro\organics\V5.I\130620A.B\V504283.D  
 Lab Smp Id: M0975-01A Client Smp ID: A-1-3-061313  
 Inj Date : 20-JUN-2013 18:13  
 Operator : WL SRC: LIMS Inst ID: V5.i  
 Smp Info : 5G,M0975-01A,,72200  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\V5.I\130620A.B\v58260GH.m  
 Meth Date : 21-Jun-2013 09:35 wluo Quant Type: ISTD  
 Cal Date : 20-JUN-2013 14:45 Cal File: V504275.D  
 Als bottle: 14  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 4.14  
 Processing Host: TARGET103

Concentration Formula: Amt \* DF \* Uf \* 5/(Ws \* (100 - M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.100	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

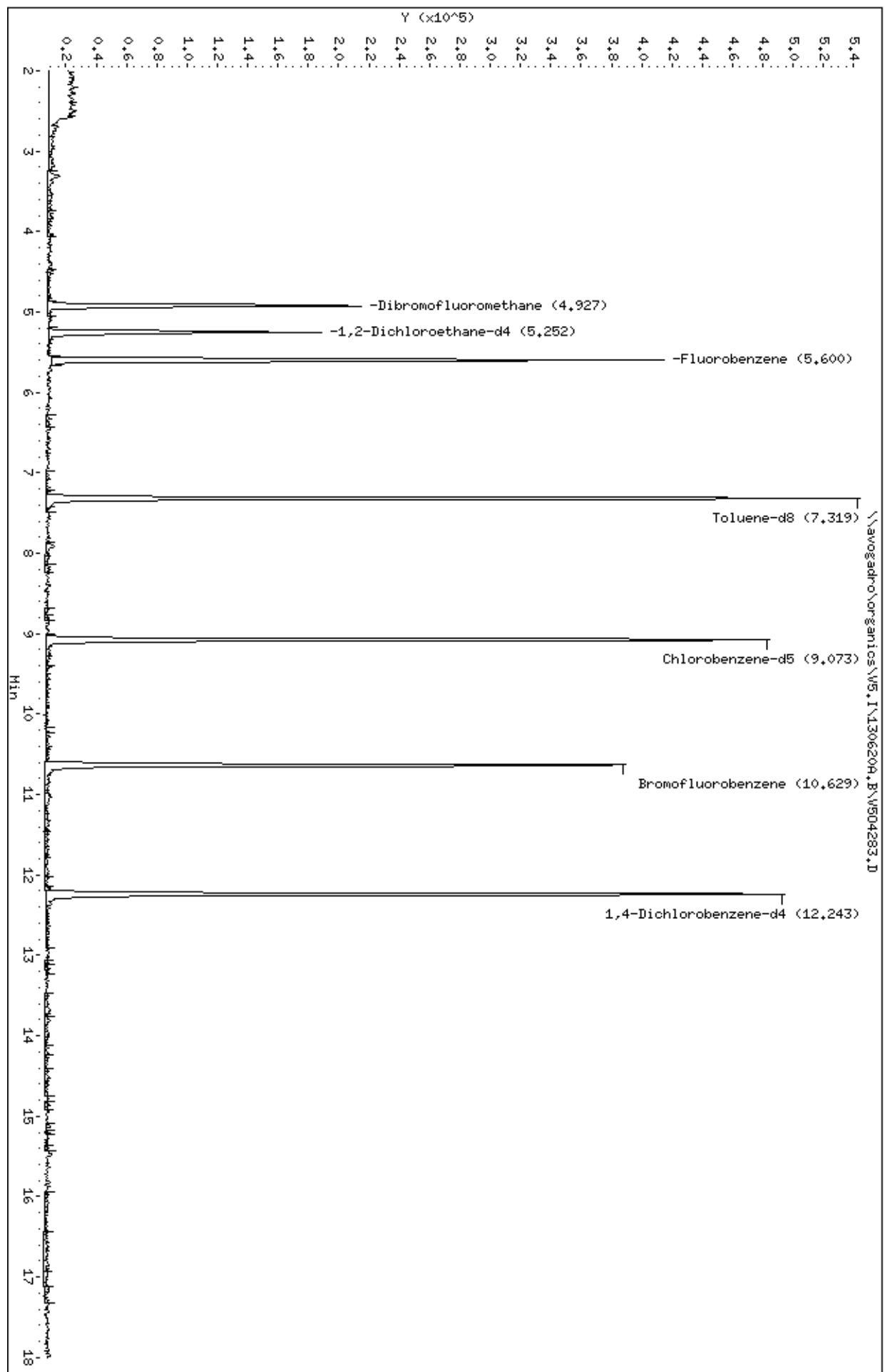
Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN ( ug/L)	FINAL (ug/Kg)
\$ 32 Dibromofluoromethane	113		4.926	4.919	(0.880)	134708	50.0858	49
\$ 38 1,2-Dichloroethane-d4	102		5.252	5.256	(0.938)	22633	50.2700	49
* 42 Fluorobenzene	96		5.600	5.593	(1.000)	390659	50.0000	
\$ 52 Toluene-d8	98		7.319	7.323	(0.807)	373426	50.0952	49
* 61 Chlorobenzene-d5	117		9.072	9.076	(1.000)	301021	50.0000	
\$ 72 Bromofluorobenzene	95		10.628	10.633	(1.172)	156798	51.8075	51
* 85 1,4-Dichlorobenzene-d4	152		12.243	12.235	(1.000)	158204	50.0000	(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organicos\W5.1\1306204.B\W504283.D  
Date : 20-JUN-2013 18:13  
Client ID: A-1-3-061313  
Sample Info: 5G,H0975-01A,72200  
Column phase: DB-624

Instrument: W5.i  
Operator: ML SRC: LIMS  
Column diameter: 0.25



1A - FORM I VOA-1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.  
A-2-2-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-02A  
 Sample wt/vol: 5.00 (g/mL) G Lab File ID: V504284.D  
 Level: (TRACE/LOW/MED) LOW Date Received: 06/14/2013  
 % Moisture: not dec. 25 Date Analyzed: 06/20/2013  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
75-71-8	Dichlorodifluoromethane		6.7	U
74-87-3	Chloromethane		6.7	U
75-01-4	Vinyl chloride		6.7	U
74-83-9	Bromomethane		6.7	U
75-00-3	Chloroethane		6.7	U
75-69-4	Trichlorofluoromethane		6.7	U
75-35-4	1,1-Dichloroethene		6.7	U
67-64-1	Acetone		6.7	U
74-88-4	Iodomethane		6.7	U
75-15-0	Carbon disulfide		6.7	U
75-09-2	Methylene chloride		6.7	U
156-60-5	trans-1,2-Dichloroethene		6.7	U
1634-04-4	Methyl tert-butyl ether		6.7	U
75-34-3	1,1-Dichloroethane		6.7	U
108-05-4	Vinyl acetate		6.7	U
78-93-3	2-Butanone		6.7	U
156-59-2	cis-1,2-Dichloroethene		6.7	U
594-20-7	2,2-Dichloropropane		6.7	U
74-97-5	Bromochloromethane		6.7	U
67-66-3	Chloroform		6.7	U
71-55-6	1,1,1-Trichloroethane		6.7	U
563-58-6	1,1-Dichloropropene		6.7	U
56-23-5	Carbon tetrachloride		6.7	U
107-06-2	1,2-Dichloroethane		6.7	U
71-43-2	Benzene		6.7	U
79-01-6	Trichloroethene		6.7	U
78-87-5	1,2-Dichloropropane		6.7	U
74-95-3	Dibromomethane		6.7	U
75-27-4	Bromodichloromethane		6.7	U
10061-01-5	cis-1,3-Dichloropropene		6.7	U
108-10-1	4-Methyl-2-pentanone		6.7	U
108-88-3	Toluene		6.7	U
10061-02-6	trans-1,3-Dichloropropene		6.7	U
79-00-5	1,1,2-Trichloroethane		6.7	U
142-28-9	1,3-Dichloropropane		6.7	U

1B - FORM I VOA-2  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.  
A-2-2-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-02A  
 Sample wt/vol: 5.00 (g/mL) G Lab File ID: V504284.D  
 Level: (TRACE/LOW/MED) LOW Date Received: 06/14/2013  
 % Moisture: not dec. 25 Date Analyzed: 06/20/2013  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
127-18-4	Tetrachloroethene		6.7	U
591-78-6	2-Hexanone		6.7	U
124-48-1	Dibromochloromethane		6.7	U
106-93-4	1,2-Dibromoethane		6.7	U
108-90-7	Chlorobenzene		6.7	U
630-20-6	1,1,1,2-Tetrachloroethane		6.7	U
100-41-4	Ethylbenzene		6.7	U
179601-23-1	m,p-Xylene		6.7	U
95-47-6	o-Xylene		6.7	U
1330-20-7	Xylene (Total)		6.7	U
100-42-5	Styrene		6.7	U
75-25-2	Bromoform		6.7	U
98-82-8	Isopropylbenzene		6.7	U
79-34-5	1,1,2,2-Tetrachloroethane		6.7	U
108-86-1	Bromobenzene		6.7	U
96-18-4	1,2,3-Trichloropropane		6.7	U
103-65-1	n-Propylbenzene		6.7	U
95-49-8	2-Chlorotoluene		6.7	U
108-67-8	1,3,5-Trimethylbenzene		6.7	U
106-43-4	4-Chlorotoluene		6.7	U
98-06-6	tert-Butylbenzene		6.7	U
95-63-6	1,2,4-Trimethylbenzene		6.7	U
135-98-8	sec-Butylbenzene		6.7	U
99-87-6	4-Isopropyltoluene		6.7	U
541-73-1	1,3-Dichlorobenzene		6.7	U
106-46-7	1,4-Dichlorobenzene		6.7	U
104-51-8	n-Butylbenzene		6.7	U
95-50-1	1,2-Dichlorobenzene		6.7	U
96-12-8	1,2-Dibromo-3-chloropropane		6.7	U
120-82-1	1,2,4-Trichlorobenzene		6.7	U
87-68-3	Hexachlorobutadiene		6.7	U
87-61-6	1,2,3-Trichlorobenzene		6.7	U
91-20-3	Naphthalene		6.7	U

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil  
 Data file : \\avogadro\organics\V5.I\130620A.B\V504284.D  
 Lab Smp Id: M0975-02A Client Smp ID: A-2-2-061313  
 Inj Date : 20-JUN-2013 18:39  
 Operator : WL SRC: LIMS Inst ID: V5.i  
 Smp Info : 5G,M0975-02A,,72200  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\V5.I\130620A.B\v58260GH.m  
 Meth Date : 21-Jun-2013 09:35 wluo Quant Type: ISTD  
 Cal Date : 20-JUN-2013 14:45 Cal File: V504275.D  
 Als bottle: 15  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 4.14  
 Processing Host: TARGET103

Concentration Formula: Amt \* DF \* Uf \* 5/(Ws \* (100 - M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN ( ug/L)	FINAL (ug/Kg)
\$ 32 Dibromofluoromethane	113		4.927	4.919	(0.880)	134508	50.3149	50
\$ 38 1,2-Dichloroethane-d4	102		5.252	5.256	(0.938)	21751	48.6041	49
* 42 Fluorobenzene	96		5.601	5.593	(1.000)	388303	50.0000	
\$ 52 Toluene-d8	98		7.320	7.323	(0.807)	369723	49.4246	49
* 61 Chlorobenzene-d5	117		9.073	9.076	(1.000)	302080	50.0000	
\$ 72 Bromofluorobenzene	95		10.629	10.633	(1.172)	148232	48.8055	49
* 85 1,4-Dichlorobenzene-d4	152		12.244	12.235	(1.000)	152324	50.0000	(Q)

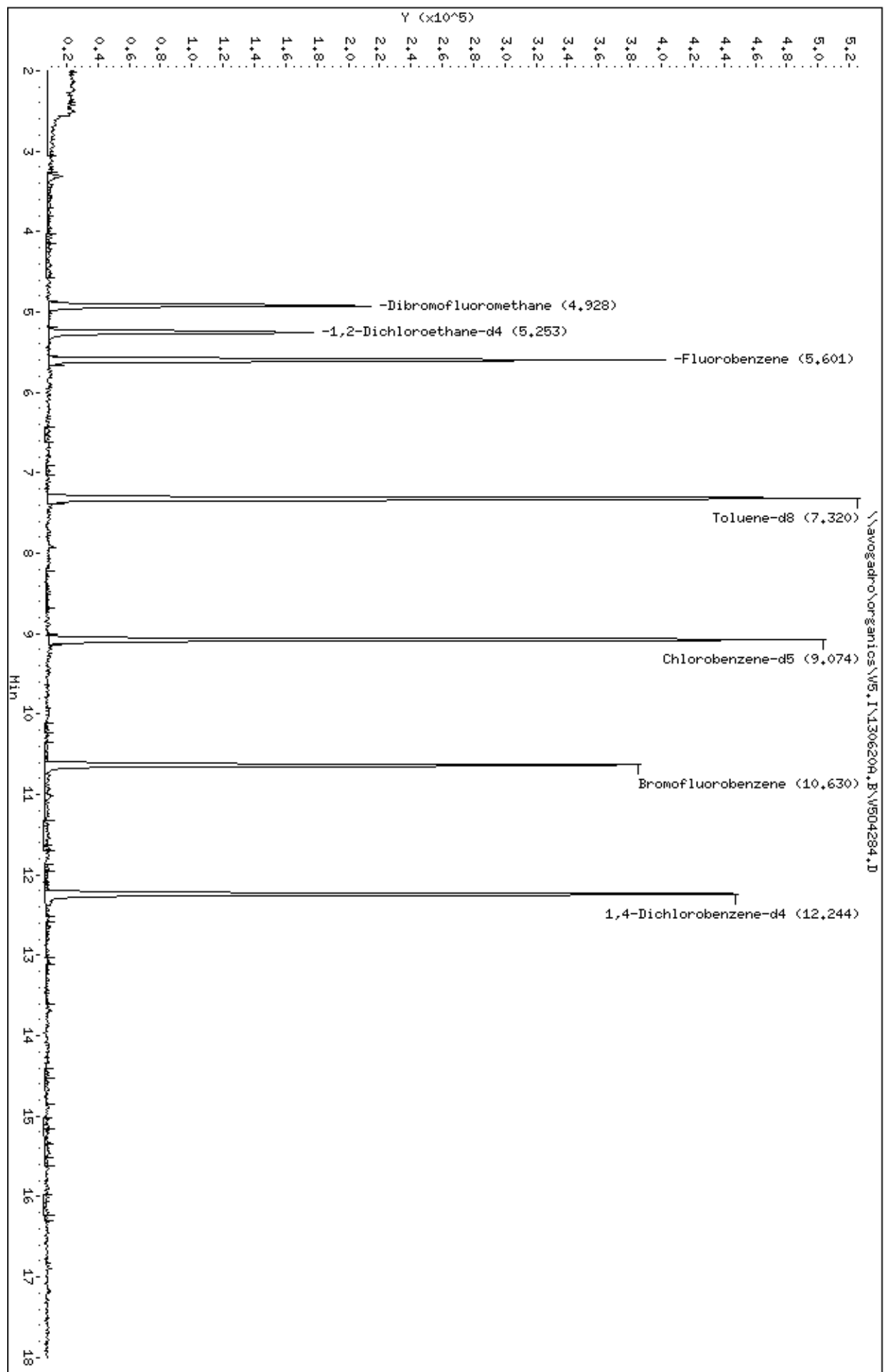
QC Flag Legend

Q - Qualifier signal failed the ratio test.



Data File: \\avogadro\organicos\W5.1\1306204.B\W504284.D  
Date : 20-JUN-2013 18:39  
Client ID: A-2-2-061313  
Sample Info: SG,M0975-02A,72200  
Column phase: DB-624

Instrument: W5.1  
Operator: ML SRC: LIMS  
Column diameter: 0.25



1A - FORM I VOA-1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.  
A-3-1-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-03A  
 Sample wt/vol: 5.10 (g/mL) G Lab File ID: V504285.D  
 Level: (TRACE/LOW/MED) LOW Date Received: 06/14/2013  
 % Moisture: not dec. 19 Date Analyzed: 06/20/2013  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
75-71-8	Dichlorodifluoromethane		6.0	U
74-87-3	Chloromethane		6.0	U
75-01-4	Vinyl chloride		6.0	U
74-83-9	Bromomethane		6.0	U
75-00-3	Chloroethane		6.0	U
75-69-4	Trichlorofluoromethane		6.0	U
75-35-4	1,1-Dichloroethene		6.0	U
67-64-1	Acetone		6.0	U
74-88-4	Iodomethane		6.0	U
75-15-0	Carbon disulfide		6.0	U
75-09-2	Methylene chloride		6.0	U
156-60-5	trans-1,2-Dichloroethene		6.0	U
1634-04-4	Methyl tert-butyl ether		6.0	U
75-34-3	1,1-Dichloroethane		6.0	U
108-05-4	Vinyl acetate		6.0	U
78-93-3	2-Butanone		6.0	U
156-59-2	cis-1,2-Dichloroethene		6.0	U
594-20-7	2,2-Dichloropropane		6.0	U
74-97-5	Bromochloromethane		6.0	U
67-66-3	Chloroform		6.0	U
71-55-6	1,1,1-Trichloroethane		6.0	U
563-58-6	1,1-Dichloropropene		6.0	U
56-23-5	Carbon tetrachloride		6.0	U
107-06-2	1,2-Dichloroethane		6.0	U
71-43-2	Benzene		6.0	U
79-01-6	Trichloroethene		6.0	U
78-87-5	1,2-Dichloropropane		6.0	U
74-95-3	Dibromomethane		6.0	U
75-27-4	Bromodichloromethane		6.0	U
10061-01-5	cis-1,3-Dichloropropene		6.0	U
108-10-1	4-Methyl-2-pentanone		6.0	U
108-88-3	Toluene		6.0	U
10061-02-6	trans-1,3-Dichloropropene		6.0	U
79-00-5	1,1,2-Trichloroethane		6.0	U
142-28-9	1,3-Dichloropropane		6.0	U

1B - FORM I VOA-2  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.  
A-3-1-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-03A  
 Sample wt/vol: 5.10 (g/mL) G Lab File ID: V504285.D  
 Level: (TRACE/LOW/MED) LOW Date Received: 06/14/2013  
 % Moisture: not dec. 19 Date Analyzed: 06/20/2013  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
127-18-4	Tetrachloroethene		6.0	U
591-78-6	2-Hexanone		6.0	U
124-48-1	Dibromochloromethane		6.0	U
106-93-4	1,2-Dibromoethane		6.0	U
108-90-7	Chlorobenzene		6.0	U
630-20-6	1,1,1,2-Tetrachloroethane		6.0	U
100-41-4	Ethylbenzene		6.0	U
179601-23-1	m,p-Xylene		6.0	U
95-47-6	o-Xylene		6.0	U
1330-20-7	Xylene (Total)		6.0	U
100-42-5	Styrene		6.0	U
75-25-2	Bromoform		6.0	U
98-82-8	Isopropylbenzene		6.0	U
79-34-5	1,1,2,2-Tetrachloroethane		6.0	U
108-86-1	Bromobenzene		6.0	U
96-18-4	1,2,3-Trichloropropane		6.0	U
103-65-1	n-Propylbenzene		6.0	U
95-49-8	2-Chlorotoluene		6.0	U
108-67-8	1,3,5-Trimethylbenzene		6.0	U
106-43-4	4-Chlorotoluene		6.0	U
98-06-6	tert-Butylbenzene		6.0	U
95-63-6	1,2,4-Trimethylbenzene		6.0	U
135-98-8	sec-Butylbenzene		6.0	U
99-87-6	4-Isopropyltoluene		6.0	U
541-73-1	1,3-Dichlorobenzene		6.0	U
106-46-7	1,4-Dichlorobenzene		6.0	U
104-51-8	n-Butylbenzene		6.0	U
95-50-1	1,2-Dichlorobenzene		6.0	U
96-12-8	1,2-Dibromo-3-chloropropane		6.0	U
120-82-1	1,2,4-Trichlorobenzene		6.0	U
87-68-3	Hexachlorobutadiene		6.0	U
87-61-6	1,2,3-Trichlorobenzene		6.0	U
91-20-3	Naphthalene		6.0	U

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil  
 Data file : \\avogadro\organics\V5.I\130620A.B\V504285.D  
 Lab Smp Id: M0975-03A Client Smp ID: A-3-1-061313  
 Inj Date : 20-JUN-2013 19:07  
 Operator : WL SRC: LIMS Inst ID: V5.i  
 Smp Info : 5G,M0975-03A,,72200  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\V5.I\130620A.B\v58260GH.m  
 Meth Date : 21-Jun-2013 09:35 wluo Quant Type: ISTD  
 Cal Date : 20-JUN-2013 14:45 Cal File: V504275.D  
 Als bottle: 16  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 4.14  
 Processing Host: TARGET103

Concentration Formula: Amt \* DF \* Uf \* 5/(Ws \* (100 - M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.100	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

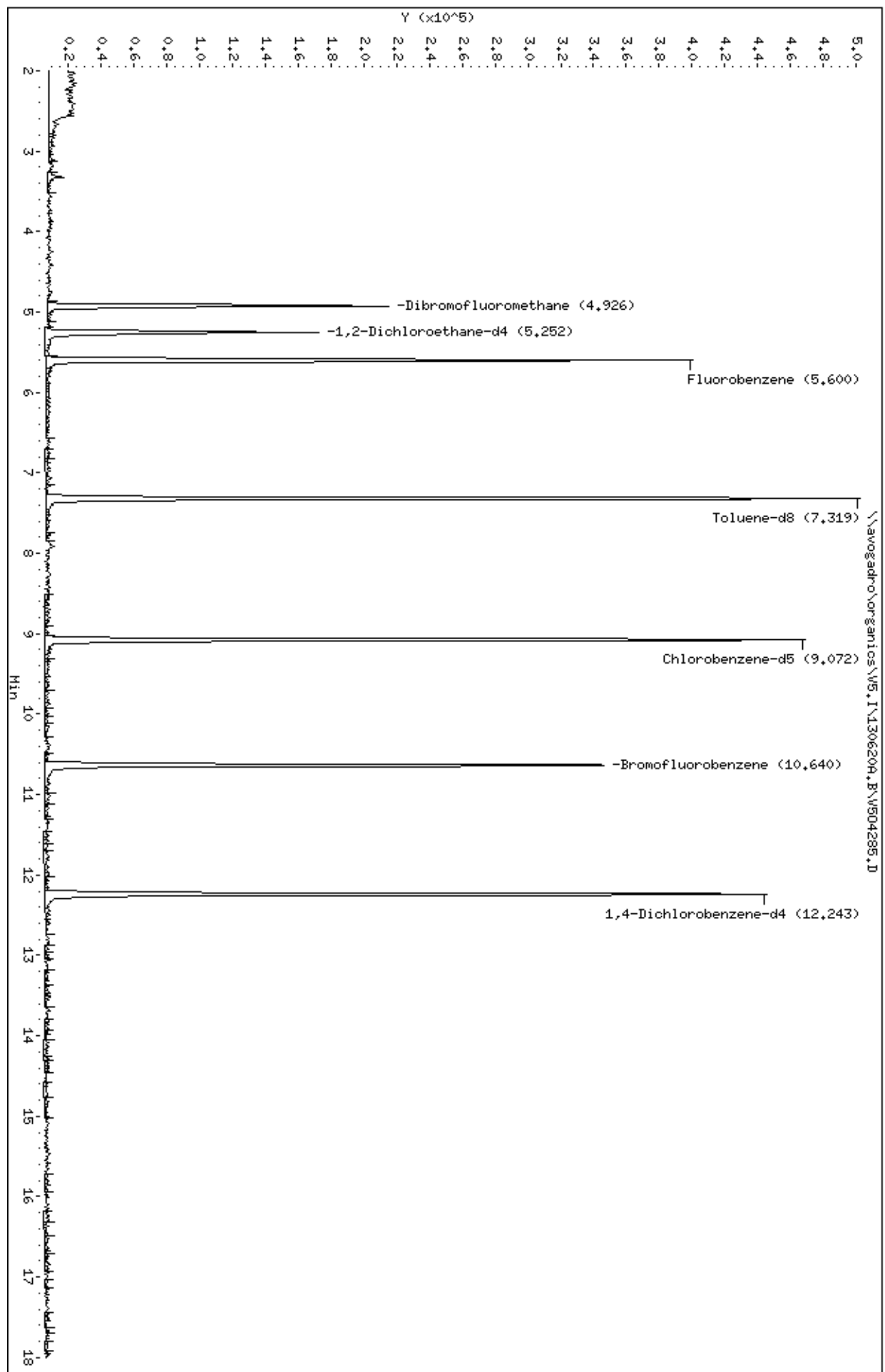
Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN ( ug/L)	FINAL (ug/Kg)
\$ 32 Dibromofluoromethane	113		4.926	4.919	(0.880)	132318	51.6273	51
\$ 38 1,2-Dichloroethane-d4	102		5.251	5.256	(0.938)	22010	51.3009	50
* 42 Fluorobenzene	96		5.599	5.593	(1.000)	372271	50.0000	
\$ 52 Toluene-d8	98		7.318	7.323	(0.807)	354374	49.9480	49
* 61 Chlorobenzene-d5	117		9.072	9.076	(1.000)	286505	50.0000	
\$ 72 Bromofluorobenzene	95		10.628	10.633	(1.172)	137552	47.7511	47
* 85 1,4-Dichlorobenzene-d4	152		12.242	12.235	(1.000)	143941	50.0000	(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organicos\W5.1\1306204.B\W504285.D  
Date : 20-JUN-2013 19:07  
Client ID: A-3-1-061313  
Sample Info: SG,M0975-03A,72200  
Column phase: DB-624

Instrument: W5.i  
Operator: ML SRC: LIMS  
Column diameter: 0.25



1A - FORM I VOA-1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B-1-4-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-05A  
 Sample wt/vol: 5.00 (g/mL) G Lab File ID: V504286.D  
 Level: (TRACE/LOW/MED) LOW Date Received: 06/14/2013  
 % Moisture: not dec. 19 Date Analyzed: 06/20/2013  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
75-71-8	Dichlorodifluoromethane		6.1	U
74-87-3	Chloromethane		6.1	U
75-01-4	Vinyl chloride		6.1	U
74-83-9	Bromomethane		6.1	U
75-00-3	Chloroethane		6.1	U
75-69-4	Trichlorofluoromethane		6.1	U
75-35-4	1,1-Dichloroethene		6.1	U
67-64-1	Acetone		6.1	U
74-88-4	Iodomethane		6.1	U
75-15-0	Carbon disulfide		6.1	U
75-09-2	Methylene chloride		6.1	U
156-60-5	trans-1,2-Dichloroethene		6.1	U
1634-04-4	Methyl tert-butyl ether		6.1	U
75-34-3	1,1-Dichloroethane		6.1	U
108-05-4	Vinyl acetate		6.1	U
78-93-3	2-Butanone		6.1	U
156-59-2	cis-1,2-Dichloroethene		6.1	U
594-20-7	2,2-Dichloropropane		6.1	U
74-97-5	Bromochloromethane		6.1	U
67-66-3	Chloroform		6.1	U
71-55-6	1,1,1-Trichloroethane		6.1	U
563-58-6	1,1-Dichloropropene		6.1	U
56-23-5	Carbon tetrachloride		6.1	U
107-06-2	1,2-Dichloroethane		6.1	U
71-43-2	Benzene		6.1	U
79-01-6	Trichloroethene		6.1	U
78-87-5	1,2-Dichloropropane		6.1	U
74-95-3	Dibromomethane		6.1	U
75-27-4	Bromodichloromethane		6.1	U
10061-01-5	cis-1,3-Dichloropropene		6.1	U
108-10-1	4-Methyl-2-pentanone		6.1	U
108-88-3	Toluene		6.1	U
10061-02-6	trans-1,3-Dichloropropene		6.1	U
79-00-5	1,1,2-Trichloroethane		6.1	U
142-28-9	1,3-Dichloropropane		6.1	U

1B - FORM I VOA-2  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B-1-4-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-05A  
 Sample wt/vol: 5.00 (g/mL) G Lab File ID: V504286.D  
 Level: (TRACE/LOW/MED) LOW Date Received: 06/14/2013  
 % Moisture: not dec. 19 Date Analyzed: 06/20/2013  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
127-18-4	Tetrachloroethene	6.1	U	
591-78-6	2-Hexanone	6.1	U	
124-48-1	Dibromochloromethane	6.1	U	
106-93-4	1,2-Dibromoethane	6.1	U	
108-90-7	Chlorobenzene	6.1	U	
630-20-6	1,1,1,2-Tetrachloroethane	6.1	U	
100-41-4	Ethylbenzene	6.1	U	
179601-23-1	m,p-Xylene	6.1	U	
95-47-6	o-Xylene	6.1	U	
1330-20-7	Xylene (Total)	6.1	U	
100-42-5	Styrene	6.1	U	
75-25-2	Bromoform	6.1	U	
98-82-8	Isopropylbenzene	6.1	U	
79-34-5	1,1,2,2-Tetrachloroethane	6.1	U	
108-86-1	Bromobenzene	6.1	U	
96-18-4	1,2,3-Trichloropropane	6.1	U	
103-65-1	n-Propylbenzene	6.1	U	
95-49-8	2-Chlorotoluene	6.1	U	
108-67-8	1,3,5-Trimethylbenzene	6.1	U	
106-43-4	4-Chlorotoluene	6.1	U	
98-06-6	tert-Butylbenzene	6.1	U	
95-63-6	1,2,4-Trimethylbenzene	6.1	U	
135-98-8	sec-Butylbenzene	6.1	U	
99-87-6	4-Isopropyltoluene	6.1	U	
541-73-1	1,3-Dichlorobenzene	6.1	U	
106-46-7	1,4-Dichlorobenzene	6.1	U	
104-51-8	n-Butylbenzene	6.1	U	
95-50-1	1,2-Dichlorobenzene	6.1	U	
96-12-8	1,2-Dibromo-3-chloropropane	6.1	U	
120-82-1	1,2,4-Trichlorobenzene	6.1	U	
87-68-3	Hexachlorobutadiene	6.1	U	
87-61-6	1,2,3-Trichlorobenzene	6.1	U	
91-20-3	Naphthalene	6.1	U	

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil  
 Data file : \\avogadro\organics\V5.I\130620A.B\V504286.D  
 Lab Smp Id: M0975-05A Client Smp ID: B-1-4-061313  
 Inj Date : 20-JUN-2013 19:33  
 Operator : WL SRC: LIMS Inst ID: V5.i  
 Smp Info : 5G,M0975-05A,,72200  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\V5.I\130620A.B\v58260GH.m  
 Meth Date : 21-Jun-2013 09:35 wluo Quant Type: ISTD  
 Cal Date : 20-JUN-2013 14:45 Cal File: V504275.D  
 Als bottle: 17  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 4.14  
 Processing Host: TARGET103

Concentration Formula: Amt \* DF \* Uf \* 5/(Ws \* (100 - M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	CONCENTRATIONS				ON-COLUMN ( ug/L)	FINAL (ug/Kg)
			RT	EXP RT	REL RT	RESPONSE		
\$ 32 Dibromofluoromethane	113		4.921	4.919	(0.880)	116513	47.5780	48
\$ 38 1,2-Dichloroethane-d4	102		5.246	5.256	(0.938)	18804	45.8698	46
* 42 Fluorobenzene	96		5.594	5.593	(1.000)	355703	50.0000	
\$ 52 Toluene-d8	98		7.313	7.323	(0.806)	326282	49.9653	50
* 61 Chlorobenzene-d5	117		9.078	9.076	(1.000)	263702	50.0000	
\$ 72 Bromofluorobenzene	95		10.634	10.633	(1.171)	129957	49.0157	49
* 85 1,4-Dichlorobenzene-d4	152		12.237	12.235	(1.000)	133483	50.0000	(Q)

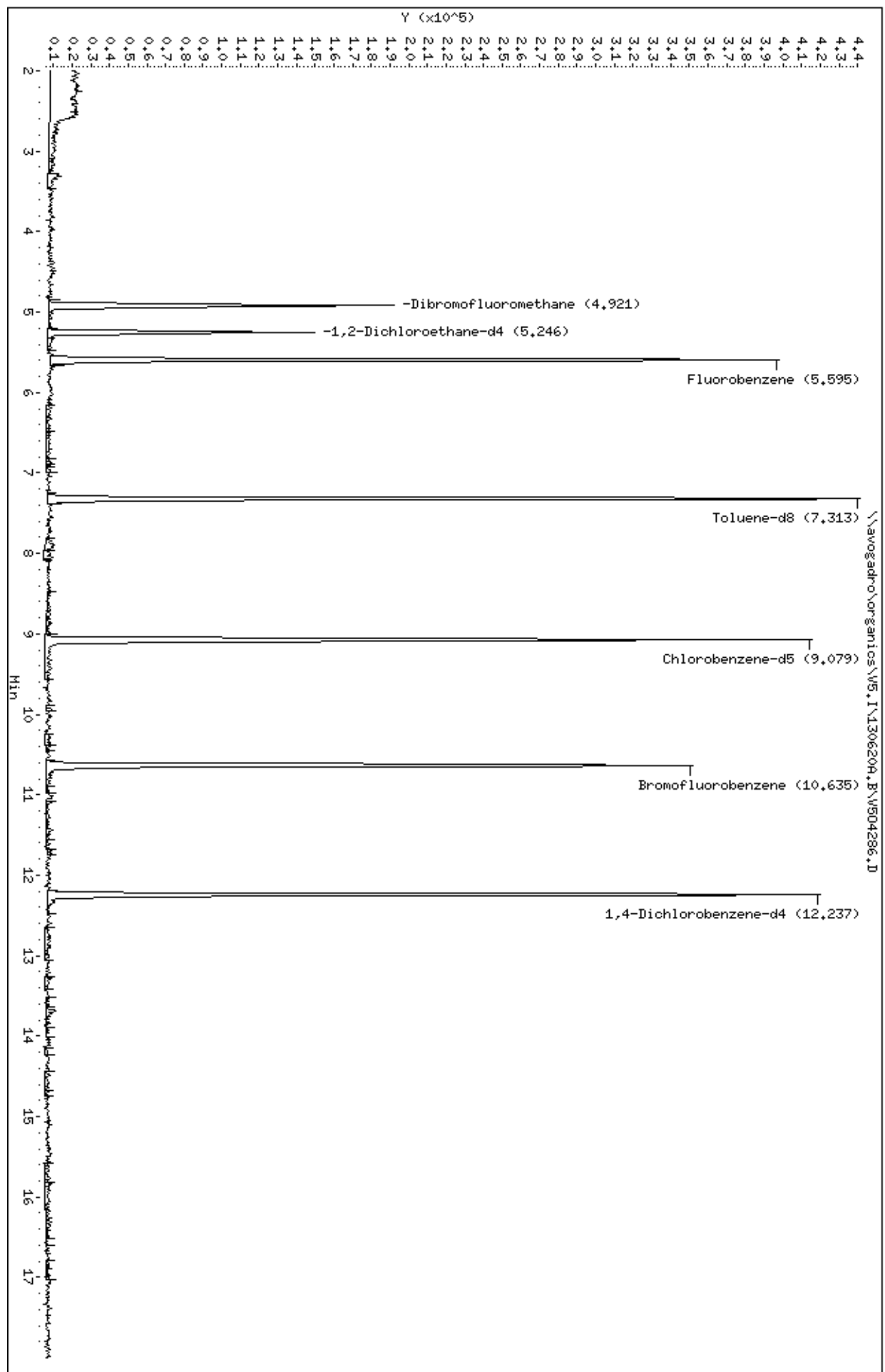
QC Flag Legend

Q - Qualifier signal failed the ratio test.



Data File: \\avogadro\organicos\W5.1\1306204.B\W504286.D  
Date : 20-JUN-2013 19:33  
Client ID: B-1-4-061313  
Sample Info: SG,H0975-05H,72200  
Column phase: DB-624

Instrument: W5.i  
Operator: ML SRC: LIMS  
Column diameter: 0.25



1A - FORM I VOA-1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B-2-1-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-06A  
 Sample wt/vol: 5.10 (g/mL) G Lab File ID: V504287.D  
 Level: (TRACE/LOW/MED) LOW Date Received: 06/14/2013  
 % Moisture: not dec. 18 Date Analyzed: 06/20/2013  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
75-71-8	Dichlorodifluoromethane		6.0	U
74-87-3	Chloromethane		6.0	U
75-01-4	Vinyl chloride		6.0	U
74-83-9	Bromomethane		6.0	U
75-00-3	Chloroethane		6.0	U
75-69-4	Trichlorofluoromethane		6.0	U
75-35-4	1,1-Dichloroethene		6.0	U
67-64-1	Acetone		6.0	U
74-88-4	Iodomethane		6.0	U
75-15-0	Carbon disulfide		6.0	U
75-09-2	Methylene chloride		6.0	U
156-60-5	trans-1,2-Dichloroethene		6.0	U
1634-04-4	Methyl tert-butyl ether		6.0	U
75-34-3	1,1-Dichloroethane		6.0	U
108-05-4	Vinyl acetate		6.0	U
78-93-3	2-Butanone		6.0	U
156-59-2	cis-1,2-Dichloroethene		6.0	U
594-20-7	2,2-Dichloropropane		6.0	U
74-97-5	Bromochloromethane		6.0	U
67-66-3	Chloroform		6.0	U
71-55-6	1,1,1-Trichloroethane		6.0	U
563-58-6	1,1-Dichloropropene		6.0	U
56-23-5	Carbon tetrachloride		6.0	U
107-06-2	1,2-Dichloroethane		6.0	U
71-43-2	Benzene		6.0	U
79-01-6	Trichloroethene		6.0	U
78-87-5	1,2-Dichloropropane		6.0	U
74-95-3	Dibromomethane		6.0	U
75-27-4	Bromodichloromethane		6.0	U
10061-01-5	cis-1,3-Dichloropropene		6.0	U
108-10-1	4-Methyl-2-pentanone		6.0	U
108-88-3	Toluene		6.0	U
10061-02-6	trans-1,3-Dichloropropene		6.0	U
79-00-5	1,1,2-Trichloroethane		6.0	U
142-28-9	1,3-Dichloropropane		6.0	U

1B - FORM I VOA-2  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B-2-1-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-06A  
 Sample wt/vol: 5.10 (g/mL) G Lab File ID: V504287.D  
 Level: (TRACE/LOW/MED) LOW Date Received: 06/14/2013  
 % Moisture: not dec. 18 Date Analyzed: 06/20/2013  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
127-18-4	Tetrachloroethene		6.0	U
591-78-6	2-Hexanone		6.0	U
124-48-1	Dibromochloromethane		6.0	U
106-93-4	1,2-Dibromoethane		6.0	U
108-90-7	Chlorobenzene		6.0	U
630-20-6	1,1,1,2-Tetrachloroethane		6.0	U
100-41-4	Ethylbenzene		6.0	U
179601-23-1	m,p-Xylene		6.0	U
95-47-6	o-Xylene		6.0	U
1330-20-7	Xylene (Total)		6.0	U
100-42-5	Styrene		6.0	U
75-25-2	Bromoform		6.0	U
98-82-8	Isopropylbenzene		6.0	U
79-34-5	1,1,2,2-Tetrachloroethane		6.0	U
108-86-1	Bromobenzene		6.0	U
96-18-4	1,2,3-Trichloropropane		6.0	U
103-65-1	n-Propylbenzene		6.0	U
95-49-8	2-Chlorotoluene		6.0	U
108-67-8	1,3,5-Trimethylbenzene		6.0	U
106-43-4	4-Chlorotoluene		6.0	U
98-06-6	tert-Butylbenzene		6.0	U
95-63-6	1,2,4-Trimethylbenzene		6.0	U
135-98-8	sec-Butylbenzene		6.0	U
99-87-6	4-Isopropyltoluene		6.0	U
541-73-1	1,3-Dichlorobenzene		6.0	U
106-46-7	1,4-Dichlorobenzene		6.0	U
104-51-8	n-Butylbenzene		6.0	U
95-50-1	1,2-Dichlorobenzene		6.0	U
96-12-8	1,2-Dibromo-3-chloropropane		6.0	U
120-82-1	1,2,4-Trichlorobenzene		6.0	U
87-68-3	Hexachlorobutadiene		6.0	U
87-61-6	1,2,3-Trichlorobenzene		6.0	U
91-20-3	Naphthalene		6.0	U

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil  
 Data file : \\avogadro\organics\V5.I\130620A.B\V504287.D  
 Lab Smp Id: M0975-06A Client Smp ID: B-2-1-061313  
 Inj Date : 20-JUN-2013 19:58  
 Operator : WL SRC: LIMS Inst ID: V5.i  
 Smp Info : 5G,M0975-06A,,72200  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\V5.I\130620A.B\v58260GH.m  
 Meth Date : 21-Jun-2013 09:35 wluo Quant Type: ISTD  
 Cal Date : 20-JUN-2013 14:45 Cal File: V504275.D  
 Als bottle: 18  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 4.14  
 Processing Host: TARGET103

Concentration Formula: Amt \* DF \* Uf \* 5/(Ws \* (100 - M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.100	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

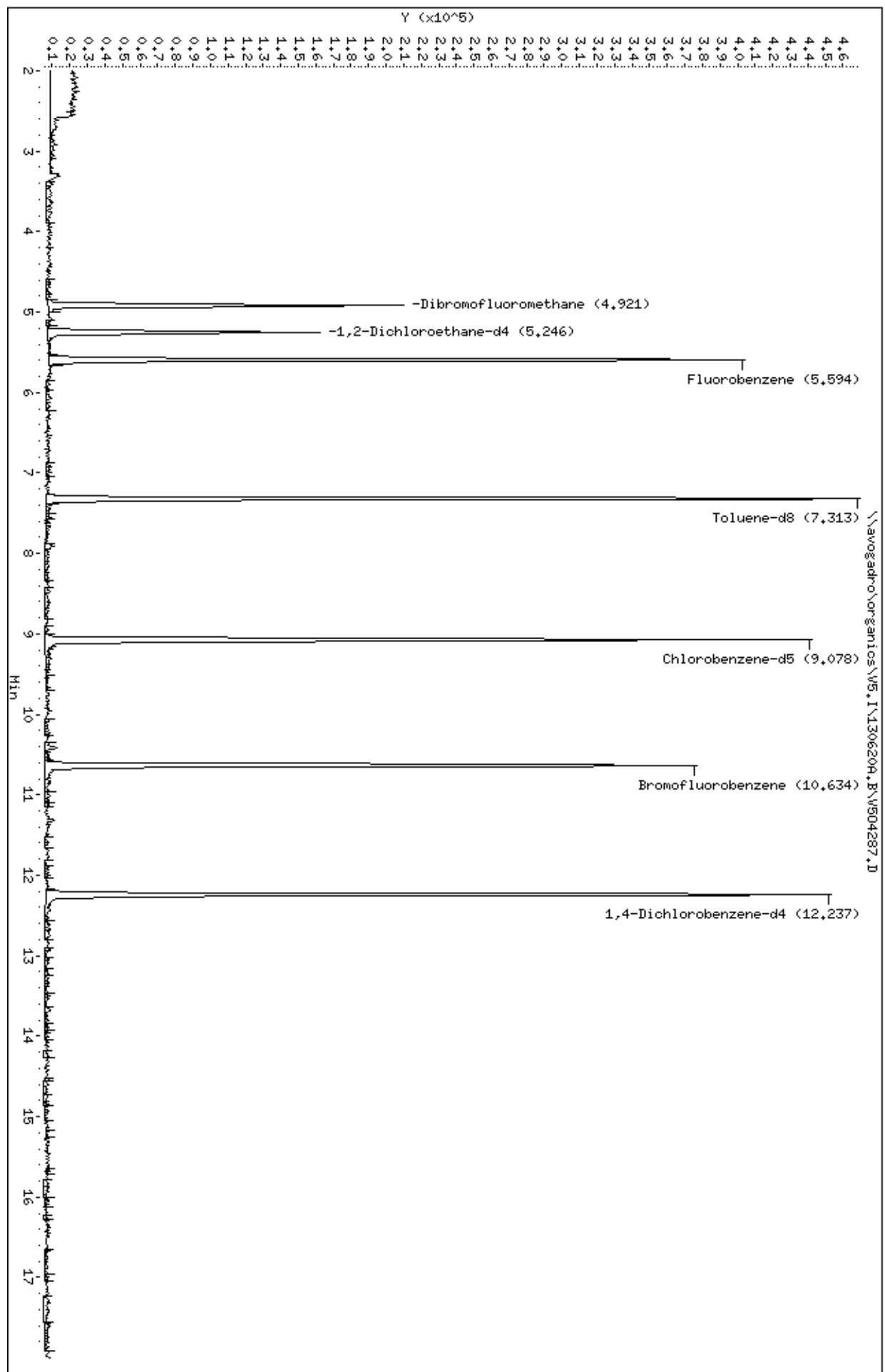
Compounds	QUANT	SIG	CONCENTRATIONS				
			ON-COLUMN	FINAL			
	MASS	RT	EXP RT	REL RT	RESPONSE	( ug/L)	(ug/Kg)
\$ 32 Dibromofluoromethane	113	4.920	4.919	(0.880)	130221	50.8270	50
\$ 38 1,2-Dichloroethane-d4	102	5.246	5.256	(0.938)	21147	49.3068	48
* 42 Fluorobenzene	96	5.594	5.593	(1.000)	372140	50.0000	
\$ 52 Toluene-d8	98	7.313	7.323	(0.806)	350780	50.1790	49
* 61 Chlorobenzene-d5	117	9.078	9.076	(1.000)	282294	50.0000	
\$ 72 Bromofluorobenzene	95	10.634	10.633	(1.171)	140803	49.6088	49
* 85 1,4-Dichlorobenzene-d4	152	12.237	12.235	(1.000)	145923	50.0000	(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organicos\W5.1\1306204.B\W504287.D  
Date: 20-JUN-2013 19:58  
Client ID: B-2-1-061313  
Sample Info: 5G,H0975-06A,72200  
Column phase: DB-624

Instrument: W5.i  
Operator: ML SRC: LIMS  
Column diameter: 0.25



1A - FORM I VOA-1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.  
C-1-2-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-08A  
 Sample wt/vol: 5.20 (g/mL) G Lab File ID: V504288.D  
 Level: (TRACE/LOW/MED) LOW Date Received: 06/14/2013  
 % Moisture: not dec. 24 Date Analyzed: 06/20/2013  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
75-71-8	Dichlorodifluoromethane		6.3	U
74-87-3	Chloromethane		6.3	U
75-01-4	Vinyl chloride		6.3	U
74-83-9	Bromomethane		6.3	U
75-00-3	Chloroethane		6.3	U
75-69-4	Trichlorofluoromethane		6.3	U
75-35-4	1,1-Dichloroethene		6.3	U
67-64-1	Acetone		6.3	U
74-88-4	Iodomethane		6.3	U
75-15-0	Carbon disulfide		6.3	U
75-09-2	Methylene chloride		6.3	U
156-60-5	trans-1,2-Dichloroethene		6.3	U
1634-04-4	Methyl tert-butyl ether		6.3	U
75-34-3	1,1-Dichloroethane		6.3	U
108-05-4	Vinyl acetate		6.3	U
78-93-3	2-Butanone		6.3	U
156-59-2	cis-1,2-Dichloroethene		6.3	U
594-20-7	2,2-Dichloropropane		6.3	U
74-97-5	Bromochloromethane		6.3	U
67-66-3	Chloroform		6.3	U
71-55-6	1,1,1-Trichloroethane		6.3	U
563-58-6	1,1-Dichloropropene		6.3	U
56-23-5	Carbon tetrachloride		6.3	U
107-06-2	1,2-Dichloroethane		6.3	U
71-43-2	Benzene		6.3	U
79-01-6	Trichloroethene		6.3	U
78-87-5	1,2-Dichloropropane		6.3	U
74-95-3	Dibromomethane		6.3	U
75-27-4	Bromodichloromethane		6.3	U
10061-01-5	cis-1,3-Dichloropropene		6.3	U
108-10-1	4-Methyl-2-pentanone		6.3	U
108-88-3	Toluene		6.3	U
10061-02-6	trans-1,3-Dichloropropene		6.3	U
79-00-5	1,1,2-Trichloroethane		6.3	U
142-28-9	1,3-Dichloropropane		6.3	U

1B - FORM I VOA-2  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.  
C-1-2-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-08A  
 Sample wt/vol: 5.20 (g/mL) G Lab File ID: V504288.D  
 Level: (TRACE/LOW/MED) LOW Date Received: 06/14/2013  
 % Moisture: not dec. 24 Date Analyzed: 06/20/2013  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
127-18-4	Tetrachloroethene		6.3	U
591-78-6	2-Hexanone		6.3	U
124-48-1	Dibromochloromethane		6.3	U
106-93-4	1,2-Dibromoethane		6.3	U
108-90-7	Chlorobenzene		6.3	U
630-20-6	1,1,1,2-Tetrachloroethane		6.3	U
100-41-4	Ethylbenzene		6.3	U
179601-23-1	m,p-Xylene		6.3	U
95-47-6	o-Xylene		6.3	U
1330-20-7	Xylene (Total)		6.3	U
100-42-5	Styrene		6.3	U
75-25-2	Bromoform		6.3	U
98-82-8	Isopropylbenzene		6.3	U
79-34-5	1,1,2,2-Tetrachloroethane		6.3	U
108-86-1	Bromobenzene		6.3	U
96-18-4	1,2,3-Trichloropropane		6.3	U
103-65-1	n-Propylbenzene		6.3	U
95-49-8	2-Chlorotoluene		6.3	U
108-67-8	1,3,5-Trimethylbenzene		6.3	U
106-43-4	4-Chlorotoluene		6.3	U
98-06-6	tert-Butylbenzene		6.3	U
95-63-6	1,2,4-Trimethylbenzene		6.3	U
135-98-8	sec-Butylbenzene		6.3	U
99-87-6	4-Isopropyltoluene		6.3	U
541-73-1	1,3-Dichlorobenzene		6.3	U
106-46-7	1,4-Dichlorobenzene		6.3	U
104-51-8	n-Butylbenzene		6.3	U
95-50-1	1,2-Dichlorobenzene		6.3	U
96-12-8	1,2-Dibromo-3-chloropropane		6.3	U
120-82-1	1,2,4-Trichlorobenzene		6.3	U
87-68-3	Hexachlorobutadiene		6.3	U
87-61-6	1,2,3-Trichlorobenzene		6.3	U
91-20-3	Naphthalene		6.3	U

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil  
 Data file : \\avogadro\organics\V5.I\130620A.B\V504288.D  
 Lab Smp Id: M0975-08A Client Smp ID: C-1-2-061313  
 Inj Date : 20-JUN-2013 20:24  
 Operator : WL SRC: LIMS Inst ID: V5.i  
 Smp Info : 5G,M0975-08A,,72200  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\V5.I\130620A.B\v58260GH.m  
 Meth Date : 21-Jun-2013 09:35 wluo Quant Type: ISTD  
 Cal Date : 20-JUN-2013 14:45 Cal File: V504275.D  
 Als bottle: 19  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 4.14  
 Processing Host: TARGET103

Concentration Formula: Amt \* DF \* Uf \* 5/(Ws \* (100 - M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.200	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN ( ug/L)	FINAL (ug/Kg)
\$ 32 Dibromofluoromethane	113		4.914	4.919	(0.878)	128582	50.5650	49
\$ 38 1,2-Dichloroethane-d4	102		5.250	5.256	(0.938)	22522	52.9080	51
* 42 Fluorobenzene	96		5.599	5.593	(1.000)	369360	50.0000	
\$ 52 Toluene-d8	98		7.317	7.323	(0.807)	354823	49.8712	48
* 61 Chlorobenzene-d5	117		9.071	9.076	(1.000)	287310	50.0000	
\$ 72 Bromofluorobenzene	95		10.627	10.633	(1.172)	139356	48.2418	46
* 85 1,4-Dichlorobenzene-d4	152		12.241	12.235	(1.000)	146867	50.0000	(Q)

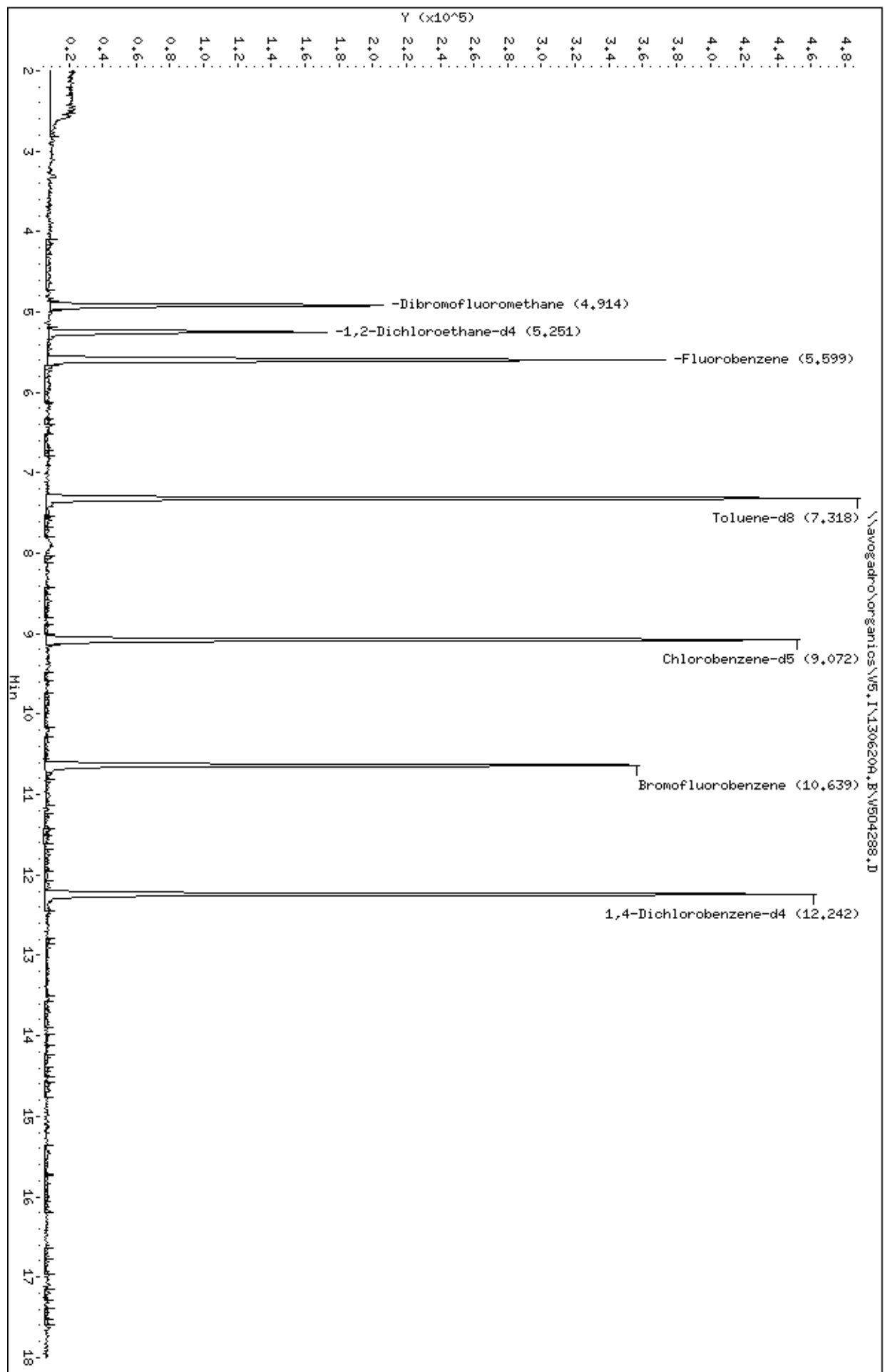
QC Flag Legend

Q - Qualifier signal failed the ratio test.



Data File: \\avogadro\organicos\W5.1\1306204.B\W504288.D  
Date : 20-JUN-2013 20:24  
Client ID: C-1-2-061313  
Sample Info: 5G,M0975-08A,72200  
Column phase: DB-624

Instrument: W5.1  
Operator: ML SRC: LIMS  
Column diameter: 0.25



1A - FORM I VOA-1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.  
C-2-3-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-09A  
 Sample wt/vol: 5.10 (g/mL) G Lab File ID: V504289.D  
 Level: (TRACE/LOW/MED) LOW Date Received: 06/14/2013  
 % Moisture: not dec. 26 Date Analyzed: 06/20/2013  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
75-71-8	Dichlorodifluoromethane		6.6	U
74-87-3	Chloromethane		6.6	U
75-01-4	Vinyl chloride		6.6	U
74-83-9	Bromomethane		6.6	U
75-00-3	Chloroethane		6.6	U
75-69-4	Trichlorofluoromethane		6.6	U
75-35-4	1,1-Dichloroethene		6.6	U
67-64-1	Acetone		6.6	U
74-88-4	Iodomethane		6.6	U
75-15-0	Carbon disulfide		6.6	U
75-09-2	Methylene chloride		6.6	U
156-60-5	trans-1,2-Dichloroethene		6.6	U
1634-04-4	Methyl tert-butyl ether		6.6	U
75-34-3	1,1-Dichloroethane		6.6	U
108-05-4	Vinyl acetate		6.6	U
78-93-3	2-Butanone		6.6	U
156-59-2	cis-1,2-Dichloroethene		6.6	U
594-20-7	2,2-Dichloropropane		6.6	U
74-97-5	Bromochloromethane		6.6	U
67-66-3	Chloroform		6.6	U
71-55-6	1,1,1-Trichloroethane		6.6	U
563-58-6	1,1-Dichloropropene		6.6	U
56-23-5	Carbon tetrachloride		6.6	U
107-06-2	1,2-Dichloroethane		6.6	U
71-43-2	Benzene		6.6	U
79-01-6	Trichloroethene		6.6	U
78-87-5	1,2-Dichloropropane		6.6	U
74-95-3	Dibromomethane		6.6	U
75-27-4	Bromodichloromethane		6.6	U
10061-01-5	cis-1,3-Dichloropropene		6.6	U
108-10-1	4-Methyl-2-pentanone		6.6	U
108-88-3	Toluene		6.6	U
10061-02-6	trans-1,3-Dichloropropene		6.6	U
79-00-5	1,1,2-Trichloroethane		6.6	U
142-28-9	1,3-Dichloropropane		6.6	U

1B - FORM I VOA-2  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.  
C-2-3-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-09A  
 Sample wt/vol: 5.10 (g/mL) G Lab File ID: V504289.D  
 Level: (TRACE/LOW/MED) LOW Date Received: 06/14/2013  
 % Moisture: not dec. 26 Date Analyzed: 06/20/2013  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
127-18-4	Tetrachloroethene		6.6	U
591-78-6	2-Hexanone		6.6	U
124-48-1	Dibromochloromethane		6.6	U
106-93-4	1,2-Dibromoethane		6.6	U
108-90-7	Chlorobenzene		6.6	U
630-20-6	1,1,1,2-Tetrachloroethane		6.6	U
100-41-4	Ethylbenzene		6.6	U
179601-23-1	m,p-Xylene		6.6	U
95-47-6	o-Xylene		6.6	U
1330-20-7	Xylene (Total)		6.6	U
100-42-5	Styrene		6.6	U
75-25-2	Bromoform		6.6	U
98-82-8	Isopropylbenzene		6.6	U
79-34-5	1,1,2,2-Tetrachloroethane		6.6	U
108-86-1	Bromobenzene		6.6	U
96-18-4	1,2,3-Trichloropropane		6.6	U
103-65-1	n-Propylbenzene		6.6	U
95-49-8	2-Chlorotoluene		6.6	U
108-67-8	1,3,5-Trimethylbenzene		6.6	U
106-43-4	4-Chlorotoluene		6.6	U
98-06-6	tert-Butylbenzene		6.6	U
95-63-6	1,2,4-Trimethylbenzene		6.6	U
135-98-8	sec-Butylbenzene		6.6	U
99-87-6	4-Isopropyltoluene		6.6	U
541-73-1	1,3-Dichlorobenzene		6.6	U
106-46-7	1,4-Dichlorobenzene		6.6	U
104-51-8	n-Butylbenzene		6.6	U
95-50-1	1,2-Dichlorobenzene		6.6	U
96-12-8	1,2-Dibromo-3-chloropropane		6.6	U
120-82-1	1,2,4-Trichlorobenzene		6.6	U
87-68-3	Hexachlorobutadiene		6.6	U
87-61-6	1,2,3-Trichlorobenzene		6.6	U
91-20-3	Naphthalene		6.6	U

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil  
 Data file : \\avogadro\organics\V5.I\130620A.B\V504289.D  
 Lab Smp Id: M0975-09A Client Smp ID: C-2-3-061313  
 Inj Date : 20-JUN-2013 20:50  
 Operator : WL SRC: LIMS Inst ID: V5.i  
 Smp Info : 5G,M0975-09A,,72200  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\V5.I\130620A.B\v58260GH.m  
 Meth Date : 21-Jun-2013 09:35 wluo Quant Type: ISTD  
 Cal Date : 20-JUN-2013 14:45 Cal File: V504275.D  
 Als bottle: 20  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 4.14  
 Processing Host: TARGET103

Concentration Formula: Amt \* DF \* Uf \* 5/(Ws \* (100 - M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.100	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

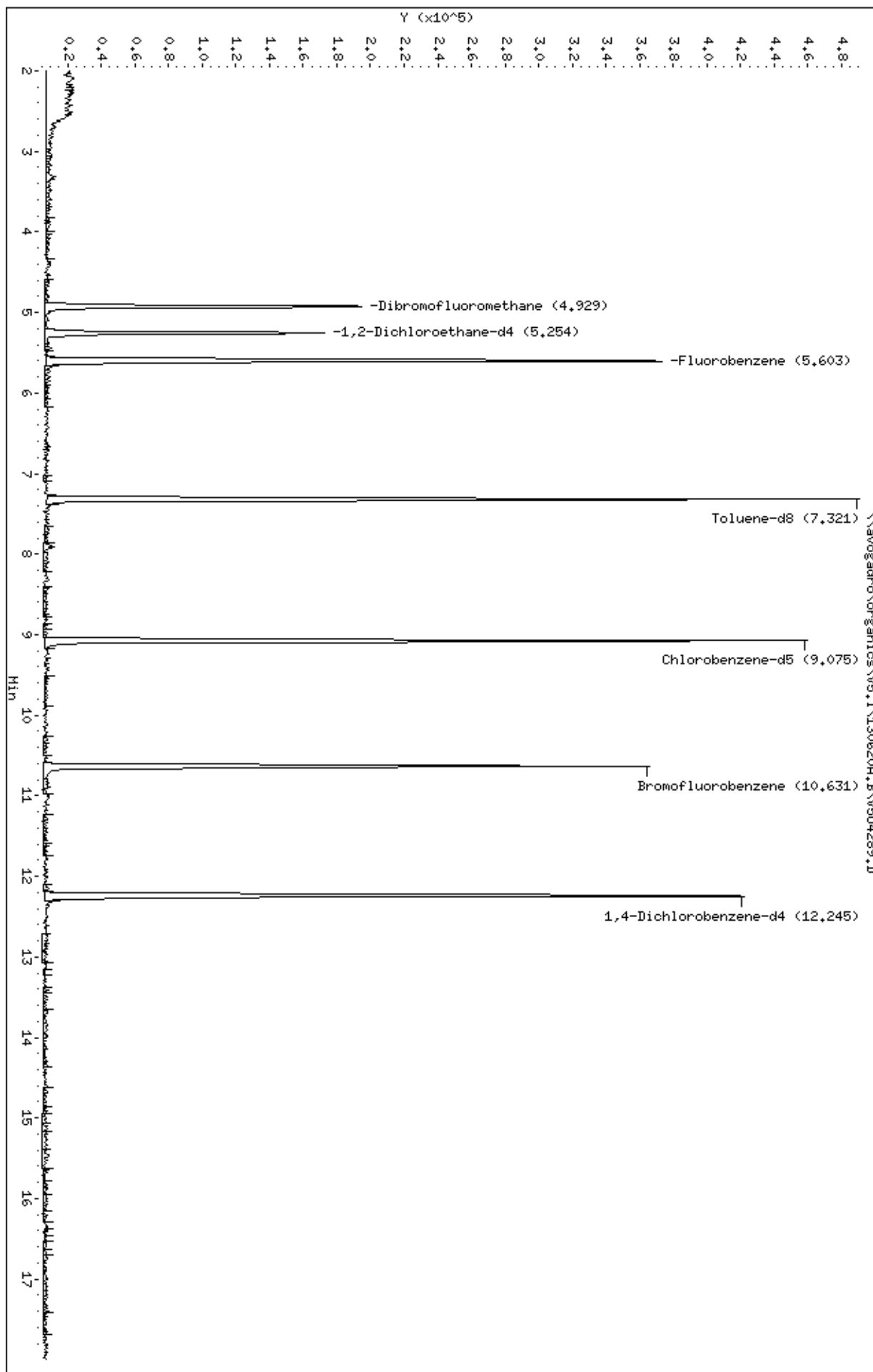
Compounds	QUANT	SIG						CONCENTRATIONS	
			MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN ( ug/L)	FINAL (ug/Kg)
\$ 32 Dibromofluoromethane	113		4.928	4.919	(0.880)	126082	50.9575	50	
\$ 38 1,2-Dichloroethane-d4	102		5.254	5.256	(0.938)	22032	53.1929	52	
* 42 Fluorobenzene	96		5.602	5.593	(1.000)	359389	50.0000		
\$ 52 Toluene-d8	98		7.321	7.323	(0.807)	346611	49.6648	49	
* 61 Chlorobenzene-d5	117		9.074	9.076	(1.000)	281827	50.0000		
\$ 72 Bromofluorobenzene	95		10.630	10.633	(1.171)	139987	49.4030	48	
* 85 1,4-Dichlorobenzene-d4	152		12.245	12.235	(1.000)	139312	50.0000	(Q)	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organicos\W5.1\1306204.B\W504289.D  
Date: 20-JUN-2013 20:50  
Client ID: C-2-3-061313  
Sample Info: 5G,H0975-09A,72200  
Column phase: DB-624

Instrument: W5.i  
Operator: ML SRC: LIMS  
Column diameter: 0.25



1A - FORM I VOA-1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C-3-2-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-10A  
 Sample wt/vol: 5.00 (g/mL) G Lab File ID: V504290.D  
 Level: (TRACE/LOW/MED) LOW Date Received: 06/14/2013  
 % Moisture: not dec. 23 Date Analyzed: 06/20/2013  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
75-71-8	Dichlorodifluoromethane		6.5	U
74-87-3	Chloromethane		6.5	U
75-01-4	Vinyl chloride		6.5	U
74-83-9	Bromomethane		6.5	U
75-00-3	Chloroethane		6.5	U
75-69-4	Trichlorofluoromethane		6.5	U
75-35-4	1,1-Dichloroethene		6.5	U
67-64-1	Acetone		6.5	U
74-88-4	Iodomethane		6.5	U
75-15-0	Carbon disulfide		6.5	U
75-09-2	Methylene chloride		6.5	U
156-60-5	trans-1,2-Dichloroethene		6.5	U
1634-04-4	Methyl tert-butyl ether		6.5	U
75-34-3	1,1-Dichloroethane		6.5	U
108-05-4	Vinyl acetate		6.5	U
78-93-3	2-Butanone		6.5	U
156-59-2	cis-1,2-Dichloroethene		6.5	U
594-20-7	2,2-Dichloropropane		6.5	U
74-97-5	Bromochloromethane		6.5	U
67-66-3	Chloroform		6.5	U
71-55-6	1,1,1-Trichloroethane		6.5	U
563-58-6	1,1-Dichloropropene		6.5	U
56-23-5	Carbon tetrachloride		6.5	U
107-06-2	1,2-Dichloroethane		6.5	U
71-43-2	Benzene		6.5	U
79-01-6	Trichloroethene		6.5	U
78-87-5	1,2-Dichloropropane		6.5	U
74-95-3	Dibromomethane		6.5	U
75-27-4	Bromodichloromethane		6.5	U
10061-01-5	cis-1,3-Dichloropropene		6.5	U
108-10-1	4-Methyl-2-pentanone		6.5	U
108-88-3	Toluene		6.5	U
10061-02-6	trans-1,3-Dichloropropene		6.5	U
79-00-5	1,1,2-Trichloroethane		6.5	U
142-28-9	1,3-Dichloropropane		6.5	U

1B - FORM I VOA-2  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.  
C-3-2-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-10A  
 Sample wt/vol: 5.00 (g/mL) G Lab File ID: V504290.D  
 Level: (TRACE/LOW/MED) LOW Date Received: 06/14/2013  
 % Moisture: not dec. 23 Date Analyzed: 06/20/2013  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
127-18-4	Tetrachloroethene		6.5	U
591-78-6	2-Hexanone		6.5	U
124-48-1	Dibromochloromethane		6.5	U
106-93-4	1,2-Dibromoethane		6.5	U
108-90-7	Chlorobenzene		6.5	U
630-20-6	1,1,1,2-Tetrachloroethane		6.5	U
100-41-4	Ethylbenzene		6.5	U
179601-23-1	m,p-Xylene		6.5	U
95-47-6	o-Xylene		6.5	U
1330-20-7	Xylene (Total)		6.5	U
100-42-5	Styrene		6.5	U
75-25-2	Bromoform		6.5	U
98-82-8	Isopropylbenzene		6.5	U
79-34-5	1,1,2,2-Tetrachloroethane		6.5	U
108-86-1	Bromobenzene		6.5	U
96-18-4	1,2,3-Trichloropropane		6.5	U
103-65-1	n-Propylbenzene		6.5	U
95-49-8	2-Chlorotoluene		6.5	U
108-67-8	1,3,5-Trimethylbenzene		6.5	U
106-43-4	4-Chlorotoluene		6.5	U
98-06-6	tert-Butylbenzene		6.5	U
95-63-6	1,2,4-Trimethylbenzene		6.5	U
135-98-8	sec-Butylbenzene		6.5	U
99-87-6	4-Isopropyltoluene		6.5	U
541-73-1	1,3-Dichlorobenzene		6.5	U
106-46-7	1,4-Dichlorobenzene		6.5	U
104-51-8	n-Butylbenzene		6.5	U
95-50-1	1,2-Dichlorobenzene		6.5	U
96-12-8	1,2-Dibromo-3-chloropropane		6.5	U
120-82-1	1,2,4-Trichlorobenzene		6.5	U
87-68-3	Hexachlorobutadiene		6.5	U
87-61-6	1,2,3-Trichlorobenzene		6.5	U
91-20-3	Naphthalene		6.5	U

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil  
 Data file : \\avogadro\organics\V5.I\130620A.B\V504290.D  
 Lab Smp Id: M0975-10A Client Smp ID: C-3-2-061313  
 Inj Date : 20-JUN-2013 21:16  
 Operator : WL SRC: LIMS Inst ID: V5.i  
 Smp Info : 5G,M0975-10A,,72200  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\V5.I\130620A.B\v58260GH.m  
 Meth Date : 21-Jun-2013 09:35 wluo Quant Type: ISTD  
 Cal Date : 20-JUN-2013 14:45 Cal File: V504275.D  
 Als bottle: 21  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 4.14  
 Processing Host: TARGET103

Concentration Formula: Amt \* DF \* Uf \* 5/(Ws \* (100 - M)/100) \* CpndVariable

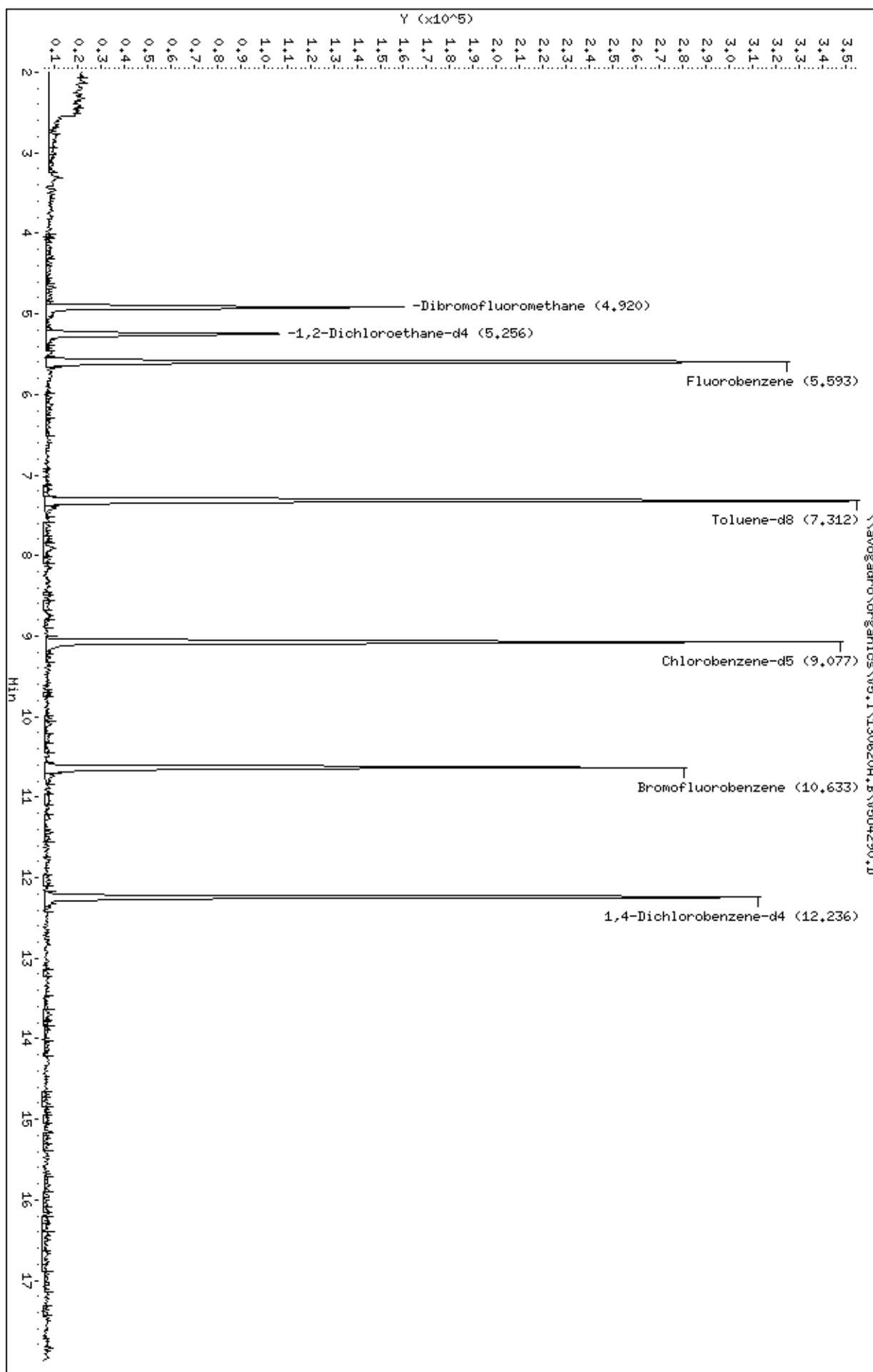
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	CONCENTRATIONS				
			ON-COLUMN	FINAL			
	MASS	RT	EXP RT	REL RT	RESPONSE	( ug/L)	(ug/Kg)
\$ 32 Dibromofluoromethane	113	4.919	4.919	(0.880)	96732	47.5197	48
\$ 38 1,2-Dichloroethane-d4	102	5.244	5.256	(0.938)	15702	46.0790	46
* 42 Fluorobenzene	96	5.593	5.593	(1.000)	295676	50.0000	
\$ 52 Toluene-d8	98	7.323	7.323	(0.807)	273995	50.2258	50
* 61 Chlorobenzene-d5	117	9.077	9.076	(1.000)	220295	50.0000	
\$ 72 Bromofluorobenzene	95	10.633	10.633	(1.171)	101950	46.0290	46
* 85 1,4-Dichlorobenzene-d4	152	12.235	12.235	(1.000)	101790	50.0000	(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.





1A - FORM I VOA-1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

D-1-1-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-12A  
 Sample wt/vol: 5.10 (g/mL) G Lab File ID: V504291.D  
 Level: (TRACE/LOW/MED) LOW Date Received: 06/14/2013  
 % Moisture: not dec. 17 Date Analyzed: 06/20/2013  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
75-71-8	Dichlorodifluoromethane		5.9	U
74-87-3	Chloromethane		5.9	U
75-01-4	Vinyl chloride		5.9	U
74-83-9	Bromomethane		5.9	U
75-00-3	Chloroethane		5.9	U
75-69-4	Trichlorofluoromethane		5.9	U
75-35-4	1,1-Dichloroethene		5.9	U
67-64-1	Acetone		5.9	U
74-88-4	Iodomethane		5.9	U
75-15-0	Carbon disulfide		5.9	U
75-09-2	Methylene chloride		5.9	U
156-60-5	trans-1,2-Dichloroethene		5.9	U
1634-04-4	Methyl tert-butyl ether		5.9	U
75-34-3	1,1-Dichloroethane		5.9	U
108-05-4	Vinyl acetate		5.9	U
78-93-3	2-Butanone		5.9	U
156-59-2	cis-1,2-Dichloroethene		5.9	U
594-20-7	2,2-Dichloropropane		5.9	U
74-97-5	Bromochloromethane		5.9	U
67-66-3	Chloroform		5.9	U
71-55-6	1,1,1-Trichloroethane		5.9	U
563-58-6	1,1-Dichloropropene		5.9	U
56-23-5	Carbon tetrachloride		5.9	U
107-06-2	1,2-Dichloroethane		5.9	U
71-43-2	Benzene		5.9	U
79-01-6	Trichloroethene		5.9	U
78-87-5	1,2-Dichloropropane		5.9	U
74-95-3	Dibromomethane		5.9	U
75-27-4	Bromodichloromethane		5.9	U
10061-01-5	cis-1,3-Dichloropropene		5.9	U
108-10-1	4-Methyl-2-pentanone		5.9	U
108-88-3	Toluene		5.9	U
10061-02-6	trans-1,3-Dichloropropene		5.9	U
79-00-5	1,1,2-Trichloroethane		5.9	U
142-28-9	1,3-Dichloropropane		5.9	U

1B - FORM I VOA-2  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

D-1-1-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-12A  
 Sample wt/vol: 5.10 (g/mL) G Lab File ID: V504291.D  
 Level: (TRACE/LOW/MED) LOW Date Received: 06/14/2013  
 % Moisture: not dec. 17 Date Analyzed: 06/20/2013  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
127-18-4	Tetrachloroethene		5.9	U
591-78-6	2-Hexanone		5.9	U
124-48-1	Dibromochloromethane		5.9	U
106-93-4	1,2-Dibromoethane		5.9	U
108-90-7	Chlorobenzene		5.9	U
630-20-6	1,1,1,2-Tetrachloroethane		5.9	U
100-41-4	Ethylbenzene		5.9	U
179601-23-1	m,p-Xylene		5.9	U
95-47-6	o-Xylene		5.9	U
1330-20-7	Xylene (Total)		5.9	U
100-42-5	Styrene		5.9	U
75-25-2	Bromoform		5.9	U
98-82-8	Isopropylbenzene		5.9	U
79-34-5	1,1,2,2-Tetrachloroethane		5.9	U
108-86-1	Bromobenzene		5.9	U
96-18-4	1,2,3-Trichloropropane		5.9	U
103-65-1	n-Propylbenzene		5.9	U
95-49-8	2-Chlorotoluene		5.9	U
108-67-8	1,3,5-Trimethylbenzene		5.9	U
106-43-4	4-Chlorotoluene		5.9	U
98-06-6	tert-Butylbenzene		5.9	U
95-63-6	1,2,4-Trimethylbenzene		5.9	U
135-98-8	sec-Butylbenzene		5.9	U
99-87-6	4-Isopropyltoluene		5.9	U
541-73-1	1,3-Dichlorobenzene		5.9	U
106-46-7	1,4-Dichlorobenzene		5.9	U
104-51-8	n-Butylbenzene		5.9	U
95-50-1	1,2-Dichlorobenzene		5.9	U
96-12-8	1,2-Dibromo-3-chloropropane		5.9	U
120-82-1	1,2,4-Trichlorobenzene		5.9	U
87-68-3	Hexachlorobutadiene		5.9	U
87-61-6	1,2,3-Trichlorobenzene		5.9	U
91-20-3	Naphthalene		5.9	U

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil  
 Data file : \\avogadro\organics\V5.I\130620A.B\V504291.D  
 Lab Smp Id: M0975-12A Client Smp ID: D-1-1-061313  
 Inj Date : 20-JUN-2013 21:42  
 Operator : WL SRC: LIMS Inst ID: V5.i  
 Smp Info : 5G,M0975-12A,,72200  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\V5.I\130620A.B\v58260GH.m  
 Meth Date : 21-Jun-2013 09:35 wluo Quant Type: ISTD  
 Cal Date : 20-JUN-2013 14:45 Cal File: V504275.D  
 Als bottle: 22  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 4.14  
 Processing Host: TARGET103

Concentration Formula: Amt \* DF \* Uf \* 5/(Ws \* (100 - M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.100	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

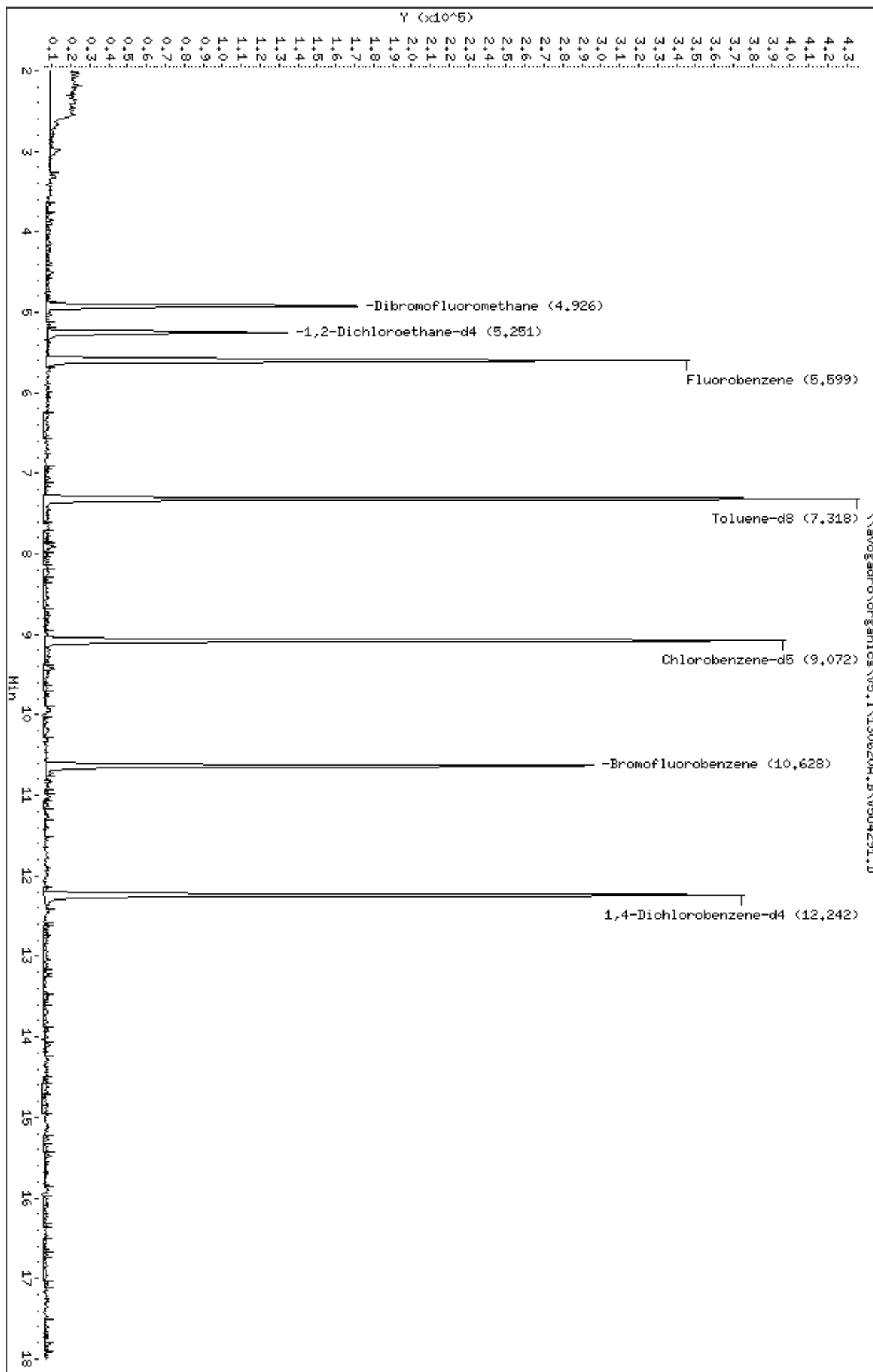
Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN ( ug/L)	FINAL (ug/Kg)
\$ 32 Dibromofluoromethane	113		4.925	4.919	(0.880)	109615	47.2841	46
\$ 38 1,2-Dichloroethane-d4	102		5.251	5.256	(0.938)	16801	43.2938	42(R)
* 42 Fluorobenzene	96		5.599	5.593	(1.000)	336724	50.0000	
\$ 52 Toluene-d8	98		7.318	7.323	(0.807)	303160	50.7328	50
* 61 Chlorobenzene-d5	117		9.071	9.076	(1.000)	241308	50.0000	
\$ 72 Bromofluorobenzene	95		10.627	10.633	(1.172)	113073	46.6053	46
* 85 1,4-Dichlorobenzene-d4	152		12.242	12.235	(1.000)	119795	50.0000	(Q)

QC Flag Legend

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

Data File: \\avogadro\organicos\W5.1\1306209.B\W504291.D  
Date : 20-JUN-2013 21:42  
Client ID: D-1-1-061313  
Sample Info: 5G,H0975-12H,72200  
Column phase: DB-624

Instrument: W5.i  
Operator: ML SRC: LIMS  
Column diameter: 0.25



1A - FORM I VOA-1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

D-3-4-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-13A  
 Sample wt/vol: 5.10 (g/mL) G Lab File ID: V504292.D  
 Level: (TRACE/LOW/MED) LOW Date Received: 06/14/2013  
 % Moisture: not dec. 19 Date Analyzed: 06/20/2013  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
75-71-8	Dichlorodifluoromethane		6.1	U
74-87-3	Chloromethane		6.1	U
75-01-4	Vinyl chloride		6.1	U
74-83-9	Bromomethane		6.1	U
75-00-3	Chloroethane		6.1	U
75-69-4	Trichlorofluoromethane		6.1	U
75-35-4	1,1-Dichloroethene		6.1	U
67-64-1	Acetone		6.1	U
74-88-4	Iodomethane		6.1	U
75-15-0	Carbon disulfide		6.1	U
75-09-2	Methylene chloride		6.1	U
156-60-5	trans-1,2-Dichloroethene		6.1	U
1634-04-4	Methyl tert-butyl ether		6.1	U
75-34-3	1,1-Dichloroethane		6.1	U
108-05-4	Vinyl acetate		6.1	U
78-93-3	2-Butanone		6.1	U
156-59-2	cis-1,2-Dichloroethene		6.1	U
594-20-7	2,2-Dichloropropane		6.1	U
74-97-5	Bromochloromethane		6.1	U
67-66-3	Chloroform		6.1	U
71-55-6	1,1,1-Trichloroethane		6.1	U
563-58-6	1,1-Dichloropropene		6.1	U
56-23-5	Carbon tetrachloride		6.1	U
107-06-2	1,2-Dichloroethane		6.1	U
71-43-2	Benzene		6.1	U
79-01-6	Trichloroethene		6.1	U
78-87-5	1,2-Dichloropropane		6.1	U
74-95-3	Dibromomethane		6.1	U
75-27-4	Bromodichloromethane		6.1	U
10061-01-5	cis-1,3-Dichloropropene		6.1	U
108-10-1	4-Methyl-2-pentanone		6.1	U
108-88-3	Toluene		6.1	U
10061-02-6	trans-1,3-Dichloropropene		6.1	U
79-00-5	1,1,2-Trichloroethane		6.1	U
142-28-9	1,3-Dichloropropane		6.1	U

1B - FORM I VOA-2  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

D-3-4-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-13A  
 Sample wt/vol: 5.10 (g/mL) G Lab File ID: V504292.D  
 Level: (TRACE/LOW/MED) LOW Date Received: 06/14/2013  
 % Moisture: not dec. 19 Date Analyzed: 06/20/2013  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
127-18-4	Tetrachloroethene		6.1	U
591-78-6	2-Hexanone		6.1	U
124-48-1	Dibromochloromethane		6.1	U
106-93-4	1,2-Dibromoethane		6.1	U
108-90-7	Chlorobenzene		6.1	U
630-20-6	1,1,1,2-Tetrachloroethane		6.1	U
100-41-4	Ethylbenzene		6.1	U
179601-23-1	m,p-Xylene		6.1	U
95-47-6	o-Xylene		6.1	U
1330-20-7	Xylene (Total)		6.1	U
100-42-5	Styrene		6.1	U
75-25-2	Bromoform		6.1	U
98-82-8	Isopropylbenzene		6.1	U
79-34-5	1,1,2,2-Tetrachloroethane		6.1	U
108-86-1	Bromobenzene		6.1	U
96-18-4	1,2,3-Trichloropropane		6.1	U
103-65-1	n-Propylbenzene		6.1	U
95-49-8	2-Chlorotoluene		6.1	U
108-67-8	1,3,5-Trimethylbenzene		6.1	U
106-43-4	4-Chlorotoluene		6.1	U
98-06-6	tert-Butylbenzene		6.1	U
95-63-6	1,2,4-Trimethylbenzene		6.1	U
135-98-8	sec-Butylbenzene		6.1	U
99-87-6	4-Isopropyltoluene		6.1	U
541-73-1	1,3-Dichlorobenzene		6.1	U
106-46-7	1,4-Dichlorobenzene		6.1	U
104-51-8	n-Butylbenzene		6.1	U
95-50-1	1,2-Dichlorobenzene		6.1	U
96-12-8	1,2-Dibromo-3-chloropropane		6.1	U
120-82-1	1,2,4-Trichlorobenzene		6.1	U
87-68-3	Hexachlorobutadiene		6.1	U
87-61-6	1,2,3-Trichlorobenzene		6.1	U
91-20-3	Naphthalene		6.1	U

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil  
 Data file : \\avogadro\organics\V5.I\130620A.B\V504292.D  
 Lab Smp Id: M0975-13A Client Smp ID: D-3-4-061313  
 Inj Date : 20-JUN-2013 22:08  
 Operator : WL SRC: LIMS Inst ID: V5.i  
 Smp Info : 5G,M0975-13A,,72200  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\V5.I\130620A.B\v58260GH.m  
 Meth Date : 21-Jun-2013 09:35 wluo Quant Type: ISTD  
 Cal Date : 20-JUN-2013 14:45 Cal File: V504275.D  
 Als bottle: 23  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 4.14  
 Processing Host: TARGET103

Concentration Formula: Amt \* DF \* Uf \* 5/(Ws \* (100 - M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.100	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	CONCENTRATIONS				ON-COLUMN ( ug/L)	FINAL (ug/Kg)
			RT	EXP RT	REL RT	RESPONSE		
\$ 32 Dibromofluoromethane	113		4.925	4.919	(0.880)	119382	49.1291	48
\$ 38 1,2-Dichloroethane-d4	102		5.250	5.256	(0.938)	19761	48.5796	48
* 42 Fluorobenzene	96		5.599	5.593	(1.000)	352955	50.0000	
\$ 52 Toluene-d8	98		7.317	7.323	(0.807)	333882	50.5288	50
* 61 Chlorobenzene-d5	117		9.071	9.076	(1.000)	266835	50.0000	
\$ 72 Bromofluorobenzene	95		10.627	10.633	(1.172)	123606	46.0729	45
* 85 1,4-Dichlorobenzene-d4	152		12.241	12.235	(1.000)	136781	50.0000	(Q)

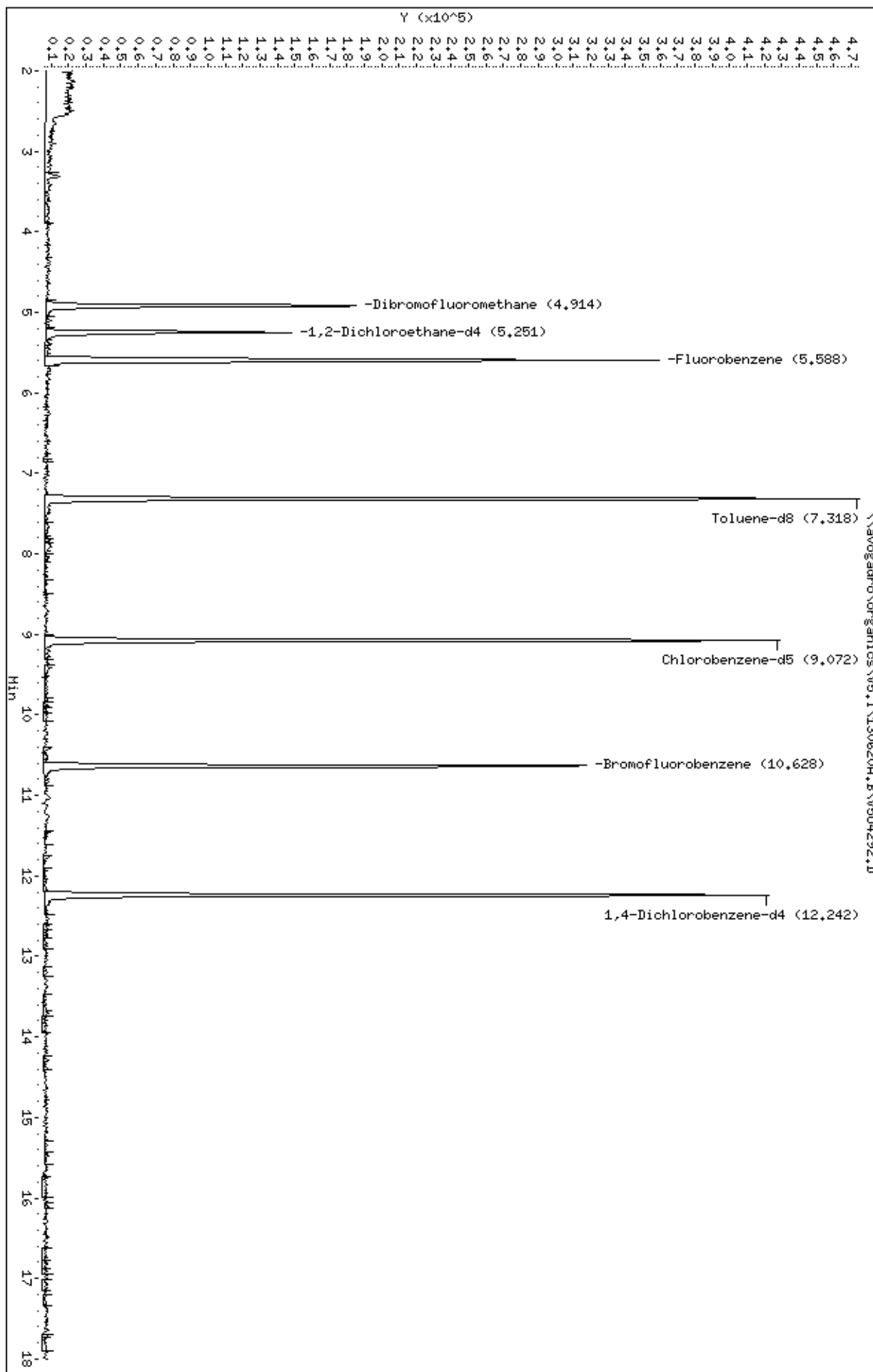
QC Flag Legend

Q - Qualifier signal failed the ratio test.



Data File: \\avogadro\organicos\W5.1\1306204.B\W504292.D  
Date : 20-JUN-2013 22:08  
Client ID: D-3-4-061313  
Sample Info: SG,M0975-13A,72200  
Column phase: DB-624

Instrument: W5.1  
Operator: ML SRC: LIMS  
Column diameter: 0.25



1A - FORM I VOA-1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E-1-3-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-15A  
 Sample wt/vol: 5.00 (g/mL) G Lab File ID: V504293.D  
 Level: (TRACE/LOW/MED) LOW Date Received: 06/14/2013  
 % Moisture: not dec. 16 Date Analyzed: 06/20/2013  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
75-71-8	Dichlorodifluoromethane		5.9	U
74-87-3	Chloromethane		5.9	U
75-01-4	Vinyl chloride		5.9	U
74-83-9	Bromomethane		5.9	U
75-00-3	Chloroethane		5.9	U
75-69-4	Trichlorofluoromethane		5.9	U
75-35-4	1,1-Dichloroethene		5.9	U
67-64-1	Acetone		5.9	U
74-88-4	Iodomethane		5.9	U
75-15-0	Carbon disulfide		5.9	U
75-09-2	Methylene chloride		5.9	U
156-60-5	trans-1,2-Dichloroethene		5.9	U
1634-04-4	Methyl tert-butyl ether		5.9	U
75-34-3	1,1-Dichloroethane		5.9	U
108-05-4	Vinyl acetate		5.9	U
78-93-3	2-Butanone		5.9	U
156-59-2	cis-1,2-Dichloroethene		5.9	U
594-20-7	2,2-Dichloropropane		5.9	U
74-97-5	Bromochloromethane		5.9	U
67-66-3	Chloroform		5.9	U
71-55-6	1,1,1-Trichloroethane		5.9	U
563-58-6	1,1-Dichloropropene		5.9	U
56-23-5	Carbon tetrachloride		5.9	U
107-06-2	1,2-Dichloroethane		5.9	U
71-43-2	Benzene		5.9	U
79-01-6	Trichloroethene		5.9	U
78-87-5	1,2-Dichloropropane		5.9	U
74-95-3	Dibromomethane		5.9	U
75-27-4	Bromodichloromethane		5.9	U
10061-01-5	cis-1,3-Dichloropropene		5.9	U
108-10-1	4-Methyl-2-pentanone		5.9	U
108-88-3	Toluene		5.9	U
10061-02-6	trans-1,3-Dichloropropene		5.9	U
79-00-5	1,1,2-Trichloroethane		5.9	U
142-28-9	1,3-Dichloropropane		5.9	U

1B - FORM I VOA-2  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E-1-3-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-15A  
 Sample wt/vol: 5.00 (g/mL) G Lab File ID: V504293.D  
 Level: (TRACE/LOW/MED) LOW Date Received: 06/14/2013  
 % Moisture: not dec. 16 Date Analyzed: 06/20/2013  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
127-18-4	Tetrachloroethene		5.9	U
591-78-6	2-Hexanone		5.9	U
124-48-1	Dibromochloromethane		5.9	U
106-93-4	1,2-Dibromoethane		5.9	U
108-90-7	Chlorobenzene		5.9	U
630-20-6	1,1,1,2-Tetrachloroethane		5.9	U
100-41-4	Ethylbenzene		5.9	U
179601-23-1	m,p-Xylene		5.9	U
95-47-6	o-Xylene		5.9	U
1330-20-7	Xylene (Total)		5.9	U
100-42-5	Styrene		5.9	U
75-25-2	Bromoform		5.9	U
98-82-8	Isopropylbenzene		5.9	U
79-34-5	1,1,2,2-Tetrachloroethane		5.9	U
108-86-1	Bromobenzene		5.9	U
96-18-4	1,2,3-Trichloropropane		5.9	U
103-65-1	n-Propylbenzene		5.9	U
95-49-8	2-Chlorotoluene		5.9	U
108-67-8	1,3,5-Trimethylbenzene		5.9	U
106-43-4	4-Chlorotoluene		5.9	U
98-06-6	tert-Butylbenzene		5.9	U
95-63-6	1,2,4-Trimethylbenzene		5.9	U
135-98-8	sec-Butylbenzene		5.9	U
99-87-6	4-Isopropyltoluene		5.9	U
541-73-1	1,3-Dichlorobenzene		5.9	U
106-46-7	1,4-Dichlorobenzene		5.9	U
104-51-8	n-Butylbenzene		5.9	U
95-50-1	1,2-Dichlorobenzene		5.9	U
96-12-8	1,2-Dibromo-3-chloropropane		5.9	U
120-82-1	1,2,4-Trichlorobenzene		5.9	U
87-68-3	Hexachlorobutadiene		5.9	U
87-61-6	1,2,3-Trichlorobenzene		5.9	U
91-20-3	Naphthalene		5.9	U

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil  
 Data file : \\avogadro\organics\V5.I\130620A.B\V504293.D  
 Lab Smp Id: M0975-15A Client Smp ID: E-1-3-061313  
 Inj Date : 20-JUN-2013 22:34  
 Operator : WL SRC: LIMS Inst ID: V5.i  
 Smp Info : 5G,M0975-15A,,72200  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\V5.I\130620A.B\v58260GH.m  
 Meth Date : 21-Jun-2013 09:35 wluo Quant Type: ISTD  
 Cal Date : 20-JUN-2013 14:45 Cal File: V504275.D  
 Als bottle: 24  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 4.14  
 Processing Host: TARGET103

Concentration Formula: Amt \* DF \* Uf \* 5/(Ws \* (100 - M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

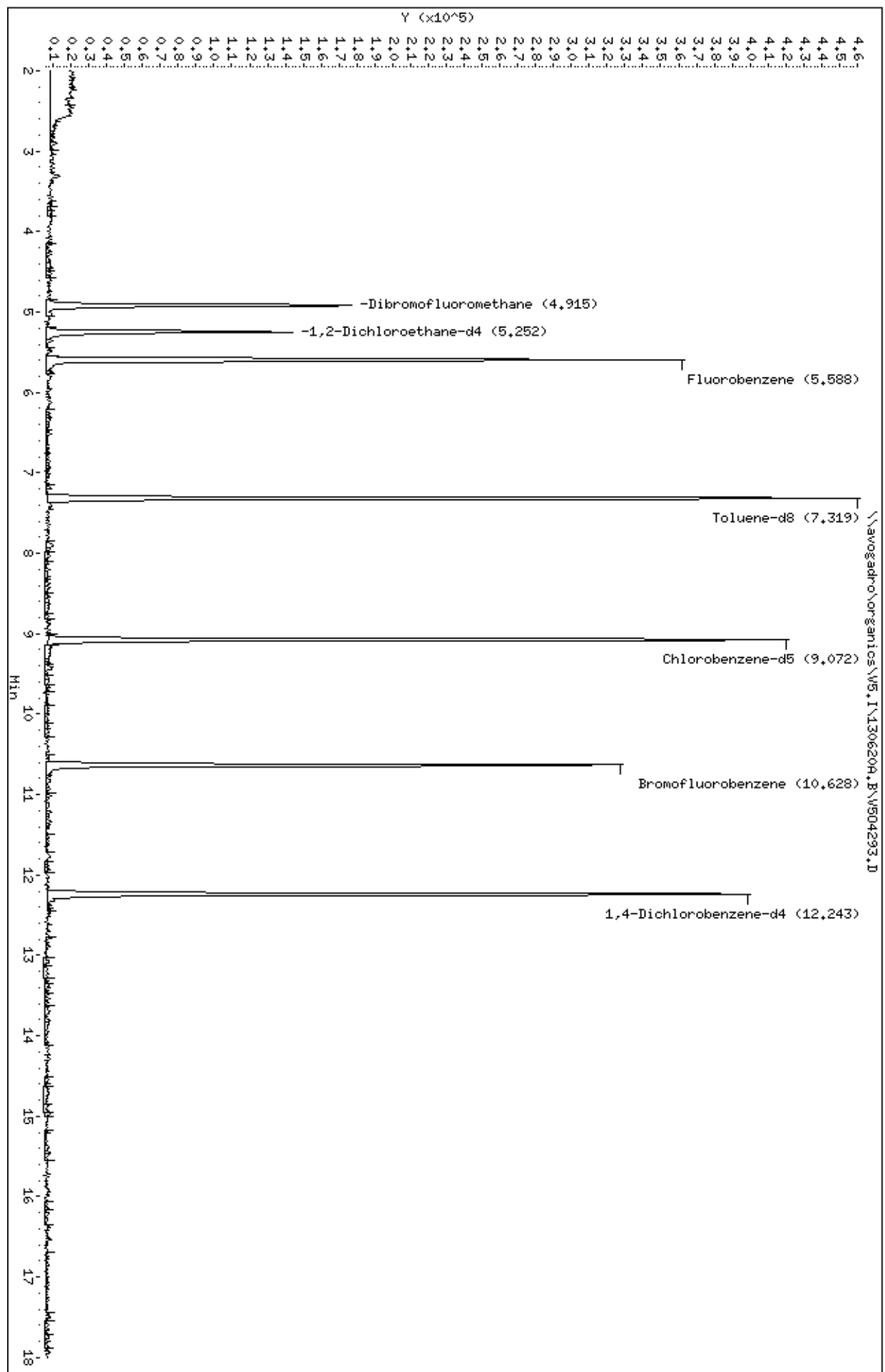
Compounds	QUANT	SIG	CONCENTRATIONS				ON-COLUMN ( ug/L)	FINAL (ug/Kg)
			RT	EXP RT	REL RT	RESPONSE		
\$ 32 Dibromofluoromethane	113		4.914	4.919	(0.879)	112640	47.3597	47
\$ 38 1,2-Dichloroethane-d4	102		5.251	5.256	(0.940)	19018	47.7668	48
* 42 Fluorobenzene	96		5.588	5.593	(1.000)	345464	50.0000	
\$ 52 Toluene-d8	98		7.318	7.323	(0.807)	327408	49.5453	50
* 61 Chlorobenzene-d5	117		9.072	9.076	(1.000)	266855	50.0000	
\$ 72 Bromofluorobenzene	95		10.628	10.633	(1.172)	126249	47.0545	47
* 85 1,4-Dichlorobenzene-d4	152		12.242	12.235	(1.000)	128048	50.0000	(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organicos\W5.1\1306204.B\W504293.D  
Date : 20-JUN-2013 22:34  
Client ID: E-1-3-061313  
Sample Info: 5G,M0975-15R,72200  
Column phase: DB-624

Instrument: W5.i  
Operator: ML SRC: LIMS  
Column diameter: 0.25



1A - FORM I VOA-1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E-2-4-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-16A  
 Sample wt/vol: 5.10 (g/mL) G Lab File ID: V504294.D  
 Level: (TRACE/LOW/MED) LOW Date Received: 06/14/2013  
 % Moisture: not dec. 25 Date Analyzed: 06/20/2013  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
75-71-8	Dichlorodifluoromethane		6.5	U
74-87-3	Chloromethane		6.5	U
75-01-4	Vinyl chloride		6.5	U
74-83-9	Bromomethane		6.5	U
75-00-3	Chloroethane		6.5	U
75-69-4	Trichlorofluoromethane		6.5	U
75-35-4	1,1-Dichloroethene		6.5	U
67-64-1	Acetone		6.5	U
74-88-4	Iodomethane		6.5	U
75-15-0	Carbon disulfide		6.5	U
75-09-2	Methylene chloride		6.5	U
156-60-5	trans-1,2-Dichloroethene		6.5	U
1634-04-4	Methyl tert-butyl ether		6.5	U
75-34-3	1,1-Dichloroethane		6.5	U
108-05-4	Vinyl acetate		6.5	U
78-93-3	2-Butanone		6.5	U
156-59-2	cis-1,2-Dichloroethene		6.5	U
594-20-7	2,2-Dichloropropane		6.5	U
74-97-5	Bromochloromethane		6.5	U
67-66-3	Chloroform		6.5	U
71-55-6	1,1,1-Trichloroethane		6.5	U
563-58-6	1,1-Dichloropropene		6.5	U
56-23-5	Carbon tetrachloride		6.5	U
107-06-2	1,2-Dichloroethane		6.5	U
71-43-2	Benzene		6.5	U
79-01-6	Trichloroethene		6.5	U
78-87-5	1,2-Dichloropropane		6.5	U
74-95-3	Dibromomethane		6.5	U
75-27-4	Bromodichloromethane		6.5	U
10061-01-5	cis-1,3-Dichloropropene		6.5	U
108-10-1	4-Methyl-2-pentanone		6.5	U
108-88-3	Toluene		6.5	U
10061-02-6	trans-1,3-Dichloropropene		6.5	U
79-00-5	1,1,2-Trichloroethane		6.5	U
142-28-9	1,3-Dichloropropane		6.5	U

1B - FORM I VOA-2  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E-2-4-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-16A  
 Sample wt/vol: 5.10 (g/mL) G Lab File ID: V504294.D  
 Level: (TRACE/LOW/MED) LOW Date Received: 06/14/2013  
 % Moisture: not dec. 25 Date Analyzed: 06/20/2013  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
127-18-4	Tetrachloroethene		6.5	U
591-78-6	2-Hexanone		6.5	U
124-48-1	Dibromochloromethane		6.5	U
106-93-4	1,2-Dibromoethane		6.5	U
108-90-7	Chlorobenzene		6.5	U
630-20-6	1,1,1,2-Tetrachloroethane		6.5	U
100-41-4	Ethylbenzene		6.5	U
179601-23-1	m,p-Xylene		6.5	U
95-47-6	o-Xylene		6.5	U
1330-20-7	Xylene (Total)		6.5	U
100-42-5	Styrene		6.5	U
75-25-2	Bromoform		6.5	U
98-82-8	Isopropylbenzene		6.5	U
79-34-5	1,1,2,2-Tetrachloroethane		6.5	U
108-86-1	Bromobenzene		6.5	U
96-18-4	1,2,3-Trichloropropane		6.5	U
103-65-1	n-Propylbenzene		6.5	U
95-49-8	2-Chlorotoluene		6.5	U
108-67-8	1,3,5-Trimethylbenzene		6.5	U
106-43-4	4-Chlorotoluene		6.5	U
98-06-6	tert-Butylbenzene		6.5	U
95-63-6	1,2,4-Trimethylbenzene		6.5	U
135-98-8	sec-Butylbenzene		6.5	U
99-87-6	4-Isopropyltoluene		6.5	U
541-73-1	1,3-Dichlorobenzene		6.5	U
106-46-7	1,4-Dichlorobenzene		6.5	U
104-51-8	n-Butylbenzene		6.5	U
95-50-1	1,2-Dichlorobenzene		6.5	U
96-12-8	1,2-Dibromo-3-chloropropane		6.5	U
120-82-1	1,2,4-Trichlorobenzene		6.5	U
87-68-3	Hexachlorobutadiene		6.5	U
87-61-6	1,2,3-Trichlorobenzene		6.5	U
91-20-3	Naphthalene		6.5	U

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil  
 Data file : \\avogadro\organics\V5.I\130620A.B\V504294.D  
 Lab Smp Id: M0975-16A Client Smp ID: E-2-4-061313  
 Inj Date : 20-JUN-2013 23:00  
 Operator : WL SRC: LIMS Inst ID: V5.i  
 Smp Info : 5G,M0975-16A,,72200  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\V5.I\130620A.B\v58260GH.m  
 Meth Date : 21-Jun-2013 09:35 wluo Quant Type: ISTD  
 Cal Date : 20-JUN-2013 14:45 Cal File: V504275.D  
 Als bottle: 25  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 4.14  
 Processing Host: TARGET103

Concentration Formula: Amt \* DF \* Uf \* 5/(Ws \* (100 - M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.100	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN ( ug/L)	FINAL (ug/Kg)
\$ 32 Dibromofluoromethane	113		4.919	4.919	(0.880)	121393	49.5953	49
\$ 38 1,2-Dichloroethane-d4	102		5.255	5.256	(0.940)	20845	50.8738	50
* 42 Fluorobenzene	96		5.592	5.593	(1.000)	355527	50.0000	
\$ 52 Toluene-d8	98		7.322	7.323	(0.807)	336220	49.7927	49
* 61 Chlorobenzene-d5	117		9.076	9.076	(1.000)	272676	50.0000	
\$ 72 Bromofluorobenzene	95		10.632	10.633	(1.171)	131361	47.9146	47
* 85 1,4-Dichlorobenzene-d4	152		12.235	12.235	(1.000)	137450	50.0000	(Q)

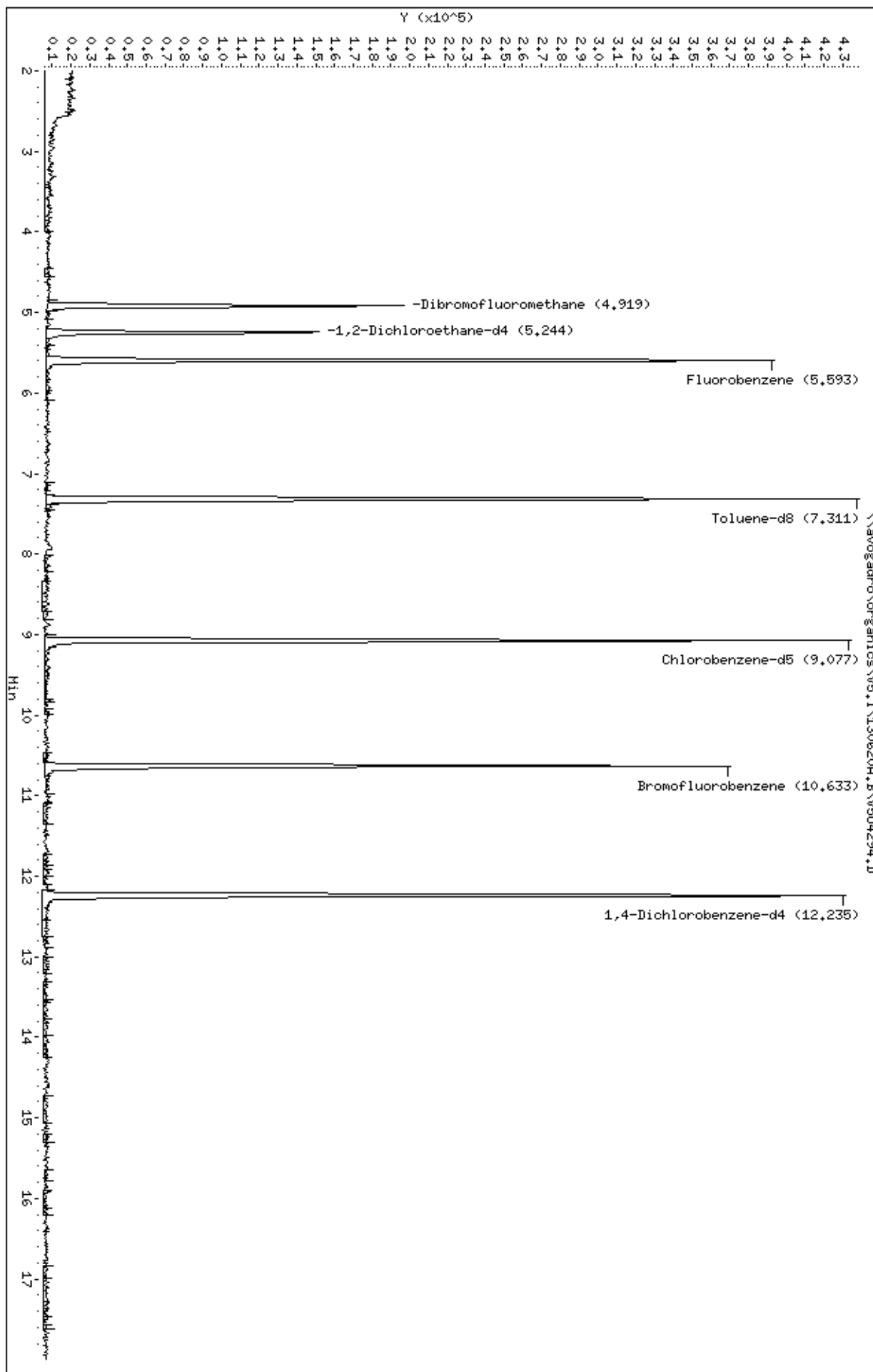
QC Flag Legend

Q - Qualifier signal failed the ratio test.



Data File: \\avogadro\organicos\W5.1\1306204.B\W504294.D  
Date : 20-JUN-2013 23:00  
Client ID: E-2-4-061313  
Sample Info: SG,H0975-16A,72200  
Column phase: DB-624

Instrument: W5.1  
Operator: ML SRC: LIMS  
Column diameter: 0.25



1A - FORM I VOA-1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E-3-2-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-17A  
 Sample wt/vol: 5.10 (g/mL) G Lab File ID: V504295.D  
 Level: (TRACE/LOW/MED) LOW Date Received: 06/14/2013  
 % Moisture: not dec. 23 Date Analyzed: 06/20/2013  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
75-71-8	Dichlorodifluoromethane		6.4	U
74-87-3	Chloromethane		6.4	U
75-01-4	Vinyl chloride		6.4	U
74-83-9	Bromomethane		6.4	U
75-00-3	Chloroethane		6.4	U
75-69-4	Trichlorofluoromethane		6.4	U
75-35-4	1,1-Dichloroethene		6.4	U
67-64-1	Acetone		6.4	U
74-88-4	Iodomethane		6.4	U
75-15-0	Carbon disulfide		6.4	U
75-09-2	Methylene chloride		6.4	U
156-60-5	trans-1,2-Dichloroethene		6.4	U
1634-04-4	Methyl tert-butyl ether		6.4	U
75-34-3	1,1-Dichloroethane		6.4	U
108-05-4	Vinyl acetate		6.4	U
78-93-3	2-Butanone		6.4	U
156-59-2	cis-1,2-Dichloroethene		6.4	U
594-20-7	2,2-Dichloropropane		6.4	U
74-97-5	Bromochloromethane		6.4	U
67-66-3	Chloroform		6.4	U
71-55-6	1,1,1-Trichloroethane		6.4	U
563-58-6	1,1-Dichloropropene		6.4	U
56-23-5	Carbon tetrachloride		6.4	U
107-06-2	1,2-Dichloroethane		6.4	U
71-43-2	Benzene		6.4	U
79-01-6	Trichloroethene		6.4	U
78-87-5	1,2-Dichloropropane		6.4	U
74-95-3	Dibromomethane		6.4	U
75-27-4	Bromodichloromethane		6.4	U
10061-01-5	cis-1,3-Dichloropropene		6.4	U
108-10-1	4-Methyl-2-pentanone		6.4	U
108-88-3	Toluene		6.4	U
10061-02-6	trans-1,3-Dichloropropene		6.4	U
79-00-5	1,1,2-Trichloroethane		6.4	U
142-28-9	1,3-Dichloropropane		6.4	U

1B - FORM I VOA-2  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.  
E-3-2-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-17A  
 Sample wt/vol: 5.10 (g/mL) G Lab File ID: V504295.D  
 Level: (TRACE/LOW/MED) LOW Date Received: 06/14/2013  
 % Moisture: not dec. 23 Date Analyzed: 06/20/2013  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
127-18-4	Tetrachloroethene		6.4	U
591-78-6	2-Hexanone		6.4	U
124-48-1	Dibromochloromethane		6.4	U
106-93-4	1,2-Dibromoethane		6.4	U
108-90-7	Chlorobenzene		6.4	U
630-20-6	1,1,1,2-Tetrachloroethane		6.4	U
100-41-4	Ethylbenzene		6.4	U
179601-23-1	m,p-Xylene		6.4	U
95-47-6	o-Xylene		6.4	U
1330-20-7	Xylene (Total)		6.4	U
100-42-5	Styrene		6.4	U
75-25-2	Bromoform		6.4	U
98-82-8	Isopropylbenzene		6.4	U
79-34-5	1,1,2,2-Tetrachloroethane		6.4	U
108-86-1	Bromobenzene		6.4	U
96-18-4	1,2,3-Trichloropropane		6.4	U
103-65-1	n-Propylbenzene		6.4	U
95-49-8	2-Chlorotoluene		6.4	U
108-67-8	1,3,5-Trimethylbenzene		6.4	U
106-43-4	4-Chlorotoluene		6.4	U
98-06-6	tert-Butylbenzene		6.4	U
95-63-6	1,2,4-Trimethylbenzene		6.4	U
135-98-8	sec-Butylbenzene		6.4	U
99-87-6	4-Isopropyltoluene		6.4	U
541-73-1	1,3-Dichlorobenzene		6.4	U
106-46-7	1,4-Dichlorobenzene		6.4	U
104-51-8	n-Butylbenzene		6.4	U
95-50-1	1,2-Dichlorobenzene		6.4	U
96-12-8	1,2-Dibromo-3-chloropropane		6.4	U
120-82-1	1,2,4-Trichlorobenzene		6.4	U
87-68-3	Hexachlorobutadiene		6.4	U
87-61-6	1,2,3-Trichlorobenzene		6.4	U
91-20-3	Naphthalene		6.4	U

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil  
 Data file : \\avogadro\organics\V5.I\130620A.B\V504295.D  
 Lab Smp Id: M0975-17A Client Smp ID: E-3-2-061313  
 Inj Date : 20-JUN-2013 23:26  
 Operator : WL SRC: LIMS Inst ID: V5.i  
 Smp Info : 5G,M0975-17A,,72200  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\V5.I\130620A.B\v58260GH.m  
 Meth Date : 21-Jun-2013 09:35 wluo Quant Type: ISTD  
 Cal Date : 20-JUN-2013 14:45 Cal File: V504275.D  
 Als bottle: 26  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 4.14  
 Processing Host: TARGET103

Concentration Formula: Amt \* DF \* Uf \* 5/(Ws \* (100 - M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.100	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

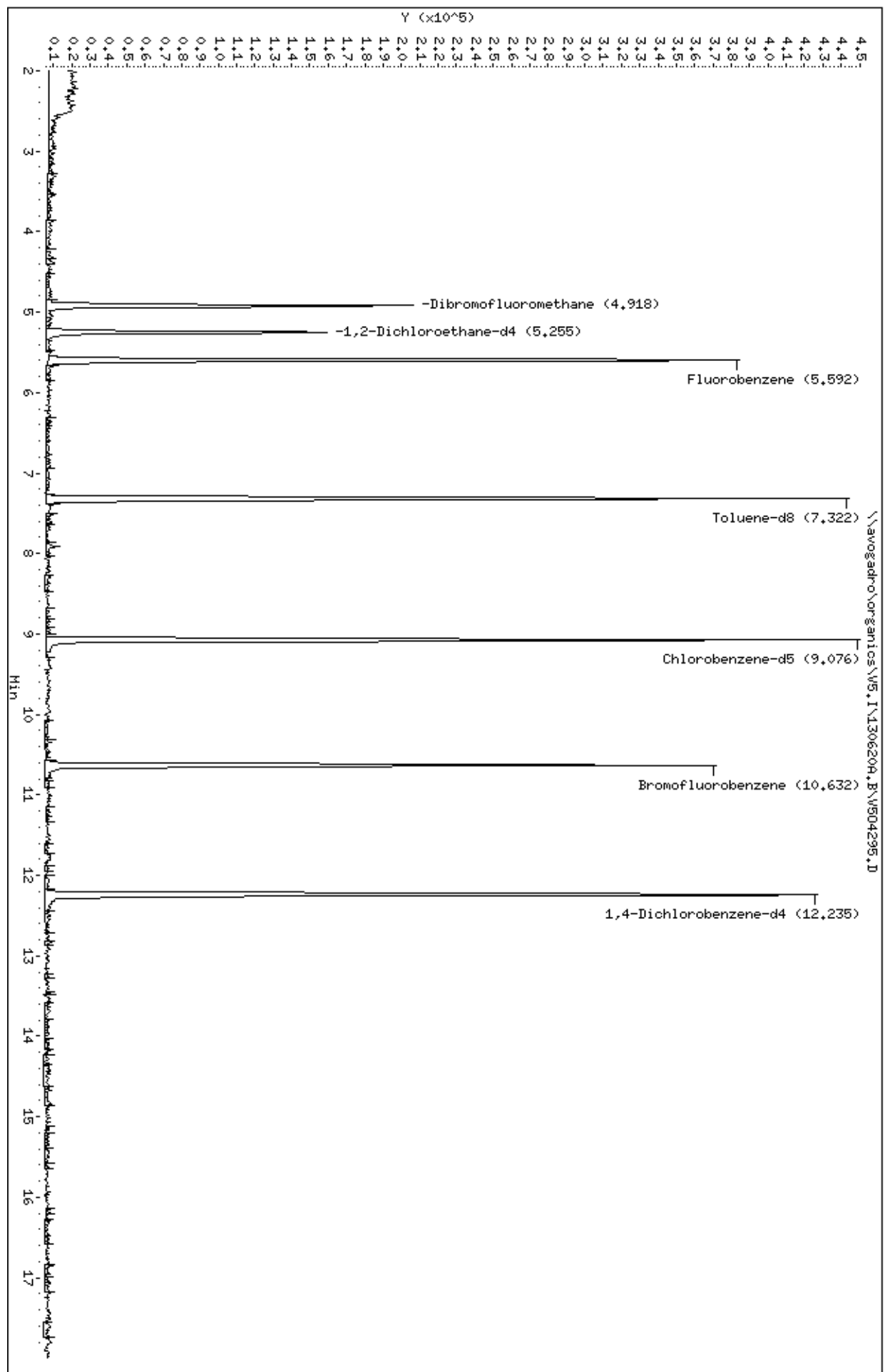
Compounds	QUANT	SIG	CONCENTRATIONS				
			ON-COLUMN	FINAL			
	MASS	RT	EXP RT	REL RT	RESPONSE	( ug/L)	(ug/Kg)
\$ 32 Dibromofluoromethane	113	4.918	4.919	(0.880)	122961	49.7285	49
\$ 38 1,2-Dichloroethane-d4	102	5.255	5.256	(0.940)	21117	51.0170	50
* 42 Fluorobenzene	96	5.591	5.593	(1.000)	359155	50.0000	
\$ 52 Toluene-d8	98	7.322	7.323	(0.807)	337114	49.9525	49
* 61 Chlorobenzene-d5	117	9.075	9.076	(1.000)	272526	50.0000	
\$ 72 Bromofluorobenzene	95	10.632	10.633	(1.171)	139091	50.7621	50
* 85 1,4-Dichlorobenzene-d4	152	12.234	12.235	(1.000)	140653	50.0000	(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organicos\W5.1\1306204.B\W504295.D  
Date : 20-JUN-2013 23:26  
Client ID: E-3-2-061313  
Sample Info: 5G,H0975-17A,72200  
Column phase: DB-624

Instrument: W5.1  
Operator: ML SRC: LIMS  
Column diameter: 0.25



6A - FORM VI VOA-1  
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Instrument ID: V5 Calibration Date(s): 06/20/2013 06/20/2013  
 Heated Purge: (Y/N) Y Calibration Time(s): 9:57 14:45  
 Purge Volume: 5.0 (mL)  
 GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF	%RSD
Dichlorodifluoromethane	0.705	0.673	0.736	0.707	0.639	0.692	5.4
Chloromethane	0.767	0.684	0.711	0.713	0.705	0.716	4.3
Vinyl chloride	0.623	0.592	0.625	0.649	0.617	0.621	3.3
Bromomethane	0.475	0.414	0.441	0.434	0.406	0.434	6.3
Chloroethane	0.343	0.296	0.316	0.322	0.298	0.315	6.1
Trichlorofluoromethane	0.960	0.834	0.901	0.849	0.826	0.874	6.4
1,1-Dichloroethene	0.438	0.395	0.430	0.380	0.370	0.403	7.5
Acetone	0.171	0.142	0.133	0.086	0.083	0.123	30.8
Iodomethane	0.803	0.754	0.806	0.703	0.697	0.752	7.0
Carbon disulfide	1.372	1.329	1.450	1.276	1.249	1.335	6.0
Methylene chloride	0.585	0.487	0.494	0.401	0.391	0.472	16.8
trans-1,2-Dichloroethene	0.471	0.427	0.467	0.409	0.407	0.436	7.1
Methyl tert-butyl ether	0.901	0.904	0.938	0.702	0.709	0.831	13.9
1,1-Dichloroethane	0.891	0.887	0.911	0.774	0.772	0.847	8.0
Vinyl acetate	1.263	1.181	1.212	0.993	0.970	1.124	11.9
2-Butanone	0.137	0.128	0.131	0.083	0.080	0.112	24.9
cis-1,2-Dichloroethene	0.485	0.448	0.468	0.406	0.395	0.440	8.8
2,2-Dichloropropane	0.748	0.640	0.684	0.602	0.592	0.653	9.8
Bromochloromethane	0.223	0.224	0.233	0.181	0.188	0.210	11.3
Chloroform	0.861	0.815	0.843	0.704	0.712	0.787	9.4
1,1,1-Trichloroethane	0.697	0.668	0.715	0.622	0.616	0.664	6.6
1,1-Dichloropropene	0.204	0.193	0.206	0.190	0.187	0.196	4.4
Carbon tetrachloride	0.612	0.572	0.618	0.545	0.553	0.580	5.8
1,2-Dichloroethane	0.598	0.514	0.556	0.442	0.422	0.506	14.7
Benzene	1.682	1.522	1.598	1.445	1.356	1.521	8.4
Trichloroethene	0.456	0.411	0.437	0.358	0.383	0.409	9.7
1,2-Dichloropropane	0.471	0.432	0.462	0.373	0.375	0.422	11.1
Dibromomethane	0.296	0.271	0.275	0.212	0.211	0.253	15.5
Bromodichloromethane	0.537	0.527	0.565	0.464	0.469	0.512	8.7
cis-1,3-Dichloropropene	0.594	0.579	0.635	0.510	0.524	0.568	9.1
4-Methyl-2-pentanone	1.206	1.271	1.311	0.851	0.888	1.106	19.8
Toluene	1.536	1.460	1.500	1.341	1.287	1.425	7.5
trans-1,3-Dichloropropene	0.450	0.461	0.541	0.404	0.426	0.457	11.4
1,1,2-Trichloroethane	0.349	0.296	0.306	0.231	0.230	0.282	18.2
1,3-Dichloropropane	0.688	0.677	0.690	0.529	0.518	0.620	14.3
Tetrachloroethene	0.466	0.466	0.497	0.446	0.418	0.459	6.4
2-Hexanone	0.993	1.107	1.166	0.759	0.786	0.962	19.2
Dibromochloromethane	0.449	0.464	0.514	0.379	0.390	0.439	12.6
1,2-Dibromoethane	0.456	0.424	0.440	0.315	0.329	0.393	16.7

6B - FORM VI VOA-2  
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Instrument ID: V5 Calibration Date(s): 06/20/2013 06/20/2013  
 Heated Purge: (Y/N) Y Calibration Time(s): 9:57 14:45  
 Purge Volume: 5.0 (mL)  
 GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF	%RSD
LAB FILE ID: _____	RRF005 = <u>V504271.D</u>	RRF020 = <u>V504272.D</u>					
	RRF050 = <u>V504273.D</u>	RRF100 = <u>V504274.D</u>	RRF200 = <u>V504275.D</u>				
Chlorobenzene	1.327	1.246	1.248	1.104	1.037	1.192	9.9
1,1,1,2-Tetrachloroethane	0.445	0.484	0.493	0.420	0.408	0.450	8.4
Ethylbenzene	0.635	0.640	0.657	0.602	0.587	0.624	4.6
m,p-Xylene	0.825	0.788	0.778	0.728	0.694	0.763	6.8
o-Xylene	0.790	0.794	0.801	0.701	0.689	0.755	7.3
Xylene (Total)	0.813	0.790	0.786	0.719	0.692	0.760	6.8
Styrene	1.195	1.247	1.299	1.114	1.089	1.189	7.4
Bromoform	0.261	0.280	0.329	0.223	0.238	0.266	15.5
Isopropylbenzene	1.976	2.078	2.162	1.970	1.883	2.014	5.3
1,1,2,2-Tetrachloroethane	1.077	1.021	1.049	0.751	0.709	0.921	19.1
Bromobenzene	1.146	1.083	1.161	0.951	0.876	1.043	12.0
1,2,3-Trichloropropane	0.896	0.978	0.960	0.653	0.651	0.828	19.7
n-Propylbenzene	0.988	1.006	1.050	0.965	0.881	0.978	6.4
2-Chlorotoluene	0.940	0.933	0.953	0.893	0.813	0.907	6.3
1,3,5-Trimethylbenzene	3.137	3.150	3.242	2.964	2.710	3.040	6.9
4-Chlorotoluene	0.956	0.935	0.987	0.890	0.838	0.921	6.3
tert-Butylbenzene	2.987	3.103	3.240	2.933	2.704	2.993	6.7
1,2,4-Trimethylbenzene	3.014	3.084	3.259	2.875	2.652	2.977	7.7
sec-Butylbenzene	4.289	4.286	4.553	4.288	3.855	4.254	5.9
4-Isopropyltoluene	3.380	3.319	3.445	3.130	2.928	3.240	6.5
1,3-Dichlorobenzene	1.924	1.898	2.075	1.763	1.631	1.858	9.1
1,4-Dichlorobenzene	1.833	1.861	1.873	1.526	1.404	1.699	12.9
n-Butylbenzene	3.810	3.736	3.888	3.388	3.110	3.586	9.1
1,2-Dichlorobenzene	1.982	1.964	2.046	1.734	1.647	1.874	9.3
1,2-Dibromo-3-chloropropane	0.128	0.136	0.149	0.085	0.088	0.117	24.7
1,2,4-Trichlorobenzene	1.318	1.375	1.434	1.158	1.116	1.280	10.8
Hexachlorobutadiene	0.932	0.954	1.082	0.917	0.876	0.952	8.2
1,2,3-Trichlorobenzene	1.198	1.213	1.381	1.038	0.940	1.154	14.8
Naphthalene	1.051	1.513	1.949	2.235	1.200	1.589	31.4

6C - FORM VI VOA-3  
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Instrument ID: V5 Calibration Date(s): 06/20/2013 06/20/2013  
 Heated Purge: (Y/N) Y Calibration Time(s): 9:57 14:45  
 Purge Volume: 5.0 (mL)  
 GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: _____	RRF005 = <u>V504271.D</u>	RRF020 = <u>V504272.D</u>					
RRF050 = <u>V504273.D</u>	RRF100 = <u>V504274.D</u>	RRF200 = <u>V504275.D</u>					
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF	%RSD
Dibromofluoromethane	0.354	0.339	0.347	0.339	0.342	0.344	1.8
1,2-Dichloroethane-d4	0.059	0.056	0.057	0.057	0.059	0.058	2.5
Toluene-d8	1.238	1.230	1.217	1.258	1.247	1.238	1.3
Bromofluorobenzene	0.499	0.498	0.509	0.493	0.515	0.503	1.7



Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil  
 Data file : \\avogadro\organics\V5.I\130620.B\V504271.D  
 Lab Smp Id: VSTD005V5 Client Smp ID: VSTD005V5  
 Inj Date : 20-JUN-2013 09:57  
 Operator : WL SRC: WL Inst ID: V5.i  
 Smp Info : 5G,VSTD005V5,VSTD005V5  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\V5.I\130620.B\v58260GH.m  
 Meth Date : 21-Jun-2013 09:32 wluo Quant Type: ISTD  
 Cal Date : 20-JUN-2013 09:57 Cal File: V504271.D  
 Als bottle: 3 Calibration Sample, Level: 1  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 4.14

Concentration Formula: Amt \* DF \* Uf \* 5/(Ws \* (100 - M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT ( ug/L)	ON-COL ( ug/L)
1 Dichlorodifluoromethane	85		1.586	1.592 (0.284)		25542	5.00000	5
2 Chloromethane	50		1.702	1.708 (0.304)		27805	5.00000	5
3 Vinyl Chloride	62		1.818	1.836 (0.325)		22569	5.00000	5
4 Bromomethane	94		2.132	2.127 (0.381)		17236	5.00000	5
5 Chloroethane	64		2.213	2.219 (0.396)		12425	5.00000	5
6 Trichlorofluoromethane	101		2.445	2.440 (0.437)		34813	5.00000	5
7 Ethanol	46		2.608	2.603 (0.466)		7253	500.000	630(AQ)
8 Ether	59		2.677	2.684 (0.479)		11823	5.00000	6(Q)
9 Acrolein	56		2.794	2.800 (0.500)		15369	25.0000	31
10 1,1-Dichloroethene	96		2.886	2.893 (0.516)		15888	5.00000	5
11 1,1,2-Trichloro-1,2,2-trifluo	101		2.921	2.928 (0.522)		18820	5.00000	6
12 Acetone	58		2.933	2.928 (0.524)		6182	5.00000	7
13 Iodomethane	142		3.026	3.021 (0.541)		29103	5.00000	5
14 Carbon Disulfide	76		3.084	3.090 (0.551)		49741	5.00000	5
15 Acetonitrile	40		3.188	3.183 (0.570)		12378	50.0000	59(Q)
16 Methyl Acetate	43		3.223	3.218 (0.576)		12070	5.00000	6
17 Methylene Chloride	84		3.305	3.311 (0.591)		21203	5.00000	6
18 tert-Butanol	59		3.421	3.427 (0.612)		2649	10.0000	13
19 Acrylonitrile	53		3.525	3.532 (0.630)		3798	5.00000	5
20 trans-1,2-Dichloroethene	96		3.560	3.567 (0.637)		17085	5.00000	5
21 Methyl tert-butyl ether	73		3.572	3.567 (0.639)		32675	5.00000	5

Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ug/L)	ON-COL ( ug/L)
22 1,1-Dichloroethane	63	3.932	3.938	(0.703)	32295	5.00000	5
23 Vinyl acetate	43	3.990	3.985	(0.713)	45803	5.00000	6
24 Diisopropyl Ether	45	4.001	4.008	(0.716)	59452	5.00000	6
25 Ethyl tert-butyl ether	59	4.338	4.345	(0.776)	42406	5.00000	5
26 cis-1,2-Dichloroethene	96	4.466	4.472	(0.799)	17584	5.00000	6
27 2-Butanone	72	4.477	4.472	(0.801)	4964	5.00000	6(Q)
28 2,2-Dichloropropane	77	4.477	4.484	(0.801)	27131	5.00000	6
29 Bromochloromethane	128	4.698	4.693	(0.840)	8090	5.00000	5(Q)
30 Tetrahydrofuran	72	4.745	4.751	(0.848)	2343	10.0000	11
31 Chloroform	83	4.768	4.763	(0.853)	31219	5.00000	5
\$ 32 Dibromofluoromethane	113	4.919	4.925	(0.880)	128231	50.0000	51
33 1,1,1-Trichloroethane	97	4.954	4.960	(0.886)	25259	5.00000	5
34 Cyclohexane	56	5.023	5.030	(0.898)	26062	5.00000	5
35 1,1-Dichloropropene	110	5.116	5.111	(0.915)	7388	5.00000	5
36 Carbon Tetrachloride	117	5.128	5.123	(0.917)	22202	5.00000	5
M 37 1,2-dichloroethene, (Total)	100				34669	10.0000	11
\$ 38 1,2-Dichloroethane-d4	102	5.256	5.250	(0.940)	21542	50.0000	52
39 Benzene	78	5.314	5.320	(0.950)	60973	5.00000	6
40 1,2-Dichloroethane	62	5.325	5.332	(0.952)	21672	5.00000	6
41 tert-Amyl methyl ether	73	5.430	5.436	(0.971)	35435	5.00000	6
* 42 Fluorobenzene	96	5.592	5.599	(1.000)	362551	50.0000	
43 Trichloroethene	130	5.976	5.982	(1.069)	16519	5.00000	6
44 Methylcyclohexane	83	6.196	6.191	(1.108)	23776	5.00000	5
45 1,2-Dichloropropane	63	6.208	6.214	(1.110)	17083	5.00000	6
46 2-Chloroethyl vinyl ether	63	6.208	6.214	(1.110)	17083	5.00000	6(T)
47 Dibromomethane	93	6.336	6.330	(1.133)	10738	5.00000	6
48 1,4-Dioxane	88	6.359	6.354	(1.137)	1863	100.0000	110
49 Bromodichloromethane	83	6.498	6.505	(1.162)	19483	5.00000	5
50 cis-1,3-Dichloropropene	75	6.997	7.004	(1.251)	21537	5.00000	5
51 4-Methyl-2-pentanone	43	7.183	7.178	(1.284)	43723	5.00000	5
\$ 52 Toluene-d8	98	7.311	7.318	(0.806)	343506	50.0000	50
53 Toluene	91	7.392	7.399	(1.322)	55683	5.00000	5
54 trans-1,3-Dichloropropene	75	7.648	7.643	(1.368)	16326	5.00000	5
55 1,1,2-Trichloroethane	97	7.868	7.863	(1.407)	12643	5.00000	6
56 Tetrachloroethene	164	8.043	8.049	(0.886)	12917	5.00000	5
57 1,3-Dichloropropane	76	8.066	8.061	(0.889)	19092	5.00000	6
58 2-Hexanone	43	8.182	8.177	(0.901)	27549	5.00000	5
59 Dibromochloromethane	129	8.345	8.340	(0.919)	12459	5.00000	5(T)
60 1,2-Dibromoethane	107	8.484	8.479	(0.935)	12652	5.00000	6
* 61 Chlorobenzene-d5	117	9.076	9.071	(1.000)	277369	50.0000	
62 1-Chlorohexane	91	9.099	9.094	(1.003)	19665	5.00000	5(Q)
63 Chlorobenzene	112	9.111	9.106	(1.004)	36816	5.00000	6
64 1,1,1,2-Tetrachloroethane	131	9.216	9.222	(1.015)	12351	5.00000	5
65 Ethylbenzene	106	9.262	9.257	(1.020)	17605	5.00000	5
66 m,p-Xylene	106	9.425	9.420	(1.038)	45770	10.0000	11
67 o-Xylene	106	9.936	9.931	(1.095)	21915	5.00000	5
68 Styrene	104	9.959	9.954	(1.097)	33145	5.00000	5
69 Bromoform	173	10.179	10.186	(1.122)	7249	5.00000	5
70 Isopropylbenzene	105	10.435	10.441	(1.150)	54820	5.00000	5
71 trans-1,4-Dichloro-2-butene	75	10.528	10.523	(1.160)	2934	5.00000	5(Q)
\$ 72 Bromofluorobenzene	95	10.632	10.627	(1.171)	138545	50.0000	50
73 Bromobenzene	156	10.830	10.825	(0.885)	17072	5.00000	5
74 1,1,2,2-Tetrachloroethane	83	10.830	10.836	(0.885)	16043	5.00000	6
75 1,2,3-Trichloropropane	75	10.888	10.894	(0.890)	13351	5.00000	5

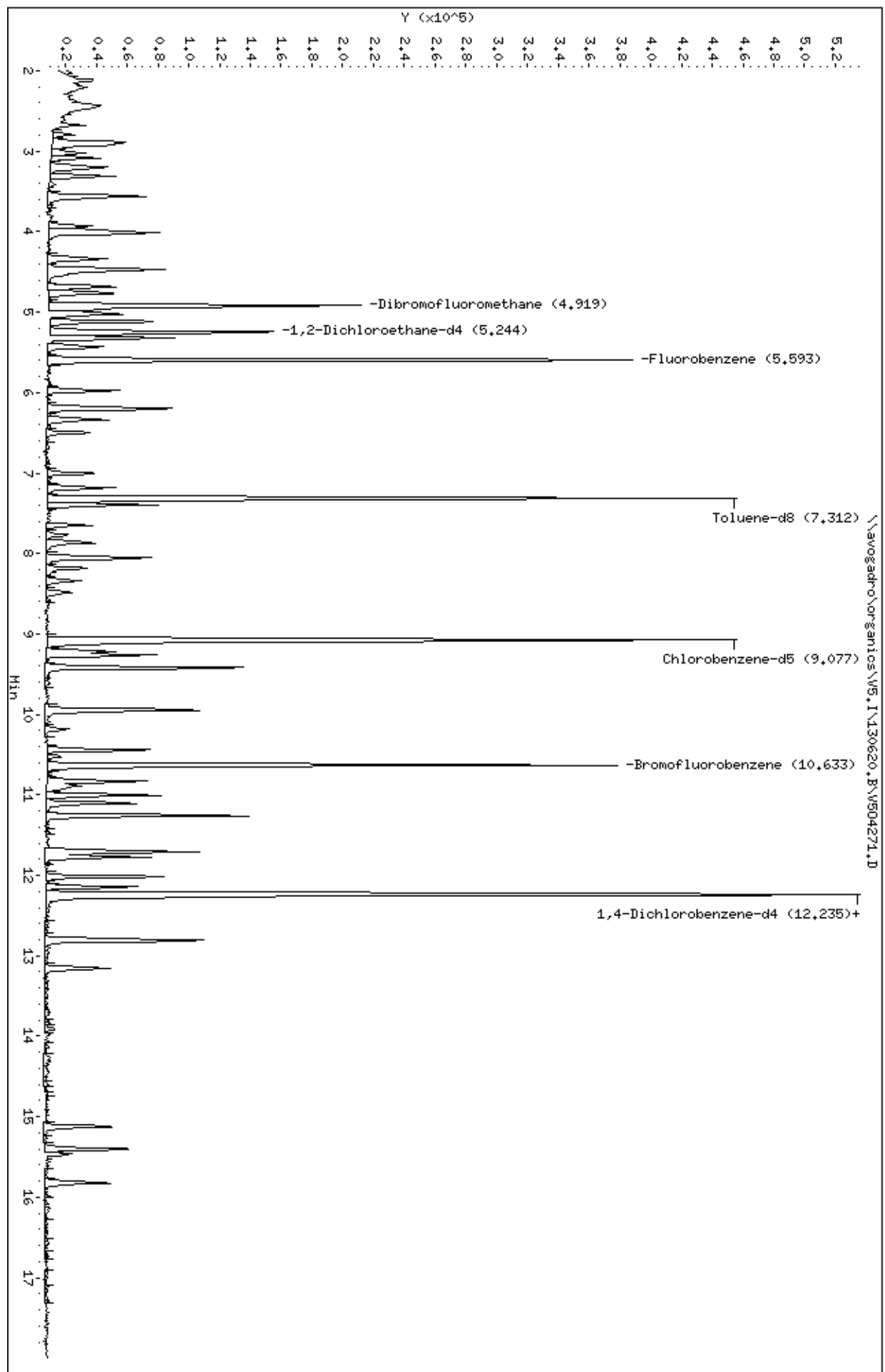
Compounds	QUANT		SIG			AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ug/L)	ON-COL ( ug/L)
76 n-Propylbenzene	120	11.004	10.999	(0.899)	14720	5.00000	5(Q)
77 2-Chlorotoluene	126	11.108	11.103	(0.908)	14006	5.00000	5(Q)
78 4-Chlorotoluene	126	11.259	11.254	(0.920)	14237	5.00000	5(Q)
79 1,3,5-Trimethylbenzene	105	11.259	11.254	(0.920)	46739	5.00000	5
80 tert-Butylbenzene	119	11.701	11.707	(0.956)	44497	5.00000	5
81 1,2,4-Trimethylbenzene	105	11.770	11.777	(0.962)	44907	5.00000	5
82 sec-Butylbenzene	105	12.014	12.009	(0.982)	63903	5.00000	5
83 1,3-Dichlorobenzene	146	12.142	12.149	(0.992)	28671	5.00000	5
84 4-Isopropyltoluene	119	12.235	12.230	(1.000)	50352	5.00000	5
* 85 1,4-Dichlorobenzene-d4	152	12.235	12.242	(1.000)	148988	50.0000	(Q)
86 1,2-Dichlorobenzene	146	12.270	12.276	(1.003)	29530	5.00000	5
M 87 Xylene (Total)	106				67685	15.0000	16
88 1,4-Dichlorobenzene	146	12.792	12.799	(1.046)	27307	5.00000	5
89 n-Butylbenzene	91	12.816	12.811	(1.047)	56757	5.00000	5
90 1,2-Dibromo-3-chloropropane	75	13.907	13.914	(1.137)	1903	5.00000	5(Q)
91 1,3,5-Trichlorobenzene	180	15.127	15.122	(2.705)	19640	5.00000	5
92 1,2,4-Trichlorobenzene	180	15.127	15.122	(1.236)	19640	5.00000	5
93 Hexachlorobutadiene	225	15.405	15.400	(1.259)	13887	5.00000	5
94 Naphthalene	128	15.463	15.470	(1.264)	15654	5.00000	3
95 1,2,3-Trichlorobenzene	180	15.823	15.818	(1.293)	17851	5.00000	5

QC Flag Legend

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

Data File: \\avogadro\organics\W5.I\130620.B\W504271.D  
Date: 20-JUN-2013 09:57  
Client ID: VSTID005V5  
Sample Info: 5G,VSTID005V5,VSTID005V5  
Column phase: DB-624

Instrument: W5.i  
Operator: ML SRC: ML  
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil  
 Data file : \\avogadro\organics\V5.I\130620.B\V504272.D  
 Lab Smp Id: VSTD020V5 Client Smp ID: VSTD020V5  
 Inj Date : 20-JUN-2013 10:23  
 Operator : WL SRC: WL Inst ID: V5.i  
 Smp Info : 5G,VSTD020V5,VSTD020V5  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\V5.I\130620.B\v58260GH.m  
 Meth Date : 21-Jun-2013 09:32 wluo Quant Type: ISTD  
 Cal Date : 20-JUN-2013 10:23 Cal File: V504272.D  
 Als bottle: 4 Calibration Sample, Level: 2  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 4.14

Concentration Formula: Amt \* DF \* Uf \* 5/(Ws \* (100 - M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT ( ug/L)	ON-COL ( ug/L)
1 Dichlorodifluoromethane	85		1.594	1.592 (0.285)		102663	20.0000	19
2 Chloromethane	50		1.721	1.708 (0.307)		104376	20.0000	19
3 Vinyl Chloride	62		1.837	1.836 (0.328)		90309	20.0000	19
4 Bromomethane	94		2.139	2.127 (0.382)		63093	20.0000	19
5 Chloroethane	64		2.221	2.219 (0.397)		45204	20.0000	19
6 Trichlorofluoromethane	101		2.441	2.440 (0.436)		127172	20.0000	19
7 Ethanol	46		2.627	2.603 (0.469)		22585	2000.00	1900(AQ)
8 Ether	59		2.685	2.684 (0.480)		44354	20.0000	21
9 Acrolein	56		2.801	2.800 (0.500)		55686	100.0000	110
10 1,1-Dichloroethene	96		2.894	2.893 (0.517)		60256	20.0000	20
11 1,1,2-Trichloro-1,2,2-trifluo	101		2.929	2.928 (0.523)		70224	20.0000	20
12 Acetone	58		2.941	2.928 (0.525)		21727	20.0000	23
13 Iodomethane	142		3.034	3.021 (0.542)		114968	20.0000	20
14 Carbon Disulfide	76		3.092	3.090 (0.552)		202719	20.0000	20
15 Acetonitrile	40		3.185	3.183 (0.569)		46747	200.0000	210(AQ)
16 Methyl Acetate	43		3.231	3.218 (0.577)		48654	20.0000	22
17 Methylene Chloride	84		3.312	3.311 (0.592)		74361	20.0000	21
18 tert-Butanol	59		3.417	3.427 (0.610)		10221	40.0000	46
19 Acrylonitrile	53		3.521	3.532 (0.629)		17479	20.0000	24
20 trans-1,2-Dichloroethene	96		3.568	3.567 (0.637)		65164	20.0000	20
21 Methyl tert-butyl ether	73		3.568	3.567 (0.637)		137923	20.0000	22

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ug/L)	ON-COL ( ug/L)
22 1,1-Dichloroethane	63	3.939	3.938 (0.703)		135340	20.0000	21
23 Vinyl acetate	43	3.997	3.985 (0.714)		180202	20.0000	21
24 Diisopropyl Ether	45	4.009	4.008 (0.716)		237261	20.0000	21
25 Ethyl tert-butyl ether	59	4.346	4.345 (0.776)		172657	20.0000	21
26 cis-1,2-Dichloroethene	96	4.474	4.472 (0.799)		68364	20.0000	20
27 2-Butanone	72	4.485	4.472 (0.801)		19471	20.0000	23(Q)
28 2,2-Dichloropropane	77	4.485	4.484 (0.801)		97560	20.0000	20
29 Bromochloromethane	128	4.694	4.693 (0.838)		34185	20.0000	21
30 Tetrahydrofuran	72	4.741	4.751 (0.847)		10367	40.0000	46
31 Chloroform	83	4.764	4.763 (0.851)		124354	20.0000	21
\$ 32 Dibromofluoromethane	113	4.927	4.925 (0.880)		129372	50.0000	49
33 1,1,1-Trichloroethane	97	4.961	4.960 (0.886)		101838	20.0000	20
34 Cyclohexane	56	5.031	5.030 (0.898)		103488	20.0000	19
35 1,1-Dichloropropene	110	5.112	5.111 (0.913)		29390	20.0000	20
36 Carbon Tetrachloride	117	5.124	5.123 (0.915)		87283	20.0000	20
M 37 1,2-dichloroethene, (Total)	100				133528	40.0000	40
\$ 38 1,2-Dichloroethane-d4	102	5.252	5.250 (0.938)		21381	50.0000	49
39 Benzene	78	5.321	5.320 (0.950)		232230	20.0000	20
40 1,2-Dichloroethane	62	5.333	5.332 (0.952)		78380	20.0000	20
41 tert-Amyl methyl ether	73	5.438	5.436 (0.971)		134626	20.0000	21
* 42 Fluorobenzene	96	5.600	5.599 (1.000)		381389	50.0000	
43 Trichloroethene	130	5.983	5.982 (1.068)		62738	20.0000	20
44 Methylcyclohexane	83	6.192	6.191 (1.106)		90088	20.0000	19
45 1,2-Dichloropropane	63	6.204	6.214 (1.108)		65895	20.0000	20
46 2-Chloroethyl vinyl ether	63	6.204	6.214 (1.108)		65895	20.0000	20(T)
47 Dibromomethane	93	6.332	6.330 (1.131)		41406	20.0000	21
48 1,4-Dioxane	88	6.355	6.354 (1.135)		7876	400.000	440
49 Bromodichloromethane	83	6.506	6.505 (1.162)		80343	20.0000	20
50 cis-1,3-Dichloropropene	75	7.005	7.004 (1.251)		88361	20.0000	20
51 4-Methyl-2-pentanone	43	7.179	7.178 (1.282)		193905	20.0000	23
\$ 52 Toluene-d8	98	7.319	7.318 (0.807)		356894	50.0000	50
53 Toluene	91	7.400	7.399 (1.321)		222780	20.0000	20
54 trans-1,3-Dichloropropene	75	7.644	7.643 (1.365)		70327	20.0000	20
55 1,1,2-Trichloroethane	97	7.865	7.863 (1.404)		45155	20.0000	21
56 Tetrachloroethene	164	8.050	8.049 (0.887)		54103	20.0000	20
57 1,3-Dichloropropane	76	8.074	8.061 (0.890)		78637	20.0000	22
58 2-Hexanone	43	8.178	8.177 (0.901)		128572	20.0000	23
59 Dibromochloromethane	129	8.341	8.340 (0.919)		53906	20.0000	21
60 1,2-Dibromoethane	107	8.480	8.479 (0.935)		49269	20.0000	22
* 61 Chlorobenzene-d5	117	9.072	9.071 (1.000)		290258	50.0000	
62 1-Chlorohexane	91	9.096	9.094 (1.003)		74506	20.0000	19(Q)
63 Chlorobenzene	112	9.107	9.106 (1.004)		144622	20.0000	21
64 1,1,1,2-Tetrachloroethane	131	9.223	9.222 (1.017)		56247	20.0000	22
65 Ethylbenzene	106	9.258	9.257 (1.020)		74328	20.0000	20
66 m,p-Xylene	106	9.421	9.420 (1.038)		182996	40.0000	41
67 o-Xylene	106	9.943	9.931 (1.096)		92164	20.0000	21
68 Styrene	104	9.955	9.954 (1.097)		144778	20.0000	21
69 Bromoform	173	10.187	10.186 (1.123)		32454	20.0000	21
70 Isopropylbenzene	105	10.443	10.441 (1.151)		241257	20.0000	21
71 trans-1,4-Dichloro-2-butene	75	10.524	10.523 (1.160)		12829	20.0000	22
\$ 72 Bromofluorobenzene	95	10.629	10.627 (1.172)		144502	50.0000	50
73 Bromobenzene	156	10.826	10.825 (0.884)		67422	20.0000	21
74 1,1,2,2-Tetrachloroethane	83	10.838	10.836 (0.885)		63530	20.0000	22
75 1,2,3-Trichloropropane	75	10.896	10.894 (0.890)		60898	20.0000	24

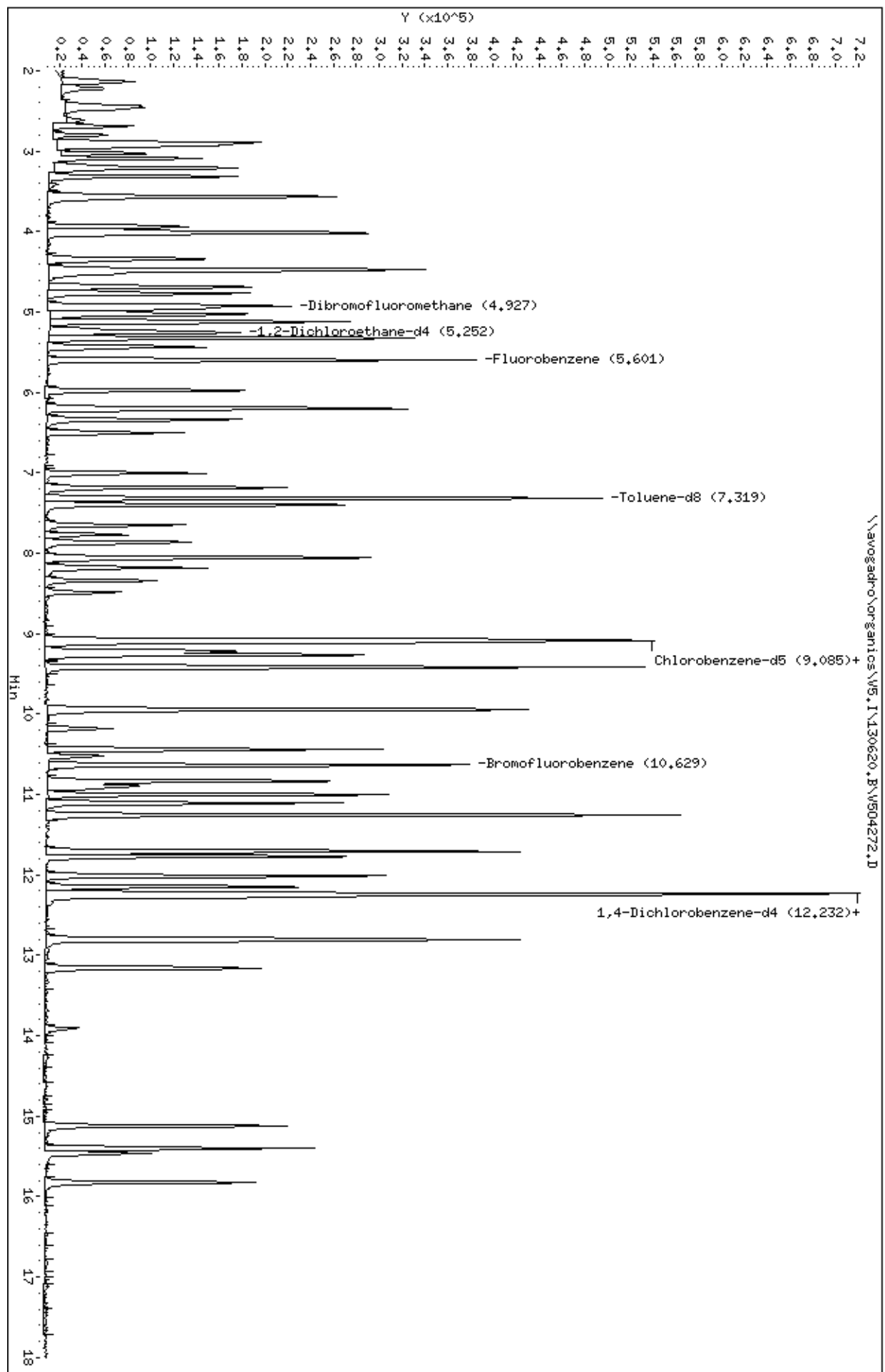
Compounds	QUANT		SIG				AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ug/L)	ON-COL ( ug/L)	
76 n-Propylbenzene	120	11.000	10.999	(0.899)	62602	20.0000	20	
77 2-Chlorotoluene	126	11.105	11.103	(0.907)	58068	20.0000	20	
78 4-Chlorotoluene	126	11.256	11.254	(0.919)	58185	20.0000	20(Q)	
79 1,3,5-Trimethylbenzene	105	11.256	11.254	(0.919)	196073	20.0000	21	
80 tert-Butylbenzene	119	11.709	11.707	(0.956)	193171	20.0000	21	
81 1,2,4-Trimethylbenzene	105	11.767	11.777	(0.961)	191982	20.0000	21	
82 sec-Butylbenzene	105	12.010	12.009	(0.981)	266817	20.0000	20	
83 1,3-Dichlorobenzene	146	12.150	12.149	(0.992)	118145	20.0000	20	
84 4-Isopropyltoluene	119	12.231	12.230	(0.999)	206589	20.0000	20	
* 85 1,4-Dichlorobenzene-d4	152	12.243	12.242	(1.000)	155619	50.0000	(Q)	
86 1,2-Dichlorobenzene	146	12.278	12.276	(1.003)	122226	20.0000	21	
M 87 Xylene (Total)	106				275160	60.0000	62	
88 1,4-Dichlorobenzene	146	12.789	12.799	(1.045)	115812	20.0000	22	
89 n-Butylbenzene	91	12.812	12.811	(1.046)	232572	20.0000	21	
90 1,2-Dibromo-3-chloropropane	75	13.903	13.914	(1.136)	8493	20.0000	23	
91 1,3,5-Trichlorobenzene	180	15.123	15.122	(2.700)	85589	20.0000	21	
92 1,2,4-Trichlorobenzene	180	15.123	15.122	(1.235)	85589	20.0000	21	
93 Hexachlorobutadiene	225	15.402	15.400	(1.258)	59371	20.0000	20	
94 Naphthalene	128	15.471	15.470	(1.264)	94182	20.0000	19	
95 1,2,3-Trichlorobenzene	180	15.820	15.818	(1.292)	75484	20.0000	21	

QC Flag Legend

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

Data File: \\avogadro\organics\W5.I\130620.B\W504272.D  
Date: 20-JUN-2013 10:23  
Client ID: VSTID020V5  
Sample Info: 5G,VSTID020V5,VSTID020V5  
Column phase: DB-624

Instrument: W5.i  
Operator: ML SRC: ML  
Column diameter: 0.25





Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil  
 Data file : \\avogadro\organics\V5.I\130620.B\V504273.D  
 Lab Smp Id: VSTD050V5 Client Smp ID: VSTD050V5  
 Inj Date : 20-JUN-2013 10:49  
 Operator : WL SRC: WL Inst ID: V5.i  
 Smp Info : 5G,VSTD050V5,VSTD050V5  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\V5.I\130620.B\v58260GH.m  
 Meth Date : 21-Jun-2013 09:32 wluo Quant Type: ISTD  
 Cal Date : 20-JUN-2013 10:49 Cal File: V504273.D  
 Als bottle: 5 Calibration Sample, Level: 3  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 4.14

Concentration Formula: Amt \* DF \* Uf \* 5/(Ws \* (100 - M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	AMOUNTS				CAL-AMT ( ug/L)	ON-COL ( ug/L)
			RT	EXP RT	REL RT	RESPONSE		
1 Dichlorodifluoromethane	85		1.592	1.592	(0.284)	253525	50.0000	53
2 Chloromethane	50		1.708	1.708	(0.305)	245112	50.0000	50
3 Vinyl Chloride	62		1.836	1.836	(0.328)	215371	50.0000	50
4 Bromomethane	94		2.127	2.127	(0.380)	151998	50.0000	51
5 Chloroethane	64		2.219	2.219	(0.396)	108734	50.0000	50
6 Trichlorofluoromethane	101		2.440	2.440	(0.436)	310369	50.0000	52
7 Ethanol	46		2.603	2.603	(0.465)	67291	5000.00	6200(A)
8 Ether	59		2.684	2.684	(0.479)	106099	50.0000	55
9 Acrolein	56		2.800	2.800	(0.500)	133982	250.000	290(A)
10 1,1-Dichloroethene	96		2.893	2.893	(0.517)	148155	50.0000	53
11 1,1,2-Trichloro-1,2,2-trifluo	101		2.928	2.928	(0.523)	169913	50.0000	53
12 Acetone	58		2.928	2.928	(0.523)	45760	50.0000	54
13 Iodomethane	142		3.021	3.021	(0.540)	277769	50.0000	54
14 Carbon Disulfide	76		3.090	3.090	(0.552)	499739	50.0000	54
15 Acetonitrile	40		3.183	3.183	(0.569)	110895	500.000	560(AQ)
16 Methyl Acetate	43		3.218	3.218	(0.575)	118750	50.0000	59
17 Methylene Chloride	84		3.311	3.311	(0.591)	170065	50.0000	52
18 tert-Butanol	59		3.427	3.427	(0.612)	22277	100.000	110
19 Acrylonitrile	53		3.532	3.532	(0.631)	38165	50.0000	57
20 trans-1,2-Dichloroethene	96		3.567	3.567	(0.637)	160818	50.0000	53
21 Methyl tert-butyl ether	73		3.567	3.567	(0.637)	323150	50.0000	56

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ug/L)	ON-COL ( ug/L)
22 1,1-Dichloroethane	63	3.938	3.938 (0.703)		313880	50.0000	54
23 Vinyl acetate	43	3.985	3.985 (0.712)		417774	50.0000	54
24 Diisopropyl Ether	45	4.008	4.008 (0.716)		542359	50.0000	53
25 Ethyl tert-butyl ether	59	4.345	4.345 (0.776)		407578	50.0000	55
26 cis-1,2-Dichloroethene	96	4.472	4.472 (0.799)		161262	50.0000	53
27 2-Butanone	72	4.472	4.472 (0.799)		44994	50.0000	58(Q)
28 2,2-Dichloropropane	77	4.484	4.484 (0.801)		235646	50.0000	52
29 Bromochloromethane	128	4.693	4.693 (0.838)		80402	50.0000	56
30 Tetrahydrofuran	72	4.751	4.751 (0.849)		23523	100.000	120
31 Chloroform	83	4.763	4.763 (0.851)		290548	50.0000	54
\$ 32 Dibromofluoromethane	113	4.925	4.925 (0.880)		119613	50.0000	50
33 1,1,1-Trichloroethane	97	4.960	4.960 (0.886)		246420	50.0000	54
34 Cyclohexane	56	5.030	5.030 (0.898)		249329	50.0000	52
35 1,1-Dichloropropene	110	5.111	5.111 (0.913)		70968	50.0000	52
36 Carbon Tetrachloride	117	5.123	5.123 (0.915)		213078	50.0000	53
M 37 1,2-dichloroethene, (Total)	100				322080	100.000	110
\$ 38 1,2-Dichloroethane-d4	102	5.250	5.250 (0.938)		19731	50.0000	50
39 Benzene	78	5.320	5.320 (0.950)		550749	50.0000	52
40 1,2-Dichloroethane	62	5.332	5.332 (0.952)		191595	50.0000	55
41 tert-Amyl methyl ether	73	5.436	5.436 (0.971)		320197	50.0000	55
* 42 Fluorobenzene	96	5.599	5.599 (1.000)		344572	50.0000	
43 Trichloroethene	130	5.982	5.982 (1.068)		150597	50.0000	53
44 Methylcyclohexane	83	6.191	6.191 (1.106)		220870	50.0000	52
45 1,2-Dichloropropane	63	6.214	6.214 (1.110)		159106	50.0000	55
46 2-Chloroethyl vinyl ether	63	6.214	6.214 (1.110)		159106	50.0000	55(T)
47 Dibromomethane	93	6.330	6.330 (1.131)		94805	50.0000	54
48 1,4-Dioxane	88	6.354	6.354 (1.135)		20920	1000.00	1300
49 Bromodichloromethane	83	6.505	6.505 (1.162)		194744	50.0000	55
50 cis-1,3-Dichloropropene	75	7.004	7.004 (1.251)		218706	50.0000	56
51 4-Methyl-2-pentanone	43	7.178	7.178 (1.282)		451721	50.0000	59
\$ 52 Toluene-d8	98	7.318	7.318 (0.807)		326685	50.0000	49
53 Toluene	91	7.399	7.399 (1.321)		516815	50.0000	53
54 trans-1,3-Dichloropropene	75	7.643	7.643 (1.365)		186466	50.0000	59
55 1,1,2-Trichloroethane	97	7.863	7.863 (1.404)		105350	50.0000	54
56 Tetrachloroethene	164	8.049	8.049 (0.887)		133493	50.0000	54
57 1,3-Dichloropropane	76	8.061	8.061 (0.889)		185098	50.0000	56
58 2-Hexanone	43	8.177	8.177 (0.901)		312989	50.0000	61
59 Dibromochloromethane	129	8.340	8.340 (0.919)		137798	50.0000	58
60 1,2-Dibromoethane	107	8.479	8.479 (0.935)		118048	50.0000	56
* 61 Chlorobenzene-d5	117	9.071	9.071 (1.000)		268328	50.0000	
62 1-Chlorohexane	91	9.094	9.094 (1.003)		185851	50.0000	52(Q)
63 Chlorobenzene	112	9.106	9.106 (1.004)		334803	50.0000	52
64 1,1,1,2-Tetrachloroethane	131	9.222	9.222 (1.017)		132262	50.0000	55
65 Ethylbenzene	106	9.257	9.257 (1.020)		176172	50.0000	53
66 m,p-Xylene	106	9.420	9.420 (1.038)		417783	100.000	100
67 o-Xylene	106	9.931	9.931 (1.095)		214953	50.0000	53
68 Styrene	104	9.954	9.954 (1.097)		348479	50.0000	55
69 Bromoform	173	10.186	10.186 (1.123)		88186	50.0000	62
70 Isopropylbenzene	105	10.441	10.441 (1.151)		580032	50.0000	54
71 trans-1,4-Dichloro-2-butene	75	10.523	10.523 (1.160)		32626	50.0000	60
\$ 72 Bromofluorobenzene	95	10.627	10.627 (1.172)		136512	50.0000	51
73 Bromobenzene	156	10.825	10.825 (0.884)		166838	50.0000	56
74 1,1,2,2-Tetrachloroethane	83	10.836	10.836 (0.885)		150720	50.0000	57
75 1,2,3-Trichloropropane	75	10.894	10.894 (0.890)		137946	50.0000	58

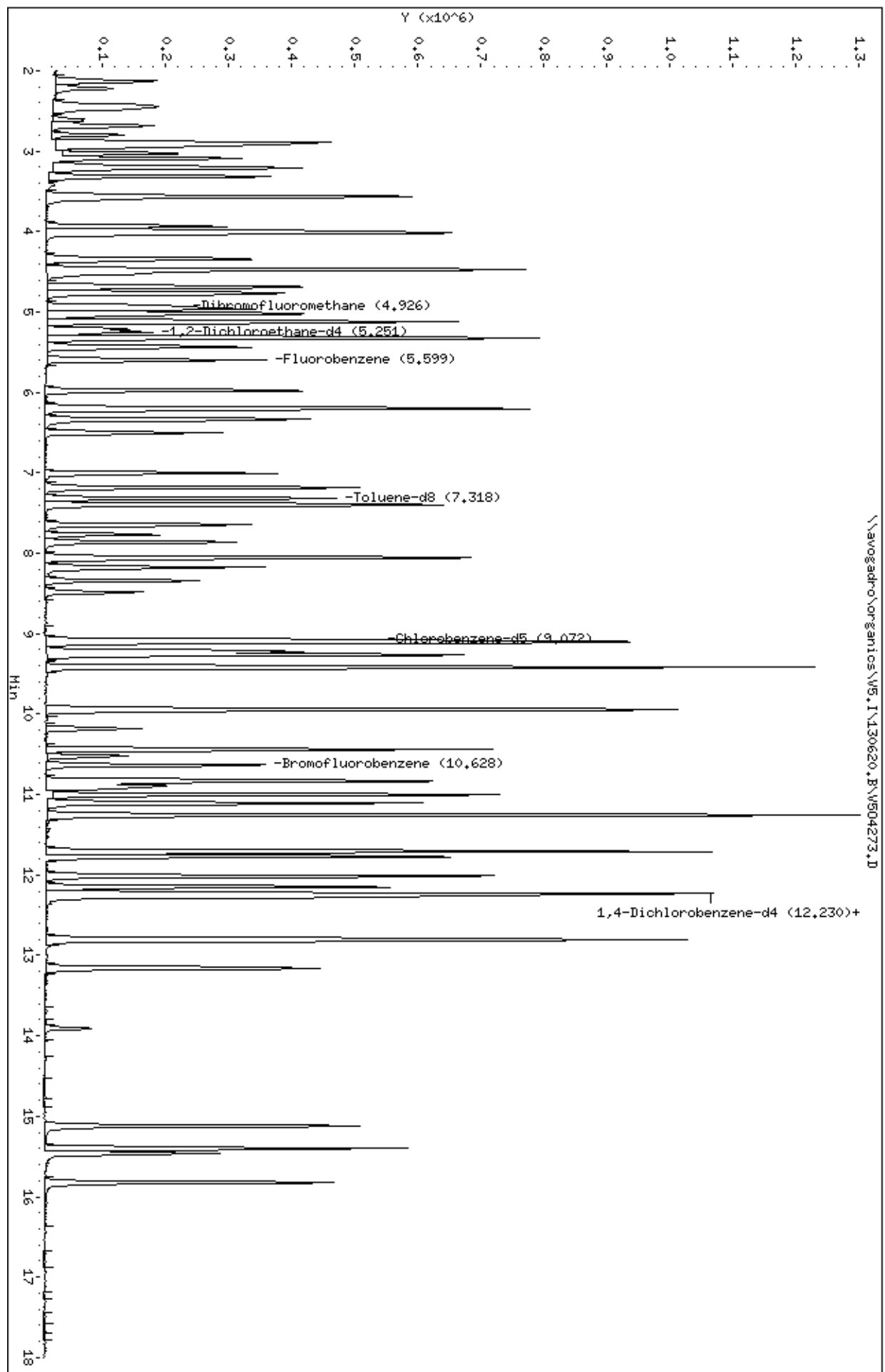
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ug/L)	ON-COL ( ug/L)	
76 n-Propylbenzene	120	10.999	10.999	(0.898)	150835	50.0000	54	
77 2-Chlorotoluene	126	11.103	11.103	(0.907)	137008	50.0000	52	
78 4-Chlorotoluene	126	11.254	11.254	(0.919)	141809	50.0000	54	
79 1,3,5-Trimethylbenzene	105	11.254	11.254	(0.919)	465814	50.0000	53	
80 tert-Butylbenzene	119	11.707	11.707	(0.956)	465595	50.0000	54	
81 1,2,4-Trimethylbenzene	105	11.777	11.777	(0.962)	468336	50.0000	55	
82 sec-Butylbenzene	105	12.009	12.009	(0.981)	654272	50.0000	54	
83 1,3-Dichlorobenzene	146	12.149	12.149	(0.992)	298139	50.0000	56	
84 4-Isopropyltoluene	119	12.230	12.230	(0.999)	495094	50.0000	53	
* 85 1,4-Dichlorobenzene-d4	152	12.242	12.242	(1.000)	143703	50.0000	(Q)	
86 1,2-Dichlorobenzene	146	12.276	12.276	(1.003)	293966	50.0000	54	
M 87 Xylene (Total)	106				632736	150.000	160	
88 1,4-Dichlorobenzene	146	12.799	12.799	(1.046)	269120	50.0000	55	
89 n-Butylbenzene	91	12.811	12.811	(1.046)	558696	50.0000	54	
90 1,2-Dibromo-3-chloropropane	75	13.914	13.914	(1.137)	21405	50.0000	63	
91 1,3,5-Trichlorobenzene	180	15.122	15.122	(2.701)	206113	50.0000	56	
92 1,2,4-Trichlorobenzene	180	15.122	15.122	(1.235)	206113	50.0000	56	
93 Hexachlorobutadiene	225	15.400	15.400	(1.258)	155462	50.0000	57	
94 Naphthalene	128	15.470	15.470	(1.264)	280049	50.0000	61	
95 1,2,3-Trichlorobenzene	180	15.818	15.818	(1.292)	198443	50.0000	60	

QC Flag Legend

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

Data File: \\avogadro\organics\W5.1\130620.B\W504273.D  
Date: 20-JUN-2013 10:49  
Client ID: VSTID050V5  
Sample Info: 5G,VSTID050V5,VSTID050V5  
Column phase: DB-624

Instrument: W5.i  
Operator: ML SRC: ML  
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil  
 Data file : \\avogadro\organics\V5.I\130620.B\V504274.D  
 Lab Smp Id: VSTD100V5 Client Smp ID: VSTD100V5  
 Inj Date : 20-JUN-2013 14:20  
 Operator : WL SRC: WL Inst ID: V5.i  
 Smp Info : 5G,VSTD100V5,VSTD100V5  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\V5.I\130620.B\v58260GH.m  
 Meth Date : 21-Jun-2013 09:32 wluo Quant Type: ISTD  
 Cal Date : 20-JUN-2013 14:20 Cal File: V504274.D  
 Als bottle: 8 Calibration Sample, Level: 4  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 4.14

Concentration Formula: Amt \* DF \* Uf \* 5/(Ws \* (100 - M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	AMOUNTS				CAL-AMT ( ug/L)	ON-COL ( ug/L)
			RT	EXP RT	REL RT	RESPONSE		
1 Dichlorodifluoromethane	85		1.591	1.592 (0.284)		521028	100.000	100
2 Chloromethane	50		1.707	1.708 (0.305)		525615	100.000	100
3 Vinyl Chloride	62		1.823	1.836 (0.326)		478346	100.000	100
4 Bromomethane	94		2.125	2.127 (0.380)		319473	100.000	100
5 Chloroethane	64		2.206	2.219 (0.394)		237440	100.000	100
6 Trichlorofluoromethane	101		2.439	2.440 (0.436)		625460	100.000	97
7 Ethanol	46		2.601	2.603 (0.465)		88257	10000.0	7600(A)
8 Ether	59		2.682	2.684 (0.479)		172249	100.000	84
9 Acrolein	56		2.787	2.800 (0.498)		179502	500.000	360(A)
10 1,1-Dichloroethene	96		2.892	2.893 (0.517)		279900	100.000	94
11 1,1,2-Trichloro-1,2,2-trifluo	101		2.915	2.928 (0.521)		324371	100.000	94
12 Acetone	58		2.926	2.928 (0.523)		63174	100.000	70
13 Iodomethane	142		3.019	3.021 (0.539)		517904	100.000	93
14 Carbon Disulfide	76		3.089	3.090 (0.552)		940478	100.000	96
15 Acetonitrile	40		3.182	3.183 (0.568)		184534	1000.00	870(AQ)
16 Methyl Acetate	43		3.217	3.218 (0.575)		166657	100.000	78
17 Methylene Chloride	84		3.310	3.311 (0.591)		295631	100.000	85
18 tert-Butanol	59		3.414	3.427 (0.610)		31504	200.000	150
19 Acrylonitrile	53		3.519	3.532 (0.629)		55113	100.000	77
20 trans-1,2-Dichloroethene	96		3.553	3.567 (0.635)		301402	100.000	94
21 Methyl tert-butyl ether	73		3.565	3.567 (0.637)		516978	100.000	84

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ug/L)	ON-COL ( ug/L)
22 1,1-Dichloroethane	63	3.925	3.938 (0.701)		570022	100.000	91
23 Vinyl acetate	43	3.995	3.985 (0.714)		731705	100.000	88
24 Diisopropyl Ether	45	4.006	4.008 (0.716)		1003146	100.000	92
25 Ethyl tert-butyl ether	59	4.332	4.345 (0.774)		705104	100.000	88
26 cis-1,2-Dichloroethene	96	4.459	4.472 (0.797)		299103	100.000	92
27 2-Butanone	72	4.471	4.472 (0.799)		60956	100.000	74
28 2,2-Dichloropropane	77	4.471	4.484 (0.799)		443383	100.000	92
29 Bromochloromethane	128	4.692	4.693 (0.838)		133330	100.000	86
30 Tetrahydrofuran	72	4.750	4.751 (0.849)		34996	200.000	160
31 Chloroform	83	4.761	4.763 (0.851)		518941	100.000	89
\$ 32 Dibromofluoromethane	113	4.912	4.925 (0.878)		124947	50.0000	49
33 1,1,1-Trichloroethane	97	4.959	4.960 (0.886)		458185	100.000	94
34 Cyclohexane	56	5.017	5.030 (0.896)		506875	100.000	99
35 1,1-Dichloropropene	110	5.110	5.111 (0.913)		140160	100.000	97
36 Carbon Tetrachloride	117	5.121	5.123 (0.915)		401558	100.000	94
M 37 1,2-dichloroethene, (Total)	100				600505	200.000	180
\$ 38 1,2-Dichloroethane-d4	102	5.249	5.250 (0.938)		20858	50.0000	49
39 Benzene	78	5.319	5.320 (0.950)		1065192	100.000	95
40 1,2-Dichloroethane	62	5.319	5.332 (0.950)		325611	100.000	87
41 tert-Amyl methyl ether	73	5.435	5.436 (0.971)		530653	100.000	85
* 42 Fluorobenzene	96	5.597	5.599 (1.000)		368468	50.0000	
43 Trichloroethene	130	5.981	5.982 (1.068)		263606	100.000	87
44 Methylcyclohexane	83	6.190	6.191 (1.106)		435354	100.000	96
45 1,2-Dichloropropane	63	6.201	6.214 (1.108)		274667	100.000	88
46 2-Chloroethyl vinyl ether	63	6.201	6.214 (1.108)		274667	100.000	88(T)
47 Dibromomethane	93	6.329	6.330 (1.131)		156269	100.000	84
48 1,4-Dioxane	88	6.364	6.354 (1.137)		24264	2000.00	1400
49 Bromodichloromethane	83	6.503	6.505 (1.162)		341988	100.000	90
50 cis-1,3-Dichloropropene	75	7.003	7.004 (1.251)		375510	100.000	90
51 4-Methyl-2-pentanone	43	7.177	7.178 (1.282)		627264	100.000	77
\$ 52 Toluene-d8	98	7.316	7.318 (0.807)		352061	50.0000	51
53 Toluene	91	7.397	7.399 (1.322)		988011	100.000	94
54 trans-1,3-Dichloropropene	75	7.641	7.643 (1.365)		298060	100.000	88
55 1,1,2-Trichloroethane	97	7.862	7.863 (1.405)		169897	100.000	82
56 Tetrachloroethene	164	8.048	8.049 (0.887)		249677	100.000	97
57 1,3-Dichloropropane	76	8.059	8.061 (0.889)		296167	100.000	85
58 2-Hexanone	43	8.175	8.177 (0.901)		424603	100.000	79
59 Dibromochloromethane	129	8.338	8.340 (0.919)		212289	100.000	86
60 1,2-Dibromoethane	107	8.477	8.479 (0.935)		176513	100.000	80
* 61 Chlorobenzene-d5	117	9.070	9.071 (1.000)		279871	50.0000	
62 1-Chlorohexane	91	9.093	9.094 (1.003)		362968	100.000	98
63 Chlorobenzene	112	9.105	9.106 (1.004)		618083	100.000	93
64 1,1,1,2-Tetrachloroethane	131	9.221	9.222 (1.017)		234964	100.000	93
65 Ethylbenzene	106	9.255	9.257 (1.020)		336694	100.000	96
66 m,p-Xylene	106	9.418	9.420 (1.038)		814837	200.000	190
67 o-Xylene	106	9.929	9.931 (1.095)		392356	100.000	93
68 Styrene	104	9.952	9.954 (1.097)		623475	100.000	94
69 Bromoform	173	10.185	10.186 (1.123)		124803	100.000	84
70 Isopropylbenzene	105	10.440	10.441 (1.151)		1102952	100.000	98
71 trans-1,4-Dichloro-2-butene	75	10.521	10.523 (1.160)		44998	100.000	79
\$ 72 Bromofluorobenzene	95	10.626	10.627 (1.172)		137949	50.0000	49
73 Bromobenzene	156	10.823	10.825 (0.884)		276982	100.000	91
74 1,1,2,2-Tetrachloroethane	83	10.835	10.836 (0.885)		218872	100.000	82
75 1,2,3-Trichloropropane	75	10.893	10.894 (0.890)		190349	100.000	79

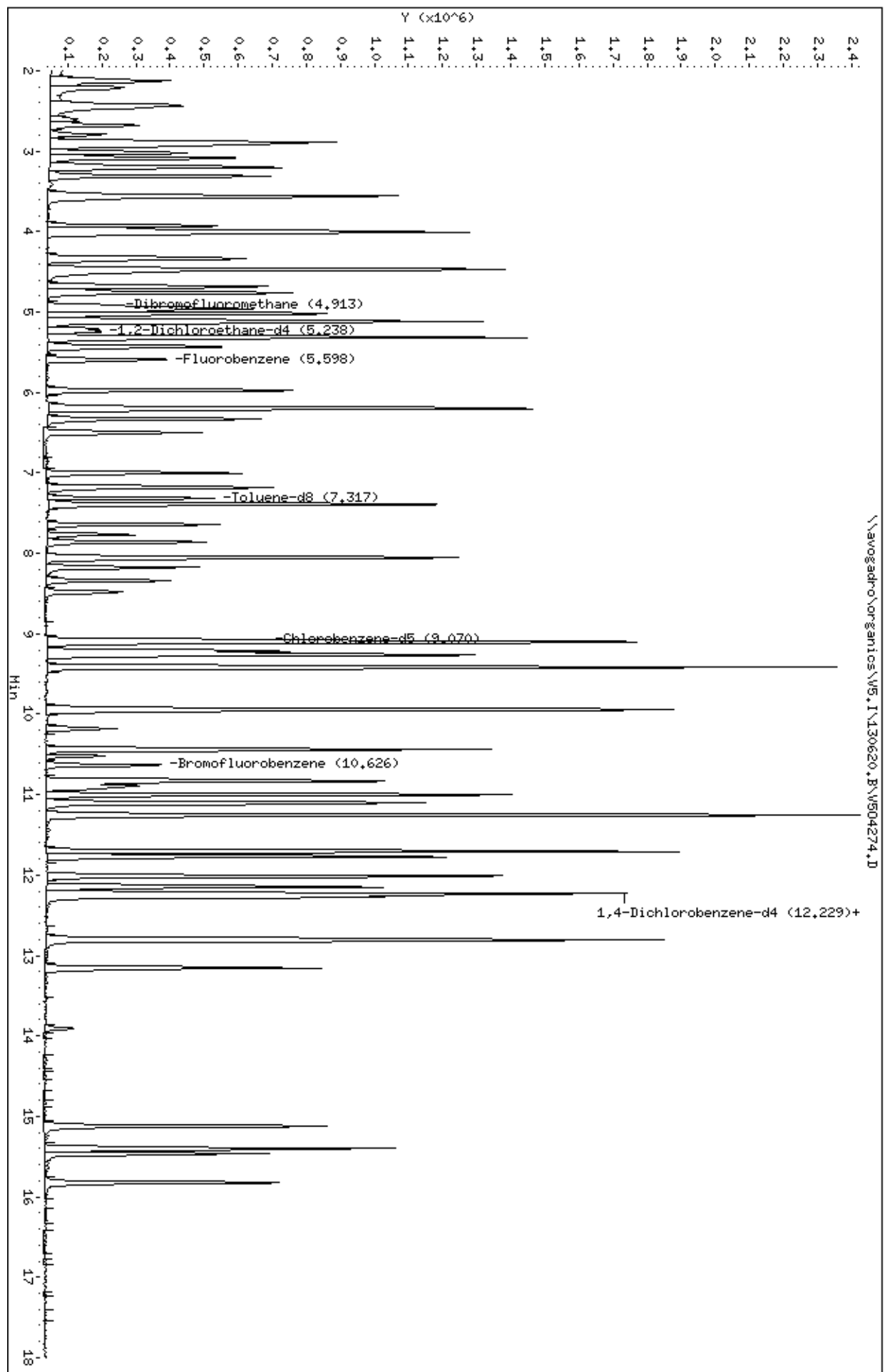
Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ug/L)	ON-COL ( ug/L)
76 n-Propylbenzene	120	10.997	10.999	(0.898)	281145	100.000	99
77 2-Chlorotoluene	126	11.102	11.103	(0.907)	260207	100.000	98
78 4-Chlorotoluene	126	11.253	11.254	(0.919)	259455	100.000	97
79 1,3,5-Trimethylbenzene	105	11.253	11.254	(0.919)	863568	100.000	97
80 tert-Butylbenzene	119	11.706	11.707	(0.956)	854603	100.000	98
81 1,2,4-Trimethylbenzene	105	11.776	11.777	(0.962)	837671	100.000	96
82 sec-Butylbenzene	105	12.008	12.009	(0.981)	1249362	100.000	100
83 1,3-Dichlorobenzene	146	12.147	12.149	(0.992)	513733	100.000	95
84 4-Isopropyltoluene	119	12.228	12.230	(0.999)	912079	100.000	96
* 85 1,4-Dichlorobenzene-d4	152	12.240	12.242	(1.000)	145692	50.0000	(Q)
86 1,2-Dichlorobenzene	146	12.275	12.276	(1.003)	505193	100.000	92
M 87 Xylene (Total)	106				1207193	300.000	280
88 1,4-Dichlorobenzene	146	12.797	12.799	(1.046)	444616	100.000	90
89 n-Butylbenzene	91	12.809	12.811	(1.046)	987160	100.000	94
90 1,2-Dibromo-3-chloropropane	75	13.912	13.914	(1.137)	24903	100.000	73
91 1,3,5-Trichlorobenzene	180	15.120	15.122	(2.701)	337458	100.000	86
92 1,2,4-Trichlorobenzene	180	15.120	15.122	(1.235)	337458	100.000	90
93 Hexachlorobutadiene	225	15.399	15.400	(1.258)	267265	100.000	96
94 Naphthalene	128	15.468	15.470	(1.264)	651205	100.000	140
95 1,2,3-Trichlorobenzene	180	15.828	15.818	(1.293)	302509	100.000	90

QC Flag Legend

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

Data File: \\avogadro\organics\W5.I\130620.B\W504274.D  
Date: 20-JUN-2013 14:20  
Client ID: VSTID100V5  
Sample Info: 5G,VSTID100V5,VSTID100V5  
Column phase: DB-624

Instrument: W5.i  
Operator: ML SRC: ML  
Column diameter: 0.25





Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil  
 Data file : \\avogadro\organics\V5.I\130620.B\V504275.D  
 Lab Smp Id: VSTD200V5 Client Smp ID: VSTD200V5  
 Inj Date : 20-JUN-2013 14:45  
 Operator : WL SRC: WL Inst ID: V5.i  
 Smp Info : 5G,VSTD200V5,VSTD200V5  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\V5.I\130620.B\v58260GH.m  
 Meth Date : 21-Jun-2013 09:32 wluo Quant Type: ISTD  
 Cal Date : 20-JUN-2013 14:45 Cal File: V504275.D  
 Als bottle: 9 Calibration Sample, Level: 5  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 4.14

Concentration Formula: Amt \* DF \* Uf \* 5/(Ws \* (100 - M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	AMOUNTS				CAL-AMT ( ug/L)	ON-COL ( ug/L)
			RT	EXP RT	REL RT	RESPONSE		
1 Dichlorodifluoromethane	85		1.584	1.592 (0.283)		942067	200.000	180
2 Chloromethane	50		1.712	1.708 (0.306)		1039753	200.000	200
3 Vinyl Chloride	62		1.828	1.836 (0.327)		910918	200.000	200
4 Bromomethane	94		2.130	2.127 (0.381)		599080	200.000	190
5 Chloroethane	64		2.211	2.219 (0.396)		439153	200.000	190
6 Trichlorofluoromethane	101		2.432	2.440 (0.435)		1219085	200.000	190
7 Ethanol	46		2.606	2.603 (0.466)		189259	20000.0	16000(A)
8 Ether	59		2.688	2.684 (0.481)		351883	200.000	170
9 Acrolein	56		2.792	2.800 (0.499)		390862	1000.00	780(A)
10 1,1-Dichloroethene	96		2.885	2.893 (0.516)		545584	200.000	180
11 1,1,2-Trichloro-1,2,2-trifluo	101		2.920	2.928 (0.522)		614575	200.000	180
12 Acetone	58		2.931	2.928 (0.524)		122502	200.000	140
13 Iodomethane	142		3.024	3.021 (0.541)		1027901	200.000	180
14 Carbon Disulfide	76		3.082	3.090 (0.551)		1842108	200.000	190
15 Acetonitrile	40		3.175	3.183 (0.568)		329265	2000.00	1500(A)
16 Methyl Acetate	43		3.222	3.218 (0.576)		342113	200.000	160
17 Methylene Chloride	84		3.315	3.311 (0.593)		576642	200.000	160
18 tert-Butanol	59		3.431	3.427 (0.614)		60878	400.000	280(A)
19 Acrylonitrile	53		3.524	3.532 (0.630)		119786	200.000	170
20 trans-1,2-Dichloroethene	96		3.559	3.567 (0.637)		600384	200.000	190
21 Methyl tert-butyl ether	73		3.570	3.567 (0.639)		1046586	200.000	170

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ug/L)	ON-COL ( ug/L)
22 1,1-Dichloroethane	63	3.930	3.938 (0.703)		1139477	200.000	180
23 Vinyl acetate	43	3.988	3.985 (0.713)		1431611	200.000	170
24 Diisopropyl Ether	45	4.000	4.008 (0.715)		1925790	200.000	180
25 Ethyl tert-butyl ether	59	4.337	4.345 (0.776)		1417465	200.000	180
26 cis-1,2-Dichloroethene	96	4.464	4.472 (0.799)		582811	200.000	180
27 2-Butanone	72	4.476	4.472 (0.801)		117894	200.000	140
28 2,2-Dichloropropane	77	4.476	4.484 (0.801)		873846	200.000	180
29 Bromochloromethane	128	4.697	4.693 (0.840)		277666	200.000	180
30 Tetrahydrofuran	72	4.743	4.751 (0.848)		70646	400.000	320(A)
31 Chloroform	83	4.766	4.763 (0.853)		1050409	200.000	180
\$ 32 Dibromofluoromethane	113	4.917	4.925 (0.880)		126140	50.0000	50
33 1,1,1-Trichloroethane	97	4.964	4.960 (0.888)		909385	200.000	180
34 Cyclohexane	56	5.022	5.030 (0.898)		1001053	200.000	190
35 1,1-Dichloropropene	110	5.115	5.111 (0.915)		275174	200.000	190
36 Carbon Tetrachloride	117	5.126	5.123 (0.917)		816123	200.000	190
M 37 1,2-dichloroethene, (Total)	100				1183195	400.000	360(A)
\$ 38 1,2-Dichloroethane-d4	102	5.254	5.250 (0.940)		21676	50.0000	51
39 Benzene	78	5.324	5.320 (0.952)		2000205	200.000	180
40 1,2-Dichloroethane	62	5.324	5.332 (0.952)		623060	200.000	170
41 tert-Amyl methyl ether	73	5.428	5.436 (0.971)		1094988	200.000	170
* 42 Fluorobenzene	96	5.591	5.599 (1.000)		368809	50.0000	
43 Trichloroethene	130	5.974	5.982 (1.069)		564931	200.000	190
44 Methylcyclohexane	83	6.195	6.191 (1.108)		865583	200.000	190
45 1,2-Dichloropropane	63	6.206	6.214 (1.110)		552680	200.000	180
46 2-Chloroethyl vinyl ether	63	6.206	6.214 (1.110)		552680	200.000	180
47 Dibromomethane	93	6.334	6.330 (1.133)		311030	200.000	170
48 1,4-Dioxane	88	6.357	6.354 (1.137)		56908	4000.00	3300(A)
49 Bromodichloromethane	83	6.497	6.505 (1.162)		691283	200.000	180
50 cis-1,3-Dichloropropene	75	7.008	7.004 (1.253)		772322	200.000	180
51 4-Methyl-2-pentanone	43	7.182	7.178 (1.285)		1310525	200.000	160
\$ 52 Toluene-d8	98	7.321	7.318 (0.807)		363577	50.0000	50
53 Toluene	91	7.391	7.399 (1.322)		1898319	200.000	180
54 trans-1,3-Dichloropropene	75	7.646	7.643 (1.368)		628350	200.000	190
55 1,1,2-Trichloroethane	97	7.867	7.863 (1.407)		339707	200.000	160
56 Tetrachloroethene	164	8.053	8.049 (0.887)		487336	200.000	180
57 1,3-Dichloropropane	76	8.064	8.061 (0.889)		603538	200.000	170
58 2-Hexanone	43	8.181	8.177 (0.901)		916846	200.000	160
59 Dibromochloromethane	129	8.343	8.340 (0.919)		455008	200.000	180
60 1,2-Dibromoethane	107	8.483	8.479 (0.935)		383699	200.000	170
* 61 Chlorobenzene-d5	117	9.075	9.071 (1.000)		291463	50.0000	
62 1-Chlorohexane	91	9.098	9.094 (1.003)		723731	200.000	190
63 Chlorobenzene	112	9.110	9.106 (1.004)		1209365	200.000	170
64 1,1,1,2-Tetrachloroethane	131	9.214	9.222 (1.015)		475869	200.000	180
65 Ethylbenzene	106	9.261	9.257 (1.020)		684428	200.000	190
66 m,p-Xylene	106	9.423	9.420 (1.038)		1617583	400.000	360(A)
67 o-Xylene	106	9.934	9.931 (1.095)		803220	200.000	180
68 Styrene	104	9.957	9.954 (1.097)		1269036	200.000	180
69 Bromoform	173	10.178	10.186 (1.122)		277321	200.000	180
70 Isopropylbenzene	105	10.445	10.441 (1.151)		2195394	200.000	190
71 trans-1,4-Dichloro-2-butene	75	10.526	10.523 (1.160)		106545	200.000	180
\$ 72 Bromofluorobenzene	95	10.631	10.627 (1.171)		149982	50.0000	51
73 Bromobenzene	156	10.828	10.825 (0.884)		564099	200.000	170
74 1,1,2,2-Tetrachloroethane	83	10.840	10.836 (0.885)		456914	200.000	150
75 1,2,3-Trichloropropane	75	10.886	10.894 (0.889)		419316	200.000	160

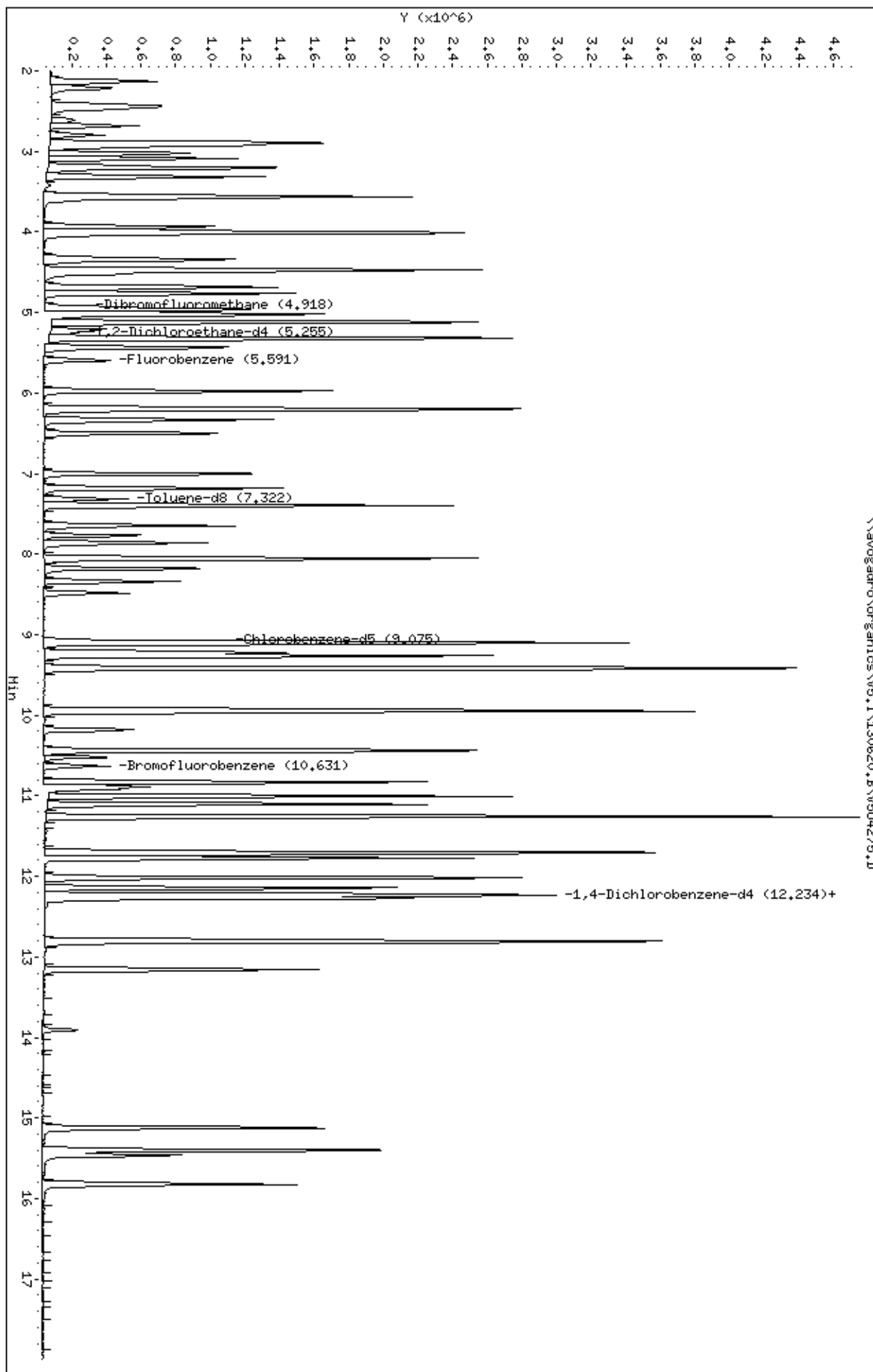
Compounds	QUANT		SIG				AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ug/L)	ON-COL ( ug/L)	
76 n-Propylbenzene	120	11.003	10.999	(0.899)	567372	200.000	180	
77 2-Chlorotoluene	126	11.107	11.103	(0.907)	523978	200.000	180	
78 4-Chlorotoluene	126	11.258	11.254	(0.919)	539901	200.000	180	
79 1,3,5-Trimethylbenzene	105	11.258	11.254	(0.919)	1745940	200.000	180	
80 tert-Butylbenzene	119	11.711	11.707	(0.956)	1741927	200.000	180	
81 1,2,4-Trimethylbenzene	105	11.769	11.777	(0.961)	1708759	200.000	180	
82 sec-Butylbenzene	105	12.013	12.009	(0.981)	2483563	200.000	180	
83 1,3-Dichlorobenzene	146	12.141	12.149	(0.991)	1050484	200.000	180	
84 4-Isopropyltoluene	119	12.234	12.230	(0.999)	1886308	200.000	180	
* 85 1,4-Dichlorobenzene-d4	152	12.245	12.242	(1.000)	161055	50.0000		
86 1,2-Dichlorobenzene	146	12.268	12.276	(1.002)	1061168	200.000	180	
M 87 Xylene (Total)	106				2420803	600.000	550	
88 1,4-Dichlorobenzene	146	12.791	12.799	(1.045)	904557	200.000	160	
89 n-Butylbenzene	91	12.814	12.811	(1.046)	2003716	200.000	170	
90 1,2-Dibromo-3-chloropropane	75	13.906	13.914	(1.136)	56690	200.000	150	
91 1,3,5-Trichlorobenzene	180	15.125	15.122	(2.705)	718721	200.000	180	
92 1,2,4-Trichlorobenzene	180	15.125	15.122	(1.235)	718721	200.000	170	
93 Hexachlorobutadiene	225	15.404	15.400	(1.258)	564207	200.000	180	
94 Naphthalene	128	15.462	15.470	(1.263)	773074	200.000	150	
95 1,2,3-Trichlorobenzene	180	15.822	15.818	(1.292)	605486	200.000	160	

QC Flag Legend

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

Data File: \\avogadro\organics\W5, I\130620, B\W504275.D  
Date: 20-JUN-2013 14:45  
Client ID: VSTID200W5  
Sample Info: 5G, VSTID200W5, VSTID200W5  
Column phase: DB-624

Instrument: W5.i  
Operator: ML SRC: ML  
Column diameter: 0.25



7A - FORM VII VOA-1  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Instrument ID: V5 Calibration Date: 06/20/2013 Time: 16:29  
 Lab File ID: V504279.D Init. Calib. Date(s): 06/20/2013 06/20/2013  
 EPA Sample No.(VSTD#####) VSTD050W5 Init. Calib. Time(s): 9:57 14:45  
 Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)  
 Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.692	0.692	0.100	0.0	20.0
Chloromethane	0.716	0.762	0.100	6.4	20.0
Vinyl chloride	0.621	0.670	0.100	7.9	20.0
Bromomethane	0.434	0.457	0.100	5.4	20.0
Chloroethane	0.315	0.331	0.100	5.3	20.0
Trichlorofluoromethane	0.874	0.900	0.100	3.0	20.0
1,1-Dichloroethene	0.403	0.400	0.100	-0.7	20.0
Acetone	0.123	0.103	0.100	-16.3	20.0
Iodomethane	0.752	0.767	0.100	2.0	20.0
Carbon disulfide	1.335	1.399	0.100	4.8	20.0
Methylene chloride	0.472	0.465	0.100	-1.3	20.0
trans-1,2-Dichloroethene	0.436	0.444	0.100	1.9	20.0
Methyl tert-butyl ether	0.831	0.907	0.100	9.1	20.0
1,1-Dichloroethane	0.847	0.889	0.200	4.9	20.0
Vinyl acetate	1.124	1.263	0.100	12.3	20.0
2-Butanone	0.112	0.105	0.100	-6.0	20.0
cis-1,2-Dichloroethene	0.440	0.460	0.100	4.4	20.0
2,2-Dichloropropane	0.653	0.653	0.100	0.0	20.0
Bromochloromethane	0.210	0.219	0.100	4.3	20.0
Chloroform	0.787	0.819	0.200	4.0	20.0
1,1,1-Trichloroethane	0.664	0.685	0.100	3.3	20.0
1,1-Dichloropropene	0.196	0.208	0.100	6.0	20.0
Carbon tetrachloride	0.580	0.603	0.100	3.9	20.0
1,2-Dichloroethane	0.506	0.531	0.100	4.8	20.0
Benzene	1.521	1.577	0.500	3.7	20.0
Trichloroethene	0.409	0.428	0.200	4.6	20.0
1,2-Dichloropropane	0.422	0.447	0.100	5.8	20.0
Dibromomethane	0.253	0.263	0.100	4.1	20.0
Bromodichloromethane	0.512	0.557	0.200	8.6	20.0
cis-1,3-Dichloropropene	0.568	0.610	0.200	7.4	20.0
4-Methyl-2-pentanone	1.106	1.249	0.100	13.0	20.0
Toluene	1.425	1.504	0.400	5.6	20.0
trans-1,3-Dichloropropene	0.457	0.511	0.100	11.9	20.0
1,1,2-Trichloroethane	0.282	0.275	0.100	-2.6	20.0
1,3-Dichloropropane	0.620	0.654	0.100	5.3	20.0
Tetrachloroethene	0.459	0.482	0.200	5.2	20.0
2-Hexanone	0.962	1.110	0.100	15.4	20.0
Dibromochloromethane	0.439	0.492	0.100	12.1	20.0
1,2-Dibromoethane	0.393	0.403	0.100	2.6	20.0
Chlorobenzene	1.192	1.223	0.500	2.6	20.0

7B - FORM VII VOA-2  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Instrument ID: V5 Calibration Date: 06/20/2013 Time: 16:29  
 Lab File ID: V504279.D Init. Calib. Date(s): 06/20/2013 06/20/2013  
 EPA Sample No.(VSTD#####) VSTD050W5 Init. Calib. Time(s): 9:57 14:45  
 Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)  
 Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
1,1,1,2-Tetrachloroethane	0.450	0.488	0.100	8.5	20.0
Ethylbenzene	0.624	0.651	0.100	4.3	20.0
m,p-Xylene	0.763	0.806	0.100	5.7	20.0
o-Xylene	0.755	0.774	0.300	2.5	20.0
Xylene (Total)	0.760	0.795	0.000	4.6	20.0
Styrene	1.189	1.312	0.300	10.4	20.0
Bromoform	0.266	0.291	0.100	9.4	20.0
Isopropylbenzene	2.014	2.184	0.100	8.5	20.0
1,1,2,2-Tetrachloroethane	0.921	0.996	0.300	8.1	20.0
Bromobenzene	1.043	1.098	0.100	5.2	20.0
1,2,3-Trichloropropane	0.828	0.902	0.100	8.9	20.0
n-Propylbenzene	0.978	1.048	0.100	7.1	20.0
2-Chlorotoluene	0.907	0.984	0.100	8.5	20.0
1,3,5-Trimethylbenzene	3.040	3.330	0.100	9.5	20.0
4-Chlorotoluene	0.921	1.004	0.100	9.0	20.0
tert-Butylbenzene	2.993	3.264	0.100	9.0	20.0
1,2,4-Trimethylbenzene	2.977	3.311	0.100	11.2	20.0
sec-Butylbenzene	4.254	4.683	0.100	10.1	20.0
4-Isopropyltoluene	3.240	3.463	0.100	6.9	20.0
1,3-Dichlorobenzene	1.858	1.997	0.600	7.5	20.0
1,4-Dichlorobenzene	1.699	1.783	0.500	5.0	20.0
n-Butylbenzene	3.586	3.870	0.100	7.9	20.0
1,2-Dichlorobenzene	1.874	2.047	0.400	9.2	20.0
1,2-Dibromo-3-chloropropane	0.117	0.130	0.050	10.5	20.0
1,2,4-Trichlorobenzene	1.280	1.406	0.200	9.8	20.0
Hexachlorobutadiene	0.952	1.022	0.100	7.3	20.0
1,2,3-Trichlorobenzene	1.154	1.239	0.100	7.3	20.0
Naphthalene	1.589	2.259	0.100	42.2	20.0

7C - FORM VII VOA-3  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Instrument ID: V5 Calibration Date: 06/20/2013 Time: 16:29  
 Lab File ID: V504279.D Init. Calib. Date(s): 06/20/2013 06/20/2013  
 EPA Sample No.(VSTD#####) VSTD050W5 Init. Calib. Time(s): 9:57 14:45  
 Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)  
 Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dibromofluoromethane	0.344	0.334	0.100	-2.8	20.0
1,2-Dichloroethane-d4	0.058	0.051	0.100	-10.8	20.0
Toluene-d8	1.238	1.246	0.100	0.6	20.0
Bromofluorobenzene	0.503	0.493	0.100	-1.9	20.0

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil  
 Data file : \\avogadro\organics\V5.I\130620A.B\V504279.D  
 Lab Smp Id: VSTD050W5 Client Smp ID: VSTD050W5  
 Inj Date : 20-JUN-2013 16:29  
 Operator : WL SRC: WL Inst ID: V5.i  
 Smp Info : 5G,VSTD050W5,VSTD050W5  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\V5.I\130620A.B\v58260GH.m  
 Meth Date : 21-Jun-2013 09:35 wluo Quant Type: ISTD  
 Cal Date : 20-JUN-2013 14:45 Cal File: V504275.D  
 Dil bottle: 10 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 4.14  
 Processing Host: TARGET103

Concentration Formula:  $\text{Amt} * \text{DF} * \text{Uf} * 5 / (\text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	AMOUNTS					
			RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ug/L)	ON-COL ( ug/L)
1 Dichlorodifluoromethane	85		1.598	1.598	(0.286)	275338	50.0000	50
2 Chloromethane	50		1.714	1.714	(0.306)	303465	50.0000	53
3 Vinyl Chloride	62		1.830	1.830	(0.327)	266873	50.0000	54
4 Bromomethane	94		2.132	2.132	(0.381)	182031	50.0000	53
5 Chloroethane	64		2.225	2.225	(0.398)	131953	50.0000	53
6 Trichlorofluoromethane	101		2.445	2.445	(0.437)	358383	50.0000	52
7 Ethanol	46		2.620	2.620	(0.468)	66609	5000.00	5300(A)
8 Ether	59		2.689	2.689	(0.481)	115984	50.0000	52
9 Acrolein	56		2.805	2.805	(0.502)	142092	250.000	260(A)
10 1,1-Dichloroethene	96		2.898	2.898	(0.518)	159213	50.0000	50
11 1,1,2-Trichloro-1,2,2-trifluo	101		2.922	2.922	(0.522)	182285	50.0000	49
12 Acetone	58		2.933	2.933	(0.525)	40957	50.0000	42
13 Iodomethane	142		3.026	3.026	(0.541)	305531	50.0000	51
14 Carbon Disulfide	76		3.084	3.084	(0.551)	556860	50.0000	52
15 Acetonitrile	40		3.177	3.177	(0.568)	118795	500.000	520(AQ)
16 Methyl Acetate	43		3.223	3.223	(0.576)	124538	50.0000	54
17 Methylene Chloride	84		3.316	3.316	(0.593)	185230	50.0000	49
18 tert-Butanol	59		3.421	3.421	(0.612)	24008	100.000	100
19 Acrylonitrile	53		3.525	3.525	(0.630)	41385	50.0000	53
20 trans-1,2-Dichloroethene	96		3.560	3.560	(0.637)	176913	50.0000	51



Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ug/L)	ON-COL ( ug/L)
21 Methyl tert-butyl ether	73	3.572	3.572	(0.639)	361034	50.0000	54
22 1,1-Dichloroethane	63	3.932	3.932	(0.703)	353870	50.0000	52
23 Vinyl acetate	43	3.978	3.978	(0.711)	502635	50.0000	56
24 Diisopropyl Ether	45	4.002	4.002	(0.716)	665843	50.0000	56
25 Ethyl tert-butyl ether	59	4.338	4.338	(0.776)	482905	50.0000	56
26 cis-1,2-Dichloroethene	96	4.466	4.466	(0.799)	182995	50.0000	52
27 2-Butanone	72	4.478	4.478	(0.801)	41769	50.0000	47(Q)
28 2,2-Dichloropropane	77	4.478	4.478	(0.801)	260088	50.0000	50
29 Bromochloromethane	128	4.698	4.698	(0.840)	87153	50.0000	52
30 Tetrahydrofuran	72	4.745	4.745	(0.848)	27307	100.000	120
31 Chloroform	83	4.768	4.768	(0.853)	325876	50.0000	52
\$ 32 Dibromofluoromethane	113	4.919	4.919	(0.880)	133171	50.0000	48
33 1,1,1-Trichloroethane	97	4.965	4.965	(0.888)	272872	50.0000	52
34 Cyclohexane	56	5.023	5.023	(0.898)	302871	50.0000	54
35 1,1-Dichloropropene	110	5.116	5.116	(0.915)	82641	50.0000	53
36 Carbon Tetrachloride	117	5.128	5.128	(0.917)	239944	50.0000	52
M 37 1,2-dichloroethene, (Total)	100				359908	100.000	100
\$ 38 1,2-Dichloroethane-d4	102	5.256	5.256	(0.940)	20470	50.0000	45
39 Benzene	78	5.325	5.325	(0.952)	627995	50.0000	52
40 1,2-Dichloroethane	62	5.325	5.325	(0.952)	211221	50.0000	52
41 tert-Amyl methyl ether	73	5.442	5.442	(0.973)	369806	50.0000	55
* 42 Fluorobenzene	96	5.593	5.593	(1.000)	398124	50.0000	
43 Trichloroethene	130	5.976	5.976	(1.069)	170346	50.0000	52
44 Methylcyclohexane	83	6.196	6.196	(1.108)	258221	50.0000	53
45 1,2-Dichloropropane	63	6.208	6.208	(1.110)	177993	50.0000	53
46 2-Chloroethyl vinyl ether	63	6.208	6.208	(1.110)	177993	50.0000	53(T)
47 Dibromomethane	93	6.336	6.336	(1.133)	104878	50.0000	52
48 1,4-Dioxane	88	6.359	6.359	(1.137)	19045	1000.00	1000
49 Bromodichloromethane	83	6.498	6.498	(1.162)	221632	50.0000	54
50 cis-1,3-Dichloropropene	75	7.009	7.009	(1.253)	242908	50.0000	54
51 4-Methyl-2-pentanone	43	7.183	7.183	(1.284)	497191	50.0000	56
\$ 52 Toluene-d8	98	7.323	7.323	(0.807)	379886	50.0000	50
53 Toluene	91	7.393	7.393	(1.322)	598974	50.0000	53
54 trans-1,3-Dichloropropene	75	7.648	7.648	(1.368)	203405	50.0000	56
55 1,1,2-Trichloroethane	97	7.869	7.869	(1.407)	109410	50.0000	49
56 Tetrachloroethene	164	8.054	8.054	(0.887)	147032	50.0000	52
57 1,3-Dichloropropane	76	8.066	8.066	(0.889)	199242	50.0000	53
58 2-Hexanone	43	8.171	8.171	(0.900)	338498	50.0000	58
59 Dibromochloromethane	129	8.345	8.345	(0.919)	150139	50.0000	56
60 1,2-Dibromoethane	107	8.484	8.484	(0.935)	122930	50.0000	51
* 61 Chlorobenzene-d5	117	9.076	9.076	(1.000)	304854	50.0000	
62 1-Chlorohexane	91	9.100	9.100	(1.003)	213749	50.0000	53(Q)
63 Chlorobenzene	112	9.111	9.111	(1.004)	372813	50.0000	51
64 1,1,1,2-Tetrachloroethane	131	9.216	9.216	(1.015)	148875	50.0000	54
65 Ethylbenzene	106	9.262	9.262	(1.020)	198364	50.0000	52
66 m,p-Xylene	106	9.413	9.413	(1.037)	491381	100.000	100
67 o-Xylene	106	9.936	9.936	(1.095)	235845	50.0000	51
68 Styrene	104	9.959	9.959	(1.097)	399890	50.0000	55
69 Bromoform	173	10.180	10.180	(1.122)	88778	50.0000	55
70 Isopropylbenzene	105	10.435	10.435	(1.150)	665868	50.0000	54
71 trans-1,4-Dichloro-2-butene	75	10.516	10.516	(1.159)	36087	50.0000	58
\$ 72 Bromofluorobenzene	95	10.633	10.633	(1.171)	150350	50.0000	49
73 Bromobenzene	156	10.830	10.830	(0.885)	177081	50.0000	53
74 1,1,2,2-Tetrachloroethane	83	10.842	10.842	(0.886)	160649	50.0000	54

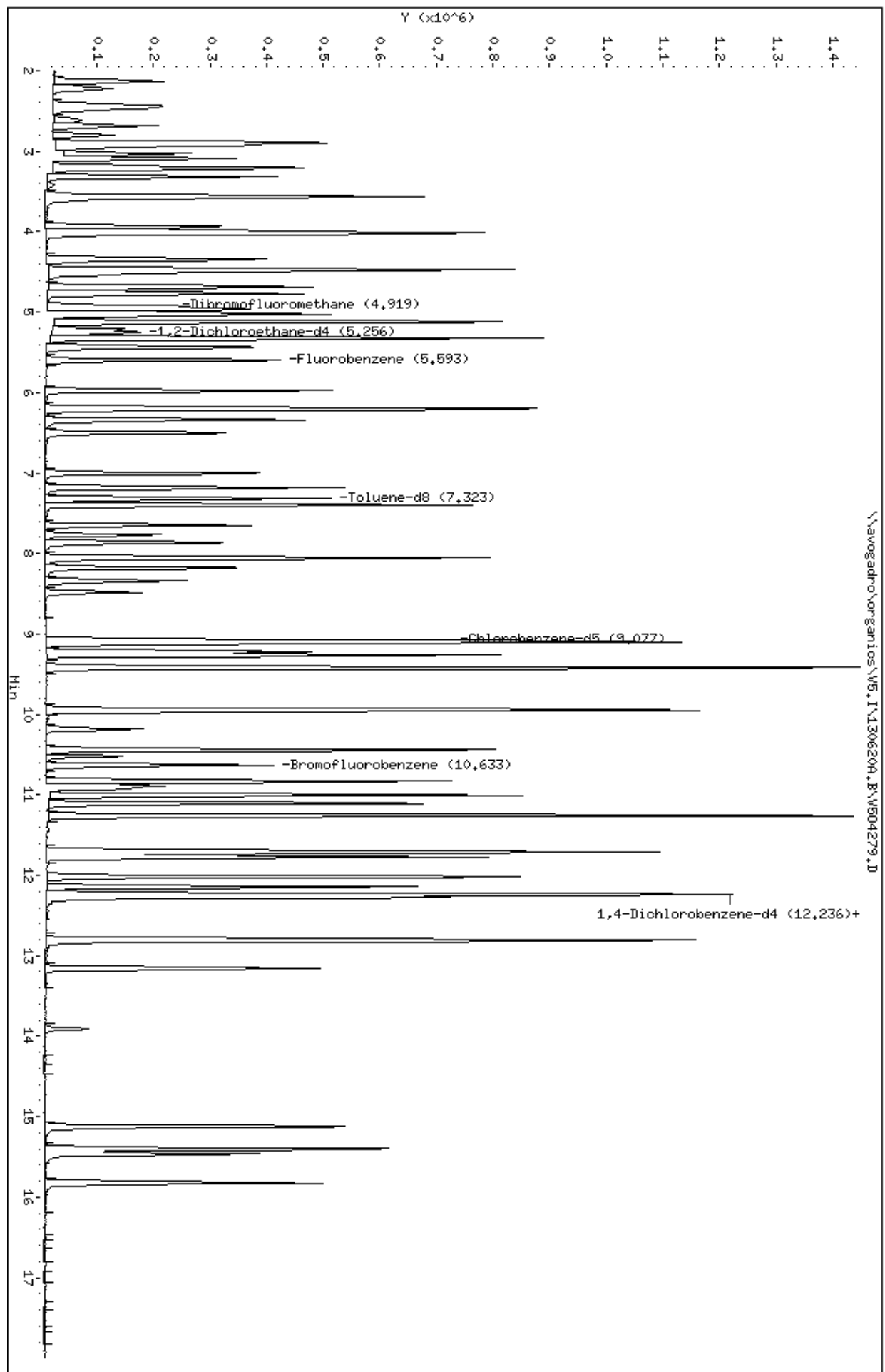
Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ug/L)	ON-COL ( ug/L)
75 1,2,3-Trichloropropane	75	10.888	10.888	(0.890)	145445	50.0000	54
76 n-Propylbenzene	120	11.004	11.004	(0.899)	168976	50.0000	54
77 2-Chlorotoluene	126	11.109	11.109	(0.908)	158662	50.0000	54
78 4-Chlorotoluene	126	11.260	11.260	(0.920)	161877	50.0000	54
79 1,3,5-Trimethylbenzene	105	11.260	11.260	(0.920)	537046	50.0000	55
80 tert-Butylbenzene	119	11.701	11.701	(0.956)	526362	50.0000	54
81 1,2,4-Trimethylbenzene	105	11.771	11.771	(0.962)	534033	50.0000	56
82 sec-Butylbenzene	105	12.015	12.015	(0.982)	755355	50.0000	55
83 1,3-Dichlorobenzene	146	12.142	12.142	(0.992)	322124	50.0000	54
84 4-Isopropyltoluene	119	12.235	12.235	(1.000)	558495	50.0000	53
* 85 1,4-Dichlorobenzene-d4	152	12.235	12.235	(1.000)	161287	50.0000	
86 1,2-Dichlorobenzene	146	12.270	12.270	(1.003)	330225	50.0000	55
M 87 Xylene (Total)	106				727226	150.000	160
88 1,4-Dichlorobenzene	146	12.793	12.793	(1.046)	287652	50.0000	52
89 n-Butylbenzene	91	12.816	12.816	(1.047)	624103	50.0000	54
90 1,2-Dibromo-3-chloropropane	75	13.907	13.907	(1.137)	20908	50.0000	55
91 1,3,5-Trichlorobenzene	180	15.127	15.127	(2.705)	226807	50.0000	54
92 1,2,4-Trichlorobenzene	180	15.127	15.127	(1.236)	226807	50.0000	55
93 Hexachlorobutadiene	225	15.406	15.406	(1.259)	164825	50.0000	54
94 Naphthalene	128	15.464	15.464	(1.264)	364420	50.0000	71
95 1,2,3-Trichlorobenzene	180	15.824	15.824	(1.293)	199764	50.0000	54

QC Flag Legend

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

Data File: \\avogadro\organicos\W5.1\1306204.B\W504279.D  
Date: 20-JUN-2013 16:29  
Client ID: VSTID050W5  
Sample Info: 5G,VSTID050W5,VSTID050W5  
Column phase: DB-624

Instrument: W5.i  
Operator: ML SRC: ML  
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\V5.I\130620.B\V504270.D  
 Lab Smp Id: BFBV5 Client Smp ID: BFBV5  
 Inj Date : 20-JUN-2013 09:05  
 Operator : WL SRC: WL Inst ID: V5.i  
 Smp Info : 2UL,BFBV5,BFBV5  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\V5.I\130620.B\bfb8260.m  
 Meth Date : 11-Jun-2013 11:02 wluc Quant Type: ISTD  
 Cal Date : Cal File:  
 Als bottle: 2 QC Sample: BFB  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET103

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
VI	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

CONCENTRATIONS							
		ON-COL		FINAL			
RT	EXP RT	REL RT	MASS	RESPONSE	( ug/L)	( ug/L)	TARGET RANGE
=====	=====	=====	=====	=====	=====	=====	=====
1 bfb				CAS #: 460-00-4			
10.628	11.000	( 0.000)	95	47688			0.00- 100.00
10.628	11.000	( 0.000)	50	11446			15.00- 40.00
10.628	11.000	( 0.000)	75	22968			30.00- 60.00
10.628	11.000	( 0.000)	96	3611			5.00- 9.00
10.628	11.000	( 0.000)	173	174			0.00- 2.00
10.628	11.000	( 0.000)	174	44008			50.00- 100.00
10.628	11.000	( 0.000)	175	2999			5.00- 9.00
10.628	11.000	( 0.000)	176	42176			95.00- 101.00
10.628	11.000	( 0.000)	177	2885			5.00- 9.00

Date : 20-JUN-2013 09:05

Client ID: BFBV5

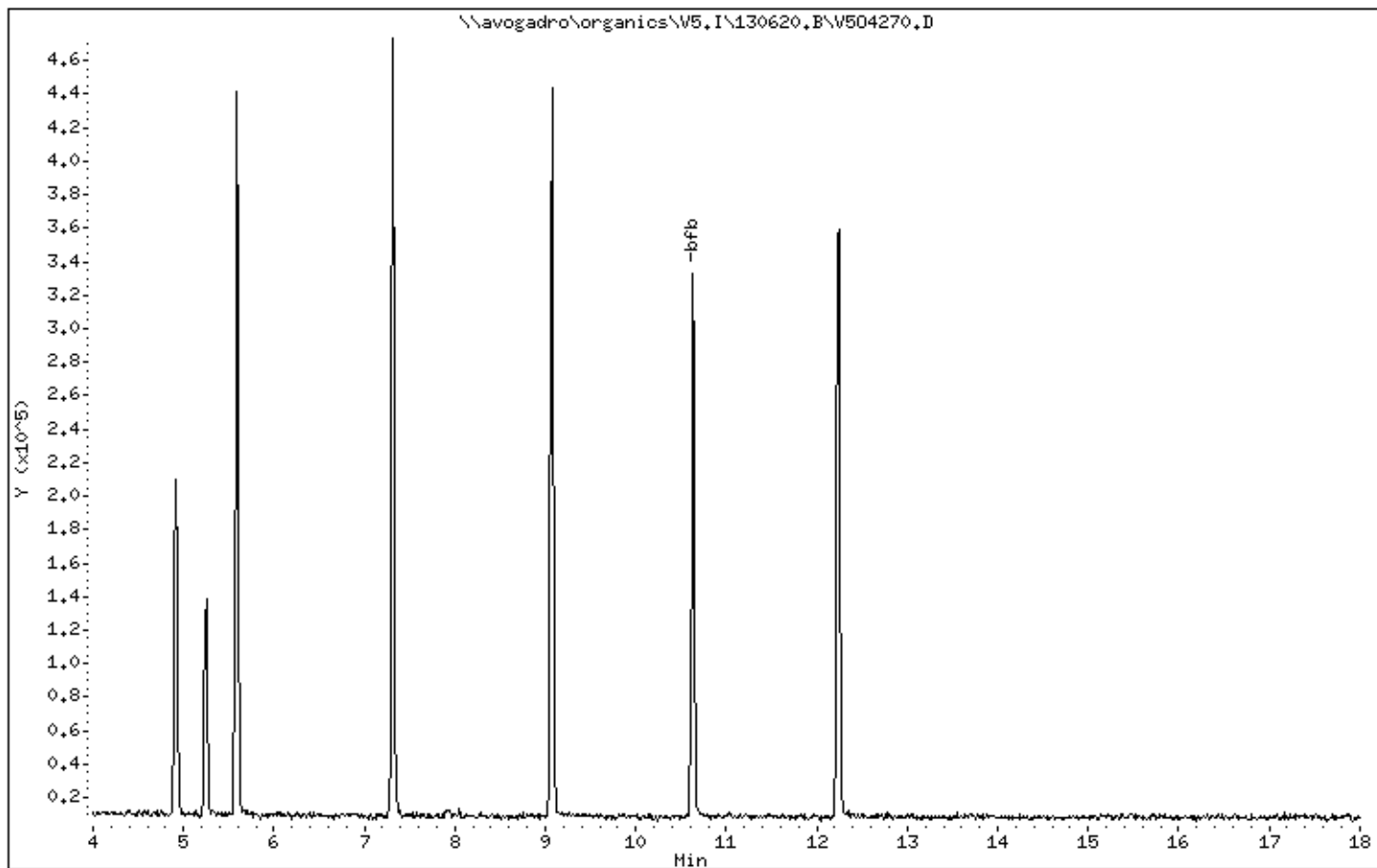
Instrument: V5.i

Sample Info: 2UL,BFBV5,BFBV5

Operator: WL SRC: WL

Column phase: DB-624

Column diameter: 0.25



Date : 20-JUN-2013 09:05

Client ID: BFBV5

Instrument: W5.i

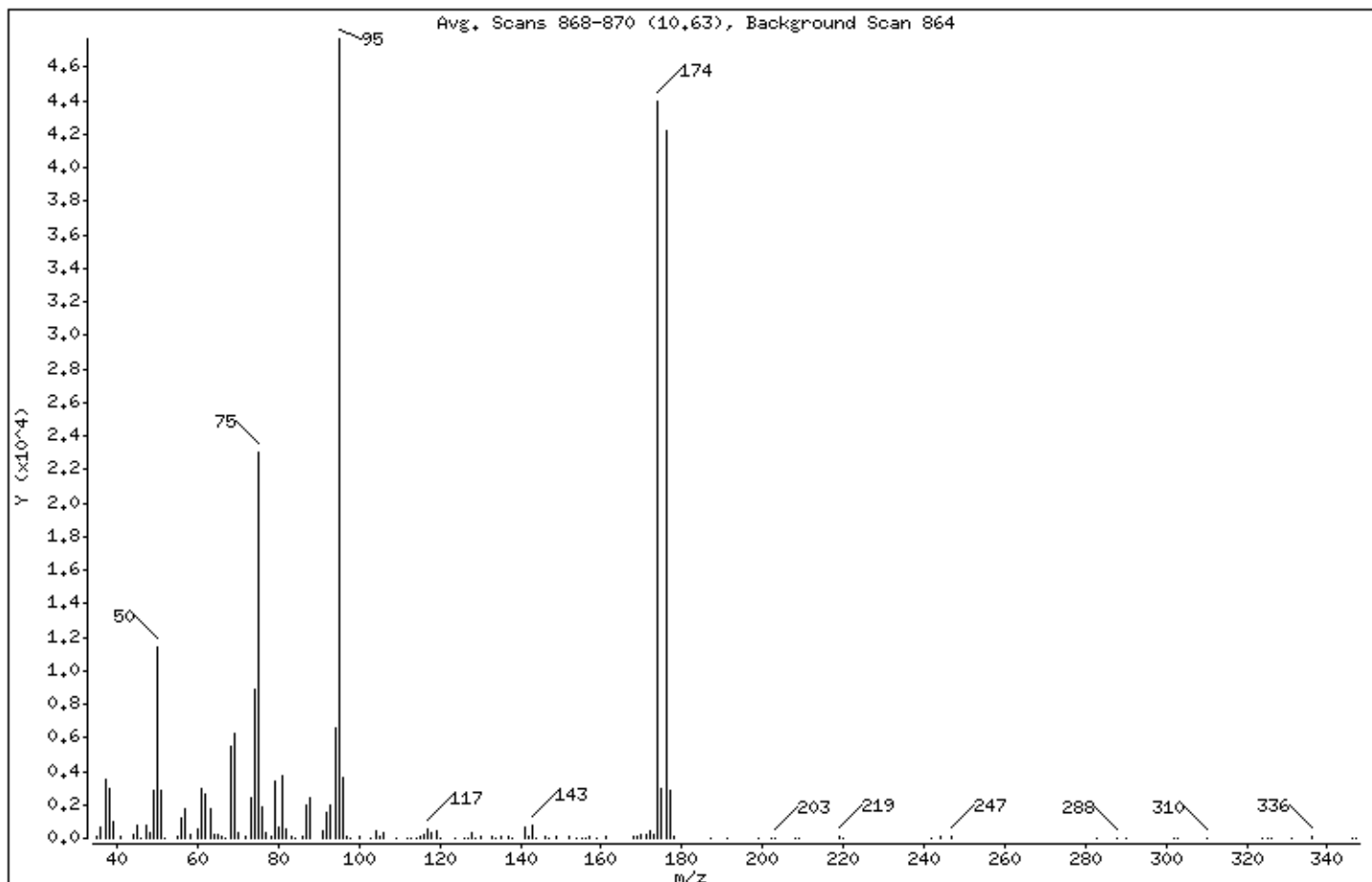
Sample Info: 2UL,BFBV5,BFBV5

Operator: WL SRC: WL

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	24,00
75	30,00 - 60,00% of mass 95	48,16
96	5,00 - 9,00% of mass 95	7,57
173	Less than 2,00% of mass 174	0,36 ( 0,40)
174	50,00 - 100,00% of mass 95	92,28
175	5,00 - 9,00% of mass 174	6,29 ( 6,81)
176	95,00 - 101,00% of mass 174	88,44 ( 95,84)
177	5,00 - 9,00% of mass 176	6,05 ( 6,84)

Date : 20-JUN-2013 09:05

Client ID: BFBV5

Instrument: V5.i

Sample Info: 2UL,BFBV5,BFBV5

Operator: WL SRC: WL

Column phase: DB-624

Column diameter: 0.25

Data File: V504270.D

Spectrum: Avg. Scans 868-870 (10.63), Background Scan 864

Location of Maximum: 95.00

Number of points: 130

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	58	75.00	22968	118.00	313	173.00	174
36.00	603	76.00	1906	119.00	466	174.00	44008
37.00	3558	77.00	315	120.00	48	175.00	2999
38.00	2922	78.00	79	124.00	42	176.00	42176
39.00	990	79.00	3423	126.00	49	177.00	2885
41.00	61	80.00	663	127.00	37	178.00	120
44.00	274	81.00	3764	128.00	278	187.00	33
45.00	720	82.00	565	129.00	39	191.00	45
46.00	15	83.00	153	130.00	144	199.00	40
47.00	725	84.00	36	133.00	72	202.00	37
48.00	378	86.00	162	134.00	36	203.00	50
49.00	2815	87.00	1933	135.00	97	208.00	36
50.00	11446	88.00	2423	137.00	149	209.00	45
51.00	2828	91.00	478	138.00	38	219.00	139
52.00	53	92.00	1583	141.00	667	220.00	49
55.00	133	93.00	1977	142.00	133	242.00	39
56.00	1164	94.00	6605	143.00	755	244.00	56
57.00	1792	95.00	47688	144.00	43	247.00	89
58.00	214	96.00	3611	146.00	114	283.00	40
60.00	578	97.00	94	147.00	37	288.00	42
61.00	2965	98.00	41	149.00	71	290.00	34
62.00	2590	100.00	132	152.00	73	302.00	37
63.00	1763	103.00	37	154.00	45	303.00	35
64.00	268	104.00	455	155.00	36	310.00	38
65.00	183	105.00	156	156.00	37	324.00	54
66.00	81	106.00	327	157.00	57	325.00	40
67.00	46	109.00	48	159.00	54	326.00	36
68.00	5442	112.00	35	161.00	79	331.00	37
69.00	6234	113.00	40	168.00	59	336.00	60
70.00	284	114.00	50	169.00	121	346.00	34
72.00	156	115.00	84	170.00	217	347.00	33
73.00	2387	116.00	228	171.00	197		
74.00	8927	117.00	534	172.00	387		

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\V5.I\130620A.B\V504278.D  
 Lab Smp Id: BFBW5 Client Smp ID: BFBW5  
 Inj Date : 20-JUN-2013 15:11  
 Operator : WL SRC: WL Inst ID: V5.i  
 Smp Info : 2UL,BFBW5,BFBW5  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\V5.I\130620A.B\bfb8260.m  
 Meth Date : 21-Jun-2013 09:35 wluc Quant Type: ISTD  
 Cal Date : Cal File:  
 Als bottle: 2 QC Sample: BFB  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET103

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
VI	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

CONCENTRATIONS							
		ON-COL		FINAL			
RT	EXP RT	REL RT	MASS	RESPONSE	( ug/L)	( ug/L)	TARGET RANGE
=====	=====	=====	=====	=====	=====	=====	=====
1 bfb		CAS #: 460-00-4					
10.634	11.000	( 0.000)	95	41360			0.00- 100.00
10.634	11.000	( 0.000)	50	10361			15.00- 40.00
10.634	11.000	( 0.000)	75	20688			30.00- 60.00
10.634	11.000	( 0.000)	96	2650			5.00- 9.00
10.634	11.000	( 0.000)	173	370			0.00- 2.00
10.634	11.000	( 0.000)	174	38464			50.00- 100.00
10.634	11.000	( 0.000)	175	3170			5.00- 9.00
10.634	11.000	( 0.000)	176	37880			95.00- 101.00
10.634	11.000	( 0.000)	177	2295			5.00- 9.00



Date : 20-JUN-2013 15:11

Client ID: BFBW5

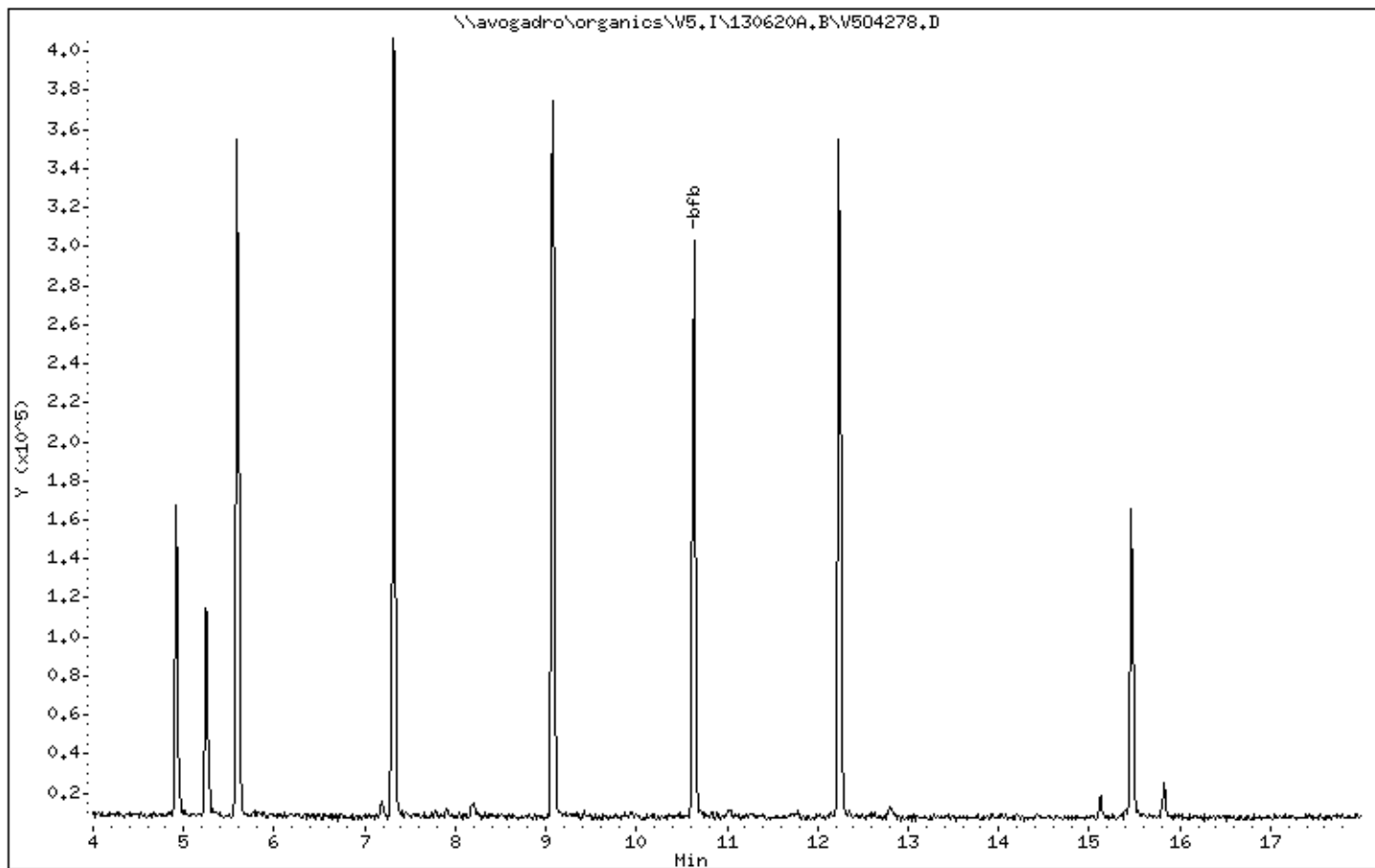
Instrument: V5.i

Sample Info: 2UL,BFBW5,BFBW5

Operator: WL SRC: WL

Column phase: DB-624

Column diameter: 0.25



Date : 20-JUN-2013 15:11

Client ID: BFBW5

Instrument: V5.i

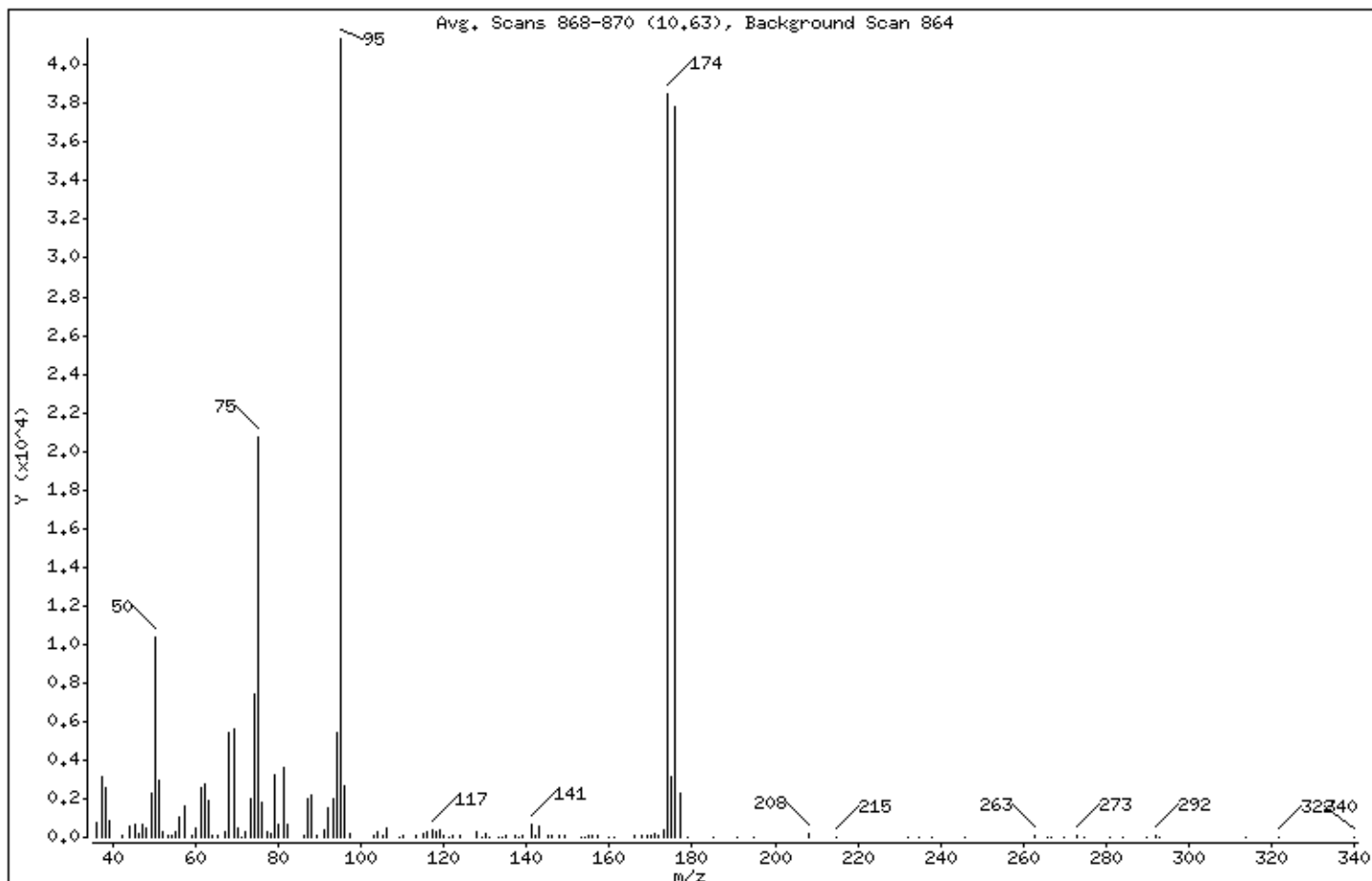
Sample Info: 2UL,BFBW5,BFBW5

Operator: WL SRC: WL

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	25.05
75	30.00 - 60.00% of mass 95	50.02
96	5.00 - 9.00% of mass 95	6.41
173	Less than 2.00% of mass 174	0.89 ( 0.96)
174	50.00 - 100.00% of mass 95	93.00
175	5.00 - 9.00% of mass 174	7.66 ( 8.24)
176	95.00 - 101.00% of mass 174	91.59 ( 98.48)
177	5.00 - 9.00% of mass 176	5.55 ( 6.06)

Date : 20-JUN-2013 15:11

Client ID: BFBW5

Instrument: V5.i

Sample Info: 2UL,BFBW5,BFBW5

Operator: WL SRC: WL

Column phase: DB-624

Column diameter: 0.25

Data File: V504278.D  
Spectrum: Avg. Scans 868-870 (10.63), Background Scan 864  
Location of Maximum: 95.00  
Number of points: 128

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	752	74.00	7415	121.00	42	173.00	370
37.00	3183	75.00	20688	122.00	64	174.00	38464
38.00	2560	76.00	1833	124.00	75	175.00	3170
39.00	847	77.00	308	128.00	276	176.00	37880
42.00	77	78.00	211	129.00	42	177.00	2295
44.00	534	79.00	3213	130.00	226	179.00	35
45.00	649	80.00	708	131.00	46	185.00	33
46.00	157	81.00	3640	133.00	38	191.00	35
47.00	648	82.00	697	134.00	37	195.00	39
48.00	432	86.00	133	135.00	120	208.00	157
49.00	2270	87.00	2016	137.00	83	215.00	44
50.00	10361	88.00	2185	138.00	42	232.00	41
51.00	2922	89.00	78	139.00	84	235.00	38
52.00	269	91.00	343	141.00	691	238.00	35
53.00	71	92.00	1516	142.00	140	246.00	33
54.00	48	93.00	1957	143.00	554	263.00	69
55.00	239	94.00	5433	145.00	55	266.00	36
56.00	1063	95.00	41360	146.00	93	267.00	37
57.00	1622	96.00	2650	148.00	104	270.00	34
59.00	97	97.00	162	149.00	70	273.00	59
60.00	509	103.00	97	153.00	43	275.00	36
61.00	2574	104.00	267	154.00	40	281.00	34
62.00	2745	105.00	128	155.00	123	284.00	36
63.00	1912	106.00	434	156.00	49	290.00	39
64.00	133	109.00	34	157.00	94	292.00	50
65.00	74	110.00	78	160.00	39	293.00	41
67.00	257	113.00	85	161.00	41	314.00	35
68.00	5424	115.00	152	166.00	105	322.00	34
69.00	5634	116.00	304	168.00	79	340.00	34
70.00	480	117.00	400	169.00	126		
71.00	45	118.00	254	170.00	105		
72.00	313	119.00	364	171.00	228		
73.00	1954	120.00	96	172.00	58		

1A - FORM I VOA-1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-72200

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-72200  
 Sample wt/vol: 5.00 (g/mL) G Lab File ID: V504282.D  
 Level: (TRACE/LOW/MED) LOW Date Received: \_\_\_\_\_  
 % Moisture: not dec. 0.0 Date Analyzed: 06/20/2013  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
75-71-8	Dichlorodifluoromethane		5.0	U
74-87-3	Chloromethane		5.0	U
75-01-4	Vinyl chloride		5.0	U
74-83-9	Bromomethane		5.0	U
75-00-3	Chloroethane		5.0	U
75-69-4	Trichlorofluoromethane		5.0	U
75-35-4	1,1-Dichloroethene		5.0	U
67-64-1	Acetone		5.0	U
74-88-4	Iodomethane		5.0	U
75-15-0	Carbon disulfide		5.0	U
75-09-2	Methylene chloride		5.0	U
156-60-5	trans-1,2-Dichloroethene		5.0	U
1634-04-4	Methyl tert-butyl ether		5.0	U
75-34-3	1,1-Dichloroethane		5.0	U
108-05-4	Vinyl acetate		5.0	U
78-93-3	2-Butanone		5.0	U
156-59-2	cis-1,2-Dichloroethene		5.0	U
594-20-7	2,2-Dichloropropane		5.0	U
74-97-5	Bromochloromethane		5.0	U
67-66-3	Chloroform		5.0	U
71-55-6	1,1,1-Trichloroethane		5.0	U
563-58-6	1,1-Dichloropropene		5.0	U
56-23-5	Carbon tetrachloride		5.0	U
107-06-2	1,2-Dichloroethane		5.0	U
71-43-2	Benzene		5.0	U
79-01-6	Trichloroethene		5.0	U
78-87-5	1,2-Dichloropropane		5.0	U
74-95-3	Dibromomethane		5.0	U
75-27-4	Bromodichloromethane		5.0	U
10061-01-5	cis-1,3-Dichloropropene		5.0	U
108-10-1	4-Methyl-2-pentanone		5.0	U
108-88-3	Toluene		5.0	U
10061-02-6	trans-1,3-Dichloropropene		5.0	U
79-00-5	1,1,2-Trichloroethane		5.0	U
142-28-9	1,3-Dichloropropane		5.0	U

1B - FORM I VOA-2  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.  
MB-72200

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-72200  
 Sample wt/vol: 5.00 (g/mL) G Lab File ID: V504282.D  
 Level: (TRACE/LOW/MED) LOW Date Received: \_\_\_\_\_  
 % Moisture: not dec. 0.0 Date Analyzed: 06/20/2013  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
127-18-4	Tetrachloroethene		5.0	U
591-78-6	2-Hexanone		5.0	U
124-48-1	Dibromochloromethane		5.0	U
106-93-4	1,2-Dibromoethane		5.0	U
108-90-7	Chlorobenzene		5.0	U
630-20-6	1,1,1,2-Tetrachloroethane		5.0	U
100-41-4	Ethylbenzene		5.0	U
179601-23-1	m,p-Xylene		5.0	U
95-47-6	o-Xylene		5.0	U
1330-20-7	Xylene (Total)		5.0	U
100-42-5	Styrene		5.0	U
75-25-2	Bromoform		5.0	U
98-82-8	Isopropylbenzene		5.0	U
79-34-5	1,1,2,2-Tetrachloroethane		5.0	U
108-86-1	Bromobenzene		5.0	U
96-18-4	1,2,3-Trichloropropane		5.0	U
103-65-1	n-Propylbenzene		5.0	U
95-49-8	2-Chlorotoluene		5.0	U
108-67-8	1,3,5-Trimethylbenzene		5.0	U
106-43-4	4-Chlorotoluene		5.0	U
98-06-6	tert-Butylbenzene		5.0	U
95-63-6	1,2,4-Trimethylbenzene		5.0	U
135-98-8	sec-Butylbenzene		5.0	U
99-87-6	4-Isopropyltoluene		5.0	U
541-73-1	1,3-Dichlorobenzene		5.0	U
106-46-7	1,4-Dichlorobenzene		5.0	U
104-51-8	n-Butylbenzene		5.0	U
95-50-1	1,2-Dichlorobenzene		5.0	U
96-12-8	1,2-Dibromo-3-chloropropane		5.0	U
120-82-1	1,2,4-Trichlorobenzene		5.0	U
87-68-3	Hexachlorobutadiene		5.0	U
87-61-6	1,2,3-Trichlorobenzene		5.0	U
91-20-3	Naphthalene		5.0	U

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil  
 Data file : \\avogadro\organics\V5.I\130620A.B\V504282.D  
 Lab Smp Id: MB-72200 Client Smp ID: VBLKW5  
 Inj Date : 20-JUN-2013 17:47  
 Operator : WL SRC: LIMS Inst ID: V5.i  
 Smp Info : 5G,MB-72200,VBLKW5,72200  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\V5.I\130620A.B\v58260GH.m  
 Meth Date : 21-Jun-2013 09:35 wluo Quant Type: ISTD  
 Cal Date : 20-JUN-2013 14:45 Cal File: V504275.D  
 Als bottle: 13 QC Sample: BLANK  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 4.14  
 Processing Host: TARGET103

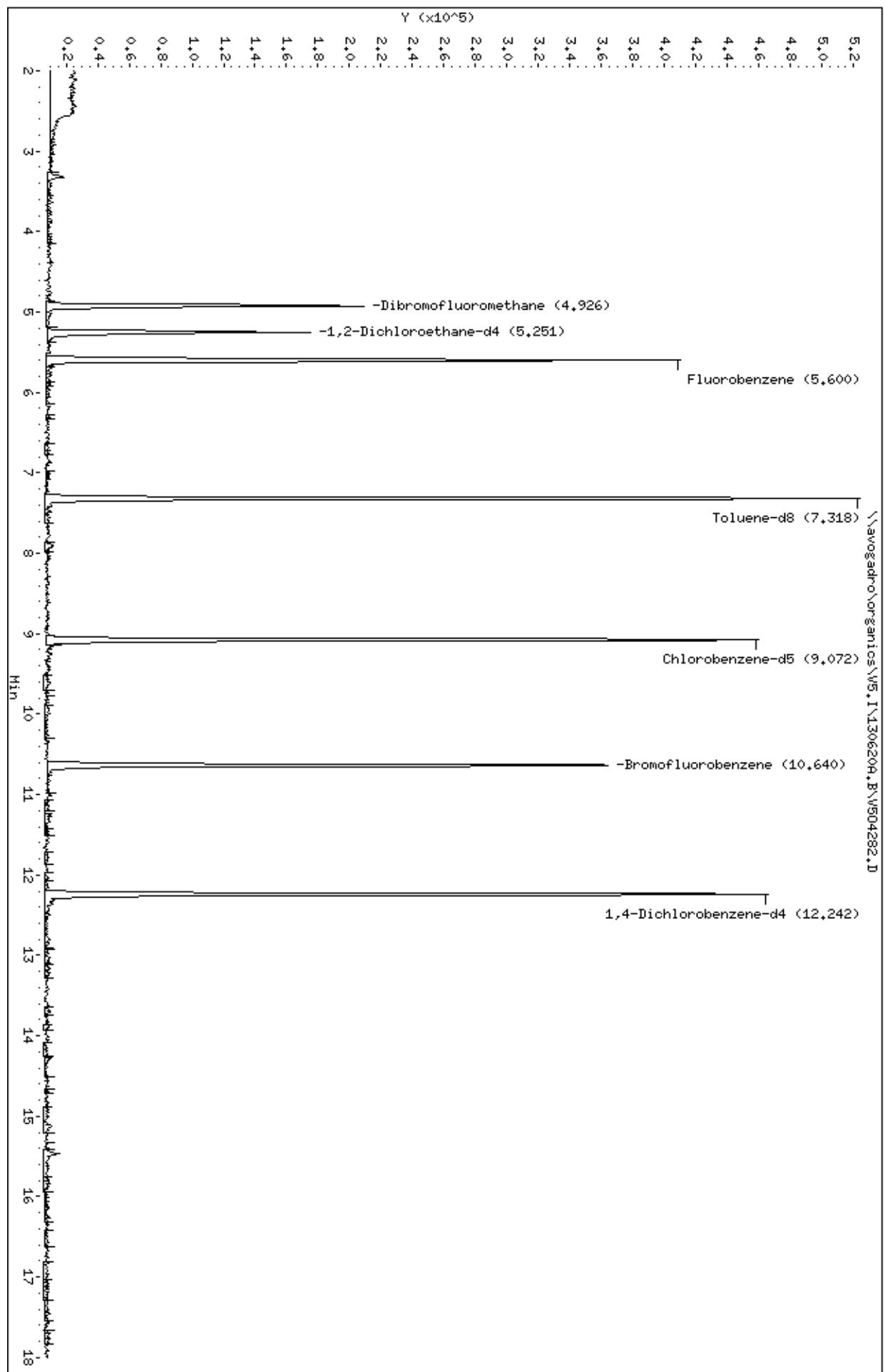
Concentration Formula: Amt \* DF \* Uf \* 5/(Ws \* (100 - M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	CONCENTRATIONS				ON-COLUMN ( ug/L)	FINAL (ug/Kg)
			RT	EXP RT	REL RT	RESPONSE		
\$ 32 Dibromofluoromethane	113		4.926	4.919	(0.880)	128019	47.7847	48
\$ 38 1,2-Dichloroethane-d4	102		5.251	5.256	(0.938)	21623	48.2143	48
* 42 Fluorobenzene	96		5.599	5.593	(1.000)	389139	50.0000	
\$ 52 Toluene-d8	98		7.318	7.323	(0.807)	368488	51.1469	51
* 61 Chlorobenzene-d5	117		9.072	9.076	(1.000)	290933	50.0000	
\$ 72 Bromofluorobenzene	95		10.628	10.633	(1.172)	146712	50.1558	50
* 85 1,4-Dichlorobenzene-d4	152		12.242	12.235	(1.000)	151129	50.0000	(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.



1A - FORM I VOA-1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.  
LCS-72200

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-72200  
 Sample wt/vol: 5.00 (g/mL) G Lab File ID: V504280.D  
 Level: (TRACE/LOW/MED) LOW Date Received: \_\_\_\_\_  
 % Moisture: not dec. 0.0 Date Analyzed: 06/20/2013  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
75-71-8	Dichlorodifluoromethane		54	
74-87-3	Chloromethane		57	
75-01-4	Vinyl chloride		59	
74-83-9	Bromomethane		57	
75-00-3	Chloroethane		56	
75-69-4	Trichlorofluoromethane		55	
75-35-4	1,1-Dichloroethene		54	
67-64-1	Acetone		56	
74-88-4	Iodomethane		55	
75-15-0	Carbon disulfide		56	
75-09-2	Methylene chloride		53	
156-60-5	trans-1,2-Dichloroethene		56	
1634-04-4	Methyl tert-butyl ether		61	
75-34-3	1,1-Dichloroethane		56	
108-05-4	Vinyl acetate		62	
78-93-3	2-Butanone		64	
156-59-2	cis-1,2-Dichloroethene		56	
594-20-7	2,2-Dichloropropane		56	
74-97-5	Bromochloromethane		55	
67-66-3	Chloroform		55	
71-55-6	1,1,1-Trichloroethane		55	
563-58-6	1,1-Dichloropropene		55	
56-23-5	Carbon tetrachloride		56	
107-06-2	1,2-Dichloroethane		56	
71-43-2	Benzene		55	
79-01-6	Trichloroethene		55	
78-87-5	1,2-Dichloropropane		57	
74-95-3	Dibromomethane		57	
75-27-4	Bromodichloromethane		57	
10061-01-5	cis-1,3-Dichloropropene		60	
108-10-1	4-Methyl-2-pentanone		70	
108-88-3	Toluene		55	
10061-02-6	trans-1,3-Dichloropropene		63	
79-00-5	1,1,2-Trichloroethane		56	
142-28-9	1,3-Dichloropropane		58	



1B - FORM I VOA-2  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.  
LCS-72200

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-72200  
 Sample wt/vol: 5.00 (g/mL) G Lab File ID: V504280.D  
 Level: (TRACE/LOW/MED) LOW Date Received: \_\_\_\_\_  
 % Moisture: not dec. 0.0 Date Analyzed: 06/20/2013  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
127-18-4	Tetrachloroethene		55	
591-78-6	2-Hexanone		73	
124-48-1	Dibromochloromethane		59	
106-93-4	1,2-Dibromoethane		59	
108-90-7	Chlorobenzene		54	
630-20-6	1,1,1,2-Tetrachloroethane		57	
100-41-4	Ethylbenzene		56	
179601-23-1	m,p-Xylene		110	
95-47-6	o-Xylene		57	
1330-20-7	Xylene (Total)		170	
100-42-5	Styrene		59	
75-25-2	Bromoform		65	
98-82-8	Isopropylbenzene		58	
79-34-5	1,1,2,2-Tetrachloroethane		62	
108-86-1	Bromobenzene		55	
96-18-4	1,2,3-Trichloropropane		64	
103-65-1	n-Propylbenzene		55	
95-49-8	2-Chlorotoluene		57	
108-67-8	1,3,5-Trimethylbenzene		57	
106-43-4	4-Chlorotoluene		57	
98-06-6	tert-Butylbenzene		57	
95-63-6	1,2,4-Trimethylbenzene		58	
135-98-8	sec-Butylbenzene		56	
99-87-6	4-Isopropyltoluene		56	
541-73-1	1,3-Dichlorobenzene		56	
106-46-7	1,4-Dichlorobenzene		56	
104-51-8	n-Butylbenzene		56	
95-50-1	1,2-Dichlorobenzene		57	
96-12-8	1,2-Dibromo-3-chloropropane		66	
120-82-1	1,2,4-Trichlorobenzene		58	
87-68-3	Hexachlorobutadiene		56	
87-61-6	1,2,3-Trichlorobenzene		60	
91-20-3	Naphthalene		77	

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil  
 Data file : \\avogadro\organics\V5.I\130620A.B\V504280.D  
 Lab Smp Id: LCS-72200 Client Smp ID: VLCSW5  
 Inj Date : 20-JUN-2013 16:55  
 Operator : WL SRC: LIMS Inst ID: V5.i  
 Smp Info : 5G,LCS-72200,VLCSW5,72200  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\V5.I\130620A.B\v58260GH.m  
 Meth Date : 21-Jun-2013 09:35 wluo Quant Type: ISTD  
 Cal Date : 20-JUN-2013 14:45 Cal File: V504275.D  
 Als bottle: 11 Calibration Sample, Level: 3  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 4.14

Concentration Formula: Amt \* DF \* Uf \* 5/(Ws \* (100 - M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	AMOUNTS				CAL-AMT ( ug/L)	ON-COL ( ug/L)
			RT	EXP RT	REL RT	RESPONSE		
1 Dichlorodifluoromethane	85		1.581	1.598 (0.282)		291875	50.0000	54
2 Chloromethane	50		1.709	1.714 (0.305)		317610	50.0000	57
3 Vinyl Chloride	62		1.825	1.830 (0.326)		284038	50.0000	58
4 Bromomethane	94		2.127	2.132 (0.380)		192055	50.0000	57
5 Chloroethane	64		2.208	2.225 (0.394)		137527	50.0000	56
6 Trichlorofluoromethane	101		2.429	2.445 (0.434)		378562	50.0000	55
7 Ethanol	46		2.615	2.620 (0.467)		87387	5000.00	7100(A)
8 Ether	59		2.684	2.689 (0.479)		128076	50.0000	59
9 Acrolein	56		2.789	2.805 (0.498)		170529	250.000	320(A)
10 1,1-Dichloroethene	96		2.882	2.898 (0.515)		170922	50.0000	54
11 1,1,2-Trichloro-1,2,2-trifluo	101		2.928	2.922 (0.523)		190248	50.0000	52
12 Acetone	58		2.928	2.933 (0.523)		53450	50.0000	56
13 Iodomethane	142		3.021	3.026 (0.540)		321696	50.0000	55
14 Carbon Disulfide	76		3.079	3.084 (0.550)		588704	50.0000	56
15 Acetonitrile	40		3.172	3.177 (0.567)		141744	500.000	630(AQ)
16 Methyl Acetate	43		3.219	3.223 (0.575)		141834	50.0000	62
17 Methylene Chloride	84		3.312	3.316 (0.591)		195367	50.0000	53
18 tert-Butanol	59		3.416	3.421 (0.610)		30966	100.000	140
19 Acrylonitrile	53		3.521	3.525 (0.629)		48047	50.0000	63
20 trans-1,2-Dichloroethene	96		3.555	3.560 (0.635)		191074	50.0000	56
21 Methyl tert-butyl ether	73		3.567	3.572 (0.637)		393114	50.0000	60

Compounds	QUANT SIG			AMOUNTS			
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ug/L)	ON-COL ( ug/L)
22 1,1-Dichloroethane	63	3.927	3.932 (0.701)		371357	50.0000	56
23 Vinyl acetate	43	3.985	3.978 (0.712)		545044	50.0000	62
24 Diisopropyl Ether	45	3.997	4.002 (0.714)		703873	50.0000	60
25 Ethyl tert-butyl ether	59	4.334	4.338 (0.774)		514349	50.0000	61
26 cis-1,2-Dichloroethene	96	4.473	4.466 (0.799)		192826	50.0000	56
27 2-Butanone	72	4.473	4.478 (0.799)		55990	50.0000	64
28 2,2-Dichloropropane	77	4.473	4.478 (0.799)		286772	50.0000	56
29 Bromochloromethane	128	4.694	4.698 (0.838)		89646	50.0000	55
30 Tetrahydrofuran	72	4.752	4.745 (0.849)		31913	100.000	140
31 Chloroform	83	4.763	4.768 (0.851)		338279	50.0000	55
\$ 32 Dibromofluoromethane	113	4.926	4.919 (0.880)		133468	50.0000	50
33 1,1,1-Trichloroethane	97	4.961	4.965 (0.886)		285265	50.0000	55
34 Cyclohexane	56	5.019	5.023 (0.896)		319129	50.0000	58
35 1,1-Dichloropropene	110	5.112	5.116 (0.913)		83775	50.0000	55
36 Carbon Tetrachloride	117	5.123	5.128 (0.915)		252011	50.0000	56
M 37 1,2-dichloroethene, (Total)	100				383900	100.000	110
\$ 38 1,2-Dichloroethane-d4	102	5.251	5.256 (0.938)		23155	50.0000	51
39 Benzene	78	5.321	5.325 (0.950)		654634	50.0000	55
40 1,2-Dichloroethane	62	5.321	5.325 (0.950)		223119	50.0000	56
41 tert-Amyl methyl ether	73	5.437	5.442 (0.971)		401944	50.0000	60
* 42 Fluorobenzene	96	5.599	5.593 (1.000)		390519	50.0000	
43 Trichloroethene	130	5.983	5.976 (1.068)		175931	50.0000	55
44 Methylcyclohexane	83	6.192	6.196 (1.106)		273270	50.0000	57
45 1,2-Dichloropropane	63	6.203	6.208 (1.108)		188006	50.0000	57
46 2-Chloroethyl vinyl ether	63	6.203	6.208 (1.108)		188006	50.0000	57(T)
47 Dibromomethane	93	6.331	6.336 (1.131)		113121	50.0000	57
48 1,4-Dioxane	88	6.354	6.359 (1.135)		23745	1000.00	1300
49 Bromodichloromethane	83	6.505	6.498 (1.162)		227573	50.0000	57
50 cis-1,3-Dichloropropene	75	7.005	7.009 (1.251)		266980	50.0000	60
51 4-Methyl-2-pentanone	43	7.179	7.183 (1.282)		606257	50.0000	70
\$ 52 Toluene-d8	98	7.318	7.323 (0.807)		382815	50.0000	51
53 Toluene	91	7.399	7.393 (1.321)		616873	50.0000	55
54 trans-1,3-Dichloropropene	75	7.643	7.648 (1.365)		224697	50.0000	63
55 1,1,2-Trichloroethane	97	7.864	7.869 (1.404)		124528	50.0000	56
56 Tetrachloroethene	164	8.050	8.054 (0.887)		153544	50.0000	55
57 1,3-Dichloropropane	76	8.061	8.066 (0.889)		218928	50.0000	58
58 2-Hexanone	43	8.177	8.171 (0.901)		427832	50.0000	73
59 Dibromochloromethane	129	8.340	8.345 (0.919)		158442	50.0000	59
60 1,2-Dibromoethane	107	8.479	8.484 (0.935)		140341	50.0000	59
* 61 Chlorobenzene-d5	117	9.072	9.076 (1.000)		303682	50.0000	
62 1-Chlorohexane	91	9.095	9.100 (1.003)		227683	50.0000	56(Q)
63 Chlorobenzene	112	9.107	9.111 (1.004)		394684	50.0000	54
64 1,1,1,2-Tetrachloroethane	131	9.223	9.216 (1.017)		156582	50.0000	57
65 Ethylbenzene	106	9.257	9.262 (1.020)		212498	50.0000	56
66 m,p-Xylene	106	9.420	9.413 (1.038)		516552	100.000	110
67 o-Xylene	106	9.931	9.936 (1.095)		259299	50.0000	56
68 Styrene	104	9.954	9.959 (1.097)		422355	50.0000	58
69 Bromoform	173	10.187	10.180 (1.123)		105142	50.0000	65
70 Isopropylbenzene	105	10.442	10.435 (1.151)		710947	50.0000	58
71 trans-1,4-Dichloro-2-butene	75	10.523	10.516 (1.160)		44628	50.0000	72
\$ 72 Bromofluorobenzene	95	10.628	10.633 (1.172)		158418	50.0000	52
73 Bromobenzene	156	10.825	10.830 (0.884)		188411	50.0000	55
74 1,1,2,2-Tetrachloroethane	83	10.837	10.842 (0.885)		185180	50.0000	62
75 1,2,3-Trichloropropane	75	10.895	10.888 (0.890)		172296	50.0000	64

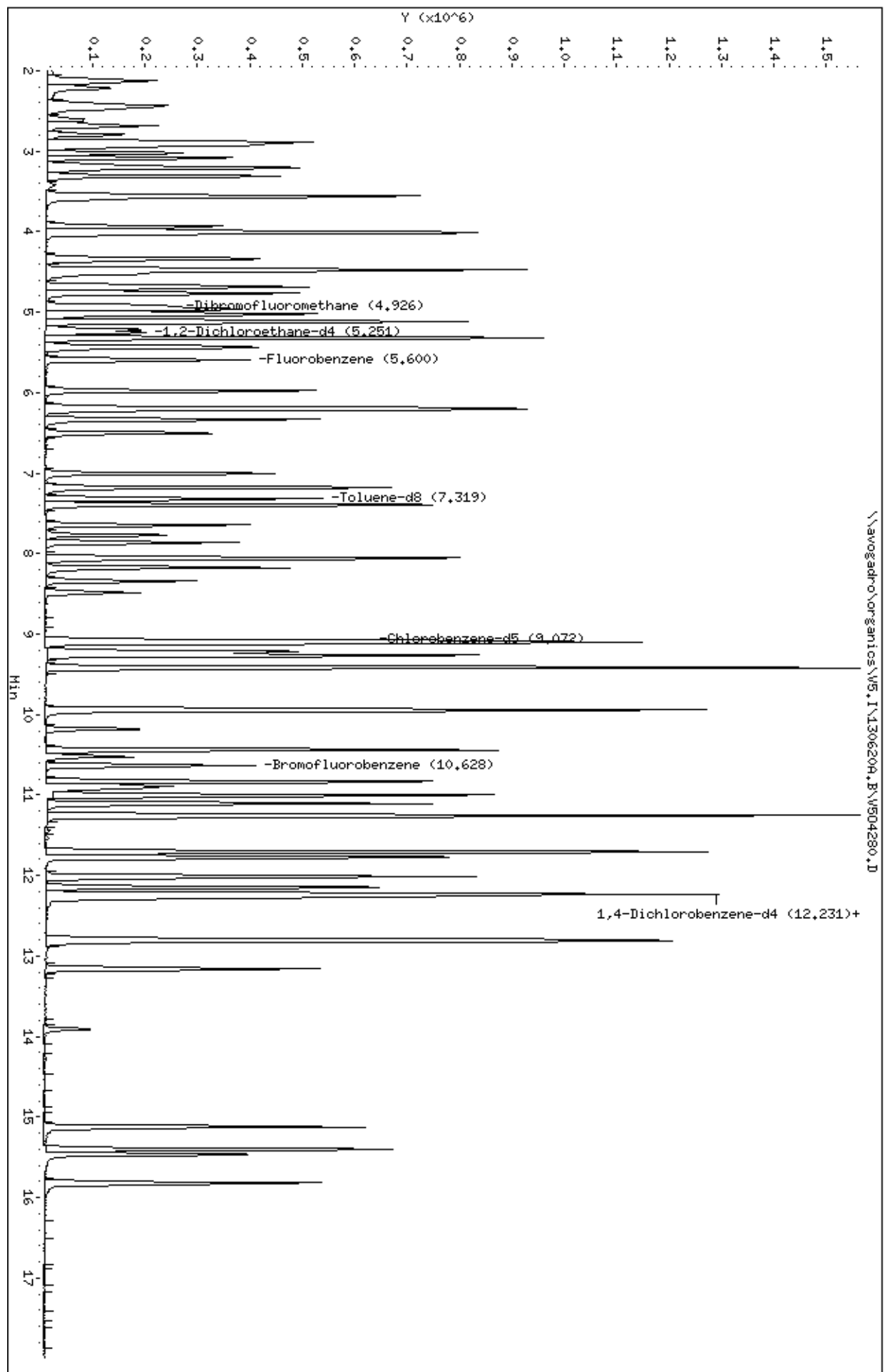
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ug/L)	ON-COL ( ug/L)	
76 n-Propylbenzene	120	10.999	11.004	(0.899)	176994	50.0000	55	
77 2-Chlorotoluene	126	11.104	11.109	(0.907)	167515	50.0000	56	
78 4-Chlorotoluene	126	11.255	11.260	(0.919)	171754	50.0000	57	
79 1,3,5-Trimethylbenzene	105	11.255	11.260	(0.919)	566892	50.0000	57	
80 tert-Butylbenzene	119	11.708	11.701	(0.956)	556401	50.0000	57	
81 1,2,4-Trimethylbenzene	105	11.778	11.771	(0.962)	565663	50.0000	58	
82 sec-Butylbenzene	105	12.021	12.015	(0.982)	775605	50.0000	56	
83 1,3-Dichlorobenzene	146	12.149	12.142	(0.992)	341069	50.0000	56	
84 4-Isopropyltoluene	119	12.230	12.235	(0.999)	595784	50.0000	56	
* 85 1,4-Dichlorobenzene-d4	152	12.242	12.235	(1.000)	163277	50.0000		
86 1,2-Dichlorobenzene	146	12.277	12.270	(1.003)	349651	50.0000	57	
M 87 Xylene (Total)	106				775851	150.000	170	
88 1,4-Dichlorobenzene	146	12.799	12.793	(1.046)	311331	50.0000	56	
89 n-Butylbenzene	91	12.811	12.816	(1.046)	654740	50.0000	56	
90 1,2-Dibromo-3-chloropropane	75	13.903	13.907	(1.136)	25310	50.0000	66	
91 1,3,5-Trichlorobenzene	180	15.122	15.127	(2.701)	243829	50.0000	59	
92 1,2,4-Trichlorobenzene	180	15.122	15.127	(1.235)	243829	50.0000	58	
93 Hexachlorobutadiene	225	15.401	15.406	(1.258)	174730	50.0000	56	
94 Naphthalene	128	15.470	15.464	(1.264)	401241	50.0000	77	
95 1,2,3-Trichlorobenzene	180	15.819	15.824	(1.292)	224444	50.0000	60	

QC Flag Legend

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

Data File: \\avogadro\organicos\W5.1\1306204.B\W504280.D  
Date: 20-JUN-2013 16:55  
Client ID: WLC5M5  
Sample Info: 55,LCS-72200,WLC5M5,72200  
Column phase: DB-624

Instrument: W5.1  
Operator: ML SRC: LIMS  
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division: Volatile Organics Low/Medium Level Soil Extraction Log

Date	Lab ID	Analysis	Initial Wt. (g)	Final Wt. (g)	Sample Wt. (g)	Extraction Volume (mL)	Sample Type	Solvent & Lot# by/Date*	Comments/Time of Encore transfer	Analyst
6/19/13	M0983	8260M	29.02	36.72	7.7	5.0	A	MeOH		JL
	14P		29.14	37.92	8.8					
	15D		29.07	31.12	8.1					
	16D		29.54	37.96	8.4					
	17D		28.83	31.70	8.4					
	18D		29.09	40.54	11.05					
	19D	8260M	29.22	37.19	8.0					JL
6/19/13	M0983	8260M	29.12	40.79	11.7	5.0	A	MeOH		JL
	M0975-01B	8260	MA	MA	5.0		E	DIH2O		WL
	LCF-72200						E			
	LCID-72200		MA	MA	5.0		E			
	M0967-01B		33.44	40.16	6.7		B			
	M0967-02B		32.12	39.74	7.6		B			
	M0975-01A		MA	MA	5.1		E			
6/19/13	M0975-02A	8260	MA	MA	5.0	5.0	E	DIH2O		WL

\*=Date added, if different than Rec. date

Sample Type: A. MeOH Pre-preserved; B. DI H2O/Freeze; C. NaHSO4 Pre-preserved; D. Encore; E. Unpreserved Jars

**Spectrum Analytical, Inc. RI Division: Volatile Organics Low/Medium Level Soil Extraction Log**

Date	Lab ID	Analysis	Initial Wt. (g)	Final Wt. (g)	Sample Wt. (g)	Extraction Volume (mL)	Sample Type	Solvent & Lot# by/Date*	Comments/ Time of Encore transfer	Analyst
6/19/13	M0975-03A	8260	ND	ND	5.1	5.0	E	DIH <sub>2</sub> O		WL
	-05A				5.0					
	-06A				5.1					
	-08A				5.2					
	-09A				5.1					
	-10A				5.0					
	-12A				5.1					
	-13A				5.1					
	-15A				5.0					
	-16A				5.1					
	M0975-17A		ND	ND	5.1		E			
	M0996-06D		32.91	38.65	5.8		B			
	M0955-01A		32.52	33.52	5.0					
	-02C		32.29	44.08	11.8		B			
6/19/13	M0915-03C	8260	32.51	42.97	10.5	5.0	B	DZH <sub>2</sub> O		WL

\*=Date added, if different than Rec. date

Sample Type: A. MeOH Pre-preserved; B. DI H<sub>2</sub>O/Freeze; C. NaHSO<sub>4</sub> Pre-preserved; D. Encore; E. Unpreserved Jars

Logbook ID: 90.0189-12/12

Reviewed By: WL 6/21/13

## *Percent Moisture and Percent Solids Report*

<i>Lab Sample ID</i>	<i>Client Sample ID</i>	<i>Analyzed</i>	<i>Percent Moisture</i>	<i>Percent Solids</i>	<i>Validated</i>
<i>M0975-01A</i>	<i>A-1-3-061313</i>	06/18/2013	20.881	79.119	Yes
<i>M0975-02A</i>	<i>A-2-2-061313</i>	06/18/2013	25.000	75.000	Yes
<i>M0975-03A</i>	<i>A-3-1-061313</i>	06/18/2013	18.921	81.079	Yes
<i>M0975-04A</i>	<i>COMP-A-061313</i>	06/18/2013	21.460	78.540	Yes
<i>M0975-05A</i>	<i>B-1-4-061313</i>	06/18/2013	18.650	81.350	Yes
<i>M0975-06A</i>	<i>B-2-1-061313</i>	06/18/2013	18.229	81.771	Yes
<i>M0975-07A</i>	<i>COMP-B-061313</i>	06/18/2013	20.671	79.329	Yes
<i>M0975-08A</i>	<i>C-1-2-061313</i>	06/18/2013	23.940	76.060	Yes
<i>M0975-09A</i>	<i>C-2-3-061313</i>	06/18/2013	25.535	74.465	Yes
<i>M0975-10A</i>	<i>C-3-2-061313</i>	06/18/2013	23.295	76.705	Yes
<i>M0975-11A</i>	<i>COMP-C-061313</i>	06/18/2013	17.278	82.722	Yes
<i>M0975-12A</i>	<i>D-1-1-061313</i>	06/18/2013	17.479	82.521	Yes
<i>M0975-13A</i>	<i>D-3-4-061313</i>	06/18/2013	19.204	80.796	Yes
<i>M0975-14A</i>	<i>COMP-D-061313</i>	06/18/2013	20.900	79.100	Yes
<i>M0975-15A</i>	<i>E-1-3-061313</i>	06/18/2013	15.889	84.111	Yes
<i>M0975-16A</i>	<i>E-2-4-061313</i>	06/18/2013	24.763	75.237	Yes
<i>M0975-17A</i>	<i>E-3-2-061313</i>	06/18/2013	23.279	76.721	Yes
<i>M0975-18A</i>	<i>COMP-E-061313</i>	06/18/2013	16.103	83.897	Yes





INJECTION LOG

BATCH: 130620A.B Start: 20-JUN-13 15:11  
End: 21-JUN-13 05:31

METHOD: 8260-L-5 ANALYST: W  
ICAL DATE: 6/20/13

Comments: Standards: IS/IS-VW130617A UL  
STD-VW130617B UL  
UL  
UL

Reviewed By: ALB Manual Integration: NA MI Review: W

FILE	TIME	LAB ID	CLIENT ID	PREP	MT	IBN	INTERNAL STDS				SURROGATES				DILN	FLG	COMMENTS	pH
							FBZ	CBZ	DCB	DFM	DCE	TOL	BBP					
V504278	15:11	BFBW5	BFBW5			SL											OK	
V504279	16:29	VSTD050W5	VSTD050W5			SL	100	100	100								OK	
V504280	16:55	LCS-72200	VLCW5	72200	SL		98	100	101	99	103	102	104			1	ER	
V504281	17:21	MB-72200	VBLKV5	72200	SL		97	95	86	99	93	102	98			1	OK	
V504282	17:47	MB-72200	VBLKW5	72200	SL		98	95	94	96	96	102	100			1	not used	
V504283	18:13	M0975-01A	A-1-3-061313	72200	SL		98	99	98	100	100	100	104			1	OK	
V504284	18:39	M0975-02A	A-2-2-061313	72200	SL		98	99	94	101	97	99	98			1	OK	
V504285	19:07	M0975-03A	A-3-1-061313	72200	SL		94	94	89	103	103	100	96			1	OK	
V504286	19:33	M0975-05A	B-1-4-061313	72200	SL		89	87	83	95	92	100	98			1	OK	
V504287	19:58	M0975-06A	B-2-1-061313	72200	SL		93	93	90	102	99	100	99			1	OK	
V504288	20:24	M0975-08A	C-1-2-061313	72200	SL		93	94	91	101	106	100	96			1	OK	
V504289	20:50	M0975-09A	C-2-3-061313	72200	SL		90	92	86	102	106	99	99			1	OK	
V504290	21:16	M0975-10A	C-3-2-061313	72200	SL		74	72	63	95	92	100	92			1	OK	
V504291	21:42	M0975-12A	D-1-1-061313	72200	SL		85	79	74	94	86*	101	93			1	OK	
V504292	22:08	M0975-13A	D-3-4-061313	72200	SL		89	88	85	98	97	101	92			1	OK	
V504293	22:34	M0975-15A	E-1-3-061313	72200	SL		87	88	79	95	96	99	94			1	OK	
V504294	23:00	M0975-16A	E-2-4-061313	72200	SL		89	89	85	99	102	100	96			1	OK	
V504295	23:26	M0975-17A	E-3-2-061313	72200	SL		90	89	87	99	102	100	102			1	OK	
V504296	23:52	M0967-01B	RS-BF-A79-061313	72200	SL		76	70	61	90	77*	105	88			1	OK	
V504297	00:18	M0967-02B	RS-BF-A81-061313	72200	SL		75	70	59	91	86*	102	86			1	OK	
V504298	00:44	M0996-06D	RP-206 (16-20)	72200	SL		71	64	55	89	73*	108	88			1	OK	
V504299	01:10	M0955-01A	WGL-SD-TB01-061	72200	SL		58	55	48*	94	85*	105	88			1	RRX	
V504300	01:36	M0955-08A	WGL-SD-TB02-061	72200	SL		72	71	65	96	93	103	92			1	OK	
V504301	02:02	M0955-02C	WGL-SD-SD01-061	72200	SL		68	67	60	99	98	100	91			1	OK	
V504302	02:28	M0955-04C	WGL-SD-SD06-061	72200	SL		82	80	73	95	96	100	93			1	OK	
V504303	02:54	M0955-05C	WGL-SD-SD07-061	72200	SL		72	70	57	98	104	101	88			1	OK	
V504304	04:12	M0871-07A	F9 week 3	72200	SL		63	60	52	92	79*	102	91			1	OK	
V504305	04:39	M0871-07B	F10 week 3	72200	SL		71	69	66	95	87*	103	94			1	OK	
V504306	05:05	M0875-07BMS		72200	SL		79	76	65	92	86*	104	93			1	RRX	
V504307	05:31	M0875-07BMSD		72200	SL		57	53	40*	88	83*	102	83*			1	RRX	

WVL 6/24/13

R - One or more spike compounds are outside of control limits  
D - Surrogates are diluted

\* - Internal Standard or Surrogate outside of control limits  
E - One or more target compounds are above the calibration range  
T - Sample was injected outside of the 12 hour sequence

**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 R23
6/18/13	M0986	AMEC	01-09, 13-20	W	J	M	R10	
	M0986		10-14			H		
	M0987		01-10, 14-17			M		
6/18/13	M0987	AMEC	11-13	W		H	R10	
	M0959	Watermark	01-08			H	R10	
	M0967	SEVENTH	01-02			F/M	R/F10	
	M0955	Watermark	08-11			M/F	R/F10	
	M0970	RIAL	01-03			A	R3	
	M0975	GZA	01-03, 05-06 08-10, 12, 13, 15-17			US	R8	
	M0976	GZA	01-05	W		US	R8	
	M0991	CHAM	01-08	VB		H	R10	
	M0992	land	01	VB		US	R3	
6/18/13	5010280	RMC	01	VB	J	H	R10	
6/19/13	M0997	RMC	01	VB	J	H	R10	

Logbook ID 90.0191-01/13  
 Reviewed By: W 6/19/13

**"Preservative Used" Key**

- UA = Unpreserved Aqueous
- US = Unpreserved Soil
- H = HCL
- A = Air
- M = MeOH
- F = Freeze
- N = NaHSO<sub>4</sub>
- E = Encore
- T = Trace, HCL



***SPECTRUM ANALYTICAL, INC.***

*Featuring*

***HANIBAL TECHNOLOGY***

**\* Semivolatile Organics \***

## REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : GZA GeoEnvironmental of NY Buffalo

Project: Former Signore Facility

Laboratory Workorder / SDG #: M0975

SW846 8270D, SVOA by GC-MS

### I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

### II. 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.

### III. METHODS

Samples were analyzed following procedures in laboratory test code:  
SW846 8270D

### IV. PREPARATION

Soil Samples were prepared following procedures in laboratory test code:  
SW3550B

### V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: S6  
Instrument Type: GCMS-Semi

Description: HP7890A  
Manufacturer: Agilent  
Model: 7890A/5973

## **VI. ANALYSIS**

### **A. Calibration:**

Calibrations met the method/SOP acceptance criteria.

### **B. Blanks:**

All method blanks were within the acceptance criteria.

### **C. Surrogates:**

Surrogate standard percent recoveries were within the QC limits.

### **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):**

No client-requested MS/MSD analyses were included in this SDG.

### **E. Internal Standards:**

Internal standard peak areas were within the QC limits.

### **F. Dilutions:**

No sample in this SDG required analysis at dilution.

### **G. Samples:**

No other unusual occurrences were noted during sample analysis.

### **H. Manual Integration**

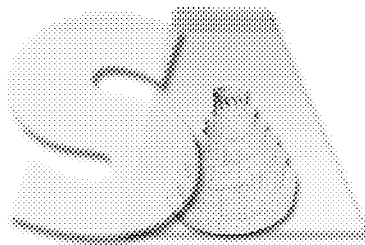
No manual integrations were performed on any sample or standard.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

A handwritten signature in black ink, appearing to be 'J. H. P.', written over a horizontal line.

Signed: \_\_\_\_\_

Date: \_\_\_\_\_ 7/1/2013 \_\_\_\_\_

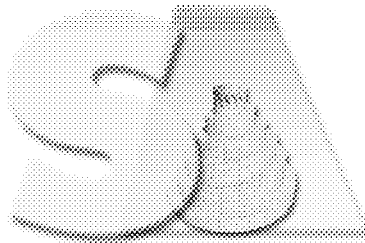


**SPECTRUM ANALYTICAL, INC.**  
*Featuring*  
**HANIBAL TECHNOLOGY**

### **Data Flag/Qualifiers:**

- U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).
- J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
  - estimated concentration for Tentatively Identified Compound
- B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a “trace” concentration below the reporting limit and equal to or above the detection limit.
- D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis
- E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.
- P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.
- A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.
- N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.
- \* For Inorganics analysis the \* flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.





**SPECTRUM ANALYTICAL, INC.**  
*Featuring*  
**HANIBAL TECHNOLOGY**

## **Sample ID Suffixes**

- DL** Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution
- RE** Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.
- RA** Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.
- RX** Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.
- MS** Matrix Spike.
- MSD** Matrix Spike Duplicate
- DUP** Duplicate analysis
- SD** Serial Dilution
- PS** Post-digestion or Post-distillation spike. For metals or inorganic analyses

## SOIL SEMIVOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM

Case No.: M0975

Mod. Ref No.:

SDG No.: SM0975

Level: (LOW/MED) LOW

	CLIENT SAMPLE NO.	SDMC1 (NBZ) #	SDMC2 (FBP) #	SDMC3 (TPH) #	SDMC4 (PHL) #	SDMC5 (2FP) #	SDMC6 (TBP) #			TOT OUT
01	COMP-A-06131 3	69	61	77	76	80	73			0
02	COMP-B-06131 3	71	63	79	85	94	79			0
03	COMP-C-06131 3	74	68	81	80	92	76			0
04	COMP-D-06131 3	76	65	83	80	88	81			0
05	COMP-E-06131 3	67	61	75	74	81	74			0
06	LCS-72397	83	77	79	94	97	71			0
07	MB-72397	86	84	90	82	72	52			0

QC LIMITS

SDMC1	(NBZ) = Nitrobenzene-d5	(35-100)
SDMC2	(FBP) = 2-Fluorobiphenyl	(45-105)
SDMC3	(TPH) = Terphenyl-d14	(30-125)
SDMC4	(PHL) = Phenol-d5	(40-100)
SDMC5	(2FP) = 2-Fluorophenol	(35-105)
SDMC6	(TBP) = 2,4,6-Tribromophenol	(35-125)

# Column to be used to flag recovery values

\* Values outside of contract required QC limits

D DMC diluted out

3 - FORM III  
SOIL LABORATORY CONTROL  
SAMPLE RECOVERY

CLIENT SAMPLE NO.

LCS-72397

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Lab Sample ID: LCS-72397 LCS Lot No.: A092773  
 Date Extracted: 06/24/2013 Date Analyzed (1): 06/26/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Phenol	3333.0000	0.0000	3057.3205	92		40 - 100
Bis(2-chloroethyl)ether	3333.0000	0.0000	2611.7285	78		40 - 105
2-Chlorophenol	3333.0000	0.0000	3375.2013	101		45 - 105
1,3-Dichlorobenzene	3333.0000	0.0000	2672.1834	80		40 - 100
1,4-Dichlorobenzene	3333.0000	0.0000	2694.5711	81		35 - 105
1,2-Dichlorobenzene	3333.0000	0.0000	2817.7905	85		45 - 95
2-Methylphenol	3333.0000	0.0000	3059.7366	92		40 - 105
2,2'-oxybis(1-Chloropropan	3333.0000	0.0000	2805.0636	84		20 - 115
4-Methylphenol	3333.0000	0.0000	2774.1833	83		40 - 105
N-Nitroso-di-n-propylamine	3333.0000	0.0000	2627.2657	79		40 - 115
Hexachloroethane	3333.0000	0.0000	2536.1600	76		35 - 110
Nitrobenzene	3333.0000	0.0000	2764.4139	83		40 - 115
Isophorone	3333.0000	0.0000	2771.1442	83		45 - 110
2-Nitrophenol	3333.0000	0.0000	2795.8169	84		40 - 110
2,4-Dimethylphenol	3333.0000	0.0000	3125.5362	94		30 - 105
2,4-Dichlorophenol	3333.0000	0.0000	3320.4687	100		45 - 110
1,2,4-Trichlorobenzene	3333.0000	0.0000	2721.0996	82		45 - 110
Naphthalene	3333.0000	0.0000	2737.7708	82		40 - 105
4-Chloroaniline	3333.0000	0.0000	2278.2318	68		10 - 100
Bis(2-chloroethoxy)methane	3333.0000	0.0000	2859.7807	86		45 - 110
Hexachlorobutadiene	3333.0000	0.0000	2808.7006	84		40 - 115
4-Chloro-3-methylphenol	3333.0000	0.0000	3073.1299	92		45 - 115
2-Methylnaphthalene	3333.0000	0.0000	2698.6062	81		45 - 105
Hexachlorocyclopentadiene	3333.0000	0.0000	2473.0729	74		8 - 148
2,4,6-Trichlorophenol	3333.0000	0.0000	2824.2674	85		45 - 110
2,4,5-Trichlorophenol	3333.0000	0.0000	2855.3304	86		50 - 110
2-Chloronaphthalene	3333.0000	0.0000	2645.0848	79		45 - 105
2-Nitroaniline	3333.0000	0.0000	2757.7039	83		45 - 120
Dimethylphthalate	3333.0000	0.0000	2814.2011	84		50 - 110
Acenaphthylene	3333.0000	0.0000	2674.5822	80		45 - 105
2,6-Dinitrotoluene	3333.0000	0.0000	2782.1864	83		50 - 110
3-Nitroaniline	3333.0000	0.0000	2551.1497	77		25 - 110
Acenaphthene	3333.0000	0.0000	2633.1056	79		45 - 110
2,4-Dinitrophenol	3333.0000	0.0000	3231.0829	97		15 - 130
4-Nitrophenol	3333.0000	0.0000	3029.6482	91		15 - 140
Dibenzofuran	3333.0000	0.0000	2774.8187	83		50 - 105
2,4-Dinitrotoluene	3333.0000	0.0000	2865.4190	86		50 - 115
Diethylphthalate	3333.0000	0.0000	2802.3053	84		50 - 115
4-Chlorophenyl-phenylether	3333.0000	0.0000	2639.5202	79		45 - 110
Fluorene	3333.0000	0.0000	2831.4714	85		50 - 110
4-Nitroaniline	3333.0000	0.0000	2788.9275	84		35 - 115
4,6-Dinitro-2-methylphenol	3333.0000	0.0000	2620.0921	79		30 - 135
N-Nitrosodiphenylamine	3333.0000	0.0000	2494.1217	75		50 - 115
4-Bromophenyl-phenylether	3333.0000	0.0000	2316.6363	70		45 - 115

3 - FORM III  
SOIL LABORATORY CONTROL  
SAMPLE RECOVERY

CLIENT SAMPLE NO.

LCS-72397

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Lab Sample ID: LCS-72397 LCS Lot No.: A092773  
 Date Extracted: 06/24/2013 Date Analyzed (1): 06/26/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Hexachlorobenzene	3333.0000	0.0000	2407.4795	72		45 - 120
Pentachlorophenol	3333.0000	0.0000	2397.3127	72		25 - 120
Phenanthrene	3333.0000	0.0000	2647.8143	79		50 - 110
Anthracene	3333.0000	0.0000	2632.0092	79		55 - 105
Carbazole	3333.0000	0.0000	2885.6683	87		45 - 115
Di-n-butylphthalate	3333.0000	0.0000	2794.3948	84		55 - 110
Fluoranthene	3333.0000	0.0000	2895.2918	87		55 - 115
Pyrene	3333.0000	0.0000	2527.6775	76		45 - 125
Butylbenzylphthalate	3333.0000	0.0000	2425.1495	73		50 - 125
3,3'-Dichlorobenzidine	3333.0000	0.0000	2163.4303	65		10 - 130
Benzo(a)anthracene	3333.0000	0.0000	2386.0298	72		50 - 110
Chrysene	3333.0000	0.0000	2619.7129	79		55 - 110
Bis(2-ethylhexyl)phthalate	3333.0000	0.0000	2369.0080	71		45 - 125
Di-n-octylphthalate	3333.0000	0.0000	2622.8938	79		40 - 130
Benzo(b)fluoranthene	3333.0000	0.0000	2593.3932	78		45 - 115
Benzo(k)fluoranthene	3333.0000	0.0000	2839.6978	85		45 - 125
Benzo(a)pyrene	3333.0000	0.0000	2642.8698	79		50 - 110
Indeno(1,2,3-cd)pyrene	3333.0000	0.0000	2850.5273	86		40 - 120
Dibenzo(a,h)anthracene	3333.0000	0.0000	2478.2654	74		40 - 125
Benzo(g,h,i)perylene	3333.0000	0.0000	2598.1986	78		40 - 125

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

\* Values outside of QC limits

Spike Recovery: 0 out of 64 outside limits

COMMENTS: \_\_\_\_\_  
 \_\_\_\_\_

4C - FORM IV SV  
SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

MB-72397

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Lab File ID: S6B4744.D Lab Sample ID: MB-72397  
 Instrument ID: S6 Date Extracted: 06/24/2013  
 Matrix: (SOIL/SED/WATER) SOIL Date Analyzed: 06/28/2013  
 Level: (LOW/MED) LOW Time Analyzed: 13:12  
 Extraction: (Type) SONC GPC Cleanup: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	COMP-A-061313	M0975-04A	S6B4637.D	06/25/2013
02	COMP-B-061313	M0975-07A	S6B4638.D	06/25/2013
03	COMP-C-061313	M0975-11A	S6B4639.D	06/25/2013
04	COMP-D-061313	M0975-14A	S6B4640.D	06/25/2013
05	COMP-E-061313	M0975-18A	S6B4641.D	06/25/2013
06	LCS-72397	LCS-72397	S6B4676.D	06/26/2013

COMMENTS :

\_\_\_\_\_  
 \_\_\_\_\_

5B - FORM V SV  
SEMIVOLATILE ORGANIC INSTRUMENT  
PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

CLIENT SAMPLE NO.

DFTPP6w

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
Lab File ID: S6B4570D.D DFTPP Injection Date: 06/21/2013  
Instrument ID: S6 DFTPP Injection Time: 14:16

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	34.8
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	45.7
70	Less than 2.0% of mass 69	0.5 (1.1)1
127	10.0 - 80.0% of mass 198	40.5
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	7.9
275	10.0 - 60.0% of mass 198	31.5
365	Greater than 1.0% of mass 198	5.0
441	Present, but less than mass 443	6.7
442	50.0 - 100% of mass 198	82.0
443	15.0 - 24.0% of mass 442	17.1 (20.8)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	SSTD0256W	SSTD0256W	S6B4571A.D	06/21/2013	15:17
02	SSTD0056W	SSTD0056W	S6B4572.D	06/21/2013	15:48
03	SSTD0606W	SSTD0606W	S6B4573.D	06/21/2013	16:13
04	SSTD0106W	SSTD0106W	S6B4574.D	06/21/2013	16:38
05	SSTD0406W	SSTD0406W	S6B4575.D	06/21/2013	17:03
06	SSTD0806W	SSTD0806W	S6B4576.D	06/21/2013	17:28

5B - FORM V SV  
SEMIVOLATILE ORGANIC INSTRUMENT  
PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

CLIENT SAMPLE NO.

DFTPP6Y

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
Lab File ID: S6B4630C.D DFTPP Injection Date: 06/25/2013  
Instrument ID: S6 DFTPP Injection Time: 15:12

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	34.5
68	Less than 2.0% of mass 69	0.5 (1.1)1
69	Mass 69 relative abundance	44.7
70	Less than 2.0% of mass 69	0.2 (0.4)1
127	10.0 - 80.0% of mass 198	40.5
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	8.5
275	10.0 - 60.0% of mass 198	31.4
365	Greater than 1.0% of mass 198	4.5
441	Present, but less than mass 443	9.4
442	50.0 - 100% of mass 198	88.5
443	15.0 - 24.0% of mass 442	18.4 (20.8)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	SSTD0256Y	SSTD0256Y	S6B4631D.D	06/25/2013	15:53
02	COMP-A-06131 3	M0975-04A	S6B4637.D	06/25/2013	18:41
03	COMP-B-06131 3	M0975-07A	S6B4638.D	06/25/2013	19:06
04	COMP-C-06131 3	M0975-11A	S6B4639.D	06/25/2013	19:32
05	COMP-D-06131 3	M0975-14A	S6B4640.D	06/25/2013	19:57
06	COMP-E-06131 3	M0975-18A	S6B4641.D	06/25/2013	20:22

5B - FORM V SV  
SEMIVOLATILE ORGANIC INSTRUMENT  
PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

CLIENT SAMPLE NO.

DFTPP6Z

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
Lab File ID: S6B4660F.D DFTPP Injection Date: 06/26/2013  
Instrument ID: S6 DFTPP Injection Time: 11:25

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	40.5
68	Less than 2.0% of mass 69	1.0 (1.9)1
69	Mass 69 relative abundance	53.1
70	Less than 2.0% of mass 69	0.8 (1.5)1
127	10.0 - 80.0% of mass 198	43.7
197	Less than 2.0% of mass 198	0.5
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.4
275	10.0 - 60.0% of mass 198	34.3
365	Greater than 1.0% of mass 198	5.8
441	Present, but less than mass 443	7.8
442	50.0 - 100% of mass 198	90.9
443	15.0 - 24.0% of mass 442	20.4 (22.4)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	SSTD0256Z	SSTD0256Z	S6B4661.D	06/26/2013	11:45
02	SSTD0806Z	SSTD0806Z	S6B4662.D	06/26/2013	13:00
03	SSTD0056Z	SSTD0056Z	S6B4663.D	06/26/2013	13:25
04	SSTD0606Z	SSTD0606Z	S6B4664.D	06/26/2013	13:51
05	SSTD0106Z	SSTD0106Z	S6B4665.D	06/26/2013	14:17
06	SSTD0406Z	SSTD0406Z	S6B4666.D	06/26/2013	14:43



5B - FORM V SV  
SEMIVOLATILE ORGANIC INSTRUMENT  
PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPINE (DFTPP)

CLIENT SAMPLE NO.

DFTPP6A

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
Lab File ID: S6B4670I.D DFTPP Injection Date: 06/26/2013  
Instrument ID: S6 DFTPP Injection Time: 17:40

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	37.4
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	48.9
70	Less than 2.0% of mass 69	0.6 (1.2)1
127	10.0 - 80.0% of mass 198	42.1
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	7.4
275	10.0 - 60.0% of mass 198	33.2
365	Greater than 1.0% of mass 198	5.1
441	Present, but less than mass 443	17.2
442	50.0 - 100% of mass 198	94.9
443	15.0 - 24.0% of mass 442	18.3 (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	SSTD0256A	SSTD0256A	S6B4671A.D	06/26/2013	18:26
02	LCS-72397	LCS-72397	S6B4676.D	06/26/2013	20:59

5B - FORM V SV  
SEMIVOLATILE ORGANIC INSTRUMENT  
PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

CLIENT SAMPLE NO.

DFTPP6B

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
Lab File ID: S6B4710I.D DFTPP Injection Date: 06/27/2013  
Instrument ID: S6 DFTPP Injection Time: 11:51

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	44.9
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	52.4
70	Less than 2.0% of mass 69	0.4 (0.8)1
127	10.0 - 80.0% of mass 198	51.7
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	7.5
275	10.0 - 60.0% of mass 198	29.2
365	Greater than 1.0% of mass 198	5.1
441	Present, but less than mass 443	13.8
442	50.0 - 100% of mass 198	95.5
443	15.0 - 24.0% of mass 442	22.2 (23.2)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	SSTD0256B	SSTD0256B	S6B4711B.D	06/27/2013	14:04
02	SSTD0806B	SSTD0806B	S6B4712.D	06/27/2013	14:29
03	SSTD0056B	SSTD0056B	S6B4713.D	06/27/2013	14:55
04	SSTD0606B	SSTD0606B	S6B4714.D	06/27/2013	15:20
05	SSTD0106B	SSTD0106B	S6B4715.D	06/27/2013	15:45
06	SSTD0406B	SSTD0406B	S6B4716.D	06/27/2013	16:11

5B - FORM V SV  
SEMIVOLATILE ORGANIC INSTRUMENT  
PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPINE (DFTPP)

CLIENT SAMPLE NO.

DFTPP6C

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
Lab File ID: S6B4740D.D DFTPP Injection Date: 06/28/2013  
Instrument ID: S6 DFTPP Injection Time: 9:58

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	51.0
68	Less than 2.0% of mass 69	0.2 (0.3)1
69	Mass 69 relative abundance	57.6
70	Less than 2.0% of mass 69	0.3 (0.6)1
127	10.0 - 80.0% of mass 198	52.2
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.8
275	10.0 - 60.0% of mass 198	32.9
365	Greater than 1.0% of mass 198	4.8
441	Present, but less than mass 443	17.7
442	50.0 - 100% of mass 198	93.7
443	15.0 - 24.0% of mass 442	19.2 (20.5)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	SSTD0256C	SSTD0256C	S6B4741.D	06/28/2013	10:20
02	MB-72397	MB-72397	S6B4744.D	06/28/2013	13:12

## SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 06/21/2013 06/21/2013  
 EPA Sample No.(SSTD020##) SSTD0256Y Date Analyzed: 06/25/2013  
 Lab File ID (Standard): S6B4631D.D Time Analyzed: 15:53  
 Instrument ID: S6

		IS1 (DCB)		IS2 (NPT)		IS3 (ANT)						
		AREA	#	RT	#	AREA	#	RT	#			
	12 HOUR STD	190441		5.333		946542		6.396		903234		7.865
	UPPER LIMIT	380882		5.833		1893084		6.896		1806468		8.365
	LOWER LIMIT	95221		4.833		473271		5.896		451617		7.365
	SAMPLE NO.											
01	COMP-A-06131 3	183722		5.333		763074		6.396		875796		7.859
02	COMP-B-06131 3	174255		5.333		768552		6.396		932153		7.859
03	COMP-C-06131 3	190222		5.333		807792		6.391		923287		7.854
04	COMP-D-06131 3	189080		5.333		814746		6.391		974828		7.859
05	COMP-E-06131 3	186641		5.333		811903		6.390		889898		7.859

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.

## SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 EPA Sample No. (SSTD020##) SSTD0256Y Date Analyzed: 06/25/2013  
 Lab File ID (Standard): S6B4631D.D Time Analyzed: 15:53  
 Instrument ID: S6 GC Column: Rxi-5sil MS ID: 0.25 (mm)

	IS4 (PHN)		IS5 (CRY)		IS6 (PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	2415889	9.129	3841965	11.737	3901521	14.223
UPPER LIMIT	4831778	9.629	7683930	12.237	7803042	14.723
LOWER LIMIT	1207945	8.629	1920983	11.237	1950761	13.723
SAMPLE NO.						
01 COMP-A-06131 3	2528054	9.105	4138663	11.590	4396069	14.046
02 COMP-B-06131 3	2784925	9.105	4640846	11.573	4751187	14.029
03 COMP-C-06131 3	2675807	9.099	4320841	11.573	4611351	14.029
04 COMP-D-06131 3	2756895	9.105	4539412	11.573	4726762	14.023
05 COMP-E-06131 3	2547659	9.099	4218771	11.573	4398624	14.023

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.

## SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 06/26/2013 06/26/2013  
 EPA Sample No.(SSTD020##) SSTD0256A Date Analyzed: 06/26/2013  
 Lab File ID (Standard): S6B4671A.D Time Analyzed: 18:26  
 Instrument ID: S6

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)							
	AREA	#	RT	#	AREA	#	RT	#				
12 HOUR STD	62236		5.308		306250		6.366		301166		7.835	
UPPER LIMIT	124472		5.808		612500		6.866		602332		8.335	
LOWER LIMIT	31118		4.808		153125		5.866		150583		7.335	
SAMPLE NO.												
01 LCS-72397	36805		5.308		167522		6.366		192755		7.835	

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.

## SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 EPA Sample No. (SSTD020##) SSTD0256A Date Analyzed: 06/26/2013  
 Lab File ID (Standard): S6B4671A.D Time Analyzed: 18:26  
 Instrument ID: S6 GC Column: Rxi-5sil MS ID: 0.25 (mm)

	IS4 (PHN)		IS5 (CRY)		IS6 (PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	866802	9.08	1504579	11.548	1474612	13.975
UPPER LIMIT	1733604	9.58	3009158	12.048	2949224	14.475
LOWER LIMIT	433401	8.58	752290	11.048	737306	13.475
SAMPLE NO.						
01 LCS-72397	603340	9.074	1176157	11.536	1195024	13.957

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.

## SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 06/27/2013 06/27/2013  
 EPA Sample No.(SSTD020##) SSTD0256C Date Analyzed: 06/28/2013  
 Lab File ID (Standard): S6B4741.D Time Analyzed: 10:20  
 Instrument ID: S6

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)						
	AREA	#	RT	#	AREA	#	RT	#			
12 HOUR STD	44175		5.238		190576		6.295		135160		7.764
UPPER LIMIT	88350		5.738		381152		6.795		270320		8.264
LOWER LIMIT	22088		4.738		95288		5.795		67580		7.264
SAMPLE NO.											
01 MB-72397	35647		5.238		150715		6.295		119955		7.758

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.



## SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 EPA Sample No. (SSTD020##) SSTD0256C Date Analyzed: 06/28/2013  
 Lab File ID (Standard): S6B4741.D Time Analyzed: 10:20  
 Instrument ID: S6 GC Column: Rxi-5sil MS ID: 0.25 (mm)

	IS4 (PHN)		IS5 (CRY)		IS6 (PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	310573	9.004	433229	11.466	457759	13.816
UPPER LIMIT	621146	9.504	866458	11.966	915518	14.316
LOWER LIMIT	155287	8.504	216615	10.966	228880	13.316
SAMPLE NO.						
01 MB-72397	297230	9.004	469364	11.484	529888	13.834

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = 200% of internal standard area

AREA LOWER LIMIT = 50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

1D - FORM I SV-1  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.  
COMP-A-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-04A  
 Sample wt/vol: 15.1 (g/mL) G Lab File ID: S6B4637.D  
 Level: (LOW/MED) LOW Extraction: (Type) SONC  
 % Moisture: 21 Decanted: (Y/N) N Date Received: 06/14/2013  
 Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/24/2013  
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/25/2013  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
108-95-2	Phenol	420	U	
111-44-4	Bis(2-chloroethyl)ether	420	U	
95-57-8	2-Chlorophenol	420	U	
541-73-1	1,3-Dichlorobenzene	420	U	
106-46-7	1,4-Dichlorobenzene	420	U	
95-50-1	1,2-Dichlorobenzene	420	U	
95-48-7	2-Methylphenol	420	U	
108-60-1	2,2'-oxybis(1-Chloropropane)	420	U	
106-44-5	4-Methylphenol	420	U	
621-64-7	N-Nitroso-di-n-propylamine	420	U	
67-72-1	Hexachloroethane	420	U	
98-95-3	Nitrobenzene	420	U	
78-59-1	Isophorone	420	U	
88-75-5	2-Nitrophenol	420	U	
105-67-9	2,4-Dimethylphenol	420	U	
120-83-2	2,4-Dichlorophenol	420	U	
120-82-1	1,2,4-Trichlorobenzene	420	U	
91-20-3	Naphthalene	420	U	
106-47-8	4-Chloroaniline	420	U	
111-91-1	Bis(2-chloroethoxy)methane	420	U	
87-68-3	Hexachlorobutadiene	420	U	
59-50-7	4-Chloro-3-methylphenol	420	U	
91-57-6	2-Methylnaphthalene	420	U	
77-47-4	Hexachlorocyclopentadiene	420	U	
88-06-2	2,4,6-Trichlorophenol	420	U	
95-95-4	2,4,5-Trichlorophenol	850	U	
91-58-7	2-Chloronaphthalene	420	U	
88-74-4	2-Nitroaniline	850	U	
131-11-3	Dimethylphthalate	420	U	
208-96-8	Acenaphthylene	420	U	
606-20-2	2,6-Dinitrotoluene	420	U	
99-09-2	3-Nitroaniline	850	U	
83-32-9	Acenaphthene	420	U	
51-28-5	2,4-Dinitrophenol	850	U	
100-02-7	4-Nitrophenol	850	U	
132-64-9	Dibenzofuran	420	U	

1E - FORM I SV-2  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.  
COMP-A-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-04A  
 Sample wt/vol: 15.1 (g/mL) G Lab File ID: S6B4637.D  
 Level: (LOW/MED) LOW Extraction: (Type) SONC  
 % Moisture: 21 Decanted: (Y/N) N Date Received: 06/14/2013  
 Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/24/2013  
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/25/2013  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
121-14-2	2,4-Dinitrotoluene	420	U	
84-66-2	Diethylphthalate	420	U	
7005-72-3	4-Chlorophenyl-phenylether	420	U	
86-73-7	Fluorene	420	U	
100-01-6	4-Nitroaniline	850	U	
534-52-1	4,6-Dinitro-2-methylphenol	850	U	
86-30-6	N-Nitrosodiphenylamine	420	U	
101-55-3	4-Bromophenyl-phenylether	420	U	
118-74-1	Hexachlorobenzene	420	U	
87-86-5	Pentachlorophenol	850	U	
85-01-8	Phenanthrene	420	U	
120-12-7	Anthracene	420	U	
86-74-8	Carbazole	420	U	
84-74-2	Di-n-butylphthalate	420	U	
206-44-0	Fluoranthene	420	U	
129-00-0	Pyrene	420	U	
85-68-7	Butylbenzylphthalate	420	U	
91-94-1	3,3'-Dichlorobenzidine	420	U	
56-55-3	Benzo(a)anthracene	420	U	
218-01-9	Chrysene	420	U	
117-81-7	Bis(2-ethylhexyl)phthalate	420	U	
117-84-0	Di-n-octylphthalate	420	U	
205-99-2	Benzo(b)fluoranthene	420	U	
207-08-9	Benzo(k)fluoranthene	420	U	
50-32-8	Benzo(a)pyrene	420	U	
193-39-5	Indeno(1,2,3-cd)pyrene	420	U	
53-70-3	Dibenzo(a,h)anthracene	420	U	
191-24-2	Benzo(g,h,i)perylene	420	U	

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S6.I\130625.B\S6B4637.d  
 Lab Smp Id: M0975-04A Client Smp ID: COMP-A-061313  
 Inj Date : 25-JUN-2013 18:41  
 Operator : PK SRC: LIMS Inst ID: S6.i  
 Smp Info : M0975-04A,,72397  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\S6.I\130625.B\S6\_8270C\_N.m  
 Meth Date : 26-Jun-2013 10:11 S6.i Quant Type: ISTD  
 Cal Date : 21-JUN-2013 16:38 Cal File: S6B4574.d  
 Als bottle: 7  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 8270C.sub  
 Target Version: 4.14  
 Processing Host: TARGET113

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC correction factor
Vt	1000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	15.100	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

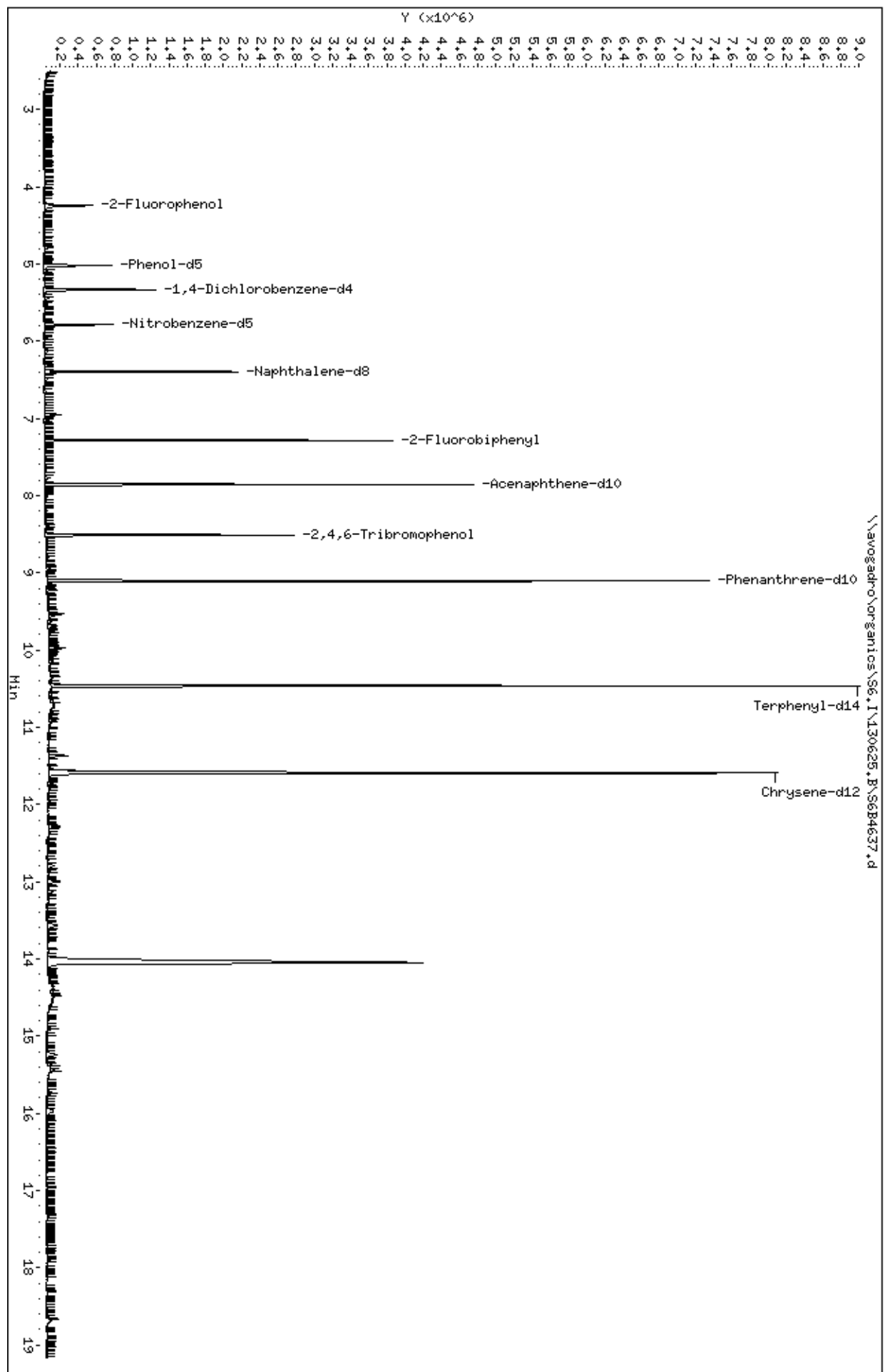
Compounds	QUANT	SIG	CONCENTRATIONS				
			ON-COLUMN	FINAL			
	MASS	RT	EXP RT	REL RT	RESPONSE	( ng)	(ug/Kg)
\$ 3 2-Fluorophenol	112	4.245	4.240	(0.796)	148920	39.9300	2600(H)
\$ 5 Phenol-d5	99	5.021	5.021	(0.942)	207379	37.8678	2500
* 12 1,4-Dichlorobenzene-d4	152	5.332	5.332	(1.000)	183722	40.0000	
\$ 22 Nitrobenzene-d5	82	5.791	5.791	(0.905)	228543	34.6934	2300
* 31 Naphthalene-d8	136	6.396	6.396	(1.000)	763074	40.0000	
\$ 41 2-Fluorobiphenyl	172	7.283	7.289	(0.927)	877864	30.6348	2000
* 48 Acenaphthene-d10	164	7.859	7.865	(1.000)	875796	40.0000	
\$ 60 2,4,6-Tribromophenol	330	8.517	8.523	(0.931)	295262	36.5330	2400(H)
* 64 Phenanthrene-d10	188	9.104	9.128	(1.000)	2528054	40.0000	(H)
\$ 72 Terphenyl-d14	244	10.468	10.562	(0.892)	2583416	38.7434	2600(H)
* 76 Chrysene-d12	240	11.590	11.737	(1.000)	4138663	40.0000	(H)
* 83 Perylene-d12	264	14.046	14.222	(1.000)	4396069	40.0000	(H)

QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\S6,I\130625,B\S6B4637.d  
 Date : 25-JUN-2013 18:41  
 Client ID: COMP-A-061313  
 Sample Info: M0975-04A,72397  
 Volume Injected (uL): 1.0  
 Column phase: Rxi-SS11 MS

Instrument: S6.i  
 Operator: PK SRC: LIMS  
 Column diameter: 0.25



1D - FORM I SV-1  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.  
COMP-B-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-07A  
 Sample wt/vol: 15.4 (g/mL) G Lab File ID: S6B4638.D  
 Level: (LOW/MED) LOW Extraction: (Type) SONC  
 % Moisture: 21 Decanted: (Y/N) N Date Received: 06/14/2013  
 Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/24/2013  
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/25/2013  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
108-95-2	Phenol	410	U	
111-44-4	Bis(2-chloroethyl)ether	410	U	
95-57-8	2-Chlorophenol	410	U	
541-73-1	1,3-Dichlorobenzene	410	U	
106-46-7	1,4-Dichlorobenzene	410	U	
95-50-1	1,2-Dichlorobenzene	410	U	
95-48-7	2-Methylphenol	410	U	
108-60-1	2,2'-oxybis(1-Chloropropane)	410	U	
106-44-5	4-Methylphenol	410	U	
621-64-7	N-Nitroso-di-n-propylamine	410	U	
67-72-1	Hexachloroethane	410	U	
98-95-3	Nitrobenzene	410	U	
78-59-1	Isophorone	410	U	
88-75-5	2-Nitrophenol	410	U	
105-67-9	2,4-Dimethylphenol	410	U	
120-83-2	2,4-Dichlorophenol	410	U	
120-82-1	1,2,4-Trichlorobenzene	410	U	
91-20-3	Naphthalene	410	U	
106-47-8	4-Chloroaniline	410	U	
111-91-1	Bis(2-chloroethoxy)methane	410	U	
87-68-3	Hexachlorobutadiene	410	U	
59-50-7	4-Chloro-3-methylphenol	410	U	
91-57-6	2-Methylnaphthalene	410	U	
77-47-4	Hexachlorocyclopentadiene	410	U	
88-06-2	2,4,6-Trichlorophenol	410	U	
95-95-4	2,4,5-Trichlorophenol	820	U	
91-58-7	2-Chloronaphthalene	410	U	
88-74-4	2-Nitroaniline	820	U	
131-11-3	Dimethylphthalate	410	U	
208-96-8	Acenaphthylene	410	U	
606-20-2	2,6-Dinitrotoluene	410	U	
99-09-2	3-Nitroaniline	820	U	
83-32-9	Acenaphthene	410	U	
51-28-5	2,4-Dinitrophenol	820	U	
100-02-7	4-Nitrophenol	820	U	
132-64-9	Dibenzofuran	410	U	

1E - FORM I SV-2  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.  
COMP-B-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-07A  
 Sample wt/vol: 15.4 (g/mL) G Lab File ID: S6B4638.D  
 Level: (LOW/MED) LOW Extraction: (Type) SONC  
 % Moisture: 21 Decanted: (Y/N) N Date Received: 06/14/2013  
 Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/24/2013  
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/25/2013  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
121-14-2	2,4-Dinitrotoluene	410		U
84-66-2	Diethylphthalate	410		U
7005-72-3	4-Chlorophenyl-phenylether	410		U
86-73-7	Fluorene	410		U
100-01-6	4-Nitroaniline	820		U
534-52-1	4,6-Dinitro-2-methylphenol	820		U
86-30-6	N-Nitrosodiphenylamine	410		U
101-55-3	4-Bromophenyl-phenylether	410		U
118-74-1	Hexachlorobenzene	410		U
87-86-5	Pentachlorophenol	820		U
85-01-8	Phenanthrene	410		U
120-12-7	Anthracene	410		U
86-74-8	Carbazole	410		U
84-74-2	Di-n-butylphthalate	410		U
206-44-0	Fluoranthene	410		U
129-00-0	Pyrene	410		U
85-68-7	Butylbenzylphthalate	410		U
91-94-1	3,3'-Dichlorobenzidine	410		U
56-55-3	Benzo(a)anthracene	410		U
218-01-9	Chrysene	410		U
117-81-7	Bis(2-ethylhexyl)phthalate	410		U
117-84-0	Di-n-octylphthalate	410		U
205-99-2	Benzo(b)fluoranthene	410		U
207-08-9	Benzo(k)fluoranthene	410		U
50-32-8	Benzo(a)pyrene	410		U
193-39-5	Indeno(1,2,3-cd)pyrene	410		U
53-70-3	Dibenzo(a,h)anthracene	410		U
191-24-2	Benzo(g,h,i)perylene	410		U

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S6.I\130625.B\S6B4638.d  
 Lab Smp Id: M0975-07A Client Smp ID: COMP-B-061313  
 Inj Date : 25-JUN-2013 19:06  
 Operator : PK SRC: LIMS Inst ID: S6.i  
 Smp Info : M0975-07A,,72397  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\S6.I\130625.B\S6\_8270C\_N.m  
 Meth Date : 26-Jun-2013 10:11 S6.i Quant Type: ISTD  
 Cal Date : 21-JUN-2013 16:38 Cal File: S6B4574.d  
 Als bottle: 8  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 8270C.sub  
 Target Version: 4.14  
 Processing Host: TARGET113

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC correction factor
Vt	1000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	15.400	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG						CONCENTRATIONS	
			MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN ( ng)	FINAL (ug/Kg)
\$ 3 2-Fluorophenol	112		4.251	4.240	(0.797)	167101	47.2391	3100	
\$ 5 Phenol-d5	99		5.021	5.021	(0.942)	220418	42.4354	2800	
* 12 1,4-Dichlorobenzene-d4	152		5.332	5.332	(1.000)	174255	40.0000		
\$ 22 Nitrobenzene-d5	82		5.791	5.791	(0.905)	235291	35.4632	2300	
* 31 Naphthalene-d8	136		6.396	6.396	(1.000)	768552	40.0000		
\$ 41 2-Fluorobiphenyl	172		7.283	7.289	(0.927)	954223	31.2862	2000	
* 48 Acenaphthene-d10	164		7.859	7.865	(1.000)	932153	40.0000		
\$ 60 2,4,6-Tribromophenol	330		8.511	8.523	(0.931)	350188	39.3326	2600	
* 64 Phenanthrene-d10	188		9.104	9.128	(1.000)	2784925	40.0000	(H)	
\$ 72 Terphenyl-d14	244		10.456	10.562	(0.890)	2939748	39.3166	2600(H)	
* 76 Chrysene-d12	240		11.572	11.737	(1.000)	4640846	40.0000	(H)	
* 83 Perylene-d12	264		14.028	14.222	(1.000)	4751187	40.0000	(H)	

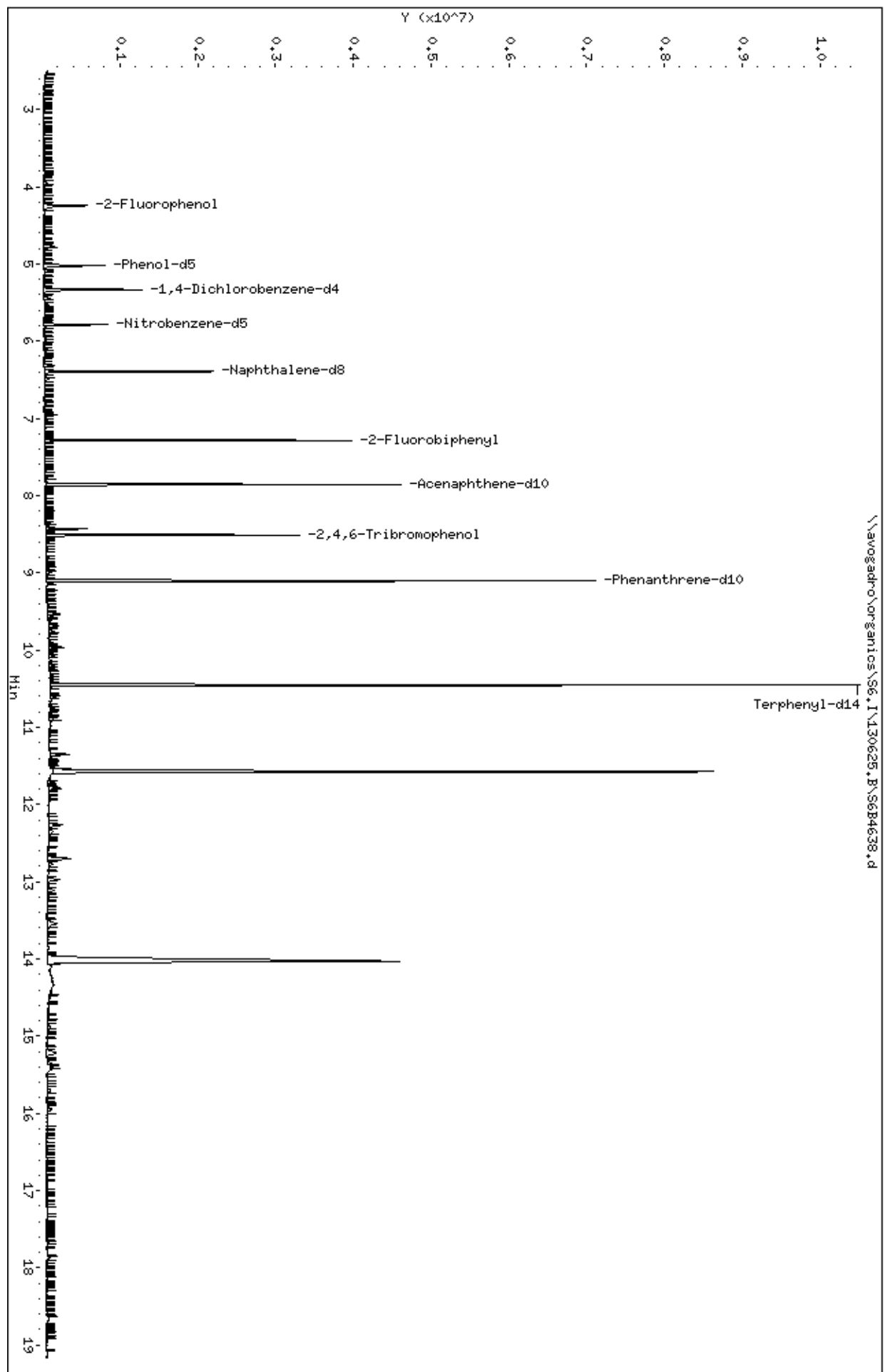
QC Flag Legend

H - Operator selected an alternate compound hit.



Data File: \\avogadro\organics\S6.I\130625.B\S6B4638.d  
Date : 25-JUN-2013 19:06  
Client ID: COMP-B-061313  
Sample Info: M0975-07A,72397  
Volume Injected (uL): 1.0  
Column phase: Rxi-SS11 MS

Instrument: S6.i  
Operator: PK SRC: LIMS  
Column diameter: 0.25



1D - FORM I SV-1  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.  
COMP-C-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-11A  
 Sample wt/vol: 15.2 (g/mL) G Lab File ID: S6B4639.D  
 Level: (LOW/MED) LOW Extraction: (Type) SONC  
 % Moisture: 17 Decanted: (Y/N) N Date Received: 06/14/2013  
 Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/24/2013  
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/25/2013  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
108-95-2	Phenol	390	U	
111-44-4	Bis(2-chloroethyl)ether	390	U	
95-57-8	2-Chlorophenol	390	U	
541-73-1	1,3-Dichlorobenzene	390	U	
106-46-7	1,4-Dichlorobenzene	390	U	
95-50-1	1,2-Dichlorobenzene	390	U	
95-48-7	2-Methylphenol	390	U	
108-60-1	2,2'-oxybis(1-Chloropropane)	390	U	
106-44-5	4-Methylphenol	390	U	
621-64-7	N-Nitroso-di-n-propylamine	390	U	
67-72-1	Hexachloroethane	390	U	
98-95-3	Nitrobenzene	390	U	
78-59-1	Isophorone	390	U	
88-75-5	2-Nitrophenol	390	U	
105-67-9	2,4-Dimethylphenol	390	U	
120-83-2	2,4-Dichlorophenol	390	U	
120-82-1	1,2,4-Trichlorobenzene	390	U	
91-20-3	Naphthalene	390	U	
106-47-8	4-Chloroaniline	390	U	
111-91-1	Bis(2-chloroethoxy)methane	390	U	
87-68-3	Hexachlorobutadiene	390	U	
59-50-7	4-Chloro-3-methylphenol	390	U	
91-57-6	2-Methylnaphthalene	390	U	
77-47-4	Hexachlorocyclopentadiene	390	U	
88-06-2	2,4,6-Trichlorophenol	390	U	
95-95-4	2,4,5-Trichlorophenol	800	U	
91-58-7	2-Chloronaphthalene	390	U	
88-74-4	2-Nitroaniline	800	U	
131-11-3	Dimethylphthalate	390	U	
208-96-8	Acenaphthylene	390	U	
606-20-2	2,6-Dinitrotoluene	390	U	
99-09-2	3-Nitroaniline	800	U	
83-32-9	Acenaphthene	390	U	
51-28-5	2,4-Dinitrophenol	800	U	
100-02-7	4-Nitrophenol	800	U	
132-64-9	Dibenzofuran	390	U	

1E - FORM I SV-2  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.  
COMP-C-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-11A  
 Sample wt/vol: 15.2 (g/mL) G Lab File ID: S6B4639.D  
 Level: (LOW/MED) LOW Extraction: (Type) SONC  
 % Moisture: 17 Decanted: (Y/N) N Date Received: 06/14/2013  
 Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/24/2013  
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/25/2013  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
121-14-2	2,4-Dinitrotoluene	390	U	U
84-66-2	Diethylphthalate	390	U	U
7005-72-3	4-Chlorophenyl-phenylether	390	U	U
86-73-7	Fluorene	390	U	U
100-01-6	4-Nitroaniline	800	U	U
534-52-1	4,6-Dinitro-2-methylphenol	800	U	U
86-30-6	N-Nitrosodiphenylamine	390	U	U
101-55-3	4-Bromophenyl-phenylether	390	U	U
118-74-1	Hexachlorobenzene	390	U	U
87-86-5	Pentachlorophenol	800	U	U
85-01-8	Phenanthrene	390	U	U
120-12-7	Anthracene	390	U	U
86-74-8	Carbazole	390	U	U
84-74-2	Di-n-butylphthalate	390	U	U
206-44-0	Fluoranthene	390	U	U
129-00-0	Pyrene	390	U	U
85-68-7	Butylbenzylphthalate	390	U	U
91-94-1	3,3'-Dichlorobenzidine	390	U	U
56-55-3	Benzo(a)anthracene	390	U	U
218-01-9	Chrysene	390	U	U
117-81-7	Bis(2-ethylhexyl)phthalate	390	U	U
117-84-0	Di-n-octylphthalate	390	U	U
205-99-2	Benzo(b)fluoranthene	390	U	U
207-08-9	Benzo(k)fluoranthene	390	U	U
50-32-8	Benzo(a)pyrene	390	U	U
193-39-5	Indeno(1,2,3-cd)pyrene	390	U	U
53-70-3	Dibenzo(a,h)anthracene	390	U	U
191-24-2	Benzo(g,h,i)perylene	390	U	U

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S6.I\130625.B\S6B4639.d  
 Lab Smp Id: M0975-11A Client Smp ID: COMP-C-061313  
 Inj Date : 25-JUN-2013 19:32  
 Operator : PK SRC: LIMS Inst ID: S6.i  
 Smp Info : M0975-11A,,72397  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\S6.I\130625.B\S6\_8270C\_N.m  
 Meth Date : 26-Jun-2013 10:11 S6.i Quant Type: ISTD  
 Cal Date : 21-JUN-2013 16:38 Cal File: S6B4574.d  
 Als bottle: 9  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 8270C.sub  
 Target Version: 4.14  
 Processing Host: TARGET113

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC correction factor
Vt	1000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	15.200	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

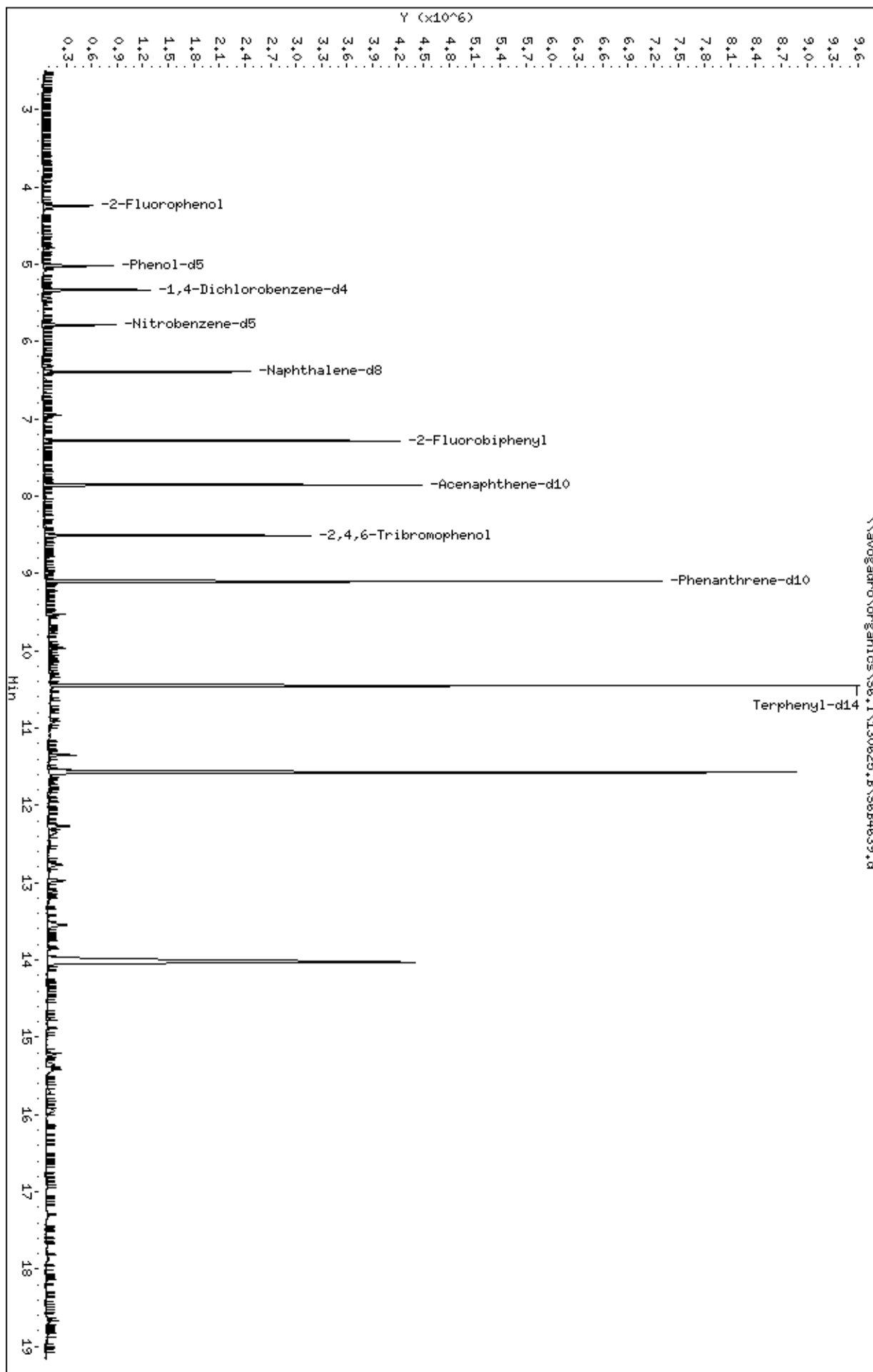
Compounds	QUANT	SIG	CONCENTRATIONS				
			ON-COLUMN	FINAL			
	MASS	RT	EXP RT	REL RT	RESPONSE	( ng)	(ug/Kg)
\$ 3 2-Fluorophenol	112	4.245	4.240	(0.796)	177559	45.9822	3000
\$ 5 Phenol-d5	99	5.021	5.021	(0.942)	227860	40.1859	2600
* 12 1,4-Dichlorobenzene-d4	152	5.332	5.332	(1.000)	190222	40.0000	
\$ 22 Nitrobenzene-d5	82	5.791	5.791	(0.906)	256536	36.7871	2400
* 31 Naphthalene-d8	136	6.390	6.396	(1.000)	807792	40.0000	
\$ 41 2-Fluorobiphenyl	172	7.283	7.289	(0.927)	1026763	33.9879	2200
* 48 Acenaphthene-d10	164	7.853	7.865	(1.000)	923287	40.0000	
\$ 60 2,4,6-Tribromophenol	330	8.511	8.523	(0.931)	324330	37.9138	2500
* 64 Phenanthrene-d10	188	9.099	9.128	(1.000)	2675807	40.0000	(H)
\$ 72 Terphenyl-d14	244	10.450	10.562	(0.886)	2827945	40.6225	2700(H)
* 76 Chrysene-d12	240	11.572	11.737	(1.000)	4320841	40.0000	(H)
* 83 Perylene-d12	264	14.028	14.222	(1.000)	4611351	40.0000	(H)

QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\S6.I\130625.B\S6B4639.d  
Date: 25-JUN-2013 19:32  
Client ID: COMP-C-061313  
Sample Info: M0975-11A,72397  
Volume Injected (uL): 1.0  
Column phase: Rxi-SS11 MS

Instrument: S6.i  
Operator: PK SRC: LIMS  
Column diameter: 0.25



1D - FORM I SV-1  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.  
COMP-D-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-14A  
 Sample wt/vol: 15.2 (g/mL) G Lab File ID: S6B4640.D  
 Level: (LOW/MED) LOW Extraction: (Type) SONC  
 % Moisture: 21 Decanted: (Y/N) N Date Received: 06/14/2013  
 Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/24/2013  
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/25/2013  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
108-95-2	Phenol	410	U	
111-44-4	Bis(2-chloroethyl)ether	410	U	
95-57-8	2-Chlorophenol	410	U	
541-73-1	1,3-Dichlorobenzene	410	U	
106-46-7	1,4-Dichlorobenzene	410	U	
95-50-1	1,2-Dichlorobenzene	410	U	
95-48-7	2-Methylphenol	410	U	
108-60-1	2,2'-oxybis(1-Chloropropane)	410	U	
106-44-5	4-Methylphenol	410	U	
621-64-7	N-Nitroso-di-n-propylamine	410	U	
67-72-1	Hexachloroethane	410	U	
98-95-3	Nitrobenzene	410	U	
78-59-1	Isophorone	410	U	
88-75-5	2-Nitrophenol	410	U	
105-67-9	2,4-Dimethylphenol	410	U	
120-83-2	2,4-Dichlorophenol	410	U	
120-82-1	1,2,4-Trichlorobenzene	410	U	
91-20-3	Naphthalene	410	U	
106-47-8	4-Chloroaniline	410	U	
111-91-1	Bis(2-chloroethoxy)methane	410	U	
87-68-3	Hexachlorobutadiene	410	U	
59-50-7	4-Chloro-3-methylphenol	410	U	
91-57-6	2-Methylnaphthalene	410	U	
77-47-4	Hexachlorocyclopentadiene	410	U	
88-06-2	2,4,6-Trichlorophenol	410	U	
95-95-4	2,4,5-Trichlorophenol	840	U	
91-58-7	2-Chloronaphthalene	410	U	
88-74-4	2-Nitroaniline	840	U	
131-11-3	Dimethylphthalate	410	U	
208-96-8	Acenaphthylene	410	U	
606-20-2	2,6-Dinitrotoluene	410	U	
99-09-2	3-Nitroaniline	840	U	
83-32-9	Acenaphthene	410	U	
51-28-5	2,4-Dinitrophenol	840	U	
100-02-7	4-Nitrophenol	840	U	
132-64-9	Dibenzofuran	410	U	

1E - FORM I SV-2  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.  
COMP-D-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-14A  
 Sample wt/vol: 15.2 (g/mL) G Lab File ID: S6B4640.D  
 Level: (LOW/MED) LOW Extraction: (Type) SONC  
 % Moisture: 21 Decanted: (Y/N) N Date Received: 06/14/2013  
 Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/24/2013  
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/25/2013  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
121-14-2	2,4-Dinitrotoluene	410		U
84-66-2	Diethylphthalate	410		U
7005-72-3	4-Chlorophenyl-phenylether	410		U
86-73-7	Fluorene	410		U
100-01-6	4-Nitroaniline	840		U
534-52-1	4,6-Dinitro-2-methylphenol	840		U
86-30-6	N-Nitrosodiphenylamine	410		U
101-55-3	4-Bromophenyl-phenylether	410		U
118-74-1	Hexachlorobenzene	410		U
87-86-5	Pentachlorophenol	840		U
85-01-8	Phenanthrene	410		U
120-12-7	Anthracene	410		U
86-74-8	Carbazole	410		U
84-74-2	Di-n-butylphthalate	410		U
206-44-0	Fluoranthene	410		U
129-00-0	Pyrene	410		U
85-68-7	Butylbenzylphthalate	410		U
91-94-1	3,3'-Dichlorobenzidine	410		U
56-55-3	Benzo(a)anthracene	410		U
218-01-9	Chrysene	410		U
117-81-7	Bis(2-ethylhexyl)phthalate	410		U
117-84-0	Di-n-octylphthalate	410		U
205-99-2	Benzo(b)fluoranthene	410		U
207-08-9	Benzo(k)fluoranthene	410		U
50-32-8	Benzo(a)pyrene	410		U
193-39-5	Indeno(1,2,3-cd)pyrene	410		U
53-70-3	Dibenzo(a,h)anthracene	410		U
191-24-2	Benzo(g,h,i)perylene	410		U

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S6.I\130625.B\S6B4640.d  
 Lab Smp Id: M0975-14A Client Smp ID: COMP-D-061313  
 Inj Date : 25-JUN-2013 19:57  
 Operator : PK SRC: LIMS Inst ID: S6.i  
 Smp Info : M0975-14A,,72397  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\S6.I\130625.B\S6\_8270C\_N.m  
 Meth Date : 26-Jun-2013 10:11 S6.i Quant Type: ISTD  
 Cal Date : 21-JUN-2013 16:38 Cal File: S6B4574.d  
 Als bottle: 10  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 8270C.sub  
 Target Version: 4.14  
 Processing Host: TARGET113

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC correction factor
Vt	1000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	15.200	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	CONCENTRATIONS				
			ON-COLUMN	FINAL			
	MASS	RT	EXP RT	REL RT	RESPONSE	( ng)	(ug/Kg)
\$ 3 2-Fluorophenol	112	4.251	4.240	(0.797)	168265	43.8385	2900
\$ 5 Phenol-d5	99	5.021	5.021	(0.942)	225731	40.0509	2600
* 12 1,4-Dichlorobenzene-d4	152	5.332	5.332	(1.000)	189080	40.0000	
\$ 22 Nitrobenzene-d5	82	5.791	5.791	(0.906)	268452	38.1672	2500
* 31 Naphthalene-d8	136	6.390	6.396	(1.000)	814746	40.0000	
\$ 41 2-Fluorobiphenyl	172	7.283	7.289	(0.927)	1043243	32.7075	2200
* 48 Acenaphthene-d10	164	7.859	7.865	(1.000)	974828	40.0000	
\$ 60 2,4,6-Tribromophenol	330	8.511	8.523	(0.931)	355951	40.3863	2600
* 64 Phenanthrene-d10	188	9.105	9.128	(1.000)	2756895	40.0000	(H)
\$ 72 Terphenyl-d14	244	10.450	10.562	(0.892)	3047191	41.6643	2700(H)
* 76 Chrysene-d12	240	11.572	11.737	(1.000)	4539412	40.0000	(H)
* 83 Perylene-d12	264	14.022	14.222	(1.000)	4726762	40.0000	(H)

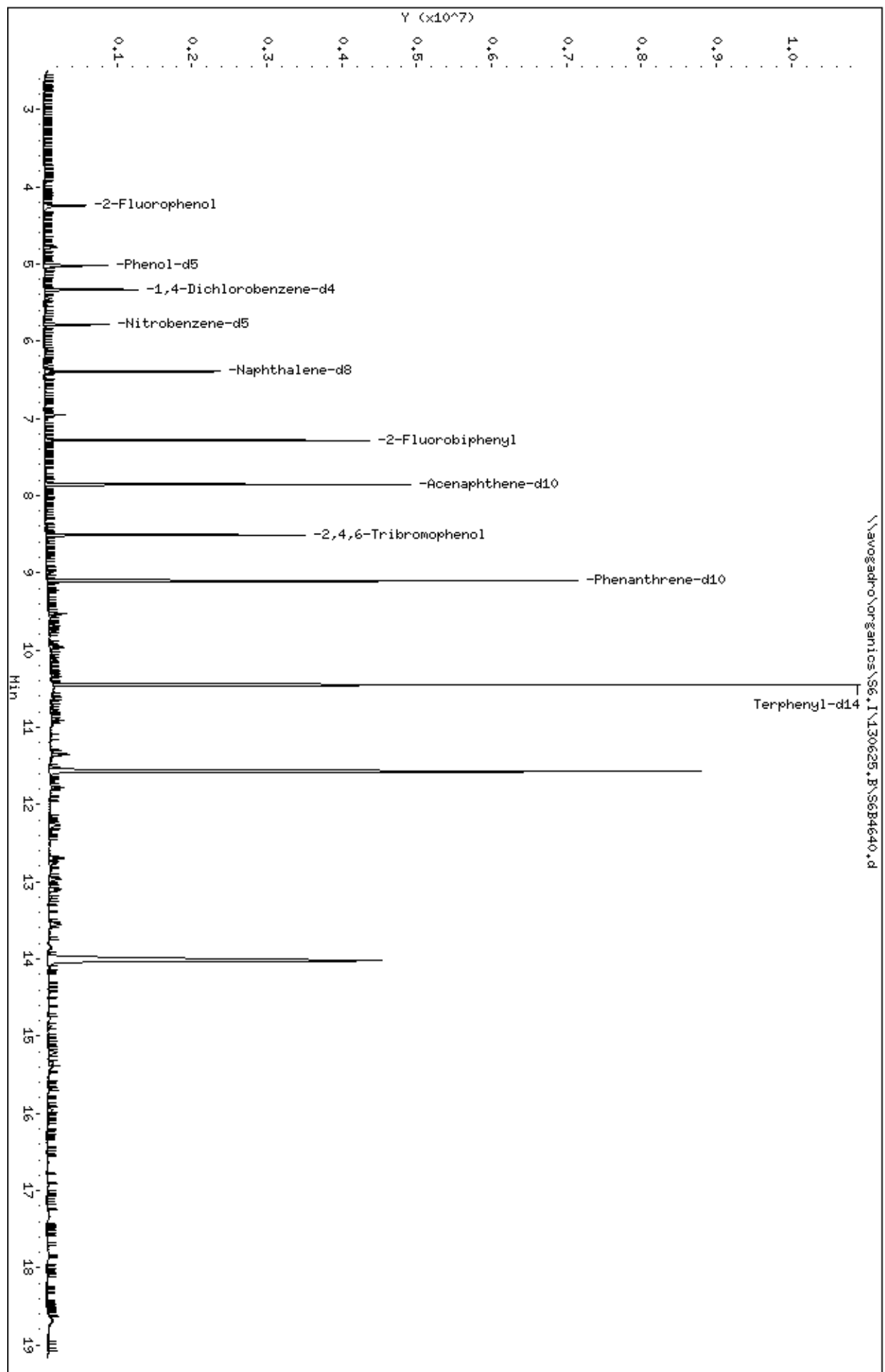
QC Flag Legend

H - Operator selected an alternate compound hit.



Data File: \\avogadro\organics\S6.I\130625.B\S6B4640.d  
 Date: 25-JUN-2013 19:57  
 Client ID: COMP-D-061313  
 Sample Info: M0975-14A,72397  
 Volume Injected (uL): 1.0  
 Column phase: Rxi-5S11 MS

Instrument: S6.i  
 Operator: PK SRC: LIMS  
 Column diameter: 0.25



1D - FORM I SV-1  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.  
COMP-E-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-18A  
 Sample wt/vol: 15.2 (g/mL) G Lab File ID: S6B4641.D  
 Level: (LOW/MED) LOW Extraction: (Type) SONC  
 % Moisture: 16 Decanted: (Y/N) N Date Received: 06/14/2013  
 Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/24/2013  
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/25/2013  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
108-95-2	Phenol	390	U	
111-44-4	Bis(2-chloroethyl)ether	390	U	
95-57-8	2-Chlorophenol	390	U	
541-73-1	1,3-Dichlorobenzene	390	U	
106-46-7	1,4-Dichlorobenzene	390	U	
95-50-1	1,2-Dichlorobenzene	390	U	
95-48-7	2-Methylphenol	390	U	
108-60-1	2,2'-oxybis(1-Chloropropane)	390	U	
106-44-5	4-Methylphenol	390	U	
621-64-7	N-Nitroso-di-n-propylamine	390	U	
67-72-1	Hexachloroethane	390	U	
98-95-3	Nitrobenzene	390	U	
78-59-1	Isophorone	390	U	
88-75-5	2-Nitrophenol	390	U	
105-67-9	2,4-Dimethylphenol	390	U	
120-83-2	2,4-Dichlorophenol	390	U	
120-82-1	1,2,4-Trichlorobenzene	390	U	
91-20-3	Naphthalene	390	U	
106-47-8	4-Chloroaniline	390	U	
111-91-1	Bis(2-chloroethoxy)methane	390	U	
87-68-3	Hexachlorobutadiene	390	U	
59-50-7	4-Chloro-3-methylphenol	390	U	
91-57-6	2-Methylnaphthalene	390	U	
77-47-4	Hexachlorocyclopentadiene	390	U	
88-06-2	2,4,6-Trichlorophenol	390	U	
95-95-4	2,4,5-Trichlorophenol	790	U	
91-58-7	2-Chloronaphthalene	390	U	
88-74-4	2-Nitroaniline	790	U	
131-11-3	Dimethylphthalate	390	U	
208-96-8	Acenaphthylene	390	U	
606-20-2	2,6-Dinitrotoluene	390	U	
99-09-2	3-Nitroaniline	790	U	
83-32-9	Acenaphthene	390	U	
51-28-5	2,4-Dinitrophenol	790	U	
100-02-7	4-Nitrophenol	790	U	
132-64-9	Dibenzofuran	390	U	

1E - FORM I SV-2  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.  
COMP-E-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-18A  
 Sample wt/vol: 15.2 (g/mL) G Lab File ID: S6B4641.D  
 Level: (LOW/MED) LOW Extraction: (Type) SONC  
 % Moisture: 16 Decanted: (Y/N) N Date Received: 06/14/2013  
 Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/24/2013  
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/25/2013  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/KG
121-14-2	2,4-Dinitrotoluene	390	U
84-66-2	Diethylphthalate	390	U
7005-72-3	4-Chlorophenyl-phenylether	390	U
86-73-7	Fluorene	390	U
100-01-6	4-Nitroaniline	790	U
534-52-1	4,6-Dinitro-2-methylphenol	790	U
86-30-6	N-Nitrosodiphenylamine	390	U
101-55-3	4-Bromophenyl-phenylether	390	U
118-74-1	Hexachlorobenzene	390	U
87-86-5	Pentachlorophenol	790	U
85-01-8	Phenanthrene	390	U
120-12-7	Anthracene	390	U
86-74-8	Carbazole	390	U
84-74-2	Di-n-butylphthalate	390	U
206-44-0	Fluoranthene	390	U
129-00-0	Pyrene	390	U
85-68-7	Butylbenzylphthalate	390	U
91-94-1	3,3'-Dichlorobenzidine	390	U
56-55-3	Benzo(a)anthracene	390	U
218-01-9	Chrysene	390	U
117-81-7	Bis(2-ethylhexyl)phthalate	390	U
117-84-0	Di-n-octylphthalate	390	U
205-99-2	Benzo(b)fluoranthene	390	U
207-08-9	Benzo(k)fluoranthene	390	U
50-32-8	Benzo(a)pyrene	390	U
193-39-5	Indeno(1,2,3-cd)pyrene	390	U
53-70-3	Dibenzo(a,h)anthracene	390	U
191-24-2	Benzo(g,h,i)perylene	390	U

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S6.I\130625.B\S6B4641.d  
 Lab Smp Id: M0975-18A Client Smp ID: COMP-E-061313  
 Inj Date : 25-JUN-2013 20:22  
 Operator : PK SRC: LIMS Inst ID: S6.i  
 Smp Info : M0975-18A,,72397  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\S6.I\130625.B\S6\_8270C\_N.m  
 Meth Date : 26-Jun-2013 10:11 S6.i Quant Type: ISTD  
 Cal Date : 21-JUN-2013 16:38 Cal File: S6B4574.d  
 Als bottle: 11  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 8270C.sub  
 Target Version: 4.14  
 Processing Host: TARGET113

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC correction factor
Vt	1000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	15.200	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

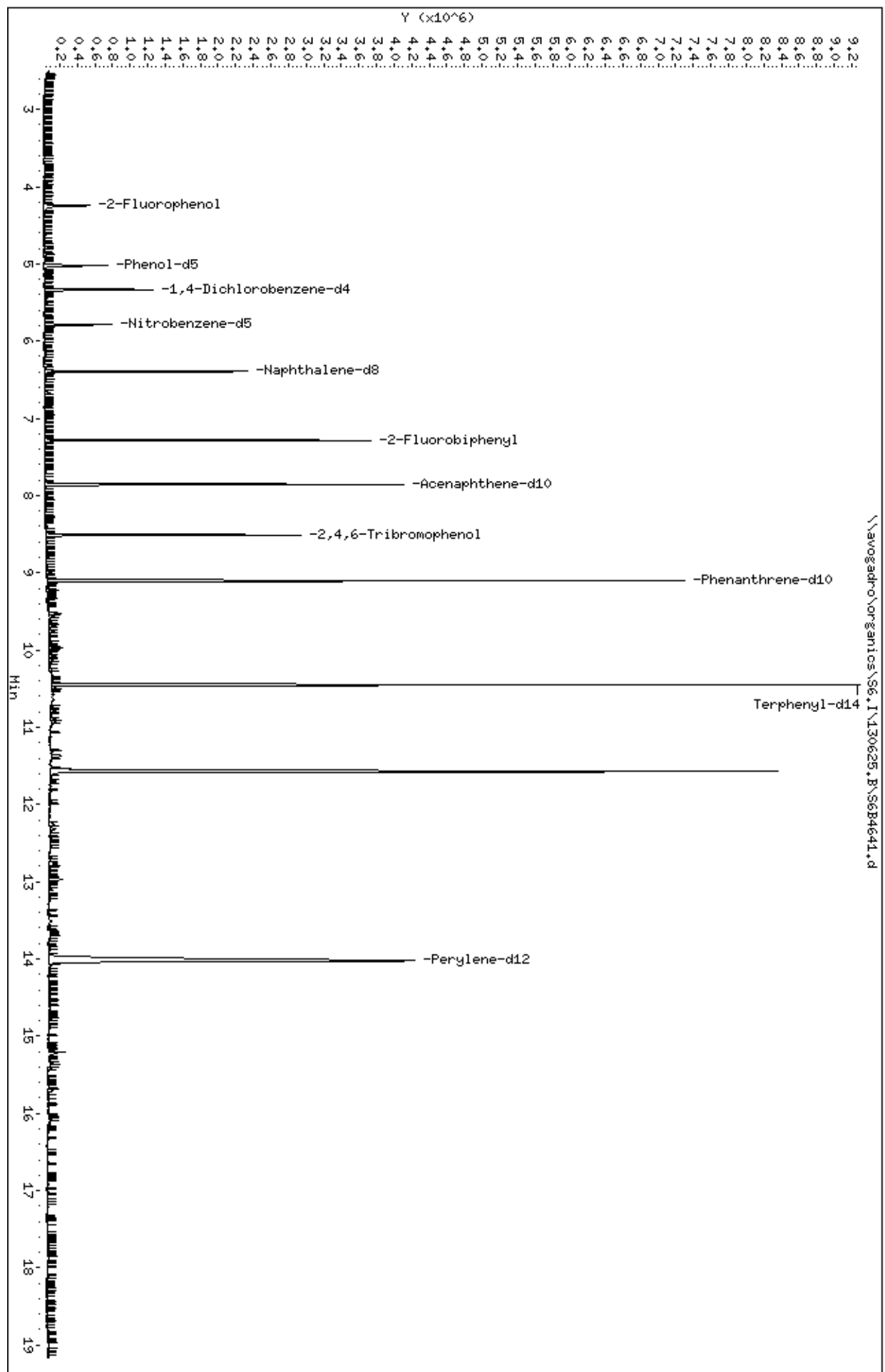
Compounds	QUANT	SIG						CONCENTRATIONS	
			MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN ( ng)	FINAL (ug/Kg)
\$ 3 2-Fluorophenol	112		4.245	4.240	(0.796)	153034	40.3914	2600	
\$ 5 Phenol-d5	99		5.021	5.021	(0.942)	205019	36.8514	2400	
* 12 1,4-Dichlorobenzene-d4	152		5.332	5.332	(1.000)	186641	40.0000		
\$ 22 Nitrobenzene-d5	82		5.791	5.791	(0.906)	235366	33.5804	2200	
* 31 Naphthalene-d8	136		6.390	6.396	(1.000)	811903	40.0000		
\$ 41 2-Fluorobiphenyl	172		7.283	7.289	(0.927)	891436	30.6154	2000	
* 48 Acenaphthene-d10	164		7.859	7.865	(1.000)	889898	40.0000		
\$ 60 2,4,6-Tribromophenol	330		8.511	8.523	(0.931)	300886	36.9424	2400	
* 64 Phenanthrene-d10	188		9.098	9.128	(1.000)	2547659	40.0000	(H)	
\$ 72 Terphenyl-d14	244		10.450	10.562	(0.888)	2550974	37.5304	2500(H)	
* 76 Chrysene-d12	240		11.572	11.737	(1.000)	4218771	40.0000	(H)	
* 83 Perylene-d12	264		14.022	14.222	(1.000)	4398624	40.0000	(H)	

QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\S6,I\130625,B\S6B4641.d  
 Date : 25-JUN-2013 20:22  
 Client ID: COMP-E-061313  
 Sample Info: M0975-18A,72397  
 Volume Injected (uL): 1.0  
 Column phase: Rxi-SS11 MS

Instrument: S6.i  
 Operator: PK SRC: LIMS  
 Column diameter: 0.25



Lab Name: MITKEM Lab Code: M0975 Case No.: M0975 SAS No.: SDG No.: SM0975

Instrument ID: S6 Calibration Date(s): 06/21/2013 06/21/2013  
GC Column: Rxi-5sil MS ID: 0.25 (mm) Length: 30 (mm) Calibration Times: 15:17 17:28

LAB FILE ID: RRF005 = S6B4572.D RRF010 = S6B4574.D RRF025 = S6B4571A.D RRF040 = S6B4575.D RRF060 = S6B4573.D  
RRF080 = S6B4576.D

COMPOUND	RRF005	RRF010	RRF025	RRF040	RRF060	RRF080	RRF		% RSD	
Phenol	1.089	1.199	1.278	1.169	1.288	1.330			1.226	7.3
Bis(2-chloroethyl) ether	0.528	0.416	0.479	0.445	0.417	0.430			0.453	9.7
2-Chlorophenol	0.949	1.074	1.146	1.067	1.076	1.050			1.060	6.0
1,3-Dichlorobenzene	1.268	1.239	1.305	1.261	1.242	1.260			1.263	1.9
1,4-Dichlorobenzene	1.266	1.289	1.414	1.278	1.271	1.301			1.303	4.3
1,2-Dichlorobenzene	1.296	1.148	1.381	1.258	1.262	1.248			1.265	6.0
2-Methylphenol	0.934	0.984	1.075	0.994	1.030	1.008			1.004	4.7
2,2'-oxybis(1-Chloropropane)	0.404	0.392	0.380	0.349	0.352	0.330			0.368	7.8
4-Methylphenol	0.992	1.168	1.240	1.172	1.250	1.329			1.192	9.6
N-Nitroso-di-n-propylamine	0.803	0.769	0.905	0.857	0.883	0.916			0.856	6.8
Hexachloroethane	0.447	0.481	0.523	0.502	0.493	0.516			0.494	5.5
Nitrobenzene	0.341	0.330	0.362	0.308	0.300	0.287			0.321	8.7
Isophorone	0.557	0.568	0.579	0.493	0.483	0.438			0.519	10.9
2-Nitrophenol	0.185	0.195	0.176	0.172	0.158	0.151			0.173	9.3
2,4-Dimethylphenol	0.271	0.292	0.366	0.333	0.325	0.301			0.315	10.7
2,4-Dichlorophenol	0.341	0.352	0.397	0.336	0.330	0.318			0.346	8.0
1,2,4-Trichlorobenzene	0.444	0.455	0.467	0.429	0.408	0.381			0.431	7.4
Naphthalene	0.885	0.877	0.946	0.864	0.835	0.846			0.875	4.5
4-Chloroaniline	0.393	0.375	0.396	0.362	0.334	0.312			0.362	9.3
Bis(2-chloroethoxy)methane	0.255	0.269	0.279	0.253	0.248	0.230			0.256	6.7
Hexachlorobutadiene	0.337	0.368	0.345	0.317	0.301	0.284			0.325	9.5
4-Chloro-3-methylphenol	0.310	0.343	0.351	0.308	0.293	0.270			0.312	9.7
2-Methylnaphthalene	0.768	0.814	0.798	0.713	0.683	0.661			0.740	8.5
Hexachlorocyclopentadiene	0.346	0.398	0.485	0.351	0.439	0.466			0.414	14.2
2,4,6-Trichlorophenol	0.402	0.452	0.514	0.425	0.439	0.439			0.445	8.5
2,4,5-Trichlorophenol		0.476	0.551	0.457	0.481	0.492			0.491	7.3
2-Chloronaphthalene	0.914	0.893	1.027	0.861	0.933	0.968			0.933	6.3

Lab Name: Spectrum Analytical, Inc.      Case No.: M0975      SAS No.:      SDG No.: SM0975  
 Lab Code: MITKEM      Instrument ID: S6      Calibration Date(s): 06/21/2013      06/21/2013  
 GC Column: Rxi-5sil MS      ID: 0.25 (mm)      Length: 30 (mm)      Calibration Times: 15:17      17:28

LAB FILE ID: RRF005 = S6B4572.D    RRF010 = S6B4574.D    RRF025 = S6B4571A.D    RRF040 = S6B4575.D    RRF060 = S6B4573.D  
 RRF080 = S6B4576.D

COMPOUND	RRF005	RRF010	RRF025	RRF040	RRF060	RRF080	RRF		% RSD	
2-Nitroaniline	0.232	0.284	0.227	0.249	0.236				0.245	9.3
Dimethylphthalate	1.226	1.297	1.249	1.330	1.316				1.320	7.4
Acenaphthylene	1.358	1.467	1.736	1.531	1.631				1.531	8.8
2,6-Dinitrotoluene	0.290	0.303	0.362	0.278	0.296				0.304	9.7
3-Nitroaniline	0.249	0.273	0.232	0.242	0.237				0.246	6.4
Acenaphthene	0.900	1.003	1.192	1.002	1.112				1.049	9.7
2,4-Dinitrophenol	0.238	0.298	0.258	0.287	0.285				0.273	9.0
4-Nitrophenol	0.320	0.400	0.312	0.335	0.327				0.339	10.4
Dibenzofuran	1.525	1.612	1.844	1.554	1.678				1.640	6.9
2,4-Dinitrotoluene	0.433	0.423	0.501	0.409	0.428				0.437	7.5
Diethylphthalate	1.130	1.188	1.434	1.159	1.258				1.241	8.9
4-Chlorophenyl-phenylether	0.870	0.866	1.058	0.873	0.956				0.932	8.2
Fluorene	1.245	1.352	1.593	1.363	1.483				1.427	9.1
4-Nitroaniline	0.313	0.340	0.284	0.293	0.279				0.302	8.3
4,6-Dinitro-2-methylphenol	0.127	0.155	0.142	0.139	0.139				0.140	7.3
N-Nitrosodiphenylamine	0.409	0.470	0.536	0.456	0.475				0.473	8.8
4-Bromophenyl-phenylether	0.217	0.237	0.272	0.227	0.235				0.238	7.9
Hexachlorobenzene	0.241	0.253	0.288	0.246	0.254				0.256	6.5
Pentachlorophenol	0.199	0.199	0.232	0.189	0.196				0.204	8.1
Phenanthrene	0.825	0.874	1.021	0.875	0.885				0.902	7.5
Anthracene	0.805	0.852	1.050	0.875	0.933				0.912	9.5
Carbazole	0.722	0.803	0.933	0.773	0.822				0.812	8.6
Di-n-butylphthalate	0.765	0.816	0.967	0.828	0.867				0.860	8.5
Fluoranthene	1.202	1.269	1.482	1.244	1.303				1.302	7.4
Pyrene	0.745	0.806	0.923	0.766	0.792				0.803	7.8
Butylbenzylphthalate	0.233	0.260	0.296	0.247	0.265				0.260	8.1
3,3'-Dichlorobenzidine	0.333	0.374	0.429	0.347	0.365				0.367	9.1

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc.

Contract:

Lab Code: MITKEM

Case No.: M0975

SAS No.:

SDG No.: SM0975

Instrument ID: S6

Calibration Date(s): 06/21/2013

06/21/2013

GC Column: Rxi-5sil MS

ID: 0.25 (mm)

Length: 30 (mm)

Calibration Times: 15:17

17:28

LAB FILE ID: RRF005 = S6B4572.D RRF010 = S6B4574.D RRF025 = S6B4571A.D RRF040 = S6B4575.D RRF060 = S6B4573.D  
 RRF080 = S6B4576.D

COMPOUND	RRF005	RRF010	RRF025	RRF040	RRF060	RRF080	RRF		% RSD	
Benzo(a)anthracene	0.957	0.998	1.135	0.956	0.950	0.946			0.990	7.4
Chrysene	0.832	0.883	1.004	0.837	0.841	0.832			0.871	7.8
Bis(2-ethylhexyl)phthalate	0.331	0.374	0.423	0.372	0.396	0.440			0.389	10.1
Di-n-octylphthalate	0.566	0.628	0.691	0.621	0.632	0.660			0.633	6.6
Benzo(b)fluoranthene	0.897	0.996	1.110	0.969	0.996	1.032			1.000	7.0
Benzo(k)fluoranthene	0.976	0.960	1.124	0.956	0.947	0.957			0.987	6.9
Benzo(a)pyrene	0.847	0.952	1.080	0.923	0.926	0.939			0.944	8.0
Indeno(1,2,3-cd)pyrene	0.877	0.992	1.115	0.981	1.171	1.190			1.054	11.7
Dibenzo(a,h)anthracene	0.877	0.979	1.105	0.943	0.944	0.975			0.970	7.8
Benzo(g,h,i)perylene	0.925	1.038	1.135	0.949	0.973	0.968			0.998	7.7



Lab Name: Spectrum Analytical, Inc. Contract:   
 Lab Code: MITKEM Case No.: M0975 SAS No.:   
 Instrument ID: S6 Calibration Date(s): 06/21/2013 06/21/2013   
 GC Column: Rxi-5sil MS ID: 0.25 (mm) Length: 30 (mm)   
 Calibration Times: 15:17 17:28   
 SDG No.: SM0975

LAB FILE ID: RRF005 = S6B4572.D RRF010 = S6B4574.D RRF025 = S6B4571A.D RRF040 = S6B4575.D RRF060 = S6B4573.D   
 RRF080 = S6B4576.D

COMPOUND	RRF005	RRF010	RRF025	RRF040	RRF060	RRF080	RRF		% RSD	
Nitrobenzene-d5	0.371	0.371	0.374	0.338	0.325	0.293			0.345	9.5
2-Fluorobiphenyl	1.210	1.269	1.474	1.218	1.327	1.355			1.309	7.6
Terphenyl-d14	0.611	0.628	0.744	0.621	0.631	0.632			0.644	7.7
Phenol-d5	1.205	1.149	1.265	1.155	1.200	1.181			1.192	3.5
2-Fluorophenol	0.737	0.769	0.890	0.784	0.848	0.843			0.812	7.1
2,4,6-Tribromophenol	0.106	0.126	0.154	0.123	0.130	0.129			0.128	11.9

Lab Name: MITKEM Lab Code: M0975 Case No.: M0975 SAS No.: SM0975 SDG No.: 06/26/2013

Instrument ID: S6 Calibration Date(s): 06/26/2013 06/26/2013

GC Column: Rxi-5sil MS ID: 0.25 (mm) Length: 30 (mm) Calibration Times: 11:45 14:43

LAB FILE ID: RRF005 = S6B4663.D RRF010 = S6B4665.D RRF025 = S6B4661.D RRF040 = S6B4666.D RRF060 = S6B4664.D  
RRF080 = S6B4662.D

COMPOUND	RRF005	RRF010	RRF025	RRF040	RRF060	RRF080	RRF		% RSD
Phenol	1.000	1.237	1.465	1.209	1.324	1.322		1.260	12.3
Bis(2-chloroethyl) ether	0.396	0.383	0.452	0.374	0.416	0.385		0.401	7.1
2-Chlorophenol	1.047	1.019	1.082	1.007	1.069	1.055		1.046	2.8
1,3-Dichlorobenzene	1.260	1.197	1.312	1.157	1.195	1.206		1.221	4.5
1,4-Dichlorobenzene	1.215	1.299	1.387	1.264	1.285	1.304		1.292	4.4
1,2-Dichlorobenzene	1.235	1.334	1.311	1.154	1.215	1.212		1.243	5.4
2-Methylphenol	1.041	0.970	1.096	0.977	1.016	1.066		1.028	4.8
2,2'-oxybis(1-Chloropropane)	0.356	0.371	0.361	0.320	0.321	0.334		0.344	6.3
4-Methylphenol	1.099	1.153	1.347	1.214	1.381	1.432		1.271	10.6
N-Nitroso-di-n-propylamine	0.850	0.780	0.847	0.729	0.836	0.872		0.819	6.6
Hexachloroethane	0.496	0.556	0.534	0.494	0.504	0.511		0.516	4.8
Nitrobenzene	0.371	0.322	0.338	0.304	0.289	0.278		0.317	10.8
Isophorone	0.611	0.540	0.598	0.515	0.466	0.443		0.529	12.9
2-Nitrophenol	0.210	0.185	0.193	0.179	0.164	0.156		0.181	10.9
2,4-Dimethylphenol	0.265	0.292	0.359	0.333	0.311	0.312		0.312	10.4
2,4-Dichlorophenol	0.347	0.378	0.387	0.348	0.334	0.327		0.353	6.7
1,2,4-Trichlorobenzene	0.463	0.450	0.477	0.404	0.397	0.382		0.429	9.1
Naphthalene	0.911	0.857	0.960	0.848	0.844	0.835		0.876	5.6
4-Chloroaniline	0.397	0.381	0.404	0.357	0.325	0.318		0.364	10.0
Bis(2-chloroethoxy)methane	0.273	0.265	0.297	0.246	0.233	0.228		0.257	10.3
Hexachlorobutadiene	0.368	0.334	0.360	0.318	0.300	0.287		0.328	9.8
4-Chloro-3-methylphenol	0.371	0.344	0.365	0.320	0.305	0.290		0.332	9.8
2-Methylnaphthalene	0.803	0.767	0.837	0.709	0.696	0.677		0.748	8.5
Hexachlorocyclopentadiene	0.298	0.330	0.434	0.292	0.391	0.395		0.357	16.3
2,4,6-Trichlorophenol	0.431	0.438	0.517	0.438	0.461	0.465		0.458	6.9
2,4,5-Trichlorophenol		0.489	0.559	0.470	0.483	0.497		0.500	6.9
2-Chloronaphthalene	0.831	0.884	1.057	0.880	0.910	0.940		0.917	8.5

Lab Name: Spectrum Analytical, Inc.      Case No.: M0975      SAS No.:      SDG No.: SM0975  
 Lab Code: MITKEM      Instrument ID: S6      Calibration Date(s): 06/26/2013      06/26/2013  
 GC Column: Rxi-5sil MS      ID: 0.25 (mm)      Length: 30 (mm)      Calibration Times: 11:45      14:43

LAB FILE ID: RRF005 = S6B4663.D    RRF010 = S6B4665.D    RRF025 = S6B4661.D    RRF040 = S6B4666.D    RRF060 = S6B4664.D  
 RRF080 = S6B4662.D

COMPOUND	RRF005	RRF010	RRF025	RRF040	RRF060	RRF080	RRF		% RSD	
2-Nitroaniline	0.230	0.275	0.230	0.238	0.238	0.238			0.242	7.8
Dimethylphthalate	1.286	1.335	1.546	1.317	1.317	1.331			1.351	7.3
Acenaphthylene	1.309	1.448	1.738	1.461	1.530	1.595			1.513	9.6
2,6-Dinitrotoluene	0.281	0.301	0.363	0.302	0.301	0.324			0.312	9.1
3-Nitroaniline	0.254	0.284	0.284	0.240	0.249	0.255			0.256	6.5
Acenaphthene	0.947	1.018	1.189	1.014	1.068	1.111			1.058	8.0
2,4-Dinitrophenol	0.193	0.238	0.258	0.257	0.257	0.273			0.244	12.8
4-Nitrophenol	0.361	0.395	0.333	0.337	0.355	0.355			0.356	6.9
Dibenzofuran	1.546	1.590	1.860	1.542	1.604	1.666			1.635	7.3
2,4-Dinitrotoluene	0.432	0.439	0.509	0.436	0.435	0.473			0.454	6.8
Diethylphthalate	1.257	1.299	1.492	1.235	1.292	1.323			1.316	7.0
4-Chlorophenyl-phenylether	0.910	0.917	1.092	0.913	0.950	0.974			0.959	7.3
Fluorene	1.288	1.389	1.621	1.434	1.457	1.507			1.449	7.7
4-Nitroaniline	0.307	0.340	0.340	0.303	0.264	0.281			0.299	9.6
4,6-Dinitro-2-methylphenol	0.128	0.141	0.139	0.141	0.141	0.142			0.138	4.1
N-Nitrosodiphenylamine	0.440	0.484	0.546	0.465	0.491	0.489			0.486	7.3
4-Bromophenyl-phenylether	0.220	0.245	0.275	0.227	0.248	0.243			0.243	7.9
Hexachlorobenzene	0.251	0.262	0.293	0.257	0.260	0.264			0.264	5.6
Pentachlorophenol	0.196	0.196	0.217	0.196	0.209	0.209			0.205	4.4
Phenanthrene	0.850	0.871	0.995	0.865	0.879	0.855			0.886	6.1
Anthracene	0.846	0.877	1.045	0.876	0.903	0.884			0.905	7.8
Carbazole	0.758	0.815	0.876	0.732	0.736	0.710			0.771	8.1
Di-n-butylphthalate	0.836	0.848	0.990	0.851	0.886	0.865			0.879	6.5
Fluoranthene	1.230	1.300	1.451	1.260	1.248	1.200			1.281	7.0
Pyrene	0.772	0.812	0.943	0.732	0.743	0.683			0.781	11.5
Butylbenzylphthalate	0.262	0.281	0.329	0.265	0.286	0.276			0.283	8.6
3,3'-Dichlorobenzidine	0.380	0.399	0.448	0.356	0.366	0.349			0.383	9.5

Lab Name: Spectrum Analytical, Inc. Case No.: M0975 SAS No.: SDG No.: SM0975

Lab Code: MITKEM Instrument ID: S6 Calibration Date(s): 06/26/2013 06/26/2013

GC Column: Rxi-5sil MS ID: 0.25 (mm) Length: 30 (mm) Calibration Times: 11:45 14:43

LAB FILE ID: RRF005 = S6B4663.D RRF010 = S6B4665.D RRF025 = S6B4661.D RRF040 = S6B4666.D RRF060 = S6B4664.D  
RRF080 = S6B4662.D

COMPOUND	RRF005	RRF010	RRF025	RRF040	RRF060	RRF080	RRF		% RSD
Benzo(a)anthracene	1.026	1.066	1.209	1.000	1.014	0.995		1.052	7.7
Chrysene	0.866	0.913	1.026	0.817	0.818	0.754		0.866	11.0
Bis(2-ethylhexyl)phthalate	0.396	0.434	0.508	0.435	0.474	0.480		0.455	8.9
Di-n-octylphthalate	0.621	0.662	0.793	0.627	0.672	0.670		0.674	9.2
Benzo(b)fluoranthene	0.946	0.994	1.147	0.940	1.024	1.148		1.033	9.1
Benzo(k)fluoranthene	0.975	1.033	1.133	0.946	0.909	0.762		0.960	13.0
Benzo(a)pyrene	0.903	0.993	1.124	0.921	0.927	0.918		0.964	8.7
Indeno(1,2,3-cd)pyrene	0.938	1.037	1.427	1.015	1.208	1.219		1.141	15.7
Dibenzo(a,h)anthracene	1.005	1.038	1.139	0.970	1.007	0.990		1.025	5.9
Benzo(g,h,i)perylene	0.999	1.048	1.165	1.003	0.988	0.984		1.031	6.7

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc.

Contract:

Lab Code: MITKEM Case No.: M0975 SAS No.: SDG No.: SM0975

Instrument ID: S6 Calibration Date(s): 06/26/2013 06/26/2013

Calibration Times: 11:45 14:43

GC Column: Rxi-5sil MS ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = S6B4663.D RRF010 = S6B4665.D RRF025 = S6B4661.D RRF040 = S6B4666.D RRF060 = S6B4664.D  
 RRF080 = S6B4662.D

COMPOUND	RRF005	RRF010	RRF025	RRF040	RRF060	RRF080	RRF		% RSD
Nitrobenzene-d5	0.338	0.323	0.376	0.318	0.302	0.287		0.324	9.5
2-Fluorobiphenyl	1.117	1.211	1.490	1.212	1.266	1.278		1.262	9.9
Terphenyl-d14	0.631	0.649	0.763	0.605	0.610	0.563		0.637	10.8
Phenol-d5	1.050	1.162	1.231	1.134	1.169	1.201		1.158	5.4
2-Fluorophenol	0.778	0.729	0.818	0.781	0.818	0.835		0.793	4.9
2,4,6-Tribromophenol	0.134	0.135	0.148	0.130	0.138	0.134		0.136	4.6

Lab Name: Spectrum Analytical, Inc.      Case No.: M0975      SAS No.:      SDG No.: SM0975  
 Lab Code: MITKEM      Instrument ID: S6      Calibration Date(s): 06/27/2013      06/27/2013  
 GC Column: Rxi-5sil MS      ID: 0.25 (mm)      Length: 30 (mm)      Calibration Times: 14:04      16:11

LAB FILE ID: RRF005 = S6B4713.D    RRF010 = S6B4715.D    RRF025 = S6B4716.D    RRF040 = S6B4716.D    RRF060 = S6B4714.D  
 RRF080 = S6B4712.D

COMPOUND	RRF005	RRF010	RRF025	RRF040	RRF060	RRF080	RRF		% RSD	
Phenol	1.094	1.340	1.607	1.324	1.389	1.473			1.371	12.5
Bis(2-chloroethyl) ether	0.382	0.458	0.499	0.436	0.424	0.395			0.432	9.9
2-Chlorophenol	1.096	1.230	1.274	1.129	1.173	1.187			1.182	5.5
1,3-Dichlorobenzene	1.146	1.457	1.520	1.260	1.343	1.266			1.332	10.4
1,4-Dichlorobenzene	1.198	1.375	1.504	1.346	1.333	1.282			1.340	7.6
1,2-Dichlorobenzene	1.302	1.271	1.368	1.302	1.285	1.218			1.291	3.8
2-Methylphenol	1.002	1.022	1.279	1.018	1.118	1.093			1.088	9.6
2,2'-oxybis(1-Chloropropane)	0.303	0.319	0.278	0.290	0.288	0.276			0.292	5.6
4-Methylphenol	1.073	1.212	1.449	1.214	1.212	1.307			1.245	10.1
N-Nitroso-di-n-propylamine	0.735	0.694	0.810	0.751	0.773	0.786			0.758	5.4
Hexachloroethane	0.576	0.511	0.593	0.525	0.535	0.511			0.542	6.4
Nitrobenzene	0.362	0.340	0.361	0.289	0.289	0.284			0.321	11.7
Isophorone	0.548	0.525	0.626	0.489	0.478	0.466			0.522	11.4
2-Nitrophenol	0.194	0.190	0.206	0.171	0.160	0.164			0.181	10.2
2,4-Dimethylphenol	0.256	0.294	0.383	0.303	0.316	0.299			0.308	13.5
2,4-Dichlorophenol	0.344	0.319	0.384	0.280	0.288	0.283			0.316	13.1
1,2,4-Trichlorobenzene	0.379	0.372	0.375	0.328	0.313	0.297			0.344	10.5
Naphthalene	0.903	0.968	1.025	0.861	0.828	0.780			0.894	10.2
4-Chloroaniline	0.413	0.417	0.431	0.339	0.343	0.340			0.380	11.6
Bis(2-chloroethoxy)methane	0.277	0.285	0.286	0.243	0.234	0.227			0.259	10.4
Hexachlorobutadiene	0.275	0.225	0.230	0.179	0.182	0.172			0.210	19.2
4-Chloro-3-methylphenol	0.323	0.317	0.383	0.276	0.274	0.261			0.306	14.8
2-Methylnaphthalene	0.768	0.735	0.823	0.640	0.635	0.618			0.703	12.0
Hexachlorocyclopentadiene	0.240	0.304	0.324	0.244	0.307	0.293			0.285	12.3
2,4,6-Trichlorophenol	0.359	0.365	0.425	0.368	0.368	0.381			0.378	6.4
2,4,5-Trichlorophenol		0.414	0.457	0.381	0.388	0.388			0.406	7.8
2-Chloronaphthalene	0.960	1.040	1.085	0.951	0.937	0.967			0.990	5.9

Lab Name: MITKEM Case No.: M0975 SAS No.: SM0975  
 Lab Code: MITKEM Instrument ID: S6 Calibration Date(s): 06/27/2013 06/27/2013  
 GC Column: Rxi-5sil MS ID: 0.25 (mm) Length: 30 (mm) Calibration Times: 14:04 16:11  
 SDG No.:

LAB FILE ID: RRF005 = S6B4713.D RRF010 = S6B4715.D RRF025 = S6B4716.D RRF040 = S6B4716.D RRF060 = S6B4714.D  
 RRF080 = S6B4712.D

COMPOUND	RRF005	RRF010	RRF025	RRF040	RRF060	RRF080	RRF		% RSD	
2-Nitroaniline	0.260	0.334	0.258	0.267	0.278				0.280	11.2
Dimethylphthalate	1.232	1.351	1.518	1.203	1.257	1.276			1.306	8.8
Acenaphthylene	1.688	1.692	1.807	1.580	1.607	1.639			1.669	4.8
2,6-Dinitrotoluene	0.296	0.303	0.386	0.289	0.295	0.302			0.312	11.8
3-Nitroaniline	0.292	0.380	0.282	0.303	0.316				0.315	12.4
Acenaphthene	1.095	1.116	1.308	1.065	1.084				1.122	8.3
2,4-Dinitrophenol	0.170	0.219	0.215	0.220	0.238				0.212	11.9
4-Nitrophenol	0.342	0.414	0.316	0.333	0.338				0.348	10.9
Dibenzofuran	1.559	1.640	1.787	1.495	1.506	1.518			1.584	7.1
2,4-Dinitrotoluene	0.435	0.420	0.530	0.399	0.420	0.434			0.440	10.5
Diethylphthalate	1.262	1.340	1.482	1.244	1.232	1.255			1.303	7.4
4-Chlorophenyl-phenylether	0.664	0.736	0.839	0.704	0.709	0.705			0.726	8.3
Fluorene	1.234	1.354	1.548	1.329	1.332	1.355			1.359	7.6
4-Nitroaniline	0.349	0.429	0.324	0.355	0.361				0.364	10.8
4,6-Dinitro-2-methylphenol	0.123	0.145	0.132	0.139	0.139	0.139			0.136	6.0
N-Nitrosodiphenylamine	0.480	0.530	0.582	0.502	0.518	0.495			0.518	6.9
4-Bromophenyl-phenylether	0.195	0.206	0.208	0.193	0.196	0.181			0.197	5.1
Hexachlorobenzene	0.212	0.215	0.233	0.202	0.212	0.205			0.213	5.0
Pentachlorophenol	0.119	0.119	0.137	0.148	0.145	0.144			0.139	8.7
Phenanthrene	0.883	0.968	1.074	0.922	0.942	0.924			0.952	6.9
Anthracene	0.928	0.980	1.106	0.919	0.996	0.957			0.981	6.9
Carbazole	0.859	0.913	1.077	0.832	0.901	0.902			0.914	9.3
Di-n-butylphthalate	0.928	1.033	1.183	0.999	1.046	1.033			1.037	8.0
Fluoranthene	1.161	1.250	1.459	1.167	1.257	1.254			1.258	8.6
Pyrene	0.771	0.876	0.923	0.816	0.790	0.716			0.815	9.1
Butylbenzylphthalate	0.323	0.373	0.406	0.361	0.358	0.322			0.357	8.9
3,3'-Dichlorobenzidine	0.376	0.381	0.486	0.348	0.373	0.367			0.389	12.7

Lab Name: Spectrum Analytical, Inc. Case No.: M0975 SAS No.: SDG No.: SM0975  
 Lab Code: MITKEM Instrument ID: S6 Calibration Date(s): 06/27/2013 06/27/2013  
 GC Column: Rxi-5sil MS ID: 0.25 (mm) Length: 30 (mm) Calibration Times: 14:04 16:11

LAB FILE ID: RRF005 = S6B4713.D RRF010 = S6B4715.D RRF025 = S6B4716.D RRF040 = S6B4717.D RRF060 = S6B4714.D  
 RRF080 = S6B4712.D

COMPOUND	RRF005	RRF010	RRF025	RRF040	RRF060	RRF080	RRF		% RSD	
Benzo(a)anthracene	0.952	1.019	1.185	0.935	0.952	0.914			0.993	10.1
Chrysene	0.894	0.922	1.043	0.824	0.844	0.812			0.890	9.6
Bis(2-ethylhexyl)phthalate	0.529	0.525	0.592	0.545	0.537	0.510			0.540	5.2
Di-n-octylphthalate	0.804	0.888	0.887	0.844	0.798	0.749			0.828	6.6
Benzo(b)fluoranthene	1.001	1.027	1.153	0.930	0.928	0.903			0.990	9.4
Benzo(k)fluoranthene	0.972	1.006	1.123	0.991	0.981	0.945			1.003	6.2
Benzo(a)pyrene	0.947	0.967	1.111	0.923	0.934	0.918			0.967	7.5
Indeno(1,2,3-cd)pyrene	0.992	1.008	1.232	1.184	1.265	1.253			1.156	10.7
Dibenzo(a,h)anthracene	0.913	1.049	1.225	0.955	1.014	0.988			1.024	10.6
Benzo(g,h,i)perylene	1.053	1.081	1.324	0.996	1.057	1.067			1.096	10.5



Lab Name: Spectrum Analytical, Inc. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 SAS No.: \_\_\_\_\_ SDG No.: SM0975  
 Instrument ID: S6 Calibration Date(s): 06/27/2013 06/27/2013  
 GC Column: Rxi-5sil MS ID: 0.25 (mm) Length: 30 (mm) Calibration Times: 14:04 16:11

LAB FILE ID: RRF005 = S6B4713.D RRF010 = S6B4715.D RRF025 = S6B4716.D RRF040 = S6B4716.D RRF060 = S6B4714.D  
 RRF080 = S6B4712.D

COMPOUND	RRF005	RRF010	RRF025	RRF040	RRF060	RRF080	RRF		% RSD
Nitrobenzene-d5	0.359	0.358	0.360	0.327	0.320	0.303		0.338	7.3
2-Fluorobiphenyl	1.126	1.192	1.319	1.183	1.196	1.185		1.200	5.3
Terphenyl-d14	0.553	0.620	0.660	0.589	0.569	0.514		0.584	8.8
Phenol-d5	1.199	1.323	1.557	1.250	1.311	1.324		1.327	9.3
2-Fluorophenol	0.847	0.985	1.062	0.951	0.999	0.987		0.972	7.3
2,4,6-Tribromophenol	0.084	0.108	0.103	0.098	0.102	0.097		0.099	8.3

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S6.I\130621.B\S6B4571A.d  
 Lab Smp Id: SSTD0256W Client Smp ID: SSTD0256W  
 Inj Date : 21-JUN-2013 15:17  
 Operator : PK SRC: PK Inst ID: S6.i  
 Smp Info : SSTD0256W,SSTD0256W  
 Misc Info : 2,3  
 Comment :  
 Method : \\avogadro\organics\S6.I\130621.B\S6\_8270C\_N.m  
 Meth Date : 24-Jun-2013 12:00 pkaczorows Quant Type: ISTD  
 Cal Date : 21-JUN-2013 16:38 Cal File: S6B4574.d  
 Dil bottle: 1 Calibration Sample, Level: 3  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: allnew.sub  
 Target Version: 4.14  
 Processing Host: TARGET113

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

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

Compounds	QUANT	SIG	AMOUNTS					
			RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
\$ 109 1,4-Dioxane-d8	96	====	2.700	2.700	(0.506)	8892	25.0000	32
108 1,4-Dioxane	58		2.730	2.730	(0.512)	3258	25.0000	24(Q)
1 N-Nitrosodimethylamine	74		3.012	3.012	(0.565)	21094	25.0000	29(Q)
2 Pyridine	79		3.065	3.065	(0.575)	29644	25.0000	27(TQ)
\$ 3 2-Fluorophenol	112		4.228	4.228	(0.793)	43675	25.0000	27
101 Benzaldehyde	77		4.962	4.962	(0.931)	42914	25.0000	27
\$ 5 Phenol-d5	99		5.009	5.009	(0.939)	62047	25.0000	26
6 Phenol	94		5.021	5.021	(0.942)	62719	25.0000	26
7 Aniline	66		5.021	5.021	(0.942)	49952	25.0000	27
8 bis(2-Chloroethyl)Ether	63		5.097	5.097	(0.956)	23505	25.0000	26
10 2-Chlorophenol	128		5.156	5.156	(0.967)	56215	25.0000	27
11 1,3-Dichlorobenzene	146		5.285	5.285	(0.991)	64043	25.0000	26
* 12 1,4-Dichlorobenzene-d4	152		5.332	5.332	(1.000)	78500	40.0000	
13 1,4-Dichlorobenzene	146		5.344	5.344	(1.002)	69364	25.0000	27
117 2-Ethyl-1-hexanol	57		5.374	5.374	(1.008)	23218	25.0000	28
15 Benzyl Alcohol	108		5.438	5.438	(1.020)	40410	25.0000	27
16 1,2-Dichlorobenzene	146		5.474	5.474	(1.026)	67739	25.0000	27
17 2-Methylphenol	108		5.526	5.526	(1.036)	52765	25.0000	27
18 2,2'-oxybis(1-Chloropropane)	45		5.544	5.544	(1.040)	18623	25.0000	26(Q)
99 Acetophenone	105		5.662	5.662	(1.062)	101337	25.0000	27

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
19 N-Nitroso-di-n-propylamine	70	5.656	5.656	(1.061)	44422	25.0000	26
20 4-Methylphenol	108	5.656	5.656	(1.061)	60834	25.0000	26
21 Hexachloroethane	117	5.761	5.761	(1.080)	25684	25.0000	26(Q)
\$ 22 Nitrobenzene-d5	82	5.785	5.785	(0.904)	79913	25.0000	27
23 Nitrobenzene	77	5.803	5.803	(0.907)	77281	25.0000	28
24 Isophorone	82	6.002	6.002	(0.938)	123634	25.0000	28
25 2-Nitrophenol	139	6.073	6.073	(0.949)	37715	25.0000	26
26 2,4-Dimethylphenol	107	6.096	6.096	(0.953)	78306	25.0000	29
27 bis(2-Chloroethoxy)methane	93	6.173	6.173	(0.965)	59691	25.0000	27
28 Benzoic Acid	105	6.179	6.179	(0.966)	62772	25.0000	28
29 2,4-Dichlorophenol	162	6.267	6.267	(0.980)	84784	25.0000	29
30 1,2,4-Trichlorobenzene	180	6.343	6.343	(0.992)	99706	25.0000	27
* 31 Naphthalene-d8	136	6.396	6.396	(1.000)	341910	40.0000	
32 Naphthalene	128	6.408	6.408	(1.002)	202129	25.0000	27
115 alpha-Terpineol	59	6.408	6.408	(1.002)	28833	25.0000	27(Q)
33 4-Chloroaniline	127	6.443	6.443	(1.007)	84677	25.0000	27
34 Hexachlorobutadiene	225	6.513	6.513	(1.018)	73673	25.0000	26
102 Caprolactam	113	6.743	6.743	(1.054)	27825	25.0000	30
35 4-Chloro-3-Methylphenol	107	6.843	6.843	(1.070)	75033	25.0000	28
36 2-Methylnaphthalene	142	6.984	6.984	(1.092)	170561	25.0000	27
114 1-Methylnaphthalene	142	7.066	7.066	(1.105)	162032	25.0000	28
38 Hexachlorocyclopentadiene	237	7.125	7.125	(0.907)	94610	25.0000	29
112 1,2,4,5-Tetrachlorobenzene	216	7.125	7.125	(0.907)	157064	25.0000	28
39 2,4,6-Trichlorophenol	196	7.213	7.213	(0.918)	100269	25.0000	29
40 2,4,5-Trichlorophenol	196	7.248	7.248	(0.922)	107516	25.0000	29
\$ 41 2-Fluorobiphenyl	172	7.283	7.283	(0.927)	287526	25.0000	28
98 1,1'-Biphenyl	154	7.371	7.371	(0.938)	272875	25.0000	28
42 2-Chloronaphthalene	162	7.389	7.389	(0.940)	200346	25.0000	28
43 2-Nitroaniline	65	7.465	7.465	(0.950)	55323	25.0000	29
44 Dimethylphthalate	163	7.612	7.612	(0.969)	293057	25.0000	28
45 2,6-Dinitrotoluene	165	7.665	7.665	(0.975)	70649	25.0000	30
46 Acenaphthylene	152	7.741	7.741	(0.985)	338607	25.0000	28
47 3-Nitroaniline	138	7.806	7.806	(0.993)	53186	25.0000	28
* 48 Acenaphthene-d10	164	7.859	7.859	(1.000)	312148	40.0000	
49 Acenaphthene	153	7.888	7.888	(1.004)	232499	25.0000	28
50 2,4-Dinitrophenol	184	7.888	7.888	(1.004)	58089	25.0000	27
51 4-Nitrophenol	109	7.935	7.935	(1.010)	78038	25.0000	30
53 2,4-Dinitrotoluene	165	8.000	8.000	(1.018)	97811	25.0000	29(Q)
52 Dibenzofuran	168	8.029	8.029	(1.022)	359774	25.0000	28
110 2,3,4,6-Tetrachlorophenol	232	8.129	8.129	(1.034)	118785	25.0000	29
54 Diethylphthalate	149	8.200	8.200	(1.043)	279823	25.0000	29
56 4-Chlorophenyl-phenylether	204	8.300	8.300	(1.056)	206477	25.0000	28
55 Fluorene	166	8.311	8.311	(1.058)	310755	25.0000	28
57 4-Nitroaniline	138	8.323	8.323	(1.059)	66278	25.0000	28
58 4,6-Dinitro-2-methylphenol	198	8.347	8.347	(0.917)	80501	25.0000	28
59 N-Nitrosodiphenylamine	169	8.400	8.400	(0.923)	277709	25.0000	28
97 Azobenzene	77	8.435	8.435	(0.926)	291849	25.0000	28
\$ 60 2,4,6-Tribromophenol	330	8.517	8.517	(0.935)	79585	25.0000	30
61 4-Bromophenyl-phenylether	248	8.711	8.711	(0.957)	141202	25.0000	29
62 Hexachlorobenzene	284	8.781	8.781	(0.965)	149341	25.0000	28
100 Atrazine	200	8.834	8.834	(0.970)	49437	25.0000	27
63 Pentachlorophenol	266	8.940	8.940	(0.982)	120103	25.0000	28(Q)
111 Pentachloronitrobenzene	237	8.958	8.958	(0.984)	75098	25.0000	28
* 64 Phenanthrene-d10	188	9.105	9.105	(1.000)	829223	40.0000	

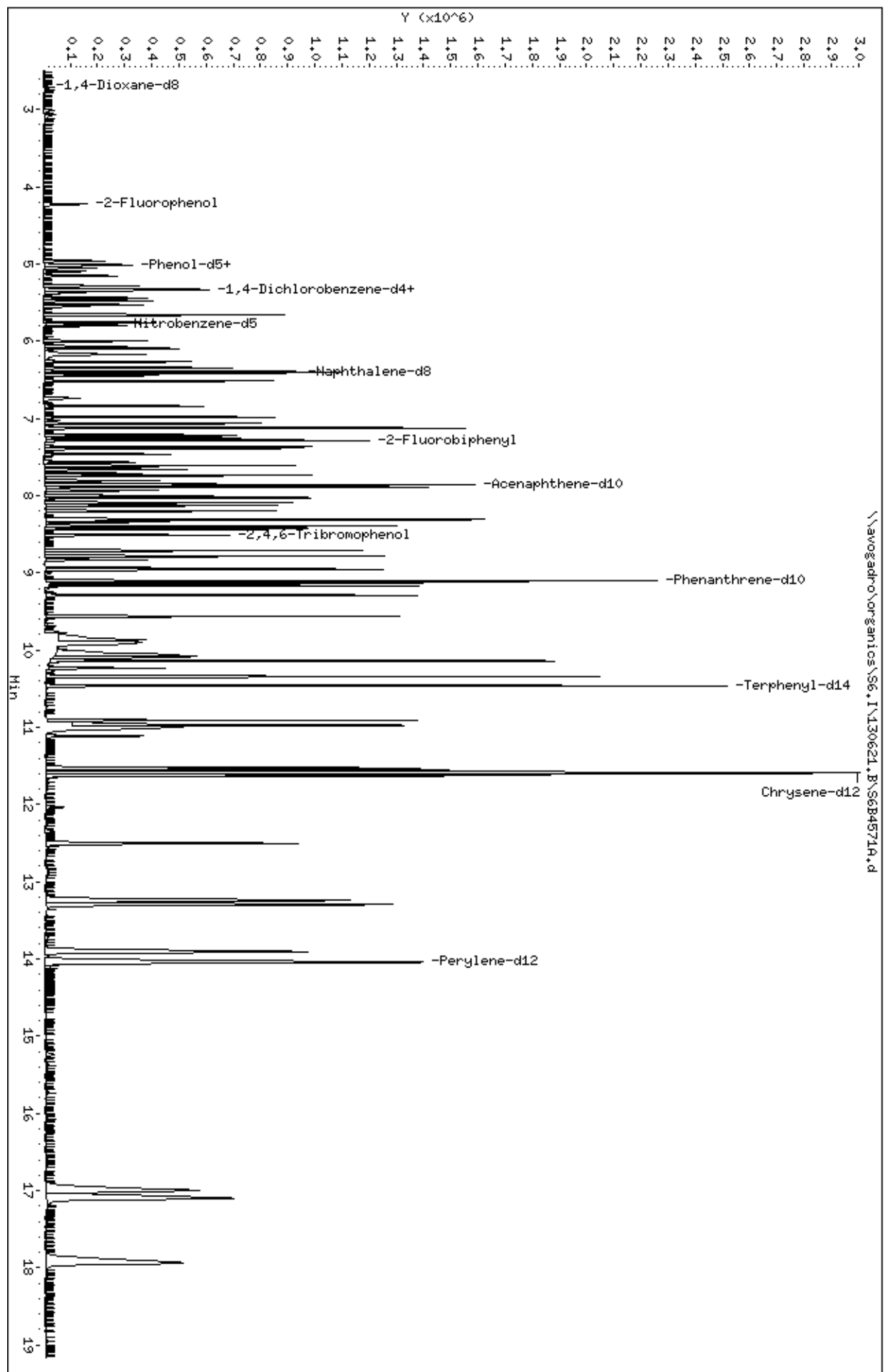
Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
65 Phenanthrene	178	9.122	9.122	(1.002)	529335	25.0000	28
66 Anthracene	178	9.163	9.163	(1.006)	544250	25.0000	29
67 Carbazole	167	9.293	9.293	(1.021)	483633	25.0000	29
68 Di-n-butylphthalate	149	9.563	9.563	(1.050)	501089	25.0000	28
69 Fluoranthene	202	10.145	10.145	(1.114)	767882	25.0000	28
70 Benzidine	184	10.239	10.239	(0.883)	164762	25.0000	27
71 Pyrene	202	10.344	10.344	(0.893)	799043	25.0000	29
\$ 72 Terphenyl-d14	244	10.462	10.462	(0.903)	644053	25.0000	29
73 Butylbenzylphthalate	149	10.908	10.908	(0.941)	255847	25.0000	28
74 3,3'-Dichlorobenzidine	252	11.525	11.525	(0.994)	371111	25.0000	29
78 bis(2-Ethylhexyl)phthalate	149	11.555	11.555	(0.997)	365785	25.0000	27
75 Benzo(a)anthracene	228	11.572	11.572	(0.998)	982018	25.0000	29
* 76 Chrysene-d12	240	11.590	11.590	(1.000)	1384512	40.0000	
77 Chrysene	228	11.625	11.625	(1.003)	869033	25.0000	29
79 Di-n-octylphthalate	149	12.501	12.501	(0.890)	611509	25.0000	27
80 Benzo(b)fluoranthene	252	13.241	13.241	(0.943)	982247	25.0000	28
81 Benzo(k)fluoranthene	252	13.294	13.294	(0.947)	994552	25.0000	28
82 Benzo(a)pyrene	252	13.911	13.911	(0.991)	955048	25.0000	28
* 83 Perylene-d12	264	14.040	14.040	(1.000)	1415377	40.0000	
84 Indeno(1,2,3-cd)pyrene	276	17.001	17.001	(1.211)	986434	25.0000	26
85 Dibenzo(a,h)anthracene	278	17.101	17.101	(1.218)	977414	25.0000	28
86 Benzo(g,h,i)perylene	276	17.936	17.936	(1.277)	1003920	25.0000	28

QC Flag Legend

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

Data File: \\avogadro\organicos\S6.I\130621.B\S6B4571A.d  
Date : 21-JUN-2013 15:17  
Client ID: SSTID0256M  
Sample Info: SSTID0256M,SSTID0256M  
Volume Injected (uL): 1.0  
Column phase: Rxi-5S11 MS

Instrument: S6.i  
Operator: PK SRC: PK  
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S6.I\130621.B\S6B4572.d  
 Lab Smp Id: SSTD0056W Client Smp ID: SSTD0056W  
 Inj Date : 21-JUN-2013 15:48  
 Operator : PK SRC: PK Inst ID: S6.i  
 Smp Info : SSTD0056W,SSTD0056W  
 Misc Info : 1,1  
 Comment :  
 Method : \\avogadro\organics\S6.I\130621.B\S6\_8270C\_N.m  
 Meth Date : 24-Jun-2013 12:00 pkaczorows Quant Type: ISTD  
 Cal Date : 21-JUN-2013 16:38 Cal File: S6B4574.d  
 Als bottle: 2 Calibration Sample, Level: 1  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: allnew.sub  
 Target Version: 4.14  
 Processing Host: TARGET113

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

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

Compounds	QUANT	SIG	AMOUNTS					
			RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
\$ 109 1,4-Dioxane-d8	96		2.718	2.700	(0.510)	1065	5.00000	4(a)
108 1,4-Dioxane	58		2.729	2.730	(0.512)	1052	5.00000	7(aQ)
1 N-Nitrosodimethylamine	74		3.017	3.012	(0.566)	3145	5.00000	4(a)
2 Pyridine	79		3.100	3.065	(0.581)	4326	5.00000	4(TaQ)
\$ 3 2-Fluorophenol	112		4.228	4.228	(0.793)	7470	5.00000	4(a)
101 Benzaldehyde	77		4.962	4.962	(0.931)	9647	5.00000	6(a)
\$ 5 Phenol-d5	99		5.009	5.009	(0.939)	12210	5.00000	5(a)
6 Phenol	94		5.021	5.021	(0.942)	11037	5.00000	4(a)
7 Aniline	66		5.015	5.021	(0.941)	8350	5.00000	4(a)
8 bis(2-Chloroethyl)Ether	63		5.097	5.097	(0.956)	5354	5.00000	6(aQ)
10 2-Chlorophenol	128		5.156	5.156	(0.967)	9622	5.00000	4(a)
11 1,3-Dichlorobenzene	146		5.285	5.285	(0.991)	12857	5.00000	5(a)
* 12 1,4-Dichlorobenzene-d4	152		5.332	5.332	(1.000)	81092	40.0000	
13 1,4-Dichlorobenzene	146		5.344	5.344	(1.002)	12831	5.00000	5(a)
117 2-Ethyl-1-hexanol	57		5.373	5.374	(1.008)	4079	5.00000	5(a)
15 Benzyl Alcohol	108		5.438	5.438	(1.020)	7666	5.00000	5(a)
16 1,2-Dichlorobenzene	146		5.473	5.474	(1.026)	13138	5.00000	5(a)
17 2-Methylphenol	108		5.526	5.526	(1.036)	9466	5.00000	5(a)
18 2,2'-oxybis(1-Chloropropane)	45		5.550	5.544	(1.041)	4095	5.00000	5(aQ)
99 Acetophenone	105		5.655	5.662	(1.061)	19633	5.00000	5(aQ)

Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
19 N-Nitroso-di-n-propylamine	70	5.655	5.656	(1.061)	8142	5.00000	5(a)
20 4-Methylphenol	108	5.650	5.656	(1.059)	10060	5.00000	4(a)
21 Hexachloroethane	117	5.761	5.761	(1.080)	4535	5.00000	4(a)
\$ 22 Nitrobenzene-d5	82	5.785	5.785	(0.905)	16030	5.00000	5(a)
23 Nitrobenzene	77	5.802	5.803	(0.908)	14760	5.00000	5(a)
24 Isophorone	82	5.996	6.002	(0.938)	24099	5.00000	5(a)
25 2-Nitrophenol	139	6.067	6.073	(0.949)	7995	5.00000	5(a)
26 2,4-Dimethylphenol	107	6.090	6.096	(0.953)	11742	5.00000	4(a)
27 bis(2-Chloroethoxy)methane	93	6.172	6.173	(0.966)	11040	5.00000	5(a)
28 Benzoic Acid	105	6.137	6.179	(0.960)	11204	5.00000	5(a)
29 2,4-Dichlorophenol	162	6.266	6.267	(0.981)	14758	5.00000	5(a)
30 1,2,4-Trichlorobenzene	180	6.343	6.343	(0.993)	19227	5.00000	5(a)
* 31 Naphthalene-d8	136	6.390	6.396	(1.000)	346121	40.0000	
32 Naphthalene	128	6.407	6.408	(1.003)	38287	5.00000	5(a)
115 alpha-Terpineol	59	6.407	6.408	(1.003)	5101	5.00000	5(aQ)
33 4-Chloroaniline	127	6.443	6.443	(1.008)	16984	5.00000	5(a)
34 Hexachlorobutadiene	225	6.513	6.513	(1.019)	14597	5.00000	5(a)
102 Caprolactam	113	6.719	6.743	(1.051)	5657	5.00000	6(a)
35 4-Chloro-3-Methylphenol	107	6.836	6.843	(1.070)	13419	5.00000	5(a)
36 2-Methylnaphthalene	142	6.983	6.984	(1.093)	33212	5.00000	5(a)
114 1-Methylnaphthalene	142	7.066	7.066	(1.106)	30238	5.00000	5(a)
38 Hexachlorocyclopentadiene	237	7.124	7.125	(0.907)	15959	5.00000	4(a)
112 1,2,4,5-Tetrachlorobenzene	216	7.124	7.125	(0.907)	27621	5.00000	4(a)
39 2,4,6-Trichlorophenol	196	7.212	7.213	(0.918)	18557	5.00000	4(aQ)
40 2,4,5-Trichlorophenol	196	7.242	7.248	(0.922)	18743	5.00000	4(a)
\$ 41 2-Fluorobiphenyl	172	7.283	7.283	(0.927)	55840	5.00000	5(a)
98 1,1'-Biphenyl	154	7.365	7.371	(0.937)	51080	5.00000	4(a)
42 2-Chloronaphthalene	162	7.389	7.389	(0.940)	42161	5.00000	5(a)
43 2-Nitroaniline	65	7.465	7.465	(0.950)	10178	5.00000	4(a)
44 Dimethylphthalate	163	7.612	7.612	(0.969)	56569	5.00000	5(Ta)
45 2,6-Dinitrotoluene	165	7.659	7.665	(0.975)	13404	5.00000	5(a)
46 Acenaphthylene	152	7.741	7.741	(0.985)	62660	5.00000	4(a)
47 3-Nitroaniline	138	7.806	7.806	(0.993)	11023	5.00000	5(a)
* 48 Acenaphthene-d10	164	7.859	7.859	(1.000)	369200	40.0000	
49 Acenaphthene	153	7.882	7.888	(1.003)	41535	5.00000	4(a)
50 2,4-Dinitrophenol	184	7.888	7.888	(1.004)	8887	5.00000	4(aQ)
51 4-Nitrophenol	109	7.929	7.935	(1.009)	15090	5.00000	5(a)
53 2,4-Dinitrotoluene	165	8.000	8.000	(1.018)	19991	5.00000	5(a)
52 Dibenzofuran	168	8.023	8.029	(1.021)	70398	5.00000	5(a)
110 2,3,4,6-Tetrachlorophenol	232	8.129	8.129	(1.034)	23251	5.00000	5
54 Diethylphthalate	149	8.194	8.200	(1.043)	52163	5.00000	4(a)
56 4-Chlorophenyl-phenylether	204	8.299	8.300	(1.056)	40148	5.00000	5(a)
55 Fluorene	166	8.311	8.311	(1.058)	57447	5.00000	4(a)
57 4-Nitroaniline	138	8.311	8.323	(1.058)	14104	5.00000	5(a)
58 4,6-Dinitro-2-methylphenol	198	8.341	8.347	(0.916)	14544	5.00000	4(aQ)
59 N-Nitrosodiphenylamine	169	8.399	8.400	(0.922)	50429	5.00000	4(a)
97 Azobenzene	77	8.435	8.435	(0.926)	57872	5.00000	5(a)
\$ 60 2,4,6-Tribromophenol	330	8.511	8.517	(0.934)	13103	5.00000	4(a)
61 4-Bromophenyl-phenylether	248	8.717	8.711	(0.957)	26723	5.00000	4(a)
62 Hexachlorobenzene	284	8.787	8.781	(0.965)	29672	5.00000	5(a)
100 Atrazine	200	8.834	8.834	(0.970)	14231	5.00000	6(a)
63 Pentachlorophenol	266	8.940	8.940	(0.981)	24203	5.00000	5(aQ)
111 Pentachloronitrobenzene	237	8.957	8.958	(0.983)	14724	5.00000	5(a)
* 64 Phenanthrene-d10	188	9.110	9.105	(1.000)	985365	40.0000	

Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
65 Phenanthrene	178	9.128	9.122	(1.002)	101639	5.00000	4(a)
66 Anthracene	178	9.169	9.163	(1.006)	99211	5.00000	4(a)
67 Carbazole	167	9.292	9.293	(1.020)	88946	5.00000	4(a)
68 Di-n-butylphthalate	149	9.569	9.563	(1.050)	94265	5.00000	4(a)
69 Fluoranthene	202	10.156	10.145	(1.115)	148111	5.00000	5(a)
70 Benzidine	184	10.250	10.239	(0.882)	32305	5.00000	4(a)
71 Pyrene	202	10.362	10.344	(0.892)	149592	5.00000	5(a)
\$ 72 Terphenyl-d14	244	10.479	10.462	(0.902)	122701	5.00000	5(a)
73 Butylbenzylphthalate	149	10.932	10.908	(0.941)	46801	5.00000	4(a)
74 3,3'-Dichlorobenzidine	252	11.549	11.525	(0.994)	66873	5.00000	4(a)
78 bis(2-Ethylhexyl)phthalate	149	11.584	11.555	(0.997)	66434	5.00000	4(a)
75 Benzo(a)anthracene	228	11.596	11.572	(0.998)	192266	5.00000	5(a)
* 76 Chrysene-d12	240	11.619	11.590	(1.000)	1607296	40.0000	
77 Chrysene	228	11.643	11.625	(1.002)	167109	5.00000	5(a)
79 Di-n-octylphthalate	149	12.536	12.501	(0.890)	112890	5.00000	4(a)
80 Benzo(b)fluoranthene	252	13.258	13.241	(0.942)	178848	5.00000	4(a)
81 Benzo(k)fluoranthene	252	13.311	13.294	(0.945)	194579	5.00000	5(a)
82 Benzo(a)pyrene	252	13.922	13.911	(0.989)	168863	5.00000	4(a)
* 83 Perylene-d12	264	14.081	14.040	(1.000)	1594882	40.0000	
84 Indeno(1,2,3-cd)pyrene	276	17.007	17.001	(1.208)	174805	5.00000	4(aH)
85 Dibenzo(a,h)anthracene	278	17.101	17.101	(1.214)	174761	5.00000	4(aH)
86 Benzo(g,h,i)perylene	276	17.924	17.936	(1.273)	184388	5.00000	5(a)

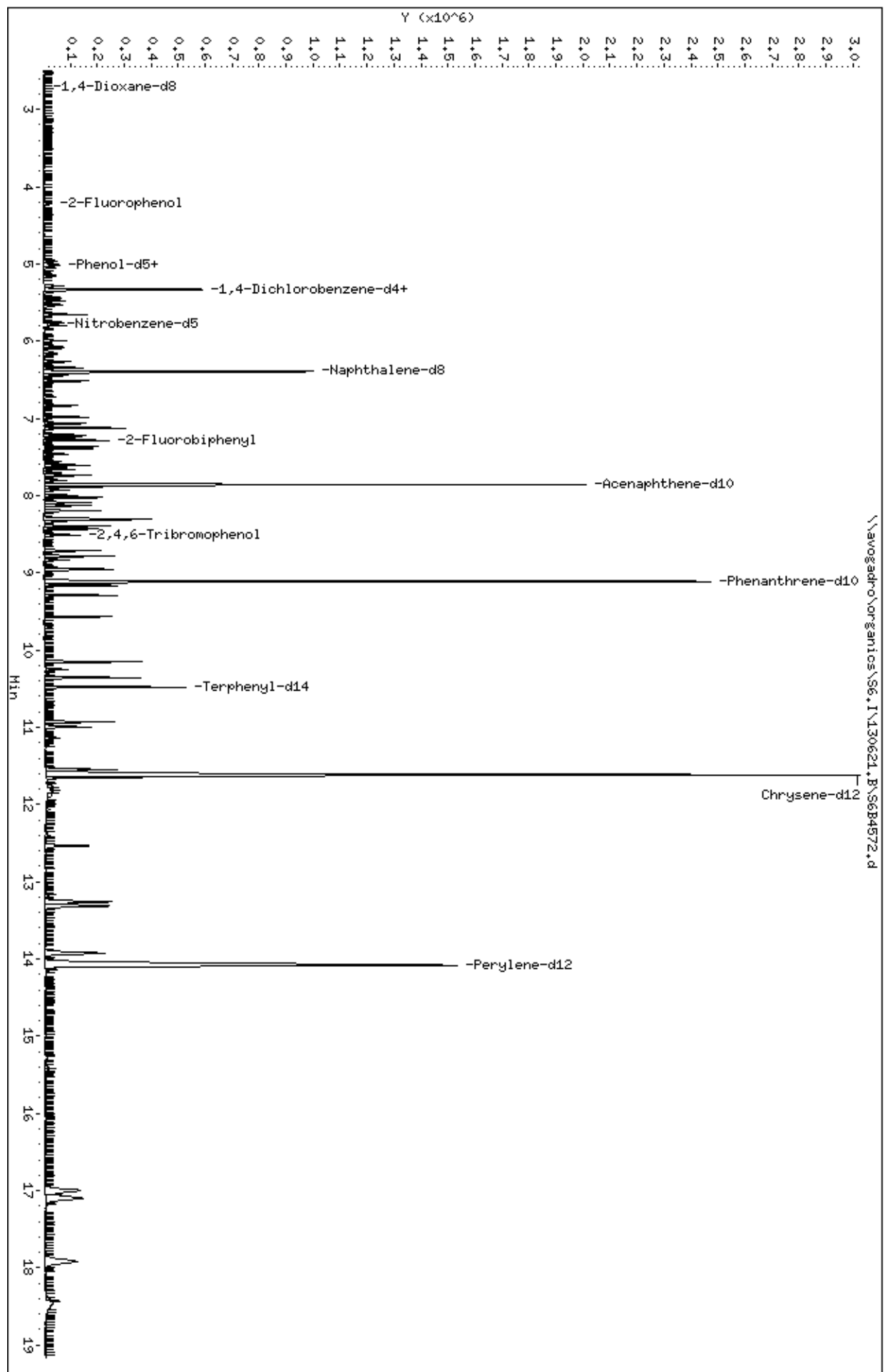
QC Flag Legend

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



Data File: \\avogadro\organics\S6,I\130621,B\S6B4572.d  
 Date: 21-JUN-2013 15:48  
 Client ID: SSTID0056M  
 Sample Info: SSTID0056M,SSTID0056M  
 Volume Injected (uL): 1.0  
 Column phase: Rxi-5S11 MS

Instrument: S6.i  
 Operator: PK SRC: PK  
 Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S6.I\130621.B\S6B4573.d  
 Lab Smp Id: SSTD0606W Client Smp ID: SSTD0606W  
 Inj Date : 21-JUN-2013 16:13  
 Operator : PK SRC: PK Inst ID: S6.i  
 Smp Info : SSTD0606W,SSTD0606W  
 Misc Info : 1,5  
 Comment :  
 Method : \\avogadro\organics\S6.I\130621.B\S6\_8270C\_N.m  
 Meth Date : 24-Jun-2013 12:00 pkaczorows Quant Type: ISTD  
 Cal Date : 21-JUN-2013 16:38 Cal File: S6B4574.d  
 Als bottle: 3 Calibration Sample, Level: 5  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: allnew.sub  
 Target Version: 4.14  
 Processing Host: TARGET113

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

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

Compounds	QUANT	SIG	AMOUNTS					
			RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
\$ 109 1,4-Dioxane-d8	96		2.694	2.700	(0.505)	16530	60.0000	51
108 1,4-Dioxane	58		2.724	2.730	(0.511)	9000	60.0000	57(Q)
1 N-Nitrosodimethylamine	74		3.012	3.012	(0.565)	52589	60.0000	62
2 Pyridine	79		3.053	3.065	(0.573)	76381	60.0000	60
\$ 3 2-Fluorophenol	112		4.228	4.228	(0.793)	116195	60.0000	63
101 Benzaldehyde	77		4.962	4.962	(0.931)	97025	60.0000	52
\$ 5 Phenol-d5	99		5.021	5.009	(0.942)	164483	60.0000	60
6 Phenol	94		5.033	5.021	(0.944)	176584	60.0000	63
7 Aniline	66		5.033	5.021	(0.944)	134635	60.0000	62(Q)
8 bis(2-Chloroethyl)Ether	63		5.103	5.097	(0.957)	57172	60.0000	55
10 2-Chlorophenol	128		5.162	5.156	(0.968)	147430	60.0000	61
11 1,3-Dichlorobenzene	146		5.285	5.285	(0.991)	170249	60.0000	59
* 12 1,4-Dichlorobenzene-d4	152		5.332	5.332	(1.000)	91376	40.0000	
13 1,4-Dichlorobenzene	146		5.344	5.344	(1.002)	174255	60.0000	58
117 2-Ethyl-1-hexanol	57		5.379	5.374	(1.009)	56278	60.0000	57
15 Benzyl Alcohol	108		5.444	5.438	(1.021)	104278	60.0000	60
16 1,2-Dichlorobenzene	146		5.479	5.474	(1.028)	172915	60.0000	60
17 2-Methylphenol	108		5.532	5.526	(1.037)	141198	60.0000	62
18 2,2'-oxybis(1-Chloropropane)	45		5.550	5.544	(1.041)	48197	60.0000	57(Q)
99 Acetophenone	105		5.667	5.662	(1.063)	271207	60.0000	61

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
19 N-Nitroso-di-n-propylamine	70	5.667	5.656 (1.063)		121041	60.0000	62
20 4-Methylphenol	108	5.661	5.656 (1.062)		171269	60.0000	63
21 Hexachloroethane	117	5.761	5.761 (1.080)		67582	60.0000	60(Q)
\$ 22 Nitrobenzene-d5	82	5.797	5.785 (0.906)		210593	60.0000	56
23 Nitrobenzene	77	5.808	5.803 (0.908)		194247	60.0000	56
24 Isophorone	82	6.008	6.002 (0.939)		312753	60.0000	56
25 2-Nitrophenol	139	6.073	6.073 (0.949)		102533	60.0000	55
26 2,4-Dimethylphenol	107	6.102	6.096 (0.954)		210555	60.0000	62
27 bis(2-Chloroethoxy)methane	93	6.179	6.173 (0.966)		160407	60.0000	58
28 Benzoic Acid	105	6.220	6.179 (0.972)		161107	60.0000	58
29 2,4-Dichlorophenol	162	6.273	6.267 (0.981)		214147	60.0000	57
30 1,2,4-Trichlorobenzene	180	6.349	6.343 (0.993)		264213	60.0000	57
* 31 Naphthalene-d8	136	6.396	6.396 (1.000)		432061	40.0000	
32 Naphthalene	128	6.414	6.408 (1.003)		540855	60.0000	57
115 alpha-Terpineol	59	6.414	6.408 (1.003)		79259	60.0000	59
33 4-Chloroaniline	127	6.449	6.443 (1.008)		216326	60.0000	55
34 Hexachlorobutadiene	225	6.519	6.513 (1.019)		195014	60.0000	55
102 Caprolactam	113	6.778	6.743 (1.060)		54158	60.0000	46
35 4-Chloro-3-Methylphenol	107	6.848	6.843 (1.071)		189771	60.0000	56
36 2-Methylnaphthalene	142	6.989	6.984 (1.093)		442795	60.0000	55
114 1-Methylnaphthalene	142	7.072	7.066 (1.106)		432845	60.0000	58
38 Hexachlorocyclopentadiene	237	7.125	7.125 (0.906)		248718	60.0000	64
112 1,2,4,5-Tetrachlorobenzene	216	7.130	7.125 (0.907)		413608	60.0000	61
39 2,4,6-Trichlorophenol	196	7.219	7.213 (0.918)		248634	60.0000	59
40 2,4,5-Trichlorophenol	196	7.254	7.248 (0.922)		272270	60.0000	60
\$ 41 2-Fluorobiphenyl	172	7.289	7.283 (0.927)		751683	60.0000	61
98 1,1'-Biphenyl	154	7.371	7.371 (0.937)		715449	60.0000	61
42 2-Chloronaphthalene	162	7.395	7.389 (0.940)		528428	60.0000	60
43 2-Nitroaniline	65	7.471	7.465 (0.950)		140749	60.0000	61
44 Dimethylphthalate	163	7.624	7.612 (0.969)		753092	60.0000	60
45 2,6-Dinitrotoluene	165	7.671	7.665 (0.975)		167548	60.0000	58
46 Acenaphthylene	152	7.747	7.741 (0.985)		867177	60.0000	60
47 3-Nitroaniline	138	7.818	7.806 (0.994)		136769	60.0000	59
* 48 Acenaphthene-d10	164	7.865	7.859 (1.000)		377544	40.0000	
49 Acenaphthene	153	7.894	7.888 (1.004)		615158	60.0000	62
50 2,4-Dinitrophenol	184	7.900	7.888 (1.004)		162594	60.0000	63(Q)
51 4-Nitrophenol	109	7.947	7.935 (1.010)		189690	60.0000	59
53 2,4-Dinitrotoluene	165	8.012	8.000 (1.019)		241727	60.0000	59(Q)
52 Dibenzofuran	168	8.035	8.029 (1.022)		922489	60.0000	60
110 2,3,4,6-Tetrachlorophenol	232	8.135	8.129 (1.034)		299782	60.0000	60
54 Diethylphthalate	149	8.206	8.200 (1.043)		712408	60.0000	61
56 4-Chlorophenyl-phenylether	204	8.306	8.300 (1.056)		541141	60.0000	62
55 Fluorene	166	8.317	8.311 (1.058)		840097	60.0000	62
57 4-Nitroaniline	138	8.341	8.323 (1.061)		165663	60.0000	58
58 4,6-Dinitro-2-methylphenol	198	8.358	8.347 (0.918)		213372	60.0000	60
59 N-Nitrosodiphenylamine	169	8.405	8.400 (0.923)		727879	60.0000	60
97 Azobenzene	77	8.441	8.435 (0.927)		767631	60.0000	59
\$ 60 2,4,6-Tribromophenol	330	8.523	8.517 (0.936)		198469	60.0000	61
61 4-Bromophenyl-phenylether	248	8.717	8.711 (0.957)		359472	60.0000	59
62 Hexachlorobenzene	284	8.787	8.781 (0.965)		389480	60.0000	60
100 Atrazine	200	8.840	8.834 (0.971)		81283	60.0000	36
63 Pentachlorophenol	266	8.946	8.940 (0.983)		299807	60.0000	58(Q)
111 Pentachloronitrobenzene	237	8.964	8.958 (0.985)		197484	60.0000	60
* 64 Phenanthrene-d10	188	9.105	9.105 (1.000)		1020914	40.0000	

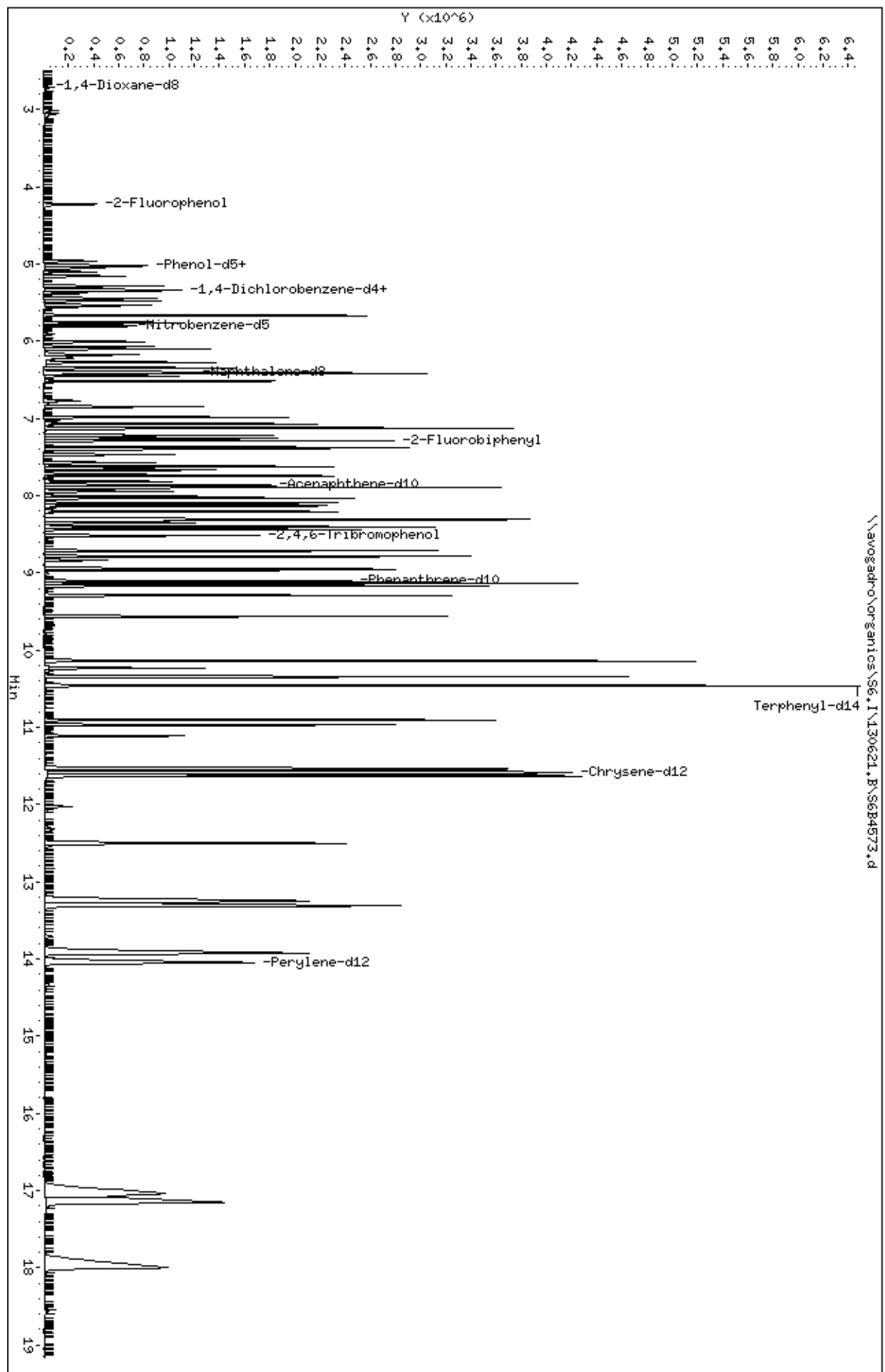
Compounds	QUANT		SIG				AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)	
=====	====	====	=====	=====	=====	=====	=====	
65 Phenanthrene	178	9.128	9.122	(1.003)	1355510	60.0000	59	
66 Anthracene	178	9.169	9.163	(1.007)	1428595	60.0000	61	
67 Carbazole	167	9.298	9.293	(1.021)	1259032	60.0000	61	
68 Di-n-butylphthalate	149	9.563	9.563	(1.050)	1328099	60.0000	60	
69 Fluoranthene	202	10.145	10.145	(1.114)	1995712	60.0000	60	
70 Benzidine	184	10.239	10.239	(0.883)	473369	60.0000	62	
71 Pyrene	202	10.344	10.344	(0.892)	2046106	60.0000	59	
§ 72 Terphenyl-d14	244	10.462	10.462	(0.902)	1642176	60.0000	59	
73 Butylbenzylphthalate	149	10.908	10.908	(0.941)	667113	60.0000	59	
74 3,3'-Dichlorobenzidine	252	11.531	11.525	(0.994)	949373	60.0000	60	
78 bis(2-Ethylhexyl)phthalate	149	11.549	11.555	(0.996)	1032344	60.0000	61	
75 Benzo(a)anthracene	228	11.572	11.572	(0.998)	2474179	60.0000	58	
* 76 Chrysene-d12	240	11.596	11.590	(1.000)	1736180	40.0000		
77 Chrysene	228	11.631	11.625	(1.003)	2189000	60.0000	58	
79 Di-n-octylphthalate	149	12.501	12.501	(0.890)	1610712	60.0000	60	
80 Benzo(b)fluoranthene	252	13.247	13.241	(0.943)	2540880	60.0000	60	
81 Benzo(k)fluoranthene	252	13.311	13.294	(0.947)	2415808	60.0000	58	
82 Benzo(a)pyrene	252	13.928	13.911	(0.991)	2360641	60.0000	59	
* 83 Perylene-d12	264	14.052	14.040	(1.000)	1699886	40.0000		
84 Indeno(1,2,3-cd)pyrene	276	17.037	17.001	(1.212)	2985369	60.0000	67	
85 Dibenzo(a,h)anthracene	278	17.154	17.101	(1.221)	2406873	60.0000	58	
86 Benzo(g,h,i)perylene	276	17.994	17.936	(1.281)	2481533	60.0000	58	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\S6,I\130621,B\S6B4573.d  
 Date: 21-JUN-2013 16:13  
 Client ID: SST10606M  
 Sample Info: SST10606M,SST10606M  
 Volume Injected (uL): 1.0  
 Column phase: Rxi-SS11 MS

Instrument: S6.i  
 Operator: PK SRC: PK  
 Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S6.I\130621.B\S6B4574.d  
 Lab Smp Id: SSTD0106W Client Smp ID: SSTD0106W  
 Inj Date : 21-JUN-2013 16:38  
 Operator : PK SRC: PK Inst ID: S6.i  
 Smp Info : SSTD0106W,SSTD0106W  
 Misc Info : 1,2  
 Comment :  
 Method : \\avogadro\organics\S6.I\130621.B\S6\_8270C\_N.m  
 Meth Date : 24-Jun-2013 12:00 pkaczorows Quant Type: ISTD  
 Cal Date : 21-JUN-2013 16:38 Cal File: S6B4574.d  
 Als bottle: 4 Calibration Sample, Level: 2  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: allnew.sub  
 Target Version: 4.14  
 Processing Host: TARGET113

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

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

Compounds	QUANT	SIG	AMOUNTS					
			RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
\$ 109 1,4-Dioxane-d8	96	====	2.706	2.700	(0.508)	3345	10.0000	10
108 1,4-Dioxane	58		2.741	2.730	(0.514)	1055	10.0000	7(a)
1 N-Nitrosodimethylamine	74		3.012	3.012	(0.565)	8221	10.0000	10
2 Pyridine	79		3.076	3.065	(0.577)	11760	10.0000	9(Ta)
\$ 3 2-Fluorophenol	112		4.228	4.228	(0.793)	17717	10.0000	9(a)
101 Benzaldehyde	77		4.962	4.962	(0.931)	25956	10.0000	14
\$ 5 Phenol-d5	99		5.009	5.009	(0.939)	26456	10.0000	10
6 Phenol	94		5.021	5.021	(0.942)	27596	10.0000	10
7 Aniline	66		5.021	5.021	(0.942)	20296	10.0000	9(a)
8 bis(2-Chloroethyl)Ether	63		5.097	5.097	(0.956)	9578	10.0000	9(a)
10 2-Chlorophenol	128		5.156	5.156	(0.967)	24733	10.0000	10
11 1,3-Dichlorobenzene	146		5.285	5.285	(0.991)	28530	10.0000	10
* 12 1,4-Dichlorobenzene-d4	152		5.332	5.332	(1.000)	92100	40.0000	
13 1,4-Dichlorobenzene	146		5.344	5.344	(1.002)	29689	10.0000	10
117 2-Ethyl-1-hexanol	57		5.374	5.374	(1.008)	10935	10.0000	11
15 Benzyl Alcohol	108		5.432	5.438	(1.019)	17906	10.0000	10
16 1,2-Dichlorobenzene	146		5.473	5.474	(1.026)	26434	10.0000	9(a)
17 2-Methylphenol	108		5.526	5.526	(1.036)	22659	10.0000	10
18 2,2'-oxybis(1-Chloropropane)	45		5.550	5.544	(1.041)	9036	10.0000	11
99 Acetophenone	105		5.661	5.662	(1.062)	38521	10.0000	9(a)

Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
19 N-Nitroso-di-n-propylamine	70	5.656	5.656	(1.061)	17716	10.0000	9(a)
20 4-Methylphenol	108	5.650	5.656	(1.059)	26896	10.0000	10
21 Hexachloroethane	117	5.761	5.761	(1.080)	11075	10.0000	10
\$ 22 Nitrobenzene-d5	82	5.785	5.785	(0.905)	35892	10.0000	11
23 Nitrobenzene	77	5.803	5.803	(0.908)	31868	10.0000	10
24 Isophorone	82	5.996	6.002	(0.938)	54852	10.0000	11
25 2-Nitrophenol	139	6.067	6.073	(0.949)	18814	10.0000	11
26 2,4-Dimethylphenol	107	6.090	6.096	(0.953)	28179	10.0000	9(a)
27 bis(2-Chloroethoxy)methane	93	6.173	6.173	(0.966)	26014	10.0000	10
28 Benzoic Acid	105	6.161	6.179	(0.964)	30143	10.0000	12(a)
29 2,4-Dichlorophenol	162	6.267	6.267	(0.981)	34001	10.0000	10
30 1,2,4-Trichlorobenzene	180	6.343	6.343	(0.993)	43961	10.0000	10
* 31 Naphthalene-d8	136	6.390	6.396	(1.000)	386498	40.0000	
32 Naphthalene	128	6.408	6.408	(1.003)	84742	10.0000	10
115 alpha-Terpineol	59	6.402	6.408	(1.002)	12853	10.0000	11
33 4-Chloroaniline	127	6.443	6.443	(1.008)	36223	10.0000	10
34 Hexachlorobutadiene	225	6.513	6.513	(1.019)	35577	10.0000	11
102 Caprolactam	113	6.725	6.743	(1.052)	12576	10.0000	12
35 4-Chloro-3-Methylphenol	107	6.837	6.843	(1.070)	33121	10.0000	11
36 2-Methylnaphthalene	142	6.983	6.984	(1.093)	78687	10.0000	11
114 1-Methylnaphthalene	142	7.066	7.066	(1.106)	69687	10.0000	10
38 Hexachlorocyclopentadiene	237	7.119	7.125	(0.906)	39679	10.0000	10
112 1,2,4,5-Tetrachlorobenzene	216	7.125	7.125	(0.907)	69568	10.0000	10
39 2,4,6-Trichlorophenol	196	7.213	7.213	(0.918)	45112	10.0000	10
40 2,4,5-Trichlorophenol	196	7.242	7.248	(0.922)	47436	10.0000	10(a)
\$ 41 2-Fluorobiphenyl	172	7.283	7.283	(0.927)	126551	10.0000	10
98 1,1'-Biphenyl	154	7.365	7.371	(0.937)	121671	10.0000	10
42 2-Chloronaphthalene	162	7.389	7.389	(0.940)	89071	10.0000	10
43 2-Nitroaniline	65	7.465	7.465	(0.950)	23115	10.0000	9(a)
44 Dimethylphthalate	163	7.606	7.612	(0.968)	129370	10.0000	10
45 2,6-Dinitrotoluene	165	7.659	7.665	(0.975)	30191	10.0000	10
46 Acenaphthylene	152	7.736	7.741	(0.984)	146363	10.0000	10
47 3-Nitroaniline	138	7.806	7.806	(0.993)	24809	10.0000	10(a)
* 48 Acenaphthene-d10	164	7.859	7.859	(1.000)	399036	40.0000	
49 Acenaphthene	153	7.882	7.888	(1.003)	100078	10.0000	10
50 2,4-Dinitrophenol	184	7.888	7.888	(1.004)	23739	10.0000	9(a)
51 4-Nitrophenol	109	7.929	7.935	(1.009)	31904	10.0000	9(a)
53 2,4-Dinitrotoluene	165	7.994	8.000	(1.017)	42226	10.0000	10
52 Dibenzofuran	168	8.023	8.029	(1.021)	160771	10.0000	10
110 2,3,4,6-Tetrachlorophenol	232	8.123	8.129	(1.034)	51677	10.0000	10
54 Diethylphthalate	149	8.194	8.200	(1.043)	118532	10.0000	10
56 4-Chlorophenyl-phenylether	204	8.300	8.300	(1.056)	86344	10.0000	9(a)
55 Fluorene	166	8.311	8.311	(1.058)	134851	10.0000	9(a)
57 4-Nitroaniline	138	8.311	8.323	(1.058)	31201	10.0000	10(a)
58 4,6-Dinitro-2-methylphenol	198	8.341	8.347	(0.916)	33481	10.0000	9(a)
59 N-Nitrosodiphenylamine	169	8.394	8.400	(0.922)	124312	10.0000	10
97 Azobenzene	77	8.435	8.435	(0.926)	134599	10.0000	10
\$ 60 2,4,6-Tribromophenol	330	8.511	8.517	(0.935)	33281	10.0000	10
61 4-Bromophenyl-phenylether	248	8.711	8.711	(0.957)	62775	10.0000	10
62 Hexachlorobenzene	284	8.781	8.781	(0.965)	66810	10.0000	10
100 Atrazine	200	8.828	8.834	(0.970)	31101	10.0000	13
63 Pentachlorophenol	266	8.940	8.940	(0.982)	52694	10.0000	10(Ta)
111 Pentachloronitrobenzene	237	8.952	8.958	(0.983)	31519	10.0000	9(a)
* 64 Phenanthrene-d10	188	9.105	9.105	(1.000)	1057835	40.0000	

Compounds	QUANT		SIG				AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)	
65 Phenanthrene	178	9.122	9.122	(1.002)	231234	10.0000	10	
66 Anthracene	178	9.163	9.163	(1.006)	225224	10.0000	9(a)	
67 Carbazole	167	9.287	9.293	(1.020)	212449	10.0000	10	
68 Di-n-butylphthalate	149	9.563	9.563	(1.050)	215762	10.0000	9(a)	
69 Fluoranthene	202	10.139	10.145	(1.114)	335590	10.0000	10	
70 Benzidine	184	10.233	10.239	(0.883)	78985	10.0000	10(a)	
71 Pyrene	202	10.338	10.344	(0.892)	344659	10.0000	10	
\$ 72 Terphenyl-d14	244	10.462	10.462	(0.903)	268419	10.0000	10	
73 Butylbenzylphthalate	149	10.908	10.908	(0.941)	111390	10.0000	10	
74 3,3'-Dichlorobenzidine	252	11.519	11.525	(0.994)	159814	10.0000	10	
78 bis(2-Ethylhexyl)phthalate	149	11.549	11.555	(0.996)	159954	10.0000	10	
75 Benzo(a)anthracene	228	11.566	11.572	(0.998)	426851	10.0000	10	
* 76 Chrysene-d12	240	11.590	11.590	(1.000)	1710608	40.0000		
77 Chrysene	228	11.619	11.625	(1.003)	377437	10.0000	10	
79 Di-n-octylphthalate	149	12.489	12.501	(0.889)	264452	10.0000	10	
80 Benzo(b)fluoranthene	252	13.223	13.241	(0.941)	419061	10.0000	10	
81 Benzo(k)fluoranthene	252	13.276	13.294	(0.945)	403842	10.0000	10	
82 Benzo(a)pyrene	252	13.887	13.911	(0.989)	400575	10.0000	10	
* 83 Perylene-d12	264	14.046	14.040	(1.000)	1683205	40.0000		
84 Indeno(1,2,3-cd)pyrene	276	16.972	17.001	(1.208)	417248	10.0000	9(a)	
85 Dibenzo(a,h)anthracene	278	17.066	17.101	(1.215)	411864	10.0000	10	
86 Benzo(g,h,i)perylene	276	17.894	17.936	(1.274)	436667	10.0000	10	

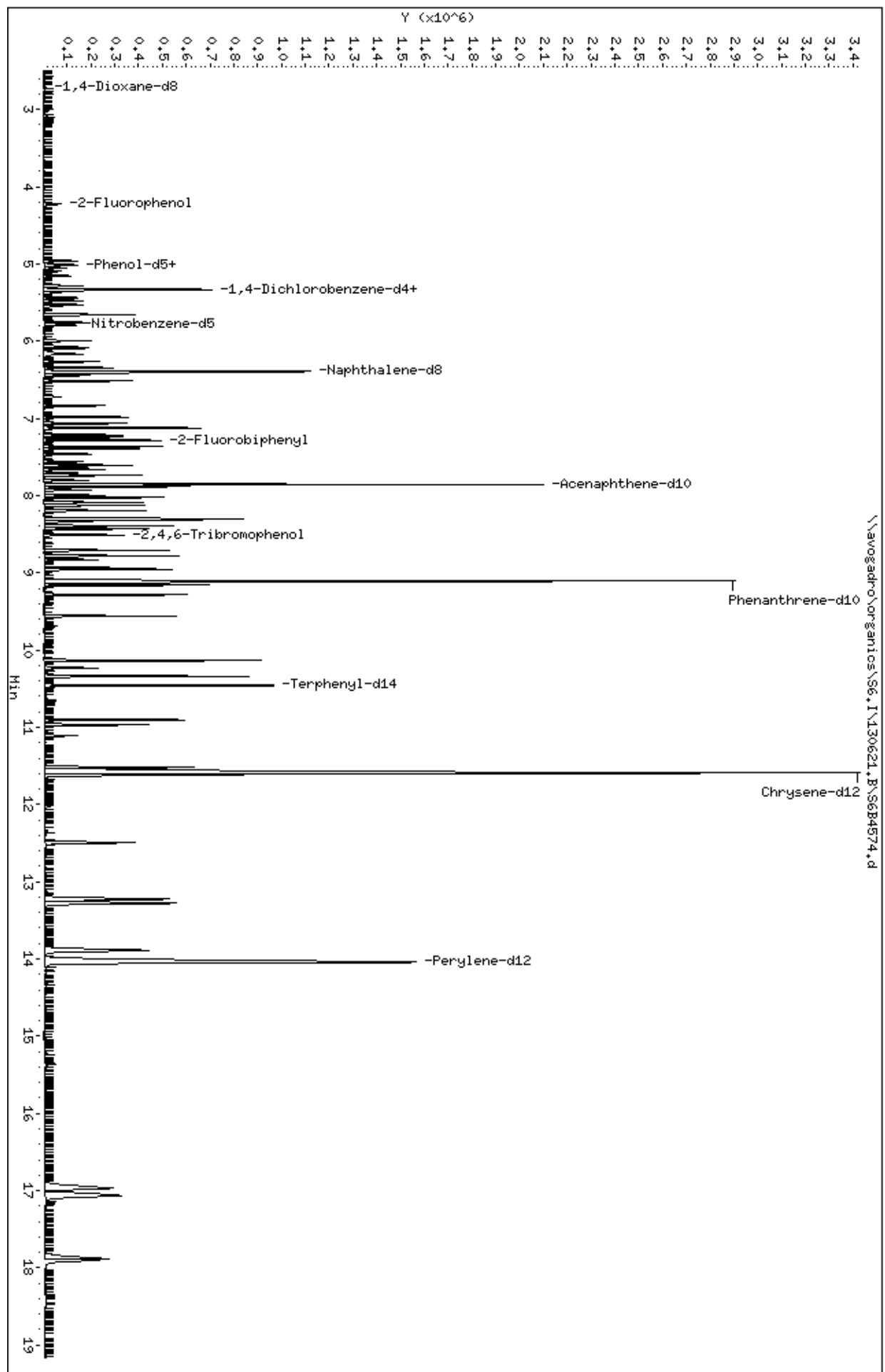
QC Flag Legend

T - Target compound detected outside RT window.  
 a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).



Data File: \\avogadro\organics\S6,I\130621,B\S6B4574.d  
 Date: 21-JUN-2013 16:38  
 Client ID: SSTID0106M  
 Sample Info: SSTID0106M,SSTID0106M  
 Volume Injected (uL): 1.0  
 Column phase: Rxi-5S11 MS

Instrument: S6.i  
 Operator: PK SRC: PK  
 Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S6.I\130621.B\S6B4575.d  
 Lab Smp Id: SSTD0406W Client Smp ID: SSTD0406W  
 Inj Date : 21-JUN-2013 17:03  
 Operator : PK SRC: PK Inst ID: S6.i  
 Smp Info : SSTD0406W,SSTD0406W  
 Misc Info : 1,4  
 Comment :  
 Method : \\avogadro\organics\S6.I\130621.B\S6\_8270C\_N.m  
 Meth Date : 24-Jun-2013 12:00 pkaczorows Quant Type: ISTD  
 Cal Date : 21-JUN-2013 16:38 Cal File: S6B4574.d  
 Als bottle: 5 Calibration Sample, Level: 4  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: allnew.sub  
 Target Version: 4.14  
 Processing Host: TARGET113

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

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

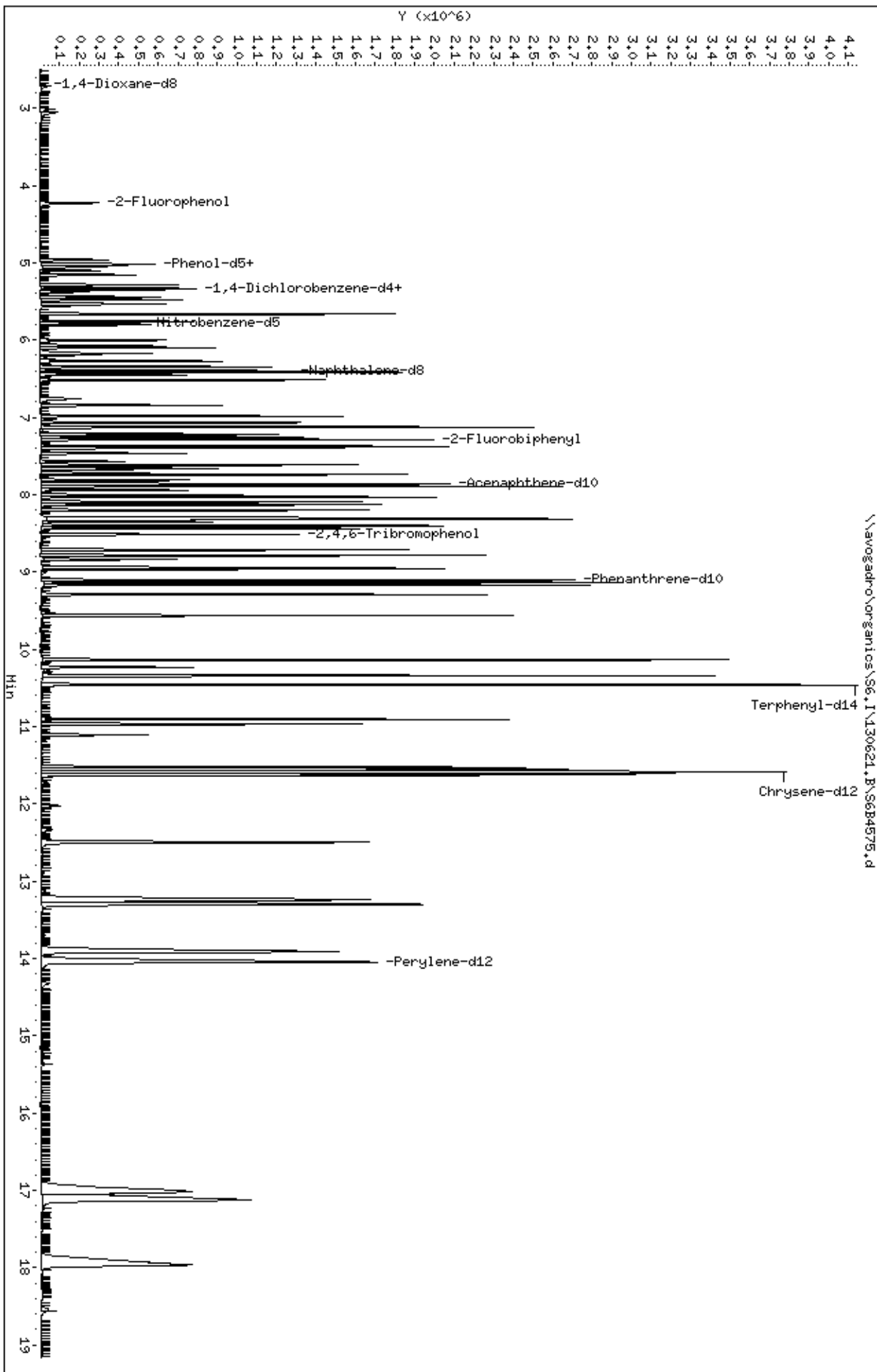
Compounds	QUANT	SIG	AMOUNTS					
			RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
\$ 109 1,4-Dioxane-d8	96	====	2.700	2.700	(0.506)	14752	40.0000	43
108 1,4-Dioxane	58	====	2.724	2.730	(0.511)	6480	40.0000	38(Q)
1 N-Nitrosodimethylamine	74	====	3.012	3.012	(0.565)	35208	40.0000	39
2 Pyridine	79	====	3.053	3.065	(0.573)	51897	40.0000	38
\$ 3 2-Fluorophenol	112	====	4.228	4.228	(0.793)	76381	40.0000	39
101 Benzaldehyde	77	====	4.962	4.962	(0.931)	68060	40.0000	34
\$ 5 Phenol-d5	99	====	5.015	5.009	(0.941)	112428	40.0000	39
6 Phenol	94	====	5.027	5.021	(0.943)	113871	40.0000	38
7 Aniline	66	====	5.027	5.021	(0.943)	88056	40.0000	38
8 bis(2-Chloroethyl)Ether	63	====	5.103	5.097	(0.957)	43343	40.0000	39(Q)
10 2-Chlorophenol	128	====	5.156	5.156	(0.967)	103883	40.0000	40
11 1,3-Dichlorobenzene	146	====	5.285	5.285	(0.991)	122809	40.0000	40
* 12 1,4-Dichlorobenzene-d4	152	====	5.332	5.332	(1.000)	97376	40.0000	
13 1,4-Dichlorobenzene	146	====	5.344	5.344	(1.002)	124417	40.0000	39
117 2-Ethyl-1-hexanol	57	====	5.379	5.374	(1.009)	38721	40.0000	37
15 Benzyl Alcohol	108	====	5.444	5.438	(1.021)	71239	40.0000	38
16 1,2-Dichlorobenzene	146	====	5.474	5.474	(1.026)	122478	40.0000	40
17 2-Methylphenol	108	====	5.532	5.526	(1.037)	96819	40.0000	40
18 2,2'-oxybis(1-Chloropropane)	45	====	5.550	5.544	(1.041)	33956	40.0000	38(Q)
99 Acetophenone	105	====	5.662	5.662	(1.062)	181544	40.0000	38

Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
19 N-Nitroso-di-n-propylamine	70	5.662	5.656	(1.062)	83499	40.0000	40
20 4-Methylphenol	108	5.662	5.656	(1.062)	114090	40.0000	39
21 Hexachloroethane	117	5.761	5.761	(1.080)	48905	40.0000	41(Q)
\$ 22 Nitrobenzene-d5	82	5.791	5.785	(0.905)	147182	40.0000	39
23 Nitrobenzene	77	5.808	5.803	(0.908)	134202	40.0000	38
24 Isophorone	82	6.002	6.002	(0.938)	214517	40.0000	38
25 2-Nitrophenol	139	6.073	6.073	(0.949)	74801	40.0000	40
26 2,4-Dimethylphenol	107	6.096	6.096	(0.953)	145031	40.0000	42
27 bis(2-Chloroethoxy)methane	93	6.173	6.173	(0.965)	110230	40.0000	40
28 Benzoic Acid	105	6.202	6.179	(0.970)	91954	40.0000	32
29 2,4-Dichlorophenol	162	6.273	6.267	(0.981)	146299	40.0000	39
30 1,2,4-Trichlorobenzene	180	6.343	6.343	(0.992)	186820	40.0000	40
* 31 Naphthalene-d8	136	6.396	6.396	(1.000)	435510	40.0000	
32 Naphthalene	128	6.414	6.408	(1.003)	376266	40.0000	39
115 alpha-Terpineol	59	6.408	6.408	(1.002)	52343	40.0000	39
33 4-Chloroaniline	127	6.449	6.443	(1.008)	157707	40.0000	40
34 Hexachlorobutadiene	225	6.513	6.513	(1.018)	138059	40.0000	39
102 Caprolactam	113	6.760	6.743	(1.057)	46987	40.0000	39
35 4-Chloro-3-Methylphenol	107	6.848	6.843	(1.071)	134039	40.0000	39
36 2-Methylnaphthalene	142	6.984	6.984	(1.092)	310574	40.0000	38
114 1-Methylnaphthalene	142	7.072	7.066	(1.106)	292016	40.0000	39
38 Hexachlorocyclopentadiene	237	7.125	7.125	(0.907)	147044	40.0000	34
112 1,2,4,5-Tetrachlorobenzene	216	7.130	7.125	(0.907)	282373	40.0000	38
39 2,4,6-Trichlorophenol	196	7.219	7.213	(0.919)	178124	40.0000	38
40 2,4,5-Trichlorophenol	196	7.248	7.248	(0.922)	191736	40.0000	38
\$ 41 2-Fluorobiphenyl	172	7.283	7.283	(0.927)	510499	40.0000	37
98 1,1'-Biphenyl	154	7.371	7.371	(0.938)	488409	40.0000	37
42 2-Chloronaphthalene	162	7.395	7.389	(0.941)	360789	40.0000	37
43 2-Nitroaniline	65	7.471	7.465	(0.951)	95011	40.0000	37
44 Dimethylphthalate	163	7.618	7.612	(0.969)	523337	40.0000	38
45 2,6-Dinitrotoluene	165	7.671	7.665	(0.976)	116369	40.0000	36
46 Acenaphthylene	152	7.741	7.741	(0.985)	612448	40.0000	38
47 3-Nitroaniline	138	7.812	7.806	(0.994)	97193	40.0000	38
* 48 Acenaphthene-d10	164	7.859	7.859	(1.000)	419111	40.0000	
49 Acenaphthene	153	7.888	7.888	(1.004)	420134	40.0000	38
50 2,4-Dinitrophenol	184	7.894	7.888	(1.004)	108214	40.0000	38
51 4-Nitrophenol	109	7.941	7.935	(1.010)	130902	40.0000	37
53 2,4-Dinitrotoluene	165	8.006	8.000	(1.019)	171334	40.0000	37(Q)
52 Dibenzofuran	168	8.029	8.029	(1.022)	651331	40.0000	38
110 2,3,4,6-Tetrachlorophenol	232	8.129	8.129	(1.034)	200209	40.0000	36
54 Diethylphthalate	149	8.200	8.200	(1.043)	485926	40.0000	37
56 4-Chlorophenyl-phenylether	204	8.306	8.300	(1.057)	365895	40.0000	37
55 Fluorene	166	8.317	8.311	(1.058)	571176	40.0000	38
57 4-Nitroaniline	138	8.329	8.323	(1.060)	119071	40.0000	38
58 4,6-Dinitro-2-methylphenol	198	8.353	8.347	(0.917)	153707	40.0000	40
59 N-Nitrosodiphenylamine	169	8.405	8.400	(0.923)	494861	40.0000	38
97 Azobenzene	77	8.441	8.435	(0.927)	533496	40.0000	39
\$ 60 2,4,6-Tribromophenol	330	8.517	8.517	(0.935)	133590	40.0000	38
61 4-Bromophenyl-phenylether	248	8.717	8.711	(0.957)	246565	40.0000	38
62 Hexachlorobenzene	284	8.787	8.781	(0.965)	266582	40.0000	38
100 Atrazine	200	8.840	8.834	(0.971)	108201	40.0000	45
63 Pentachlorophenol	266	8.940	8.940	(0.982)	205401	40.0000	37(Q)
111 Pentachloronitrobenzene	237	8.958	8.958	(0.984)	133688	40.0000	38
* 64 Phenanthrene-d10	188	9.105	9.105	(1.000)	1085267	40.0000	

Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
65 Phenanthrene	178	9.128	9.122	(1.003)	950042	40.0000	39
66 Anthracene	178	9.169	9.163	(1.007)	949974	40.0000	38
67 Carbazole	167	9.293	9.293	(1.021)	838613	40.0000	38
68 Di-n-butylphthalate	149	9.563	9.563	(1.050)	898304	40.0000	38
69 Fluoranthene	202	10.139	10.145	(1.114)	1350145	40.0000	38
70 Benzidine	184	10.233	10.239	(0.883)	290475	40.0000	37
71 Pyrene	202	10.344	10.344	(0.893)	1378480	40.0000	38
\$ 72 Terphenyl-d14	244	10.462	10.462	(0.903)	1117793	40.0000	38
73 Butylbenzylphthalate	149	10.903	10.908	(0.941)	444764	40.0000	38
74 3,3'-Dichlorobenzidine	252	11.525	11.525	(0.994)	624046	40.0000	38
78 bis(2-Ethylhexyl)phthalate	149	11.549	11.555	(0.996)	668924	40.0000	38
75 Benzo(a)anthracene	228	11.566	11.572	(0.998)	1721154	40.0000	39
* 76 Chrysene-d12	240	11.590	11.590	(1.000)	1799443	40.0000	
77 Chrysene	228	11.625	11.625	(1.003)	1505392	40.0000	38
79 Di-n-octylphthalate	149	12.495	12.501	(0.890)	1077731	40.0000	39
80 Benzo(b)fluoranthene	252	13.241	13.241	(0.943)	1683734	40.0000	39
81 Benzo(k)fluoranthene	252	13.300	13.294	(0.947)	1659976	40.0000	39
82 Benzo(a)pyrene	252	13.911	13.911	(0.990)	1602629	40.0000	39
* 83 Perylene-d12	264	14.046	14.040	(1.000)	1736781	40.0000	
84 Indeno(1,2,3-cd)pyrene	276	17.019	17.001	(1.212)	1703316	40.0000	37
85 Dibenzo(a,h)anthracene	278	17.125	17.101	(1.219)	1638476	40.0000	39
86 Benzo(g,h,i)perylene	276	17.965	17.936	(1.279)	1647856	40.0000	38

QC Flag Legend

Q - Qualifier signal failed the ratio test.



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S6.I\130621.B\S6B4576.d  
 Lab Smp Id: SSTD0806W Client Smp ID: SSTD0806W  
 Inj Date : 21-JUN-2013 17:28  
 Operator : PK SRC: PK Inst ID: S6.i  
 Smp Info : SSTD0806W,SSTD0806W  
 Misc Info : 1,6  
 Comment :  
 Method : \\avogadro\organics\S6.I\130621.B\S6\_8270C\_N.m  
 Meth Date : 24-Jun-2013 12:00 pkaczorows Quant Type: ISTD  
 Cal Date : 21-JUN-2013 16:38 Cal File: S6B4574.d  
 Dil bottle: 6 Calibration Sample, Level: 6  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: allnew.sub  
 Target Version: 4.14  
 Processing Host: TARGET113

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

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

Compounds	QUANT	SIG	AMOUNTS					
			RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
\$ 109 1,4-Dioxane-d8	96	====	2.700	2.700	(0.506)	32889	80.0000	82
108 1,4-Dioxane	58		2.724	2.730	(0.511)	15148	80.0000	77(Q)
1 N-Nitrosodimethylamine	74		3.017	3.012	(0.566)	82977	80.0000	80
2 Pyridine	79		3.053	3.065	(0.573)	135380	80.0000	85(A)
\$ 3 2-Fluorophenol	112		4.234	4.228	(0.794)	190806	80.0000	83
101 Benzaldehyde	77		4.962	4.962	(0.931)	126466	80.0000	54
\$ 5 Phenol-d5	99		5.027	5.009	(0.943)	267259	80.0000	79
6 Phenol	94		5.039	5.021	(0.945)	300981	80.0000	87(A)
7 Aniline	66		5.039	5.021	(0.945)	237823	80.0000	89(AQ)
8 bis(2-Chloroethyl)Ether	63		5.109	5.097	(0.958)	97310	80.0000	76(Q)
10 2-Chlorophenol	128		5.162	5.156	(0.968)	237578	80.0000	79
11 1,3-Dichlorobenzene	146		5.291	5.285	(0.992)	285192	80.0000	80
* 12 1,4-Dichlorobenzene-d4	152		5.332	5.332	(1.000)	113141	40.0000	(Q)
13 1,4-Dichlorobenzene	146		5.350	5.344	(1.003)	294325	80.0000	80
117 2-Ethyl-1-hexanol	57		5.385	5.374	(1.010)	95405	80.0000	78
15 Benzyl Alcohol	108		5.450	5.438	(1.022)	169641	80.0000	78
16 1,2-Dichlorobenzene	146		5.479	5.474	(1.028)	282400	80.0000	79
17 2-Methylphenol	108		5.538	5.526	(1.039)	228117	80.0000	80(A)
18 2,2'-oxybis(1-Chloropropane)	45		5.556	5.544	(1.042)	74593	80.0000	72(Q)
99 Acetophenone	105		5.673	5.662	(1.064)	476719	80.0000	87(A)

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
19 N-Nitroso-di-n-propylamine	70	5.673	5.656 (1.064)		207234	80.0000	86(A)
20 4-Methylphenol	108	5.673	5.656 (1.064)		300700	80.0000	89(A)
21 Hexachloroethane	117	5.761	5.761 (1.080)		116660	80.0000	84(AQ)
\$ 22 Nitrobenzene-d5	82	5.797	5.785 (0.906)		327880	80.0000	68
23 Nitrobenzene	77	5.814	5.803 (0.909)		321632	80.0000	72
24 Isophorone	82	6.014	6.002 (0.940)		489507	80.0000	67
25 2-Nitrophenol	139	6.079	6.073 (0.950)		169486	80.0000	70
26 2,4-Dimethylphenol	107	6.108	6.096 (0.955)		336414	80.0000	76
27 bis(2-Chloroethoxy)methane	93	6.178	6.173 (0.966)		257808	80.0000	72
28 Benzoic Acid	105	6.255	6.179 (0.978)		257818	80.0000	71(QH)
29 2,4-Dichlorophenol	162	6.278	6.267 (0.982)		355426	80.0000	74
30 1,2,4-Trichlorobenzene	180	6.349	6.343 (0.993)		426208	80.0000	71
* 31 Naphthalene-d8	136	6.396	6.396 (1.000)		559407	40.0000	
32 Naphthalene	128	6.419	6.408 (1.004)		947050	80.0000	77
115 alpha-Terpineol	59	6.419	6.408 (1.004)		131449	80.0000	76(Q)
33 4-Chloroaniline	127	6.455	6.443 (1.009)		348587	80.0000	69
34 Hexachlorobutadiene	225	6.519	6.513 (1.019)		317619	80.0000	70
102 Caprolactam	113	6.795	6.743 (1.062)		81989	80.0000	54
35 4-Chloro-3-Methylphenol	107	6.860	6.843 (1.073)		302143	80.0000	69
36 2-Methylnaphthalene	142	6.989	6.984 (1.093)		739087	80.0000	71
114 1-Methylnaphthalene	142	7.072	7.066 (1.106)		688253	80.0000	71
38 Hexachlorocyclopentadiene	237	7.124	7.125 (0.906)		419468	80.0000	90(A)
112 1,2,4,5-Tetrachlorobenzene	216	7.130	7.125 (0.907)		697700	80.0000	87(A)
39 2,4,6-Trichlorophenol	196	7.224	7.213 (0.919)		395416	80.0000	79
40 2,4,5-Trichlorophenol	196	7.260	7.248 (0.923)		442815	80.0000	82(A)
\$ 41 2-Fluorobiphenyl	172	7.289	7.283 (0.927)		1219629	80.0000	83
98 1,1'-Biphenyl	154	7.377	7.371 (0.938)		1178047	80.0000	84(A)
42 2-Chloronaphthalene	162	7.401	7.389 (0.941)		871056	80.0000	83(A)
43 2-Nitroaniline	65	7.477	7.465 (0.951)		212852	80.0000	77
44 Dimethylphthalate	163	7.636	7.612 (0.971)		1184472	80.0000	80
45 2,6-Dinitrotoluene	165	7.683	7.665 (0.977)		267670	80.0000	78
46 Acenaphthylene	152	7.747	7.741 (0.985)		1467697	80.0000	85(A)
47 3-Nitroaniline	138	7.829	7.806 (0.996)		213655	80.0000	77
* 48 Acenaphthene-d10	164	7.865	7.859 (1.000)		450037	40.0000	
49 Acenaphthene	153	7.894	7.888 (1.004)		1001033	80.0000	85(A)
50 2,4-Dinitrophenol	184	7.906	7.888 (1.005)		256384	80.0000	83(A)
51 4-Nitrophenol	109	7.959	7.935 (1.012)		294194	80.0000	77
53 2,4-Dinitrotoluene	165	8.018	8.000 (1.019)		385323	80.0000	78(Q)
52 Dibenzofuran	168	8.035	8.029 (1.022)		1509918	80.0000	82(A)
110 2,3,4,6-Tetrachlorophenol	232	8.135	8.129 (1.034)		462080	80.0000	78
54 Diethylphthalate	149	8.211	8.200 (1.044)		1150748	80.0000	82(A)
56 4-Chlorophenyl-phenylether	204	8.311	8.300 (1.057)		870272	80.0000	83(A)
55 Fluorene	166	8.323	8.311 (1.058)		1373236	80.0000	86(A)
57 4-Nitroaniline	138	8.352	8.323 (1.062)		251083	80.0000	74
58 4,6-Dinitro-2-methylphenol	198	8.364	8.347 (0.918)		326846	80.0000	79
59 N-Nitrosodiphenylamine	169	8.411	8.400 (0.923)		1161638	80.0000	83(A)
97 Azobenzene	77	8.446	8.435 (0.927)		1205776	80.0000	81(A)
\$ 60 2,4,6-Tribromophenol	330	8.523	8.517 (0.936)		302794	80.0000	80
61 4-Bromophenyl-phenylether	248	8.723	8.711 (0.957)		561085	80.0000	80(A)
62 Hexachlorobenzene	284	8.793	8.781 (0.965)		598513	80.0000	80
100 Atrazine	200	8.840	8.834 (0.970)		120999	80.0000	46
63 Pentachlorophenol	266	8.946	8.940 (0.982)		477627	80.0000	80(Q)
111 Pentachloronitrobenzene	237	8.963	8.958 (0.984)		312597	80.0000	83(A)
* 64 Phenanthrene-d10	188	9.110	9.105 (1.000)		1175589	40.0000	

Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
65 Phenanthrene	178	9.134	9.122	(1.003)	2184031	80.0000	82(A)
66 Anthracene	178	9.175	9.163	(1.007)	2244949	80.0000	84(A)
67 Carbazole	167	9.298	9.293	(1.021)	1930521	80.0000	81(A)
68 Di-n-butylphthalate	149	9.569	9.563	(1.050)	2154359	80.0000	85(A)
69 Fluoranthene	202	10.144	10.145	(1.114)	3081682	80.0000	80(A)
70 Benzidine	184	10.233	10.239	(0.883)	713449	80.0000	80(A)
71 Pyrene	202	10.344	10.344	(0.893)	3194288	80.0000	79
\$ 72 Terphenyl-d14	244	10.462	10.462	(0.903)	2551298	80.0000	78
73 Butylbenzylphthalate	149	10.902	10.908	(0.941)	1070170	80.0000	82(A)
74 3,3'-Dichlorobenzidine	252	11.531	11.525	(0.995)	1430747	80.0000	77
78 bis(2-Ethylhexyl)phthalate	149	11.543	11.555	(0.996)	1776258	80.0000	90(A)
75 Benzo(a)anthracene	228	11.572	11.572	(0.998)	3816245	80.0000	76
* 76 Chrysene-d12	240	11.590	11.590	(1.000)	2017368	40.0000	
77 Chrysene	228	11.631	11.625	(1.004)	3358302	80.0000	76
79 Di-n-octylphthalate	149	12.501	12.501	(0.890)	2495454	80.0000	83(A)
80 Benzo(b)fluoranthene	252	13.259	13.241	(0.944)	3902763	80.0000	82(A)
81 Benzo(k)fluoranthene	252	13.317	13.294	(0.948)	3619023	80.0000	78
82 Benzo(a)pyrene	252	13.934	13.911	(0.992)	3552075	80.0000	80
* 83 Perylene-d12	264	14.046	14.040	(1.000)	1891360	40.0000	
84 Indeno(1,2,3-cd)pyrene	276	17.060	17.001	(1.215)	4503000	80.0000	90(A)
85 Dibenzo(a,h)anthracene	278	17.189	17.101	(1.224)	3688485	80.0000	80(A)
86 Benzo(g,h,i)perylene	276	18.041	17.936	(1.284)	3659997	80.0000	78

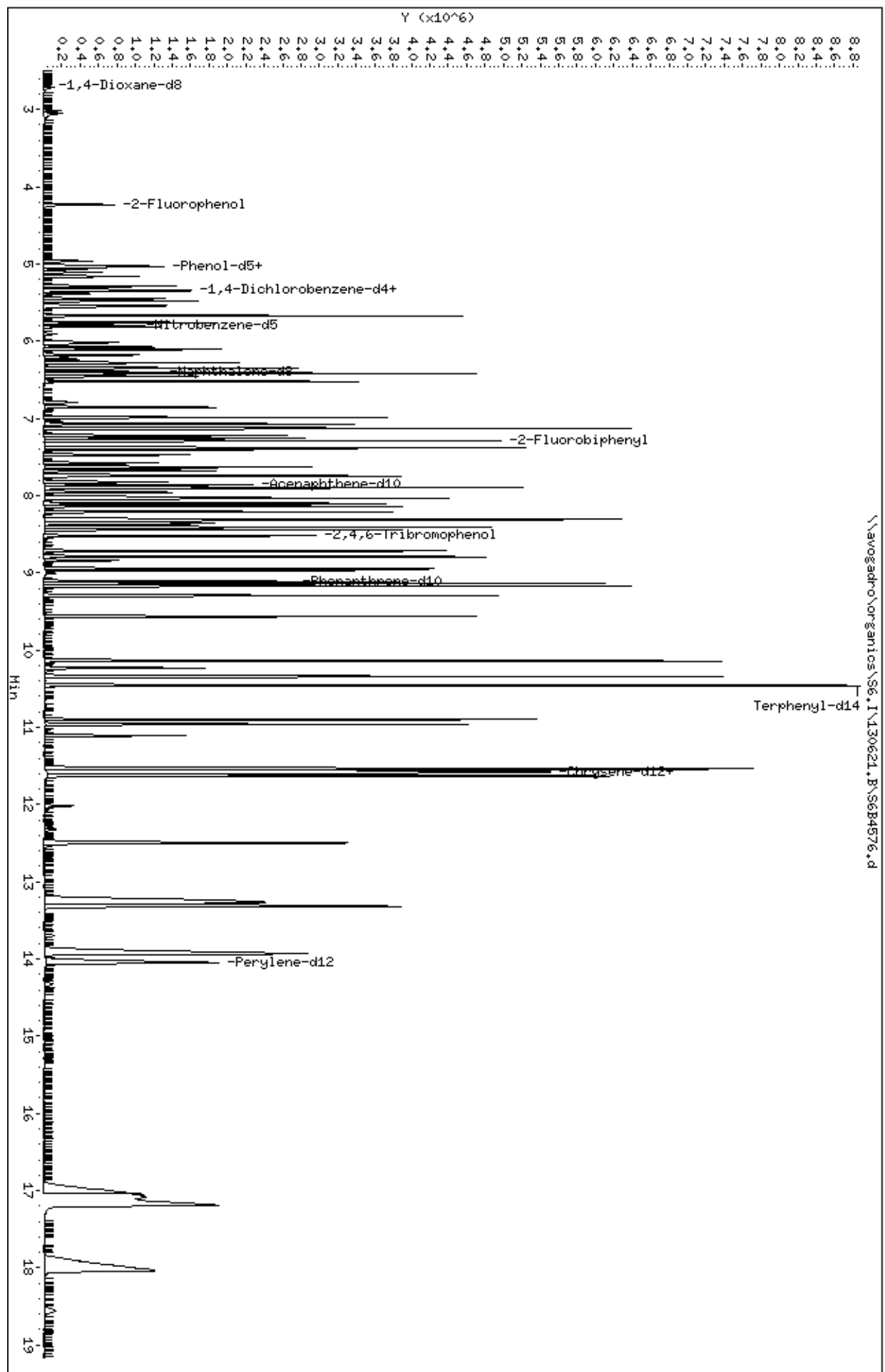
QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.
- H - Operator selected an alternate compound hit.



Data File: \\avogadro\organics\S6,I\130621,B\S6B4576.d  
 Date : 21-JUN-2013 17:28  
 Client ID: SSTID0806M  
 Sample Info: SSTID0806M,SSTID0806M  
 Volume Injected (uL): 1.0  
 Column phase: Rxi-5S11 MS

Instrument: S6.i  
 Operator: PK SRC: PK  
 Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S6.I\130626.B\S6B4661.d  
 Lab Smp Id: SSTD0256Z Client Smp ID: SSTD0256Z  
 Inj Date : 26-JUN-2013 11:45  
 Operator : PK SRC: PK Inst ID: S6.i  
 Smp Info : SSTD0256Z,SSTD0256Z  
 Misc Info : 2,3  
 Comment :  
 Method : \\avogadro\organics\S6.I\130626.B\S6\_8270C\_N.m  
 Meth Date : 26-Jun-2013 15:33 pkaczorows Quant Type: ISTD  
 Cal Date : 26-JUN-2013 14:43 Cal File: S6B4666.d  
 Als bottle: 1 Calibration Sample, Level: 3  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: allnew.sub  
 Target Version: 4.14  
 Processing Host: TARGET113

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

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

Compounds	QUANT	SIG	AMOUNTS					
			MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)
\$ 109 1,4-Dioxane-d8	96		2.692	2.692	(0.507)	15162	25.0000	24(H)
108 1,4-Dioxane	58		2.722	2.722	(0.513)	9094	25.0000	32
1 N-Nitrosodimethylamine	74		3.010	3.010	(0.567)	48596	25.0000	26
2 Pyridine	79		3.045	3.045	(0.574)	73123	25.0000	24
\$ 3 2-Fluorophenol	112		4.214	4.221	(0.794)	132743	25.0000	26
101 Benzaldehyde	77		4.943	4.943	(0.931)	146914	25.0000	29
\$ 5 Phenol-d5	99		4.996	4.996	(0.941)	199735	25.0000	26
6 Phenol	94		5.007	5.008	(0.944)	237832	25.0000	29
7 Aniline	66		5.007	5.007	(0.944)	155324	25.0000	24
8 bis(2-Chloroethyl)Ether	63		5.078	5.079	(0.957)	73334	25.0000	28
10 2-Chlorophenol	128		5.137	5.137	(0.968)	175541	25.0000	26
11 1,3-Dichlorobenzene	146		5.266	5.267	(0.992)	212965	25.0000	27
* 12 1,4-Dichlorobenzene-d4	152		5.307	5.308	(1.000)	259686	40.0000	
13 1,4-Dichlorobenzene	146		5.325	5.325	(1.003)	225059	25.0000	27
117 2-Ethyl-1-hexanol	57		5.354	5.354	(1.009)	76657	25.0000	31
15 Benzyl Alcohol	108		5.419	5.419	(1.021)	138838	25.0000	28
16 1,2-Dichlorobenzene	146		5.454	5.455	(1.028)	212701	25.0000	26
17 2-Methylphenol	108		5.513	5.508	(1.039)	177903	25.0000	27
18 2,2'-oxybis(1-Chloropropane)	45		5.530	5.531	(1.042)	58647	25.0000	26(Q)
99 Acetophenone	105		5.642	5.642	(1.063)	349510	25.0000	27

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
19 N-Nitroso-di-n-propylamine	70	5.636	5.637	(1.062)	137485	25.0000	26
20 4-Methylphenol	108	5.636	5.637	(1.062)	218567	25.0000	26
21 Hexachloroethane	117	5.736	5.737	(1.081)	86741	25.0000	26
\$ 22 Nitrobenzene-d5	82	5.765	5.766	(0.905)	275968	25.0000	29
23 Nitrobenzene	77	5.783	5.784	(0.908)	248231	25.0000	27
24 Isophorone	82	5.983	5.978	(0.939)	438960	25.0000	28
25 2-Nitrophenol	139	6.047	6.048	(0.949)	141778	25.0000	27(Q)
26 2,4-Dimethylphenol	107	6.077	6.072	(0.954)	263521	25.0000	29
27 bis(2-Chloroethoxy)methane	93	6.147	6.148	(0.965)	218406	25.0000	29
28 Benzoic Acid	105	6.177	6.177	(0.970)	218103	25.0000	27(Q)
29 2,4-Dichlorophenol	162	6.247	6.248	(0.981)	283921	25.0000	27
30 1,2,4-Trichlorobenzene	180	6.323	6.318	(0.993)	350168	25.0000	28
* 31 Naphthalene-d8	136	6.370	6.371	(1.000)	1175175	40.0000	
32 Naphthalene	128	6.388	6.389	(1.003)	705201	25.0000	27
115 alpha-Terpineol	59	6.388	6.388	(1.003)	107918	25.0000	28
33 4-Chloroaniline	127	6.423	6.424	(1.008)	296473	25.0000	28
34 Hexachlorobutadiene	225	6.494	6.489	(1.019)	264117	25.0000	27
102 Caprolactam	113	6.729	6.729	(1.056)	84448	25.0000	27
35 4-Chloro-3-Methylphenol	107	6.823	6.824	(1.071)	268019	25.0000	27
36 2-Methylnaphthalene	142	6.964	6.959	(1.093)	614494	25.0000	28
114 1-Methylnaphthalene	142	7.046	7.046	(1.106)	572837	25.0000	28
38 Hexachlorocyclopentadiene	237	7.099	7.100	(0.906)	299830	25.0000	30
112 1,2,4,5-Tetrachlorobenzene	216	7.105	7.105	(0.906)	569025	25.0000	29
39 2,4,6-Trichlorophenol	196	7.193	7.194	(0.918)	357010	25.0000	28
40 2,4,5-Trichlorophenol	196	7.228	7.223	(0.922)	386402	25.0000	28
\$ 41 2-Fluorobiphenyl	172	7.264	7.258	(0.927)	1030006	25.0000	30
98 1,1'-Biphenyl	154	7.352	7.347	(0.938)	962733	25.0000	28
42 2-Chloronaphthalene	162	7.369	7.370	(0.940)	730294	25.0000	29
43 2-Nitroaniline	65	7.446	7.447	(0.950)	190260	25.0000	28
44 Dimethylphthalate	163	7.598	7.593	(0.969)	1068328	25.0000	29
45 2,6-Dinitrotoluene	165	7.645	7.640	(0.975)	250895	25.0000	29
46 Acenaphthylene	152	7.722	7.717	(0.985)	1201214	25.0000	29
47 3-Nitroaniline	138	7.792	7.787	(0.994)	196418	25.0000	28
* 48 Acenaphthene-d10	164	7.839	7.834	(1.000)	1105697	40.0000	
49 Acenaphthene	153	7.869	7.864	(1.004)	821708	25.0000	28
50 2,4-Dinitrophenol	184	7.875	7.870	(1.004)	164808	25.0000	24(Q)
51 4-Nitrophenol	109	7.922	7.917	(1.010)	273005	25.0000	28
53 2,4-Dinitrotoluene	165	7.986	7.981	(1.019)	351636	25.0000	28
52 Dibenzofuran	168	8.010	8.005	(1.022)	1285108	25.0000	28
110 2,3,4,6-Tetrachlorophenol	232	8.110	8.110	(1.034)	422047	25.0000	28
54 Diethylphthalate	149	8.180	8.175	(1.043)	1031043	25.0000	28
56 4-Chlorophenyl-phenylether	204	8.286	8.281	(1.057)	754808	25.0000	28
55 Fluorene	166	8.298	8.293	(1.058)	1120249	25.0000	28
57 4-Nitroaniline	138	8.309	8.298	(1.060)	235199	25.0000	28
58 4,6-Dinitro-2-methylphenol	198	8.333	8.322	(0.915)	263726	25.0000	25
59 N-Nitrosodiphenylamine	169	8.386	8.381	(0.921)	1021554	25.0000	28
97 Azobenzene	77	8.421	8.421	(0.925)	1082676	25.0000	29
\$ 60 2,4,6-Tribromophenol	330	8.503	8.498	(0.934)	277268	25.0000	27
61 4-Bromophenyl-phenylether	248	8.703	8.698	(0.956)	515056	25.0000	28
62 Hexachlorobenzene	284	8.774	8.769	(0.964)	547933	25.0000	28
100 Atrazine	200	8.826	8.826	(0.970)	189235	25.0000	29
63 Pentachlorophenol	266	8.932	8.927	(0.981)	405188	25.0000	26
111 Pentachloronitrobenzene	237	8.950	8.950	(0.983)	289276	25.0000	28
* 64 Phenanthrene-d10	188	9.103	9.098	(1.000)	2993799	40.0000	

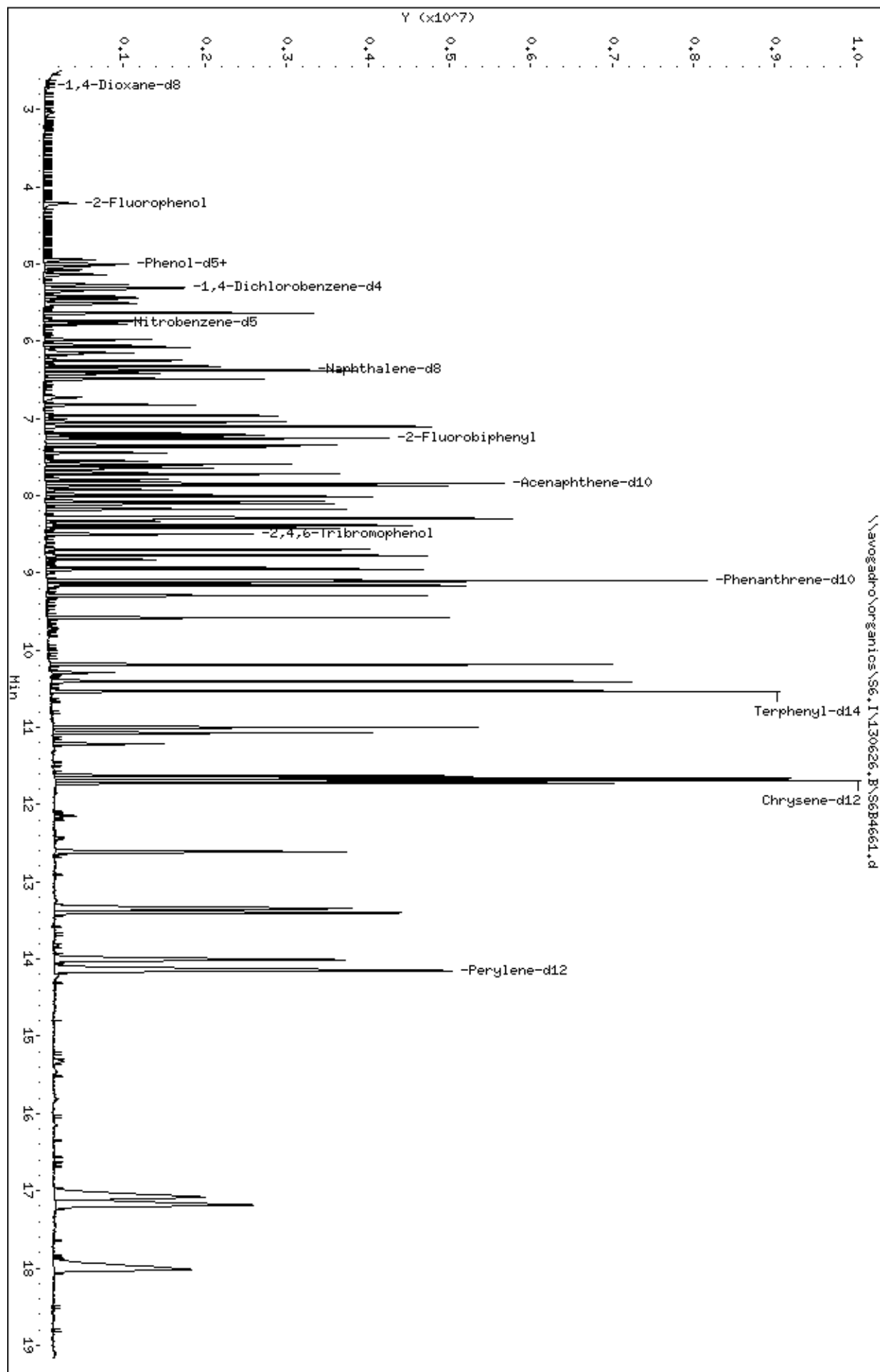
Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
65 Phenanthrene	178	9.120	9.115	(1.002)	1860905	25.0000	28
66 Anthracene	178	9.167	9.156	(1.007)	1955427	25.0000	29
67 Carbazole	167	9.296	9.286	(1.021)	1639151	25.0000	28
68 Di-n-butylphthalate	149	9.579	9.568	(1.052)	1852176	25.0000	28
69 Fluoranthene	202	10.190	10.173	(1.119)	2714897	25.0000	28
70 Benzidine	184	10.289	10.289	(0.880)	329651	25.0000	22(H)
71 Pyrene	202	10.407	10.384	(0.890)	2804823	25.0000	30
\$ 72 Terphenyl-d14	244	10.530	10.514	(0.901)	2270921	25.0000	30(H)
73 Butylbenzylphthalate	149	11.000	10.978	(0.941)	978495	25.0000	29
74 3,3'-Dichlorobenzidine	252	11.629	11.601	(0.994)	1332324	25.0000	29(H)
78 bis(2-Ethylhexyl)phthalate	149	11.658	11.636	(0.997)	1510811	25.0000	28
75 Benzo(a)anthracene	228	11.670	11.642	(0.998)	3598000	25.0000	29
* 76 Chrysene-d12	240	11.694	11.665	(1.000)	4760085	40.0000	
77 Chrysene	228	11.723	11.695	(1.002)	3051946	25.0000	30
79 Di-n-octylphthalate	149	12.616	12.588	(0.892)	2420621	25.0000	29
80 Benzo(b)fluoranthene	252	13.345	13.363	(0.943)	3501369	25.0000	28
81 Benzo(k)fluoranthene	252	13.398	13.363	(0.947)	3457954	25.0000	30
82 Benzo(a)pyrene	252	14.009	13.974	(0.990)	3431820	25.0000	29
* 83 Perylene-d12	264	14.150	14.156	(1.000)	4885384	40.0000	(Q)
84 Indeno(1,2,3-cd)pyrene	276	17.082	17.041	(1.207)	4357836	25.0000	31
85 Dibenzo(a,h)anthracene	278	17.187	17.218	(1.215)	3477966	25.0000	28
86 Benzo(g,h,i)perylene	276	18.022	18.046	(1.274)	3556201	25.0000	28(Q)

QC Flag Legend

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

Data File: \\avogadro\organics\S6,I\130626,B\S6B4661.d  
 Date: 26-JUN-2013 11:45  
 Client ID: SSTID0256Z  
 Sample Info: SSTID0256Z,SSTID0256Z  
 Volume Injected (uL): 1.0  
 Column phase: Rxi-5S11 MS

Instrument: S6.i  
 Operator: PK SRC: PK  
 Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S6.I\130626.B\S6B4662.d  
 Lab Smp Id: SSTD0806Z Client Smp ID: SSTD0806Z  
 Inj Date : 26-JUN-2013 13:00  
 Operator : PK SRC: PK Inst ID: S6.i  
 Smp Info : SSTD0806Z,SSTD0806Z  
 Misc Info : 1,6  
 Comment :  
 Method : \\avogadro\organics\S6.I\130626.B\S6\_8270C\_N.m  
 Meth Date : 26-Jun-2013 15:33 pkaczorows Quant Type: ISTD  
 Cal Date : 26-JUN-2013 14:43 Cal File: S6B4666.d  
 Als bottle: 2 Calibration Sample, Level: 6  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: allnew.sub  
 Target Version: 4.14  
 Processing Host: TARGET113

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

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

Compounds	QUANT	SIG	AMOUNTS					
			RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
\$ 109 1,4-Dioxane-d8	96		2.687	2.692 (0.506)		82988	80.0000	110
108 1,4-Dioxane	58		2.711	2.722 (0.510)		26681	80.0000	76(Q)
1 N-Nitrosodimethylamine	74		3.005	3.010 (0.565)		198565	80.0000	85(A)
2 Pyridine	79		3.034	3.045 (0.571)		343770	80.0000	93(A)
\$ 3 2-Fluorophenol	112		4.221	4.221 (0.794)		529710	80.0000	84
101 Benzaldehyde	77		4.943	4.943 (0.930)		262177	80.0000	42
\$ 5 Phenol-d5	99		5.014	4.996 (0.944)		761746	80.0000	83
6 Phenol	94		5.020	5.008 (0.945)		838370	80.0000	84(AQ)
7 Aniline	66		5.020	5.007 (0.945)		923931	80.0000	120(AQ)
8 bis(2-Chloroethyl)Ether	63		5.090	5.079 (0.958)		244352	80.0000	77
10 2-Chlorophenol	128		5.143	5.137 (0.968)		668772	80.0000	81(A)
11 1,3-Dichlorobenzene	146		5.267	5.267 (0.991)		764959	80.0000	79
* 12 1,4-Dichlorobenzene-d4	152		5.314	5.308 (1.000)		317044	40.0000	
13 1,4-Dichlorobenzene	146		5.325	5.325 (1.002)		826672	80.0000	81(A)
117 2-Ethyl-1-hexanol	57		5.361	5.354 (1.009)		238510	80.0000	78
15 Benzyl Alcohol	108		5.431	5.419 (1.022)		500630	80.0000	82(A)
16 1,2-Dichlorobenzene	146		5.455	5.455 (1.027)		768336	80.0000	78
17 2-Methylphenol	108		5.519	5.508 (1.039)		676075	80.0000	83(A)
18 2,2'-oxybis(1-Chloropropane)	45		5.531	5.531 (1.041)		211705	80.0000	78
99 Acetophenone	105		5.654	5.642 (1.064)		1398472	80.0000	88(A)

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
19 N-Nitroso-di-n-propylamine	70	5.654	5.637	(1.064)	552853	80.0000	85(A)
20 4-Methylphenol	108	5.649	5.637	(1.063)	907994	80.0000	90(A)
21 Hexachloroethane	117	5.743	5.737	(1.081)	324270	80.0000	79
\$ 22 Nitrobenzene-d5	82	5.778	5.766	(0.906)	940129	80.0000	71
23 Nitrobenzene	77	5.795	5.784	(0.909)	910970	80.0000	70
24 Isophorone	82	5.995	5.978	(0.940)	1450514	80.0000	67
25 2-Nitrophenol	139	6.054	6.048	(0.949)	510460	80.0000	69
26 2,4-Dimethylphenol	107	6.089	6.072	(0.955)	1022728	80.0000	80(A)
27 bis(2-Chloroethoxy)methane	93	6.160	6.148	(0.966)	746698	80.0000	71
28 Benzoic Acid	105	6.242	6.177	(0.979)	823235	80.0000	74(Q)
29 2,4-Dichlorophenol	162	6.260	6.248	(0.982)	1071159	80.0000	74
30 1,2,4-Trichlorobenzene	180	6.330	6.318	(0.993)	1252883	80.0000	71
* 31 Naphthalene-d8	136	6.377	6.371	(1.000)	1637770	40.0000	
32 Naphthalene	128	6.395	6.389	(1.003)	2735552	80.0000	76
115 alpha-Terpineol	59	6.395	6.388	(1.003)	391246	80.0000	72
33 4-Chloroaniline	127	6.436	6.424	(1.009)	1041989	80.0000	70
34 Hexachlorobutadiene	225	6.495	6.489	(1.018)	938495	80.0000	70
102 Caprolactam	113	6.782	6.729	(1.064)	256945	80.0000	58
35 4-Chloro-3-Methylphenol	107	6.841	6.824	(1.073)	950652	80.0000	70
36 2-Methylnaphthalene	142	6.971	6.959	(1.093)	2218929	80.0000	72
114 1-Methylnaphthalene	142	7.053	7.046	(1.106)	2086735	80.0000	72
38 Hexachlorocyclopentadiene	237	7.106	7.100	(0.905)	1093229	80.0000	89(A)
112 1,2,4,5-Tetrachlorobenzene	216	7.112	7.105	(0.906)	2025843	80.0000	83(A)
39 2,4,6-Trichlorophenol	196	7.206	7.194	(0.918)	1286245	80.0000	81(A)
40 2,4,5-Trichlorophenol	196	7.247	7.223	(0.923)	1374484	80.0000	81(A)
\$ 41 2-Fluorobiphenyl	172	7.270	7.258	(0.926)	3537061	80.0000	81
98 1,1'-Biphenyl	154	7.358	7.347	(0.937)	3518985	80.0000	83(A)
42 2-Chloronaphthalene	162	7.382	7.370	(0.940)	2601740	80.0000	82(A)
43 2-Nitroaniline	65	7.464	7.447	(0.951)	659646	80.0000	79
44 Dimethylphthalate	163	7.617	7.593	(0.970)	3683594	80.0000	79
45 2,6-Dinitrotoluene	165	7.664	7.640	(0.976)	896780	80.0000	83(A)
46 Acenaphthylene	152	7.734	7.717	(0.985)	4414669	80.0000	84(A)
47 3-Nitroaniline	138	7.817	7.787	(0.996)	706446	80.0000	80
* 48 Acenaphthene-d10	164	7.852	7.834	(1.000)	1384102	40.0000	
49 Acenaphthene	153	7.881	7.864	(1.004)	3076771	80.0000	84(A)
50 2,4-Dinitrophenol	184	7.899	7.870	(1.006)	756416	80.0000	90(AQ)
51 4-Nitrophenol	109	7.952	7.917	(1.013)	983188	80.0000	80
53 2,4-Dinitrotoluene	165	8.010	7.981	(1.020)	1309217	80.0000	83(AQ)
52 Dibenzofuran	168	8.022	8.005	(1.022)	4611910	80.0000	82(A)
110 2,3,4,6-Tetrachlorophenol	232	8.128	8.110	(1.035)	1530046	80.0000	82(A)
54 Diethylphthalate	149	8.204	8.175	(1.045)	3662982	80.0000	80(A)
56 4-Chlorophenyl-phenylether	204	8.304	8.281	(1.058)	2696285	80.0000	81(A)
55 Fluorene	166	8.316	8.293	(1.059)	4172137	80.0000	83(A)
57 4-Nitroaniline	138	8.351	8.298	(1.064)	779061	80.0000	75
58 4,6-Dinitro-2-methylphenol	198	8.363	8.322	(0.916)	1073841	80.0000	82(A)
59 N-Nitrosodiphenylamine	169	8.410	8.381	(0.921)	3692559	80.0000	80(A)
97 Azobenzene	77	8.439	8.421	(0.924)	3643750	80.0000	77
\$ 60 2,4,6-Tribromophenol	330	8.528	8.498	(0.934)	1012307	80.0000	79
61 4-Bromophenyl-phenylether	248	8.727	8.698	(0.956)	1834169	80.0000	80
62 Hexachlorobenzene	284	8.798	8.769	(0.963)	1993723	80.0000	80
100 Atrazine	200	8.857	8.826	(0.970)	385952	80.0000	46
63 Pentachlorophenol	266	8.968	8.927	(0.982)	1576860	80.0000	81(A)
111 Pentachloronitrobenzene	237	8.980	8.950	(0.983)	1085056	80.0000	83(A)
* 64 Phenanthrene-d10	188	9.133	9.098	(1.000)	3774262	40.0000	

Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
65 Phenanthrene	178	9.156	9.115	(1.003)	6452871	80.0000	77
66 Anthracene	178	9.203	9.156	(1.008)	6676546	80.0000	78
67 Carbazole	167	9.338	9.286	(1.023)	5359706	80.0000	74
68 Di-n-butylphthalate	149	9.626	9.568	(1.054)	6530131	80.0000	79
69 Fluoranthene	202	10.255	10.173	(1.123)	9055204	80.0000	75
70 Benzidine	184	10.361	10.289	(0.886)	1613566	80.0000	74(H)
71 Pyrene	202	10.478	10.384	(0.896)	9311825	80.0000	70(H)
\$ 72 Terphenyl-d14	244	10.613	10.514	(0.907)	7664620	80.0000	71
73 Butylbenzylphthalate	149	11.095	10.978	(0.948)	3761279	80.0000	78(H)
74 3,3'-Dichlorobenzidine	252	11.747	11.601	(1.004)	4759973	80.0000	73
78 bis(2-Ethylhexyl)phthalate	149	11.771	11.636	(1.006)	6543934	80.0000	84(AH)
75 Benzo(a)anthracene	228	11.777	11.642	(1.007)	13549866	80.0000	76(H)
* 76 Chrysene-d12	240	11.800	11.665	(1.000)	6812272	40.0000	(H)
77 Chrysene	228	11.841	11.695	(1.012)	10270627	80.0000	70(H)
79 Di-n-octylphthalate	149	12.740	12.588	(0.892)	8845929	80.0000	79
80 Benzo(b)fluoranthene	252	13.504	13.363	(0.945)	15165322	80.0000	89(A)
81 Benzo(k)fluoranthene	252	13.557	13.363	(0.949)	10069435	80.0000	64(H)
82 Benzo(a)pyrene	252	14.168	13.974	(0.992)	12133376	80.0000	76
* 83 Perylene-d12	264	14.286	14.156	(1.000)	6606349	40.0000	(Q)
84 Indeno(1,2,3-cd)pyrene	276	17.347	17.041	(1.214)	16100816	80.0000	85(A)
85 Dibenzo(a,h)anthracene	278	17.435	17.218	(1.220)	13074104	80.0000	77
86 Benzo(g,h,i)perylene	276	18.275	18.046	(1.279)	13000521	80.0000	76(Q)

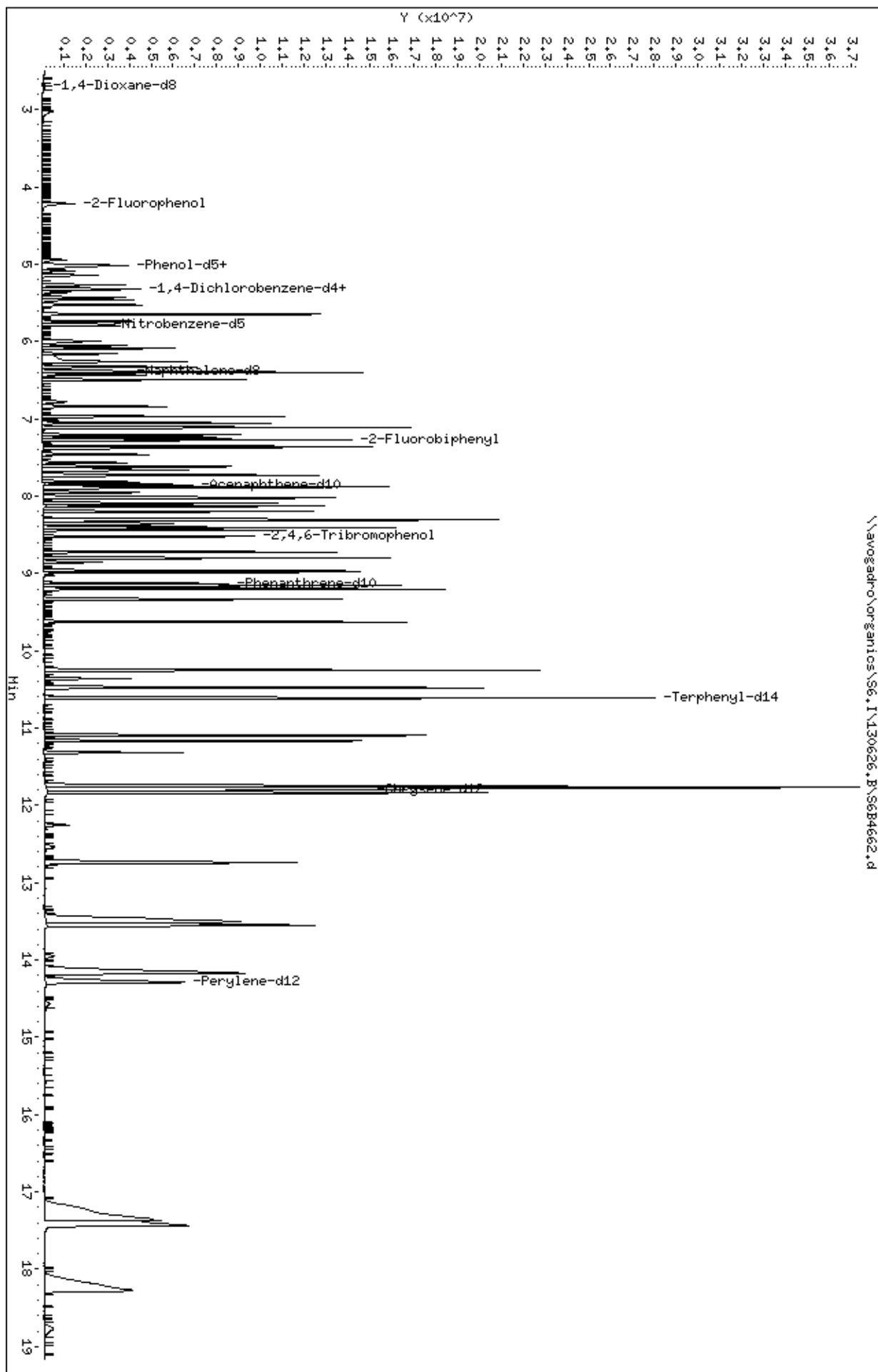
QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.
- H - Operator selected an alternate compound hit.



Data File: \\avogadro\organics\S6,I\130626,B\S6B4662.d  
Date : 26-JUN-2013 13:00  
Client ID: SSTID0806Z  
Sample Info: SSTID0806Z,SSTID0806Z  
Volume Injected (uL): 1.0  
Column phase: Rxi-5S11 MS

Instrument: S6.i  
Operator: PK SRC: PK  
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S6.I\130626.B\S6B4663.d  
 Lab Smp Id: SSTD0056Z Client Smp ID: SSTD0056Z  
 Inj Date : 26-JUN-2013 13:25  
 Operator : PK SRC: PK Inst ID: S6.i  
 Smp Info : SSTD0056Z,SSTD0056Z  
 Misc Info : 1,1  
 Comment :  
 Method : \\avogadro\organics\S6.I\130626.B\S6\_8270C\_N.m  
 Meth Date : 26-Jun-2013 15:33 pkaczorows Quant Type: ISTD  
 Cal Date : 26-JUN-2013 14:43 Cal File: S6B4666.d  
 Als bottle: 3 Calibration Sample, Level: 1  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: allnew.sub  
 Target Version: 4.14  
 Processing Host: TARGET113

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

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

Compounds	QUANT	SIG	AMOUNTS					
			RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
\$ 109 1,4-Dioxane-d8	96		2.699	2.692 (0.509)		2218	5.00000	4(a)
108 1,4-Dioxane	58		2.717	2.722 (0.512)		1114	5.00000	4(aQ)
1 N-Nitrosodimethylamine	74		3.010	3.010 (0.567)		7119	5.00000	4(aQ)
2 Pyridine	79		3.052	3.045 (0.575)		11195	5.00000	4(Ta)
\$ 3 2-Fluorophenol	112		4.215	4.221 (0.794)		23282	5.00000	5(a)
101 Benzaldehyde	77		4.943	4.943 (0.931)		25588	5.00000	5(a)
\$ 5 Phenol-d5	99		4.996	4.996 (0.941)		31416	5.00000	4(a)
6 Phenol	94		5.002	5.008 (0.942)		29914	5.00000	4(a)
7 Aniline	66		5.002	5.007 (0.942)		25536	5.00000	4(a)
8 bis(2-Chloroethyl)Ether	63		5.079	5.079 (0.957)		11854	5.00000	5(aQ)
10 2-Chlorophenol	128		5.137	5.137 (0.968)		31313	5.00000	5(a)
11 1,3-Dichlorobenzene	146		5.267	5.267 (0.992)		37709	5.00000	5(a)
* 12 1,4-Dichlorobenzene-d4	152		5.308	5.308 (1.000)		239341	40.0000	
13 1,4-Dichlorobenzene	146		5.325	5.325 (1.003)		36349	5.00000	5(aQ)
117 2-Ethyl-1-hexanol	57		5.355	5.354 (1.009)		11232	5.00000	5(a)
15 Benzyl Alcohol	108		5.413	5.419 (1.020)		22561	5.00000	5(a)
16 1,2-Dichlorobenzene	146		5.455	5.455 (1.028)		36958	5.00000	5(a)
17 2-Methylphenol	108		5.508	5.508 (1.038)		31134	5.00000	5(a)
18 2,2'-oxybis(1-Chloropropane)	45		5.525	5.531 (1.041)		10652	5.00000	5(a)
99 Acetophenone	105		5.637	5.642 (1.062)		53306	5.00000	4(a)

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
19 N-Nitroso-di-n-propylamine	70	5.631	5.637	(1.061)	25431	5.00000	5(a)
20 4-Methylphenol	108	5.631	5.637	(1.061)	32888	5.00000	4(aQ)
21 Hexachloroethane	117	5.737	5.737	(1.081)	14832	5.00000	5(a)
\$ 22 Nitrobenzene-d5	82	5.766	5.766	(0.905)	43523	5.00000	5(a)
23 Nitrobenzene	77	5.778	5.784	(0.907)	47783	5.00000	6(a)
24 Isophorone	82	5.972	5.978	(0.937)	78743	5.00000	6(a)
25 2-Nitrophenol	139	6.048	6.048	(0.949)	27090	5.00000	6(a)
26 2,4-Dimethylphenol	107	6.072	6.072	(0.953)	34071	5.00000	4(a)
27 bis(2-Chloroethoxy)methane	93	6.148	6.148	(0.965)	35127	5.00000	5(a)
28 Benzoic Acid	105	6.130	6.177	(0.962)	45133	5.00000	6(a)
29 2,4-Dichlorophenol	162	6.248	6.248	(0.981)	44701	5.00000	5(a)
30 1,2,4-Trichlorobenzene	180	6.318	6.318	(0.992)	59667	5.00000	5(a)
* 31 Naphthalene-d8	136	6.371	6.371	(1.000)	1030427	40.0000	
32 Naphthalene	128	6.389	6.389	(1.003)	117289	5.00000	5(a)
115 alpha-Terpineol	59	6.383	6.388	(1.002)	19100	5.00000	6(a)
33 4-Chloroaniline	127	6.424	6.424	(1.008)	51190	5.00000	5(a)
34 Hexachlorobutadiene	225	6.495	6.489	(1.019)	47344	5.00000	6(a)
102 Caprolactam	113	6.694	6.729	(1.051)	18576	5.00000	7(a)
35 4-Chloro-3-Methylphenol	107	6.818	6.824	(1.070)	47764	5.00000	6(a)
36 2-Methylnaphthalene	142	6.959	6.959	(1.092)	103459	5.00000	5(a)
114 1-Methylnaphthalene	142	7.041	7.046	(1.105)	94633	5.00000	5(a)
38 Hexachlorocyclopentadiene	237	7.100	7.100	(0.906)	44423	5.00000	4(a)
112 1,2,4,5-Tetrachlorobenzene	216	7.106	7.105	(0.906)	92772	5.00000	4(a)
39 2,4,6-Trichlorophenol	196	7.194	7.194	(0.918)	64263	5.00000	5(a)
40 2,4,5-Trichlorophenol	196	7.223	7.223	(0.921)	65420	5.00000	4(a)
\$ 41 2-Fluorobiphenyl	172	7.258	7.258	(0.926)	166475	5.00000	4(a)
98 1,1'-Biphenyl	154	7.347	7.347	(0.937)	162966	5.00000	4(a)
42 2-Chloronaphthalene	162	7.370	7.370	(0.940)	123778	5.00000	4(a)
43 2-Nitroaniline	65	7.441	7.447	(0.949)	32497	5.00000	4(a)
44 Dimethylphthalate	163	7.587	7.593	(0.968)	191698	5.00000	5(a)
45 2,6-Dinitrotoluene	165	7.640	7.640	(0.975)	41843	5.00000	4(a)
46 Acenaphthylene	152	7.717	7.717	(0.984)	195080	5.00000	4(a)
47 3-Nitroaniline	138	7.787	7.787	(0.993)	37834	5.00000	5(a)
* 48 Acenaphthene-d10	164	7.840	7.834	(1.000)	1192181	40.0000	
49 Acenaphthene	153	7.864	7.864	(1.003)	141086	5.00000	4(a)
50 2,4-Dinitrophenol	184	7.869	7.870	(1.004)	19012	5.00000	3(aQ)
51 4-Nitrophenol	109	7.911	7.917	(1.009)	52226	5.00000	5(a)
53 2,4-Dinitrotoluene	165	7.975	7.981	(1.017)	64398	5.00000	5(a)
52 Dibenzofuran	168	8.005	8.005	(1.021)	230370	5.00000	5(a)
110 2,3,4,6-Tetrachlorophenol	232	8.105	8.110	(1.034)	77061	5.00000	5
54 Diethylphthalate	149	8.175	8.175	(1.043)	187252	5.00000	5(a)
56 4-Chlorophenyl-phenylether	204	8.281	8.281	(1.056)	135640	5.00000	5(a)
55 Fluorene	166	8.293	8.293	(1.058)	191956	5.00000	4(a)
57 4-Nitroaniline	138	8.293	8.298	(1.058)	44922	5.00000	5(a)
58 4,6-Dinitro-2-methylphenol	198	8.322	8.322	(0.914)	40549	5.00000	4(a)
59 N-Nitrosodiphenylamine	169	8.381	8.381	(0.921)	181514	5.00000	4(a)
97 Azobenzene	77	8.416	8.421	(0.924)	193513	5.00000	5(a)
\$ 60 2,4,6-Tribromophenol	330	8.498	8.498	(0.934)	55333	5.00000	5(a)
61 4-Bromophenyl-phenylether	248	8.698	8.698	(0.955)	91008	5.00000	4(a)
62 Hexachlorobenzene	284	8.768	8.769	(0.963)	103458	5.00000	5(a)
100 Atrazine	200	8.821	8.826	(0.969)	45733	5.00000	6(a)
63 Pentachlorophenol	266	8.933	8.927	(0.981)	77357	5.00000	4(a)
111 Pentachloronitrobenzene	237	8.951	8.950	(0.983)	52509	5.00000	4(a)
* 64 Phenanthrene-d10	188	9.103	9.098	(1.000)	3303396	40.0000	

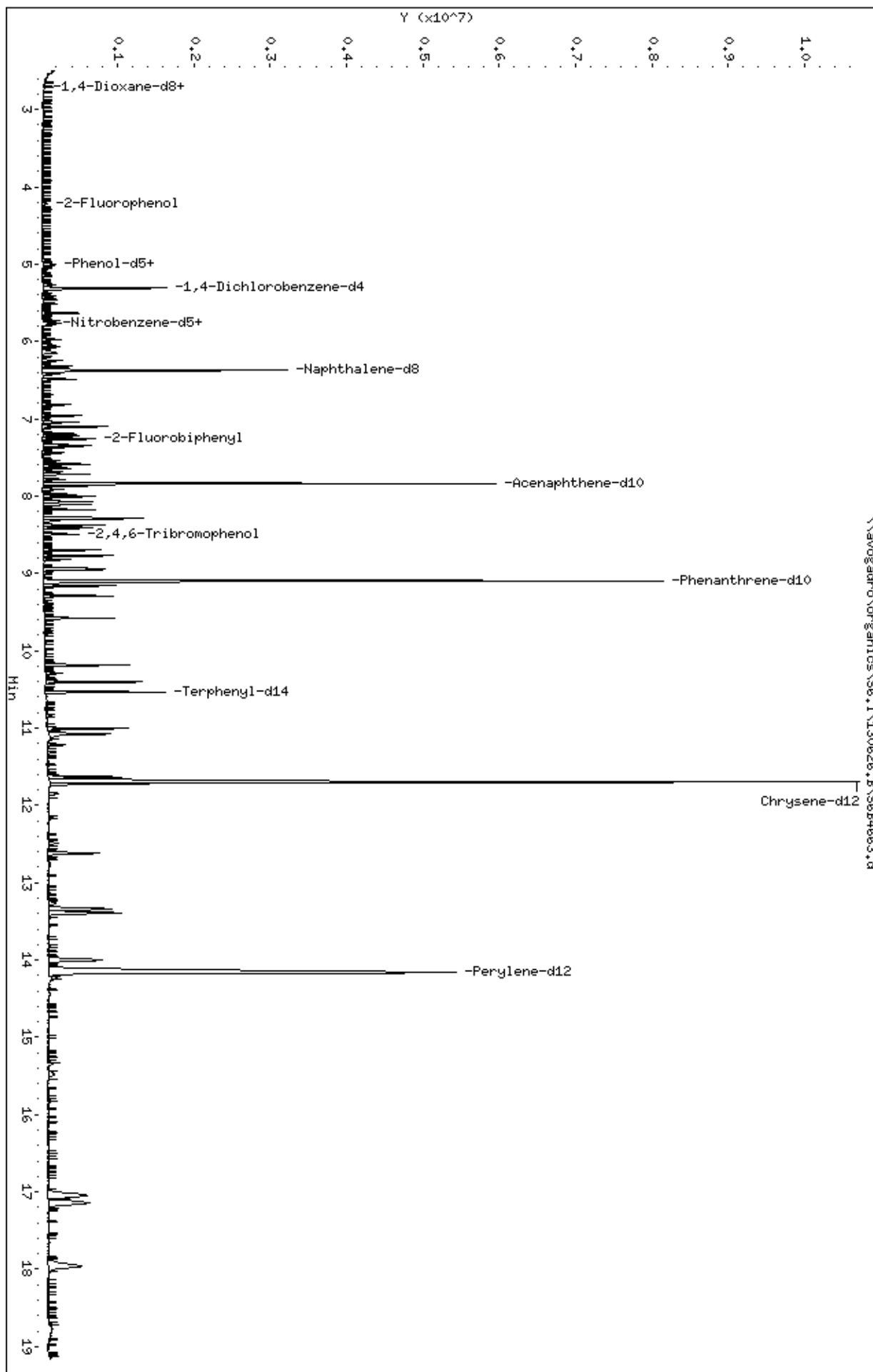
Compounds	QUANT		SIG				AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)	
65 Phenanthrene	178	9.121	9.115	(1.002)	350903	5.00000	5(a)	
66 Anthracene	178	9.162	9.156	(1.006)	349485	5.00000	5(a)	
67 Carbazole	167	9.291	9.286	(1.021)	313079	5.00000	5(a)	
68 Di-n-butylphthalate	149	9.579	9.568	(1.052)	345006	5.00000	5(a)	
69 Fluoranthene	202	10.190	10.173	(1.119)	507921	5.00000	5(a)	
70 Benzidine	184	10.296	10.289	(0.880)	89049	5.00000	5(a)	
71 Pyrene	202	10.402	10.384	(0.889)	530939	5.00000	5(a)	
\$ 72 Terphenyl-d14	244	10.531	10.514	(0.900)	433916	5.00000	5(a)	
73 Butylbenzylphthalate	149	11.007	10.978	(0.941)	180268	5.00000	5(a)	
74 3,3'-Dichlorobenzidine	252	11.630	11.601	(0.994)	261400	5.00000	5(a)	
78 bis(2-Ethylhexyl)phthalate	149	11.671	11.636	(0.997)	272573	5.00000	4(a)	
75 Benzo(a)anthracene	228	11.677	11.642	(0.998)	706024	5.00000	5(a)	
* 76 Chrysene-d12	240	11.700	11.665	(1.000)	5503618	40.0000		
77 Chrysene	228	11.724	11.695	(1.002)	595971	5.00000	5(a)	
79 Di-n-octylphthalate	149	12.623	12.588	(0.891)	448881	5.00000	5(a)	
80 Benzo(b)fluoranthene	252	13.340	13.363	(0.942)	683510	5.00000	4(a)	
81 Benzo(k)fluoranthene	252	13.387	13.363	(0.945)	704365	5.00000	5(a)	
82 Benzo(a)pyrene	252	14.004	13.974	(0.989)	652264	5.00000	5(a)	
* 83 Perylene-d12	264	14.162	14.156	(1.000)	5781400	40.0000	(Q)	
84 Indeno(1,2,3-cd)pyrene	276	17.047	17.041	(1.204)	677978	5.00000	4(a)	
85 Dibenzo(a,h)anthracene	278	17.141	17.218	(1.210)	726555	5.00000	5(a)	
86 Benzo(g,h,i)perylene	276	17.964	18.046	(1.268)	722066	5.00000	5(aQH)	

QC Flag Legend

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

Data File: \\avogadro\organics\S6,I\130626,B\S6B4663.d  
Date: 26-JUN-2013 13:25  
Client ID: SSTID0056Z  
Sample Info: SSTID0056Z,SSTID0056Z  
Volume Injected (uL): 1.0  
Column phase: Rxi-5S11 MS

Instrument: S6.i  
Operator: PK SRC: PK  
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S6.I\130626.B\S6B4664.d  
 Lab Smp Id: SSTD0606Z Client Smp ID: SSTD0606Z  
 Inj Date : 26-JUN-2013 13:51  
 Operator : PK SRC: PK Inst ID: S6.i  
 Smp Info : SSTD0606Z,SSTD0606Z  
 Misc Info : 1,5  
 Comment :  
 Method : \\avogadro\organics\S6.I\130626.B\S6\_8270C\_N.m  
 Meth Date : 26-Jun-2013 15:33 pkaczorows Quant Type: ISTD  
 Cal Date : 26-JUN-2013 14:43 Cal File: S6B4666.d  
 Als bottle: 4 Calibration Sample, Level: 5  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: allnew.sub  
 Target Version: 4.14  
 Processing Host: TARGET113

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

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

Compounds	QUANT	SIG	AMOUNTS					
			RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
\$ 109 1,4-Dioxane-d8	96		2.687	2.692 (0.506)		61483	60.0000	80
108 1,4-Dioxane	58		2.723	2.722 (0.512)		25697	60.0000	72
1 N-Nitrosodimethylamine	74		3.011	3.010 (0.567)		144959	60.0000	62
2 Pyridine	79		3.040	3.045 (0.572)		209415	60.0000	56
\$ 3 2-Fluorophenol	112		4.221	4.221 (0.794)		392647	60.0000	62
101 Benzaldehyde	77		4.944	4.943 (0.930)		319514	60.0000	51
\$ 5 Phenol-d5	99		5.008	4.996 (0.943)		560795	60.0000	60
6 Phenol	94		5.020	5.008 (0.945)		635475	60.0000	63
7 Aniline	66		5.020	5.007 (0.945)		501011	60.0000	62
8 bis(2-Chloroethyl)Ether	63		5.085	5.079 (0.957)		199445	60.0000	62(Q)
10 2-Chlorophenol	128		5.143	5.137 (0.968)		512933	60.0000	61
11 1,3-Dichlorobenzene	146		5.267	5.267 (0.991)		573276	60.0000	59
* 12 1,4-Dichlorobenzene-d4	152		5.314	5.308 (1.000)		319949	40.0000	
13 1,4-Dichlorobenzene	146		5.325	5.325 (1.002)		616863	60.0000	60
117 2-Ethyl-1-hexanol	57		5.361	5.354 (1.009)		181376	60.0000	59
15 Benzyl Alcohol	108		5.425	5.419 (1.021)		367491	60.0000	60
16 1,2-Dichlorobenzene	146		5.455	5.455 (1.027)		582951	60.0000	59
17 2-Methylphenol	108		5.519	5.508 (1.039)		487502	60.0000	59
18 2,2'-oxybis(1-Chloropropane)	45		5.531	5.531 (1.041)		154232	60.0000	56
99 Acetophenone	105		5.649	5.642 (1.063)		1011622	60.0000	63

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
19 N-Nitroso-di-n-propylamine	70	5.649	5.637 (1.063)		401116	60.0000	61
20 4-Methylphenol	108	5.649	5.637 (1.063)		662648	60.0000	65
21 Hexachloroethane	117	5.737	5.737 (1.080)		241981	60.0000	59
\$ 22 Nitrobenzene-d5	82	5.772	5.766 (0.906)		718641	60.0000	56
23 Nitrobenzene	77	5.790	5.784 (0.909)		688095	60.0000	55
24 Isophorone	82	5.989	5.978 (0.940)		1111629	60.0000	53
25 2-Nitrophenol	139	6.054	6.048 (0.950)		390954	60.0000	54
26 2,4-Dimethylphenol	107	6.083	6.072 (0.955)		742161	60.0000	60
27 bis(2-Chloroethoxy)methane	93	6.154	6.148 (0.966)		556509	60.0000	54
28 Benzoic Acid	105	6.224	6.177 (0.977)		598220	60.0000	55(Q)
29 2,4-Dichlorophenol	162	6.254	6.248 (0.982)		796870	60.0000	57
30 1,2,4-Trichlorobenzene	180	6.324	6.318 (0.993)		946914	60.0000	56
* 31 Naphthalene-d8	136	6.371	6.371 (1.000)		1588933	40.0000	
32 Naphthalene	128	6.395	6.389 (1.004)		2012213	60.0000	58
115 alpha-Terpineol	59	6.389	6.388 (1.003)		294201	60.0000	56
33 4-Chloroaniline	127	6.430	6.424 (1.009)		775180	60.0000	54
34 Hexachlorobutadiene	225	6.495	6.489 (1.019)		716206	60.0000	55
102 Caprolactam	113	6.765	6.729 (1.062)		201563	60.0000	47
35 4-Chloro-3-Methylphenol	107	6.836	6.824 (1.073)		727066	60.0000	55
36 2-Methylnaphthalene	142	6.965	6.959 (1.093)		1659156	60.0000	56
114 1-Methylnaphthalene	142	7.047	7.046 (1.106)		1574319	60.0000	56
38 Hexachlorocyclopentadiene	237	7.100	7.100 (0.906)		838410	60.0000	66
112 1,2,4,5-Tetrachlorobenzene	216	7.112	7.105 (0.907)		1521920	60.0000	60
39 2,4,6-Trichlorophenol	196	7.200	7.194 (0.918)		990161	60.0000	60
40 2,4,5-Trichlorophenol	196	7.235	7.223 (0.923)		1036453	60.0000	59
\$ 41 2-Fluorobiphenyl	172	7.264	7.258 (0.927)		2717976	60.0000	60
98 1,1'-Biphenyl	154	7.353	7.347 (0.938)		2637589	60.0000	60
42 2-Chloronaphthalene	162	7.376	7.370 (0.941)		1953128	60.0000	60
43 2-Nitroaniline	65	7.452	7.447 (0.951)		510893	60.0000	59
44 Dimethylphthalate	163	7.611	7.593 (0.971)		2826733	60.0000	58
45 2,6-Dinitrotoluene	165	7.658	7.640 (0.977)		646737	60.0000	58
46 Acenaphthylene	152	7.729	7.717 (0.986)		3283097	60.0000	61
47 3-Nitroaniline	138	7.805	7.787 (0.996)		533485	60.0000	58
* 48 Acenaphthene-d10	164	7.840	7.834 (1.000)		1430964	40.0000	
49 Acenaphthene	153	7.870	7.864 (1.004)		2292351	60.0000	60
50 2,4-Dinitrophenol	184	7.881	7.870 (1.005)		551859	60.0000	63(Q)
51 4-Nitrophenol	109	7.940	7.917 (1.013)		724020	60.0000	57
53 2,4-Dinitrotoluene	165	7.999	7.981 (1.020)		932767	60.0000	57
52 Dibenzofuran	168	8.011	8.005 (1.022)		3441987	60.0000	59
110 2,3,4,6-Tetrachlorophenol	232	8.116	8.110 (1.035)		1125444	60.0000	58
54 Diethylphthalate	149	8.187	8.175 (1.044)		2773092	60.0000	59
56 4-Chlorophenyl-phenylether	204	8.287	8.281 (1.057)		2038284	60.0000	59
55 Fluorene	166	8.304	8.293 (1.059)		3127108	60.0000	60
57 4-Nitroaniline	138	8.328	8.298 (1.062)		566663	60.0000	53
58 4,6-Dinitro-2-methylphenol	198	8.346	8.322 (0.917)		790796	60.0000	61
59 N-Nitrosodiphenylamine	169	8.393	8.381 (0.922)		2754293	60.0000	61
97 Azobenzene	77	8.428	8.421 (0.926)		2782141	60.0000	60
\$ 60 2,4,6-Tribromophenol	330	8.504	8.498 (0.934)		772849	60.0000	60
61 4-Bromophenyl-phenylether	248	8.704	8.698 (0.956)		1392517	60.0000	61
62 Hexachlorobenzene	284	8.780	8.769 (0.965)		1459605	60.0000	59
100 Atrazine	200	8.833	8.826 (0.970)		290019	60.0000	35
63 Pentachlorophenol	266	8.939	8.927 (0.982)		1174517	60.0000	61
111 Pentachloronitrobenzene	237	8.957	8.950 (0.984)		771325	60.0000	60
* 64 Phenanthrene-d10	188	9.103	9.098 (1.000)		3739847	40.0000	

Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
=====	====	====	=====	=====	=====	=====	=====
65 Phenanthrene	178	9.127	9.115	(1.003)	4933481	60.0000	60
66 Anthracene	178	9.174	9.156	(1.008)	5065483	60.0000	60
67 Carbazole	167	9.303	9.286	(1.022)	4130287	60.0000	57
68 Di-n-butylphthalate	149	9.579	9.568	(1.052)	4971579	60.0000	60
69 Fluoranthene	202	10.190	10.173	(1.119)	7001067	60.0000	58
70 Benzidine	184	10.290	10.289	(0.880)	1393859	60.0000	68
71 Pyrene	202	10.408	10.384	(0.890)	7144681	60.0000	57
\$ 72 Terphenyl-d14	244	10.531	10.514	(0.901)	5868867	60.0000	58
73 Butylbenzylphthalate	149	11.001	10.978	(0.941)	2747465	60.0000	60
74 3,3'-Dichlorobenzidine	252	11.636	11.601	(0.995)	3517159	60.0000	57
78 bis(2-Ethylhexyl)phthalate	149	11.659	11.636	(0.997)	4558097	60.0000	62
75 Benzo(a)anthracene	228	11.671	11.642	(0.998)	9747110	60.0000	58
* 76 Chrysene-d12	240	11.695	11.665	(1.000)	6409991	40.0000	
77 Chrysene	228	11.730	11.695	(1.003)	7862691	60.0000	57
79 Di-n-octylphthalate	149	12.617	12.588	(0.891)	6541781	60.0000	60
80 Benzo(b)fluoranthene	252	13.369	13.363	(0.944)	9971042	60.0000	59
81 Benzo(k)fluoranthene	252	13.422	13.363	(0.948)	8852684	60.0000	57
82 Benzo(a)pyrene	252	14.033	13.974	(0.991)	9025633	60.0000	58
* 83 Perylene-d12	264	14.156	14.156	(1.000)	6490161	40.0000	(Q)
84 Indeno(1,2,3-cd)pyrene	276	17.165	17.041	(1.212)	11759994	60.0000	64
85 Dibenzo(a,h)anthracene	278	17.259	17.218	(1.219)	9804957	60.0000	59
86 Benzo(g,h,i)perylene	276	18.099	18.046	(1.278)	9614516	60.0000	57(Q)

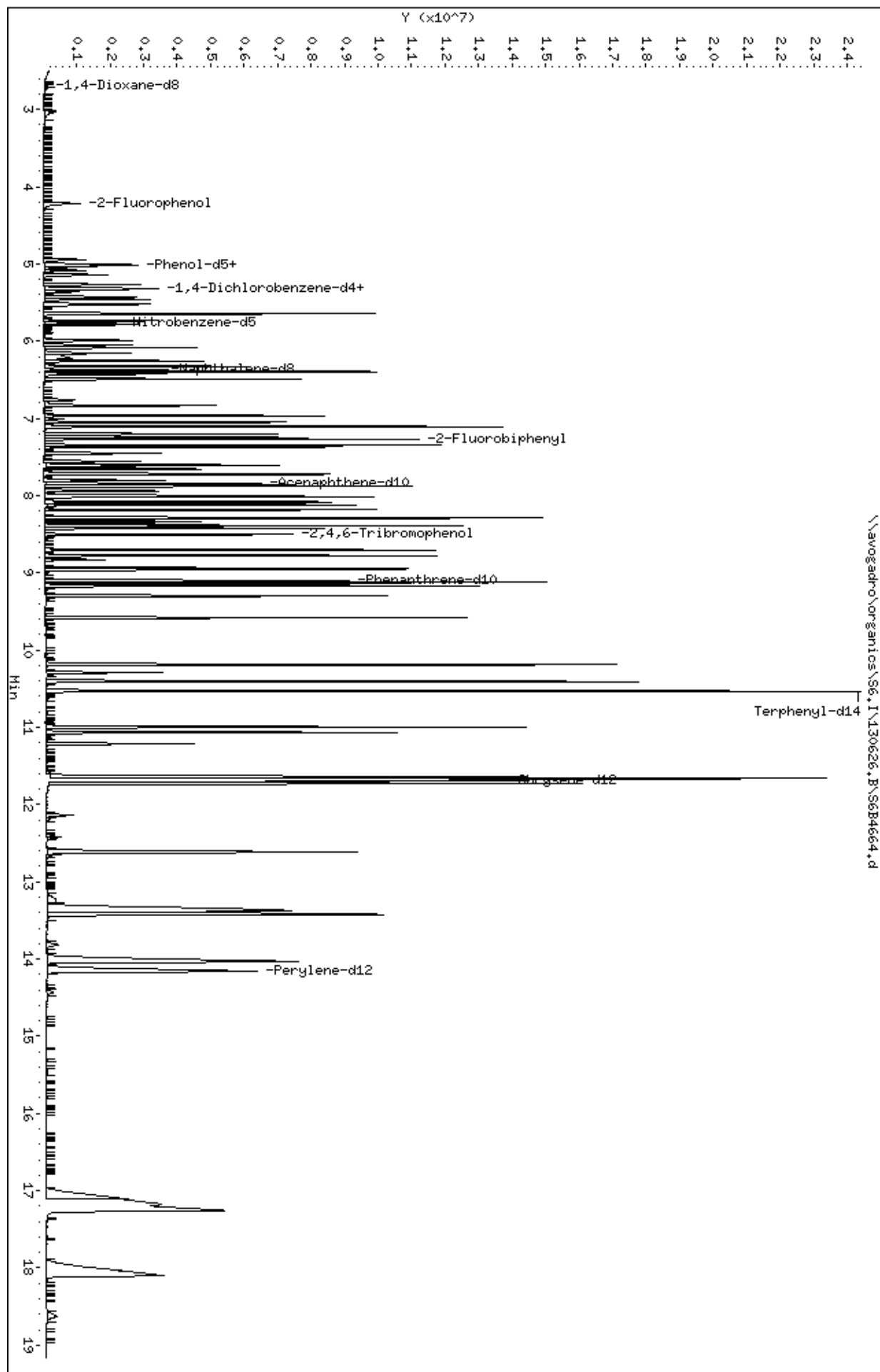
QC Flag Legend

Q - Qualifier signal failed the ratio test.



Data File: \\avogadro\organics\S6,I\130626,B\S6B4664.d  
Date: 26-JUN-2013 13:51  
Client ID: SSTID0606Z  
Sample Info: SSTID0606Z,SSTID0606Z  
Volume Injected (uL): 1.0  
Column phase: Rxi-5S11 MS

Instrument: S6.i  
Operator: PK SRC: PK  
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S6.I\130626.B\S6B4665.d  
 Lab Smp Id: SSTD0106Z Client Smp ID: SSTD0106Z  
 Inj Date : 26-JUN-2013 14:17  
 Operator : PK SRC: PK Inst ID: S6.i  
 Smp Info : SSTD0106Z,SSTD0106Z  
 Misc Info : 1,2  
 Comment :  
 Method : \\avogadro\organics\S6.I\130626.B\S6\_8270C\_N.m  
 Meth Date : 26-Jun-2013 15:33 pkaczorows Quant Type: ISTD  
 Cal Date : 26-JUN-2013 14:43 Cal File: S6B4666.d  
 Dil bottle: 5 Calibration Sample, Level: 2  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: allnew.sub  
 Target Version: 4.14  
 Processing Host: TARGET113

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

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

Compounds	QUANT	SIG	AMOUNTS					
			RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
\$ 109 1,4-Dioxane-d8	96		2.693	2.692 (0.507)		3796	10.0000	5(aQ)
108 1,4-Dioxane	58		2.723	2.722 (0.513)		1946	10.0000	6(aQ)
1 N-Nitrosodimethylamine	74		3.010	3.010 (0.567)		24414	10.0000	11
2 Pyridine	79		3.046	3.045 (0.574)		28225	10.0000	8(a)
\$ 3 2-Fluorophenol	112		4.215	4.221 (0.794)		56231	10.0000	9(a)
101 Benzaldehyde	77		4.944	4.943 (0.931)		88464	10.0000	15
\$ 5 Phenol-d5	99		4.996	4.996 (0.941)		89704	10.0000	10
6 Phenol	94		5.008	5.008 (0.944)		95492	10.0000	10
7 Aniline	66		5.008	5.007 (0.944)		63518	10.0000	8(aQ)
8 bis(2-Chloroethyl)Ether	63		5.079	5.079 (0.957)		29540	10.0000	10(Q)
10 2-Chlorophenol	128		5.137	5.137 (0.968)		78621	10.0000	10
11 1,3-Dichlorobenzene	146		5.267	5.267 (0.992)		92358	10.0000	10
* 12 1,4-Dichlorobenzene-d4	152		5.308	5.308 (1.000)		308676	40.0000	
13 1,4-Dichlorobenzene	146		5.325	5.325 (1.003)		100277	10.0000	10
117 2-Ethyl-1-hexanol	57		5.355	5.354 (1.009)		26847	10.0000	9(a)
15 Benzyl Alcohol	108		5.419	5.419 (1.021)		54093	10.0000	9(aQ)
16 1,2-Dichlorobenzene	146		5.455	5.455 (1.028)		102962	10.0000	11
17 2-Methylphenol	108		5.508	5.508 (1.038)		74852	10.0000	9(a)
18 2,2'-oxybis(1-Chloropropane)	45		5.525	5.531 (1.041)		28614	10.0000	11(Q)
99 Acetophenone	105		5.637	5.642 (1.062)		145179	10.0000	9(a)

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
19 N-Nitroso-di-n-propylamine	70	5.631	5.637	(1.061)	60163	10.0000	10
20 4-Methylphenol	108	5.631	5.637	(1.061)	89000	10.0000	9(a)
21 Hexachloroethane	117	5.737	5.737	(1.081)	42934	10.0000	11(Q)
\$ 22 Nitrobenzene-d5	82	5.766	5.766	(0.905)	111758	10.0000	10
23 Nitrobenzene	77	5.778	5.784	(0.907)	111321	10.0000	10
24 Isophorone	82	5.978	5.978	(0.938)	187145	10.0000	10
25 2-Nitrophenol	139	6.048	6.048	(0.949)	63913	10.0000	10(Q)
26 2,4-Dimethylphenol	107	6.072	6.072	(0.953)	101043	10.0000	9(a)
27 bis(2-Chloroethoxy)methane	93	6.148	6.148	(0.965)	91927	10.0000	10
28 Benzoic Acid	105	6.154	6.177	(0.966)	114509	10.0000	12(aQ)
29 2,4-Dichlorophenol	162	6.248	6.248	(0.981)	130745	10.0000	11
30 1,2,4-Trichlorobenzene	180	6.318	6.318	(0.992)	155731	10.0000	10
* 31 Naphthalene-d8	136	6.371	6.371	(1.000)	1384980	40.0000	
32 Naphthalene	128	6.389	6.389	(1.003)	296663	10.0000	10
115 alpha-Terpineol	59	6.383	6.388	(1.002)	46517	10.0000	10
33 4-Chloroaniline	127	6.424	6.424	(1.008)	131888	10.0000	10
34 Hexachlorobutadiene	225	6.489	6.489	(1.018)	115635	10.0000	10
102 Caprolactam	113	6.712	6.729	(1.053)	40766	10.0000	11
35 4-Chloro-3-Methylphenol	107	6.818	6.824	(1.070)	118982	10.0000	10
36 2-Methylnaphthalene	142	6.959	6.959	(1.092)	265542	10.0000	10
114 1-Methylnaphthalene	142	7.047	7.046	(1.106)	255500	10.0000	10
38 Hexachlorocyclopentadiene	237	7.100	7.100	(0.906)	121686	10.0000	9(a)
112 1,2,4,5-Tetrachlorobenzene	216	7.106	7.105	(0.906)	250812	10.0000	10
39 2,4,6-Trichlorophenol	196	7.194	7.194	(0.918)	161257	10.0000	10
40 2,4,5-Trichlorophenol	196	7.223	7.223	(0.921)	180306	10.0000	10(a)
\$ 41 2-Fluorobiphenyl	172	7.258	7.258	(0.926)	446455	10.0000	10
98 1,1'-Biphenyl	154	7.347	7.347	(0.937)	430942	10.0000	10
42 2-Chloronaphthalene	162	7.370	7.370	(0.940)	325888	10.0000	10
43 2-Nitroaniline	65	7.447	7.447	(0.950)	84856	10.0000	9(a)
44 Dimethylphthalate	163	7.588	7.593	(0.968)	492045	10.0000	10
45 2,6-Dinitrotoluene	165	7.640	7.640	(0.975)	111088	10.0000	10
46 Acenaphthylene	152	7.717	7.717	(0.984)	533763	10.0000	10
47 3-Nitroaniline	138	7.787	7.787	(0.993)	93527	10.0000	10(a)
* 48 Acenaphthene-d10	164	7.840	7.834	(1.000)	1474256	40.0000	
49 Acenaphthene	153	7.864	7.864	(1.003)	375179	10.0000	10
50 2,4-Dinitrophenol	184	7.870	7.870	(1.004)	71001	10.0000	8(aQ)
51 4-Nitrophenol	109	7.917	7.917	(1.010)	133115	10.0000	10(a)
53 2,4-Dinitrotoluene	165	7.981	7.981	(1.018)	161783	10.0000	10
52 Dibenzofuran	168	8.005	8.005	(1.021)	586145	10.0000	10
110 2,3,4,6-Tetrachlorophenol	232	8.105	8.110	(1.034)	192999	10.0000	10
54 Diethylphthalate	149	8.175	8.175	(1.043)	478915	10.0000	10
56 4-Chlorophenyl-phenylether	204	8.281	8.281	(1.056)	338075	10.0000	10
55 Fluorene	166	8.293	8.293	(1.058)	511825	10.0000	10
57 4-Nitroaniline	138	8.298	8.298	(1.058)	113304	10.0000	10(a)
58 4,6-Dinitro-2-methylphenol	198	8.322	8.322	(0.914)	126222	10.0000	9(a)
59 N-Nitrosodiphenylamine	169	8.381	8.381	(0.920)	475527	10.0000	10
97 Azobenzene	77	8.416	8.421	(0.924)	487935	10.0000	10
\$ 60 2,4,6-Tribromophenol	330	8.498	8.498	(0.933)	132471	10.0000	10(H)
61 4-Bromophenyl-phenylether	248	8.698	8.698	(0.955)	241112	10.0000	10
62 Hexachlorobenzene	284	8.774	8.769	(0.963)	257886	10.0000	10
100 Atrazine	200	8.821	8.826	(0.968)	107823	10.0000	12
63 Pentachlorophenol	266	8.939	8.927	(0.981)	192291	10.0000	10(a)
111 Pentachloronitrobenzene	237	8.951	8.950	(0.983)	134610	10.0000	10
* 64 Phenanthrene-d10	188	9.109	9.098	(1.000)	3929837	40.0000	

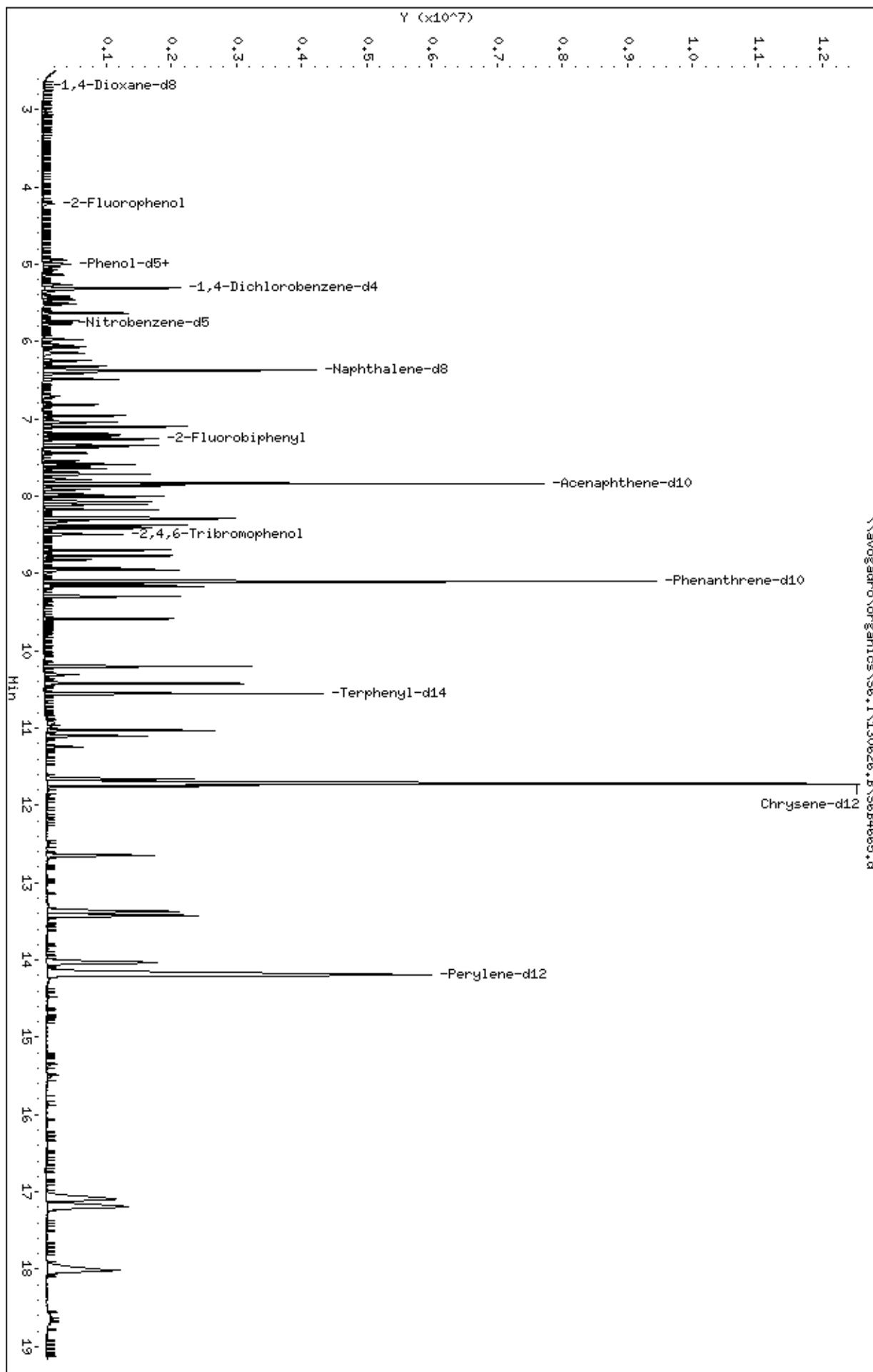
Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
65 Phenanthrene	178	9.127	9.115	(1.002)	855343	10.0000	10
66 Anthracene	178	9.168	9.156	(1.006)	861682	10.0000	10
67 Carbazole	167	9.297	9.286	(1.021)	800976	10.0000	10
68 Di-n-butylphthalate	149	9.591	9.568	(1.053)	832784	10.0000	10
69 Fluoranthene	202	10.202	10.173	(1.120)	1277019	10.0000	10
70 Benzidine	184	10.308	10.289	(0.879)	215471	10.0000	10(a)
71 Pyrene	202	10.425	10.384	(0.889)	1317043	10.0000	10
\$ 72 Terphenyl-d14	244	10.555	10.514	(0.900)	1052657	10.0000	10
73 Butylbenzylphthalate	149	11.031	10.978	(0.941)	455193	10.0000	10
74 3,3'-Dichlorobenzidine	252	11.659	11.601	(0.994)	646772	10.0000	10
78 bis(2-Ethylhexyl)phthalate	149	11.695	11.636	(0.997)	704013	10.0000	10
75 Benzo(a)anthracene	228	11.700	11.642	(0.998)	1730056	10.0000	10
* 76 Chrysene-d12	240	11.724	11.665	(1.000)	6490580	40.0000	
77 Chrysene	228	11.753	11.695	(1.002)	1481369	10.0000	10
79 Di-n-octylphthalate	149	12.652	12.588	(0.892)	1111794	10.0000	10
80 Benzo(b)fluoranthene	252	13.369	13.363	(0.942)	1670023	10.0000	10
81 Benzo(k)fluoranthene	252	13.422	13.363	(0.946)	1736088	10.0000	11
82 Benzo(a)pyrene	252	14.033	13.974	(0.989)	1667822	10.0000	10
* 83 Perylene-d12	264	14.192	14.156	(1.000)	6720542	40.0000	(Q)
84 Indeno(1,2,3-cd)pyrene	276	17.094	17.041	(1.205)	1742716	10.0000	9(a)
85 Dibenzo(a,h)anthracene	278	17.194	17.218	(1.212)	1744498	10.0000	10(H)
86 Benzo(g,h,i)perylene	276	18.017	18.046	(1.270)	1761207	10.0000	10(QH)

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\S6,I\130626,B\S6B4665.d  
Date: 26-JUN-2013 14:17  
Client ID: SSTID0106Z  
Sample Info: SSTID0106Z,SSTID0106Z  
Volume Injected (uL): 1.0  
Column phase: Rxi-5Si1 MS

Instrument: S6.i  
Operator: PK SRC: PK  
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S6.I\130626.B\S6B4666.d  
 Lab Smp Id: SSTD0406Z Client Smp ID: SSTD0406Z  
 Inj Date : 26-JUN-2013 14:43  
 Operator : PK SRC: PK Inst ID: S6.i  
 Smp Info : SSTD0406Z,SSTD0406Z  
 Misc Info : 1,4  
 Comment :  
 Method : \\avogadro\organics\S6.I\130626.B\S6\_8270C\_N.m  
 Meth Date : 26-Jun-2013 15:33 pkaczorows Quant Type: ISTD  
 Cal Date : 26-JUN-2013 14:43 Cal File: S6B4666.d  
 Als bottle: 6 Calibration Sample, Level: 4  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: allnew.sub  
 Target Version: 4.14  
 Processing Host: TARGET113

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

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

Compounds	QUANT	SIG	AMOUNTS					
			RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
\$ 109 1,4-Dioxane-d8	96		2.693	2.692 (0.507)		27343	40.0000	42
108 1,4-Dioxane	58		2.723	2.722 (0.513)		14363	40.0000	47
1 N-Nitrosodimethylamine	74		3.005	3.010 (0.566)		79739	40.0000	40
2 Pyridine	79		3.040	3.045 (0.573)		148407	40.0000	46
\$ 3 2-Fluorophenol	112		4.215	4.221 (0.794)		213553	40.0000	39
101 Benzaldehyde	77		4.944	4.943 (0.931)		193117	40.0000	36
\$ 5 Phenol-d5	99		5.002	4.996 (0.942)		310321	40.0000	39
6 Phenol	94		5.014	5.008 (0.945)		330749	40.0000	38
7 Aniline	66		5.008	5.007 (0.944)		248389	40.0000	36
8 bis(2-Chloroethyl)Ether	63		5.079	5.079 (0.957)		102426	40.0000	37
10 2-Chlorophenol	128		5.137	5.137 (0.968)		275381	40.0000	38
11 1,3-Dichlorobenzene	146		5.267	5.267 (0.992)		316600	40.0000	38
* 12 1,4-Dichlorobenzene-d4	152		5.308	5.308 (1.000)		273557	40.0000	
13 1,4-Dichlorobenzene	146		5.325	5.325 (1.003)		345696	40.0000	39
117 2-Ethyl-1-hexanol	57		5.355	5.354 (1.009)		96476	40.0000	37
15 Benzyl Alcohol	108		5.419	5.419 (1.021)		204333	40.0000	39
16 1,2-Dichlorobenzene	146		5.455	5.455 (1.028)		315800	40.0000	37
17 2-Methylphenol	108		5.513	5.508 (1.039)		267315	40.0000	38
18 2,2'-oxybis(1-Chloropropane)	45		5.531	5.531 (1.042)		87611	40.0000	37
99 Acetophenone	105		5.643	5.642 (1.063)		518072	40.0000	38

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
19 N-Nitroso-di-n-propylamine	70	5.643	5.637 (1.063)		199494	40.0000	36
20 4-Methylphenol	108	5.643	5.637 (1.063)		332100	40.0000	38
21 Hexachloroethane	117	5.737	5.737 (1.081)		135095	40.0000	38
\$ 22 Nitrobenzene-d5	82	5.772	5.766 (0.906)		389800	40.0000	39
23 Nitrobenzene	77	5.784	5.784 (0.908)		373058	40.0000	38
24 Isophorone	82	5.984	5.978 (0.939)		631160	40.0000	39
25 2-Nitrophenol	139	6.048	6.048 (0.949)		219737	40.0000	40
26 2,4-Dimethylphenol	107	6.078	6.072 (0.954)		408540	40.0000	43
27 bis(2-Chloroethoxy)methane	93	6.154	6.148 (0.966)		301085	40.0000	38
28 Benzoic Acid	105	6.189	6.177 (0.971)		284027	40.0000	34
29 2,4-Dichlorophenol	162	6.254	6.248 (0.982)		426070	40.0000	39
30 1,2,4-Trichlorobenzene	180	6.324	6.318 (0.993)		495547	40.0000	38
* 31 Naphthalene-d8	136	6.371	6.371 (1.000)		1225889	40.0000	
32 Naphthalene	128	6.389	6.389 (1.003)		1039771	40.0000	39
115 alpha-Terpineol	59	6.389	6.388 (1.003)		150484	40.0000	37
33 4-Chloroaniline	127	6.424	6.424 (1.008)		437893	40.0000	39
34 Hexachlorobutadiene	225	6.495	6.489 (1.019)		389986	40.0000	39
102 Caprolactam	113	6.741	6.729 (1.058)		129672	40.0000	39
35 4-Chloro-3-Methylphenol	107	6.830	6.824 (1.072)		392129	40.0000	38
36 2-Methylnaphthalene	142	6.965	6.959 (1.093)		869671	40.0000	38
114 1-Methylnaphthalene	142	7.047	7.046 (1.106)		845240	40.0000	39
38 Hexachlorocyclopentadiene	237	7.100	7.100 (0.906)		355031	40.0000	33
112 1,2,4,5-Tetrachlorobenzene	216	7.106	7.105 (0.906)		804440	40.0000	38
39 2,4,6-Trichlorophenol	196	7.200	7.194 (0.918)		533154	40.0000	38
40 2,4,5-Trichlorophenol	196	7.229	7.223 (0.922)		572548	40.0000	38
\$ 41 2-Fluorobiphenyl	172	7.264	7.258 (0.927)		1475367	40.0000	38
98 1,1'-Biphenyl	154	7.353	7.347 (0.938)		1409531	40.0000	38
42 2-Chloronaphthalene	162	7.370	7.370 (0.940)		1071089	40.0000	38
43 2-Nitroaniline	65	7.452	7.447 (0.951)		280083	40.0000	38
44 Dimethylphthalate	163	7.599	7.593 (0.969)		1568624	40.0000	38
45 2,6-Dinitrotoluene	165	7.652	7.640 (0.976)		367921	40.0000	39
46 Acenaphthylene	152	7.723	7.717 (0.985)		1778975	40.0000	39
47 3-Nitroaniline	138	7.799	7.787 (0.995)		292224	40.0000	37
* 48 Acenaphthene-d10	164	7.840	7.834 (1.000)		1217674	40.0000	
49 Acenaphthene	153	7.870	7.864 (1.004)		1234399	40.0000	38
50 2,4-Dinitrophenol	184	7.875	7.870 (1.004)		313776	40.0000	42
51 4-Nitrophenol	109	7.928	7.917 (1.011)		405678	40.0000	37
53 2,4-Dinitrotoluene	165	7.987	7.981 (1.019)		531198	40.0000	38
52 Dibenzofuran	168	8.011	8.005 (1.022)		1878140	40.0000	38
110 2,3,4,6-Tetrachlorophenol	232	8.110	8.110 (1.034)		628998	40.0000	38
54 Diethylphthalate	149	8.181	8.175 (1.043)		1503689	40.0000	38
56 4-Chlorophenyl-phenylether	204	8.287	8.281 (1.057)		1111931	40.0000	38
55 Fluorene	166	8.298	8.293 (1.058)		1745605	40.0000	40
57 4-Nitroaniline	138	8.316	8.298 (1.061)		368394	40.0000	40
58 4,6-Dinitro-2-methylphenol	198	8.340	8.322 (0.916)		457327	40.0000	40
59 N-Nitrosodiphenylamine	169	8.387	8.381 (0.921)		1528594	40.0000	38
97 Azobenzene	77	8.422	8.421 (0.925)		1564621	40.0000	38
\$ 60 2,4,6-Tribromophenol	330	8.504	8.498 (0.934)		427403	40.0000	38
61 4-Bromophenyl-phenylether	248	8.704	8.698 (0.955)		745901	40.0000	37
62 Hexachlorobenzene	284	8.780	8.769 (0.964)		843716	40.0000	39
100 Atrazine	200	8.833	8.826 (0.970)		340374	40.0000	47
63 Pentachlorophenol	266	8.945	8.927 (0.982)		644582	40.0000	38
111 Pentachloronitrobenzene	237	8.957	8.950 (0.983)		430992	40.0000	38
* 64 Phenanthrene-d10	188	9.109	9.098 (1.000)		3286129	40.0000	

Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
65 Phenanthrene	178	9.133	9.115	(1.003)	2842067	40.0000	39
66 Anthracene	178	9.180	9.156	(1.008)	2878075	40.0000	39
67 Carbazole	167	9.309	9.286	(1.022)	2404605	40.0000	38
68 Di-n-butylphthalate	149	9.597	9.568	(1.054)	2797589	40.0000	39
69 Fluoranthene	202	10.214	10.173	(1.121)	4140568	40.0000	39
70 Benzidine	184	10.320	10.289	(0.883)	745403	40.0000	41
71 Pyrene	202	10.437	10.384	(0.893)	4197024	40.0000	38
\$ 72 Terphenyl-d14	244	10.566	10.514	(0.904)	3466431	40.0000	38
73 Butylbenzylphthalate	149	11.042	10.978	(0.945)	1519391	40.0000	37
74 3,3'-Dichlorobenzidine	252	11.683	11.601	(1.000)	2043585	40.0000	37
78 bis(2-Ethylhexyl)phthalate	149	11.712	11.636	(1.002)	2492291	40.0000	38
75 Benzo(a)anthracene	228	11.718	11.642	(1.003)	5731070	40.0000	38
* 76 Chrysene-d12	240	11.742	11.665	(1.000)	5732758	40.0000	(H)
77 Chrysene	228	11.777	11.695	(1.008)	4681317	40.0000	38(H)
79 Di-n-octylphthalate	149	12.676	12.588	(0.899)	3736930	40.0000	37(H)
80 Benzo(b)fluoranthene	252	13.404	13.363	(0.951)	5603797	40.0000	36
81 Benzo(k)fluoranthene	252	13.463	13.363	(0.955)	5644291	40.0000	39(H)
82 Benzo(a)pyrene	252	14.074	13.974	(0.998)	5490455	40.0000	38(H)
* 83 Perylene-d12	264	14.209	14.156	(1.000)	5963482	40.0000	(QH)
84 Indeno(1,2,3-cd)pyrene	276	17.171	17.041	(1.218)	6052182	40.0000	36
85 Dibenzo(a,h)anthracene	278	17.276	17.218	(1.225)	5783728	40.0000	38(H)
86 Benzo(g,h,i)perylene	276	18.117	18.046	(1.285)	5982552	40.0000	39(Q)

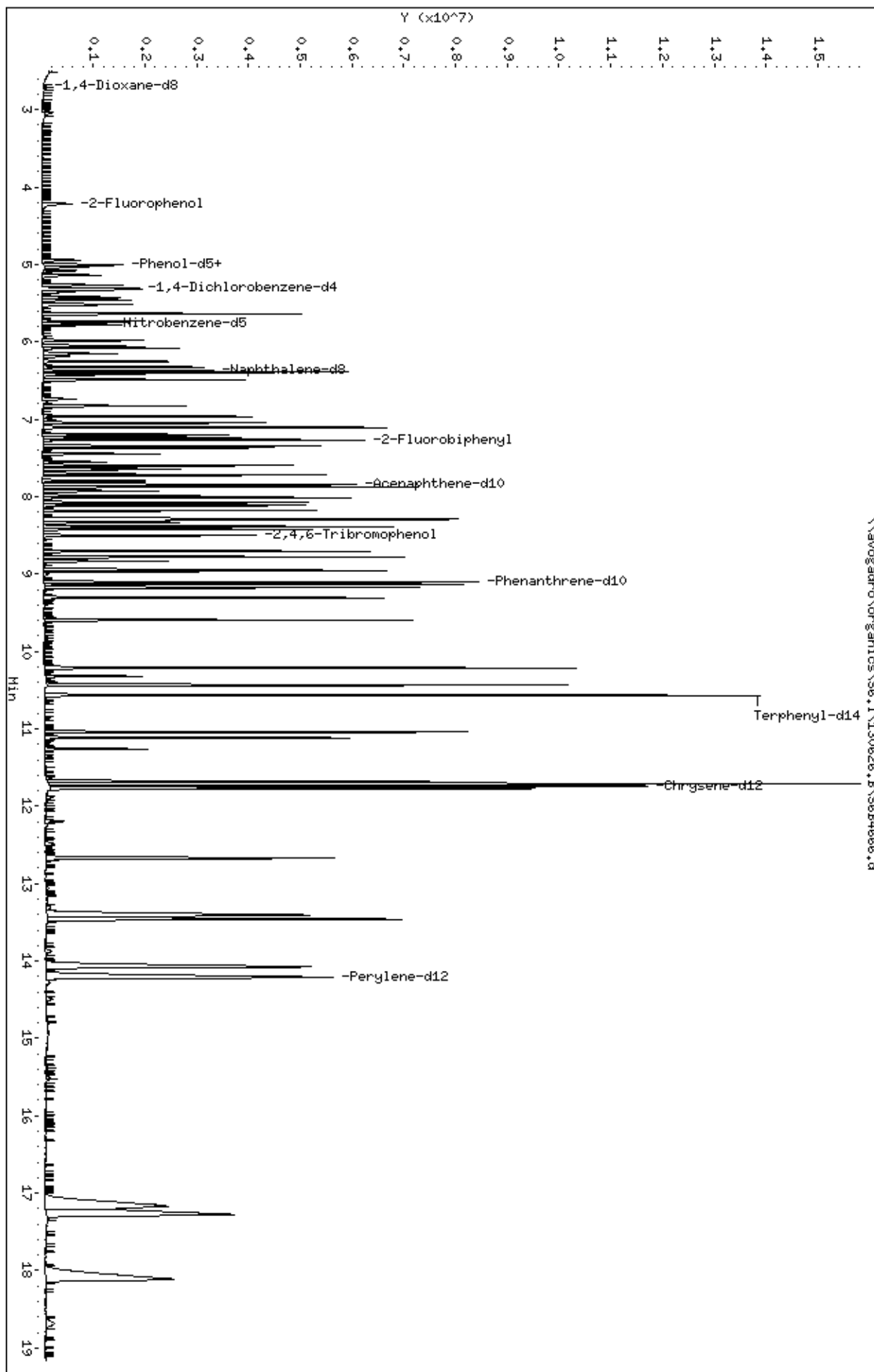
QC Flag Legend

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



Data File: \\avogadro\organics\S6,I\130626,B\S6B4666.d  
Date: 26-JUN-2013 14:43  
Client ID: SSTID0406Z  
Sample Info: SSTID0406Z,SSTID0406Z  
Volume Injected (uL): 1.0  
Column phase: Rxi-5Sil MS

Instrument: S6.i  
Operator: PK SRC: PK  
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S6.I\130627.B\S6B4711B.d  
 Lab Smp Id: SSTD0256B Client Smp ID: SSTD0256B  
 Inj Date : 27-JUN-2013 14:04  
 Operator : PK SRC: PK Inst ID: S6.i  
 Smp Info : SSTD0256B,SSTD0256B  
 Misc Info : 2,3  
 Comment :  
 Method : \\avogadro\organics\S6.I\130627.B\S6\_8270C\_N.m  
 Meth Date : 28-Jun-2013 14:12 pkaczorows Quant Type: ISTD  
 Cal Date : 27-JUN-2013 16:11 Cal File: S6B4716.d  
 Dil bottle: 1 Calibration Sample, Level: 3  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: allnew.sub  
 Target Version: 4.14  
 Processing Host: TARGET113

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

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

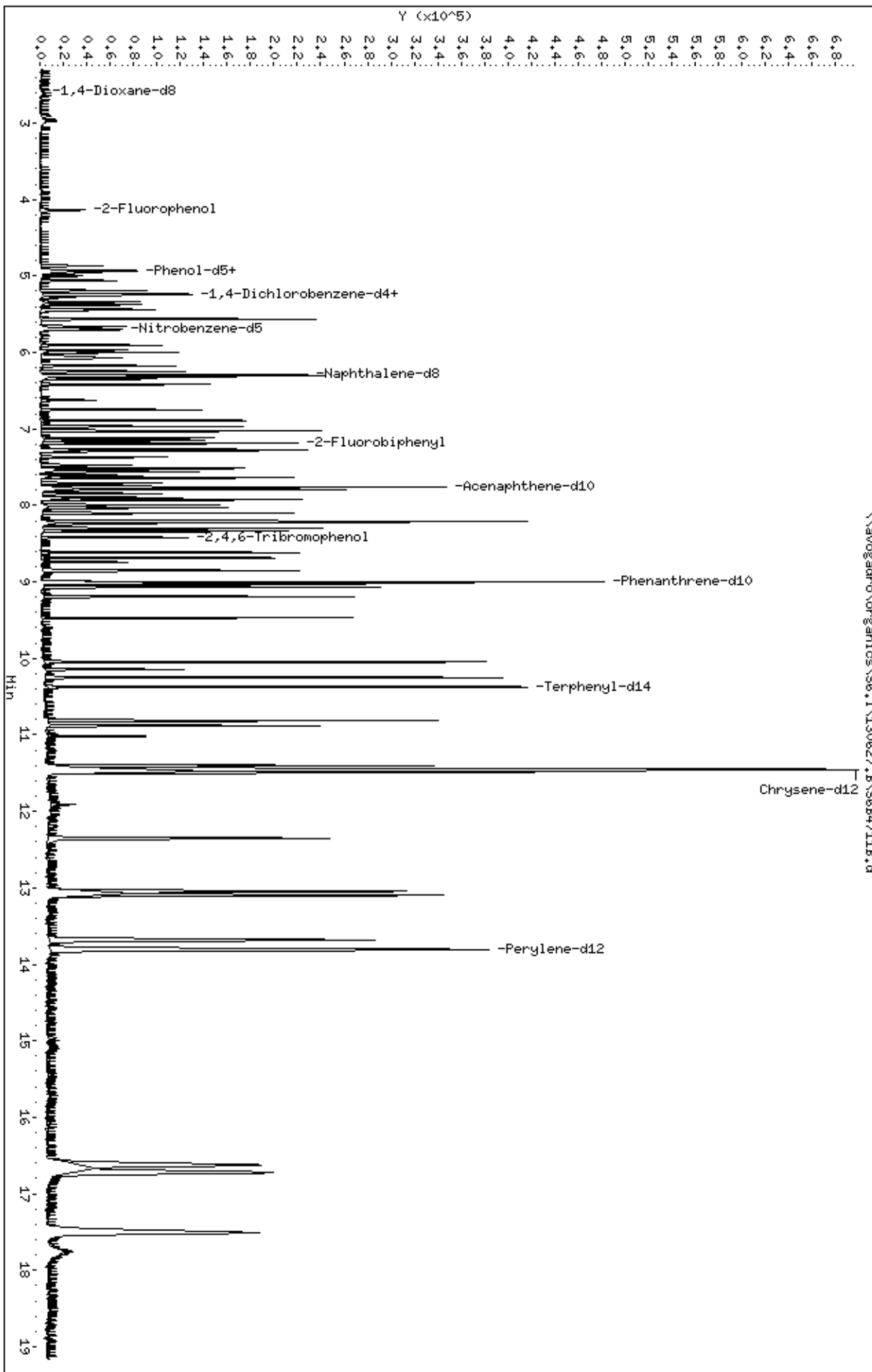
Compounds	QUANT	SIG	AMOUNTS					
			RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
\$ 109 1,4-Dioxane-d8	96		2.593	2.593	(0.496)	1990	25.0000	26
108 1,4-Dioxane	58		2.617	2.617	(0.500)	310	25.0000	12(Q)
1 N-Nitrosodimethylamine	74		2.905	2.905	(0.555)	3997	25.0000	24(Q)
2 Pyridine	79		2.957	2.957	(0.565)	5498	25.0000	18(T)
\$ 3 2-Fluorophenol	112		4.144	4.138	(0.792)	11566	25.0000	27
101 Benzaldehyde	77		4.867	4.867	(0.930)	9584	25.0000	28
\$ 5 Phenol-d5	99		4.926	4.926	(0.942)	16954	25.0000	29
6 Phenol	94		4.938	4.938	(0.944)	17497	25.0000	29
7 Aniline	66		4.932	4.932	(0.943)	12015	25.0000	29
8 bis(2-Chloroethyl)Ether	63		5.002	5.002	(0.956)	5434	25.0000	29
10 2-Chlorophenol	128		5.061	5.061	(0.967)	13871	25.0000	27
11 1,3-Dichlorobenzene	146		5.190	5.190	(0.992)	16545	25.0000	28
* 12 1,4-Dichlorobenzene-d4	152		5.231	5.237	(1.000)	17421	40.0000	
13 1,4-Dichlorobenzene	146		5.249	5.249	(1.003)	16378	25.0000	28
117 2-Ethyl-1-hexanol	57		5.278	5.278	(1.009)	4115	25.0000	27
15 Benzyl Alcohol	108		5.343	5.343	(1.021)	9371	25.0000	28
16 1,2-Dichlorobenzene	146		5.378	5.378	(1.028)	14894	25.0000	26
17 2-Methylphenol	108		5.437	5.437	(1.039)	13929	25.0000	29
18 2,2'-oxybis(1-Chloropropane)	45		5.455	5.455	(1.043)	3025	25.0000	24(Q)
99 Acetophenone	105		5.560	5.560	(1.063)	24025	25.0000	29

Compounds	QUANT SIG			AMOUNTS			
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
19 N-Nitroso-di-n-propylamine	70	5.560	5.560	(1.063)	8816	25.0000	27
20 4-Methylphenol	108	5.560	5.560	(1.063)	15780	25.0000	29
21 Hexachloroethane	117	5.660	5.660	(1.082)	6454	25.0000	27
\$ 22 Nitrobenzene-d5	82	5.690	5.690	(0.904)	17113	25.0000	27
23 Nitrobenzene	77	5.707	5.707	(0.907)	17146	25.0000	28
24 Isophorone	82	5.901	5.901	(0.937)	29741	25.0000	30
25 2-Nitrophenol	139	5.972	5.972	(0.949)	9802	25.0000	28
26 2,4-Dimethylphenol	107	6.001	6.001	(0.953)	18175	25.0000	31
27 bis(2-Chloroethoxy)methane	93	6.077	6.077	(0.965)	13584	25.0000	28
28 Benzoic Acid	105	6.060	6.060	(0.963)	16106	25.0000	31
29 2,4-Dichlorophenol	162	6.171	6.171	(0.980)	18257	25.0000	30
30 1,2,4-Trichlorobenzene	180	6.248	6.248	(0.993)	17819	25.0000	27
* 31 Naphthalene-d8	136	6.295	6.295	(1.000)	75990	40.0000	
32 Naphthalene	128	6.312	6.312	(1.003)	48686	25.0000	29
115 alpha-Terpineol	59	6.312	6.312	(1.003)	5483	25.0000	26(Q)
33 4-Chloroaniline	127	6.348	6.348	(1.008)	20466	25.0000	28
34 Hexachlorobutadiene	225	6.418	6.418	(1.020)	10903	25.0000	27
102 Caprolactam	113	6.624	6.624	(1.052)	6741	25.0000	30
35 4-Chloro-3-Methylphenol	107	6.747	6.747	(1.072)	18205	25.0000	31
36 2-Methylnaphthalene	142	6.888	6.882	(1.094)	39065	25.0000	29
114 1-Methylnaphthalene	142	6.971	6.971	(1.107)	35087	25.0000	28
38 Hexachlorocyclopentadiene	237	7.023	7.023	(0.905)	12370	25.0000	28
112 1,2,4,5-Tetrachlorobenzene	216	7.029	7.029	(0.906)	22218	25.0000	27
39 2,4,6-Trichlorophenol	196	7.117	7.117	(0.917)	16211	25.0000	28
40 2,4,5-Trichlorophenol	196	7.153	7.147	(0.922)	17450	25.0000	28
\$ 41 2-Fluorobiphenyl	172	7.188	7.182	(0.927)	50321	25.0000	27
98 1,1'-Biphenyl	154	7.270	7.270	(0.937)	54204	25.0000	27
42 2-Chloronaphthalene	162	7.294	7.294	(0.940)	41411	25.0000	27
43 2-Nitroaniline	65	7.370	7.370	(0.950)	12746	25.0000	30
44 Dimethylphthalate	163	7.517	7.511	(0.969)	57916	25.0000	29
45 2,6-Dinitrotoluene	165	7.564	7.564	(0.975)	14734	25.0000	31
46 Acenaphthylene	152	7.640	7.640	(0.985)	68953	25.0000	27
47 3-Nitroaniline	138	7.711	7.711	(0.994)	14517	25.0000	30
* 48 Acenaphthene-d10	164	7.758	7.758	(1.000)	61053	40.0000	
49 Acenaphthene	153	7.787	7.781	(1.004)	49918	25.0000	29
50 2,4-Dinitrophenol	184	7.793	7.793	(1.005)	8375	25.0000	26(Q)
51 4-Nitrophenol	109	7.840	7.840	(1.011)	15804	25.0000	30
53 2,4-Dinitrotoluene	165	7.905	7.899	(1.019)	20221	25.0000	30
52 Dibenzofuran	168	7.928	7.928	(1.022)	68190	25.0000	28
110 2,3,4,6-Tetrachlorophenol	232	8.028	8.028	(1.035)	16527	25.0000	29
54 Diethylphthalate	149	8.099	8.099	(1.044)	56552	25.0000	28
56 4-Chlorophenyl-phenylether	204	8.204	8.204	(1.058)	32015	25.0000	29
55 Fluorene	166	8.216	8.210	(1.059)	59067	25.0000	28
57 4-Nitroaniline	138	8.222	8.216	(1.060)	16379	25.0000	30
58 4,6-Dinitro-2-methylphenol	198	8.246	8.245	(0.916)	13413	25.0000	27
59 N-Nitrosodiphenylamine	169	8.304	8.298	(0.922)	54031	25.0000	28
97 Azobenzene	77	8.340	8.340	(0.926)	61870	25.0000	27
\$ 60 2,4,6-Tribromophenol	330	8.416	8.416	(0.935)	9579	25.0000	26
61 4-Bromophenyl-phenylether	248	8.616	8.616	(0.957)	19321	25.0000	26
62 Hexachlorobenzene	284	8.686	8.680	(0.965)	21591	25.0000	27
100 Atrazine	200	8.739	8.739	(0.971)	8459	25.0000	29
63 Pentachlorophenol	266	8.845	8.845	(0.982)	12683	25.0000	25
111 Pentachloronitrobenzene	237	8.857	8.857	(0.984)	9583	25.0000	27
* 64 Phenanthrene-d10	188	9.003	8.998	(1.000)	148493	40.0000	

Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
65 Phenanthrene	178	9.021	9.021	(1.002)	99659	25.0000	28
66 Anthracene	178	9.068	9.062	(1.007)	102622	25.0000	28
67 Carbazole	167	9.197	9.191	(1.022)	99931	25.0000	29
68 Di-n-butylphthalate	149	9.473	9.462	(1.052)	109765	25.0000	28
69 Fluoranthene	202	10.043	10.032	(1.116)	135453	25.0000	29
70 Benzidine	184	10.143	10.143	(0.885)	37410	25.0000	28
71 Pyrene	202	10.249	10.231	(0.894)	140777	25.0000	28
\$ 72 Terphenyl-d14	244	10.372	10.349	(0.905)	100706	25.0000	28
73 Butylbenzylphthalate	149	10.813	10.790	(0.943)	61951	25.0000	28
74 3,3'-Dichlorobenzidine	252	11.407	11.377	(0.995)	74164	25.0000	31
78 bis(2-Ethylhexyl)phthalate	149	11.442	11.412	(0.998)	90318	25.0000	27
75 Benzo(a)anthracene	228	11.448	11.424	(0.998)	180825	25.0000	30
* 76 Chrysene-d12	240	11.465	11.436	(1.000)	244081	40.0000	
77 Chrysene	228	11.495	11.465	(1.003)	159044	25.0000	29
79 Di-n-octylphthalate	149	12.353	12.317	(0.894)	164436	25.0000	27
80 Benzo(b)fluoranthene	252	13.052	13.016	(0.945)	213764	25.0000	29
81 Benzo(k)fluoranthene	252	13.099	13.063	(0.949)	208147	25.0000	28
82 Benzo(a)pyrene	252	13.686	13.651	(0.991)	206012	25.0000	29
* 83 Perylene-d12	264	13.810	13.774	(1.000)	296591	40.0000	
84 Indeno(1,2,3-cd)pyrene	276	16.624	16.589	(1.204)	228341	25.0000	27
85 Dibenzo(a,h)anthracene	278	16.718	16.677	(1.211)	227000	25.0000	30
86 Benzo(g,h,i)perylene	276	17.511	17.470	(1.268)	245483	25.0000	30

QC Flag Legend

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



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S6.I\130627.B\S6B4712.d  
 Lab Smp Id: SSTD0806B Client Smp ID: SSTD0806B  
 Inj Date : 27-JUN-2013 14:29  
 Operator : PK SRC: PK Inst ID: S6.i  
 Smp Info : SSTD0806B,SSTD0806B  
 Misc Info : 1,6  
 Comment :  
 Method : \\avogadro\organics\S6.I\130627.B\S6\_8270C\_N.m  
 Meth Date : 28-Jun-2013 14:12 pkaczorows Quant Type: ISTD  
 Cal Date : 27-JUN-2013 16:11 Cal File: S6B4716.d  
 Als bottle: 2 Calibration Sample, Level: 6  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: allnew.sub  
 Target Version: 4.14  
 Processing Host: TARGET113

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

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

Compounds	QUANT	SIG	AMOUNTS					
			RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
\$ 109 1,4-Dioxane-d8	96		2.587	2.593	(0.494)	11680	80.0000	82
108 1,4-Dioxane	58		2.623	2.617	(0.501)	3695	80.0000	80(Q)
1 N-Nitrosodimethylamine	74		2.905	2.905	(0.555)	26176	80.0000	82(A)
2 Pyridine	79		2.946	2.957	(0.563)	49795	80.0000	89(A)
\$ 3 2-Fluorophenol	112		4.139	4.138	(0.790)	64607	80.0000	81
101 Benzaldehyde	77		4.867	4.867	(0.929)	37992	80.0000	59
\$ 5 Phenol-d5	99		4.932	4.926	(0.942)	86610	80.0000	80
6 Phenol	94		4.944	4.938	(0.944)	96367	80.0000	86(A)
7 Aniline	66		4.938	4.932	(0.943)	62344	80.0000	81(A)
8 bis(2-Chloroethyl)Ether	63		5.008	5.002	(0.956)	25838	80.0000	73
10 2-Chlorophenol	128		5.067	5.061	(0.967)	77682	80.0000	80(A)
11 1,3-Dichlorobenzene	146		5.190	5.190	(0.991)	82826	80.0000	76
* 12 1,4-Dichlorobenzene-d4	152		5.237	5.237	(1.000)	32715	40.0000	(Q)
13 1,4-Dichlorobenzene	146		5.249	5.249	(1.002)	83908	80.0000	76
117 2-Ethyl-1-hexanol	57		5.284	5.278	(1.009)	22937	80.0000	81(A)
15 Benzyl Alcohol	108		5.349	5.343	(1.021)	53686	80.0000	86(A)
16 1,2-Dichlorobenzene	146		5.378	5.378	(1.027)	79684	80.0000	75
17 2-Methylphenol	108		5.443	5.437	(1.039)	71484	80.0000	80(A)
18 2,2'-oxybis(1-Chloropropane)	45		5.455	5.455	(1.042)	18036	80.0000	75(Q)
99 Acetophenone	105		5.566	5.560	(1.063)	129395	80.0000	84(A)

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
19 N-Nitroso-di-n-propylamine	70	5.566	5.560	(1.063)	51400	80.0000	83(A)
20 4-Methylphenol	108	5.566	5.560	(1.063)	85543	80.0000	84(A)
21 Hexachloroethane	117	5.660	5.660	(1.081)	33463	80.0000	76
\$ 22 Nitrobenzene-d5	82	5.696	5.690	(0.905)	100475	80.0000	72
23 Nitrobenzene	77	5.707	5.707	(0.907)	94167	80.0000	71
24 Isophorone	82	5.907	5.901	(0.938)	154302	80.0000	71
25 2-Nitrophenol	139	5.978	5.972	(0.950)	54383	80.0000	72
26 2,4-Dimethylphenol	107	6.007	6.001	(0.954)	99143	80.0000	78
27 bis(2-Chloroethoxy)methane	93	6.077	6.077	(0.965)	75385	80.0000	70
28 Benzoic Acid	105	6.101	6.060	(0.969)	87571	80.0000	78
29 2,4-Dichlorophenol	162	6.177	6.171	(0.981)	93806	80.0000	72
30 1,2,4-Trichlorobenzene	180	6.248	6.248	(0.993)	98271	80.0000	69
* 31 Naphthalene-d8	136	6.295	6.295	(1.000)	165711	40.0000	
32 Naphthalene	128	6.313	6.312	(1.003)	258527	80.0000	70
115 alpha-Terpineol	59	6.313	6.312	(1.003)	34372	80.0000	74
33 4-Chloroaniline	127	6.354	6.348	(1.009)	112734	80.0000	72
34 Hexachlorobutadiene	225	6.418	6.418	(1.020)	56873	80.0000	65
102 Caprolactam	113	6.659	6.624	(1.058)	35375	80.0000	74
35 4-Chloro-3-Methylphenol	107	6.753	6.747	(1.073)	86614	80.0000	68
36 2-Methylnaphthalene	142	6.888	6.882	(1.094)	204756	80.0000	70
114 1-Methylnaphthalene	142	6.971	6.971	(1.107)	193737	80.0000	71
38 Hexachlorocyclopentadiene	237	7.023	7.023	(0.905)	65991	80.0000	82(A)
112 1,2,4,5-Tetrachlorobenzene	216	7.029	7.029	(0.905)	113475	80.0000	74
39 2,4,6-Trichlorophenol	196	7.123	7.117	(0.918)	85740	80.0000	81(A)
40 2,4,5-Trichlorophenol	196	7.153	7.147	(0.921)	87345	80.0000	78
\$ 41 2-Fluorobiphenyl	172	7.188	7.182	(0.926)	267084	80.0000	79
98 1,1'-Biphenyl	154	7.276	7.270	(0.937)	284532	80.0000	76
42 2-Chloronaphthalene	162	7.294	7.294	(0.939)	217786	80.0000	78
43 2-Nitroaniline	65	7.376	7.370	(0.950)	62681	80.0000	80
44 Dimethylphthalate	163	7.523	7.511	(0.969)	287557	80.0000	78
45 2,6-Dinitrotoluene	165	7.570	7.564	(0.975)	68053	80.0000	77
46 Acenaphthylene	152	7.646	7.640	(0.985)	369358	80.0000	78
47 3-Nitroaniline	138	7.717	7.711	(0.994)	71211	80.0000	80(A)
* 48 Acenaphthene-d10	164	7.764	7.758	(1.000)	112647	40.0000	
49 Acenaphthene	153	7.787	7.781	(1.003)	244195	80.0000	77
50 2,4-Dinitrophenol	184	7.799	7.793	(1.005)	53586	80.0000	90(AQ)
51 4-Nitrophenol	109	7.852	7.840	(1.011)	76049	80.0000	77
53 2,4-Dinitrotoluene	165	7.911	7.899	(1.019)	97813	80.0000	79
52 Dibenzofuran	168	7.934	7.928	(1.022)	342066	80.0000	77
110 2,3,4,6-Tetrachlorophenol	232	8.034	8.028	(1.035)	83508	80.0000	79
54 Diethylphthalate	149	8.105	8.099	(1.044)	282770	80.0000	77
56 4-Chlorophenyl-phenylether	204	8.210	8.204	(1.058)	158783	80.0000	78
55 Fluorene	166	8.216	8.210	(1.058)	305255	80.0000	80
57 4-Nitroaniline	138	8.234	8.216	(1.061)	81312	80.0000	81(A)
58 4,6-Dinitro-2-methylphenol	198	8.251	8.245	(0.916)	75006	80.0000	82(AQ)
59 N-Nitrosodiphenylamine	169	8.304	8.298	(0.922)	267263	80.0000	76
97 Azobenzene	77	8.340	8.340	(0.926)	306058	80.0000	75
\$ 60 2,4,6-Tribromophenol	330	8.422	8.416	(0.935)	52618	80.0000	79
61 4-Bromophenyl-phenylether	248	8.616	8.616	(0.956)	97626	80.0000	74
62 Hexachlorobenzene	284	8.686	8.680	(0.964)	111047	80.0000	77
100 Atrazine	200	8.739	8.739	(0.970)	25548	80.0000	47
63 Pentachlorophenol	266	8.845	8.845	(0.982)	78010	80.0000	83(A)
111 Pentachloronitrobenzene	237	8.863	8.857	(0.984)	48677	80.0000	76
* 64 Phenanthrene-d10	188	9.009	8.998	(1.000)	270228	40.0000	

Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
65 Phenanthrene	178	9.027	9.021	(1.002)	499219	80.0000	78
66 Anthracene	178	9.068	9.062	(1.007)	517339	80.0000	78
67 Carbazole	167	9.197	9.191	(1.021)	487274	80.0000	79
68 Di-n-butylphthalate	149	9.474	9.462	(1.052)	558263	80.0000	80
69 Fluoranthene	202	10.049	10.032	(1.115)	677567	80.0000	80
70 Benzidine	184	10.149	10.143	(0.884)	194260	80.0000	73
71 Pyrene	202	10.255	10.231	(0.894)	704206	80.0000	70
\$ 72 Terphenyl-d14	244	10.373	10.349	(0.904)	505436	80.0000	70
73 Butylbenzylphthalate	149	10.819	10.790	(0.943)	316403	80.0000	72
74 3,3'-Dichlorobenzidine	252	11.418	11.377	(0.995)	361032	80.0000	76
78 bis(2-Ethylhexyl)phthalate	149	11.448	11.412	(0.997)	501944	80.0000	76
75 Benzo(a)anthracene	228	11.460	11.424	(0.998)	899394	80.0000	74
* 76 Chrysene-d12	240	11.477	11.436	(1.000)	491758	40.0000	
77 Chrysene	228	11.507	11.465	(1.003)	799081	80.0000	73
79 Di-n-octylphthalate	149	12.364	12.317	(0.894)	859244	80.0000	72
80 Benzo(b)fluoranthene	252	13.075	13.016	(0.946)	1034941	80.0000	73
81 Benzo(k)fluoranthene	252	13.128	13.063	(0.949)	1083460	80.0000	75
82 Benzo(a)pyrene	252	13.716	13.651	(0.992)	1053225	80.0000	76
* 83 Perylene-d12	264	13.827	13.774	(1.000)	573366	40.0000	
84 Indeno(1,2,3-cd)pyrene	276	16.689	16.589	(1.207)	1436927	80.0000	87(A)
85 Dibenzo(a,h)anthracene	278	16.789	16.677	(1.214)	1132730	80.0000	77
86 Benzo(g,h,i)perylene	276	17.594	17.470	(1.272)	1223577	80.0000	78

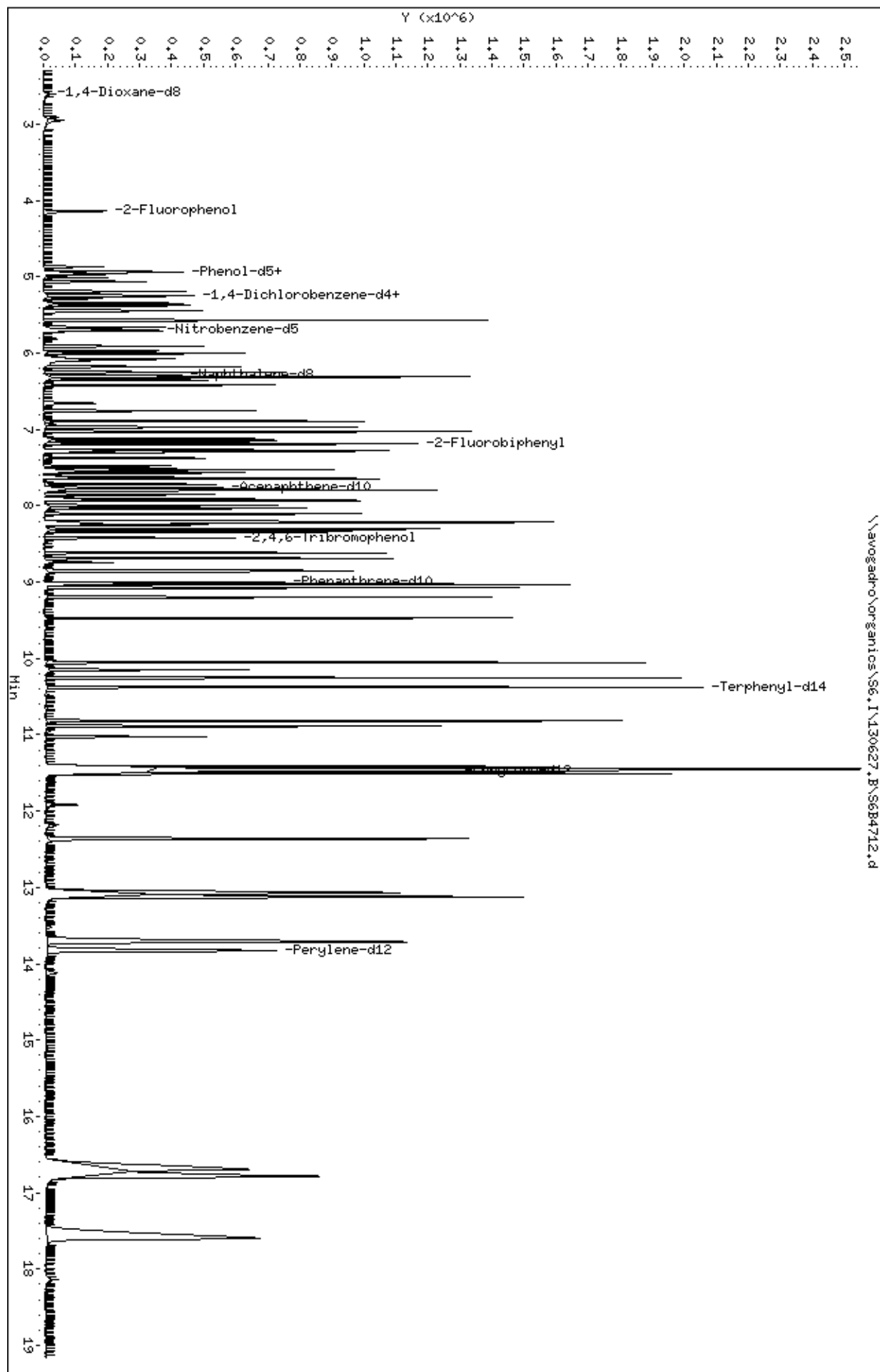
QC Flag Legend

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



Data File: \\avogadro\organics\S6.I\130627.B\S6B4712.d  
Date : 27-JUN-2013 14:29  
Client ID: SSTID0806B  
Sample Info: SSTID0806B,SSTID0806B  
Volume Injected (uL): 1.0  
Column phase: Rxi-SS11 MS

Instrument: S6.i  
Operator: PK SRC: PK  
Column diameter: 0.25



\\avogadro\organics\S6.I\130627.B\S6B4712.d

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S6.I\130627.B\S6B4713.d  
 Lab Smp Id: SSTD0056B Client Smp ID: SSTD0056B  
 Inj Date : 27-JUN-2013 14:55  
 Operator : PK SRC: PK Inst ID: S6.i  
 Smp Info : SSTD0056B,SSTD0056B  
 Misc Info : 1,1  
 Comment :  
 Method : \\avogadro\organics\S6.I\130627.B\S6\_8270C\_N.m  
 Meth Date : 28-Jun-2013 14:12 pkaczorows Quant Type: ISTD  
 Cal Date : 27-JUN-2013 16:11 Cal File: S6B4716.d  
 Als bottle: 3 Calibration Sample, Level: 1  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: allnew.sub  
 Target Version: 4.14  
 Processing Host: TARGET113

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

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

Compounds	QUANT	SIG	AMOUNTS					
			RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
\$ 109 1,4-Dioxane-d8	96		2.599	2.593 (0.496)		659	5.00000	4(a)
108 1,4-Dioxane	58		2.634	2.617 (0.503)		324	5.00000	6(aQ)
1 N-Nitrosodimethylamine	74		2.916	2.905 (0.557)		1331	5.00000	4(a)
2 Pyridine	79		2.969	2.957 (0.567)		1368	5.00000	2(TaQ)
\$ 3 2-Fluorophenol	112		4.144	4.138 (0.791)		3665	5.00000	4(aQ)
101 Benzaldehyde	77		4.867	4.867 (0.929)		3144	5.00000	4(a)
\$ 5 Phenol-d5	99		4.926	4.926 (0.941)		5189	5.00000	4(a)
6 Phenol	94		4.937	4.938 (0.943)		4732	5.00000	4(a)
7 Aniline	66		4.932	4.932 (0.942)		3522	5.00000	4(a)
8 bis(2-Chloroethyl)Ether	63		5.008	5.002 (0.956)		1652	5.00000	4(a)
10 2-Chlorophenol	128		5.061	5.061 (0.966)		4740	5.00000	5(a)
11 1,3-Dichlorobenzene	146		5.190	5.190 (0.991)		4958	5.00000	4(a)
* 12 1,4-Dichlorobenzene-d4	152		5.237	5.237 (1.000)		34612	40.0000	
13 1,4-Dichlorobenzene	146		5.249	5.249 (1.002)		5183	5.00000	4(aQ)
117 2-Ethyl-1-hexanol	57		5.278	5.278 (1.008)		1372	5.00000	4(TaQ)
15 Benzyl Alcohol	108		5.343	5.343 (1.020)		2628	5.00000	4(a)
16 1,2-Dichlorobenzene	146		5.378	5.378 (1.027)		5633	5.00000	5(a)
17 2-Methylphenol	108		5.437	5.437 (1.038)		4335	5.00000	5(a)
18 2,2'-oxybis(1-Chloropropane)	45		5.454	5.455 (1.042)		1309	5.00000	5(aQ)
99 Acetophenone	105		5.560	5.560 (1.062)		7125	5.00000	4(a)

Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
19 N-Nitroso-di-n-propylamine	70	5.560	5.560	(1.062)	3181	5.00000	5 (TaQ)
20 4-Methylphenol	108	5.560	5.560	(1.062)	4644	5.00000	4 (a)
21 Hexachloroethane	117	5.660	5.660	(1.081)	2494	5.00000	5 (a)
\$ 22 Nitrobenzene-d5	82	5.689	5.690	(0.904)	6260	5.00000	5 (a)
23 Nitrobenzene	77	5.707	5.707	(0.907)	6327	5.00000	6 (Ta)
24 Isophorone	82	5.901	5.901	(0.937)	9561	5.00000	5 (a)
25 2-Nitrophenol	139	5.972	5.972	(0.949)	3386	5.00000	5 (a)
26 2,4-Dimethylphenol	107	6.001	6.001	(0.953)	4472	5.00000	4 (a)
27 bis(2-Chloroethoxy)methane	93	6.077	6.077	(0.965)	4841	5.00000	5 (a)
28 Benzoic Acid	105	6.042	6.060	(0.960)	4485	5.00000	5 (a)
29 2,4-Dichlorophenol	162	6.171	6.171	(0.980)	5996	5.00000	5 (a)
30 1,2,4-Trichlorobenzene	180	6.248	6.248	(0.993)	6613	5.00000	6 (a)
* 31 Naphthalene-d8	136	6.295	6.295	(1.000)	139636	40.0000	
32 Naphthalene	128	6.312	6.312	(1.003)	15758	5.00000	5 (a)
115 alpha-Terpineol	59	6.312	6.312	(1.003)	2178	5.00000	6 (a)
33 4-Chloroaniline	127	6.348	6.348	(1.008)	7200	5.00000	5 (a)
34 Hexachlorobutadiene	225	6.418	6.418	(1.020)	4807	5.00000	6 (a)
102 Caprolactam	113	6.618	6.624	(1.051)	2020	5.00000	5 (a)
35 4-Chloro-3-Methylphenol	107	6.747	6.747	(1.072)	5634	5.00000	5 (a)
36 2-Methylnaphthalene	142	6.888	6.882	(1.094)	13397	5.00000	5 (a)
114 1-Methylnaphthalene	142	6.970	6.971	(1.107)	12192	5.00000	5 (a)
38 Hexachlorocyclopentadiene	237	7.023	7.023	(0.905)	3412	5.00000	4 (Ta)
112 1,2,4,5-Tetrachlorobenzene	216	7.029	7.029	(0.906)	8166	5.00000	5 (a)
39 2,4,6-Trichlorophenol	196	7.117	7.117	(0.917)	5105	5.00000	5 (a)
40 2,4,5-Trichlorophenol	196	7.147	7.147	(0.921)	5296	5.00000	5 (a)
\$ 41 2-Fluorobiphenyl	172	7.188	7.182	(0.927)	16033	5.00000	5 (a)
98 1,1'-Biphenyl	154	7.270	7.270	(0.937)	18982	5.00000	5 (a)
42 2-Chloronaphthalene	162	7.288	7.294	(0.939)	13670	5.00000	5 (a)
43 2-Nitroaniline	65	7.370	7.370	(0.950)	3798	5.00000	5 (a)
44 Dimethylphthalate	163	7.511	7.511	(0.968)	17536	5.00000	5 (a)
45 2,6-Dinitrotoluene	165	7.564	7.564	(0.975)	4219	5.00000	5 (a)
46 Acenaphthylene	152	7.640	7.640	(0.985)	24020	5.00000	5 (a)
47 3-Nitroaniline	138	7.705	7.711	(0.993)	4308	5.00000	5 (a)
* 48 Acenaphthene-d10	164	7.758	7.758	(1.000)	113864	40.0000	
49 Acenaphthene	153	7.781	7.781	(1.003)	15586	5.00000	5 (a)
50 2,4-Dinitrophenol	184	7.793	7.793	(1.005)	1628	5.00000	3 (aQ)
51 4-Nitrophenol	109	7.840	7.840	(1.011)	4801	5.00000	5 (a)
53 2,4-Dinitrotoluene	165	7.899	7.899	(1.018)	6198	5.00000	5 (a)
52 Dibenzofuran	168	7.928	7.928	(1.022)	22183	5.00000	5 (a)
110 2,3,4,6-Tetrachlorophenol	232	8.028	8.028	(1.035)	5241	5.00000	5
54 Diethylphthalate	149	8.098	8.099	(1.044)	17965	5.00000	5 (a)
56 4-Chlorophenyl-phenylether	204	8.204	8.204	(1.058)	9444	5.00000	4 (a)
55 Fluorene	166	8.210	8.210	(1.058)	17570	5.00000	4 (a)
57 4-Nitroaniline	138	8.216	8.216	(1.059)	4377	5.00000	4 (a)
58 4,6-Dinitro-2-methylphenol	198	8.239	8.245	(0.916)	2919	5.00000	3 (aQ)
59 N-Nitrosodiphenylamine	169	8.298	8.298	(0.922)	15827	5.00000	5 (a)
97 Azobenzene	77	8.333	8.340	(0.926)	19469	5.00000	5 (a)
\$ 60 2,4,6-Tribromophenol	330	8.416	8.416	(0.935)	2772	5.00000	4 (aQ)
61 4-Bromophenyl-phenylether	248	8.616	8.616	(0.958)	6430	5.00000	5 (a)
62 Hexachlorobenzene	284	8.680	8.680	(0.965)	6971	5.00000	5 (a)
100 Atrazine	200	8.733	8.739	(0.971)	3288	5.00000	6 (TaQ)
63 Pentachlorophenol	266	8.845	8.845	(0.983)	3251	5.00000	4 (a)
111 Pentachloronitrobenzene	237	8.851	8.857	(0.984)	3425	5.00000	6 (a)
* 64 Phenanthrene-d10	188	8.997	8.998	(1.000)	263519	40.0000	

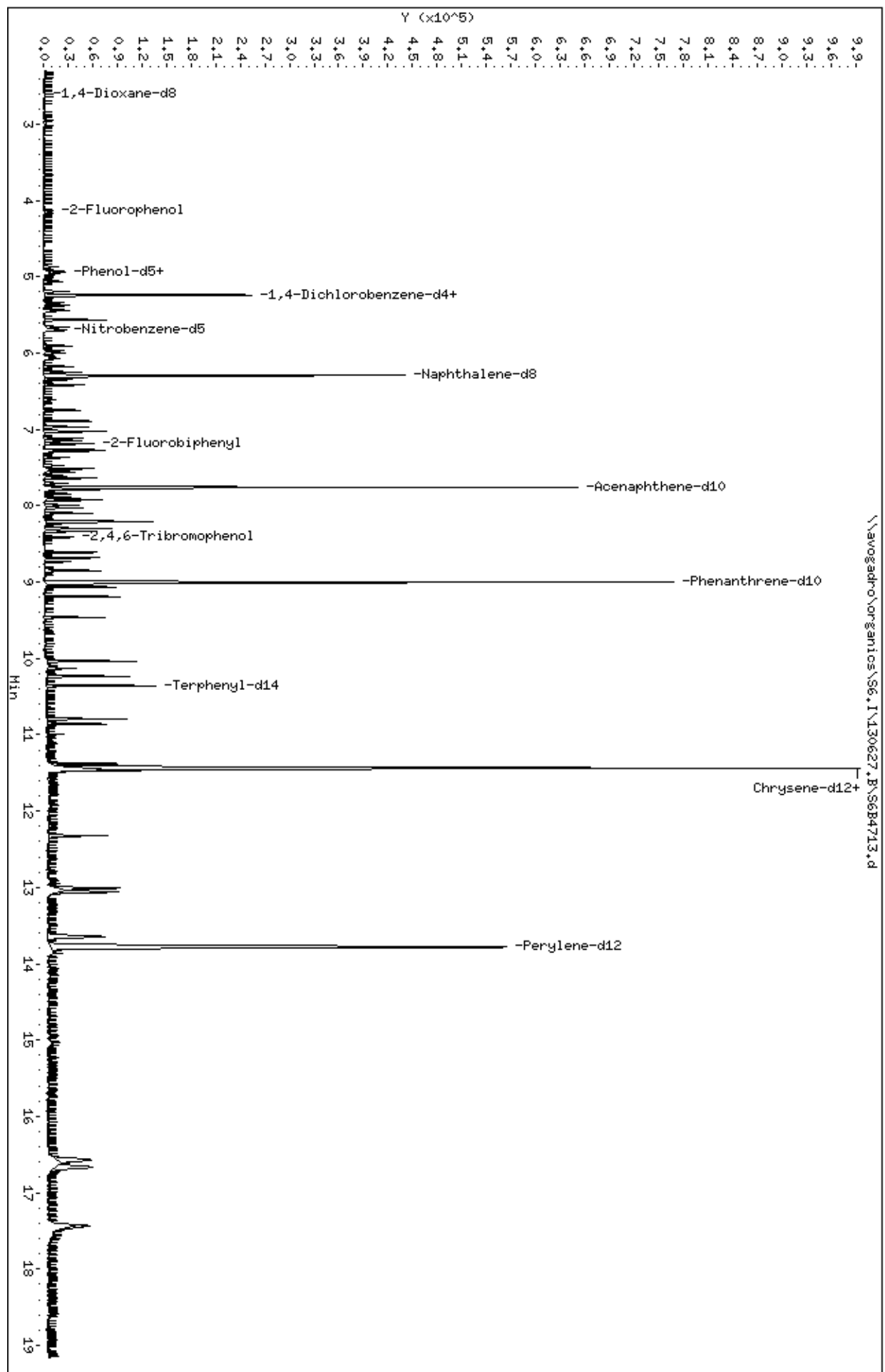
Compounds	QUANT		SIG				AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)	
65 Phenanthrene	178	9.021	9.021	(1.003)	29083	5.00000	5(a)	
66 Anthracene	178	9.062	9.062	(1.007)	30569	5.00000	5(a)	
67 Carbazole	167	9.191	9.191	(1.022)	28292	5.00000	5(a)	
68 Di-n-butylphthalate	149	9.467	9.462	(1.052)	30569	5.00000	4(a)	
69 Fluoranthene	202	10.032	10.032	(1.115)	38246	5.00000	5(a)	
70 Benzidine	184	10.131	10.143	(0.885)	12149	5.00000	5(Ta)	
71 Pyrene	202	10.237	10.231	(0.895)	39576	5.00000	5(a)	
\$ 72 Terphenyl-d14	244	10.355	10.349	(0.905)	28375	5.00000	5(a)	
73 Butylbenzylphthalate	149	10.795	10.790	(0.944)	16580	5.00000	4(a)	
74 3,3'-Dichlorobenzidine	252	11.377	11.377	(0.994)	19314	5.00000	5(a)	
78 bis(2-Ethylhexyl)phthalate	149	11.418	11.412	(0.998)	27135	5.00000	5(a)	
75 Benzo(a)anthracene	228	11.430	11.424	(0.999)	48860	5.00000	5(a)	
* 76 Chrysene-d12	240	11.442	11.436	(1.000)	410520	40.0000		
77 Chrysene	228	11.471	11.465	(1.003)	45857	5.00000	5(a)	
79 Di-n-octylphthalate	149	12.323	12.317	(0.894)	45627	5.00000	5(a)	
80 Benzo(b)fluoranthene	252	13.010	13.016	(0.944)	56823	5.00000	5(a)	
81 Benzo(k)fluoranthene	252	13.063	13.063	(0.948)	55199	5.00000	5(a)	
82 Benzo(a)pyrene	252	13.645	13.651	(0.990)	53741	5.00000	5(a)	
* 83 Perylene-d12	264	13.780	13.774	(1.000)	454136	40.0000		
84 Indeno(1,2,3-cd)pyrene	276	16.583	16.589	(1.203)	56331	5.00000	4(a)	
85 Dibenzo(a,h)anthracene	278	16.665	16.677	(1.209)	51820	5.00000	4(a)	
86 Benzo(g,h,i)perylene	276	17.446	17.470	(1.266)	59782	5.00000	5(a)	

QC Flag Legend

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

Data File: \\avogadro\organics\S6,I\130627,B\S6B4713.d  
 Date : 27-JUN-2013 14:55  
 Client ID: SSTID0056B  
 Sample Info: SSTID0056B,SSTID0056B  
 Volume Injected (uL): 1.0  
 Column phase: Rxi-5Sil MS

Instrument: S6.i  
 Operator: PK SRC: PK  
 Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S6.I\130627.B\S6B4714.d  
 Lab Smp Id: SSTD0606B Client Smp ID: SSTD0606B  
 Inj Date : 27-JUN-2013 15:20  
 Operator : PK SRC: PK Inst ID: S6.i  
 Smp Info : SSTD0606B,SSTD0606B  
 Misc Info : 1,5  
 Comment :  
 Method : \\avogadro\organics\S6.I\130627.B\S6\_8270C\_N.m  
 Meth Date : 28-Jun-2013 14:12 pkaczorows Quant Type: ISTD  
 Cal Date : 27-JUN-2013 16:11 Cal File: S6B4716.d  
 Als bottle: 4 Calibration Sample, Level: 5  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: allnew.sub  
 Target Version: 4.14  
 Processing Host: TARGET113

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

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

Compounds	QUANT	SIG	AMOUNTS					
			RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
\$ 109 1,4-Dioxane-d8	96		2.593	2.593	(0.495)	12352	60.0000	68
108 1,4-Dioxane	58		2.622	2.617	(0.501)	3226	60.0000	54(Q)
1 N-Nitrosodimethylamine	74		2.904	2.905	(0.555)	26369	60.0000	64
2 Pyridine	79		2.946	2.957	(0.562)	47237	60.0000	65(T)
\$ 3 2-Fluorophenol	112		4.138	4.138	(0.790)	63036	60.0000	62
101 Benzaldehyde	77		4.867	4.867	(0.929)	47795	60.0000	57
\$ 5 Phenol-d5	99		4.932	4.926	(0.942)	82701	60.0000	59
6 Phenol	94		4.943	4.938	(0.944)	87662	60.0000	61
7 Aniline	66		4.943	4.932	(0.944)	59566	60.0000	60
8 bis(2-Chloroethyl)Ether	63		5.008	5.002	(0.956)	26772	60.0000	59
10 2-Chlorophenol	128		5.067	5.061	(0.967)	74038	60.0000	60
11 1,3-Dichlorobenzene	146		5.190	5.190	(0.991)	84765	60.0000	60
* 12 1,4-Dichlorobenzene-d4	152		5.237	5.237	(1.000)	42070	40.0000	(Q)
13 1,4-Dichlorobenzene	146		5.249	5.249	(1.002)	84112	60.0000	60
117 2-Ethyl-1-hexanol	57		5.284	5.278	(1.009)	21522	60.0000	59
15 Benzyl Alcohol	108		5.349	5.343	(1.021)	52996	60.0000	66
16 1,2-Dichlorobenzene	146		5.378	5.378	(1.027)	81121	60.0000	60
17 2-Methylphenol	108		5.443	5.437	(1.039)	70525	60.0000	62
18 2,2'-oxybis(1-Chloropropane)	45		5.454	5.455	(1.042)	18160	60.0000	59
99 Acetophenone	105		5.566	5.560	(1.063)	124763	60.0000	63

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
19 N-Nitroso-di-n-propylamine	70	5.566	5.560	(1.063)	48754	60.0000	61
20 4-Methylphenol	108	5.566	5.560	(1.063)	76498	60.0000	58
21 Hexachloroethane	117	5.666	5.660	(1.082)	33764	60.0000	59
\$ 22 Nitrobenzene-d5	82	5.695	5.690	(0.905)	96251	60.0000	57
23 Nitrobenzene	77	5.707	5.707	(0.907)	87139	60.0000	54
24 Isophorone	82	5.907	5.901	(0.938)	143836	60.0000	55
25 2-Nitrophenol	139	5.977	5.972	(0.950)	48169	60.0000	53
26 2,4-Dimethylphenol	107	6.007	6.001	(0.954)	95019	60.0000	61
27 bis(2-Chloroethoxy)methane	93	6.077	6.077	(0.965)	70422	60.0000	54
28 Benzoic Acid	105	6.101	6.060	(0.969)	80181	60.0000	59
29 2,4-Dichlorophenol	162	6.177	6.171	(0.981)	86664	60.0000	54
30 1,2,4-Trichlorobenzene	180	6.248	6.248	(0.993)	94215	60.0000	54
* 31 Naphthalene-d8	136	6.295	6.295	(1.000)	200760	40.0000	
32 Naphthalene	128	6.312	6.312	(1.003)	249282	60.0000	56
115 alpha-Terpineol	59	6.312	6.312	(1.003)	33587	60.0000	59
33 4-Chloroaniline	127	6.353	6.348	(1.009)	103258	60.0000	54
34 Hexachlorobutadiene	225	6.418	6.418	(1.020)	54752	60.0000	52
102 Caprolactam	113	6.653	6.624	(1.057)	31846	60.0000	55
35 4-Chloro-3-Methylphenol	107	6.753	6.747	(1.073)	82608	60.0000	54
36 2-Methylnaphthalene	142	6.888	6.882	(1.094)	191105	60.0000	54
114 1-Methylnaphthalene	142	6.970	6.971	(1.107)	178151	60.0000	54
38 Hexachlorocyclopentadiene	237	7.023	7.023	(0.905)	64578	60.0000	64
112 1,2,4,5-Tetrachlorobenzene	216	7.029	7.029	(0.906)	110487	60.0000	58
39 2,4,6-Trichlorophenol	196	7.123	7.117	(0.918)	77575	60.0000	58
40 2,4,5-Trichlorophenol	196	7.152	7.147	(0.922)	81720	60.0000	58
\$ 41 2-Fluorobiphenyl	172	7.188	7.182	(0.927)	251933	60.0000	60
98 1,1'-Biphenyl	154	7.270	7.270	(0.937)	270756	60.0000	58
42 2-Chloronaphthalene	162	7.294	7.294	(0.940)	197311	60.0000	57
43 2-Nitroaniline	65	7.370	7.370	(0.950)	56305	60.0000	57
44 Dimethylphthalate	163	7.523	7.511	(0.970)	264831	60.0000	58
45 2,6-Dinitrotoluene	165	7.570	7.564	(0.976)	62084	60.0000	57
46 Acenaphthylene	152	7.640	7.640	(0.985)	338508	60.0000	58
47 3-Nitroaniline	138	7.717	7.711	(0.995)	63764	60.0000	58
* 48 Acenaphthene-d10	164	7.758	7.758	(1.000)	140448	40.0000	
49 Acenaphthene	153	7.787	7.781	(1.004)	223961	60.0000	57
50 2,4-Dinitrophenol	184	7.799	7.793	(1.005)	46366	60.0000	62
51 4-Nitrophenol	109	7.846	7.840	(1.011)	70096	60.0000	57
53 2,4-Dinitrotoluene	165	7.905	7.899	(1.019)	88531	60.0000	57
52 Dibenzofuran	168	7.928	7.928	(1.022)	317339	60.0000	57
110 2,3,4,6-Tetrachlorophenol	232	8.034	8.028	(1.036)	76085	60.0000	57
54 Diethylphthalate	149	8.104	8.099	(1.045)	259558	60.0000	57
56 4-Chlorophenyl-phenylether	204	8.204	8.204	(1.058)	149318	60.0000	58
55 Fluorene	166	8.216	8.210	(1.059)	280644	60.0000	59
57 4-Nitroaniline	138	8.228	8.216	(1.061)	74890	60.0000	60
58 4,6-Dinitro-2-methylphenol	198	8.251	8.245	(0.916)	65394	60.0000	62(Q)
59 N-Nitrosodiphenylamine	169	8.304	8.298	(0.922)	243244	60.0000	60
97 Azobenzene	77	8.339	8.340	(0.926)	281686	60.0000	59
\$ 60 2,4,6-Tribromophenol	330	8.416	8.416	(0.935)	47978	60.0000	62
61 4-Bromophenyl-phenylether	248	8.616	8.616	(0.957)	92083	60.0000	60
62 Hexachlorobenzene	284	8.686	8.680	(0.965)	99472	60.0000	60
100 Atrazine	200	8.739	8.739	(0.971)	22383	60.0000	36
63 Pentachlorophenol	266	8.845	8.845	(0.982)	68314	60.0000	63
111 Pentachloronitrobenzene	237	8.856	8.857	(0.984)	42867	60.0000	58
* 64 Phenanthrene-d10	188	9.003	8.998	(1.000)	313115	40.0000	

Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
65 Phenanthrene	178	9.021	9.021	(1.002)	442234	60.0000	59
66 Anthracene	178	9.062	9.062	(1.007)	467907	60.0000	61
67 Carbazole	167	9.191	9.191	(1.021)	423289	60.0000	59
68 Di-n-butylphthalate	149	9.462	9.462	(1.051)	491154	60.0000	60
69 Fluoranthene	202	10.032	10.032	(1.114)	590342	60.0000	60
70 Benzidine	184	10.131	10.143	(0.886)	157038	60.0000	57
71 Pyrene	202	10.231	10.231	(0.895)	606056	60.0000	58
\$ 72 Terphenyl-d14	244	10.349	10.349	(0.905)	436490	60.0000	58
73 Butylbenzylphthalate	149	10.784	10.790	(0.943)	274520	60.0000	60
74 3,3'-Dichlorobenzidine	252	11.377	11.377	(0.995)	286121	60.0000	58
78 bis(2-Ethylhexyl)phthalate	149	11.406	11.412	(0.997)	411480	60.0000	60
75 Benzo(a)anthracene	228	11.418	11.424	(0.998)	730401	60.0000	58
* 76 Chrysene-d12	240	11.436	11.436	(1.000)	511225	40.0000	
77 Chrysene	228	11.465	11.465	(1.003)	647581	60.0000	57
79 Di-n-octylphthalate	149	12.311	12.317	(0.893)	689240	60.0000	58
80 Benzo(b)fluoranthene	252	13.022	13.016	(0.945)	801739	60.0000	56
81 Benzo(k)fluoranthene	252	13.075	13.063	(0.949)	847949	60.0000	59
82 Benzo(a)pyrene	252	13.657	13.651	(0.991)	806689	60.0000	58
* 83 Perylene-d12	264	13.780	13.774	(1.000)	575994	40.0000	
84 Indeno(1,2,3-cd)pyrene	276	16.624	16.589	(1.206)	1093375	60.0000	66
85 Dibenzo(a,h)anthracene	278	16.718	16.677	(1.213)	875888	60.0000	59
86 Benzo(g,h,i)perylene	276	17.523	17.470	(1.272)	913257	60.0000	58

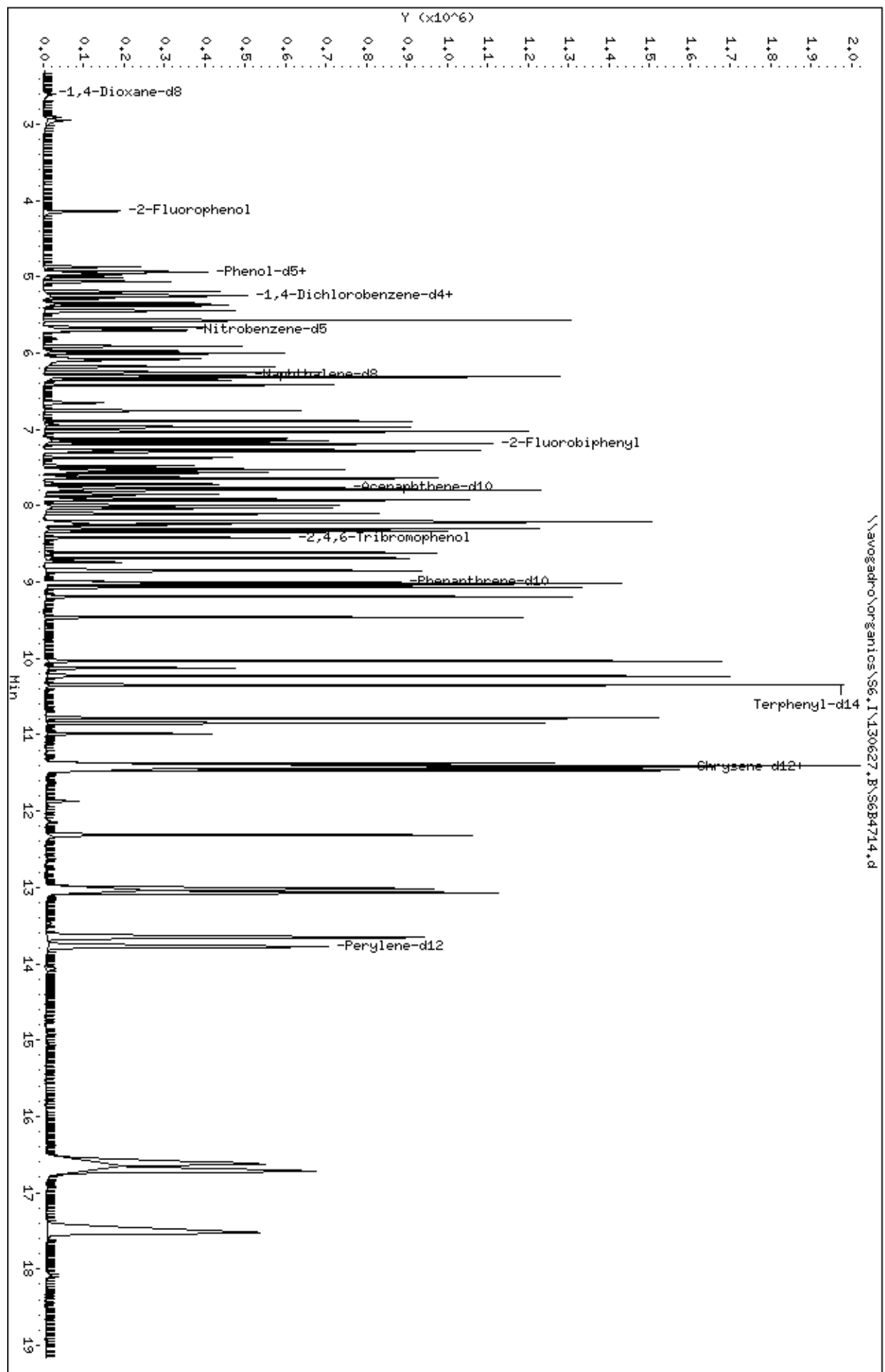
QC Flag Legend

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



Data File: \\avogadro\organics\S6.I\130627.B\S6B4714.d  
Date : 27-JUN-2013 15:20  
Client ID: SSTID0606B  
Sample Info: SSTID0606B,SSTID0606B  
Volume Injected (uL): 1.0  
Column phase: Rxi-5S11 MS

Instrument: S6.i  
Operator: PK SRC: PK  
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S6.I\130627.B\S6B4715.d  
 Lab Smp Id: SSTD0106B Client Smp ID: SSTD0106B  
 Inj Date : 27-JUN-2013 15:45  
 Operator : PK SRC: PK Inst ID: S6.i  
 Smp Info : SSTD0106B,SSTD0106B  
 Misc Info : 1,2  
 Comment :  
 Method : \\avogadro\organics\S6.I\130627.B\S6\_8270C\_N.m  
 Meth Date : 28-Jun-2013 14:12 pkaczorows Quant Type: ISTD  
 Cal Date : 27-JUN-2013 16:11 Cal File: S6B4716.d  
 Als bottle: 5 Calibration Sample, Level: 2  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: allnew.sub  
 Target Version: 4.14  
 Processing Host: TARGET113

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

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

Compounds	QUANT	SIG	AMOUNTS					
			RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
\$ 109 1,4-Dioxane-d8	96		2.593	2.593	(0.495)	1675	10.0000	7(a)
108 1,4-Dioxane	58		2.629	2.617	(0.502)	880	10.0000	11(Q)
1 N-Nitrosodimethylamine	74		2.916	2.905	(0.557)	5993	10.0000	11
2 Pyridine	79		2.958	2.957	(0.565)	9950	10.0000	10(T)
\$ 3 2-Fluorophenol	112		4.139	4.138	(0.790)	13861	10.0000	10
101 Benzaldehyde	77		4.867	4.867	(0.929)	15164	10.0000	14
\$ 5 Phenol-d5	99		4.926	4.926	(0.941)	18619	10.0000	10
6 Phenol	94		4.938	4.938	(0.943)	18858	10.0000	10
7 Aniline	66		4.938	4.932	(0.943)	13495	10.0000	10
8 bis(2-Chloroethyl)Ether	63		5.002	5.002	(0.955)	6439	10.0000	10
10 2-Chlorophenol	128		5.061	5.061	(0.966)	17310	10.0000	10
11 1,3-Dichlorobenzene	146		5.190	5.190	(0.991)	20499	10.0000	11
* 12 1,4-Dichlorobenzene-d4	152		5.237	5.237	(1.000)	56273	40.0000	
13 1,4-Dichlorobenzene	146		5.249	5.249	(1.002)	19345	10.0000	10
117 2-Ethyl-1-hexanol	57		5.278	5.278	(1.008)	4959	10.0000	10
15 Benzyl Alcohol	108		5.343	5.343	(1.020)	10076	10.0000	9(a)
16 1,2-Dichlorobenzene	146		5.378	5.378	(1.027)	17874	10.0000	10
17 2-Methylphenol	108		5.437	5.437	(1.038)	14372	10.0000	9(a)
18 2,2'-oxybis(1-Chloropropane)	45		5.455	5.455	(1.042)	4491	10.0000	11(Q)
99 Acetophenone	105		5.566	5.560	(1.063)	23918	10.0000	9(a)

Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
19 N-Nitroso-di-n-propylamine	70	5.560	5.560	(1.062)	9769	10.0000	9(a)
20 4-Methylphenol	108	5.560	5.560	(1.062)	17046	10.0000	10
21 Hexachloroethane	117	5.666	5.660	(1.082)	7185	10.0000	9(a)
\$ 22 Nitrobenzene-d5	82	5.690	5.690	(0.904)	20386	10.0000	11
23 Nitrobenzene	77	5.707	5.707	(0.907)	19376	10.0000	11
24 Isophorone	82	5.901	5.901	(0.937)	29857	10.0000	10
25 2-Nitrophenol	139	5.972	5.972	(0.949)	10804	10.0000	10
26 2,4-Dimethylphenol	107	6.001	6.001	(0.953)	16744	10.0000	10
27 bis(2-Chloroethoxy)methane	93	6.077	6.077	(0.965)	16222	10.0000	11
28 Benzoic Acid	105	6.066	6.060	(0.964)	16595	10.0000	11(a)
29 2,4-Dichlorophenol	162	6.171	6.171	(0.980)	18181	10.0000	10
30 1,2,4-Trichlorobenzene	180	6.248	6.248	(0.993)	21188	10.0000	11
* 31 Naphthalene-d8	136	6.295	6.295	(1.000)	227682	40.0000	
32 Naphthalene	128	6.313	6.312	(1.003)	55106	10.0000	11
115 alpha-Terpineol	59	6.313	6.312	(1.003)	6489	10.0000	10(Q)
33 4-Chloroaniline	127	6.348	6.348	(1.008)	23740	10.0000	11
34 Hexachlorobutadiene	225	6.418	6.418	(1.020)	12784	10.0000	11
102 Caprolactam	113	6.624	6.624	(1.052)	7191	10.0000	11
35 4-Chloro-3-Methylphenol	107	6.747	6.747	(1.072)	18024	10.0000	10
36 2-Methylnaphthalene	142	6.888	6.882	(1.094)	41810	10.0000	10
114 1-Methylnaphthalene	142	6.971	6.971	(1.107)	40247	10.0000	11
38 Hexachlorocyclopentadiene	237	7.023	7.023	(0.905)	13432	10.0000	11
112 1,2,4,5-Tetrachlorobenzene	216	7.029	7.029	(0.906)	23915	10.0000	10
39 2,4,6-Trichlorophenol	196	7.117	7.117	(0.917)	16153	10.0000	10
40 2,4,5-Trichlorophenol	196	7.153	7.147	(0.922)	18332	10.0000	10(a)
\$ 41 2-Fluorobiphenyl	172	7.188	7.182	(0.927)	52747	10.0000	10
98 1,1'-Biphenyl	154	7.270	7.270	(0.937)	61130	10.0000	10
42 2-Chloronaphthalene	162	7.288	7.294	(0.939)	45993	10.0000	10
43 2-Nitroaniline	65	7.364	7.370	(0.949)	11493	10.0000	9(a)
44 Dimethylphthalate	163	7.511	7.511	(0.968)	59750	10.0000	10
45 2,6-Dinitrotoluene	165	7.564	7.564	(0.975)	13391	10.0000	10
46 Acenaphthylene	152	7.640	7.640	(0.985)	74867	10.0000	10
47 3-Nitroaniline	138	7.705	7.711	(0.993)	12895	10.0000	9(a)
* 48 Acenaphthene-d10	164	7.758	7.758	(1.000)	176939	40.0000	
49 Acenaphthene	153	7.781	7.781	(1.003)	49357	10.0000	10
50 2,4-Dinitrophenol	184	7.793	7.793	(1.005)	7521	10.0000	8(aQ)
51 4-Nitrophenol	109	7.840	7.840	(1.011)	15149	10.0000	10(a)
53 2,4-Dinitrotoluene	165	7.899	7.899	(1.018)	18557	10.0000	10
52 Dibenzofuran	168	7.928	7.928	(1.022)	72539	10.0000	10
110 2,3,4,6-Tetrachlorophenol	232	8.028	8.028	(1.035)	16912	10.0000	10
54 Diethylphthalate	149	8.099	8.099	(1.044)	59284	10.0000	10
56 4-Chlorophenyl-phenylether	204	8.204	8.204	(1.058)	32567	10.0000	10
55 Fluorene	166	8.210	8.210	(1.058)	59888	10.0000	10
57 4-Nitroaniline	138	8.216	8.216	(1.059)	15455	10.0000	10(a)
58 4,6-Dinitro-2-methylphenol	198	8.246	8.245	(0.916)	12631	10.0000	9(aQ)
59 N-Nitrosodiphenylamine	169	8.298	8.298	(0.922)	54286	10.0000	10
97 Azobenzene	77	8.334	8.340	(0.926)	63247	10.0000	10
\$ 60 2,4,6-Tribromophenol	330	8.410	8.416	(0.935)	11076	10.0000	11
61 4-Bromophenyl-phenylether	248	8.610	8.616	(0.957)	21130	10.0000	10
62 Hexachlorobenzene	284	8.680	8.680	(0.965)	22023	10.0000	10
100 Atrazine	200	8.733	8.739	(0.971)	10259	10.0000	12
63 Pentachlorophenol	266	8.839	8.845	(0.982)	12146	10.0000	8(a)
111 Pentachloronitrobenzene	237	8.851	8.857	(0.984)	9298	10.0000	10
* 64 Phenanthrene-d10	188	8.998	8.998	(1.000)	409768	40.0000	

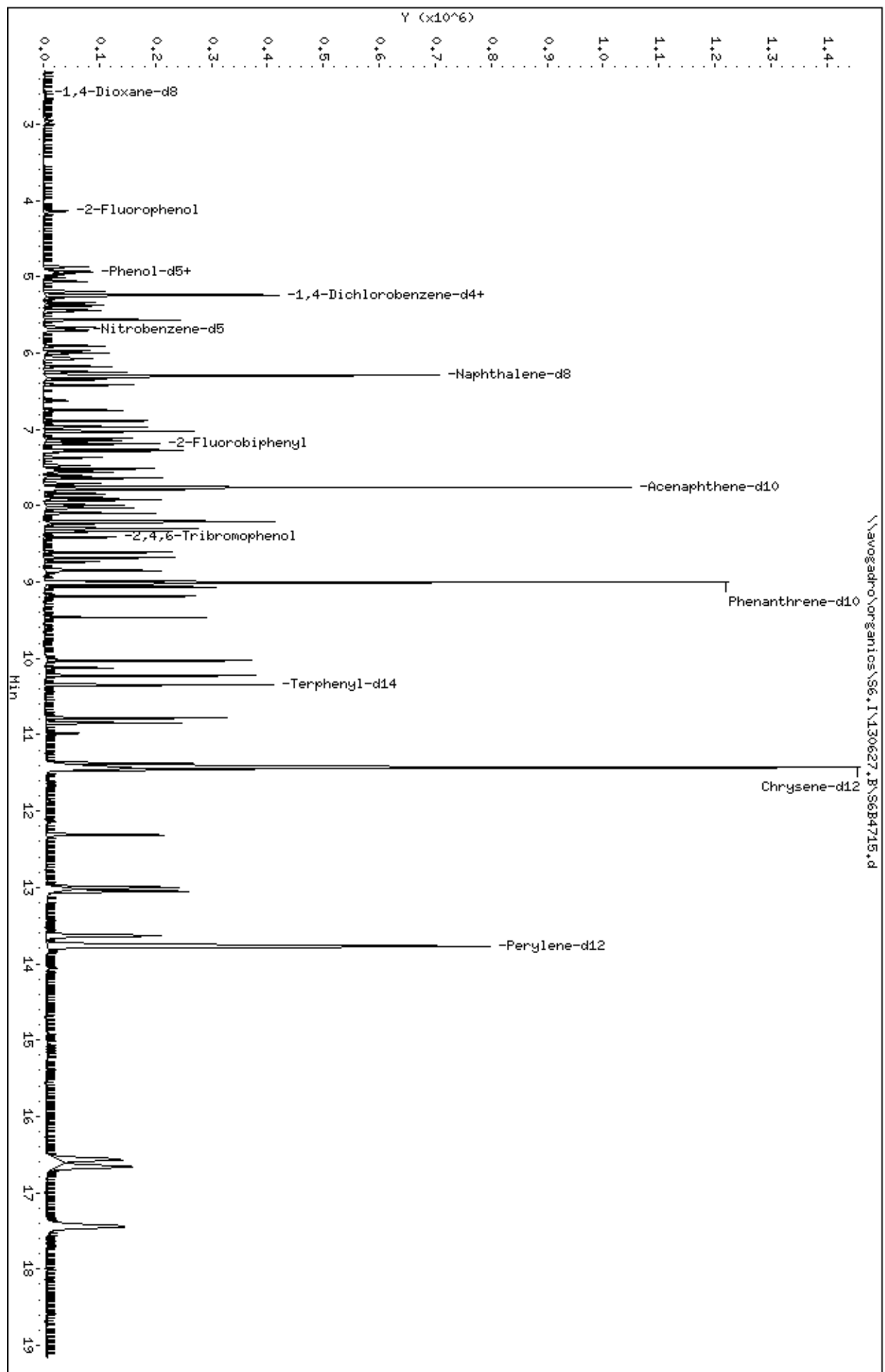
Compounds	QUANT		SIG				AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)	
65 Phenanthrene	178	9.021	9.021	(1.003)	99153	10.0000	10	
66 Anthracene	178	9.062	9.062	(1.007)	100409	10.0000	10	
67 Carbazole	167	9.186	9.191	(1.021)	93531	10.0000	10	
68 Di-n-butylphthalate	149	9.462	9.462	(1.052)	105869	10.0000	10	
69 Fluoranthene	202	10.026	10.032	(1.114)	128095	10.0000	10	
70 Benzidine	184	10.126	10.143	(0.886)	35632	10.0000	11(a)	
71 Pyrene	202	10.226	10.231	(0.895)	132887	10.0000	11	
\$ 72 Terphenyl-d14	244	10.343	10.349	(0.905)	94005	10.0000	11	
73 Butylbenzylphthalate	149	10.784	10.790	(0.943)	56553	10.0000	10	
74 3,3'-Dichlorobenzidine	252	11.371	11.377	(0.995)	57737	10.0000	10	
78 bis(2-Ethylhexyl)phthalate	149	11.401	11.412	(0.997)	79696	10.0000	10	
75 Benzo(a)anthracene	228	11.413	11.424	(0.998)	154590	10.0000	10	
* 76 Chrysene-d12	240	11.430	11.436	(1.000)	606893	40.0000		
77 Chrysene	228	11.460	11.465	(1.003)	139901	10.0000	10	
79 Di-n-octylphthalate	149	12.311	12.317	(0.894)	145961	10.0000	11	
80 Benzo(b)fluoranthene	252	13.005	13.016	(0.944)	168844	10.0000	10	
81 Benzo(k)fluoranthene	252	13.052	13.063	(0.948)	165433	10.0000	10	
82 Benzo(a)pyrene	252	13.639	13.651	(0.990)	159024	10.0000	10	
* 83 Perylene-d12	264	13.774	13.774	(1.000)	657528	40.0000		
84 Indeno(1,2,3-cd)pyrene	276	16.560	16.589	(1.202)	165617	10.0000	9(a)	
85 Dibenzo(a,h)anthracene	278	16.659	16.677	(1.209)	172376	10.0000	10	
86 Benzo(g,h,i)perylene	276	17.453	17.470	(1.267)	177631	10.0000	10	

QC Flag Legend

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

Data File: \\avogadro\organics\S6,I\130627,B\S6B4715.d  
Date : 27-JUN-2013 15:45  
Client ID: SSTID0106B  
Sample Info: SSTID0106B,SSTID0106B  
Volume Injected (uL): 1.0  
Column phase: Rxi-5S11 MS

Instrument: S6.i  
Operator: PK SRC: PK  
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S6.I\130627.B\S6B4716.d  
 Lab Smp Id: SSTD0406B Client Smp ID: SSTD0406B  
 Inj Date : 27-JUN-2013 16:11  
 Operator : PK SRC: PK Inst ID: S6.i  
 Smp Info : SSTD0406B,SSTD0406B  
 Misc Info : 1,4  
 Comment :  
 Method : \\avogadro\organics\S6.I\130627.B\S6\_8270C\_N.m  
 Meth Date : 28-Jun-2013 14:12 pkaczorows Quant Type: ISTD  
 Cal Date : 27-JUN-2013 16:11 Cal File: S6B4716.d  
 Als bottle: 6 Calibration Sample, Level: 4  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: allnew.sub  
 Target Version: 4.14  
 Processing Host: TARGET113

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

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

Compounds	QUANT	SIG	AMOUNTS					
			RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
\$ 109 1,4-Dioxane-d8	96		2.593	2.593	(0.495)	17903	40.0000	49
108 1,4-Dioxane	58		2.623	2.617	(0.501)	5705	40.0000	47
1 N-Nitrosodimethylamine	74		2.911	2.905	(0.556)	35280	40.0000	43
2 Pyridine	79		2.946	2.957	(0.563)	60122	40.0000	41
\$ 3 2-Fluorophenol	112		4.144	4.138	(0.791)	80497	40.0000	39
101 Benzaldehyde	77		4.867	4.867	(0.929)	61568	40.0000	37
\$ 5 Phenol-d5	99		4.932	4.926	(0.942)	105869	40.0000	38
6 Phenol	94		4.943	4.938	(0.944)	112068	40.0000	39
7 Aniline	66		4.943	4.932	(0.944)	71544	40.0000	36
8 bis(2-Chloroethyl)Ether	63		5.008	5.002	(0.956)	36915	40.0000	40
10 2-Chlorophenol	128		5.067	5.061	(0.967)	95557	40.0000	38
11 1,3-Dichlorobenzene	146		5.190	5.190	(0.991)	106696	40.0000	38
* 12 1,4-Dichlorobenzene-d4	152		5.237	5.237	(1.000)	84669	40.0000	
13 1,4-Dichlorobenzene	146		5.249	5.249	(1.002)	113953	40.0000	40
117 2-Ethyl-1-hexanol	57		5.284	5.278	(1.009)	28689	40.0000	39
15 Benzyl Alcohol	108		5.349	5.343	(1.021)	63548	40.0000	39
16 1,2-Dichlorobenzene	146		5.378	5.378	(1.027)	110230	40.0000	40
17 2-Methylphenol	108		5.443	5.437	(1.039)	86193	40.0000	37
18 2,2'-oxybis(1-Chloropropane)	45		5.455	5.455	(1.042)	24586	40.0000	40
99 Acetophenone	105		5.566	5.560	(1.063)	154736	40.0000	39

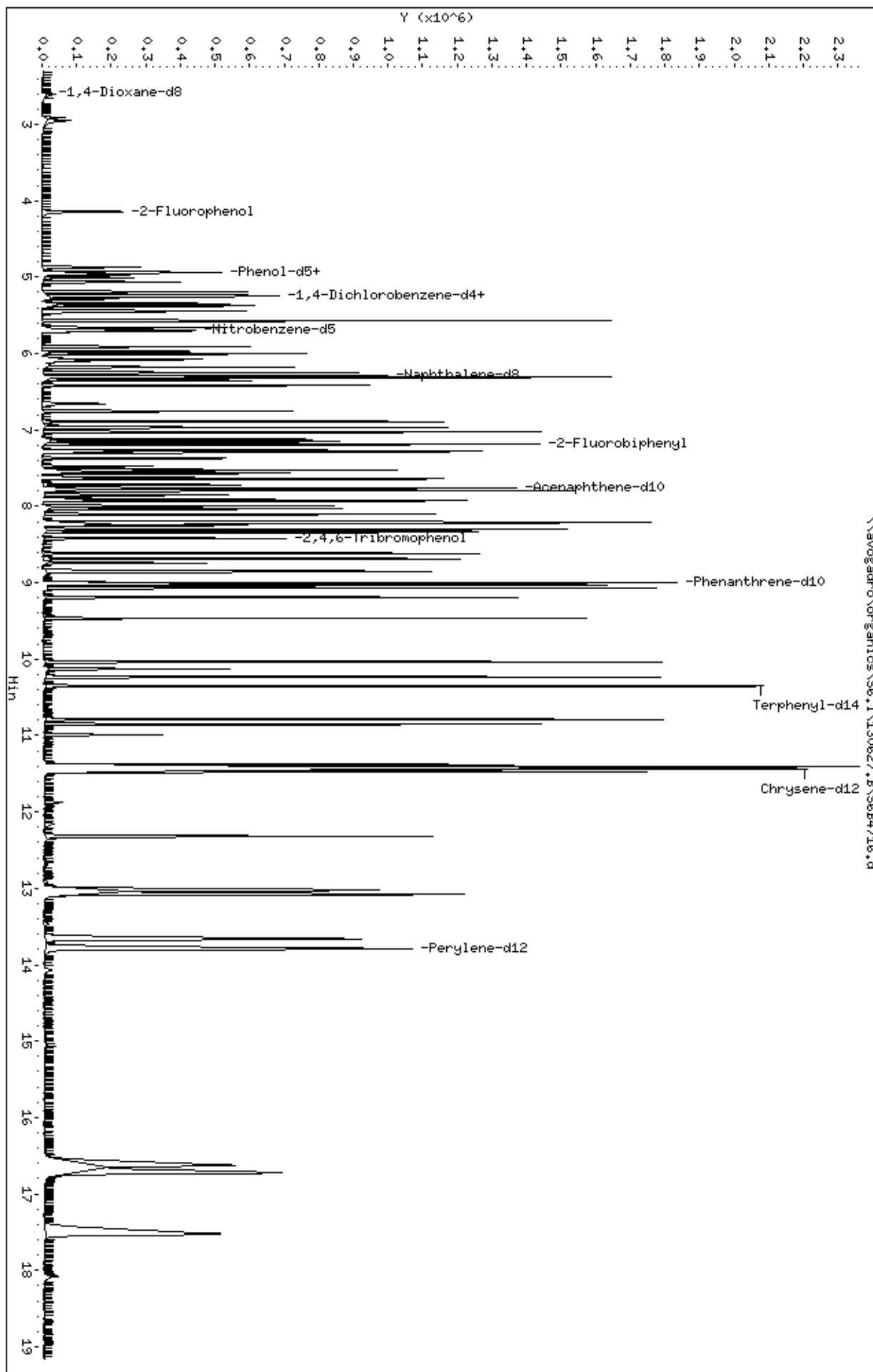
Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
19 N-Nitroso-di-n-propylamine	70	5.566	5.560	(1.063)	63545	40.0000	40
20 4-Methylphenol	108	5.566	5.560	(1.063)	102764	40.0000	39
21 Hexachloroethane	117	5.660	5.660	(1.081)	44427	40.0000	39
\$ 22 Nitrobenzene-d5	82	5.696	5.690	(0.905)	124330	40.0000	39
23 Nitrobenzene	77	5.713	5.707	(0.908)	109972	40.0000	36
24 Isophorone	82	5.907	5.901	(0.938)	186234	40.0000	37
25 2-Nitrophenol	139	5.978	5.972	(0.950)	65144	40.0000	38
26 2,4-Dimethylphenol	107	6.007	6.001	(0.954)	115389	40.0000	39
27 bis(2-Chloroethoxy)methane	93	6.077	6.077	(0.965)	92530	40.0000	38
28 Benzoic Acid	105	6.101	6.060	(0.969)	71082	40.0000	28
29 2,4-Dichlorophenol	162	6.177	6.171	(0.981)	106764	40.0000	35
30 1,2,4-Trichlorobenzene	180	6.248	6.248	(0.993)	124825	40.0000	38
* 31 Naphthalene-d8	136	6.295	6.295	(1.000)	380745	40.0000	
32 Naphthalene	128	6.312	6.312	(1.003)	327802	40.0000	38
115 alpha-Terpineol	59	6.312	6.312	(1.003)	40274	40.0000	38
33 4-Chloroaniline	127	6.354	6.348	(1.009)	129040	40.0000	36
34 Hexachlorobutadiene	225	6.418	6.418	(1.020)	67982	40.0000	34
102 Caprolactam	113	6.659	6.624	(1.058)	37986	40.0000	34
35 4-Chloro-3-Methylphenol	107	6.753	6.747	(1.073)	105204	40.0000	36
36 2-Methylnaphthalene	142	6.888	6.882	(1.094)	243497	40.0000	36
114 1-Methylnaphthalene	142	6.971	6.971	(1.107)	233256	40.0000	37
38 Hexachlorocyclopentadiene	237	7.023	7.023	(0.905)	65764	40.0000	34
112 1,2,4,5-Tetrachlorobenzene	216	7.029	7.029	(0.905)	141953	40.0000	39
39 2,4,6-Trichlorophenol	196	7.123	7.117	(0.918)	99269	40.0000	39
40 2,4,5-Trichlorophenol	196	7.153	7.147	(0.921)	102795	40.0000	38
\$ 41 2-Fluorobiphenyl	172	7.188	7.182	(0.926)	319095	40.0000	39
98 1,1'-Biphenyl	154	7.276	7.270	(0.937)	346166	40.0000	39
42 2-Chloronaphthalene	162	7.294	7.294	(0.939)	256572	40.0000	38
43 2-Nitroaniline	65	7.370	7.370	(0.949)	69731	40.0000	37
44 Dimethylphthalate	163	7.523	7.511	(0.969)	324558	40.0000	37
45 2,6-Dinitrotoluene	165	7.570	7.564	(0.975)	77966	40.0000	37
46 Acenaphthylene	152	7.640	7.640	(0.984)	426202	40.0000	38
47 3-Nitroaniline	138	7.717	7.711	(0.994)	76087	40.0000	36
* 48 Acenaphthene-d10	164	7.764	7.758	(1.000)	269762	40.0000	
49 Acenaphthene	153	7.787	7.781	(1.003)	287394	40.0000	38
50 2,4-Dinitrophenol	184	7.799	7.793	(1.005)	57870	40.0000	40
51 4-Nitrophenol	109	7.852	7.840	(1.011)	85117	40.0000	36
53 2,4-Dinitrotoluene	165	7.911	7.899	(1.019)	107670	40.0000	36
52 Dibenzofuran	168	7.928	7.928	(1.021)	403303	40.0000	38
110 2,3,4,6-Tetrachlorophenol	232	8.034	8.028	(1.035)	93441	40.0000	37
54 Diethylphthalate	149	8.105	8.099	(1.044)	335490	40.0000	38
56 4-Chlorophenyl-phenylether	204	8.204	8.204	(1.057)	189851	40.0000	39
55 Fluorene	166	8.216	8.210	(1.058)	358434	40.0000	39
57 4-Nitroaniline	138	8.234	8.216	(1.061)	87427	40.0000	36
58 4,6-Dinitro-2-methylphenol	198	8.251	8.245	(0.916)	79974	40.0000	39
59 N-Nitrosodiphenylamine	169	8.304	8.298	(0.922)	303632	40.0000	39
97 Azobenzene	77	8.340	8.340	(0.926)	362222	40.0000	39
\$ 60 2,4,6-Tribromophenol	330	8.416	8.416	(0.935)	59246	40.0000	40
61 4-Bromophenyl-phenylether	248	8.616	8.616	(0.957)	116848	40.0000	39
62 Hexachlorobenzene	284	8.686	8.680	(0.965)	122468	40.0000	38
100 Atrazine	200	8.739	8.739	(0.971)	55636	40.0000	46
63 Pentachlorophenol	266	8.845	8.845	(0.982)	89606	40.0000	43
111 Pentachloronitrobenzene	237	8.857	8.857	(0.984)	52515	40.0000	37
* 64 Phenanthrene-d10	188	9.003	8.998	(1.000)	604823	40.0000	

Compounds	QUANT		SIG				AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)	
=====	=====	=====	=====	=====	=====	=====	=====	
65 Phenanthrene	178	9.027	9.021	(1.003)	557404	40.0000	39	
66 Anthracene	178	9.068	9.062	(1.007)	555843	40.0000	37	
67 Carbazole	167	9.191	9.191	(1.021)	503472	40.0000	36	
68 Di-n-butylphthalate	149	9.468	9.462	(1.052)	604358	40.0000	38	
69 Fluoranthene	202	10.038	10.032	(1.115)	705612	40.0000	37	
70 Benzidine	184	10.132	10.143	(0.885)	157508	40.0000	33	
71 Pyrene	202	10.237	10.231	(0.895)	713822	40.0000	40	
\$ 72 Terphenyl-d14	244	10.355	10.349	(0.905)	514822	40.0000	40	
73 Butylbenzylphthalate	149	10.790	10.790	(0.943)	315764	40.0000	40	
74 3,3'-Dichlorobenzidine	252	11.383	11.377	(0.995)	304213	40.0000	36	
78 bis(2-Ethylhexyl)phthalate	149	11.412	11.412	(0.997)	476725	40.0000	40	
75 Benzo(a)anthracene	228	11.424	11.424	(0.998)	817093	40.0000	38	
* 76 Chrysene-d12	240	11.442	11.436	(1.000)	874311	40.0000		
77 Chrysene	228	11.477	11.465	(1.003)	720686	40.0000	37	
79 Di-n-octylphthalate	149	12.317	12.317	(0.893)	761889	40.0000	41	
80 Benzo(b)fluoranthene	252	13.022	13.016	(0.944)	840024	40.0000	38	
81 Benzo(k)fluoranthene	252	13.081	13.063	(0.948)	895232	40.0000	40	
82 Benzo(a)pyrene	252	13.669	13.651	(0.991)	833869	40.0000	38	
* 83 Perylene-d12	264	13.792	13.774	(1.000)	903029	40.0000		
84 Indeno(1,2,3-cd)pyrene	276	16.624	16.589	(1.205)	1069233	40.0000	41	
85 Dibenzo(a,h)anthracene	278	16.718	16.677	(1.212)	862256	40.0000	37	
86 Benzo(g,h,i)perylene	276	17.523	17.470	(1.271)	899132	40.0000	36	



Data File: \\avogadro\organics\S6.I\130627.B\S6B4716.d  
Date: 27-JUN-2013 16:11  
Client ID: SSTID0406B  
Sample Info: SSTID0406B,SSTID0406B  
Volume Injected (uL): 1.0  
Column phase: Rxi-5S11 MS

Instrument: S6.i  
Operator: PK SRC: PK  
Column diameter: 0.25



7E - FORM VII SV-1  
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Instrument ID: S6 Calibration Date: 06/25/2013 Time: 15:53  
 Lab File ID: S6B4631D.D Init. Calib. Date(s): 06/21/2013 06/21/2013  
 EPA Sample No. (SSTD020##) SSTD0256Y Init. Calib. Time(s): 15:17 17:28  
 GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	RRF	RRF025	MIN RRF	%D	MAX %D
Phenol	1.226	1.516	0.800	23.7	20.0
Bis(2-chloroethyl)ether	0.453	0.503	0.700	11.2	20.0
2-Chlorophenol	1.060	1.249	0.800	17.8	20.0
1,3-Dichlorobenzene	1.263	1.363	0.010	8.0	20.0
1,4-Dichlorobenzene	1.303	1.551	0.010	19.0	20.0
1,2-Dichlorobenzene	1.265	1.418	0.010	12.1	20.0
2-Methylphenol	1.004	1.177	0.700	17.2	20.0
2,2'-oxybis(1-Chloropropane)	0.368	0.465	0.010	26.4	20.0
4-Methylphenol	1.192	1.440	0.600	20.8	20.0
N-Nitroso-di-n-propylamine	0.856	0.902	0.500	5.4	20.0
Hexachloroethane	0.494	0.577	0.300	16.9	20.0
Nitrobenzene	0.321	0.343	0.200	6.6	20.0
Isophorone	0.519	0.604	0.400	16.3	20.0
2-Nitrophenol	0.173	0.200	0.100	15.4	20.0
2,4-Dimethylphenol	0.315	0.362	0.200	14.9	20.0
2,4-Dichlorophenol	0.346	0.389	0.200	12.6	20.0
1,2,4-Trichlorobenzene	0.431	0.458	0.010	6.3	20.0
Naphthalene	0.875	0.956	0.700	9.2	20.0
4-Chloroaniline	0.362	0.406	0.010	12.2	20.0
Bis(2-chloroethoxy)methane	0.256	0.291	0.300	13.8	20.0
Hexachlorobutadiene	0.325	0.331	0.010	1.7	20.0
4-Chloro-3-methylphenol	0.312	0.372	0.200	19.0	20.0
2-Methylnaphthalene	0.740	0.832	0.400	12.5	20.0
Hexachlorocyclopentadiene	0.414	0.398	0.050	-4.0	20.0
2,4,6-Trichlorophenol	0.445	0.500	0.200	12.4	20.0
2,4,5-Trichlorophenol	0.491	0.549	0.200	11.6	20.0
2-Chloronaphthalene	0.933	1.029	0.800	10.3	20.0
2-Nitroaniline	0.245	0.277	0.010	13.1	20.0
Dimethylphthalate	1.320	1.553	0.010	17.7	20.0
Acenaphthylene	1.531	1.780	0.900	16.3	20.0
2,6-Dinitrotoluene	0.304	0.358	0.200	17.8	20.0
3-Nitroaniline	0.246	0.291	0.010	18.2	20.0
Acenaphthene	1.049	1.160	0.900	10.6	20.0
2,4-Dinitrophenol	0.273	0.198	0.010	-27.4	20.0
4-Nitrophenol	0.339	0.378	0.010	11.6	20.0
Dibenzofuran	1.640	1.840	0.800	12.2	20.0
2,4-Dinitrotoluene	0.437	0.508	0.200	16.4	20.0
Diethylphthalate	1.241	1.495	0.010	20.4	20.0
4-Chlorophenyl-phenylether	0.932	1.046	0.400	12.2	20.0
Fluorene	1.427	1.645	0.900	15.3	20.0
4-Nitroaniline	0.302	0.342	0.010	13.3	20.0
4,6-Dinitro-2-methylphenol	0.140	0.141	0.010	0.5	20.0

7F - FORM VII SV-2  
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Instrument ID: S6 Calibration Date: 06/25/2013 Time: 15:53  
 Lab File ID: S6B4631D.D Init. Calib. Date(s): 06/21/2013 06/21/2013  
 EPA Sample No.(SSTD020##) SSTD0256Y Init. Calib. Time(s): 15:17 17:28  
 GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	RRF	RRF025	MIN RRF	%D	MAX %D
N-Nitrosodiphenylamine	0.473	0.561	0.010	18.6	20.0
4-Bromophenyl-phenylether	0.238	0.280	0.100	17.7	20.0
Hexachlorobenzene	0.256	0.294	0.100	14.8	20.0
Pentachlorophenol	0.204	0.222	0.050	8.8	20.0
Phenanthrene	0.902	1.004	0.700	11.4	20.0
Anthracene	0.912	1.045	0.700	14.6	20.0
Carbazole	0.812	0.882	0.010	8.6	20.0
Di-n-butylphthalate	0.860	1.033	0.010	20.2	20.0
Fluoranthene	1.302	1.469	0.600	12.9	20.0
Pyrene	0.803	0.936	0.600	16.6	20.0
Butylbenzylphthalate	0.260	0.329	0.010	26.7	20.0
3,3'-Dichlorobenzidine	0.367	0.428	0.010	16.6	20.0
Benzo(a)anthracene	0.990	1.204	0.800	21.5	20.0
Chrysene	0.871	1.022	0.700	17.3	20.0
Bis(2-ethylhexyl)phthalate	0.389	0.512	0.010	31.6	20.0
Di-n-octylphthalate	0.633	0.780	0.010	23.2	20.0
Benzo(b)fluoranthene	1.000	1.151	0.700	15.0	20.0
Benzo(k)fluoranthene	0.987	1.137	0.700	15.2	20.0
Benzo(a)pyrene	0.944	1.104	0.700	17.0	20.0
Indeno(1,2,3-cd)pyrene	1.054	1.137	0.500	7.8	20.0
Dibenzo(a,h)anthracene	0.970	1.137	0.400	17.2	20.0
Benzo(g,h,i)perylene	0.998	1.117	0.500	12.0	20.0

7G - FORM VII SV-3  
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Instrument ID: S6 Calibration Date: 06/25/2013 Time: 15:53  
 Lab File ID: S6B4631D.D Init. Calib. Date(s): 06/21/2013 06/21/2013  
 EPA Sample No. (SSTD020##) SSTD0256Y Init. Calib. Time(s): 15:17 17:28  
 GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	RRF	RRF025	MIN RRF	%D	MAX %D
Nitrobenzene-d5	0.345	0.379	0.010	9.8	20.0
2-Fluorobiphenyl	1.309	1.453	0.010	11.0	20.0
Terphenyl-d14	0.644	0.758	0.010	17.6	20.0
Phenol-d5	1.192	1.368	0.010	14.7	20.0
2-Fluorophenol	0.812	0.884	0.010	8.9	20.0
2,4,6-Tribromophenol	0.128	0.156	0.010	22.0	20.0

7E - FORM VII SV-1  
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Instrument ID: S6 Calibration Date: 06/26/2013 Time: 18:26  
 Lab File ID: S6B4671A.D Init. Calib. Date(s): 06/26/2013 06/26/2013  
 EPA Sample No. (SSTD020##) SSTD0256A Init. Calib. Time(s): 11:45 14:43  
 GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	RRF	RRF025	MIN RRF	%D	MAX %D
Phenol	1.260	1.441	0.800	14.4	20.0
Bis(2-chloroethyl)ether	0.401	0.518	0.700	29.2	20.0
2-Chlorophenol	1.046	1.167	0.800	11.5	20.0
1,3-Dichlorobenzene	1.221	1.410	0.010	15.5	20.0
1,4-Dichlorobenzene	1.292	1.360	0.010	5.2	20.0
1,2-Dichlorobenzene	1.243	1.415	0.010	13.8	20.0
2-Methylphenol	1.028	1.169	0.700	13.7	20.0
2,2'-oxybis(1-Chloropropane)	0.344	0.421	0.010	22.4	20.0
4-Methylphenol	1.271	1.378	0.600	8.4	20.0
N-Nitroso-di-n-propylamine	0.819	0.922	0.500	12.6	20.0
Hexachloroethane	0.516	0.584	0.300	13.3	20.0
Nitrobenzene	0.317	0.369	0.200	16.4	20.0
Isophorone	0.529	0.579	0.400	9.5	20.0
2-Nitrophenol	0.181	0.197	0.100	8.5	20.0
2,4-Dimethylphenol	0.312	0.361	0.200	15.7	20.0
2,4-Dichlorophenol	0.353	0.395	0.200	11.8	20.0
1,2,4-Trichlorobenzene	0.429	0.483	0.010	12.7	20.0
Naphthalene	0.876	0.937	0.700	6.9	20.0
4-Chloroaniline	0.364	0.428	0.010	17.6	20.0
Bis(2-chloroethoxy)methane	0.257	0.286	0.300	11.3	20.0
Hexachlorobutadiene	0.328	0.367	0.010	11.8	20.0
4-Chloro-3-methylphenol	0.332	0.360	0.200	8.4	20.0
2-Methylnaphthalene	0.748	0.836	0.400	11.7	20.0
Hexachlorocyclopentadiene	0.357	0.409	0.050	14.8	20.0
2,4,6-Trichlorophenol	0.458	0.520	0.200	13.6	20.0
2,4,5-Trichlorophenol	0.500	0.554	0.200	10.9	20.0
2-Chloronaphthalene	0.917	1.035	0.800	12.9	20.0
2-Nitroaniline	0.242	0.283	0.010	16.9	20.0
Dimethylphthalate	1.351	1.615	0.010	19.6	20.0
Acenaphthylene	1.513	1.768	0.900	16.8	20.0
2,6-Dinitrotoluene	0.312	0.336	0.200	7.7	20.0
3-Nitroaniline	0.256	0.307	0.010	19.6	20.0
Acenaphthene	1.058	1.216	0.900	14.9	20.0
2,4-Dinitrophenol	0.244	0.285	0.010	16.9	20.0
4-Nitrophenol	0.356	0.403	0.010	13.1	20.0
Dibenzofuran	1.635	1.851	0.800	13.2	20.0
2,4-Dinitrotoluene	0.454	0.519	0.200	14.4	20.0
Diethylphthalate	1.316	1.514	0.010	15.0	20.0
4-Chlorophenyl-phenylether	0.959	1.081	0.400	12.7	20.0
Fluorene	1.449	1.683	0.900	16.2	20.0
4-Nitroaniline	0.299	0.360	0.010	20.3	20.0
4,6-Dinitro-2-methylphenol	0.138	0.147	0.010	6.2	20.0

7F - FORM VII SV-2  
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Instrument ID: S6 Calibration Date: 06/26/2013 Time: 18:26  
 Lab File ID: S6B4671A.D Init. Calib. Date(s): 06/26/2013 06/26/2013  
 EPA Sample No.(SSTD020##) SSTD0256A Init. Calib. Time(s): 11:45 14:43  
 GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	RRF	RRF025	MIN RRF	%D	MAX %D
N-Nitrosodiphenylamine	0.486	0.528	0.010	8.7	20.0
4-Bromophenyl-phenylether	0.243	0.251	0.100	3.2	20.0
Hexachlorobenzene	0.264	0.282	0.100	6.4	20.0
Pentachlorophenol	0.205	0.212	0.050	3.4	20.0
Phenanthrene	0.886	1.003	0.700	13.2	20.0
Anthracene	0.905	1.023	0.700	13.0	20.0
Carbazole	0.771	0.896	0.010	16.1	20.0
Di-n-butylphthalate	0.879	1.011	0.010	15.0	20.0
Fluoranthene	1.281	1.494	0.600	16.6	20.0
Pyrene	0.781	0.895	0.600	14.7	20.0
Butylbenzylphthalate	0.283	0.298	0.010	5.4	20.0
3,3'-Dichlorobenzidine	0.383	0.421	0.010	10.0	20.0
Benzo(a)anthracene	1.052	1.103	0.800	4.9	20.0
Chrysene	0.866	0.969	0.700	12.0	20.0
Bis(2-ethylhexyl)phthalate	0.455	0.451	0.010	-0.8	20.0
Di-n-octylphthalate	0.674	0.762	0.010	13.1	20.0
Benzo(b)fluoranthene	1.033	1.148	0.700	11.1	20.0
Benzo(k)fluoranthene	0.960	1.199	0.700	24.9	20.0
Benzo(a)pyrene	0.964	1.114	0.700	15.5	20.0
Indeno(1,2,3-cd)pyrene	1.141	1.192	0.500	4.5	20.0
Dibenzo(a,h)anthracene	1.025	1.095	0.400	6.8	20.0
Benzo(g,h,i)perylene	1.031	1.153	0.500	11.9	20.0

7G - FORM VII SV-3  
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Instrument ID: S6 Calibration Date: 06/26/2013 Time: 18:26  
 Lab File ID: S6B4671A.D Init. Calib. Date(s): 06/26/2013 06/26/2013  
 EPA Sample No. (SSTD020##) SSTD0256A Init. Calib. Time(s): 11:45 14:43  
 GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	RRF	RRF025	MIN RRF	%D	MAX %D
Nitrobenzene-d5	0.324	0.366	0.010	13.1	20.0
2-Fluorobiphenyl	1.262	1.469	0.010	16.4	20.0
Terphenyl-d14	0.637	0.709	0.010	11.3	20.0
Phenol-d5	1.158	1.361	0.010	17.5	20.0
2-Fluorophenol	0.793	0.823	0.010	3.8	20.0
2,4,6-Tribromophenol	0.136	0.137	0.010	0.3	20.0

7E - FORM VII SV-1  
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Instrument ID: S6 Calibration Date: 06/28/2013 Time: 10:20  
 Lab File ID: S6B4741.D Init. Calib. Date(s): 06/27/2013 06/27/2013  
 EPA Sample No. (SSTD020##) SSTD0256C Init. Calib. Time(s): 14:04 16:11  
 GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	RRF	RRF025	MIN RRF	%D	MAX %D
Phenol	1.371	1.507	0.800	9.9	20.0
Bis(2-chloroethyl)ether	0.432	0.434	0.700	0.4	20.0
2-Chlorophenol	1.182	1.229	0.800	4.0	20.0
1,3-Dichlorobenzene	1.332	1.404	0.010	5.4	20.0
1,4-Dichlorobenzene	1.340	1.488	0.010	11.0	20.0
1,2-Dichlorobenzene	1.291	1.366	0.010	5.8	20.0
2-Methylphenol	1.088	1.163	0.700	6.9	20.0
2,2'-oxybis(1-Chloropropane)	0.292	0.316	0.010	8.1	20.0
4-Methylphenol	1.245	1.238	0.600	-0.5	20.0
N-Nitroso-di-n-propylamine	0.758	0.837	0.500	10.4	20.0
Hexachloroethane	0.542	0.573	0.300	5.7	20.0
Nitrobenzene	0.321	0.368	0.200	14.8	20.0
Isophorone	0.522	0.573	0.400	9.8	20.0
2-Nitrophenol	0.181	0.193	0.100	6.5	20.0
2,4-Dimethylphenol	0.308	0.346	0.200	12.1	20.0
2,4-Dichlorophenol	0.316	0.338	0.200	6.8	20.0
1,2,4-Trichlorobenzene	0.344	0.370	0.010	7.7	20.0
Naphthalene	0.894	0.999	0.700	11.7	20.0
4-Chloroaniline	0.380	0.414	0.010	8.9	20.0
Bis(2-chloroethoxy)methane	0.259	0.294	0.300	13.8	20.0
Hexachlorobutadiene	0.210	0.234	0.010	11.5	20.0
4-Chloro-3-methylphenol	0.306	0.320	0.200	4.6	20.0
2-Methylnaphthalene	0.703	0.765	0.400	8.8	20.0
Hexachlorocyclopentadiene	0.285	0.375	0.050	31.6	20.0
2,4,6-Trichlorophenol	0.378	0.423	0.200	12.1	20.0
2,4,5-Trichlorophenol	0.406	0.445	0.200	9.8	20.0
2-Chloronaphthalene	0.990	1.161	0.800	17.3	20.0
2-Nitroaniline	0.280	0.307	0.010	9.9	20.0
Dimethylphthalate	1.306	1.463	0.010	12.0	20.0
Acenaphthylene	1.669	1.898	0.900	13.7	20.0
2,6-Dinitrotoluene	0.312	0.355	0.200	13.9	20.0
3-Nitroaniline	0.315	0.351	0.010	11.7	20.0
Acenaphthene	1.122	1.269	0.900	13.1	20.0
2,4-Dinitrophenol	0.212	0.224	0.010	5.6	20.0
4-Nitrophenol	0.348	0.364	0.010	4.6	20.0
Dibenzofuran	1.584	1.809	0.800	14.2	20.0
2,4-Dinitrotoluene	0.440	0.488	0.200	10.9	20.0
Diethylphthalate	1.303	1.480	0.010	13.6	20.0
4-Chlorophenyl-phenylether	0.726	0.868	0.400	19.5	20.0
Fluorene	1.359	1.565	0.900	15.2	20.0
4-Nitroaniline	0.364	0.413	0.010	13.6	20.0
4,6-Dinitro-2-methylphenol	0.136	0.145	0.010	7.1	20.0



7F - FORM VII SV-2  
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Instrument ID: S6 Calibration Date: 06/28/2013 Time: 10:20  
 Lab File ID: S6B4741.D Init. Calib. Date(s): 06/27/2013 06/27/2013  
 EPA Sample No.(SSTD020##) SSTD0256C Init. Calib. Time(s): 14:04 16:11  
 GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	RRF	RRF025	MIN RRF	%D	MAX %D
N-Nitrosodiphenylamine	0.518	0.582	0.010	12.4	20.0
4-Bromophenyl-phenylether	0.197	0.235	0.100	19.6	20.0
Hexachlorobenzene	0.213	0.254	0.100	19.3	20.0
Pentachlorophenol	0.139	0.151	0.050	9.3	20.0
Phenanthrene	0.952	1.076	0.700	13.0	20.0
Anthracene	0.981	1.083	0.700	10.4	20.0
Carbazole	0.914	1.008	0.010	10.3	20.0
Di-n-butylphthalate	1.037	1.208	0.010	16.5	20.0
Fluoranthene	1.258	1.330	0.600	5.7	20.0
Pyrene	0.815	0.991	0.600	21.6	20.0
Butylbenzylphthalate	0.357	0.426	0.010	19.4	20.0
3,3'-Dichlorobenzidine	0.389	0.438	0.010	12.8	20.0
Benzo(a)anthracene	0.993	1.139	0.800	14.7	20.0
Chrysene	0.890	1.014	0.700	13.9	20.0
Bis(2-ethylhexyl)phthalate	0.540	0.642	0.010	19.0	20.0
Di-n-octylphthalate	0.828	1.027	0.010	24.0	20.0
Benzo(b)fluoranthene	0.990	1.157	0.700	16.8	20.0
Benzo(k)fluoranthene	1.003	1.166	0.700	16.2	20.0
Benzo(a)pyrene	0.967	1.116	0.700	15.4	20.0
Indeno(1,2,3-cd)pyrene	1.156	1.182	0.500	2.3	20.0
Dibenzo(a,h)anthracene	1.024	1.064	0.400	3.9	20.0
Benzo(g,h,i)perylene	1.096	1.166	0.500	6.3	20.0

7G - FORM VII SV-3  
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Instrument ID: S6 Calibration Date: 06/28/2013 Time: 10:20  
 Lab File ID: S6B4741.D Init. Calib. Date(s): 06/27/2013 06/27/2013  
 EPA Sample No. (SSTD020##) SSTD0256C Init. Calib. Time(s): 14:04 16:11  
 GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	RRF	RRF025	MIN RRF	%D	MAX %D
Nitrobenzene-d5	0.338	0.367	0.010	8.6	20.0
2-Fluorobiphenyl	1.200	1.408	0.010	17.3	20.0
Terphenyl-d14	0.584	0.733	0.010	25.4	20.0
Phenol-d5	1.327	1.409	0.010	6.1	20.0
2-Fluorophenol	0.972	1.034	0.010	6.4	20.0
2,4,6-Tribromophenol	0.099	0.118	0.010	19.6	20.0

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S6.I\130625.B\S6B4631D.d  
 Lab Smp Id: SSTD0256Y Client Smp ID: SSTD0256Y  
 Inj Date : 25-JUN-2013 15:53  
 Operator : PK SRC: PK Inst ID: S6.i  
 Smp Info : SSTD0256Y,SSTD0256Y  
 Misc Info : 2,3  
 Comment :  
 Method : \\avogadro\organics\S6.I\130625.B\S6\_8270C\_N.m  
 Meth Date : 26-Jun-2013 10:11 S6.i Quant Type: ISTD  
 Cal Date : 21-JUN-2013 16:38 Cal File: S6B4574.d  
 Als bottle: 1 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: allnew.sub  
 Target Version: 4.14  
 Processing Host: TARGET113

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

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

Compounds	QUANT	SIG	AMOUNTS					
			RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
\$ 109 1,4-Dioxane-d8	96		2.718	2.718 (0.510)		15411	25.0000	23(Q)
108 1,4-Dioxane	58		2.747	2.747 (0.515)		6473	25.0000	20(Q)
1 N-Nitrosodimethylamine	74		3.029	3.029 (0.568)		43864	25.0000	25
2 Pyridine	79		3.070	3.070 (0.576)		49823	25.0000	19
\$ 3 2-Fluorophenol	112		4.240	4.240 (0.795)		105258	25.0000	27
101 Benzaldehyde	77		4.968	4.968 (0.932)		113617	25.0000	29
\$ 5 Phenol-d5	99		5.021	5.021 (0.942)		162837	25.0000	29
6 Phenol	94		5.033	5.033 (0.944)		180407	25.0000	31
7 Aniline	66		5.033	5.033 (0.944)		125157	25.0000	28
8 bis(2-Chloroethyl)Ether	63		5.103	5.103 (0.957)		59904	25.0000	28
10 2-Chlorophenol	128		5.162	5.162 (0.968)		148681	25.0000	29
11 1,3-Dichlorobenzene	146		5.291	5.291 (0.992)		162259	25.0000	27
* 12 1,4-Dichlorobenzene-d4	152		5.332	5.332 (1.000)		190441	40.0000	
13 1,4-Dichlorobenzene	146		5.350	5.350 (1.003)		184597	25.0000	30
117 2-Ethyl-1-hexanol	57		5.379	5.379 (1.009)		61280	25.0000	30
15 Benzyl Alcohol	108		5.444	5.444 (1.021)		105494	25.0000	29
16 1,2-Dichlorobenzene	146		5.479	5.479 (1.028)		168797	25.0000	28
17 2-Methylphenol	108		5.532	5.532 (1.037)		140060	25.0000	29
18 2,2'-oxybis(1-Chloropropane)	45		5.556	5.556 (1.042)		55303	25.0000	32
99 Acetophenone	105		5.661	5.661 (1.062)		276542	25.0000	30

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
19 N-Nitroso-di-n-propylamine	70	5.661	5.661	(1.062)	107354	25.0000	26
20 4-Methylphenol	108	5.661	5.661	(1.062)	171378	25.0000	30
21 Hexachloroethane	117	5.761	5.761	(1.080)	68704	25.0000	29
\$ 22 Nitrobenzene-d5	82	5.791	5.791	(0.905)	224204	25.0000	27
23 Nitrobenzene	77	5.808	5.808	(0.908)	202701	25.0000	27
24 Isophorone	82	6.002	6.002	(0.938)	357340	25.0000	29
25 2-Nitrophenol	139	6.073	6.073	(0.949)	118079	25.0000	29
26 2,4-Dimethylphenol	107	6.102	6.102	(0.954)	213909	25.0000	29
27 bis(2-Chloroethoxy)methane	93	6.173	6.173	(0.965)	172243	25.0000	28
28 Benzoic Acid	105	6.184	6.184	(0.967)	144540	25.0000	24
29 2,4-Dichlorophenol	162	6.272	6.272	(0.981)	230234	25.0000	28
30 1,2,4-Trichlorobenzene	180	6.349	6.349	(0.993)	270672	25.0000	26
* 31 Naphthalene-d8	136	6.396	6.396	(1.000)	946542	40.0000	
32 Naphthalene	128	6.413	6.413	(1.003)	565732	25.0000	27
115 alpha-Terpineol	59	6.408	6.408	(1.002)	89380	25.0000	30
33 4-Chloroaniline	127	6.449	6.449	(1.008)	240256	25.0000	28
34 Hexachlorobutadiene	225	6.519	6.519	(1.019)	195790	25.0000	25
102 Caprolactam	113	6.748	6.748	(1.055)	81415	25.0000	31
35 4-Chloro-3-Methylphenol	107	6.848	6.848	(1.071)	219907	25.0000	30
36 2-Methylnaphthalene	142	6.989	6.989	(1.093)	492202	25.0000	28
114 1-Methylnaphthalene	142	7.072	7.072	(1.106)	464793	25.0000	28
38 Hexachlorocyclopentadiene	237	7.124	7.124	(0.906)	224413	25.0000	24
112 1,2,4,5-Tetrachlorobenzene	216	7.130	7.130	(0.907)	441405	25.0000	27
39 2,4,6-Trichlorophenol	196	7.218	7.218	(0.918)	282539	25.0000	28
40 2,4,5-Trichlorophenol	196	7.254	7.254	(0.922)	309658	25.0000	29
\$ 41 2-Fluorobiphenyl	172	7.289	7.289	(0.927)	820013	25.0000	28
98 1,1'-Biphenyl	154	7.371	7.371	(0.937)	766587	25.0000	27
42 2-Chloronaphthalene	162	7.395	7.395	(0.940)	580686	25.0000	28
43 2-Nitroaniline	65	7.471	7.471	(0.950)	156648	25.0000	28
44 Dimethylphthalate	163	7.618	7.618	(0.969)	876795	25.0000	29
45 2,6-Dinitrotoluene	165	7.671	7.671	(0.975)	202333	25.0000	29
46 Acenaphthylene	152	7.747	7.747	(0.985)	1004600	25.0000	29
47 3-Nitroaniline	138	7.818	7.818	(0.994)	164375	25.0000	30
* 48 Acenaphthene-d10	164	7.865	7.865	(1.000)	903234	40.0000	
49 Acenaphthene	153	7.888	7.888	(1.003)	655101	25.0000	28
50 2,4-Dinitrophenol	184	7.894	7.894	(1.004)	111971	25.0000	18(aQ)
51 4-Nitrophenol	109	7.941	7.941	(1.010)	213518	25.0000	28
53 2,4-Dinitrotoluene	165	8.006	8.006	(1.018)	287025	25.0000	29
52 Dibenzofuran	168	8.035	8.035	(1.022)	1038892	25.0000	28
110 2,3,4,6-Tetrachlorophenol	232	8.135	8.135	(1.034)	337018	25.0000	28
54 Diethylphthalate	149	8.206	8.206	(1.043)	843817	25.0000	30
56 4-Chlorophenyl-phenylether	204	8.311	8.311	(1.057)	590265	25.0000	28
55 Fluorene	166	8.323	8.323	(1.058)	928430	25.0000	29
57 4-Nitroaniline	138	8.329	8.329	(1.059)	192955	25.0000	28
58 4,6-Dinitro-2-methylphenol	198	8.352	8.352	(0.915)	212929	25.0000	25
59 N-Nitrosodiphenylamine	169	8.405	8.405	(0.921)	847598	25.0000	30
97 Azobenzene	77	8.446	8.446	(0.925)	911776	25.0000	30
\$ 60 2,4,6-Tribromophenol	330	8.523	8.523	(0.934)	235627	25.0000	30
61 4-Bromophenyl-phenylether	248	8.723	8.723	(0.956)	422691	25.0000	29
62 Hexachlorobenzene	284	8.799	8.799	(0.964)	443875	25.0000	29
100 Atrazine	200	8.846	8.846	(0.969)	145358	25.0000	27
63 Pentachlorophenol	266	8.958	8.958	(0.981)	335008	25.0000	27(Q)
111 Pentachloronitrobenzene	237	8.975	8.975	(0.983)	227403	25.0000	29
* 64 Phenanthrene-d10	188	9.128	9.128	(1.000)	2415889	40.0000	

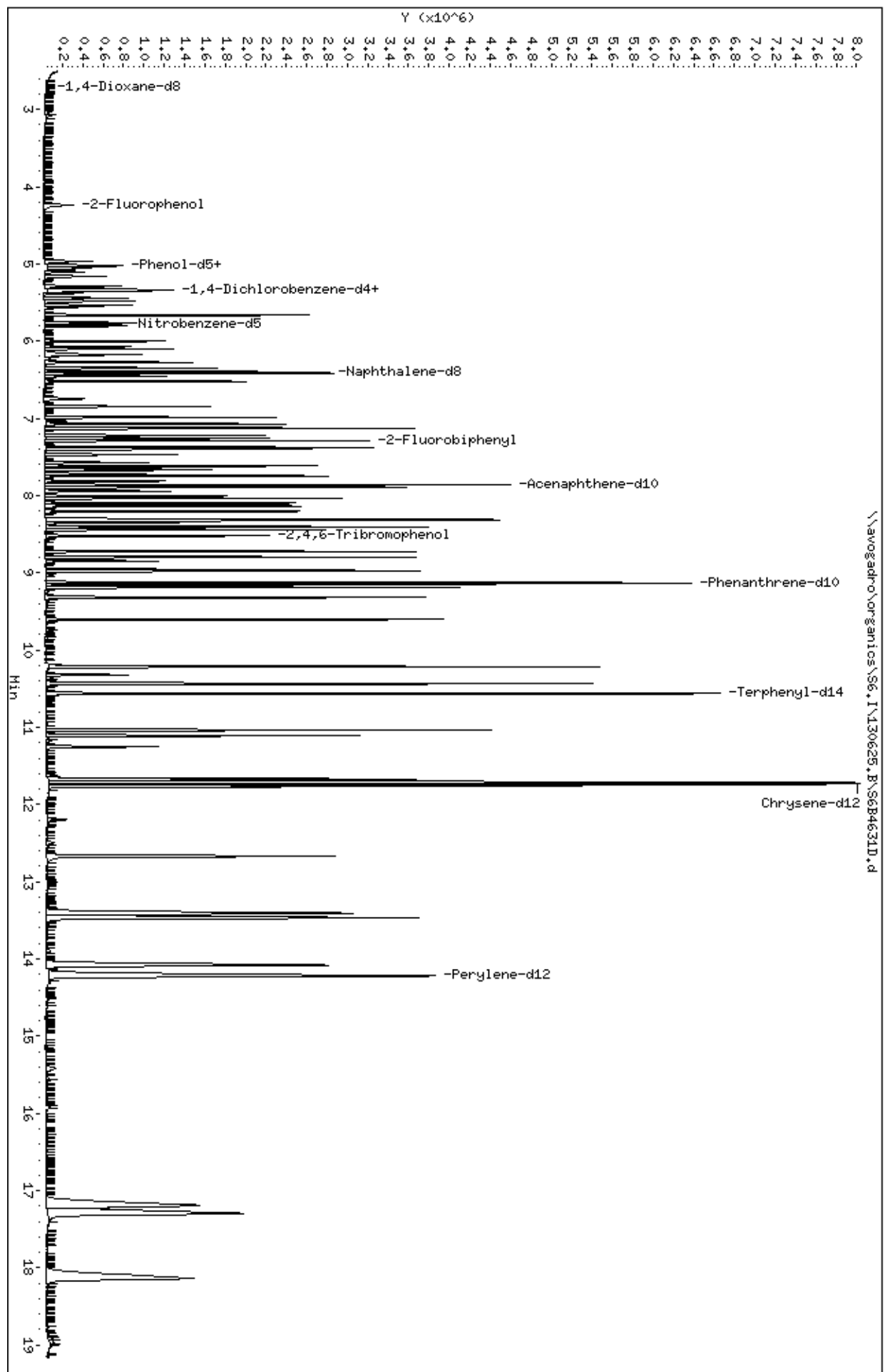
Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
65 Phenanthrene	178	9.146	9.146	(1.002)	1516132	25.0000	28
66 Anthracene	178	9.193	9.193	(1.007)	1578164	25.0000	29
67 Carbazole	167	9.322	9.322	(1.021)	1332318	25.0000	27
68 Di-n-butylphthalate	149	9.604	9.604	(1.052)	1560218	25.0000	30
69 Fluoranthene	202	10.221	10.221	(1.120)	2218396	25.0000	28
70 Benzidine	184	10.321	10.321	(0.879)	317989	25.0000	19(a)
71 Pyrene	202	10.438	10.438	(0.889)	2247888	25.0000	29
\$ 72 Terphenyl-d14	244	10.562	10.562	(0.900)	1820377	25.0000	29
73 Butylbenzylphthalate	149	11.038	11.038	(0.940)	789750	25.0000	32
74 3,3'-Dichlorobenzidine	252	11.672	11.672	(0.994)	1026852	25.0000	29
78 bis(2-Ethylhexyl)phthalate	149	11.707	11.707	(0.997)	1230001	25.0000	33
75 Benzo(a)anthracene	228	11.713	11.713	(0.998)	2890161	25.0000	30
* 76 Chrysene-d12	240	11.737	11.737	(1.000)	3841965	40.0000	
77 Chrysene	228	11.766	11.766	(1.002)	2454280	25.0000	29
79 Di-n-octylphthalate	149	12.671	12.671	(0.891)	1901278	25.0000	31
80 Benzo(b)fluoranthene	252	13.405	13.405	(0.943)	2805539	25.0000	29
81 Benzo(k)fluoranthene	252	13.464	13.464	(0.947)	2772570	25.0000	29
82 Benzo(a)pyrene	252	14.081	14.081	(0.990)	2693130	25.0000	29
* 83 Perylene-d12	264	14.222	14.222	(1.000)	3901521	40.0000	
84 Indeno(1,2,3-cd)pyrene	276	17.195	17.195	(1.209)	2771610	25.0000	27
85 Dibenzo(a,h)anthracene	278	17.295	17.295	(1.216)	2772359	25.0000	29
86 Benzo(g,h,i)perylene	276	18.135	18.135	(1.275)	2723965	25.0000	28

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\organicos\S6.I\130625.B\S6B4631D.d  
 Date : 25-JUN-2013 15:53  
 Client ID: SSTID0256Y  
 Sample Info: SSTID0256Y,SSTID0256Y  
 Volume Injected (uL): 1.0  
 Column phase: Rxi-SSi1 MS

Instrument: S6.i  
 Operator: PK SRC: PK  
 Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S6.I\130626A.B\S6B4671A.d  
 Lab Smp Id: SSTD0256A Client Smp ID: SSTD0256A  
 Inj Date : 26-JUN-2013 18:26  
 Operator : PK SRC: PK Inst ID: S6.i  
 Smp Info : SSTD0256A,SSTD0256A  
 Misc Info : 2,3  
 Comment :  
 Method : \\avogadro\organics\S6.I\130626A.B\S6\_8270C\_N.m  
 Meth Date : 27-Jun-2013 14:57 S6.i Quant Type: ISTD  
 Cal Date : 26-JUN-2013 14:43 Cal File: S6B4666.d  
 Als bottle: 1 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: allnew.sub  
 Target Version: 4.14  
 Processing Host: TARGET113

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

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

Compounds	QUANT	SIG	AMOUNTS					
			RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
\$ 109 1,4-Dioxane-d8	96	====	2.693	2.693	(0.507)	5083	25.0000	34
108 1,4-Dioxane	58		2.717	2.717	(0.512)	1536	25.0000	22(Q)
1 N-Nitrosodimethylamine	74		3.005	3.005	(0.566)	13077	25.0000	29
2 Pyridine	79		3.046	3.046	(0.574)	21564	25.0000	30(T)
\$ 3 2-Fluorophenol	112		4.215	4.215	(0.794)	32024	25.0000	26
101 Benzaldehyde	77		4.943	4.943	(0.931)	36477	25.0000	30
\$ 5 Phenol-d5	99		4.996	4.996	(0.941)	52931	25.0000	29
6 Phenol	94		5.008	5.008	(0.944)	56059	25.0000	29
7 Aniline	66		5.008	5.008	(0.944)	41477	25.0000	26
8 bis(2-Chloroethyl)Ether	63		5.079	5.079	(0.957)	20151	25.0000	32
10 2-Chlorophenol	128		5.137	5.137	(0.968)	45382	25.0000	28
11 1,3-Dichlorobenzene	146		5.267	5.267	(0.992)	54849	25.0000	29
* 12 1,4-Dichlorobenzene-d4	152		5.308	5.308	(1.000)	62236	40.0000	
13 1,4-Dichlorobenzene	146		5.320	5.320	(1.002)	52895	25.0000	26
117 2-Ethyl-1-hexanol	57		5.355	5.355	(1.009)	16884	25.0000	28
15 Benzyl Alcohol	108		5.419	5.419	(1.021)	33584	25.0000	28
16 1,2-Dichlorobenzene	146		5.455	5.455	(1.028)	55036	25.0000	28
17 2-Methylphenol	108		5.508	5.508	(1.038)	45462	25.0000	28
18 2,2'-oxybis(1-Chloropropane)	45		5.525	5.525	(1.041)	16380	25.0000	31
99 Acetophenone	105		5.637	5.637	(1.062)	90280	25.0000	29

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
19 N-Nitroso-di-n-propylamine	70	5.637	5.637	(1.062)	35859	25.0000	28
20 4-Methylphenol	108	5.637	5.637	(1.062)	53612	25.0000	27
21 Hexachloroethane	117	5.737	5.737	(1.081)	22732	25.0000	28
\$ 22 Nitrobenzene-d5	82	5.766	5.766	(0.906)	70081	25.0000	28
23 Nitrobenzene	77	5.784	5.784	(0.909)	70610	25.0000	29
24 Isophorone	82	5.978	5.978	(0.939)	110894	25.0000	27
25 2-Nitrophenol	139	6.048	6.048	(0.950)	37636	25.0000	27(Q)
26 2,4-Dimethylphenol	107	6.072	6.072	(0.954)	69074	25.0000	29
27 bis(2-Chloroethoxy)methane	93	6.148	6.148	(0.966)	54797	25.0000	28
28 Benzoic Acid	105	6.166	6.166	(0.969)	58564	25.0000	28
29 2,4-Dichlorophenol	162	6.248	6.248	(0.982)	75610	25.0000	28
30 1,2,4-Trichlorobenzene	180	6.318	6.318	(0.993)	92524	25.0000	28
* 31 Naphthalene-d8	136	6.365	6.365	(1.000)	306250	40.0000	
32 Naphthalene	128	6.383	6.383	(1.003)	179263	25.0000	27
115 alpha-Terpineol	59	6.383	6.383	(1.003)	27577	25.0000	27
33 4-Chloroaniline	127	6.424	6.424	(1.009)	81858	25.0000	29
34 Hexachlorobutadiene	225	6.489	6.489	(1.019)	70155	25.0000	28
102 Caprolactam	113	6.718	6.718	(1.055)	28407	25.0000	34
35 4-Chloro-3-Methylphenol	107	6.824	6.824	(1.072)	68974	25.0000	27
36 2-Methylnaphthalene	142	6.959	6.959	(1.093)	160032	25.0000	28
114 1-Methylnaphthalene	142	7.041	7.041	(1.106)	147432	25.0000	27
38 Hexachlorocyclopentadiene	237	7.094	7.094	(0.906)	77052	25.0000	29
112 1,2,4,5-Tetrachlorobenzene	216	7.100	7.100	(0.906)	143873	25.0000	27
39 2,4,6-Trichlorophenol	196	7.194	7.194	(0.918)	97956	25.0000	28
40 2,4,5-Trichlorophenol	196	7.223	7.223	(0.922)	104272	25.0000	28
\$ 41 2-Fluorobiphenyl	172	7.258	7.258	(0.926)	276511	25.0000	29
98 1,1'-Biphenyl	154	7.347	7.347	(0.938)	259814	25.0000	28
42 2-Chloronaphthalene	162	7.364	7.364	(0.940)	194872	25.0000	28
43 2-Nitroaniline	65	7.441	7.441	(0.950)	53329	25.0000	29
44 Dimethylphthalate	163	7.587	7.587	(0.969)	304026	25.0000	30
45 2,6-Dinitrotoluene	165	7.640	7.640	(0.975)	63291	25.0000	27
46 Acenaphthylene	152	7.717	7.717	(0.985)	332828	25.0000	29
47 3-Nitroaniline	138	7.787	7.787	(0.994)	57694	25.0000	30
* 48 Acenaphthene-d10	164	7.834	7.834	(1.000)	301166	40.0000	
49 Acenaphthene	153	7.864	7.864	(1.004)	228839	25.0000	29
50 2,4-Dinitrophenol	184	7.870	7.870	(1.004)	53655	25.0000	29(Q)
51 4-Nitrophenol	109	7.917	7.917	(1.011)	75870	25.0000	28
53 2,4-Dinitrotoluene	165	7.981	7.981	(1.019)	97719	25.0000	28
52 Dibenzofuran	168	8.005	8.005	(1.022)	348375	25.0000	28
110 2,3,4,6-Tetrachlorophenol	232	8.105	8.105	(1.034)	116035	25.0000	28
54 Diethylphthalate	149	8.175	8.175	(1.043)	285012	25.0000	29
56 4-Chlorophenyl-phenylether	204	8.275	8.275	(1.056)	203504	25.0000	28
55 Fluorene	166	8.287	8.287	(1.058)	316849	25.0000	29
57 4-Nitroaniline	138	8.298	8.298	(1.059)	67721	25.0000	30
58 4,6-Dinitro-2-methylphenol	198	8.322	8.322	(0.917)	79613	25.0000	26
59 N-Nitrosodiphenylamine	169	8.375	8.375	(0.922)	285974	25.0000	27
97 Azobenzene	77	8.410	8.410	(0.926)	313680	25.0000	29
\$ 60 2,4,6-Tribromophenol	330	8.492	8.492	(0.935)	74198	25.0000	25
61 4-Bromophenyl-phenylether	248	8.686	8.686	(0.957)	136021	25.0000	26
62 Hexachlorobenzene	284	8.757	8.757	(0.964)	152520	25.0000	27
100 Atrazine	200	8.810	8.810	(0.970)	55924	25.0000	29
63 Pentachlorophenol	266	8.915	8.915	(0.982)	114997	25.0000	26
111 Pentachloronitrobenzene	237	8.933	8.933	(0.984)	75407	25.0000	25
* 64 Phenanthrene-d10	188	9.080	9.080	(1.000)	866802	40.0000	



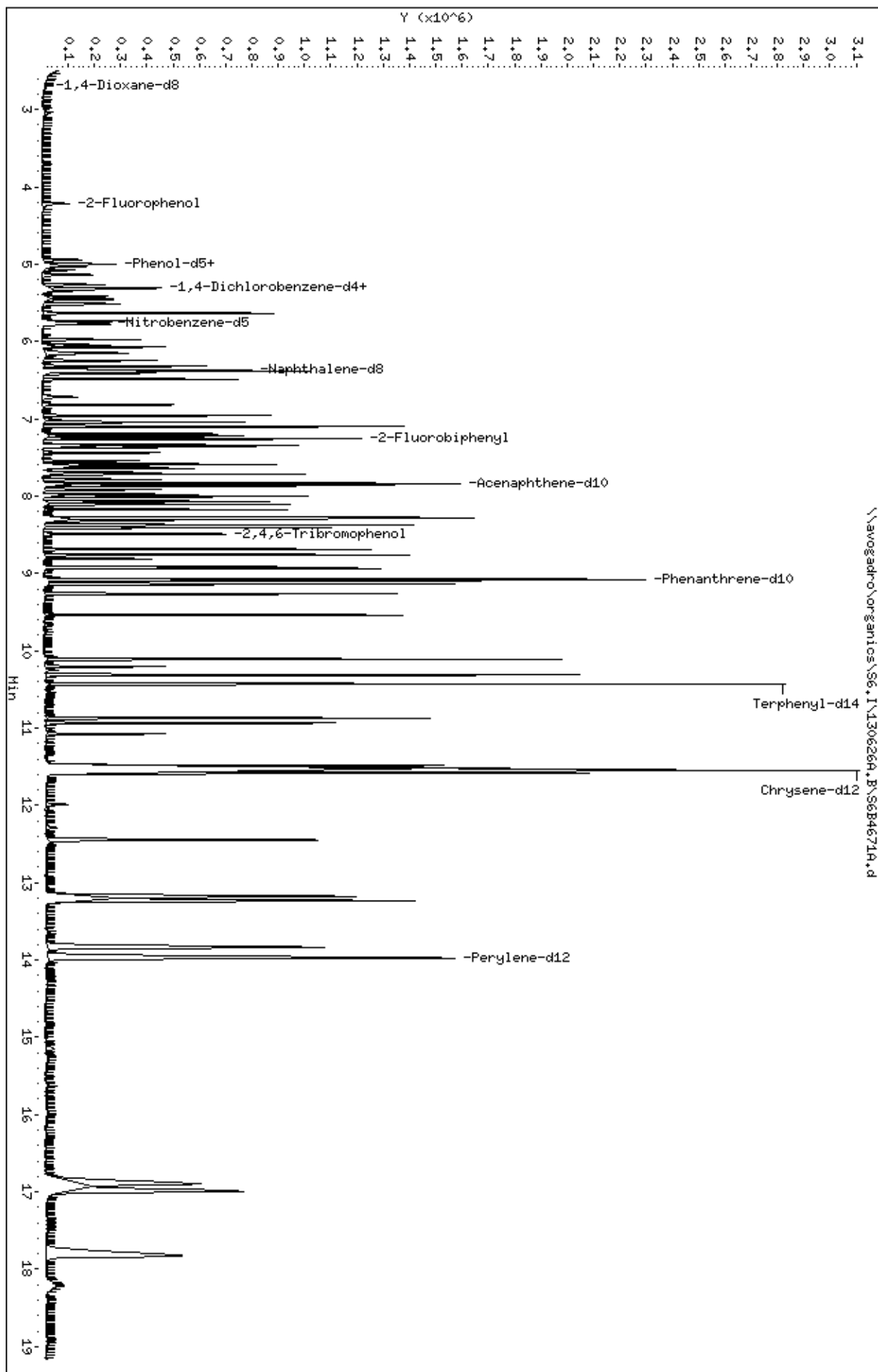
Compounds	QUANT		SIG				AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)	
65 Phenanthrene	178	9.098	9.098	(1.002)	543300	25.0000	28	
66 Anthracene	178	9.139	9.139	(1.006)	554088	25.0000	28	
67 Carbazole	167	9.268	9.268	(1.021)	485142	25.0000	29	
68 Di-n-butylphthalate	149	9.538	9.538	(1.050)	547726	25.0000	29	
69 Fluoranthene	202	10.114	10.114	(1.114)	809222	25.0000	29	
70 Benzidine	184	10.208	10.208	(0.884)	161243	25.0000	34	
71 Pyrene	202	10.314	10.314	(0.893)	841836	25.0000	29	
\$ 72 Terphenyl-d14	244	10.431	10.431	(0.903)	666336	25.0000	28	
73 Butylbenzylphthalate	149	10.872	10.872	(0.941)	280578	25.0000	26	
74 3,3'-Dichlorobenzidine	252	11.483	11.483	(0.994)	396360	25.0000	28	
78 bis(2-Ethylhexyl)phthalate	149	11.512	11.512	(0.997)	424155	25.0000	25	
75 Benzo(a)anthracene	228	11.530	11.530	(0.998)	1036992	25.0000	26	
* 76 Chrysene-d12	240	11.548	11.548	(1.000)	1504579	40.0000		
77 Chrysene	228	11.583	11.583	(1.003)	911542	25.0000	28	
79 Di-n-octylphthalate	149	12.447	12.447	(0.891)	702698	25.0000	28	
80 Benzo(b)fluoranthene	252	13.175	13.175	(0.943)	1057994	25.0000	28	
81 Benzo(k)fluoranthene	252	13.234	13.234	(0.947)	1104807	25.0000	31	
82 Benzo(a)pyrene	252	13.839	13.839	(0.990)	1026641	25.0000	29	
* 83 Perylene-d12	264	13.974	13.974	(1.000)	1474612	40.0000		
84 Indeno(1,2,3-cd)pyrene	276	16.889	16.889	(1.209)	1098634	25.0000	26	
85 Dibenzo(a,h)anthracene	278	16.988	16.988	(1.216)	1009186	25.0000	27	
86 Benzo(g,h,i)perylene	276	17.817	17.817	(1.275)	1063062	25.0000	28	

QC Flag Legend

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

Data File: \\avogadro\organicos\S6,I\1306264,B\S6B4671A.d  
Date : 26-JUN-2013 18:26  
Client ID: SSTID02564  
Sample Info: SSTID02564,SSTID02564  
Volume Injected (uL): 1.0  
Column phase: Rxi-5S11 MS

Instrument: S6.i  
Operator: PK SRC: PK  
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S6.I\130628.B\S6B4741.d  
 Lab Smp Id: SSTD0256C Client Smp ID: SSTD0256C  
 Inj Date : 28-JUN-2013 10:20  
 Operator : PK SRC: PK Inst ID: S6.i  
 Smp Info : SSTD0256C,SSTD0256C  
 Misc Info : 2,3  
 Comment :  
 Method : \\avogadro\organics\S6.I\130628.B\S6\_8270C\_N.m  
 Meth Date : 28-Jun-2013 14:20 S6.i Quant Type: ISTD  
 Cal Date : 27-JUN-2013 16:11 Cal File: S6B4716.d  
 Als bottle: 1 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: allnew.sub  
 Target Version: 4.14  
 Processing Host: TARGET113

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

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

Compounds	QUANT	SIG	AMOUNTS					
			RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
\$ 109 1,4-Dioxane-d8	96		2.599	2.599	(0.496)	4909	25.0000	26
108 1,4-Dioxane	58		2.623	2.623	(0.501)	1754	25.0000	28(Q)
1 N-Nitrosodimethylamine	74		2.910	2.910	(0.556)	13169	25.0000	31
2 Pyridine	79		2.952	2.952	(0.564)	22567	25.0000	30(T)
\$ 3 2-Fluorophenol	112		4.138	4.138	(0.790)	28553	25.0000	27
101 Benzaldehyde	77		4.867	4.867	(0.929)	25255	25.0000	29
\$ 5 Phenol-d5	99		4.926	4.926	(0.941)	38890	25.0000	26
6 Phenol	94		4.938	4.938	(0.943)	41612	25.0000	27
7 Aniline	66		4.938	4.938	(0.943)	26208	25.0000	25
8 bis(2-Chloroethyl)Ether	63		5.008	5.008	(0.956)	11981	25.0000	25
10 2-Chlorophenol	128		5.061	5.061	(0.966)	33924	25.0000	26
11 1,3-Dichlorobenzene	146		5.190	5.190	(0.991)	38751	25.0000	26
* 12 1,4-Dichlorobenzene-d4	152		5.237	5.237	(1.000)	44175	40.0000	
13 1,4-Dichlorobenzene	146		5.249	5.249	(1.002)	41074	25.0000	28
117 2-Ethyl-1-hexanol	57		5.284	5.284	(1.009)	10550	25.0000	28
15 Benzyl Alcohol	108		5.343	5.343	(1.020)	23280	25.0000	28
16 1,2-Dichlorobenzene	146		5.378	5.378	(1.027)	37710	25.0000	26
17 2-Methylphenol	108		5.437	5.437	(1.038)	32119	25.0000	27
18 2,2'-oxybis(1-Chloropropane)	45		5.455	5.455	(1.042)	8722	25.0000	27
99 Acetophenone	105		5.566	5.566	(1.063)	55860	25.0000	27

Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
19 N-Nitroso-di-n-propylamine	70	5.566	5.566	(1.063)	23113	25.0000	28
20 4-Methylphenol	108	5.566	5.566	(1.063)	34190	25.0000	25
21 Hexachloroethane	117	5.660	5.660	(1.081)	15811	25.0000	26
\$ 22 Nitrobenzene-d5	82	5.690	5.690	(0.904)	43675	25.0000	27
23 Nitrobenzene	77	5.707	5.707	(0.907)	43892	25.0000	29
24 Isophorone	82	5.901	5.901	(0.937)	68243	25.0000	27
25 2-Nitrophenol	139	5.978	5.978	(0.950)	22954	25.0000	27
26 2,4-Dimethylphenol	107	6.001	6.001	(0.953)	41204	25.0000	28
27 bis(2-Chloroethoxy)methane	93	6.077	6.077	(0.965)	35064	25.0000	28
28 Benzoic Acid	105	6.083	6.083	(0.966)	31281	25.0000	24
29 2,4-Dichlorophenol	162	6.177	6.177	(0.981)	40235	25.0000	27
30 1,2,4-Trichlorobenzene	180	6.248	6.248	(0.993)	44129	25.0000	27
* 31 Naphthalene-d8	136	6.295	6.295	(1.000)	190576	40.0000	
32 Naphthalene	128	6.312	6.312	(1.003)	118963	25.0000	28
115 alpha-Terpineol	59	6.312	6.312	(1.003)	15525	25.0000	29
33 4-Chloroaniline	127	6.354	6.354	(1.009)	49363	25.0000	27
34 Hexachlorobutadiene	225	6.418	6.418	(1.020)	27923	25.0000	28
102 Caprolactam	113	6.641	6.641	(1.055)	15387	25.0000	28
35 4-Chloro-3-Methylphenol	107	6.753	6.753	(1.073)	38100	25.0000	26
36 2-Methylnaphthalene	142	6.888	6.888	(1.094)	91090	25.0000	27
114 1-Methylnaphthalene	142	6.971	6.971	(1.107)	83927	25.0000	27
38 Hexachlorocyclopentadiene	237	7.023	7.023	(0.905)	31707	25.0000	33
112 1,2,4,5-Tetrachlorobenzene	216	7.029	7.029	(0.905)	52457	25.0000	29
39 2,4,6-Trichlorophenol	196	7.123	7.123	(0.918)	35749	25.0000	28
40 2,4,5-Trichlorophenol	196	7.153	7.153	(0.921)	37618	25.0000	28
\$ 41 2-Fluorobiphenyl	172	7.188	7.188	(0.926)	118934	25.0000	29
98 1,1'-Biphenyl	154	7.270	7.270	(0.936)	129109	25.0000	29
42 2-Chloronaphthalene	162	7.294	7.294	(0.939)	98113	25.0000	29
43 2-Nitroaniline	65	7.370	7.370	(0.949)	25963	25.0000	27
44 Dimethylphthalate	163	7.517	7.517	(0.968)	123570	25.0000	28
45 2,6-Dinitrotoluene	165	7.570	7.570	(0.975)	30007	25.0000	28
46 Acenaphthylene	152	7.640	7.640	(0.984)	160333	25.0000	28
47 3-Nitroaniline	138	7.711	7.711	(0.993)	29685	25.0000	28
* 48 Acenaphthene-d10	164	7.764	7.764	(1.000)	135160	40.0000	
49 Acenaphthene	153	7.787	7.787	(1.003)	107227	25.0000	28
50 2,4-Dinitrophenol	184	7.793	7.793	(1.004)	18944	25.0000	26(Q)
51 4-Nitrophenol	109	7.846	7.846	(1.011)	30779	25.0000	26
53 2,4-Dinitrotoluene	165	7.905	7.905	(1.018)	41185	25.0000	28
52 Dibenzofuran	168	7.928	7.928	(1.021)	152787	25.0000	28
110 2,3,4,6-Tetrachlorophenol	232	8.034	8.034	(1.035)	33319	25.0000	26
54 Diethylphthalate	149	8.104	8.104	(1.044)	125022	25.0000	28
56 4-Chlorophenyl-phenylether	204	8.210	8.210	(1.058)	73293	25.0000	30
55 Fluorene	166	8.216	8.216	(1.058)	132196	25.0000	29
57 4-Nitroaniline	138	8.222	8.222	(1.059)	34922	25.0000	29
58 4,6-Dinitro-2-methylphenol	198	8.251	8.251	(0.916)	28182	25.0000	27
59 N-Nitrosodiphenylamine	169	8.304	8.304	(0.922)	112988	25.0000	28
97 Azobenzene	77	8.340	8.340	(0.926)	137470	25.0000	29
\$ 60 2,4,6-Tribromophenol	330	8.416	8.416	(0.935)	22942	25.0000	30
61 4-Bromophenyl-phenylether	248	8.616	8.616	(0.957)	45640	25.0000	30
62 Hexachlorobenzene	284	8.686	8.686	(0.965)	49382	25.0000	30
100 Atrazine	200	8.739	8.739	(0.971)	17801	25.0000	29
63 Pentachlorophenol	266	8.845	8.845	(0.982)	29406	25.0000	27
111 Pentachloronitrobenzene	237	8.862	8.862	(0.984)	20757	25.0000	28
* 64 Phenanthrene-d10	188	9.003	9.003	(1.000)	310573	40.0000	

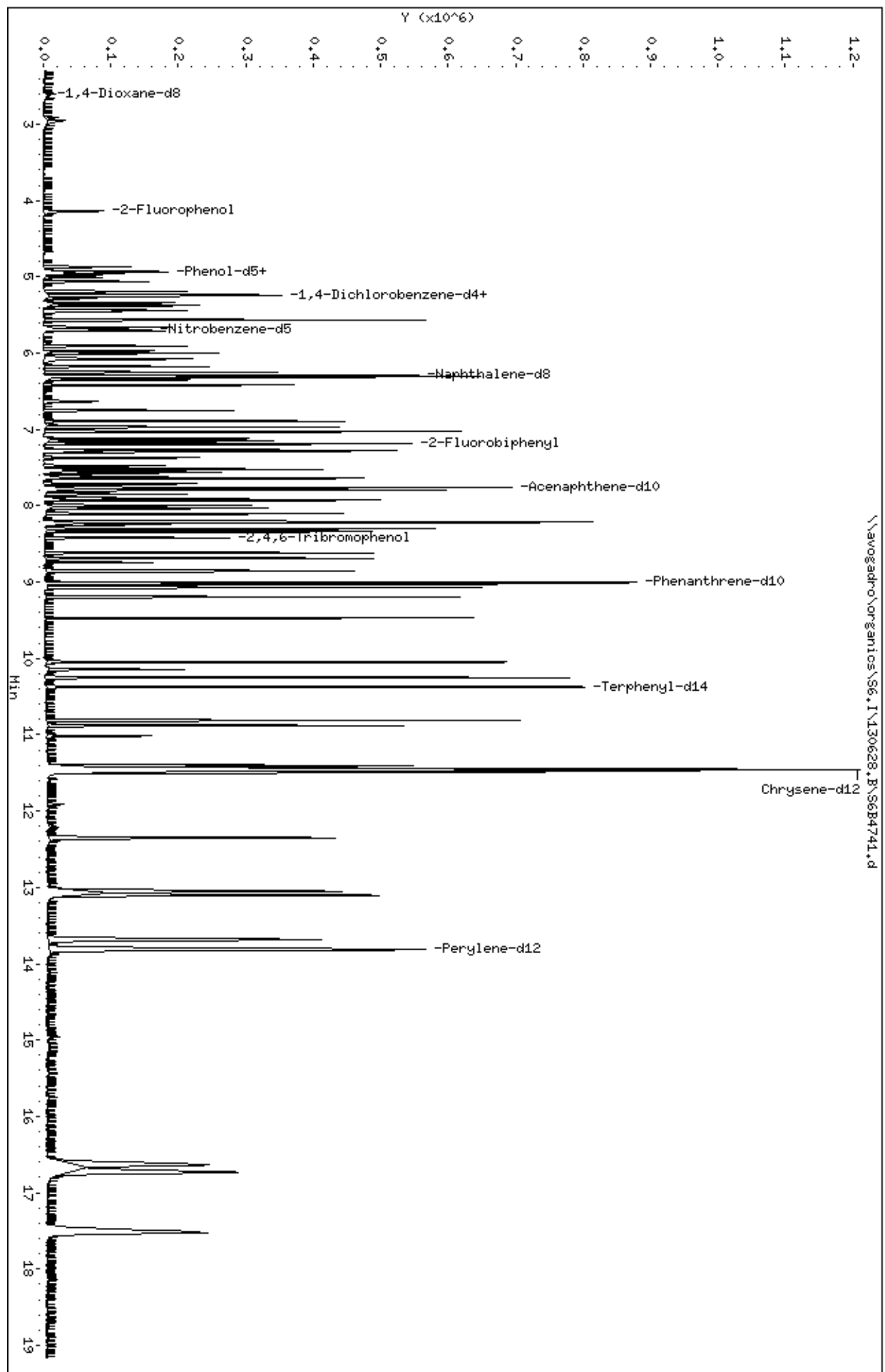
Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)
65 Phenanthrene	178	9.027	9.027	(1.003)	208829	25.0000	28
66 Anthracene	178	9.068	9.068	(1.007)	210310	25.0000	28
67 Carbazole	167	9.197	9.197	(1.022)	195750	25.0000	28
68 Di-n-butylphthalate	149	9.473	9.473	(1.052)	234508	25.0000	29
69 Fluoranthene	202	10.049	10.049	(1.116)	258080	25.0000	26
70 Benzidine	184	10.143	10.143	(0.885)	66557	25.0000	28
71 Pyrene	202	10.249	10.249	(0.894)	268438	25.0000	30
\$ 72 Terphenyl-d14	244	10.372	10.372	(0.905)	198389	25.0000	31
73 Butylbenzylphthalate	149	10.813	10.813	(0.943)	115433	25.0000	30
74 3,3'-Dichlorobenzidine	252	11.407	11.407	(0.995)	118672	25.0000	28
78 bis(2-Ethylhexyl)phthalate	149	11.442	11.442	(0.998)	173858	25.0000	30
75 Benzo(a)anthracene	228	11.448	11.448	(0.998)	308518	25.0000	29
* 76 Chrysene-d12	240	11.465	11.465	(1.000)	433229	40.0000	
77 Chrysene	228	11.495	11.495	(1.003)	274538	25.0000	28
79 Di-n-octylphthalate	149	12.353	12.353	(0.894)	293940	25.0000	31
80 Benzo(b)fluoranthene	252	13.052	13.052	(0.945)	330946	25.0000	29
81 Benzo(k)fluoranthene	252	13.105	13.105	(0.949)	333652	25.0000	29
82 Benzo(a)pyrene	252	13.686	13.686	(0.991)	319305	25.0000	29
* 83 Perylene-d12	264	13.816	13.816	(1.000)	457759	40.0000	
84 Indeno(1,2,3-cd)pyrene	276	16.630	16.630	(1.204)	338273	25.0000	26
85 Dibenzo(a,h)anthracene	278	16.730	16.730	(1.211)	304417	25.0000	26
86 Benzo(g,h,i)perylene	276	17.523	17.523	(1.268)	333523	25.0000	26

QC Flag Legend

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

Data File: \\avogadro\organics\S6,I\130628,B\S6B4741.d  
Date: 28-JUN-2013 10:20  
Client ID: SSTID0256C  
Sample Info: SSTID0256C,SSTID0256C  
Volume Injected (uL): 1.0  
Column phase: Rxi-5S11 MS

Instrument: S6.i  
Operator: PK SRC: PK  
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S6.I\130621.B\S6B4570D.d  
 Lab Smp Id: DFTPP6w Client Smp ID: DFTPP6w  
 Inj Date : 21-JUN-2013 14:16  
 Operator : PK SRC: PK Inst ID: S6.i  
 Smp Info : DFTPP6w,DFTPP6w  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\S6.I\130621.B\S6\_dftppSOM.m  
 Meth Date : 21-Jun-2013 14:34 pkaczorows Quant Type: ESTD  
 Cal Date : Cal File:  
 Als bottle: 50 QC Sample: DFTPP  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET113

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				
4.775	4.776	-0.001	198	856320			0.00- 100.00	100.00	
4.775	4.776	-0.001	51	297901			10.00- 80.00	34.79	
4.775	4.776	-0.001	68	0	0.0	0.0	0.00- 2.00	0.00	
4.775	4.776	-0.001	69	391232			0.00- 0.00	45.69	
4.775	4.776	-0.001	70	4481			0.00- 2.00	1.15	
4.775	4.776	-0.001	127	346552			10.00- 80.00	40.47	
4.775	4.776	-0.001	197	0	0.0	0.0	0.00- 2.00	0.00	
4.775	4.776	-0.001	199	67988			5.00- 9.00	7.94	
4.775	4.776	-0.001	275	269741			10.00- 60.00	31.50	
4.775	4.776	-0.001	365	43071			1.00- 0.00	5.03	
4.775	4.776	-0.001	441	57322			0.01- 99.99	39.23	
4.775	4.776	-0.001	442	701821			50.00- 100.00	81.96	
4.775	4.776	-0.001	443	146104			15.00- 24.00	20.82	

Date : 21-JUN-2013 14:16

Client ID: DFTPP6w

Instrument: S6.i

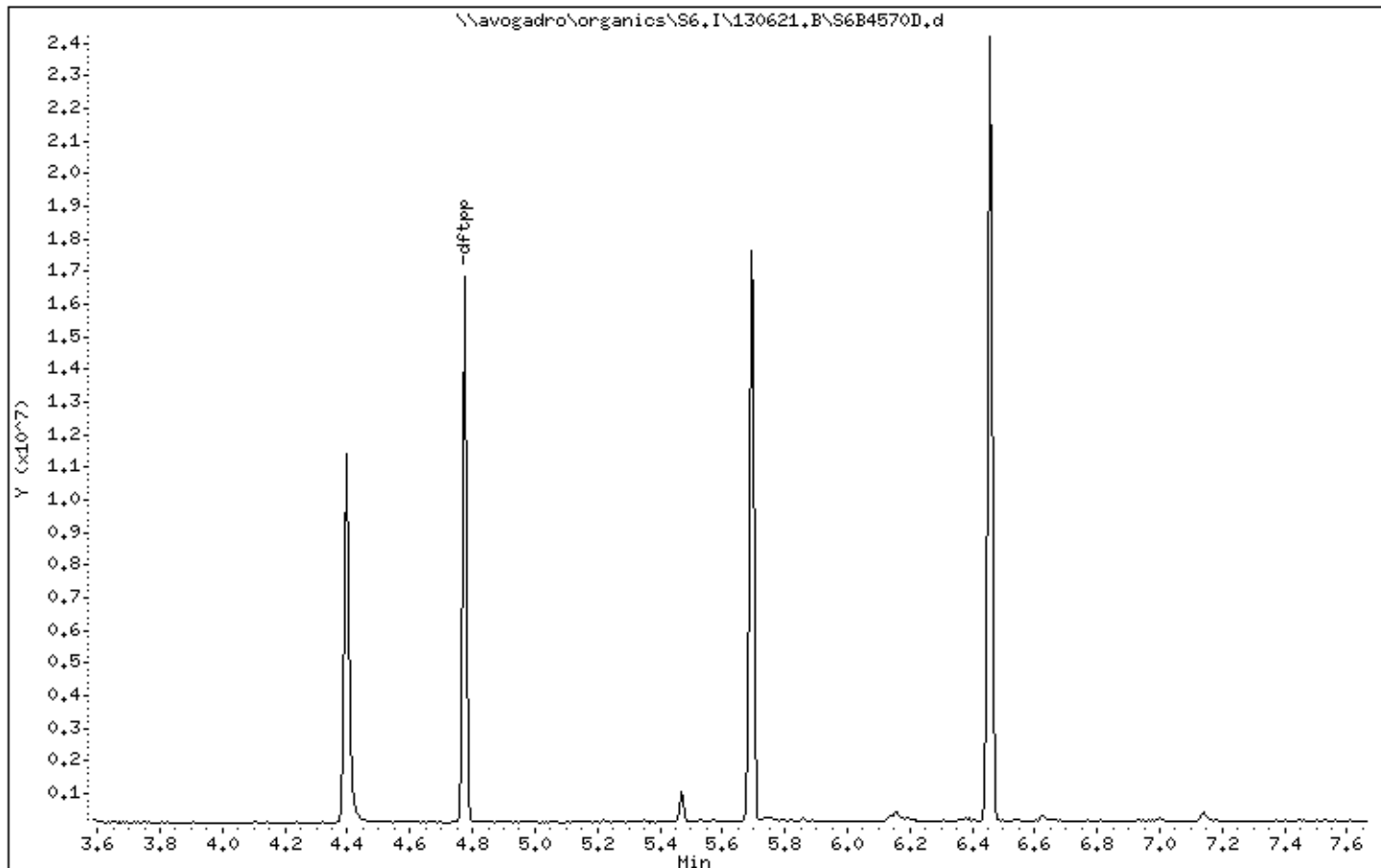
Sample Info: DFTPP6w,DFTPP6w

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0.25





Date : 21-JUN-2013 14:16

Client ID: DFTPP6w

Instrument: S6.i

Sample Info: DFTPP6w,DFTPP6w

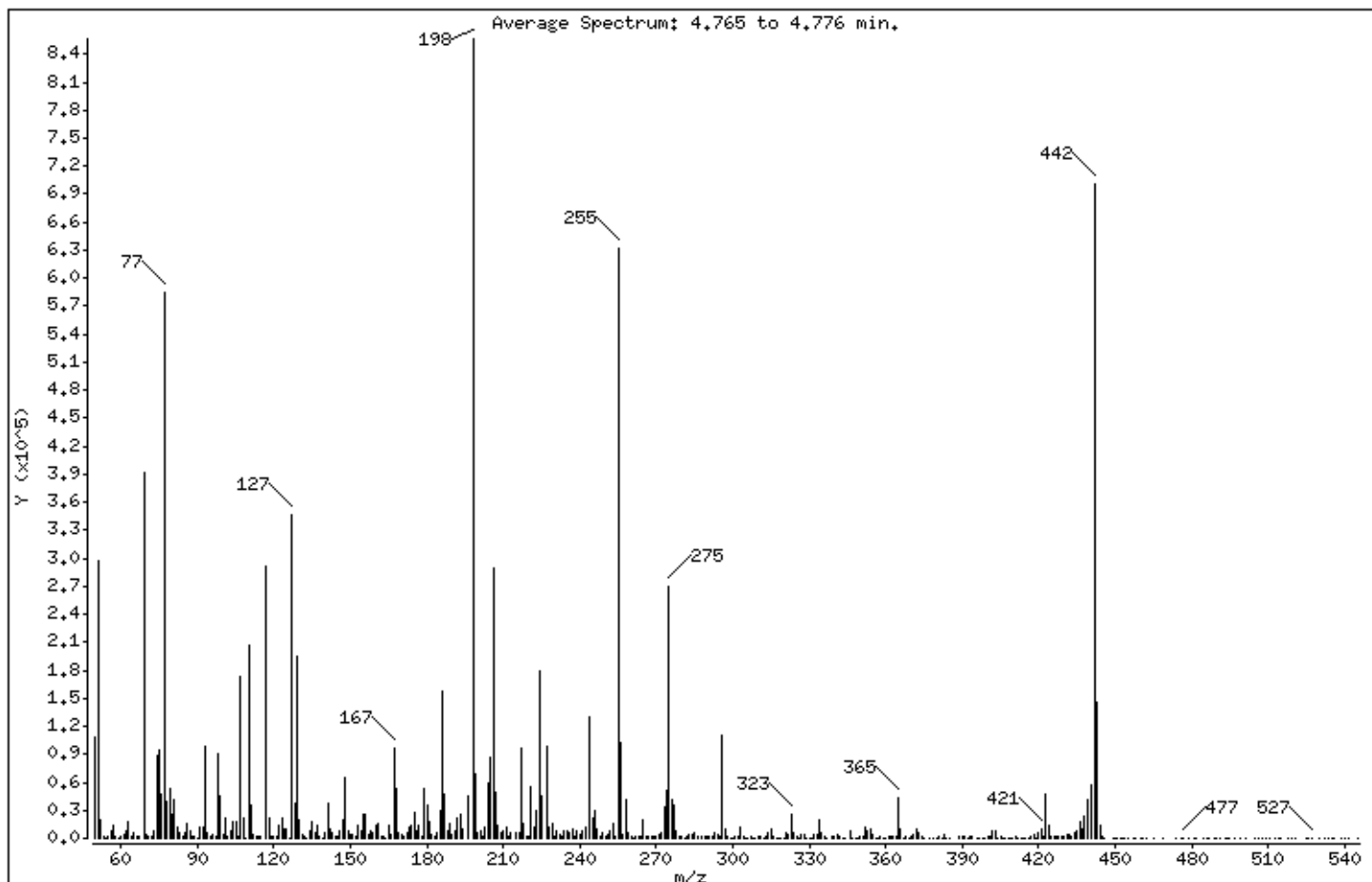
Volume Injected (uL): 2.0

Operator: PK SRC: PK

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	34.79
68	Less than 2.00% of mass 69	0.00 ( 0.00)
69	Mass 69 relative abundance	45.69
70	Less than 2.00% of mass 69	0.52 ( 1.15)
127	10.00 - 80.00% of mass 198	40.47
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	7.94
275	10.00 - 60.00% of mass 198	31.50
365	Greater than 1.00% of mass 198	5.03
441	Present, but less than mass 442	6.69
442	50.00 - 100.00% of mass 198	81.96
443	15.00 - 24.00% of mass 442	17.06 ( 20.82)

Date : 21-JUN-2013 14:16

Client ID: DFTPP6w

Instrument: S6.i

Sample Info: DFTPP6w,DFTPP6w

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0.25

Data File: S6B4570D.d

Spectrum: Average Spectrum: 4.765 to 4.776 min.

Location of Maximum: 198.00

Number of points: 435

m/z	Y	m/z	Y	m/z	Y	m/z	Y
50.00	108632	161.00	15059	275.00	269696	392.00	780
51.00	297856	162.00	2520	276.00	41376	393.00	1169
52.00	18888	163.00	1834	277.00	35400	394.00	1007
53.00	1150	164.00	785	278.00	7695	396.00	422
54.00	927	165.00	13486	279.00	1521	397.00	274
55.00	2439	166.00	4892	280.00	1107	398.00	194
56.00	8379	167.00	95880	281.00	186	399.00	633
57.00	13500	168.00	53016	282.00	1216	400.00	1298
58.00	1092	169.00	6013	283.00	3231	401.00	1780
59.00	724	170.00	3268	284.00	3921	402.00	8343
60.00	1356	171.00	2476	285.00	5317	403.00	8715
61.00	4802	172.00	6541	286.00	1204	404.00	132
62.00	7541	173.00	11313	288.00	1874	405.00	1375
63.00	18536	174.00	13852	289.00	1880	406.00	254
64.00	2519	175.00	27512	290.00	1909	407.00	436
65.00	5681	176.00	7692	291.00	1894	408.00	187
66.00	1168	177.00	13014	292.00	1913	409.00	405
67.00	2019	178.00	2879	293.00	6837	410.00	565
69.00	391232	179.00	53688	294.00	3262	411.00	986
70.00	4481	180.00	36128	295.00	1038	412.00	401
71.00	1881	181.00	17264	296.00	110824	413.00	73
72.00	1833	182.00	3888	297.00	10651	414.00	868
73.00	8118	183.00	994	298.00	2165	415.00	453
74.00	88632	184.00	6861	299.00	468	416.00	280
75.00	93992	185.00	29504	300.00	317	417.00	1074
76.00	46392	186.00	157504	301.00	1149	418.00	3654
77.00	584000	187.00	47744	302.00	2132	419.00	256
78.00	39640	188.00	7550	303.00	12162	420.00	5168
79.00	53360	189.00	15110	304.00	2499	421.00	9339
80.00	26280	190.00	3518	305.00	78	422.00	2808
81.00	40904	191.00	8841	306.00	550	423.00	46272
82.00	10881	192.00	20936	307.00	1219	424.00	13066
83.00	5248	193.00	24624	308.00	544	425.00	1234
84.00	1017	194.00	10628	309.00	386	426.00	1176
85.00	6160	196.00	45432	310.00	1797	427.00	1251

Date : 21-JUN-2013 14:16

Client ID: DFTPP6w

Instrument: S6.i

Sample Info: DFTPP6w,DFTPP6w

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0.25

Data File: S6B4570D.d

Spectrum: Average Spectrum: 4.765 to 4.776 min.

Location of Maximum: 198.00

Number of points: 435

m/z	Y	m/z	Y	m/z	Y	m/z	Y
86.00	16255	198.00	856320	311.00	1019	428.00	1793
87.00	7689	199.00	67984	312.00	844	429.00	1697
88.00	2305	200.00	6389	313.00	1732	430.00	2705
89.00	1192	201.00	8418	314.00	6101	431.00	3974
90.00	84	202.00	1980	315.00	8872	432.00	4324
91.00	12496	203.00	12768	316.00	2239	433.00	1640
92.00	11520	204.00	59552	317.00	381	434.00	5479
93.00	98472	205.00	86248	318.00	319	435.00	7455
94.00	5708	206.00	289664	319.00	819	436.00	18280
95.00	2264	207.00	49552	320.00	924	437.00	10068
96.00	4240	208.00	13434	321.00	4978	438.00	23560
97.00	2097	209.00	5157	322.00	3475	439.00	42128
98.00	91304	210.00	8845	323.00	24848	441.00	57320
99.00	44792	211.00	12573	324.00	5130	442.00	701760
100.00	3763	212.00	2402	325.00	2551	443.00	146048
101.00	22544	213.00	5065	326.00	513	444.00	12888
102.00	2917	215.00	5770	327.00	4743	445.00	1559
103.00	8529	216.00	4974	328.00	3331	446.00	523
104.00	18456	217.00	95744	329.00	840	449.00	221
105.00	16760	218.00	15814	330.00	437	450.00	116
106.00	1701	219.00	2684	331.00	781	451.00	571
107.00	172992	220.00	1507	332.00	3367	452.00	160
108.00	21664	221.00	54136	333.00	3234	453.00	355
109.00	782	222.00	11091	334.00	20208	454.00	50
110.00	207040	223.00	29976	335.00	5386	455.00	56
111.00	36088	224.00	178944	336.00	1071	457.00	144
112.00	4831	225.00	44936	337.00	394	458.00	113
113.00	2311	227.00	98688	339.00	1322	460.00	54
114.00	1148	228.00	12672	340.00	1219	461.00	101
115.00	1776	229.00	15246	341.00	3005	462.00	203
117.00	292032	230.00	1808	342.00	1014	465.00	331
118.00	21720	231.00	8114	343.00	454	469.00	118
119.00	1442	232.00	3931	344.00	291	474.00	61
120.00	1542	233.00	2268	346.00	8838	476.00	70
121.00	1901	234.00	7578	347.00	941	477.00	546

Date : 21-JUN-2013 14:16

Client ID: DFTPP6w

Instrument: S6.i

Sample Info: DFTPP6w,DFTPP6w

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0.25

Data File: S6B4570D.d

Spectrum: Average Spectrum: 4.765 to 4.776 min.

Location of Maximum: 198.00

Number of points: 435

m/z	Y	m/z	Y	m/z	Y	m/z	Y
122.00	13242	235.00	8158	348.00	419	479.00	194
123.00	20784	236.00	5996	349.00	747	481.00	345
124.00	9463	237.00	8899	350.00	2362	482.00	132
125.00	9953	238.00	1107	351.00	1005	485.00	141
126.00	504	239.00	8471	352.00	12204	486.00	220
127.00	346496	240.00	4217	353.00	7815	487.00	361
128.00	36832	241.00	7152	354.00	9635	489.00	137
129.00	195328	242.00	11781	355.00	3843	490.00	345
130.00	19592	244.00	130480	356.00	218	491.00	500
131.00	3400	245.00	21128	357.00	201	493.00	391
132.00	1293	246.00	30248	358.00	1106	494.00	133
133.00	892	247.00	9748	359.00	186	495.00	177
134.00	7632	248.00	2843	360.00	406	497.00	270
135.00	18424	249.00	6305	361.00	1967	499.00	97
136.00	6636	250.00	2435	362.00	1544	501.00	280
137.00	14617	251.00	3166	363.00	2306	505.00	105
138.00	2884	252.00	7353	364.00	2713	506.00	266
139.00	593	253.00	14948	365.00	43064	508.00	212
140.00	6506	254.00	1733	366.00	9748	509.00	129
141.00	36888	255.00	632320	367.00	339	511.00	76
142.00	10071	256.00	101880	368.00	1291	513.00	52
143.00	5967	257.00	3286	369.00	395	514.00	109
144.00	2084	258.00	41576	370.00	2125	515.00	55
145.00	2451	259.00	6674	371.00	3795	518.00	111
146.00	7530	260.00	1546	372.00	9746	519.00	197
147.00	20056	261.00	868	373.00	5588	521.00	58
148.00	65208	262.00	1486	374.00	1335	525.00	85
149.00	7557	263.00	1531	375.00	560	526.00	50
150.00	2975	264.00	2675	377.00	534	527.00	521
151.00	3490	265.00	19760	379.00	143	530.00	101
152.00	2316	266.00	2871	380.00	73	532.00	86
153.00	13487	267.00	2688	381.00	1090	534.00	67
154.00	8199	268.00	2121	382.00	281	535.00	103
155.00	25200	269.00	2648	383.00	3525	536.00	177
156.00	25064	270.00	2921	384.00	435	539.00	410

Date : 21-JUN-2013 14:16

Client ID: DFTPP6w

Instrument: S6.i

Sample Info: DFTPP6w,DFTPP6w

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0.25

Data File: S6B4570D.d  
Spectrum: Average Spectrum: 4.765 to 4.776 min.  
Location of Maximum: 198.00  
Number of points: 435

m/z	Y	m/z	Y	m/z	Y	m/z	Y
157.00	4399	271.00	4145	385.00	422	540.00	162
158.00	8238	272.00	5551	389.00	2541	542.00	169
159.00	5054	273.00	34424	390.00	998	545.00	222
160.00	13229	274.00	51448	391.00	1520		

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S6.I\130625.B\S6B4630C.d  
 Lab Smp Id: DFTPP6Y Client Smp ID: DFTPP6Y  
 Inj Date : 25-JUN-2013 15:12  
 Operator : PK SRC: PK Inst ID: S6.i  
 Smp Info : DFTPP6Y,DFTPP6Y  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\S6.I\130625.B\S6\_dftppSOM.m  
 Meth Date : 21-Jun-2013 14:34 pkaczorows Quant Type: ESTD  
 Cal Date : Cal File:  
 Als bottle: 50 QC Sample: DFTPP  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET113

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				
4.798	4.776	0.022	198	331690			0.00- 100.00	100.00	
4.798	4.776	0.022	51	114554			10.00- 80.00	34.54	
4.798	4.776	0.022	68	1569			0.00- 2.00	1.06	
4.798	4.776	0.022	69	148168			0.00- 0.00	44.67	
4.798	4.776	0.022	70	657			0.00- 2.00	0.44	
4.798	4.776	0.022	127	134458			10.00- 80.00	40.54	
4.798	4.776	0.022	197	0	0.0	0.0	0.00- 2.00	0.00	
4.798	4.776	0.022	199	28089			5.00- 9.00	8.47	
4.798	4.776	0.022	275	104074			10.00- 60.00	31.38	
4.798	4.776	0.022	365	15059			1.00- 0.00	4.54	
4.798	4.776	0.022	441	31200			0.01- 99.99	51.11	
4.798	4.776	0.022	442	293565			50.00- 100.00	88.51	
4.798	4.776	0.022	443	61050			15.00- 24.00	20.80	

Date : 25-JUN-2013 15:12

Client ID: DFTPP6Y

Instrument: S6.i

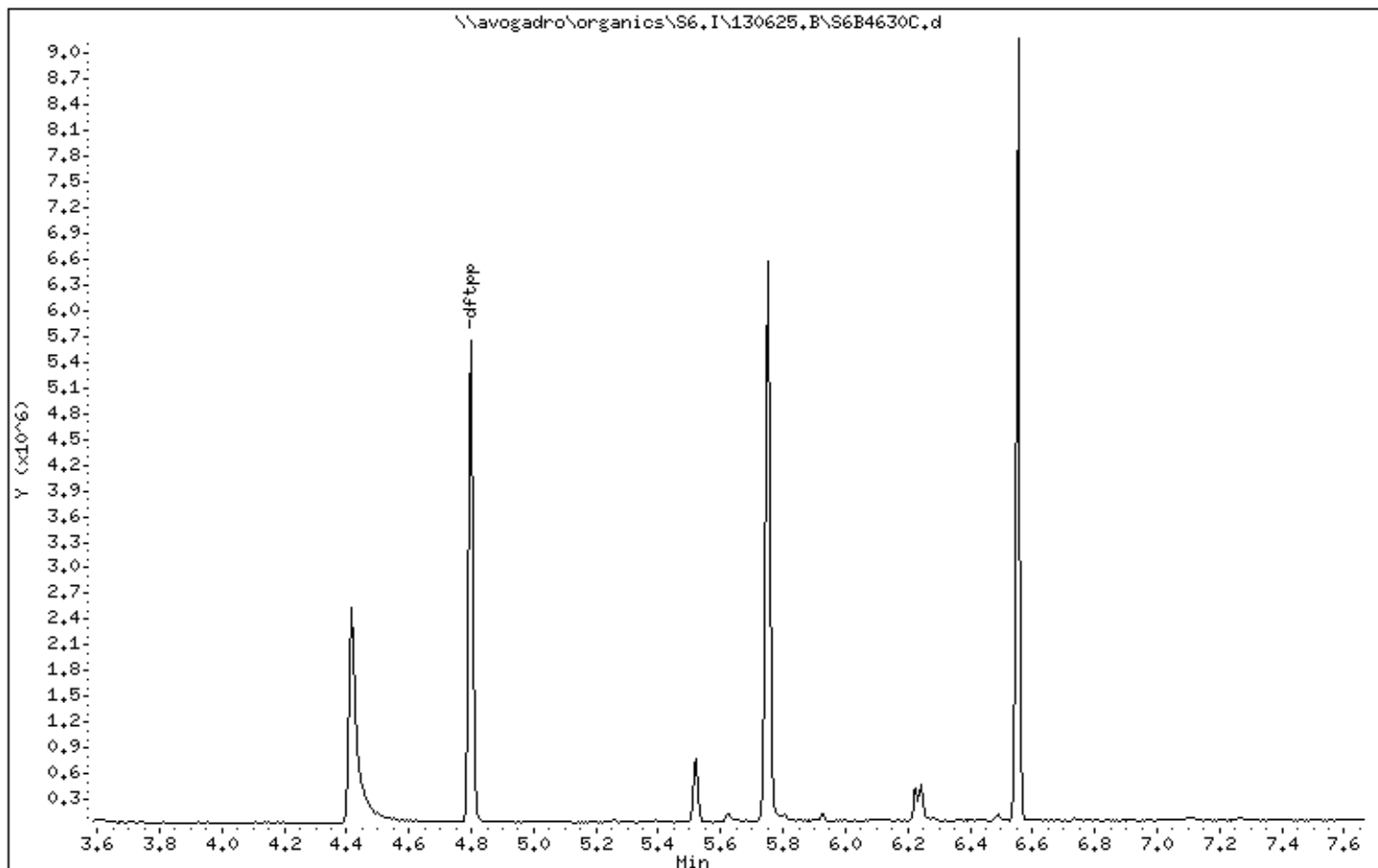
Sample Info: DFTPP6Y,DFTPP6Y

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0.25



Date : 25-JUN-2013 15:12

Client ID: DFTPP6Y

Instrument: S6.i

Sample Info: DFTPP6Y, DFTPP6Y

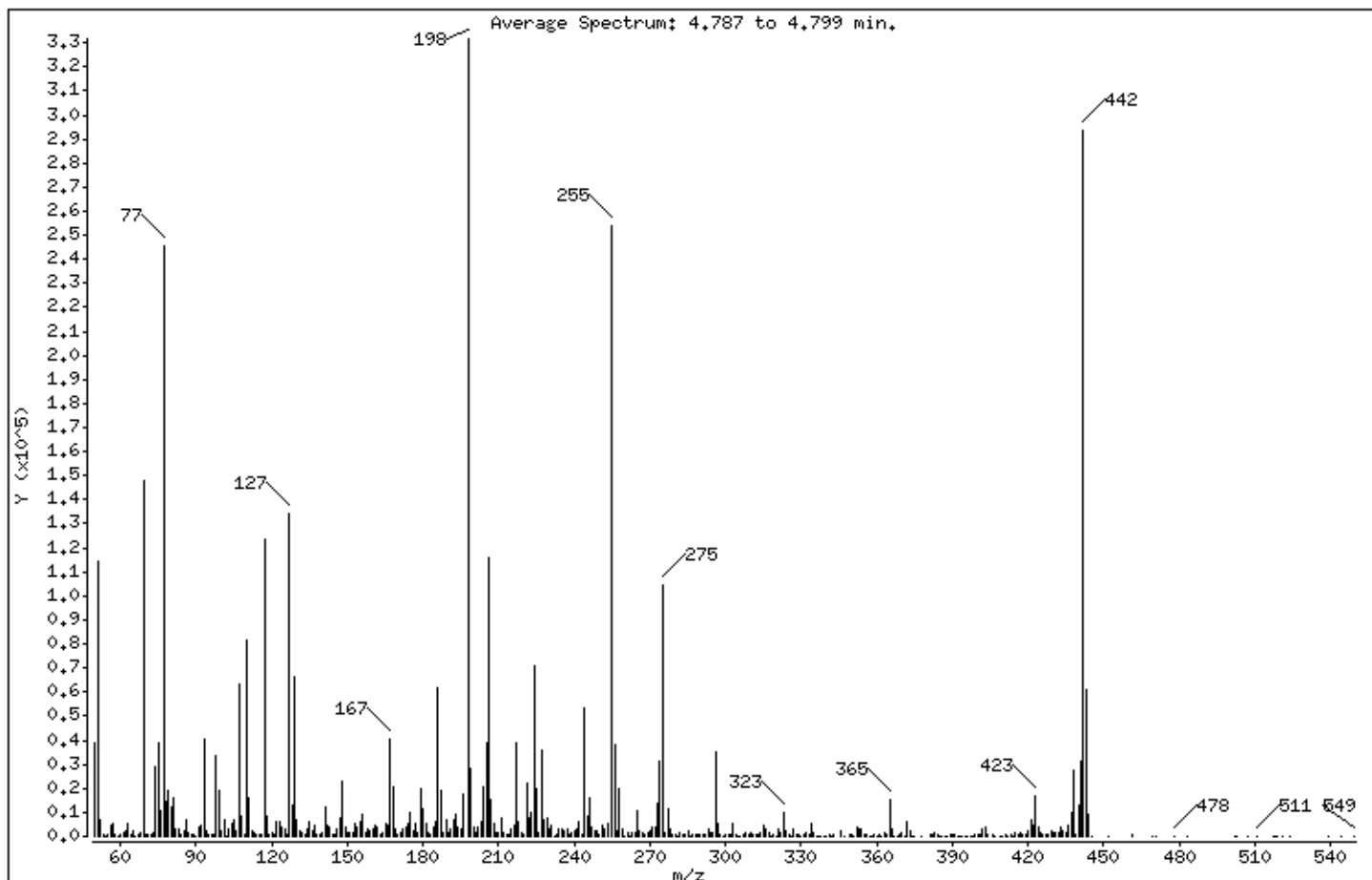
Volume Injected (uL): 2.0

Operator: PK SRC: PK

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	34.54
68	Less than 2.00% of mass 69	0.47 ( 1.06)
69	Mass 69 relative abundance	44.67
70	Less than 2.00% of mass 69	0.20 ( 0.44)
127	10.00 - 80.00% of mass 198	40.54
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	8.47
275	10.00 - 60.00% of mass 198	31.38
365	Greater than 1.00% of mass 198	4.54
441	Present, but less than mass 442	9.41
442	50.00 - 100.00% of mass 198	88.51
443	15.00 - 24.00% of mass 442	18.41 ( 20.80)



Date : 25-JUN-2013 15:12

Client ID: DFTPP6Y

Instrument: S6.i

Sample Info: DFTPP6Y,DFTPP6Y

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0.25

Data File: S6B4630C.d

Spectrum: Average Spectrum: 4.787 to 4.799 min.

Location of Maximum: 198.00

Number of points: 403

m/z	Y	m/z	Y	m/z	Y	m/z	Y
50.00	39024	151.00	1432	253.00	5703	358.00	260
51.00	114552	152.00	1533	255.00	254080	359.00	600
52.00	7014	153.00	5125	256.00	38312	360.00	205
53.00	393	154.00	3541	257.00	2436	361.00	614
54.00	126	155.00	6467	258.00	19568	362.00	349
55.00	640	156.00	9211	259.00	3204	363.00	1221
56.00	4208	157.00	1762	260.00	305	364.00	721
57.00	5311	158.00	2802	261.00	1224	365.00	15059
58.00	765	159.00	2509	262.00	245	366.00	3205
59.00	330	160.00	3089	263.00	1659	367.00	205
60.00	540	161.00	4651	264.00	1678	368.00	252
61.00	1652	162.00	3523	265.00	10382	369.00	670
62.00	2013	163.00	1083	266.00	2646	370.00	1656
63.00	5539	164.00	1328	267.00	1833	371.00	236
64.00	897	165.00	5101	268.00	668	372.00	6043
65.00	2179	166.00	4348	269.00	1728	373.00	1932
66.00	255	167.00	40704	270.00	2660	374.00	263
67.00	889	168.00	20760	271.00	3970	375.00	150
68.00	1569	169.00	3369	272.00	4154	378.00	90
69.00	148160	170.00	502	273.00	13558	381.00	759
70.00	657	171.00	1261	274.00	31088	382.00	991
71.00	694	172.00	2973	275.00	104072	383.00	1561
72.00	649	173.00	3648	276.00	1792	384.00	985
73.00	1715	174.00	5553	277.00	11204	385.00	304
74.00	29032	175.00	9594	278.00	2703	386.00	101
75.00	38560	176.00	2203	279.00	759	387.00	122
76.00	10992	177.00	5067	280.00	433	388.00	56
77.00	245632	178.00	1150	281.00	276	389.00	699
78.00	14856	179.00	20136	282.00	1570	390.00	477
79.00	19056	180.00	11781	283.00	1086	391.00	569
80.00	12103	181.00	5256	284.00	1030	392.00	267
81.00	16118	182.00	1715	285.00	2167	393.00	151
82.00	3060	183.00	423	286.00	157	394.00	69
83.00	3121	184.00	3590	287.00	549	395.00	217
84.00	972	185.00	5911	288.00	495	396.00	225

Date : 25-JUN-2013 15:12

Client ID: DFTPP6Y

Instrument: S6.i

Sample Info: DFTPP6Y,DFTPP6Y

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0.25

Data File: S6B4630C.d

Spectrum: Average Spectrum: 4.787 to 4.799 min.

Location of Maximum: 198.00

Number of points: 403

m/z	Y	m/z	Y	m/z	Y	m/z	Y
85.00	2356	186.00	61376	289.00	472	397.00	329
86.00	7037	187.00	18696	290.00	450	398.00	155
87.00	1807	188.00	1898	291.00	1088	399.00	682
88.00	626	189.00	6930	292.00	935	400.00	391
89.00	730	190.00	1774	293.00	3118	401.00	532
90.00	126	191.00	2816	294.00	1858	402.00	2702
91.00	3820	192.00	6614	295.00	1549	403.00	3631
92.00	4410	193.00	9130	296.00	34976	404.00	691
93.00	40112	194.00	3548	297.00	5057	406.00	391
94.00	2225	195.00	2809	298.00	448	407.00	84
95.00	687	196.00	17280	299.00	265	409.00	198
96.00	791	198.00	331648	300.00	509	410.00	208
97.00	834	199.00	28088	301.00	592	411.00	818
98.00	33800	200.00	3771	302.00	1112	412.00	214
99.00	18784	201.00	1174	303.00	5449	413.00	585
100.00	2088	202.00	4024	304.00	764	414.00	217
101.00	7043	203.00	6224	305.00	192	415.00	1390
102.00	113	204.00	20488	306.00	137	416.00	382
103.00	3211	205.00	38528	307.00	442	417.00	1206
104.00	4973	206.00	116168	308.00	1257	418.00	584
105.00	6942	207.00	15536	309.00	929	419.00	401
106.00	2422	208.00	5571	310.00	1224	420.00	2301
107.00	62920	209.00	1530	311.00	614	421.00	7118
108.00	8438	210.00	1806	312.00	512	422.00	4365
109.00	537	211.00	7437	313.00	491	423.00	16520
110.00	81848	212.00	1815	314.00	1901	424.00	3829
111.00	16334	213.00	741	315.00	4385	425.00	1164
112.00	2181	214.00	659	316.00	3146	426.00	530
113.00	1148	215.00	3066	317.00	1673	427.00	968
114.00	571	216.00	4341	318.00	380	428.00	830
115.00	691	217.00	38832	319.00	1010	429.00	2580
116.00	845	218.00	6002	320.00	291	430.00	1794
117.00	123544	219.00	1316	321.00	2690	431.00	1440
118.00	8064	220.00	681	322.00	1154	432.00	1888
119.00	1043	221.00	21792	323.00	10094	433.00	3474

Date : 25-JUN-2013 15:12

Client ID: DFTPP6Y

Instrument: S6.i

Sample Info: DFTPP6Y,DFTPP6Y

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0.25

Data File: S6B4630C.d

Spectrum: Average Spectrum: 4.787 to 4.799 min.

Location of Maximum: 198.00

Number of points: 403

m/z	Y	m/z	Y	m/z	Y	m/z	Y
120.00	1541	222.00	7645	324.00	2545	434.00	2020
121.00	791	223.00	10035	325.00	769	435.00	1415
122.00	6237	224.00	70560	326.00	104	436.00	4807
123.00	6285	225.00	20120	327.00	2701	437.00	9793
124.00	3739	226.00	1716	328.00	1046	438.00	27296
125.00	2822	227.00	36072	329.00	714	439.00	1066
126.00	570	228.00	7093	330.00	349	440.00	12770
127.00	134400	229.00	7428	331.00	598	441.00	31200
128.00	13233	230.00	2776	332.00	1761	442.00	293504
129.00	66240	231.00	4548	333.00	891	443.00	61048
130.00	6645	232.00	133	334.00	5583	444.00	8853
131.00	1908	233.00	757	335.00	1830	445.00	235
132.00	1407	234.00	3029	336.00	223	452.00	77
133.00	602	235.00	3138	337.00	77	461.00	383
134.00	3149	236.00	2247	338.00	96	469.00	139
135.00	6279	237.00	2831	339.00	113	471.00	75
136.00	2276	238.00	662	340.00	283	478.00	194
137.00	4495	239.00	1758	341.00	744	483.00	67
138.00	860	240.00	1917	342.00	318	502.00	175
139.00	929	241.00	2910	343.00	523	503.00	141
140.00	1253	242.00	6122	346.00	2259	507.00	170
141.00	12135	243.00	1025	347.00	272	511.00	218
142.00	4252	244.00	53416	349.00	666	517.00	53
143.00	3958	245.00	8245	350.00	600	518.00	66
144.00	794	246.00	15702	351.00	119	519.00	70
145.00	496	247.00	3888	352.00	3806	521.00	112
146.00	3016	248.00	2248	353.00	2696	524.00	134
147.00	7592	249.00	2020	354.00	3384	539.00	74
148.00	22776	250.00	659	355.00	991	544.00	167
149.00	3434	251.00	4231	356.00	410	549.00	82
150.00	1309	252.00	3153	357.00	306		

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S6.I\130626.B\S6B4660F.d  
 Lab Smp Id: DFTPP6Z Client Smp ID: DFTPP6Z  
 Inj Date : 26-JUN-2013 11:25  
 Operator : PK SRC: PK Inst ID: S6.i  
 Smp Info : DFTPP6Z,DFTPP6Z  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\S6.I\130626.B\S6\_dftppSOM.m  
 Meth Date : 21-Jun-2013 14:34 pkaczorows Quant Type: ESTD  
 Cal Date : Cal File:  
 Als bottle: 50 QC Sample: DFTPP  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET113

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		TARGET RANGE		RATIO	
RT	EXP RT	DLT RT	MASS	RESPONSE	( ug/L)	( ug/L)			
=====									
1 dftpp					CAS #: 5074-71-5				
4.759	4.776	-0.017	198	334528			0.00-	100.00	100.00
4.759	4.776	-0.017	51	135434			10.00-	80.00	40.49
4.759	4.776	-0.017	68	3396			0.00-	2.00	1.91
4.759	4.776	-0.017	69	177773			0.00-	0.00	53.14
4.759	4.776	-0.017	70	2680			0.00-	2.00	1.51
4.759	4.776	-0.017	127	146064			10.00-	80.00	43.66
4.759	4.776	-0.017	197	1729			0.00-	2.00	0.52
4.759	4.776	-0.017	199	21487			5.00-	9.00	6.42
4.759	4.776	-0.017	275	114855			10.00-	60.00	34.33
4.759	4.776	-0.017	365	19563			1.00-	0.00	5.85
4.759	4.776	-0.017	441	26033			0.01-	99.99	38.15
4.759	4.776	-0.017	442	303978			50.00-	100.00	90.87
4.759	4.776	-0.017	443	68232			15.00-	24.00	22.45

Date : 26-JUN-2013 11:25

Client ID: DFTPP6Z

Instrument: S6.i

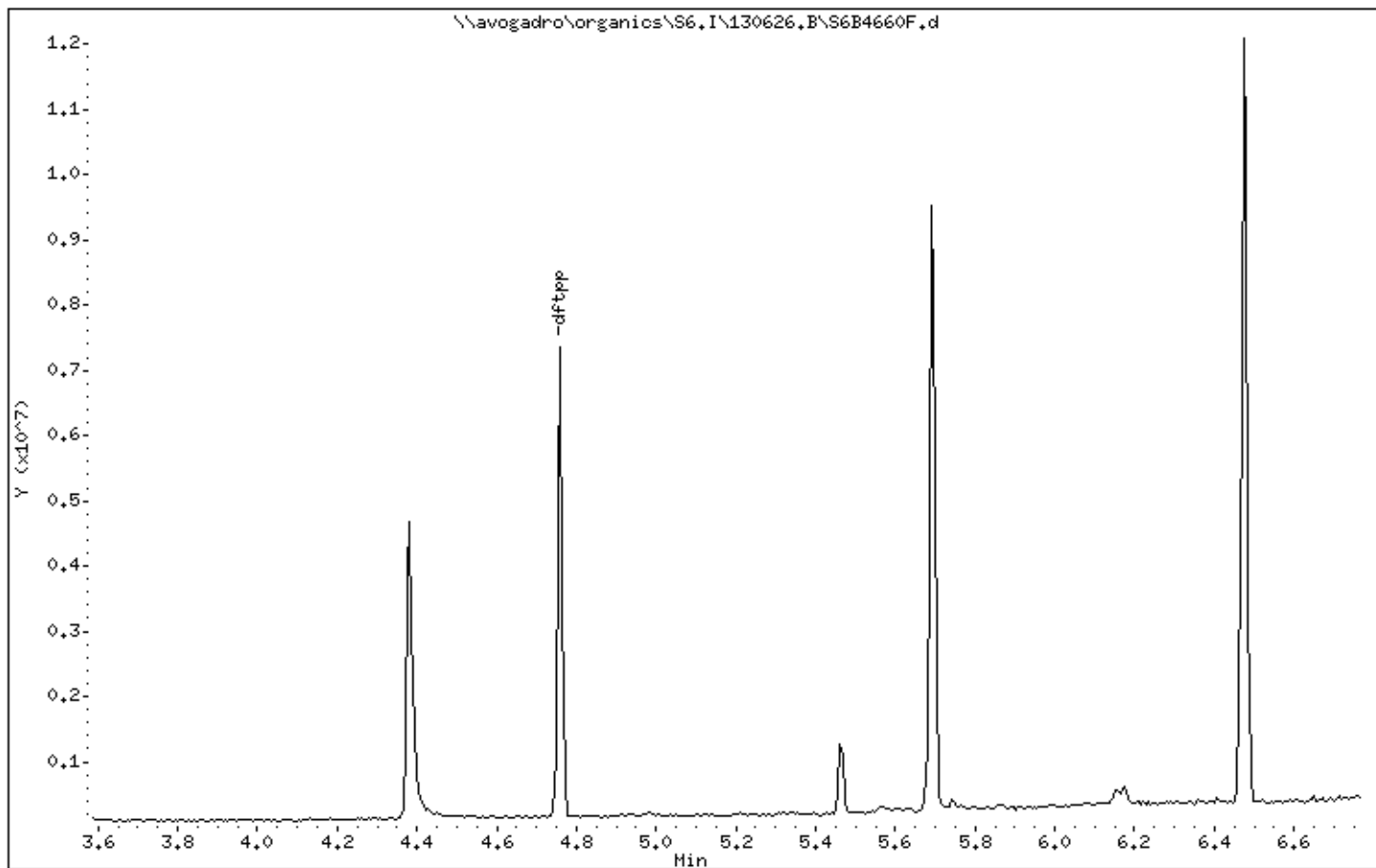
Sample Info: DFTPP6Z,DFTPP6Z

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0.25



Date : 26-JUN-2013 11:25

Client ID: DFTPP6Z

Instrument: S6.i

Sample Info: DFTPP6Z,DFTPP6Z

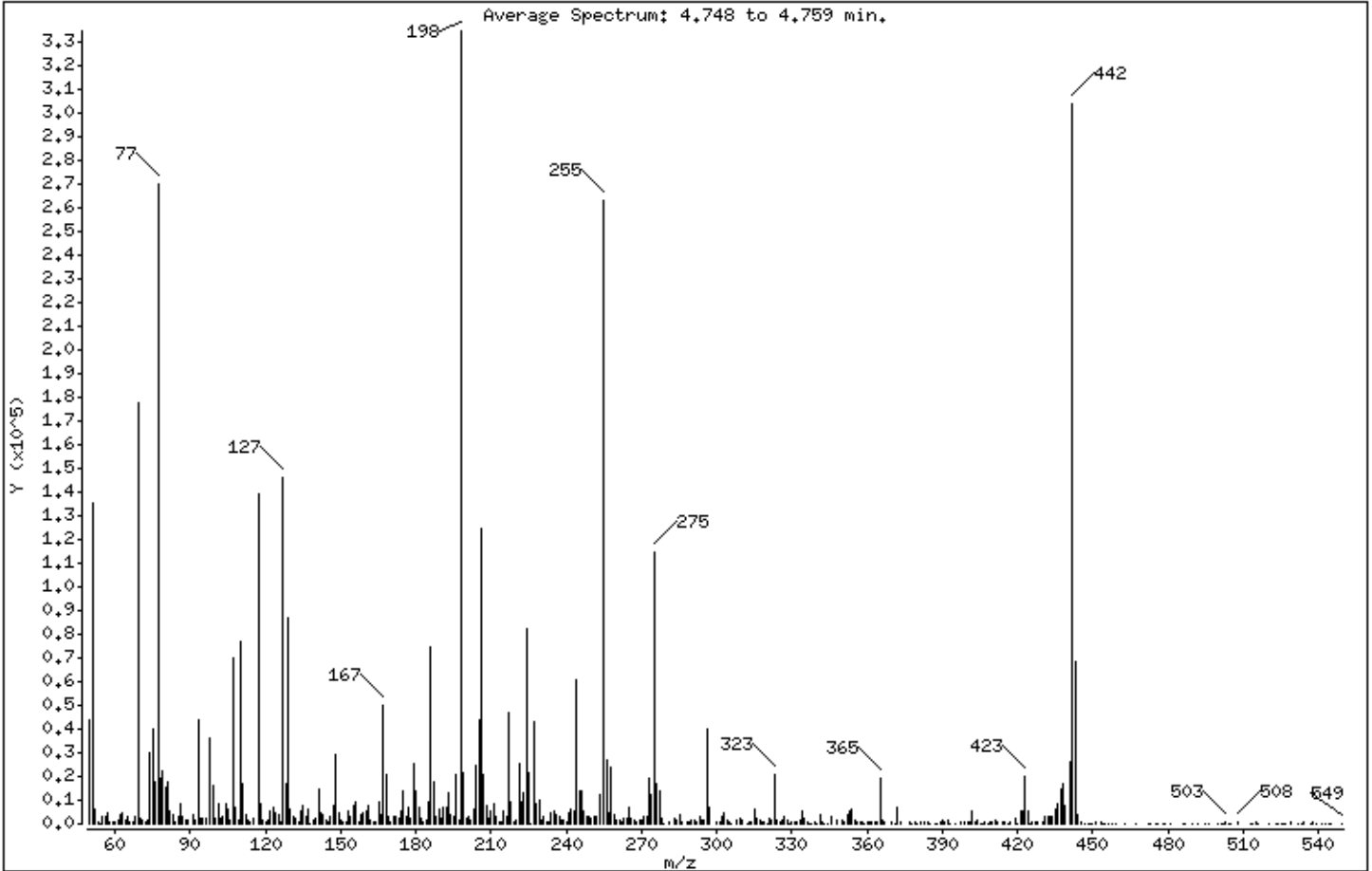
Volume Injected (uL): 2.0

Operator: PK SRC: PK

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	40.49
68	Less than 2.00% of mass 69	1.02 ( 1.91)
69	Mass 69 relative abundance	53.14
70	Less than 2.00% of mass 69	0.80 ( 1.51)
127	10.00 - 80.00% of mass 198	43.66
197	Less than 2.00% of mass 198	0.52
199	5.00 - 9.00% of mass 198	6.42
275	10.00 - 60.00% of mass 198	34.33
365	Greater than 1.00% of mass 198	5.85
441	Present, but less than mass 442	7.78
442	50.00 - 100.00% of mass 198	90.87
443	15.00 - 24.00% of mass 442	20.40 ( 22.45)

Date : 26-JUN-2013 11:25

Client ID: DFTPP6Z

Instrument: S6.i

Sample Info: DFTPP6Z,DFTPP6Z

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0.25

Data File: S6B4660F.d

Spectrum: Average Spectrum: 4.748 to 4.759 min.

Location of Maximum: 198.00

Number of points: 423

m/z	Y	m/z	Y	m/z	Y	m/z	Y
50.00	44208	159.00	4506	266.00	2088	389.00	438
51.00	135424	160.00	5191	267.00	1364	390.00	1454
52.00	6526	161.00	7374	268.00	660	391.00	476
53.00	795	162.00	1554	269.00	1362	392.00	1419
54.00	198	163.00	491	270.00	1709	393.00	244
55.00	3173	164.00	752	271.00	3356	395.00	59
56.00	3331	165.00	8987	272.00	2778	397.00	695
57.00	4598	166.00	3896	273.00	19432	399.00	1038
58.00	864	167.00	49832	274.00	12637	400.00	623
59.00	458	168.00	20552	275.00	114848	401.00	832
60.00	878	169.00	3355	276.00	16912	402.00	5363
61.00	1782	170.00	791	277.00	13705	403.00	1097
62.00	3556	171.00	3211	278.00	2346	404.00	1901
63.00	4526	172.00	2980	279.00	329	405.00	335
64.00	1204	173.00	1948	281.00	969	406.00	320
65.00	2735	174.00	5610	283.00	2190	407.00	563
66.00	594	175.00	13892	284.00	1191	408.00	91
67.00	1051	176.00	2756	285.00	3779	409.00	628
68.00	3396	177.00	6926	286.00	649	410.00	424
69.00	177728	178.00	2690	288.00	779	411.00	1907
70.00	2680	179.00	25552	289.00	630	412.00	591
71.00	1521	180.00	13543	290.00	1248	414.00	577
72.00	508	181.00	6636	291.00	1403	415.00	740
73.00	1772	182.00	2227	292.00	966	416.00	132
74.00	29944	183.00	574	293.00	2734	417.00	935
75.00	39872	184.00	1741	294.00	1840	419.00	2478
76.00	17944	185.00	9325	295.00	1354	420.00	365
77.00	270272	186.00	74504	296.00	40232	421.00	5421
78.00	19504	187.00	17528	297.00	6544	422.00	5021
79.00	22064	188.00	3228	300.00	515	423.00	20144
80.00	15536	189.00	6000	301.00	584	424.00	5111
81.00	17464	190.00	2534	302.00	2945	425.00	236
82.00	5187	191.00	7002	303.00	4577	426.00	716
83.00	4086	192.00	6675	304.00	1597	427.00	793
84.00	428	193.00	13326	305.00	511	428.00	770

Date : 26-JUN-2013 11:25

Client ID: DFTPP6Z

Instrument: S6.i

Sample Info: DFTPP6Z,DFTPP6Z

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0.25

Data File: S6B4660F.d

Spectrum: Average Spectrum: 4.748 to 4.759 min.

Location of Maximum: 198.00

Number of points: 423

m/z	Y	m/z	Y	m/z	Y	m/z	Y
85.00	3357	194.00	4040	306.00	226	430.00	776
86.00	8165	195.00	2882	308.00	1378	431.00	2877
87.00	3167	196.00	20656	309.00	2017	432.00	3241
88.00	1509	197.00	1729	310.00	1845	433.00	3456
89.00	1414	198.00	334528	312.00	289	434.00	3392
91.00	4110	199.00	21480	313.00	400	435.00	6296
92.00	1808	200.00	2403	314.00	958	436.00	8462
93.00	43680	201.00	3043	315.00	5922	437.00	14850
94.00	2496	202.00	1874	316.00	2477	438.00	17128
95.00	2233	203.00	6491	317.00	1366	439.00	7807
96.00	2111	204.00	24688	318.00	643	441.00	26032
98.00	36112	205.00	44064	319.00	908	442.00	303936
99.00	16223	206.00	124840	320.00	263	443.00	68232
100.00	2262	207.00	20392	321.00	2016	444.00	3871
101.00	8303	208.00	7944	322.00	1775	445.00	788
102.00	2267	209.00	2621	323.00	20784	447.00	74
103.00	3252	210.00	5255	324.00	1892	448.00	292
104.00	8076	211.00	8750	325.00	609	449.00	300
105.00	6504	212.00	3366	326.00	1311	450.00	381
106.00	1543	213.00	745	327.00	3029	451.00	393
107.00	70032	214.00	1001	328.00	1514	453.00	861
108.00	7230	215.00	5186	329.00	164	454.00	244
109.00	1690	216.00	3137	330.00	584	455.00	235
110.00	76816	217.00	46568	331.00	862	456.00	240
111.00	16920	218.00	9437	332.00	565	458.00	83
112.00	3610	219.00	773	333.00	1407	459.00	223
113.00	1617	220.00	1694	334.00	5272	463.00	102
114.00	410	221.00	25184	335.00	2356	467.00	174
115.00	2055	222.00	9264	336.00	589	472.00	292
117.00	139456	223.00	12811	337.00	351	473.00	295
118.00	8215	224.00	82160	338.00	303	475.00	95
119.00	1567	225.00	21896	339.00	414	476.00	146
120.00	817	226.00	362	340.00	348	478.00	107
121.00	1324	227.00	43008	341.00	3776	479.00	213
122.00	5651	228.00	8488	342.00	490	481.00	199



Date : 26-JUN-2013 11:25

Client ID: DFTPP6Z

Instrument: S6.i

Sample Info: DFTPP6Z,DFTPP6Z

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0.25

Data File: S6B4660F.d

Spectrum: Average Spectrum: 4.748 to 4.759 min.

Location of Maximum: 198.00

Number of points: 423

m/z	Y	m/z	Y	m/z	Y	m/z	Y
123.00	6901	229.00	10151	343.00	239	486.00	259
124.00	4384	230.00	1648	344.00	84	487.00	118
125.00	4022	231.00	2961	346.00	3435	490.00	131
126.00	669	232.00	442	348.00	1244	492.00	289
127.00	146048	233.00	1120	350.00	1656	495.00	65
128.00	16928	234.00	4355	351.00	985	496.00	73
129.00	86568	235.00	5196	352.00	4107	500.00	329
130.00	6215	236.00	3749	353.00	5054	501.00	125
131.00	2910	237.00	3131	354.00	6253	502.00	176
132.00	1977	238.00	1468	355.00	1850	503.00	592
133.00	798	239.00	1270	356.00	449	504.00	100
134.00	5469	240.00	757	357.00	454	505.00	71
135.00	7774	241.00	4568	358.00	534	508.00	676
136.00	2994	242.00	6377	359.00	85	513.00	67
137.00	6302	243.00	5279	360.00	807	514.00	78
138.00	253	244.00	60592	361.00	516	515.00	448
139.00	1393	245.00	13588	362.00	736	516.00	292
140.00	2408	246.00	13995	363.00	1090	520.00	50
141.00	14355	247.00	5306	364.00	770	523.00	57
142.00	4685	248.00	3129	365.00	19560	524.00	222
143.00	3498	249.00	3220	366.00	1269	525.00	121
144.00	1641	250.00	2436	367.00	714	526.00	246
145.00	1126	251.00	3396	370.00	802	527.00	78
146.00	3341	252.00	2977	371.00	266	529.00	658
147.00	7554	253.00	12554	372.00	7104	532.00	72
148.00	29096	255.00	263296	373.00	546	533.00	142
149.00	4801	256.00	26616	377.00	467	534.00	593
150.00	1533	257.00	4578	378.00	202	537.00	167
151.00	1044	258.00	23808	379.00	838	538.00	567
152.00	797	259.00	4208	380.00	154	539.00	362
153.00	5398	260.00	1669	381.00	825	541.00	110
154.00	2698	261.00	1712	383.00	1134	543.00	229
155.00	7905	262.00	439	384.00	1018	544.00	207
156.00	9251	263.00	2568	385.00	73	545.00	182
157.00	1015	264.00	1965	387.00	146	549.00	67

Date : 26-JUN-2013 11:25

Client ID: DFTPP6Z

Instrument: S6.i

Sample Info: DFTPP6Z,DFTPP6Z

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0.25

Data File: S6B4660F.d

Spectrum: Average Spectrum: 4.748 to 4.759 min.

Location of Maximum: 198.00

Number of points: 423

m/z	Y	m/z	Y	m/z	Y	m/z	Y
158.00	3502	265.00	7225	388.00	103		

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S6.I\130626A.B\S6B4670I.d  
 Lab Smp Id: DFTPP6A Client Smp ID: DFTPP6A  
 Inj Date : 26-JUN-2013 17:40  
 Operator : PK SRC: PK Inst ID: S6.i  
 Smp Info : DFTPP6A,DFTPP6A  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\S6.I\130626A.B\S6\_dftppSOM.m  
 Meth Date : 26-Jun-2013 17:17 pkaczorows Quant Type: ESTD  
 Cal Date : Cal File:  
 Als bottle: 50 QC Sample: DFTPP  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET113

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				
4.753	4.753	0.000	198	118394			0.00- 100.00	100.00	
4.753	4.753	0.000	51	44242			10.00- 80.00	37.37	
4.753	4.753	0.000	68	0	0.0	0.0	0.00- 2.00	0.00	
4.753	4.753	0.000	69	57868			0.00- 0.00	48.88	
4.753	4.753	0.000	70	720			0.00- 2.00	1.24	
4.753	4.753	0.000	127	49833			10.00- 80.00	42.09	
4.753	4.753	0.000	197	0	0.0	0.0	0.00- 2.00	0.00	
4.753	4.753	0.000	199	8744			5.00- 9.00	7.39	
4.753	4.753	0.000	275	39276			10.00- 60.00	33.17	
4.753	4.753	0.000	365	6039			1.00- 0.00	5.10	
4.753	4.753	0.000	441	20371			0.01- 99.99	94.22	
4.753	4.753	0.000	442	112364			50.00- 100.00	94.91	
4.753	4.753	0.000	443	21620			15.00- 24.00	19.24	

Date : 26-JUN-2013 17:40

Client ID: DFTPP6A

Instrument: S6.i

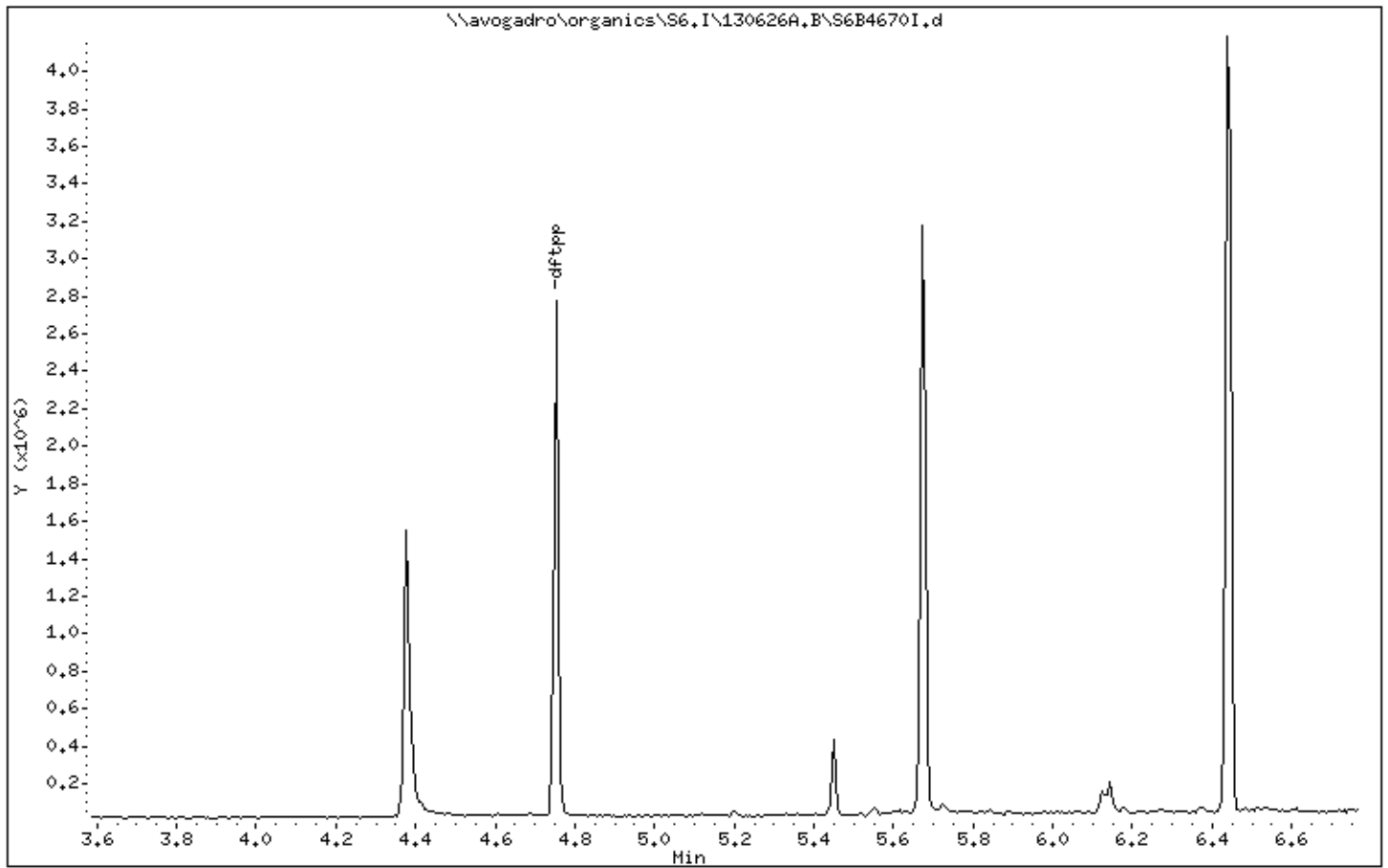
Sample Info: DFTPP6A,DFTPP6A

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0,25



Date : 26-JUN-2013 17:40

Client ID: DFTPP6A

Instrument: S6.i

Sample Info: DFTPP6A,DFTPP6A

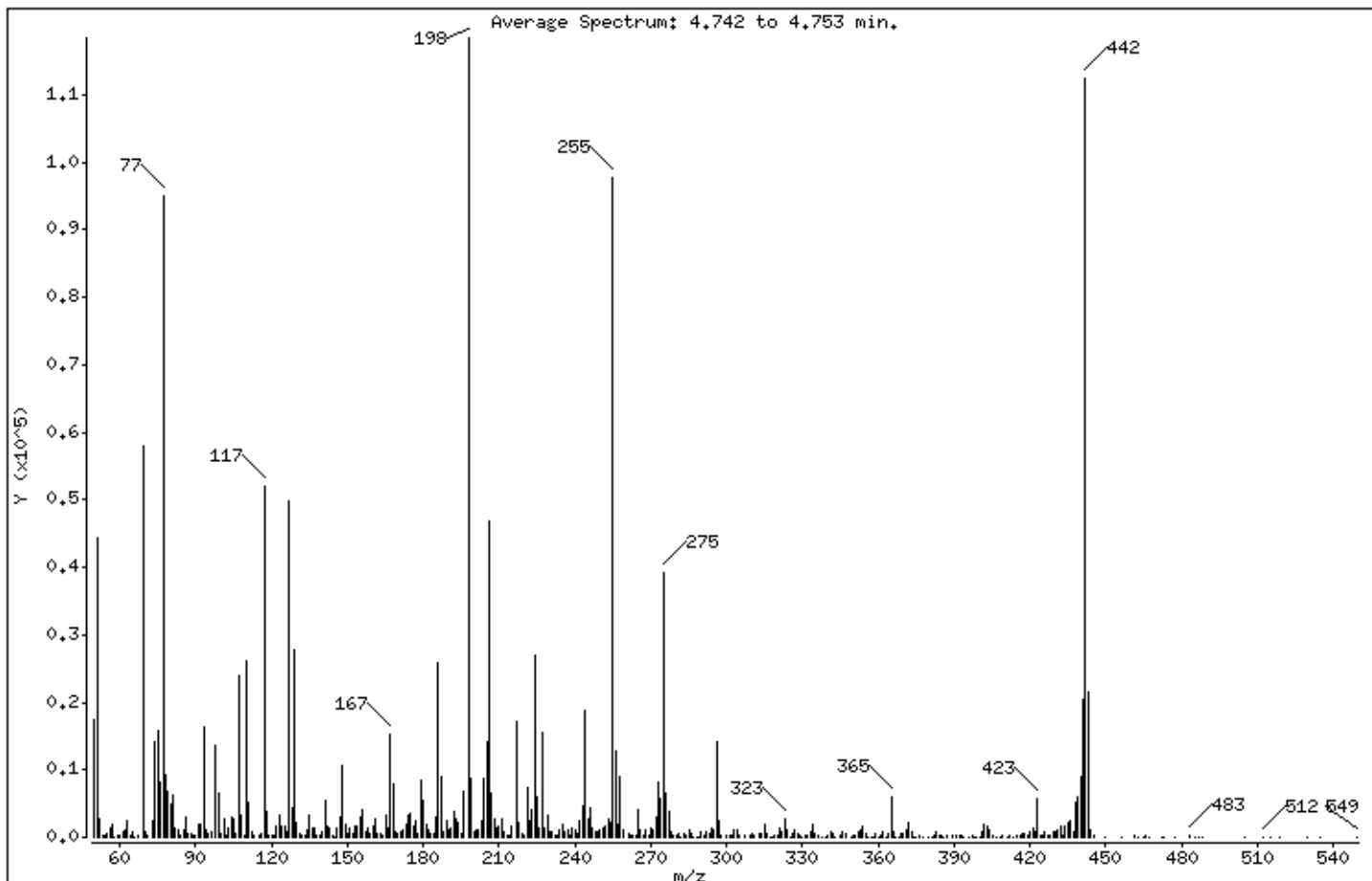
Volume Injected (uL): 2.0

Operator: PK SRC: PK

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	37,37
68	Less than 2,00% of mass 69	0,00 ( 0,00)
69	Mass 69 relative abundance	48,88
70	Less than 2,00% of mass 69	0,61 ( 1,24)
127	10,00 - 80,00% of mass 198	42,09
197	Less than 2,00% of mass 198	0,00
199	5,00 - 9,00% of mass 198	7,39
275	10,00 - 60,00% of mass 198	33,17
365	Greater than 1,00% of mass 198	5,10
441	Present, but less than mass 443	17,21
442	50,00 - 100,00% of mass 198	94,91
443	15,00 - 24,00% of mass 442	18,26 ( 19,24)

Date : 26-JUN-2013 17:40

Client ID: DFTPP6A

Instrument: S6.i

Sample Info: DFTPP6A,DFTPP6A

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0,25

Data File: S6B4670I.d

Spectrum: Average Spectrum: 4.742 to 4.753 min.

Location of Maximum: 198,00

Number of points: 395

m/z	Y	m/z	Y	m/z	Y	m/z	Y
50,00	17288	153,00	1566	254,00	2216	361,00	350
51,00	44240	154,00	1585	255,00	97592	362,00	859
52,00	2661	155,00	3030	256,00	12736	363,00	55
53,00	326	156,00	3989	257,00	2000	364,00	562
54,00	258	157,00	885	258,00	8941	365,00	6039
55,00	409	158,00	1442	259,00	1024	366,00	769
56,00	1316	159,00	596	261,00	417	367,00	122
57,00	1946	160,00	1628	262,00	243	368,00	101
58,00	135	161,00	2665	263,00	241	369,00	477
59,00	195	162,00	577	264,00	215	370,00	600
60,00	377	163,00	538	265,00	3965	371,00	1024
61,00	690	164,00	307	266,00	1070	372,00	2207
62,00	1204	165,00	3204	267,00	220	373,00	698
63,00	2328	166,00	1431	268,00	1161	374,00	74
64,00	243	167,00	15337	269,00	194	375,00	50
65,00	833	168,00	8009	270,00	1495	376,00	157
66,00	120	169,00	717	271,00	1063	378,00	100
67,00	317	170,00	481	272,00	2859	380,00	63
69,00	57864	171,00	780	273,00	8224	381,00	128
70,00	720	172,00	1127	274,00	5606	382,00	180
71,00	327	173,00	1860	275,00	39272	383,00	780
73,00	2364	174,00	3328	276,00	6548	384,00	144
74,00	14071	175,00	3456	277,00	3918	385,00	190
75,00	15856	176,00	1684	278,00	849	386,00	51
76,00	8073	177,00	2353	279,00	223	387,00	306
77,00	94888	178,00	426	280,00	336	389,00	144
78,00	9172	179,00	8405	281,00	415	391,00	402
79,00	6915	180,00	5404	282,00	69	392,00	268
80,00	4969	181,00	1951	283,00	589	393,00	335
81,00	6307	182,00	1051	284,00	330	394,00	86
82,00	1423	183,00	423	285,00	1205	396,00	75
83,00	1178	184,00	538	286,00	607	397,00	257
84,00	301	185,00	2973	287,00	85	398,00	103
85,00	1101	186,00	25808	288,00	57	399,00	73
86,00	2971	187,00	9107	289,00	67	400,00	109

Date : 26-JUN-2013 17:40

Client ID: DFTPP6A

Instrument: S6.i

Sample Info: DFTPP6A,DFTPP6A

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0,25

Data File: S6B4670I.d

Spectrum: Average Spectrum: 4.742 to 4.753 min.

Location of Maximum: 198,00

Number of points: 395

m/z	Y	m/z	Y	m/z	Y	m/z	Y
87,00	442	188,00	727	290,00	833	401,00	848
88,00	433	189,00	2582	291,00	259	402,00	1884
89,00	228	190,00	1078	292,00	888	403,00	1721
90,00	170	191,00	1287	293,00	448	404,00	1178
91,00	1801	192,00	3923	294,00	1269	405,00	236
92,00	1951	193,00	2812	295,00	1117	407,00	82
93,00	16360	194,00	2137	296,00	14035	408,00	101
94,00	980	195,00	411	297,00	2410	409,00	401
95,00	593	196,00	6829	298,00	389	411,00	87
96,00	763	198,00	118392	300,00	198	412,00	375
98,00	13572	199,00	8744	301,00	376	413,00	107
99,00	6611	200,00	911	302,00	207	415,00	174
100,00	674	201,00	1059	303,00	1029	416,00	236
101,00	2679	202,00	1192	304,00	1206	417,00	644
102,00	166	203,00	2422	305,00	156	418,00	512
103,00	1356	204,00	8709	307,00	174	419,00	225
104,00	2877	205,00	14142	309,00	315	420,00	858
105,00	2797	206,00	46904	310,00	593	421,00	1296
106,00	517	207,00	6591	311,00	308	422,00	891
107,00	24056	208,00	2729	313,00	513	423,00	5651
108,00	3232	209,00	1492	314,00	441	424,00	293
109,00	191	210,00	1541	315,00	2035	425,00	199
110,00	26088	211,00	2841	316,00	637	426,00	912
111,00	5114	212,00	690	317,00	89	427,00	236
112,00	716	213,00	314	318,00	91	428,00	149
113,00	201	214,00	404	319,00	379	429,00	750
115,00	309	215,00	1578	320,00	148	430,00	682
116,00	463	217,00	17200	321,00	1400	431,00	1174
117,00	51952	218,00	2297	322,00	780	432,00	1661
118,00	3937	219,00	626	323,00	2829	433,00	305
119,00	359	220,00	364	324,00	992	434,00	1765
120,00	207	221,00	7282	325,00	88	435,00	2144
121,00	364	222,00	2562	326,00	441	436,00	2414
122,00	1747	223,00	4191	327,00	966	437,00	743
123,00	3311	224,00	26992	328,00	535	438,00	5199

Date : 26-JUN-2013 17:40

Client ID: DFTPP6A

Instrument: S6.i

Sample Info: DFTPP6A,DFTPP6A

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0,25

Data File: S6B4670I.d  
Spectrum: Average Spectrum: 4.742 to 4.753 min.  
Location of Maximum: 198,00  
Number of points: 395

m/z	Y	m/z	Y	m/z	Y	m/z	Y
124,00	1497	225,00	6033	329,00	179	439,00	5999
125,00	1583	226,00	1469	330,00	127	440,00	8867
126,00	798	227,00	15405	331,00	373	441,00	20368
127,00	49832	228,00	1401	332,00	258	442,00	112360
128,00	4456	229,00	3228	333,00	896	443,00	21616
129,00	27808	230,00	780	334,00	2027	444,00	1075
130,00	2258	231,00	725	335,00	668	445,00	361
131,00	519	232,00	177	336,00	257	450,00	86
132,00	259	233,00	286	338,00	102	456,00	78
133,00	386	234,00	1072	339,00	134	461,00	284
134,00	1015	235,00	1820	340,00	315	463,00	62
135,00	3154	236,00	782	341,00	722	465,00	107
136,00	1297	237,00	1183	342,00	517	466,00	176
137,00	1493	238,00	356	343,00	103	467,00	77
138,00	191	239,00	1387	345,00	370	472,00	63
139,00	403	240,00	1069	346,00	828	473,00	126
140,00	686	241,00	643	347,00	547	477,00	50
141,00	5505	242,00	2548	349,00	91	483,00	177
142,00	1760	243,00	4507	350,00	296	485,00	59
143,00	1357	244,00	18880	351,00	227	487,00	123
144,00	397	245,00	2594	352,00	840	488,00	67
145,00	124	246,00	4359	353,00	1179	505,00	57
146,00	1495	247,00	1233	354,00	1508	512,00	82
147,00	3097	248,00	857	355,00	679	515,00	66
148,00	10549	249,00	939	356,00	110	519,00	62
149,00	2041	250,00	960	357,00	103	530,00	58
150,00	495	251,00	1371	358,00	134	535,00	61
151,00	1366	252,00	1769	359,00	433	549,00	79
152,00	568	253,00	2743	360,00	93		



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S6.I\130627.B\S6B4710I.d  
 Lab Smp Id: DFTPP6B Client Smp ID: DFTPP6B  
 Inj Date : 27-JUN-2013 11:51  
 Operator : PK SRC: PK Inst ID: S6.i  
 Smp Info : DFTPP6B,DFTPP6B  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\S6.I\130627.B\S6\_dftppSOM.m  
 Meth Date : 27-Jun-2013 10:19 pkaczorows Quant Type: ESTD  
 Cal Date : Cal File:  
 Als bottle: 50 QC Sample: DFTPP  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET113

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				
4.684	4.685	-0.001	198	355008			0.00- 100.00	100.00	
4.684	4.685	-0.001	51	159232			10.00- 80.00	44.85	
4.684	4.685	-0.001	68	0	0.0	0.0	0.00- 2.00	0.00	
4.684	4.685	-0.001	69	185984			0.00- 0.00	52.39	
4.684	4.685	-0.001	70	1516			0.00- 2.00	0.82	
4.684	4.685	-0.001	127	183552			10.00- 80.00	51.70	
4.684	4.685	-0.001	197	0	0.0	0.0	0.00- 2.00	0.00	
4.684	4.685	-0.001	199	26720			5.00- 9.00	7.53	
4.684	4.685	-0.001	275	103680			10.00- 60.00	29.20	
4.684	4.685	-0.001	365	18064			1.00- 0.00	5.09	
4.684	4.685	-0.001	441	49104			0.01- 99.99	62.33	
4.684	4.685	-0.001	442	339072			50.00- 100.00	95.51	
4.684	4.685	-0.001	443	78776			15.00- 24.00	23.23	

Date : 27-JUN-2013 11:51

Client ID: DFTPP6B

Instrument: S6.i

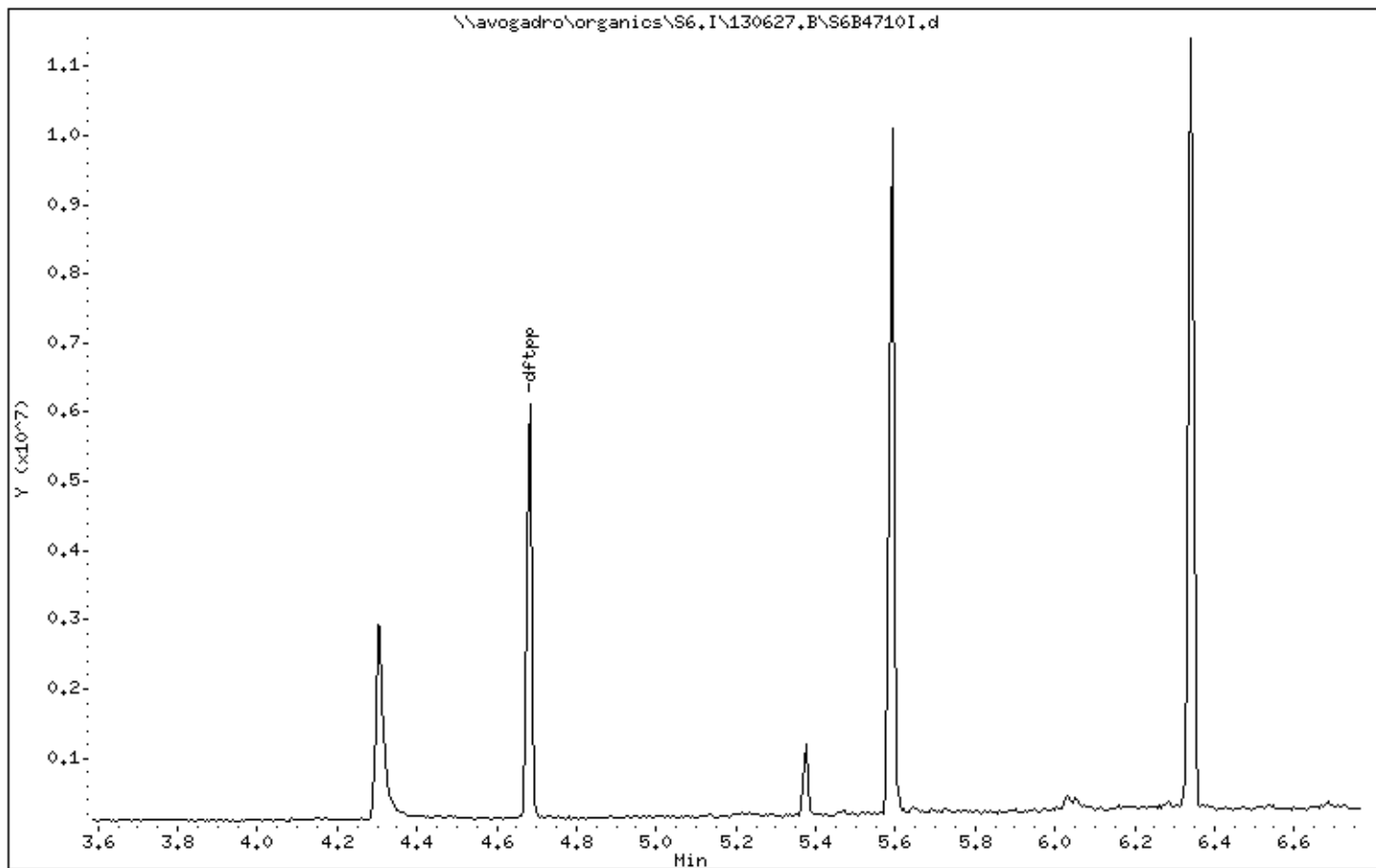
Sample Info: DFTPP6B,DFTPP6B

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0.25



Date : 27-JUN-2013 11:51

Client ID: DFTPP6B

Instrument: S6.i

Sample Info: DFTPP6B,DFTPP6B

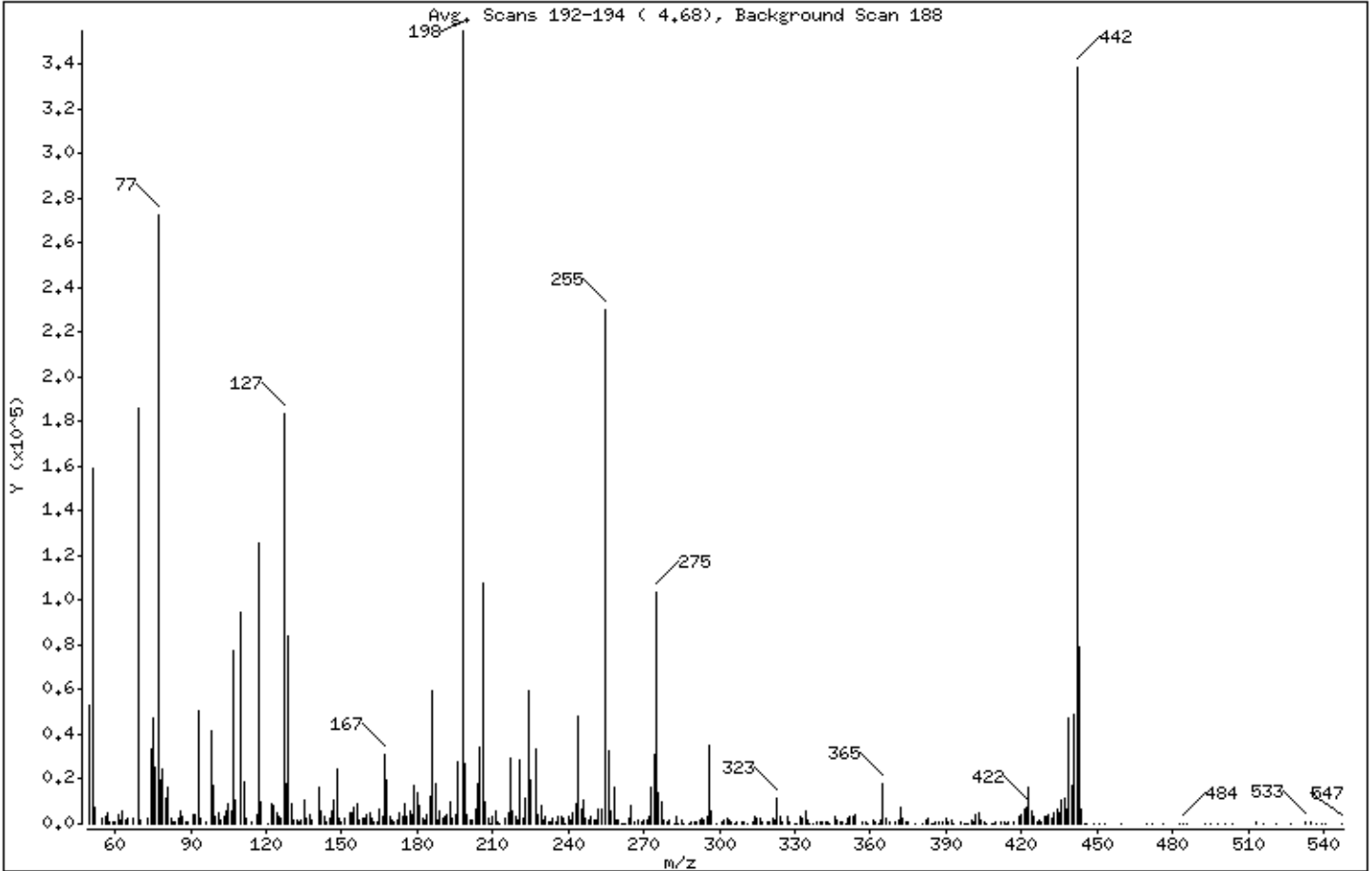
Volume Injected (uL): 2.0

Operator: PK SRC: PK

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	44.85
68	Less than 2.00% of mass 69	0.00 ( 0.00)
69	Mass 69 relative abundance	52.39
70	Less than 2.00% of mass 69	0.43 ( 0.82)
127	10.00 - 80.00% of mass 198	51.70
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	7.53
275	10.00 - 60.00% of mass 198	29.20
365	Greater than 1.00% of mass 198	5.09
441	Present, but less than mass 443	13.83
442	50.00 - 100.00% of mass 198	95.51
443	15.00 - 24.00% of mass 442	22.19 ( 23.23)

Date : 27-JUN-2013 11:51

Client ID: DFTPP6B

Instrument: S6.i

Sample Info: DFTPP6B,DFTPP6B

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0.25

Data File: S6B47101.d

Spectrum: Avg. Scans 192-194 ( 4.68), Background Scan 188

Location of Maximum: 198.00

Number of points: 373

m/z	Y	m/z	Y	m/z	Y	m/z	Y
50.00	52976	161.00	4576	259.00	1315	370.00	513
51.00	159232	162.00	2324	260.00	1244	371.00	1747
52.00	7023	163.00	705	261.00	281	372.00	7532
55.00	2444	164.00	863	262.00	179	373.00	2228
56.00	3082	165.00	6633	263.00	79	374.00	1107
57.00	4714	166.00	2941	264.00	2429	375.00	524
58.00	455	167.00	30696	265.00	8520	378.00	384
59.00	798	168.00	19296	266.00	795	381.00	355
60.00	1221	169.00	2994	268.00	1627	382.00	1719
61.00	3839	170.00	1922	269.00	1193	383.00	2337
62.00	1943	171.00	1021	270.00	1741	384.00	357
63.00	5595	172.00	1812	271.00	2015	385.00	123
64.00	1561	173.00	4901	272.00	3588	386.00	562
65.00	2205	174.00	3227	273.00	16051	387.00	627
67.00	2396	175.00	8970	274.00	31336	389.00	559
69.00	185984	176.00	3374	275.00	103680	390.00	2441
70.00	1516	177.00	5554	276.00	13528	391.00	540
73.00	2050	178.00	3801	277.00	9412	392.00	1766
74.00	33176	179.00	17016	278.00	1568	393.00	260
75.00	46952	180.00	14088	279.00	989	396.00	423
76.00	25648	181.00	8081	280.00	1562	397.00	67
77.00	272192	182.00	2346	282.00	389	398.00	115
78.00	19864	183.00	1498	283.00	3267	399.00	50
79.00	24264	184.00	3957	284.00	35	400.00	1689
80.00	11707	185.00	12232	285.00	1957	401.00	1190
81.00	16664	186.00	59824	286.00	344	402.00	3881
82.00	2553	187.00	17552	288.00	73	403.00	5006
83.00	910	188.00	1830	289.00	541	404.00	1261
84.00	519	189.00	5361	290.00	667	405.00	647
85.00	2584	190.00	2432	291.00	456	406.00	139
86.00	5434	191.00	3135	292.00	1366	408.00	100
87.00	3647	192.00	3994	293.00	2483	409.00	276
88.00	1172	193.00	9398	294.00	1597	410.00	1008
89.00	745	194.00	2822	295.00	3239	412.00	758
91.00	3748	195.00	3938	296.00	34872	413.00	1173

Date : 27-JUN-2013 11:51

Client ID: DFTPP6B

Instrument: S6.i

Sample Info: DFTPP6B,DFTPP6B

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0.25

Data File: S6B47101.d

Spectrum: Avg. Scans 192-194 ( 4.68), Background Scan 188

Location of Maximum: 198.00

Number of points: 373

m/z	Y	m/z	Y	m/z	Y	m/z	Y
92.00	4103	196.00	27400	297.00	5871	414.00	184
93.00	50280	198.00	355008	299.00	296	415.00	668
94.00	2369	199.00	26720	301.00	725	417.00	1082
96.00	494	200.00	4316	302.00	1789	419.00	2968
98.00	41976	201.00	1994	303.00	2603	420.00	3804
99.00	16992	202.00	1305	304.00	1252	421.00	6503
100.00	3563	203.00	6193	305.00	917	422.00	7043
101.00	5000	204.00	18192	306.00	67	423.00	16544
102.00	1643	205.00	34152	307.00	570	424.00	5766
103.00	3087	206.00	107576	309.00	495	425.00	3652
104.00	5667	207.00	9619	310.00	566	426.00	1158
105.00	8860	208.00	2567	311.00	255	427.00	1976
106.00	5843	209.00	361	313.00	904	428.00	835
107.00	77528	210.00	3009	314.00	3033	429.00	3379
108.00	10202	211.00	5918	315.00	2226	430.00	3500
110.00	94288	212.00	985	316.00	2085	431.00	4143
111.00	18512	213.00	315	317.00	622	432.00	2777
112.00	2500	215.00	2299	319.00	687	433.00	4660
114.00	861	216.00	5231	320.00	1171	434.00	6207
116.00	4202	217.00	29528	321.00	2219	435.00	4524
117.00	126088	218.00	5813	322.00	1676	436.00	10622
118.00	9438	219.00	3417	323.00	11570	437.00	11444
121.00	388	220.00	2008	324.00	2918	438.00	6124
122.00	9334	221.00	28392	325.00	1161	439.00	47096
123.00	7918	222.00	2069	327.00	3657	440.00	17176
124.00	4951	223.00	11746	328.00	1125	441.00	49104
125.00	3073	224.00	59424	330.00	385	442.00	339072
126.00	2219	225.00	19744	331.00	361	443.00	78776
127.00	183552	227.00	33600	332.00	2915	444.00	6251
128.00	18120	228.00	4278	333.00	2071	445.00	194
129.00	84032	229.00	7968	334.00	5712	446.00	83
130.00	8600	230.00	1252	335.00	1643	449.00	95
131.00	1824	231.00	3314	336.00	51	451.00	79
132.00	1417	232.00	946	337.00	290	453.00	60
133.00	771	233.00	654	339.00	595	460.00	181

Date : 27-JUN-2013 11:51

Client ID: DFTPP6B

Instrument: S6.i

Sample Info: DFTPP6B,DFTPP6B

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0.25

Data File: S6B47101.d

Spectrum: Avg. Scans 192-194 ( 4.68), Background Scan 188

Location of Maximum: 198.00

Number of points: 373

m/z	Y	m/z	Y	m/z	Y	m/z	Y
134.00	1351	234.00	2106	340.00	682	470.00	77
135.00	10308	235.00	920	341.00	672	472.00	63
136.00	2824	236.00	2981	342.00	604	476.00	95
137.00	3713	237.00	3493	343.00	524	483.00	59
138.00	1392	238.00	2219	344.00	245	484.00	267
141.00	16322	239.00	212	346.00	3153	486.00	163
142.00	5786	240.00	3379	347.00	2032	493.00	55
143.00	3331	241.00	1514	348.00	906	495.00	140
144.00	548	242.00	4499	349.00	624	498.00	168
145.00	2311	243.00	8841	350.00	290	501.00	58
146.00	5650	244.00	47840	351.00	2712	504.00	87
147.00	10610	245.00	6779	352.00	3013	513.00	509
148.00	24600	246.00	10315	353.00	3295	516.00	142
149.00	2167	247.00	2338	354.00	3782	521.00	191
150.00	478	248.00	1687	357.00	983	527.00	69
151.00	2206	249.00	2881	358.00	425	533.00	695
153.00	4490	250.00	1496	359.00	309	535.00	651
154.00	4686	251.00	2032	361.00	1227	537.00	79
155.00	7716	252.00	6299	362.00	758	539.00	320
156.00	9248	253.00	6532	363.00	134	541.00	53
157.00	1887	255.00	230208	364.00	1313	547.00	138
158.00	2268	256.00	32920	365.00	18064		
159.00	2317	257.00	5503	366.00	2155		
160.00	3981	258.00	16071	368.00	829		

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S6.I\130628.B\S6B4740D.d  
 Lab Smp Id: DFTPP6C Client Smp ID: DFTPP6C  
 Inj Date : 28-JUN-2013 09:58  
 Operator : PK SRC: PK Inst ID: S6.i  
 Smp Info : DFTPP6C,DFTPP6C  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\S6.I\130628.B\S6\_dftppSOM.m  
 Meth Date : 27-Jun-2013 10:19 pkaczorows Quant Type: ESTD  
 Cal Date : Cal File:  
 Als bottle: 50 QC Sample: DFTPP  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET113

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		TARGET RANGE		RATIO	
RT	EXP RT	DLT RT	MASS	RESPONSE	( ug/L)	( ug/L)			
-----									
1 dftpp					CAS #: 5074-71-5				
4.690	4.685	0.005	198	514112			0.00-	100.00	100.00
4.690	4.685	0.005	51	262400			10.00-	80.00	51.04
4.690	4.685	0.005	68	1005			0.00-	2.00	0.34
4.690	4.685	0.005	69	296192			0.00-	0.00	57.61
4.690	4.685	0.005	70	1678			0.00-	2.00	0.57
4.690	4.685	0.005	127	268352			10.00-	80.00	52.20
4.690	4.685	0.005	197	0	0.0	0.0	0.00-	2.00	0.00
4.690	4.685	0.005	199	40312			5.00-	9.00	7.84
4.690	4.685	0.005	275	169088			10.00-	60.00	32.89
4.690	4.685	0.005	365	24760			1.00-	0.00	4.82
4.690	4.685	0.005	441	91224			0.01-	99.99	92.32
4.690	4.685	0.005	442	481536			50.00-	100.00	93.66
4.690	4.685	0.005	443	98808			15.00-	24.00	20.52

Date : 28-JUN-2013 09:58

Client ID: DFTPP6C

Instrument: S6.i

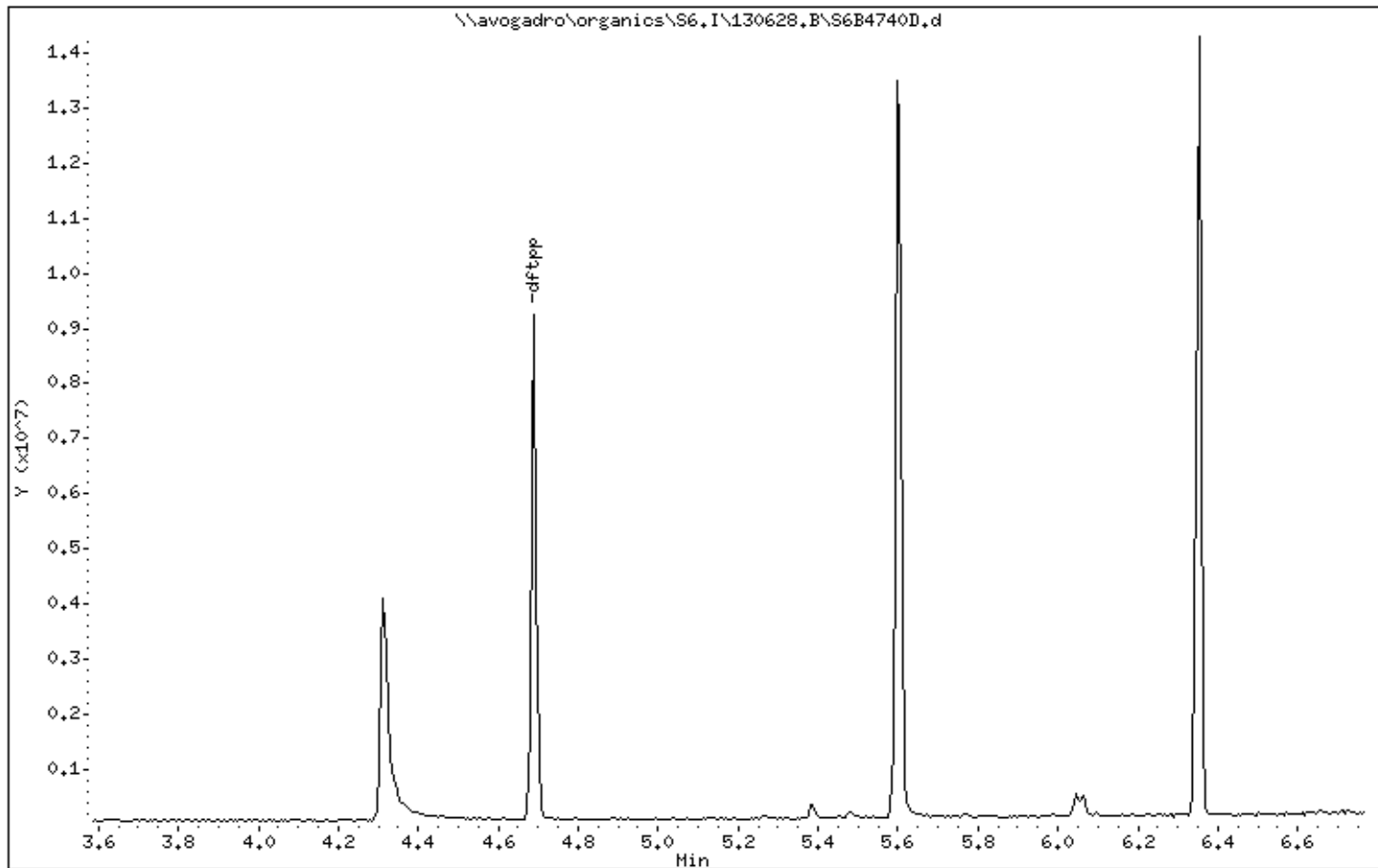
Sample Info: DFTPP6C,DFTPP6C

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0.25





Date : 28-JUN-2013 09:58

Client ID: DFTPP6C

Instrument: S6.i

Sample Info: DFTPP6C,DFTPP6C

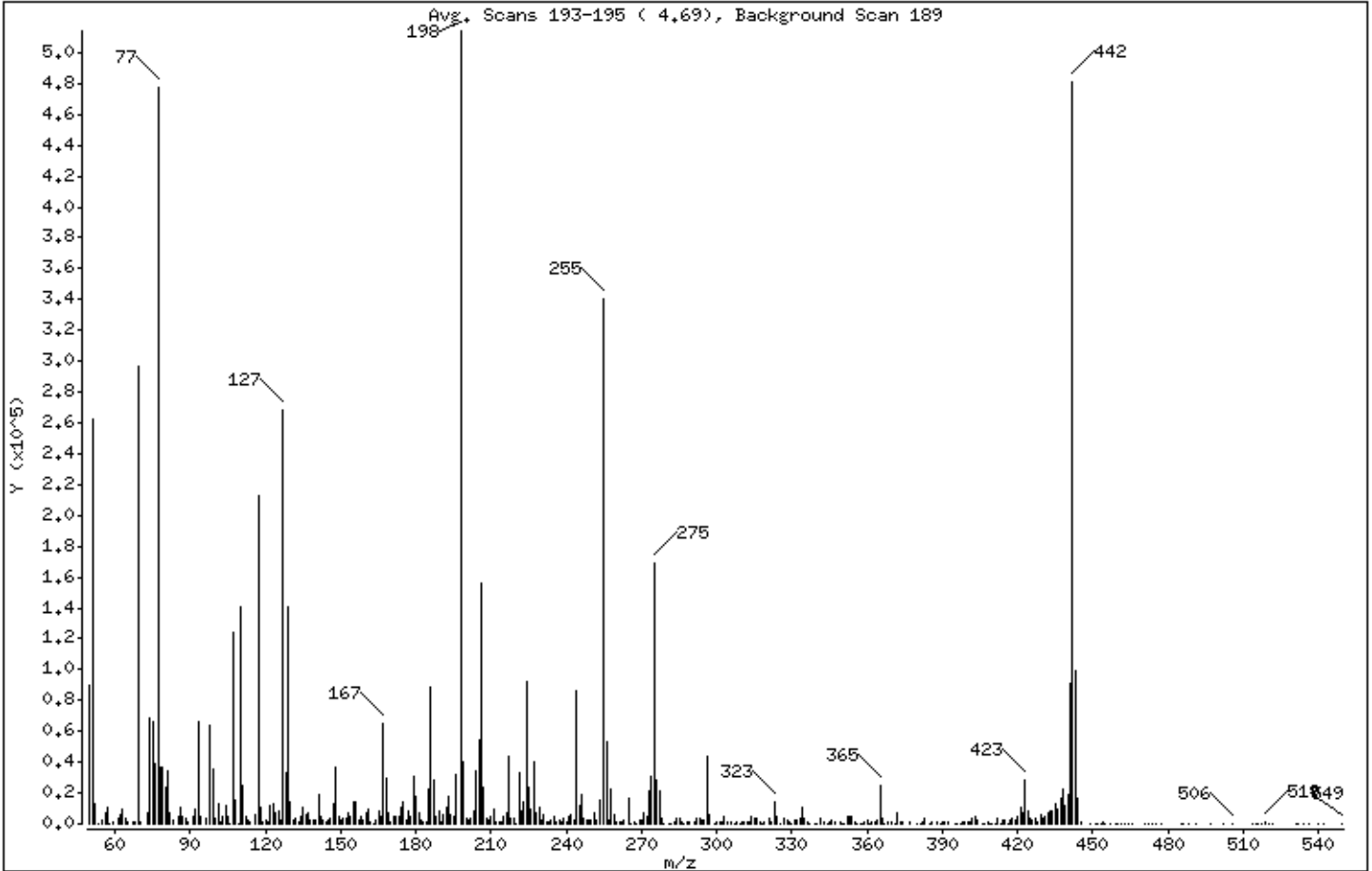
Volume Injected (uL): 2.0

Operator: PK SRC: PK

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	51.04
68	Less than 2.00% of mass 69	0.20 ( 0.34)
69	Mass 69 relative abundance	57.61
70	Less than 2.00% of mass 69	0.33 ( 0.57)
127	10.00 - 80.00% of mass 198	52.20
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	7.84
275	10.00 - 60.00% of mass 198	32.89
365	Greater than 1.00% of mass 198	4.82
441	Present, but less than mass 442	17.74
442	50.00 - 100.00% of mass 198	93.66
443	15.00 - 24.00% of mass 442	19.22 ( 20.52)

Date : 28-JUN-2013 09:58

Client ID: DFTPP6C

Instrument: S6.i

Sample Info: DFTPP6C,DFTPP6C

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0.25

Data File: S6B4740D.d

Spectrum: Avg. Scans 193-195 ( 4.69), Background Scan 189

Location of Maximum: 198.00

Number of points: 403

m/z	Y	m/z	Y	m/z	Y	m/z	Y
50.00	90216	161.00	9284	265.00	16029	380.00	383
51.00	262400	162.00	1651	266.00	199	381.00	135
52.00	12590	163.00	329	267.00	1088	382.00	740
53.00	336	164.00	2381	268.00	333	383.00	3983
55.00	2300	165.00	8782	269.00	2791	385.00	375
56.00	6758	166.00	4865	270.00	2749	386.00	953
57.00	10722	167.00	64632	271.00	6650	388.00	1048
58.00	162	168.00	29496	272.00	4911	389.00	480
59.00	795	169.00	7456	273.00	21576	390.00	1658
61.00	3744	170.00	1595	274.00	30264	391.00	1202
62.00	5623	171.00	4623	275.00	169088	392.00	1577
63.00	9684	172.00	4657	276.00	28192	395.00	218
64.00	2986	173.00	5025	277.00	21192	396.00	84
65.00	1385	174.00	10775	278.00	3791	397.00	513
67.00	1459	175.00	14680	279.00	381	398.00	967
68.00	1005	176.00	2889	281.00	260	399.00	597
69.00	296192	177.00	8813	282.00	287	400.00	1283
70.00	1678	178.00	4366	283.00	1289	401.00	949
73.00	6918	179.00	30712	284.00	3544	402.00	3367
74.00	68608	180.00	17904	285.00	3773	403.00	4896
75.00	66288	181.00	6761	286.00	1511	404.00	2058
76.00	38632	182.00	2196	287.00	137	406.00	383
77.00	478016	183.00	1275	288.00	1272	407.00	58
78.00	36232	184.00	1181	289.00	916	408.00	1323
79.00	36568	185.00	22592	291.00	852	409.00	333
80.00	23048	186.00	88648	292.00	3682	410.00	461
81.00	34096	187.00	28232	293.00	3117	411.00	393
82.00	7457	188.00	4219	294.00	1955	412.00	2994
83.00	2757	189.00	8013	295.00	2480	413.00	104
85.00	4732	190.00	979	296.00	44080	414.00	2539
86.00	10447	191.00	5850	297.00	5972	415.00	2614
87.00	5076	192.00	10420	299.00	306	416.00	259
88.00	3461	193.00	17824	300.00	1045	417.00	2464
89.00	1405	194.00	6193	301.00	730	418.00	3059
91.00	5087	195.00	5231	302.00	1624	419.00	2150

Date : 28-JUN-2013 09:58

Client ID: DFTPP6C

Instrument: S6.i

Sample Info: DFTPP6C,DFTPP6C

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0.25

Data File: S6B4740D.d

Spectrum: Avg. Scans 193-195 ( 4.69), Background Scan 189

Location of Maximum: 198.00

Number of points: 403

m/z	Y	m/z	Y	m/z	Y	m/z	Y
92.00	9909	196.00	32248	303.00	4811	420.00	4379
93.00	65616	198.00	514112	304.00	1763	421.00	10399
94.00	4552	199.00	40312	306.00	681	422.00	7375
96.00	3473	200.00	3751	307.00	312	423.00	28352
98.00	64120	201.00	2880	308.00	639	424.00	8499
99.00	35328	202.00	3216	309.00	53	425.00	3591
100.00	3948	203.00	8055	310.00	848	426.00	2442
101.00	12771	204.00	34704	311.00	1574	427.00	3666
102.00	788	205.00	54400	312.00	1334	428.00	1723
103.00	4937	206.00	156160	313.00	1018	429.00	5894
104.00	11701	207.00	23368	314.00	4226	430.00	4001
105.00	4785	208.00	3341	315.00	3198	431.00	4586
106.00	292	209.00	2330	316.00	3502	432.00	6875
107.00	123856	210.00	4775	317.00	1553	433.00	7876
108.00	15919	211.00	8867	318.00	174	434.00	8423
109.00	190	212.00	1686	319.00	1238	435.00	12800
110.00	140288	213.00	1540	321.00	3892	436.00	8999
111.00	25088	214.00	658	322.00	1195	437.00	16314
112.00	5012	215.00	5158	323.00	14410	438.00	22208
113.00	2218	216.00	6982	324.00	4443	439.00	12206
114.00	1243	217.00	43312	325.00	566	440.00	19480
116.00	6232	218.00	3244	327.00	3118	441.00	91224
117.00	212608	219.00	3488	328.00	1859	442.00	481536
118.00	10602	220.00	401	329.00	1037	443.00	98808
119.00	1513	221.00	32776	330.00	442	444.00	16576
120.00	1988	222.00	8844	331.00	2334	445.00	757
121.00	1082	223.00	14278	332.00	2373	449.00	170
122.00	11502	224.00	91856	333.00	3273	451.00	149
123.00	12938	225.00	23728	334.00	10840	452.00	213
124.00	7147	226.00	9014	335.00	3561	453.00	182
125.00	7891	227.00	39688	336.00	822	454.00	757
126.00	2280	228.00	7226	337.00	238	455.00	122
127.00	268352	229.00	10598	339.00	51	457.00	238
128.00	32896	230.00	2089	340.00	57	459.00	62
129.00	141184	231.00	5976	341.00	3088	460.00	211

Date : 28-JUN-2013 09:58

Client ID: DFTPP6C

Instrument: S6.i

Sample Info: DFTPP6C,DFTPP6C

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0.25

Data File: S6B4740D.d

Spectrum: Avg. Scans 193-195 ( 4.69), Background Scan 189

Location of Maximum: 198.00

Number of points: 403

m/z	Y	m/z	Y	m/z	Y	m/z	Y
130.00	13907	232.00	1681	343.00	990	461.00	502
131.00	2908	233.00	968	344.00	538	463.00	67
132.00	3285	234.00	2345	345.00	1048	464.00	433
133.00	1625	235.00	5025	346.00	2029	466.00	61
134.00	4933	236.00	1267	347.00	637	471.00	123
135.00	10945	237.00	2335	349.00	818	472.00	69
136.00	5977	238.00	1085	350.00	389	474.00	254
137.00	7302	239.00	3432	351.00	468	475.00	103
138.00	1939	240.00	1428	352.00	4607	477.00	118
139.00	2598	241.00	5293	353.00	4278	485.00	50
140.00	2648	242.00	6098	354.00	4608	486.00	105
141.00	19208	243.00	2950	355.00	1111	488.00	140
142.00	4744	244.00	86192	356.00	18	491.00	127
143.00	2473	245.00	11755	357.00	315	497.00	250
144.00	914	246.00	19376	358.00	505	502.00	254
145.00	1895	247.00	3039	359.00	1052	506.00	507
146.00	4048	248.00	2400	360.00	1962	514.00	71
147.00	12836	249.00	2471	361.00	221	515.00	50
148.00	36464	250.00	2205	362.00	1202	516.00	250
149.00	4604	251.00	7432	363.00	993	517.00	461
150.00	2008	252.00	2934	364.00	2744	519.00	637
151.00	3081	253.00	14969	365.00	24760	520.00	64
152.00	3150	255.00	339840	366.00	2979	522.00	354
153.00	6533	256.00	52608	367.00	59	531.00	86
154.00	4505	257.00	2145	368.00	1271	532.00	69
155.00	14442	258.00	22440	370.00	1380	534.00	81
156.00	13868	259.00	5753	371.00	568	536.00	128
157.00	2583	260.00	1092	372.00	6943	540.00	57
158.00	4399	261.00	831	373.00	1703	542.00	486
159.00	2290	262.00	596	374.00	791	549.00	140
160.00	6672	263.00	1852	377.00	805		

1D - FORM I SV-1  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.  
MB-72397

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-72397  
 Sample wt/vol: 15.0 (g/mL) G Lab File ID: S6B4744.D  
 Level: (LOW/MED) LOW Extraction: (Type) SONC  
 % Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: \_\_\_\_\_  
 Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/24/2013  
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/28/2013  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
108-95-2	Phenol	330	U	
111-44-4	Bis(2-chloroethyl)ether	330	U	
95-57-8	2-Chlorophenol	330	U	
541-73-1	1,3-Dichlorobenzene	330	U	
106-46-7	1,4-Dichlorobenzene	330	U	
95-50-1	1,2-Dichlorobenzene	330	U	
95-48-7	2-Methylphenol	330	U	
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U	
106-44-5	4-Methylphenol	330	U	
621-64-7	N-Nitroso-di-n-propylamine	330	U	
67-72-1	Hexachloroethane	330	U	
98-95-3	Nitrobenzene	330	U	
78-59-1	Isophorone	330	U	
88-75-5	2-Nitrophenol	330	U	
105-67-9	2,4-Dimethylphenol	330	U	
120-83-2	2,4-Dichlorophenol	330	U	
120-82-1	1,2,4-Trichlorobenzene	330	U	
91-20-3	Naphthalene	330	U	
106-47-8	4-Chloroaniline	330	U	
111-91-1	Bis(2-chloroethoxy)methane	330	U	
87-68-3	Hexachlorobutadiene	330	U	
59-50-7	4-Chloro-3-methylphenol	330	U	
91-57-6	2-Methylnaphthalene	330	U	
77-47-4	Hexachlorocyclopentadiene	330	U	
88-06-2	2,4,6-Trichlorophenol	330	U	
95-95-4	2,4,5-Trichlorophenol	670	U	
91-58-7	2-Chloronaphthalene	330	U	
88-74-4	2-Nitroaniline	670	U	
131-11-3	Dimethylphthalate	330	U	
208-96-8	Acenaphthylene	330	U	
606-20-2	2,6-Dinitrotoluene	330	U	
99-09-2	3-Nitroaniline	670	U	
83-32-9	Acenaphthene	330	U	
51-28-5	2,4-Dinitrophenol	670	U	
100-02-7	4-Nitrophenol	670	U	
132-64-9	Dibenzofuran	330	U	

1E - FORM I SV-2  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.  
MB-72397

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-72397  
 Sample wt/vol: 15.0 (g/mL) G Lab File ID: S6B4744.D  
 Level: (LOW/MED) LOW Extraction: (Type) SONC  
 % Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: \_\_\_\_\_  
 Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/24/2013  
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/28/2013  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
121-14-2	2,4-Dinitrotoluene	330	U	
84-66-2	Diethylphthalate	330	U	
7005-72-3	4-Chlorophenyl-phenylether	330	U	
86-73-7	Fluorene	330	U	
100-01-6	4-Nitroaniline	670	U	
534-52-1	4,6-Dinitro-2-methylphenol	670	U	
86-30-6	N-Nitrosodiphenylamine	330	U	
101-55-3	4-Bromophenyl-phenylether	330	U	
118-74-1	Hexachlorobenzene	330	U	
87-86-5	Pentachlorophenol	670	U	
85-01-8	Phenanthrene	330	U	
120-12-7	Anthracene	330	U	
86-74-8	Carbazole	330	U	
84-74-2	Di-n-butylphthalate	330	U	
206-44-0	Fluoranthene	330	U	
129-00-0	Pyrene	330	U	
85-68-7	Butylbenzylphthalate	330	U	
91-94-1	3,3'-Dichlorobenzidine	330	U	
56-55-3	Benzo(a)anthracene	330	U	
218-01-9	Chrysene	330	U	
117-81-7	Bis(2-ethylhexyl)phthalate	330	U	
117-84-0	Di-n-octylphthalate	330	U	
205-99-2	Benzo(b)fluoranthene	330	U	
207-08-9	Benzo(k)fluoranthene	330	U	
50-32-8	Benzo(a)pyrene	330	U	
193-39-5	Indeno(1,2,3-cd)pyrene	330	U	
53-70-3	Dibenzo(a,h)anthracene	330	U	
191-24-2	Benzo(g,h,i)perylene	330	U	

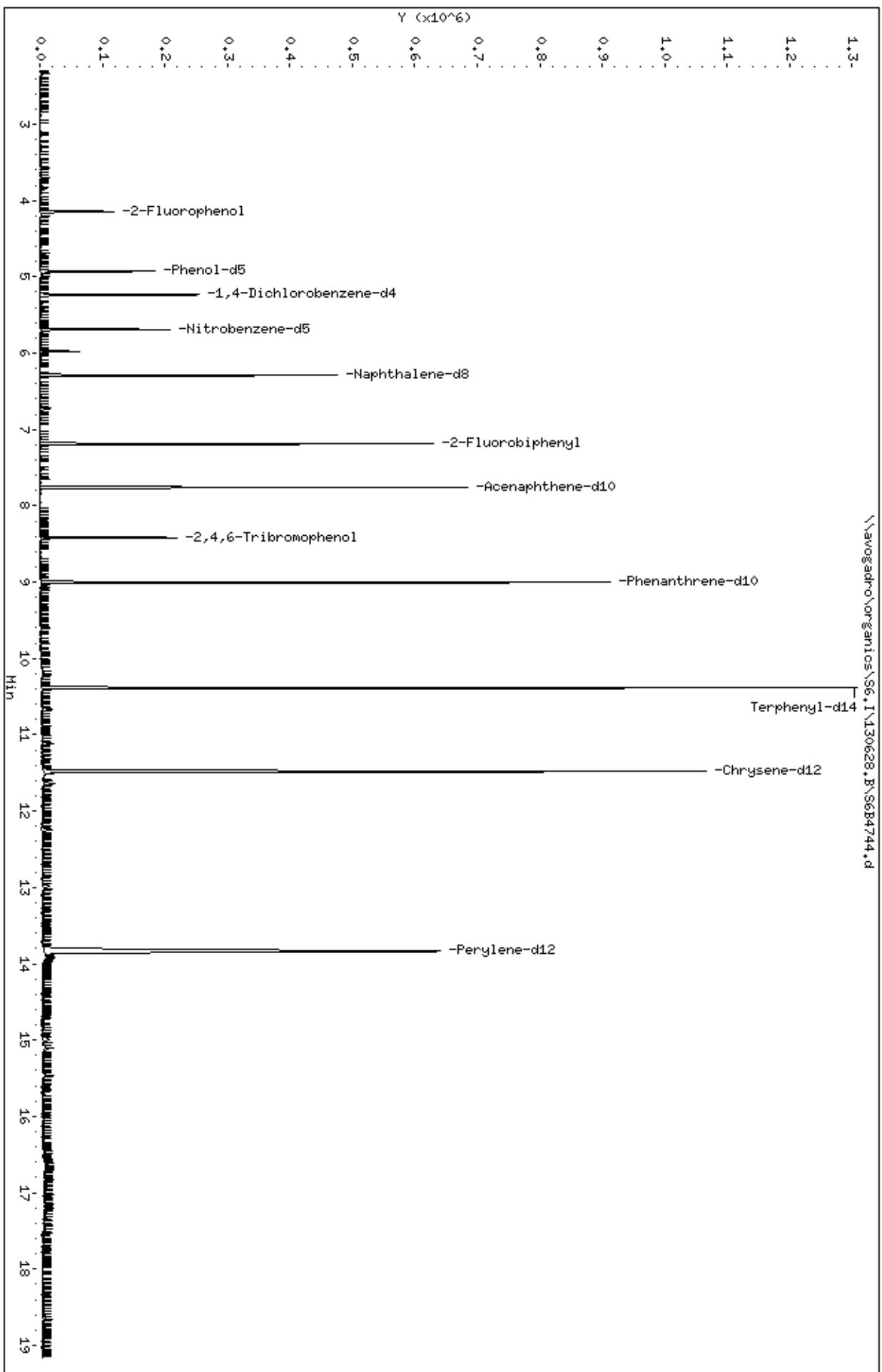
Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S6.I\130628.B\S6B4744.d  
 Lab Smp Id: MB-72397 Client Smp ID: MB-72397  
 Inj Date : 28-JUN-2013 13:12  
 Operator : PK SRC: LIMS Inst ID: S6.i  
 Smp Info : MB-72397,MB-72397,72397  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\S6.I\130628.B\S6\_8270C\_N.m  
 Meth Date : 28-Jun-2013 14:20 S6.i Quant Type: ISTD  
 Cal Date : 27-JUN-2013 16:11 Cal File: S6B4716.d  
 Als bottle: 4 QC Sample: BLANK  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: allnew.sub  
 Target Version: 4.14  
 Processing Host: TARGET113

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC correction factor
Vt	1000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	15.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	CONCENTRATIONS					
			ON-COLUMN	FINAL	RT	EXP RT	REL RT	RESPONSE
	MASS		( ng)	(ug/Kg)				
\$ 3 2-Fluorophenol	112		35.7768	2400	4.144	4.138	(0.791)	30989
\$ 5 Phenol-d5	99		41.2242	2700	4.926	4.926	(0.941)	48767
* 12 1,4-Dichlorobenzene-d4	152		40.0000		5.237	5.237	(1.000)	35647
\$ 22 Nitrobenzene-d5	82		43.2237	2900	5.690	5.690	(0.904)	55005
* 31 Naphthalene-d8	136		40.0000		6.295	6.295	(1.000)	150715
\$ 41 2-Fluorobiphenyl	172		41.9471	2800	7.188	7.188	(0.927)	150992
* 48 Acenaphthene-d10	164		40.0000		7.758	7.764	(1.000)	119955
\$ 60 2,4,6-Tribromophenol	330		25.8992	1700	8.416	8.416	(0.935)	19019
* 64 Phenanthrene-d10	188		40.0000		9.004	9.003	(1.000)	297230
\$ 72 Terphenyl-d14	244		45.2326	3000	10.384	10.372	(0.904)	310022
* 76 Chrysene-d12	240		40.0000		11.483	11.465	(1.000)	469364
* 83 Perylene-d12	264		40.0000		13.833	13.816	(1.000)	529888





1D - FORM I SV-1  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.  
LCS-72397

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-72397  
 Sample wt/vol: 15.0 (g/mL) G Lab File ID: S6B4676.D  
 Level: (LOW/MED) LOW Extraction: (Type) SONC  
 % Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: \_\_\_\_\_  
 Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/24/2013  
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/26/2013  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
108-95-2	Phenol		3100	
111-44-4	Bis(2-chloroethyl)ether		2600	
95-57-8	2-Chlorophenol		3400	
541-73-1	1,3-Dichlorobenzene		2700	
106-46-7	1,4-Dichlorobenzene		2700	
95-50-1	1,2-Dichlorobenzene		2800	
95-48-7	2-Methylphenol		3100	
108-60-1	2,2'-oxybis(1-Chloropropane)		2800	
106-44-5	4-Methylphenol		2800	
621-64-7	N-Nitroso-di-n-propylamine		2600	
67-72-1	Hexachloroethane		2500	
98-95-3	Nitrobenzene		2800	
78-59-1	Isophorone		2800	
88-75-5	2-Nitrophenol		2800	
105-67-9	2,4-Dimethylphenol		3100	
120-83-2	2,4-Dichlorophenol		3300	
120-82-1	1,2,4-Trichlorobenzene		2700	
91-20-3	Naphthalene		2700	
106-47-8	4-Chloroaniline		2300	
111-91-1	Bis(2-chloroethoxy)methane		2900	
87-68-3	Hexachlorobutadiene		2800	
59-50-7	4-Chloro-3-methylphenol		3100	
91-57-6	2-Methylnaphthalene		2700	
77-47-4	Hexachlorocyclopentadiene		2500	
88-06-2	2,4,6-Trichlorophenol		2800	
95-95-4	2,4,5-Trichlorophenol		2900	
91-58-7	2-Chloronaphthalene		2600	
88-74-4	2-Nitroaniline		2800	
131-11-3	Dimethylphthalate		2800	
208-96-8	Acenaphthylene		2700	
606-20-2	2,6-Dinitrotoluene		2800	
99-09-2	3-Nitroaniline		2600	
83-32-9	Acenaphthene		2600	
51-28-5	2,4-Dinitrophenol		3200	
100-02-7	4-Nitrophenol		3000	
132-64-9	Dibenzofuran		2800	

1E - FORM I SV-2  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.  
LCS-72397

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-72397  
 Sample wt/vol: 15.0 (g/mL) G Lab File ID: S6B4676.D  
 Level: (LOW/MED) LOW Extraction: (Type) SONC  
 % Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: \_\_\_\_\_  
 Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/24/2013  
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/26/2013  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
121-14-2	2,4-Dinitrotoluene	2900		
84-66-2	Diethylphthalate	2800		
7005-72-3	4-Chlorophenyl-phenylether	2600		
86-73-7	Fluorene	2800		
100-01-6	4-Nitroaniline	2800		
534-52-1	4,6-Dinitro-2-methylphenol	2600		
86-30-6	N-Nitrosodiphenylamine	2500		
101-55-3	4-Bromophenyl-phenylether	2300		
118-74-1	Hexachlorobenzene	2400		
87-86-5	Pentachlorophenol	2400		
85-01-8	Phenanthrene	2600		
120-12-7	Anthracene	2600		
86-74-8	Carbazole	2900		
84-74-2	Di-n-butylphthalate	2800		
206-44-0	Fluoranthene	2900		
129-00-0	Pyrene	2500		
85-68-7	Butylbenzylphthalate	2400		
91-94-1	3,3'-Dichlorobenzidine	2200		
56-55-3	Benzo(a)anthracene	2400		
218-01-9	Chrysene	2600		
117-81-7	Bis(2-ethylhexyl)phthalate	2400		
117-84-0	Di-n-octylphthalate	2600		
205-99-2	Benzo(b)fluoranthene	2600		
207-08-9	Benzo(k)fluoranthene	2800		
50-32-8	Benzo(a)pyrene	2600		
193-39-5	Indeno(1,2,3-cd)pyrene	2900		
53-70-3	Dibenzo(a,h)anthracene	2500		
191-24-2	Benzo(g,h,i)perylene	2600		

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S6.I\130626A.B\S6B4676.d  
 Lab Smp Id: LCS-72397 Client Smp ID: LCS-72397  
 Inj Date : 26-JUN-2013 20:59  
 Operator : PK SRC: LIMS Inst ID: S6.i  
 Smp Info : LCS-72397,LCS-72397,72397  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\S6.I\130626A.B\S6\_8270C\_N.m  
 Meth Date : 27-Jun-2013 14:57 S6.i Quant Type: ISTD  
 Cal Date : 26-JUN-2013 14:43 Cal File: S6B4666.d  
 Als bottle: 6 QC Sample: LCS  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: allnew.sub  
 Target Version: 4.14  
 Processing Host: TARGET113

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC correction factor
Vt	1000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	15.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	CONCENTRATIONS					
			ON-COLUMN	FINAL	REL RT	RESPONSE	(ug/Kg)	
	MASS		RT	EXP RT	REL RT	RESPONSE	( ng)	(ug/Kg)
1 N-Nitrosodimethylamine	74		2.993	3.005	(0.564)	8829	32.7038	2200
2 Pyridine	79		3.034	3.046	(0.572)	10639	24.7349	1600
\$ 3 2-Fluorophenol	112		4.221	4.215	(0.795)	35308	48.3803	3200
101 Benzaldehyde	77		4.938	4.943	(0.930)	26977	37.4921	2500
\$ 5 Phenol-d5	99		5.002	4.996	(0.942)	50281	47.1941	3100
6 Phenol	94		5.014	5.008	(0.945)	53154	45.8598	3000
7 Aniline	66		5.008	5.008	(0.944)	42820	46.2085	3100(Q)
8 bis(2-Chloroethyl)Ether	63		5.079	5.079	(0.957)	14456	39.1759	2600(Q)
10 2-Chlorophenol	128		5.137	5.137	(0.968)	48736	50.6280	3400
11 1,3-Dichlorobenzene	146		5.261	5.267	(0.991)	45042	40.0828	2700
* 12 1,4-Dichlorobenzene-d4	152		5.308	5.308	(1.000)	36805	40.0000	
13 1,4-Dichlorobenzene	146		5.319	5.320	(1.002)	48061	40.4186	2700
15 Benzyl Alcohol	108		5.419	5.419	(1.021)	30717	43.4238	2900
16 1,2-Dichlorobenzene	146		5.455	5.455	(1.028)	48360	42.2669	2800
17 2-Methylphenol	108		5.513	5.508	(1.039)	43398	45.8960	3000
18 2,2'-oxybis(1-Chloropropane)	45		5.525	5.525	(1.041)	13316	42.0760	2800(Q)
99 Acetophenone	105		5.637	5.637	(1.062)	76488	41.4820	2800
19 N-Nitroso-di-n-propylamine	70		5.637	5.637	(1.062)	29696	39.4090	2600
20 4-Methylphenol	108		5.637	5.637	(1.062)	48665	41.6127	2800

Compounds	QUANT SIG		CONCENTRATIONS				
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN ( ng)	FINAL (ug/Kg)
21 Hexachloroethane	117	5.737	5.737	(1.081)	18062	38.0424	2500
\$ 22 Nitrobenzene-d5	82	5.766	5.766	(0.906)	56306	41.5184	2800
23 Nitrobenzene	77	5.778	5.784	(0.908)	55039	41.4662	2800
24 Isophorone	82	5.978	5.978	(0.939)	92079	41.5672	2800
25 2-Nitrophenol	139	6.042	6.048	(0.949)	31821	41.9373	2800
26 2,4-Dimethylphenol	107	6.072	6.072	(0.954)	61261	46.8830	3100
27 bis(2-Chloroethoxy)methane	93	6.148	6.148	(0.966)	46190	42.8967	2800
28 Benzoic Acid	105	6.171	6.166	(0.970)	45840	40.1910	2700(Q)
29 2,4-Dichlorophenol	162	6.248	6.248	(0.982)	73708	49.8070	3300
30 1,2,4-Trichlorobenzene	180	6.318	6.318	(0.993)	73328	40.8165	2700
* 31 Naphthalene-d8	136	6.365	6.365	(1.000)	167522	40.0000	
32 Naphthalene	128	6.383	6.383	(1.003)	150637	41.0666	2700
33 4-Chloroaniline	127	6.418	6.424	(1.008)	52061	34.1735	2300
34 Hexachlorobutadiene	225	6.489	6.489	(1.019)	57823	42.1305	2800
102 Caprolactam	113	6.730	6.718	(1.057)	28116	62.3801	4200(R)
35 4-Chloro-3-Methylphenol	107	6.824	6.824	(1.072)	64176	46.0969	3100
36 2-Methylnaphthalene	142	6.959	6.959	(1.093)	126857	40.4791	2700
114 1-Methylnaphthalene	142	7.041	7.041	(1.106)	132904	44.9106	3000
38 Hexachlorocyclopentadiene	237	7.094	7.094	(0.906)	63735	37.0961	2500
112 1,2,4,5-Tetrachlorobenzene	216	7.100	7.100	(0.906)	167331	49.2778	3300
39 2,4,6-Trichlorophenol	196	7.194	7.194	(0.918)	93539	42.3640	2800
40 2,4,5-Trichlorophenol	196	7.223	7.223	(0.922)	101027	42.8300	2800
\$ 41 2-Fluorobiphenyl	172	7.258	7.258	(0.926)	235477	38.7076	2600
98 1,1'-Biphenyl	154	7.341	7.347	(0.937)	252487	42.9851	2900
42 2-Chloronaphthalene	162	7.364	7.364	(0.940)	175294	39.6763	2600
43 2-Nitroaniline	65	7.441	7.441	(0.950)	48314	41.3656	2800
44 Dimethylphthalate	163	7.587	7.587	(0.969)	274723	42.2130	2800
45 2,6-Dinitrotoluene	165	7.640	7.640	(0.975)	62767	41.7328	2800
46 Acenaphthylene	152	7.717	7.717	(0.985)	292594	40.1187	2700
47 3-Nitroaniline	138	7.787	7.787	(0.994)	47271	38.2672	2600
* 48 Acenaphthene-d10	164	7.834	7.834	(1.000)	192755	40.0000	
49 Acenaphthene	153	7.858	7.864	(1.003)	201334	39.4966	2600
50 2,4-Dinitrophenol	184	7.869	7.870	(1.004)	56948	48.4662	3200(Q)
51 4-Nitrophenol	109	7.916	7.917	(1.010)	78043	45.4447	3000
53 2,4-Dinitrotoluene	165	7.981	7.981	(1.019)	94022	42.9813	2900
52 Dibenzofuran	168	7.999	8.005	(1.021)	327864	41.6223	2800
110 2,3,4,6-Tetrachlorophenol	232	8.104	8.105	(1.034)	111643	42.8361	2800
54 Diethylphthalate	149	8.169	8.175	(1.043)	266635	42.0346	2800
56 4-Chlorophenyl-phenylether	204	8.275	8.275	(1.056)	183050	39.5928	2600
55 Fluorene	166	8.287	8.287	(1.058)	296613	42.4721	2800
57 4-Nitroaniline	138	8.298	8.298	(1.059)	60383	41.8339	2800
58 4,6-Dinitro-2-methylphenol	198	8.322	8.322	(0.917)	82022	39.3014	2600
59 N-Nitrosodiphenylamine	169	8.375	8.375	(0.923)	274145	37.4118	2500
97 Azobenzene	77	8.410	8.410	(0.927)	283725	37.6370	2500
\$ 60 2,4,6-Tribromophenol	330	8.486	8.492	(0.935)	72930	35.4236	2400
61 4-Bromophenyl-phenylether	248	8.686	8.686	(0.957)	127479	34.7495	2300
62 Hexachlorobenzene	284	8.757	8.757	(0.965)	144067	36.1122	2400
100 Atrazine	200	8.810	8.810	(0.971)	143211	107.884	7200(AR)
63 Pentachlorophenol	266	8.915	8.915	(0.983)	111375	35.9597	2400
111 Pentachloronitrobenzene	237	8.915	8.933	(0.983)	6217	2.97535	200(aQ)
* 64 Phenanthrene-d10	188	9.074	9.080	(1.000)	603340	40.0000	
65 Phenanthrene	178	9.097	9.098	(1.003)	530592	39.7172	2600
66 Anthracene	178	9.139	9.139	(1.007)	539102	39.4801	2600
67 Carbazole	167	9.262	9.268	(1.021)	503546	43.2850	2900

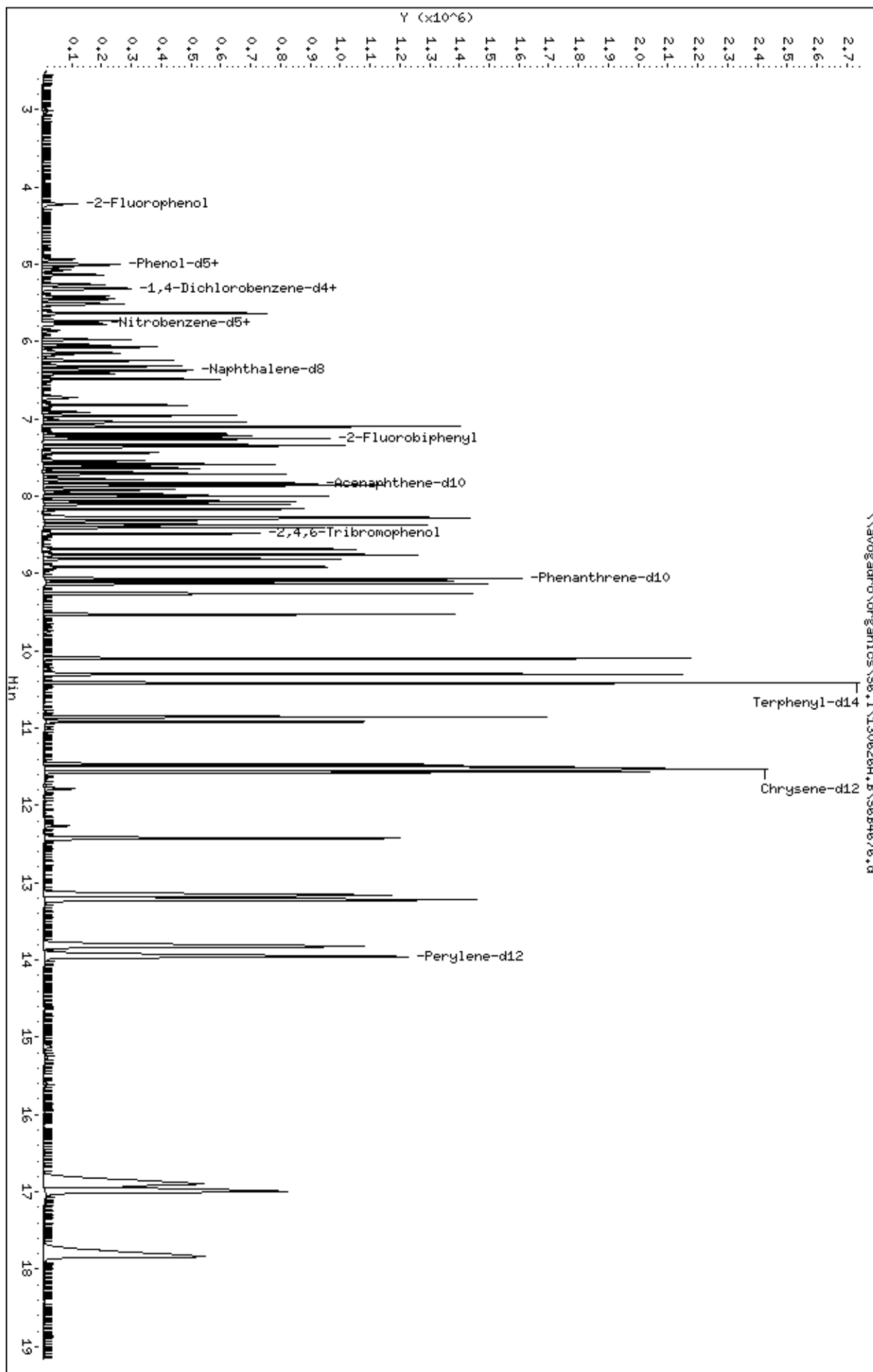
Compounds	QUANT		SIG				CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN ( ng)	FINAL (ug/Kg)	
68 Di-n-butylphthalate	149	9.532	9.538	(1.051)	555917	41.9159	2800	
69 Fluoranthene	202	10.102	10.114	(1.113)	839408	43.4294	2900	
70 Benzidine	184	10.196	10.208	(0.884)	7002	1.86414	120(aQ)	
71 Pyrene	202	10.302	10.314	(0.893)	870490	37.9152	2500	
\$ 72 Terphenyl-d14	244	10.419	10.431	(0.903)	743012	39.6856	2600	
73 Butylbenzylphthalate	149	10.860	10.872	(0.941)	302762	36.3772	2400	
74 3,3'-Dichlorobenzidine	252	11.471	11.483	(0.994)	365464	32.4515	2200	
78 bis(2-Ethylhexyl)phthalate	149	11.495	11.512	(0.996)	474897	35.5351	2400	
75 Benzo(a)anthracene	228	11.512	11.530	(0.998)	1106721	35.7904	2400	
* 76 Chrysene-d12	240	11.536	11.548	(1.000)	1176157	40.0000		
77 Chrysene	228	11.571	11.583	(1.003)	1000089	39.2957	2600	
79 Di-n-octylphthalate	149	12.423	12.447	(0.890)	792175	39.3434	2600	
80 Benzo(b)fluoranthene	252	13.163	13.175	(0.943)	1200579	38.9009	2600	
81 Benzo(k)fluoranthene	252	13.222	13.234	(0.947)	1221322	42.5955	2800	
82 Benzo(a)pyrene	252	13.827	13.839	(0.991)	1141977	39.6430	2600	
* 83 Perylene-d12	264	13.957	13.974	(1.000)	1195024	40.0000		
84 Indeno(1,2,3-cd)pyrene	276	16.894	16.889	(1.210)	1457122	42.7579	2800	
85 Dibenzo(a,h)anthracene	278	16.994	16.988	(1.218)	1138224	37.1740	2500	
86 Benzo(g,h,i)perylene	276	17.829	17.817	(1.277)	1200597	38.9730	2600	

QC Flag Legend

- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- 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\organicos\S6\_1\130626d,B\S6B4676.d  
Date : 26-JUN-2013 20:59  
Client ID: LCS-72397  
Sample Info: LCS-72397,LCS-72397,72397  
Volume Injected (uL): 1.0  
Column phase: Rxi-SS11 MS

Instrument: S6.i  
Operator: PK SRC: LIMS  
Column diameter: 0.25



**Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division**

**PREP BATCH REPORT**

Prep Start Date: 06/24/2013 08:16

Prep End Date: 06/24/2013 13:02

Prep Batch ID: 72397

Prep Code: BNA\_S\_PR

Prep Type: SONG/SW3550B

Prep Factor Units: mL / g

Technician: Jodie B Warner

QC Matrix: NA2SO4 Solvent (1): MECL2  
 QC Matrix Lot: 121756 Solvent (1) Lot: DI 364

Filter?: FILTER Solvent (2): ACE  
 Filter Lot: FC003203 Solvent (2) Lot: 125597

Clean Up (1): N/A  
 Clean Up (1) Lot: N/A

Clean Up (2): N/A  
 Clean Up (2) Lot: N/A

Therm ID1: MT-88

Bath Temp1 (C): 87

Sonicator Tuned? Yes

Cycles/Hour: 0

Start Time: N/A

End Time: N/A

Lab Sample ID	Client Samp ID	M	Initial (mL/g)	Final (mL)	Surrogate Spike ID	Surr (mL)	LCS/D Spike ID	Spike (mL)	A* Init	W* Init	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH	CNCNTR Unit
MB-72397	BatchQC		15	1	OSW130521A	1			JBW	TM	06/24/13		06/24/13	JKD	R7	>11	<2	KD 1
LCS-72397	BatchQC		15	1	OSW130521A	1	OSW130531A	1	JBW	TM	06/24/13		06/24/13	JKD	R7			KD 1
M0984-13C	360109-E508	S	15.1	1	OSW130521A	1			JBW	TM	07/03/13	01	06/24/13	JKD	R7			KD 1
M0999-08A	SS-11	S	15	1	OSW130521A	1			JBW	TM	07/03/13	01	06/24/13	JKD	R7			KD 1
M0999-08AMS	SS-11	S	15.1	1	OSW130521A	1	OSW130531A	1	JBW	TM	07/03/13	01	06/24/13	JKD	R7			KD 1
M0999-08AMSD	SS-11	S	15.3	1	OSW130521A	1	OSW130531A	1	JBW	TM	07/03/13	01	06/24/13	JKD	R7			KD 1
M0999-09A	SS-11 DUP	S	15.1	1	OSW130521A	1			JBW	TM	07/03/13	01	06/24/13	JKD	R7			KD 1
M0975-04A	COMP-A-061313	S	15.1	1	OSW130521A	1			JBW	TM	06/26/13	01	06/24/13	JKD	R7			KD 1
M0975-07A	COMP-B-061313	S	15.4	1	OSW130521A	1			JBW	TM	06/26/13	01	06/24/13	JKD	R7			KD 1
M0975-11A	COMP-C-061313	S	15.2	1	OSW130521A	1			JBW	TM	06/26/13	01	06/24/13	JKD	R7			KD 1
M0975-14A	COMP-D-061313	S	15.2	1	OSW130521A	1			JBW	TM	06/26/13	01	06/24/13	JKD	R7			KD 1
M0975-18A	COMP-E-061313	S	15.2	1	OSW130521A	1			JBW	TM	06/26/13	01	06/24/13	JKD	R7			KD 1

*JW*  
*06/24/13*

James Kyle Dorsey Analyst Reviewed 06/24/2013  
 Jodie B Warner Manager Reviewed 06/24/2013

Comments:

## *Percent Moisture and Percent Solids Report*

<i>Lab Sample ID</i>	<i>Client Sample ID</i>	<i>Analyzed</i>	<i>Percent Moisture</i>	<i>Percent Solids</i>	<i>Validated</i>
M0975-01A	A-1-3-061313	06/18/2013	20.881	79.119	Yes
M0975-02A	A-2-2-061313	06/18/2013	25.000	75.000	Yes
M0975-03A	A-3-1-061313	06/18/2013	18.921	81.079	Yes
M0975-04A	COMP-A-061313	06/18/2013	21.460	78.540	Yes
M0975-05A	B-1-4-061313	06/18/2013	18.650	81.350	Yes
M0975-06A	B-2-1-061313	06/18/2013	18.229	81.771	Yes
M0975-07A	COMP-B-061313	06/18/2013	20.671	79.329	Yes
M0975-08A	C-1-2-061313	06/18/2013	23.940	76.060	Yes
M0975-09A	C-2-3-061313	06/18/2013	25.535	74.465	Yes
M0975-10A	C-3-2-061313	06/18/2013	23.295	76.705	Yes
M0975-11A	COMP-C-061313	06/18/2013	17.278	82.722	Yes
M0975-12A	D-1-1-061313	06/18/2013	17.479	82.521	Yes
M0975-13A	D-3-4-061313	06/18/2013	19.204	80.796	Yes
M0975-14A	COMP-D-061313	06/18/2013	20.900	79.100	Yes
M0975-15A	E-1-3-061313	06/18/2013	15.889	84.111	Yes
M0975-16A	E-2-4-061313	06/18/2013	24.763	75.237	Yes
M0975-17A	E-3-2-061313	06/18/2013	23.279	76.721	Yes
M0975-18A	COMP-E-061313	06/18/2013	16.103	83.897	Yes





Logbook ID: 70.0195-04/13  
 Spectrum Analytical, Inc. RI Division S6 Inlet Maintenance By: *pk*  
 Semivolatiles Laboratory Inlet Liner : *blend*  
 Inlet Seal: *blend*  
 Septum : *new*

Method: *920* ANALYST: *pk* BATCH: 130625.B Start: 25-JUN-13 15:12  
 ICAL DATE: *6/14/13* EMV: *1682* End: 26-JUN-13 00:09

Internal Standard: *S1304 (7A)*  
 Comments: *#10389*  
*Tune-D120820A*  
*13-J130408C*

Reviewed By: \_\_\_\_\_ MI Review: \_\_\_\_\_

FILE			LAB ID	CLIENT ID	PREP	MT	BATCH	DCB	NPT	ANT	PHN	CRY	PRY	NEZ	FBP	BN	TPH	PHL	2FP	TBP	DCB	2CP	DILN	FLG	COMMENTS					
INTERNAL STANDARDS												SURROGATES																		
S6B4630C	15:12	DFTPP6Y					AO																							
S6B4631D	15:53	SSTD0256Y					AO	100	100	100	100	100	100													1		<i>AO</i>		
S6B4632	16:34	MB-72395					AO	80	72	86	93	94	99	88	84	84	106	72	76	93										
S6B4633	17:00	LCS-72395					AO	97	85	97	97	98	99	88	81	81	98	83	69	99									1	<i>ER</i>
S6B4634	17:25	LCS-D-72395					AO	110	95	108	109	108	106	91	81	81	96	79	73	95									1	<i>ER</i>
S6B4635	17:51	MB-72397					SL	99	88	106	114	118	122	88	83	83	99	104	116	88										
S6B4636	18:16	LCS-72397					SL	113	103	116	121	119	121	89	83	83	96	102	109	99									1	<i>ER</i>
S6B4637	18:41	M0975-04A					SL	96	81	97	105	108	113	69	61	61	77	76	80	73										
S6B4638	19:06	M0975-07A					SL	92	81	103	115	121	122	71	62	62	79	85	94	79										
S6B4639	19:32	M0975-11A					SL	100	85	102	111	112	118	74	68	68	81	80	92	76										
S6B4640	19:57	M0975-14A					SL	99	86	108	114	118	121	76	65	65	83	80	88	81										
S6B4641	20:22	M0975-18A					SL	98	86	99	105	110	113	67	61	61	75	74	81	74										
S6B4642	20:47	M0984-13C					SL	89	87	140	131	107	117	66	54	54	81	63	73	60										
S6B4643	21:12	M1021-01B					AO	71	65	82	88	94	99	86	82	82	102	13	18	64										
S6B4644	21:38	M1027-01B					AO	95	82	98	101	104	110	72	73	73	92	16	24	94										
S6B4645	22:03	M1028-01B					AO	100	87	105	115	124	131	77	74	74	108	14	17	72										
S6B4646	22:28	M0999-07F					AO	73	68	86	92	98	104	77	75	75	112	19	28	100										
S6B4647	22:54	M0999-08A					SL	73	66	80	88	104	121	56	57	57	67	66	77	76										
S6B4648	23:19	M0999-08AMS					SL	110	94	112	117	131	141	68	63	63	70	71	78	77										
S6B4649	23:44	M0999-08AMS					SL	119	102	120	127	141	151	64	61	61	70	70	75	73										
S6B4650	00:09	M0999-09A					SL	133	113	130	135	147	160	58	58	58	70	64	71	71										

Internal Standard or Surrogate outside of control limits  
 One or more target compounds are above the calibration range  
 Sample was injected outside of the 12 hour sequence

*MI 6/26/13*

Spectrum Analytical, Inc. RI Division S6 Injection Log  
Semivolatiles Laboratory

44 - SU130408A  
45  
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METHOD: 8220  
ICAL DATE: 07/26/13

ANALYST: PM  
ENV: 2432

BATCH: 130626.B  
Start: 26-JUN-13 11:25  
End: 26-JUN-13 15:11

Internal Standard: SD130417A  
Comments: #10422  
Tune - 5/20/2008  
Inlet Maintenance By: PM  
Liner : Clean  
Column : CHi STAB  
Inlet Seal: Clean  
Septum : New

Reviewed By: WMS/STP Manual Integration: NA

MI Review: N/A

FILE	TIME	LAB ID	CLIENT ID	PREP   MT	BATCH	DCB	INTERNAL STANDARDS							SURROGATES							COMMENTS					
							ANT	PHN	CRY	PRY	NBZ	FBP	TPH	PHL	2FP	TBP	DCB	2CP	DIIN	PLG						
S6B4660F	11:25	DFTPP6Z			AA																					
S6B4661	11:45	SSTD0256Z			AA	100	100	100	100	100																
S6B4662	13:00	SSTD0806Z			AA	122	139	125	143	135																
S6B4663	13:25	SSTD0056Z			AA	92	88	108	110	116	118															
S6B4664	13:51	SSTD0606Z			AA	123	135	129	125	135	133															
S6B4665	14:17	SSTD0106Z			AA	119	118	133	131	136	138															
S6B4666	14:43	SSTD0406Z			AA	105	104	110	110	120	122															
S6B4667	15:11	SICV0256Z			AA	52	56	58	60	66	70	55	60	57	59	57	56									

\* - Internal Standard or Surrogate outside of control limits

E - One or more target compounds are above the calibration range

T - Sample was injected outside of the 12 hour sequence

R - One or more spike compounds are outside of control limits

D - Surrogates are diluted

PM 6/27/13





Spectrom Analytical, Inc. RI Division S6 Injection Log

METHOD: 8220  
ICAL DATE: 6/27/13

BATCH: 130628.B

Start: 28-JUN-13 09:58  
End: 28-JUN-13 14:55

Internal Standard: SD30407A

#10430

Tune-22082at  
C3 in 130628.C

Inlet Maintenance By: M  
Liner : NA  
Column : ✓  
Inlet Seal : ✓  
Septum : ✓

Reviewed By: JMS 6/28/13 Manual Integration: MA MI Review: N/A

FILE	TIME	LAB ID	CLIENT ID	PREP MT	INTERNAL STANDARDS				SURROGATES				DIIN FLG	COMMENTS						
					NPT	DCB	ANT	PHN	CRY	PRY	NEZ	FBP			BN	TPH	PHL	2FP	ACID	OLM
S6B4740D	09:58	DFTFP6C	DFTFP6C	AQ															1	OL
S6B4741	10:20	SSTD0256C	SSTD0256C	AQ	100	100	100	100	100	100									1	
S6B4742C	12:21	MB-72256	MB-72256	SL	114	121	134	139	139	139	87	86	100	77	68	32*			1	
S6B4743	12:46	LCSD-72256	LCSD-72256	SL	87	79	87	89	97	101	90	86	98	83	86	92			1	
S6B4744	13:12	MB-72397	MB-72397	SL	81	79	89	96	108	116	86	84	90	82	72	52			1	
S6B4745	13:38	LCS-72227	LCS-72227	AQ	170	160	175	178	180	175	96	94	105	84	83	96			1	
S6B4746	14:04	M1037-01A	WC-PAH-3-1	AQ	92	86	94	94	100	110	91	88	104	46	59	104			1	
S6B4747	14:29	M1050-01A	SOIL PILE	AQ	66	65	64	68	79	94	95	100	115	53	62	113			1	
S6B4748	14:55	M0938-02C	OU6-061113FB	AQ	118	107	125	125	132	135	100	86	114	19	32	100			1	OL

\* - Internal Standard or Surrogate outside of control limits  
E - One or more target compounds are above the calibration range  
T - Sample was injected outside of the 12 hour sequence

R - One or more spike compounds are outside of control limits  
D - Surrogates are diluted

M 6/28/13



**SPECTRUM ANALYTICAL, INC.**  
*Featuring*  
**HANIBAL TECHNOLOGY**

**\* Pesticide Organics \***

## REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : GZA GeoEnvironmental of NY Buffalo

Project: Former Signore Facility

Laboratory Workorder / SDG #: M0975

SW846 8081B, Organochlorine Pesticides by GC-ECD

### I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

### II. 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.

### III. METHODS

Samples were analyzed following procedures in laboratory test code:  
SW846 8081B

### IV. PREPARATION

Soil Samples were prepared following procedures in laboratory test code:  
SW3550B

### V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: E5  
Instrument Type: GC-ECD  
Description: HP6890  
Manufacturer: Hewlett-Packard



Model: 6890

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

## **VI. ANALYSIS**

### **A. Calibration:**

Calibrations met the method/SOP acceptance criteria.

### **B. Blanks:**

All method blanks were within the acceptance criteria.

### **C. Surrogates:**

Surrogate standard percent recoveries were within the QC limits.

### **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):**

No client-requested MS/MSD analyses were included in this SDG.

### **E. Dilutions:**

No sample in this SDG required analysis at dilution.

### **F. Samples:**

The lower concentration between the primary and confirmatory GC column concentrations is reported due to the presence of interferences unless otherwise indicated. P flags are assigned to compounds when D% between the two columns are greater than 40%.

No other unusual occurrences were noted during sample analysis.

### **G. Manual Integration**

Where needed, manual integrations were performed to improve data quality. The corrections were reviewed and associated hardcopies

generated and reported as required. Manual integrations are coded to provide the data reviewer justification for such action. The codes are labeled on the ion chromatogram signal (GC/MS signal) and chromatogram for GC based analysis as follows:

- M1 peak tailing or fronting
- M2 peak co-elution
- M3 rising or falling baseline
- M4 retention time shift
- M5 miscellaneous - under this category, the justification is explained
- M6 software did not integrate peak
- M7 partial peak integration

The following samples were manually integrated:

TOXAPH3J5 Toxaphene on front column due to M3

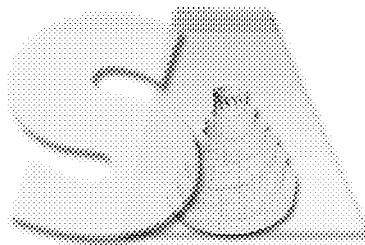
TOXAPH4J5 Decachlorobiphenyl on front column , Toxaphene on front column due to M3

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.



Signed: \_\_\_\_\_

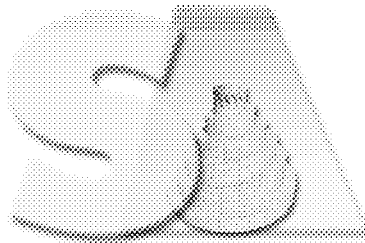
Date: \_\_\_\_\_ 6/27/2013 \_\_\_\_\_



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*Featuring*  
**HANIBAL TECHNOLOGY**

### **Data Flag/Qualifiers:**

- U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).
- J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
  - estimated concentration for Tentatively Identified Compound
- B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a “trace” concentration below the reporting limit and equal to or above the detection limit.
- D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis
- E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.
- P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.
- A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.
- N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.
- \* For Inorganics analysis the \* flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.



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**HANIBAL TECHNOLOGY**

## **Sample ID Suffixes**

- DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution
- RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.
- RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.
- RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.
- MS Matrix Spike.
- MSD Matrix Spike Duplicate
- DUP Duplicate analysis
- SD Serial Dilution
- PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

2P - FORM II PEST-2  
SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 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	MB-72288	89	100	96	90			0
02	LCS-72288	91	99	97	93			0
03	LCSD-72288	90	100	98	92			0
04	COMP-A-06131 3	65	74	73	72			0
05	COMP-B-06131 3	60	68	68	67			0
06	COMP-C-06131 3	71	81	78	77			0
07	COMP-D-06131 3	71	82	78	78			0
08	COMP-E-06131 3	70	78	75	75			0

TCX = Tetrachloro-m-xylene  
 DCB = Decachlorobiphenyl

QC LIMITS  
 (14-113)  
 (55-130)

# Column to be used to flag recovery values  
 \* Values outside of QC limits  
 D Surrogate diluted out

som13.06.03.A

3M - FORM III PEST-3  
SOIL PESTICIDE LABORATORY CONTROL  
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-72288

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Lab Sample ID: LCS-72288 LCS Lot No.: A085100  
 Date Extracted: 06/18/2013 Date Analyzed (1): 06/20/2013  
 Instrument ID (1): E5 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS
alpha-BHC	6.6670	5.8351	88		60-125
beta-BHC	6.6670	6.0913	91		60-125
delta-BHC	6.6670	6.1319	92		55-130
gamma-BHC (Lindane)	6.6670	5.8218	87		60-125
Heptachlor	6.6670	5.9513	89		50-140
Aldrin	6.6670	5.8360	88		45-140
Heptachlor epoxide	6.6670	6.0323	90		65-130
Endosulfan I	6.6670	5.8659	88		15-135
Dieldrin	13.3330	12.5823	94		65-125
4,4'-DDE	13.3330	13.2393	99		70-125
Endrin	13.3330	13.0599	98		60-135
Endosulfan II	13.3330	12.0559	90		35-140
4,4'-DDD	13.3330	12.3437	93		30-135
Endosulfan sulfate	13.3330	13.3751	100		60-135
4,4'-DDT	13.3330	13.3533	100		45-140
Methoxychlor	66.6670	67.0396	101		55-145
Endrin ketone	13.3330	12.7139	95		65-135
Endrin aldehyde	13.3330	12.8654	96		35-145
alpha-Chlordane	6.6670	5.9377	89		65-120
gamma-Chlordane	6.6670	5.9286	89		65-125

Instrument ID (2): E5 GC Column(2): CLPPestII ID: 0.53 (mm)  
 Date Analyzed (2): 06/20/2013

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS
alpha-BHC	6.6670	6.1594	92		60-125
beta-BHC	6.6670	5.3722	81		60-125
delta-BHC	6.6670	6.4698	97		55-130
gamma-BHC (Lindane)	6.6670	6.0919	91		60-125

COMMENTS:

\_\_\_\_\_  
 \_\_\_\_\_

3M - FORM III PEST-3  
 SOIL PESTICIDE LABORATORY CONTROL  
 SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-72288

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Lab Sample ID: LCS-72288 LCS Lot No.: A085100  
 Date Extracted: 06/18/2013 Date Analyzed (1): 06/20/2013

Heptachlor	6.6670	6.2045	93	50-140
Aldrin	6.6670	6.0443	91	45-140
Heptachlor epoxide	6.6670	6.1304	92	65-130
Endosulfan I	6.6670	5.9948	90	15-135
Dieldrin	13.3330	12.5358	94	65-125
4,4'-DDE	13.3330	12.3762	93	70-125
Endrin	13.3330	13.8515	104	60-135
Endosulfan II	13.3330	12.3582	93	35-140
4,4'-DDD	13.3330	13.1891	99	30-135
Endosulfan sulfate	13.3330	12.6096	95	60-135
4,4'-DDT	13.3330	13.0640	98	45-140
Methoxychlor	66.6670	66.3383	100	55-145
Endrin ketone	13.3330	12.4403	93	65-135
Endrin aldehyde	13.3330	12.8564	96	35-145
alpha-Chlordane	6.6670	6.0844	91	65-120
gamma-Chlordane	6.6670	6.2195	93	65-125

# Column to be used to flag recovery values with an asterisk

\* Values outside of QC limits

LCS Recovery: 0 out of 40 outside limits.

COMMENTS:

\_\_\_\_\_  
 \_\_\_\_\_

3M - FORM III PEST-3  
 SOIL PESTICIDE LABORATORY CONTROL  
 SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-72288

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Lab Sample ID: LCSD-72288 LCS Lot No.: A085100  
 Date Extracted: 06/18/2013 Date Analyzed (1): 06/20/2013  
 Instrument ID (1): E5 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS	%RPD #	RPD LIMIT
alpha-BHC	6.6670	5.9401	89		60-125	1.0	30
beta-BHC	6.6670	6.2398	94		60-125	3.0	30
delta-BHC	6.6670	6.2457	94		55-130	2.0	30
gamma-BHC (Lindane)	6.6670	5.8879	88		60-125	1.0	30
Heptachlor	6.6670	6.0649	91		50-140	2.0	30
Aldrin	6.6670	5.9111	89		45-140	1.0	30
Heptachlor epoxide	6.6670	6.0347	91		65-130	1.0	30
Endosulfan I	6.6670	5.9210	89		15-135	1.0	30
Dieldrin	13.3330	12.3548	93		65-125	1.0	30
4,4'-DDE	13.3330	13.3969	100		70-125	1.0	30
Endrin	13.3330	13.1826	99		60-135	1.0	30
Endosulfan II	13.3330	12.3481	93		35-140	3.0	30
4,4'-DDD	13.3330	12.5897	94		30-135	1.0	30
Endosulfan sulfate	13.3330	13.4131	101		60-135	1.0	30
4,4'-DDT	13.3330	13.3702	100		45-140	0	30
Methoxychlor	66.6670	67.3489	101		55-145	0	30
Endrin ketone	13.3330	12.7439	96		65-135	1.0	30
Endrin aldehyde	13.3330	12.9602	97		35-145	1.0	30
alpha-Chlordane	6.6670	5.9878	90		65-120	1.0	30
gamma-Chlordane	6.6670	6.0184	90		65-125	1.0	30

Instrument ID (2): E5 GC Column(2): CLPPestII ID: 0.53 (mm)  
 Date Analyzed (2): 06/20/2013

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS	%RPD #	RPD LIMIT
alpha-BHC	6.6670	6.1233	92		60-125	0	30
beta-BHC	6.6670	5.2888	79		60-125	3.0	30
delta-BHC	6.6670	6.3681	96		55-130	1.0	30
gamma-BHC (Lindane)	6.6670	6.0819	91		60-125	0	30

COMMENTS:

\_\_\_\_\_  
 \_\_\_\_\_



3M - FORM III PEST-3  
 SOIL PESTICIDE LABORATORY CONTROL  
 SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-72288

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Lab Sample ID: LCSD-72288 LCS Lot No.: A085100  
 Date Extracted: 06/18/2013 Date Analyzed (1): 06/20/2013

Heptachlor	6.6670	6.1925	93	50-140	0	30
Aldrin	6.6670	6.0661	91	45-140	0	30
Heptachlor epoxide	6.6670	6.1702	93	65-130	1.0	30
Endosulfan I	6.6670	6.1171	92	15-135	2.0	30
Dieldrin	13.3330	12.6502	95	65-125	1.0	30
4,4'-DDE	13.3330	12.4451	93	70-125	0	30
Endrin	13.3330	14.0566	105	60-135	1.0	30
Endosulfan II	13.3330	12.1374	91	35-140	2.0	30
4,4'-DDD	13.3330	12.9832	97	30-135	2.0	30
Endosulfan sulfate	13.3330	12.6064	95	60-135	0	30
4,4'-DDT	13.3330	13.1319	98	45-140	0	30
Methoxychlor	66.6670	66.0104	99	55-145	1.0	30
Endrin ketone	13.3330	12.5832	94	65-135	1.0	30
Endrin aldehyde	13.3330	12.7925	96	35-145	0	30
alpha-Chlordane	6.6670	6.0589	91	65-120	0	30
gamma-Chlordane	6.6670	6.2717	94	65-125	1.0	30

# Column to be used to flag recovery values with an asterisk

\* Values outside of QC limits

LCS Recovery: 0 out of 40 outside limits.

RPD: 0 out of 40 outside limits.

COMMENTS : \_\_\_\_\_  
 \_\_\_\_\_

4E - FORM IV PEST  
PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-72288

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Lab File ID: E5J7636F.D / E5J7636R.D Lab Sample ID: MB-72288  
 Matrix: (SOIL/SED/WATER) SOIL Extraction: (Type) SONC Date Extracted: 06/18/2013  
 Sulfur Cleanup: (Y/N) Y GPC Cleanup:(Y/N) N

Date Analyzed (1): 06/20/2013 Date Analyzed (2): 06/20/2013  
 Time Analyzed (1): 14:36 Time Analyzed (2): 14:36  
 Instrument ID (1): E5 Instrument ID (2): E5  
 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	LCS-72288	LCS-72288	06/20/2013	06/20/2013
02	LCSD-72288	LCSD-72288	06/20/2013	06/20/2013
03	COMP-A-06131 3	M0975-04A	06/20/2013	06/20/2013
04	COMP-B-06131 3	M0975-07A	06/20/2013	06/20/2013
05	COMP-C-06131 3	M0975-11A	06/20/2013	06/20/2013
06	COMP-D-06131 3	M0975-14A	06/20/2013	06/20/2013
07	COMP-E-06131 3	M0975-18A	06/20/2013	06/20/2013

COMMENTS:

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1G - FORM I PEST  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

COMP-A-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-04A  
 Sample wt/vol: 30.3 (g/mL) G Lab File ID: E5J7641F.D/E5J7641R.D  
 % Moisture: 21 Decanted: (Y/N) N Date Received: 06/14/2013  
 Extraction: (Type) SONC Date Extracted: 06/18/2013  
 Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/20/2013  
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/KG
319-84-6	alpha-BHC	2.1	U
319-85-7	beta-BHC	2.1	U
319-86-8	delta-BHC	2.1	U
58-89-9	gamma-BHC (Lindane)	2.1	U
76-44-8	Heptachlor	2.1	U
309-00-2	Aldrin	2.1	U
1024-57-3	Heptachlor epoxide	2.1	U
959-98-8	Endosulfan I	2.1	U
60-57-1	Dieldrin	4.2	U
72-55-9	4,4'-DDE	4.2	U
72-20-8	Endrin	4.2	U
33213-65-9	Endosulfan II	4.2	U
72-54-8	4,4'-DDD	4.2	U
1031-07-8	Endosulfan sulfate	4.2	U
50-29-3	4,4'-DDT	4.2	U
72-43-5	Methoxychlor	21	U
53494-70-5	Endrin ketone	4.2	U
7421-93-4	Endrin aldehyde	4.2	U
5103-71-9	alpha-Chlordane	2.1	U
5103-74-2	gamma-Chlordane	2.1	U
8001-35-2	Toxaphene	210	U

Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130620F.B\E5J7641F.D  
 Lab Smp Id: M0975-04A Client Smp ID: COMP-A-061313  
 Inj Date : 20-JUN-2013 16:06  
 Operator : GMA SRC: LIMS Inst ID: E5.i  
 Smp Info : M0975-04A,,72288,8081G.SUB,,  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\E5.I\130620F.B\E58081f.m  
 Meth Date : 21-Jun-2013 08:35 gappolonia Quant Type: ESTD  
 Cal Date : 19-JUN-2013 18:15 Cal File: E5J7618F.D  
 Als bottle: 25  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 8081G.SUB  
 Target Version: 4.14 Sample Matrix: SOIL  
 Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.300	Weigth of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

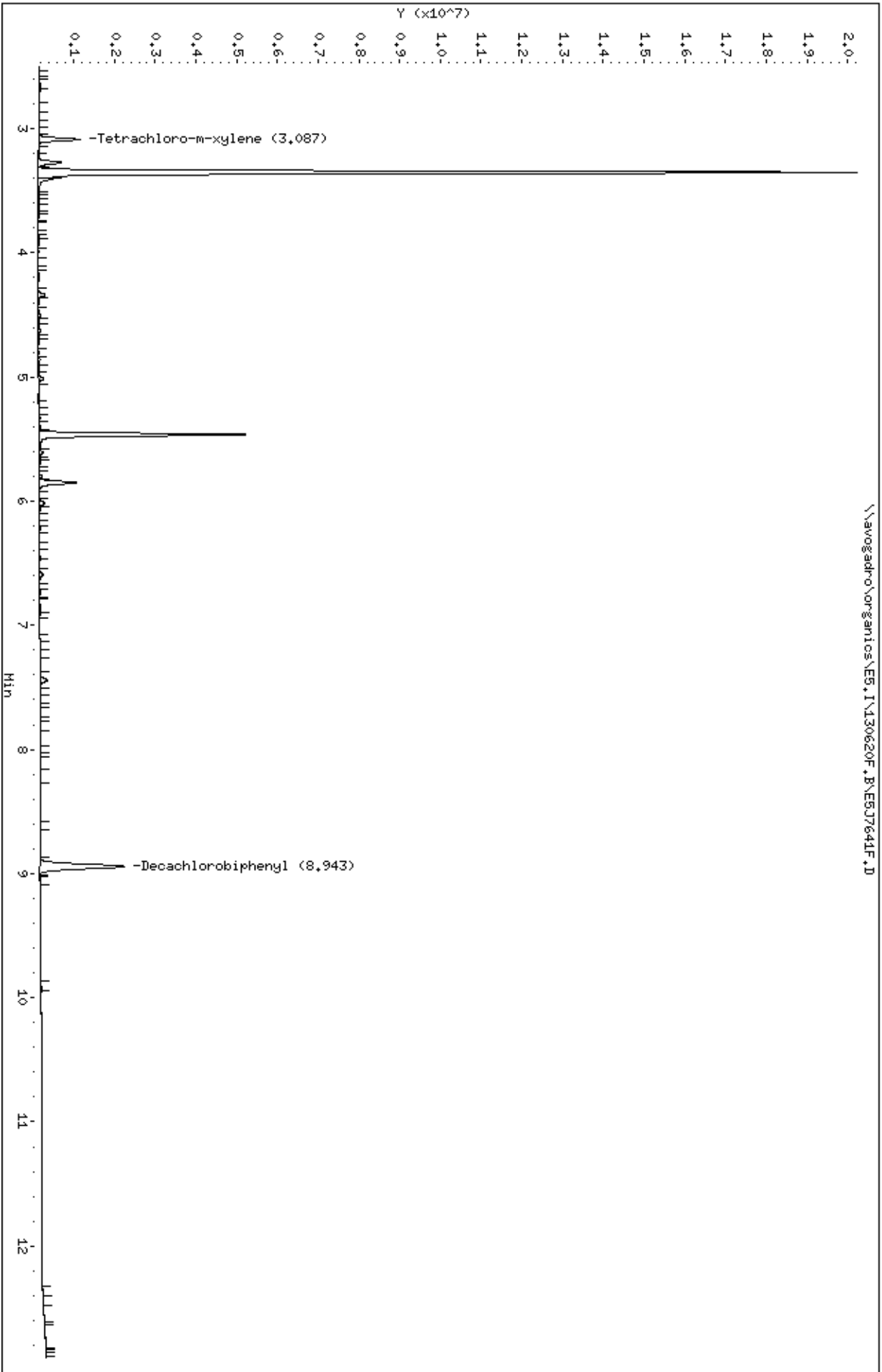
CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	RESPONSE ( ng)	(ug/Kg)	TARGET RANGE	RATIO
\$ 1								
3.086	3.085	0.001	1756150	0.03895	13			
\$ 2								
8.943	8.944	-0.001	5633283	0.08762	29			

Data File: \\avogadro\organicos\ES,I\130620F,B\ESJ7644F.D  
Date : 20-JUN-2013 16:06  
Client ID: COMP-A-061313  
Sample Info: M0975-04A,72288,8081G,SUB,,  
Volume Injected (uL): 1.0  
Column phase: CLPrest

Instrument: ES.i  
Operator: GHA SRC: LIMS  
Column diameter: 0.53

\\avogadro\organicos\ES,I\130620F,B\ESJ7644F.D



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130620R.B\E5J7641R.D  
 Lab Smp Id: M0967-04A  
 Inj Date : 20-JUN-2013 16:06  
 Operator : GMA SRC: GMA Inst ID: E5.i  
 Smp Info : M0967-04A,,72288,8081G.SUB,,  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\E5.I\130620R.B\E58081r.m  
 Meth Date : 21-Jun-2013 13:08 E5.i Quant Type: ESTD  
 Cal Date : 19-JUN-2013 18:15 Cal File: E5J7618R.D  
 Als bottle: 25  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 8081G.SUB  
 Target Version: 4.14 Sample Matrix: WATER

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
RT	EXP RT	DLT RT	ON-COL		FINAL	RATIO
			RESPONSE (	ng)		
====	=====	=====	=====	=====	=====	=====
\$ 1					CAS #: 877-09-8	
3.662	3.661	0.001	6720912	0.04456	0.44	
-----						
\$ 2					CAS #: 2051-24-3	
12.057	12.065	-0.008	20398719	0.08584	0.86	
-----						

Data File: \\avogadro\organicos\ES,I\130620R,B\ESJ764LR.D

Date : 20-JUN-2013 16:06

Client ID:

Sample Info: M0967-04h,72288,8081G,SUB,,

Volume Injected (uL): 1.0

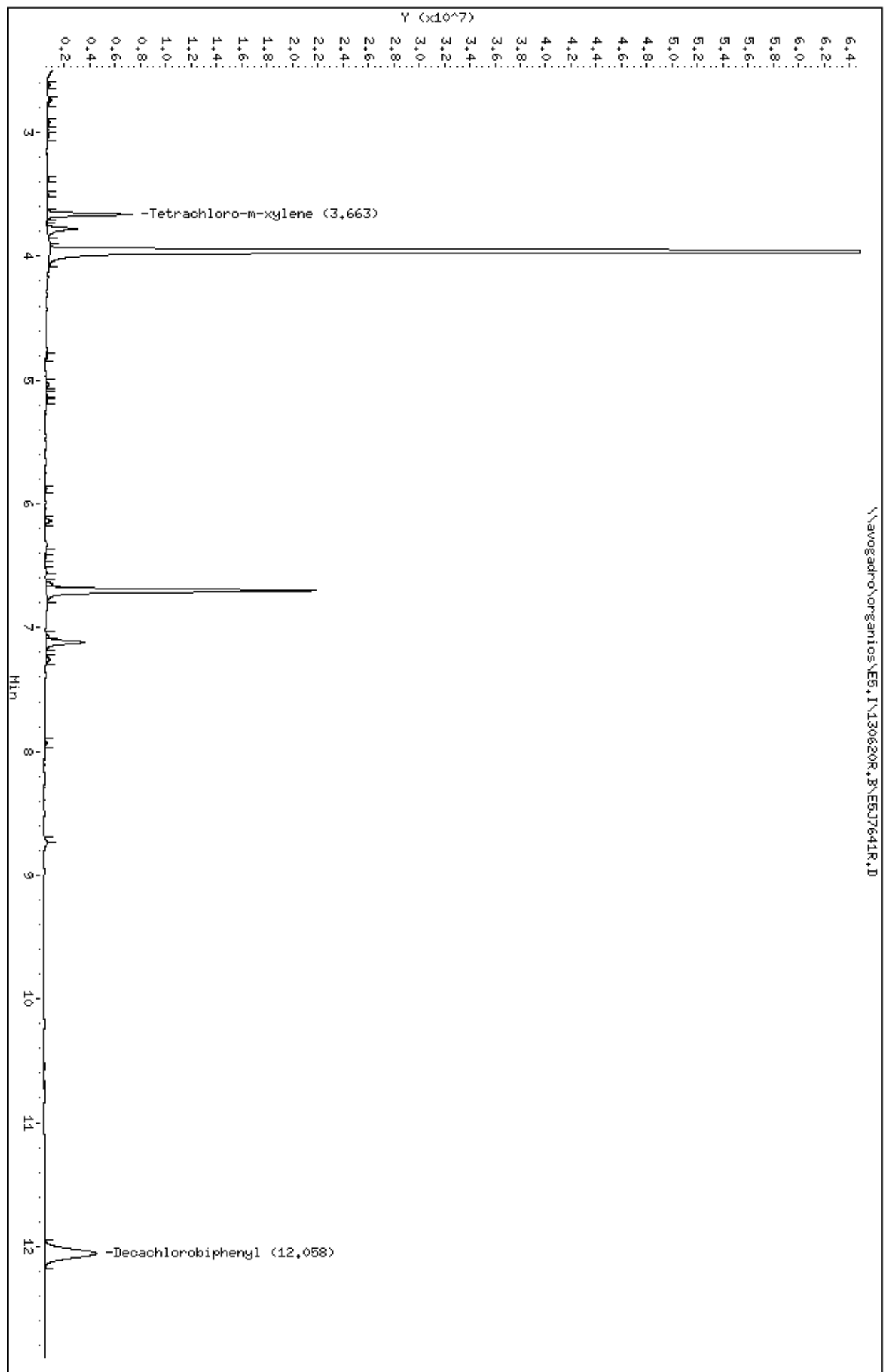
Column phase: CLPestII

Instrument: ES.i

Operator: GHA SRC: GHA

Column diameter: 0.53

\\avogadro\organicos\ES,I\130620R,B\ESJ764LR.D



1G - FORM I PEST  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

COMP-B-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-07A  
 Sample wt/vol: 30.1 (g/mL) G Lab File ID: E5J7642F.D/E5J7642R.D  
 % Moisture: 21 Decanted: (Y/N) N Date Received: 06/14/2013  
 Extraction: (Type) SONC Date Extracted: 06/18/2013  
 Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/20/2013  
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/KG
319-84-6	alpha-BHC	2.1	U
319-85-7	beta-BHC	2.1	U
319-86-8	delta-BHC	2.1	U
58-89-9	gamma-BHC (Lindane)	2.1	U
76-44-8	Heptachlor	2.1	U
309-00-2	Aldrin	2.1	U
1024-57-3	Heptachlor epoxide	2.1	U
959-98-8	Endosulfan I	2.1	U
60-57-1	Dieldrin	4.1	U
72-55-9	4,4'-DDE	4.1	U
72-20-8	Endrin	4.1	U
33213-65-9	Endosulfan II	4.1	U
72-54-8	4,4'-DDD	4.1	U
1031-07-8	Endosulfan sulfate	4.1	U
50-29-3	4,4'-DDT	4.1	U
72-43-5	Methoxychlor	21	U
53494-70-5	Endrin ketone	4.1	U
7421-93-4	Endrin aldehyde	4.1	U
5103-71-9	alpha-Chlordane	2.1	U
5103-74-2	gamma-Chlordane	2.1	U
8001-35-2	Toxaphene	210	U



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130620F.B\E5J7642F.D  
 Lab Smp Id: M0975-07A Client Smp ID: COMP-B-061313  
 Inj Date : 20-JUN-2013 16:23  
 Operator : GMA SRC: LIMS Inst ID: E5.i  
 Smp Info : M0975-07A,,72288,8081G.SUB,,  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\E5.I\130620F.B\E58081f.m  
 Meth Date : 21-Jun-2013 08:35 gappolonia Quant Type: ESTD  
 Cal Date : 19-JUN-2013 18:15 Cal File: E5J7618F.D  
 Als bottle: 26  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 8081G.SUB  
 Target Version: 4.14 Sample Matrix: SOIL  
 Processing Host: TARGET106

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

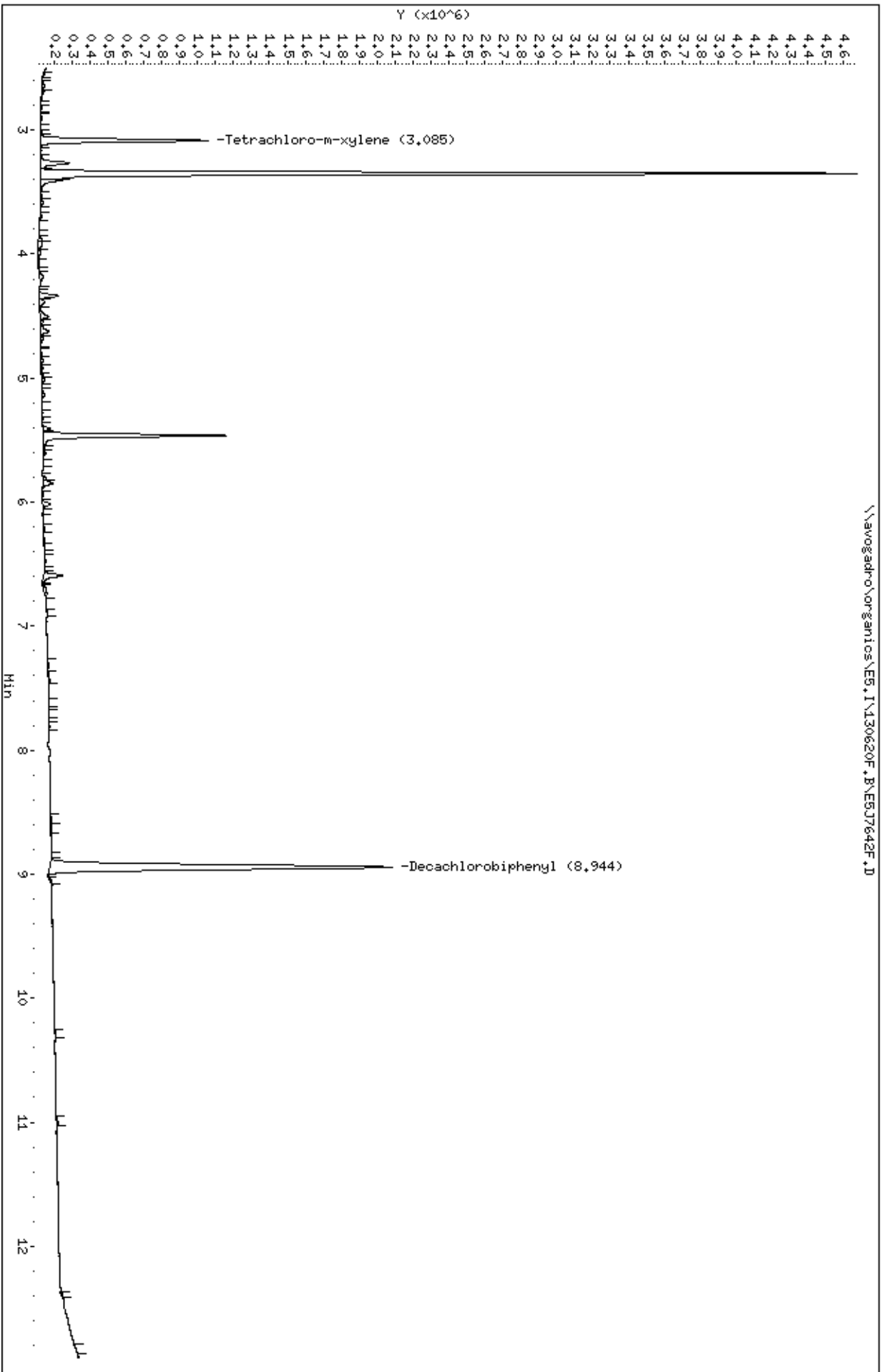
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.100	Weigth of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
=====	=====	=====	RESPONSE ( ng)	(ug/Kg)	=====	=====
\$ 1					CAS #: 877-09-8	
3.085	3.085	0.000	1627761	0.03610	12	
\$ 2					CAS #: 2051-24-3	
8.944	8.944	0.000	5258313	0.08179	27	

Data File: \\avogadro\organicos\ES,I\130620F,B\ESJ7642F.D  
Date : 20-JUN-2013 16:23  
Client ID: COMP-B-061313  
Sample Info: M0975-07A,72288,8081G,SUB,,  
Volume Injected (uL): 1.0  
Column phase: CLPrest

Instrument: ES.i  
Operator: GHA SRC: LIMS  
Column diameter: 0.53



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130620R.B\E5J7642R.D  
 Lab Smp Id: M0975-07A Client Smp ID: COMP-B-061313  
 Inj Date : 20-JUN-2013 16:23  
 Operator : GMA SRC: LIMS Inst ID: E5.i  
 Smp Info : M0975-07A,,72288,8081G.SUB,,  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\E5.I\130620R.B\E58081r.m  
 Meth Date : 21-Jun-2013 13:08 E5.i Quant Type: ESTD  
 Cal Date : 19-JUN-2013 18:15 Cal File: E5J7618R.D  
 Als bottle: 26  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 8081G.SUB  
 Target Version: 4.14 Sample Matrix: SOIL

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

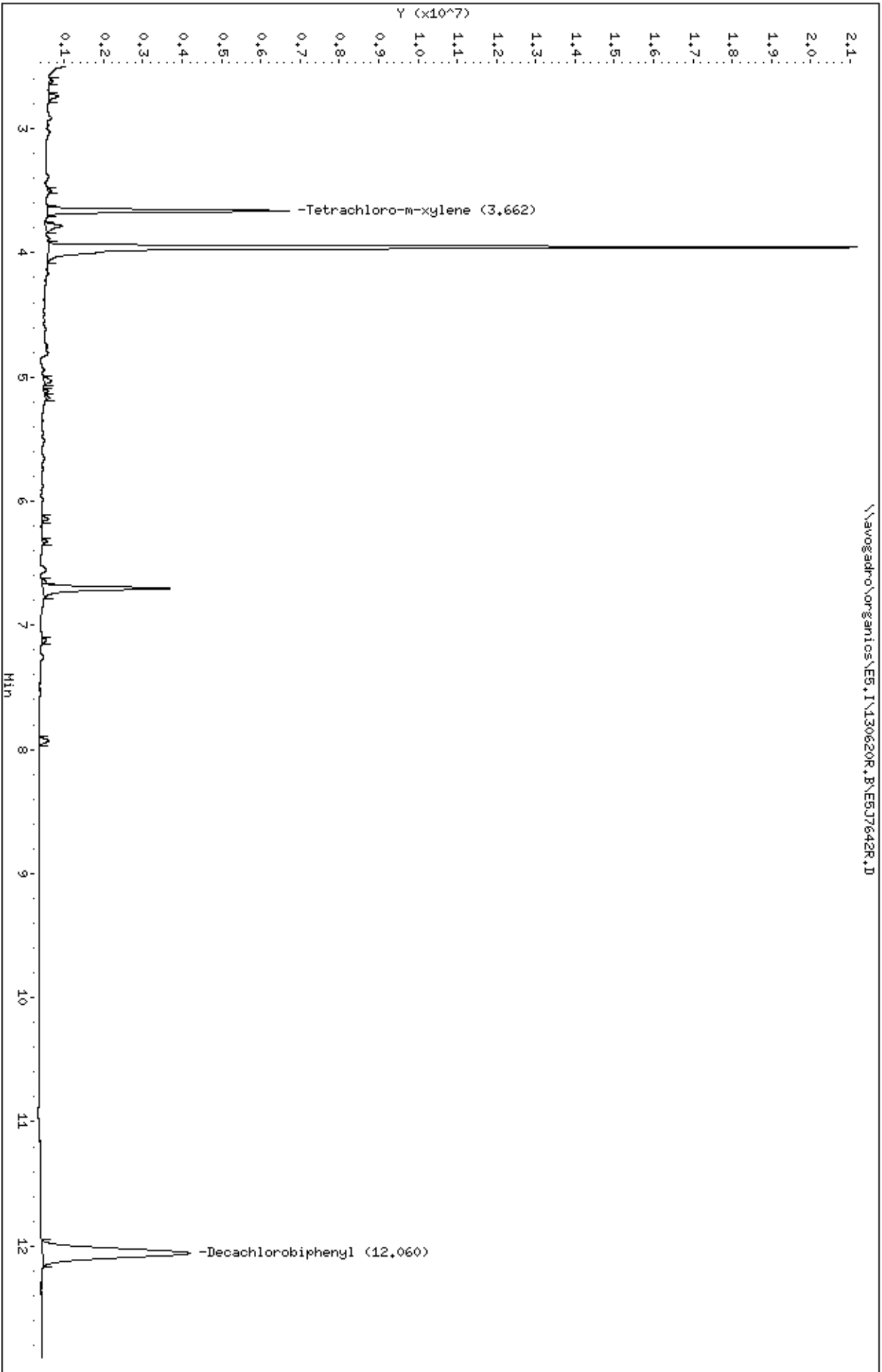
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.100	Weigth of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
		ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE ( ng)	(ug/Kg)	TARGET RANGE	RATIO
====	=====	=====	=====	=====	=====	=====
\$ 1					CAS #: 877-09-8	
3.661	3.661	0.000	6175838	0.04095	14	
-----						
\$ 2					CAS #: 2051-24-3	
12.060	12.065	-0.005	18971147	0.07983	26	
-----						

Data File: \\avogadro\organicos\ES,I\130620R,B\ESJ7642R.D  
Date : 20-JUN-2013 16:23  
Client ID: COMP-B-061313  
Sample Info: M0975-07A,,72288,8081G,SUB,,  
Volume Injected (uL): 1.0  
Column phase: CLPestII

Instrument: ES.i  
Operator: GHA SRC: LIMS  
Column diameter: 0.53

\\avogadro\organicos\ES,I\130620R,B\ESJ7642R.D



1G - FORM I PEST  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

COMP-C-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-11A  
 Sample wt/vol: 30.4 (g/mL) G Lab File ID: E5J7643F.D/E5J7643R.D  
 % Moisture: 17 Decanted: (Y/N) N Date Received: 06/14/2013  
 Extraction: (Type) SONC Date Extracted: 06/18/2013  
 Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/20/2013  
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
319-84-6	alpha-BHC		2.0	U
319-85-7	beta-BHC		2.0	U
319-86-8	delta-BHC		2.0	U
58-89-9	gamma-BHC (Lindane)		2.0	U
76-44-8	Heptachlor		2.0	U
309-00-2	Aldrin		2.0	U
1024-57-3	Heptachlor epoxide		2.0	U
959-98-8	Endosulfan I		2.0	U
60-57-1	Dieldrin		3.9	U
72-55-9	4,4'-DDE		3.9	U
72-20-8	Endrin		3.9	U
33213-65-9	Endosulfan II		3.9	U
72-54-8	4,4'-DDD		3.9	U
1031-07-8	Endosulfan sulfate		3.9	U
50-29-3	4,4'-DDT		3.9	U
72-43-5	Methoxychlor		20	U
53494-70-5	Endrin ketone		3.9	U
7421-93-4	Endrin aldehyde		3.9	U
5103-71-9	alpha-Chlordane		2.0	U
5103-74-2	gamma-Chlordane		2.0	U
8001-35-2	Toxaphene		200	U

Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130620F.B\E5J7643F.D  
 Lab Smp Id: M0975-11A Client Smp ID: COMP-C-061313  
 Inj Date : 20-JUN-2013 16:41  
 Operator : GMA SRC: LIMS Inst ID: E5.i  
 Smp Info : M0975-11A,,72288,8081G.SUB,,  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\E5.I\130620F.B\E58081f.m  
 Meth Date : 21-Jun-2013 08:35 gappolonia Quant Type: ESTD  
 Cal Date : 19-JUN-2013 18:15 Cal File: E5J7618F.D  
 Als bottle: 27  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 8081G.SUB  
 Target Version: 4.14 Sample Matrix: SOIL  
 Processing Host: TARGET106

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

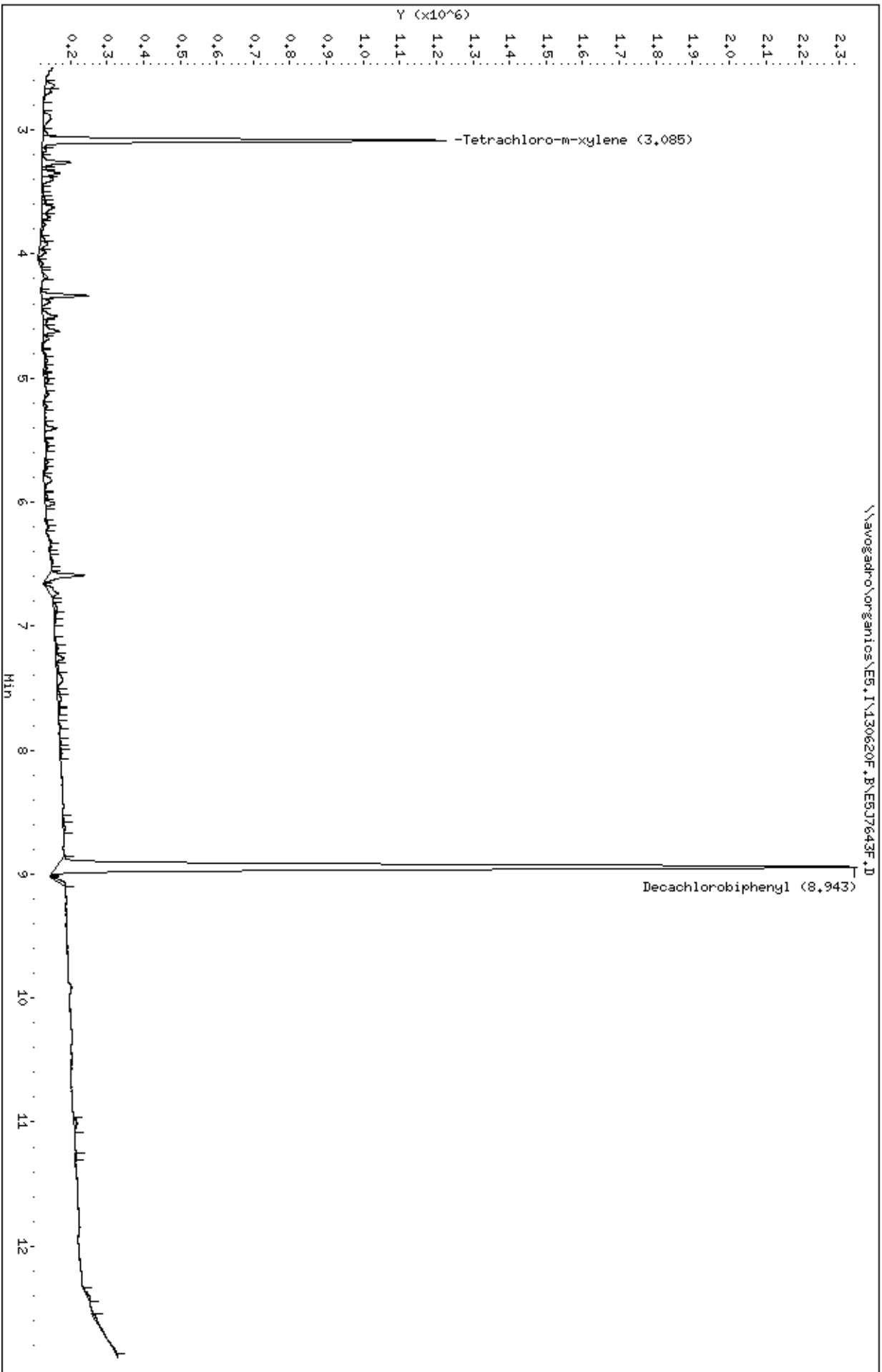
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.400	Weigth of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
=====	=====	=====	RESPONSE ( ng)	(ug/Kg)	=====	=====
\$ 1					CAS #: 877-09-8	
3.084	3.085	-0.001	1914967	0.04247	14	
\$ 2					CAS #: 2051-24-3	
8.943	8.944	-0.001	5986739	0.09312	31	

Data File: \\avogadro\organicos\ES,I\130620F,B\ESJ7643F.D  
Date : 20-JUN-2013 16:41  
Client ID: COMP-C-061313  
Sample Info: M0975-11A,,72288,8081G,SUB,,  
Volume Injected (uL): 1.0  
Column phase: CLPrest

Instrument: ES.i  
Operator: GHA SRC: LIMS  
Column diameter: 0.53



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130620R.B\E5J7643R.D  
 Lab Smp Id: M0975-11A Client Smp ID: COMP-C-061313  
 Inj Date : 20-JUN-2013 16:41  
 Operator : GMA SRC: LIMS Inst ID: E5.i  
 Smp Info : M0975-11A,,72288,8081G.SUB,,  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\E5.I\130620R.B\E58081r.m  
 Meth Date : 21-Jun-2013 13:08 E5.i Quant Type: ESTD  
 Cal Date : 19-JUN-2013 18:15 Cal File: E5J7618R.D  
 Als bottle: 27  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 8081G.SUB  
 Target Version: 4.14 Sample Matrix: SOIL

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.400	Weighth of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS

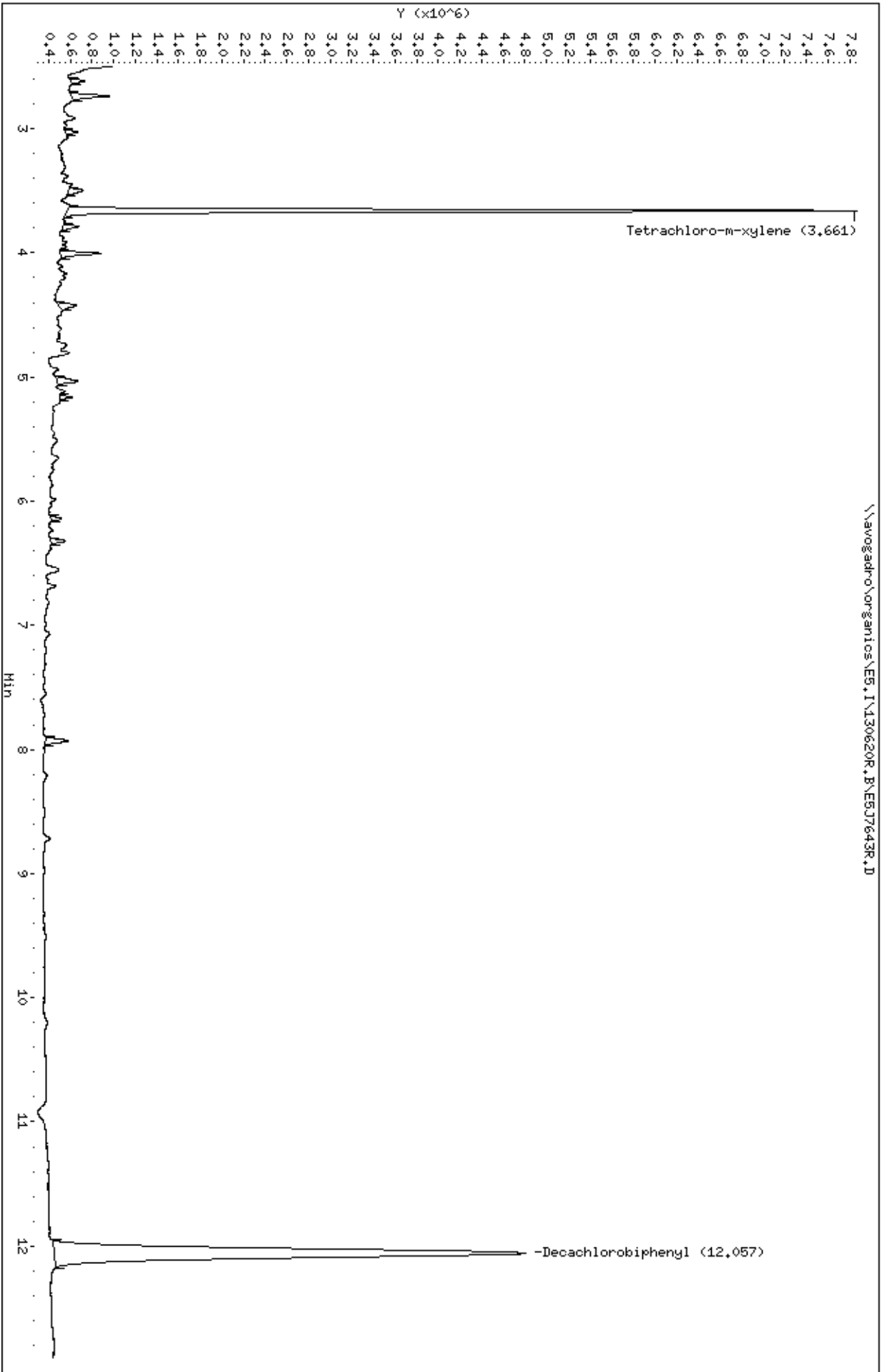
RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====
\$ 1						
3.661	3.661	0.000	7301028	0.04841	16	
-----						
\$ 2						
12.057	12.065	-0.008	21840144	0.09191	30	
-----						



Data File: \\avogadro\organicos\ES,I\130620R,B\ESJ7643R.D  
Date : 20-JUN-2013 16:41  
Client ID: C0MP-C-061313  
Sample Info: M0975-11A,,72288,8081G,SUB,,  
Volume Injected (uL): 1.0  
Column phase: CLPestII

Instrument: ES.i  
Operator: GHA SRC: LIMS  
Column diameter: 0.53

\\avogadro\organicos\ES,I\130620R,B\ESJ7643R.D



1G - FORM I PEST  
 PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

COMP-D-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-14A  
 Sample wt/vol: 30.1 (g/mL) G Lab File ID: E5J7644F.D/E5J7644R.D  
 % Moisture: 21 Decanted: (Y/N) N Date Received: 06/14/2013  
 Extraction: (Type) SONC Date Extracted: 06/18/2013  
 Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/20/2013  
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/KG
319-84-6	alpha-BHC	2.1	U
319-85-7	beta-BHC	2.1	U
319-86-8	delta-BHC	2.1	U
58-89-9	gamma-BHC (Lindane)	2.1	U
76-44-8	Heptachlor	2.1	U
309-00-2	Aldrin	2.1	U
1024-57-3	Heptachlor epoxide	2.1	U
959-98-8	Endosulfan I	2.1	U
60-57-1	Dieldrin	4.2	U
72-55-9	4,4'-DDE	4.2	U
72-20-8	Endrin	4.2	U
33213-65-9	Endosulfan II	4.2	U
72-54-8	4,4'-DDD	4.2	U
1031-07-8	Endosulfan sulfate	4.2	U
50-29-3	4,4'-DDT	4.2	U
72-43-5	Methoxychlor	21	U
53494-70-5	Endrin ketone	4.2	U
7421-93-4	Endrin aldehyde	4.2	U
5103-71-9	alpha-Chlordane	2.1	U
5103-74-2	gamma-Chlordane	2.1	U
8001-35-2	Toxaphene	210	U

Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130620F.B\E5J7644F.D  
 Lab Smp Id: M0975-14A Client Smp ID: COMP-D-061313  
 Inj Date : 20-JUN-2013 16:58  
 Operator : GMA SRC: LIMS Inst ID: E5.i  
 Smp Info : M0975-14A,,72288,8081G.SUB,,  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\E5.I\130620F.B\E58081f.m  
 Meth Date : 21-Jun-2013 08:35 gappolonia Quant Type: ESTD  
 Cal Date : 19-JUN-2013 18:15 Cal File: E5J7618F.D  
 Als bottle: 28  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 8081G.SUB  
 Target Version: 4.14 Sample Matrix: SOIL  
 Processing Host: TARGET106

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

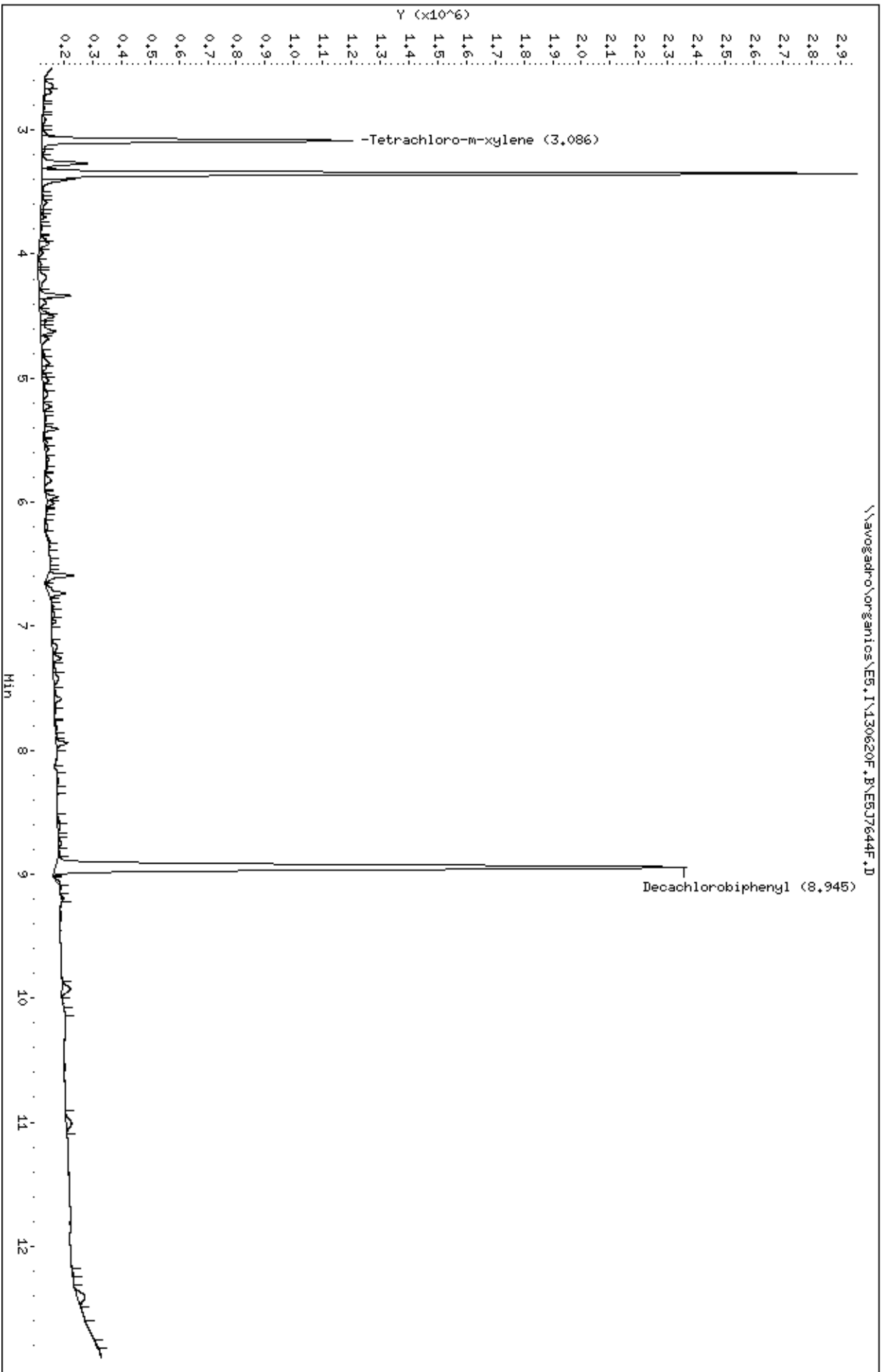
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.100	Weigth of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	RESPONSE ( ng)	(ug/Kg)	TARGET RANGE	RATIO
\$ 1								
3.085	3.085	0.000	1931713	0.04284	14			
\$ 2								
8.945	8.944	0.001	6007370	0.09344	31			

Data File: \\avogadro\organicos\ES,I\130620F,B\ESJ7644F.D  
Date : 20-JUN-2013 16:58  
Client ID: COMP-D-061313  
Sample Info: M0975-14h,72288,8081G,SUB,,  
Volume Injected (uL): 1.0  
Column phase: CLPrest

Instrument: ES.i  
Operator: GHA SRC: LIMS  
Column diameter: 0.53



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130620R.B\E5J7644R.D  
 Lab Smp Id: M0975-14A Client Smp ID: COMP-D-061313  
 Inj Date : 20-JUN-2013 16:58  
 Operator : GMA SRC: LIMS Inst ID: E5.i  
 Smp Info : M0975-14A,,72288,8081G.SUB,,  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\E5.I\130620R.B\E58081r.m  
 Meth Date : 21-Jun-2013 13:08 E5.i Quant Type: ESTD  
 Cal Date : 19-JUN-2013 18:15 Cal File: E5J7618R.D  
 Als bottle: 28  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 8081G.SUB  
 Target Version: 4.14 Sample Matrix: SOIL

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

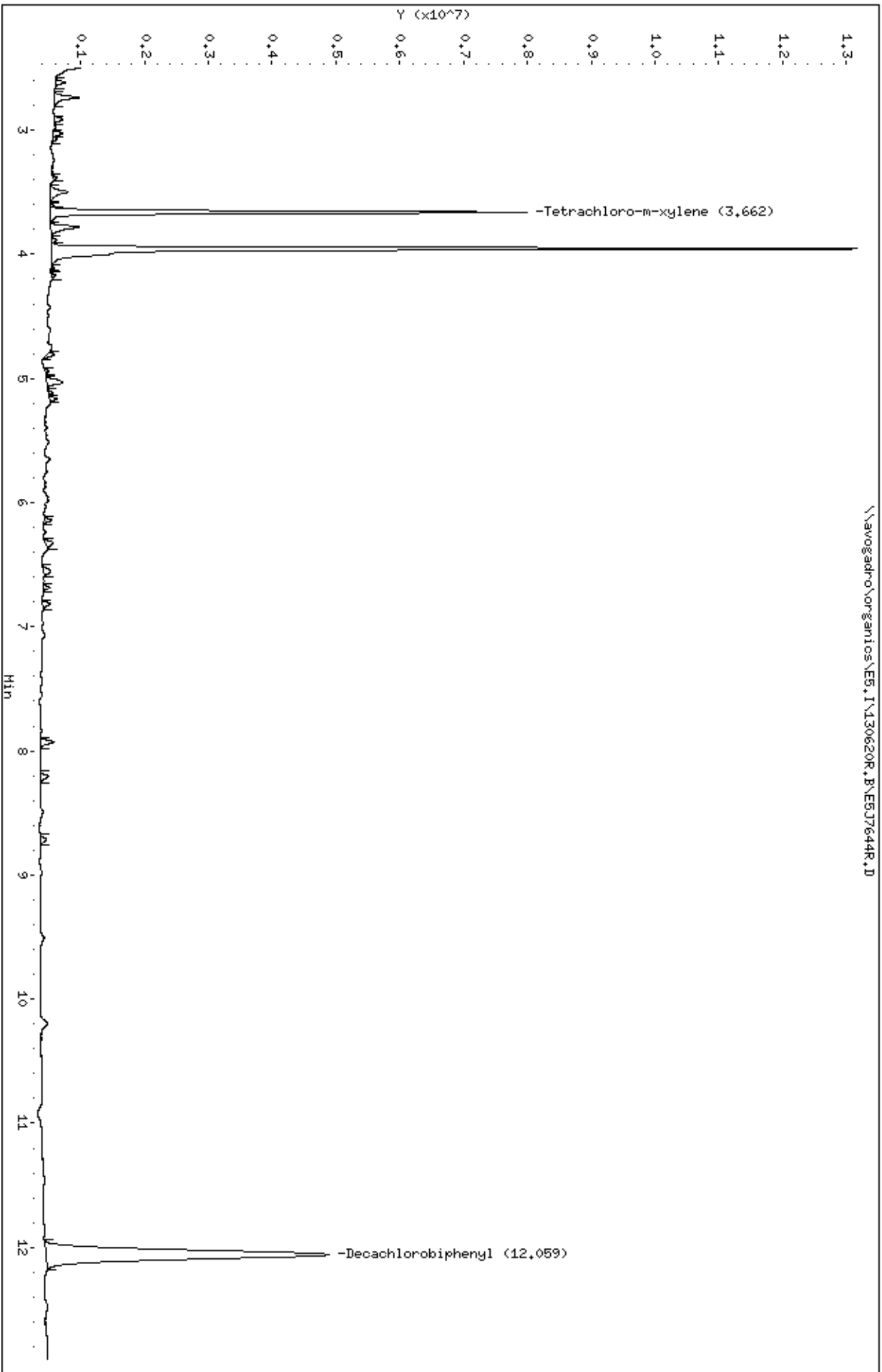
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.100	Weigth of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====
\$ 1						
3.661	3.661	0.000	7457106	0.04944	16	
\$ 2						
12.059	12.065	-0.006	22222547	0.09351	31	

Data File: \\avogadro\organicos\ES,I\130620R,B\ESJ7644R.D  
Date : 20-JUN-2013 16:58  
Client ID: COMP-D-061313  
Sample Info: M0975-14h,72288,8081G,SUB,,  
Volume Injected (uL): 1.0  
Column phase: CLPestII

Instrument: ES.i  
Operator: GHA SRC: LIMS  
Column diameter: 0.53



1G - FORM I PEST  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

COMP-E-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-18A  
 Sample wt/vol: 30.0 (g/mL) G Lab File ID: E5J7645F.D/E5J7645R.D  
 % Moisture: 16 Decanted: (Y/N) N Date Received: 06/14/2013  
 Extraction: (Type) SONC Date Extracted: 06/18/2013  
 Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/20/2013  
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
319-84-6	alpha-BHC		2.0	U
319-85-7	beta-BHC		2.0	U
319-86-8	delta-BHC		2.0	U
58-89-9	gamma-BHC (Lindane)		2.0	U
76-44-8	Heptachlor		2.0	U
309-00-2	Aldrin		2.0	U
1024-57-3	Heptachlor epoxide		2.0	U
959-98-8	Endosulfan I		2.0	U
60-57-1	Dieldrin		3.9	U
72-55-9	4,4'-DDE		3.9	U
72-20-8	Endrin		3.9	U
33213-65-9	Endosulfan II		3.9	U
72-54-8	4,4'-DDD		3.9	U
1031-07-8	Endosulfan sulfate		3.9	U
50-29-3	4,4'-DDT		3.9	U
72-43-5	Methoxychlor		20	U
53494-70-5	Endrin ketone		3.9	U
7421-93-4	Endrin aldehyde		3.9	U
5103-71-9	alpha-Chlordane		2.0	U
5103-74-2	gamma-Chlordane		2.0	U
8001-35-2	Toxaphene		200	U

Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130620F.B\E5J7645F.D  
 Lab Smp Id: M0975-18A Client Smp ID: COMP-E-061313  
 Inj Date : 20-JUN-2013 17:15  
 Operator : GMA SRC: LIMS Inst ID: E5.i  
 Smp Info : M0975-18A,,72288,8081G.SUB,,  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\E5.I\130620F.B\E58081f.m  
 Meth Date : 21-Jun-2013 08:35 gappolonia Quant Type: ESTD  
 Cal Date : 19-JUN-2013 18:15 Cal File: E5J7618F.D  
 Als bottle: 29  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 8081G.SUB  
 Target Version: 4.14 Sample Matrix: SOIL  
 Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weigth of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

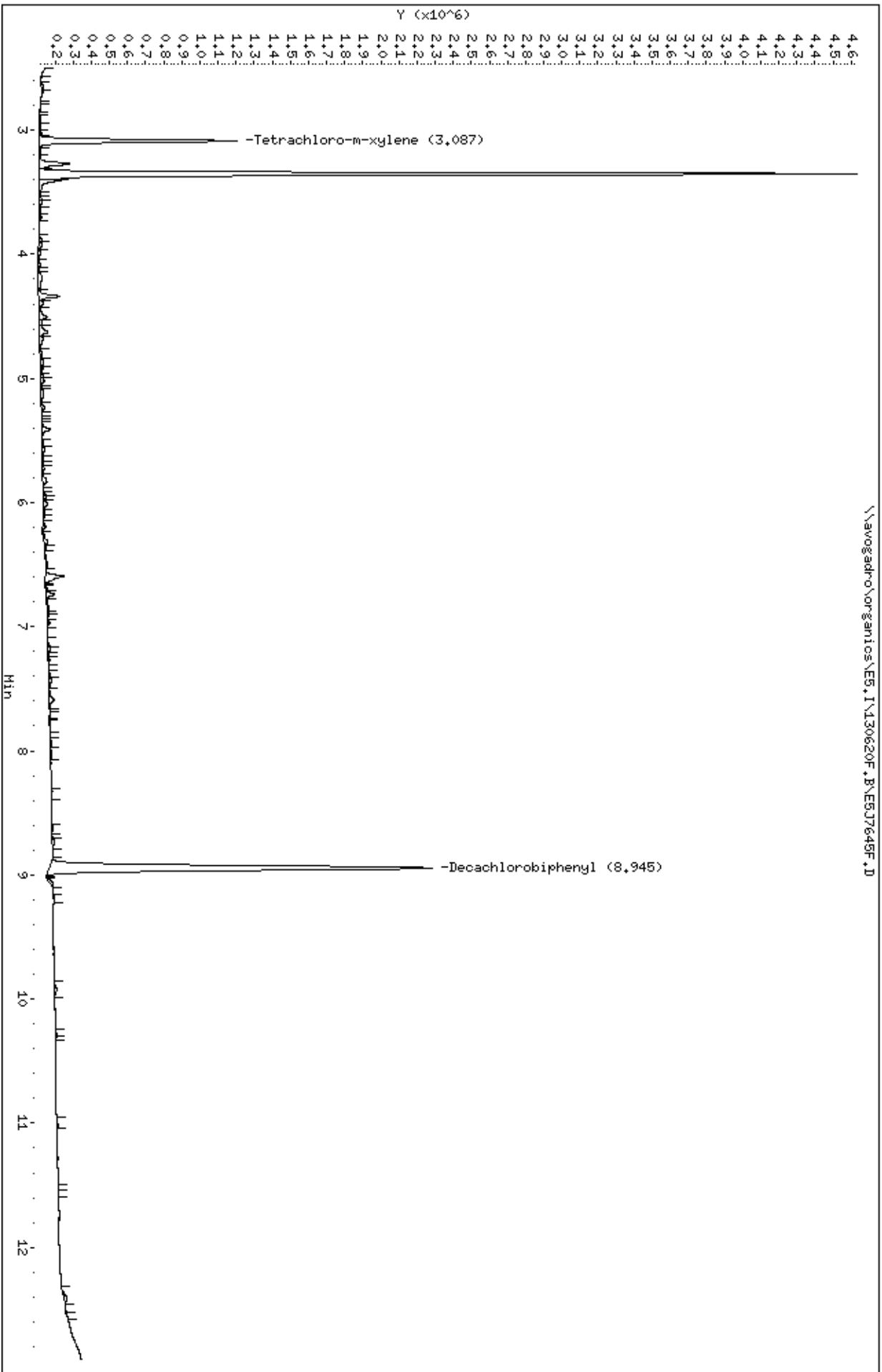
CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
=====	=====	=====	RESPONSE ( ng)	(ug/Kg)	=====	=====
\$ 1					CAS #: 877-09-8	
3.087	3.085	0.002	1882639	0.04176	14	
\$ 2					CAS #: 2051-24-3	
8.944	8.944	0.000	5752447	0.08947	30	



Data File: \\avogadro\organicos\ES, I\130620F, B\ESJ7649F.D  
Date: 20-JUN-2013 17:15  
Client ID: COMP-E-061313  
Sample Info: M0975-18A, 72288, 8081G, SUB,,  
Volume Injected (uL): 1.0  
Column phase: CLPrest

Instrument: ES.i  
Operator: GHA SRC: LIMS  
Column diameter: 0.53



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130620R.B\E5J7645R.D  
 Lab Smp Id: M0975-18A Client Smp ID: COMP-E-061313  
 Inj Date : 20-JUN-2013 17:15  
 Operator : GMA SRC: LIMS Inst ID: E5.i  
 Smp Info : M0975-18A,,72288,8081G.SUB,,  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\E5.I\130620R.B\E58081r.m  
 Meth Date : 21-Jun-2013 13:08 E5.i Quant Type: ESTD  
 Cal Date : 19-JUN-2013 18:15 Cal File: E5J7618R.D  
 Als bottle: 29  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 8081G.SUB  
 Target Version: 4.14 Sample Matrix: SOIL

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

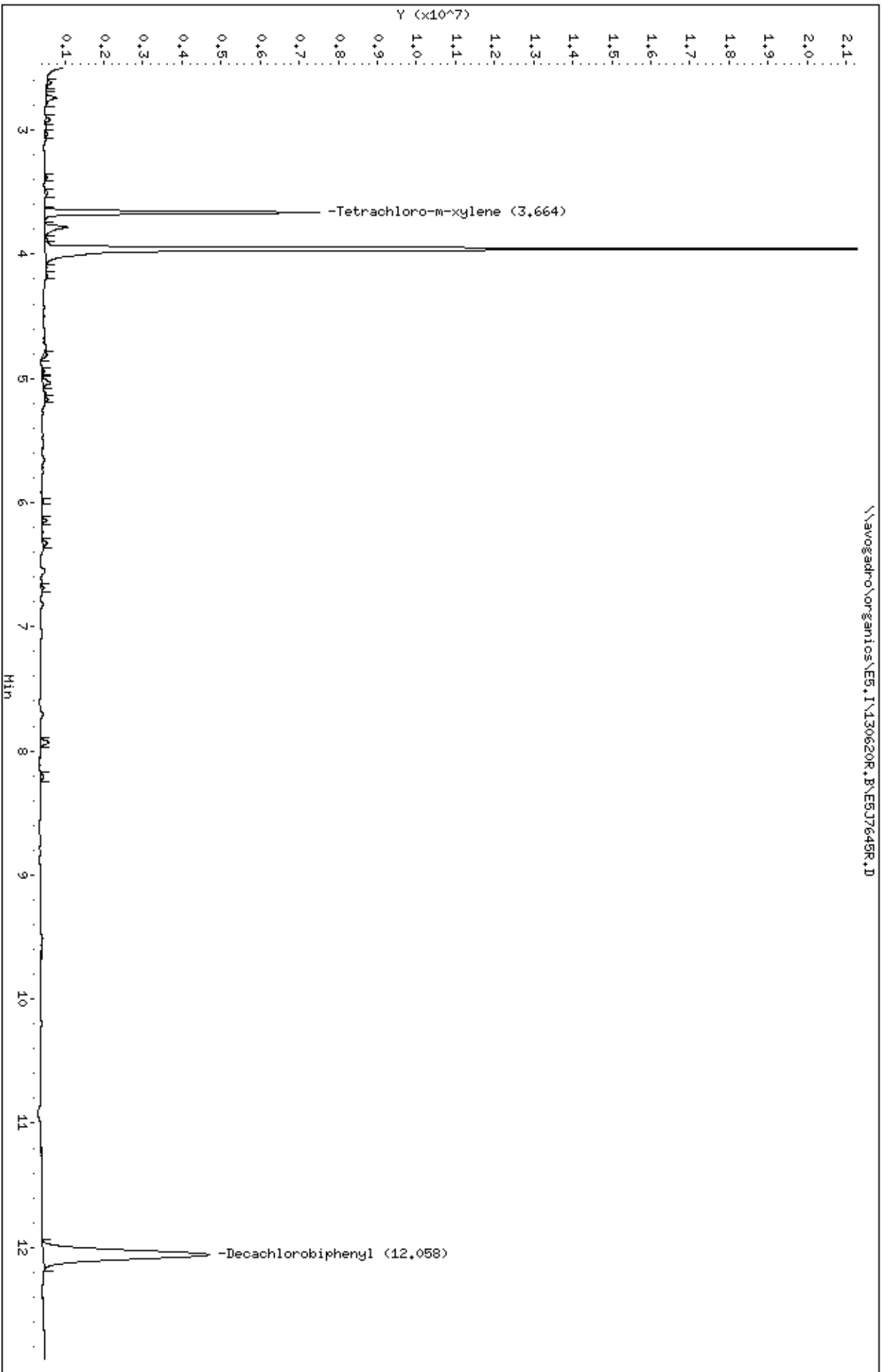
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weighth of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
\$ 1						
3.663	3.661	0.002	7034644	0.04664	16	
\$ 2						
12.057	12.065	-0.008	21319727	0.08972	30	

Data File: \\avogadro\organicos\ES,I\130620R,B\ESJ7645R.D  
Date : 20-JUN-2013 17:15  
Client ID: COMP-E-061313  
Sample Info: M0975-18A,,72288,8081G,SUB,,  
Volume Injected (uL): 1.0  
Column phase: CLPestII

Instrument: ES.i  
Operator: GHA SRC: LIMS  
Column diameter: 0.53



6J - FORM VI PEST-1  
PESTICIDE INITIAL CALIBRATION OF SINGLE COMPONENT ANALYTES

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Instrument ID: E5  
 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: 06/19/2013 06/19/2013

COMPOUND	RT* OF STANDARDS					RT	RT WINDOW **	
	CS1	CS2	CS3	CS4	CS5		FROM	TO
	alpha-BHC	3.530	3.530	3.527	3.527		3.527	3.528
beta-BHC	3.858	3.858	3.855	3.855	3.855	3.856	3.806	3.906
delta-BHC	4.013	4.011	4.009	4.008	4.008	4.010	3.960	4.060
gamma-BHC (Lindane)	3.790	3.789	3.786	3.786	3.787	3.788	3.738	3.838
Heptachlor	4.199	4.199	4.195	4.195	4.195	4.197	4.147	4.247
Aldrin	4.470	4.470	4.466	4.465	4.466	4.467	4.417	4.517
Heptachlor epoxide	5.041	5.040	5.036	5.034	5.035	5.037	4.967	5.107
Endosulfan I	5.436	5.435	5.430	5.428	5.429	5.432	5.362	5.502
Dieldrin	5.688	5.687	5.682	5.680	5.681	5.684	5.614	5.754
4,4'-DDE	5.378	5.377	5.373	5.370	5.372	5.374	5.304	5.444
Endrin	5.934	5.933	5.928	5.926	5.927	5.930	5.860	6.000
Endosulfan II	6.181	6.178	6.172	6.170	6.169	6.174	6.104	6.244
4,4'-DDD	6.014	6.013	6.007	6.005	6.004	6.009	5.939	6.079
Endosulfan sulfate	7.104	7.103	7.099	7.097	7.097	7.100	7.030	7.170
4,4'-DDT	6.318	6.317	6.312	6.310	6.311	6.314	6.244	6.384
Methoxychlor	6.868	6.867	6.863	6.860	6.861	6.864	6.794	6.934
Endrin ketone	7.434	7.433	7.429	7.427	7.428	7.430	7.360	7.500
Endrin aldehyde	6.624	6.623	6.619	6.616	6.617	6.620	6.550	6.690
alpha-Chlordane	5.299	5.298	5.294	5.291	5.293	5.295	5.225	5.365
gamma-Chlordane	5.165	5.164	5.160	5.158	5.158	5.161	5.091	5.231
TCX (A)	3.088	3.087	3.085	3.085	3.086	3.086	3.036	3.136
DCB (A)	8.948	8.947	8.945	8.943	8.944	8.945	8.845	9.045

(A) Surrogate RTs are measured from Standard Mixture A if two mixtures are used or from Standard Mix C if one mix is used.

(B) Surrogate RTs are measured from Standard Mixture A if two mixtures are used. Leave entries blank if Standard Mixtures C is used.

\* RT windows are ± 0.05 minutes for all compounds that elute before Heptachlor epoxide; ± 0.07 minutes for all other compounds (except ± 0.10 minutes for DCB)

TCX = Tetrachloro-m-xylene

DCB = Decachlorobipenyl

6J - FORM VI PEST-1  
PESTICIDE INITIAL CALIBRATION OF SINGLE COMPONENT ANALYTES

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Instrument ID: E5  
 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: 06/19/2013 06/19/2013

COMPOUND	RT* OF STANDARDS					RT	RT WINDOW **	
	CS1	CS2	CS3	CS4	CS5		FROM	TO
	alpha-BHC	4.249	4.249	4.245	4.245		4.247	4.247
beta-BHC	4.683	4.683	4.679	4.678	4.679	4.680	4.630	4.730
delta-BHC	5.002	5.000	4.997	4.996	4.997	4.999	4.949	5.049
gamma-BHC (Lindane)	4.609	4.609	4.605	4.605	4.607	4.607	4.557	4.657
Heptachlor	5.078	5.078	5.075	5.073	5.075	5.076	5.026	5.126
Aldrin	5.439	5.440	5.435	5.434	5.436	5.437	5.387	5.487
Heptachlor epoxide	6.085	6.084	6.080	6.078	6.080	6.081	6.011	6.151
Endosulfan I	6.530	6.530	6.526	6.523	6.525	6.527	6.457	6.597
Dieldrin	6.838	6.838	6.834	6.832	6.834	6.835	6.765	6.905
4,4'-DDE	6.637	6.635	6.631	6.630	6.631	6.633	6.563	6.703
Endrin	7.198	7.197	7.194	7.192	7.193	7.195	7.125	7.265
Endosulfan II	7.459	7.459	7.455	7.452	7.452	7.455	7.385	7.525
4,4'-DDD	7.325	7.325	7.320	7.317	7.317	7.321	7.251	7.391
Endosulfan sulfate	8.295	8.296	8.292	8.290	8.291	8.293	8.223	8.363
4,4'-DDT	7.728	7.729	7.724	7.723	7.724	7.726	7.656	7.796
Methoxychlor	8.794	8.794	8.791	8.789	8.789	8.791	8.721	8.861
Endrin ketone	9.158	9.158	9.155	9.153	9.153	9.155	9.085	9.225
Endrin aldehyde	7.902	7.901	7.897	7.896	7.897	7.899	7.829	7.969
alpha-Chlordane	6.459	6.458	6.455	6.452	6.453	6.455	6.385	6.525
gamma-Chlordane	6.297	6.295	6.291	6.290	6.291	6.293	6.223	6.363
TCX (A)	3.663	3.662	3.660	3.660	3.662	3.661	3.611	3.711
DCB (A)	12.064	12.069	12.063	12.065	12.066	12.065	11.965	12.165

(A) Surrogate RTs are measured from Standard Mixture A if two mixtures are used or from Standard Mix C if one mix is used.

(B) Surrogate RTs are measured from Standard Mixture A if two mixtures are used. Leave entries blank if Standard Mixtures C is used.

\* RT windows are ± 0.05 minutes for all compounds that elute before Heptachlor epoxide; ± 0.07 minutes for all other compounds (except ± 0.10 minutes for DCB)

TCX = Tetrachloro-m-xylene

DCB = Decachlorobipenyl

6K - FORM VI PEST-2  
PESTICIDE INITIAL CALIBRATION OF SINGLE COMPONENT ANALYTES

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Instrument ID: E5  
 Level (x CS1): CS1 1.0 CS1 2.0 CS3 4.0 CS4 8.0 CS5 16.0  
 GC Column: CLPPest ID: 0.53 (mm) Calibration Date(s): 06/19/2013 06/19/2013

COMPOUND	CALIBRATION FACTORS (CFs)					% RSD
	CS1	CS2	CS3	CS4	CS5	
alpha-BHC	46212400	47382500	48355050	49964725	52359750	4.9
beta-BHC	29309800	30335100	29778000	29453450	30609413	1.9
delta-BHC	66359400	71387000	72389150	74249400	78017713	5.9
gamma-BHC (Lindane)	69966600	71816400	72290750	73825950	76750688	3.5
Heptachlor	73365000	73886900	73403100	73983100	76084025	1.5
Aldrin	67058000	68167100	68573550	69428350	71333213	2.3
Heptachlor epoxide	67129000	67146800	65956300	66447150	67535588	0.9
Endosulfan I	41261600	40279800	38840350	39178900	38740563	2.7
Dieldrin	70209300	70419000	70887150	71766150	72936250	1.6
4,4'-DDE	34838000	35806250	36252825	37551438	38793319	4.2
Endrin	36932100	37478350	37737025	38339688	38611469	1.8
Endosulfan II	61843700	59448500	56968675	56560613	56697544	4.0
4,4'-DDD	49320400	50235000	50989625	51468463	50556788	1.6
Endosulfan sulfate	58907400	57882400	56227050	59540825	58128138	2.2
4,4'-DDT	56784000	55824700	54853300	57346100	59073319	2.8
Methoxychlor	29618340	29180990	29144750	29250770	28750894	1.1
Endrin ketone	39344200	39002500	37383950	37492013	38838438	2.4
Endrin aldehyde	28893400	28731600	27693200	28416288	29291319	2.1
alpha-Chlordane	64395600	64947500	64025650	64015625	64756650	0.7
gamma-Chlordane	40740400	40749800	40239500	40777750	41242113	0.9
TCX (A)	44757800	44963700	44352650	45192000	46167775	1.5
DCB (A)	68900600	65705900	64071100	61062350	61718669	4.9

(A) Surrogate CFs and %RSD are measured from Standard Nixture A if two mixtures are used or from Standard mixture C if one mixture is used.

(B) Surrogate CFs and %RSD are measured from Standard Nixture B if two mixtures are used. Leave entries blank if Standard mixture C if one mixture is used.

TCX = Tetrachloro-m-xylene

DCB = Decachlorobiphenyl

## PESTICIDE INITIAL CALIBRATION OF SINGLE COMPONENT ANALYTES

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Instrument ID: E5  
 Level (x CS1): CS1 1.0 CS1 2.0 CS3 4.0 CS4 8.0 CS5 16.0  
 GC Column: CLPPestII ID: 0.53 (mm) Calibration Date(s): 06/19/2013 06/19/2013

COMPOUND	CALIBRATION FACTORS (CFs)					% RSD
	CS1	CS2	CS3	CS4	CS5	
alpha-BHC	439371200	437627100	432840500	440893925	477163763	4.0
beta-BHC	137394200	199612300	173519700	158902125	155807113	14.1
delta-BHC	337307200	330929300	337988700	347605700	373476975	4.9
gamma-BHC (Lindane)	376147000	387462700	380894700	385683725	411383513	3.5
Heptachlor	399559000	389814900	386399700	391307625	417480463	3.1
Aldrin	359700800	350453700	344425850	348817350	368290625	2.7
Heptachlor epoxide	285762600	280101300	274639750	275685250	289233275	2.2
Endosulfan I	142644200	138838100	139923400	140921600	150113663	3.1
Dieldrin	265054200	263039100	264784325	271263188	285985144	3.5
4,4'-DDE	247431400	245138500	246531975	252256513	267654550	3.7
Endrin	114590100	114703950	117381650	123272600	132312900	6.2
Endosulfan II	229715400	225511650	231463775	238938388	250894006	4.2
4,4'-DDD	200881800	195978600	195129900	201552800	221182663	5.2
Endosulfan sulfate	199755800	196193600	192727825	195053838	207076413	2.8
4,4'-DDT	169519900	174563350	181029050	192355363	213215369	9.3
Methoxychlor	92835740	97013280	100587070	106934210	119258828	10.0
Endrin ketone	90880000	89973800	88704100	91036363	98515700	4.2
Endrin aldehyde	75784000	76698200	76887000	81086688	87685894	6.2
alpha-Chlordane	251631400	243849400	241349550	243036200	253705738	2.3
gamma-Chlordane	274545600	269060900	264980500	267276625	281067988	2.4
TCX (A)	151003600	149353800	145312450	149059375	159364200	3.5
DCB (A)	263625600	246619850	230243075	223253175	224449238	7.3

(A) Surrogate CFs and %RSD are measured from Standard Nixture A if two mixtures are used or from Standard mixture C if one mixture is used.

(B) Surrogate CFs and %RSD are measured from Standard Nixture B if two mixtures are used. Leave entries blank if Standard mixture C if one mixture is used.

TCX = Tetrachloro-m-xylene

DCB = Decachlorobiphenyl

6L - FORM VI PEST-3  
TOXAPHENE INITIAL CALIBRATION

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Instrument ID (1): E5 Date(s) Analyzed (1): 06/19/2013 06/19/2013  
 GC Column (1): 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 <sup>1</sup>	RT OF STANDARDS					RT	RT WINDOW	
		CS1	CS2	CS3	CS4	CS5		FROM	TO
TOXAPHENE	1	6.234	6.232	6.232	6.231	6.230	6.232	6.162	6.302
	2	6.292	6.291	6.291	6.289	6.289	6.290	6.220	6.360
	3	6.595	6.592	6.591	6.591	6.589	6.592	6.522	6.662
	4	6.986	6.985	6.984	6.982	6.981	6.984	6.914	7.054

Instrument ID (2): E5 Date(s) Analyzed (2): 06/19/2013 06/19/2013  
 GC Column (2): 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 <sup>1</sup>	RT OF STANDARDS					RT	RT WINDOW	
		CS1	CS2	CS3	CS4	CS5		FROM	TO
TOXAPHENE	1	7.557	7.557	7.555	7.555	7.555	7.556	7.486	7.626
	2	7.904	7.903	7.902	7.901	7.900	7.902	7.832	7.972
	3	8.660	8.660	8.658	8.658	8.656	8.658	8.588	8.728
	4	8.759	8.758	8.757	8.756	8.756	8.757	8.687	8.827

<sup>1</sup>At least three peaks for each column are required for identification of Toxaphene.



6M - FORM VI PEST-4  
TOXAPHENE INITIAL CALIBRATION

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Instrument ID (1): E5 Date(s) Analyzed (1): 06/19/2013 06/19/2013  
 GC Column (1): CLPPest ID: 0.53 (mm)  
 Level (x CS1): CS1 1.0 CS1 2.0 CS3 4.0 CS4 8.0 CS5 16.0

COMPOUND	PEAK <sup>1</sup>	CALIBRATION FACTORS (CFs) STANDARDS					% RSD
		CS1	CS2	CS3	CS4	CS5	
TOXAPHENE	1	1077630	1174448	1187511	1302117	1327288	8.4
	2	997890	1058168	1083336	1144099	1217247	7.6
	3	1219740	1253956	1235396	1303554	1344837	4.1
	4	1460494	1521682	1526725	1573605	1594845	3.4

Instrument ID (2): E5 Date(s) Analyzed (2): 06/19/2013 06/19/2013  
 GC Column (2): CLPPestII ID: 0.53 (mm)  
 Level (x CS1): CS1 1.0 CS1 2.0 CS3 4.0 CS4 8.0 CS5 16.0

COMPOUND	PEAK <sup>1</sup>	CALIBRATION FACTORS (CFs) STANDARDS					% RSD
		CS1	CS2	CS3	CS4	CS5	
TOXAPHENE	1	5058972	5547743	5841996	5906956	6651956	10.0
	2	4409000	5019777	5548937	5863553	6540770	14.8
	3	2844330	3237724	3703560	3596140	4507142	17.3
	4	3160226	3693722	4195312	4352537	4930610	16.5

<sup>1</sup>At least three peaks for each column are required for identification of Toxaphene.

7J - FORM VII PEST-1  
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 GC Column: CLPPest ID: 0.53 (mm) Calibration Date(s): 06/19/2013 06/19/2013  
 EPA Sample No. (PIBLK##): \_\_\_\_\_ Date Analyzed: \_\_\_\_\_  
 Lab Sample ID (PIBLK): \_\_\_\_\_ Time Analyzed: \_\_\_\_\_  
 EPA Sample No. (PEM##): PEMJ5 Date Analyzed: 06/19/2013  
 Lab Sample ID (PEM): PEMJ5 Time Analyzed: 14:25

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
		FROM	TO			
alpha-BHC	3.528	3.478	3.578	0.010	0.010	0.0
beta-BHC	3.856	3.806	3.906	0.010	0.010	0.0
gamma-BHC (Lindane)	3.788	3.738	3.838	0.010	0.010	0.0
Endrin	5.930	5.860	6.000	0.051	0.050	2.0
4,4'-DDT	6.315	6.244	6.384	0.109	0.100	9.0
Methoxychlor	6.864	6.794	6.934	0.270	0.250	8.0
TCX	3.086	3.036	3.136	0.020	0.020	0.0
DCB	8.945	8.845	9.045	0.021	0.020	5.0

4,4'-DDT %Breakdown (1): 1.7 Endrin %Breakdown (1): 5.2

Combined %Breakdown (1): 6.9

TCX = Tetrachloro-m-xylene

DCB = Decachlorobiphenyl

7J - FORM VII PEST-1  
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 GC Column: CLPPestII ID: 0.53 (mm) Calibration Date(s): 06/19/2013 06/19/2013  
 EPA Sample No. (PIBLK##): \_\_\_\_\_ Date Analyzed: \_\_\_\_\_  
 Lab Sample ID (PIBLK): \_\_\_\_\_ Time Analyzed: \_\_\_\_\_  
 EPA Sample No. (PEM##): PEMJ5 Date Analyzed: 06/19/2013  
 Lab Sample ID (PEM): PEMJ5 Time Analyzed: 14:25

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
		FROM	TO			
alpha-BHC	4.246	4.197	4.297	0.010	0.010	0.0
beta-BHC	4.680	4.630	4.730	0.009	0.010	-10.0
gamma-BHC (Lindane)	4.606	4.557	4.657	0.010	0.010	0.0
Endrin	7.195	7.125	7.265	0.050	0.050	0.0
4,4'-DDT	7.725	7.656	7.796	0.109	0.100	9.0
Methoxychlor	8.790	8.721	8.861	0.263	0.250	5.2
TCX	3.661	3.611	3.711	0.020	0.020	0.0
DCB	12.063	11.965	12.165	0.020	0.020	0.0

4,4'-DDT %Breakdown (1): 4.5 Endrin %Breakdown (1): 13.3

Combined %Breakdown (1): 17.8

TCX = Tetrachloro-m-xylene

DCB = Decachlorobiphenyl

7J - FORM VII PEST-1  
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 GC Column: CLPPest ID: 0.53 (mm) Calibration Date(s): 06/19/2013 06/19/2013  
 EPA Sample No. (PIBLK##): PIBLKJA Date Analyzed: 06/20/2013  
 Lab Sample ID (PIBLK): PIBLKJA Time Analyzed: 12:15  
 EPA Sample No. (PEM##): PEMJA Date Analyzed: 06/20/2013  
 Lab Sample ID (PEM): PEMJA Time Analyzed: 12:32

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
		FROM	TO			
alpha-BHC	3.529	3.478	3.578	0.010	0.010	0.0
beta-BHC	3.858	3.806	3.906	0.010	0.010	0.0
gamma-BHC (Lindane)	3.789	3.738	3.838	0.010	0.010	0.0
Endrin	5.934	5.860	6.000	0.053	0.050	6.0
4,4'-DDT	6.317	6.244	6.384	0.109	0.100	9.0
Methoxychlor	6.866	6.794	6.934	0.271	0.250	8.4
TCX	3.087	3.036	3.136	0.020	0.020	0.0
DCB	8.948	8.845	9.045	0.021	0.020	5.0

4,4'-DDT %Breakdown (1): 0.9 Endrin %Breakdown (1): 2.1

Combined %Breakdown (1): 3.0

TCX = Tetrachloro-m-xylene

DCB = Decachlorobiphenyl

7J - FORM VII PEST-1  
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 GC Column: CLPPestII ID: 0.53 (mm) Calibration Date(s): 06/19/2013 06/19/2013  
 EPA Sample No. (PIBLK##): PIBLKJA Date Analyzed: 06/20/2013  
 Lab Sample ID (PIBLK): PIBLKJA Time Analyzed: 12:15  
 EPA Sample No. (PEM##): PEMJA Date Analyzed: 06/20/2013  
 Lab Sample ID (PEM): PEMJA Time Analyzed: 12:32

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
		FROM	TO			
alpha-BHC	4.248	4.197	4.297	0.010	0.010	0.0
beta-BHC	4.681	4.630	4.730	0.009	0.010	-10.0
gamma-BHC (Lindane)	4.609	4.557	4.657	0.010	0.010	0.0
Endrin	7.198	7.125	7.265	0.055	0.050	10.0
4,4'-DDT	7.725	7.656	7.796	0.110	0.100	10.0
Methoxychlor	8.790	8.721	8.861	0.268	0.250	7.2
TCX	3.663	3.611	3.711	0.020	0.020	0.0
DCB	12.063	11.965	12.165	0.018	0.020	-10.0

4,4'-DDT %Breakdown (1): 1.9 Endrin %Breakdown (1): 0.0

Combined %Breakdown (1): 1.9

TCX = Tetrachloro-m-xylene

DCB = Decachlorobiphenyl

7J - FORM VII PEST-1  
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 GC Column: CLPPest ID: 0.53 (mm) Calibration Date(s): 06/19/2013 06/19/2013  
 EPA Sample No. (PIBLK##): PIBLKJB Date Analyzed: 06/20/2013  
 Lab Sample ID (PIBLK): PIBLKJB Time Analyzed: 19:00  
 EPA Sample No. (PEM##): PEMJB Date Analyzed: 06/20/2013  
 Lab Sample ID (PEM): PEMJB Time Analyzed: 19:18

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
		FROM	TO			
alpha-BHC	3.528	3.478	3.578	0.010	0.010	0.0
beta-BHC	3.857	3.806	3.906	0.011	0.010	10.0
gamma-BHC (Lindane)	3.788	3.738	3.838	0.010	0.010	0.0
Endrin	5.932	5.860	6.000	0.054	0.050	8.0
4,4'-DDT	6.315	6.244	6.384	0.113	0.100	13.0
Methoxychlor	6.865	6.794	6.934	0.280	0.250	12.0
TCX	3.085	3.036	3.136	0.021	0.020	5.0
DCB	8.945	8.845	9.045	0.022	0.020	10.0

4,4'-DDT %Breakdown (1): 1.3 Endrin %Breakdown (1): 3.8

Combined %Breakdown (1): 5.1

TCX = Tetrachloro-m-xylene

DCB = Decachlorobiphenyl

7J - FORM VII PEST-1  
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 GC Column: CLPPestII ID: 0.53 (mm) Calibration Date(s): 06/19/2013 06/19/2013  
 EPA Sample No. (PIBLK##): PIBLKJB Date Analyzed: 06/20/2013  
 Lab Sample ID (PIBLK): PIBLKJB Time Analyzed: 19:00  
 EPA Sample No. (PEM##): PEMJJB Date Analyzed: 06/20/2013  
 Lab Sample ID (PEM): PEMJJB Time Analyzed: 19:18

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
		FROM	TO			
alpha-BHC	4.247	4.197	4.297	0.010	0.010	0.0
beta-BHC	4.680	4.630	4.730	0.010	0.010	0.0
gamma-BHC (Lindane)	4.607	4.557	4.657	0.010	0.010	0.0
Endrin	7.196	7.125	7.265	0.053	0.050	6.0
4,4'-DDT	7.725	7.656	7.796	0.117	0.100	17.0
Methoxychlor	8.789	8.721	8.861	0.290	0.250	16.0
TCX	3.660	3.611	3.711	0.022	0.020	10.0
DCB	12.057	11.965	12.165	0.022	0.020	10.0

4,4'-DDT %Breakdown (1): 5.0 Endrin %Breakdown (1): 15.0

Combined %Breakdown (1): 20.0

TCX = Tetrachloro-m-xylene

DCB = Decachlorobiphenyl

7L - FORM VII PEST-3  
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 GC Column: CLPPest ID: 0.53 (mm) Calibration Date(s): 06/19/2013 06/19/2013  
 EPA Sample No. (PIBLK##): PIBLKJA Date Analyzed: 06/20/2013  
 Lab Sample ID (PIBLK): PIBLKJA Time Analyzed: 12:15  
 EPA Sample No. (INDC3##): INDC3JA Date Analyzed: 06/20/2013  
 Lab Sample ID (INDC3): INDC3JA Time Analyzed: 12:50

INDIVIDUAL MIX C COMPOUND	RT	RT WINDOW		CF	CF	%D
		FROM	TO			
alpha-BHC	3.529	3.478	3.578	48854885.000	46642700.000	-4.5
beta-BHC	3.857	3.806	3.906	29897153.000	29357800.000	-1.8
delta-BHC	4.010	3.960	4.060	72480533.000	70760100.000	-2.4
gamma-BHC (Lindane)	3.788	3.738	3.838	72930078.000	69709450.000	-4.4
Heptachlor	4.197	4.147	4.247	74144425.000	69917250.000	-5.7
Aldrin	4.469	4.417	4.517	68912043.000	64511950.000	-6.4
Heptachlor epoxide	5.039	4.967	5.107	66842968.000	63334250.000	-5.2
Endosulfan I	5.432	5.362	5.502	39660243.000	37189650.000	-6.2
Dieldrin	5.685	5.614	5.754	71243570.000	69258575.000	-2.8
4,4'-DDE	5.374	5.304	5.444	36648366.000	38679850.000	5.5
Endrin	5.931	5.860	6.000	37819726.000	38929400.000	2.9
Endosulfan II	6.175	6.104	6.244	58303806.000	55526250.000	-4.8
4,4'-DDD	6.009	5.939	6.079	50514055.000	49507250.000	-2.0
Endosulfan sulfate	7.101	7.030	7.170	58137163.000	59903575.000	3.0
4,4'-DDT	6.315	6.244	6.384	56776284.000	57567225.000	1.4
Methoxychlor	6.863	6.794	6.934	29189149.000	30348185.000	4.0
Endrin ketone	7.431	7.360	7.500	38412220.000	37947375.000	-1.2
Endrin aldehyde	6.620	6.550	6.690	28605161.000	28347750.000	-0.9
alpha-Chlordane	5.296	5.225	5.365	64428205.000	61935800.000	-3.9
gamma-Chlordane	5.162	5.091	5.231	40749913.000	38877900.000	-4.6
TCX	3.086	3.036	3.136	45086785.000	44071250.000	-2.3
DCB	8.944	8.845	9.045	64291724.000	64233375.000	-0.1

TCX = Tetrachloro-m-xylene  
 DCB = Decachlorobiphenyl



7L - FORM VII PEST-3  
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 GC Column: CLPPestII ID: 0.53 (mm) Calibration Date(s): 06/19/2013 06/19/2013  
 EPA Sample No. (PIBLK##): PIBLKJA Date Analyzed: 06/20/2013  
 Lab Sample ID (PIBLK): PIBLKJA Time Analyzed: 12:15  
 EPA Sample No. (INDC3##): INDC3JA Date Analyzed: 06/20/2013  
 Lab Sample ID (INDC3): INDC3JA Time Analyzed: 12:50

INDIVIDUAL MIX C COMPOUND	RT	RT WINDOW		CF	CF	%D
		FROM	TO			
alpha-BHC	4.247	4.197	4.297	445579298.000	428376450.000	-3.9
beta-BHC	4.681	4.630	4.730	165047088.000	139291050.000	-15.6
delta-BHC	4.999	4.949	5.049	345461575.000	333525100.000	-3.5
gamma-BHC (Lindane)	4.607	4.557	4.657	388314328.000	373596700.000	-3.8
Heptachlor	5.077	5.026	5.126	396912338.000	368116950.000	-7.3
Aldrin	5.438	5.387	5.487	354337665.000	334098650.000	-5.7
Heptachlor epoxide	6.082	6.011	6.151	281084435.000	264087250.000	-6.0
Endosulfan I	6.528	6.457	6.597	142488193.000	136028250.000	-4.5
Dieldrin	6.836	6.765	6.905	270025191.000	259110200.000	-4.0
4,4'-DDE	6.632	6.563	6.703	251802588.000	239851700.000	-4.7
Endrin	7.196	7.125	7.265	120452240.000	129679925.000	7.7
Endosulfan II	7.454	7.385	7.525	235304644.000	217420650.000	-7.6
4,4'-DDD	7.318	7.251	7.391	202945153.000	196164125.000	-3.3
Endosulfan sulfate	8.291	8.223	8.363	198161495.000	191746650.000	-3.2
4,4'-DDT	7.724	7.656	7.796	186136606.000	184637500.000	-0.8
Methoxychlor	8.789	8.721	8.861	103325826.000	103086555.000	-0.2
Endrin ketone	9.153	9.085	9.225	91821993.000	88638900.000	-3.5
Endrin aldehyde	7.897	7.829	7.969	79628356.000	78494900.000	-1.4
alpha-Chlordane	6.456	6.385	6.525	246714458.000	229131450.000	-7.1
gamma-Chlordane	6.294	6.223	6.363	271386323.000	256384950.000	-5.5
TCX	3.662	3.611	3.711	150818685.000	149829550.000	-0.7
DCB	12.059	11.965	12.165	237638188.000	217815550.000	-8.3

TCX = Tetrachloro-m-xylene  
 DCB = Decachlorobiphenyl

7L - FORM VII PEST-3  
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 GC Column: CLPPest ID: 0.53 (mm) Calibration Date(s): 06/19/2013 06/19/2013  
 EPA Sample No. (PIBLK##): PIBLKJB Date Analyzed: 06/20/2013  
 Lab Sample ID (PIBLK): PIBLKJB Time Analyzed: 19:00  
 EPA Sample No. (INDC3##): INDC3JB Date Analyzed: 06/20/2013  
 Lab Sample ID (INDC3): INDC3JB Time Analyzed: 19:35

INDIVIDUAL MIX C COMPOUND	RT	RT WINDOW		CF	CF	%D
		FROM	TO			
alpha-BHC	3.528	3.478	3.578	48854885.000	46922000.000	-4.0
beta-BHC	3.857	3.806	3.906	29897153.000	29280700.000	-2.1
delta-BHC	4.011	3.960	4.060	72480533.000	70156300.000	-3.2
gamma-BHC (Lindane)	3.788	3.738	3.838	72930078.000	68752000.000	-5.7
Heptachlor	4.197	4.147	4.247	74144425.000	70001300.000	-5.6
Aldrin	4.468	4.417	4.517	68912043.000	65074500.000	-5.6
Heptachlor epoxide	5.038	4.967	5.107	66842968.000	64516850.000	-3.5
Endosulfan I	5.433	5.362	5.502	39660243.000	38268550.000	-3.5
Dieldrin	5.686	5.614	5.754	71243570.000	70702450.000	-0.8
4,4'-DDE	5.376	5.304	5.444	36648366.000	37893325.000	3.4
Endrin	5.931	5.860	6.000	37819726.000	38906625.000	2.9
Endosulfan II	6.176	6.104	6.244	58303806.000	57310675.000	-1.7
4,4'-DDD	6.010	5.939	6.079	50514055.000	50498325.000	0.0
Endosulfan sulfate	7.101	7.030	7.170	58137163.000	61442950.000	5.7
4,4'-DDT	6.315	6.244	6.384	56776284.000	58519675.000	3.1
Methoxychlor	6.864	6.794	6.934	29189149.000	30289600.000	3.8
Endrin ketone	7.430	7.360	7.500	38412220.000	39286125.000	2.3
Endrin aldehyde	6.621	6.550	6.690	28605161.000	29162400.000	1.9
alpha-Chlordane	5.297	5.225	5.365	64428205.000	59724450.000	-7.3
gamma-Chlordane	5.162	5.091	5.231	40749913.000	39196750.000	-3.8
TCX	3.086	3.036	3.136	45086785.000	43152400.000	-4.3
DCB	8.944	8.845	9.045	64291724.000	65398875.000	1.7

TCX = Tetrachloro-m-xylene  
 DCB = Decachlorobiphenyl

7L - FORM VII PEST-3  
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 GC Column: CLPPestII ID: 0.53 (mm) Calibration Date(s): 06/19/2013 06/19/2013  
 EPA Sample No. (PIBLK##): PIBLKJB Date Analyzed: 06/20/2013  
 Lab Sample ID (PIBLK): PIBLKJB Time Analyzed: 19:00  
 EPA Sample No. (INDC3##): INDC3JB Date Analyzed: 06/20/2013  
 Lab Sample ID (INDC3): INDC3JB Time Analyzed: 19:35

INDIVIDUAL MIX C COMPOUND	RT	RT WINDOW		CF	CF	%D
		FROM	TO			
alpha-BHC	4.247	4.197	4.297	445579298.000	441056250.000	-1.0
beta-BHC	4.681	4.630	4.730	165047088.000	142878700.000	-13.4
delta-BHC	5.000	4.949	5.049	345461575.000	353229750.000	2.2
gamma-BHC (Lindane)	4.608	4.557	4.657	388314328.000	385774900.000	-0.7
Heptachlor	5.077	5.026	5.126	396912338.000	391087550.000	-1.5
Aldrin	5.439	5.387	5.487	354337665.000	350574600.000	-1.1
Heptachlor epoxide	6.083	6.011	6.151	281084435.000	277400150.000	-1.3
Endosulfan I	6.528	6.457	6.597	142488193.000	145542400.000	2.1
Dieldrin	6.836	6.765	6.905	270025191.000	272313875.000	0.8
4,4'-DDE	6.633	6.563	6.703	251802588.000	249805200.000	-0.8
Endrin	7.196	7.125	7.265	120452240.000	127810375.000	6.1
Endosulfan II	7.455	7.385	7.525	235304644.000	228831475.000	-2.8
4,4'-DDD	7.319	7.251	7.391	202945153.000	207377500.000	2.2
Endosulfan sulfate	8.292	8.223	8.363	198161495.000	198824600.000	0.3
4,4'-DDT	7.725	7.656	7.796	186136606.000	185285025.000	-0.5
Methoxychlor	8.789	8.721	8.861	103325826.000	105935390.000	2.5
Endrin ketone	9.153	9.085	9.225	91821993.000	93631450.000	2.0
Endrin aldehyde	7.898	7.829	7.969	79628356.000	82073675.000	3.1
alpha-Chlordane	6.456	6.385	6.525	246714458.000	249938000.000	1.3
gamma-Chlordane	6.294	6.223	6.363	271386323.000	270060750.000	-0.5
TCX	3.661	3.611	3.711	150818685.000	152970900.000	1.4
DCB	12.057	11.965	12.165	237638188.000	229202275.000	-3.5

TCX = Tetrachloro-m-xylene  
 DCB = Decachlorobiphenyl

8G - FORM VIII PEST  
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 06/19/2013 06/19/2013  
 Instrument ID: E5

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION							
TCX: <u>3.086</u>			DCB: <u>8.945</u>				
EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT	#	DCB RT	#
01	PEMJ5	E5J7605F.D	6/19/2013	14:25	3.086	8.945	
02	TOXAPH1J5	E5J7607F.D	6/19/2013	15:00	3.087	8.947	
03	TOXAPH2J5	E5J7608F.D	6/19/2013	15:18	3.087	8.948	
04	TOXAPH3J5	E5J7609F.D	6/19/2013	15:36	3.088	8.947	
05	TOXAPH4J5	E5J7610F.D	6/19/2013	15:53	3.086	8.945	
06	TOXAPH5J5	E5J7611F.D	6/19/2013	16:11	3.085	8.945	
07	TC3J5	E5J7612F.D	6/19/2013	16:28	3.086	8.946	
08	INDC1J5	E5J7614F.D	6/19/2013	17:04	3.088	8.948	
09	INDC2J5	E5J7615F.D	6/19/2013	17:22	3.087	8.947	
10	INDC3J5	E5J7616F.D	6/19/2013	17:39	3.085	8.945	
11	INDC4J5	E5J7617F.D	6/19/2013	17:57	3.085	8.943	
12	INDC5J5	E5J7618F.D	6/19/2013	18:15	3.086	8.944	
13	PEMJA	E5J7629F.D	6/20/2013	12:32	3.087	8.948	
14	INDC3JA	E5J7630F.D	6/20/2013	12:50	3.086	8.944	
15	TOXAPH3JA	E5J7631F.D	6/20/2013	13:08	3.087	8.944	
16	MB-72288	E5J7636F.D	6/20/2013	14:36	3.086	8.944	
17	LCS-72288	E5J7637F.D	6/20/2013	14:56	3.087	8.949	
18	LCSD-72288	E5J7638F.D	6/20/2013	15:13	3.087	8.944	
19	COMP-A-06131 3	E5J7641F.D	6/20/2013	16:06	3.087	8.943	
20	COMP-B-06131 3	E5J7642F.D	6/20/2013	16:23	3.085	8.944	
21	COMP-C-06131 3	E5J7643F.D	6/20/2013	16:41	3.085	8.943	
22	COMP-D-06131 3	E5J7644F.D	6/20/2013	16:58	3.086	8.945	
23	COMP-E-06131 3	E5J7645F.D	6/20/2013	17:15	3.087	8.945	

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)  
 DCB = Decachlorobiphenyl (± 0.10 MINUTES)

# Column used to flag RT values with an asterisk.

8G - FORM VIII PEST  
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 06/19/2013 06/19/2013  
 Instrument ID: E5

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION							
TCX: <u>3.086</u>			DCB: <u>8.945</u>				
EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT	#	DCB RT	#
24	PEMJJB	E5J7652F.D	6/20/2013	19:18	3.085	8.945	
25	INDC3JB	E5J7653F.D	6/20/2013	19:35	3.086	8.944	
26	TOXAPH3JB	E5J7654F.D	6/20/2013	19:53	3.085	8.944	

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)  
 DCB = Decachlorobiphenyl (± 0.10 MINUTES)

# Column used to flag RT values with an asterisk.

8G - FORM VIII PEST  
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 06/19/2013 06/19/2013  
 Instrument ID: E5

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION							
TCX: <u>3.661</u>			DCB: <u>12.065</u>				
EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT	#	DCB RT	#
01	PEMJ5	E5J7605R.D	6/19/2013	14:25	3.661	12.063	
02	TOXAPH1J5	E5J7607R.D	6/19/2013	15:00	3.662	12.066	
03	TOXAPH2J5	E5J7608R.D	6/19/2013	15:18	3.661	12.065	
04	TOXAPH3J5	E5J7609R.D	6/19/2013	15:36	3.662	12.062	
05	TOXAPH4J5	E5J7610R.D	6/19/2013	15:53	3.662	12.061	
06	TOXAPH5J5	E5J7611R.D	6/19/2013	16:11	3.661	12.063	
07	TC3J5	E5J7612R.D	6/19/2013	16:28	3.662	12.063	
08	INDC1J5	E5J7614R.D	6/19/2013	17:04	3.663	12.064	
09	INDC2J5	E5J7615R.D	6/19/2013	17:22	3.662	12.069	
10	INDC3J5	E5J7616R.D	6/19/2013	17:39	3.660	12.063	
11	INDC4J5	E5J7617R.D	6/19/2013	17:57	3.660	12.065	
12	INDC5J5	E5J7618R.D	6/19/2013	18:15	3.662	12.066	
13	PEMJA	E5J7629R.D	6/20/2013	12:32	3.663	12.063	
14	INDC3JA	E5J7630R.D	6/20/2013	12:50	3.662	12.059	
15	TOXAPH3JA	E5J7631R.D	6/20/2013	13:08	3.663	12.062	
16	MB-72288	E5J7636R.D	6/20/2013	14:36	3.662	12.057	
17	LCS-72288	E5J7637R.D	6/20/2013	14:56	3.661	12.065	
18	LCSD-72288	E5J7638R.D	6/20/2013	15:13	3.664	12.059	
19	COMP-A-06131 3	E5J7641R.D	6/20/2013	16:06	3.663	12.058	
20	COMP-B-06131 3	E5J7642R.D	6/20/2013	16:23	3.662	12.060	
21	COMP-C-06131 3	E5J7643R.D	6/20/2013	16:41	3.661	12.057	
22	COMP-D-06131 3	E5J7644R.D	6/20/2013	16:58	3.662	12.059	
23	COMP-E-06131 3	E5J7645R.D	6/20/2013	17:15	3.664	12.058	

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)  
 DCB = Decachlorobiphenyl (± 0.10 MINUTES)

# Column used to flag RT values with an asterisk.

8G - FORM VIII PEST  
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 06/19/2013 06/19/2013  
 Instrument ID: E5

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION							
TCX: <u>3.661</u>			DCB: <u>12.065</u>				
EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT	#	DCB RT	#
24	PEMJJB	E5J7652R.D	6/20/2013	19:18	3.660	12.057	
25	INDC3JB	E5J7653R.D	6/20/2013	19:35	3.661	12.057	
26	TOXAPH3JB	E5J7654R.D	6/20/2013	19:53	3.661	12.058	

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)  
 DCB = Decachlorobiphenyl (± 0.10 MINUTES)

# Column used to flag RT values with an asterisk.

10A - FORM X PEST-1  
IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES

EPA SAMPLE NO.

LCS-72288

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
Lab Sample ID: LCS-72288 Date(s) Analyzed: 06/20/2013 06/20/2013  
Instrument ID (1): E5 Instrument ID (2): E5  
GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
alpha-BHC	1	3.530	3.478	3.578	5.8	5.6
	2	4.247	4.197	4.297	6.2	
beta-BHC	1	3.859	3.806	3.906	6.1	13.4
	2	4.680	4.630	4.730	5.4	
delta-BHC	1	4.012	3.960	4.060	6.1	5.5
	2	4.999	4.949	5.049	6.5	
gamma-BHC (Lindane)	1	3.789	3.738	3.838	5.8	4.6
	2	4.607	4.557	4.657	6.1	
Heptachlor	1	4.199	4.147	4.247	6.0	4.3
	2	5.077	5.026	5.126	6.2	
Aldrin	1	4.470	4.417	4.517	5.8	3.6
	2	5.437	5.387	5.487	6.0	
Heptachlor epoxide	1	5.040	4.967	5.107	6.0	1.6
	2	6.082	6.011	6.151	6.1	
Endosulfan I	1	5.435	5.362	5.502	5.9	2.2
	2	6.527	6.457	6.597	6.0	
Dieldrin	1	5.687	5.614	5.754	13	0.4
	2	6.836	6.765	6.905	13	
4,4'-DDE	1	5.377	5.304	5.444	13	7.0
	2	6.633	6.563	6.703	12	
Endrin	1	5.933	5.860	6.000	13	6.1
	2	7.196	7.125	7.265	14	
Endosulfan II	1	6.176	6.104	6.244	12	2.5
	2	7.456	7.385	7.525	12	
4,4'-DDD	1	6.011	5.939	6.079	12	6.8
	2	7.320	7.251	7.391	13	
Endosulfan sulfate	1	7.104	7.030	7.170	13	6.1
	2	8.294	8.223	8.363	13	
4,4'-DDT	1	6.316	6.244	6.384	13	2.2
	2	7.727	7.656	7.796	13	
Methoxychlor	1	6.867	6.794	6.934	67	1.1
	2	8.792	8.721	8.861	66	
Endrin ketone	1	7.434	7.360	7.500	13	2.2
	2	9.158	9.085	9.225	12	



10A - FORM X PEST-1  
 IDENTIFICATION SUMMARY  
 FOR SINGLE COMPONENT ANALYTES

EPA SAMPLE NO.

LCS-72288

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Lab Sample ID: LCS-72288 Date(s) Analyzed: 06/20/2013 06/20/2013  
 Instrument ID (1): E5 Instrument ID (2): E5  
 GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

Endrin aldehyde	1	6.622	6.550	6.690	13	0
	2	7.900	7.829	7.969	13	
alpha-Chlordane	1	5.298	5.225	5.365	5.9	2.5
	2	6.456	6.385	6.525	6.1	
gamma-Chlordane	1	5.164	5.091	5.231	5.9	4.9
	2	6.294	6.223	6.363	6.2	

10A - FORM X PEST-1  
IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES

EPA SAMPLE NO.

LCSD-72288

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
Lab Sample ID: LCSD-72288 Date(s) Analyzed: 06/20/2013 06/20/2013  
Instrument ID (1): E5 Instrument ID (2): E5  
GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
alpha-BHC	1	3.529	3.478	3.578	5.9	3.1
	2	4.248	4.197	4.297	6.1	
beta-BHC	1	3.857	3.806	3.906	6.2	18.0
	2	4.682	4.630	4.730	5.3	
delta-BHC	1	4.011	3.960	4.060	6.2	2.0
	2	5.000	4.949	5.049	6.4	
gamma-BHC (Lindane)	1	3.789	3.738	3.838	5.9	3.3
	2	4.608	4.557	4.657	6.1	
Heptachlor	1	4.198	4.147	4.247	6.1	2.1
	2	5.077	5.026	5.126	6.2	
Aldrin	1	4.469	4.417	4.517	5.9	2.6
	2	5.438	5.387	5.487	6.1	
Heptachlor epoxide	1	5.040	4.967	5.107	6.0	2.2
	2	6.082	6.011	6.151	6.2	
Endosulfan I	1	5.433	5.362	5.502	5.9	3.3
	2	6.528	6.457	6.597	6.1	
Dieldrin	1	5.685	5.614	5.754	12	2.4
	2	6.837	6.765	6.905	13	
4,4'-DDE	1	5.375	5.304	5.444	13	7.6
	2	6.633	6.563	6.703	12	
Endrin	1	5.931	5.860	6.000	13	6.6
	2	7.196	7.125	7.265	14	
Endosulfan II	1	6.175	6.104	6.244	12	1.7
	2	7.455	7.385	7.525	12	
4,4'-DDD	1	6.009	5.939	6.079	13	3.1
	2	7.318	7.251	7.391	13	
Endosulfan sulfate	1	7.101	7.030	7.170	13	6.4
	2	8.292	8.223	8.363	13	
4,4'-DDT	1	6.314	6.244	6.384	13	1.8
	2	7.725	7.656	7.796	13	
Methoxychlor	1	6.864	6.794	6.934	67	2.0
	2	8.789	8.721	8.861	66	
Endrin ketone	1	7.431	7.360	7.500	13	1.3
	2	9.153	9.085	9.225	13	

10A - FORM X PEST-1  
IDENTIFICATION SUMMARY  
FOR SINGLE COMPONENT ANALYTES

EPA SAMPLE NO.

LCS-72288

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
Lab Sample ID: LCS-72288 Date(s) Analyzed: 06/20/2013 06/20/2013  
Instrument ID (1): E5 Instrument ID (2): E5  
GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

Endrin aldehyde	1	6.621	6.550	6.690	13	1.3
	2	7.898	7.829	7.969	13	
alpha-Chlordane	1	5.297	5.225	5.365	6.0	1.2
	2	6.457	6.385	6.525	6.1	
gamma-Chlordane	1	5.162	5.091	5.231	6.0	4.2
	2	6.294	6.223	6.363	6.3	

Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130619BF.B\E5J7607F.D  
 Lab Smp Id: TOXAPH1J5 Client Smp ID: TOXAPH1J5  
 Inj Date : 19-JUN-2013 15:00  
 Operator : GMA SRC: GMA Inst ID: E5.i  
 Smp Info : TOXAPH1J5,TOXAPH1J5,,sومتox.sub,,  
 Misc Info : 1,1,,1  
 Comment :  
 Method : \\avogadro\organics\E5.I\130619BF.B\E58081f.m  
 Meth Date : 21-Jun-2013 10:52 gappolonia Quant Type: ESTD  
 Cal Date : 19-JUN-2013 17:04 Cal File: E5J7614F.D  
 Als bottle: 4 Calibration Sample, Level: 1  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: sometox.sub  
 Target Version: 4.14 Sample Matrix: WATER

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

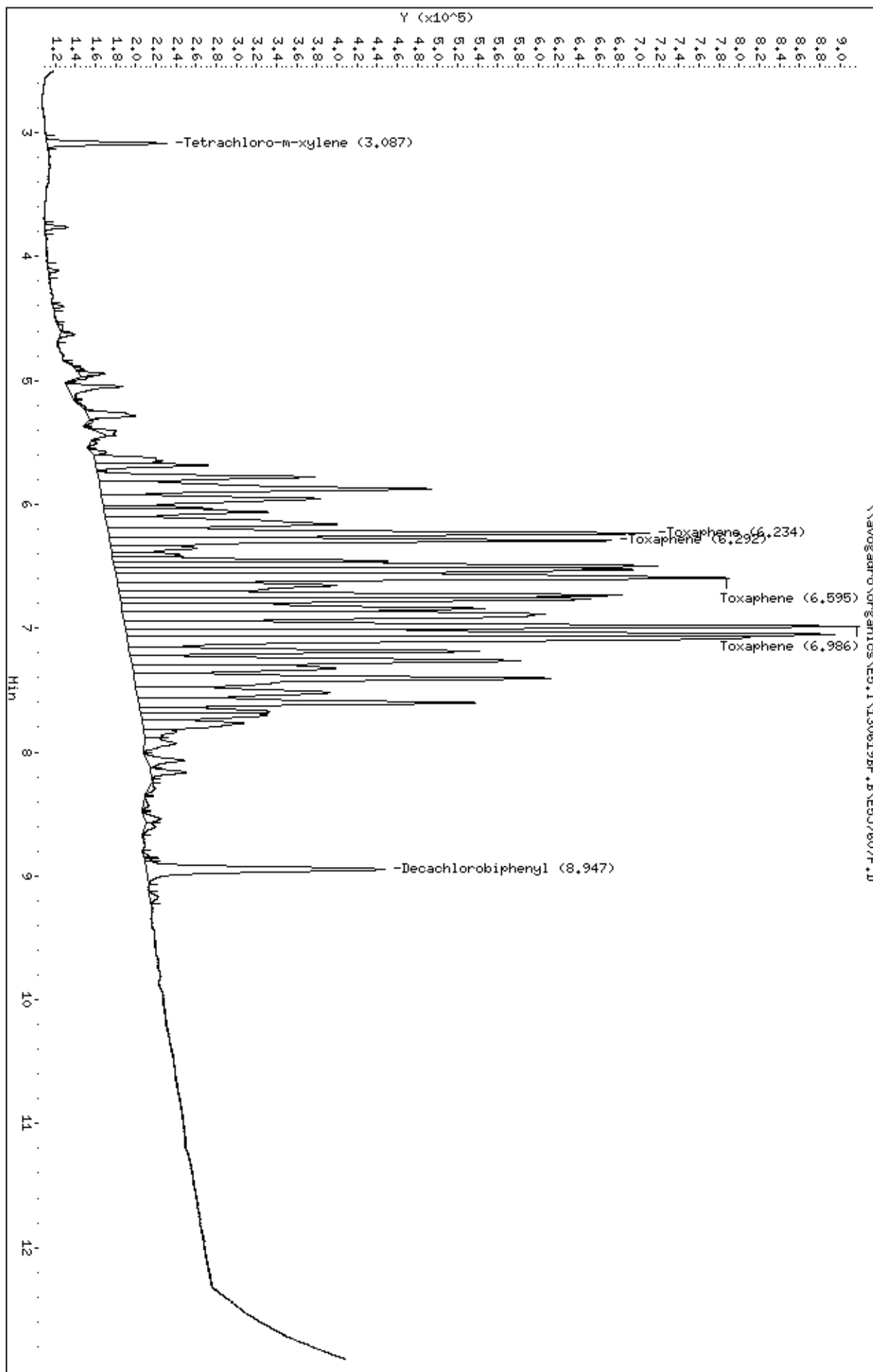
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
3.086	3.085	0.001	215568	0.00500	0.0048	(a)
\$ 2					CAS #: 2051-24-3	
8.946	8.944	0.002	733180	0.01000	0.011	(a)
28					CAS #: 8001-35-2	
6.234	6.230	0.004	538815	0.50000	0.48 80.00- 120.00	100.00(a)
6.292	6.289	0.003	498945	0.50000	0.50 67.86- 107.86	92.60
6.594	6.590	0.004	609870	0.50000	0.53 80.11- 120.11	113.19
6.985	6.982	0.003	730247	0.50000	0.51 100.85- 140.85	135.53
Average of Peak Amounts =			0.50500			

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\ES, I\130619BF.B\ESJ7607F.D  
Date: 19-JUN-2013 15:00  
Client ID: TOXAPH1J5  
Sample Info: TOXAPH1J5, TOXAPH1J5,,sontox,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPrest

Instrument: ES.i  
Operator: GHM SRC: GHM  
Column diameter: 0.53



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130619BR.B\E5J7607R.D  
 Lab Smp Id: TOXAPH1J5 Client Smp ID: TOXAPH1J5  
 Inj Date : 19-JUN-2013 15:00  
 Operator : GMA SRC: GMA Inst ID: E5.i  
 Smp Info : TOXAPH1J5,TOXAPH1J5,,sومتox.sub,,  
 Misc Info : 1,1,,1  
 Comment :  
 Method : \\avogadro\organics\E5.I\130619BR.B\E58081r.m  
 Meth Date : 21-Jun-2013 13:30 gappolonia Quant Type: ESTD  
 Cal Date : 19-JUN-2013 15:00 Cal File: E5J7607R.D  
 Als bottle: 4 Calibration Sample, Level: 1  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: sometox.sub  
 Target Version: 4.14 Sample Matrix: WATER

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

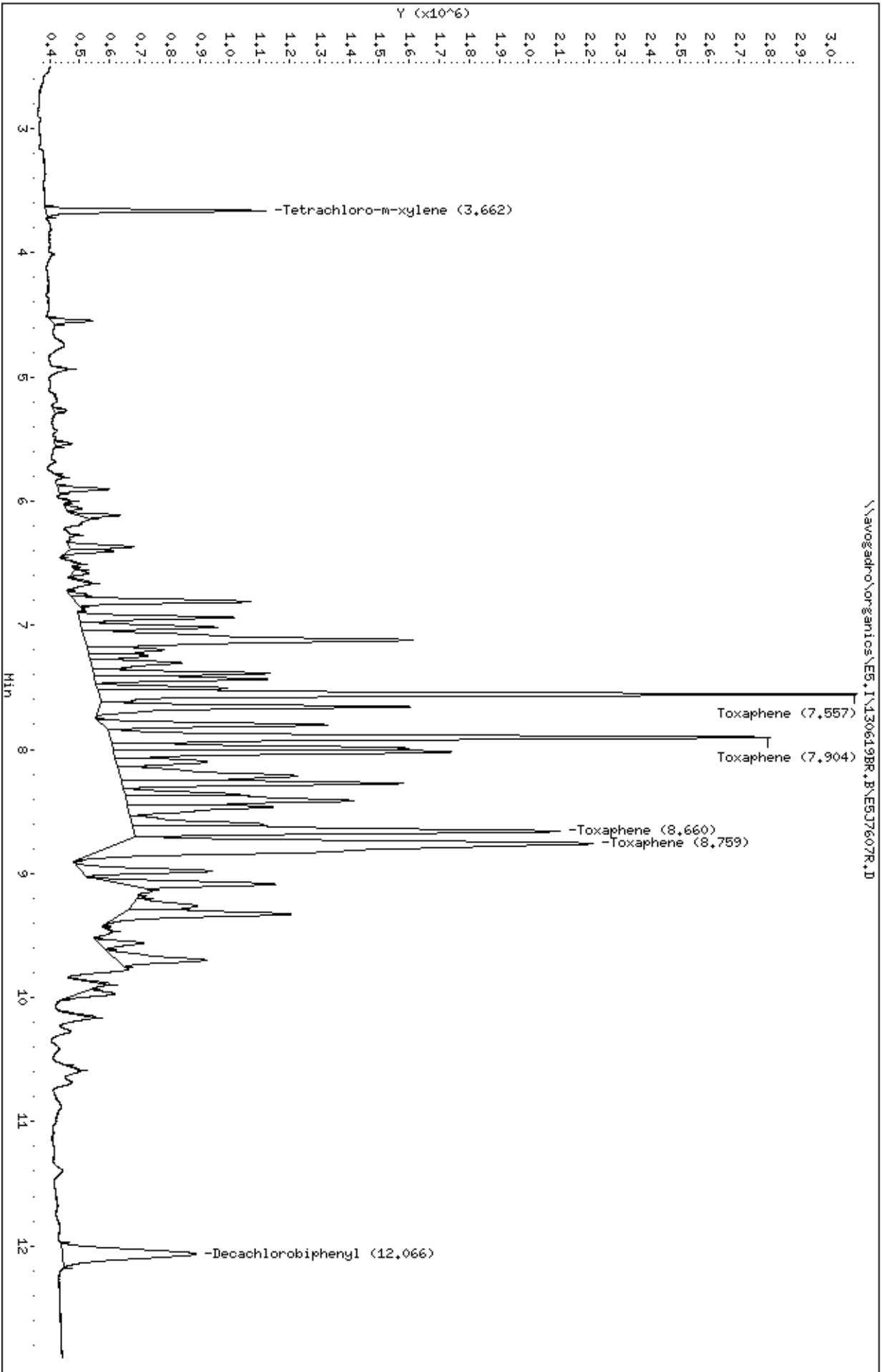
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
3.661	3.661	0.000	736315	0.00500		(a)
\$ 2					CAS #: 2051-24-3	
12.065	12.065	0.000	2359040	0.01000		(a)
28					CAS #: 8001-35-2	
7.556	7.555	0.001	2529486	0.50000	0.56 80.00- 120.00	100.00(a)
7.904	7.900	0.004	2204500	0.50000	0.56 78.33- 118.33	87.15
8.659	8.656	0.003	1422165	0.50000	0.53 47.76- 87.76	56.22
8.759	8.756	0.003	1580113	0.50000	0.54 54.12- 94.12	62.47
Average of Peak Amounts =			0.54750			

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\ES, I\130619BR, B\ESJ7607R.D  
Date: 19-JUN-2013 15:00  
Client ID: TOXAPH1J5  
Sample Info: TOXAPH1J5, TOXAPH1J5,,sontox, sub,  
Volume Injected (uL): 1.0  
Column phase: CLPrestII

Instrument: ES.i  
Operator: GHA SRC: GHA  
Column diameter: 0.53



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130619BF.B\E5J7608F.D  
 Lab Smp Id: TOXAPH2J5 Client Smp ID: TOXAPH2J5  
 Inj Date : 19-JUN-2013 15:18  
 Operator : GMA SRC: GMA Inst ID: E5.i  
 Smp Info : TOXAPH2J5,TOXAPH2J5,,sومتox.sub,,  
 Misc Info : 1,2,,1  
 Comment :  
 Method : \\avogadro\organics\E5.I\130619BF.B\E58081f.m  
 Meth Date : 21-Jun-2013 10:52 gappolonia Quant Type: ESTD  
 Cal Date : 19-JUN-2013 17:22 Cal File: E5J7615F.D  
 Als bottle: 5 Calibration Sample, Level: 2  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: sometox.sub  
 Target Version: 4.14 Sample Matrix: WATER

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
3.087	3.085	0.002	440595 0.01000	0.0098		(a)
\$ 2					CAS #: 2051-24-3	
8.948	8.944	0.004	1469741 0.02000	0.023		(a)
28					CAS #: 8001-35-2	
6.232	6.230	0.002	1174448 1.00000	1.0	80.00- 120.00	100.00(a)
6.290	6.289	0.001	1058168 1.00000	1.0	67.86- 107.86	90.10
6.592	6.590	0.002	1253956 1.00000	1.1	80.11- 120.11	106.77
6.984	6.982	0.002	1521682 1.00000	1.1	100.85- 140.85	129.57
Average of Peak Amounts =			1.05000			

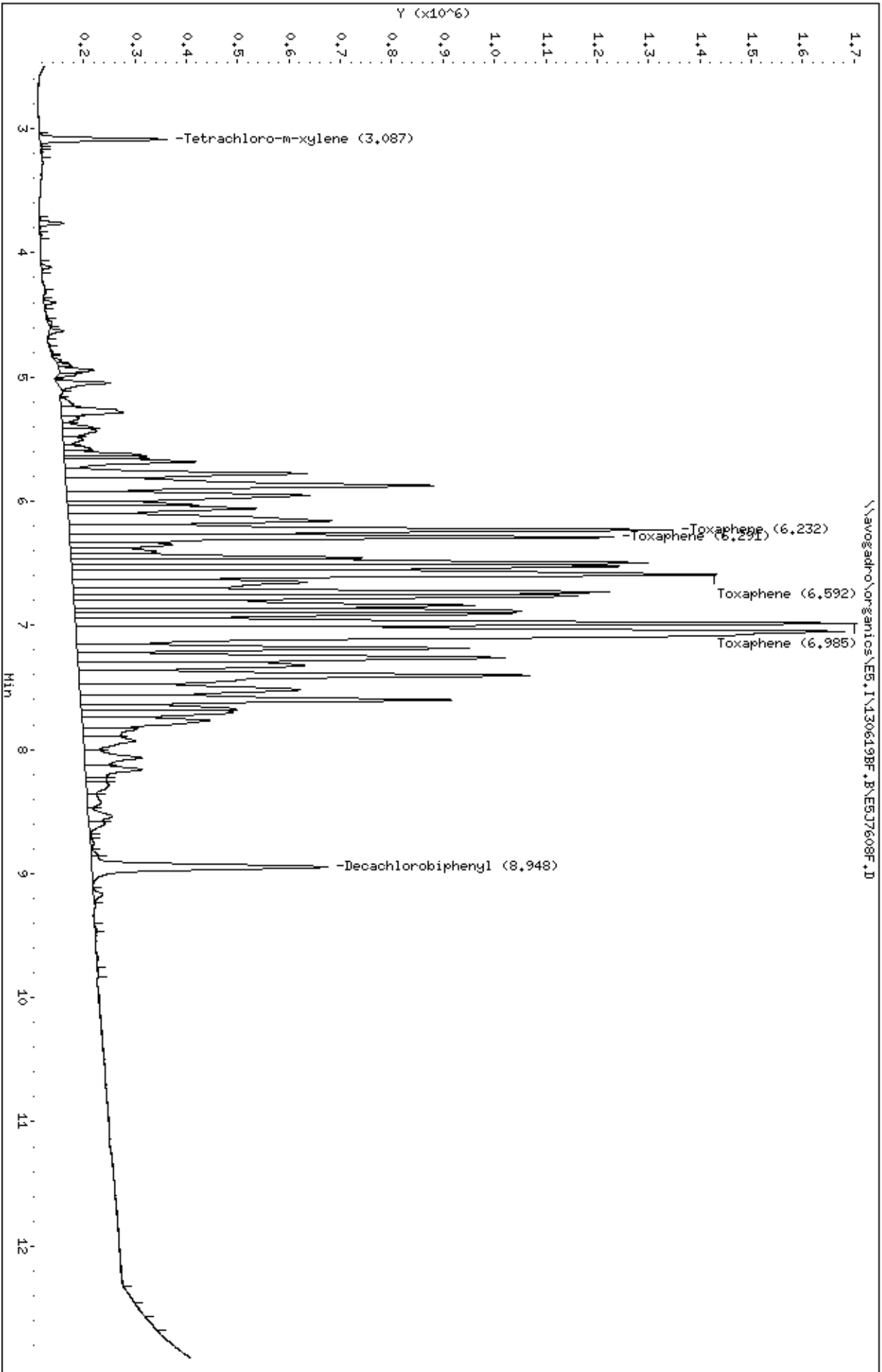
QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).



Data File: \\avogadro\organicos\ES, I\130619BF.B\ESJ7608F.D  
Date : 19-JUN-2013 15:18  
Client ID: TOXAPH2J5  
Sample Info: TOXAPH2J5, TOXAPH2J5,,sontox,sub,  
Volume Injected (uL): 1.0  
Column phase: CLPrest

Instrument: ES.i  
Operator: GHM SRC: GHM  
Column diameter: 0.53



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130619BR.B\E5J7608R.D  
 Lab Smp Id: TOXAPH2J5 Client Smp ID: TOXAPH2J5  
 Inj Date : 19-JUN-2013 15:18  
 Operator : GMA SRC: GMA Inst ID: E5.i  
 Smp Info : TOXAPH2J5,TOXAPH2J5,,sومتox.sub,,  
 Misc Info : 1,2,,1  
 Comment :  
 Method : \\avogadro\organics\E5.I\130619BR.B\E58081r.m  
 Meth Date : 21-Jun-2013 13:30 gappolonia Quant Type: ESTD  
 Cal Date : 19-JUN-2013 15:18 Cal File: E5J7608R.D  
 Als bottle: 5 Calibration Sample, Level: 2  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: sometox.sub  
 Target Version: 4.14 Sample Matrix: WATER

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

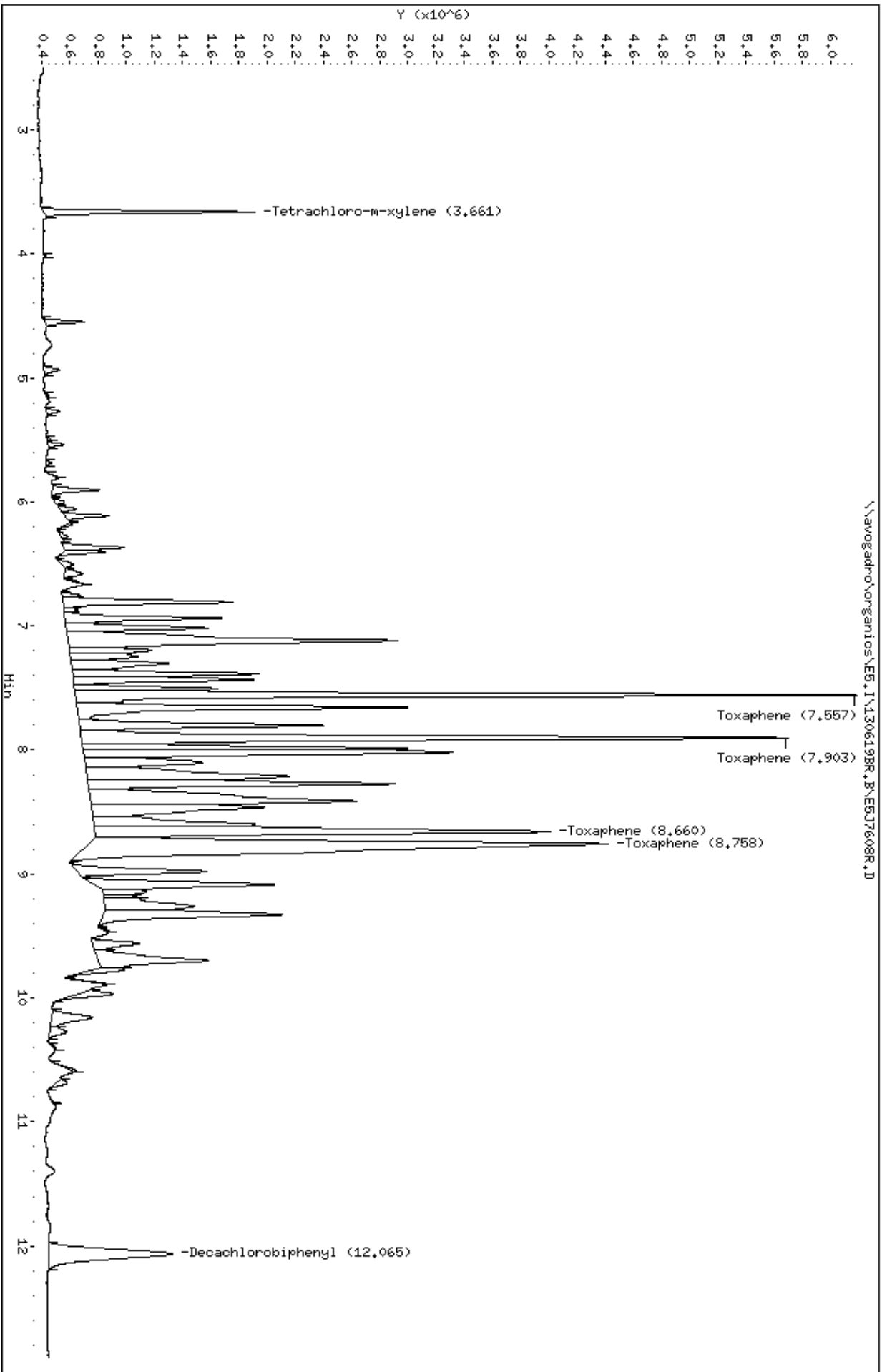
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
3.661	3.661	0.000	1493367	0.01000		(a)
\$ 2					CAS #: 2051-24-3	
12.064	12.065	-0.001	4687564	0.02000		(a)
28					CAS #: 8001-35-2	
7.557	7.555	0.002	5547743	1.00000	1.2 80.00- 120.00	100.00(a)
7.903	7.900	0.003	5019777	1.00000	1.2 78.33- 118.33	90.48
8.659	8.656	0.003	3237724	1.00000	1.2 47.76- 87.76	58.36
8.758	8.756	0.002	3693722	1.00000	1.2 54.12- 94.12	66.58
Average of Peak Amounts =			1.20000			

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\ES, I\130619BR, B\ESJ7608R.D  
Date : 19-JUN-2013 15:18  
Client ID: TOXAPH2J5  
Sample Info: TOXAPH2J5, TOXAPH2J5,,sontox,sub,  
Volume Injected (uL): 1.0  
Column phase: CLPrestII

Instrument: ES.i  
Operator: GHA SRC: GHA  
Column diameter: 0.53



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130619BF.B\E5J7609F.D  
 Lab Smp Id: TOXAPH3J5 Client Smp ID: TOXAPH3J5  
 Inj Date : 19-JUN-2013 15:36  
 Operator : GMA SRC: GMA Inst ID: E5.i  
 Smp Info : TOXAPH3J5,TOXAPH3J5,,sومتox.sub,,  
 Misc Info : 1,3,,1  
 Comment :  
 Method : \\avogadro\organics\E5.I\130619BF.B\E58081f.m  
 Meth Date : 21-Jun-2013 10:52 gappolonia Quant Type: ESTD  
 Cal Date : 19-JUN-2013 17:39 Cal File: E5J7616F.D  
 Als bottle: 6 Calibration Sample, Level: 3  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: sometox.sub  
 Target Version: 4.14 Sample Matrix: WATER

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

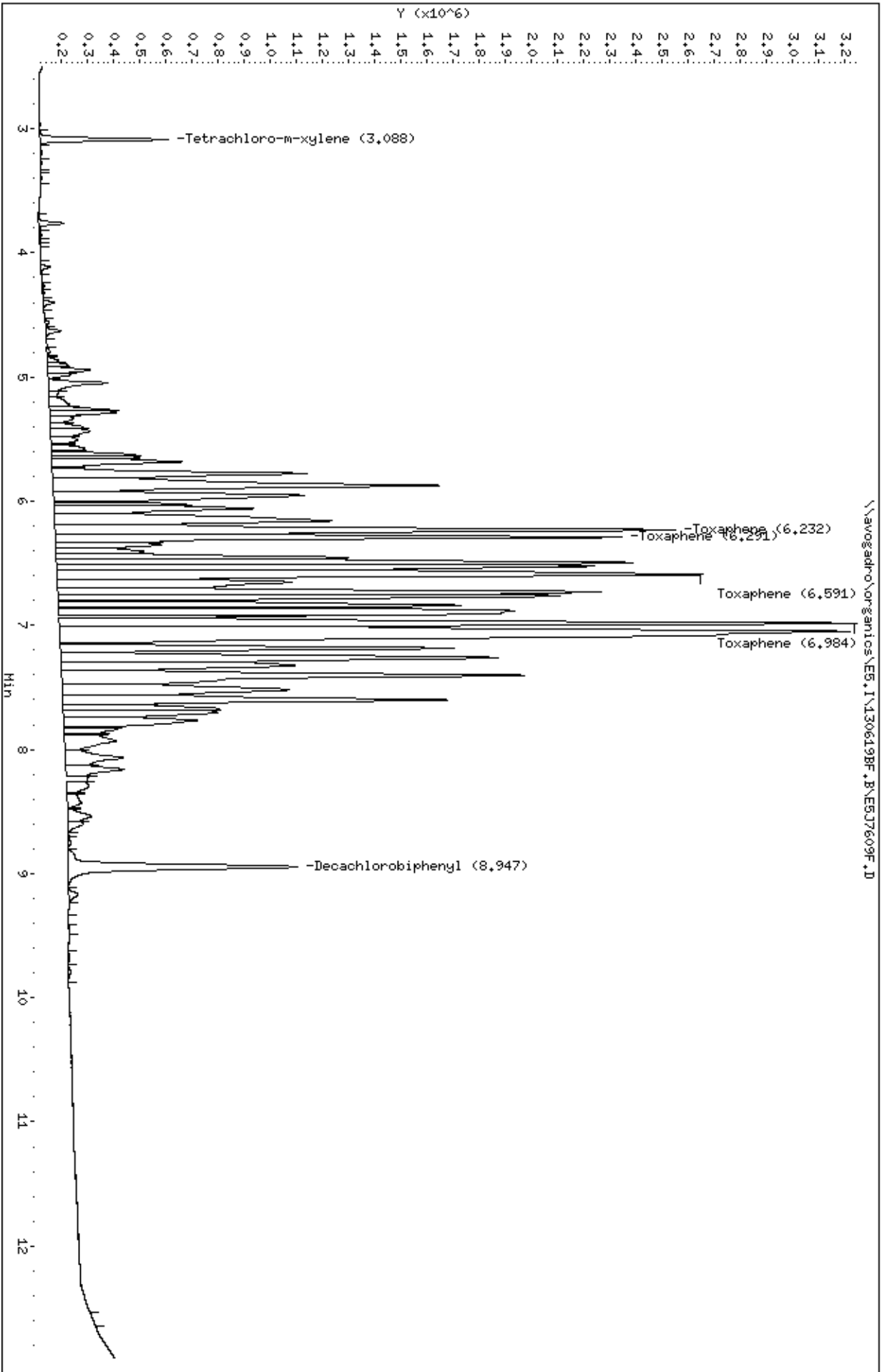
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
3.087	3.085	0.002	859440	0.02000	0.019	(a)
\$ 2					CAS #: 2051-24-3	
8.946	8.944	0.002	2846949	0.04000	0.044	(a)
28					CAS #: 8001-35-2	
6.231	6.230	0.001	2375022	2.00000	2.1 80.00- 120.00	100.00(a)M3 GMA 06/25
6.290	6.289	0.001	2166671	2.00000	2.1 67.86- 107.86	91.23
6.590	6.590	0.000	2470791	2.00000	2.1 80.11- 120.11	104.03
6.984	6.982	0.002	3053449	2.00000	2.1 100.85- 140.85	128.57
Average of Peak Amounts =			2.10000			

QC Flag Legend

- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- M - Compound response manually integrated.

Data File: \\avogadro\organics\ES\_1\130619BF.B\ESJ7609F.D  
Date : 19-JUN-2013 15:36  
Client ID: TOXAPH3J5  
Sample Info: TOXAPH3J5,TOXAPH3J5,,sontox,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPrest

Instrument: ES.i  
Operator: GHA SRC: GHA  
Column diameter: 0.53



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130619BR.B\E5J7609R.D  
 Lab Smp Id: TOXAPH3J5 Client Smp ID: TOXAPH3J5  
 Inj Date : 19-JUN-2013 15:36  
 Operator : GMA SRC: GMA Inst ID: E5.i  
 Smp Info : TOXAPH3J5,TOXAPH3J5,,sومتox.sub,,  
 Misc Info : 1,3,,1  
 Comment :  
 Method : \\avogadro\organics\E5.I\130619BR.B\E58081r.m  
 Meth Date : 21-Jun-2013 13:30 gappolonia Quant Type: ESTD  
 Cal Date : 19-JUN-2013 15:36 Cal File: E5J7609R.D  
 Als bottle: 6 Calibration Sample, Level: 3  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: sometox.sub  
 Target Version: 4.14 Sample Matrix: WATER

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

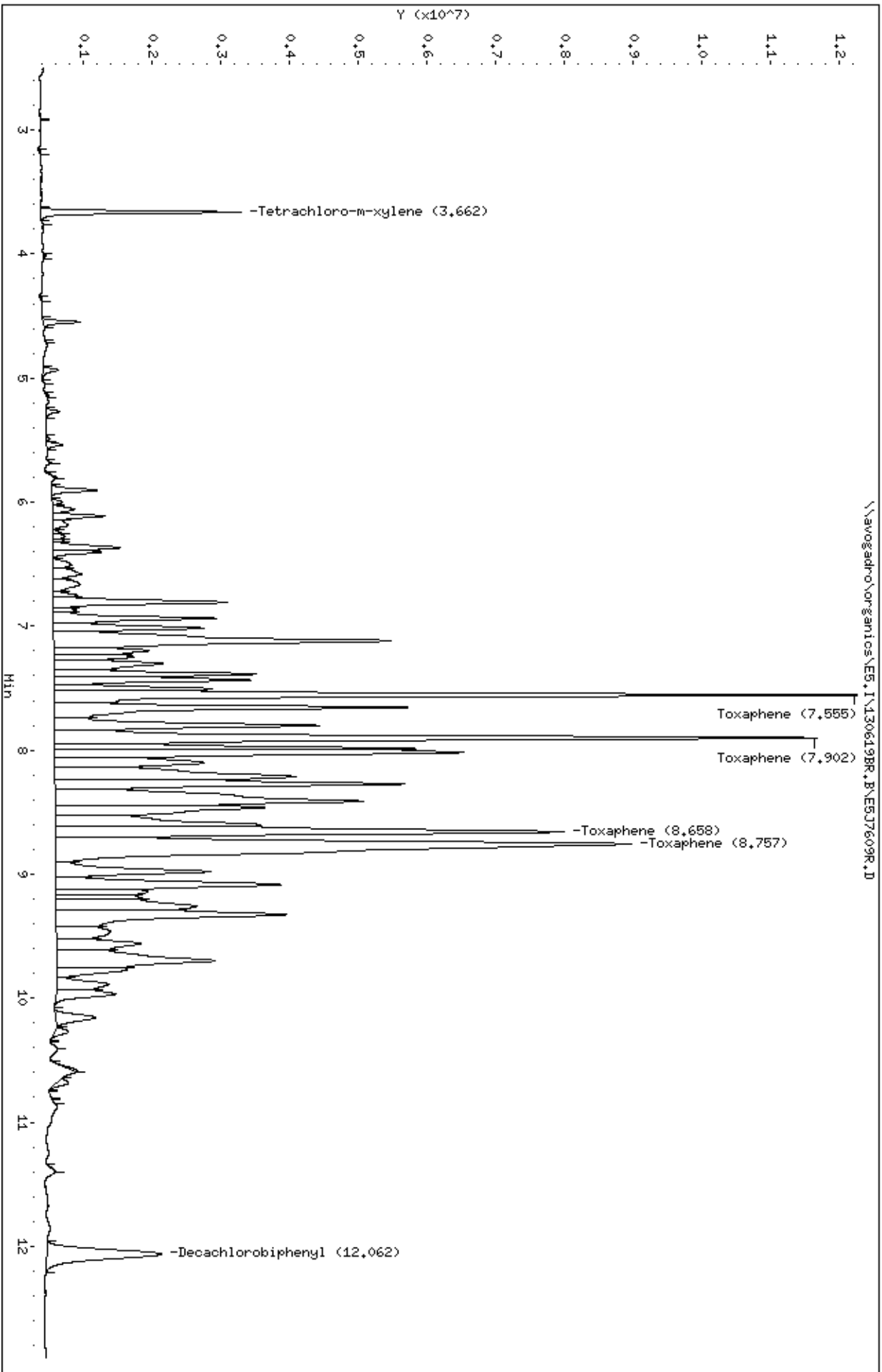
AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
3.661	3.661	0.000	2911041	0.02000		(a)
\$ 2					CAS #: 2051-24-3	
12.061	12.065	-0.004	9026202	0.04000		(a)
28					CAS #: 8001-35-2	
7.555	7.555	0.000	11683991	2.00000	2.3 80.00- 120.00	100.00(a)
7.901	7.900	0.001	11097874	2.00000	2.5 78.33- 118.33	94.98
8.658	8.656	0.002	7407119	2.00000	2.5 47.76- 87.76	63.40
8.756	8.756	0.000	8390623	2.00000	2.6 54.12- 94.12	71.81
Average of Peak Amounts =			2.47500			

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\ES, I\130619BR, B\ESJ7609R.D  
Date: 19-JUN-2013 15:36  
Client ID: TOXAPH3J5  
Sample Info: TOXAPH3J5, TOXAPH3J5,,sontox,sub,  
Volume Injected (uL): 1.0  
Column phase: CLPestII

Instrument: ES.i  
Operator: GHA SRC: GHA  
Column diameter: 0.53



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130619BF.B\E5J7610F.D  
 Lab Smp Id: TOXAPH4J5 Client Smp ID: TOXAPH4J5  
 Inj Date : 19-JUN-2013 15:53  
 Operator : GMA SRC: GMA Inst ID: E5.i  
 Smp Info : TOXAPH4J5,TOXAPH4J5,,sومتox.sub,,  
 Misc Info : 1,4,,1  
 Comment :  
 Method : \\avogadro\organics\E5.I\130619BF.B\E58081f.m  
 Meth Date : 21-Jun-2013 10:52 gappolonia Quant Type: ESTD  
 Cal Date : 19-JUN-2013 17:57 Cal File: E5J7617F.D  
 Als bottle: 7 Calibration Sample, Level: 4  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: sometox.sub  
 Target Version: 4.14 Sample Matrix: WATER

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
3.085	3.085	0.000	1737633 0.04000	0.038		(a)
\$ 2					CAS #: 2051-24-3	
8.945	8.944	0.001	5524231 0.08000	0.086		(a)M3 GMA 06/25
28					CAS #: 8001-35-2	
6.230	6.230	0.000	5208469 4.00000	4.3	80.00- 120.00	100.00(a)M3 GMA 06/25
6.289	6.289	0.000	4576395 4.00000	4.2	67.86- 107.86	87.86
6.590	6.590	0.000	5214215 4.00000	4.1	80.11- 120.11	100.11
6.982	6.982	0.000	6294421 4.00000	4.1	100.85- 140.85	120.85
Average of Peak Amounts =			4.17500			

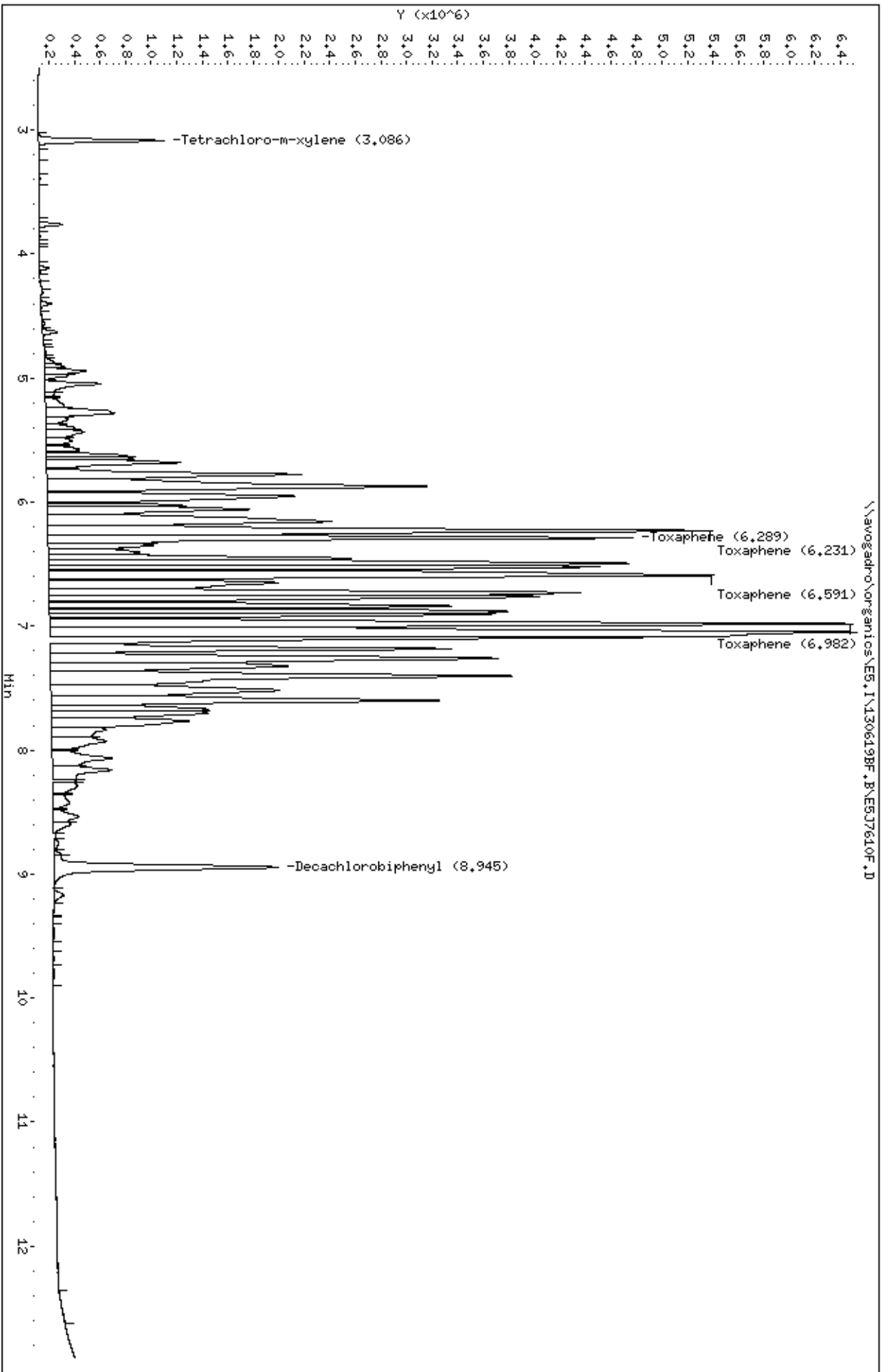
QC Flag Legend

- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- M - Compound response manually integrated.



Data File: \\avogadro\organicos\ES, I\130619BF.B\ESJ7610F.D  
Date: 19-JUN-2013 15:53  
Client ID: TOXAPH4J5  
Sample Info: TOXAPH4J5, TOXAPH4J5,,sontox,sub,  
Volume Injected (uL): 1.0  
Column phase: CLPrest

Instrument: ES.i  
Operator: GHA SRC: GHA  
Column diameter: 0.53



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130619BR.B\E5J7610R.D  
 Lab Smp Id: TOXAPH4J5 Client Smp ID: TOXAPH4J5  
 Inj Date : 19-JUN-2013 15:53  
 Operator : GMA SRC: GMA Inst ID: E5.i  
 Smp Info : TOXAPH4J5,TOXAPH4J5,,sومتox.sub,,  
 Misc Info : 1,4,,1  
 Comment :  
 Method : \\avogadro\organics\E5.I\130619BR.B\E58081r.m  
 Meth Date : 21-Jun-2013 13:30 gappolonia Quant Type: ESTD  
 Cal Date : 19-JUN-2013 15:53 Cal File: E5J7610R.D  
 Als bottle: 7 Calibration Sample, Level: 4  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: sometox.sub  
 Target Version: 4.14 Sample Matrix: WATER

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

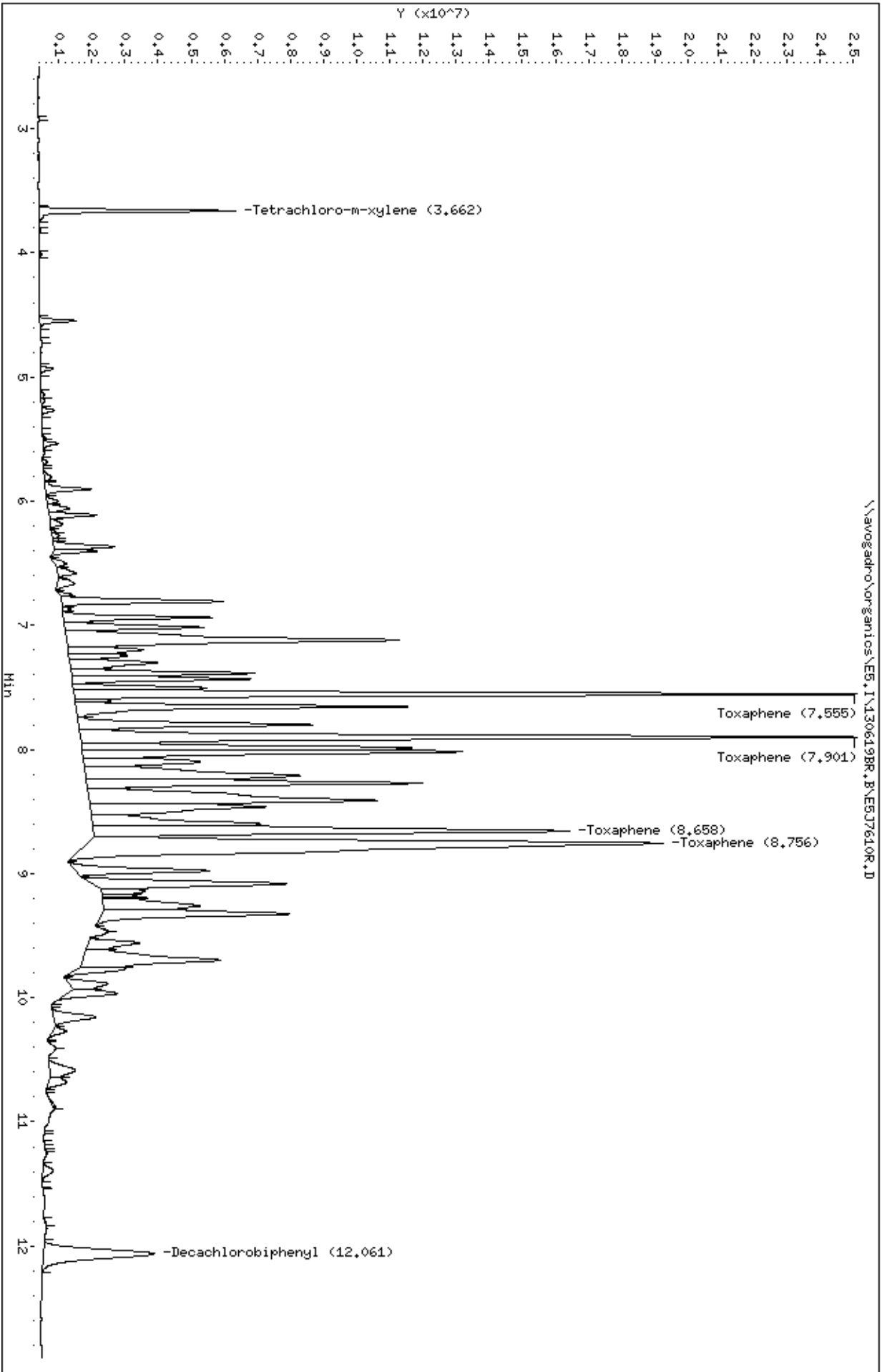
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
3.661	3.661	0.000	5935473	0.04000		(a)
\$ 2					CAS #: 2051-24-3	
12.060	12.065	-0.005	17781985	0.08000		(a)
28					CAS #: 8001-35-2	
7.555	7.555	0.000	23627825	4.00000	4.5 80.00- 120.00	100.00(a)
7.900	7.900	0.000	23454212	4.00000	5.0 78.33- 118.33	99.27
8.657	8.656	0.001	14384560	4.00000	4.6 47.76- 87.76	60.88
8.755	8.756	-0.001	17410149	4.00000	5.0 54.12- 94.12	73.68
Average of Peak Amounts =			4.77500			

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\ES, I\130619BR, B\ESJ7610R.D  
Date : 19-JUN-2013 15:53  
Client ID: TOXAPH4J5  
Sample Info: TOXAPH4J5, TOXAPH4J5,,sontox,sub,  
Volume Injected (uL): 1.0  
Column phase: CLPrestII

Instrument: ES.i  
Operator: GHA SRC: GHA  
Column diameter: 0.53



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130619BF.B\E5J7611F.D  
 Lab Smp Id: TOXAPH5J5 Client Smp ID: TOXAPH5J5  
 Inj Date : 19-JUN-2013 16:11  
 Operator : GMA SRC: GMA Inst ID: E5.i  
 Smp Info : TOXAPH5J5,TOXAPH5J5,,sومتox.sub,,  
 Misc Info : 1,5,,1  
 Comment :  
 Method : \\avogadro\organics\E5.I\130619BF.B\E58081f.m  
 Meth Date : 21-Jun-2013 10:52 gappolonia Quant Type: ESTD  
 Cal Date : 19-JUN-2013 18:15 Cal File: E5J7618F.D  
 Als bottle: 8 Calibration Sample, Level: 5  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: sometox.sub  
 Target Version: 4.14 Sample Matrix: WATER

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

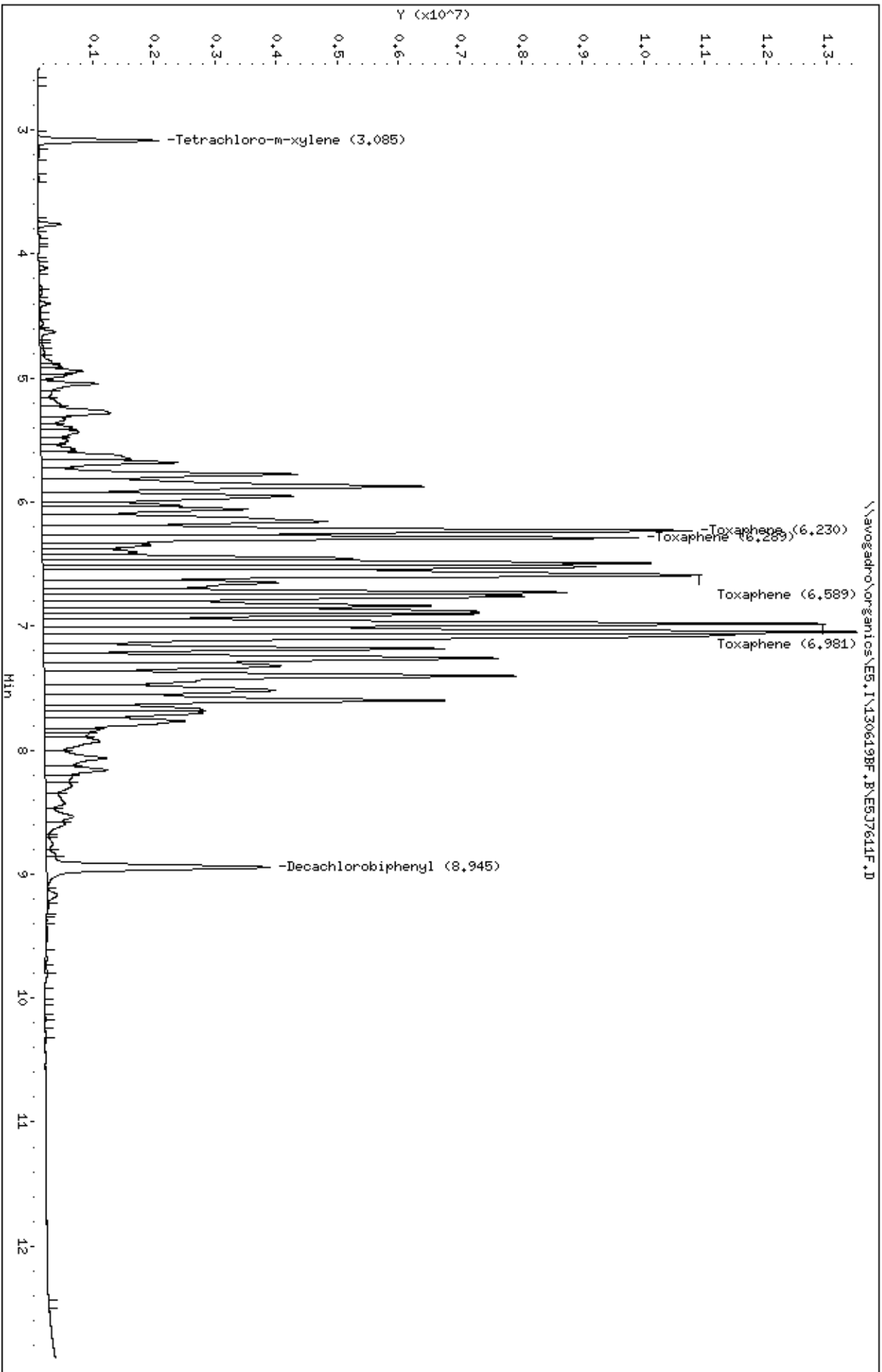
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
3.085	3.085	0.000	3532793	0.08000	0.078	
\$ 2					CAS #: 2051-24-3	
8.945	8.944	0.001	11543436	0.16000	0.18	(A)
28					CAS #: 8001-35-2	
6.230	6.230	0.000	10618300	8.00000	9.9 80.00- 120.00	100.00(A)
6.288	6.289	-0.001	9737974	8.00000	10 67.86- 107.86	91.71
6.589	6.590	-0.001	10758696	8.00000	9.8 80.11- 120.11	101.32
6.981	6.982	-0.001	12758758	8.00000	9.2 100.85- 140.85	120.16
Average of Peak Amounts =			9.72500			

QC Flag Legend

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

Data File: \\avogadro\organicos\ES\_1\130619BF.B\ESJ7611F.D  
Date : 19-JUN-2013 16:11  
Client ID: TOXAPH5J5  
Sample Info: TOXAPH5J5,TOXAPH5J5,,sontox,sub,  
Volume Injected (uL): 1.0  
Column phase: CLPrest

Instrument: ES.i  
Operator: GHA SRC: GHA  
Column diameter: 0.53



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130619BR.B\E5J7611R.D  
 Lab Smp Id: TOXAPH5J5 Client Smp ID: TOXAPH5J5  
 Inj Date : 19-JUN-2013 16:11  
 Operator : GMA SRC: GMA Inst ID: E5.i  
 Smp Info : TOXAPH5J5,TOXAPH5J5,,sومتox.sub,,  
 Misc Info : 1,5,,1  
 Comment :  
 Method : \\avogadro\organics\E5.I\130619BR.B\E58081r.m  
 Meth Date : 21-Jun-2013 13:30 gappolonia Quant Type: ESTD  
 Cal Date : 19-JUN-2013 16:11 Cal File: E5J7611R.D  
 Als bottle: 8 Calibration Sample, Level: 5  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: sometox.sub  
 Target Version: 4.14 Sample Matrix: WATER

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

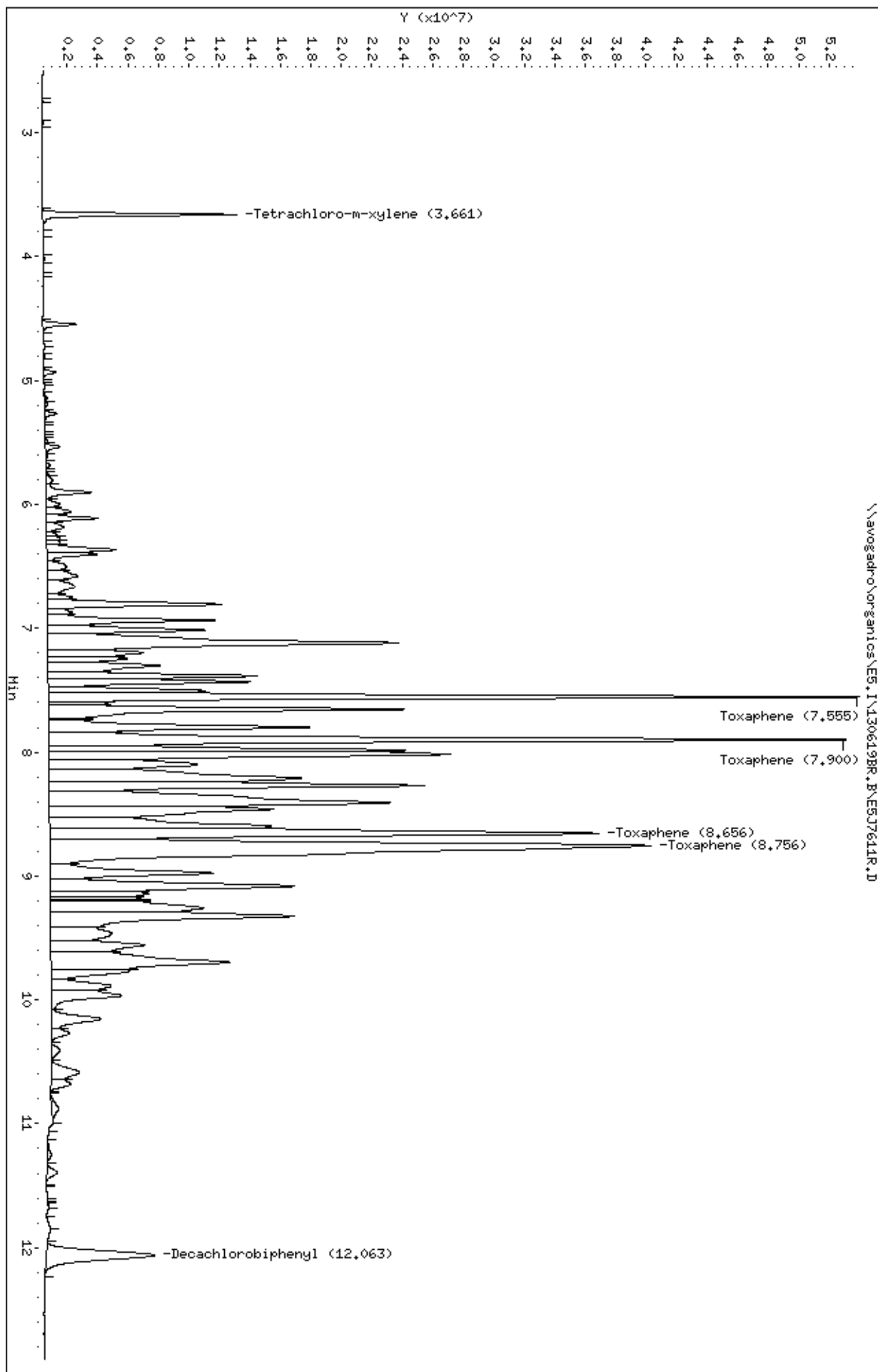
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
3.661	3.661	0.000	12782737	0.08000		(a)
\$ 2					CAS #: 2051-24-3	
12.062	12.065	-0.003	36835974	0.16000		(a)
28					CAS #: 8001-35-2	
7.555	7.555	0.000	53215648	8.00000	9.9 80.00- 120.00	100.00(A)
7.900	7.900	0.000	52326156	8.00000	10 78.33- 118.33	98.33
8.656	8.656	0.000	36057132	8.00000	11 47.76- 87.76	67.76
8.756	8.756	0.000	39444876	8.00000	11 54.12- 94.12	74.12
Average of Peak Amounts =			10.4750			

QC Flag Legend

- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\avogadro\organicos\ES, I\130619BR, B\ESJ7611R.D  
Date: 19-JUN-2013 16:11  
Client ID: TOXAPH5J5  
Sample Info: TOXAPH5J5, TOXAPH5J5,,sontox,sub,  
Volume Injected (uL): 1.0  
Column phase: CLPestII

Instrument: ES.i  
Operator: GHA SRC: GHA  
Column diameter: 0.53



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130619BF.B\E5J7612F.D  
 Lab Smp Id: TC3J5 Client Smp ID: TC3J5  
 Inj Date : 19-JUN-2013 16:28  
 Operator : GMA SRC: GMA Inst ID: E5.i  
 Smp Info : TC3J5,TC3J5,,CHLORDANE.sub,,  
 Misc Info : 1,3,,1  
 Comment :  
 Method : \\avogadro\organics\E5.I\130619BF.B\E58081f.m  
 Meth Date : 21-Jun-2013 10:52 gappolonia Quant Type: ESTD  
 Cal Date : 19-JUN-2013 18:15 Cal File: E5J7618F.D  
 Als bottle: 9 Calibration Sample, Level: 3  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: CHLORDANE.sub  
 Target Version: 4.14 Sample Matrix: WATER

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
3.086	3.085	0.001	1190595	0.02000		(a)
\$ 2					CAS #: 2051-24-3	
8.946	8.944	0.002	3517985	0.04000		(a)
29					CAS #: 12789-03-6	
4.588	4.588	0.000	3422180	1.00000	80.00- 120.00	100.00(a)
5.161	5.161	0.000	11941506	1.00000	328.94- 368.94	348.94
5.287	5.287	0.000	18551189	1.00000	522.09- 562.09	542.09

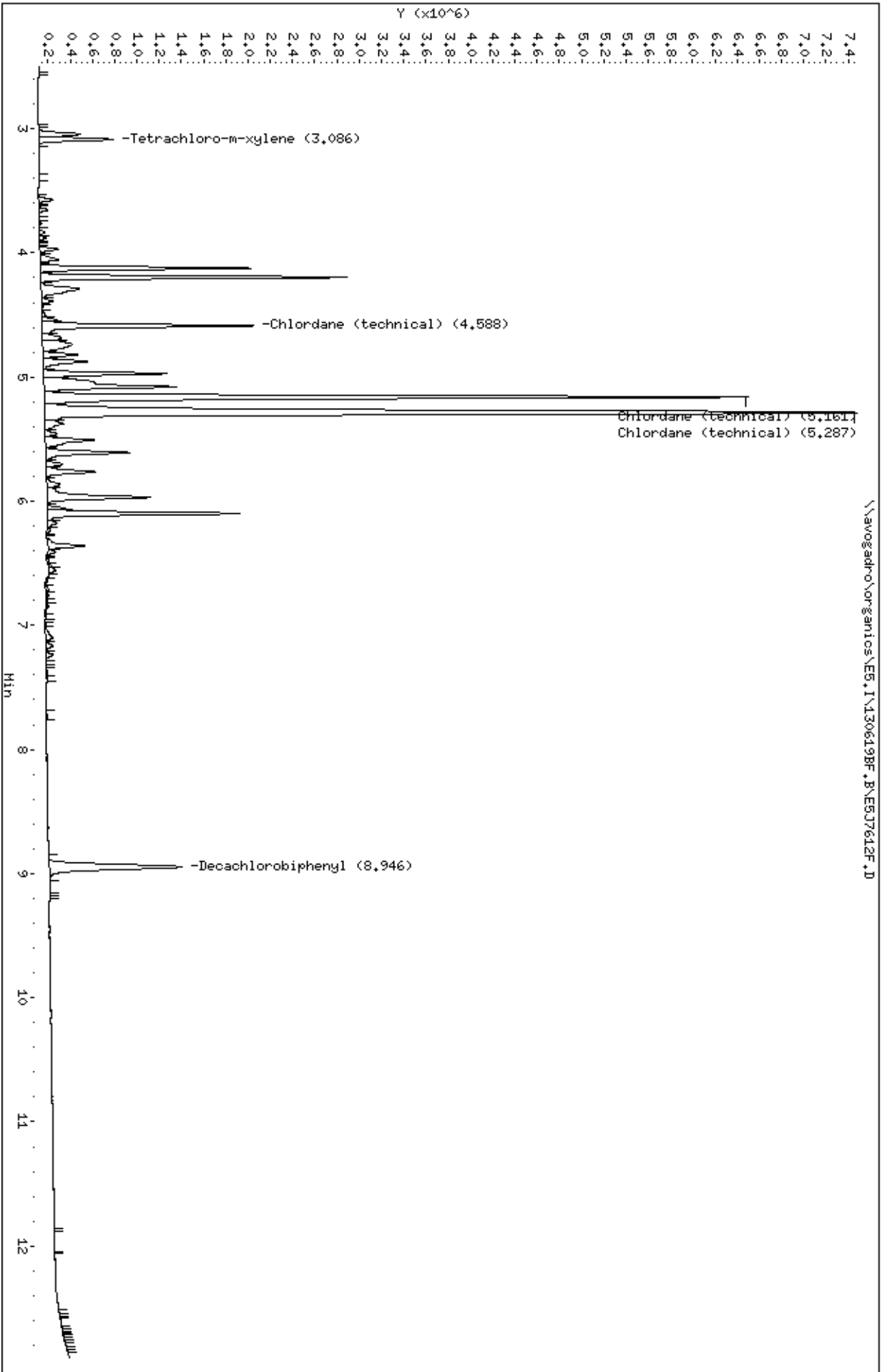
QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).



Data File: \\avogadro\organicos\ES\_1\130619BF.B\ESJ7612F.D  
Date: 19-JUN-2013 16:28  
Client ID: TC3J5  
Sample Info: TC3J5,TC3J5,,CHLORDANE,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPrest

Instrument: ES.i  
Operator: GHA SRC: GHA  
Column diameter: 0.53



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130619BR.B\E5J7612R.D  
 Lab Smp Id: TC3J5 Client Smp ID: TC3J5  
 Inj Date : 19-JUN-2013 16:28  
 Operator : GMA SRC: GMA Inst ID: E5.i  
 Smp Info : TC3J5,TC3J5,,CHLORDANE.sub,,  
 Misc Info : 1,3,,1  
 Comment :  
 Method : \\avogadro\organics\E5.I\130619BR.B\E58081r.m  
 Meth Date : 21-Jun-2013 13:30 gappolonia Quant Type: ESTD  
 Cal Date : 19-JUN-2013 16:28 Cal File: E5J7612R.D  
 Als bottle: 9 Calibration Sample, Level: 3  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: CHLORDANE.sub  
 Target Version: 4.14 Sample Matrix: WATER

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

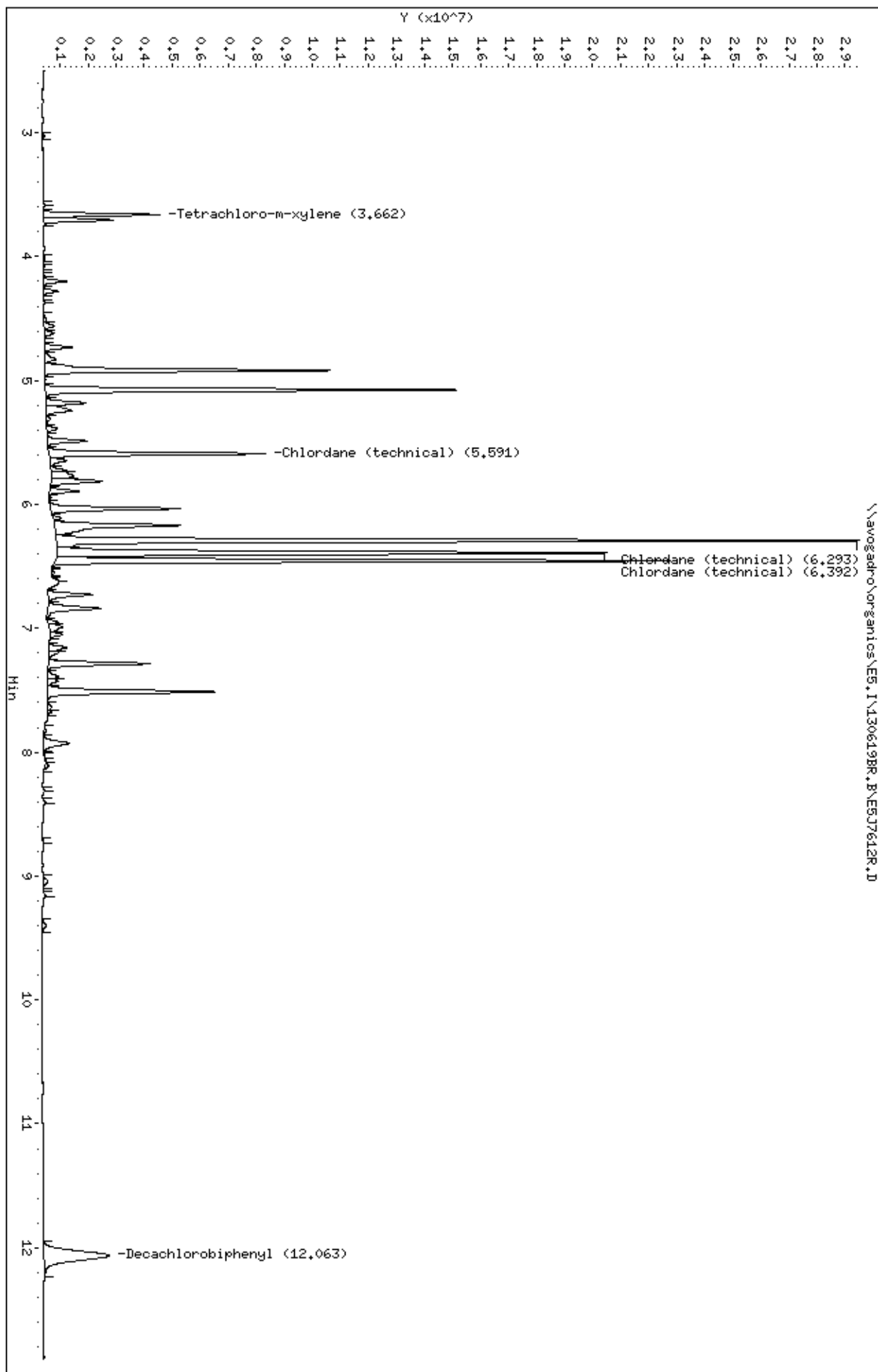
AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
3.662	3.661	0.001	4128636	0.02000		(a)
\$ 2					CAS #: 2051-24-3	
12.063	12.065	-0.002	12585175	0.04000		(a)
29					CAS #: 12789-03-6	
5.591	5.591	0.000	7738477	1.00000	80.00- 120.00	100.00(a)
6.293	6.293	0.000	28662809	1.00000	350.39- 390.39	370.39
6.392	6.392	0.000	19620657	1.00000	233.55- 273.55	253.55

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\ES\_1\130619BR.B\ESJ7612R.D  
Date : 19-JUN-2013 16:28  
Client ID: TC3J5  
Sample Info: TC3J5,TC3J5,,CHLORDANE,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPestII

Instrument: ES.i  
Operator: GHA SRC: GHA  
Column diameter: 0.53



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130619BF.B\E5J7614F.D  
 Lab Smp Id: INDC1J5 Client Smp ID: INDC1J5  
 Inj Date : 19-JUN-2013 17:04  
 Operator : GMA SRC: GMA Inst ID: E5.i  
 Smp Info : INDC1J5,INDC1J5,,indA.sub,,  
 Misc Info : 1,1,,1  
 Comment :  
 Method : \\avogadro\organics\E5.I\130619BF.B\E58081f.m  
 Meth Date : 21-Jun-2013 10:52 gappolonia Quant Type: ESTD  
 Cal Date : 19-JUN-2013 18:15 Cal File: E5J7618F.D  
 Als bottle: 11 Calibration Sample, Level: 1  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: indA.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
3.088	3.085	0.003	223789 0.00500	0.0050		(a)
6					CAS #: 319-84-6	
3.530	3.527	0.003	231062 0.00500	0.0047		(a)
7					CAS #: 58-89-9	
3.790	3.786	0.004	349833 0.00500	0.0048		(a)
10					CAS #: 319-85-7	
3.858	3.855	0.003	146549 0.00500	0.0049		(a)
11					CAS #: 319-86-8	
4.012	4.008	0.004	331797 0.00500	0.0046		(a)
8					CAS #: 76-44-8	
4.199	4.195	0.004	366825 0.00500	0.0049		(a)
9					CAS #: 309-00-2	
4.470	4.465	0.005	335290 0.00500	0.0049		(a)

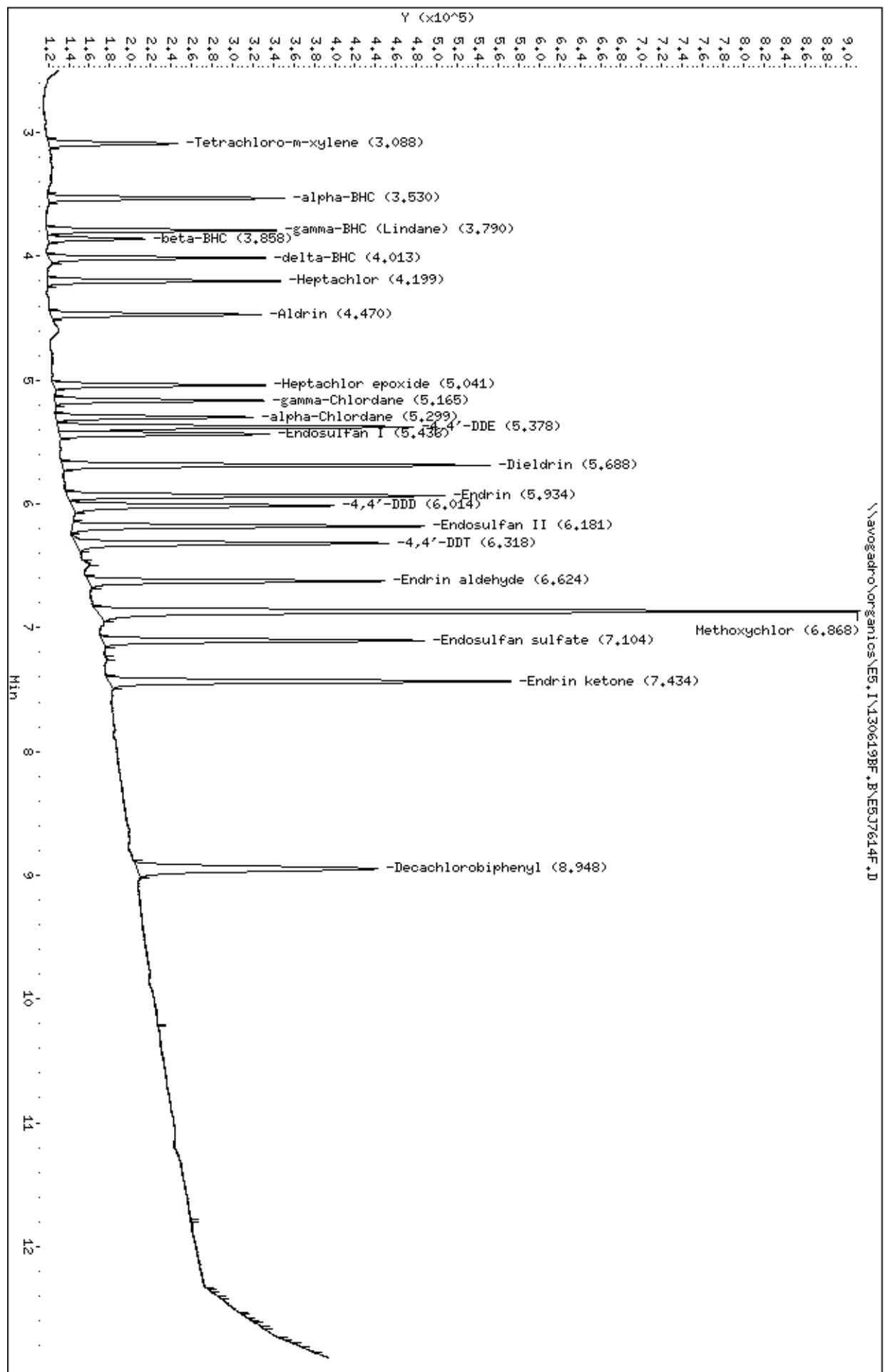
AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT	ON-COL	TARGET RANGE	RATIO
=====	=====	=====	RESPONSE ( ng)	( ng)	=====	=====
14	Heptachlor epoxide			CAS #: 1024-57-3		
5.040	5.035	0.005	335645	0.00500	0.0050	(a)
-----						
16	gamma-Chlordane			CAS #: 5103-74-2		
5.165	5.158	0.007	203702	0.00500	0.0050	(a)
-----						
17	alpha-Chlordane			CAS #: 5103-71-9		
5.299	5.292	0.007	321978	0.00500	0.0050	(a)
-----						
18	4,4'-DDE			CAS #: 72-55-9		
5.378	5.371	0.007	348380	0.01000	0.0095	(a)
-----						
15	Endosulfan I			CAS #: 959-98-8		
5.435	5.429	0.006	206308	0.00500	0.0052	(a)
-----						
19	Dieldrin			CAS #: 60-57-1		
5.688	5.680	0.008	702093	0.01000	0.0098	(a)
-----						
20	Endrin			CAS #: 72-20-8		
5.934	5.926	0.008	369321	0.01000	0.0098	(a)
-----						
21	4,4'-DDD			CAS #: 72-54-8		
6.014	6.004	0.010	493204	0.01000	0.0098	(a)
-----						
22	Endosulfan II			CAS #: 33213-65-9		
6.180	6.169	0.011	618437	0.01000	0.011	(a)
-----						
23	4,4'-DDT			CAS #: 50-29-3		
6.318	6.310	0.008	567840	0.01000	0.010	(a)
-----						
24	Endrin aldehyde			CAS #: 7421-93-4		
6.624	6.616	0.008	288934	0.01000	0.010	(a)
-----						
26	Methoxychlor			CAS #: 72-43-5		
6.868	6.860	0.008	1480917	0.05000	0.051	(a)
-----						
25	Endosulfan sulfate			CAS #: 1031-07-8		
7.104	7.096	0.008	589074	0.01000	0.010	(a)
-----						
27	Endrin ketone			CAS #: 53494-70-5		
7.434	7.427	0.007	393442	0.01000	0.010	(a)
-----						
\$ 2	Decachlorobiphenyl			CAS #: 2051-24-3		
8.947	8.944	0.003	689006	0.01000	0.011	(a)
-----						

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\ES, I\130619BF.B\ESJ7614F.D  
 Date: 19-JUN-2013 17:04  
 Client ID: INDC1J5  
 Sample Info: INDC1J5, INDC1J5,, indh, sub,,  
 Volume Injected (uL): 1.0  
 Column phase: CLPrest

Instrument: ES.i  
 Operator: GHA SRC: GHA  
 Column diameter: 0.53



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130619BR.B\E5J7614R.D  
 Lab Smp Id: INDC1J5 Client Smp ID: INDC1J5  
 Inj Date : 19-JUN-2013 17:04  
 Operator : GMA SRC: GMA Inst ID: E5.i  
 Smp Info : INDC1J5,INDC1J5,,indA.sub,,  
 Misc Info : 1,1,,1  
 Comment :  
 Method : \\avogadro\organics\E5.I\130619BR.B\E58081r.m  
 Meth Date : 21-Jun-2013 13:30 gappolonia Quant Type: ESTD  
 Cal Date : 19-JUN-2013 17:04 Cal File: E5J7614R.D  
 Als bottle: 11 Calibration Sample, Level: 1  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: indA.sub  
 Target Version: 4.14 Sample Matrix: WATER

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
3.663	3.661	0.002	755018	0.00500	0.0050	(a)
6					CAS #: 319-84-6	
4.249	4.246	0.003	2196856	0.00500	0.0049	(a)
7					CAS #: 58-89-9	
4.609	4.606	0.003	1880735	0.00500	0.0048	(a)
10					CAS #: 319-85-7	
4.682	4.679	0.003	686971	0.00500	0.0042	(a)
11					CAS #: 319-86-8	
5.001	4.997	0.004	1686536	0.00500	0.0049	(a)
8					CAS #: 76-44-8	
5.078	5.075	0.003	1997795	0.00500	0.0050	(a)
9					CAS #: 309-00-2	
5.439	5.435	0.004	1798504	0.00500	0.0051	(a)

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
====	=====	=====	=====	=====	=====	=====
14	Heptachlor epoxide				CAS #: 1024-57-3	
6.085	6.080	0.005	1428813	0.00500	0.0051	(a)
-----						
16	gamma-Chlordane				CAS #: 5103-74-2	
6.296	6.290	0.006	1372728	0.00500	0.0050	(a)
-----						
17	alpha-Chlordane				CAS #: 5103-71-9	
6.459	6.453	0.006	1258157	0.00500	0.0051	(a)
-----						
18	4,4'-DDE				CAS #: 72-55-9	
6.636	6.630	0.006	2474314	0.01000	0.0098	(a)
-----						
15	Endosulfan I				CAS #: 959-98-8	
6.530	6.525	0.005	713221	0.00500	0.0050	(a)
-----						
19	Dieldrin				CAS #: 60-57-1	
6.838	6.834	0.004	2650542	0.01000	0.0098	(a)
-----						
20	Endrin				CAS #: 72-20-8	
7.198	7.193	0.005	1145901	0.01000	0.0095	(a)
-----						
21	4,4'-DDD				CAS #: 72-54-8	
7.325	7.317	0.008	2008818	0.01000	0.0099	(a)
-----						
22	Endosulfan II				CAS #: 33213-65-9	
7.459	7.452	0.007	2297154	0.01000	0.0098	(a)
-----						
23	4,4'-DDT				CAS #: 50-29-3	
7.728	7.724	0.004	1695199	0.01000	0.0091	(a)
-----						
24	Endrin aldehyde				CAS #: 7421-93-4	
7.901	7.896	0.005	757840	0.01000	0.0095	(a)
-----						
26	Methoxychlor				CAS #: 72-43-5	
8.794	8.789	0.005	4641787	0.05000	0.045	(a)
-----						
25	Endosulfan sulfate				CAS #: 1031-07-8	
8.295	8.290	0.005	1997558	0.01000	0.010	(a)
-----						
27	Endrin ketone				CAS #: 53494-70-5	
9.157	9.153	0.004	908800	0.01000	0.0099	(a)
-----						
\$ 2	Decachlorobiphenyl				CAS #: 2051-24-3	
12.064	12.065	-0.001	2636256	0.01000	0.011	(a)
-----						

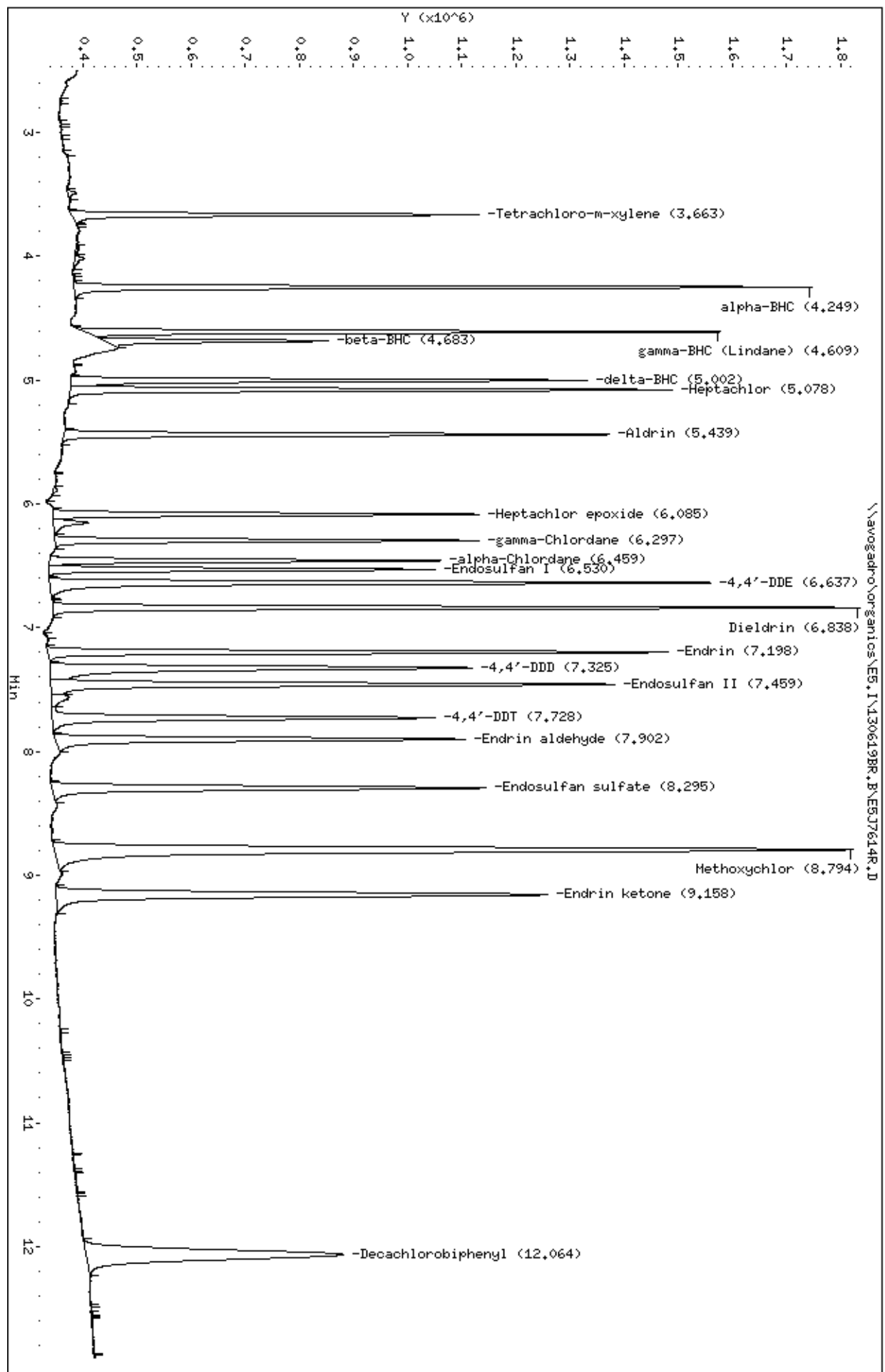
QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).



Data File: \\avogadro\organicos\ES,I\130619BR,B\ESJ7614R.D  
 Date : 19-JUN-2013 17:04  
 Client ID: INDC135  
 Sample Info: INDC135,INDC135,,ind4,sub,,  
 Volume Injected (uL): 1.0  
 Column phase: CLPrestII

Instrument: ES.i  
 Operator: GHA SRC: GHA  
 Column diameter: 0.53



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130619BF.B\E5J7615F.D  
 Lab Smp Id: INDC2J5 Client Smp ID: INDC2J5  
 Inj Date : 19-JUN-2013 17:22  
 Operator : GMA SRC: GMA Inst ID: E5.i  
 Smp Info : INDC2J5,INDC2J5,,indA.sub,,  
 Misc Info : 1,2,,1  
 Comment :  
 Method : \\avogadro\organics\E5.I\130619BF.B\E58081f.m  
 Meth Date : 21-Jun-2013 10:52 gappolonia Quant Type: ESTD  
 Cal Date : 19-JUN-2013 18:15 Cal File: E5J7618F.D  
 Als bottle: 12 Calibration Sample, Level: 2  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: indA.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
3.087	3.085	0.002	449637 0.01000	0.0100		(a)
6					CAS #: 319-84-6	
3.529	3.527	0.002	473825 0.01000	0.0097		(a)
7					CAS #: 58-89-9	
3.788	3.786	0.002	718164 0.01000	0.0098		(a)
10					CAS #: 319-85-7	
3.857	3.855	0.002	303351 0.01000	0.010		(a)
11					CAS #: 319-86-8	
4.011	4.008	0.003	713870 0.01000	0.0098		(a)
8					CAS #: 76-44-8	
4.198	4.195	0.003	738869 0.01000	0.0100		(a)
9					CAS #: 309-00-2	
4.469	4.465	0.004	681671 0.01000	0.0099		(a)

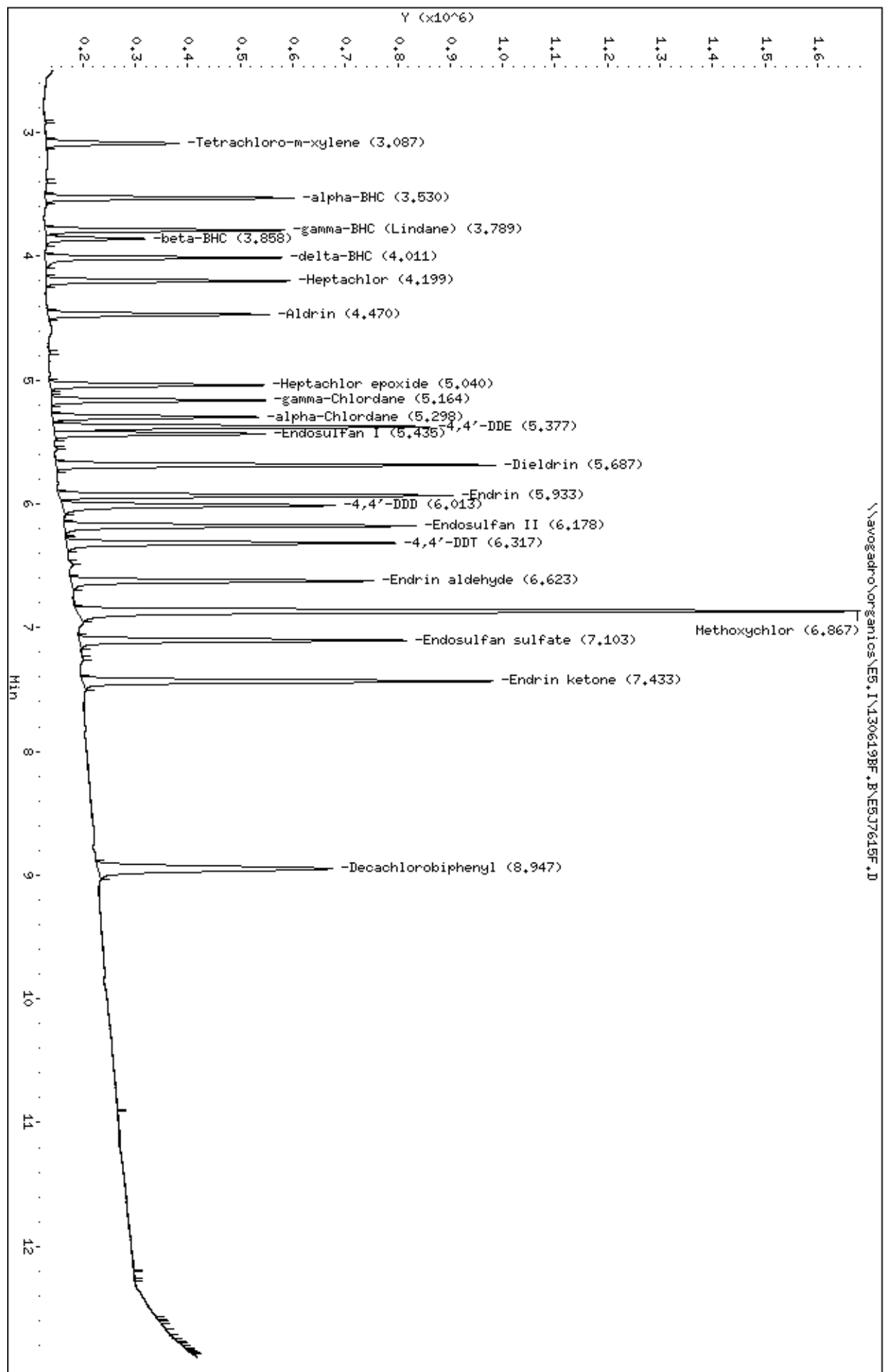
AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT	ON-COL	TARGET RANGE	RATIO
=====	=====	=====	RESPONSE ( ng)	( ng)	=====	=====
14	Heptachlor epoxide			CAS #: 1024-57-3		
5.040	5.035	0.005	671468	0.01000	0.010	(a)
-----						
16	gamma-Chlordane			CAS #: 5103-74-2		
5.163	5.158	0.005	407498	0.01000	0.0100	(a)
-----						
17	alpha-Chlordane			CAS #: 5103-71-9		
5.297	5.292	0.005	649475	0.01000	0.010	(a)
-----						
18	4,4'-DDE			CAS #: 72-55-9		
5.377	5.371	0.006	716125	0.02000	0.020	(a)
-----						
15	Endosulfan I			CAS #: 959-98-8		
5.434	5.429	0.005	402798	0.01000	0.010	(a)
-----						
19	Dieldrin			CAS #: 60-57-1		
5.687	5.680	0.007	1408380	0.02000	0.020	(a)
-----						
20	Endrin			CAS #: 72-20-8		
5.932	5.926	0.006	749567	0.02000	0.020	(a)
-----						
21	4,4'-DDD			CAS #: 72-54-8		
6.012	6.004	0.008	1004700	0.02000	0.020	(a)
-----						
22	Endosulfan II			CAS #: 33213-65-9		
6.177	6.169	0.008	1188970	0.02000	0.020	(a)
-----						
23	4,4'-DDT			CAS #: 50-29-3		
6.317	6.310	0.007	1116494	0.02000	0.020	(a)
-----						
24	Endrin aldehyde			CAS #: 7421-93-4		
6.622	6.616	0.006	574632	0.02000	0.020	(a)
-----						
26	Methoxychlor			CAS #: 72-43-5		
6.867	6.860	0.007	2918099	0.10000	0.100	(a)
-----						
25	Endosulfan sulfate			CAS #: 1031-07-8		
7.102	7.096	0.006	1157648	0.02000	0.020	(a)
-----						
27	Endrin ketone			CAS #: 53494-70-5		
7.432	7.427	0.005	780050	0.02000	0.020	(a)
-----						
\$ 2	Decachlorobiphenyl			CAS #: 2051-24-3		
8.947	8.944	0.003	1314118	0.02000	0.020	(a)
-----						

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\ES, I\130619BF.B\ESJ761SF.D  
 Date: 19-JUN-2013 17:22  
 Client ID: INDC2J5  
 Sample Info: INDC2J5, INDC2J5,, indh, sub,,  
 Volume Injected (uL): 1.0  
 Column phase: CLPrest

Instrument: ES,1  
 Operator: GHA SRC: GHA  
 Column diameter: 0.53



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130619BR.B\E5J7615R.D  
 Lab Smp Id: INDC2J5 Client Smp ID: INDC2J5  
 Inj Date : 19-JUN-2013 17:22  
 Operator : GMA SRC: GMA Inst ID: E5.i  
 Smp Info : INDC2J5,INDC2J5,,indA.sub,,  
 Misc Info : 1,2,,1  
 Comment :  
 Method : \\avogadro\organics\E5.I\130619BR.B\E58081r.m  
 Meth Date : 21-Jun-2013 13:30 gappolonia Quant Type: ESTD  
 Cal Date : 19-JUN-2013 17:22 Cal File: E5J7615R.D  
 Als bottle: 12 Calibration Sample, Level: 2  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: indA.sub  
 Target Version: 4.14 Sample Matrix: WATER

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
====	=====	=====	=====	=====	=====	=====
\$ 1					CAS #: 877-09-8	
3.662	3.661	0.001	1493538	0.01000	0.0099	(a)
-----						
6					CAS #: 319-84-6	
4.248	4.246	0.002	4376271	0.01000	0.0098	(a)
-----						
7					CAS #: 58-89-9	
4.608	4.606	0.002	3874627	0.01000	0.0100	(a)
-----						
10					CAS #: 319-85-7	
4.682	4.679	0.003	1996123	0.01000	0.012	(a)
-----						
11					CAS #: 319-86-8	
5.000	4.997	0.003	3309293	0.01000	0.0096	(a)
-----						
8					CAS #: 76-44-8	
5.077	5.075	0.002	3898149	0.01000	0.0098	(a)
-----						
9					CAS #: 309-00-2	
5.439	5.435	0.004	3504537	0.01000	0.0099	(a)
-----						

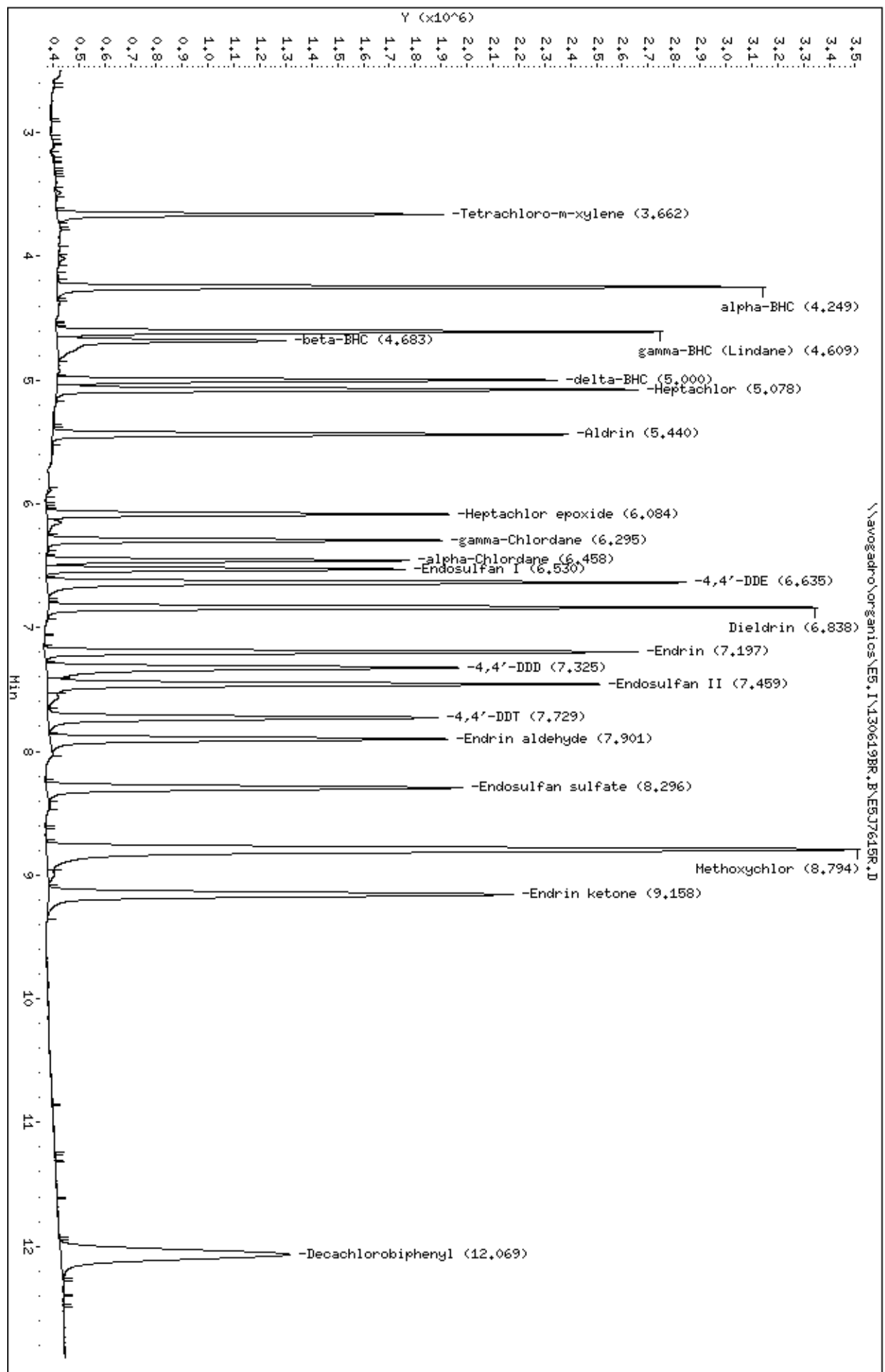
AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT	ON-COL	TARGET RANGE	RATIO
=====	=====	=====	RESPONSE ( ng)	( ng)	=====	=====
14	Heptachlor epoxide			CAS #: 1024-57-3		
6.083	6.080	0.003	2801013	0.01000	0.0100	(a)
-----						
16	gamma-Chlordane			CAS #: 5103-74-2		
6.295	6.290	0.005	2690609	0.01000	0.0099	(a)
-----						
17	alpha-Chlordane			CAS #: 5103-71-9		
6.457	6.453	0.004	2438494	0.01000	0.0099	(a)
-----						
18	4,4'-DDE			CAS #: 72-55-9		
6.635	6.630	0.005	4902770	0.02000	0.019	(a)
-----						
15	Endosulfan I			CAS #: 959-98-8		
6.529	6.525	0.004	1388381	0.01000	0.0097	(a)
-----						
19	Dieldrin			CAS #: 60-57-1		
6.837	6.834	0.003	5260782	0.02000	0.019	(a)
-----						
20	Endrin			CAS #: 72-20-8		
7.197	7.193	0.004	2294079	0.02000	0.019	(a)
-----						
21	4,4'-DDD			CAS #: 72-54-8		
7.324	7.317	0.007	3919572	0.02000	0.019	(a)
-----						
22	Endosulfan II			CAS #: 33213-65-9		
7.458	7.452	0.006	4510233	0.02000	0.019	(a)
-----						
23	4,4'-DDT			CAS #: 50-29-3		
7.728	7.724	0.004	3491267	0.02000	0.019	(a)
-----						
24	Endrin aldehyde			CAS #: 7421-93-4		
7.901	7.896	0.005	1533964	0.02000	0.019	(a)
-----						
26	Methoxychlor			CAS #: 72-43-5		
8.793	8.789	0.004	9701328	0.10000	0.094	(a)
-----						
25	Endosulfan sulfate			CAS #: 1031-07-8		
8.296	8.290	0.006	3923872	0.02000	0.020	(a)
-----						
27	Endrin ketone			CAS #: 53494-70-5		
9.157	9.153	0.004	1799476	0.02000	0.020	(a)
-----						
\$ 2	Decachlorobiphenyl			CAS #: 2051-24-3		
12.068	12.065	0.003	4932397	0.02000	0.021	(a)
-----						

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\ES, I\130619BR.B\ESJ7615R.D  
 Date : 19-JUN-2013 17:22  
 Client ID: INDC2J5  
 Sample Info: INDC2J5, INDC2J5,, indh, sub,,  
 Volume Injected (uL): 1.0  
 Column phase: CLPrestII

Instrument: ES,1  
 Operator: GHA SRC: GHA  
 Column diameter: 0.53



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130619BF.B\E5J7616F.D  
 Lab Smp Id: INDC3J5 Client Smp ID: INDC3J5  
 Inj Date : 19-JUN-2013 17:39  
 Operator : GMA SRC: GMA Inst ID: E5.i  
 Smp Info : INDC3J5,INDC3J5,,indA.sub,,  
 Misc Info : 1,3,,1  
 Comment :  
 Method : \\avogadro\organics\E5.I\130619BF.B\E58081f.m  
 Meth Date : 21-Jun-2013 10:52 gappolonia Quant Type: ESTD  
 Cal Date : 19-JUN-2013 18:15 Cal File: E5J7618F.D  
 Als bottle: 13 Calibration Sample, Level: 3  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: indA.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
3.084	3.085	-0.001	887053 0.02000	0.020		(a)
6					CAS #: 319-84-6	
3.527	3.527	0.000	967101 0.02000	0.020		(a)
7					CAS #: 58-89-9	
3.786	3.786	0.000	1445815 0.02000	0.020		(a)
10					CAS #: 319-85-7	
3.854	3.855	-0.001	595560 0.02000	0.020		(a)
11					CAS #: 319-86-8	
4.008	4.008	0.000	1447783 0.02000	0.020		(a)
8					CAS #: 76-44-8	
4.195	4.195	0.000	1468062 0.02000	0.020		(a)
9					CAS #: 309-00-2	
4.466	4.465	0.001	1371471 0.02000	0.020		(a)



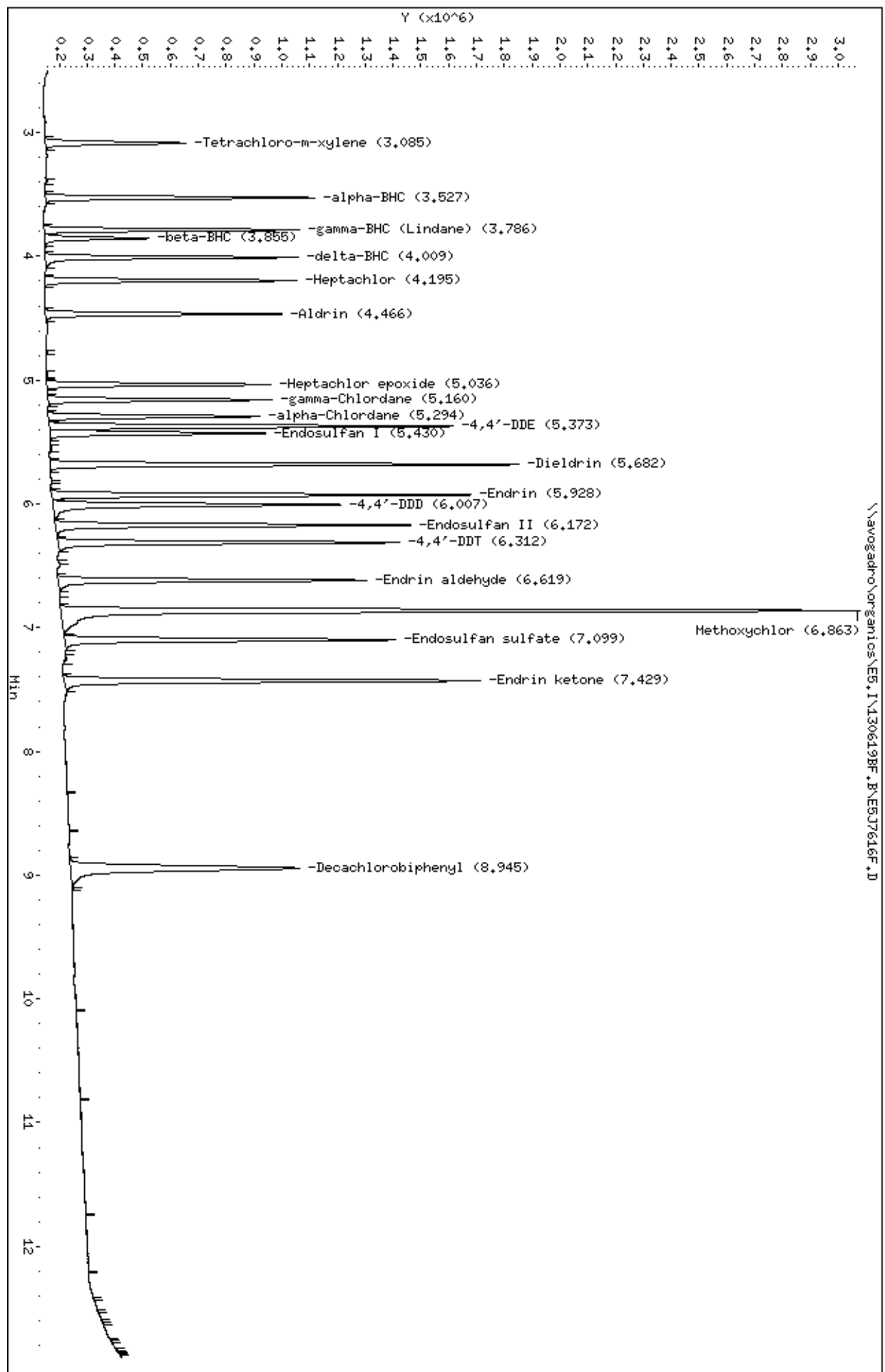
AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT	ON-COL	TARGET RANGE	RATIO
=====	=====	=====	RESPONSE ( ng)	( ng)	=====	=====
14	Heptachlor epoxide			CAS #: 1024-57-3		
5.036	5.035	0.001	1319126 0.02000	0.020		(a)
-----						
16	gamma-Chlordane			CAS #: 5103-74-2		
5.159	5.158	0.001	804790 0.02000	0.020		(a)
-----						
17	alpha-Chlordane			CAS #: 5103-71-9		
5.293	5.292	0.001	1280513 0.02000	0.020		(a)
-----						
18	4,4'-DDE			CAS #: 72-55-9		
5.372	5.371	0.001	1450113 0.04000	0.040		(a)
-----						
15	Endosulfan I			CAS #: 959-98-8		
5.430	5.429	0.001	776807 0.02000	0.020		(a)
-----						
19	Dieldrin			CAS #: 60-57-1		
5.682	5.680	0.002	2835486 0.04000	0.040		(a)
-----						
20	Endrin			CAS #: 72-20-8		
5.927	5.926	0.001	1509481 0.04000	0.040		(a)
-----						
21	4,4'-DDD			CAS #: 72-54-8		
6.007	6.004	0.003	2039585 0.04000	0.040		(a)
-----						
22	Endosulfan II			CAS #: 33213-65-9		
6.172	6.169	0.003	2278747 0.04000	0.039		(a)
-----						
23	4,4'-DDT			CAS #: 50-29-3		
6.312	6.310	0.002	2194132 0.04000	0.039		(a)
-----						
24	Endrin aldehyde			CAS #: 7421-93-4		
6.618	6.616	0.002	1107728 0.04000	0.039		(a)
-----						
26	Methoxychlor			CAS #: 72-43-5		
6.862	6.860	0.002	5828950 0.20000	0.20		(a)
-----						
25	Endosulfan sulfate			CAS #: 1031-07-8		
7.098	7.096	0.002	2249082 0.04000	0.039		(a)
-----						
27	Endrin ketone			CAS #: 53494-70-5		
7.428	7.427	0.001	1495358 0.04000	0.039		(a)
-----						
\$ 2	Decachlorobiphenyl			CAS #: 2051-24-3		
8.944	8.944	0.000	2562844 0.04000	0.040		(a)
-----						

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\ES, I\130619BF.B\ESJ7616F.D  
 Date: 19-JUN-2013 17:39  
 Client ID: INDC3J5  
 Sample Info: INDC3J5, INDC3J5,, indh, sub,,  
 Volume Injected (uL): 1.0  
 Column phase: CLPrest

Instrument: ES,1  
 Operator: GHA SRC: GHA  
 Column diameter: 0.53



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130619BR.B\E5J7616R.D  
 Lab Smp Id: INDC3J5 Client Smp ID: INDC3J5  
 Inj Date : 19-JUN-2013 17:39  
 Operator : GMA SRC: GMA Inst ID: E5.i  
 Smp Info : INDC3J5,INDC3J5,,indA.sub,,  
 Misc Info : 1,3,,1  
 Comment :  
 Method : \\avogadro\organics\E5.I\130619BR.B\E58081r.m  
 Meth Date : 21-Jun-2013 13:30 gappolonia Quant Type: ESTD  
 Cal Date : 19-JUN-2013 17:39 Cal File: E5J7616R.D  
 Als bottle: 13 Calibration Sample, Level: 3  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: indA.sub  
 Target Version: 4.14 Sample Matrix: WATER

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
====	=====	=====	=====	=====	=====	=====
\$ 1					CAS #: 877-09-8	
3.659	3.661	-0.002	2906249 0.02000	0.019		(a)
-----						
6					CAS #: 319-84-6	
4.245	4.246	-0.001	8656810 0.02000	0.019		(a)
-----						
7					CAS #: 58-89-9	
4.605	4.606	-0.001	7617894 0.02000	0.020		(a)
-----						
10					CAS #: 319-85-7	
4.678	4.679	-0.001	3470394 0.02000	0.021		(a)
-----						
11					CAS #: 319-86-8	
4.997	4.997	0.000	6759774 0.02000	0.020		(a)
-----						
8					CAS #: 76-44-8	
5.074	5.075	-0.001	7727994 0.02000	0.019		(a)
-----						
9					CAS #: 309-00-2	
5.435	5.435	0.000	6888517 0.02000	0.019		(a)
-----						

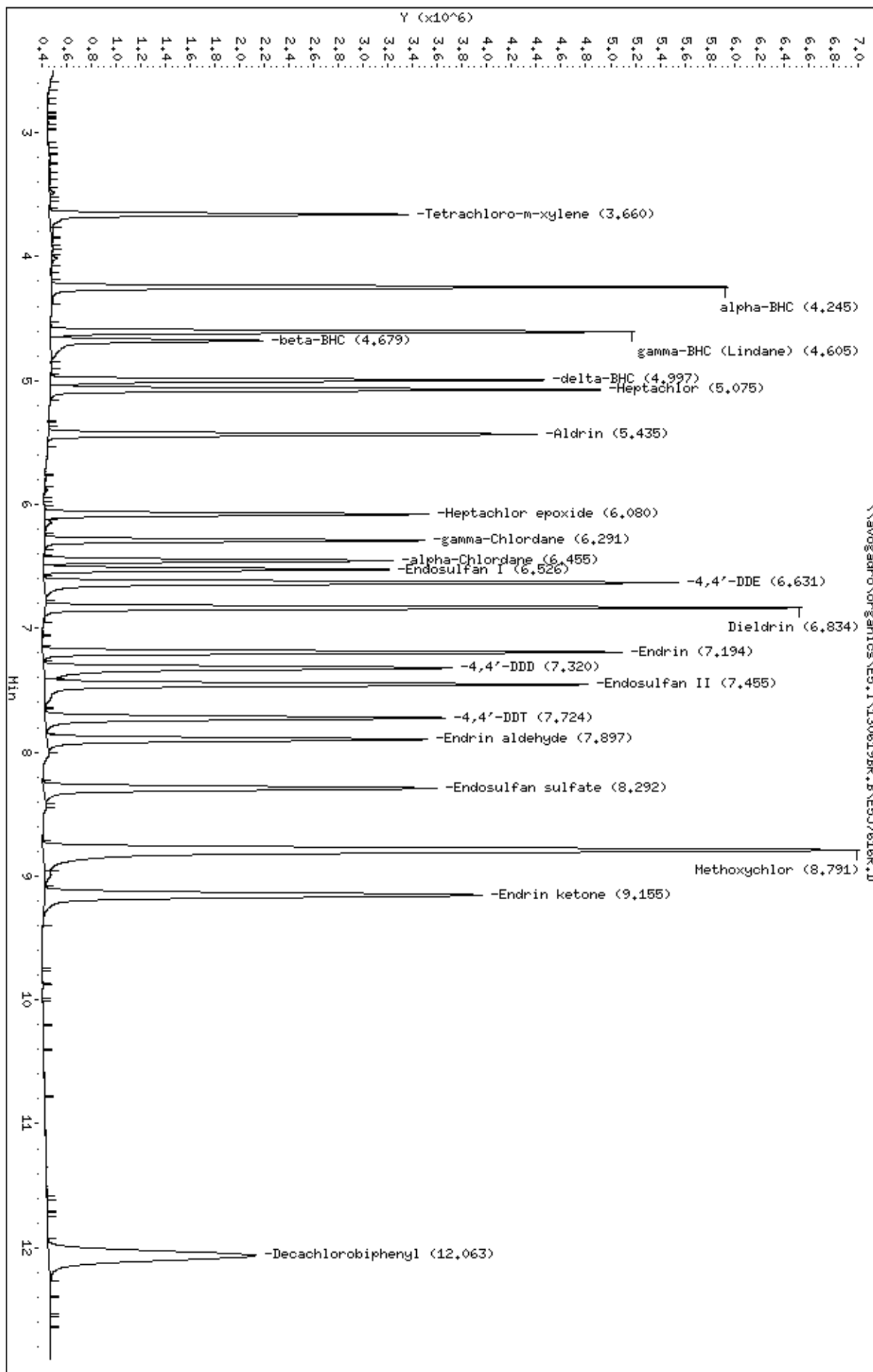
AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
====	=====	=====	=====	=====	=====	=====
14	Heptachlor epoxide			CAS #: 1024-57-3		
6.079	6.080	-0.001	5492795 0.02000	0.020		(a)
-----						
16	gamma-Chlordane			CAS #: 5103-74-2		
6.291	6.290	0.001	5299610 0.02000	0.020		(a)
-----						
17	alpha-Chlordane			CAS #: 5103-71-9		
6.454	6.453	0.001	4826991 0.02000	0.020		(a)
-----						
18	4,4'-DDE			CAS #: 72-55-9		
6.631	6.630	0.001	9861279 0.04000	0.039		(a)
-----						
15	Endosulfan I			CAS #: 959-98-8		
6.526	6.525	0.001	2798468 0.02000	0.020		(a)
-----						
19	Dieldrin			CAS #: 60-57-1		
6.833	6.834	-0.001	10591373 0.04000	0.039		(a)
-----						
20	Endrin			CAS #: 72-20-8		
7.193	7.193	0.000	4695266 0.04000	0.039		(a)
-----						
21	4,4'-DDD			CAS #: 72-54-8		
7.319	7.317	0.002	7805196 0.04000	0.038		(a)
-----						
22	Endosulfan II			CAS #: 33213-65-9		
7.454	7.452	0.002	9258551 0.04000	0.039		(a)
-----						
23	4,4'-DDT			CAS #: 50-29-3		
7.723	7.724	-0.001	7241162 0.04000	0.039		(a)
-----						
24	Endrin aldehyde			CAS #: 7421-93-4		
7.897	7.896	0.001	3075480 0.04000	0.039		(a)
-----						
26	Methoxychlor			CAS #: 72-43-5		
8.791	8.789	0.002	20117414 0.20000	0.19		(a)
-----						
25	Endosulfan sulfate			CAS #: 1031-07-8		
8.292	8.290	0.002	7709113 0.04000	0.039		(a)
-----						
27	Endrin ketone			CAS #: 53494-70-5		
9.155	9.153	0.002	3548164 0.04000	0.039		(a)
-----						
\$ 2	Decachlorobiphenyl			CAS #: 2051-24-3		
12.062	12.065	-0.003	9209723 0.04000	0.039		(a)
-----						

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\ES, I\130619BR, B\ESJ7616R.D  
 Date: 19-JUN-2013 17:39  
 Client ID: INDC3J5  
 Sample Info: INDC3J5, INDC3J5,, indh, sub,,  
 Volume Injected (uL): 1.0  
 Column phase: CLPrestII

Instrument: ES.i  
 Operator: GHA SRC: GHA  
 Column diameter: 0.53



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130619BF.B\E5J7617F.D  
 Lab Smp Id: INDC4J5 Client Smp ID: INDC4J5  
 Inj Date : 19-JUN-2013 17:57  
 Operator : GMA SRC: GMA Inst ID: E5.i  
 Smp Info : INDC4J5,INDC4J5,,indA.sub,,  
 Misc Info : 1,4,,1  
 Comment :  
 Method : \\avogadro\organics\E5.I\130619BF.B\E58081f.m  
 Meth Date : 21-Jun-2013 10:52 gappolonia Quant Type: ESTD  
 Cal Date : 19-JUN-2013 18:15 Cal File: E5J7618F.D  
 Als bottle: 14 Calibration Sample, Level: 4  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: indA.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
3.084	3.085	-0.001	1807680 0.04000	0.040		(a)
6					CAS #: 319-84-6	
3.527	3.527	0.000	1998589 0.04000	0.041		(a)
7					CAS #: 58-89-9	
3.786	3.786	0.000	2953038 0.04000	0.040		(a)
10					CAS #: 319-85-7	
3.854	3.855	-0.001	1178138 0.04000	0.039		(a)
11					CAS #: 319-86-8	
4.007	4.008	-0.001	2969976 0.04000	0.041		(a)
8					CAS #: 76-44-8	
4.194	4.195	-0.001	2959324 0.04000	0.040		(a)
9					CAS #: 309-00-2	
4.464	4.465	-0.001	2777134 0.04000	0.040		(a)

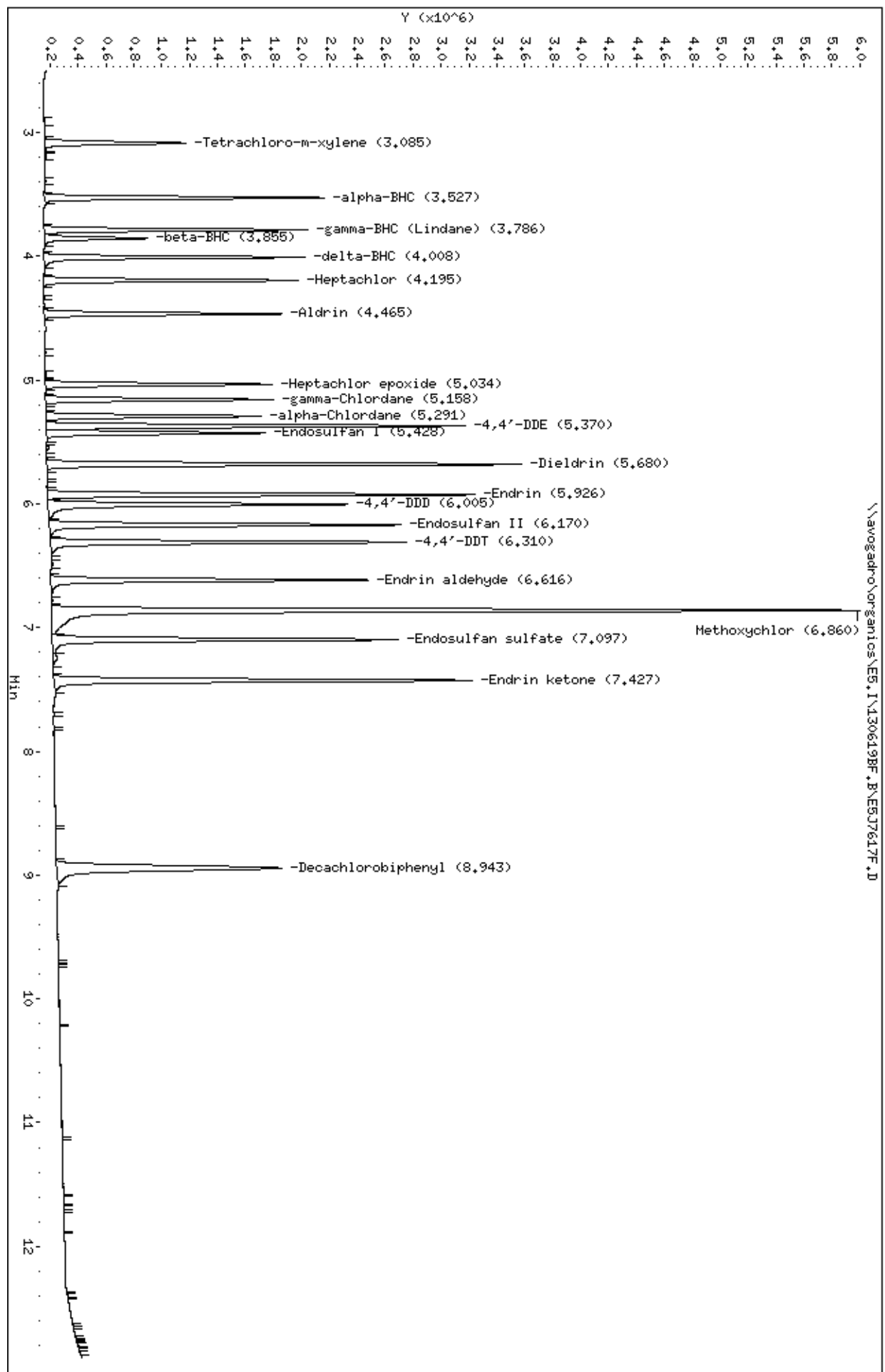
AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT	ON-COL	TARGET RANGE	RATIO
=====	=====	=====	RESPONSE ( ng)	( ng)	=====	=====
14	Heptachlor epoxide			CAS #: 1024-57-3		
5.033	5.035	-0.002	2657886	0.04000	0.040	(a)
-----						
16	gamma-Chlordane			CAS #: 5103-74-2		
5.157	5.158	-0.001	1631110	0.04000	0.040	(a)
-----						
17	alpha-Chlordane			CAS #: 5103-71-9		
5.291	5.292	-0.001	2560625	0.04000	0.040	(a)
-----						
18	4,4'-DDE			CAS #: 72-55-9		
5.370	5.371	-0.001	3004115	0.08000	0.082	(a)
-----						
15	Endosulfan I			CAS #: 959-98-8		
5.427	5.429	-0.002	1567156	0.04000	0.040	(a)
-----						
19	Dieldrin			CAS #: 60-57-1		
5.680	5.680	0.000	5741292	0.08000	0.080	(a)
-----						
20	Endrin			CAS #: 72-20-8		
5.926	5.926	0.000	3067175	0.08000	0.081	(a)
-----						
21	4,4'-DDD			CAS #: 72-54-8		
6.004	6.004	0.000	4117477	0.08000	0.082	(a)
-----						
22	Endosulfan II			CAS #: 33213-65-9		
6.169	6.169	0.000	4524849	0.08000	0.078	(a)
-----						
23	4,4'-DDT			CAS #: 50-29-3		
6.310	6.310	0.000	4587688	0.08000	0.081	(a)
-----						
24	Endrin aldehyde			CAS #: 7421-93-4		
6.616	6.616	0.000	2273303	0.08000	0.079	(a)
-----						
26	Methoxychlor			CAS #: 72-43-5		
6.860	6.860	0.000	11700308	0.40000	0.40	(a)
-----						
25	Endosulfan sulfate			CAS #: 1031-07-8		
7.097	7.096	0.001	4763266	0.08000	0.082	(a)
-----						
27	Endrin ketone			CAS #: 53494-70-5		
7.427	7.427	0.000	2999361	0.08000	0.078	(a)
-----						
\$ 2	Decachlorobiphenyl			CAS #: 2051-24-3		
8.942	8.944	-0.002	4884988	0.08000	0.076	(a)
-----						

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\ES, I\130619BF.B\ESJ7617F.D  
 Date : 19-JUN-2013 17:57  
 Client ID: INDC4J5  
 Sample Info: INDC4J5, INDC4J5,, indh, sub,,  
 Volume Injected (uL): 1.0  
 Column phase: CLPrest

Instrument: ES.i  
 Operator: GHA SRC: GHA  
 Column diameter: 0.53





Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130619BR.B\E5J7617R.D  
 Lab Smp Id: INDC4J5 Client Smp ID: INDC4J5  
 Inj Date : 19-JUN-2013 17:57  
 Operator : GMA SRC: GMA Inst ID: E5.i  
 Smp Info : INDC4J5,INDC4J5,,indA.sub,,  
 Misc Info : 1,4,,1  
 Comment :  
 Method : \\avogadro\organics\E5.I\130619BR.B\E58081r.m  
 Meth Date : 21-Jun-2013 13:30 gappolonia Quant Type: ESTD  
 Cal Date : 19-JUN-2013 17:57 Cal File: E5J7617R.D  
 Als bottle: 14 Calibration Sample, Level: 4  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: indA.sub  
 Target Version: 4.14 Sample Matrix: WATER

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
3.659	3.661	-0.002	5962375 0.04000	0.040		(a)
6					CAS #: 319-84-6	
4.245	4.246	-0.001	17635757 0.04000	0.040		(a)
7					CAS #: 58-89-9	
4.604	4.606	-0.002	15427349 0.04000	0.040		(a)
10					CAS #: 319-85-7	
4.677	4.679	-0.002	6356085 0.04000	0.038		(a)
11					CAS #: 319-86-8	
4.996	4.997	-0.001	13904228 0.04000	0.040		(a)
8					CAS #: 76-44-8	
5.072	5.075	-0.003	15652305 0.04000	0.039		(a)
9					CAS #: 309-00-2	
5.433	5.435	-0.002	13952694 0.04000	0.039		(a)

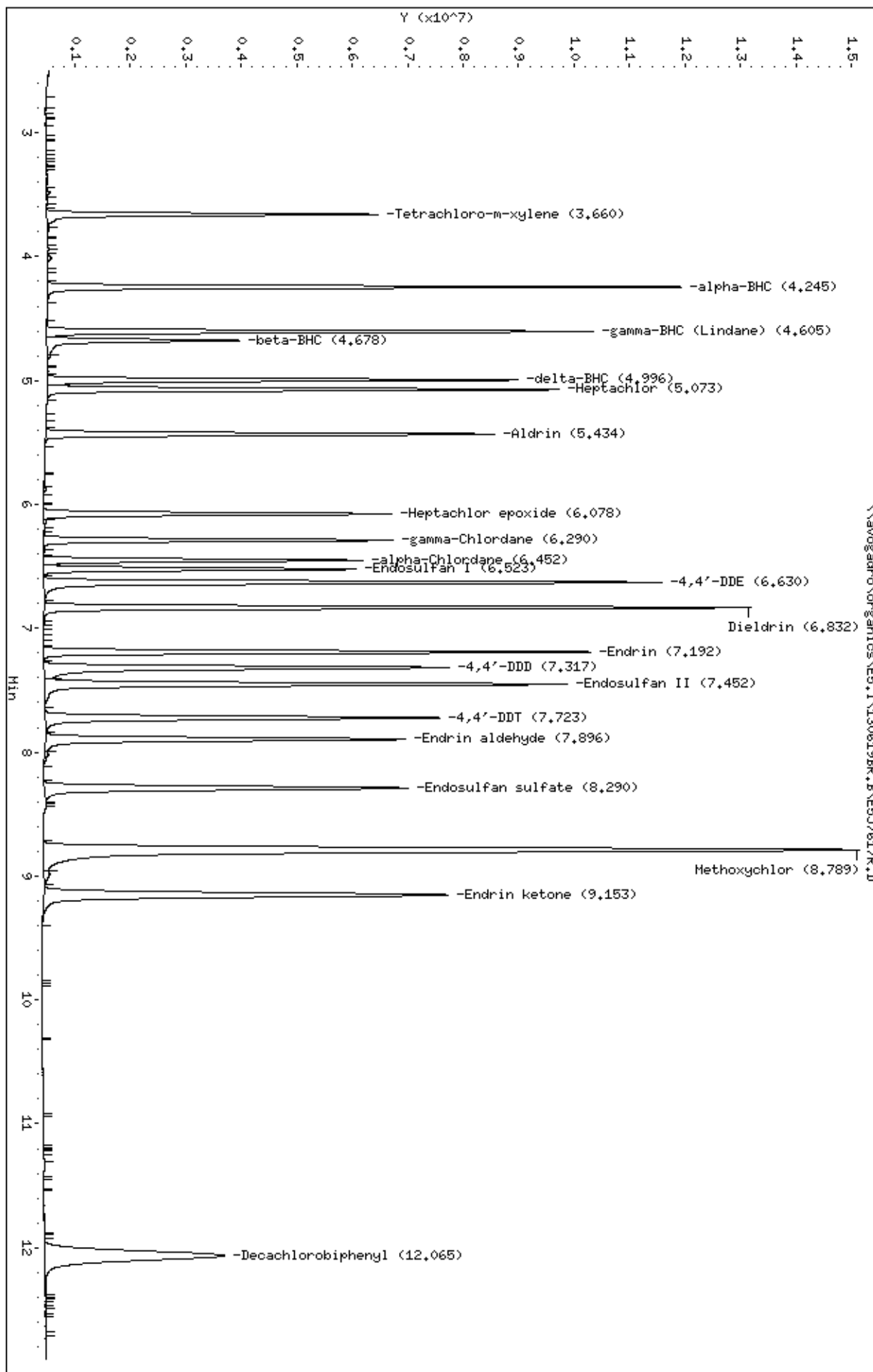
AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
====	=====	=====	=====	=====	=====	=====
14	Heptachlor epoxide			CAS #: 1024-57-3		
6.077	6.080	-0.003	11027410	0.04000	0.039	(a)
-----						
16	gamma-Chlordane			CAS #: 5103-74-2		
6.289	6.290	-0.001	10691065	0.04000	0.039	(a)
-----						
17	alpha-Chlordane			CAS #: 5103-71-9		
6.452	6.453	-0.001	9721448	0.04000	0.039	(a)
-----						
18	4,4'-DDE			CAS #: 72-55-9		
6.629	6.630	-0.001	20180521	0.08000	0.080	(a)
-----						
15	Endosulfan I			CAS #: 959-98-8		
6.522	6.525	-0.003	5636864	0.04000	0.040	(a)
-----						
19	Dieldrin			CAS #: 60-57-1		
6.832	6.834	-0.002	21701055	0.08000	0.080	(a)
-----						
20	Endrin			CAS #: 72-20-8		
7.192	7.193	-0.001	9861808	0.08000	0.082	(a)
-----						
21	4,4'-DDD			CAS #: 72-54-8		
7.317	7.317	0.000	16124224	0.08000	0.079	(a)
-----						
22	Endosulfan II			CAS #: 33213-65-9		
7.452	7.452	0.000	19115071	0.08000	0.081	(a)
-----						
23	4,4'-DDT			CAS #: 50-29-3		
7.722	7.724	-0.002	15388429	0.08000	0.083	(a)
-----						
24	Endrin aldehyde			CAS #: 7421-93-4		
7.896	7.896	0.000	6486935	0.08000	0.081	(a)
-----						
26	Methoxychlor			CAS #: 72-43-5		
8.788	8.789	-0.001	42773684	0.40000	0.41	(a)
-----						
25	Endosulfan sulfate			CAS #: 1031-07-8		
8.290	8.290	0.000	15604307	0.08000	0.079	(a)
-----						
27	Endrin ketone			CAS #: 53494-70-5		
9.152	9.153	-0.001	7282909	0.08000	0.079	(a)
-----						
\$ 2	Decachlorobiphenyl			CAS #: 2051-24-3		
12.064	12.065	-0.001	17860254	0.08000	0.075	(a)
-----						

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\ES, I\130619BR, B\ESJ7617R.D  
Date: 19-JUN-2013 17:57  
Client ID: INDC4J5  
Sample Info: INDC4J5, INDC4J5,, ind4, sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPestII

Instrument: ES,1  
Operator: GHA SRC: GHA  
Column diameter: 0.53



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130619BF.B\E5J7618F.D  
 Lab Smp Id: INDC5J5 Client Smp ID: INDC5J5  
 Inj Date : 19-JUN-2013 18:15  
 Operator : GMA SRC: GMA Inst ID: E5.i  
 Smp Info : INDC5J5,INDC5J5,,indA.sub,,  
 Misc Info : 1,5,,1  
 Comment :  
 Method : \\avogadro\organics\E5.I\130619BF.B\E58081f.m  
 Meth Date : 21-Jun-2013 10:52 gappolonia Quant Type: ESTD  
 Cal Date : 19-JUN-2013 18:15 Cal File: E5J7618F.D  
 Als bottle: 15 Calibration Sample, Level: 5  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: indA.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
3.085	3.085	0.000	3693422 0.08000	0.082		(A)
6					CAS #: 319-84-6	
3.527	3.527	0.000	4188780 0.08000	0.086		(A)
7					CAS #: 58-89-9	
3.786	3.786	0.000	6140055 0.08000	0.084		(A)
10					CAS #: 319-85-7	
3.855	3.855	0.000	2448753 0.08000	0.082		(A)
11					CAS #: 319-86-8	
4.008	4.008	0.000	6241417 0.08000	0.086		(A)
8					CAS #: 76-44-8	
4.195	4.195	0.000	6086722 0.08000	0.082		(A)
9					CAS #: 309-00-2	
4.465	4.465	0.000	5706657 0.08000	0.083		(A)

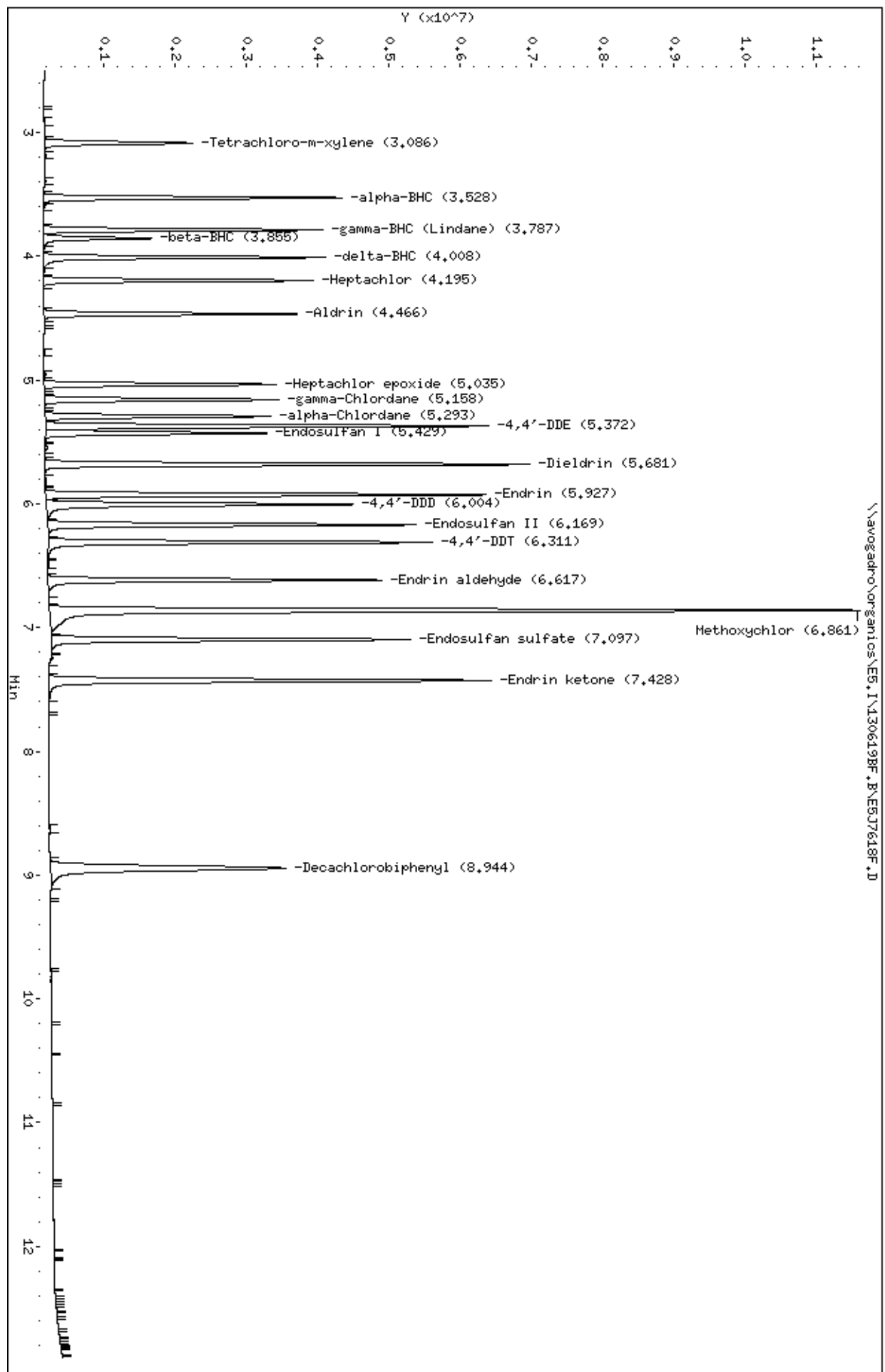
AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT	ON-COL	TARGET RANGE	RATIO
=====	=====	=====	RESPONSE ( ng)	( ng)	=====	=====
14	Heptachlor epoxide			CAS #: 1024-57-3		
5.035	5.035	0.000	5402847	0.08000	0.081	(A)
-----						
16	gamma-Chlordane			CAS #: 5103-74-2		
5.158	5.158	0.000	3299369	0.08000	0.081	(A)
-----						
17	alpha-Chlordane			CAS #: 5103-71-9		
5.292	5.292	0.000	5180532	0.08000	0.080	(A)
-----						
18	4,4'-DDE			CAS #: 72-55-9		
5.371	5.371	0.000	6206931	0.16000	0.17	(A)
-----						
15	Endosulfan I			CAS #: 959-98-8		
5.429	5.429	0.000	3099245	0.08000	0.078	
-----						
19	Dieldrin			CAS #: 60-57-1		
5.680	5.680	0.000	11669800	0.16000	0.16	(A)
-----						
20	Endrin			CAS #: 72-20-8		
5.926	5.926	0.000	6177835	0.16000	0.16	(A)
-----						
21	4,4'-DDD			CAS #: 72-54-8		
6.004	6.004	0.000	8089086	0.16000	0.16	(A)
-----						
22	Endosulfan II			CAS #: 33213-65-9		
6.169	6.169	0.000	9071607	0.16000	0.16	
-----						
23	4,4'-DDT			CAS #: 50-29-3		
6.310	6.310	0.000	9451731	0.16000	0.17	(A)
-----						
24	Endrin aldehyde			CAS #: 7421-93-4		
6.616	6.616	0.000	4686611	0.16000	0.16	(A)
-----						
26	Methoxychlor			CAS #: 72-43-5		
6.860	6.860	0.000	23000715	0.80000	0.79	
-----						
25	Endosulfan sulfate			CAS #: 1031-07-8		
7.096	7.096	0.000	9300502	0.16000	0.16	
-----						
27	Endrin ketone			CAS #: 53494-70-5		
7.427	7.427	0.000	6214150	0.16000	0.16	(A)
-----						
\$ 2	Decachlorobiphenyl			CAS #: 2051-24-3		
8.944	8.944	0.000	9874987	0.16000	0.15	
-----						

QC Flag Legend

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

Data File: \\avogadro\organicos\ES, I\130619BF.B\ESJ7618F.D  
 Date: 19-JUN-2013 18:15  
 Client ID: INDC535  
 Sample Info: INDC535, INDC535,, indh, sub,,  
 Volume Injected (uL): 1.0  
 Column phase: CLPrest

Instrument: ES.i  
 Operator: GHA SRC: GHA  
 Column diameter: 0.53



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130619BR.B\E5J7618R.D  
 Lab Smp Id: INDC5J5 Client Smp ID: INDC5J5  
 Inj Date : 19-JUN-2013 18:15  
 Operator : GMA SRC: GMA Inst ID: E5.i  
 Smp Info : INDC5J5,INDC5J5,,indA.sub,,  
 Misc Info : 1,5,,1  
 Comment :  
 Method : \\avogadro\organics\E5.I\130619BR.B\E58081r.m  
 Meth Date : 21-Jun-2013 13:30 gappolonia Quant Type: ESTD  
 Cal Date : 19-JUN-2013 18:15 Cal File: E5J7618R.D  
 Als bottle: 15 Calibration Sample, Level: 5  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: indA.sub  
 Target Version: 4.14 Sample Matrix: WATER

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
3.661	3.661	0.000	12749136 0.08000	0.084		(A)
6					CAS #: 319-84-6	
4.246	4.246	0.000	38173101 0.08000	0.086		(A)
7					CAS #: 58-89-9	
4.606	4.606	0.000	32910681 0.08000	0.085		(A)
10					CAS #: 319-85-7	
4.679	4.679	0.000	12464569 0.08000	0.076		
11					CAS #: 319-86-8	
4.997	4.997	0.000	29878158 0.08000	0.086		(A)
8					CAS #: 76-44-8	
5.075	5.075	0.000	33398437 0.08000	0.084		(A)
9					CAS #: 309-00-2	
5.435	5.435	0.000	29463250 0.08000	0.083		(A)

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT	ON-COL	TARGET RANGE	RATIO
=====	=====	=====	RESPONSE ( ng)	( ng)	=====	=====
14	Heptachlor epoxide			CAS #: 1024-57-3		
6.080	6.080	0.000	23138662	0.08000	0.082	(A)
-----						
16	gamma-Chlordane			CAS #: 5103-74-2		
6.290	6.290	0.000	22485439	0.08000	0.083	(A)
-----						
17	alpha-Chlordane			CAS #: 5103-71-9		
6.453	6.453	0.000	20296459	0.08000	0.082	(A)
-----						
18	4,4'-DDE			CAS #: 72-55-9		
6.630	6.630	0.000	42824728	0.16000	0.17	(A)
-----						
15	Endosulfan I			CAS #: 959-98-8		
6.525	6.525	0.000	12009093	0.08000	0.084	(A)
-----						
19	Dieldrin			CAS #: 60-57-1		
6.834	6.834	0.000	45757623	0.16000	0.17	(A)
-----						
20	Endrin			CAS #: 72-20-8		
7.193	7.193	0.000	21170064	0.16000	0.18	(A)
-----						
21	4,4'-DDD			CAS #: 72-54-8		
7.317	7.317	0.000	35389226	0.16000	0.17	(A)
-----						
22	Endosulfan II			CAS #: 33213-65-9		
7.452	7.452	0.000	40143041	0.16000	0.17	(A)
-----						
23	4,4'-DDT			CAS #: 50-29-3		
7.724	7.724	0.000	34114459	0.16000	0.18	(A)
-----						
24	Endrin aldehyde			CAS #: 7421-93-4		
7.896	7.896	0.000	14029743	0.16000	0.18	(A)
-----						
26	Methoxychlor			CAS #: 72-43-5		
8.789	8.789	0.000	95407062	0.80000	0.92	(A)
-----						
25	Endosulfan sulfate			CAS #: 1031-07-8		
8.290	8.290	0.000	33132226	0.16000	0.17	(A)
-----						
27	Endrin ketone			CAS #: 53494-70-5		
9.153	9.153	0.000	15762512	0.16000	0.17	(A)
-----						
\$ 2	Decachlorobiphenyl			CAS #: 2051-24-3		
12.065	12.065	0.000	35911878	0.16000	0.15	
-----						

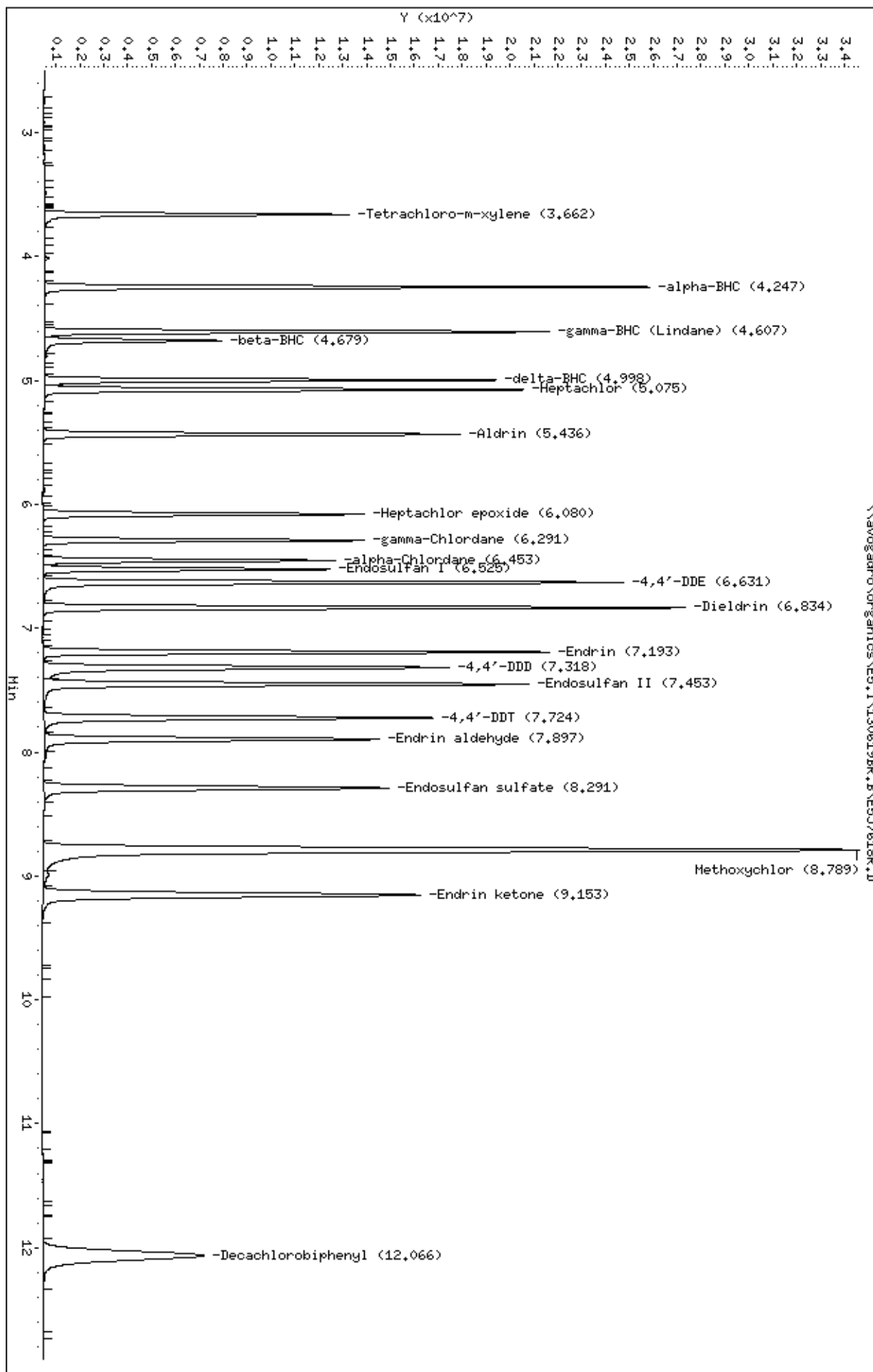
QC Flag Legend

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



Data File: \\avogadro\organicos\ES, I\130619BR, B\ESJ7618R.D  
Date: 19-JUN-2013 18:15  
Client ID: INDC535  
Sample Info: INDC535, INDC535, indh, sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPrestII

Instrument: ES.i  
Operator: GHA SRC: GHA  
Column diameter: 0.53



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130619AF.B\E5J7605F.D  
 Lab Smp Id: PEMJ5 Client Smp ID: PEMJ5  
 Inj Date : 19-JUN-2013 14:25  
 Operator : GMA SRC: GMA Inst ID: E5.i  
 Smp Info : PEMJ5,PEMJ5,,pem.sub,pem.spk,  
 Misc Info : 3,,PEM,1,,1000,,  
 Comment : Column Phase: CLP PEST Column Diameter: 0.53mm  
 Method : \\avogadro\organics\E5.I\130619AF.B\E5\_1586-f.m  
 Meth Date : 19-Jun-2013 14:43 gappolonia Quant Type: ESTD  
 Cal Date : 30-MAY-2013 18:01 Cal File: E5J7446F.D  
 Als bottle: 2 QC Sample: PEM  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: pem.sub  
 Target Version: 4.14  
 Processing Host: TARGET106

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

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

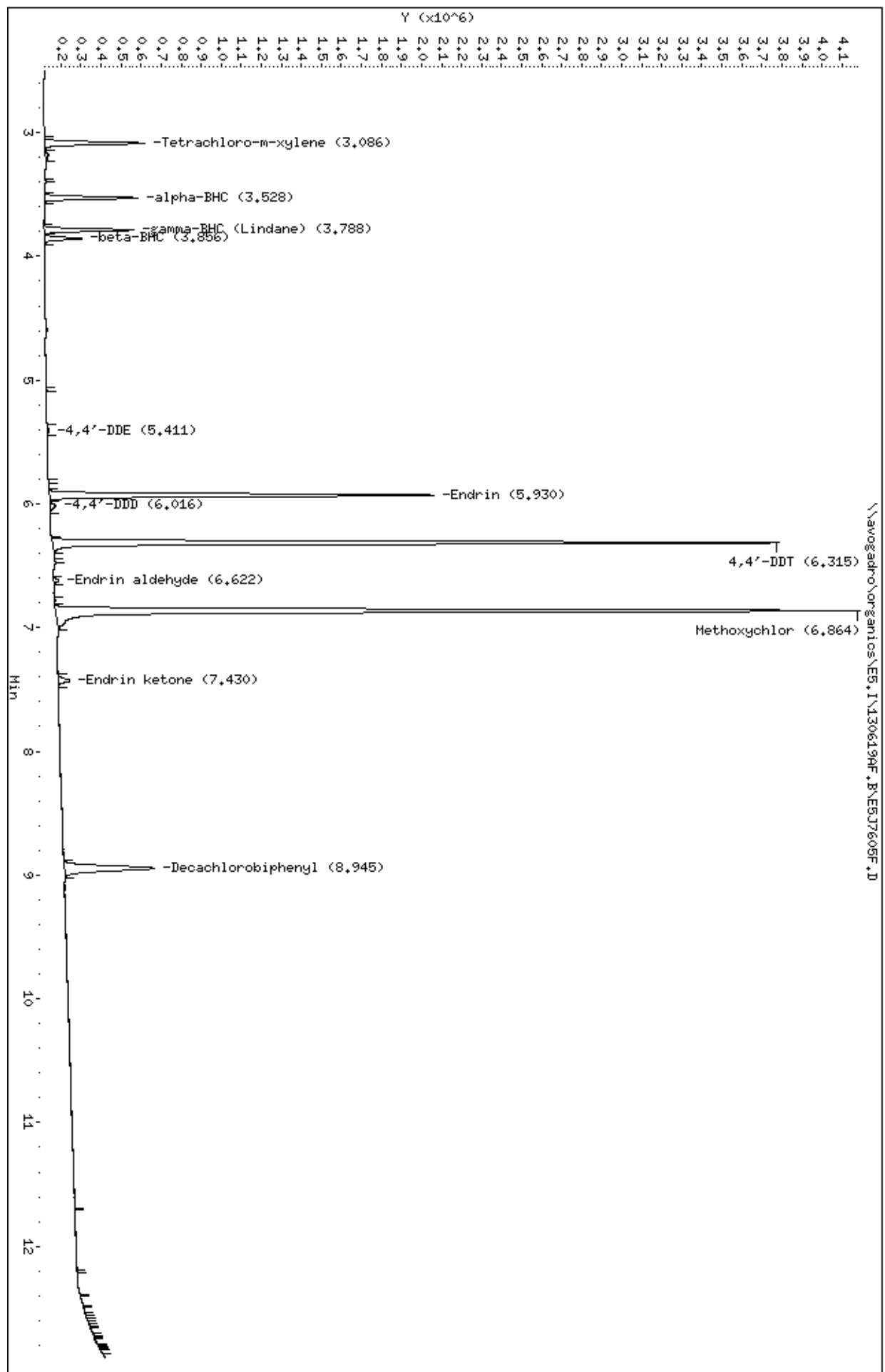
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN ( ng)	FINAL ( ug/L)
\$ 1 Tetrachloro-m-xylene	3.086	3.088	-0.002	882021	0.02376	0.024
3 alpha-BHC	3.527	3.530	-0.003	735144	0.01184	0.012
4 gamma-BHC (Lindane)	3.787	3.790	-0.003	702677	0.01183	0.012
7 beta-BHC	3.856	3.859	-0.003	299396	0.01222	0.012
13 4,4'-DDE	5.411	5.378	0.033	23003	0.00048	0.00048(a)
15 Endrin	5.930	5.933	-0.003	1924410	0.06645	0.066(R)
16 4,4'-DDD	6.016	6.012	0.004	68838	0.00177	0.0018(a)
18 4,4'-DDT	6.314	6.318	-0.004	6125482	0.14766	0.15(R)
19 Endrin aldehyde	6.622	6.623	-0.001	26836	0.00119	0.0012(a)
21 Methoxychlor	6.863	6.867	-0.004	7722432	0.35084	0.35(R)
22 Endrin ketone	7.429	7.434	-0.005	59525	0.00194	0.0019(a)
\$ 2 Decachlorobiphenyl	8.945	8.951	-0.006	1314039	0.02606	0.026(R)

QC Flag Legend

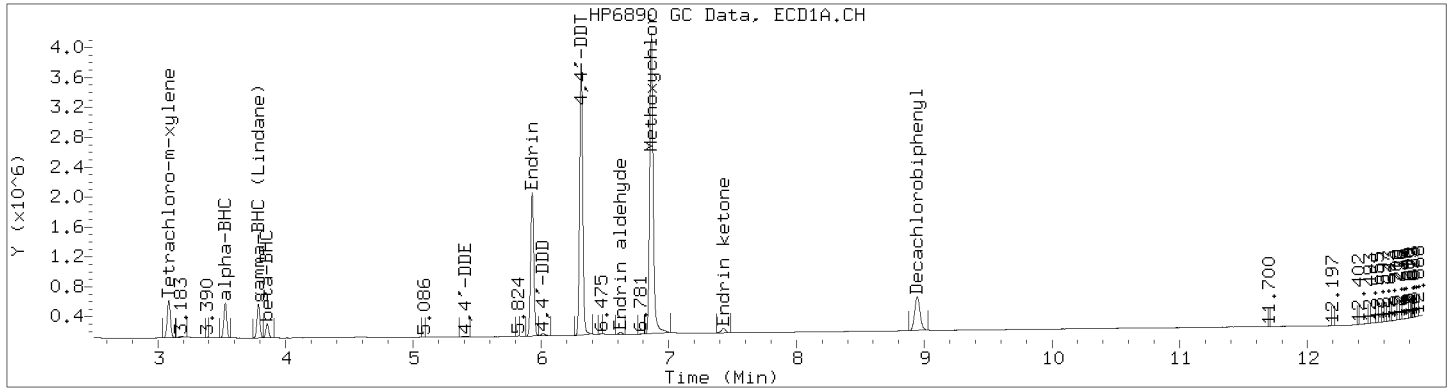
- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organicos\ES\_1\130619HF.B\ESJ7605F.D  
 Date : 19-JUN-2013 14:25  
 Client ID: PEHJ5  
 Sample Info: PEHJ5,PEHJ5,,pen+sub,pen+spk,  
 Volume Injected (uL): 1.0  
 Column phase: CLPrest

Instrument: ES.i  
 Operator: GHA SRC: GHA  
 Column diameter: 0.53

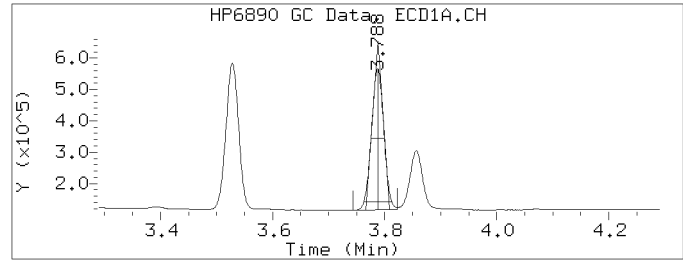


Data File : \\avogadro\organics\E5.I\130619AF.B/E5J7605F.D  
 Lab Smp ID : PEMJ5  
 Client Smp ID : PEMJ5  
 Sample Type: PEM  
 Inj Date : 19-JUN-2013 14:25



gamma-BHC (Lindane) to beta-BHC

Resolution: 96.8



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130619AR.B\E5J7605R.D  
 Lab Smp Id: PEMJ5 Client Smp ID: PEMJ5  
 Inj Date : 19-JUN-2013 14:25  
 Operator : GMA SRC: GMA Inst ID: E5.i  
 Smp Info : PEMJ5,PEMJ5,,pem.sub,pem.spk,  
 Misc Info : 3,,PEM,1,,1000,,  
 Comment : Column Phase: CLP PEST (II) Column Diameter: 0.53mm  
 Method : \\avogadro\organics\E5.I\130619AR.B\E5\_1586-r.m  
 Meth Date : 19-Jun-2013 14:44 gappolonia Quant Type: ESTD  
 Cal Date : 30-MAY-2013 18:01 Cal File: E5J7446R.D  
 Als bottle: 2 QC Sample: PEM  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: pem.sub  
 Target Version: 4.14  
 Processing Host: TARGET106

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

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

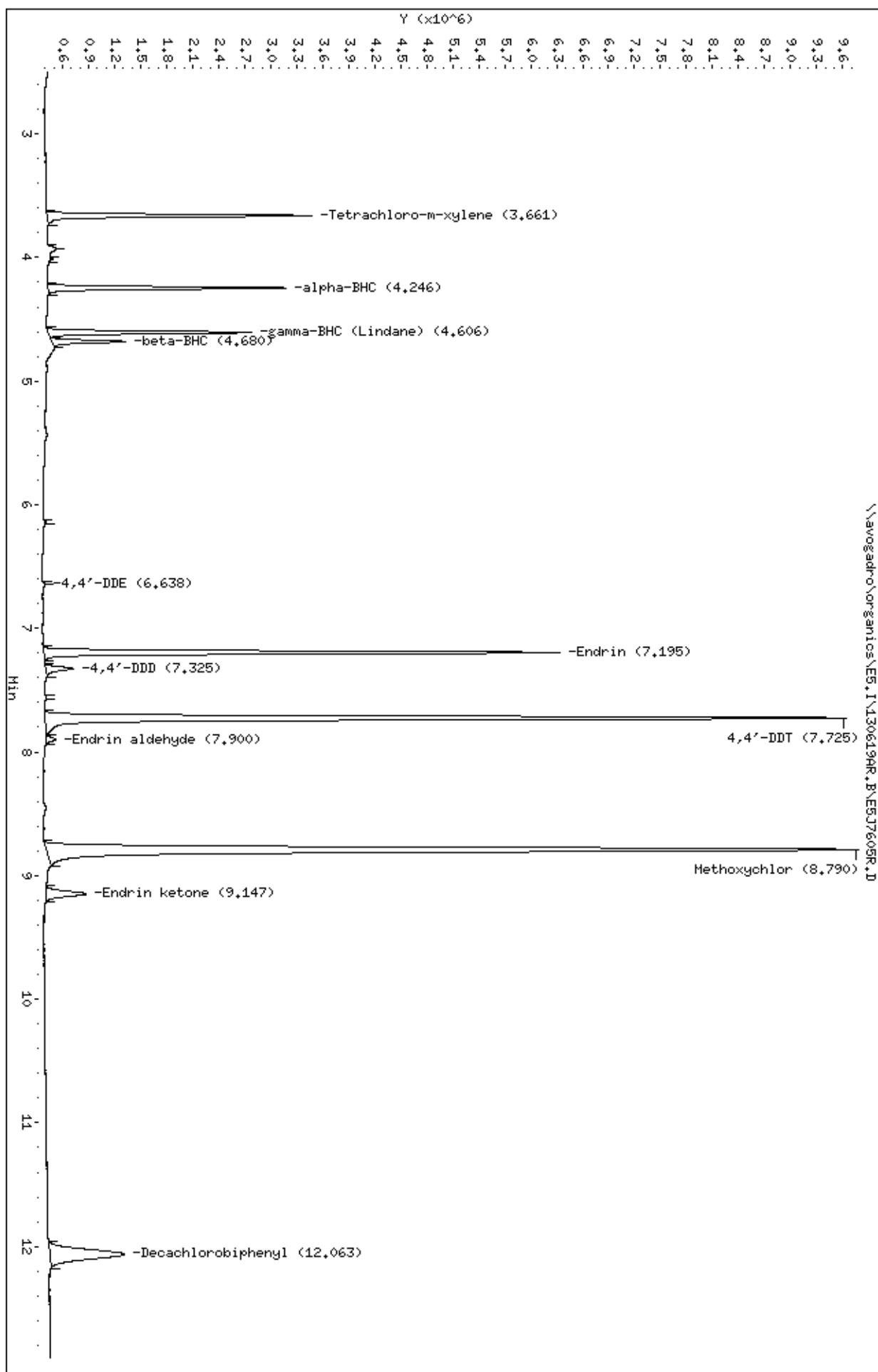
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN ( ng)	FINAL ( ug/L)
\$ 1 Tetrachloro-m-xylene	3.661	3.664	-0.003	4964965	0.02259	0.023
6 alpha-BHC	4.246	4.250	-0.004	4301514	0.01112	0.011
7 gamma-BHC (Lindane)	4.606	4.610	-0.004	3718134	0.01101	0.011
10 beta-BHC	4.679	4.684	-0.005	1385800	0.00923	0.0092
18 4,4'-DDE	6.637	6.636	0.001	2767	1e-005	0.000013(a)
20 Endrin	7.195	7.199	-0.004	5960118	0.06170	0.062
21 4,4'-DDD	7.325	7.324	0.001	745689	0.00434	0.0043(a)
23 4,4'-DDT	7.725	7.729	-0.004	19724519	0.13664	0.14(R)
24 Endrin aldehyde	7.900	7.902	-0.002	113479	0.00166	0.0017(a)
26 Methoxychlor	8.789	8.795	-0.006	26135758	0.30644	0.31
27 Endrin ketone	9.147	9.160	-0.013	465049	0.00564	0.0056(a)
\$ 2 Decachlorobiphenyl	12.062	12.072	-0.010	4523935	0.02193	0.022

QC Flag Legend

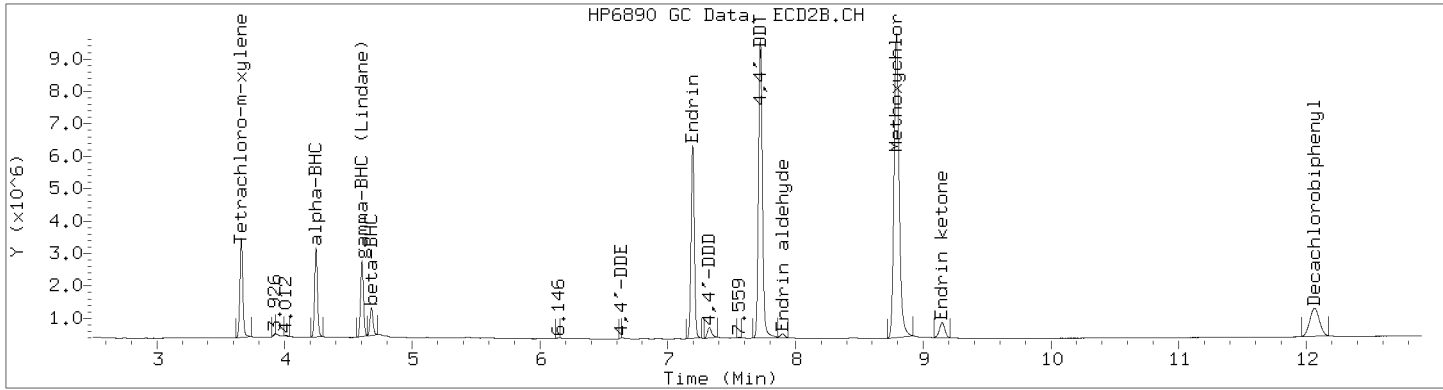
- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organicos\ES,1\130619AR.B\ESJ7605R.D  
Date: 19-JUN-2013 14:25  
Client ID: PEMJ5  
Sample Info: PEMJ5,PEMJ5,,pem,sub,pem,spk,  
Volume Injected (uL): 1.0  
Column phase: CLPpeStII

Instrument: ES,1  
Operator: GHA SRC: GHA  
Column diameter: 0.53



Data File : \\avogadro\organics\E5.I\130619AR.B/E5J7605R.D  
Lab Smp ID : PEMJ5  
Client Smp ID : PEMJ5  
Sample Type: PEM  
Inj Date : 19-JUN-2013 14:25



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130620F.B\E5J7629F.D  
 Lab Smp Id: PEMJA Client Smp ID: PEMJA  
 Inj Date : 20-JUN-2013 12:32  
 Operator : GMA SRC: GMA Inst ID: E5.i  
 Smp Info : PEMJA,PEMJA,,pem.sub,pem.spk,  
 Misc Info : 3,,PEM,1,,1000,,  
 Comment :  
 Method : \\avogadro\organics\E5.I\130620F.B\E58081f.m  
 Meth Date : 21-Jun-2013 08:35 gappolonia Quant Type: ESTD  
 Cal Date : 19-JUN-2013 18:15 Cal File: E5J7618F.D  
 Als bottle: 2 QC Sample: PEM  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: pem.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	1000.000	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						
RT	EXP RT	DLT RT	RESPONSE ( ng)	ON-COL	FINAL ( ug/L)	TARGET RANGE RATIO
\$ 1						CAS #: 877-09-8
3.086	3.085	0.001	909003	0.02016	0.020	
6						CAS #: 319-84-6
3.529	3.527	0.002	465995	0.00954	0.0095	
7						CAS #: 58-89-9
3.788	3.786	0.002	693890	0.00951	0.0095	
10						CAS #: 319-85-7
3.857	3.855	0.002	303905	0.01017	0.010	
18						CAS #: 72-55-9
5.375	5.371	0.004	4454	1e-004	0.00012	(a)
20						CAS #: 72-20-8
5.933	5.926	0.007	1997463	0.05282	0.053	
21						CAS #: 72-54-8
6.017	6.004	0.013	38812	8e-004	0.00077	(a)



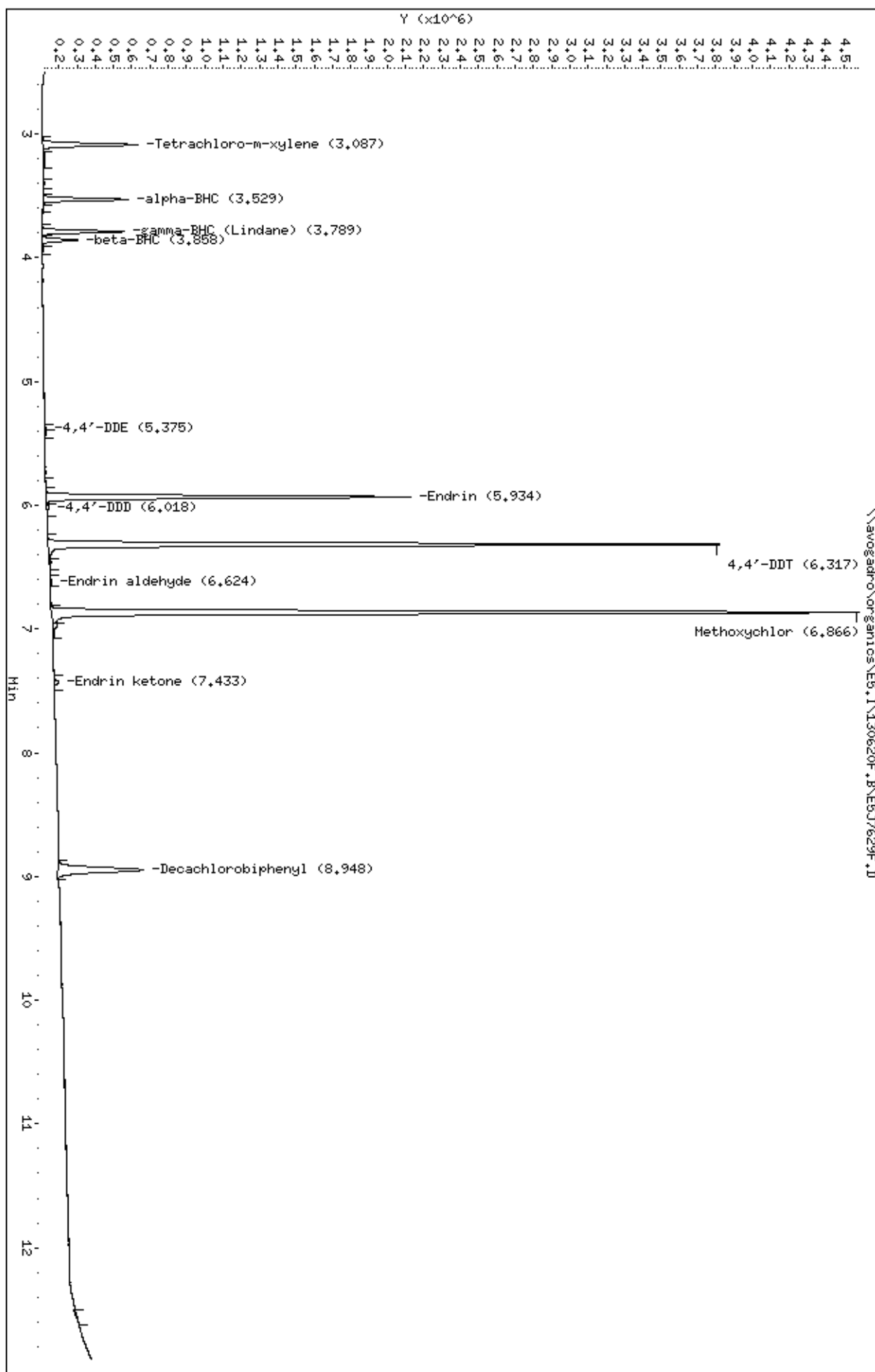
CONCENTRATIONS						
RT	EXP RT	DLT RT	RESPONSE (	ON-COL	FINAL	TARGET RANGE
=====	=====	=====	ng)	(	ug/L)	=====
=====	=====	=====	=====	=====	=====	=====
23	4,4'-DDT				CAS #: 50-29-3	
6.316	6.310	0.006	6198615	0.10918	0.11	
-----						
24	Endrin aldehyde				CAS #: 7421-93-4	
6.623	6.616	0.007	10149	4e-004	0.00035	(a)
-----						
26	Methoxychlor				CAS #: 72-43-5	
6.866	6.860	0.006	7924749	0.27150	0.27	
-----						
27	Endrin ketone				CAS #: 53494-70-5	
7.432	7.427	0.005	27130	7e-004	0.00071	(a)
-----						
\$ 2	Decachlorobiphenyl				CAS #: 2051-24-3	
8.947	8.944	0.003	1341062	0.02086	0.021	
-----						

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\ES, I\130620F.B\ESJ7629F.D  
Date : 20-JUN-2013 12:32  
Client ID: PEHJA  
Sample Info: PEHJA,PEHJA,,pem,sub,pem,spk,  
Volume Injected (uL): 1.0  
Column phase: CLPrest

Instrument: ES,1  
Operator: GHA SRC: GHA  
Column diameter: 0.53



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130620R.B\E5J7629R.D  
 Lab Smp Id: PEMJA Client Smp ID: PEMJA  
 Inj Date : 20-JUN-2013 12:32  
 Operator : GMA SRC: GMA Inst ID: E5.i  
 Smp Info : PEMJA,PEMJA,,pem.sub,pem.spk,  
 Misc Info : 3,,PEM,1,,1000,,  
 Comment :  
 Method : \\avogadro\organics\E5.I\130620R.B\E58081r.m  
 Meth Date : 21-Jun-2013 13:08 E5.i Quant Type: ESTD  
 Cal Date : 19-JUN-2013 18:15 Cal File: E5J7618R.D  
 Als bottle: 2 QC Sample: PEM  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: pem.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	1000.000	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						
RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
=====	=====	=====	RESPONSE ( ng)	( ug/L)	=====	=====
\$ 1					CAS #: 877-09-8	
3.662	3.661	0.001	3089817	0.02049	0.020	
-----						
6					CAS #: 319-84-6	
4.247	4.246	0.001	4264321	0.00957	0.0096	
-----						
7					CAS #: 58-89-9	
4.608	4.606	0.002	3757003	0.00968	0.0097	
-----						
10					CAS #: 319-85-7	
4.681	4.679	0.002	1414348	0.00857	0.0086	
-----						
20					CAS #: 72-20-8	
7.197	7.193	0.004	6682962	0.05548	0.055	
-----						
21					CAS #: 72-54-8	
7.325	7.317	0.008	382002	0.00188	0.0019	(a)
-----						
23					CAS #: 50-29-3	
7.725	7.724	0.001	20433852	0.10978	0.11	
-----						

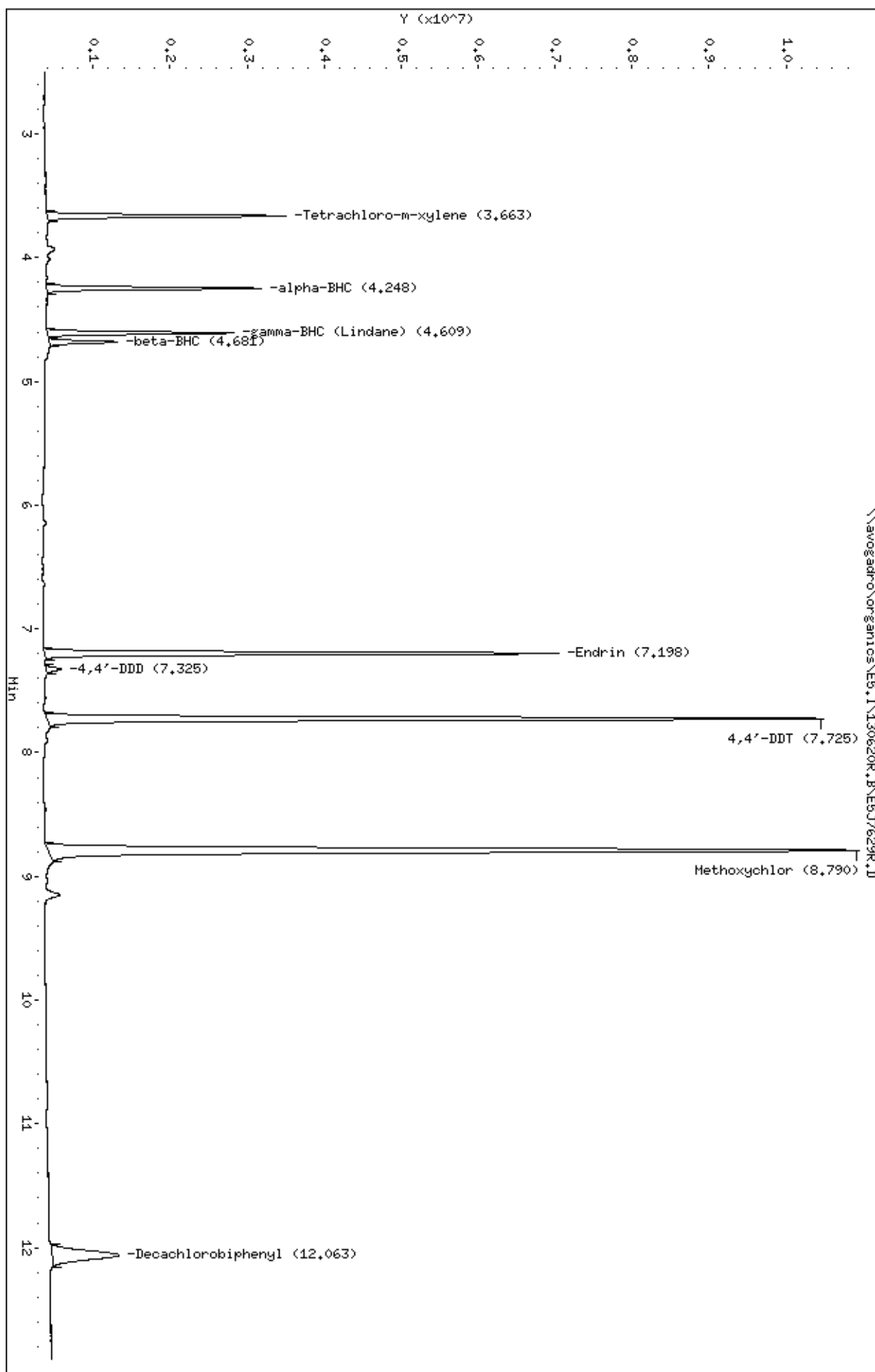
RT	EXP RT	DLT RT	CONCENTRATIONS		TARGET RANGE	RATIO	
			ON-COL	FINAL			
=====	=====	=====	RESPONSE (	ng)	( ug/L)	=====	=====
26	Methoxychlor				CAS #: 72-43-5		
8.790	8.789	0.001	27676711	0.26786	0.27		
-----							
\$ 2	Decachlorobiphenyl				CAS #: 2051-24-3		
12.062	12.065	-0.003	4339912	0.01826	0.018		
-----							

QC Flag Legend

a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\ES, I\130620R, B\ESJ7629R.D  
Date: 20-JUN-2013 12:32  
Client ID: PEMJA  
Sample Info: PEMJA, PEMJA, /pem, sub, pem, spk,  
Volume Injected (uL): 1.0  
Column phase: CLPestII

Instrument: ES, I  
Operator: GHA SRC: GHA  
Column diameter: 0.53



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130620F.B\E5J7630F.D  
 Lab Smp Id: INDC3JA Client Smp ID: INDC3JA  
 Inj Date : 20-JUN-2013 12:50  
 Operator : GMA SRC: GMA Inst ID: E5.i  
 Smp Info : INDC3JA,INDC3JA,,indA.sub,,  
 Misc Info : 1,3,,1  
 Comment :  
 Method : \\avogadro\organics\E5.I\130620F.B\E58081f.m  
 Meth Date : 21-Jun-2013 08:35 gappolonia Quant Type: ESTD  
 Cal Date : 19-JUN-2013 18:15 Cal File: E5J7618F.D  
 Als bottle: 13 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: indA.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT	ON-COL	TARGET RANGE	RATIO
=====	=====	=====	RESPONSE ( ng)	( ng)	=====	=====
\$ 1				CAS #: 877-09-8		
3.086	3.085	0.001	881425 0.02000	0.020		(a)
-----						
6				CAS #: 319-84-6		
3.528	3.527	0.001	932854 0.02000	0.019		(a)
-----						
7				CAS #: 58-89-9		
3.788	3.786	0.002	1394189 0.02000	0.019		(a)
-----						
10				CAS #: 319-85-7		
3.857	3.855	0.002	587156 0.02000	0.020		(a)
-----						
11				CAS #: 319-86-8		
4.009	4.008	0.001	1415202 0.02000	0.020		(a)
-----						
8				CAS #: 76-44-8		
4.197	4.195	0.002	1398345 0.02000	0.019		(a)
-----						
9				CAS #: 309-00-2		
4.468	4.465	0.003	1290239 0.02000	0.019		(a)
-----						

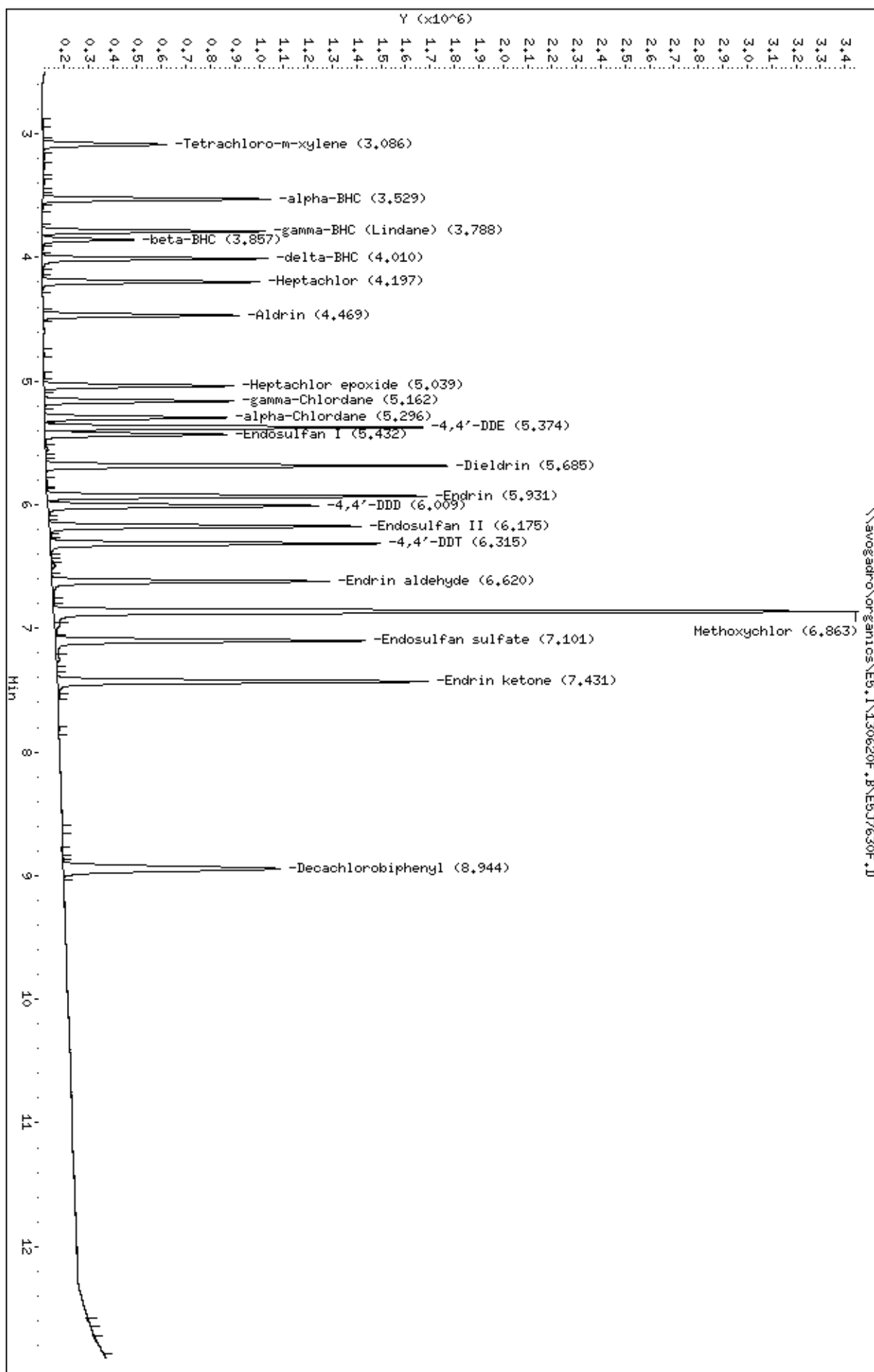
AMOUNTS						
RT	EXP RT	DLT RT	RESPONSE (	CAL-AMT	ON-COL	TARGET RANGE
=====	=====	=====	ng)	(	ng)	=====
			=====	=====	=====	RATIO
						=====
14	Heptachlor epoxide				CAS #: 1024-57-3	
5.038	5.035	0.003	1266685	0.02000	0.019	(a)
-----						
16	gamma-Chlordane				CAS #: 5103-74-2	
5.162	5.158	0.004	777558	0.02000	0.019	(a)
-----						
17	alpha-Chlordane				CAS #: 5103-71-9	
5.296	5.292	0.004	1238716	0.02000	0.019	(a)
-----						
18	4,4'-DDE				CAS #: 72-55-9	
5.373	5.371	0.002	1547194	0.04000	0.042	(a)
-----						
15	Endosulfan I				CAS #: 959-98-8	
5.432	5.429	0.003	743793	0.02000	0.019	(a)
-----						
19	Dieldrin				CAS #: 60-57-1	
5.684	5.680	0.004	2770343	0.04000	0.039	(a)
-----						
20	Endrin				CAS #: 72-20-8	
5.931	5.926	0.005	1557176	0.04000	0.041	(a)
-----						
21	4,4'-DDD				CAS #: 72-54-8	
6.008	6.004	0.004	1980290	0.04000	0.039	(a)
-----						
22	Endosulfan II				CAS #: 33213-65-9	
6.174	6.169	0.005	2221050	0.04000	0.038	(a)
-----						
23	4,4'-DDT				CAS #: 50-29-3	
6.314	6.310	0.004	2302689	0.04000	0.040	(a)
-----						
24	Endrin aldehyde				CAS #: 7421-93-4	
6.619	6.616	0.003	1133910	0.04000	0.040	(a)
-----						
26	Methoxychlor				CAS #: 72-43-5	
6.863	6.860	0.003	6069637	0.20000	0.21	(a)
-----						
25	Endosulfan sulfate				CAS #: 1031-07-8	
7.100	7.096	0.004	2396143	0.04000	0.041	(a)
-----						
27	Endrin ketone				CAS #: 53494-70-5	
7.430	7.427	0.003	1517895	0.04000	0.040	(a)
-----						
\$ 2	Decachlorobiphenyl				CAS #: 2051-24-3	
8.943	8.944	-0.001	2569335	0.04000	0.040	(a)
-----						

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\ES, I\130620F.B\ESJ7630F.D  
 Date: 20-JUN-2013 12:50  
 Client ID: INDC3JA  
 Sample Info: INDC3JA, INDC3JA, IndA.sub.,  
 Volume Injected (uL): 1.0  
 Column phase: CLPest

Instrument: ES,1  
 Operator: GHA SRC: GHA  
 Column diameter: 0.53





Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130620R.B\E5J7630R.D  
 Lab Smp Id: INDC3JA Client Smp ID: INDC3JA  
 Inj Date : 20-JUN-2013 12:50  
 Operator : GMA SRC: GMA Inst ID: E5.i  
 Smp Info : INDC3JA,INDC3JA,,indA.sub,,  
 Misc Info : 1,3,,1  
 Comment :  
 Method : \\avogadro\organics\E5.I\130620R.B\E58081r.m  
 Meth Date : 21-Jun-2013 13:08 E5.i Quant Type: ESTD  
 Cal Date : 19-JUN-2013 18:15 Cal File: E5J7618R.D  
 Als bottle: 13 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: indA.sub  
 Target Version: 4.14 Sample Matrix: WATER

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
3.662	3.661	0.001	2996591 0.02000	0.020		(a)
6					CAS #: 319-84-6	
4.247	4.246	0.001	8567529 0.02000	0.019		(a)
7					CAS #: 58-89-9	
4.607	4.606	0.001	7471934 0.02000	0.019		(a)
10					CAS #: 319-85-7	
4.680	4.679	0.001	2785821 0.02000	0.017		(a)
11					CAS #: 319-86-8	
4.998	4.997	0.001	6670502 0.02000	0.019		(a)
8					CAS #: 76-44-8	
5.077	5.075	0.002	7362339 0.02000	0.018		(a)
9					CAS #: 309-00-2	
5.438	5.435	0.003	6681973 0.02000	0.019		(a)

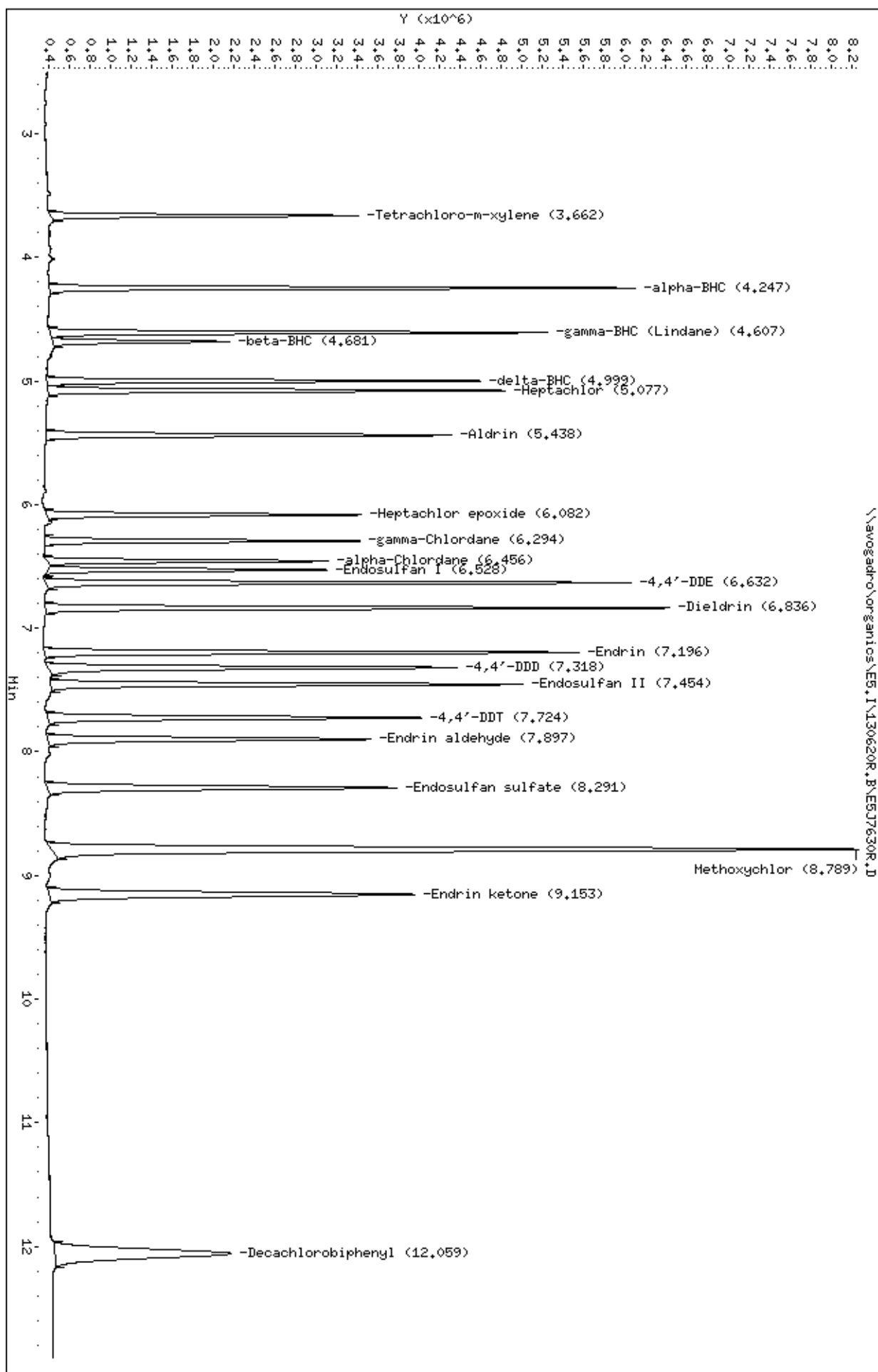
AMOUNTS							
RT	EXP RT	DLT RT	RESPONSE	CAL-AMT ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
====	=====	=====	=====	=====	=====	=====	=====
14	Heptachlor epoxide					CAS #: 1024-57-3	
6.082	6.080	0.002	5281745	0.02000	0.019		(a)
-----							
16	gamma-Chlordane					CAS #: 5103-74-2	
6.293	6.290	0.003	5127699	0.02000	0.019		(a)
-----							
17	alpha-Chlordane					CAS #: 5103-71-9	
6.456	6.453	0.003	4582629	0.02000	0.018		(a)
-----							
18	4,4'-DDE					CAS #: 72-55-9	
6.632	6.630	0.002	9594068	0.04000	0.038		(a)
-----							
15	Endosulfan I					CAS #: 959-98-8	
6.528	6.525	0.003	2720565	0.02000	0.019		(a)
-----							
19	Dieldrin					CAS #: 60-57-1	
6.835	6.834	0.001	10364408	0.04000	0.038		(a)
-----							
20	Endrin					CAS #: 72-20-8	
7.195	7.193	0.002	5187197	0.04000	0.043		(a)
-----							
21	4,4'-DDD					CAS #: 72-54-8	
7.318	7.317	0.001	7846565	0.04000	0.039		(a)
-----							
22	Endosulfan II					CAS #: 33213-65-9	
7.453	7.452	0.001	8696826	0.04000	0.037		(a)
-----							
23	4,4'-DDT					CAS #: 50-29-3	
7.723	7.724	-0.001	7385500	0.04000	0.040		(a)
-----							
24	Endrin aldehyde					CAS #: 7421-93-4	
7.897	7.896	0.001	3139796	0.04000	0.039		(a)
-----							
26	Methoxychlor					CAS #: 72-43-5	
8.788	8.789	-0.001	20617311	0.20000	0.20		(a)
-----							
25	Endosulfan sulfate					CAS #: 1031-07-8	
8.290	8.290	0.000	7669866	0.04000	0.039		(a)
-----							
27	Endrin ketone					CAS #: 53494-70-5	
9.153	9.153	0.000	3545556	0.04000	0.039		(a)
-----							
\$ 2	Decachlorobiphenyl					CAS #: 2051-24-3	
12.058	12.065	-0.007	8712622	0.04000	0.037		(a)
-----							

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\ES, I\130620R, B\ESJ7630R.D  
 Date: 20-JUN-2013 12:50  
 Client ID: INDC3JA  
 Sample Info: INDC3JA, INDC3JA, IndA, sub,,  
 Volume Injected (uL): 1.0  
 Column phase: CLPestII

Instrument: ES,1  
 Operator: GHA SRC: GHA  
 Column diameter: 0.53



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130620F.B\E5J7631F.D  
 Lab Smp Id: TOXAPH3JA Client Smp ID: TOXAPH3JA  
 Inj Date : 20-JUN-2013 13:08  
 Operator : GMA SRC: GMA Inst ID: E5.i  
 Smp Info : TOXAPH3JA,TOXAPH3JA,,sومتox.sub,,  
 Misc Info : 1,3,,1  
 Comment :  
 Method : \\avogadro\organics\E5.I\130620F.B\E58081f.m  
 Meth Date : 21-Jun-2013 08:35 gappolonia Quant Type: ESTD  
 Cal Date : 19-JUN-2013 18:15 Cal File: E5J7618F.D  
 Als bottle: 6 Calibration Sample, Level: 3  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: sometox.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

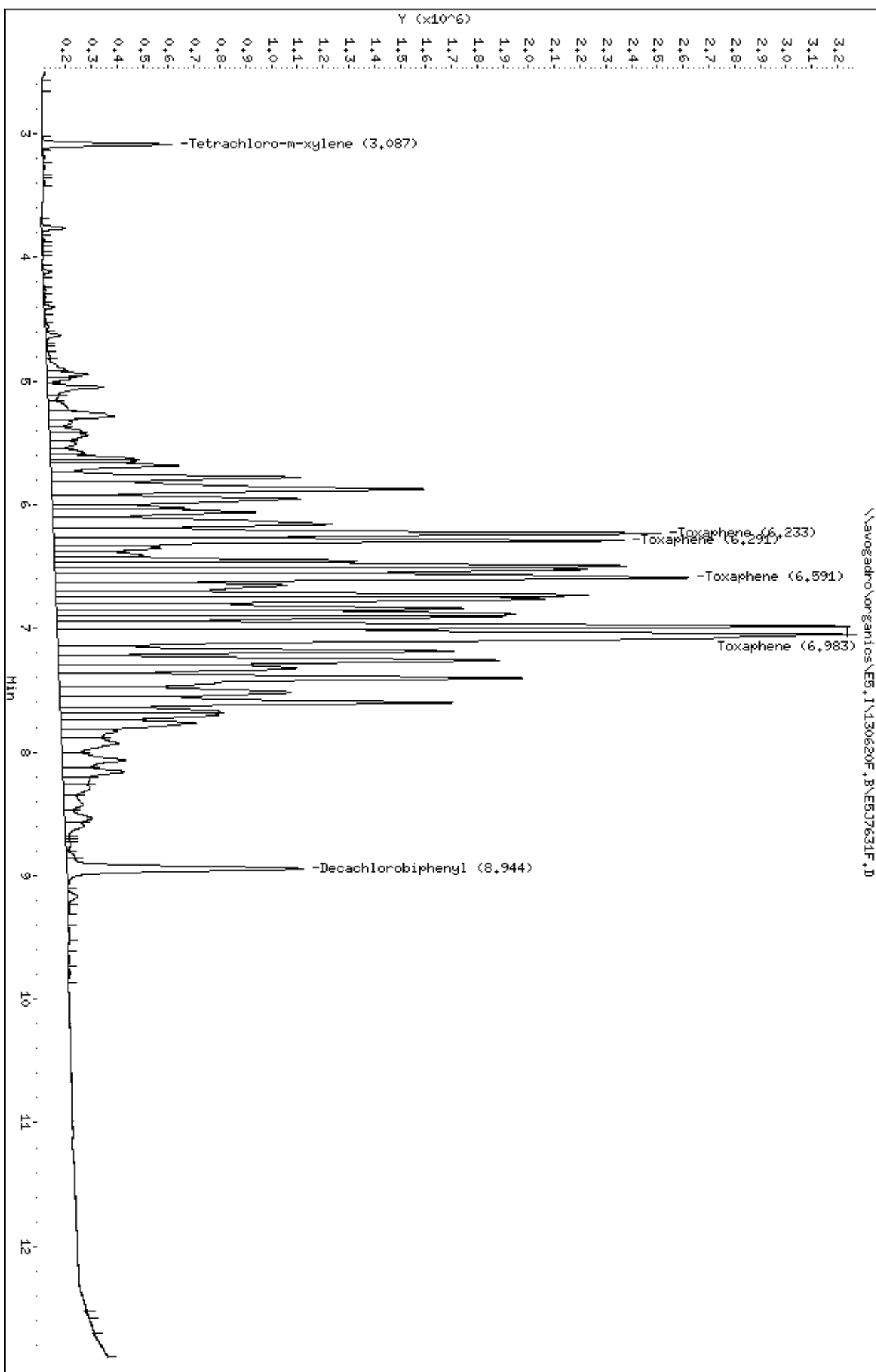
AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT	ON-COL	TARGET RANGE	RATIO
=====	=====	=====	RESPONSE ( ng)	( ng)	=====	=====
\$ 1					CAS #: 877-09-8	
3.086	3.085	0.001	881695 0.02000	0.020		(a)
-----						
\$ 2					CAS #: 2051-24-3	
8.944	8.944	0.000	2840321 0.04000	0.044		(a)
-----						
28					CAS #: 8001-35-2	
6.232	6.230	0.002	2361443 2.00000	1.9	80.00- 120.00	100.00(a)
6.290	6.289	0.001	2216400 2.00000	2.0	71.80- 111.80	93.86
6.590	6.590	0.000	2458147 2.00000	1.9	84.37- 124.37	104.10
6.983	6.982	0.001	3082519 2.00000	2.0	132.26- 172.26	130.54
Average of Peak Amounts =			1.95000			

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\ES, I\130620F, B\ESJ7631F.D  
Date: 20-JUN-2013 13:08  
Client ID: TOXAPH3JA  
Sample Info: TOXAPH3JA, TOXAPH3JA, sontox+sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPpest

Instrument: ES,1  
Operator: GHA SRC: GHA  
Column diameter: 0.53



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130620R.B\E5J7631R.D  
 Lab Smp Id: TOXAPH3JA Client Smp ID: TOXAPH3JA  
 Inj Date : 20-JUN-2013 13:08  
 Operator : GMA SRC: GMA Inst ID: E5.i  
 Smp Info : TOXAPH3JA,TOXAPH3JA,,sومتox.sub,,  
 Misc Info : 1,3,,1  
 Comment :  
 Method : \\avogadro\organics\E5.I\130620R.B\E58081r.m  
 Meth Date : 21-Jun-2013 13:08 E5.i Quant Type: ESTD  
 Cal Date : 19-JUN-2013 18:15 Cal File: E5J7618R.D  
 Als bottle: 6 Calibration Sample, Level: 3  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: sometox.sub  
 Target Version: 4.14 Sample Matrix: WATER

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

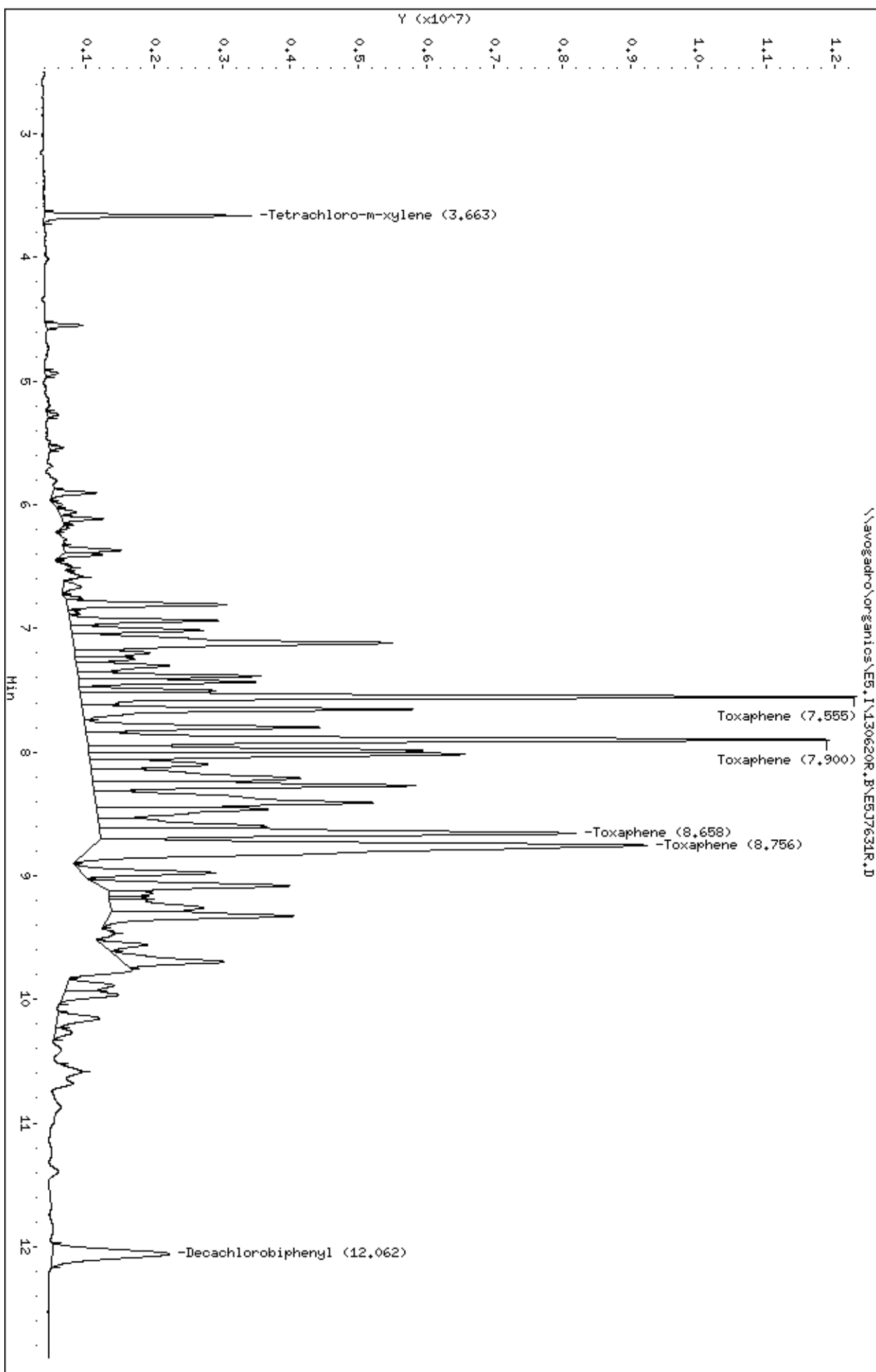
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
3.662	3.661	0.001	3047011 0.02000	0.020		(a)
\$ 2					CAS #: 2051-24-3	
12.061	12.065	-0.004	8921346 0.04000	0.038		(a)
28					CAS #: 8001-35-2	
7.555	7.555	0.000	11399156 2.00000	2.0	80.00- 120.00	100.00(a)
7.900	7.900	0.000	10899668 2.00000	2.0	74.20- 114.20	95.62
8.658	8.656	0.002	6994290 2.00000	2.0	40.64- 80.64	61.36
8.755	8.756	-0.001	8130783 2.00000	2.0	49.81- 89.81	71.33
Average of Peak Amounts =			2.00000			

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\ES, I\130620R, B\ESJ7631R.D  
Date : 20-JUN-2013 13:08  
Client ID: TOXAPH3JA  
Sample Info: TOXAPH3JA, TOXAPH3JA, somtox+sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPestII

Instrument: ES,1  
Operator: GHA SRC: GHA  
Column diameter: 0.53



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130620F.B\E5J7652F.D  
 Lab Smp Id: PEMJB Client Smp ID: PEMJB  
 Inj Date : 20-JUN-2013 19:18  
 Operator : GMA SRC: GMA Inst ID: E5.i  
 Smp Info : PEMJB,PEMJB,,pem.sub,pem.spk,  
 Misc Info : 3,,PEM,1,,1000,,  
 Comment :  
 Method : \\avogadro\organics\E5.I\130620F.B\E58081f.m  
 Meth Date : 21-Jun-2013 08:35 gappolonia Quant Type: ESTD  
 Cal Date : 19-JUN-2013 18:15 Cal File: E5J7618F.D  
 Als bottle: 2 QC Sample: PEM  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: pem.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	1000.000	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						
RT	EXP RT	DLT RT	RESPONSE ( ng)	ON-COL	FINAL ( ug/L)	TARGET RANGE RATIO
=====	=====	=====	=====	=====	=====	=====
\$ 1						CAS #: 877-09-8
3.084	3.085	-0.001	933637	0.02071	0.021	
-----						
6						CAS #: 319-84-6
3.527	3.527	0.000	482421	0.00987	0.0099	
-----						
7						CAS #: 58-89-9
3.787	3.786	0.001	712902	0.00978	0.0098	
-----						
10						CAS #: 319-85-7
3.857	3.855	0.002	316572	0.01059	0.010	
-----						
18						CAS #: 72-55-9
5.378	5.371	0.007	6754	2e-004	0.00018	(a)
-----						
20						CAS #: 72-20-8
5.932	5.926	0.006	2053607	0.05430	0.054	
-----						
21						CAS #: 72-54-8
6.017	6.004	0.013	54329	0.00108	0.0011	(a)
-----						



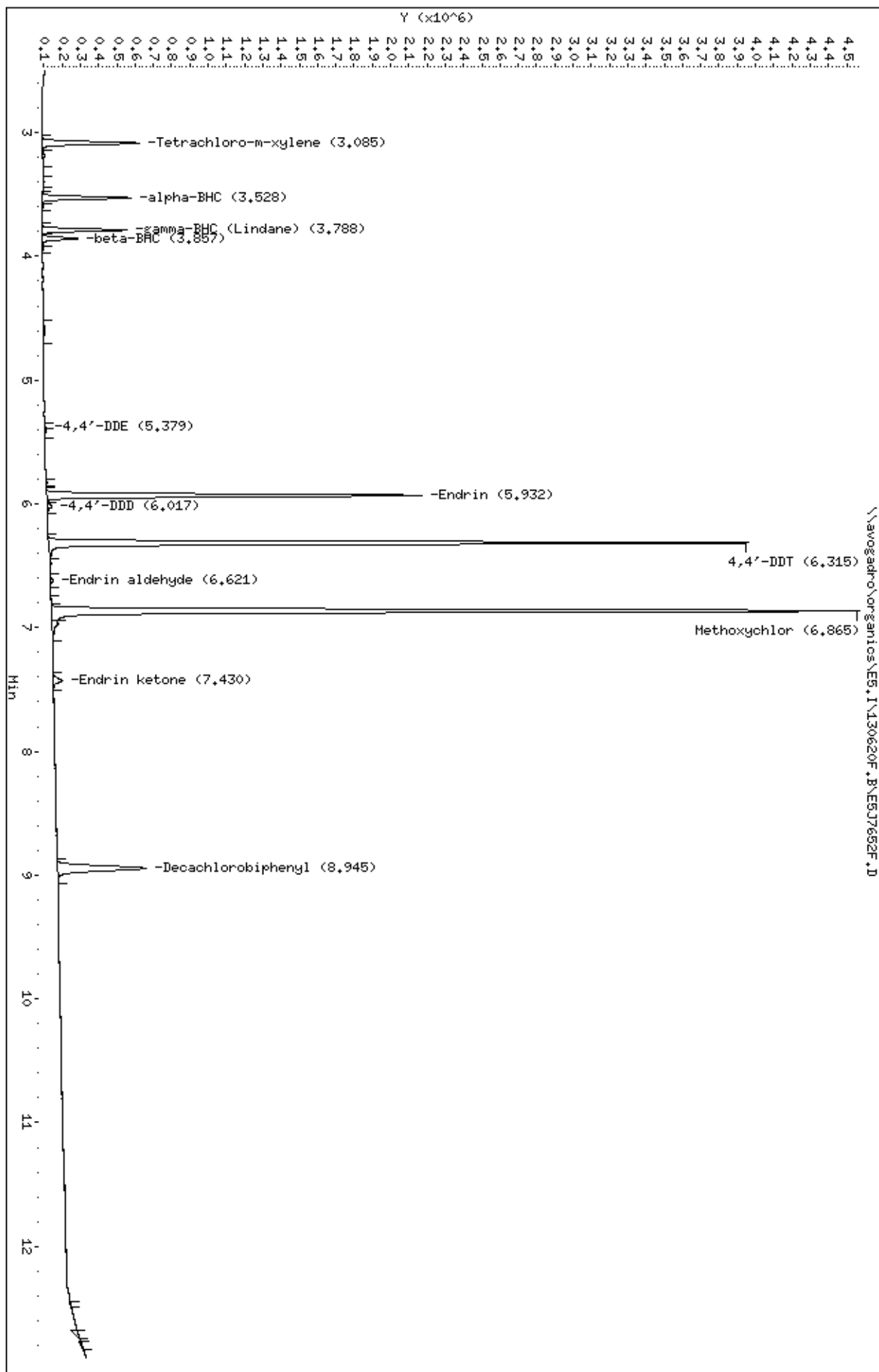
CONCENTRATIONS						
RT	EXP RT	DLT RT	RESPONSE (	ON-COL	FINAL	TARGET RANGE
=====	=====	=====	ng)	(	ug/L)	=====
=====	=====	=====	=====	=====	=====	=====
23	4,4'-DDT				CAS #: 50-29-3	
6.315	6.310	0.005	6441598	0.11346	0.11	
-----						
24	Endrin aldehyde				CAS #: 7421-93-4	
6.621	6.616	0.005	17728	0.00062	0.00062	(a)
-----						
26	Methoxychlor				CAS #: 72-43-5	
6.864	6.860	0.004	8158919	0.27952	0.28	
-----						
27	Endrin ketone				CAS #: 53494-70-5	
7.429	7.427	0.002	48756	0.00127	0.0013	(a)
-----						
\$ 2	Decachlorobiphenyl				CAS #: 2051-24-3	
8.944	8.944	0.000	1406571	0.02188	0.022	
-----						

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\ES, I\130620F, B\ESJ7652F.D  
 Date: 20-JUN-2013 19:18  
 Client ID: PEHJB  
 Sample Info: PEHJB,PEHJB,,pem,sub,pem,spk,  
 Volume Injected (uL): 1.0  
 Column phase: CLPrest

Instrument: ES,1  
 Operator: GHA SRC: GHA  
 Column diameter: 0.53



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130620R.B\E5J7652R.D  
 Lab Smp Id: PEMJB Client Smp ID: PEMJB  
 Inj Date : 20-JUN-2013 19:18  
 Operator : GMA SRC: GMA Inst ID: E5.i  
 Smp Info : PEMJB,PEMJB,,pem.sub,pem.spk,  
 Misc Info : 3,,PEM,1,,1000,,  
 Comment :  
 Method : \\avogadro\organics\E5.I\130620R.B\E58081r.m  
 Meth Date : 21-Jun-2013 13:08 E5.i Quant Type: ESTD  
 Cal Date : 19-JUN-2013 18:15 Cal File: E5J7618R.D  
 Als bottle: 2 QC Sample: PEM  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: pem.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	1000.000	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						
RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
=====	=====	=====	RESPONSE ( ng)	( ug/L)	=====	=====
\$ 1					CAS #: 877-09-8	
3.660	3.661	-0.001	3369539	0.02234	0.022	
-----						
6					CAS #: 319-84-6	
4.247	4.246	0.001	4641074	0.01042	0.010	
-----						
7					CAS #: 58-89-9	
4.607	4.606	0.001	4025605	0.01037	0.010	
-----						
10					CAS #: 319-85-7	
4.680	4.679	0.001	1568957	0.00951	0.0095	
-----						
18					CAS #: 72-55-9	
6.639	6.630	0.009	98924	4e-004	0.00039	(a)
-----						
20					CAS #: 72-20-8	
7.196	7.193	0.003	6404935	0.05317	0.053	
-----						
21					CAS #: 72-54-8	
7.324	7.317	0.007	933056	0.00460	0.0046	(a)
-----						

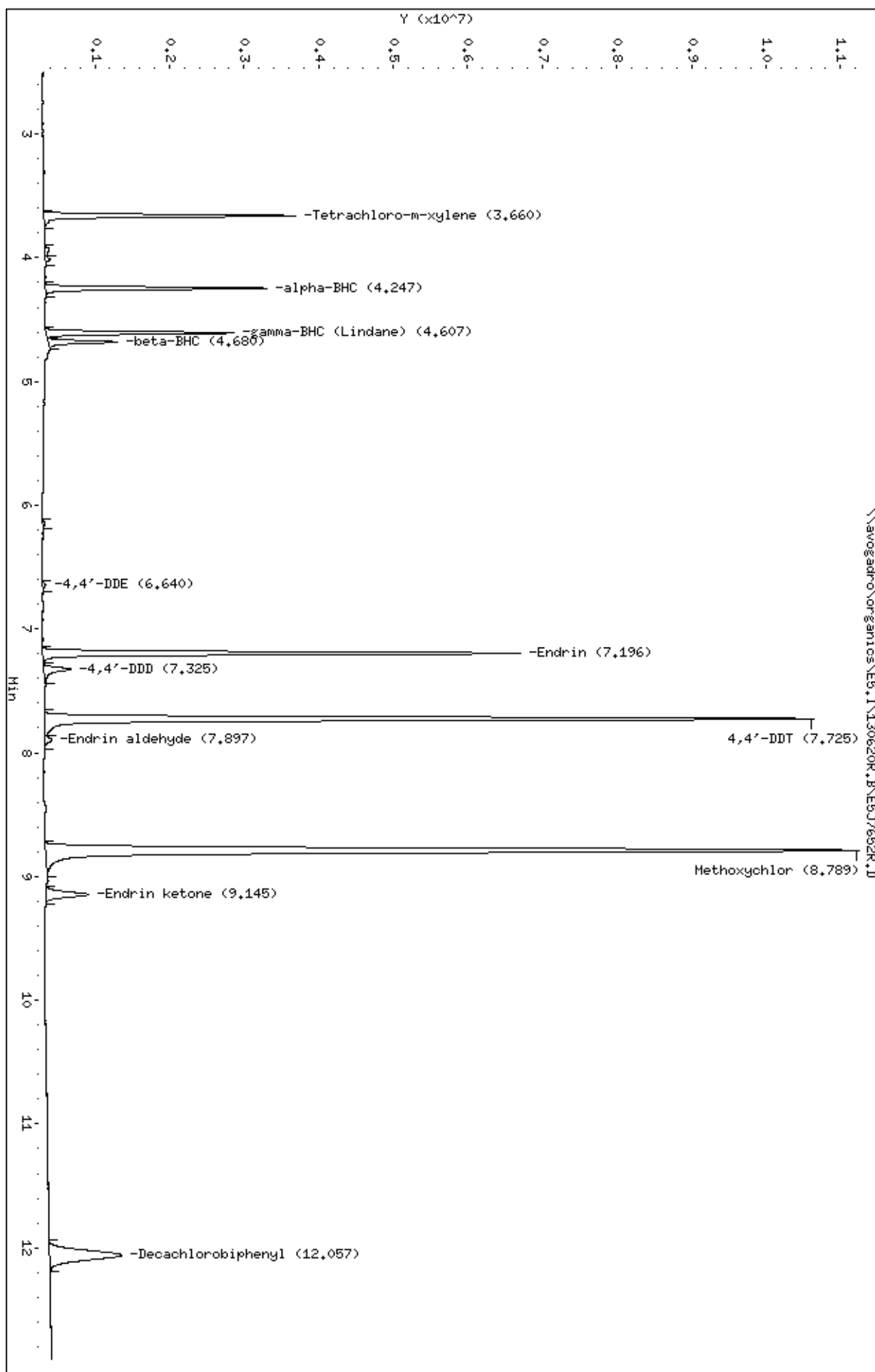
CONCENTRATIONS						
RT	EXP RT	DLT RT	RESPONSE (	ON-COL	FINAL	TARGET RANGE
=====	=====	=====	ng)	(	ug/L)	=====
=====	=====	=====	=====	=====	=====	=====
23	4,4'	-DDT			CAS #:	50-29-3
7.725	7.724	0.001	21798501	0.11711	0.12	
-----						
24	Endrin	aldehyde			CAS #:	7421-93-4
7.897	7.896	0.001	102690	0.00129	0.0013	(a)
-----						
26	Methoxychlor				CAS #:	72-43-5
8.788	8.789	-0.001	29997283	0.29032	0.29	
-----						
27	Endrin	ketone			CAS #:	53494-70-5
9.145	9.153	-0.008	568587	0.00619	0.0062	(a)
-----						
\$ 2	Decachlorobiphenyl				CAS #:	2051-24-3
12.057	12.065	-0.008	5161956	0.02172	0.022	
-----						

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\ES\_1\130620R\_B\ESJ7652R.D  
Date : 20-JUN-2013 19:18  
Client ID: PEMJB  
Sample Info: PEMJB,PEMJB,,pem,sub,pem,spk,  
Volume Injected (uL): 1.0  
Column phase: CLPestII

Instrument: ES.1  
Operator: GHA SRC: GHA  
Column diameter: 0.53



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130620F.B\E5J7653F.D  
 Lab Smp Id: INDC3JB Client Smp ID: INDC3JB  
 Inj Date : 20-JUN-2013 19:35  
 Operator : GMA SRC: GMA Inst ID: E5.i  
 Smp Info : INDC3JB,INDC3JB,,indA.sub,,  
 Misc Info : 1,3,,1  
 Comment :  
 Method : \\avogadro\organics\E5.I\130620F.B\E58081f.m  
 Meth Date : 21-Jun-2013 08:35 gappolonia Quant Type: ESTD  
 Cal Date : 19-JUN-2013 18:15 Cal File: E5J7618F.D  
 Als bottle: 13 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: indA.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT	ON-COL	TARGET RANGE	RATIO
=====	=====	=====	RESPONSE ( ng)	( ng)	=====	=====
\$ 1				CAS #: 877-09-8		
3.085	3.085	0.000	863048 0.02000	0.019		(a)
-----						
6				CAS #: 319-84-6		
3.528	3.527	0.001	938440 0.02000	0.019		(a)
-----						
7				CAS #: 58-89-9		
3.788	3.786	0.002	1375040 0.02000	0.019		(a)
-----						
10				CAS #: 319-85-7		
3.857	3.855	0.002	585614 0.02000	0.020		(a)
-----						
11				CAS #: 319-86-8		
4.010	4.008	0.002	1403126 0.02000	0.019		(a)
-----						
8				CAS #: 76-44-8		
4.197	4.195	0.002	1400026 0.02000	0.019		(a)
-----						
9				CAS #: 309-00-2		
4.468	4.465	0.003	1301490 0.02000	0.019		(a)
-----						

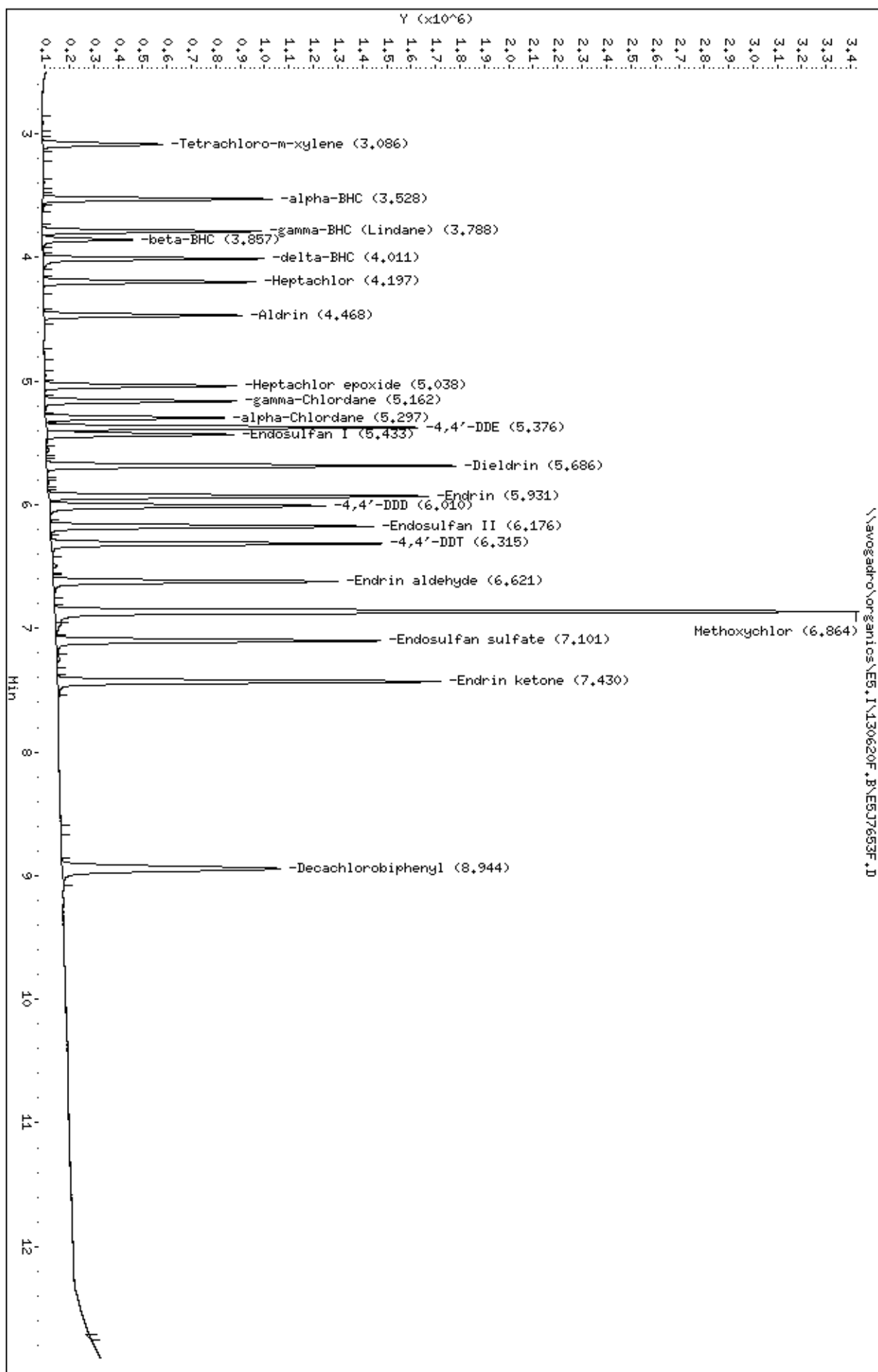
AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT	ON-COL	TARGET RANGE	RATIO
=====	=====	=====	RESPONSE ( ng)	( ng)	=====	=====
14	Heptachlor epoxide			CAS #: 1024-57-3		
5.038	5.035	0.003	1290337 0.02000	0.019		(a)
-----						
16	gamma-Chlordane			CAS #: 5103-74-2		
5.162	5.158	0.004	783935 0.02000	0.019		(a)
-----						
17	alpha-Chlordane			CAS #: 5103-71-9		
5.297	5.292	0.005	1194489 0.02000	0.018		(a)
-----						
18	4,4'-DDE			CAS #: 72-55-9		
5.375	5.371	0.004	1515733 0.04000	0.041		(a)
-----						
15	Endosulfan I			CAS #: 959-98-8		
5.433	5.429	0.004	765371 0.02000	0.019		(a)
-----						
19	Dieldrin			CAS #: 60-57-1		
5.685	5.680	0.005	2828098 0.04000	0.040		(a)
-----						
20	Endrin			CAS #: 72-20-8		
5.931	5.926	0.005	1556265 0.04000	0.041		(a)
-----						
21	4,4'-DDD			CAS #: 72-54-8		
6.009	6.004	0.005	2019933 0.04000	0.040		(a)
-----						
22	Endosulfan II			CAS #: 33213-65-9		
6.175	6.169	0.006	2292427 0.04000	0.039		(a)
-----						
23	4,4'-DDT			CAS #: 50-29-3		
6.314	6.310	0.004	2340787 0.04000	0.041		(a)
-----						
24	Endrin aldehyde			CAS #: 7421-93-4		
6.620	6.616	0.004	1166496 0.04000	0.041		(a)
-----						
26	Methoxychlor			CAS #: 72-43-5		
6.863	6.860	0.003	6057920 0.20000	0.21		(a)
-----						
25	Endosulfan sulfate			CAS #: 1031-07-8		
7.100	7.096	0.004	2457718 0.04000	0.042		(a)
-----						
27	Endrin ketone			CAS #: 53494-70-5		
7.429	7.427	0.002	1571445 0.04000	0.041		(a)
-----						
\$ 2	Decachlorobiphenyl			CAS #: 2051-24-3		
8.943	8.944	-0.001	2615955 0.04000	0.041		(a)
-----						

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\ES,I\130620F.B\ESJ7653F.D  
 Date : 20-JUN-2013 19:35  
 Client ID: INDC3JB  
 Sample Info: INDC3JB,INDC3JB,,IndA,sub,,  
 Volume Injected (uL): 1.0  
 Column phase: CLPest

Instrument: ES.1  
 Operator: GHA SRC: GHA  
 Column diameter: 0.53





Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130620R.B\E5J7653R.D  
 Lab Smp Id: INDC3JB Client Smp ID: INDC3JB  
 Inj Date : 20-JUN-2013 19:35  
 Operator : GMA SRC: GMA Inst ID: E5.i  
 Smp Info : INDC3JB,INDC3JB,,indA.sub,,  
 Misc Info : 1,3,,1  
 Comment :  
 Method : \\avogadro\organics\E5.I\130620R.B\E58081r.m  
 Meth Date : 21-Jun-2013 13:08 E5.i Quant Type: ESTD  
 Cal Date : 19-JUN-2013 18:15 Cal File: E5J7618R.D  
 Als bottle: 13 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: indA.sub  
 Target Version: 4.14 Sample Matrix: WATER

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
3.661	3.661	0.000	3059418 0.02000	0.020		(a)
6					CAS #: 319-84-6	
4.247	4.246	0.001	8821125 0.02000	0.020		(a)
7					CAS #: 58-89-9	
4.608	4.606	0.002	7715498 0.02000	0.020		(a)
10					CAS #: 319-85-7	
4.680	4.679	0.001	2857574 0.02000	0.017		(a)
11					CAS #: 319-86-8	
4.999	4.997	0.002	7064595 0.02000	0.020		(a)
8					CAS #: 76-44-8	
5.077	5.075	0.002	7821751 0.02000	0.020		(a)
9					CAS #: 309-00-2	
5.438	5.435	0.003	7011492 0.02000	0.020		(a)

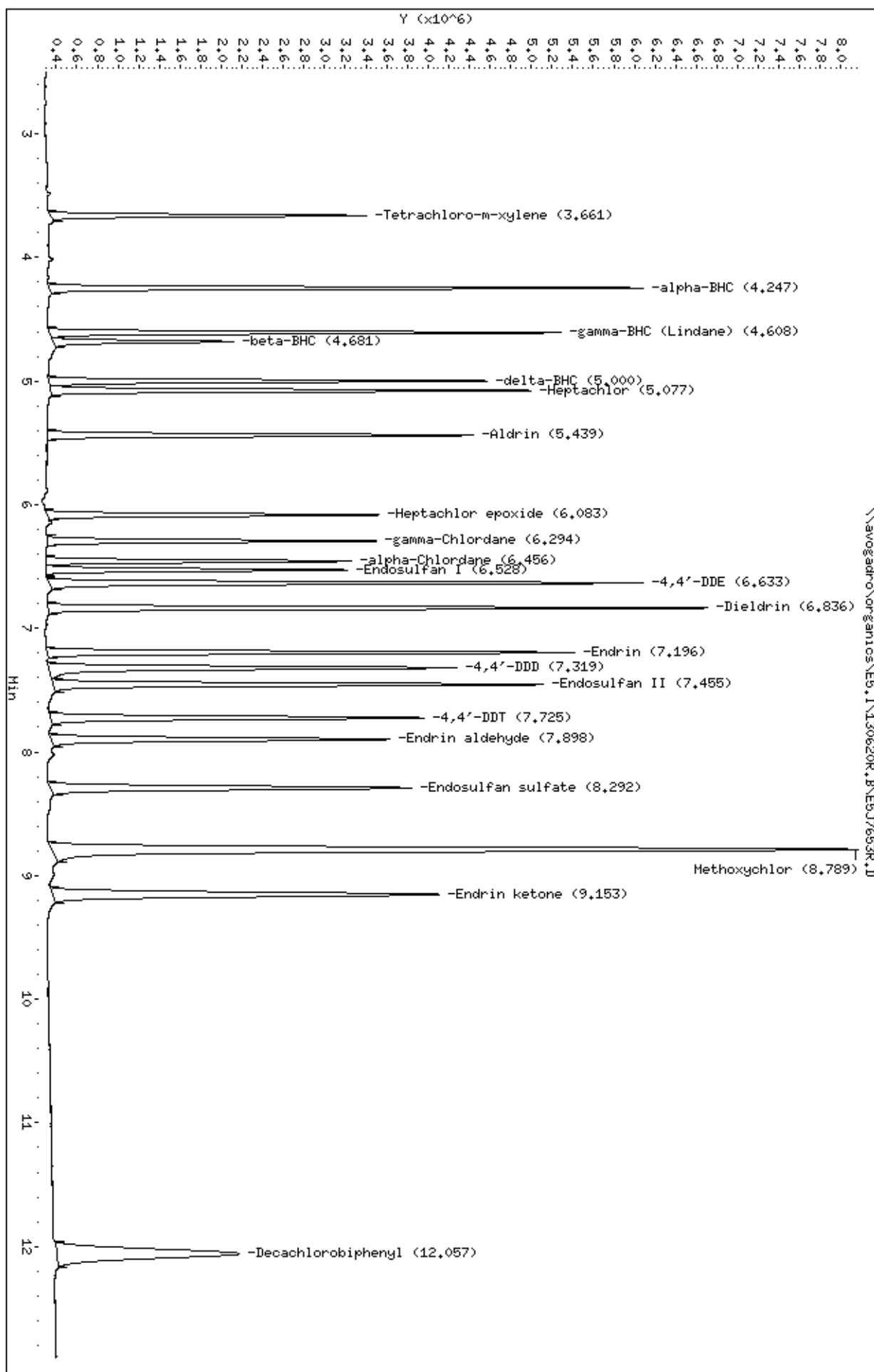
AMOUNTS						
RT	EXP RT	DLT RT	RESPONSE ( ng)	CAL-AMT ( ng)	ON-COL ( ng)	TARGET RANGE RATIO
====	=====	=====	=====	=====	=====	=====
14	Heptachlor epoxide				CAS #: 1024-57-3	
6.083	6.080	0.003	5548003	0.02000	0.020	(a)
-----						
16	gamma-Chlordane				CAS #: 5103-74-2	
6.293	6.290	0.003	5401215	0.02000	0.020	(a)
-----						
17	alpha-Chlordane				CAS #: 5103-71-9	
6.456	6.453	0.003	4998760	0.02000	0.020	(a)
-----						
18	4,4'-DDE				CAS #: 72-55-9	
6.633	6.630	0.003	9992208	0.04000	0.040	(a)
-----						
15	Endosulfan I				CAS #: 959-98-8	
6.528	6.525	0.003	2910848	0.02000	0.020	(a)
-----						
19	Dieldrin				CAS #: 60-57-1	
6.835	6.834	0.001	10892555	0.04000	0.040	(a)
-----						
20	Endrin				CAS #: 72-20-8	
7.195	7.193	0.002	5112415	0.04000	0.042	(a)
-----						
21	4,4'-DDD				CAS #: 72-54-8	
7.318	7.317	0.001	8295100	0.04000	0.041	(a)
-----						
22	Endosulfan II				CAS #: 33213-65-9	
7.454	7.452	0.002	9153259	0.04000	0.039	(a)
-----						
23	4,4'-DDT				CAS #: 50-29-3	
7.724	7.724	0.000	7411401	0.04000	0.040	(a)
-----						
24	Endrin aldehyde				CAS #: 7421-93-4	
7.898	7.896	0.002	3282947	0.04000	0.041	(a)
-----						
26	Methoxychlor				CAS #: 72-43-5	
8.788	8.789	-0.001	21187078	0.20000	0.20	(a)
-----						
25	Endosulfan sulfate				CAS #: 1031-07-8	
8.292	8.290	0.002	7952984	0.04000	0.040	(a)
-----						
27	Endrin ketone				CAS #: 53494-70-5	
9.153	9.153	0.000	3745258	0.04000	0.041	(a)
-----						
\$ 2	Decachlorobiphenyl				CAS #: 2051-24-3	
12.057	12.065	-0.008	9168091	0.04000	0.038	(a)
-----						

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\ES,I\130620R,B\ESJ7653R.D  
 Date: 20-JUN-2013 19:35  
 Client ID: INDC3JB  
 Sample Info: INDC3JB,INDC3JB,,IndA,sub,,  
 Volume Injected (uL): 1.0  
 Column phase: CLPestII

Instrument: ES.1  
 Operator: GHA SRC: GHA  
 Column diameter: 0.53



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130620F.B\E5J7654F.D  
 Lab Smp Id: TOXAPH3JB Client Smp ID: TOXAPH3JB  
 Inj Date : 20-JUN-2013 19:53  
 Operator : GMA SRC: GMA Inst ID: E5.i  
 Smp Info : TOXAPH3JB,TOXAPH3JB,,sومتox.sub,,  
 Misc Info : 1,3,,1  
 Comment :  
 Method : \\avogadro\organics\E5.I\130620F.B\E58081f.m  
 Meth Date : 21-Jun-2013 08:35 gappolonia Quant Type: ESTD  
 Cal Date : 19-JUN-2013 18:15 Cal File: E5J7618F.D  
 Als bottle: 6 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: sometox.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

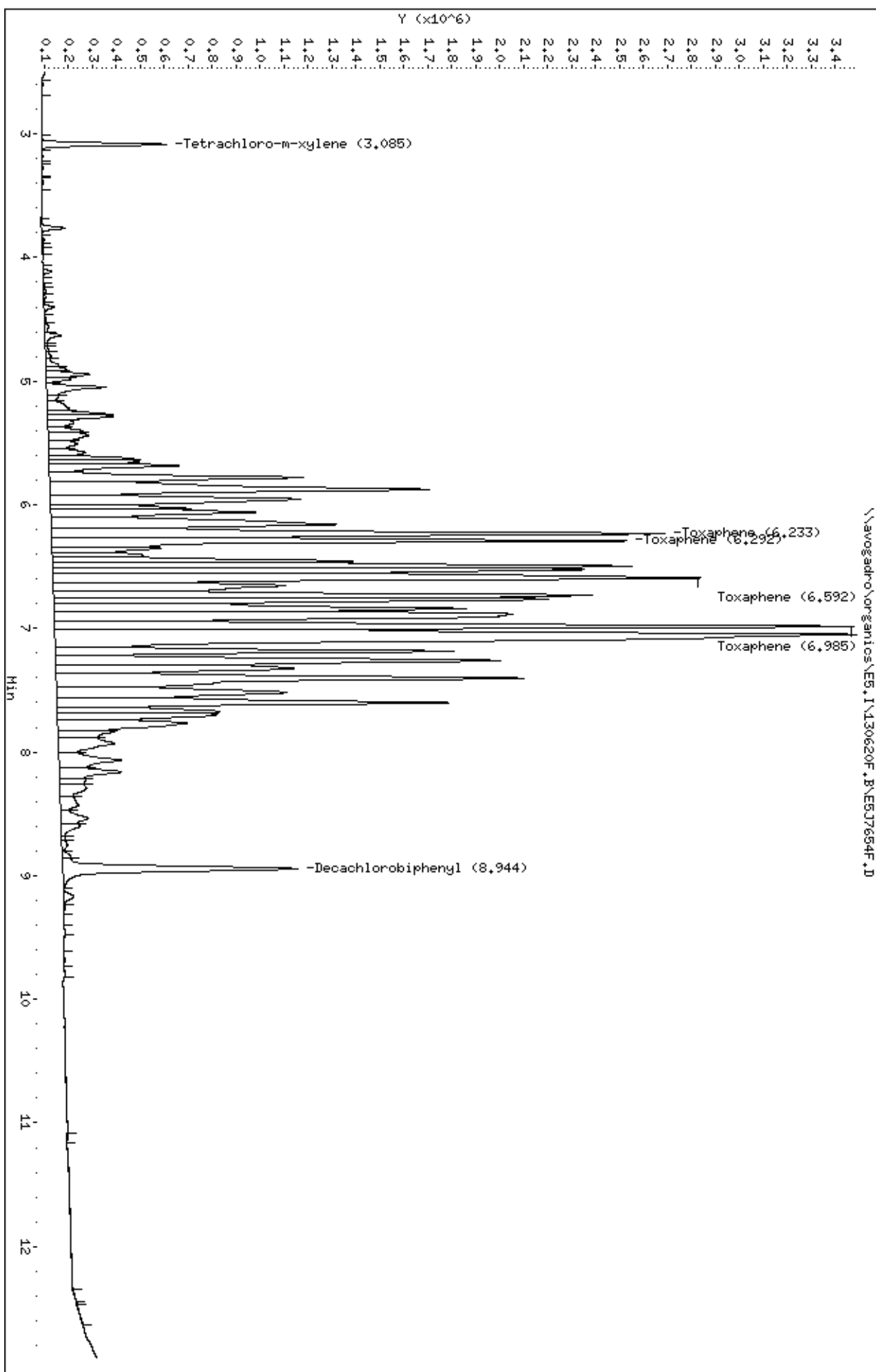
AMOUNTS							
RT	EXP RT	DLT RT	CAL-AMT	ON-COL	TARGET RANGE	RATIO	
=====	=====	=====	RESPONSE ( ng)	( ng)	=====	=====	=====
\$ 1					CAS #: 877-09-8		
3.084	3.085	-0.001	907817 0.02000	0.020			(a)
-----							
\$ 2					CAS #: 2051-24-3		
8.943	8.944	-0.001	3096440 0.04000	0.048			(a)
-----							
28					CAS #: 8001-35-2		
6.232	6.230	0.002	2559515 2.00000	2.1	80.00- 120.00	100.00	(a)
6.292	6.289	0.003	2399908 2.00000	2.2	71.80- 111.80	93.76	
6.592	6.590	0.002	2702021 2.00000	2.1	84.37- 124.37	105.57	
6.984	6.982	0.002	3334639 2.00000	2.2	132.26- 172.26	130.28	
Average of Peak Amounts =				2.15000			

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\wogadro\organicos\ES, I\130620F.B\ESJ7654F.D  
Date: 20-JUN-2013 19:53  
Client ID: TOXAPH3JB  
Sample Info: TOXAPH3JB, TOXAPH3JB,,sontox+sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPpest

Instrument: ES,1  
Operator: GHA SRC: GHA  
Column diameter: 0.53



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130620R.B\E5J7654R.D  
 Lab Smp Id: TOXAPH3JB Client Smp ID: TOXAPH3JB  
 Inj Date : 20-JUN-2013 19:53  
 Operator : GMA SRC: GMA Inst ID: E5.i  
 Smp Info : TOXAPH3JB,TOXAPH3JB,,sومتox.sub,,  
 Misc Info : 1,3,,1  
 Comment :  
 Method : \\avogadro\organics\E5.I\130620R.B\E58081r.m  
 Meth Date : 21-Jun-2013 13:08 E5.i Quant Type: ESTD  
 Cal Date : 19-JUN-2013 18:15 Cal File: E5J7618R.D  
 Als bottle: 6 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: sometox.sub  
 Target Version: 4.14 Sample Matrix: WATER

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

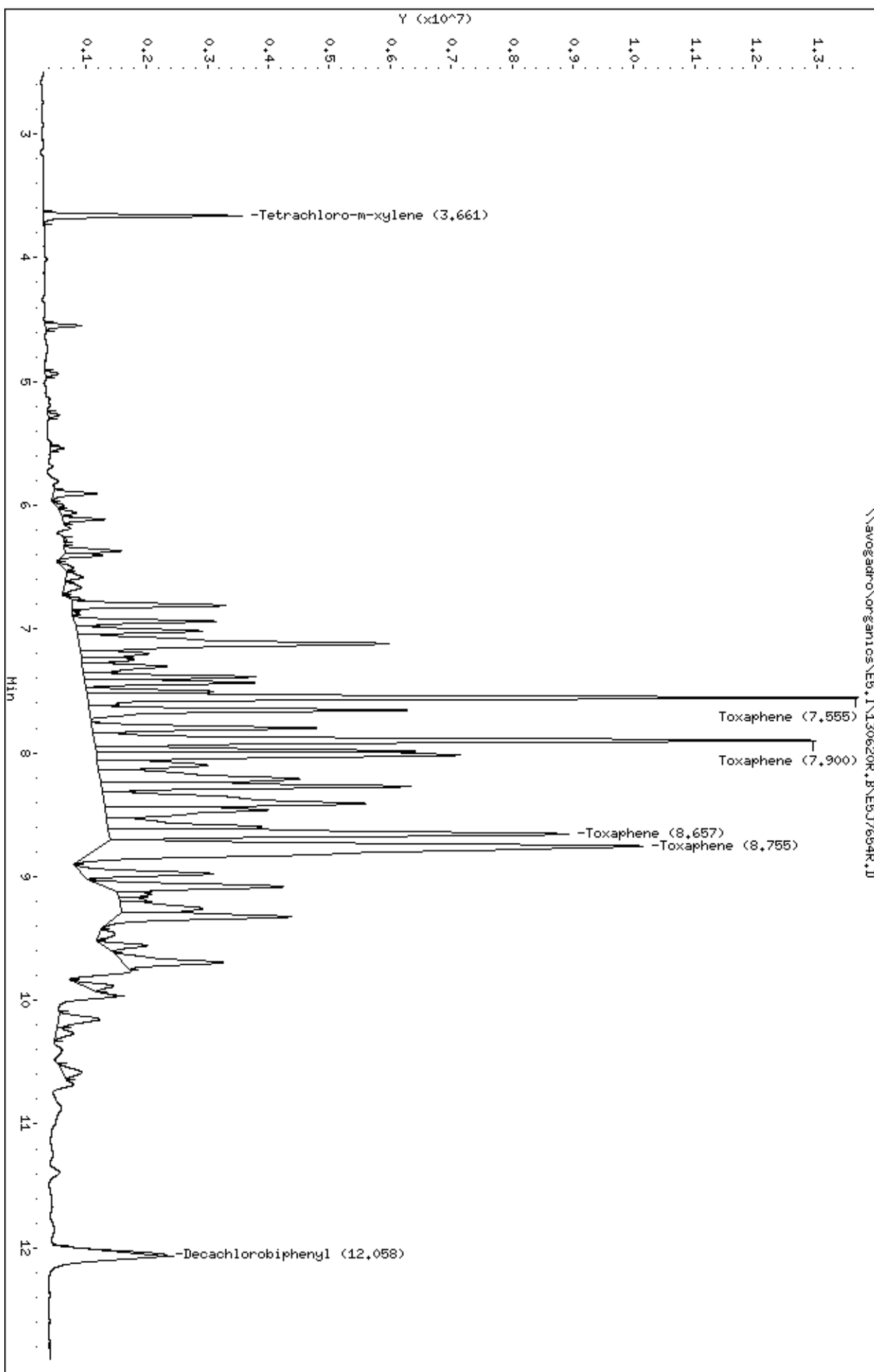
RT	EXP RT	DLT RT	CAL-AMT	ON-COL	TARGET RANGE	RATIO
=====	=====	=====	RESPONSE ( ng)	( ng)	=====	=====
\$ 1					CAS #: 877-09-8	
3.661	3.661	0.000	3264865 0.02000	0.022		(a)
\$ 2					CAS #: 2051-24-3	
12.057	12.065	-0.008	652697 0.04000	0.0027		(a)
28					CAS #: 8001-35-2	
7.555	7.555	0.000	12648418 2.00000	2.2	80.00- 120.00	100.00(a)
7.900	7.900	0.000	11837500 2.00000	2.2	74.20- 114.20	93.59
8.657	8.656	0.001	7546931 2.00000	2.1	40.64- 80.64	59.67
8.755	8.756	-0.001	8903759 2.00000	2.2	49.81- 89.81	70.39
Average of Peak Amounts =			2.17500			

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\ES, I\130620R, B\ESJ7654R.D  
Date : 20-JUN-2013 19:53  
Client ID: TOXAPH3JB  
Sample Info: TOXAPH3JB, TOXAPH3JB,,sontox+sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPpeStII

Instrument: ES,1  
Operator: GHA SRC: GHA  
Column diameter: 0.53



1G - FORM I PEST  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-72288

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-72288  
 Sample wt/vol: 30.0 (g/mL) G Lab File ID: E5J7636F.D/E5J7636R.D  
 % Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: \_\_\_\_\_  
 Extraction: (Type) SONC Date Extracted: 06/18/2013  
 Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/20/2013  
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/KG
319-84-6	alpha-BHC	1.7	U
319-85-7	beta-BHC	1.7	U
319-86-8	delta-BHC	1.7	U
58-89-9	gamma-BHC (Lindane)	1.7	U
76-44-8	Heptachlor	1.7	U
309-00-2	Aldrin	1.7	U
1024-57-3	Heptachlor epoxide	1.7	U
959-98-8	Endosulfan I	1.7	U
60-57-1	Dieldrin	3.3	U
72-55-9	4,4'-DDE	3.3	U
72-20-8	Endrin	3.3	U
33213-65-9	Endosulfan II	3.3	U
72-54-8	4,4'-DDD	3.3	U
1031-07-8	Endosulfan sulfate	3.3	U
50-29-3	4,4'-DDT	3.3	U
72-43-5	Methoxychlor	17	U
53494-70-5	Endrin ketone	3.3	U
7421-93-4	Endrin aldehyde	3.3	U
5103-71-9	alpha-Chlordane	1.7	U
5103-74-2	gamma-Chlordane	1.7	U
8001-35-2	Toxaphene	170	U



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130620F.B\E5J7636F.D  
 Lab Smp Id: MB-72288 Client Smp ID: MB-72288  
 Inj Date : 20-JUN-2013 14:36  
 Operator : GMA SRC: LIMS Inst ID: E5.i  
 Smp Info : MB-72288,MB-72288,72288,8081G.SUB,,  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\E5.I\130620F.B\E58081f.m  
 Meth Date : 21-Jun-2013 08:35 gappolonia Quant Type: ESTD  
 Cal Date : 19-JUN-2013 18:15 Cal File: E5J7618F.D  
 Als bottle: 20 QC Sample: BLANK  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 8081G.SUB  
 Target Version: 4.14 Sample Matrix: SOIL  
 Processing Host: TARGET106

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

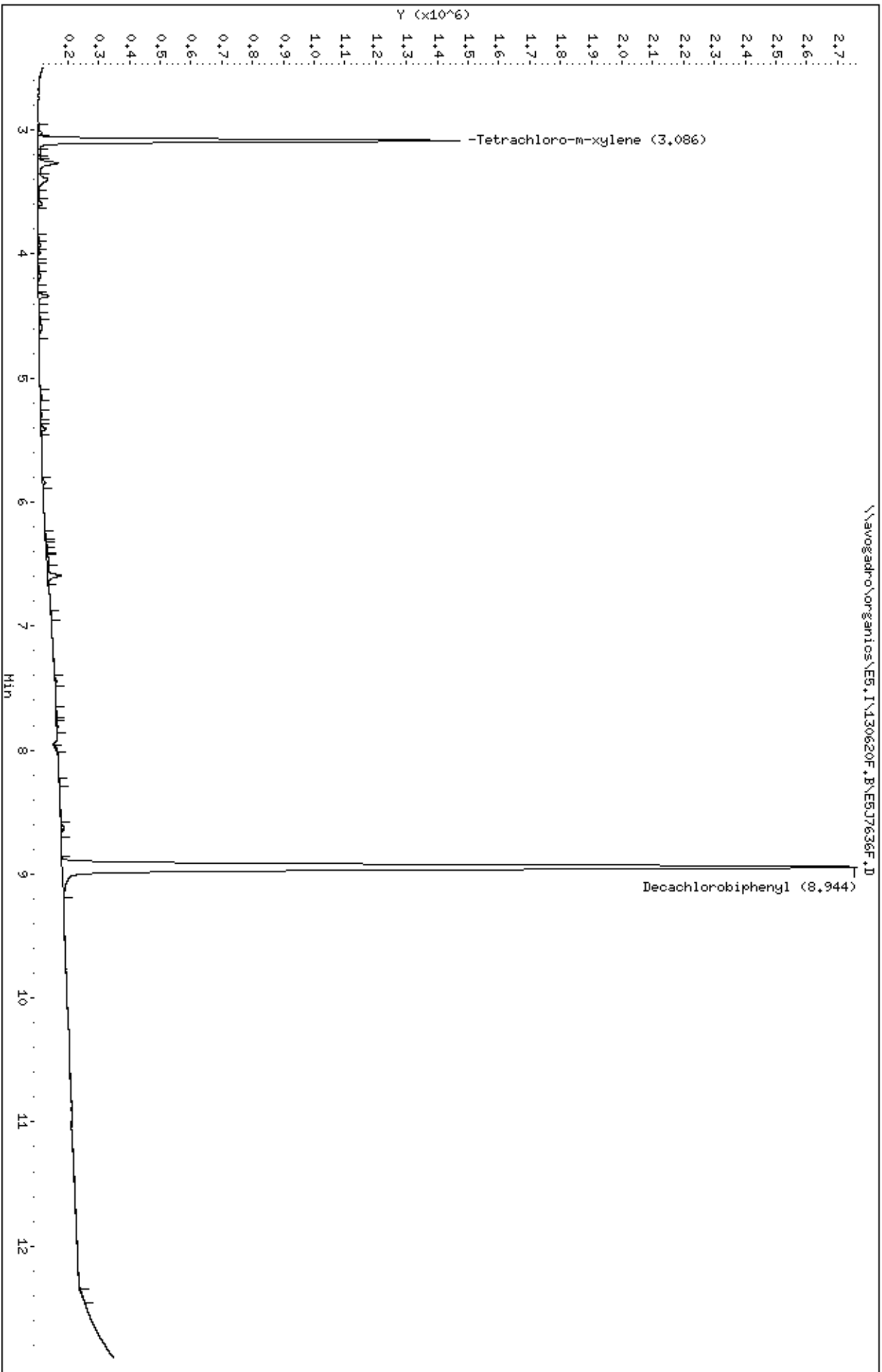
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weigth of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====
\$ 1						
3.086	3.085	0.001	2408524	0.05342	18	
-----						
\$ 2						
8.943	8.944	-0.001	7422333	0.11545	38	
-----						

Data File: \\avogadro\organicos\ES,I\130620F,B\ESJ7636F.D  
Date : 20-JUN-2013 14:36  
Client ID: MB-72288  
Sample Info: MB-72288,MB-72288,72288,8081G.SUB,,  
Volume Injected (uL): 1.0  
Column phase: CLPrest

Instrument: ES.i  
Operator: GHA SRC: LIMS  
Column diameter: 0.53



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130620R.B\E5J7636R.D  
 Lab Smp Id: MB-72288 Client Smp ID: MB-72288  
 Inj Date : 20-JUN-2013 14:36  
 Operator : GMA SRC: LIMS Inst ID: E5.i  
 Smp Info : MB-72288,MB-72288,72288,8081G.SUB,,  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\E5.I\130620R.B\E58081r.m  
 Meth Date : 21-Jun-2013 13:08 E5.i Quant Type: ESTD  
 Cal Date : 19-JUN-2013 18:15 Cal File: E5J7618R.D  
 Als bottle: 20 QC Sample: BLANK  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 8081G.SUB  
 Target Version: 4.14 Sample Matrix: SOIL

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

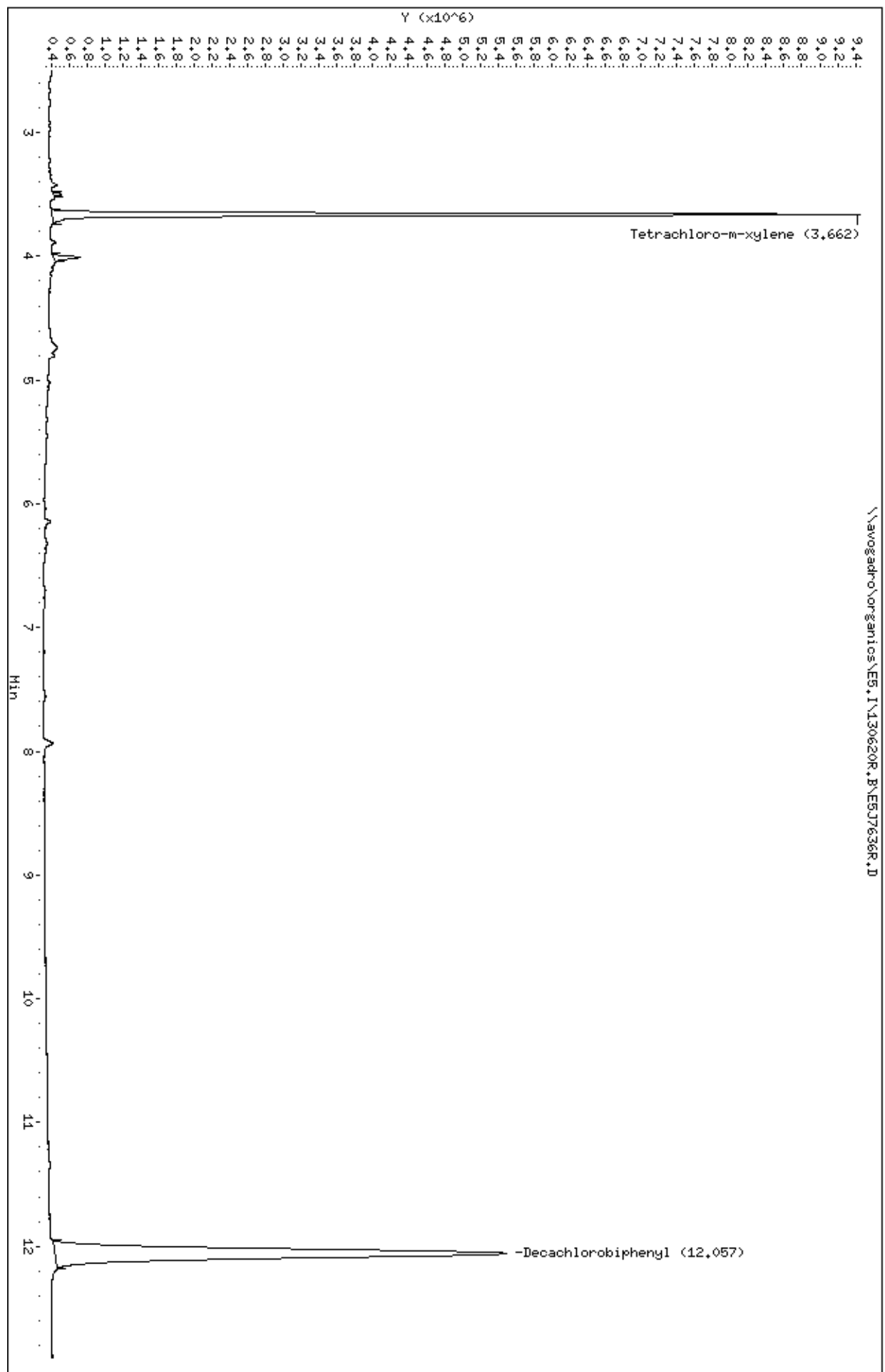
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weigth of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====
\$ 1						
3.661	3.661	0.000	9040804	0.05994	20	
-----						
\$ 2						
12.056	12.065	-0.009	25727939	0.10827	36	
-----						

Data File: \\avogadro\organicos\ES,I\130620R,B\ESJ7636R.D  
Date : 20-JUN-2013 14:36  
Client ID: MB-72288  
Sample Info: MB-72288,MB-72288,72288,8081G.SUB,,  
Volume Injected (uL): 1.0  
Column phase: CLPestII

Instrument: ES.i  
Operator: GHA SRC: LIMS  
Column diameter: 0.53



1G - FORM I PEST  
 PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-72288(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-72288  
 Sample wt/vol: 30 (g/mL) G Lab File ID: E5J7637F.D  
 % Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: \_\_\_\_\_  
 Extraction: (Type) SONC Date Extracted: 06/18/2013  
 Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/20/2013  
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
319-84-6	alpha-BHC		5.8	
319-85-7	beta-BHC		6.1	
319-86-8	delta-BHC		6.1	
58-89-9	gamma-BHC (Lindane)		5.8	
76-44-8	Heptachlor		6.0	
309-00-2	Aldrin		5.8	
1024-57-3	Heptachlor epoxide		6.0	
959-98-8	Endosulfan I		5.9	
60-57-1	Dieldrin		13	
72-55-9	4,4'-DDE		13	
72-20-8	Endrin		13	
33213-65-9	Endosulfan II		12	
72-54-8	4,4'-DDD		12	
1031-07-8	Endosulfan sulfate		13	
50-29-3	4,4'-DDT		13	
72-43-5	Methoxychlor		67	
53494-70-5	Endrin ketone		13	
7421-93-4	Endrin aldehyde		13	
5103-71-9	alpha-Chlordane		5.9	
5103-74-2	gamma-Chlordane		5.9	
8001-35-2	Toxaphene		170	U

1G - FORM I PEST  
 PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-72288(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-72288  
 Sample wt/vol: 30 (g/mL) G Lab File ID: E5J7637R.D  
 % Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: \_\_\_\_\_  
 Extraction: (Type) SONC Date Extracted: 06/18/2013  
 Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/20/2013  
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
319-84-6	alpha-BHC		6.2	
319-85-7	beta-BHC		5.4	
319-86-8	delta-BHC		6.5	
58-89-9	gamma-BHC (Lindane)		6.1	
76-44-8	Heptachlor		6.2	
309-00-2	Aldrin		6.0	
1024-57-3	Heptachlor epoxide		6.1	
959-98-8	Endosulfan I		6.0	
60-57-1	Dieldrin		13	
72-55-9	4,4'-DDE		12	
72-20-8	Endrin		14	
33213-65-9	Endosulfan II		12	
72-54-8	4,4'-DDD		13	
1031-07-8	Endosulfan sulfate		13	
50-29-3	4,4'-DDT		13	
72-43-5	Methoxychlor		66	
53494-70-5	Endrin ketone		12	
7421-93-4	Endrin aldehyde		13	
5103-71-9	alpha-Chlordane		6.1	
5103-74-2	gamma-Chlordane		6.2	
8001-35-2	Toxaphene		170	U

Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130620F.B\E5J7637F.D  
 Lab Smp Id: LCS-72288 Client Smp ID: LCS-72288  
 Inj Date : 20-JUN-2013 14:56  
 Operator : GMA SRC: LIMS Inst ID: E5.i  
 Smp Info : LCS-72288,LCS-72288,72288,8081G.SUB,,  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\E5.I\130620F.B\E58081f.m  
 Meth Date : 21-Jun-2013 08:35 gappolonia Quant Type: ESTD  
 Cal Date : 19-JUN-2013 18:15 Cal File: E5J7618F.D  
 Als bottle: 21 QC Sample: LCS  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 8081G.SUB  
 Target Version: 4.14 Sample Matrix: SOIL  
 Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weigth of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

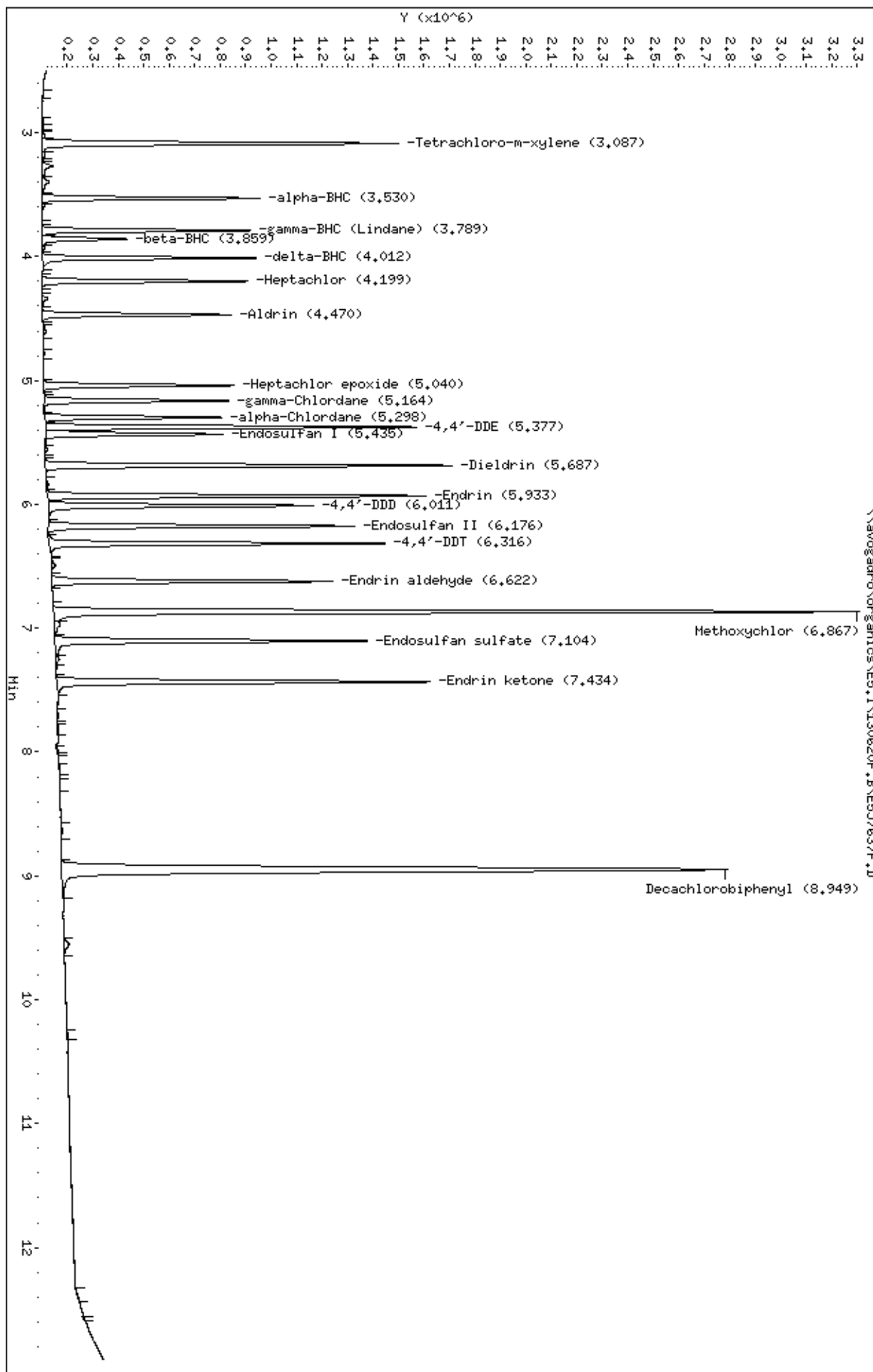
CONCENTRATIONS						
RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
=====	=====	=====	RESPONSE ( ng)	(ug/Kg)	=====	=====
\$ 1					CAS #: 877-09-8	
3.086	3.085	0.001	2458019	0.05452	18	
-----						
\$ 2					CAS #: 2051-24-3	
8.948	8.944	0.004	7521130	0.11698	39	
-----						
6					CAS #: 319-84-6	
3.530	3.527	0.003	855217	0.01751	5.8	
-----						
7					CAS #: 58-89-9	
3.789	3.786	0.003	1273761	0.01747	5.8	
-----						
8					CAS #: 76-44-8	
4.198	4.195	0.003	1323760	0.01785	6.0	
-----						
9					CAS #: 309-00-2	
4.470	4.465	0.005	1206506	0.01751	5.8	
-----						

CONCENTRATIONS						
RT	EXP RT	DLT RT	ON-COL		FINAL	TARGET RANGE
=====	=====	=====	RESPONSE (	ng)	(ug/Kg)	=====
=====	=====	=====	=====	=====	=====	=====
10	beta-BHC				CAS #:	319-85-7
3.858	3.855	0.003	546336	0.01827	6.1	
-----						
11	delta-BHC				CAS #:	319-86-8
4.011	4.008	0.003	1333320	0.01840	6.1	
-----						
14	Heptachlor epoxide				CAS #:	1024-57-3
5.040	5.035	0.005	1209657	0.01810	6.0	
-----						
15	Endosulfan I				CAS #:	959-98-8
5.435	5.429	0.006	697925	0.01760	5.9	
-----						
16	gamma-Chlordane				CAS #:	5103-74-2
5.164	5.158	0.006	724767	0.01779	5.9	
-----						
17	alpha-Chlordane				CAS #:	5103-71-9
5.297	5.292	0.005	1147665	0.01781	5.9	
-----						
18	4,4'-DDE				CAS #:	72-55-9
5.376	5.371	0.005	1455599	0.03972	13	
-----						
19	Dieldrin				CAS #:	60-57-1
5.686	5.680	0.006	2689229	0.03775	12	
-----						
20	Endrin				CAS #:	72-20-8
5.932	5.926	0.006	1481762	0.03918	13	
-----						
21	4,4'-DDD				CAS #:	72-54-8
6.011	6.004	0.007	1870588	0.03703	12	
-----						
22	Endosulfan II				CAS #:	33213-65-9
6.176	6.169	0.007	2108717	0.03617	12	
-----						
23	4,4'-DDT				CAS #:	50-29-3
6.316	6.310	0.006	2274445	0.04006	13	
-----						
24	Endrin aldehyde				CAS #:	7421-93-4
6.621	6.616	0.005	1104053	0.03860	13	
-----						
25	Endosulfan sulfate				CAS #:	1031-07-8
7.103	7.096	0.007	2332767	0.04013	13	
-----						
26	Methoxychlor				CAS #:	72-43-5
6.866	6.860	0.006	5870489	0.20112	67	
-----						
27	Endrin ketone				CAS #:	53494-70-5
7.433	7.427	0.006	1465106	0.03814	13	
-----						



Data File: \\avogadro\organicos\ES.I\130620F.B\ESJ7637F.D  
 Date: 20-JUN-2013 14:56  
 Client ID: LCS-72288  
 Sample Info: LCS-72288,LCS-72288,72288,80816.SUB,  
 Volume Injected (uL): 1.0  
 Column phase: CLPrest

Instrument: ES.i  
 Operator: GHA SRC: LIMS  
 Column diameter: 0.53



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130620R.B\E5J7637R.D  
 Lab Smp Id: LCS-72288 Client Smp ID: LCS-72288  
 Inj Date : 20-JUN-2013 14:56  
 Operator : GMA SRC: LIMS Inst ID: E5.i  
 Smp Info : LCS-72288,LCS-72288,72288,8081G.SUB,,  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\E5.I\130620R.B\E58081r.m  
 Meth Date : 21-Jun-2013 13:08 E5.i Quant Type: ESTD  
 Cal Date : 19-JUN-2013 18:15 Cal File: E5J7618R.D  
 Als bottle: 21 QC Sample: LCS  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 8081G.SUB  
 Target Version: 4.14 Sample Matrix: SOIL

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

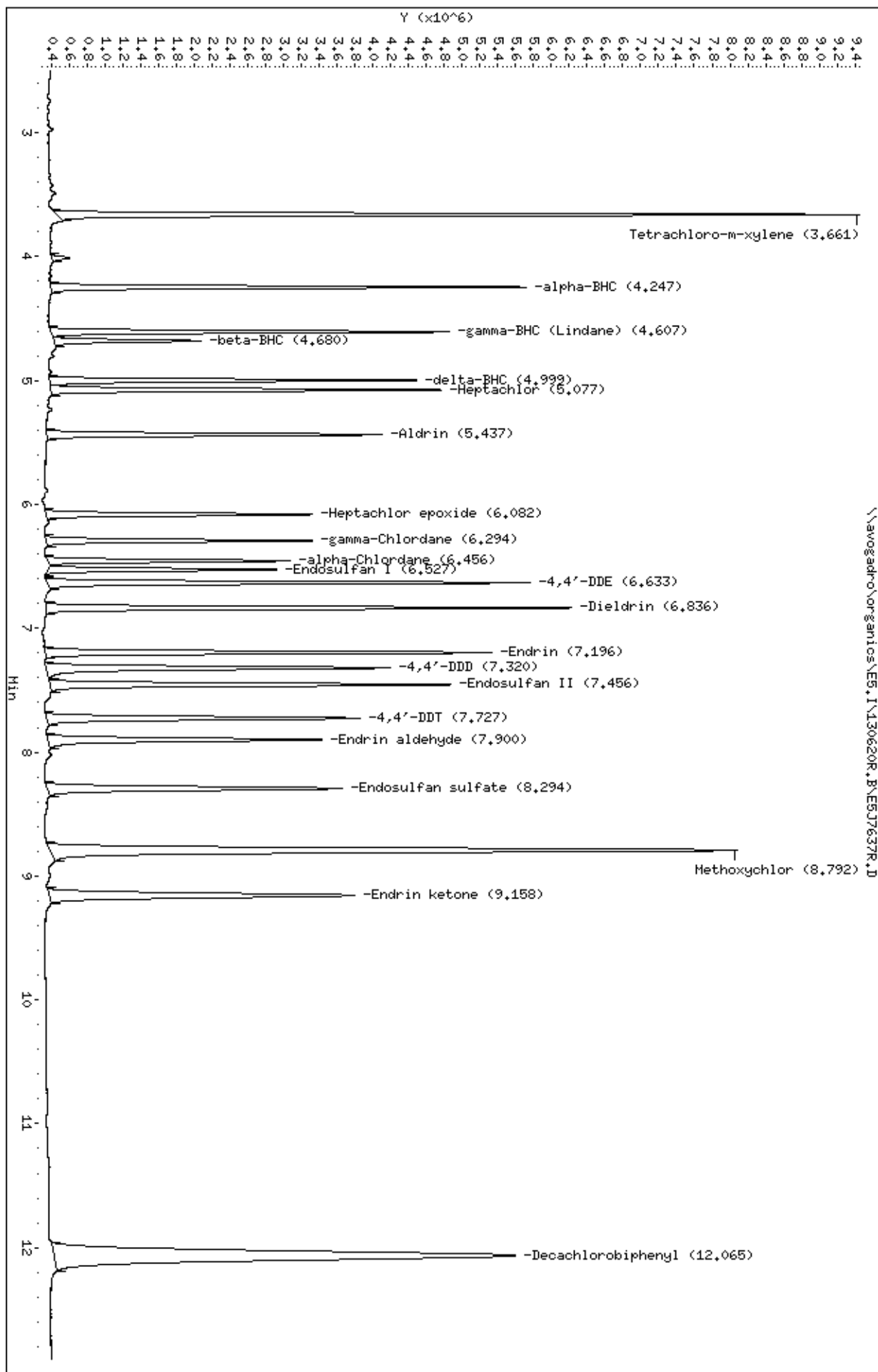
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weigh of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
=====	=====	=====	RESPONSE ( ng)	(ug/Kg)	=====	=====
\$ 1					CAS #: 877-09-8	
3.661	3.661	0.000	8990790	0.05961	20	
\$ 2					CAS #: 2051-24-3	
12.065	12.065	0.000	26397675	0.11108	37	
6					CAS #: 319-84-6	
4.246	4.246	0.000	8233487	0.01848	6.2	
7					CAS #: 58-89-9	
4.606	4.606	0.000	7096701	0.01828	6.1	
8					CAS #: 76-44-8	
5.076	5.075	0.001	7387910	0.01861	6.2	
9					CAS #: 309-00-2	
5.436	5.435	0.001	6425125	0.01813	6.0	
10					CAS #: 319-85-7	
4.680	4.679	0.001	2659975	0.01612	5.4	

CONCENTRATIONS						
RT	EXP RT	DLT RT	ON-COL		FINAL	TARGET RANGE
=====	=====	=====	RESPONSE (	ng)	(ug/Kg)	=====
=====	=====	=====	=====	=====	=====	=====
11	delta-BHC				CAS #:	319-86-8
4.998	4.997	0.001	6705221	0.01941	6.5	
-----						
14	Heptachlor epoxide				CAS #:	1024-57-3
6.081	6.080	0.001	5169452	0.01839	6.1	
-----						
15	Endosulfan I				CAS #:	959-98-8
6.526	6.525	0.001	2562559	0.01798	6.0	
-----						
16	gamma-Chlordane				CAS #:	5103-74-2
6.293	6.290	0.003	5063624	0.01866	6.2	
-----						
17	alpha-Chlordane				CAS #:	5103-71-9
6.456	6.453	0.003	4503349	0.01825	6.1	
-----						
18	4,4'-DDE				CAS #:	72-55-9
6.632	6.630	0.002	9349075	0.03713	12	
-----						
19	Dieldrin				CAS #:	60-57-1
6.836	6.834	0.002	10154973	0.03761	12	
-----						
20	Endrin				CAS #:	72-20-8
7.196	7.193	0.003	5005326	0.04155	14	
-----						
21	4,4'-DDD				CAS #:	72-54-8
7.320	7.317	0.003	8029978	0.03957	13	
-----						
22	Endosulfan II				CAS #:	33213-65-9
7.456	7.452	0.004	8723833	0.03707	12	
-----						
23	4,4'-DDT				CAS #:	50-29-3
7.726	7.724	0.002	7295064	0.03919	13	
-----						
24	Endrin aldehyde				CAS #:	7421-93-4
7.900	7.896	0.004	3071191	0.03857	13	
-----						
25	Endosulfan sulfate				CAS #:	1031-07-8
8.293	8.290	0.003	7496204	0.03783	13	
-----						
26	Methoxychlor				CAS #:	72-43-5
8.791	8.789	0.002	20563366	0.19901	66	
-----						
27	Endrin ketone				CAS #:	53494-70-5
9.157	9.153	0.004	3426870	0.03732	12	
-----						

Data File: \\avogadro\organicos\ES,I\130620R,B\ESJ7637R.D  
 Date : 20-JUN-2013 14:56  
 Client ID: LCS-72288  
 Sample Info: LCS-72288,LCS-72288,72288,80816.SUB,  
 Volume Injected (uL): 1.0  
 Column phase: CLPestII

Instrument: ES.i  
 Operator: GHA SRC: LIMS  
 Column diameter: 0.53



1G - FORM I PEST  
 PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-72288(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-72288  
 Sample wt/vol: 30 (g/mL) G Lab File ID: E5J7638F.D  
 % Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: \_\_\_\_\_  
 Extraction: (Type) SONC Date Extracted: 06/18/2013  
 Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/20/2013  
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
319-84-6	alpha-BHC		5.9	
319-85-7	beta-BHC		6.2	
319-86-8	delta-BHC		6.2	
58-89-9	gamma-BHC (Lindane)		5.9	
76-44-8	Heptachlor		6.1	
309-00-2	Aldrin		5.9	
1024-57-3	Heptachlor epoxide		6.0	
959-98-8	Endosulfan I		5.9	
60-57-1	Dieldrin		12	
72-55-9	4,4'-DDE		13	
72-20-8	Endrin		13	
33213-65-9	Endosulfan II		12	
72-54-8	4,4'-DDD		13	
1031-07-8	Endosulfan sulfate		13	
50-29-3	4,4'-DDT		13	
72-43-5	Methoxychlor		67	
53494-70-5	Endrin ketone		13	
7421-93-4	Endrin aldehyde		13	
5103-71-9	alpha-Chlordane		6.0	
5103-74-2	gamma-Chlordane		6.0	
8001-35-2	Toxaphene		170	U

1G - FORM I PEST  
 PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-72288(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-72288  
 Sample wt/vol: 30 (g/mL) G Lab File ID: E5J7638R.D  
 % Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: \_\_\_\_\_  
 Extraction: (Type) SONC Date Extracted: 06/18/2013  
 Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/20/2013  
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
319-84-6	alpha-BHC		6.1	
319-85-7	beta-BHC		5.3	
319-86-8	delta-BHC		6.4	
58-89-9	gamma-BHC (Lindane)		6.1	
76-44-8	Heptachlor		6.2	
309-00-2	Aldrin		6.1	
1024-57-3	Heptachlor epoxide		6.2	
959-98-8	Endosulfan I		6.1	
60-57-1	Dieldrin		13	
72-55-9	4,4'-DDE		12	
72-20-8	Endrin		14	
33213-65-9	Endosulfan II		12	
72-54-8	4,4'-DDD		13	
1031-07-8	Endosulfan sulfate		13	
50-29-3	4,4'-DDT		13	
72-43-5	Methoxychlor		66	
53494-70-5	Endrin ketone		13	
7421-93-4	Endrin aldehyde		13	
5103-71-9	alpha-Chlordane		6.1	
5103-74-2	gamma-Chlordane		6.3	
8001-35-2	Toxaphene		170	U

Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130620F.B\E5J7638F.D  
 Lab Smp Id: LCSD-72288 Client Smp ID: LCSD-72288  
 Inj Date : 20-JUN-2013 15:13  
 Operator : GMA SRC: LIMS Inst ID: E5.i  
 Smp Info : LCSD-72288,LCSD-72288,72288,8081G.SUB,,  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\E5.I\130620F.B\E58081f.m  
 Meth Date : 21-Jun-2013 08:35 gappolonia Quant Type: ESTD  
 Cal Date : 19-JUN-2013 18:15 Cal File: E5J7618F.D  
 Als bottle: 22 QC Sample: LCSD  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 8081G.SUB  
 Target Version: 4.14 Sample Matrix: SOIL  
 Processing Host: TARGET106

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weigth of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

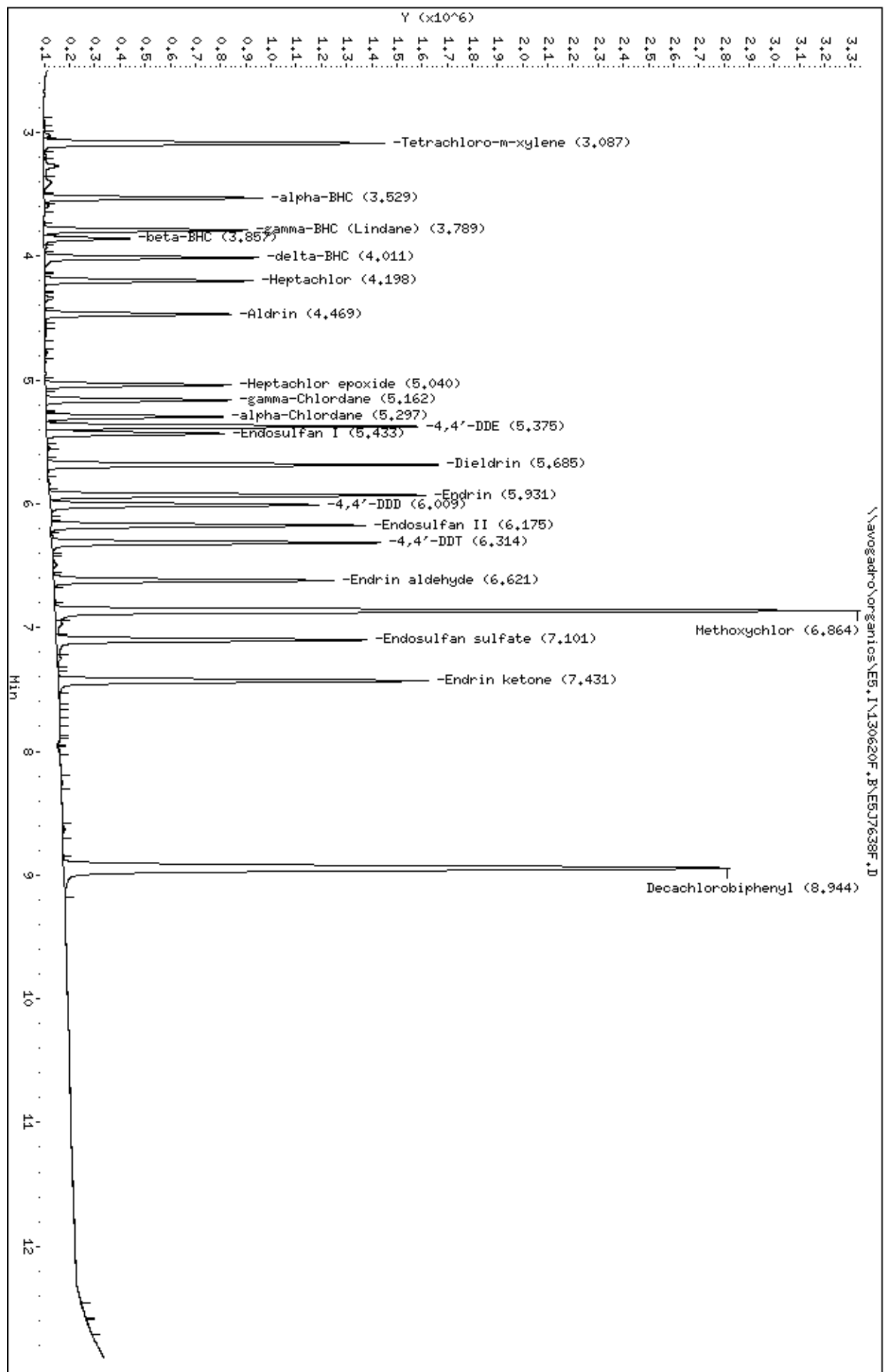
CONCENTRATIONS						
RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
=====	=====	=====	RESPONSE ( ng)	(ug/Kg)	=====	=====
\$ 1					CAS #: 877-09-8	
3.087	3.085	0.002	2434278	0.05399	18	
\$ 2					CAS #: 2051-24-3	
8.944	8.944	0.000	7557400	0.11755	39	
6					CAS #: 319-84-6	
3.529	3.527	0.002	870605	0.01782	5.9	
7					CAS #: 58-89-9	
3.789	3.786	0.003	1288212	0.01766	5.9	
8					CAS #: 76-44-8	
4.198	4.195	0.003	1349041	0.01819	6.1	
9					CAS #: 309-00-2	
4.469	4.465	0.004	1222030	0.01773	5.9	

CONCENTRATIONS						
RT	EXP RT	DLT RT	RESPONSE (	ng)	FINAL (ug/Kg)	TARGET RANGE
=====	=====	=====	=====	=====	=====	=====
10	beta-BHC				CAS #: 319-85-7	
3.857	3.855	0.002	559660	0.01872	6.2	
-----						
11	delta-BHC				CAS #: 319-86-8	
4.010	4.008	0.002	1358078	0.01874	6.2	
-----						
14	Heptachlor epoxide				CAS #: 1024-57-3	
5.039	5.035	0.004	1210123	0.01810	6.0	
-----						
15	Endosulfan I				CAS #: 959-98-8	
5.433	5.429	0.004	704488	0.01776	5.9	
-----						
16	gamma-Chlordane				CAS #: 5103-74-2	
5.162	5.158	0.004	735746	0.01806	6.0	
-----						
17	alpha-Chlordane				CAS #: 5103-71-9	
5.296	5.292	0.004	1157357	0.01796	6.0	
-----						
18	4,4'-DDE				CAS #: 72-55-9	
5.374	5.371	0.003	1472925	0.04019	13	
-----						
19	Dieldrin				CAS #: 60-57-1	
5.684	5.680	0.004	2640591	0.03706	12	
-----						
20	Endrin				CAS #: 72-20-8	
5.930	5.926	0.004	1495687	0.03955	13	
-----						
21	4,4'-DDD				CAS #: 72-54-8	
6.009	6.004	0.005	1907870	0.03777	12	
-----						
22	Endosulfan II				CAS #: 33213-65-9	
6.174	6.169	0.005	2159830	0.03704	12	
-----						
23	4,4'-DDT				CAS #: 50-29-3	
6.314	6.310	0.004	2277329	0.04011	13	
-----						
24	Endrin aldehyde				CAS #: 7421-93-4	
6.620	6.616	0.004	1112187	0.03888	13	
-----						
25	Endosulfan sulfate				CAS #: 1031-07-8	
7.100	7.096	0.004	2339397	0.04024	13	
-----						
26	Methoxychlor				CAS #: 72-43-5	
6.864	6.860	0.004	5897570	0.20205	67	
-----						
27	Endrin ketone				CAS #: 53494-70-5	
7.430	7.427	0.003	1468564	0.03823	13	
-----						



Data File: \\avogadro\organicos\ES.I\130620F.B\ESJ7638F.D  
 Date: 20-JUN-2013 15:13  
 Client ID: LCSD-72288  
 Sample Info: LCSD-72288,LCSD-72288,72288,8081G.SUB,  
 Volume Injected (uL): 1.0  
 Column phase: CLPrest

Instrument: ES.i  
 Operator: GHA SRC: LIMS  
 Column diameter: 0.53



Spectrum Analytical, Inc. RI Division

NYASP Pesticide Quantitation Report

Data file : \\avogadro\organics\E5.I\130620R.B\E5J7638R.D  
 Lab Smp Id: LCSD-72288 Client Smp ID: LCSD-72288  
 Inj Date : 20-JUN-2013 15:13  
 Operator : GMA SRC: LIMS Inst ID: E5.i  
 Smp Info : LCSD-72288,LCSD-72288,72288,8081G.SUB,,  
 Misc Info :  
 Comment :  
 Method : \\avogadro\organics\E5.I\130620R.B\E58081r.m  
 Meth Date : 21-Jun-2013 13:08 E5.i Quant Type: ESTD  
 Cal Date : 19-JUN-2013 18:15 Cal File: E5J7618R.D  
 Als bottle: 22 QC Sample: LCSD  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: 8081G.SUB  
 Target Version: 4.14 Sample Matrix: SOIL

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

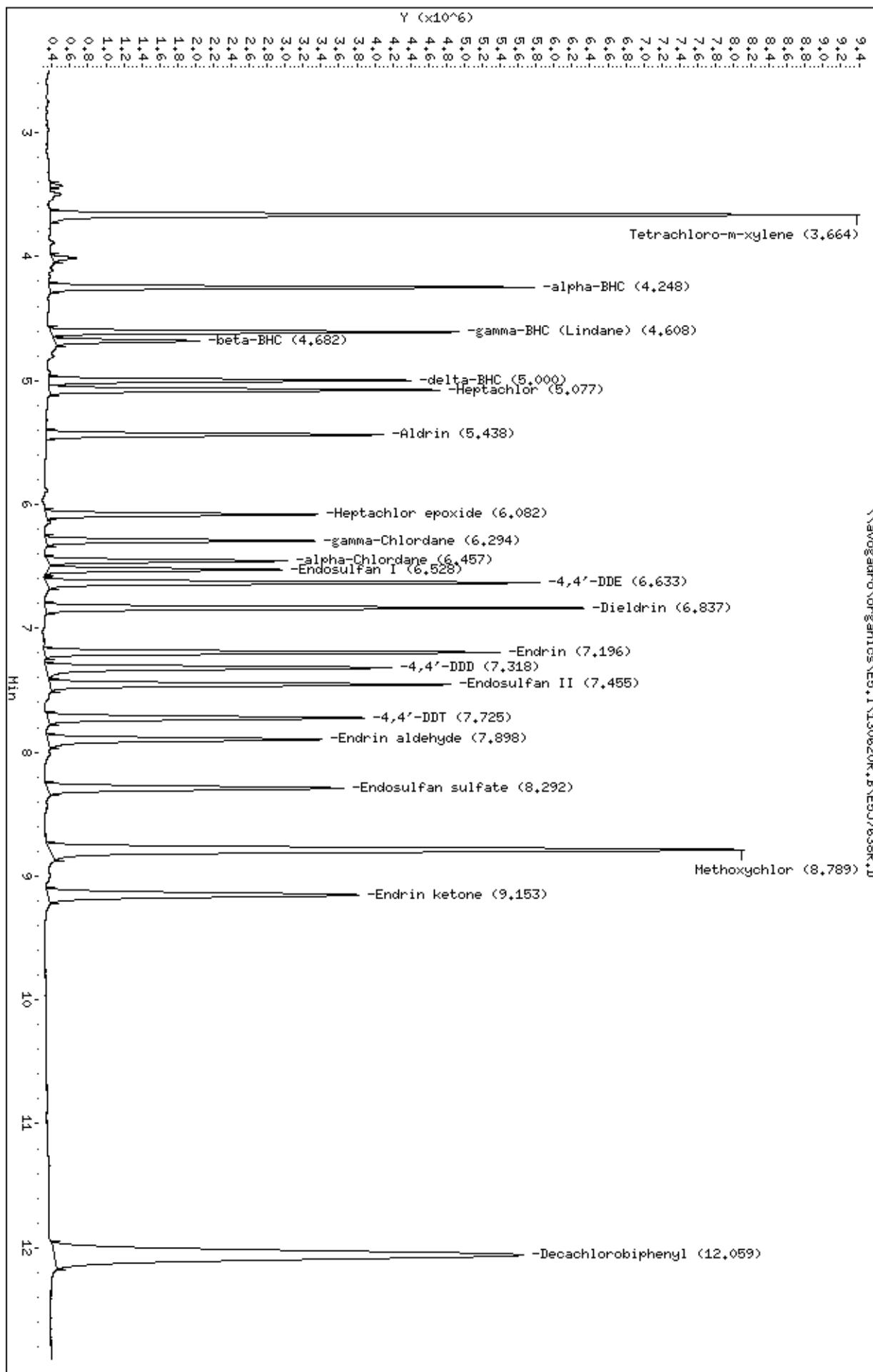
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
=====	=====	=====	RESPONSE ( ng)	(ug/Kg)	=====	=====
\$ 1					CAS #: 877-09-8	
3.664	3.661	0.003	9026455	0.05985	20	
\$ 2					CAS #: 2051-24-3	
12.059	12.065	-0.006	26369168	0.11096	37	
6					CAS #: 319-84-6	
4.248	4.246	0.002	8185279	0.01837	6.1	
7					CAS #: 58-89-9	
4.608	4.606	0.002	7085090	0.01825	6.1	
8					CAS #: 76-44-8	
5.077	5.075	0.002	7373616	0.01858	6.2	
9					CAS #: 309-00-2	
5.438	5.435	0.003	6448307	0.01820	6.1	
10					CAS #: 319-85-7	
4.681	4.679	0.002	2618682	0.01587	5.3	

CONCENTRATIONS						
RT	EXP RT	DLT RT	RESPONSE (	ng)	FINAL	TARGET RANGE
====	=====	=====	=====	=====	=====	=====
						RATIO
						=====
11	delta-BHC				CAS #:	319-86-8
4.999	4.997	0.002	6599849	0.01910	6.4	
-----						
14	Heptachlor epoxide				CAS #:	1024-57-3
6.082	6.080	0.002	5203021	0.01851	6.2	
-----						
15	Endosulfan I				CAS #:	959-98-8
6.528	6.525	0.003	2614861	0.01835	6.1	
-----						
16	gamma-Chlordane				CAS #:	5103-74-2
6.294	6.290	0.004	5106164	0.01882	6.3	
-----						
17	alpha-Chlordane				CAS #:	5103-71-9
6.456	6.453	0.003	4484441	0.01818	6.0	
-----						
18	4,4'-DDE				CAS #:	72-55-9
6.633	6.630	0.003	9401122	0.03734	12	
-----						
19	Dieldrin				CAS #:	60-57-1
6.836	6.834	0.002	10247583	0.03795	13	
-----						
20	Endrin				CAS #:	72-20-8
7.195	7.193	0.002	5079441	0.04217	14	
-----						
21	4,4'-DDD				CAS #:	72-54-8
7.318	7.317	0.001	7904647	0.03895	13	
-----						
22	Endosulfan II				CAS #:	33213-65-9
7.454	7.452	0.002	8567988	0.03641	12	
-----						
23	4,4'-DDT				CAS #:	50-29-3
7.724	7.724	0.000	7332994	0.03940	13	
-----						
24	Endrin aldehyde				CAS #:	7421-93-4
7.898	7.896	0.002	3055931	0.03838	13	
-----						
25	Endosulfan sulfate				CAS #:	1031-07-8
8.291	8.290	0.001	7494338	0.03782	13	
-----						
26	Methoxychlor				CAS #:	72-43-5
8.789	8.789	0.000	20461723	0.19803	66	
-----						
27	Endrin ketone				CAS #:	53494-70-5
9.153	9.153	0.000	3466236	0.03775	12	
-----						

Data File: \\avogadro\organicos\ES.I\130620R.B\ESJ7638R.D  
 Date : 20-JUN-2013 15:13  
 Client ID: LCSD-72288  
 Sample Info: LCSD-72288,LCSD-72288,72288,8081G.SUB,  
 Volume Injected (uL): 1.0  
 Column phase: CLPestII

Instrument: ES.i  
 Operator: GHA SRC: LIMS  
 Column diameter: 0.53



# Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

# PREP BATCH REPORT

Prep Start Date: 06/18/2013 08:37

Prep End Date: 06/18/2013 17:23

Prep Batch ID: 72288

Prep Code: PEST\_S\_PR

Prep Type: SONC/SW3550B

Technician: Jodie B Warner

Prep Factor Units: mL / g

QC Matrix: NA2SO4  
 Solvent (1): MECL2  
 QC Matrix Lot: 121756  
 Solvent (1) Lot: DI 364

Filter?: FILTER  
 Filter Lot: FC003203  
 Solvent (2): ACE  
 Solvent (2) Lot: 125597

Solvent (3): HEXANE  
 Solvent (3) Lot: DH 335

Solvent (4): N/A  
 Solvent (4) Lot: N/A

Clean Up (1): N/A  
 Clean Up (1) Lot: N/A

Clean Up (2): N/A  
 Clean Up (2) Lot: N/A

Clean Up (3): N/A  
 Clean Up (3) Lot: N/A

Clean Up (4): N/A  
 Clean Up (4) Lot: N/A

Therm ID1: N/A

Sonicator Tuned? Yes

Cycles/Hour 0

Start Time: N/A

End Time: N/A

Lab 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* W* Init Init TM	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH	CNCNTR Unit
MB-72288	BatchQC		30	10	OPW130514A	1			JBW TM	06/18/13	JKD	06/18/13	JKD	R21	<2		Turbo Vap 1
CLEAN UP (MB-72288): /CU_130618C (LOT: MKBH2986V) /jdorsey																	
LCS-72288	BatchQC		30	10	OPW130514A	1	OPW130522A	1	JBW TM	06/18/13	JKD	06/18/13	JKD	R21			Turbo Vap 1
CLEAN UP (LCS-72288): /CU_130618C (LOT: MKBH2986V) /jdorsey																	
LCSD-72288	BatchQC		30	10	OPW130514A	1	OPW130522A	1	JBW TM	06/18/13	JKD	06/18/13	JKD	R21			Turbo Vap 1
CLEAN UP (LCSD-72288): /CU_130618C (LOT: MKBH2986V) /jdorsey																	
M0967-01A	RS-BF-A79-061313	S	30	10	OPW130514A	1			JBW TM	07/05/13	01	06/18/13	JKD	R21*			Turbo Vap 1
CLEAN UP (M0967-01A): /CU_130618C (LOT: MKBH2986V) /jdorsey																	
M0967-02A	RS-BF-A81-061313	S	30.3	10	OPW130514A	1			JBW TM	07/05/13	01	06/18/13	JKD	R21			Turbo Vap 1
CLEAN UP (M0967-02A): /CU_130618C (LOT: MKBH2986V) /jdorsey																	
M0975-04A	COMP-A-061313	S	30.3	10	OPW130514A	1			JBW TM	06/26/13	01	06/18/13	JKD	R21			Turbo Vap 1
CLEAN UP (M0975-04A): /CU_130618C (LOT: MKBH2986V) /jdorsey																	
M0975-07A	COMP-B-061313	S	30.1	10	OPW130514A	1			JBW TM	06/26/13	01	06/18/13	JKD	R21			Turbo Vap 1
CLEAN UP (M0975-07A): /CU_130618C (LOT: MKBH2986V) /jdorsey																	
M0975-11A	COMP-C-061313	S	30.4	10	OPW130514A	1			JBW TM	06/26/13	01	06/18/13	JKD	R21			Turbo Vap 1
CLEAN UP (M0975-11A): /CU_130618C (LOT: MKBH2986V) /jdorsey																	
M0975-14A	COMP-D-061313	S	30.1	10	OPW130514A	1			JBW TM	06/26/13	01	06/18/13	JKD	R21			Turbo Vap 1
CLEAN UP (M0975-14A): /CU_130618C (LOT: MKBH2986V) /jdorsey																	
M0975-18A	COMP-E-061313	S	30	10	OPW130514A	1			JBW TM	06/26/13	01	06/18/13	JKD	R21			Turbo Vap 1
CLEAN UP (M0975-18A): /CU_130618C (LOT: MKBH2986V) /jdorsey																	

James Kyle Dorsey  
 Analyst Reviewed  
 Date: 06/18/2013  
 Jodie B Warner  
 Manager Reviewed  
 Date: 06/18/2013

Comments:

\*W = Witnessed (Spike) \*T = Transferred

JKD  
 06/18/13

Logbook ID: 50-0149-05/13

## *Percent Moisture and Percent Solids Report*

<i>Lab Sample ID</i>	<i>Client Sample ID</i>	<i>Analyzed</i>	<i>Percent Moisture</i>	<i>Percent Solids</i>	<i>Validated</i>
M0975-01A	A-1-3-061313	06/18/2013	20.881	79.119	Yes
M0975-02A	A-2-2-061313	06/18/2013	25.000	75.000	Yes
M0975-03A	A-3-1-061313	06/18/2013	18.921	81.079	Yes
M0975-04A	COMP-A-061313	06/18/2013	21.460	78.540	Yes
M0975-05A	B-1-4-061313	06/18/2013	18.650	81.350	Yes
M0975-06A	B-2-1-061313	06/18/2013	18.229	81.771	Yes
M0975-07A	COMP-B-061313	06/18/2013	20.671	79.329	Yes
M0975-08A	C-1-2-061313	06/18/2013	23.940	76.060	Yes
M0975-09A	C-2-3-061313	06/18/2013	25.535	74.465	Yes
M0975-10A	C-3-2-061313	06/18/2013	23.295	76.705	Yes
M0975-11A	COMP-C-061313	06/18/2013	17.278	82.722	Yes
M0975-12A	D-1-1-061313	06/18/2013	17.479	82.521	Yes
M0975-13A	D-3-4-061313	06/18/2013	19.204	80.796	Yes
M0975-14A	COMP-D-061313	06/18/2013	20.900	79.100	Yes
M0975-15A	E-1-3-061313	06/18/2013	15.889	84.111	Yes
M0975-16A	E-2-4-061313	06/18/2013	24.763	75.237	Yes
M0975-17A	E-3-2-061313	06/18/2013	23.279	76.721	Yes
M0975-18A	COMP-E-061313	06/18/2013	16.103	83.897	Yes

Spectrum Analytical, Inc. RI Division E5  
 GC Semivolatiles Laboratory

Injection Log

METHOD: 8081  
 ICAL DATE: 6/19/13

ANALYST: OMO

START BATCH: 130619BF.B Start: 19-JUN-13 13:50  
 END BATCH: 130619BF.B End: 19-JUN-13 19:07

Internal Standard:  
 Comments:

Inlet Maintenance By:  
 Liner :           
 Column :           
 Inlet Seal:           
 Septum :         

8081 ICAC  
 6/19/13  
 Manual Integration: OMO MI Review: 6/19/13

Reviewed By: 6/19/13

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	SURROGATES				ANALYST CHECK	COMMENTS	
						FRONT TCMX	REAR TCMX	DILN	FLAGS			
E5J7603F/R	13:50	P1BLKJA	P1BLKJA			31	31	29*				
E5J7604F/R	14:08	RESCJ5	RESCJ5			SL						
E5J7605F/R	14:25	PEMJ5	PEMJ5			AQ						
E5J7606F/R	14:43	TOXAPH6J5	TOXAPH6J5			AQ						
E5J7607F/R	15:00	TOXAPH1J5	TOXAPH1J5			AQ						
E5J7608F/R	15:18	TOXAPH2J5	TOXAPH2J5			AQ						
E5J7609F/R	15:36	TOXAPH3J5	TOXAPH3J5			AQ						
E5J7610F/R	15:53	TOXAPH4J5	TOXAPH4J5			AQ						
E5J7611F/R	16:11	TOXAPH5J5	TOXAPH5J5			AQ						
E5J7612F/R	16:28	TC3J5	TC3J5			AQ						
E5J7613F/R	16:46	INDC6J5	INDC6J5			AQ						
E5J7614F/R	17:04	INDC1J5	INDC1J5			AQ						
E5J7615F/R	17:22	INDC2J5	INDC2J5			AQ						
E5J7616F/R	17:39	INDC3J5	INDC3J5			AQ						
E5J7617F/R	17:57	INDC4J5	INDC4J5			AQ						
E5J7618F/R	18:15	INDC5J5	INDC5J5			AQ						
E5J7619F/R	18:32	INDC1CVJ5	INDC1CVJ5			AQ						
E5J7620F/R	18:50	P1BLKJA	P1BLKJA	13061	AQ	34	32	29*				
E5J7621F/R	19:07	PEMJA	PEMJA	13061	AQ							

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

OMO  
6/19/13

**Spectrum Analytical, Inc. RI Division - PEST/PCB RUN LOGBOOK: INSTRUMENT E5**

START BATCH: 130620F.B    END: 20-JUN-13 12:15  
 END BATCH: 130620F.B    END: 21-JUN-13 04:01

ANALYST: CLM

METHOD: 2081

INJECTION Log

CLIENT ID

LAB ID

TIME

FILE

PREP BATCH

MT

FRONT

REAR

DI LN

FLAGS

ANALYST

CHECK

COMMENTS

Inlet Maintenance By:

Liner :  
 Column : T  
 Inlet Seal :  
 Septum :

STDS    Range 77

Reviewed By: CLM    Manual Integration: N/A    MI Review: N/A

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	FRONT	REAR	DI LN	FLAGS	ANALYST	CHECK	COMMENTS
E5J7628F/R	12:15	PIBLKJA	PIBLKJA	AQ	30*	31	35	29*				
E5J7629F/R	12:32	PEMJA	PEMJA	AQ								
E5J7630F/R	12:50	INDC3JA	INDC3JA	AQ								
E5J7631F/R	13:08	TOXAPH3JA	TOXAPH3JA	AQ								
E5J7632F/R	13:26	TC3JA	TC3JA	AQ								
E5J7633F/R	13:43	MB-72221	MB-72221	AQ	101	104	94					
E5J7634F/R	14:01	LCS-72221	LCS-72221	AQ	101	104	96					
E5J7635F/R	14:18	M0939-01B	ET01 GRAB	AQ	76	87	90	83				
E5J7636F/R	14:36	MB-72288	MB-72288	SL	89	96	100	90				
E5J7637F/R	14:56	LCS-72288	LCS-72288	SL	91	97	99	92				
E5J7638F/R	15:13	LCS-D-72288	LCS-D-72288	SL	90	98	100	92				
E5J7639F/R	15:31	M0967-01A	RS-BF-A79-061311	SL	66	76	75	74				
E5J7640F/R	15:48	M0975-02A	RS-BF-A81-061311	SL	62	71	70	68				
E5J7641F/R	16:06	M0975-04A	COMP-A-061313	SL	65	73	74	72				
E5J7642F/R	16:23	M0975-07A	COMP-B-061313	SL	60	68	68	66				
E5J7643F/R	16:41	M0975-11A	COMP-C-061313	SL	71	78	81	76				
E5J7644F/R	16:58	M0975-14A	COMP-D-061313	SL	71	78	82	78				
E5J7645F/R	17:15	M0975-18A	COMP-E-061313	SL	70	74	78	75				
E5J7646F/R	17:33	MB-72321	MB-72321	AQ	84	92	93	88				
E5J7647F/R	17:50	LCS-72338	LCS-72338	AQ	85	96	96	93				
E5J7648F/R	18:08	LCS-D-72338	LCS-D-72338	AQ	84	95	95	91				
E5J7649F/R	18:25	M0992-01A	WC-PAH-3A-1	AQ	61	51	65	51				
E5J7650F/R	18:43	M0992-01AMS	WC-PAH-3A-1MS	AQ	56	47	65	47				
E5J7651F/R	19:00	PIBLKJB	PIBLKJB	AQ	32	34	34	32				
E5J7652F/R	19:18	PEMJB	PEMJB	AQ								
E5J7653F/R	19:35	INDC3JB	INDC3JB	AQ								
E5J7654F/R	19:53	TOXAPH3JB	TOXAPH3JB	AQ								

\* - One or more target compounds are above the calibration range  
 \* - One or more spike compounds are outside of control limits  
 \* - Surrogate is outside of control limits  
 \* - Surrogate is diluted

CLM  
6/21/13



# Spectrum Analytical, Inc. RI Division - PEST/PCB RUN LOGBOOK: INSTRUMENT E5

Spectrum Analytical, Inc. RI Division E5 Injection Log  
 METHOD: 2081 ANALYST: [Signature]  
 INTERNAL DATE: 6/11/13 START BATCH: 130620F.B END BATCH: 130620F.B  
 Start: 20-JUN-13 12:15  
 End: 21-JUN-13 04:01

Inlet Maintenance By:  
 Liner :  
 Column :  
 Inlet Seal: T  
 Septum :

Internal Standard:  
 Comments:  
 Reviewed By: [Signature] Manual Integration: WNS MI Review: NA  
 STDS Recyge 77

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	SURROGATES				DILN	ANALYST			COMMENTS					
						TCMX	DCB	FRONT	REAR		TCMX	DCB	DCB		DCB	DCB	DCB	DCB	DCB
E5J7655F/R	20:10	TC3JB	TC3JB																
E5J7656F/R	20:28	MB-72127	MB-72127	72127	AQ														
E5J7657F/R	20:45	LCS-72127	LCS-72127	72127	AQ	82	88	96	92										
E5J7658F/R	21:02	LCSD-72127	LCSD-72127	72127	AQ	85	90	101	94										
E5J7659F/R	21:20	M0891-02B	OU7-060413FB	72127	AQ	81	86	94	91										
E5J7660F/R	21:37	M0891-04B	OU7-MW142D	72127	AQ	79	56	91	60										
E5J7661F/R	21:55	M0891-06B	OU7-MW142I	72127	AQ	74	71	83	76										
E5J7662F/R	22:12	M0891-08B	OU7-MW143D	72127	AQ	74	68	88	72										
E5J7663F/R	22:29	M0891-10B	OU7-MW143I	72127	AQ	75	56	88	59										
E5J7664F/R	22:47	M0891-12B	OU7-MW148S	72127	AQ	76	55	90	58										
E5J7665F/R	23:04	M0891-14B	OU7-060413FD	72127	AQ	70	67	84	72										
E5J7666F/R	23:22	PIBLKJC	PIBLKJC		AQ	72	72	84	79										
E5J7667F/R	23:39	PEMJC	PEMJC		AQ	30	32	35	34										
E5J7668F/R	23:57	INDC3JC	INDC3JC		AQ														
E5J7669F/R	00:14	TOXAPH3JC	TOXAPH3JC		AQ														
E5J7670F/R	00:32	TC3JC	TC3JC		AQ														
E5J7671F/R	00:49	MB-72316	MB-72316	72316	SL	79	89	95	95										
E5J7672F/R	01:07	LCS-72316	LCS-72316	72316	SL	78	88	94	94										
E5J7673F/R	01:24	LCSD-72316	LCSD-72316	72316	SL	75	88	89	94										
E5J7674F/R	01:41	M0954-01A	5-N-5A	72316	SL	59	65	81	70										
E5J7675F/R	01:59	M0954-02A	5-N-5B	72316	SL	66	69	84	79										
E5J7676F/R	02:16	M0954-09A	2-AREAL-B5A	72316	SL	62	84	88	74										
E5J7677F/R	02:34	M0954-10A	2-AREAL-B5B	72316	SL	67	69	80	84										
E5J7678F/R	02:51	PIBLKJD	PIBLKJD		AQ	31	32	34	31										
E5J7679F/R	03:08	PEMJD	PEMJD		AQ														
E5J7680F/R	03:26	INDC3JD	INDC3JD		AQ														
E5J7681F/R	03:43	TOXAPH3JD	TOXAPH3JD		AQ														

NOT needed

done 6/11/13

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 E5**

Spectrum Analytical, Inc. RI Division E5 Injection Log      METHOD: *QUP*      ANALYST: *QUP*      START BATCH: 130620F.B      Start: 20-JUN-13 12:15  
 GC Semivolatiles Laboratory      ICAL DATE: *6/13*      END BATCH: 130620F.B      End: 21-JUN-13 04:01

Inlet Maintenance By:  
 Liner : *B*  
 Column :  
 Inlet Seal:  
 Septum :

*STDs Range 77*

Reviewed By: *G. J. [Signature]*      Manual Integration: *WNS*      MI Review: *NAF*

FILE	TIME	LAB ID	CLIENT ID	PREP	MT	SURROGATES		DILN	ANALYST				
						FRONT	REAR		DCB	TCMX	DCB	TCMX	DCB
E5J7682F/R	04:01	TC3JD	TC3JD		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

Standard ID's

<i>Camp</i>	<i>Col 11/13</i>											
-------------	------------------	--	--	--	--	--	--	--	--	--	--	--

Comments

Reviewed \_\_\_\_\_



***SPECTRUM ANALYTICAL, INC.***

*Featuring*

***HANIBAL TECHNOLOGY***

**\* PCB Organics \***

## REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : GZA GeoEnvironmental of NY Buffalo

Project: Former Signore Facility

Laboratory Workorder / SDG #: M0975

SW846 8082A, PCB by GC-ECD

### I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

### II. 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.

### III. METHODS

Samples were analyzed following procedures in laboratory test code:  
SW846 8082A

### IV. PREPARATION

Soil Samples were prepared following procedures in laboratory test code:  
SW3550B

### V. INSTRUMENTATION

The following instrumentation was used

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.

## **VI. ANALYSIS**

### **A. Calibration:**

Calibrations met the method/SOP acceptance criteria.

### **B. Blanks:**

All method blanks were within the acceptance criteria.

### **C. Surrogates:**

Surrogate standard percent recoveries were within the QC limits.

### **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):**

No client-requested MS/MSD analyses were included in this SDG.

### **E. Dilutions:**

No sample in this SDG required analysis at dilution.

### **F. Samples:**

The lower concentration between the primary and confirmatory GC column concentrations is reported due to the presence of interferences unless otherwise indicated. P flags are assigned to compounds when D% between the two columns are greater than 40%.

No other unusual occurrences were noted during sample analysis.

### **G. Manual Integration**

Where needed, manual integrations were performed to improve data quality. The corrections were reviewed and associated hardcopies

generated and reported as required. Manual integrations are coded to provide the data reviewer justification for such action. The codes are labeled on the ion chromatogram signal (GC/MS signal) and chromatogram for GC based analysis as follows:

- M1 peak tailing or fronting
- M2 peak co-elution
- M3 rising or falling baseline
- M4 retention time shift
- M5 miscellaneous - under this category, the justification is explained
- M6 software did not integrate peak
- M7 partial peak integration

The following samples were manually integrated:

AR16601D2 Aroclor-1260 on front column , Decachlorobiphenyl  
on front column due to M6

AR16603DK Aroclor-1260 on rear column due to M6

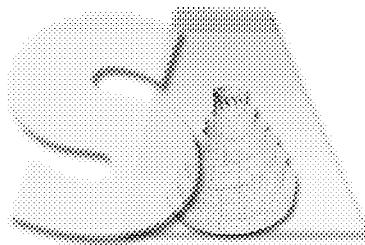
AR16606D2 Aroclor-1016 on front column , Aroclor-1260 on front  
column , Decachlorobiphenyl on front column due to M6

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.



Signed: \_\_\_\_\_

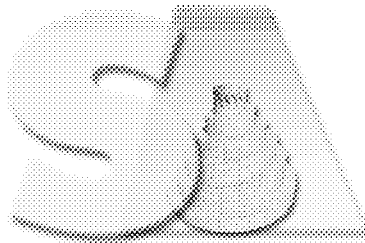
Date: \_\_\_\_\_ 6/27/2013 \_\_\_\_\_



*SPECTRUM ANALYTICAL, INC.*  
Featuring  
*HANIBAL TECHNOLOGY*

### **Data Flag/Qualifiers:**

- U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).
- J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
  - estimated concentration for Tentatively Identified Compound
- B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a “trace” concentration below the reporting limit and equal to or above the detection limit.
- D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis
- E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.
- P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.
- A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.
- N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.
- \* For Inorganics analysis the \* flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.



**SPECTRUM ANALYTICAL, INC.**  
*Featuring*  
**HANIBAL TECHNOLOGY**

## **Sample ID Suffixes**

- DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution
- RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.
- RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.
- RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.
- MS Matrix Spike.
- MSD Matrix Spike Duplicate
- DUP Duplicate analysis
- SD Serial Dilution
- PS Post-digestion or Post-distillation spike. For metals or inorganic analyses



2R - FORM II ARO-2  
SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 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	MB-72289	93	92	89	90			0
02	LCS-72289	100	97	89	90			0
03	LCSD-72289	97	95	91	93			0
04	COMP-A-06131 3	78	77	81	75			0
05	COMP-B-06131 3	74	73	73	75			0
06	COMP-C-06131 3	86	85	90	83			0
07	COMP-D-06131 3	85	85	89	82			0
08	COMP-E-06131 3	84	82	82	79			0

TCX = Tetrachloro-m-xylene  
 DCB = Decachlorobiphenyl

QC LIMITS  
 (34-147)  
 (60-125)

# Column to be used to flag recovery values  
 \* Values outside of QC limits  
 D Surrogate diluted out

som13.06.03.A

3P - FORM III ARO-4  
 SOIL AROCLOR LABORATORY CONTROL  
 SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-72289

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Lab Sample ID: LCS-72289 LCS Lot No.: A072217  
 Date Extracted: 06/18/2013 Date Analyzed (1): 06/19/2013  
 Instrument ID (1): E2 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC #	QC LIMITS
Aroclor-1016	133.3330	121.5978	91	40-140
Aroclor-1260	133.3330	122.4739	92	60-130

Instrument ID (2): E2 GC Column(2): CLPPestII ID: 0.53 (mm)  
 Date Analyzed (2): 06/19/2013

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC #	QC LIMITS
Aroclor-1016	133.3330	113.8541	85	40-140
Aroclor-1260	133.3330	84.1892	63	60-130

# 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 : \_\_\_\_\_  
 \_\_\_\_\_

3P - FORM III ARO-4  
 SOIL AROCLOR LABORATORY CONTROL  
 SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-72289

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Lab Sample ID: LCSD-72289 LCS Lot No.: A072217  
 Date Extracted: 06/18/2013 Date Analyzed (1): 06/19/2013  
 Instrument ID (1): E2 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC #	QC LIMITS	%RPD #	RPD LIMIT
Aroclor-1016	133.3330	120.6033	90	40-140	1.0	30
Aroclor-1260	133.3330	125.2841	94	60-130	2.0	30

Instrument ID (2): E2 GC Column(2): CLPPestII ID: 0.53 (mm)  
 Date Analyzed (2): 06/19/2013

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC #	QC LIMITS	%RPD #	RPD LIMIT
Aroclor-1016	133.3330	114.7297	86	40-140	1.0	30
Aroclor-1260	133.3330	86.2962	65	60-130	3.0	30

# Column to be used to flag recovery values with an asterisk

\* Values outside of QC limits

LCS Recovery: 0 out of 4 outside limits.

RPD: 0 out of 4 outside limits.

COMMENTS: \_\_\_\_\_  
 \_\_\_\_\_

4F - FORM IV ARO  
 AROCLOR METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-72289

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Lab File ID: E2M1009F.D / E2M1009R.D Lab Sample ID: MB-72289  
 Matrix: (SOIL/SED/WATER) SOIL Extraction: (Type) SONC Date Extracted: 06/18/2013  
 Sulfur Cleanup: (Y/N) Y GPC Cleanup:(Y/N) N  
 Acid Cleanup: (Y/N) Y  
 Date Analyzed (1): 06/19/2013 Date Analyzed (2): 06/19/2013  
 Time Analyzed (1): 10:58 Time Analyzed (2): 10:58  
 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	LCS-72289	LCS-72289	06/19/2013	06/19/2013
02	LCSD-72289	LCSD-72289	06/19/2013	06/19/2013
03	COMP-A-06131 3	M0975-04A	06/19/2013	06/19/2013
04	COMP-B-06131 3	M0975-07A	06/19/2013	06/19/2013
05	COMP-C-06131 3	M0975-11A	06/19/2013	06/19/2013
06	COMP-D-06131 3	M0975-14A	06/19/2013	06/19/2013
07	COMP-E-06131 3	M0975-18A	06/19/2013	06/19/2013

COMMENTS:

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1H - FORM I ARO  
 AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.  
 COMP-A-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-04A  
 Sample wt/vol: 30.3 (g/mL) G Lab File ID: E2M1014F.D/E2M1014R.D  
 % Moisture: 21 Decanted: (Y/N) N Date Received: 06/14/2013  
 Extraction: (Type) SONC Date Extracted: 06/18/2013  
 Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/19/2013  
 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:		Q
		(ug/L or ug/Kg)	UG/KG	
12674-11-2	Aroclor-1016	42		U
11104-28-2	Aroclor-1221	42		U
11141-16-5	Aroclor-1232	42		U
53469-21-9	Aroclor-1242	42		U
12672-29-6	Aroclor-1248	42		U
11097-69-1	Aroclor-1254	42		U
11096-82-5	Aroclor-1260	42		U

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130619F.B\E2M1014F.D  
 Lab Smp Id: M0975-04A Client Smp ID: COMP-A-061313  
 Inj Date : 19-JUN-2013 12:36  
 Operator : TM SRC: LIMS Inst ID: E2.i  
 Smp Info : M0975-04A,,72289,8082A.sub,,  
 Misc Info : 2,3,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130619F.B\E2\_LL\_PCB\_F.m  
 Meth Date : 19-Jun-2013 15:07 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 02:14 Cal File: E2M0477F.D  
 Als bottle: 10  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: 8082A.sub  
 Target Version: 4.14 Sample Matrix: SOIL  
 Processing Host: TARGET112

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

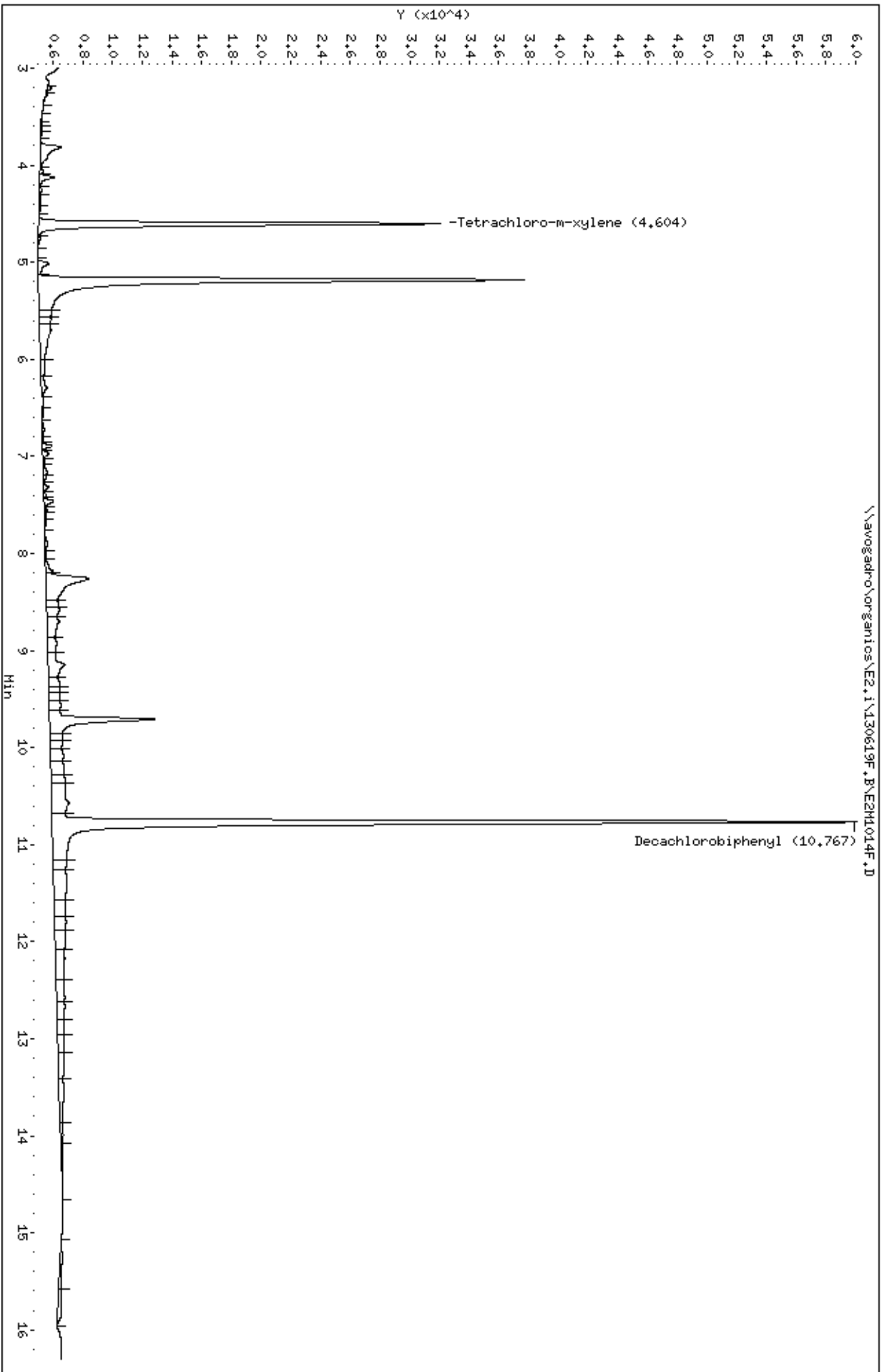
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.300	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
=====	=====	=====	RESPONSE ( ng)	(ug/Kg)	=====	=====
\$ 1					CAS #: 877-09-8	
4.603	4.565	0.038	26986	0.04669	15	
\$ 11					CAS #: 2051-24-3	
10.766	10.728	0.038	1901070	0.09705	32	

Data File: \\avogadro\organicos\E2.1\130619F.B\E2H1014F.D  
Date : 19-JUN-2013 12:36  
Client ID: COMP-A-061313  
Sample Info: M0975-04h,72289,8082h,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPest

Instrument: E2.1  
Operator: TH SRC: LIMS  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130619R.B\E2M1014R.D  
 Lab Smp Id: M0975-04A Client Smp ID: COMP-A-061313  
 Inj Date : 19-JUN-2013 12:36  
 Operator : TM SRC: LIMS Inst ID: E2.i  
 Smp Info : M0975-04A,,72289,8082A.sub,,  
 Misc Info : 2,3,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130619R.B\E2\_LL\_PCB\_R.m  
 Meth Date : 19-Jun-2013 15:08 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 02:14 Cal File: E2M0477R.D  
 Als bottle: 10  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: 8082A.sub  
 Target Version: 4.14 Sample Matrix: SOIL  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.300	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS

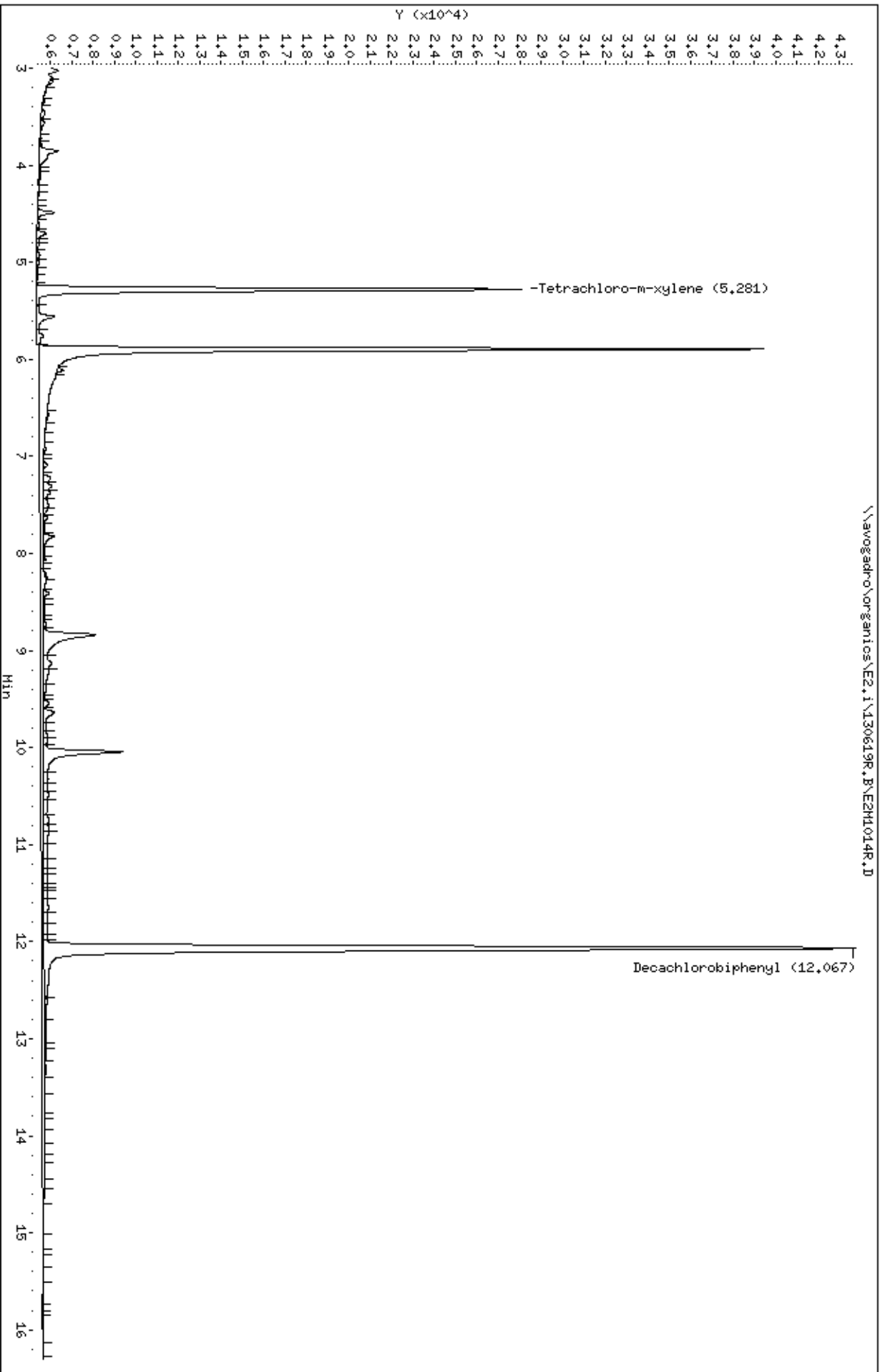
RT	EXP RT	DLT RT	ON-COL	FINAL	RESPONSE ( ng)	(ug/Kg)	TARGET RANGE	RATIO
\$ 1								
5.280	5.242	0.038	22657	0.04599	15			
\$ 11								
12.067	12.018	0.049	38045	0.08974	30			



Data File: \\avogadro\organicos\E2.i\130619R.B\E2H1014R.D  
Date : 19-JUN-2013 12:36  
Client ID: COMP-A-061313  
Sample Info: M0975-04A,72289,8082A,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPestH1

Instrument: E2.i  
Operator: TH SRC: LIMS  
Column diameter: 0.32

\\avogadro\organicos\E2.i\130619R.B\E2H1014R.D



1H - FORM I ARO  
 AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

COMP-B-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-07A  
 Sample wt/vol: 30.1 (g/mL) G Lab File ID: E2M1015F.D/E2M1015R.D  
 % Moisture: 21 Decanted: (Y/N) N Date Received: 06/14/2013  
 Extraction: (Type) SONC Date Extracted: 06/18/2013  
 Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/19/2013  
 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:		Q
		(ug/L or ug/Kg)	UG/KG	
12674-11-2	Aroclor-1016	41		U
11104-28-2	Aroclor-1221	41		U
11141-16-5	Aroclor-1232	41		U
53469-21-9	Aroclor-1242	41		U
12672-29-6	Aroclor-1248	41		U
11097-69-1	Aroclor-1254	41		U
11096-82-5	Aroclor-1260	41		U

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130619F.B\E2M1015F.D  
 Lab Smp Id: M0975-07A Client Smp ID: COMP-B-061313  
 Inj Date : 19-JUN-2013 12:56  
 Operator : TM SRC: LIMS Inst ID: E2.i  
 Smp Info : M0975-07A,,72289,8082A.sub,,  
 Misc Info : 2,3,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130619F.B\E2\_LL\_PCB\_F.m  
 Meth Date : 19-Jun-2013 15:07 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 02:14 Cal File: E2M0477F.D  
 Als bottle: 11  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: 8082A.sub  
 Target Version: 4.14 Sample Matrix: SOIL  
 Processing Host: TARGET112

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

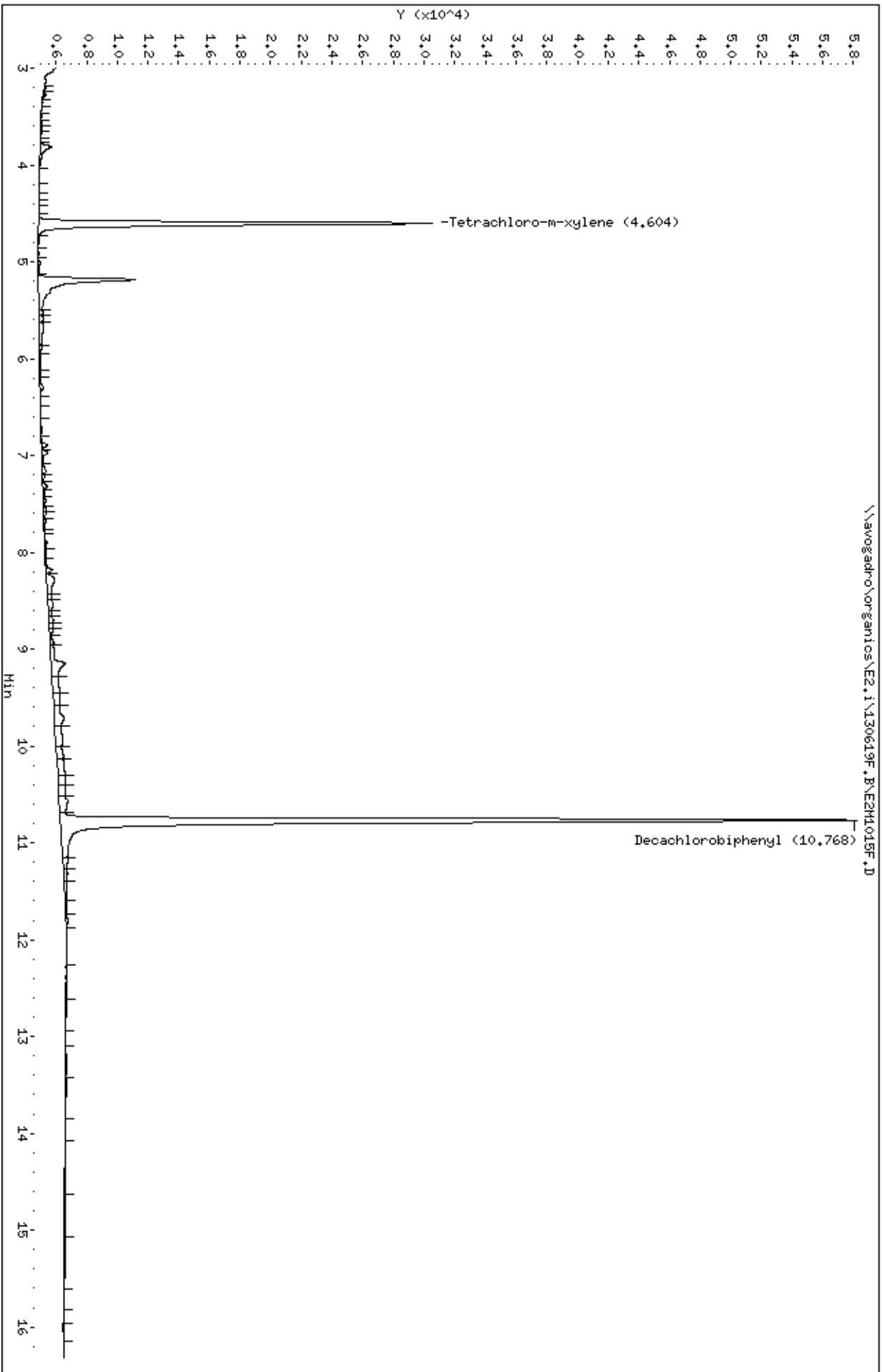
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.100	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
=====	=====	=====	RESPONSE ( ng)	(ug/Kg)	=====	=====
\$ 1					CAS #: 877-09-8	
4.603	4.565	0.038	25626	0.04434	15	
-----						
\$ 11					CAS #: 2051-24-3	
10.767	10.728	0.039	1723923	0.08801	29	
-----						

Data File: \\avogadro\organicos\E2.1\130619F.B\E2H101SF.D  
Date : 19-JUN-2013 12:56  
Client ID: COMP-B-061313  
Sample Info: M0975-07A,72289,8082A,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPrest

Instrument: E2.1  
Operator: TH SRC: LIMS  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130619R.B\E2M1015R.D  
 Lab Smp Id: M0975-07A Client Smp ID: COMP-B-061313  
 Inj Date : 19-JUN-2013 12:56  
 Operator : TM SRC: LIMS Inst ID: E2.i  
 Smp Info : M0975-07A,,72289,8082A.sub,,  
 Misc Info : 2,3,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130619R.B\E2\_LL\_PCB\_R.m  
 Meth Date : 19-Jun-2013 15:08 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 02:14 Cal File: E2M0477R.D  
 Als bottle: 11  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: 8082A.sub  
 Target Version: 4.14 Sample Matrix: SOIL  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.100	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

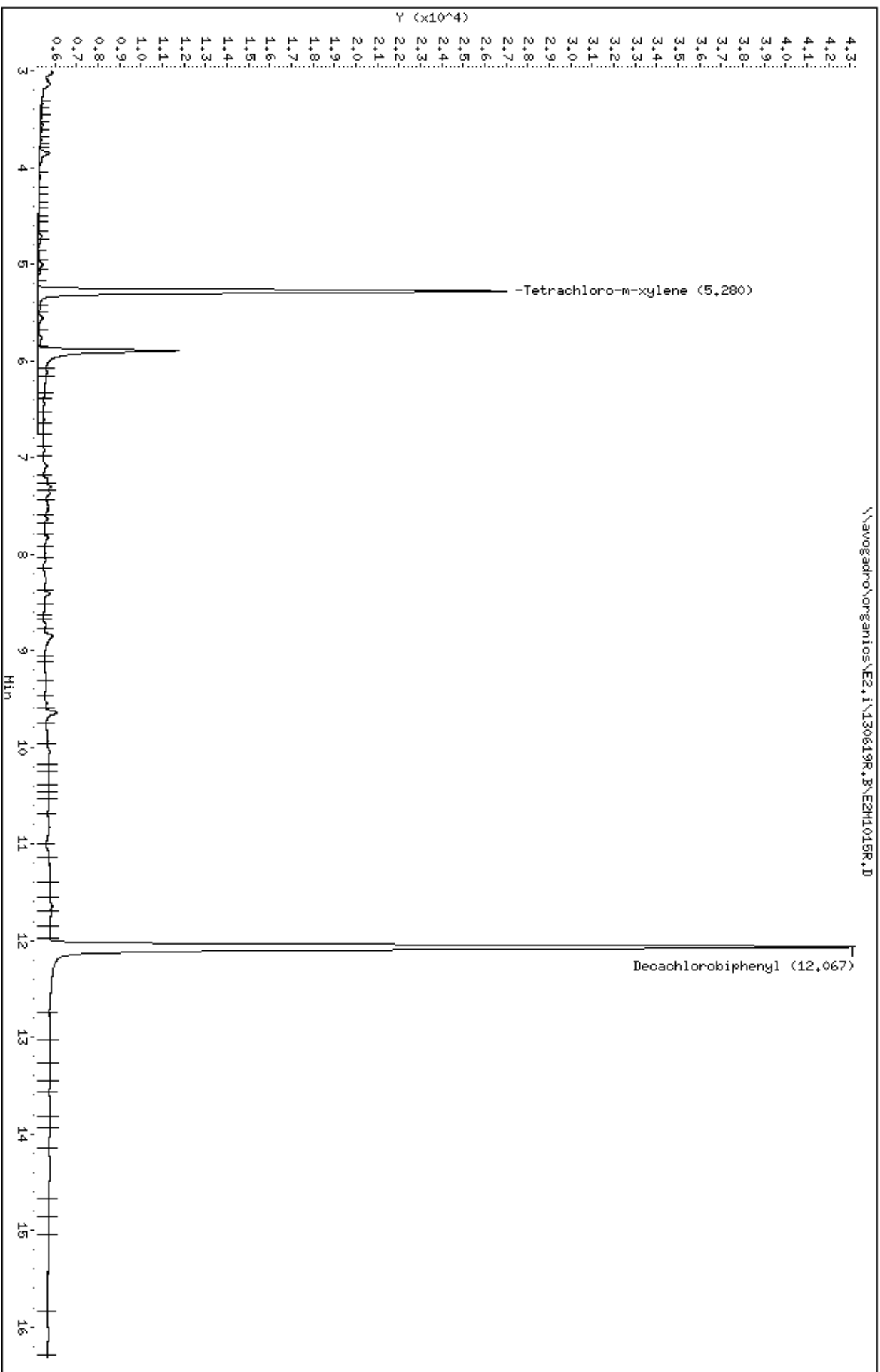
CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
=====	=====	=====	RESPONSE ( ng)	(ug/Kg)	=====	=====
\$ 1					CAS #: 877-09-8	
5.280	5.242	0.038	21695	0.04404	15	
-----						
\$ 11					CAS #: 2051-24-3	
12.066	12.018	0.048	38082	0.08983	30	
-----						

Data File: \\avogadro\organicos\E2.i\130619R.B\E2H101SR.D  
Date : 19-JUN-2013 12:56  
Client ID: COMP-B-061313  
Sample Info: M0975-07A,,72289,8082A,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPestH1

Instrument: E2.i  
Operator: TH SRC: LIMS  
Column diameter: 0.32

\\avogadro\organicos\E2.i\130619R.B\E2H101SR.D



1H - FORM I ARO  
 AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

COMP-C-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-11A  
 Sample wt/vol: 30.4 (g/mL) G Lab File ID: E2M1016F.D/E2M1016R.D  
 % Moisture: 17 Decanted: (Y/N) N Date Received: 06/14/2013  
 Extraction: (Type) SONC Date Extracted: 06/18/2013  
 Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/19/2013  
 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:		Q
		(ug/L or ug/Kg)	UG/KG	
12674-11-2	Aroclor-1016	39		U
11104-28-2	Aroclor-1221	39		U
11141-16-5	Aroclor-1232	39		U
53469-21-9	Aroclor-1242	39		U
12672-29-6	Aroclor-1248	39		U
11097-69-1	Aroclor-1254	39		U
11096-82-5	Aroclor-1260	39		U

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130619F.B\E2M1016F.D  
 Lab Smp Id: M0975-11A Client Smp ID: COMP-C-061313  
 Inj Date : 19-JUN-2013 13:16  
 Operator : TM SRC: LIMS Inst ID: E2.i  
 Smp Info : M0975-11A,,72289,8082A.sub,,  
 Misc Info : 2,3,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130619F.B\E2\_LL\_PCB\_F.m  
 Meth Date : 19-Jun-2013 15:07 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 02:14 Cal File: E2M0477F.D  
 Als bottle: 12  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: 8082A.sub  
 Target Version: 4.14 Sample Matrix: SOIL  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.400	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

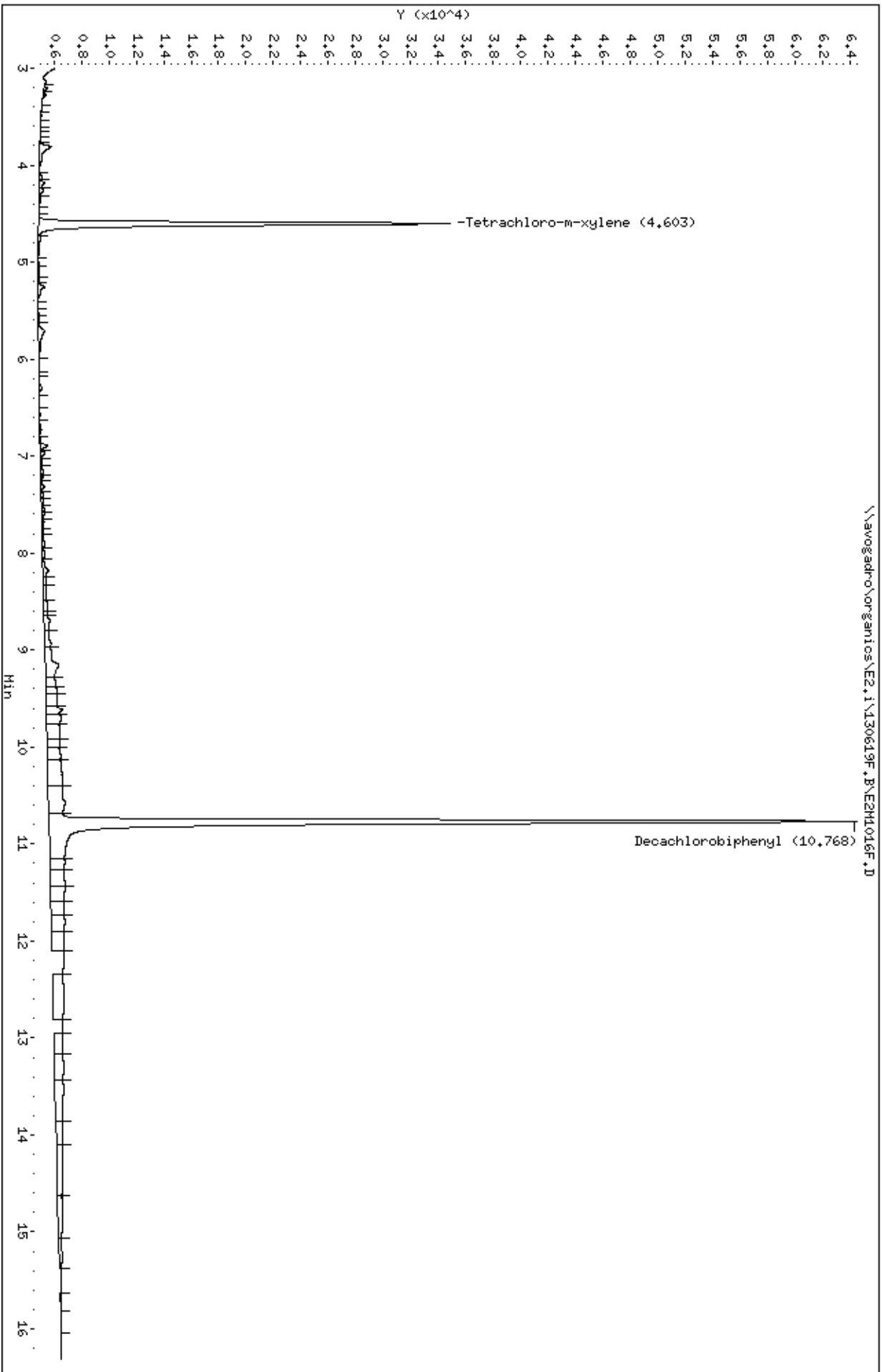
CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
=====	=====	=====	RESPONSE ( ng)	(ug/Kg)	=====	=====
\$ 1					CAS #: 877-09-8	
4.603	4.565	0.038	29890	0.05171	17	
-----						
\$ 11					CAS #: 2051-24-3	
10.767	10.728	0.039	2112790	0.10786	35	
-----						



Data File: \\avogadro\organicos\E2.i\130619F.B\E2H1016F.D  
Date: 19-JUN-2013 13:16  
Client ID: COMP-C-061313  
Sample Info: M0975-11A, 72289, 8082A, sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPest

Instrument: E2.i  
Operator: TH SRC: LIMS  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130619R.B\E2M1016R.D  
 Lab Smp Id: M0975-11A Client Smp ID: COMP-C-061313  
 Inj Date : 19-JUN-2013 13:16  
 Operator : TM SRC: LIMS Inst ID: E2.i  
 Smp Info : M0975-11A,,72289,8082A.sub,,  
 Misc Info : 2,3,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130619R.B\E2\_LL\_PCB\_R.m  
 Meth Date : 19-Jun-2013 15:08 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 02:14 Cal File: E2M0477R.D  
 Als bottle: 12  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: 8082A.sub  
 Target Version: 4.14 Sample Matrix: SOIL  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.400	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

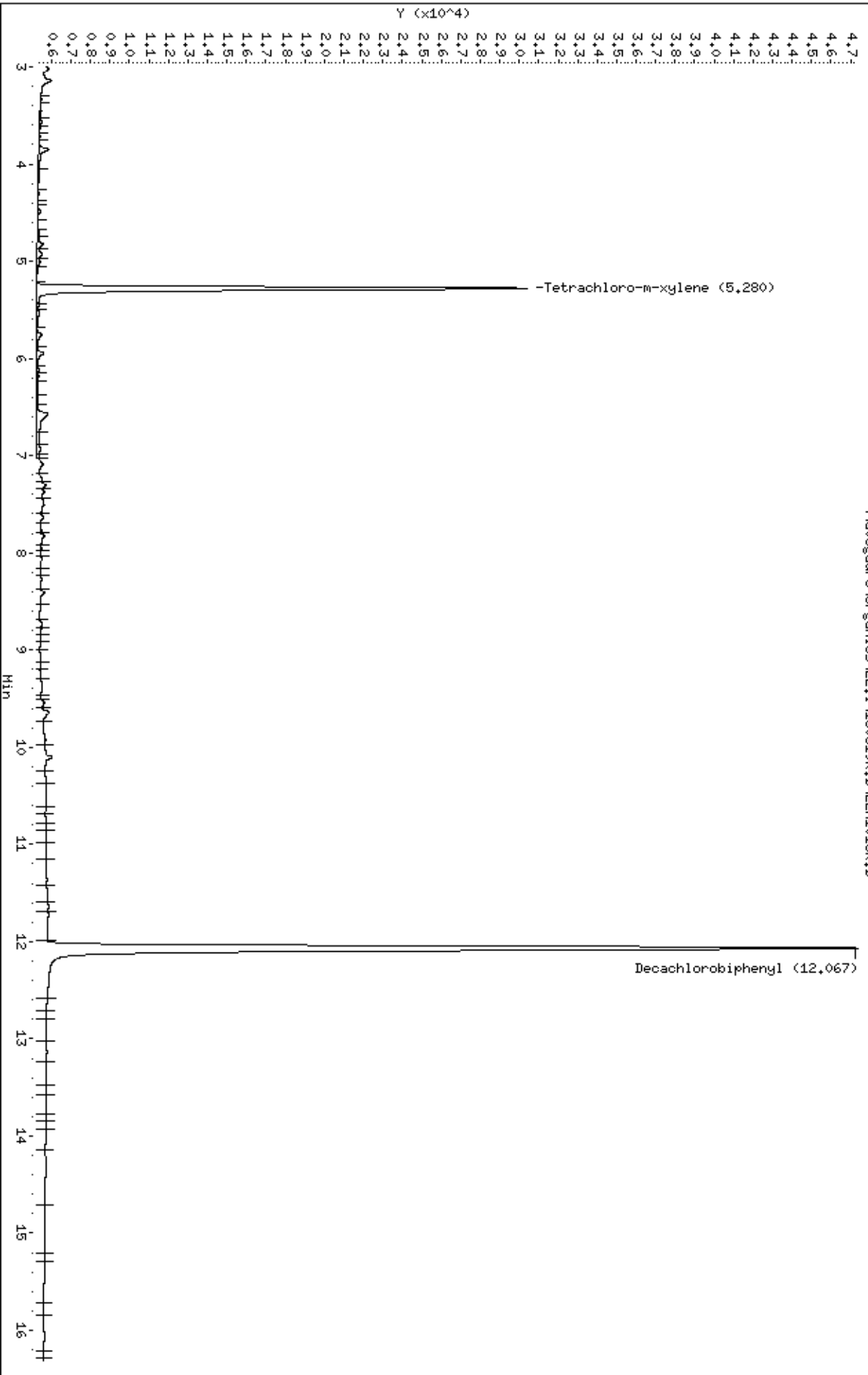
CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	RESPONSE ( ng)	(ug/Kg)	TARGET RANGE	RATIO
\$ 1								
5.279	5.242	0.037	25030	0.05081	17			
\$ 11								
12.067	12.018	0.049	42225	0.09960	33			

Data File: \\avogadro\organicos\E2.1\130619R.B\E2H1016R.D  
Date : 19-JUN-2013 13:16  
Client ID: COMP-C-061313  
Sample Info: M0975-11A,,72289,8082A,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPestII

Instrument: E2.1  
Operator: TH SRC: LIMS  
Column diameter: 0.32

\\avogadro\organicos\E2.1\130619R.B\E2H1016R.D



1H - FORM I ARO  
 AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

COMP-D-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-14A  
 Sample wt/vol: 30.1 (g/mL) G Lab File ID: E2M1017F.D/E2M1017R.D  
 % Moisture: 21 Decanted: (Y/N) N Date Received: 06/14/2013  
 Extraction: (Type) SONC Date Extracted: 06/18/2013  
 Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/19/2013  
 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:		Q
		(ug/L or ug/Kg)	UG/KG	
12674-11-2	Aroclor-1016	42		U
11104-28-2	Aroclor-1221	42		U
11141-16-5	Aroclor-1232	42		U
53469-21-9	Aroclor-1242	42		U
12672-29-6	Aroclor-1248	42		U
11097-69-1	Aroclor-1254	42		U
11096-82-5	Aroclor-1260	42		U

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130619F.B\E2M1017F.D  
 Lab Smp Id: M0975-14A Client Smp ID: COMP-D-061313  
 Inj Date : 19-JUN-2013 13:36  
 Operator : TM SRC: LIMS Inst ID: E2.i  
 Smp Info : M0975-14A,,72289,8082A.sub,,  
 Misc Info : 2,3,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130619F.B\E2\_LL\_PCB\_F.m  
 Meth Date : 19-Jun-2013 15:07 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 02:14 Cal File: E2M0477F.D  
 Als bottle: 13  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: 8082A.sub  
 Target Version: 4.14 Sample Matrix: SOIL  
 Processing Host: TARGET112

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

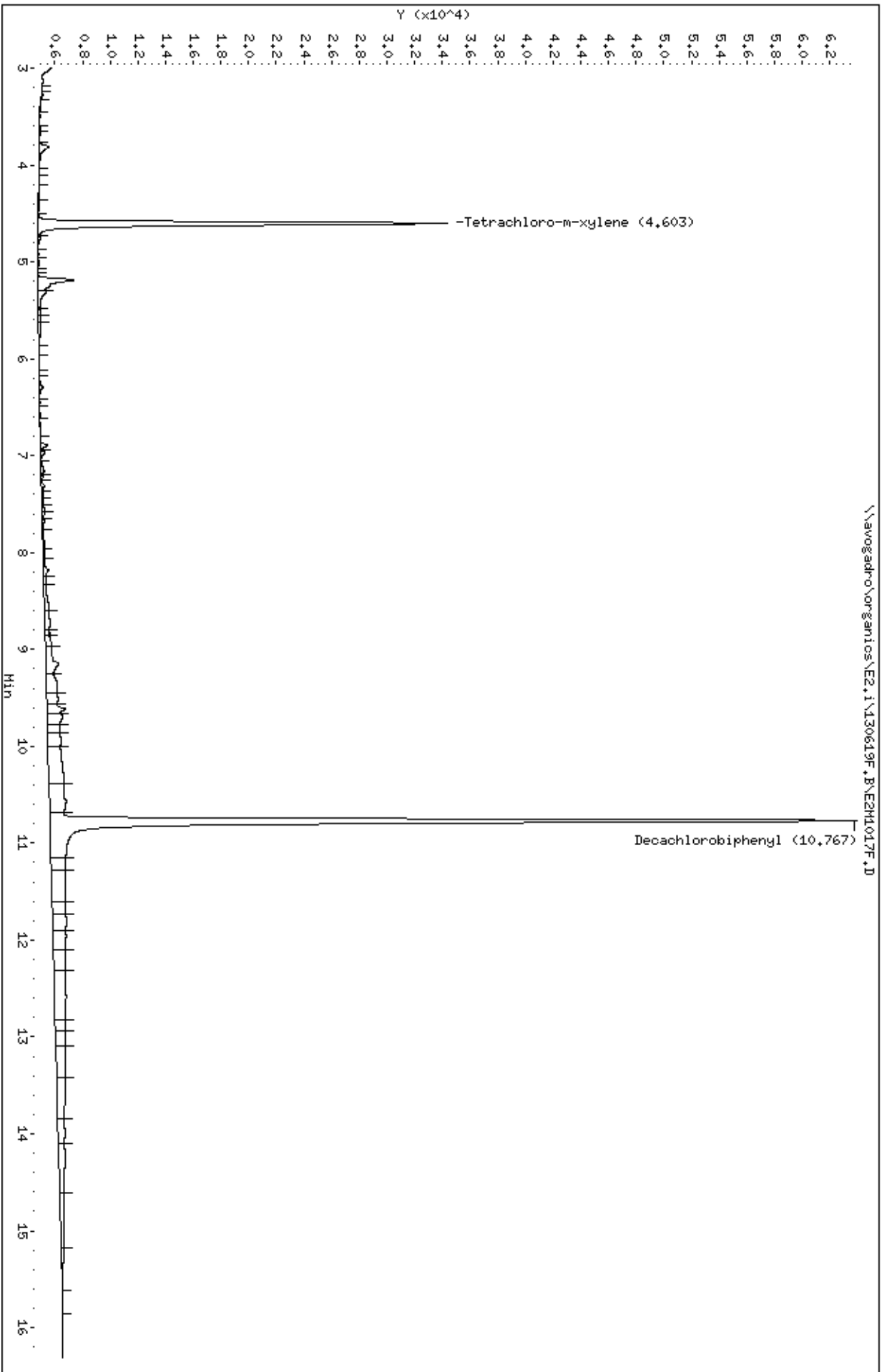
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.100	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	RESPONSE ( ng)	(ug/Kg)	TARGET RANGE	RATIO
\$ 1								
4.602	4.565	0.037	29492	0.05102	17			
\$ 11								
10.767	10.728	0.039	2097624	0.10708	36			

Data File: \\avogadro\organicos\E2.1\130619F.B\E2H1017F.D  
Date : 19-JUN-2013 13:36  
Client ID: COMP-D-061313  
Sample Info: M0975-14h, 72289, 8082A, sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPest

Instrument: E2.1  
Operator: TH SRC: LIMS  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130619R.B\E2M1017R.D  
 Lab Smp Id: M0975-14A Client Smp ID: COMP-D-061313  
 Inj Date : 19-JUN-2013 13:36  
 Operator : TM SRC: LIMS Inst ID: E2.i  
 Smp Info : M0975-14A,,72289,8082A.sub,,  
 Misc Info : 2,3,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130619R.B\E2\_LL\_PCB\_R.m  
 Meth Date : 19-Jun-2013 15:08 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 02:14 Cal File: E2M0477R.D  
 Als bottle: 13  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: 8082A.sub  
 Target Version: 4.14 Sample Matrix: SOIL  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.100	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

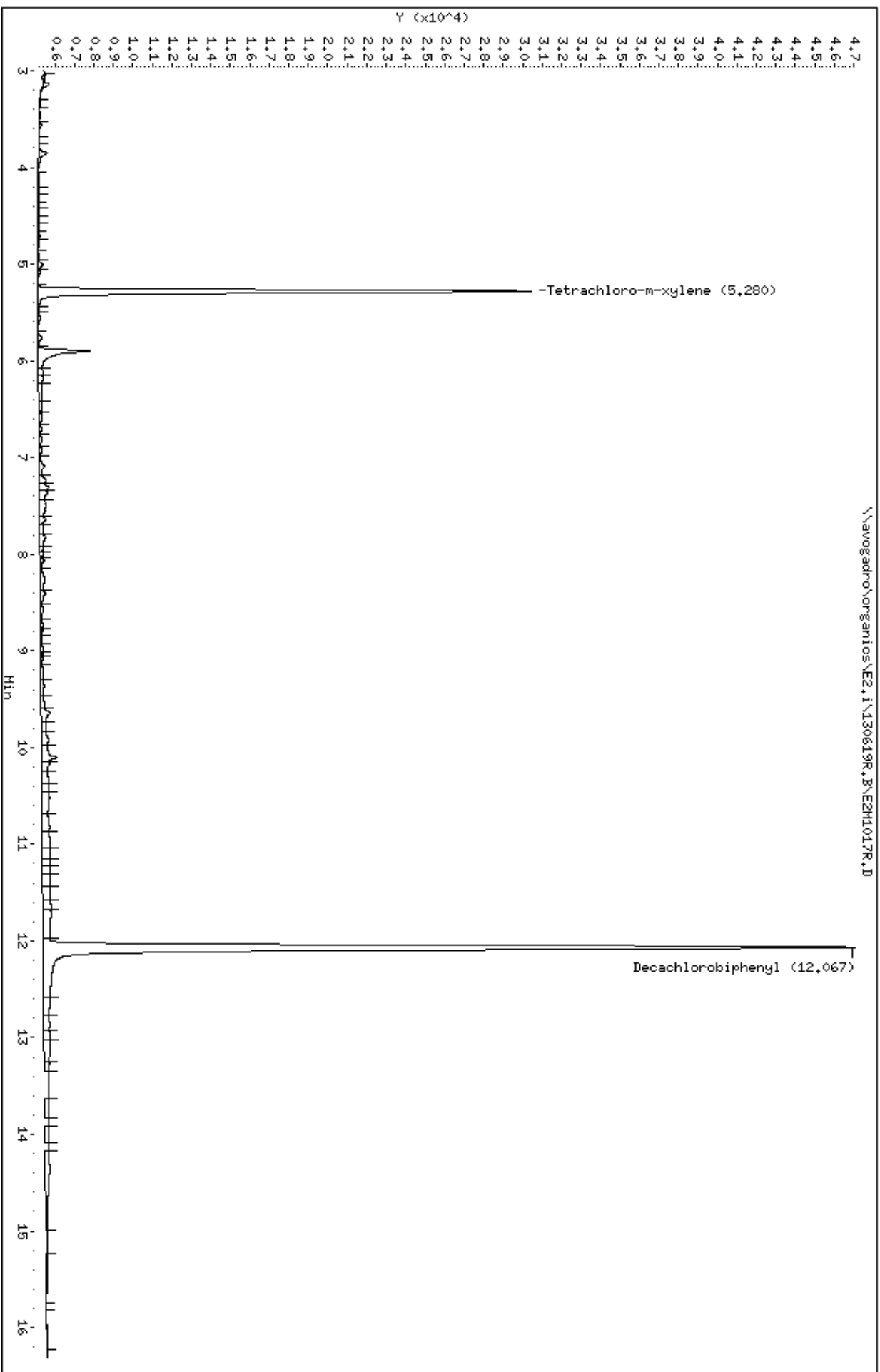
CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
=====	=====	=====	RESPONSE ( ng)	(ug/Kg)	=====	=====
\$ 1					CAS #: 877-09-8	
5.279	5.242	0.037	25146	0.05105	17	
-----						
\$ 11					CAS #: 2051-24-3	
12.067	12.018	0.049	41614	0.09816	33	
-----						

Data File: \\avogadro\organicos\E2.i\130619R.B\E2H1017R.D  
Date : 19-JUN-2013 13:36  
Client ID: COMP-D-061313  
Sample Info: M0975-14h,72289,8082A,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPestH1

Instrument: E2.i  
Operator: TH SRC: LIMS  
Column diameter: 0.32

\\avogadro\organicos\E2.i\130619R.B\E2H1017R.D





1H - FORM I ARO  
 AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

COMP-E-061313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0975-18A  
 Sample wt/vol: 30.0 (g/mL) G Lab File ID: E2M1018F.D/E2M1018R.D  
 % Moisture: 16 Decanted: (Y/N) N Date Received: 06/14/2013  
 Extraction: (Type) SONC Date Extracted: 06/18/2013  
 Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/19/2013  
 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:		Q
		(ug/L or ug/Kg)	UG/KG	
12674-11-2	Aroclor-1016	39		U
11104-28-2	Aroclor-1221	39		U
11141-16-5	Aroclor-1232	39		U
53469-21-9	Aroclor-1242	39		U
12672-29-6	Aroclor-1248	39		U
11097-69-1	Aroclor-1254	39		U
11096-82-5	Aroclor-1260	39		U

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130619F.B\E2M1018F.D  
 Lab Smp Id: M0975-18A Client Smp ID: COMP-E-061313  
 Inj Date : 19-JUN-2013 13:55  
 Operator : TM SRC: LIMS Inst ID: E2.i  
 Smp Info : M0975-18A,,72289,8082A.sub,,  
 Misc Info : 2,3,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130619F.B\E2\_LL\_PCB\_F.m  
 Meth Date : 19-Jun-2013 15:07 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 02:14 Cal File: E2M0477F.D  
 Als bottle: 14  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: 8082A.sub  
 Target Version: 4.14 Sample Matrix: SOIL  
 Processing Host: TARGET112

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

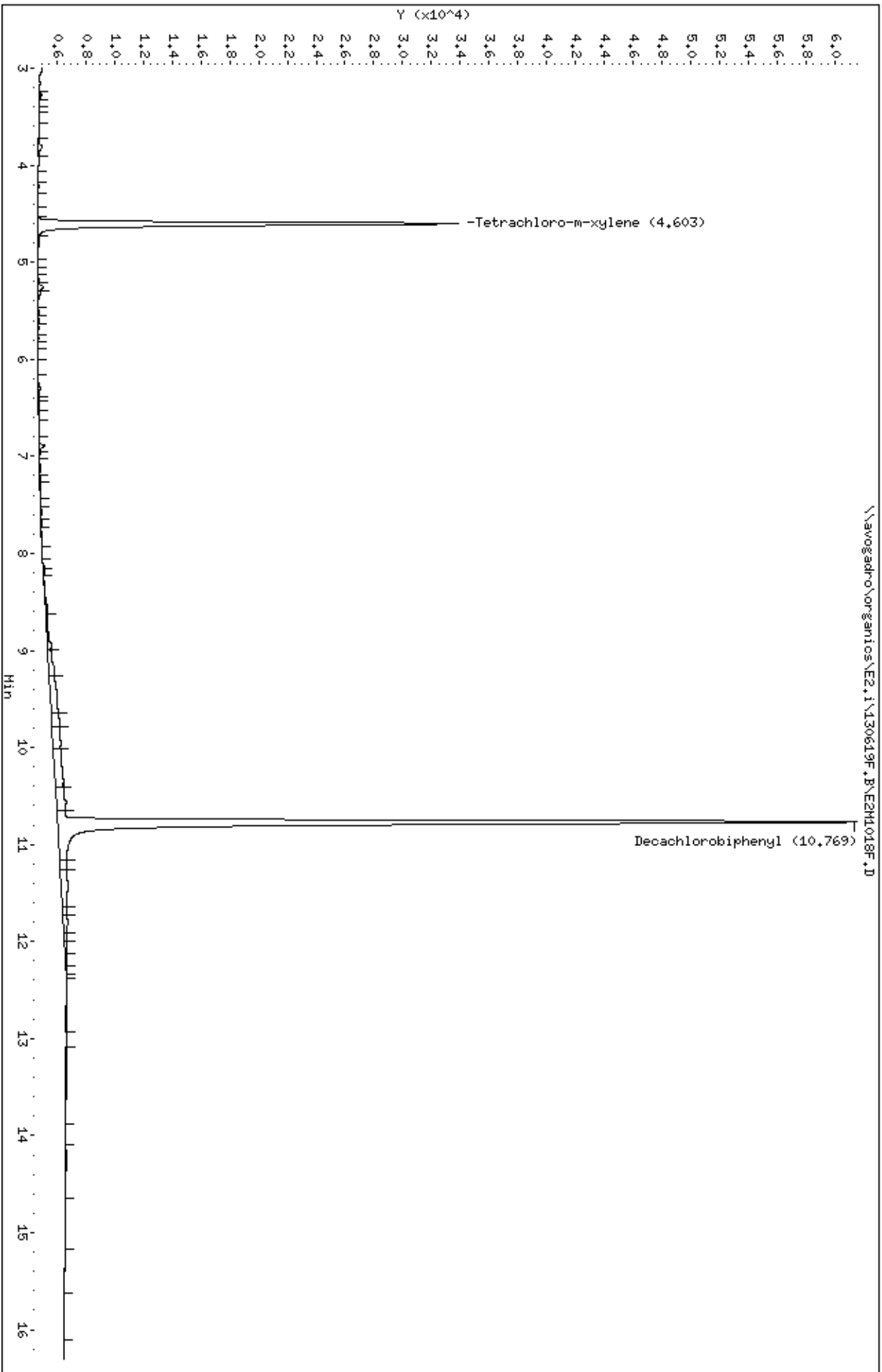
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
=====	=====	=====	RESPONSE ( ng)	(ug/Kg)	=====	=====
\$ 1					CAS #: 877-09-8	
4.602	4.565	0.037	29054	0.05027	17	
-----						
\$ 11					CAS #: 2051-24-3	
10.768	10.728	0.040	1925980	0.09832	33	
-----						

Data File: \\avogadro\organicos\E2.1\130619F.B\E2H1018F.D  
Date: 19-JUN-2013 13:55  
Client ID: COMP-E-061313  
Sample Info: M0975-18A,72289,8082A,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPest

Instrument: E2.1  
Operator: TH SRC: LIMS  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130619R.B\E2M1018R.D  
 Lab Smp Id: M0975-18A Client Smp ID: COMP-E-061313  
 Inj Date : 19-JUN-2013 13:55  
 Operator : TM SRC: LIMS Inst ID: E2.i  
 Smp Info : M0975-18A,,72289,8082A.sub,,  
 Misc Info : 2,3,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130619R.B\E2\_LL\_PCB\_R.m  
 Meth Date : 19-Jun-2013 15:08 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 02:14 Cal File: E2M0477R.D  
 Als bottle: 14  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: 8082A.sub  
 Target Version: 4.14 Sample Matrix: SOIL  
 Processing Host: TARGET112

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

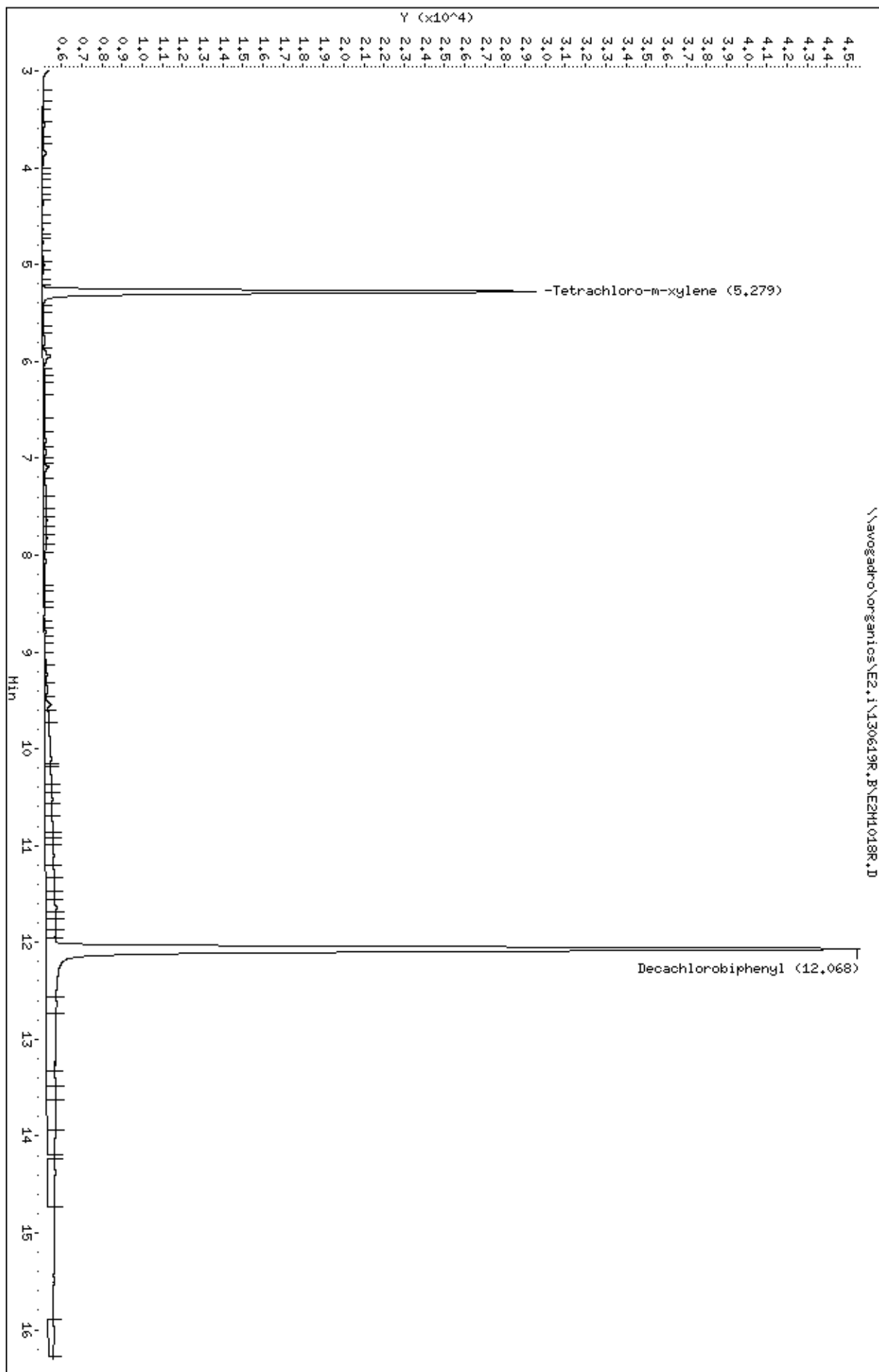
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
=====	=====	=====	RESPONSE ( ng)	(ug/Kg)	=====	=====
\$ 1					CAS #: 877-09-8	
5.279	5.242	0.037	24325	0.04938	16	
-----						
\$ 11					CAS #: 2051-24-3	
12.067	12.018	0.049	40336	0.09515	32	
-----						

Data File: \\avogadro\organicos\E2.i\130619R.B\E2H1018R.D  
Date : 19-JUN-2013 13:55  
Client ID: COMP-E-061313  
Sample Info: M0975-18A,72289,8082A,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPestH1

Instrument: E2.i  
Operator: TH SRC: LIMS  
Column diameter: 0.32



M0975 Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Instrument ID: E2

Level (x CS1): CS1 1.0 CS2 2.0 CS3 4.0 CS4 8.0 CS5 16.0 CS6 0.5 CS7 \_\_\_\_\_ CS8 \_\_\_\_\_ CS9 \_\_\_\_\_

GC Column: CLPest ID: 0.53 (mm) Date(s) Analyzed (1): 05/29/2013 05/30/2013

COMPOUND	PEAK*	RT OF STANDARDS															RT WINDOW **	
		CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8	CS9	RT	FROM	TO					
AR1016	1	5.759	5.759	5.757	5.756	5.757	5.758									5.758	5.688	5.828
	2	6.432	6.432	6.431	6.430	6.431	6.432									6.431	6.361	6.501
	3	6.613	6.613	6.612	6.610	6.611	6.612									6.612	6.542	6.682
AR1260	1	8.640	8.640	8.638	8.636	8.636	8.638									8.638	8.568	8.708
	2	8.893	8.892	8.890	8.887	8.886	8.892									8.890	8.820	8.960
	3	9.440	9.440	9.438	9.435	9.435	9.437									9.438	9.368	9.508
AR1242	1	6.609	6.610	6.610	6.610	6.609	6.611									6.610	6.540	6.680
	2	6.689	6.690	6.690	6.690	6.689	6.690									6.690	6.620	6.760
	3	6.870	6.870	6.871	6.871	6.870	6.870									6.870	6.800	6.940
AR1248	1	6.690	6.691	6.690	6.690	6.690	6.691									6.690	6.620	6.760
	2	7.118	7.119	7.118	7.117	7.117	7.119									7.118	7.048	7.188
	3	7.218	7.219	7.219	7.218	7.217	7.220									7.218	7.148	7.288
AR1254	1	7.818	7.818	7.818	7.817	7.817	7.819									7.818	7.748	7.888
	2	8.095	8.095	8.095	8.095	8.094	8.095									8.095	8.025	8.165
TCX (A)	3	8.215	8.215	8.215	8.213	8.213	8.215									8.214	8.144	8.284
		4.566	4.566	4.564	4.564	4.565										4.565	4.515	4.615
DCB (A)		10.730	10.730	10.730	10.728	10.729										10.729	10.629	10.829

\* 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

M0975 Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Instrument ID: E2

Level (x CS1): CS1 1.0 CS2 2.0 CS3 4.0 CS4 8.0 CS5 16.0 CS6 0.5 CS7 CS8 CS9  
 GC Column: CLPpestII ID: 0.53 (mm) Date(s) Analyzed (1): 05/29/2013 05/30/2013

COMPOUND	PEAK*	RT OF STANDARDS															RT WINDOW **	
		CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8	CS9	RT	FROM	TO					
AR1016	1	7.242	7.242	7.241	7.239	7.241	7.242									7.241	7.171	7.311
	2	7.403	7.402	7.401	7.399	7.401	7.403									7.401	7.331	7.471
	3	7.519	7.518	7.518	7.516	7.517	7.519									7.518	7.448	7.588
AR1260	1	9.055	9.054	9.053	9.051	9.051	9.055									9.053	8.983	9.123
	2	9.220	9.219	9.218	9.216	9.216	9.220									9.218	9.148	9.288
	3	9.519	9.517	9.517	9.514	9.514	9.517									9.516	9.446	9.586
AR1242	1	6.673	6.672	6.672	6.672	6.671	6.673									6.672	6.602	6.742
	2	6.988	6.988	6.988	6.988	6.987	6.988									6.988	6.918	7.058
	3	7.239	7.239	7.240	7.239	7.238	7.240									7.239	7.169	7.309
AR1248	1	7.397	7.399	7.398	7.398	7.397	7.399									7.398	7.328	7.468
	2	7.615	7.616	7.616	7.615	7.614	7.617									7.615	7.545	7.685
	3	7.900	7.900	7.900	7.899	7.899	7.901									7.900	7.830	7.970
AR1254	1	8.310	8.310	8.309	8.308	8.309	8.311									8.309	8.239	8.379
	2	8.480	8.480	8.479	8.478	8.478	8.481									8.479	8.409	8.549
	3	8.893	8.893	8.892	8.890	8.891	8.894									8.892	8.822	8.962
TCX (A)		5.247	5.244	5.242	5.242	5.243									5.243	5.193	5.293	
DCB (A)		12.021	12.020	12.020	12.017	12.018									12.019	11.919	12.119	

\* 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

AROCLOR INITIAL CALIBRATION (MULTIPOINT)

M0975

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: SDG No.: SM0975  
 Instrument ID: E2 Date(s) Analyzed: 05/29/2013 05/30/2013

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 CS6 0.5 CS7 CS8 CS9 16.0

COMPOUND	PEAK <sup>1</sup>	CALIBRATION FACTORS (CFs)											% RSD			
		CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8	CS9	CS9	16.0				
AR1016	1	25330	23695	21603	21023	17928	26160									13.5
	2	40330	38595	35643	36054	31359	41360									9.8
	3	21560	20825	19280	19531	17168	22060									8.9
AR1260	1	43620	42770	39533	41163	37762	45440									6.7
	2	36170	36835	34713	36926	35371	38100									3.3
	3	50830	51680	48118	51158	46084	63100									11.4
AR1242	1	15950	15530	15288	14774	14572	16720									5.1
	2	10690	10720	10723	10755	10819	11160									1.6
	3	14440	13935	13260	12534	11887	15620									9.9
AR1248	1	6040	5695	5568	5594	5373	6260									5.7
	2	27170	24980	23215	21988	20123	29220									13.8
	3	16900	15800	15130	14810	13852	17840									9.2
AR1254	1	37460	36125	34093	31211	29086	40340									11.9
	2	24940	24180	23890	22731	21897	24860									5.1
	3	35990	36325	35763	34180	33066	36880									4.1
DCB (A)	1	24188000	21215650	18460225	17371713	16706981										15.8
TCX (A)	e	586600	577200	568600	580675	576925										1.1

At least three peaks for each column are required for identification of Aroclors.



AROCLOR INITIAL CALIBRATION (MULTIPOINT)

M0975

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: SDG No.: SM0975  
 Instrument ID: E2 Date(s) Analyzed: 05/29/2013 05/30/2013

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 CS6 0.5 CS7 CS8 CS9 16.0

COMPOUND	PEAK <sup>1</sup>	CALIBRATION FACTORS (CFs)										% RSD			
		CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8	CS9	16.0				
AR1016	1	41420	39070	35705	35159	30241	46940								15.1
	2	22200	20775	18960	19138	16253	27340								18.2
	3	14670	13945	12865	13060	11580	19140								18.5
AR1260	1	34900	32835	30065	30830	27119	41000								14.6
	2	37330	37195	34483	35140	31524	45680								13.0
	3	37290	37230	34693	35569	32683	45560								12.0
AR1242	1	16730	15545	15008	14104	13333	18820								12.6
	2	9060	8280	8095	7813	7547	10080								11.1
	3	31640	29630	28598	27146	25328	33560								10.2
AR1248	1	10210	9165	8518	8194	7563	10880								13.9
	2	21770	19640	18050	16656	14972	24200								17.6
	3	25320	23255	21708	20444	18906	27860								14.3
AR1254	1	29100	28920	27293	24555	21419	32920								14.6
	2	29820	29735	28953	26334	23956	32940								10.9
	3	33380	35355	35625	33496	31710	35920								4.8
DCB (A)	1	480600	462950	411850	389900	374350									10.9
TCX (A)	e	509200	504900	483400	487175	478413									2.8

At least three peaks for each column are required for identification of Aroclors.

6Q - FORM VI ARO-3  
 AROCLOR INITIAL CALIBRATION (SINGLE POINT)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Instrument ID: E2 Date(s) Analyzed: 05/29/2013 05/30/2013  
 GC Column: CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT (ng)	PEAK <sup>1</sup>	RT	RT WINDOW		CALIBRATION FACTOR
				FROM	TO	
Aroclor-1221	0.4	1	3.76	3.69	3.83	6318
		2	4.35	4.28	4.42	1900
		3	4.84	4.77	4.91	7090
		4				
		5				
Aroclor-1232	0.4	1	4.84	4.77	4.91	4873
		2	5.16	5.09	5.23	14375
		3	6.06	5.99	6.13	5235
		4				
		5				

<sup>1</sup> 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: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Instrument ID: E2 Date(s) Analyzed: 05/29/2013 05/30/2013  
 GC Column: CLPPestII ID: 0.53 (mm)

COMPOUND	AMOUNT (ng)	PEAK <sup>1</sup>	RT	RT WINDOW		CALIBRATION FACTOR
				FROM	TO	
Aroclor-1221	0.4	1	4.40	4.33	4.47	5235
		2	5.06	4.99	5.13	1820
		3	5.76	5.69	5.83	6620
		4				
		5				
Aroclor-1232	0.4	1	5.76	5.69	5.83	4428
		2	5.99	5.92	6.06	3448
		3	6.08	6.01	6.15	12360
		4				
		5				

<sup>1</sup> At least three peaks for each column are required for identification of multicomponent analytes.

7N - FORM VII ARO  
 AROCLOR CALIBRATION VERIFICATION SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975

GC Column: CLPPest ID: 0.53 (mm) Calibration Date(s): 05/29/2013 05/30/2013

EPA Sample No. (AR####3##): AR16603DK Date Analyzed: 06/19/2013

Lab Sample ID: AR16603DK Time Analyzed: 9:31

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 WINDOW		CF	CF	%D
		RT	FROM	TO			
AR1016	1	5.796	5.688	5.828	22622.91667	22502.5	-0.5
	2	6.465	6.361	6.501	37223.33333	34370	-7.7
	3	6.646	6.542	6.682	20070.625	18917.5	-5.7
AR1260	1	8.670	8.568	8.708	41714.47917	38547.5	-7.6
	2	8.923	8.820	8.960	36352.5	34950	-3.9
	3	9.470	9.368	9.508	51828.125	49937.5	-3.6
TCX		4.606	4.515	4.615	578000	578850	0.1
DCB		10.771	10.629	10.829	19588513.75	20000500	2.1

TCX = Tetrachloro-m-xylene  
 DCB = Decachlorobiphenyl

7N - FORM VII ARO  
 AROCLOR CALIBRATION VERIFICATION SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975

GC Column: CLPPestII ID: 0.53 (mm) Calibration Date(s): 05/29/2013 05/30/2013

EPA Sample No. (AR####3##): AR16603DK Date Analyzed: 06/19/2013

Lab Sample ID: AR16603DK Time Analyzed: 9:31

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 WINDOW		CF	CF	%D
		RT	FROM	TO			
AR1016	1	7.267	7.171	7.311	38089.0625	33545	-11.9
	2	7.426	7.331	7.471	20777.60417	18007.5	-13.3
	3	7.543	7.448	7.588	14210	12115	-14.7
AR1260	1	9.077	8.983	9.123	32791.5625	29927.5	-8.7
	2	9.243	9.148	9.288	36891.875	32372.5	-12.3
	3	9.544	9.446	9.586	37170.72917	32885	-11.5
TCX		5.281	5.193	5.293	492617.5	466150	-5.4
DCB		12.069	11.919	12.119	423930	420800	-0.7

TCX = Tetrachloro-m-xylene  
 DCB = Decachlorobiphenyl

7N - FORM VII ARO  
 AROCLOR CALIBRATION VERIFICATION SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975

GC Column: CLPPest ID: 0.53 (mm) Calibration Date(s): 05/29/2013 05/30/2013

EPA Sample No. (AR####3##): AR16603DL Date Analyzed: 06/19/2013

Lab Sample ID: AR16603DL Time Analyzed: 14:35

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 WINDOW		CF	CF	%D
		RT	FROM	TO			
AR1016	1	5.794	5.688	5.828	22622.91667	22367.5	-1.1
	2	6.464	6.361	6.501	37223.33333	34350	-7.7
	3	6.644	6.542	6.682	20070.625	18642.5	-7.1
AR1260	1	8.672	8.568	8.708	41714.47917	36067.5	-13.5
	2	8.926	8.820	8.960	36352.5	33605	-7.6
	3	9.470	9.368	9.508	51828.125	48402.5	-6.6
TCX		4.604	4.515	4.615	578000	585000	1.2
DCB		10.771	10.629	10.829	19588513.75	19961300	1.9

TCX = Tetrachloro-m-xylene  
 DCB = Decachlorobiphenyl

7N - FORM VII ARO  
 AROCLOR CALIBRATION VERIFICATION SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975

GC Column: CLPPestII ID: 0.53 (mm) Calibration Date(s): 05/29/2013 05/30/2013

EPA Sample No. (AR####3##): AR16603DL Date Analyzed: 06/19/2013

Lab Sample ID: AR16603DL Time Analyzed: 14:35

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 WINDOW		CF	CF	%D
		RT	FROM	TO			
AR1016	1	7.267	7.171	7.311	38089.0625	34285	-10.0
	2	7.427	7.331	7.471	20777.60417	18502.5	-10.9
	3	7.543	7.448	7.588	14210	12425	-12.6
AR1260	1	9.077	8.983	9.123	32791.5625	29860	-8.9
	2	9.245	9.148	9.288	36891.875	32330	-12.4
	3	9.545	9.446	9.586	37170.72917	33537.5	-9.8
TCX		5.281	5.193	5.293	492617.5	496200	0.7
DCB		12.070	11.919	12.119	423930	428175	1.0

TCX = Tetrachloro-m-xylene  
 DCB = Decachlorobiphenyl

8H - FORM VIII ARO  
 AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 05/29/2013 05/30/2013  
 Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION							
TCX: <u>4.565</u>			DCB: <u>10.729</u>				
EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT	#	DCB RT	#
01	AR12213D2	E2M0446F.D	5/29/2013	16:02	4.561	10.723	
02	AR12323D2	E2M0449F.D	5/29/2013	17:01	4.559	10.724	
03	AR12421D2	E2M0452F.D	5/29/2013	18:00	4.562	10.727	
04	AR12426D2	E2M0453F.D	5/29/2013	18:20	4.562	10.728	
05	AR12422D2	E2M0454F.D	5/29/2013	18:40	4.563	10.727	
06	AR12423D2	E2M0455F.D	5/29/2013	19:00	4.563	10.728	
07	AR12424D2	E2M0456F.D	5/29/2013	19:19	4.563	10.727	
08	AR12425D2	E2M0457F.D	5/29/2013	19:39	4.563	10.725	
09	AR12481D2	E2M0458F.D	5/29/2013	19:59	4.565	10.730	
10	AR12486D2	E2M0459F.D	5/29/2013	20:19	4.566	10.732	
11	AR12482D2	E2M0460F.D	5/29/2013	20:38	4.565	10.730	
12	AR12483D2	E2M0461F.D	5/29/2013	20:58	4.564	10.729	
13	AR12484D2	E2M0462F.D	5/29/2013	21:18	4.564	10.728	
14	AR12485D2	E2M0463F.D	5/29/2013	21:38	4.563	10.727	
15	AR12541D2	E2M0464F.D	5/29/2013	21:58	4.565	10.731	
16	AR12546D2	E2M0465F.D	5/29/2013	22:17	4.566	10.731	
17	AR12542D2	E2M0466F.D	5/29/2013	22:37	4.566	10.731	
18	AR12543D2	E2M0467F.D	5/29/2013	22:57	4.566	10.730	
19	AR12544D2	E2M0468F.D	5/29/2013	23:17	4.565	10.730	
20	AR12545D2	E2M0469F.D	5/29/2013	23:36	4.565	10.729	
21	AR12623D2	E2M0470F.D	5/29/2013	23:56	4.565	10.730	
22	AR12683D2	E2M0471F.D	5/30/2013	0:16	4.566	10.729	
23	AR16601D2	E2M0472F.D	5/30/2013	0:35	4.566	10.730	
24	AR16606D2	E2M0473F.D	5/30/2013	0:55	4.566	10.728	
25	AR16602D2	E2M0474F.D	5/30/2013	1:15	4.566	10.730	
26	AR16603D2	E2M0475F.D	5/30/2013	1:34	4.564	10.730	
27	AR16604D2	E2M0476F.D	5/30/2013	1:54	4.564	10.728	

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: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 05/29/2013 05/30/2013  
 Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION							
TCX: <u>4.565</u>			DCB: <u>10.729</u>				
EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT	#	DCB RT	#
28	AR16605D2	E2M0477F.D	5/30/2013	2:14	4.565	10.729	
29	AR16603DK	E2M1005F.D	6/19/2013	9:31	4.606	10.771	
30	MB-72289	E2M1009F.D	6/19/2013	10:58	4.606	10.774	
31	LCS-72289	E2M1010F.D	6/19/2013	11:17	4.603	10.767	
32	LCSD-72289	E2M1011F.D	6/19/2013	11:37	4.602	10.767	
33	COMP-A-06131 3	E2M1014F.D	6/19/2013	12:36	4.604	10.767	
34	COMP-B-06131 3	E2M1015F.D	6/19/2013	12:56	4.604	10.768	
35	COMP-C-06131 3	E2M1016F.D	6/19/2013	13:16	4.603	10.768	
36	COMP-D-06131 3	E2M1017F.D	6/19/2013	13:36	4.603	10.767	
37	COMP-E-06131 3	E2M1018F.D	6/19/2013	13:55	4.603	10.769	
38	AR16603DL	E2M1020F.D	6/19/2013	14:35	4.604	10.771	

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: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 05/29/2013 05/30/2013  
 Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION							
TCX: <u>5.243</u>			DCB: <u>12.019</u>				
EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT	#	DCB RT	#
01	AR12213D2	E2M0446R.D	5/29/2013	16:02	5.238	12.011	
02	AR12323D2	E2M0449R.D	5/29/2013	17:01	5.236	12.012	
03	AR12421D2	E2M0452R.D	5/29/2013	18:00	5.240	12.014	
04	AR12426D2	E2M0453R.D	5/29/2013	18:20	5.240	12.018	
05	AR12422D2	E2M0454R.D	5/29/2013	18:40	5.241	12.016	
06	AR12423D2	E2M0455R.D	5/29/2013	19:00	5.241	12.017	
07	AR12424D2	E2M0456R.D	5/29/2013	19:19	5.241	12.016	
08	AR12425D2	E2M0457R.D	5/29/2013	19:39	5.240	12.014	
09	AR12481D2	E2M0458R.D	5/29/2013	19:59	5.242	12.019	
10	AR12486D2	E2M0459R.D	5/29/2013	20:19	5.243	12.021	
11	AR12482D2	E2M0460R.D	5/29/2013	20:38	5.243	12.020	
12	AR12483D2	E2M0461R.D	5/29/2013	20:58	5.242	12.018	
13	AR12484D2	E2M0462R.D	5/29/2013	21:18	5.242	12.018	
14	AR12485D2	E2M0463R.D	5/29/2013	21:38	5.241	12.017	
15	AR12541D2	E2M0464R.D	5/29/2013	21:58	5.242	12.021	
16	AR12546D2	E2M0465R.D	5/29/2013	22:17	5.246	12.022	
17	AR12542D2	E2M0466R.D	5/29/2013	22:37	5.244	12.021	
18	AR12543D2	E2M0467R.D	5/29/2013	22:57	5.243	12.021	
19	AR12544D2	E2M0468R.D	5/29/2013	23:17	5.243	12.020	
20	AR12545D2	E2M0469R.D	5/29/2013	23:36	5.243	12.020	
21	AR12623D2	E2M0470R.D	5/29/2013	23:56	5.243	12.021	
22	AR12683D2	E2M0471R.D	5/30/2013	0:16	5.243	12.019	
23	AR16601D2	E2M0472R.D	5/30/2013	0:35	5.247	12.021	
24	AR16606D2	E2M0473R.D	5/30/2013	0:55	5.246	12.020	
25	AR16602D2	E2M0474R.D	5/30/2013	1:15	5.244	12.020	
26	AR16603D2	E2M0475R.D	5/30/2013	1:34	5.242	12.020	
27	AR16604D2	E2M0476R.D	5/30/2013	1:54	5.242	12.017	

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: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 05/29/2013 05/30/2013  
 Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION							
TCX: <u>5.243</u>			DCB: <u>12.019</u>				
EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT	#	DCB RT	#
28	AR16605D2	E2M0477R.D	5/30/2013	2:14	5.243	12.018	
29	AR16603DK	E2M1005R.D	6/19/2013	9:31	5.281	12.069	
30	MB-72289	E2M1009R.D	6/19/2013	10:58	5.268	12.067	
31	LCS-72289	E2M1010R.D	6/19/2013	11:17	5.280	12.065	
32	LCSD-72289	E2M1011R.D	6/19/2013	11:37	5.280	12.067	
33	COMP-A-06131 3	E2M1014R.D	6/19/2013	12:36	5.281	12.067	
34	COMP-B-06131 3	E2M1015R.D	6/19/2013	12:56	5.280	12.067	
35	COMP-C-06131 3	E2M1016R.D	6/19/2013	13:16	5.280	12.067	
36	COMP-D-06131 3	E2M1017R.D	6/19/2013	13:36	5.280	12.067	
37	COMP-E-06131 3	E2M1018R.D	6/19/2013	13:55	5.279	12.068	
38	AR16603DL	E2M1020R.D	6/19/2013	14:35	5.281	12.070	

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.

LCS-72289

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Lab Sample ID: LCS-72289 Date(s) Analyzed: 06/19/2013 06/19/2013  
 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		CONCENTRATION		%D
			FROM	TO	PEAK	MEAN	
Aroclor-1016	1	5.794	5.688	5.828	125.1681	121.597847	
	2	6.464	6.361	6.501	119.2173		
COLUMN 1	3	6.644	6.542	6.682	120.4081		
	4						
	5						
COLUMN 2	1	7.266	7.171	7.311	114.9586	113.854139	6.8
	2	7.426	7.331	7.471	114.2416		
	3	7.543	7.448	7.588	112.3622		
	4						
	5						
Aroclor-1260	1	8.668	8.568	8.708	114.5645	122.473874	
	2	8.922	8.820	8.960	117.5252		
COLUMN 1	3	9.468	9.368	9.508	135.3319		
	4						
	5						
COLUMN 2	1	9.076	8.983	9.123	116.2189	84.189170	45.5
	2	9.192	9.148	9.288	24.5402		
	3	9.542	9.446	9.586	111.8084		
	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.

LCSD-72289

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Lab Sample ID: LCSD-72289 Date(s) Analyzed: 06/19/2013 06/19/2013  
 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		CONCENTRATION		%D
			FROM	TO	PEAK	MEAN	
Aroclor-1016	1	5.793	5.688	5.828	124.2840	120.603308	
	2	6.462	6.361	6.501	117.8651		
	3	6.643	6.542	6.682	119.6608		
	4						
	5						
COLUMN 1	1	7.266	7.171	7.311	115.4225	114.729689	5.1
	2	7.427	7.331	7.471	114.7389		
	3	7.543	7.448	7.588	114.0277		
	4						
	5						
COLUMN 2	1	8.668	8.568	8.708	116.8899	125.284121	
	2	8.921	8.820	8.960	120.6978		
	3	9.467	9.368	9.508	138.2647		
	4						
	5						
Aroclor-1260	1	9.076	8.983	9.123	119.0347	86.296194	45.2
	2	9.192	9.148	9.288	25.5973		
	3	9.542	9.446	9.586	114.2566		
	4						
	5						
COLUMN 2	1						
	2						
	3						
	4						
	5						

At least 3 peaks for each column are required for identification of multicomponent analytes

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BF.B\E2M0445F.D  
 Lab Smp Id: AIBLKDA Client Smp ID: AIBLKDA  
 Inj Date : 29-MAY-2013 15:42  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AIBLKDA,AIBLKDA,,AIBLK.sub,,  
 Misc Info : 3,,INSTBLANK,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BF.B\E2\_LL\_PCB\_F.m  
 Meth Date : 30-May-2013 12:49 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 01:34 Cal File: E2M0475F.D  
 Als bottle: 100 QC Sample: INSTBLANK  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: AIBLK.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	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						
RT	EXP RT	DLT RT	ON-COL		FINAL	RATIO
			RESPONSE (	ng)	( ug/L)	
====	=====	=====	=====	=====	=====	=====
\$ 1					CAS #: 877-09-8	
4.561	4.565	-0.004	11519	0.01993	0.20	
-----						
\$ 11					CAS #: 2051-24-3	
10.723	10.728	-0.005	814728	0.04159	0.42	
-----						

Data File: \\avogadro\organicos\E2.1\130529BF.B\E2H044SF.D

Date: 29-MAY-2013 15:42

Client ID: AIBLKDA

Sample Info: AIBLKDA,AIBLKDA,AIBLK,sub,,

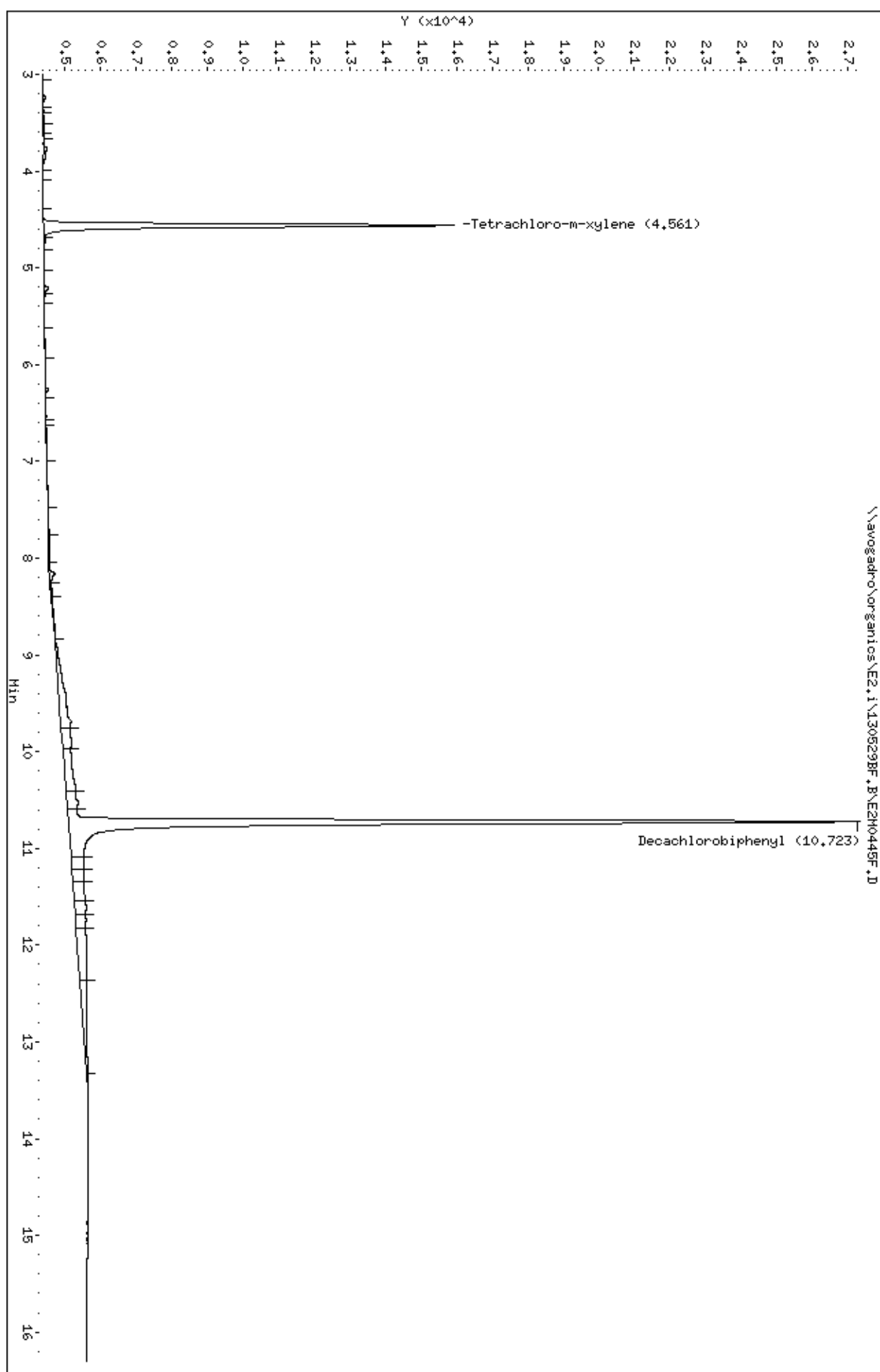
Volume Injected (uL): 1.0

Column phase: CLPest

Instrument: E2.1

Operator: TH SRC: TH

Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BR.B\E2M0445R.D  
 Lab Smp Id: AIBLKDA Client Smp ID: AIBLKDA  
 Inj Date : 29-MAY-2013 15:42  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AIBLKDA,AIBLKDA,,AIBLK.sub,,  
 Misc Info : 3,,INSTBLANK,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BR.B\E2\_LL\_PCB\_R.m  
 Meth Date : 30-May-2013 12:59 tmcdaniel Quant Type: ESTD  
 Cal Date : Cal File:  
 Als bottle: 100 QC Sample: INSTBLANK  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: AIBLK.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

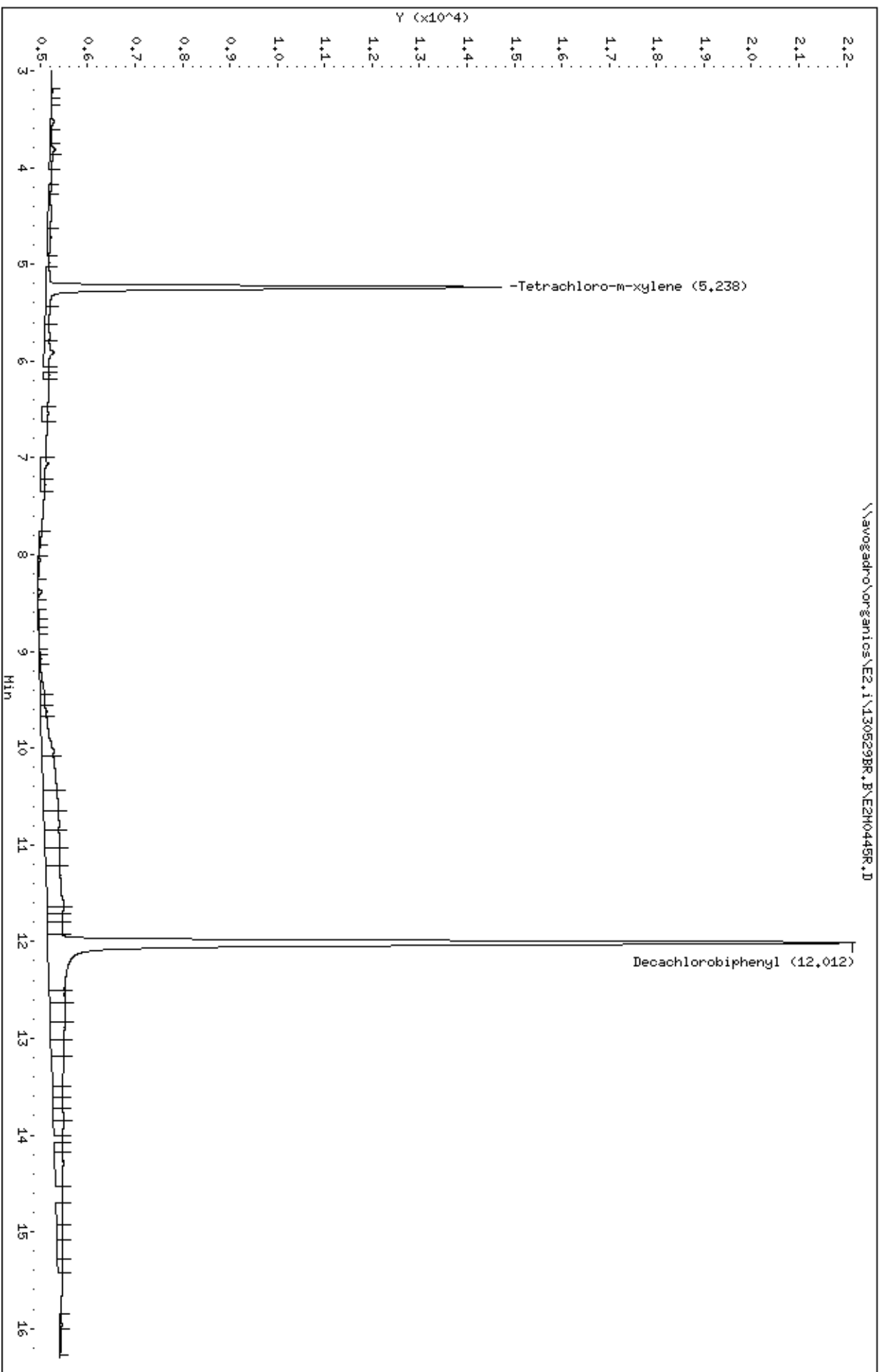
CONCENTRATIONS						
		ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE ( ng)	( ug/L)	TARGET RANGE	RATIO
====	=====	=====	=====	=====	=====	=====
\$ 1					CAS #: 877-09-8	
5.237	5.242	-0.005	9613	0.01951	0.20	
-----						
\$ 11					CAS #: 2051-24-3	
12.011	12.018	-0.007	17032	0.04018	0.40	
-----						



Data File: \\avogadro\organicos\E2.1\130529BR.B\E2H0445R.D  
Date : 29-MAY-2013 15:42  
Client ID: AIBLKDA  
Sample Info: AIBLKDA,AIBLKDA,,AIBLK,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPestII

Instrument: E2.1  
Operator: TH SRC: TH  
Column diameter: 0.32

\\avogadro\organicos\E2.1\130529BR.B\E2H0445R.D



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BF.B\E2M0446F.D  
 Lab Smp Id: AR12213D2 Client Smp ID: AR12213D2  
 Inj Date : 29-MAY-2013 16:02  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12213D2,AR12213D2,,ar1221.sub,,  
 Misc Info : 1,3,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BF.B\E2\_LL\_PCB\_F.m  
 Meth Date : 30-May-2013 12:49 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 01:34 Cal File: E2M0475F.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: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

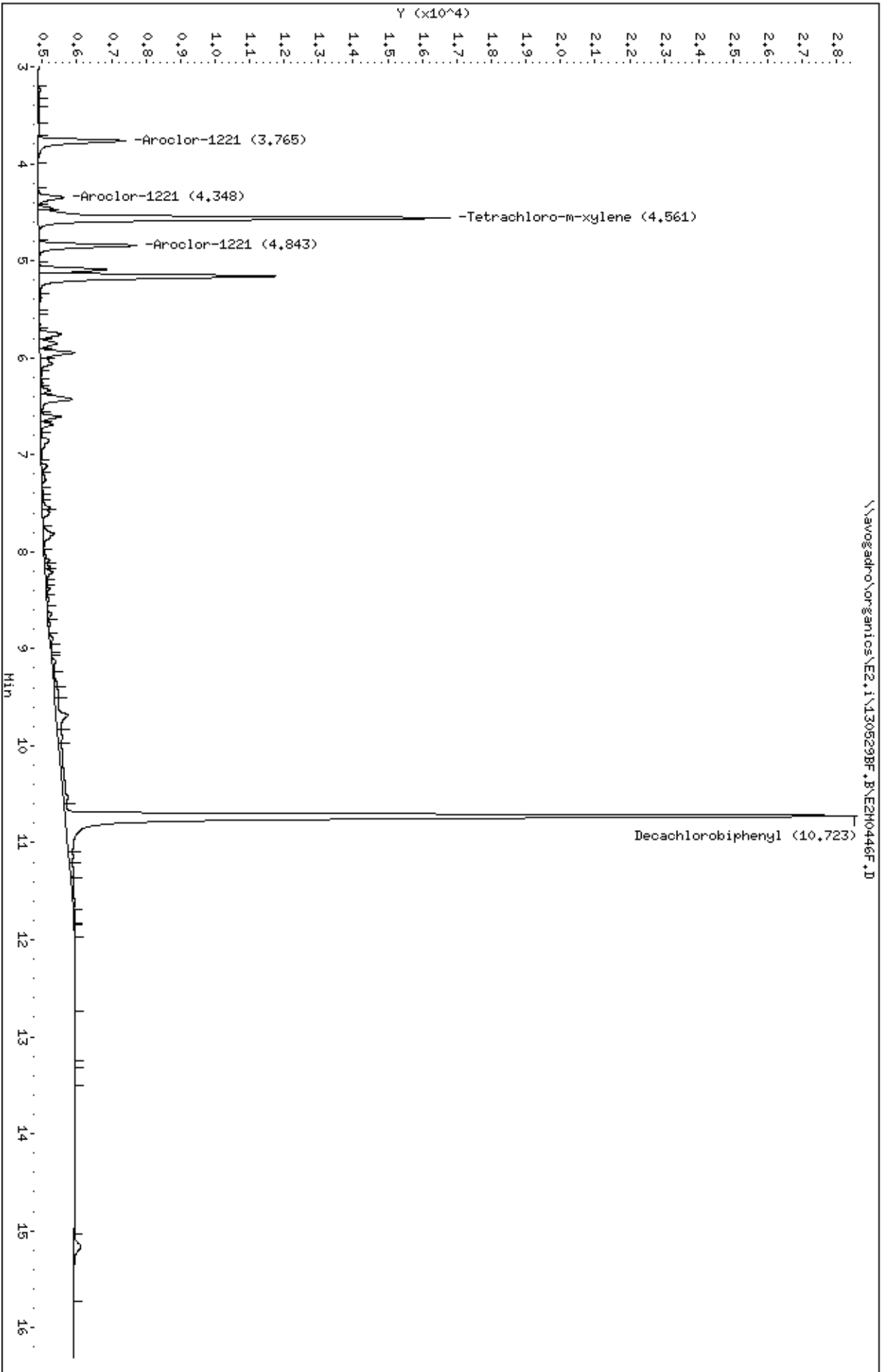
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
4.560	4.565	-0.005	11889 0.02000	0.020		(a)
-----						
3					CAS #: 11104-28-2	
3.764	3.764	0.000	2527 0.40000	0.40	80.00- 120.00	100.00(a)
4.348	4.348	0.000	760 0.40000	0.40	10.08- 50.08	30.08
4.843	4.843	0.000	2836 0.40000	0.40	92.23- 132.23	112.23
Average of Peak Amounts =			0.40000			
-----						
\$ 11					CAS #: 2051-24-3	
10.723	10.728	-0.005	779876 0.04000	0.040		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\E2,1\130529BF.B\E2H0446F.D  
Date : 29-MAY-2013 16:02  
Client ID: AR12213D2  
Sample Info: AR12213D2,AR12213D2,,ar-1221,sub,  
Volume Injected (uL): 1.0  
Column phase: CLPrest

Instrument: E2.1  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BR.B\E2M0446R.D  
 Lab Smp Id: AR12213D2 Client Smp ID: AR12213D2  
 Inj Date : 29-MAY-2013 16:02  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12213D2,AR12213D2,,ar1221.sub,,  
 Misc Info : 1,3,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BR.B\E2\_LL\_PCB\_R.m  
 Meth Date : 30-May-2013 12:59 tmcdaniel Quant Type: ESTD  
 Cal Date : 29-MAY-2013 16:02 Cal File: E2M0446R.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: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

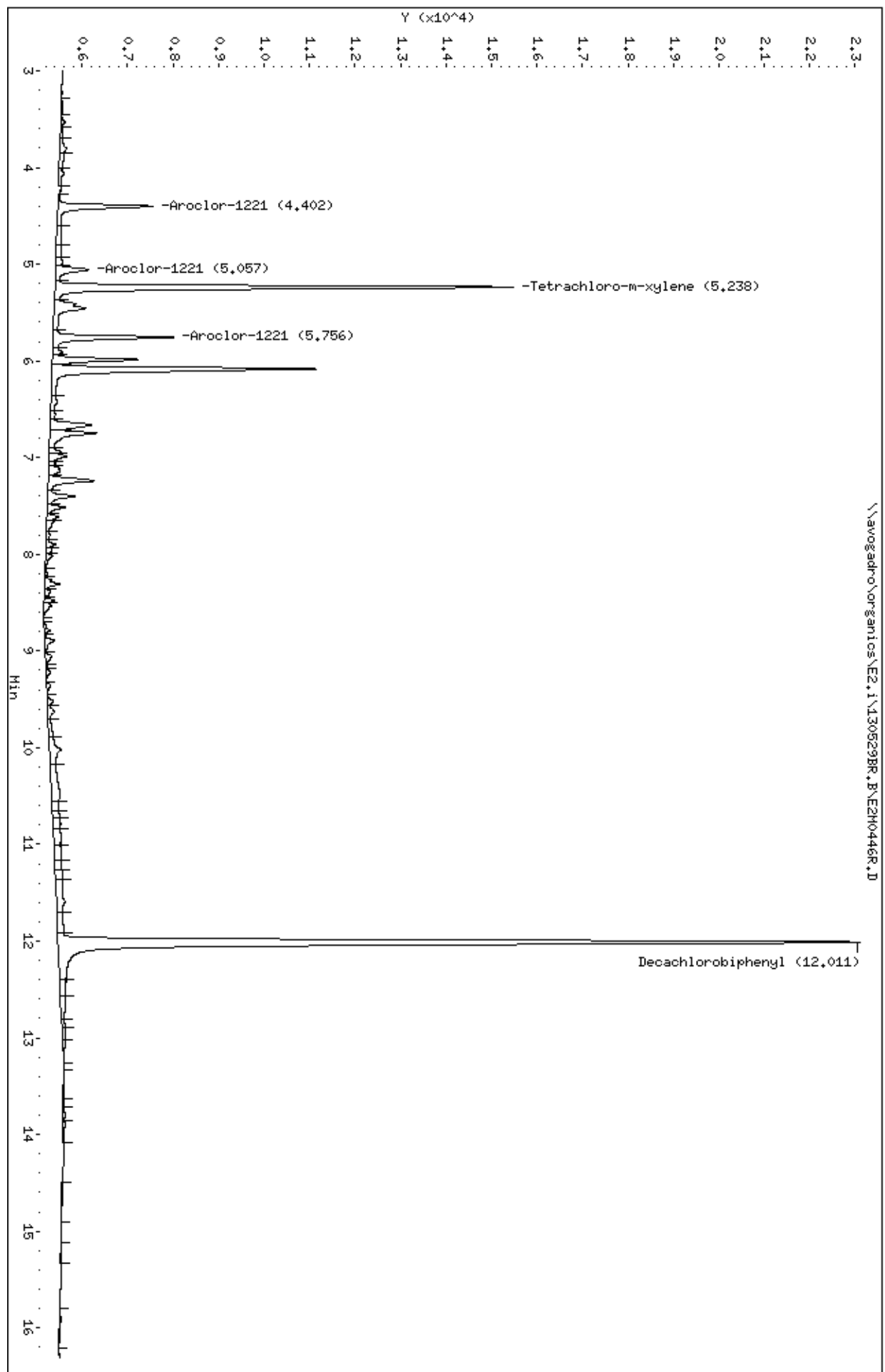
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
5.237	5.242	-0.005	10077 0.02000	0.020		(a)
-----						
2					CAS #: 11104-28-2	
4.402	4.402	0.000	2094 0.40000	0.40	80.00- 120.00	100.00(a)
5.057	5.057	0.000	728 0.40000	0.40	14.77- 54.77	34.77
5.756	5.756	0.000	2648 0.40000	0.40	106.46- 146.46	126.46
Average of Peak Amounts =			0.40000			
-----						
\$ 11					CAS #: 2051-24-3	
12.011	12.018	-0.007	17643 0.04000	0.040		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\E2,1\130529BR,B\E2H0446R.D  
Date : 29-MAY-2013 16:02  
Client ID: AR12213D2  
Sample Info: AR12213D2,AR12213D2,,ar-1221,sub,  
Volume Injected (uL): 1.0  
Column phase: CLPestII

Instrument: E2.i  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BF.B\E2M0449F.D  
 Lab Smp Id: AR12323D2 Client Smp ID: AR12323D2  
 Inj Date : 29-MAY-2013 17:01  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12323D2,AR12323D2,,ar1232.sub,,  
 Misc Info : 1,3,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BF.B\E2\_LL\_PCB\_F.m  
 Meth Date : 30-May-2013 12:49 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 01:34 Cal File: E2M0475F.D  
 Als bottle: 4 Calibration Sample, Level: 3  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1232.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

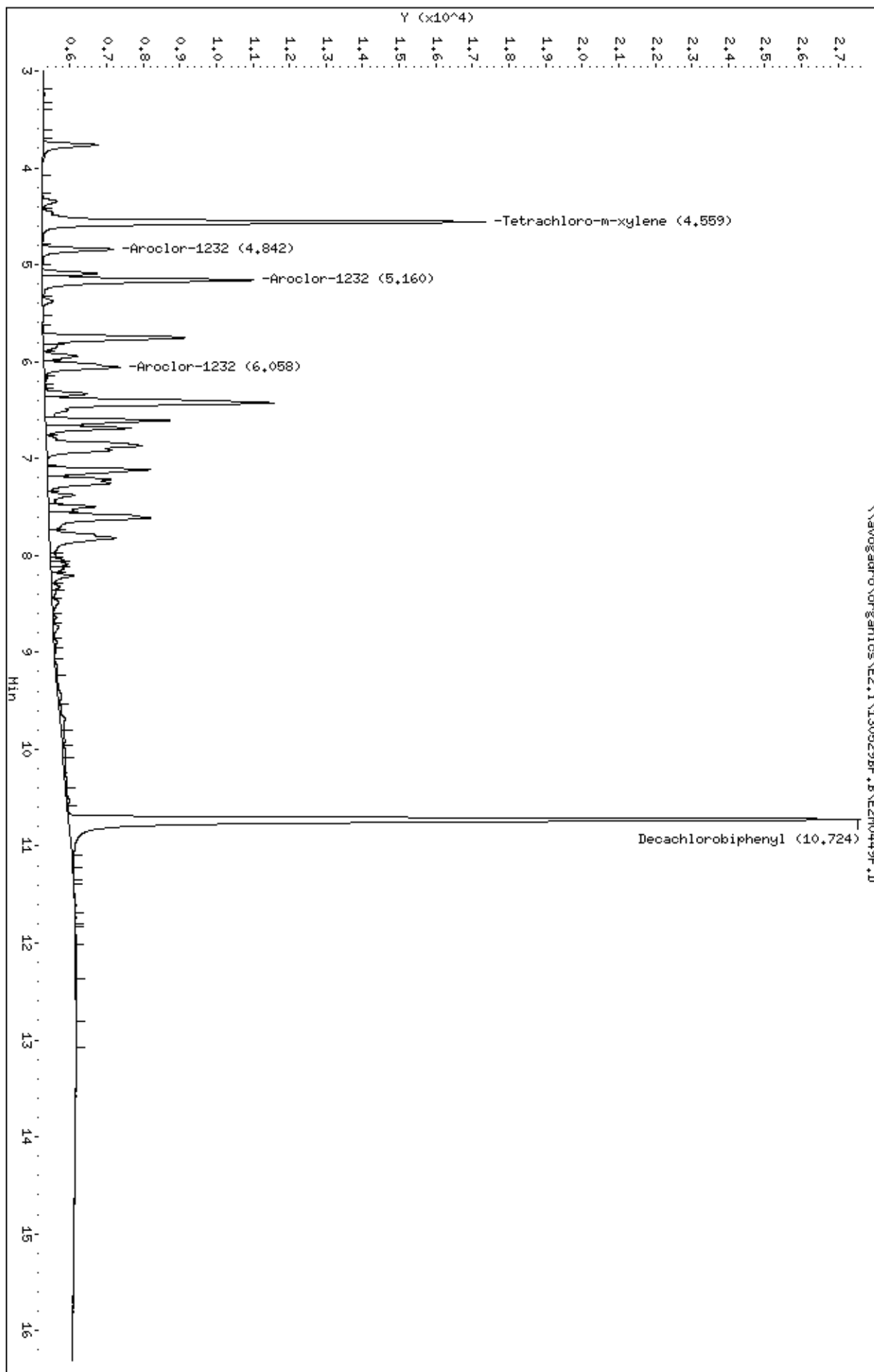
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
4.558	4.565	-0.007	12105 0.02000	0.020		(a)
-----						
4					CAS #: 11141-16-5	
4.841	4.842	-0.001	1949 0.40000	0.40	80.00- 120.00	100.00(a)
5.159	5.159	0.000	5750 0.40000	0.40	254.95- 294.95	295.02
6.058	6.058	0.000	2094 0.40000	0.40	86.68- 126.68	107.44
Average of Peak Amounts =			0.40000			
-----						
\$ 11					CAS #: 2051-24-3	
10.724	10.728	-0.004	727646 0.04000	0.040		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\E2,1\130529BF.B\E2H0449F.D  
Date: 29-May-2013 17:01  
Client ID: AR12323D2  
Sample Info: AR12323D2,AR12323D2,,ar1232,sub,  
Volume Injected (uL): 1.0  
Column phase: CLPrest

Instrument: E2.1  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BR.B\E2M0449R.D  
 Lab Smp Id: AR12323D2 Client Smp ID: AR12323D2  
 Inj Date : 29-MAY-2013 17:01  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12323D2,AR12323D2,,ar1232.sub,,  
 Misc Info : 1,3,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BR.B\E2\_LL\_PCB\_R.m  
 Meth Date : 30-May-2013 12:59 tmcdaniel Quant Type: ESTD  
 Cal Date : 29-MAY-2013 17:01 Cal File: E2M0449R.D  
 Als bottle: 4 Calibration Sample, Level: 3  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1232.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
5.236	5.242	-0.006	10152 0.02000	0.020		(a)
-----						
3					CAS #: 11141-16-5	
5.755	5.757	-0.002	1771 0.40000	0.40	80.00- 120.00	100.00(a)
5.986	5.989	-0.003	1379 0.40000	0.40	57.20- 97.20	77.87
6.082	6.084	-0.002	4944 0.40000	0.40	242.71- 282.71	279.16
Average of Peak Amounts =			0.40000			
-----						
\$ 11					CAS #: 2051-24-3	
12.011	12.018	-0.007	16906 0.04000	0.040		(a)

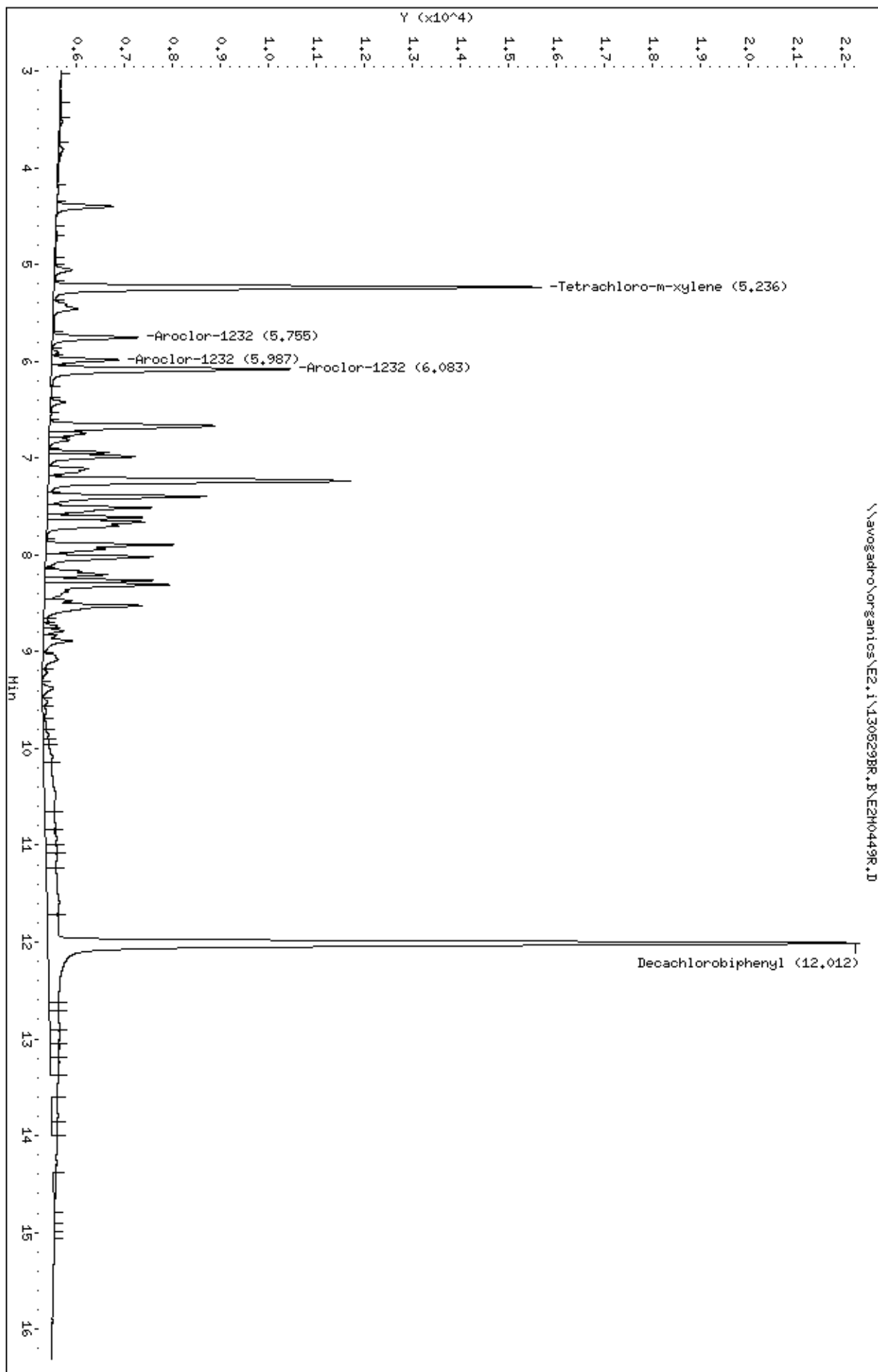
QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).



Data File: \\avogadro\organicos\E2,1\130529BR,B\E2H0449R.D  
Date: 29-May-2013 17:01  
Client ID: AR12323D2  
Sample Info: AR12323D2,AR12323D2,,ar-1232,sub,  
Volume Injected (uL): 1.0  
Column phase: CLPestII

Instrument: E2.i  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BF.B\E2M0452F.D  
 Lab Smp Id: AR12421D2 Client Smp ID: AR12421D2  
 Inj Date : 29-MAY-2013 18:00  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12421D2,AR12421D2,,ar1242.sub,,  
 Misc Info : 1,1,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BF.B\E2\_LL\_PCB\_F.m  
 Meth Date : 30-May-2013 12:49 tmcdaniel Quant Type: ESTD  
 Cal Date : 29-MAY-2013 18:00 Cal File: E2M0452F.D  
 Als bottle: 7 Calibration Sample, Level: 1  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1242.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

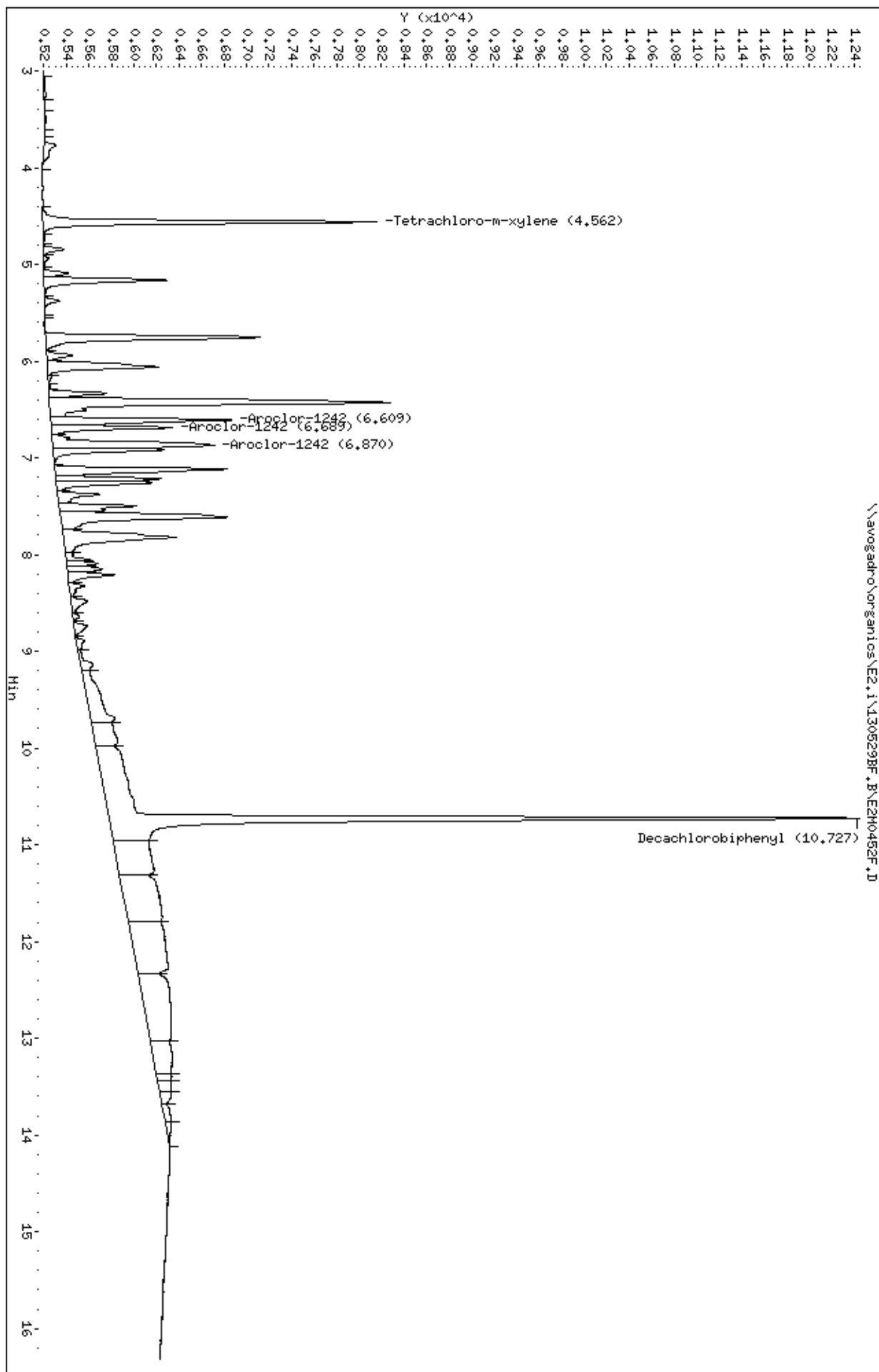
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
-----						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
4.561	4.565	-0.004	2967 0.00500	0.0021		(a)
-----						
6	Aroclor-1242		CAS #: 53469-21-9			
6.609	6.608	0.001	1595 0.10000	0.10	80.00- 120.00	100.00(a)
6.688	6.689	-0.001	1069 0.10000	0.100	54.24- 94.24	67.02
6.869	6.870	-0.001	1444 0.10000	0.10	61.57- 101.57	90.53
	Average of Peak Amounts =		0.10000			
-----						
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.726	10.728	-0.002	346775 0.01000	0.0070		(a)
-----						

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\E2,1\130529BF.B\E2H0452F.D  
Date: 29-May-2013 18:00  
Client ID: AR12421D2  
Sample Info: AR12421D2,AR12421D2,,ar1242,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPrest

Instrument: E2.1  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BR.B\E2M0452R.D  
 Lab Smp Id: AR12421D2 Client Smp ID: AR12421D2  
 Inj Date : 29-MAY-2013 18:00  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12421D2,AR12421D2,,ar1242.sub,,  
 Misc Info : 1,1,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BR.B\E2\_LL\_PCB\_R.m  
 Meth Date : 30-May-2013 12:59 tmcdaniel Quant Type: ESTD  
 Cal Date : 29-MAY-2013 18:00 Cal File: E2M0452R.D  
 Als bottle: 7 Calibration Sample, Level: 1  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1242.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

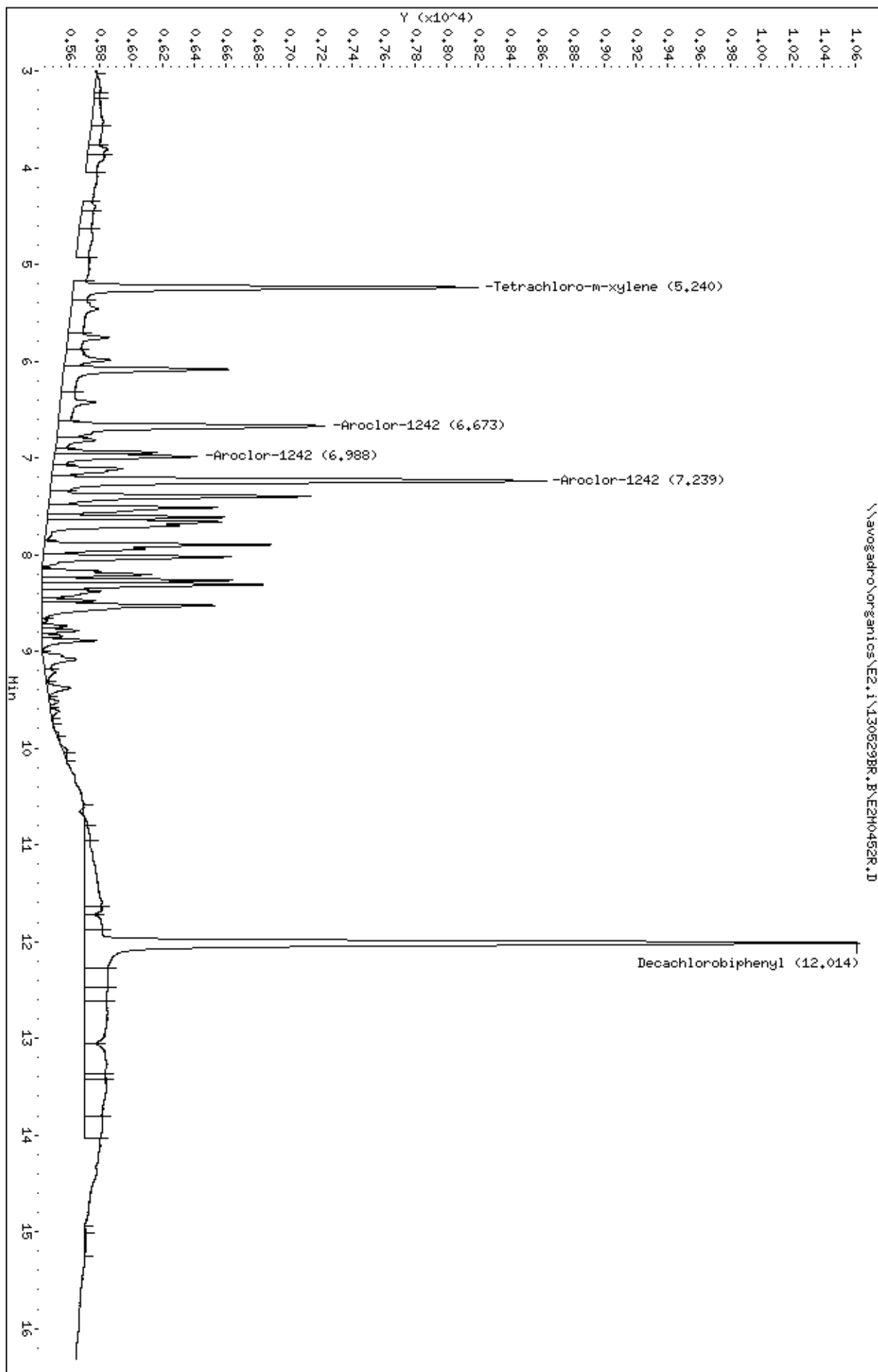
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
-----						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
5.239	5.242	-0.003	2559 0.00500	0.0022		(a)
-----						
4	Aroclor-1242		CAS #: 53469-21-9			
6.672	6.670	0.002	1673 0.10000	0.10	80.00- 120.00	100.00(a)
6.987	6.987	0.000	906 0.10000	0.10	36.61- 76.61	54.15
7.239	7.238	0.001	3164 0.10000	0.10	169.97- 209.97	189.12
	Average of Peak Amounts =		0.10000			
-----						
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
12.014	12.018	-0.004	4920 0.01000	0.0055		(a)
-----						

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\E2,1\130529BR,B\E2H0452R.D  
Date: 29-May-2013 18:00  
Client ID: AR12421D2  
Sample Info: AR12421D2,AR12421D2,,ar1242,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPestH11

Instrument: E2.1  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BF.B\E2M0453F.D  
 Lab Smp Id: AR12426D2 Client Smp ID: AR12426D2  
 Inj Date : 29-MAY-2013 18:20  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12426D2,AR12426D2,,ar1242.sub,,  
 Misc Info : 1,6,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BF.B\E2\_LL\_PCB\_F.m  
 Meth Date : 30-May-2013 12:49 tmcdaniel Quant Type: ESTD  
 Cal Date : 29-MAY-2013 18:20 Cal File: E2M0453F.D  
 Als bottle: 8 Calibration Sample, Level: 6  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1242.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

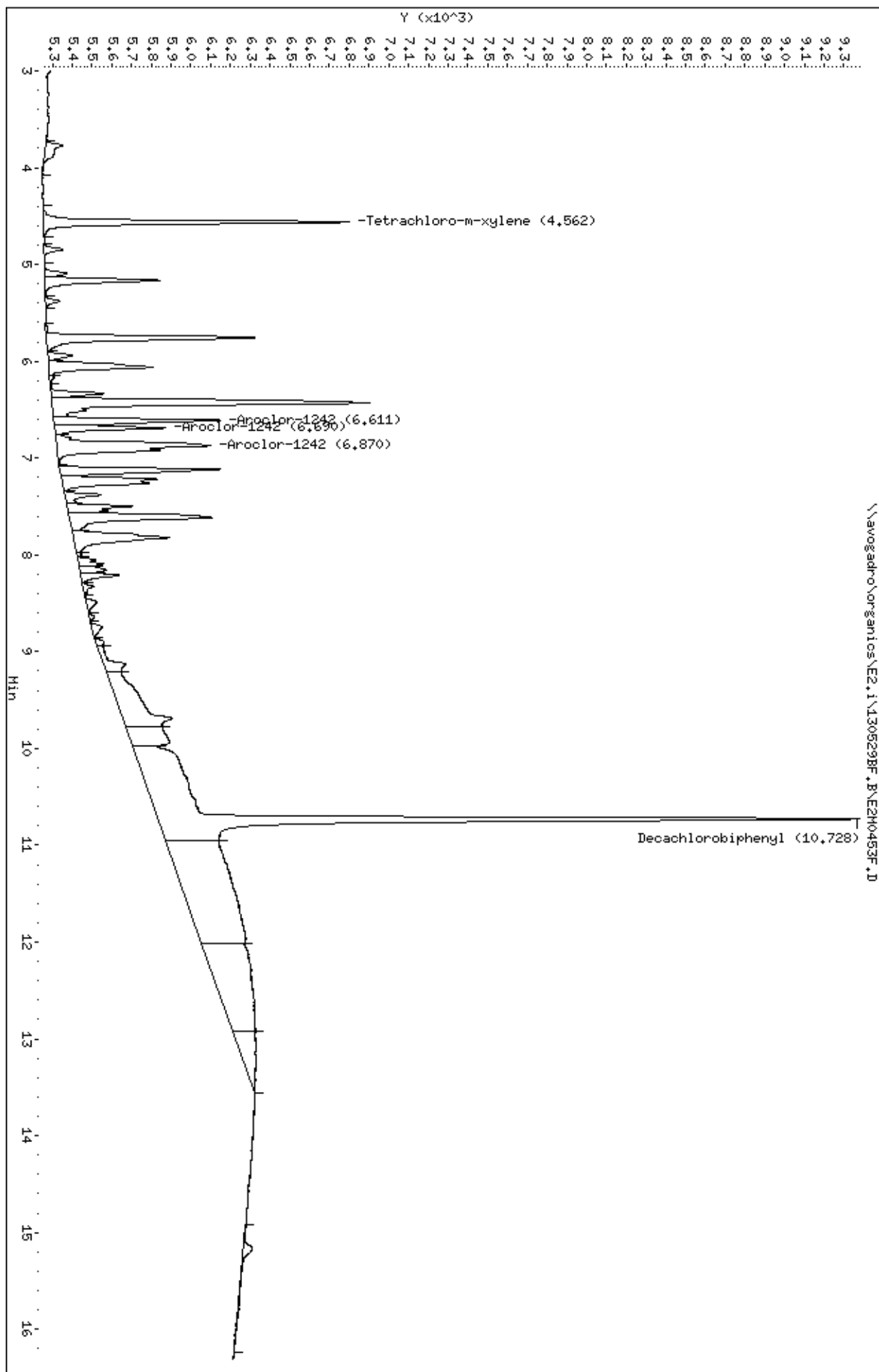
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
-----						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
4.562	4.565	-0.003	1545 0.00000	0.0011		(a)
-----						
6	Aroclor-1242		CAS #: 53469-21-9			
6.610	6.608	0.002	836 0.05000	0.052	80.00- 120.00	100.00(a)
6.689	6.689	0.000	558 0.05000	0.051	54.24- 94.24	66.75
6.870	6.870	0.000	781 0.05000	0.054	61.57- 101.57	93.42
	Average of Peak Amounts =		0.05233			
-----						
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.728	10.728	0.000	234261 0.00000	0.0048		(a)
-----						

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\E2,1\130529BF.B\E2H0453F.D  
Date: 29-May-2013 18:20  
Client ID: AR12426D2  
Sample Info: AR12426D2,AR12426D2,,ar-1242,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPrest

Instrument: E2.i  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BR.B\E2M0453R.D  
 Lab Smp Id: AR12426D2 Client Smp ID: AR12426D2  
 Inj Date : 29-MAY-2013 18:20  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12426D2,AR12426D2,,ar1242.sub,,  
 Misc Info : 1,6,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BR.B\E2\_LL\_PCB\_R.m  
 Meth Date : 30-May-2013 12:59 tmcdaniel Quant Type: ESTD  
 Cal Date : 29-MAY-2013 18:20 Cal File: E2M0453R.D  
 Als bottle: 8 Calibration Sample, Level: 6  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1242.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
-----						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
5.240	5.242	-0.002	1375 0.00000	0.0012		(a)
-----						
4	Aroclor-1242		CAS #: 53469-21-9			
6.672	6.670	0.002	941 0.05000	0.053	80.00- 120.00	100.00(a)
6.988	6.987	0.001	504 0.05000	0.053	36.61- 76.61	53.56
7.239	7.238	0.001	1678 0.05000	0.051	169.97- 209.97	178.32
	Average of Peak Amounts =		0.05233			
-----						
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
12.017	12.018	-0.001	2611 0.00000	0.0029		(a)
-----						

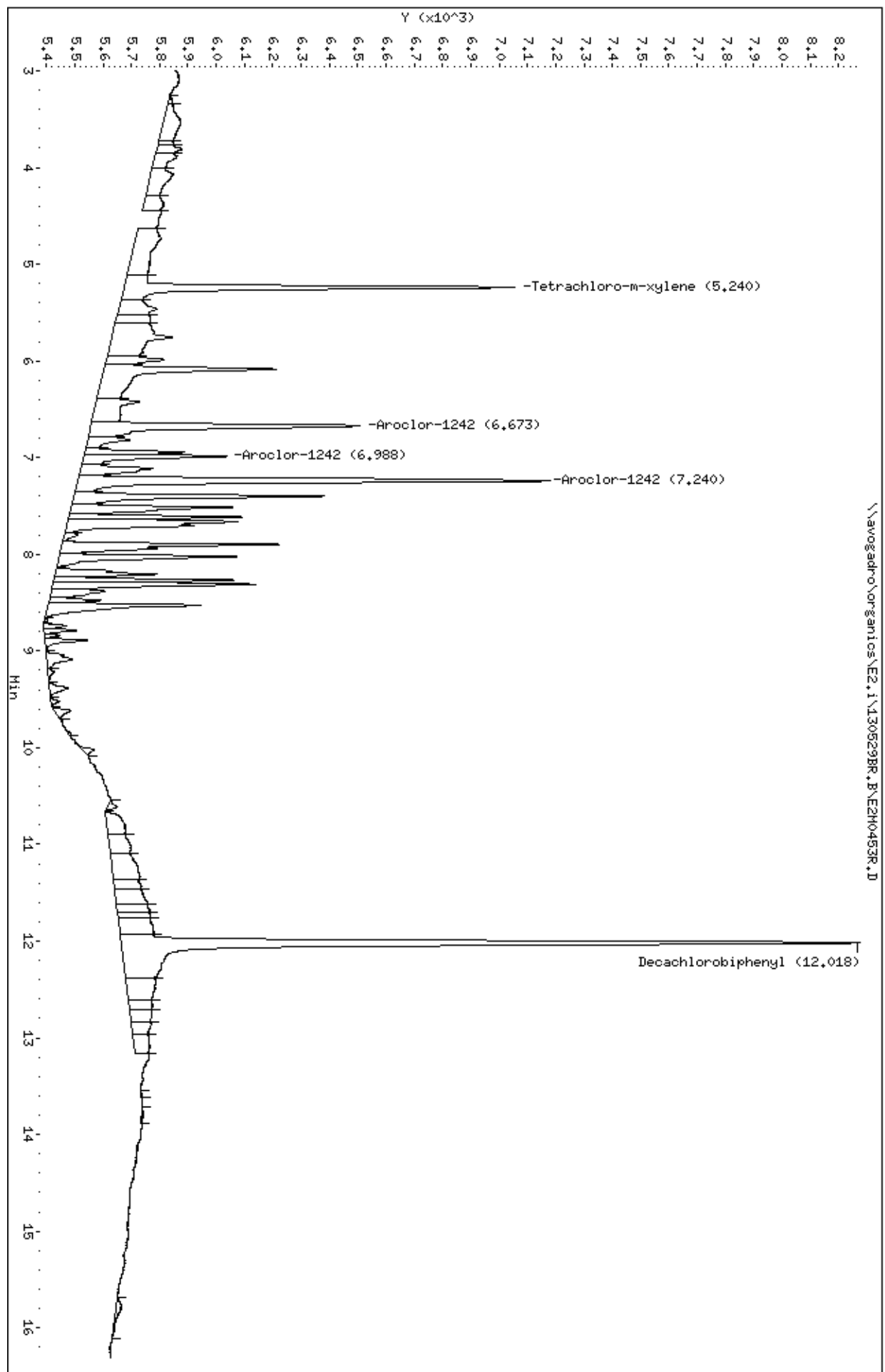
QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).



Data File: \\avogadro\organicos\E2,1\130529BR,B\E2H0453R.D  
Date : 29-May-2013 18:20  
Client ID: AR12426D2  
Sample Info: AR12426D2,AR12426D2,,ar-1242,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPestHII

Instrument: E2.i  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BF.B\E2M0454F.D  
 Lab Smp Id: AR12422D2 Client Smp ID: AR12422D2  
 Inj Date : 29-MAY-2013 18:40  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12422D2,AR12422D2,,ar1242.sub,,  
 Misc Info : 1,2,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BF.B\E2\_LL\_PCB\_F.m  
 Meth Date : 30-May-2013 12:49 tmcdaniel Quant Type: ESTD  
 Cal Date : 29-MAY-2013 18:40 Cal File: E2M0454F.D  
 Als bottle: 9 Calibration Sample, Level: 2  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1242.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

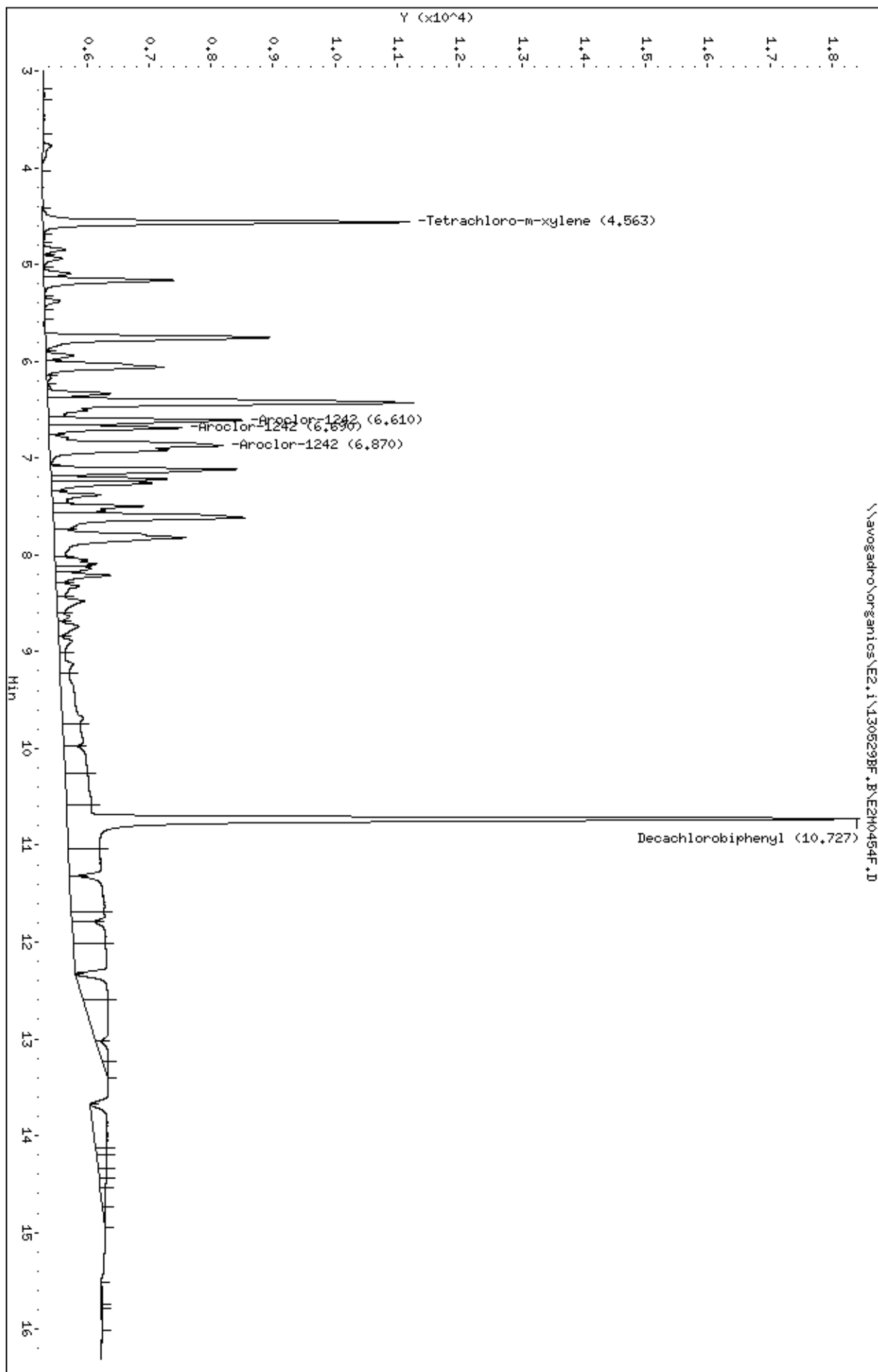
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
-----						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
4.562	4.565	-0.003	5886 0.01000	0.0051		(a)
-----						
6	Aroclor-1242		CAS #: 53469-21-9			
6.609	6.608	0.001	3106 0.20000	0.20	80.00- 120.00	100.00(a)
6.689	6.689	0.000	2144 0.20000	0.20	54.24- 94.24	69.03
6.870	6.870	0.000	2787 0.20000	0.19	61.57- 101.57	89.73
	Average of Peak Amounts =		0.19667			
-----						
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.726	10.728	-0.002	507782 0.02000	0.012		(a)
-----						

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\E2,1\130529BF.B\E2H0454F.D  
Date : 29-MAY-2013 18:40  
Client ID: AR12422D2  
Sample Info: AR12422D2,AR12422D2,,ar-1242,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPrest

Instrument: E2.1  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BR.B\E2M0454R.D  
 Lab Smp Id: AR12422D2 Client Smp ID: AR12422D2  
 Inj Date : 29-MAY-2013 18:40  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12422D2,AR12422D2,,ar1242.sub,,  
 Misc Info : 1,2,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BR.B\E2\_LL\_PCB\_R.m  
 Meth Date : 30-May-2013 12:59 tmcdaniel Quant Type: ESTD  
 Cal Date : 29-MAY-2013 18:40 Cal File: E2M0454R.D  
 Als bottle: 9 Calibration Sample, Level: 2  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1242.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

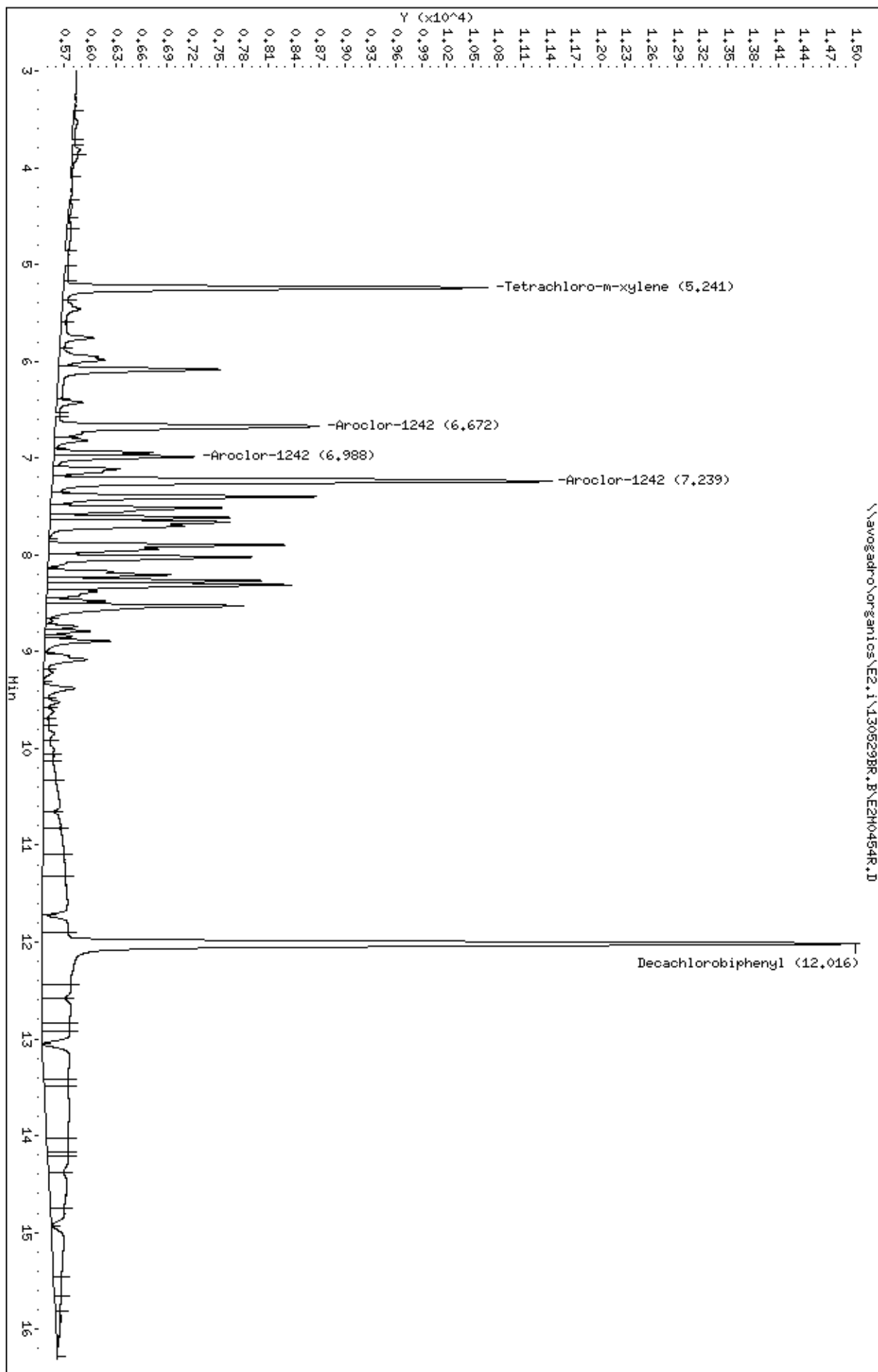
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
-----						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
5.240	5.242	-0.002	4972 0.01000	0.0052		(a)
-----						
4	Aroclor-1242		CAS #: 53469-21-9			
6.672	6.670	0.002	3109 0.20000	0.18	80.00- 120.00	100.00(a)
6.987	6.987	0.000	1656 0.20000	0.18	36.61- 76.61	53.26
7.239	7.238	0.001	5926 0.20000	0.19	169.97- 209.97	190.61
	Average of Peak Amounts =		0.18333			
-----						
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
12.016	12.018	-0.002	9612 0.02000	0.013		(a)
-----						

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\E2,1\130529BR,B\E2H0454R.D  
Date : 29-May-2013 18:40  
Client ID: AR12422D2  
Sample Info: AR12422D2,AR12422D2,,ar1242,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPestH11

Instrument: E2.i  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BF.B\E2M0455F.D  
 Lab Smp Id: AR12423D2 Client Smp ID: AR12423D2  
 Inj Date : 29-MAY-2013 19:00  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12423D2,AR12423D2,,ar1242.sub,,  
 Misc Info : 1,3,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BF.B\E2\_LL\_PCB\_F.m  
 Meth Date : 30-May-2013 12:49 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 01:34 Cal File: E2M0475F.D  
 Als bottle: 10 Calibration Sample, Level: 3  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1242.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

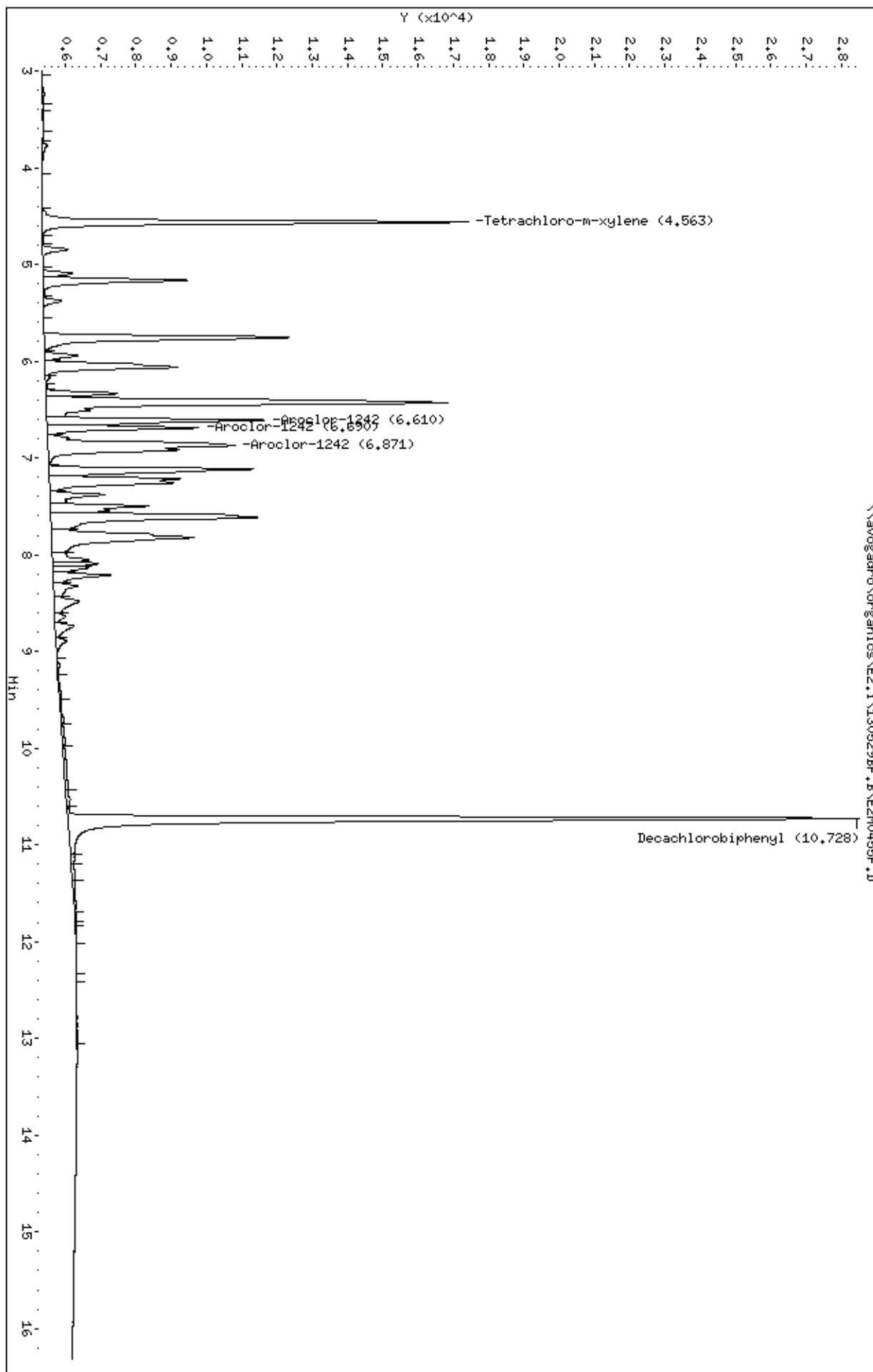
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
4.563	4.565	-0.002	12042 0.02000	0.020		(a)
6					CAS #: 53469-21-9	
6.610	6.608	0.002	6115 0.40000	0.38	80.00- 120.00	100.00(a)
6.690	6.689	0.001	4289 0.40000	0.40	54.24- 94.24	70.14
6.870	6.870	0.000	5304 0.40000	0.37	61.57- 101.57	86.74
Average of Peak Amounts =			0.38333			
\$ 11					CAS #: 2051-24-3	
10.727	10.728	-0.001	763654 0.04000	0.029		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\E2,1\130529BF.B\E2H0455F.D  
Date: 29-MAY-2013 19:00  
Client ID: AR12423D2  
Sample Info: AR12423D2,AR12423D2,,ar-1242,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPest

Instrument: E2.i  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BR.B\E2M0455R.D  
 Lab Smp Id: AR12423D2 Client Smp ID: AR12423D2  
 Inj Date : 29-MAY-2013 19:00  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12423D2,AR12423D2,,ar1242.sub,,  
 Misc Info : 1,3,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BR.B\E2\_LL\_PCB\_R.m  
 Meth Date : 30-May-2013 12:59 tmcdaniel Quant Type: ESTD  
 Cal Date : 29-MAY-2013 19:00 Cal File: E2M0455R.D  
 Als bottle: 10 Calibration Sample, Level: 3  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1242.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
-----						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
5.240	5.242	-0.002	10086	0.02000	0.020	(a)
-----						
4	Aroclor-1242		CAS #: 53469-21-9			
6.672	6.670	0.002	6003	0.40000	0.36 80.00- 120.00	100.00(a)
6.988	6.987	0.001	3238	0.40000	0.36 36.61- 76.61	53.94
7.239	7.238	0.001	11439	0.40000	0.37 169.97- 209.97	190.55
Average of Peak Amounts =			0.36333			
-----						
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
12.017	12.018	-0.001	17349	0.04000	0.037	(a)
-----						

QC Flag Legend

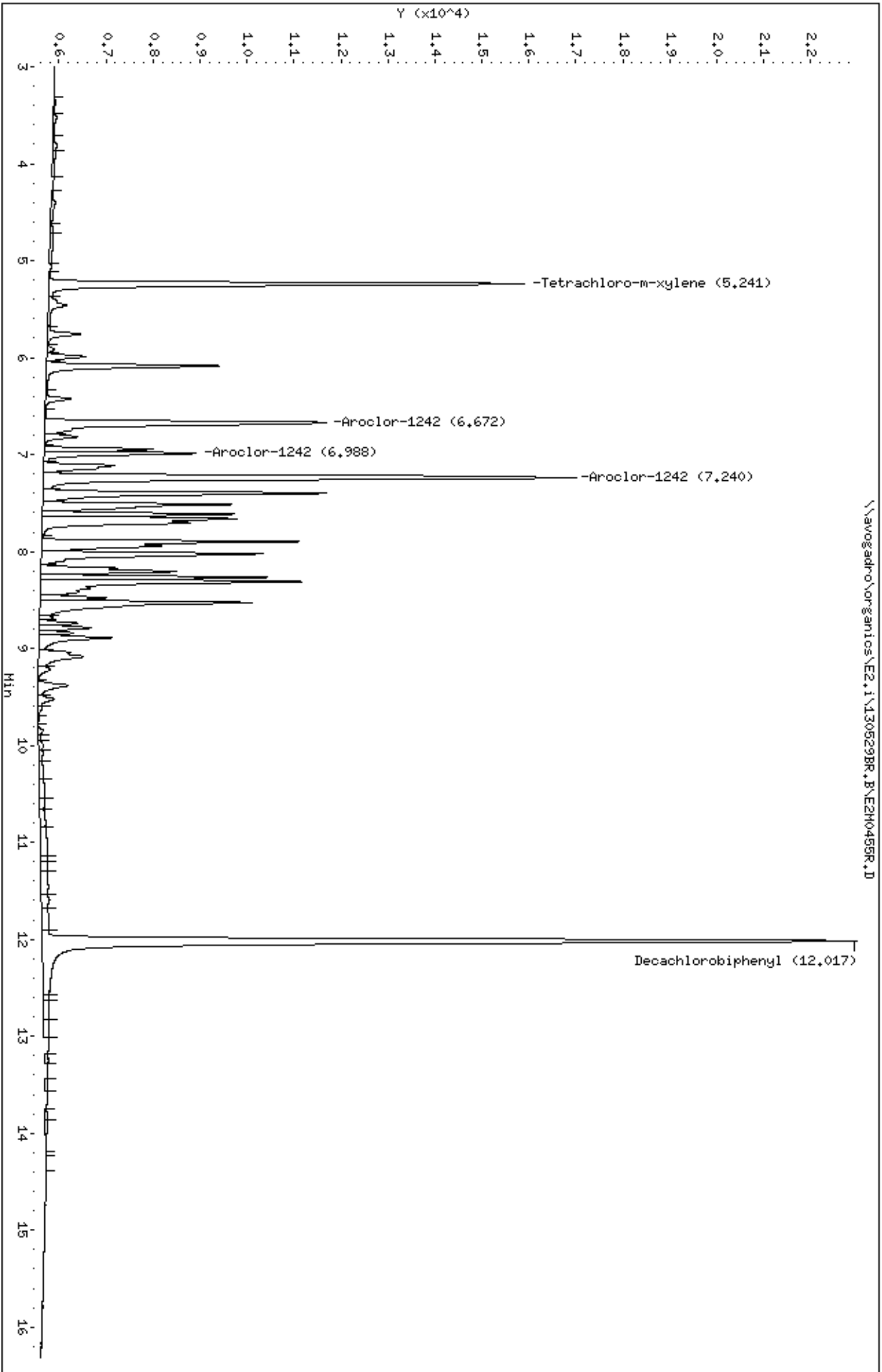
a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).



Data File: \\avogadro\organicos\E2,1\130529BR,B\E2H0455R.D  
Date : 29-MAY-2013 19:00  
Client ID: AR12423D2  
Sample Info: AR12423D2,AR12423D2,,ar-1242,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPestH11

Instrument: E2.1  
Operator: TH SRC: TH  
Column diameter: 0.32

\\avogadro\organicos\E2,1\130529BR,B\E2H0455R.D



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BF.B\E2M0456F.D  
 Lab Smp Id: AR12424D2 Client Smp ID: AR12424D2  
 Inj Date : 29-MAY-2013 19:19  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12424D2,AR12424D2,,ar1242.sub,,  
 Misc Info : 1,4,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BF.B\E2\_LL\_PCB\_F.m  
 Meth Date : 30-May-2013 12:49 tmcdaniel Quant Type: ESTD  
 Cal Date : 29-MAY-2013 19:19 Cal File: E2M0456F.D  
 Als bottle: 11 Calibration Sample, Level: 4  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1242.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

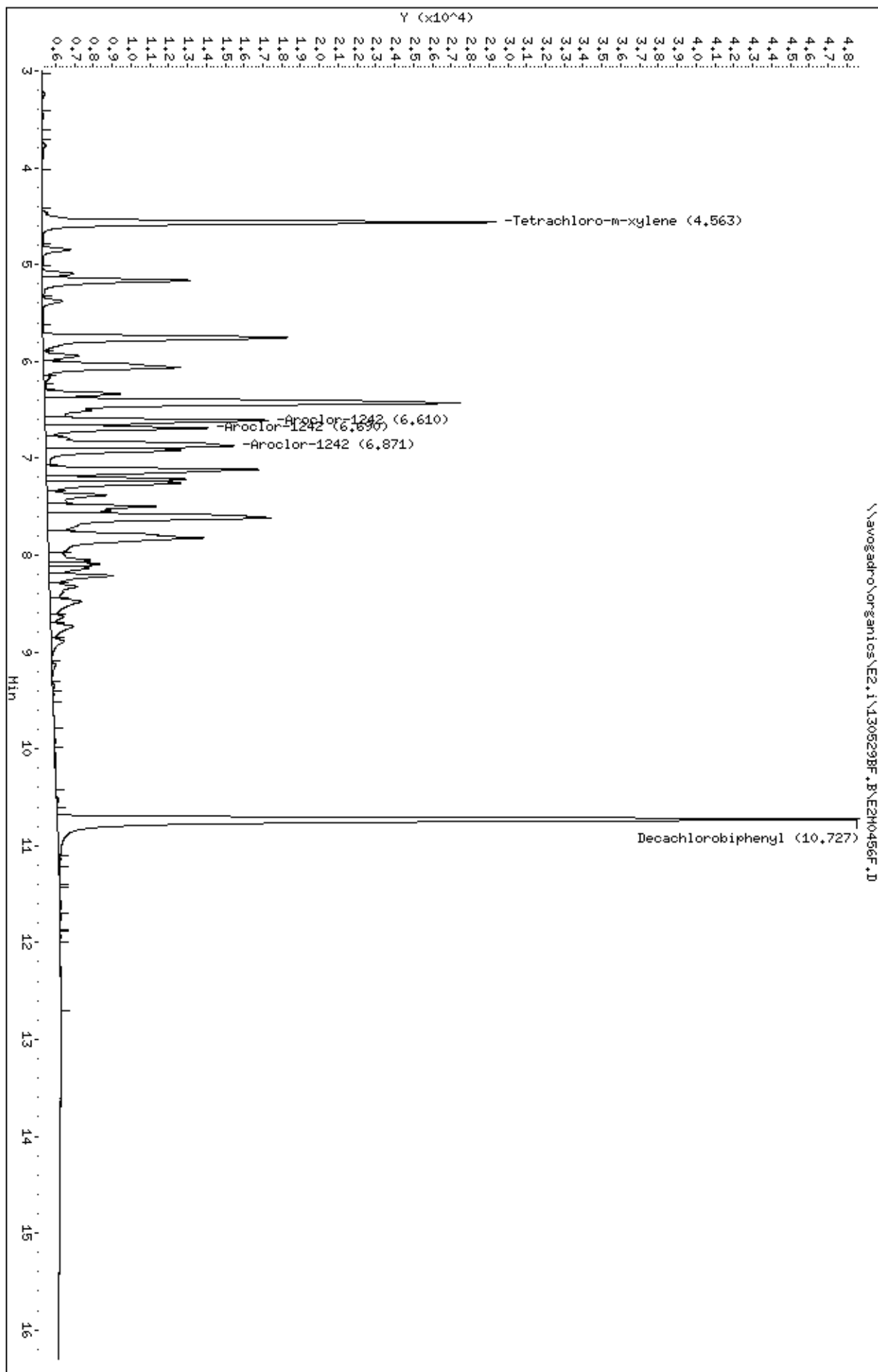
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
-----						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
4.563	4.565	-0.002	24025 0.04000	0.040		(a)
-----						
6	Aroclor-1242		CAS #: 53469-21-9			
6.610	6.608	0.002	11819 0.80000	0.76	80.00- 120.00	100.00(a)
6.690	6.689	0.001	8604 0.80000	0.80	54.24- 94.24	72.80
6.870	6.870	0.000	10027 0.80000	0.72	61.57- 101.57	84.84
	Average of Peak Amounts =		0.76000			
-----						
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.726	10.728	-0.002	1406373 0.08000	0.058		
-----						

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\EE2\1\130529BF.B\EE2H0456F.D  
Date: 29-May-2013 19:19  
Client ID: AR12424D2  
Sample Info: AR12424D2,AR12424D2,,ar1242,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPrest

Instrument: EE.1  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BR.B\E2M0456R.D  
 Lab Smp Id: AR12424D2 Client Smp ID: AR12424D2  
 Inj Date : 29-MAY-2013 19:19  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12424D2,AR12424D2,,ar1242.sub,,  
 Misc Info : 1,4,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BR.B\E2\_LL\_PCB\_R.m  
 Meth Date : 30-May-2013 12:59 tmcdaniel Quant Type: ESTD  
 Cal Date : 29-MAY-2013 19:19 Cal File: E2M0456R.D  
 Als bottle: 11 Calibration Sample, Level: 4  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1242.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

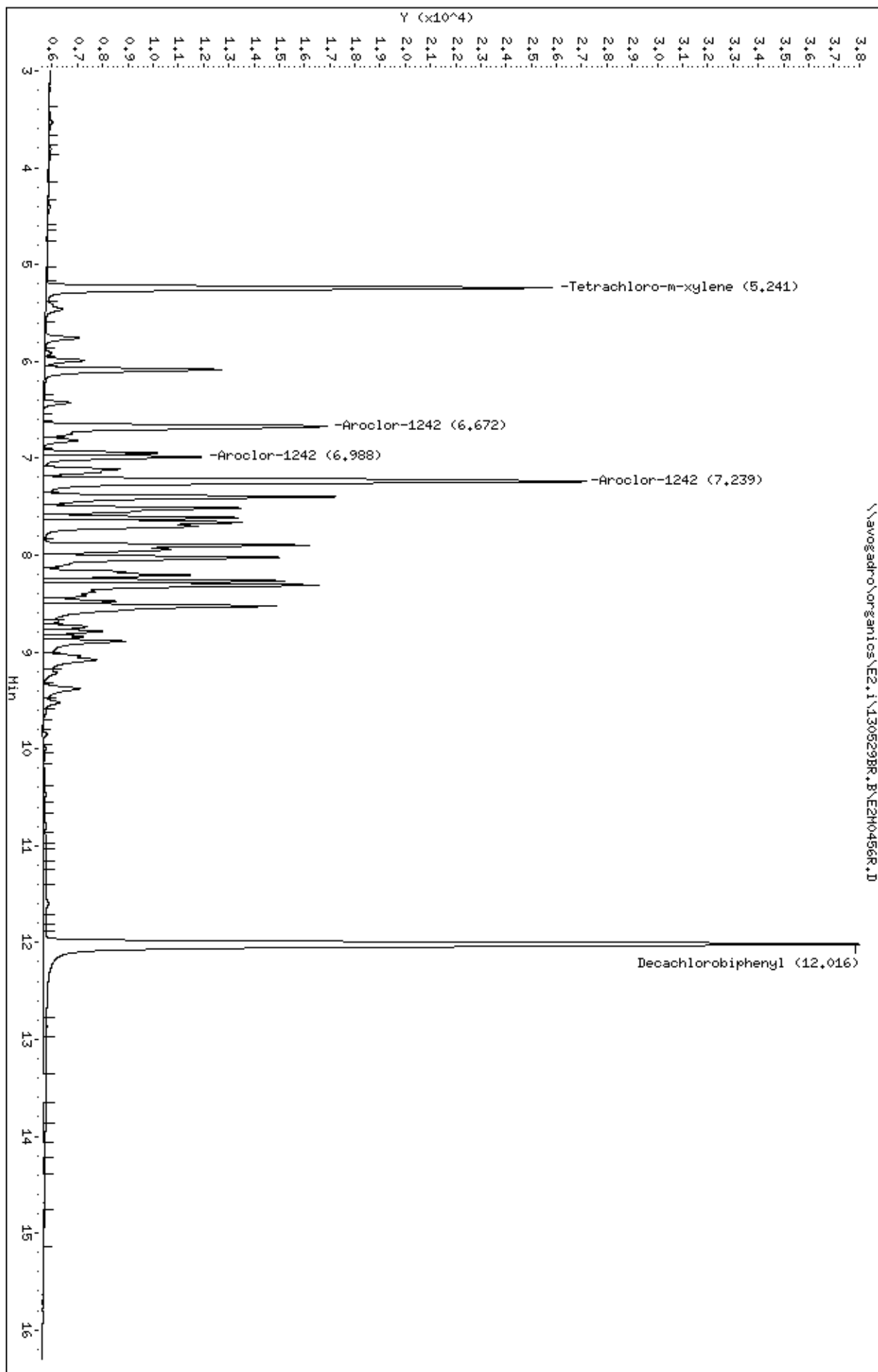
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
5.240	5.242	-0.002	20002 0.04000	0.040		(a)
-----						
4					CAS #: 53469-21-9	
6.672	6.670	0.002	11283 0.80000	0.70	80.00- 120.00	100.00(a)
6.987	6.987	0.000	6250 0.80000	0.72	36.61- 76.61	55.39
7.239	7.238	0.001	21717 0.80000	0.72	169.97- 209.97	192.48
Average of Peak Amounts =			0.71333			
-----						
\$ 11					CAS #: 2051-24-3	
12.016	12.018	-0.002	32383 0.08000	0.072		

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\E2,1\130529BR,B\E2H0456R.D  
Date : 29-MAY-2013 19:19  
Client ID: AR12424D2  
Sample Info: AR12424D2,AR12424D2,,ar1242,sub,  
Volume Injected (uL): 1.0  
Column phase: CLPestH1

Instrument: E2.i  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BF.B\E2M0457F.D  
 Lab Smp Id: AR12425D2 Client Smp ID: AR12425D2  
 Inj Date : 29-MAY-2013 19:39  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12425D2,AR12425D2,,ar1242.sub,,  
 Misc Info : 1,5,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BF.B\E2\_LL\_PCB\_F.m  
 Meth Date : 30-May-2013 12:49 tmcdaniel Quant Type: ESTD  
 Cal Date : 29-MAY-2013 19:39 Cal File: E2M0457F.D  
 Als bottle: 12 Calibration Sample, Level: 5  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1242.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

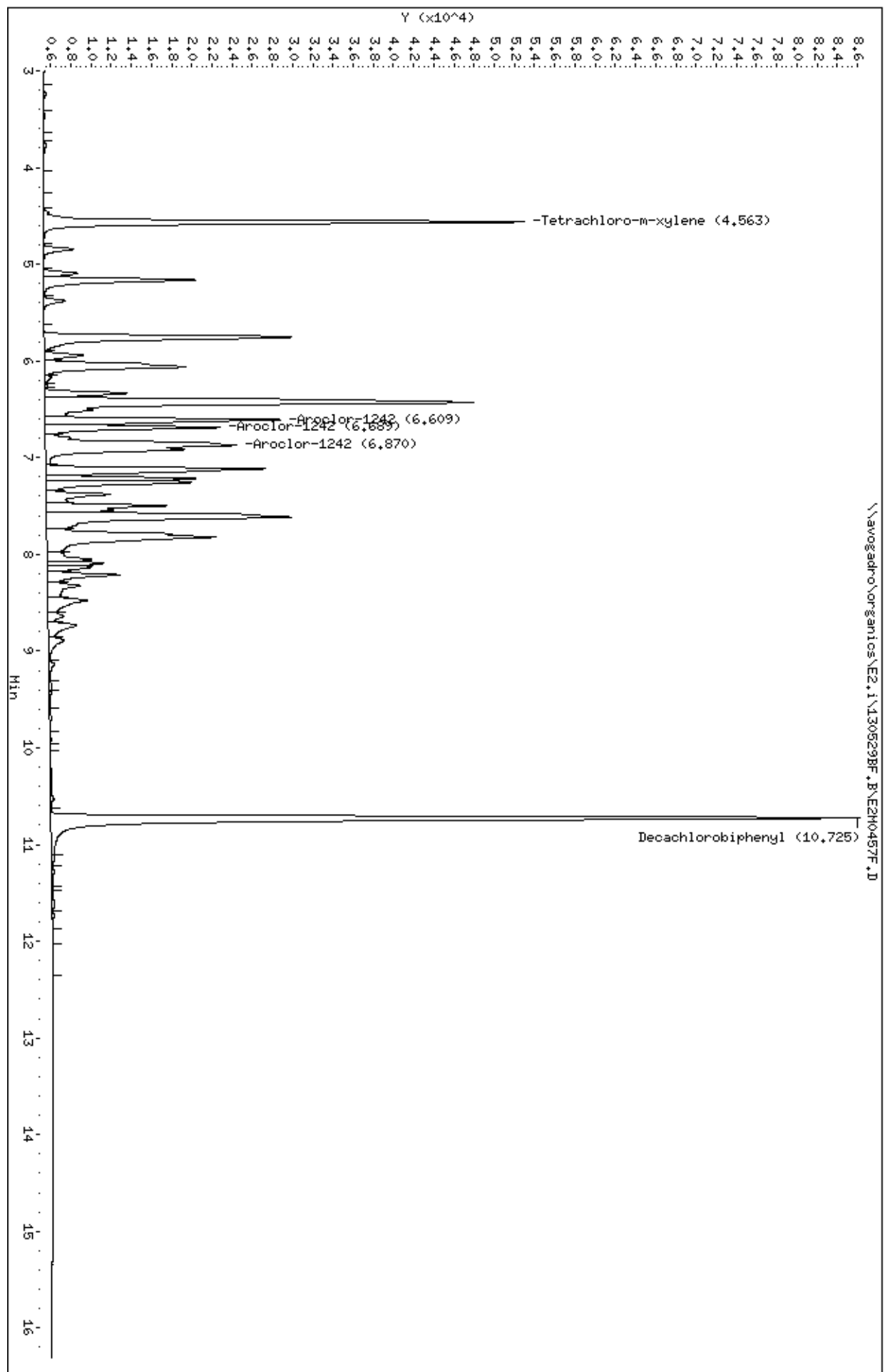
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
4.563	4.565	-0.002	47542 0.08000	0.080		
6					CAS #: 53469-21-9	
6.608	6.608	0.000	23315 1.60000	1.5	80.00- 120.00	100.00
6.689	6.689	0.000	17310 1.60000	1.6	54.24- 94.24	74.24
6.870	6.870	0.000	19019 1.60000	1.4	61.57- 101.57	81.57
Average of Peak Amounts =			1.50000			
\$ 11					CAS #: 2051-24-3	
10.725	10.728	-0.003	2647740 0.16000	0.12		

Data File: \\avogadro\organicos\EE2\1\130529BF.B\EE2H0457F.D  
Date : 29-MAY-2013 19:39  
Client ID: AR12425D2  
Sample Info: AR12425D2,AR12425D2,,ar1242,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPrest

Instrument: EE2.i  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BR.B\E2M0457R.D  
 Lab Smp Id: AR12425D2 Client Smp ID: AR12425D2  
 Inj Date : 29-MAY-2013 19:39  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12425D2,AR12425D2,,ar1242.sub,,  
 Misc Info : 1,5,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BR.B\E2\_LL\_PCB\_R.m  
 Meth Date : 30-May-2013 12:59 tmcdaniel Quant Type: ESTD  
 Cal Date : 29-MAY-2013 19:39 Cal File: E2M0457R.D  
 Als bottle: 12 Calibration Sample, Level: 5  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1242.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

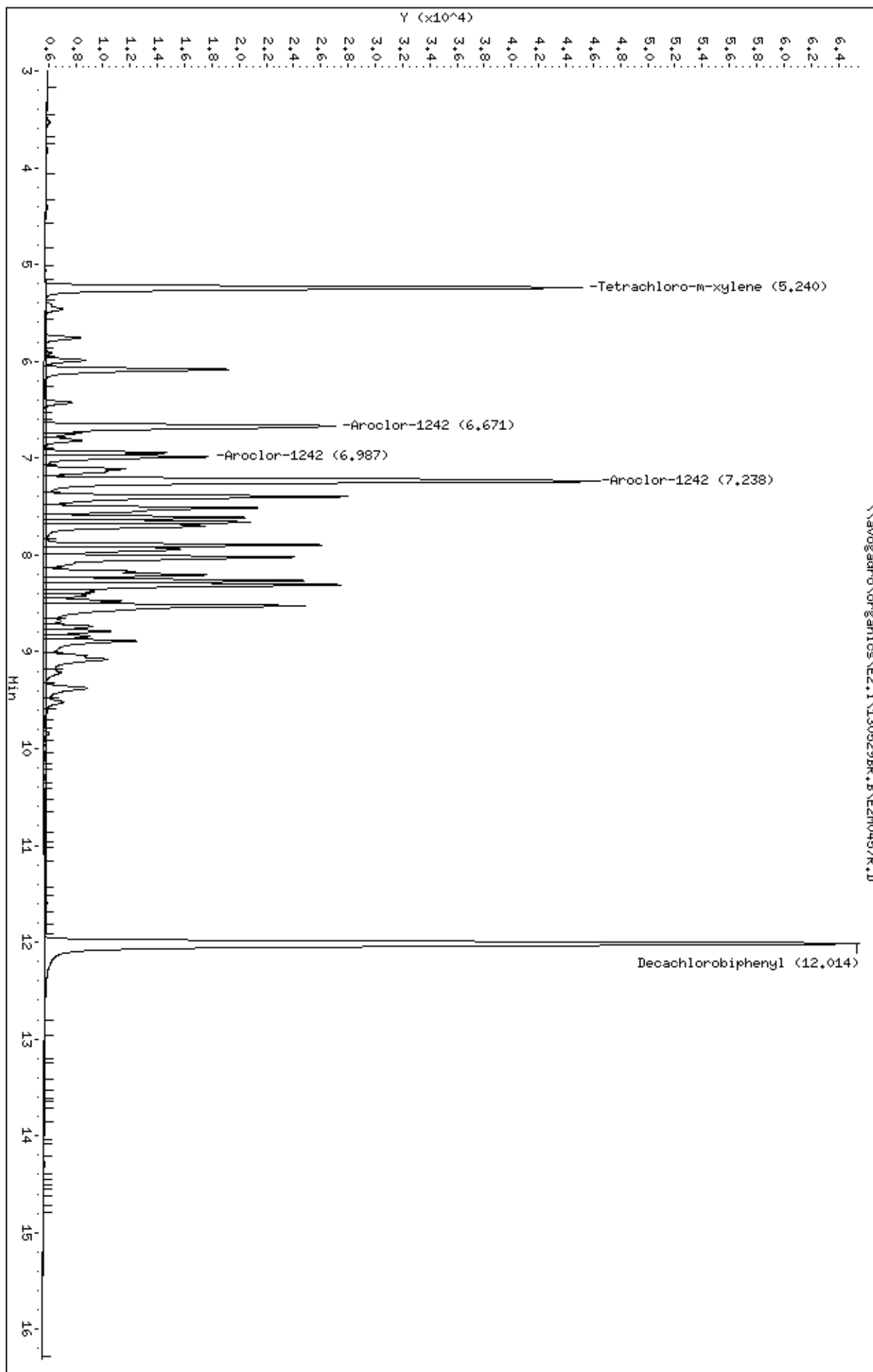
AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
-----						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
5.239	5.242	-0.003	39151	0.08000	0.078	
-----						
4	Aroclor-1242		CAS #: 53469-21-9			
6.670	6.670	0.000	21332	1.60000	1.4 80.00- 120.00	100.00
6.987	6.987	0.000	12075	1.60000	1.4 36.61- 76.61	56.61
7.238	7.238	0.000	40525	1.60000	1.4 169.97- 209.97	189.97
Average of Peak Amounts =			1.40000			
-----						
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
12.014	12.018	-0.004	59742	0.16000	0.14	
-----						



Data File: \\avogadro\organicos\E2,1\130529BR,B\E2H0457R.D  
Date: 29-May-2013 19:39  
Client ID: AR12425D2  
Sample Info: AR12425D2,AR12425D2,,ar-1242,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPestHII

Instrument: E2.1  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BF.B\E2M0458F.D  
 Lab Smp Id: AR12481D2 Client Smp ID: AR12481D2  
 Inj Date : 29-MAY-2013 19:59  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12481D2,AR12481D2,,ar1248.sub,,  
 Misc Info : 1,1,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BF.B\E2\_LL\_PCB\_F.m  
 Meth Date : 30-May-2013 12:49 tmcdaniel Quant Type: ESTD  
 Cal Date : 29-MAY-2013 19:59 Cal File: E2M0458F.D  
 Als bottle: 13 Calibration Sample, Level: 1  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1248.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

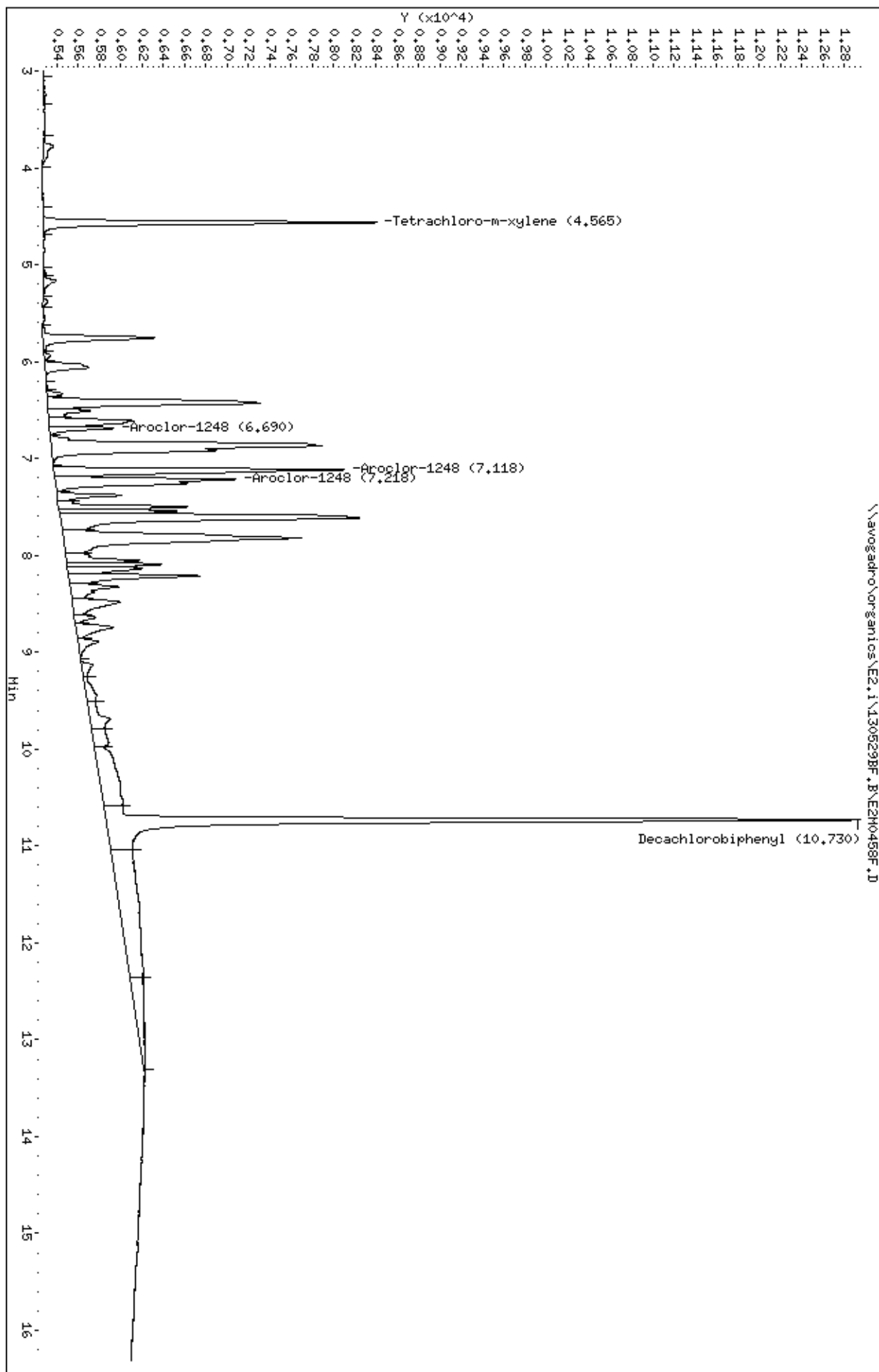
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
-----						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
4.564	4.565	-0.001	3135 0.00500	0.0052		(a)
-----						
7	Aroclor-1248		CAS #: 12672-29-6			
6.689	6.689	0.000	604 0.10000	0.10	80.00- 120.00	100.00(a)
7.117	7.116	0.001	2717 0.10000	0.11	354.56- 394.56	449.83
7.218	7.217	0.001	1690 0.10000	0.10	237.83- 277.83	279.80
	Average of Peak Amounts =		0.10333			
-----						
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.730	10.728	0.002	278447 0.01000	0.013		(a)
-----						

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\E2,1\130529BF.B\E2H0458F.D  
Date : 29-MAY-2013 19:59  
Client ID: AR12481D2  
Sample Info: AR12481D2,AR12481D2,,ar1248,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPrest

Instrument: E2.i  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BR.B\E2M0458R.D  
 Lab Smp Id: AR12481D2 Client Smp ID: AR12481D2  
 Inj Date : 29-MAY-2013 19:59  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12481D2,AR12481D2,,ar1248.sub,,  
 Misc Info : 1,1,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BR.B\E2\_LL\_PCB\_R.m  
 Meth Date : 30-May-2013 12:59 tmcdaniel Quant Type: ESTD  
 Cal Date : 29-MAY-2013 19:59 Cal File: E2M0458R.D  
 Als bottle: 13 Calibration Sample, Level: 1  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1248.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

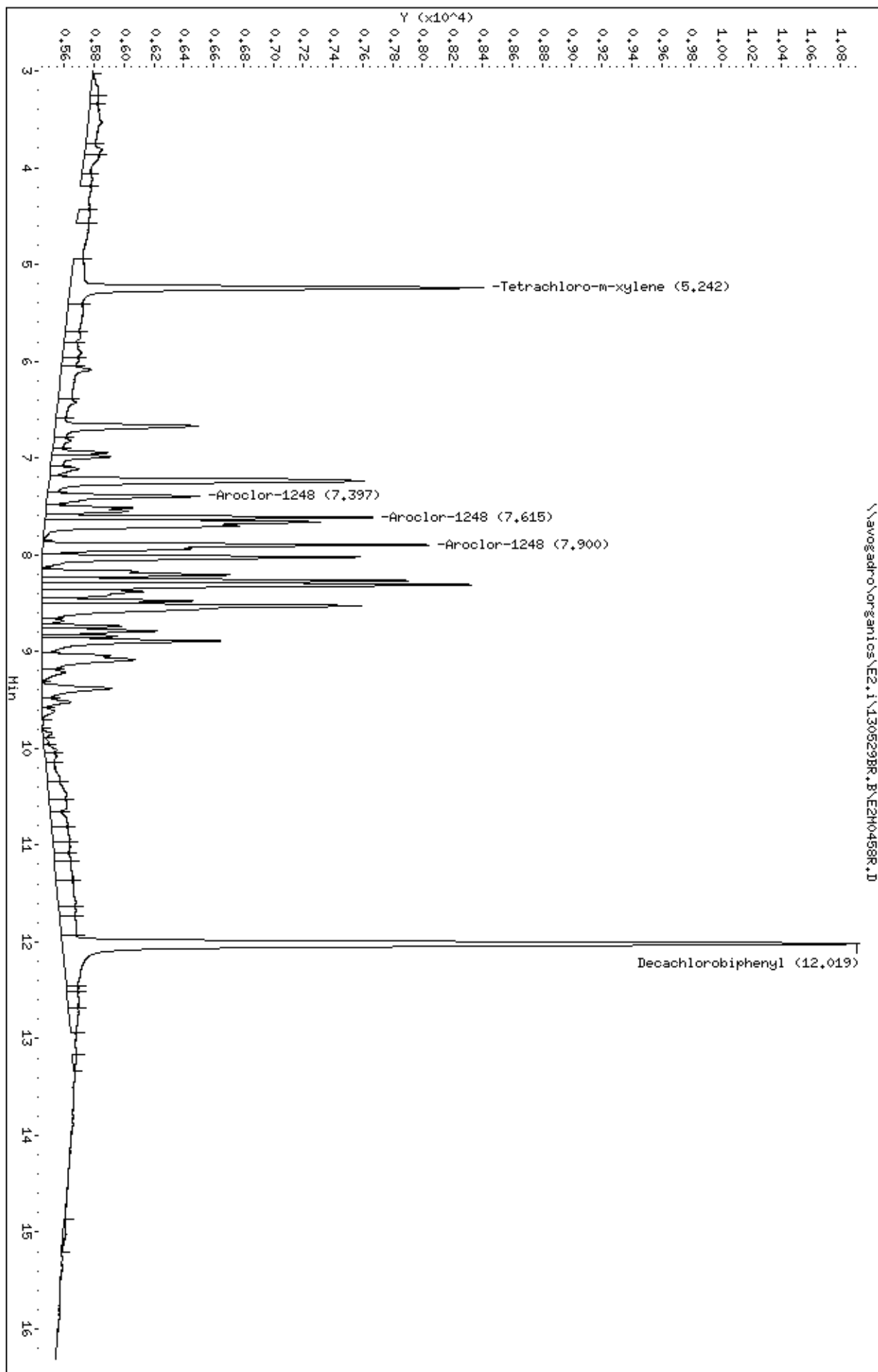
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
-----						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
5.242	5.242	0.000	2762 0.00500	0.0054		(a)
-----						
5	Aroclor-1248		CAS #: 12672-29-6			
7.397	7.397	0.000	1021 0.10000	0.10	80.00- 120.00	100.00(a)
7.615	7.614	0.001	2177 0.10000	0.10	177.98- 217.98	213.22
7.899	7.898	0.001	2532 0.10000	0.10	229.99- 269.99	247.99
	Average of Peak Amounts =		0.10000			
-----						
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
12.018	12.018	0.000	5340 0.01000	0.012		(a)
-----						

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\E2,1\130529BR,B\E2H0458R.D  
Date : 29-MAY-2013 19:59  
Client ID: AR12481D2  
Sample Info: AR12481D2,AR12481D2,,ar-1248,sub,  
Volume Injected (uL): 1.0  
Column phase: CLPestH1

Instrument: E2.1  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BF.B\E2M0459F.D  
 Lab Smp Id: AR12486D2 Client Smp ID: AR12486D2  
 Inj Date : 29-MAY-2013 20:19  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12486D2,AR12486D2,,ar1248.sub,,  
 Misc Info : 1,6,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BF.B\E2\_LL\_PCB\_F.m  
 Meth Date : 30-May-2013 12:49 tmcdaniel Quant Type: ESTD  
 Cal Date : 29-MAY-2013 20:19 Cal File: E2M0459F.D  
 Als bottle: 14 Calibration Sample, Level: 6  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1248.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

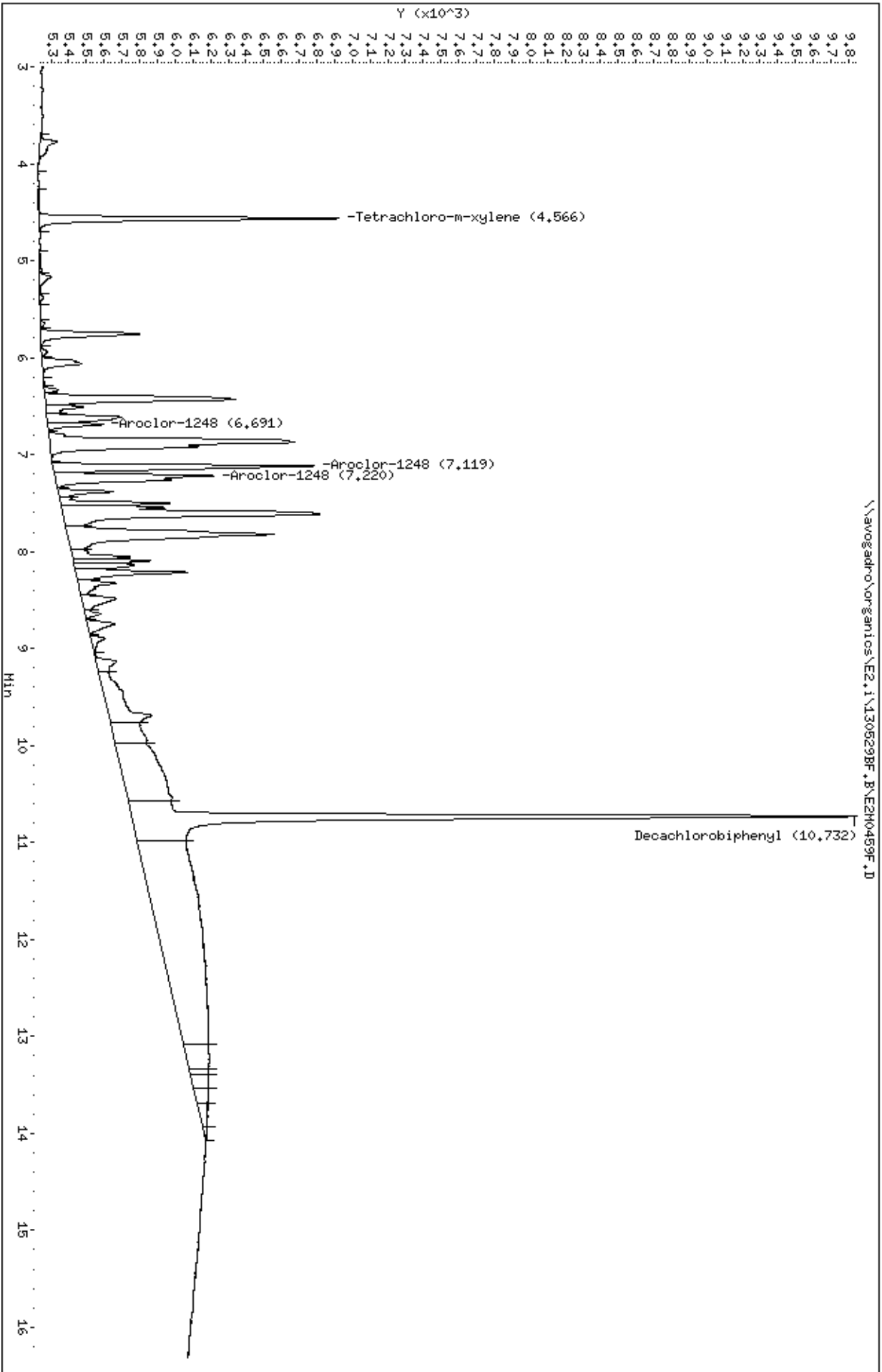
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
-----						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
4.565	4.565	0.000	1687 0.00000	0.0028		(a)
-----						
7	Aroclor-1248		CAS #: 12672-29-6			
6.691	6.689	0.002	313 0.05000	0.052	80.00- 120.00	100.00(a)
7.119	7.116	0.003	1461 0.05000	0.055	354.56- 394.56	466.77
7.219	7.217	0.002	892 0.05000	0.054	237.83- 277.83	284.98
	Average of Peak Amounts =		0.05367			
-----						
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.731	10.728	0.003	186229 0.00000	0.0087		(a)
-----						

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\E2,1\130529BF.B\E2H0459F.D  
Date : 29-MAY-2013 20:19  
Client ID: AR12486D2  
Sample Info: AR12486D2,AR12486D2,,ar1248,sub,  
Volume Injected (uL): 1.0  
Column phase: CLPrest

Instrument: E2.i  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BR.B\E2M0459R.D  
 Lab Smp Id: AR12486D2 Client Smp ID: AR12486D2  
 Inj Date : 29-MAY-2013 20:19  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12486D2,AR12486D2,,ar1248.sub,,  
 Misc Info : 1,6,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BR.B\E2\_LL\_PCB\_R.m  
 Meth Date : 30-May-2013 12:59 tmcdaniel Quant Type: ESTD  
 Cal Date : 29-MAY-2013 20:19 Cal File: E2M0459R.D  
 Als bottle: 14 Calibration Sample, Level: 6  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1248.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
-----						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
5.243	5.242	0.001	1521 0.00000	0.0030		(a)
-----						
5	Aroclor-1248		CAS #: 12672-29-6			
7.398	7.397	0.001	544 0.05000	0.052	80.00- 120.00	100.00(a)
7.616	7.614	0.002	1210 0.05000	0.053	177.98- 217.98	222.43
7.901	7.898	0.003	1393 0.05000	0.052	229.99- 269.99	256.07
	Average of Peak Amounts =		0.05233			
-----						
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
12.020	12.018	0.002	2975 0.00000	0.0067		(a)
-----						

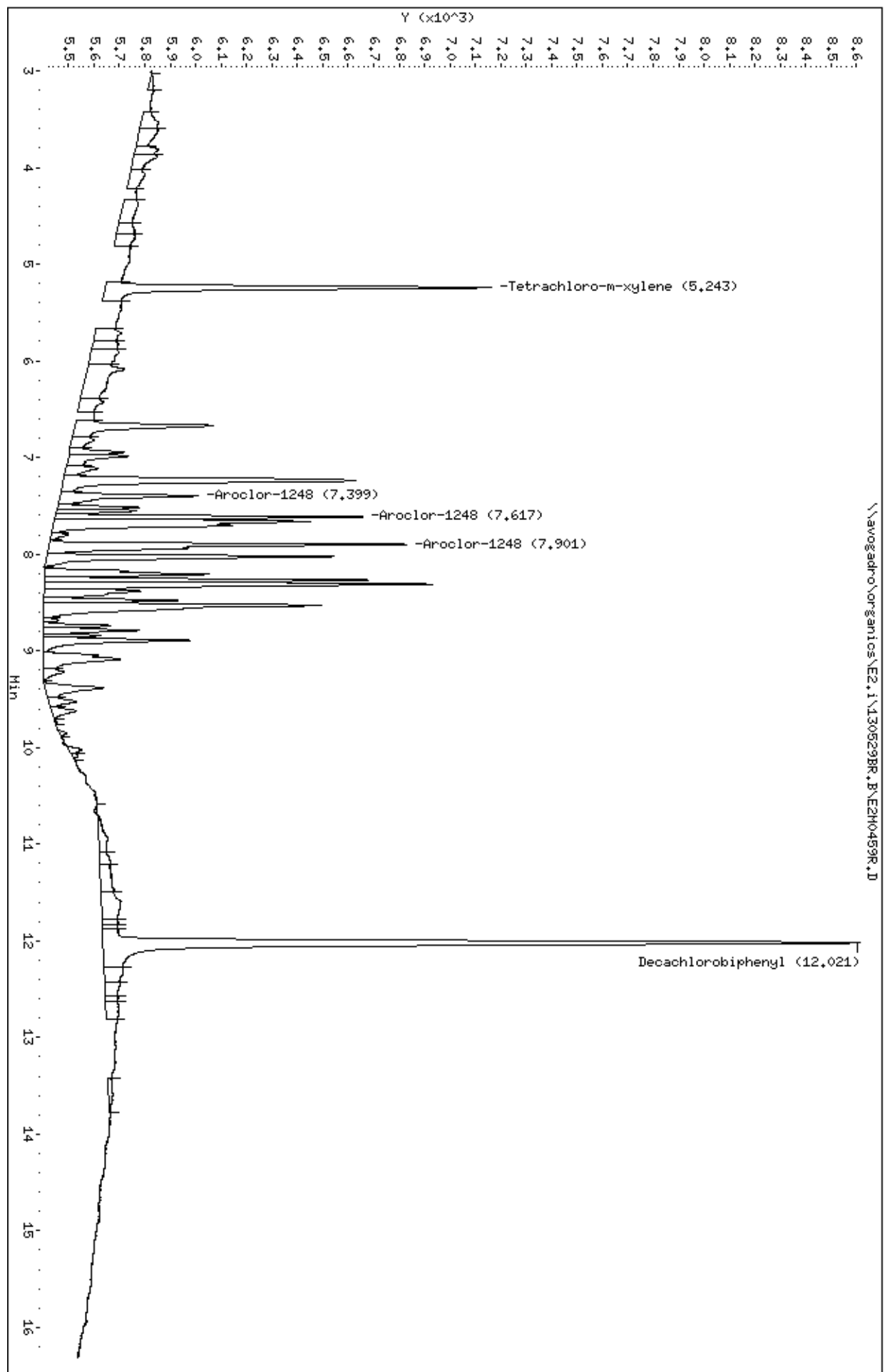
QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).



Data File: \\avogadro\organicos\E2,1\130529BR,B\E2H0459R.D  
Date : 29-May-2013 20:19  
Client ID: ARI2486D2  
Sample Info: ARI2486D2,ARI2486D2,,ar-1248,sub,  
Volume Injected (uL): 1.0  
Column phase: CLPrestII

Instrument: E2.i  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BF.B\E2M0460F.D  
 Lab Smp Id: AR12482D2 Client Smp ID: AR12482D2  
 Inj Date : 29-MAY-2013 20:38  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12482D2,AR12482D2,,ar1248.sub,,  
 Misc Info : 1,2,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BF.B\E2\_LL\_PCB\_F.m  
 Meth Date : 30-May-2013 12:49 tmcdaniel Quant Type: ESTD  
 Cal Date : 29-MAY-2013 20:38 Cal File: E2M0460F.D  
 Als bottle: 15 Calibration Sample, Level: 2  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1248.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

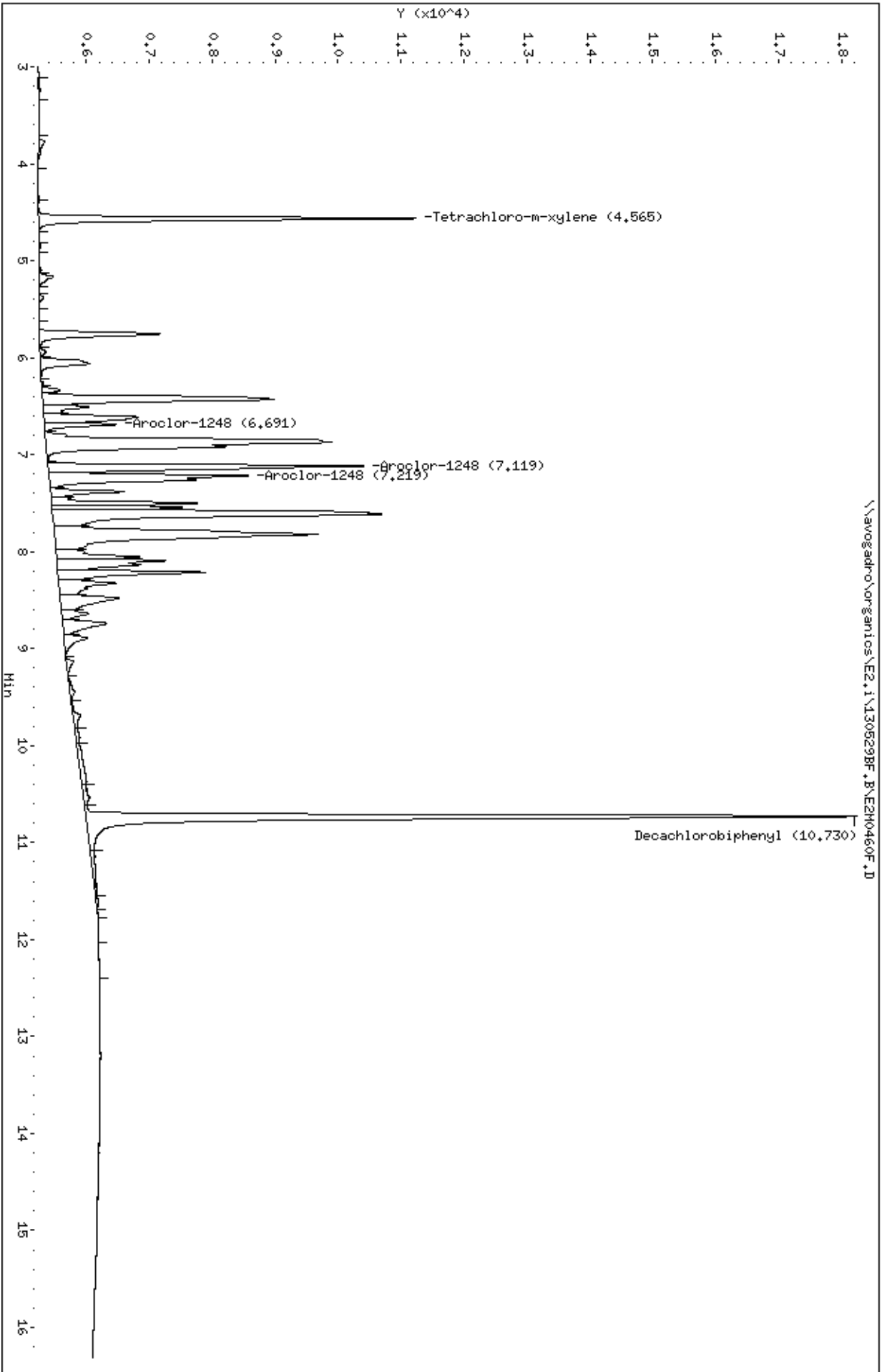
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
-----						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
4.565	4.565	0.000	5991 0.01000	0.0099		(a)
-----						
7	Aroclor-1248		CAS #: 12672-29-6			
6.690	6.689	0.001	1139 0.20000	0.19	80.00- 120.00	100.00(a)
7.118	7.116	0.002	4996 0.20000	0.19	354.56- 394.56	438.63
7.218	7.217	0.001	3160 0.20000	0.19	237.83- 277.83	277.44
	Average of Peak Amounts =		0.19000			
-----						
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.730	10.728	0.002	420890 0.02000	0.021		(a)
-----						

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\E2,1\130529BF.B\E2H0460F.D  
Date : 29-MAY-2013 20:38  
Client ID: AR12482D2  
Sample Info: AR12482D2,AR12482D2,,ar-1248,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPrest

Instrument: E2.i  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BR.B\E2M0460R.D  
 Lab Smp Id: AR12482D2 Client Smp ID: AR12482D2  
 Inj Date : 29-MAY-2013 20:38  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12482D2,AR12482D2,,ar1248.sub,,  
 Misc Info : 1,2,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BR.B\E2\_LL\_PCB\_R.m  
 Meth Date : 30-May-2013 12:59 tmcdaniel Quant Type: ESTD  
 Cal Date : 29-MAY-2013 20:38 Cal File: E2M0460R.D  
 Als bottle: 15 Calibration Sample, Level: 2  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1248.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

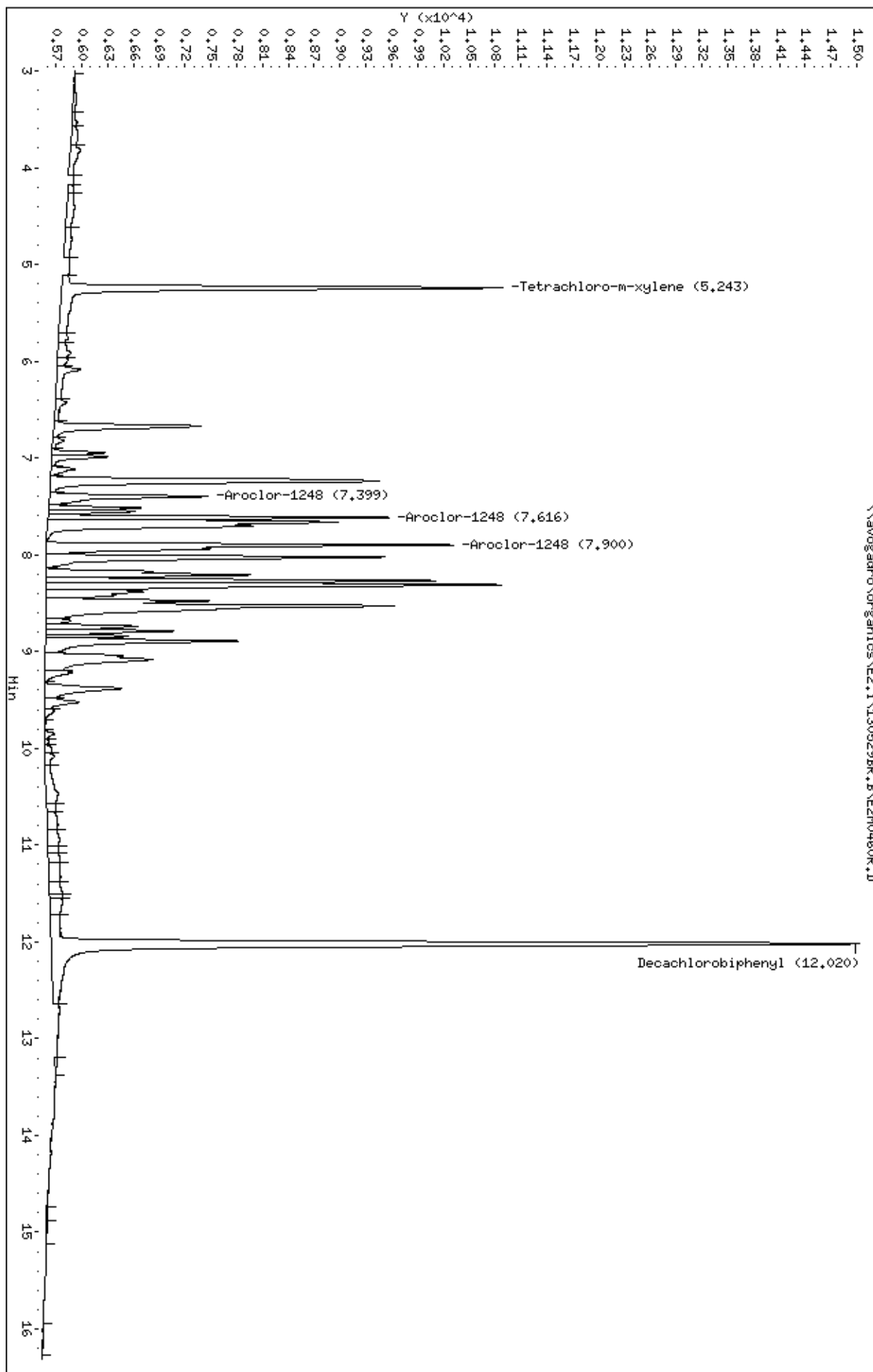
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
-----						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
5.242	5.242	0.000	5119 0.01000	0.010		(a)
-----						
5	Aroclor-1248		CAS #: 12672-29-6			
7.398	7.397	0.001	1833 0.20000	0.18	80.00- 120.00	100.00(a)
7.615	7.614	0.001	3928 0.20000	0.18	177.98- 217.98	214.29
7.900	7.898	0.002	4651 0.20000	0.18	229.99- 269.99	253.74
	Average of Peak Amounts =		0.18000			
-----						
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
12.019	12.018	0.001	9365 0.02000	0.021		(a)
-----						

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\E2,1\130529BR,B\E2H046OR.D  
Date: 29-May-2013 20:38  
Client ID: AR12482D2  
Sample Info: AR12482D2,AR12482D2,,ar-1248,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPestII

Instrument: E2.1  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BF.B\E2M0461F.D  
 Lab Smp Id: AR12483D2 Client Smp ID: AR12483D2  
 Inj Date : 29-MAY-2013 20:58  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12483D2,AR12483D2,,ar1248.sub,,  
 Misc Info : 1,3,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BF.B\E2\_LL\_PCB\_F.m  
 Meth Date : 30-May-2013 12:49 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 01:34 Cal File: E2M0475F.D  
 Als bottle: 16 Calibration Sample, Level: 3  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1248.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

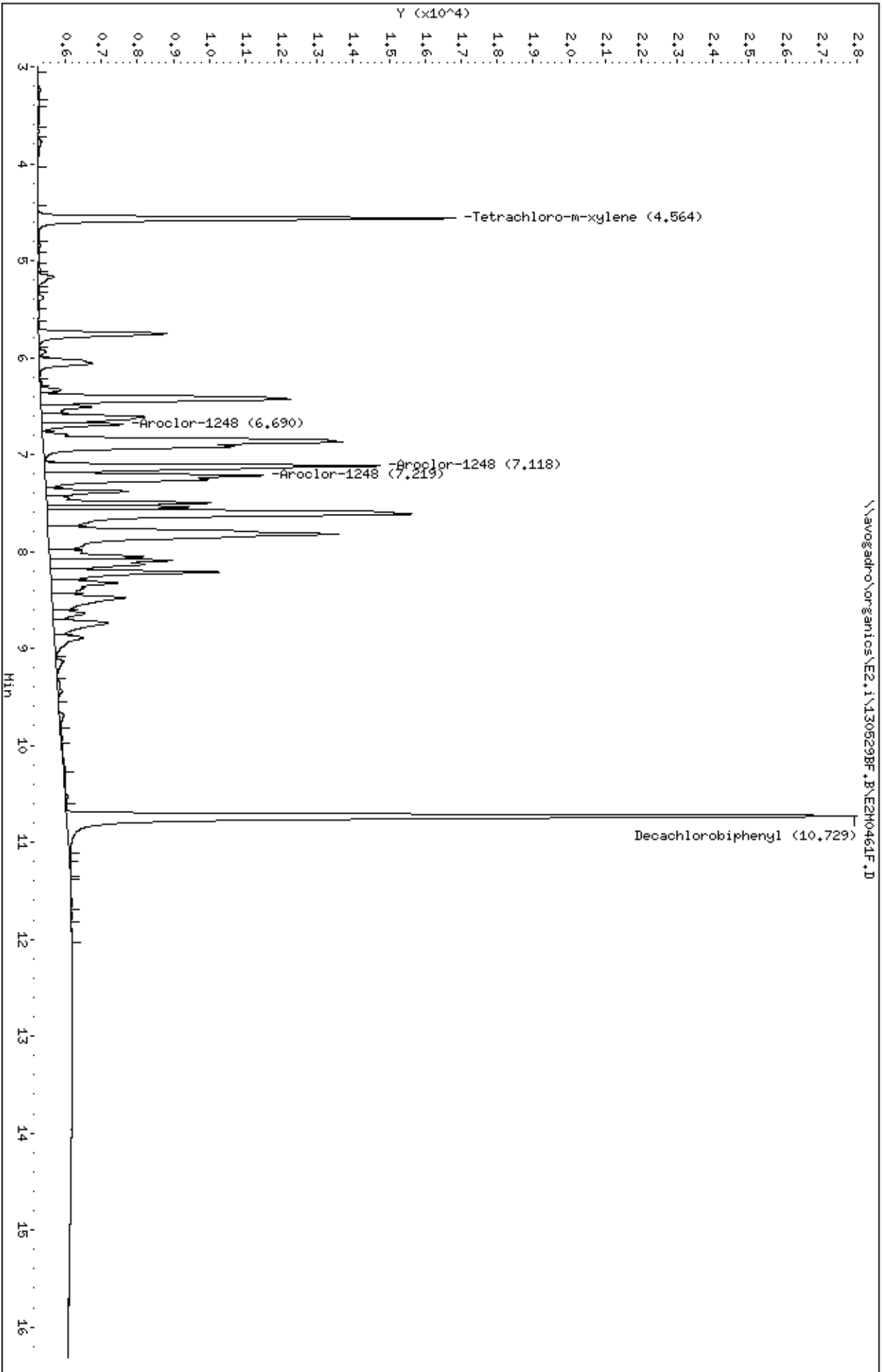
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
4.564	4.565	-0.001	11596 0.02000	0.019		(a)
7					CAS #: 12672-29-6	
6.690	6.689	0.001	2227 0.40000	0.38	80.00- 120.00	100.00(a)
7.118	7.116	0.002	9286 0.40000	0.36	354.56- 394.56	416.97
7.218	7.217	0.001	6052 0.40000	0.37	237.83- 277.83	271.76
Average of Peak Amounts =			0.37000			
\$ 11					CAS #: 2051-24-3	
10.729	10.728	0.001	738710 0.04000	0.036		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\E2,1\130529BF.B\E2H0461F.D  
Date: 29-May-2013 20:58  
Client ID: AR12483D2  
Sample Info: AR12483D2,AR12483D2,,ar-1248,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPrest

Instrument: E2.i  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BR.B\E2M0461R.D  
 Lab Smp Id: AR12483D2 Client Smp ID: AR12483D2  
 Inj Date : 29-MAY-2013 20:58  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12483D2,AR12483D2,,ar1248.sub,,  
 Misc Info : 1,3,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BR.B\E2\_LL\_PCB\_R.m  
 Meth Date : 30-May-2013 12:59 tmcdaniel Quant Type: ESTD  
 Cal Date : 29-MAY-2013 20:58 Cal File: E2M0461R.D  
 Als bottle: 16 Calibration Sample, Level: 3  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1248.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
-----						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
5.241	5.242	-0.001	9819 0.02000	0.019		(a)
-----						
5	Aroclor-1248		CAS #: 12672-29-6			
7.398	7.397	0.001	3407 0.40000	0.35	80.00- 120.00	100.00(a)
7.615	7.614	0.001	7220 0.40000	0.34	177.98- 217.98	211.92
7.900	7.898	0.002	8683 0.40000	0.35	229.99- 269.99	254.86
	Average of Peak Amounts =		0.34667			
-----						
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
12.018	12.018	0.000	16915 0.04000	0.038		(a)
-----						

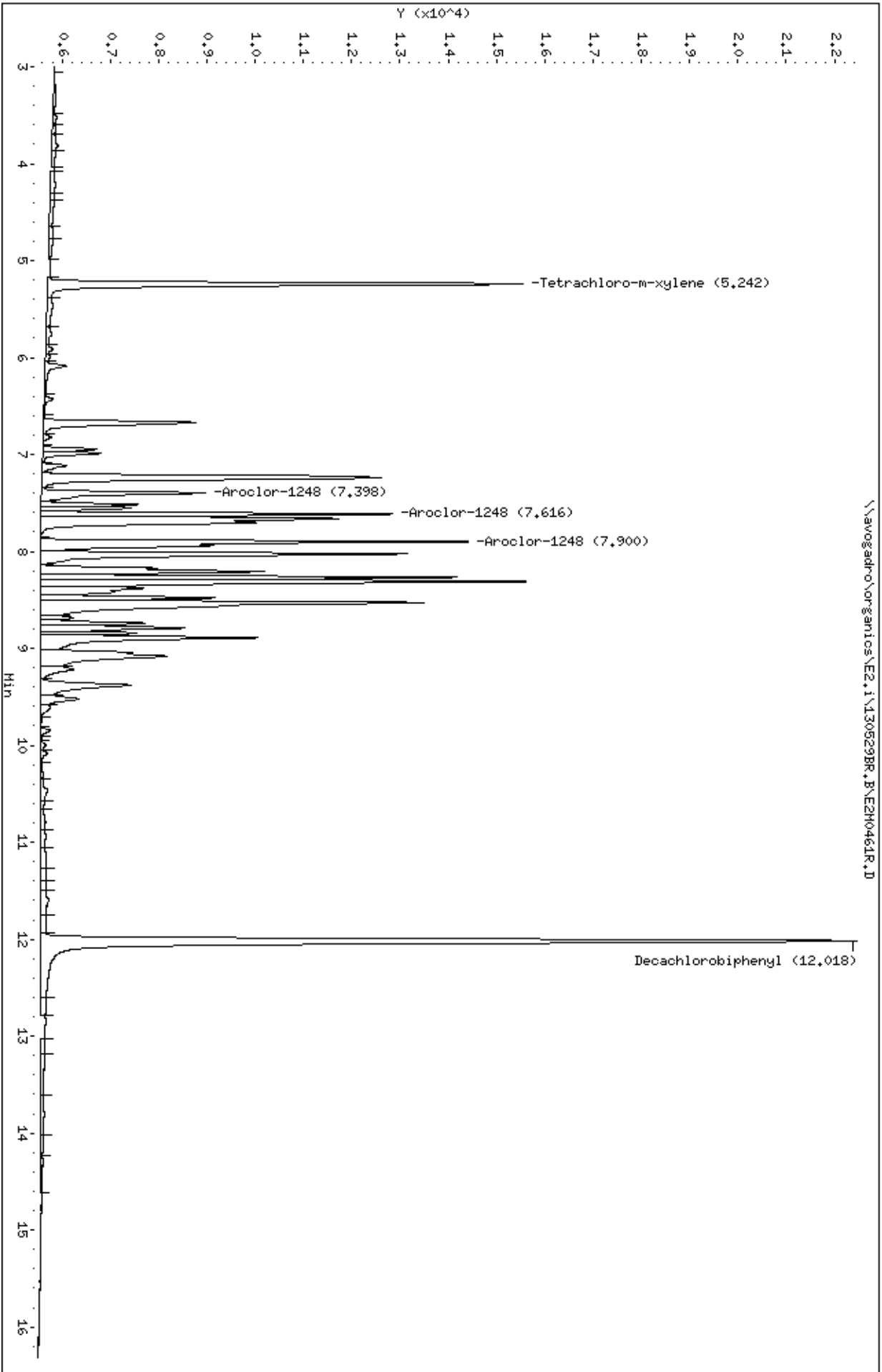
QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).



Data File: \\avogadro\organicos\E2,1\130529BR,B\E2H0461R.D  
Date : 29-May-2013 20:58  
Client ID: AR12483D2  
Sample Info: AR12483D2,AR12483D2,,ar-1248,sub,  
Volume Injected (uL): 1.0  
Column phase: CLPestII

Instrument: E2.i  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BF.B\E2M0462F.D  
 Lab Smp Id: AR12484D2 Client Smp ID: AR12484D2  
 Inj Date : 29-MAY-2013 21:18  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12484D2,AR12484D2,,ar1248.sub,,  
 Misc Info : 1,4,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BF.B\E2\_LL\_PCB\_F.m  
 Meth Date : 30-May-2013 12:49 tmcdaniel Quant Type: ESTD  
 Cal Date : 29-MAY-2013 21:18 Cal File: E2M0462F.D  
 Als bottle: 17 Calibration Sample, Level: 4  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1248.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

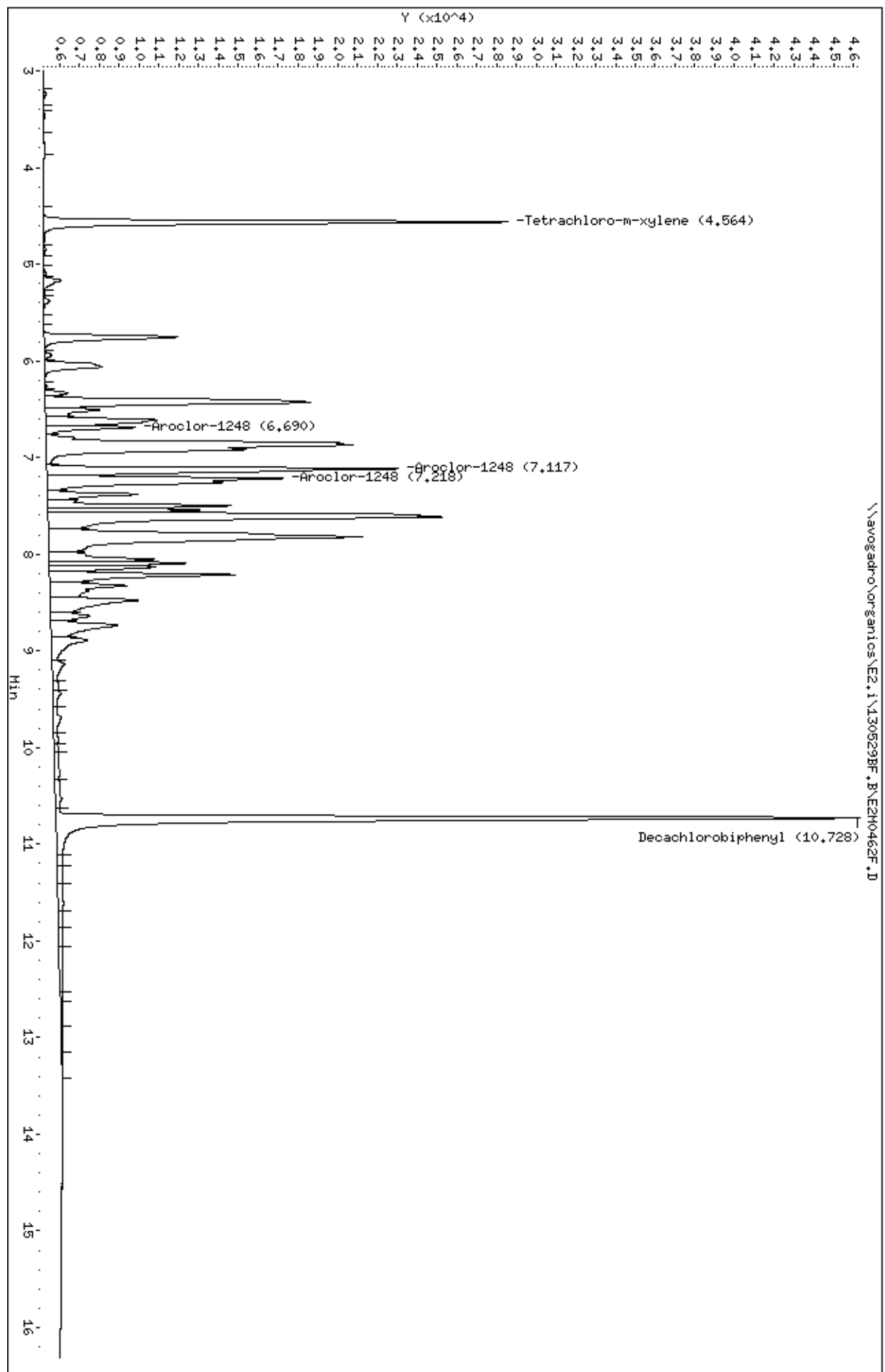
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
4.563	4.565	-0.002	23350 0.04000	0.039		(a)
7					CAS #: 12672-29-6	
6.690	6.689	0.001	4475 0.80000	0.77	80.00- 120.00	100.00(a)
7.117	7.116	0.001	17590 0.80000	0.69	354.56- 394.56	393.07
7.218	7.217	0.001	11848 0.80000	0.74	237.83- 277.83	264.76
Average of Peak Amounts =			0.73333			
\$ 11					CAS #: 2051-24-3	
10.728	10.728	0.000	1409115 0.08000	0.069		

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\E2,1\130529BF.B\E2H0462F.D  
Date : 29-MAY-2013 21:18  
Client ID: AR12484D2  
Sample Info: AR12484D2,AR12484D2,,ar1248,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPrest

Instrument: E2.1  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BR.B\E2M0462R.D  
 Lab Smp Id: AR12484D2 Client Smp ID: AR12484D2  
 Inj Date : 29-MAY-2013 21:18  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12484D2,AR12484D2,,ar1248.sub,,  
 Misc Info : 1,4,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BR.B\E2\_LL\_PCB\_R.m  
 Meth Date : 30-May-2013 12:59 tmcdaniel Quant Type: ESTD  
 Cal Date : 29-MAY-2013 21:18 Cal File: E2M0462R.D  
 Als bottle: 17 Calibration Sample, Level: 4  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1248.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

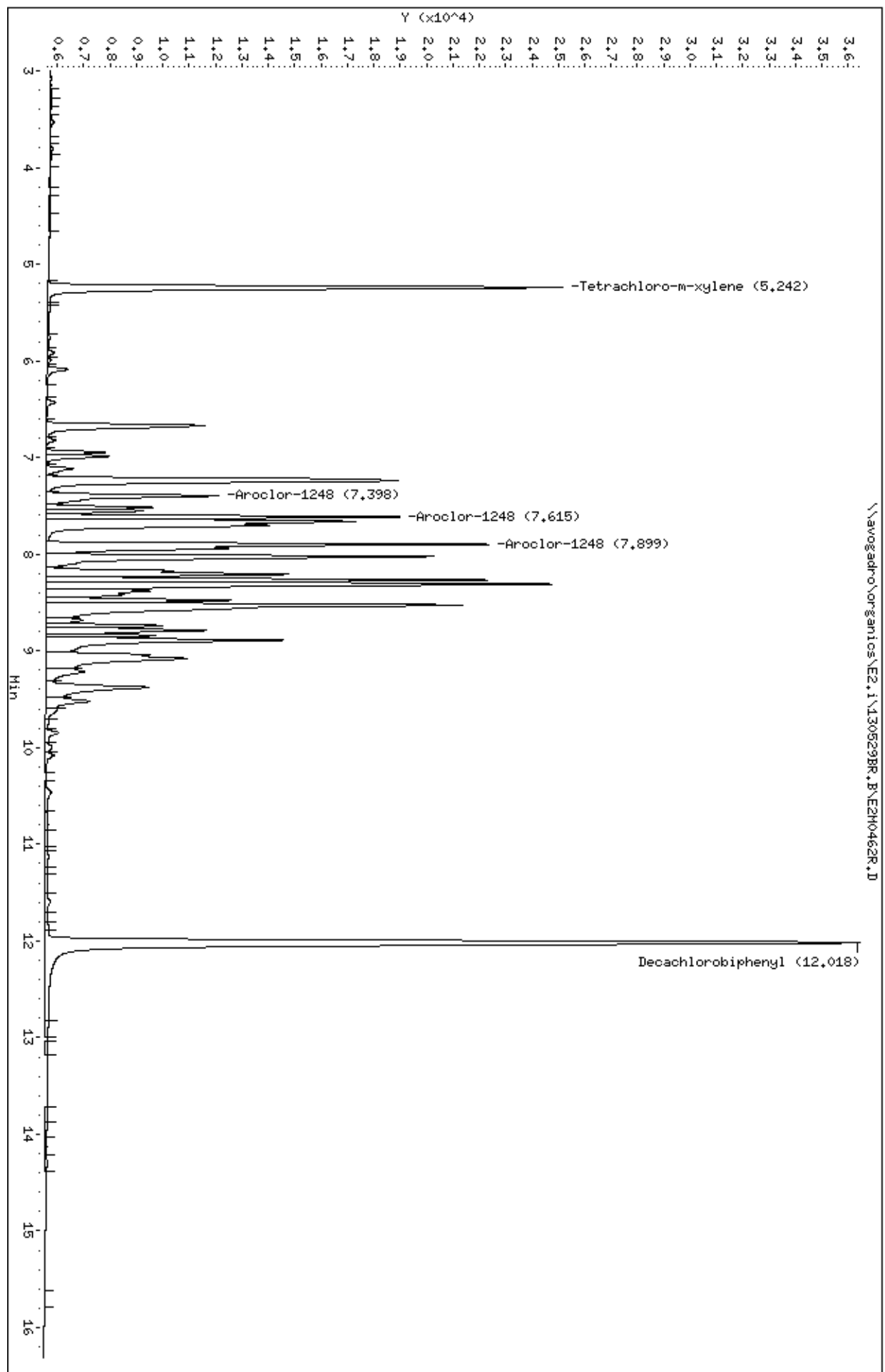
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
5.241	5.242	-0.001	19444 0.04000	0.038		(a)
-----						
5					CAS #: 12672-29-6	
7.397	7.397	0.000	6555 0.80000	0.70	80.00- 120.00	100.00(a)
7.615	7.614	0.001	13325 0.80000	0.66	177.98- 217.98	203.28
7.899	7.898	0.001	16355 0.80000	0.69	229.99- 269.99	249.50
Average of Peak Amounts =			0.68333			
-----						
\$ 11					CAS #: 2051-24-3	
12.018	12.018	0.000	30938 0.08000	0.071		

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\E2,1\130529BR,B\E2H0462R.D  
Date : 29-May-2013 21:18  
Client ID: AR12484D2  
Sample Info: AR12484D2,AR12484D2,,ar-1248,sub,  
Volume Injected (uL): 1.0  
Column phase: CLPrestII

Instrument: E2.i  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BF.B\E2M0463F.D  
 Lab Smp Id: AR12485D2 Client Smp ID: AR12485D2  
 Inj Date : 29-MAY-2013 21:38  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12485D2,AR12485D2,,ar1248.sub,,  
 Misc Info : 1,5,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BF.B\E2\_LL\_PCB\_F.m  
 Meth Date : 30-May-2013 12:49 tmcdaniel Quant Type: ESTD  
 Cal Date : 29-MAY-2013 21:38 Cal File: E2M0463F.D  
 Als bottle: 18 Calibration Sample, Level: 5  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1248.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

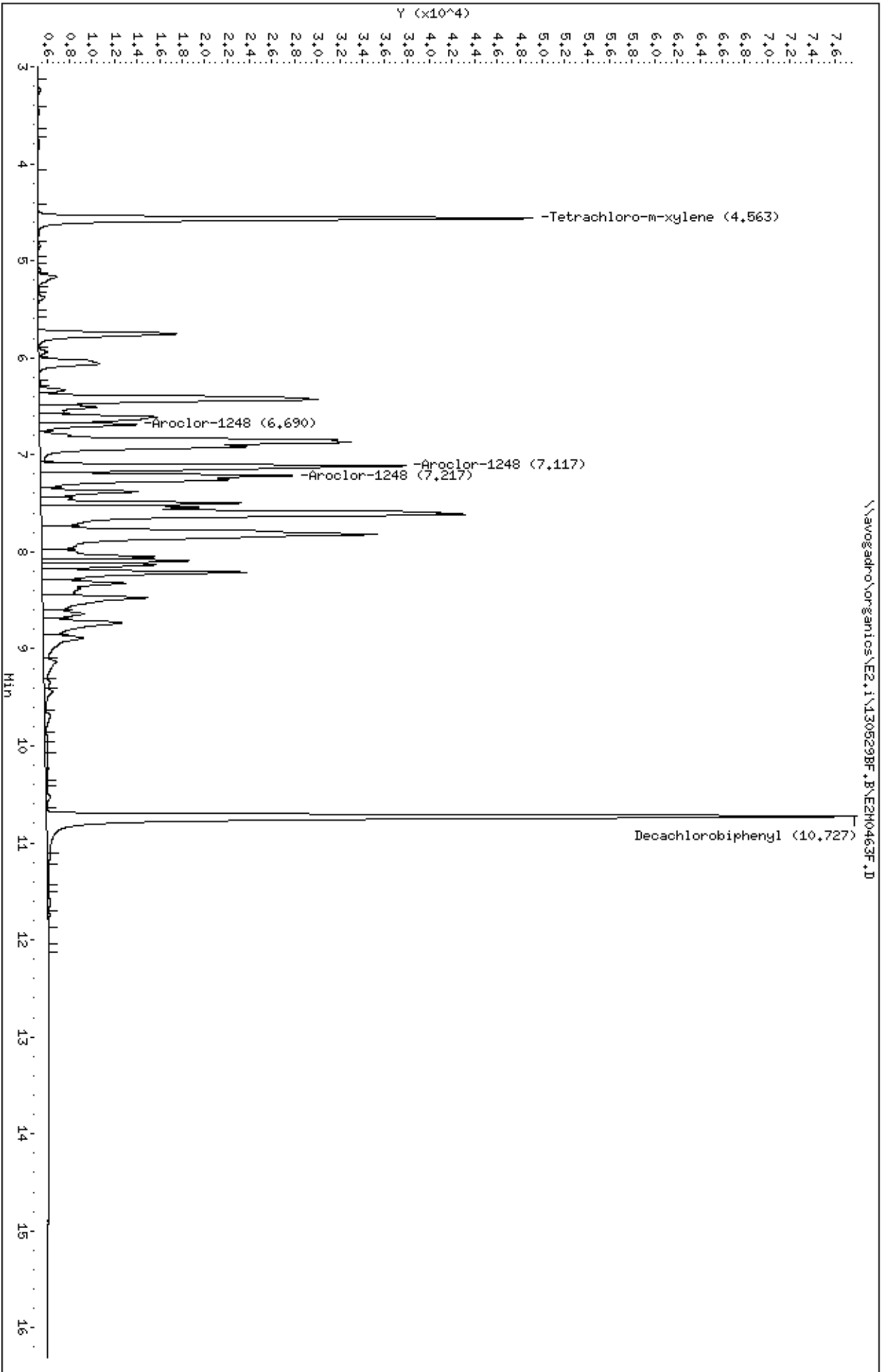
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
-----						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
4.563	4.565	-0.002	43921	0.08000	0.075	
-----						
7	Aroclor-1248		CAS #: 12672-29-6			
6.689	6.689	0.000	8596	1.60000	1.5 80.00- 120.00	100.00
7.116	7.116	0.000	32197	1.60000	1.3 354.56- 394.56	374.56
7.217	7.217	0.000	22163	1.60000	1.4 237.83- 277.83	257.83
Average of Peak Amounts =			1.40000			
-----						
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.727	10.728	-0.001	2403043	0.16000	0.12	
-----						

Data File: \\avogadro\organicos\E2,1\130529BF.B\E2H0463F.D  
Date : 29-MAY-2013 21:38  
Client ID: AR12485D2  
Sample Info: AR12485D2,AR12485D2,,ar-1248,sub,  
Volume Injected (uL): 1.0  
Column phase: CLPrest

Instrument: E2.1  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BR.B\E2M0463R.D  
 Lab Smp Id: AR12485D2 Client Smp ID: AR12485D2  
 Inj Date : 29-MAY-2013 21:38  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12485D2,AR12485D2,,ar1248.sub,,  
 Misc Info : 1,5,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BR.B\E2\_LL\_PCB\_R.m  
 Meth Date : 30-May-2013 12:59 tmcdaniel Quant Type: ESTD  
 Cal Date : 29-MAY-2013 21:38 Cal File: E2M0463R.D  
 Als bottle: 18 Calibration Sample, Level: 5  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1248.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

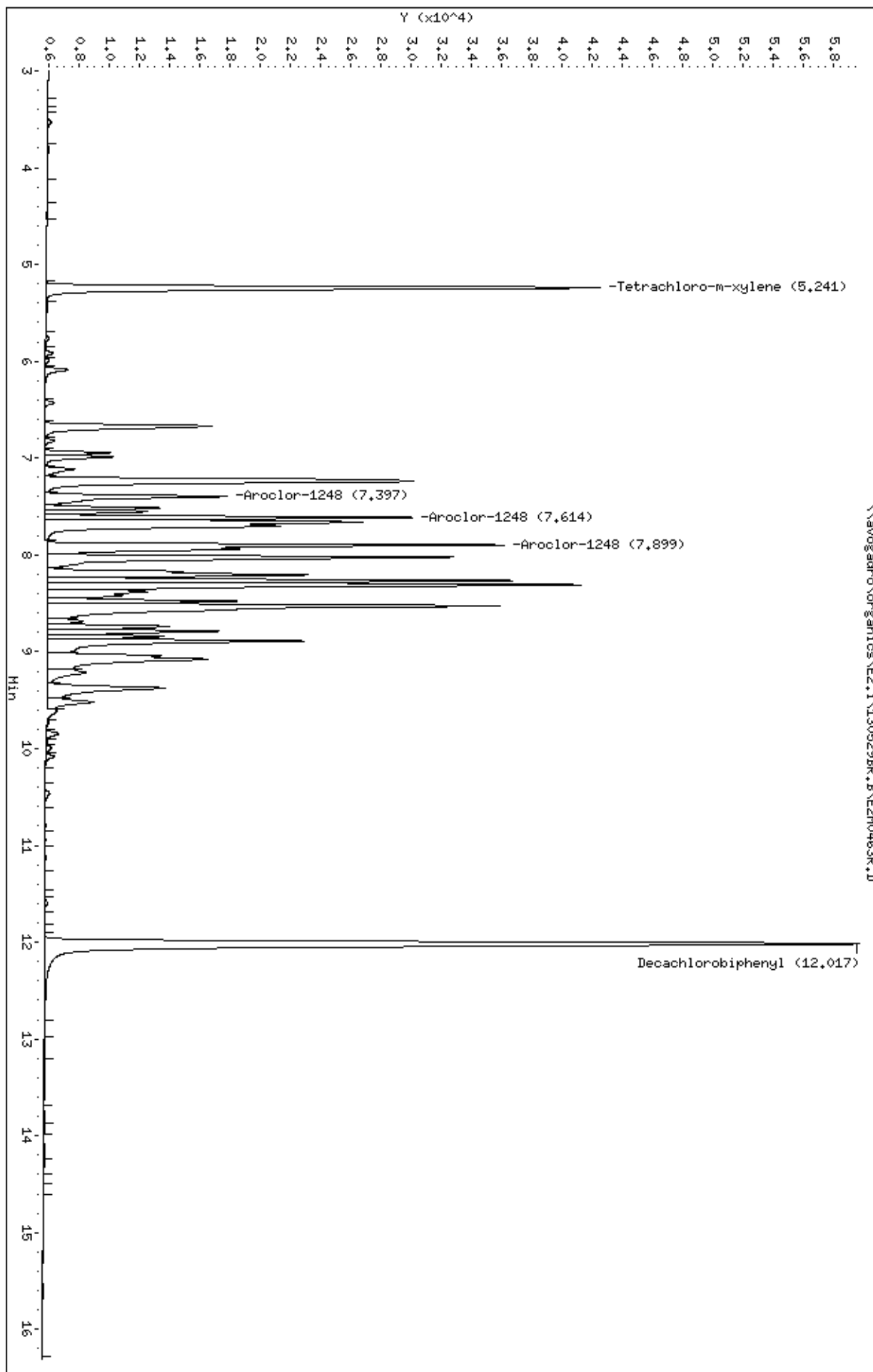
AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
5.240	5.242	-0.002	36589	0.08000	0.073	
-----						
5					CAS #: 12672-29-6	
7.397	7.397	0.000	12100	1.60000	1.3 80.00- 120.00	100.00
7.614	7.614	0.000	23955	1.60000	1.2 177.98- 217.98	197.98
7.898	7.898	0.000	30249	1.60000	1.3 229.99- 269.99	249.99
Average of Peak Amounts =			1.26667			
-----						
\$ 11					CAS #: 2051-24-3	
12.016	12.018	-0.002	54044	0.16000	0.12	
-----						



Data File: \\avogadro\organicos\E2,1\130529BR,B\E2H0463R.D  
Date : 29-MAY-2013 21:38  
Client ID: AR12485D2  
Sample Info: AR12485D2,AR12485D2,,ar-1248,sub,  
Volume Injected (uL): 1.0  
Column phase: CLPestII

Instrument: E2.i  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BF.B\E2M0464F.D  
 Lab Smp Id: AR12541D2 Client Smp ID: AR12541D2  
 Inj Date : 29-MAY-2013 21:58  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12541D2,AR12541D2,,ar1254.sub,,  
 Misc Info : 1,1,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BF.B\E2\_LL\_PCB\_F.m  
 Meth Date : 30-May-2013 12:49 tmcdaniel Quant Type: ESTD  
 Cal Date : 29-MAY-2013 21:58 Cal File: E2M0464F.D  
 Als bottle: 19 Calibration Sample, Level: 1  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1254.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

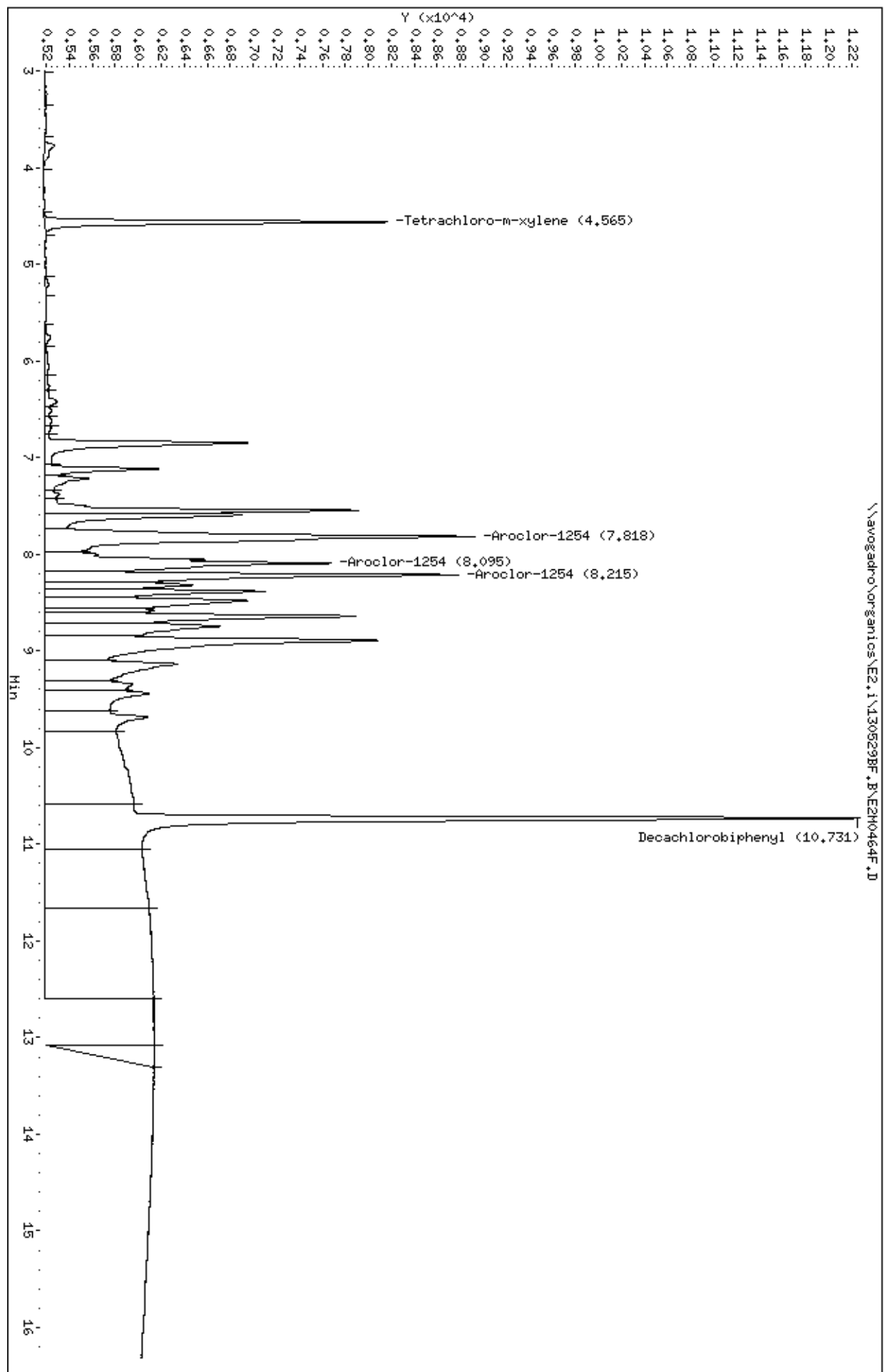
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
4.564	4.565	-0.001	2978 0.00500	0.0051		(a)
\$ 11					CAS #: 2051-24-3	
10.730	10.728	0.002	437128 0.01000	0.019		(a)
8					CAS #: 11097-69-1	
7.817	7.816	0.001	3746 0.10000	0.10	80.00- 120.00	100.00(a)
8.094	8.094	0.000	2494 0.10000	0.10	55.28- 95.28	66.58
8.214	8.212	0.002	3599 0.10000	0.10	93.68- 133.68	96.08
Average of Peak Amounts =			0.10000			

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\E2,1\130529BF.B\E2H0464F.D  
 Date: 29-May-2013 21:58  
 Client ID: AR12541D2  
 Sample Info: AR12541D2,AR12541D2,,ar-1254,sub,  
 Volume Injected (uL): 1.0  
 Column phase: CLPrest

Instrument: E2.1  
 Operator: TH SRC: TH  
 Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BR.B\E2M0464R.D  
 Lab Smp Id: AR12541D2 Client Smp ID: AR12541D2  
 Inj Date : 29-MAY-2013 21:58  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12541D2,AR12541D2,,ar1254.sub,,  
 Misc Info : 1,1,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BR.B\E2\_LL\_PCB\_R.m  
 Meth Date : 30-May-2013 12:59 tmcdaniel Quant Type: ESTD  
 Cal Date : 29-MAY-2013 21:58 Cal File: E2M0464R.D  
 Als bottle: 19 Calibration Sample, Level: 1  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1254.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

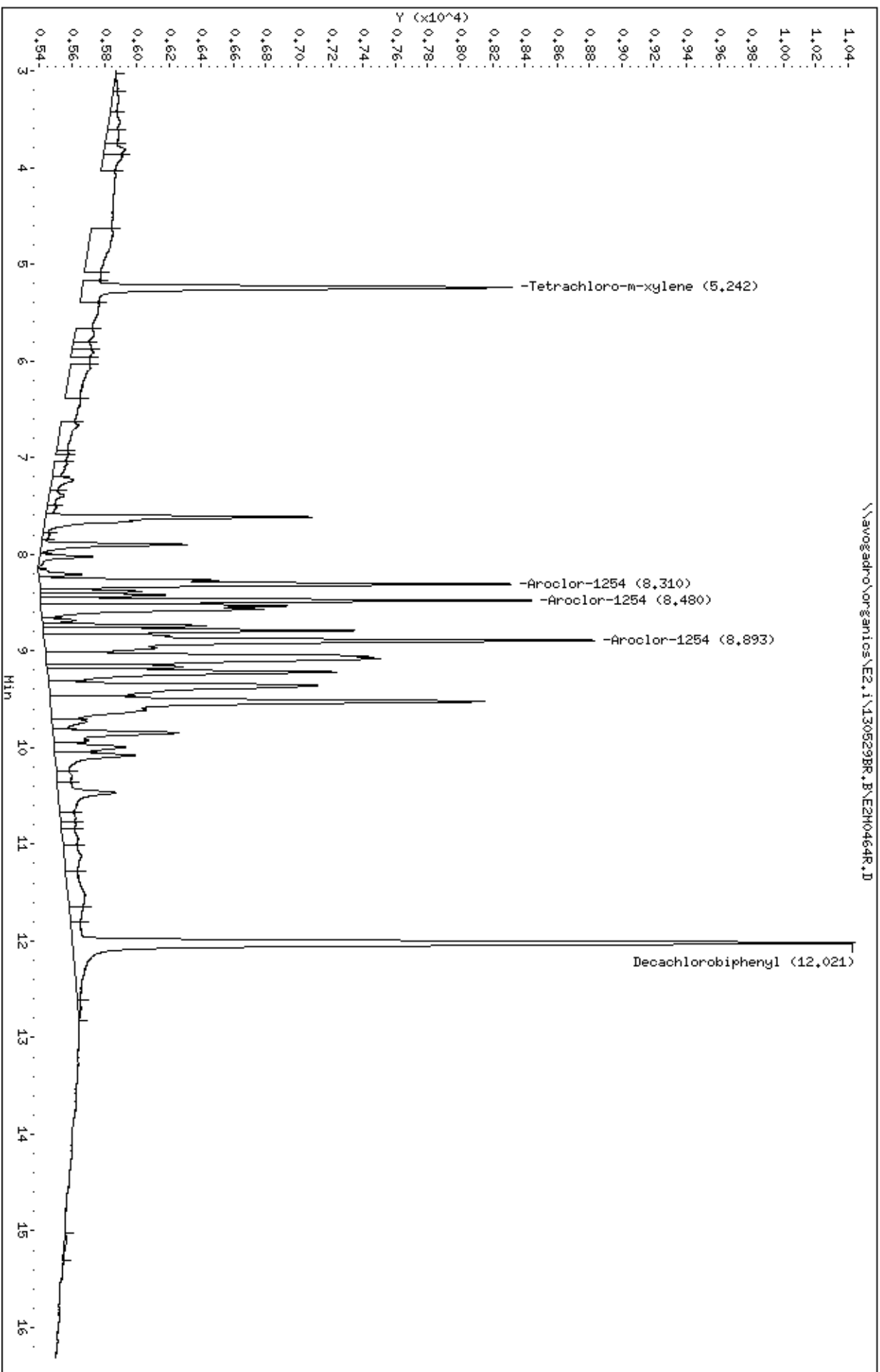
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
5.242	5.242	0.000	2651 0.00500	0.0054		(a)
\$ 11					CAS #: 2051-24-3	
12.021	12.018	0.003	4839 0.01000	0.012		(a)
7					CAS #: 11097-69-1	
8.310	8.308	0.002	2910 0.10000	0.10	80.00- 120.00	100.00(a)
8.480	8.478	0.002	2982 0.10000	0.10	91.84- 131.84	102.47
8.893	8.890	0.003	3338 0.10000	0.10	128.05- 168.05	114.71
Average of Peak Amounts =			0.10000			

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\E2,1\130529BR,B\E2H0464R.D  
Date: 29-May-2013 21:58  
Client ID: AR12541D2  
Sample Info: AR12541D2,AR12541D2,,ar-1254,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPestII

Instrument: E2.i  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BF.B\E2M0465F.D  
 Lab Smp Id: AR12546D2 Client Smp ID: AR12546D2  
 Inj Date : 29-MAY-2013 22:17  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12546D2,AR12546D2,,ar1254.sub,,  
 Misc Info : 1,6,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BF.B\E2\_LL\_PCB\_F.m  
 Meth Date : 30-May-2013 12:49 tmcdaniel Quant Type: ESTD  
 Cal Date : 29-MAY-2013 22:17 Cal File: E2M0465F.D  
 Als bottle: 20 Calibration Sample, Level: 6  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1254.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

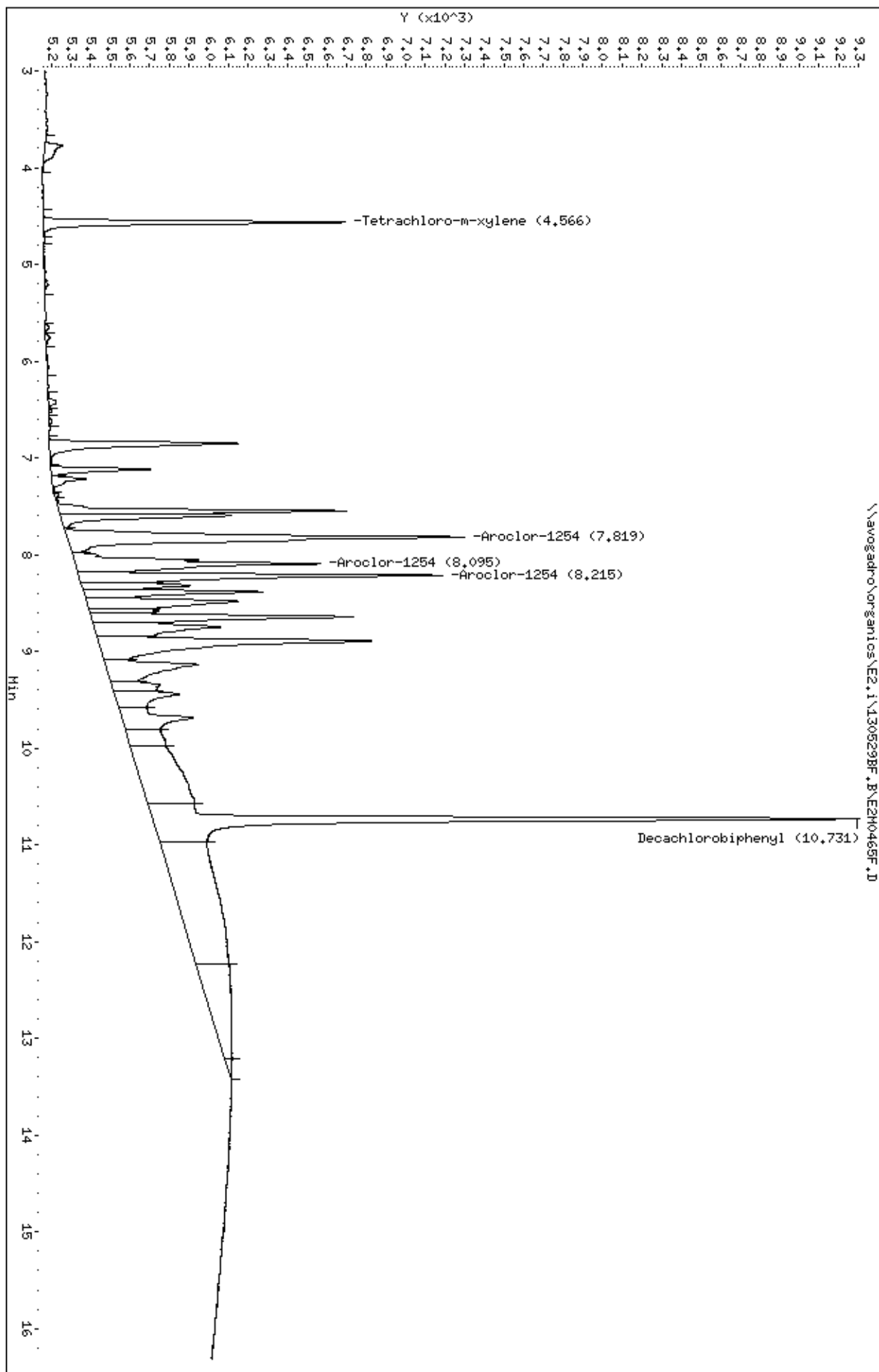
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
4.566	4.565	0.001	1529 0.00000	0.0026		(a)
\$ 11					CAS #: 2051-24-3	
10.731	10.728	0.003	166401 0.00000	0.0072		(a)
8					CAS #: 11097-69-1	
7.818	7.816	0.002	2017 0.05000	0.054	80.00- 120.00	100.00(a)
8.095	8.094	0.001	1243 0.05000	0.051	55.28- 95.28	61.63
8.215	8.212	0.003	1844 0.05000	0.051	93.68- 133.68	91.42
Average of Peak Amounts =			0.05200			

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\EE2,1\130529BF.B\EE2H0465F.D  
Date: 29-MAY-2013 22:17  
Client ID: AR12546D2  
Sample Info: AR12546D2,AR12546D2,,ar-1254,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPrest

Instrument: EE2.i  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BR.B\E2M0465R.D  
 Lab Smp Id: AR12546D2 Client Smp ID: AR12546D2  
 Inj Date : 29-MAY-2013 22:17  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12546D2,AR12546D2,,ar1254.sub,,  
 Misc Info : 1,6,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BR.B\E2\_LL\_PCB\_R.m  
 Meth Date : 30-May-2013 12:59 tmcdaniel Quant Type: ESTD  
 Cal Date : 29-MAY-2013 22:17 Cal File: E2M0465R.D  
 Als bottle: 20 Calibration Sample, Level: 6  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1254.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
5.245	5.242	0.003	1353 0.00000	0.0027		(a)
\$ 11					CAS #: 2051-24-3	
12.021	12.018	0.003	2607 0.00000	0.0062		(a)
7					CAS #: 11097-69-1	
8.310	8.308	0.002	1646 0.05000	0.053	80.00- 120.00	100.00(a)
8.480	8.478	0.002	1647 0.05000	0.052	91.84- 131.84	100.06
8.893	8.890	0.003	1796 0.05000	0.052	128.05- 168.05	109.11
Average of Peak Amounts =			0.05233			

QC Flag Legend

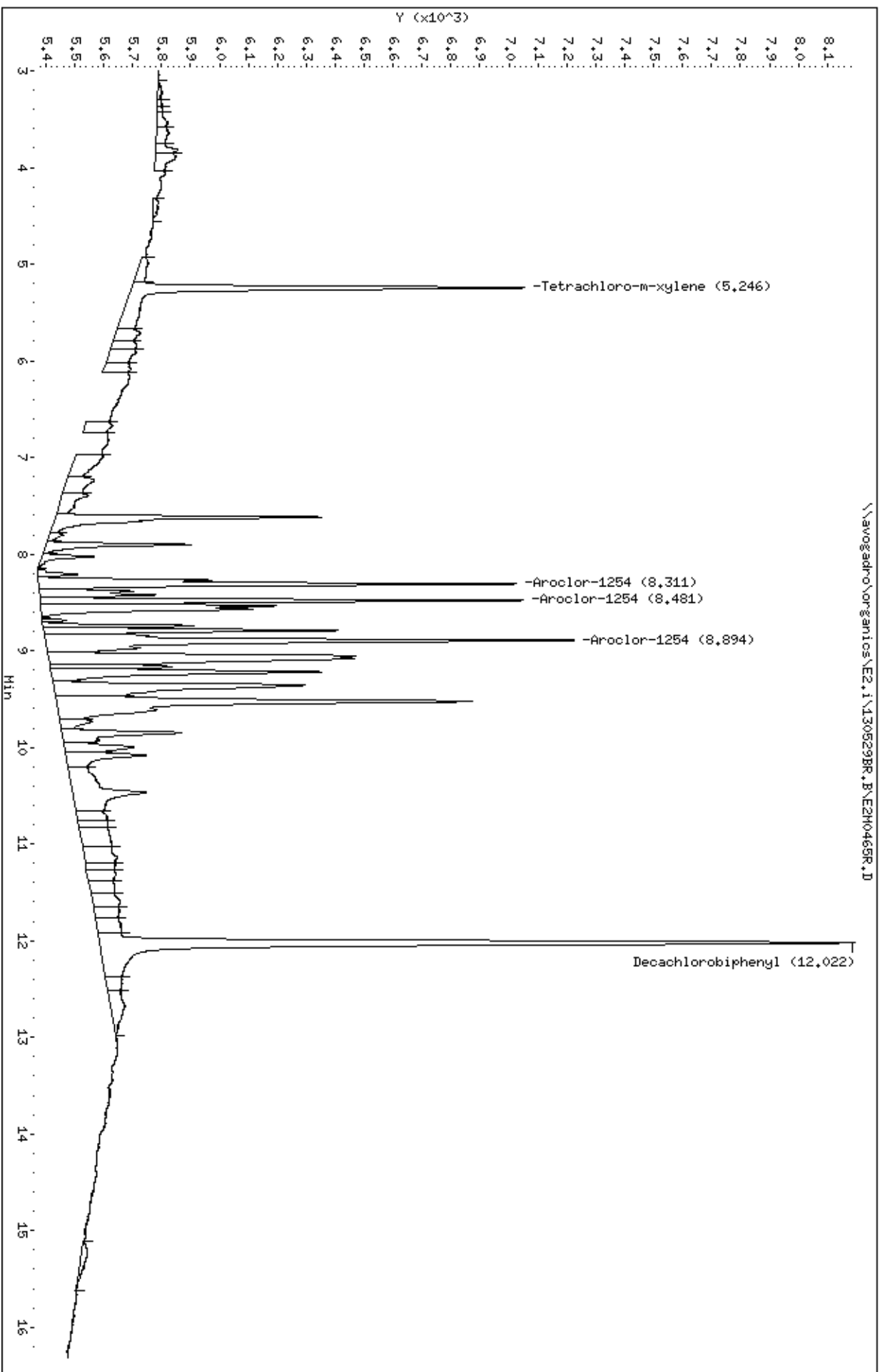
a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).



Data File: \\avogadro\organicos\E2,1\130529BR,B\E2H0465R.D  
Date : 29-MAY-2013 22:17  
Client ID: AR12546D2  
Sample Info: AR12546D2,AR12546D2,,ar-1254,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPestII

Instrument: E2.i  
Operator: TH SRC: TH  
Column diameter: 0.32

\\avogadro\organicos\E2,1\130529BR,B\E2H0465R.D



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BF.B\E2M0466F.D  
 Lab Smp Id: AR12542D2 Client Smp ID: AR12542D2  
 Inj Date : 29-MAY-2013 22:37  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12542D2,AR12542D2,,ar1254.sub,,  
 Misc Info : 1,2,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BF.B\E2\_LL\_PCB\_F.m  
 Meth Date : 30-May-2013 12:49 tmcdaniel Quant Type: ESTD  
 Cal Date : 29-MAY-2013 22:37 Cal File: E2M0466F.D  
 Als bottle: 21 Calibration Sample, Level: 2  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1254.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

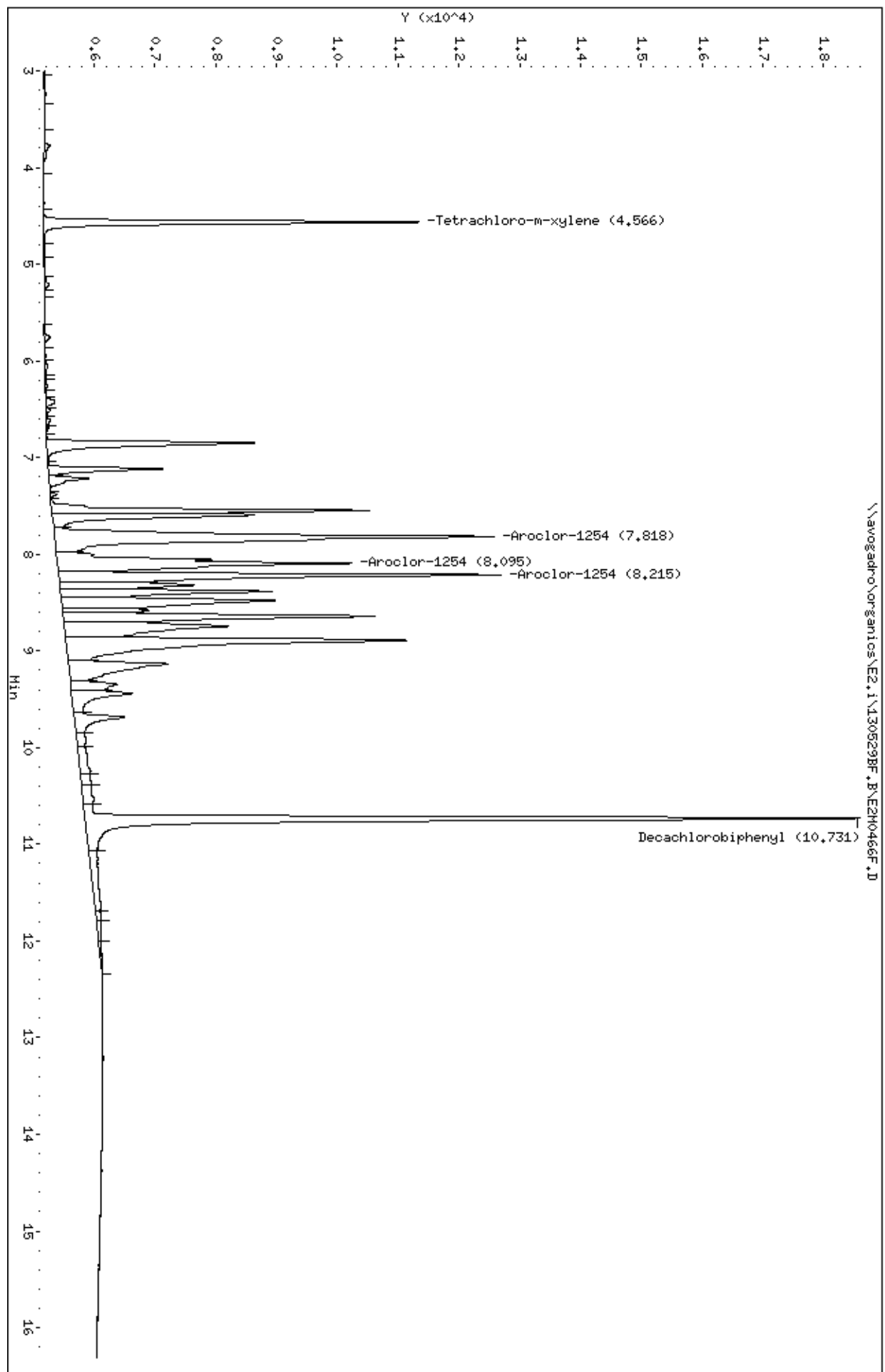
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
4.565	4.565	0.000	6163 0.01000	0.010		(a)
\$ 11					CAS #: 2051-24-3	
10.731	10.728	0.003	452466 0.02000	0.019		(a)
8					CAS #: 11097-69-1	
7.817	7.816	0.001	7225 0.20000	0.20	80.00- 120.00	100.00(a)
8.095	8.094	0.001	4836 0.20000	0.20	55.28- 95.28	66.93
8.214	8.212	0.002	7265 0.20000	0.20	93.68- 133.68	100.55
Average of Peak Amounts =			0.20000			

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\E2,1\130529BF.B\E2H0466F.D  
Date : 29-MAY-2013 22:37  
Client ID: AR12542D2  
Sample Info: AR12542D2,AR12542D2,,ar-1254,sub,  
Volume Injected (uL): 1.0  
Column phase: CLPrest

Instrument: E2.1  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BR.B\E2M0466R.D  
 Lab Smp Id: AR12542D2 Client Smp ID: AR12542D2  
 Inj Date : 29-MAY-2013 22:37  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12542D2,AR12542D2,,ar1254.sub,,  
 Misc Info : 1,2,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BR.B\E2\_LL\_PCB\_R.m  
 Meth Date : 30-May-2013 12:59 tmcdaniel Quant Type: ESTD  
 Cal Date : 29-MAY-2013 22:37 Cal File: E2M0466R.D  
 Als bottle: 21 Calibration Sample, Level: 2  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1254.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

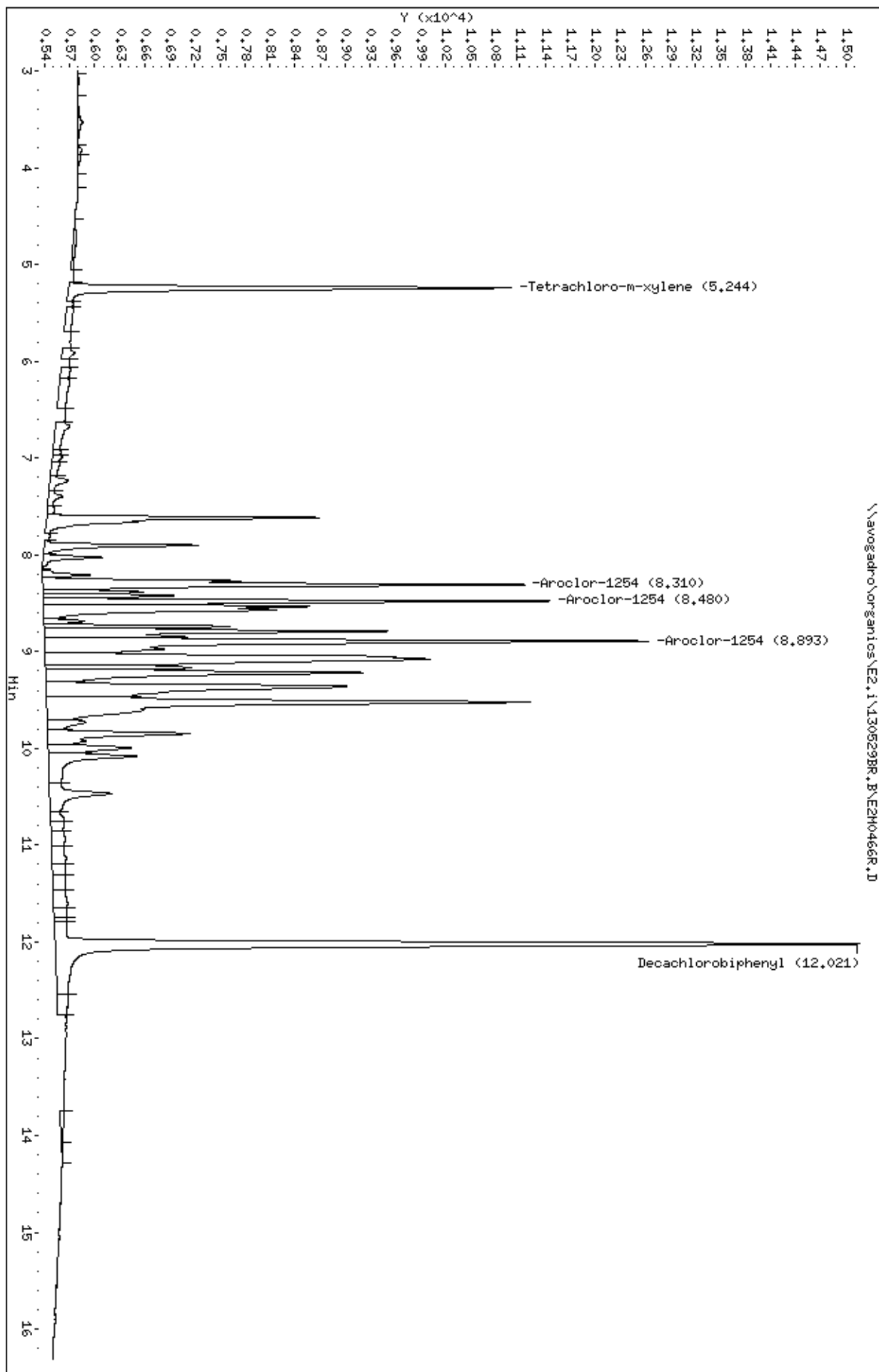
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
5.243	5.242	0.001	5301 0.01000	0.011		(a)
\$ 11					CAS #: 2051-24-3	
12.021	12.018	0.003	9646 0.02000	0.023		(a)
7					CAS #: 11097-69-1	
8.309	8.308	0.001	5784 0.20000	0.19	80.00- 120.00	100.00(a)
8.479	8.478	0.001	5947 0.20000	0.19	91.84- 131.84	102.82
8.892	8.890	0.002	7071 0.20000	0.20	128.05- 168.05	122.25
Average of Peak Amounts =			0.19333			

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\E2,1\130529BR,B\E2H0466R.D  
Date : 29-MAY-2013 22:37  
Client ID: AR12542D2  
Sample Info: AR12542D2,AR12542D2,,ar-1254,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPestII

Instrument: E2.i  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BF.B\E2M0467F.D  
 Lab Smp Id: AR12543D2 Client Smp ID: AR12543D2  
 Inj Date : 29-MAY-2013 22:57  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12543D2,AR12543D2,,ar1254.sub,,  
 Misc Info : 1,3,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BF.B\E2\_LL\_PCB\_F.m  
 Meth Date : 30-May-2013 12:49 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 01:34 Cal File: E2M0475F.D  
 Als bottle: 22 Calibration Sample, Level: 3  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1254.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

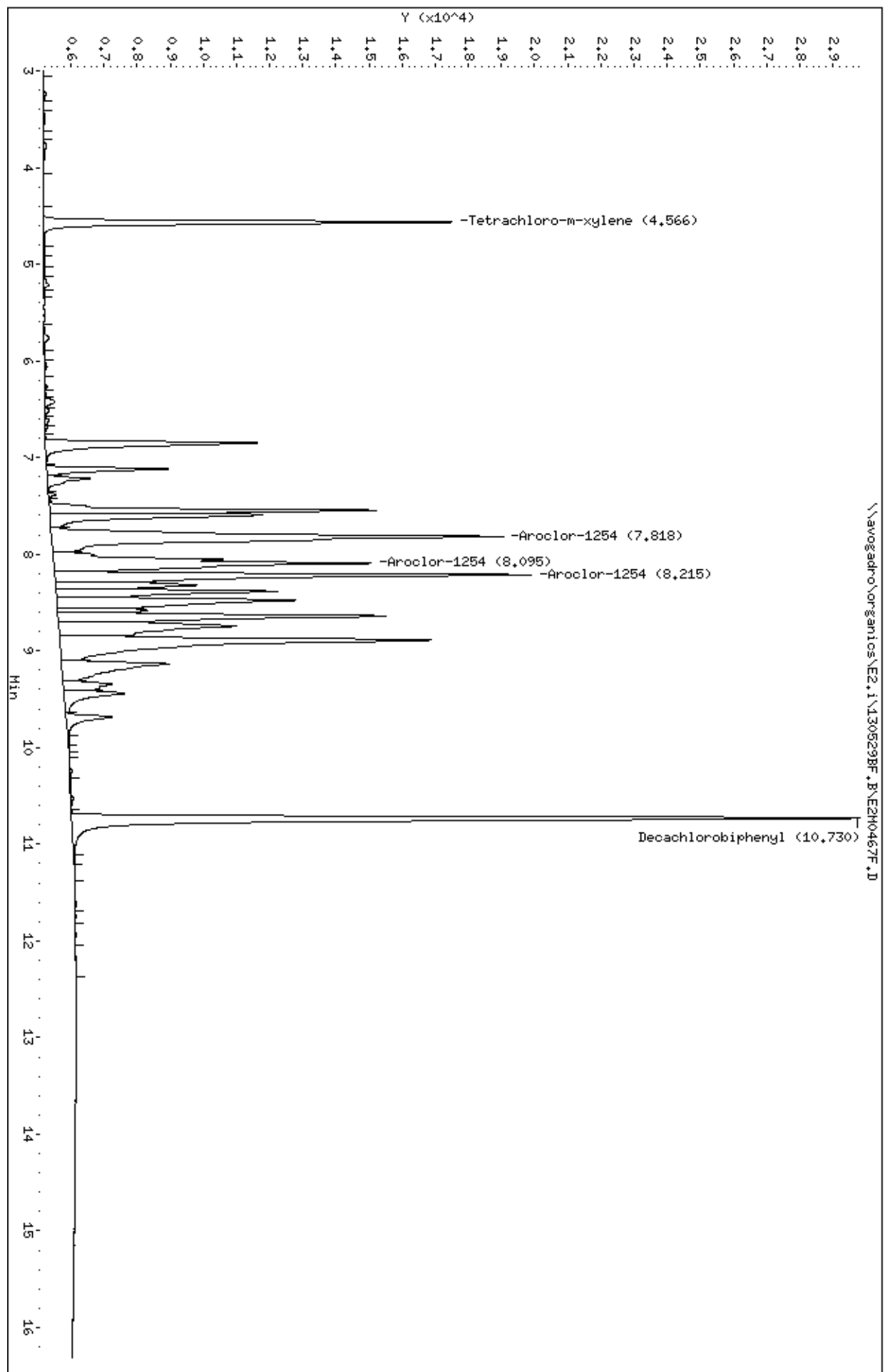
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
4.566	4.565	0.001	12278 0.02000	0.021		(a)
\$ 11					CAS #: 2051-24-3	
10.730	10.728	0.002	787655 0.04000	0.033		(a)
8					CAS #: 11097-69-1	
7.818	7.816	0.002	13637 0.40000	0.37	80.00- 120.00	100.00(a)
8.095	8.094	0.001	9556 0.40000	0.39	55.28- 95.28	70.07
8.214	8.212	0.002	14305 0.40000	0.39	93.68- 133.68	104.90
Average of Peak Amounts =			0.38333			

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\E2,1\130529BF.B\E2H0467F.D  
Date: 29-MAY-2013 22:57  
Client ID: AR12543D2  
Sample Info: AR12543D2,AR12543D2,,ar-1254,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPrest

Instrument: E2.1  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BR.B\E2M0467R.D  
 Lab Smp Id: AR12543D2 Client Smp ID: AR12543D2  
 Inj Date : 29-MAY-2013 22:57  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12543D2,AR12543D2,,ar1254.sub,,  
 Misc Info : 1,3,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BR.B\E2\_LL\_PCB\_R.m  
 Meth Date : 30-May-2013 12:59 tmcdaniel Quant Type: ESTD  
 Cal Date : 29-MAY-2013 22:57 Cal File: E2M0467R.D  
 Als bottle: 22 Calibration Sample, Level: 3  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1254.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
5.243	5.242	0.001	10473 0.02000	0.021		(a)
\$ 11					CAS #: 2051-24-3	
12.020	12.018	0.002	18028 0.04000	0.042		(a)
7					CAS #: 11097-69-1	
8.309	8.308	0.001	10917 0.40000	0.37	80.00- 120.00	100.00(a)
8.479	8.478	0.001	11581 0.40000	0.38	91.84- 131.84	106.08
8.892	8.890	0.002	14250 0.40000	0.41	128.05- 168.05	130.53
Average of Peak Amounts =			0.38667			

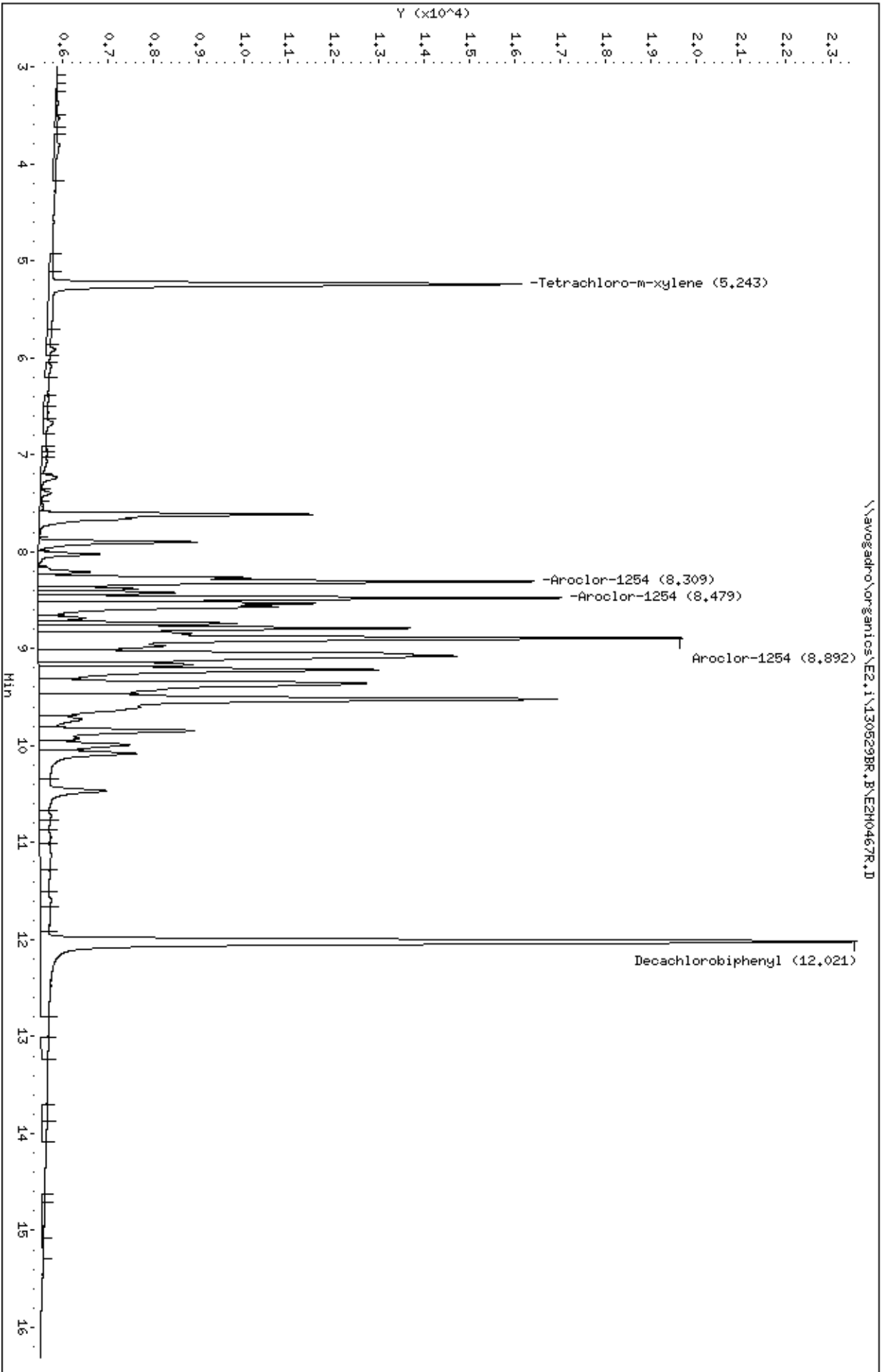
QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).



Data File: \\avogadro\organicos\EE2,1\130529BR,B\EE2H0467R.D  
Date : 29-MAY-2013 22:57  
Client ID: AR12543D2  
Sample Info: AR12543D2,AR12543D2,,ar-1254,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPestH11

Instrument: EE2.i  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BF.B\E2M0468F.D  
 Lab Smp Id: AR12544D2 Client Smp ID: AR12544D2  
 Inj Date : 29-MAY-2013 23:17  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12544D2,AR12544D2,,ar1254.sub,,  
 Misc Info : 1,4,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BF.B\E2\_LL\_PCB\_F.m  
 Meth Date : 30-May-2013 12:49 tmcdaniel Quant Type: ESTD  
 Cal Date : 29-MAY-2013 23:17 Cal File: E2M0468F.D  
 Als bottle: 23 Calibration Sample, Level: 4  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1254.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

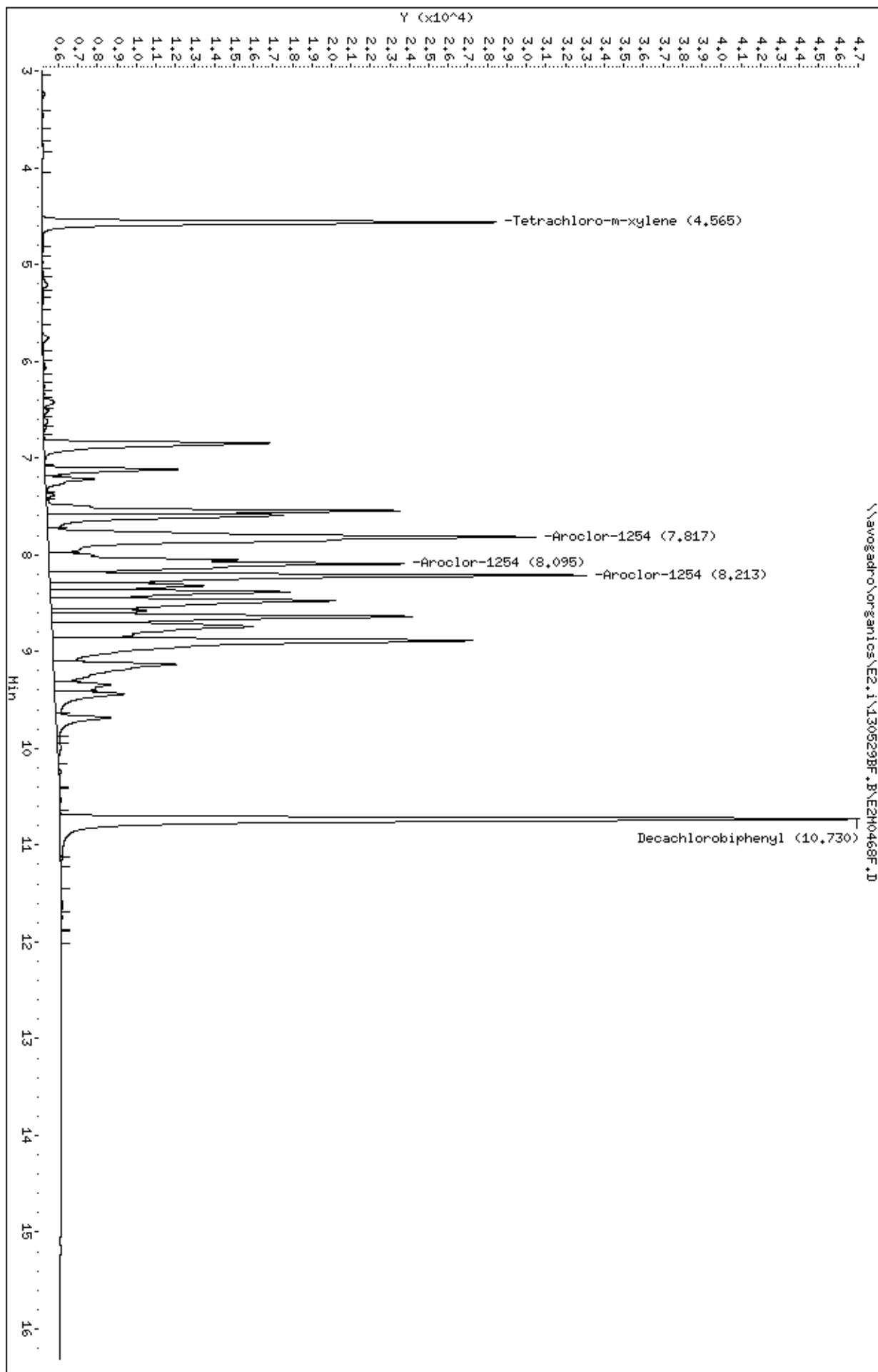
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
4.564	4.565	-0.001	23290 0.04000	0.039		(a)
\$ 11					CAS #: 2051-24-3	
10.729	10.728	0.001	1362202 0.08000	0.058		
8					CAS #: 11097-69-1	
7.817	7.816	0.001	24969 0.80000	0.70	80.00- 120.00	100.00(a)
8.094	8.094	0.000	18185 0.80000	0.75	55.28- 95.28	72.83
8.213	8.212	0.001	27344 0.80000	0.76	93.68- 133.68	109.51
Average of Peak Amounts =			0.73667			

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\E2,1\130529BF.B\E2H0468F.D  
Date : 29-MAY-2013 23:17  
Client ID: AR12544D2  
Sample Info: AR12544D2,AR12544D2,,ar-1254,sub,  
Volume Injected (uL): 1.0  
Column phase: CLPFest

Instrument: E2.1  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BR.B\E2M0468R.D  
 Lab Smp Id: AR12544D2 Client Smp ID: AR12544D2  
 Inj Date : 29-MAY-2013 23:17  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12544D2,AR12544D2,,ar1254.sub,,  
 Misc Info : 1,4,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BR.B\E2\_LL\_PCB\_R.m  
 Meth Date : 30-May-2013 12:59 tmcdaniel Quant Type: ESTD  
 Cal Date : 29-MAY-2013 23:17 Cal File: E2M0468R.D  
 Als bottle: 23 Calibration Sample, Level: 4  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1254.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

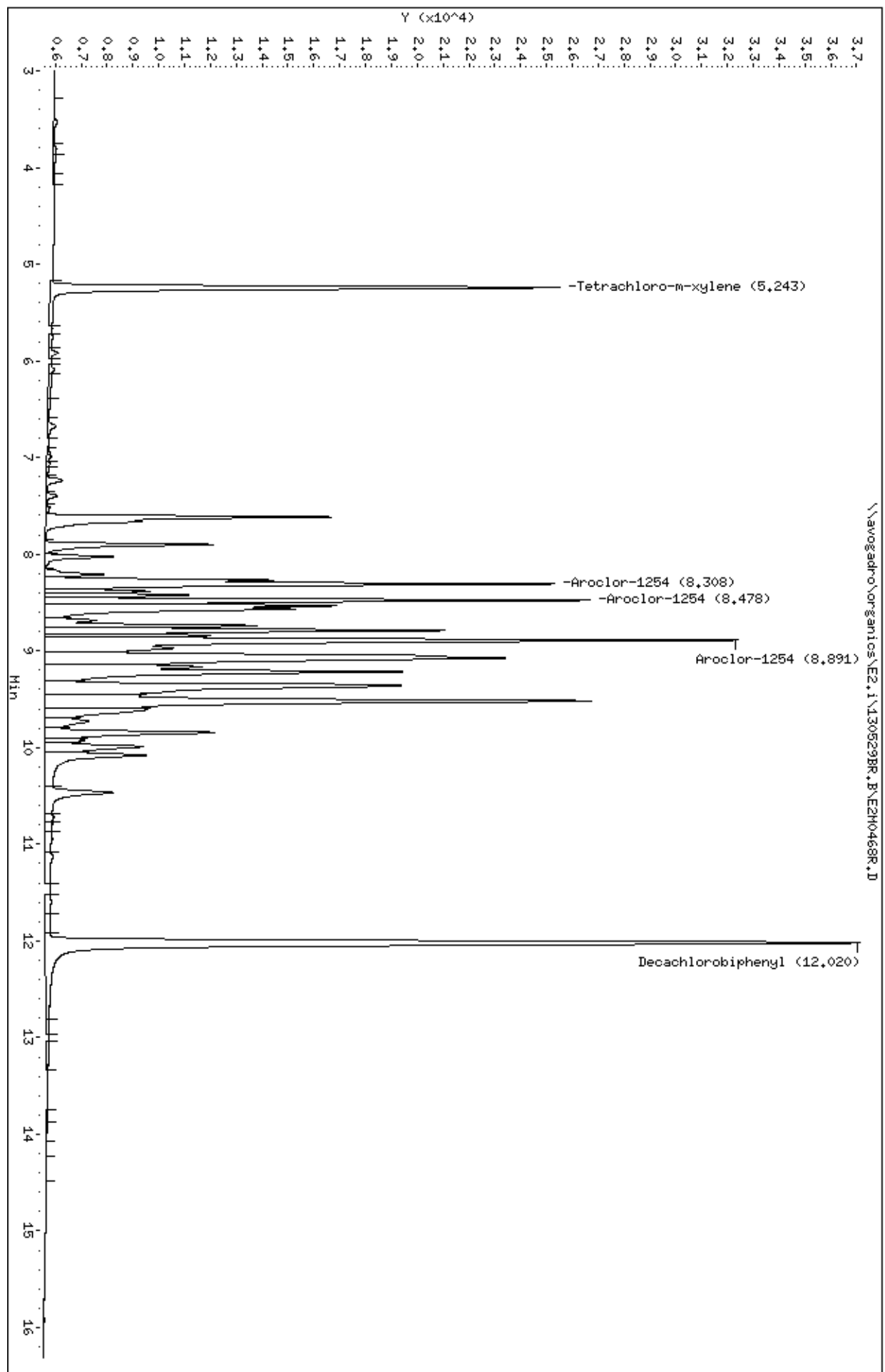
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
5.242	5.242	0.000	19722 0.04000	0.039		(a)
\$ 11					CAS #: 2051-24-3	
12.019	12.018	0.001	31459 0.08000	0.073		
7					CAS #: 11097-69-1	
8.308	8.308	0.000	19644 0.80000	0.69	80.00- 120.00	100.00(a)
8.477	8.478	-0.001	21067 0.80000	0.71	91.84- 131.84	107.24
8.890	8.890	0.000	26797 0.80000	0.77	128.05- 168.05	136.41
Average of Peak Amounts =			0.72333			

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\E2.1\130529BR.B\2H0468R.D  
Date: 29-MAY-2013 23:17  
Client ID: AR12544D2  
Sample Info: AR12544D2,AR12544D2,,ar-1254,sub,  
Volume Injected (uL): 1.0  
Column phase: CLPestH11

Instrument: E2.1  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BF.B\E2M0469F.D  
 Lab Smp Id: AR12545D2 Client Smp ID: AR12545D2  
 Inj Date : 29-MAY-2013 23:36  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12545D2,AR12545D2,,ar1254.sub,,  
 Misc Info : 1,5,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BF.B\E2\_LL\_PCB\_F.m  
 Meth Date : 30-May-2013 12:49 tmcdaniel Quant Type: ESTD  
 Cal Date : 29-MAY-2013 23:36 Cal File: E2M0469F.D  
 Als bottle: 24 Calibration Sample, Level: 5  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1254.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

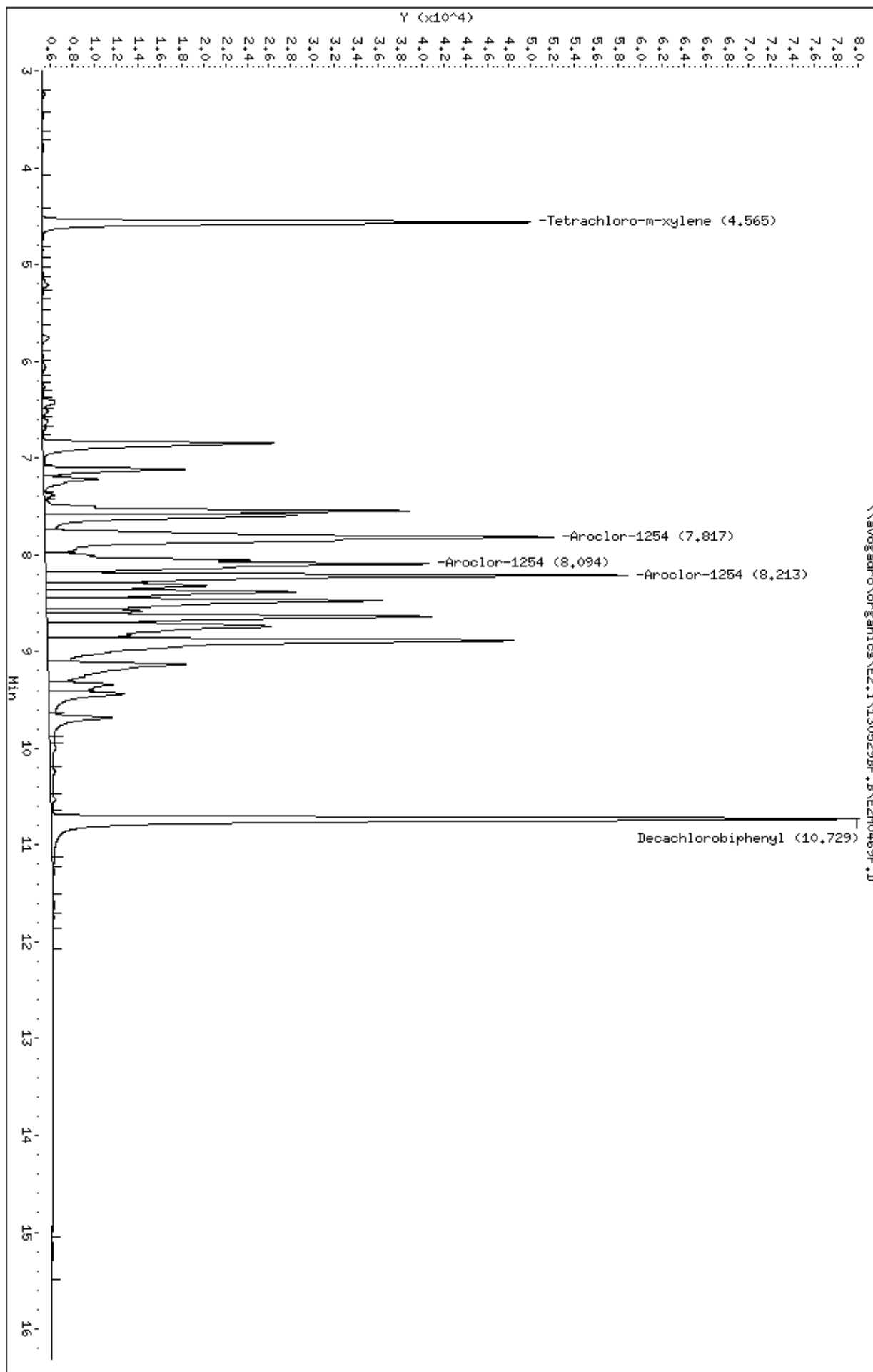
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
4.565	4.565	0.000	44744 0.08000	0.075		
\$ 11					CAS #: 2051-24-3	
10.728	10.728	0.000	2452774 0.16000	0.10		
8					CAS #: 11097-69-1	
7.816	7.816	0.000	46537 1.60000	1.3	80.00- 120.00	100.00
8.094	8.094	0.000	35035 1.60000	1.5	55.28- 95.28	75.28
8.212	8.212	0.000	52905 1.60000	1.5	93.68- 133.68	113.68
Average of Peak Amounts =			1.43333			

Data File: \\avogadro\organicos\EE2,1\130529BF.B\EE2H0469F.D  
Date: 29-MAY-2013 23:36  
Client ID: AR12545D2  
Sample Info: AR12545D2,AR12545D2,,ar-1254,sub,  
Volume Injected (uL): 1.0  
Column phase: CLPrest

Instrument: EE.i  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BR.B\E2M0469R.D  
 Lab Smp Id: AR12545D2 Client Smp ID: AR12545D2  
 Inj Date : 29-MAY-2013 23:36  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12545D2,AR12545D2,,ar1254.sub,,  
 Misc Info : 1,5,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BR.B\E2\_LL\_PCB\_R.m  
 Meth Date : 30-May-2013 12:59 tmcdaniel Quant Type: ESTD  
 Cal Date : 29-MAY-2013 23:36 Cal File: E2M0469R.D  
 Als bottle: 24 Calibration Sample, Level: 5  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1254.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

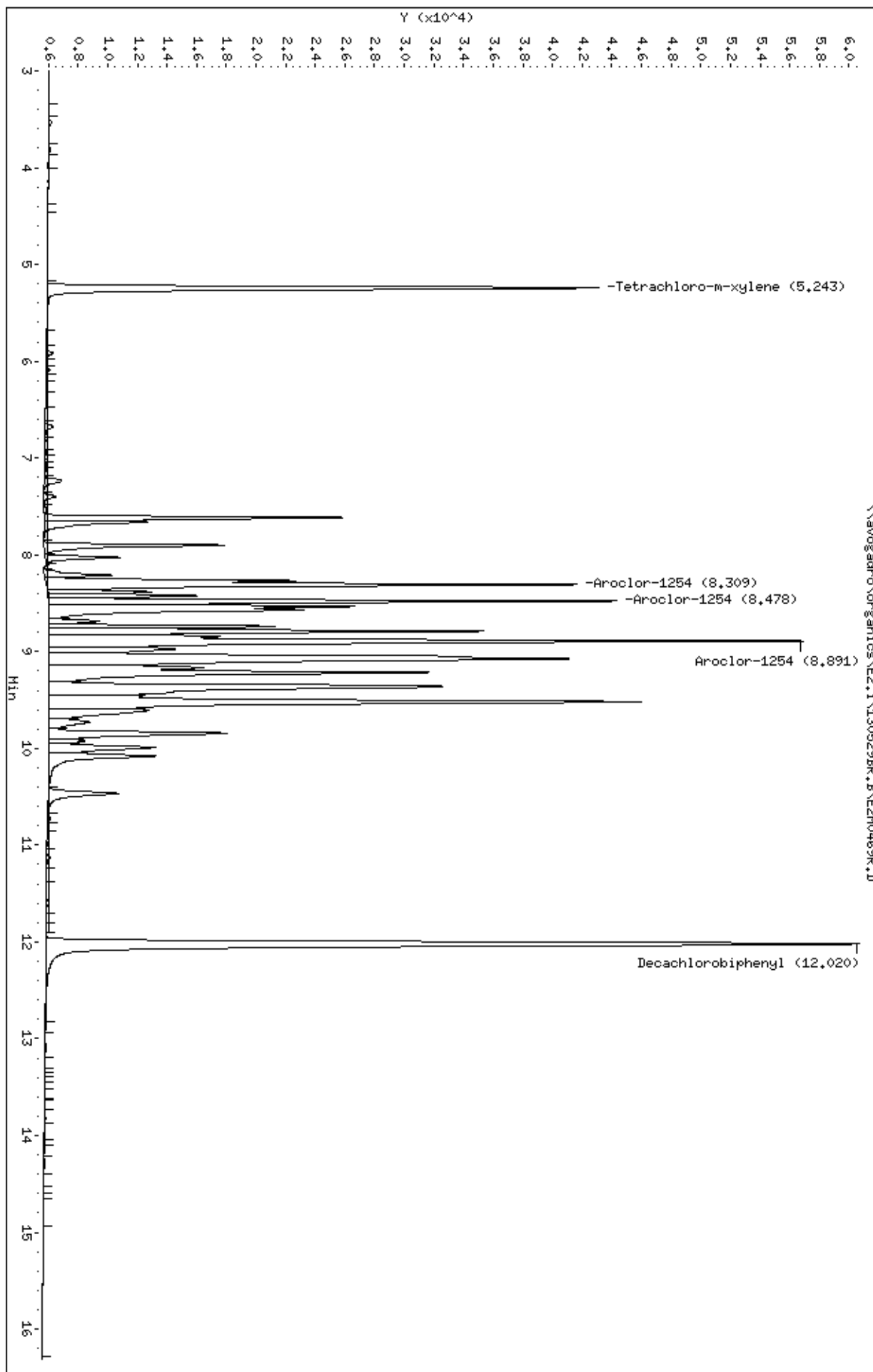
AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
5.243	5.242	0.001	37238 0.08000	0.073		
\$ 11					CAS #: 2051-24-3	
12.020	12.018	0.002	54755 0.16000	0.13		
7					CAS #: 11097-69-1	
8.308	8.308	0.000	34270 1.60000	1.2	80.00- 120.00	100.00
8.478	8.478	0.000	38329 1.60000	1.3	91.84- 131.84	111.84
8.890	8.890	0.000	50736 1.60000	1.5	128.05- 168.05	148.05
Average of Peak Amounts =			1.33333			



Data File: \\avogadro\organicos\E2.1\130529BR.B\E2H0469R.D  
Date : 29-MAY-2013 23:36  
Client ID: AR12545D2  
Sample Info: AR12545D2,AR12545D2,,ar-1254,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPestII

Instrument: E2.1  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BF.B\E2M0470F.D  
 Lab Smp Id: AR12623D2 Client Smp ID: AR12623D2  
 Inj Date : 29-MAY-2013 23:56  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12623D2,AR12623D2,,ar1262.sub,,  
 Misc Info : 1,3,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BF.B\E2\_LL\_PCB\_F.m  
 Meth Date : 30-May-2013 12:49 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 01:34 Cal File: E2M0475F.D  
 Als bottle: 25 Calibration Sample, Level: 3  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1262.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

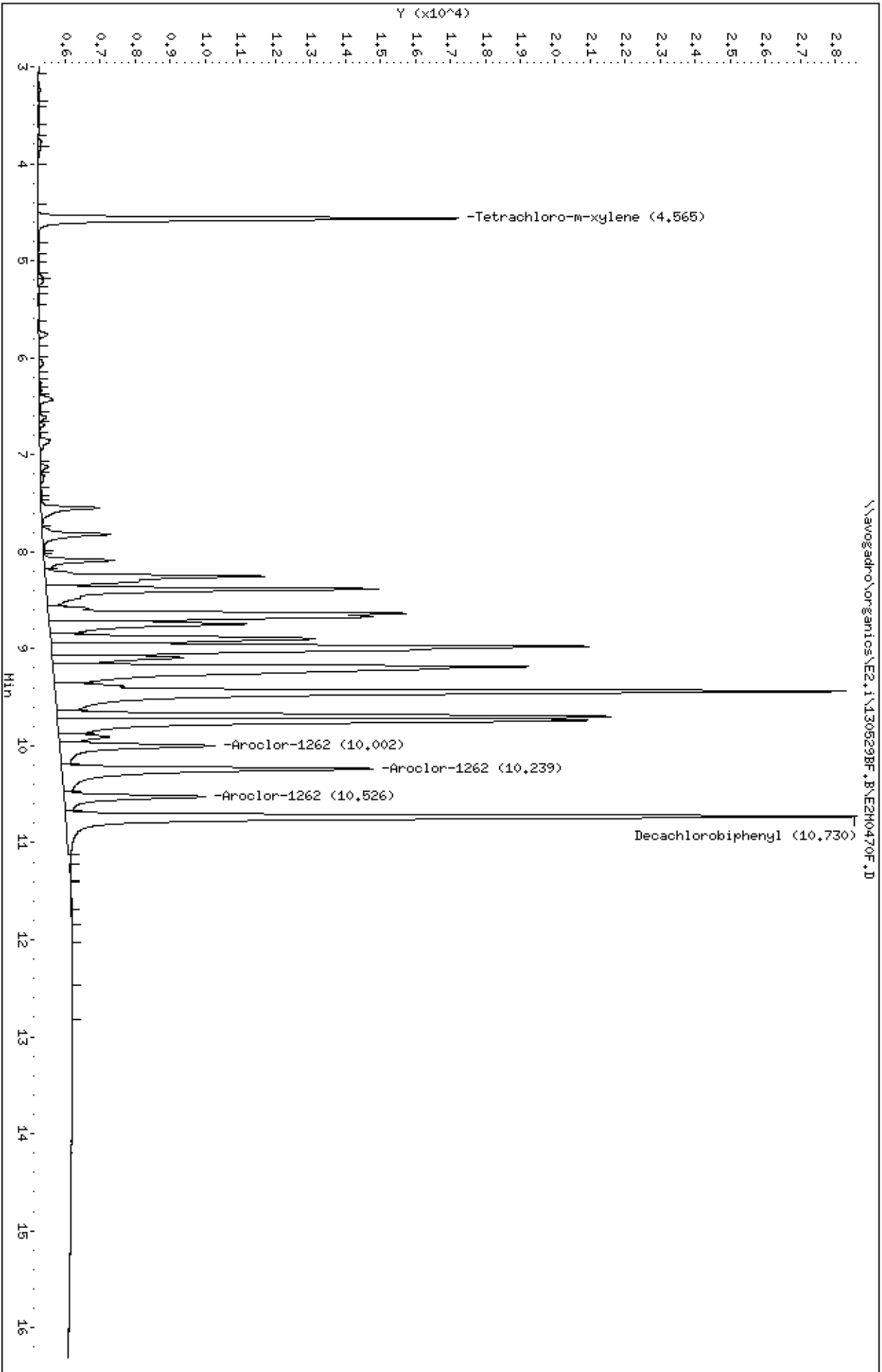
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
4.565	4.565	0.000	12021 0.02000	0.020		(a)
-----						
2					CAS #: 37324-23-5	
10.001	10.001	0.000	4443 0.40000	0.40	80.00- 120.00	100.00
10.239	10.239	0.000	8865 0.40000	0.40	179.53- 219.53	199.53
10.525	10.525	0.000	4039 0.40000	0.40	70.91- 110.91	90.91
Average of Peak Amounts =			0.40000			
-----						
\$ 11					CAS #: 2051-24-3	
10.729	10.728	0.001	762974 0.04000	0.032		(a)
-----						

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\E2.1\130529BF.B\E2H0470F.D  
Date: 29-MAY-2013 23:56  
Client ID: AR12623D2  
Sample Info: AR12623D2,AR12623D2,,ar-1262,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLP/Pest

Instrument: E2.1  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BR.B\E2M0470R.D  
 Lab Smp Id: AR12623D2 Client Smp ID: AR12623D2  
 Inj Date : 29-MAY-2013 23:56  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12623D2,AR12623D2,,ar1262.sub,,  
 Misc Info : 1,3,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BR.B\E2\_LL\_PCB\_R.m  
 Meth Date : 30-May-2013 12:59 tmcdaniel Quant Type: ESTD  
 Cal Date : 29-MAY-2013 23:56 Cal File: E2M0470R.D  
 Als bottle: 25 Calibration Sample, Level: 3  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1262.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

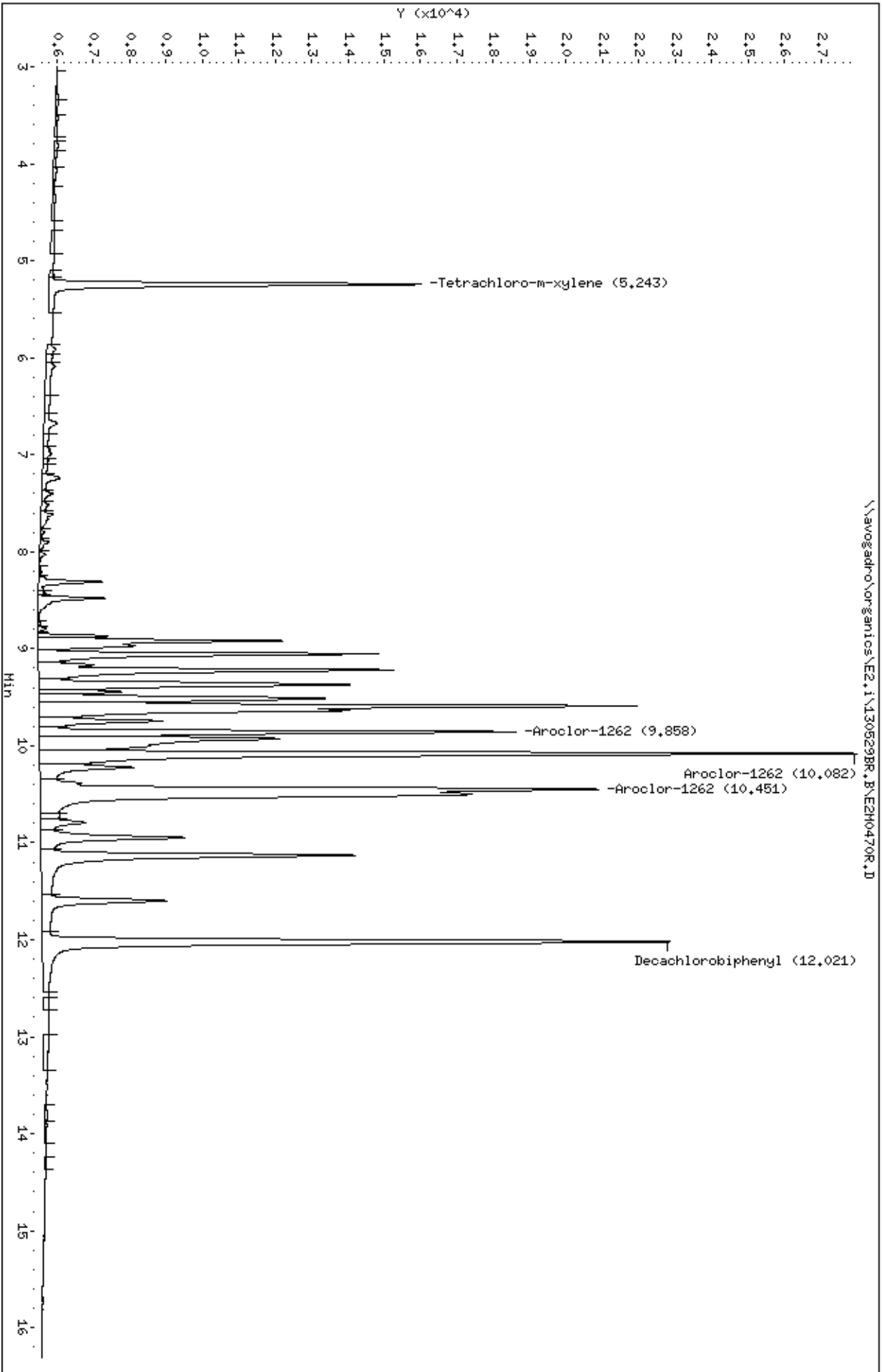
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
5.243	5.242	0.001	10222 0.02000	0.020		(a)
10					CAS #: 37324-23-5	
9.857	9.857	0.000	13121 0.40000	0.40	80.00- 120.00	100.00(a)
10.081	10.081	0.000	22281 0.40000	0.40	149.81- 189.81	169.81
10.450	10.450	0.000	15342 0.40000	0.40	96.93- 136.93	116.93
Average of Peak Amounts =			0.40000			
\$ 11					CAS #: 2051-24-3	
12.020	12.018	0.002	17216 0.04000	0.040		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\E2,1\130529BR,B\E2H0470R.D  
Date : 29-MAY-2013 23:56  
Client ID: AR12623D2  
Sample Info: AR12623D2,AR12623D2,,ar-1262,sub,  
Volume Injected (uL): 1.0  
Column phase: CLPestII

Instrument: E2.i  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BF.B\E2M0471F.D  
 Lab Smp Id: AR12683D2 Client Smp ID: AR12683D2  
 Inj Date : 30-MAY-2013 00:16  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12683D2,AR12683D2,,ar1268.sub,,  
 Misc Info : 1,3,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BF.B\E2\_LL\_PCB\_F.m  
 Meth Date : 30-May-2013 12:49 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 01:34 Cal File: E2M0475F.D  
 Als bottle: 26 Calibration Sample, Level: 3  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1268.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

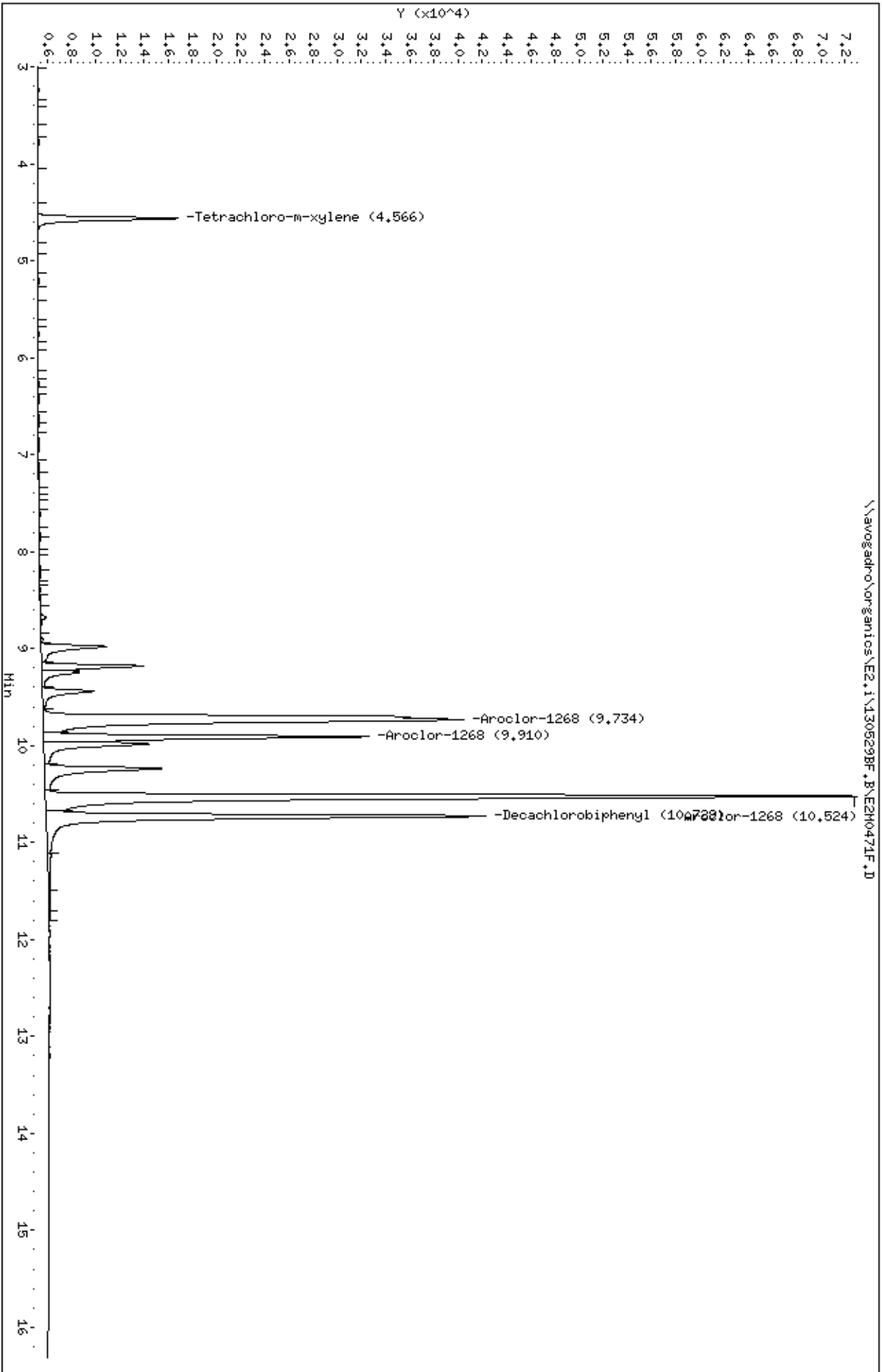
RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
-----						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
4.565	4.565	0.000	11579 0.02000	0.020		(a)
-----						
10	Aroclor-1268		CAS #: 11100-14-4			
9.733	9.733	0.000	34819 0.40000	0.40	80.00- 120.00	100.00(a)
9.910	9.910	0.000	26763 0.40000	0.40	56.86- 96.86	76.86
10.523	10.523	0.000	66964 0.40000	0.40	172.32- 212.32	192.32
	Average of Peak Amounts =		0.40000			
-----						
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.729	10.728	0.001	1287870 0.04000	0.049		(a)
-----						

QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\E2,1\130529BF.B\E2H0471F.D  
 Date : 30-MAY-2013 00:16  
 Client ID: ARL12683D2  
 Sample Info: ARL12683D2,ARL12683D2,,ar-1268,sub,  
 Volume Injected (uL): 1.0  
 Column phase: CLPrest

Instrument: E2.i  
 Operator: TH SRC: TH  
 Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BR.B\E2M0471R.D  
 Lab Smp Id: AR12683D2 Client Smp ID: AR12683D2  
 Inj Date : 30-MAY-2013 00:16  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR12683D2,AR12683D2,,ar1268.sub,,  
 Misc Info : 1,3,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BR.B\E2\_LL\_PCB\_R.m  
 Meth Date : 30-May-2013 12:59 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 00:16 Cal File: E2M0471R.D  
 Als bottle: 26 Calibration Sample, Level: 3  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1268.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
5.243	5.242	0.001	9981 0.02000	0.020		(a)
-----						
9					CAS #: 11100-14-4	
10.790	10.790	0.000	24628 0.40000	0.40	80.00- 120.00	100.00(a)
10.911	10.911	0.000	7200 0.40000	0.40	9.24- 49.24	29.24
11.129	11.129	0.000	9393 0.40000	0.40	18.14- 58.14	38.14
Average of Peak Amounts =			0.40000			
-----						
\$ 11					CAS #: 2051-24-3	
12.019	12.018	0.001	26790 0.04000	0.056		

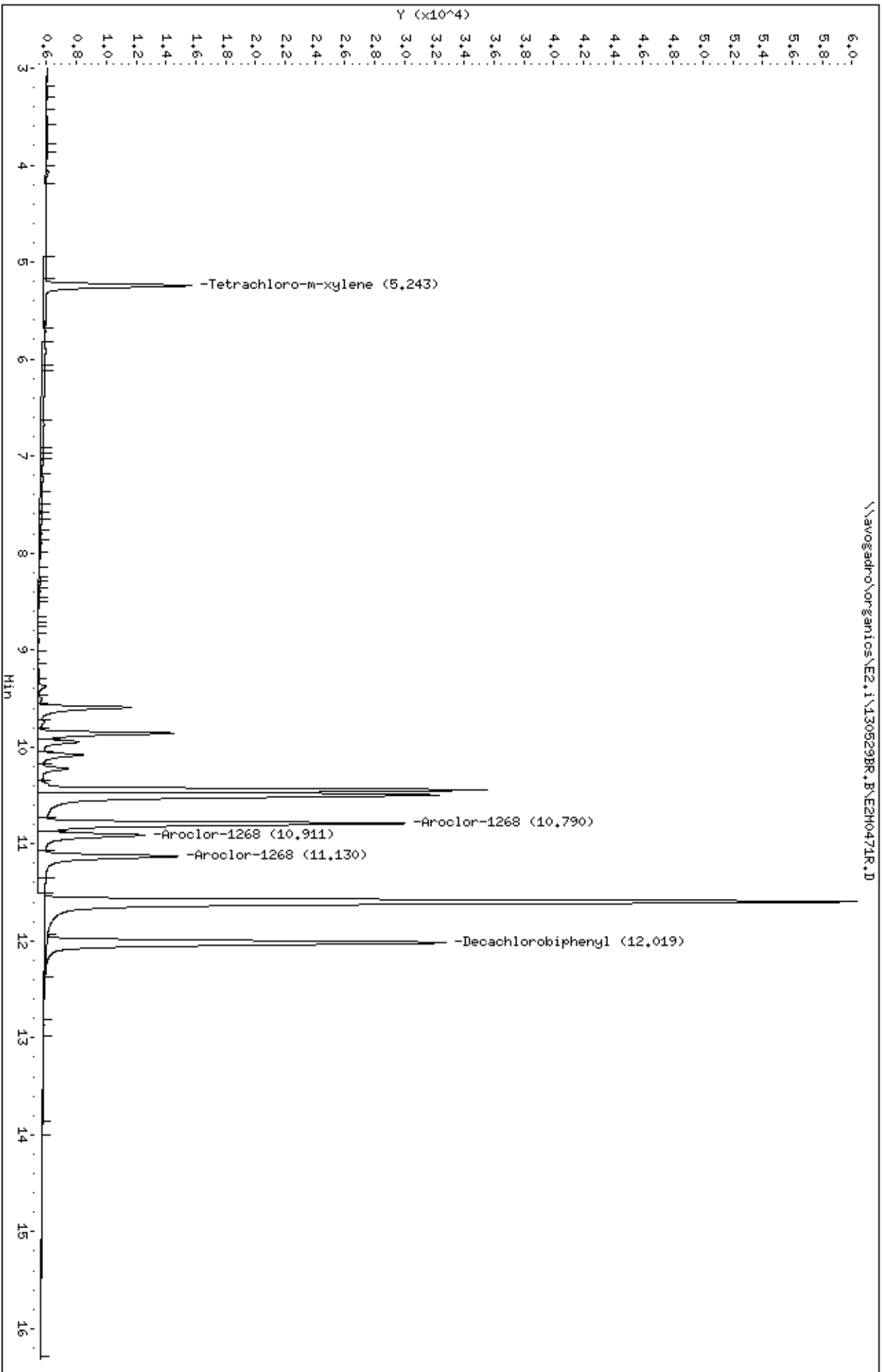
QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).



Data File: \\avogadro\organicos\E2,1\130529BR,B\E2H0471R.D  
Date : 30-May-2013 00:16  
Client ID: AR12683D2  
Sample Info: AR12683D2,AR12683D2,,ar-1268,sub,  
Volume Injected (uL): 1.0  
Column phase: CLPestII

Instrument: E2.i  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BF.B\E2M0472F.D  
 Lab Smp Id: AR16601D2 Client Smp ID: AR16601D2  
 Inj Date : 30-MAY-2013 00:35  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR16601D2,AR16601D2,,ar1660.sub,,  
 Misc Info : 1,1,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BF.B\E2\_LL\_PCB\_F.m  
 Meth Date : 30-May-2013 12:49 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 00:35 Cal File: E2M0472F.D  
 Als bottle: 27 Calibration Sample, Level: 1  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1660.sub  
 Target Version: 4.14 Sample Matrix: WATER

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
-----						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
4.566	4.565	0.001	2933 0.00500	0.0051		(a)
-----						
5	Aroclor-1016		CAS #: 12674-11-2			
5.759	5.756	0.003	2533 0.10000	0.11	80.00- 120.00	100.00(a)
6.431	6.431	0.000	4033 0.10000	0.11	154.92- 194.92	159.22
6.613	6.611	0.002	2156 0.10000	0.11	75.76- 115.76	85.12
	Average of Peak Amounts =		0.11000			
-----						
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.730	10.728	0.002	241880 0.01000	0.012		(aM)M6 TM 06/04
-----						
9	Aroclor-1260		CAS #: 11096-82-5			
8.640	8.635	0.005	4362 0.10000	0.10	80.00- 120.00	100.00(aM)M6 TM 06/04
8.893	8.885	0.008	3617 0.10000	0.099	73.67- 113.67	82.92
9.440	9.435	0.005	5083 0.10000	0.098	102.04- 142.04	116.53
	Average of Peak Amounts =		0.09900			
-----						

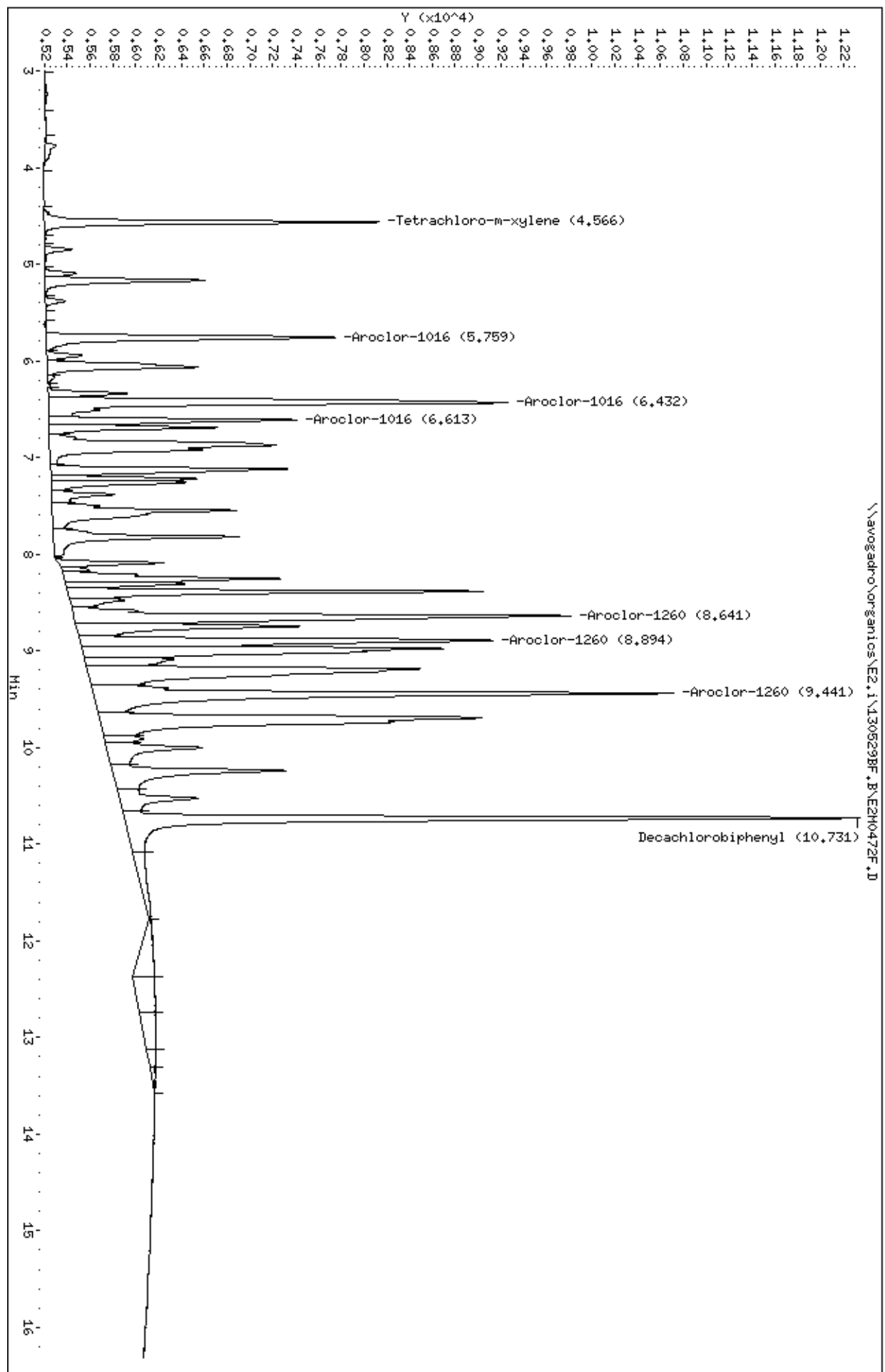
Data File: \\avogadro\organics\E2.i\130529BF.B\E2M0472F.D  
Report Date: 04-Jun-2013 10:25

QC Flag Legend

- a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).
- M - Compound response manually integrated.

Data File: \\avogadro\organicos\E2.1\130529BF.B\E2H0472F.D  
Date: 30-MAY-2013 00:35  
Client ID: AR16601D2  
Sample Info: AR16601D2,AR16601D2,,ar1660,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPrest

Instrument: E2.1  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BR.B\E2M0472R.D  
 Lab Smp Id: AR16601D2 Client Smp ID: AR16601D2  
 Inj Date : 30-MAY-2013 00:35  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR16601D2,AR16601D2,,ar1660.sub,,  
 Misc Info : 1,1,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BR.B\E2\_LL\_PCB\_R.m  
 Meth Date : 30-May-2013 12:59 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 00:35 Cal File: E2M0472R.D  
 Als bottle: 27 Calibration Sample, Level: 1  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1660.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
-----						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
5.246	5.242	0.004	2546 0.00500	0.0051		(a)
-----						
6	Aroclor-1016		CAS #: 12674-11-2			
7.242	7.240	0.002	4142 0.10000	0.10	80.00- 120.00	100.00(a)
7.403	7.400	0.003	2220 0.10000	0.10	33.79- 73.79	53.60
7.518	7.516	0.002	1467 0.10000	0.10	16.38- 56.38	35.42
	Average of Peak Amounts =		0.10000			
-----						
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
12.021	12.018	0.003	4806 0.01000	0.010		(a)
-----						
8	Aroclor-1260		CAS #: 11096-82-5			
9.054	9.051	0.003	3490 0.10000	0.10	80.00- 120.00	100.00(a)
9.220	9.215	0.005	3733 0.10000	0.10	96.25- 136.25	106.96
9.518	9.514	0.004	3729 0.10000	0.10	98.14- 138.14	106.85
	Average of Peak Amounts =		0.10000			
-----						

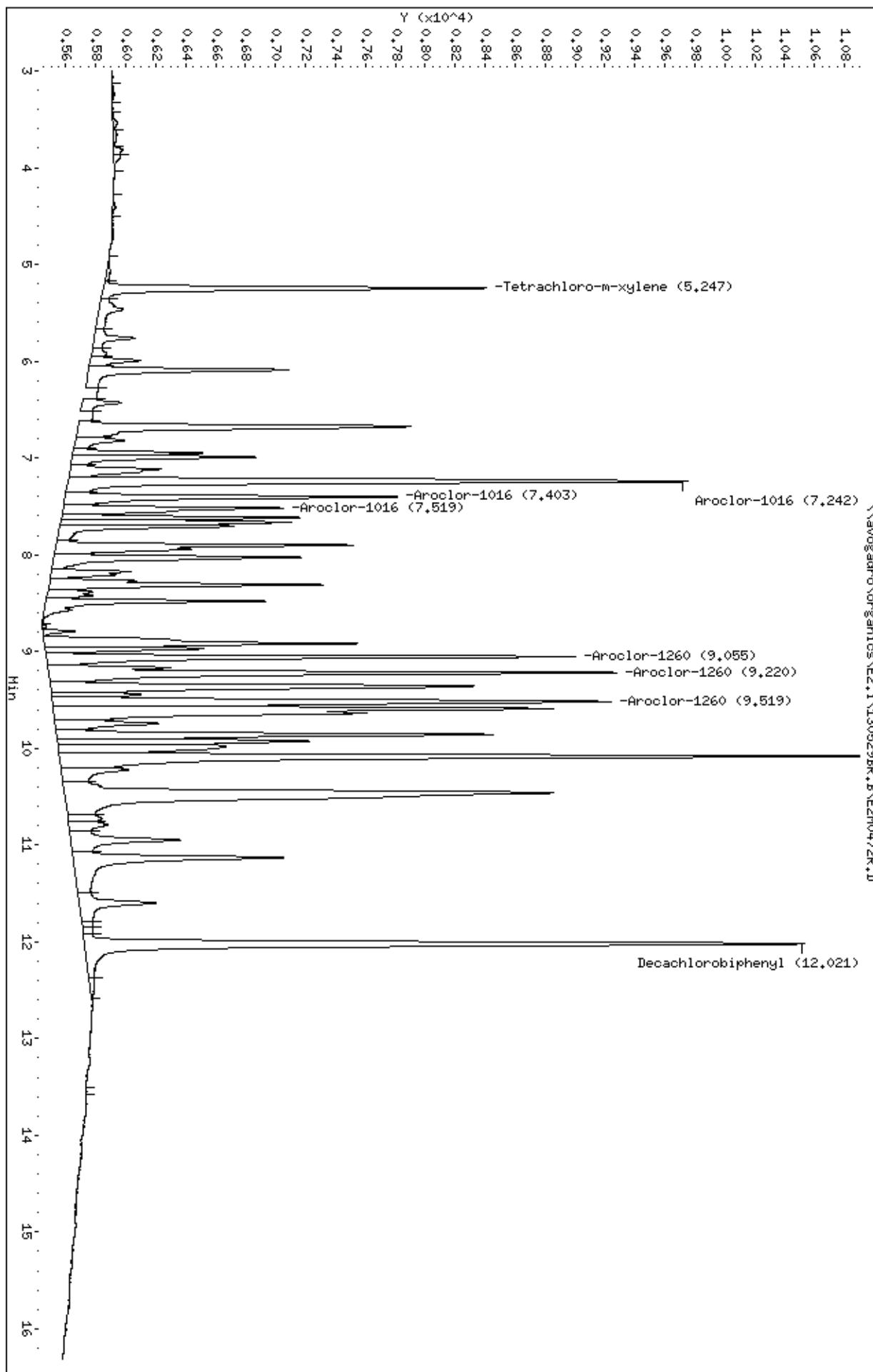
Data File: \\avogadro\organics\E2.i\130529BR.B\E2M0472R.D  
Report Date: 04-Jun-2013 10:25

QC Flag Legend

a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\E2.1\130529BR.B\2H0472R.D  
Date: 30-May-2013 00:35  
Client ID: AR16601D2  
Sample Info: AR16601D2,AR16601D2,,ar1660,sub,  
Volume Injected (uL): 1.0  
Column phase: CLPrestII

Instrument: E2.1  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BF.B\E2M0473F.D  
 Lab Smp Id: AR16606D2 Client Smp ID: AR16606D2  
 Inj Date : 30-MAY-2013 00:55  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR16606D2,AR16606D2,,ar1660.sub,,  
 Misc Info : 1,6,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BF.B\E2\_LL\_PCB\_F.m  
 Meth Date : 30-May-2013 12:49 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 00:55 Cal File: E2M0473F.D  
 Als bottle: 28 Calibration Sample, Level: 6  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1660.sub  
 Target Version: 4.14 Sample Matrix: WATER

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
-----						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
4.565	4.565	0.000	1562 0.00000	0.0027		(a)
-----						
5	Aroclor-1016		CAS #: 12674-11-2			
5.758	5.756	0.002	1308 0.05000	0.058	80.00- 120.00	100.00(am)M6 TM 06/04
6.431	6.431	0.000	2068 0.05000	0.056	154.92- 194.92	158.10
6.611	6.611	0.000	1103 0.05000	0.055	75.76- 115.76	84.33
	Average of Peak Amounts =		0.05633			
-----						
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.728	10.728	0.000	139734 0.00000	0.0071		(am)M6 TM 06/04
-----						
9	Aroclor-1260		CAS #: 11096-82-5			
8.638	8.635	0.003	2272 0.05000	0.054	80.00- 120.00	100.00(am)M6 TM 06/04
8.891	8.885	0.006	1905 0.05000	0.052	73.67- 113.67	83.85
9.436	9.435	0.001	3155 0.05000	0.061	102.04- 142.04	138.86
	Average of Peak Amounts =		0.05567			
-----						



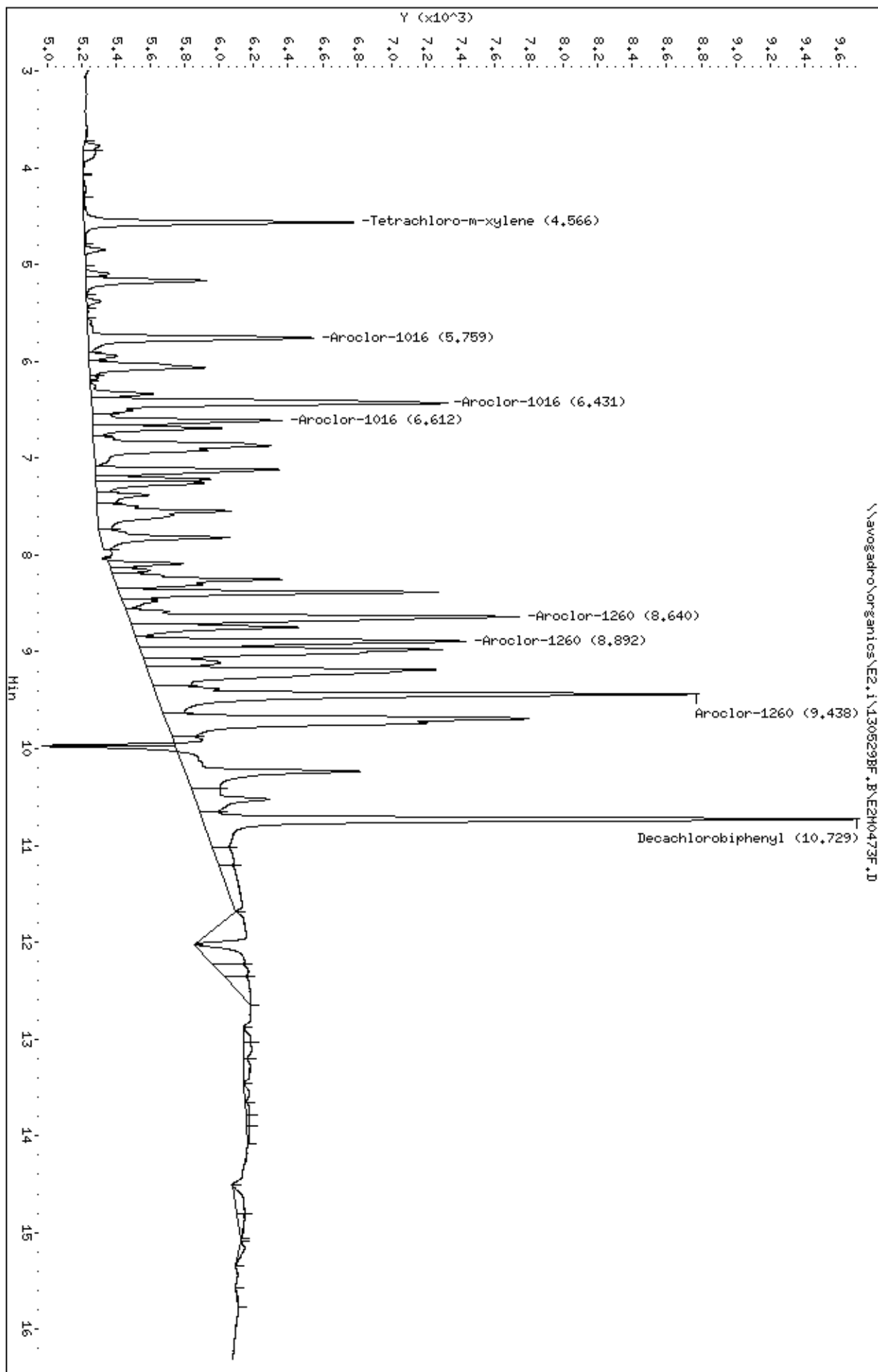
Data File: \\avogadro\organics\E2.i\130529BF.B\E2M0473F.D  
Report Date: 04-Jun-2013 10:25

QC Flag Legend

- a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).
- M - Compound response manually integrated.

Data File: \\avogadro\organicos\EE2\1\130529BF.B\EE2H0473F.D  
Date: 30-May-2013 00:55  
Client ID: AR16606D2  
Sample Info: AR16606D2,AR16606D2,,ar1660,sub,  
Volume Injected (uL): 1.0  
Column phase: CLPrest

Instrument: EE2.i  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BR.B\E2M0473R.D  
 Lab Smp Id: AR16606D2 Client Smp ID: AR16606D2  
 Inj Date : 30-MAY-2013 00:55  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR16606D2,AR16606D2,,ar1660.sub,,  
 Misc Info : 1,6,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BR.B\E2\_LL\_PCB\_R.m  
 Meth Date : 30-May-2013 12:59 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 00:55 Cal File: E2M0473R.D  
 Dil bottle: 28 Calibration Sample, Level: 6  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1660.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
-----						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
5.245	5.242	0.003	1535 0.00000	0.0031		(a)
-----						
6	Aroclor-1016		CAS #: 12674-11-2			
7.242	7.240	0.002	2347 0.05000	0.053	80.00- 120.00	100.00(a)
7.402	7.400	0.002	1367 0.05000	0.055	33.79- 73.79	58.24
7.518	7.516	0.002	957 0.05000	0.057	16.38- 56.38	40.78
	Average of Peak Amounts =		0.05500			
-----						
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
12.019	12.018	0.001	3286 0.00000	0.0069		(a)
-----						
8	Aroclor-1260		CAS #: 11096-82-5			
9.054	9.051	0.003	2050 0.05000	0.054	80.00- 120.00	100.00(a)
9.219	9.215	0.004	2284 0.05000	0.055	96.25- 136.25	111.41
9.517	9.514	0.003	2278 0.05000	0.055	98.14- 138.14	111.12
	Average of Peak Amounts =		0.05467			
-----						

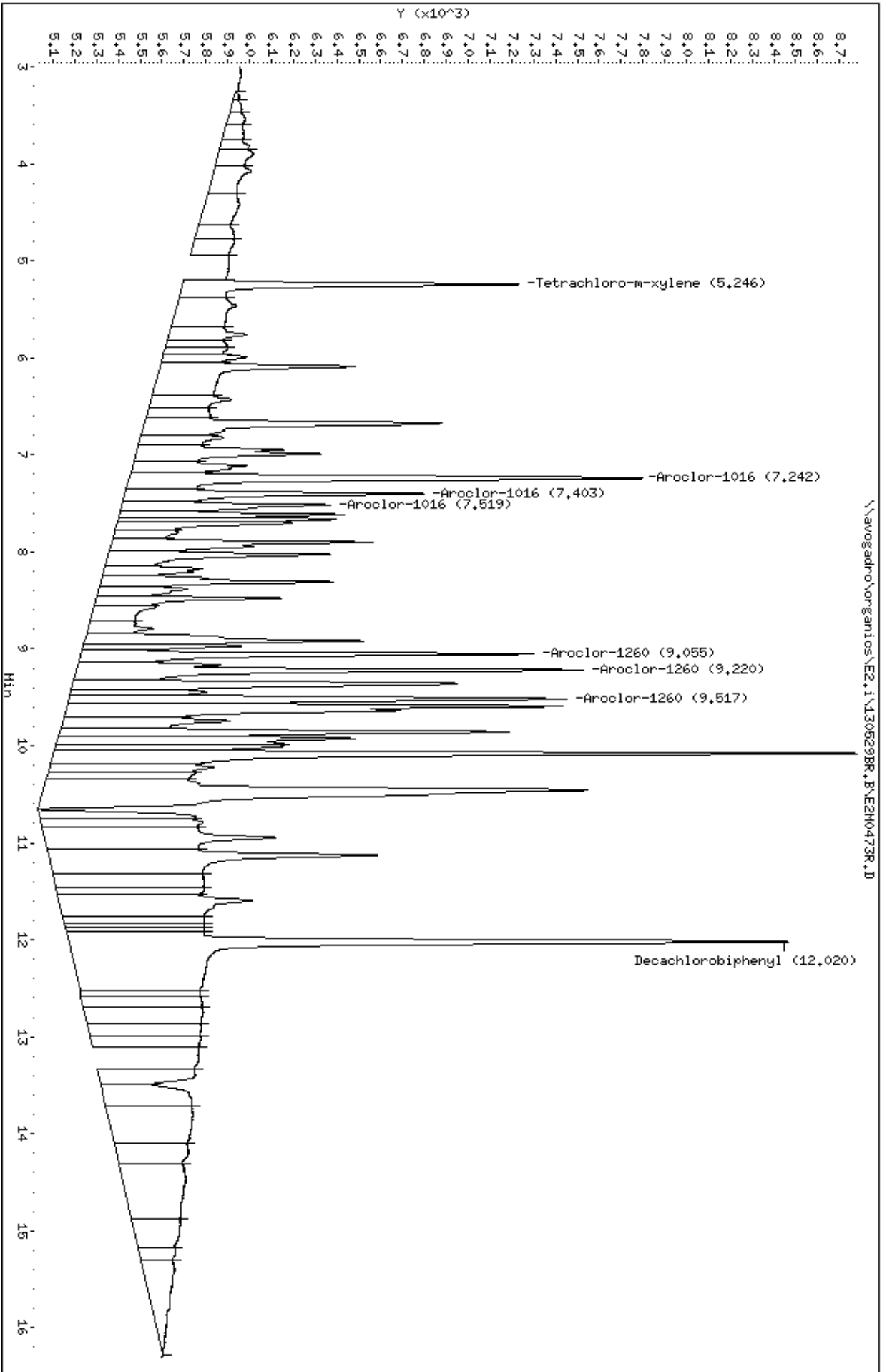
Data File: \\avogadro\organics\E2.i\130529BR.B\E2M0473R.D  
Report Date: 04-Jun-2013 10:25

QC Flag Legend

a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\E2.1\130529BR.B\2H0473R.D  
Date: 30-May-2013 00:55  
Client ID: AR16606D2  
Sample Info: AR16606D2,AR16606D2,,ar1660,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPrestII

Instrument: E2.1  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BF.B\E2M0474F.D  
 Lab Smp Id: AR16602D2 Client Smp ID: AR16602D2  
 Inj Date : 30-MAY-2013 01:15  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR16602D2,AR16602D2,,ar1660.sub,,  
 Misc Info : 1,2,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BF.B\E2\_LL\_PCB\_F.m  
 Meth Date : 30-May-2013 12:49 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 01:15 Cal File: E2M0474F.D  
 Als bottle: 29 Calibration Sample, Level: 2  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1660.sub  
 Target Version: 4.14 Sample Matrix: WATER

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
-----						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
4.565	4.565	0.000	5772 0.01000	0.0100		(a)
-----						
5	Aroclor-1016		CAS #: 12674-11-2			
5.758	5.756	0.002	4739 0.20000	0.21	80.00- 120.00	100.00(a)
6.431	6.431	0.000	7719 0.20000	0.21	154.92- 194.92	162.88
6.612	6.611	0.001	4165 0.20000	0.21	75.76- 115.76	87.89
	Average of Peak Amounts =		0.21000			
-----						
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.730	10.728	0.002	424313 0.02000	0.022		(a)
-----						
9	Aroclor-1260		CAS #: 11096-82-5			
8.639	8.635	0.004	8554 0.20000	0.20	80.00- 120.00	100.00(a)
8.892	8.885	0.007	7367 0.20000	0.20	73.67- 113.67	86.12
9.439	9.435	0.004	10336 0.20000	0.20	102.04- 142.04	120.83
	Average of Peak Amounts =		0.20000			
-----						

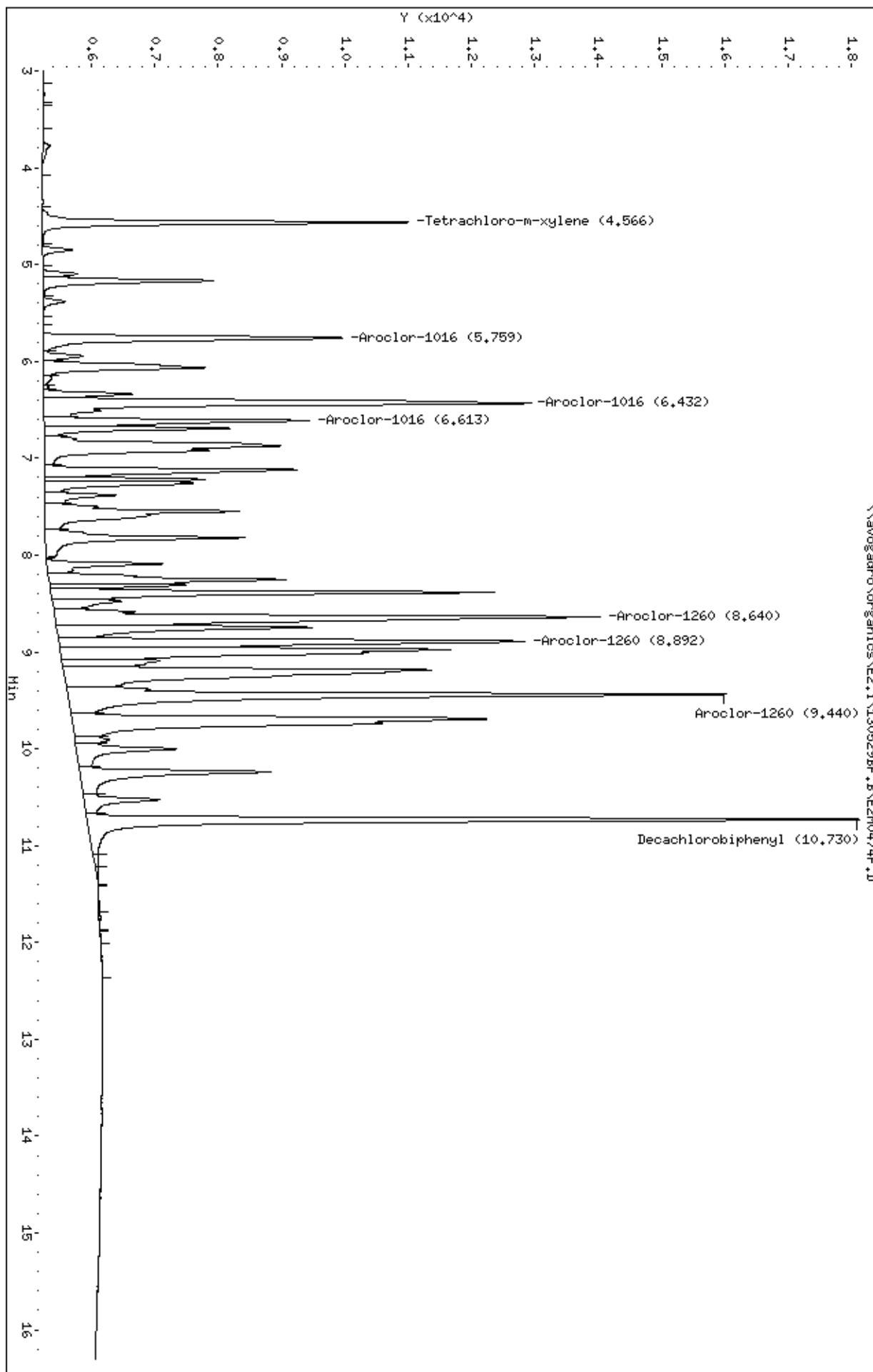
Data File: \\avogadro\organics\E2.i\130529BF.B\E2M0474F.D  
Report Date: 04-Jun-2013 10:25

QC Flag Legend

a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\E2.1\130529BF.B\E2H0474F.D  
Date: 30-MAY-2013 01:15  
Client ID: AR16602D2  
Sample Info: AR16602D2,AR16602D2,,ar1660,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPrest

Instrument: E2.1  
Operator: TH SRC: TH  
Column diameter: 0.32





Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BR.B\E2M0474R.D  
 Lab Smp Id: AR16602D2 Client Smp ID: AR16602D2  
 Inj Date : 30-MAY-2013 01:15  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR16602D2,AR16602D2,,ar1660.sub,,  
 Misc Info : 1,2,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BR.B\E2\_LL\_PCB\_R.m  
 Meth Date : 30-May-2013 12:59 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 01:15 Cal File: E2M0474R.D  
 Als bottle: 29 Calibration Sample, Level: 2  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1660.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
-----						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
5.243	5.242	0.001	5049 0.01000	0.010		(a)
-----						
6	Aroclor-1016		CAS #: 12674-11-2			
7.241	7.240	0.001	7814 0.20000	0.18	80.00- 120.00	100.00(a)
7.401	7.400	0.001	4155 0.20000	0.18	33.79- 73.79	53.17
7.517	7.516	0.001	2789 0.20000	0.18	16.38- 56.38	35.69
	Average of Peak Amounts =		0.18000			
-----						
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
12.020	12.018	0.002	9259 0.02000	0.020		(a)
-----						
8	Aroclor-1260		CAS #: 11096-82-5			
9.053	9.051	0.002	6567 0.20000	0.18	80.00- 120.00	100.00(a)
9.218	9.215	0.003	7439 0.20000	0.18	96.25- 136.25	113.28
9.517	9.514	0.003	7446 0.20000	0.19	98.14- 138.14	113.39
	Average of Peak Amounts =		0.18333			
-----						

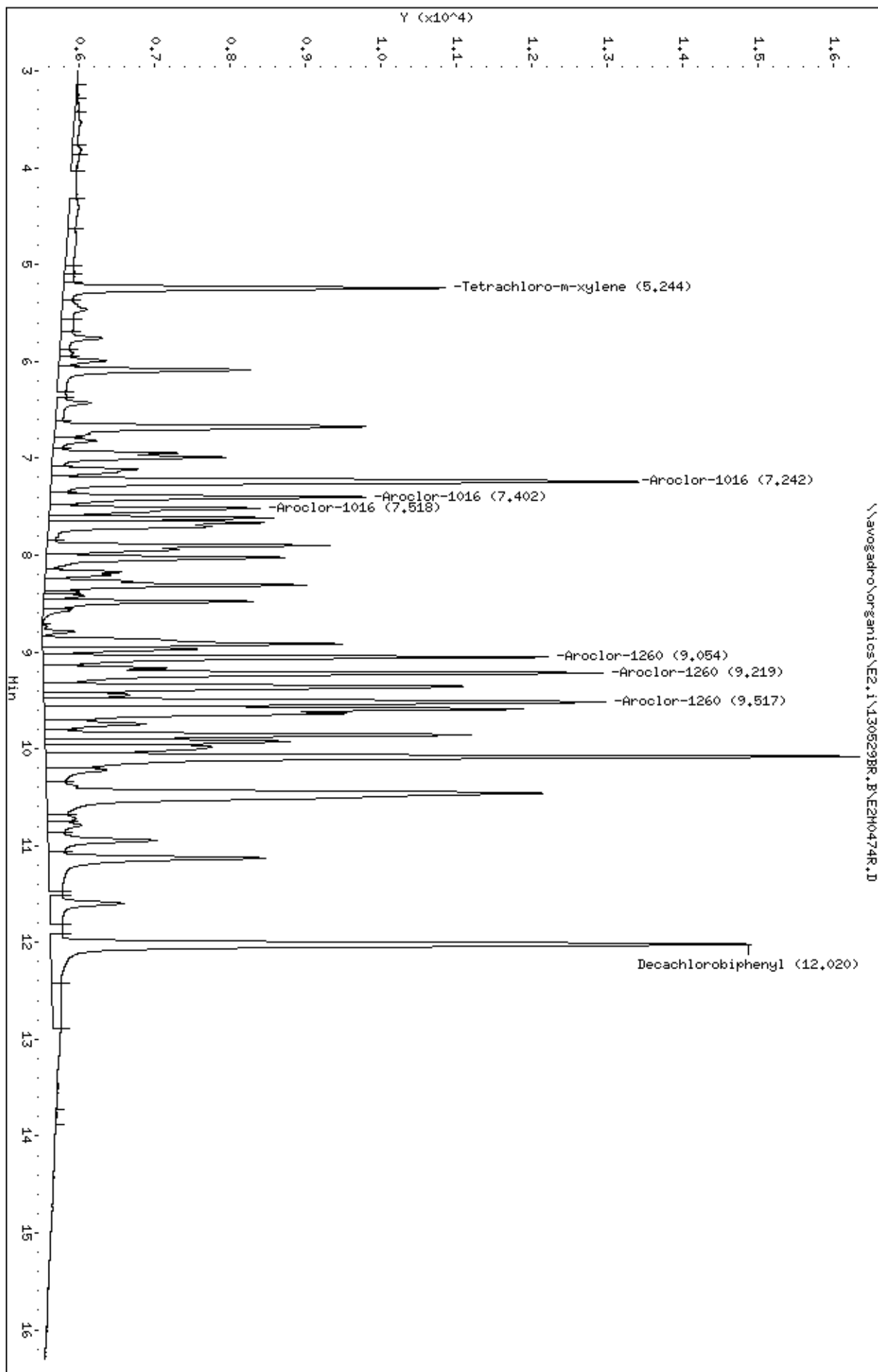
Data File: \\avogadro\organics\E2.i\130529BR.B\E2M0474R.D  
Report Date: 04-Jun-2013 10:25

QC Flag Legend

a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\E2.1\130529BR.B\E2H0474R.D  
Date: 30-May-2013 01:15  
Client ID: AR16602D2  
Sample Info: AR16602D2,AR16602D2,,ar1660,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPestII

Instrument: E2.1  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BF.B\E2M0475F.D  
 Lab Smp Id: AR16603D2 Client Smp ID: AR16603D2  
 Inj Date : 30-MAY-2013 01:34  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR16603D2,AR16603D2,,ar1660.sub,,  
 Misc Info : 1,3,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BF.B\E2\_LL\_PCB\_F.m  
 Meth Date : 30-May-2013 12:49 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 01:34 Cal File: E2M0475F.D  
 Als bottle: 30 Calibration Sample, Level: 3  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1660.sub  
 Target Version: 4.14 Sample Matrix: WATER

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
-----						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
4.564	4.565	-0.001	11372 0.02000	0.020		(a)
-----						
5	Aroclor-1016		CAS #: 12674-11-2			
5.756	5.756	0.000	8641 0.40000	0.38	80.00- 120.00	100.00(a)
6.430	6.431	-0.001	14257 0.40000	0.38	154.92- 194.92	164.99
6.611	6.611	0.000	7712 0.40000	0.38	75.76- 115.76	89.25
	Average of Peak Amounts =		0.38000			
-----						
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.729	10.728	0.001	738409 0.04000	0.038		(a)
-----						
9	Aroclor-1260		CAS #: 11096-82-5			
8.638	8.635	0.003	15813 0.40000	0.38	80.00- 120.00	100.00(a)
8.890	8.885	0.005	13885 0.40000	0.38	73.67- 113.67	87.81
9.438	9.435	0.003	19247 0.40000	0.37	102.04- 142.04	121.72
	Average of Peak Amounts =		0.37667			
-----						

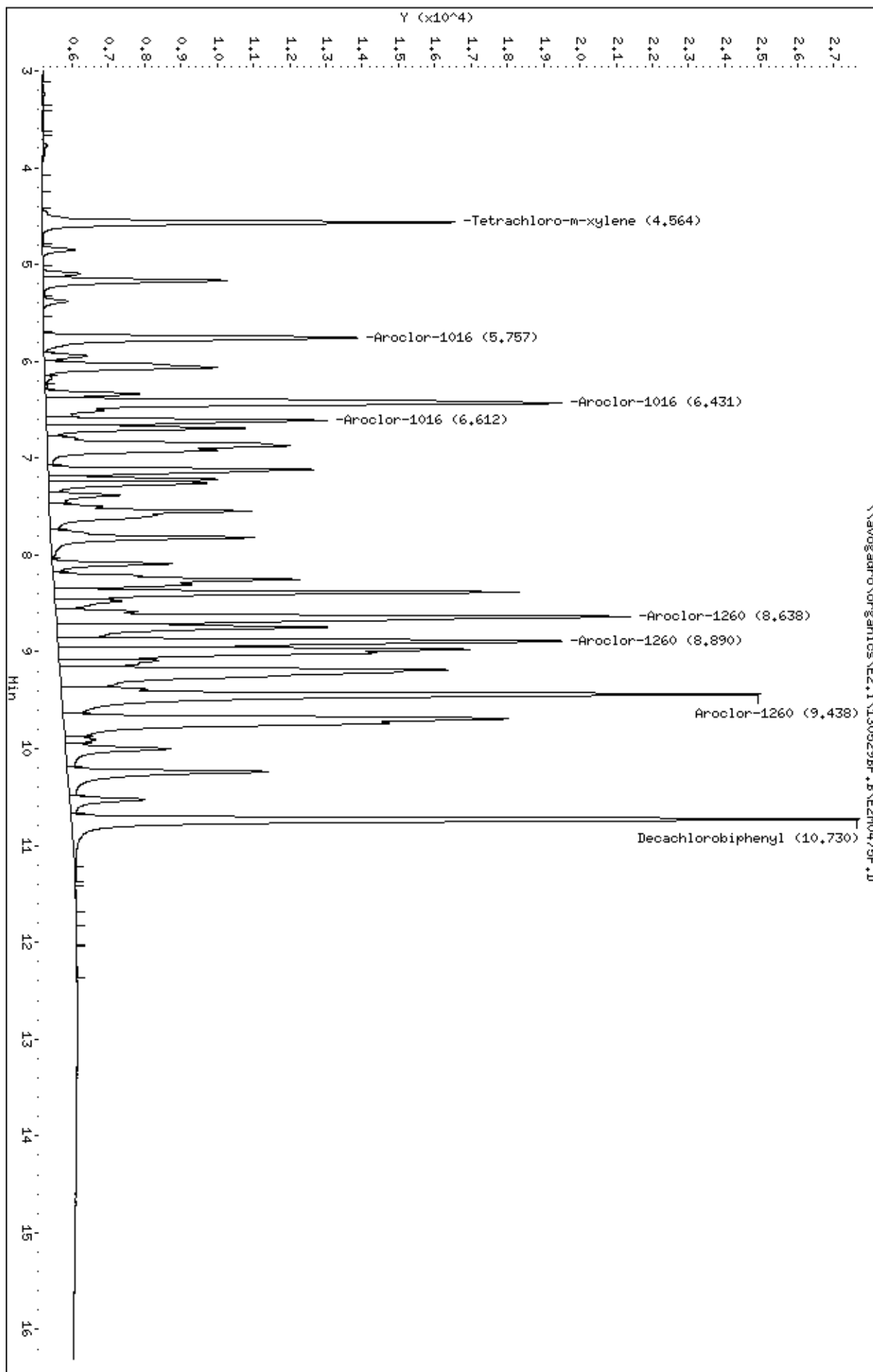
Data File: \\avogadro\organics\E2.i\130529BF.B\E2M0475F.D  
Report Date: 04-Jun-2013 10:25

QC Flag Legend

a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\EE2\1\130529BF.B\EE2H0475F.D  
Date: 30-MAY-2013 01:34  
Client ID: AR16603D2  
Sample Info: AR16603D2,AR16603D2,,ar1660,sub,  
Volume Injected (uL): 1.0  
Column phase: CLPrest

Instrument: EE2.i  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BR.B\E2M0475R.D  
 Lab Smp Id: AR16603D2 Client Smp ID: AR16603D2  
 Inj Date : 30-MAY-2013 01:34  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR16603D2,AR16603D2,,ar1660.sub,,  
 Misc Info : 1,3,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BR.B\E2\_LL\_PCB\_R.m  
 Meth Date : 30-May-2013 12:59 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 01:34 Cal File: E2M0475R.D  
 Als bottle: 30 Calibration Sample, Level: 3  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1660.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
-----						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
5.242	5.242	0.000	9668 0.02000	0.020		(a)
-----						
6	Aroclor-1016		CAS #: 12674-11-2			
7.240	7.240	0.000	14282 0.40000	0.35	80.00- 120.00	100.00(a)
7.401	7.400	0.001	7584 0.40000	0.34	33.79- 73.79	53.10
7.517	7.516	0.001	5146 0.40000	0.34	16.38- 56.38	36.03
	Average of Peak Amounts =		0.34333			
-----						
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
12.019	12.018	0.001	16474 0.04000	0.039		(a)
-----						
8	Aroclor-1260		CAS #: 11096-82-5			
9.052	9.051	0.001	12026 0.40000	0.35	80.00- 120.00	100.00(a)
9.217	9.215	0.002	13793 0.40000	0.36	96.25- 136.25	114.69
9.516	9.514	0.002	13877 0.40000	0.36	98.14- 138.14	115.39
	Average of Peak Amounts =		0.35667			
-----						

Data File: \\avogadro\organics\E2.i\130529BR.B\E2M0475R.D  
Report Date: 04-Jun-2013 10:25

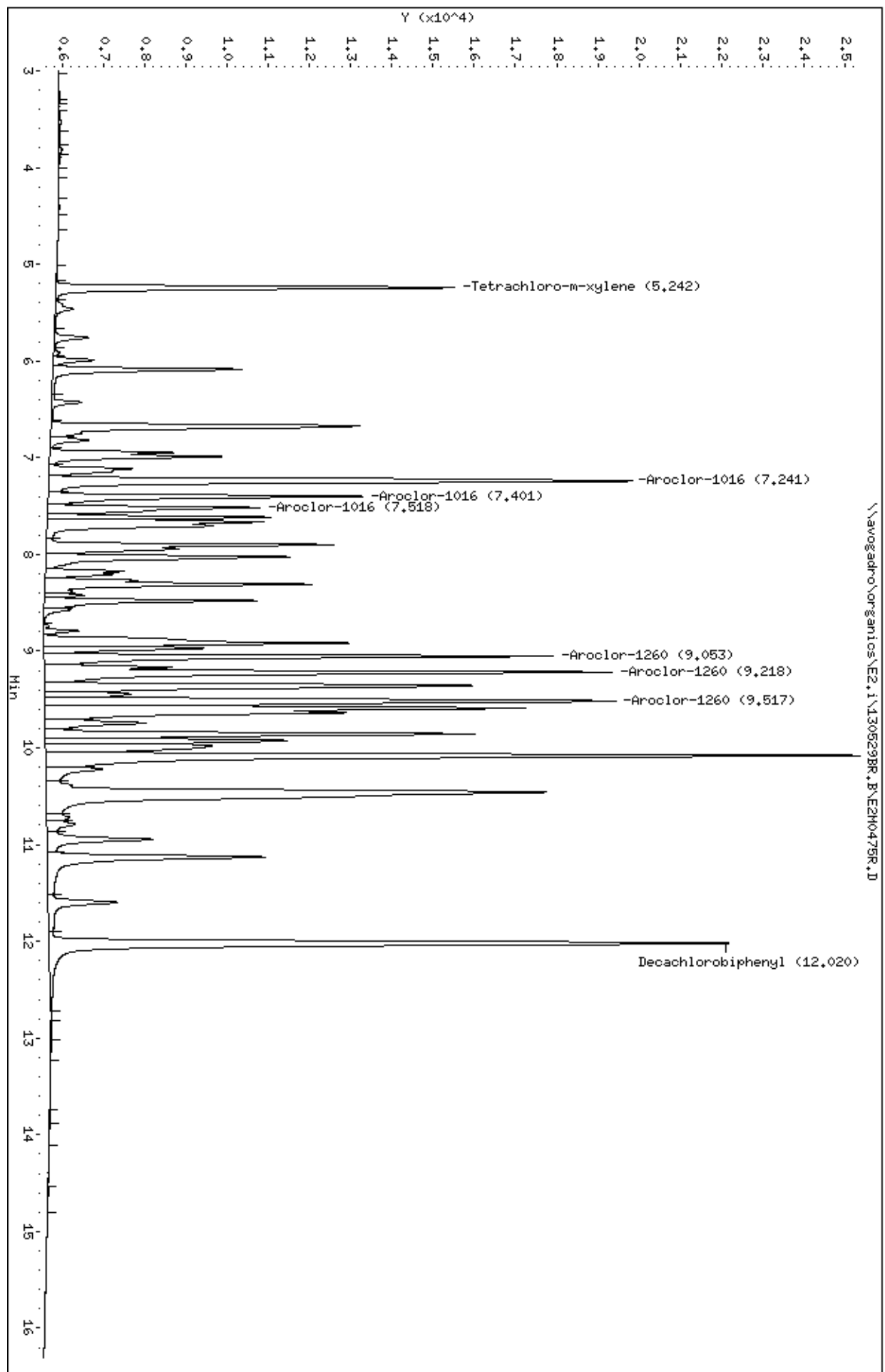
QC Flag Legend

a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).



Data File: \\avogadro\organicos\E2.1\130529BR.B\2H0475R.D  
Date : 30-MAY-2013 01:34  
Client ID: AR16603D2  
Sample Info: AR16603D2,AR16603D2,,ar-1660,sub,  
Volume Injected (uL): 1.0  
Column phase: CLPestII

Instrument: E2.1  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BF.B\E2M0476F.D  
 Lab Smp Id: AR16604D2 Client Smp ID: AR16604D2  
 Inj Date : 30-MAY-2013 01:54  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR16604D2,AR16604D2,,ar1660.sub,,  
 Misc Info : 1,4,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BF.B\E2\_LL\_PCB\_F.m  
 Meth Date : 30-May-2013 12:49 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 01:54 Cal File: E2M0476F.D  
 Als bottle: 31 Calibration Sample, Level: 4  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1660.sub  
 Target Version: 4.14 Sample Matrix: WATER

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
-----						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
4.563	4.565	-0.002	23227 0.04000	0.040		(a)
-----						
5	Aroclor-1016		CAS #: 12674-11-2			
5.755	5.756	-0.001	16818 0.80000	0.74	80.00- 120.00	100.00(a)
6.429	6.431	-0.002	28843 0.80000	0.77	154.92- 194.92	171.50
6.610	6.611	-0.001	15625 0.80000	0.78	75.76- 115.76	92.91
	Average of Peak Amounts =		0.76333			
-----						
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.727	10.728	-0.001	1389737 0.08000	0.071		
-----						
9	Aroclor-1260		CAS #: 11096-82-5			
8.636	8.635	0.001	32930 0.80000	0.79	80.00- 120.00	100.00(a)
8.886	8.885	0.001	29541 0.80000	0.81	73.67- 113.67	89.71
9.435	9.435	0.000	40926 0.80000	0.79	102.04- 142.04	124.28
	Average of Peak Amounts =		0.79667			
-----						

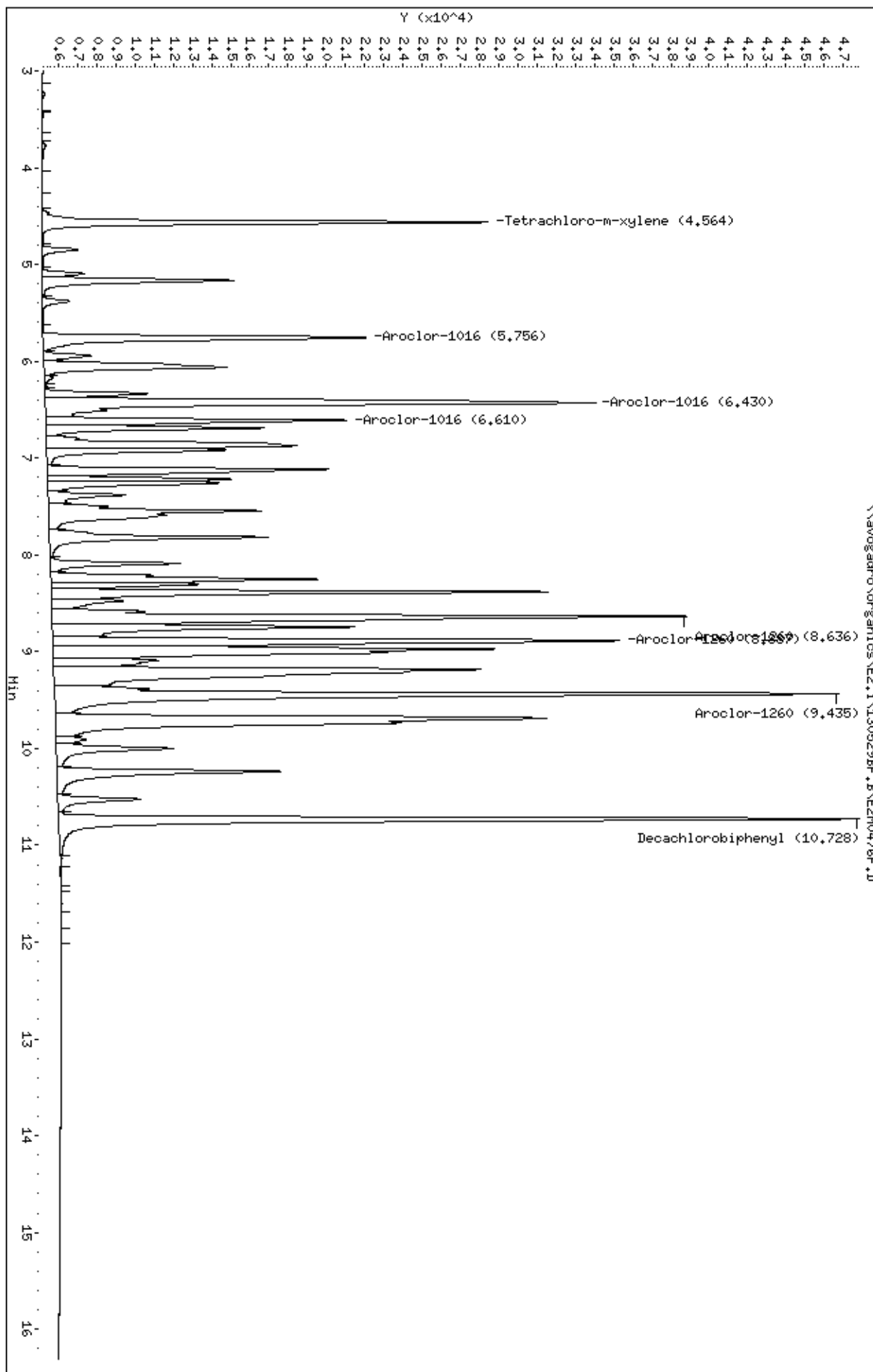
Data File: \\avogadro\organics\E2.i\130529BF.B\E2M0476F.D  
Report Date: 04-Jun-2013 10:25

QC Flag Legend

a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\E2.1\130529BF.B\E2H0476F.D  
 Date: 30-MAY-2013 01:54  
 Client ID: AR16604D2  
 Sample Info: AR16604D2,AR16604D2,,ar1660,sub,  
 Volume Injected (uL): 1.0  
 Column phase: CLPrest

Instrument: E2.1  
 Operator: TH SRC: TH  
 Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BR.B\E2M0476R.D  
 Lab Smp Id: AR16604D2 Client Smp ID: AR16604D2  
 Inj Date : 30-MAY-2013 01:54  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR16604D2,AR16604D2,,ar1660.sub,,  
 Misc Info : 1,4,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BR.B\E2\_LL\_PCB\_R.m  
 Meth Date : 30-May-2013 12:59 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 01:54 Cal File: E2M0476R.D  
 Als bottle: 31 Calibration Sample, Level: 4  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1660.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
-----						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
5.241	5.242	-0.001	19487 0.04000	0.040		(a)
-----						
6	Aroclor-1016		CAS #: 12674-11-2			
7.239	7.240	-0.001	28127 0.80000	0.71	80.00- 120.00	100.00(a)
7.399	7.400	-0.001	15310 0.80000	0.71	33.79- 73.79	54.43
7.515	7.516	-0.001	10448 0.80000	0.71	16.38- 56.38	37.15
Average of Peak Amounts =			0.71000			
-----						
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
12.016	12.018	-0.002	31192 0.08000	0.075		
-----						
8	Aroclor-1260		CAS #: 11096-82-5			
9.051	9.051	0.000	24664 0.80000	0.73	80.00- 120.00	100.00(a)
9.215	9.215	0.000	28112 0.80000	0.74	96.25- 136.25	113.98
9.513	9.514	-0.001	28455 0.80000	0.75	98.14- 138.14	115.37
Average of Peak Amounts =			0.74000			
-----						

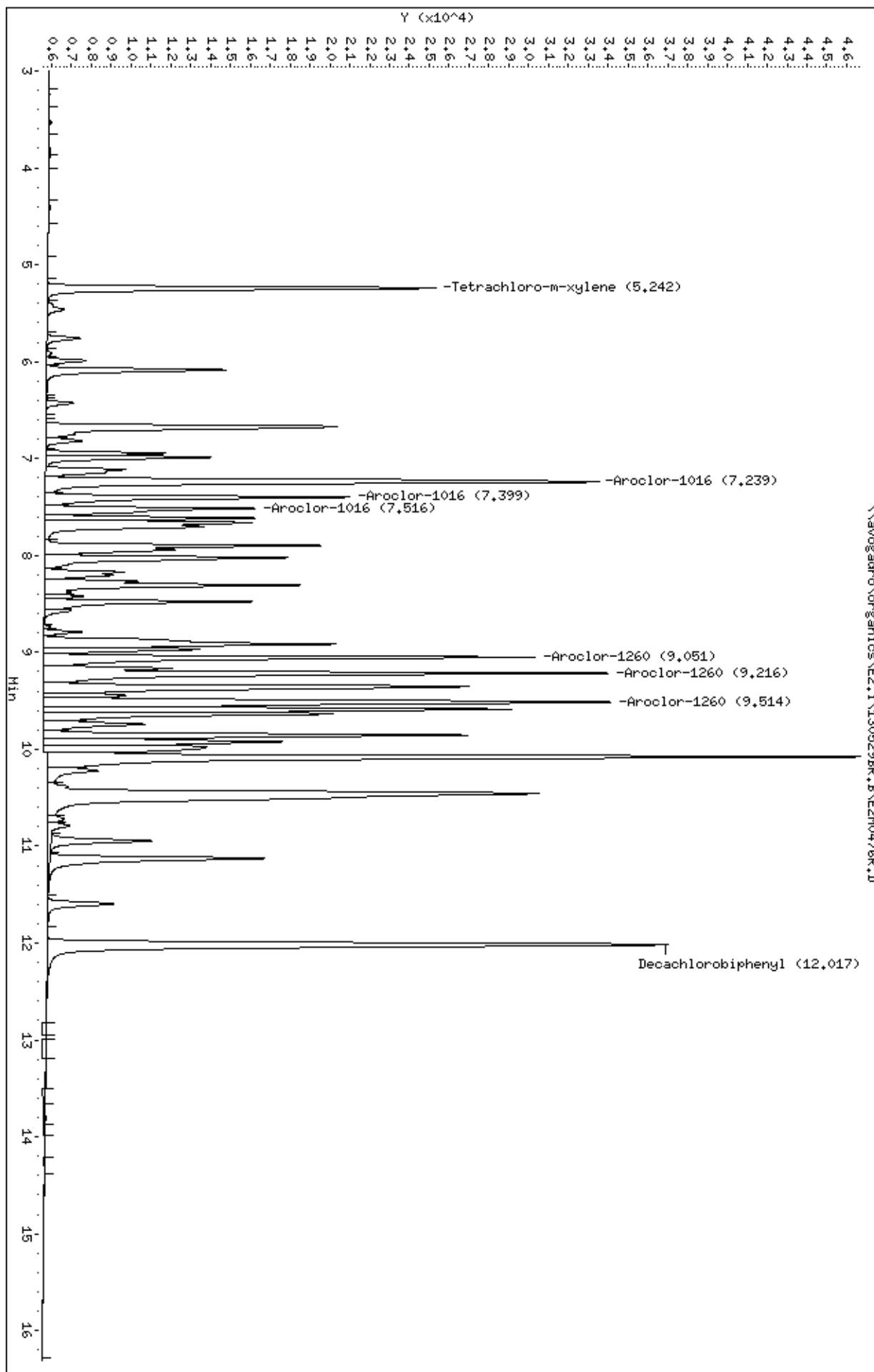
Data File: \\avogadro\organics\E2.i\130529BR.B\E2M0476R.D  
Report Date: 04-Jun-2013 10:25

QC Flag Legend

a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\EE2,1\130529BR,B\EE2H0476R.D  
Date : 30-MAY-2013 01:54  
Client ID: AR16604D2  
Sample Info: AR16604D2,AR16604D2,,ar-1660,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPrestII

Instrument: EE2.i  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BF.B\E2M0477F.D  
 Lab Smp Id: AR16605D2 Client Smp ID: AR16605D2  
 Inj Date : 30-MAY-2013 02:14  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR16605D2,AR16605D2,,ar1660.sub,,  
 Misc Info : 1,5,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BF.B\E2\_LL\_PCB\_F.m  
 Meth Date : 30-May-2013 12:49 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 02:14 Cal File: E2M0477F.D  
 Als bottle: 32 Calibration Sample, Level: 5  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1660.sub  
 Target Version: 4.14 Sample Matrix: WATER

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

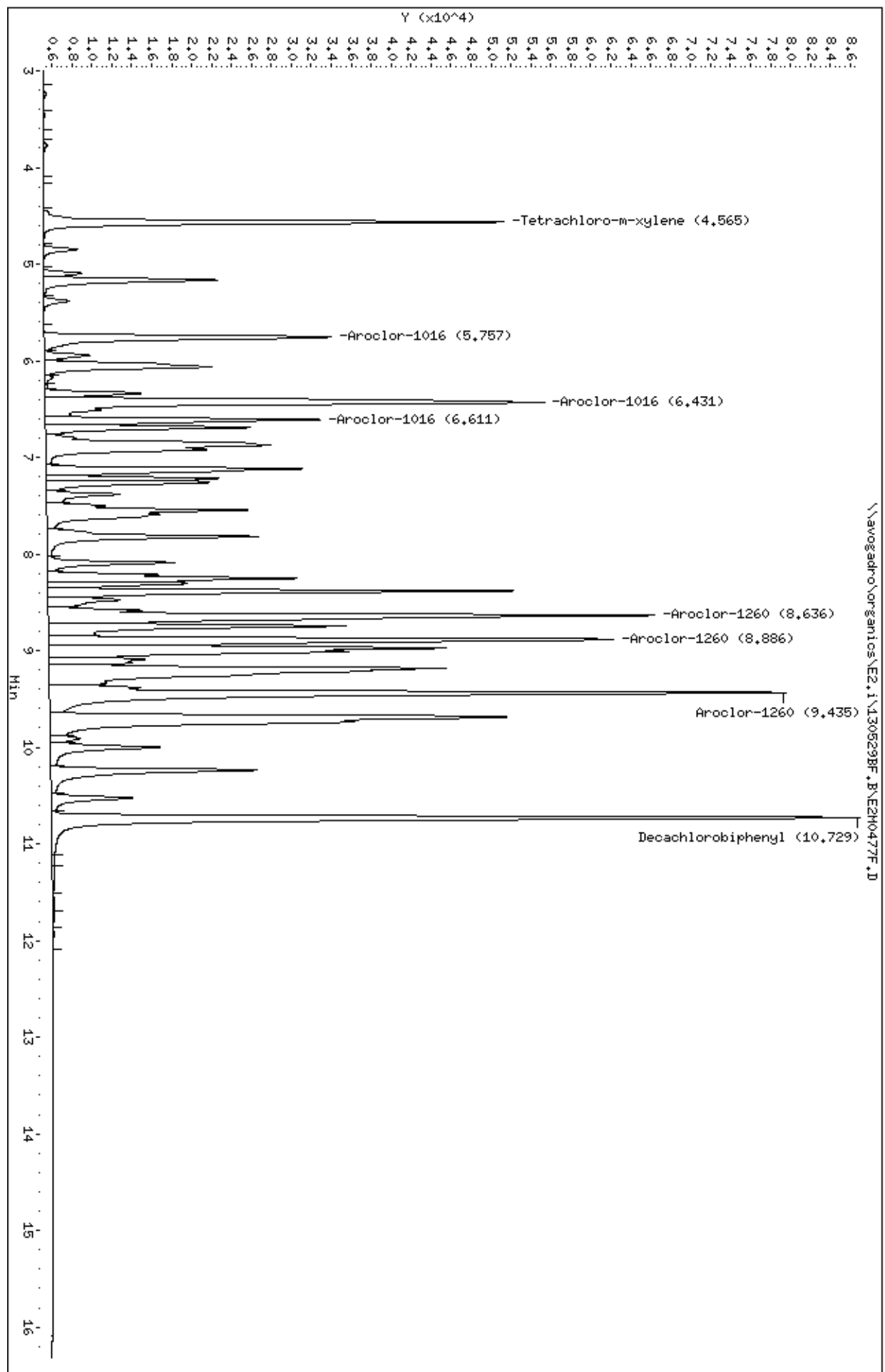
AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
-----						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
4.565	4.565	0.000	46154	0.08000	0.080	
-----						
5	Aroclor-1016		CAS #: 12674-11-2			
5.756	5.756	0.000	28684	1.60000	1.3 80.00- 120.00	100.00
6.431	6.431	0.000	50174	1.60000	1.3 154.92- 194.92	174.92
6.611	6.611	0.000	27468	1.60000	1.4 75.76- 115.76	95.76
Average of Peak Amounts =			1.33333			
-----						
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.728	10.728	0.000	2673117	0.16000	0.14	
-----						
9	Aroclor-1260		CAS #: 11096-82-5			
8.635	8.635	0.000	60419	1.60000	1.4 80.00- 120.00	100.00
8.885	8.885	0.000	56594	1.60000	1.6 73.67- 113.67	93.67
9.435	9.435	0.000	73734	1.60000	1.4 102.04- 142.04	122.04
Average of Peak Amounts =			1.46667			
-----						



Data File: \\avogadro\organicos\EE2.1\130529BF.B\EE2H0477F.D  
 Date: 30-MAY-2013 02:14  
 Client ID: AR16605D2  
 Sample Info: AR16605D2,AR16605D2,,ar1660,sub,,  
 Volume Injected (uL): 1.0  
 Column phase: CLPrest

Instrument: EE2.i  
 Operator: TH SRC: TH  
 Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130529BR.B\E2M0477R.D  
 Lab Smp Id: AR16605D2 Client Smp ID: AR16605D2  
 Inj Date : 30-MAY-2013 02:14  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR16605D2,AR16605D2,,ar1660.sub,,  
 Misc Info : 1,5,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130529BR.B\E2\_LL\_PCB\_R.m  
 Meth Date : 30-May-2013 12:59 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 02:14 Cal File: E2M0477R.D  
 Dil bottle: 32 Calibration Sample, Level: 5  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1660.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

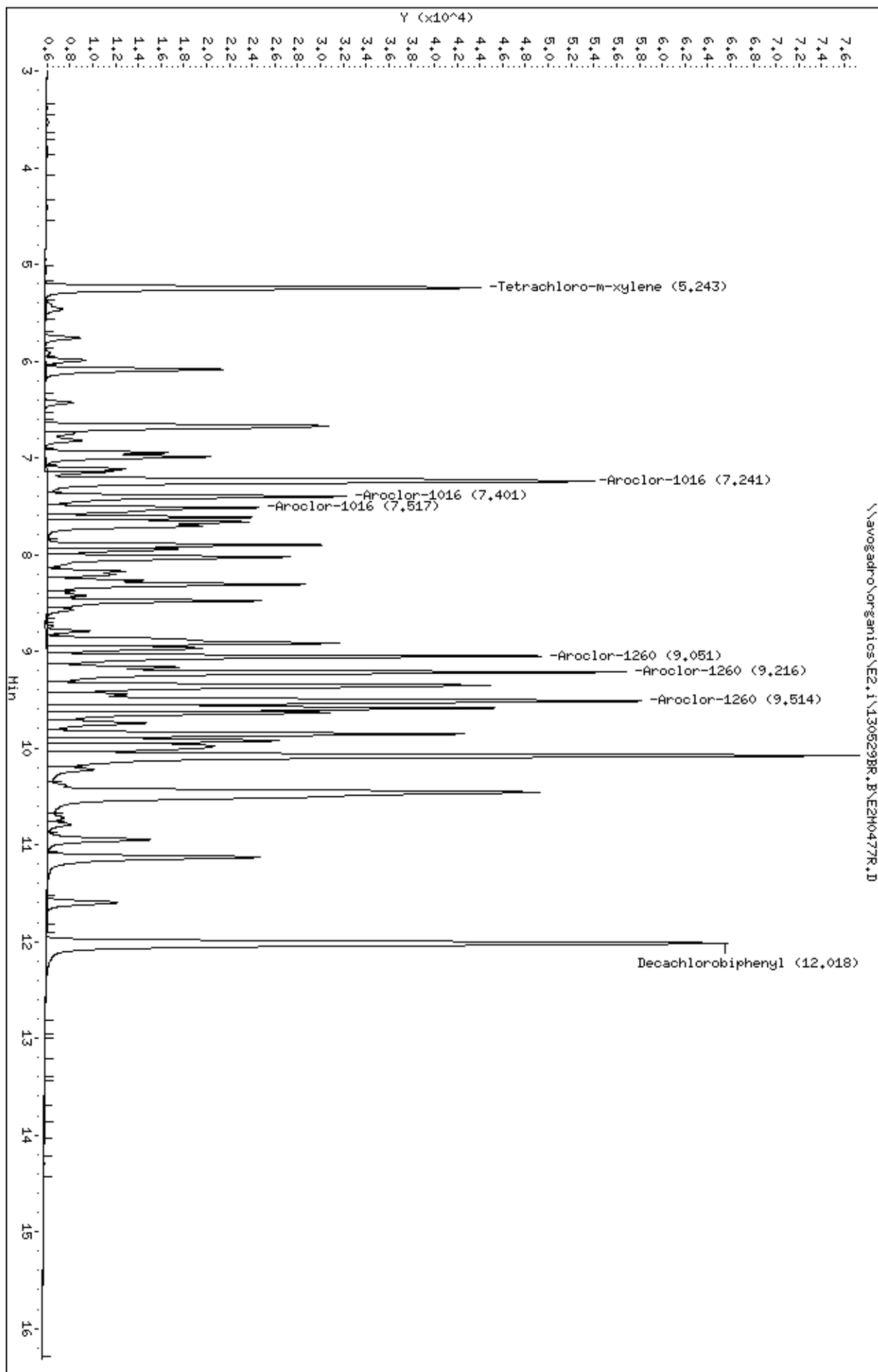
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
-----						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
5.242	5.242	0.000	38273 0.08000	0.078		
-----						
6	Aroclor-1016		CAS #: 12674-11-2			
7.240	7.240	0.000	48385 1.60000	1.3	80.00- 120.00	100.00
7.400	7.400	0.000	26005 1.60000	1.2	33.79- 73.79	53.75
7.516	7.516	0.000	18528 1.60000	1.3	16.38- 56.38	38.29
Average of Peak Amounts =			1.26667			
-----						
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
12.018	12.018	0.000	59896 0.16000	0.14		
-----						
8	Aroclor-1260		CAS #: 11096-82-5			
9.051	9.051	0.000	43391 1.60000	1.3	80.00- 120.00	100.00
9.215	9.215	0.000	50438 1.60000	1.4	96.25- 136.25	116.24
9.514	9.514	0.000	52293 1.60000	1.4	98.14- 138.14	120.52
Average of Peak Amounts =			1.36667			
-----						

Data File: \\avogadro\organicos\E2.1\130529BR.B\E2H0477R.D  
Date: 30-May-2013 02:14  
Client ID: AR16605D2  
Sample Info: AR16605D2,AR16605D2,,ar1660,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPestII

Instrument: E2.1  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130619F.B\E2M1005F.D  
 Lab Smp Id: AR16603DK Client Smp ID: AR16603DK  
 Inj Date : 19-JUN-2013 09:31  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR16603DK,AR16603DK,,ar1660.sub,,  
 Misc Info : 2,3,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130619F.B\E2\_LL\_PCB\_F.m  
 Meth Date : 19-Jun-2013 15:07 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 02:14 Cal File: E2M0477F.D  
 Als bottle: 1 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: ar1660.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET111

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
-----						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
4.606	4.565	0.041	11577 0.02000	0.020		(a)
-----						
5	Aroclor-1016		CAS #: 12674-11-2			
5.795	5.756	0.039	9001 0.40000	0.40	80.00- 120.00	100.00(a)
6.464	6.431	0.033	13748 0.40000	0.37	133.57- 173.57	152.74
6.645	6.611	0.034	7567 0.40000	0.38	63.35- 103.35	84.07
	Average of Peak Amounts =		0.38333			
-----						
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.770	10.728	0.042	800020 0.04000	0.041		(a)
-----						
9	Aroclor-1260		CAS #: 11096-82-5			
8.669	8.635	0.034	15419 0.40000	0.37	80.00- 120.00	100.00(a)
8.923	8.885	0.038	13980 0.40000	0.38	73.17- 113.17	90.67
9.469	9.435	0.034	19975 0.40000	0.38	114.20- 154.20	129.55
	Average of Peak Amounts =		0.37667			
-----						

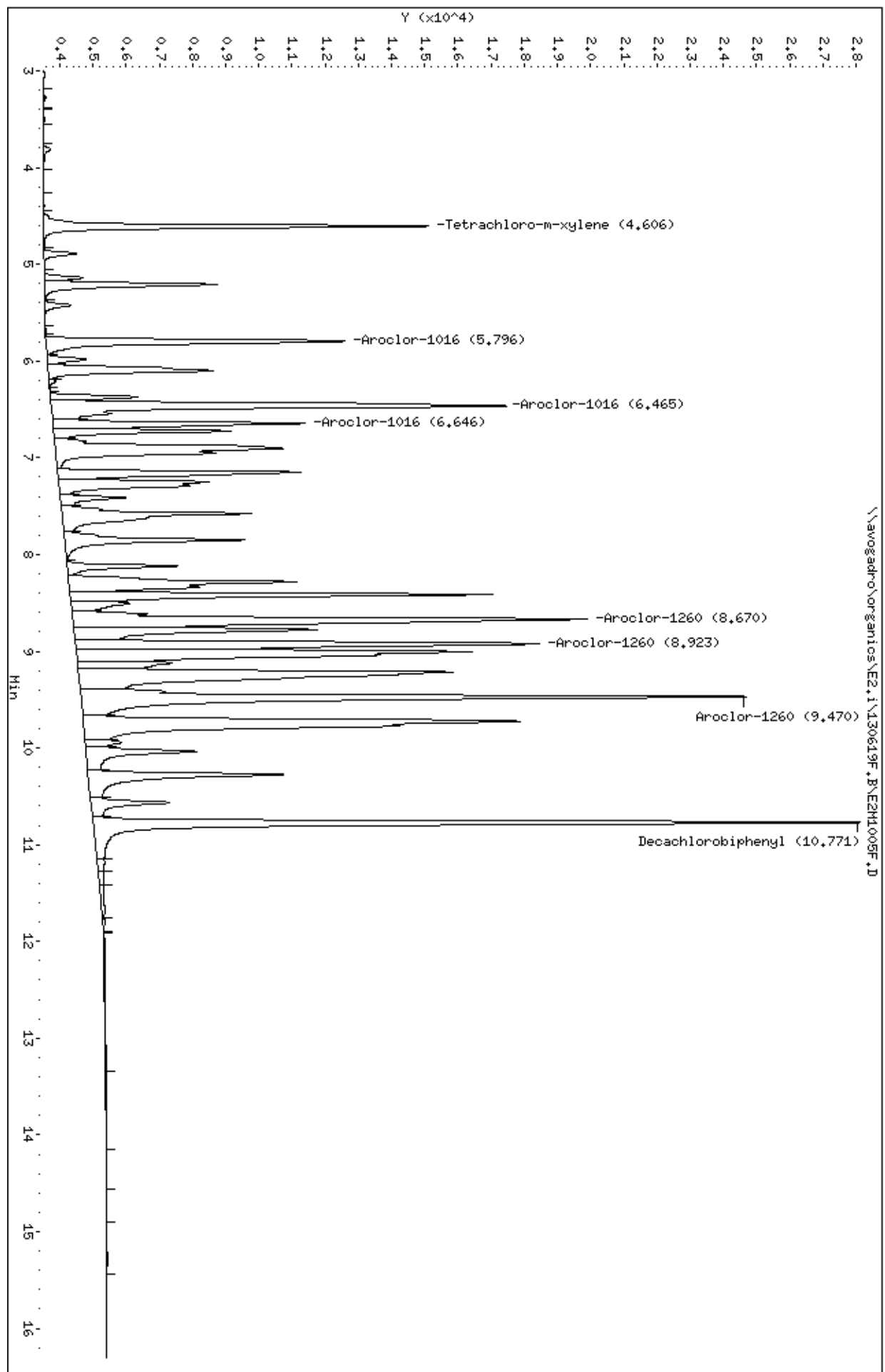
Data File: \\avogadro\organics\E2.i\130619F.B\E2M1005F.D  
Report Date: 19-Jun-2013 16:05

QC Flag Legend

a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\E2.1\130619F.B\E2H1005F.D  
Date: 19-JUN-2013 09:31  
Client ID: AR16603DK  
Sample Info: AR16603DK,AR16603DK,ar1660,sub,  
Volume Injected (uL): 1.0  
Column phase: CLPrest

Instrument: E2.1  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130619R.B\E2M1005R.D  
 Lab Smp Id: AR16603DK Client Smp ID: AR16603DK  
 Inj Date : 19-JUN-2013 09:31  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR16603DK,AR16603DK,,ar1660.sub,,  
 Misc Info : 2,3,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130619R.B\E2\_LL\_PCB\_R.m  
 Meth Date : 19-Jun-2013 15:08 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 02:14 Cal File: E2M0477R.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: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
-----						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
5.280	5.242	0.038	9323 0.02000	0.019		(a)
-----						
6	Aroclor-1016		CAS #: 12674-11-2			
7.266	7.240	0.026	13418 0.40000	0.35	80.00- 120.00	100.00(a)
7.426	7.400	0.026	7203 0.40000	0.35	71.09- 111.09	53.68
7.542	7.516	0.026	4846 0.40000	0.34	68.12- 108.12	36.12
	Average of Peak Amounts =		0.34667			
-----						
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
12.069	12.018	0.051	16832 0.04000	0.040		(a)
-----						
8	Aroclor-1260		CAS #: 11096-82-5			
9.076	9.051	0.025	11971 0.40000	0.36	80.00- 120.00	100.00(a)M6 TM 06/19
9.243	9.215	0.028	12949 0.40000	0.35	88.27- 128.27	108.17
9.543	9.514	0.029	13154 0.40000	0.35	92.32- 132.32	109.88
	Average of Peak Amounts =		0.35333			
-----						

Data File: \\avogadro\organics\E2.i\130619R.B\E2M1005R.D  
Report Date: 19-Jun-2013 16:06

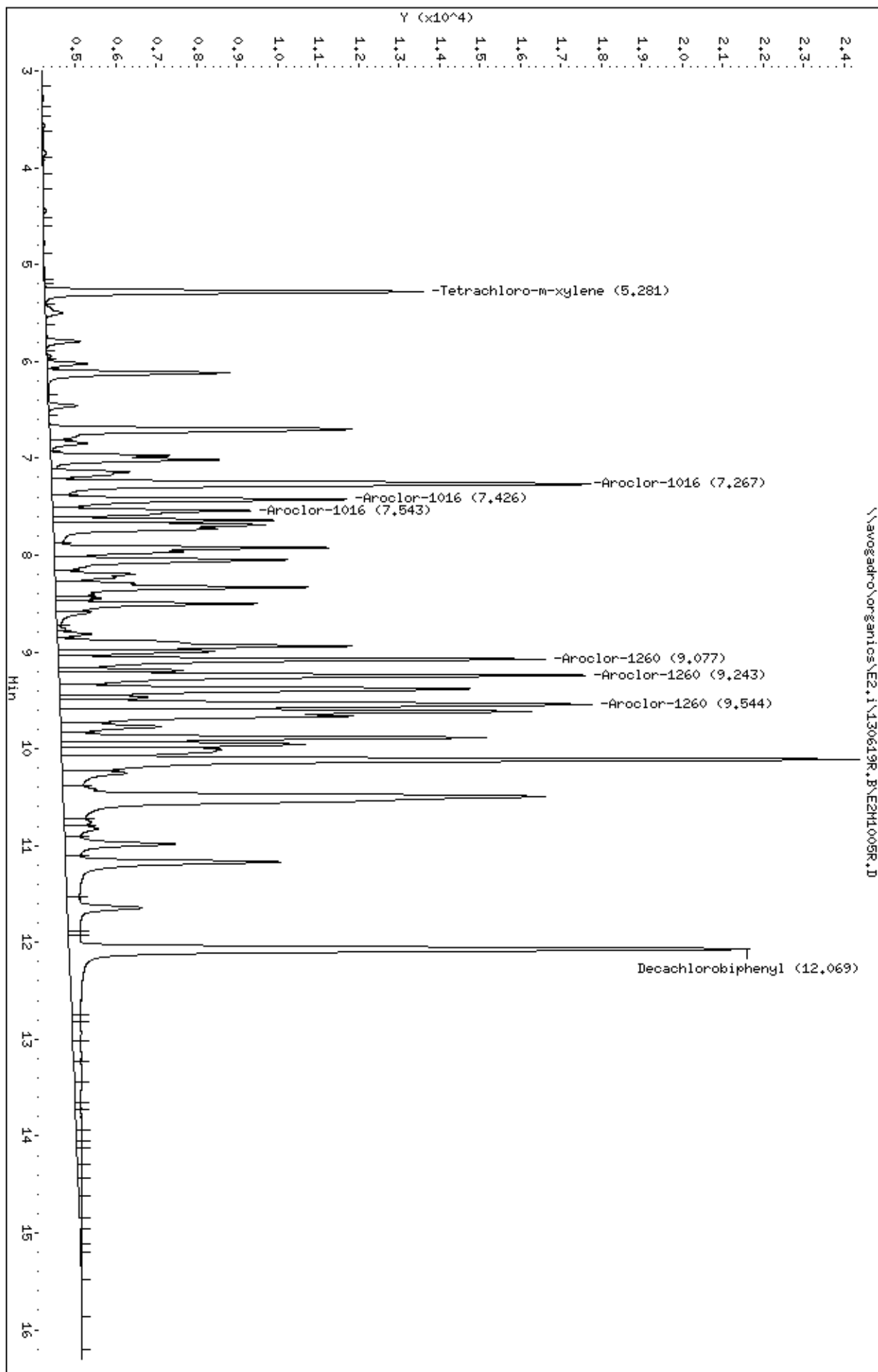
#### QC Flag Legend

- a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).
- M - Compound response manually integrated.



Data File: \\avogadro\organicos\E2.i\130619R.B\E2H1005R.D  
Date : 19-JUN-2013 09:31  
Client ID: AR16603DK  
Sample Info: AR16603DK,AR16603DK,ar-1660,sub,  
Volume Injected (uL): 1.0  
Column phase: CLPestH1

Instrument: E2.i  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130619F.B\E2M1020F.D  
 Lab Smp Id: AR16603DL Client Smp ID: AR16603DL  
 Inj Date : 19-JUN-2013 14:35  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR16603DL,AR16603DL,,ar1660.sub,,  
 Misc Info : 2,3,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130619F.B\E2\_LL\_PCB\_F.m  
 Meth Date : 19-Jun-2013 15:07 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 02:14 Cal File: E2M0477F.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: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
-----						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
4.603	4.565	0.038	11700 0.02000	0.020		(a)
-----						
5	Aroclor-1016		CAS #: 12674-11-2			
5.794	5.756	0.038	8947 0.40000	0.40	80.00- 120.00	100.00(a)
6.463	6.431	0.032	13740 0.40000	0.37	133.57- 173.57	153.57
6.644	6.611	0.033	7457 0.40000	0.37	63.35- 103.35	83.35
	Average of Peak Amounts =		0.38000			
-----						
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.770	10.728	0.042	798452 0.04000	0.041		(a)
-----						
9	Aroclor-1260		CAS #: 11096-82-5			
8.671	8.635	0.036	14427 0.40000	0.34	80.00- 120.00	100.00(a)
8.925	8.885	0.040	13442 0.40000	0.37	73.17- 113.17	93.17
9.470	9.435	0.035	19361 0.40000	0.37	114.20- 154.20	134.20
	Average of Peak Amounts =		0.36000			
-----						

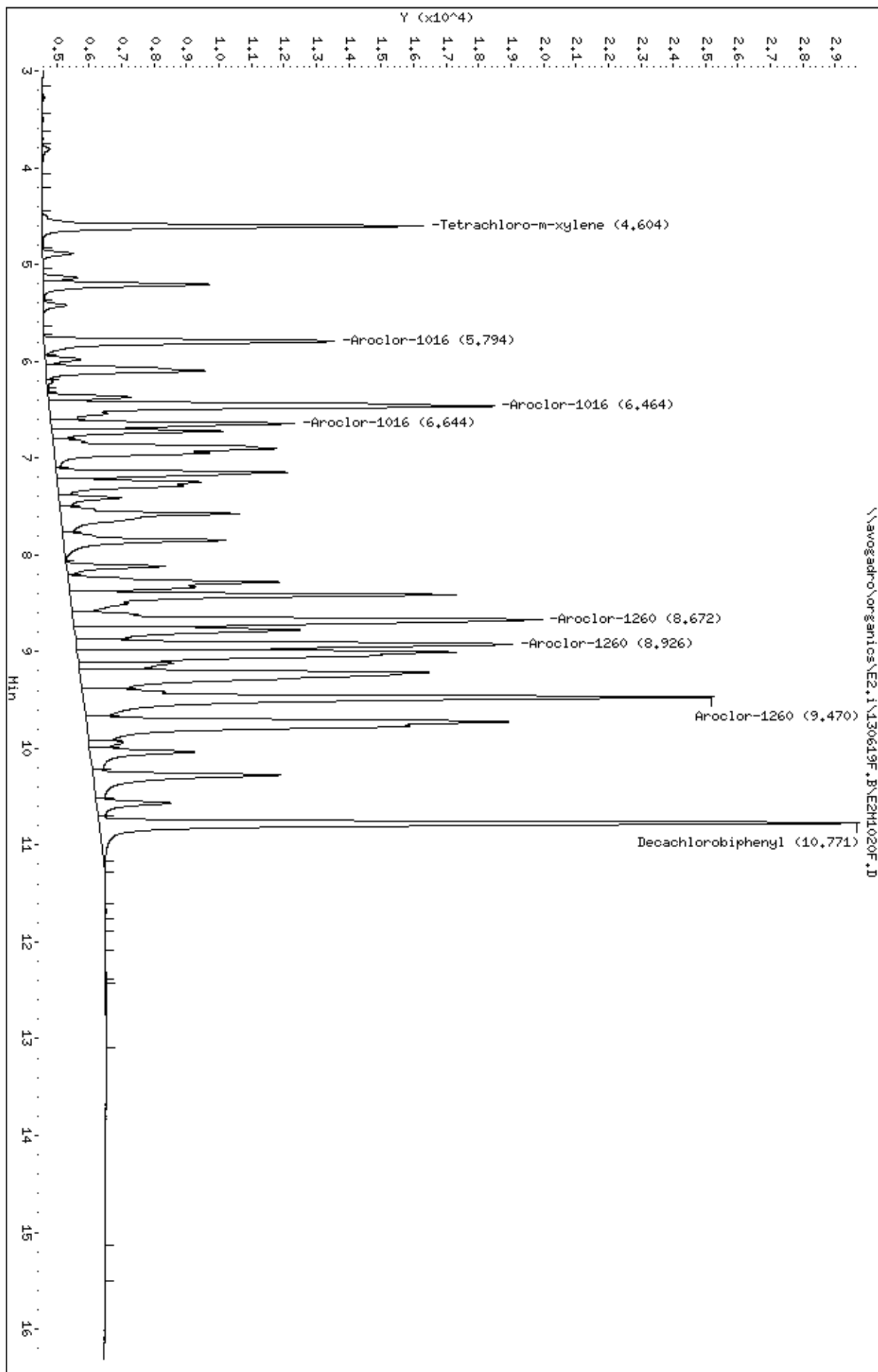
Data File: \\avogadro\organics\E2.i\130619F.B\E2M1020F.D  
Report Date: 19-Jun-2013 16:05

QC Flag Legend

a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\E2.1\130619F.B\E2H1020F.D  
Date: 19-JUN-2013 14:35  
Client ID: AR16603DL  
Sample Info: AR16603DL,AR16603DL,ar1660,sub,  
Volume Injected (uL): 1.0  
Column phase: CLPrest

Instrument: E2.1  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130619R.B\E2M1020R.D  
 Lab Smp Id: AR16603DL Client Smp ID: AR16603DL  
 Inj Date : 19-JUN-2013 14:35  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : AR16603DL,AR16603DL,,ar1660.sub,,  
 Misc Info : 2,3,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130619R.B\E2\_LL\_PCB\_R.m  
 Meth Date : 19-Jun-2013 15:08 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 02:14 Cal File: E2M0477R.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: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ng)	ON-COL ( ng)	TARGET RANGE	RATIO
-----						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
5.280	5.242	0.038	9924 0.02000	0.020		(a)
-----						
6	Aroclor-1016		CAS #: 12674-11-2			
7.266	7.240	0.026	13714 0.40000	0.36	80.00- 120.00	100.00(a)
7.426	7.400	0.026	7401 0.40000	0.36	71.09- 111.09	53.97
7.543	7.516	0.027	4970 0.40000	0.35	68.12- 108.12	36.24
	Average of Peak Amounts =		0.35667			
-----						
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
12.070	12.018	0.052	17127 0.04000	0.040		(a)
-----						
8	Aroclor-1260		CAS #: 11096-82-5			
9.077	9.051	0.026	11944 0.40000	0.36	80.00- 120.00	100.00(a)
9.244	9.215	0.029	12932 0.40000	0.35	88.27- 128.27	108.27
9.545	9.514	0.031	13415 0.40000	0.36	92.32- 132.32	112.32
	Average of Peak Amounts =		0.35667			
-----						

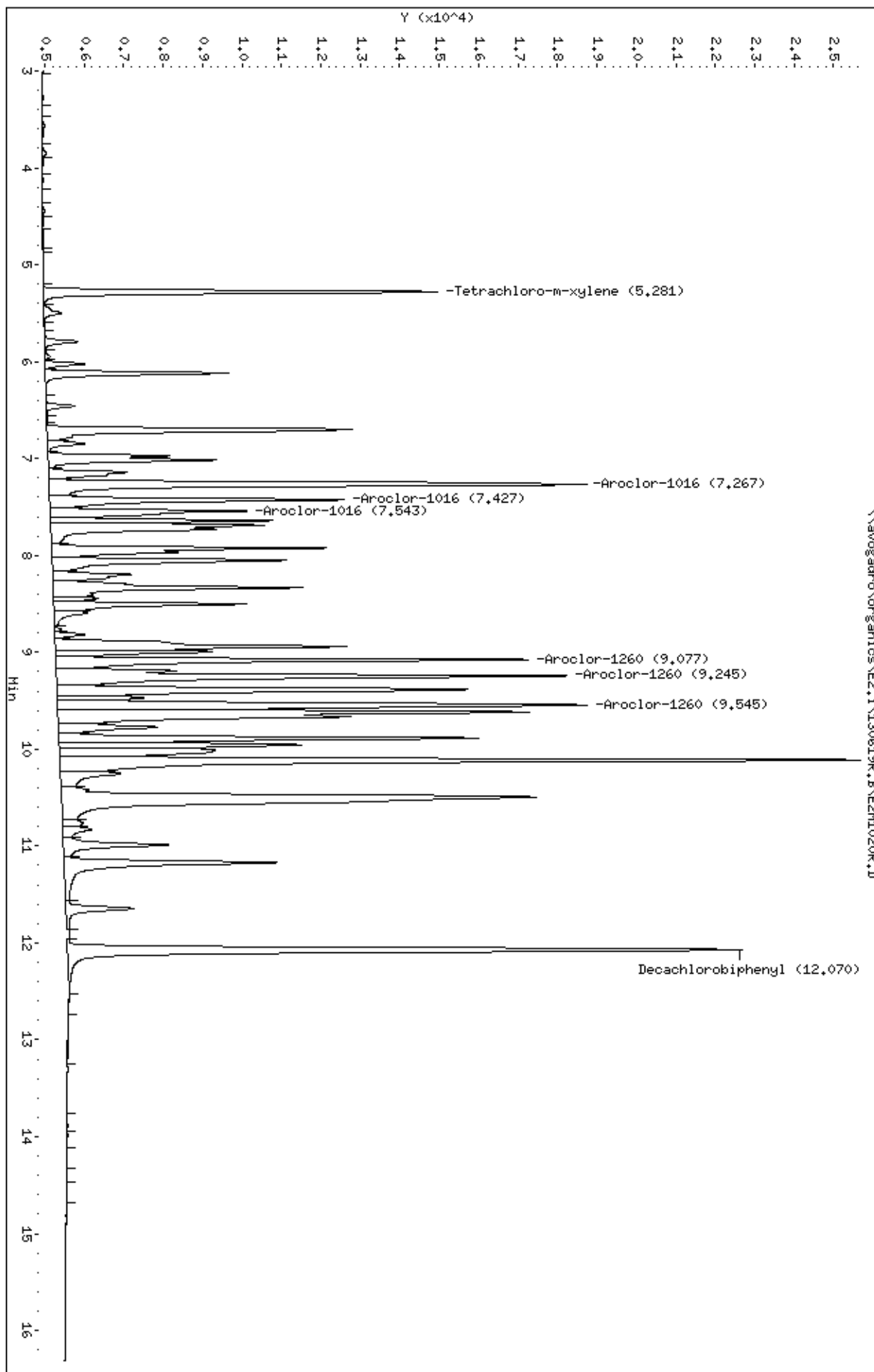
Data File: \\avogadro\organics\E2.i\130619R.B\E2M1020R.D  
Report Date: 19-Jun-2013 16:06

QC Flag Legend

a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\E2.i\130619R.B\EZM1020R.D  
Date : 19-JUN-2013 14:35  
Client ID: AR16603DL  
Sample Info: AR16603DL,AR16603DL,ar-1660,sub,  
Volume Injected (uL): 1.0  
Column phase: CLPestII

Instrument: E2.i  
Operator: TH SRC: TH  
Column diameter: 0.32



1H - FORM I ARO  
 AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-72289

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-72289  
 Sample wt/vol: 30.0 (g/mL) G Lab File ID: E2M1009F.D/E2M1009R.D  
 % Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: \_\_\_\_\_  
 Extraction: (Type) SONC Date Extracted: 06/18/2013  
 Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/19/2013  
 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)	UG/KG
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130619F.B\E2M1009F.D  
 Lab Smp Id: MB-72289 Client Smp ID: MB-72289  
 Inj Date : 19-JUN-2013 10:58  
 Operator : TM SRC: LIMS Inst ID: E2.i  
 Smp Info : MB-72289,MB-72289,72289,8082A.sub,,  
 Misc Info : 2,3,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130619F.B\E2\_LL\_PCB\_F.m  
 Meth Date : 19-Jun-2013 15:07 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 02:14 Cal File: E2M0477F.D  
 Als bottle: 5 QC Sample: BLANK  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: 8082A.sub  
 Target Version: 4.14 Sample Matrix: SOIL  
 Processing Host: TARGET112

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

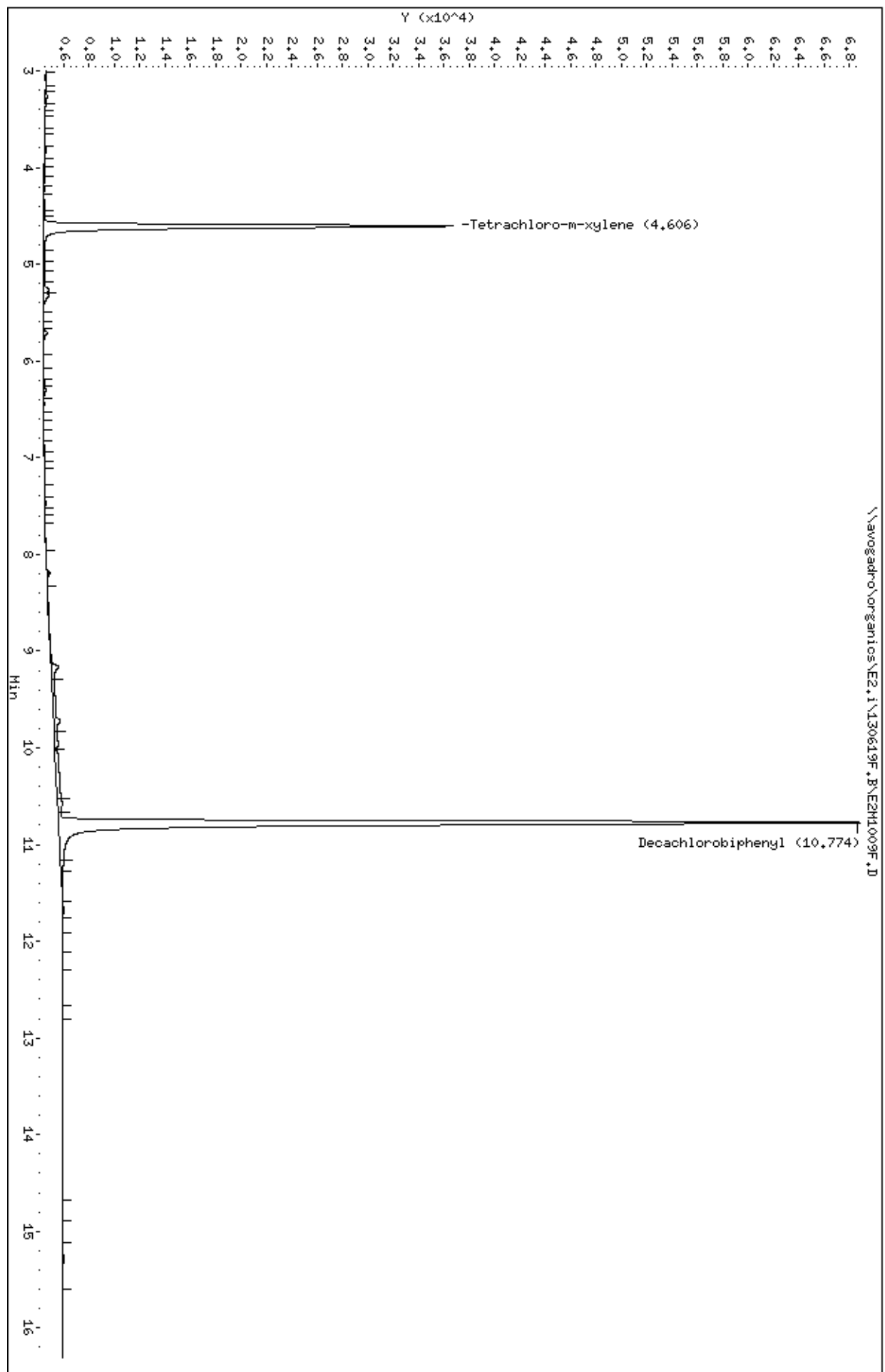
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	RESPONSE ( ng)	(ug/Kg)	TARGET RANGE	RATIO
\$ 1								
4.606	4.565	0.041			32279	0.05585		19
-----								
\$ 11								
10.773	10.728	0.045			2096488	0.10703		36
-----								

Data File: \\avogadro\organicos\E2.i\130619F.B\E2H1009F.D  
Date : 19-JUN-2013 10:58  
Client ID: MB-72289  
Sample Info: MB-72289,MB-72289,72289,8082A,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPrest

Instrument: E2.i  
Operator: TH SRC: LIMS  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130619R.B\E2M1009R.D  
 Lab Smp Id: MB-72289 Client Smp ID: MB-72289  
 Inj Date : 19-JUN-2013 10:58  
 Operator : TM SRC: LIMS Inst ID: E2.i  
 Smp Info : MB-72289,MB-72289,72289,8082A.sub,,  
 Misc Info : 2,3,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130619R.B\E2\_LL\_PCB\_R.m  
 Meth Date : 19-Jun-2013 15:08 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 02:14 Cal File: E2M0477R.D  
 Als bottle: 5 QC Sample: BLANK  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: 8082A.sub  
 Target Version: 4.14 Sample Matrix: SOIL  
 Processing Host: TARGET112

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

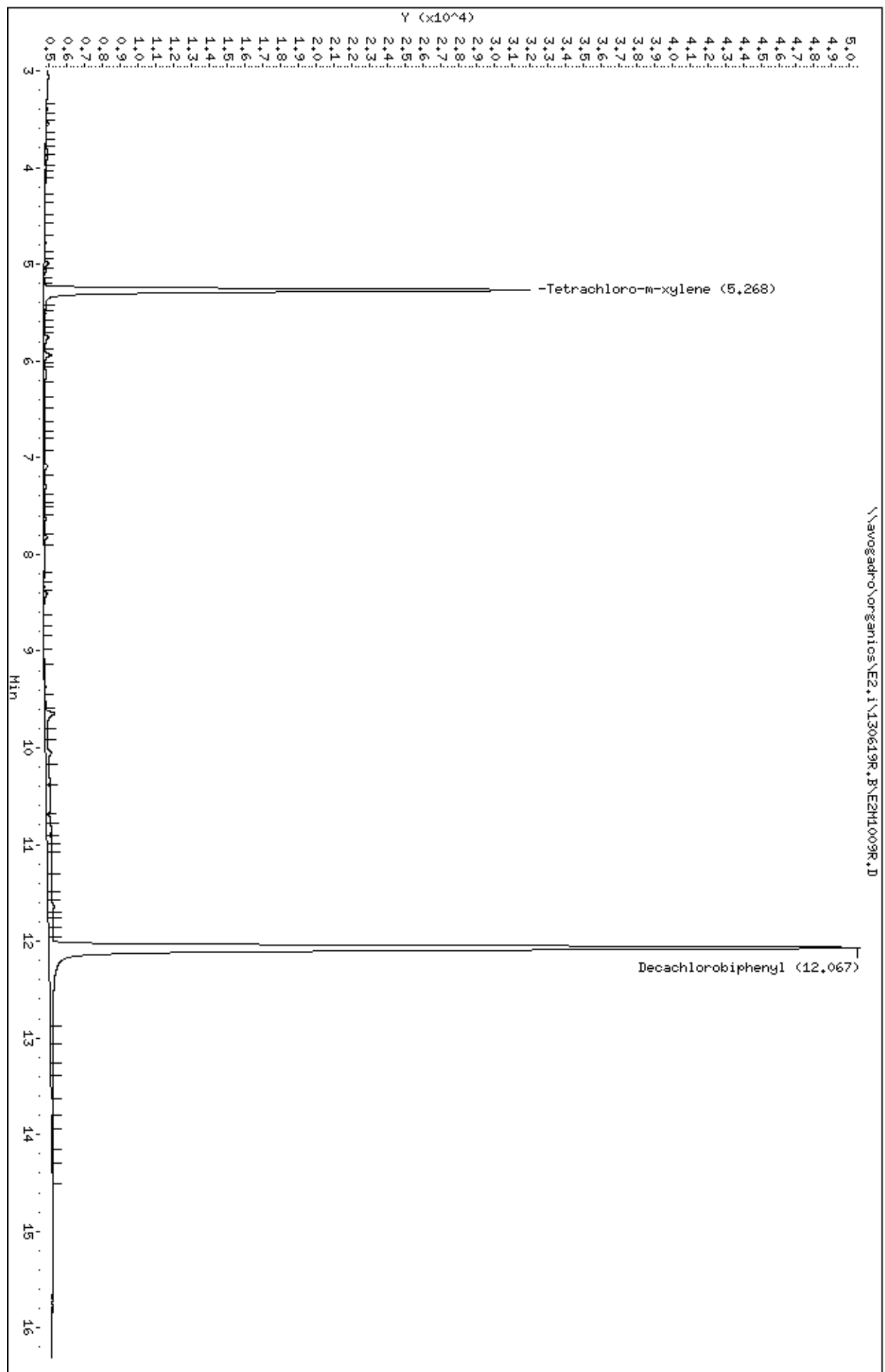
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====
\$ 1						
5.267	5.242	0.025	27214	0.05524	18	
-----						
\$ 11						
12.067	12.018	0.049	45548	0.10744	36	
-----						

Data File: \\avogadro\organicos\E2.i\130619R.B\E2H1009R.D  
Date : 19-JUN-2013 10:58  
Client ID: MB-72289  
Sample Info: MB-72289,MB-72289,72289,8082A,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPestH1

Instrument: E2.i  
Operator: TH SRC: LIMS  
Column diameter: 0.32



1H - FORM I ARO  
 AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-72289(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-72289  
 Sample wt/vol: 30 (g/mL) G Lab File ID: E2M1010F.D  
 % Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: \_\_\_\_\_  
 Extraction: (Type) SONC Date Extracted: 06/18/2013  
 Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/19/2013  
 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:		Q
		(ug/L or ug/Kg)	UG/KG	
12674-11-2	Aroclor-1016		120	
11104-28-2	Aroclor-1221		33	U
11141-16-5	Aroclor-1232		33	U
53469-21-9	Aroclor-1242		33	U
12672-29-6	Aroclor-1248		33	U
11097-69-1	Aroclor-1254		33	U
11096-82-5	Aroclor-1260		120	P

1H - FORM I ARO  
 AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-72289(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-72289

Sample wt/vol: 30 (g/mL) G Lab File ID: E2M1010R.D

% Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: \_\_\_\_\_

Extraction: (Type) SONC Date Extracted: 06/18/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/19/2013

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)	UG/KG
12674-11-2	Aroclor-1016		110
11104-28-2	Aroclor-1221		33
11141-16-5	Aroclor-1232		33
53469-21-9	Aroclor-1242		33
12672-29-6	Aroclor-1248		33
11097-69-1	Aroclor-1254		33
11096-82-5	Aroclor-1260		84

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130619F.B\E2M1010F.D  
 Lab Smp Id: LCS-72289 Client Smp ID: LCS-72289  
 Inj Date : 19-JUN-2013 11:17  
 Operator : TM SRC: LIMS Inst ID: E2.i  
 Smp Info : LCS-72289,LCS-72289,72289,8082A.sub,,  
 Misc Info : 2,3,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130619F.B\E2\_LL\_PCB\_F.m  
 Meth Date : 19-Jun-2013 15:07 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 02:14 Cal File: E2M0477F.D  
 Als bottle: 6 QC Sample: LCS  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: 8082A.sub  
 Target Version: 4.14 Sample Matrix: SOIL  
 Processing Host: TARGET112

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

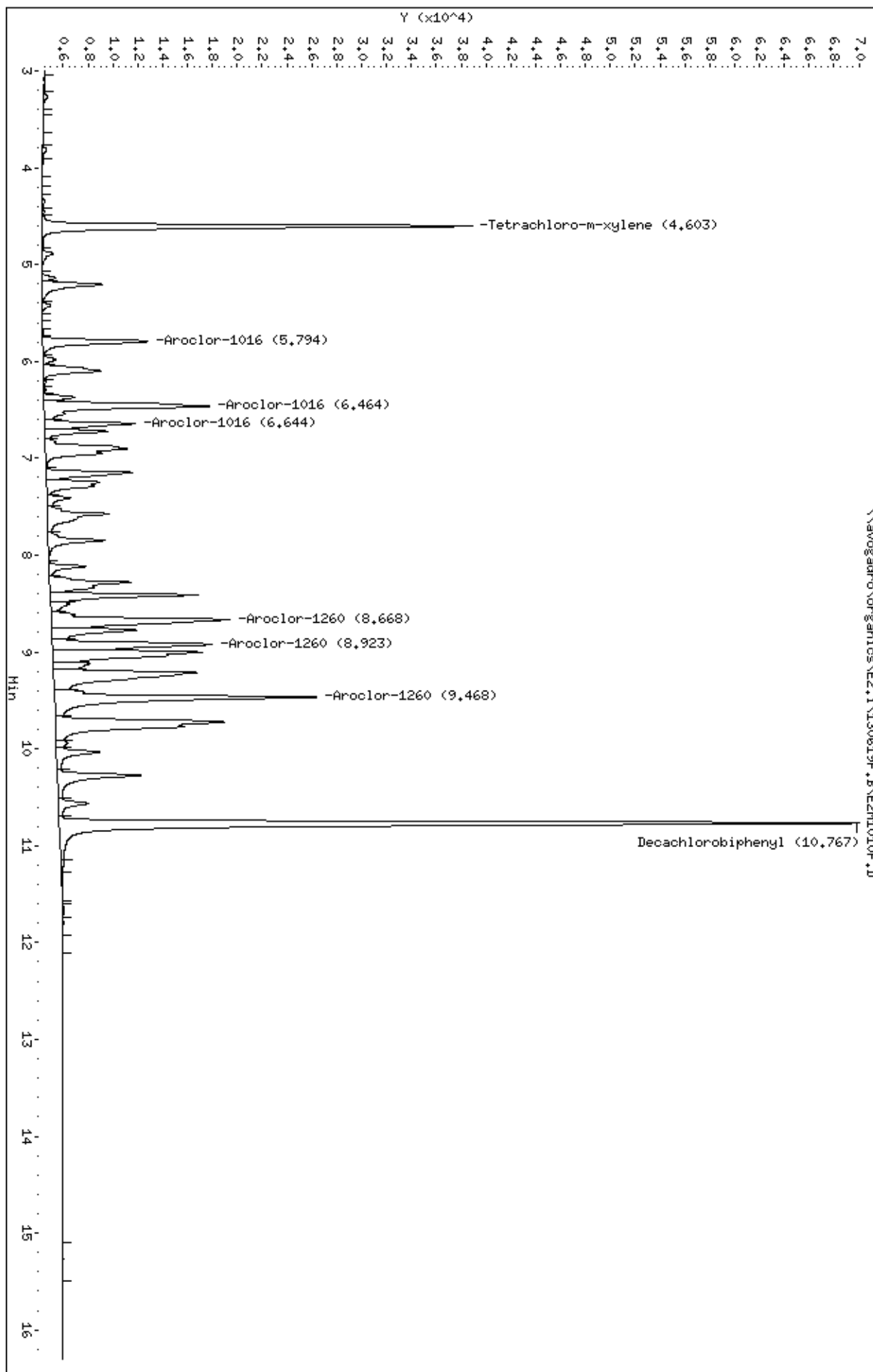
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
=====	=====	=====	RESPONSE ( ng)	(ug/Kg)	=====	=====
\$ 1 Tetrachloro-m-xylene CAS #: 877-09-8						
4.603	4.565	0.038	34514	0.05971	20	
-----						
5 Aroclor-1016 CAS #: 12674-11-2						
5.794	5.756	0.038	8495	0.37550	120 80.00- 120.00	100.00
6.463	6.431	0.032	13313	0.35765	120 133.57- 173.57	156.72
6.644	6.611	0.033	7250	0.36122	120 63.35- 103.35	85.34
Average of Peak Concentrations = 120						
-----						
9 Aroclor-1260 CAS #: 11096-82-5						
8.668	8.635	0.033	14337	0.34369	110 80.00- 120.00	100.00
8.922	8.885	0.037	12817	0.35258	120 73.17- 113.17	89.40
9.467	9.435	0.032	21042	0.40600	140 114.20- 154.20	146.77
Average of Peak Concentrations = 120						
-----						
\$ 11 Decachlorobiphenyl CAS #: 2051-24-3						
10.767	10.728	0.039	2101100	0.10726	36	
-----						

Data File: \\avogadro\organicos\E2.i\130619F.B\ECH1010F.D  
Date: 19-JUN-2013 11:17  
Client ID: LCS-72289  
Sample Info: LCS-72289,LCS-72289,72289,80824,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPrest

Instrument: E2.i  
Operator: TH SRC: LIMS  
Column diameter: 0.32





Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130619R.B\E2M1010R.D  
 Lab Smp Id: LCS-72289 Client Smp ID: LCS-72289  
 Inj Date : 19-JUN-2013 11:17  
 Operator : TM SRC: LIMS Inst ID: E2.i  
 Smp Info : LCS-72289,LCS-72289,72289,8082A.sub,,  
 Misc Info : 2,3,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130619R.B\E2\_LL\_PCB\_R.m  
 Meth Date : 19-Jun-2013 15:08 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 02:14 Cal File: E2M0477R.D  
 Als bottle: 6 QC Sample: LCS  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: 8082A.sub  
 Target Version: 4.14 Sample Matrix: SOIL  
 Processing Host: TARGET112

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

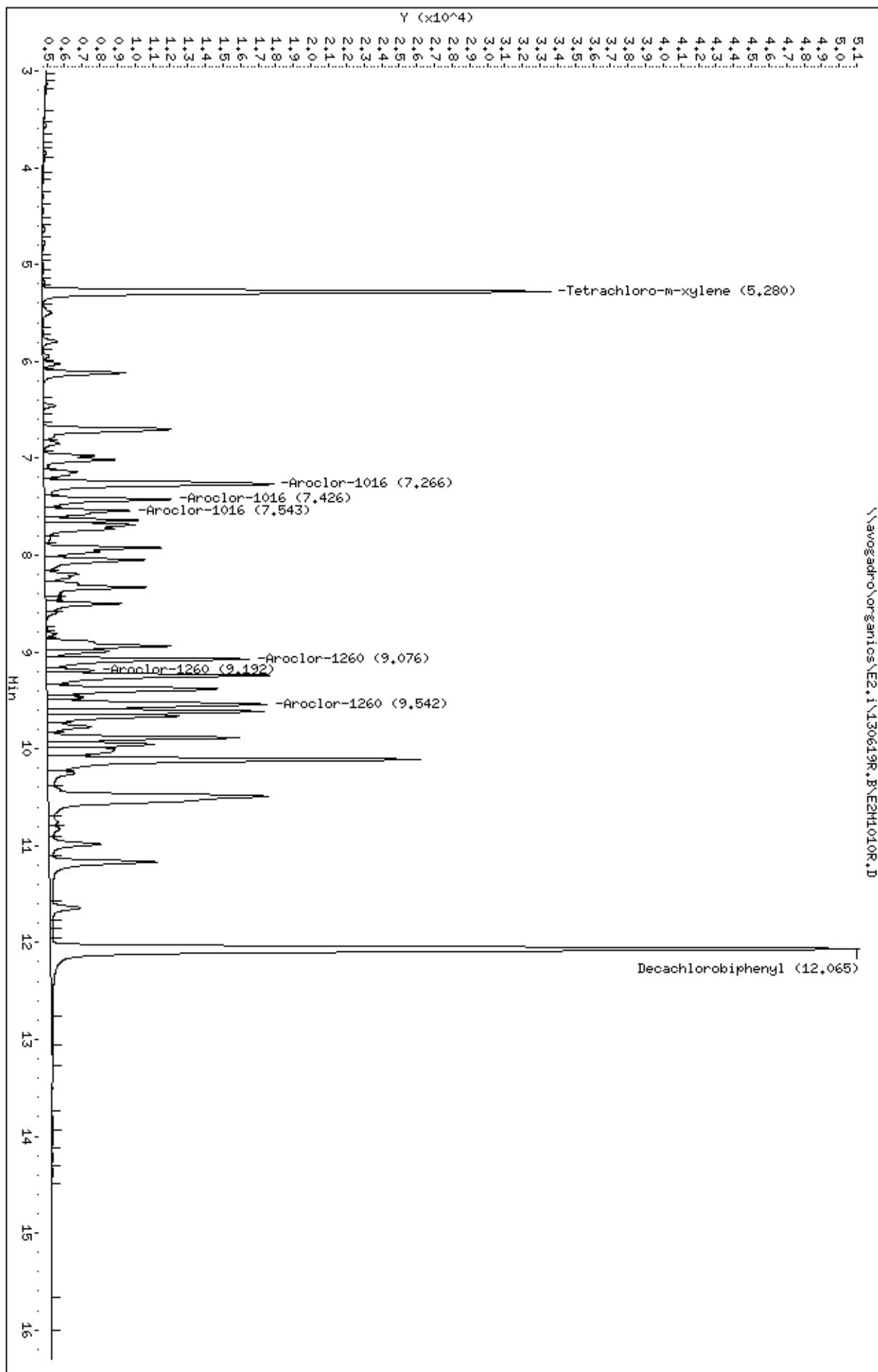
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	RESPONSE ( ng)	ON-COL	FINAL	TARGET RANGE	RATIO
-----							
\$ 1	Tetrachloro-m-xylene			CAS #: 877-09-8			
5.279	5.242	0.037	28701 0.05826		19		
-----							
6	Aroclor-1016			CAS #: 12674-11-2			
7.266	7.240	0.026	13136 0.34488	110	80.00- 120.00	100.00	
7.426	7.400	0.026	7121 0.34272	110	71.09- 111.09	54.21	
7.542	7.516	0.026	4790 0.33709	110	68.12- 108.12	36.46	
	Average of Peak Concentrations =			110			
-----							
8	Aroclor-1260			CAS #: 11096-82-5			
9.075	9.051	0.024	11433 0.34866	120	80.00- 120.00	100.00	
9.191	9.215	-0.024	2716 0.07362	24	88.27- 128.27	23.76	
9.542	9.514	0.028	12468 0.33543	110	92.32- 132.32	109.05	
	Average of Peak Concentrations =			84			
-----							
\$ 11	Decachlorobiphenyl			CAS #: 2051-24-3			
12.065	12.018	0.047	45953 0.10840		36		
-----							

Data File: \\avogadro\organicos\E2.i\130619R.B\E2H1010R.D  
Date : 19-JUN-2013 11:17  
Client ID: LCS-72289  
Sample Info: LCS-72289,LCS-72289,72289,80824,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPestHII

Instrument: E2.i  
Operator: TH SRC: LIMS  
Column diameter: 0.32



1H - FORM I ARO  
 AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-72289(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-72289  
 Sample wt/vol: 30 (g/mL) G Lab File ID: E2M1011F.D  
 % Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: \_\_\_\_\_  
 Extraction: (Type) SONC Date Extracted: 06/18/2013  
 Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/19/2013  
 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:		Q
		(ug/L or ug/Kg)	UG/KG	
12674-11-2	Aroclor-1016		120	
11104-28-2	Aroclor-1221		33	U
11141-16-5	Aroclor-1232		33	U
53469-21-9	Aroclor-1242		33	U
12672-29-6	Aroclor-1248		33	U
11097-69-1	Aroclor-1254		33	U
11096-82-5	Aroclor-1260		130	P

1H - FORM I ARO  
 AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-72289(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: M0975 Mod. Ref No.: \_\_\_\_\_ SDG No.: SM0975

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-72289

Sample wt/vol: 30 (g/mL) G Lab File ID: E2M1011R.D

% Moisture: \_\_\_\_\_ Decanted: (Y/N) \_\_\_\_\_ Date Received: \_\_\_\_\_

Extraction: (Type) SONC Date Extracted: 06/18/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/19/2013

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:		Q
		(ug/L or ug/Kg)	UG/KG	
12674-11-2	Aroclor-1016		110	
11104-28-2	Aroclor-1221		33	U
11141-16-5	Aroclor-1232		33	U
53469-21-9	Aroclor-1242		33	U
12672-29-6	Aroclor-1248		33	U
11097-69-1	Aroclor-1254		33	U
11096-82-5	Aroclor-1260		86	P

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130619F.B\E2M1011F.D  
 Lab Smp Id: LCSD-72289 Client Smp ID: LCSD-72289  
 Inj Date : 19-JUN-2013 11:37  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : LCSD-72289,LCSD-72289,72289,8082A.sub,,  
 Misc Info : 2,3,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130619F.B\E2\_LL\_PCB\_F.m  
 Meth Date : 19-Jun-2013 15:07 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 02:14 Cal File: E2M0477F.D  
 Als bottle: 7 QC Sample: LCSD  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: 8082A.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

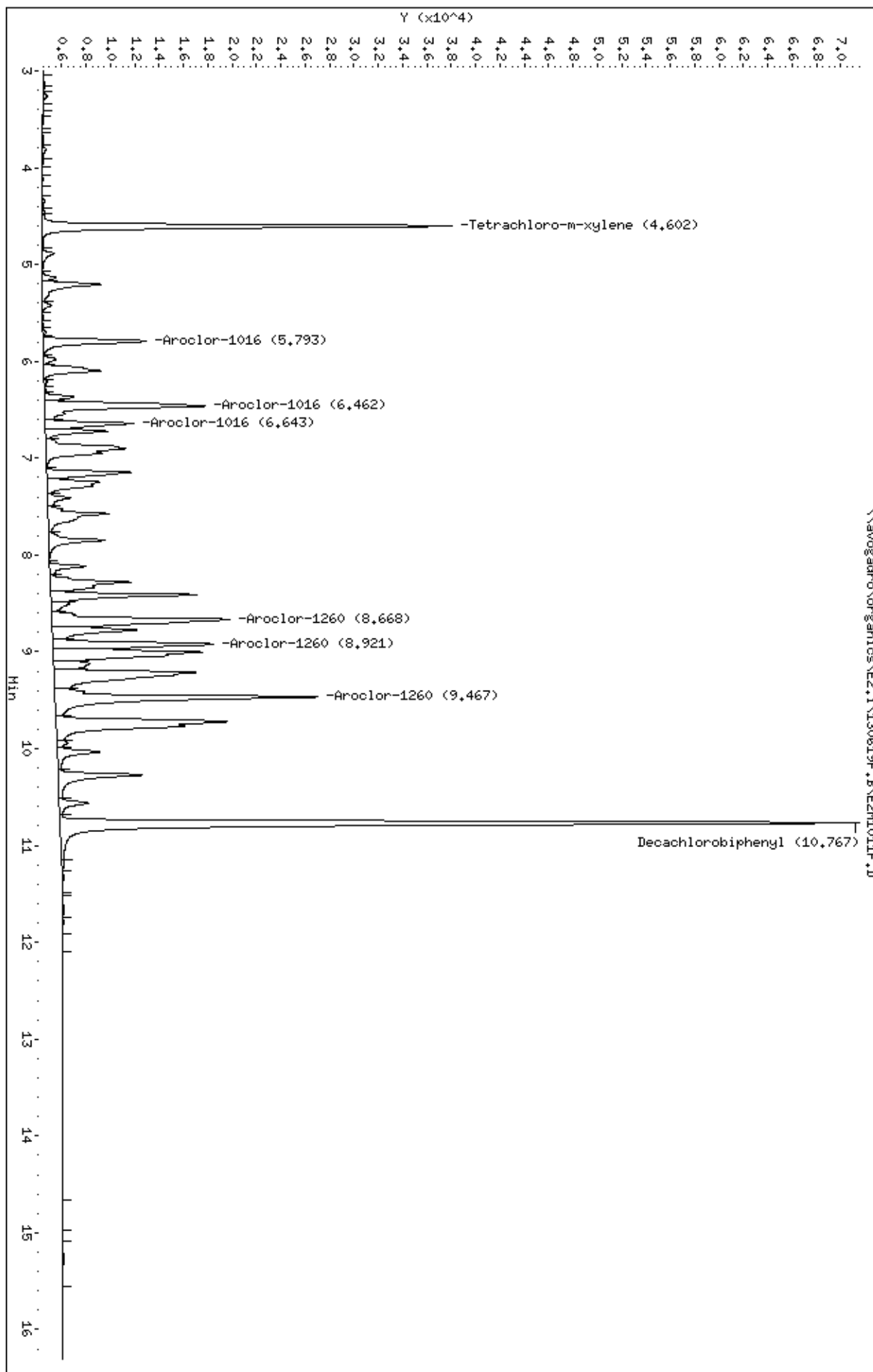
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====
-----						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
4.602	4.565	0.037	33729	0.05835	0.58	
-----						
5		Aroclor-1016		CAS #: 12674-11-2		
5.792	5.756	0.036	8435	0.37285	3.7 80.00- 120.00	100.00
6.462	6.431	0.031	13162	0.35360	3.5 133.57- 173.57	156.04
6.642	6.611	0.031	7205	0.35898	3.6 63.35- 103.35	85.42
Average of Peak Concentrations =			3.6			
-----						
9		Aroclor-1260		CAS #: 11096-82-5		
8.667	8.635	0.032	14628	0.35067	3.5 80.00- 120.00	100.00
8.921	8.885	0.036	13163	0.36209	3.6 73.17- 113.17	89.98
9.466	9.435	0.031	21498	0.41479	4.1 114.20- 154.20	146.96
Average of Peak Concentrations =			3.8			
-----						
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.766	10.728	0.038	2132848	0.10888	1.1	
-----						

Data File: \\avogadro\organicos\E2.i\130619F.B\E2H1011F.D  
Date : 19-JUN-2013 11:37  
Client ID: LCSD-72289  
Sample Info: LCSD-72289,LCSD-72289,72289,8082A,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPrest

Instrument: E2.i  
Operator: TH SRC: TH  
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130619R.B\E2M1011R.D  
 Lab Smp Id: LCSD-72289 Client Smp ID: LCSD-72289  
 Inj Date : 19-JUN-2013 11:37  
 Operator : TM SRC: TM Inst ID: E2.i  
 Smp Info : LCSD-72289,LCSD-72289,72289,8082A.sub,,  
 Misc Info : 2,3,,1  
 Comment :  
 Method : \\avogadro\organics\E2.i\130619R.B\E2\_LL\_PCB\_R.m  
 Meth Date : 19-Jun-2013 15:08 tmcdaniel Quant Type: ESTD  
 Cal Date : 30-MAY-2013 02:14 Cal File: E2M0477R.D  
 Als bottle: 7 QC Sample: LCSD  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: 8082A.sub  
 Target Version: 4.14 Sample Matrix: WATER  
 Processing Host: TARGET112

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	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

RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====
-----						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
5.279	5.242	0.037	28118	0.05708	0.57	(H)
-----						
6		Aroclor-1016		CAS #: 12674-11-2		
7.266	7.240	0.026	13189	0.34627	3.5	80.00- 120.00 100.00
7.426	7.400	0.026	7152	0.34422	3.4	71.09- 111.09 54.23
7.542	7.516	0.026	4861	0.34208	3.4	68.12- 108.12 36.86
Average of Peak Concentrations =			3.4			
-----						
8		Aroclor-1260		CAS #: 11096-82-5		
9.076	9.051	0.025	11710	0.35710	3.6	80.00- 120.00 100.00
9.192	9.215	-0.023	2833	0.07679	0.77	88.27- 128.27 24.19
9.542	9.514	0.028	12741	0.34277	3.4	92.32- 132.32 108.80
Average of Peak Concentrations =			2.6			
-----						
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
12.067	12.018	0.049	47134	0.11118	1.1	
-----						

Data File: \\avogadro\organics\E2.i\130619R.B\E2M1011R.D  
Report Date: 19-Jun-2013 16:06

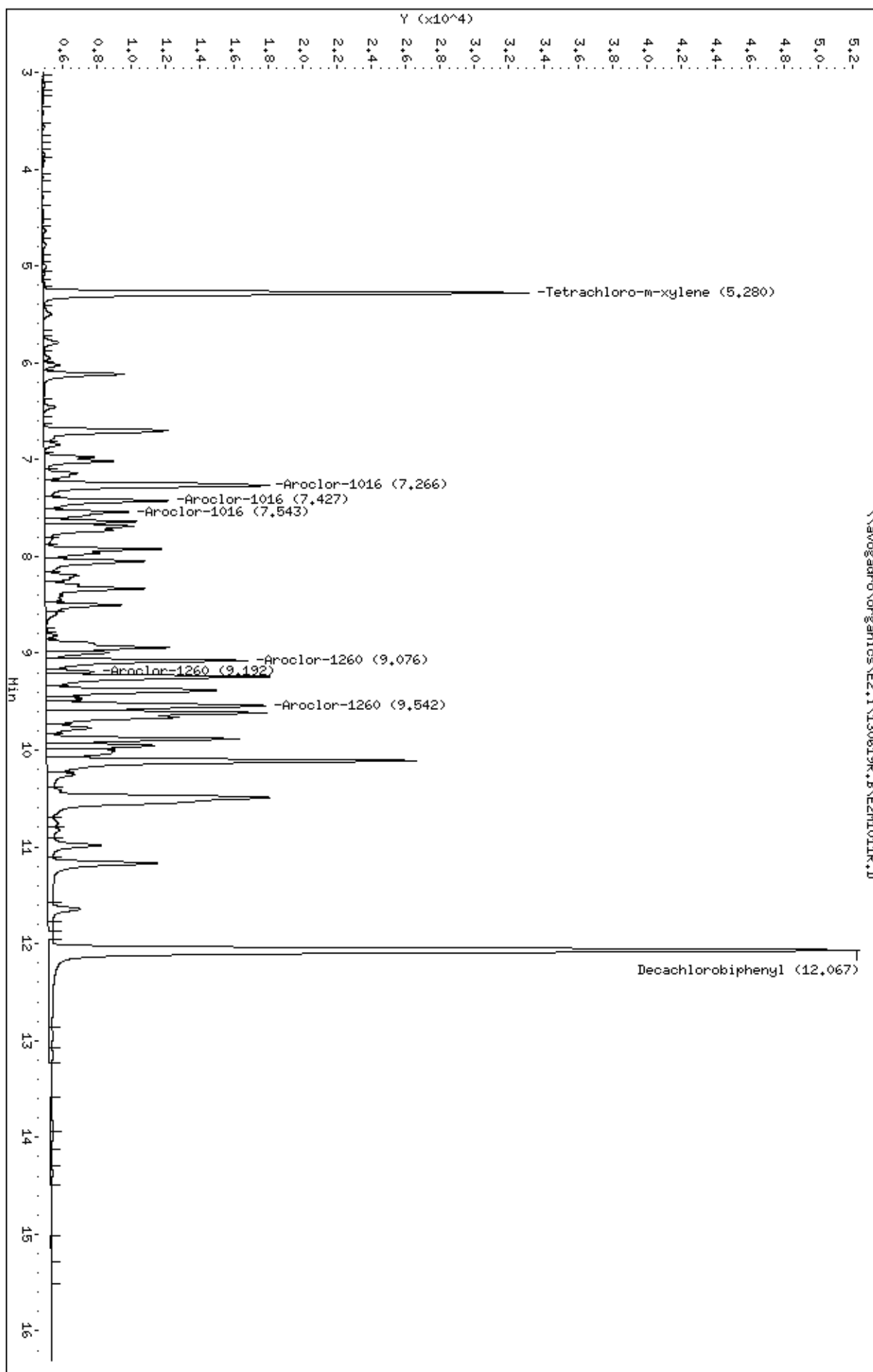
QC Flag Legend

H - Operator selected an alternate compound hit.



Data File: \\avogadro\organicos\EE2\130619R.B\EZM1011R.D  
Date : 19-JUN-2013 11:37  
Client ID: LCSD-72289  
Sample Info: LCSD-72289,LCSD-72289,72289,8082R,sub,,  
Volume Injected (uL): 1.0  
Column phase: CLPestHII

Instrument: EE2.i  
Operator: TH SRC: TH  
Column diameter: 0.32



# Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

# PREP BATCH REPORT

Prep Start Date: 06/18/2013 08:40  
 Prep End Date: 06/18/2013 17:22  
 Prep Batch ID: 72289

Prep Type: SONC/SW3550B

Prep Factor Units: mL / g

Technician: Jodie B Warner

QC Matrix: NA2SO4 Solvent (1): MECL2  
 QC Matrix Lot: 121756 Solvent (1) Lot: DI 364  
 Filter?: FILTER Solvent (2): ACE  
 Filter Lot: FC003203 Solvent (2) Lot: 125597

Solvent (3): HEXANE Solvent (5): N/A  
 Solvent (3) Lot: DH 335 Solvent (5) Lot: N/A  
 Solvent (4): N/A Solvent (6): N/A  
 Solvent (4) Lot: N/A Solvent (6) Lot: N/A

Clean Up (1): N/A Clean Up (3): N/A  
 Clean Up (1) Lot: N/A Clean Up (1) Lot: N/A  
 Clean Up (2): N/A Clean Up (4): N/A  
 Clean Up (2) Lot: N/A Clean Up (4) Lot: N/A

Sonicator Tuned? Yes Bath Temp1 (C): N/A

Therm ID1: N/A

Start Time: N/A  
 End Time: N/A

Cycles/Hour 0

Lab Sample ID	Client Samp ID	M	Initial (mL/g)	Final (mL)	Surrogate Spike ID	Surr (mL)	LCS/ID Spike ID	Spike (mL)	A* W* Init Init	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH	CNCNTR Unit
MB-72289	BatchQC		30	10	OPW130514A	1			JBW TM	06/18/13		06/18/13	JKD	R21		<2	Turbo Vap 1
CLEAN UP (MB-72289): /ACID_130618B (LOT: B00M5126) /jdorsey, /CU_130618B (LOT: MKBH2986V) /jdorsey																	
LCS-72289	BatchQC		30	10	OPW130514A	1	OPW130404A	1	JBW TM	06/18/13		06/18/13	JKD	R21			Turbo Vap 1
CLEAN UP (LCS-72289): /ACID_130618B (LOT: B00M5126) /jdorsey, /CU_130618B (LOT: MKBH2986V) /jdorsey																	
LCSD-72289	BatchQC		30	10	OPW130514A	1	OPW130404A	1	JBW TM	06/18/13		06/18/13	JKD	R21			Turbo Vap 1
CLEAN UP (LCSD-72289): /ACID_130618B (LOT: B00M5126) /jdorsey, /CU_130618B (LOT: MKBH2986V) /jdorsey																	
M0967-01A	RS-BF-A79-061313	S	30	10	OPW130514A	1			JBW TM	07/05/13	01	06/18/13	JKD	R21			Turbo Vap 1
CLEAN UP (M0967-01A): /ACID_130618B (LOT: B00M5126) /jdorsey, /CU_130618B (LOT: MKBH2986V) /jdorsey																	
M0967-02A	RS-BF-A81-061313	S	30.3	10	OPW130514A	1			JBW TM	07/05/13	01	06/18/13	JKD	R21			Turbo Vap 1
CLEAN UP (M0967-02A): /ACID_130618B (LOT: B00M5126) /jdorsey, /CU_130618B (LOT: MKBH2986V) /jdorsey																	
M0975-04A	COMP-A-061313	S	30.3	10	OPW130514A	1			JBW TM	06/26/13	01	06/18/13	JKD	R21			Turbo Vap 1
CLEAN UP (M0975-04A): /ACID_130618B (LOT: B00M5126) /jdorsey, /CU_130618B (LOT: MKBH2986V) /jdorsey																	
M0975-07A	COMP-B-061313	S	30.1	10	OPW130514A	1			JBW TM	06/26/13	01	06/18/13	JKD	R21			Turbo Vap 1
CLEAN UP (M0975-07A): /ACID_130618B (LOT: B00M5126) /jdorsey, /CU_130618B (LOT: MKBH2986V) /jdorsey																	
M0975-11A	COMP-C-061313	S	30.4	10	OPW130514A	1			JBW TM	06/26/13	01	06/18/13	JKD	R21			Turbo Vap 1
CLEAN UP (M0975-11A): /ACID_130618B (LOT: B00M5126) /jdorsey, /CU_130618B (LOT: MKBH2986V) /jdorsey																	
M0975-14A	COMP-D-061313	S	30.1	10	OPW130514A	1			JBW TM	06/26/13	01	06/18/13	JKD	R21			Turbo Vap 1
CLEAN UP (M0975-14A): /ACID_130618B (LOT: B00M5126) /jdorsey, /CU_130618B (LOT: MKBH2986V) /jdorsey																	
M0975-18A	COMP-E-061313	S	30	10	OPW130514A	1			JBW TM	06/26/13	01	06/18/13	JKD	R21			Turbo Vap 1
CLEAN UP (M0975-18A): /ACID_130618B (LOT: B00M5126) /jdorsey, /CU_130618B (LOT: MKBH2986V) /jdorsey																	

James Kyle Dorsey 06/18/2013 Jodie B Warner 06/18/2013  
 Analyst Reviewed Date Manager Reviewed Date

Comments:

\*A = Analyst (Spiked) \*W = Witnessed (Spike) \*T = Transferred

JKD  
 06/18/13

## *Percent Moisture and Percent Solids Report*

<i>Lab Sample ID</i>	<i>Client Sample ID</i>	<i>Analyzed</i>	<i>Percent Moisture</i>	<i>Percent Solids</i>	<i>Validated</i>
M0975-01A	A-1-3-061313	06/18/2013	20.881	79.119	Yes
M0975-02A	A-2-2-061313	06/18/2013	25.000	75.000	Yes
M0975-03A	A-3-1-061313	06/18/2013	18.921	81.079	Yes
M0975-04A	COMP-A-061313	06/18/2013	21.460	78.540	Yes
M0975-05A	B-1-4-061313	06/18/2013	18.650	81.350	Yes
M0975-06A	B-2-1-061313	06/18/2013	18.229	81.771	Yes
M0975-07A	COMP-B-061313	06/18/2013	20.671	79.329	Yes
M0975-08A	C-1-2-061313	06/18/2013	23.940	76.060	Yes
M0975-09A	C-2-3-061313	06/18/2013	25.535	74.465	Yes
M0975-10A	C-3-2-061313	06/18/2013	23.295	76.705	Yes
M0975-11A	COMP-C-061313	06/18/2013	17.278	82.722	Yes
M0975-12A	D-1-1-061313	06/18/2013	17.479	82.521	Yes
M0975-13A	D-3-4-061313	06/18/2013	19.204	80.796	Yes
M0975-14A	COMP-D-061313	06/18/2013	20.900	79.100	Yes
M0975-15A	E-1-3-061313	06/18/2013	15.889	84.111	Yes
M0975-16A	E-2-4-061313	06/18/2013	24.763	75.237	Yes
M0975-17A	E-3-2-061313	06/18/2013	23.279	76.721	Yes
M0975-18A	COMP-E-061313	06/18/2013	16.103	83.897	Yes

Spectrum Analytical, Inc. RI Division E2 Injection Log GC Semivolatiles Laboratory

METHOD: 8082 ANALYST: TM  
 ICAL DATE: 5/29/13

START BATCH: 130529BF.B End: 29-MAY-13 15:42  
 END BATCH: 130529BF.B End: 30-MAY-13 02:34

Internal Standard:  
 Comments:

Inlet Maintenance By: TM  
 Liner : new  
 Column : cut Guard Column  
 Inlet Seal: new  
 Septum : new

8082 F CAL

Reviewed By: UJLB Manual Integration: NA MI Review: NA

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	SURROGATES				DIILN	FLAGS	ANALYST		COMMENTS
					MT	FRONT	REAR	DCB			TCMX	DCB	
E2M0445F/R	15:42	AIBLKDA	AIBLKDA		AQ	100	69	98	67	1			
E2M0446F/R	16:02	AR12213D2	AR12213D2		AQ					1			PW130523 A
E2M0447F/R	16:22	AR12321D2	AR12321D2		AQ					1			<del>PW130523 B</del> TM 5/29/13 not using
E2M0448F/R	16:42	AR12322D2	AR12322D2		AQ					1			not using
E2M0449F/R	17:01	AR12323D2	AR12323D2		AQ					1			PW130523 B
E2M0450F/R	17:21	AR12324D2	AR12323D2		AQ					1			not using
E2M0451F/R	17:40	AR12325D2	AR12323D2		AQ					1			not using
E2M0452F/R	18:00	AR12421D2	AR12421D2		AQ					1			PW130523 F
E2M0453F/R	18:20	AR12426D2	AR12426D2		AQ					1			↓
E2M0454F/R	18:40	AR12422D2	AR12422D2		AQ					1			PW130523 G
E2M0455F/R	19:00	AR12423D2	AR12423D2		AQ					1			PW130521 A
E2M0456F/R	19:19	AR12424D2	AR12424D2		AQ					1			PW130523 H
E2M0457F/R	19:39	AR12425D2	AR12425D2		AQ					1			↓
E2M0458F/R	19:59	AR12481D2	AR12481D2		AQ					1			↓
E2M0459F/R	20:19	AR12486D2	AR12486D2		AQ					1			↓
E2M0460F/R	20:38	AR12482D2	AR12482D2		AQ					1			PW130523 I
E2M0461F/R	20:58	AR12483D2	AR12483D2		AQ					1			PW130521 B
E2M0462F/R	21:18	AR12484D2	AR12484D2		AQ					1			PW130523 M
E2M0463F/R	21:38	AR12485D2	AR12485D2		AQ					1			↓
E2M0464F/R	21:58	AR12541D2	AR12541D2		AQ					1			↓
E2M0465F/R	22:17	AR12546D2	AR12546D2		AQ					1			↓
E2M0466F/R	22:37	AR12542D2	AR12542D2		AQ					1			PW130523 K
E2M0467F/R	22:57	AR12543D2	AR12543D2		AQ					1			PW130521 C
E2M0468F/R	23:17	AR12544D2	AR12544D2		AQ					1			PW130523 J
E2M0469F/R	23:36	AR12545D2	AR12545D2		AQ					1			↓
E2M0470F/R	23:56	AR12623D2	AR12623D2		AQ					1			↓
E2M0471F/R	00:16	AR12683D2	AR12683D2		AQ					1			PW130523 O

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

TM 6/4/13

Spectrum Analytical, Inc. RI Division E2 Injection Log  
 GC Semivolatiles Laboratory

METHOD: 8082 ANALYST: CTM  
 ICAL DATE: 5/29/13  
 START BATCH: 130529BF.B Start: 29-MAY-13 15:42  
 END BATCH: 130529BF.B End: 30-MAY-13 02:34

Inlet Maintenance By: TM  
 Liner : new  
 Column : cut guard column  
 Inlet Seal: new  
 Septum : new

8082 I CAL

Internal Standard:  
 Comments:

Reviewed By: CTM MI Review: CTM  
 Manual Integration: 5/29/13

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	SURROGATES				ANALYST	COMMENTS		
						FRONT	REAR	DILN	FLAGS				
						TCMX	DCB	TCMX	DCB	F	R	F	R
E2M0472F/R	00:35	AR16601D2	AR16601D2		AQ								
E2M0473F/R	00:55	AR16606D2	AR16606D2		AQ								
E2M0474F/R	01:15	AR16602D2	AR16602D2		AQ								
E2M0475F/R	01:34	AR16603D2	AR16603D2		AQ								
E2M0476F/R	01:54	AR16604D2	AR16604D2		AQ								
E2M0477F/R	02:14	AR16605D2	AR16605D2		AQ								
E2M0478F/R	02:34	AR1660CVDA	AR1660CVDA		AQ								

MI\_F9\_11  
 MI\_F5\_9\_11  
 PW130523 V  
 PW130523 W  
 PW130521 D  
 PW130522 X  
 PW130523 E

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

CTM  
 6/4/13

M0975

Spectrum Analytical, Inc. RI Division - PEST/PCB RUN LOGBOOK: INSTRUMENT E2

Spectrum Analytical, Inc. RI Division E2 Injection Log  
GC Semivolatiles Laboratory  
METHOD: 8082 ANALYST: JM  
ICAL DATE: 5/29/13  
START BATCH: 130619F.B End: 19-JUN-13 09:11  
END BATCH: 130619F.B End: 19-JUN-13 14:35

Inlet Maintenance By:  
Liner :  
Column :  
Inlet Seal :  
Septum :

SAJ's on pg 75

Internal Standard:  
Comments:

Reviewed By: SAJ Manual Integration: JM 6/19/13 MI Review: 6/19/13

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	SURROGATES				DIIN	FLAGS	ANALYST		COMMENTS
						TCMX	DCB	DCB	DCB			TCMX	DCB	
E2M1004F/R	09:11	AIBLKDK	AIBLKDK		AQ					1				MI_R8
E2M1005F/R	09:31	AR16603DK	AR16603DK		AQ					1				
E2M1006F/R	09:51	AR12423DK	AR12423DK		AQ					1				
E2M1007F/R	10:10	AR12483DK	AR12483DK		AQ					1				
E2M1008F/R	10:30	AR12543DK	AR12543DK		AQ					1				
E2M1009F/R	10:58	MB-72289	MB-72289	72289	SL	93	89	92	90	1				
E2M1010F/R	11:17	LCS-72289	LCS-72289	72289	SL	100	89	97	90	1				
E2M1011F/R	11:37	LCS-72289	LCS-72289	72289	AQ	97	91	95	93	1				
E2M1012F/R	11:57	M0967-01A	RS-BF-A79-06131	72289	SL	76	79	75	76	1				
E2M1013F/R	12:17	M0967-02A	RS-BF-A81-06131	72289	SL	74	72	73	72	1				
E2M1014F/R	12:36	M0975-04A	COMP-A-061313	72289	SL	78	81	77	75	1				
E2M1015F/R	12:56	M0975-07A	COMP-B-061313	72289	SL	74	73	73	75	1				
E2M1016F/R	13:16	M0975-11A	COMP-C-061313	72289	SL	86	90	85	83	1				
E2M1017F/R	13:36	M0975-14A	COMP-D-061313	72289	SL	85	89	85	82	1				
E2M1018F/R	13:55	M0975-18A	COMP-E-061313	72289	SL	84	82	82	79	1				
E2M1019F/R	14:15	AIBLKDL	AIBLKDL		AQ					1				
E2M1020F/R	14:35	AR16603DL	AR16603DL		AQ					1				

SAJ 6/19/13

REVIEWED

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.***

*Featuring*

***HANIBAL TECHNOLOGY***

**\* Metals \***

## REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : GZA GeoEnvironmental of NY Buffalo

Project: Former Signore Facility

Laboratory Workorder / SDG #: M0975

SW846 6010C, SW846 7471B

### I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form or other record of communication is included with the Sample Receipt Documentation.

### II. 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.

### III. METHODS

Samples were analyzed following procedures in laboratory test code: SW846 6010C, SW846 7471B

### IV. PREPARATION

Soil Samples were prepared following procedures in laboratory test code: SW3050B

Soil Samples were prepared following procedures in laboratory test code: SW7471B

### V. INSTRUMENTATION

The following instrumentation was used:

Instrument Code: FIMS2

Instrument Type: CVAA



Description: FIMS  
Manufacturer: Perkin-Elmer  
Model: FIMS100

Instrument Code: OPTIMA3  
Instrument Type: ICP  
Description: Optima ICP-OES  
Manufacturer: Perkin-Elmer  
Model: 4300 DV

## VI. ANALYSIS

### A. Calibration:

Calibrations met the method/SOP acceptance criteria.

### B. Blanks:

All method blanks were within the acceptance criteria.

### C. Spikes:

#### 1. Laboratory Control Spikes (LCS):

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

#### 2. Matrix spike (MS):

Matrix spikes were performed on sample: COMP-E-061313 (M0975-18AMS).

Percent recoveries were within the QC limits with the following exceptions:

COMP-E-061313 (M0975-18AMS), recovery is below criteria for Antimony at 46% with criteria of (80-120).

### D. Post Digestion Spike (PDS):

Post-digestion spike analysis was performed on sample: COMP-E-061313 (M0975-18APDS).

COMP-E-061313 (M0975-18APDS) for Antimony due to recovery of this element outside of QC limits in the matrix spike.

**E. Duplicate sample:**

Duplicate analyses were performed on sample: COMP-E-061313 (M0975-18ADUP).

Relative percent differences were within the QC limits with the following exceptions:

COMP-E-061313 (M0975-18ADUP), Duplicate analysis not within control limit for Manganese.

**F. Serial Dilution (SD):**

Serial Dilution analyses were performed on sample: COMP-E-061313 (M0975-18ASD).

Percent differences were within the QC limits.

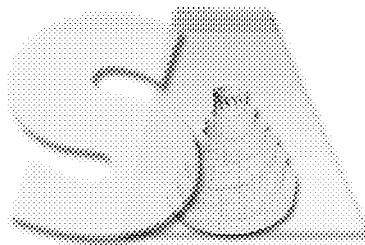
**G. Samples:**

No other unusual occurrences were noted during sample analysis.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed: 

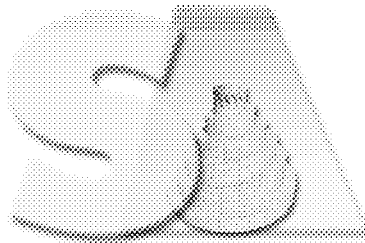
Date: 06/26/13



*SPECTRUM ANALYTICAL, INC.*  
Featuring  
*HANIBAL TECHNOLOGY*

### **Data Flag/Qualifiers:**

- U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).
- J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
  - estimated concentration for Tentatively Identified Compound
- B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a “trace” concentration below the reporting limit and equal to or above the detection limit.
- D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis
- E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.
- P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.
- A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.
- N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.
- \* For Inorganics analysis the \* flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.



**SPECTRUM ANALYTICAL, INC.**  
*Featuring*  
**HANIBAL TECHNOLOGY**

## **Sample ID Suffixes**

- DL** Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution
- RE** Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.
- RA** Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.
- RX** Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.
- MS** Matrix Spike.
- MSD** Matrix Spike Duplicate
- DUP** Duplicate analysis
- SD** Serial Dilution
- PS** Post-digestion or Post-distillation spike. For metals or inorganic analyses

U.S.EPA - CLP  
COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

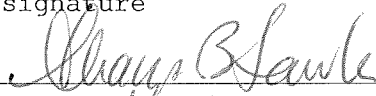

Lab Name: Spectrum Analytical, Inc. Contract: 21.0056491.00  
Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: SM0975  
SOW No.: SW846

EPA Sample No.	Lab Sample ID
<u>COMP-A-061313</u>	<u>M0975-04</u>
<u>COMP-B-061313</u>	<u>M0975-07</u>
<u>COMP-C-061313</u>	<u>M0975-11</u>
<u>COMP-D-061313</u>	<u>M0975-14</u>
<u>COMP-E-061313</u>	<u>M0975-18</u>
<u>COMP-E-061313D</u>	<u>M0975-18DUP</u>
<u>COMP-E-061313S</u>	<u>M0975-18MS</u>

Were ICP interelement corrections applied? Yes/No Yes  
Were background corrections applied? Yes/No Yes  
If yes-were raw data generated before application of background corrections? Yes/No No

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature

Signature:  Name:   
Date: 6/26/13 Title: QA

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

COMP-A-061313

Lab Name: Spectrum Analytical, Inc. Contract: 21.0056491.  
 Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix (soil/water): SOIL Lab Sample ID: M0975-04  
 Level (low/med): MED Date Received: 06/14/2013  
 % Solids: 78.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	18800			P
7440-36-0	Antimony	0.42	U	N	P
7440-38-2	Arsenic	16.1			P
7440-39-3	Barium	240			P
7440-41-7	Beryllium	0.87			P
7440-43-9	Cadmium	0.017	U		P
7440-70-2	Calcium	2610			P
7440-47-3	Chromium	20.7			P
7440-48-4	Cobalt	15.0			P
7440-50-8	Copper	17.1			P
7439-89-6	Iron	31700			P
7439-92-1	Lead	19.2			P
7439-95-4	Magnesium	3940			P
7439-96-5	Manganese	875		*	P
7439-97-6	Mercury	0.044	B		CV
7440-02-0	Nickel	26.7			P
7440-09-7	Potassium	1310			P
7782-49-2	Selenium	0.90	B		P
7440-22-4	Silver	0.15	B		P
7440-23-5	Sodium	13.7	B		P
7440-28-0	Thallium	0.25	U		P
7440-62-2	Vanadium	21.0			P
7440-66-6	Zinc	86.8			P

Comments:

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U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

COMP-B-061313

Lab Name: Spectrum Analytical, Inc. Contract: 21.0056491.  
 Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix (soil/water): SOIL Lab Sample ID: M0975-07  
 Level (low/med): MED Date Received: 06/14/2013  
 % Solids: 79.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	17200			P
7440-36-0	Antimony	0.29	U	N	P
7440-38-2	Arsenic	15.0			P
7440-39-3	Barium	251			P
7440-41-7	Beryllium	0.81			P
7440-43-9	Cadmium	0.10	B		P
7440-70-2	Calcium	2230			P
7440-47-3	Chromium	18.7			P
7440-48-4	Cobalt	14.5			P
7440-50-8	Copper	17.9			P
7439-89-6	Iron	32900			P
7439-92-1	Lead	17.7			P
7439-95-4	Magnesium	3800			P
7439-96-5	Manganese	812		*	P
7439-97-6	Mercury	0.048	B		CV
7440-02-0	Nickel	27.3			P
7440-09-7	Potassium	1050			P
7782-49-2	Selenium	0.49	U		P
7440-22-4	Silver	0.12	B		P
7440-23-5	Sodium	14.3	B		P
7440-28-0	Thallium	0.17	U		P
7440-62-2	Vanadium	19.2			P
7440-66-6	Zinc	79.9			P

Comments:

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U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

COMP-C-061313

Lab Name: Spectrum Analytical, Inc. Contract: 21.0056491.  
 Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix (soil/water): SOIL Lab Sample ID: M0975-11  
 Level (low/med): MED Date Received: 06/14/2013  
 % Solids: 82.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	16800			P
7440-36-0	Antimony	0.35	U	N	P
7440-38-2	Arsenic	16.7			P
7440-39-3	Barium	282			P
7440-41-7	Beryllium	0.80			P
7440-43-9	Cadmium	0.16	B		P
7440-70-2	Calcium	2640			P
7440-47-3	Chromium	18.2			P
7440-48-4	Cobalt	14.0			P
7440-50-8	Copper	18.5			P
7439-89-6	Iron	31200			P
7439-92-1	Lead	23.3			P
7439-95-4	Magnesium	3650			P
7439-96-5	Manganese	1320		*	P
7439-97-6	Mercury	0.052			CV
7440-02-0	Nickel	25.0			P
7440-09-7	Potassium	1270			P
7782-49-2	Selenium	0.93	B		P
7440-22-4	Silver	0.20	B		P
7440-23-5	Sodium	13.3	B		P
7440-28-0	Thallium	0.29	B		P
7440-62-2	Vanadium	19.1			P
7440-66-6	Zinc	87.8			P

Comments:

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U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

COMP-D-061313

Lab Name: Spectrum Analytical, Inc. Contract: 21.0056491.  
 Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix (soil/water): SOIL Lab Sample ID: M0975-14  
 Level (low/med): MED Date Received: 06/14/2013  
 % Solids: 79.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	18100			P
7440-36-0	Antimony	0.33	U	N	P
7440-38-2	Arsenic	17.1			P
7440-39-3	Barium	266			P
7440-41-7	Beryllium	0.86			P
7440-43-9	Cadmium	0.082	B		P
7440-70-2	Calcium	2450			P
7440-47-3	Chromium	19.4			P
7440-48-4	Cobalt	14.7			P
7440-50-8	Copper	20.6			P
7439-89-6	Iron	34700			P
7439-92-1	Lead	21.1			P
7439-95-4	Magnesium	4070			P
7439-96-5	Manganese	951		*	P
7439-97-6	Mercury	0.044	B		CV
7440-02-0	Nickel	27.4			P
7440-09-7	Potassium	1160			P
7782-49-2	Selenium	0.83	B		P
7440-22-4	Silver	0.13	B		P
7440-23-5	Sodium	13.7	B		P
7440-28-0	Thallium	0.19	U		P
7440-62-2	Vanadium	20.6			P
7440-66-6	Zinc	85.2			P

Comments:

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U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

COMP-E-061313

Lab Name: Spectrum Analytical, Inc. Contract: 21.0056491.  
 Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix (soil/water): SOIL Lab Sample ID: M0975-18  
 Level (low/med): MED Date Received: 06/14/2013  
 % Solids: 83.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	16600			P
7440-36-0	Antimony	0.32	U	N	P
7440-38-2	Arsenic	15.4			P
7440-39-3	Barium	258			P
7440-41-7	Beryllium	0.75			P
7440-43-9	Cadmium	0.11	B		P
7440-70-2	Calcium	2010			P
7440-47-3	Chromium	17.8			P
7440-48-4	Cobalt	14.3			P
7440-50-8	Copper	20.6			P
7439-89-6	Iron	32600			P
7439-92-1	Lead	20.6			P
7439-95-4	Magnesium	3660			P
7439-96-5	Manganese	979		*	P
7439-97-6	Mercury	0.044			CV
7440-02-0	Nickel	25.2			P
7440-09-7	Potassium	1060			P
7782-49-2	Selenium	0.54	U		P
7440-22-4	Silver	0.17	B		P
7440-23-5	Sodium	12.9	B		P
7440-28-0	Thallium	0.25	B		P
7440-62-2	Vanadium	19.2			P
7440-66-6	Zinc	83.7			P

Comments:

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2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Spectrum Analytical, Inc. Contract: 21.0056491.00

Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: SM0975

Initial Calibration Source: \_\_\_\_\_

Continuing Calibration Source: \_\_\_\_\_

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	06/18/13 15:21			06/18/13 15:39			06/18/13 15:57		
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Mercury	5.0	4.83	96.6	5.0	4.85	96.9	4.90	98.0	CV

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Spectrum Analytical, Inc. Contract: 21.0056491.00

Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: SM0975

Initial Calibration Source: \_\_\_\_\_

Continuing Calibration Source: \_\_\_\_\_

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	06/21/13 10:35			06/21/13 10:58			06/21/13 11:20		
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	10000.0	10868.29	108.7	10000.0	10995.38	110.0	10726.60	107.3	P
Antimony	500.0	499.15	99.8	500.0	508.41	101.7	510.02	102.0	P
Arsenic	500.0	510.69	102.1	500.0	515.80	103.2	510.21	102.0	P
Barium	10000.0	10457.44	104.6	10000.0	10522.68	105.2	10421.70	104.2	P
Beryllium	250.0	253.96	101.6	250.0	254.67	101.9	251.09	100.4	P
Cadmium	250.0	264.52	105.8	250.0	267.02	106.8	263.49	105.4	P
Calcium	25000.0	24913.24	99.7	25000.0	25279.88	101.1	25064.29	100.3	P
Chromium	1000.0	1068.11	106.8	1000.0	1070.50	107.0	1063.86	106.4	P
Cobalt	2500.0	2640.38	105.6	2500.0	2648.22	105.9	2620.94	104.8	P
Copper	1250.0	1278.91	102.3	1250.0	1271.19	101.7	1258.47	100.7	P
Iron	5000.0	5457.99	109.2	5000.0	5519.77	110.4	5413.77	108.3	P
Lead	500.0	509.41	101.9	500.0	517.32	103.5	516.36	103.3	P
Magnesium	25000.0	25972.92	103.9	25000.0	26230.51	104.9	25820.65	103.3	P
Manganese	2500.0	2580.71	103.2	2500.0	2593.07	103.7	2559.14	102.4	P
Nickel	2500.0	2661.50	106.5	2500.0	2670.72	106.8	2645.09	105.8	P
Potassium	25000.0	25320.49	101.3	25000.0	26550.41	106.2	24489.62	98.0	P
Selenium	500.0	499.44	99.9	500.0	502.26	100.5	502.46	100.5	P
Silver	1250.0	1315.94	105.3	1250.0	1312.52	105.0	1301.64	104.1	P
Sodium	25000.0	25622.14	102.5	25000.0	26870.97	107.5	24711.97	98.8	P
Thallium	500.0	491.85	98.4	500.0	499.83	100	497.80	99.6	P
Vanadium	2500.0	2582.01	103.3	2500.0	2579.25	103.2	2564.85	102.6	P
Zinc	2500.0	2714.99	108.6	2500.0	2731.36	109.3	2696.69	107.9	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

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2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Spectrum Analytical, Inc. Contract: 21.0056491.00

Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: SM0975

Initial Calibration Source: \_\_\_\_\_

Continuing Calibration Source: \_\_\_\_\_

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				10000.0	10317.41	103.2			P
Antimony				500.0	497.76	99.6	506.57	101.3	P
Arsenic				500.0	495.50	99.1			P
Barium				10000.0	10142.10	101.4			P
Beryllium				250.0	243.45	97.4			P
Cadmium				250.0	255.41	102.2			P
Calcium				25000.0	24176.39	96.7			P
Chromium				1000.0	1023.69	102.4			P
Cobalt				2500.0	2527.69	101.1			P
Copper				1250.0	1228.86	98.3			P
Iron				5000.0	5250.27	105.0	5255.85	105.1	P
Lead				500.0	499.42	99.9			P
Magnesium				25000.0	25156.56	100.6			P
Manganese				2500.0	2495.16	99.8	2582.30	103.3	P
Nickel				2500.0	2554.97	102.2			P
Potassium				25000.0	25426.50	101.7			P
Selenium				500.0	492.43	98.5			P
Silver				1250.0	1267.28	101.4			P
Sodium				25000.0	25726.62	102.9			P
Thallium				500.0	481.20	96.2			P
Vanadium				2500.0	2491.82	99.7			P
Zinc				2500.0	2594.95	103.8			P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 21.0056491.00

Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: SM0975

Preparation Blank Matrix (soil/water): SOIL Method Blank ID: \_\_\_\_\_

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG **MB-72291**

**FIMS2\_130618B**

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)				Preparation Blank		M	
		C	06/18/13 15:41	C	06/18/13 15:59	C		C		
Mercury	0.028	U	0.028	U	0.028	U		0.002	U	CV

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3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 21.0056491.00

Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: SM0975

Preparation Blank Matrix (soil/water): SOIL Method Blank ID: \_\_\_\_\_

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG **MB-72322**

**OPTIMA3\_130621B**

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)				Preparation Blank		C	M	
		C	06/21/13 11:01	C	06/21/13 11:23	C	06/21/13 12:01	C			
Aluminum	69.3	B	66.0	U	66.0	U	66.0	U	1.216	B	P
Antimony	9.3	U	9.3	U	9.3	U	9.3	U	0.380	U	P
Arsenic	4.3	U	4.3	U	4.3	U	4.5	B	0.410	U	P
Barium	1.2	B	1.1	U	1.3	B	1.3	B	0.031	U	P
Beryllium	0.3	U	0.3	U	0.3	U	0.3	U	0.002	U	P
Cadmium	0.9	U	0.9	U	0.9	U	0.9	U	0.015	U	P
Calcium	110.0	U	114.1	B	110.0	U	110.0	U	6.100	U	P
Chromium	0.6	U	0.6	U	0.6	U	0.6	U	0.019	U	P
Cobalt	0.7	U	0.7	U	0.7	U	0.7	U	0.044	U	P
Copper	3.6	U	3.6	U	3.6	U	3.6	U	0.110	U	P
Iron	31.0	U	31.0	U	31.0	U	31.0	U	1.500	U	P
Lead	4.2	U	4.2	U	4.2	U	4.2	U	0.170	U	P
Magnesium	76.0	U	76.0	U	76.0	U	76.0	U	0.630	U	P
Manganese	10.0	U	10.0	U	10.0	U	10.0	U	0.130	U	P
Nickel	0.9	U	0.8	U	0.8	U	0.8	U	0.043	U	P
Potassium	76.0	U	76.0	U	76.0	U	76.0	U	3.400	U	P
Selenium	12.0	U	12.0	U	12.0	U	12.0	U	0.640	U	P
Silver	6.9	U	6.9	U	6.9	U	6.9	U	0.143	B	P
Sodium	-154.1	B	-183.4	B	-248.8	B	-289.0	B	1.100	U	P
Thallium	6.2	U	6.2	U	6.2	U	6.2	U	0.220	U	P
Vanadium	1.1	U	1.1	U	1.1	U	1.1	U	0.060	U	P
Zinc	4.9	U	4.9	U	4.9	U	4.9	U	0.180	U	P

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3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 21.0056491.00

Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: SM0975

Preparation Blank Matrix (soil/water): \_\_\_\_\_ Method Blank ID: \_\_\_\_\_

Preparation Blank Concentration Units (ug/L or mg/kg): \_\_\_\_\_

**OPTIMA3\_130621B**

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)				Preparation Blank		M
		C	06/21/13 12:38	C		C		C	
Antimony			9.3	U					P
Iron			31.0	U					P
Manganese			10.0	U					P



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4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 21.0056491.00

Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: SM0975

ICP ID Number: OPTIMA3 ICS Source: \_\_\_\_\_

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found			
	Sol. A	Sol. AB	Sol. A	Sol. AB	%R	Sol. A	%R	Sol. AB	%R
Aluminum	500000	500000	559713	556353.1	111.3				
Antimony	0	600	11	656.4	109.4				
Arsenic	0	100	11	109.9	109.9				
Barium	0	500	3	544.5	108.9				
Beryllium	0	500	0	519	103.8				
Cadmium	0	1000	0	1016.8	101.7				
Calcium	500000	500000	568742	558203.1	111.6				
Chromium	0	500	1	495	99.0				
Cobalt	0	500	3	473.3	94.7				
Copper	0	500	9	548.2	109.6				
Iron	200000	200000	200981	199218.8	99.6				
Lead	0	500	-5	471.7	94.3				
Magnesium	500000	500000	514236	513659	102.7				
Manganese	0	500	0	516.4	103.3				
Nickel	0	1000	2	926.7	92.7				
Potassium	0	25000	262	26876.2	107.5				
Selenium	0	500	7	502	100.4				
Silver	0	200	3	234.4	117.2				
Sodium	0	25000	283	26884.1	107.5				
Thallium	0	100	-3	85	85.0				
Vanadium	0	500	-10	512	102.4				
Zinc	0	1000	8	954.4	95.4				

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5A

EPA SAMPLE NO.

SPIKE SAMPLE RECOVERY

COMP-E-061313S

Lab Name: Spectrum Analytical, Inc. Contract: 21.0056491.

Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: SM0975

Matrix (soil/water): SOIL Level (low/med): MED

% Solids for Sample: 83.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Antimony	75-125	8.8	0.32 U	19.2	46	N	P
Arsenic	75-125	33.0	15.4	19.2	92		P
Barium	75-125	625	258	385	96		P
Beryllium	75-125	10.5	0.75	9.6	102		P
Cadmium	75-125	9.9	0.11 B	9.6	102		P
Chromium	75-125	57.3	17.8	38.5	103		P
Cobalt	75-125	114	14.3	96.0	104		P
Copper	75-125	69.8	20.6	47.8	103		P
Lead	75-125	37.5	20.6	19.2	88		P
Nickel	75-125	124	25.2	96.0	103		P
Selenium	75-125	19.2	0.54 U	19.2	100		P
Silver	75-125	52.4	0.054 B	47.8	110		P
Thallium	75-125	18.4	0.19 B	19.2	95		P
Vanadium	75-125	115	19.2	96.0	99		P
Zinc	75-125	174	83.7	96.0	95		P

Comments:

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5B

EPA SAMPLE NO.

POST DIGEST SPIKE SAMPLE RECOVERY

COMP-E-061313A

Lab Name: Spectrum Analytical, Inc. Contract: 21.0056491.

Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: SM0975

Matrix (soil/water): SOIL Level (low/med): MED

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	Control Limit %R	Spike Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Antimony		481.52	0.38 U	455.0	106		P

Comments:

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6

EPA SAMPLE NO.

DUPLICATES

COMP-E-061313D

Lab Name: Spectrum Analytical, Inc. Contract: 21.0056491.  
 Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: SM0975  
 Matrix (soil/water): SOIL Level (low/med): MED  
 % Solids for Sample: 83.9 % Solids for Duplicate: 83.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		16587.2287		16734.3075		0.9		P
Antimony		0.3200	U	0.3300	U			P
Arsenic		15.4438		14.4834		6.4		P
Barium		257.7411		231.8033		10.6		P
Beryllium	0.2	0.7500		0.7034		6.4		P
Cadmium		0.1133	B	0.0526	B	73.2		P
Calcium		2010.9021		1896.2280		5.9		P
Chromium		17.8472		18.1492		1.7		P
Cobalt		14.2525		13.2267		7.5		P
Copper		20.5530		17.3676		16.8		P
Iron		32599.0507		29648.6894		9.5		P
Lead		20.6177		19.0925		7.7		P
Magnesium		3656.3874		3672.0427		0.4		P
Manganese		979.2127		770.1297		23.9	*	P
Nickel		25.1627		24.8704		1.2		P
Potassium		1057.9679		1079.1365		2		P
Selenium		0.5400	U	0.7582	B	200		P
Silver		0.1684	B	0.1122	B	40.1		P
Sodium		12.8570	B	13.4477	B	4.5		P
Thallium		0.2548	B	0.2732	B	7		P
Vanadium		19.2042		19.2350		0.2		P
Zinc		83.7134		77.5260		7.7		P

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7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 21.0056491.00

Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: SM0975

Solid LCS Source: \_\_\_\_\_ LCS(D) ID: \_\_\_\_\_

Aqueous LCS Source: \_\_\_\_\_ **LCS-72291**

Analyte	Aqueous (ug/L)			Solid (mg/Kg)					
	True	Found	%R	True	Found	C	Limits	%R	
Mercury				0.8	0.7		0.6	0.9	87.5

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7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 21.0056491.00

Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: SM0975

Solid LCS Source: \_\_\_\_\_

LCS(D) ID:

Aqueous LCS Source: \_\_\_\_\_

**LCS-72322**

Analyte	Aqueous (ug/L)			Solid (mg/Kg)				
	True	Found	%R	True	Found	C	Limits	%R
Aluminum				455.0	463.1		364 546.0	101.8
Antimony				22.8	23.7		18.2 27.3	103.9
Arsenic				22.8	22.8		18.2 27.3	100.0
Barium				455.0	468.3		364 546.0	102.9
Beryllium				11.4	11.2		9.1 13.6	98.2
Cadmium				11.4	11.7		9.1 13.6	102.6
Calcium				1135.0	1101.6		908 1362.0	97.1
Chromium				45.5	47.1		36.4 54.6	103.5
Cobalt				113.5	117.7		90.8 136.2	103.7
Copper				56.5	56.3		45.2 67.8	99.6
Iron				227.5	245.2		182 273.0	107.8
Lead				22.8	23.2		18.2 27.3	101.8
Magnesium				1135.0	1171.1		908 1362.0	103.2
Manganese				113.5	115.3		90.8 136.2	101.6
Nickel				113.5	117.6		90.8 136.2	103.6
Potassium				1135.0	1113.8		908 1362.0	98.1
Selenium				22.8	21.5		18.2 27.3	94.3
Silver				56.5	57.2		42.4 67.8	101.2
Sodium				1135.0	1118.7		908 1362.0	98.6
Thallium				22.8	21.9		18.2 27.3	96.1
Vanadium				113.5	113.7		90.8 136.2	100.2
Zinc				113.5	116.5		90.8 136.2	102.6

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EPA SAMPLE NO.

ICP SERIAL DILUTIONS

COMP-E-061313

Lab Name: Spectrum Analytical, Inc. Contract: 21.0056491.

Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: SM0975

Matrix (soil/water): SOIL Level (low/med): MED

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	Initial Sample		Serial Dilution		% Difference	Q	M
	Result (I)	C	Result (S)	C			
Aluminum	389655.29		381554.43		2		P
Antimony	9.30	U	46.50	U			P
Arsenic	362.80		365.69		1		P
Barium	6054.67		6029.61		0		P
Beryllium	17.62		18.44		5		P
Cadmium	2.66	B	4.45	U	100		P
Calcium	47238.67		48644.56		3		P
Chromium	419.25		417.16		1		P
Cobalt	334.81		347.79		4		P
Copper	482.82		476.57		1		P
Iron	38289.68		37727.05		2		P
Lead	484.34		496.55		3		P
Magnesium	85893.23		86615.20		1		P
Manganese	23002.96		24289.67		6		P
Nickel	591.10		609.88		3		P
Potassium	24853.02		25933.66		4		P
Selenium	12.00	U	60.00	U			P
Silver	6.90	B	34.50	U	100		P
Sodium	302.03	B	145.00	U	100		P
Thallium	6.20	B	31.00	U	100		P
Vanadium	451.13		444.33		2		P
Zinc	1966.54		1988.16		1		P

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METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 21.0056491.00

Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: SM0975

Instrument Type: CV InstrumentID: FIMS2 Date: 03/04/2010

Preparation Method: 7471B

Concentration Units (ug/L or mg/kg): ug/L

Analyte	Wavelength /Mass	CRDL	MDL
Mercury	253.70	0.2	0.028

Comments:

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METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 21.0056491.00

Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: SM0975

Instrument Type: CV InstrumentID: FIMS2 Date: 02/09/2011

Preparation Method: 7471B

Concentration Units (ug/L or mg/kg): mg/Kg

Analyte	Wavelength /Mass	CRDL	MDL
Mercury	253.70	0.03	0.0021

Comments:

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METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 21.0056491.00

Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: SM0975

Instrument Type: P InstrumentID: OPTIMA3 Date: 06/03/2010

Preparation Method: 3050B

Concentration Units (ug/L or mg/kg): mg/Kg

Analyte	Wavelength /Mass	CRDL	MDL
Aluminum	308.21	10	1.2
Antimony	206.83	1.0	0.38
Arsenic	188.98	1.0	0.41
Barium	233.53	10	0.031
Beryllium	313.11	0.25	0.0015
Cadmium	226.50	0.25	0.015
Calcium	227.54	40	6.1
Chromium	267.72	1.0	0.019
Cobalt	228.62	2.5	0.044
Copper	324.75	1.5	0.11
Iron	273.96	10	1.5
Lead	220.35	0.50	0.17
Magnesium	279.08	25	0.63
Manganese	257.61	2.5	0.13
Nickel	231.60	2.5	0.043
Potassium	766.49	50	3.4
Selenium	196.03	1.5	0.64
Silver	328.07	1.5	0.064
Sodium	589.59	50	1.1
Thallium	190.80	1.0	0.22
Vanadium	292.40	2.5	0.060
Zinc	206.20	2.5	0.18

Comments:

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10

METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 21.0056491.00

Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: SM0975

Instrument Type: P InstrumentID: OPTIMA3 Date: 03/03/2010

Preparation Method: 3005A

Concentration Units (ug/L or mg/kg): ug/L

Analyte	Wavelength /Mass	CRDL	MDL
Aluminum	308.21	200	66.0
Antimony	206.83	20	9.3
Arsenic	188.98	20	4.3
Barium	233.53	200	1.1
Beryllium	313.11	5.0	0.26
Cadmium	226.50	5.0	0.89
Calcium	227.54	800	110
Chromium	267.72	20	0.64
Cobalt	228.62	50	0.67
Copper	324.75	30	3.6
Iron	273.96	200	31.0
Lead	220.35	10	4.2
Magnesium	279.08	500	76.0
Manganese	257.61	50	10.0
Nickel	231.60	50	0.85
Potassium	766.49	1000	76.0
Selenium	196.03	30	12.0
Silver	328.07	30	6.9
Sodium	589.59	1000	29.0
Thallium	190.80	20	6.2
Vanadium	292.40	50	1.1
Zinc	206.20	50	4.9

Comments:

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11A

ICP INTERELEMENT CORRECTION FACTORS (BIANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 21.0056491.00

Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: SM0975

ICP ID Number: OPTIMA3 Date: 3/22/2013

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Al	Ca	Fe	Mg	Co
Aluminum	308.21		0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.83	0.0524709	0.0000000	0.0813952	0.0208555	0.0000000
Arsenic	188.97	0.0211768	-0.0144099	-0.1293530	0.0000000	0.0000000
Barium	233.52	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.10	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0340687	0.0000000	0.0000000
Calcium	227.54	0.0000000		-37.6317000	0.0000000	154.2530000
Chromium	267.71	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.61	0.0000000	0.0000000	0.0000000	0.0000000	
Copper	324.75	0.0000000	0.0000000	-0.1055780	0.0000000	0.0000000
Iron	273.95	0.1353110	0.0000000		0.0629507	0.0000000
Lead	220.35	-0.0646768	0.0000000	0.0402248	0.0000000	0.0000000
Magnesium	279.07	0.0000000	0.0000000	0.0000000		0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	-0.2617180
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	-0.0463483	0.0206586	-0.4046580	0.0000000	-0.4462920
Silver	328.06	0.0000000	0.0000000	-0.0397677	0.0000000	0.0000000
Sodium	589.59	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.80	0.0000000	-0.0178616	-0.0847627	-0.0140225	2.5469000
Titanium	334.94	0.0055152	-0.0099349	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0441272	0.0000000	0.0000000
Zinc	206.20	0.0128739	0.0000000	0.0000000	0.0000000	0.0000000

Comments:

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11B

ICP INTERELEMENT CORRECTION FACTORS (BIANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 21.0056491.00  
 Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: SM0975  
 ICP ID Number: OPTIMA3 Date: 3/22/2013

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Cr	Cu	Mn	Ni	Tl
Aluminum	308.21	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.83	12.8721000	0.3052440	0.0000000	0.0000000	0.0000000
Arsenic	188.97	-8.5884200	0.0000000	0.0000000	0.0000000	0.0000000
Barium	233.52	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.10	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000000	-0.5446510	0.0000000
Calcium	227.54	0.0000000	0.0000000	0.0000000	52.9720000	0.0000000
Chromium	267.71		0.0000000	0.4053390	0.0000000	0.0000000
Cobalt	228.61	0.0000000	0.0000000	0.0000000	0.1592230	0.0000000
Copper	324.75	0.0000000		0.0000000	0.0000000	0.0000000
Iron	273.95	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.0451725	0.4845090	0.1475910	0.0797307	0.0000000
Magnesium	279.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000		0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000		0.2826600
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	0.0000000	0.0000000	0.3886040	-0.1531550	0.0000000
Silver	328.06	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	589.59	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.80	0.1975820	0.0000000	0.2934860	0.0000000	
Titanium	334.94	0.2542870	0.0000000	0.0000000	0.0000000	0.1359400
Vanadium	292.40	-3.1034300	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	206.20	-2.4395100	0.0000000	0.0000000	0.0000000	0.0000000

Comments:

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11B

ICP INTERELEMENT CORRECTION FACTORS (BIANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 21.0056491.00  
 Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: SM0975  
 ICP ID Number: OPTIMA3 Date: 3/22/2013

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Ti	V	_____	_____	_____
Aluminum	308.21	0.0000000	4.6508100			
Antimony	206.83	-0.8473160	-1.2603800			
Arsenic	188.97	0.0000000	0.0000000			
Barium	233.52	0.0000000	-1.1393900			
Beryllium	313.10	-1.7951400	-0.0449437			
Cadmium	226.50	0.2180210	0.0000000			
Calcium	227.54	0.0000000	62.2286000			
Chromium	267.71	0.0000000	-0.4256330			
Cobalt	228.61	2.0452400	0.0000000			
Copper	324.75	0.0000000	-0.2212660			
Iron	273.95	-2.1905500	-14.8783000			
Lead	220.35	-0.5895250	0.0000000			
Magnesium	279.07	0.0000000	0.0000000			
Manganese	257.61	0.0000000	0.0000000			
Nickel	231.60	0.0000000	0.0000000			
Potassium	766.49	0.0000000	0.0000000			
Selenium	196.02	0.0000000	0.0000000			
Silver	328.06	0.0000000	-5.3154700			
Sodium	589.59	0.0000000	0.0000000			
Thallium	190.80	0.8213800	2.1141200			
Titanium	334.94		0.0000000			
Vanadium	292.40	1.0836500				
Zinc	206.20	0.0000000	0.0000000			

Comments:

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ICP LINEAR RANGES (BIANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 21.0056491.00

Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: SM0975

ICP ID Number: OPTIMA3 Date: 3/18/2013

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Aluminum	0.20	500000	P
Antimony	0.20	50000	P
Arsenic	0.20	50000	P
Barium	0.20	100000	P
Beryllium	0.20	10000	P
Cadmium	0.20	50000	P
Calcium	0.20	500000	P
Chromium	0.20	50000	P
Cobalt	0.20	100000	P
Copper	0.20	50000	P
Iron	0.20	500000	P
Lead	0.20	100000	P
Magnesium	0.20	500000	P
Manganese	0.20	50000	P
Nickel	0.20	100000	P
Potassium	0.20	500000	P
Selenium	0.20	50000	P
Silver	0.20	2500	P
Sodium	0.20	500000	P
Thallium	0.20	50000	P
Vanadium	0.20	50000	P
Zinc	0.20	50000	P

Comments:

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PREPARATION LOG

Lab Name: Spectrum Analytical, Inc. Contract: 21.0056491.00  
 Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: SM0975  
 Preparation Method: 7471B Batch ID: 72291

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
CCB	06/18/2013	0.60	100
CCV	06/18/2013	0.60	100
ICB	06/18/2013	0.60	100
ICV	06/18/2013	0.60	100
S0	06/18/2013	0.60	100
S0.2	06/18/2013	0.60	100
S1.0	06/18/2013	0.60	100
S10.0	06/18/2013	0.60	100
S2.0	06/18/2013	0.60	100
S5.0	06/18/2013	0.60	100
COMP-A-061313	06/18/2013	0.56	100
COMP-B-061313	06/18/2013	0.51	100
COMP-C-061313	06/18/2013	0.54	100
COMP-D-061313	06/18/2013	0.55	100
COMP-E-061313	06/18/2013	0.58	100
LCSS	06/18/2013	0.60	100
PBS	06/18/2013	0.60	100

Comments:

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PREPARATION LOG

Lab Name: Spectrum Analytical, Inc. Contract: 21.0056491.00  
Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: SM0975  
Preparation Method: 3050B Batch ID: 72322

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
COMP-A-061313	06/20/2013	1.14	50
COMP-B-061313	06/20/2013	1.65	50
COMP-C-061313	06/20/2013	1.31	50
COMP-D-061313	06/20/2013	1.46	50
COMP-E-061313	06/20/2013	1.40	50
COMP-E-061313D	06/20/2013	1.39	50
COMP-E-061313S	06/20/2013	1.41	50
LCSS	06/20/2013	1.00	50
PBS	06/20/2013	1.00	50

Comments:

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ANALYSIS RUN LOG

Lab Name: Spectrum Analytical, Inc. Contract: 21.0056491.00  
 Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: SM0975  
 Instrument ID Number: FIMS2 Method: CV  
 Start Date: 06/18/2013 End Date: 06/18/2013

**FIMS2\_130618B**

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C O	C R	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N				
S0	1.0	1511																										X			
S0.2	1.0	1512																										X			
S1.0	1.0	1514																										X			
S2.0	1.0	1516																										X			
S5.0	1.0	1517																										X			
S10.0	1.0	1519																										X			
ICV	1.0	1521																										X			
ICB	1.0	1522																										X			
PBS	1.0	1524																										X			
LCSS	1.0	1526																										X			
ZZZZZZ	1.0	1527																													
ZZZZZZ	1.0	1529																													
ZZZZZZ	1.0	1531																													
ZZZZZZ	1.0	1532																													
ZZZZZZ	1.0	1534																													
COMP-A-061313	1.0	1536																										X			
COMP-B-061313	1.0	1537																										X			
CCV	1.0	1539																										X			
CCB	1.0	1541																										X			
COMP-C-061313	1.0	1542																										X			
COMP-D-061313	1.0	1544																										X			
COMP-E-061313	1.0	1546																										X			
ZZZZZZ	1.0	1547																													
ZZZZZZ	1.0	1549																													
ZZZZZZ	1.0	1551																													
ZZZZZZ	1.0	1552																													
ZZZZZZ	1.0	1554																													
ZZZZZZ	20.0	1556																													
CCV	1.0	1557																										X			
CCB	1.0	1559																										X			

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ANALYSIS RUN LOG

Lab Name: Spectrum Analytical, Inc. Contract: 21.0056491.00  
 Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: SM0975  
 Instrument ID Number: OPTIMA3 Method: P  
 Start Date: 06/21/2013 End Date: 06/21/2013

**OPTIMA3\_130621B**

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C O	C R	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N				
S0	1.0	1021		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
S1	1.0	1024		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
S2	1.0	1028		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
S3	1.0	1032		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
ICV	1.0	1035		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
ICB	1.0	1039		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
ZZZZZZ	1.0	1043																													
ZZZZZZ	1.0	1047																													
ICSA	1.0	1050		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
ICSAB	1.0	1054		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
CCV	1.0	1058		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
CCB	1.0	1101		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
PBS	1.0	1105		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
LCSS	1.0	1109		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
ZZZZZZ	1.0	1112																													
ZZZZZZ	1.0	1116																													
CCV	1.0	1120		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
CCB	1.0	1123		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
COMP-A-061313	1.0	1127		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
COMP-B-061313	1.0	1131		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
COMP-C-061313	1.0	1135		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
COMP-D-061313	1.0	1138		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
COMP-E-061313	1.0	1142		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
COMP-E-061313D	1.0	1146		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
COMP-E-061313S	1.0	1150			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
COMP-E-061313L	5.0	1153		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
CCV	1.0	1157		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
CCB	1.0	1201		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
COMP-E-061313A	1.0	1205			X																										
COMP-A-061313	20.0	1208													X																
COMP-B-061313	20.0	1212													X																
COMP-C-061313	20.0	1216													X		X														

U.S. EPA - CLP  
14  
ANALYSIS RUN LOG

Lab Name: Spectrum Analytical, Inc. Contract: 21.0056491.00  
 Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: SM0975  
 Instrument ID Number: OPTIMA3 Method: P  
 Start Date: 06/21/2013 End Date: 06/21/2013

**OPTIMA3\_130621B**

EPA Sample No.	D/F	Time	% R	Analytes																																				
				A L	S B	A S	B A	B E	C D	C A	C O	C R	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N													
COMP-D-061313	20.0	1219																										X												
COMP-E-061313	20.0	1223																											X											
COMP-E-061313D	20.0	1227																											X											
COMP-E-061313L	100.0	1230																											X											
CCV	1.0	1234				X																						X			X									
CCB	1.0	1238				X																						X			X									

# **Instrument Raw Data**

Reprocessing Begun

Logged In Analyst: mitOptima3

Technique: ICP Continuous

Results Data Set (original): B13062102

Results Library (original): C:\pe\Administrator\Results\Results.mdb

Results Data Set (reprocessed): B13062102A

Results Library (reprocessed): C:\pe\Administrator\Results\Results.mdb

Sequence No.: 1

Autosampler Location: 1

Sample ID: S0

Date Collected: 6/21/2013 10:21:05 AM

Analyst:

Data Type: Reprocessed on 6/21/2013 2:04:48 PM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: S0

Analyte	Mean Corrected			Calib	
	Intensity	Std.Dev.	RSD	Conc.	Units
Y 360.073	1702178.1	21812.91	1.28%	100.00	%
Lu 261.542	1104656.4	13918.71	1.26%	100.0	%
Ag 328.068†	-3722.1	64.35	1.73%	[0.00]	mg/L
Al 308.215†	4580.9	76.24	1.66%	[0.00]	mg/L
As 188.979†	5.2	0.42	8.06%	[0.00]	mg/L
Ba 233.527†	-104.2	4.99	4.78%	[0.00]	mg/L
Be 313.107†	-1557.1	34.55	2.22%	[0.00]	mg/L
Co 228.616†	-42.4	2.58	6.07%	[0.00]	mg/L
Cr 267.716†	51.2	6.06	11.83%	[0.00]	mg/L
Cu 324.752†	2874.0	64.85	2.26%	[0.00]	mg/L
Fe 273.955†	-504.5	4.31	0.86%	[0.00]	mg/L
Mg 279.077†	-845.8	35.08	4.15%	[0.00]	mg/L
Mn 257.610†	-269.7	12.17	4.51%	[0.00]	mg/L
Ni 231.604†	-64.9	5.77	8.89%	[0.00]	mg/L
Pb 220.353†	55.9	1.37	2.45%	[0.00]	mg/L
Sb 206.836†	50.0	4.04	8.07%	[0.00]	mg/L
Se 196.026†	-13.3	2.72	20.51%	[0.00]	mg/L
Tl 190.801†	-3.1	1.53	48.76%	[0.00]	mg/L
V 292.402†	-44.1	37.90	86.02%	[0.00]	mg/L
Zn 206.200†	81.2	2.54	3.13%	[0.00]	mg/L
Cd 226.502†	-79.6	5.90	7.41%	[0.00]	mg/L
Ti 334.940†	140.6	21.90	15.58%	[0.00]	mg/L
Ca 227.546†	108.0	0.28	0.26%	[0.00]	mg/L
Na 589.592†	1295.0	62.07	4.79%	[0.00]	mg/L
K 766.490†	1706.0	21.45	1.26%	[0.00]	mg/L

Sequence No.: 2

Autosampler Location: 9

Sample ID: S1

Date Collected: 6/21/2013 10:24:43 AM

Analyst:

Data Type: Reprocessed on 6/21/2013 2:04:50 PM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: S1

Analyte	Mean Corrected			Calib	
	Intensity	Std.Dev.	RSD	Conc.	Units
Y 360.073	1588436.5	62595.38	3.94%	93.318	%
Lu 261.542	1035207.2	41363.78	4.00%	93.71	%
Ag 328.068†	347906.8	11243.30	3.23%	[2.5]	mg/L
Al 308.215†	369997.6	12805.88	3.46%	[20]	mg/L
As 188.979†	1066.2	59.92	5.62%	[1]	mg/L
Ba 233.527†	1630497.9	40802.36	2.50%	[20]	mg/L
Be 313.107†	904309.1	24477.20	2.71%	[0.5]	mg/L
Co 228.616†	151546.9	4881.19	3.22%	[5]	mg/L
Cr 267.716†	112531.0	3511.52	3.12%	[2]	mg/L
Cu 324.752†	519702.6	11405.38	2.19%	[2.5]	mg/L
Fe 273.955†	207808.1	6578.32	3.17%	[10]	mg/L

Mg 279.077†	685439.9	20253.79	2.95%	[50]	mg/L
Mn 257.610†	2461036.7	61320.27	2.49%	[5]	mg/L
Ni 231.604†	111221.0	3489.59	3.14%	[5]	mg/L
Pb 220.353†	4461.6	245.42	5.50%	[1]	mg/L
Sb 206.836†	1534.0	86.38	5.63%	[1]	mg/L
Se 196.026†	728.2	39.14	5.38%	[1]	mg/L
Tl 190.801†	1050.9	49.59	4.72%	[1]	mg/L
V 292.402†	497631.7	12254.11	2.46%	[5]	mg/L
Zn 206.200†	123364.3	3723.26	3.02%	[5]	mg/L
Cd 226.502†	19696.4	587.28	2.98%	[0.5]	mg/L
Ti 334.940†	552733.6	14444.82	2.61%	[1]	mg/L
Ca 227.546†	8672.2	464.88	5.36%	[50]	mg/L
Na 589.592†	187490.1	8660.52	4.62%	[50]	mg/L
K 766.490†	56448.4	2630.00	4.66%	[50]	mg/L

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Sequence No.: 3                               Autosampler Location: 10
Sample ID: S2                                 Date Collected: 6/21/2013 10:28:26 AM
Analyst:                                       Data Type: Reprocessed on 6/21/2013 2:04:51 PM
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:                             Initial Sample Vol:
Dilution:                                     Sample Prep Vol:
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Mean Data: S2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	1550625.4	24443.13	1.58%	91.097	%
Lu 261.542	1009583.5	14896.44	1.48%	91.39	%
Ag 328.068†	183783.7	3267.08	1.78%	[1.25]	mg/L
Al 308.215†	194821.0	3874.25	1.99%	[10]	mg/L
As 188.979†	554.2	11.04	1.99%	[0.5]	mg/L
Ba 233.527†	858087.6	4552.04	0.53%	[10]	mg/L
Be 313.107†	467790.7	2556.13	0.55%	[0.25]	mg/L
Co 228.616†	81029.2	1567.15	1.93%	[2.5]	mg/L
Cr 267.716†	59392.6	1084.27	1.83%	[1]	mg/L
Cu 324.752†	262636.2	4965.29	1.89%	[1.25]	mg/L
Fe 273.955†	110610.7	2111.07	1.91%	[5]	mg/L
Mg 279.077†	349840.6	6673.23	1.91%	[25]	mg/L
Mn 257.610†	1292700.2	7041.54	0.54%	[2.5]	mg/L
Ni 231.604†	59391.8	1082.36	1.82%	[2.5]	mg/L
Pb 220.353†	2380.4	42.58	1.79%	[0.5]	mg/L
Sb 206.836†	813.4	13.95	1.72%	[0.5]	mg/L
Se 196.026†	384.1	10.83	2.82%	[0.5]	mg/L
Tl 190.801†	558.0	8.43	1.51%	[0.5]	mg/L
V 292.402†	251758.0	4588.76	1.82%	[2.5]	mg/L
Zn 206.200†	66107.7	1201.44	1.82%	[2.5]	mg/L
Cd 226.502†	10436.9	208.96	2.00%	[0.25]	mg/L
Ti 334.940†	284924.2	1807.60	0.63%	[0.5]	mg/L
Ca 227.546†	4513.8	88.36	1.96%	[25]	mg/L
Na 589.592†	94737.2	2788.44	2.94%	[25]	mg/L
K 766.490†	28562.0	866.93	3.04%	[25]	mg/L

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=====
Sequence No.: 4                               Autosampler Location: 11
Sample ID: S3                                 Date Collected: 6/21/2013 10:32:08 AM
Analyst:                                       Data Type: Reprocessed on 6/21/2013 2:04:52 PM
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:                             Initial Sample Vol:
Dilution:                                     Sample Prep Vol:
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Mean Data: S3

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	1576649.2	49733.63	3.15%	92.625	%
Lu 261.542	1032079.4	33401.41	3.24%	93.43	%
Ag 328.068†	3695.2	158.65	4.29%	[0.025]	mg/L
Al 308.215†	4352.6	361.65	8.31%	[0.2]	mg/L
As 188.979†	12.7	1.90	14.98%	[0.01]	mg/L
Ba 233.527†	18749.6	955.34	5.10%	[0.2]	mg/L

Be 313.107†	9617.6	385.00	4.00%	[0.005]	mg/L
Co 228.616†	1683.2	54.35	3.23%	[0.05]	mg/L
Cr 267.716†	1220.6	49.37	4.04%	[0.02]	mg/L
Cu 324.752†	5632.2	318.96	5.66%	[0.025]	mg/L
Fe 273.955†	2380.2	90.15	3.79%	[0.1]	mg/L
Mg 279.077†	7592.1	375.54	4.95%	[0.5]	mg/L
Mn 257.610†	28357.5	1394.45	4.92%	[0.05]	mg/L
Ni 231.604†	1222.6	47.70	3.90%	[0.05]	mg/L
Pb 220.353†	55.4	9.65	17.43%	[0.01]	mg/L
Sb 206.836†	31.9	7.13	22.32%	[0.01]	mg/L
Se 196.026†	9.2	5.17	55.99%	[0.01]	mg/L
Tl 190.801†	9.1	1.21	13.27%	[0.01]	mg/L
V 292.402†	5385.0	255.89	4.75%	[0.05]	mg/L
Zn 206.200†	1370.4	51.97	3.79%	[0.05]	mg/L
Cd 226.502†	216.4	7.92	3.66%	[0.005]	mg/L
Ti 334.940†	6057.7	263.75	4.35%	[0.01]	mg/L
Ca 227.546†	97.3	14.19	14.59%	[0.5]	mg/L
Na 589.592†	1459.3	86.97	5.96%	[0.5]	mg/L
K 766.490†	663.2	76.80	11.58%	[0.5]	mg/L

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**Calibration Summary**

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	140700	0.00000	0.999750	
Al 308.215	3	Lin Thru 0	0.0	18700	0.00000	0.999778	
As 188.979	3	Lin Thru 0	0.0	1075	0.00000	0.999875	
Ba 233.527	3	Lin Thru 0	0.0	82380	0.00000	0.999783	
Be 313.107	3	Lin Thru 0	0.0	1821000	0.00000	0.999906	
Co 228.616	3	Lin Thru 0	0.0	30730	0.00000	0.999625	
Cr 267.716	3	Lin Thru 0	0.0	56890	0.00000	0.999758	
Cu 324.752	3	Lin Thru 0	0.0	208300	0.00000	0.999991	
Fe 273.955	3	Lin Thru 0	0.0	21050	0.00000	0.999675	
Mg 279.077	3	Lin Thru 0	0.0	13770	0.00000	0.999965	
Mn 257.610	3	Lin Thru 0	0.0	497200	0.00000	0.999799	
Ni 231.604	3	Lin Thru 0	0.0	22550	0.00000	0.999640	
Pb 220.353	3	Lin Thru 0	0.0	4522	0.00000	0.999648	
Sb 206.836	3	Lin Thru 0	0.0	1553	0.00000	0.999670	
Se 196.026	3	Lin Thru 0	0.0	736.2	0.00000	0.999761	
Tl 190.801	3	Lin Thru 0	0.0	1064	0.00000	0.999700	
V 292.402	3	Lin Thru 0	0.0	99760	0.00000	0.999989	
Zn 206.200	3	Lin Thru 0	0.0	25030	0.00000	0.999600	
Cd 226.502	3	Lin Thru 0	0.0	39860	0.00000	0.999721	
Ti 334.940	3	Lin Thru 0	0.0	556200	0.00000	0.999924	
Ca 227.546	3	Lin Thru 0	0.0	174.9	0.00000	0.999867	
Na 589.592	3	Lin Thru 0	0.0	3758	0.00000	0.999989	
K 766.490	3	Lin Thru 0	0.0	1132	0.00000	0.999987	

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Sequence No.: 5	Autosampler Location: 3
Sample ID: ICV	Date Collected: 6/21/2013 10:35:47 AM
Analyst:	Data Type: Reprocessed on 6/21/2013 2:04:53 PM
Logged In Analyst (Original) : mitOptima3	
Initial Sample Wt:	Initial Sample Vol:
Dilution:	Sample Prep Vol:

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**Mean Data: ICV**

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1560938.4	91.702 %	0.2734			0.30%
Lu 261.542	1019464.7	92.29 %	0.251			0.27%
Ag 328.068†	183737.0	1.3159 mg/L	0.05126	1.3159 mg/L	0.05126	3.90%
QC value within limits for Ag 328.068 Recovery = 105.28%						
Al 308.215†	203424.1	10.868 mg/L	0.4573	10.868 mg/L	0.4573	4.21%
QC value within limits for Al 308.215 Recovery = 108.68%						
As 188.979†	538.6	0.51069 mg/L	0.007519	0.51069 mg/L	0.007519	1.47%
QC value within limits for As 188.979 Recovery = 102.14%						
Ba 233.527†	861268.5	10.457 mg/L	0.0218	10.457 mg/L	0.0218	0.21%
QC value within limits for Ba 233.527 Recovery = 104.57%						
Be 313.107†	460624.6	0.25396 mg/L	0.000702	0.25396 mg/L	0.000702	0.28%



Co	228.616†	81183.9	2.6404 mg/L	0.11376	2.6404 mg/L	0.11376	4.31%
Cr	267.716†	60763.2	1.0681 mg/L	0.04503	1.0681 mg/L	0.04503	4.22%
Cu	324.752†	266195.0	1.2789 mg/L	0.05033	1.2789 mg/L	0.05033	3.94%
Fe	273.955†	114121.0	5.4580 mg/L	0.23806	5.4580 mg/L	0.23806	4.36%
Mg	279.077†	357540.0	25.973 mg/L	1.1970	25.973 mg/L	1.1970	4.61%
Mn	257.610†	1283094.6	2.5807 mg/L	0.00592	2.5807 mg/L	0.00592	0.23%
Ni	231.604†	59996.0	2.6615 mg/L	0.12012	2.6615 mg/L	0.12012	4.51%
Pb	220.353†	2305.5	0.50941 mg/L	0.008995	0.50941 mg/L	0.008995	1.77%
Sb	206.836†	792.7	0.49915 mg/L	0.004097	0.49915 mg/L	0.004097	0.82%
Se	196.026†	366.0	0.49944 mg/L	0.009297	0.49944 mg/L	0.009297	1.86%
Tl	190.801†	536.8	0.49185 mg/L	0.008208	0.49185 mg/L	0.008208	1.67%
V	292.402†	257335.6	2.5820 mg/L	0.10465	2.5820 mg/L	0.10465	4.05%
Zn	206.200†	67886.7	2.7150 mg/L	0.12848	2.7150 mg/L	0.12848	4.73%
Cd	226.502†	10503.2	0.26452 mg/L	0.012967	0.26452 mg/L	0.012967	4.90%
Ti	334.940†	282504.8	0.50781 mg/L	0.000820	0.50781 mg/L	0.000820	0.16%
Ca	227.546†	4444.8	24.913 mg/L	0.3230	24.913 mg/L	0.3230	1.30%
Na	589.592†	96279.6	25.622 mg/L	0.1684	25.622 mg/L	0.1684	0.66%
K	766.490†	28654.8	25.320 mg/L	0.1878	25.320 mg/L	0.1878	0.74%

QC value within limits for Be 313.107 Recovery = 101.58%  
 QC value within limits for Co 228.616 Recovery = 105.62%  
 QC value within limits for Cr 267.716 Recovery = 106.81%  
 QC value within limits for Cu 324.752 Recovery = 102.31%  
 QC value within limits for Fe 273.955 Recovery = 109.16%  
 QC value within limits for Mg 279.077 Recovery = 103.89%  
 QC value within limits for Mn 257.610 Recovery = 103.23%  
 QC value within limits for Ni 231.604 Recovery = 106.46%  
 QC value within limits for Pb 220.353 Recovery = 101.88%  
 QC value within limits for Sb 206.836 Recovery = 99.83%  
 QC value within limits for Se 196.026 Recovery = 99.89%  
 QC value within limits for Tl 190.801 Recovery = 98.37%  
 QC value within limits for V 292.402 Recovery = 103.28%  
 QC value within limits for Zn 206.200 Recovery = 108.60%  
 QC value within limits for Cd 226.502 Recovery = 105.81%  
 QC value within limits for Ti 334.940 Recovery = Not calculated  
 QC value within limits for Ca 227.546 Recovery = 99.65%  
 QC value within limits for Na 589.592 Recovery = 102.49%  
 QC value within limits for K 766.490 Recovery = 101.28%

All analyte(s) passed QC.

Sequence No.: 6  
 Sample ID: ICB  
 Analyst:  
 Logged In Analyst (Original) : mitOptima3  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 4  
 Date Collected: 6/21/2013 10:39:29 AM  
 Data Type: Reprocessed on 6/21/2013 2:04:54 PM  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1633488.6	95.965 %	0.0275			0.03%
Lu 261.542	1059288.0	95.89 %	0.184			0.19%
Ag 328.068†	0.4	0.00001 mg/L	0.001923	0.00001 mg/L	0.001923	>999.9%
Al 308.215†	1296.3	0.06933 mg/L	0.009021	0.06933 mg/L	0.009021	13.01%
As 188.979†	0.7	0.00068 mg/L	0.001216	0.00068 mg/L	0.001216	178.63%
Ba 233.527†	95.4	0.00116 mg/L	0.000414	0.00116 mg/L	0.000414	35.75%
Be 313.107†	46.6	0.00003 mg/L	0.000005	0.00003 mg/L	0.000005	20.59%
Co 228.616†	15.2	0.00050 mg/L	0.000054	0.00050 mg/L	0.000054	10.85%
Cr 267.716†	5.3	0.00009 mg/L	0.000174	0.00009 mg/L	0.000174	187.42%
Cu 324.752†	53.5	0.00026 mg/L	0.000609	0.00026 mg/L	0.000609	236.76%
Fe 273.955†	61.8	0.00294 mg/L	0.000279	0.00294 mg/L	0.000279	9.50%

QC value within limits for Ag 328.068 Recovery = Not calculated  
 QC value within limits for Al 308.215 Recovery = Not calculated  
 QC value within limits for As 188.979 Recovery = Not calculated  
 QC value within limits for Ba 233.527 Recovery = Not calculated  
 QC value within limits for Be 313.107 Recovery = Not calculated  
 QC value within limits for Co 228.616 Recovery = Not calculated  
 QC value within limits for Cr 267.716 Recovery = Not calculated  
 QC value within limits for Cu 324.752 Recovery = Not calculated  
 QC value within limits for Fe 273.955 Recovery = Not calculated

Mg 279.077†	391.6	0.02845 mg/L	0.003286	0.02845 mg/L	0.003286	11.55%
QC value within limits for Mg 279.077	Recovery = Not calculated					
Mn 257.610†	171.0	0.00034 mg/L	0.000110	0.00034 mg/L	0.000110	32.02%
QC value within limits for Mn 257.610	Recovery = Not calculated					
Ni 231.604†	9.6	0.00043 mg/L	0.000042	0.00043 mg/L	0.000042	9.92%
QC value within limits for Ni 231.604	Recovery = Not calculated					
Pb 220.353†	0.8	0.00018 mg/L	0.001506	0.00018 mg/L	0.001506	824.64%
QC value within limits for Pb 220.353	Recovery = Not calculated					
Sb 206.836†	2.9	0.00187 mg/L	0.003287	0.00187 mg/L	0.003287	175.40%
QC value within limits for Sb 206.836	Recovery = Not calculated					
Se 196.026†	0.4	0.00053 mg/L	0.000683	0.00053 mg/L	0.000683	129.46%
QC value within limits for Se 196.026	Recovery = Not calculated					
Tl 190.801†	-0.3	-0.00033 mg/L	0.005149	-0.00033 mg/L	0.005149	>999.9%
QC value within limits for Tl 190.801	Recovery = Not calculated					
V 292.402†	73.3	0.00073 mg/L	0.000376	0.00073 mg/L	0.000376	51.15%
QC value within limits for V 292.402	Recovery = Not calculated					
Zn 206.200†	54.4	0.00217 mg/L	0.000177	0.00217 mg/L	0.000177	8.14%
QC value within limits for Zn 206.200	Recovery = Not calculated					
Cd 226.502†	6.2	0.00015 mg/L	0.000097	0.00015 mg/L	0.000097	62.49%
QC value within limits for Cd 226.502	Recovery = Not calculated					
Ti 334.940†	216.1	0.00039 mg/L	0.000158	0.00039 mg/L	0.000158	40.75%
QC value within limits for Ti 334.940	Recovery = Not calculated					
Ca 227.546†	5.1	0.02927 mg/L	0.051342	0.02927 mg/L	0.051342	175.39%
QC value within limits for Ca 227.546	Recovery = Not calculated					
Na 589.592†	-579.2	-0.15415 mg/L	0.007738	-0.15415 mg/L	0.007738	5.02%
QC value within limits for Na 589.592	Recovery = Not calculated					
K 766.490†	67.8	0.05994 mg/L	0.037654	0.05994 mg/L	0.037654	62.82%
QC value within limits for K 766.490	Recovery = Not calculated					

All analyte(s) passed QC.

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Sequence No.: 7                               Autosampler Location: 2
Sample ID: LLICV                             Date Collected: 6/21/2013 10:43:08 AM
Analyst:                                       Data Type: Reprocessed on 6/21/2013 2:04:55 PM
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:                             Initial Sample Vol:
Dilution:                                     Sample Prep Vol:
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Mean Data: LLICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1623387.3	95.371 %	2.1279			2.23%
Lu 261.542	1064242.3	96.34 %	2.195			2.28%
Ag 328.068†	4533.5	0.03242 mg/L	0.000250	0.03242 mg/L	0.000250	0.77%
QC value within limits for Ag 328.068	Recovery = 108.08%					
Al 308.215†	4115.7	0.21989 mg/L	0.005977	0.21989 mg/L	0.005977	2.72%
QC value within limits for Al 308.215	Recovery = 109.94%					
As 188.979†	25.8	0.02422 mg/L	0.004127	0.02422 mg/L	0.004127	17.04%
QC value within limits for As 188.979	Recovery = 121.11%					
Ba 233.527†	18001.1	0.21857 mg/L	0.003785	0.21857 mg/L	0.003785	1.73%
QC value within limits for Ba 233.527	Recovery = 109.28%					
Be 313.107†	9465.5	0.00524 mg/L	0.000097	0.00524 mg/L	0.000097	1.86%
QC value within limits for Be 313.107	Recovery = 104.72%					
Co 228.616†	1695.3	0.05512 mg/L	0.002271	0.05512 mg/L	0.002271	4.12%
QC value within limits for Co 228.616	Recovery = 110.24%					
Cr 267.716†	1199.4	0.02108 mg/L	0.000843	0.02108 mg/L	0.000843	4.00%
QC value within limits for Cr 267.716	Recovery = 105.41%					
Cu 324.752†	6528.8	0.03137 mg/L	0.000550	0.03137 mg/L	0.000550	1.75%
QC value within limits for Cu 324.752	Recovery = 104.58%					
Fe 273.955†	4581.3	0.21840 mg/L	0.004591	0.21840 mg/L	0.004591	2.10%
QC value within limits for Fe 273.955	Recovery = 109.20%					
Mg 279.077†	7391.1	0.53692 mg/L	0.006061	0.53692 mg/L	0.006061	1.13%
QC value within limits for Mg 279.077	Recovery = 107.38%					
Mn 257.610†	27447.9	0.05521 mg/L	0.000898	0.05521 mg/L	0.000898	1.63%
QC value within limits for Mn 257.610	Recovery = 110.41%					
Ni 231.604†	1225.1	0.05434 mg/L	0.002193	0.05434 mg/L	0.002193	4.03%
QC value within limits for Ni 231.604	Recovery = 108.69%					
Pb 220.353†	52.5	0.01160 mg/L	0.001086	0.01160 mg/L	0.001086	9.37%
QC value within limits for Pb 220.353	Recovery = 115.99%					
Sb 206.836†	43.3	0.02767 mg/L	0.004216	0.02767 mg/L	0.004216	15.24%

QC value greater than the upper limit for Sb 206.836 Recovery = 138.33%

Se	196.026†	18.2	0.02475 mg/L	0.005268	0.02475 mg/L	0.005268	21.28%
Tl	190.801†	21.3	0.01980 mg/L	0.001457	0.01980 mg/L	0.001457	7.36%
V	292.402†	5181.7	0.05197 mg/L	0.000715	0.05197 mg/L	0.000715	1.38%
Zn	206.200†	1361.5	0.05445 mg/L	0.002622	0.05445 mg/L	0.002622	4.82%
Cd	226.502†	213.3	0.00536 mg/L	0.000132	0.00536 mg/L	0.000132	2.46%
Ti	334.940†	11193.9	0.02013 mg/L	0.000456	0.02013 mg/L	0.000456	2.27%
Ca	227.546†	138.0	0.78295 mg/L	0.102317	0.78295 mg/L	0.102317	13.07%
Na	589.592†	3047.7	0.81105 mg/L	0.014942	0.81105 mg/L	0.014942	1.84%
K	766.490†	1076.1	0.95088 mg/L	0.033740	0.95088 mg/L	0.033740	3.55%

QC value within limits for K 766.490 Recovery = 95.09%

QC Failed. Continue with analysis.

Sequence No.: 8  
 Sample ID: LLICV  
 Analyst:  
 Logged In Analyst (Original) : mitOptima3  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 2  
 Date Collected: 6/21/2013 10:47:04 AM  
 Data Type: Reprocessed on 6/21/2013 2:04:55 PM  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: LLICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD	
Y	360.073	1619945.0	95.169 %	4.4115		4.64%	
Lu	261.542	1061532.9	96.10 %	4.431		4.61%	
Ag	328.068†	4314.9	0.03086 mg/L	0.000446	0.03086 mg/L	0.000446	1.44%
Al	308.215†	3695.5	0.19743 mg/L	0.015935	0.19743 mg/L	0.015935	8.07%
As	188.979†	20.9	0.01967 mg/L	0.002281	0.01967 mg/L	0.002281	11.60%
Ba	233.527†	16769.4	0.20361 mg/L	0.004853	0.20361 mg/L	0.004853	2.38%
Be	313.107†	8926.0	0.00494 mg/L	0.000080	0.00494 mg/L	0.000080	1.62%
Co	228.616†	1668.6	0.05425 mg/L	0.001364	0.05425 mg/L	0.001364	2.51%
Cr	267.716†	1176.6	0.02068 mg/L	0.000664	0.02068 mg/L	0.000664	3.21%
Cu	324.752†	6047.2	0.02906 mg/L	0.000754	0.02906 mg/L	0.000754	2.59%
Fe	273.955†	4250.9	0.20266 mg/L	0.004893	0.20266 mg/L	0.004893	2.41%
Mg	279.077†	6944.0	0.50444 mg/L	0.009383	0.50444 mg/L	0.009383	1.86%
Mn	257.610†	25659.1	0.05161 mg/L	0.001241	0.05161 mg/L	0.001241	2.40%
Ni	231.604†	1203.8	0.05340 mg/L	0.001369	0.05340 mg/L	0.001369	2.56%
Pb	220.353†	45.2	0.00999 mg/L	0.001534	0.00999 mg/L	0.001534	15.36%
Sb	206.836†	35.2	0.02243 mg/L	0.002198	0.02243 mg/L	0.002198	9.80%
Se	196.026†	23.1	0.03139 mg/L	0.002034	0.03139 mg/L	0.002034	6.48%
Tl	190.801†	20.2	0.01876 mg/L	0.001627	0.01876 mg/L	0.001627	8.67%
V	292.402†	4862.0	0.04877 mg/L	0.001087	0.04877 mg/L	0.001087	2.23%
Zn	206.200†	1336.9	0.05347 mg/L	0.001668	0.05347 mg/L	0.001668	3.12%

QC value within limits for Zn 206.200 Recovery = 106.93%

Cd 226.502†	207.9	0.00523 mg/L	0.000170	0.00523 mg/L	0.000170	3.24%
QC value within limits for Cd 226.502 Recovery = 104.59%						
Ti 334.940†	10401.2	0.01870 mg/L	0.000456	0.01870 mg/L	0.000456	2.44%
QC value within limits for Ti 334.940 Recovery = 93.50%						
Ca 227.546†	139.6	0.79149 mg/L	0.030555	0.79149 mg/L	0.030555	3.86%
QC value within limits for Ca 227.546 Recovery = 98.94%						
Na 589.592†	3109.1	0.82739 mg/L	0.074486	0.82739 mg/L	0.074486	9.00%
QC value within limits for Na 589.592 Recovery = 82.74%						
K 766.490†	1142.8	1.0098 mg/L	0.13947	1.0098 mg/L	0.13947	13.81%
QC value within limits for K 766.490 Recovery = 100.98%						

All analyte(s) passed QC.

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Sequence No.: 9                               Autosampler Location: 5
Sample ID: ICSA                               Date Collected: 6/21/2013 10:50:41 AM
Analyst:                                       Data Type: Reprocessed on 6/21/2013 2:04:56 PM
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:                             Initial Sample Vol:
Dilution:                                     Sample Prep Vol:
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Mean Data: ICSEA

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1460629.2	85.809 %		1.3361			1.56%
Lu 261.542	948380.3	85.85 %		1.463			1.70%
Ag 328.068†	-31.8	0.00279 mg/L		0.001015	0.00279 mg/L	0.001015	36.43%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 308.215†	10464721.5	559.71 mg/L		19.791	559.71 mg/L	19.791	3.54%
QC value within limits for Al 308.215 Recovery = 111.94%							
As 188.979†	0.9	0.01110 mg/L		0.000957	0.01110 mg/L	0.000957	8.62%
QC value within limits for As 188.979 Recovery = Not calculated							
Ba 233.527†	241.6	0.00293 mg/L		0.000112	0.00293 mg/L	0.000112	3.81%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-263.5	-0.00015 mg/L		0.000057	-0.00015 mg/L	0.000057	38.13%
QC value within limits for Be 313.107 Recovery = Not calculated							
Co 228.616†	87.0	0.00284 mg/L		0.000105	0.00284 mg/L	0.000105	3.72%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	74.7	0.00131 mg/L		0.000278	0.00131 mg/L	0.000278	21.20%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-2487.5	0.00929 mg/L		0.000572	0.00929 mg/L	0.000572	6.15%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 273.955†	4232787.9	200.98 mg/L		4.281	200.98 mg/L	4.281	2.13%
QC value within limits for Fe 273.955 Recovery = 100.49%							
Mg 279.077†	7078911.8	514.24 mg/L		19.880	514.24 mg/L	19.880	3.87%
QC value within limits for Mg 279.077 Recovery = 102.85%							
Mn 257.610†	37.8	0.00008 mg/L		0.000151	0.00008 mg/L	0.000151	199.11%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Ni 231.604†	44.4	0.00198 mg/L		0.000378	0.00198 mg/L	0.000378	19.15%
QC value within limits for Ni 231.604 Recovery = Not calculated							
Pb 220.353†	-150.9	-0.00525 mg/L		0.002500	-0.00525 mg/L	0.002500	47.57%
QC value within limits for Pb 220.353 Recovery = Not calculated							
Sb 206.836†	81.2	0.01086 mg/L		0.009518	0.01086 mg/L	0.009518	87.68%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-53.0	0.00676 mg/L		0.005726	0.00676 mg/L	0.005726	84.69%
QC value within limits for Se 196.026 Recovery = Not calculated							
Tl 190.801†	-29.3	-0.00348 mg/L		0.001957	-0.00348 mg/L	0.001957	56.30%
QC value within limits for Tl 190.801 Recovery = Not calculated							
V 292.402†	-90.2	-0.00977 mg/L		0.000194	-0.00977 mg/L	0.000194	1.98%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 206.200†	392.5	0.00848 mg/L		0.000384	0.00848 mg/L	0.000384	4.52%
QC value within limits for Zn 206.200 Recovery = Not calculated							
Cd 226.502†	421.8	-0.00048 mg/L		0.000058	-0.00048 mg/L	0.000058	12.14%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Ti 334.940†	-1500.8	-0.00021 mg/L		0.000083	-0.00021 mg/L	0.000083	40.28%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Ca 227.546†	98130.9	568.74 mg/L		11.925	568.74 mg/L	11.925	2.10%
QC value within limits for Ca 227.546 Recovery = 113.75%							
Na 589.592†	1062.3	0.28269 mg/L		0.043003	0.28269 mg/L	0.043003	15.21%
QC value within limits for Na 589.592 Recovery = Not calculated							
K 766.490†	296.6	0.26206 mg/L		0.033568	0.26206 mg/L	0.033568	12.81%

QC value within limits for K 766.490 Recovery = Not calculated  
All analyte(s) passed QC.

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Sequence No.: 10                               Autosampler Location: 6
Sample ID: ICSAB                               Date Collected: 6/21/2013 10:54:27 AM
Analyst:                                       Data Type: Reprocessed on 6/21/2013 2:04:57 PM
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:                             Initial Sample Vol:
Dilution:                                     Sample Prep Vol:
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## Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1479701.6	86.930 %		0.4955			0.57%
Lu 261.542	960572.2	86.96 %		0.555			0.64%
Ag 328.068†	32272.1	0.23438 mg/L		0.005565	0.23438 mg/L	0.005565	2.37%
QC value within limits for Ag 328.068 Recovery = 117.19%							
Al 308.215†	10401939.9	556.35 mg/L		1.596	556.35 mg/L	1.596	0.29%
QC value within limits for Al 308.215 Recovery = 111.27%							
As 188.979†	102.6	0.10985 mg/L		0.002642	0.10985 mg/L	0.002642	2.41%
QC value within limits for As 188.979 Recovery = 109.85%							
Ba 233.527†	44812.0	0.54454 mg/L		0.018612	0.54454 mg/L	0.018612	3.42%
QC value within limits for Ba 233.527 Recovery = 108.91%							
Be 313.107†	945101.6	0.51898 mg/L		0.002342	0.51898 mg/L	0.002342	0.45%
QC value within limits for Be 313.107 Recovery = 103.80%							
Co 228.616†	14548.4	0.47328 mg/L		0.014754	0.47328 mg/L	0.014754	3.12%
QC value within limits for Co 228.616 Recovery = 94.66%							
Cr 267.716†	28157.9	0.49495 mg/L		0.014043	0.49495 mg/L	0.014043	2.84%
QC value within limits for Cr 267.716 Recovery = 98.99%							
Cu 324.752†	109797.7	0.54820 mg/L		0.016356	0.54820 mg/L	0.016356	2.98%
QC value within limits for Cu 324.752 Recovery = 109.64%							
Fe 273.955†	4195517.6	199.22 mg/L		0.508	199.22 mg/L	0.508	0.26%
QC value within limits for Fe 273.955 Recovery = 99.61%							
Mg 279.077†	7070966.9	513.66 mg/L		1.127	513.66 mg/L	1.127	0.22%
QC value within limits for Mg 279.077 Recovery = 102.73%							
Mn 257.610†	256744.7	0.51639 mg/L		0.016207	0.51639 mg/L	0.016207	3.14%
QC value within limits for Mn 257.610 Recovery = 103.28%							
Ni 231.604†	20891.1	0.92667 mg/L		0.027496	0.92667 mg/L	0.027496	2.97%
QC value within limits for Ni 231.604 Recovery = 92.67%							
Pb 220.353†	2008.2	0.47168 mg/L		0.013026	0.47168 mg/L	0.013026	2.76%
QC value within limits for Pb 220.353 Recovery = 94.34%							
Sb 206.836†	1092.2	0.65639 mg/L		0.018794	0.65639 mg/L	0.018794	2.86%
QC value within limits for Sb 206.836 Recovery = 109.40%							
Se 196.026†	311.9	0.50204 mg/L		0.024188	0.50204 mg/L	0.024188	4.82%
QC value within limits for Se 196.026 Recovery = 100.41%							
Tl 190.801†	67.8	0.08500 mg/L		0.001486	0.08500 mg/L	0.001486	1.75%
QC value within limits for Tl 190.801 Recovery = 85.00%							
V 292.402†	51802.6	0.51200 mg/L		0.016024	0.51200 mg/L	0.016024	3.13%
QC value within limits for V 292.402 Recovery = 102.40%							
Zn 206.200†	24034.9	0.95440 mg/L		0.030037	0.95440 mg/L	0.030037	3.15%
QC value within limits for Zn 206.200 Recovery = 95.44%							
Cd 226.502†	40950.3	1.0168 mg/L		0.03079	1.0168 mg/L	0.03079	3.03%
QC value within limits for Cd 226.502 Recovery = 101.68%							
Ti 334.940†	-1499.7	-0.00043 mg/L		0.000189	-0.00043 mg/L	0.000189	44.20%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Ca 227.546†	96326.5	558.20 mg/L		18.180	558.20 mg/L	18.180	3.26%
QC value within limits for Ca 227.546 Recovery = 111.64%							
Na 589.592†	101021.7	26.884 mg/L		0.1026	26.884 mg/L	0.1026	0.38%
QC value within limits for Na 589.592 Recovery = 107.54%							
K 766.490†	30415.5	26.876 mg/L		0.1355	26.876 mg/L	0.1355	0.50%
QC value within limits for K 766.490 Recovery = 107.50%							

All analyte(s) passed QC.

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=====
Sequence No.: 11                               Autosampler Location: 3
Sample ID: CCV                               Date Collected: 6/21/2013 10:58:09 AM
Analyst:                                       Data Type: Reprocessed on 6/21/2013 2:04:57 PM
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:                             Initial Sample Vol:
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Dilution:

Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1556044.5	91.415 %	3.6030			3.94%
Lu 261.542	1015995.6	91.97 %	3.663			3.98%
Ag 328.068†	183256.9	1.3125 mg/L	0.03949	1.3125 mg/L	0.03949	3.01%
	QC value within limits for Ag 328.068 Recovery = 105.00%					
Al 308.215†	205799.8	10.995 mg/L	0.2938	10.995 mg/L	0.2938	2.67%
	QC value within limits for Al 308.215 Recovery = 109.95%					
As 188.979†	544.0	0.51580 mg/L	0.012689	0.51580 mg/L	0.012689	2.46%
	QC value within limits for As 188.979 Recovery = 103.16%					
Ba 233.527†	866643.5	10.523 mg/L	0.0934	10.523 mg/L	0.0934	0.89%
	QC value within limits for Ba 233.527 Recovery = 105.23%					
Be 313.107†	461910.1	0.25467 mg/L	0.002314	0.25467 mg/L	0.002314	0.91%
	QC value within limits for Be 313.107 Recovery = 101.87%					
Co 228.616†	81425.0	2.6482 mg/L	0.08126	2.6482 mg/L	0.08126	3.07%
	QC value within limits for Co 228.616 Recovery = 105.93%					
Cr 267.716†	60899.4	1.0705 mg/L	0.03252	1.0705 mg/L	0.03252	3.04%
	QC value within limits for Cr 267.716 Recovery = 107.05%					
Cu 324.752†	264585.9	1.2712 mg/L	0.04042	1.2712 mg/L	0.04042	3.18%
	QC value within limits for Cu 324.752 Recovery = 101.70%					
Fe 273.955†	115423.0	5.5198 mg/L	0.14240	5.5198 mg/L	0.14240	2.58%
	QC value within limits for Fe 273.955 Recovery = 110.40%					
Mg 279.077†	361086.0	26.231 mg/L	0.7321	26.231 mg/L	0.7321	2.79%
	QC value within limits for Mg 279.077 Recovery = 104.92%					
Mn 257.610†	1289239.7	2.5931 mg/L	0.02489	2.5931 mg/L	0.02489	0.96%
	QC value within limits for Mn 257.610 Recovery = 103.72%					
Ni 231.604†	60203.9	2.6707 mg/L	0.07432	2.6707 mg/L	0.07432	2.78%
	QC value within limits for Ni 231.604 Recovery = 106.83%					
Pb 220.353†	2341.2	0.51732 mg/L	0.012620	0.51732 mg/L	0.012620	2.44%
	QC value within limits for Pb 220.353 Recovery = 103.46%					
Sb 206.836†	807.1	0.50841 mg/L	0.014074	0.50841 mg/L	0.014074	2.77%
	QC value within limits for Sb 206.836 Recovery = 101.68%					
Se 196.026†	368.1	0.50226 mg/L	0.005609	0.50226 mg/L	0.005609	1.12%
	QC value within limits for Se 196.026 Recovery = 100.45%					
Tl 190.801†	545.3	0.49983 mg/L	0.015903	0.49983 mg/L	0.015903	3.18%
	QC value within limits for Tl 190.801 Recovery = 99.97%					
V 292.402†	257059.7	2.5792 mg/L	0.07594	2.5792 mg/L	0.07594	2.94%
	QC value within limits for V 292.402 Recovery = 103.17%					
Zn 206.200†	68296.2	2.7314 mg/L	0.07812	2.7314 mg/L	0.07812	2.86%
	QC value within limits for Zn 206.200 Recovery = 109.25%					
Cd 226.502†	10603.2	0.26702 mg/L	0.007306	0.26702 mg/L	0.007306	2.74%
	QC value within limits for Cd 226.502 Recovery = 106.81%					
Ti 334.940†	283500.1	0.50960 mg/L	0.004420	0.50960 mg/L	0.004420	0.87%
	QC value within limits for Ti 334.940 Recovery = Not calculated					
Ca 227.546†	4508.8	25.280 mg/L	0.6260	25.280 mg/L	0.6260	2.48%
	QC value within limits for Ca 227.546 Recovery = 101.12%					
Na 589.592†	100972.3	26.871 mg/L	1.3405	26.871 mg/L	1.3405	4.99%
	QC value within limits for Na 589.592 Recovery = 107.48%					
K 766.490†	30046.7	26.550 mg/L	1.3621	26.550 mg/L	1.3621	5.13%
	QC value within limits for K 766.490 Recovery = 106.20%					

All analyte(s) passed QC.

Sequence No.: 12  
Sample ID: CCB  
Analyst:  
Logged In Analyst (Original) : mitOptima3  
Initial Sample Wt:  
Dilution:

Autosampler Location: 4  
Date Collected: 6/21/2013 11:01:50 AM  
Data Type: Reprocessed on 6/21/2013 2:04:58 PM  
Initial Sample Vol:  
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1631272.8	95.834 %	3.9952			4.17%
Lu 261.542	1070221.0	96.88 %	4.049			4.18%
Ag 328.068†	36.8	0.00026 mg/L	0.001777	0.00026 mg/L	0.001777	673.76%

Al	308.215†	453.9	0.02428 mg/L	0.013150	0.02428 mg/L	0.013150	54.17%
As	188.979†	1.8	0.00167 mg/L	0.002734	0.00167 mg/L	0.002734	163.90%
Ba	233.527†	56.8	0.00069 mg/L	0.000209	0.00069 mg/L	0.000209	30.33%
Be	313.107†	25.6	0.00001 mg/L	0.000041	0.00001 mg/L	0.000041	283.24%
Co	228.616†	7.8	0.00025 mg/L	0.000139	0.00025 mg/L	0.000139	54.45%
Cr	267.716†	2.6	0.00005 mg/L	0.000137	0.00005 mg/L	0.000137	300.55%
Cu	324.752†	302.8	0.00145 mg/L	0.000699	0.00145 mg/L	0.000699	48.06%
Fe	273.955†	29.6	0.00141 mg/L	0.001345	0.00141 mg/L	0.001345	95.22%
Mg	279.077†	71.7	0.00521 mg/L	0.003849	0.00521 mg/L	0.003849	73.90%
Mn	257.610†	133.0	0.00027 mg/L	0.000026	0.00027 mg/L	0.000026	9.65%
Ni	231.604†	7.1	0.00032 mg/L	0.000302	0.00032 mg/L	0.000302	95.30%
Pb	220.353†	6.5	0.00144 mg/L	0.001329	0.00144 mg/L	0.001329	92.02%
Sb	206.836†	8.6	0.00551 mg/L	0.001243	0.00551 mg/L	0.001243	22.58%
Se	196.026†	-1.2	-0.00166 mg/L	0.011214	-0.00166 mg/L	0.011214	674.22%
Tl	190.801†	-1.9	-0.00181 mg/L	0.001554	-0.00181 mg/L	0.001554	86.05%
V	292.402†	48.2	0.00048 mg/L	0.000024	0.00048 mg/L	0.000024	4.94%
Zn	206.200†	16.8	0.00067 mg/L	0.000467	0.00067 mg/L	0.000467	69.68%
Cd	226.502†	1.9	0.00005 mg/L	0.000197	0.00005 mg/L	0.000197	418.18%
Ti	334.940†	94.3	0.00017 mg/L	0.000179	0.00017 mg/L	0.000179	104.58%
Ca	227.546†	20.0	0.11406 mg/L	0.048682	0.11406 mg/L	0.048682	42.68%
Na	589.592†	-689.1	-0.18339 mg/L	0.023807	-0.18339 mg/L	0.023807	12.98%
K	766.490†	28.2	0.02489 mg/L	0.130919	0.02489 mg/L	0.130919	526.07%

All analyte(s) passed QC.

Sequence No.: 13  
 Sample ID: MB-72322-PBS  
 Analyst:  
 Logged In Analyst (Original) : mitOptima3  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 38  
 Date Collected: 6/21/2013 11:05:29 AM  
 Data Type: Reprocessed on 6/21/2013 2:04:59 PM  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: MB-72322-PBS

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1590215.6	93.422 %	%	3.6896			3.95%
Lu 261.542	1048482.9	94.91 %	%	3.772			3.97%
Ag 328.068†	401.5	0.00285 mg/L	mg/L	0.000937	0.00285 mg/L	0.000937	32.84%
Al 308.215†	454.6	0.02431 mg/L	mg/L	0.010592	0.02431 mg/L	0.010592	43.57%
As 188.979†	1.1	0.00098 mg/L	mg/L	0.000972	0.00098 mg/L	0.000972	98.96%
Ba 233.527†	2.7	0.00003 mg/L	mg/L	0.000106	0.00003 mg/L	0.000106	320.00%
Be 313.107†	-13.0	-0.00001 mg/L	mg/L	0.000031	-0.00001 mg/L	0.000031	490.04%
Co 228.616†	4.2	0.00014 mg/L	mg/L	0.000413	0.00014 mg/L	0.000413	301.67%
Cr 267.716†	21.4	0.00038 mg/L	mg/L	0.000094	0.00038 mg/L	0.000094	24.96%
Cu 324.752†	432.7	0.00208 mg/L	mg/L	0.000751	0.00208 mg/L	0.000751	36.11%
Fe 273.955†	424.9	0.02019 mg/L	mg/L	0.000762	0.02019 mg/L	0.000762	3.78%
Mg 279.077†	36.6	0.00266 mg/L	mg/L	0.003563	0.00266 mg/L	0.003563	134.09%

Mn 257.610†	207.9	0.00042	mg/L	0.000025	0.00042	mg/L	0.000025	5.93%
Ni 231.604†	-7.8	-0.00035	mg/L	0.000362	-0.00035	mg/L	0.000362	104.79%
Pb 220.353†	2.5	0.00056	mg/L	0.001020	0.00056	mg/L	0.001020	181.33%
Sb 206.836†	11.4	0.00736	mg/L	0.002448	0.00736	mg/L	0.002448	33.28%
Se 196.026†	-0.2	-0.00021	mg/L	0.003353	-0.00021	mg/L	0.003353	>999.9%
Tl 190.801†	-1.6	-0.00151	mg/L	0.001844	-0.00151	mg/L	0.001844	121.88%
V 292.402†	37.0	0.00037	mg/L	0.000304	0.00037	mg/L	0.000304	81.90%
Zn 206.200†	31.5	0.00126	mg/L	0.000206	0.00126	mg/L	0.000206	16.39%
Cd 226.502†	-6.3	-0.00016	mg/L	0.000130	-0.00016	mg/L	0.000130	81.36%
Ti 334.940†	216.4	0.00039	mg/L	0.000072	0.00039	mg/L	0.000072	18.53%
Ca 227.546†	7.8	0.04524	mg/L	0.078740	0.04524	mg/L	0.078740	174.05%
Na 589.592†	-892.7	-0.23756	mg/L	0.005815	-0.23756	mg/L	0.005815	2.45%
K 766.490†	-29.4	-0.02594	mg/L	0.049361	-0.02594	mg/L	0.049361	190.28%

Sequence No.: 14

Sample ID: LCS-72322-LCS

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 39

Date Collected: 6/21/2013 11:09:07 AM

Data Type: Reprocessed on 6/21/2013 2:05:00 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LCS-72322-LCS

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1562764.9	91.810	%	4.4177				4.81%
Lu 261.542	1031956.0	93.42	%	4.544				4.86%
Ag 328.068†	159766.2	1.1444	mg/L	0.01189	1.1444	mg/L	0.01189	1.04%
Al 308.215†	173360.8	9.2618	mg/L	0.12055	9.2618	mg/L	0.12055	1.30%
As 188.979†	480.1	0.45518	mg/L	0.019767	0.45518	mg/L	0.019767	4.34%
Ba 233.527†	771360.0	9.3657	mg/L	0.11671	9.3657	mg/L	0.11671	1.25%
Be 313.107†	408689.7	0.22452	mg/L	0.003575	0.22452	mg/L	0.003575	1.59%
Co 228.616†	72334.3	2.3535	mg/L	0.03179	2.3535	mg/L	0.03179	1.35%
Cr 267.716†	53592.5	0.94205	mg/L	0.014657	0.94205	mg/L	0.014657	1.56%
Cu 324.752†	234221.0	1.1253	mg/L	0.01544	1.1253	mg/L	0.01544	1.37%
Fe 273.955†	102558.1	4.9033	mg/L	0.06840	4.9033	mg/L	0.06840	1.39%
Mg 279.077†	322420.7	23.422	mg/L	0.3391	23.422	mg/L	0.3391	1.45%
Mn 257.610†	1146106.4	2.3052	mg/L	0.02957	2.3052	mg/L	0.02957	1.28%
Ni 231.604†	53040.4	2.3529	mg/L	0.02960	2.3529	mg/L	0.02960	1.26%
Pb 220.353†	2097.3	0.46314	mg/L	0.022142	0.46314	mg/L	0.022142	4.78%
Sb 206.836†	753.3	0.47476	mg/L	0.019638	0.47476	mg/L	0.019638	4.14%
Se 196.026†	315.5	0.43055	mg/L	0.014282	0.43055	mg/L	0.014282	3.32%
Tl 190.801†	477.7	0.43805	mg/L	0.019787	0.43805	mg/L	0.019787	4.52%
V 292.402†	226577.3	2.2739	mg/L	0.03186	2.2739	mg/L	0.03186	1.40%
Zn 206.200†	58277.3	2.3307	mg/L	0.03354	2.3307	mg/L	0.03354	1.44%
Cd 226.502†	9274.3	0.23366	mg/L	0.003227	0.23366	mg/L	0.003227	1.38%
Ti 334.940†	677.9	0.00109	mg/L	0.000068	0.00109	mg/L	0.000068	6.28%
Ca 227.546†	3930.7	22.032	mg/L	1.0920	22.032	mg/L	1.0920	4.96%
Na 589.592†	84074.6	22.374	mg/L	1.3898	22.374	mg/L	1.3898	6.21%
K 766.490†	25208.6	22.275	mg/L	1.4707	22.275	mg/L	1.4707	6.60%

Sequence No.: 15

Sample ID: M0967-01A-RS-BF-A79-0613

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 40

Date Collected: 6/21/2013 11:12:41 AM

Data Type: Reprocessed on 6/21/2013 2:05:00 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: M0967-01A-RS-BF-A79-0613

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1609008.0	94.526	%	0.6880				0.73%
Lu 261.542	1043854.7	94.50	%	0.667				0.71%
Ag 328.068†	196.3	0.00189	mg/L	0.001289	0.00189	mg/L	0.001289	68.07%
Al 308.215†	366410.7	19.597	mg/L	0.1723	19.597	mg/L	0.1723	0.88%
As 188.979†	9.7	0.01014	mg/L	0.002569	0.01014	mg/L	0.002569	25.35%
Ba 233.527†	5892.1	0.07163	mg/L	0.004589	0.07163	mg/L	0.004589	6.41%
Be 313.107†	-9856.5	0.00061	mg/L	0.000094	0.00061	mg/L	0.000094	15.39%



Co	228.616†	289.5	0.00256 mg/L	0.000538	0.00256 mg/L	0.000538	21.02%
Cr	267.716†	4111.9	0.07228 mg/L	0.002019	0.07228 mg/L	0.002019	2.79%
Cu	324.752†	1535.6	0.00822 mg/L	0.000713	0.00822 mg/L	0.000713	8.67%
Fe	273.955†	164615.1	7.8266 mg/L	0.05687	7.8266 mg/L	0.05687	0.73%
Mg	279.077†	3041.5	0.22095 mg/L	0.009401	0.22095 mg/L	0.009401	4.25%
Mn	257.610†	40904.4	0.08227 mg/L	0.002973	0.08227 mg/L	0.002973	3.61%
Ni	231.604†	173.5	0.00770 mg/L	0.000466	0.00770 mg/L	0.000466	6.05%
Pb	220.353†	297.2	0.06864 mg/L	0.001369	0.06864 mg/L	0.001369	2.00%
Sb	206.836†	11.8	0.00812 mg/L	0.001267	0.00812 mg/L	0.001267	15.60%
Se	196.026†	-2.7	-0.00026 mg/L	0.008997	-0.00026 mg/L	0.008997	>999.9%
Tl	190.801†	-2.6	-0.00489 mg/L	0.003027	-0.00489 mg/L	0.003027	61.95%
V	292.402†	9518.3	0.09165 mg/L	0.002883	0.09165 mg/L	0.002883	3.15%
Zn	206.200†	243.8	0.00967 mg/L	0.000901	0.00967 mg/L	0.000901	9.32%
Cd	226.502†	14.3	-0.00080 mg/L	0.000009	-0.00080 mg/L	0.000009	1.18%
Ti	334.940†	1865640.1	3.3544 mg/L	0.02470	3.3544 mg/L	0.02470	0.74%
Ca	227.546†	-11.9	0.21831 mg/L	0.026780	0.21831 mg/L	0.026780	12.27%
Na	589.592†	-810.1	-0.21557 mg/L	0.014908	-0.21557 mg/L	0.014908	6.92%
K	766.490†	1757.9	1.5533 mg/L	0.03254	1.5533 mg/L	0.03254	2.09%

Sequence No.: 16  
Sample ID: M0967-02A-RS-BF-A81-0613  
Analyst:  
Logged In Analyst (Original) : mitOptima3  
Initial Sample Wt:  
Dilution:

Autosampler Location: 41  
Date Collected: 6/21/2013 11:16:21 AM  
Data Type: Reprocessed on 6/21/2013 2:05:01 PM  
Initial Sample Vol:  
Sample Prep Vol:

Mean Data: M0967-02A-RS-BF-A81-0613

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y	360.073	1635270.1	96.069 %	6.0740				6.32%
Lu	261.542	1058685.3	95.84 %	6.166				6.43%
Ag	328.068†	170.2	0.00166 mg/L	0.001255	0.00166 mg/L	0.001255	75.80%	
Al	308.215†	353558.5	18.910 mg/L	0.1531	18.910 mg/L	0.1531	0.81%	
As	188.979†	9.3	0.00949 mg/L	0.004541	0.00949 mg/L	0.004541	47.85%	
Ba	233.527†	5034.1	0.06121 mg/L	0.003200	0.06121 mg/L	0.003200	5.23%	
Be	313.107†	-10436.7	0.00061 mg/L	0.000356	0.00061 mg/L	0.000356	58.40%	
Co	228.616†	272.8	0.00166 mg/L	0.000571	0.00166 mg/L	0.000571	34.47%	
Cr	267.716†	3610.2	0.06346 mg/L	0.002449	0.06346 mg/L	0.002449	3.86%	
Cu	324.752†	1234.5	0.00660 mg/L	0.001313	0.00660 mg/L	0.001313	19.89%	
Fe	273.955†	131180.1	6.2385 mg/L	0.32000	6.2385 mg/L	0.32000	5.13%	
Mg	279.077†	3006.5	0.21840 mg/L	0.002756	0.21840 mg/L	0.002756	1.26%	
Mn	257.610†	39455.9	0.07936 mg/L	0.004140	0.07936 mg/L	0.004140	5.22%	
Ni	231.604†	125.5	0.00557 mg/L	0.000401	0.00557 mg/L	0.000401	7.19%	
Pb	220.353†	267.2	0.06213 mg/L	0.004745	0.06213 mg/L	0.004745	7.64%	
Sb	206.836†	3.9	0.00342 mg/L	0.004868	0.00342 mg/L	0.004868	142.22%	
Se	196.026†	-2.0	0.00019 mg/L	0.001152	0.00019 mg/L	0.001152	595.28%	
Tl	190.801†	-1.4	-0.00405 mg/L	0.002068	-0.00405 mg/L	0.002068	51.08%	
V	292.402†	8806.2	0.08437 mg/L	0.004514	0.08437 mg/L	0.004514	5.35%	
Zn	206.200†	202.8	0.00801 mg/L	0.000702	0.00801 mg/L	0.000702	8.76%	
Cd	226.502†	6.6	-0.00094 mg/L	0.000243	-0.00094 mg/L	0.000243	25.71%	
Ti	334.940†	1963369.0	3.5301 mg/L	0.02865	3.5301 mg/L	0.02865	0.81%	
Ca	227.546†	-5.2	0.19782 mg/L	0.073089	0.19782 mg/L	0.073089	36.95%	
Na	589.592†	-906.6	-0.24128 mg/L	0.010653	-0.24128 mg/L	0.010653	4.42%	
K	766.490†	1627.8	1.4384 mg/L	0.19705	1.4384 mg/L	0.19705	13.70%	

Sequence No.: 17  
Sample ID: CCV  
Analyst:  
Logged In Analyst (Original) : mitOptima3  
Initial Sample Wt:  
Dilution:

Autosampler Location: 3  
Date Collected: 6/21/2013 11:20:00 AM  
Data Type: Reprocessed on 6/21/2013 2:05:02 PM  
Initial Sample Vol:  
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y	360.073	1597502.0	93.850 %	3.6548				3.89%
Lu	261.542	1043938.1	94.50 %	3.704				3.92%

Ag	328.068†	181733.3	1.3016 mg/L	0.05961	1.3016 mg/L	0.05961	4.58%
	QC value within limits for Ag	328.068	Recovery =	104.13%			
Al	308.215†	200773.4	10.727 mg/L	0.5164	10.727 mg/L	0.5164	4.81%
	QC value within limits for Al	308.215	Recovery =	107.27%			
As	188.979†	538.1	0.51021 mg/L	0.030799	0.51021 mg/L	0.030799	6.04%
	QC value within limits for As	188.979	Recovery =	102.04%			
Ba	233.527†	858325.9	10.422 mg/L	0.0364	10.422 mg/L	0.0364	0.35%
	QC value within limits for Ba	233.527	Recovery =	104.22%			
Be	313.107†	455395.5	0.25109 mg/L	0.000544	0.25109 mg/L	0.000544	0.22%
	QC value within limits for Be	313.107	Recovery =	100.43%			
Co	228.616†	80586.6	2.6209 mg/L	0.12542	2.6209 mg/L	0.12542	4.79%
	QC value within limits for Co	228.616	Recovery =	104.84%			
Cr	267.716†	60521.5	1.0639 mg/L	0.05099	1.0639 mg/L	0.05099	4.79%
	QC value within limits for Cr	267.716	Recovery =	106.39%			
Cu	324.752†	261939.1	1.2585 mg/L	0.05871	1.2585 mg/L	0.05871	4.67%
	QC value within limits for Cu	324.752	Recovery =	100.68%			
Fe	273.955†	113195.1	5.4138 mg/L	0.26132	5.4138 mg/L	0.26132	4.83%
	QC value within limits for Fe	273.955	Recovery =	108.28%			
Mg	279.077†	355443.9	25.821 mg/L	1.2988	25.821 mg/L	1.2988	5.03%
	QC value within limits for Mg	279.077	Recovery =	103.28%			
Mn	257.610†	1272372.8	2.5591 mg/L	0.00920	2.5591 mg/L	0.00920	0.36%
	QC value within limits for Mn	257.610	Recovery =	102.37%			
Ni	231.604†	59626.3	2.6451 mg/L	0.12816	2.6451 mg/L	0.12816	4.85%
	QC value within limits for Ni	231.604	Recovery =	105.80%			
Pb	220.353†	2336.9	0.51636 mg/L	0.030375	0.51636 mg/L	0.030375	5.88%
	QC value within limits for Pb	220.353	Recovery =	103.27%			
Sb	206.836†	809.5	0.51002 mg/L	0.028616	0.51002 mg/L	0.028616	5.61%
	QC value within limits for Sb	206.836	Recovery =	102.00%			
Se	196.026†	368.2	0.50246 mg/L	0.028844	0.50246 mg/L	0.028844	5.74%
	QC value within limits for Se	196.026	Recovery =	100.49%			
Tl	190.801†	543.1	0.49780 mg/L	0.029052	0.49780 mg/L	0.029052	5.84%
	QC value within limits for Tl	190.801	Recovery =	99.56%			
V	292.402†	255624.6	2.5649 mg/L	0.12487	2.5649 mg/L	0.12487	4.87%
	QC value within limits for V	292.402	Recovery =	102.59%			
Zn	206.200†	67428.7	2.6967 mg/L	0.13619	2.6967 mg/L	0.13619	5.05%
	QC value within limits for Zn	206.200	Recovery =	107.87%			
Cd	226.502†	10462.7	0.26349 mg/L	0.013440	0.26349 mg/L	0.013440	5.10%
	QC value within limits for Cd	226.502	Recovery =	105.40%			
Ti	334.940†	282236.8	0.50733 mg/L	0.000300	0.50733 mg/L	0.000300	0.06%
	QC value within limits for Ti	334.940	Recovery =	Not calculated			
Ca	227.546†	4470.6	25.064 mg/L	1.5037	25.064 mg/L	1.5037	6.00%
	QC value within limits for Ca	227.546	Recovery =	100.26%			
Na	589.592†	92859.5	24.712 mg/L	0.7271	24.712 mg/L	0.7271	2.94%
	QC value within limits for Na	589.592	Recovery =	98.85%			
K	766.490†	27714.6	24.490 mg/L	0.7291	24.490 mg/L	0.7291	2.98%
	QC value within limits for K	766.490	Recovery =	97.96%			

All analyte(s) passed QC.

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Sequence No.: 18                               Autosampler Location: 4
Sample ID: CCB                                 Date Collected: 6/21/2013 11:23:41 AM
Analyst:                                       Data Type: Reprocessed on 6/21/2013 2:05:03 PM
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:                             Initial Sample Vol:
Dilution:                                     Sample Prep Vol:
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Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Y 360.073	1634600.7	96.030 %		2.4990				2.60%
Lu 261.542	1071898.5	97.03 %		2.513				2.59%
Ag 328.068†	54.4	0.00039 mg/L		0.000900	0.00039 mg/L		0.000900	231.64%
	QC value within limits for Ag	328.068	Recovery =	Not calculated				
Al 308.215†	305.0	0.01631 mg/L		0.007424	0.01631 mg/L		0.007424	45.51%
	QC value within limits for Al	308.215	Recovery =	Not calculated				
As 188.979†	2.1	0.00195 mg/L		0.000543	0.00195 mg/L		0.000543	27.84%
	QC value within limits for As	188.979	Recovery =	Not calculated				
Ba 233.527†	103.9	0.00126 mg/L		0.000872	0.00126 mg/L		0.000872	69.10%
	QC value within limits for Ba	233.527	Recovery =	Not calculated				
Be 313.107†	91.8	0.00005 mg/L		0.000055	0.00005 mg/L		0.000055	106.92%

Co	228.616†	14.2	0.00046 mg/L	0.000243	0.00046 mg/L	0.000243	52.64%
Cr	267.716†	3.4	0.00006 mg/L	0.000391	0.00006 mg/L	0.000391	647.06%
Cu	324.752†	257.0	0.00123 mg/L	0.000993	0.00123 mg/L	0.000993	80.51%
Fe	273.955†	15.6	0.00075 mg/L	0.000814	0.00075 mg/L	0.000814	108.85%
Mg	279.077†	85.1	0.00618 mg/L	0.003009	0.00618 mg/L	0.003009	48.68%
Mn	257.610†	323.2	0.00065 mg/L	0.000324	0.00065 mg/L	0.000324	49.81%
Ni	231.604†	11.0	0.00049 mg/L	0.000308	0.00049 mg/L	0.000308	62.93%
Pb	220.353†	-0.5	-0.00011 mg/L	0.001183	-0.00011 mg/L	0.001183	>999.9%
Sb	206.836†	3.4	0.00219 mg/L	0.001294	0.00219 mg/L	0.001294	59.24%
Se	196.026†	0.4	0.00049 mg/L	0.004646	0.00049 mg/L	0.004646	951.97%
Tl	190.801†	-2.8	-0.00268 mg/L	0.000918	-0.00268 mg/L	0.000918	34.27%
V	292.402†	52.0	0.00052 mg/L	0.000361	0.00052 mg/L	0.000361	69.33%
Zn	206.200†	18.6	0.00074 mg/L	0.000442	0.00074 mg/L	0.000442	59.54%
Cd	226.502†	4.8	0.00012 mg/L	0.000097	0.00012 mg/L	0.000097	80.28%
Ti	334.940†	217.2	0.00039 mg/L	0.000095	0.00039 mg/L	0.000095	24.21%
Ca	227.546†	1.3	0.00734 mg/L	0.063306	0.00734 mg/L	0.063306	862.84%
Na	589.592†	-935.1	-0.24885 mg/L	0.006404	-0.24885 mg/L	0.006404	2.57%
K	766.490†	-12.1	-0.01068 mg/L	0.068700	-0.01068 mg/L	0.068700	643.04%

QC value within limits for Be 313.107 Recovery = Not calculated  
 QC value within limits for Co 228.616 Recovery = Not calculated  
 QC value within limits for Cr 267.716 Recovery = Not calculated  
 QC value within limits for Cu 324.752 Recovery = Not calculated  
 QC value within limits for Fe 273.955 Recovery = Not calculated  
 QC value within limits for Mg 279.077 Recovery = Not calculated  
 QC value within limits for Mn 257.610 Recovery = Not calculated  
 QC value within limits for Ni 231.604 Recovery = Not calculated  
 QC value within limits for Pb 220.353 Recovery = Not calculated  
 QC value within limits for Sb 206.836 Recovery = Not calculated  
 QC value within limits for Se 196.026 Recovery = Not calculated  
 QC value within limits for Tl 190.801 Recovery = Not calculated  
 QC value within limits for V 292.402 Recovery = Not calculated  
 QC value within limits for Zn 206.200 Recovery = Not calculated  
 QC value within limits for Cd 226.502 Recovery = Not calculated  
 QC value within limits for Ti 334.940 Recovery = Not calculated  
 QC value within limits for Ca 227.546 Recovery = Not calculated  
 QC value within limits for Na 589.592 Recovery = Not calculated  
 QC value within limits for K 766.490 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 19  
 Sample ID: M0975-04A-COMP-A-061313  
 Analyst:  
 Logged In Analyst (Original) : mitOptima3  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 42  
 Date Collected: 6/21/2013 11:27:20 AM  
 Data Type: Reprocessed on 6/21/2013 2:05:03 PM  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: M0975-04A-COMP-A-061313

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 360.073	1599028.5	93.940	%	1.7724			1.89%
Lu 261.542	960483.3	86.95	%	1.022			1.18%
Ag 328.068†	-963.0	0.00267	mg/L	0.000676	0.00267 mg/L	0.000676	25.33%
Al 308.215†	6305521.2	337.25	mg/L	4.551	337.25 mg/L	4.551	1.35%
As 188.979†	252.2	0.28879	mg/L	0.011465	0.28879 mg/L	0.011465	3.97%
Ba 233.527†	354022.1	4.2977	mg/L	0.06832	4.2977 mg/L	0.06832	1.59%
Be 313.107†	26180.4	0.01559	mg/L	0.000301	0.01559 mg/L	0.000301	1.93%
Co 228.616†	8315.6	0.26916	mg/L	0.006408	0.26916 mg/L	0.006408	2.38%
Cr 267.716†	21488.1	0.37153	mg/L	0.009154	0.37153 mg/L	0.009154	2.46%
Cu 324.752†	52170.6	0.30623	mg/L	0.004657	0.30623 mg/L	0.004657	1.52%
Fe 273.955†	11108368.7	527.69	mg/L	6.911	527.69 mg/L	6.911	1.31%
Concentration greater than upper limit for Fe 273.955.							
Mg 279.077†	970836.9	70.525	mg/L	1.1802	70.525 mg/L	1.1802	1.67%
Mn 257.610†	7787405.8	15.663	mg/L	0.2062	15.663 mg/L	0.2062	1.32%
Ni 231.604†	10768.5	0.47768	mg/L	0.011986	0.47768 mg/L	0.011986	2.51%
Pb 220.353†	1557.4	0.34293	mg/L	0.010313	0.34293 mg/L	0.010313	3.01%
Sb 206.836†	89.8	0.00461	mg/L	0.004376	0.00461 mg/L	0.004376	94.91%
Se 196.026†	-119.3	0.01603	mg/L	0.006084	0.01603 mg/L	0.006084	37.96%
Tl 190.801†	-30.1	0.00242	mg/L	0.000358	0.00242 mg/L	0.000358	14.83%
V 292.402†	39806.3	0.37617	mg/L	0.006486	0.37617 mg/L	0.006486	1.72%

Zn 206.200†	38970.7	1.5537 mg/L	0.02874	1.5537 mg/L	0.02874	1.85%
Cd 226.502†	1150.8	-0.00004 mg/L	0.000791	-0.00004 mg/L	0.000791	>999.9%
Ti 334.940†	371110.7	0.66559 mg/L	0.012631	0.66559 mg/L	0.012631	1.90%
Ca 227.546†	4730.5	46.819 mg/L	0.8964	46.819 mg/L	0.8964	1.91%
Na 589.592†	921.0	0.24509 mg/L	0.056642	0.24509 mg/L	0.056642	23.11%
K 766.490†	26546.6	23.458 mg/L	1.3962	23.458 mg/L	1.3962	5.95%

Sequence No.: 20  
Sample ID: M0975-07A-COMP-B-061313  
Analyst:  
Logged In Analyst (Original) : mitOptima3  
Initial Sample Wt:  
Dilution:

Autosampler Location: 43  
Date Collected: 6/21/2013 11:31:07 AM  
Data Type: Reprocessed on 6/21/2013 2:05:04 PM

Initial Sample Vol:  
Sample Prep Vol:

Mean Data: M0975-07A-COMP-B-061313

Analyte	Mean Corrected		Calib. Units	Std.Dev.	Sample		RSD
	Intensity	Conc.			Conc.	Units	
Y 360.073	1662321.8	97.659	%	0.1369			0.14%
Lu 261.542	962650.6	87.14	%	0.571			0.66%
Ag 328.068†	-1408.7	0.00322	mg/L	0.000344	0.00322	mg/L	10.68%
Al 308.215†	8433285.6	451.06	mg/L	2.162	451.06	mg/L	0.48%
As 188.979†	341.1	0.39351	mg/L	0.008061	0.39351	mg/L	2.05%
Ba 233.527†	540806.5	6.5652	mg/L	0.04524	6.5652	mg/L	0.69%
Be 313.107†	36104.4	0.02110	mg/L	0.000195	0.02110	mg/L	0.92%
Co 228.616†	11673.5	0.37833	mg/L	0.007614	0.37833	mg/L	2.01%
Cr 267.716†	28340.0	0.48976	mg/L	0.010159	0.48976	mg/L	2.07%
Cu 324.752†	81553.8	0.46971	mg/L	0.003516	0.46971	mg/L	0.75%
Fe 273.955†	1557588.9	739.90	mg/L	3.457	739.90	mg/L	0.47%
Concentration greater than upper limit for Fe 273.955.							
Mg 279.077†	1369965.7	99.519	mg/L	0.7092	99.519	mg/L	0.71%
Mn 257.610†	10568043.9	21.256	mg/L	0.0909	21.256	mg/L	0.43%
Ni 231.604†	16092.7	0.71385	mg/L	0.013700	0.71385	mg/L	1.92%
Pb 220.353†	2115.2	0.46421	mg/L	0.009836	0.46421	mg/L	2.12%
Sb 206.836†	116.1	0.00145	mg/L	0.004541	0.00145	mg/L	313.28%
Se 196.026†	-178.5	0.00662	mg/L	0.007293	0.00662	mg/L	110.15%
Tl 190.801†	-43.5	0.00241	mg/L	0.002217	0.00241	mg/L	91.90%
V 292.402†	53206.6	0.50147	mg/L	0.004580	0.50147	mg/L	0.91%
Zn 206.200†	52459.7	2.0915	mg/L	0.01707	2.0915	mg/L	0.82%
Cd 226.502†	1720.1	0.00269	mg/L	0.001307	0.00269	mg/L	48.60%
Ti 334.940†	387142.9	0.69380	mg/L	0.008801	0.69380	mg/L	1.27%
Ca 227.546†	5379.8	58.481	mg/L	0.9086	58.481	mg/L	1.55%
Na 589.592†	1402.7	0.37330	mg/L	0.043472	0.37330	mg/L	11.65%
K 766.490†	31198.6	27.568	mg/L	0.4447	27.568	mg/L	1.61%

Sequence No.: 21  
Sample ID: M0975-11A-COMP-C-061313  
Analyst:  
Logged In Analyst (Original) : mitOptima3  
Initial Sample Wt:  
Dilution:

Autosampler Location: 44  
Date Collected: 6/21/2013 11:35:00 AM  
Data Type: Reprocessed on 6/21/2013 2:05:05 PM

Initial Sample Vol:  
Sample Prep Vol:

Mean Data: M0975-11A-COMP-C-061313

Analyte	Mean Corrected		Calib. Units	Std.Dev.	Sample		RSD
	Intensity	Conc.			Conc.	Units	
Y 360.073	1663752.2	97.743	%	5.2491			5.37%
Lu 261.542	994940.4	90.07	%	2.586			2.87%
Ag 328.068†	-890.6	0.00440	mg/L	0.000941	0.00440	mg/L	21.40%
Al 308.215†	6788505.9	363.09	mg/L	1.602	363.09	mg/L	0.44%
As 188.979†	322.6	0.36169	mg/L	0.014760	0.36169	mg/L	4.08%
Ba 233.527†	503507.6	6.1123	mg/L	0.14143	6.1123	mg/L	2.31%
Be 313.107†	29199.7	0.01731	mg/L	0.000442	0.01731	mg/L	2.55%
Co 228.616†	9363.9	0.30320	mg/L	0.009065	0.30320	mg/L	2.99%
Cr 267.716†	22978.2	0.39354	mg/L	0.012345	0.39354	mg/L	3.14%
Cu 324.752†	70479.8	0.40151	mg/L	0.005101	0.40151	mg/L	1.27%
Fe 273.955†	12581558.4	597.67	mg/L	3.327	597.67	mg/L	0.56%
Concentration greater than upper limit for Fe 273.955.							
Mg 279.077†	1088135.6	79.046	mg/L	2.1365	79.046	mg/L	2.70%

Mn 257.610†	12930113.8	26.007 mg/L	0.1400	26.007 mg/L	0.1400	0.54%
Concentration greater than upper limit for Mn 257.610.						
Ni 231.604†	12204.0	0.54136 mg/L	0.016375	0.54136 mg/L	0.016375	3.02%
Pb 220.353†	2303.7	0.50529 mg/L	0.016158	0.50529 mg/L	0.016158	3.20%
Sb 206.836†	93.0	0.00084 mg/L	0.004036	0.00084 mg/L	0.004036	480.49%
Se 196.026†	-130.6	0.02008 mg/L	0.010904	0.02008 mg/L	0.010904	54.29%
Tl 190.801†	-27.8	0.00634 mg/L	0.003298	0.00634 mg/L	0.003298	51.99%
V 292.402†	43889.0	0.41406 mg/L	0.009551	0.41406 mg/L	0.009551	2.31%
Zn 206.200†	47700.7	1.9023 mg/L	0.04829	1.9023 mg/L	0.04829	2.54%
Cd 226.502†	1445.3	0.00352 mg/L	0.001250	0.00352 mg/L	0.001250	35.48%
Ti 334.940†	388701.9	0.69715 mg/L	0.012609	0.69715 mg/L	0.012609	1.81%
Ca 227.546†	6108.5	57.322 mg/L	1.2321	57.322 mg/L	1.2321	2.15%
Na 589.592†	1079.8	0.28736 mg/L	0.052020	0.28736 mg/L	0.052020	18.10%
K 766.490†	31147.9	27.523 mg/L	2.5305	27.523 mg/L	2.5305	9.19%

Sequence No.: 22 Autosampler Location: 45  
Sample ID: M0975-14A-COMP-D-061313 Date Collected: 6/21/2013 11:38:47 AM  
Analyst: Data Type: Reprocessed on 6/21/2013 2:05:05 PM  
Logged In Analyst (Original) : mitOptima3  
Initial Sample Wt: Initial Sample Vol:  
Dilution: Sample Prep Vol:

Mean Data: M0975-14A-COMP-D-061313

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1659337.9	97.483	%	0.5950			0.61%
Lu 261.542	954086.0	86.37	%	0.479			0.56%
Ag 328.068†	-1329.7	0.00306	mg/L	0.000515	0.00306 mg/L	0.000515	16.83%
Al 308.215†	7803652.9	417.38	mg/L	7.089	417.38 mg/L	7.089	1.70%
As 188.979†	347.6	0.39550	mg/L	0.000963	0.39550 mg/L	0.000963	0.24%
Ba 233.527†	506646.0	6.1505	mg/L	0.08302	6.1505 mg/L	0.08302	1.35%
Be 313.107†	34003.0	0.01995	mg/L	0.000299	0.01995 mg/L	0.000299	1.50%
Co 228.616†	10460.3	0.33886	mg/L	0.002205	0.33886 mg/L	0.002205	0.65%
Cr 267.716†	25992.0	0.44818	mg/L	0.002177	0.44818 mg/L	0.002177	0.49%
Cu 324.752†	83746.8	0.47593	mg/L	0.006191	0.47593 mg/L	0.006191	1.30%
Fe 273.955†	14719259.8	699.22	mg/L	11.117	699.22 mg/L	11.117	1.59%
Concentration greater than upper limit for Fe 273.955.							
Mg 279.077†	1293747.5	93.982	mg/L	1.3332	93.982 mg/L	1.3332	1.42%
Mn 257.610†	10925320.5	21.974	mg/L	0.3691	21.974 mg/L	0.3691	1.68%
Ni 231.604†	14281.9	0.63353	mg/L	0.003156	0.63353 mg/L	0.003156	0.50%
Pb 220.353†	2227.3	0.48837	mg/L	0.001112	0.48837 mg/L	0.001112	0.23%
Sb 206.836†	100.3	-0.00402	mg/L	0.002868	-0.00402 mg/L	0.002868	71.34%
Se 196.026†	-158.3	0.01915	mg/L	0.011264	0.01915 mg/L	0.011264	58.83%
Tl 190.801†	-40.1	0.00273	mg/L	0.005251	0.00273 mg/L	0.005251	192.56%
V 292.402†	50427.6	0.47528	mg/L	0.007180	0.47528 mg/L	0.007180	1.51%
Zn 206.200†	49357.3	1.9679	mg/L	0.02634	1.9679 mg/L	0.02634	1.34%
Cd 226.502†	1601.0	0.00189	mg/L	0.000782	0.00189 mg/L	0.000782	41.29%
Ti 334.940†	388399.7	0.69625	mg/L	0.007006	0.69625 mg/L	0.007006	1.01%
Ca 227.546†	5318.3	56.611	mg/L	0.4404	56.611 mg/L	0.4404	0.78%
Na 589.592†	1185.7	0.31555	mg/L	0.024217	0.31555 mg/L	0.024217	7.67%
K 766.490†	30310.7	26.784	mg/L	0.4205	26.784 mg/L	0.4205	1.57%

Sequence No.: 23 Autosampler Location: 46  
Sample ID: M0975-18A-COMP-E-061313 Date Collected: 6/21/2013 11:42:36 AM  
Analyst: Data Type: Reprocessed on 6/21/2013 2:05:06 PM  
Logged In Analyst (Original) : mitOptima3  
Initial Sample Wt: Initial Sample Vol:  
Dilution: Sample Prep Vol:

Mean Data: M0975-18A-COMP-E-061313

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1597222.7	93.834	%	0.6280			0.67%
Lu 261.542	954045.9	86.37	%	0.419			0.48%
Ag 328.068†	-1123.0	0.00396	mg/L	0.001386	0.00396 mg/L	0.001386	35.02%
Al 308.215†	7285258.5	389.66	mg/L	0.656	389.66 mg/L	0.656	0.17%
As 188.979†	315.9	0.36280	mg/L	0.004018	0.36280 mg/L	0.004018	1.11%

Ba	233.527†	498754.2	6.0547 mg/L	0.03652	6.0547 mg/L	0.03652	0.60%
Be	313.107†	29806.6	0.01762 mg/L	0.000073	0.01762 mg/L	0.000073	0.41%
Co	228.616†	10334.7	0.33481 mg/L	0.003550	0.33481 mg/L	0.003550	1.06%
Cr	267.716†	24370.7	0.41925 mg/L	0.004460	0.41925 mg/L	0.004460	1.06%
Cu	324.752†	85874.8	0.48282 mg/L	0.002630	0.48282 mg/L	0.002630	0.54%
Fe	273.955†	14055818.2	667.71 mg/L	1.014	667.71 mg/L	1.014	0.15%
Concentration greater than upper limit for Fe 273.955.							
Mg	279.077†	1182395.6	85.893 mg/L	0.6286	85.893 mg/L	0.6286	0.73%
Mn	257.610†	11436784.7	23.003 mg/L	0.0327	23.003 mg/L	0.0327	0.14%
Ni	231.604†	13325.3	0.59110 mg/L	0.006620	0.59110 mg/L	0.006620	1.12%
Pb	220.353†	2212.2	0.48434 mg/L	0.005169	0.48434 mg/L	0.005169	1.07%
Sb	206.836†	93.4	-0.00482 mg/L	0.002197	-0.00482 mg/L	0.002197	45.60%
Se	196.026†	-155.8	0.01095 mg/L	0.003504	0.01095 mg/L	0.003504	32.01%
Tl	190.801†	-33.9	0.00599 mg/L	0.008047	0.00599 mg/L	0.008047	134.43%
V	292.402†	47887.0	0.45113 mg/L	0.002549	0.45113 mg/L	0.002549	0.56%
Zn	206.200†	49316.1	1.9665 mg/L	0.01259	1.9665 mg/L	0.01259	0.64%
Cd	226.502†	1563.3	0.00266 mg/L	0.000507	0.00266 mg/L	0.000507	19.05%
Ti	334.940†	381227.5	0.68343 mg/L	0.005056	0.68343 mg/L	0.005056	0.74%
Ca	227.546†	3886.0	47.239 mg/L	0.4093	47.239 mg/L	0.4093	0.87%
Na	589.592†	1134.9	0.30203 mg/L	0.022891	0.30203 mg/L	0.022891	7.58%
K	766.490†	28125.8	24.853 mg/L	0.4467	24.853 mg/L	0.4467	1.80%

Sequence No.: 24

Sample ID: M0975-18ADUP~COMP-E-0613

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 47

Date Collected: 6/21/2013 11:46:23 AM

Data Type: Reprocessed on 6/21/2013 2:05:07 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: M0975-18ADUP~COMP-E-0613

Analyte	Mean Corrected	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1600744.4	94.041 %		0.7615			0.81%
Lu 261.542	975610.4	88.32 %		1.608			1.82%
Ag 328.068†	-1232.3	0.00262 mg/L		0.000609	0.00262 mg/L	0.000609	23.29%
Al 308.215†	7297357.4	390.30 mg/L		4.194	390.30 mg/L	4.194	1.07%
As 188.979†	293.3	0.33780 mg/L		0.008790	0.33780 mg/L	0.008790	2.60%
Ba 233.527†	445353.5	5.4065 mg/L		0.08960	5.4065 mg/L	0.08960	1.66%
Be 313.107†	27549.9	0.01641 mg/L		0.000306	0.01641 mg/L	0.000306	1.87%
Co 228.616†	9526.9	0.30849 mg/L		0.006116	0.30849 mg/L	0.006116	1.98%
Cr 267.716†	24484.9	0.42330 mg/L		0.008571	0.42330 mg/L	0.008571	2.02%
Cu 324.752†	70482.6	0.40507 mg/L		0.006541	0.40507 mg/L	0.006541	1.61%
Fe 273.955†	13286716.3	631.17 mg/L		6.731	631.17 mg/L	6.731	1.07%
Concentration greater than upper limit for Fe 273.955.							
Mg 279.077†	1178976.4	85.645 mg/L		1.4421	85.645 mg/L	1.4421	1.68%
Mn 257.610†	8930537.0	17.962 mg/L		0.1867	17.962 mg/L	0.1867	1.04%
Ni 231.604†	13076.6	0.58006 mg/L		0.011973	0.58006 mg/L	0.011973	2.06%
Pb 220.353†	2025.3	0.44530 mg/L		0.010745	0.44530 mg/L	0.010745	2.41%
Sb 206.836†	83.9	-0.00877 mg/L		0.003829	-0.00877 mg/L	0.003829	43.65%
Se 196.026†	-143.7	0.01768 mg/L		0.015053	0.01768 mg/L	0.015053	85.12%
Tl 190.801†	-32.4	0.00637 mg/L		0.000728	0.00637 mg/L	0.000728	11.42%
V 292.402†	47477.3	0.44863 mg/L		0.008059	0.44863 mg/L	0.008059	1.80%
Zn 206.200†	45352.9	1.8082 mg/L		0.03310	1.8082 mg/L	0.03310	1.83%
Cd 226.502†	1426.3	0.00123 mg/L		0.000335	0.00123 mg/L	0.000335	27.33%
Ti 334.940†	389328.0	0.69797 mg/L		0.012802	0.69797 mg/L	0.012802	1.83%
Ca 227.546†	3598.9	44.227 mg/L		0.5702	44.227 mg/L	0.5702	1.29%
Na 589.592†	1178.6	0.31365 mg/L		0.018993	0.31365 mg/L	0.018993	6.06%
K 766.490†	28483.7	25.169 mg/L		0.2310	25.169 mg/L	0.2310	0.92%

Sequence No.: 25

Sample ID: M0975-18AMS~COMP-E-06131

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 48

Date Collected: 6/21/2013 11:50:10 AM

Data Type: Reprocessed on 6/21/2013 2:05:08 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: M0975-18AMS~COMP-E-06131

Analyte	Mean Corrected		Calib. Units	Std.Dev.	Sample		RSD	
	Intensity	Conc.			Conc.	Units		Std.Dev.
Y 360.073	1587718.1	93.276	%	0.8585			0.92%	
Lu 261.542	962391.0	87.12	%	1.925			2.21%	
Ag 328.068†	171556.4	1.2388	mg/L	0.02774	1.2388	mg/L	0.02774	2.24%
Al 308.215†	7115551.2	380.57	mg/L	2.694	380.57	mg/L	2.694	0.71%
As 188.979†	766.0	0.78147	mg/L	0.016708	0.78147	mg/L	0.016708	2.14%
Ba 233.527†	1217707.8	14.784	mg/L	0.3273	14.784	mg/L	0.3273	2.21%
Be 313.107†	450889.1	0.24916	mg/L	0.005333	0.24916	mg/L	0.005333	2.14%
Co 228.616†	83072.4	2.7012	mg/L	0.06273	2.7012	mg/L	0.06273	2.32%
Cr 267.716†	77501.6	1.3547	mg/L	0.02972	1.3547	mg/L	0.02972	2.19%
Cu 324.752†	330859.0	1.6512	mg/L	0.03721	1.6512	mg/L	0.03721	2.25%
Fe 273.955†	12448763.6	591.39	mg/L	3.866	591.39	mg/L	3.866	0.65%
Concentration greater than upper limit for Fe 273.955.								
Mg 279.077†	1442986.3	104.82	mg/L	2.332	104.82	mg/L	2.332	2.22%
Mn 257.610†	10664926.1	21.451	mg/L	0.1291	21.451	mg/L	0.1291	0.60%
Ni 231.604†	66340.1	2.9429	mg/L	0.06876	2.9429	mg/L	0.06876	2.34%
Pb 220.353†	4028.5	0.88802	mg/L	0.018161	0.88802	mg/L	0.018161	2.05%
Sb 206.836†	430.9	0.20818	mg/L	0.007486	0.20818	mg/L	0.007486	3.60%
Se 196.026†	186.9	0.45309	mg/L	0.009015	0.45309	mg/L	0.009015	1.99%
Tl 190.801†	438.6	0.43455	mg/L	0.011786	0.43455	mg/L	0.011786	2.71%
V 292.402†	272788.7	2.7116	mg/L	0.06262	2.7116	mg/L	0.06262	2.31%
Zn 206.200†	103317.0	4.1266	mg/L	0.09303	4.1266	mg/L	0.09303	2.25%
Cd 226.502†	10609.1	0.23503	mg/L	0.006302	0.23503	mg/L	0.006302	2.68%
Ti 334.940†	450273.7	0.80757	mg/L	0.022864	0.80757	mg/L	0.022864	2.83%
Ca 227.546†	8086.8	67.758	mg/L	0.9769	67.758	mg/L	0.9769	1.44%
Na 589.592†	86142.1	22.924	mg/L	0.4105	22.924	mg/L	0.4105	1.79%
K 766.490†	50491.1	44.616	mg/L	0.7743	44.616	mg/L	0.7743	1.74%

Sequence No.: 26  
Sample ID: M0975-18ASD~COMP-E-061313  
Analyst:  
Logged In Analyst (Original) : mitOptima3  
Initial Sample Wt:  
Dilution:

Autosampler Location: 49  
Date Collected: 6/21/2013 11:53:58 AM  
Data Type: Reprocessed on 6/21/2013 2:05:08 PM

Initial Sample Vol:  
Sample Prep Vol:

Mean Data: M0975-18ASD~COMP-E-061313

Analyte	Mean Corrected		Calib. Units	Std.Dev.	Sample		RSD	
	Intensity	Conc.			Conc.	Units		Std.Dev.
Y 360.073	1629080.3	95.706	%	3.8420			4.01%	
Lu 261.542	1047713.4	94.85	%	3.872			4.08%	
Ag 328.068†	-94.0	0.00190	mg/L	0.000788	0.00190	mg/L	0.000788	41.56%
Al 308.215†	1426760.0	76.311	mg/L	0.2973	76.311	mg/L	0.2973	0.39%
As 188.979†	62.3	0.07314	mg/L	0.002835	0.07314	mg/L	0.002835	3.88%
Ba 233.527†	99338.0	1.2059	mg/L	0.05257	1.2059	mg/L	0.05257	4.36%
Be 313.107†	6268.6	0.00369	mg/L	0.000208	0.00369	mg/L	0.000208	5.64%
Co 228.616†	2146.6	0.06956	mg/L	0.003409	0.06956	mg/L	0.003409	4.90%
Cr 267.716†	4856.3	0.08343	mg/L	0.004045	0.08343	mg/L	0.004045	4.85%
Cu 324.752†	16650.7	0.09531	mg/L	0.004707	0.09531	mg/L	0.004707	4.94%
Fe 273.955†	3063843.6	145.55	mg/L	0.638	145.55	mg/L	0.638	0.44%
Mg 279.077†	238466.8	17.323	mg/L	0.7003	17.323	mg/L	0.7003	4.04%
Mn 257.610†	2415303.7	4.8579	mg/L	0.02593	4.8579	mg/L	0.02593	0.53%
Ni 231.604†	2749.7	0.12198	mg/L	0.006299	0.12198	mg/L	0.006299	5.16%
Pb 220.353†	456.3	0.09931	mg/L	0.004700	0.09931	mg/L	0.004700	4.73%
Sb 206.836†	25.7	0.00295	mg/L	0.007071	0.00295	mg/L	0.007071	239.70%
Se 196.026†	-31.2	0.00585	mg/L	0.009074	0.00585	mg/L	0.009074	155.17%
Tl 190.801†	-11.9	-0.00284	mg/L	0.002245	-0.00284	mg/L	0.002245	79.16%
V 292.402†	9494.3	0.08887	mg/L	0.005551	0.08887	mg/L	0.005551	6.25%
Zn 206.200†	9971.0	0.39763	mg/L	0.017982	0.39763	mg/L	0.017982	4.52%
Cd 226.502†	307.0	-0.00027	mg/L	0.000447	-0.00027	mg/L	0.000447	167.31%
Ti 334.940†	74557.0	0.13366	mg/L	0.004731	0.13366	mg/L	0.004731	3.54%
Ca 227.546†	747.5	9.7289	mg/L	0.27475	9.7289	mg/L	0.27475	2.82%
Na 589.592†	-586.0	-0.15595	mg/L	0.003823	-0.15595	mg/L	0.003823	2.45%
K 766.490†	5869.8	5.1867	mg/L	0.27090	5.1867	mg/L	0.27090	5.22%

Sequence No.: 27  
Sample ID: CCV  
Analyst:

Autosampler Location: 3  
Date Collected: 6/21/2013 11:57:46 AM  
Data Type: Reprocessed on 6/21/2013 2:05:09 PM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

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Mean Data: CCV

Analyte	Mean Corrected		Calib.		Sample		RSD
	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	
Y 360.073	1599155.6	93.948	%	3.1951			3.40%
Lu 261.542	1058249.9	95.80	%	3.293			3.44%
Ag 328.068†	176939.6	1.2673	mg/L	0.02629	1.2673	mg/L	0.02629 2.07%
	QC value within limits for Ag 328.068 Recovery = 101.38%						
Al 308.215†	193116.6	10.317	mg/L	0.2270	10.317	mg/L	0.2270 2.20%
	QC value within limits for Al 308.215 Recovery = 103.17%						
As 188.979†	522.7	0.49550	mg/L	0.019730	0.49550	mg/L	0.019730 3.98%
	QC value within limits for As 188.979 Recovery = 99.10%						
Ba 233.527†	835298.7	10.142	mg/L	0.2156	10.142	mg/L	0.2156 2.13%
	QC value within limits for Ba 233.527 Recovery = 101.42%						
Be 313.107†	441551.0	0.24345	mg/L	0.005695	0.24345	mg/L	0.005695 2.34%
	QC value within limits for Be 313.107 Recovery = 97.38%						
Co 228.616†	77719.4	2.5277	mg/L	0.05530	2.5277	mg/L	0.05530 2.19%
	QC value within limits for Co 228.616 Recovery = 101.11%						
Cr 267.716†	58236.4	1.0237	mg/L	0.02055	1.0237	mg/L	0.02055 2.01%
	QC value within limits for Cr 267.716 Recovery = 102.37%						
Cu 324.752†	255775.6	1.2289	mg/L	0.02945	1.2289	mg/L	0.02945 2.40%
	QC value within limits for Cu 324.752 Recovery = 98.31%						
Fe 273.955†	109775.0	5.2503	mg/L	0.10859	5.2503	mg/L	0.10859 2.07%
	QC value within limits for Fe 273.955 Recovery = 105.01%						
Mg 279.077†	346302.1	25.157	mg/L	0.5361	25.157	mg/L	0.5361 2.13%
	QC value within limits for Mg 279.077 Recovery = 100.63%						
Mn 257.610†	1240564.0	2.4952	mg/L	0.05402	2.4952	mg/L	0.05402 2.17%
	QC value within limits for Mn 257.610 Recovery = 99.81%						
Ni 231.604†	57594.8	2.5550	mg/L	0.05545	2.5550	mg/L	0.05545 2.17%
	QC value within limits for Ni 231.604 Recovery = 102.20%						
Pb 220.353†	2260.3	0.49942	mg/L	0.018800	0.49942	mg/L	0.018800 3.76%
	QC value within limits for Pb 220.353 Recovery = 99.88%						
Sb 206.836†	789.7	0.49776	mg/L	0.020675	0.49776	mg/L	0.020675 4.15%
	QC value within limits for Sb 206.836 Recovery = 99.55%						
Se 196.026†	360.9	0.49243	mg/L	0.023483	0.49243	mg/L	0.023483 4.77%
	QC value within limits for Se 196.026 Recovery = 98.49%						
Tl 190.801†	525.0	0.48120	mg/L	0.019857	0.48120	mg/L	0.019857 4.13%
	QC value within limits for Tl 190.801 Recovery = 96.24%						
V 292.402†	248348.8	2.4918	mg/L	0.05074	2.4918	mg/L	0.05074 2.04%
	QC value within limits for V 292.402 Recovery = 99.67%						
Zn 206.200†	64885.0	2.5950	mg/L	0.05628	2.5950	mg/L	0.05628 2.17%
	QC value within limits for Zn 206.200 Recovery = 103.80%						
Cd 226.502†	10141.9	0.25541	mg/L	0.005478	0.25541	mg/L	0.005478 2.14%
	QC value within limits for Cd 226.502 Recovery = 102.16%						
Ti 334.940†	271920.5	0.48879	mg/L	0.010717	0.48879	mg/L	0.010717 2.19%
	QC value within limits for Ti 334.940 Recovery = Not calculated						
Ca 227.546†	4312.3	24.176	mg/L	0.9552	24.176	mg/L	0.9552 3.95%
	QC value within limits for Ca 227.546 Recovery = 96.71%						
Na 589.592†	96672.2	25.727	mg/L	0.3601	25.727	mg/L	0.3601 1.40%
	QC value within limits for Na 589.592 Recovery = 102.91%						
K 766.490†	28774.8	25.426	mg/L	0.3470	25.426	mg/L	0.3470 1.36%
	QC value within limits for K 766.490 Recovery = 101.71%						

All analyte(s) passed QC.

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Sequence No.: 28

Sample ID: CCB

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 6/21/2013 12:01:21 PM

Data Type: Reprocessed on 6/21/2013 2:05:10 PM

Initial Sample Vol:

Sample Prep Vol:

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Mean Data: CCB

Analyte	Mean Corrected		Calib.		Sample		RSD
	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	
Y 360.073	1719821.4	101.04	%	4.462			4.42%



Lu 261.542	1123362.9	101.7 %	4.61			4.54%
Ag 328.068†	80.6	0.00057 mg/L	0.000907	0.00057 mg/L	0.000907	158.02%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 308.215†	114.2	0.00611 mg/L	0.011233	0.00611 mg/L	0.011233	183.87%
QC value within limits for Al 308.215 Recovery = Not calculated						
As 188.979†	4.8	0.00447 mg/L	0.004518	0.00447 mg/L	0.004518	101.17%
QC value within limits for As 188.979 Recovery = Not calculated						
Ba 233.527†	106.6	0.00129 mg/L	0.000729	0.00129 mg/L	0.000729	56.27%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	235.7	0.00013 mg/L	0.000039	0.00013 mg/L	0.000039	30.25%
QC value within limits for Be 313.107 Recovery = Not calculated						
Co 228.616†	13.0	0.00042 mg/L	0.000166	0.00042 mg/L	0.000166	39.29%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	5.6	0.00010 mg/L	0.000209	0.00010 mg/L	0.000209	212.29%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	120.3	0.00058 mg/L	0.000606	0.00058 mg/L	0.000606	104.70%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 273.955†	191.2	0.00909 mg/L	0.001798	0.00909 mg/L	0.001798	19.79%
QC value within limits for Fe 273.955 Recovery = Not calculated						
Mg 279.077†	91.2	0.00663 mg/L	0.002927	0.00663 mg/L	0.002927	44.17%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	301.1	0.00061 mg/L	0.000156	0.00061 mg/L	0.000156	25.78%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Ni 231.604†	5.6	0.00025 mg/L	0.000312	0.00025 mg/L	0.000312	124.30%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Pb 220.353†	-1.2	-0.00026 mg/L	0.001706	-0.00026 mg/L	0.001706	659.62%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	1.2	0.00077 mg/L	0.002414	0.00077 mg/L	0.002414	312.94%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	0.8	0.00106 mg/L	0.002066	0.00106 mg/L	0.002066	194.58%
QC value within limits for Se 196.026 Recovery = Not calculated						
Tl 190.801†	-2.3	-0.00218 mg/L	0.000623	-0.00218 mg/L	0.000623	28.54%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	31.2	0.00031 mg/L	0.000218	0.00031 mg/L	0.000218	69.69%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	19.2	0.00077 mg/L	0.000268	0.00077 mg/L	0.000268	34.87%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Cd 226.502†	0.0	0.00000 mg/L	0.000229	0.00000 mg/L	0.000229	>999.9%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Ti 334.940†	127.3	0.00023 mg/L	0.000135	0.00023 mg/L	0.000135	59.20%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Ca 227.546†	-3.5	-0.01979 mg/L	0.070684	-0.01979 mg/L	0.070684	357.17%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Na 589.592†	-1085.8	-0.28895 mg/L	0.007624	-0.28895 mg/L	0.007624	2.64%
QC value within limits for Na 589.592 Recovery = Not calculated						
K 766.490†	-66.3	-0.05862 mg/L	0.099814	-0.05862 mg/L	0.099814	170.28%
QC value within limits for K 766.490 Recovery = Not calculated						

All analyte(s) passed QC.

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Sequence No.: 29                               Autosampler Location: 50
Sample ID: M0975-18APDS~COMP-E-06131         Date Collected: 6/21/2013 12:05:00 PM
Analyst:                                       Data Type: Reprocessed on 6/21/2013 2:05:10 PM
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:                             Initial Sample Vol:
Dilution:                                     Sample Prep Vol:
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Mean Data: M0975-18APDS~COMP-E-06131

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1614868.9	94.871 %	2.6338			2.78%
Lu 261.542	968169.3	87.64 %	2.134			2.43%
Ag 328.068†	164744.8	1.1914 mg/L	0.01133	1.1914 mg/L	0.01133	0.95%
Al 308.215†	7323173.5	391.67 mg/L	5.903	391.67 mg/L	5.903	1.51%
As 188.979†	785.6	0.80634 mg/L	0.015530	0.80634 mg/L	0.015530	1.93%
Ba 233.527†	1256122.7	15.251 mg/L	0.1461	15.251 mg/L	0.1461	0.96%
Be 313.107†	442885.5	0.24455 mg/L	0.002651	0.24455 mg/L	0.002651	1.08%
Co 228.616†	82355.5	2.6781 mg/L	0.02599	2.6781 mg/L	0.02599	0.97%
Cr 267.716†	77504.2	1.3536 mg/L	0.01416	1.3536 mg/L	0.01416	1.05%
Cu 324.752†	337964.5	1.6919 mg/L	0.01942	1.6919 mg/L	0.01942	1.15%

Fe 273.955†	13760307.7	653.70 mg/L	10.527	653.70 mg/L	10.527	1.61%
Concentration greater than upper limit for Fe 273.955.						
Mg 279.077†	1453262.9	105.57 mg/L	0.970	105.57 mg/L	0.970	0.92%
Mn 257.610†	12106806.5	24.351 mg/L	0.3812	24.351 mg/L	0.3812	1.57%
Ni 231.604†	66141.6	2.9341 mg/L	0.02850	2.9341 mg/L	0.02850	0.97%
Pb 220.353†	4149.4	0.91246 mg/L	0.019836	0.91246 mg/L	0.019836	2.17%
Sb 206.836†	862.2	0.48152 mg/L	0.004295	0.48152 mg/L	0.004295	0.89%
Se 196.026†	173.3	0.45396 mg/L	0.010944	0.45396 mg/L	0.010944	2.41%
Tl 190.801†	427.0	0.42722 mg/L	0.008446	0.42722 mg/L	0.008446	1.98%
V 292.402†	275530.6	2.7365 mg/L	0.02843	2.7365 mg/L	0.02843	1.04%
Zn 206.200†	105918.9	4.2305 mg/L	0.04821	4.2305 mg/L	0.04821	1.14%
Cd 226.502†	10592.8	0.23122 mg/L	0.002354	0.23122 mg/L	0.002354	1.02%
Ti 334.940†	382113.6	0.68494 mg/L	0.014804	0.68494 mg/L	0.014804	2.16%
Ca 227.546†	7893.1	68.998 mg/L	1.1694	68.998 mg/L	1.1694	1.69%
Na 589.592†	84387.2	22.457 mg/L	0.4730	22.457 mg/L	0.4730	2.11%
K 766.490†	51841.5	45.809 mg/L	0.9782	45.809 mg/L	0.9782	2.14%

Sequence No.: 30  
Sample ID: M0975-04A-COMP-A-0613 20X  
Analyst:  
Logged In Analyst (Original) : mitOptima3  
Initial Sample Wt:  
Dilution:

Autosampler Location: 68  
Date Collected: 6/21/2013 12:08:48 PM  
Data Type: Reprocessed on 6/21/2013 2:05:11 PM  
Initial Sample Vol:  
Sample Prep Vol:

Mean Data: M0975-04A-COMP-A-0613 20X

Analyte	Mean Corrected		Calib. Units	Std.Dev.	Sample		RSD
	Intensity	Conc.			Conc.	Units	
Y 360.073	1643092.4	96.529	%	1.4273			1.48%
Lu 261.542	1078948.3	97.67	%	1.423			1.46%
Ag 328.068†	-89.6	-0.00013	mg/L	0.000955	-0.00013	mg/L	725.43%
Al 308.215†	293610.5	15.704	mg/L	0.0310	15.704	mg/L	0.20%
As 188.979†	12.0	0.01414	mg/L	0.001726	0.01414	mg/L	12.21%
Ba 233.527†	17908.1	0.21740	mg/L	0.007763	0.21740	mg/L	3.57%
Be 313.107†	1461.4	0.00086	mg/L	0.000084	0.00086	mg/L	9.75%
Co 228.616†	437.8	0.01418	mg/L	0.000557	0.01418	mg/L	3.93%
Cr 267.716†	1081.6	0.01869	mg/L	0.000778	0.01869	mg/L	4.16%
Cu 324.752†	2637.5	0.01566	mg/L	0.000937	0.01566	mg/L	5.98%
Fe 273.955†	596853.7	28.353	mg/L	0.0508	28.353	mg/L	0.18%
Mg 279.077†	49900.6	3.6249	mg/L	0.11260	3.6249	mg/L	3.11%
Mn 257.610†	404636.3	0.81385	mg/L	0.002079	0.81385	mg/L	0.26%
Ni 231.604†	555.5	0.02464	mg/L	0.000759	0.02464	mg/L	3.08%
Pb 220.353†	79.9	0.01743	mg/L	0.000442	0.01743	mg/L	2.53%
Sb 206.836†	6.6	0.00150	mg/L	0.004046	0.00150	mg/L	269.31%
Se 196.026†	-4.4	0.00343	mg/L	0.008013	0.00343	mg/L	233.59%
Tl 190.801†	-4.8	-0.00281	mg/L	0.001624	-0.00281	mg/L	57.68%
V 292.402†	1986.7	0.01869	mg/L	0.001190	0.01869	mg/L	6.37%
Zn 206.200†	2063.8	0.08231	mg/L	0.003480	0.08231	mg/L	4.23%
Cd 226.502†	57.6	-0.00011	mg/L	0.000151	-0.00011	mg/L	137.95%
Ti 334.940†	18037.9	0.03235	mg/L	0.000761	0.03235	mg/L	2.35%
Ca 227.546†	215.9	2.2967	mg/L	0.08040	2.2967	mg/L	3.50%
Na 589.592†	-943.3	-0.25104	mg/L	0.031473	-0.25104	mg/L	12.54%
K 766.490†	1477.2	1.3053	mg/L	0.06560	1.3053	mg/L	5.03%

Sequence No.: 31  
Sample ID: M0975-07A-COMP-B-0613 20X  
Analyst:  
Logged In Analyst (Original) : mitOptima3  
Initial Sample Wt:  
Dilution:

Autosampler Location: 69  
Date Collected: 6/21/2013 12:12:27 PM  
Data Type: Reprocessed on 6/21/2013 2:05:12 PM  
Initial Sample Vol:  
Sample Prep Vol:

Mean Data: M0975-07A-COMP-B-0613 20X

Analyte	Mean Corrected		Calib. Units	Std.Dev.	Sample		RSD
	Intensity	Conc.			Conc.	Units	
Y 360.073	1626582.8	95.559	%	4.0796			4.27%
Lu 261.542	1067390.8	96.63	%	4.202			4.35%
Ag 328.068†	-41.9	0.00046	mg/L	0.001931	0.00046	mg/L	420.94%
Al 308.215†	414391.9	22.164	mg/L	0.2185	22.164	mg/L	0.99%

As	188.979†	24.4	0.02724 mg/L	0.003722	0.02724 mg/L	0.003722	13.66%
Ba	233.527†	28418.2	0.34498 mg/L	0.025315	0.34498 mg/L	0.025315	7.34%
Be	313.107†	1920.4	0.00112 mg/L	0.000044	0.00112 mg/L	0.000044	3.91%
Co	228.616†	628.4	0.02037 mg/L	0.000951	0.02037 mg/L	0.000951	4.67%
Cr	267.716†	1494.6	0.02581 mg/L	0.001724	0.02581 mg/L	0.001724	6.68%
Cu	324.752†	4054.0	0.02402 mg/L	0.002335	0.02402 mg/L	0.002335	9.72%
Fe	273.955†	907145.3	43.093 mg/L	0.3751	43.093 mg/L	0.3751	0.87%
Mg	279.077†	73226.2	5.3194 mg/L	0.38913	5.3194 mg/L	0.38913	7.32%
Mn	257.610†	583633.3	1.1739 mg/L	0.01089	1.1739 mg/L	0.01089	0.93%
Ni	231.604†	867.6	0.03849 mg/L	0.001572	0.03849 mg/L	0.001572	4.08%
Pb	220.353†	113.0	0.02454 mg/L	0.000861	0.02454 mg/L	0.000861	3.51%
Sb	206.836†	10.6	0.00281 mg/L	0.001539	0.00281 mg/L	0.001539	54.68%
Se	196.026†	-9.6	0.00137 mg/L	0.002946	0.00137 mg/L	0.002946	215.52%
Tl	190.801†	-6.9	-0.00389 mg/L	0.001606	-0.00389 mg/L	0.001606	41.29%
V	292.402†	2742.2	0.02563 mg/L	0.001654	0.02563 mg/L	0.001654	6.45%
Zn	206.200†	2875.9	0.11469 mg/L	0.005144	0.11469 mg/L	0.005144	4.48%
Cd	226.502†	91.6	-0.00006 mg/L	0.000085	-0.00006 mg/L	0.000085	144.24%
Ti	334.940†	19134.9	0.03429 mg/L	0.002515	0.03429 mg/L	0.002515	7.33%
Ca	227.546†	261.7	3.1116 mg/L	0.13854	3.1116 mg/L	0.13854	4.45%
Na	589.592†	-1001.9	-0.26662 mg/L	0.036025	-0.26662 mg/L	0.036025	13.51%
K	766.490†	1678.0	1.4827 mg/L	0.08277	1.4827 mg/L	0.08277	5.58%

Sequence No.: 32

Sample ID: M0975-11A-COMP-C-0613 20X

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 70

Date Collected: 6/21/2013 12:16:06 PM

Data Type: Reprocessed on 6/21/2013 2:05:13 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: M0975-11A-COMP-C-0613 20X

Analyte	Mean Corrected		Calib.	Std.Dev.	Sample		RSD
	Intensity	Conc.			Units	Std.Dev.	
Y	360.073	1688176.6	99.177	%	1.6901		1.70%
Lu	261.542	1100344.6	99.61	%	1.779		1.79%
Ag	328.068†	34.9	0.00084	mg/L	0.001716	0.00084 mg/L	203.53%
Al	308.215†	327213.1	17.501	mg/L	0.1267	17.501 mg/L	0.72%
As	188.979†	20.4	0.02248	mg/L	0.002168	0.02248 mg/L	9.64%
Ba	233.527†	25406.8	0.30843	mg/L	0.013795	0.30843 mg/L	4.47%
Be	313.107†	1607.8	0.00094	mg/L	0.000016	0.00094 mg/L	1.70%
Co	228.616†	505.4	0.01637	mg/L	0.000486	0.01637 mg/L	2.97%
Cr	267.716†	1209.6	0.02069	mg/L	0.001293	0.02069 mg/L	6.25%
Cu	324.752†	3258.1	0.01921	mg/L	0.000851	0.01921 mg/L	4.43%
Fe	273.955†	711815.5	33.814	mg/L	0.2035	33.814 mg/L	0.60%
Mg	279.077†	56084.4	4.0742	mg/L	0.19067	4.0742 mg/L	4.68%
Mn	257.610†	713560.4	1.4352	mg/L	0.00860	1.4352 mg/L	0.60%
Ni	231.604†	651.7	0.02891	mg/L	0.000307	0.02891 mg/L	1.06%
Pb	220.353†	131.6	0.02868	mg/L	0.001842	0.02868 mg/L	6.42%
Sb	206.836†	5.7	0.00052	mg/L	0.001583	0.00052 mg/L	305.97%
Se	196.026†	-11.0	-0.00390	mg/L	0.004398	-0.00390 mg/L	112.81%
Tl	190.801†	-2.2	-0.00017	mg/L	0.003626	-0.00017 mg/L	>999.9%
V	292.402†	2181.7	0.02041	mg/L	0.001302	0.02041 mg/L	6.38%
Zn	206.200†	2528.3	0.10085	mg/L	0.001794	0.10085 mg/L	1.78%
Cd	226.502†	73.7	0.00000	mg/L	0.000016	0.00000 mg/L	711.21%
Ti	334.940†	18683.6	0.03351	mg/L	0.001515	0.03351 mg/L	4.52%
Ca	227.546†	306.1	3.0178	mg/L	0.09506	3.0178 mg/L	3.15%
Na	589.592†	-1180.7	-0.31422	mg/L	0.000792	-0.31422 mg/L	0.25%
K	766.490†	1483.4	1.3108	mg/L	0.12742	1.3108 mg/L	9.72%

Sequence No.: 33

Sample ID: M0975-14A-COMP-D-0613 20X

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 71

Date Collected: 6/21/2013 12:19:46 PM

Data Type: Reprocessed on 6/21/2013 2:05:13 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: M0975-14A-COMP-D-0613 20X

Analyte	Mean Corrected		Calib.	Std.Dev.	Sample		RSD
	Intensity	Conc.			Units	Std.Dev.	

Analyte	Intensity	Conc. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 360.073	1645525.0	96.672 %	3.1751			3.28%
Lu 261.542	1082012.7	97.95 %	3.236			3.30%
Ag 328.068†	12.2	0.00078 mg/L	0.000541	0.00078 mg/L	0.000541	68.97%
Al 308.215†	379065.6	20.274 mg/L	0.0396	20.274 mg/L	0.0396	0.20%
As 188.979†	22.6	0.02524 mg/L	0.006003	0.02524 mg/L	0.006003	23.78%
Ba 233.527†	24921.1	0.30253 mg/L	0.008602	0.30253 mg/L	0.008602	2.84%
Be 313.107†	1715.8	0.00100 mg/L	0.000022	0.00100 mg/L	0.000022	2.17%
Co 228.616†	540.8	0.01753 mg/L	0.000352	0.01753 mg/L	0.000352	2.01%
Cr 267.716†	1294.9	0.02228 mg/L	0.000427	0.02228 mg/L	0.000427	1.91%
Cu 324.752†	3868.3	0.02280 mg/L	0.000736	0.02280 mg/L	0.000736	3.23%
Fe 273.955†	842694.7	40.032 mg/L	0.0965	40.032 mg/L	0.0965	0.24%
Mg 279.077†	65028.8	4.7239 mg/L	0.13439	4.7239 mg/L	0.13439	2.84%
Mn 257.610†	597652.5	1.2021 mg/L	0.00192	1.2021 mg/L	0.00192	0.16%
Ni 231.604†	727.5	0.03227 mg/L	0.001167	0.03227 mg/L	0.001167	3.62%
Pb 220.353†	120.0	0.02607 mg/L	0.001044	0.02607 mg/L	0.001044	4.01%
Sb 206.836†	3.3	-0.00160 mg/L	0.003770	-0.00160 mg/L	0.003770	235.01%
Se 196.026†	-5.7	0.00555 mg/L	0.002650	0.00555 mg/L	0.002650	47.75%
Tl 190.801†	-3.5	-0.00093 mg/L	0.000889	-0.00093 mg/L	0.000889	95.72%
V 292.402†	2438.1	0.02271 mg/L	0.000746	0.02271 mg/L	0.000746	3.29%
Zn 206.200†	2562.0	0.10216 mg/L	0.002781	0.10216 mg/L	0.002781	2.72%
Cd 226.502†	77.6	-0.00024 mg/L	0.000205	-0.00024 mg/L	0.000205	83.89%
Ti 334.940†	18222.5	0.03266 mg/L	0.001037	0.03266 mg/L	0.001037	3.18%
Ca 227.546†	243.0	2.8905 mg/L	0.07965	2.8905 mg/L	0.07965	2.76%
Na 589.592†	-1132.6	-0.30142 mg/L	0.018923	-0.30142 mg/L	0.018923	6.28%
K 766.490†	1467.1	1.2964 mg/L	0.12163	1.2964 mg/L	0.12163	9.38%

Sequence No.: 34

Sample ID: M0975-18A-COMP-E-0613 20X

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 72

Date Collected: 6/21/2013 12:23:26 PM

Data Type: Reprocessed on 6/21/2013 2:05:14 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: M0975-18A-COMP-E-0613 20X

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1650049.7	96.938 %		2.9542			3.05%
Lu 261.542	1078965.8	97.67 %		2.974			3.04%
Ag 328.068†	-100.8	-0.00005 mg/L		0.001702	-0.00005 mg/L	0.001702	>999.9%
Al 308.215†	356025.7	19.042 mg/L		0.0386	19.042 mg/L	0.0386	0.20%
As 188.979†	16.4	0.01927 mg/L		0.003069	0.01927 mg/L	0.003069	15.93%
Ba 233.527†	25369.5	0.30797 mg/L		0.019527	0.30797 mg/L	0.019527	6.34%
Be 313.107†	1522.1	0.00090 mg/L		0.000010	0.00090 mg/L	0.000010	1.12%
Co 228.616†	538.9	0.01746 mg/L		0.000769	0.01746 mg/L	0.000769	4.40%
Cr 267.716†	1246.7	0.02141 mg/L		0.000819	0.02141 mg/L	0.000819	3.82%
Cu 324.752†	4112.3	0.02379 mg/L		0.001626	0.02379 mg/L	0.001626	6.84%
Fe 273.955†	806022.0	38.290 mg/L		0.0737	38.290 mg/L	0.0737	0.19%
Mg 279.077†	62205.5	4.5188 mg/L		0.30226	4.5188 mg/L	0.30226	6.69%
Mn 257.610†	629470.9	1.2661 mg/L		0.00245	1.2661 mg/L	0.00245	0.19%
Ni 231.604†	704.6	0.03126 mg/L		0.001303	0.03126 mg/L	0.001303	4.17%
Pb 220.353†	116.4	0.02525 mg/L		0.002005	0.02525 mg/L	0.002005	7.94%
Sb 206.836†	1.7	-0.00244 mg/L		0.001882	-0.00244 mg/L	0.001882	77.15%
Se 196.026†	-7.6	0.00237 mg/L		0.004249	0.00237 mg/L	0.004249	179.34%
Tl 190.801†	-4.8	-0.00232 mg/L		0.002296	-0.00232 mg/L	0.002296	98.79%
V 292.402†	2336.7	0.02176 mg/L		0.001441	0.02176 mg/L	0.001441	6.62%
Zn 206.200†	2557.3	0.10199 mg/L		0.004327	0.10199 mg/L	0.004327	4.24%
Cd 226.502†	78.7	-0.00012 mg/L		0.000087	-0.00012 mg/L	0.000087	71.11%
Ti 334.940†	18821.9	0.03374 mg/L		0.002366	0.03374 mg/L	0.002366	7.01%
Ca 227.546†	178.7	2.4573 mg/L		0.17185	2.4573 mg/L	0.17185	6.99%
Na 589.592†	-1154.2	-0.30716 mg/L		0.017302	-0.30716 mg/L	0.017302	5.63%
K 766.490†	1341.3	1.1853 mg/L		0.13312	1.1853 mg/L	0.13312	11.23%

Sequence No.: 35

Sample ID: M0975-18ADUP~COMP-E- 20X

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Autosampler Location: 73

Date Collected: 6/21/2013 12:27:07 PM

Data Type: Reprocessed on 6/21/2013 2:05:15 PM

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: M0975-18ADUP~COMP-E- 20X

Analyte	Mean Corrected		Calib. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Y 360.073	1669950.4	98.107	%	3.1595				3.22%
Lu 261.542	1087825.4	98.48	%	3.220				3.27%
Ag 328.068†	15.8	0.00072	mg/L	0.001032	0.00072	mg/L	0.001032	142.91%
Al 308.215†	341969.2	18.290	mg/L	0.1671	18.290	mg/L	0.1671	0.91%
As 188.979†	18.0	0.02036	mg/L	0.002185	0.02036	mg/L	0.002185	10.73%
Ba 233.527†	21813.8	0.26481	mg/L	0.010152	0.26481	mg/L	0.010152	3.83%
Be 313.107†	1425.3	0.00084	mg/L	0.000041	0.00084	mg/L	0.000041	4.90%
Co 228.616†	490.2	0.01588	mg/L	0.000379	0.01588	mg/L	0.000379	2.39%
Cr 267.716†	1174.7	0.02028	mg/L	0.000634	0.02028	mg/L	0.000634	3.13%
Cu 324.752†	3153.2	0.01879	mg/L	0.000952	0.01879	mg/L	0.000952	5.06%
Fe 273.955†	727840.0	34.576	mg/L	0.3106	34.576	mg/L	0.3106	0.90%
Mg 279.077†	59487.4	4.3214	mg/L	0.16385	4.3214	mg/L	0.16385	3.79%
Mn 257.610†	466825.9	0.93893	mg/L	0.008531	0.93893	mg/L	0.008531	0.91%
Ni 231.604†	678.7	0.03011	mg/L	0.000864	0.03011	mg/L	0.000864	2.87%
Pb 220.353†	109.1	0.02378	mg/L	0.001528	0.02378	mg/L	0.001528	6.43%
Sb 206.836†	3.2	-0.00121	mg/L	0.002733	-0.00121	mg/L	0.002733	226.30%
Se 196.026†	-1.9	0.00900	mg/L	0.010210	0.00900	mg/L	0.010210	113.39%
Tl 190.801†	-5.2	-0.00288	mg/L	0.002177	-0.00288	mg/L	0.002177	75.72%
V 292.402†	2273.6	0.02129	mg/L	0.000896	0.02129	mg/L	0.000896	4.21%
Zn 206.200†	2344.3	0.09349	mg/L	0.003755	0.09349	mg/L	0.003755	4.02%
Cd 226.502†	72.1	-0.00008	mg/L	0.000081	-0.00008	mg/L	0.000081	95.93%
Ti 334.940†	18171.0	0.03258	mg/L	0.001283	0.03258	mg/L	0.001283	3.94%
Ca 227.546†	180.7	2.3293	mg/L	0.12125	2.3293	mg/L	0.12125	5.21%
Na 589.592†	-1119.9	-0.29803	mg/L	0.019004	-0.29803	mg/L	0.019004	6.38%
K 766.490†	1169.6	1.0335	mg/L	0.13300	1.0335	mg/L	0.13300	12.87%

Sequence No.: 36

Sample ID: M0975-18ASD~COMP-E- 100X

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 74

Date Collected: 6/21/2013 12:30:48 PM

Data Type: Reprocessed on 6/21/2013 2:05:15 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: M0975-18ASD~COMP-E- 100X

Analyte	Mean Corrected		Calib. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Y 360.073	1664206.5	97.769	%	2.8256				2.89%
Lu 261.542	1088149.2	98.51	%	2.918				2.96%
Ag 328.068†	10.4	0.00021	mg/L	0.000529	0.00021	mg/L	0.000529	256.02%
Al 308.215†	67024.0	3.5848	mg/L	0.08222	3.5848	mg/L	0.08222	2.29%
As 188.979†	1.4	0.00213	mg/L	0.004599	0.00213	mg/L	0.004599	215.69%
Ba 233.527†	4871.8	0.05914	mg/L	0.000951	0.05914	mg/L	0.000951	1.61%
Be 313.107†	358.1	0.00021	mg/L	0.000047	0.00021	mg/L	0.000047	22.47%
Co 228.616†	107.7	0.00349	mg/L	0.000134	0.00349	mg/L	0.000134	3.83%
Cr 267.716†	246.2	0.00423	mg/L	0.000110	0.00423	mg/L	0.000110	2.61%
Cu 324.752†	671.7	0.00402	mg/L	0.000169	0.00402	mg/L	0.000169	4.19%
Fe 273.955†	158835.1	7.5454	mg/L	0.03676	7.5454	mg/L	0.03676	0.49%
Mg 279.077†	11965.5	0.86921	mg/L	0.022887	0.86921	mg/L	0.022887	2.63%
Mn 257.610†	123829.6	0.24906	mg/L	0.001368	0.24906	mg/L	0.001368	0.55%
Ni 231.604†	130.1	0.00577	mg/L	0.000139	0.00577	mg/L	0.000139	2.41%
Pb 220.353†	23.6	0.00511	mg/L	0.001271	0.00511	mg/L	0.001271	24.86%
Sb 206.836†	4.8	0.00241	mg/L	0.002619	0.00241	mg/L	0.002619	108.50%
Se 196.026†	-3.9	-0.00278	mg/L	0.001196	-0.00278	mg/L	0.001196	43.05%
Tl 190.801†	-3.0	-0.00239	mg/L	0.000193	-0.00239	mg/L	0.000193	8.08%
V 292.402†	485.2	0.00454	mg/L	0.000290	0.00454	mg/L	0.000290	6.40%
Zn 206.200†	504.8	0.02013	mg/L	0.000240	0.02013	mg/L	0.000240	1.19%
Cd 226.502†	18.7	0.00006	mg/L	0.000249	0.00006	mg/L	0.000249	438.67%
Ti 334.940†	3495.6	0.00627	mg/L	0.000155	0.00627	mg/L	0.000155	2.48%
Ca 227.546†	28.3	0.44464	mg/L	0.026439	0.44464	mg/L	0.026439	5.95%
Na 589.592†	-1289.8	-0.34324	mg/L	0.016396	-0.34324	mg/L	0.016396	4.78%
K 766.490†	137.6	0.12162	mg/L	0.038034	0.12162	mg/L	0.038034	31.27%

Sequence No.: 37  
 Sample ID: CCV  
 Analyst:  
 Logged In Analyst (Original) : mitOptima3  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 3  
 Date Collected: 6/21/2013 12:34:29 PM  
 Data Type: Reprocessed on 6/21/2013 2:05:16 PM  
 Initial Sample Vol:  
 Sample Prep Vol:

-----  
 Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1613568.1	94.794 %	1.7270			1.82%
Lu 261.542	1059637.5	95.92 %	1.800			1.88%
Ag 328.068†	176418.4	1.2636 mg/L	0.06010	1.2636 mg/L	0.06010	4.76%
	QC value within limits for Ag 328.068 Recovery = 101.09%					
Al 308.215†	193354.8	10.330 mg/L	0.5551	10.330 mg/L	0.5551	5.37%
	QC value within limits for Al 308.215 Recovery = 103.30%					
As 188.979†	526.2	0.49883 mg/L	0.016217	0.49883 mg/L	0.016217	3.25%
	QC value within limits for As 188.979 Recovery = 99.77%					
Ba 233.527†	866731.5	10.524 mg/L	0.0868	10.524 mg/L	0.0868	0.82%
	QC value within limits for Ba 233.527 Recovery = 105.24%					
Be 313.107†	457013.3	0.25197 mg/L	0.002019	0.25197 mg/L	0.002019	0.80%
	QC value within limits for Be 313.107 Recovery = 100.79%					
Co 228.616†	78342.3	2.5479 mg/L	0.13525	2.5479 mg/L	0.13525	5.31%
	QC value within limits for Co 228.616 Recovery = 101.92%					
Cr 267.716†	58723.9	1.0322 mg/L	0.05248	1.0322 mg/L	0.05248	5.08%
	QC value within limits for Cr 267.716 Recovery = 103.22%					
Cu 324.752†	252426.9	1.2128 mg/L	0.05857	1.2128 mg/L	0.05857	4.83%
	QC value within limits for Cu 324.752 Recovery = 97.02%					
Fe 273.955†	109892.4	5.2558 mg/L	0.27353	5.2558 mg/L	0.27353	5.20%
	QC value within limits for Fe 273.955 Recovery = 105.12%					
Mg 279.077†	343904.9	24.982 mg/L	1.3624	24.982 mg/L	1.3624	5.45%
	QC value within limits for Mg 279.077 Recovery = 99.93%					
Mn 257.610†	1283888.8	2.5823 mg/L	0.02206	2.5823 mg/L	0.02206	0.85%
	QC value within limits for Mn 257.610 Recovery = 103.29%					
Ni 231.604†	57859.7	2.5667 mg/L	0.13362	2.5667 mg/L	0.13362	5.21%
	QC value within limits for Ni 231.604 Recovery = 102.67%					
Pb 220.353†	2292.5	0.50656 mg/L	0.013666	0.50656 mg/L	0.013666	2.70%
	QC value within limits for Pb 220.353 Recovery = 101.31%					
Sb 206.836†	803.6	0.50657 mg/L	0.015171	0.50657 mg/L	0.015171	2.99%
	QC value within limits for Sb 206.836 Recovery = 101.31%					
Se 196.026†	359.4	0.49030 mg/L	0.011527	0.49030 mg/L	0.011527	2.35%
	QC value within limits for Se 196.026 Recovery = 98.06%					
Tl 190.801†	531.9	0.48763 mg/L	0.016087	0.48763 mg/L	0.016087	3.30%
	QC value within limits for Tl 190.801 Recovery = 97.53%					
V 292.402†	248054.1	2.4889 mg/L	0.12873	2.4889 mg/L	0.12873	5.17%
	QC value within limits for V 292.402 Recovery = 99.55%					
Zn 206.200†	65064.4	2.6021 mg/L	0.13631	2.6021 mg/L	0.13631	5.24%
	QC value within limits for Zn 206.200 Recovery = 104.09%					
Cd 226.502†	10155.6	0.25576 mg/L	0.013165	0.25576 mg/L	0.013165	5.15%
	QC value within limits for Cd 226.502 Recovery = 102.30%					
Ti 334.940†	281559.9	0.50612 mg/L	0.004495	0.50612 mg/L	0.004495	0.89%
	QC value within limits for Ti 334.940 Recovery = Not calculated					
Ca 227.546†	4361.1	24.452 mg/L	0.7283	24.452 mg/L	0.7283	2.98%
	QC value within limits for Ca 227.546 Recovery = 97.81%					
Na 589.592†	93645.7	24.921 mg/L	0.2447	24.921 mg/L	0.2447	0.98%
	QC value within limits for Na 589.592 Recovery = 99.68%					
K 766.490†	27744.8	24.516 mg/L	0.3846	24.516 mg/L	0.3846	1.57%
	QC value within limits for K 766.490 Recovery = 98.07%					

All analyte(s) passed QC.

-----  
 Sequence No.: 38  
 Sample ID: CCB  
 Analyst:  
 Logged In Analyst (Original) : mitOptima3  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 4  
 Date Collected: 6/21/2013 12:38:11 PM  
 Data Type: Reprocessed on 6/21/2013 2:05:17 PM  
 Initial Sample Vol:  
 Sample Prep Vol:

-----  
 Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 360.073	1543077.2	90.653	%	1.5392				1.70%
Lu 261.542	1018113.3	92.17	%	1.628				1.77%
Ag 328.068†	-10.8	-0.00007	mg/L	0.000986	-0.00007	mg/L	0.000986	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	308.8	0.01651	mg/L	0.005757	0.01651	mg/L	0.005757	34.87%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	1.7	0.00155	mg/L	0.002717	0.00155	mg/L	0.002717	175.17%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	113.6	0.00138	mg/L	0.000898	0.00138	mg/L	0.000898	65.08%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	57.9	0.00003	mg/L	0.000032	0.00003	mg/L	0.000032	99.69%
QC value within limits for Be 313.107 Recovery = Not calculated								
Co 228.616†	15.1	0.00049	mg/L	0.000298	0.00049	mg/L	0.000298	60.60%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	18.5	0.00033	mg/L	0.000088	0.00033	mg/L	0.000088	27.12%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	114.1	0.00055	mg/L	0.000127	0.00055	mg/L	0.000127	23.15%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 273.955†	66.6	0.00318	mg/L	0.000737	0.00318	mg/L	0.000737	23.17%
QC value within limits for Fe 273.955 Recovery = Not calculated								
Mg 279.077†	66.3	0.00482	mg/L	0.001169	0.00482	mg/L	0.001169	24.26%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	203.7	0.00041	mg/L	0.000254	0.00041	mg/L	0.000254	62.08%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Ni 231.604†	2.4	0.00011	mg/L	0.000416	0.00011	mg/L	0.000416	382.02%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	11.4	0.00252	mg/L	0.000869	0.00252	mg/L	0.000869	34.46%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	4.4	0.00285	mg/L	0.003339	0.00285	mg/L	0.003339	117.10%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-0.2	-0.00030	mg/L	0.001464	-0.00030	mg/L	0.001464	487.48%
QC value within limits for Se 196.026 Recovery = Not calculated								
Tl 190.801†	-2.9	-0.00270	mg/L	0.001164	-0.00270	mg/L	0.001164	43.11%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	115.5	0.00116	mg/L	0.000492	0.00116	mg/L	0.000492	42.46%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	27.3	0.00109	mg/L	0.000412	0.00109	mg/L	0.000412	37.84%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Cd 226.502†	-2.4	-0.00006	mg/L	0.000028	-0.00006	mg/L	0.000028	45.91%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Ti 334.940†	114.4	0.00021	mg/L	0.000129	0.00021	mg/L	0.000129	62.67%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Ca 227.546†	5.7	0.03252	mg/L	0.039253	0.03252	mg/L	0.039253	120.71%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Na 589.592†	-1191.7	-0.31713	mg/L	0.028254	-0.31713	mg/L	0.028254	8.91%
QC value within limits for Na 589.592 Recovery = Not calculated								
K 766.490†	2.5	0.00221	mg/L	0.078363	0.00221	mg/L	0.078363	>999.9%
QC value within limits for K 766.490 Recovery = Not calculated								

All analyte(s) passed QC.

```

=====
Sequence No.: 39                               Autosampler Location: 51
Sample ID: MB-72345-PBW                       Date Collected: 6/21/2013 12:41:50 PM
Analyst:                                       Data Type: Reprocessed on 6/21/2013 2:05:18 PM
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:                             Initial Sample Vol:
Dilution:                                     Sample Prep Vol:
=====
    
```

Mean Data: MB-72345-PBW

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 360.073	1696894.6	99.690	%	2.8040				2.81%
Lu 261.542	1110835.5	100.6	%	2.90				2.89%
Ag 328.068†	180.0	0.00128	mg/L	0.000876	0.00128	mg/L	0.000876	68.31%
Al 308.215†	-79.8	-0.00427	mg/L	0.005199	-0.00427	mg/L	0.005199	121.71%
As 188.979†	2.8	0.00265	mg/L	0.001625	0.00265	mg/L	0.001625	61.36%
Ba 233.527†	-2.9	-0.00004	mg/L	0.000061	-0.00004	mg/L	0.000061	172.36%
Be 313.107†	111.8	0.00006	mg/L	0.000028	0.00006	mg/L	0.000028	45.41%

=====  
Analysis Begun

Logged In Analyst: mitFIMS2                                   Technique: AA FIMS-MHS  
Spectrometer Model: FIMS-100, S/N B050-9550                   Autosampler Model: AS-90

Sample Information File: C:\data-AA\mitFIMS2\Sample Information\0618b.sif  
Batch ID: Null  
Results Data Set: HG13061802  
Results Library: C:\data-AA\mitFIMS2\Results\Results.mdb

=====  
Method Loaded  
Method Name: Comm Hg   Method Last Saved: 12/19/2012 4:02:38 PM  
Method Description: Hg Analysis by Cold Vapor AA

Analyte   Calibration Equation                                   Wavelength  
Hg 253.7   Lin Thru 0   253.7

=====  
Sequence No.: 1   Autosampler Location: 1  
Sample ID: S0   Date Collected: 6/18/2013 3:11:18 PM  
Analyst:   Data Type: Original  
Initial Sample Wt:   Initial Sample Vol:  
Dilution:   Sample Prep Vol:

-----  
Replicate Data: S0  
Repl   SampleConc   StndConc   BlnkCorr   Peak   Peak   Time   Peak  
#    ug/L           ug/L       Signal   Area   Height                   Stored  
1           [0.00]       0.0004   0.0021   0.0004   15:12:17           Yes  
2           [0.00]       0.0003   0.0036   0.0003   15:12:57           Yes  
Mean:           [0.00]       0.0003  
SD:             0.00       0.0001  
%RSD:           0.00       27.11  
Auto-zero performed.

=====  
Sequence No.: 2   Autosampler Location: 2  
Sample ID: S0.20   Date Collected: 6/18/2013 3:12:59 PM  
Analyst:   Data Type: Original  
Initial Sample Wt:   Initial Sample Vol:  
Dilution:   Sample Prep Vol:

-----  
Replicate Data: S0.20  
Repl   SampleConc   StndConc   BlnkCorr   Peak   Peak   Time   Peak  
#    ug/L           ug/L       Signal   Area   Height                   Stored  
1           [0.2]       0.0026   0.0161   0.0029   15:13:57           Yes  
2           [0.2]       0.0028   0.0138   0.0031   15:14:37           Yes  
Mean:           [0.2]       0.0027  
SD:             0.0       0.0001  
%RSD:           0.0       4.73  
Standard number 1 applied. [0.2]  
Correlation Coef.: 1.000000    Slope: 0.01334    Intercept: 0.00000

=====  
Sequence No.: 3   Autosampler Location: 3  
Sample ID: S1.0   Date Collected: 6/18/2013 3:14:39 PM  
Analyst:   Data Type: Original  
Initial Sample Wt:   Initial Sample Vol:  
Dilution:   Sample Prep Vol:

-----  
Replicate Data: S1.0  
Repl   SampleConc   StndConc   BlnkCorr   Peak   Peak   Time   Peak  
#    ug/L           ug/L       Signal   Area   Height                   Stored  
1           [1]         0.0152   0.0933   0.0155   15:15:37           Yes  
2           [1]         0.0147   0.0817   0.0150   15:16:17           Yes  
Mean:           [1]         0.0149



SD: 0 0.0003  
 %RSD: 0 2.29  
 Standard number 2 applied. [1]  
 Correlation Coef.: 0.999295 Slope: 0.01489 Intercept: 0.00000

=====  
 Sequence No.: 4 Autosampler Location: 4  
 Sample ID: S2.0 Date Collected: 6/18/2013 3:16:19 PM  
 Analyst: Data Type: Original  
 Initial Sample Wt: Initial Sample Vol:  
 Dilution: Sample Prep Vol:

-----  
Replicate Data: S2.0

Repl #	SampleConc ug/L	StdConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2]	0.0299	0.1701	0.0302	15:17:16	Yes
2		[2]	0.0302	0.1743	0.0305	15:17:56	Yes
Mean:		[2]	0.0301				
SD:		0	0.0002				
%RSD:		0	0.72				

Standard number 3 applied. [2]  
 Correlation Coef.: 0.999842 Slope: 0.01500 Intercept: 0.00000

=====  
 Sequence No.: 5 Autosampler Location: 5  
 Sample ID: S5.0 Date Collected: 6/18/2013 3:17:58 PM  
 Analyst: Data Type: Original  
 Initial Sample Wt: Initial Sample Vol:  
 Dilution: Sample Prep Vol:

-----  
Replicate Data: S5.0

Repl #	SampleConc ug/L	StdConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5]	0.0753	0.4341	0.0756	15:18:56	Yes
2		[5]	0.0765	0.4392	0.0768	15:19:36	Yes
Mean:		[5]	0.0759				
SD:		0	0.0009				
%RSD:		0	1.13				

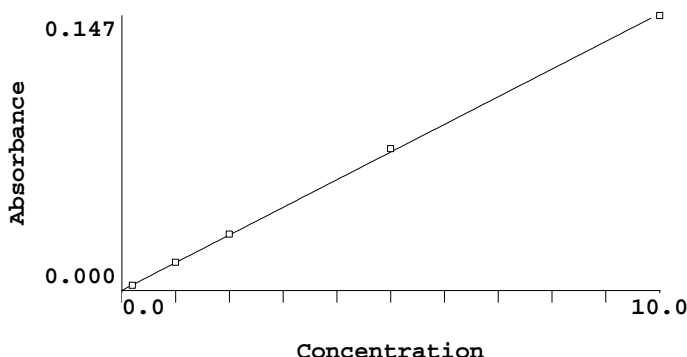
Standard number 4 applied. [5]  
 Correlation Coef.: 0.999959 Slope: 0.01514 Intercept: 0.00000

=====  
 Sequence No.: 6 Autosampler Location: 6  
 Sample ID: S10.0 Date Collected: 6/18/2013 3:19:38 PM  
 Analyst: Data Type: Original  
 Initial Sample Wt: Initial Sample Vol:  
 Dilution: Sample Prep Vol:

-----  
Replicate Data: S10.0

Repl #	SampleConc ug/L	StdConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10]	0.1482	0.8610	0.1485	15:20:35	Yes
2		[10]	0.1466	0.8575	0.1469	15:21:15	Yes
Mean:		[10]	0.1474				
SD:		0	0.0012				
%RSD:		0	0.80				

Standard number 5 applied. [10]  
 Correlation Coef.: 0.999856 Slope: 0.01483 Intercept: 0.00000  
 The calibration curve may not be linear.



Calibration data for Hg 253.7

Equation: Linear Through Zero

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
S0	0.0000	0	0.000	0.00	27.1
S0.20	0.0027	0.2	0.180	0.00	4.7
S1.0	0.0149	1.0	1.008	0.00	2.3
S2.0	0.0301	2.0	2.026	0.00	0.7
S5.0	0.0759	5.0	5.114	0.00	1.1
S10.0	0.1474	10.0	9.935	0.00	0.8

Correlation Coef.: 0.999856    Slope: 0.01483    Intercept: 0.00000

Sequence No.: 7

Autosampler Location: 7

Sample ID: ICV

Date Collected: 6/18/2013 3:21:18 PM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: ICV

Repl #	Sample Conc ug/L	Std Conc ug/L	Blk Corr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.838	4.838	0.0718	0.4183	0.0721	15:22:16	Yes
2	4.819	4.819	0.0715	0.4192	0.0718	15:22:56	Yes
Mean:	4.828	4.828	0.0716				
SD:	0.013	0.013	0.0002				
%RSD:	0.279	0.279	0.28				

QC value within limits for Hg 253.7    Recovery = 96.57%  
All analyte(s) passed QC.

Sequence No.: 8

Autosampler Location: 1

Sample ID: ICB

Date Collected: 6/18/2013 3:22:57 PM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: ICB

Repl #	Sample Conc ug/L	Std Conc ug/L	Blk Corr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.013	0.013	0.0002	0.0064	0.0005	15:23:58	Yes
2	-0.023	-0.023	-0.0003	-0.0086	-0.0000	15:24:37	Yes
Mean:	-0.005	-0.005	-0.0001				
SD:	0.025	0.025	0.0004				
%RSD:	482.2	482.2	482.17				

QC value within limits for Hg 253.7    Recovery = Not calculated  
All analyte(s) passed QC.

Sequence No.: 9

Autosampler Location: 17

Sample ID: MB-72291

Date Collected: 6/18/2013 3:24:39 PM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

-----  
Replicate Data: MB-72291

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.006	-0.006	-0.0001	0.0030	0.0002	15:25:37	Yes
2	-0.004	-0.004	-0.0001	-0.0026	0.0003	15:26:17	Yes
Mean:	-0.005	-0.005	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	19.95	19.95	19.95				

=====

Sequence No.: 10	Autosampler Location: 18
Sample ID: LCS-72291	Date Collected: 6/18/2013 3:26:19 PM
Analyst:	Data Type: Original
Initial Sample Wt:	Initial Sample Vol:
Dilution:	Sample Prep Vol:

-----

Replicate Data: LCS-72291

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.449	4.449	0.0660	0.3912	0.0663	15:27:16	Yes
2	4.448	4.448	0.0660	0.3897	0.0663	15:27:56	Yes
Mean:	4.448	4.448	0.0660				
SD:	0.001	0.001	0.0000				
%RSD:	0.013	0.013	0.01				

=====

Sequence No.: 11	Autosampler Location: 19
Sample ID: M0955-09B	Date Collected: 6/18/2013 3:27:58 PM
Analyst:	Data Type: Original
Initial Sample Wt:	Initial Sample Vol:
Dilution:	Sample Prep Vol:

-----

Replicate Data: M0955-09B

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.258	0.258	0.0038	0.0218	0.0041	15:28:55	Yes
2	0.266	0.266	0.0040	0.0260	0.0043	15:29:35	Yes
Mean:	0.262	0.262	0.0039				
SD:	0.006	0.006	0.0001				
%RSD:	2.364	2.364	2.36				

=====

Sequence No.: 12	Autosampler Location: 20
Sample ID: M0955-10B	Date Collected: 6/18/2013 3:29:37 PM
Analyst:	Data Type: Original
Initial Sample Wt:	Initial Sample Vol:
Dilution:	Sample Prep Vol:

-----

Replicate Data: M0955-10B

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.856	0.856	0.0127	0.0786	0.0130	15:30:35	Yes
2	0.844	0.844	0.0125	0.0734	0.0128	15:31:15	Yes
Mean:	0.850	0.850	0.0126				
SD:	0.009	0.009	0.0001				
%RSD:	1.041	1.041	1.04				

=====

Sequence No.: 13	Autosampler Location: 21
Sample ID: M0955-11B	Date Collected: 6/18/2013 3:31:17 PM
Analyst:	Data Type: Original
Initial Sample Wt:	Initial Sample Vol:
Dilution:	Sample Prep Vol:

-----

Replicate Data: M0955-11B

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.284	0.284	0.0042	0.0272	0.0045	15:32:14	Yes
2	0.280	0.280	0.0042	0.0297	0.0045	15:32:54	Yes
Mean:	0.282	0.282	0.0042				
SD:	0.003	0.003	0.0000				
%RSD:	1.001	1.001	1.00				

Sequence No.: 14  
Sample ID: M0967-01A  
Analyst:  
Initial Sample Wt:  
Dilution:

Autosampler Location: 22  
Date Collected: 6/18/2013 3:32:56 PM  
Data Type: Original  
Initial Sample Vol:  
Sample Prep Vol:

## Replicate Data: M0967-01A

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.019	0.019	0.0003	0.0056	0.0006	15:33:54	Yes
2	0.016	0.016	0.0002	0.0058	0.0006	15:34:34	Yes
Mean:	0.017	0.017	0.0003				
SD:	0.003	0.003	0.0000				
%RSD:	15.30	15.30	15.30				

Sequence No.: 15  
Sample ID: M0967-02A  
Analyst:  
Initial Sample Wt:  
Dilution:

Autosampler Location: 23  
Date Collected: 6/18/2013 3:34:36 PM  
Data Type: Original  
Initial Sample Vol:  
Sample Prep Vol:

## Replicate Data: M0967-02A

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.021	0.021	0.0003	0.0083	0.0006	15:35:34	Yes
2	0.030	0.030	0.0005	0.0128	0.0008	15:36:13	Yes
Mean:	0.025	0.025	0.0004				
SD:	0.007	0.007	0.0001				
%RSD:	27.33	27.33	27.33				

Sequence No.: 16  
Sample ID: M0975-04A  
Analyst:  
Initial Sample Wt:  
Dilution:

Autosampler Location: 24  
Date Collected: 6/18/2013 3:36:15 PM  
Data Type: Original  
Initial Sample Vol:  
Sample Prep Vol:

## Replicate Data: M0975-04A

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.196	0.196	0.0029	0.0222	0.0032	15:37:13	Yes
2	0.193	0.193	0.0029	0.0179	0.0032	15:37:53	Yes
Mean:	0.195	0.195	0.0029				
SD:	0.002	0.002	0.0000				
%RSD:	1.060	1.060	1.06				

Sequence No.: 17  
Sample ID: M0975-07A  
Analyst:  
Initial Sample Wt:  
Dilution:

Autosampler Location: 25  
Date Collected: 6/18/2013 3:37:55 PM  
Data Type: Original  
Initial Sample Vol:  
Sample Prep Vol:

## Replicate Data: M0975-07A

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.187	0.187	0.0028	0.0164	0.0031	15:38:52	Yes

2	0.200	0.200	0.0030	0.0234	0.0033	15:39:32	Yes
Mean:	0.194	0.194	0.0029				
SD:	0.010	0.010	0.0001				
%RSD:	5.045	5.045	5.04				

```

=====
Sequence No.: 18                               Autosampler Location: 7
Sample ID: CCV                                 Date Collected: 6/18/2013 3:39:34 PM
Analyst:                                       Data Type: Original
Initial Sample Wt:                             Initial Sample Vol:
Dilution:                                     Sample Prep Vol:
=====

```

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.870	4.870	0.0722	0.4343	0.0726	15:40:33	Yes
2	4.824	4.824	0.0716	0.4223	0.0719	15:41:13	Yes
Mean:	4.847	4.847	0.0719				
SD:	0.033	0.033	0.0005				
%RSD:	0.677	0.677	0.68				

QC value within limits for Hg 253.7 Recovery = 96.94%  
All analyte(s) passed QC.

```

=====
Sequence No.: 19                               Autosampler Location: 1
Sample ID: CCB                                 Date Collected: 6/18/2013 3:41:14 PM
Analyst:                                       Data Type: Original
Initial Sample Wt:                             Initial Sample Vol:
Dilution:                                     Sample Prep Vol:
=====

```

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.013	-0.013	-0.0002	-0.0014	0.0001	15:42:15	Yes
2	-0.010	-0.010	-0.0001	-0.0023	0.0002	15:42:55	Yes
Mean:	-0.011	-0.011	-0.0002				
SD:	0.003	0.003	0.0000				
%RSD:	22.71	22.71	22.71				

QC value within limits for Hg 253.7 Recovery = Not calculated  
All analyte(s) passed QC.

```

=====
Sequence No.: 20                               Autosampler Location: 26
Sample ID: M0975-11A                          Date Collected: 6/18/2013 3:42:57 PM
Analyst:                                       Data Type: Original
Initial Sample Wt:                             Initial Sample Vol:
Dilution:                                     Sample Prep Vol:
=====

```

Replicate Data: M0975-11A

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.228	0.228	0.0034	0.0184	0.0037	15:43:57	Yes
2	0.233	0.233	0.0035	0.0246	0.0038	15:44:37	Yes
Mean:	0.230	0.230	0.0034				
SD:	0.004	0.004	0.0001				
%RSD:	1.618	1.618	1.62				

```

=====
Sequence No.: 21                               Autosampler Location: 27
Sample ID: M0975-14A                          Date Collected: 6/18/2013 3:44:39 PM
Analyst:                                       Data Type: Original
Initial Sample Wt:                             Initial Sample Vol:
Dilution:                                     Sample Prep Vol:
=====

```

Replicate Data: M0975-14A

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
--------	-----------------	---------------	-----------------	-----------	-------------	------	-------------

1	0.208	0.208	0.0031	0.0264	0.0034	15:45:37	Yes
2	0.171	0.171	0.0025	0.0156	0.0029	15:46:17	Yes
Mean:	0.190	0.190	0.0028				
SD:	0.026	0.026	0.0004				
%RSD:	13.72	13.72	13.72				

```

=====
Sequence No.: 22                               Autosampler Location: 28
Sample ID: M0975-18A                           Date Collected: 6/18/2013 3:46:18 PM
Analyst:                                       Data Type: Original
Initial Sample Wt:                             Initial Sample Vol:
Dilution:                                     Sample Prep Vol:
=====

```

Replicate Data: M0975-18A

Repl #	SampleConc ug/L	StndConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.208	0.208	0.0031	0.0207	0.0034	15:47:16	Yes
2	0.217	0.217	0.0032	0.0218	0.0035	15:47:56	Yes
Mean:	0.212	0.212	0.0031				
SD:	0.007	0.007	0.0001				
%RSD:	3.088	3.088	3.09				

```

=====
Sequence No.: 23                               Autosampler Location: 29
Sample ID: M0988-01A                           Date Collected: 6/18/2013 3:47:58 PM
Analyst:                                       Data Type: Original
Initial Sample Wt:                             Initial Sample Vol:
Dilution:                                     Sample Prep Vol:
=====

```

Replicate Data: M0988-01A

Repl #	SampleConc ug/L	StndConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	67.54	67.54	1.0019	7.4414	1.0022	15:48:56	Yes
2	67.60	67.60	1.0028	7.4164	1.0031	15:49:36	Yes
Mean:	67.57	67.57	1.0023				
SD:	0.044	0.044	0.0006				
%RSD:	0.065	0.065	0.06				

Sample concentration is greater than that of the highest standard.

Sample concentration is greater than that of the highest standard.

Sample concentration is greater than that of the highest standard.

```

=====
Sequence No.: 24                               Autosampler Location: 30
Sample ID: M0988-02A                           Date Collected: 6/18/2013 3:49:38 PM
Analyst:                                       Data Type: Original
Initial Sample Wt:                             Initial Sample Vol:
Dilution:                                     Sample Prep Vol:
=====

```

Replicate Data: M0988-02A

Repl #	SampleConc ug/L	StndConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	11.87	11.87	0.1761	1.0414	0.1764	15:50:35	Yes
2	11.89	11.89	0.1764	1.0507	0.1767	15:51:15	Yes
Mean:	11.88	11.88	0.1762				
SD:	0.017	0.017	0.0002				
%RSD:	0.141	0.141	0.14				

Sample concentration is greater than that of the highest standard.

Sample concentration is greater than that of the highest standard.

Sample concentration is greater than that of the highest standard.

```

=====
Sequence No.: 25                               Autosampler Location: 31
Sample ID: M0988-02ADUP                         Date Collected: 6/18/2013 3:51:17 PM
Analyst:                                       Data Type: Original
Initial Sample Wt:                             Initial Sample Vol:
Dilution:                                     Sample Prep Vol:
=====

```

Replicate Data: M0988-02ADUP

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	12.18	12.18	0.1807	1.0867	0.1811	15:52:15	Yes
Sample concentration is greater than that of the highest standard.							
2	12.14	12.14	0.1800	1.0697	0.1804	15:52:55	Yes
Sample concentration is greater than that of the highest standard.							
Mean:	12.16	12.16	0.1804				
SD:	0.033	0.033	0.0005				
%RSD:	0.274	0.274	0.27				
Sample concentration is greater than that of the highest standard.							

Sequence No.: 26

Sample ID: M0988-02AMS

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 32

Date Collected: 6/18/2013 3:52:57 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: M0988-02AMS

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	13.85	13.85	0.2054	1.2305	0.2057	15:53:58	Yes
Sample concentration is greater than that of the highest standard.							
2	13.94	13.94	0.2068	1.2340	0.2071	15:54:38	Yes
Sample concentration is greater than that of the highest standard.							
Mean:	13.89	13.89	0.2061				
SD:	0.064	0.064	0.0010				
%RSD:	0.462	0.462	0.46				
Sample concentration is greater than that of the highest standard.							

Sequence No.: 27

Sample ID: M0994-01A

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 33

Date Collected: 6/18/2013 3:54:40 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: M0994-01A

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	24.85	24.85	0.3686	2.2658	0.3689	15:55:38	Yes
Sample concentration is greater than that of the highest standard.							
2	24.78	24.78	0.3676	2.2368	0.3680	15:56:17	Yes
Sample concentration is greater than that of the highest standard.							
Mean:	24.81	24.81	0.3681				
SD:	0.045	0.045	0.0007				
%RSD:	0.182	0.182	0.18				
Sample concentration is greater than that of the highest standard.							

Sequence No.: 28

Sample ID: M0988-01A 20x

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 34

Date Collected: 6/18/2013 3:56:19 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: M0988-01A 20x

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	6.984	6.984	0.1036	0.6102	0.1039	15:57:16	Yes
2	7.064	7.064	0.1048	0.6208	0.1051	15:57:56	Yes
Mean:	7.024	7.024	0.1042				
SD:	0.057	0.057	0.0008				
%RSD:	0.807	0.807	0.81				

Sequence No.: 29

Autosampler Location: 7

Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Date Collected: 6/18/2013 3:57:57 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Table with 8 columns: Repl #, SampleConc ug/L, StndConc ug/L, BlnkCorr Signal, Peak Area, Peak Height, Time, Peak Stored. Contains 2 replicate rows and summary statistics (Mean, SD, %RSD).

QC value within limits for Hg 253.7 Recovery = 98.01%
All analyte(s) passed QC.

Sequence No.: 30
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 6/18/2013 3:59:40 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Table with 8 columns: Repl #, SampleConc ug/L, StndConc ug/L, BlnkCorr Signal, Peak Area, Peak Height, Time, Peak Stored. Contains 2 replicate rows and summary statistics (Mean, SD, %RSD).

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 31
Sample ID: M0988-02A 3x
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 35
Date Collected: 6/18/2013 4:01:22 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: M0988-02A 3x

Table with 8 columns: Repl #, SampleConc ug/L, StndConc ug/L, BlnkCorr Signal, Peak Area, Peak Height, Time, Peak Stored. Contains 2 replicate rows and summary statistics (Mean, SD, %RSD).

Sequence No.: 32
Sample ID: M0988-02ADUP 3x
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 36
Date Collected: 6/18/2013 4:03:03 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: M0988-02ADUP 3x

Table with 8 columns: Repl #, SampleConc ug/L, StndConc ug/L, BlnkCorr Signal, Peak Area, Peak Height, Time, Peak Stored. Contains 2 replicate rows and summary statistics (Mean, SD, %RSD).



Sequence No.: 33  
 Sample ID: M0988-02AMS 3x  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 37  
 Date Collected: 6/18/2013 4:04:43 PM  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

-----  
 Replicate Data: M0988-02AMS 3x

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.143	5.143	0.0763	0.4388	0.0766	16:05:41	Yes
2	5.113	5.113	0.0758	0.4359	0.0762	16:06:20	Yes
Mean:	5.128	5.128	0.0761				
SD:	0.022	0.022	0.0003				
%RSD:	0.421	0.421	0.42				

Sequence No.: 34  
 Sample ID: M0994-01A 10x  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 38  
 Date Collected: 6/18/2013 4:06:22 PM  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

-----  
 Replicate Data: M0994-01A 10x

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.903	2.903	0.0431	0.2461	0.0434	16:07:20	Yes
2	2.874	2.874	0.0426	0.2411	0.0430	16:08:00	Yes
Mean:	2.888	2.888	0.0428				
SD:	0.021	0.021	0.0003				
%RSD:	0.711	0.711	0.71				

Sequence No.: 35  
 Sample ID: CCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 7  
 Date Collected: 6/18/2013 4:08:02 PM  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

-----  
 Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.026	5.026	0.0746	0.4249	0.0749	16:09:02	Yes
2	5.015	5.015	0.0744	0.4222	0.0747	16:09:42	Yes
Mean:	5.021	5.021	0.0745				
SD:	0.008	0.008	0.0001				
%RSD:	0.157	0.157	0.16				

QC value within limits for Hg 253.7 Recovery = 100.41%  
 All analyte(s) passed QC.

Sequence No.: 36  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 1  
 Date Collected: 6/18/2013 4:09:44 PM  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

-----  
 Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.010	0.010	0.0001	0.0037	0.0005	16:10:44	Yes
2	0.024	0.024	0.0004	0.0097	0.0007	16:11:23	Yes
Mean:	0.017	0.017	0.0003				
SD:	0.010	0.010	0.0001				
%RSD:	59.14	59.14	59.14				

QC value within limits for Hg 253.7 Recovery = Not calculated  
 All analyte(s) passed QC.

Prep Start Date: 06/18/2013 12:15  
 Prep End Date: 06/18/2013 13:00  
 Prep Batch ID: 72291

Prep Code: SW7471A\_PR  
 Technician: David T Camara  
 Prep Type: 7471B/SW7471B

Prep Factor Units:  
 mL / g

QC Matrix: N/A      Conc HNO3 1112120      5% KMnO4 IR13061701      Reagent 5 Lot: N/A  
 QC Matrix Lot: N/A      Conc HNO3 (mL): 1.25      5% KMnO4 (mL): 15.0      Reagent 5 (mL): N/A  
 Filter?: N/A      Conc HCl 4112073      Reagent 6 Lot: N/A  
 Filter Lot: N/A      Conc HCl (mL): 3.75      Reagent 6 (mL): N/A

Digestion Start Time 1: 06/18/2013 12:15      Digestion Start Time 2: 06/18/2013 12:30  
 Digestion End Time 1: 06/18/2013 12:17      Digestion End Time 2: 06/18/2013 13:00

Block Temp (C): 97  
 Therm ID1: MT-47  
 Corr Fac-2

Lab Sample ID	Client Samp ID	M	Initial (mL/g)	Final (mL)	Sample Color	Sample Clarity	Extract Color	Extract Clarity	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11	<2	HOT BLOCK
	40 uL III30617A		0.6	100	--	--	--	--	06/18/13		06/18/13	DTC	HgLab				HB-K
S1.0			0.6	100	--	--	--	--	06/18/13		06/18/13	DTC	HgLab				HB-K
	200 uL III30617A		0.6	100	--	--	--	--	06/18/13		06/18/13	DTC	HgLab				HB-K
S2.0			0.6	100	--	--	--	--	06/18/13		06/18/13	DTC	HgLab				HB-K
	400 uL III30617A		0.6	100	--	--	--	--	06/18/13		06/18/13	DTC	HgLab				HB-K
S5.0			0.6	100	--	--	--	--	06/18/13		06/18/13	DTC	HgLab				HB-K
	1000 uL III30617A		0.6	100	--	--	--	--	06/18/13		06/18/13	DTC	HgLab				HB-K
S10.0			0.6	100	--	--	--	--	06/18/13		06/18/13	DTC	HgLab				HB-K
	2000 uL III30617A		0.6	100	--	--	--	--	06/18/13		06/18/13	DTC	HgLab				HB-K
ICV			0.6	100	--	--	--	--	06/18/13		06/18/13	DTC	HgLab				HB-K
	1000 uL III30617B		0.6	100	--	--	--	--	06/18/13		06/18/13	DTC	HgLab				HB-K
ICB			0.6	100	--	--	--	--	06/18/13		06/18/13	DTC	HgLab				HB-K
CCV			0.6	100	--	--	--	--	06/18/13		06/18/13	DTC	HgLab				HB-K
	1000 uL III30617B		0.6	100	--	--	--	--	06/18/13		06/18/13	DTC	HgLab				HB-K
CCB			0.6	100	--	--	--	--	06/18/13		06/18/13	DTC	HgLab				HB-K
MB-72291			0.6	100	--	--	--	--	06/18/13		06/18/13	DTC	HgLab				HB-K
LCS-72291			0.6	100	--	--	--	--	06/18/13		06/18/13	DTC	HgLab				HB-K
	1000 uL III30617C		0.59	100	--	--	--	--	07/03/13	01	06/18/13	DTC	HgLab				HB-K
M0955-09B	WGL-SD-SD02-0613	S	0.59	100	--	--	--	--	07/03/13	01	06/18/13	DTC	HgLab				DoD
TAL																	
M0955-10B	WGL-SD-SD03-0613	S	0.55	100	--	--	--	--	07/03/13	01	06/18/13	DTC	HgLab				DoD
TAL																	
M0955-11B	WGL-SD-SD04-0613	S	0.54	100	--	--	--	--	07/03/13	01	06/18/13	DTC	HgLab				DoD
TAL																	
M0955-12B	RS-BF-A79-061313	S	0.56	100	--	--	--	--	07/05/13	01	06/18/13	DTC	HgLab				DoD
TAL																	
M0955-01A	RS-BF-A79-061313	S	0.56	100	--	--	--	--	07/05/13	01	06/18/13	DTC	HgLab				DoD
TAL																	

*DE 6/18/13*

**Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division**

**PREP BATCH REPORT**

Prep Start Date: **06/18/2013 12:15**  
 Prep End Date: **06/18/2013 13:00**  
 Prep Batch ID: **72291**

Prep Code: **SW7471A\_PR**      Prep Type: **7471B/SW7471B**  
 Technician: **David T Camara**      Prep Factor Units: **mL / g**

QC Matrix: N/A      Conc HNO3: 1112120      5% KMnO4 IR13061701      Reagent 5 Lot: N/A  
 QC Matrix Lot: N/A      Conc HNO3 (mL): 1.25      5% KMnO4 (mL): 15.0      Reagent 5 (mL): N/A  
 Filter?: N/A      Conc HCl: 4112073      Reagent 4 Lot: N/A      Reagent 6 Lot: N/A  
 Filter Lot: N/A      Conc HCl (mL): 3.75      Reagent 4 (mL): N/A      Reagent 6 (mL): N/A

Digestion Start Time 1: 06/18/2013 12:15      Digestion Start Time 2: 06/18/2013 12:30      Therm ID1: **MT-47**  
 Digestion End Time 1: 06/18/2013 12:17      Digestion End Time 2: 06/18/2013 13:00      Corr Fac: **-2**

Block Temp (C): 97

Lab Sample ID	Client Samp ID	M	Initial (mL/g)	Final (mL)	Sample Color	Sample Clarity	Extract Color	Extract Clarity	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH	HOT BLOCK
M0967-02A	RS-BF-A81-061313	S	0.58	100	--	--	--	--	07/05/13	01	06/18/13	DTC	HgLab	>11	<2	HB-2
TAL																
M0975-04A	COMP-A-061313	S	0.56	100	--	--	--	--	06/26/13	01	06/18/13	DTC	HgLab			HB-2
TAL																
M0975-07A	COMP-B-061313	S	0.51	100	--	--	--	--	06/26/13	01	06/18/13	DTC	HgLab			HB-2
TAL																
M0975-11A	COMP-C-061313	S	0.54	100	--	--	--	--	06/26/13	01	06/18/13	DTC	HgLab			HB-2
TAL																
M0975-14A	COMP-D-061313	S	0.55	100	--	--	--	--	06/26/13	01	06/18/13	DTC	HgLab			HB-2
TAL																
M0975-18A	COMP-E-061313	S	0.58	100	--	--	--	--	06/26/13	01	06/18/13	DTC	HgLab			HB-2
TAL																
M0988-01A	121-S04-061413-1	S	0.56	100	--	--	--	--	06/21/13	01	06/18/13	DTC	HgLab			HB-2
M0988-02A	225-B01-061413-1	S	0.52	100	--	--	--	--	06/21/13	01	06/18/13	DTC	HgLab			HB-2
M0988-02ADUP	225-B01-061413-1	S	0.53	100	--	--	--	--	06/21/13		06/18/13	DTC	HgLab			HB-2
M0988-02AMS	225-B01-061413-1	S	0.53	100	--	--	--	--	06/21/13		06/18/13	DTC	HgLab			HB-2
1000 uL III30617C																
M0994-01A	225-B02-061713-1	S	0.54	100	--	--	--	--	06/24/13		06/18/13	DTC	HgLab			HB-2

*DC 6/18/13*

Analyst Reviewed: **David T Camara**      Date: **06/18/2013**  
 Manager Reviewed: \_\_\_\_\_      Date: \_\_\_\_\_

# Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

## PREP BATCH REPORT

Prep Start Date: 06/20/2013 11:15

Prep End Date: 06/20/2013 12:45

Prep Batch ID: 72322

Prep Code: ICP\_S\_PR

Prep Type: 3050B/SW3050B

Prep Factor Units: mL / g

Technician: David T Camara

QC Matrix: N/A  
 1:1 HNO3 1112120  
 30% H2O2 (mL): 5.0

Reagent 5 Lot: N/A  
 Reagent 5 (mL): N/A

Filter?: N/A  
 Conc HNO3 1112120  
 Filter Lot: N/A  
 Conc HNO3 (mL): 2.5

Reagent 6 Lot: N/A  
 Reagent 6 (mL): N/A

Digestion Start Time 1: 06/20/2013 11:15  
 Digestion End Time 1: 06/20/2013 12:00

Digestion Start Time 2: 06/20/2013 12:30  
 Digestion End Time 2: 06/20/2013 12:45

Block Temp (C): 97  
 Therm ID1: MT-102  
 Corr Fac -1

Lab Sample ID	Client Samp ID	M	Initial (mL/g)	Final (mL)	Sample Color	Sample Clarity	Extract Color	Extract Clarity	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH	HOT BLOCK
MB-72322			1	50	--	--	--	--			06/20/13	DTC	ICPLab	>11	<-2	HB-B
LCS-72322			1	50	--	--	--	--			06/20/13	DTC	ICPLab			HB-B
M0967-01A	RS-BF-A79-061313	S	1.61	50	--	--	--	--	07/05/13	01	06/20/13	DTC	ICPLab			HB-B
M0967-02A	RS-BF-A81-061313	S	1.34	50	--	--	--	--	07/05/13	01	06/20/13	DTC	ICPLab			HB-B
M0975-04A	COMP-A-061313	S	1.14	50	--	--	--	--	06/26/13	01	06/20/13	DTC	ICPLab			HB-B
M0975-07A	COMP-B-061313	S	1.65	50	--	--	--	--	06/26/13	01	06/20/13	DTC	ICPLab			HB-B
M0975-11A	COMP-C-061313	S	1.31	50	--	--	--	--	06/26/13	01	06/20/13	DTC	ICPLab			HB-B
M0975-14A	COMP-D-061313	S	1.46	50	--	--	--	--	06/26/13	01	06/20/13	DTC	ICPLab			HB-B
M0975-18A	COMP-E-061313	S	1.4	50	--	--	--	--	06/26/13	01	06/20/13	DTC	ICPLab			HB-B
M0975-18ADUP	COMP-E-061313	S	1.39	50	--	--	--	--	06/26/13	01	06/20/13	DTC	ICPLab			HB-B
M0975-18AMS	COMP-E-061313	S	1.41	50	--	--	--	--	06/26/13	01	06/20/13	DTC	ICPLab			HB-B

455 uL III30603A, 455 uL IP130227A, 45.5 uL IP130311A, 45.5 uL IP130311B, TAL

David T Camara  
 Analyst Reviewed

06/20/2013  
 Date

6/21/13  
 Date

DC 6/20/13

Manager Reviewed

## *Percent Moisture and Percent Solids Report*

<i>Lab Sample ID</i>	<i>Client Sample ID</i>	<i>Analyzed</i>	<i>Percent Moisture</i>	<i>Percent Solids</i>	<i>Validated</i>
<i>M0975-01A</i>	<i>A-1-3-061313</i>	06/18/2013	20.881	79.119	Yes
<i>M0975-02A</i>	<i>A-2-2-061313</i>	06/18/2013	25.000	75.000	Yes
<i>M0975-03A</i>	<i>A-3-1-061313</i>	06/18/2013	18.921	81.079	Yes
<i>M0975-04A</i>	<i>COMP-A-061313</i>	06/18/2013	21.460	78.540	Yes
<i>M0975-05A</i>	<i>B-1-4-061313</i>	06/18/2013	18.650	81.350	Yes
<i>M0975-06A</i>	<i>B-2-1-061313</i>	06/18/2013	18.229	81.771	Yes
<i>M0975-07A</i>	<i>COMP-B-061313</i>	06/18/2013	20.671	79.329	Yes
<i>M0975-08A</i>	<i>C-1-2-061313</i>	06/18/2013	23.940	76.060	Yes
<i>M0975-09A</i>	<i>C-2-3-061313</i>	06/18/2013	25.535	74.465	Yes
<i>M0975-10A</i>	<i>C-3-2-061313</i>	06/18/2013	23.295	76.705	Yes
<i>M0975-11A</i>	<i>COMP-C-061313</i>	06/18/2013	17.278	82.722	Yes
<i>M0975-12A</i>	<i>D-1-1-061313</i>	06/18/2013	17.479	82.521	Yes
<i>M0975-13A</i>	<i>D-3-4-061313</i>	06/18/2013	19.204	80.796	Yes
<i>M0975-14A</i>	<i>COMP-D-061313</i>	06/18/2013	20.900	79.100	Yes
<i>M0975-15A</i>	<i>E-1-3-061313</i>	06/18/2013	15.889	84.111	Yes
<i>M0975-16A</i>	<i>E-2-4-061313</i>	06/18/2013	24.763	75.237	Yes
<i>M0975-17A</i>	<i>E-3-2-061313</i>	06/18/2013	23.279	76.721	Yes
<i>M0975-18A</i>	<i>COMP-E-061313</i>	06/18/2013	16.103	83.897	Yes

# Internal Chain of Custody

**Client:** GZA\_BUFFALO

**Work Order:** M0975

**Profile Name:** GZA\_SINGNORE

**MATRIX Soil**

Samp #	Bottle	Test	Status	Received	Date
01A	001	PMoist	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
01A	001	SW8260_LOW_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
01A	001	SW8260_MED_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
02A	001	PMoist	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
02A	001	SW8260_LOW_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
02A	001	SW8260_MED_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
03A	001	PMoist	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
03A	001	SW8260_LOW_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
03A	001	SW8260_MED_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
04A	001	PMoist	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
04A	001	SW6010_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
04A	001	SW7471	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
04A	001	SW7471	Out	David T Camara	6/18/2013 11:50:21 AM
04A	001	SW7471	In	David T Camara	6/18/2013 1:28:04 PM
04A	001	SW7471	In	Jodie B Warner	6/24/2013 12:00:18 PM
04A	001	SW8081_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
04A	001	SW8081_S	Out	Jodie B Warner	6/18/2013 9:39:49 AM
04A	001	SW8081_S	In	Jodie B Warner	6/18/2013 10:38:00 AM
04A	001	SW8081_S	In	Jodie B Warner	6/24/2013 12:00:18 PM
04A	001	SW8082_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
04A	001	SW8082_S	Out	Jodie B Warner	6/18/2013 9:39:54 AM
04A	001	SW8082_S	In	Jodie B Warner	6/18/2013 10:38:00 AM
04A	001	SW8082_S	In	Jodie B Warner	6/24/2013 12:00:18 PM
04A	001	SW8270_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
04A	001	SW8270_S	Out	Jodie B Warner	6/18/2013 9:39:56 AM
04A	001	SW8270_S	In	Jodie B Warner	6/18/2013 10:38:00 AM
04A	001	SW8270_S	Out	Jodie B Warner	6/24/2013 11:01:22 AM
04A	001	SW8270_S	In	Jodie B Warner	6/24/2013 12:00:18 PM
05A	001	PMoist	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
05A	001	SW8260_LOW_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
05A	001	SW8260_MED_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM

# Internal Chain of Custody

**Client:** GZA\_BUFFALO

**Work Order:** M0975

**Profile Name:** GZA\_SINGNORE

**MATRIX Soil**

Samp #	Bottle	Test	Status	Received	Date
06A	001	PMoist	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
06A	001	SW8260_LOW_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
06A	001	SW8260_MED_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
07A	001	PMoist	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
07A	001	SW6010_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
07A	001	SW7471	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
07A	001	SW7471	Out	David T Camara	6/18/2013 11:50:21 AM
07A	001	SW7471	In	David T Camara	6/18/2013 1:28:04 PM
07A	001	SW7471	In	Jodie B Warner	6/24/2013 12:00:18 PM
07A	001	SW8081_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
07A	001	SW8081_S	Out	Jodie B Warner	6/18/2013 9:39:49 AM
07A	001	SW8081_S	In	Jodie B Warner	6/18/2013 10:38:00 AM
07A	001	SW8081_S	In	Jodie B Warner	6/24/2013 12:00:18 PM
07A	001	SW8082_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
07A	001	SW8082_S	Out	Jodie B Warner	6/18/2013 9:39:54 AM
07A	001	SW8082_S	In	Jodie B Warner	6/18/2013 10:38:00 AM
07A	001	SW8082_S	In	Jodie B Warner	6/24/2013 12:00:18 PM
07A	001	SW8270_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
07A	001	SW8270_S	Out	Jodie B Warner	6/18/2013 9:39:56 AM
07A	001	SW8270_S	In	Jodie B Warner	6/18/2013 10:38:00 AM
07A	001	SW8270_S	Out	Jodie B Warner	6/24/2013 11:01:22 AM
07A	001	SW8270_S	In	Jodie B Warner	6/24/2013 12:00:18 PM
08A	001	PMoist	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
08A	001	SW8260_LOW_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
08A	001	SW8260_MED_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
09A	001	PMoist	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
09A	001	SW8260_LOW_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
09A	001	SW8260_MED_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
10A	001	PMoist	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
10A	001	SW8260_LOW_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
10A	001	SW8260_MED_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM

# Internal Chain of Custody

**Client:** GZA\_BUFFALO

**Work Order:** M0975

**Profile Name:** GZA\_SINGNORE

**MATRIX Soil**

Samp #	Bottle	Test	Status	Received	Date
11A	001	PMoist	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
11A	001	SW6010_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
11A	001	SW7471	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
11A	001	SW7471	Out	David T Camara	6/18/2013 11:50:21 AM
11A	001	SW7471	In	David T Camara	6/18/2013 1:28:04 PM
11A	001	SW7471	In	Jodie B Warner	6/24/2013 12:00:18 PM
11A	001	SW8081_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
11A	001	SW8081_S	Out	Jodie B Warner	6/18/2013 9:39:49 AM
11A	001	SW8081_S	In	Jodie B Warner	6/18/2013 10:38:00 AM
11A	001	SW8081_S	In	Jodie B Warner	6/24/2013 12:00:18 PM
11A	001	SW8082_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
11A	001	SW8082_S	Out	Jodie B Warner	6/18/2013 9:39:54 AM
11A	001	SW8082_S	In	Jodie B Warner	6/18/2013 10:38:00 AM
11A	001	SW8082_S	In	Jodie B Warner	6/24/2013 12:00:18 PM
11A	001	SW8270_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
11A	001	SW8270_S	Out	Jodie B Warner	6/18/2013 9:39:56 AM
11A	001	SW8270_S	In	Jodie B Warner	6/18/2013 10:38:00 AM
11A	001	SW8270_S	Out	Jodie B Warner	6/24/2013 11:01:22 AM
11A	001	SW8270_S	In	Jodie B Warner	6/24/2013 12:00:18 PM
12A	001	PMoist	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
12A	001	SW8260_LOW_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
12A	001	SW8260_MED_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
13A	001	PMoist	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
13A	001	SW8260_LOW_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
13A	001	SW8260_MED_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM



# Internal Chain of Custody

**Client:** GZA\_BUFFALO

**Work Order:** M0975

**Profile Name:** GZA\_SINGNORE

**MATRIX Soil**

Samp #	Bottle	Test	Status	Received	Date
14A	001	PMoist	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
14A	001	SW6010_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
14A	001	SW7471	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
14A	001	SW7471	Out	David T Camara	6/18/2013 11:50:21 AM
14A	001	SW7471	In	David T Camara	6/18/2013 1:28:04 PM
14A	001	SW7471	In	Jodie B Warner	6/24/2013 12:00:18 PM
14A	001	SW8081_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
14A	001	SW8081_S	Out	Jodie B Warner	6/18/2013 9:39:49 AM
14A	001	SW8081_S	In	Jodie B Warner	6/18/2013 10:38:00 AM
14A	001	SW8081_S	In	Jodie B Warner	6/24/2013 12:00:18 PM
14A	001	SW8082_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
14A	001	SW8082_S	Out	Jodie B Warner	6/18/2013 9:39:54 AM
14A	001	SW8082_S	In	Jodie B Warner	6/18/2013 10:38:00 AM
14A	001	SW8082_S	In	Jodie B Warner	6/24/2013 12:00:18 PM
14A	001	SW8270_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
14A	001	SW8270_S	Out	Jodie B Warner	6/18/2013 9:39:56 AM
14A	001	SW8270_S	In	Jodie B Warner	6/18/2013 10:38:00 AM
14A	001	SW8270_S	Out	Jodie B Warner	6/24/2013 11:01:22 AM
14A	001	SW8270_S	In	Jodie B Warner	6/24/2013 12:00:18 PM
15A	001	PMoist	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
15A	001	SW8260_LOW_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
15A	001	SW8260_MED_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
16A	001	PMoist	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
16A	001	SW8260_LOW_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
16A	001	SW8260_MED_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
17A	001	PMoist	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
17A	001	SW8260_LOW_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
17A	001	SW8260_MED_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM

# Internal Chain of Custody

**Client:** GZA\_BUFFALO

**Work Order:** M0975

**Profile Name:** GZA\_SINGNORE

**MATRIX**      **Soil**

Samp #	Bottle	Test	Status	Received	Date
18A	001	PMoist	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
18A	001	SW6010_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
18A	001	SW7471	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
18A	001	SW7471	Out	David T Camara	6/18/2013 11:50:21 AM
18A	001	SW7471	In	David T Camara	6/18/2013 1:28:04 PM
18A	001	SW7471	In	Jodie B Warner	6/24/2013 12:00:18 PM
18A	001	SW8081_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
18A	001	SW8082_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
18A	001	SW8270_S	In	LOGIN: tmcdaniel	6/14/2013 4:12:00 PM
18A	001	SW8270_S	Out	Jodie B Warner	6/24/2013 11:01:22 AM
18A	001	SW8270_S	In	Jodie B Warner	6/24/2013 12:00:18 PM

## **Last Page of Data Report**