Report Date:
24-Dec-12 14:24

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

LaBella Associates
300 State Street, Suite 201
Rochester, NY 14614

Work Order: L2516
Project : LaBella Stand By-Monoco
Project #: 210259

Attn: Dan Noll

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
L2516-01	WC-1	Soil	05-Dec-12 10:00	06-Dec-12 10:55
L2516-02	WC-2	Soil	05-Dec-12 10:00	06-Dec-12 10:55
L2516-03	WC-3	Soil	05-Dec-12 10:00	06-Dec-12 10:55
L2516-04	WC-4	Soil	05-Dec-12 10:00	06-Dec-12 10:55
L2516-05	WC-5	Soil	05-Dec-12 10:00	06-Dec-12 10:55

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 requirments have been meet.

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.

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

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Stand By-Monoco

Laboratory Workorder / SDG #: L2516

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

Aqueous Samples were prepared following procedures in laboratory test code: SW3510

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: S3
Instrument Type: GCMS-SEMI
Description: HP6890 / HP5973
Manufacturer: Hewlett-Packard
Model: 6890 / 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):

Matrix spikes were performed on sample: WC-5 (L2516-05AMS).

Percent recoveries were within the QC limits.

Replicate RPDs were within the advisory QC limits.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

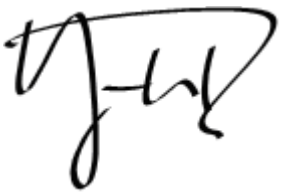
F. Dilutions:

No sample in this SDG required analysis at dilution.

G. Samples:

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:_____12/21/2012_____

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Stand By-Monoco

Laboratory Workorder / SDG #: L2516

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

Aqueous Samples were prepared following procedures in laboratory test code: SW3510

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:

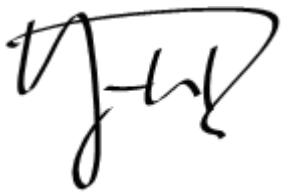
No sample in this SDG required analysis at dilution.

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.

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:_____12/20/2012_____

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Stand By-Monoco

Laboratory Workorder / SDG #: L2516

SW846 6010C

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

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW3005

V. INSTRUMENTATION

The following instrumentation was used to perform

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 recovery for laboratory control sample was within the QC limits.

2. Matrix spike (MS):

Matrix spike was performed on sample: WC-5 (L2516-05AMS).

Percent recovery was within the QC limits.

D. Post Digestion Spike (PDS):

A post-digestion spike was not performed on any sample in this SDG.

E. Duplicate sample:

A duplicate analysis was not performed on any sample in this SDG.

F. Serial Dilution (SD):

Serial Dilution analysis was performed on sample: WC-5 (L2516-05ASD).

Percent RPD was 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 RI, 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: 12/24/12

Client: LaBella Associates
Client Sample ID: WC-1 **Project:** LaBella Stand By-Monoco
Lab ID: L2516-01 **Collection Date:** 12/05/12 10:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8270D -- SVOA by GC-MS							**SW8270_W**
1,4-Dichlorobenzene -- TCLP	ND		33	ug/L	1	12/11/2012 12:55	69620
2-Methylphenol -- TCLP	ND		33	ug/L	1	12/11/2012 12:55	69620
4-Methylphenol -- TCLP	ND		33	ug/L	1	12/11/2012 12:55	69620
Hexachloroethane -- TCLP	ND		33	ug/L	1	12/11/2012 12:55	69620
Nitrobenzene -- TCLP	ND		33	ug/L	1	12/11/2012 12:55	69620
Hexachlorobutadiene -- TCLP	ND		33	ug/L	1	12/11/2012 12:55	69620
2,4,6-Trichlorophenol -- TCLP	ND		33	ug/L	1	12/11/2012 12:55	69620
2,4,5-Trichlorophenol -- TCLP	ND		67	ug/L	1	12/11/2012 12:55	69620
2,4-Dinitrotoluene -- TCLP	ND		33	ug/L	1	12/11/2012 12:55	69620
Hexachlorobenzene -- TCLP	ND		33	ug/L	1	12/11/2012 12:55	69620
Pentachlorophenol -- TCLP	ND		67	ug/L	1	12/11/2012 12:55	69620
Pyridine -- TCLP	ND		67	ug/L	1	12/11/2012 12:55	69620
Surrogate: Nitrobenzene-d5 -- TCLP	72.1		40-110	%REC	1	12/11/2012 12:55	69620
Surrogate: 2-Fluorobiphenyl -- TCLP	87.0		50-110	%REC	1	12/11/2012 12:55	69620
Surrogate: Terphenyl-d14 -- TCLP	106		50-135	%REC	1	12/11/2012 12:55	69620
Surrogate: Phenol-d5 -- TCLP	51.2		10-115	%REC	1	12/11/2012 12:55	69620
Surrogate: 2-Fluorophenol -- TCLP	66.2		20-110	%REC	1	12/11/2012 12:55	69620
Surrogate: 2,4,6-Tribromophenol -- TCLP	95.2		40-125	%REC	1	12/11/2012 12:55	69620

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

12/20/2012

Client: LaBella Associates
Client Sample ID: WC-2
Lab ID: L2516-02
Project: LaBella Stand By-Monoco
Collection Date: 12/05/12 10:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8270D -- SVOA by GC-MS							**SW8270_W**
1,4-Dichlorobenzene -- TCLP	ND		33	ug/L	1	12/11/2012 13:18	69620
2-Methylphenol -- TCLP	ND		33	ug/L	1	12/11/2012 13:18	69620
4-Methylphenol -- TCLP	ND		33	ug/L	1	12/11/2012 13:18	69620
Hexachloroethane -- TCLP	ND		33	ug/L	1	12/11/2012 13:18	69620
Nitrobenzene -- TCLP	ND		33	ug/L	1	12/11/2012 13:18	69620
Hexachlorobutadiene -- TCLP	ND		33	ug/L	1	12/11/2012 13:18	69620
2,4,6-Trichlorophenol -- TCLP	ND		33	ug/L	1	12/11/2012 13:18	69620
2,4,5-Trichlorophenol -- TCLP	ND		67	ug/L	1	12/11/2012 13:18	69620
2,4-Dinitrotoluene -- TCLP	ND		33	ug/L	1	12/11/2012 13:18	69620
Hexachlorobenzene -- TCLP	ND		33	ug/L	1	12/11/2012 13:18	69620
Pentachlorophenol -- TCLP	ND		67	ug/L	1	12/11/2012 13:18	69620
Pyridine -- TCLP	ND		67	ug/L	1	12/11/2012 13:18	69620
Surrogate: Nitrobenzene-d5 -- TCLP	80.2		40-110	%REC	1	12/11/2012 13:18	69620
Surrogate: 2-Fluorobiphenyl -- TCLP	98.4		50-110	%REC	1	12/11/2012 13:18	69620
Surrogate: Terphenyl-d14 -- TCLP	126		50-135	%REC	1	12/11/2012 13:18	69620
Surrogate: Phenol-d5 -- TCLP	55.5		10-115	%REC	1	12/11/2012 13:18	69620
Surrogate: 2-Fluorophenol -- TCLP	72.1		20-110	%REC	1	12/11/2012 13:18	69620
Surrogate: 2,4,6-Tribromophenol -- TCLP	102		40-125	%REC	1	12/11/2012 13:18	69620

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

12/20/2012

Client: LaBella Associates
Client Sample ID: WC-3
Lab ID: L2516-03
Project: LaBella Stand By-Monoco
Collection Date: 12/05/12 10:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8270D -- SVOA by GC-MS							**SW8270_W**
1,4-Dichlorobenzene -- TCLP	ND		33	ug/L	1	12/11/2012 13:42	69620
2-Methylphenol -- TCLP	ND		33	ug/L	1	12/11/2012 13:42	69620
4-Methylphenol -- TCLP	ND		33	ug/L	1	12/11/2012 13:42	69620
Hexachloroethane -- TCLP	ND		33	ug/L	1	12/11/2012 13:42	69620
Nitrobenzene -- TCLP	ND		33	ug/L	1	12/11/2012 13:42	69620
Hexachlorobutadiene -- TCLP	ND		33	ug/L	1	12/11/2012 13:42	69620
2,4,6-Trichlorophenol -- TCLP	ND		33	ug/L	1	12/11/2012 13:42	69620
2,4,5-Trichlorophenol -- TCLP	ND		67	ug/L	1	12/11/2012 13:42	69620
2,4-Dinitrotoluene -- TCLP	ND		33	ug/L	1	12/11/2012 13:42	69620
Hexachlorobenzene -- TCLP	ND		33	ug/L	1	12/11/2012 13:42	69620
Pentachlorophenol -- TCLP	ND		67	ug/L	1	12/11/2012 13:42	69620
Pyridine -- TCLP	ND		67	ug/L	1	12/11/2012 13:42	69620
Surrogate: Nitrobenzene-d5 -- TCLP	72.4		40-110	%REC	1	12/11/2012 13:42	69620
Surrogate: 2-Fluorobiphenyl -- TCLP	87.9		50-110	%REC	1	12/11/2012 13:42	69620
Surrogate: Terphenyl-d14 -- TCLP	55.6		50-135	%REC	1	12/11/2012 13:42	69620
Surrogate: Phenol-d5 -- TCLP	49.9		10-115	%REC	1	12/11/2012 13:42	69620
Surrogate: 2-Fluorophenol -- TCLP	65.0		20-110	%REC	1	12/11/2012 13:42	69620
Surrogate: 2,4,6-Tribromophenol -- TCLP	96.3		40-125	%REC	1	12/11/2012 13:42	69620

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

12/20/2012

Client: LaBella Associates
Client Sample ID: WC-4
Lab ID: L2516-04
Project: LaBella Stand By-Monoco
Collection Date: 12/05/12 10:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8270D -- SVOA by GC-MS							**SW8270_W**
1,4-Dichlorobenzene -- TCLP	ND		33	ug/L	1	12/11/2012 14:05	69620
2-Methylphenol -- TCLP	ND		33	ug/L	1	12/11/2012 14:05	69620
4-Methylphenol -- TCLP	ND		33	ug/L	1	12/11/2012 14:05	69620
Hexachloroethane -- TCLP	ND		33	ug/L	1	12/11/2012 14:05	69620
Nitrobenzene -- TCLP	ND		33	ug/L	1	12/11/2012 14:05	69620
Hexachlorobutadiene -- TCLP	ND		33	ug/L	1	12/11/2012 14:05	69620
2,4,6-Trichlorophenol -- TCLP	ND		33	ug/L	1	12/11/2012 14:05	69620
2,4,5-Trichlorophenol -- TCLP	ND		67	ug/L	1	12/11/2012 14:05	69620
2,4-Dinitrotoluene -- TCLP	ND		33	ug/L	1	12/11/2012 14:05	69620
Hexachlorobenzene -- TCLP	ND		33	ug/L	1	12/11/2012 14:05	69620
Pentachlorophenol -- TCLP	ND		67	ug/L	1	12/11/2012 14:05	69620
Pyridine -- TCLP	ND		67	ug/L	1	12/11/2012 14:05	69620
Surrogate: Nitrobenzene-d5 -- TCLP	71.7		40-110	%REC	1	12/11/2012 14:05	69620
Surrogate: 2-Fluorobiphenyl -- TCLP	88.4		50-110	%REC	1	12/11/2012 14:05	69620
Surrogate: Terphenyl-d14 -- TCLP	116		50-135	%REC	1	12/11/2012 14:05	69620
Surrogate: Phenol-d5 -- TCLP	48.5		10-115	%REC	1	12/11/2012 14:05	69620
Surrogate: 2-Fluorophenol -- TCLP	61.8		20-110	%REC	1	12/11/2012 14:05	69620
Surrogate: 2,4,6-Tribromophenol -- TCLP	102		40-125	%REC	1	12/11/2012 14:05	69620

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

12/20/2012

Client: LaBella Associates
Client Sample ID: WC-5
Lab ID: L2516-05
Project: LaBella Stand By-Monoco
Collection Date: 12/05/12 10:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8270D -- SVOA by GC-MS							**SW8270_W**
1,4-Dichlorobenzene -- TCLP	ND		33	ug/L	1	12/11/2012 14:29	69620
2-Methylphenol -- TCLP	ND		33	ug/L	1	12/11/2012 14:29	69620
4-Methylphenol -- TCLP	ND		33	ug/L	1	12/11/2012 14:29	69620
Hexachloroethane -- TCLP	ND		33	ug/L	1	12/11/2012 14:29	69620
Nitrobenzene -- TCLP	ND		33	ug/L	1	12/11/2012 14:29	69620
Hexachlorobutadiene -- TCLP	ND		33	ug/L	1	12/11/2012 14:29	69620
2,4,6-Trichlorophenol -- TCLP	ND		33	ug/L	1	12/11/2012 14:29	69620
2,4,5-Trichlorophenol -- TCLP	ND		67	ug/L	1	12/11/2012 14:29	69620
2,4-Dinitrotoluene -- TCLP	ND		33	ug/L	1	12/11/2012 14:29	69620
Hexachlorobenzene -- TCLP	ND		33	ug/L	1	12/11/2012 14:29	69620
Pentachlorophenol -- TCLP	ND		67	ug/L	1	12/11/2012 14:29	69620
Pyridine -- TCLP	ND		67	ug/L	1	12/11/2012 14:29	69620
Surrogate: Nitrobenzene-d5 -- TCLP	69.4		40-110	%REC	1	12/11/2012 14:29	69620
Surrogate: 2-Fluorobiphenyl -- TCLP	89.5		50-110	%REC	1	12/11/2012 14:29	69620
Surrogate: Terphenyl-d14 -- TCLP	124		50-135	%REC	1	12/11/2012 14:29	69620
Surrogate: Phenol-d5 -- TCLP	48.8		10-115	%REC	1	12/11/2012 14:29	69620
Surrogate: 2-Fluorophenol -- TCLP	62.0		20-110	%REC	1	12/11/2012 14:29	69620
Surrogate: 2,4,6-Tribromophenol -- TCLP	99.2		40-125	%REC	1	12/11/2012 14:29	69620

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

CLIENT: LaBella Associates
Work Order: L2516
Project: LaBella Stand By-Monoco

ANALYTICAL QC SUMMARY REPORT

SW8270_W

SW846 8270D -- SVOA by GC-MS

Sample ID **MB-69590** SampType: **MBLK** TestCode: **SW8270_W** Prep Date: **12/07/12 11:15** Run ID: **S3_121211A**

Client ID: **MB-69590** Batch ID: **69620** Units: **ug/L** Analysis Date: **12/11/12 12:31** SeqNo: **1842785**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene -- TCLP	ND	3.7	33									
2-Methylphenol -- TCLP	ND	3.2	33									
4-Methylphenol -- TCLP	ND	4.7	33									
Hexachloroethane -- TCLP	ND	1.8	33									
Nitrobenzene -- TCLP	ND	5.3	33									
Hexachlorobutadiene -- TCLP	ND	2.5	33									
2,4,6-Trichlorophenol -- TCLP	ND	1.8	33									
2,4,5-Trichlorophenol -- TCLP	ND	0.87	67									
2,4-Dinitrotoluene -- TCLP	ND	1.4	33									
Hexachlorobenzene -- TCLP	ND	1.5	33									
Pentachlorophenol -- TCLP	ND	5.7	67									
Pyridine -- TCLP	ND	1.9	67									
Surrogate: Nitrobenzene-d5 -- TCLP	129.5		33	166.7	0	77.7	40	110	0			
Surrogate: 2-Fluorobiphenyl -- TCLP	167.9		33	166.7	0	101	50	110	0			
Surrogate: Terphenyl-d14 -- TCLP	211.2		33	166.7	0	127	50	135	0			
Surrogate: Phenol-d5 -- TCLP	151.7		33	166.7	0	91.0	10	115	0			
Surrogate: 2-Fluorophenol -- TCLP	150.0		33	166.7	0	90.0	20	110	0			
Surrogate: 2,4,6-Tribromophenol -- TCLP	174.6		33	166.7	0	105	40	125	0			

CLIENT: LaBella Associates
Work Order: L2516
Project: LaBella Stand By-Monoco

ANALYTICAL QC SUMMARY REPORT

SW8270_W

SW846 8270D -- SVOA by GC-MS

Sample ID **LCS-69620** SampType: **LCS** TestCode: **SW8270_W** Prep Date: **12/07/12 11:15** Run ID: **S3_121211A**
Client ID: **LCS-69620** Batch ID: **69620** Units: **ug/L** Analysis Date: **12/11/12 15:15** SeqNo: **1843430**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	157.3	3.7	33	166.7	0	94.4	30	100	0			
2-Methylphenol	156.2	3.2	33	166.7	0	93.7	40	110	0			
4-Methylphenol	150.1	4.7	33	166.7	0	90.0	30	110	0			
Hexachloroethane	139.3	1.8	33	166.7	0	83.6	30	95	0			
Nitrobenzene	132.2	5.3	33	166.7	0	79.3	45	110	0			
Hexachlorobutadiene	149.5	2.5	33	166.7	0	89.7	25	105	0			
2,4,6-Trichlorophenol	164.0	1.8	33	166.7	0	98.4	50	115	0			
2,4,5-Trichlorophenol	180.0	0.87	67	166.7	0	108	50	110	0			
2,4-Dinitrotoluene	180.2	1.4	33	166.7	0	108	50	120	0			
Hexachlorobenzene	180.3	1.5	33	166.7	0	108	50	110	0			
Pentachlorophenol	119.8	5.7	67	166.7	0	71.9	40	115	0			
Pyridine	140.8	1.9	67	166.7	0	84.5	10	106	0			
Surrogate: Nitrobenzene-d5	133.3		33	166.7	0	80.0	40	110	0			
Surrogate: 2-Fluorobiphenyl	177.7		33	166.7	0	107	50	110	0			
Surrogate: Terphenyl-d14	188.2		33	166.7	0	113	50	135	0			
Surrogate: Phenol-d5	159.4		33	166.7	0	95.6	10	115	0			
Surrogate: 2-Fluorophenol	148.8		33	166.7	0	89.3	20	110	0			
Surrogate: 2,4,6-Tribromophenol	189.9		33	166.7	0	114	40	125	0			

Qualifiers: ND - Not Detected at the MDL; S - Recovery outside accepted recovery limits; MDL - Method Detection Limit; B - Analyte detected in the associated Method Blank
J - Analyte detected below quanititation limits; R - RPD outside accepted recovery limits; RL - Reporting Limit

CLIENT: LaBella Associates
Work Order: L2516
Project: LaBella Stand By-Monoco

ANALYTICAL QC SUMMARY REPORT

SW8270_W

SW846 8270D -- SVOA by GC-MS

Sample ID **LCSD-69620** SampType: **LCSD** TestCode: **SW8270_W** Prep Date: **12/07/12 11:15** Run ID: **S3_121211A**
Client ID: **LCSD-69620** Batch ID: **69620** Units: **ug/L** Analysis Date: **12/11/12 15:39** SeqNo: **1843431**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	153.1	3.7	33	166.7	0	91.9	30	100	157.3	2.67	40	
2-Methylphenol	155.3	3.2	33	166.7	0	93.2	40	110	156.2	0.529	40	
4-Methylphenol	138.7	4.7	33	166.7	0	83.2	30	110	150.1	7.87	40	
Hexachloroethane	129.3	1.8	33	166.7	0	77.6	30	95	139.3	7.39	40	
Nitrobenzene	128.4	5.3	33	166.7	0	77.0	45	110	132.2	2.93	40	
Hexachlorobutadiene	145.9	2.5	33	166.7	0	87.5	25	105	149.5	2.49	40	
2,4,6-Trichlorophenol	156.4	1.8	33	166.7	0	93.9	50	115	164.0	4.74	40	
2,4,5-Trichlorophenol	174.0	0.87	67	166.7	0	104	50	110	180.0	3.39	40	
2,4-Dinitrotoluene	173.5	1.4	33	166.7	0	104	50	120	180.2	3.78	40	
Hexachlorobenzene	176.9	1.5	33	166.7	0	106	50	110	180.3	1.9	40	
Pentachlorophenol	115.1	5.7	67	166.7	0	69.1	40	115	119.8	3.97	40	
Pyridine	132.5	1.9	67	166.7	0	79.5	10	106	140.8	6.04	40	
Surrogate: Nitrobenzene-d5	126.1		33	166.7	0	75.7	40	110	0			
Surrogate: 2-Fluorobiphenyl	167.9		33	166.7	0	101	50	110	0			
Surrogate: Terphenyl-d14	168.7		33	166.7	0	101	50	135	0			
Surrogate: Phenol-d5	151.6		33	166.7	0	91.0	10	115	0			
Surrogate: 2-Fluorophenol	140.6		33	166.7	0	84.4	20	110	0			
Surrogate: 2,4,6-Tribromophenol	177.1		33	166.7	0	106	40	125	0			

CLIENT: LaBella Associates
Work Order: L2516
Project: LaBella Stand By-Monoco

ANALYTICAL QC SUMMARY REPORT

SW8270_W

SW846 8270D -- SVOA by GC-MS

Sample ID **L2516-05AMS** SampType: **MS** TestCode: **SW8270_W** Prep Date: **12/07/12 11:15** Run ID: **S3_121211A**
Client ID: **WC-5** Batch ID: **69620** Units: **ug/L** Analysis Date: **12/11/12 14:52** SeqNo: **1843429**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene -- TCLP	134.7	3.7	33	166.7	0	80.8	30	100	0			
2-Methylphenol -- TCLP	140.0	3.2	33	166.7	0	84.0	40	110	0			
4-Methylphenol -- TCLP	121.2	4.7	33	166.7	0	72.7	30	110	0			
Hexachloroethane -- TCLP	110.8	1.8	33	166.7	0	66.5	30	95	0			
Nitrobenzene -- TCLP	128.7	5.3	33	166.7	0	77.2	45	110	0			
Hexachlorobutadiene -- TCLP	121.9	2.5	33	166.7	0	73.1	25	105	0			
2,4,6-Trichlorophenol -- TCLP	156.6	1.8	33	166.7	0	93.9	50	115	0			
2,4,5-Trichlorophenol -- TCLP	173.1	0.87	67	166.7	0	104	50	110	0			
2,4-Dinitrotoluene -- TCLP	175.7	1.4	33	166.7	0	105	50	120	0			
Hexachlorobenzene -- TCLP	170.9	1.5	33	166.7	0	103	50	110	0			
Pentachlorophenol -- TCLP	112.1	5.7	67	166.7	0	67.3	40	115	0			
Pyridine -- TCLP	101.2	1.9	67	166.7	0	60.7	10	106	0			
Surrogate: Nitrobenzene-d5 -- TCLP	126.7		33	166.7	0	76.0	40	110	0			
Surrogate: 2-Fluorobiphenyl -- TCLP	163.2		33	166.7	0	97.9	50	110	0			
Surrogate: Terphenyl-d14 -- TCLP	164.5		33	166.7	0	98.7	50	135	0			
Surrogate: Phenol-d5 -- TCLP	87.17		33	166.7	0	52.3	10	115	0			
Surrogate: 2-Fluorophenol -- TCLP	110.6		33	166.7	0	66.3	20	110	0			
Surrogate: 2,4,6-Tribromophenol -- TCLP	172.4		33	166.7	0	103	40	125	0			

Qualifiers: ND - Not Detected at the MDL; S - Recovery outside accepted recovery limits; MDL - Method Detection Limit; B - Analyte detected in the associated Method Blank
J - Analyte detected below quanititation limits; R - RPD outside accepted recovery limits; RL - Reporting Limit

Client: LaBella Associates
Client Sample ID: WC-5 **Project:** LaBella Stand By-Monoco
Lab ID: L2516-05 **Collection Date:** 12/05/12 10:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8081B -- Organochlorine Pesticides by GC-ECD							**SW8081_W**
gamma-BHC (Lindane) -- TCLP	ND		0.17	ug/L	1	12/10/2012 14:38	69618
Heptachlor -- TCLP	ND		0.17	ug/L	1	12/10/2012 14:38	69618
Heptachlor epoxide -- TCLP	ND		0.17	ug/L	1	12/10/2012 14:38	69618
Endrin -- TCLP	ND		0.33	ug/L	1	12/10/2012 14:38	69618
Methoxychlor -- TCLP	ND		1.7	ug/L	1	12/10/2012 14:38	69618
Toxaphene -- TCLP	ND		17	ug/L	1	12/10/2012 14:38	69618
Chlordane (technical) -- TCLP	ND		8.3	ug/L	1	12/10/2012 14:38	69618
Surrogate: Tetrachloro-m-xylene -- TCLP	81.8		25-140	%REC	1	12/10/2012 14:38	69618
Surrogate: Decachlorobiphenyl -- TCLP	71.0		30-135	%REC	1	12/10/2012 14:38	69618

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

CLIENT: LaBella Associates
Work Order: L2516
Project: LaBella Stand By-Monoco

ANALYTICAL QC SUMMARY REPORT

SW8081_W

SW846 8081B -- Organochlorine Pesticides by GC-ECD

Sample ID **MB-69590** SampType: **MBLK** TestCode: **SW8081_W** Prep Date: **12/07/12 11:12** Run ID: **E5_121210A**
Client ID: **MB-69590** Batch ID: **69618** Units: **ug/L** Analysis Date: **12/10/12 15:08** SeqNo: **1841935**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
gamma-BHC (Lindane) -- TCLP	ND	0.0063	0.17									
Heptachlor -- TCLP	ND	0.013	0.17									
Heptachlor epoxide -- TCLP	ND	0.0093	0.17									
Endrin -- TCLP	ND	0.012	0.33									
Methoxychlor -- TCLP	ND	0.10	1.7									
Toxaphene -- TCLP	ND	0.47	17									
Chlordane (technical) -- TCLP	ND	0.21	8.3									

Sample ID **MB-69590** SampType: **MBLK** TestCode: **SW8081_W** Prep Date: **12/07/12 11:12** Run ID: **E5_121210B**
Client ID: **MB-69590** Batch ID: **69618** Units: **ug/L** Analysis Date: **12/10/12 15:08** SeqNo: **1841938**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surrogate: Tetrachloro-m-xylene -- TCLP	2.067		0.17	2.000	0	103	25	140	0			
Surrogate: Decachlorobiphenyl -- TCLP	4.220		0.33	4.000	0	105	30	135	0			

Sample ID **LCS-69618** SampType: **LCS** TestCode: **SW8081_W** Prep Date: **12/07/12 11:12** Run ID: **E5_121210B**
Client ID: **LCS-69618** Batch ID: **69618** Units: **ug/L** Analysis Date: **12/10/12 15:38** SeqNo: **1847422**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
gamma-BHC (Lindane)	0.6439	0.0063	0.17	0.6667	0	96.6	25	135	0			
Heptachlor	0.6825	0.013	0.17	0.6667	0	102	40	130	0			
Heptachlor epoxide	0.6875	0.0093	0.17	0.6667	0	103	60	130	0			
Endrin	1.357	0.012	0.33	1.333	0	102	55	135	0			
Methoxychlor	7.125	0.10	1.7	6.667	0	107	55	150	0			
Surrogate: Tetrachloro-m-xylene	2.136		0.17	2.000	0	107	25	140	0			
Surrogate: Decachlorobiphenyl	4.459		0.33	4.000	0	111	30	135	0			

CLIENT: LaBella Associates
Work Order: L2516
Project: LaBella Stand By-Monoco

ANALYTICAL QC SUMMARY REPORT

SW8081_W

SW846 8081B -- Organochlorine Pesticides by GC-ECD

Sample ID **LCSD-69618** SampType: **LCSD** TestCode: **SW8081_W** Prep Date: **12/07/12 11:12** Run ID: **E5_121210B**
Client ID: **LCSD-69618** Batch ID: **69618** Units: **ug/L** Analysis Date: **12/10/12 15:53** SeqNo: **1847423**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
gamma-BHC (Lindane)	0.6429	0.0063	0.17	0.6667	0	96.4	25	135	0.6439	0.154	30	
Heptachlor	0.6881	0.013	0.17	0.6667	0	103	40	130	0.6825	0.824	30	
Heptachlor epoxide	0.6877	0.0093	0.17	0.6667	0	103	60	130	0.6875	0.0261	30	
Endrin	1.346	0.012	0.33	1.333	0	101	55	135	1.357	0.86	30	
Methoxychlor	7.057	0.10	1.7	6.667	0	106	55	150	7.125	0.956	30	
Surrogate: Tetrachloro-m-xylene	2.042		0.17	2.000	0	102	25	140	0			
Surrogate: Decachlorobiphenyl	4.253		0.33	4.000	0	106	30	135	0			

Qualifiers: ND - Not Detected at the MDL; S - Recovery outside accepted recovery limits; MDL - Method Detection Limit; B - Analyte detected in the associated Method Blank
J - Analyte detected below quanititation limits; R - RPD outside accepted recovery limits; RL - Reporting Limit

Client: LaBella Associates
Client Sample ID: WC-5
Lab ID: L2516-05
Project: LaBella Stand By-Monoco
Collection Date: 12/05/12 10:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 6010C -- Metals by ICP							**SW6010_W**
Lead -- TCLP	12		10	ug/L	1	12/10/2012 8:30	69603

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

CLIENT: LaBella Associates
Work Order: L2516
Project: LaBella Stand By-Monoco

ANALYTICAL QC SUMMARY REPORT

SW6010_W

SW846 6010C -- Metals by ICP

Sample ID: **MB-69603** SampType: **MBLK** TestCode: **SW6010_W** Prep Date: **12/07/12 12:00** Run ID: **OPTIMA3_121210A**
Client ID: **MB-69603** Batch ID: **69603** Units: **ug/L** Analysis Date: **12/10/12 8:23** SeqNo: **1841738**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	4.2	10									

Sample ID: **LCS-69603** SampType: **LCS** TestCode: **SW6010_W** Prep Date: **12/07/12 12:00** Run ID: **OPTIMA3_121210A**
Client ID: **LCS-69603** Batch ID: **69603** Units: **ug/L** Analysis Date: **12/10/12 8:26** SeqNo: **1841739**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	484.2	4.2	10	455.0	0	106	80	120	0			

Sample ID: **L2516-05AMS** SampType: **MS** TestCode: **SW6010_W** Prep Date: **12/07/12 12:00** Run ID: **OPTIMA3_121210A**
Client ID: **WC-5** Batch ID: **69603** Units: **ug/L** Analysis Date: **12/10/12 8:33** SeqNo: **1841741**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead -- TCLP	476.8	4.2	10	455.0	11.89	102	80	120	0			

Sample ID: **L2516-05ASD** SampType: **SD** TestCode: **SW6010_W** Prep Date: **12/07/12 12:00** Run ID: **OPTIMA3_121210A**
Client ID: **WC-5** Batch ID: **69603** Units: **ug/L** Analysis Date: **12/10/12 8:40** SeqNo: **1841743**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead -- TCLP	ND	21	50	0	0	0	0	0	11.89	0	10	

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: L2516

Client ID: LABELLA
Project: LaBella Stand By
WO Name: LaBella Stand By-Monoco
Location: LABELLA_STANDBY_CONTRACT, 210259

Case:
SDG:
PO: 210259

HC Due: 12/20/12
Fax Due: 12/10/12
Fax Report: ☑

Report Level: LEVEL 2
Special Program:
EDD: ENVIROINSITE_1
EQUIIS_4_NYSDEC

Comments: use this project for between 11-50 samples, no RUSH surcharge base on lab capacity, no charge for MS/MSD or a batch of 7 or more samples, no charge for TB. no hard copy

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
L2516-01A	WC-1	12/05/2012 10:00	12/06/2012	Soil	SW8270_W	/ TCLP_SVOA				Y	S3
L2516-02A	WC-2	12/05/2012 10:00	12/06/2012	Soil	SW8270_W	/ TCLP_SVOA				Y	S3
L2516-03A	WC-3	12/05/2012 10:00	12/06/2012	Soil	SW8270_W	/ TCLP_SVOA				Y	S3
L2516-04A	WC-4	12/05/2012 10:00	12/06/2012	Soil	SW8270_W	/ TCLP_SVOA				Y	S3
L2516-05A	WC-5	12/05/2012 10:00	12/06/2012	Soil	SW6010_W	/ TCLP_ICP, lead only				Y	S3
L2516-05A	WC-5	12/05/2012 10:00	12/06/2012	Soil	SW8081_W	/ TCLP_PEST				Y	S3
L2516-05A	WC-5	12/05/2012 10:00	12/06/2012	Soil	SW8270_W	/ TCLP_SVOA				Y	S3

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

HT = Test logged in but has been placed on hold

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Page _____ of _____

CHAIN OF CUSTODY RECORD

☐ 11 Almgren Drive, Agawam, MA 01001, (413) 789-9018
☐ 8405 Benjamin Road, Ste A, Tampa, FL 33634, (813) 888-9507
☐ 175 Metro Center Blvd, Warwick, RI 02886, (401) 732-3400

Special Handling:

TAT- Indicate Date Needed: 2 Days
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: LaBella Associates
300 State St Suite 201
Rochester, NY 14614

Telephone #: _____

Project Mgr. D. Noll

Invoice To: SAME

P.O. No.: _____ RQN: _____

Project No.: 210259

Site Name: Monoco

Location: Pittsford, NY State: _____

Sampler(s): SRD

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= Deionized Water 10=H_3PO_4 11= _____ 12= _____

List preservative code below:

QA/QC Reporting Notes:

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

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: TCLP SVOCs	TCLP Pb	TCLP Chlordane
L2516 01	WC-1	12-5-12	1000	G	SO			2		X		
02	WC-2	"	1000	G	SO			2		X		
03	WC-3	"	1000	G	SO			2		X		
04	WC-4	"	1000	G	SO			2		X		
L2516 05	WC-5	"	1000	G	SO			2		X	X	X

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other _____

State-specific reporting standards: _____

Relinquished by:	Received by:	Date:	Time:	Temp°C
Seth Davis	Fedex	12-5-12	1200	
		12/6/12	10:05	3

☐ EDD Format _____
☐ E-mail to dnoll@labellapc.com
sdavis@labellapc.com

Condition upon receipt:
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

Received By:	Page 01 of 00
Reviewed By: Jodie Warner	Log-in Date 12/06/2012
Work Order: L2516	Client Name: LaBella Associates
Project Name/Event: LaBella Stand By	

Remarks: (1/2) Please see associated sample/extract transfer logbook pages submitted with this data package.

1. Custody Seal(s) — Present / Absent
   Intact / Broken
2. Custody Seal Nos. N/A
3. Traffic Reports/ Chain of Custody Records (TR/COCs) or Packing Lists — Present / Absent
4. Airbill — AirBill / Sticker
   Present / Absent
5. Airbill No. FedEx 8017 1344 6673
6. Sample Tags — Present / Absent
   Sample Tag Numbers
   Listed / Not Listed on Chain-of-Custody
7. Sample Condition — Intact / Broken / Leaking
8. Cooler Temperature Indicator Bottle — Present / Absent

9. Cooler Temperature	3 °C
10. Does information on TR/COCs and sample tags agree?	Yes / No
11. Date Received at Laboratory	12/06/2012
12. Time Received	10:05

Sample Transfer	
Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area #	Area #
By	By
On	On

IR Temp Gun ID:MT-1

CoolantCondition: ICE

Preservative Name/Lot No:

Lab Sample ID	Preservation (pH) HNO3	H2SO4	HCl	NaOH	H3PO4	VOA Matrix	Soil HeadSpace or Air Bubble > or equal to 1/4"
L2516-01							
L2516-02							
L2516-03							
L2516-04							
L2516-05							

VOA Matrix Key:

US = Unpreserved Soil	A= Air
UA = Unpreserved Aqueous	H = HCl
M = MeOH	E = Encore
N = NaHSO4	F = Freeze

See Sample Condition Notification/Corrective Action Form Yes / No

Rad OK Yes / No

Last Page of Data Report

Report Date:
11-Mar-13 17:11

SPECTRUM ANALYTICAL, INC.
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- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

LaBella Associates
300 State Street, Suite 201
Rochester, NY 14614

Work Order: M0252
Project : LaBella Stand By-Monoco
Project #: 210259

Attn: Dan Noll

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M0252-01	WC-1	Soil	26-Feb-13 13:00	27-Feb-13 10:15
M0252-02	WC-2	Soil	26-Feb-13 13:00	27-Feb-13 10:15
M0252-03	WC-3	Soil	26-Feb-13 13:00	27-Feb-13 10:15
M0252-04	WC-4	Soil	26-Feb-13 13:00	27-Feb-13 10:15
M0252-05	WC-5	Soil	26-Feb-13 13:00	27-Feb-13 10:15

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 requirments have been meet.

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.

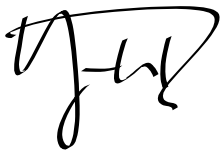
Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

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

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
DoD ELAP
Certificate # L2247 Testing

Authorized by:



Yihai Ding
Laboratory Director

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* Data Summary Pack *

175 Metro Center Boulevard · Warwick, RI 02886-1755 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Stand By -- 210259 **SDG :** M0252

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
WC-1	M0252-01	SW8260_W	SW8270_W	SW8082_S	SW6010_W	
WC-1	M0252-01				SW7470	
WC-2	M0252-02	SW8260_W	SW8270_W	SW8082_S	SW6010_W	
WC-2	M0252-02				SW7470	
WC-3	M0252-03	SW8260_W	SW8270_W	SW8082_S	SW6010_W	
WC-3	M0252-03				SW7470	
WC-4	M0252-04	SW8260_W	SW8270_W	SW8082_S	SW6010_W	
WC-4	M0252-04				SW7470	
WC-5	M0252-05	SW8260_W	SW8270_W	SW8082_S	SW6010_W	
WC-5	M0252-05				SW7470	

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Stand By -- 210259 **SDG :** M0252

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8260_W					
M0252-01B	SL	2/26/2013	2/27/2013	NA	3/1/2013
M0252-02B	SL	2/26/2013	2/27/2013	NA	3/1/2013
M0252-03B	SL	2/26/2013	2/27/2013	NA	3/1/2013
M0252-04B	SL	2/26/2013	2/27/2013	NA	3/1/2013
M0252-05B	SL	2/26/2013	2/27/2013	NA	3/1/2013

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Stand By -- 210259 **SDG :** M0252

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8270_W					
M0252-01A	SL	2/26/2013	2/27/2013	2/28/2013	2/28/2013
M0252-02A	SL	2/26/2013	2/27/2013	2/28/2013	2/28/2013
M0252-03A	SL	2/26/2013	2/27/2013	2/28/2013	2/28/2013
M0252-04A	SL	2/26/2013	2/27/2013	2/28/2013	2/28/2013
M0252-04AMS	SL	2/26/2013	2/27/2013	2/28/2013	2/28/2013
M0252-05A	SL	2/26/2013	2/27/2013	2/28/2013	2/28/2013

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Stand By -- 210259 **SDG :** M0252

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8082_S					
M0252-01A	SL	2/26/2013	2/27/2013	2/28/2013	2/28/2013
M0252-02A	SL	2/26/2013	2/27/2013	2/28/2013	2/28/2013
M0252-03A	SL	2/26/2013	2/27/2013	2/28/2013	2/28/2013
M0252-04A	SL	2/26/2013	2/27/2013	2/28/2013	2/28/2013
M0252-05A	SL	2/26/2013	2/27/2013	2/28/2013	2/28/2013

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Stand By -- 210259 **SDG :** M0252

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
SW8260_W					
M0252-01B	SL	SW8260_W	NA	LOW	1
M0252-02B	SL	SW8260_W	NA	LOW	1
M0252-03B	SL	SW8260_W	NA	LOW	1
M0252-04B	SL	SW8260_W	NA	LOW	1
M0252-05B	SL	SW8260_W	NA	LOW	1

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Stand By -- 210259 **SDG :** M0252

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
SW8270_W					
M0252-01A	SL	SW8270_W	3510C	NA	1
M0252-02A	SL	SW8270_W	3510C	NA	1
M0252-03A	SL	SW8270_W	3510C	NA	1
M0252-04A	SL	SW8270_W	3510C	NA	1
M0252-04AMS	SL	SW8270_W	3510C	NA	1
M0252-05A	SL	SW8270_W	3510C	NA	1

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Stand By -- 210259 **SDG :** M0252

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
SW8082_S					
M0252-01A	SL	SW8082_S	3550B	Acid/Sulfur	1
M0252-02A	SL	SW8082_S	3550B	Acid/Sulfur	1
M0252-03A	SL	SW8082_S	3550B	Acid/Sulfur	1
M0252-04A	SL	SW8082_S	3550B	Acid/Sulfur	1
M0252-05A	SL	SW8082_S	3550B	Acid/Sulfur	1

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Stand By -- 210259 **SDG :** M0252

Laboratory Sample ID	Matrix	Metals Requested	Date Received By Lab	Date Analyzed
SW6010_W				
M0252-01A	SL	SW6010_W	2/27/2013	3/1/2013
M0252-02A	SL	SW6010_W	2/27/2013	3/1/2013
M0252-03A	SL	SW6010_W	2/27/2013	3/1/2013
M0252-04A	SL	SW6010_W	2/27/2013	3/1/2013
M0252-04AMS	SL	SW6010_W	2/27/2013	3/1/2013
M0252-05A	SL	SW6010_W	2/27/2013	3/1/2013
SW7470				
M0252-01A	SL	SW7470	2/27/2013	3/1/2013
M0252-02A	SL	SW7470	2/27/2013	3/1/2013
M0252-03A	SL	SW7470	2/27/2013	3/1/2013
M0252-04A	SL	SW7470	2/27/2013	3/1/2013
M0252-04AMS	SL	SW7470	2/27/2013	3/1/2013
M0252-05A	SL	SW7470	2/27/2013	3/1/2013

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation

Sample Preparation and Analysis Summary Toxicity Characteristic Leaching Procedure

Project Name : LaBella Stand By -- 210259 **SDG :** M0252

Laboratory Sample ID	Matrix	Analytical Protocol	Date Collected	Date Received By Lab	Date Extracted
SW1311					
M0252-01A	SL	SW1311	2/26/2013	2/27/2013	2/27/2013
M0252-01B	SL	SW1311	2/26/2013	2/27/2013	2/27/2013
M0252-02A	SL	SW1311	2/26/2013	2/27/2013	2/27/2013
M0252-02B	SL	SW1311	2/26/2013	2/27/2013	2/27/2013
M0252-03A	SL	SW1311	2/26/2013	2/27/2013	2/27/2013
M0252-03B	SL	SW1311	2/26/2013	2/27/2013	2/27/2013
M0252-04A	SL	SW1311	2/26/2013	2/27/2013	2/27/2013
M0252-04B	SL	SW1311	2/26/2013	2/27/2013	2/28/2013
M0252-05A	SL	SW1311	2/26/2013	2/27/2013	2/27/2013
M0252-05B	SL	SW1311	2/26/2013	2/27/2013	2/28/2013

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: M0252

Client ID: LABELLA
Project: LaBella Stand By
WO Name: LaBella Stand By-Monoco
Location: LABELLA_STANDBY_CONTRACT, 210259

Case:
SDG:
PO: 210259

HC Due: 03/01/13
Fax Due: 03/01/13
Fax Report: ☑

Report Level: ASP-B
Special Program:
EDD: ENVIROINSITE_1
EQUIIS_4_NYSDEC

Comments: use this project for between 11-50 samples, no RUSH surcharge base on lab capacity, no charge for MS/MSD or a batch of 7 or more samples, no charge for TB. no hard copy

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M0252-01A	WC-1	02/26/2013 13:00	02/27/2013	Soil	PMoist	/					N2
M0252-01A	WC-1	02/26/2013 13:00	02/27/2013	Soil	SW6010_W	/ TCLP_METALS				Y	N2
M0252-01A	WC-1	02/26/2013 13:00	02/27/2013	Soil	SW7470	/ TCLP_METALS					N2
M0252-01A	WC-1	02/26/2013 13:00	02/27/2013	Soil	SW8082_S	/					N2
M0252-01A	WC-1	02/26/2013 13:00	02/27/2013	Soil	SW8270_W	/ TCLP_SVOA				Y	N2
M0252-01B	WC-1	02/26/2013 13:00	02/27/2013	Soil	SW8260_W	/ TCLP_VOA				Y	VOA
M0252-02A	WC-2	02/26/2013 13:00	02/27/2013	Soil	PMoist	/					N2
M0252-02A	WC-2	02/26/2013 13:00	02/27/2013	Soil	SW6010_W	/ TCLP_METALS				Y	N2
M0252-02A	WC-2	02/26/2013 13:00	02/27/2013	Soil	SW7470	/ TCLP_METALS					N2
M0252-02A	WC-2	02/26/2013 13:00	02/27/2013	Soil	SW8082_S	/					N2
M0252-02A	WC-2	02/26/2013 13:00	02/27/2013	Soil	SW8270_W	/ TCLP_SVOA				Y	N2
M0252-02B	WC-2	02/26/2013 13:00	02/27/2013	Soil	SW8260_W	/ TCLP_VOA				Y	VOA
M0252-03A	WC-3	02/26/2013 13:00	02/27/2013	Soil	PMoist	/					N2
M0252-03A	WC-3	02/26/2013 13:00	02/27/2013	Soil	SW6010_W	/ TCLP_METALS				Y	N2
M0252-03A	WC-3	02/26/2013 13:00	02/27/2013	Soil	SW7470	/ TCLP_METALS					N2
M0252-03A	WC-3	02/26/2013 13:00	02/27/2013	Soil	SW8082_S	/					N2
M0252-03A	WC-3	02/26/2013 13:00	02/27/2013	Soil	SW8270_W	/ TCLP_SVOA				Y	N2
M0252-03B	WC-3	02/26/2013 13:00	02/27/2013	Soil	SW8260_W	/ TCLP_VOA				Y	VOA
M0252-04A	WC-4	02/26/2013 13:00	02/27/2013	Soil	PMoist	/					N2
M0252-04A	WC-4	02/26/2013 13:00	02/27/2013	Soil	SW6010_W	/ TCLP_METALS				Y	N2
M0252-04A	WC-4	02/26/2013 13:00	02/27/2013	Soil	SW7470	/ TCLP_METALS					N2
M0252-04A	WC-4	02/26/2013 13:00	02/27/2013	Soil	SW8082_S	/					N2
M0252-04A	WC-4	02/26/2013 13:00	02/27/2013	Soil	SW8270_W	/ TCLP_SVOA				Y	N2

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

HT = Test logged in but has been placed on hold

02/27/2013 15:24 Lab Client Rep: Agnes R Huntley

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: M0252

Client ID: LABELLA
Project: LaBella Stand By
WO Name: LaBella Stand By-Monoco
Location: LABELLA_STANDBY_CONTRACT, 210259

Case:
SDG:
PO: 210259

HC Due: 03/01/13
Fax Due: 03/01/13
Fax Report: ☑

Report Level: ASP-B
Special Program:
EDD: ENVIROINSITE_1
EQUIIS_4_NYSDEC

Comments: use this project for between 11-50 samples, no RUSH surcharge base on lab capacity, no charge for MS/MSD or a batch of 7 or more samples, no charge for TB. no hard copy

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M0252-04B	WC-4	02/26/2013 13:00	02/27/2013	Soil	SW8260_W	/ TCLP_VOA				Y	VOA
M0252-05A	WC-5	02/26/2013 13:00	02/27/2013	Soil	PMoist	/					N2
M0252-05A	WC-5	02/26/2013 13:00	02/27/2013	Soil	SW6010_W	/ TCLP_METALS				Y	N2
M0252-05A	WC-5	02/26/2013 13:00	02/27/2013	Soil	SW7470	/ TCLP_METALS					N2
M0252-05A	WC-5	02/26/2013 13:00	02/27/2013	Soil	SW8082_S	/					N2
M0252-05A	WC-5	02/26/2013 13:00	02/27/2013	Soil	SW8270_W	/ TCLP_SVOA				Y	N2
M0252-05B	WC-5	02/26/2013 13:00	02/27/2013	Soil	SW8260_W	/ TCLP_VOA				Y	VOA

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

HT = Test logged in but has been placed on hold

* Volatiles *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Stand By-Monoco

Laboratory Workorder / SDG #: M0252

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

Aqueous Samples were prepared following procedures in laboratory test code: SW5030

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: V5
Instrument Type: GCMS-VOA

Description: HP6890 / HP6890
Manufacturer: Hewlett-Packard
Model: 6890 / 6890
GC Column used: 30 m X 0.25 mm ID [1.40 um thickness] DB-624 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 with the following exceptions. Please note that the acceptance criteria allow one surrogate recovery outside of the QC limits per fraction.

WC-4 (M0252-04B-TCLP), recovery is above criteria for Toluene-d8 at 137% with criteria of (85-120).

WC-5 (M0252-05B-TCLP), recovery is below criteria for Bromofluorobenzene at 72% with criteria of (75-120).

(MB-70672-TCLP), recovery is below criteria for Toluene-d8 at 73% with criteria of (85-120).

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-70695 in batch 70695, Percent Recovery is outside QC Limits, recovery is below criteria for 1,1-Dichloroethene at 61% with criteria of (70-130).

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.

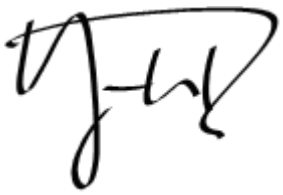
G. Samples:

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.



Signed:_____ _____

Date:_____3/11/2013_____

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.

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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0252-01B

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5O1979.D

Level: (TRACE/LOW/MED) LOW Date Received: 02/27/2013

% Moisture: not dec. Date Analyzed: 03/01/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	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
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-2

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0252-02B

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5O1980.D

Level: (TRACE/LOW/MED) LOW Date Received: 02/27/2013

% Moisture: not dec. Date Analyzed: 03/01/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	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
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-3

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0252-03B

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5O1981.D

Level: (TRACE/LOW/MED) LOW Date Received: 02/27/2013

% Moisture: not dec. Date Analyzed: 03/01/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	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
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-4

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0252-04B

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5O2005.D

Level: (TRACE/LOW/MED) LOW Date Received: 02/27/2013

% Moisture: not dec. Date Analyzed: 03/01/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	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
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0252-05B

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5O2006.D

Level: (TRACE/LOW/MED) LOW Date Received: 02/27/2013

% Moisture: not dec. Date Analyzed: 03/01/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	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
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-70654

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-70654

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5O1978.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 02/28/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	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
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-70672

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-70672

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5O2004.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 03/01/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	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
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-70677

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-70677

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5O1964.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 02/28/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	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
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-70695

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-70695

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5O2003.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 03/01/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	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
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-70677

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-70677

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5O1963.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 02/28/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	38	
75-35-4	1,1-Dichloroethene	44	
78-93-3	2-Butanone	51	
67-66-3	Chloroform	50	
56-23-5	Carbon tetrachloride	51	
107-06-2	1,2-Dichloroethane	48	
71-43-2	Benzene	51	
79-01-6	Trichloroethene	51	
127-18-4	Tetrachloroethene	52	
108-90-7	Chlorobenzene	49	

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-70695

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-70695

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5O2002.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 03/01/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	56	
75-35-4	1,1-Dichloroethene	30	
78-93-3	2-Butanone	51	
67-66-3	Chloroform	45	
56-23-5	Carbon tetrachloride	47	
107-06-2	1,2-Dichloroethane	44	
71-43-2	Benzene	46	
79-01-6	Trichloroethene	36	
127-18-4	Tetrachloroethene	48	
108-90-7	Chlorobenzene	46	

2B - FORM II VOA-2

WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Level: (TRACE or LOW) LOW

	EPA SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-70677	102	98	101	102				0
02	MB-70677	94	91	100	97				0
03	MB-70654	100	96	102	95				0
04	WC-1	102	88	102	98				0
05	WC-2	96	92	101	98				0
06	WC-3	99	90	102	95				0
07	LCS-70695	98	97	99	98				0
08	MB-70695	97	81	100	99				0
09	MB-70672	94	87	73 *	99				1
10	WC-4	99	88	137 *	105				1
11	WC-5	101	90	96	72 *				1

		QC LIMITS
VDMC1	(DBFM) Dibromofluoromethane	(85-115)
VDMC2	(DCE) = 1,2-Dichloroethane-d4	(70-120)
VDMC3	(TOL) = Toluene-d8	(85-120)
VDMC4	(BFB) = Bromofluorobenzene	(75-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

som12.12.17.A

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-70677

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Lab Sample ID: LCS-70677 LCS Lot No.:

Date Extracted: 02/28/2013 Date Analyzed (1): 02/28/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Vinyl chloride	50.0000	0.0000	37.5233	75		50 - 145
1,1-Dichloroethene	50.0000	0.0000	44.3831	89		70 - 130
2-Butanone	50.0000	0.0000	51.2463	102		30 - 150
Chloroform	50.0000	0.0000	50.3912	101		65 - 135
Carbon tetrachloride	50.0000	0.0000	50.8266	102		65 - 140
1,2-Dichloroethane	50.0000	0.0000	47.9531	96		70 - 130
Benzene	50.0000	0.0000	51.4455	103		80 - 120
Trichloroethene	50.0000	0.0000	51.3569	103		70 - 125
Tetrachloroethene	50.0000	0.0000	52.0573	104		45 - 150
Chlorobenzene	50.0000	0.0000	49.2745	99		80 - 120

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

* Values outside of QC limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-70695

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Lab Sample ID: LCS-70695 LCS Lot No.:

Date Extracted: 03/01/2013 Date Analyzed (1): 03/01/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Vinyl chloride	50.0000	0.0000	56.4109	113		50 - 145
1,1-Dichloroethene	50.0000	0.0000	30.4899	61	*	70 - 130
2-Butanone	50.0000	0.0000	51.0289	102		30 - 150
Chloroform	50.0000	0.0000	45.2782	91		65 - 135
Carbon tetrachloride	50.0000	0.0000	47.1584	94		65 - 140
1,2-Dichloroethane	50.0000	0.0000	44.3236	89		70 - 130
Benzene	50.0000	0.0000	46.2197	92		80 - 120
Trichloroethene	50.0000	0.0000	35.8379	72		70 - 125
Tetrachloroethene	50.0000	0.0000	48.2302	96		45 - 150
Chlorobenzene	50.0000	0.0000	45.7974	92		80 - 120

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

* Values outside of QC limits

Spike Recovery: 1 out of 10 outside limits

COMMENTS:

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
MB-70677

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Lab File ID: V5O1964.D Lab Sample ID: MB-70677

Instrument ID: V5

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 02/28/2013

Level: (TRACE or LOW/MED) LOW Time Analyzed: 17:52

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-70677	LCS-70677	V5O1963.D	16:27
02	MB-70654	MB-70654	V5O1978.D	23:49
03	WC-1	M0252-01B	V5O1979.D	0:14
04	WC-2	M0252-02B	V5O1980.D	0:40
05	WC-3	M0252-03B	V5O1981.D	1:05

COMMENTS:

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
MB-70695

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Lab File ID: V5O2003.D Lab Sample ID: MB-70695

Instrument ID: V5

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 03/01/2013

Level: (TRACE or LOW/MED) LOW Time Analyzed: 12:54

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-70695	LCS-70695	V5O2002.D	12:02
02	MB-70672	MB-70672	V5O2004.D	13:20
03	WC-4	M0252-04B	V5O2005.D	13:46
04	WC-5	M0252-05B	V5O2006.D	14:11

COMMENTS:

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 02/26/2013 02/26/2013

EPA Sample No.(VSTD#####): VSTD050X5 Date Analyzed: 02/28/2013

Lab File ID (Standard): V5O1962.D Time Analyzed: 16:02

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

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	407524		4.451		345849		7.656		197450		10.734	
	UPPER LIMIT	815048		4.951		691698		8.156		394900		11.234	
	LOWER LIMIT	203762		3.951		172925		7.156		98725		10.234	
	EPA SAMPLE NO.												
01	LCS-70677	671358		4.441		551641		7.658		315629		10.724	
02	MB-70677	595430		4.445		484898		7.650		271623		10.727	
03	MB-70654	389541		4.447		449370		7.652		249576		10.729	
04	WC-1	541275		4.444		452196		7.649		246581		10.727	
05	WC-2	559547		4.444		459573		7.649		242716		10.727	
06	WC-3	549477		4.447		459690		7.652		244173		10.730	

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.

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 02/26/2013 02/26/2013

EPA Sample No.(VSTD#####): VSTD050Y5 Date Analyzed: 03/01/2013

Lab File ID (Standard): V5O2001.D Time Analyzed: 11:36

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

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	413906		4.453		322052		7.658		158126		10.724	
	UPPER LIMIT	827812		4.953		644104		8.158		316252		11.224	
	LOWER LIMIT	206953		3.953		161026		7.158		79063		10.224	
	EPA SAMPLE NO.												
01	LCS-70695	371540		4.452		305003		7.657		137888		10.735	
02	MB-70695	360551		4.453		301438		7.658		173014		10.724	
03	MB-70672	354151		4.444		303473		7.661		173543		10.726	
04	WC-4	352370		4.441		216150		7.657		170538		10.723	
05	WC-5	368167		4.446		311073		7.651		128201		10.728	

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.

* Semivolatile Organics *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Stand By-Monoco

Laboratory Workorder / SDG #: M0252

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

Aqueous Samples were prepared following procedures in laboratory test code: SW3510

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: S3
Instrument Type: GCMS-SEMI
Description: HP6890 / HP5973
Manufacturer: Hewlett-Packard
Model: 6890 / 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 with the following exceptions. Please note that the acceptance criteria allow one surrogate recovery outside of the QC limits per fraction.

(MB-70653-TCLP), recovery is above criteria for Terphenyl-d14 at 137% with criteria of (50-135).

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):

Matrix spikes were performed on sample: WC-4 (M0252-04AMS).

Percent recoveries were within the QC limits.

Replicate RPDs were within the advisory QC limits.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

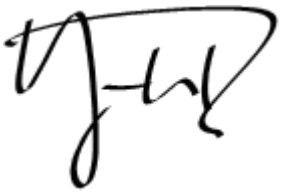
F. Dilutions:

No sample in this SDG required analysis at dilution.

G. Samples:

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:_____3/11/2013_____

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.

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

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0252-01A

Sample wt/vol: 300 (g/mL) ML Lab File ID: S3I3780.D

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

% Moisture: Decanted: (Y/N) Date Received: 02/27/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/28/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 02/28/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	33	U
95-48-7	2-Methylphenol	33	U
106-44-5	4-Methylphenol	33	U
67-72-1	Hexachloroethane	33	U
98-95-3	Nitrobenzene	33	U
87-68-3	Hexachlorobutadiene	33	U
88-06-2	2,4,6-Trichlorophenol	33	U
95-95-4	2,4,5-Trichlorophenol	67	U
121-14-2	2,4-Dinitrotoluene	33	U
118-74-1	Hexachlorobenzene	33	U
87-86-5	Pentachlorophenol	67	U
110-86-1	Pyridine	67	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-2

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0252-02A

Sample wt/vol: 300 (g/mL) ML Lab File ID: S3I3781.D

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

% Moisture: Decanted: (Y/N) Date Received: 02/27/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/28/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 02/28/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	33	U
95-48-7	2-Methylphenol	33	U
106-44-5	4-Methylphenol	33	U
67-72-1	Hexachloroethane	33	U
98-95-3	Nitrobenzene	33	U
87-68-3	Hexachlorobutadiene	33	U
88-06-2	2,4,6-Trichlorophenol	33	U
95-95-4	2,4,5-Trichlorophenol	67	U
121-14-2	2,4-Dinitrotoluene	33	U
118-74-1	Hexachlorobenzene	33	U
87-86-5	Pentachlorophenol	67	U
110-86-1	Pyridine	67	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-3

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0252-03A

Sample wt/vol: 300 (g/mL) ML Lab File ID: S3I3782.D

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

% Moisture: Decanted: (Y/N) Date Received: 02/27/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/28/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 02/28/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	33	U
95-48-7	2-Methylphenol	33	U
106-44-5	4-Methylphenol	33	U
67-72-1	Hexachloroethane	33	U
98-95-3	Nitrobenzene	33	U
87-68-3	Hexachlorobutadiene	33	U
88-06-2	2,4,6-Trichlorophenol	33	U
95-95-4	2,4,5-Trichlorophenol	67	U
121-14-2	2,4-Dinitrotoluene	33	U
118-74-1	Hexachlorobenzene	33	U
87-86-5	Pentachlorophenol	67	U
110-86-1	Pyridine	67	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-4

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0252-04A

Sample wt/vol: 300 (g/mL) ML Lab File ID: S3I3783.D

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

% Moisture: Decanted: (Y/N) Date Received: 02/27/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/28/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 02/28/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	33	U
95-48-7	2-Methylphenol	33	U
106-44-5	4-Methylphenol	33	U
67-72-1	Hexachloroethane	33	U
98-95-3	Nitrobenzene	33	U
87-68-3	Hexachlorobutadiene	33	U
88-06-2	2,4,6-Trichlorophenol	33	U
95-95-4	2,4,5-Trichlorophenol	67	U
121-14-2	2,4-Dinitrotoluene	33	U
118-74-1	Hexachlorobenzene	33	U
87-86-5	Pentachlorophenol	67	U
110-86-1	Pyridine	67	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0252-05A

Sample wt/vol: 300 (g/mL) ML Lab File ID: S3I3785.D

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

% Moisture: Decanted: (Y/N) Date Received: 02/27/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/28/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 02/28/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	33	U
95-48-7	2-Methylphenol	33	U
106-44-5	4-Methylphenol	33	U
67-72-1	Hexachloroethane	33	U
98-95-3	Nitrobenzene	33	U
87-68-3	Hexachlorobutadiene	33	U
88-06-2	2,4,6-Trichlorophenol	33	U
95-95-4	2,4,5-Trichlorophenol	67	U
121-14-2	2,4-Dinitrotoluene	33	U
118-74-1	Hexachlorobenzene	33	U
87-86-5	Pentachlorophenol	67	U
110-86-1	Pyridine	67	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-70653

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-70653

Sample wt/vol: 300 (g/mL) ML Lab File ID: S3I3777.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/28/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 02/28/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	33	U
95-48-7	2-Methylphenol	33	U
106-44-5	4-Methylphenol	33	U
67-72-1	Hexachloroethane	33	U
98-95-3	Nitrobenzene	33	U
87-68-3	Hexachlorobutadiene	33	U
88-06-2	2,4,6-Trichlorophenol	33	U
95-95-4	2,4,5-Trichlorophenol	67	U
121-14-2	2,4-Dinitrotoluene	33	U
118-74-1	Hexachlorobenzene	33	U
87-86-5	Pentachlorophenol	67	U
110-86-1	Pyridine	67	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-70671

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-70671

Sample wt/vol: 300 (g/mL) ML Lab File ID: S3I3778.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/28/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 02/28/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	140	
95-48-7	2-Methylphenol	140	
106-44-5	4-Methylphenol	140	
67-72-1	Hexachloroethane	140	
98-95-3	Nitrobenzene	120	
87-68-3	Hexachlorobutadiene	140	
88-06-2	2,4,6-Trichlorophenol	150	
95-95-4	2,4,5-Trichlorophenol	150	
121-14-2	2,4-Dinitrotoluene	160	
118-74-1	Hexachlorobenzene	150	
87-86-5	Pentachlorophenol	130	
110-86-1	Pyridine	140	

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-70671

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-70671

Sample wt/vol: 300 (g/mL) ML Lab File ID: S3I3779.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/28/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 02/28/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	140	
95-48-7	2-Methylphenol	140	
106-44-5	4-Methylphenol	140	
67-72-1	Hexachloroethane	140	
98-95-3	Nitrobenzene	120	
87-68-3	Hexachlorobutadiene	140	
88-06-2	2,4,6-Trichlorophenol	160	
95-95-4	2,4,5-Trichlorophenol	150	
121-14-2	2,4-Dinitrotoluene	160	
118-74-1	Hexachlorobenzene	160	
87-86-5	Pentachlorophenol	140	
110-86-1	Pyridine	130	

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-4MS

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0252-04AMS

Sample wt/vol: 300 (g/mL) ML Lab File ID: S3I3784.D

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

% Moisture: Decanted: (Y/N) Date Received: 02/27/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/28/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 02/28/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	120	
95-48-7	2-Methylphenol	120	
106-44-5	4-Methylphenol	110	
67-72-1	Hexachloroethane	120	
98-95-3	Nitrobenzene	120	
87-68-3	Hexachlorobutadiene	120	
88-06-2	2,4,6-Trichlorophenol	160	
95-95-4	2,4,5-Trichlorophenol	150	
121-14-2	2,4-Dinitrotoluene	160	
118-74-1	Hexachlorobenzene	160	
87-86-5	Pentachlorophenol	150	
110-86-1	Pyridine	95	

2H - FORM II SV-2

WATER SEMIVOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

	EPA SAMPLE NO.	SDMC1 (NBZ) #	SDMC2 (FBP) #	SDMC3 (TPH) #	SDMC4 (PHL) #	SDMC5 (2FP) #	SDMC6 (TBP) #			TOT OUT
01	MB-70653	77	96	137 *	75	85	100			1
02	LCS-70671	77	97	119	80	87	108			0
03	LCSD-70671	75	97	117	80	85	110			0
04	WC-1	71	89	120	37	56	97			0
05	WC-2	70	88	118	36	56	99			0
06	WC-3	70	87	116	39	57	95			0
07	WC-4	79	99	132	42	64	109			0
08	WC-4MS	74	98	116	43	59	112			0
09	WC-5	69	86	117	39	58	99			0

		QC LIMITS
SDMC1	(NBZ) = Nitrobenzene-d5	(40-110)
SDMC2	(FBP) = 2-Fluorobiphenyl	(50-110)
SDMC3	(TPH) = Terphenyl-d14	(50-135)
SDMC4	(PHL) = Phenol-d5	(10-115)
SDMC5	(2FP) = 2-Fluorophenol	(20-110)
SDMC6	(TBP) = 2,4,6-Tribromophenol	(40-125)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D DMC diluted out

som12.12.17.A

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-70671

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Lab Sample ID: LCS-70671 LCS Lot No.: A090321

Date Extracted: 02/28/2013 Date Analyzed (1): 02/28/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
1,4-Dichlorobenzene	166.6667	0.0000	144.1633	86		30 - 100
2-Methylphenol	166.6667	0.0000	141.9581	85		40 - 110
4-Methylphenol	166.6667	0.0000	136.2980	82		30 - 110
Hexachloroethane	166.6667	0.0000	139.1328	83		30 - 95
Nitrobenzene	166.6667	0.0000	121.9491	73		45 - 110
Hexachlorobutadiene	166.6667	0.0000	138.8819	83		25 - 105
2,4,6-Trichlorophenol	166.6667	0.0000	153.7716	92		50 - 115
2,4,5-Trichlorophenol	166.6667	0.0000	148.4614	89		50 - 110
2,4-Dinitrotoluene	166.6667	0.0000	156.6021	94		50 - 120
Hexachlorobenzene	166.6667	0.0000	153.4026	92		50 - 110
Pentachlorophenol	166.6667	0.0000	132.5790	80		40 - 115
Pyridine	166.6667	0.0000	139.2936	84		10 - 106

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

* Values outside of QC limits

Spike Recovery: 0 out of 12 outside limits

COMMENTS:

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-70671

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Lab Sample ID: LCSD-70671 LCS Lot No.: A090321

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
1,4-Dichlorobenzene	166.6667	143.6750	86		0		40	30 - 100
2-Methylphenol	166.6667	143.3557	86		1		40	40 - 110
4-Methylphenol	166.6667	135.2504	81		1		40	30 - 110
Hexachloroethane	166.6667	140.0148	84		1		40	30 - 95
Nitrobenzene	166.6667	121.7425	73		0		40	45 - 110
Hexachlorobutadiene	166.6667	137.9374	83		0		40	25 - 105
2,4,6-Trichlorophenol	166.6667	157.5219	95		3		40	50 - 115
2,4,5-Trichlorophenol	166.6667	150.0178	90		1		40	50 - 110
2,4-Dinitrotoluene	166.6667	156.7788	94		0		40	50 - 120
Hexachlorobenzene	166.6667	157.5784	95		3		40	50 - 110
Pentachlorophenol	166.6667	141.7328	85		6		40	40 - 115
Pyridine	166.6667	134.8504	81		4		40	10 - 106

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

* Values outside of QC limits

RPD: 0 out of 12 outside limits

Spike Recovery: 0 out of 12 outside limits

COMMENTS:

4C - FORM IV SV

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-70653

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Lab File ID: S3I3777.D Lab Sample ID: MB-70653

Instrument ID: S3 Date Extracted: 02/28/2013

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 02/28/2013

Level: (LOW/MED) LOW Time Analyzed: 17:32

Extraction: (Type) SEPF GPC Cleanup: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	LCS-70671	LCS-70671	S3I3778.D	02/28/2013
02	LCSD-70671	LCSD-70671	S3I3779.D	02/28/2013
03	WC-1	M0252-01A	S3I3780.D	02/28/2013
04	WC-2	M0252-02A	S3I3781.D	02/28/2013
05	WC-3	M0252-03A	S3I3782.D	02/28/2013
06	WC-4	M0252-04A	S3I3783.D	02/28/2013
07	WC-4MS	M0252-04AMS	S3I3784.D	02/28/2013
08	WC-5	M0252-05A	S3I3785.D	02/28/2013

COMMENTS:

8C - FORM VIII SV-1

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 01/31/2013 01/31/2013

EPA Sample No.(SSTD020##) SSTD0253Z Date Analyzed: 02/28/2013

Lab File ID (Standard): S3I3771.D Time Analyzed: 10:53

Instrument ID: S3

		IS1 (DCB)			IS2 (NPT)			IS3 (ANT)		
		AREA	#	RT	#	AREA	#	RT	#	AREA	#	RT	#
	12 HOUR STD	139483		4.114		510909		5.877		377193		7.645	
	UPPER LIMIT	278966		4.614		1021818		6.377		754386		8.145	
	LOWER LIMIT	69742		3.614		255455		5.377		188597		7.145	
	EPA SAMPLE NO.												
01	MB-70653	135594		4.110		507332		5.873		362653		7.642	
02	LCS-70671	131632		4.113		500874		5.881		370527		7.644	
03	LCSD-70671	140575		4.116		527108		5.879		385438		7.647	
04	WC-1	141498		4.117		519421		5.875		364128		7.643	
05	WC-2	136809		4.116		495490		5.879		357307		7.642	
06	WC-3	133075		4.117		493542		5.879		349260		7.642	
07	WC-4	134488		4.116		505410		5.879		348158		7.642	
08	WC-4MS	123197		4.119		450121		5.882		321074		7.645	
09	WC-5	149755		4.117		555399		5.880		398814		7.643	

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

8D - FORM VIII SV-2

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

EPA Sample No.(SSTD020##) SSTD0253Z Date Analyzed: 02/28/2013

Lab File ID (Standard): S3I3771.D Time Analyzed: 10:53

Instrument ID: S3 GC Column: Rxi-5sil MS ID: 0.25 (mm)

		IS4 (PHN) AREA	#	RT	#	IS5 (CRY) AREA	#	RT	#	IS6 (PRY) AREA	#	RT	#
	12 HOUR STD	767620		8.922		1022334		11.321		792678		13.159	
	UPPER LIMIT	1535240		9.422		2044668		11.821		1585356		13.659	
	LOWER LIMIT	383810		8.422		511167		10.821		396339		12.659	
	EPA SAMPLE NO.												
01	MB-70653	740972		8.913		869968		11.264		742827		13.091	
02	LCS-70671	759461		8.916		1018485		11.234		775435		13.056	
03	LCSD-70671	773577		8.918		1052939		11.242		776577		13.069	
04	WC-1	733350		8.914		889994		11.238		745802		13.065	
05	WC-2	721579		8.913		860372		11.243		723298		13.070	
06	WC-3	697916		8.914		833867		11.206		720787		13.022	
07	WC-4	710304		8.914		844370		11.195		731808		13.016	
08	WC-4MS	657601		8.916		877438		11.197		685141		13.014	
09	WC-5	781116		8.914		925535		11.185		791611		13.001	

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.

* PCB Organics *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Stand By-Monoco

Laboratory Workorder / SDG #: M0252

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: SW3550

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:

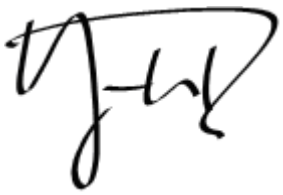
No sample in this SDG required analysis at dilution.

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.

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:_____3/11/2013_____

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.

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

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0252-01A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: E2L8853F.D/E2L8853R.D

% Moisture: 20 Decanted: (Y/N) N Date Received: 02/27/2013

Extraction: (Type) SONC Date Extracted: 02/28/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 02/28/2013

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	Q
12674-11-2	Aroclor-1016	41	U
11104-28-2	Aroclor-1221	41	U
11141-16-5	Aroclor-1232	41	U
53469-21-9	Aroclor-1242	41	U
12672-29-6	Aroclor-1248	41	U
11097-69-1	Aroclor-1254	41	U
11096-82-5	Aroclor-1260	41	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-2

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0252-02A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: E2L8854F.D/E2L8854R.D

% Moisture: 12 Decanted: (Y/N) N Date Received: 02/27/2013

Extraction: (Type) SONC Date Extracted: 02/28/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 02/28/2013

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	Q
12674-11-2	Aroclor-1016	37	U
11104-28-2	Aroclor-1221	37	U
11141-16-5	Aroclor-1232	37	U
53469-21-9	Aroclor-1242	37	U
12672-29-6	Aroclor-1248	37	U
11097-69-1	Aroclor-1254	37	U
11096-82-5	Aroclor-1260	37	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-3

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0252-03A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: E2L8855F.D/E2L8855R.D

% Moisture: 16 Decanted: (Y/N) N Date Received: 02/27/2013

Extraction: (Type) SONC Date Extracted: 02/28/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 02/28/2013

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	Q
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	39	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	39	U
11096-82-5	Aroclor-1260	39	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-4

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0252-04A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E2L8856F.D/E2L8856R.D

% Moisture: 15 Decanted: (Y/N) N Date Received: 02/27/2013

Extraction: (Type) SONC Date Extracted: 02/28/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 02/28/2013

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	Q
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	39	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	39	U
11096-82-5	Aroclor-1260	39	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0252-05A

Sample wt/vol: 30.4 (g/mL) G Lab File ID: E2L8857F.D/E2L8857R.D

% Moisture: 16 Decanted: (Y/N) N Date Received: 02/27/2013

Extraction: (Type) SONC Date Extracted: 02/28/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 02/28/2013

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	Q
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	39	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	39	U
11096-82-5	Aroclor-1260	39	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-70660

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-70660

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E2L8849F.D/E2L8849R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 02/28/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 02/28/2013

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	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-70660(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-70660

Sample wt/vol: 30 (g/mL) G Lab File ID: E2L8850F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 02/28/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 02/28/2013

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	Q
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	110	

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-70660(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-70660

Sample wt/vol: 30 (g/mL) G Lab File ID: E2L8850R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 02/28/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 02/28/2013

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	Q
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	

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
LCSD-70660(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-70660

Sample wt/vol: 30 (g/mL) G Lab File ID: E2L8851F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 02/28/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 02/28/2013

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	Q
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	110	

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
LCSD-70660(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-70660

Sample wt/vol: 30 (g/mL) G Lab File ID: E2L8851R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 02/28/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 02/28/2013

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	Q
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	

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

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-70660	88	92	82	83			0
02	LCS-70660	89	94	86	89			0
03	LCSD-70660	89	94	84	87			0
04	WC-1	70	72	65	70			0
05	WC-2	77	80	70	76			0
06	WC-3	70	75	65	68			0
07	WC-4	76	80	70	73			0
08	WC-5	79	82	72	74			0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som12.12.17.A

3P - FORM III ARO-4

SOIL AROCLOR LABORATORY CONTROL SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-70660

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Lab Sample ID: LCS-70660 LCS Lot No.: A086503

Date Extracted: 02/28/2013 Date Analyzed (1): 02/28/2013

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	117.8462	88		40-140
Aroclor-1260	133.3330	113.2280	85		60-130

Instrument ID (2): E2 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 02/28/2013

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS
Aroclor-1016	133.3330	117.3634	88		40-140
Aroclor-1260	133.3330	127.2175	95		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:

som12.12.17.A

3P - FORM III ARO-4
SOIL AROCLOR LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-70660

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Lab Sample ID: LCSD-70660 LCS Lot No.: A086503

Date Extracted: 02/28/2013 Date Analyzed (1): 02/28/2013

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	115.9898	87		40-140	1.0		30
Aroclor-1260	133.3330	111.2134	83		60-130	2.0		30

Instrument ID (2): E2 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 02/28/2013

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS	%RPD	#	RPD LIMIT
Aroclor-1016	133.3330	115.9258	87		40-140	1.0		30
Aroclor-1260	133.3330	124.9068	94		60-130	1.0		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:

som12.12.17.A

4F - FORM IV ARO

AROCLOR METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-70660

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0252 Mod. Ref No.: SDG No.: SM0252

Lab File ID: E2L8849F.D / E2L8849R.D Lab Sample ID: MB-70660

Matrix: (SOIL/SED/WATER) SOIL Extraction: (Type) SONC Date Extracted: 02/28/2013

Sulfur Cleanup: (Y/N) Y GPC Cleanup:(Y/N) N

Acid Cleanup: (Y/N Y

Date Analyzed (1): 02/28/2013 Date Analyzed (2): 02/28/2013

Time Analyzed (1): 14:00 Time Analyzed (2): 14:00

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-70660	LCS-70660	02/28/2013	02/28/2013
02	LCSD-70660	LCSD-70660	02/28/2013	02/28/2013
03	WC-1	M0252-01A	02/28/2013	02/28/2013
04	WC-2	M0252-02A	02/28/2013	02/28/2013
05	WC-3	M0252-03A	02/28/2013	02/28/2013
06	WC-4	M0252-04A	02/28/2013	02/28/2013
07	WC-5	M0252-05A	02/28/2013	02/28/2013

COMMENTS:

* Metals *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Stand By-Monoco

Laboratory Workorder / SDG #: M0252

SW846 6010C, SW846 7470A

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 7470A.

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW3005A, SW7470A.

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: WC-4 (M0252-04AMS).

Percent recoveries were within the QC limits.

D. Post Digestion Spike (PDS):

A post-digestion spike was not performed on any sample in this SDG.

E. Duplicate sample:

A duplicate analysis was not performed on any sample in this SDG.

F. Serial Dilution (SD):

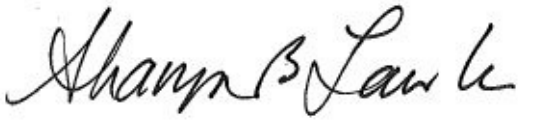
Serial Dilution analyses were performed on sample: WC-4 (M0252-04ASD).

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: 03/11/13

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.

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

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

WC-1

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0252

Matrix (soil/water): WATER Lab Sample ID: M0252-01

Level (low/med): MED Date Received: 02/27/2013

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	911			P
7440-43-9	Cadmium	0.89	U		P
7440-47-3	Chromium	0.64	U		P
7439-92-1	Lead	66.6			P
7439-97-6	Mercury	0.042	B		CV
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P

Comments:

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

WC-1

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0252

Matrix (soil/water): WATER Lab Sample ID: M0252-01

Level (low/med): MED Date Received: 02/27/2013

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	911			P
7440-43-9	Cadmium	0.89	U		P
7440-47-3	Chromium	0.64	U		P
7439-92-1	Lead	66.6			P
7439-97-6	Mercury	0.042	B		CV
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P

Comments:

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

WC-2

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0252

Matrix (soil/water): WATER Lab Sample ID: M0252-02

Level (low/med): MED Date Received: 02/27/2013

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	640			P
7440-43-9	Cadmium	0.89	U		P
7440-47-3	Chromium	0.64	U		P
7439-92-1	Lead	4.2	U		P
7439-97-6	Mercury	0.028	U		CV
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P

Comments:

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

WC-2

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0252

Matrix (soil/water): WATER Lab Sample ID: M0252-02

Level (low/med): MED Date Received: 02/27/2013

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	640			P
7440-43-9	Cadmium	0.89	U		P
7440-47-3	Chromium	0.64	U		P
7439-92-1	Lead	4.2	U		P
7439-97-6	Mercury	0.028	U		CV
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P

Comments:

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

WC-3

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0252

Matrix (soil/water): WATER Lab Sample ID: M0252-03

Level (low/med): MED Date Received: 02/27/2013

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	896			P
7440-43-9	Cadmium	0.89	U		P
7440-47-3	Chromium	0.64	U		P
7439-92-1	Lead	7.2	B		P
7439-97-6	Mercury	0.028	U		CV
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P

Comments:

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

WC-3

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0252

Matrix (soil/water): WATER Lab Sample ID: M0252-03

Level (low/med): MED Date Received: 02/27/2013

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	896			P
7440-43-9	Cadmium	0.89	U		P
7440-47-3	Chromium	0.64	U		P
7439-92-1	Lead	7.2	B		P
7439-97-6	Mercury	0.028	U		CV
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P

Comments:

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

WC-4

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0252

Matrix (soil/water): WATER Lab Sample ID: M0252-04

Level (low/med): MED Date Received: 02/27/2013

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	719			P
7440-43-9	Cadmium	0.89	U		P
7440-47-3	Chromium	0.64	U		P
7439-92-1	Lead	7.3	B		P
7439-97-6	Mercury	0.028	U		CV
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P

Comments:

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

WC-4

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0252

Matrix (soil/water): WATER Lab Sample ID: M0252-04

Level (low/med): MED Date Received: 02/27/2013

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	719			P
7440-43-9	Cadmium	0.89	U		P
7440-47-3	Chromium	0.64	U		P
7439-92-1	Lead	7.3	B		P
7439-97-6	Mercury	0.028	U		CV
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P

Comments:

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

WC-5

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0252

Matrix (soil/water): WATER Lab Sample ID: M0252-05

Level (low/med): MED Date Received: 02/27/2013

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.9	B		P
7440-39-3	Barium	608			P
7440-43-9	Cadmium	0.89	U		P
7440-47-3	Chromium	2.7	B		P
7439-92-1	Lead	36.1			P
7439-97-6	Mercury	0.028	U		CV
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P

Comments:

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

WC-5

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0252

Matrix (soil/water): WATER Lab Sample ID: M0252-05

Level (low/med): MED Date Received: 02/27/2013

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.9	B		P
7440-39-3	Barium	608			P
7440-43-9	Cadmium	0.89	U		P
7440-47-3	Chromium	2.7	B		P
7439-92-1	Lead	36.1			P
7439-97-6	Mercury	0.028	U		CV
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P

Comments:

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0252

Solid LCS Source: LCS(D) ID:

Aqueous LCS Source: **LCS-70685**

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Arsenic	455.0	465.17	102.2						
Barium	9100.0	9303.40	102.2						
Cadmium	227.0	229.46	101.1						
Chromium	910.0	891.30	97.9						
Lead	455.0	464.70	102.1						
Selenium	455.0	451.34	99.2						
Silver	1130.0	1121.45	99.2						

7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0252

Solid LCS Source:

Aqueous LCS Source:

LCS(D) ID:
LCS-70687

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Mercury	4.6	4.09	88.9						

7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0252

Solid LCS Source:

Aqueous LCS Source:

LCS(D) ID:
LCSD-70685

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Arsenic	455.0	468.08	102.9						
Barium	9100.0	9305.30	102.3						
Cadmium	227.0	228.99	100.9						
Chromium	910.0	897.53	98.6						
Lead	455.0	463.61	101.9						
Selenium	455.0	455.01	100.0						
Silver	1130.0	1129.82	100.0						

7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0252

Solid LCS Source:

Aqueous LCS Source:

LCS(D) ID:
LCSD-70687

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Mercury	4.6	4.24	92.2						

U.S. EPA - CLP

5A

SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

WC-4S

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0252

Matrix (soil/water): WATER Level (low/med): MED

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Arsenic	75-125	465		4.3	U	456	102		P
Barium	75-125	9110		719		9100	92		P
Cadmium	75-125	213		0.89	U	227	94		P
Chromium	75-125	826		0.64	U	910	91		P
Lead	75-125	442		7.3	B	455	96		P
Selenium	75-125	444		12.0	U	455	98		P
Silver	75-125	1140		6.9	U	1130	101		P
Mercury	75-125	4.2		0.028	U	4.6	92		CV

Comments:

U.S. EPA - CLP

5A

SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

WC-4S

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0252

Matrix (soil/water): WATER Level (low/med): MED

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Arsenic	75-125	465		4.3	U	456	102		P
Barium	75-125	9110		719		9100	92		P
Cadmium	75-125	213		0.89	U	227	94		P
Chromium	75-125	826		0.64	U	910	91		P
Lead	75-125	442		7.3	B	455	96		P
Selenium	75-125	444		12.0	U	455	98		P
Silver	75-125	1140		6.9	U	1130	101		P
Mercury	75-125	4.2		0.028	U	4.6	92		CV

Comments:

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0252

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-70687**

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

FIMS2_130301A

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
Analyte		C	03/01/13 15:25	C	03/01/13 15:30	C		C		C	M
Mercury	0.028	U	0.028	U	0.028	U			0.028	U	CV

U.S. EPA - CLP

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0252

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-70653**

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

FIMS2_130301A

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
Analyte		C		C		C		C		C	M
Mercury									0.028	U	CV

U.S. EPA - CLP

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0252

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-70653**

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

OPTIMA3_130301A

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 03/01/13 13:30	C	03/01/13 13:58	C	03/01/13 14:19	C	Preparation Blank	C	M
Arsenic	4.3	U	4.3	U	4.3	U	4.3	U	4.300	U	P
Barium	1.1	U	1.1	U	1.1	U	1.1	B	1.100	U	P
Cadmium	0.9	U	0.9	U	0.9	U	0.9	U	0.890	U	P
Chromium	0.6	U	0.6	U	0.6	U	0.6	U	0.718	B	P
Lead	4.2	U	4.2	U	4.2	U	4.2	U	4.200	U	P
Selenium	12.0	U	12.0	U	12.0	U	12.0	U	12.000	U	P
Silver	6.9	U	6.9	U	6.9	U	6.9	U	6.900	U	P

U.S. EPA - CLP

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0252

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-70685**

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

OPTIMA3_130301A

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
Analyte		C	03/01/13 14:51	C		C		C		C	M
Arsenic			4.3	U					4.300	U	P
Barium			1.1	U					1.100	U	P
Cadmium			0.9	U					0.890	U	P
Chromium			0.6	U					0.640	U	P
Lead			4.2	U					4.200	U	P
Selenium			12.0	U					12.000	U	P
Silver			6.9	U					6.900	U	P

Report Date:
02-Apr-13 16:28

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

LaBella Associates
300 State Street, Suite 201
Rochester, NY 14614

Work Order: M0383
Project : LaBella Monoco Oil
Project #:

Attn: Dan Noll

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M0383-01	WC 1	Soil	20-Mar-13 15:00	21-Mar-13 08:18
M0383-02	WC 2	Soil	20-Mar-13 15:00	21-Mar-13 08:18
M0383-03	WC 3	Soil	20-Mar-13 15:00	21-Mar-13 08:18
M0383-04	WC 4	Soil	20-Mar-13 15:00	21-Mar-13 08:18
M0383-05	WC 5	Soil	20-Mar-13 15:00	21-Mar-13 08:18
M0383-07	WC 7	Soil	20-Mar-13 15:00	21-Mar-13 08:18
M0383-08	WC 8	Soil	20-Mar-13 15:00	21-Mar-13 08:18

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 requirments have been meet.

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.

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

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
DoD ELAP
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* Data Summary Pack *

175 Metro Center Boulevard · Warwick, RI 02886-1755 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0383

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
WC 1	M0383-01	SW8260_W	SW8270_W	SW8082_S	SW6010_W	
WC 1	M0383-01				SW7470	
WC 2	M0383-02	SW8260_W	SW8270_W	SW8082_S	SW6010_W	
WC 2	M0383-02				SW7470	
WC 3	M0383-03	SW8260_W	SW8270_W	SW8082_S	SW6010_W	
WC 3	M0383-03				SW7470	
WC 4	M0383-04	SW8260_W	SW8270_W	SW8082_S	SW6010_W	
WC 4	M0383-04				SW7470	
WC 5	M0383-05	SW8260_W	SW8270_W	SW8082_S	SW6010_W	
WC 5	M0383-05				SW7470	
WC 7	M0383-07	SW8260_W	SW8270_W	SW8082_S	SW6010_W	
WC 7	M0383-07				SW7470	
WC 8	M0383-08	SW8260_W	SW8270_W	SW8082_S	SW6010_W	
WC 8	M0383-08				SW7470	

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0383

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8260_W					
M0383-01A	SL	3/20/2013	3/21/2013	NA	3/25/2013
M0383-02A	SL	3/20/2013	3/21/2013	NA	3/25/2013
M0383-03A	SL	3/20/2013	3/21/2013	NA	3/25/2013
M0383-03AMS	SL	3/20/2013	3/21/2013	NA	3/25/2013
M0383-04A	SL	3/20/2013	3/21/2013	NA	3/26/2013
M0383-05A	SL	3/20/2013	3/21/2013	NA	3/26/2013
M0383-07A	SL	3/20/2013	3/21/2013	NA	3/26/2013
M0383-08A	SL	3/20/2013	3/21/2013	NA	3/26/2013

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0383

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8270_W					
M0383-01B	SL	3/20/2013	3/21/2013	3/22/2013	3/22/2013
M0383-02B	SL	3/20/2013	3/21/2013	3/22/2013	3/22/2013
M0383-03B	SL	3/20/2013	3/21/2013	3/22/2013	3/22/2013
M0383-04B	SL	3/20/2013	3/21/2013	3/22/2013	3/22/2013
M0383-05B	SL	3/20/2013	3/21/2013	3/22/2013	3/22/2013
M0383-07B	SL	3/20/2013	3/21/2013	3/22/2013	3/22/2013
M0383-08B	SL	3/20/2013	3/21/2013	3/22/2013	3/22/2013
M0383-08BMS	SL	3/20/2013	3/21/2013	3/22/2013	3/22/2013

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0383

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8082_S					
M0383-01B	SL	3/20/2013	3/21/2013	3/22/2013	3/22/2013
M0383-02B	SL	3/20/2013	3/21/2013	3/22/2013	3/22/2013
M0383-03B	SL	3/20/2013	3/21/2013	3/22/2013	3/22/2013
M0383-04B	SL	3/20/2013	3/21/2013	3/22/2013	3/22/2013
M0383-05B	SL	3/20/2013	3/21/2013	3/22/2013	3/22/2013
M0383-07B	SL	3/20/2013	3/21/2013	3/22/2013	3/22/2013
M0383-08B	SL	3/20/2013	3/21/2013	3/22/2013	3/22/2013

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0383

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
SW8260_W					
M0383-01A	SL	SW8260_W	NA	LOW	1
M0383-02A	SL	SW8260_W	NA	LOW	1
M0383-03A	SL	SW8260_W	NA	LOW	1
M0383-03AMS	SL	SW8260_W	NA	LOW	1
M0383-04A	SL	SW8260_W	NA	LOW	1
M0383-05A	SL	SW8260_W	NA	LOW	1
M0383-07A	SL	SW8260_W	NA	LOW	1
M0383-08A	SL	SW8260_W	NA	LOW	1

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0383

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
SW8270_W					
M0383-01B	SL	SW8270_W	3510C	NA	1
M0383-02B	SL	SW8270_W	3510C	NA	1
M0383-03B	SL	SW8270_W	3510C	NA	1
M0383-04B	SL	SW8270_W	3510C	NA	1
M0383-05B	SL	SW8270_W	3510C	NA	1
M0383-07B	SL	SW8270_W	3510C	NA	1
M0383-08B	SL	SW8270_W	3510C	NA	1
M0383-08BMS	SL	SW8270_W	3510C	NA	1

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0383

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
SW8082_S					
M0383-01B	SL	SW8082_S	3550B	Acid/Sulfur	1
M0383-02B	SL	SW8082_S	3550B	Acid/Sulfur	1
M0383-03B	SL	SW8082_S	3550B	Acid/Sulfur	1
M0383-04B	SL	SW8082_S	3550B	Acid/Sulfur	1
M0383-05B	SL	SW8082_S	3550B	Acid/Sulfur	1
M0383-07B	SL	SW8082_S	3550B	Acid/Sulfur	1
M0383-08B	SL	SW8082_S	3550B	Acid/Sulfur	1

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0383

Laboratory Sample ID	Matrix	Metals Requested	Date Received By Lab	Date Analyzed
SW6010_W				
M0383-01B	SL	SW6010_W	3/21/2013	3/25/2013
M0383-02B	SL	SW6010_W	3/21/2013	3/25/2013
M0383-03B	SL	SW6010_W	3/21/2013	3/25/2013
M0383-04B	SL	SW6010_W	3/21/2013	3/25/2013
M0383-05B	SL	SW6010_W	3/21/2013	3/25/2013
M0383-07B	SL	SW6010_W	3/21/2013	3/25/2013
M0383-08B	SL	SW6010_W	3/21/2013	3/25/2013
M0383-08BMS	SL	SW6010_W	3/21/2013	3/25/2013
SW7470				
M0383-01B	SL	SW7470	3/21/2013	3/25/2013
M0383-02B	SL	SW7470	3/21/2013	3/25/2013
M0383-03B	SL	SW7470	3/21/2013	3/25/2013
M0383-04B	SL	SW7470	3/21/2013	3/25/2013
M0383-05B	SL	SW7470	3/21/2013	3/25/2013
M0383-07B	SL	SW7470	3/21/2013	3/25/2013
M0383-08B	SL	SW7470	3/21/2013	3/25/2013
M0383-08BMS	SL	SW7470	3/21/2013	3/25/2013

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation

Sample Preparation and Analysis Summary Toxicity Characteristic Leaching Procedure

Project Name : LaBella Monoco Oil **SDG :** M0383

Laboratory Sample ID	Matrix	Analytical Protocol	Date Collected	Date Received By Lab	Date Extracted
SW1311					
M0383-01B	SL	SW1311	3/20/2013	3/21/2013	3/21/2013
M0383-01A	SL	SW1311	3/20/2013	3/21/2013	3/23/2013
M0383-02B	SL	SW1311	3/20/2013	3/21/2013	3/21/2013
M0383-02A	SL	SW1311	3/20/2013	3/21/2013	3/23/2013
M0383-03B	SL	SW1311	3/20/2013	3/21/2013	3/21/2013
M0383-03A	SL	SW1311	3/20/2013	3/21/2013	3/23/2013
M0383-04B	SL	SW1311	3/20/2013	3/21/2013	3/21/2013
M0383-04A	SL	SW1311	3/20/2013	3/21/2013	3/26/2013
M0383-05B	SL	SW1311	3/20/2013	3/21/2013	3/21/2013
M0383-05A	SL	SW1311	3/20/2013	3/21/2013	3/26/2013
M0383-07B	SL	SW1311	3/20/2013	3/21/2013	3/21/2013
M0383-07A	SL	SW1311	3/20/2013	3/21/2013	3/26/2013
M0383-08B	SL	SW1311	3/20/2013	3/21/2013	3/21/2013
M0383-08A	SL	SW1311	3/20/2013	3/21/2013	3/26/2013

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: M0383

Client ID: LABELLA
Project: LaBella Monoco Oil
WO Name: LaBella Monoco Oil
Location: LABELLA_MONOCO-OIL,

Case:
SDG:
PO: 210259

HC Due: 04/02/13
Fax Due: 03/25/13
Fax Report: ☑

Report Level: ASP-B
Special Program:
EDD: ENVIROINSITE_1
EQUIIS_4_NYSDEC

Comments: use this project for between 11-50 samples, no RUSH surcharge base on lab capacity, no charge for MS/MSD or a batch of 7 or more samples, no charge for TB. no hard copy

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M0383-01A	WC 1	03/20/2013 15:00	03/21/2013	Soil	SW8260_W	/ TCLP_VOA				Y	VOA
M0383-01B	WC 1	03/20/2013 15:00	03/21/2013	Soil	PMoist	/					A4
M0383-01B	WC 1	03/20/2013 15:00	03/21/2013	Soil	SW6010_W	/ TCLP_METALS				Y	A4
M0383-01B	WC 1	03/20/2013 15:00	03/21/2013	Soil	SW7470	/ TCLP_METALS					A4
M0383-01B	WC 1	03/20/2013 15:00	03/21/2013	Soil	SW8082_S	/					A4
M0383-01B	WC 1	03/20/2013 15:00	03/21/2013	Soil	SW8270_W	/ TCLP_SVOA				Y	A4
M0383-02A	WC 2	03/20/2013 15:00	03/21/2013	Soil	SW8260_W	/ TCLP_VOA				Y	VOA
M0383-02B	WC 2	03/20/2013 15:00	03/21/2013	Soil	PMoist	/					A4
M0383-02B	WC 2	03/20/2013 15:00	03/21/2013	Soil	SW6010_W	/ TCLP_METALS				Y	A4
M0383-02B	WC 2	03/20/2013 15:00	03/21/2013	Soil	SW7470	/ TCLP_METALS					A4
M0383-02B	WC 2	03/20/2013 15:00	03/21/2013	Soil	SW8082_S	/					A4
M0383-02B	WC 2	03/20/2013 15:00	03/21/2013	Soil	SW8270_W	/ TCLP_SVOA				Y	A4
M0383-03A	WC 3	03/20/2013 15:00	03/21/2013	Soil	SW8260_W	/ TCLP_VOA				Y	VOA
M0383-03B	WC 3	03/20/2013 15:00	03/21/2013	Soil	PMoist	/					A4
M0383-03B	WC 3	03/20/2013 15:00	03/21/2013	Soil	SW6010_W	/ TCLP_METALS				Y	A4
M0383-03B	WC 3	03/20/2013 15:00	03/21/2013	Soil	SW7470	/ TCLP_METALS					A4
M0383-03B	WC 3	03/20/2013 15:00	03/21/2013	Soil	SW8082_S	/					A4
M0383-03B	WC 3	03/20/2013 15:00	03/21/2013	Soil	SW8270_W	/ TCLP_SVOA				Y	A4
M0383-04A	WC 4	03/20/2013 15:00	03/21/2013	Soil	SW8260_W	/ TCLP_VOA				Y	VOA
M0383-04B	WC 4	03/20/2013 15:00	03/21/2013	Soil	PMoist	/					A4
M0383-04B	WC 4	03/20/2013 15:00	03/21/2013	Soil	SW6010_W	/ TCLP_METALS				Y	A4
M0383-04B	WC 4	03/20/2013 15:00	03/21/2013	Soil	SW7470	/ TCLP_METALS					A4
M0383-04B	WC 4	03/20/2013 15:00	03/21/2013	Soil	SW8082_S	/					A4

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

HT = Test logged in but has been placed on hold

Lab Client Rep: Agnes R Huntley

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: M0383

Client ID: LABELLA
Project: LaBella Monoco Oil
WO Name: LaBella Monoco Oil
Location: LABELLA_MONOCO-OIL,

Case:
SDG:
PO: 210259

HC Due: 04/02/13
Fax Due: 03/25/13
Fax Report: ☑

Report Level: ASP-B
Special Program:
EDD: ENVIROINSITE_1
EQUIIS_4_NYSDEC

Comments: use this project for between 11-50 samples, no RUSH surcharge base on lab capacity, no charge for MS/MSD or a batch of 7 or more samples, no charge for TB. no hard copy

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M0383-04B	WC 4	03/20/2013 15:00	03/21/2013	Soil	SW8270_W	/ TCLP_SVOA				Y	A4
M0383-05A	WC 5	03/20/2013 15:00	03/21/2013	Soil	SW8260_W	/ TCLP_VOA				Y	VOA
M0383-05B	WC 5	03/20/2013 15:00	03/21/2013	Soil	PMoist	/					A4
M0383-05B	WC 5	03/20/2013 15:00	03/21/2013	Soil	SW6010_W	/ TCLP_METALS				Y	A4
M0383-05B	WC 5	03/20/2013 15:00	03/21/2013	Soil	SW7470	/ TCLP_METALS					A4
M0383-05B	WC 5	03/20/2013 15:00	03/21/2013	Soil	SW8082_S	/					A4
M0383-05B	WC 5	03/20/2013 15:00	03/21/2013	Soil	SW8270_W	/ TCLP_SVOA				Y	A4
M0383-07A	WC 7	03/20/2013 15:00	03/21/2013	Soil	SW8260_W	/ TCLP_VOA				Y	VOA
M0383-07B	WC 7	03/20/2013 15:00	03/21/2013	Soil	PMoist	/					A4
M0383-07B	WC 7	03/20/2013 15:00	03/21/2013	Soil	SW6010_W	/ TCLP_METALS				Y	A4
M0383-07B	WC 7	03/20/2013 15:00	03/21/2013	Soil	SW7470	/ TCLP_METALS					A4
M0383-07B	WC 7	03/20/2013 15:00	03/21/2013	Soil	SW8082_S	/					A4
M0383-07B	WC 7	03/20/2013 15:00	03/21/2013	Soil	SW8270_W	/ TCLP_SVOA				Y	A4
M0383-08A	WC 8	03/20/2013 15:00	03/21/2013	Soil	SW8260_W	/ TCLP_VOA				Y	VOA
M0383-08B	WC 8	03/20/2013 15:00	03/21/2013	Soil	PMoist	/					A4
M0383-08B	WC 8	03/20/2013 15:00	03/21/2013	Soil	SW6010_W	/ TCLP_METALS				Y	A4
M0383-08B	WC 8	03/20/2013 15:00	03/21/2013	Soil	SW7470	/ TCLP_METALS					A4
M0383-08B	WC 8	03/20/2013 15:00	03/21/2013	Soil	SW8082_S	/					A4
M0383-08B	WC 8	03/20/2013 15:00	03/21/2013	Soil	SW8270_W	/ TCLP_SVOA				Y	A4

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

HT = Test logged in but has been placed on hold

* Volatiles *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Monoco Oil

Laboratory Workorder / SDG #: M0383

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

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

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: V10
Instrument Type: GCMS-VOA

Description: HP7890A
Manufacturer: Agilent
Model: 7890A / 5975C
GC Column used: 30 m X 0.25 mm ID [1.40 um thickness] DB-624 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):

Matrix spikes were performed on sample: WC 3 (M0383-03AMS).

Percent recoveries were within the QC limits.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

F. Dilutions:

No sample in this SDG required analysis at dilution.

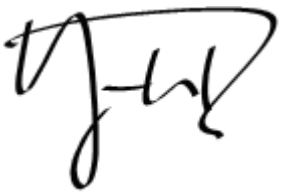
G. Samples:

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.



Signed:_____ _____

Date:_____4/2/2013_____

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.

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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC 1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0383-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B8886.D

Level: (TRACE/LOW/MED) LOW Date Received: 03/21/2013

% Moisture: not dec. 16 Date Analyzed: 03/25/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	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
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC 2

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0383-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B8887.D

Level: (TRACE/LOW/MED) LOW Date Received: 03/21/2013

% Moisture: not dec. 12 Date Analyzed: 03/25/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	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
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC 3

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0383-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B8888.D

Level: (TRACE/LOW/MED) LOW Date Received: 03/21/2013

% Moisture: not dec. 14 Date Analyzed: 03/25/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	0.76	J
79-01-6	Trichloroethene	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC 4

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0383-04A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B8916.D

Level: (TRACE/LOW/MED) LOW Date Received: 03/21/2013

% Moisture: not dec. 9.7 Date Analyzed: 03/26/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	3.3	J
67-66-3	Chloroform	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
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC 5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0383-05A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B8917.D

Level: (TRACE/LOW/MED) LOW Date Received: 03/21/2013

% Moisture: not dec. 18 Date Analyzed: 03/26/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	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
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC 7

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0383-07A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B8918.D

Level: (TRACE/LOW/MED) LOW Date Received: 03/21/2013

% Moisture: not dec. 16 Date Analyzed: 03/26/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	2.2	J
67-66-3	Chloroform	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
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC 8

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0383-08A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B8919.D

Level: (TRACE/LOW/MED) LOW Date Received: 03/21/2013

% Moisture: not dec. 21 Date Analyzed: 03/26/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	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
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-70955

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-70955

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B8885.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 03/25/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	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
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-70956

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-70956

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B8884.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 03/25/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethene	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-70967

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-70967

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B8915.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 03/26/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	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
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-70981

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-70981

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B8914.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 03/26/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethene	1.0	U
127-18-4	Tetrachloroethene	1.0	U
108-90-7	Chlorobenzene	1.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-70956

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-70956

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B8882.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 03/25/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	43	
75-35-4	1,1-Dichloroethene	45	
78-93-3	2-Butanone	55	
67-66-3	Chloroform	46	
56-23-5	Carbon tetrachloride	44	
107-06-2	1,2-Dichloroethane	45	
71-43-2	Benzene	47	
79-01-6	Trichloroethene	46	
127-18-4	Tetrachloroethene	45	
108-90-7	Chlorobenzene	48	

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-70981

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-70981

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B8912.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 03/26/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	47	
75-35-4	1,1-Dichloroethene	50	
78-93-3	2-Butanone	59	
67-66-3	Chloroform	49	
56-23-5	Carbon tetrachloride	48	
107-06-2	1,2-Dichloroethane	47	
71-43-2	Benzene	51	
79-01-6	Trichloroethene	50	
127-18-4	Tetrachloroethene	48	
108-90-7	Chlorobenzene	50	

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC 3MS

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0383-03AMS

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B8899.D

Level: (TRACE/LOW/MED) LOW Date Received: 03/21/2013

% Moisture: not dec. 14 Date Analyzed: 03/25/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	47	
75-35-4	1,1-Dichloroethene	49	
78-93-3	2-Butanone	49	
67-66-3	Chloroform	48	
56-23-5	Carbon tetrachloride	47	
107-06-2	1,2-Dichloroethane	47	
71-43-2	Benzene	51	
79-01-6	Trichloroethene	49	
127-18-4	Tetrachloroethene	49	
108-90-7	Chlorobenzene	50	

2B - FORM II VOA-2

WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Level: (TRACE or LOW) LOW

	EPA SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-70956	97	97	100	99				0
02	MB-70956	98	101	102	97				0
03	MB-70955	97	98	101	99				0
04	WC 1	98	101	103	100				0
05	WC 2	98	101	102	100				0
06	WC 3	96	100	103	98				0
07	WC 3MS	98	98	102	100				0
08	LCS-70981	98	99	101	99				0
09	MB-70981	96	100	103	97				0
10	MB-70967	95	100	102	98				0
11	WC 4	95	98	102	100				0
12	WC 5	95	99	102	99				0
13	WC 7	95	99	101	99				0
14	WC 8	95	98	103	97				0

		QC LIMITS
VDMC1	(DBFM) Dibromofluoromethane	(85-115)
VDMC2	(DCE) = 1,2-Dichloroethane-d4	(70-120)
VDMC3	(TOL) = Toluene-d8	(85-120)
VDMC4	(BFB) = Bromofluorobenzene	(75-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

som13.03.14.A

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-70956

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Lab Sample ID: LCS-70956 LCS Lot No.:

Date Extracted: 03/25/2013 Date Analyzed (1): 03/25/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Vinyl chloride	50.0000	0.0000	42.6739	85		50 - 145
1,1-Dichloroethene	50.0000	0.0000	44.8175	90		70 - 130
2-Butanone	50.0000	0.0000	55.4823	111		30 - 150
Chloroform	50.0000	0.0000	45.7918	92		65 - 135
Carbon tetrachloride	50.0000	0.0000	43.8621	88		65 - 140
1,2-Dichloroethane	50.0000	0.0000	45.1704	90		70 - 130
Benzene	50.0000	0.0000	46.8888	94		80 - 120
Trichloroethene	50.0000	0.0000	45.7348	91		70 - 125
Tetrachloroethene	50.0000	0.0000	45.4771	91		45 - 150
Chlorobenzene	50.0000	0.0000	47.6452	95		80 - 120

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

* Values outside of QC limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-70981

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Lab Sample ID: LCS-70981 LCS Lot No.:

Date Extracted: 03/26/2013 Date Analyzed (1): 03/26/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Vinyl chloride	50.0000	0.0000	46.7692	94		50 - 145
1,1-Dichloroethene	50.0000	0.0000	50.3380	101		70 - 130
2-Butanone	50.0000	0.0000	59.0590	118		30 - 150
Chloroform	50.0000	0.0000	48.8193	98		65 - 135
Carbon tetrachloride	50.0000	0.0000	48.0552	96		65 - 140
1,2-Dichloroethane	50.0000	0.0000	46.7219	93		70 - 130
Benzene	50.0000	0.0000	51.2226	102		80 - 120
Trichloroethene	50.0000	0.0000	49.5931	99		70 - 125
Tetrachloroethene	50.0000	0.0000	48.1325	96		45 - 150
Chlorobenzene	50.0000	0.0000	50.2213	100		80 - 120

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

* Values outside of QC limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
MB-70956

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Lab File ID: V8B8884.D Lab Sample ID: MB-70956

Instrument ID: V10

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 03/25/2013

Level: (TRACE or LOW/MED) LOW Time Analyzed: 9:36

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-70956	LCS-70956	V8B8882.D	8:28
02	MB-70955	MB-70955	V8B8885.D	10:03
03	WC 1	M0383-01A	V8B8886.D	10:30
04	WC 2	M0383-02A	V8B8887.D	10:57
05	WC 3	M0383-03A	V8B8888.D	11:25
06	WC 3MS	M0383-03AMS	V8B8899.D	16:20

COMMENTS:

som13.03.14.A

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
MB-70981

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Lab File ID: V8B8914.D Lab Sample ID: MB-70981

Instrument ID: V10

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 03/26/2013

Level: (TRACE or LOW/MED) LOW Time Analyzed: 9:58

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-70981	LCS-70981	V8B8912.D	8:47
02	MB-70967	MB-70967	V8B8915.D	10:25
03	WC 4	M0383-04A	V8B8916.D	10:52
04	WC 5	M0383-05A	V8B8917.D	11:19
05	WC 7	M0383-07A	V8B8918.D	11:46
06	WC 8	M0383-08A	V8B8919.D	12:13

COMMENTS:

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 03/07/2013 03/07/2013

EPA Sample No.(VSTD#####): VSTD05010U Date Analyzed: 03/25/2013

Lab File ID (Standard): V8B8881.D Time Analyzed: 7:43

Instrument ID: V10 Heated Purge: (Y/N) N

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	2777759		5.307		2151113		8.291		1120008		10.782	
	UPPER LIMIT	5555518		5.807		4302226		8.791		2240016		11.282	
	LOWER LIMIT	1388880		4.807		1075557		7.791		560004		10.282	
	EPA SAMPLE NO.												
01	LCS-70956	2675983		5.304		2004353		8.291		1012124		10.783	
02	MB-70956	2588991		5.307		1943371		8.291		908759		10.782	
03	MB-70955	2633484		5.307		1935565		8.291		925186		10.786	
04	WC 1	2598057		5.307		1933222		8.291		955264		10.782	
05	WC 2	2669309		5.307		1979507		8.291		970473		10.783	
06	WC 3	2719063		5.307		1987253		8.291		975399		10.782	
07	WC 3MS	2724229		5.307		2044091		8.291		1026896		10.783	

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.

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 03/07/2013 03/07/2013

EPA Sample No.(VSTD#####): VSTD05010V Date Analyzed: 03/26/2013

Lab File ID (Standard): V8B8911.D Time Analyzed: 7:39

Instrument ID: V10 Heated Purge: (Y/N) N

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	2820269		5.307		2156729		8.291		1085339		10.783	
	UPPER LIMIT	5640538		5.807		4313458		8.791		2170678		11.283	
	LOWER LIMIT	1410135		4.807		1078365		7.791		542670		10.283	
	EPA SAMPLE NO.												
01	LCS-70981	2804278		5.304		2139348		8.291		1068595		10.783	
02	MB-70981	2817407		5.307		2066429		8.291		964477		10.786	
03	MB-70967	2750820		5.307		2034070		8.291		986993		10.782	
04	WC 4	2807205		5.307		2049471		8.291		1011159		10.783	
05	WC 5	2853623		5.307		2099610		8.291		1011931		10.783	
06	WC 7	2823853		5.307		2099596		8.294		1002911		10.783	
07	WC 8	2867927		5.307		2130762		8.294		1015261		10.782	

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.

* Semivolatile Organics *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Monoco Oil

Laboratory Workorder / SDG #: M0383

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

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

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 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-70943 in batch 70943, Percent Recovery is outside QC Limits, recovery is above criteria for Hexachlorobutadiene at 107% with criteria of (25-105).

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

Matrix spikes were performed on sample: WC 8 (M0383-08BMS).

Percent recoveries were within the QC limits.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

F. Dilutions:

No sample in this SDG required analysis at dilution.

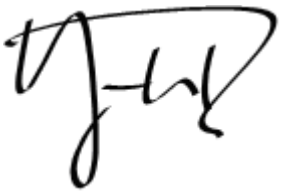
G. Samples:

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.



Signed:_____ _____

Date:_____4/2/2013_____

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.

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

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

WC 1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0383-01B

Sample wt/vol: 300 (g/mL) ML Lab File ID: S6B3061.D

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

% Moisture: Decanted: (Y/N) Date Received: 03/21/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/22/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/22/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	33	U
95-48-7	2-Methylphenol	33	U
106-44-5	4-Methylphenol	33	U
67-72-1	Hexachloroethane	33	U
98-95-3	Nitrobenzene	33	U
87-68-3	Hexachlorobutadiene	33	U
88-06-2	2,4,6-Trichlorophenol	33	U
95-95-4	2,4,5-Trichlorophenol	67	U
121-14-2	2,4-Dinitrotoluene	33	U
118-74-1	Hexachlorobenzene	33	U
87-86-5	Pentachlorophenol	67	U
110-86-1	Pyridine	67	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

WC 2

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0383-02B

Sample wt/vol: 300 (g/mL) ML Lab File ID: S6B3062.D

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

% Moisture: Decanted: (Y/N) Date Received: 03/21/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/22/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/22/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	33	U
95-48-7	2-Methylphenol	33	U
106-44-5	4-Methylphenol	33	U
67-72-1	Hexachloroethane	33	U
98-95-3	Nitrobenzene	33	U
87-68-3	Hexachlorobutadiene	33	U
88-06-2	2,4,6-Trichlorophenol	33	U
95-95-4	2,4,5-Trichlorophenol	67	U
121-14-2	2,4-Dinitrotoluene	33	U
118-74-1	Hexachlorobenzene	33	U
87-86-5	Pentachlorophenol	67	U
110-86-1	Pyridine	67	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

WC 3

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0383-03B

Sample wt/vol: 300 (g/mL) ML Lab File ID: S6B3063.D

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

% Moisture: Decanted: (Y/N) Date Received: 03/21/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/22/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/22/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	33	U
95-48-7	2-Methylphenol	33	U
106-44-5	4-Methylphenol	33	U
67-72-1	Hexachloroethane	33	U
98-95-3	Nitrobenzene	33	U
87-68-3	Hexachlorobutadiene	33	U
88-06-2	2,4,6-Trichlorophenol	33	U
95-95-4	2,4,5-Trichlorophenol	67	U
121-14-2	2,4-Dinitrotoluene	33	U
118-74-1	Hexachlorobenzene	33	U
87-86-5	Pentachlorophenol	67	U
110-86-1	Pyridine	67	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

WC 4

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0383-04B

Sample wt/vol: 300 (g/mL) ML Lab File ID: S6B3064.D

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

% Moisture: Decanted: (Y/N) Date Received: 03/21/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/22/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/22/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	33	U
95-48-7	2-Methylphenol	33	U
106-44-5	4-Methylphenol	33	U
67-72-1	Hexachloroethane	33	U
98-95-3	Nitrobenzene	33	U
87-68-3	Hexachlorobutadiene	33	U
88-06-2	2,4,6-Trichlorophenol	33	U
95-95-4	2,4,5-Trichlorophenol	67	U
121-14-2	2,4-Dinitrotoluene	33	U
118-74-1	Hexachlorobenzene	33	U
87-86-5	Pentachlorophenol	67	U
110-86-1	Pyridine	67	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

WC 5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0383-05B

Sample wt/vol: 300 (g/mL) ML Lab File ID: S6B3065.D

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

% Moisture: Decanted: (Y/N) Date Received: 03/21/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/22/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/22/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	33	U
95-48-7	2-Methylphenol	33	U
106-44-5	4-Methylphenol	33	U
67-72-1	Hexachloroethane	33	U
98-95-3	Nitrobenzene	33	U
87-68-3	Hexachlorobutadiene	33	U
88-06-2	2,4,6-Trichlorophenol	33	U
95-95-4	2,4,5-Trichlorophenol	67	U
121-14-2	2,4-Dinitrotoluene	33	U
118-74-1	Hexachlorobenzene	33	U
87-86-5	Pentachlorophenol	67	U
110-86-1	Pyridine	67	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

WC 7

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0383-07B

Sample wt/vol: 300 (g/mL) ML Lab File ID: S6B3066.D

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

% Moisture: Decanted: (Y/N) Date Received: 03/21/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/22/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/22/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	33	U
95-48-7	2-Methylphenol	33	U
106-44-5	4-Methylphenol	33	U
67-72-1	Hexachloroethane	33	U
98-95-3	Nitrobenzene	33	U
87-68-3	Hexachlorobutadiene	33	U
88-06-2	2,4,6-Trichlorophenol	33	U
95-95-4	2,4,5-Trichlorophenol	67	U
121-14-2	2,4-Dinitrotoluene	33	U
118-74-1	Hexachlorobenzene	33	U
87-86-5	Pentachlorophenol	67	U
110-86-1	Pyridine	67	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

WC 8

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0383-08B

Sample wt/vol: 300 (g/mL) ML Lab File ID: S6B3067.D

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

% Moisture: Decanted: (Y/N) Date Received: 03/21/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/22/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/22/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	33	U
95-48-7	2-Methylphenol	33	U
106-44-5	4-Methylphenol	33	U
67-72-1	Hexachloroethane	33	U
98-95-3	Nitrobenzene	33	U
87-68-3	Hexachlorobutadiene	33	U
88-06-2	2,4,6-Trichlorophenol	33	U
95-95-4	2,4,5-Trichlorophenol	67	U
121-14-2	2,4-Dinitrotoluene	33	U
118-74-1	Hexachlorobenzene	33	U
87-86-5	Pentachlorophenol	67	U
110-86-1	Pyridine	67	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-70928

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-70928

Sample wt/vol: 300 (g/mL) ML Lab File ID: S6B3058.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/22/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/22/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	33	U
95-48-7	2-Methylphenol	33	U
106-44-5	4-Methylphenol	33	U
67-72-1	Hexachloroethane	33	U
98-95-3	Nitrobenzene	33	U
87-68-3	Hexachlorobutadiene	33	U
88-06-2	2,4,6-Trichlorophenol	33	U
95-95-4	2,4,5-Trichlorophenol	67	U
121-14-2	2,4-Dinitrotoluene	33	U
118-74-1	Hexachlorobenzene	33	U
87-86-5	Pentachlorophenol	67	U
110-86-1	Pyridine	67	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-70943

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-70943

Sample wt/vol: 300 (g/mL) ML Lab File ID: S6B3059.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/22/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/22/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	150	
95-48-7	2-Methylphenol	140	
106-44-5	4-Methylphenol	140	
67-72-1	Hexachloroethane	140	
98-95-3	Nitrobenzene	150	
87-68-3	Hexachlorobutadiene	180	
88-06-2	2,4,6-Trichlorophenol	160	
95-95-4	2,4,5-Trichlorophenol	170	
121-14-2	2,4-Dinitrotoluene	160	
118-74-1	Hexachlorobenzene	170	
87-86-5	Pentachlorophenol	150	
110-86-1	Pyridine	130	

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCSD-70943

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-70943

Sample wt/vol: 300 (g/mL) ML Lab File ID: S6B3060.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/22/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/22/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	140	
95-48-7	2-Methylphenol	140	
106-44-5	4-Methylphenol	130	
67-72-1	Hexachloroethane	140	
98-95-3	Nitrobenzene	150	
87-68-3	Hexachlorobutadiene	170	
88-06-2	2,4,6-Trichlorophenol	160	
95-95-4	2,4,5-Trichlorophenol	160	
121-14-2	2,4-Dinitrotoluene	160	
118-74-1	Hexachlorobenzene	170	
87-86-5	Pentachlorophenol	150	
110-86-1	Pyridine	120	

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

WC 8MS

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0383-08BMS

Sample wt/vol: 300 (g/mL) ML Lab File ID: S6B3068.D

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

% Moisture: Decanted: (Y/N) Date Received: 03/21/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/22/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/22/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	130	
95-48-7	2-Methylphenol	120	
106-44-5	4-Methylphenol	110	
67-72-1	Hexachloroethane	130	
98-95-3	Nitrobenzene	140	
87-68-3	Hexachlorobutadiene	160	
88-06-2	2,4,6-Trichlorophenol	150	
95-95-4	2,4,5-Trichlorophenol	150	
121-14-2	2,4-Dinitrotoluene	150	
118-74-1	Hexachlorobenzene	160	
87-86-5	Pentachlorophenol	150	
110-86-1	Pyridine	89	

2H - FORM II SV-2

WATER SEMIVOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

	CLIENT SAMPLE NO.	SDMC1 (NBZ) #	SDMC2 (FBP) #	SDMC3 (TPH) #	SDMC4 (PHL) #	SDMC5 (2FP) #	SDMC6 (TBP) #			TOT OUT
01	MB-70928	96	88	107	80	82	104			0
02	LCS-70943	96	91	106	82	80	108			0
03	LCSD-70943	91	90	107	78	76	107			0
04	WC 1	92	85	95	45	59	99			0
05	WC 2	84	80	97	42	53	104			0
06	WC 3	76	73	91	34	47	94			0
07	WC 4	88	82	92	37	51	101			0
08	WC 5	85	81	97	44	57	101			0
09	WC 7	80	77	99	39	50	97			0
10	WC 8	87	82	99	42	56	103			0
11	WC 8MS	86	86	101	42	55	104			0

		QC LIMITS
SDMC1	(NBZ) = Nitrobenzene-d5	(40-110)
SDMC2	(FBP) = 2-Fluorobiphenyl	(50-110)
SDMC3	(TPH) = Terphenyl-d14	(50-135)
SDMC4	(PHL) = Phenol-d5	(10-115)
SDMC5	(2FP) = 2-Fluorophenol	(20-110)
SDMC6	(TBP) = 2,4,6-Tribromophenol	(40-125)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D DMC diluted out

som13.03.14.A

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.
LCS-70943

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Lab Sample ID: LCS-70943 LCS Lot No.: A090321

Date Extracted: 03/22/2013 Date Analyzed (1): 03/22/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
1,4-Dichlorobenzene	166.6667	0.0000	145.6264	87		30 - 100
2-Methylphenol	166.6667	0.0000	141.1132	85		40 - 110
4-Methylphenol	166.6667	0.0000	137.5434	83		30 - 110
Hexachloroethane	166.6667	0.0000	143.9777	86		30 - 95
Nitrobenzene	166.6667	0.0000	149.7588	90		45 - 110
Hexachlorobutadiene	166.6667	0.0000	178.6190	107	*	25 - 105
2,4,6-Trichlorophenol	166.6667	0.0000	157.6593	95		50 - 115
2,4,5-Trichlorophenol	166.6667	0.0000	165.7364	99		50 - 110
2,4-Dinitrotoluene	166.6667	0.0000	157.3489	94		50 - 120
Hexachlorobenzene	166.6667	0.0000	167.6622	101		50 - 110
Pentachlorophenol	166.6667	0.0000	150.9422	91		40 - 115
Pyridine	166.6667	0.0000	125.0586	75		10 - 106

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

* Values outside of QC limits

Spike Recovery: 1 out of 12 outside limits

COMMENTS:

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-70943

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Lab Sample ID: LCSD-70943 LCS Lot No.: A090321

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
1,4-Dichlorobenzene	166.6667	141.6565	85		2		40	30 - 100
2-Methylphenol	166.6667	137.8121	83		2		40	40 - 110
4-Methylphenol	166.6667	134.1395	80		4		40	30 - 110
Hexachloroethane	166.6667	138.2223	83		4		40	30 - 95
Nitrobenzene	166.6667	146.8694	88		2		40	45 - 110
Hexachlorobutadiene	166.6667	172.4803	103		4		40	25 - 105
2,4,6-Trichlorophenol	166.6667	155.0007	93		2		40	50 - 115
2,4,5-Trichlorophenol	166.6667	160.3032	96		3		40	50 - 110
2,4-Dinitrotoluene	166.6667	158.6890	95		1		40	50 - 120
Hexachlorobenzene	166.6667	167.6554	101		0		40	50 - 110
Pentachlorophenol	166.6667	149.3587	90		1		40	40 - 115
Pyridine	166.6667	121.2189	73		3		40	10 - 106

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

* Values outside of QC limits

RPD: 0 out of 12 outside limits

Spike Recovery: 0 out of 12 outside limits

COMMENTS:

4C - FORM IV SV

SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

MB-70928

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Lab File ID: S6B3058.D Lab Sample ID: MB-70928

Instrument ID: S6 Date Extracted: 03/22/2013

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 03/22/2013

Level: (LOW/MED) LOW Time Analyzed: 15:28

Extraction: (Type) SEPF GPC Cleanup: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	LCS-70943	LCS-70943	S6B3059.D	03/22/2013
02	LCSD-70943	LCSD-70943	S6B3060.D	03/22/2013
03	WC 1	M0383-01B	S6B3061.D	03/22/2013
04	WC 2	M0383-02B	S6B3062.D	03/22/2013
05	WC 3	M0383-03B	S6B3063.D	03/22/2013
06	WC 4	M0383-04B	S6B3064.D	03/22/2013
07	WC 5	M0383-05B	S6B3065.D	03/22/2013
08	WC 7	M0383-07B	S6B3066.D	03/22/2013
09	WC 8	M0383-08B	S6B3067.D	03/22/2013
10	WC 8MS	M0383-08BMS	S6B3068.D	03/22/2013

COMMENTS:

8C - FORM VIII SV-1

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 03/12/2013 03/12/2013

EPA Sample No.(SSTD020##) SSTD0256T Date Analyzed: 03/22/2013

Lab File ID (Standard): S6B3051.D Time Analyzed: 11:14

Instrument ID: S6

		IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
	12 HOUR STD	125327		5.293		504354		6.35		327218		7.807	
	UPPER LIMIT	250654		5.793		1008708		6.85		654436		8.307	
	LOWER LIMIT	62664		4.793		252177		5.85		163609		7.307	
	SAMPLE NO.												
01	MB-70928	165544		5.299		623920		6.350		432244		7.802	
02	LCS-70943	193015		5.299		717545		6.356		479124		7.808	
03	LCSD-70943	193193		5.299		715473		6.356		469531		7.808	
04	WC 1	191826		5.299		684100		6.350		462038		7.802	
05	WC 2	175890		5.299		644077		6.350		438587		7.802	
06	WC 3	194946		5.299		705133		6.350		469350		7.802	
07	WC 4	200196		5.299		727178		6.350		493950		7.802	
08	WC 5	195373		5.299		698580		6.351		472596		7.802	
09	WC 7	192441		5.299		698189		6.350		473524		7.802	
10	WC 8	189332		5.299		694910		6.350		469398		7.802	
11	WC 8MS	210049		5.299		776854		6.356		517052		7.808	

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

8D - FORM VIII SV-2

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

EPA Sample No.(SSTD020##) SSTD0256T Date Analyzed: 03/22/2013

Lab File ID (Standard): S6B3051.D Time Analyzed: 11:14

Instrument ID: S6 GC Column: Rxi-5sil MS ID: 0.25 (mm)

		IS4 (PHN) AREA	#	RT	#	IS5 (CRY) AREA	#	RT	#	IS6 (PRY) AREA	#	RT	#
	12 HOUR STD	649785		9.047		753632		11.427		672012		13.06	
	UPPER LIMIT	1299570		9.547		1507264		11.927		1344024		13.56	
	LOWER LIMIT	324893		8.547		376816		10.927		336006		12.56	
	SAMPLE NO.												
01	MB-70928	840708		9.035		998368		11.333		938264		12.937	
02	LCS-70943	912139		9.041		1070004		11.333		1015056		12.937	
03	LCSD-70943	899898		9.042		1033863		11.333		977972		12.931	
04	WC 1	887170		9.036		1026623		11.327		987472		12.937	
05	WC 2	850933		9.036		1018244		11.333		970468		12.943	
06	WC 3	899279		9.036		1079954		11.321		1033265		12.925	
07	WC 4	955416		9.036		1137159		11.333		1082522		12.937	
08	WC 5	919936		9.036		1089515		11.315		1050077		12.914	
09	WC 7	912386		9.035		1090731		11.315		1037976		12.919	
10	WC 8	893605		9.036		1075226		11.321		1043919		12.925	
11	WC 8MS	995137		9.041		1171937		11.321		1135474		12.925	

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.

* PCB Organics *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Monoco Oil

Laboratory Workorder / SDG #: M0383

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%.

Surrogate Tetrachloro-m-xylene was outside of the RT window in sample WC2 and WC4. No PCB pattern was detected in these samples.

No other unusual occurrences were noted during sample analysis.

G. Manual Integration

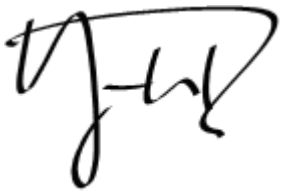
Where needed, manual integrations were performed to improve data quality. The corrections were reviewed and associated hardcopies generated and reported as required. Manual integrations are coded to provide the data reviewer justification for such action. The codes are labeled on the ion chromatogram 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:

WC 2 (M0383-02B) Tetrachloro-m-xylene on rear column , Tetrachloro-m-xylene on front column due to M6
WC 4 (M0383-04B) Tetrachloro-m-xylene on rear column , Tetrachloro-m-xylene 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:_____4/2/2013_____

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.

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

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

WC 1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0383-01B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E2L9190F.D/E2L9190R.D

% Moisture: 16 Decanted: (Y/N) N Date Received: 03/21/2013

Extraction: (Type) SONC Date Extracted: 03/22/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/22/2013

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	Q
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	39	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	39	U
11096-82-5	Aroclor-1260	39	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

WC 2

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0383-02B

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E2L9191F.D/E2L9191R.D

% Moisture: 12 Decanted: (Y/N) N Date Received: 03/21/2013

Extraction: (Type) SONC Date Extracted: 03/22/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/22/2013

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	Q
12674-11-2	Aroclor-1016	37	U
11104-28-2	Aroclor-1221	37	U
11141-16-5	Aroclor-1232	37	U
53469-21-9	Aroclor-1242	37	U
12672-29-6	Aroclor-1248	37	U
11097-69-1	Aroclor-1254	37	U
11096-82-5	Aroclor-1260	37	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

WC 3

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0383-03B

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E2L9192F.D/E2L9192R.D

% Moisture: 14 Decanted: (Y/N) N Date Received: 03/21/2013

Extraction: (Type) SONC Date Extracted: 03/22/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/22/2013

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	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	38	U
11096-82-5	Aroclor-1260	38	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

WC 4

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0383-04B

Sample wt/vol: 30.2 (g/mL) G Lab File ID: E2L9193F.D/E2L9193R.D

% Moisture: 9.7 Decanted: (Y/N) N Date Received: 03/21/2013

Extraction: (Type) SONC Date Extracted: 03/22/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/22/2013

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	Q
12674-11-2	Aroclor-1016	36	U
11104-28-2	Aroclor-1221	36	U
11141-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	36	U
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	36	U
11096-82-5	Aroclor-1260	36	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

WC 5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0383-05B

Sample wt/vol: 30.3 (g/mL) G Lab File ID: E2L9194F.D/E2L9194R.D

% Moisture: 18 Decanted: (Y/N) N Date Received: 03/21/2013

Extraction: (Type) SONC Date Extracted: 03/22/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/22/2013

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	Q
12674-11-2	Aroclor-1016	40	U
11104-28-2	Aroclor-1221	40	U
11141-16-5	Aroclor-1232	40	U
53469-21-9	Aroclor-1242	40	U
12672-29-6	Aroclor-1248	40	U
11097-69-1	Aroclor-1254	40	U
11096-82-5	Aroclor-1260	40	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

WC 7

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0383-07B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E2L9195F.D/E2L9195R.D

% Moisture: 16 Decanted: (Y/N) N Date Received: 03/21/2013

Extraction: (Type) SONC Date Extracted: 03/22/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/22/2013

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	Q
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	39	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	39	U
11096-82-5	Aroclor-1260	39	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

WC 8

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0383-08B

Sample wt/vol: 30.5 (g/mL) G Lab File ID: E2L9197F.D/E2L9197R.D

% Moisture: 21 Decanted: (Y/N) N Date Received: 03/21/2013

Extraction: (Type) SONC Date Extracted: 03/22/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/22/2013

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	Q
12674-11-2	Aroclor-1016	41	U
11104-28-2	Aroclor-1221	41	U
11141-16-5	Aroclor-1232	41	U
53469-21-9	Aroclor-1242	41	U
12672-29-6	Aroclor-1248	41	U
11097-69-1	Aroclor-1254	41	U
11096-82-5	Aroclor-1260	41	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-70935

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-70935

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E2L9187F.D/E2L9187R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 03/22/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/22/2013

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	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-70935(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-70935

Sample wt/vol: 30 (g/mL) G Lab File ID: E2L9188F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 03/22/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/22/2013

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	Q
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	110	

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-70935(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-70935

Sample wt/vol: 30 (g/mL) G Lab File ID: E2L9188R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 03/22/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/22/2013

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	Q
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	130	

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
LCSD-70935(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-70935

Sample wt/vol: 30 (g/mL) G Lab File ID: E2L9189F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 03/22/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/22/2013

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	Q
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	110	

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
LCSD-70935(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-70935

Sample wt/vol: 30 (g/mL) G Lab File ID: E2L9189R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 03/22/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/22/2013

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	Q
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	

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	CLIENT SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-70935	93	97	88	89			0
02	LCS-70935	86	89	83	87			0
03	LCSD-70935	88	92	83	87			0
04	WC 1	68	72	62	67			0
05	WC 2	66	76	65	66			0
06	WC 3	70	73	63	68			0
07	WC 4	68	76	65	66			0
08	WC 5	71	75	69	66			0
09	WC 7	71	73	64	67			0
10	WC 8	70	72	67	70			0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.03.14.A

Page 1 of 1 SW846

3P - FORM III ARO-4

SOIL AROCLOR LABORATORY CONTROL SAMPLE RECOVERY

CLIENT SAMPLE NO.

LCS-70935

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Lab Sample ID: LCS-70935 LCS Lot No.: A086503

Date Extracted: 03/22/2013 Date Analyzed (1): 03/22/2013

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	111.9076	84	40-140
Aroclor-1260	133.3330	105.1736	79	60-130

Instrument ID (2): E2 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 03/22/2013

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC #	QC LIMITS
Aroclor-1016	133.3330	113.0399	85	40-140
Aroclor-1260	133.3330	125.2371	94	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:

som13.03.14.A

3P - FORM III ARO-4
SOIL AROCLOR LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

CLIENT SAMPLE NO.
LCSD-70935

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Lab Sample ID: LCSD-70935 LCS Lot No.: A086503

Date Extracted: 03/22/2013 Date Analyzed (1): 03/22/2013

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	114.9333	86		40-140	2.0		30
Aroclor-1260	133.3330	107.1348	80		60-130	1.0		30

Instrument ID (2): E2 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 03/22/2013

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS	%RPD	#	RPD LIMIT
Aroclor-1016	133.3330	116.4655	87		40-140	2.0		30
Aroclor-1260	133.3330	126.6756	95		60-130	1.0		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:

som13.03.14.A

4F - FORM IV ARO

AROCLOR METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

MB-70935

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0383 Mod. Ref No.: SDG No.: SM0383

Lab File ID: E2L9187F.D / E2L9187R.D Lab Sample ID: MB-70935

Matrix: (SOIL/SED/WATER) SOIL Extraction: (Type) SONC Date Extracted: 03/22/2013

Sulfur Cleanup: (Y/N) Y GPC Cleanup:(Y/N) N

Acid Cleanup: (Y/N Y

Date Analyzed (1): 03/22/2013 Date Analyzed (2): 03/22/2013

Time Analyzed (1): 14:28 Time Analyzed (2): 14:28

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-70935	LCS-70935	03/22/2013	03/22/2013
02	LCSD-70935	LCSD-70935	03/22/2013	03/22/2013
03	WC 1	M0383-01B	03/22/2013	03/22/2013
04	WC 2	M0383-02B	03/22/2013	03/22/2013
05	WC 3	M0383-03B	03/22/2013	03/22/2013
06	WC 4	M0383-04B	03/22/2013	03/22/2013
07	WC 5	M0383-05B	03/22/2013	03/22/2013
08	WC 7	M0383-07B	03/22/2013	03/22/2013
09	WC 8	M0383-08B	03/22/2013	03/22/2013

COMMENTS:

* Metals *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Monoco Oil

Laboratory Workorder / SDG #: M0383

SW846 6010C, SW846 7470A

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 7470A

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW3005A
Aqueous Samples were prepared following procedures in laboratory test code: SW7470A

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: WC 8 (M0383-08BMS).

Percent recoveries were within the QC limits.

D. Post Digestion Spike (PDS):

A post-digestion spike was not performed on any sample in this SDG.

E. Duplicate sample:

A duplicate analysis was not performed on any sample in this SDG.

F. Serial Dilution (SD):

Serial Dilution analyses were performed on sample: WC 8 (M0383-08BSD).

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: 03/29/13

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.

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

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

WC 1

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0383

Matrix (soil/water): WATER Lab Sample ID: M0383-01

Level (low/med): MED Date Received: 03/21/2013

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	771			P
7440-43-9	Cadmium	0.89	U		P
7440-47-3	Chromium	0.64	U		P
7439-92-1	Lead	4.2	U		P
7439-97-6	Mercury	0.028	U		CV
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P

Comments:

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

WC 2

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0383

Matrix (soil/water): WATER Lab Sample ID: M0383-02

Level (low/med): MED Date Received: 03/21/2013

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	1020			P
7440-43-9	Cadmium	0.89	U		P
7440-47-3	Chromium	0.64	U		P
7439-92-1	Lead	4.2	U		P
7439-97-6	Mercury	0.029	B		CV
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P

Comments:

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

WC 3

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0383

Matrix (soil/water): WATER Lab Sample ID: M0383-03

Level (low/med): MED Date Received: 03/21/2013

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	6.3	B		P
7440-39-3	Barium	1060			P
7440-43-9	Cadmium	0.89	U		P
7440-47-3	Chromium	0.64	U		P
7439-92-1	Lead	6.5	B		P
7439-97-6	Mercury	0.028	U		CV
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P

Comments:

1 EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

WC 4

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0383

Matrix (soil/water): WATER Lab Sample ID: M0383-04

Level (low/med): MED Date Received: 03/21/2013

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	958			P
7440-43-9	Cadmium	0.89	U		P
7440-47-3	Chromium	0.64	U		P
7439-92-1	Lead	235			P
7439-97-6	Mercury	0.028	U		CV
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P

Comments:

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

WC 5

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0383

Matrix (soil/water): WATER Lab Sample ID: M0383-05

Level (low/med): MED Date Received: 03/21/2013

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	1110			P
7440-43-9	Cadmium	0.89	U		P
7440-47-3	Chromium	0.64	U		P
7439-92-1	Lead	4.2	U		P
7439-97-6	Mercury	0.028	U		CV
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P

Comments:

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

WC 7

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0383

Matrix (soil/water): WATER Lab Sample ID: M0383-07

Level (low/med): MED Date Received: 03/21/2013

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	956			P
7440-43-9	Cadmium	0.89	U		P
7440-47-3	Chromium	0.64	U		P
7439-92-1	Lead	7.8	B		P
7439-97-6	Mercury	0.028	U		CV
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P

Comments:

1 EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

WC 8

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0383

Matrix (soil/water): WATER Lab Sample ID: M0383-08

Level (low/med): MED Date Received: 03/21/2013

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	884			P
7440-43-9	Cadmium	0.89	U		P
7440-47-3	Chromium	0.64	U		P
7439-92-1	Lead	5.5	B		P
7439-97-6	Mercury	0.028	U		CV
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P

Comments:

7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0383

Solid LCS Source:

Aqueous LCS Source:

LCS(D) ID:
LCS-70944

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Arsenic	455.0	450.67	99.0						
Barium	9100.0	8964.75	98.5						
Cadmium	227.0	225.02	99.1						
Chromium	910.0	871.47	95.8						
Lead	455.0	450.07	98.9						
Selenium	455.0	446.89	98.2						
Silver	1130.0	1159.23	102.6						

7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0383

Solid LCS Source:

Aqueous LCS Source:

LCS(D) ID:
LCS-70945

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Mercury	4.6	4.32	93.9						

7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0383

Solid LCS Source:

Aqueous LCS Source:

LCS(D) ID:
LCSD-70944

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Arsenic	455.0	470.30	103.4						
Barium	9100.0	9197.03	101.1						
Cadmium	227.0	232.47	102.4						
Chromium	910.0	903.37	99.3						
Lead	455.0	461.75	101.5						
Selenium	455.0	456.48	100.3						
Silver	1130.0	1186.88	105.0						

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0383

Solid LCS Source:

Aqueous LCS Source:

LCS(D) ID:
LCSD-70945

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Mercury	4.6	4.13	89.8						

U.S. EPA - CLP

5A

SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

WC 8S

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0383

Matrix (soil/water): WATER Level (low/med): MED

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Arsenic	75-125	480		4.3	U	456	105		P
Barium	75-125	9350		884		9100	93		P
Cadmium	75-125	224		0.89	U	227	99		P
Chromium	75-125	852		0.64	U	910	94		P
Lead	75-125	446		5.5	B	455	97		P
Selenium	75-125	485		12.0	U	455	107		P
Silver	75-125	1080		6.9	U	1130	95		P
Mercury	75-125	4.1		0.028	U	4.6	91		CV

Comments:

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0383

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-70945**

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

FIMS2_130325A

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
Analyte		C	03/25/13 10:42	C	03/25/13 11:01	C	03/25/13 11:16	C		C	M
Mercury	0.028	U	0.028	U	0.028	U	0.028	U	0.028	U	CV

U.S. EPA - CLP

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0383

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-70928**

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

FIMS2_130325A

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
Analyte		C		C		C		C		C	M
Mercury									0.028	U	CV

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0383

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-70928**

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

OPTIMA3_130325A

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 03/25/13 9:00	C	03/25/13 9:28	C	03/25/13 10:00	C	Preparation Blank	C	M
Arsenic	4.3	U	4.3	U	4.3	U	4.3	U	4.300	U	P
Barium	1.1	U	1.1	U	1.1	U	1.2	B	1.100	U	P
Cadmium	0.9	U	0.9	U	0.9	U	0.9	U	0.890	U	P
Chromium	0.8	B	0.6	U	0.6	U	0.6	U	1.118	B	P
Lead	4.2	U	4.2	U	4.2	U	4.2	U	4.200	U	P
Selenium	12.0	U	12.0	U	12.0	U	12.0	U	12.000	U	P
Silver	6.9	U	6.9	U	6.9	U	6.9	U	6.900	U	P

U.S. EPA - CLP

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0383

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-70944**

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

OPTIMA3_130325A

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L)	C		C		C	Preparation Blank	C	M
Arsenic									4.300	U	P
Barium									1.100	U	P
Cadmium									0.890	U	P
Chromium									0.640	U	P
Lead									4.200	U	P
Selenium									12.000	U	P
Silver									6.900	U	P

Report Date:
10-Apr-13 15:21

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

LaBella Associates
300 State Street, Suite 201
Rochester, NY 14614

Work Order: M0422
Project : LaBella Monoco Oil
Project #:

Attn: Dan Noll

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M0422-01	WC-1	Soil	28-Mar-13 15:00	29-Mar-13 10:34
M0422-02	WC-2	Soil	28-Mar-13 15:00	29-Mar-13 10:34
M0422-03	WC-3	Soil	28-Mar-13 15:00	29-Mar-13 10:34
M0422-04	WC-4	Soil	28-Mar-13 15:00	29-Mar-13 10:34
M0422-05	WC-5	Soil	28-Mar-13 15:00	29-Mar-13 10:34

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 requirments have been meet.

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.

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

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
DoD ELAP
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* Data Summary Pack *

175 Metro Center Boulevard · Warwick, RI 02886-1755 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0422

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
WC-1	M0422-01	SW8260_W	SW8270_W	SW8082_S	SW6010_W	
WC-1	M0422-01				SW7470	
WC-2	M0422-02	SW8260_W	SW8270_W	SW8082_S	SW6010_W	
WC-2	M0422-02				SW7470	
WC-3	M0422-03	SW8260_W	SW8270_W	SW8082_S	SW6010_W	
WC-3	M0422-03				SW7470	
WC-4	M0422-04	SW8260_W	SW8270_W	SW8082_S	SW6010_W	
WC-4	M0422-04				SW7470	
WC-5	M0422-05	SW8260_W	SW8270_W	SW8082_S	SW6010_W	
WC-5	M0422-05				SW7470	

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0422

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8260_W					
M0422-01B	SL	3/28/2013	3/29/2013	NA	4/1/2013
M0422-02B	SL	3/28/2013	3/29/2013	NA	4/1/2013
M0422-03B	SL	3/28/2013	3/29/2013	NA	4/1/2013
M0422-04B	SL	3/28/2013	3/29/2013	NA	4/1/2013
M0422-05B	SL	3/28/2013	3/29/2013	NA	4/1/2013

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0422

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8270_W					
M0422-01A	SL	3/28/2013	3/29/2013	4/1/2013	4/1/2013
M0422-02A	SL	3/28/2013	3/29/2013	4/1/2013	4/1/2013
M0422-03A	SL	3/28/2013	3/29/2013	4/1/2013	4/1/2013
M0422-04A	SL	3/28/2013	3/29/2013	4/1/2013	4/1/2013
M0422-05A	SL	3/28/2013	3/29/2013	4/1/2013	4/2/2013
M0422-05AMS	SL	3/28/2013	3/29/2013	4/1/2013	4/2/2013

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0422

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8082_S					
M0422-01A	SL	3/28/2013	3/29/2013	3/29/2013	4/2/2013
M0422-02A	SL	3/28/2013	3/29/2013	3/29/2013	4/2/2013
M0422-03A	SL	3/28/2013	3/29/2013	3/29/2013	4/2/2013
M0422-04A	SL	3/28/2013	3/29/2013	3/29/2013	4/2/2013
M0422-05A	SL	3/28/2013	3/29/2013	3/29/2013	4/2/2013

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0422

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
SW8260_W					
M0422-01B	SL	SW8260_W	NA	LOW	1
M0422-02B	SL	SW8260_W	NA	LOW	1
M0422-03B	SL	SW8260_W	NA	LOW	1
M0422-04B	SL	SW8260_W	NA	LOW	1
M0422-05B	SL	SW8260_W	NA	LOW	1

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0422

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
SW8270_W					
M0422-01A	SL	SW8270_W	3510C	NA	1
M0422-02A	SL	SW8270_W	3510C	NA	1
M0422-03A	SL	SW8270_W	3510C	NA	1
M0422-04A	SL	SW8270_W	3510C	NA	1
M0422-05A	SL	SW8270_W	3510C	NA	1
M0422-05AMS	SL	SW8270_W	3510C	NA	1

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0422

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
SW8082_S					
M0422-01A	SL	SW8082_S	3550B	Acid/Sulfur	1
M0422-02A	SL	SW8082_S	3550B	Acid/Sulfur	1
M0422-03A	SL	SW8082_S	3550B	Acid/Sulfur	1
M0422-04A	SL	SW8082_S	3550B	Acid/Sulfur	1
M0422-05A	SL	SW8082_S	3550B	Acid/Sulfur	1

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0422

Laboratory Sample ID	Matrix	Metals Requested	Date Received By Lab	Date Analyzed
SW6010_W				
M0422-01A	SL	SW6010_W	3/29/2013	4/2/2013
M0422-02A	SL	SW6010_W	3/29/2013	4/2/2013
M0422-03A	SL	SW6010_W	3/29/2013	4/2/2013
M0422-04A	SL	SW6010_W	3/29/2013	4/2/2013
M0422-05A	SL	SW6010_W	3/29/2013	4/2/2013
SW7470				
M0422-01A	SL	SW7470	3/29/2013	4/2/2013
M0422-02A	SL	SW7470	3/29/2013	4/2/2013
M0422-03A	SL	SW7470	3/29/2013	4/2/2013
M0422-04A	SL	SW7470	3/29/2013	4/2/2013
M0422-05A	SL	SW7470	3/29/2013	4/2/2013

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation

Sample Preparation and Analysis Summary Toxicity Characteristic Leaching Procedure

Project Name : LaBella Monoco Oil **SDG :** M0422

Laboratory Sample ID	Matrix	Analytical Protocol	Date Collected	Date Received By Lab	Date Extracted
SW1311					
M0422-01A	SL	SW1311	3/28/2013	3/29/2013	3/30/2013
M0422-01B	SL	SW1311	3/28/2013	3/29/2013	3/29/2013
M0422-02A	SL	SW1311	3/28/2013	3/29/2013	3/30/2013
M0422-02B	SL	SW1311	3/28/2013	3/29/2013	3/29/2013
M0422-03A	SL	SW1311	3/28/2013	3/29/2013	3/30/2013
M0422-03B	SL	SW1311	3/28/2013	3/29/2013	3/29/2013
M0422-04A	SL	SW1311	3/28/2013	3/29/2013	3/30/2013
M0422-04B	SL	SW1311	3/28/2013	3/29/2013	3/29/2013
M0422-05A	SL	SW1311	3/28/2013	3/29/2013	3/30/2013
M0422-05B	SL	SW1311	3/28/2013	3/29/2013	3/29/2013

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: M0422

Client ID: LABELLA
Project: LaBella Monoco Oil
WO Name: LaBella Monoco Oil
Location: LABELLA_MONOCO-OIL,

Case:
SDG:
PO: 210259

HC Due: 04/10/13
Fax Due: 04/03/13
Fax Report: ☑

Report Level: ASP-B
Special Program:
EDD: ENVIROINSITE_1
EQUIIS_4_NYSDEC

Comments: use this project for between 11-50 samples, no RUSH surcharge base on lab capacity, no charge for MS/MSD or a batch of 7 or more samples, no charge for TB. no hard copy

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M0422-01A	WC-1	03/28/2013 15:00	03/29/2013	Soil	PMoist	/					N4
M0422-01A	WC-1	03/28/2013 15:00	03/29/2013	Soil	SW6010_W	/ TCLP_METALS				Y	N4
M0422-01A	WC-1	03/28/2013 15:00	03/29/2013	Soil	SW7470	/ TCLP_METALS					N4
M0422-01A	WC-1	03/28/2013 15:00	03/29/2013	Soil	SW8082_S	/					N4
M0422-01A	WC-1	03/28/2013 15:00	03/29/2013	Soil	SW8270_W	/ TCLP_SVOA				Y	N4
M0422-01B	WC-1	03/28/2013 15:00	03/29/2013	Soil	SW8260_W	/ TCLP_VOA				Y	VOA
M0422-02A	WC-2	03/28/2013 15:00	03/29/2013	Soil	PMoist	/					N4
M0422-02A	WC-2	03/28/2013 15:00	03/29/2013	Soil	SW6010_W	/ TCLP_METALS				Y	N4
M0422-02A	WC-2	03/28/2013 15:00	03/29/2013	Soil	SW7470	/ TCLP_METALS					N4
M0422-02A	WC-2	03/28/2013 15:00	03/29/2013	Soil	SW8082_S	/					N4
M0422-02A	WC-2	03/28/2013 15:00	03/29/2013	Soil	SW8270_W	/ TCLP_SVOA				Y	N4
M0422-02B	WC-2	03/28/2013 15:00	03/29/2013	Soil	SW8260_W	/ TCLP_VOA				Y	VOA
M0422-03A	WC-3	03/28/2013 15:00	03/29/2013	Soil	PMoist	/					N4
M0422-03A	WC-3	03/28/2013 15:00	03/29/2013	Soil	SW6010_W	/ TCLP_METALS				Y	N4
M0422-03A	WC-3	03/28/2013 15:00	03/29/2013	Soil	SW7470	/ TCLP_METALS					N4
M0422-03A	WC-3	03/28/2013 15:00	03/29/2013	Soil	SW8082_S	/					N4
M0422-03A	WC-3	03/28/2013 15:00	03/29/2013	Soil	SW8270_W	/ TCLP_SVOA				Y	N4
M0422-03B	WC-3	03/28/2013 15:00	03/29/2013	Soil	SW8260_W	/ TCLP_VOA				Y	VOA
M0422-04A	WC-4	03/28/2013 15:00	03/29/2013	Soil	PMoist	/					N4
M0422-04A	WC-4	03/28/2013 15:00	03/29/2013	Soil	SW6010_W	/ TCLP_METALS				Y	N4
M0422-04A	WC-4	03/28/2013 15:00	03/29/2013	Soil	SW7470	/ TCLP_METALS					N4
M0422-04A	WC-4	03/28/2013 15:00	03/29/2013	Soil	SW8082_S	/					N4
M0422-04A	WC-4	03/28/2013 15:00	03/29/2013	Soil	SW8270_W	/ TCLP_SVOA				Y	N4

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

HT = Test logged in but has been placed on hold

03/29/2013 13:21 Lab Client Rep: Agnes R Huntley

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: M0422

Client ID: LABELLA
Project: LaBella Monoco Oil
WO Name: LaBella Monoco Oil
Location: LABELLA_MONOCO-OIL,

Case:
SDG:
PO: 210259

HC Due: 04/10/13
Fax Due: 04/03/13
Fax Report: ☑

Report Level: ASP-B
Special Program:
EDD: ENVIROINSITE_1
EQUIIS_4_NYSDEC

Comments: use this project for between 11-50 samples, no RUSH surcharge base on lab capacity, no charge for MS/MSD or a batch of 7 or more samples, no charge for TB. no hard copy

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M0422-04B	WC-4	03/28/2013 15:00	03/29/2013	Soil	SW8260_W	/ TCLP_VOA				Y	VOA
M0422-05A	WC-5	03/28/2013 15:00	03/29/2013	Soil	PMoist	/					N4
M0422-05A	WC-5	03/28/2013 15:00	03/29/2013	Soil	SW6010_W	/ TCLP_METALS				Y	N4
M0422-05A	WC-5	03/28/2013 15:00	03/29/2013	Soil	SW7470	/ TCLP_METALS					N4
M0422-05A	WC-5	03/28/2013 15:00	03/29/2013	Soil	SW8082_S	/					N4
M0422-05A	WC-5	03/28/2013 15:00	03/29/2013	Soil	SW8270_W	/ TCLP_SVOA				Y	N4
M0422-05B	WC-5	03/28/2013 15:00	03/29/2013	Soil	SW8260_W	/ TCLP_VOA				Y	VOA

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

HT = Test logged in but has been placed on hold

* Volatiles *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Monoco Oil

Laboratory Workorder / SDG #: M0422

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

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

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: V10
Instrument Type: GCMS-VOA

Description: HP7890A
Manufacturer: Agilent
Model: 7890A / 5975C

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:

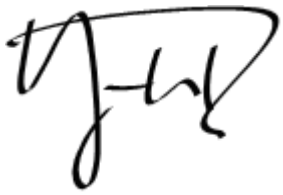
No other unusual occurrences were noted during sample analysis.

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.



Signed:_____ _____

Date:_____4/10/2013_____

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.

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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0422 Mod. Ref No.: SDG No.: SM0422

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0422-01B

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9000.D

Level: (TRACE/LOW/MED) LOW Date Received: 03/29/2013

% Moisture: not dec. 16 Date Analyzed: 04/01/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	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
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-2

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0422 Mod. Ref No.: SDG No.: SM0422

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0422-02B

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9001.D

Level: (TRACE/LOW/MED) LOW Date Received: 03/29/2013

% Moisture: not dec. 13 Date Analyzed: 04/01/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	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
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-3

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0422 Mod. Ref No.: SDG No.: SM0422

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0422-03B

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9002.D

Level: (TRACE/LOW/MED) LOW Date Received: 03/29/2013

% Moisture: not dec. 11 Date Analyzed: 04/01/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	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
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-4

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0422 Mod. Ref No.: SDG No.: SM0422

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0422-04B

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B8998.D

Level: (TRACE/LOW/MED) LOW Date Received: 03/29/2013

% Moisture: not dec. 8.6 Date Analyzed: 04/01/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	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
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0422 Mod. Ref No.: SDG No.: SM0422

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0422-05B

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B8999.D

Level: (TRACE/LOW/MED) LOW Date Received: 03/29/2013

% Moisture: not dec. 15 Date Analyzed: 04/01/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	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
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-71035

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0422 Mod. Ref No.: SDG No.: SM0422

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-71035

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B8997.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 04/01/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	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
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-71046

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0422 Mod. Ref No.: SDG No.: SM0422

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-71046

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B8996.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 04/01/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	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
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-71046

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0422 Mod. Ref No.: SDG No.: SM0422

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-71046

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B8994.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 04/01/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	47	
75-35-4	1,1-Dichloroethene	48	
78-93-3	2-Butanone	51	
67-66-3	Chloroform	50	
56-23-5	Carbon tetrachloride	53	
107-06-2	1,2-Dichloroethane	53	
71-43-2	Benzene	47	
79-01-6	Trichloroethene	49	
127-18-4	Tetrachloroethene	49	
108-90-7	Chlorobenzene	47	

2B - FORM II VOA-2

WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0422 Mod. Ref No.: SDG No.: SM0422

Level: (TRACE or LOW) LOW

	EPA SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-71046	105	101	97	100				0
02	MB-71046	103	101	100	99				0
03	MB-71035	102	102	99	99				0
04	WC-4	103	101	98	100				0
05	WC-5	97	101	100	103				0
06	WC-1	98	102	98	100				0
07	WC-2	98	103	98	99				0
08	WC-3	97	102	99	99				0

		QC LIMITS
VDMC1	(DBFM) Dibromofluoromethane	(85-115)
VDMC2	(DCE) = 1,2-Dichloroethane-d4	(70-120)
VDMC3	(TOL) = Toluene-d8	(85-120)
VDMC4	(BFB) = Bromofluorobenzene	(75-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

som13.04.02.A

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-71046

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0422 Mod. Ref No.: SDG No.: SM0422

Lab Sample ID: LCS-71046 LCS Lot No.:

Date Extracted: 04/01/2013 Date Analyzed (1): 04/01/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Vinyl chloride	50.0000	0.0000	47.4978	95		50 - 145
1,1-Dichloroethene	50.0000	0.0000	47.5414	95		70 - 130
2-Butanone	50.0000	0.0000	50.9051	102		30 - 150
Chloroform	50.0000	0.0000	50.2968	101		65 - 135
Carbon tetrachloride	50.0000	0.0000	53.1409	106		65 - 140
1,2-Dichloroethane	50.0000	0.0000	52.8535	106		70 - 130
Benzene	50.0000	0.0000	47.3948	95		80 - 120
Trichloroethene	50.0000	0.0000	48.6151	97		70 - 125
Tetrachloroethene	50.0000	0.0000	48.7045	97		45 - 150
Chlorobenzene	50.0000	0.0000	46.8372	94		80 - 120

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

* Values outside of QC limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:

4A - FORM IV VOA

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-71046

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0422 Mod. Ref No.: SDG No.: SM0422

Lab File ID: V8B8996.D Lab Sample ID: MB-71046

Instrument ID: V10

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 04/01/2013

Level: (TRACE or LOW/MED) LOW Time Analyzed: 10:56

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-71046	LCS-71046	V8B8994.D	10:01
02	MB-71035	MB-71035	V8B8997.D	11:23
03	WC-4	M0422-04B	V8B8998.D	11:51
04	WC-5	M0422-05B	V8B8999.D	12:18
05	WC-1	M0422-01B	V8B9000.D	12:46
06	WC-2	M0422-02B	V8B9001.D	13:14
07	WC-3	M0422-03B	V8B9002.D	13:41

COMMENTS:

som13.03.14.A

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0422 Mod. Ref No.: SDG No.: SM0422

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 03/27/2013 03/27/2013

EPA Sample No.(VSTD#####): VSTD05010Y Date Analyzed: 04/01/2013

Lab File ID (Standard): V8B8993.D Time Analyzed: 9:34

Instrument ID: V10 Heated Purge: (Y/N) N

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	2237991		5.307		1773302		8.291		906129		10.783	
	UPPER LIMIT	4475982		5.807		3546604		8.791		1812258		11.283	
	LOWER LIMIT	1118996		4.807		886651		7.791		453065		10.283	
	EPA SAMPLE NO.												
01	LCS-71046	2261629		5.307		1794347		8.294		904489		10.786	
02	MB-71046	2286720		5.307		1756872		8.291		826206		10.786	
03	MB-71035	2256666		5.307		1730990		8.291		844367		10.783	
04	WC-4	2269403		5.307		1747781		8.294		832244		10.786	
05	WC-5	2228643		5.297		1698655		8.297		842118		10.792	
06	WC-1	2575331		5.307		2011910		8.294		1001705		10.782	
07	WC-2	2672713		5.307		2070473		8.294		1006580		10.782	
08	WC-3	2683256		5.304		2014886		8.294		969468		10.786	

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.

* Semivolatile Organics *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Monoco Oil

Laboratory Workorder / SDG #: M0422

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

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

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: S3
Instrument Type: GCMS-SEMI

Description: HP6890 / HP5973
Manufacturer: Hewlett-Packard
Model: 6890 / 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):

Matrix spikes were performed on sample: WC-5 (M0422-05AMS).

Percent recoveries were within the QC limits.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

F. Dilutions:

No sample in this SDG required analysis at dilution.

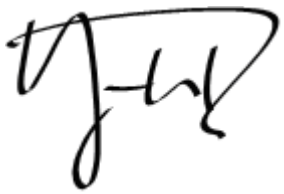
G. Samples:

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.



Signed:_____ _____

Date:_____4/9/2013_____

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.

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* For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.

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

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0422 Mod. Ref No.: SDG No.: SM0422

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0422-01A

Sample wt/vol: 300 (g/mL) ML Lab File ID: S3I4257.D

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

% Moisture: Decanted: (Y/N) Date Received: 03/29/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 04/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 04/01/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	33	U
95-48-7	2-Methylphenol	33	U
106-44-5	4-Methylphenol	33	U
67-72-1	Hexachloroethane	33	U
98-95-3	Nitrobenzene	33	U
87-68-3	Hexachlorobutadiene	33	U
88-06-2	2,4,6-Trichlorophenol	33	U
95-95-4	2,4,5-Trichlorophenol	67	U
121-14-2	2,4-Dinitrotoluene	33	U
118-74-1	Hexachlorobenzene	33	U
87-86-5	Pentachlorophenol	67	U
110-86-1	Pyridine	67	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-2

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0422 Mod. Ref No.: SDG No.: SM0422

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0422-02A

Sample wt/vol: 300 (g/mL) ML Lab File ID: S3I4258.D

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

% Moisture: Decanted: (Y/N) Date Received: 03/29/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 04/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 04/01/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	33	U
95-48-7	2-Methylphenol	33	U
106-44-5	4-Methylphenol	33	U
67-72-1	Hexachloroethane	33	U
98-95-3	Nitrobenzene	33	U
87-68-3	Hexachlorobutadiene	33	U
88-06-2	2,4,6-Trichlorophenol	33	U
95-95-4	2,4,5-Trichlorophenol	67	U
121-14-2	2,4-Dinitrotoluene	33	U
118-74-1	Hexachlorobenzene	33	U
87-86-5	Pentachlorophenol	67	U
110-86-1	Pyridine	67	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-3

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0422 Mod. Ref No.: SDG No.: SM0422

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0422-03A

Sample wt/vol: 300 (g/mL) ML Lab File ID: S3I4259.D

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

% Moisture: Decanted: (Y/N) Date Received: 03/29/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 04/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 04/01/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	33	U
95-48-7	2-Methylphenol	33	U
106-44-5	4-Methylphenol	33	U
67-72-1	Hexachloroethane	33	U
98-95-3	Nitrobenzene	33	U
87-68-3	Hexachlorobutadiene	33	U
88-06-2	2,4,6-Trichlorophenol	33	U
95-95-4	2,4,5-Trichlorophenol	67	U
121-14-2	2,4-Dinitrotoluene	33	U
118-74-1	Hexachlorobenzene	33	U
87-86-5	Pentachlorophenol	67	U
110-86-1	Pyridine	67	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-4

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0422 Mod. Ref No.: SDG No.: SM0422

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0422-04A

Sample wt/vol: 300 (g/mL) ML Lab File ID: S3I4260.D

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

% Moisture: Decanted: (Y/N) Date Received: 03/29/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 04/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 04/01/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	33	U
95-48-7	2-Methylphenol	33	U
106-44-5	4-Methylphenol	33	U
67-72-1	Hexachloroethane	33	U
98-95-3	Nitrobenzene	33	U
87-68-3	Hexachlorobutadiene	33	U
88-06-2	2,4,6-Trichlorophenol	33	U
95-95-4	2,4,5-Trichlorophenol	67	U
121-14-2	2,4-Dinitrotoluene	33	U
118-74-1	Hexachlorobenzene	33	U
87-86-5	Pentachlorophenol	67	U
110-86-1	Pyridine	67	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0422 Mod. Ref No.: SDG No.: SM0422

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0422-05A

Sample wt/vol: 300 (g/mL) ML Lab File ID: S3I4261.D

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

% Moisture: Decanted: (Y/N) Date Received: 03/29/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 04/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 04/02/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	33	U
95-48-7	2-Methylphenol	33	U
106-44-5	4-Methylphenol	33	U
67-72-1	Hexachloroethane	33	U
98-95-3	Nitrobenzene	33	U
87-68-3	Hexachlorobutadiene	33	U
88-06-2	2,4,6-Trichlorophenol	33	U
95-95-4	2,4,5-Trichlorophenol	67	U
121-14-2	2,4-Dinitrotoluene	33	U
118-74-1	Hexachlorobenzene	33	U
87-86-5	Pentachlorophenol	67	U
110-86-1	Pyridine	67	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-71036

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0422 Mod. Ref No.: SDG No.: SM0422

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-71036

Sample wt/vol: 300 (g/mL) ML Lab File ID: S3I4244.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 04/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 04/01/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	33	U
95-48-7	2-Methylphenol	33	U
106-44-5	4-Methylphenol	33	U
67-72-1	Hexachloroethane	33	U
98-95-3	Nitrobenzene	33	U
87-68-3	Hexachlorobutadiene	33	U
88-06-2	2,4,6-Trichlorophenol	33	U
95-95-4	2,4,5-Trichlorophenol	67	U
121-14-2	2,4-Dinitrotoluene	33	U
118-74-1	Hexachlorobenzene	33	U
87-86-5	Pentachlorophenol	67	U
110-86-1	Pyridine	67	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-71045

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0422 Mod. Ref No.: SDG No.: SM0422

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-71045

Sample wt/vol: 300 (g/mL) ML Lab File ID: S3I4245.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 04/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 04/01/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	140	
95-48-7	2-Methylphenol	140	
106-44-5	4-Methylphenol	130	
67-72-1	Hexachloroethane	140	
98-95-3	Nitrobenzene	120	
87-68-3	Hexachlorobutadiene	150	
88-06-2	2,4,6-Trichlorophenol	150	
95-95-4	2,4,5-Trichlorophenol	150	
121-14-2	2,4-Dinitrotoluene	160	
118-74-1	Hexachlorobenzene	170	
87-86-5	Pentachlorophenol	130	
110-86-1	Pyridine	120	

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-71045

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0422 Mod. Ref No.: SDG No.: SM0422

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-71045

Sample wt/vol: 300 (g/mL) ML Lab File ID: S3I4246.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 04/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 04/01/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	140	
95-48-7	2-Methylphenol	130	
106-44-5	4-Methylphenol	130	
67-72-1	Hexachloroethane	140	
98-95-3	Nitrobenzene	130	
87-68-3	Hexachlorobutadiene	140	
88-06-2	2,4,6-Trichlorophenol	160	
95-95-4	2,4,5-Trichlorophenol	160	
121-14-2	2,4-Dinitrotoluene	160	
118-74-1	Hexachlorobenzene	170	
87-86-5	Pentachlorophenol	130	
110-86-1	Pyridine	120	

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-5MS

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0422 Mod. Ref No.: SDG No.: SM0422

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0422-05AMS

Sample wt/vol: 300 (g/mL) ML Lab File ID: S3I4262.D

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

% Moisture: Decanted: (Y/N) Date Received: 03/29/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 04/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 04/02/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	110	
95-48-7	2-Methylphenol	93	
106-44-5	4-Methylphenol	83	
67-72-1	Hexachloroethane	100	
98-95-3	Nitrobenzene	110	
87-68-3	Hexachlorobutadiene	110	
88-06-2	2,4,6-Trichlorophenol	130	
95-95-4	2,4,5-Trichlorophenol	130	
121-14-2	2,4-Dinitrotoluene	140	
118-74-1	Hexachlorobenzene	150	
87-86-5	Pentachlorophenol	100	
110-86-1	Pyridine	80	

2H - FORM II SV-2

WATER SEMIVOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0422 Mod. Ref No.: SDG No.: SM0422

	EPA SAMPLE NO.	SDMC1 (NBZ) #	SDMC2 (FBP) #	SDMC3 (TPH) #	SDMC4 (PHL) #	SDMC5 (2FP) #	SDMC6 (TBP) #			TOT OUT
01	MB-71036	75	91	129	71	79	101			0
02	LCS-71045	76	93	111	78	77	115			0
03	LCSD-71045	75	95	109	79	78	116			0
04	WC-1	64	81	113	36	49	100			0
05	WC-2	63	76	104	44	50	90			0
06	WC-3	68	84	119	35	50	100			0
07	WC-4	64	79	116	28	44	97			0
08	WC-5	70	82	118	29	46	98			0
09	WC-5MS	66	81	99	31	44	98			0

			QC LIMITS
SDMC1	(NBZ)	= Nitrobenzene-d5	(40-110)
SDMC2	(FBP)	= 2-Fluorobiphenyl	(50-110)
SDMC3	(TPH)	= Terphenyl-d14	(50-135)
SDMC4	(PHL)	= Phenol-d5	(10-115)
SDMC5	(2FP)	= 2-Fluorophenol	(20-110)
SDMC6	(TBP)	= 2,4,6-Tribromophenol	(40-125)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D DMC diluted out

som13.04.02.A

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-71045

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0422 Mod. Ref No.: SDG No.: SM0422

Lab Sample ID: LCS-71045 LCS Lot No.: A091525

Date Extracted: 04/01/2013 Date Analyzed (1): 04/01/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
1,4-Dichlorobenzene	166.6667	0.0000	140.0928	84		30 - 100
2-Methylphenol	166.6667	0.0000	135.7627	81		40 - 110
4-Methylphenol	166.6667	0.0000	129.4673	78		30 - 110
Hexachloroethane	166.6667	0.0000	142.6682	86		30 - 95
Nitrobenzene	166.6667	0.0000	122.9220	74		45 - 110
Hexachlorobutadiene	166.6667	0.0000	146.9388	88		25 - 105
2,4,6-Trichlorophenol	166.6667	0.0000	152.7807	92		50 - 115
2,4,5-Trichlorophenol	166.6667	0.0000	151.9169	91		50 - 110
2,4-Dinitrotoluene	166.6667	0.0000	158.8472	95		50 - 120
Hexachlorobenzene	166.6667	0.0000	170.2539	102		50 - 110
Pentachlorophenol	166.6667	0.0000	126.3901	76		40 - 115
Pyridine	166.6667	0.0000	115.6185	69		10 - 106

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

* Values outside of QC limits

Spike Recovery: 0 out of 12 outside limits

COMMENTS:

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-71045

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0422 Mod. Ref No.: SDG No.: SM0422

Lab Sample ID: LCSD-71045 LCS Lot No.: A091525

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
1,4-Dichlorobenzene	166.6667	142.0298	85		1		40	30 - 100
2-Methylphenol	166.6667	133.2142	80		1		40	40 - 110
4-Methylphenol	166.6667	126.2012	76		3		40	30 - 110
Hexachloroethane	166.6667	142.0031	85		1		40	30 - 95
Nitrobenzene	166.6667	126.1646	76		3		40	45 - 110
Hexachlorobutadiene	166.6667	144.3575	87		1		40	25 - 105
2,4,6-Trichlorophenol	166.6667	164.2722	99		7		40	50 - 115
2,4,5-Trichlorophenol	166.6667	157.9909	95		4		40	50 - 110
2,4-Dinitrotoluene	166.6667	160.1229	96		1		40	50 - 120
Hexachlorobenzene	166.6667	172.2442	103		1		40	50 - 110
Pentachlorophenol	166.6667	125.1635	75		1		40	40 - 115
Pyridine	166.6667	120.7900	72		4		40	10 - 106

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

* Values outside of QC limits

RPD: 0 out of 12 outside limits

Spike Recovery: 0 out of 12 outside limits

COMMENTS:

4C - FORM IV SV

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-71036

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0422 Mod. Ref No.: SDG No.: SM0422

Lab File ID: S3I4244.D Lab Sample ID: MB-71036

Instrument ID: S3 Date Extracted: 04/01/2013

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 04/01/2013

Level: (LOW/MED) LOW Time Analyzed: 16:59

Extraction: (Type) SEPF GPC Cleanup: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	LCS-71045	LCS-71045	S3I4245.D	04/01/2013
02	LCSD-71045	LCSD-71045	S3I4246.D	04/01/2013
03	WC-1	M0422-01A	S3I4257.D	04/01/2013
04	WC-2	M0422-02A	S3I4258.D	04/01/2013
05	WC-3	M0422-03A	S3I4259.D	04/01/2013
06	WC-4	M0422-04A	S3I4260.D	04/01/2013
07	WC-5	M0422-05A	S3I4261.D	04/02/2013
08	WC-5MS	M0422-05AMS	S3I4262.D	04/02/2013

COMMENTS:

8C - FORM VIII SV-1

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0422 Mod. Ref No.: SDG No.: SM0422

GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 01/31/2013 01/31/2013

EPA Sample No.(SSTD020##) SSTD0253N Date Analyzed: 04/01/2013

Lab File ID (Standard): S3I4241.D Time Analyzed: 15:28

Instrument ID: S3

		IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
	12 HOUR STD	238889		4.012		906028		5.813		686592		7.586	
	UPPER LIMIT	477778		4.512		1812056		6.313		1373184		8.086	
	LOWER LIMIT	119445		3.512		453014		5.313		343296		7.086	
	EPA SAMPLE NO.												
01	MB-71036	226812		4.014		861694		5.809		619517		7.583	
02	LCS-71045	220262		4.020		813081		5.815		616871		7.588	
03	LCSD-71045	227802		4.021		821199		5.816		611667		7.590	
04	WC-1	231214		4.015		864516		5.810		597869		7.584	
05	WC-2	242884		4.015		871680		5.810		619817		7.584	
06	WC-3	217167		4.012		807508		5.812		560804		7.586	
07	WC-4	225336		4.015		822318		5.810		590253		7.583	
08	WC-5	250432		4.015		925105		5.809		654015		7.583	
09	WC-5MS	232554		4.015		857220		5.816		632438		7.589	

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

8D - FORM VIII SV-2

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0422 Mod. Ref No.: SDG No.: SM0422

EPA Sample No.(SSTD020##) SSTD0253N Date Analyzed: 04/01/2013

Lab File ID (Standard): S3I4241.D Time Analyzed: 15:28

Instrument ID: S3 GC Column: Rxi-5sil MS ID: 0.25 (mm)

		IS4 (PHN) AREA	#	RT	#	IS5 (CRY) AREA	#	RT	#	IS6 (PRY) AREA	#	RT	#
	12 HOUR STD	1390767		8.863		1819881		11.176		1474940		12.961	
	UPPER LIMIT	2781534		9.363		3639762		11.676		2949880		13.461	
	LOWER LIMIT	695384		8.363		909941		10.676		737470		12.461	
	EPA SAMPLE NO.												
01	MB-71036	1260206		8.854		1501564		11.119		1292891		12.893	
02	LCS-71045	1195677		8.860		1701767		11.135		1261137		12.914	
03	LCSD-71045	1194177		8.861		1712357		11.132		1271830		12.905	
04	WC-1	1128803		8.860		1405438		11.104		1245284		12.878	
05	WC-2	1182895		8.861		1428273		11.120		1277560		12.894	
06	WC-3	1094707		8.857		1311470		11.101		1186574		12.869	
07	WC-4	1145298		8.860		1370716		11.088		1200905		12.856	
08	WC-5	1283930		8.860		1499630		11.088		1317802		12.856	
09	WC-5MS	1209346		8.861		1683009		11.094		1298366		12.857	

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.

* PCB Organics *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Monoco Oil

Laboratory Workorder / SDG #: M0422

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 with the following exceptions. Please note that the acceptance criteria allow one surrogate recovery outside of the QC limits per fraction.

WC-2 (M0422-02A), recovery is below criteria for Decachlorobiphenyl on front column at 59% with criteria of (60-125).

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

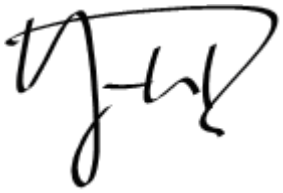
The following samples were manually integrated:

AR16603AT Aroclor-1260 on rear column due to M6

WC-2 (M0422-02A) Tetrachloro-m-xylene on rear column due to M6

WC-3 (M0422-03A) Decachlorobiphenyl on rear 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:_____4/9/2013_____

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.

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

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

WC-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0422 Mod. Ref No.: SDG No.: SM0422

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0422-01A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: E2L9315F.D/E2L9315R.D

% Moisture: 16 Decanted: (Y/N) N Date Received: 03/29/2013

Extraction: (Type) SONC Date Extracted: 03/29/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 04/02/2013

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	Q
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	39	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	39	U
11096-82-5	Aroclor-1260	39	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

WC-2

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0422 Mod. Ref No.: SDG No.: SM0422

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0422-02A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: E2L9316F.D/E2L9316R.D

% Moisture: 13 Decanted: (Y/N) N Date Received: 03/29/2013

Extraction: (Type) SONC Date Extracted: 03/29/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 04/02/2013

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	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	38	U
11096-82-5	Aroclor-1260	38	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

WC-3

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0422 Mod. Ref No.: SDG No.: SM0422

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0422-03A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E2L9317F.D/E2L9317R.D

% Moisture: 11 Decanted: (Y/N) N Date Received: 03/29/2013

Extraction: (Type) SONC Date Extracted: 03/29/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 04/02/2013

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	Q
12674-11-2	Aroclor-1016	37	U
11104-28-2	Aroclor-1221	37	U
11141-16-5	Aroclor-1232	37	U
53469-21-9	Aroclor-1242	37	U
12672-29-6	Aroclor-1248	37	U
11097-69-1	Aroclor-1254	37	U
11096-82-5	Aroclor-1260	37	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

WC-4

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0422 Mod. Ref No.: SDG No.: SM0422

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0422-04A

Sample wt/vol: 30.5 (g/mL) G Lab File ID: E2L9318F.D/E2L9318R.D

% Moisture: 8.6 Decanted: (Y/N) N Date Received: 03/29/2013

Extraction: (Type) SONC Date Extracted: 03/29/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 04/02/2013

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	Q
12674-11-2	Aroclor-1016	35	U
11104-28-2	Aroclor-1221	35	U
11141-16-5	Aroclor-1232	35	U
53469-21-9	Aroclor-1242	35	U
12672-29-6	Aroclor-1248	35	U
11097-69-1	Aroclor-1254	35	U
11096-82-5	Aroclor-1260	35	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

WC-5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0422 Mod. Ref No.: SDG No.: SM0422

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0422-05A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E2L9319F.D/E2L9319R.D

% Moisture: 15 Decanted: (Y/N) N Date Received: 03/29/2013

Extraction: (Type) SONC Date Extracted: 03/29/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 04/02/2013

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	Q
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	39	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	39	U
11096-82-5	Aroclor-1260	39	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-71038

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0422 Mod. Ref No.: SDG No.: SM0422

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-71038

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E2L9313F.D/E2L9313R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 03/29/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 04/02/2013

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	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-71038(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0422 Mod. Ref No.: SDG No.: SM0422

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-71038

Sample wt/vol: 30 (g/mL) G Lab File ID: E2L9314F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 03/29/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 04/02/2013

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	Q
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	100	

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-71038(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0422 Mod. Ref No.: SDG No.: SM0422

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-71038

Sample wt/vol: 30 (g/mL) G Lab File ID: E2L9314R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 03/29/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 04/02/2013

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	Q
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	91	

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0422 Mod. Ref No.: SDG No.: SM0422

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	CLIENT SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-71038	81	85	85	83			0
02	LCS-71038	87	91	83	82			0
03	WC-1	59	61	78	65			0
04	WC-2	57	61	59 *	63			1
05	WC-3	68	72	72	73			0
06	WC-4	66	70	75	73			0
07	WC-5	67	71	68	67			0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.04.02.A

3P - FORM III ARO-4

SOIL AROCLOR LABORATORY CONTROL SAMPLE RECOVERY

CLIENT SAMPLE NO.

LCS-71038

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0422 Mod. Ref No.: SDG No.: SM0422

Lab Sample ID: LCS-71038 LCS Lot No.: A086503

Date Extracted: 03/29/2013 Date Analyzed (1): 04/02/2013

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	109.5038	82		40-140
Aroclor-1260	133.3330	102.5004	77		60-130

Instrument ID (2): E2 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 04/02/2013

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS
Aroclor-1016	133.3330	110.3253	83		40-140
Aroclor-1260	133.3330	91.1811	68		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:

som13.04.02.A

4F - FORM IV ARO

AROCLOR METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

MB-71038

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0422 Mod. Ref No.: SDG No.: SM0422

Lab File ID: E2L9313F.D / E2L9313R.D Lab Sample ID: MB-71038

Matrix: (SOIL/SED/WATER) SOIL Extraction: (Type) SONC Date Extracted: 03/29/2013

Sulfur Cleanup: (Y/N) Y GPC Cleanup:(Y/N) N

Acid Cleanup: (Y/N Y

Date Analyzed (1): 04/02/2013 Date Analyzed (2): 04/02/2013

Time Analyzed (1): 10:52 Time Analyzed (2): 10:52

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-71038	LCS-71038	04/02/2013	04/02/2013
02	WC-1	M0422-01A	04/02/2013	04/02/2013
03	WC-2	M0422-02A	04/02/2013	04/02/2013
04	WC-3	M0422-03A	04/02/2013	04/02/2013
05	WC-4	M0422-04A	04/02/2013	04/02/2013
06	WC-5	M0422-05A	04/02/2013	04/02/2013

COMMENTS:

* Metals *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Monoco Oil

Laboratory Workorder / SDG #: M0422

SW846 1311 SW846 6010C, SW846 7470A

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 7470A

IV. PREPARATION

Soil Samples were prepared following procedures in laboratory test code: SW1311
Aqueous Samples were prepared following procedures in laboratory test code: SW3005A, SW7470A

V. INSTRUMENTATION

The following instrumentation was used:

Instrument Code: FIMS2
Instrument Type: CVAA
Description: FIMS
Manufacturer: Perkin-Elmer
Model: FIMS100

Instrument Code: OPTIMA2
Instrument Type: ICP
Description: Optima 3100 XL
Manufacturer: Perkin-Elmer
Model: 3100 XL

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):

A matrix spike was not performed on any sample in this SDG.

D. Post Digestion Spike (PDS):

A post-digestion spike was not performed on any sample in this SDG.

E. Duplicate sample:

A duplicate analysis was not performed on any sample in this SDG.

F. Serial Dilution (SD):

A serial dilution was not performed on any sample in this SDG.

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: 04/10/13

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.

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

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

WC-1

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0422

Matrix (soil/water): WATER Lab Sample ID: M0422-01

Level (low/med): MED Date Received: 03/29/2013

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	1350			P
7440-43-9	Cadmium	1.2	B		P
7440-47-3	Chromium	0.64	U		P
7439-92-1	Lead	4.2	U		P
7439-97-6	Mercury	0.044	B		CV
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P

Comments:

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

WC-2

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0422

Matrix (soil/water): WATER Lab Sample ID: M0422-02

Level (low/med): MED Date Received: 03/29/2013

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	1230			P
7440-43-9	Cadmium	0.89	U		P
7440-47-3	Chromium	0.64	U		P
7439-92-1	Lead	4.2	U		P
7439-97-6	Mercury	0.041	B		CV
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P

Comments:

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

WC-3

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0422

Matrix (soil/water): WATER Lab Sample ID: M0422-03

Level (low/med): MED Date Received: 03/29/2013

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	1090			P
7440-43-9	Cadmium	1.2	B		P
7440-47-3	Chromium	0.64	U		P
7439-92-1	Lead	4.2	U		P
7439-97-6	Mercury	0.028	U		CV
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P

Comments:

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

WC-4

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0422

Matrix (soil/water): WATER Lab Sample ID: M0422-04

Level (low/med): MED Date Received: 03/29/2013

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	1130			P
7440-43-9	Cadmium	1.2	B		P
7440-47-3	Chromium	0.64	U		P
7439-92-1	Lead	4.2	U		P
7439-97-6	Mercury	0.028	U		CV
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P

Comments:

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

WC-5

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0422

Matrix (soil/water): WATER Lab Sample ID: M0422-05

Level (low/med): MED Date Received: 03/29/2013

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	1150			P
7440-43-9	Cadmium	1.7	B		P
7440-47-3	Chromium	0.64	U		P
7439-92-1	Lead	10.1			P
7439-97-6	Mercury	0.028	U		CV
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P

Comments:

7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0422

Solid LCS Source:

Aqueous LCS Source:

LCS(D) ID:
LCS-71027

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Mercury	4.6	4.52	98.3						

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0422

Solid LCS Source: LCS(D) ID:

Aqueous LCS Source: **LCS-71048**

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Arsenic	455.0	490.13	107.7						
Barium	9100.0	9349.53	102.7						
Cadmium	227.0	237.13	104.5						
Chromium	910.0	880.41	96.7						
Lead	455.0	478.26	105.1						
Selenium	455.0	473.66	104.1						
Silver	1130.0	1184.70	104.8						

7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0422

Solid LCS Source:

Aqueous LCS Source:

LCS(D) ID:
LCSD-71027

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Mercury	4.6	4.45	96.7						

7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0422

Solid LCS Source:

Aqueous LCS Source:

LCS(D) ID:
LCSD-71048

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Arsenic	455.0	493.84	108.5						
Barium	9100.0	9424.61	103.6						
Cadmium	227.0	239.45	105.5						
Chromium	910.0	893.28	98.2						
Lead	455.0	481.29	105.8						
Selenium	455.0	479.63	105.4						
Silver	1130.0	1197.75	106.0						

U.S. EPA - CLP

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0422

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-71027**

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

FIMS2_130402A

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
Analyte		C	04/02/13 10:14	C	04/02/13 10:30	C		C		C	M
Mercury	0.028	U	0.028	U	0.028	U			0.028	U	CV

U.S. EPA - CLP

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0422

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-71036**

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

FIMS2_130402A

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
Analyte		C		C		C		C		C	M
Mercury									0.028	U	CV

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0422

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-71036**

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

OPTIMA2_130402B

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
Analyte		C	04/02/13 8:46	C	04/02/13 9:20	C	04/02/13 9:56	C		C	M
Arsenic	4.3	U	4.3	U	4.3	U	4.3	U	4.300	U	P
Barium	5.2	B	6.8	B	1.2	B	5.6	B	1.100	U	P
Cadmium	0.9	U	0.9	U	0.9	U	0.9	U	0.890	U	P
Chromium	1.0	B	1.1	B	0.6	U	0.9	B	0.640	U	P
Lead	4.2	U	4.2	U	4.2	U	4.2	U	4.200	U	P
Selenium	12.0	U	12.0	U	12.0	U	12.0	U	12.000	U	P
Silver	12.1	B	6.9	U	6.9	U	6.9	U	6.900	U	P

U.S. EPA - CLP

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0422

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-71048**

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

OPTIMA2_130402B

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
Analyte		C	04/02/13 10:21	C		C		C		C	M
Arsenic			4.3	U					4.300	U	P
Barium			4.9	B					1.100	U	P
Cadmium			0.9	U					0.890	U	P
Chromium			0.6	U					0.640	U	P
Lead			4.2	U					4.200	U	P
Selenium			12.0	U					12.000	U	P
Silver			6.9	U					6.900	U	P

Report Date:
15-May-13 09:57

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

LaBella Associates
300 State Street, Suite 201
Rochester, NY 14614

Work Order: M0641
Project : LaBella Monoco Oil
Project #:

Attn: Dan Noll

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M0641-01	WC-1	Soil	01-May-13 10:00	02-May-13 08:57
M0641-02	WC-2	Soil	01-May-13 10:00	02-May-13 08:57
M0641-03	WC-3	Soil	01-May-13 10:00	02-May-13 08:57
M0641-04	WC-4	Soil	01-May-13 10:00	02-May-13 08:57

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 requirments have been meet.

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.

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

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

SPECTRUM ANALYTICAL, INC.
Featuring
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* Data Summary Pack *

175 Metro Center Boulevard · Warwick, RI 02886-1755 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

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

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

Project Name : LaBella Monoco Oil **SDG :** M0641

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
WC-1	M0641-01	SW8260_W	SW8270_W	SW8082_S	SW6010_W	
WC-1	M0641-01				SW7470	
WC-2	M0641-02	SW8260_W	SW8270_W	SW8082_S	SW6010_W	
WC-2	M0641-02				SW7470	
WC-3	M0641-03	SW8260_W	SW8270_W	SW8082_S	SW6010_W	
WC-3	M0641-03				SW7470	
WC-4	M0641-04	SW8260_W	SW8270_W	SW8082_S	SW6010_W	
WC-4	M0641-04				SW7470	

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

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

Project Name : LaBella Monoco Oil **SDG :** M0641

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8260_W					
M0641-01B	SL	5/1/2013	5/2/2013	NA	5/8/2013
M0641-02B	SL	5/1/2013	5/2/2013	NA	5/8/2013
M0641-03B	SL	5/1/2013	5/2/2013	NA	5/8/2013
M0641-03BMS	SL	5/1/2013	5/2/2013	NA	5/9/2013
M0641-04B	SL	5/1/2013	5/2/2013	NA	5/8/2013
M0641-04BMS	SL	5/1/2013	5/2/2013	NA	5/9/2013

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

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

Project Name : LaBella Monoco Oil **SDG :** M0641

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8270_W					
M0641-01A	SL	5/1/2013	5/2/2013	5/7/2013	5/7/2013
M0641-02A	SL	5/1/2013	5/2/2013	5/7/2013	5/7/2013
M0641-03A	SL	5/1/2013	5/2/2013	5/7/2013	5/7/2013
M0641-04A	SL	5/1/2013	5/2/2013	5/7/2013	5/7/2013
M0641-04AMS	SL	5/1/2013	5/2/2013	5/7/2013	5/7/2013

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

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

Project Name : LaBella Monoco Oil **SDG :** M0641

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8082_S					
M0641-01A	SL	5/1/2013	5/2/2013	5/6/2013	5/8/2013
M0641-02A	SL	5/1/2013	5/2/2013	5/6/2013	5/8/2013
M0641-03A	SL	5/1/2013	5/2/2013	5/6/2013	5/8/2013
M0641-04A	SL	5/1/2013	5/2/2013	5/6/2013	5/8/2013

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

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

Project Name : LaBella Monoco Oil **SDG :** M0641

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
SW8260_W					
M0641-01B	SL	SW8260_W	NA	LOW	1
M0641-02B	SL	SW8260_W	NA	LOW	1
M0641-03B	SL	SW8260_W	NA	LOW	1
M0641-03BMS	SL	SW8260_W	NA	LOW	1
M0641-04B	SL	SW8260_W	NA	LOW	1
M0641-04BMS	SL	SW8260_W	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 : LaBella Monoco Oil **SDG :** M0641

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
SW8270_W					
M0641-01A	SL	SW8270_W	3510C	NA	1
M0641-02A	SL	SW8270_W	3510C	NA	1
M0641-03A	SL	SW8270_W	3510C	NA	1
M0641-04A	SL	SW8270_W	3510C	NA	1
M0641-04AMS	SL	SW8270_W	3510C	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 : LaBella Monoco Oil **SDG :** M0641

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
SW8082_S					
M0641-01A	SL	SW8082_S	3550B	acid/sulfur	1
M0641-02A	SL	SW8082_S	3550B	acid/sulfur	1
M0641-03A	SL	SW8082_S	3550B	acid/sulfur	1
M0641-04A	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 : LaBella Monoco Oil **SDG :** M0641

Laboratory Sample ID	Matrix	Metals Requested	Date Received By Lab	Date Analyzed
SW6010_W				
M0641-01A	SL	SW6010_W	5/2/2013	5/8/2013
M0641-02A	SL	SW6010_W	5/2/2013	5/8/2013
M0641-03A	SL	SW6010_W	5/2/2013	5/8/2013
M0641-04A	SL	SW6010_W	5/2/2013	5/8/2013
M0641-04AMS	SL	SW6010_W	5/2/2013	5/8/2013
SW7470				
M0641-01A	SL	SW7470	5/2/2013	5/8/2013
M0641-02A	SL	SW7470	5/2/2013	5/8/2013
M0641-03A	SL	SW7470	5/2/2013	5/8/2013
M0641-04A	SL	SW7470	5/2/2013	5/8/2013
M0641-04AMS	SL	SW7470	5/2/2013	5/8/2013

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

New York State Department of Environmental Conservation

Sample Preparation and Analysis Summary Toxicity Characteristic Leaching Procedure

Project Name : LaBella Monoco Oil **SDG :** M0641

Laboratory Sample ID	Matrix	Analytical Protocol	Date Collected	Date Received By Lab	Date Extracted
SW1311					
M0641-01A	SL	SW1311	5/1/2013	5/2/2013	
M0641-01A	SL	SW1311	5/1/2013	5/2/2013	5/6/2013
M0641-01B	SL	SW1311	5/1/2013	5/2/2013	5/7/2013
M0641-02A	SL	SW1311	5/1/2013	5/2/2013	
M0641-02A	SL	SW1311	5/1/2013	5/2/2013	5/6/2013
M0641-02B	SL	SW1311	5/1/2013	5/2/2013	5/7/2013
M0641-03A	SL	SW1311	5/1/2013	5/2/2013	
M0641-03A	SL	SW1311	5/1/2013	5/2/2013	5/6/2013
M0641-03B	SL	SW1311	5/1/2013	5/2/2013	5/7/2013
M0641-04A	SL	SW1311	5/1/2013	5/2/2013	5/6/2013
M0641-04A	SL	SW1311	5/1/2013	5/2/2013	5/6/2013
M0641-04B	SL	SW1311	5/1/2013	5/2/2013	5/8/2013

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

WorkOrder: M0641

Client ID: LABELLA
Project: LaBella Monoco Oil
WO Name: LaBella Monoco Oil
Location: LABELLA_MONOCO-OIL,

Case:
SDG:
PO: 210259

HC Due: 05/14/13
Fax Due: 05/09/13
Fax Report: ☑

Report Level: ASP-B
Special Program:
EDD: ENVIROINSITE_1
EQUIIS_4_NYSDEC

Comments: MDLs UPDATED and > PQL -- MDLs UPDATED and > PQL -- use this project for between 11-50 samples, no RUSH surcharge base on lab capacity, no charge for MS/MSD or a batch of 7 or more samples, no charge for TB. no hard copy

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M0641-01A	WC-1	05/01/2013 10:00	05/02/2013	Soil	PMoist	/					A2
M0641-01A	WC-1	05/01/2013 10:00	05/02/2013	Soil	SW6010_W	/ TCLP_METALS				Y	A2
M0641-01A	WC-1	05/01/2013 10:00	05/02/2013	Soil	SW7470	/ TCLP_METALS					A2
M0641-01A	WC-1	05/01/2013 10:00	05/02/2013	Soil	SW8082_S	/					A2
M0641-01A	WC-1	05/01/2013 10:00	05/02/2013	Soil	SW8270_W	/ MDLs UPDATED and > PQL -- MDLs UPDATED and > PQL -				Y	A2
M0641-01B	WC-1	05/01/2013 10:00	05/02/2013	Soil	SW8260_W	/ TCLP_VOA				Y	VOA
M0641-02A	WC-2	05/01/2013 10:00	05/02/2013	Soil	PMoist	/					A2
M0641-02A	WC-2	05/01/2013 10:00	05/02/2013	Soil	SW6010_W	/ TCLP_METALS				Y	A2
M0641-02A	WC-2	05/01/2013 10:00	05/02/2013	Soil	SW7470	/ TCLP_METALS					A2
M0641-02A	WC-2	05/01/2013 10:00	05/02/2013	Soil	SW8082_S	/					A2
M0641-02A	WC-2	05/01/2013 10:00	05/02/2013	Soil	SW8270_W	/ MDLs UPDATED and > PQL -- MDLs UPDATED and > PQL -				Y	A2
M0641-02B	WC-2	05/01/2013 10:00	05/02/2013	Soil	SW8260_W	/ TCLP_VOA				Y	VOA
M0641-03A	WC-3	05/01/2013 10:00	05/02/2013	Soil	PMoist	/					A2
M0641-03A	WC-3	05/01/2013 10:00	05/02/2013	Soil	SW6010_W	/ TCLP_METALS				Y	A2
M0641-03A	WC-3	05/01/2013 10:00	05/02/2013	Soil	SW7470	/ TCLP_METALS					A2
M0641-03A	WC-3	05/01/2013 10:00	05/02/2013	Soil	SW8082_S	/					A2
M0641-03A	WC-3	05/01/2013 10:00	05/02/2013	Soil	SW8270_W	/ MDLs UPDATED and > PQL -- MDLs UPDATED and > PQL -				Y	A2
M0641-03B	WC-3	05/01/2013 10:00	05/02/2013	Soil	SW8260_W	/ TCLP_VOA				Y	VOA
M0641-04A	WC-4	05/01/2013 10:00	05/02/2013	Soil	PMoist	/					A2
M0641-04A	WC-4	05/01/2013 10:00	05/02/2013	Soil	SW6010_W	/ TCLP_METALS				Y	A2
M0641-04A	WC-4	05/01/2013 10:00	05/02/2013	Soil	SW7470	/ TCLP_METALS					A2

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

HT = Test logged in but has been placed on hold

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

WorkOrder: M0641

Client ID: LABELLA
Project: LaBella Monoco Oil
WO Name: LaBella Monoco Oil
Location: LABELLA_MONOCO-OIL,

Case:
SDG:
PO: 210259

HC Due: 05/14/13
Fax Due: 05/09/13
Fax Report: ☑

Report Level: ASP-B
Special Program:
EDD: ENVIROINSITE_1
EQUIIS_4_NYSDEC

Comments: MDLs UPDATED and > PQL -- MDLs UPDATED and > PQL -- use this project for between 11-50 samples, no RUSH surcharge base on lab capacity, no charge for MS/MSD or a batch of 7 or more samples, no charge for TB. no hard copy

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M0641-04A	WC-4	05/01/2013 10:00	05/02/2013	Soil	SW8082_S	/					A2
M0641-04A	WC-4	05/01/2013 10:00	05/02/2013	Soil	SW8270_W	/ MDLs UPDATED and > PQL -- MDLs UPDATED and > PQL -				Y	A2
M0641-04B	WC-4	05/01/2013 10:00	05/02/2013	Soil	SW8260_W	/ TCLP_VOA				Y	VOA

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

HT = Test logged in but has been placed on hold

* Volatiles *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Monoco Oil

Laboratory Workorder / SDG #: M0641

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

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

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: V10
Instrument Type: GCMS-VOA

Description: HP7890A
Manufacturer: Agilent
Model: 7890A / 5975C

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.

Replicate RPDs were within the advisory QC limits.

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

Matrix spikes were performed on samples: WC-3 (M0641-03BMS) and WC-4 (M0641-04BMS).

Percent recoveries were within the QC limits.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

F. Dilutions:

No sample in this SDG required analysis at dilution.

G. Samples:

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.

Signed: 

Date: 05/14/13

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.

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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0641-01B

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9686.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/02/2013

% Moisture: not dec. Date Analyzed: 05/08/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	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
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-2

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0641-02B

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9687.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/02/2013

% Moisture: not dec. Date Analyzed: 05/08/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	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
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-3

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0641-03B

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9688.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/02/2013

% Moisture: not dec. Date Analyzed: 05/08/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	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
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-4

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0641-04B

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9689.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/02/2013

% Moisture: not dec. Date Analyzed: 05/08/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	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
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VTBLK10Y

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-71522

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9684.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 05/08/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	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
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VTBLK10Z

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-71559

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9685.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 05/08/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	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
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-75160

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-75160

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9679.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 05/08/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	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
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-75160

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-75160

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9676.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 05/08/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	53	
75-35-4	1,1-Dichloroethene	54	
78-93-3	2-Butanone	48	
67-66-3	Chloroform	52	
56-23-5	Carbon tetrachloride	53	
107-06-2	1,2-Dichloroethane	52	
71-43-2	Benzene	54	
79-01-6	Trichloroethene	52	
127-18-4	Tetrachloroethene	52	
108-90-7	Chlorobenzene	52	

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-75160

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-75160

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9677.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 05/08/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	43	
75-35-4	1,1-Dichloroethene	43	
78-93-3	2-Butanone	46	
67-66-3	Chloroform	44	
56-23-5	Carbon tetrachloride	43	
107-06-2	1,2-Dichloroethane	46	
71-43-2	Benzene	45	
79-01-6	Trichloroethene	43	
127-18-4	Tetrachloroethene	42	
108-90-7	Chlorobenzene	44	

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-3MS

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0641-03BMS

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9698.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/02/2013

% Moisture: not dec. Date Analyzed: 05/09/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	56	
75-35-4	1,1-Dichloroethene	56	
78-93-3	2-Butanone	45	
67-66-3	Chloroform	56	
56-23-5	Carbon tetrachloride	56	
107-06-2	1,2-Dichloroethane	55	
71-43-2	Benzene	56	
79-01-6	Trichloroethene	55	
127-18-4	Tetrachloroethene	48	
108-90-7	Chlorobenzene	50	

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-4MS

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0641-04BMS

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9699.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/02/2013

% Moisture: not dec. Date Analyzed: 05/09/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	58	
75-35-4	1,1-Dichloroethene	58	
78-93-3	2-Butanone	46	
67-66-3	Chloroform	56	
56-23-5	Carbon tetrachloride	56	
107-06-2	1,2-Dichloroethane	54	
71-43-2	Benzene	58	
79-01-6	Trichloroethene	57	
127-18-4	Tetrachloroethene	51	
108-90-7	Chlorobenzene	52	

2B - FORM II VOA-2

WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

Level: (TRACE or LOW) LOW

	EPA SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-75160	99	99	100	100				0
02	LCSD-75160	99	100	100	99				0
03	MB-75160	100	102	101	97				0
04	VTBLK10Y	101	102	99	99				0
05	VTBLK10Z	101	101	99	99				0
06	WC-1	102	101	100	98				0
07	WC-2	102	102	100	101				0
08	WC-3	102	100	100	102				0
09	WC-4	98	99	100	101				0
10	WC-3MS	104	99	97	102				0
11	WC-4MS	103	100	96	102				0

		QC LIMITS
VDMC1	(DBFM) Dibromofluoromethane	(85-115)
VDMC2	(DCE) = 1,2-Dichloroethane-d4	(70-120)
VDMC3	(TOL) = Toluene-d8	(85-120)
VDMC4	(BFB) = Bromofluorobenzene	(75-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

som13.05.07.A

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-75160

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

Lab Sample ID: LCS-75160 LCS Lot No.:

Date Extracted: Date Analyzed (1): 05/08/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Vinyl chloride	50.0000	0.0000	53.1741	106		50 - 145
1,1-Dichloroethene	50.0000	0.0000	53.6352	107		70 - 130
2-Butanone	50.0000	0.0000	47.7483	95		30 - 150
Chloroform	50.0000	0.0000	52.3594	105		65 - 135
Carbon tetrachloride	50.0000	0.0000	53.0469	106		65 - 140
1,2-Dichloroethane	50.0000	0.0000	51.7740	104		70 - 130
Benzene	50.0000	0.0000	53.7862	108		80 - 120
Trichloroethene	50.0000	0.0000	52.4688	105		70 - 125
Tetrachloroethene	50.0000	0.0000	51.7869	104		45 - 150
Chlorobenzene	50.0000	0.0000	52.0048	104		80 - 120

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

* Values outside of QC limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:

3 - FORM III

WATER LABORATORY CONTROL

SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-75160

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

Lab Sample ID: LCSD-75160 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Vinyl chloride	50.0000	43.4222	87		20		40	50 - 145
1,1-Dichloroethene	50.0000	42.9552	86		22		40	70 - 130
2-Butanone	50.0000	46.4496	93		2		40	30 - 150
Chloroform	50.0000	44.2982	89		16		40	65 - 135
Carbon tetrachloride	50.0000	42.5901	85		22		40	65 - 140
1,2-Dichloroethane	50.0000	46.1119	92		12		40	70 - 130
Benzene	50.0000	44.5624	89		19		40	80 - 120
Trichloroethene	50.0000	43.2749	87		19		40	70 - 125
Tetrachloroethene	50.0000	42.0589	84		21		40	45 - 150
Chlorobenzene	50.0000	43.6649	87		18		40	80 - 120

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

* Values outside of QC limits

RPD: 0 out of 10 outside limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:

CLIENT: LaBella Associates
Work Order: M0641
Project: LaBella Monoco Oil

ANALYTICAL QC SUMMARY REPORT

SW8260_W

SW846 8260C -- VOC by GC-MS

Sample ID: **M0641-03BMS** SampType: **MS** TestCode: **SW8260_W** Prep Date: **05/08/13 13:03** Run ID: **V10_130508B**

Client ID: **WC-3** Batch ID: **71560** Units: **ug/L** Analysis Date: **05/09/13 2:43** SeqNo: **1896722**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride -- TCLP	56.47	0.50	5.0	50.00	0	113	50	145	0			
1,1-Dichloroethene -- TCLP	55.65	0.39	5.0	50.00	0	111	70	130	0			
2-Butanone -- TCLP	44.79	2.1	5.0	50.00	0	89.6	30	150	0			
Chloroform -- TCLP	56.04	0.33	5.0	50.00	0	112	65	135	0			
Carbon tetrachloride -- TCLP	55.88	0.54	5.0	50.00	0	112	65	140	0			
1,2-Dichloroethane -- TCLP	55.14	0.41	5.0	50.00	0	110	70	130	0			
Benzene -- TCLP	56.46	0.33	5.0	50.00	0	113	80	120	0			
Trichloroethene -- TCLP	55.10	0.36	5.0	50.00	0	110	70	125	0			
Tetrachloroethene -- TCLP	47.91	0.65	5.0	50.00	0	95.8	45	150	0			
Chlorobenzene -- TCLP	50.29	0.26	5.0	50.00	0	101	80	120	0			
Surrogate: Dibromofluoromethane -- TCLP	51.87		5.0	50.00	0	104	85	115	0			
Surrogate: 1,2-Dichloroethane-d4 -- TCLP	49.49		5.0	50.00	0	99.0	70	120	0			
Surrogate: Toluene-d8 -- TCLP	48.41		5.0	50.00	0	96.8	85	120	0			
Surrogate: Bromofluorobenzene -- TCLP	51.09		5.0	50.00	0	102	75	120	0			

CLIENT: LaBella Associates
Work Order: M0641
Project: LaBella Monoco Oil

ANALYTICAL QC SUMMARY REPORT

SW8260_W

SW846 8260C -- VOC by GC-MS

Sample ID: **M0641-04BMS** SampType: **MS** TestCode: **SW8260_W** Prep Date: **05/08/13 13:03** Run ID: **V10_130508B**

Client ID: **WC-4** Batch ID: **71560** Units: **ug/L** Analysis Date: **05/09/13 3:11** SeqNo: **1896723**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride -- TCLP	58.49	0.50	5.0	50.00	0	117	50	145	0			
1,1-Dichloroethene -- TCLP	57.62	0.39	5.0	50.00	0	115	70	130	0			
2-Butanone -- TCLP	46.33	2.1	5.0	50.00	0	92.7	30	150	0			
Chloroform -- TCLP	56.04	0.33	5.0	50.00	0	112	65	135	0			
Carbon tetrachloride -- TCLP	56.24	0.54	5.0	50.00	0	112	65	140	0			
1,2-Dichloroethane -- TCLP	54.37	0.41	5.0	50.00	0	109	70	130	0			
Benzene -- TCLP	57.78	0.33	5.0	50.00	0	116	80	120	0			
Trichloroethene -- TCLP	56.89	0.36	5.0	50.00	0	114	70	125	0			
Tetrachloroethene -- TCLP	50.52	0.65	5.0	50.00	0	101	45	150	0			
Chlorobenzene -- TCLP	51.81	0.26	5.0	50.00	0	104	80	120	0			
Surrogate: Dibromofluoromethane -- TCLP	51.28		5.0	50.00	0	103	85	115	0			
Surrogate: 1,2-Dichloroethane-d4 -- TCLP	49.92		5.0	50.00	0	99.8	70	120	0			
Surrogate: Toluene-d8 -- TCLP	48.05		5.0	50.00	0	96.1	85	120	0			
Surrogate: Bromofluorobenzene -- TCLP	51.12		5.0	50.00	0	102	75	120	0			

Qualifiers: ND - Not Detected at the MDL; S - Recovery outside accepted recovery limits; MDL - Method Detection Limit; B - Analyte detected in the associated Method Blank; J - Analyte detected below quanititation limits; R - RPD outside accepted recovery limits; RL - Reporting Limit

4A - FORM IV VOA

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-75160

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

Lab File ID: V8B9679.D Lab Sample ID: MB-75160

Instrument ID: V10

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 05/08/2013

Level: (TRACE or LOW/MED) LOW Time Analyzed: 18:04

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-75160	LCS-75160	V8B9676.D	16:40
02	LCSD-75160	LCSD-75160	V8B9677.D	17:08
03	VTBLK10Y	MB-71522	V8B9684.D	20:22
04	VTBLK10Z	MB-71559	V8B9685.D	20:50
05	WC-1	M0641-01B	V8B9686.D	21:17
06	WC-2	M0641-02B	V8B9687.D	21:44
07	WC-3	M0641-03B	V8B9688.D	22:12
08	WC-4	M0641-04B	V8B9689.D	22:39
09	WC-3MS	M0641-03BMS	V8B9698.D	2:43
10	WC-4MS	M0641-04BMS	V8B9699.D	3:11

COMMENTS:

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 05/08/2013 05/08/2013

EPA Sample No.(VSTD#####): VSTD05010Y Date Analyzed: 05/08/2013

Lab File ID (Standard): V8B9675.D Time Analyzed: 16:11

Instrument ID: V10 Heated Purge: (Y/N) N

		IS1 (S1) AREA #	RT #	IS2 (S2) AREA #	RT #	IS3 (S3) AREA #	RT #
	12 HOUR STD	1788797	5.307	1625327	8.291	836810	10.782
	UPPER LIMIT	3577594	5.807	3250654	8.791	1673620	11.282
	LOWER LIMIT	894399	4.807	812664	7.791	418405	10.282
	EPA SAMPLE NO.						
01	LCS-75160	1806196	5.307	1651965	8.294	853578	10.786
02	LCSD-75160	1823076	5.307	1672850	8.294	850413	10.783
03	MB-75160	1754843	5.307	1576573	8.294	747464	10.786
04	VTBLK10Y	1608536	5.307	1467924	8.294	736039	10.783
05	VTBLK10Z	1614147	5.310	1475621	8.294	733055	10.786
06	WC-1	1627724	5.307	1497602	8.294	750055	10.786
07	WC-2	1629165	5.307	1512601	8.291	764616	10.783
08	WC-3	1653824	5.307	1553760	8.294	793896	10.786
09	WC-4	1787359	5.307	1632529	8.294	823608	10.786
10	WC-3MS	1632961	5.307	1623629	8.294	862621	10.786
11	WC-4MS	1750542	5.307	1713206	8.294	907029	10.783

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.

* Semivolatile Organics *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Monoco Oil

Laboratory Workorder / SDG #: M0641

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

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

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 with the following exceptions. Please note that the acceptance criteria allow one surrogate recovery outside of the QC limits per fraction.

WC-1 (M0641-01A-TCLP), recovery is above criteria for 2,4,6-Tribromophenol at 125% with criteria of (40-125) and Nitrobenzene-d5 at 110% with criteria of (40-110).

WC-3 (M0641-03A-TCLP), recovery is above criteria for 2,4,6-Tribromophenol at 128% with criteria of (40-125) and Nitrobenzene-d5 at 116% with criteria of (40-110).

WC-4 (M0641-04A-TCLP), recovery is above criteria for 2,4,6-Tribromophenol at 126% with criteria of (40-125) and Nitrobenzene-d5 at 111% with criteria of (40-110).

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-71519 in batch 71519, recovery is above criteria for Hexachlorobutadiene at 110% with criteria of (25-105).

LCSD-71519 in batch 71519, recovery is above criteria for Hexachlorobenzene at 120% with criteria of (50-110) and

Hexachlorobutadiene at 108% with criteria of (25-105).

Replicate RPDs were within the advisory QC limits.

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

Matrix spike was performed on sample: WC-4 (M0641-04AMS).

Percent recoveries were within the QC limits with the following exceptions:

WC-4 (M0641-04AMS-TCLP), recovery is above criteria for Hexachlorobenzene at 118% with criteria of (50-110).

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.

Signed: 

Date: 05/13/13

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.

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

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0641-01A

Sample wt/vol: 300 (g/mL) ML Lab File ID: S6B3684.D

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

% Moisture: Decanted: (Y/N) Date Received: 05/02/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/07/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/07/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	33	U
95-48-7	2-Methylphenol	33	U
106-44-5	4-Methylphenol	33	U
67-72-1	Hexachloroethane	33	U
98-95-3	Nitrobenzene	33	U
87-68-3	Hexachlorobutadiene	33	U
88-06-2	2,4,6-Trichlorophenol	33	U
95-95-4	2,4,5-Trichlorophenol	67	U
121-14-2	2,4-Dinitrotoluene	33	U
118-74-1	Hexachlorobenzene	33	U
87-86-5	Pentachlorophenol	67	U
110-86-1	Pyridine	67	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-2

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0641-02A

Sample wt/vol: 300 (g/mL) ML Lab File ID: S6B3685.D

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

% Moisture: Decanted: (Y/N) Date Received: 05/02/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/07/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/07/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	33	U
95-48-7	2-Methylphenol	33	U
106-44-5	4-Methylphenol	33	U
67-72-1	Hexachloroethane	33	U
98-95-3	Nitrobenzene	33	U
87-68-3	Hexachlorobutadiene	33	U
88-06-2	2,4,6-Trichlorophenol	33	U
95-95-4	2,4,5-Trichlorophenol	67	U
121-14-2	2,4-Dinitrotoluene	33	U
118-74-1	Hexachlorobenzene	33	U
87-86-5	Pentachlorophenol	67	U
110-86-1	Pyridine	67	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-3

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0641-03A

Sample wt/vol: 300 (g/mL) ML Lab File ID: S6B3686.D

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

% Moisture: Decanted: (Y/N) Date Received: 05/02/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/07/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/07/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	33	U
95-48-7	2-Methylphenol	33	U
106-44-5	4-Methylphenol	33	U
67-72-1	Hexachloroethane	33	U
98-95-3	Nitrobenzene	33	U
87-68-3	Hexachlorobutadiene	33	U
88-06-2	2,4,6-Trichlorophenol	33	U
95-95-4	2,4,5-Trichlorophenol	67	U
121-14-2	2,4-Dinitrotoluene	33	U
118-74-1	Hexachlorobenzene	33	U
87-86-5	Pentachlorophenol	67	U
110-86-1	Pyridine	67	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-4

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0641-04A

Sample wt/vol: 300 (g/mL) ML Lab File ID: S6B3687.D

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

% Moisture: Decanted: (Y/N) Date Received: 05/02/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/07/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/07/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	33	U
95-48-7	2-Methylphenol	33	U
106-44-5	4-Methylphenol	33	U
67-72-1	Hexachloroethane	33	U
98-95-3	Nitrobenzene	33	U
87-68-3	Hexachlorobutadiene	33	U
88-06-2	2,4,6-Trichlorophenol	33	U
95-95-4	2,4,5-Trichlorophenol	67	U
121-14-2	2,4-Dinitrotoluene	33	U
118-74-1	Hexachlorobenzene	33	U
87-86-5	Pentachlorophenol	67	U
110-86-1	Pyridine	67	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-71506

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-71506

Sample wt/vol: 300 (g/mL) ML Lab File ID: S6B3681.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/07/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/07/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	33	U
95-48-7	2-Methylphenol	33	U
106-44-5	4-Methylphenol	33	U
67-72-1	Hexachloroethane	33	U
98-95-3	Nitrobenzene	33	U
87-68-3	Hexachlorobutadiene	33	U
88-06-2	2,4,6-Trichlorophenol	33	U
95-95-4	2,4,5-Trichlorophenol	67	U
121-14-2	2,4-Dinitrotoluene	33	U
118-74-1	Hexachlorobenzene	33	U
87-86-5	Pentachlorophenol	67	U
110-86-1	Pyridine	67	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-71519

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-71519

Sample wt/vol: 300 (g/mL) ML Lab File ID: S6B3682.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/07/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/07/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	150	
95-48-7	2-Methylphenol	130	
106-44-5	4-Methylphenol	130	
67-72-1	Hexachloroethane	130	
98-95-3	Nitrobenzene	160	
87-68-3	Hexachlorobutadiene	180	
88-06-2	2,4,6-Trichlorophenol	160	
95-95-4	2,4,5-Trichlorophenol	170	
121-14-2	2,4-Dinitrotoluene	180	
118-74-1	Hexachlorobenzene	180	
87-86-5	Pentachlorophenol	120	
110-86-1	Pyridine	120	

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-71519

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-71519

Sample wt/vol: 300 (g/mL) ML Lab File ID: S6B3703.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/07/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/09/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	140	
95-48-7	2-Methylphenol	120	
106-44-5	4-Methylphenol	130	
67-72-1	Hexachloroethane	130	
98-95-3	Nitrobenzene	160	
87-68-3	Hexachlorobutadiene	180	
88-06-2	2,4,6-Trichlorophenol	170	
95-95-4	2,4,5-Trichlorophenol	170	
121-14-2	2,4-Dinitrotoluene	190	
118-74-1	Hexachlorobenzene	200	
87-86-5	Pentachlorophenol	110	
110-86-1	Pyridine	110	

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-4MS

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0641-04AMS

Sample wt/vol: 300 (g/mL) ML Lab File ID: S6B3688.D

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

% Moisture: Decanted: (Y/N) Date Received: 05/02/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/07/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/07/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	140	
95-48-7	2-Methylphenol	120	
106-44-5	4-Methylphenol	110	
67-72-1	Hexachloroethane	130	
98-95-3	Nitrobenzene	170	
87-68-3	Hexachlorobutadiene	170	
88-06-2	2,4,6-Trichlorophenol	170	
95-95-4	2,4,5-Trichlorophenol	180	
121-14-2	2,4-Dinitrotoluene	190	
118-74-1	Hexachlorobenzene	200	
87-86-5	Pentachlorophenol	130	
110-86-1	Pyridine	95	

2H - FORM II SV-2

WATER SEMIVOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

	EPA SAMPLE NO.	SDMC1 (NBZ) #	SDMC2 (FBP) #	SDMC3 (TPH) #	SDMC4 (PHL) #	SDMC5 (2FP) #	SDMC6 (TBP) #			TOT OUT
01	MB-71506	83	74	91	67	65	92			0
02	LCS-71519	89	89	95	73	67	107			0
03	WC-1	110 *	101	120	56	63	125 *			2
04	WC-2	100	92	113	43	59	116			0
05	WC-3	116 *	106	126	48	64	128 *			2
06	WC-4	111 *	103	122	46	62	126 *			2
07	WC-4MS	104	106	112	44	56	123			0
08	LCSD-71519	89	90	102	69	63	111			0

		QC LIMITS
SDMC1	(NBZ) = Nitrobenzene-d5	(40-110)
SDMC2	(FBP) = 2-Fluorobiphenyl	(50-110)
SDMC3	(TPH) = Terphenyl-d14	(50-135)
SDMC4	(PHL) = Phenol-d5	(10-115)
SDMC5	(2FP) = 2-Fluorophenol	(20-110)
SDMC6	(TBP) = 2,4,6-Tribromophenol	(40-125)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D DMC diluted out

som13.05.07.A

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-71519

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

Lab Sample ID: LCS-71519 LCS Lot No.: A091525

Date Extracted: 05/07/2013 Date Analyzed (1): 05/07/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
1,4-Dichlorobenzene	166.6667	0.0000	146.5587	88		30 - 100
2-Methylphenol	166.6667	0.0000	134.1133	80		40 - 110
4-Methylphenol	166.6667	0.0000	130.1449	78		30 - 110
Hexachloroethane	166.6667	0.0000	133.9963	80		30 - 95
Nitrobenzene	166.6667	0.0000	157.5525	95		45 - 110
Hexachlorobutadiene	166.6667	0.0000	182.8221	110	*	25 - 105
2,4,6-Trichlorophenol	166.6667	0.0000	161.1076	97		50 - 115
2,4,5-Trichlorophenol	166.6667	0.0000	167.1642	100		50 - 110
2,4-Dinitrotoluene	166.6667	0.0000	183.3592	110		50 - 120
Hexachlorobenzene	166.6667	0.0000	181.0852	109		50 - 110
Pentachlorophenol	166.6667	0.0000	118.3491	71		40 - 115
Pyridine	166.6667	0.0000	122.6465	74		10 - 106

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

* Values outside of QC limits

Spike Recovery: 1 out of 12 outside limits

COMMENTS:

3 - FORM III

WATER LABORATORY CONTROL

SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-71519

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

Lab Sample ID: LCSD-71519 LCS Lot No.: A091525

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
1,4-Dichlorobenzene	166.6667	138.5506	83		6		40	30 - 100
2-Methylphenol	166.6667	124.3000	75		6		40	40 - 110
4-Methylphenol	166.6667	127.3041	76		3		40	30 - 110
Hexachloroethane	166.6667	134.8601	81		1		40	30 - 95
Nitrobenzene	166.6667	162.2388	97		2		40	45 - 110
Hexachlorobutadiene	166.6667	180.1196	108	*	2		40	25 - 105
2,4,6-Trichlorophenol	166.6667	168.6879	101		4		40	50 - 115
2,4,5-Trichlorophenol	166.6667	165.8715	100		0		40	50 - 110
2,4-Dinitrotoluene	166.6667	189.6415	114		4		40	50 - 120
Hexachlorobenzene	166.6667	200.1579	120	*	10		40	50 - 110
Pentachlorophenol	166.6667	112.3855	67		6		40	40 - 115
Pyridine	166.6667	114.2384	69		7		40	10 - 106

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

* Values outside of QC limits

RPD: 0 out of 12 outside limits

Spike Recovery: 2 out of 12 outside limits

COMMENTS:

4C - FORM IV SV

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-71506

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

Lab File ID: S6B3681.D Lab Sample ID: MB-71506

Instrument ID: S6 Date Extracted: 05/07/2013

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 05/07/2013

Level: (LOW/MED) LOW Time Analyzed: 15:58

Extraction: (Type) SEPF GPC Cleanup: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	LCS-71519	LCS-71519	S6B3682.D	05/07/2013
02	WC-1	M0641-01A	S6B3684.D	05/07/2013
03	WC-2	M0641-02A	S6B3685.D	05/07/2013
04	WC-3	M0641-03A	S6B3686.D	05/07/2013
05	WC-4	M0641-04A	S6B3687.D	05/07/2013
06	WC-4MS	M0641-04AMS	S6B3688.D	05/07/2013
07	LCSD-71519	LCSD-71519	S6B3703.D	05/09/2013

COMMENTS:

8C - FORM VIII SV-1

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 04/17/2013 04/17/2013

EPA Sample No.(SSTD020##) SSTD0256P Date Analyzed: 05/07/2013

Lab File ID (Standard): S6B3671A.D Time Analyzed: 11:26

Instrument ID: S6

		IS1 (DCB) AREA	#	IS1 (DCB) RT	#	IS2 (NPT) AREA	#	IS2 (NPT) RT	#	IS3 (ANT) AREA	#	IS3 (ANT) RT	#
	12 HOUR STD	237184		5		1037783		6.057		758959		7.515	
	UPPER LIMIT	474368		5.5		2075566		6.557		1517918		8.015	
	LOWER LIMIT	118592		4.5		518892		5.557		379480		7.015	
	EPA SAMPLE NO.												
01	MB-71506	233860		5.000		993553		6.052		762717		7.509	
02	LCS-71519	280401		5.000		1138185		6.057		861691		7.515	
03	WC-1	242694		5.000		975876		6.052		705236		7.509	
04	WC-2	267491		5.000		1069313		6.052		784105		7.509	
05	WC-3	246141		5.000		988206		6.052		717251		7.509	
06	WC-4	247346		5.000		1005556		6.052		727360		7.509	
07	WC-4MS	250026		5.000		1007826		6.057		728371		7.515	

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

8D - FORM VIII SV-2

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

EPA Sample No.(SSTD020##) SSTD0256P Date Analyzed: 05/07/2013

Lab File ID (Standard): S6B3671A.D Time Analyzed: 11:26

Instrument ID: S6 GC Column: Rxi-5sil MS ID: 0.25 (mm)

		IS4 (PHN) AREA	#	RT	#	IS5 (CRY) AREA	#	RT	#	IS6 (PRY) AREA	#	RT	#
	12 HOUR STD	1609408		8.748		2345703		11.04		2246119		12.509	
	UPPER LIMIT	3218816		9.248		4691406		11.54		4492238		13.009	
	LOWER LIMIT	804704		8.248		1172852		10.54		1123060		12.009	
	EPA SAMPLE NO.												
01	MB-71506	1646117		8.749		2347192		11.040		2398815		12.521	
02	LCS-71519	1812608		8.754		2718895		11.046		2639072		12.515	
03	WC-1	1481062		8.749		2060054		11.034		2044091		12.503	
04	WC-2	1645744		8.749		2289201		11.028		2304256		12.491	
05	WC-3	1500736		8.743		2078755		11.022		2067639		12.485	
06	WC-4	1520735		8.743		2115046		11.017		2070274		12.485	
07	WC-4MS	1528025		8.748		2255737		11.034		2160280		12.491	

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12
AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

8C - FORM VIII SV-1

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 04/17/2013 04/17/2013

EPA Sample No.(SSTD020##) SSTD0256R Date Analyzed: 05/09/2013

Lab File ID (Standard): S6B3701.D Time Analyzed: 10:24

Instrument ID: S6

		IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	167795	5	733410	6.052	553903	7.509
	UPPER LIMIT	335590	5.5	1466820	6.552	1107806	8.009
	LOWER LIMIT	83898	4.5	366705	5.552	276952	7.009
	EPA SAMPLE NO.						
01	LCSD-71519	184583	5.000	725486	6.058	533765	7.515

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

8D - FORM VIII SV-2

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

EPA Sample No.(SSTD020##) SSTD0256R Date Analyzed: 05/09/2013

Lab File ID (Standard): S6B3701.D Time Analyzed: 10:24

Instrument ID: S6 GC Column: Rxi-5sil MS ID: 0.25 (mm)

		IS4 (PHN) AREA	#	RT	#	IS5 (CRY) AREA	#	RT	#	IS6 (PRY) AREA	#	RT	#
	12 HOUR STD	1206772		8.748		1910596		11.046		1828049		12.515	
	UPPER LIMIT	2413544		9.248		3821192		11.546		3656098		13.015	
	LOWER LIMIT	603386		8.248		955298		10.546		914025		12.015	
	EPA SAMPLE NO.												
01	LCSD-71519	1123057		8.749		1700963		11.040		1622096		12.509	

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.

* PCB Organics *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Monoco Oil

Laboratory Workorder / SDG #: M0641

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.

Replicate RPDs were within the advisory 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 is greater than 40%.

No other unusual occurrences were noted during sample analysis.

G. Manual Integration

Manual integration was not performed on any sample in this SDG.

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: 05/13/13

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.

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

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0641-01A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E2M0041F.D/E2M0041R.D

% Moisture: 18 Decanted: (Y/N) N Date Received: 05/02/2013

Extraction: (Type) SONC Date Extracted: 05/06/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/08/2013

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	Q
12674-11-2	Aroclor-1016	40	U
11104-28-2	Aroclor-1221	40	U
11141-16-5	Aroclor-1232	40	U
53469-21-9	Aroclor-1242	40	U
12672-29-6	Aroclor-1248	40	U
11097-69-1	Aroclor-1254	40	U
11096-82-5	Aroclor-1260	40	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-2

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0641-02A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: E2M0042F.D/E2M0042R.D

% Moisture: 15 Decanted: (Y/N) N Date Received: 05/02/2013

Extraction: (Type) SONC Date Extracted: 05/06/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/08/2013

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	Q
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	39	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	39	U
11096-82-5	Aroclor-1260	39	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-3

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0641-03A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E2M0043F.D/E2M0043R.D

% Moisture: 18 Decanted: (Y/N) N Date Received: 05/02/2013

Extraction: (Type) SONC Date Extracted: 05/06/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/08/2013

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	Q
12674-11-2	Aroclor-1016	40	U
11104-28-2	Aroclor-1221	40	U
11141-16-5	Aroclor-1232	40	U
53469-21-9	Aroclor-1242	40	U
12672-29-6	Aroclor-1248	40	U
11097-69-1	Aroclor-1254	40	U
11096-82-5	Aroclor-1260	40	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-4

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0641-04A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E2M0044F.D/E2M0044R.D

% Moisture: 16 Decanted: (Y/N) N Date Received: 05/02/2013

Extraction: (Type) SONC Date Extracted: 05/06/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/08/2013

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	Q
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	39	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	39	U
11096-82-5	Aroclor-1260	39	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-71510

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-71510

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E2M0038F.D/E2M0038R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 05/06/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/08/2013

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	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-71510(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-71510

Sample wt/vol: 30 (g/mL) G Lab File ID: E2M0039F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 05/06/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/08/2013

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	Q
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	110	

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-71510(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-71510

Sample wt/vol: 30 (g/mL) G Lab File ID: E2M0039R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 05/06/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/08/2013

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	Q
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	

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
LCSD-71510(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-71510

Sample wt/vol: 30 (g/mL) G Lab File ID: E2M0040F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 05/06/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/08/2013

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	Q
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	110	

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
LCSD-71510(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-71510

Sample wt/vol: 30 (g/mL) G Lab File ID: E2M0040R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 05/06/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/08/2013

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	Q
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	120	

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

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-71510	84	89	89	84			0
02	LCS-71510	88	93	88	88			0
03	LCSD-71510	83	87	84	85			0
04	WC-1	64	65	66	71			0
05	WC-2	68	70	70	73			0
06	WC-3	69	71	69	73			0
07	WC-4	70	71	66	75			0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.05.07.A

3P - FORM III ARO-4

SOIL AROCLOR LABORATORY CONTROL SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-71510

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

Lab Sample ID: LCS-71510 LCS Lot No.: A086503

Date Extracted: 05/06/2013 Date Analyzed (1): 05/08/2013

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	111.3926	84		40-140
Aroclor-1260	133.3330	110.1323	83		60-130

Instrument ID (2): E2 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 05/08/2013

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS
Aroclor-1016	133.3330	115.1906	86		40-140
Aroclor-1260	133.3330	126.2020	95		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:

som13.05.07.A

3P - FORM III ARO-4

SOIL AROCLOR LABORATORY CONTROL

SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-71510

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

Lab Sample ID: LCSD-71510 LCS Lot No.: A086503

Date Extracted: 05/06/2013 Date Analyzed (1): 05/08/2013

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	107.6072	81		40-140	4.0		30
Aroclor-1260	133.3330	105.2508	79		60-130	5.0		30

Instrument ID (2): E2 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 05/08/2013

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS	%RPD	#	RPD LIMIT
Aroclor-1016	133.3330	112.5439	84		40-140	2.0		30
Aroclor-1260	133.3330	123.2172	92		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:

som13.05.07.A

4F - FORM IV ARO

AROCLOR METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-71510

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0641 Mod. Ref No.: SDG No.: SM0641

Lab File ID: E2M0038F.D / E2M0038R.D Lab Sample ID: MB-71510

Matrix: (SOIL/SED/WATER) SOIL Extraction: (Type) SONC Date Extracted: 05/06/2013

Sulfur Cleanup: (Y/N) Y GPC Cleanup:(Y/N) N

Acid Cleanup: (Y/N Y

Date Analyzed (1): 05/08/2013 Date Analyzed (2): 05/08/2013

Time Analyzed (1): 11:07 Time Analyzed (2): 11:07

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-71510	LCS-71510	05/08/2013	05/08/2013
02	LCSD-71510	LCSD-71510	05/08/2013	05/08/2013
03	WC-1	M0641-01A	05/08/2013	05/08/2013
04	WC-2	M0641-02A	05/08/2013	05/08/2013
05	WC-3	M0641-03A	05/08/2013	05/08/2013
06	WC-4	M0641-04A	05/08/2013	05/08/2013

COMMENTS:

* Metals *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Monoco Oil

Laboratory Workorder / SDG #: M0641

SW846 6010C, SW846 7470A

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 7470A

IV. PREPARATION

Soil Samples were prepared following procedures in laboratory test code: SW1311
Aqueous Samples were prepared following procedures in laboratory test code: SW3005A
Aqueous Samples were prepared following procedures in laboratory test code: SW7470A

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: WC-4 (M0641-04AMS).

Percent recoveries were within the QC limits.

D. Post Digestion Spike (PDS):

A post-digestion spike was not performed on any sample in this SDG.

E. Duplicate sample:

A duplicate analysis was not performed on any sample in this SDG.

F. Serial Dilution (SD):

Serial Dilution analysis was performed on sample: WC-4 (M0641-04ASD).

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: 05/15/13

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.

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

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

WC-1

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0641

Matrix (soil/water): WATER Lab Sample ID: M0641-01

Level (low/med): MED Date Received: 05/02/2013

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.7	B		P
7440-39-3	Barium	1070			P
7440-43-9	Cadmium	0.89	U		P
7440-47-3	Chromium	0.64	U		P
7439-92-1	Lead	22.8			P
7439-97-6	Mercury	0.054	B		CV
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P

Comments:

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

WC-2

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0641

Matrix (soil/water): WATER Lab Sample ID: M0641-02

Level (low/med): MED Date Received: 05/02/2013

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.7	B		P
7440-39-3	Barium	1150			P
7440-43-9	Cadmium	0.89	U		P
7440-47-3	Chromium	0.64	U		P
7439-92-1	Lead	10.2			P
7439-97-6	Mercury	0.047	B		CV
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P

Comments:

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

WC-3

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0641

Matrix (soil/water): WATER Lab Sample ID: M0641-03

Level (low/med): MED Date Received: 05/02/2013

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	8.8	B		P
7440-39-3	Barium	1060			P
7440-43-9	Cadmium	0.97	B		P
7440-47-3	Chromium	0.64	U		P
7439-92-1	Lead	52.6			P
7439-97-6	Mercury	0.028	U		CV
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P

Comments:

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

WC-4

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0641

Matrix (soil/water): WATER Lab Sample ID: M0641-04

Level (low/med): MED Date Received: 05/02/2013

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	1010			P
7440-43-9	Cadmium	0.89	U		P
7440-47-3	Chromium	0.64	U		P
7439-92-1	Lead	7.9	B		P
7439-97-6	Mercury	0.028	U		CV
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P

Comments:

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7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0641

Solid LCS Source: LCS(D) ID:

Aqueous LCS Source: **LCS-71533**

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Arsenic	455.0	478.65	105.2						
Barium	9100.0	9735.36	107.0						
Cadmium	227.0	237.28	104.5						
Chromium	910.0	945.10	103.9						
Lead	455.0	467.78	102.8						
Selenium	455.0	464.77	102.1						
Silver	1130.0	1223.76	108.3						

7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0641

Solid LCS Source:

Aqueous LCS Source:

LCS(D) ID:
LCS-71535

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Mercury	4.6	4.44	96.5						

7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0641

Solid LCS Source:

Aqueous LCS Source:

LCS(D) ID:
LCSD-71533

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Arsenic	455.0	481.61	105.8						
Barium	9100.0	9763.23	107.3						
Cadmium	227.0	243.69	107.4						
Chromium	910.0	977.97	107.5						
Lead	455.0	471.30	103.6						
Selenium	455.0	472.28	103.8						
Silver	1130.0	1227.73	108.6						

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0641

Solid LCS Source:

Aqueous LCS Source:

LCS(D) ID:
LCSD-71535

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Mercury	4.6	4.52	98.3						

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5A

SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

WC-4S

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0641

Matrix (soil/water): WATER Level (low/med): MED

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Arsenic	75-125	470		4.3	U	456	103		P
Barium	75-125	10000		1010		9100	99		P
Cadmium	75-125	211		0.89	U	227	93		P
Chromium	75-125	900		0.64	U	910	99		P
Lead	75-125	429		7.9	B	455	93		P
Selenium	75-125	467		12.0	U	455	103		P
Silver	75-125	1220		6.9	U	1130	108		P
Mercury	75-125	4.1		0.028	U	4.6	90		CV

Comments:

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0641

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-71535**

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

FIMS2_130508A

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
Analyte		C	05/08/13 12:01	C		C		C		C	M
Mercury	0.028	U	0.028	U					0.028	U	CV

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3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0641

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-71506**

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

FIMS2_130508A

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
Analyte		C		C		C		C		C	M
Mercury									0.028	U	CV

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0641

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-71506**

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

OPTIMA3_130508A

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 05/08/13 10:02	C	05/08/13 10:34	C	05/08/13 10:55	C	Preparation Blank	C	M
Arsenic	4.3	U	4.3	U	4.3	U	4.3	U	4.300	U	P
Barium	1.1	U	1.1	U	1.2	B	1.3	B	1.100	U	P
Cadmium	0.9	U	0.9	U	0.9	U	0.9	U	0.890	U	P
Chromium	0.6	U	0.6	U	0.6	U	0.6	U	0.640	U	P
Lead	4.2	U	4.2	U	4.2	U	4.2	U	4.200	U	P
Selenium	12.0	U	12.0	U	12.0	U	12.0	U	12.000	U	P
Silver	6.9	U	6.9	U	6.9	U	6.9	U	6.900	U	P

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3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0641

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-71533**

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

OPTIMA3_130508A

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L)	C		C		C	Preparation Blank	C	M
Arsenic									4.300	U	P
Barium									1.100	U	P
Cadmium									0.890	U	P
Chromium									0.640	U	P
Lead									4.200	U	P
Selenium									12.000	U	P
Silver									6.900	U	P

Report Date:
04-Jun-13 13:23

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

LaBella Associates
300 State Street, Suite 201
Rochester, NY 14614

Work Order: M0798
Project : LaBella Monoco Oil
Project #:

Attn: Dan Noll

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M0798-01	WC-1	Soil	21-May-13 09:00	22-May-13 10:40
M0798-02	WC-2	Soil	21-May-13 09:00	22-May-13 10:40
M0798-03	WC-3	Soil	21-May-13 09:00	22-May-13 10:40
M0798-04	WC-4	Soil	21-May-13 09:00	22-May-13 10:40
M0798-05	WC-5	Soil	21-May-13 09:00	22-May-13 10:40

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 requirments have been meet.

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.

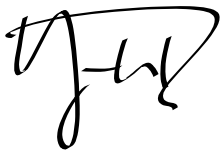
Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

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

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
DoD ELAP
Certificate # L2247 Testing

Authorized by:



Yihai Ding
Laboratory Director

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* Data Summary Pack *

175 Metro Center Boulevard · Warwick, RI 02886-1755 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

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

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

Project Name : LaBella Monoco Oil **SDG :** M0798

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
WC-1	M0798-01	SW8260_W	SW8270_W	SW8082_S	SW6010_W	
WC-1	M0798-01				SW7470	
WC-2	M0798-02	SW8260_W	SW8270_W	SW8082_S	SW6010_W	
WC-2	M0798-02				SW7470	
WC-3	M0798-03	SW8260_W	SW8270_W	SW8082_S	SW6010_W	
WC-3	M0798-03				SW7470	
WC-4	M0798-04	SW8260_W	SW8270_W	SW8082_S	SW6010_W	
WC-4	M0798-04				SW7470	
WC-5	M0798-05	SW8260_W	SW8270_W	SW8082_S	SW6010_W	
WC-5	M0798-05				SW7470	

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

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

Project Name : LaBella Monoco Oil **SDG :** M0798

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8260_W					
M0798-01B	SL	5/21/2013	5/22/2013	NA	5/24/2013
M0798-02B	SL	5/21/2013	5/22/2013	NA	5/24/2013
M0798-03B	SL	5/21/2013	5/22/2013	NA	5/24/2013
M0798-04B	SL	5/21/2013	5/22/2013	NA	5/24/2013
M0798-05B	SL	5/21/2013	5/22/2013	NA	5/24/2013

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

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

Project Name : LaBella Monoco Oil **SDG :** M0798

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8270_W					
M0798-01A	SL	5/21/2013	5/22/2013	5/23/2013	5/24/2013
M0798-02A	SL	5/21/2013	5/22/2013	5/23/2013	5/24/2013
M0798-03A	SL	5/21/2013	5/22/2013	5/23/2013	5/24/2013
M0798-04A	SL	5/21/2013	5/22/2013	5/23/2013	5/24/2013
M0798-05A	SL	5/21/2013	5/22/2013	5/23/2013	5/24/2013
M0798-05AMS	SL	5/21/2013	5/22/2013	5/23/2013	5/24/2013

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

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

Project Name : LaBella Monoco Oil **SDG :** M0798

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8082_S					
M0798-01A	SL	5/21/2013	5/22/2013	5/23/2013	5/25/2013
M0798-02A	SL	5/21/2013	5/22/2013	5/23/2013	5/25/2013
M0798-03A	SL	5/21/2013	5/22/2013	5/23/2013	5/25/2013
M0798-04A	SL	5/21/2013	5/22/2013	5/23/2013	5/25/2013
M0798-05A	SL	5/21/2013	5/22/2013	5/23/2013	5/25/2013

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

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

Project Name : LaBella Monoco Oil **SDG :** M0798

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
SW8260_W					
M0798-01B	SL	SW8260_W	NA	LOW	1
M0798-02B	SL	SW8260_W	NA	LOW	1
M0798-03B	SL	SW8260_W	NA	LOW	1
M0798-04B	SL	SW8260_W	NA	LOW	1
M0798-05B	SL	SW8260_W	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 : LaBella Monoco Oil **SDG :** M0798

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
SW8270_W					
M0798-01A	SL	SW8270_W	3510C	NA	1
M0798-02A	SL	SW8270_W	3510C	NA	1
M0798-03A	SL	SW8270_W	3510C	NA	1
M0798-04A	SL	SW8270_W	3510C	NA	1
M0798-05A	SL	SW8270_W	3510C	NA	1
M0798-05AMS	SL	SW8270_W	3510C	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 : LaBella Monoco Oil **SDG :** M0798

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
SW8082_S					
M0798-01A	SL	SW8082_S	3550B	acid/sulfur	1
M0798-02A	SL	SW8082_S	3550B	acid/sulfur	1
M0798-03A	SL	SW8082_S	3550B	acid/sulfur	1
M0798-04A	SL	SW8082_S	3550B	acid/sulfur	1
M0798-05A	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 : LaBella Monoco Oil **SDG :** M0798

Laboratory Sample ID	Matrix	Metals Requested	Date Received By Lab	Date Analyzed
SW6010_W				
M0798-01A	SL	SW6010_W	5/22/2013	5/24/2013
M0798-02A	SL	SW6010_W	5/22/2013	5/24/2013
M0798-03A	SL	SW6010_W	5/22/2013	5/24/2013
M0798-04A	SL	SW6010_W	5/22/2013	5/24/2013
M0798-05A	SL	SW6010_W	5/22/2013	5/24/2013
M0798-05AMS	SL	SW6010_W	5/22/2013	5/24/2013
SW7470				
M0798-01A	SL	SW7470	5/22/2013	5/24/2013
M0798-02A	SL	SW7470	5/22/2013	5/24/2013
M0798-03A	SL	SW7470	5/22/2013	5/24/2013
M0798-04A	SL	SW7470	5/22/2013	5/24/2013
M0798-05A	SL	SW7470	5/22/2013	5/24/2013
M0798-05AMS	SL	SW7470	5/22/2013	5/24/2013

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

New York State Department of Environmental Conservation

Sample Preparation and Analysis Summary Toxicity Characteristic Leaching Procedure

Project Name : LaBella Monoco Oil **SDG :** M0798

Laboratory Sample ID	Matrix	Analytical Protocol	Date Collected	Date Received By Lab	Date Extracted
SW1311					
M0798-01A	SL	SW1311	5/21/2013	5/22/2013	5/22/2013
M0798-01B	SL	SW1311	5/21/2013	5/22/2013	5/23/2013
M0798-02A	SL	SW1311	5/21/2013	5/22/2013	5/22/2013
M0798-02B	SL	SW1311	5/21/2013	5/22/2013	5/23/2013
M0798-03A	SL	SW1311	5/21/2013	5/22/2013	5/22/2013
M0798-03B	SL	SW1311	5/21/2013	5/22/2013	5/24/2013
M0798-04A	SL	SW1311	5/21/2013	5/22/2013	5/22/2013
M0798-04B	SL	SW1311	5/21/2013	5/22/2013	5/24/2013
M0798-05A	SL	SW1311	5/21/2013	5/22/2013	5/22/2013
M0798-05B	SL	SW1311	5/21/2013	5/22/2013	5/24/2013

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

WorkOrder: M0798

Client ID: LABELLA
Project: LaBella Monoco Oil
WO Name: LaBella Monoco Oil
Location: LABELLA_MONOCO-OIL,

Case:
SDG:
PO: 210259

HC Due: 06/03/13
Fax Due: 05/28/13
Fax Report: ☑

Report Level: ASP-B
Special Program:
EDD: ENVIROINSITE_1
EQUIIS_4_NYSDEC

Comments: MDLs UPDATED and > PQL -- MDLs UPDATED and > PQL -- use this project for between 11-50 samples, no RUSH surcharge base on lab capacity, no charge for MS/MSD or a batch of 7 or more samples, no charge for TB. no hard copy

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M0798-01A	WC-1	05/21/2013 09:00	05/22/2013	Soil	PMoist	/					S1
M0798-01A	WC-1	05/21/2013 09:00	05/22/2013	Soil	SW6010_W	/ TCLP_METALS				Y	S1
M0798-01A	WC-1	05/21/2013 09:00	05/22/2013	Soil	SW7470	/ TCLP_METALS					S1
M0798-01A	WC-1	05/21/2013 09:00	05/22/2013	Soil	SW8082_S	/					S1
M0798-01A	WC-1	05/21/2013 09:00	05/22/2013	Soil	SW8270_W	/ MDLs UPDATED and > PQL -- MDLs UPDATED and > PQL -				Y	S1
M0798-01B	WC-1	05/21/2013 09:00	05/22/2013	Soil	SW8260_W	/ TCLP_VOA				Y	VOA
M0798-02A	WC-2	05/21/2013 09:00	05/22/2013	Soil	PMoist	/					S1
M0798-02A	WC-2	05/21/2013 09:00	05/22/2013	Soil	SW6010_W	/ TCLP_METALS				Y	S1
M0798-02A	WC-2	05/21/2013 09:00	05/22/2013	Soil	SW7470	/ TCLP_METALS					S1
M0798-02A	WC-2	05/21/2013 09:00	05/22/2013	Soil	SW8082_S	/					S1
M0798-02A	WC-2	05/21/2013 09:00	05/22/2013	Soil	SW8270_W	/ MDLs UPDATED and > PQL -- MDLs UPDATED and > PQL -				Y	S1
M0798-02B	WC-2	05/21/2013 09:00	05/22/2013	Soil	SW8260_W	/ TCLP_VOA				Y	VOA
M0798-03A	WC-3	05/21/2013 09:00	05/22/2013	Soil	PMoist	/					S1
M0798-03A	WC-3	05/21/2013 09:00	05/22/2013	Soil	SW6010_W	/ TCLP_METALS				Y	S1
M0798-03A	WC-3	05/21/2013 09:00	05/22/2013	Soil	SW7470	/ TCLP_METALS					S1
M0798-03A	WC-3	05/21/2013 09:00	05/22/2013	Soil	SW8082_S	/					S1
M0798-03A	WC-3	05/21/2013 09:00	05/22/2013	Soil	SW8270_W	/ MDLs UPDATED and > PQL -- MDLs UPDATED and > PQL -				Y	S1
M0798-03B	WC-3	05/21/2013 09:00	05/22/2013	Soil	SW8260_W	/ TCLP_VOA				Y	VOA
M0798-04A	WC-4	05/21/2013 09:00	05/22/2013	Soil	PMoist	/					S1
M0798-04A	WC-4	05/21/2013 09:00	05/22/2013	Soil	SW6010_W	/ TCLP_METALS				Y	S1
M0798-04A	WC-4	05/21/2013 09:00	05/22/2013	Soil	SW7470	/ TCLP_METALS					S1

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

HT = Test logged in but has been placed on hold

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

WorkOrder: M0798

Client ID: LABELLA
Project: LaBella Monoco Oil
WO Name: LaBella Monoco Oil
Location: LABELLA_MONOCO-OIL,

Case:
SDG:
PO: 210259

HC Due: 06/03/13
Fax Due: 05/28/13
Fax Report: ☑

Report Level: ASP-B
Special Program:
EDD: ENVIROINSITE_1
EQUIIS_4_NYSDEC

Comments: MDLs UPDATED and > PQL -- MDLs UPDATED and > PQL -- use this project for between 11-50 samples, no RUSH surcharge base on lab capacity, no charge for MS/MSD or a batch of 7 or more samples, no charge for TB. no hard copy

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M0798-04A	WC-4	05/21/2013 09:00	05/22/2013	Soil	SW8082_S	/					S1
M0798-04A	WC-4	05/21/2013 09:00	05/22/2013	Soil	SW8270_W	/ MDLs UPDATED and > PQL -- MDLs UPDATED and > PQL -				Y	S1
M0798-04B	WC-4	05/21/2013 09:00	05/22/2013	Soil	SW8260_W	/ TCLP_VOA				Y	VOA
M0798-05A	WC-5	05/21/2013 09:00	05/22/2013	Soil	PMoist	/					S1
M0798-05A	WC-5	05/21/2013 09:00	05/22/2013	Soil	SW6010_W	/ TCLP_METALS				Y	S1
M0798-05A	WC-5	05/21/2013 09:00	05/22/2013	Soil	SW7470	/ TCLP_METALS					S1
M0798-05A	WC-5	05/21/2013 09:00	05/22/2013	Soil	SW8082_S	/					S1
M0798-05A	WC-5	05/21/2013 09:00	05/22/2013	Soil	SW8270_W	/ MDLs UPDATED and > PQL -- MDLs UPDATED and > PQL -				Y	S1
M0798-05B	WC-5	05/21/2013 09:00	05/22/2013	Soil	SW8260_W	/ TCLP_VOA				Y	VOA

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

HT = Test logged in but has been placed on hold

* Volatiles *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Monoco Oil

Laboratory Workorder / SDG #: M0798

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

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

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: V10
Instrument Type: GCMS-VOA

Description: HP7890A
Manufacturer: Agilent
Model: 7890A / 5975C

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

TCLP blank MB-71858 has Benzene detected above the reporting limit but much lower than the TCLP regulatory limit of 500 ug/L.

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.

Replicate RPDs were within the advisory 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.

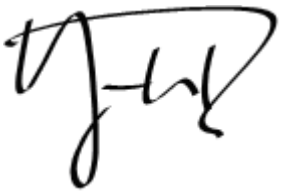
G. Samples:

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.



Signed:_____ _____

Date:_____6/3/2013_____

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.

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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

WC-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0798-01B

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8C0004.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/22/2013

% Moisture: not dec. Date Analyzed: 05/24/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	6.6	
79-01-6	Trichloroethene	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

WC-2

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0798-02B

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8C0005.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/22/2013

% Moisture: not dec. Date Analyzed: 05/24/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	7.0	
79-01-6	Trichloroethene	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

WC-3

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0798-03B

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8C0009.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/22/2013

% Moisture: not dec. Date Analyzed: 05/24/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	6.2	
79-01-6	Trichloroethene	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

WC-4

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0798-04B

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8C0010.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/22/2013

% Moisture: not dec. Date Analyzed: 05/24/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	7.8	
79-01-6	Trichloroethene	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

WC-5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0798-05B

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8C0011.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/22/2013

% Moisture: not dec. Date Analyzed: 05/24/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	0.52	J
79-01-6	Trichloroethene	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-71850

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-71850

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8C0003.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 05/24/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	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
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-71858

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-71858

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8C0008.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 05/24/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	8.5	
79-01-6	Trichloroethene	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-71881

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-71881

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8C0002.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 05/24/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	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
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-71881

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-71881

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8C0000.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 05/24/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	47	
75-35-4	1,1-Dichloroethene	47	
78-93-3	2-Butanone	50	
67-66-3	Chloroform	49	
56-23-5	Carbon tetrachloride	46	
107-06-2	1,2-Dichloroethane	48	
71-43-2	Benzene	51	
79-01-6	Trichloroethene	46	
127-18-4	Tetrachloroethene	45	
108-90-7	Chlorobenzene	48	

2B - FORM II VOA-2

WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

Level: (TRACE or LOW) LOW

	CLIENT SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-71881	100	99	100	100				0
02	MB-71881	100	100	101	98				0
03	MB-71850	100	100	101	99				0
04	WC-1	99	101	101	99				0
05	WC-2	99	101	102	98				0
06	MB-71858	100	99	106	99				0
07	WC-3	100	99	101	99				0
08	WC-4	100	101	101	98				0
09	WC-5	101	101	103	100				0

		QC LIMITS
VDMC1	(DBFM) Dibromofluoromethane	(85-115)
VDMC2	(DCE) = 1,2-Dichloroethane-d4	(70-120)
VDMC3	(TOL) = Toluene-d8	(85-120)
VDMC4	(BFB) = Bromofluorobenzene	(75-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

som13.05.07.A

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.
LCS-71881

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

Lab Sample ID: LCS-71881 LCS Lot No.:

Date Extracted: 05/24/2013 Date Analyzed (1): 05/24/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Vinyl chloride	50.0000	0.0000	47.2893	95		50 - 145
1,1-Dichloroethene	50.0000	0.0000	46.6132	93		70 - 130
2-Butanone	50.0000	0.0000	50.2597	101		30 - 150
Chloroform	50.0000	0.0000	48.5981	97		65 - 135
Carbon tetrachloride	50.0000	0.0000	46.2310	92		65 - 140
1,2-Dichloroethane	50.0000	0.0000	48.3575	97		70 - 130
Benzene	50.0000	0.0000	50.7739	102		80 - 120
Trichloroethene	50.0000	0.0000	46.1692	92		70 - 125
Tetrachloroethene	50.0000	0.0000	44.7583	90		45 - 150
Chlorobenzene	50.0000	0.0000	47.7703	96		80 - 120

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

* Values outside of QC limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.
MB-71881

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

Lab File ID: V8C0002.D Lab Sample ID: MB-71881

Instrument ID: V10

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 05/24/2013

Level: (TRACE or LOW/MED) LOW Time Analyzed: 12:37

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-71881	LCS-71881	V8C0000.D	11:42
02	MB-71850	MB-71850	V8C0003.D	13:04
03	WC-1	M0798-01B	V8C0004.D	13:31
04	WC-2	M0798-02B	V8C0005.D	13:59
05	MB-71858	MB-71858	V8C0008.D	15:20
06	WC-3	M0798-03B	V8C0009.D	15:48
07	WC-4	M0798-04B	V8C0010.D	16:15
08	WC-5	M0798-05B	V8C0011.D	16:43

COMMENTS:

som13.05.07.A

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 05/24/2013 05/24/2013

EPA Sample No.(VSTD#####): VSTD05010K Date Analyzed: 05/24/2013

Lab File ID (Standard): V8B9992.D Time Analyzed: 8:01

Instrument ID: V10 Heated Purge: (Y/N) N

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	4935506		5.307		3890502		8.294		1970233		10.786	
	UPPER LIMIT	9871012		5.807		7781004		8.794		3940466		11.286	
	LOWER LIMIT	2467753		4.807		1945251		7.794		985117		10.286	
	SAMPLE NO.												
01	LCS-71881	4973563		5.310		3934361		8.294		1944241		10.786	
02	MB-71881	4923480		5.310		3819485		8.294		1743546		10.789	
03	MB-71850	4880422		5.310		3796169		8.294		1762828		10.786	
04	WC-1	4933834		5.310		3806633		8.294		1814213		10.786	
05	WC-2	4879297		5.310		3789073		8.294		1775549		10.786	
06	MB-71858	4822342		5.310		3779587		8.294		1846192		10.786	
07	WC-3	4822583		5.310		3742245		8.294		1774440		10.786	
08	WC-4	4752527		5.310		3726571		8.294		1794577		10.786	
09	WC-5	4756952		5.310		3639075		8.294		1739157		10.786	

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.

* Semivolatile Organics *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Monoco Oil

Laboratory Workorder / SDG #: M0798

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

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

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 with the following exceptions. Please note that the acceptance criteria allow one surrogate recovery outside of the QC limits per fraction.

WC-1 (M0798-01A-TCLP), recovery is above criteria for 2,4,6-Tribromophenol at 131% with criteria of (40-125).

WC-4 (M0798-04A-TCLP), recovery is above criteria for 2,4,6-Tribromophenol at 130% with criteria of (40-125) and Nitrobenzene-d5 at 111% with criteria of (40-110).

D. Spikes:

1. Laboratory Control Spikes (LCS):

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

Replicate RPDs were within the advisory QC limits.

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

Matrix spikes were performed on sample: WC-5 (M0798-05AMS).

Percent recoveries were within the QC limits with the following exceptions:

WC-5 (M0798-05AMS-TCLP), recovery is above criteria for Hexachlorobenzene at 111% with criteria of (50-110).

Replicate RPDs were within the advisory QC limits.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

F. Dilutions:

No sample in this SDG required analysis at dilution.

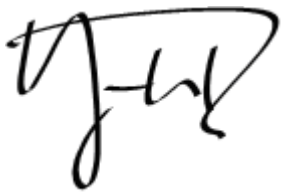
G. Samples:

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.



Signed:_____ _____

Date:_____6/3/2013_____

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.

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

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0798-01A

Sample wt/vol: 300 (g/mL) ML Lab File ID: S6B4058.D

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

% Moisture: Decanted: (Y/N) Date Received: 05/22/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/23/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/24/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	33	U
95-48-7	2-Methylphenol	33	U
106-44-5	4-Methylphenol	33	U
67-72-1	Hexachloroethane	33	U
98-95-3	Nitrobenzene	33	U
87-68-3	Hexachlorobutadiene	33	U
88-06-2	2,4,6-Trichlorophenol	33	U
95-95-4	2,4,5-Trichlorophenol	67	U
121-14-2	2,4-Dinitrotoluene	33	U
118-74-1	Hexachlorobenzene	33	U
87-86-5	Pentachlorophenol	67	U
110-86-1	Pyridine	67	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-2

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0798-02A

Sample wt/vol: 300 (g/mL) ML Lab File ID: S6B4059.D

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

% Moisture: Decanted: (Y/N) Date Received: 05/22/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/23/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/24/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	33	U
95-48-7	2-Methylphenol	33	U
106-44-5	4-Methylphenol	33	U
67-72-1	Hexachloroethane	33	U
98-95-3	Nitrobenzene	33	U
87-68-3	Hexachlorobutadiene	33	U
88-06-2	2,4,6-Trichlorophenol	33	U
95-95-4	2,4,5-Trichlorophenol	67	U
121-14-2	2,4-Dinitrotoluene	33	U
118-74-1	Hexachlorobenzene	33	U
87-86-5	Pentachlorophenol	67	U
110-86-1	Pyridine	67	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-3

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0798-03A

Sample wt/vol: 300 (g/mL) ML Lab File ID: S6B4060.D

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

% Moisture: Decanted: (Y/N) Date Received: 05/22/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/23/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/24/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	33	U
95-48-7	2-Methylphenol	33	U
106-44-5	4-Methylphenol	33	U
67-72-1	Hexachloroethane	33	U
98-95-3	Nitrobenzene	33	U
87-68-3	Hexachlorobutadiene	33	U
88-06-2	2,4,6-Trichlorophenol	33	U
95-95-4	2,4,5-Trichlorophenol	67	U
121-14-2	2,4-Dinitrotoluene	33	U
118-74-1	Hexachlorobenzene	33	U
87-86-5	Pentachlorophenol	67	U
110-86-1	Pyridine	67	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-4

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0798-04A

Sample wt/vol: 300 (g/mL) ML Lab File ID: S6B4061.D

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

% Moisture: Decanted: (Y/N) Date Received: 05/22/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/23/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/24/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	33	U
95-48-7	2-Methylphenol	33	U
106-44-5	4-Methylphenol	33	U
67-72-1	Hexachloroethane	33	U
98-95-3	Nitrobenzene	33	U
87-68-3	Hexachlorobutadiene	33	U
88-06-2	2,4,6-Trichlorophenol	33	U
95-95-4	2,4,5-Trichlorophenol	67	U
121-14-2	2,4-Dinitrotoluene	33	U
118-74-1	Hexachlorobenzene	33	U
87-86-5	Pentachlorophenol	67	U
110-86-1	Pyridine	67	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0798-05A

Sample wt/vol: 300 (g/mL) ML Lab File ID: S6B4062.D

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

% Moisture: Decanted: (Y/N) Date Received: 05/22/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/23/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/24/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	33	U
95-48-7	2-Methylphenol	33	U
106-44-5	4-Methylphenol	33	U
67-72-1	Hexachloroethane	33	U
98-95-3	Nitrobenzene	33	U
87-68-3	Hexachlorobutadiene	33	U
88-06-2	2,4,6-Trichlorophenol	33	U
95-95-4	2,4,5-Trichlorophenol	67	U
121-14-2	2,4-Dinitrotoluene	33	U
118-74-1	Hexachlorobenzene	33	U
87-86-5	Pentachlorophenol	67	U
110-86-1	Pyridine	67	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-71837

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-71837

Sample wt/vol: 300 (g/mL) ML Lab File ID: S6B4042.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/23/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/24/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	33	U
95-48-7	2-Methylphenol	33	U
106-44-5	4-Methylphenol	33	U
67-72-1	Hexachloroethane	33	U
98-95-3	Nitrobenzene	33	U
87-68-3	Hexachlorobutadiene	33	U
88-06-2	2,4,6-Trichlorophenol	33	U
95-95-4	2,4,5-Trichlorophenol	67	U
121-14-2	2,4-Dinitrotoluene	33	U
118-74-1	Hexachlorobenzene	33	U
87-86-5	Pentachlorophenol	67	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-71842

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-71842

Sample wt/vol: 300 (g/mL) ML Lab File ID: S6B4056.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/23/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/24/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	130	
95-48-7	2-Methylphenol	110	
106-44-5	4-Methylphenol	100	
67-72-1	Hexachloroethane	120	
98-95-3	Nitrobenzene	130	
87-68-3	Hexachlorobutadiene	160	
88-06-2	2,4,6-Trichlorophenol	120	
95-95-4	2,4,5-Trichlorophenol	150	
121-14-2	2,4-Dinitrotoluene	140	
118-74-1	Hexachlorobenzene	160	
87-86-5	Pentachlorophenol	110	
110-86-1	Pyridine	100	

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-71842

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-71842

Sample wt/vol: 300 (g/mL) ML Lab File ID: S6B4057.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/23/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/24/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	130	
95-48-7	2-Methylphenol	110	
106-44-5	4-Methylphenol	110	
67-72-1	Hexachloroethane	120	
98-95-3	Nitrobenzene	140	
87-68-3	Hexachlorobutadiene	160	
88-06-2	2,4,6-Trichlorophenol	120	
95-95-4	2,4,5-Trichlorophenol	160	
121-14-2	2,4-Dinitrotoluene	150	
118-74-1	Hexachlorobenzene	170	
87-86-5	Pentachlorophenol	120	
110-86-1	Pyridine	97	

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-5MS

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0798-05AMS

Sample wt/vol: 300 (g/mL) ML Lab File ID: S6B4063.D

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

% Moisture: Decanted: (Y/N) Date Received: 05/22/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/23/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/24/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	120	
95-48-7	2-Methylphenol	150	
106-44-5	4-Methylphenol	110	
67-72-1	Hexachloroethane	110	
98-95-3	Nitrobenzene	150	
87-68-3	Hexachlorobutadiene	150	
88-06-2	2,4,6-Trichlorophenol	140	
95-95-4	2,4,5-Trichlorophenol	170	
121-14-2	2,4-Dinitrotoluene	160	
118-74-1	Hexachlorobenzene	190	
87-86-5	Pentachlorophenol	140	
110-86-1	Pyridine	70	

2H - FORM II SV-2

WATER SEMIVOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

	EPA SAMPLE NO.	SDMC1 (NBZ) #	SDMC2 (FBP) #	SDMC3 (TPH) #	SDMC4 (PHL) #	SDMC5 (2FP) #	SDMC6 (TBP) #			TOT OUT
01	MB-71837	99	92	113	75	80	104			0
02	LCS-71842	94	93	89	70	72	106			0
03	LCSD-71842	92	93	96	70	70	110			0
04	WC-1	98	93	106	42	58	131 *			1
05	WC-2	101	91	103	49	60	110			0
06	WC-3	108	97	108	46	61	114			0
07	WC-4	111 *	101	104	47	65	130 *			2
08	WC-5	107	99	105	49	66	121			0
09	WC-5MS	99	97	90	40	55	122			0

		QC LIMITS
SDMC1	(NBZ) = Nitrobenzene-d5	(40-110)
SDMC2	(FBP) = 2-Fluorobiphenyl	(50-110)
SDMC3	(TPH) = Terphenyl-d14	(50-135)
SDMC4	(PHL) = Phenol-d5	(10-115)
SDMC5	(2FP) = 2-Fluorophenol	(20-110)
SDMC6	(TBP) = 2,4,6-Tribromophenol	(40-125)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D DMC diluted out

som13.05.07.A

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-71842

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

Lab Sample ID: LCS-71842 LCS Lot No.: A091166

Date Extracted: 05/23/2013 Date Analyzed (1): 05/24/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
1,4-Dichlorobenzene	166.6667	0.0000	131.6119	79		30 - 100
2-Methylphenol	166.6667	0.0000	112.6375	68		40 - 110
4-Methylphenol	166.6667	0.0000	104.7427	63		30 - 110
Hexachloroethane	166.6667	0.0000	120.3258	72		30 - 95
Nitrobenzene	166.6667	0.0000	133.0188	80		45 - 110
Hexachlorobutadiene	166.6667	0.0000	163.2669	98		25 - 105
2,4,6-Trichlorophenol	166.6667	0.0000	120.8286	72		50 - 115
2,4,5-Trichlorophenol	166.6667	0.0000	152.9023	92		50 - 110
2,4-Dinitrotoluene	166.6667	0.0000	143.0358	86		50 - 120
Hexachlorobenzene	166.6667	0.0000	158.6231	95		50 - 110
Pentachlorophenol	166.6667	0.0000	108.3617	65		40 - 115
Pyridine	166.6667	0.0000	99.8989	60		10 - 106

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

* Values outside of QC limits

Spike Recovery: 0 out of 12 outside limits

COMMENTS:

3 - FORM III

WATER LABORATORY CONTROL

SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-71842

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

Lab Sample ID: LCSD-71842 LCS Lot No.: A091166

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
1,4-Dichlorobenzene	166.6667	130.1065	78		1		40	30 - 100
2-Methylphenol	166.6667	107.9572	65		5		40	40 - 110
4-Methylphenol	166.6667	105.3510	63		0		40	30 - 110
Hexachloroethane	166.6667	116.8704	70		3		40	30 - 95
Nitrobenzene	166.6667	136.6085	82		2		40	45 - 110
Hexachlorobutadiene	166.6667	164.9099	99		1		40	25 - 105
2,4,6-Trichlorophenol	166.6667	124.3957	75		4		40	50 - 115
2,4,5-Trichlorophenol	166.6667	160.9615	97		5		40	50 - 110
2,4-Dinitrotoluene	166.6667	153.1546	92		7		40	50 - 120
Hexachlorobenzene	166.6667	171.7330	103		8		40	50 - 110
Pentachlorophenol	166.6667	120.1902	72		10		40	40 - 115
Pyridine	166.6667	97.0951	58		3		40	10 - 106

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

* Values outside of QC limits

RPD: 0 out of 12 outside limits

Spike Recovery: 0 out of 12 outside limits

COMMENTS:

4C - FORM IV SV

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-71837

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

Lab File ID: S6B4042.D Lab Sample ID: MB-71837

Instrument ID: S6 Date Extracted: 05/23/2013

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 05/24/2013

Level: (LOW/MED) LOW Time Analyzed: 12:08

Extraction: (Type) SEPF GPC Cleanup: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	LCS-71842	LCS-71842	S6B4056.D	05/24/2013
02	LCSD-71842	LCSD-71842	S6B4057.D	05/24/2013
03	WC-1	M0798-01A	S6B4058.D	05/24/2013
04	WC-2	M0798-02A	S6B4059.D	05/24/2013
05	WC-3	M0798-03A	S6B4060.D	05/24/2013
06	WC-4	M0798-04A	S6B4061.D	05/24/2013
07	WC-5	M0798-05A	S6B4062.D	05/24/2013
08	WC-5MS	M0798-05AMS	S6B4063.D	05/24/2013

COMMENTS:

8C - FORM VIII SV-1

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 04/17/2013 04/17/2013

EPA Sample No.(SSTD020##) SSTD025B6 Date Analyzed: 05/24/2013

Lab File ID (Standard): S6B4041.D Time Analyzed: 11:36

Instrument ID: S6

		IS1 (DCB) AREA	#	IS1 (DCB) RT	#	IS2 (NPT) AREA	#	IS2 (NPT) RT	#	IS3 (ANT) AREA	#	IS3 (ANT) RT	#
	12 HOUR STD	83502		4.588		348419		5.646		276301		7.091	
	UPPER LIMIT	167004		5.088		696838		6.146		552602		7.591	
	LOWER LIMIT	41751		4.088		174210		5.146		138151		6.591	
	EPA SAMPLE NO.												
01	MB-71837	91206		4.588		375263		5.640		279348		7.091	
02	LCS-71842	115262		4.594		461778		5.646		334852		7.097	
03	LCSD-71842	129110		4.594		514950		5.652		374667		7.097	
04	WC-1	111784		4.588		443172		5.646		310421		7.091	
05	WC-2	106937		4.588		430881		5.646		306423		7.091	
06	WC-3	105179		4.588		417781		5.646		298563		7.091	
07	WC-4	112822		4.594		449279		5.646		318097		7.091	
08	WC-5	115920		4.594		471225		5.646		332113		7.091	
09	WC-5MS	108694		4.594		442796		5.646		324564		7.097	

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

8D - FORM VIII SV-2

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

EPA Sample No.(SSTD020##) SSTD025B6 Date Analyzed: 05/24/2013

Lab File ID (Standard): S6B4041.D Time Analyzed: 11:36

Instrument ID: S6 GC Column: Rxi-5sil MS ID: 0.25 (mm)

		IS4 (PHN) AREA	#	RT	#	IS5 (CRY) AREA	#	RT	#	IS6 (PRY) AREA	#	RT	#
	12 HOUR STD	600892		8.319		938480		10.575		863330		11.885	
	UPPER LIMIT	1201784		8.819		1876960		11.075		1726660		12.385	
	LOWER LIMIT	300446		7.819		469240		10.075		431665		11.385	
	EPA SAMPLE NO.												
01	MB-71837	597946		8.319		836436		10.593		868965		11.921	
02	LCS-71842	683706		8.319		1085325		10.569		971579		11.874	
03	LCSD-71842	754616		8.325		1175918		10.569		1025468		11.868	
04	WC-1	654034		8.319		866939		10.558		873463		11.856	
05	WC-2	644778		8.313		856097		10.552		857515		11.850	
06	WC-3	626967		8.313		854665		10.546		863369		11.839	
07	WC-4	657590		8.313		884809		10.552		878643		11.850	
08	WC-5	684331		8.313		900203		10.552		888474		11.839	
09	WC-5MS	660280		8.319		1018537		10.558		902422		11.845	

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.

* PCB Organics *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Monoco Oil

Laboratory Workorder / SDG #: M0798

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.

Replicate RPDs were within the advisory 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:

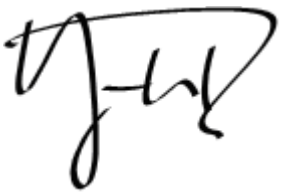
The lower concentration between the primary and confirmatory GC column concentrations is reported due to the presence of interferences unless otherwise indicated. P flags are assigned to compounds when D% between the two columns are greater than 40%.

No other unusual occurrences were noted during sample analysis.

G. Manual Integration

No sample in this SDG were performed with manual integration.

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:_____6/3/2013_____

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.

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

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0798-01A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: E2M0386F.D/E2M0386R.D

% Moisture: 22 Decanted: (Y/N) N Date Received: 05/22/2013

Extraction: (Type) SONC Date Extracted: 05/23/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/25/2013

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	Q
12674-11-2	Aroclor-1016	42	U
11104-28-2	Aroclor-1221	42	U
11141-16-5	Aroclor-1232	42	U
53469-21-9	Aroclor-1242	42	U
12672-29-6	Aroclor-1248	42	U
11097-69-1	Aroclor-1254	42	U
11096-82-5	Aroclor-1260	42	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-2

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0798-02A

Sample wt/vol: 30.4 (g/mL) G Lab File ID: E2M0387F.D/E2M0387R.D

% Moisture: 13 Decanted: (Y/N) N Date Received: 05/22/2013

Extraction: (Type) SONC Date Extracted: 05/23/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/25/2013

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	Q
12674-11-2	Aroclor-1016	37	U
11104-28-2	Aroclor-1221	37	U
11141-16-5	Aroclor-1232	37	U
53469-21-9	Aroclor-1242	37	U
12672-29-6	Aroclor-1248	37	U
11097-69-1	Aroclor-1254	37	U
11096-82-5	Aroclor-1260	37	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-3

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0798-03A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E2M0388F.D/E2M0388R.D

% Moisture: 11 Decanted: (Y/N) N Date Received: 05/22/2013

Extraction: (Type) SONC Date Extracted: 05/23/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/25/2013

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	Q
12674-11-2	Aroclor-1016	37	U
11104-28-2	Aroclor-1221	37	U
11141-16-5	Aroclor-1232	37	U
53469-21-9	Aroclor-1242	37	U
12672-29-6	Aroclor-1248	37	U
11097-69-1	Aroclor-1254	37	U
11096-82-5	Aroclor-1260	37	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-4

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0798-04A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: E2M0389F.D/E2M0389R.D

% Moisture: 16 Decanted: (Y/N) N Date Received: 05/22/2013

Extraction: (Type) SONC Date Extracted: 05/23/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/25/2013

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	Q
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	39	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	39	U
11096-82-5	Aroclor-1260	39	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC-5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0798-05A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E2M0390F.D/E2M0390R.D

% Moisture: 24 Decanted: (Y/N) N Date Received: 05/22/2013

Extraction: (Type) SONC Date Extracted: 05/23/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/25/2013

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	Q
12674-11-2	Aroclor-1016	43	U
11104-28-2	Aroclor-1221	43	U
11141-16-5	Aroclor-1232	43	U
53469-21-9	Aroclor-1242	43	U
12672-29-6	Aroclor-1248	43	U
11097-69-1	Aroclor-1254	43	U
11096-82-5	Aroclor-1260	43	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-71862

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-71862

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E2M0383F.D/E2M0383R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 05/23/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/25/2013

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	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-71862(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-71862

Sample wt/vol: 30 (g/mL) G Lab File ID: E2M0384F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 05/23/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/25/2013

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	Q
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	130	

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-71862(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-71862

Sample wt/vol: 30 (g/mL) G Lab File ID: E2M0384R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 05/23/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/25/2013

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	Q
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	120	

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
LCSD-71862(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-71862

Sample wt/vol: 30 (g/mL) G Lab File ID: E2M0385F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 05/23/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/25/2013

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	Q
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	

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
LCSD-71862(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-71862

Sample wt/vol: 30 (g/mL) G Lab File ID: E2M0385R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 05/23/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/25/2013

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	Q
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	120	

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

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-71862	94	92	88	89			0
02	LCS-71862	92	91	85	92			0
03	LCSD-71862	92	90	84	90			0
04	WC-1	76	74	66	84			0
05	WC-2	77	76	71	85			0
06	WC-3	77	75	68	87			0
07	WC-4	65	63	63	76			0
08	WC-5	67	65	64	81			0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.05.07.A

3P - FORM III ARO-4

SOIL AROCLOR LABORATORY CONTROL SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-71862

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

Lab Sample ID: LCS-71862 LCS Lot No.: A072217

Date Extracted: 05/23/2013 Date Analyzed (1): 05/25/2013

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	112.8550	85		40-140
Aroclor-1260	133.3330	128.1577	96		60-130

Instrument ID (2): E2 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 05/25/2013

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS
Aroclor-1016	133.3330	112.0296	84		40-140
Aroclor-1260	133.3330	122.1695	92		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:

som13.05.07.A

3P - FORM III ARO-4

SOIL AROCLOR LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-71862

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

Lab Sample ID: LCSD-71862 LCS Lot No.: A072217

Date Extracted: 05/23/2013 Date Analyzed (1): 05/25/2013

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	115.9884	87		40-140	2.0		30
Aroclor-1260	133.3330	130.3025	98		60-130	2.0		30

Instrument ID (2): E2 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 05/25/2013

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS	%RPD	#	RPD LIMIT
Aroclor-1016	133.3330	114.7735	86		40-140	2.0		30
Aroclor-1260	133.3330	123.8084	93		60-130	1.0		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:

som13.05.07.A

4F - FORM IV ARO

AROCLOR METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-71862

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0798 Mod. Ref No.: SDG No.: SM0798

Lab File ID: E2M0383F.D / E2M0383R.D Lab Sample ID: MB-71862

Matrix: (SOIL/SED/WATER) SOIL Extraction: (Type) SONC Date Extracted: 05/23/2013

Sulfur Cleanup: (Y/N) Y GPC Cleanup:(Y/N) N

Acid Cleanup: (Y/N Y

Date Analyzed (1): 05/25/2013 Date Analyzed (2): 05/25/2013

Time Analyzed (1): 8:45 Time Analyzed (2): 8:45

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-71862	LCS-71862	05/25/2013	05/25/2013
02	LCSD-71862	LCSD-71862	05/25/2013	05/25/2013
03	WC-1	M0798-01A	05/25/2013	05/25/2013
04	WC-2	M0798-02A	05/25/2013	05/25/2013
05	WC-3	M0798-03A	05/25/2013	05/25/2013
06	WC-4	M0798-04A	05/25/2013	05/25/2013
07	WC-5	M0798-05A	05/25/2013	05/25/2013

COMMENTS:

* Metals *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Monoco Oil

Laboratory Workorder / SDG #: M0798

SW846 1311, SW846 6010C, SW846 7470A

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 7470A

IV. PREPARATION

Soil Samples were prepared following procedures in laboratory test code: SW1311
Aqueous Samples were prepared following procedures in laboratory test code: SW3005A
Aqueous Samples were prepared following procedures in laboratory test code: SW7470A

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: WC-5 (M0798-05AMS).

Percent recoveries were within the QC limits with the following exceptions:

WC-5 (M0798-05AMS-TCLP), recovery is below criteria for Mercury at 47% with criteria of (80-120).

D. Post Digestion Spike (PDS):

A post-digestion spike was not performed on any sample in this SDG.

E. Duplicate sample:

A duplicate analysis was not performed on any sample in this SDG.

F. Serial Dilution (SD):

Serial Dilution analyses were performed on sample: WC-5 (M0798-05ASD).

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: 06/04/13

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.

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

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

WC-1

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0798

Matrix (soil/water): WATER Lab Sample ID: M0798-01

Level (low/med): MED Date Received: 05/22/2013

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	8.3	B		P
7440-39-3	Barium	1510			P
7440-43-9	Cadmium	2.0	B		P
7440-47-3	Chromium	2.3	B		P
7439-92-1	Lead	69.6			P
7439-97-6	Mercury	0.028	U	N	CV
7782-49-2	Selenium	12.5	B		P
7440-22-4	Silver	6.9	U		P

Comments:

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

WC-2

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0798

Matrix (soil/water): WATER Lab Sample ID: M0798-02

Level (low/med): MED Date Received: 05/22/2013

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	1010			P
7440-43-9	Cadmium	0.89	U		P
7440-47-3	Chromium	0.64	U		P
7439-92-1	Lead	19.7			P
7439-97-6	Mercury	0.028	U	N	CV
7782-49-2	Selenium	13.7	B		P
7440-22-4	Silver	6.9	U		P

Comments:

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

WC-3

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0798

Matrix (soil/water): WATER Lab Sample ID: M0798-03

Level (low/med): MED Date Received: 05/22/2013

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	1050			P
7440-43-9	Cadmium	0.89	U		P
7440-47-3	Chromium	0.64	U		P
7439-92-1	Lead	6.4	B		P
7439-97-6	Mercury	0.028	U	N	CV
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P

Comments:

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

WC-4

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0798

Matrix (soil/water): WATER Lab Sample ID: M0798-04

Level (low/med): MED Date Received: 05/22/2013

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.7	B		P
7440-39-3	Barium	1350			P
7440-43-9	Cadmium	1.2	B		P
7440-47-3	Chromium	0.64	U		P
7439-92-1	Lead	21.0			P
7439-97-6	Mercury	0.028	U	N	CV
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P

Comments:

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

WC-5

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0798

Matrix (soil/water): WATER Lab Sample ID: M0798-05

Level (low/med): MED Date Received: 05/22/2013

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.5	B		P
7440-39-3	Barium	1180			P
7440-43-9	Cadmium	1.4	B		P
7440-47-3	Chromium	0.64	U		P
7439-92-1	Lead	21.8			P
7439-97-6	Mercury	0.028	U	N	CV
7782-49-2	Selenium	14.1	B		P
7440-22-4	Silver	6.9	U		P

Comments:

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0798

Solid LCS Source:

Aqueous LCS Source:

LCS(D) ID:
LCS-71856

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Arsenic	455.0	482.41	106.0						
Barium	9100.0	9824.83	108.0						
Cadmium	227.0	238.51	105.1						
Chromium	910.0	951.87	104.6						
Lead	455.0	479.83	105.5						
Selenium	455.0	479.55	105.4						
Silver	1130.0	1182.22	104.6						

7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0798

Solid LCS Source:

Aqueous LCS Source:

LCS(D) ID:
LCS-71857

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Mercury	4.6	4.19	91.1						

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0798

Solid LCS Source:

Aqueous LCS Source:

LCS(D) ID:
LCSD-71856

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Arsenic	455.0	486.12	106.8						
Barium	9100.0	9595.51	105.4						
Cadmium	227.0	249.21	109.8						
Chromium	910.0	977.54	107.4						
Lead	455.0	475.55	104.5						
Selenium	455.0	478.41	105.1						
Silver	1130.0	1182.79	104.7						

7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0798

Solid LCS Source:

Aqueous LCS Source:

LCS(D) ID:
LCSD-71857

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Mercury	4.6	4.64	100.9						

U.S. EPA - CLP

5A

SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

WC-5S

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0798

Matrix (soil/water): WATER Level (low/med): MED

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Arsenic	75-125	488		4.5	B	456	106		P
Barium	75-125	10100		1180		9100	99		P
Cadmium	75-125	227		1.4	B	227	99		P
Chromium	75-125	897		0.64	U	910	99		P
Lead	75-125	469		21.8		455	98		P
Selenium	75-125	483		14.1	B	455	103		P
Silver	75-125	1200		6.9	U	1130	107		P
Mercury	75-125	2.2		0.028	U	4.6	48	N	CV

Comments:

U.S. EPA - CLP

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0798

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-71857**

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

FIMS2_130524A

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 05/24/13 9:05	C	05/24/13 9:11	C		C	Preparation Blank	C	M
Mercury	0.028	U	0.028	U	0.028	U			0.028	U	CV

U.S. EPA - CLP

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0798

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-71837**

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

FIMS2_130524A

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
Analyte		C		C		C		C		C	M
Mercury									0.028	U	CV

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0798

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-71837**

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

OPTIMA3_130524A

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 05/24/13 7:58	C	05/24/13 8:28	C	05/24/13 9:05	C	Preparation Blank	C	M
Arsenic	4.3	U	4.3	U	4.3	U	4.3	U	4.300	U	P
Barium	1.1	U	1.1	U	1.1	U	1.1	U	1.100	U	P
Cadmium	0.9	U	0.9	U	0.9	U	0.9	U	0.890	U	P
Chromium	0.6	U	0.6	U	0.6	U	0.6	U	0.640	U	P
Lead	4.2	U	4.2	U	4.2	U	4.2	U	4.200	U	P
Selenium	12.0	U	12.0	U	12.0	U	12.0	U	12.000	U	P
Silver	6.9	U	6.9	U	6.9	U	6.9	U	6.900	U	P

U.S. EPA - CLP

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0798

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-71856**

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

OPTIMA3_130524A

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 05/24/13 9:32	C	05/24/13 10:06	C		C	Preparation Blank	C	M
Arsenic			4.3	U	4.3	U			4.300	U	P
Barium			1.1	U	1.2	B			1.100	U	P
Cadmium			0.9	U	0.9	U			0.890	U	P
Chromium			0.6	U	0.6	U			0.640	U	P
Lead			4.2	U	4.2	U			4.200	U	P
Selenium			12.0	U	12.0	U			12.000	U	P
Silver			6.9	U	6.9	U			6.900	U	P

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 5-Day
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: LaBella
300 State St Suite 201
Rochester NY 14614

Project Mgr.: D. Eggert

Invoice To: SAME

P.O. No.: _____ RQN: _____

Project No.: 210259
Site Name: Monaco
Location: Pittsford State: NY
Sampler(s): SRD

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9=_____ 10=_____ 11=_____

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

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: TCLP VOC	TCLP SVOC	TCLP Metals	PCBs	List preservative code below:	Notes:
M11846-01	WC-1	7-16-13	1300	G	SO		2			X	X	X	X		
- 02	WC-2	"	"	G	SO		2			X	X	X	X		
- 03	WC-3	"	"	G	SO		2			X	X	X	X		
- 04	WC-4	"	"	G	SO		2			X	X	X	X		
M11846-05	WC-5	"	"	G	SO		2			X	X	X	X		

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other _____

State specific reporting standards:
_____

☒ E-mail to sdavis
EDD Format _____

Condition upon receipt: ☒ Iced ☐ Ambient ☒ °C 5.6°C

Relinquished by:	Received by:	Date:	Time:
Seth Davis	FEDEX	7-16-13	1600
FedEx		7/17/13	10:18

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

Received By: VJB	Page 01 of 00
Reviewed By: RC	Log-in Date 07/17/2013
Work Order: M1186	Client Name: LaBella Associates
Project Name/Event: LaBella Monoco Oil	

Remarks: (1/2) Please see associated sample/extract transfer logbook pages submitted with this data package.

1. Custody Seal(s)	Present / Absent
	Intact / Broken
2. Custody Seal Nos.	N/A
3. Traffic Reports/ Chain of Custody Records (TR/COCs) or Packing Lists	Present / Absent
4. Airbill	AirBill / Sticker
	Present / Absent
5. Airbill No.	FedEx 7957 9886 1847
6. Sample Tags	Present / Absent
Sample Tag Numbers	Listed / Not Listed on Chain-of-Custody
7. Sample Condition	Intact / Broken / Leaking
8. Cooler Temperature Indicator Bottle	Present / Absent
9. Cooler Temperature	5.6 °C
10. Does information on TR/COCs and sample tags agree?	Yes / No
11. Date Received at Laboratory	07/17/2013
12. Time Received	10:18

Sample Transfer	
Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area #	Area #
By	By
On	On

Lab Sample ID	Preservation (pH) HNO3	H2SO4	HCl	NaOH	H3PO4	VOA Matrix	Soil HeadSpace or Air Bubble > or equal to 1/4"
M1186-01						US	
M1186-02						US	
M1186-03						US	
M1186-04						US	
M1186-05						US	

IR Temp Gun ID:MT-74

CoolantCondition: ICE

Preservative Name/Lot No:

VOA Matrix Key:

US = Unpreserved Soil	A= Air
UA = Unpreserved Aqueous	H = HCl
M = MeOH	E = Encore
N = NaHSO4	F = Freeze

See Sample Condition Notification/Corrective Action Form Yes / No

Rad OK Yes / No

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

07/24/2013

Client: LaBella Associates
Client Sample ID: WC-1
Lab ID: M1186-01
Project: LaBella Monoco Oil
Collection Date: 07/16/13 13:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 6010C -- Metals by ICP							**SW6010_W**
Arsenic -- TCLP	10	J	20	ug/L	1	07/24/2013 9:32	72826
Barium -- TCLP	1400		200	ug/L	1	07/24/2013 9:32	72826
Cadmium -- TCLP	1.2	J	5.0	ug/L	1	07/24/2013 9:32	72826
Chromium -- TCLP	ND		20	ug/L	1	07/24/2013 9:32	72826
Lead -- TCLP	14		10	ug/L	1	07/24/2013 9:32	72826
Selenium -- TCLP	14	J	30	ug/L	1	07/24/2013 9:32	72826
Silver -- TCLP	ND		30	ug/L	1	07/24/2013 9:32	72826
SW846 7470A -- Mercury by FIA							**SW7470**
Mercury -- TCLP	ND		0.20	µg/L	1	07/24/2013 13:00	72827

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

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

07/24/2013

Client: LaBella Associates
Client Sample ID: WC-2
Lab ID: M1186-02
Project: LaBella Monoco Oil
Collection Date: 07/16/13 13:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 6010C -- Metals by ICP							**SW6010_W**
Arsenic -- TCLP	11	J	20	ug/L	1	07/24/2013 9:36	72826
Barium -- TCLP	1200		200	ug/L	1	07/24/2013 9:36	72826
Cadmium -- TCLP	1.5	J	5.0	ug/L	1	07/24/2013 9:36	72826
Chromium -- TCLP	ND		20	ug/L	1	07/24/2013 9:36	72826
Lead -- TCLP	33		10	ug/L	1	07/24/2013 9:36	72826
Selenium -- TCLP	14	J	30	ug/L	1	07/24/2013 9:36	72826
Silver -- TCLP	ND		30	ug/L	1	07/24/2013 9:36	72826
SW846 7470A -- Mercury by FIA							**SW7470**
Mercury -- TCLP	ND		0.20	µg/L	1	07/24/2013 13:02	72827

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

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

07/24/2013

Client: LaBella Associates
Client Sample ID: WC-3
Lab ID: M1186-03
Project: LaBella Monoco Oil
Collection Date: 07/16/13 13:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 6010C -- Metals by ICP							**SW6010_W**
Arsenic -- TCLP	8.1	J	20	ug/L	1	07/24/2013 9:39	72826
Barium -- TCLP	1300		200	ug/L	1	07/24/2013 9:39	72826
Cadmium -- TCLP	1.1	J	5.0	ug/L	1	07/24/2013 9:39	72826
Chromium -- TCLP	ND		20	ug/L	1	07/24/2013 9:39	72826
Lead -- TCLP	74		10	ug/L	1	07/24/2013 9:39	72826
Selenium -- TCLP	13	J	30	ug/L	1	07/24/2013 9:39	72826
Silver -- TCLP	ND		30	ug/L	1	07/24/2013 9:39	72826
SW846 7470A -- Mercury by FIA							**SW7470**
Mercury -- TCLP	0.041	J	0.20	µg/L	1	07/24/2013 13:04	72827

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

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

07/24/2013

Client: LaBella Associates
Client Sample ID: WC-4
Lab ID: M1186-04
Project: LaBella Monoco Oil
Collection Date: 07/16/13 13:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 6010C -- Metals by ICP							**SW6010_W**
Arsenic -- TCLP	4.9	J	20	ug/L	1	07/24/2013 9:43	72826
Barium -- TCLP	1700		200	ug/L	1	07/24/2013 9:43	72826
Cadmium -- TCLP	2.5	J	5.0	ug/L	1	07/24/2013 9:43	72826
Chromium -- TCLP	ND		20	ug/L	1	07/24/2013 9:43	72826
Lead -- TCLP	240		10	ug/L	1	07/24/2013 9:43	72826
Selenium -- TCLP	17	J	30	ug/L	1	07/24/2013 9:43	72826
Silver -- TCLP	ND		30	ug/L	1	07/24/2013 9:43	72826
SW846 7470A -- Mercury by FIA							**SW7470**
Mercury -- TCLP	ND		0.20	µg/L	1	07/24/2013 13:05	72827

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

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

07/24/2013

Client: LaBella Associates
Client Sample ID: WC-5
Lab ID: M1186-05
Project: LaBella Monoco Oil
Collection Date: 07/16/13 13:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 6010C -- Metals by ICP							**SW6010_W**
Arsenic -- TCLP	9.7	J	20	ug/L	1	07/24/2013 9:53	72826
Barium -- TCLP	830		200	ug/L	1	07/24/2013 9:53	72826
Cadmium -- TCLP	2.4	J	5.0	ug/L	1	07/24/2013 9:53	72826
Chromium -- TCLP	ND		20	ug/L	1	07/24/2013 9:53	72826
Lead -- TCLP	130		10	ug/L	1	07/24/2013 9:53	72826
Selenium -- TCLP	ND		30	ug/L	1	07/24/2013 9:53	72826
Silver -- TCLP	ND		30	ug/L	1	07/24/2013 9:53	72826
SW846 7470A -- Mercury by FIA							**SW7470**
Mercury -- TCLP	ND		0.20	µg/L	1	07/24/2013 13:07	72827

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

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

07/24/2013

Client: LaBella Associates
Client Sample ID: WC-1
Lab ID: M1186-01
Project: LaBella Monoco Oil
Collection Date: 07/16/13 13:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8082A -- PCB by GC-ECD							**SW8082_S**
Aroclor-1016	ND		39	ug/Kg	1	07/19/2013 7:54	72783
Aroclor-1221	ND		39	ug/Kg	1	07/19/2013 7:54	72783
Aroclor-1232	ND		39	ug/Kg	1	07/19/2013 7:54	72783
Aroclor-1242	ND		39	ug/Kg	1	07/19/2013 7:54	72783
Aroclor-1248	ND		39	ug/Kg	1	07/19/2013 7:54	72783
Aroclor-1254	ND		39	ug/Kg	1	07/19/2013 7:54	72783
Aroclor-1260	ND		39	ug/Kg	1	07/19/2013 7:54	72783
Surrogate: Tetrachloro-m-xylene	68.0		34-147	%REC	1	07/19/2013 7:54	72783
Surrogate: Decachlorobiphenyl	70.7		60-125	%REC	1	07/19/2013 7:54	72783

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

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

07/24/2013

Client: LaBella Associates
Client Sample ID: WC-2
Lab ID: M1186-02
Project: LaBella Monoco Oil
Collection Date: 07/16/13 13:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8082A -- PCB by GC-ECD							**SW8082_S**
Aroclor-1016	ND		39	ug/Kg	1	07/19/2013 8:14	72783
Aroclor-1221	ND		39	ug/Kg	1	07/19/2013 8:14	72783
Aroclor-1232	ND		39	ug/Kg	1	07/19/2013 8:14	72783
Aroclor-1242	ND		39	ug/Kg	1	07/19/2013 8:14	72783
Aroclor-1248	ND		39	ug/Kg	1	07/19/2013 8:14	72783
Aroclor-1254	ND		39	ug/Kg	1	07/19/2013 8:14	72783
Aroclor-1260	ND		39	ug/Kg	1	07/19/2013 8:14	72783
Surrogate: Tetrachloro-m-xylene	65.1		34-147	%REC	1	07/19/2013 8:14	72783
Surrogate: Decachlorobiphenyl	68.3		60-125	%REC	1	07/19/2013 8:14	72783

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

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

07/24/2013

Client: LaBella Associates
Client Sample ID: WC-3
Lab ID: M1186-03
Project: LaBella Monoco Oil
Collection Date: 07/16/13 13:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8082A -- PCB by GC-ECD							**SW8082_S**
Aroclor-1016	ND		39	ug/Kg	1	07/19/2013 8:34	72783
Aroclor-1221	ND		39	ug/Kg	1	07/19/2013 8:34	72783
Aroclor-1232	ND		39	ug/Kg	1	07/19/2013 8:34	72783
Aroclor-1242	ND		39	ug/Kg	1	07/19/2013 8:34	72783
Aroclor-1248	ND		39	ug/Kg	1	07/19/2013 8:34	72783
Aroclor-1254	ND		39	ug/Kg	1	07/19/2013 8:34	72783
Aroclor-1260	ND		39	ug/Kg	1	07/19/2013 8:34	72783
Surrogate: Tetrachloro-m-xylene	68.8		34-147	%REC	1	07/19/2013 8:34	72783
Surrogate: Decachlorobiphenyl	70.7		60-125	%REC	1	07/19/2013 8:34	72783

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

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

07/24/2013

Client: LaBella Associates
Client Sample ID: WC-4
Lab ID: M1186-04
Project: LaBella Monoco Oil
Collection Date: 07/16/13 13:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8082A -- PCB by GC-ECD							**SW8082_S**
Aroclor-1016	ND		39	ug/Kg	1	07/19/2013 8:54	72783
Aroclor-1221	ND		39	ug/Kg	1	07/19/2013 8:54	72783
Aroclor-1232	ND		39	ug/Kg	1	07/19/2013 8:54	72783
Aroclor-1242	ND		39	ug/Kg	1	07/19/2013 8:54	72783
Aroclor-1248	ND		39	ug/Kg	1	07/19/2013 8:54	72783
Aroclor-1254	ND		39	ug/Kg	1	07/19/2013 8:54	72783
Aroclor-1260	ND		39	ug/Kg	1	07/19/2013 8:54	72783
Surrogate: Tetrachloro-m-xylene	67.4		34-147	%REC	1	07/19/2013 8:54	72783
Surrogate: Decachlorobiphenyl	67.4		60-125	%REC	1	07/19/2013 8:54	72783

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

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

07/24/2013

Client: LaBella Associates
Client Sample ID: WC-5
Lab ID: M1186-05
Project: LaBella Monoco Oil
Collection Date: 07/16/13 13:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8082A -- PCB by GC-ECD							**SW8082_S**
Aroclor-1016	ND		39	ug/Kg	1	07/19/2013 9:14	72783
Aroclor-1221	ND		39	ug/Kg	1	07/19/2013 9:14	72783
Aroclor-1232	ND		39	ug/Kg	1	07/19/2013 9:14	72783
Aroclor-1242	ND		39	ug/Kg	1	07/19/2013 9:14	72783
Aroclor-1248	ND		39	ug/Kg	1	07/19/2013 9:14	72783
Aroclor-1254	ND		39	ug/Kg	1	07/19/2013 9:14	72783
Aroclor-1260	ND		39	ug/Kg	1	07/19/2013 9:14	72783
Surrogate: Tetrachloro-m-xylene	65.6		34-147	%REC	1	07/19/2013 9:14	72783
Surrogate: Decachlorobiphenyl	70.0		60-125	%REC	1	07/19/2013 9:14	72783

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

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

07/24/2013

Client: LaBella Associates
Client Sample ID: WC-1
Lab ID: M1186-01
Project: LaBella Monoco Oil
Collection Date: 07/16/13 13:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8270D -- SVOA by GC-MS							**SW8270_W**
1,4-Dichlorobenzene -- TCLP	ND		33	ug/L	1	07/23/2013 14:48	72823
2-Methylphenol -- TCLP	ND		33	ug/L	1	07/23/2013 14:48	72823
4-Methylphenol -- TCLP	ND		33	ug/L	1	07/23/2013 14:48	72823
Hexachloroethane -- TCLP	ND		33	ug/L	1	07/23/2013 14:48	72823
Nitrobenzene -- TCLP	ND		33	ug/L	1	07/23/2013 14:48	72823
Hexachlorobutadiene -- TCLP	ND		33	ug/L	1	07/23/2013 14:48	72823
2,4,6-Trichlorophenol -- TCLP	ND		33	ug/L	1	07/23/2013 14:48	72823
2,4,5-Trichlorophenol -- TCLP	ND		67	ug/L	1	07/23/2013 14:48	72823
2,4-Dinitrotoluene -- TCLP	ND		33	ug/L	1	07/23/2013 14:48	72823
Hexachlorobenzene -- TCLP	ND		33	ug/L	1	07/23/2013 14:48	72823
Pentachlorophenol -- TCLP	ND		67	ug/L	1	07/23/2013 14:48	72823
Pyridine -- TCLP	ND		67	ug/L	1	07/23/2013 14:48	72823
Surrogate: Nitrobenzene-d5 -- TCLP	87.5		40-110	%REC	1	07/23/2013 14:48	72823
Surrogate: 2-Fluorobiphenyl -- TCLP	91.7		50-110	%REC	1	07/23/2013 14:48	72823
Surrogate: Terphenyl-d14 -- TCLP	111		50-135	%REC	1	07/23/2013 14:48	72823
Surrogate: Phenol-d5 -- TCLP	66.1		10-115	%REC	1	07/23/2013 14:48	72823
Surrogate: 2-Fluorophenol -- TCLP	73.8		20-110	%REC	1	07/23/2013 14:48	72823
Surrogate: 2,4,6-Tribromophenol -- TCLP	110		40-125	%REC	1	07/23/2013 14:48	72823

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

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

07/24/2013

Client: LaBella Associates
Client Sample ID: WC-2
Lab ID: M1186-02
Project: LaBella Monoco Oil
Collection Date: 07/16/13 13:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8270D -- SVOA by GC-MS							**SW8270_W**
1,4-Dichlorobenzene -- TCLP	ND		33	ug/L	1	07/23/2013 15:14	72823
2-Methylphenol -- TCLP	ND		33	ug/L	1	07/23/2013 15:14	72823
4-Methylphenol -- TCLP	ND		33	ug/L	1	07/23/2013 15:14	72823
Hexachloroethane -- TCLP	ND		33	ug/L	1	07/23/2013 15:14	72823
Nitrobenzene -- TCLP	ND		33	ug/L	1	07/23/2013 15:14	72823
Hexachlorobutadiene -- TCLP	ND		33	ug/L	1	07/23/2013 15:14	72823
2,4,6-Trichlorophenol -- TCLP	ND		33	ug/L	1	07/23/2013 15:14	72823
2,4,5-Trichlorophenol -- TCLP	ND		67	ug/L	1	07/23/2013 15:14	72823
2,4-Dinitrotoluene -- TCLP	ND		33	ug/L	1	07/23/2013 15:14	72823
Hexachlorobenzene -- TCLP	ND		33	ug/L	1	07/23/2013 15:14	72823
Pentachlorophenol -- TCLP	ND		67	ug/L	1	07/23/2013 15:14	72823
Pyridine -- TCLP	ND		67	ug/L	1	07/23/2013 15:14	72823
Surrogate: Nitrobenzene-d5 -- TCLP	85.5		40-110	%REC	1	07/23/2013 15:14	72823
Surrogate: 2-Fluorobiphenyl -- TCLP	90.1		50-110	%REC	1	07/23/2013 15:14	72823
Surrogate: Terphenyl-d14 -- TCLP	107		50-135	%REC	1	07/23/2013 15:14	72823
Surrogate: Phenol-d5 -- TCLP	44.7		10-115	%REC	1	07/23/2013 15:14	72823
Surrogate: 2-Fluorophenol -- TCLP	57.4		20-110	%REC	1	07/23/2013 15:14	72823
Surrogate: 2,4,6-Tribromophenol -- TCLP	97.6		40-125	%REC	1	07/23/2013 15:14	72823

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

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

07/24/2013

Client: LaBella Associates
Client Sample ID: WC-3
Lab ID: M1186-03
Project: LaBella Monoco Oil
Collection Date: 07/16/13 13:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8270D -- SVOA by GC-MS							**SW8270_W**
1,4-Dichlorobenzene -- TCLP	ND		33	ug/L	1	07/23/2013 15:41	72823
2-Methylphenol -- TCLP	ND		33	ug/L	1	07/23/2013 15:41	72823
4-Methylphenol -- TCLP	ND		33	ug/L	1	07/23/2013 15:41	72823
Hexachloroethane -- TCLP	ND		33	ug/L	1	07/23/2013 15:41	72823
Nitrobenzene -- TCLP	ND		33	ug/L	1	07/23/2013 15:41	72823
Hexachlorobutadiene -- TCLP	ND		33	ug/L	1	07/23/2013 15:41	72823
2,4,6-Trichlorophenol -- TCLP	ND		33	ug/L	1	07/23/2013 15:41	72823
2,4,5-Trichlorophenol -- TCLP	ND		67	ug/L	1	07/23/2013 15:41	72823
2,4-Dinitrotoluene -- TCLP	ND		33	ug/L	1	07/23/2013 15:41	72823
Hexachlorobenzene -- TCLP	ND		33	ug/L	1	07/23/2013 15:41	72823
Pentachlorophenol -- TCLP	ND		67	ug/L	1	07/23/2013 15:41	72823
Pyridine -- TCLP	ND		67	ug/L	1	07/23/2013 15:41	72823
Surrogate: Nitrobenzene-d5 -- TCLP	91.2		40-110	%REC	1	07/23/2013 15:41	72823
Surrogate: 2-Fluorobiphenyl -- TCLP	95.3		50-110	%REC	1	07/23/2013 15:41	72823
Surrogate: Terphenyl-d14 -- TCLP	110		50-135	%REC	1	07/23/2013 15:41	72823
Surrogate: Phenol-d5 -- TCLP	50.8		10-115	%REC	1	07/23/2013 15:41	72823
Surrogate: 2-Fluorophenol -- TCLP	64.5		20-110	%REC	1	07/23/2013 15:41	72823
Surrogate: 2,4,6-Tribromophenol -- TCLP	110		40-125	%REC	1	07/23/2013 15:41	72823

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

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

07/24/2013

Client: LaBella Associates
Client Sample ID: WC-4
Lab ID: M1186-04
Project: LaBella Monoco Oil
Collection Date: 07/16/13 13:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8270D -- SVOA by GC-MS							**SW8270_W**
1,4-Dichlorobenzene -- TCLP	ND		33	ug/L	1	07/24/2013 9:54	72823
2-Methylphenol -- TCLP	ND		33	ug/L	1	07/24/2013 9:54	72823
4-Methylphenol -- TCLP	ND		33	ug/L	1	07/24/2013 9:54	72823
Hexachloroethane -- TCLP	ND		33	ug/L	1	07/24/2013 9:54	72823
Nitrobenzene -- TCLP	ND		33	ug/L	1	07/24/2013 9:54	72823
Hexachlorobutadiene -- TCLP	ND		33	ug/L	1	07/24/2013 9:54	72823
2,4,6-Trichlorophenol -- TCLP	ND		33	ug/L	1	07/24/2013 9:54	72823
2,4,5-Trichlorophenol -- TCLP	ND		67	ug/L	1	07/24/2013 9:54	72823
2,4-Dinitrotoluene -- TCLP	ND		33	ug/L	1	07/24/2013 9:54	72823
Hexachlorobenzene -- TCLP	ND		33	ug/L	1	07/24/2013 9:54	72823
Pentachlorophenol -- TCLP	ND		67	ug/L	1	07/24/2013 9:54	72823
Pyridine -- TCLP	ND		67	ug/L	1	07/24/2013 9:54	72823
Surrogate: Nitrobenzene-d5 -- TCLP	92.1		40-110	%REC	1	07/24/2013 9:54	72823
Surrogate: 2-Fluorobiphenyl -- TCLP	96.2		50-110	%REC	1	07/24/2013 9:54	72823
Surrogate: Terphenyl-d14 -- TCLP	113		50-135	%REC	1	07/24/2013 9:54	72823
Surrogate: Phenol-d5 -- TCLP	48.8		10-115	%REC	1	07/24/2013 9:54	72823
Surrogate: 2-Fluorophenol -- TCLP	63.1		20-110	%REC	1	07/24/2013 9:54	72823
Surrogate: 2,4,6-Tribromophenol -- TCLP	107		40-125	%REC	1	07/24/2013 9:54	72823

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

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

07/24/2013

Client: LaBella Associates
Client Sample ID: WC-5
Lab ID: M1186-05
Project: LaBella Monoco Oil
Collection Date: 07/16/13 13:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8270D -- SVOA by GC-MS							**SW8270_W**
1,4-Dichlorobenzene -- TCLP	ND		33	ug/L	1	07/23/2013 16:34	72823
2-Methylphenol -- TCLP	ND		33	ug/L	1	07/23/2013 16:34	72823
4-Methylphenol -- TCLP	ND		33	ug/L	1	07/23/2013 16:34	72823
Hexachloroethane -- TCLP	ND		33	ug/L	1	07/23/2013 16:34	72823
Nitrobenzene -- TCLP	ND		33	ug/L	1	07/23/2013 16:34	72823
Hexachlorobutadiene -- TCLP	ND		33	ug/L	1	07/23/2013 16:34	72823
2,4,6-Trichlorophenol -- TCLP	ND		33	ug/L	1	07/23/2013 16:34	72823
2,4,5-Trichlorophenol -- TCLP	ND		67	ug/L	1	07/23/2013 16:34	72823
2,4-Dinitrotoluene -- TCLP	ND		33	ug/L	1	07/23/2013 16:34	72823
Hexachlorobenzene -- TCLP	ND		33	ug/L	1	07/23/2013 16:34	72823
Pentachlorophenol -- TCLP	ND		67	ug/L	1	07/23/2013 16:34	72823
Pyridine -- TCLP	ND		67	ug/L	1	07/23/2013 16:34	72823
Surrogate: Nitrobenzene-d5 -- TCLP	89.9		40-110	%REC	1	07/23/2013 16:34	72823
Surrogate: 2-Fluorobiphenyl -- TCLP	95.0		50-110	%REC	1	07/23/2013 16:34	72823
Surrogate: Terphenyl-d14 -- TCLP	113		50-135	%REC	1	07/23/2013 16:34	72823
Surrogate: Phenol-d5 -- TCLP	39.5		10-115	%REC	1	07/23/2013 16:34	72823
Surrogate: 2-Fluorophenol -- TCLP	52.8		20-110	%REC	1	07/23/2013 16:34	72823
Surrogate: 2,4,6-Tribromophenol -- TCLP	95.1		40-125	%REC	1	07/23/2013 16:34	72823

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

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

07/24/2013

Client: LaBella Associates
Client Sample ID: WC-1
Lab ID: M1186-01
Project: LaBella Monoco Oil
Collection Date: 07/16/13 13:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS							**SW8260_W**
Vinyl chloride -- TCLP	ND		5.0	ug/L	1	07/19/2013 19:50	72805
1,1-Dichloroethene -- TCLP	ND		5.0	ug/L	1	07/19/2013 19:50	72805
2-Butanone -- TCLP	ND		5.0	ug/L	1	07/19/2013 19:50	72805
Chloroform -- TCLP	ND		5.0	ug/L	1	07/19/2013 19:50	72805
Carbon tetrachloride -- TCLP	ND		5.0	ug/L	1	07/19/2013 19:50	72805
1,2-Dichloroethane -- TCLP	ND		5.0	ug/L	1	07/19/2013 19:50	72805
Benzene -- TCLP	ND		5.0	ug/L	1	07/19/2013 19:50	72805
Trichloroethene -- TCLP	ND		5.0	ug/L	1	07/19/2013 19:50	72805
Tetrachloroethene -- TCLP	4.5	J	5.0	ug/L	1	07/19/2013 19:50	72805
Chlorobenzene -- TCLP	ND		5.0	ug/L	1	07/19/2013 19:50	72805
Surrogate: Dibromofluoromethane -- TCLP	103		85-115	%REC	1	07/19/2013 19:50	72805
Surrogate: 1,2-Dichloroethane-d4 -- TCLP	97.9		70-120	%REC	1	07/19/2013 19:50	72805
Surrogate: Toluene-d8 -- TCLP	108		85-120	%REC	1	07/19/2013 19:50	72805
Surrogate: Bromofluorobenzene -- TCLP	105		75-120	%REC	1	07/19/2013 19:50	72805

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

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

07/24/2013

Client: LaBella Associates
Client Sample ID: WC-2
Lab ID: M1186-02
Project: LaBella Monoco Oil
Collection Date: 07/16/13 13:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS							**SW8260_W**
Vinyl chloride -- TCLP	ND		5.0	ug/L	1	07/19/2013 20:13	72805
1,1-Dichloroethene -- TCLP	ND		5.0	ug/L	1	07/19/2013 20:13	72805
2-Butanone -- TCLP	ND		5.0	ug/L	1	07/19/2013 20:13	72805
Chloroform -- TCLP	ND		5.0	ug/L	1	07/19/2013 20:13	72805
Carbon tetrachloride -- TCLP	ND		5.0	ug/L	1	07/19/2013 20:13	72805
1,2-Dichloroethane -- TCLP	ND		5.0	ug/L	1	07/19/2013 20:13	72805
Benzene -- TCLP	ND		5.0	ug/L	1	07/19/2013 20:13	72805
Trichloroethene -- TCLP	ND		5.0	ug/L	1	07/19/2013 20:13	72805
Tetrachloroethene -- TCLP	ND		5.0	ug/L	1	07/19/2013 20:13	72805
Chlorobenzene -- TCLP	ND		5.0	ug/L	1	07/19/2013 20:13	72805
Surrogate: Dibromofluoromethane -- TCLP	98.5		85-115	%REC	1	07/19/2013 20:13	72805
Surrogate: 1,2-Dichloroethane-d4 -- TCLP	93.5		70-120	%REC	1	07/19/2013 20:13	72805
Surrogate: Toluene-d8 -- TCLP	101		85-120	%REC	1	07/19/2013 20:13	72805
Surrogate: Bromofluorobenzene -- TCLP	102		75-120	%REC	1	07/19/2013 20:13	72805

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

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

07/24/2013

Client: LaBella Associates
Client Sample ID: WC-3
Lab ID: M1186-03
Project: LaBella Monoco Oil
Collection Date: 07/16/13 13:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS							**SW8260_W**
Vinyl chloride -- TCLP	ND		5.0	ug/L	1	07/19/2013 20:36	72805
1,1-Dichloroethene -- TCLP	ND		5.0	ug/L	1	07/19/2013 20:36	72805
2-Butanone -- TCLP	ND		5.0	ug/L	1	07/19/2013 20:36	72805
Chloroform -- TCLP	ND		5.0	ug/L	1	07/19/2013 20:36	72805
Carbon tetrachloride -- TCLP	ND		5.0	ug/L	1	07/19/2013 20:36	72805
1,2-Dichloroethane -- TCLP	ND		5.0	ug/L	1	07/19/2013 20:36	72805
Benzene -- TCLP	ND		5.0	ug/L	1	07/19/2013 20:36	72805
Trichloroethene -- TCLP	ND		5.0	ug/L	1	07/19/2013 20:36	72805
Tetrachloroethene -- TCLP	ND		5.0	ug/L	1	07/19/2013 20:36	72805
Chlorobenzene -- TCLP	ND		5.0	ug/L	1	07/19/2013 20:36	72805
Surrogate: Dibromofluoromethane -- TCLP	100		85-115	%REC	1	07/19/2013 20:36	72805
Surrogate: 1,2-Dichloroethane-d4 -- TCLP	91.6		70-120	%REC	1	07/19/2013 20:36	72805
Surrogate: Toluene-d8 -- TCLP	102		85-120	%REC	1	07/19/2013 20:36	72805
Surrogate: Bromofluorobenzene -- TCLP	103		75-120	%REC	1	07/19/2013 20:36	72805

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

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

07/24/2013

Client: LaBella Associates
Client Sample ID: WC-4
Lab ID: M1186-04
Project: LaBella Monoco Oil
Collection Date: 07/16/13 13:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS							**SW8260_W**
Vinyl chloride -- TCLP	ND		5.0	ug/L	1	07/19/2013 21:00	72805
1,1-Dichloroethene -- TCLP	ND		5.0	ug/L	1	07/19/2013 21:00	72805
2-Butanone -- TCLP	ND		5.0	ug/L	1	07/19/2013 21:00	72805
Chloroform -- TCLP	ND		5.0	ug/L	1	07/19/2013 21:00	72805
Carbon tetrachloride -- TCLP	ND		5.0	ug/L	1	07/19/2013 21:00	72805
1,2-Dichloroethane -- TCLP	ND		5.0	ug/L	1	07/19/2013 21:00	72805
Benzene -- TCLP	ND		5.0	ug/L	1	07/19/2013 21:00	72805
Trichloroethene -- TCLP	ND		5.0	ug/L	1	07/19/2013 21:00	72805
Tetrachloroethene -- TCLP	ND		5.0	ug/L	1	07/19/2013 21:00	72805
Chlorobenzene -- TCLP	ND		5.0	ug/L	1	07/19/2013 21:00	72805
Surrogate: Dibromofluoromethane -- TCLP	101		85-115	%REC	1	07/19/2013 21:00	72805
Surrogate: 1,2-Dichloroethane-d4 -- TCLP	92.3		70-120	%REC	1	07/19/2013 21:00	72805
Surrogate: Toluene-d8 -- TCLP	103		85-120	%REC	1	07/19/2013 21:00	72805
Surrogate: Bromofluorobenzene -- TCLP	103		75-120	%REC	1	07/19/2013 21:00	72805

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

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

07/24/2013

Client: LaBella Associates
Client Sample ID: WC-5
Lab ID: M1186-05
Project: LaBella Monoco Oil
Collection Date: 07/16/13 13:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS							**SW8260_W**
Vinyl chloride -- TCLP	ND		5.0	ug/L	1	07/19/2013 21:23	72805
1,1-Dichloroethene -- TCLP	ND		5.0	ug/L	1	07/19/2013 21:23	72805
2-Butanone -- TCLP	ND		5.0	ug/L	1	07/19/2013 21:23	72805
Chloroform -- TCLP	ND		5.0	ug/L	1	07/19/2013 21:23	72805
Carbon tetrachloride -- TCLP	ND		5.0	ug/L	1	07/19/2013 21:23	72805
1,2-Dichloroethane -- TCLP	ND		5.0	ug/L	1	07/19/2013 21:23	72805
Benzene -- TCLP	ND		5.0	ug/L	1	07/19/2013 21:23	72805
Trichloroethene -- TCLP	ND		5.0	ug/L	1	07/19/2013 21:23	72805
Tetrachloroethene -- TCLP	13		5.0	ug/L	1	07/19/2013 21:23	72805
Chlorobenzene -- TCLP	ND		5.0	ug/L	1	07/19/2013 21:23	72805
Surrogate: Dibromofluoromethane -- TCLP	99.3		85-115	%REC	1	07/19/2013 21:23	72805
Surrogate: 1,2-Dichloroethane-d4 -- TCLP	94.2		70-120	%REC	1	07/19/2013 21:23	72805
Surrogate: Toluene-d8 -- TCLP	110		85-120	%REC	1	07/19/2013 21:23	72805
Surrogate: Bromofluorobenzene -- TCLP	116		75-120	%REC	1	07/19/2013 21:23	72805

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

PARADIGM

ENVIRONMENTAL SERVICES, INC.

Analytical Report For

LaBella Associates, P.C.

For Lab Project ID

130625

Referencing

210259

Prepared

Wednesday, February 20, 2013

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

Certifies that this report has been approved by the Technical Director or Designee

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 130625

Client: LaBella Associates, P.C.

Project Reference: 210259

Sample Identifier: Direct Discharge
Lab Sample ID: 130625-01
Matrix: Wastewater

Date Sampled: 2/19/2013
Date Received: 2/19/2013

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	< 0.00020	mg/L		2/20/2013

Method Reference(s): EPA 245.1
Data File: hg130220a

Priority Pollutant Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Antimony	< 0.060	mg/L		2/20/2013
Arsenic	**0.012**	mg/L		2/20/2013
Beryllium	< 0.0050	mg/L		2/20/2013
Cadmium	< 0.0050	mg/L		2/20/2013
Chromium	< 0.010	mg/L		2/20/2013
Copper	< 0.025	mg/L		2/20/2013
Lead (Axial)	< 0.010	mg/L		2/20/2013
Nickel	< 0.040	mg/L		2/20/2013
Selenium	< 0.010	mg/L		2/20/2013
Silver	< 0.010	mg/L		2/20/2013
Thallium	< 0.025	mg/L		2/20/2013
Zinc	< 0.060	mg/L		2/20/2013

Method Reference(s): EPA 200.7
Data File: 022013a

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 1.0	ug/L		2/20/2013
PCB-1221	< 1.0	ug/L		2/20/2013
PCB-1232	< 1.0	ug/L		2/20/2013
PCB-1242	< 1.0	ug/L		2/20/2013

Report Prepared Wednesday, February 20, 2013

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 130625

Client: LaBella Associates, P.C.

Project Reference: 210259

Sample Identifier: Direct Discharge
Lab Sample ID: 130625-01
Matrix: Wastewater

Date Sampled: 2/19/2013
Date Received: 2/19/2013

PCB-1248	< 1.0	ug/L		2/20/2013
PCB-1254	< 1.0	ug/L		2/20/2013
PCB-1260	< 1.0	ug/L		2/20/2013

Method Reference(s): EPA 608

Semi-Volatile Organics (Acids)

Analyte	Result	Units	Qualifier	Date Analyzed
2,4,6-Trichlorophenol	< 10	ug/L		2/20/2013
2,4-Dichlorophenol	< 10	ug/L		2/20/2013
2,4-Dimethylphenol	< 10	ug/L		2/20/2013
2,4-Dinitrophenol	< 20	ug/L		2/20/2013
2-Chlorophenol	< 10	ug/L		2/20/2013
2-Nitrophenol	< 10	ug/L		2/20/2013
4,6-Dinitro-2-methylphenol	< 20	ug/L		2/20/2013
4-Chloro-3-methylphenol	< 10	ug/L		2/20/2013
4-Nitrophenol	< 20	ug/L		2/20/2013
Pentachlorophenol	< 20	ug/L		2/20/2013
Phenol	< 10	ug/L		2/20/2013

Method Reference(s): EPA 625
Data File: S67979.D

Semi-Volatile Organics (Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,2,4-Trichlorobenzene	< 10	ug/L		2/20/2013
1,2-Dichlorobenzene	< 10	ug/L		2/20/2013
1,3-Dichlorobenzene	< 10	ug/L		2/20/2013
1,4-Dichlorobenzene	< 10	ug/L		2/20/2013
2,4-Dinitrotoluene	< 10	ug/L		2/20/2013

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 130625

Client: LaBella Associates, P.C.

Project Reference: 210259

Sample Identifier: Direct Discharge
Lab Sample ID: 130625-01
Matrix: Wastewater

Date Sampled: 2/19/2013
Date Received: 2/19/2013

2,6-Dinitrotoluene	< 10	ug/L	2/20/2013
2-Chloronaphthalene	< 10	ug/L	2/20/2013
3,3'-Dichlorobenzidine	< 10	ug/L	2/20/2013
4-Bromophenyl phenyl ether	< 10	ug/L	2/20/2013
4-Chlorophenyl phenyl ether	< 10	ug/L	2/20/2013
Acenaphthene	< 10	ug/L	2/20/2013
Acenaphthylene	< 10	ug/L	2/20/2013
Anthracene	< 10	ug/L	2/20/2013
Benzidine	< 20	ug/L	2/20/2013
Benzo (a) anthracene	< 10	ug/L	2/20/2013
Benzo (a) pyrene	< 10	ug/L	2/20/2013
Benzo (b) fluoranthene	< 10	ug/L	2/20/2013
Benzo (g,h,i) perylene	< 10	ug/L	2/20/2013
Benzo (k) fluoranthene	< 10	ug/L	2/20/2013
Bis (2-chloroethoxy) methane	< 10	ug/L	2/20/2013
Bis (2-chloroethyl) ether	< 10	ug/L	2/20/2013
Bis (2-chloroisopropyl) ether	< 10	ug/L	2/20/2013
Bis (2-ethylhexyl) phthalate	**11**	ug/L	2/20/2013
Butylbenzylphthalate	< 10	ug/L	2/20/2013
Chrysene	< 10	ug/L	2/20/2013
Dibenz (a,h) anthracene	< 10	ug/L	2/20/2013
Diethyl phthalate	< 10	ug/L	2/20/2013
Dimethyl phthalate	< 20	ug/L	2/20/2013
Di-n-butyl phthalate	< 10	ug/L	2/20/2013
Di-n-octylphthalate	< 10	ug/L	2/20/2013

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 130625

Client: LaBella Associates, P.C.

Project Reference: 210259

Sample Identifier: Direct Discharge
Lab Sample ID: 130625-01
Matrix: Wastewater

Date Sampled: 2/19/2013
Date Received: 2/19/2013

Fluoranthene	< 10	ug/L	2/20/2013
Fluorene	< 10	ug/L	2/20/2013
Hexachlorobenzene	< 10	ug/L	2/20/2013
Hexachlorobutadiene	< 10	ug/L	2/20/2013
Hexachlorocyclopentadiene	< 10	ug/L	2/20/2013
Hexachloroethane	< 10	ug/L	2/20/2013
Indeno (1,2,3-cd) pyrene	< 10	ug/L	2/20/2013
Isophorone	< 10	ug/L	2/20/2013
Naphthalene	< 10	ug/L	2/20/2013
Nitrobenzene	< 10	ug/L	2/20/2013
N-Nitrosodimethylamine	< 10	ug/L	2/20/2013
N-Nitroso-di-n-propylamine	< 10	ug/L	2/20/2013
N-Nitrosodiphenylamine	< 10	ug/L	2/20/2013
Phenanthrene	< 10	ug/L	2/20/2013
Pyrene	< 10	ug/L	2/20/2013

Method Reference(s): EPA 625
Data File: S67977.D

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.0	ug/L		2/19/2013
1,1,2,2-Tetrachloroethane	< 2.0	ug/L		2/19/2013
1,1,2-Trichloroethane	< 2.0	ug/L		2/19/2013
1,1-Dichloroethane	< 2.0	ug/L		2/19/2013
1,1-Dichloroethene	< 2.0	ug/L		2/19/2013
1,2-Dichlorobenzene	< 2.0	ug/L		2/19/2013
1,2-Dichloroethane	< 2.0	ug/L		2/19/2013

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 130625

Client: LaBella Associates, P.C.

Project Reference: 210259

Sample Identifier: Direct Discharge
Lab Sample ID: 130625-01
Matrix: Wastewater

Date Sampled: 2/19/2013
Date Received: 2/19/2013

1,2-Dichloropropane	< 2.0	ug/L	2/19/2013
1,3-Dichlorobenzene	< 2.0	ug/L	2/19/2013
1,4-Dichlorobenzene	< 2.0	ug/L	2/19/2013
2-Chloroethyl vinyl Ether	< 10	ug/L	2/19/2013
Benzene	< 0.70	ug/L	2/19/2013
Bromodichloromethane	< 2.0	ug/L	2/19/2013
Bromoform	< 5.0	ug/L	2/19/2013
Bromomethane	< 2.0	ug/L	2/19/2013
Carbon Tetrachloride	< 2.0	ug/L	2/19/2013
Chlorobenzene	< 2.0	ug/L	2/19/2013
Chloroethane	< 2.0	ug/L	2/19/2013
Chloroform	< 2.0	ug/L	2/19/2013
Chloromethane	< 2.0	ug/L	2/19/2013
cis-1,3-Dichloropropene	< 2.0	ug/L	2/19/2013
Dibromochloromethane	< 2.0	ug/L	2/19/2013
Ethylbenzene	< 2.0	ug/L	2/19/2013
Methylene chloride	< 5.0	ug/L	2/19/2013
Tetrachloroethene	< 2.0	ug/L	2/19/2013
Toluene	< 2.0	ug/L	2/19/2013
trans-1,2-Dichloroethene	< 2.0	ug/L	2/19/2013
trans-1,3-Dichloropropene	< 2.0	ug/L	2/19/2013
Trichloroethene	< 2.0	ug/L	2/19/2013
Trichlorofluoromethane	< 2.0	ug/L	2/19/2013
Vinyl chloride	< 2.0	ug/L	2/19/2013

Method Reference(s): EPA 624
Data File: X03539.D

Report Prepared Wednesday, February 20, 2013

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.
"E" = Result has been estimated, calibration limit exceeded.
"Z" = See case narrative.
"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.
"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.
"B" = Method blank contained trace levels of analyte. Refer to included method blank report.
"V" = Sample concentration is >10 times the spike. No meaningful Spike Recovery can be calculated.
"J" = Result estimated between the quantitation limit and half the quanitation limit.
"L" = Laboratory Control Sample recovery outside accepted QC limits.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

PARADIGM ENVIRONMENTAL SERVICES, INC.

CHAIN OF CUSTODY

REPORT TO:	INVOICE TO:	LAB PROJECT ID
CLIENT: LABELLA	CLIENT: La Bella	130625
ADDRESS:	ADDRESS:	Quotation #:
CITY: STATE: ZIP:	CITY: STATE: ZIP:	Email: dnoll@labellapc.com sdavis@labellapc.com
PHONE:	PHONE:	
ATTN: Seth Davis & DAN Noll	ATTN: DAN Noll	

PROJECT REFERENCE

210259

Matrix Codes:

AQ - Aqueous Liquid **NQ** - Non-Aqueous Liquid **WA** - Water **WG** - Groundwater **DW** - Drinking Water **WW** - Wastewater **SO** - Soil **SL** - Sludge **SD** - Solid **PT** - Paint **WP** - Wipe **CK** - Caulk **OL** - Oil **AR** - Air

REQUESTED ANALYSIS

	DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	VOCs 624	SVOCs 625 Add	PCB 608	PPL Metals						REMARKS	PARADIGM LAB SAMPLE NUMBER		
1	2/19/2013	1000		X	Direct Discharge	WA	5	X	X	X	X						WASTEWATER METHODS	0	1	
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				

3°Iced

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	☐	Batch QC	☐	Basic EDD	☐
Rush 3 day	☐	Category A	☐	NYSDEC EDD	☐
Rush 2 day	☐	Category B	☐		
Rush 1 day	☒				
Other please indicate:	☐	Other please indicate:	☐	Other EDD please indicate:	☐

Seth Davis	2/19/2013 1000	Total Cost:
Sampled By	Date/Time	
[signature]	2/19/2013 1235	
Relinquished By	Date/Time	
[signature]	2/19/13 1235	P.I.F.
Received By	Date/Time	
Elizabeth A Honca	2/19/13 1240	
Received @ Lab By	Date/Time	

Chain of Custody Supplement

Client: LaBella **Completed by:** EAH

Lab Project ID: 130625 **Date:** 2/19/13

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	NELAC compliance with the sample condition requirements upon receipt Yes	No	N/A
Container Type	X		
Comments			
Transferred to method-compliant container			X
Headspace (<1 mL)	X 624		X
Comments			
Preservation	X		X PCB
Comments			
Chlorine Absent (<0.10 ppm per test strip)	X 625		X PCB Met
Comments	624:		
Holding Time	X		
Comments			
Temperature	X		X Metals
Comments	3°C iced		
Sufficient Sample Quantity	X		
Comments			

Report Date:
11-Mar-13 12:03

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

LaBella Associates
300 State Street, Suite 201
Rochester, NY 14614

Work Order: M0253
Project : LaBella Stand By-Monoco
Project #: 210259

Attn: Dan Noll

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M0253-01	DIRECT DISCHARGE-1	Aqueous	26-Feb-13 14:00	27-Feb-13 10:15

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 requirments have been meet.

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.

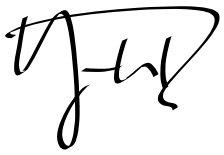
Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

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

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:



Yihai Ding
Laboratory Director

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* Data Summary Pack *

175 Metro Center Boulevard · Warwick, RI 02886-1755 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Stand By -- 210259 **SDG :** M0253

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
DIRECT DISCHARGE-1	M0253-01	E624	E625	E608_PCB	E200.7	
DIRECT DISCHARGE-1	M0253-01				E245.1	

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Stand By -- 210259 **SDG :** M0253

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
E624					
M0253-01A	AQ	2/26/2013	2/27/2013	NA	3/1/2013

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Stand By -- 210259 **SDG :** M0253

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
E625					
M0253-01B	AQ	2/26/2013	2/27/2013	2/28/2013	2/28/2013

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Stand By -- 210259 **SDG :** M0253

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
E608_PCB					
M0253-01B	AQ	2/26/2013	2/27/2013	2/28/2013	2/28/2013

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Stand By -- 210259 **SDG :** M0253

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
E624					
M0253-01A	AQ	E624	NA	LOW	1

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Stand By -- 210259 **SDG :** M0253

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
E625					
M0253-01B	AQ	E625	3510C	NA	1

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Stand By -- 210259 **SDG :** M0253

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
E608_PCB					
M0253-01B	AQ	E608_PCB	3510C	Acid/Sulfur	1

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Stand By -- 210259 **SDG :** M0253

Laboratory Sample ID	Matrix	Metals Requested	Date Received By Lab	Date Analyzed
E200.7				
M0253-01C	AQ	E200.7	2/27/2013	3/1/2013
E245.1				
M0253-01C	AQ	E245.1	2/27/2013	3/4/2013

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: M0253

Client ID: LABELLA
Project: LaBella Stand By
WO Name: LaBella Stand By-Monoco
Location: LABELLA_STANDBY_CONTRACT, 210259

Case:
SDG:
PO: 210259

HC Due: 03/11/13
Fax Due: 03/01/13
Fax Report: ☑

Report Level: ASP-B
Special Program:
EDD: ENVIROINSITE_1
EQUIIS_4_NYSDEC

Comments: use this project for between 11-50 samples, no RUSH surcharge base on lab capacity, no charge for MS/MSD or a batch of 7 or more samples, no charge for TB. no hard copy

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M0253-01A	DIRECT DISCHARGE-1	02/26/2013 14:00	02/27/2013	Aqueous	E624	/ 1ppb ICAL				Y	VOA
M0253-01B	DIRECT DISCHARGE-1	02/26/2013 14:00	02/27/2013	Aqueous	E608_PCB	ONLY 1 LITER; USE 0.5LITER PER ANALYSIS /					B4
M0253-01B	DIRECT DISCHARGE-1	02/26/2013 14:00	02/27/2013	Aqueous	E625	ONLY 1 LITER; USE 0.5LITER PER ANALYSIS /					B4
M0253-01C	DIRECT DISCHARGE-1	02/26/2013 14:00	02/27/2013	Aqueous	E200.7	/ PP13_200				Y	M6
M0253-01C	DIRECT DISCHARGE-1	02/26/2013 14:00	02/27/2013	Aqueous	E245.1	/ PP13_200					M6

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

HT = Test logged in but has been placed on hold

03/04/2013 08:35

Lab Client Rep: Agnes R Huntley

* Volatiles *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Stand By-Monoco

Laboratory Workorder / SDG #: M0253

EPA 624, VOC 624 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: EPA 624

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW5030

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.

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.

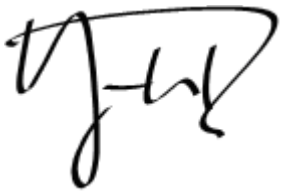
G. Samples:

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.



Signed:_____ _____

Date:_____3/11/2013_____

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.

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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DIRECT DISCHARGE-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0253 Mod. Ref No.: SDG No.: SM0253

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0253-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5O1990.D

Level: (TRACE/LOW/MED) LOW Date Received: 02/27/2013

% Moisture: not dec. Date Analyzed: 03/01/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
75-09-2	Methylene chloride	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
127-18-4	Tetrachloroethene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
110-75-8	2-Chloroethyl vinyl ether	1.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-70677

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0253 Mod. Ref No.: SDG No.: SM0253

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-70677

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5O1964.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 02/28/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
75-09-2	Methylene chloride	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
127-18-4	Tetrachloroethene	5.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
110-75-8	2-Chloroethyl vinyl ether	1.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-70677

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0253 Mod. Ref No.: SDG No.: SM0253

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-70677

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5O1963.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 02/28/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	33	
75-01-4	Vinyl chloride	38	
74-83-9	Bromomethane	40	
75-00-3	Chloroethane	34	
75-69-4	Trichlorofluoromethane	44	
75-35-4	1,1-Dichloroethene	44	
75-09-2	Methylene chloride	53	
156-60-5	trans-1,2-Dichloroethene	50	
75-34-3	1,1-Dichloroethane	51	
67-66-3	Chloroform	50	
71-55-6	1,1,1-Trichloroethane	55	
56-23-5	Carbon tetrachloride	51	
107-06-2	1,2-Dichloroethane	48	
71-43-2	Benzene	51	
79-01-6	Trichloroethene	51	
78-87-5	1,2-Dichloropropane	53	
75-27-4	Bromodichloromethane	51	
10061-01-5	cis-1,3-Dichloropropene	51	
108-88-3	Toluene	51	
10061-02-6	trans-1,3-Dichloropropene	52	
79-00-5	1,1,2-Trichloroethane	50	
127-18-4	Tetrachloroethene	52	
124-48-1	Dibromochloromethane	38	
108-90-7	Chlorobenzene	49	
100-41-4	Ethylbenzene	52	
75-25-2	Bromoform	52	
79-34-5	1,1,2,2-Tetrachloroethane	46	
541-73-1	1,3-Dichlorobenzene	51	
106-46-7	1,4-Dichlorobenzene	49	
95-50-1	1,2-Dichlorobenzene	33	
110-75-8	2-Chloroethyl vinyl ether	24	

2B - FORM II VOA-2

WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0253 Mod. Ref No.: SDG No.: SM0253

Level: (TRACE or LOW) LOW

	EPA SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-70677	102	98	101	102				0
02	MB-70677	94	91	100	97				0
03	DIRECT DISCHARGE-1	100	93	102	100				0

		QC LIMITS
VDMC1	(DBFM) Dibromofluoromethane	(85-115)
VDMC2	(DCE) = 1,2-Dichloroethane-d4	(70-120)
VDMC3	(TOL) = Toluene-d8	(85-120)
VDMC4	(BFB) = Bromofluorobenzene	(75-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

som12.12.17.A

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-70677

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0253 Mod. Ref No.: SDG No.: SM0253

Lab Sample ID: LCS-70677 LCS Lot No.:

Date Extracted: 02/28/2013 Date Analyzed (1): 02/28/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Chloromethane	50.0000	0.0000	33.0138	66		1 - 273
Vinyl chloride	50.0000	0.0000	37.5233	75		1 - 251
Bromomethane	50.0000	0.0000	39.5634	79		1 - 242
Chloroethane	50.0000	0.0000	34.1186	68		14 - 230
Trichlorofluoromethane	50.0000	0.0000	44.0962	88		17 - 181
1,1-Dichloroethene	50.0000	0.0000	44.3831	89		1 - 234
Methylene chloride	50.0000	0.0000	52.5114	105		1 - 221
trans-1,2-Dichloroethene	50.0000	0.0000	50.1403	100		54 - 156
1,1-Dichloroethane	50.0000	0.0000	51.1380	102		59 - 155
Chloroform	50.0000	0.0000	50.3912	101		51 - 138
1,1,1-Trichloroethane	50.0000	0.0000	55.4410	111		52 - 162
Carbon tetrachloride	50.0000	0.0000	50.8266	102		70 - 140
1,2-Dichloroethane	50.0000	0.0000	47.9531	96		49 - 155
Benzene	50.0000	0.0000	51.4455	103		37 - 151
Trichloroethene	50.0000	0.0000	51.3569	103		71 - 157
1,2-Dichloropropane	50.0000	0.0000	53.4816	107		1 - 210
Bromodichloromethane	50.0000	0.0000	51.4397	103		35 - 155
cis-1,3-Dichloropropene	50.0000	0.0000	51.3112	103		1 - 227
Toluene	50.0000	0.0000	51.2174	102		47 - 150
trans-1,3-Dichloropropene	50.0000	0.0000	51.5762	103		17 - 183
1,1,2-Trichloroethane	50.0000	0.0000	50.3262	101		52 - 150
Tetrachloroethene	50.0000	0.0000	52.0573	104		64 - 148
Dibromochloromethane	50.0000	0.0000	38.0011	76		53 - 149
Chlorobenzene	50.0000	0.0000	49.2745	99		37 - 150
Ethylbenzene	50.0000	0.0000	51.9586	104		37 - 162
Bromoform	50.0000	0.0000	52.1128	104		45 - 169
1,1,2,2-Tetrachloroethane	50.0000	0.0000	45.9954	92		46 - 157
1,3-Dichlorobenzene	50.0000	0.0000	51.3931	103		59 - 156
1,4-Dichlorobenzene	50.0000	0.0000	49.1263	98		18 - 190
1,2-Dichlorobenzene	50.0000	0.0000	33.2716	67		18 - 190
2-Chloroethyl vinyl ether	50.0000	0.0000	24.4791	49		1 - 305

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

* Values outside of QC limits

Spike Recovery: 0 out of 31 outside limits

COMMENTS:

4A - FORM IV VOA

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-70677

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0253 Mod. Ref No.: SDG No.: SM0253

Lab File ID: V5O1964.D Lab Sample ID: MB-70677

Instrument ID: V5

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 02/28/2013

Level: (TRACE or LOW/MED) LOW Time Analyzed: 17:52

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-70677	LCS-70677	V5O1963.D	16:27
02	DIRECT DISCHARGE-1	M0253-01A	V5O1990.D	4:56

COMMENTS:

som12.12.17.A

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0253 Mod. Ref No.: SDG No.: SM0253

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 02/26/2013 02/26/2013

EPA Sample No.(VSTD#####): VSTD050X5 Date Analyzed: 02/28/2013

Lab File ID (Standard): V5O1962.D Time Analyzed: 16:02

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

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	407524		4.451		345849		7.656		197450		10.734	
	UPPER LIMIT	815048		4.951		691698		8.156		394900		11.234	
	LOWER LIMIT	203762		3.951		172925		7.156		98725		10.234	
	EPA SAMPLE NO.												
01	LCS-70677	671358		4.441		551641		7.658		315629		10.724	
02	MB-70677	595430		4.445		484898		7.650		271623		10.727	
03	DIRECT DISCHARGE-1	490388		4.447		402945		7.652		225102		10.730	

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.

* Semivolatile Organics *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Stand By-Monoco

Laboratory Workorder / SDG #: M0253

EPA 625, 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: EPA 625

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW3510

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: S3
Instrument Type: GCMS-SEMI
Description: HP6890 / HP5973
Manufacturer: Hewlett-Packard
Model: 6890 / 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 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-70664 in batch 70664, Percent Recovery is outside QC Limits, recovery is below criteria for 2,4-Dimethylphenol at 12% with criteria of (32-119).

LCSD-70664 in batch 70664, Percent Recovery is outside QC Limits, recovery is below criteria for 2,4-Dimethylphenol at 12% with criteria of (32-119).

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.

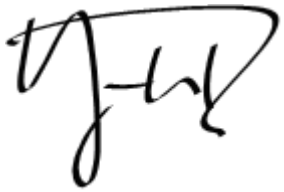
F. Dilutions:

No sample in this SDG required analysis at dilution.

G. Samples:

No other unusual occurrences were noted during sample analysis.

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:_____3/11/2013_____

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.

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

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DIRECT DISCHARGE-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0253 Mod. Ref No.: SDG No.: SM0253

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0253-01B

Sample wt/vol: 500 (g/mL) ML Lab File ID: S3I3790.D

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

% Moisture: Decanted: (Y/N) Date Received: 02/27/2013

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/28/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 02/28/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
108-95-2	Phenol	10	U
111-44-4	Bis(2-chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
108-60-1	2,2´-oxybis(1-Chloropropane)	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
111-91-1	Bis(2-chloroethoxy)methane	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DIRECT DISCHARGE-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0253 Mod. Ref No.: SDG No.: SM0253

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0253-01B

Sample wt/vol: 500 (g/mL) ML Lab File ID: S3I3790.D

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

% Moisture: Decanted: (Y/N) Date Received: 02/27/2013

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/28/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 02/28/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3´-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

EPA SAMPLE NO.
MB-70664

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0253 Mod. Ref No.: SDG No.: SM0253

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-70664

Sample wt/vol: 500 (g/mL) ML Lab File ID: S3I3787.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/28/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 02/28/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
108-95-2	Phenol	10	U
111-44-4	Bis(2-chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
108-60-1	2,2´-oxybis(1-Chloropropane)	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
111-91-1	Bis(2-chloroethoxy)methane	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-70664

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0253 Mod. Ref No.: SDG No.: SM0253

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-70664

Sample wt/vol: 500 (g/mL) ML Lab File ID: S3I3787.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/28/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 02/28/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3´-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-70664

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0253 Mod. Ref No.: SDG No.: SM0253

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-70664

Sample wt/vol: 500 (g/mL) ML Lab File ID: S3I3788.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/28/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 02/28/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
108-95-2	Phenol	34	
111-44-4	Bis(2-chloroethyl)ether	30	
95-57-8	2-Chlorophenol	35	
541-73-1	1,3-Dichlorobenzene	36	
106-46-7	1,4-Dichlorobenzene	36	
95-50-1	1,2-Dichlorobenzene	37	
108-60-1	2,2´-oxybis(1-Chloropropane)	28	
621-64-7	N-Nitroso-di-n-propylamine	22	
67-72-1	Hexachloroethane	35	
98-95-3	Nitrobenzene	31	
78-59-1	Isophorone	30	
88-75-5	2-Nitrophenol	38	
105-67-9	2,4-Dimethylphenol	6.1	J
120-83-2	2,4-Dichlorophenol	34	
120-82-1	1,2,4-Trichlorobenzene	36	
91-20-3	Naphthalene	38	
111-91-1	Bis(2-chloroethoxy)methane	33	
87-68-3	Hexachlorobutadiene	35	
59-50-7	4-Chloro-3-methylphenol	29	
77-47-4	Hexachlorocyclopentadiene	27	
88-06-2	2,4,6-Trichlorophenol	34	
91-58-7	2-Chloronaphthalene	40	
131-11-3	Dimethylphthalate	36	
208-96-8	Acenaphthylene	34	
606-20-2	2,6-Dinitrotoluene	37	
83-32-9	Acenaphthene	38	
51-28-5	2,4-Dinitrophenol	33	J
100-02-7	4-Nitrophenol	30	J
121-14-2	2,4-Dinitrotoluene	37	
84-66-2	Diethylphthalate	35	
7005-72-3	4-Chlorophenyl-phenylether	35	
86-73-7	Fluorene	38	
534-52-1	4,6-Dinitro-2-methylphenol	35	J
86-30-6	N-Nitrosodiphenylamine	33	
101-55-3	4-Bromophenyl-phenylether	40	
118-74-1	Hexachlorobenzene	38	

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-70664

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0253 Mod. Ref No.: SDG No.: SM0253

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-70664

Sample wt/vol: 500 (g/mL) ML Lab File ID: S3I3788.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/28/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 02/28/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
87-86-5	Pentachlorophenol	37	J
85-01-8	Phenanthrene	40	
120-12-7	Anthracene	37	
84-74-2	Di-n-butylphthalate	41	
206-44-0	Fluoranthene	40	
129-00-0	Pyrene	43	
85-68-7	Butylbenzylphthalate	42	
91-94-1	3,3´-Dichlorobenzidine	22	
56-55-3	Benzo(a)anthracene	39	
218-01-9	Chrysene	44	
117-81-7	Bis(2-ethylhexyl)phthalate	45	
117-84-0	Di-n-octylphthalate	46	
205-99-2	Benzo(b)fluoranthene	39	
207-08-9	Benzo(k)fluoranthene	42	
50-32-8	Benzo(a)pyrene	37	
193-39-5	Indeno(1,2,3-cd)pyrene	40	
53-70-3	Dibenzo(a,h)anthracene	39	
191-24-2	Benzo(g,h,i)perylene	40	

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-70664

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0253 Mod. Ref No.: SDG No.: SM0253

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-70664

Sample wt/vol: 500 (g/mL) ML Lab File ID: S3I3789.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/28/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 02/28/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
108-95-2	Phenol	34	
111-44-4	Bis(2-chloroethyl)ether	31	
95-57-8	2-Chlorophenol	36	
541-73-1	1,3-Dichlorobenzene	37	
106-46-7	1,4-Dichlorobenzene	37	
95-50-1	1,2-Dichlorobenzene	39	
108-60-1	2,2´-oxybis(1-Chloropropane)	29	
621-64-7	N-Nitroso-di-n-propylamine	22	
67-72-1	Hexachloroethane	37	
98-95-3	Nitrobenzene	32	
78-59-1	Isophorone	31	
88-75-5	2-Nitrophenol	40	
105-67-9	2,4-Dimethylphenol	5.8	J
120-83-2	2,4-Dichlorophenol	34	
120-82-1	1,2,4-Trichlorobenzene	37	
91-20-3	Naphthalene	38	
111-91-1	Bis(2-chloroethoxy)methane	33	
87-68-3	Hexachlorobutadiene	35	
59-50-7	4-Chloro-3-methylphenol	28	
77-47-4	Hexachlorocyclopentadiene	27	
88-06-2	2,4,6-Trichlorophenol	34	
91-58-7	2-Chloronaphthalene	43	
131-11-3	Dimethylphthalate	38	
208-96-8	Acenaphthylene	36	
606-20-2	2,6-Dinitrotoluene	39	
83-32-9	Acenaphthene	40	
51-28-5	2,4-Dinitrophenol	37	J
100-02-7	4-Nitrophenol	31	J
121-14-2	2,4-Dinitrotoluene	38	
84-66-2	Diethylphthalate	36	
7005-72-3	4-Chlorophenyl-phenylether	38	
86-73-7	Fluorene	39	
534-52-1	4,6-Dinitro-2-methylphenol	37	J
86-30-6	N-Nitrosodiphenylamine	31	
101-55-3	4-Bromophenyl-phenylether	40	
118-74-1	Hexachlorobenzene	39	

EPA SAMPLE NO.
LCSD-70664

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0253 Mod. Ref No.: SDG No.: SM0253

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-70664

Sample wt/vol: 500 (g/mL) ML Lab File ID: S3I3789.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/28/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 02/28/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
87-86-5	Pentachlorophenol	35	J
85-01-8	Phenanthrene	41	
120-12-7	Anthracene	38	
84-74-2	Di-n-butylphthalate	41	
206-44-0	Fluoranthene	40	
129-00-0	Pyrene	44	
85-68-7	Butylbenzylphthalate	43	
91-94-1	3,3´-Dichlorobenzidine	18	J
56-55-3	Benzo(a)anthracene	39	
218-01-9	Chrysene	44	
117-81-7	Bis(2-ethylhexyl)phthalate	45	
117-84-0	Di-n-octylphthalate	46	
205-99-2	Benzo(b)fluoranthene	41	
207-08-9	Benzo(k)fluoranthene	41	
50-32-8	Benzo(a)pyrene	37	
193-39-5	Indeno(1,2,3-cd)pyrene	41	
53-70-3	Dibenzo(a,h)anthracene	40	
191-24-2	Benzo(g,h,i)perylene	41	

2H - FORM II SV-2

WATER SEMIVOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0253 Mod. Ref No.: SDG No.: SM0253

	EPA SAMPLE NO.	SDMC1 (NBZ) #	SDMC2 (FBP) #	SDMC3 (TPH) #	SDMC4 (PHL) #	SDMC5 (2FP) #	SDMC6 (TBP) #			TOT OUT
01	MB-70664	57	69	104	56	62	76			0
02	LCS-70664	65	78	95	63	65	81			0
03	LCSD-70664	66	81	95	63	66	81			0
04	DIRECT DISCHARGE-1	62	76	99	22	37	79			0

			QC LIMITS
SDMC1	(NBZ)	= Nitrobenzene-d5	(40-110)
SDMC2	(FBP)	= 2-Fluorobiphenyl	(50-110)
SDMC3	(TPH)	= Terphenyl-d14	(50-135)
SDMC4	(PHL)	= Phenol-d5	(10-115)
SDMC5	(2FP)	= 2-Fluorophenol	(20-110)
SDMC6	(TBP)	= 2,4,6-Tribromophenol	(40-125)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D DMC diluted out

som12.12.17.A

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-70664

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0253 Mod. Ref No.: SDG No.: SM0253

Lab Sample ID: LCS-70664 LCS Lot No.: A090321

Date Extracted: 02/28/2013 Date Analyzed (1): 02/28/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Phenol	50.0000	0.0000	33.5281	67		5 - 112
Bis(2-chloroethyl)ether	50.0000	0.0000	30.2670	61		12 - 158
2-Chlorophenol	50.0000	0.0000	34.7799	70		23 - 134
1,3-Dichlorobenzene	50.0000	0.0000	36.2260	72		1 - 172
1,4-Dichlorobenzene	50.0000	0.0000	36.1436	72		20 - 124
1,2-Dichlorobenzene	50.0000	0.0000	36.7926	74		32 - 129
2,2´-oxybis(1-Chloropropan	50.0000	0.0000	27.6555	55		36 - 166
N-Nitroso-di-n-propylamine	50.0000	0.0000	22.1033	44		1 - 230
Hexachloroethane	50.0000	0.0000	35.1299	70		40 - 113
Nitrobenzene	50.0000	0.0000	31.0743	62		35 - 180
Isophorone	50.0000	0.0000	30.1588	60		21 - 196
2-Nitrophenol	50.0000	0.0000	37.9834	76		29 - 182
2,4-Dimethylphenol	50.0000	0.0000	6.0618	12	*	32 - 119
2,4-Dichlorophenol	50.0000	0.0000	34.4580	69		39 - 135
1,2,4-Trichlorobenzene	50.0000	0.0000	35.7494	71		44 - 142
Naphthalene	50.0000	0.0000	38.0300	76		21 - 133
Bis(2-chloroethoxy)methane	50.0000	0.0000	33.1544	66		33 - 184
Hexachlorobutadiene	50.0000	0.0000	35.0067	70		24 - 116
4-Chloro-3-methylphenol	50.0000	0.0000	28.7861	58		22 - 147
Hexachlorocyclopentadiene	50.0000	0.0000	27.2770	55		34 - 103
2,4,6-Trichlorophenol	50.0000	0.0000	34.1278	68		37 - 144
2-Chloronaphthalene	50.0000	0.0000	39.5838	79		60 - 118
Dimethylphthalate	50.0000	0.0000	36.0374	72		1 - 112
Acenaphthylene	50.0000	0.0000	34.4802	69		33 - 145
2,6-Dinitrotoluene	50.0000	0.0000	36.6879	73		50 - 158
Acenaphthene	50.0000	0.0000	38.0356	76		47 - 155
2,4-Dinitrophenol	50.0000	0.0000	32.8198	66		1 - 191
4-Nitrophenol	50.0000	0.0000	29.9244	60		1 - 132
2,4-Dinitrotoluene	50.0000	0.0000	37.4117	75		39 - 139
Diethylphthalate	50.0000	0.0000	34.9088	70		1 - 114
4-Chlorophenyl-phenylether	50.0000	0.0000	35.1950	70		25 - 158
Fluorene	50.0000	0.0000	37.7011	75		59 - 121
4,6-Dinitro-2-methylphenol	50.0000	0.0000	35.1931	70		1 - 181
N-Nitrosodiphenylamine	50.0000	0.0000	32.8728	66		48 - 121
4-Bromophenyl-phenylether	50.0000	0.0000	39.5606	79		53 - 127
Hexachlorobenzene	50.0000	0.0000	37.8344	76		1 - 152
Pentachlorophenol	50.0000	0.0000	37.0162	74		14 - 176
Phenanthrene	50.0000	0.0000	40.4845	81		54 - 120
Anthracene	50.0000	0.0000	37.3965	75		27 - 133
Di-n-butylphthalate	50.0000	0.0000	41.1337	82		1 - 118
Fluoranthene	50.0000	0.0000	40.1711	80		26 - 137
Pyrene	50.0000	0.0000	42.8236	86		52 - 115
Butylbenzylphthalate	50.0000	0.0000	42.0701	84		1 - 152
3,3´-Dichlorobenzidine	50.0000	0.0000	22.4413	45		1 - 262

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-70664

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0253 Mod. Ref No.: SDG No.: SM0253

Lab Sample ID: LCS-70664 LCS Lot No.: A090321

Date Extracted: 02/28/2013 Date Analyzed (1): 02/28/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Benzo(a)anthracene	50.0000	0.0000	38.6290	77		33 - 143
Chrysene	50.0000	0.0000	43.5115	87		17 - 168
Bis(2-ethylhexyl)phthalate	50.0000	0.0000	44.5830	89		8 - 158
Di-n-octylphthalate	50.0000	0.0000	45.6182	91		4 - 146
Benzo(b)fluoranthene	50.0000	0.0000	38.7184	77		24 - 159
Benzo(k)fluoranthene	50.0000	0.0000	41.8783	84		11 - 162
Benzo(a)pyrene	50.0000	0.0000	37.3311	75		17 - 163
Indeno(1,2,3-cd)pyrene	50.0000	0.0000	39.5381	79		1 - 171
Dibenzo(a,h)anthracene	50.0000	0.0000	38.8768	78		1 - 227
Benzo(g,h,i)perylene	50.0000	0.0000	40.0495	80		1 - 219

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

* Values outside of QC limits

Spike Recovery: 1 out of 54 outside limits

COMMENTS:

3 - FORM III

WATER LABORATORY CONTROL

SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-70664

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0253 Mod. Ref No.: SDG No.: SM0253

Lab Sample ID: LCSD-70664 LCS Lot No.: A090321

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Phenol	50.0000	34.1295	68		1		40	5 - 112
Bis(2-chloroethyl)ether	50.0000	31.3215	63		3		40	12 - 158
2-Chlorophenol	50.0000	35.9890	72		3		40	23 - 134
1,3-Dichlorobenzene	50.0000	37.3668	75		4		40	1 - 172
1,4-Dichlorobenzene	50.0000	37.0182	74		3		40	20 - 124
1,2-Dichlorobenzene	50.0000	38.9335	78		5		40	32 - 129
2,2´-oxybis(1-Chloropropan	50.0000	29.1417	58		5		40	36 - 166
N-Nitroso-di-n-propylamine	50.0000	22.4283	45		2		40	1 - 230
Hexachloroethane	50.0000	36.6845	73		4		40	40 - 113
Nitrobenzene	50.0000	31.8800	64		3		40	35 - 180
Isophorone	50.0000	31.2926	63		5		40	21 - 196
2-Nitrophenol	50.0000	40.0630	80		5		40	29 - 182
2,4-Dimethylphenol	50.0000	5.8404	12	*	0		40	32 - 119
2,4-Dichlorophenol	50.0000	34.4539	69		0		40	39 - 135
1,2,4-Trichlorobenzene	50.0000	36.8906	74		4		40	44 - 142
Naphthalene	50.0000	38.2960	77		1		40	21 - 133
Bis(2-chloroethoxy)methane	50.0000	32.9379	66		0		40	33 - 184
Hexachlorobutadiene	50.0000	34.6378	69		1		40	24 - 116
4-Chloro-3-methylphenol	50.0000	27.8046	56		4		40	22 - 147
Hexachlorocyclopentadiene	50.0000	26.5782	53		4		40	34 - 103
2,4,6-Trichlorophenol	50.0000	34.4050	69		1		40	37 - 144
2-Chloronaphthalene	50.0000	42.6374	85		7		40	60 - 118
Dimethylphthalate	50.0000	37.6178	75		4		40	1 - 112
Acenaphthylene	50.0000	36.2136	72		4		40	33 - 145
2,6-Dinitrotoluene	50.0000	38.8155	78		7		40	50 - 158
Acenaphthene	50.0000	39.8101	80		5		40	47 - 155
2,4-Dinitrophenol	50.0000	36.9335	74		11		40	1 - 191
4-Nitrophenol	50.0000	31.4779	63		5		40	1 - 132
2,4-Dinitrotoluene	50.0000	38.4093	77		3		40	39 - 139
Diethylphthalate	50.0000	36.0084	72		3		40	1 - 114
4-Chlorophenyl-phenylether	50.0000	37.9262	76		8		40	25 - 158
Fluorene	50.0000	39.2646	79		5		40	59 - 121
4,6-Dinitro-2-methylphenol	50.0000	37.0718	74		6		40	1 - 181
N-Nitrosodiphenylamine	50.0000	31.1132	62		6		40	48 - 121
4-Bromophenyl-phenylether	50.0000	40.0838	80		1		40	53 - 127
Hexachlorobenzene	50.0000	38.8849	78		3		40	1 - 152
Pentachlorophenol	50.0000	35.3899	71		4		40	14 - 176
Phenanthrene	50.0000	40.9219	82		1		40	54 - 120
Anthracene	50.0000	37.9226	76		1		40	27 - 133
Di-n-butylphthalate	50.0000	41.3767	83		1		40	1 - 118
Fluoranthene	50.0000	40.3639	81		1		40	26 - 137
Pyrene	50.0000	43.7222	87		1		40	52 - 115
Butylbenzylphthalate	50.0000	43.3416	87		4		40	1 - 152
3,3´-Dichlorobenzidine	50.0000	18.3767	37		20		40	1 - 262
Benzo(a)anthracene	50.0000	39.2162	78		1		40	33 - 143
Chrysene	50.0000	43.8017	88		1		40	17 - 168

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-70664

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0253 Mod. Ref No.: SDG No.: SM0253

Lab Sample ID: LCSD-70664 LCS Lot No.: A090321

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Bis(2-ethylhexyl)phthalate	50.0000	45.4138	91		2		40	8 - 158
Di-n-octylphthalate	50.0000	46.1495	92		1		40	4 - 146
Benzo(b)fluoranthene	50.0000	40.8762	82		6		40	24 - 159
Benzo(k)fluoranthene	50.0000	41.1491	82		2		40	11 - 162
Benzo(a)pyrene	50.0000	37.2989	75		0		40	17 - 163
Indeno(1,2,3-cd)pyrene	50.0000	40.7201	81		3		40	1 - 171
Dibenzo(a,h)anthracene	50.0000	39.6407	79		1		40	1 - 227
Benzo(g,h,i)perylene	50.0000	40.6155	81		1		40	1 - 219

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

* Values outside of QC limits

RPD: 0 out of 54 outside limits

Spike Recovery: 1 out of 54 outside limits

COMMENTS:

4C - FORM IV SV

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-70664

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0253 Mod. Ref No.: SDG No.: SM0253

Lab File ID: S3I3787.D Lab Sample ID: MB-70664

Instrument ID: S3 Date Extracted: 02/28/2013

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 02/28/2013

Level: (LOW/MED) LOW Time Analyzed: 21:53

Extraction: (Type) SEPF GPC Cleanup: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	LCS-70664	LCS-70664	S3I3788.D	02/28/2013
02	LCSD-70664	LCSD-70664	S3I3789.D	02/28/2013
03	DIRECT DISCHARGE-1	M0253-01B	S3I3790.D	02/28/2013

COMMENTS:

8C - FORM VIII SV-1

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0253 Mod. Ref No.: SDG No.: SM0253

GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 01/31/2013 01/31/2013

EPA Sample No.(SSTD020##) SSTD0253Z Date Analyzed: 02/28/2013

Lab File ID (Standard): S3I3771.D Time Analyzed: 10:53

Instrument ID: S3

		IS1 (DCB) AREA	#	IS1 (DCB) RT	#	IS2 (NPT) AREA	#	IS2 (NPT) RT	#	IS3 (ANT) AREA	#	IS3 (ANT) RT	#
	12 HOUR STD	139483		4.114		510909		5.877		377193		7.645	
	UPPER LIMIT	278966		4.614		1021818		6.377		754386		8.145	
	LOWER LIMIT	69742		3.614		255455		5.377		188597		7.145	
	EPA SAMPLE NO.												
01	MB-70664	153776		4.116		568405		5.879		400692		7.642	
02	LCS-70664	147660		4.119		537889		5.882		399458		7.645	
03	LCSD-70664	145786		4.122		541032		5.879		387875		7.647	
04	DIRECT DISCHARGE-1	147985		4.118		542068		5.876		380472		7.644	

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

8D - FORM VIII SV-2

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0253 Mod. Ref No.: SDG No.: SM0253

EPA Sample No.(SSTD020##) SSTD0253Z Date Analyzed: 02/28/2013

Lab File ID (Standard): S3I3771.D Time Analyzed: 10:53

Instrument ID: S3 GC Column: Rxi-5sil MS ID: 0.25 (mm)

		IS4 (PHN) AREA	#	RT	#	IS5 (CRY) AREA	#	RT	#	IS6 (PRY) AREA	#	RT	#
	12 HOUR STD	767620		8.922		1022334		11.321		792678		13.159	
	UPPER LIMIT	1535240		9.422		2044668		11.821		1585356		13.659	
	LOWER LIMIT	383810		8.422		511167		10.821		396339		12.659	
	EPA SAMPLE NO.												
01	MB-70664	804113		8.914		940681		11.195		788463		13.016	
02	LCS-70664	796765		8.917		1059369		11.208		756542		13.030	
03	LCSD-70664	792690		8.919		1036387		11.221		743213		13.048	
04	DIRECT DISCHARGE-1	739978		8.915		847005		11.207		714232		13.029	

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.

* PCB Organics *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Stand By-Monoco

Laboratory Workorder / SDG #: M0253

EPA 608 PCB, 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: EPA 608 PCB

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW3510

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:

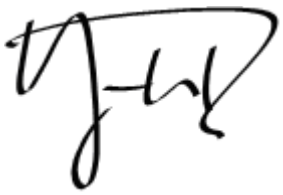
No sample in this SDG required analysis at dilution.

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.

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:_____3/11/2013_____

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.

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

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DIRECT DISCHARGE-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0253 Mod. Ref No.: SDG No.: SM0253

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0253-01B

Sample wt/vol: 500 (g/mL) ML Lab File ID: E2L8848F.D/E2L8848R.D

% Moisture: Decanted: (Y/N) Date Received: 02/27/2013

Extraction: (Type) SEPF Date Extracted: 02/28/2013

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 02/28/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-70663

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0253 Mod. Ref No.: SDG No.: SM0253

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-70663

Sample wt/vol: 500 (g/mL) ML Lab File ID: E2L8845F.D/E2L8845R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 02/28/2013

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 02/28/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-70663(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0253 Mod. Ref No.: SDG No.: SM0253

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-70663

Sample wt/vol: 500 (g/mL) ML Lab File ID: E2L8846F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 02/28/2013

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 02/28/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	3.5	
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	3.4	

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-70663(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0253 Mod. Ref No.: SDG No.: SM0253

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-70663

Sample wt/vol: 500 (g/mL) ML Lab File ID: E2L8846R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 02/28/2013

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 02/28/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	3.4	
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	3.7	

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
LCSD-70663(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0253 Mod. Ref No.: SDG No.: SM0253

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-70663

Sample wt/vol: 500 (g/mL) ML Lab File ID: E2L8847F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 02/28/2013

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 02/28/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	3.7	
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	3.6	

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
LCSD-70663(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0253 Mod. Ref No.: SDG No.: SM0253

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-70663

Sample wt/vol: 500 (g/mL) ML Lab File ID: E2L8847R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 02/28/2013

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 02/28/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	3.7	
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	4.0	

2Q - FORM II ARO-1

WATER AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0253 Mod. Ref No.: SDG No.: SM0253

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-70663	89		92		83		85				0
02	LCS-70663	87		90		84		86				0
03	LCSD-70663	94		98		90		93				0
04	DIRECT DISCHARGE-1	78		82		73		77				0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(39-126)
DCB = Decachlorobiphenyl	(17-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som12.12.17.A

3N - FORM III ARO-3

WATER AROCLOR LABORATORY CONTROL SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-70663

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0253 Mod. Ref No.: SDG No.: SM0253

Lab Sample ID: LCS-70663 LCS Lot No.: A086503

Date Extracted: 02/28/2013 Date Analyzed (1): 02/28/2013

Instrument ID (1): E2 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC	#	QC LIMITS
Aroclor-1016	4.0000	3.5119	88		50-114
Aroclor-1260	4.0000	3.3646	84		8-127

Instrument ID (2): E2 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 02/28/2013

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC	#	QC LIMITS
Aroclor-1016	4.0000	3.4273	86		50-114
Aroclor-1260	4.0000	3.6837	92		8-127

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:

som12.12.17.A

3N - FORM III ARO-3
WATER AROCLOR LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-70663

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0253 Mod. Ref No.: SDG No.: SM0253

Lab Sample ID: LCSD-70663 LCS Lot No.: A086503

Date Extracted: 02/28/2013 Date Analyzed (1): 02/28/2013

Instrument ID (1): E2 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC	#	QC LIMITS	%RPD	#	RPD LIMIT
Aroclor-1016	4.0000	3.7275	93		50-114	6.0		40
Aroclor-1260	4.0000	3.5907	90		8-127	7.0		40

Instrument ID (2): E2 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 02/28/2013

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC	#	QC LIMITS	%RPD	#	RPD LIMIT
Aroclor-1016	4.0000	3.6818	92		50-114	7.0		40
Aroclor-1260	4.0000	3.9688	99		8-127	7.0		40

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:

som12.12.17.A

4F - FORM IV ARO

AROCLOR METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-70663

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0253 Mod. Ref No.: SDG No.: SM0253

Lab File ID: E2L8845F.D / E2L8845R.D Lab Sample ID: MB-70663

Matrix: (SOIL/SED/WATER) WATER Extraction: (Type) SEPF Date Extracted: 02/28/2013

Sulfur Cleanup: (Y/N) Y GPC Cleanup:(Y/N) N

Acid Cleanup: (Y/N Y

Date Analyzed (1): 02/28/2013 Date Analyzed (2): 02/28/2013

Time Analyzed (1): 12:42 Time Analyzed (2): 12:42

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-70663	LCS-70663	02/28/2013	02/28/2013
02	LCSD-70663	LCSD-70663	02/28/2013	02/28/2013
03	DIRECT DISCHARGE-1	M0253-01B	02/28/2013	02/28/2013

COMMENTS:

* Metals *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Stand By-Monoco

Laboratory Workorder / SDG #: M0253

EPA 200.7, EPA 245.1

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: EPA 200.7, EPA 245.1.

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: EPA 200.7, EPA 245.1.

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):

A matrix spike was not performed on any sample in this SDG.

D. Post Digestion Spike (PDS):

A post-digestion spike was not performed on any sample in this SDG.

E. Duplicate sample:

A duplicate analysis was not performed on any sample in this SDG.

F. Serial Dilution (SD):

A serial dilution was not performed on any sample in this SDG.

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: 03/07/13

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.

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

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

DIRECT DISCHARGE-1

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0253

Matrix (soil/water): WATER Lab Sample ID: M0253-01

Level (low/med): LOW Date Received: 02/27/2013

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	7.0	U		P
7440-38-2	Arsenic	5.2	U		P
7440-41-7	Beryllium	0.063	U		P
7440-43-9	Cadmium	0.19	U		P
7440-47-3	Chromium	0.48	B		P
7440-50-8	Copper	2.0	B		P
7439-92-1	Lead	2.4	U		P
7439-97-6	Mercury	0.030	U		CV
7440-02-0	Nickel	1.0	B		P
7782-49-2	Selenium	14.0	U		P
7440-22-4	Silver	0.75	U		P
7440-28-0	Thallium	7.0	U		P
7440-66-6	Zinc	8.5	B		P

Comments:

7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0253

Solid LCS Source:

Aqueous LCS Source:

LCS(D) ID:
LCS-70686

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Antimony	100.0	93.48	93.5						
Arsenic	40.0	40.08	100.2						
Beryllium	50.0	49.16	98.3						
Cadmium	50.0	49.61	99.2						
Chromium	200.0	202.03	101.0						
Copper	250.0	241.59	96.6						
Lead	20.0	20.17	100.9						
Nickel	500.0	513.57	102.7						
Selenium	50.0	48.87	97.7						
Silver	50.0	50.20	100.4						
Thallium	50.0	49.77	99.5						
Zinc	500.0	504.96	101.0						

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0253

Solid LCS Source: LCS(D) ID:

Aqueous LCS Source: **LCS-70716**

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Mercury	4.6	4.31	93.7						

7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0253

Solid LCS Source:

Aqueous LCS Source:

LCS(D) ID:
LCSD-70686

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Antimony	100.0	97.54	97.5						
Arsenic	40.0	39.45	98.6						
Beryllium	50.0	48.38	96.8						
Cadmium	50.0	49.65	99.3						
Chromium	200.0	199.54	99.8						
Copper	250.0	233.29	93.3						
Lead	20.0	20.55	102.8						
Nickel	500.0	506.04	101.2						
Selenium	50.0	56.94	113.9						
Silver	50.0	50.07	100.1						
Thallium	50.0	50.60	101.2						
Zinc	500.0	498.40	99.7						

U.S. EPA - CLP

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0253

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-70716**

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

FIMS2_130304B

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
Analyte		C	03/04/13 15:17	C	03/04/13 15:35	C	03/04/13 15:53	C		C	M
Mercury	0.030	U	0.030	U	0.032	B	0.036	B	0.030	U	CV

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0253

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-70686**

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

OPTIMA3_130301B

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 03/01/13 13:30	C	03/01/13 13:58	C		C	Preparation Blank	C	M
Antimony	7.0	U	7.0	U	7.0	U			7.000	U	P
Arsenic	5.2	U	5.2	U	5.2	U			5.200	U	P
Beryllium	0.1	U	0.1	U	0.1	U			0.063	U	P
Cadmium	0.2	U	0.2	U	0.2	U			0.190	U	P
Chromium	0.4	U	0.4	U	0.4	U			0.390	U	P
Copper	1.1	U	1.1	U	1.1	U			1.100	U	P
Lead	2.4	U	2.4	U	2.4	U			2.400	U	P
Nickel	0.8	U	0.8	U	0.8	U			0.810	U	P
Selenium	14.0	U	14.0	U	14.0	U			14.000	U	P
Silver	0.8	U	0.8	U	0.8	U			0.750	U	P
Thallium	7.0	U	7.0	U	7.0	U			7.000	U	P
Zinc	1.0	U	1.0	U	1.0	U			1.000	U	P

Report Date:
13-Mar-13 09:00

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

LaBella Associates
300 State Street, Suite 201
Rochester, NY 14614

Work Order: M0262
Project : LaBella Stand By-Monoco
Project #: 210259

Attn: Dan Noll

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M0262-01	DIRECT DISCHARGE 2	Aqueous	27-Feb-13 14:30	28-Feb-13 10:10

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 requirments have been meet.

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.

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

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Stand By -- 210259 **SDG :** M0262

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
DIRECT DISCHARGE 2	M0262-01	E624	E625	E608_PCB	E200.7	
DIRECT DISCHARGE 2	M0262-01				E245.1	

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Stand By -- 210259 **SDG :** M0262

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
E624					
M0262-01A	AQ	2/27/2013	2/28/2013	NA	3/1/2013

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Stand By -- 210259 **SDG :** M0262

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
E608_PCB					
M0262-01B	AQ	2/27/2013	2/28/2013	3/1/2013	3/1/2013

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Stand By -- 210259 **SDG :** M0262

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
E625					
M0262-01B	AQ	2/27/2013	2/28/2013	3/1/2013	3/4/2013

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Stand By -- 210259 **SDG :** M0262

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
E624					
M0262-01A	AQ	E624	NA	LOW	1

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Stand By -- 210259 **SDG :** M0262

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
E625					
M0262-01B	AQ	E625	3510C	NA	1

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Stand By -- 210259 **SDG :** M0262

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
E608_PCB					
M0262-01B	AQ	E608_PCB	3510C	Acid/Sulfur	1

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Stand By -- 210259 **SDG :** M0262

Laboratory Sample ID	Matrix	Metals Requested	Date Received By Lab	Date Analyzed
E200.7				
M0262-01C	AQ	E200.7	2/28/2013	3/1/2013
E245.1				
M0262-01C	AQ	E245.1	2/28/2013	3/4/2013

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: M0262

Client ID: LABELLA
Project: LaBella Stand By
WO Name: LaBella Stand By-Monoco
Location: LABELLA_STANDBY_CONTRACT, 210259

Case:
SDG:
PO: 210259

HC Due: 03/12/13
Fax Due: 03/04/13
Fax Report: ☑

Report Level: ASP-B
Special Program:
EDD: ENVIROINSITE_1
EQUIIS_4_NYSDEC

Comments: use this project for between 11-50 samples, no RUSH surcharge base on lab capacity, no charge for MS/MSD or a batch of 7 or more samples, no charge for TB. no hard copy

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M0262-01A	DIRECT DISCHARGE 2	02/27/2013 14:30	02/28/2013	Aqueous	E624	/ 1ppb ICAL				Y	VOA
M0262-01B	DIRECT DISCHARGE 2	02/27/2013 14:30	02/28/2013	Aqueous	E608_PCB	/					C2
M0262-01B	DIRECT DISCHARGE 2	02/27/2013 14:30	02/28/2013	Aqueous	E625	/					C2
M0262-01C	DIRECT DISCHARGE 2	02/27/2013 14:30	02/28/2013	Aqueous	E200.7	/ PP13_200				Y	M1
M0262-01C	DIRECT DISCHARGE 2	02/27/2013 14:30	02/28/2013	Aqueous	E245.1	/ PP13_200					M1

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

HT = Test logged in but has been placed on hold

03/04/2013 08:31

Lab Client Rep: Agnes R Huntley

Sample Transmittal Documentation

M0262

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 2-DAY
· All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
· Samples disposed of after 30 days unless otherwise instructed.

Report To: LaBella
300 State St Suite 201
Rochester NY 14614

Project Mgr.: D. Noll

Invoice To: SAME

P.O. No.: _____ RQN: _____

Project No.: 210259
Site Name: Monaco
Location: Pittsford State: NY
Sampler(s): RD

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 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=_____

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: 624	625	PPL Metals	608 PCBs					
M0262-01	Direct Discharge	2-27-13	1430	G	WW	2	3		1	X	X	X	X					

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other _____
State specific reporting standards: _____

☐ E-mail to dnoll, sdavis
EDD Format _____

Condition upon receipt: ☒ Iced ☐ Ambient ☒ °C 3.0

Relinquished by:	Received by:	Date:	Time:
Seth Davis	FEDEX	2-27-13	1600
FedEx		2/28/13	10:10

Page 3 of 402

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

Received By: AED	Page 01 of 00
Reviewed By: VEB	Log-in Date 02/28/2013
Work Order: M0262	Client Name: LaBella Associates
Project Name/Event: LaBella Stand By-Monanco	

Remarks: (1/2) Please see associated sample/extract transfer logbook pages submitted with this data package.

1. Custody Seal(s)	Present / Absent
	Intact / Broken
2. Custody Seal Nos.	N/A
3. Traffic Reports/ Chain of Custody Records (TR/COCs) or Packing Lists	Present / Absent
4. Airbill	AirBill / Sticker
	Present / Absent
5. Airbill No.	FedEx 8017 8828 6923
6. Sample Tags	Present / Absent
Sample Tag Numbers	Listed / Not Listed on Chain-of-Custody
7. Sample Condition	Intact / Broken/ Leaking
8. Cooler Temperature Indicator Bottle	Present / Absent
9. Cooler Temperature	3 °C
10. Does information on TR/COCs and sample tags agree?	Yes / No
11. Date Received at Laboratory	02/28/2013
12. Time Received	10:10

Lab Sample ID	Preservation (pH) HNO3	H2SO4	HCl	NaOH	H3PO4	VOA Matrix	Soil HeadSpace or Air Bubble > or equal to 1/4"
M0262-01						H	

Sample Transfer

Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area #	Area #
By	By
On	On

IR Temp Gun ID:MT-1

CoolantCondition: ICE

Preservative Name/Lot No:

VOA Matrix Key:

US = Unpreserved Soil	A= Air
UA = Unpreserved Aqueous	H = HCl
M = MeOH	E = Encore
N = NaHSO4	F = Freeze

See Sample Condition Notification/Corrective Action Form Yes / No

Rad OK Yes / No

* Volatiles *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Stand By-Monoco

Laboratory Workorder / SDG #: M0262

EPA 624, VOC 624 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: EPA 624

IV. PREPARATION

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

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.

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:

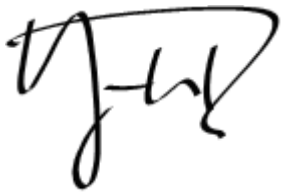
No other unusual occurrences were noted during sample analysis.

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.



Signed:_____ _____

Date:_____3/12/2013_____

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.

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

2B - FORM II VOA-2

WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Level: (TRACE or LOW) LOW

	CLIENT SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-70677	102	98	101	102				0
02	MB-70677	94	91	100	97				0
03	DIRECT DISCHARGE 2	102	88	102	96				0

		QC LIMITS
VDMC1	(DBFM) Dibromofluoromethane	(85-115)
VDMC2	(DCE) = 1,2-Dichloroethane-d4	(70-120)
VDMC3	(TOL) = Toluene-d8	(85-120)
VDMC4	(BFB) = Bromofluorobenzene	(75-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

som12.12.17.A

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.
LCS-70677

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Lab Sample ID: LCS-70677 LCS Lot No.:

Date Extracted: 02/28/2013 Date Analyzed (1): 02/28/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Chloromethane	50.0000	0.0000	33.0138	66		1 - 273
Vinyl chloride	50.0000	0.0000	37.5233	75		1 - 251
Bromomethane	50.0000	0.0000	39.5634	79		1 - 242
Chloroethane	50.0000	0.0000	34.1186	68		14 - 230
Trichlorofluoromethane	50.0000	0.0000	44.0962	88		17 - 181
1,1-Dichloroethene	50.0000	0.0000	44.3831	89		1 - 234
Methylene chloride	50.0000	0.0000	52.5114	105		1 - 221
trans-1,2-Dichloroethene	50.0000	0.0000	50.1403	100		54 - 156
1,1-Dichloroethane	50.0000	0.0000	51.1380	102		59 - 155
Chloroform	50.0000	0.0000	50.3912	101		51 - 138
1,1,1-Trichloroethane	50.0000	0.0000	55.4410	111		52 - 162
Carbon tetrachloride	50.0000	0.0000	50.8266	102		70 - 140
1,2-Dichloroethane	50.0000	0.0000	47.9531	96		49 - 155
Benzene	50.0000	0.0000	51.4455	103		37 - 151
Trichloroethene	50.0000	0.0000	51.3569	103		71 - 157
1,2-Dichloropropane	50.0000	0.0000	53.4816	107		1 - 210
Bromodichloromethane	50.0000	0.0000	51.4397	103		35 - 155
cis-1,3-Dichloropropene	50.0000	0.0000	51.3112	103		1 - 227
Toluene	50.0000	0.0000	51.2174	102		47 - 150
trans-1,3-Dichloropropene	50.0000	0.0000	51.5762	103		17 - 183
1,1,2-Trichloroethane	50.0000	0.0000	50.3262	101		52 - 150
Tetrachloroethene	50.0000	0.0000	52.0573	104		64 - 148
Dibromochloromethane	50.0000	0.0000	38.0011	76		53 - 149
Chlorobenzene	50.0000	0.0000	49.2745	99		37 - 150
Ethylbenzene	50.0000	0.0000	51.9586	104		37 - 162
Bromoform	50.0000	0.0000	52.1128	104		45 - 169
1,1,2,2-Tetrachloroethane	50.0000	0.0000	45.9954	92		46 - 157
1,3-Dichlorobenzene	50.0000	0.0000	51.3931	103		59 - 156
1,4-Dichlorobenzene	50.0000	0.0000	49.1263	98		18 - 190
1,2-Dichlorobenzene	50.0000	0.0000	33.2716	67		18 - 190
2-Chloroethyl vinyl ether	50.0000	0.0000	24.4791	49		1 - 305

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

* Values outside of QC limits

Spike Recovery: 0 out of 31 outside limits

COMMENTS:

4A - FORM IV VOA

VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

MB-70677

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Lab File ID: V5O1964.D Lab Sample ID: MB-70677

Instrument ID: V5

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 02/28/2013

Level: (TRACE or LOW/MED) LOW Time Analyzed: 17:52

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-70677	LCS-70677	V5O1963.D	16:27
02	DIRECT DISCHARGE 2	M0262-01A	V5O1991.D	5:21

COMMENTS:

som12.12.17.A

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

CLIENT SAMPLE NO.
BFBT5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Lab File ID: V5O1880.D BFB Injection Date: 02/26/2013

Instrument ID: V5 BFB Injection Time: 16:15

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.9
75	30.0 - 60.0% of mass 95	47.4
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	5.6
173	Less than 2.0% of mass 174	0.2 (0.2)1
174	Greater than 50.0% of mass 95	94.2
175	5.0 - 9.0% of mass 174	7.3 (7.7)1
176	95.0 - 101.0% of mass 174	89.9 (95.3)1
177	5.0 - 9.0% of mass 176	6.3 (7.0)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	VSTD001T5	VSTD001T5	V5O1882.D	02/26/2013	17:07
02	VSTD005T5	VSTD005T5	V5O1883.D	02/26/2013	17:33
03	VSTD020T5	VSTD020T5	V5O1884.D	02/26/2013	17:58
04	VSTD050T5	VSTD050T5	V5O1885.D	02/26/2013	18:24
05	VSTD100T5	VSTD100T5	V5O1886.D	02/26/2013	18:50
06	VSTD200T5	VSTD200T5	V5O1887.D	02/26/2013	19:16

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

CLIENT SAMPLE NO.
BFBX5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Lab File ID: V5O1961.D BFB Injection Date: 02/28/2013

Instrument ID: V5 BFB Injection Time: 15:24

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	50.8
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	76.4
175	5.0 - 9.0% of mass 174	5.9 (7.7)1
176	95.0 - 101.0% of mass 174	74.3 (97.3)1
177	5.0 - 9.0% of mass 176	4.9 (6.6)2

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050X5	VSTD050X5	V5O1962.D	02/28/2013	16:02
02	LCS-70677	LCS-70677	V5O1963.D	02/28/2013	16:27
03	MB-70677	MB-70677	V5O1964.D	02/28/2013	17:52
04	DIRECT DISCHARGE 2	M0262-01A	V5O1991.D	03/01/2013	5:21

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 02/26/2013 02/26/2013

EPA Sample No.(VSTD#####): VSTD050X5 Date Analyzed: 02/28/2013

Lab File ID (Standard): V5O1962.D Time Analyzed: 16:02

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

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	407524		4.451		345849		7.656		197450		10.734	
	UPPER LIMIT	815048		4.951		691698		8.156		394900		11.234	
	LOWER LIMIT	203762		3.951		172925		7.156		98725		10.234	
	SAMPLE NO.												
01	LCS-70677	671358		4.441		551641		7.658		315629		10.724	
02	MB-70677	595430		4.445		484898		7.650		271623		10.727	
03	DIRECT DISCHARGE 2	493285		4.446		423911		7.651		224154		10.729	

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

CLIENT SAMPLE NO.

DIRECT DISCHARGE 2

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0262-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5O1991.D

Level: (TRACE/LOW/MED) LOW Date Received: 02/28/2013

% Moisture: not dec. Date Analyzed: 03/01/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
75-09-2	Methylene chloride	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
127-18-4	Tetrachloroethene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
110-75-8	2-Chloroethyl vinyl ether	1.0	U

Data File: \\avogadro\organics\V5.I\130228.B\V5O1991.D
Report Date: 05-Mar-2013 13:30

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

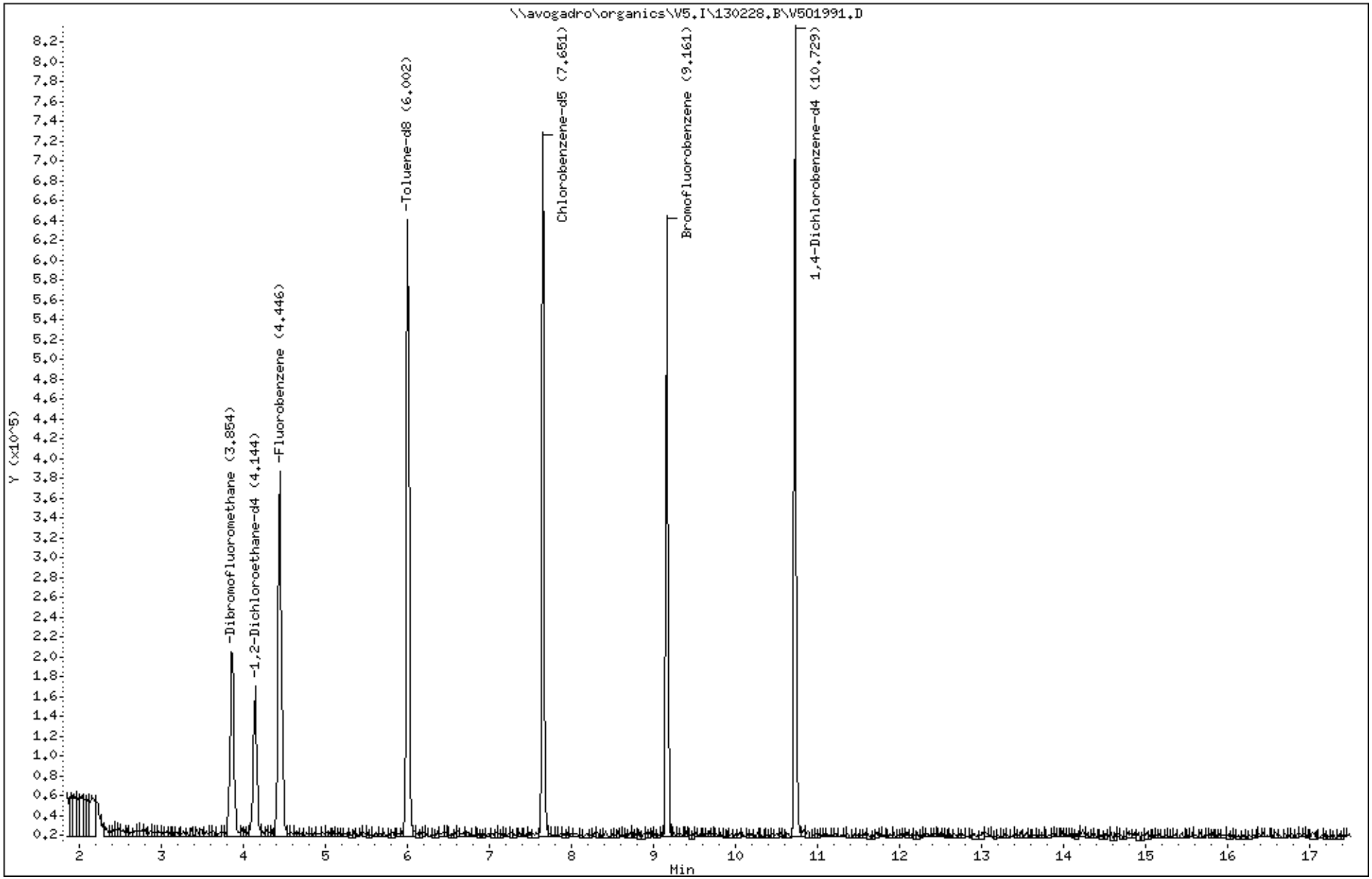
Data file : \\avogadro\organics\V5.I\130228.B\V5O1991.D
Lab Smp Id: M0262-01A Client Smp ID: DIRECT DISCHARGE 2
Inj Date : 01-MAR-2013 05:21
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5ML,M0262-01A,,70678,
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\130228.B\v5_8260W.m
Meth Date : 01-Mar-2013 09:33 V5.i Quant Type: ISTD
Cal Date : 26-FEB-2013 19:16 Cal File: V5O1887.D
Als bottle: 32
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 624.sub
Target Version: 4.14
Processing Host: TARGET103

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 37 Dibromofluoromethane	113	3.853	3.858	(0.867)	175485	51.1310	51
$ 43 1,2-Dichloroethane-d4	102	4.144	4.137	(0.932)	29730	43.7528	44
* 47 Fluorobenzene	96	4.446	4.451	(1.000)	493285	50.0000	
$ 59 Toluene-d8	98	6.002	6.007	(0.784)	487519	50.7528	51
* 69 Chlorobenzene-d5	117	7.651	7.656	(1.000)	423911	50.0000	
$ 80 Bromofluorobenzene	95	9.161	9.165	(1.197)	180679	48.1330	48
* 94 1,4-Dichlorobenzene-d4	152	10.728	10.733	(1.000)	224154	50.0000	

Data File: \\avogadro\organics\V5.I\130228.B\V501991.D
Date : 01-MAR-2013 05:21
Client ID: DIRECT DISCHARGE 2
Instrument: V5.i
Sample Info: 5ML,M0262-01A,,70678,
Purge Volume: 5.0
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



6B - FORM VI VOA-2

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: M0262 SAS No.: SDG No.: SM0262

Instrument ID: V5 Calibration Date(s): 02/26/2013 02/26/2013

Heated Purge: (Y/N) N Calibration Times: 17:07 19:16

Purge Volume: 5 (mL)

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

LAB FILE ID: RRF005 = V5O1883.D RRF020 = V5O1884.D RRF050 = V5O1885.D RRF100 = V5O1886.D RRF200 = V5O1887.D
RRF001 = V5O1882.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Chloromethane	0.298	0.295	0.292	0.314	0.304	0.348					0.309	6.7
Vinyl chloride	0.300	0.267	0.282	0.305	0.319	0.277					0.292	6.7
Bromomethane	0.258	0.286	0.285	0.309	0.351	0.435					0.321	20.0
Chloroethane	0.186	0.221	0.210	0.223	0.258	0.197					0.216	11.5
Trichlorofluoromethane	0.400	0.344	0.440	0.441	0.492	0.420					0.423	11.6
1,1-Dichloroethene	0.240	0.210	0.219	0.238	0.257	0.243					0.234	7.2
Methylene chloride	0.245	0.263	0.273	0.286	0.281	0.185					0.256	14.6
trans-1,2-Dichloroethene	0.289	0.267	0.286	0.290	0.303	0.338					0.295	8.1
1,1-Dichloroethane	0.509	0.484	0.488	0.508	0.515	0.462					0.495	4.1
Chloroform	0.457	0.485	0.481	0.500	0.498	0.476					0.483	3.3
1,1,1-Trichloroethane	0.300	0.313	0.322	0.320	0.313	0.220					0.298	13.1
Carbon tetrachloride	0.290	0.320	0.313	0.323	0.339	0.241					0.304	11.5
1,2-Dichloroethane	0.335	0.342	0.340	0.348	0.367	0.386					0.353	5.6
Benzene	0.959	0.992	0.984	1.032	1.060	0.845					0.979	7.7
Trichloroethene	0.275	0.298	0.285	0.319	0.317	0.274					0.295	6.8
1,2-Dichloropropane	0.279	0.285	0.296	0.306	0.311	0.221					0.283	11.6
Bromodichloromethane	0.342	0.356	0.367	0.377	0.384	0.295					0.354	9.1
cis-1,3-Dichloropropene	0.426	0.396	0.439	0.447	0.462	0.364					0.422	8.6
Toluene	0.929	1.018	1.009	1.017	1.029	0.922					0.987	4.9
trans-1,3-Dichloropropene	0.328	0.353	0.380	0.385	0.401	0.338					0.364	7.9
1,1,2-Trichloroethane	0.234	0.242	0.232	0.232	0.239	0.218					0.233	3.6
Tetrachloroethene	0.272	0.278	0.306	0.309	0.317	0.311					0.299	6.3
Dibromochloromethane	0.330	0.345	0.381	0.386	0.402	0.242					0.348	16.8
Chlorobenzene	0.903	0.858	0.898	0.921	0.965	0.943					0.915	4.1
Ethylbenzene	0.405	0.415	0.434	0.451	0.471	0.375					0.425	8.0
Bromoform	0.229	0.245	0.249	0.249	0.256	0.183					0.235	11.5
1,1,2,2-Tetrachloroethane	0.649	0.697	0.708	0.705	0.655	0.663					0.680	3.9

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: M0262 SAS No.: SDG No.: SM0262

Instrument ID: V5 Calibration Date(s): 02/26/2013 02/26/2013

Heated Purge: (Y/N) N Calibration Times: 17:07 19:16

Purge Volume: 5 (mL)

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

LAB FILE ID: RRF005 = V5O1883.D RRF020 = V5O1884.D RRF050 = V5O1885.D RRF100 = V5O1886.D RRF200 = V5O1887.D

RRF001 = V5O1882.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
1,3-Dichlorobenzene	1.154	1.125	1.242	1.243	1.179	1.087					1.172	5.4
1,4-Dichlorobenzene	1.257	1.254	1.291	1.365	1.319	1.376					1.310	4.0
1,2-Dichlorobenzene	1.113	1.095	1.160	1.185	1.109	1.009					1.112	5.5
2-Chloroethyl vinyl ether	0.038	0.024	0.022	0.024	0.025	0.049					0.030	35.8

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: M0262 SAS No.: SDG No.: SM0262

Instrument ID: V5 Calibration Date(s): 02/26/2013 02/26/2013

Heated Purge: (Y/N) N Calibration Times: 17:07 19:16

Purge Volume: 5 (mL)

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

LAB FILE ID: RRF005 = V5O1883.D RRF020 = V5O1884.D RRF050 = V5O1885.D RRF100 = V5O1886.D RRF200 = V5O1887.D

RRF001 = V5O1882.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dibromofluoromethane	0.345	0.339	0.345	0.353	0.357	0.339					0.346	2.1
1,2-Dichloroethane-d4	0.062	0.065	0.066	0.071	0.081	0.054					0.066	13.4
Toluene-d8	1.160	1.088	1.151	1.143	1.123	1.151					1.136	2.4
Bromofluorobenzene	0.461	0.438	0.440	0.445	0.430	0.438					0.442	2.4

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

Data File: \\avogadro\organics\V5.I\130226C.B\V5O1882.D
Report Date: 28-Feb-2013 10:05

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\130226C.B\V5O1882.D
Lab Smp Id: VSTD001T5 Client Smp ID: VSTD001T5
Inj Date : 26-FEB-2013 17:07
Operator : SRC: Inst ID: V5.i
Smp Info : 5ML,VSTD001T5,VSTD001T5
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\130226C.B\v5_8260W.m
Meth Date : 28-Feb-2013 10:04 wluo Quant Type: ISTD
Cal Date : 26-FEB-2013 17:07 Cal File: V5O1882.D
Als bottle: 5 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FULL.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
3	Chloromethane	50	1.389	1.435	(0.313)	5594	1.00000	1
5	Bromomethane	94	1.714	1.737	(0.386)	6997	1.00000	1(Q)
8	Ethanol	46	1.993	2.051	(0.449)	2113	500.000	190(Q)
11	1,1-Dichloroethene	96	2.248	2.248	(0.506)	3905	1.00000	1(Q)
13	Acetone	58	2.039	2.283	(0.459)	1808	1.00000	4(TQ)
15	Carbon Disulfide	76	2.376	2.422	(0.535)	16428	1.00000	1
18	Methyl Acetate	43	2.492	2.492	(0.561)	5270	1.00000	1
17	Allyl Chloride	39	2.480	2.480	(0.558)	6154	1.00000	1(Q)
22	trans-1,2-Dichloroethene	96	2.759	2.747	(0.621)	5442	1.00000	1
31	2-Butanone	72	3.433	3.479	(0.773)	578	1.00000	1(TQ)
35	Tetrahydrofuran	72	3.723	3.711	(0.838)	1015	1.00000	2
$ 37	Dibromofluoromethane	113	3.862	3.862	(0.869)	272622	1.00000	49
39	Cyclohexane	56	3.978	3.955	(0.895)	4950	1.00000	1(Q)
40	1,1-Dichloropropene	110	4.037	4.037	(0.909)	2340	1.00000	1(Q)
$ 43	1,2-Dichloroethane-d4	102	4.141	4.153	(0.932)	43392	1.00000	39
45	1,2-Dichloroethane	62	4.211	4.199	(0.948)	6209	1.00000	1
* 47	Fluorobenzene	96	4.443	4.443	(1.000)	804284	50.0000	
50	Methylcyclohexane	83	5.000	4.989	(1.125)	5439	1.00000	1
53	Dibromomethane	93	5.093	5.093	(1.146)	3752	1.00000	1
54	1,4-Dioxane	88	5.117	5.117	(1.152)	894	1.00000	41(Q)
56	2-Chloroethyl vinyl ether	63	5.581	5.569	(1.256)	788	1.00000	2(TQ)
58	4-Methyl-2-pentanone	43	5.883	5.883	(1.324)	6266	1.00000	1(TQ)
$ 59	Toluene-d8	98	6.011	6.011	(0.785)	725724	1.00000	51

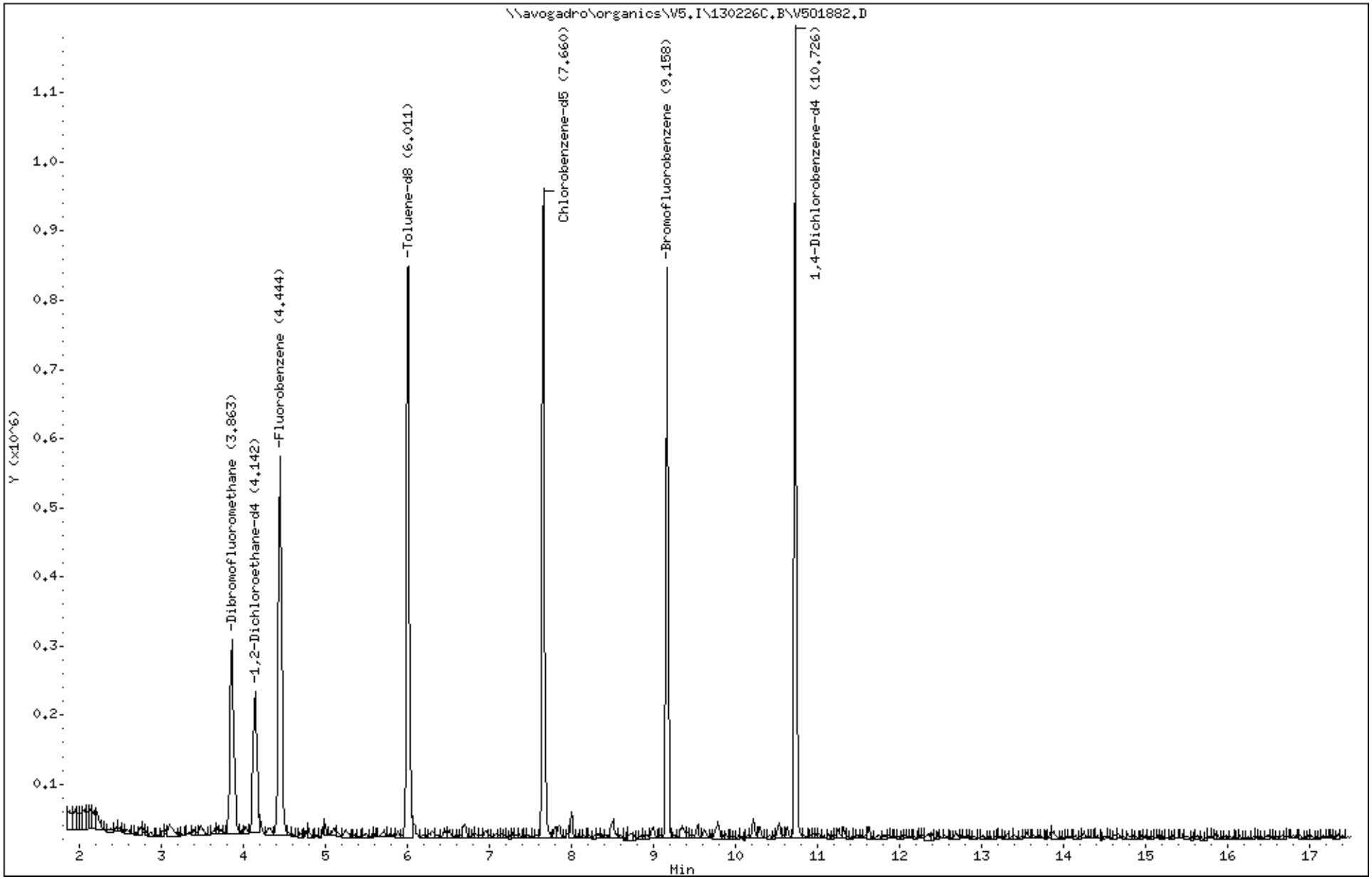
Data File: \\avogadro\organics\V5.I\130226C.B\V5O1882.D
Report Date: 28-Feb-2013 10:05

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	64	Tetrachloroethene	164	6.696	6.696	(0.874)	3920	1.00000	1(Q)
M	48	1,2-Dichloroethene (Total)	96				8593	1.00000	2
	68	1,2-Dibromoethane	107	7.068	7.079	(0.923)	4131	1.00000	1(T)
*	69	Chlorobenzene-d5	117	7.660	7.660	(1.000)	630740	50.0000	
	71	Chlorobenzene	112	7.695	7.695	(1.005)	11896	1.00000	1
	70	1-Chlorohexane	91	7.695	7.695	(1.005)	6341	1.00000	1
$	80	Bromofluorobenzene	95	9.158	9.170	(1.196)	276061	1.00000	49
	83	1,2,3-Trichloropropane	75	9.402	9.413	(0.877)	5004	1.00000	2
	87	4-Chlorotoluene	126	9.762	9.773	(0.910)	4546	1.00000	1(Q)
*	94	1,4-Dichlorobenzene-d4	152	10.726	10.726	(1.000)	336549	50.0000	(Q)
	95	1,4-Dichlorobenzene	146	10.749	10.760	(1.002)	9264	1.00000	1(Q)
	98	Hexachloroethane	117	11.620	11.620	(1.083)	3554	1.00000	1(Q)
	99	1,2-Dibromo-3-chloropropane	75	12.340	12.351	(1.150)	661	1.00000	1(Q)

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\130226C.B\V501882.D
Date : 26-FEB-2013 17:07
Client ID: VSTD001T5
Instrument: V5.i
Sample Info: 5ML,VSTD001T5,VSTD001T5
Purge Volume: 5.0
Operator: SRC:
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\130226C.B\V5O1883.D
Report Date: 28-Feb-2013 10:05

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\130226C.B\V5O1883.D
Lab Smp Id: VSTD005T5 Client Smp ID: VSTD005T5
Inj Date : 26-FEB-2013 17:33
Operator : SRC: Inst ID: V5.i
Smp Info : 5ML,VSTD005T5,VSTD005T5
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\130226C.B\v5_8260W.m
Meth Date : 28-Feb-2013 10:04 wluo Quant Type: ISTD
Cal Date : 26-FEB-2013 17:33 Cal File: V5O1883.D
Als bottle: 6 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FULL.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.363	1.342	(0.306)	20531	5.00000	5
3	Chloromethane	50	1.432	1.435	(0.322)	23517	5.00000	5
4	Vinyl Chloride	62	1.490	1.528	(0.335)	23636	5.00000	5
5	Bromomethane	94	1.758	1.737	(0.395)	20347	5.00000	4(Q)
6	Chloroethane	64	1.792	1.807	(0.403)	14663	5.00000	4(Q)
7	Trichlorofluoromethane	101	1.909	1.935	(0.429)	31587	5.00000	5(Q)
8	Ethanol	46	2.059	2.051	(0.463)	3541	500.000	330(Q)
9	Ether	59	2.094	2.086	(0.471)	20368	5.00000	4(Q)
10	Acrolein	56	2.176	2.167	(0.489)	22559	25.0000	25(Q)
11	1,1-Dichloroethene	96	2.269	2.248	(0.510)	18913	5.00000	5(Q)
12	1,1,2-Trichloro-1,2,2-Trifluo	101	2.257	2.260	(0.507)	15471	5.00000	6(Q)
13	Acetone	58	2.280	2.283	(0.512)	3133	5.00000	7(Q)
14	Iodomethane	142	2.350	2.376	(0.528)	30195	5.00000	4
15	Carbon Disulfide	76	2.408	2.422	(0.541)	65000	5.00000	4
18	Methyl Acetate	43	2.466	2.492	(0.554)	18262	5.00000	4
16	Acetonitrile	41	2.466	2.469	(0.554)	42196	50.0000	41
17	Allyl Chloride	39	2.489	2.480	(0.559)	26337	5.00000	5(Q)
20	Methylene Chloride	84	2.547	2.573	(0.572)	19334	5.00000	5(Q)
19	tert-Butanol	59	2.094	2.086	(0.471)	20368	10.0000	8
22	trans-1,2-Dichloroethene	96	2.756	2.747	(0.619)	22789	5.00000	5
23	Methyl tert-butyl ether	73	2.756	2.759	(0.619)	49141	5.00000	5
24	1,1-Dichloroethane	63	3.035	3.049	(0.682)	40169	5.00000	5
25	Vinyl acetate	43	3.081	3.096	(0.692)	73952	5.00000	4

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	26 Diisopropyl Ether	45	3.116	3.107	(0.700)	77408	5.00000	5
	21 Acrylonitrile	53	3.116	3.119	(0.700)	28190	5.00000	5
	27 2-Chloro-1,3-Butadiene	53	3.116	3.119	(0.700)	28190	5.00000	5
	28 Ethyl tert-butyl ether	59	3.372	3.386	(0.757)	56159	5.00000	4
	29 cis-1,2-Dichloroethene	96	3.488	3.479	(0.784)	22960	5.00000	5
	31 2-Butanone	72	3.500	3.479	(0.786)	2651	5.00000	5(Q)
	30 2,2-Dichloropropane	77	3.500	3.491	(0.786)	20132	5.00000	5
	32 Propionitrile	54	3.511	3.526	(0.789)	24842	50.0000	50
	33 Methacrylonitrile	41	3.650	3.642	(0.820)	30505	10.0000	9
	34 Bromochloromethane	128	3.662	3.665	(0.823)	13829	5.00000	5
	35 Tetrahydrofuran	72	3.720	3.711	(0.836)	4330	10.0000	9
	36 Chloroform	83	3.720	3.735	(0.836)	36074	5.00000	5
$	37 Dibromofluoromethane	113	3.860	3.862	(0.867)	271837	50.0000	50
	38 1,1,1-Trichloroethane	97	3.894	3.909	(0.875)	23649	5.00000	5
	39 Cyclohexane	56	3.941	3.955	(0.885)	19867	5.00000	5
	41 Carbon Tetrachloride	117	4.057	4.048	(0.911)	22844	5.00000	5
	40 1,1-Dichloropropene	110	4.022	4.037	(0.903)	9799	5.00000	4
	42 Isobutyl Alcohol	43	4.115	4.118	(0.924)	14654	100.000	93
$	43 1,2-Dichloroethane-d4	102	4.138	4.153	(0.930)	49029	50.0000	45
	44 Benzene	78	4.208	4.211	(0.945)	75685	5.00000	5
	45 1,2-Dichloroethane	62	4.208	4.199	(0.945)	26428	5.00000	5
	46 tert-Amyl methyl ether	73	4.312	4.315	(0.969)	51843	5.00000	5
*	47 Fluorobenzene	96	4.452	4.443	(1.000)	788932	50.0000	
	49 Trichloroethene	130	4.789	4.791	(1.076)	21681	5.00000	5
	50 Methylcyclohexane	83	4.986	4.989	(1.120)	22092	5.00000	5
	51 1,2-Dichloropropane	63	4.986	4.989	(1.120)	22041	5.00000	5
	53 Dibromomethane	93	5.090	5.093	(1.143)	16716	5.00000	5
	52 Methyl Methacrylate	69	5.102	5.105	(1.146)	12626	5.00000	4
	54 1,4-Dioxane	88	5.125	5.117	(1.151)	1739	100.000	81(Q)
	55 Bromodichloromethane	83	5.253	5.256	(1.180)	26980	5.00000	5
	56 2-Chloroethyl vinyl ether	63	5.567	5.569	(1.250)	2996	5.00000	6(T)
	57 cis-1,3-Dichloropropene	75	5.706	5.709	(1.282)	33609	5.00000	5
	58 4-Methyl-2-pentanone	43	5.880	5.883	(1.321)	24442	5.00000	5
$	59 Toluene-d8	98	6.008	6.011	(0.785)	719518	50.0000	51
	60 Toluene	91	6.078	6.080	(1.365)	73307	5.00000	5
	61 trans-1,3-Dichloropropene	75	6.310	6.313	(1.417)	25897	5.00000	4
	62 Ethyl Methacrylate	69	6.449	6.452	(1.449)	17351	5.00000	4
	63 1,1,2-Trichloroethane	97	6.507	6.510	(1.462)	18476	5.00000	5
	64 Tetrachloroethene	164	6.693	6.696	(0.874)	16899	5.00000	4
	65 1,3-Dichloropropane	76	6.693	6.696	(0.874)	28951	5.00000	5
M	48 1,2-Dichloroethene (Total)	96				45749	10.0000	10
	66 2-Hexanone	43	6.821	6.824	(0.891)	18787	5.00000	6
	67 Dibromochloromethane	129	6.960	6.951	(0.909)	20470	5.00000	5(T)
	68 1,2-Dibromoethane	107	7.076	7.079	(0.924)	19707	5.00000	5(T)
*	69 Chlorobenzene-d5	117	7.657	7.660	(1.000)	620295	50.0000	
	71 Chlorobenzene	112	7.692	7.695	(1.005)	55988	5.00000	5
	70 1-Chlorohexane	91	7.692	7.695	(1.005)	28076	5.00000	5(Q)
	72 1,1,1,2-Tetrachloroethane	131	7.796	7.799	(1.018)	19777	5.00000	5
	73 Ethylbenzene	106	7.843	7.846	(1.024)	25135	5.00000	5(Q)
	74 m,p-Xylene	106	7.994	7.997	(1.044)	67958	10.0000	10
	75 o-Xylene	106	8.493	8.496	(1.109)	30921	5.00000	5
	76 Styrene	104	8.516	8.508	(1.112)	52093	5.00000	5
	77 Bromoform	173	8.714	8.717	(1.138)	14217	5.00000	5
	78 Isopropylbenzene	105	8.992	8.995	(1.174)	71818	5.00000	5

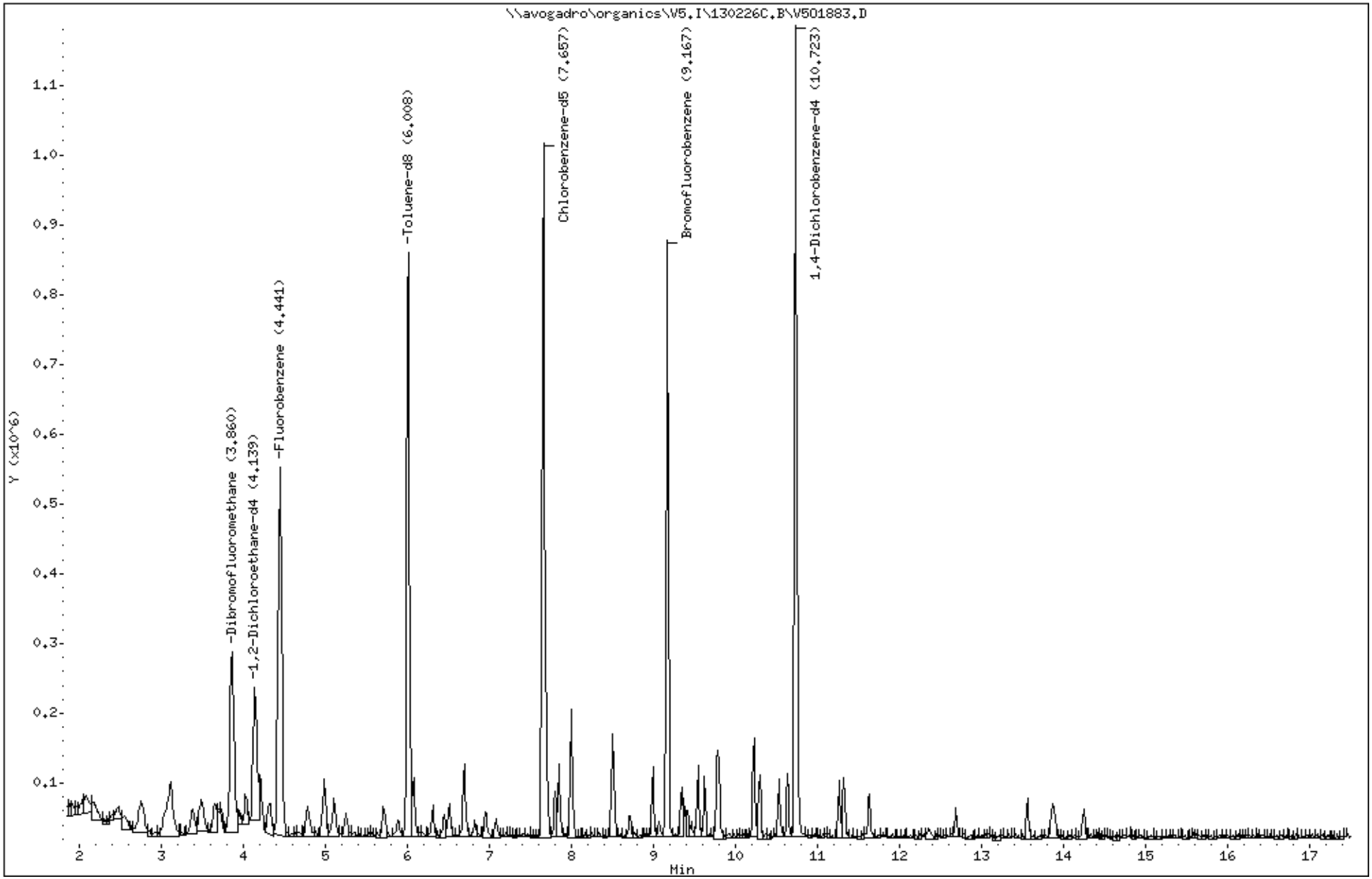
Data File: \\avogadro\organics\V5.I\130226C.B\V5O1883.D
Report Date: 28-Feb-2013 10:05

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	79 trans-1,4-Dichloro-2-butene	75	9.062	9.065	(1.184)	5772	5.00000	4(Q)
$	80 Bromofluorobenzene	95	9.167	9.170	(1.197)	285894	50.0000	52
	82 Bromobenzene	156	9.341	9.344	(0.871)	22836	5.00000	5
	81 1,1,2,2-Tetrachloroethane	83	9.376	9.379	(0.874)	22684	5.00000	5
	83 1,2,3-Trichloropropane	75	9.411	9.413	(0.878)	14004	5.00000	4
	84 n-Propylbenzene	120	9.538	9.541	(0.890)	19712	5.00000	5(Q)
	85 2-Chlorotoluene	126	9.620	9.622	(0.897)	18116	5.00000	4
	87 4-Chlorotoluene	126	9.771	9.773	(0.911)	21724	5.00000	5(Q)
	86 1,3,5-Trimethylbenzene	105	9.794	9.797	(0.913)	55404	5.00000	5
	88 tert-Butylbenzene	119	10.223	10.226	(0.953)	60664	5.00000	5
	89 1,2,4-Trimethylbenzene	105	10.293	10.296	(0.960)	59571	5.00000	5
	90 sec-Butylbenzene	105	10.525	10.528	(0.982)	68505	5.00000	4
	92 1,3-Dichlorobenzene	146	10.630	10.633	(0.991)	40302	5.00000	5
*	94 1,4-Dichlorobenzene-d4	152	10.723	10.726	(1.000)	349305	50.0000	(Q)
	93 4-Isopropyltoluene	119	10.746	10.749	(1.002)	61946	5.00000	5
	95 1,4-Dichlorobenzene	146	10.758	10.760	(1.003)	43915	5.00000	5
	97 1,2-Dichlorobenzene	146	11.257	11.260	(1.050)	38892	5.00000	5
	96 n-Butylbenzene	91	11.315	11.318	(1.055)	53253	5.00000	5
	98 Hexachloroethane	117	11.617	11.620	(1.083)	14193	5.00000	4
	99 1,2-Dibromo-3-chloropropane	75	12.360	12.351	(1.153)	2506	5.00000	5
	100 1,3,5-Trichlorobenzene	182	12.685	12.688	(2.849)	14972	5.00000	5
M	91 Xylene (Total)	106				98879	15.0000	15
	101 1,2,4-Trichlorobenzene	180	13.556	13.559	(1.264)	18901	5.00000	4
	102 Hexachlorobutadiene	225	13.858	13.861	(1.292)	8994	5.00000	5(Q)
	103 Naphthalene	128	13.882	13.884	(1.295)	32792	5.00000	5
	104 1,2,3-Trichlorobenzene	180	14.242	14.244	(1.328)	13696	5.00000	5

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\130226C.B\V501883.D
Date : 26-FEB-2013 17:33
Client ID: VSTD005T5
Instrument: V5.i
Sample Info: 5ML,VSTD005T5,VSTD005T5
Purge Volume: 5.0
Operator: SRC:
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\130226C.B\V5O1884.D
Report Date: 28-Feb-2013 10:05

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\130226C.B\V5O1884.D
Lab Smp Id: VSTD020T5 Client Smp ID: VSTD020T5
Inj Date : 26-FEB-2013 17:58
Operator : SRC: Inst ID: V5.i
Smp Info : 5ML,VSTD020T5,VSTD020T5
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\130226C.B\v5_8260W.m
Meth Date : 28-Feb-2013 10:04 wluo Quant Type: ISTD
Cal Date : 26-FEB-2013 17:58 Cal File: V5O1884.D
Als bottle: 7 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FULL.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.391	1.342	(0.313)	69658	20.0000	17
3	Chloromethane	50	1.437	1.435	(0.323)	93217	20.0000	18
4	Vinyl Chloride	62	1.519	1.528	(0.342)	84217	20.0000	18
5	Bromomethane	94	1.728	1.737	(0.389)	90193	20.0000	16(Q)
6	Chloroethane	64	1.809	1.807	(0.407)	69820	20.0000	23
7	Trichlorofluoromethane	101	1.925	1.935	(0.433)	108593	20.0000	17(Q)
8	Ethanol	46	2.041	2.051	(0.459)	7785	2000.00	1100(Q)
9	Ether	59	2.099	2.086	(0.472)	98650	20.0000	26(Q)
10	Acrolein	56	2.169	2.167	(0.488)	90775	100.000	100
11	1,1-Dichloroethene	96	2.250	2.248	(0.506)	66154	20.0000	17(Q)
12	1,1,2-Trichloro-1,2,2-Trifluo	101	2.239	2.260	(0.504)	45464	20.0000	17
13	Acetone	58	2.250	2.283	(0.506)	6255	20.0000	10(Q)
14	Iodomethane	142	2.367	2.376	(0.532)	134205	20.0000	22
15	Carbon Disulfide	76	2.425	2.422	(0.545)	262789	20.0000	18
18	Methyl Acetate	43	2.471	2.492	(0.556)	73306	20.0000	17
16	Acetonitrile	41	2.471	2.469	(0.556)	201896	200.000	240
17	Allyl Chloride	39	2.471	2.480	(0.556)	106770	20.0000	20(Q)
20	Methylene Chloride	84	2.564	2.573	(0.577)	83117	20.0000	24(Q)
19	tert-Butanol	59	2.099	2.086	(0.472)	98650	40.0000	48
22	trans-1,2-Dichloroethene	96	2.750	2.747	(0.619)	84105	20.0000	17
23	Methyl tert-butyl ether	73	2.761	2.759	(0.621)	204644	20.0000	21
24	1,1-Dichloroethane	63	3.040	3.049	(0.684)	152732	20.0000	20
25	Vinyl acetate	43	3.098	3.096	(0.697)	321181	20.0000	21

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	26 Diisopropyl Ether	45	3.110	3.107	(0.700)	329441	20.0000	22
	21 Acrylonitrile	53	3.121	3.119	(0.702)	112465	20.0000	20
	27 2-Chloro-1,3-Butadiene	53	3.121	3.119	(0.702)	112465	20.0000	20
	28 Ethyl tert-butyl ether	59	3.388	3.386	(0.762)	243896	20.0000	21
	29 cis-1,2-Dichloroethene	96	3.481	3.479	(0.783)	101782	20.0000	26
	31 2-Butanone	72	3.470	3.479	(0.781)	10903	20.0000	20(Q)
	30 2,2-Dichloropropane	77	3.493	3.491	(0.786)	86831	20.0000	22
	32 Propionitrile	54	3.516	3.526	(0.791)	93365	200.000	190
	33 Methacrylonitrile	41	3.644	3.642	(0.820)	128989	40.0000	42
	34 Bromochloromethane	128	3.667	3.665	(0.825)	52290	20.0000	23
	35 Tetrahydrofuran	72	3.725	3.711	(0.838)	19530	40.0000	45
	36 Chloroform	83	3.737	3.735	(0.841)	153115	20.0000	21
$	37 Dibromofluoromethane	113	3.865	3.862	(0.869)	267768	50.0000	49
	38 1,1,1-Trichloroethane	97	3.899	3.909	(0.877)	98694	20.0000	24
	39 Cyclohexane	56	3.969	3.955	(0.893)	81644	20.0000	18(Q)
	41 Carbon Tetrachloride	117	4.050	4.048	(0.911)	101008	20.0000	24(Q)
	40 1,1-Dichloropropene	110	4.039	4.037	(0.909)	42947	20.0000	20
	42 Isobutyl Alcohol	43	4.120	4.118	(0.927)	61589	400.000	420
$	43 1,2-Dichloroethane-d4	102	4.143	4.153	(0.932)	50931	50.0000	52
	44 Benzene	78	4.201	4.211	(0.945)	312834	20.0000	22
	45 1,2-Dichloroethane	62	4.201	4.199	(0.945)	107905	20.0000	19
	46 tert-Amyl methyl ether	73	4.318	4.315	(0.971)	205737	20.0000	20
*	47 Fluorobenzene	96	4.445	4.443	(1.000)	788723	50.0000	
	49 Trichloroethene	130	4.794	4.791	(1.078)	94129	20.0000	22
	50 Methylcyclohexane	83	4.991	4.989	(1.123)	85757	20.0000	18
	51 1,2-Dichloropropane	63	4.991	4.989	(1.123)	89838	20.0000	23
	53 Dibromomethane	93	5.096	5.093	(1.146)	65586	20.0000	19
	52 Methyl Methacrylate	69	5.107	5.105	(1.149)	57725	20.0000	23
	54 1,4-Dioxane	88	5.107	5.117	(1.149)	8865	400.000	510(Q)
	55 Bromodichloromethane	83	5.258	5.256	(1.183)	112416	20.0000	22
	56 2-Chloroethyl vinyl ether	63	5.572	5.569	(1.253)	7431	20.0000	11(Q)
	57 cis-1,3-Dichloropropene	75	5.711	5.709	(1.285)	124867	20.0000	20
	58 4-Methyl-2-pentanone	43	5.885	5.883	(1.324)	97018	20.0000	20
$	59 Toluene-d8	98	6.001	6.011	(0.784)	708851	50.0000	47
	60 Toluene	91	6.083	6.080	(1.368)	321042	20.0000	22
	61 trans-1,3-Dichloropropene	75	6.315	6.313	(1.421)	111212	20.0000	21
	62 Ethyl Methacrylate	69	6.443	6.452	(1.449)	72621	20.0000	21
	63 1,1,2-Trichloroethane	97	6.512	6.510	(1.465)	76349	20.0000	21
	64 Tetrachloroethene	164	6.687	6.696	(0.874)	72437	20.0000	19
	65 1,3-Dichloropropane	76	6.698	6.696	(0.876)	117752	20.0000	21
	66 2-Hexanone	43	6.826	6.824	(0.892)	61692	20.0000	16
	67 Dibromochloromethane	129	6.954	6.951	(0.909)	89823	20.0000	24
	68 1,2-Dibromoethane	107	7.081	7.079	(0.926)	79635	20.0000	19
*	69 Chlorobenzene-d5	117	7.650	7.660	(1.000)	651704	50.0000	
	71 Chlorobenzene	112	7.685	7.695	(1.005)	223668	20.0000	18
	70 1-Chlorohexane	91	7.697	7.695	(1.006)	113498	20.0000	19(Q)
	72 1,1,1,2-Tetrachloroethane	131	7.801	7.799	(1.020)	81028	20.0000	21
	73 Ethylbenzene	106	7.848	7.846	(1.026)	108147	20.0000	21
	74 m,p-Xylene	106	7.999	7.997	(1.046)	263867	40.0000	40
	75 o-Xylene	106	8.498	8.496	(1.111)	123581	20.0000	20
	76 Styrene	104	8.510	8.508	(1.112)	217709	20.0000	22
	77 Bromoform	173	8.707	8.717	(1.138)	63775	20.0000	24
	78 Isopropylbenzene	105	8.986	8.995	(1.175)	304935	20.0000	21
	79 trans-1,4-Dichloro-2-butene	75	9.067	9.065	(1.185)	24628	20.0000	20(Q)

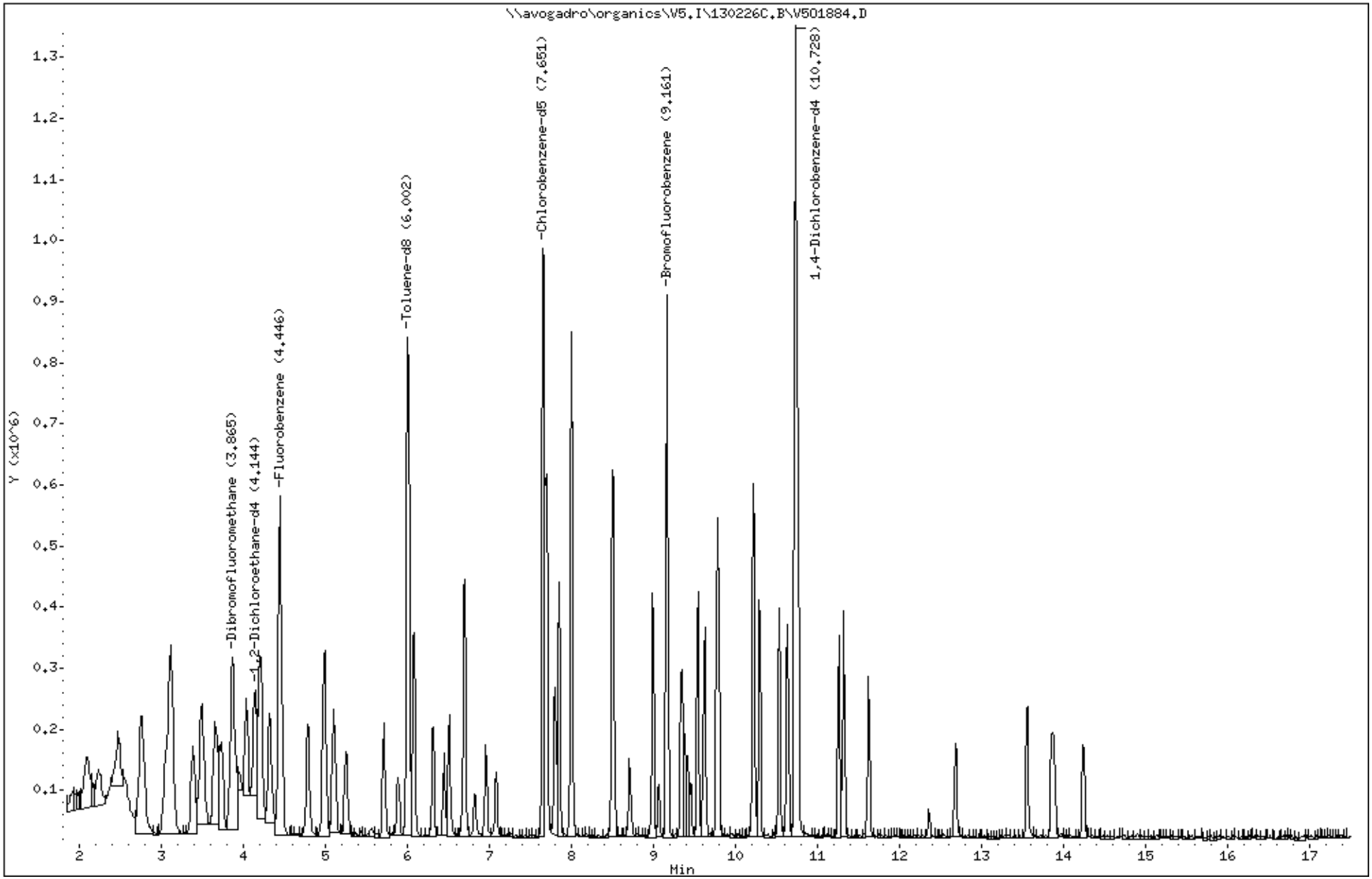
Data File: \\avogadro\organics\V5.I\130226C.B\V5O1884.D
Report Date: 28-Feb-2013 10:05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
$	80 Bromofluorobenzene	95	9.160	9.170	(1.197)	285352	50.0000	48
	82 Bromobenzene	156	9.346	9.344	(0.871)	96118	20.0000	23
	81 1,1,2,2-Tetrachloroethane	83	9.369	9.379	(0.873)	99443	20.0000	21
	83 1,2,3-Trichloropropane	75	9.416	9.413	(0.878)	65113	20.0000	16
	84 n-Propylbenzene	120	9.543	9.541	(0.890)	84329	20.0000	21
	85 2-Chlorotoluene	126	9.625	9.622	(0.897)	82400	20.0000	23
	87 4-Chlorotoluene	126	9.776	9.773	(0.911)	86037	20.0000	18
	86 1,3,5-Trimethylbenzene	105	9.787	9.797	(0.912)	241573	20.0000	22
	88 tert-Butylbenzene	119	10.229	10.226	(0.953)	257331	20.0000	21
	89 1,2,4-Trimethylbenzene	105	10.287	10.296	(0.959)	248584	20.0000	22
	90 sec-Butylbenzene	105	10.530	10.528	(0.982)	306144	20.0000	21
	92 1,3-Dichlorobenzene	146	10.635	10.633	(0.991)	160538	20.0000	20
*	94 1,4-Dichlorobenzene-d4	152	10.728	10.726	(1.000)	356777	50.0000	
	93 4-Isopropyltoluene	119	10.751	10.749	(1.002)	253130	20.0000	22
	95 1,4-Dichlorobenzene	146	10.763	10.760	(1.003)	178918	20.0000	19
	97 1,2-Dichlorobenzene	146	11.262	11.260	(1.050)	156240	20.0000	21
	96 n-Butylbenzene	91	11.320	11.318	(1.055)	237721	20.0000	23
	98 Hexachloroethane	117	11.622	11.620	(1.083)	60978	20.0000	18
	99 1,2-Dibromo-3-chloropropane	75	12.354	12.351	(1.152)	8969	20.0000	15(Q)
	100 1,3,5-Trichlorobenzene	182	12.691	12.688	(2.855)	56609	20.0000	21
	101 1,2,4-Trichlorobenzene	180	13.562	13.559	(1.264)	81598	20.0000	21
	102 Hexachlorobutadiene	225	13.863	13.861	(1.292)	32594	20.0000	22(Q)
	103 Naphthalene	128	13.887	13.884	(1.294)	132675	20.0000	22
	104 1,2,3-Trichlorobenzene	180	14.247	14.244	(1.328)	59615	20.0000	22

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\130226C.B\V501884.D
Date : 26-FEB-2013 17:58
Client ID: VSTD020T5
Instrument: V5.i
Sample Info: 5ML,VSTD020T5,VSTD020T5
Purge Volume: 5.0
Operator: SRC:
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\130226C.B\V5O1885.D
Report Date: 28-Feb-2013 10:05

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\130226C.B\V5O1885.D
Lab Smp Id: VSTD050T5 Client Smp ID: VSTD050T5
Inj Date : 26-FEB-2013 18:24
Operator : SRC: Inst ID: V5.i
Smp Info : 5ML,VSTD050T5,VSTD050T5
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\130226C.B\v5_8260W.m
Meth Date : 28-Feb-2013 10:04 wluo Quant Type: ISTD
Cal Date : 26-FEB-2013 18:24 Cal File: V5O1885.D
Als bottle: 8 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FULL.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.342	1.342	(0.302)	220890	50.0000	56
3	Chloromethane	50	1.435	1.435	(0.323)	238333	50.0000	46
4	Vinyl Chloride	62	1.528	1.528	(0.344)	230145	50.0000	50
5	Bromomethane	94	1.737	1.737	(0.391)	232800	50.0000	44
6	Chloroethane	64	1.807	1.807	(0.407)	171836	50.0000	52
7	Trichlorofluoromethane	101	1.935	1.935	(0.435)	359207	50.0000	57
8	Ethanol	46	2.051	2.051	(0.462)	58901	5000.00	10000(Q)
9	Ether	59	2.086	2.086	(0.469)	238628	50.0000	55
10	Acrolein	56	2.167	2.167	(0.488)	232075	250.000	250
11	1,1-Dichloroethene	96	2.248	2.248	(0.506)	179129	50.0000	48
12	1,1,2-Trichloro-1,2,2-Trifluo	101	2.260	2.260	(0.509)	140741	50.0000	54(Q)
13	Acetone	58	2.283	2.283	(0.514)	20496	50.0000	42(Q)
14	Iodomethane	142	2.376	2.376	(0.535)	374350	50.0000	57
15	Carbon Disulfide	76	2.422	2.422	(0.545)	712892	50.0000	49
18	Methyl Acetate	43	2.492	2.492	(0.561)	219106	50.0000	51
16	Acetonitrile	41	2.469	2.469	(0.556)	560781	500.000	580
17	Allyl Chloride	39	2.480	2.480	(0.558)	290237	50.0000	53
20	Methylene Chloride	84	2.573	2.573	(0.579)	222811	50.0000	59(Q)
19	tert-Butanol	59	2.086	2.086	(0.469)	238628	100.000	100
22	trans-1,2-Dichloroethene	96	2.747	2.747	(0.618)	233718	50.0000	48
23	Methyl tert-butyl ether	73	2.759	2.759	(0.621)	515073	50.0000	51
24	1,1-Dichloroethane	63	3.049	3.049	(0.686)	398973	50.0000	50
25	Vinyl acetate	43	3.096	3.096	(0.697)	846580	50.0000	52

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	26 Diisopropyl Ether	45	3.107	3.107	(0.699)	860138	50.0000	54
	21 Acrylonitrile	53	3.119	3.119	(0.702)	299813	50.0000	51
	27 2-Chloro-1,3-Butadiene	53	3.119	3.119	(0.702)	299813	50.0000	51
	28 Ethyl tert-butyl ether	59	3.386	3.386	(0.762)	640284	50.0000	53
	29 cis-1,2-Dichloroethene	96	3.479	3.479	(0.783)	256370	50.0000	58
	31 2-Butanone	72	3.479	3.479	(0.783)	27187	50.0000	49(Q)
	30 2,2-Dichloropropane	77	3.491	3.491	(0.786)	204090	50.0000	49
	32 Propionitrile	54	3.526	3.526	(0.794)	254415	500.000	510
	33 Methacrylonitrile	41	3.642	3.642	(0.820)	326561	100.000	100
	34 Bromochloromethane	128	3.665	3.665	(0.825)	137082	50.0000	55
	35 Tetrahydrofuran	72	3.711	3.711	(0.835)	44628	100.000	94
	36 Chloroform	83	3.735	3.735	(0.841)	392569	50.0000	51
$	37 Dibromofluoromethane	113	3.862	3.862	(0.869)	282110	50.0000	50
	38 1,1,1-Trichloroethane	97	3.909	3.909	(0.880)	262979	50.0000	58
	39 Cyclohexane	56	3.955	3.955	(0.890)	222226	50.0000	50
	41 Carbon Tetrachloride	117	4.048	4.048	(0.911)	255988	50.0000	55
	40 1,1-Dichloropropene	110	4.037	4.037	(0.909)	108973	50.0000	49
	42 Isobutyl Alcohol	43	4.118	4.118	(0.927)	159558	1000.00	1000
$	43 1,2-Dichloroethane-d4	102	4.153	4.153	(0.935)	53926	50.0000	52
	44 Benzene	78	4.211	4.211	(0.948)	803795	50.0000	53
	45 1,2-Dichloroethane	62	4.199	4.199	(0.945)	277696	50.0000	48
	46 tert-Amyl methyl ether	73	4.315	4.315	(0.971)	554155	50.0000	52
*	47 Fluorobenzene	96	4.443	4.443	(1.000)	816780	50.0000	
	49 Trichloroethene	130	4.791	4.791	(1.078)	232856	50.0000	50
	50 Methylcyclohexane	83	4.989	4.989	(1.123)	253281	50.0000	52
	51 1,2-Dichloropropane	63	4.989	4.989	(1.123)	241661	50.0000	56
	53 Dibromomethane	93	5.093	5.093	(1.146)	171522	50.0000	48
	52 Methyl Methacrylate	69	5.105	5.105	(1.149)	159448	50.0000	57
	54 1,4-Dioxane	88	5.117	5.117	(1.152)	21370	1000.00	1000
	55 Bromodichloromethane	83	5.256	5.256	(1.183)	299710	50.0000	55
	56 2-Chloroethyl vinyl ether	63	5.569	5.569	(1.254)	18243	50.0000	30
	57 cis-1,3-Dichloropropene	75	5.709	5.709	(1.285)	358468	50.0000	56
	58 4-Methyl-2-pentanone	43	5.883	5.883	(1.324)	253401	50.0000	50
$	59 Toluene-d8	98	6.011	6.011	(0.785)	745286	50.0000	51
	60 Toluene	91	6.080	6.080	(1.369)	824430	50.0000	53
	61 trans-1,3-Dichloropropene	75	6.313	6.313	(1.421)	310341	50.0000	56
	62 Ethyl Methacrylate	69	6.452	6.452	(1.452)	209526	50.0000	57
	63 1,1,2-Trichloroethane	97	6.510	6.510	(1.465)	189398	50.0000	50
	64 Tetrachloroethene	164	6.696	6.696	(0.874)	198191	50.0000	53
	65 1,3-Dichloropropane	76	6.696	6.696	(0.874)	323718	50.0000	58
	66 2-Hexanone	43	6.824	6.824	(0.891)	177248	50.0000	51
	67 Dibromochloromethane	129	6.951	6.951	(0.908)	246971	50.0000	62
	68 1,2-Dibromoethane	107	7.079	7.079	(0.924)	214151	50.0000	52
*	69 Chlorobenzene-d5	117	7.660	7.660	(1.000)	647382	50.0000	
	71 Chlorobenzene	112	7.695	7.695	(1.005)	581242	50.0000	50
	70 1-Chlorohexane	91	7.695	7.695	(1.005)	306044	50.0000	53(Q)
	72 1,1,1,2-Tetrachloroethane	131	7.799	7.799	(1.018)	193987	50.0000	49
	73 Ethylbenzene	106	7.846	7.846	(1.024)	281213	50.0000	54
	74 m,p-Xylene	106	7.997	7.997	(1.044)	710608	100.000	110
	75 o-Xylene	106	8.496	8.496	(1.109)	335374	50.0000	54
	76 Styrene	104	8.508	8.508	(1.111)	571361	50.0000	56
	77 Bromoform	173	8.717	8.717	(1.138)	161127	50.0000	57
	78 Isopropylbenzene	105	8.995	8.995	(1.174)	802247	50.0000	55
	79 trans-1,4-Dichloro-2-butene	75	9.065	9.065	(1.183)	64810	50.0000	53

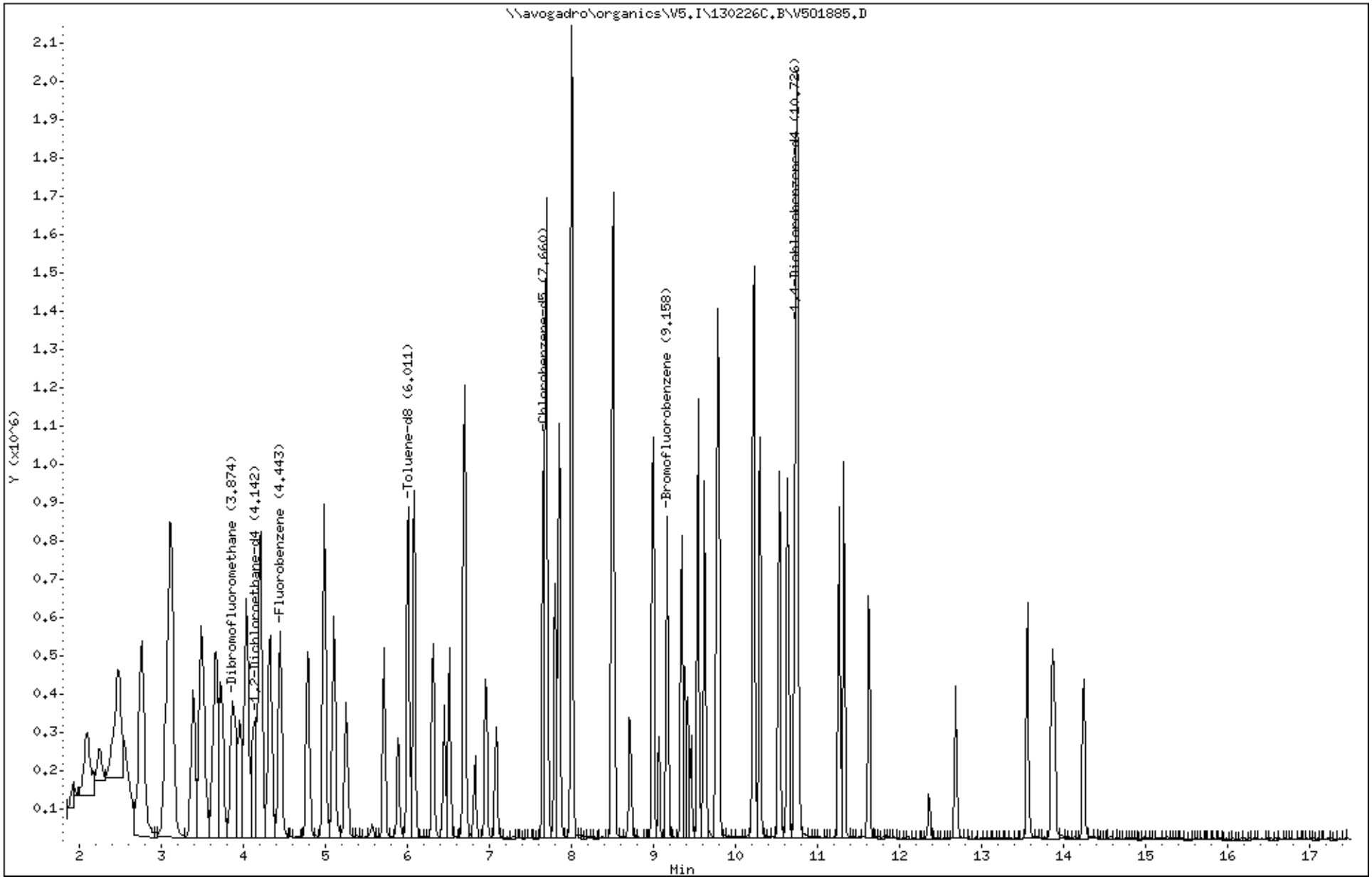
Data File: \\avogadro\organics\V5.I\130226C.B\V5O1885.D
Report Date: 28-Feb-2013 10:05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
$	80 Bromofluorobenzene	95	9.170	9.170	(1.197)	284854	50.0000	49
	82 Bromobenzene	156	9.344	9.344	(0.871)	253774	50.0000	59
	81 1,1,2,2-Tetrachloroethane	83	9.379	9.379	(0.874)	245439	50.0000	53
	83 1,2,3-Trichloropropane	75	9.413	9.413	(0.878)	155529	50.0000	42
	84 n-Propylbenzene	120	9.541	9.541	(0.890)	223062	50.0000	56
	85 2-Chlorotoluene	126	9.622	9.622	(0.897)	207612	50.0000	56
	87 4-Chlorotoluene	126	9.773	9.773	(0.911)	222318	50.0000	51
	86 1,3,5-Trimethylbenzene	105	9.797	9.797	(0.913)	625948	50.0000	57
	88 tert-Butylbenzene	119	10.226	10.226	(0.953)	660968	50.0000	54
	89 1,2,4-Trimethylbenzene	105	10.296	10.296	(0.960)	625867	50.0000	55
	90 sec-Butylbenzene	105	10.528	10.528	(0.982)	765410	50.0000	53
	92 1,3-Dichlorobenzene	146	10.633	10.633	(0.991)	430609	50.0000	55
*	94 1,4-Dichlorobenzene-d4	152	10.726	10.726	(1.000)	346790	50.0000	
	93 4-Isopropyltoluene	119	10.749	10.749	(1.002)	655048	50.0000	57
	95 1,4-Dichlorobenzene	146	10.760	10.760	(1.003)	447628	50.0000	50
	97 1,2-Dichlorobenzene	146	11.260	11.260	(1.050)	402213	50.0000	54
	96 n-Butylbenzene	91	11.318	11.318	(1.055)	600337	50.0000	56
	98 Hexachloroethane	117	11.620	11.620	(1.083)	160265	50.0000	51
	99 1,2-Dibromo-3-chloropropane	75	12.351	12.351	(1.152)	26041	50.0000	48(Q)
	100 1,3,5-Trichlorobenzene	182	12.688	12.688	(2.856)	153969	50.0000	55
	101 1,2,4-Trichlorobenzene	180	13.559	13.559	(1.264)	227398	50.0000	59
	102 Hexachlorobutadiene	225	13.861	13.861	(1.292)	90196	50.0000	60
	103 Naphthalene	128	13.884	13.884	(1.294)	373456	50.0000	61
	104 1,2,3-Trichlorobenzene	180	14.244	14.244	(1.328)	153469	50.0000	56

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\130226C.B\V501885.D
Date : 26-FEB-2013 18:24
Client ID: VSTD050T5
Instrument: V5.i
Sample Info: 5ML,VSTD050T5,VSTD050T5
Purge Volume: 5.0
Operator: SRC:
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\130226C.B\V5O1886.D
Report Date: 28-Feb-2013 10:05

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\130226C.B\V5O1886.D
Lab Smp Id: VSTD100T5 Client Smp ID: VSTD100T5
Inj Date : 26-FEB-2013 18:50
Operator : SRC: Inst ID: V5.i
Smp Info : 5ML,VSTD100T5,VSTD100T5
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\130226C.B\v5_8260W.m
Meth Date : 28-Feb-2013 10:04 wluo Quant Type: ISTD
Cal Date : 26-FEB-2013 18:50 Cal File: V5O1886.D
Als bottle: 9 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FULL.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.350	1.342	(0.304)	432147	100.000	110
3	Chloromethane	50	1.443	1.435	(0.325)	513703	100.000	100
4	Vinyl Chloride	62	1.512	1.528	(0.341)	498145	100.000	110
5	Bromomethane	94	1.733	1.737	(0.390)	505124	100.000	98
6	Chloroethane	64	1.814	1.807	(0.409)	364611	100.000	110(Q)
7	Trichlorofluoromethane	101	1.919	1.935	(0.432)	719978	100.000	110
8	Ethanol	46	2.035	2.051	(0.459)	141842	10000.0	18000(Q)
9	Ether	59	2.093	2.086	(0.472)	508751	100.000	110
10	Acrolein	56	2.151	2.167	(0.485)	420998	500.000	450
11	1,1-Dichloroethene	96	2.244	2.248	(0.506)	388887	100.000	100
12	1,1,2-Trichloro-1,2,2-Trifluo	101	2.267	2.260	(0.511)	320220	100.000	120
13	Acetone	58	2.267	2.283	(0.511)	39604	100.000	86
14	Iodomethane	142	2.360	2.376	(0.532)	830437	100.000	120
15	Carbon Disulfide	76	2.407	2.422	(0.542)	1497783	100.000	100
18	Methyl Acetate	43	2.476	2.492	(0.558)	442670	100.000	100
16	Acetonitrile	41	2.465	2.469	(0.555)	1142001	1000.00	1100
17	Allyl Chloride	39	2.476	2.480	(0.558)	604980	100.000	110
20	Methylene Chloride	84	2.558	2.573	(0.576)	467143	100.000	120
19	tert-Butanol	59	2.093	2.086	(0.472)	508751	200.000	220
22	trans-1,2-Dichloroethene	96	2.755	2.747	(0.621)	473993	100.000	98
23	Methyl tert-butyl ether	73	2.767	2.759	(0.623)	1089360	100.000	110
24	1,1-Dichloroethane	63	3.045	3.049	(0.686)	829760	100.000	100
25	Vinyl acetate	43	3.092	3.096	(0.697)	1741364	100.000	110

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	26 Diisopropyl Ether	45	3.103	3.107	(0.699)	1802017	100.000	110
	21 Acrylonitrile	53	3.115	3.119	(0.702)	638570	100.000	110
	27 2-Chloro-1,3-Butadiene	53	3.115	3.119	(0.702)	638570	100.000	110
	28 Ethyl tert-butyl ether	59	3.382	3.386	(0.762)	1369362	100.000	110
	29 cis-1,2-Dichloroethene	96	3.475	3.479	(0.783)	536668	100.000	120
	31 2-Butanone	72	3.487	3.479	(0.785)	56305	100.000	100(Q)
	30 2,2-Dichloropropane	77	3.498	3.491	(0.788)	407227	100.000	98
	32 Propionitrile	54	3.510	3.526	(0.791)	510387	1000.00	1000
	33 Methacrylonitrile	41	3.638	3.642	(0.820)	682343	200.000	210
	34 Bromochloromethane	128	3.661	3.665	(0.825)	300297	100.000	120
	35 Tetrahydrofuran	72	3.719	3.711	(0.838)	103072	200.000	220
	36 Chloroform	83	3.731	3.735	(0.840)	816463	100.000	100
$	37 Dibromofluoromethane	113	3.858	3.862	(0.869)	288795	50.0000	51
	38 1,1,1-Trichloroethane	97	3.893	3.909	(0.877)	523567	100.000	110
	39 Cyclohexane	56	3.951	3.955	(0.890)	440401	100.000	99(Q)
	41 Carbon Tetrachloride	117	4.044	4.048	(0.911)	528656	100.000	110
	40 1,1-Dichloropropene	110	4.032	4.037	(0.908)	234555	100.000	110
	42 Isobutyl Alcohol	43	4.114	4.118	(0.927)	341386	2000.00	2200
$	43 1,2-Dichloroethane-d4	102	4.137	4.153	(0.932)	58097	50.0000	55
	44 Benzene	78	4.207	4.211	(0.948)	1687078	100.000	110
	45 1,2-Dichloroethane	62	4.207	4.199	(0.948)	568417	100.000	99
	46 tert-Amyl methyl ether	73	4.311	4.315	(0.971)	1151009	100.000	110
*	47 Fluorobenzene	96	4.439	4.443	(1.000)	817128	50.0000	
	49 Trichloroethene	130	4.787	4.791	(1.078)	521364	100.000	110
	50 Methylcyclohexane	83	4.985	4.989	(1.123)	467513	100.000	95
	51 1,2-Dichloropropane	63	4.985	4.989	(1.123)	500361	100.000	110
	53 Dibromomethane	93	5.089	5.093	(1.146)	361540	100.000	100
	52 Methyl Methacrylate	69	5.101	5.105	(1.149)	329134	100.000	110
	54 1,4-Dioxane	88	5.113	5.117	(1.152)	46061	2000.00	2200
	55 Bromodichloromethane	83	5.252	5.256	(1.183)	616766	100.000	110
	56 2-Chloroethyl vinyl ether	63	5.565	5.569	(1.254)	39476	100.000	73
	57 cis-1,3-Dichloropropene	75	5.716	5.709	(1.288)	730579	100.000	110
	58 4-Methyl-2-pentanone	43	5.879	5.883	(1.324)	524766	100.000	100
$	59 Toluene-d8	98	6.007	6.011	(0.785)	761776	50.0000	50
	60 Toluene	91	6.076	6.080	(1.369)	1662470	100.000	100
	61 trans-1,3-Dichloropropene	75	6.309	6.313	(1.421)	629453	100.000	110
	62 Ethyl Methacrylate	69	6.448	6.452	(1.453)	460434	100.000	120
	63 1,1,2-Trichloroethane	97	6.506	6.510	(1.466)	379649	100.000	100
	64 Tetrachloroethene	164	6.692	6.696	(0.874)	411805	100.000	100
	65 1,3-Dichloropropane	76	6.703	6.696	(0.876)	668688	100.000	110
	66 2-Hexanone	43	6.820	6.824	(0.891)	367380	100.000	100
	67 Dibromochloromethane	129	6.959	6.951	(0.909)	515093	100.000	120
	68 1,2-Dibromoethane	107	7.087	7.079	(0.926)	457049	100.000	110
*	69 Chlorobenzene-d5	117	7.656	7.660	(1.000)	666410	50.0000	
	71 Chlorobenzene	112	7.691	7.695	(1.005)	1227887	100.000	100
	70 1-Chlorohexane	91	7.702	7.695	(1.006)	638900	100.000	100
	72 1,1,1,2-Tetrachloroethane	131	7.795	7.799	(1.018)	430406	100.000	110
	73 Ethylbenzene	106	7.853	7.846	(1.026)	601536	100.000	110
	74 m,p-Xylene	106	8.004	7.997	(1.046)	1531400	200.000	220
	75 o-Xylene	106	8.504	8.496	(1.111)	733838	100.000	110
	76 Styrene	104	8.515	8.508	(1.112)	1250363	100.000	120
	77 Bromoform	173	8.713	8.717	(1.138)	332445	100.000	110(T)
	78 Isopropylbenzene	105	8.991	8.995	(1.174)	1692555	100.000	110
	79 trans-1,4-Dichloro-2-butene	75	9.061	9.065	(1.184)	146174	100.000	110

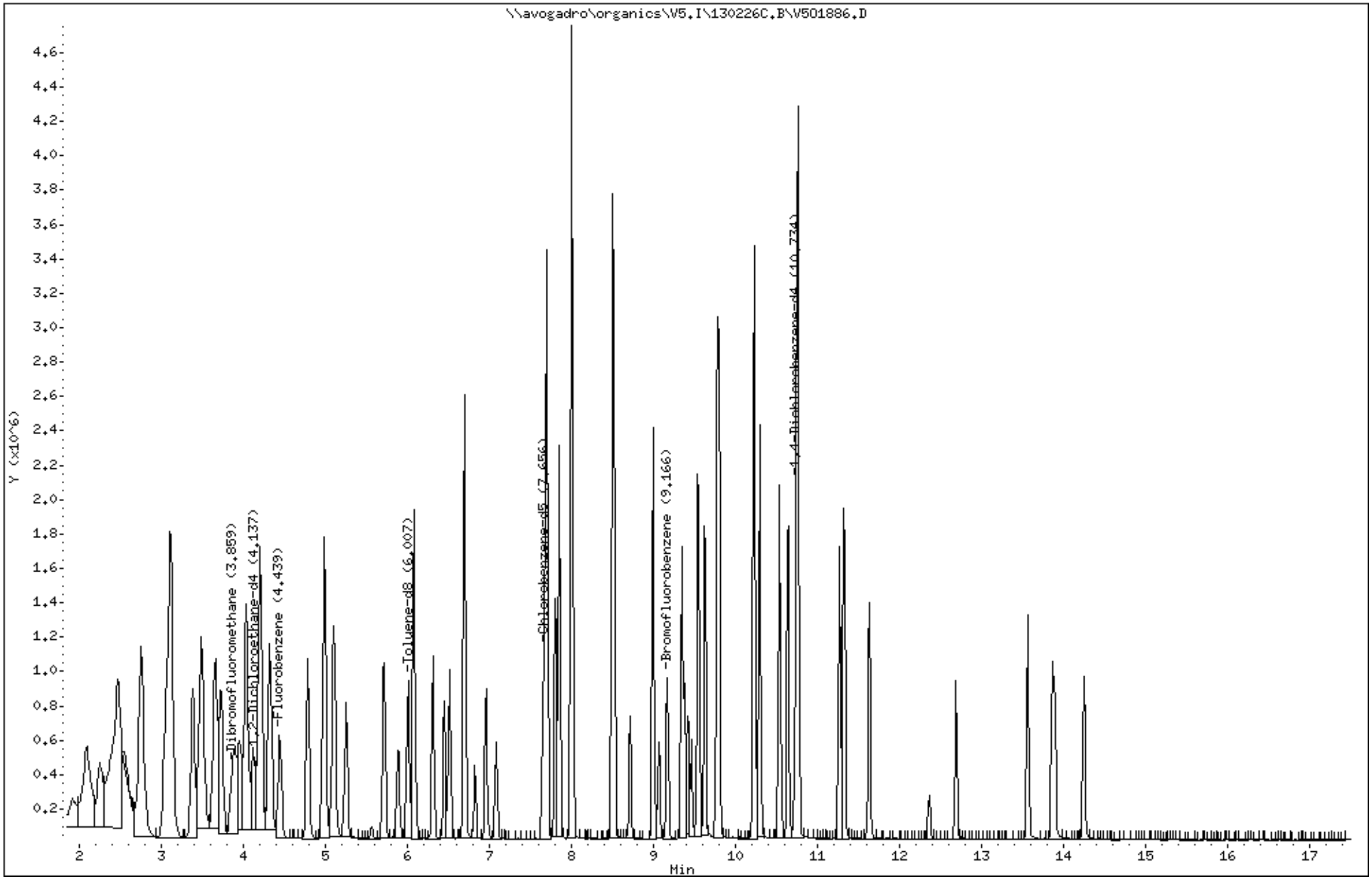
Data File: \\avogadro\organics\V5.I\130226C.B\V5O1886.D
Report Date: 28-Feb-2013 10:05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	80 Bromofluorobenzene	95	9.165	9.170	(1.197)	296758	50.0000	50
	82 Bromobenzene	156	9.340	9.344	(0.870)	525049	100.000	120
	81 1,1,2,2-Tetrachloroethane	83	9.374	9.379	(0.873)	494268	100.000	100
	83 1,2,3-Trichloropropane	75	9.409	9.413	(0.877)	334259	100.000	93
	84 n-Propylbenzene	120	9.549	9.541	(0.890)	469774	100.000	110
	85 2-Chlorotoluene	126	9.630	9.622	(0.897)	434624	100.000	110
	87 4-Chlorotoluene	126	9.769	9.773	(0.910)	493946	100.000	110
	86 1,3,5-Trimethylbenzene	105	9.793	9.797	(0.912)	1338823	100.000	120
	88 tert-Butylbenzene	119	10.222	10.226	(0.952)	1439707	100.000	110
	89 1,2,4-Trimethylbenzene	105	10.292	10.296	(0.959)	1342426	100.000	110
	90 sec-Butylbenzene	105	10.536	10.528	(0.982)	1642605	100.000	110
	92 1,3-Dichlorobenzene	146	10.640	10.633	(0.991)	871589	100.000	110
*	94 1,4-Dichlorobenzene-d4	152	10.733	10.726	(1.000)	350583	50.0000	
	93 4-Isopropyltoluene	119	10.756	10.749	(1.002)	1426556	100.000	120
	95 1,4-Dichlorobenzene	146	10.756	10.760	(1.002)	956751	100.000	100
	97 1,2-Dichlorobenzene	146	11.267	11.260	(1.050)	831006	100.000	110
	96 n-Butylbenzene	91	11.314	11.318	(1.054)	1266269	100.000	110
	98 Hexachloroethane	117	11.627	11.620	(1.083)	346565	100.000	110
	99 1,2-Dibromo-3-chloropropane	75	12.359	12.351	(1.151)	50173	100.000	93
	100 1,3,5-Trichlorobenzene	182	12.684	12.688	(2.857)	309416	100.000	110
	101 1,2,4-Trichlorobenzene	180	13.555	13.559	(1.263)	462452	100.000	110
	102 Hexachlorobutadiene	225	13.857	13.861	(1.291)	186149	100.000	120
	103 Naphthalene	128	13.880	13.884	(1.293)	785025	100.000	120
	104 1,2,3-Trichlorobenzene	180	14.240	14.244	(1.327)	327395	100.000	110

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\130226C.B\V501886.D
Date : 26-FEB-2013 18:50
Client ID: VSTD100T5
Instrument: V5.i
Sample Info: 5ML,VSTD100T5,VSTD100T5
Purge Volume: 5.0
Operator: SRC:
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\130226C.B\V5O1887.D
Report Date: 28-Feb-2013 10:05

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\130226C.B\V5O1887.D
Lab Smp Id: VSTD200T5 Client Smp ID: VSTD200T5
Inj Date : 26-FEB-2013 19:16
Operator : SRC: Inst ID: V5.i
Smp Info : 5ML,VSTD200T5,VSTD200T5
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\130226C.B\v5_8260W.m
Meth Date : 28-Feb-2013 10:04 wluo Quant Type: ISTD
Cal Date : 26-FEB-2013 19:16 Cal File: V5O1887.D
Als bottle: 10 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FULL.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.356	1.342	(0.305)	942338	200.000	220(A)
3	Chloromethane	50	1.461	1.435	(0.329)	1011427	200.000	200
4	Vinyl Chloride	62	1.531	1.528	(0.344)	1062292	200.000	220(A)
5	Bromomethane	94	1.728	1.737	(0.389)	1170279	200.000	220(A)
6	Chloroethane	64	1.786	1.807	(0.402)	857424	200.000	250(A)
7	Trichlorofluoromethane	101	1.925	1.935	(0.433)	1637727	200.000	240(A)
8	Ethanol	46	2.053	2.051	(0.462)	384403	20000.0	40000(AQ)
9	Ether	59	2.088	2.086	(0.470)	1135029	200.000	240(A)
10	Acrolein	56	2.169	2.167	(0.488)	1062209	1000.00	1100(A)
11	1,1-Dichloroethene	96	2.239	2.248	(0.504)	854337	200.000	220(A)
12	1,1,2-Trichloro-1,2,2-Trifluo	101	2.251	2.260	(0.506)	698627	200.000	250(A)
13	Acetone	58	2.262	2.283	(0.509)	98366	200.000	220(AQ)
14	Iodomethane	142	2.367	2.376	(0.532)	1792038	200.000	240(A)
15	Carbon Disulfide	76	2.448	2.422	(0.551)	3126994	200.000	210(A)
18	Methyl Acetate	43	2.483	2.492	(0.559)	913517	200.000	210(A)
16	Acetonitrile	41	2.471	2.469	(0.556)	2349363	2000.00	2200(A)
17	Allyl Chloride	39	2.471	2.480	(0.556)	1228225	200.000	210(A)
20	Methylene Chloride	84	2.576	2.573	(0.579)	934915	200.000	220(A)
19	tert-Butanol	59	2.088	2.086	(0.470)	1135029	400.000	460(A)
22	trans-1,2-Dichloroethene	96	2.750	2.747	(0.619)	1008069	200.000	200(A)
23	Methyl tert-butyl ether	73	2.762	2.759	(0.621)	2282383	200.000	220(A)
24	1,1-Dichloroethane	63	3.040	3.049	(0.684)	1716160	200.000	210(A)
25	Vinyl acetate	43	3.098	3.096	(0.697)	3594626	200.000	210(A)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	26 Diisopropyl Ether	45	3.110	3.107	(0.700)	3671643	200.000	220(A)
	21 Acrylonitrile	53	3.110	3.119	(0.700)	1356999	200.000	220(A)
	27 2-Chloro-1,3-Butadiene	53	3.110	3.119	(0.700)	1356999	200.000	220(A)
	28 Ethyl tert-butyl ether	59	3.389	3.386	(0.762)	2747648	200.000	210(A)
	29 cis-1,2-Dichloroethene	96	3.482	3.479	(0.783)	1104698	200.000	230(A)
	31 2-Butanone	72	3.493	3.479	(0.786)	127401	200.000	220(TAQ)
	30 2,2-Dichloropropane	77	3.493	3.491	(0.786)	845770	200.000	200(A)
	32 Propionitrile	54	3.516	3.526	(0.791)	1094986	2000.00	2100(A)
	33 Methacrylonitrile	41	3.644	3.642	(0.820)	1432144	400.000	430(A)
	34 Bromochloromethane	128	3.667	3.665	(0.825)	602902	200.000	220(A)
	35 Tetrahydrofuran	72	3.714	3.711	(0.835)	214900	400.000	440(A)
	36 Chloroform	83	3.725	3.735	(0.838)	1658420	200.000	210(A)
$	37 Dibromofluoromethane	113	3.865	3.862	(0.869)	296764	50.0000	52
	38 1,1,1-Trichloroethane	97	3.900	3.909	(0.877)	1042195	200.000	210(A)
	39 Cyclohexane	56	3.958	3.955	(0.890)	843026	200.000	190
	41 Carbon Tetrachloride	117	4.039	4.048	(0.909)	1128948	200.000	230(A)
	40 1,1-Dichloropropene	110	4.027	4.037	(0.906)	495418	200.000	220(A)
	42 Isobutyl Alcohol	43	4.120	4.118	(0.927)	719123	4000.00	4400(A)
$	43 1,2-Dichloroethane-d4	102	4.144	4.153	(0.932)	67036	50.0000	61
	44 Benzene	78	4.202	4.211	(0.945)	3530912	200.000	220(A)
	45 1,2-Dichloroethane	62	4.213	4.199	(0.948)	1223095	200.000	210(A)
	46 tert-Amyl methyl ether	73	4.318	4.315	(0.971)	2460727	200.000	220(A)
*	47 Fluorobenzene	96	4.446	4.443	(1.000)	832407	50.0000	
	49 Trichloroethene	130	4.782	4.791	(1.076)	1056470	200.000	220(A)
	50 Methylcyclohexane	83	4.980	4.989	(1.120)	914814	200.000	180
	51 1,2-Dichloropropane	63	4.991	4.989	(1.123)	1036972	200.000	220(A)
	53 Dibromomethane	93	5.096	5.093	(1.146)	768921	200.000	210(A)
	52 Methyl Methacrylate	69	5.107	5.105	(1.149)	719448	200.000	230(A)
	54 1,4-Dioxane	88	5.107	5.117	(1.149)	104780	4000.00	4800(A)
	55 Bromodichloromethane	83	5.247	5.256	(1.180)	1278537	200.000	220(A)
	56 2-Chloroethyl vinyl ether	63	5.572	5.569	(1.253)	82054	200.000	160
	57 cis-1,3-Dichloropropene	75	5.711	5.709	(1.285)	1537674	200.000	220(A)
	58 4-Methyl-2-pentanone	43	5.886	5.883	(1.324)	1057774	200.000	200(A)
$	59 Toluene-d8	98	6.002	6.011	(0.783)	767880	50.0000	49
	60 Toluene	91	6.083	6.080	(1.368)	3424997	200.000	210(A)
	61 trans-1,3-Dichloropropene	75	6.315	6.313	(1.421)	1334528	200.000	220(A)
	62 Ethyl Methacrylate	69	6.443	6.452	(1.449)	979380	200.000	240(A)
	63 1,1,2-Trichloroethane	97	6.513	6.510	(1.465)	797242	200.000	210(A)
	64 Tetrachloroethene	164	6.698	6.696	(0.874)	867252	200.000	210(A)
	65 1,3-Dichloropropane	76	6.698	6.696	(0.874)	1478375	200.000	230(A)
	66 2-Hexanone	43	6.826	6.824	(0.891)	743976	200.000	200
	67 Dibromochloromethane	129	6.954	6.951	(0.908)	1098773	200.000	240(A)
	68 1,2-Dibromoethane	107	7.082	7.079	(0.924)	922701	200.000	210(A)
*	69 Chlorobenzene-d5	117	7.662	7.660	(1.000)	683791	50.0000	
	71 Chlorobenzene	112	7.697	7.695	(1.005)	2640697	200.000	210(A)
	70 1-Chlorohexane	91	7.697	7.695	(1.005)	1443506	200.000	230(A)
	72 1,1,1,2-Tetrachloroethane	131	7.802	7.799	(1.018)	925992	200.000	220(A)
	73 Ethylbenzene	106	7.848	7.846	(1.024)	1288001	200.000	230(A)
	74 m,p-Xylene	106	8.011	7.997	(1.045)	3482859	400.000	480(A)
	75 o-Xylene	106	8.498	8.496	(1.109)	1671906	200.000	240(A)
	76 Styrene	104	8.522	8.508	(1.112)	2731243	200.000	240(A)
	77 Bromoform	173	8.719	8.717	(1.138)	699776	200.000	220(A)
	78 Isopropylbenzene	105	8.998	8.995	(1.174)	3442615	200.000	210(A)
	79 trans-1,4-Dichloro-2-butene	75	9.068	9.065	(1.183)	320740	200.000	240(A)

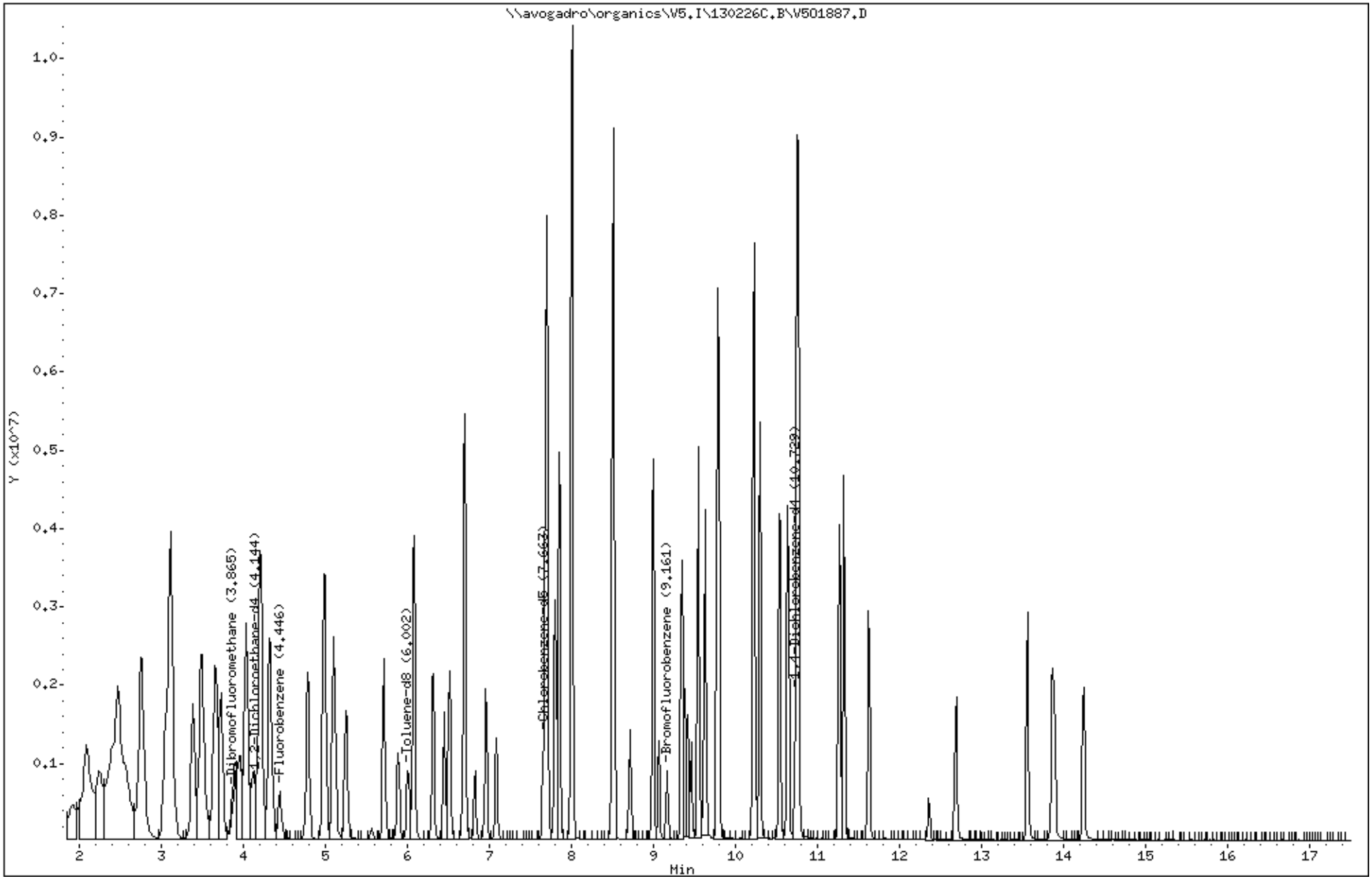
Data File: \\avogadro\organics\V5.I\130226C.B\V5O1887.D
Report Date: 28-Feb-2013 10:05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	80 Bromofluorobenzene	95	9.160	9.170	(1.196)	293815	50.0000	48
	82 Bromobenzene	156	9.346	9.344	(0.871)	1113141	200.000	210(A)
	81 1,1,2,2-Tetrachloroethane	83	9.381	9.379	(0.874)	1036203	200.000	190
	83 1,2,3-Trichloropropane	75	9.416	9.413	(0.878)	664118	200.000	170
	84 n-Propylbenzene	120	9.544	9.541	(0.890)	1027073	200.000	210(A)
	85 2-Chlorotoluene	126	9.625	9.622	(0.897)	937676	200.000	210(A)
	87 4-Chlorotoluene	126	9.776	9.773	(0.911)	1084681	200.000	210(A)
	86 1,3,5-Trimethylbenzene	105	9.799	9.797	(0.913)	2912563	200.000	220(A)
	88 tert-Butylbenzene	119	10.229	10.226	(0.953)	3060856	200.000	210(A)
	89 1,2,4-Trimethylbenzene	105	10.298	10.296	(0.960)	2879696	200.000	210(A)
	90 sec-Butylbenzene	105	10.531	10.528	(0.982)	3458531	200.000	200(A)
	92 1,3-Dichlorobenzene	146	10.635	10.633	(0.991)	1865478	200.000	200(A)
*	94 1,4-Dichlorobenzene-d4	152	10.728	10.726	(1.000)	395417	50.0000	(Q)
	93 4-Isopropyltoluene	119	10.751	10.749	(1.002)	3192706	200.000	230(A)
	95 1,4-Dichlorobenzene	146	10.763	10.760	(1.003)	2085474	200.000	200(A)
	97 1,2-Dichlorobenzene	146	11.262	11.260	(1.050)	1753932	200.000	200
	96 n-Butylbenzene	91	11.320	11.318	(1.055)	2617658	200.000	200(A)
	98 Hexachloroethane	117	11.622	11.620	(1.083)	733145	200.000	200
	99 1,2-Dibromo-3-chloropropane	75	12.354	12.351	(1.152)	118154	200.000	200
	100 1,3,5-Trichlorobenzene	182	12.691	12.688	(2.855)	656851	200.000	220(A)
	101 1,2,4-Trichlorobenzene	180	13.562	13.559	(1.264)	995731	200.000	210(A)
	102 Hexachlorobutadiene	225	13.864	13.861	(1.292)	408495	200.000	220(A)
	103 Naphthalene	128	13.887	13.884	(1.294)	1700848	200.000	220(A)
	104 1,2,3-Trichlorobenzene	180	14.247	14.244	(1.328)	719754	200.000	220(A)

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\V5.I\130226C.B\V501887.D
Date : 26-FEB-2013 19:16
Client ID: VSTD200T5
Instrument: V5.i
Sample Info: 5ML,VSTD200T5,VSTD200T5
Purge Volume: 5.0
Operator: SRC:
Column phase: DB-624
Column diameter: 0.25



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

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Instrument ID: V5 Calibration Date: 02/28/2013 Time: 16:02

Lab File ID: V5O1962.D Init. Calib. Date(s): 02/26/2013 02/26/2013

EPA Sample No.(VSTD#####) VSTD050X5 Init. Calib. Time(s): 17:07 19:16

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Chloromethane	0.309	0.374	0.010	21.1	20.0
Vinyl chloride	0.292	0.411	0.010	40.9	20.0
Bromomethane	0.321	0.451	0.010	40.6	20.0
Chloroethane	0.216	0.194	0.010	-10.2	20.0
Trichlorofluoromethane	0.423	0.272	0.010	-35.6	20.0
1,1-Dichloroethene	0.234	0.264	0.100	12.8	20.0
Methylene chloride	0.256	0.276	0.010	8.1	20.0
trans-1,2-Dichloroethene	0.295	0.296	0.010	0.0	20.0
1,1-Dichloroethane	0.495	0.502	0.010	1.5	20.0
Chloroform	0.483	0.528	0.010	9.3	20.0
1,1,1-Trichloroethane	0.298	0.313	0.010	5.0	20.0
Carbon tetrachloride	0.304	0.332	0.010	9.1	20.0
1,2-Dichloroethane	0.353	0.359	0.010	1.6	20.0
Benzene	0.979	1.063	0.010	8.6	20.0
Trichloroethene	0.295	0.307	0.010	4.1	20.0
1,2-Dichloropropane	0.283	0.308	0.010	8.8	20.0
Bromodichloromethane	0.354	0.378	0.010	7.0	20.0
cis-1,3-Dichloropropene	0.422	0.456	0.010	8.0	20.0
Toluene	0.987	1.029	0.010	4.2	20.0
trans-1,3-Dichloropropene	0.364	0.372	0.010	2.1	20.0
1,1,2-Trichloroethane	0.233	0.221	0.010	-4.9	20.0
Tetrachloroethene	0.299	0.305	0.010	1.9	20.0
Dibromochloromethane	0.348	0.359	0.010	3.3	20.0
Chlorobenzene	0.915	0.909	0.010	-0.7	20.0
Ethylbenzene	0.425	0.427	0.010	0.5	20.0
Bromoform	0.235	0.241	0.010	2.5	20.0
1,1,2,2-Tetrachloroethane	0.680	0.617	0.300	-9.2	20.0
1,3-Dichlorobenzene	1.172	1.114	0.010	-5.0	20.0
1,4-Dichlorobenzene	1.310	1.272	0.010	-2.9	20.0
1,2-Dichlorobenzene	1.112	1.081	0.010	-2.8	20.0
2-Chloroethyl vinyl ether	0.030	0.025	0.010	-19.0	20.0

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

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Instrument ID: V5 Calibration Date: 02/28/2013 Time: 16:02

Lab File ID: V5O1962.D Init. Calib. Date(s): 02/26/2013 02/26/2013

EPA Sample No.(VSTD#####) VSTD050X5 Init. Calib. Time(s): 17:07 19:16

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	$\overline{RRF}$	RRF050	MIN RRF	%D	MAX %D
Dibromofluoromethane	0.346	0.356	0.010	2.7	20.0
1,2-Dichloroethane-d4	0.066	0.064	0.010	-3.5	20.0
Toluene-d8	1.136	1.113	0.010	-2.0	20.0
Bromofluorobenzene	0.442	0.414	0.010	-6.2	20.0

Data File: \\avogadro\organics\V5.I\130228.B\V5O1962.D
Report Date: 05-Mar-2013 13:29

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\130228.B\V5O1962.D
Lab Smp Id: VSTD050X5 Client Smp ID: VSTD050X5
Inj Date : 28-FEB-2013 16:02
Operator : SRC: Inst ID: V5.i
Smp Info : 5ML,VSTD050X5,VSTD050X5
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\130228.B\v5_8260W.m
Meth Date : 01-Mar-2013 09:33 V5.i Quant Type: ISTD
Cal Date : 26-FEB-2013 19:16 Cal File: V5O1887.D
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FULL.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.361	1.361	(0.306)	96859	50.0000	46
3	Chloromethane	50	1.443	1.443	(0.324)	152278	50.0000	60
4	Vinyl Chloride	62	1.524	1.524	(0.343)	167433	50.0000	70(Q)
5	Bromomethane	94	1.745	1.745	(0.392)	183761	50.0000	70
6	Chloroethane	64	1.814	1.814	(0.408)	79028	50.0000	45(Q)
7	Trichlorofluoromethane	101	1.919	1.919	(0.431)	110998	50.0000	32
8	Ethanol	46	2.035	2.035	(0.457)	41144	5000.00	7300(Q)
9	Ether	59	2.093	2.093	(0.470)	173084	50.0000	73
10	Acrolein	56	2.174	2.174	(0.489)	167888	250.000	360
11	1,1-Dichloroethene	96	2.256	2.256	(0.507)	107733	50.0000	56
12	1,1,2-Trichloro-1,2,2-Trifluo	101	2.279	2.279	(0.512)	77828	50.0000	54
13	Acetone	58	2.291	2.291	(0.515)	9984	50.0000	44
14	Iodomethane	142	2.383	2.383	(0.536)	221862	50.0000	59
15	Carbon Disulfide	76	2.407	2.407	(0.541)	388235	50.0000	53
18	Methyl Acetate	43	2.500	2.500	(0.562)	121539	50.0000	56
16	Acetonitrile	41	2.488	2.488	(0.559)	311634	500.000	580
17	Allyl Chloride	39	2.476	2.476	(0.556)	167374	50.0000	58
20	Methylene Chloride	84	2.569	2.569	(0.577)	112598	50.0000	54
19	tert-Butanol	59	2.093	2.093	(0.470)	178348	100.000	140
22	trans-1,2-Dichloroethene	96	2.755	2.755	(0.619)	120454	50.0000	50
23	Methyl tert-butyl ether	73	2.767	2.767	(0.622)	289091	50.0000	55
24	1,1-Dichloroethane	63	3.045	3.045	(0.684)	204649	50.0000	51
25	Vinyl acetate	43	3.103	3.103	(0.697)	471838	50.0000	56

		QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	26 Diisopropyl Ether	45	3.115	3.115	(0.700)	482612	50.0000	58
	21 Acrylonitrile	53	3.127	3.127	(0.703)	166860	50.0000	54
	27 2-Chloro-1,3-Butadiene	53	3.127	3.127	(0.703)	166860	50.0000	54
	28 Ethyl tert-butyl ether	59	3.394	3.394	(0.763)	339548	50.0000	53
	29 cis-1,2-Dichloroethene	96	3.487	3.487	(0.783)	130632	50.0000	54
	31 2-Butanone	72	3.487	3.487	(0.783)	15499	50.0000	54
	30 2,2-Dichloropropane	77	3.510	3.510	(0.789)	113747	50.0000	55
	32 Propionitrile	54	3.522	3.522	(0.791)	128916	500.000	500
	33 Methacrylonitrile	41	3.649	3.649	(0.820)	170909	100.000	100
	34 Bromochloromethane	128	3.672	3.672	(0.825)	70374	50.0000	52
	35 Tetrahydrofuran	72	3.707	3.707	(0.833)	24378	100.000	100
	36 Chloroform	83	3.742	3.742	(0.841)	214973	50.0000	55
$	37 Dibromofluoromethane	113	3.858	3.858	(0.867)	144933	50.0000	51
	38 1,1,1-Trichloroethane	97	3.893	3.893	(0.875)	127447	50.0000	52
	39 Cyclohexane	56	3.963	3.963	(0.890)	116295	50.0000	53
	41 Carbon Tetrachloride	117	4.044	4.044	(0.909)	135380	50.0000	54
	40 1,1-Dichloropropene	110	4.032	4.032	(0.906)	56914	50.0000	50
	42 Isobutyl Alcohol	43	4.114	4.114	(0.924)	91252	1000.00	1100
$	43 1,2-Dichloroethane-d4	102	4.137	4.137	(0.930)	26116	50.0000	46
	44 Benzene	78	4.207	4.207	(0.945)	433041	50.0000	54
	45 1,2-Dichloroethane	62	4.207	4.207	(0.945)	146134	50.0000	51
	46 tert-Amyl methyl ether	73	4.323	4.323	(0.971)	294974	50.0000	53
*	47 Fluorobenzene	96	4.451	4.451	(1.000)	407524	50.0000	
	49 Trichloroethene	130	4.787	4.787	(1.076)	125064	50.0000	52
	50 Methylcyclohexane	83	4.985	4.985	(1.120)	118760	50.0000	50
	51 1,2-Dichloropropane	63	4.985	4.985	(1.120)	125498	50.0000	54
	53 Dibromomethane	93	5.101	5.101	(1.146)	90078	50.0000	50
	52 Methyl Methacrylate	69	5.112	5.112	(1.149)	76922	50.0000	49
	54 1,4-Dioxane	88	5.112	5.112	(1.149)	13250	1000.00	1200
	55 Bromodichloromethane	83	5.252	5.252	(1.180)	154168	50.0000	53
	56 2-Chloroethyl vinyl ether	63	5.577	5.577	(1.253)	9996	50.0000	40
	57 cis-1,3-Dichloropropene	75	5.716	5.716	(1.284)	185903	50.0000	54
	58 4-Methyl-2-pentanone	43	5.891	5.891	(1.324)	140190	50.0000	55
$	59 Toluene-d8	98	6.007	6.007	(0.785)	385060	50.0000	49
	60 Toluene	91	6.076	6.076	(1.365)	419185	50.0000	52
	61 trans-1,3-Dichloropropene	75	6.309	6.309	(1.417)	151514	50.0000	51
	62 Ethyl Methacrylate	69	6.448	6.448	(1.449)	102663	50.0000	49
	63 1,1,2-Trichloroethane	97	6.518	6.518	(1.464)	90259	50.0000	48
	64 Tetrachloroethene	164	6.692	6.692	(0.874)	105368	50.0000	51
	65 1,3-Dichloropropane	76	6.703	6.703	(0.876)	169174	50.0000	52
	66 2-Hexanone	43	6.820	6.820	(0.891)	94407	50.0000	50
	67 Dibromochloromethane	129	6.959	6.959	(0.909)	124252	50.0000	52
	68 1,2-Dibromoethane	107	7.075	7.075	(0.924)	108512	50.0000	48
*	69 Chlorobenzene-d5	117	7.656	7.656	(1.000)	345849	50.0000	
	71 Chlorobenzene	112	7.691	7.691	(1.005)	314269	50.0000	50
	70 1-Chlorohexane	91	7.702	7.702	(1.006)	164476	50.0000	50(Q)
	72 1,1,1,2-Tetrachloroethane	131	7.795	7.795	(1.018)	101806	50.0000	47
	73 Ethylbenzene	106	7.853	7.853	(1.026)	147790	50.0000	50
	74 m,p-Xylene	106	8.004	8.004	(1.046)	381051	100.000	100
	75 o-Xylene	106	8.492	8.492	(1.109)	183708	50.0000	51
	76 Styrene	104	8.515	8.515	(1.112)	299217	50.0000	50
	77 Bromoform	173	8.713	8.713	(1.138)	83368	50.0000	51
	78 Isopropylbenzene	105	8.991	8.991	(1.174)	418108	50.0000	50
	79 trans-1,4-Dichloro-2-butene	75	9.061	9.061	(1.184)	27289	50.0000	38

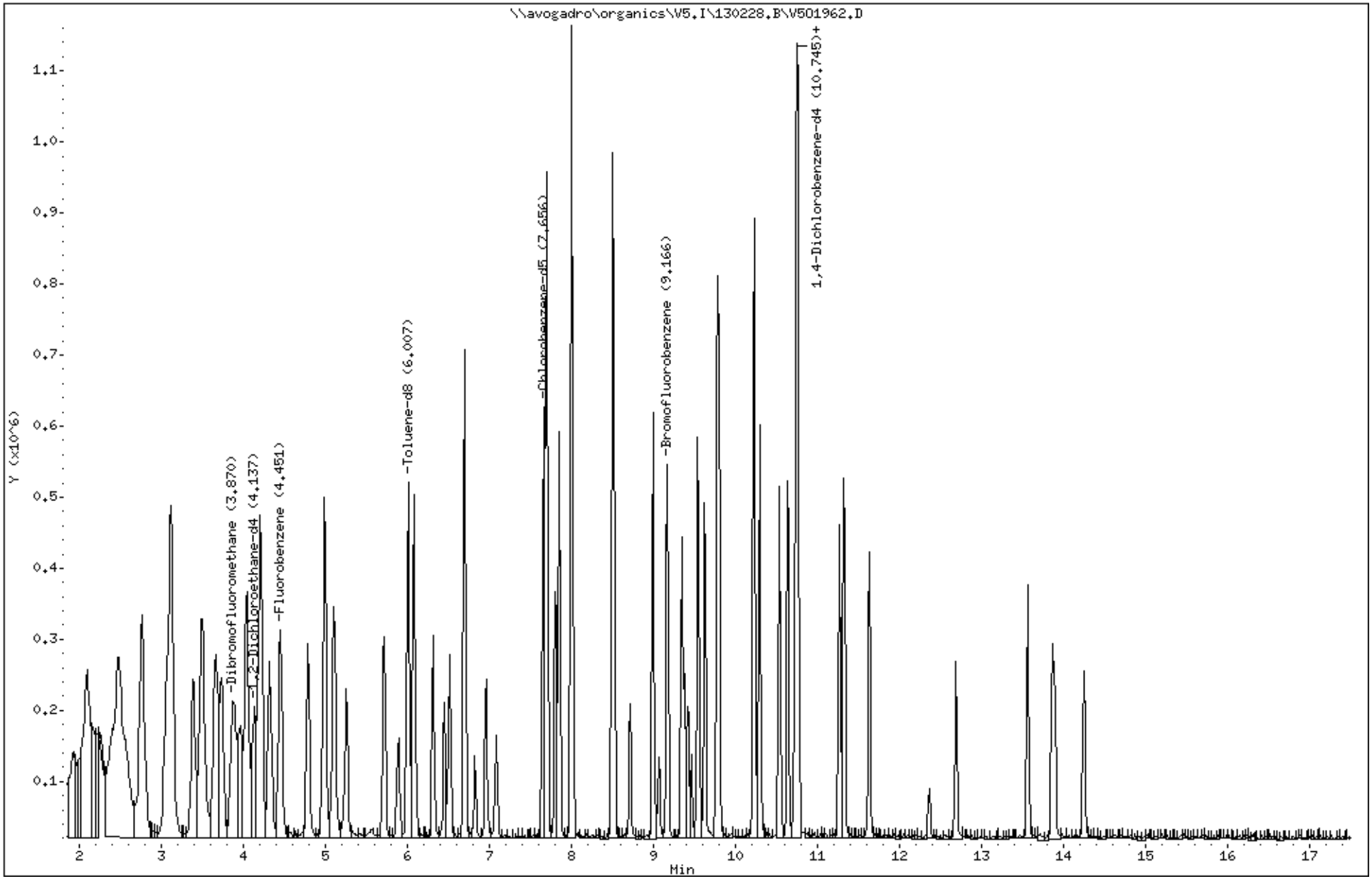
Data File: \\avogadro\organics\V5.I\130228.B\V5O1962.D
Report Date: 05-Mar-2013 13:29

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
$	80 Bromofluorobenzene	95	9.165	9.165	(1.197)	143345	50.0000	47
	82 Bromobenzene	156	9.340	9.340	(0.870)	132421	50.0000	50
	81 1,1,2,2-Tetrachloroethane	83	9.374	9.374	(0.873)	121868	50.0000	45
	83 1,2,3-Trichloropropane	75	9.409	9.409	(0.877)	82138	50.0000	42
	84 n-Propylbenzene	120	9.537	9.537	(0.889)	112653	50.0000	46
	85 2-Chlorotoluene	126	9.618	9.618	(0.896)	104697	50.0000	47
	87 4-Chlorotoluene	126	9.769	9.769	(0.910)	124808	50.0000	48
	86 1,3,5-Trimethylbenzene	105	9.793	9.793	(0.912)	325471	50.0000	48
	88 tert-Butylbenzene	119	10.222	10.222	(0.952)	344339	50.0000	47
	89 1,2,4-Trimethylbenzene	105	10.292	10.292	(0.959)	324998	50.0000	47
	90 sec-Butylbenzene	105	10.536	10.536	(0.982)	412321	50.0000	48
	92 1,3-Dichlorobenzene	146	10.629	10.629	(0.990)	219865	50.0000	48
*	94 1,4-Dichlorobenzene-d4	152	10.733	10.733	(1.000)	197450	50.0000	
	93 4-Isopropyltoluene	119	10.745	10.745	(1.001)	357430	50.0000	50
	95 1,4-Dichlorobenzene	146	10.756	10.756	(1.002)	251141	50.0000	48
	97 1,2-Dichlorobenzene	146	11.267	11.267	(1.050)	213427	50.0000	49
	96 n-Butylbenzene	91	11.314	11.314	(1.054)	323083	50.0000	50
	98 Hexachloroethane	117	11.627	11.627	(1.083)	82732	50.0000	45
	99 1,2-Dibromo-3-chloropropane	75	12.347	12.347	(1.150)	13440	50.0000	45
	100 1,3,5-Trichlorobenzene	182	12.684	12.684	(2.850)	83116	50.0000	56
	101 1,2,4-Trichlorobenzene	180	13.555	13.555	(1.263)	124257	50.0000	52
	102 Hexachlorobutadiene	225	13.857	13.857	(1.291)	51755	50.0000	55
	103 Naphthalene	128	13.880	13.880	(1.293)	182383	50.0000	47
	104 1,2,3-Trichlorobenzene	180	14.240	14.240	(1.327)	85284	50.0000	51

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\130228.B\V501962.D
Date : 28-FEB-2013 16:02
Client ID: VSTD050X5
Instrument: V5.i
Sample Info: 5ML,VSTD050X5,VSTD050X5
Purge Volume: 5.0
Operator: SRC:
Column phase: DB-624
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\V5.I\130226C.B\V5O1880.D
Lab Smp Id: BFBT5 Client Smp ID: BFBT5
Inj Date : 26-FEB-2013 16:15
Operator : SRC: Inst ID: V5.i
Smp Info : 2UL,BFBT5,BFBT5
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\130226C.B\bfb8260.m
Meth Date : 28-Feb-2013 10:04 wluo 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

RT	EXP RT	REL RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
9.160	9.000	(0.000)	95	120200			0.00- 100.00	100.00
9.160	9.000	(0.000)	50	23976			15.00- 40.00	19.95
9.160	9.000	(0.000)	75	56920			30.00- 60.00	47.35
9.160	9.000	(0.000)	96	6764			5.00- 9.00	5.63
9.160	9.000	(0.000)	173	280			0.00- 2.00	0.25
9.160	9.000	(0.000)	174	113272			50.00- 100.00	94.24
9.160	9.000	(0.000)	175	8774			5.00- 9.00	7.75
9.160	9.000	(0.000)	176	108000			95.00- 101.00	95.35
9.160	9.000	(0.000)	177	7551			5.00- 9.00	6.99

Data File: \\avogadro\organics\V5.I\130226C.B\V501880.D

Date : 26-FEB-2013 16:15

Client ID: BFBT5

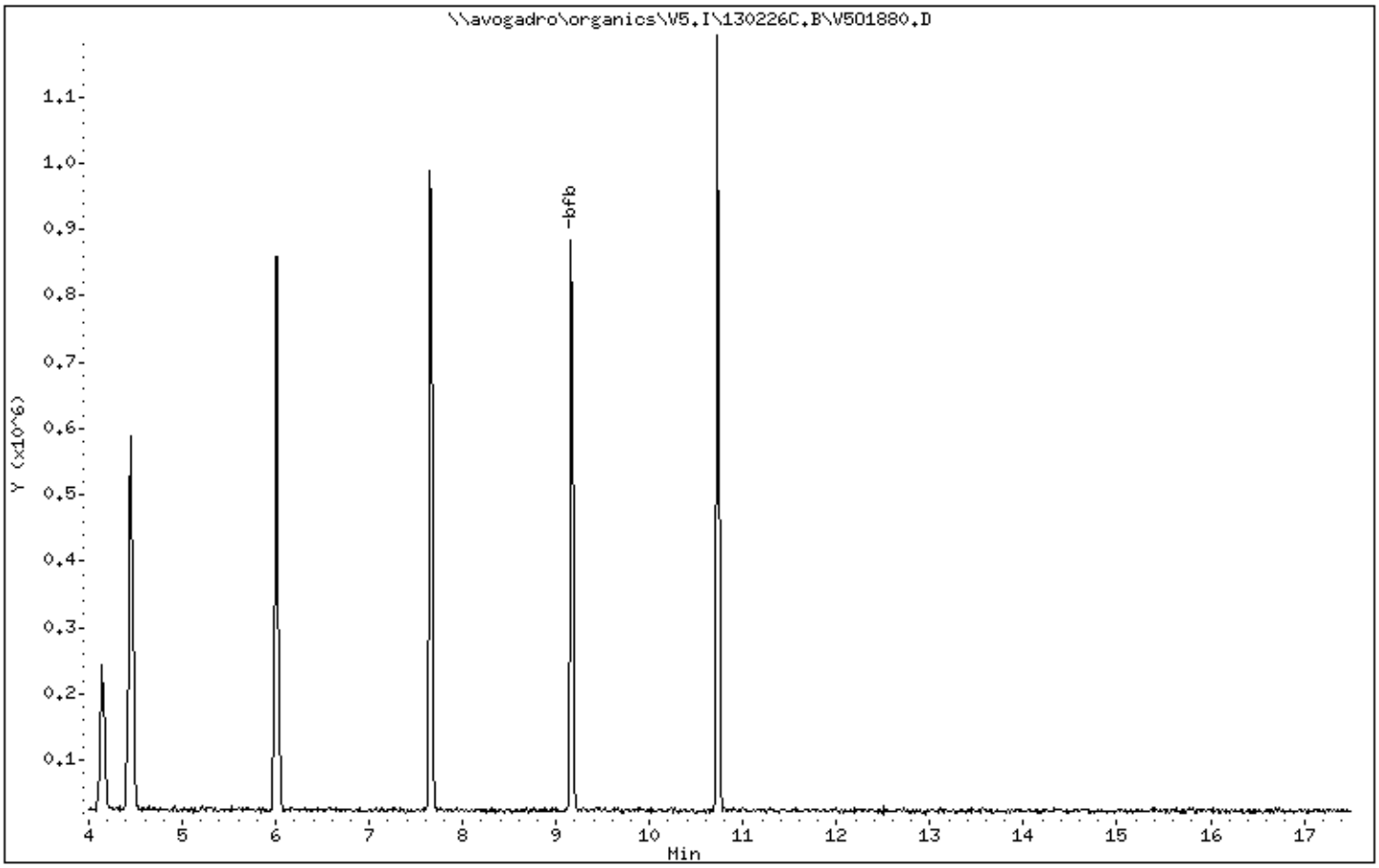
Instrument: V5.i

Sample Info: 2UL,BFBT5,BFBT5

Operator: SRC:

Column phase: DB-624

Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\130226C.B\V501880.D

Date : 26-FEB-2013 16:15

Client ID: BFBT5

Instrument: V5.i

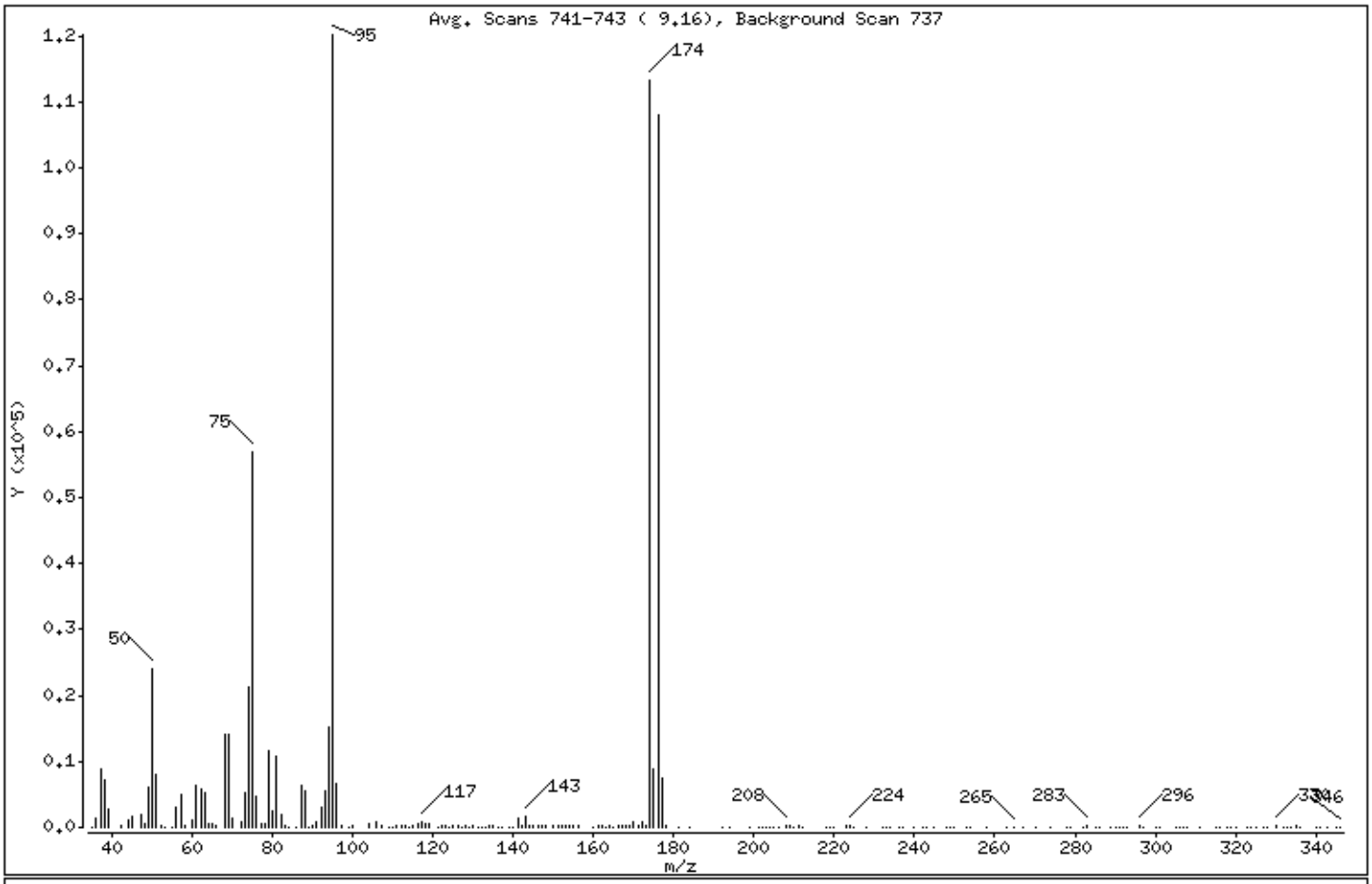
Sample Info: 2UL,BFBT5,BFBT5

Operator: SRC:

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.95
75	30.00 - 60.00% of mass 95	47.35
96	5.00 - 9.00% of mass 95	5.63
173	Less than 2.00% of mass 174	0.23 (0.25)
174	50.00 - 100.00% of mass 95	94.24
175	5.00 - 9.00% of mass 174	7.30 (7.75)
176	95.00 - 101.00% of mass 174	89.85 (95.35)
177	5.00 - 9.00% of mass 176	6.28 (6.99)

Date : 26-FEB-2013 16:15

Client ID: BFBT5 Instrument: V5.i

Sample Info: 2UL,BFBT5,BFBT5

Operator: SRC:

Column phase: DB-624 Column diameter: 0.25

Data File: V501880.D
Spectrum: Avg. Scans 741-743 (9.16), Background Scan 737
Location of Maximum: 95.00
Number of points: 207

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	59	96.00	6764	160.00	92	249.00	59
36.00	1475	97.00	376	161.00	200	250.00	63
37.00	8957	99.00	39	162.00	169	253.00	39
38.00	7313	100.00	271	163.00	47	254.00	54
39.00	2634	104.00	615	164.00	139	258.00	37
42.00	265	106.00	932	165.00	42	263.00	68
44.00	1232	107.00	220	166.00	184	265.00	136
45.00	1664	109.00	59	167.00	217	267.00	17
47.00	1968	110.00	116	168.00	307	270.00	134
48.00	453	111.00	345	169.00	241	274.00	97
49.00	6205	112.00	152	170.00	875	278.00	45
50.00	23976	113.00	195	171.00	388	279.00	79
51.00	7944	114.00	45	172.00	942	282.00	53
52.00	405	115.00	199	173.00	280	283.00	296
53.00	41	116.00	561	174.00	113272	285.00	46
55.00	91	117.00	714	175.00	8774	286.00	109
56.00	2954	118.00	661	176.00	108000	289.00	116
57.00	5013	119.00	685	177.00	7551	290.00	82
58.00	208	121.00	49	178.00	154	291.00	95
60.00	1016	122.00	153	181.00	126	292.00	81
61.00	6366	123.00	152	184.00	71	293.00	75
62.00	5674	124.00	43	192.00	81	296.00	149
63.00	5191	125.00	154	194.00	43	297.00	127
64.00	624	126.00	300	199.00	125	300.00	85
65.00	482	127.00	122	201.00	63	301.00	71
66.00	299	128.00	250	202.00	74	305.00	104
68.00	14126	129.00	71	203.00	75	306.00	59
69.00	14223	130.00	347	204.00	112	307.00	44
70.00	1381	131.00	118	205.00	42	308.00	55
72.00	779	132.00	94	206.00	41	311.00	68
73.00	5230	133.00	47	208.00	281	315.00	96
74.00	21344	134.00	204	209.00	215	316.00	33
75.00	56920	135.00	319	210.00	45	318.00	41
76.00	4579	136.00	75	211.00	214	319.00	119
77.00	633	137.00	26	212.00	83	320.00	106

Date : 26-FEB-2013 16:15

Client ID: BFBT5 Instrument: V5.i

Sample Info: 2UL,BFBT5,BFBT5

Operator: SRC:

Column phase: DB-624 Column diameter: 0.25

Data File: V501880.D
Spectrum: Avg. Scans 741-743 (9.16), Background Scan 737
Location of Maximum: 95.00
Number of points: 207

m/z	Y	m/z	Y	m/z	Y	m/z	Y
78.00	662	139.00	49	218.00	112	323.00	97
79.00	11538	140.00	113	219.00	38	324.00	34
80.00	2370	141.00	1371	220.00	48	325.00	73
81.00	10667	142.00	239	223.00	160	327.00	44
82.00	2000	143.00	1756	224.00	192	328.00	83
83.00	339	144.00	202	225.00	40	330.00	157
84.00	69	145.00	215	228.00	62	332.00	88
86.00	83	146.00	160	232.00	54	333.00	73
87.00	6427	147.00	224	233.00	52	334.00	68
88.00	5438	148.00	361	234.00	112	335.00	149
89.00	67	150.00	163	236.00	35	336.00	120
90.00	192	151.00	163	237.00	86	340.00	108
91.00	704	152.00	181	240.00	36	341.00	33
92.00	2922	153.00	167	242.00	37	343.00	53
93.00	5634	154.00	291	243.00	63	345.00	48
94.00	15188	155.00	334	245.00	58	346.00	46
95.00	120200	156.00	173	248.00	83		

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\V5.I\130228.B\V5O1961.D
Lab Smp Id: BFBX5 Client Smp ID: BFBX5
Inj Date : 28-FEB-2013 15:24
Operator : SRC: Inst ID: V5.i
Smp Info : 2UL,BFBX5,BFBX5
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\130228.B\bfb8260.m
Meth Date : 27-Feb-2013 09:39 wluo 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	CONCENTRATIONS FINAL		
RT	EXP RT	REL RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
9.161	9.200	(0.000)	95	43800			0.00- 100.00	100.00
9.161	9.200	(0.000)	50	10495			15.00- 40.00	23.96
9.161	9.200	(0.000)	75	22232			30.00- 60.00	50.76
9.161	9.200	(0.000)	96	3155			5.00- 9.00	7.20
9.161	9.200	(0.000)	173	0	0.0	0.0	0.00- 2.00	0.00
9.161	9.200	(0.000)	174	33448			50.00- 100.00	76.37
9.161	9.200	(0.000)	175	2574			5.00- 9.00	7.70
9.161	9.200	(0.000)	176	32560			95.00- 101.00	97.35
9.161	9.200	(0.000)	177	2135			5.00- 9.00	6.56

Data File: \\avogadro\organics\V5.I\130228.B\V501961.D

Date : 28-FEB-2013 15:24

Client ID: BFBX5

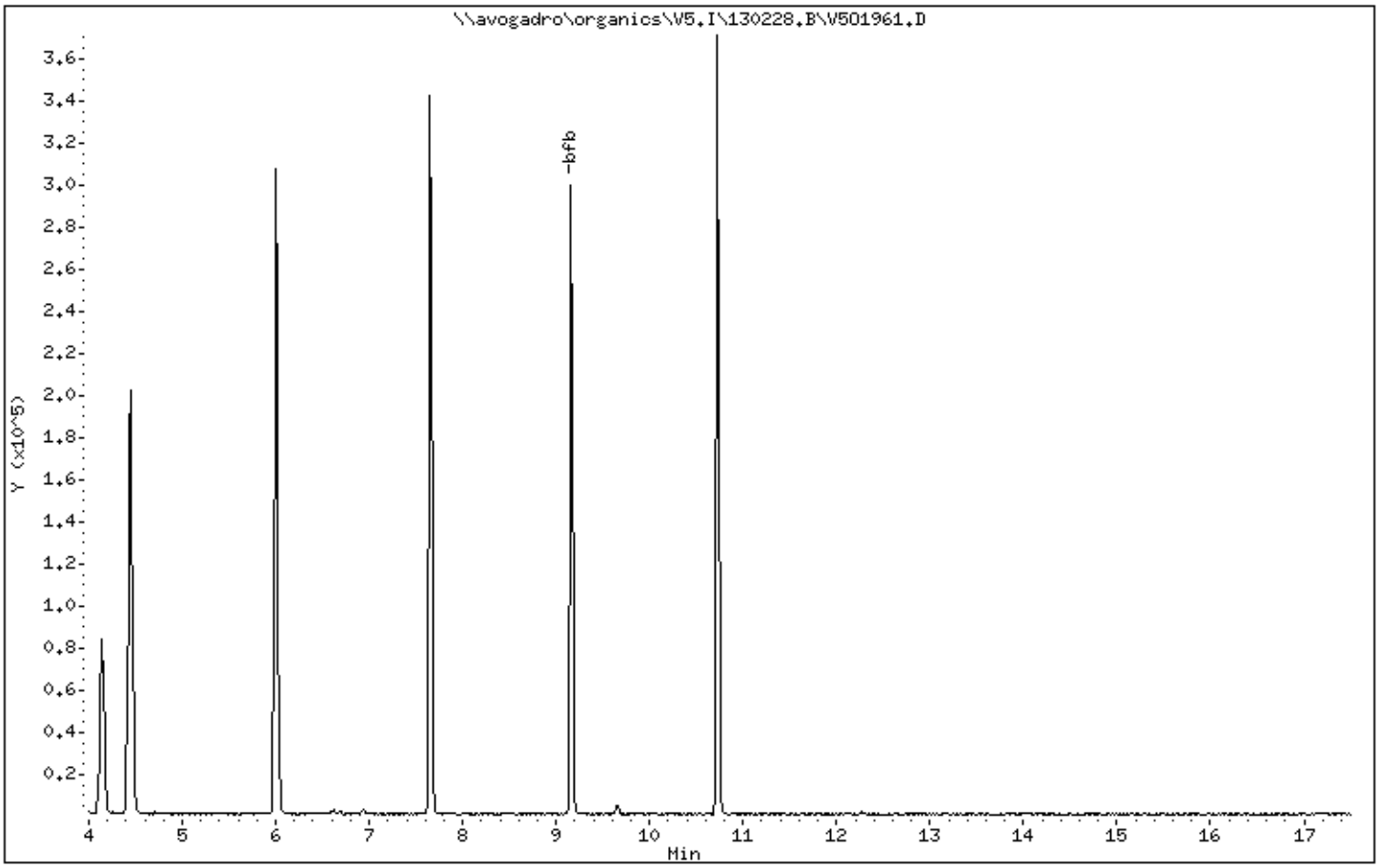
Instrument: V5.i

Sample Info: 2UL,BFBX5,BFBX5

Operator: SRC:

Column phase: DB-624

Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\130228.B\V501961.D

Date : 28-FEB-2013 15:24

Client ID: BFBX5

Instrument: V5.i

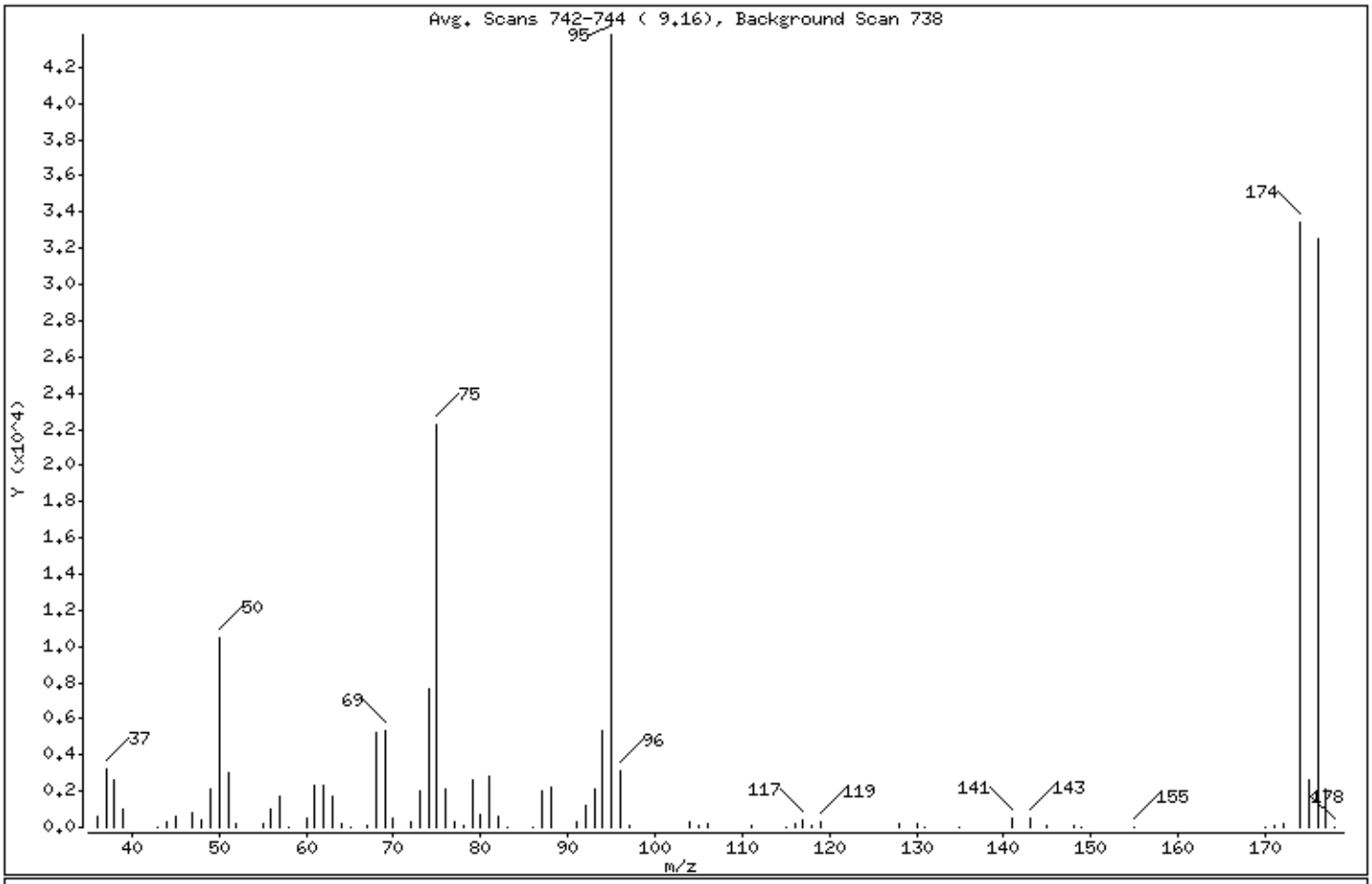
Sample Info: 2UL,BFBX5,BFBX5

Operator: SRC:

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	23.96
75	30.00 - 60.00% of mass 95	50.76
96	5.00 - 9.00% of mass 95	7.20
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	76.37
175	5.00 - 9.00% of mass 174	5.88 (7.70)
176	95.00 - 101.00% of mass 174	74.34 (97.35)
177	5.00 - 9.00% of mass 176	4.87 (6.56)

Date : 28-FEB-2013 15:24

Client ID: BFBX5 Instrument: V5.i

Sample Info: 2UL,BFBX5,BFBX5

Operator: SRC:

Column phase: DB-624 Column diameter: 0.25

Data File: V501961.D
Spectrum: Avg. Scans 742-744 (9.16), Background Scan 738
Location of Maximum: 95.00
Number of points: 76

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	577	63.00	1703	87.00	2048	131.00	50
37.00	3192	64.00	193	88.00	2171	135.00	40
38.00	2618	65.00	34	91.00	282	141.00	483
39.00	1036	67.00	127	92.00	1208	143.00	454
43.00	45	68.00	5241	93.00	2073	145.00	51
44.00	301	69.00	5365	94.00	5316	148.00	55
45.00	562	70.00	458	95.00	43800	149.00	34
47.00	808	72.00	282	96.00	3155	155.00	36
48.00	394	73.00	1982	97.00	74	170.00	48
49.00	2105	74.00	7685	104.00	285	171.00	138
50.00	10495	75.00	22232	105.00	67	172.00	165
51.00	3041	76.00	2074	106.00	245	174.00	33448
52.00	167	77.00	284	111.00	62	175.00	2574
55.00	200	78.00	82	115.00	40	176.00	32560
56.00	967	79.00	2633	116.00	204	177.00	2135
57.00	1696	80.00	726	117.00	353	178.00	48
58.00	49	81.00	2809	118.00	115		
60.00	548	82.00	593	119.00	260		
61.00	2338	83.00	40	128.00	200		
62.00	2282	86.00	35	130.00	157		

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-70677

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-70677

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5O1964.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 02/28/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
75-09-2	Methylene chloride	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
127-18-4	Tetrachloroethene	5.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
110-75-8	2-Chloroethyl vinyl ether	1.0	U

Data File: \\avogadro\organics\V5.I\130228.B\V5O1964.D
Report Date: 05-Mar-2013 13:29

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

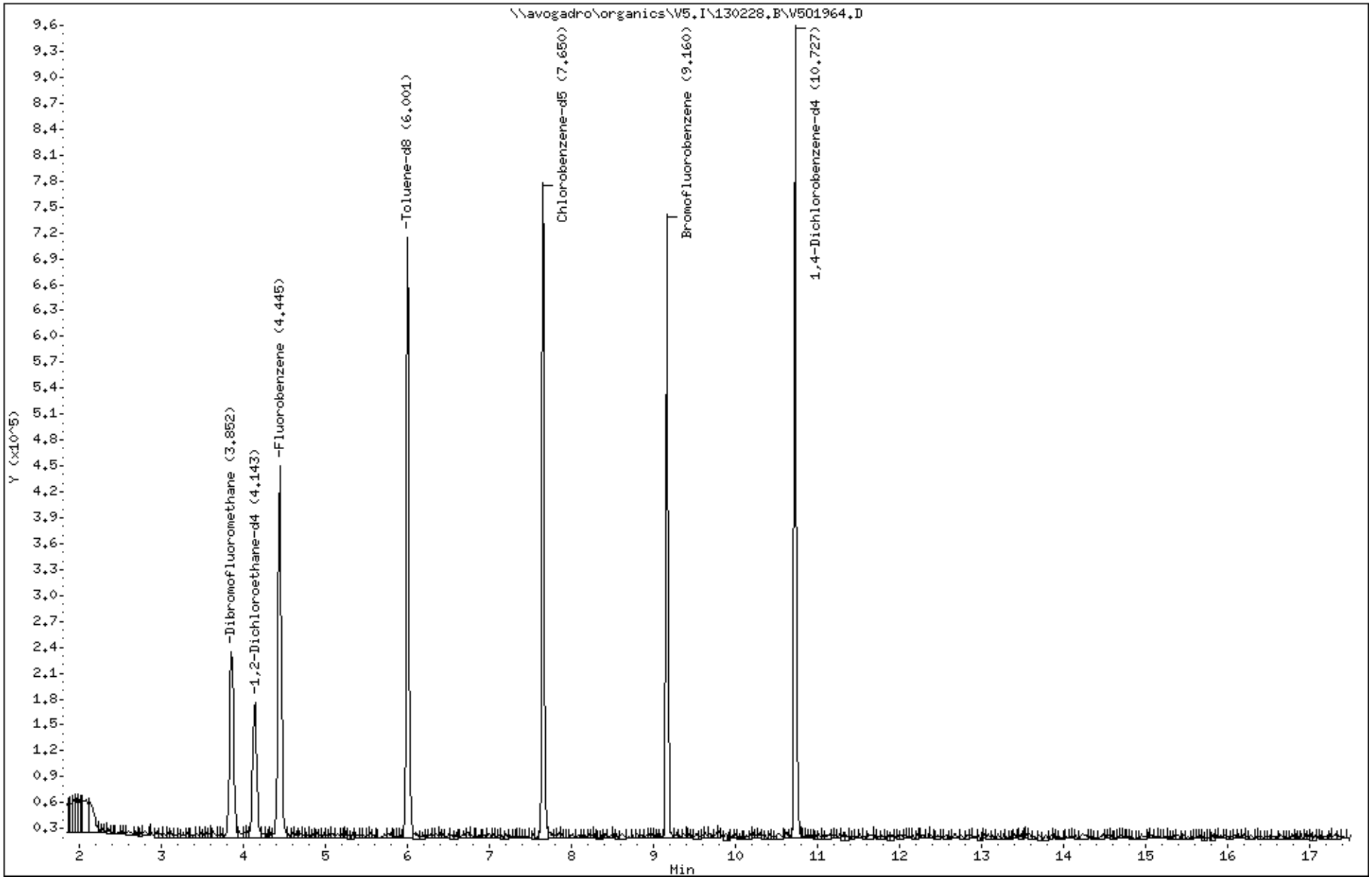
Data file : \\avogadro\organics\V5.I\130228.B\V5O1964.D
Lab Smp Id: MB-70677 Client Smp ID: VBLKX5
Inj Date : 28-FEB-2013 17:52
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5ML,MB-70677,VBLKX5,70677
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\130228.B\v5_8260W.m
Meth Date : 01-Mar-2013 09:33 V5.i Quant Type: ISTD
Cal Date : 26-FEB-2013 19:16 Cal File: V5O1887.D
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FULL.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 37 Dibromofluoromethane	113	3.864	3.858	(0.869)	194412	46.9283	47
$ 43 1,2-Dichloroethane-d4	102	4.142	4.137	(0.932)	37460	45.6716	46
* 47 Fluorobenzene	96	4.444	4.451	(1.000)	595430	50.0000	
$ 59 Toluene-d8	98	6.000	6.007	(0.784)	551091	50.1552	50
* 69 Chlorobenzene-d5	117	7.649	7.656	(1.000)	484898	50.0000	
$ 80 Bromofluorobenzene	95	9.159	9.165	(1.197)	207990	48.4397	48
* 94 1,4-Dichlorobenzene-d4	152	10.727	10.733	(1.000)	271623	50.0000	

Data File: \\avogadro\organics\V5.I\130228.B\V501964.D
Date : 28-FEB-2013 17:52
Client ID: VBLKX5
Instrument: V5.i
Sample Info: 5ML,MB-70677,VBLKX5,70677
Purge Volume: 5.0
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-70677

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-70677

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5O1963.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 02/28/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	33	
75-01-4	Vinyl chloride	38	
74-83-9	Bromomethane	40	
75-00-3	Chloroethane	34	
75-69-4	Trichlorofluoromethane	44	
75-35-4	1,1-Dichloroethene	44	
75-09-2	Methylene chloride	53	
156-60-5	trans-1,2-Dichloroethene	50	
75-34-3	1,1-Dichloroethane	51	
67-66-3	Chloroform	50	
71-55-6	1,1,1-Trichloroethane	55	
56-23-5	Carbon tetrachloride	51	
107-06-2	1,2-Dichloroethane	48	
71-43-2	Benzene	51	
79-01-6	Trichloroethene	51	
78-87-5	1,2-Dichloropropane	53	
75-27-4	Bromodichloromethane	51	
10061-01-5	cis-1,3-Dichloropropene	51	
108-88-3	Toluene	51	
10061-02-6	trans-1,3-Dichloropropene	52	
79-00-5	1,1,2-Trichloroethane	50	
127-18-4	Tetrachloroethene	52	
124-48-1	Dibromochloromethane	38	
108-90-7	Chlorobenzene	49	
100-41-4	Ethylbenzene	52	
75-25-2	Bromoform	52	
79-34-5	1,1,2,2-Tetrachloroethane	46	
541-73-1	1,3-Dichlorobenzene	51	
106-46-7	1,4-Dichlorobenzene	49	
95-50-1	1,2-Dichlorobenzene	33	
110-75-8	2-Chloroethyl vinyl ether	24	

Data File: \\avogadro\organics\V5.I\130228.B\V5O1963.D
Report Date: 05-Mar-2013 13:29

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\130228.B\V5O1963.D
Lab Smp Id: LCS-70677 Client Smp ID: VLCSX5
Inj Date : 28-FEB-2013 16:27
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 5ML,LCS-70677,VLCSX5,70677
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\130228.B\v5_8260W.m
Meth Date : 01-Mar-2013 09:33 V5.i Quant Type: ISTD
Cal Date : 26-FEB-2013 19:16 Cal File: V5O1887.D
Als bottle: 4 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FULL.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.363	1.361	(0.307)	126045	50.0000	36
3	Chloromethane	50	1.444	1.443	(0.325)	136768	50.0000	33(Q)
4	Vinyl Chloride	62	1.514	1.524	(0.341)	146882	50.0000	38
5	Bromomethane	94	1.712	1.745	(0.386)	170377	50.0000	40
6	Chloroethane	64	1.793	1.814	(0.404)	98909	50.0000	34(Q)
7	Trichlorofluoromethane	101	1.932	1.919	(0.435)	250333	50.0000	44
8	Ethanol	46	2.037	2.035	(0.459)	35532	5000.00	3800(Q)
9	Ether	59	2.095	2.093	(0.472)	191668	50.0000	49
10	Acrolein	56	2.176	2.174	(0.490)	180526	250.000	230
11	1,1-Dichloroethene	96	2.246	2.256	(0.506)	139652	50.0000	44(Q)
12	1,1,2-Trichloro-1,2,2-Trifluo	101	2.234	2.279	(0.503)	97046	50.0000	41
13	Acetone	58	2.234	2.291	(0.503)	12963	50.0000	35(Q)
14	Iodomethane	142	2.350	2.383	(0.529)	364639	50.0000	59
15	Carbon Disulfide	76	2.408	2.407	(0.542)	606800	50.0000	50
18	Methyl Acetate	43	2.478	2.500	(0.558)	179032	50.0000	50
16	Acetonitrile	41	2.478	2.488	(0.558)	481674	500.000	550
17	Allyl Chloride	39	2.478	2.476	(0.558)	252567	50.0000	53
20	Methylene Chloride	84	2.559	2.569	(0.576)	180186	50.0000	52
19	tert-Butanol	59	2.095	2.093	(0.472)	198402	100.000	98
22	trans-1,2-Dichloroethene	96	2.757	2.755	(0.621)	198909	50.0000	50
23	Methyl tert-butyl ether	73	2.768	2.767	(0.623)	456599	50.0000	53
24	1,1-Dichloroethane	63	3.047	3.045	(0.686)	339561	50.0000	51
25	Vinyl acetate	43	3.094	3.103	(0.697)	701357	50.0000	51

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	26 Diisopropyl Ether	45	3.117	3.115	(0.702)	736124	50.0000	53
	21 Acrylonitrile	53	3.117	3.127	(0.702)	250896	50.0000	50
	27 2-Chloro-1,3-Butadiene	53	3.117	3.127	(0.702)	250896	50.0000	50
	28 Ethyl tert-butyl ether	59	3.384	3.394	(0.762)	542527	50.0000	52
	29 cis-1,2-Dichloroethene	96	3.477	3.487	(0.783)	217479	50.0000	54
	31 2-Butanone	72	3.477	3.487	(0.783)	23968	50.0000	51(TQ)
	30 2,2-Dichloropropane	77	3.488	3.510	(0.786)	178093	50.0000	52
	32 Propionitrile	54	3.512	3.522	(0.791)	211369	500.000	500
	33 Methacrylonitrile	41	3.651	3.649	(0.822)	278248	100.000	100
	34 Bromochloromethane	128	3.663	3.672	(0.825)	123001	50.0000	56(Q)
	35 Tetrahydrofuran	72	3.709	3.707	(0.835)	42915	100.000	110
	36 Chloroform	83	3.732	3.742	(0.840)	326622	50.0000	50
$	37 Dibromofluoromethane	113	3.860	3.858	(0.869)	238355	50.0000	51
	38 1,1,1-Trichloroethane	97	3.895	3.893	(0.877)	221821	50.0000	55
	39 Cyclohexane	56	3.953	3.963	(0.890)	188972	50.0000	52(Q)
	41 Carbon Tetrachloride	117	4.046	4.044	(0.911)	207788	50.0000	51
	40 1,1-Dichloropropene	110	4.034	4.032	(0.908)	93429	50.0000	50
	42 Isobutyl Alcohol	43	4.115	4.114	(0.927)	160317	1000.00	1200
$	43 1,2-Dichloroethane-d4	102	4.150	4.137	(0.935)	45276	50.0000	49
	44 Benzene	78	4.208	4.207	(0.948)	676098	50.0000	51
	45 1,2-Dichloroethane	62	4.208	4.207	(0.948)	227303	50.0000	48
	46 tert-Amyl methyl ether	73	4.313	4.323	(0.971)	468808	50.0000	51
*	47 Fluorobenzene	96	4.441	4.451	(1.000)	671358	50.0000	
	49 Trichloroethene	130	4.789	4.787	(1.078)	203273	50.0000	51
	50 Methylcyclohexane	83	4.986	4.985	(1.123)	198430	50.0000	50
	51 1,2-Dichloropropane	63	4.986	4.985	(1.123)	203298	50.0000	53
	53 Dibromomethane	93	5.091	5.101	(1.146)	142844	50.0000	48
	52 Methyl Methacrylate	69	5.103	5.112	(1.149)	128896	50.0000	50
	54 1,4-Dioxane	88	5.103	5.112	(1.149)	26751	1000.00	1500
	55 Bromodichloromethane	83	5.254	5.252	(1.183)	244251	50.0000	51
	56 2-Chloroethyl vinyl ether	63	5.567	5.577	(1.254)	9951	50.0000	24(TQ)
	57 cis-1,3-Dichloropropene	75	5.706	5.716	(1.285)	290910	50.0000	51
	58 4-Methyl-2-pentanone	43	5.881	5.891	(1.324)	217613	50.0000	52
$	59 Toluene-d8	98	6.008	6.007	(0.785)	628913	50.0000	50
	60 Toluene	91	6.078	6.076	(1.369)	678979	50.0000	51
	61 trans-1,3-Dichloropropene	75	6.310	6.309	(1.421)	252164	50.0000	52
	62 Ethyl Methacrylate	69	6.450	6.448	(1.452)	163205	50.0000	47
	63 1,1,2-Trichloroethane	97	6.508	6.518	(1.465)	157408	50.0000	50
	64 Tetrachloroethene	164	6.694	6.692	(0.874)	171655	50.0000	52
	65 1,3-Dichloropropane	76	6.694	6.703	(0.874)	262008	50.0000	50
M	48 1,2-Dichloroethene (Total)	96				416388	100.000	100
	66 2-Hexanone	43	6.821	6.820	(0.891)	151322	50.0000	50
	67 Dibromochloromethane	129	6.961	6.959	(0.909)	145765	50.0000	38
	68 1,2-Dibromoethane	107	7.077	7.075	(0.924)	111471	50.0000	31
*	69 Chlorobenzene-d5	117	7.657	7.656	(1.000)	551641	50.0000	
	71 Chlorobenzene	112	7.692	7.691	(1.005)	497265	50.0000	49
	70 1-Chlorohexane	91	7.692	7.702	(1.005)	253680	50.0000	48(Q)
	72 1,1,1,2-Tetrachloroethane	131	7.797	7.795	(1.018)	177738	50.0000	52
	73 Ethylbenzene	106	7.843	7.853	(1.024)	243826	50.0000	52
	74 m,p-Xylene	106	7.994	8.004	(1.044)	620520	100.000	100
	75 o-Xylene	106	8.494	8.492	(1.109)	282433	50.0000	49
	76 Styrene	104	8.517	8.515	(1.112)	474372	50.0000	50
	77 Bromoform	173	8.714	8.713	(1.138)	135229	50.0000	52
	78 Isopropylbenzene	105	8.993	8.991	(1.174)	669665	50.0000	51

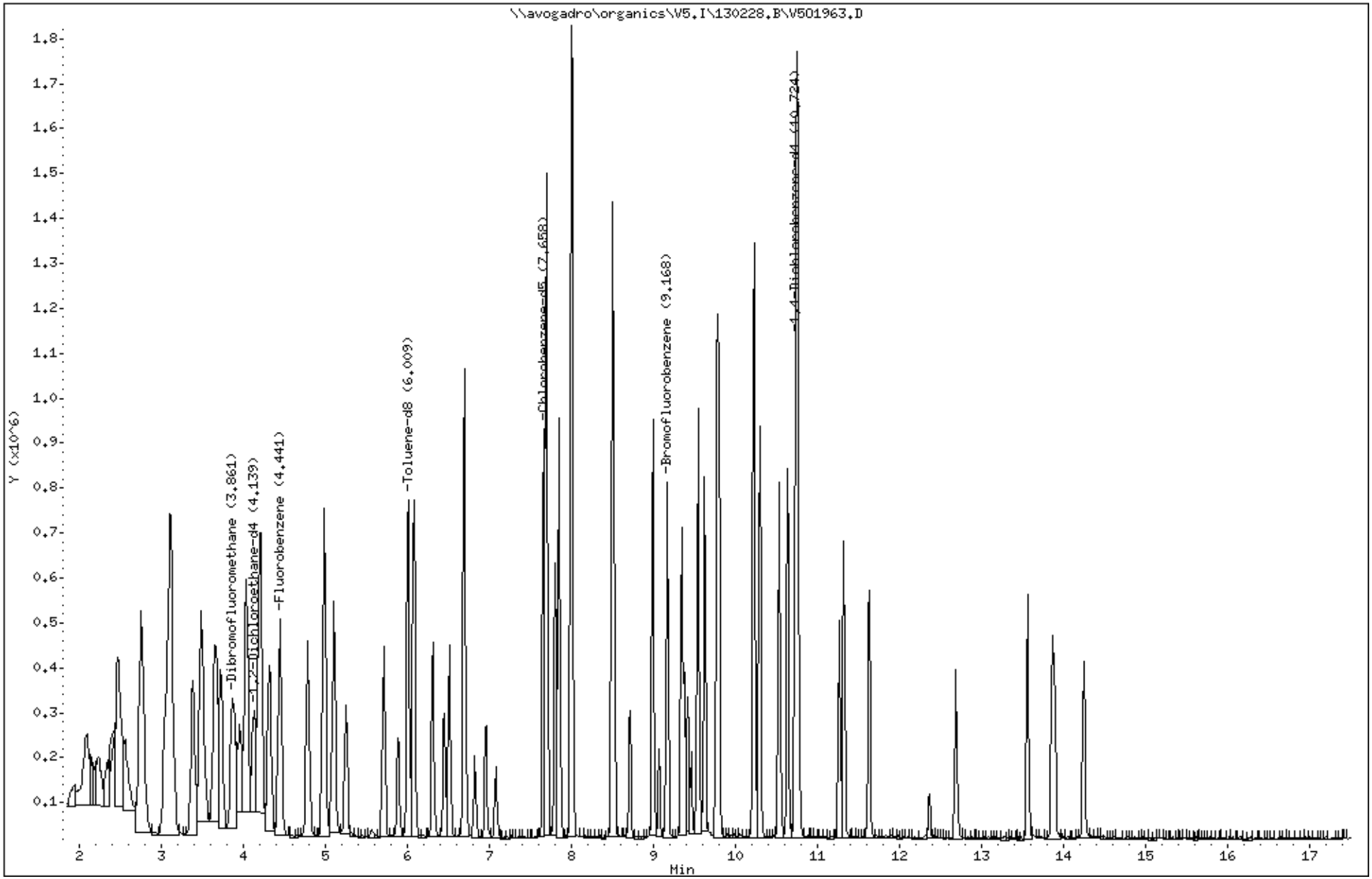
Data File: \\avogadro\organics\V5.I\130228.B\V5O1963.D
Report Date: 05-Mar-2013 13:29

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	79 trans-1,4-Dichloro-2-butene	75	9.063	9.061	(1.183)	47497	50.0000	42
$	80 Bromofluorobenzene	95	9.167	9.165	(1.197)	249492	50.0000	51
	82 Bromobenzene	156	9.341	9.340	(0.871)	218927	50.0000	51
	81 1,1,2,2-Tetrachloroethane	83	9.376	9.374	(0.874)	197296	50.0000	46
	83 1,2,3-Trichloropropane	75	9.411	9.409	(0.878)	124999	50.0000	40
	84 n-Propylbenzene	120	9.539	9.537	(0.890)	186001	50.0000	48
	85 2-Chlorotoluene	126	9.620	9.618	(0.897)	177445	50.0000	50
	87 4-Chlorotoluene	126	9.771	9.769	(0.911)	195849	50.0000	47
	86 1,3,5-Trimethylbenzene	105	9.794	9.793	(0.913)	529090	50.0000	49
	88 tert-Butylbenzene	119	10.224	10.222	(0.953)	562390	50.0000	48
	89 1,2,4-Trimethylbenzene	105	10.294	10.292	(0.960)	537833	50.0000	49
	90 sec-Butylbenzene	105	10.526	10.536	(0.982)	673985	50.0000	50
	92 1,3-Dichlorobenzene	146	10.630	10.629	(0.991)	380121	50.0000	51
*	94 1,4-Dichlorobenzene-d4	152	10.723	10.733	(1.000)	315629	50.0000	
	93 4-Isopropyltoluene	119	10.747	10.745	(1.002)	563011	50.0000	49
	95 1,4-Dichlorobenzene	146	10.758	10.756	(1.003)	406304	50.0000	49
	97 1,2-Dichlorobenzene	146	11.258	11.267	(1.050)	233509	50.0000	33
	96 n-Butylbenzene	91	11.316	11.314	(1.055)	385403	50.0000	37
	98 Hexachloroethane	117	11.629	11.627	(1.084)	133918	50.0000	46
	99 1,2-Dibromo-3-chloropropane	75	12.361	12.347	(1.153)	21864	50.0000	46
	100 1,3,5-Trichlorobenzene	182	12.686	12.684	(2.857)	135400	50.0000	56
M	91 Xylene (Total)	106				902953	150.000	150
	101 1,2,4-Trichlorobenzene	180	13.557	13.555	(1.264)	193677	50.0000	51
	102 Hexachlorobutadiene	225	13.859	13.857	(1.292)	88637	50.0000	59
	103 Naphthalene	128	13.882	13.880	(1.295)	318119	50.0000	51
	104 1,2,3-Trichlorobenzene	180	14.242	14.240	(1.328)	140266	50.0000	52

QC Flag Legend

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

Data File: \\avogadro\organics\V5.I\130228.B\V501963.D
Date : 28-FEB-2013 16:27
Client ID: VLCSX5
Instrument: V5.i
Sample Info: 5ML,LCS-70677,VLCSX5,70677
Purge Volume: 5.0
Operator: SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



M0262

METHOD: CAL ID: ANALYST:

INITIAL CAL: IS/SS ID: ARCHIVE:

COMMENTS: ICV ID:

Spectrum Analytical, Inc. RI Division V5 Injection Log
Volatiles Laboratory

METHOD: 8260_W ANALYST: WL
ICAL DATE: 2/26/13

BATCH: 130226A.B

Start: 26-FEB-13 16:15
End: 26-FEB-13 20:07

Comments:

Standards: IS/SS-VW130214A ___ uL
STD-VW130207A ___ uL
BFB-VW120105A ___ uL
_____ ___ uL

Reviewed By: 2-27-13 Manual Integration: NA MI Review: WL

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS FBZ	INTERNAL STDS CBZ	INTERNAL STDS DCB	SURROGATES DFM	SURROGATES DCE	SURROGATES TOL	SURROGATES BFB	DILN	FLG	COMMENTS	pH
V5O1880	16:15	BFBT5	BFBT5		AQ									1		OK	
V5O1881	16:41	VSTD0.2T5	VSTD0.2T5		AQ		98	97	95					1		OK	
V5O1882	17:07	VSTD001T5	VSTD001T5		AQ		99	97	97					1		OK	
V5O1883	17:33	VSTD005T5	VSTD005T5		AQ		97	96	101					1		OK	
V5O1884	17:58	VSTD020T5	VSTD020T5		AQ		97	100	103					1		OK, for acetone and 2-Butanone only in 3E test	
V5O1885	18:24	VSTD050T5	VSTD050T5		AQ		100	100	100					1		OK	
V5O1886	18:50	VSTD100T5	VSTD100T5		AQ		100	103	101					1		OK	
V5O1887	19:16	VSTD200T5	VSTD200T5		AQ		102	105	114					1		OK	
V5O1889	20:07	VICV050T5	VICV050T5		AQ		99	100	101	101	93	101	97	1		OK	

* - 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

WL 2/27/13

M0262

Spectrum Analytical, Inc. RI Division V5 Injection Log
Volatiles Laboratory

METHOD: 8260_W ANALYST: WL BATCH: 130228.B Start: 28-FEB-13 15:24
ICAL DATE: 2/26/13 End: 01-MAR-13 05:47

Comments:

Standards: IS/SS-VW130227A ___ uL
STD-VW130207A ___ uL
_____ ___ uL
_____ ___ uL

Reviewed By: 3/7/13 Manual Integration: NA MI Review: WL

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS FBZ	CBZ	DCB	SURROGATES DFM	DCE	TOL	BFB	DILN	FLG	COMMENTS	pH
V501961	15:24	BFBX5	BFBX5		AQ	__	___	___	___	___	___	___	___	1		OK	
V501962	16:02	VSTD050X5	VSTD050X5		AQ	__	100	100	100	___	___	___	___	1		OK	
V501963	16:27	LCS-70677	VLCSX5	70677	AQ	__	165	160	160	102	98	101	102	1	R	OK	
V501964	17:52	MB-70677	VBLKX5	70677	AQ	__	146	140	138	94	91	100	97	1		OK	
V501965	18:17	M0213-03A	NM-MW-11D	70677	AQ	1	147	142	136	98	87	99	98	1		OK	2
V501966	18:43	M0213-05A	NM-MW-08S	70677	AQ	1	145	141	136	97	86	99	101	1		OK	2
V501967	19:08	M0213-06A	NM-MW-12D	70677	AQ	1	148	145	136	94	95	100	96	1		OK	2
V501968	19:34	M0213-08A	NM-MW-02D	70677	AQ	1	83	79	82	99	82	100	74*	1		OK	2
V501969	19:59	M0213-13A	NM-MW-10D	70677	AQ	1	143	145	135	98	86	98	93	1		OK	2
V501970	20:25	M0213-15A	NM-MW-02S	70677	AQ	1	141	139	133	97	89	100	103	1		OK	2
V501971	20:49	M0213-04A	NM-MW-11S	70677	AQ	1	81	78	81	102	88	102	102	20		OK, cis-DCE=108	2
V501972	21:15	M0213-07A	NM-MW-06S	70677	AQ	1	126	128	118	99	91	99	97	5		OK 72	2
V501973	21:41	M0213-09A	NM-MW-04D	70677	AQ	1	128	120	122	97	88	104	101	10		Not wred, clean	2
V501974	22:06	M0213-10A	NM-MW-04S	70677	AQ	1	82	83	60	101	90	99	97	40		OK, VC=135	2
V501975	22:32	M0213-11A	FD-022013	70677	AQ	1	139	133	92	98	85	100	100	50		OK, 76	2
V501976	22:58	M0213-12A	NM-MW-09D	70677	AQ	1	135	131	122	97	88	100	97	10		cis-DCE=56, RRX5	2
V501977	23:23	M0213-14A	NM-MW-05S	70677	AQ	1	133	132	126	98	95	97	94	20	E	331, 80	2
V501978	23:49	MB-70654	VTBLKX5	70677	AQ	1	96	130	126	100	96	102	95	1		OK	
V501979	00:14	M0252-01B	WC-1	70677	AQ	1	133	131	125	102	88	102	98	1		OK	
V501980	00:40	M0252-02B	WC-2	70677	AQ	1	137	133	123	96	92	101	98	1		OK	
V501981	01:05	M0252-03B	WC-3	70677	AQ	1	135	133	124	99	90	102	95	1		OK	
V501982	01:30	M0213-09A	NM-MW-04D	70677	AQ	1	134	130	125	93	92	98	93	1		OK	
V501983	01:56	M0213-09AMS	NM-MW-04DMS	70677	AQ	2	99	95	94	98	91	97	92	1	ER	OK	2
V501984	02:22	M0213-09AMSD	NM-MW-04DMSD	70677	AQ	3	119	114	116	94	95	102	98	1	ER	OK	2
V501987	03:40	M0234-01A	EFF022213	70678	AQ	1	92	84	108	100	87	105	130*	1		OK	2
V501988	04:04	M0234-02A	EQTANK022213	70677	AQ	1	87	68	84	99	95	128*	120	40		OK, PCE=133	2
V501989	04:30	M0234-03A	POSTSTRIP022213	70678	AQ	1	92	85	113	95	83	104	133*	1		OK	2
V501990	04:56	M0253-01A	DIRECT DISCHARG	70678	AQ	1	120	117	114	100	92	102	100	1		OK	2
V501991	05:21	M0262-01A	DIRECT DISCHARG	70678	AQ	1	121	123	114	102	88	102	96	1		OK	2
V501992	05:47	M0216-01A	WETWELL	70678	AQ	1136	126	124	118	103	88	102	96	10		OK, foaming, reported	2

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range
Q - Sample was injected outside of the 12 hour sequence
R - One or more spike compounds are outside of control limits
D - Surrogates are diluted

WL 3/5/13

Spectrum Analytical, Inc. RI Division : VOLATILE SAMPLES RECEIVING LOGBOOK

VOA Log-In Date	Workorder	Client ID	Sample Numbers	Relinquished by:	Received by:	Pres. Used	F/R	Returned to R1
2/28/13	M0242	EPA	01-07	AED		~~HT~~ DEO 2/28/13	R13	
	M0242	EPA	08	AED		PE	R13	
	M0250	EPA	01-07	AED		T	R13	
	M0260	EPA	01-06	AED		H	R4	
	M0264	Land remediation	01,02	AED		VS	R9	
	M0265	PEL	01,02	AED		H	R9	
	M0262	Labella	01	AED		H	R9	
	M0266	PEL	01-06	AED		F	F10	
	M0266	PEL	01-06	AED		M	R10	
	5010180	RIRRC	01	AED		H	R10	
	M0268	EARTH	01-06	AED		H	R9	
	M0267	EPA	01-10	AED		T	R13	
2/28/13	M0269	VERUTEK	01-07	AED		H	R10	
3/1/13	5010182	PEL	01-42	VEB		H	R8	

Logbook ID 90.0191-04/12

Reviewed By:

"Preservative Used" Key

UA = Unpreserved Aqueous	**H** = HCL	**A** = Air	**M** = MeOH	**E** = Encore
US = Unpreserved Soil	**N** = $NaHSO_4$		**F** = Freeze	**T** = Trace, HCL

* Semivolatile Organics *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Stand By-Monoco

Laboratory Workorder / SDG #: M0262

EPA 625, 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: EPA 625

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW3510

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: S3
Instrument Type: GCMS-SEMI
Description: HP6890 / HP5973
Manufacturer: Hewlett-Packard
Model: 6890 / 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.

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:_____3/11/2013_____

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.

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

2H - FORM II SV-2

WATER SEMIVOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

	EPA SAMPLE NO.	SDMC1 (NBZ) #	SDMC2 (FBP) #	SDMC3 (TPH) #	SDMC4 (PHL) #	SDMC5 (2FP) #	SDMC6 (TBP) #			TOT OUT
01	MB-70680	63	74	101	65	73	84			0
02	LCS-70680	64	81	98	70	75	92			0
03	LCSD-70680	61	77	94	64	70	93			0
04	DIRECT DISCHARGE 2	59	75	97	11	22	78			0

			QC LIMITS
SDMC1	(NBZ)	= Nitrobenzene-d5	(40-110)
SDMC2	(FBP)	= 2-Fluorobiphenyl	(50-110)
SDMC3	(TPH)	= Terphenyl-d14	(50-135)
SDMC4	(PHL)	= Phenol-d5	(10-115)
SDMC5	(2FP)	= 2-Fluorophenol	(20-110)
SDMC6	(TBP)	= 2,4,6-Tribromophenol	(40-125)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D DMC diluted out

som12.12.17.A

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-70680

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Lab Sample ID: LCS-70680 LCS Lot No.: A090321

Date Extracted: 03/01/2013 Date Analyzed (1): 03/04/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Phenol	50.0000	0.0000	38.6744	77		5 - 112
Bis(2-chloroethyl)ether	50.0000	0.0000	32.4984	65		12 - 158
2-Chlorophenol	50.0000	0.0000	39.4755	79		23 - 134
1,3-Dichlorobenzene	50.0000	0.0000	37.9255	76		1 - 172
1,4-Dichlorobenzene	50.0000	0.0000	38.5798	77		20 - 124
1,2-Dichlorobenzene	50.0000	0.0000	39.3331	79		32 - 129
2,2´-oxybis(1-Chloropropan	50.0000	0.0000	29.4272	59		36 - 166
N-Nitroso-di-n-propylamine	50.0000	0.0000	32.6688	65		1 - 230
Hexachloroethane	50.0000	0.0000	36.4314	73		40 - 113
Nitrobenzene	50.0000	0.0000	32.3493	65		35 - 180
Isophorone	50.0000	0.0000	32.5560	65		21 - 196
2-Nitrophenol	50.0000	0.0000	39.0596	78		29 - 182
2,4-Dimethylphenol	50.0000	0.0000	33.5947	67		32 - 119
2,4-Dichlorophenol	50.0000	0.0000	38.0653	76		39 - 135
1,2,4-Trichlorobenzene	50.0000	0.0000	36.8577	74		44 - 142
Naphthalene	50.0000	0.0000	39.5467	79		21 - 133
Bis(2-chloroethoxy)methane	50.0000	0.0000	35.5174	71		33 - 184
Hexachlorobutadiene	50.0000	0.0000	35.8588	72		24 - 116
4-Chloro-3-methylphenol	50.0000	0.0000	35.5850	71		22 - 147
Hexachlorocyclopentadiene	50.0000	0.0000	44.1937	88		34 - 103
2,4,6-Trichlorophenol	50.0000	0.0000	42.4072	85		37 - 144
2-Chloronaphthalene	50.0000	0.0000	43.9810	88		60 - 118
Dimethylphthalate	50.0000	0.0000	40.4704	81		1 - 112
Acenaphthylene	50.0000	0.0000	43.8746	88		33 - 145
2,6-Dinitrotoluene	50.0000	0.0000	41.2348	82		50 - 158
Acenaphthene	50.0000	0.0000	42.7244	85		47 - 155
2,4-Dinitrophenol	50.0000	0.0000	30.6041	61		1 - 191
4-Nitrophenol	50.0000	0.0000	29.0182	58		1 - 132
2,4-Dinitrotoluene	50.0000	0.0000	41.8667	84		39 - 139
Diethylphthalate	50.0000	0.0000	39.5923	79		1 - 114
4-Chlorophenyl-phenylether	50.0000	0.0000	41.8278	84		25 - 158
Fluorene	50.0000	0.0000	43.4005	87		59 - 121
4,6-Dinitro-2-methylphenol	50.0000	0.0000	37.4239	75		1 - 181
N-Nitrosodiphenylamine	50.0000	0.0000	42.0701	84		48 - 121
4-Bromophenyl-phenylether	50.0000	0.0000	42.9940	86		53 - 127
Hexachlorobenzene	50.0000	0.0000	41.7904	84		1 - 152
Pentachlorophenol	50.0000	0.0000	31.7692	64		14 - 176
Phenanthrene	50.0000	0.0000	45.1253	90		54 - 120
Anthracene	50.0000	0.0000	44.6840	89		27 - 133
Di-n-butylphthalate	50.0000	0.0000	46.4906	93		1 - 118
Fluoranthene	50.0000	0.0000	45.3543	91		26 - 137
Pyrene	50.0000	0.0000	46.7195	93		52 - 115
Butylbenzylphthalate	50.0000	0.0000	46.4098	93		1 - 152
3,3´-Dichlorobenzidine	50.0000	0.0000	42.1320	84		1 - 262

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-70680

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Lab Sample ID: LCS-70680 LCS Lot No.: A090321

Date Extracted: 03/01/2013 Date Analyzed (1): 03/04/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Benzo(a)anthracene	50.0000	0.0000	44.2739	89		33 - 143
Chrysene	50.0000	0.0000	41.2645	83		17 - 168
Bis(2-ethylhexyl)phthalate	50.0000	0.0000	43.4778	87		8 - 158
Di-n-octylphthalate	50.0000	0.0000	47.6079	95		4 - 146
Benzo(b)fluoranthene	50.0000	0.0000	40.5274	81		24 - 159
Benzo(k)fluoranthene	50.0000	0.0000	42.1074	84		11 - 162
Benzo(a)pyrene	50.0000	0.0000	42.0695	84		17 - 163
Indeno(1,2,3-cd)pyrene	50.0000	0.0000	41.5319	83		1 - 171
Dibenzo(a,h)anthracene	50.0000	0.0000	39.7111	79		1 - 227
Benzo(g,h,i)perylene	50.0000	0.0000	42.4712	85		1 - 219

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

* Values outside of QC limits

Spike Recovery: 0 out of 54 outside limits

COMMENTS:

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-70680

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Lab Sample ID: LCSD-70680 LCS Lot No.: A090321

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Phenol	50.0000	35.0334	70		10		40	5 - 112
Bis(2-chloroethyl)ether	50.0000	30.3077	61		6		40	12 - 158
2-Chlorophenol	50.0000	35.4005	71		11		40	23 - 134
1,3-Dichlorobenzene	50.0000	36.2790	73		4		40	1 - 172
1,4-Dichlorobenzene	50.0000	35.7950	72		7		40	20 - 124
1,2-Dichlorobenzene	50.0000	36.7099	73		8		40	32 - 129
2,2´-oxybis(1-Chloropropan	50.0000	26.6871	53		11		40	36 - 166
N-Nitroso-di-n-propylamine	50.0000	30.0466	60		8		40	1 - 230
Hexachloroethane	50.0000	34.3699	69		6		40	40 - 113
Nitrobenzene	50.0000	31.5123	63		3		40	35 - 180
Isophorone	50.0000	31.9119	64		2		40	21 - 196
2-Nitrophenol	50.0000	37.3632	75		4		40	29 - 182
2,4-Dimethylphenol	50.0000	35.0019	70		4		40	32 - 119
2,4-Dichlorophenol	50.0000	36.1762	72		5		40	39 - 135
1,2,4-Trichlorobenzene	50.0000	35.3769	71		4		40	44 - 142
Naphthalene	50.0000	36.9917	74		7		40	21 - 133
Bis(2-chloroethoxy)methane	50.0000	32.5628	65		9		40	33 - 184
Hexachlorobutadiene	50.0000	33.2834	67		7		40	24 - 116
4-Chloro-3-methylphenol	50.0000	36.1652	72		1		40	22 - 147
Hexachlorocyclopentadiene	50.0000	40.0672	80		10		40	34 - 103
2,4,6-Trichlorophenol	50.0000	41.2057	82		4		40	37 - 144
2-Chloronaphthalene	50.0000	41.6295	83		6		40	60 - 118
Dimethylphthalate	50.0000	40.1198	80		1		40	1 - 112
Acenaphthylene	50.0000	41.3986	83		6		40	33 - 145
2,6-Dinitrotoluene	50.0000	40.1178	80		2		40	50 - 158
Acenaphthene	50.0000	40.6959	81		5		40	47 - 155
2,4-Dinitrophenol	50.0000	33.1669	66		8		40	1 - 191
4-Nitrophenol	50.0000	29.4613	59		2		40	1 - 132
2,4-Dinitrotoluene	50.0000	41.9634	84		0		40	39 - 139
Diethylphthalate	50.0000	40.0529	80		1		40	1 - 114
4-Chlorophenyl-phenylether	50.0000	39.9293	80		5		40	25 - 158
Fluorene	50.0000	41.0310	82		6		40	59 - 121
4,6-Dinitro-2-methylphenol	50.0000	37.8253	76		1		40	1 - 181
N-Nitrosodiphenylamine	50.0000	42.5111	85		1		40	48 - 121
4-Bromophenyl-phenylether	50.0000	41.5688	83		4		40	53 - 127
Hexachlorobenzene	50.0000	40.8696	82		2		40	1 - 152
Pentachlorophenol	50.0000	32.0359	64		0		40	14 - 176
Phenanthrene	50.0000	43.8380	88		2		40	54 - 120
Anthracene	50.0000	43.6264	87		2		40	27 - 133
Di-n-butylphthalate	50.0000	46.1628	92		1		40	1 - 118
Fluoranthene	50.0000	44.6908	89		2		40	26 - 137
Pyrene	50.0000	45.3152	91		2		40	52 - 115
Butylbenzylphthalate	50.0000	45.6287	91		2		40	1 - 152
3,3´-Dichlorobenzidine	50.0000	41.8544	84		0		40	1 - 262
Benzo(a)anthracene	50.0000	43.0824	86		3		40	33 - 143
Chrysene	50.0000	42.1756	84		1		40	17 - 168

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-70680

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Lab Sample ID: LCSD-70680 LCS Lot No.: A090321

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Bis(2-ethylhexyl)phthalate	50.0000	43.4884	87		0		40	8 - 158
Di-n-octylphthalate	50.0000	46.7706	94		1		40	4 - 146
Benzo(b)fluoranthene	50.0000	40.1114	80		1		40	24 - 159
Benzo(k)fluoranthene	50.0000	41.5005	83		1		40	11 - 162
Benzo(a)pyrene	50.0000	41.6232	83		1		40	17 - 163
Indeno(1,2,3-cd)pyrene	50.0000	40.6716	81		2		40	1 - 171
Dibenzo(a,h)anthracene	50.0000	40.3831	81		3		40	1 - 227
Benzo(g,h,i)perylene	50.0000	40.7123	81		5		40	1 - 219

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

* Values outside of QC limits

RPD: 0 out of 54 outside limits

Spike Recovery: 0 out of 54 outside limits

COMMENTS:

4C - FORM IV SV

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-70680

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Lab File ID: S3I3822.D Lab Sample ID: MB-70680

Instrument ID: S3 Date Extracted: 03/01/2013

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 03/04/2013

Level: (LOW/MED) LOW Time Analyzed: 11:53

Extraction: (Type) SEPF GPC Cleanup: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	LCS-70680	LCS-70680	S3I3823.D	03/04/2013
02	LCSD-70680	LCSD-70680	S3I3824.D	03/04/2013
03	DIRECT DISCHARGE 2	M0262-01B	S3I3825.D	03/04/2013

COMMENTS:

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

EPA SAMPLE NO.
DFTPP3N

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Lab File ID: S3I3540.D DFTPP Injection Date: 01/31/2013

Instrument ID: S3 DFTPP Injection Time: 11:27

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	36.9
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	51.7
70	Less than 2.0% of mass 69	0.3 (0.5)1
127	10.0 - 80.0% of mass 198	49.2
197	Less than 2.0% of mass 198	0.3
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.3
275	10.0 - 60.0% of mass 198	32.3
365	Greater than 1.0% of mass 198	4.9
441	Present, but less than mass 443	10.2
442	50.0 - 100% of mass 198	66.5
443	15.0 - 24.0% of mass 442	13.8 (20.7)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	SSTD0253N	SSTD0253N	S3I3541D.D	01/31/2013	17:13
02	SSTD0803N	SSTD0803N	S3I3542D.D	01/31/2013	18:03
03	SSTD0053N	SSTD0053N	S3I3543D.D	01/31/2013	18:29
04	SSTD0403N	SSTD0403N	S3I3544D.D	01/31/2013	18:55
05	SSTD0103N	SSTD0103N	S3I3545D.D	01/31/2013	19:22
06	SSTD0603N	SSTD0603N	S3I3546D.D	01/31/2013	19:49

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

EPA SAMPLE NO.
DFTPP3B

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Lab File ID: S3I3820.D DFTPP Injection Date: 03/04/2013

Instrument ID: S3 DFTPP Injection Time: 10:07

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	30.6
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	44.4
70	Less than 2.0% of mass 69	0.4 (1.0)1
127	10.0 - 80.0% of mass 198	45.6
197	Less than 2.0% of mass 198	0.1
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	8.2
275	10.0 - 60.0% of mass 198	30.6
365	Greater than 1.0% of mass 198	3.8
441	Present, but less than mass 443	11.2
442	50.0 - 100% of mass 198	73.0
443	15.0 - 24.0% of mass 442	14.0 (19.1)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	SSTD0253B	SSTD0253B	S3I3821.D	03/04/2013	11:22
02	MB-70680	MB-70680	S3I3822.D	03/04/2013	11:53
03	LCS-70680	LCS-70680	S3I3823.D	03/04/2013	12:19
04	LCSD-70680	LCSD-70680	S3I3824.D	03/04/2013	12:45
05	DIRECT DISCHARGE 2	M0262-01B	S3I3825.D	03/04/2013	13:10

8C - FORM VIII SV-1

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 01/31/2013 01/31/2013

EPA Sample No.(SSTD020##) SSTD0253B Date Analyzed: 03/04/2013

Lab File ID (Standard): S3I3821.D Time Analyzed: 11:22

Instrument ID: S3

		IS1 (DCB)			IS2 (NPT)			IS3 (ANT)		
		AREA	#	RT	#	AREA	#	RT	#	AREA	#	RT	#
	12 HOUR STD	113079		4.111		431918		5.879		317048		7.642	
	UPPER LIMIT	226158		4.611		863836		6.379		634096		8.142	
	LOWER LIMIT	56540		3.611		215959		5.379		158524		7.142	
	EPA SAMPLE NO.												
01	MB-70680	123868		4.106		472797		5.875		345062		7.643	
02	LCS-70680	107743		4.111		408882		5.879		297001		7.647	
03	LCSD-70680	111585		4.110		404885		5.878		297752		7.641	
04	DIRECT DISCHARGE 2	115401		4.111		427941		5.874		297252		7.637	

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

8D - FORM VIII SV-2

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

EPA Sample No.(SSTD020##) SSTD0253B Date Analyzed: 03/04/2013

Lab File ID (Standard): S3I3821.D Time Analyzed: 11:22

Instrument ID: S3 GC Column: Rxi-5sil MS ID: 0.25 (mm)

		IS4 (PHN) AREA	#	RT	#	IS5 (CRY) AREA	#	RT	#	IS6 (PRY) AREA	#	RT	#
	12 HOUR STD	671542		8.918		909225		11.317		714767		13.16	
	UPPER LIMIT	1343084		9.418		1818450		11.817		1429534		13.66	
	LOWER LIMIT	335771		8.418		454613		10.817		357384		12.66	
	EPA SAMPLE NO.												
01	MB-70680	690836		8.920		896479		11.356		734597		13.209	
02	LCS-70680	613672		8.929		860446		11.398		658176		13.246	
03	LCSD-70680	616240		8.918		863276		11.317		652598		13.154	
04	DIRECT DISCHARGE 2	600107		8.919		725378		11.323		649102		13.166	

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12
AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DIRECT DISCHARGE 2

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0262-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I3825.D

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

% Moisture: Decanted: (Y/N) Date Received: 02/28/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/04/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
108-95-2	Phenol	10	U
111-44-4	Bis(2-chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
108-60-1	2,2´-oxybis(1-Chloropropane)	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
111-91-1	Bis(2-chloroethoxy)methane	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DIRECT DISCHARGE 2

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0262-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I3825.D

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

% Moisture: Decanted: (Y/N) Date Received: 02/28/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/04/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3´-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-ethylhexyl)phthalate	1.3	J
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

Data File: \\avogadro\organics\S3.I\130304.B\S3I3825.D
Report Date: 05-Mar-2013 11:13

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\130304.B\S3I3825.D
Lab Smp Id: M0262-01B Client Smp ID: DIRECT DISCHARGE 2
Inj Date : 04-MAR-2013 13:10
Operator : PK   SRC: LIMS Inst ID: S3.i
Smp Info : M0262-01B,,70680
Misc Info :
Comment   :
Method   : \\avogadro\organics\S3.I\130304.B\s3_8270C_N.m
Meth Date : 05-Mar-2013 11:12 S3.i Quant Type: ISTD
Cal Date : 31-JAN-2013 19:49 Cal File: S3I3546D.D
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 625.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

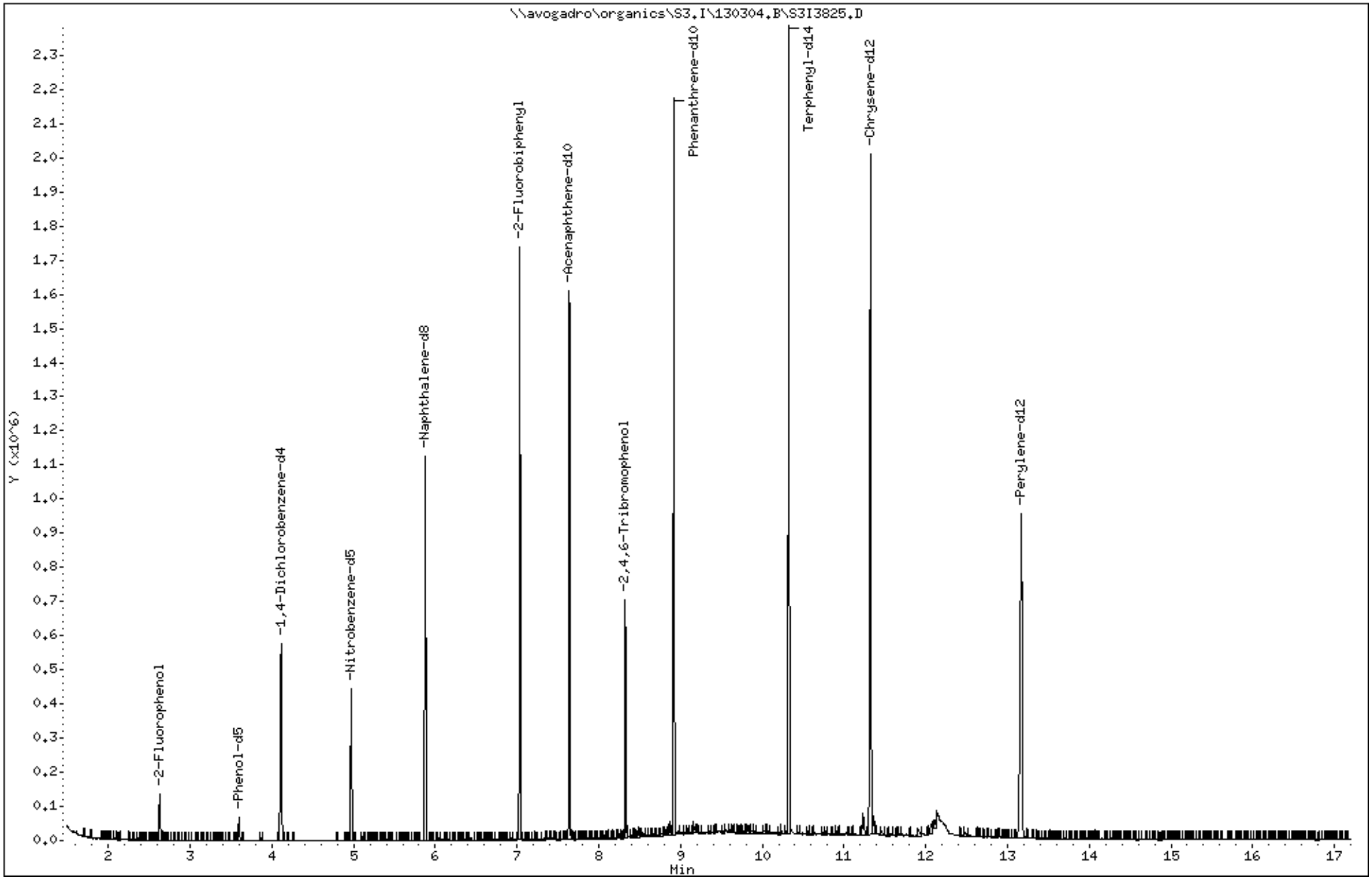
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
$	3 2-Fluorophenol	112	2.626	2.630	(0.639)	36137	11.0035	11
$	5 Phenol-d5	99	3.598	3.603	(0.875)	25578	5.50578	6(a)
*	12 1,4-Dichlorobenzene-d4	152	4.111	4.110	(1.000)	115401	40.0000	
$	22 Nitrobenzene-d5	82	4.971	4.970	(0.846)	150031	29.4924	29
*	31 Naphthalene-d8	136	5.874	5.878	(1.000)	427941	40.0000	
$	41 2-Fluorobiphenyl	172	7.033	7.032	(0.921)	378330	37.6326	38
*	48 Acenaphthene-d10	164	7.636	7.641	(1.000)	297252	40.0000	
$	60 2,4,6-Tribromophenol	330	8.331	8.330	(0.934)	57691	39.2309	39
*	64 Phenanthrene-d10	188	8.919	8.918	(1.000)	600107	40.0000	
$	72 Terphenyl-d14	244	10.324	10.323	(0.912)	592105	48.6596	49
*	76 Chrysene-d12	240	11.323	11.317	(1.000)	725378	40.0000	
	78 bis(2-Ethylhexyl)phthalate	149	11.365	11.354	(1.004)	12794	1.26618	1(a)
*	83 Perylene-d12	264	13.166	13.160	(1.000)	649102	40.0000	

QC Flag Legend

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

Data File: \\avogadro\organics\S3.I\130304.B\S3I3825.D
Date : 04-MAR-2013 13:10
Client ID: DIRECT DISCHARGE 2
Sample Info: M0262-01B,,70680
Volume Injected (uL): 1.0
Column phase: Rxi-5Sil MS

Instrument: S3.i
Operator: PK SRC: LIMS
Column diameter: 0.25



Data File: \\avogadro\organics\S3.I\130304.B\S3I3825.D

Date : 04-MAR-2013 13:10

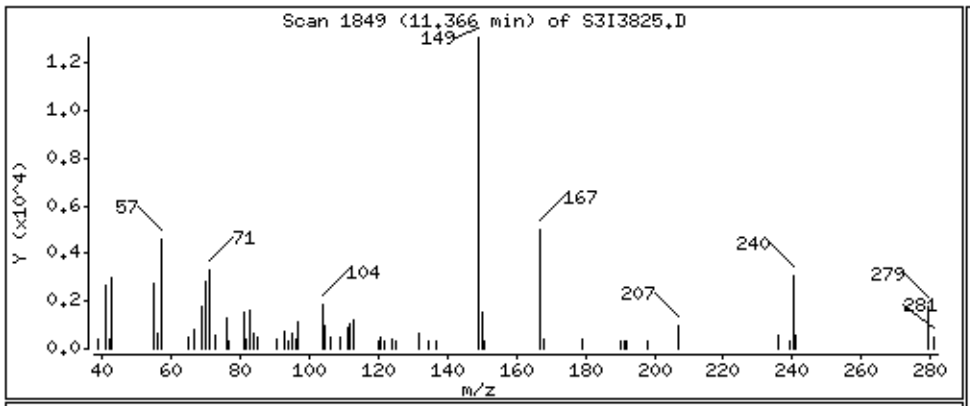
Client ID: DIRECT DISCHARGE 2 Instrument: S3.i

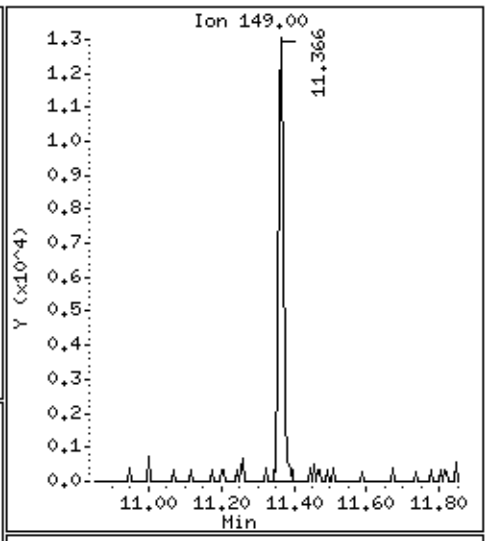
Sample Info: M0262-01B,,70680

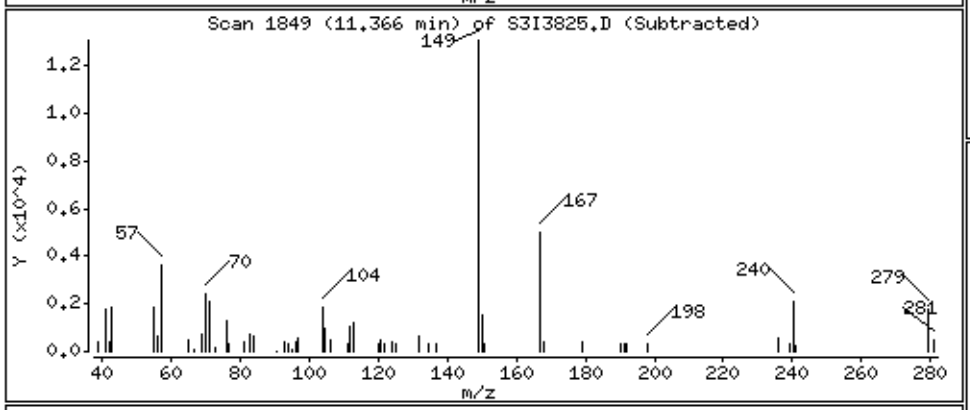
Volume Injected (uL): 1.0 Operator: PK SRC: LIMS

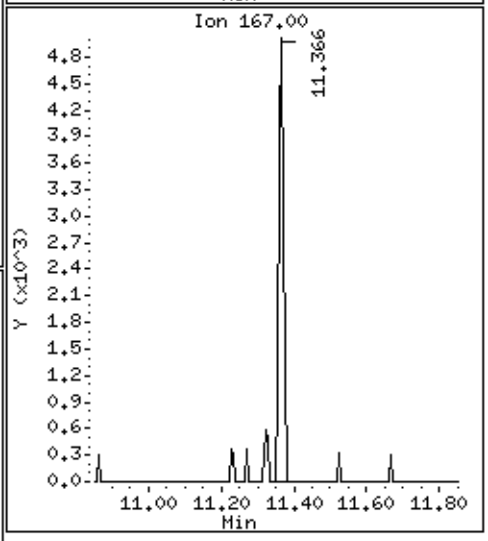
Column phase: Rxi-5Sil MS Column diameter: 0.25

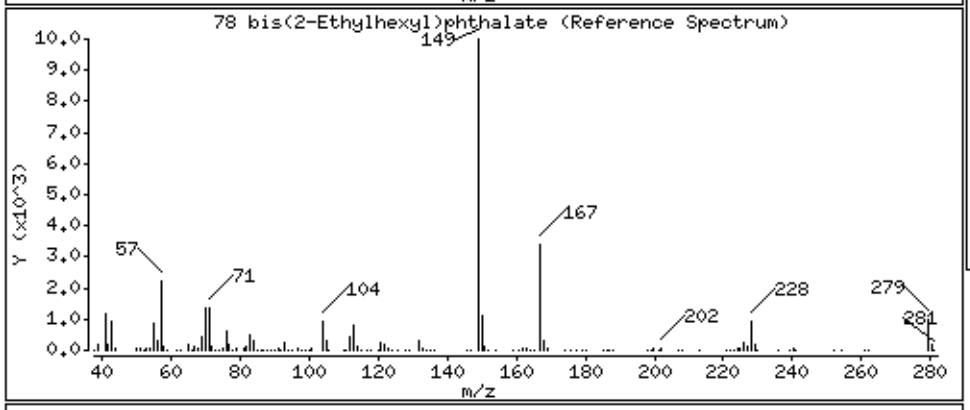
78 bis(2-Ethylhexyl)phthalate Concentration: 1 ug/L

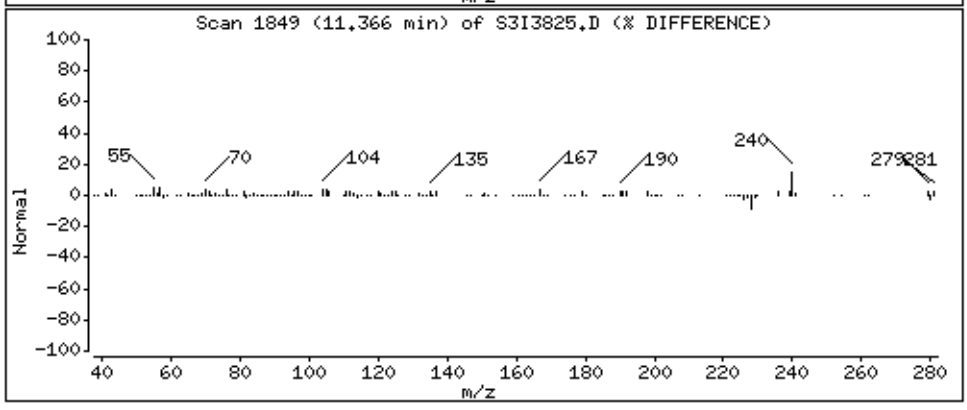












6 - FORM VI SV-2

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: M0262 SAS No.: SDG No.: SM0262

Instrument ID: S3 Calibration Date(s): 01/31/2013 01/31/2013

Calibration Times: 17:13 19:49

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

LAB FILE ID: RRF005 = S3I3543D.D RRF010 = S3I3545D.D RRF025 = S3I3541D.D RRF040 = S3I3544D.D RRF060 = S3I3546D.D
RRF080 = S3I3542D.D

COMPOUND	RRF005	RRF010	RRF025	RRF040	RRF060	RRF080					RRF	% RSD
Phenol	1.570	1.639	1.608	1.523	1.905	2.092					1.723	13.1
Bis(2-chloroethyl)ether	0.794	0.742	0.768	0.722	0.808	0.864					0.783	6.5
2-Chlorophenol	1.234	1.243	1.228	1.134	1.298	1.418					1.259	7.5
1,3-Dichlorobenzene	1.460	1.501	1.428	1.344	1.544	1.614					1.482	6.3
1,4-Dichlorobenzene	1.477	1.477	1.449	1.406	1.620	1.699					1.521	7.4
1,2-Dichlorobenzene	1.330	1.407	1.326	1.262	1.476	1.552					1.392	7.7
2,2´-oxybis(1-Chloropropane)	0.774	0.727	0.692	0.654	0.735	0.794					0.729	7.1
N-Nitroso-di-n-propylamine	1.149	1.158	1.172	1.118	1.149	1.092					1.140	2.6
Hexachloroethane	0.581	0.576	0.600	0.557	0.644	0.680					0.606	7.7
Nitrobenzene	0.481	0.479	0.480	0.433	0.504	0.518					0.483	6.0
Isophorone	0.767	0.794	0.792	0.768	0.844	0.853					0.803	4.6
2-Nitrophenol	0.189	0.187	0.193	0.180	0.208	0.226					0.197	8.6
2,4-Dimethylphenol	0.367	0.309	0.410	0.257	0.447	0.495					0.381	23.2
2,4-Dichlorophenol	0.321	0.322	0.335	0.327	0.393	0.403					0.350	10.6
1,2,4-Trichlorobenzene	0.383	0.381	0.394	0.366	0.444	0.456					0.404	9.2
Naphthalene	1.044	1.029	1.069	1.005	1.173	1.190					1.085	7.1
Bis(2-chloroethoxy)methane	0.398	0.407	0.415	0.376	0.434	0.462					0.415	7.2
Hexachlorobutadiene	0.292	0.297	0.280	0.276	0.330	0.335					0.302	8.3
4-Chloro-3-methylphenol	0.367	0.380	0.391	0.391	0.438	0.444					0.402	7.9
Hexachlorocyclopentadiene	0.332	0.337	0.422	0.230	0.446	0.608					0.396	32.6
2,4,6-Trichlorophenol	0.363	0.381	0.394	0.339	0.448	0.455					0.397	11.7
2-Chloronaphthalene	1.013	1.021	1.087	1.011	1.362	1.401					1.149	15.9
Dimethylphthalate	1.337	1.369	1.374	1.284	1.649	1.597					1.435	10.5
Acenaphthylene	1.643	1.658	1.733	1.549	1.970	1.933					1.748	9.6
2,6-Dinitrotoluene	0.289	0.302	0.292	0.276	0.343	0.341					0.307	9.2
Acenaphthene	1.053	1.024	1.070	0.953	1.254	1.268					1.104	11.6
2,4-Dinitrophenol		0.177	0.215	0.209	0.276	0.282					0.232	19.6

6 - FORM VI SV-3

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: M0262 SAS No.: SDG No.: SM0262

Instrument ID: S3 Calibration Date(s): 01/31/2013 01/31/2013

Calibration Times: 17:13 19:49

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

LAB FILE ID: RRF005 = S3I3543D.D RRF010 = S3I3545D.D RRF025 = S3I3541D.D RRF040 = S3I3544D.D RRF060 = S3I3546D.D
RRF080 = S3I3542D.D

COMPOUND	RRF005	RRF010	RRF025	RRF040	RRF060	RRF080					RRF	% RSD
4-Nitrophenol		0.306	0.306	0.286	0.351	0.346					0.319	8.8
2,4-Dinitrotoluene	0.389	0.448	0.468	0.462	0.623	0.610					0.500	18.9
Diethylphthalate	1.335	1.360	1.378	1.264	1.577	1.552					1.411	8.9
4-Chlorophenyl-phenylether	0.742	0.780	0.812	0.817	1.155	1.144					0.908	20.8
Fluorene	1.327	1.342	1.431	1.409	1.928	1.841					1.546	17.2
4,6-Dinitro-2-methylphenol		0.139	0.142	0.135	0.173	0.177					0.153	13.0
N-Nitrosodiphenylamine	0.542	0.550	0.561	0.518	0.661	0.652					0.581	10.4
4-Bromophenyl-phenylether	0.213	0.213	0.223	0.205	0.270	0.273					0.233	13.0
Hexachlorobenzene	0.227	0.228	0.230	0.215	0.285	0.284					0.245	12.8
Pentachlorophenol		0.156	0.177	0.157	0.214	0.215					0.184	16.0
Phenanthrene	0.929	0.964	0.981	0.892	1.118	1.017					0.984	8.0
Anthracene	0.913	0.953	0.983	0.887	1.124	1.032					0.982	8.8
Di-n-butylphthalate	0.956	1.023	1.065	0.975	1.201	1.083					1.051	8.4
Fluoranthene	1.172	1.231	1.223	1.143	1.405	1.236					1.235	7.4
Pyrene	0.923	0.924	0.885	0.782	0.896	0.832					0.874	6.4
Butylbenzylphthalate	0.331	0.342	0.352	0.317	0.385	0.383					0.352	7.9
3,3´-Dichlorobenzidine	0.323	0.346	0.333	0.307	0.387	0.339					0.339	7.9
Benzo(a)anthracene	1.088	1.066	1.007	0.909	1.092	1.059					1.037	6.7
Chrysene	0.939	0.950	0.914	0.892	1.039	0.960					0.949	5.3
Bis(2-ethylhexyl)phthalate	0.475	0.513	0.514	0.530	0.659	0.652					0.557	14.0
Di-n-octylphthalate	0.997	1.050	1.004	1.060	1.124	1.141					1.063	5.6
Benzo(b)fluoranthene	1.290	1.325	1.173	1.210	1.288	1.377					1.277	5.8
Benzo(k)fluoranthene	1.362	1.360	1.185	1.274	1.348	1.331					1.310	5.3
Benzo(a)pyrene	1.218	1.242	1.113	1.053	1.208	1.243					1.180	6.6
Indeno(1,2,3-cd)pyrene	1.092	1.143	1.025	1.061	1.111	1.196					1.105	5.5
Dibenzo(a,h)anthracene	1.090	1.113	1.001	1.029	1.097	1.145					1.079	5.0
Benzo(g,h,i)perylene	1.141	1.164	1.012	1.052	1.066	1.128					1.094	5.4

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

6 - FORM VI SV-3

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: M0262 SAS No.: SDG No.: SM0262

Instrument ID: S3 Calibration Date(s): 01/31/2013 01/31/2013

Calibration Times: 17:13 19:49

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

LAB FILE ID: RRF005 = S3I3543D.D RRF010 = S3I3545D.D RRF025 = S3I3541D.D RRF040 = S3I3544D.D RRF060 = S3I3546D.D
RRF080 = S3I3542D.D

COMPOUND	RRF005	RRF010	RRF025	RRF040	RRF060	RRF080					RRF	% RSD
Nitrobenzene-d5	0.447	0.462	0.477	0.441	0.509	0.516					0.475	6.6
2-Fluorobiphenyl	1.282	1.297	1.317	1.175	1.517	1.530					1.353	10.4
Terphenyl-d14	0.688	0.693	0.662	0.608	0.711	0.664					0.671	5.4
Phenol-d5	1.564	1.485	1.594	1.464	1.727	1.829					1.610	8.8
2-Fluorophenol	1.067	1.074	1.119	1.047	1.207	1.315					1.138	9.1
2,4,6-Tribromophenol	0.084	0.088	0.091	0.088	0.117	0.120					0.098	16.3

Data File: \\avogadro\organics\S3.I\130131.B\S3I3541D.D
Report Date: 06-Feb-2013 15:39

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\130131.B\S3I3541D.D
Lab Smp Id: SSTD0253N Client Smp ID: SSTD0253N
Inj Date : 31-JAN-2013 17:13
Operator : PK SRC: PK Inst ID: S3.i
Smp Info : SSTD0253N,SSTD0253N
Misc Info : 2,3
Comment   :
Method   : \\avogadro\organics\S3.I\130131.B\s3_8270C_N.m
Meth Date : 06-Feb-2013 15:39 pkaczorows Quant Type: ISTD
Cal Date : 31-JAN-2013 19:49 Cal File: S3I3546D.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

		QUANT SIG					AMOUNTS CAL-AMT	ON-COL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
$	109 1,4-Dioxane-d8	96	1.599	1.599	(0.376)	40556	25.0000	24
	108 1,4-Dioxane	58	1.615	1.615	(0.380)	21998	25.0000	22
	1 N-Nitrosodimethylamine	74	1.770	1.770	(0.416)	91636	25.0000	24
	2 Pyridine	79	1.796	1.797	(0.422)	150149	25.0000	23
$	3 2-Fluorophenol	112	2.710	2.710	(0.637)	156129	25.0000	24
	101 Benzaldehyde	77	3.607	3.608	(0.848)	131426	25.0000	24
$	5 Phenol-d5	99	3.703	3.699	(0.871)	222343	25.0000	25
	6 Phenol	94	3.720	3.720	(0.874)	224290	25.0000	23
	7 Aniline	66	3.720	3.720	(0.874)	150555	25.0000	23(Q)
	8 bis(2-Chloroethyl)Ether	63	3.848	3.843	(0.905)	107193	25.0000	24
	10 2-Chlorophenol	128	3.917	3.918	(0.921)	171283	25.0000	24
	11 1,3-Dichlorobenzene	146	4.163	4.158	(0.979)	199163	25.0000	24
*	12 1,4-Dichlorobenzene-d4	152	4.254	4.254	(1.000)	223204	40.0000	
	13 1,4-Dichlorobenzene	146	4.280	4.281	(1.006)	202202	25.0000	24
	117 2-Ethyl-1-hexanol	57	4.398	4.398	(1.034)	112465	25.0000	24
	15 Benzyl Alcohol	108	4.489	4.489	(1.055)	115813	25.0000	23
	16 1,2-Dichlorobenzene	146	4.521	4.521	(1.063)	184957	25.0000	24
	17 2-Methylphenol	108	4.681	4.676	(1.100)	164834	25.0000	25
	18 2,2'-oxybis(1-Chloropropane)	45	4.718	4.714	(1.109)	96581	25.0000	24
	99 Acetophenone	105	4.884	4.879	(1.148)	275308	25.0000	24

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
19	N-Nitroso-di-n-propylamine	70	4.905	4.906	(1.153)	163471	25.0000	26
20	4-Methylphenol	108	4.916	4.917	(1.156)	182261	25.0000	25
21	Hexachloroethane	117	5.018	5.013	(1.180)	83687	25.0000	25
$ 22	Nitrobenzene-d5	82	5.087	5.082	(0.850)	250678	25.0000	25
23	Nitrobenzene	77	5.114	5.109	(0.855)	252637	25.0000	25
24	Isophorone	82	5.440	5.440	(0.909)	416374	25.0000	25
25	2-Nitrophenol	139	5.530	5.531	(0.924)	101649	25.0000	24
26	2,4-Dimethylphenol	107	5.627	5.622	(0.940)	215836	25.0000	27
27	bis(2-Chloroethoxy)methane	93	5.739	5.739	(0.959)	217965	25.0000	25
28	Benzoic Acid	105	5.792	5.782	(0.968)	172737	25.0000	27(Q)
29	2,4-Dichlorophenol	162	5.830	5.830	(0.974)	176372	25.0000	24
30	1,2,4-Trichlorobenzene	180	5.926	5.926	(0.990)	206918	25.0000	24
* 31	Naphthalene-d8	136	5.985	5.980	(1.000)	841292	40.0000	
32	Naphthalene	128	6.006	6.001	(1.004)	562341	25.0000	25
115	alpha-Terpineol	59	6.049	6.049	(1.011)	96048	25.0000	24
33	4-Chloroaniline	127	6.091	6.087	(1.018)	231761	25.0000	25
34	Hexachlorobutadiene	225	6.182	6.177	(1.033)	147180	25.0000	23
102	Caprolactam	113	6.471	6.466	(1.081)	66863	25.0000	26
35	4-Chloro-3-Methylphenol	107	6.647	6.642	(1.111)	205556	25.0000	24
36	2-Methylnaphthalene	142	6.759	6.754	(1.129)	412578	25.0000	24
114	1-Methylnaphthalene	142	6.855	6.851	(1.145)	385058	25.0000	24
38	Hexachlorocyclopentadiene	237	6.935	6.931	(0.895)	175694	25.0000	27
112	1,2,4,5-Tetrachlorobenzene	216	6.930	6.931	(0.895)	277367	25.0000	24
39	2,4,6-Trichlorophenol	196	7.053	7.048	(0.910)	164096	25.0000	25
40	2,4,5-Trichlorophenol	196	7.085	7.080	(0.915)	170384	25.0000	24
$ 41	2-Fluorobiphenyl	172	7.133	7.134	(0.921)	548588	25.0000	24
98	1,1'-Biphenyl	154	7.224	7.219	(0.932)	633435	25.0000	24
42	2-Chloronaphthalene	162	7.229	7.230	(0.933)	453087	25.0000	24
43	2-Nitroaniline	65	7.336	7.331	(0.947)	159337	25.0000	24
44	Dimethylphthalate	163	7.528	7.524	(0.972)	572336	25.0000	24
45	2,6-Dinitrotoluene	165	7.571	7.566	(0.977)	121506	25.0000	24
46	Acenaphthylene	152	7.614	7.609	(0.983)	721880	25.0000	25
47	3-Nitroaniline	138	7.715	7.711	(0.996)	122172	25.0000	24
* 48	Acenaphthene-d10	164	7.747	7.743	(1.000)	666639	40.0000	
49	Acenaphthene	153	7.774	7.769	(1.003)	445653	25.0000	24
50	2,4-Dinitrophenol	184	7.806	7.801	(1.008)	89726	25.0000	23
51	4-Nitrophenol	109	7.876	7.876	(1.017)	127413	25.0000	24
53	2,4-Dinitrotoluene	165	7.924	7.919	(1.023)	195061	25.0000	23
52	Dibenzofuran	168	7.929	7.924	(1.023)	719747	25.0000	24
110	2,3,4,6-Tetrachlorophenol	232	8.041	8.036	(1.038)	175273	25.0000	23
54	Diethylphthalate	149	8.153	8.149	(1.052)	574081	25.0000	24
56	4-Chlorophenyl-phenylether	204	8.234	8.229	(1.063)	338363	25.0000	22
55	Fluorene	166	8.228	8.223	(1.062)	596416	25.0000	23
57	4-Nitroaniline	138	8.255	8.250	(1.066)	121524	25.0000	25
58	4,6-Dinitro-2-methylphenol	198	8.276	8.272	(0.917)	130642	25.0000	23
59	N-Nitrosodiphenylamine	169	8.335	8.330	(0.923)	514899	25.0000	24
97	Azobenzene	77	8.367	8.362	(0.927)	647604	25.0000	25
$ 60	2,4,6-Tribromophenol	330	8.437	8.432	(0.934)	83237	25.0000	23
61	4-Bromophenyl-phenylether	248	8.650	8.645	(0.958)	205014	25.0000	24
62	Hexachlorobenzene	284	8.704	8.699	(0.964)	210831	25.0000	23
100	Atrazine	200	8.800	8.790	(0.975)	134913	25.0000	23
63	Pentachlorophenol	266	8.875	8.865	(0.983)	162245	25.0000	24
111	Pentachloronitrobenzene	237	8.891	8.881	(0.985)	123360	25.0000	24
* 64	Phenanthrene-d10	188	9.030	9.019	(1.000)	1469166	40.0000	

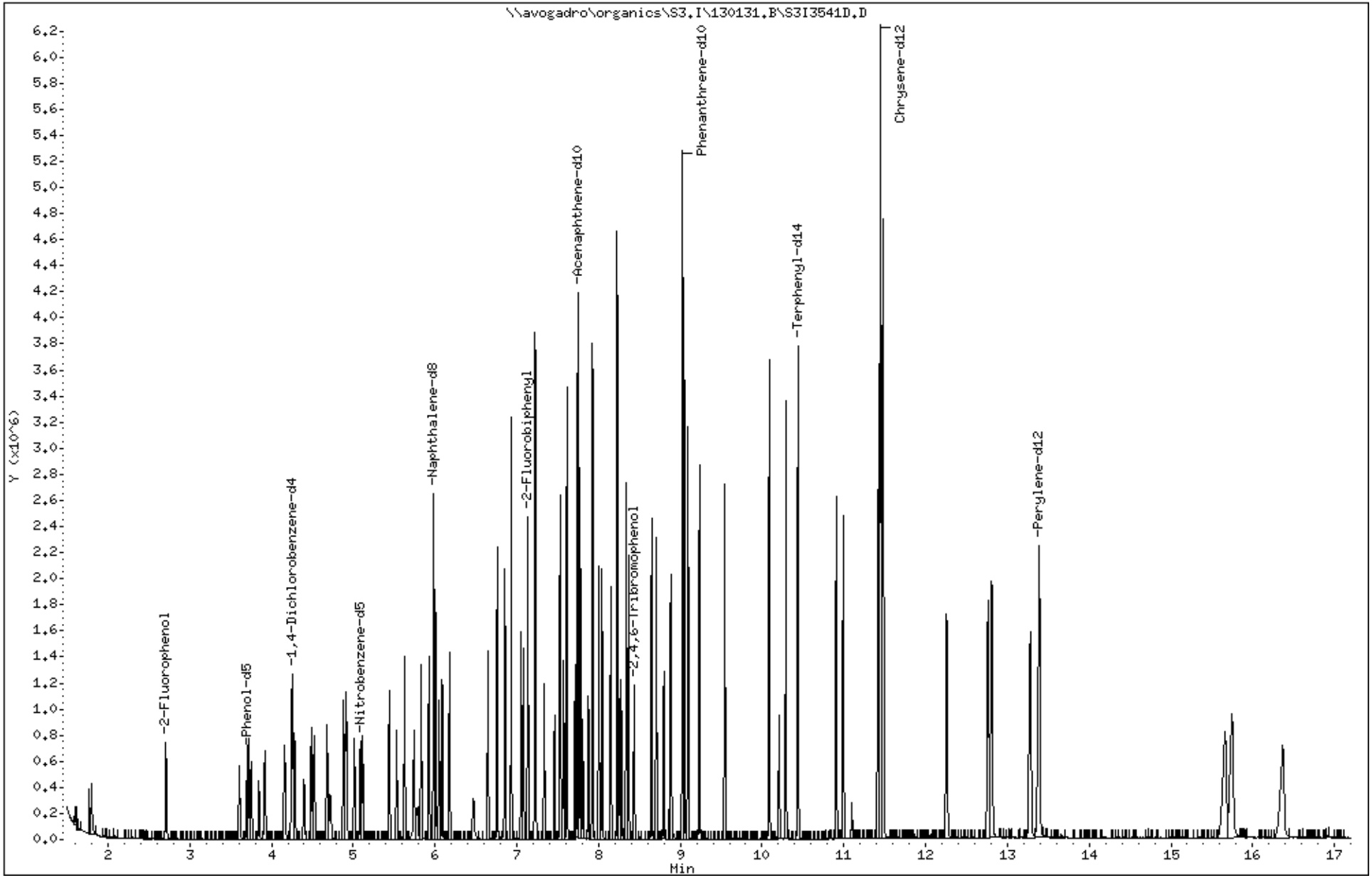
Data File: \\avogadro\organics\S3.I\130131.B\S3I3541D.D
Report Date: 06-Feb-2013 15:39

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
	65	Phenanthrene	178	9.051	9.041	(1.002)	900994	25.0000	25
	66	Anthracene	178	9.094	9.078	(1.007)	902289	25.0000	25
	67	Carbazole	167	9.233	9.217	(1.022)	795389	25.0000	25
	68	Di-n-butylphthalate	149	9.542	9.516	(1.057)	977762	25.0000	25
	69	Fluoranthene	202	10.087	10.040	(1.117)	1123016	25.0000	25
	70	Benzidine	184	10.210	10.152	(0.892)	295549	25.0000	29
	71	Pyrene	202	10.290	10.232	(0.899)	1150654	25.0000	25
$	72	Terphenyl-d14	244	10.440	10.371	(0.912)	860685	25.0000	25
	73	Butylbenzylphthalate	149	10.905	10.804	(0.952)	457341	25.0000	25
	74	3,3'-Dichlorobenzidine	252	11.418	11.290	(0.997)	433366	25.0000	24
	78	bis(2-Ethylhexyl)phthalate	149	11.487	11.349	(1.003)	668369	25.0000	23
	75	Benzo(a)anthracene	228	11.434	11.349	(0.999)	1309582	25.0000	24
*	76	Chrysene-d12	240	11.450	11.327	(1.000)	2079997	40.0000	
	77	Chrysene	228	11.476	11.349	(1.002)	1188101	25.0000	24
	79	Di-n-octylphthalate	149	12.256	12.102	(0.915)	990929	25.0000	24
	80	Benzo(b)fluoranthene	252	12.764	12.663	(0.953)	1158240	25.0000	23
	81	Benzo(k)fluoranthene	252	12.806	12.663	(0.956)	1170016	25.0000	23
	82	Benzo(a)pyrene	252	13.282	13.128	(0.992)	1099116	25.0000	24
*	83	Perylene-d12	264	13.394	13.234	(1.000)	1579530	40.0000	
	84	Indeno(1,2,3-cd)pyrene	276	15.665	15.574	(1.170)	1011663	25.0000	23
	85	Dibenzo(a,h)anthracene	278	15.750	15.569	(1.176)	988609	25.0000	23
	86	Benzo(g,h,i)perylene	276	16.370	16.194	(1.222)	998585	25.0000	23

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\S3.I\130131.B\S3I3541D.D
Date : 31-JAN-2013 17:13
Client ID: SSTD0253N
Instrument: S3.i
Sample Info: SSTD0253N,SSTD0253N
Volume Injected (uL): 1.0
Operator: PK SRC: PK
Column phase: Rxi-5Sil MS
Column diameter: 0.25



Data File: \\avogadro\organics\S3.I\130131.B\S3I3542D.D
Report Date: 06-Feb-2013 15:39

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\130131.B\S3I3542D.D
Lab Smp Id: SSTD0803N Client Smp ID: SSTD0803N
Inj Date : 31-JAN-2013 18:03
Operator : PK   SRC: PK Inst ID: S3.i
Smp Info : SSTD0803N,SSTD0803N
Misc Info : 1,6
Comment   :
Method   : \\avogadro\organics\S3.I\130131.B\s3_8270C_N.m
Meth Date : 06-Feb-2013 15:39 pkaczorows Quant Type: ISTD
Cal Date : 31-JAN-2013 19:49 Cal File: S3I3546D.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

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
$	109	1,4-Dioxane-d8	96	1.600	1.599	(0.376)	125772	80.0000	87
	108	1,4-Dioxane	58	1.616	1.615	(0.380)	73594	80.0000	88(A)
	1	N-Nitrosodimethylamine	74	1.776	1.770	(0.418)	282053	80.0000	88(A)
	2	Pyridine	79	1.798	1.797	(0.423)	493313	80.0000	91(A)
$	3	2-Fluorophenol	112	2.716	2.710	(0.638)	499382	80.0000	92
	101	Benzaldehyde	77	3.609	3.608	(0.848)	158592	80.0000	35
$	5	Phenol-d5	99	3.715	3.699	(0.873)	694268	80.0000	91
	6	Phenol	94	3.737	3.720	(0.878)	794380	80.0000	97(A)
	7	Aniline	66	3.737	3.720	(0.878)	548690	80.0000	99(A)
	8	bis(2-Chloroethyl)Ether	63	3.854	3.843	(0.906)	328059	80.0000	88(A)
	10	2-Chlorophenol	128	3.924	3.918	(0.922)	538254	80.0000	90(A)
	11	1,3-Dichlorobenzene	146	4.164	4.158	(0.979)	612758	80.0000	87(A)
*	12	1,4-Dichlorobenzene-d4	152	4.255	4.254	(1.000)	189840	40.0000	
	13	1,4-Dichlorobenzene	146	4.287	4.281	(1.008)	645159	80.0000	89(A)
	117	2-Ethyl-1-hexanol	57	4.405	4.398	(1.035)	361183	80.0000	92(A)
	15	Benzyl Alcohol	108	4.506	4.489	(1.059)	374800	80.0000	89(A)
	16	1,2-Dichlorobenzene	146	4.527	4.521	(1.064)	589429	80.0000	89(A)
	17	2-Methylphenol	108	4.688	4.676	(1.102)	513729	80.0000	92(A)
	18	2,2'-oxybis(1-Chloropropane)	45	4.720	4.714	(1.109)	301541	80.0000	87(A)
	99	Acetophenone	105	4.891	4.879	(1.149)	869705	80.0000	89(A)

Data File: \\avogadro\organics\S3.I\130131.B\S3I3542D.D
Report Date: 06-Feb-2013 15:39

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
	19 N-Nitroso-di-n-propylamine	70	4.917	4.906	(1.156)	414610	80.0000	77
	20 4-Methylphenol	108	4.939	4.917	(1.161)	571504	80.0000	93(A)
	21 Hexachloroethane	117	5.014	5.013	(1.178)	258277	80.0000	90(A)
$	22 Nitrobenzene-d5	82	5.094	5.082	(0.851)	749558	80.0000	87
	23 Nitrobenzene	77	5.120	5.109	(0.855)	751240	80.0000	86(A)
	24 Isophorone	82	5.452	5.440	(0.911)	1238133	80.0000	85(A)
	25 2-Nitrophenol	139	5.537	5.531	(0.925)	328615	80.0000	92(A)
	26 2,4-Dimethylphenol	107	5.639	5.622	(0.942)	718100	80.0000	100(A)
	27 bis(2-Chloroethoxy)methane	93	5.751	5.739	(0.961)	671237	80.0000	89(A)
	28 Benzoic Acid	105	5.842	5.782	(0.976)	317576	80.0000	58(Q)
	29 2,4-Dichlorophenol	162	5.842	5.830	(0.976)	584717	80.0000	92(A)
	30 1,2,4-Trichlorobenzene	180	5.932	5.926	(0.991)	662199	80.0000	90(A)
*	31 Naphthalene-d8	136	5.986	5.980	(1.000)	725746	40.0000	
	32 Naphthalene	128	6.012	6.001	(1.004)	1727123	80.0000	88(A)
	115 alpha-Terpineol	59	6.055	6.049	(1.012)	306693	80.0000	90(A)
	33 4-Chloroaniline	127	6.098	6.087	(1.019)	745035	80.0000	92(A)
	34 Hexachlorobutadiene	225	6.183	6.177	(1.033)	486153	80.0000	89(A)
	102 Caprolactam	113	6.536	6.466	(1.092)	161070	80.0000	73
	35 4-Chloro-3-Methylphenol	107	6.664	6.642	(1.113)	644249	80.0000	88(A)
	36 2-Methylnaphthalene	142	6.760	6.754	(1.129)	1353237	80.0000	91(A)
	114 1-Methylnaphthalene	142	6.862	6.851	(1.146)	1230120	80.0000	89(A)
	38 Hexachlorocyclopentadiene	237	6.937	6.931	(0.895)	687215	80.0000	120(A)
	112 1,2,4,5-Tetrachlorobenzene	216	6.937	6.931	(0.895)	1009105	80.0000	100(A)
	39 2,4,6-Trichlorophenol	196	7.060	7.048	(0.911)	514627	80.0000	92(A)
	40 2,4,5-Trichlorophenol	196	7.092	7.080	(0.915)	546260	80.0000	92(A)
$	41 2-Fluorobiphenyl	172	7.140	7.134	(0.921)	1729278	80.0000	90
	98 1,1'-Biphenyl	154	7.230	7.219	(0.933)	2009385	80.0000	92(A)
	42 2-Chloronaphthalene	162	7.236	7.230	(0.934)	1583832	80.0000	98(A)
	43 2-Nitroaniline	65	7.343	7.331	(0.948)	491317	80.0000	87(A)
	44 Dimethylphthalate	163	7.540	7.524	(0.973)	1805280	80.0000	89(A)
	45 2,6-Dinitrotoluene	165	7.583	7.566	(0.979)	385447	80.0000	89(A)
	46 Acenaphthylene	152	7.620	7.609	(0.983)	2185099	80.0000	88(A)
	47 3-Nitroaniline	138	7.727	7.711	(0.997)	390430	80.0000	91(A)
*	48 Acenaphthene-d10	164	7.749	7.743	(1.000)	565304	40.0000	
	49 Acenaphthene	153	7.781	7.769	(1.004)	1433578	80.0000	92(A)
	50 2,4-Dinitrophenol	184	7.818	7.801	(1.009)	318641	80.0000	97(A)
	51 4-Nitrophenol	109	7.893	7.876	(1.019)	390657	80.0000	87(A)
	53 2,4-Dinitrotoluene	165	7.936	7.919	(1.024)	689827	80.0000	98(A)
	52 Dibenzofuran	168	7.936	7.924	(1.024)	2253008	80.0000	90(A)
	110 2,3,4,6-Tetrachlorophenol	232	8.048	8.036	(1.039)	597705	80.0000	94(A)
	54 Diethylphthalate	149	8.160	8.149	(1.053)	1754858	80.0000	88(A)
	56 4-Chlorophenyl-phenylether	204	8.235	8.229	(1.063)	1293018	80.0000	100(A)
	55 Fluorene	166	8.235	8.223	(1.063)	2081452	80.0000	95(A)
	57 4-Nitroaniline	138	8.272	8.250	(1.068)	362340	80.0000	87(A)
	58 4,6-Dinitro-2-methylphenol	198	8.294	8.272	(0.918)	443165	80.0000	92(A)
	59 N-Nitrosodiphenylamine	169	8.347	8.330	(0.924)	1636099	80.0000	90(A)
	97 Azobenzene	77	8.374	8.362	(0.927)	1884528	80.0000	85(A)
$	60 2,4,6-Tribromophenol	330	8.443	8.432	(0.935)	299862	80.0000	98
	61 4-Bromophenyl-phenylether	248	8.651	8.645	(0.958)	684386	80.0000	94(A)
	62 Hexachlorobenzene	284	8.710	8.699	(0.965)	713550	80.0000	93(A)
	100 Atrazine	200	8.806	8.790	(0.975)	414337	80.0000	83(A)
	63 Pentachlorophenol	266	8.876	8.865	(0.983)	539651	80.0000	94(A)
	111 Pentachloronitrobenzene	237	8.892	8.881	(0.985)	398880	80.0000	91(A)
*	64 Phenanthrene-d10	188	9.031	9.019	(1.000)	1254061	40.0000	

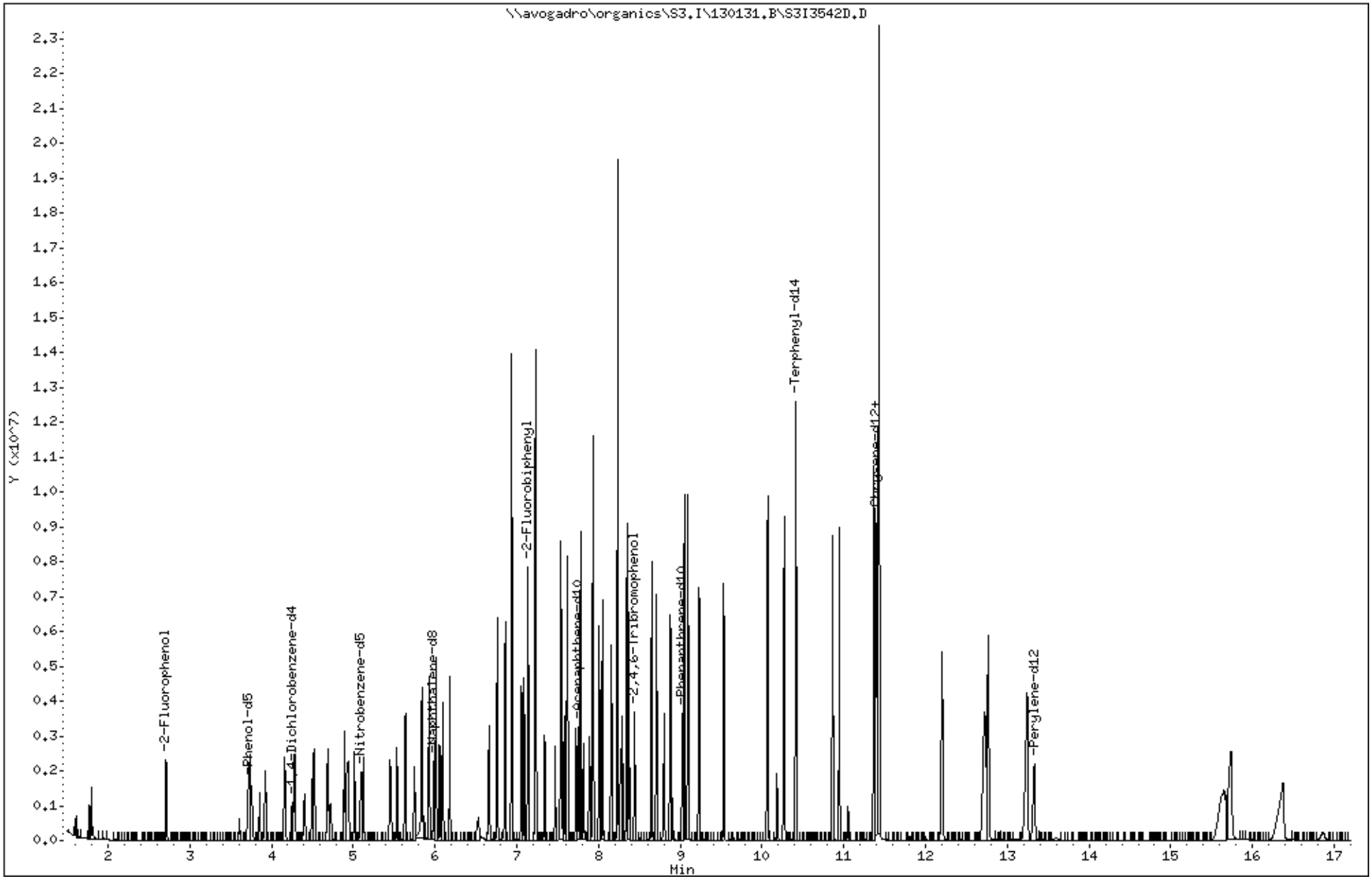
Data File: \\avogadro\organics\S3.I\130131.B\S3I3542D.D
Report Date: 06-Feb-2013 15:39

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
65	Phenanthrene	178	9.052	9.041	(1.002)	2550291	80.0000	83(A)
66	Anthracene	178	9.095	9.078	(1.007)	2587644	80.0000	84(A)
67	Carbazole	167	9.234	9.217	(1.022)	2362702	80.0000	86(A)
68	Di-n-butylphthalate	149	9.533	9.516	(1.056)	2715277	80.0000	82(A)
69	Fluoranthene	202	10.073	10.040	(1.115)	3099044	80.0000	80(A)
70	Benzidine	184	10.185	10.152	(0.886)	553546	80.0000	58(H)
71	Pyrene	202	10.270	10.232	(0.894)	3234550	80.0000	76(H)
$ 72	Terphenyl-d14	244	10.414	10.371	(0.906)	2582155	80.0000	79(H)
73	Butylbenzylphthalate	149	10.863	10.804	(0.945)	1491160	80.0000	87(AH)
74	3,3'-Dichlorobenzidine	252	11.371	11.290	(0.989)	1319331	80.0000	80(AH)
78	bis(2-Ethylhexyl)phthalate	149	11.429	11.349	(0.994)	2534567	80.0000	94(AH)
75	Benzo(a)anthracene	228	11.387	11.349	(0.991)	4119301	80.0000	82(AH)
* 76	Chrysene-d12	240	11.403	11.327	(1.000)	1944710	40.0000	(H)
77	Chrysene	228	11.429	11.349	(0.994)	3733707	80.0000	81(AH)
79	Di-n-octylphthalate	149	12.204	12.102	(0.910)	3151305	80.0000	86(A)
80	Benzo(b)fluoranthene	252	12.722	12.663	(0.949)	3800503	80.0000	86(AH)
81	Benzo(k)fluoranthene	252	12.770	12.663	(0.953)	3675806	80.0000	81(A)
82	Benzo(a)pyrene	252	13.240	13.128	(0.988)	3431112	80.0000	84(AH)
* 83	Perylene-d12	264	13.331	13.234	(1.000)	1380429	40.0000	(H)
84	Indeno(1,2,3-cd)pyrene	276	15.644	15.574	(1.167)	3302350	80.0000	87(AQ)
85	Dibenzo(a,h)anthracene	278	15.741	15.569	(1.174)	3161616	80.0000	85(A)
86	Benzo(g,h,i)perylene	276	16.371	16.194	(1.221)	3115195	80.0000	82(A)

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\S3.I\130131.B\S3I3542D.D
Date : 31-JAN-2013 18:03
Client ID: SSTD0803N
Instrument: S3.i
Sample Info: SSTD0803N,SSTD0803N
Volume Injected (uL): 1.0
Operator: PK SRC: PK
Column phase: Rxi-5Sil MS
Column diameter: 0.25



Data File: \\avogadro\organics\S3.I\130131.B\S3I3543D.D
Report Date: 06-Feb-2013 15:39

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\130131.B\S3I3543D.D
Lab Smp Id: SSTD0053N Client Smp ID: SSTD0053N
Inj Date : 31-JAN-2013 18:29
Operator : PK   SRC: PK Inst ID: S3.i
Smp Info : SSTD0053N,SSTD0053N
Misc Info : 1,1
Comment   :
Method   : \\avogadro\organics\S3.I\130131.B\s3_8270C_N.m
Meth Date : 06-Feb-2013 15:39 pkaczorows Quant Type: ISTD
Cal Date : 31-JAN-2013 19:49 Cal File: S3I3546D.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

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
$	109 1,4-Dioxane-d8	96	1.601	1.599	(0.377)	7583	5.00000	5(a)
	108 1,4-Dioxane	58	1.611	1.615	(0.380)	4453	5.00000	5(aQ)
	1 N-Nitrosodimethylamine	74	1.766	1.770	(0.416)	15397	5.00000	4(a)
	2 Pyridine	79	1.798	1.797	(0.424)	25604	5.00000	4(a)
$	3 2-Fluorophenol	112	2.707	2.710	(0.638)	26519	5.00000	5(a)
	101 Benzaldehyde	77	3.604	3.608	(0.849)	31971	5.00000	7(a)
$	5 Phenol-d5	99	3.690	3.699	(0.869)	38867	5.00000	5(a)
	6 Phenol	94	3.711	3.720	(0.874)	39006	5.00000	4(a)
	7 Aniline	66	3.711	3.720	(0.874)	25526	5.00000	4(a)
	8 bis(2-Chloroethyl)Ether	63	3.839	3.843	(0.904)	19723	5.00000	5(a)
	10 2-Chlorophenol	128	3.909	3.918	(0.921)	30660	5.00000	5(a)
	11 1,3-Dichlorobenzene	146	4.154	4.158	(0.979)	36287	5.00000	5(a)
*	12 1,4-Dichlorobenzene-d4	152	4.245	4.254	(1.000)	198779	40.0000	
	13 1,4-Dichlorobenzene	146	4.277	4.281	(1.008)	36698	5.00000	5(a)
	117 2-Ethyl-1-hexanol	57	4.389	4.398	(1.034)	19875	5.00000	5(a)
	15 Benzyl Alcohol	108	4.480	4.489	(1.055)	22812	5.00000	5(a)
	16 1,2-Dichlorobenzene	146	4.518	4.521	(1.064)	33039	5.00000	5(a)
	17 2-Methylphenol	108	4.667	4.676	(1.099)	27347	5.00000	5(a)
	18 2,2'-oxybis(1-Chloropropane)	45	4.705	4.714	(1.108)	19241	5.00000	5(a)
	99 Acetophenone	105	4.875	4.879	(1.148)	49879	5.00000	5(a)

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							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
	19 N-Nitroso-di-n-propylamine	70	4.897	4.906	(1.154)	28559	5.00000	5(a)
	20 4-Methylphenol	108	4.902	4.917	(1.155)	29526	5.00000	4(a)
	21 Hexachloroethane	117	5.009	5.013	(1.180)	14425	5.00000	5(a)
$	22 Nitrobenzene-d5	82	5.078	5.082	(0.850)	43499	5.00000	5(a)
	23 Nitrobenzene	77	5.105	5.109	(0.854)	46852	5.00000	5(a)
	24 Isophorone	82	5.431	5.440	(0.909)	74625	5.00000	5(a)
	25 2-Nitrophenol	139	5.527	5.531	(0.925)	18374	5.00000	5(a)
	26 2,4-Dimethylphenol	107	5.618	5.622	(0.940)	35720	5.00000	5(a)
	27 bis(2-Chloroethoxy)methane	93	5.736	5.739	(0.960)	38699	5.00000	5(a)
	28 Benzoic Acid	105	5.720	5.782	(0.957)	22679	5.00000	4(aH)
	29 2,4-Dichlorophenol	162	5.826	5.830	(0.975)	31252	5.00000	4(a)
	30 1,2,4-Trichlorobenzene	180	5.923	5.926	(0.991)	37233	5.00000	5(a)
*	31 Naphthalene-d8	136	5.976	5.980	(1.000)	778627	40.0000	
	32 Naphthalene	128	6.003	6.001	(1.004)	101649	5.00000	5(a)
	115 alpha-Terpineol	59	6.045	6.049	(1.012)	16392	5.00000	4(a)
	33 4-Chloroaniline	127	6.083	6.087	(1.018)	41209	5.00000	5(a)
	34 Hexachlorobutadiene	225	6.174	6.177	(1.033)	28441	5.00000	5(a)
	102 Caprolactam	113	6.435	6.466	(1.077)	12016	5.00000	5(a)
	35 4-Chloro-3-Methylphenol	107	6.633	6.642	(1.110)	35739	5.00000	4(a)
	36 2-Methylnaphthalene	142	6.751	6.754	(1.130)	74327	5.00000	5(a)
	114 1-Methylnaphthalene	142	6.852	6.851	(1.147)	70622	5.00000	5(a)
	38 Hexachlorocyclopentadiene	237	6.927	6.931	(0.895)	25555	5.00000	4(a)
	112 1,2,4,5-Tetrachlorobenzene	216	6.927	6.931	(0.895)	46896	5.00000	4(a)
	39 2,4,6-Trichlorophenol	196	7.044	7.048	(0.910)	27939	5.00000	4(a)
	40 2,4,5-Trichlorophenol	196	7.076	7.080	(0.914)	29409	5.00000	4(a)
$	41 2-Fluorobiphenyl	172	7.130	7.134	(0.921)	98590	5.00000	5(a)
	98 1,1'-Biphenyl	154	7.215	7.219	(0.932)	107405	5.00000	4(a)
	42 2-Chloronaphthalene	162	7.226	7.230	(0.934)	77884	5.00000	4(a)
	43 2-Nitroaniline	65	7.328	7.331	(0.947)	25966	5.00000	4(a)
	44 Dimethylphthalate	163	7.514	7.524	(0.971)	102822	5.00000	5(a)
	45 2,6-Dinitrotoluene	165	7.563	7.566	(0.977)	22265	5.00000	5(a)
	46 Acenaphthylene	152	7.605	7.609	(0.983)	126390	5.00000	5(a)
	47 3-Nitroaniline	138	7.707	7.711	(0.996)	22081	5.00000	5(a)
*	48 Acenaphthene-d10	164	7.739	7.743	(1.000)	615323	40.0000	
	49 Acenaphthene	153	7.766	7.769	(1.003)	80980	5.00000	5(a)
	50 2,4-Dinitrophenol	184	7.798	7.801	(1.008)	9150	5.00000	2(a)
	51 4-Nitrophenol	109	7.867	7.876	(1.017)	20958	5.00000	4(a)
	53 2,4-Dinitrotoluene	165	7.915	7.919	(1.023)	29958	5.00000	4(a)
	52 Dibenzofuran	168	7.920	7.924	(1.023)	121442	5.00000	4(a)
	110 2,3,4,6-Tetrachlorophenol	232	8.038	8.036	(1.039)	30645	5.00000	4(a)
	54 Diethylphthalate	149	8.140	8.149	(1.052)	102664	5.00000	5(a)
	56 4-Chlorophenyl-phenylether	204	8.225	8.229	(1.063)	57061	5.00000	4(a)
	55 Fluorene	166	8.220	8.223	(1.062)	102054	5.00000	4(a)
	57 4-Nitroaniline	138	8.236	8.250	(1.064)	21070	5.00000	5(a)
	58 4,6-Dinitro-2-methylphenol	198	8.268	8.272	(0.914)	17971	5.00000	3(a)
	59 N-Nitrosodiphenylamine	169	8.327	8.330	(0.921)	92838	5.00000	5(a)
	97 Azobenzene	77	8.359	8.362	(0.924)	115426	5.00000	5(a)
$	60 2,4,6-Tribromophenol	330	8.428	8.432	(0.932)	14458	5.00000	4(a)
	61 4-Bromophenyl-phenylether	248	8.642	8.645	(0.956)	36564	5.00000	4(a)
	62 Hexachlorobenzene	284	8.695	8.699	(0.962)	38947	5.00000	5(a)
	100 Atrazine	200	8.786	8.790	(0.972)	25931	5.00000	5(a)
	63 Pentachlorophenol	266	8.861	8.865	(0.980)	25409	5.00000	4(a)
	111 Pentachloronitrobenzene	237	8.877	8.881	(0.982)	21624	5.00000	4(a)
*	64 Phenanthrene-d10	188	9.016	9.019	(1.000)	1371060	40.0000	(H)

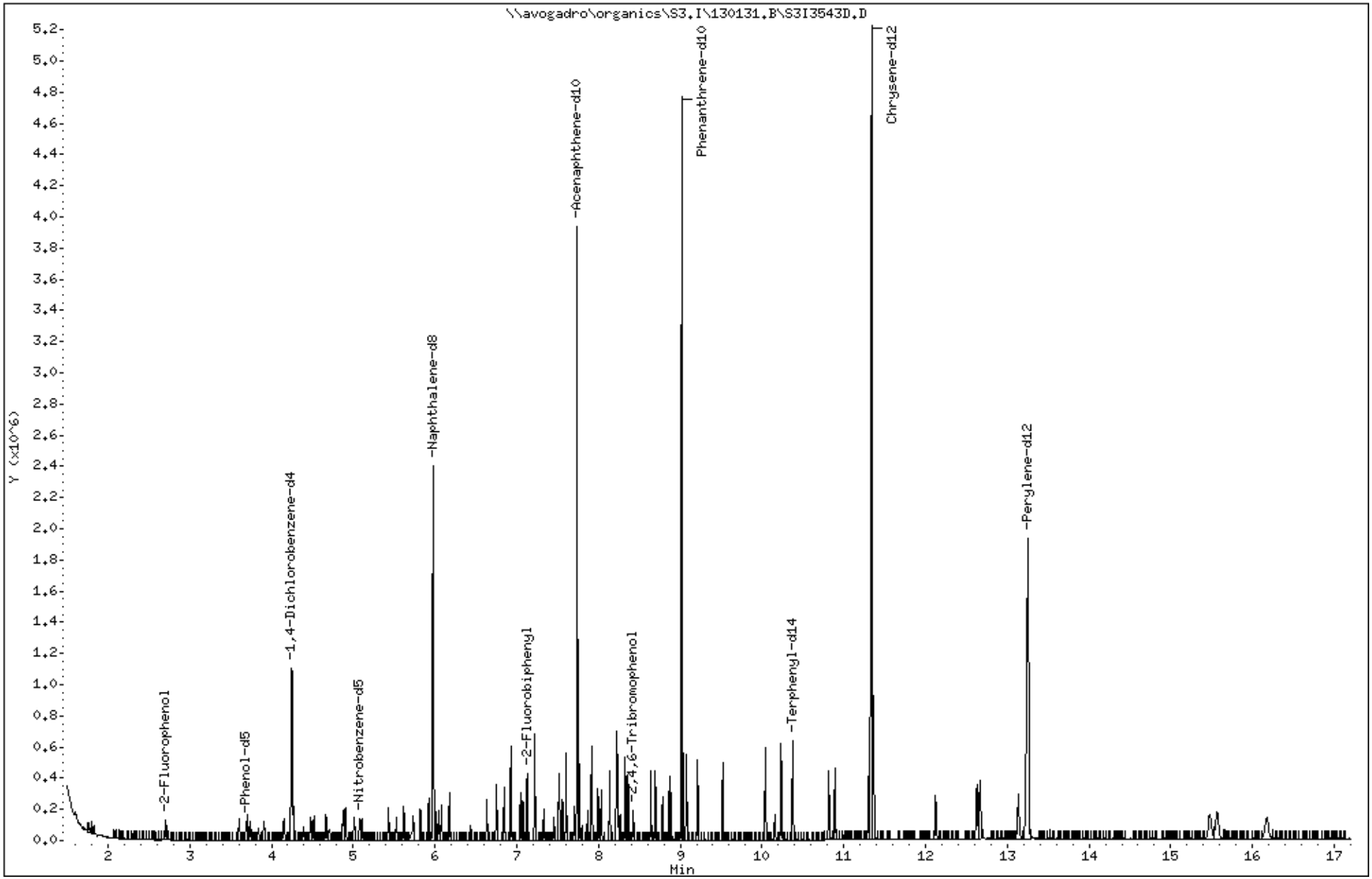
Data File: \\avogadro\organics\S3.I\130131.B\S3I3543D.D
Report Date: 06-Feb-2013 15:39

		QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
	65 Phenanthrene	178	9.037	9.041	(0.999)	159229	5.00000	5(aH)
	66 Anthracene	178	9.074	9.078	(1.004)	156472	5.00000	5(a)
	67 Carbazole	167	9.213	9.217	(1.019)	143890	5.00000	5(aH)
	68 Di-n-butylphthalate	149	9.518	9.516	(1.053)	163880	5.00000	4(a)
	69 Fluoranthene	202	10.041	10.040	(1.110)	200937	5.00000	5(a)
	70 Benzidine	184	10.154	10.152	(0.887)	47963	5.00000	6(aH)
	71 Pyrene	202	10.234	10.232	(0.894)	203090	5.00000	5(aH)
$	72 Terphenyl-d14	244	10.378	10.371	(0.907)	151356	5.00000	5(aH)
	73 Butylbenzylphthalate	149	10.816	10.804	(0.945)	72833	5.00000	5(aH)
	74 3,3'-Dichlorobenzidine	252	11.302	11.290	(0.988)	71015	5.00000	5(aH)
	78 bis(2-Ethylhexyl)phthalate	149	11.366	11.349	(0.993)	104602	5.00000	4(aH)
	75 Benzo(a)anthracene	228	11.323	11.349	(0.990)	239457	5.00000	5(aH)
*	76 Chrysene-d12	240	11.339	11.327	(1.000)	1760507	40.0000	(H)
	77 Chrysene	228	11.361	11.349	(0.993)	206531	5.00000	5(aH)
	79 Di-n-octylphthalate	149	12.125	12.102	(0.906)	157786	5.00000	5(aH)
	80 Benzo(b)fluoranthene	252	12.627	12.663	(0.944)	203994	5.00000	5(aH)
	81 Benzo(k)fluoranthene	252	12.670	12.663	(0.947)	215383	5.00000	5(aH)
	82 Benzo(a)pyrene	252	13.134	13.128	(0.982)	192684	5.00000	5(aH)
*	83 Perylene-d12	264	13.252	13.234	(1.000)	1265532	40.0000	(H)
	84 Indeno(1,2,3-cd)pyrene	276	15.474	15.574	(1.157)	172790	5.00000	5(aH)
	85 Dibenzo(a,h)anthracene	278	15.565	15.569	(1.163)	172403	5.00000	5(aH)
	86 Benzo(g,h,i)perylene	276	16.179	16.194	(1.209)	180497	5.00000	5(aH)

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\S3.I\130131.B\S3I3543D.D
Date : 31-JAN-2013 18:29
Client ID: SSTD0053N
Instrument: S3.i
Sample Info: SSTD0053N,SSTD0053N
Volume Injected (uL): 1.0
Operator: PK SRC: PK
Column phase: Rxi-5Sil MS
Column diameter: 0.25



Data File: \\avogadro\organics\S3.I\130131.B\S3I3544D.D
Report Date: 06-Feb-2013 15:39

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\130131.B\S3I3544D.D
Lab Smp Id: SSTD0403N Client Smp ID: SSTD0403N
Inj Date : 31-JAN-2013 18:55
Operator : PK   SRC: PK Inst ID: S3.i
Smp Info : SSTD0403N,SSTD0403N
Misc Info : 1,4
Comment   :
Method   : \\avogadro\organics\S3.I\130131.B\s3_8270C_N.m
Meth Date : 06-Feb-2013 15:39 pkaczorows Quant Type: ISTD
Cal Date : 31-JAN-2013 19:49 Cal File: S3I3546D.D
Als bottle: 4 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 MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
$ 109 1,4-Dioxane-d8	96	1.600	1.599	(0.377)	52524	40.0000	36
108 1,4-Dioxane	58	1.616	1.615	(0.380)	30828	40.0000	37
1 N-Nitrosodimethylamine	74	1.771	1.770	(0.417)	124341	40.0000	39
2 Pyridine	79	1.798	1.797	(0.423)	201321	40.0000	37
$ 3 2-Fluorophenol	112	2.711	2.710	(0.638)	199143	40.0000	37
101 Benzaldehyde	77	3.604	3.608	(0.848)	187566	40.0000	41
$ 5 Phenol-d5	99	3.705	3.699	(0.872)	278353	40.0000	36
6 Phenol	94	3.721	3.720	(0.876)	289607	40.0000	35
7 Aniline	66	3.721	3.720	(0.876)	204311	40.0000	37(Q)
8 bis(2-Chloroethyl)Ether	63	3.844	3.843	(0.904)	137326	40.0000	37
10 2-Chlorophenol	128	3.919	3.918	(0.922)	215711	40.0000	36
11 1,3-Dichlorobenzene	146	4.159	4.158	(0.979)	255609	40.0000	36
* 12 1,4-Dichlorobenzene-d4	152	4.250	4.254	(1.000)	190187	40.0000	
13 1,4-Dichlorobenzene	146	4.277	4.281	(1.006)	267390	40.0000	37
117 2-Ethyl-1-hexanol	57	4.400	4.398	(1.035)	142203	40.0000	36
15 Benzyl Alcohol	108	4.490	4.489	(1.057)	150445	40.0000	36
16 1,2-Dichlorobenzene	146	4.522	4.521	(1.064)	240065	40.0000	36
17 2-Methylphenol	108	4.677	4.676	(1.101)	199563	40.0000	36
18 2,2'-oxybis(1-Chloropropane)	45	4.709	4.714	(1.108)	124360	40.0000	36
99 Acetophenone	105	4.880	4.879	(1.148)	371439	40.0000	38

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
	19 N-Nitroso-di-n-propylamine	70	4.907	4.906	(1.155)	212581	40.0000	39
	20 4-Methylphenol	108	4.918	4.917	(1.157)	231129	40.0000	37
	21 Hexachloroethane	117	5.014	5.013	(1.180)	106002	40.0000	37
$	22 Nitrobenzene-d5	82	5.083	5.082	(0.850)	324197	40.0000	37
	23 Nitrobenzene	77	5.110	5.109	(0.854)	317959	40.0000	36
	24 Isophorone	82	5.441	5.440	(0.910)	564101	40.0000	38
	25 2-Nitrophenol	139	5.532	5.531	(0.925)	132286	40.0000	36
	26 2,4-Dimethylphenol	107	5.623	5.622	(0.940)	188664	40.0000	27
	27 bis(2-Chloroethoxy)methane	93	5.740	5.739	(0.960)	276256	40.0000	36
	28 Benzoic Acid	105	5.815	5.782	(0.972)	231374	40.0000	42
	29 2,4-Dichlorophenol	162	5.831	5.830	(0.975)	240157	40.0000	37
	30 1,2,4-Trichlorobenzene	180	5.927	5.926	(0.991)	268612	40.0000	36
*	31 Naphthalene-d8	136	5.981	5.980	(1.000)	734358	40.0000	
	32 Naphthalene	128	6.002	6.001	(1.004)	737977	40.0000	37
	115 alpha-Terpineol	59	6.050	6.049	(1.012)	127859	40.0000	37
	33 4-Chloroaniline	127	6.088	6.087	(1.018)	300136	40.0000	36
	34 Hexachlorobutadiene	225	6.179	6.177	(1.033)	202389	40.0000	36
	102 Caprolactam	113	6.488	6.466	(1.085)	89612	40.0000	40
	35 4-Chloro-3-Methylphenol	107	6.649	6.642	(1.112)	287226	40.0000	39
	36 2-Methylnaphthalene	142	6.755	6.754	(1.129)	558736	40.0000	37
	114 1-Methylnaphthalene	142	6.852	6.851	(1.146)	514140	40.0000	37
	38 Hexachlorocyclopentadiene	237	6.932	6.931	(0.895)	147207	40.0000	23
	112 1,2,4,5-Tetrachlorobenzene	216	6.932	6.931	(0.895)	379664	40.0000	34
	39 2,4,6-Trichlorophenol	196	7.049	7.048	(0.910)	216968	40.0000	34
	40 2,4,5-Trichlorophenol	196	7.081	7.080	(0.914)	234302	40.0000	35
$	41 2-Fluorobiphenyl	172	7.135	7.134	(0.921)	751353	40.0000	35
	98 1,1'-Biphenyl	154	7.220	7.219	(0.932)	866423	40.0000	35
	42 2-Chloronaphthalene	162	7.231	7.230	(0.934)	646799	40.0000	35
	43 2-Nitroaniline	65	7.338	7.331	(0.948)	222495	40.0000	35
	44 Dimethylphthalate	163	7.530	7.524	(0.972)	821025	40.0000	36
	45 2,6-Dinitrotoluene	165	7.567	7.566	(0.977)	176807	40.0000	36
	46 Acenaphthylene	152	7.610	7.609	(0.983)	990669	40.0000	35
	47 3-Nitroaniline	138	7.717	7.711	(0.997)	170833	40.0000	35
*	48 Acenaphthene-d10	164	7.744	7.743	(1.000)	639532	40.0000	
	49 Acenaphthene	153	7.770	7.769	(1.003)	609672	40.0000	34
	50 2,4-Dinitrophenol	184	7.803	7.801	(1.008)	133959	40.0000	36
	51 4-Nitrophenol	109	7.877	7.876	(1.017)	182869	40.0000	36
	53 2,4-Dinitrotoluene	165	7.925	7.919	(1.023)	295424	40.0000	37
	52 Dibenzofuran	168	7.925	7.924	(1.023)	1032818	40.0000	36
	110 2,3,4,6-Tetrachlorophenol	232	8.043	8.036	(1.039)	255599	40.0000	35
	54 Diethylphthalate	149	8.150	8.149	(1.052)	808064	40.0000	36
	56 4-Chlorophenyl-phenylether	204	8.230	8.229	(1.063)	522500	40.0000	36
	55 Fluorene	166	8.225	8.223	(1.062)	901041	40.0000	36
	57 4-Nitroaniline	138	8.257	8.250	(1.066)	171290	40.0000	36
	58 4,6-Dinitro-2-methylphenol	198	8.278	8.272	(0.918)	192238	40.0000	35
	59 N-Nitrosodiphenylamine	169	8.337	8.330	(0.924)	737657	40.0000	36
	97 Azobenzene	77	8.363	8.362	(0.927)	896946	40.0000	36
$	60 2,4,6-Tribromophenol	330	8.433	8.432	(0.935)	125788	40.0000	36
	61 4-Bromophenyl-phenylether	248	8.647	8.645	(0.959)	292484	40.0000	35
	62 Hexachlorobenzene	284	8.700	8.699	(0.964)	305533	40.0000	35
	100 Atrazine	200	8.796	8.790	(0.975)	266647	40.0000	47
	63 Pentachlorophenol	266	8.866	8.865	(0.983)	223893	40.0000	34
	111 Pentachloronitrobenzene	237	8.882	8.881	(0.985)	178529	40.0000	36
*	64 Phenanthrene-d10	188	9.021	9.019	(1.000)	1423736	40.0000	

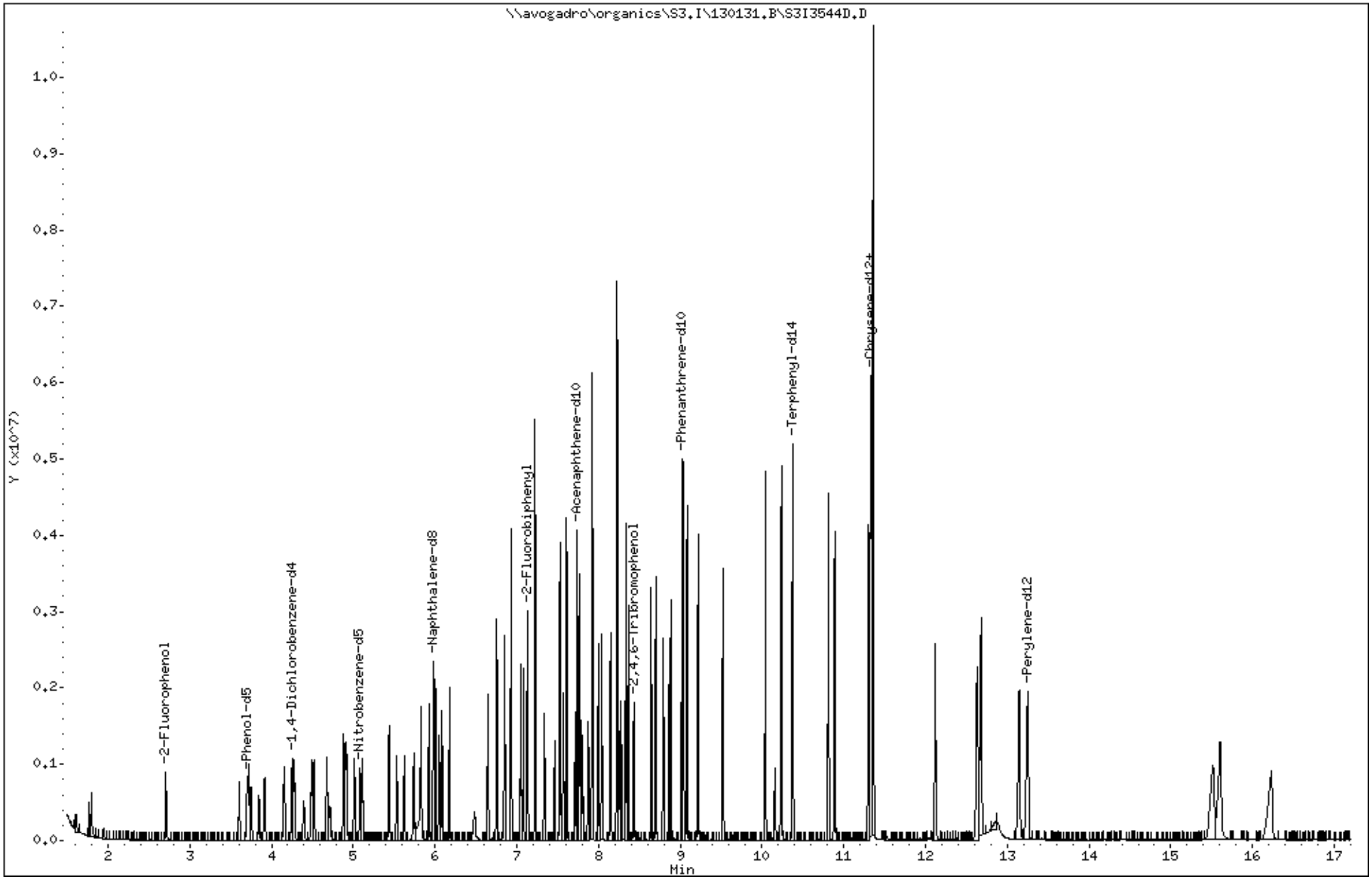
Data File: \\avogadro\organics\S3.I\130131.B\S3I3544D.D
Report Date: 06-Feb-2013 15:39

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
65	Phenanthrene	178	9.042	9.041	(1.002)	1270503	40.0000	36
66	Anthracene	178	9.085	9.078	(1.007)	1263306	40.0000	36
67	Carbazole	167	9.218	9.217	(1.022)	1111630	40.0000	36
68	Di-n-butylphthalate	149	9.517	9.516	(1.055)	1388760	40.0000	37
69	Fluoranthene	202	10.041	10.040	(1.113)	1627037	40.0000	37
70	Benzidine	184	10.153	10.152	(0.887)	256148	40.0000	25(H)
71	Pyrene	202	10.239	10.232	(0.894)	1612681	40.0000	36(H)
$ 72	Terphenyl-d14	244	10.377	10.371	(0.906)	1253928	40.0000	36(H)
73	Butylbenzylphthalate	149	10.810	10.804	(0.944)	653722	40.0000	36(H)
74	3,3'-Dichlorobenzidine	252	11.302	11.290	(0.987)	634169	40.0000	36(H)
78	bis(2-Ethylhexyl)phthalate	149	11.360	11.349	(0.992)	1094030	40.0000	38(H)
75	Benzo(a)anthracene	228	11.323	11.349	(0.989)	1876239	40.0000	35(H)
* 76	Chrysene-d12	240	11.339	11.327	(1.000)	2063518	40.0000	(H)
77	Chrysene	228	11.360	11.349	(0.992)	1840710	40.0000	38(H)
79	Di-n-octylphthalate	149	12.119	12.102	(0.906)	1407528	40.0000	40(H)
80	Benzo(b)fluoranthene	252	12.637	12.663	(0.945)	1606118	40.0000	38(H)
81	Benzo(k)fluoranthene	252	12.680	12.663	(0.948)	1692042	40.0000	39(H)
82	Benzo(a)pyrene	252	13.150	13.128	(0.983)	1398627	40.0000	36(H)
* 83	Perylene-d12	264	13.252	13.234	(1.000)	1327817	40.0000	(H)
84	Indeno(1,2,3-cd)pyrene	276	15.517	15.574	(1.160)	1409032	40.0000	38(QH)
85	Dibenzo(a,h)anthracene	278	15.607	15.569	(1.167)	1366874	40.0000	38(H)
86	Benzo(g,h,i)perylene	276	16.227	16.194	(1.213)	1396611	40.0000	38(H)

QC Flag Legend

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

Data File: \\avogadro\organics\S3.I\130131.B\S3I3544D.D
Date : 31-JAN-2013 18:55
Client ID: SSTD0403N
Instrument: S3.i
Sample Info: SSTD0403N,SSTD0403N
Volume Injected (uL): 1.0
Operator: PK SRC: PK
Column phase: Rxi-5Sil MS
Column diameter: 0.25



Data File: \\avogadro\organics\S3.I\130131.B\S3I3545D.D
Report Date: 06-Feb-2013 15:40

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\130131.B\S3I3545D.D
Lab Smp Id: SSTD0103N Client Smp ID: SSTD0103N
Inj Date : 31-JAN-2013 19:22
Operator : PK   SRC: PK Inst ID: S3.i
Smp Info : SSTD0103N,SSTD0103N
Misc Info : 1,2
Comment   :
Method   : \\avogadro\organics\S3.I\130131.B\s3_8270C_N.m
Meth Date : 06-Feb-2013 15:39 pkaczorows Quant Type: ISTD
Cal Date : 31-JAN-2013 19:49 Cal File: S3I3546D.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

			QUANT SIG					AMOUNTS CAL-AMT	AMOUNTS ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
$	109	1,4-Dioxane-d8	96	1.600	1.599	(0.377)	12042	10.0000	9(a)
	108	1,4-Dioxane	58	1.616	1.615	(0.380)	7069	10.0000	10(Q)
	1	N-Nitrosodimethylamine	74	1.771	1.770	(0.417)	26709	10.0000	10
	2	Pyridine	79	1.798	1.797	(0.423)	45363	10.0000	9(a)
$	3	2-Fluorophenol	112	2.711	2.710	(0.638)	44814	10.0000	9(a)
	101	Benzaldehyde	77	3.603	3.608	(0.848)	49845	10.0000	12
$	5	Phenol-d5	99	3.694	3.699	(0.869)	61926	10.0000	9(a)
	6	Phenol	94	3.710	3.720	(0.873)	68356	10.0000	10
	7	Aniline	66	3.710	3.720	(0.873)	44977	10.0000	9(a)
	8	bis(2-Chloroethyl)Ether	63	3.844	3.843	(0.904)	30948	10.0000	9(a)
	10	2-Chlorophenol	128	3.913	3.918	(0.921)	51836	10.0000	10
	11	1,3-Dichlorobenzene	146	4.159	4.158	(0.979)	62609	10.0000	10
*	12	1,4-Dichlorobenzene-d4	152	4.250	4.254	(1.000)	166852	40.0000	
	13	1,4-Dichlorobenzene	146	4.276	4.281	(1.006)	61591	10.0000	10
	117	2-Ethyl-1-hexanol	57	4.394	4.398	(1.034)	33184	10.0000	10
	15	Benzyl Alcohol	108	4.485	4.489	(1.055)	36651	10.0000	10
	16	1,2-Dichlorobenzene	146	4.522	4.521	(1.064)	58710	10.0000	10
	17	2-Methylphenol	108	4.672	4.676	(1.099)	46843	10.0000	10
	18	2,2'-oxybis(1-Chloropropane)	45	4.714	4.714	(1.109)	30318	10.0000	10
	99	Acetophenone	105	4.875	4.879	(1.147)	82028	10.0000	10

Data File: \\avogadro\organics\S3.I\130131.B\S3I3545D.D
Report Date: 06-Feb-2013 15:40

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
	19 N-Nitroso-di-n-propylamine	70	4.901	4.906	(1.153)	48285	10.0000	10
	20 4-Methylphenol	108	4.907	4.917	(1.155)	48257	10.0000	9(a)
	21 Hexachloroethane	117	5.014	5.013	(1.180)	24010	10.0000	9(a)
$	22 Nitrobenzene-d5	82	5.083	5.082	(0.850)	76112	10.0000	10
	23 Nitrobenzene	77	5.104	5.109	(0.854)	78923	10.0000	10
	24 Isophorone	82	5.436	5.440	(0.909)	130724	10.0000	10
	25 2-Nitrophenol	139	5.532	5.531	(0.925)	30821	10.0000	9(a)
	26 2,4-Dimethylphenol	107	5.623	5.622	(0.940)	50882	10.0000	8(a)
	27 bis(2-Chloroethoxy)methane	93	5.735	5.739	(0.959)	66935	10.0000	10
	28 Benzoic Acid	105	5.740	5.782	(0.960)	49442	10.0000	10(a)
	29 2,4-Dichlorophenol	162	5.826	5.830	(0.974)	53078	10.0000	9(a)
	30 1,2,4-Trichlorobenzene	180	5.922	5.926	(0.990)	62656	10.0000	9(a)
*	31 Naphthalene-d8	136	5.981	5.980	(1.000)	658507	40.0000	
	32 Naphthalene	128	6.002	6.001	(1.004)	169437	10.0000	9(a)
	115 alpha-Terpineol	59	6.045	6.049	(1.011)	29967	10.0000	10
	33 4-Chloroaniline	127	6.082	6.087	(1.017)	68749	10.0000	9(a)
	34 Hexachlorobutadiene	225	6.178	6.177	(1.033)	48838	10.0000	10
	102 Caprolactam	113	6.445	6.466	(1.078)	20556	10.0000	10
	35 4-Chloro-3-Methylphenol	107	6.638	6.642	(1.110)	62507	10.0000	9(a)
	36 2-Methylnaphthalene	142	6.755	6.754	(1.129)	124416	10.0000	9(a)
	114 1-Methylnaphthalene	142	6.851	6.851	(1.146)	116546	10.0000	9(a)
	38 Hexachlorocyclopentadiene	237	6.931	6.931	(0.896)	44041	10.0000	8(a)
	112 1,2,4,5-Tetrachlorobenzene	216	6.926	6.931	(0.895)	84977	10.0000	9(a)
	39 2,4,6-Trichlorophenol	196	7.044	7.048	(0.910)	49930	10.0000	10
	40 2,4,5-Trichlorophenol	196	7.076	7.080	(0.914)	51746	10.0000	9(a)
$	41 2-Fluorobiphenyl	172	7.129	7.134	(0.921)	169782	10.0000	10
	98 1,1'-Biphenyl	154	7.220	7.219	(0.933)	187216	10.0000	9(a)
	42 2-Chloronaphthalene	162	7.225	7.230	(0.934)	133687	10.0000	9(a)
	43 2-Nitroaniline	65	7.332	7.331	(0.948)	51888	10.0000	10(a)
	44 Dimethylphthalate	163	7.519	7.524	(0.972)	179107	10.0000	10
	45 2,6-Dinitrotoluene	165	7.562	7.566	(0.977)	39474	10.0000	10
	46 Acenaphthylene	152	7.605	7.609	(0.983)	217002	10.0000	9(a)
	47 3-Nitroaniline	138	7.706	7.711	(0.996)	37059	10.0000	9(a)
*	48 Acenaphthene-d10	164	7.738	7.743	(1.000)	523513	40.0000	
	49 Acenaphthene	153	7.765	7.769	(1.003)	133961	10.0000	9(a)
	50 2,4-Dinitrophenol	184	7.797	7.801	(1.008)	23111	10.0000	8(a)
	51 4-Nitrophenol	109	7.866	7.876	(1.017)	40004	10.0000	10(a)
	53 2,4-Dinitrotoluene	165	7.914	7.919	(1.023)	58595	10.0000	9(a)
	52 Dibenzofuran	168	7.920	7.924	(1.023)	217256	10.0000	9(a)
	110 2,3,4,6-Tetrachlorophenol	232	8.037	8.036	(1.039)	57551	10.0000	10
	54 Diethylphthalate	149	8.139	8.149	(1.052)	177936	10.0000	10
	56 4-Chlorophenyl-phenylether	204	8.230	8.229	(1.064)	102132	10.0000	8(a)
	55 Fluorene	166	8.219	8.223	(1.062)	175575	10.0000	9(a)
	57 4-Nitroaniline	138	8.240	8.250	(1.065)	37537	10.0000	10(a)
	58 4,6-Dinitro-2-methylphenol	198	8.267	8.272	(0.916)	40202	10.0000	9(a)
	59 N-Nitrosodiphenylamine	169	8.331	8.330	(0.924)	159594	10.0000	9(a)
	97 Azobenzene	77	8.363	8.362	(0.927)	205205	10.0000	10
$	60 2,4,6-Tribromophenol	330	8.427	8.432	(0.934)	25519	10.0000	9(a)
	61 4-Bromophenyl-phenylether	248	8.641	8.645	(0.958)	61735	10.0000	9(a)
	62 Hexachlorobenzene	284	8.694	8.699	(0.964)	66083	10.0000	9(a)
	100 Atrazine	200	8.785	8.790	(0.974)	47615	10.0000	10
	63 Pentachlorophenol	266	8.860	8.865	(0.982)	45119	10.0000	8(a)
	111 Pentachloronitrobenzene	237	8.876	8.881	(0.984)	38169	10.0000	9(a)
*	64 Phenanthrene-d10	188	9.020	9.019	(1.000)	1160528	40.0000	

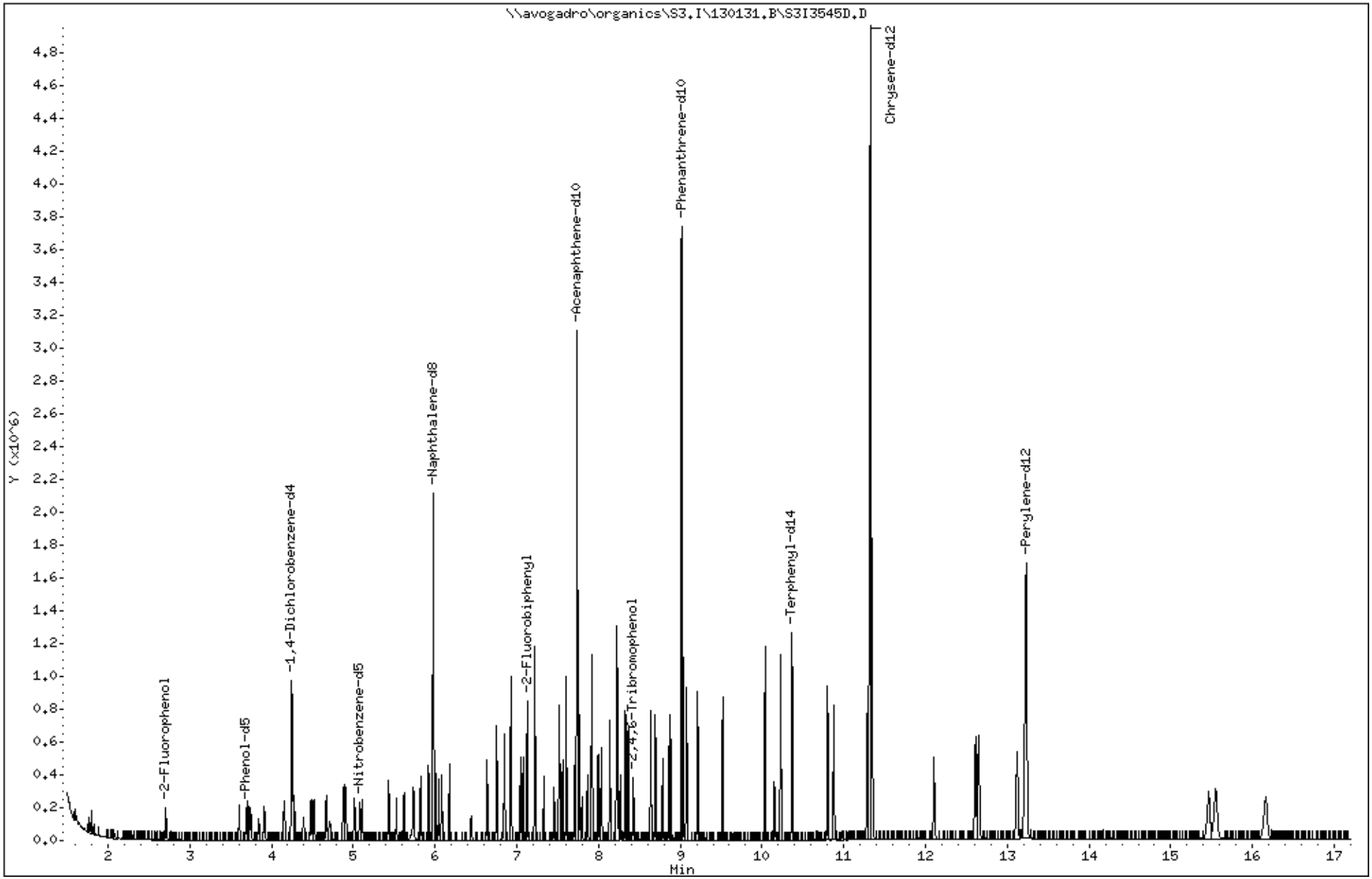
Data File: \\avogadro\organics\S3.I\130131.B\S3I3545D.D
Report Date: 06-Feb-2013 15:40

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
65	Phenanthrene	178	9.036	9.041	(1.002)	279643	10.0000	10
66	Anthracene	178	9.079	9.078	(1.007)	276584	10.0000	10
67	Carbazole	167	9.213	9.217	(1.021)	239960	10.0000	9(a)
68	Di-n-butylphthalate	149	9.517	9.516	(1.055)	296871	10.0000	10
69	Fluoranthene	202	10.035	10.040	(1.113)	357172	10.0000	10(H)
70	Benzidine	184	10.147	10.152	(0.886)	108976	10.0000	14(aH)
71	Pyrene	202	10.228	10.232	(0.893)	359496	10.0000	10(H)
$ 72	Terphenyl-d14	244	10.366	10.371	(0.905)	269719	10.0000	10(H)
73	Butylbenzylphthalate	149	10.799	10.804	(0.943)	132883	10.0000	10(H)
74	3,3'-Dichlorobenzidine	252	11.285	11.290	(0.986)	134514	10.0000	10(H)
78	bis(2-Ethylhexyl)phthalate	149	11.349	11.349	(0.991)	199496	10.0000	9(aH)
75	Benzo(a)anthracene	228	11.307	11.349	(0.987)	414765	10.0000	10(H)
* 76	Chrysene-d12	240	11.323	11.327	(1.000)	1556171	40.0000	(H)
77	Chrysene	228	11.344	11.349	(0.991)	369755	10.0000	10(H)
79	Di-n-octylphthalate	149	12.103	12.102	(0.904)	292829	10.0000	10(H)
80	Benzo(b)fluoranthene	252	12.610	12.663	(0.942)	369439	10.0000	10(H)
81	Benzo(k)fluoranthene	252	12.653	12.663	(0.945)	379200	10.0000	10(H)
82	Benzo(a)pyrene	252	13.118	13.128	(0.980)	346370	10.0000	10(H)
* 83	Perylene-d12	264	13.230	13.234	(1.000)	1115143	40.0000	(H)
84	Indeno(1,2,3-cd)pyrene	276	15.463	15.574	(1.155)	318756	10.0000	10(QH)
85	Dibenzo(a,h)anthracene	278	15.548	15.569	(1.161)	310329	10.0000	10(H)
86	Benzo(g,h,i)perylene	276	16.163	16.194	(1.207)	324490	10.0000	11(H)

QC Flag Legend

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

Data File: \\avogadro\organics\S3.I\130131.B\S3I3545D.D
Date : 31-JAN-2013 19:22
Client ID: SSTD0103N
Instrument: S3.i
Sample Info: SSTD0103N,SSTD0103N
Volume Injected (uL): 1.0
Operator: PK SRC: PK
Column phase: Rxi-5Sil MS
Column diameter: 0.25



Data File: \\avogadro\organics\S3.I\130131.B\S3I3546D.D
Report Date: 06-Feb-2013 15:40

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\130131.B\S3I3546D.D
Lab Smp Id: SSTD0603N Client Smp ID: SSTD0603N
Inj Date : 31-JAN-2013 19:49
Operator : PK   SRC: PK Inst ID: S3.i
Smp Info : SSTD0603N,SSTD0603N
Misc Info : 1,5
Comment   :
Method   : \\avogadro\organics\S3.I\130131.B\s3_8270C_N.m
Meth Date : 06-Feb-2013 15:39 pkaczorows Quant Type: ISTD
Cal Date : 31-JAN-2013 19:49 Cal File: S3I3546D.D
Als bottle: 6 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

			QUANT SIG					AMOUNTS CAL-AMT	AMOUNTS ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
$	109	1,4-Dioxane-d8	96	1.602	1.599	(0.377)	83950	60.0000	66
	108	1,4-Dioxane	58	1.618	1.615	(0.381)	47958	60.0000	66
	1	N-Nitrosodimethylamine	74	1.773	1.770	(0.417)	181781	60.0000	65
	2	Pyridine	79	1.800	1.797	(0.423)	302209	60.0000	63
$	3	2-Fluorophenol	112	2.713	2.710	(0.638)	301393	60.0000	64
	101	Benzaldehyde	77	3.611	3.608	(0.849)	234025	60.0000	58
$	5	Phenol-d5	99	3.712	3.699	(0.873)	431242	60.0000	64
	6	Phenol	94	3.734	3.720	(0.878)	475694	60.0000	66
	7	Aniline	66	3.734	3.720	(0.878)	330125	60.0000	68
	8	bis(2-Chloroethyl)Ether	63	3.851	3.843	(0.906)	201746	60.0000	62
	10	2-Chlorophenol	128	3.926	3.918	(0.923)	324250	60.0000	62
	11	1,3-Dichlorobenzene	146	4.161	4.158	(0.979)	385689	60.0000	62
*	12	1,4-Dichlorobenzene-d4	152	4.252	4.254	(1.000)	166486	40.0000	
	13	1,4-Dichlorobenzene	146	4.284	4.281	(1.008)	404511	60.0000	64
	117	2-Ethyl-1-hexanol	57	4.407	4.398	(1.036)	214754	60.0000	62
	15	Benzyl Alcohol	108	4.503	4.489	(1.059)	231599	60.0000	63
	16	1,2-Dichlorobenzene	146	4.524	4.521	(1.064)	368495	60.0000	64
	17	2-Methylphenol	108	4.684	4.676	(1.102)	305489	60.0000	63
	18	2,2'-oxybis(1-Chloropropane)	45	4.722	4.714	(1.111)	183608	60.0000	60
	99	Acetophenone	105	4.887	4.879	(1.150)	548391	60.0000	64

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
	19 N-Nitroso-di-n-propylamine	70	4.914	4.906	(1.156)	286843	60.0000	60
	20 4-Methylphenol	108	4.930	4.917	(1.160)	354235	60.0000	66
	21 Hexachloroethane	117	5.016	5.013	(1.180)	160746	60.0000	64
$	22 Nitrobenzene-d5	82	5.090	5.082	(0.851)	484918	60.0000	64
	23 Nitrobenzene	77	5.117	5.109	(0.855)	480513	60.0000	63
	24 Isophorone	82	5.448	5.440	(0.911)	804186	60.0000	63
	25 2-Nitrophenol	139	5.534	5.531	(0.925)	198357	60.0000	63
	26 2,4-Dimethylphenol	107	5.630	5.622	(0.941)	425614	60.0000	70
	27 bis(2-Chloroethoxy)methane	93	5.742	5.739	(0.960)	413115	60.0000	63
	28 Benzoic Acid	105	5.838	5.782	(0.976)	324074	60.0000	68(Q)
	29 2,4-Dichlorophenol	162	5.838	5.830	(0.976)	374098	60.0000	67
	30 1,2,4-Trichlorobenzene	180	5.929	5.926	(0.991)	422847	60.0000	66
*	31 Naphthalene-d8	136	5.983	5.980	(1.000)	635012	40.0000	
	32 Naphthalene	128	6.009	6.001	(1.004)	1116829	60.0000	65
	115 alpha-Terpineol	59	6.052	6.049	(1.012)	192137	60.0000	65
	33 4-Chloroaniline	127	6.095	6.087	(1.019)	455540	60.0000	64
	34 Hexachlorobutadiene	225	6.180	6.177	(1.033)	314027	60.0000	66
	102 Caprolactam	113	6.517	6.466	(1.089)	115487	60.0000	60
	35 4-Chloro-3-Methylphenol	107	6.656	6.642	(1.113)	417495	60.0000	65
	36 2-Methylnaphthalene	142	6.757	6.754	(1.129)	868676	60.0000	67
	114 1-Methylnaphthalene	142	6.859	6.851	(1.146)	795156	60.0000	66
	38 Hexachlorocyclopentadiene	237	6.934	6.931	(0.895)	335718	60.0000	68
	112 1,2,4,5-Tetrachlorobenzene	216	6.934	6.931	(0.895)	630710	60.0000	71
	39 2,4,6-Trichlorophenol	196	7.051	7.048	(0.910)	337368	60.0000	68
	40 2,4,5-Trichlorophenol	196	7.088	7.080	(0.915)	359323	60.0000	68
$	41 2-Fluorobiphenyl	172	7.137	7.134	(0.921)	1142588	60.0000	67
	98 1,1'-Biphenyl	154	7.227	7.219	(0.933)	1371558	60.0000	70
	42 2-Chloronaphthalene	162	7.233	7.230	(0.934)	1025727	60.0000	71
	43 2-Nitroaniline	65	7.340	7.331	(0.948)	327319	60.0000	65
	44 Dimethylphthalate	163	7.532	7.524	(0.972)	1241935	60.0000	69
	45 2,6-Dinitrotoluene	165	7.575	7.566	(0.978)	258737	60.0000	67
	46 Acenaphthylene	152	7.617	7.609	(0.983)	1483527	60.0000	68
	47 3-Nitroaniline	138	7.724	7.711	(0.997)	245727	60.0000	64
*	48 Acenaphthene-d10	164	7.746	7.743	(1.000)	502167	40.0000	
	49 Acenaphthene	153	7.778	7.769	(1.004)	944523	60.0000	68
	50 2,4-Dinitrophenol	184	7.810	7.801	(1.008)	207652	60.0000	71
	51 4-Nitrophenol	109	7.884	7.876	(1.018)	264459	60.0000	66
	53 2,4-Dinitrotoluene	165	7.932	7.919	(1.024)	469183	60.0000	75
	52 Dibenzofuran	168	7.927	7.924	(1.023)	1591054	60.0000	71
	110 2,3,4,6-Tetrachlorophenol	232	8.045	8.036	(1.039)	392098	60.0000	69
	54 Diethylphthalate	149	8.152	8.149	(1.052)	1187898	60.0000	67
	56 4-Chlorophenyl-phenylether	204	8.232	8.229	(1.063)	870201	60.0000	76
	55 Fluorene	166	8.226	8.223	(1.062)	1452438	60.0000	75
	57 4-Nitroaniline	138	8.264	8.250	(1.067)	240457	60.0000	65
	58 4,6-Dinitro-2-methylphenol	198	8.285	8.272	(0.918)	290408	60.0000	68
	59 N-Nitrosodiphenylamine	169	8.338	8.330	(0.924)	1112536	60.0000	68
	97 Azobenzene	77	8.371	8.362	(0.928)	1326605	60.0000	67
$	60 2,4,6-Tribromophenol	330	8.435	8.432	(0.935)	197273	60.0000	72
	61 4-Bromophenyl-phenylether	248	8.648	8.645	(0.959)	453784	60.0000	69
	62 Hexachlorobenzene	284	8.702	8.699	(0.964)	479774	60.0000	70
	100 Atrazine	200	8.798	8.790	(0.975)	230125	60.0000	52
	63 Pentachlorophenol	266	8.867	8.865	(0.983)	360312	60.0000	70
	111 Pentachloronitrobenzene	237	8.883	8.881	(0.985)	276912	60.0000	70
*	64 Phenanthrene-d10	188	9.022	9.019	(1.000)	1121755	40.0000	

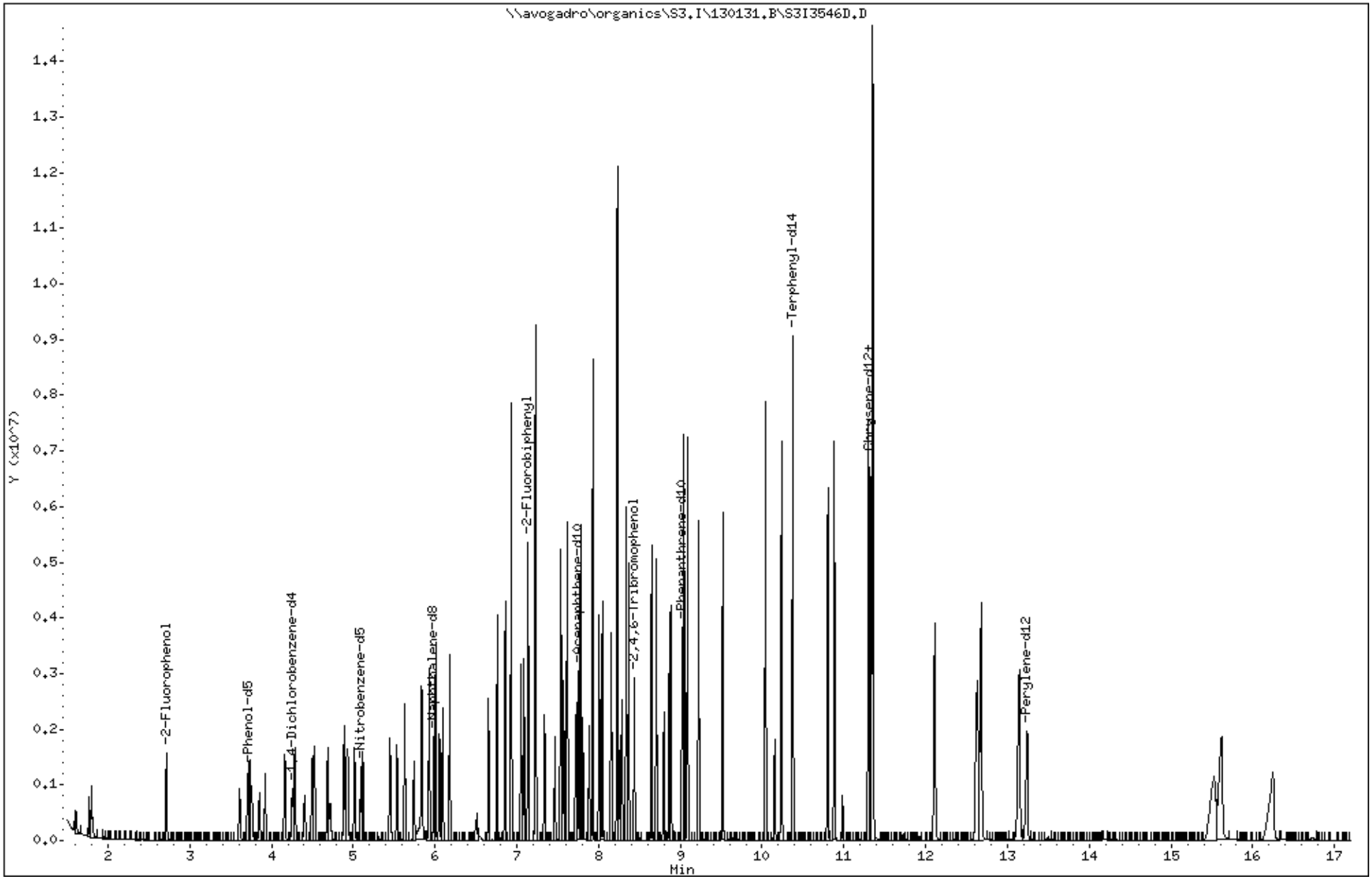
Data File: \\avogadro\organics\S3.I\130131.B\S3I3546D.D
Report Date: 06-Feb-2013 15:40

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
65	Phenanthrene	178	9.044	9.041	(1.002)	1881601	60.0000	68
66	Anthracene	178	9.086	9.078	(1.007)	1890567	60.0000	69
67	Carbazole	167	9.220	9.217	(1.022)	1716926	60.0000	70
68	Di-n-butylphthalate	149	9.519	9.516	(1.055)	2021534	60.0000	69
69	Fluoranthene	202	10.043	10.040	(1.113)	2363860	60.0000	68(H)
70	Benzidine	184	10.155	10.152	(0.886)	491484	60.0000	56(H)
71	Pyrene	202	10.235	10.232	(0.893)	2391446	60.0000	62(H)
$ 72	Terphenyl-d14	244	10.374	10.371	(0.905)	1898153	60.0000	64(H)
73	Butylbenzylphthalate	149	10.807	10.804	(0.943)	1027912	60.0000	66(H)
74	3,3'-Dichlorobenzidine	252	11.298	11.290	(0.986)	1031465	60.0000	68(H)
78	bis(2-Ethylhexyl)phthalate	149	11.351	11.349	(0.990)	1758734	60.0000	71(H)
75	Benzo(a)anthracene	228	11.314	11.349	(0.987)	2913916	60.0000	63(H)
* 76	Chrysene-d12	240	11.330	11.327	(1.000)	1778954	40.0000	(H)
77	Chrysene	228	11.357	11.349	(0.991)	2772646	60.0000	66(H)
79	Di-n-octylphthalate	149	12.110	12.102	(0.906)	2203518	60.0000	63(H)
80	Benzo(b)fluoranthene	252	12.634	12.663	(0.945)	2525538	60.0000	60(H)
81	Benzo(k)fluoranthene	252	12.676	12.663	(0.948)	2643641	60.0000	62(H)
82	Benzo(a)pyrene	252	13.146	13.128	(0.983)	2369247	60.0000	61(H)
* 83	Perylene-d12	264	13.237	13.234	(1.000)	1307393	40.0000	(H)
84	Indeno(1,2,3-cd)pyrene	276	15.524	15.574	(1.161)	2178414	60.0000	60(H)
85	Dibenzo(a,h)anthracene	278	15.620	15.569	(1.168)	2151967	60.0000	61(H)
86	Benzo(g,h,i)perylene	276	16.250	16.194	(1.215)	2090626	60.0000	58(H)

QC Flag Legend

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

Data File: \\avogadro\organics\S3.I\130131.B\S3I3546D.D
Date : 31-JAN-2013 19:49
Client ID: SSTD0603N
Instrument: S3.i
Sample Info: SSTD0603N,SSTD0603N
Volume Injected (uL): 1.0
Operator: PK SRC: PK
Column phase: Rxi-5Sil MS
Column diameter: 0.25



7E - FORM VII SV-1

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Instrument ID: S3 Calibration Date: 03/04/2013 Time: 11:22

Lab File ID: S3I3821.D Init. Calib. Date(s): 01/31/2013 01/31/2013

EPA Sample No.(SSTD020##) SSTD0253B Init. Calib. Time(s): 17:13 19:49

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

COMPOUND	RRF	RRF025	MIN RRF	%D	MAX %D
Phenol	1.723	1.680	0.010	-2.5	20.0
Bis(2-chloroethyl)ether	0.783	0.677	0.010	-13.6	20.0
2-Chlorophenol	1.259	1.244	0.010	-1.2	20.0
1,3-Dichlorobenzene	1.482	1.427	0.010	-3.7	20.0
1,4-Dichlorobenzene	1.521	1.475	0.010	-3.1	20.0
1,2-Dichlorobenzene	1.392	1.384	0.010	-0.6	20.0
2,2´-oxybis(1-Chloropropane)	0.729	0.589	0.010	-19.3	20.0
N-Nitroso-di-n-propylamine	1.140	0.972	0.050	-14.7	20.0
Hexachloroethane	0.606	0.550	0.010	-9.3	20.0
Nitrobenzene	0.483	0.400	0.010	-17.0	20.0
Isophorone	0.803	0.684	0.010	-14.8	20.0
2-Nitrophenol	0.197	0.191	0.010	-3.0	20.0
2,4-Dimethylphenol	0.381	0.394	0.010	3.4	20.0
2,4-Dichlorophenol	0.350	0.327	0.010	-6.5	20.0
1,2,4-Trichlorobenzene	0.404	0.385	0.010	-4.6	20.0
Naphthalene	1.085	1.044	0.010	-3.8	20.0
Bis(2-chloroethoxy)methane	0.415	0.369	0.010	-11.2	20.0
Hexachlorobutadiene	0.302	0.270	0.010	-10.3	20.0
4-Chloro-3-methylphenol	0.402	0.368	0.010	-8.4	20.0
Hexachlorocyclopentadiene	0.396	0.410	0.050	3.6	20.0
2,4,6-Trichlorophenol	0.397	0.394	0.010	-0.8	20.0
2-Chloronaphthalene	1.149	1.122	0.010	-2.4	20.0
Dimethylphthalate	1.435	1.368	0.010	-4.7	20.0
Acenaphthylene	1.748	1.828	0.010	4.6	20.0
2,6-Dinitrotoluene	0.307	0.312	0.010	1.4	20.0
Acenaphthene	1.104	1.102	0.010	-0.2	20.0
2,4-Dinitrophenol	0.232	0.141	0.050	-39.2	20.0
4-Nitrophenol	0.319	0.202	0.050	-36.5	20.0
2,4-Dinitrotoluene	0.500	0.469	0.010	-6.1	20.0
Diethylphthalate	1.411	1.354	0.010	-4.0	20.0
4-Chlorophenyl-phenylether	0.908	0.803	0.010	-11.6	20.0
Fluorene	1.546	1.495	0.010	-3.3	20.0
4,6-Dinitro-2-methylphenol	0.153	0.110	0.010	-27.9	20.0
N-Nitrosodiphenylamine	0.581	0.558	0.010	-3.9	20.0
4-Bromophenyl-phenylether	0.233	0.226	0.010	-3.2	20.0
Hexachlorobenzene	0.245	0.234	0.010	-4.6	20.0
Pentachlorophenol	0.184	0.123	0.010	-32.9	20.0
Phenanthrene	0.984	0.989	0.010	0.5	20.0
Anthracene	0.982	1.021	0.010	4.0	20.0
Di-n-butylphthalate	1.051	1.104	0.010	5.1	20.0
Fluoranthene	1.235	1.288	0.010	4.3	20.0
Pyrene	0.874	0.954	0.010	9.2	20.0

7F - FORM VII SV-2

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Instrument ID: S3 Calibration Date: 03/04/2013 Time: 11:22

Lab File ID: S3I3821.D Init. Calib. Date(s): 01/31/2013 01/31/2013

EPA Sample No.(SSTD020##) SSTD0253B Init. Calib. Time(s): 17:13 19:49

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

COMPOUND	RRF	RRF025	MIN RRF	%D	MAX %D
Butylbenzylphthalate	0.352	0.386	0.010	9.9	20.0
3,3´-Dichlorobenzidine	0.339	0.382	0.010	12.7	20.0
Benzo(a)anthracene	1.037	1.059	0.010	2.1	20.0
Chrysene	0.949	0.953	0.010	0.4	20.0
Bis(2-ethylhexyl)phthalate	0.557	0.559	0.010	0.4	20.0
Di-n-octylphthalate	1.063	1.171	0.010	10.2	20.0
Benzo(b)fluoranthene	1.277	1.214	0.010	-5.0	20.0
Benzo(k)fluoranthene	1.310	1.292	0.010	-1.4	20.0
Benzo(a)pyrene	1.180	1.159	0.010	-1.8	20.0
Indeno(1,2,3-cd)pyrene	1.105	1.082	0.010	-2.0	20.0
Dibenzo(a,h)anthracene	1.079	1.016	0.010	-5.9	20.0
Benzo(g,h,i)perylene	1.094	1.082	0.010	-1.1	20.0

7G - FORM VII SV-3

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Instrument ID: S3 Calibration Date: 03/04/2013 Time: 11:22

Lab File ID: S3I3821.D Init. Calib. Date(s): 01/31/2013 01/31/2013

EPA Sample No.(SSTD020##) SSTD0253B Init. Calib. Time(s): 17:13 19:49

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

COMPOUND	$\overline{RRF}$	RRF025	MIN RRF	%D	MAX %D
Nitrobenzene-d5	0.475	0.402	0.010	-15.4	20.0
2-Fluorobiphenyl	1.353	1.392	0.010	2.9	20.0
Terphenyl-d14	0.671	0.711	0.010	6.0	20.0
Phenol-d5	1.610	1.496	0.010	-7.1	20.0
2-Fluorophenol	1.138	1.179	0.010	3.6	20.0
2,4,6-Tribromophenol	0.098	0.101	0.010	3.3	20.0

Data File: \\avogadro\organics\S3.I\130304.B\S3I3821.D
Report Date: 05-Mar-2013 11:12

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\130304.B\S3I3821.D
Lab Smp Id: SSTD0253B Client Smp ID: SSTD0253B
Inj Date : 04-MAR-2013 11:22
Operator : PK   SRC: PK Inst ID: S3.i
Smp Info : SSTD0253B,SSTD0253B
Misc Info : 2,3
Comment   :
Method   : \\avogadro\organics\S3.I\130304.B\s3_8270C_N.m
Meth Date : 05-Mar-2013 11:12 S3.i Quant Type: ISTD
Cal Date : 31-JAN-2013 19:49 Cal File: S3I3546D.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

			QUANT SIG					AMOUNTS CAL-AMT	AMOUNTS ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
$	109	1,4-Dioxane-d8	96	1.535	1.535	(0.374)	20727	25.0000	24
	108	1,4-Dioxane	58	1.546	1.546	(0.376)	9759	25.0000	20(Q)
	1	N-Nitrosodimethylamine	74	1.701	1.701	(0.414)	46600	25.0000	24
	2	Pyridine	79	1.727	1.727	(0.420)	80566	25.0000	25
$	3	2-Fluorophenol	112	2.630	2.630	(0.640)	83322	25.0000	26
	101	Benzaldehyde	77	3.490	3.490	(0.849)	54535	25.0000	20
$	5	Phenol-d5	99	3.603	3.603	(0.877)	105698	25.0000	23
	6	Phenol	94	3.619	3.619	(0.880)	118751	25.0000	24
	7	Aniline	66	3.624	3.624	(0.882)	109253	25.0000	33
	8	bis(2-Chloroethyl)Ether	63	3.720	3.720	(0.905)	47836	25.0000	22
	10	2-Chlorophenol	128	3.795	3.795	(0.923)	87954	25.0000	25
	11	1,3-Dichlorobenzene	146	4.019	4.019	(0.978)	100826	25.0000	24
*	12	1,4-Dichlorobenzene-d4	152	4.110	4.110	(1.000)	113079	40.0000	
	13	1,4-Dichlorobenzene	146	4.137	4.137	(1.006)	104233	25.0000	24
	117	2-Ethyl-1-hexanol	57	4.265	4.265	(1.038)	47718	25.0000	20
	15	Benzyl Alcohol	108	4.366	4.366	(1.062)	58480	25.0000	23
	16	1,2-Dichlorobenzene	146	4.393	4.393	(1.069)	97812	25.0000	25
	17	2-Methylphenol	108	4.575	4.575	(1.113)	80456	25.0000	24
	18	2,2'-oxybis(1-Chloropropane)	45	4.596	4.596	(1.118)	41594	25.0000	20
	99	Acetophenone	105	4.767	4.767	(1.160)	132422	25.0000	23

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
	19 N-Nitroso-di-n-propylamine	70	4.789	4.789	(1.165)	68716	25.0000	21
	20 4-Methylphenol	108	4.821	4.821	(1.173)	84037	25.0000	23
	21 Hexachloroethane	117	4.895	4.895	(1.191)	38852	25.0000	23
$	22 Nitrobenzene-d5	82	4.970	4.970	(0.846)	108544	25.0000	21
	23 Nitrobenzene	77	4.997	4.997	(0.850)	108099	25.0000	21
	24 Isophorone	82	5.328	5.328	(0.906)	184642	25.0000	21
	25 2-Nitrophenol	139	5.424	5.424	(0.923)	51683	25.0000	24
	26 2,4-Dimethylphenol	107	5.531	5.531	(0.941)	106350	25.0000	26
	27 bis(2-Chloroethoxy)methane	93	5.638	5.638	(0.959)	99525	25.0000	22
	28 Benzoic Acid	105	5.654	5.654	(0.962)	14440	25.0000	4(a)
	29 2,4-Dichlorophenol	162	5.734	5.734	(0.975)	88361	25.0000	23
	30 1,2,4-Trichlorobenzene	180	5.820	5.820	(0.990)	103941	25.0000	24
*	31 Naphthalene-d8	136	5.878	5.878	(1.000)	431918	40.0000	
	32 Naphthalene	128	5.900	5.900	(1.004)	281742	25.0000	24
	115 alpha-Terpineol	59	5.948	5.948	(1.012)	39050	25.0000	19
	33 4-Chloroaniline	127	5.985	5.985	(1.018)	116342	25.0000	24
	34 Hexachlorobutadiene	225	6.076	6.076	(1.034)	72979	25.0000	22
	102 Caprolactam	113	6.386	6.386	(1.086)	32816	25.0000	25
	35 4-Chloro-3-Methylphenol	107	6.562	6.562	(1.116)	99328	25.0000	23
	36 2-Methylnaphthalene	142	6.658	6.658	(1.133)	210924	25.0000	24
	114 1-Methylnaphthalene	142	6.754	6.754	(1.149)	194096	25.0000	24
	38 Hexachlorocyclopentadiene	237	6.829	6.829	(0.894)	81250	25.0000	26
	112 1,2,4,5-Tetrachlorobenzene	216	6.829	6.829	(0.894)	128977	25.0000	23
	39 2,4,6-Trichlorophenol	196	6.957	6.957	(0.911)	77976	25.0000	25
	40 2,4,5-Trichlorophenol	196	6.989	6.989	(0.915)	79302	25.0000	24
$	41 2-Fluorobiphenyl	172	7.032	7.032	(0.920)	275739	25.0000	26
	98 1,1'-Biphenyl	154	7.123	7.123	(0.932)	302962	25.0000	25
	42 2-Chloronaphthalene	162	7.128	7.128	(0.933)	222355	25.0000	24
	43 2-Nitroaniline	65	7.241	7.241	(0.948)	65871	25.0000	21
	44 Dimethylphthalate	163	7.428	7.428	(0.972)	271004	25.0000	24
	45 2,6-Dinitrotoluene	165	7.470	7.470	(0.978)	61756	25.0000	25
	46 Acenaphthylene	152	7.508	7.508	(0.983)	362184	25.0000	26
	47 3-Nitroaniline	138	7.615	7.615	(0.997)	60313	25.0000	25
*	48 Acenaphthene-d10	164	7.641	7.641	(1.000)	317048	40.0000	
	49 Acenaphthene	153	7.673	7.673	(1.004)	218280	25.0000	25
	50 2,4-Dinitrophenol	184	7.705	7.705	(1.008)	27930	25.0000	15(a)
	51 4-Nitrophenol	109	7.796	7.796	(1.020)	40124	25.0000	16(a)
	53 2,4-Dinitrotoluene	165	7.823	7.823	(1.024)	93012	25.0000	23
	52 Dibenzofuran	168	7.823	7.823	(1.024)	344797	25.0000	24
	110 2,3,4,6-Tetrachlorophenol	232	7.940	7.940	(1.039)	78550	25.0000	22
	54 Diethylphthalate	149	8.047	8.047	(1.053)	268306	25.0000	24
	56 4-Chlorophenyl-phenylether	204	8.127	8.127	(1.064)	159064	25.0000	22
	55 Fluorene	166	8.122	8.122	(1.063)	296220	25.0000	24
	57 4-Nitroaniline	138	8.154	8.154	(1.067)	56068	25.0000	24
	58 4,6-Dinitro-2-methylphenol	198	8.175	8.175	(0.917)	46336	25.0000	18(a)
	59 N-Nitrosodiphenylamine	169	8.234	8.234	(0.923)	234201	25.0000	24
	97 Azobenzene	77	8.266	8.266	(0.927)	263838	25.0000	22
$	60 2,4,6-Tribromophenol	330	8.330	8.330	(0.934)	42518	25.0000	26
	61 4-Bromophenyl-phenylether	248	8.544	8.544	(0.958)	94654	25.0000	24
	62 Hexachlorobenzene	284	8.597	8.597	(0.964)	98049	25.0000	24
	100 Atrazine	200	8.694	8.694	(0.975)	55467	25.0000	21
	63 Pentachlorophenol	266	8.768	8.768	(0.983)	51762	25.0000	17(a)
	111 Pentachloronitrobenzene	237	8.779	8.779	(0.984)	51704	25.0000	22
*	64 Phenanthrene-d10	188	8.918	8.918	(1.000)	671542	40.0000	

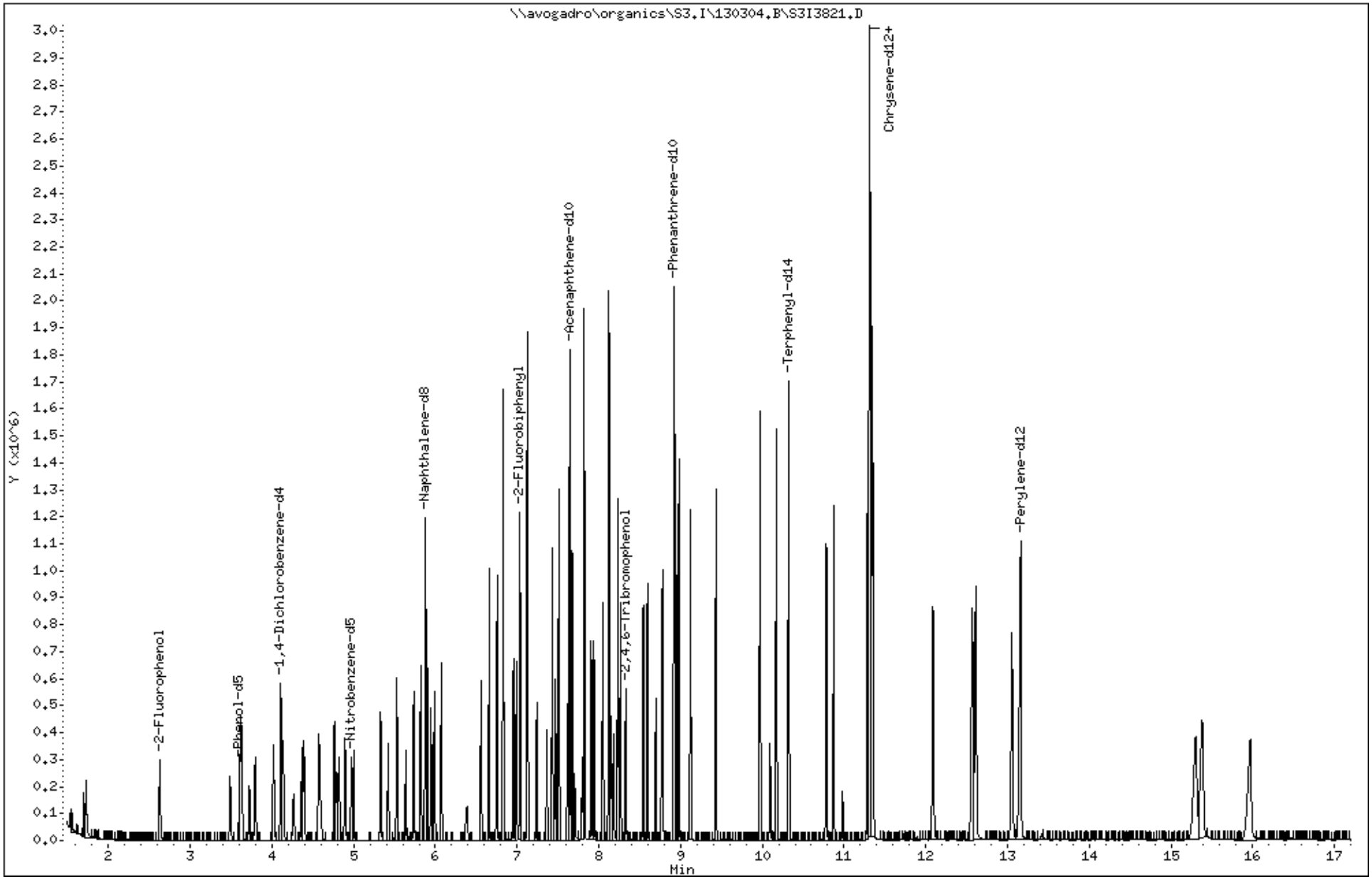
Data File: \\avogadro\organics\S3.I\130304.B\S3I3821.D
Report Date: 05-Mar-2013 11:12

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
	65	Phenanthrene	178	8.939	8.939	(1.002)	414972	25.0000	25
	66	Anthracene	178	8.982	8.982	(1.007)	428649	25.0000	26
	67	Carbazole	167	9.121	9.121	(1.023)	378550	25.0000	26
	68	Di-n-butylphthalate	149	9.431	9.431	(1.058)	463427	25.0000	26
	69	Fluoranthene	202	9.970	9.970	(1.118)	540540	25.0000	26
	70	Benzidine	184	10.093	10.093	(0.892)	109093	25.0000	24
	71	Pyrene	202	10.173	10.173	(0.899)	542125	25.0000	27
$	72	Terphenyl-d14	244	10.323	10.323	(0.912)	404073	25.0000	26
	73	Butylbenzylphthalate	149	10.788	10.788	(0.953)	219613	25.0000	27
	74	3,3'-Dichlorobenzidine	252	11.290	11.290	(0.998)	217178	25.0000	28
	78	bis(2-Ethylhexyl)phthalate	149	11.354	11.354	(1.003)	317828	25.0000	25
	75	Benzo(a)anthracene	228	11.306	11.306	(0.999)	601675	25.0000	26
*	76	Chrysene-d12	240	11.317	11.317	(1.000)	909225	40.0000	
	77	Chrysene	228	11.343	11.343	(1.002)	541516	25.0000	25
	79	Di-n-octylphthalate	149	12.091	12.091	(0.919)	523153	25.0000	28
	80	Benzo(b)fluoranthene	252	12.572	12.572	(0.955)	542107	25.0000	24
	81	Benzo(k)fluoranthene	252	12.609	12.609	(0.958)	577109	25.0000	25
	82	Benzo(a)pyrene	252	13.053	13.053	(0.992)	517768	25.0000	24
*	83	Perylene-d12	264	13.160	13.160	(1.000)	714767	40.0000	
	84	Indeno(1,2,3-cd)pyrene	276	15.302	15.302	(1.163)	483419	25.0000	24
	85	Dibenzo(a,h)anthracene	278	15.382	15.382	(1.169)	453654	25.0000	24
	86	Benzo(g,h,i)perylene	276	15.970	15.970	(1.214)	483223	25.0000	25

QC Flag Legend

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

Data File: \\avogadro\organics\S3.I\130304.B\S3I3821.D
Date : 04-MAR-2013 11:22
Client ID: SSTD0253B
Instrument: S3.i
Sample Info: SSTD0253B,SSTD0253B
Volume Injected (uL): 1.0
Operator: PK SRC: PK
Column phase: Rxi-5Sil MS
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\130131.B\S3I3540.D
Lab Smp Id: DFTPP3N Client Smp ID: DFTPP3N
Inj Date : 31-JAN-2013 11:27
Operator : PK SRC: PK Inst ID: S3.i
Smp Info : DFTPP3N,DFTPP3N
Misc Info :
Comment :
Method : \\avogadro\organics\S3.I\130131.B\S3_dftppSOM.m
Meth Date : 06-Feb-2013 15:43 pkaczorows Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 100 QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vf/Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume (uL)
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
1 dftpp							CAS #: 5074-71-5	
3.971	3.918	0.053	198	1682944			0.00- 100.00	100.00
3.971	3.918	0.053	51	621312			10.00- 80.00	36.92
3.971	3.918	0.053	68	0	0.0	0.0	0.00- 2.00	0.00
3.971	3.918	0.053	69	870784			0.00- 0.00	51.74
3.971	3.918	0.053	70	4509			0.00- 2.00	0.52
3.971	3.918	0.053	127	827456			10.00- 80.00	49.17
3.971	3.918	0.053	197	5768			0.00- 2.00	0.34
3.971	3.918	0.053	199	122120			5.00- 9.00	7.26
3.971	3.918	0.053	275	544000			10.00- 60.00	32.32
3.971	3.918	0.053	365	81784			1.00- 0.00	4.86
3.971	3.918	0.053	441	171008			0.01- 99.99	73.77
3.971	3.918	0.053	442	1119744			50.00- 100.00	66.53
3.971	3.918	0.053	443	231808			15.00- 24.00	20.70

Data File: \\avogadro\organics\S3.I\130131.B\S3I3540.D

Date : 31-JAN-2013 11:27

Client ID: DFTPP3N

Instrument: S3.i

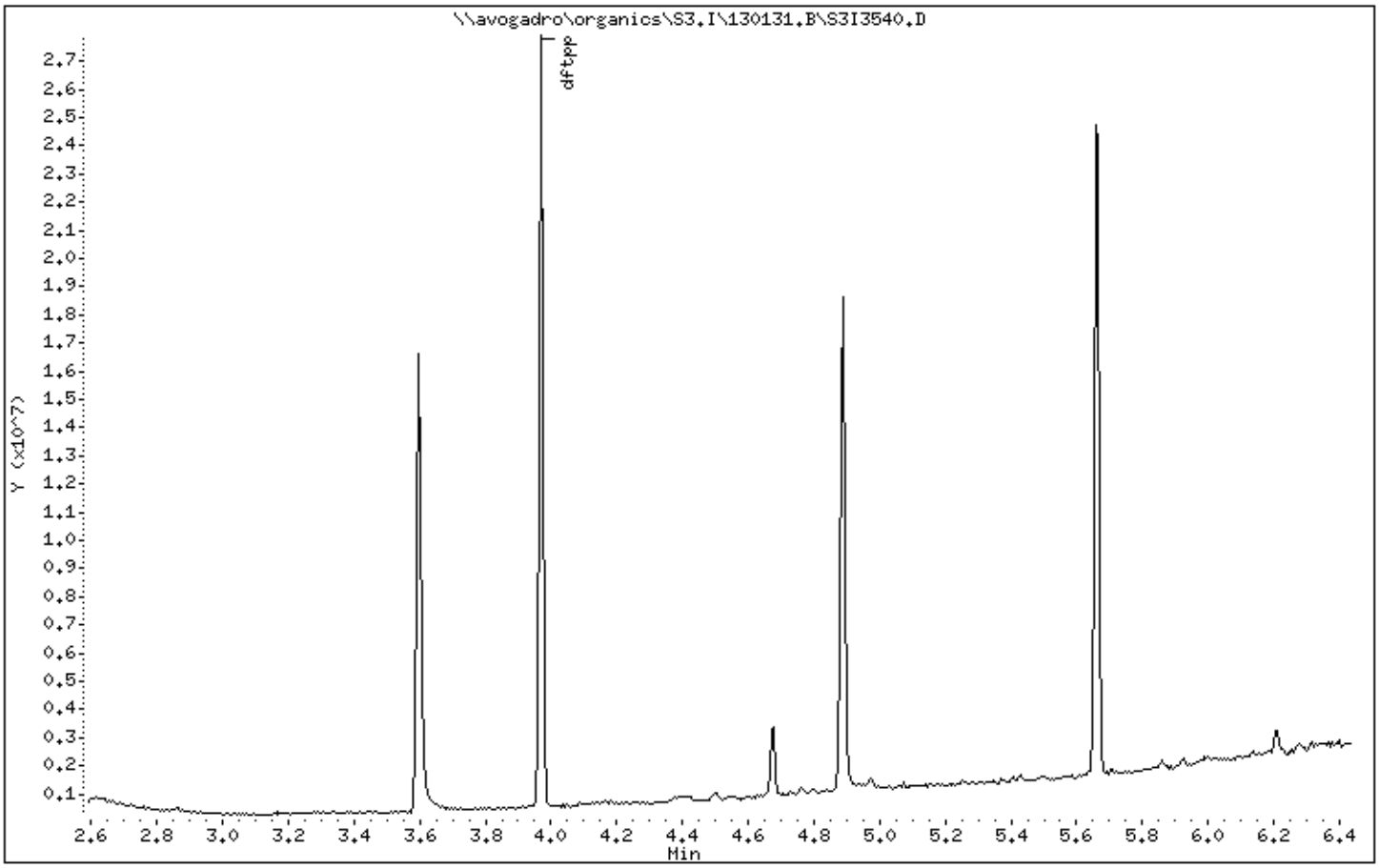
Sample Info: DFTPP3N,DFTPP3N

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0.25



Data File: \\avogadro\organics\S3.I\130131.B\S3I3540.D

Date : 31-JAN-2013 11:27

Client ID: DFTPP3N

Instrument: S3.i

Sample Info: DFTPP3N,DFTPP3N

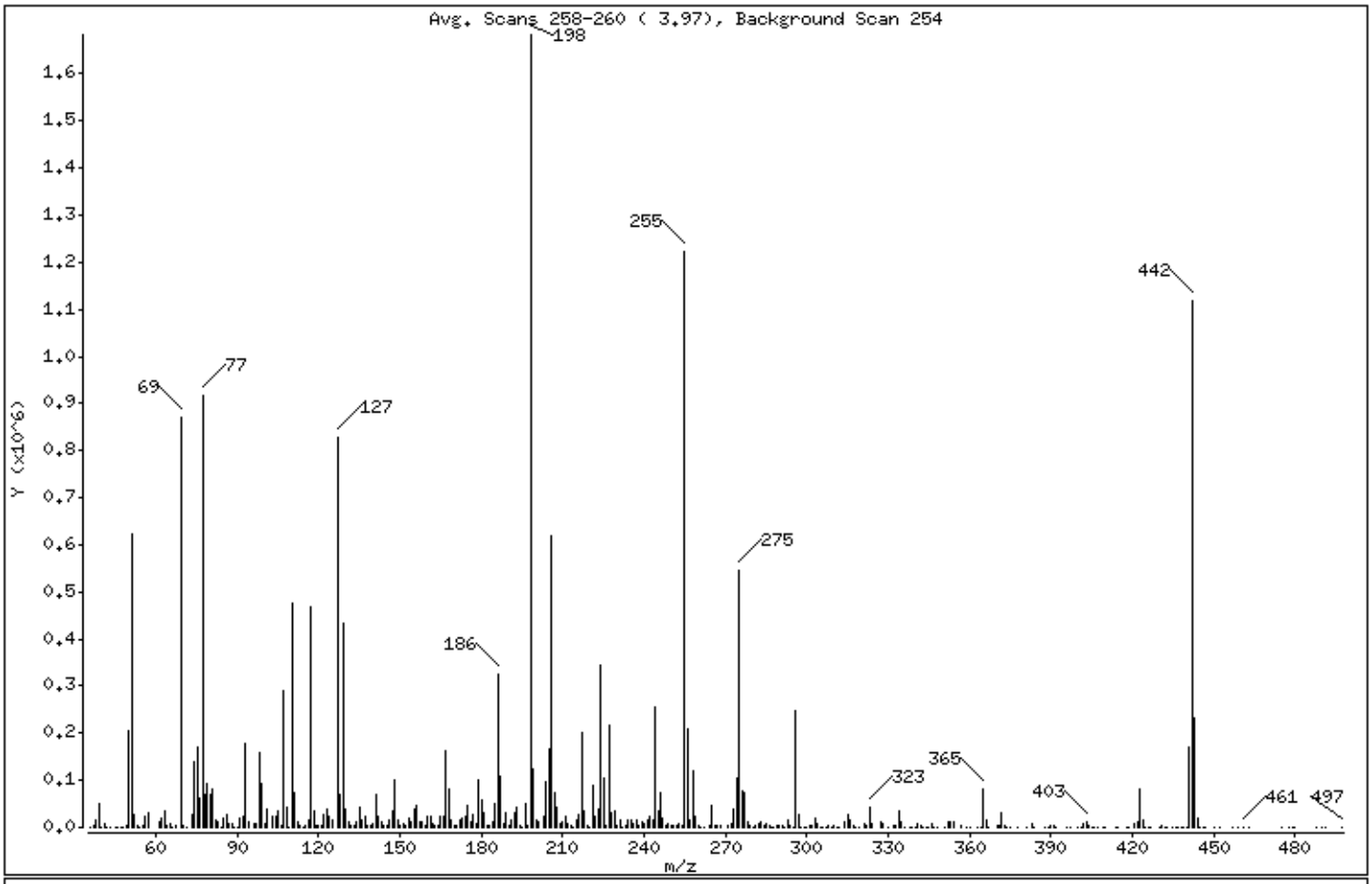
Volume Injected (uL): 2.0

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	36.92
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	51.74
70	Less than 2.00% of mass 69	0.27 (0.52)
127	10.00 - 80.00% of mass 198	49.17
197	Less than 2.00% of mass 198	0.34
199	5.00 - 9.00% of mass 198	7.26
275	10.00 - 60.00% of mass 198	32.32
365	Greater than 1.00% of mass 198	4.86
441	Present, but less than mass 443	10.16
442	50.00 - 100.00% of mass 198	66.53
443	15.00 - 24.00% of mass 442	13.77 (20.70)

Date : 31-JAN-2013 11:27

Client ID: DFTPP3N Instrument: S3.i

Sample Info: DFTPP3N,DFTPP3N

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

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S3I3540.D
Spectrum: Avg. Scans 258-260 (3.97), Background Scan 254
Location of Maximum: 198.00
Number of points: 374

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1116	139.00	4206	234.00	14545	338.00	893
37.00	5731	140.00	8463	235.00	16984	339.00	655
38.00	14182	141.00	68816	236.00	7656	340.00	651
39.00	48536	142.00	21648	237.00	15992	341.00	6995
40.00	1628	143.00	13233	238.00	2996	342.00	3879
41.00	7178	144.00	3644	239.00	12215	343.00	1114
42.00	735	145.00	3227	240.00	6021	344.00	390
43.00	1474	146.00	15085	241.00	14110	345.00	1397
45.00	1609	147.00	34608	242.00	22752	346.00	9334
46.00	382	148.00	100624	243.00	14448	347.00	1750
47.00	465	149.00	13889	244.00	255744	348.00	898
48.00	1297	150.00	2629	245.00	33440	351.00	528
49.00	4999	151.00	8727	246.00	72896	352.00	12106
50.00	203776	152.00	4932	247.00	19256	353.00	10803
51.00	621312	153.00	17992	248.00	3102	354.00	10357
52.00	28200	154.00	12211	249.00	7890	357.00	2416
53.00	2900	155.00	37400	250.00	2487	359.00	602
54.00	197	156.00	45784	251.00	2308	360.00	194
55.00	5264	157.00	11788	252.00	5148	363.00	242
56.00	23664	158.00	12629	253.00	6362	364.00	1094
57.00	31816	159.00	3867	254.00	3709	365.00	81784
61.00	9926	160.00	24144	255.00	1223680	366.00	13589
62.00	20016	161.00	21360	256.00	207488	367.00	1289
63.00	34472	162.00	7167	257.00	16050	370.00	5716
64.00	4233	163.00	3457	258.00	118512	371.00	2588
65.00	9301	164.00	2727	259.00	24120	372.00	31224
66.00	781	165.00	23848	260.00	4043	373.00	4815
67.00	3833	166.00	22696	261.00	1425	374.00	221
69.00	870784	167.00	160576	262.00	1668	375.00	311
70.00	4509	168.00	79808	264.00	3812	378.00	244
71.00	1692	169.00	13666	265.00	46704	381.00	443
73.00	26352	170.00	5360	266.00	2606	383.00	7203
74.00	138368	171.00	5423	267.00	5298	384.00	731
75.00	171264	172.00	16840	268.00	3336	388.00	564
76.00	63096	173.00	17536	271.00	3862	389.00	356

Date : 31-JAN-2013 11:27

Client ID: DFTPP3N Instrument: S3.i

Sample Info: DFTPP3N,DFTPP3N

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

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S3I3540.D
Spectrum: Avg. Scans 258-260 (3.97), Background Scan 254
Location of Maximum: 198.00
Number of points: 374

m/z	Y	m/z	Y	m/z	Y	m/z	Y
77.00	916480	174.00	22144	272.00	7072	390.00	2404
78.00	67768	175.00	48064	273.00	40024	391.00	2142
79.00	93040	176.00	10588	274.00	104176	392.00	900
80.00	70752	177.00	28784	275.00	544000	396.00	431
81.00	82736	178.00	8609	276.00	78784	397.00	149
82.00	15912	179.00	102440	277.00	74464	400.00	548
83.00	12614	180.00	59544	278.00	11629	401.00	1027
84.00	701	181.00	29600	279.00	4251	402.00	6811
85.00	17568	182.00	5142	280.00	1660	403.00	11843
86.00	25592	183.00	4021	281.00	4418	404.00	5252
87.00	9515	184.00	10915	282.00	7719	405.00	106
88.00	7093	185.00	50824	283.00	10776	406.00	505
89.00	1830	186.00	325120	284.00	3663	407.00	135
90.00	391	187.00	108760	285.00	9092	409.00	441
91.00	18696	188.00	9039	286.00	2310	410.00	231
92.00	23152	189.00	31664	287.00	1455	414.00	177
93.00	176960	190.00	3723	288.00	597	415.00	854
94.00	10251	191.00	14558	289.00	3612	418.00	756
96.00	7978	192.00	30192	290.00	2375	419.00	118
97.00	6947	193.00	41400	291.00	2922	421.00	7345
98.00	156992	194.00	4670	292.00	1593	422.00	11298
99.00	93128	195.00	1349	293.00	14465	423.00	80552
100.00	7754	196.00	49016	294.00	4022	424.00	15728
101.00	38448	197.00	5768	295.00	395	425.00	1433
103.00	22288	198.00	1682944	296.00	248896	426.00	236
104.00	24592	199.00	122120	297.00	28216	427.00	259
105.00	33992	200.00	16366	298.00	1591	430.00	190
106.00	4935	201.00	9711	299.00	206	431.00	2449
107.00	291584	203.00	21696	300.00	584	432.00	472
108.00	41352	204.00	97360	301.00	3208	433.00	339
109.00	558	205.00	164992	302.00	3427	435.00	1144
110.00	474432	206.00	618944	303.00	19144	436.00	145
111.00	74888	207.00	73704	304.00	9089	437.00	223
112.00	10587	208.00	41280	305.00	566	438.00	652
113.00	3421	209.00	6883	306.00	373	439.00	667

Date : 31-JAN-2013 11:27

Client ID: DFTPP3N Instrument: S3.i

Sample Info: DFTPP3N,DFTPP3N

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

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S3I3540.D
Spectrum: Avg. Scans 258-260 (3.97), Background Scan 254
Location of Maximum: 198.00
Number of points: 374

m/z	Y	m/z	Y	m/z	Y	m/z	Y
114.00	235	210.00	12408	307.00	845	440.00	1484
115.00	3490	211.00	24624	308.00	2943	441.00	171008
116.00	16318	212.00	6533	309.00	1509	442.00	1119744
117.00	467456	213.00	2823	310.00	1976	443.00	231808
118.00	34064	214.00	1203	311.00	1541	444.00	18096
119.00	4749	215.00	15490	312.00	686	445.00	1104
120.00	2579	216.00	25376	314.00	13487	446.00	405
121.00	4035	217.00	199936	315.00	25352	447.00	125
122.00	26264	218.00	33152	316.00	15218	450.00	380
123.00	39424	219.00	3351	317.00	2373	452.00	129
124.00	22800	220.00	1695	318.00	1040	457.00	152
125.00	13603	221.00	87200	319.00	182	459.00	241
127.00	827456	222.00	25040	321.00	8703	461.00	1398
128.00	68088	223.00	39464	322.00	2315	463.00	1374
129.00	434560	224.00	344960	323.00	43696	475.00	839
130.00	37632	225.00	105024	324.00	8042	478.00	109
131.00	10619	226.00	2741	327.00	13054	479.00	406
132.00	2529	227.00	214784	328.00	6714	480.00	112
133.00	2651	228.00	29664	330.00	1558	488.00	200
134.00	11151	229.00	35880	332.00	4583	490.00	102
135.00	42736	230.00	4009	333.00	2886	491.00	222
136.00	16036	231.00	14896	334.00	36528	497.00	113
137.00	23248	232.00	1830	335.00	10248		
138.00	2332	233.00	3704	336.00	458		

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\130304.B\S3I3820.D
Lab Smp Id: DFTPP3B Client Smp ID: DFTPP3B
Inj Date : 04-MAR-2013 10:07
Operator : PK SRC: PK Inst ID: S3.i
Smp Info : DFTPP3B,DFTPP3B
Misc Info :
Comment :
Method : \\avogadro\organics\S3.I\130304.B\S3_dftppSOM.m
Meth Date : 08-Feb-2013 09:47 pkaczorows Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 100 QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: 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

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 dftpp						CAS #: 5074-71-5		
3.839	3.918	-0.079	198	1085440			0.00- 100.00	100.00
3.839	3.918	-0.079	51	331648			10.00- 80.00	30.55
3.839	3.918	-0.079	68	0	0.0	0.0	0.00- 2.00	0.00
3.839	3.918	-0.079	69	482368			0.00- 0.00	44.44
3.839	3.918	-0.079	70	4683			0.00- 2.00	0.97
3.839	3.918	-0.079	127	494784			10.00- 80.00	45.58
3.839	3.918	-0.079	197	1369			0.00- 2.00	0.13
3.839	3.918	-0.079	199	89288			5.00- 9.00	8.23
3.839	3.918	-0.079	275	332096			10.00- 60.00	30.60
3.839	3.918	-0.079	365	41768			1.00- 0.00	3.85
3.839	3.918	-0.079	441	121840			0.01- 99.99	80.36
3.839	3.918	-0.079	442	792768			50.00- 100.00	73.04
3.839	3.918	-0.079	443	151616			15.00- 24.00	19.12

Data File: \\avogadro\organics\S3.I\130304.B\S3I3820.D

Date : 04-MAR-2013 10:07

Client ID: DFTPP3B

Instrument: S3.i

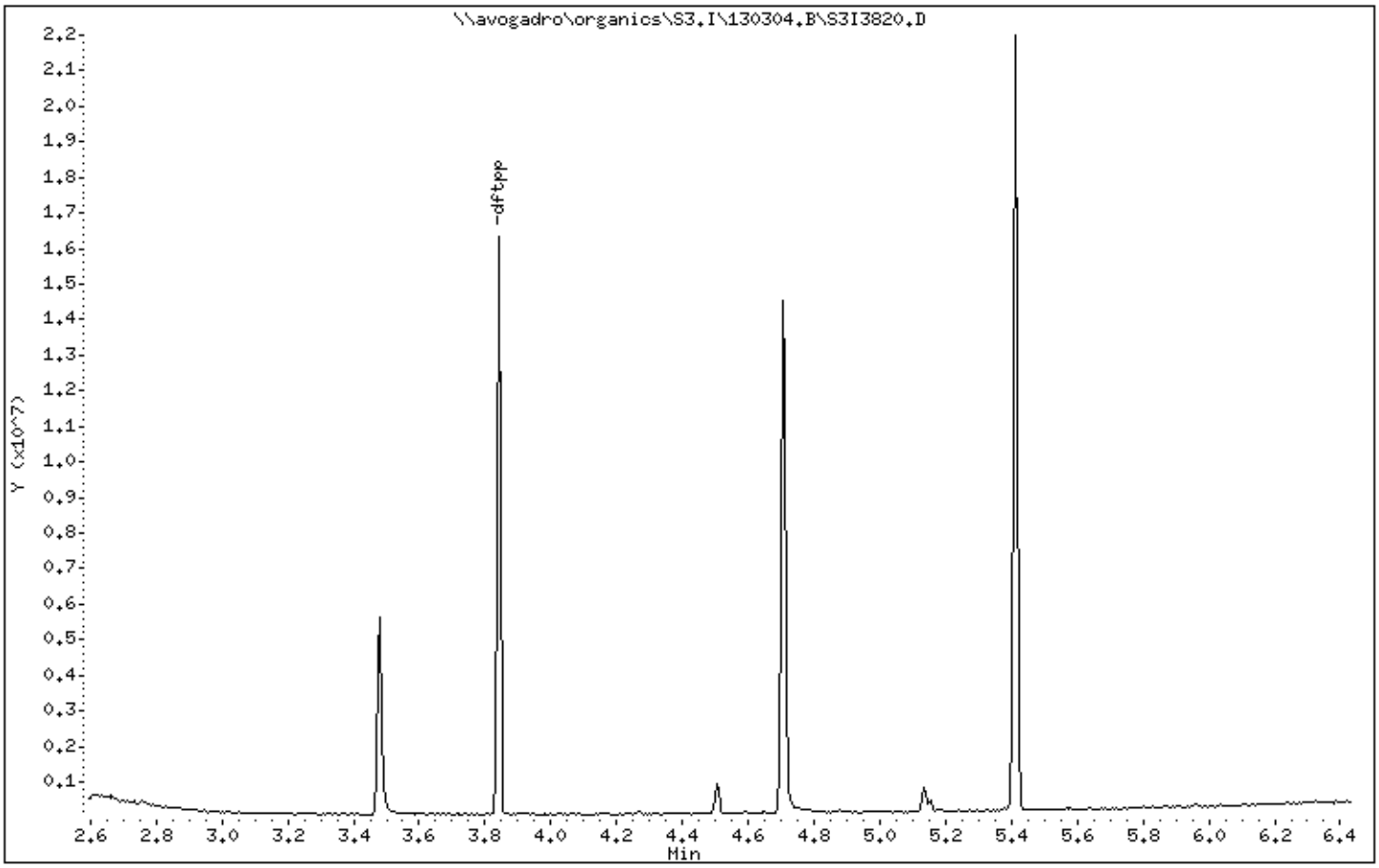
Sample Info: DFTPP3B,DFTPP3B

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0.25



Data File: \\avogadro\organics\S3.I\130304.B\S3I3820.D

Date : 04-MAR-2013 10:07

Client ID: DFTPP3B

Instrument: S3.i

Sample Info: DFTPP3B,DFTPP3B

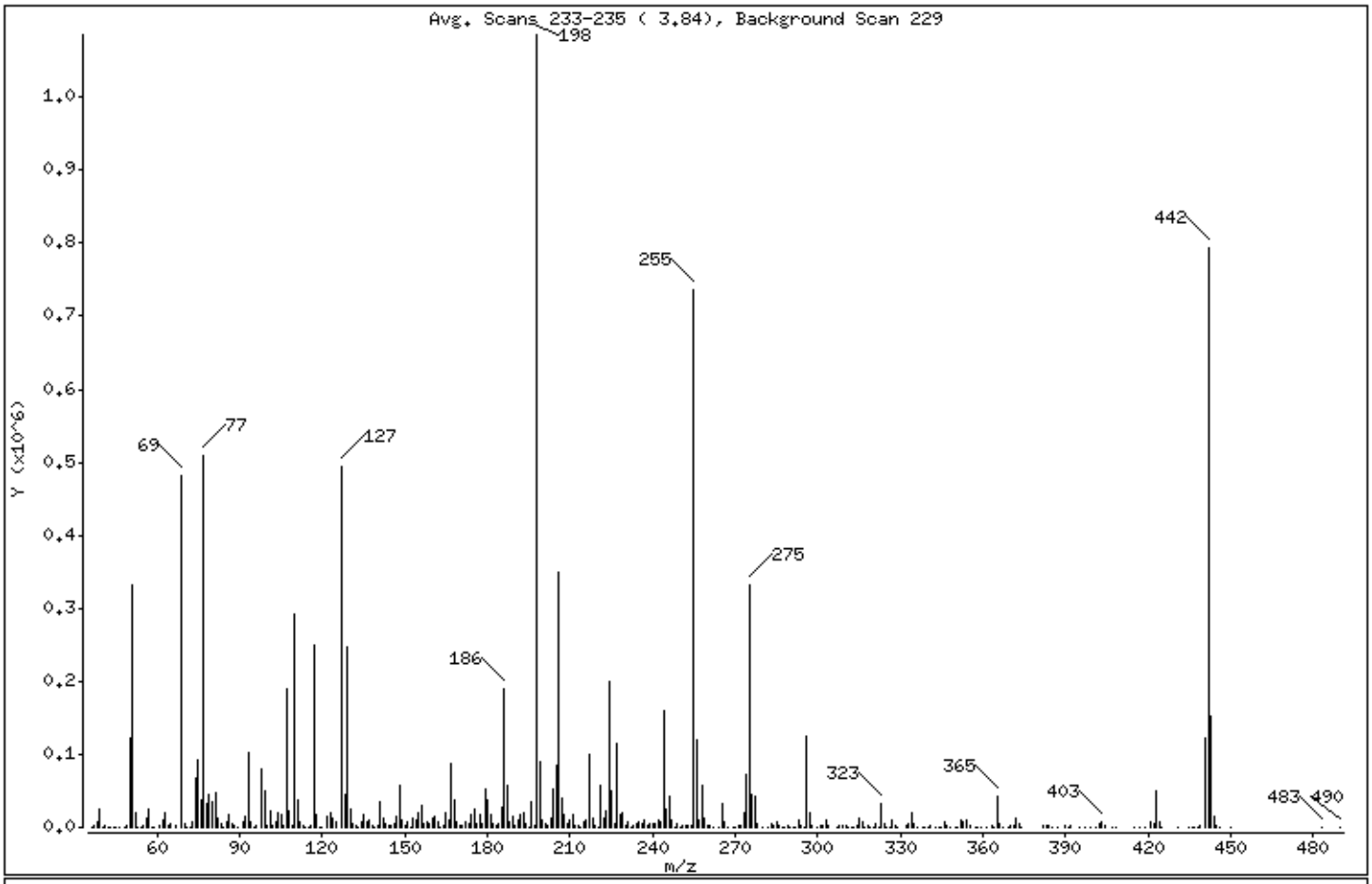
Volume Injected (uL): 2.0

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	30.55
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	44.44
70	Less than 2.00% of mass 69	0.43 (0.97)
127	10.00 - 80.00% of mass 198	45.58
197	Less than 2.00% of mass 198	0.13
199	5.00 - 9.00% of mass 198	8.23
275	10.00 - 60.00% of mass 198	30.60
365	Greater than 1.00% of mass 198	3.85
441	Present, but less than mass 443	11.22
442	50.00 - 100.00% of mass 198	73.04
443	15.00 - 24.00% of mass 442	13.97 (19.12)

Date : 04-MAR-2013 10:07

Client ID: DFTPP3B Instrument: S3.i

Sample Info: DFTPP3B,DFTPP3B

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

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S3I3820.D
Spectrum: Avg. Scans 233-235 (3.84), Background Scan 229
Location of Maximum: 198.00
Number of points: 355

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	187	133.00	700	222.00	12698	318.00	1355
37.00	1544	134.00	7865	223.00	22864	319.00	1184
38.00	7003	135.00	17400	224.00	198400	320.00	857
39.00	25376	136.00	8241	225.00	49080	321.00	4044
40.00	512	137.00	10983	226.00	5703	322.00	984
41.00	1769	138.00	2205	227.00	115976	323.00	33064
42.00	552	139.00	436	228.00	16295	324.00	5816
43.00	129	140.00	2667	229.00	21200	325.00	841
44.00	1168	141.00	33968	230.00	2997	326.00	641
45.00	1004	142.00	12624	231.00	6705	327.00	8967
46.00	131	143.00	5289	232.00	594	328.00	3032
48.00	563	144.00	1835	233.00	3056	329.00	436
49.00	2446	145.00	1826	234.00	5365	332.00	2057
50.00	122592	146.00	6134	235.00	6345	333.00	4268
51.00	331648	147.00	16170	236.00	5248	334.00	18960
52.00	18832	148.00	57160	237.00	8761	335.00	4307
53.00	1138	149.00	11034	238.00	1289	336.00	498
54.00	113	150.00	1899	239.00	4128	338.00	217
55.00	3214	151.00	7942	240.00	4236	339.00	603
56.00	11915	152.00	1222	241.00	5699	340.00	348
57.00	25136	153.00	13574	242.00	10650	341.00	3694
58.00	936	154.00	9043	243.00	6511	343.00	391
59.00	207	155.00	20184	244.00	158720	344.00	303
61.00	2004	156.00	30480	245.00	24984	345.00	189
62.00	9696	157.00	4568	246.00	43656	346.00	6882
63.00	19984	158.00	8446	247.00	9421	347.00	2251
64.00	2663	159.00	5198	248.00	923	348.00	145
65.00	4812	160.00	13127	249.00	4625	350.00	744
67.00	1457	161.00	13917	250.00	736	351.00	314
69.00	482368	162.00	7089	251.00	1705	352.00	9324
70.00	4683	163.00	1047	252.00	2184	353.00	7347
71.00	562	164.00	1312	253.00	2829	354.00	11050
72.00	135	165.00	19048	254.00	3242	355.00	2361
73.00	7811	166.00	11068	255.00	735168	357.00	199
74.00	67696	167.00	87824	256.00	118656	358.00	265

Date : 04-MAR-2013 10:07

Client ID: DFTPP3B Instrument: S3.i

Sample Info: DFTPP3B,DFTPP3B

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

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S3I3820.D
Spectrum: Avg. Scans 233-235 (3.84), Background Scan 229
Location of Maximum: 198.00
Number of points: 355

m/z	Y	m/z	Y	m/z	Y	m/z	Y
75.00	91368	168.00	36376	257.00	9628	359.00	494
76.00	36712	169.00	7345	258.00	56776	361.00	476
77.00	510016	170.00	3692	259.00	11580	363.00	1449
78.00	33384	171.00	2997	260.00	1780	364.00	661
79.00	45848	172.00	6931	261.00	1633	365.00	41768
80.00	34744	173.00	5857	262.00	862	366.00	5610
81.00	47800	174.00	17840	264.00	1178	367.00	698
82.00	12754	175.00	25528	265.00	32136	369.00	170
83.00	5170	176.00	3989	266.00	6300	370.00	1768
84.00	596	177.00	18296	267.00	1059	371.00	1678
85.00	6622	178.00	4881	269.00	420	372.00	11968
86.00	18400	179.00	51928	270.00	373	373.00	4338
87.00	5263	180.00	36384	271.00	2359	374.00	824
88.00	3271	181.00	16784	272.00	2499	382.00	1694
89.00	1094	182.00	3864	273.00	21088	383.00	3352
91.00	8695	183.00	1656	274.00	71680	384.00	1894
92.00	14199	184.00	5352	275.00	332096	385.00	84
93.00	101656	185.00	26576	276.00	44896	387.00	229
94.00	8431	186.00	189184	277.00	42936	390.00	1709
95.00	583	187.00	57192	278.00	5211	391.00	931
96.00	1994	188.00	6954	280.00	153	392.00	1941
98.00	80168	189.00	15550	282.00	1015	395.00	342
99.00	50520	190.00	2001	283.00	3908	397.00	1195
100.00	3420	191.00	10426	284.00	3656	399.00	343
101.00	22776	192.00	16824	285.00	7422	401.00	1175
102.00	1285	193.00	20920	286.00	1365	402.00	4787
103.00	8484	194.00	4513	287.00	220	403.00	6778
104.00	20288	195.00	511	288.00	326	404.00	3538
105.00	17464	196.00	36112	289.00	1496	407.00	244
106.00	1537	197.00	1369	290.00	1131	408.00	351
107.00	190528	198.00	1085440	291.00	1075	415.00	435
108.00	22168	199.00	89288	292.00	254	417.00	204
109.00	2703	200.00	9148	293.00	8895	419.00	297
110.00	292544	201.00	5699	294.00	1895	421.00	6258
111.00	37072	202.00	1636	295.00	980	422.00	3905

Date : 04-MAR-2013 10:07

Client ID: DFTPP3B Instrument: S3.i

Sample Info: DFTPP3B,DFTPP3B

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

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S3I3820.D
Spectrum: Avg. Scans 233-235 (3.84), Background Scan 229
Location of Maximum: 198.00
Number of points: 355

m/z	Y	m/z	Y	m/z	Y	m/z	Y
112.00	6777	203.00	13187	296.00	125448	423.00	49448
113.00	1966	204.00	53080	297.00	18960	424.00	7541
114.00	719	205.00	84400	298.00	1759	425.00	307
115.00	394	206.00	348608	300.00	571	431.00	152
116.00	2268	207.00	40616	301.00	1263	435.00	104
117.00	248320	208.00	16640	302.00	2357	436.00	232
118.00	17272	209.00	5896	303.00	10786	437.00	367
119.00	1209	210.00	9709	304.00	3066	438.00	132
120.00	1081	211.00	16576	307.00	618	439.00	1423
122.00	15288	212.00	3722	308.00	1967	441.00	121840
123.00	20520	213.00	1792	309.00	2460	442.00	792768
124.00	12614	214.00	169	310.00	2247	443.00	151616
125.00	7021	215.00	6483	311.00	1214	444.00	15003
127.00	494784	216.00	10282	312.00	558	445.00	1555
128.00	44152	217.00	100584	313.00	572	446.00	130
129.00	247808	218.00	13503	314.00	2978	450.00	127
130.00	25784	219.00	1882	315.00	11856	483.00	113
131.00	5034	220.00	630	316.00	8177	490.00	167
132.00	3168	221.00	58592	317.00	505		

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-70680

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-70680

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I3822.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/04/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
108-95-2	Phenol	10	U
111-44-4	Bis(2-chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
108-60-1	2,2´-oxybis(1-Chloropropane)	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
111-91-1	Bis(2-chloroethoxy)methane	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-70680

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-70680

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I3822.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/04/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3´-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

Data File: \\avogadro\organics\S3.I\130304.B\S3I3822.D
Report Date: 05-Mar-2013 11:12

Spectrum Analytical, Inc. RI Division

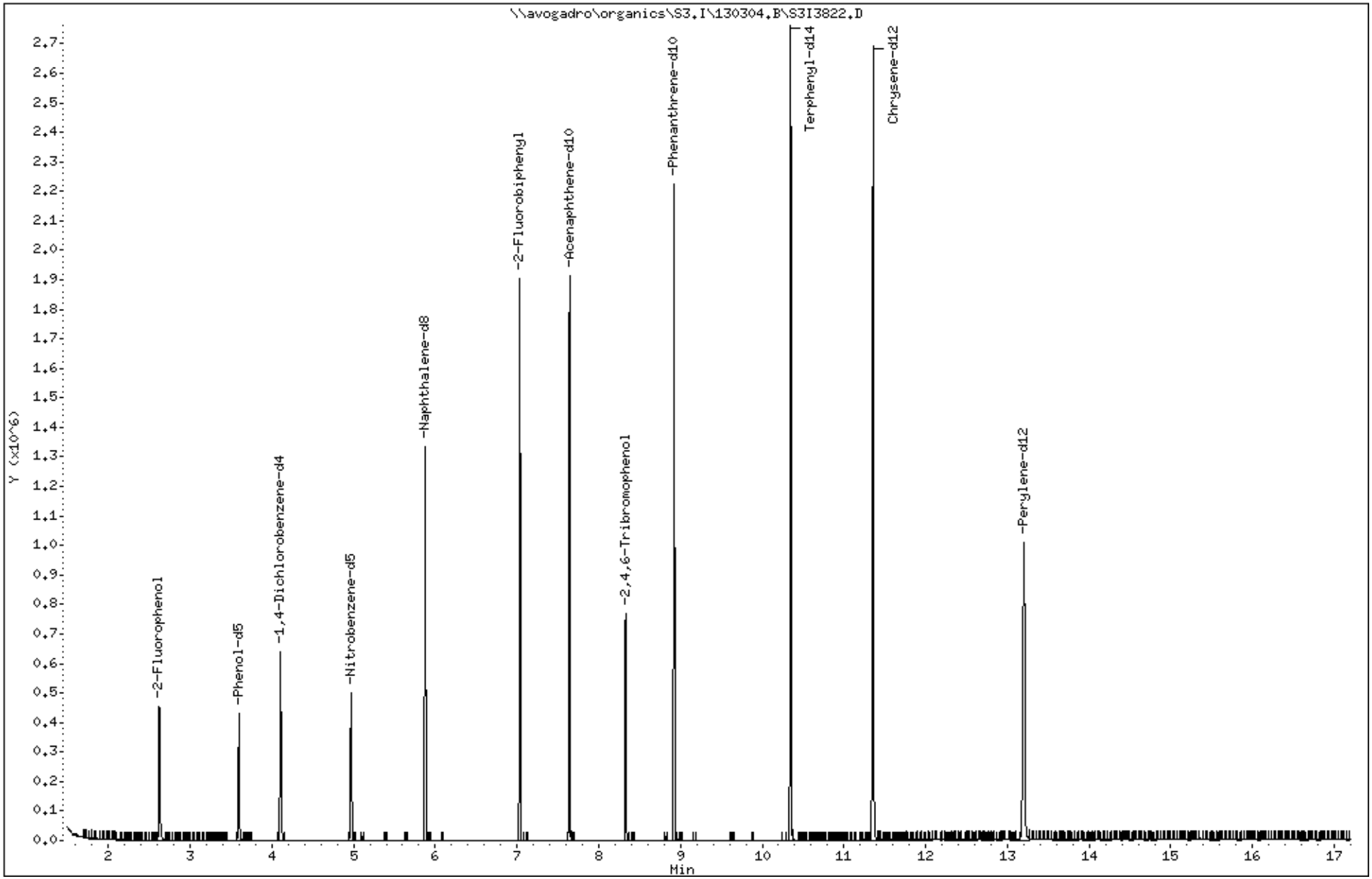
Data file : \\avogadro\organics\S3.I\130304.B\S3I3822.D
Lab Smp Id: MB-70680 Client Smp ID: MB-70680
Inj Date : 04-MAR-2013 11:53
Operator : PK SRC: LIMS Inst ID: S3.i
Smp Info : MB-70680,MB-70680,70680
Misc Info :
Comment   :
Method   : \\avogadro\organics\S3.I\130304.B\s3_8270C_N.m
Meth Date : 05-Mar-2013 11:12 S3.i Quant Type: ISTD
Cal Date : 31-JAN-2013 19:49 Cal File: S3I3546D.D
Als bottle: 2 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 625.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 MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
$	3 2-Fluorophenol	112	2.626	2.630	(0.640)	128097	36.3386	36
$	5 Phenol-d5	99	3.598	3.603	(0.876)	160900	32.2670	32
*	12 1,4-Dichlorobenzene-d4	152	4.106	4.110	(1.000)	123868	40.0000	
$	22 Nitrobenzene-d5	82	4.971	4.970	(0.846)	177855	31.6450	32
*	31 Naphthalene-d8	136	5.874	5.878	(1.000)	472797	40.0000	
$	41 2-Fluorobiphenyl	172	7.033	7.032	(0.920)	432363	37.0484	37
*	48 Acenaphthene-d10	164	7.642	7.641	(1.000)	345062	40.0000	
$	60 2,4,6-Tribromophenol	330	8.332	8.330	(0.934)	70897	41.8796	42
*	64 Phenanthrene-d10	188	8.919	8.918	(1.000)	690836	40.0000	
$	72 Terphenyl-d14	244	10.346	10.323	(0.911)	761423	50.6314	51
*	76 Chrysene-d12	240	11.355	11.317	(1.000)	896479	40.0000	
*	83 Perylene-d12	264	13.209	13.160	(1.000)	734597	40.0000	

Data File: \\avogadro\organics\S3.I\130304.B\S3I3822.D
Date : 04-MAR-2013 11:53
Client ID: MB-70680
Instrument: S3.i
Sample Info: MB-70680,MB-70680,70680
Volume Injected (uL): 1.0
Operator: PK SRC: LIMS
Column phase: Rxi-5Sil MS
Column diameter: 0.25



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-70680

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-70680

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I3823.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/04/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
108-95-2	Phenol	39	
111-44-4	Bis(2-chloroethyl)ether	32	
95-57-8	2-Chlorophenol	39	
541-73-1	1,3-Dichlorobenzene	38	
106-46-7	1,4-Dichlorobenzene	39	
95-50-1	1,2-Dichlorobenzene	39	
108-60-1	2,2´-oxybis(1-Chloropropane)	29	
621-64-7	N-Nitroso-di-n-propylamine	33	
67-72-1	Hexachloroethane	36	
98-95-3	Nitrobenzene	32	
78-59-1	Isophorone	33	
88-75-5	2-Nitrophenol	39	
105-67-9	2,4-Dimethylphenol	34	
120-83-2	2,4-Dichlorophenol	38	
120-82-1	1,2,4-Trichlorobenzene	37	
91-20-3	Naphthalene	40	
111-91-1	Bis(2-chloroethoxy)methane	36	
87-68-3	Hexachlorobutadiene	36	
59-50-7	4-Chloro-3-methylphenol	36	
77-47-4	Hexachlorocyclopentadiene	44	
88-06-2	2,4,6-Trichlorophenol	42	
91-58-7	2-Chloronaphthalene	44	
131-11-3	Dimethylphthalate	40	
208-96-8	Acenaphthylene	44	
606-20-2	2,6-Dinitrotoluene	41	
83-32-9	Acenaphthene	43	
51-28-5	2,4-Dinitrophenol	31	
100-02-7	4-Nitrophenol	29	
121-14-2	2,4-Dinitrotoluene	42	
84-66-2	Diethylphthalate	40	
7005-72-3	4-Chlorophenyl-phenylether	42	
86-73-7	Fluorene	43	
534-52-1	4,6-Dinitro-2-methylphenol	37	
86-30-6	N-Nitrosodiphenylamine	42	
101-55-3	4-Bromophenyl-phenylether	43	
118-74-1	Hexachlorobenzene	42	

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-70680

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-70680

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I3823.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/04/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
87-86-5	Pentachlorophenol	32	
85-01-8	Phenanthrene	45	
120-12-7	Anthracene	45	
84-74-2	Di-n-butylphthalate	46	
206-44-0	Fluoranthene	45	
129-00-0	Pyrene	47	
85-68-7	Butylbenzylphthalate	46	
91-94-1	3,3´-Dichlorobenzidine	42	
56-55-3	Benzo(a)anthracene	44	
218-01-9	Chrysene	41	
117-81-7	Bis(2-ethylhexyl)phthalate	43	
117-84-0	Di-n-octylphthalate	48	
205-99-2	Benzo(b)fluoranthene	41	
207-08-9	Benzo(k)fluoranthene	42	
50-32-8	Benzo(a)pyrene	42	
193-39-5	Indeno(1,2,3-cd)pyrene	42	
53-70-3	Dibenzo(a,h)anthracene	40	
191-24-2	Benzo(g,h,i)perylene	42	

Data File: \\avogadro\organics\S3.I\130304.B\S3I3823.D
Report Date: 05-Mar-2013 11:12

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\130304.B\S3I3823.D
Lab Smp Id: LCS-70680 Client Smp ID: LCS-70680
Inj Date : 04-MAR-2013 12:19
Operator : PK SRC: LIMS Inst ID: S3.i
Smp Info : LCS-70680,LCS-70680,70680
Misc Info :
Comment   :
Method   : \\avogadro\organics\S3.I\130304.B\s3_8270C_N.m
Meth Date : 05-Mar-2013 11:12 S3.i Quant Type: ISTD
Cal Date : 31-JAN-2013 19:49 Cal File: S3I3546D.D
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 625.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 MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)
$	3 2-Fluorophenol	112	2.625	2.630	(0.639)	115513	37.6729	38
$	5 Phenol-d5	99	3.603	3.603	(0.877)	151895	35.0200	35
	6 Phenol	94	3.624	3.619	(0.882)	179457	38.6744	39
	8 bis(2-Chloroethyl)Ether	63	3.726	3.720	(0.906)	68542	32.4984	32
	10 2-Chlorophenol	128	3.795	3.795	(0.923)	133882	39.4755	39
	11 1,3-Dichlorobenzene	146	4.020	4.019	(0.978)	151382	37.9255	38
*	12 1,4-Dichlorobenzene-d4	152	4.110	4.110	(1.000)	107743	40.0000	
	13 1,4-Dichlorobenzene	146	4.137	4.137	(1.006)	158091	38.5798	38
	16 1,2-Dichlorobenzene	146	4.394	4.393	(1.069)	147500	39.3331	39
	18 2,2'-oxybis(1-Chloropropane)	45	4.591	4.596	(1.117)	57821	29.4272	29
	19 N-Nitroso-di-n-propylamine	70	4.794	4.789	(1.166)	100273	32.6688	33
	21 Hexachloroethane	117	4.896	4.895	(1.191)	59489	36.4314	36
$	22 Nitrobenzene-d5	82	4.976	4.970	(0.846)	156710	32.2413	32
	23 Nitrobenzene	77	5.003	4.997	(0.851)	159621	32.3493	32
	24 Isophorone	82	5.334	5.328	(0.907)	267236	32.5560	32
	25 2-Nitrophenol	139	5.425	5.424	(0.923)	78796	39.0596	39
	26 2,4-Dimethylphenol	107	5.531	5.531	(0.941)	130783	33.5947	34
	27 bis(2-Chloroethoxy)methane	93	5.638	5.638	(0.959)	150735	35.5174	36
	29 2,4-Dichlorophenol	162	5.734	5.734	(0.975)	136288	38.0653	38
	30 1,2,4-Trichlorobenzene	180	5.825	5.820	(0.991)	152123	36.8577	37

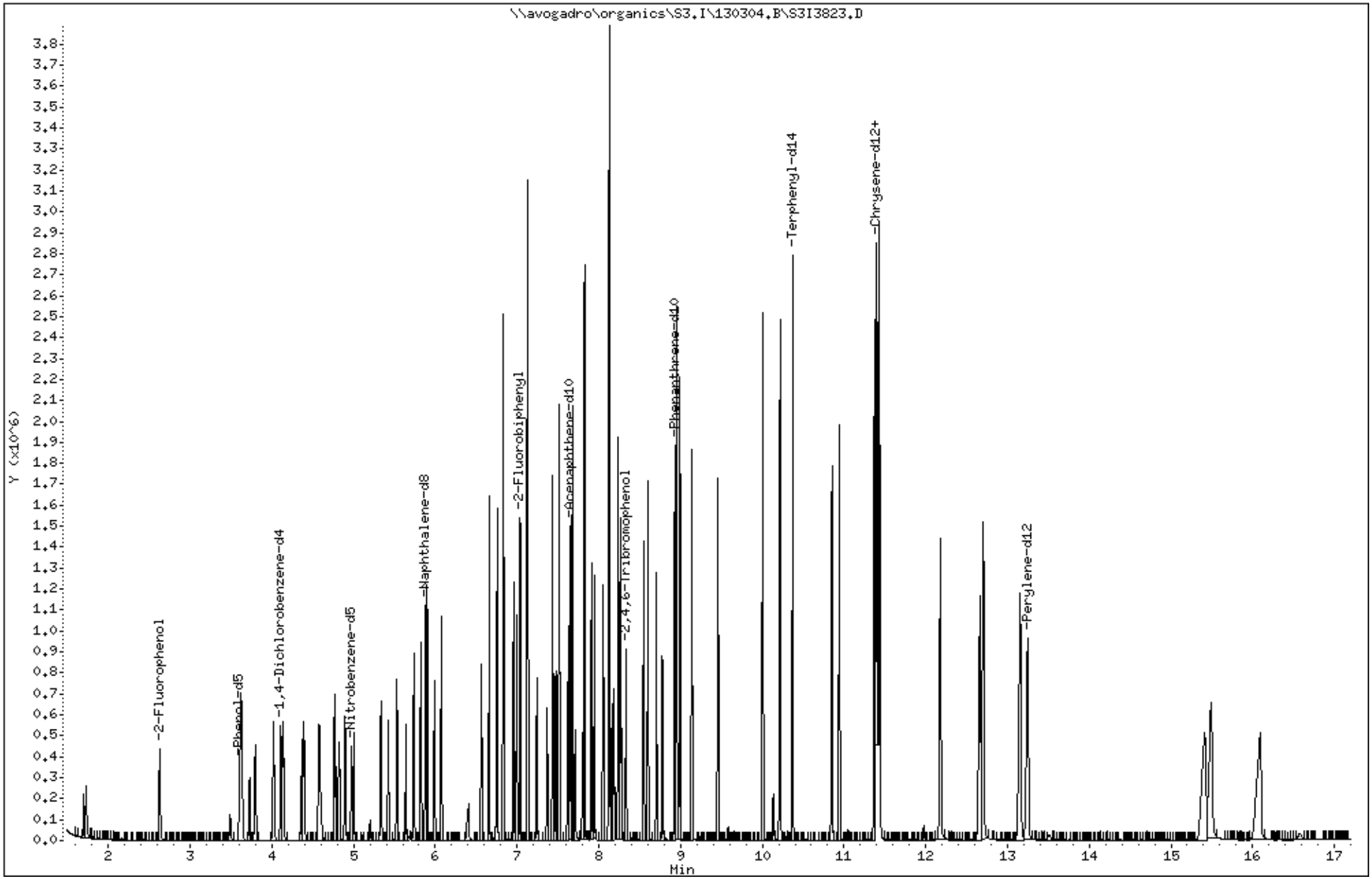
Data File: \\avogadro\organics\S3.I\130304.B\S3I3823.D
Report Date: 05-Mar-2013 11:12

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
*	31 Naphthalene-d8	136	5.879	5.878	(1.000)	408882	40.0000	
	32 Naphthalene	128	5.900	5.900	(1.004)	438638	39.5467	40
	34 Hexachlorobutadiene	225	6.076	6.076	(1.034)	110515	35.8588	36
	35 4-Chloro-3-Methylphenol	107	6.562	6.562	(1.116)	146174	35.5850	36
	38 Hexachlorocyclopentadiene	237	6.830	6.829	(0.893)	129841	44.1937	44
	39 2,4,6-Trichlorophenol	196	6.958	6.957	(0.910)	124948	42.4072	42
$	41 2-Fluorobiphenyl	172	7.038	7.032	(0.920)	405689	40.3881	40
	42 2-Chloronaphthalene	162	7.129	7.128	(0.932)	375298	43.9810	44
	44 Dimethylphthalate	163	7.433	7.428	(0.972)	431122	40.4704	40
	45 2,6-Dinitrotoluene	165	7.476	7.470	(0.978)	94075	41.2348	41
	46 Acenaphthylene	152	7.513	7.508	(0.983)	569288	43.8746	44
*	48 Acenaphthene-d10	164	7.647	7.641	(1.000)	297001	40.0000	
	49 Acenaphthene	153	7.674	7.673	(1.003)	350075	42.7244	43
	50 2,4-Dinitrophenol	184	7.711	7.705	(1.008)	52669	30.6041	31
	51 4-Nitrophenol	109	7.802	7.796	(1.020)	68690	29.0182	29
	53 2,4-Dinitrotoluene	165	7.828	7.823	(1.024)	155447	41.8667	42
	54 Diethylphthalate	149	8.048	8.047	(1.052)	414741	39.5923	40
	55 Fluorene	166	8.128	8.122	(1.063)	498302	43.4005	43
	56 4-Chlorophenyl-phenylether	204	8.133	8.127	(1.064)	282116	41.8278	42
	58 4,6-Dinitro-2-methylphenol	198	8.181	8.175	(0.916)	87862	37.4239	37
	59 N-Nitrosodiphenylamine	169	8.240	8.234	(0.923)	374796	42.0701	42
$	60 2,4,6-Tribromophenol	330	8.336	8.330	(0.934)	69021	45.8980	46
	61 4-Bromophenyl-phenylether	248	8.550	8.544	(0.958)	153621	42.9940	43
	62 Hexachlorobenzene	284	8.603	8.597	(0.964)	156957	41.7904	42
	63 Pentachlorophenol	266	8.779	8.768	(0.983)	89560	31.7692	32
*	64 Phenanthrene-d10	188	8.929	8.918	(1.000)	613672	40.0000	
	65 Phenanthrene	178	8.950	8.939	(1.002)	680950	45.1253	45
	66 Anthracene	178	8.993	8.982	(1.007)	673142	44.6840	45
	68 Di-n-butylphthalate	149	9.458	9.431	(1.059)	749355	46.4906	46
	69 Fluoranthene	202	10.008	9.970	(1.121)	859309	45.3543	45
	71 Pyrene	202	10.216	10.173	(0.896)	877924	46.7195	47
$	72 Terphenyl-d14	244	10.371	10.323	(0.910)	704182	48.7860	49
	73 Butylbenzylphthalate	149	10.852	10.788	(0.952)	351034	46.4098	46
	74 3,3'-Dichlorobenzidine	252	11.370	11.290	(0.998)	307374	42.1320	42
	75 Benzo(a)anthracene	228	11.381	11.306	(0.999)	987614	44.2739	44
*	76 Chrysene-d12	240	11.397	11.317	(1.000)	860446	40.0000	
	77 Chrysene	228	11.424	11.343	(1.002)	842362	41.2645	41(H)
	78 bis(2-Ethylhexyl)phthalate	149	11.434	11.354	(1.003)	521120	43.4778	43
	79 Di-n-octylphthalate	149	12.182	12.091	(0.920)	832536	47.6079	48
	80 Benzo(b)fluoranthene	252	12.663	12.572	(0.956)	851567	40.5274	40
	81 Benzo(k)fluoranthene	252	12.706	12.609	(0.959)	907710	42.1074	42(H)
	82 Benzo(a)pyrene	252	13.155	13.053	(0.993)	816605	42.0695	42
*	83 Perylene-d12	264	13.245	13.160	(1.000)	658176	40.0000	
	84 Indeno(1,2,3-cd)pyrene	276	15.414	15.302	(1.164)	754972	41.5319	42
	85 Dibenzo(a,h)anthracene	278	15.494	15.382	(1.170)	705294	39.7111	40
	86 Benzo(g,h,i)perylene	276	16.093	15.970	(1.215)	764375	42.4712	42

QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\S3.I\130304.B\S3I3823.D
Date : 04-MAR-2013 12:19
Client ID: LCS-70680
Instrument: S3.i
Sample Info: LCS-70680,LCS-70680,70680
Volume Injected (uL): 1.0
Operator: PK SRC: LIMS
Column phase: Rxi-5Sil MS
Column diameter: 0.25



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-70680

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-70680

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I3824.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/04/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
108-95-2	Phenol	35	
111-44-4	Bis(2-chloroethyl)ether	30	
95-57-8	2-Chlorophenol	35	
541-73-1	1,3-Dichlorobenzene	36	
106-46-7	1,4-Dichlorobenzene	36	
95-50-1	1,2-Dichlorobenzene	37	
108-60-1	2,2´-oxybis(1-Chloropropane)	27	
621-64-7	N-Nitroso-di-n-propylamine	30	
67-72-1	Hexachloroethane	34	
98-95-3	Nitrobenzene	32	
78-59-1	Isophorone	32	
88-75-5	2-Nitrophenol	37	
105-67-9	2,4-Dimethylphenol	35	
120-83-2	2,4-Dichlorophenol	36	
120-82-1	1,2,4-Trichlorobenzene	35	
91-20-3	Naphthalene	37	
111-91-1	Bis(2-chloroethoxy)methane	33	
87-68-3	Hexachlorobutadiene	33	
59-50-7	4-Chloro-3-methylphenol	36	
77-47-4	Hexachlorocyclopentadiene	40	
88-06-2	2,4,6-Trichlorophenol	41	
91-58-7	2-Chloronaphthalene	42	
131-11-3	Dimethylphthalate	40	
208-96-8	Acenaphthylene	41	
606-20-2	2,6-Dinitrotoluene	40	
83-32-9	Acenaphthene	41	
51-28-5	2,4-Dinitrophenol	33	
100-02-7	4-Nitrophenol	29	
121-14-2	2,4-Dinitrotoluene	42	
84-66-2	Diethylphthalate	40	
7005-72-3	4-Chlorophenyl-phenylether	40	
86-73-7	Fluorene	41	
534-52-1	4,6-Dinitro-2-methylphenol	38	
86-30-6	N-Nitrosodiphenylamine	43	
101-55-3	4-Bromophenyl-phenylether	42	
118-74-1	Hexachlorobenzene	41	

EPA SAMPLE NO.
LCSD-70680

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-70680

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I3824.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/04/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
87-86-5	Pentachlorophenol	32	
85-01-8	Phenanthrene	44	
120-12-7	Anthracene	44	
84-74-2	Di-n-butylphthalate	46	
206-44-0	Fluoranthene	45	
129-00-0	Pyrene	45	
85-68-7	Butylbenzylphthalate	46	
91-94-1	3,3´-Dichlorobenzidine	42	
56-55-3	Benzo(a)anthracene	43	
218-01-9	Chrysene	42	
117-81-7	Bis(2-ethylhexyl)phthalate	43	
117-84-0	Di-n-octylphthalate	47	
205-99-2	Benzo(b)fluoranthene	40	
207-08-9	Benzo(k)fluoranthene	42	
50-32-8	Benzo(a)pyrene	42	
193-39-5	Indeno(1,2,3-cd)pyrene	41	
53-70-3	Dibenzo(a,h)anthracene	40	
191-24-2	Benzo(g,h,i)perylene	41	

Data File: \\avogadro\organics\S3.I\130304.B\S3I3824.D
Report Date: 05-Mar-2013 11:12

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\130304.B\S3I3824.D
Lab Smp Id: LCSD-70680 Client Smp ID: LCSD-70680
Inj Date : 04-MAR-2013 12:45
Operator : PK SRC: LIMS Inst ID: S3.i
Smp Info : LCSD-70680,LCSD-70680,70680
Misc Info :
Comment   :
Method   : \\avogadro\organics\S3.I\130304.B\s3_8270C_N.m
Meth Date : 05-Mar-2013 11:12 S3.i Quant Type: ISTD
Cal Date : 31-JAN-2013 19:49 Cal File: S3I3546D.D
Als bottle: 4 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 625.sub
Target Version: 4.14
Processing Host: TARGET113

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

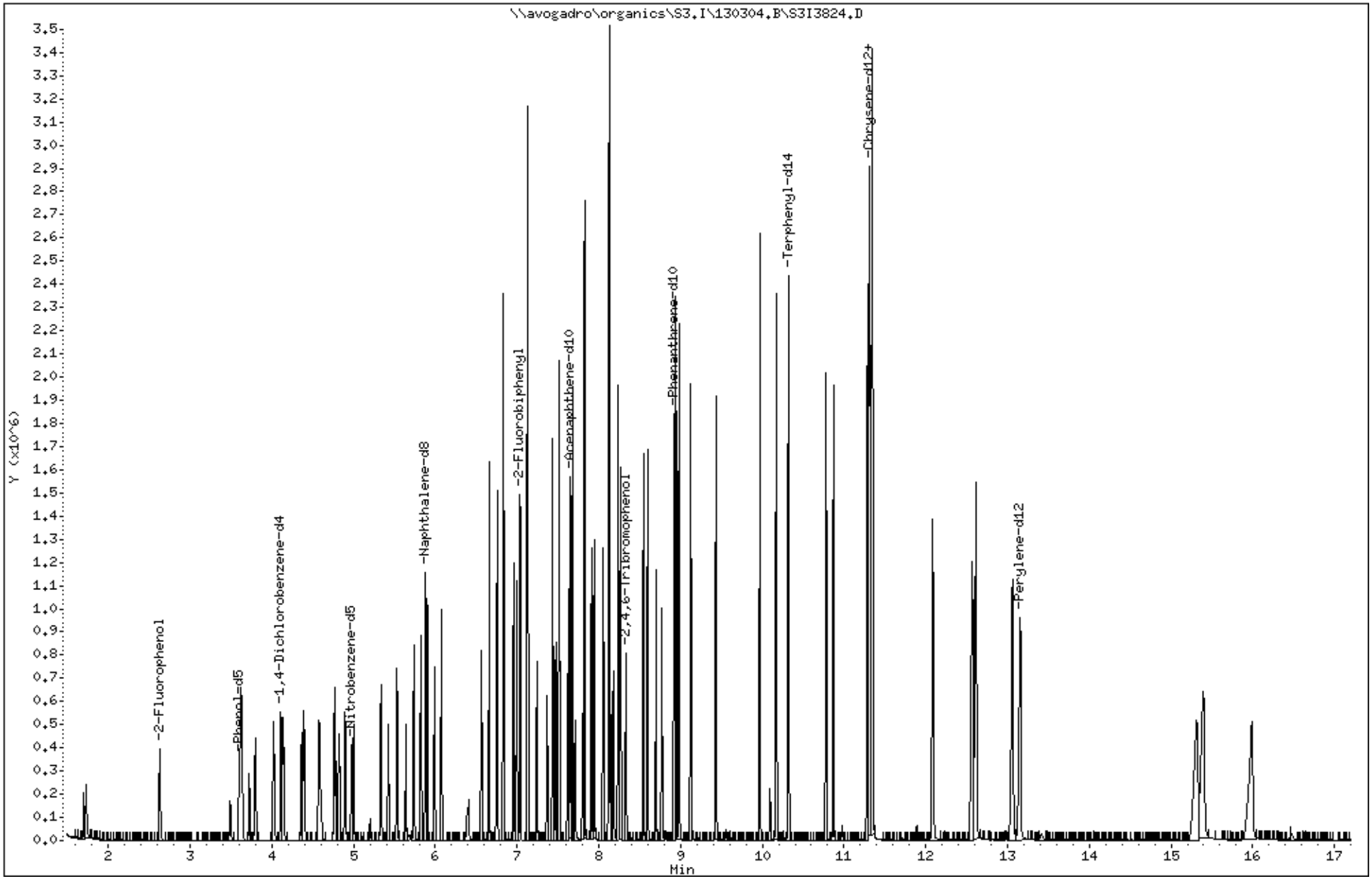
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)
$	3 2-Fluorophenol	112	2.625	2.630	(0.639)	110822	34.8986	35
$	5 Phenol-d5	99	3.602	3.603	(0.877)	142801	31.7898	32
	6 Phenol	94	3.624	3.619	(0.882)	168359	35.0334	35
	8 bis(2-Chloroethyl)Ether	63	3.725	3.720	(0.906)	66201	30.3077	30
	10 2-Chlorophenol	128	3.795	3.795	(0.923)	124343	35.4005	35
	11 1,3-Dichlorobenzene	146	4.019	4.019	(0.978)	149974	36.2790	36
*	12 1,4-Dichlorobenzene-d4	152	4.110	4.110	(1.000)	111585	40.0000	
	13 1,4-Dichlorobenzene	146	4.136	4.137	(1.007)	151910	35.7950	36
	16 1,2-Dichlorobenzene	146	4.393	4.393	(1.069)	142572	36.7099	37
	18 2,2'-oxybis(1-Chloropropane)	45	4.596	4.596	(1.118)	54307	26.6871	27
	19 N-Nitroso-di-n-propylamine	70	4.794	4.789	(1.166)	95513	30.0466	30
	21 Hexachloroethane	117	4.895	4.895	(1.191)	58124	34.3699	34
$	22 Nitrobenzene-d5	82	4.975	4.970	(0.846)	147894	30.7278	31
	23 Nitrobenzene	77	5.002	4.997	(0.851)	153971	31.5123	32
	24 Isophorone	82	5.333	5.328	(0.907)	259388	31.9119	32
	25 2-Nitrophenol	139	5.424	5.424	(0.923)	74637	37.3632	37
	26 2,4-Dimethylphenol	107	5.531	5.531	(0.941)	134929	35.0019	35
	27 bis(2-Chloroethoxy)methane	93	5.638	5.638	(0.959)	136845	32.5628	32
	29 2,4-Dichlorophenol	162	5.734	5.734	(0.975)	128258	36.1762	36
	30 1,2,4-Trichlorobenzene	180	5.825	5.820	(0.991)	144584	35.3769	35

Data File: \\avogadro\organics\S3.I\130304.B\S3I3824.D
Report Date: 05-Mar-2013 11:12

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
*	31 Naphthalene-d8	136	5.878	5.878	(1.000)	404885	40.0000	
	32 Naphthalene	128	5.899	5.900	(1.004)	406288	36.9917	37
	34 Hexachlorobutadiene	225	6.076	6.076	(1.034)	101575	33.2834	33
	35 4-Chloro-3-Methylphenol	107	6.567	6.562	(1.117)	147105	36.1652	36
	38 Hexachlorocyclopentadiene	237	6.834	6.829	(0.894)	118015	40.0672	40
	39 2,4,6-Trichlorophenol	196	6.957	6.957	(0.911)	121715	41.2057	41
$	41 2-Fluorobiphenyl	172	7.037	7.032	(0.921)	387189	38.4491	38
	42 2-Chloronaphthalene	162	7.133	7.128	(0.934)	356130	41.6295	42
	44 Dimethylphthalate	163	7.433	7.428	(0.973)	428468	40.1198	40
	45 2,6-Dinitrotoluene	165	7.475	7.470	(0.978)	91758	40.1178	40
	46 Acenaphthylene	152	7.513	7.508	(0.983)	538520	41.3986	41
*	48 Acenaphthene-d10	164	7.641	7.641	(1.000)	297752	40.0000	
	49 Acenaphthene	153	7.673	7.673	(1.004)	334297	40.6959	41
	50 2,4-Dinitrophenol	184	7.710	7.705	(1.009)	57224	33.1669	33
	51 4-Nitrophenol	109	7.801	7.796	(1.021)	69915	29.4613	29
	53 2,4-Dinitrotoluene	165	7.828	7.823	(1.024)	156200	41.9634	42
	54 Diethylphthalate	149	8.052	8.047	(1.054)	420627	40.0529	40
	55 Fluorene	166	8.122	8.122	(1.063)	472288	41.0310	41
	56 4-Chlorophenyl-phenylether	204	8.127	8.127	(1.064)	269992	39.9293	40
	58 4,6-Dinitro-2-methylphenol	198	8.180	8.175	(0.917)	89176	37.8253	38
	59 N-Nitrosodiphenylamine	169	8.239	8.234	(0.924)	380310	42.5111	42
$	60 2,4,6-Tribromophenol	330	8.335	8.330	(0.935)	70305	46.5571	46
	61 4-Bromophenyl-phenylether	248	8.544	8.544	(0.958)	149150	41.5688	42
	62 Hexachlorobenzene	284	8.597	8.597	(0.964)	154141	40.8696	41
	63 Pentachlorophenol	266	8.768	8.768	(0.983)	90690	32.0359	32
*	64 Phenanthrene-d10	188	8.918	8.918	(1.000)	616240	40.0000	
	65 Phenanthrene	178	8.939	8.939	(1.002)	664292	43.8380	44
	66 Anthracene	178	8.982	8.982	(1.007)	659960	43.6264	44
	68 Di-n-butylphthalate	149	9.431	9.431	(1.058)	747184	46.1628	46
	69 Fluoranthene	202	9.970	9.970	(1.118)	850281	44.6908	45
	71 Pyrene	202	10.173	10.173	(0.899)	854337	45.3152	45
$	72 Terphenyl-d14	244	10.317	10.323	(0.912)	682922	47.1580	47
	73 Butylbenzylphthalate	149	10.782	10.788	(0.953)	346261	45.6287	46
	74 3,3'-Dichlorobenzidine	252	11.284	11.290	(0.997)	306353	41.8544	42
	75 Benzo(a)anthracene	228	11.300	11.306	(0.999)	964196	43.0824	43
*	76 Chrysene-d12	240	11.316	11.317	(1.000)	863276	40.0000	
	77 Chrysene	228	11.338	11.343	(1.002)	863793	42.1756	42
	78 bis(2-Ethylhexyl)phthalate	149	11.348	11.354	(1.003)	522962	43.4884	43
	79 Di-n-octylphthalate	149	12.086	12.091	(0.919)	810961	46.7706	47
	80 Benzo(b)fluoranthene	252	12.572	12.572	(0.956)	835682	40.1114	40
	81 Benzo(k)fluoranthene	252	12.614	12.609	(0.959)	887045	41.5005	42
	82 Benzo(a)pyrene	252	13.063	13.053	(0.993)	801094	41.6232	42
*	83 Perylene-d12	264	13.154	13.160	(1.000)	652598	40.0000	
	84 Indeno(1,2,3-cd)pyrene	276	15.312	15.302	(1.164)	733068	40.6716	41
	85 Dibenzo(a,h)anthracene	278	15.398	15.382	(1.171)	711150	40.3831	40
	86 Benzo(g,h,i)perylene	276	15.991	15.970	(1.216)	726510	40.7123	41

Data File: \\avogadro\organics\S3.I\130304.B\S3I3824.D
Date : 04-MAR-2013 12:45
Client ID: LCSD-70680
Instrument: S3.i
Sample Info: LCSD-70680,LCSD-70680,70680
Volume Injected (uL): 1.0
Operator: PK SRC: LIMS
Column phase: Rxi-5Sil MS
Column diameter: 0.25



Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division PREP BATCH REPORT

Prep Start Date: **03/01/2013 08:26**
Prep End Date: **03/01/2013 14:10**
Prep Batch ID: **70680**

Prep Code: **BNA_W_PR**
Technician: **Jodie B Warner**

Prep Type: **SEPF/SW3510C**

Prep Factor Units: **mL / mL**

QC Matrix: NA2SO4
QC Matrix Lot: 121756

Solvent (1): MECL2
Solvent (1) Lot: DH 299

Solvent (3): N/A
Solvent (3) Lot: N/A

Solvent (5): N/A
Solvent (5) Lot: N/A

Clean Up (1): N/A
Clean Up (1) Lot: N/A

Clean Up (3): N/A
Clean Up (1) Lot: N/A

Filter?: FILTER
Filter Lot: FC003203

Solvent (2): N/A
Solvent (2) Lot: N/A

Solvent (4): N/A
Solvent (4) Lot: N/A

Solvent (6): N/A
Solvent (6) Lot: N/A

Clean Up (2): N/A
Clean Up (2) Lot: N/A

Clean Up (4): N/A
Clean Up (4) Lot: N/A

Start Time: N/A
End Time: N/A

Cycles/Hour 0

Sonicator Tuned? N/A

Bath Temp1 (C): 87

Therm ID1: MT-88

Mitkem Sample ID	Client Samp ID	M	Initial (mL/g)	Final (mL)	Surrogate Spike ID	Surr (mL)	LCS/D MS/D Spike ID	Spike (mL)	A* Init	W* Init	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11	pH <2	CNCNTR Unit
MB-70680	BatchQC		1000	1	OSW130115A	1			JBW	TM			03/01/13	JBW	R7	7.0	☑	☑	KD 1
LCS-70680	BatchQC		1000	1	OSW130115A	1	OSW130212A	1	JBW	TM			03/01/13	JBW	R7	7.0	☑	☑	KD 1
LCSD-70680	BatchQC		1000	1	OSW130115A	1	OSW130212A	1	JBW	TM			03/01/13	JBW	R7	7.0	☑	☑	KD 1
M0262-01B	DIRECT DISCHARGE	A	1000	1	OSW130115A	1			JBW	TM	03/12/13	01	03/01/13	JBW	R7	7.0	☑	☑	KD 1

Jodie B Warner — 03/01/2013
Analyst Reviewed — Date

Timothy McDaniel — 03/01/2013
Manager Reviewed — Date

Comments:

*A = Analyst (Spiked) *W = Witnessed (Spike) *T = Transferred

JW 3/1/13

Logbook ID: 50.0147-02/13

Logbook ID: 70.0192-11/12

Instrument S3
Injection Log

Spectrum Analytical, Inc. RI Div
SemiVolatiles Laboratory

Spectrum Analytical, Inc. RI Division S3 Injection Log
Semivolatiles Laboratory

L1 SL120126A
L2 B
L3 C
L4 D
L5 E
L6 F

METHOD: 8270
ICAL DATE: 1/31/13
ANALYST: MK
EMV: 1261

BATCH: 130131.B

Start: 31-JAN-13 11:27
End: 31-JAN-13 20:16

Internal Standard: SL120625A
Comments:

#9927 Tune—SL120820A

Inlet Maintenance By: MK
Liner : clean
Column : clipped
Inlet Seal: clean
Septum : New

Reviewed By: G 2/6/13

Manual Integration: NA

MI Review: MK

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	INTERNAL STANDARDS DCB	NPT	ANT	PHN	CRY	PRY	SURROGATES BN NBZ	BN FBP	BN TPH	ACID PHL	ACID 2FP	ACID TBP	OLM DCB	OLM 2CP	DILN	FLG	COMMENTS
S3I3540	11:27	DFTPP3N	DFTPP3N		AQ																	
S3I3541D	17:13	SSTD0253N	SSTD0253N		AQ	100	100	100	100	100	100									1		ok
S3I3542D	18:03	SSTD0803N	SSTD0803N		AQ	85	86	85	85	93	87									1		
S3I3543D	18:29	SSTD0053N	SSTD0053N		AQ	89	93	92	93	85	80									1		
S3I3544D	18:55	SSTD0403N	SSTD0403N		AQ	85	87	96	97	99	84									1		
S3I3545D	19:22	SSTD0103N	SSTD0103N		AQ	75	78	79	79	75	71									1		
S3I3546D	19:49	SSTD0603N	SSTD0603N		AQ	75	75	75	76	86	83									1		
S3I3547D	20:16	SICV0253N	SICV0253N		AQ	70	75	77	80	80	81	99	97	99	97	96	96			1		ok

* - 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

MK 2/4/13

Spectrum Analytical, Inc. RI Division S3 Injection Log
Semivolatiles Laboratory

METHOD: 8220
ICAL DATE: 2/31/13

ANALYST: [initials]
EMV: 1230

BATCH: 130304.B

Start: 04-MAR-13 10:07
End: 04-MAR-13 16:56

Internal Standard: SI120625A
Comments:

#9927

Tune – SI120820A
L3 – SW121026C

Inlet Maintenance By: [initials]
Liner : NA
Column :
Inlet Seal:
Septum :

Reviewed By: MMS 3/5/13

Manual Integration: NA

MI Review: NA

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	INTERNAL STANDARDS DCB	NPT	ANT	PHN	CRY	PRY	SURROGATES BN NBZ	BN FBP	BN TPH	ACID PHL	ACID 2FP	ACID TBP	OLM DCB	OLM 2CP	DILN	FLG	COMMENTS
S3I3820	10:07	DFTPP3B	DFTPP3B		AQ																	
S3I3821	11:22	SSTD0253B	SSTD0253B		AQ	100	100	100	100	100	100									1		ok
S3I3822	11:53	MB-70680	MB-70680	70680	AQ	110	109	109	103	99	103	63	74	101	64	73	84			1		
S3I3823	12:19	LCS-70680	LCS-70680	70680	AQ	95	.95	94	91	95	92	64	81	98	70	75	92			1		
S3I3824	12;45	LCSD-70680	LCSD-70680	70680	AQ	99	94	94	92	95	91	61	77	94	64	70	93			1		
S3I3825	13:10	M0262-01B	DIRECT DISCHARG	70680	AQ	102	99	94	89	80	91	59	75	97	11	22	78			1		
S3I3826	13:35	MB-70676	MB-70676	70691	AQ	101	101	98	98	92	98	68	81	110	67	75	86			1		
S3I3827	14:00	LCS-70691	LCS-70691	70691	AQ	101	100	100	99	100	98	71	88	104	72	78	100			1		
S3I3828	14:25	LCSD-70691	LCSD-70691	70691	AQ	110	108	107	104	106	101	69	85	101	71	76	96			1		
S3I3829	14:50	M0264-01A	WC-PAH-9-1	70691	AQ	100	109	95	90	82	92	62	83	105	37	54	88			1		
S3I3830	15:16	M0264-02A	WC-PAH-9-2	70691	AQ	107	121	103	98	93	101	59	81	99	39	54	96			1	E	DLx4
S3I3831	15:41	M0264-02AMS	WC-PAH-9-2MS	70691	AQ	130	167	125	119	124	118	46	74	92	38	49	90			1	ER	
S3I3832	16:56	M0264-02ADL	WC-PAH-9-2DL	70691	AQ	135	133	134	130	120	129	56	62	75	30	46	69			4		ok

* - 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

[initials] 3/5/13

* PCB Organics *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Stand By-Monoco

Laboratory Workorder / SDG #: M0262

EPA 608 PCB, 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: EPA 608 PCB

IV. PREPARATION

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

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:

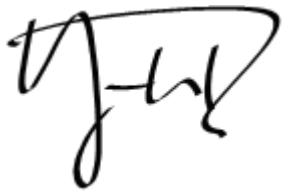
The lower concentration between the primary and confirmatory GC column concentrations is reported due to the presence of interferences unless otherwise indicated. P flags are assigned to compounds when D% between the two columns are greater than 40%.

No other unusual occurrences were noted during sample analysis.

G. Manual Integration

No sample in this SDG were performed with manual integration.

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:_____3/12/2013_____

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.

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

2Q - FORM II ARO-1

WATER AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	CLIENT SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-70682	93	97	86	89			0
02	LCS-70682	88	92	83	85			0
03	LCSD-70682	87	91	82	86			0
04	DIRECT DISCHARGE 2	80	84	65	69			0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(39-126)
DCB = Decachlorobiphenyl	(17-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som12.12.17.A

3N - FORM III ARO-3
WATER AROCLOR LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.
LCS-70682

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Lab Sample ID: LCS-70682 LCS Lot No.: A086503

Date Extracted: 03/01/2013 Date Analyzed (1): 03/01/2013

Instrument ID (1): E2 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC	#	QC LIMITS
Aroclor-1016	4.0000	3.5013	88		50-114
Aroclor-1260	4.0000	3.3247	83		8-127

Instrument ID (2): E2 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 03/01/2013

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC	#	QC LIMITS
Aroclor-1016	4.0000	3.5155	88		50-114
Aroclor-1260	4.0000	3.6727	92		8-127

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:

som12.12.17.A

3N - FORM III ARO-3
WATER AROCLOR LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

CLIENT SAMPLE NO.
LCSD-70682

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Lab Sample ID: LCSD-70682 LCS Lot No.: A086503

Date Extracted: 03/01/2013 Date Analyzed (1): 03/01/2013

Instrument ID (1): E2 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC	#	QC LIMITS	%RPD	#	RPD LIMIT
Aroclor-1016	4.0000	3.4485	86		50-114	2.0		40
Aroclor-1260	4.0000	3.3032	83		8-127	0		40

Instrument ID (2): E2 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 03/01/2013

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC	#	QC LIMITS	%RPD	#	RPD LIMIT
Aroclor-1016	4.0000	3.4860	87		50-114	1.0		40
Aroclor-1260	4.0000	3.6780	92		8-127	0		40

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:

som12.12.17.A

4F - FORM IV ARO

AROCLOR METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

MB-70682

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Lab File ID: E2L8868F.D / E2L8868R.D Lab Sample ID: MB-70682

Matrix: (SOIL/SED/WATER) WATER Extraction: (Type) SEPF Date Extracted: 03/01/2013

Sulfur Cleanup: (Y/N) Y GPC Cleanup:(Y/N) N

Acid Cleanup: (Y/N Y

Date Analyzed (1): 03/01/2013 Date Analyzed (2): 03/01/2013

Time Analyzed (1): 15:05 Time Analyzed (2): 15:05

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-70682	LCS-70682	03/01/2013	03/01/2013
02	LCSD-70682	LCSD-70682	03/01/2013	03/01/2013
03	DIRECT DISCHARGE 2	M0262-01B	03/01/2013	03/01/2013

COMMENTS:

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DIRECT DISCHARGE 2

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0262-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2L8871F.D/E2L8871R.D

% Moisture: Decanted: (Y/N) Date Received: 02/28/2013

Extraction: (Type) SEPF Date Extracted: 03/01/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/01/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

Data File: \\avogadro\organics\E2.i\130301F.B\E2L8871F.D
Report Date: 04-Mar-2013 12:49

Spectrum Analytical, Inc. RI Division

Quantitation Report

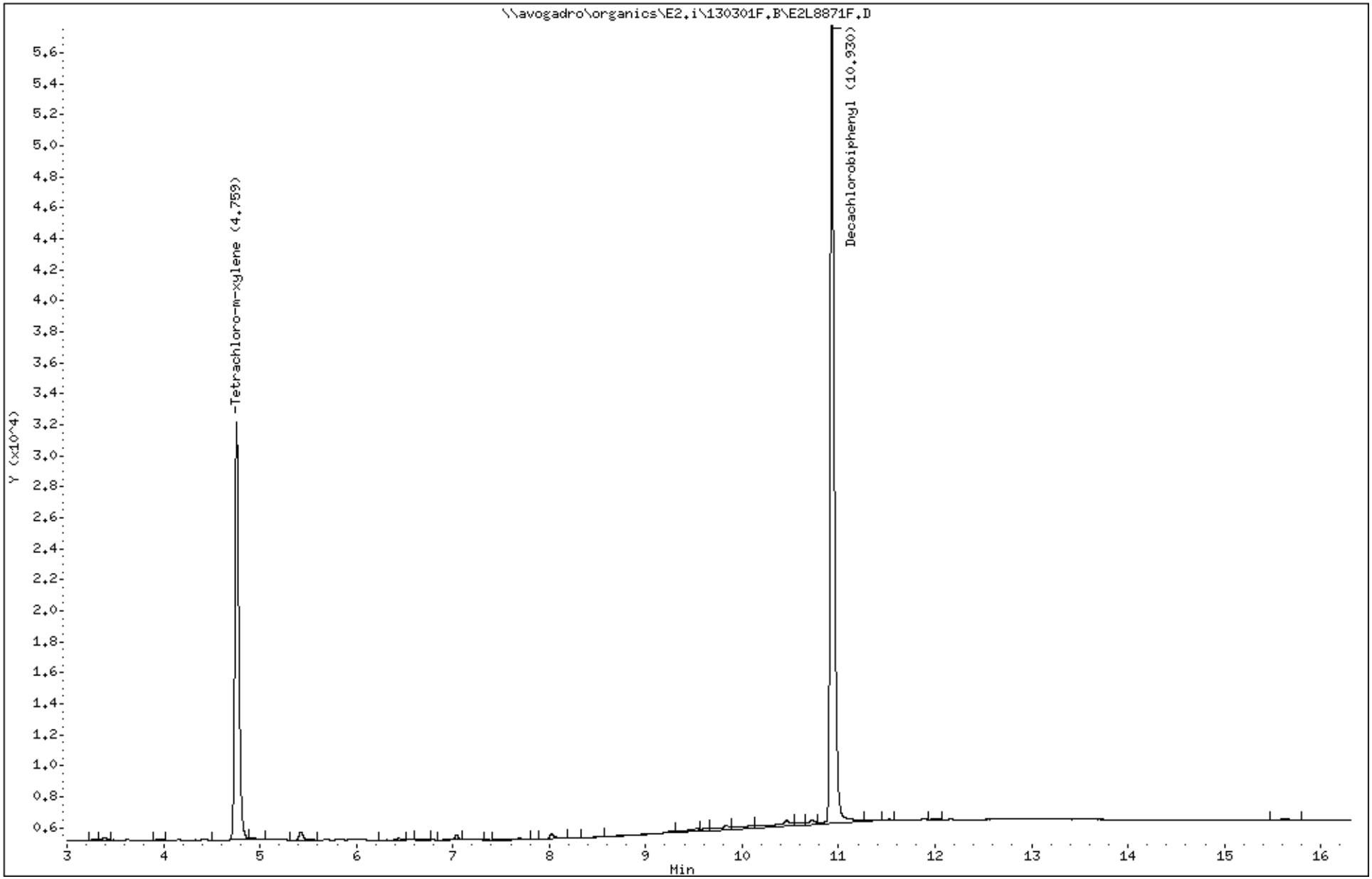
Data file : \\avogadro\organics\E2.i\130301F.B\E2L8871F.D
Lab Smp Id: M0262-01B Client Smp ID: DIRECT DISCHARGE 2
Inj Date : 01-MAR-2013 16:04
Operator : TM   SRC: LIMS Inst ID: E2.i
Smp Info : M0262-01B,,70682,8082A.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130301F.B\E2_LL_PCB_F.m
Meth Date : 04-Mar-2013 08:24 tmcdaniel Quant Type: ESTD
Cal Date : 31-JAN-2013 09:14 Cal File: E2L8513F.D
Als bottle: 8
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

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.758	4.725	0.033	26950	0.04795	0.48		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
10.929	10.896	0.033	1533891	0.07770	0.78		

Data File: \\avogadro\organics\E2.i\130301F.B\E2L8871F.D
Date : 01-MAR-2013 16:04
Client ID: DIRECT DISCHARGE 2
Instrument: E2.i
Sample Info: M0262-01B,,70682,8082A,sub,,
Volume Injected (uL): 1.0
Operator: TM SRC: LIMS
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130301R.B\E2L8871R.D
Report Date: 04-Mar-2013 12:50

Spectrum Analytical, Inc. RI Division

Quantitation Report

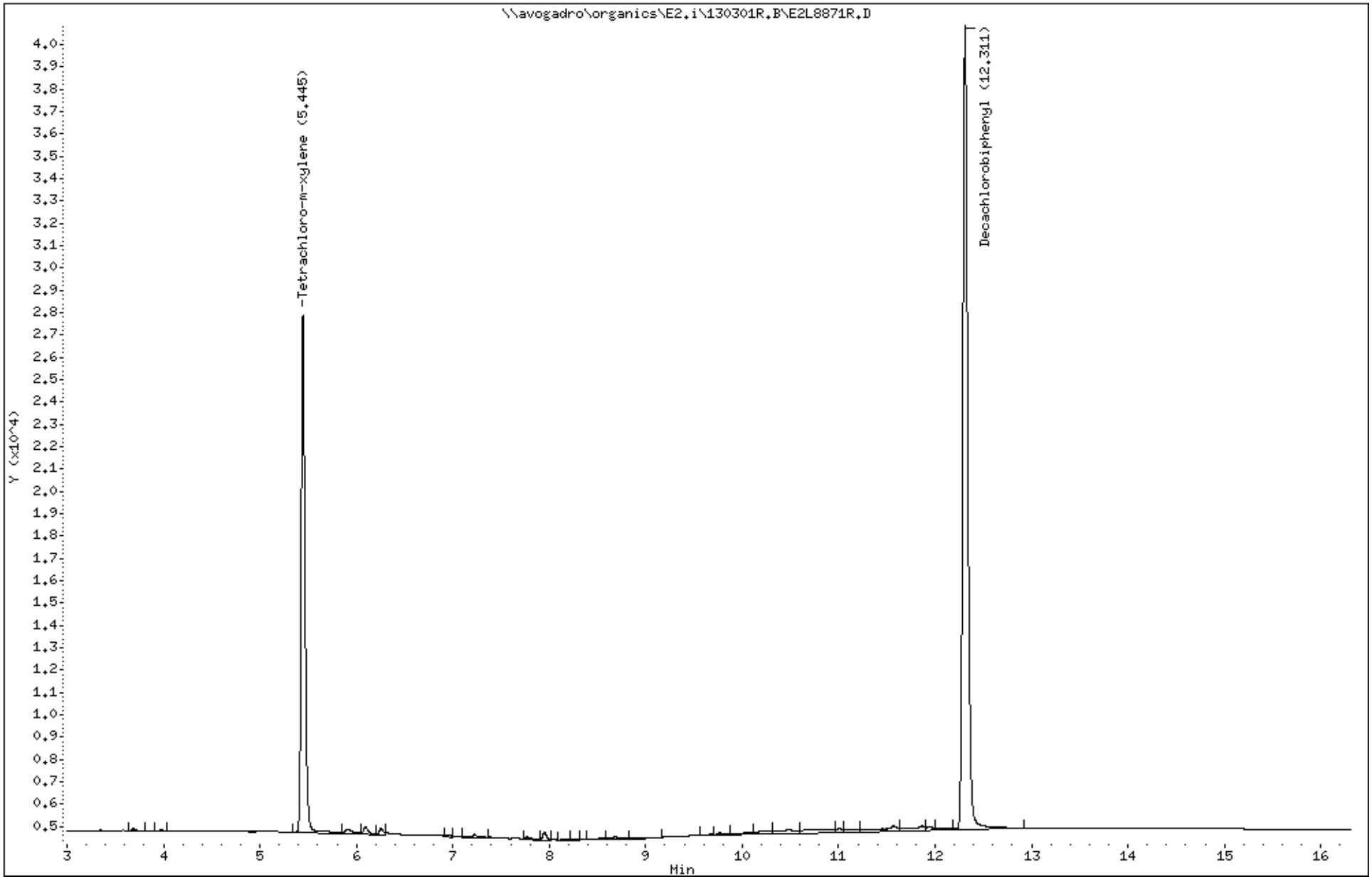
Data file : \\avogadro\organics\E2.i\130301R.B\E2L8871R.D
Lab Smp Id: M0262-01B Client Smp ID: DIRECT DISCHARGE 2
Inj Date : 01-MAR-2013 16:04
Operator : TM   SRC: LIMS Inst ID: E2.i
Smp Info : M0262-01B,,70682,8082A.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130301R.B\E2_LL_PCB_R.m
Meth Date : 04-Mar-2013 08:25 tmcdaniel Quant Type: ESTD
Cal Date : 31-JAN-2013 09:14 Cal File: E2L8513R.D
Als bottle: 8
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

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
5.445	5.410	0.035	23123	0.05050	0.50		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
12.310	12.262	0.048	35987	0.08254	0.82		

Data File: \\avogadro\organics\E2.i\130301R.B\E2L8871R.D
Date : 01-MAR-2013 16:04
Client ID: DIRECT DISCHARGE 2
Instrument: E2.i
Sample Info: M0262-01B,,70682,8082A,sub,,
Volume Injected (uL): 1.0
Operator: TM SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.32



6N - FORM VI ARO-1

AROCLORS INITIAL CALIBRATION (MULTIPOINT)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

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: CLPPest ID: 0.53 (mm) Date(s) Analyzed (1): 01/30/2013 01/31/2013

COMPOUND	PEAK*	RT OF STANDARDS									__	RT WINDOW **	
		CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8	CS9	RT	FROM	TO
AR1016	1	5.924	5.921	5.919	5.915	5.914	5.923				5.919	5.849	5.989
	2	6.584	6.583	6.582	6.579	6.578	6.585				6.582	6.512	6.652
	3	6.762	6.760	6.759	6.755	6.755	6.763				6.759	6.689	6.829
AR1260	1	8.516	8.514	8.513	8.510	8.510	8.517				8.514	8.444	8.584
	2	8.769	8.766	8.764	8.761	8.761	8.770				8.765	8.695	8.835
	3	9.018	9.015	9.012	9.009	9.007	9.020				9.013	8.943	9.083
AR1242	1	6.225	6.225	6.224	6.223	6.223	6.224				6.224	6.154	6.294
	2	6.763	6.764	6.762	6.761	6.761	6.763				6.762	6.692	6.832
	3	6.842	6.843	6.841	6.840	6.840	6.841				6.841	6.771	6.911
AR1248	1	7.018	7.018	7.017	7.017	7.017	7.018				7.018	6.948	7.088
	2	7.263	7.263	7.261	7.261	7.260	7.264				7.262	7.192	7.332
	3	7.362	7.362	7.360	7.360	7.359	7.363				7.361	7.291	7.431
AR1254	1	7.686	7.685	7.685	7.683	7.683	7.687				7.685	7.615	7.755
	2	7.954	7.953	7.953	7.951	7.951	7.955				7.953	7.883	8.023
	3	8.229	8.229	8.228	8.227	8.227	8.230				8.228	8.158	8.298
TCX		4.733	4.732	4.729	4.727	4.725					4.729	4.679	4.779
DCB		10.903	10.901	10.900	10.896	10.896					10.899	10.799	10.999

* At least three peaks for each column are required for identification of Aroclors.

**Retention Time windows are ± 0.07 minutes for each Aroclor peak; 0.05 minutes for tetrachloro-m-xylene; ± 0.10 minutes for decachlorobiphenyl.

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

6N - FORM VI ARO-1

AROCLORS INITIAL CALIBRATION (MULTIPOINT)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

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): 01/30/2013 01/31/2013

COMPOUND	PEAK*	RT OF STANDARDS									__	RT WINDOW **	
		CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8	CS9	RT	FROM	TO
AR1016	1	7.378	7.377	7.372	7.372	7.371	7.379				7.375	7.305	7.445
	2	7.537	7.536	7.530	7.530	7.529	7.537				7.533	7.463	7.603
	3	7.652	7.651	7.646	7.645	7.644	7.652				7.648	7.578	7.718
AR1260	1	9.655	9.653	9.648	9.647	9.646	9.655				9.651	9.581	9.721
	2	9.729	9.728	9.724	9.722	9.721	9.730				9.726	9.656	9.796
	3	10.006	10.005	10.000	9.999	9.998	10.007				10.003	9.933	10.073
AR1242	1	6.820	6.818	6.817	6.817	6.816	6.819				6.818	6.748	6.888
	2	7.131	7.130	7.129	7.129	7.129	7.130				7.130	7.060	7.200
	3	7.380	7.379	7.378	7.378	7.378	7.379				7.379	7.309	7.449
AR1248	1	7.798	7.798	7.798	7.796	7.796	7.798				7.797	7.727	7.867
	2	8.034	8.035	8.034	8.032	8.031	8.035				8.033	7.963	8.103
	3	8.159	8.159	8.158	8.157	8.156	8.159				8.158	8.088	8.228
AR1254	1	8.440	8.440	8.438	8.437	8.437	8.441				8.439	8.369	8.509
	2	8.609	8.608	8.607	8.606	8.606	8.610				8.608	8.538	8.678
	3	9.021	9.020	9.019	9.018	9.017	9.022				9.019	8.949	9.089
TCX		5.419	5.420	5.412	5.413	5.410					5.415	5.365	5.465
DCB		12.274	12.273	12.264	12.263	12.263					12.267	12.167	12.367

* At least three peaks for each column are required for identification of Aroclors.

**Retention Time windows are ± 0.07 minutes for each Aroclor peak; 0.05 minutes for tetrachloro-m-xylene; ± 0.10 minutes for decachlorobiphenyl.

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

6P - FORM VI ARO-2

AROCLOR INITIAL CALIBRATION (MULTIPOINT)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Instrument ID: E2 Date(s) Analyzed: 01/30/2013 01/31/2013

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 [1]	CALIBRATION FACTORS (CFs)									% RSD
		CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8	CS9	
AR1016	1	25720	26865	23708	21278	18147	26280				14.3
	2	37300	39855	34870	32939	29002	36680				10.8
	3	20450	22165	19960	18908	16702	18580				9.5
AR1260	1	43210	44140	39960	37303	32430	43320				11.3
	2	55330	56995	51738	48758	42403	54540				10.4
	3	48190	50830	46890	45255	40769	43280				7.8
AR1242	1	9510	10015	9465	9039	8558	10100				6.2
	2	14990	15360	14603	13926	13263	14100				5.3
	3	10100	10390	10068	9851	9756	9320				3.7
AR1248	1	23790	23640	21085	19771	18216	27320				14.7
	2	25320	25525	23430	22470	21291	28580				10.7
	3	15410	15940	15130	14946	14479	17220				6.2
AR1254	1	29100	29950	27343	24029	22388	32040				13.4
	2	40510	41105	37563	33388	30942	45280				13.9
	3	26870	28145	26945	24599	23604	28700				7.5
DCB (A)	l	21963100	21744200	19976925	18371775	16648350					11.5
TCX (A)	e	551200	617400	556750	542650	542138					5.6

[1] At least three peaks for each column are required for identification of Aroclors.

6P - FORM VI ARO-2

AROCLOR INITIAL CALIBRATION (MULTIPOINT)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Instrument ID: E2 Date(s) Analyzed: 01/30/2013 01/31/2013

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 [1]	CALIBRATION FACTORS (CFs)									
		CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8	CS9	% RSD
AR1016	1	35580	37625	31765	30179	26309	36360				13.1
	2	19150	20330	17615	16820	14676	19060				11.3
	3	11370	12550	11095	11098	10031	10900				7.3
AR1260	1	39520	40615	35465	34095	30703	38500				10.3
	2	32930	32815	28238	26378	21789	37960				19.1
	3	29010	30075	26963	25625	21711	32140				13.3
AR1242	1	15130	15435	14300	13523	12516	16460				9.7
	2	7810	8075	7670	7418	6983	8300				6.1
	3	25970	26095	24300	22954	21398	27580				9.2
AR1248	1	16100	16345	14915	14126	13178	18060				11.3
	2	21880	22150	20335	19349	18328	24580				10.6
	3	17630	18135	17108	16681	16143	19580				6.9
AR1254	1	29440	29685	26793	23413	21384	32220				15.2
	2	31350	31460	28453	24818	22756	34480				15.4
	3	38560	39390	36453	32484	30416	40960				11.4
DCB (A)	l	499500	491400	435550	394100	359531					13.9
TCX (A)	e	458400	510900	444450	437275	438238					6.7

[1] At least three peaks for each column are required for identification of Aroclors.

6Q - FORM VI PEST

TOXAPHENE INITIAL CALIBRATION (SINGLE POINT)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Instrument ID: E2 Date(s) Analyzed: 01/30/2013 01/31/2013

GC Column: CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT (ng)	PEAK [1]	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR
Aroclor-1221	0.4	1	3.92	3.85	3.99	5393
		2	4.52	4.45	4.59	1475
		3	5.02	4.95	5.09	6628
		4				
		5				
Aroclor-1232	0.4	1	5.02	4.95	5.09	4603
		2	5.35	5.28	5.42	13553
		3	5.92	5.85	5.99	9885
		4				
		5				

[1] At least three peaks for each column are required for identification of multicomponent analytes.

6Q - FORM VI PEST

TOXAPHENE INITIAL CALIBRATION (SINGLE POINT)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Instrument ID: E2 Date(s) Analyzed: 01/30/2013 01/31/2013

GC Column: CLPPestII ID: 0.53 (mm)

COMPOUND	AMOUNT (ng)	PEAK [1]	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR
Aroclor-1221	0.4	1	4.57	4.50	4.64	4668
		2	5.24	5.17	5.31	1288
		3	5.92	5.85	5.99	5963
		4				
		5				
Aroclor-1232	0.4	1	5.92	5.85	5.99	4118
		2	6.24	6.17	6.31	11340
		3	6.82	6.75	6.89	8235
		4				
		5				

[1] At least three peaks for each column are required for identification of multicomponent analytes.

7N - FORM VII ARO

AROCLOR CALIBRATION VERIFICATION SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

GC Column: CLPPest ID: 0.53 (mm) Calibration Date(s): 01/30/2013 01/31/2013

EPA Sample No. (AR####3##): AR16603AD Date Analyzed: 03/01/2013

Lab Sample ID: AR16603AD Time Analyzed: 13:24

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

AROCLOR COMPOUND	PEAK	RETENTION RT	RT WINDOW FROM	RT WINDOW TO	__ CF	CF	%D
AR1016	1	5.950	5.849	5.989	23666.14583	23397.5	-1.1
	2	6.608	6.512	6.652	35107.60417	34032.5	-3.1
	3	6.786	6.689	6.829	19460.72917	19362.5	-0.5
AR1260	1	8.537	8.444	8.584	40060.41667	38097.5	-4.9
	2	8.790	8.695	8.835	51627.1875	48637.5	-5.8
	3	9.038	8.943	9.083	45869.0625	44262.5	-3.5
TCX		4.763	4.679	4.779	562027.5	555550	-1.2
DCB		10.935	10.799	10.999	19740870	19148375	-3.0

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.: M0262 Mod. Ref No.: SDG No.: SM0262

GC Column: CLPPestII ID: 0.53 (mm) Calibration Date(s): 01/30/2013 01/31/2013

EPA Sample No. (AR####3##): AR16603AD Date Analyzed: 03/01/2013

Lab Sample ID: AR16603AD Time Analyzed: 13:24

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

AROCLOR COMPOUND	PEAK	RETENTION RT	RT WINDOW FROM	RT WINDOW TO	__ CF	CF	%D
AR1016	1	7.397	7.305	7.445	32969.6875	31462.5	-4.6
	2	7.557	7.463	7.603	17941.875	17570	-2.1
	3	7.672	7.578	7.718	11173.85417	11025	-1.3
AR1260	1	9.675	9.581	9.721	36483.02083	35437.5	-2.9
	2	9.751	9.656	9.796	30018.125	28962.5	-3.5
	3	10.030	9.933	10.073	27587.29167	28115	1.9
TCX		5.449	5.365	5.465	457852.5	455400	-0.5
DCB		12.312	12.167	12.367	436016.25	433100	-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.: M0262 Mod. Ref No.: SDG No.: SM0262

GC Column: CLPPest ID: 0.53 (mm) Calibration Date(s): 01/30/2013 01/31/2013

EPA Sample No. (AR####3##): AR16603AE Date Analyzed: 03/01/2013

Lab Sample ID: AR16603AE Time Analyzed: 16:44

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

AROCLOR COMPOUND	PEAK	RETENTION RT	RT WINDOW FROM	RT WINDOW TO	__ CF	CF	%D
AR1016	1	5.948	5.849	5.989	23666.14583	22882.5	-3.3
	2	6.606	6.512	6.652	35107.60417	33245	-5.3
	3	6.785	6.689	6.829	19460.72917	18770	-3.5
AR1260	1	8.536	8.444	8.584	40060.41667	37047.5	-7.5
	2	8.789	8.695	8.835	51627.1875	47820	-7.4
	3	9.038	8.943	9.083	45869.0625	43805	-4.5
TCX		4.761	4.679	4.779	562027.5	549750	-2.2
DCB		10.933	10.799	10.999	19740870	19400275	-1.7

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.: M0262 Mod. Ref No.: SDG No.: SM0262

GC Column: CLPPestII ID: 0.53 (mm) Calibration Date(s): 01/30/2013 01/31/2013

EPA Sample No. (AR####3##): AR16603AE Date Analyzed: 03/01/2013

Lab Sample ID: AR16603AE Time Analyzed: 16:44

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

AROCLOR COMPOUND	PEAK	RETENTION RT	RT WINDOW FROM	RT WINDOW TO	__ CF	CF	%D
AR1016	1	7.398	7.305	7.445	32969.6875	31000	-6.0
	2	7.557	7.463	7.603	17941.875	17462.5	-2.7
	3	7.672	7.578	7.718	11173.85417	11102.5	-0.6
AR1260	1	9.675	9.581	9.721	36483.02083	35720	-2.1
	2	9.751	9.656	9.796	30018.125	29355	-2.2
	3	10.031	9.933	10.073	27587.29167	28187.5	2.2
TCX		5.449	5.365	5.465	457852.5	467350	2.1
DCB		12.315	12.167	12.367	436016.25	443850	1.8

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

8H - FORM VIII ARO
AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 01/30/2013 01/31/2013

Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.729 DCB: 10.899

	CLIENT SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12213A2	E2L8486F.D	1/30/2013	18:59	4.734	10.903
02	AR12323A2	E2L8487F.D	1/30/2013	19:19	4.735	10.903
03	AR12421A2	E2L8488F.D	1/30/2013	19:38	4.735	10.904
04	AR12426A2	E2L8489F.D	1/30/2013	19:58	4.734	10.905
05	AR12422A2	E2L8490F.D	1/30/2013	20:18	4.734	10.903
06	AR12423A2	E2L8491F.D	1/30/2013	20:38	4.734	10.903
07	AR12424A2	E2L8492F.D	1/30/2013	20:57	4.733	10.901
08	AR12425A2	E2L8493F.D	1/30/2013	21:17	4.732	10.901
09	AR12481A2	E2L8494F.D	1/30/2013	21:37	4.735	10.905
10	AR12486A2	E2L8495F.D	1/30/2013	21:57	4.734	10.905
11	AR12482A2	E2L8496F.D	1/30/2013	22:17	4.735	10.904
12	AR12483A2	E2L8497F.D	1/30/2013	22:36	4.734	10.903
13	AR12484A2	E2L8498F.D	1/30/2013	22:56	4.734	10.902
14	AR12485A2	E2L8499F.D	1/30/2013	23:15	4.733	10.901
15	AR12541A2	E2L8500F.D	1/30/2013	23:35	4.735	10.903
16	AR12546A2	E2L8501F.D	1/30/2013	23:55	4.735	10.904
17	AR12542A2	E2L8502F.D	1/31/2013	0:14	4.734	10.902
18	AR12543A2	E2L8503F.D	1/31/2013	0:34	4.733	10.902
19	AR12544A2	E2L8504F.D	1/31/2013	0:54	4.732	10.900
20	AR12545A2	E2L8505F.D	1/31/2013	1:14	4.732	10.900
21	AR12623A2	E2L8506F.D	1/31/2013	1:33	4.734	10.901
22	AR12683A2	E2L8507F.D	1/31/2013	1:53	4.733	10.900
23	AR16601A2	E2L8508F.D	1/31/2013	2:13	4.733	10.903
24	AR16606A2	E2L8509F.D	1/31/2013	2:33	4.733	10.904
25	AR16602A2	E2L8510F.D	1/31/2013	2:52	4.732	10.901
26	AR16603A2	E2L8511F.D	1/31/2013	8:35	4.729	10.900
27	AR16604A2	E2L8512F.D	1/31/2013	8:54	4.727	10.896

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.: M0262 Mod. Ref No.: SDG No.: SM0262

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 01/30/2013 01/31/2013

Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.729 DCB: 10.899

	CLIENT SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR16605A2	E2L8513F.D	1/31/2013	9:14	4.725	10.896
29	AR16603AD	E2L8864F.D	3/1/2013	13:24	4.763	10.935
30	MB-70682	E2L8868F.D	3/1/2013	15:05	4.767	10.942
31	LCS-70682	E2L8869F.D	3/1/2013	15:25	4.759	10.931
32	LCSD-70682	E2L8870F.D	3/1/2013	15:44	4.759	10.930
33	DIRECT DISCHARGE 2	E2L8871F.D	3/1/2013	16:04	4.759	10.930
34	AR16603AE	E2L8873F.D	3/1/2013	16:44	4.761	10.933

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.: M0262 Mod. Ref No.: SDG No.: SM0262

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 01/30/2013 01/31/2013

Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

	MEAN SURROGATE RT FROM INITIAL CALIBRATION TCX: 5.415 DCB: 12.267					
	CLIENT SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12213A2	E2L8486R.D	1/30/2013	18:59	5.420	12.275
02	AR12323A2	E2L8487R.D	1/30/2013	19:19	5.421	12.275
03	AR12421A2	E2L8488R.D	1/30/2013	19:38	5.422	12.276
04	AR12426A2	E2L8489R.D	1/30/2013	19:58	5.420	12.276
05	AR12422A2	E2L8490R.D	1/30/2013	20:18	5.420	12.275
06	AR12423A2	E2L8491R.D	1/30/2013	20:38	5.419	12.275
07	AR12424A2	E2L8492R.D	1/30/2013	20:57	5.421	12.272
08	AR12425A2	E2L8493R.D	1/30/2013	21:17	5.419	12.275
09	AR12481A2	E2L8494R.D	1/30/2013	21:37	5.421	12.276
10	AR12486A2	E2L8495R.D	1/30/2013	21:57	5.421	12.277
11	AR12482A2	E2L8496R.D	1/30/2013	22:17	5.423	12.275
12	AR12483A2	E2L8497R.D	1/30/2013	22:36	5.423	12.275
13	AR12484A2	E2L8498R.D	1/30/2013	22:56	5.422	12.273
14	AR12485A2	E2L8499R.D	1/30/2013	23:15	5.420	12.274
15	AR12541A2	E2L8500R.D	1/30/2013	23:35	5.422	12.275
16	AR12546A2	E2L8501R.D	1/30/2013	23:55	5.422	12.276
17	AR12542A2	E2L8502R.D	1/31/2013	0:14	5.422	12.274
18	AR12543A2	E2L8503R.D	1/31/2013	0:34	5.419	12.274
19	AR12544A2	E2L8504R.D	1/31/2013	0:54	5.420	12.271
20	AR12545A2	E2L8505R.D	1/31/2013	1:14	5.418	12.271
21	AR12623A2	E2L8506R.D	1/31/2013	1:33	5.420	12.273
22	AR12683A2	E2L8507R.D	1/31/2013	1:53	5.420	12.270
23	AR16601A2	E2L8508R.D	1/31/2013	2:13	5.419	12.274
24	AR16606A2	E2L8509R.D	1/31/2013	2:33	5.419	12.275
25	AR16602A2	E2L8510R.D	1/31/2013	2:52	5.420	12.273
26	AR16603A2	E2L8511R.D	1/31/2013	8:35	5.412	12.264
27	AR16604A2	E2L8512R.D	1/31/2013	8:54	5.413	12.263

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.: M0262 Mod. Ref No.: SDG No.: SM0262

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 01/30/2013 01/31/2013

Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 5.415 DCB: 12.267

	CLIENT SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR16605A2	E2L8513R.D	1/31/2013	9:14	5.410	12.263
29	AR16603AD	E2L8864R.D	3/1/2013	13:24	5.449	12.312
30	MB-70682	E2L8868R.D	3/1/2013	15:05	5.438	12.316
31	LCS-70682	E2L8869R.D	3/1/2013	15:25	5.446	12.311
32	LCSD-70682	E2L8870R.D	3/1/2013	15:44	5.446	12.310
33	DIRECT DISCHARGE 2	E2L8871R.D	3/1/2013	16:04	5.445	12.311
34	AR16603AE	E2L8873R.D	3/1/2013	16:44	5.449	12.315

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

CLIENT SAMPLE NO.
LCS-70682

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Lab Sample ID: LCS-70682 Date(s) Analyzed: 03/01/2013 03/01/2013

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 FROM	RT WINDOW TO	CONCENTRATION PEAK	CONCENTRATION MEAN	%D
Aroclor-1016	1	5.947	5.849	5.989	3.4759		
	2	6.606	6.512	6.652	3.4913		
COLUMN 1	3	6.784	6.689	6.829	3.5369		
	4						
	5					3.501328	
	1	7.397	7.305	7.445	3.4532		
	2	7.556	7.463	7.603	3.5342		
COLUMN 2	3	7.671	7.578	7.718	3.5592		
	4						
	5					3.515521	0.4
Aroclor-1260	1	8.535	8.444	8.584	3.3592		
	2	8.787	8.695	8.835	3.3207		
COLUMN 1	3	9.036	8.943	9.083	3.2942		
	4						
	5					3.324689	
	1	9.674	9.581	9.721	3.3443		
	2	9.750	9.656	9.796	3.8124		
COLUMN 2	3	10.029	9.933	10.073	3.8616		
	4						
	5					3.672740	10.5

At least 3 peaks for each column are required for identification of multicomponent analytes

10C - FORM X ARO
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.
LCSD-70682

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Lab Sample ID: LCSD-70682 Date(s) Analyzed: 03/01/2013 03/01/2013

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 FROM	RT WINDOW TO	CONCENTRATION PEAK	CONCENTRATION MEAN	%D
Aroclor-1016	1	5.946	5.849	5.989	3.4213		
	2	6.605	6.512	6.652	3.4448		
COLUMN 1	3	6.783	6.689	6.829	3.4793		
	4						
	5					3.448498	
	1	7.396	7.305	7.445	3.4259		
	2	7.556	7.463	7.603	3.4890		
COLUMN 2	3	7.671	7.578	7.718	3.5431		
	4						
	5					3.486004	1.1
Aroclor-1260	1	8.535	8.444	8.584	3.3430		
	2	8.787	8.695	8.835	3.2851		
COLUMN 1	3	9.036	8.943	9.083	3.2815		
	4						
	5					3.303185	
	1	9.673	9.581	9.721	3.3451		
	2	9.749	9.656	9.796	3.8114		
COLUMN 2	3	10.029	9.933	10.073	3.8775		
	4						
	5					3.677997	11.3

At least 3 peaks for each column are required for identification of multicomponent analytes

Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8486F.D
Report Date: 06-Feb-2013 10:30

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AF.B\E2L8486F.D
Lab Smp Id: AR12213A2 Client Smp ID: AR12213A2
Inj Date : 30-JAN-2013 18:59
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR12213A2,AR12213A2,,ar1221.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AF.B\E2_LL_PCB_F.m
Meth Date : 06-Feb-2013 09:59 tmcdaniel Quant Type: ESTD
Cal Date : 30-JAN-2013 18:59 Cal File: E2L8486F.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: GERMANIUM

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

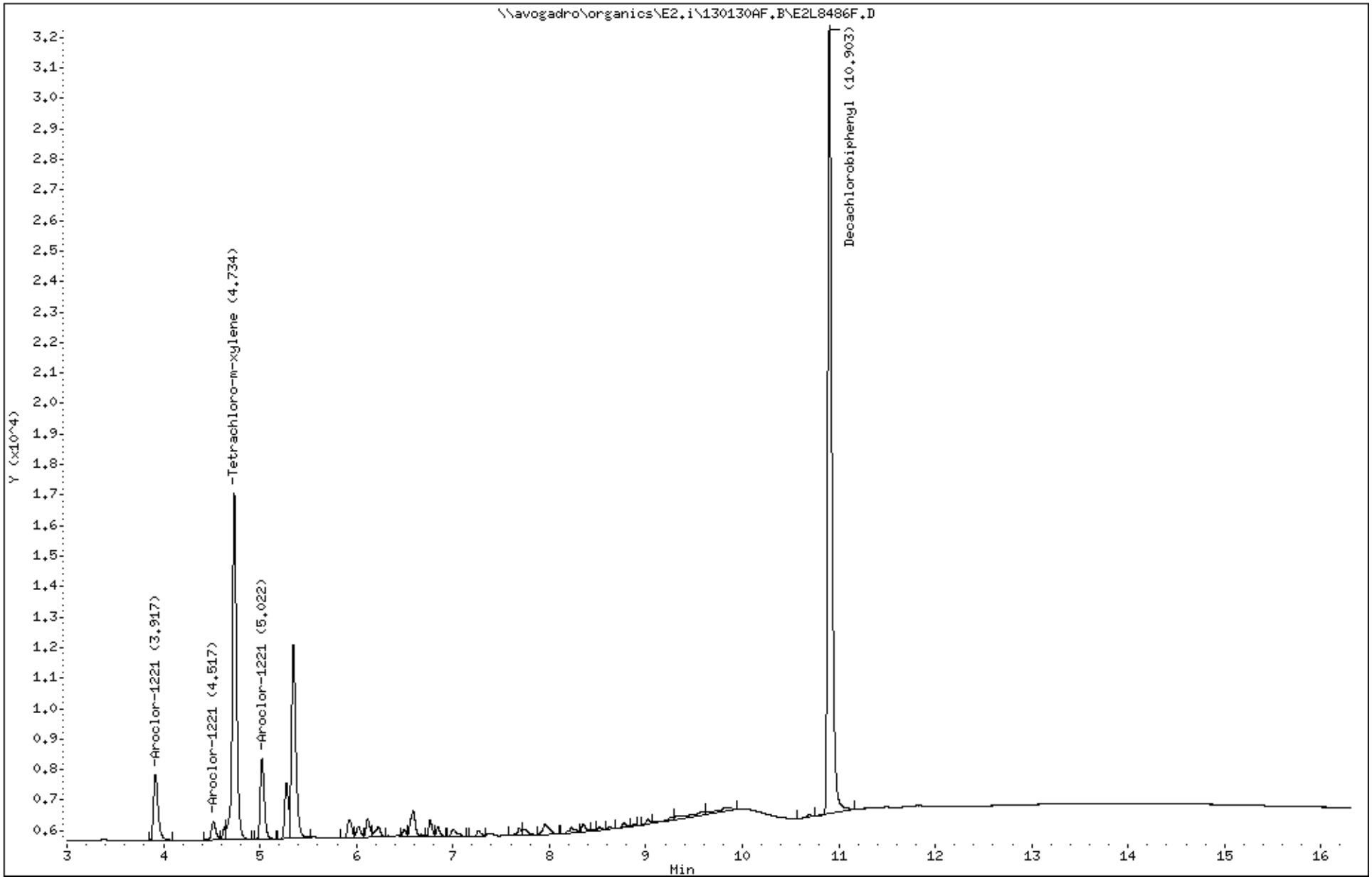
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.734	4.725	0.009	11378	0.02000	0.020			(a)
3 Aroclor-1221					CAS #: 11104-28-2			
3.917	3.917	0.000	2157	0.40000	0.40	80.00- 120.00	100.00	(a)
4.516	4.516	0.000	590	0.40000	0.40	7.35- 47.35	27.35	
5.022	5.022	0.000	2651	0.40000	0.40	102.90- 142.90	122.90	
Average of Peak Amounts =					0.40000			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.902	10.896	0.006	756293	0.04000	0.040			(a)

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8486F.D
Date : 30-JAN-2013 18:59
Client ID: AR12213A2
Instrument: E2.i
Sample Info: AR12213A2,AR12213A2,,ar1221.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8486R.D
Report Date: 06-Feb-2013 10:31

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AR.B\E2L8486R.D
Lab Smp Id: AR12213A2 Client Smp ID: AR12213A2
Inj Date : 30-JAN-2013 18:59
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR12213A2,AR12213A2,,ar1221.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AR.B\E2_LL_PCB_R.m
Meth Date : 04-Feb-2013 13:13 tmcdaniel Quant Type: ESTD
Cal Date : 30-JAN-2013 18:59 Cal File: E2L8486R.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: GERMANIUM

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

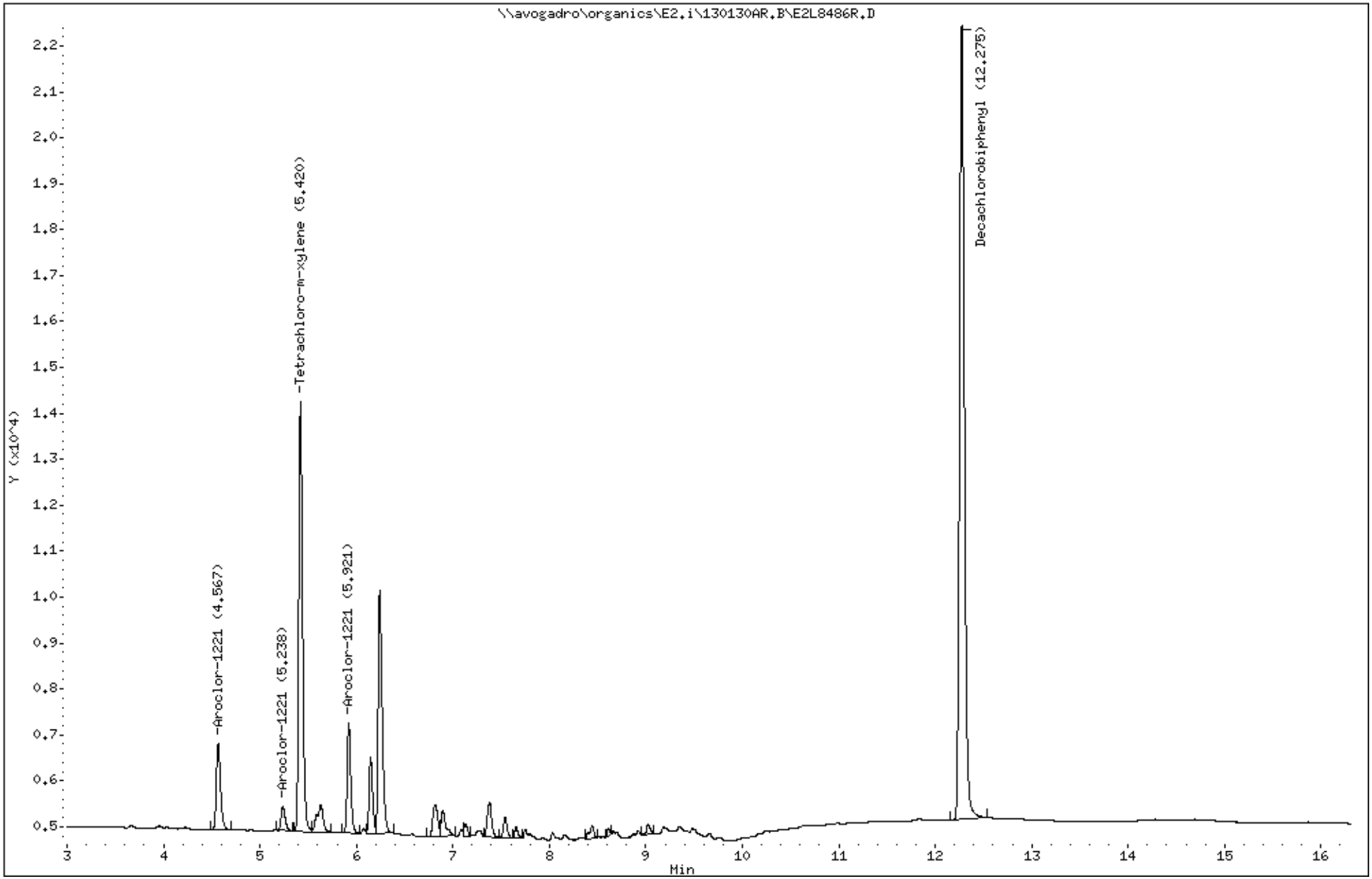
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
5.420	5.410	0.010	9363	0.02000	0.020			(a)
2 Aroclor-1221					CAS #: 11104-28-2			
4.567	4.567	0.000	1867	0.40000	0.40	80.00- 120.00	100.00	(a)
5.237	5.237	0.000	515	0.40000	0.40	7.58- 47.58	27.58	
5.920	5.920	0.000	2385	0.40000	0.40	107.75- 147.75	127.75	
Average of Peak Amounts =				0.40000				
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
12.274	12.262	0.012	17285	0.04000	0.040			(a)

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8486R.D
Date : 30-JAN-2013 18:59
Client ID: AR12213A2 Instrument: E2.i
Sample Info: AR12213A2,AR12213A2,,ar1221.sub,,
Volume Injected (uL): 1.0 Operator: GMA/T SRC: GMA/T
Column phase: CLPPestII Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8487F.D
Report Date: 06-Feb-2013 10:30

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AF.B\E2L8487F.D
Lab Smp Id: AR12323A2 Client Smp ID: AR12323A2
Inj Date : 30-JAN-2013 19:19
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR12323A2,AR12323A2,,ar1232.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AF.B\E2_LL_PCB_F.m
Meth Date : 06-Feb-2013 09:59 tmcdaniel Quant Type: ESTD
Cal Date : 30-JAN-2013 19:19 Cal File: E2L8487F.D
Als bottle: 2 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1232.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

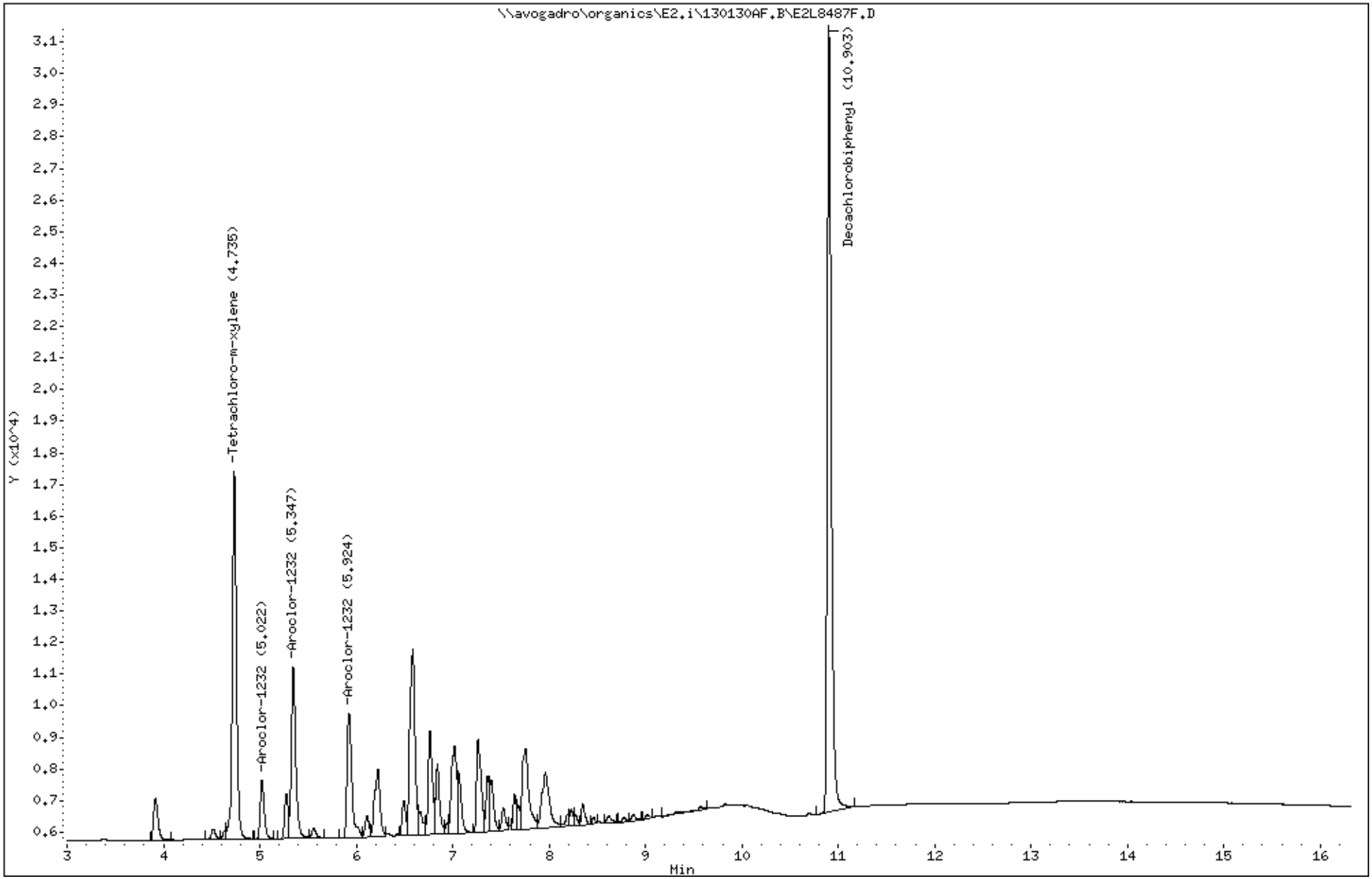
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.734	4.725	0.009	11663	0.02000	0.020			(a)
4 Aroclor-1232						CAS #: 11141-16-5		
5.022	5.022	0.000	1841	0.40000	0.40	80.00- 120.00	100.00	(a)
5.346	5.346	0.000	5421	0.40000	0.40	806.42- 846.42	294.46	
5.924	5.924	0.000	3954	0.40000	0.40	7380.00-7420.00	214.77	
Average of Peak Amounts =				0.40000				
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.903	10.896	0.007	731320	0.04000	0.040			(a)

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8487F.D
Date : 30-JAN-2013 19:19
Client ID: AR12323A2
Instrument: E2.i
Sample Info: AR12323A2,AR12323A2,,ar1232.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8487R.D
Report Date: 06-Feb-2013 10:31

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AR.B\E2L8487R.D
Lab Smp Id: AR12323A2 Client Smp ID: AR12323A2
Inj Date : 30-JAN-2013 19:19
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR12323A2,AR12323A2,,ar1232.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AR.B\E2_LL_PCB_R.m
Meth Date : 04-Feb-2013 13:13 tmcdaniel Quant Type: ESTD
Cal Date : 30-JAN-2013 19:19 Cal File: E2L8487R.D
Als bottle: 2 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1232.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

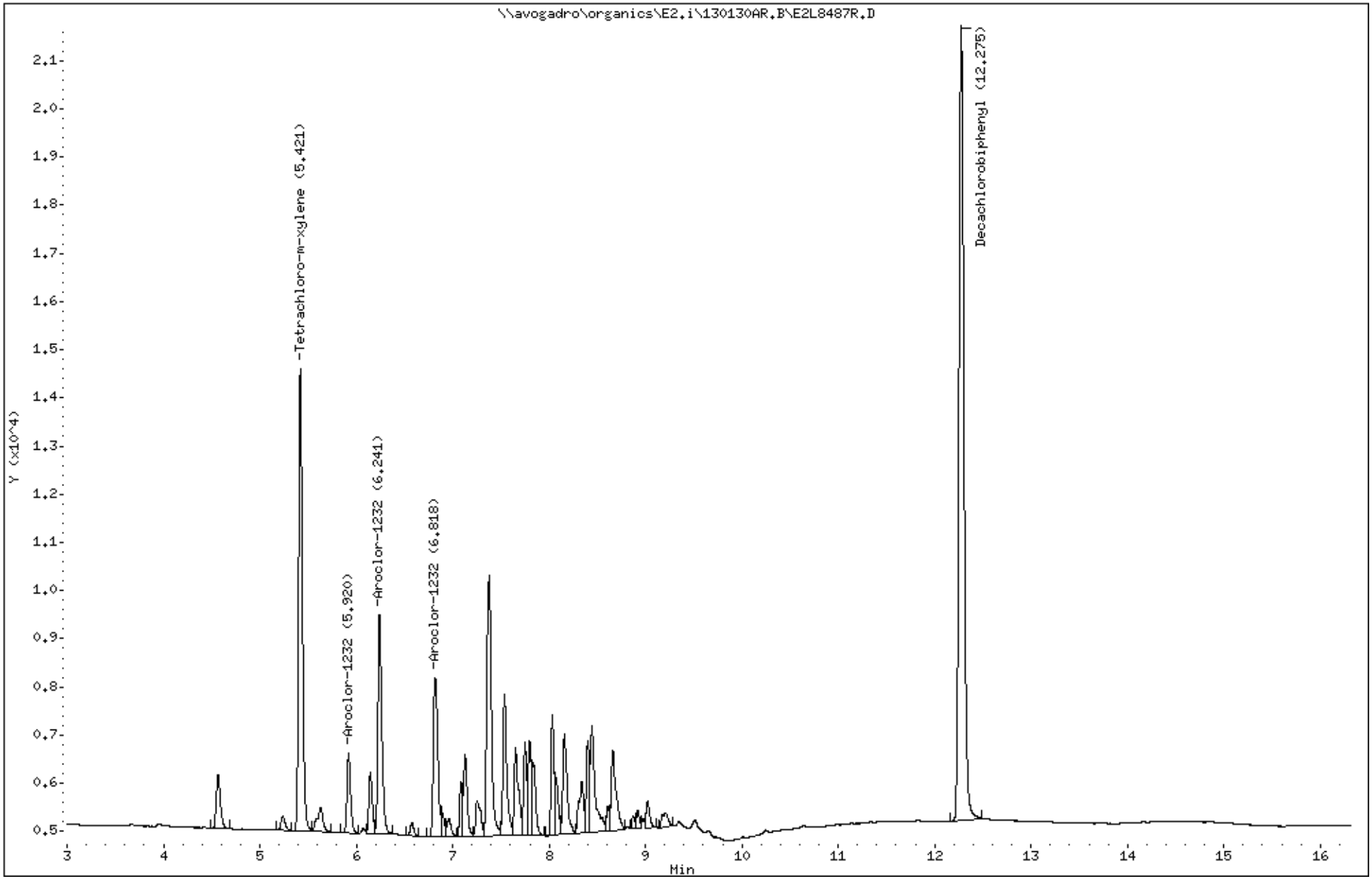
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
5.420	5.410	0.010	9612	0.02000	0.020			(a)
3 Aroclor-1232					CAS #: 11141-16-5			
5.920	5.920	0.000	1647	0.40000	0.40	80.00- 120.00	100.00	(a)
6.240	6.240	0.000	4536	0.40000	0.40	526.73- 566.73	275.41	
6.818	6.818	0.000	3294	0.40000	0.40	891.21- 931.21	200.00	
Average of Peak Amounts =				0.40000				
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
12.275	12.262	0.013	16499	0.04000	0.040			(a)

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8487R.D
Date : 30-JAN-2013 19:19
Client ID: AR12323A2
Instrument: E2.i
Sample Info: AR12323A2,AR12323A2,,ar1232.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8488F.D
Report Date: 06-Feb-2013 10:30

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AF.B\E2L8488F.D
Lab Smp Id: AR12421A2 Client Smp ID: AR12421A2
Inj Date : 30-JAN-2013 19:38
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR12421A2,AR12421A2,,ar1242.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AF.B\E2_LL_PCB_F.m
Meth Date : 06-Feb-2013 09:59 tmcdaniel Quant Type: ESTD
Cal Date : 30-JAN-2013 19:38 Cal File: E2L8488F.D
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

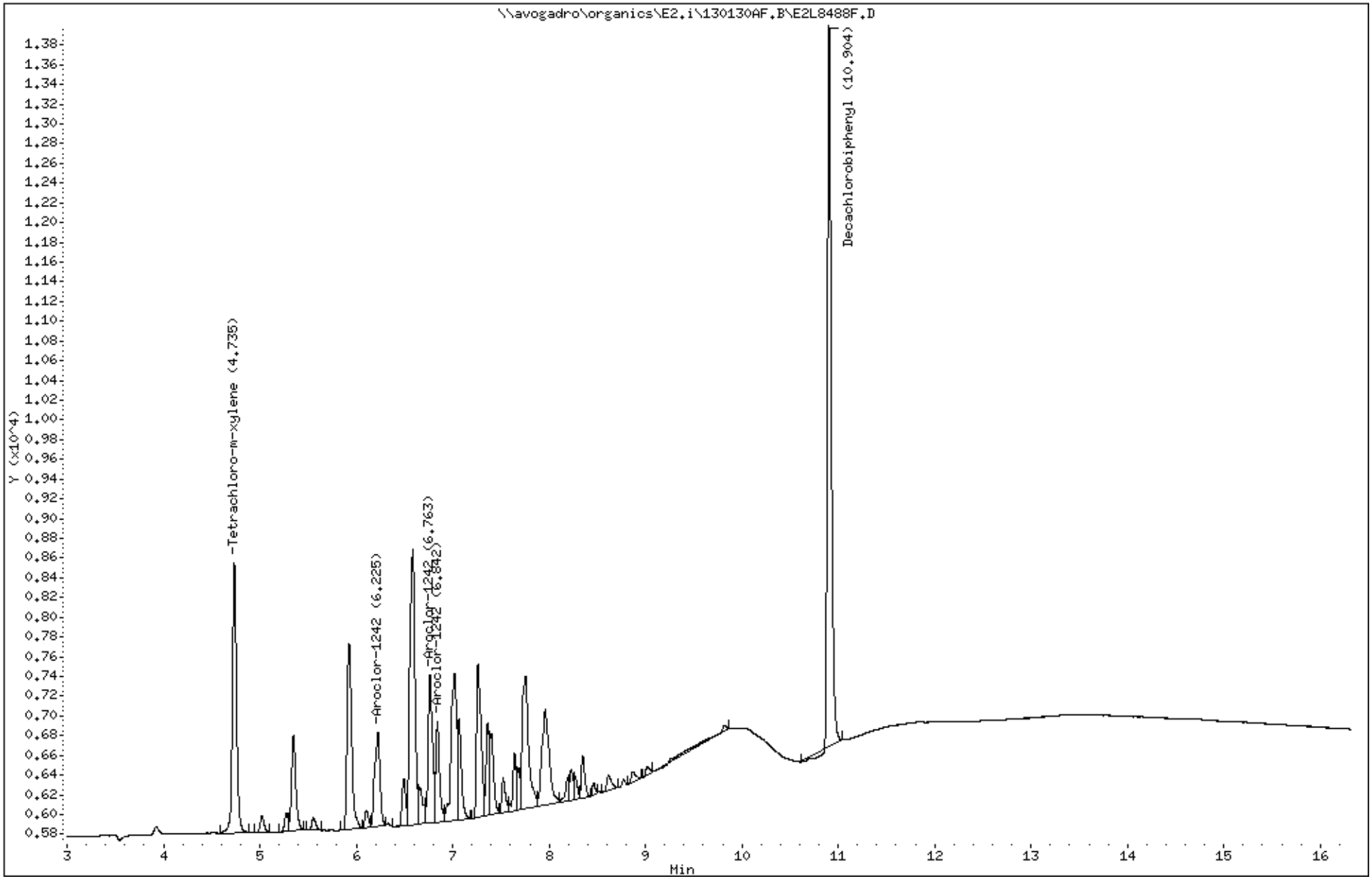
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.735	4.725	0.010	2739	0.00500	0.0048			(a)
6 Aroclor-1242						CAS #: 53469-21-9		
6.225	6.222	0.003	951	0.10000	0.10	80.00- 120.00	100.00	(a)
6.763	6.760	0.003	1499	0.10000	0.10	136.25- 176.25	157.62	
6.841	6.840	0.001	1010	0.10000	0.10	88.65- 128.65	106.20	
Average of Peak Amounts =					0.10000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.904	10.896	0.008	199809	0.01000	0.010			(a)

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8488F.D
Date : 30-JAN-2013 19:38
Client ID: AR12421A2
Instrument: E2.i
Sample Info: AR12421A2,AR12421A2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8488R.D
Report Date: 06-Feb-2013 10:31

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AR.B\E2L8488R.D
Lab Smp Id: AR12421A2 Client Smp ID: AR12421A2
Inj Date : 30-JAN-2013 19:38
Operator : GMA/T SRC: GMA/T Inst ID: E2.i
Smp Info : AR12421A2,AR12421A2,,ar1242.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AR.B\E2_LL_PCB_R.m
Meth Date : 04-Feb-2013 13:13 tmcdaniel Quant Type: ESTD
Cal Date : 30-JAN-2013 19:38 Cal File: E2L8488R.D
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

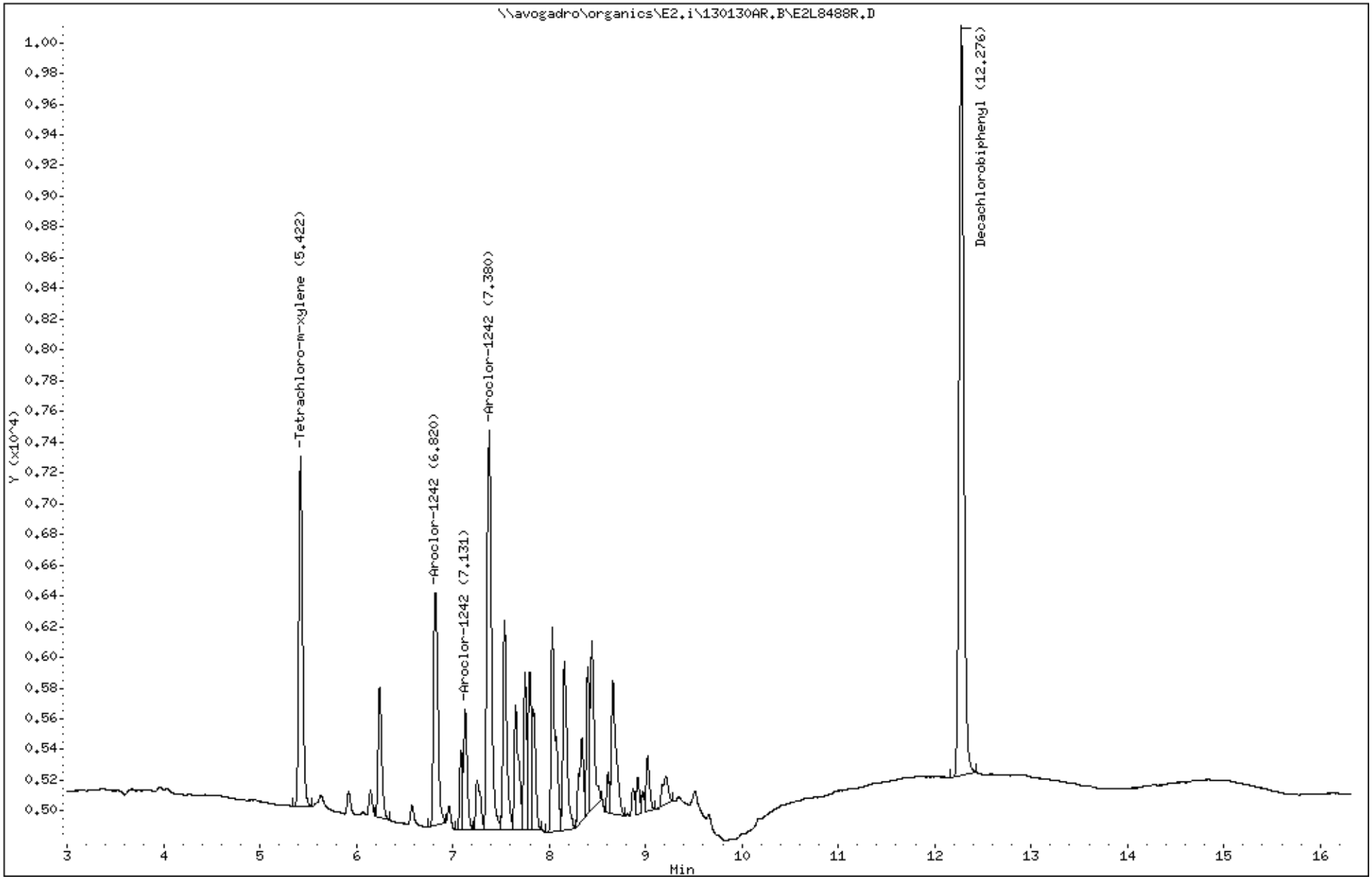
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.422	5.410	0.012	2277	0.00500	0.0049			(a)
4 Aroclor-1242						CAS #: 53469-21-9		
6.819	6.815	0.004	1513	0.10000	0.10	80.00- 120.00	100.00	(a)
7.130	7.128	0.002	781	0.10000	0.10	33.63- 73.63	51.62	
7.380	7.378	0.002	2597	0.10000	0.10	151.48- 191.48	171.65	
Average of Peak Amounts =				0.10000				
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.275	12.262	0.013	4882	0.01000	0.011			(a)

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8488R.D
Date : 30-JAN-2013 19:38
Client ID: AR12421A2
Instrument: E2.i
Sample Info: AR12421A2,AR12421A2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8489F.D
Report Date: 06-Feb-2013 10:30

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AF.B\E2L8489F.D
Lab Smp Id: AR12426A2 Client Smp ID: AR12426A2
Inj Date : 30-JAN-2013 19:58
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR12426A2,AR12426A2,,ar1242.sub,,
Misc Info : 1,6,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AF.B\E2_LL_PCB_F.m
Meth Date : 06-Feb-2013 09:59 tmcdaniel Quant Type: ESTD
Cal Date : 30-JAN-2013 19:58 Cal File: E2L8489F.D
Als bottle: 4 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

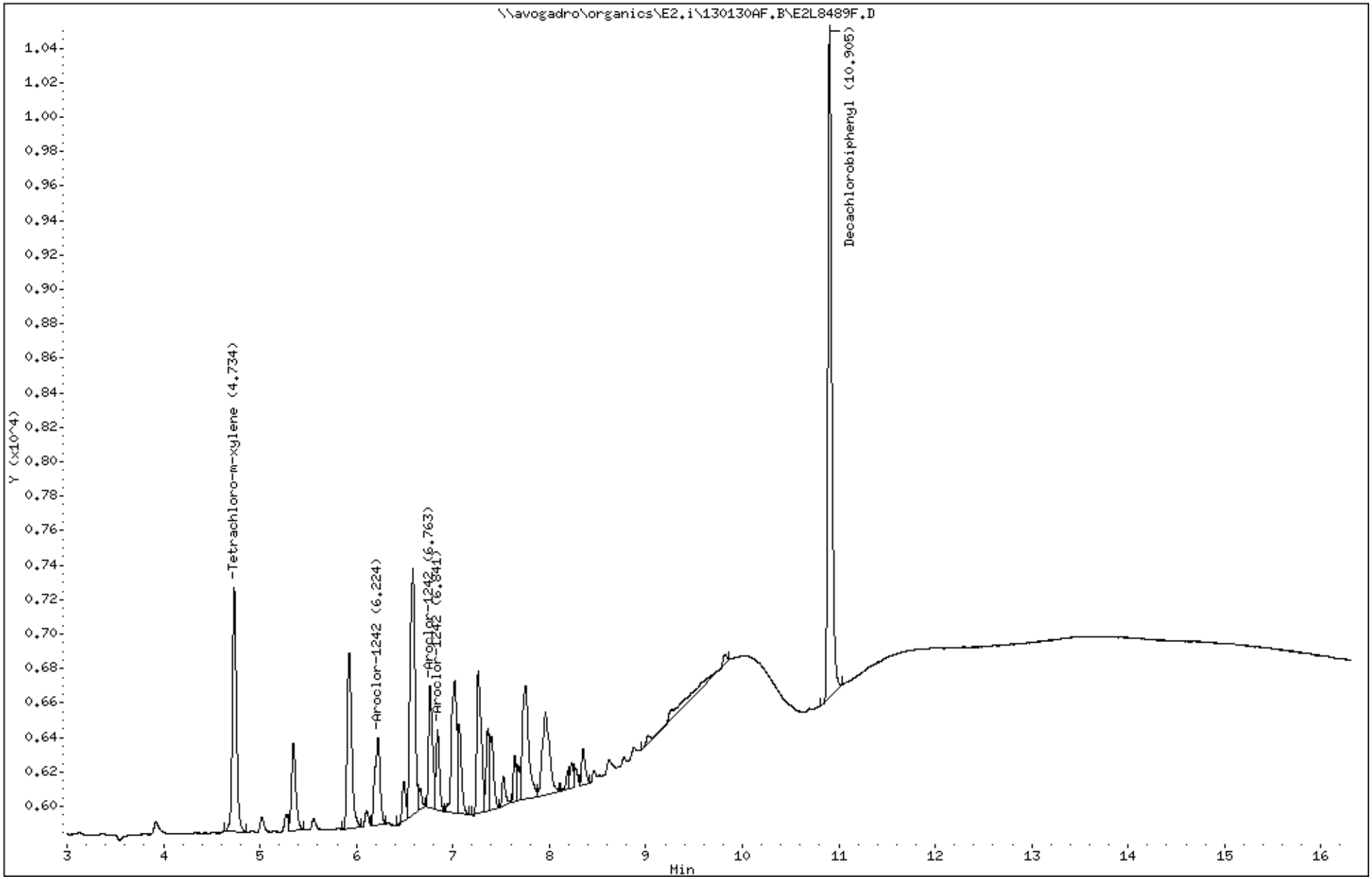
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.733	4.725	0.008	1413	0.00000	0.0025			(a)
6 Aroclor-1242					CAS #: 53469-21-9			
6.224	6.222	0.002	505	0.05000	0.052	80.00- 120.00	100.00	(a)
6.762	6.760	0.002	705	0.05000	0.048	136.25- 176.25	139.60	
6.841	6.840	0.001	466	0.05000	0.048	88.65- 128.65	92.28	
Average of Peak Amounts =					0.04933			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.904	10.896	0.008	108414	0.00000	0.0057			(a)

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8489F.D
Date : 30-JAN-2013 19:58
Client ID: AR12426A2
Instrument: E2.i
Sample Info: AR12426A2,AR12426A2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8489R.D
Report Date: 06-Feb-2013 10:31

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AR.B\E2L8489R.D
Lab Smp Id: AR12426A2 Client Smp ID: AR12426A2
Inj Date : 30-JAN-2013 19:58
Operator : GMA/T SRC: GMA/T Inst ID: E2.i
Smp Info : AR12426A2,AR12426A2,,ar1242.sub,,
Misc Info : 1,6,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AR.B\E2_LL_PCB_R.m
Meth Date : 04-Feb-2013 13:13 tmcdaniel Quant Type: ESTD
Cal Date : 30-JAN-2013 19:58 Cal File: E2L8489R.D
Als bottle: 4 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

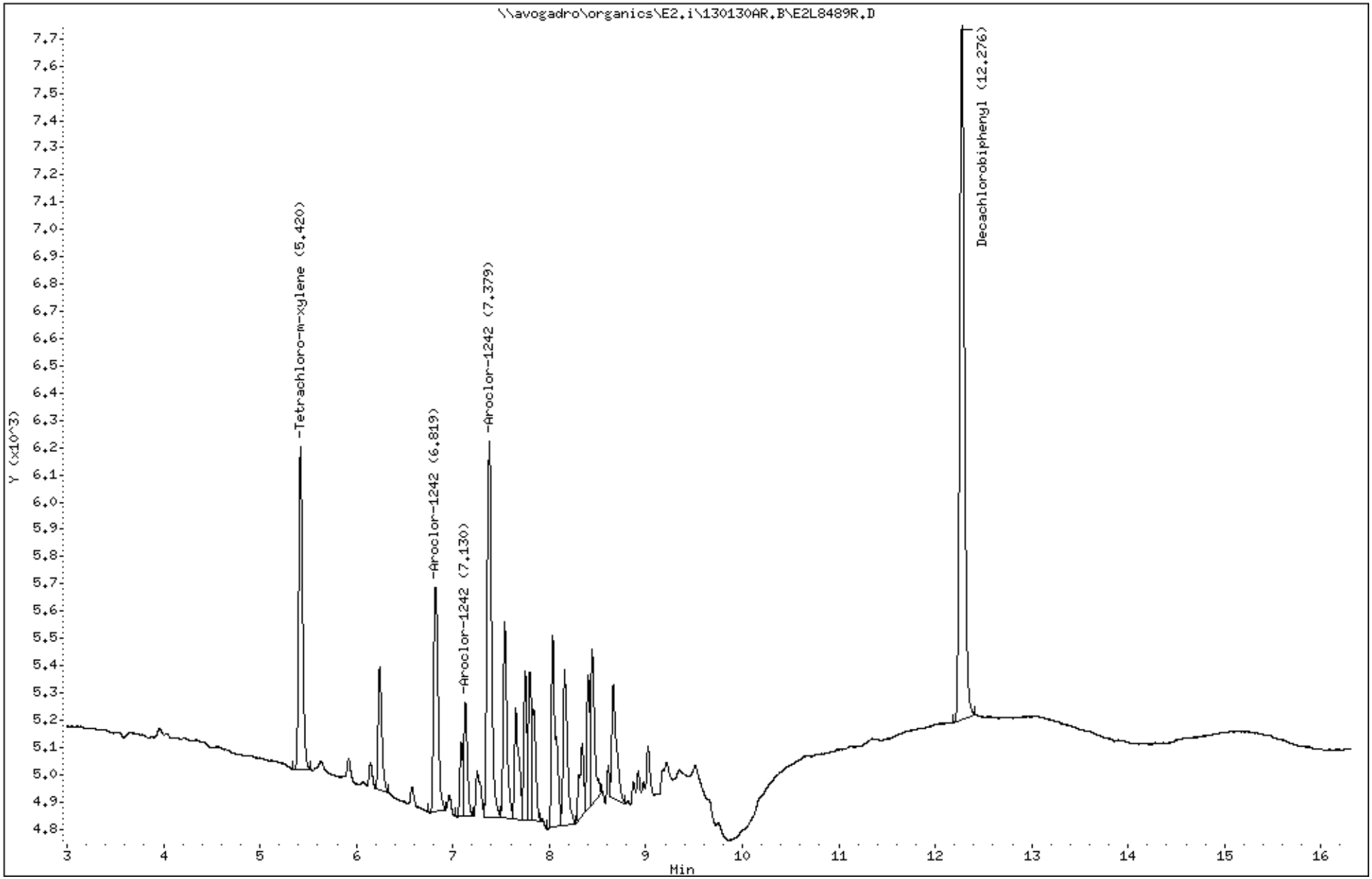
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
5.420	5.410	0.010	1185	0.00000	0.0025			(a)
4 Aroclor-1242					CAS #: 53469-21-9			
6.819	6.815	0.004	823	0.05000	0.052	80.00- 120.00	100.00	(a)
7.130	7.128	0.002	415	0.05000	0.052	33.63- 73.63	50.43	
7.378	7.378	0.000	1379	0.05000	0.052	151.48- 191.48	167.56	
Average of Peak Amounts =					0.05200			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
12.276	12.262	0.014	2546	0.00000	0.0056			(a)

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8489R.D
Date : 30-JAN-2013 19:58
Client ID: AR12426A2
Instrument: E2.i
Sample Info: AR12426A2,AR12426A2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8490F.D
Report Date: 06-Feb-2013 10:30

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AF.B\E2L8490F.D
Lab Smp Id: AR12422A2 Client Smp ID: AR12422A2
Inj Date : 30-JAN-2013 20:18
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR12422A2,AR12422A2,,ar1242.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AF.B\E2_LL_PCB_F.m
Meth Date : 06-Feb-2013 09:59 tmcdaniel Quant Type: ESTD
Cal Date : 30-JAN-2013 20:18 Cal File: E2L8490F.D
Als bottle: 5 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

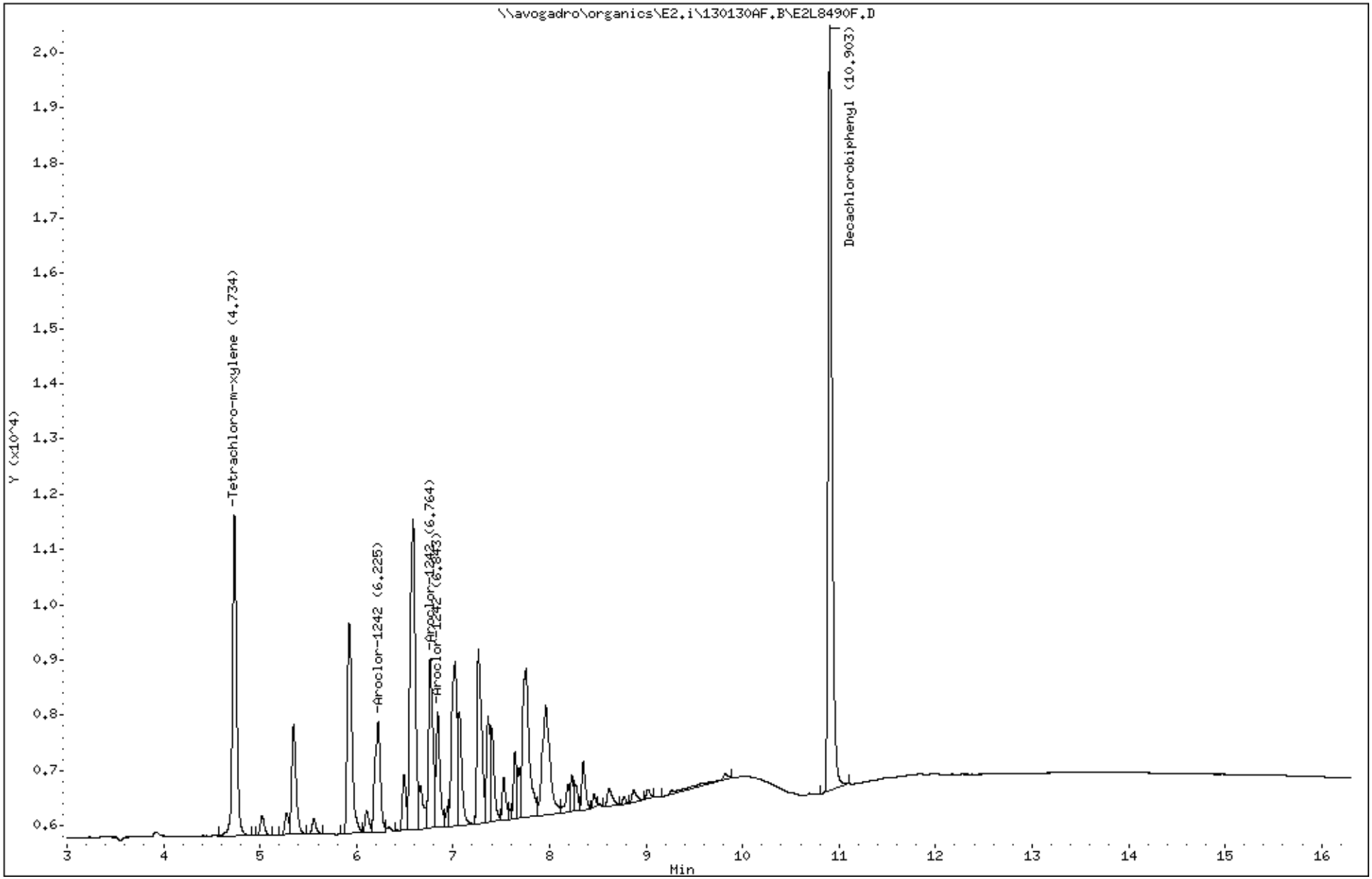
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.734	4.725	0.009	5809	0.01000	0.010			(a)
6 Aroclor-1242						CAS #: 53469-21-9		
6.225	6.222	0.003	2003	0.20000	0.20	80.00- 120.00	100.00	(a)
6.763	6.760	0.003	3072	0.20000	0.21	136.25- 176.25	153.37	
6.842	6.840	0.002	2078	0.20000	0.21	88.65- 128.65	103.74	
Average of Peak Amounts =					0.20667			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.903	10.896	0.007	397783	0.02000	0.020			(a)

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8490F.D
Date : 30-JAN-2013 20:18
Client ID: AR12422A2
Instrument: E2.i
Sample Info: AR12422A2,AR12422A2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8490R.D
Report Date: 06-Feb-2013 10:31

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AR.B\E2L8490R.D
Lab Smp Id: AR12422A2 Client Smp ID: AR12422A2
Inj Date : 30-JAN-2013 20:18
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR12422A2,AR12422A2,,ar1242.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AR.B\E2_LL_PCB_R.m
Meth Date : 04-Feb-2013 13:13 tmcdaniel Quant Type: ESTD
Cal Date : 30-JAN-2013 20:18 Cal File: E2L8490R.D
Als bottle: 5 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

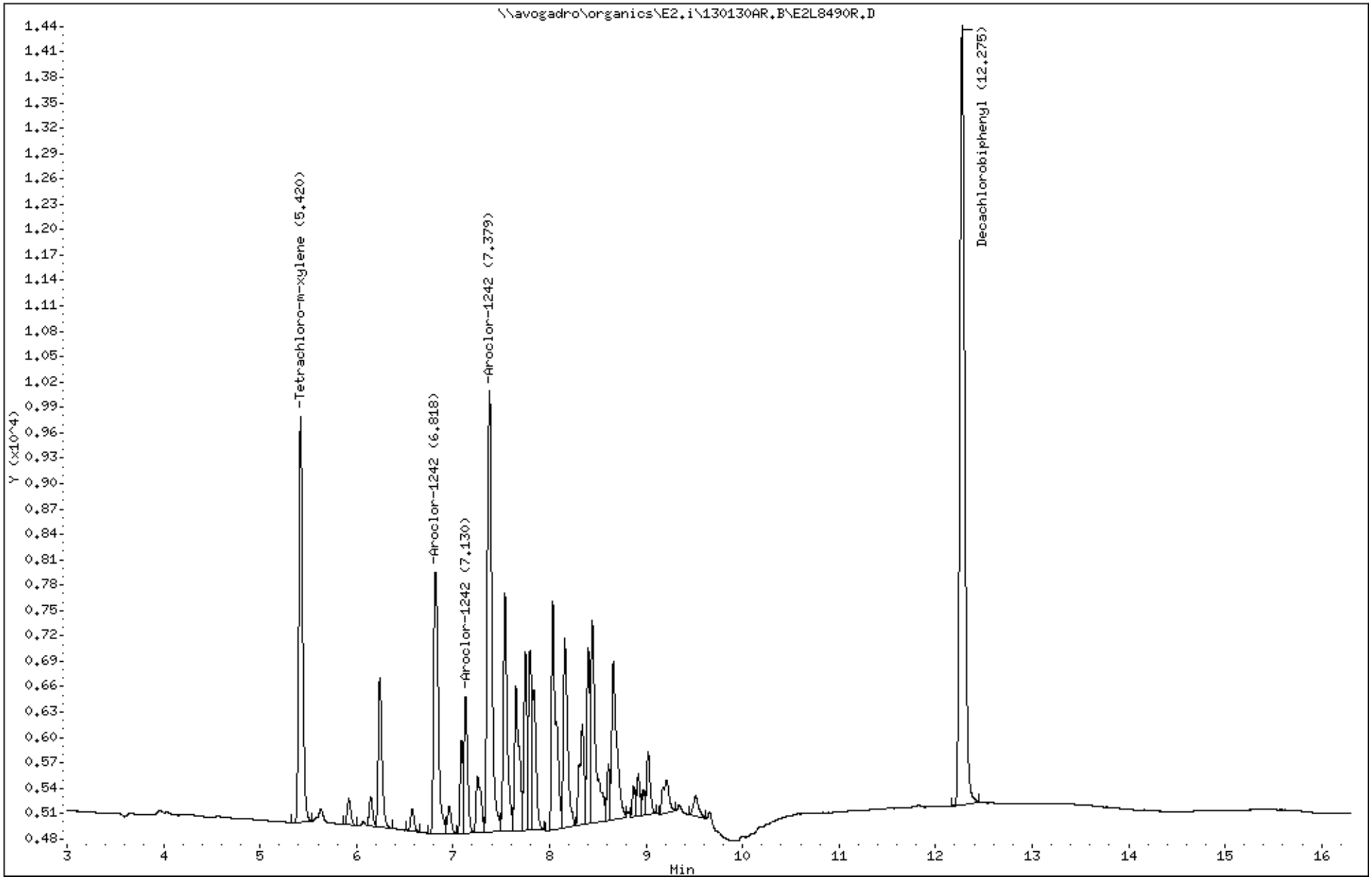
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.420	5.410	0.010	4785	0.01000	0.010			(a)
4 Aroclor-1242						CAS #: 53469-21-9		
6.818	6.815	0.003	3087	0.20000	0.20	80.00- 120.00	100.00	(a)
7.130	7.128	0.002	1615	0.20000	0.20	33.63- 73.63	52.32	
7.379	7.378	0.001	5219	0.20000	0.20	151.48- 191.48	169.06	
Average of Peak Amounts =					0.20000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.274	12.262	0.012	9207	0.02000	0.020			(a)

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8490R.D
Date : 30-JAN-2013 20:18
Client ID: AR12422A2
Instrument: E2.i
Sample Info: AR12422A2,AR12422A2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8491F.D
Report Date: 06-Feb-2013 10:30

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AF.B\E2L8491F.D
Lab Smp Id: AR12423A2 Client Smp ID: AR12423A2
Inj Date : 30-JAN-2013 20:38
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR12423A2,AR12423A2,,ar1242.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AF.B\E2_LL_PCB_F.m
Meth Date : 06-Feb-2013 09:59 tmcdaniel Quant Type: ESTD
Cal Date : 30-JAN-2013 20:38 Cal File: E2L8491F.D
Als bottle: 6 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

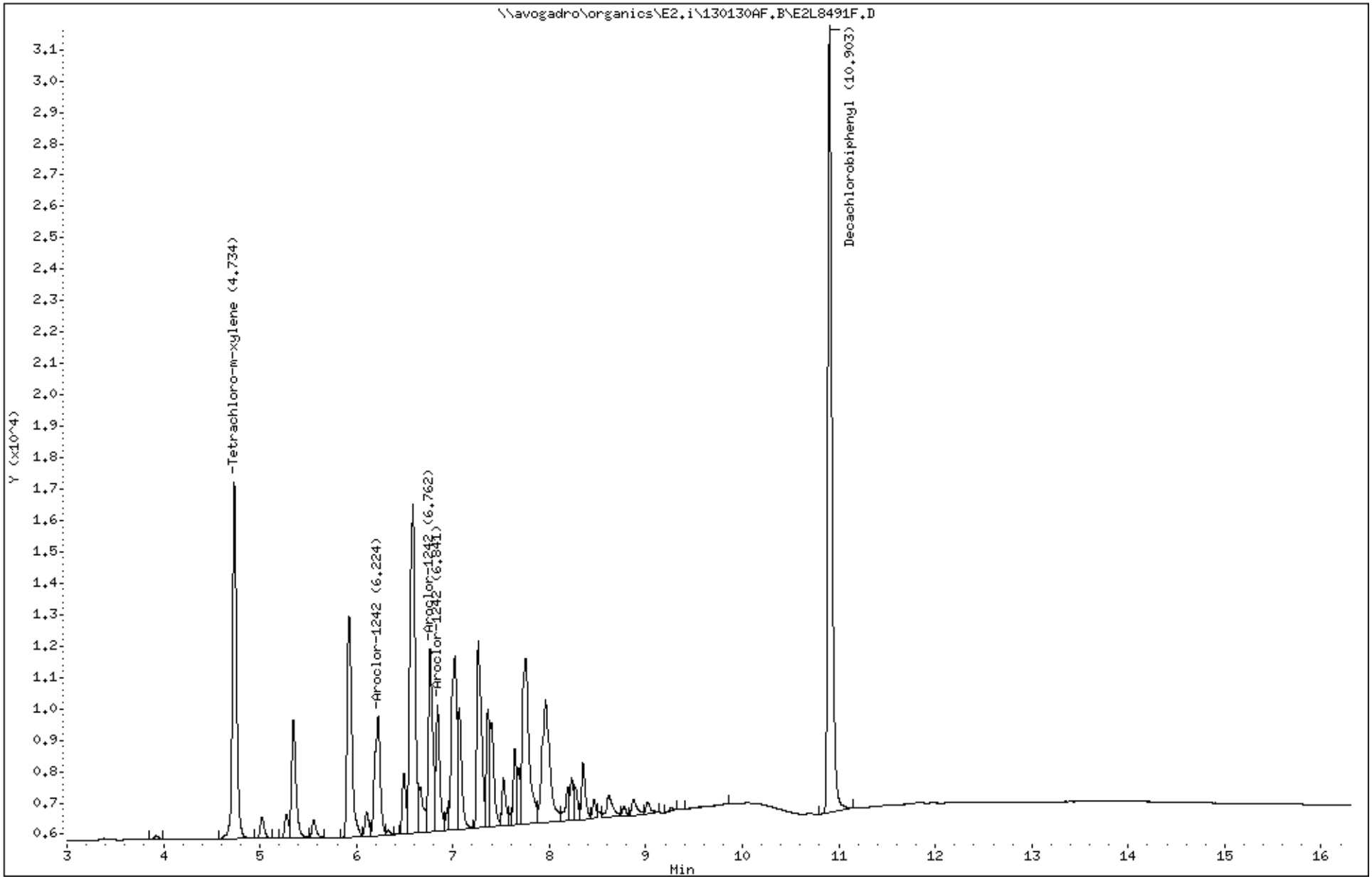
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.733	4.725	0.008	11340	0.02000	0.020			(a)
6 Aroclor-1242						CAS #: 53469-21-9		
6.224	6.222	0.002	3786	0.40000	0.39	80.00- 120.00	100.00	(a)
6.762	6.760	0.002	5841	0.40000	0.40	136.25- 176.25	154.28	
6.841	6.840	0.001	4027	0.40000	0.40	88.65- 128.65	106.37	
Average of Peak Amounts =					0.39667			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.903	10.896	0.007	739239	0.04000	0.038			(a)

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8491F.D
Date : 30-JAN-2013 20:38
Client ID: AR12423A2
Instrument: E2.i
Sample Info: AR12423A2,AR12423A2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8491R.D
Report Date: 06-Feb-2013 10:31

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AR.B\E2L8491R.D
Lab Smp Id: AR12423A2 Client Smp ID: AR12423A2
Inj Date : 30-JAN-2013 20:38
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR12423A2,AR12423A2,,ar1242.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AR.B\E2_LL_PCB_R.m
Meth Date : 04-Feb-2013 13:13 tmcdaniel Quant Type: ESTD
Cal Date : 30-JAN-2013 20:38 Cal File: E2L8491R.D
Als bottle: 6 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

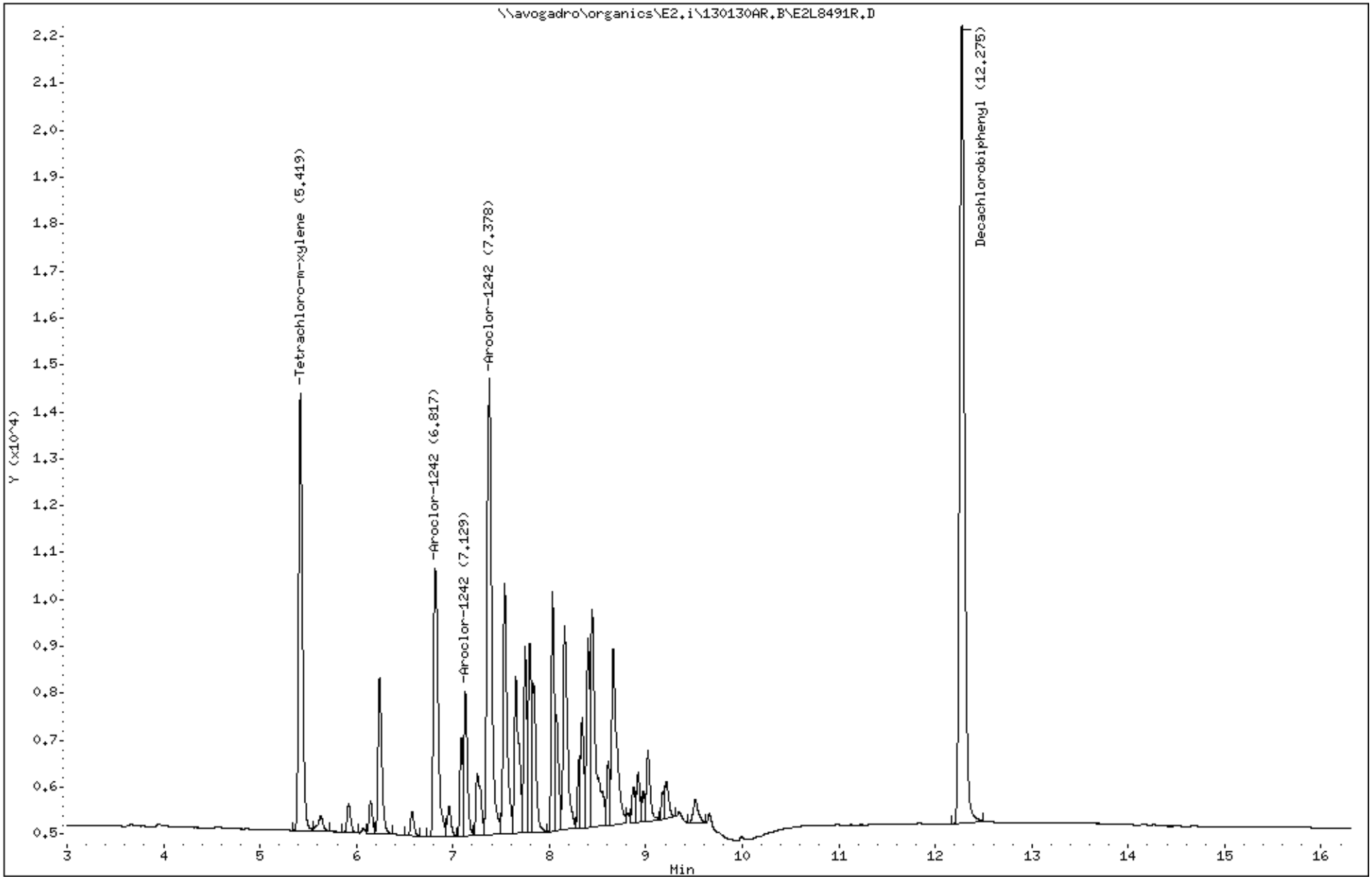
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
5.418	5.410	0.008	9331	0.02000	0.020			(a)
4 Aroclor-1242					CAS #: 53469-21-9			
6.816	6.815	0.001	5720	0.40000	0.37	80.00- 120.00	100.00	(a)
7.129	7.128	0.001	3068	0.40000	0.38	33.63- 73.63	53.64	
7.377	7.378	-0.001	9720	0.40000	0.37	151.48- 191.48	169.93	
Average of Peak Amounts =					0.37333			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
12.274	12.262	0.012	16991	0.04000	0.037			(a)

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8491R.D
Date : 30-JAN-2013 20:38
Client ID: AR12423A2
Instrument: E2.i
Sample Info: AR12423A2,AR12423A2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8492F.D
Report Date: 06-Feb-2013 10:30

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AF.B\E2L8492F.D
Lab Smp Id: AR12424A2 Client Smp ID: AR12424A2
Inj Date : 30-JAN-2013 20:57
Operator : GMA/T SRC: GMA/T Inst ID: E2.i
Smp Info : AR12424A2,AR12424A2,,ar1242.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AF.B\E2_LL_PCB_F.m
Meth Date : 06-Feb-2013 09:59 tmcdaniel Quant Type: ESTD
Cal Date : 30-JAN-2013 20:57 Cal File: E2L8492F.D
Als bottle: 7 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

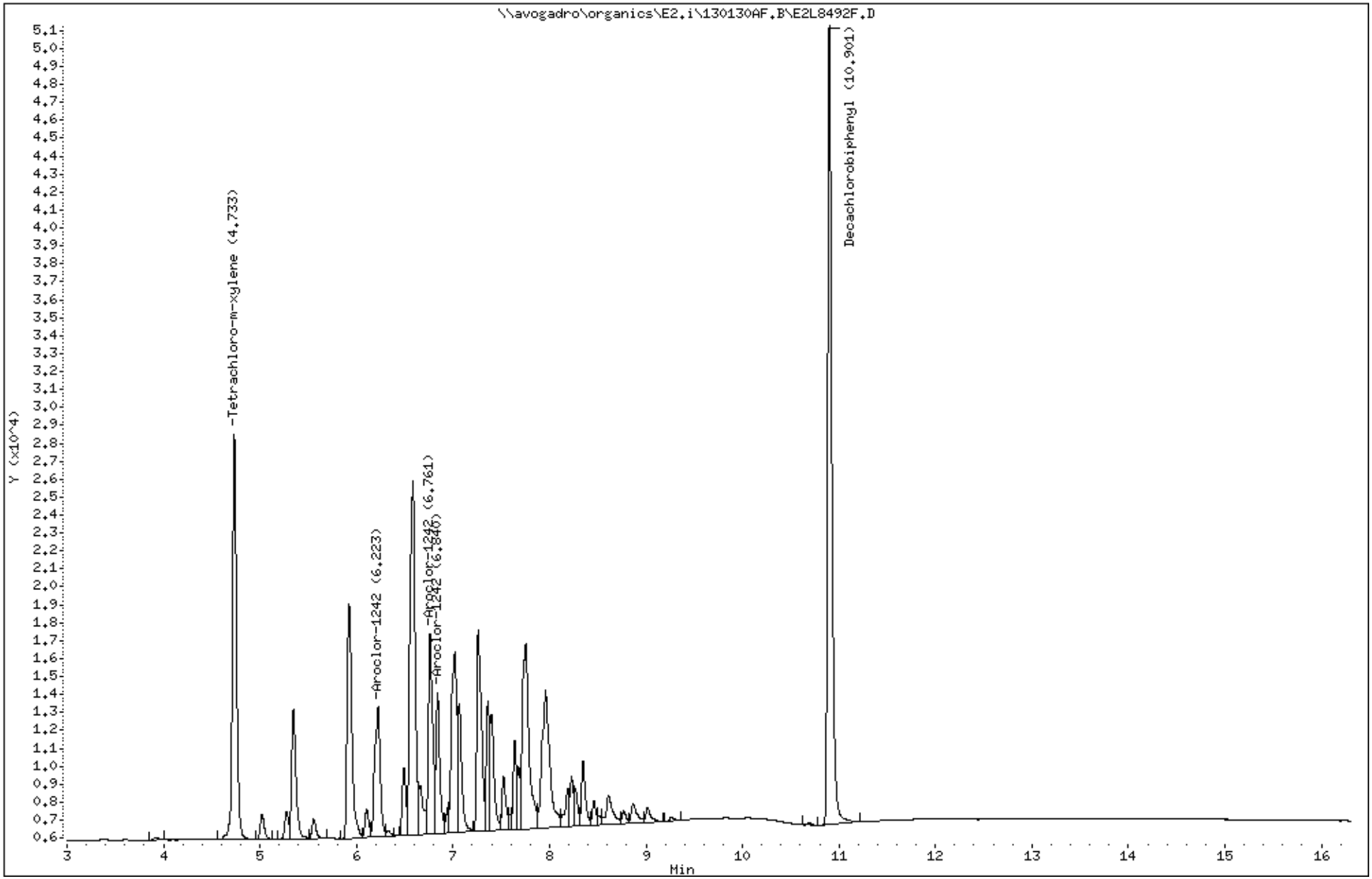
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.733	4.725	0.008	22577	0.04000	0.040		(a)
6 Aroclor-1242						CAS #: 53469-21-9	
6.223	6.222	0.001	7231	0.80000	0.75	80.00- 120.00	100.00(a)
6.761	6.760	0.001	11141	0.80000	0.76	136.25- 176.25	154.07
6.840	6.840	0.000	7881	0.80000	0.79	88.65- 128.65	108.99
Average of Peak Amounts =					0.76667		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
10.900	10.896	0.004	1320460	0.08000	0.070		

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8492F.D
Date : 30-JAN-2013 20:57
Client ID: AR12424A2
Instrument: E2.i
Sample Info: AR12424A2,AR12424A2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8492R.D
Report Date: 06-Feb-2013 10:31

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AR.B\E2L8492R.D
Lab Smp Id: AR12424A2 Client Smp ID: AR12424A2
Inj Date : 30-JAN-2013 20:57
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR12424A2,AR12424A2,,ar1242.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AR.B\E2_LL_PCB_R.m
Meth Date : 04-Feb-2013 13:13 tmcdaniel Quant Type: ESTD
Cal Date : 30-JAN-2013 20:57 Cal File: E2L8492R.D
Als bottle: 7 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

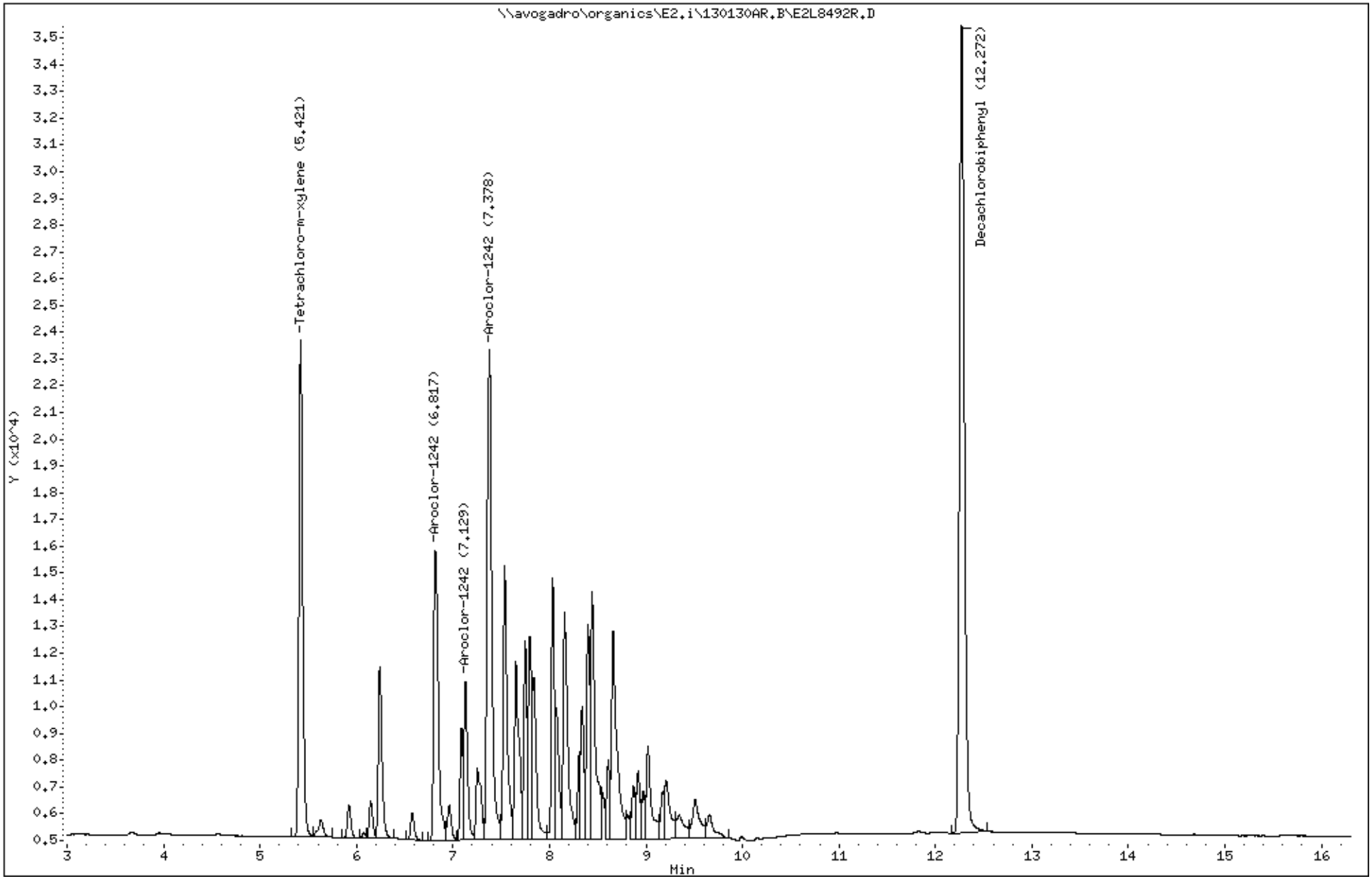
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
5.420	5.410	0.010	18583	0.04000	0.040			(a)
4 Aroclor-1242					CAS #: 53469-21-9			
6.816	6.815	0.001	10818	0.80000	0.72	80.00- 120.00	100.00	(a)
7.129	7.128	0.001	5934	0.80000	0.76	33.63- 73.63	54.85	
7.378	7.378	0.000	18363	0.80000	0.72	151.48- 191.48	169.74	
Average of Peak Amounts =					0.73333			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
12.272	12.262	0.010	30197	0.08000	0.069			

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8492R.D
Date : 30-JAN-2013 20:57
Client ID: AR12424A2
Instrument: E2.i
Sample Info: AR12424A2,AR12424A2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8493F.D
Report Date: 06-Feb-2013 10:30

Spectrum Analytical, Inc. RI Division

Quantitation Report

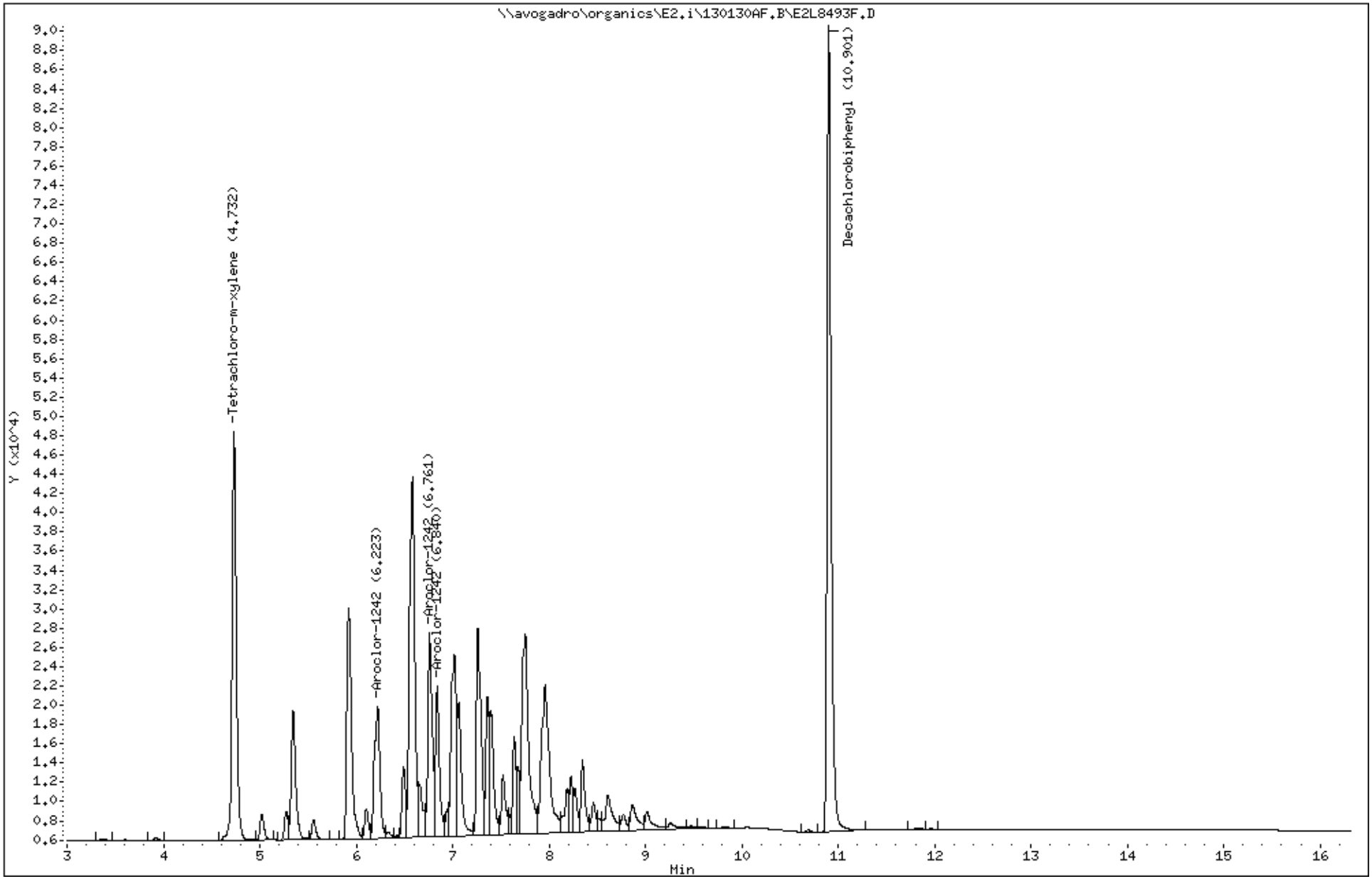
Data file : \\avogadro\organics\E2.i\130130AF.B\E2L8493F.D
Lab Smp Id: AR12425A2 Client Smp ID: AR12425A2
Inj Date : 30-JAN-2013 21:17
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR12425A2,AR12425A2,,ar1242.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AF.B\E2_LL_PCB_F.m
Meth Date : 06-Feb-2013 09:59 tmcdaniel Quant Type: ESTD
Cal Date : 30-JAN-2013 21:17 Cal File: E2L8493F.D
Als bottle: 8 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.732	4.725	0.007	42478	0.08000	0.076			
6 Aroclor-1242						CAS #: 53469-21-9		
6.222	6.222	0.000	13693	1.60000	1.4	80.00- 120.00		100.00
6.760	6.760	0.000	21220	1.60000	1.5	136.25- 176.25		154.97
6.840	6.840	0.000	15609	1.60000	1.6	88.65- 128.65		113.99
Average of Peak Amounts =					1.50000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.901	10.896	0.005	2473992	0.16000	0.14			

Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8493F.D
Date : 30-JAN-2013 21:17
Client ID: AR12425A2
Instrument: E2.i
Sample Info: AR12425A2,AR12425A2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8493R.D
Report Date: 06-Feb-2013 10:31

Spectrum Analytical, Inc. RI Division

Quantitation Report

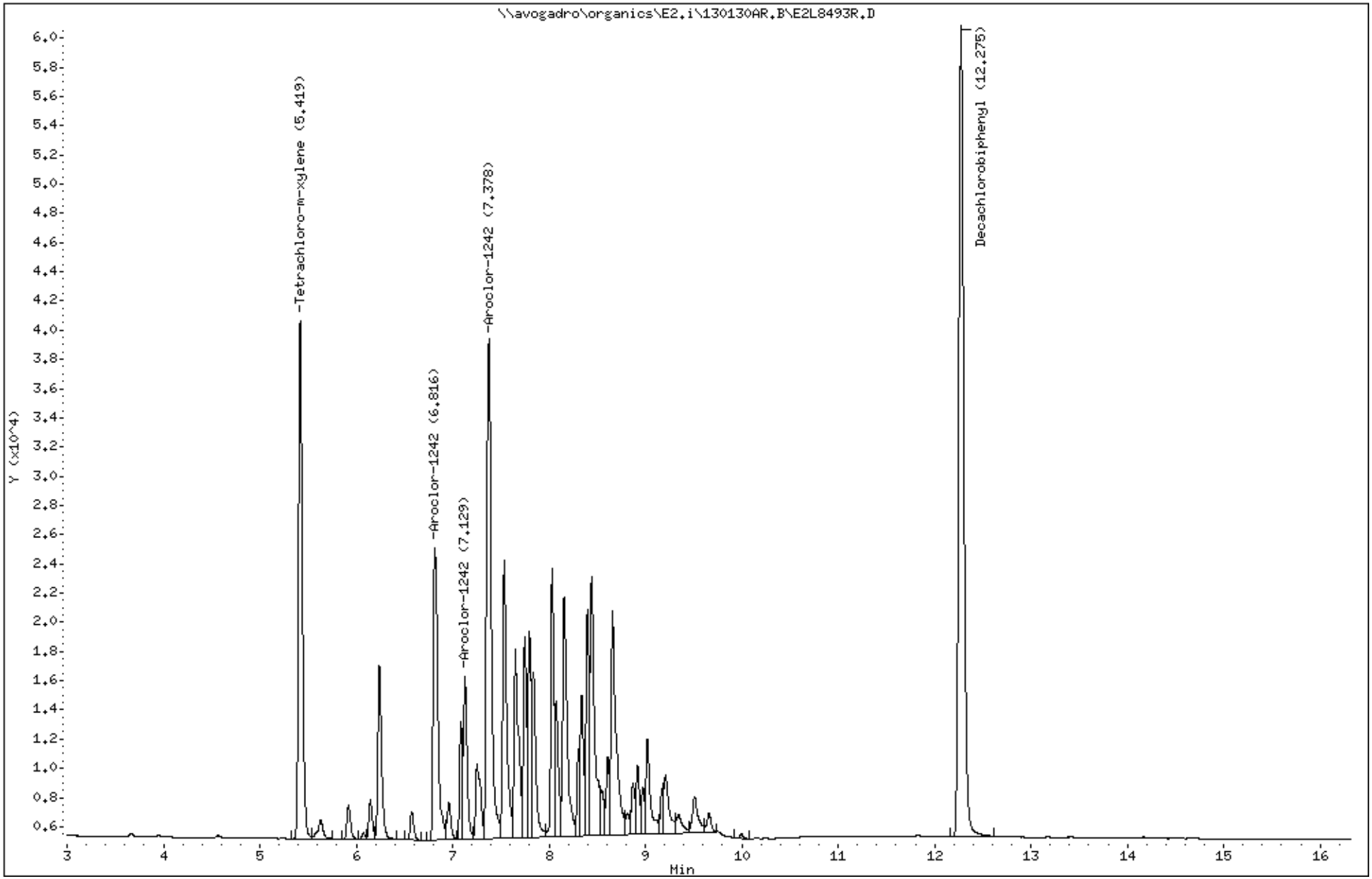
Data file : \\avogadro\organics\E2.i\130130AR.B\E2L8493R.D
Lab Smp Id: AR12425A2 Client Smp ID: AR12425A2
Inj Date : 30-JAN-2013 21:17
Operator : GMA/T SRC: GMA/T Inst ID: E2.i
Smp Info : AR12425A2,AR12425A2,,ar1242.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AR.B\E2_LL_PCB_R.m
Meth Date : 04-Feb-2013 13:13 tmcdaniel Quant Type: ESTD
Cal Date : 30-JAN-2013 21:17 Cal File: E2L8493R.D
Als bottle: 8 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.419	5.410	0.009	35488	0.08000	0.077			
4 Aroclor-1242						CAS #: 53469-21-9		
6.815	6.815	0.000	20025	1.60000	1.4	80.00- 120.00		100.00
7.128	7.128	0.000	11173	1.60000	1.4	33.63- 73.63		55.80
7.378	7.378	0.000	34236	1.60000	1.4	151.48- 191.48		170.97
Average of Peak Amounts =				1.40000				
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.274	12.262	0.012	55565	0.16000	0.13			

Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8493R.D
Date : 30-JAN-2013 21:17
Client ID: AR12425A2
Instrument: E2.i
Sample Info: AR12425A2,AR12425A2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8494F.D
Report Date: 06-Feb-2013 10:30

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AF.B\E2L8494F.D
Lab Smp Id: AR12481A2 Client Smp ID: AR12481A2
Inj Date : 30-JAN-2013 21:37
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR12481A2,AR12481A2,,ar1248.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AF.B\E2_LL_PCB_F.m
Meth Date : 06-Feb-2013 09:59 tmcdaniel Quant Type: ESTD
Cal Date : 30-JAN-2013 21:37 Cal File: E2L8494F.D
Als bottle: 9 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

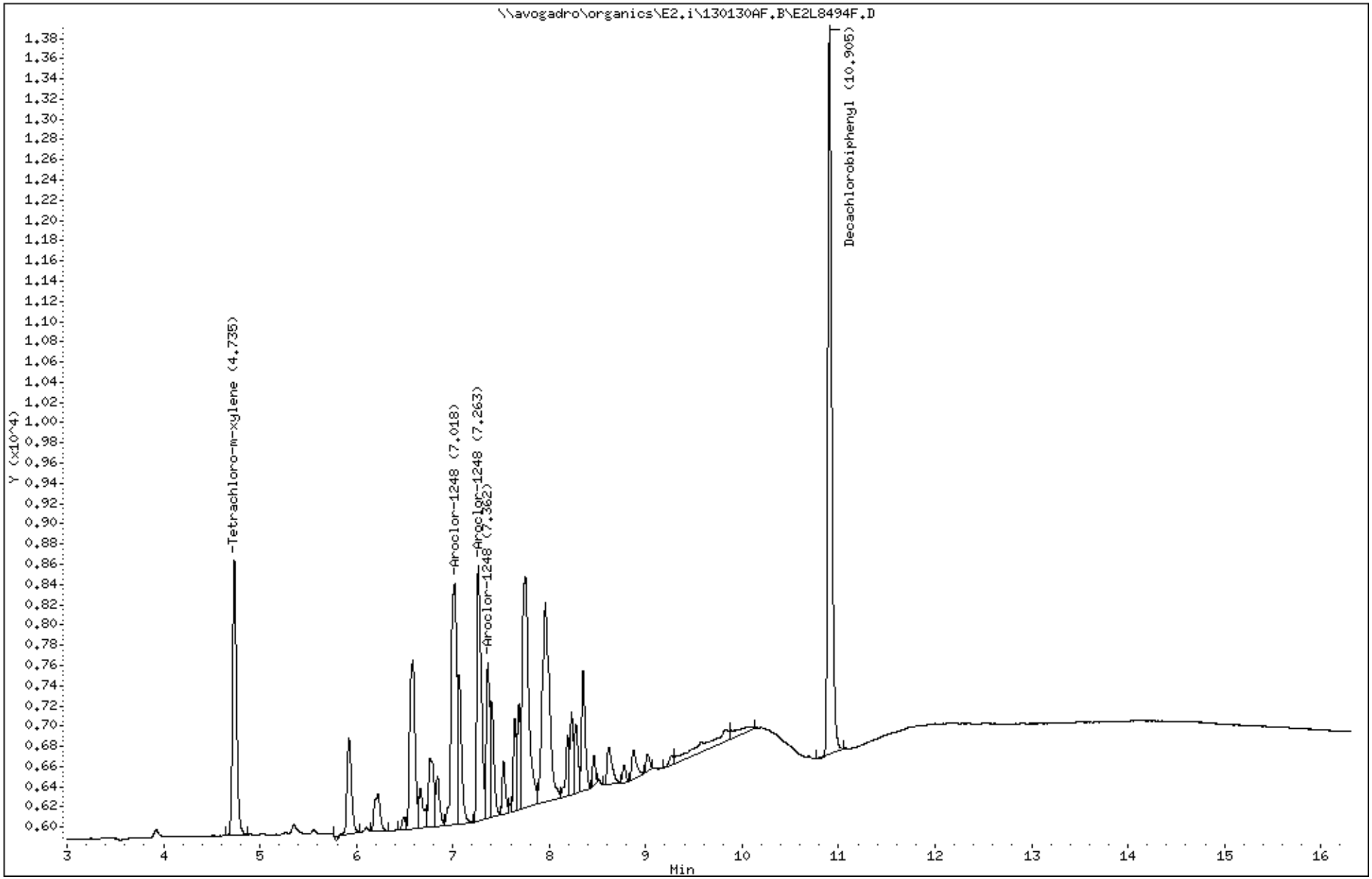
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.734	4.725	0.009	2721	0.00500	0.0049			(a)
7 Aroclor-1248						CAS #: 12672-29-6		
7.018	7.016	0.002	2379	0.10000	0.10	80.00- 120.00	100.00	(a)
7.263	7.259	0.004	2532	0.10000	0.10	88.76- 128.76	106.43	
7.362	7.359	0.003	1541	0.10000	0.10	49.67- 89.67	64.78	
	Average of Peak Amounts =			0.10000				
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.904	10.896	0.008	202373	0.01000	0.011			(a)

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8494F.D
Date : 30-JAN-2013 21:37
Client ID: AR12481A2
Instrument: E2.i
Sample Info: AR12481A2,AR12481A2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8494R.D
Report Date: 06-Feb-2013 10:31

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AR.B\E2L8494R.D
Lab Smp Id: AR12481A2 Client Smp ID: AR12481A2
Inj Date : 30-JAN-2013 21:37
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR12481A2,AR12481A2,,ar1248.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AR.B\E2_LL_PCB_R.m
Meth Date : 04-Feb-2013 13:13 tmcdaniel Quant Type: ESTD
Cal Date : 30-JAN-2013 21:37 Cal File: E2L8494R.D
Als bottle: 9 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

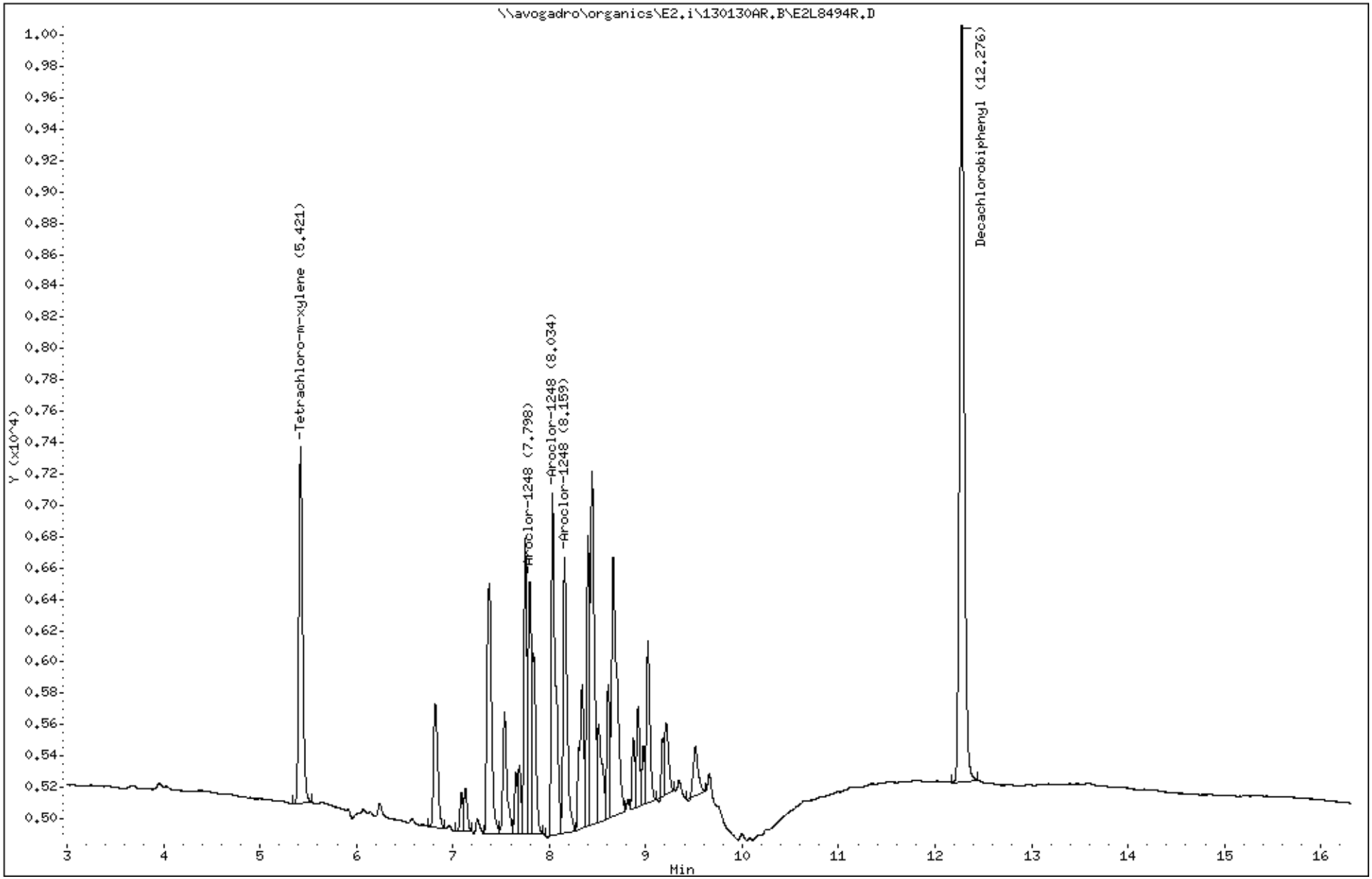
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.421	5.410	0.011	2271	0.00500	0.0049			(a)
5 Aroclor-1248						CAS #: 12672-29-6		
7.798	7.795	0.003	1610	0.10000	0.10	80.00- 120.00	100.00	(a)
8.034	8.031	0.003	2188	0.10000	0.10	156.52- 196.52	135.90	
8.158	8.156	0.002	1763	0.10000	0.10	97.05- 137.05	109.50	
Average of Peak Amounts =				0.10000				
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.276	12.262	0.014	4828	0.01000	0.012			(a)

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8494R.D
Date : 30-JAN-2013 21:37
Client ID: AR12481A2
Instrument: E2.i
Sample Info: AR12481A2,AR12481A2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8495F.D
Report Date: 06-Feb-2013 10:30

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AF.B\E2L8495F.D
Lab Smp Id: AR12486A2 Client Smp ID: AR12486A2
Inj Date : 30-JAN-2013 21:57
Operator : GMA/T SRC: GMA/T Inst ID: E2.i
Smp Info : AR12486A2,AR12486A2,,ar1248.sub,,
Misc Info : 1,6,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AF.B\E2_LL_PCB_F.m
Meth Date : 06-Feb-2013 09:59 tmcdaniel Quant Type: ESTD
Cal Date : 30-JAN-2013 21:57 Cal File: E2L8495F.D
Als bottle: 10 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

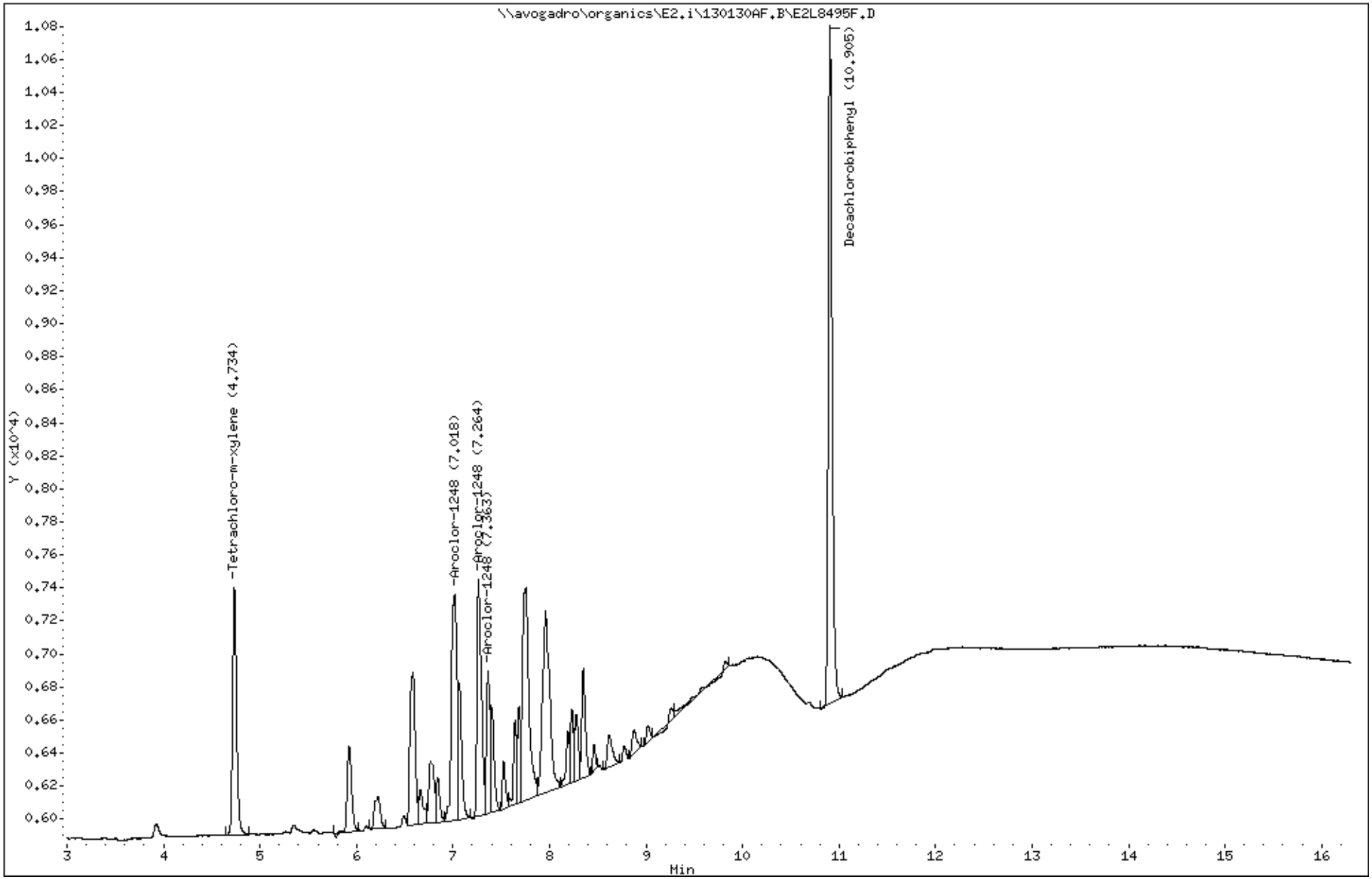
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.734	4.725	0.009	1499	0.00000	0.0027			(a)
7 Aroclor-1248						CAS #: 12672-29-6		
7.018	7.016	0.002	1366	0.05000	0.053	80.00- 120.00	100.00	(a)
7.263	7.259	0.004	1429	0.05000	0.053	88.76- 128.76	104.61	
7.362	7.359	0.003	861	0.05000	0.053	49.67- 89.67	63.03	
		Average of Peak Amounts =		0.05300				
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.905	10.896	0.009	114676	0.00000	0.0063			(a)

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8495F.D
Date : 30-JAN-2013 21:57
Client ID: AR12486A2
Instrument: E2.i
Sample Info: AR12486A2,AR12486A2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8495R.D
Report Date: 06-Feb-2013 10:31

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AR.B\E2L8495R.D
Lab Smp Id: AR12486A2 Client Smp ID: AR12486A2
Inj Date : 30-JAN-2013 21:57
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR12486A2,AR12486A2,,ar1248.sub,,
Misc Info : 1,6,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AR.B\E2_LL_PCB_R.m
Meth Date : 04-Feb-2013 13:13 tmcdaniel Quant Type: ESTD
Cal Date : 30-JAN-2013 21:57 Cal File: E2L8495R.D
Als bottle: 10 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

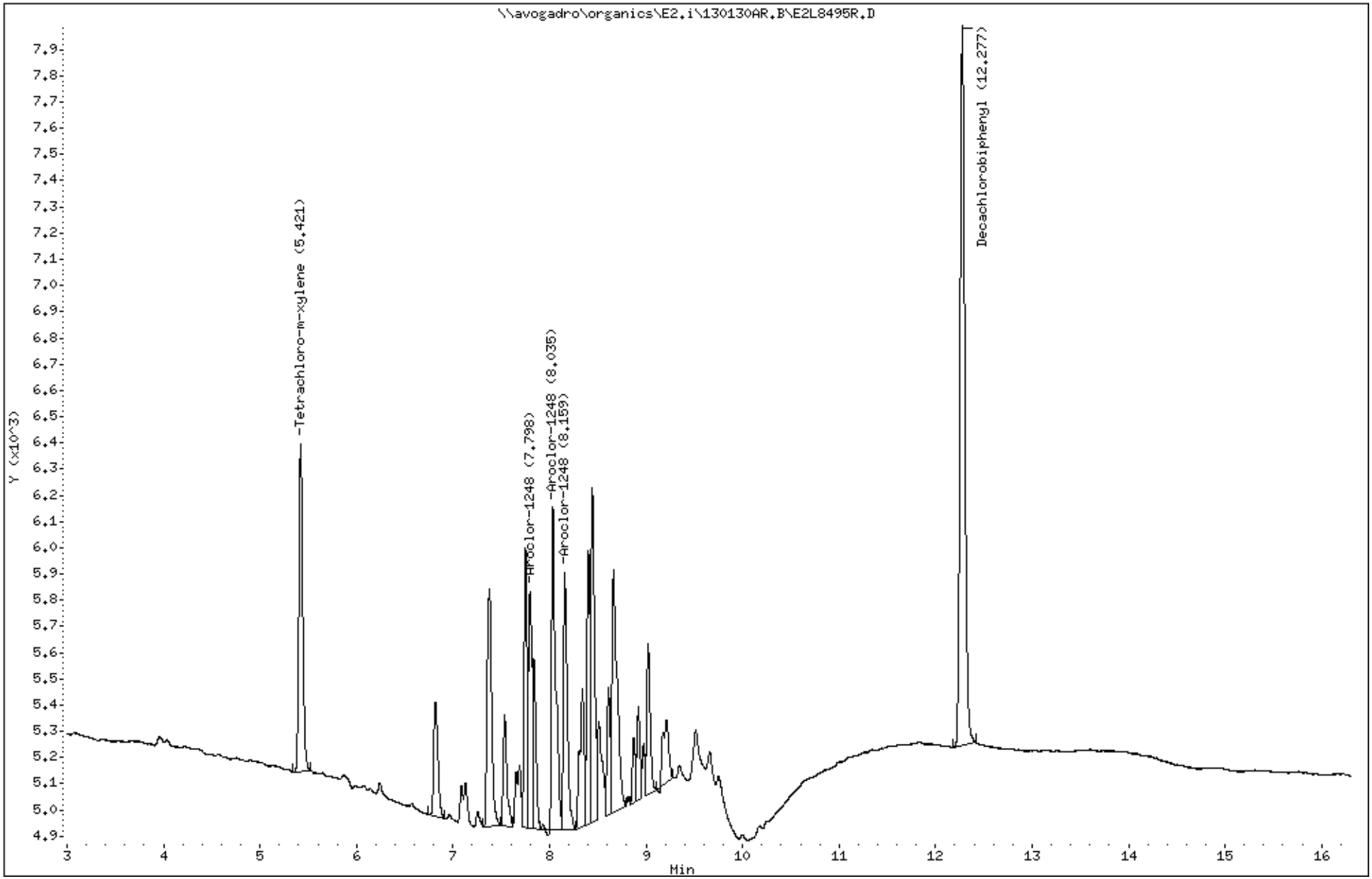
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
5.421	5.410	0.011	1252	0.00000	0.0027			(a)
5 Aroclor-1248					CAS #: 12672-29-6			
7.798	7.795	0.003	903	0.05000	0.053	80.00- 120.00	100.00	(a)
8.034	8.031	0.003	1229	0.05000	0.053	156.52- 196.52	136.10	
8.158	8.156	0.002	979	0.05000	0.053	97.05- 137.05	108.42	
	Average of Peak Amounts =			0.05300				
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
12.276	12.262	0.014	2746	0.00000	0.0066			(a)

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8495R.D
Date : 30-JAN-2013 21:57
Client ID: AR12486A2
Instrument: E2.i
Sample Info: AR12486A2,AR12486A2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8496F.D
Report Date: 06-Feb-2013 10:30

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AF.B\E2L8496F.D
Lab Smp Id: AR12482A2 Client Smp ID: AR12482A2
Inj Date : 30-JAN-2013 22:17
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR12482A2,AR12482A2,,ar1248.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AF.B\E2_LL_PCB_F.m
Meth Date : 06-Feb-2013 09:59 tmcdaniel Quant Type: ESTD
Cal Date : 30-JAN-2013 22:17 Cal File: E2L8496F.D
Als bottle: 11 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

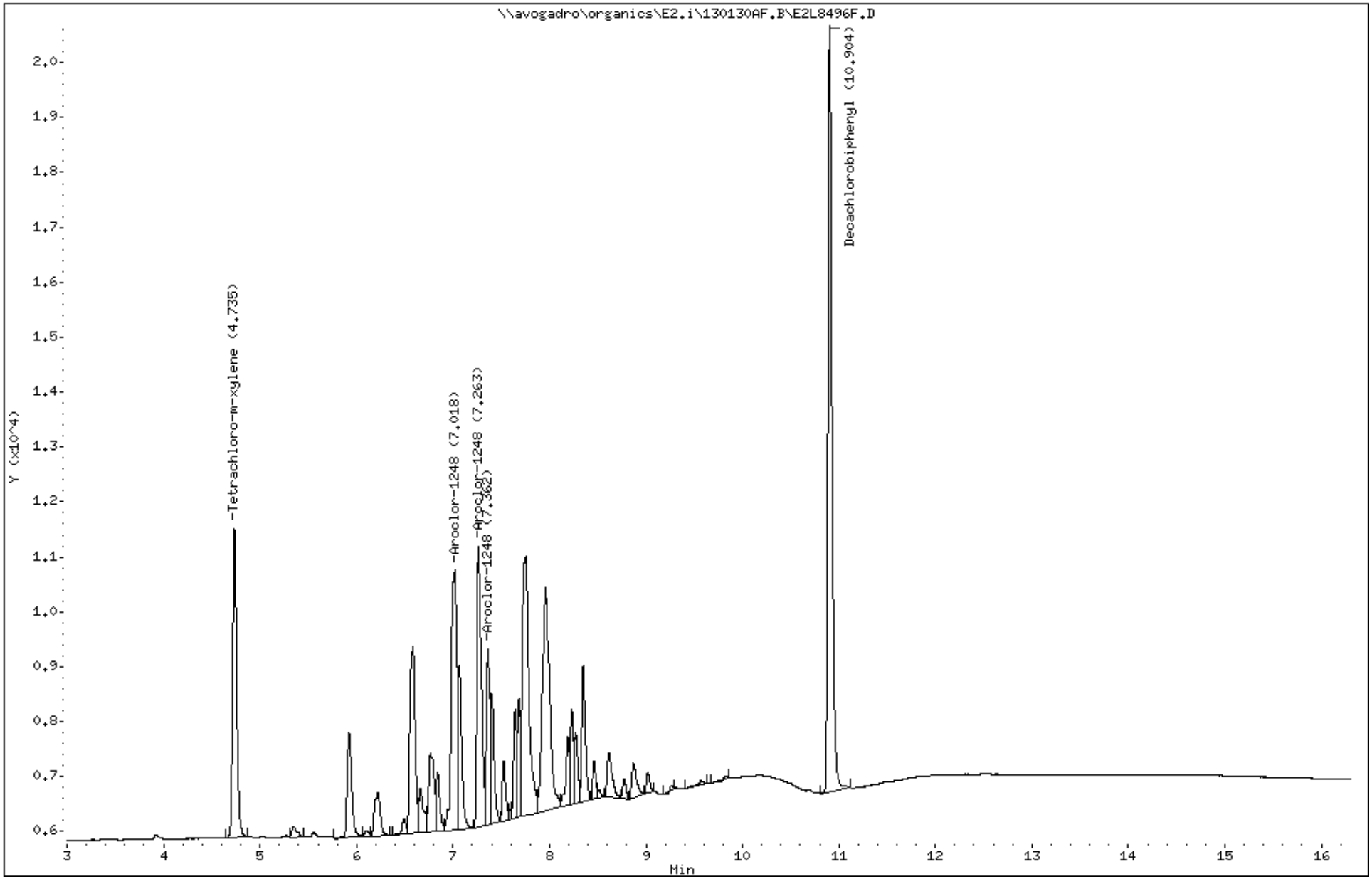
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.735	4.725	0.010	5631	0.01000	0.010			(a)
7 Aroclor-1248						CAS #: 12672-29-6		
7.018	7.016	0.002	4728	0.20000	0.19	80.00- 120.00	100.00	(a)
7.262	7.259	0.003	5105	0.20000	0.19	88.76- 128.76	107.97	
7.362	7.359	0.003	3188	0.20000	0.20	49.67- 89.67	67.43	
Average of Peak Amounts =					0.19333			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.903	10.896	0.007	402194	0.02000	0.022			(a)

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8496F.D
Date : 30-JAN-2013 22:17
Client ID: AR12482A2
Instrument: E2.i
Sample Info: AR12482A2,AR12482A2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8496R.D
Report Date: 06-Feb-2013 10:31

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AR.B\E2L8496R.D
Lab Smp Id: AR12482A2 Client Smp ID: AR12482A2
Inj Date : 30-JAN-2013 22:17
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR12482A2,AR12482A2,,ar1248.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AR.B\E2_LL_PCB_R.m
Meth Date : 04-Feb-2013 13:13 tmcdaniel Quant Type: ESTD
Cal Date : 30-JAN-2013 22:17 Cal File: E2L8496R.D
Als bottle: 11 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

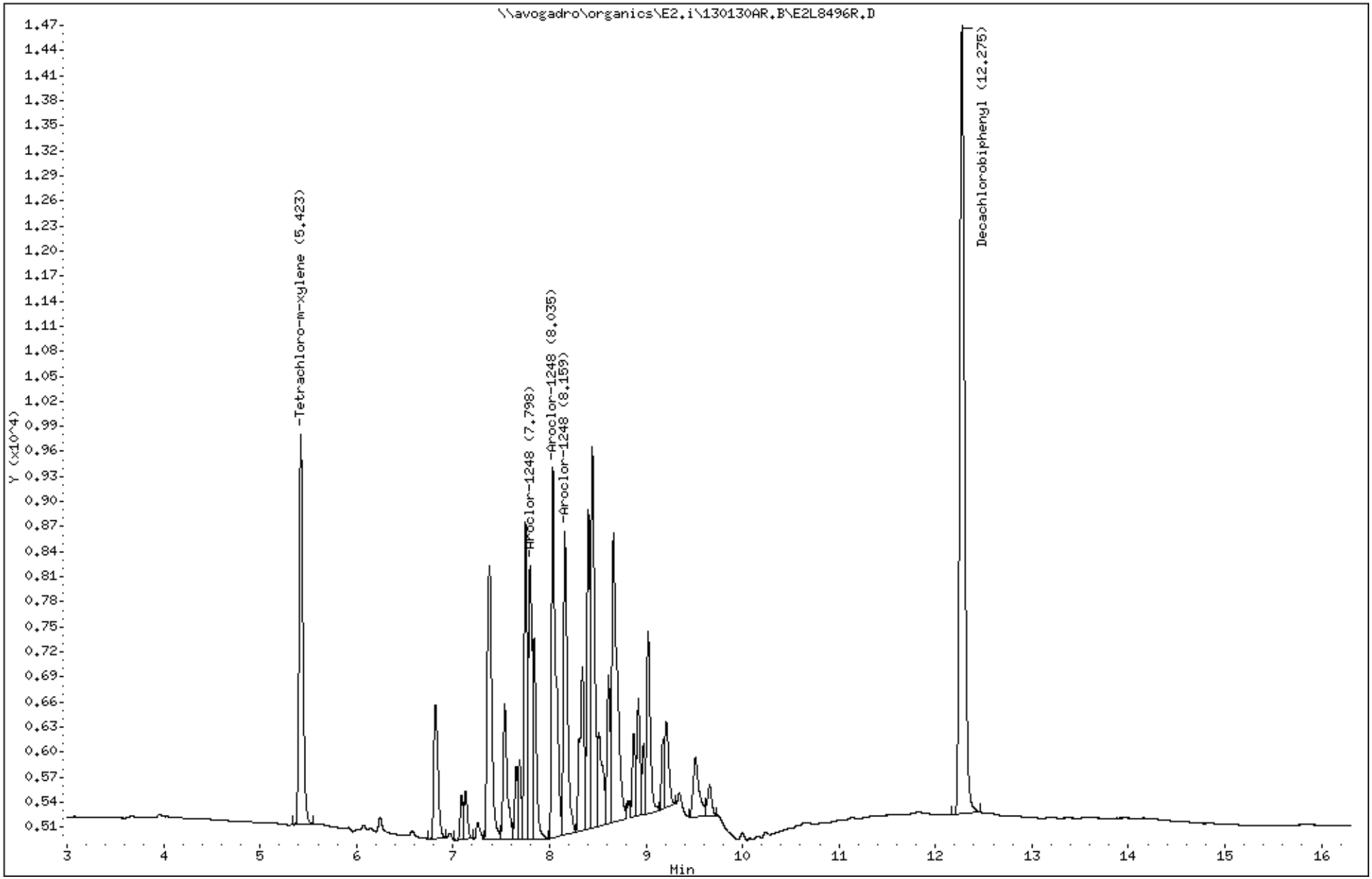
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
5.422	5.410	0.012	4673	0.01000	0.010			(a)
5 Aroclor-1248					CAS #: 12672-29-6			
7.798	7.795	0.003	3269	0.20000	0.19	80.00- 120.00	100.00	(a)
8.034	8.031	0.003	4430	0.20000	0.19	156.52- 196.52	135.52	
8.159	8.156	0.003	3627	0.20000	0.20	97.05- 137.05	110.95	
Average of Peak Amounts =					0.19333			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
12.275	12.262	0.013	9437	0.02000	0.022			(a)

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8496R.D
Date : 30-JAN-2013 22:17
Client ID: AR12482A2
Instrument: E2.i
Sample Info: AR12482A2,AR12482A2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8497F.D
Report Date: 06-Feb-2013 10:30

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AF.B\E2L8497F.D
Lab Smp Id: AR12483A2 Client Smp ID: AR12483A2
Inj Date : 30-JAN-2013 22:36
Operator : GMA/T SRC: GMA/T Inst ID: E2.i
Smp Info : AR12483A2,AR12483A2,,ar1248.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AF.B\E2_LL_PCB_F.m
Meth Date : 06-Feb-2013 09:59 tmcdaniel Quant Type: ESTD
Cal Date : 30-JAN-2013 22:36 Cal File: E2L8497F.D
Als bottle: 12 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

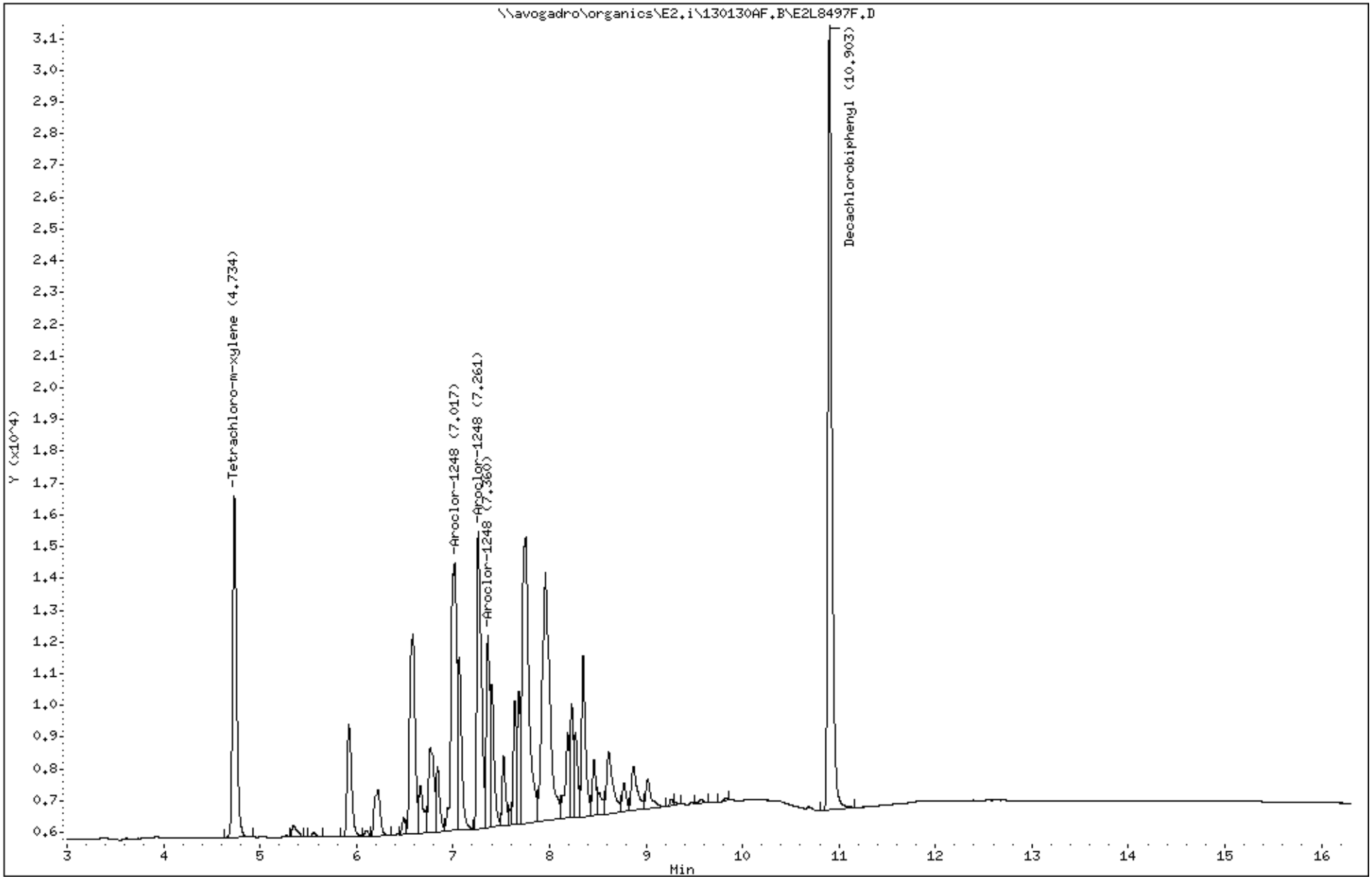
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.734	4.725	0.009	10784	0.02000	0.020			(a)
7 Aroclor-1248					CAS #: 12672-29-6			
7.017	7.016	0.001	8434	0.40000	0.35	80.00- 120.00	100.00	(a)
7.261	7.259	0.002	9372	0.40000	0.36	88.76- 128.76	111.12	
7.360	7.359	0.001	6052	0.40000	0.38	49.67- 89.67	71.76	
Average of Peak Amounts =					0.36333			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.902	10.896	0.006	721051	0.04000	0.040			(a)

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8497F.D
Date : 30-JAN-2013 22:36
Client ID: AR12483A2
Instrument: E2.i
Sample Info: AR12483A2,AR12483A2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8497R.D
Report Date: 06-Feb-2013 10:31

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AR.B\E2L8497R.D
Lab Smp Id: AR12483A2 Client Smp ID: AR12483A2
Inj Date : 30-JAN-2013 22:36
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR12483A2,AR12483A2,,ar1248.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AR.B\E2_LL_PCB_R.m
Meth Date : 04-Feb-2013 13:13 tmcdaniel Quant Type: ESTD
Cal Date : 30-JAN-2013 22:36 Cal File: E2L8497R.D
Als bottle: 12 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

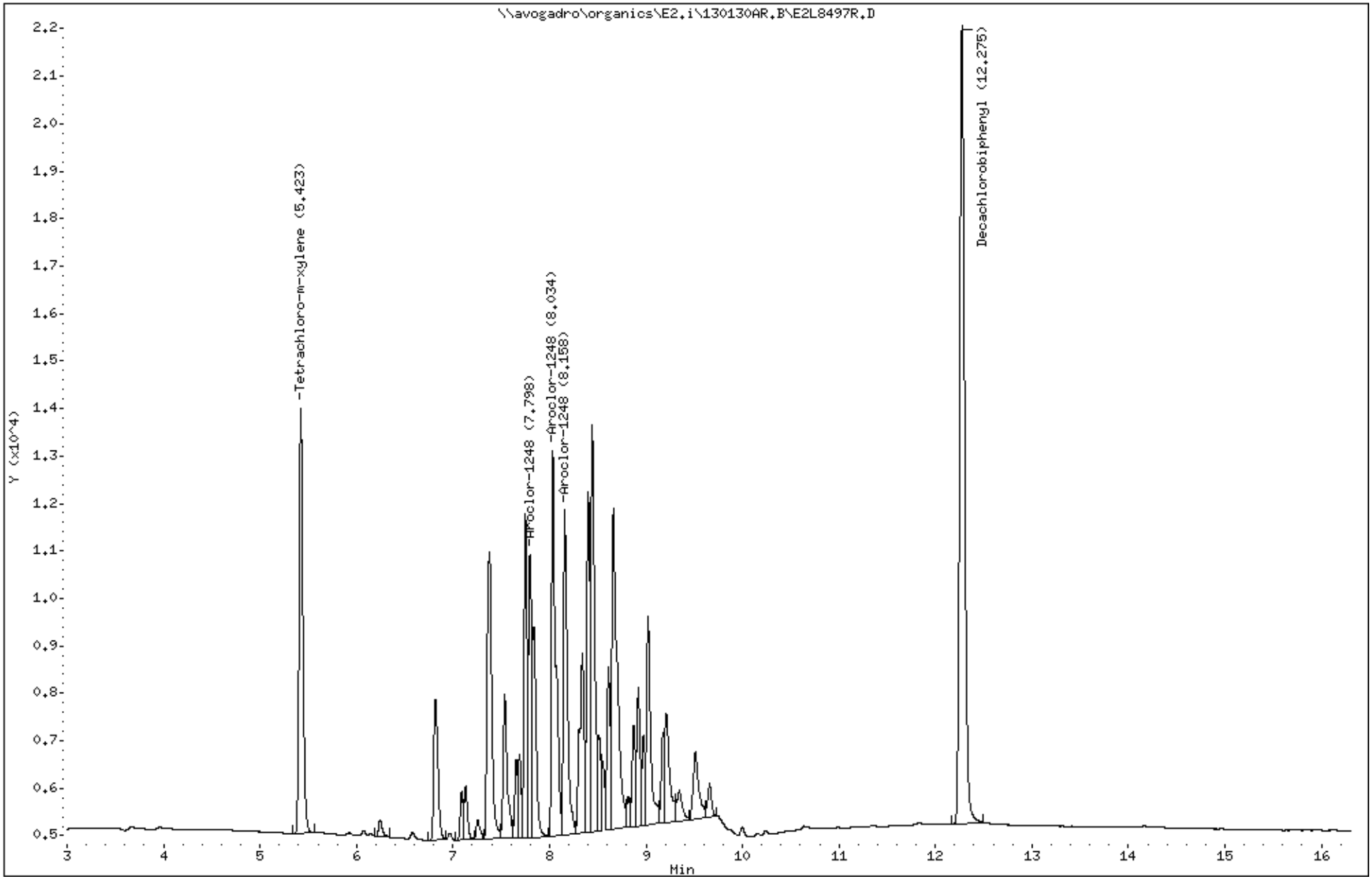
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
5.422	5.410	0.012	8966	0.02000	0.020			(a)
5 Aroclor-1248					CAS #: 12672-29-6			
7.797	7.795	0.002	5966	0.40000	0.36	80.00- 120.00	100.00	(a)
8.033	8.031	0.002	8134	0.40000	0.36	156.52- 196.52	136.34	
8.158	8.156	0.002	6843	0.40000	0.38	97.05- 137.05	114.70	
Average of Peak Amounts =					0.36667			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
12.274	12.262	0.012	16816	0.04000	0.040			(a)

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8497R.D
Date : 30-JAN-2013 22:36
Client ID: AR12483A2
Instrument: E2.i
Sample Info: AR12483A2,AR12483A2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8498F.D
Report Date: 06-Feb-2013 10:30

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AF.B\E2L8498F.D
Lab Smp Id: AR12484A2 Client Smp ID: AR12484A2
Inj Date : 30-JAN-2013 22:56
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR12484A2,AR12484A2,,ar1248.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AF.B\E2_LL_PCB_F.m
Meth Date : 06-Feb-2013 09:59 tmcdaniel Quant Type: ESTD
Cal Date : 30-JAN-2013 22:56 Cal File: E2L8498F.D
Als bottle: 13 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

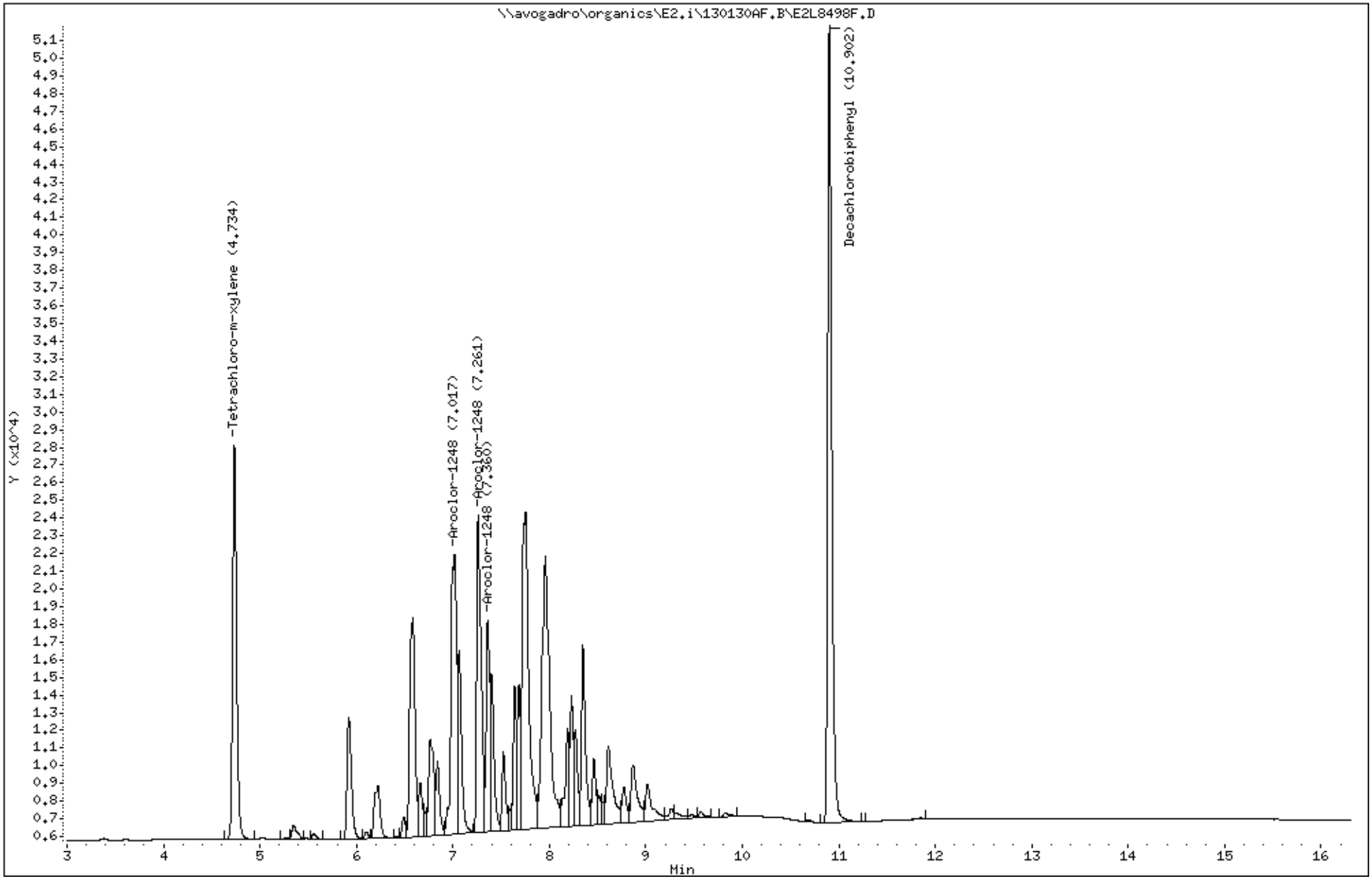
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.734	4.725	0.009	22317	0.04000	0.041			(a)
7 Aroclor-1248						CAS #: 12672-29-6		
7.017	7.016	0.001	15817	0.80000	0.68	80.00- 120.00	100.00	(a)
7.260	7.259	0.001	17976	0.80000	0.72	88.76- 128.76	113.65	
7.360	7.359	0.001	11957	0.80000	0.76	49.67- 89.67	75.60	
Average of Peak Amounts =					0.72000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.901	10.896	0.005	1327928	0.08000	0.073			

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8498F.D
Date : 30-JAN-2013 22:56
Client ID: AR12484A2
Instrument: E2.i
Sample Info: AR12484A2,AR12484A2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8498R.D
Report Date: 06-Feb-2013 10:31

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AR.B\E2L8498R.D
Lab Smp Id: AR12484A2 Client Smp ID: AR12484A2
Inj Date : 30-JAN-2013 22:56
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR12484A2,AR12484A2,,ar1248.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AR.B\E2_LL_PCB_R.m
Meth Date : 04-Feb-2013 13:13 tmcdaniel Quant Type: ESTD
Cal Date : 30-JAN-2013 22:56 Cal File: E2L8498R.D
Als bottle: 13 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

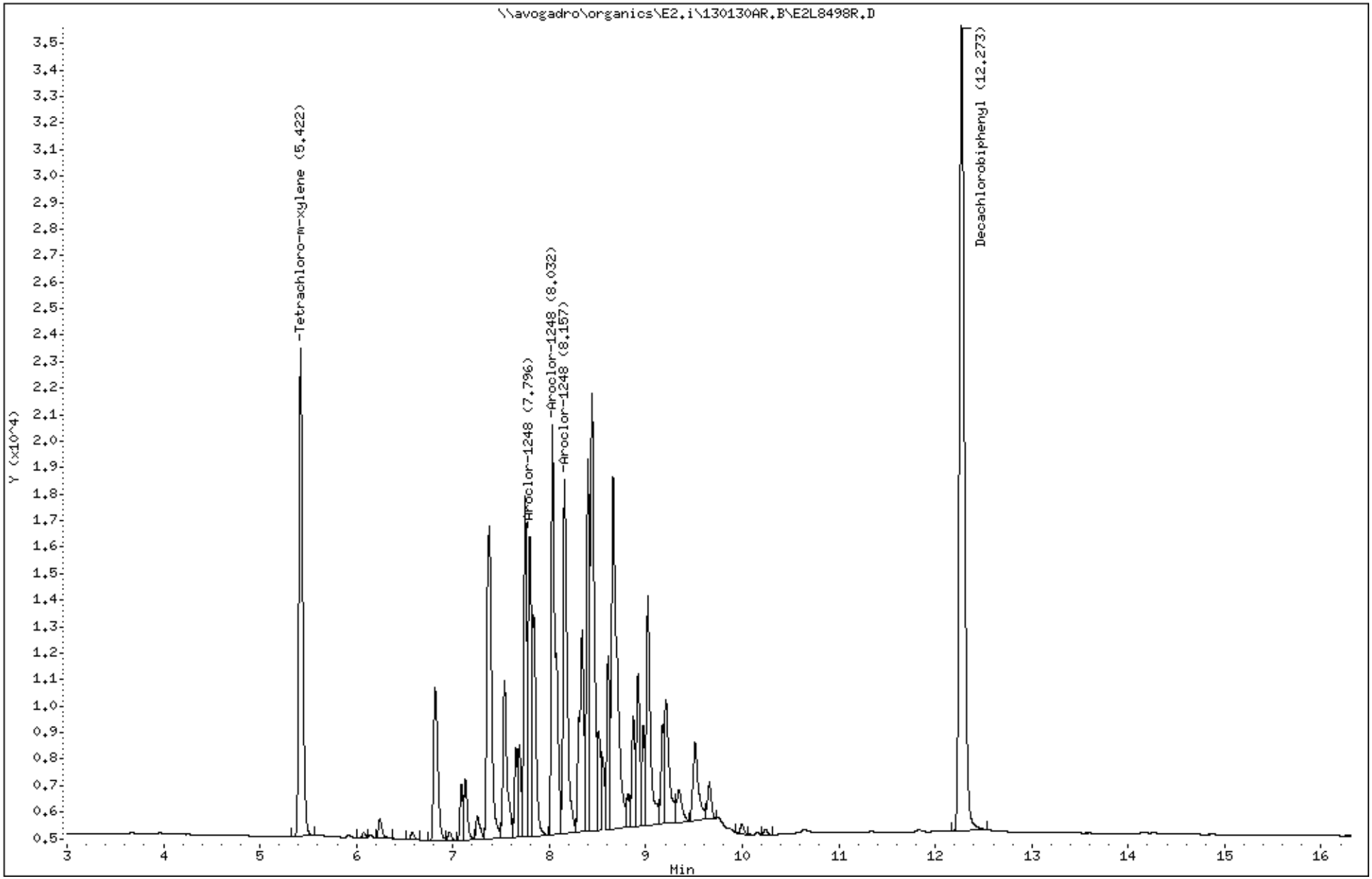
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.421	5.410	0.011	18427	0.04000	0.040			(a)
5 Aroclor-1248						CAS #: 12672-29-6		
7.796	7.795	0.001	11301	0.80000	0.71	80.00- 120.00	100.00	(a)
8.031	8.031	0.000	15479	0.80000	0.71	156.52- 196.52	136.97	
8.156	8.156	0.000	13345	0.80000	0.75	97.05- 137.05	118.09	
Average of Peak Amounts =					0.72333			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.272	12.262	0.010	30416	0.08000	0.072			

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8498R.D
Date : 30-JAN-2013 22:56
Client ID: AR12484A2
Instrument: E2.i
Sample Info: AR12484A2,AR12484A2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8499F.D
Report Date: 06-Feb-2013 10:30

Spectrum Analytical, Inc. RI Division

Quantitation Report

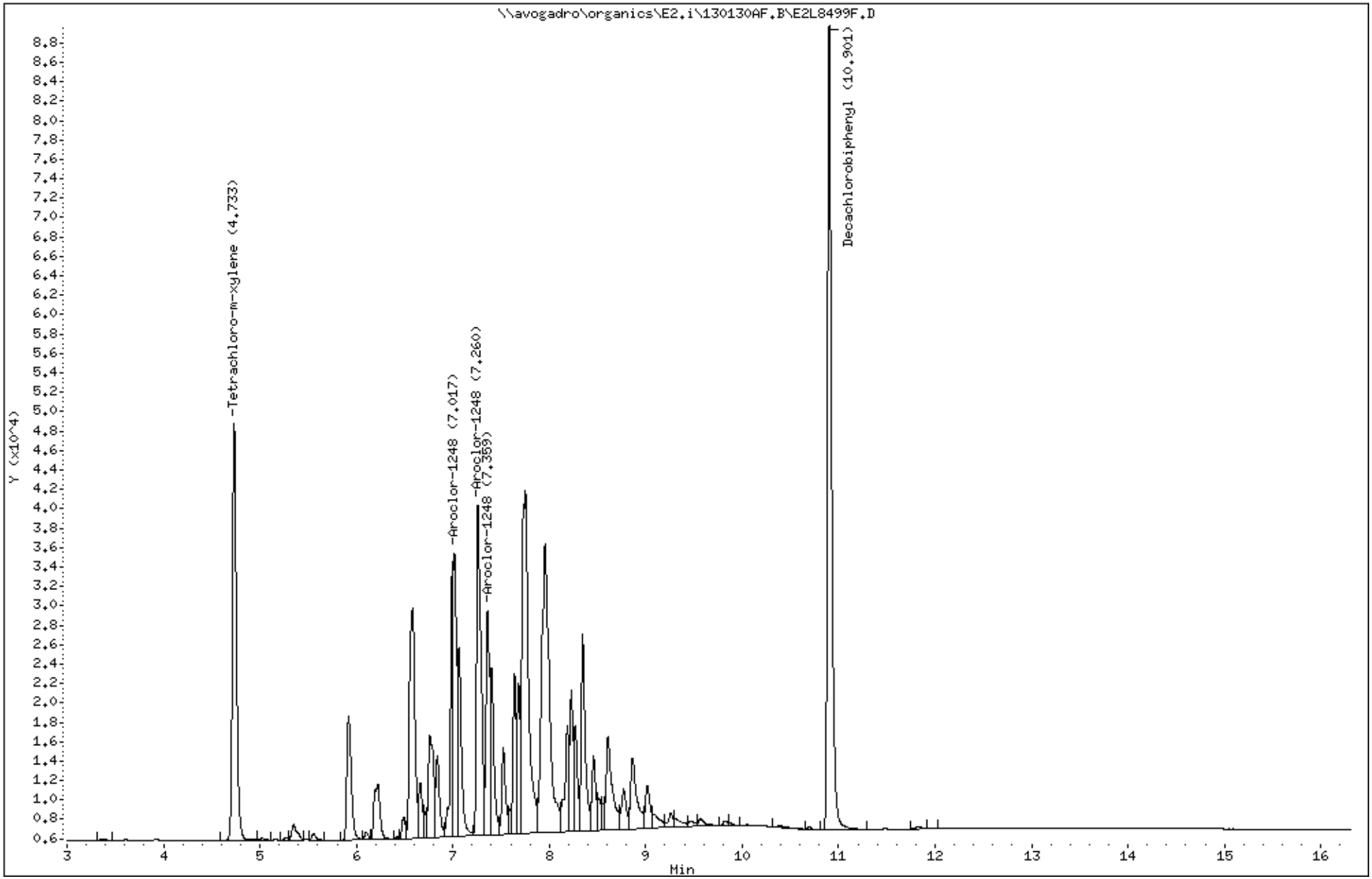
Data file : \\avogadro\organics\E2.i\130130AF.B\E2L8499F.D
Lab Smp Id: AR12485A2 Client Smp ID: AR12485A2
Inj Date : 30-JAN-2013 23:15
Operator : GMA/T SRC: GMA/T Inst ID: E2.i
Smp Info : AR12485A2,AR12485A2,,ar1248.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AF.B\E2_LL_PCB_F.m
Meth Date : 06-Feb-2013 09:59 tmcdaniel Quant Type: ESTD
Cal Date : 30-JAN-2013 23:15 Cal File: E2L8499F.D
Als bottle: 14 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.732	4.725	0.007	42920	0.08000	0.078			
7 Aroclor-1248						CAS #: 12672-29-6		
7.016	7.016	0.000	29146	1.60000	1.3	80.00- 120.00		100.00
7.259	7.259	0.000	34065	1.60000	1.4	88.76- 128.76		116.88
7.359	7.359	0.000	23166	1.60000	1.5	49.67- 89.67		79.48
	Average of Peak Amounts =				1.40000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.901	10.896	0.005	2448753	0.16000	0.14			

Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8499F.D
Date : 30-JAN-2013 23:15
Client ID: AR12485A2
Instrument: E2.i
Sample Info: AR12485A2,AR12485A2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8499R.D
Report Date: 06-Feb-2013 10:31

Spectrum Analytical, Inc. RI Division

Quantitation Report

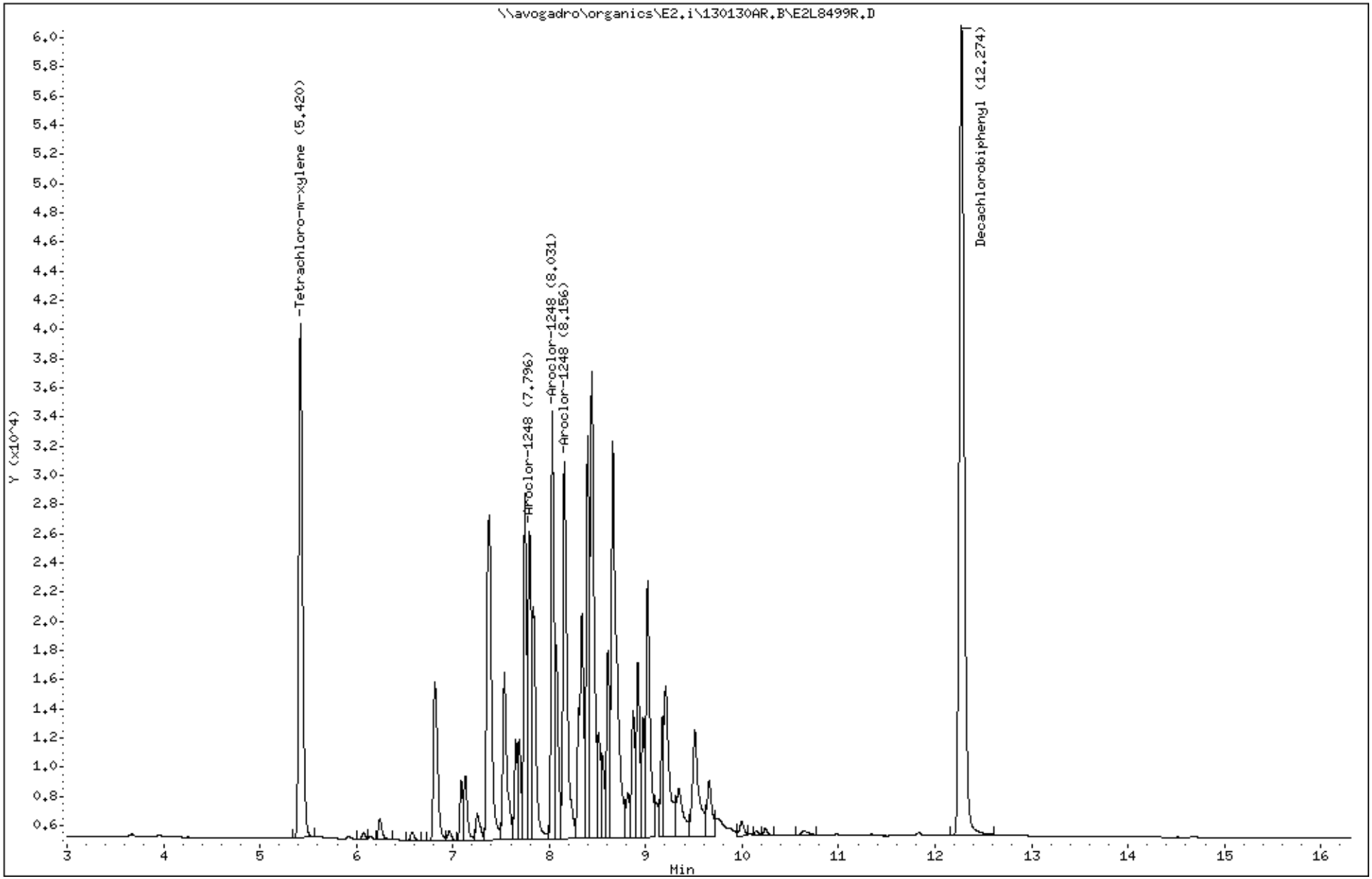
Data file : \\avogadro\organics\E2.i\130130AR.B\E2L8499R.D
Lab Smp Id: AR12485A2 Client Smp ID: AR12485A2
Inj Date : 30-JAN-2013 23:15
Operator : GMA/T SRC: GMA/T Inst ID: E2.i
Smp Info : AR12485A2,AR12485A2,,ar1248.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AR.B\E2_LL_PCB_R.m
Meth Date : 04-Feb-2013 13:13 tmcdaniel Quant Type: ESTD
Cal Date : 30-JAN-2013 23:15 Cal File: E2L8499R.D
Als bottle: 14 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.419	5.410	0.009	35302	0.08000	0.078			
5 Aroclor-1248						CAS #: 12672-29-6		
7.795	7.795	0.000	21084	1.60000	1.4	80.00- 120.00		100.00
8.031	8.031	0.000	29325	1.60000	1.4	156.52- 196.52		139.09
8.156	8.156	0.000	25828	1.60000	1.5	97.05- 137.05		122.50
Average of Peak Amounts =					1.43333			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.273	12.262	0.011	55544	0.16000	0.13			

Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8499R.D
Date : 30-JAN-2013 23:15
Client ID: AR12485A2
Instrument: E2.i
Sample Info: AR12485A2,AR12485A2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8500F.D
Report Date: 06-Feb-2013 10:30

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AF.B\E2L8500F.D
Lab Smp Id: AR12541A2 Client Smp ID: AR12541A2
Inj Date : 30-JAN-2013 23:35
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR12541A2,AR12541A2,,ar1254.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AF.B\E2_LL_PCB_F.m
Meth Date : 06-Feb-2013 09:59 tmcdaniel Quant Type: ESTD
Cal Date : 30-JAN-2013 23:35 Cal File: E2L8500F.D
Als bottle: 15 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

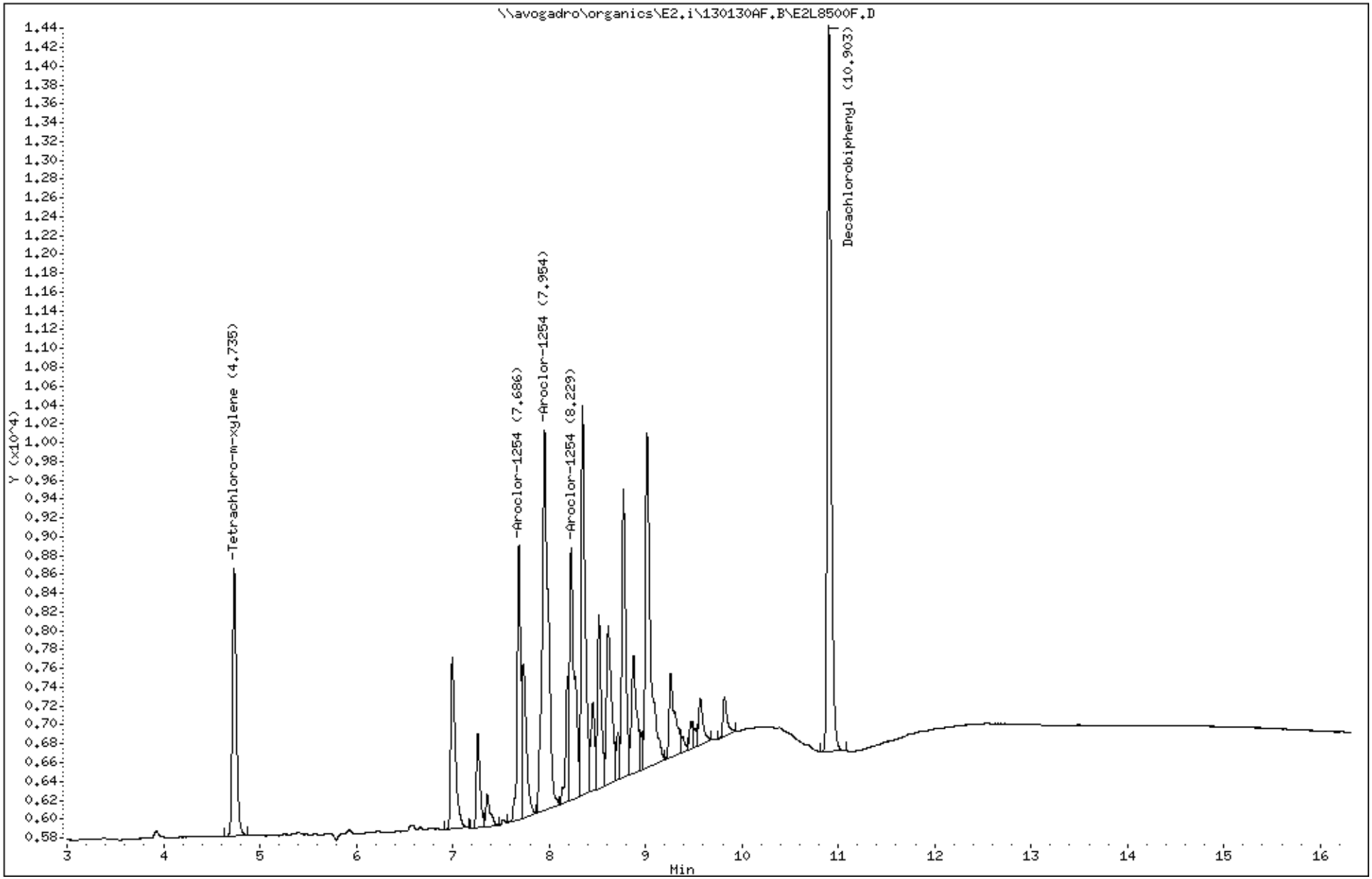
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.734	4.725	0.009	2843	0.00500	0.0051			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.903	10.896	0.007	217530	0.01000	0.012			(a)
8 Aroclor-1254						CAS #: 11097-69-1		
7.686	7.683	0.003	2910	0.10000	0.10	80.00- 120.00	100.00	(a)
7.953	7.950	0.003	4051	0.10000	0.10	78.12- 118.12	139.21	
8.229	8.226	0.003	2687	0.10000	0.10	42.84- 82.84	92.34	
Average of Peak Amounts =					0.10000			

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8500F.D
Date : 30-JAN-2013 23:35
Client ID: AR12541A2
Instrument: E2.i
Sample Info: AR12541A2,AR12541A2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8500R.D
Report Date: 06-Feb-2013 10:31

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AR.B\E2L8500R.D
Lab Smp Id: AR12541A2 Client Smp ID: AR12541A2
Inj Date : 30-JAN-2013 23:35
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR12541A2,AR12541A2,,ar1254.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AR.B\E2_LL_PCB_R.m
Meth Date : 04-Feb-2013 13:13 tmcdaniel Quant Type: ESTD
Cal Date : 30-JAN-2013 23:35 Cal File: E2L8500R.D
Als bottle: 15 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

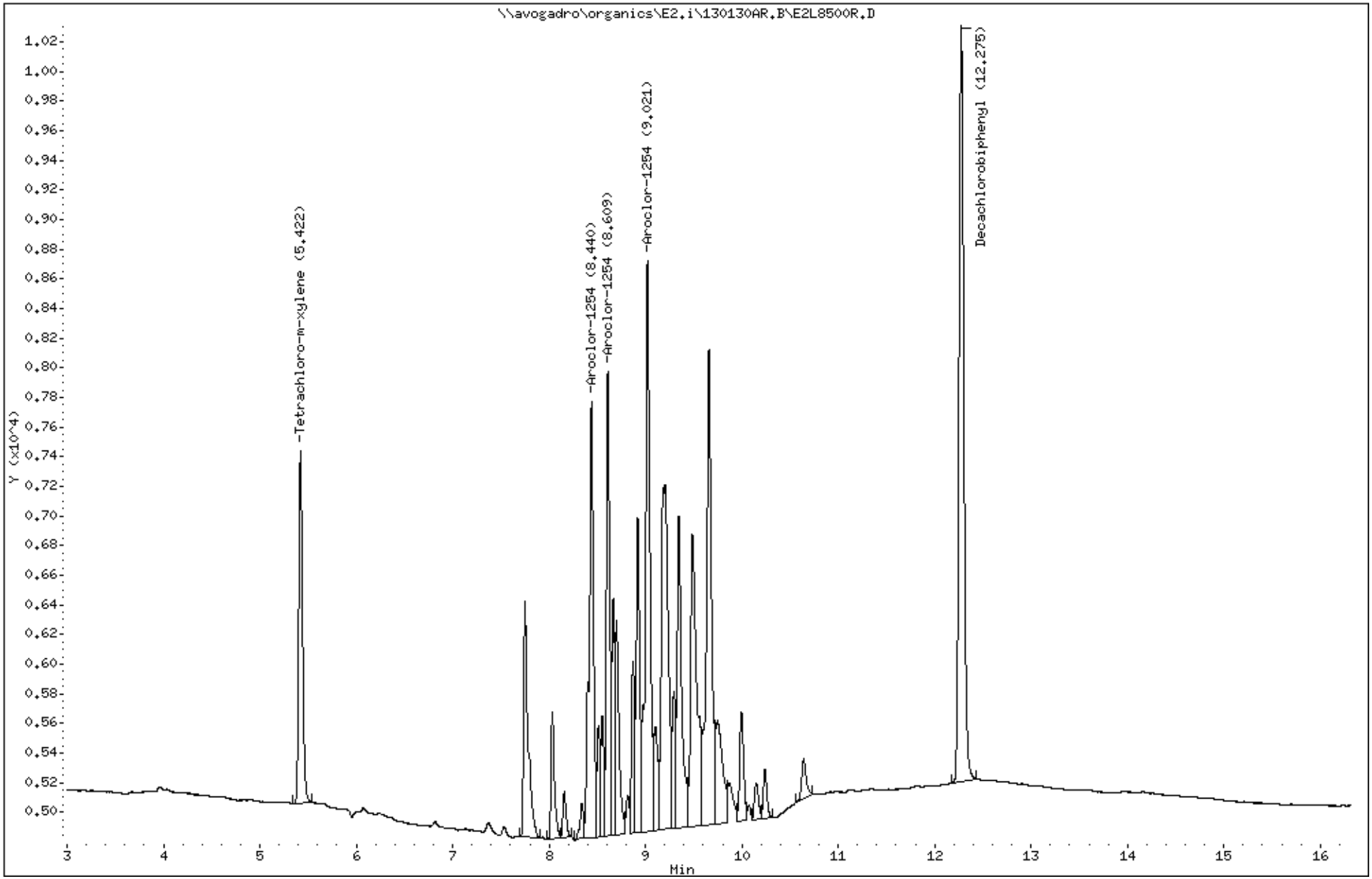
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.421	5.410	0.011	2378	0.00500	0.0052			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.275	12.262	0.013	5102	0.01000	0.012			(a)
7 Aroclor-1254						CAS #: 11097-69-1		
8.440	8.437	0.003	2944	0.10000	0.10	80.00- 120.00	100.00	(a)
8.609	8.605	0.004	3135	0.10000	0.10	195.31- 235.31	106.49	
9.021	9.017	0.004	3856	0.10000	0.10	135.01- 175.01	130.98	
Average of Peak Amounts =				0.10000				

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8500R.D
Date : 30-JAN-2013 23:35
Client ID: AR12541A2
Instrument: E2.i
Sample Info: AR12541A2,AR12541A2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8501F.D
Report Date: 06-Feb-2013 10:30

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AF.B\E2L8501F.D
Lab Smp Id: AR12546A2 Client Smp ID: AR12546A2
Inj Date : 30-JAN-2013 23:55
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR12546A2,AR12546A2,,ar1254.sub,,
Misc Info : 1,6,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AF.B\E2_LL_PCB_F.m
Meth Date : 06-Feb-2013 09:59 tmcdaniel Quant Type: ESTD
Cal Date : 30-JAN-2013 23:55 Cal File: E2L8501F.D
Als bottle: 16 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

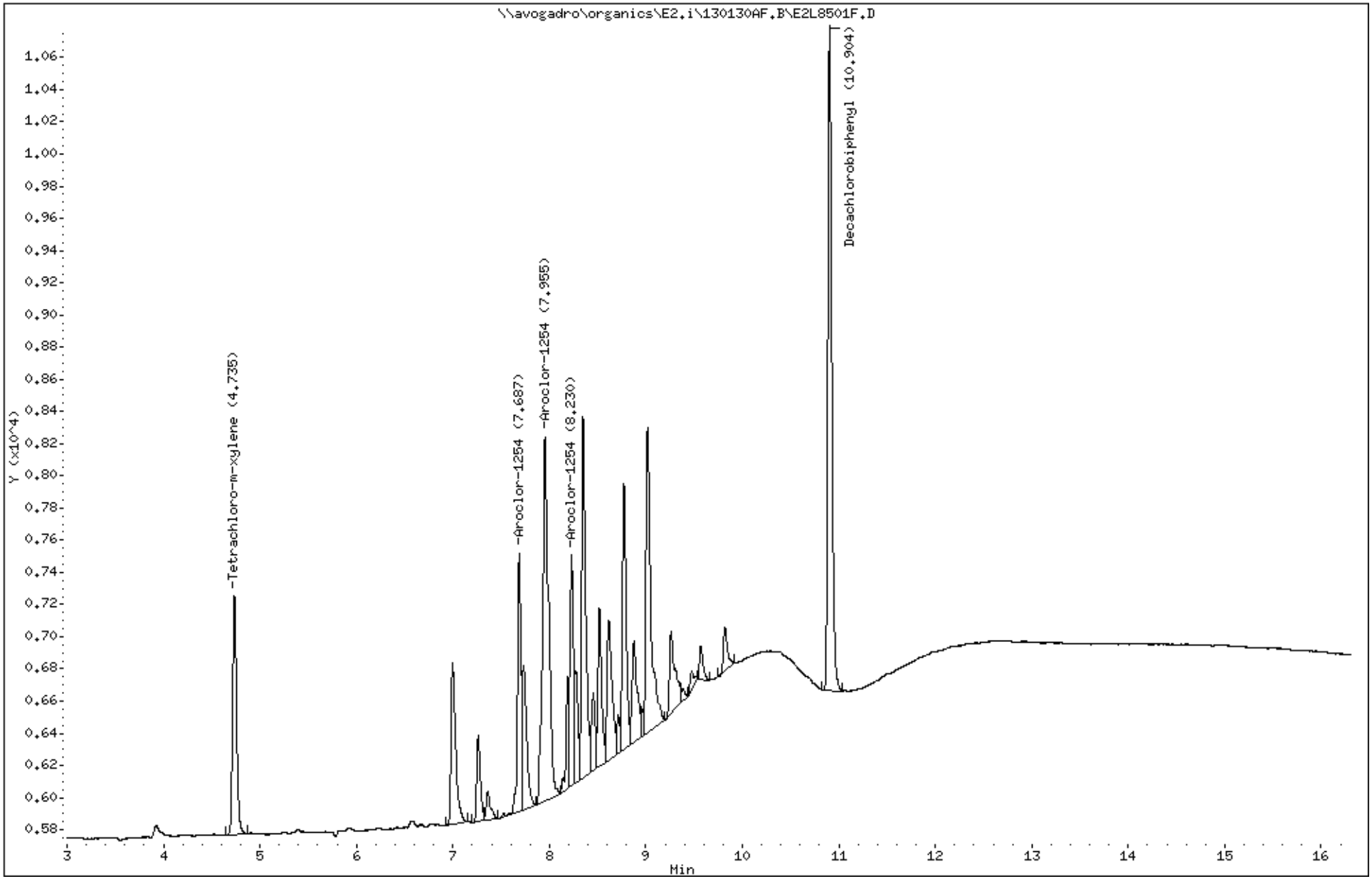
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.734	4.725	0.009	1483	0.00000	0.0027			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.904	10.896	0.008	115746	0.00000	0.0063			(a)
8 Aroclor-1254						CAS #: 11097-69-1		
7.686	7.683	0.003	1602	0.05000	0.052	80.00- 120.00	100.00	(a)
7.954	7.950	0.004	2264	0.05000	0.053	78.12- 118.12	141.32	
8.229	8.226	0.003	1435	0.05000	0.052	42.84- 82.84	89.58	
Average of Peak Amounts =					0.05233			

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8501F.D
Date : 30-JAN-2013 23:55
Client ID: AR12546A2
Instrument: E2.i
Sample Info: AR12546A2,AR12546A2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8501R.D
Report Date: 06-Feb-2013 10:31

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AR.B\E2L8501R.D
Lab Smp Id: AR12546A2 Client Smp ID: AR12546A2
Inj Date : 30-JAN-2013 23:55
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR12546A2,AR12546A2,,ar1254.sub,,
Misc Info : 1,6,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AR.B\E2_LL_PCB_R.m
Meth Date : 04-Feb-2013 13:13 tmcdaniel Quant Type: ESTD
Cal Date : 30-JAN-2013 23:55 Cal File: E2L8501R.D
Als bottle: 16 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

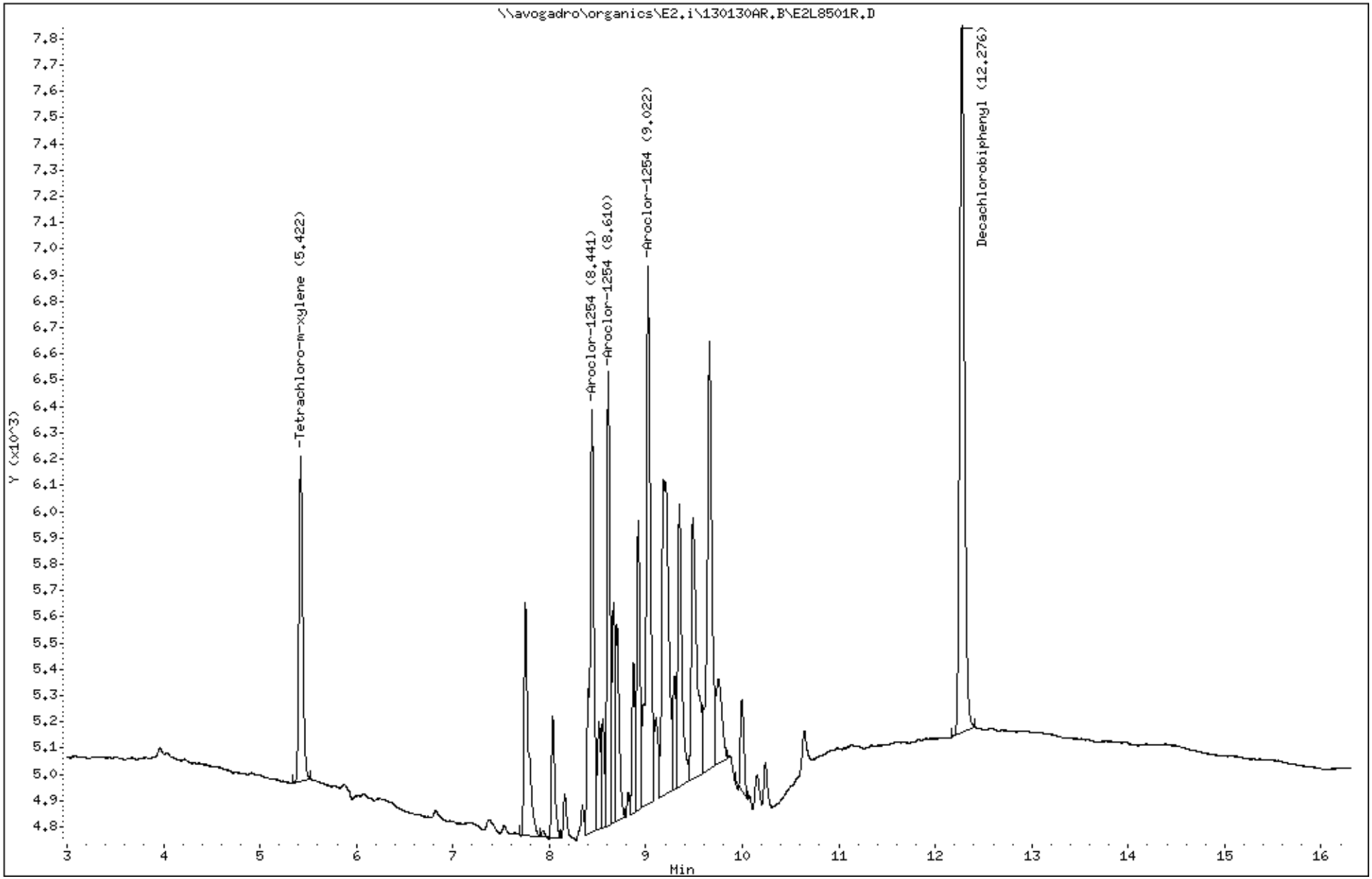
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.422	5.410	0.012	1238	0.00000	0.0027			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.275	12.262	0.013	2694	0.00000	0.0063			(a)
7 Aroclor-1254						CAS #: 11097-69-1		
8.440	8.437	0.003	1611	0.05000	0.052	80.00- 120.00	100.00	(a)
8.609	8.605	0.004	1724	0.05000	0.052	195.31- 235.31	107.01	
9.021	9.017	0.004	2048	0.05000	0.052	135.01- 175.01	127.13	
Average of Peak Amounts =					0.05200			

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8501R.D
Date : 30-JAN-2013 23:55
Client ID: AR12546A2
Instrument: E2.i
Sample Info: AR12546A2,AR12546A2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8502F.D
Report Date: 06-Feb-2013 10:30

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AF.B\E2L8502F.D
Lab Smp Id: AR12542A2 Client Smp ID: AR12542A2
Inj Date : 31-JAN-2013 00:14
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR12542A2,AR12542A2,,ar1254.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AF.B\E2_LL_PCB_F.m
Meth Date : 06-Feb-2013 09:59 tmcdaniel Quant Type: ESTD
Cal Date : 31-JAN-2013 00:14 Cal File: E2L8502F.D
Als bottle: 17 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

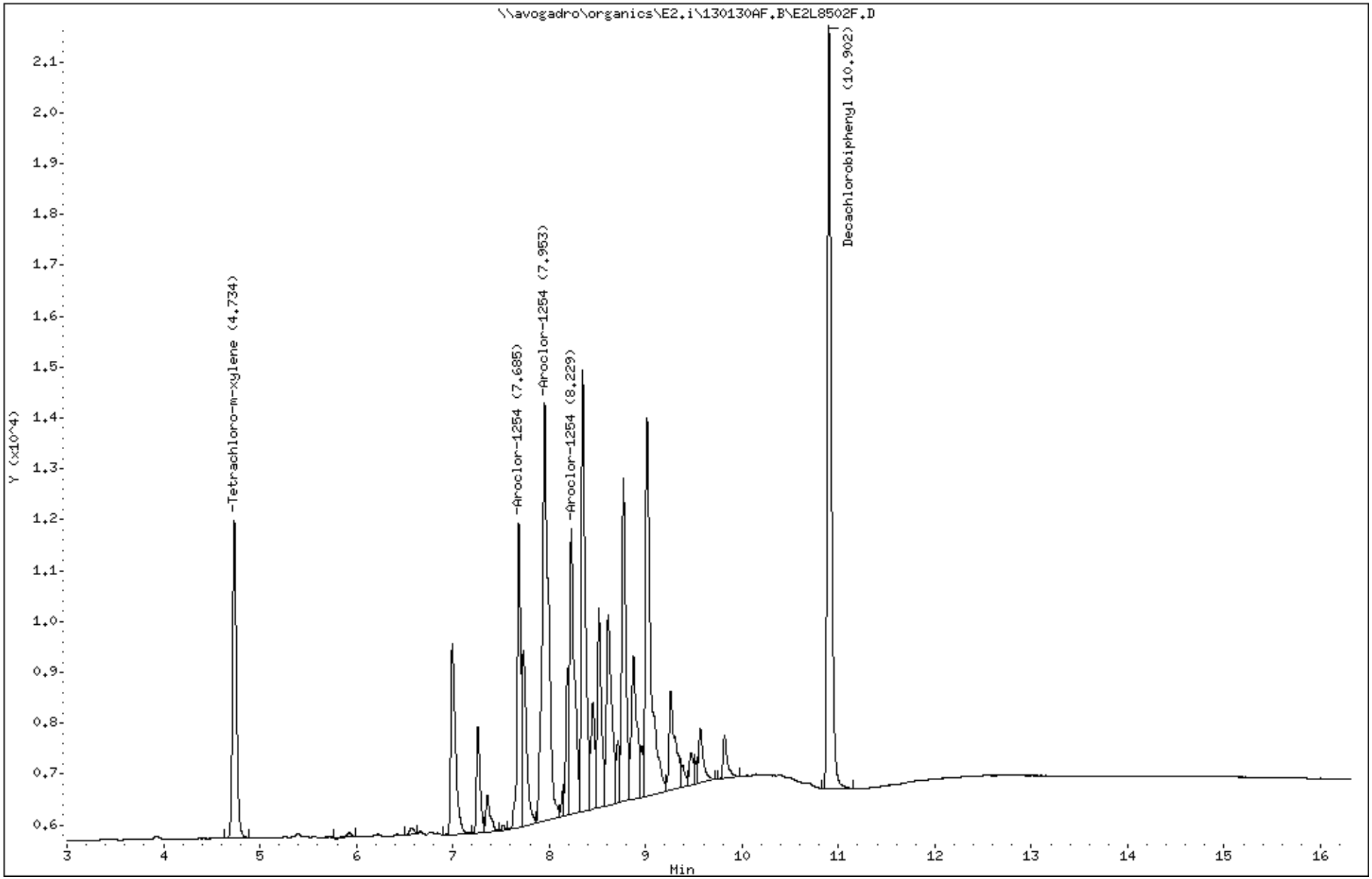
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.734	4.725	0.009	6239	0.01000	0.011			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.902	10.896	0.006	431736	0.02000	0.023			(a)
8 Aroclor-1254						CAS #: 11097-69-1		
7.685	7.683	0.002	5990	0.20000	0.20	80.00- 120.00	100.00	(a)
7.953	7.950	0.003	8221	0.20000	0.19	78.12- 118.12	137.25	
8.229	8.226	0.003	5629	0.20000	0.20	42.84- 82.84	93.97	
Average of Peak Amounts =					0.19667			

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8502F.D
Date : 31-JAN-2013 00:14
Client ID: AR12542A2
Instrument: E2.i
Sample Info: AR12542A2,AR12542A2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8502R.D
Report Date: 06-Feb-2013 10:31

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AR.B\E2L8502R.D
Lab Smp Id: AR12542A2 Client Smp ID: AR12542A2
Inj Date : 31-JAN-2013 00:14
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR12542A2,AR12542A2,,ar1254.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AR.B\E2_LL_PCB_R.m
Meth Date : 04-Feb-2013 13:13 tmcdaniel Quant Type: ESTD
Cal Date : 31-JAN-2013 00:14 Cal File: E2L8502R.D
Als bottle: 17 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

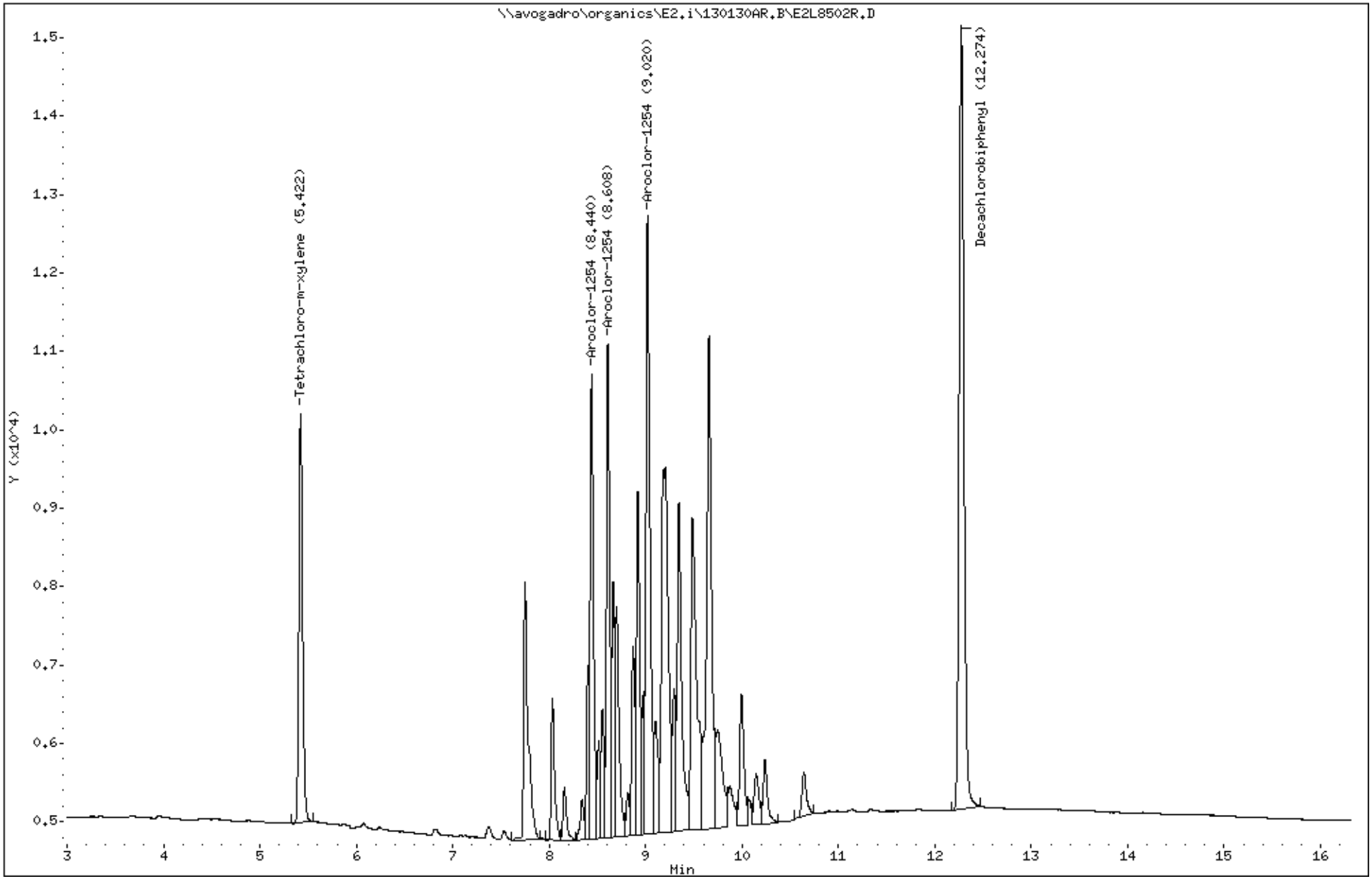
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.422	5.410	0.012	5216	0.01000	0.011			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.274	12.262	0.012	9993	0.02000	0.023			(a)
7 Aroclor-1254						CAS #: 11097-69-1		
8.439	8.437	0.002	5937	0.20000	0.19	80.00- 120.00	100.00	(a)
8.608	8.605	0.003	6292	0.20000	0.19	195.31- 235.31	105.98	
9.019	9.017	0.002	7878	0.20000	0.20	135.01- 175.01	132.69	
Average of Peak Amounts =					0.19333			

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8502R.D
Date : 31-JAN-2013 00:14
Client ID: AR12542A2
Instrument: E2.i
Sample Info: AR12542A2,AR12542A2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8503F.D
Report Date: 06-Feb-2013 10:30

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AF.B\E2L8503F.D
Lab Smp Id: AR12543A2 Client Smp ID: AR12543A2
Inj Date : 31-JAN-2013 00:34
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR12543A2,AR12543A2,,ar1254.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AF.B\E2_LL_PCB_F.m
Meth Date : 06-Feb-2013 09:59 tmcdaniel Quant Type: ESTD
Cal Date : 31-JAN-2013 00:34 Cal File: E2L8503F.D
Als bottle: 18 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

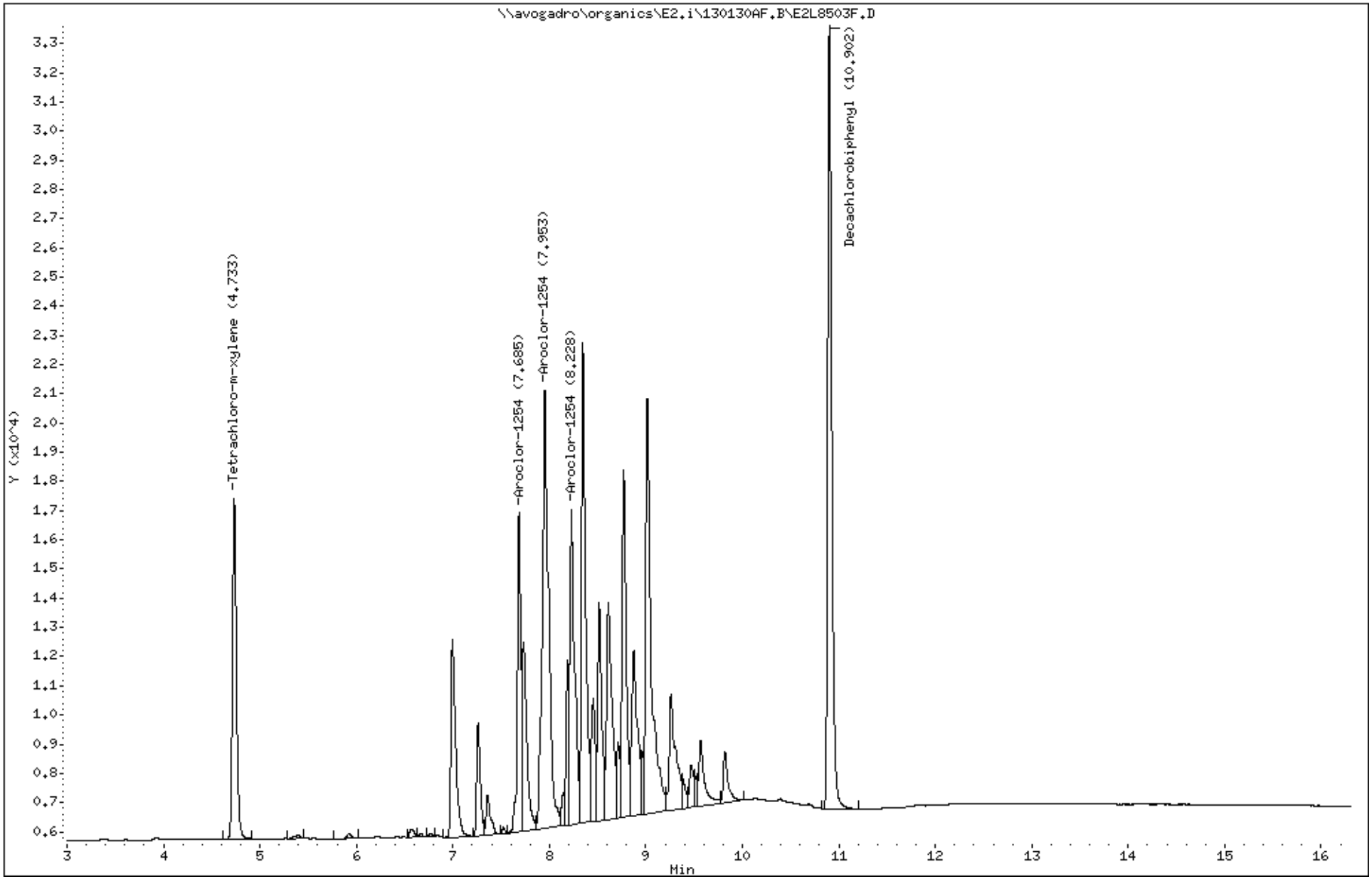
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.732	4.725	0.007	11676	0.02000	0.020			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.902	10.896	0.006	790070	0.04000	0.042			(a)
8 Aroclor-1254						CAS #: 11097-69-1		
7.684	7.683	0.001	10937	0.40000	0.37	80.00- 120.00	100.00	(a)
7.952	7.950	0.002	15025	0.40000	0.36	78.12- 118.12	137.38	
8.228	8.226	0.002	10778	0.40000	0.39	42.84- 82.84	98.55	
Average of Peak Amounts =					0.37333			

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8503F.D
Date : 31-JAN-2013 00:34
Client ID: AR12543A2
Instrument: E2.i
Sample Info: AR12543A2,AR12543A2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8503R.D
Report Date: 06-Feb-2013 10:31

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AR.B\E2L8503R.D
Lab Smp Id: AR12543A2 Client Smp ID: AR12543A2
Inj Date : 31-JAN-2013 00:34
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR12543A2,AR12543A2,,ar1254.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AR.B\E2_LL_PCB_R.m
Meth Date : 04-Feb-2013 13:13 tmcdaniel Quant Type: ESTD
Cal Date : 31-JAN-2013 00:34 Cal File: E2L8503R.D
Als bottle: 18 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

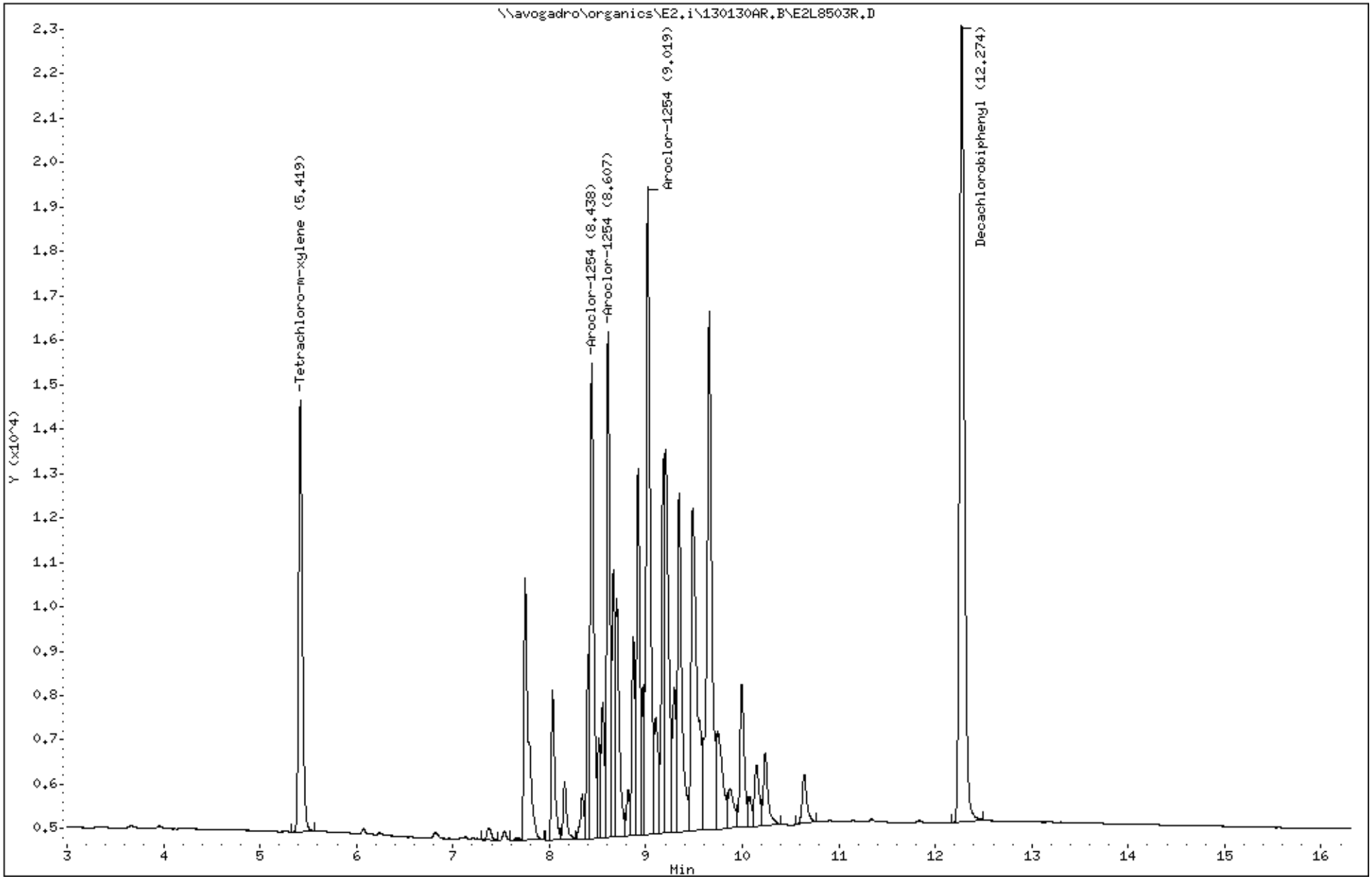
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.418	5.410	0.008	9716	0.02000	0.020			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.273	12.262	0.011	17945	0.04000	0.041			(a)
7 Aroclor-1254						CAS #: 11097-69-1		
8.438	8.437	0.001	10717	0.40000	0.36	80.00- 120.00	100.00	(a)
8.607	8.605	0.002	11381	0.40000	0.36	195.31- 235.31	106.20	
9.019	9.017	0.002	14581	0.40000	0.38	135.01- 175.01	136.05	
Average of Peak Amounts =					0.36667			

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8503R.D
Date : 31-JAN-2013 00:34
Client ID: AR12543A2
Instrument: E2.i
Sample Info: AR12543A2,AR12543A2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8504F.D
Report Date: 06-Feb-2013 10:30

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AF.B\E2L8504F.D
Lab Smp Id: AR12544A2 Client Smp ID: AR12544A2
Inj Date : 31-JAN-2013 00:54
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR12544A2,AR12544A2,,ar1254.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AF.B\E2_LL_PCB_F.m
Meth Date : 06-Feb-2013 09:59 tmcdaniel Quant Type: ESTD
Cal Date : 31-JAN-2013 00:54 Cal File: E2L8504F.D
Als bottle: 19 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

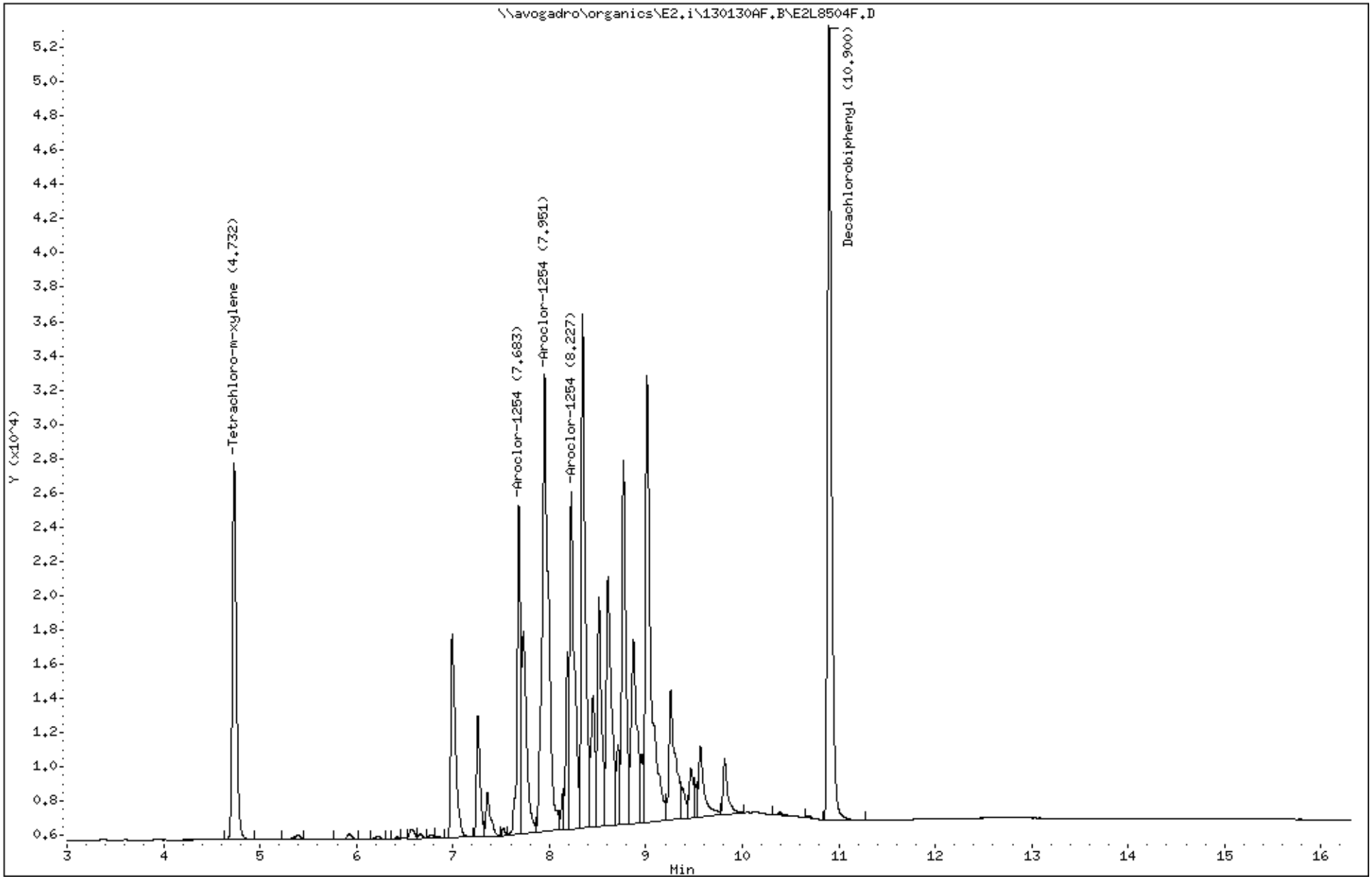
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.732	4.725	0.007	22021	0.04000	0.038			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.900	10.896	0.004	1363140	0.08000	0.071			
8 Aroclor-1254						CAS #: 11097-69-1		
7.683	7.683	0.000	19223	0.80000	0.67	80.00- 120.00	100.00(a)	
7.951	7.950	0.001	26710	0.80000	0.68	78.12- 118.12	138.95	
8.226	8.226	0.000	19679	0.80000	0.73	42.84- 82.84	102.37	
Average of Peak Amounts =					0.69333			

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8504F.D
Date : 31-JAN-2013 00:54
Client ID: AR12544A2
Instrument: E2.i
Sample Info: AR12544A2,AR12544A2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8504R.D
Report Date: 06-Feb-2013 10:31

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AR.B\E2L8504R.D
Lab Smp Id: AR12544A2 Client Smp ID: AR12544A2
Inj Date : 31-JAN-2013 00:54
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR12544A2,AR12544A2,,ar1254.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AR.B\E2_LL_PCB_R.m
Meth Date : 04-Feb-2013 13:13 tmcdaniel Quant Type: ESTD
Cal Date : 31-JAN-2013 00:54 Cal File: E2L8504R.D
Als bottle: 19 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

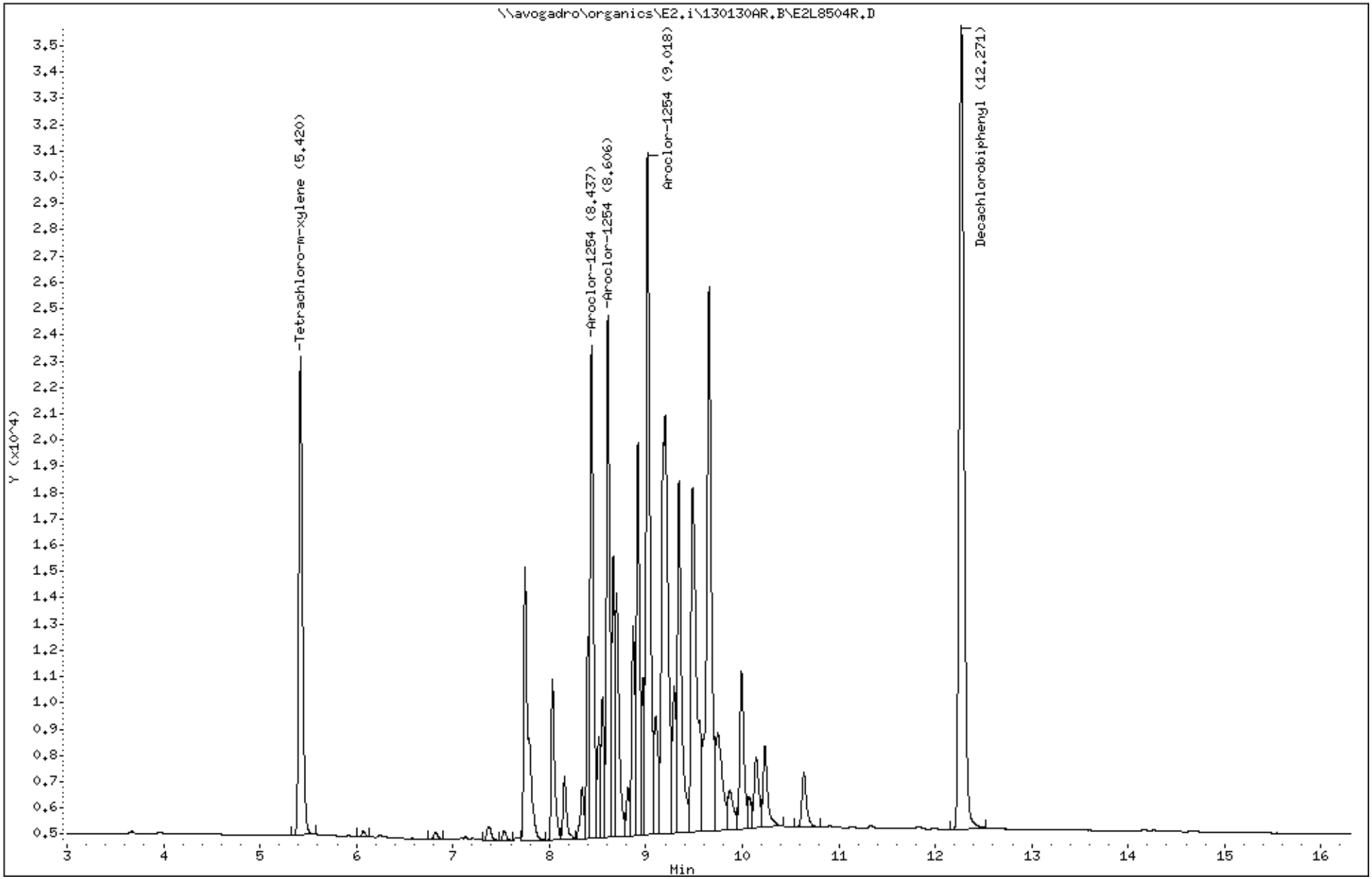
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.419	5.410	0.009	18207	0.04000	0.038			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.270	12.262	0.008	30590	0.08000	0.070			
7 Aroclor-1254						CAS #: 11097-69-1		
8.436	8.437	-0.001	18730	0.80000	0.66	80.00- 120.00	100.00	(a)
8.606	8.605	0.001	19854	0.80000	0.66	195.31- 235.31	106.00	
9.017	9.017	0.000	25987	0.80000	0.69	135.01- 175.01	138.75	
Average of Peak Amounts =					0.67000			

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8504R.D
Date : 31-JAN-2013 00:54
Client ID: AR12544A2
Instrument: E2.i
Sample Info: AR12544A2,AR12544A2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8505F.D
Report Date: 06-Feb-2013 10:30

Spectrum Analytical, Inc. RI Division

Quantitation Report

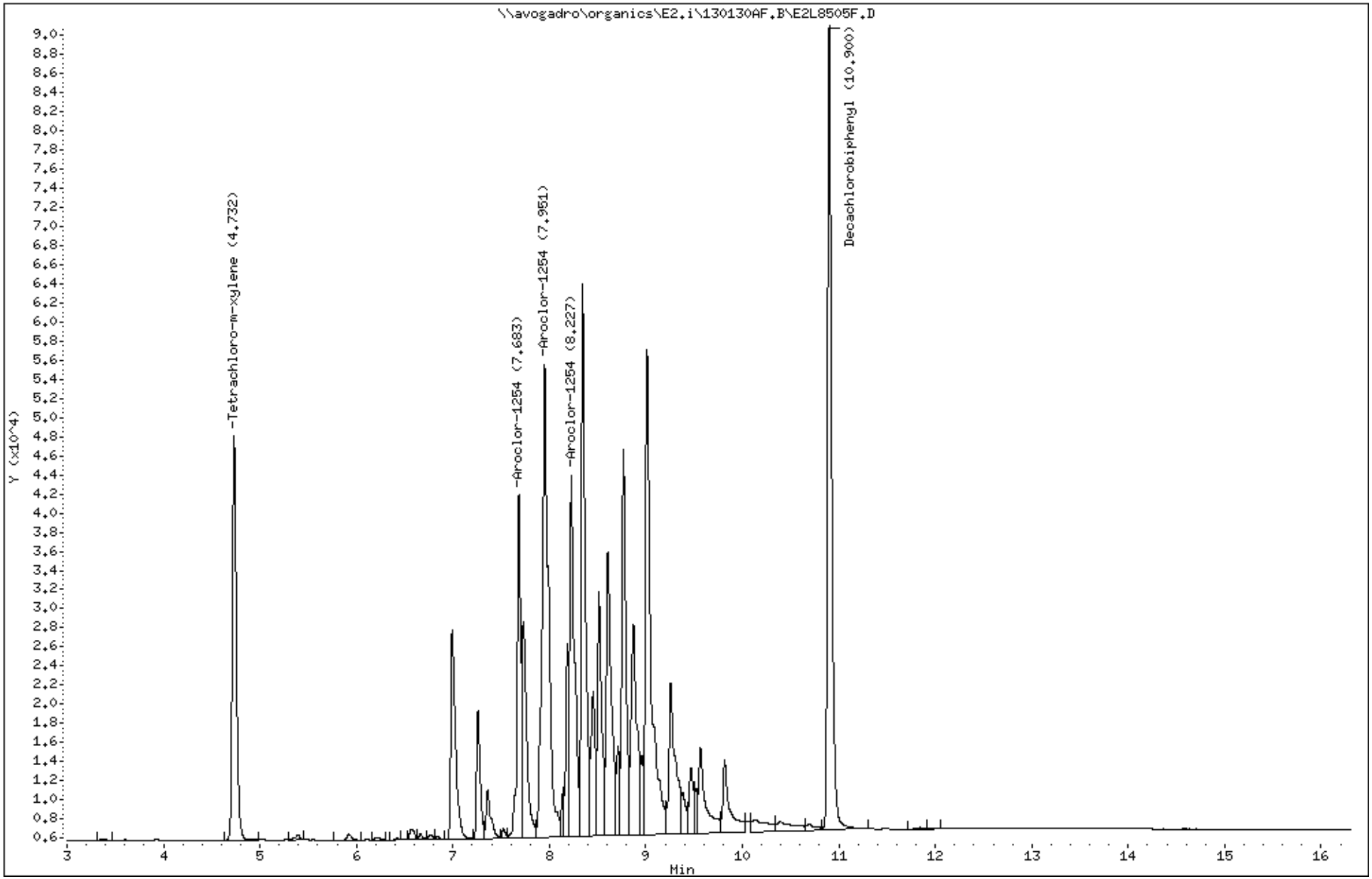
Data file : \\avogadro\organics\E2.i\130130AF.B\E2L8505F.D
Lab Smp Id: AR12545A2 Client Smp ID: AR12545A2
Inj Date : 31-JAN-2013 01:14
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR12545A2,AR12545A2,,ar1254.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AF.B\E2_LL_PCB_F.m
Meth Date : 06-Feb-2013 09:59 tmcdaniel Quant Type: ESTD
Cal Date : 31-JAN-2013 01:14 Cal File: E2L8505F.D
Als bottle: 20 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.731	4.725	0.006	42366	0.08000	0.074			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.900	10.896	0.004	2510931	0.16000	0.13			
8 Aroclor-1254						CAS #: 11097-69-1		
7.683	7.683	0.000	35821	1.60000	1.3	80.00- 120.00		100.00
7.950	7.950	0.000	49507	1.60000	1.3	78.12- 118.12		138.21
8.226	8.226	0.000	37767	1.60000	1.4	42.84- 82.84		105.43
Average of Peak Amounts =				1.33333				

Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8505F.D
Date : 31-JAN-2013 01:14
Client ID: AR12545A2
Instrument: E2.i
Sample Info: AR12545A2,AR12545A2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8505R.D
Report Date: 06-Feb-2013 10:31

Spectrum Analytical, Inc. RI Division

Quantitation Report

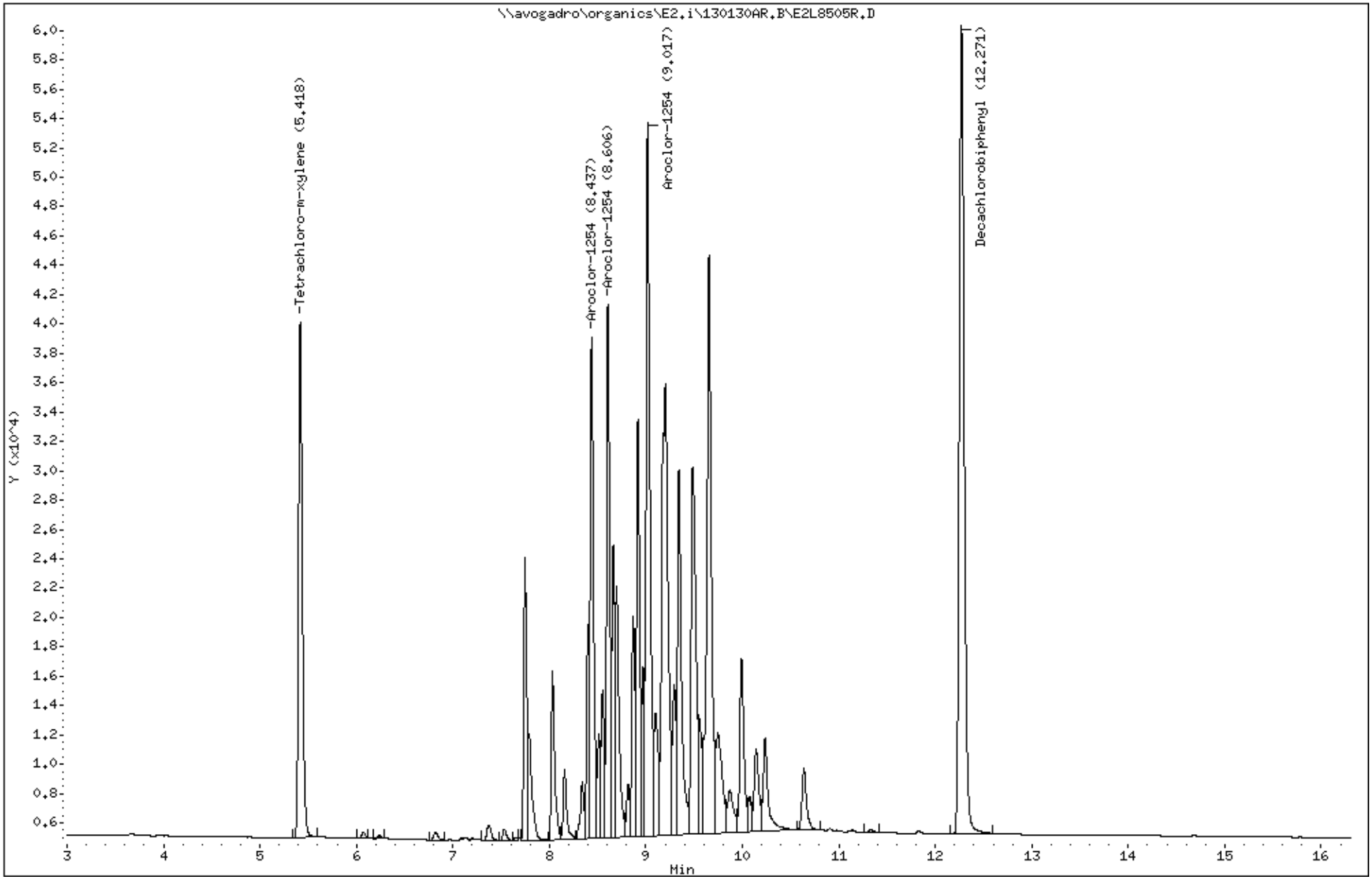
Data file : \\avogadro\organics\E2.i\130130AR.B\E2L8505R.D
Lab Smp Id: AR12545A2 Client Smp ID: AR12545A2
Inj Date : 31-JAN-2013 01:14
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR12545A2,AR12545A2,,ar1254.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AR.B\E2_LL_PCB_R.m
Meth Date : 04-Feb-2013 13:13 tmcdaniel Quant Type: ESTD
Cal Date : 31-JAN-2013 01:14 Cal File: E2L8505R.D
Als bottle: 20 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.417	5.410	0.007	35103	0.08000	0.074			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.271	12.262	0.009	55098	0.16000	0.13			
7 Aroclor-1254						CAS #: 11097-69-1		
8.437	8.437	0.000	34214	1.60000	1.2	80.00- 120.00		100.00
8.605	8.605	0.000	36410	1.60000	1.3	195.31- 235.31		106.42
9.017	9.017	0.000	48665	1.60000	1.3	135.01- 175.01		142.24
Average of Peak Amounts =					1.26667			

Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8505R.D
Date : 31-JAN-2013 01:14
Client ID: AR12545A2
Instrument: E2.i
Sample Info: AR12545A2,AR12545A2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8506F.D
Report Date: 06-Feb-2013 10:30

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AF.B\E2L8506F.D
Lab Smp Id: AR12623A2 Client Smp ID: AR12623A2
Inj Date : 31-JAN-2013 01:33
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR12623A2,AR12623A2,,ar1262.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AF.B\E2_LL_PCB_F.m
Meth Date : 06-Feb-2013 09:59 tmcdaniel Quant Type: ESTD
Cal Date : 31-JAN-2013 01:33 Cal File: E2L8506F.D
Als bottle: 21 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1262.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

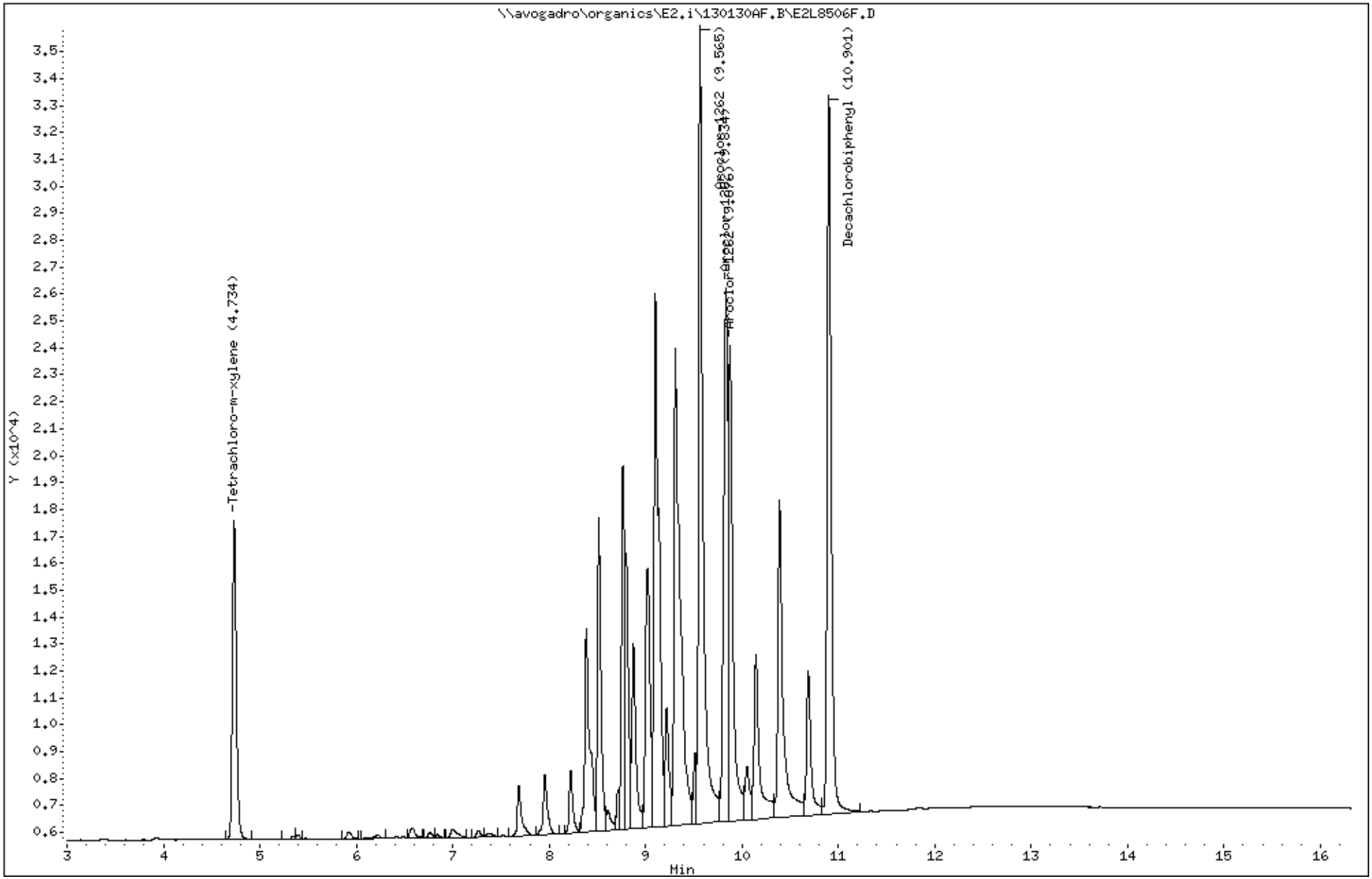
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.733	4.725	0.008	11861	0.02000	0.021			(a)
2 Aroclor-1262					CAS #: 37324-23-5			
9.564	9.564	0.000	29665	0.40000	0.40	80.00- 120.00	100.00	
9.834	9.834	0.000	19862	0.40000	0.40	37.34- 77.34	66.95	
9.875	9.875	0.000	17713	0.40000	0.40	19.69- 59.69	59.71	
Average of Peak Amounts =				0.40000				
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.901	10.896	0.005	797777	0.04000	0.042			(a)

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8506F.D
Date : 31-JAN-2013 01:33
Client ID: AR12623A2
Instrument: E2.i
Sample Info: AR12623A2,AR12623A2,,ar1262.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8506R.D
Report Date: 06-Feb-2013 10:31

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AR.B\E2L8506R.D
Lab Smp Id: AR12623A2 Client Smp ID: AR12623A2
Inj Date : 31-JAN-2013 01:33
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR12623A2,AR12623A2,,ar1262.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AR.B\E2_LL_PCB_R.m
Meth Date : 04-Feb-2013 13:13 tmcdaniel Quant Type: ESTD
Cal Date : 31-JAN-2013 01:33 Cal File: E2L8506R.D
Als bottle: 21 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1262.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

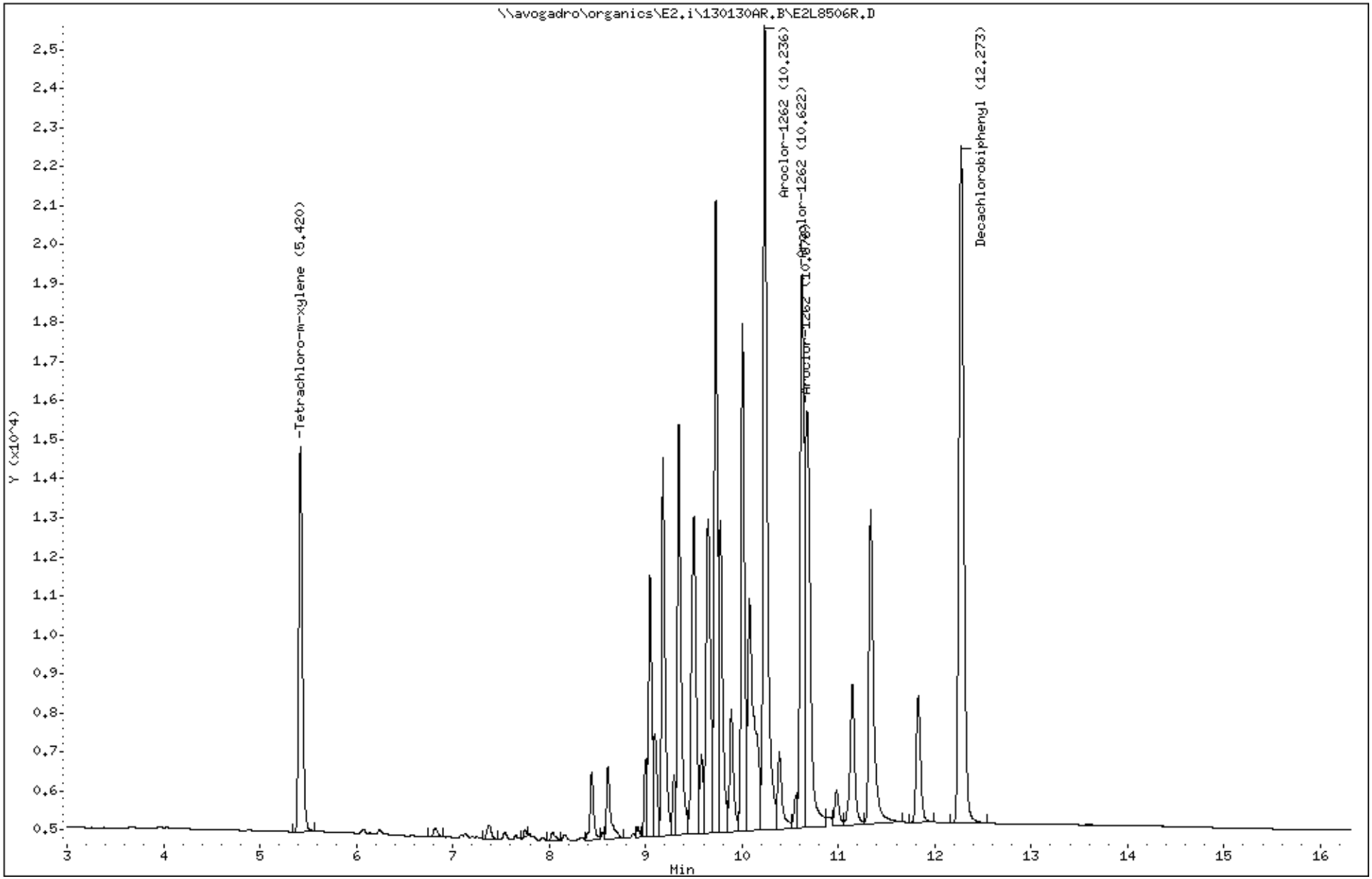
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT	AMOUNTS ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
5.420	5.410	0.010	9868	0.02000	0.021		(a)
10 Aroclor-1262					CAS #: 37324-23-5		
10.235	10.235	0.000	20614	0.40000	0.40	80.00- 120.00	100.00(a)
10.622	10.622	0.000	14182	0.40000	0.40	48.80- 88.80	68.80
10.675	10.675	0.000	10676	0.40000	0.40	31.79- 71.79	51.79
Average of Peak Amounts =				0.40000			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
12.273	12.262	0.011	17378	0.04000	0.040		(a)

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8506R.D
Date : 31-JAN-2013 01:33
Client ID: AR12623A2
Instrument: E2.i
Sample Info: AR12623A2,AR12623A2,,ar1262.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8507F.D
Report Date: 06-Feb-2013 10:30

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AF.B\E2L8507F.D
Lab Smp Id: AR12683A2 Client Smp ID: AR12683A2
Inj Date : 31-JAN-2013 01:53
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR12683A2,AR12683A2,,ar1268.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AF.B\E2_LL_PCB_F.m
Meth Date : 06-Feb-2013 09:59 tmcdaniel Quant Type: ESTD
Cal Date : 31-JAN-2013 01:53 Cal File: E2L8507F.D
Als bottle: 22 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1268.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

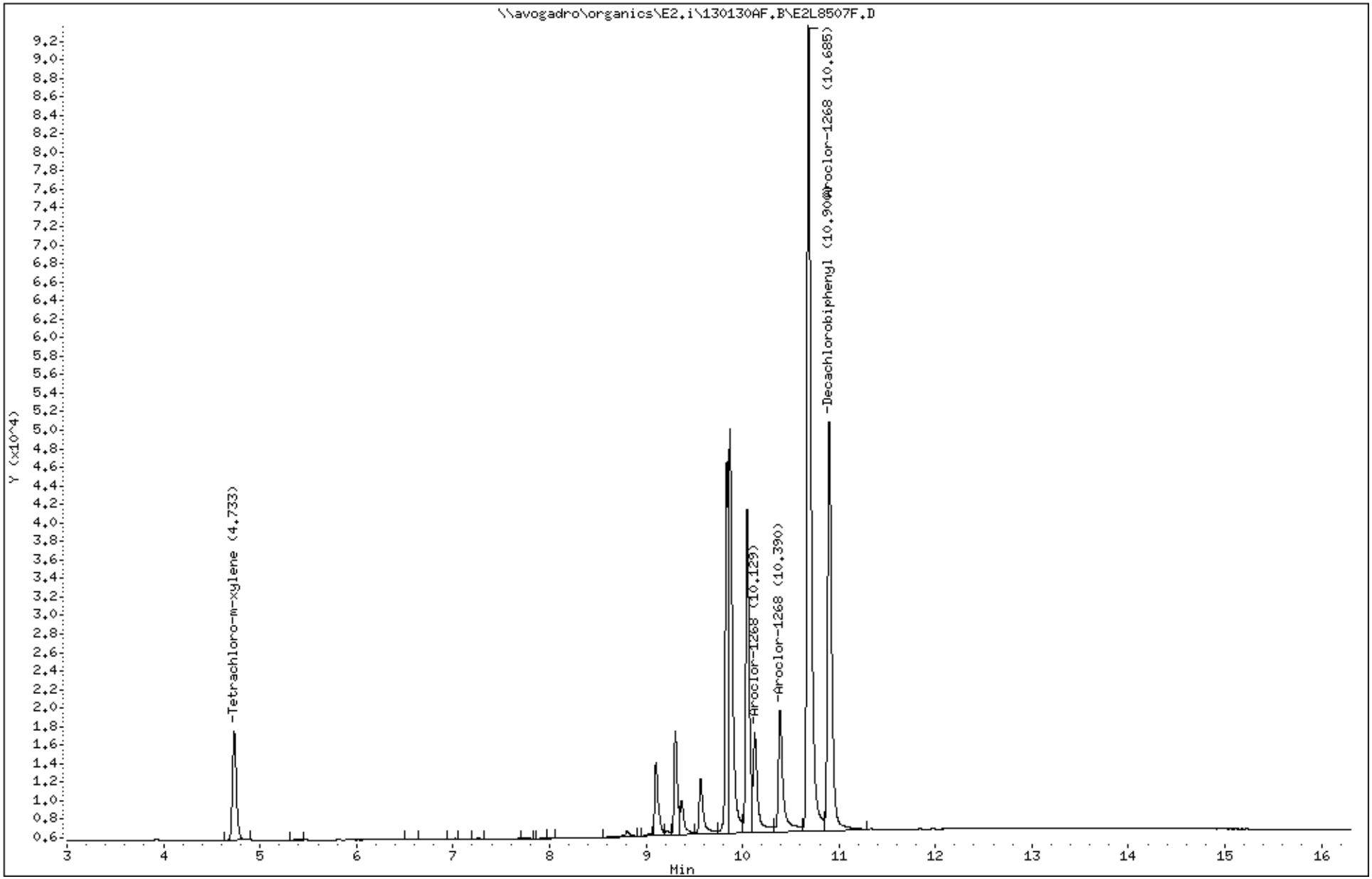
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.732	4.725	0.007	11713	0.02000	0.020			(a)
10 Aroclor-1268						CAS #: 11100-14-4		
10.128	10.128	0.000	10761	0.40000	0.40	80.00- 120.00	100.00	(a)
10.389	10.389	0.000	13157	0.40000	0.40	182.56- 222.56	122.27	
10.685	10.685	0.000	86992	0.40000	0.40	47.60- 87.60	808.40	
Average of Peak Amounts =				0.40000				
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.899	10.896	0.003	1349380	0.04000	0.061			

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8507F.D
Date : 31-JAN-2013 01:53
Client ID: AR12683A2 Instrument: E2.i
Sample Info: AR12683A2,AR12683A2,,ar1268.sub,,
Volume Injected (uL): 1.0 Operator: GMA/T SRC: GMA/T
Column phase: CLPPest Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8507R.D
Report Date: 06-Feb-2013 10:31

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AR.B\E2L8507R.D
Lab Smp Id: AR12683A2 Client Smp ID: AR12683A2
Inj Date : 31-JAN-2013 01:53
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR12683A2,AR12683A2,,ar1268.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AR.B\E2_LL_PCB_R.m
Meth Date : 04-Feb-2013 13:13 tmcdaniel Quant Type: ESTD
Cal Date : 31-JAN-2013 01:53 Cal File: E2L8507R.D
Als bottle: 22 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1268.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

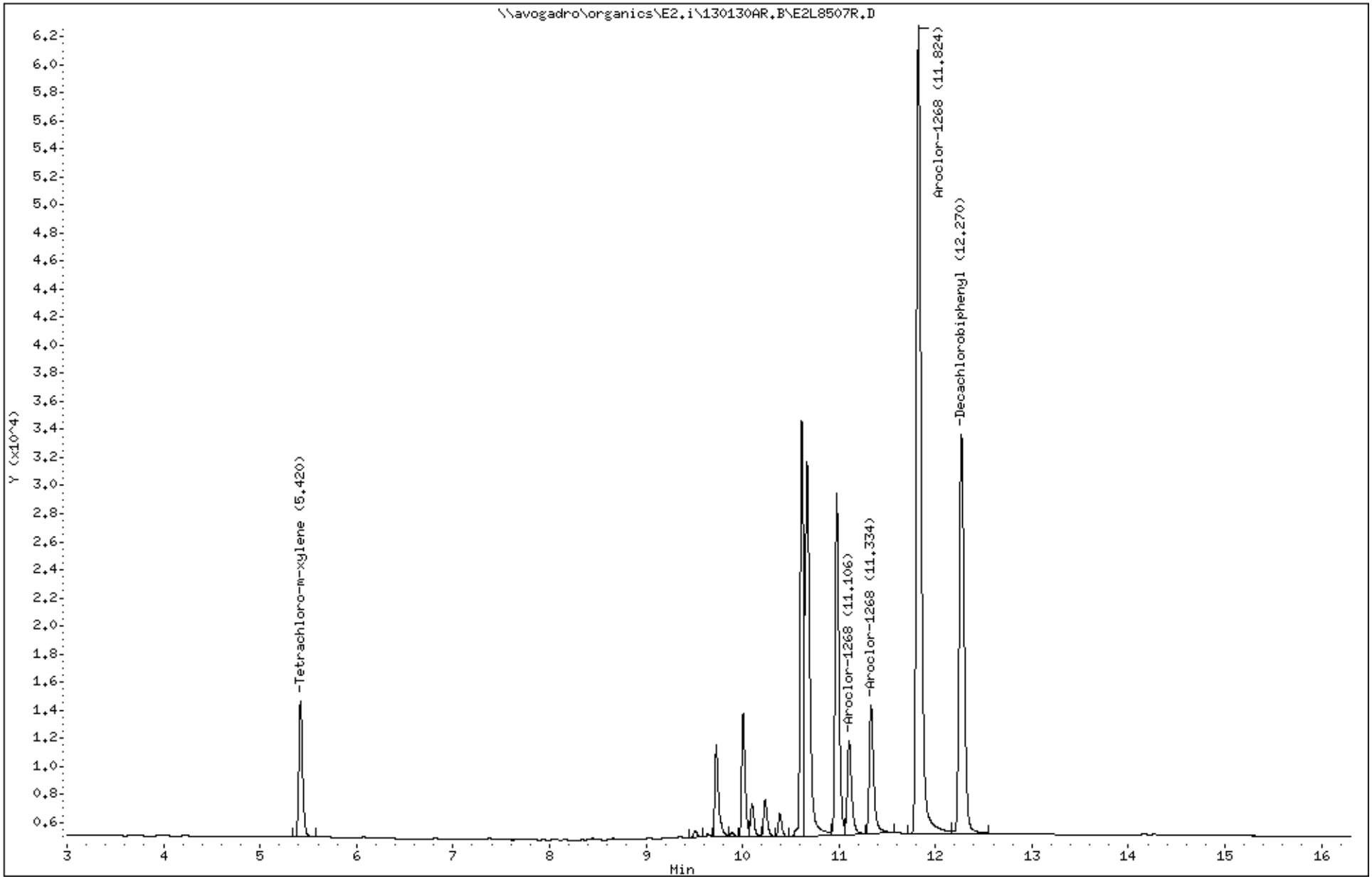
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.419	5.410	0.009	9704	0.02000	0.020			(a)
9 Aroclor-1268						CAS #: 11100-14-4		
11.105	11.105	0.000	6693	0.40000	0.40	80.00- 120.00	100.00	(a)
11.333	11.333	0.000	9169	0.40000	0.40	206.99- 246.99	136.99	
11.824	11.824	0.000	57629	0.40000	0.40	43.40- 83.40	861.03	
Average of Peak Amounts =					0.40000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.270	12.262	0.008	28400	0.04000	0.058			

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8507R.D
Date : 31-JAN-2013 01:53
Client ID: AR12683A2
Instrument: E2.i
Sample Info: AR12683A2,AR12683A2,,ar1268.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8508F.D
Report Date: 06-Feb-2013 10:30

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AF.B\E2L8508F.D
Lab Smp Id: AR16601A2 Client Smp ID: AR16601A2
Inj Date : 31-JAN-2013 02:13
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR16601A2,AR16601A2,,ar1660.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AF.B\E2_LL_PCB_F.m
Meth Date : 06-Feb-2013 09:59 tmcdaniel Quant Type: ESTD
Cal Date : 31-JAN-2013 02:13 Cal File: E2L8508F.D
Als bottle: 23 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

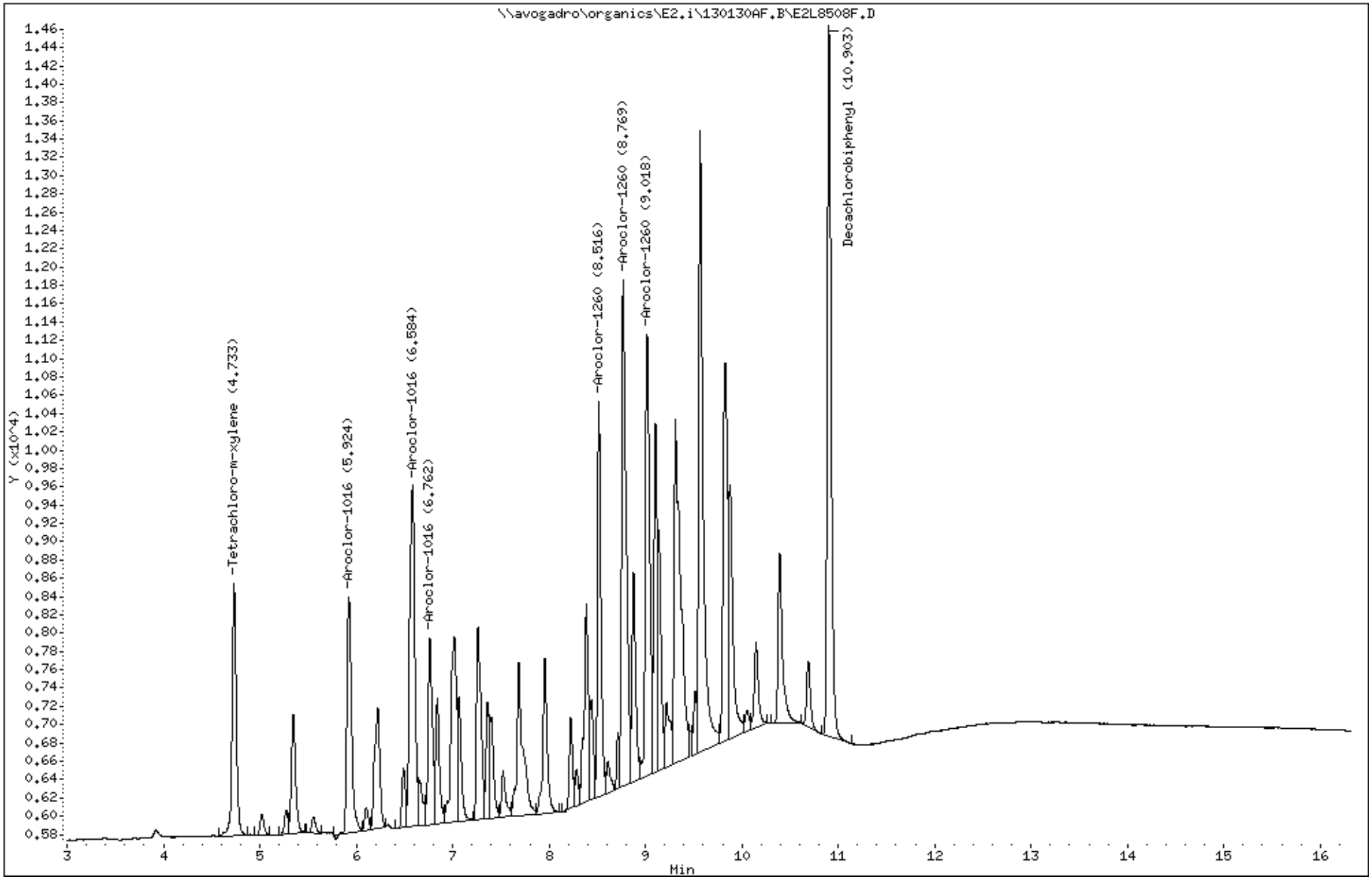
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.733	4.725	0.008	2756	0.00500	0.0048			(a)
5 Aroclor-1016						CAS #: 12674-11-2		
5.923	5.914	0.009	2572	0.10000	0.10	80.00- 120.00	100.00	(a)
6.584	6.578	0.006	3730	0.10000	0.10	133.37- 173.37	145.02	
6.762	6.754	0.008	2045	0.10000	0.10	66.42- 106.42	79.51	
Average of Peak Amounts =				0.10000				
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.903	10.896	0.007	219631	0.01000	0.0100			(a)
9 Aroclor-1260						CAS #: 11096-82-5		
8.516	8.509	0.007	4321	0.10000	0.10	80.00- 120.00	100.00	(a)
8.768	8.760	0.008	5533	0.10000	0.10	110.24- 150.24	128.05	
9.017	9.007	0.010	4819	0.10000	0.10	96.04- 136.04	111.53	
Average of Peak Amounts =				0.10000				

Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8508F.D
Report Date: 06-Feb-2013 10:30

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8508F.D
Date : 31-JAN-2013 02:13
Client ID: AR16601A2
Instrument: E2.i
Sample Info: AR16601A2,AR16601A2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8508R.D
Report Date: 06-Feb-2013 10:31

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AR.B\E2L8508R.D
Lab Smp Id: AR16601A2 Client Smp ID: AR16601A2
Inj Date : 31-JAN-2013 02:13
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR16601A2,AR16601A2,,ar1660.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AR.B\E2_LL_PCB_R.m
Meth Date : 04-Feb-2013 13:13 tmcdaniel Quant Type: ESTD
Cal Date : 31-JAN-2013 02:13 Cal File: E2L8508R.D
Als bottle: 23 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

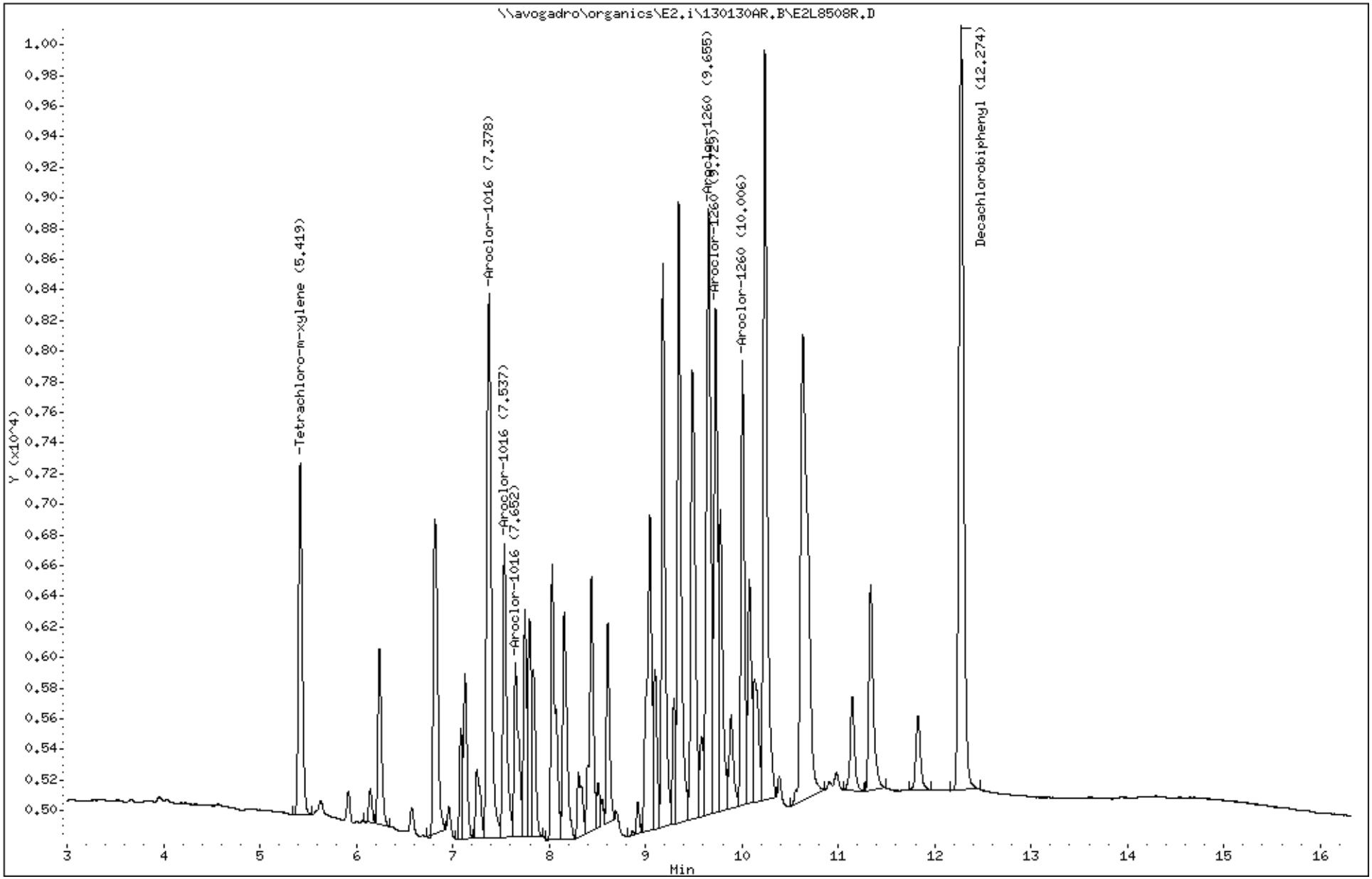
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.419	5.410	0.009	2292	0.00500	0.0048			(a)
6 Aroclor-1016						CAS #: 12674-11-2		
7.378	7.371	0.007	3558	0.10000	0.10	80.00- 120.00	100.00	(a)
7.536	7.529	0.007	1915	0.10000	0.10	34.44- 74.44	53.82	
7.651	7.644	0.007	1137	0.10000	0.10	14.02- 54.02	31.96	
Average of Peak Amounts =					0.10000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.274	12.262	0.012	4995	0.01000	0.010			(a)
8 Aroclor-1260						CAS #: 11096-82-5		
9.654	9.646	0.008	3952	0.10000	0.10	80.00- 120.00	100.00	(a)
9.729	9.721	0.008	3293	0.10000	0.10	68.39- 108.39	83.32	
10.006	9.997	0.009	2901	0.10000	0.10	62.74- 102.74	73.41	
Average of Peak Amounts =					0.10000			

Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8508R.D
Report Date: 06-Feb-2013 10:31

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8508R.D
Date : 31-JAN-2013 02:13
Client ID: AR16601A2
Instrument: E2.i
Sample Info: AR16601A2,AR16601A2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8509F.D
Report Date: 06-Feb-2013 10:30

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AF.B\E2L8509F.D
Lab Smp Id: AR16606A2 Client Smp ID: AR16606A2
Inj Date : 31-JAN-2013 02:33
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR16606A2,AR16606A2,,ar1660.sub,,
Misc Info : 1,6,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AF.B\E2_LL_PCB_F.m
Meth Date : 06-Feb-2013 09:59 tmcdaniel Quant Type: ESTD
Cal Date : 31-JAN-2013 02:33 Cal File: E2L8509F.D
Als bottle: 24 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

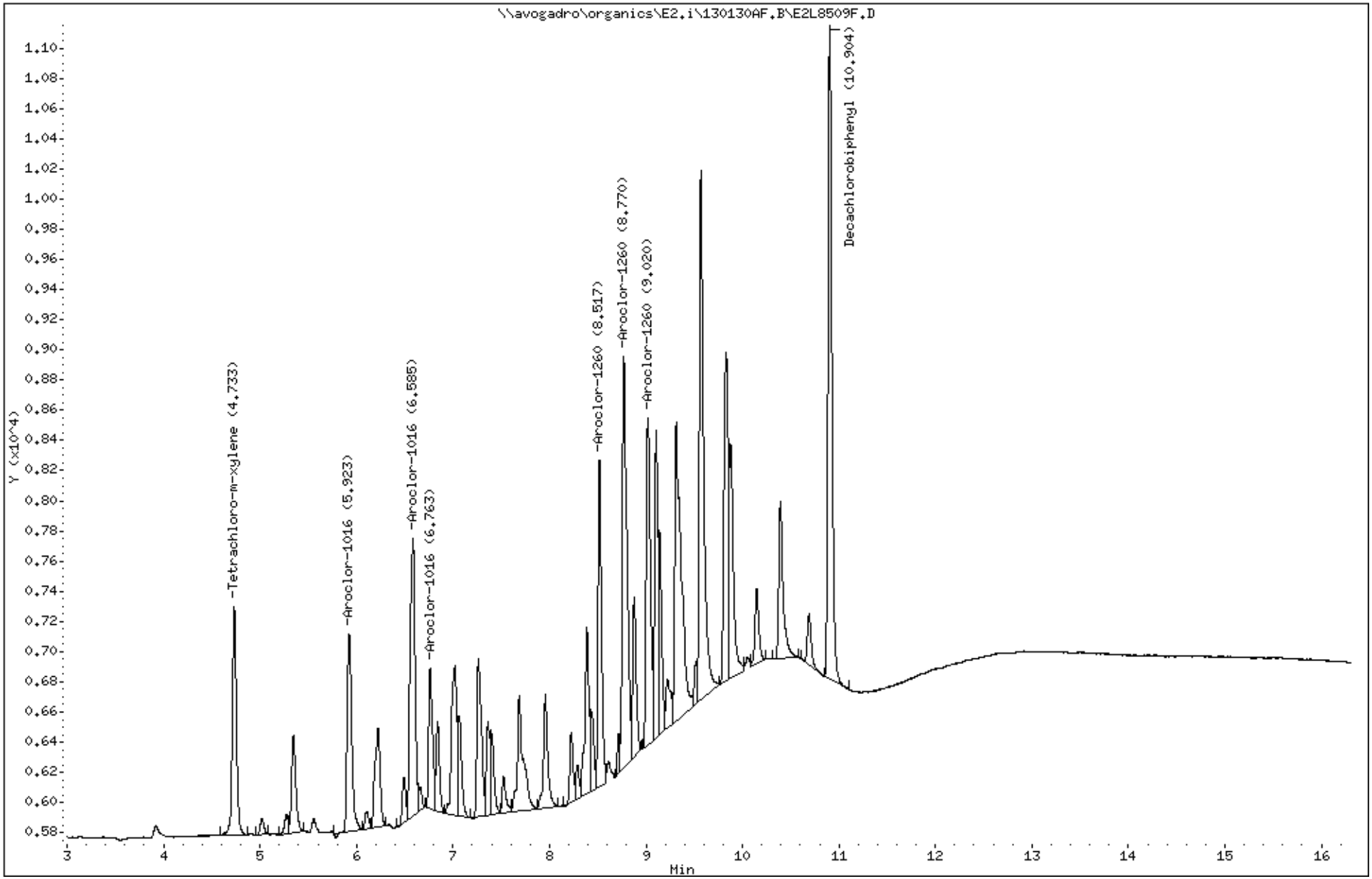
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.733	4.725	0.008	1515	0.00000	0.0027			(a)
5 Aroclor-1016						CAS #: 12674-11-2		
5.923	5.914	0.009	1314	0.05000	0.050	80.00- 120.00	100.00	(a)
6.585	6.578	0.007	1834	0.05000	0.050	133.37- 173.37	139.57	
6.762	6.754	0.008	929	0.05000	0.048	66.42- 106.42	70.70	
Average of Peak Amounts =					0.04933			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.904	10.896	0.008	120927	0.00000	0.0055			(a)
9 Aroclor-1260						CAS #: 11096-82-5		
8.517	8.509	0.008	2166	0.05000	0.050	80.00- 120.00	100.00	(a)
8.770	8.760	0.010	2727	0.05000	0.050	110.24- 150.24	125.90	
9.019	9.007	0.012	2164	0.05000	0.047	96.04- 136.04	99.91	
Average of Peak Amounts =					0.04900			

Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8509F.D
Report Date: 06-Feb-2013 10:30

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8509F.D
Date : 31-JAN-2013 02:33
Client ID: AR16606A2
Instrument: E2.i
Sample Info: AR16606A2,AR16606A2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8509R.D
Report Date: 06-Feb-2013 10:31

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AR.B\E2L8509R.D
Lab Smp Id: AR16606A2 Client Smp ID: AR16606A2
Inj Date : 31-JAN-2013 02:33
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR16606A2,AR16606A2,,ar1660.sub,,
Misc Info : 1,6,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AR.B\E2_LL_PCB_R.m
Meth Date : 04-Feb-2013 13:13 tmcdaniel Quant Type: ESTD
Cal Date : 31-JAN-2013 02:33 Cal File: E2L8509R.D
Als bottle: 24 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

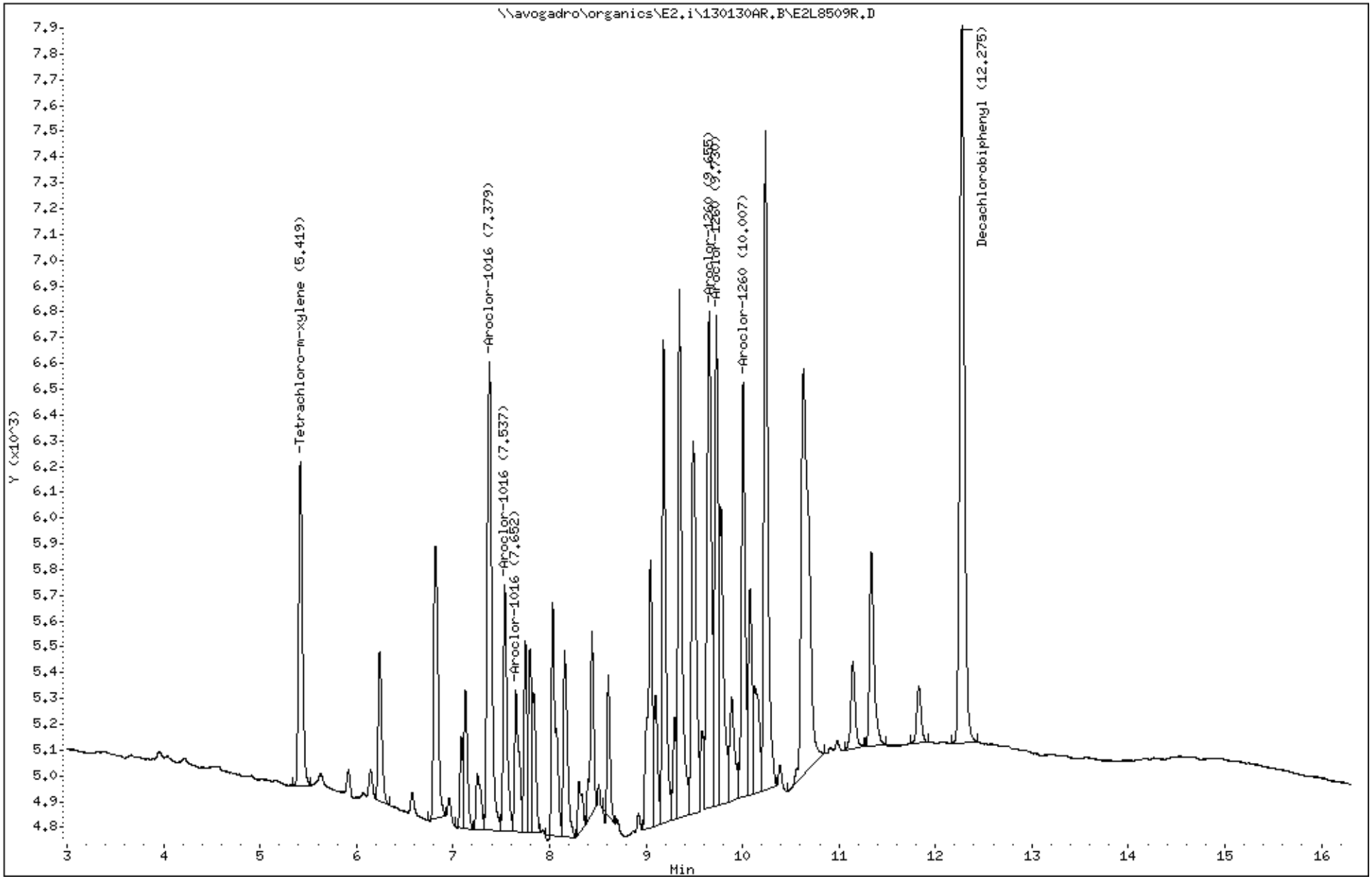
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.418	5.410	0.008	1255	0.00000	0.0026			(a)
6 Aroclor-1016						CAS #: 12674-11-2		
7.378	7.371	0.007	1818	0.05000	0.050	80.00- 120.00	100.00	(a)
7.537	7.529	0.008	953	0.05000	0.050	34.44- 74.44	52.42	
7.652	7.644	0.008	545	0.05000	0.049	14.02- 54.02	29.98	
Average of Peak Amounts =					0.04967			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.274	12.262	0.012	2782	0.00000	0.0057			(a)
8 Aroclor-1260						CAS #: 11096-82-5		
9.655	9.646	0.009	1925	0.05000	0.049	80.00- 120.00	100.00	(a)
9.730	9.721	0.009	1898	0.05000	0.054	68.39- 108.39	98.60	
10.007	9.997	0.010	1607	0.05000	0.052	62.74- 102.74	83.48	
Average of Peak Amounts =					0.05167			

Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8509R.D
Report Date: 06-Feb-2013 10:31

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8509R.D
Date : 31-JAN-2013 02:33
Client ID: AR16606A2
Instrument: E2.i
Sample Info: AR16606A2,AR16606A2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8510F.D
Report Date: 06-Feb-2013 10:30

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AF.B\E2L8510F.D
Lab Smp Id: AR16602A2 Client Smp ID: AR16602A2
Inj Date : 31-JAN-2013 02:52
Operator : GMA/T SRC: GMA/T Inst ID: E2.i
Smp Info : AR16602A2,AR16602A2,,ar1660.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AF.B\E2_LL_PCB_F.m
Meth Date : 06-Feb-2013 09:59 tmcdaniel Quant Type: ESTD
Cal Date : 31-JAN-2013 02:52 Cal File: E2L8510F.D
Als bottle: 25 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

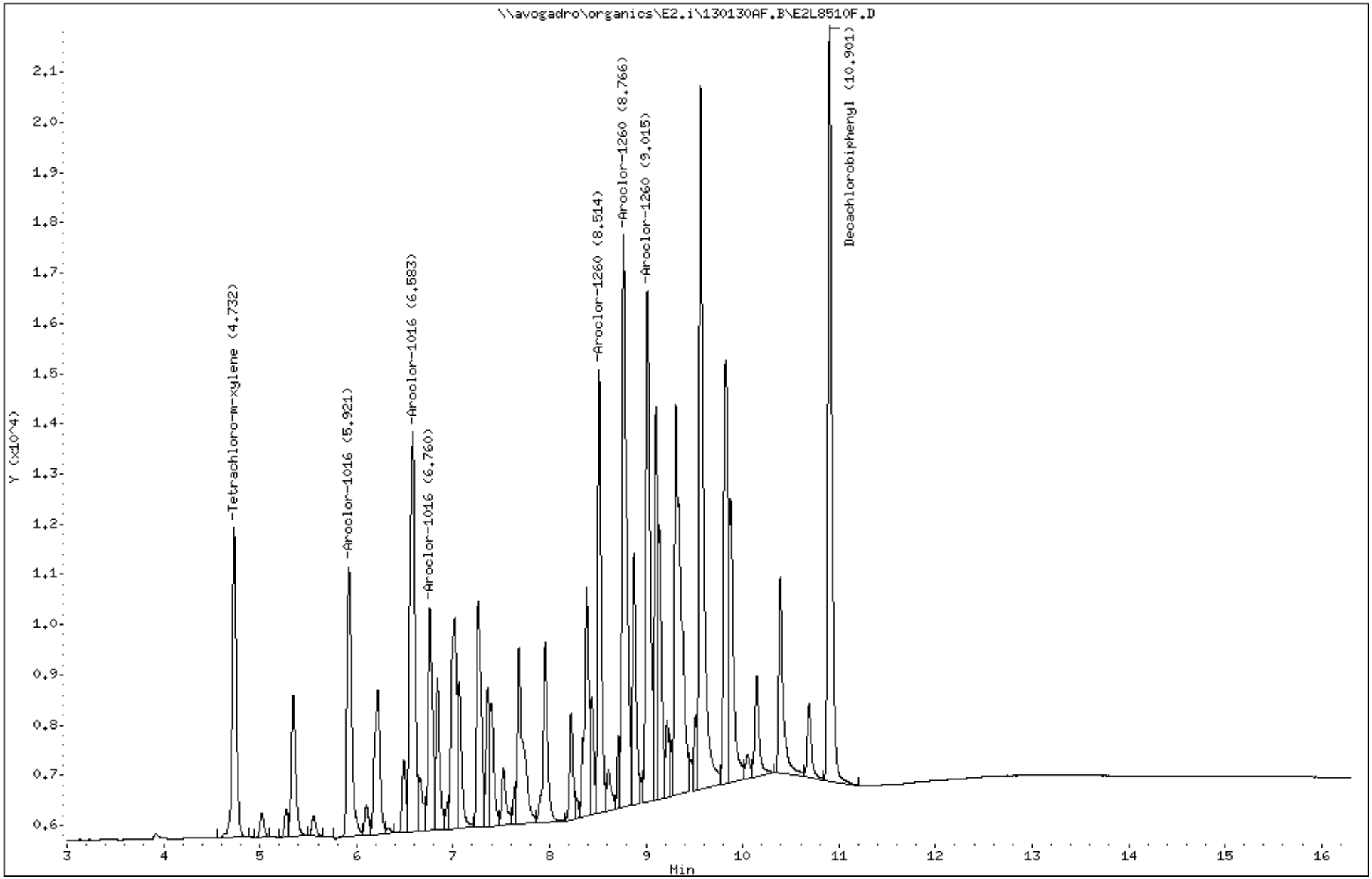
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.731	4.725	0.006	6174	0.01000	0.011			(a)
5 Aroclor-1016						CAS #: 12674-11-2		
5.921	5.914	0.007	5373	0.20000	0.20	80.00- 120.00	100.00	(a)
6.583	6.578	0.005	7971	0.20000	0.21	133.37- 173.37	148.35	
6.760	6.754	0.006	4433	0.20000	0.22	66.42- 106.42	82.51	
Average of Peak Amounts =					0.21000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.901	10.896	0.005	434884	0.02000	0.020			(a)
9 Aroclor-1260						CAS #: 11096-82-5		
8.514	8.509	0.005	8828	0.20000	0.20	80.00- 120.00	100.00	(a)
8.766	8.760	0.006	11399	0.20000	0.20	110.24- 150.24	129.12	
9.014	9.007	0.007	10166	0.20000	0.21	96.04- 136.04	115.16	
Average of Peak Amounts =					0.20333			

Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8510F.D
Report Date: 06-Feb-2013 10:30

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8510F.D
Date : 31-JAN-2013 02:52
Client ID: AR16602A2
Instrument: E2.i
Sample Info: AR16602A2,AR16602A2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8510R.D
Report Date: 06-Feb-2013 10:31

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AR.B\E2L8510R.D
Lab Smp Id: AR16602A2 Client Smp ID: AR16602A2
Inj Date : 31-JAN-2013 02:52
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR16602A2,AR16602A2,,ar1660.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AR.B\E2_LL_PCB_R.m
Meth Date : 04-Feb-2013 13:13 tmcdaniel Quant Type: ESTD
Cal Date : 31-JAN-2013 02:52 Cal File: E2L8510R.D
Als bottle: 25 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

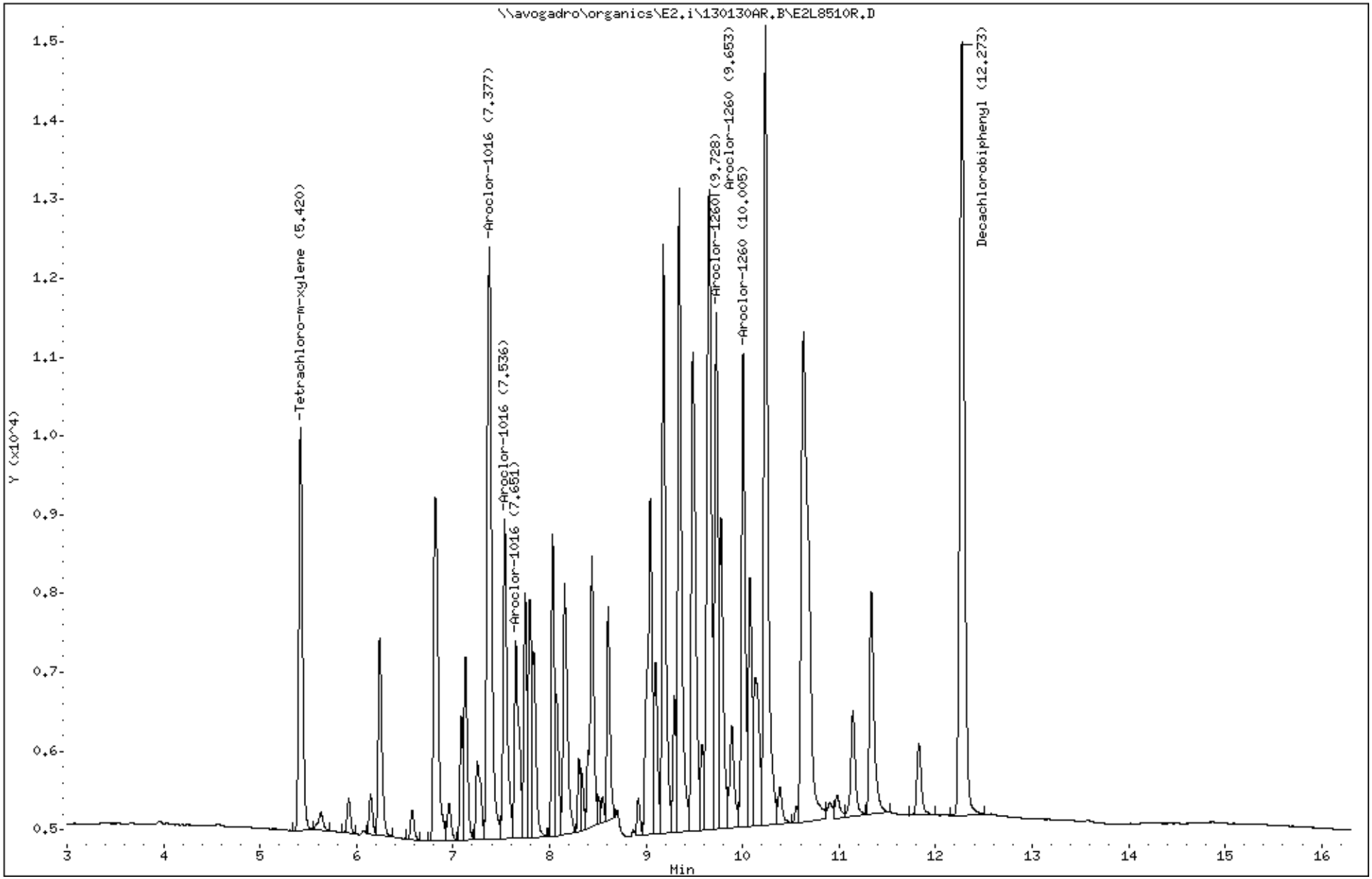
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.419	5.410	0.009	5109	0.01000	0.011			(a)
6 Aroclor-1016						CAS #: 12674-11-2		
7.377	7.371	0.006	7525	0.20000	0.21	80.00- 120.00	100.00	(a)
7.536	7.529	0.007	4066	0.20000	0.21	34.44- 74.44	54.03	
7.650	7.644	0.006	2510	0.20000	0.22	14.02- 54.02	33.36	
Average of Peak Amounts =					0.21333			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.272	12.262	0.010	9828	0.02000	0.020			(a)
8 Aroclor-1260						CAS #: 11096-82-5		
9.653	9.646	0.007	8123	0.20000	0.20	80.00- 120.00	100.00	(a)
9.727	9.721	0.006	6563	0.20000	0.19	68.39- 108.39	80.80	
10.005	9.997	0.008	6015	0.20000	0.20	62.74- 102.74	74.05	
Average of Peak Amounts =					0.19667			

Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8510R.D
Report Date: 06-Feb-2013 10:31

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8510R.D
Date : 31-JAN-2013 02:52
Client ID: AR16602A2
Instrument: E2.i
Sample Info: AR16602A2,AR16602A2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8511F.D
Report Date: 06-Feb-2013 10:30

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AF.B\E2L8511F.D
Lab Smp Id: AR16603A2 Client Smp ID: AR16603A2
Inj Date : 31-JAN-2013 08:35
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR16603A2,AR16603A2,,ar1660.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AF.B\E2_LL_PCB_F.m
Meth Date : 06-Feb-2013 09:59 tmcdaniel Quant Type: ESTD
Cal Date : 31-JAN-2013 08:35 Cal File: E2L8511F.D
Als bottle: 26 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

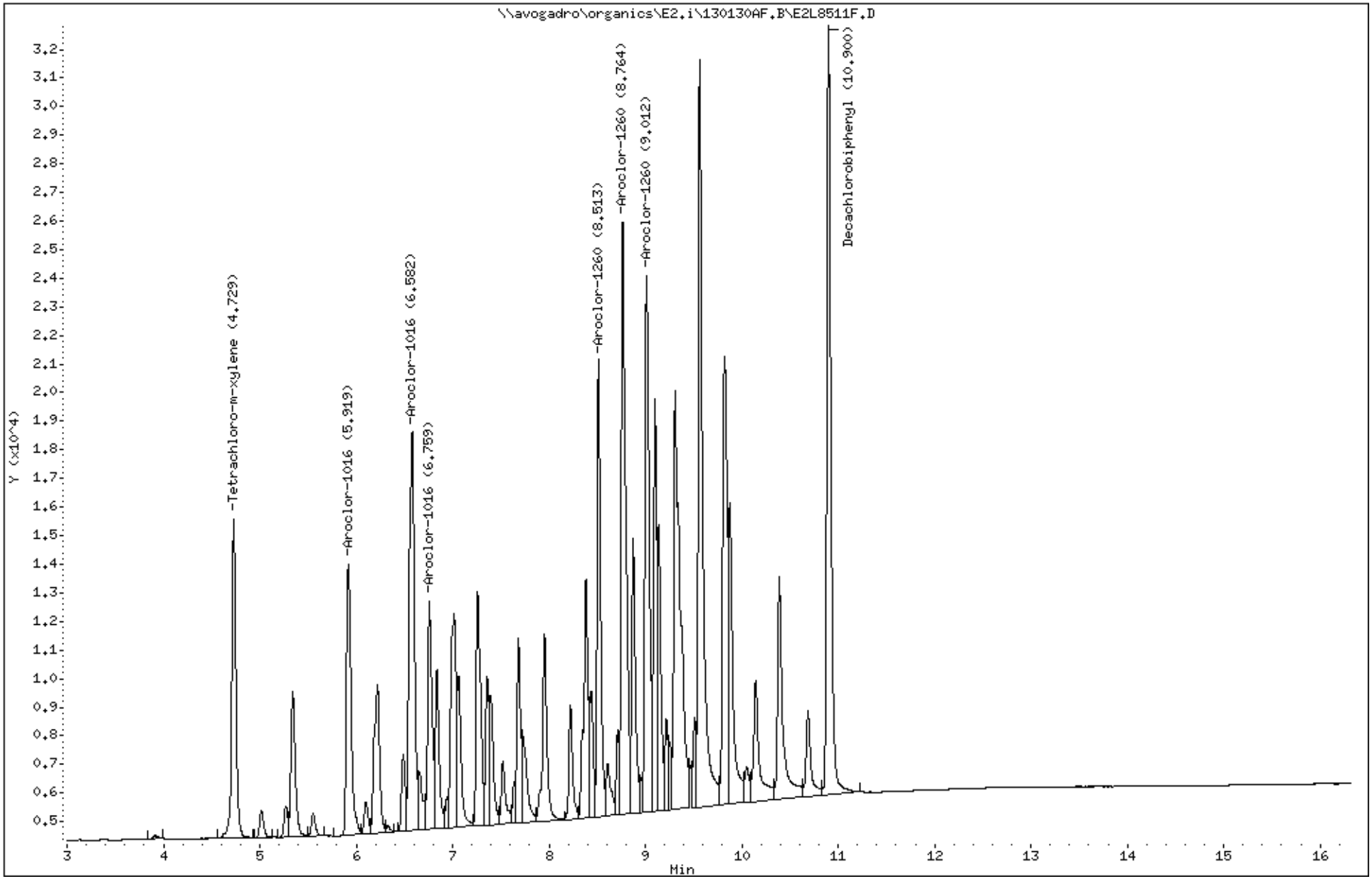
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.729	4.725	0.004	11135	0.02000	0.020			(a)
5 Aroclor-1016					CAS #: 12674-11-2			
5.918	5.914	0.004	9483	0.40000	0.37	80.00- 120.00	100.00	(a)
6.581	6.578	0.003	13948	0.40000	0.38	133.37- 173.37	147.08	
6.758	6.754	0.004	7984	0.40000	0.39	66.42- 106.42	84.19	
	Average of Peak Amounts =				0.38000			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.899	10.896	0.003	799077	0.04000	0.041			(a)
9 Aroclor-1260					CAS #: 11096-82-5			
8.513	8.509	0.004	15984	0.40000	0.37	80.00- 120.00	100.00	(a)
8.764	8.760	0.004	20695	0.40000	0.38	110.24- 150.24	129.47	
9.012	9.007	0.005	18756	0.40000	0.40	96.04- 136.04	117.34	
	Average of Peak Amounts =				0.38333			

Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8511F.D
Report Date: 06-Feb-2013 10:30

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8511F.D
Date : 31-JAN-2013 08:35
Client ID: AR16603A2
Instrument: E2.i
Sample Info: AR16603A2,AR16603A2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8511R.D
Report Date: 06-Feb-2013 10:31

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AR.B\E2L8511R.D
Lab Smp Id: AR16603A2 Client Smp ID: AR16603A2
Inj Date : 31-JAN-2013 08:35
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR16603A2,AR16603A2,,ar1660.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AR.B\E2_LL_PCB_R.m
Meth Date : 04-Feb-2013 13:13 tmcdaniel Quant Type: ESTD
Cal Date : 31-JAN-2013 08:35 Cal File: E2L8511R.D
Als bottle: 26 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

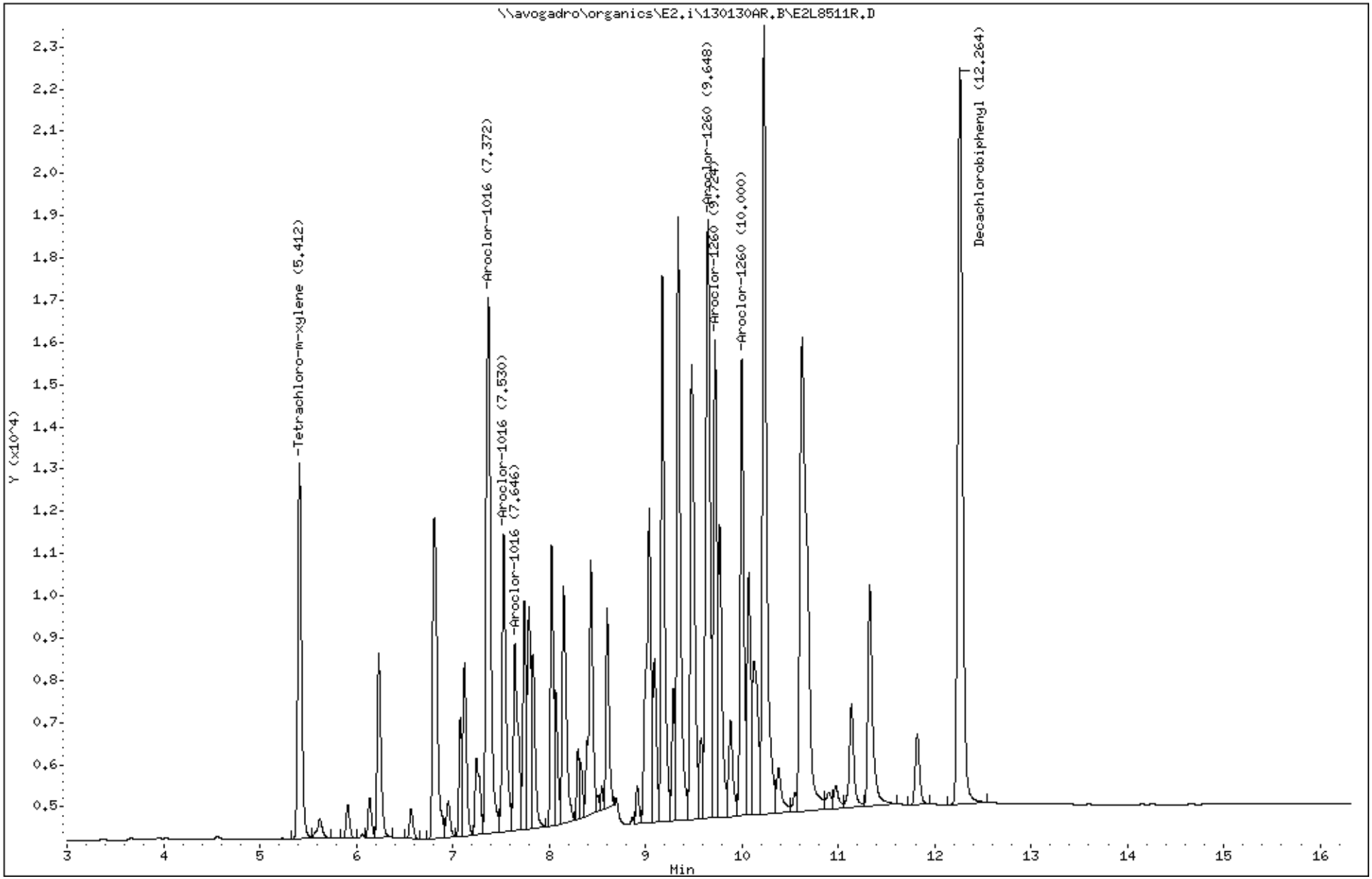
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.411	5.410	0.001	8889	0.02000	0.019			(a)
6 Aroclor-1016						CAS #: 12674-11-2		
7.372	7.371	0.001	12706	0.40000	0.36	80.00- 120.00	100.00	(a)
7.530	7.529	0.001	7046	0.40000	0.37	34.44- 74.44	55.45	
7.646	7.644	0.002	4438	0.40000	0.39	14.02- 54.02	34.93	
Average of Peak Amounts =					0.37333			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.263	12.262	0.001	17422	0.04000	0.040			(a)
8 Aroclor-1260						CAS #: 11096-82-5		
9.648	9.646	0.002	14186	0.40000	0.37	80.00- 120.00	100.00	(a)
9.723	9.721	0.002	11295	0.40000	0.34	68.39- 108.39	79.62	
10.000	9.997	0.003	10785	0.40000	0.36	62.74- 102.74	76.03	
Average of Peak Amounts =					0.35667			

Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8511R.D
Report Date: 06-Feb-2013 10:31

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8511R.D
Date : 31-JAN-2013 08:35
Client ID: AR16603A2
Instrument: E2.i
Sample Info: AR16603A2,AR16603A2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8512F.D
Report Date: 06-Feb-2013 10:30

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AF.B\E2L8512F.D
Lab Smp Id: AR16604A2 Client Smp ID: AR16604A2
Inj Date : 31-JAN-2013 08:54
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR16604A2,AR16604A2,,ar1660.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AF.B\E2_LL_PCB_F.m
Meth Date : 06-Feb-2013 09:59 tmcdaniel Quant Type: ESTD
Cal Date : 31-JAN-2013 08:54 Cal File: E2L8512F.D
Als bottle: 27 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

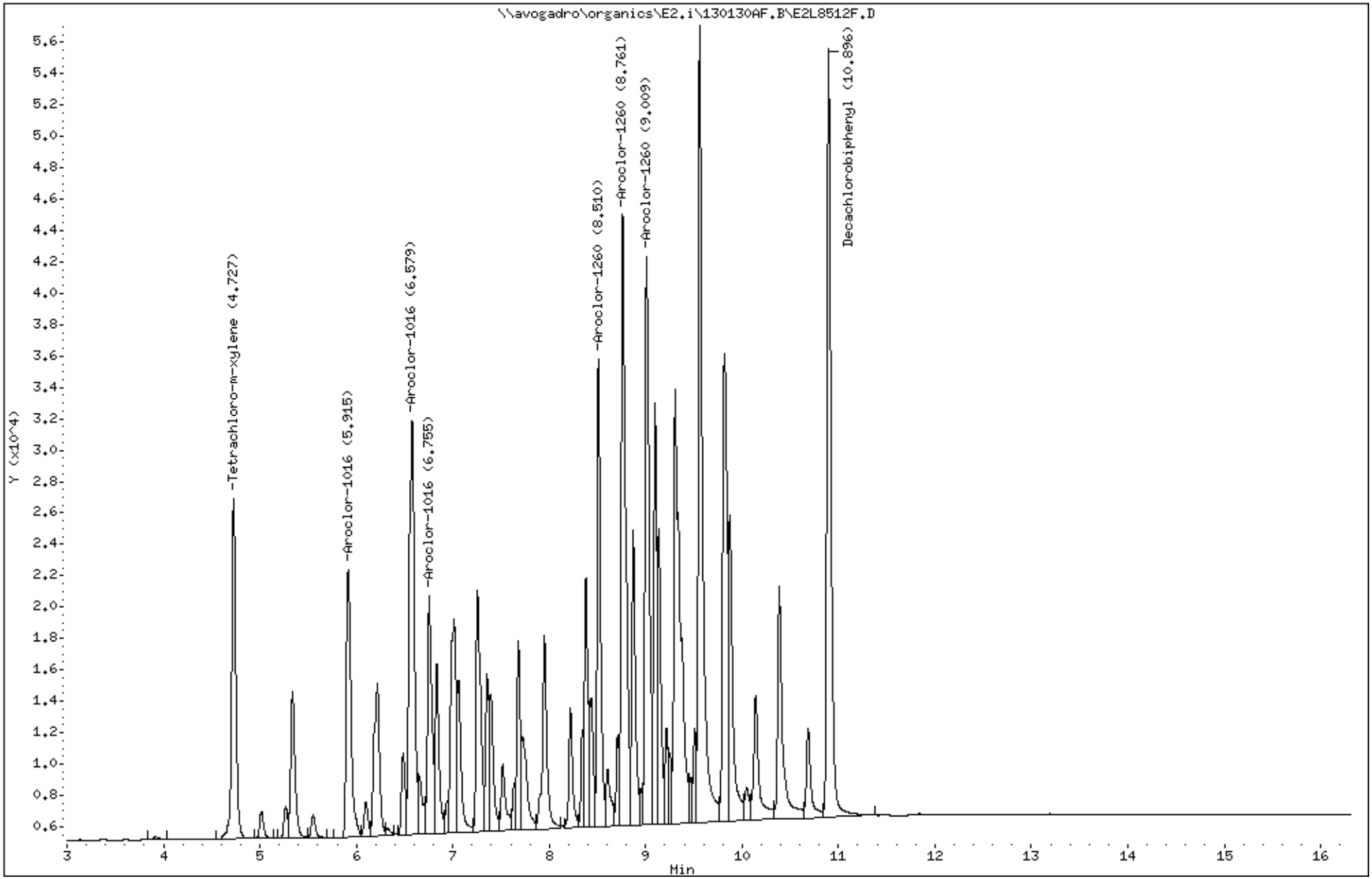
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.727	4.725	0.002	21706	0.04000	0.039			(a)
5 Aroclor-1016						CAS #: 12674-11-2		
5.915	5.914	0.001	17022	0.80000	0.69	80.00- 120.00	100.00	(a)
6.578	6.578	0.000	26351	0.80000	0.72	133.37- 173.37	154.81	
6.755	6.754	0.001	15126	0.80000	0.76	66.42- 106.42	88.86	
Average of Peak Amounts =					0.72333			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.896	10.896	0.000	1469742	0.08000	0.075			
9 Aroclor-1260						CAS #: 11096-82-5		
8.510	8.509	0.001	29842	0.80000	0.72	80.00- 120.00	100.00	(a)
8.761	8.760	0.001	39006	0.80000	0.73	110.24- 150.24	130.71	
9.008	9.007	0.001	36204	0.80000	0.77	96.04- 136.04	121.32	
Average of Peak Amounts =					0.74000			

Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8512F.D
Report Date: 06-Feb-2013 10:30

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8512F.D
Date : 31-JAN-2013 08:54
Client ID: AR16604A2
Instrument: E2.i
Sample Info: AR16604A2,AR16604A2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8512R.D
Report Date: 06-Feb-2013 10:31

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130130AR.B\E2L8512R.D
Lab Smp Id: AR16604A2 Client Smp ID: AR16604A2
Inj Date : 31-JAN-2013 08:54
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR16604A2,AR16604A2,,ar1660.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AR.B\E2_LL_PCB_R.m
Meth Date : 04-Feb-2013 13:13 tmcdaniel Quant Type: ESTD
Cal Date : 31-JAN-2013 08:54 Cal File: E2L8512R.D
Als bottle: 27 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

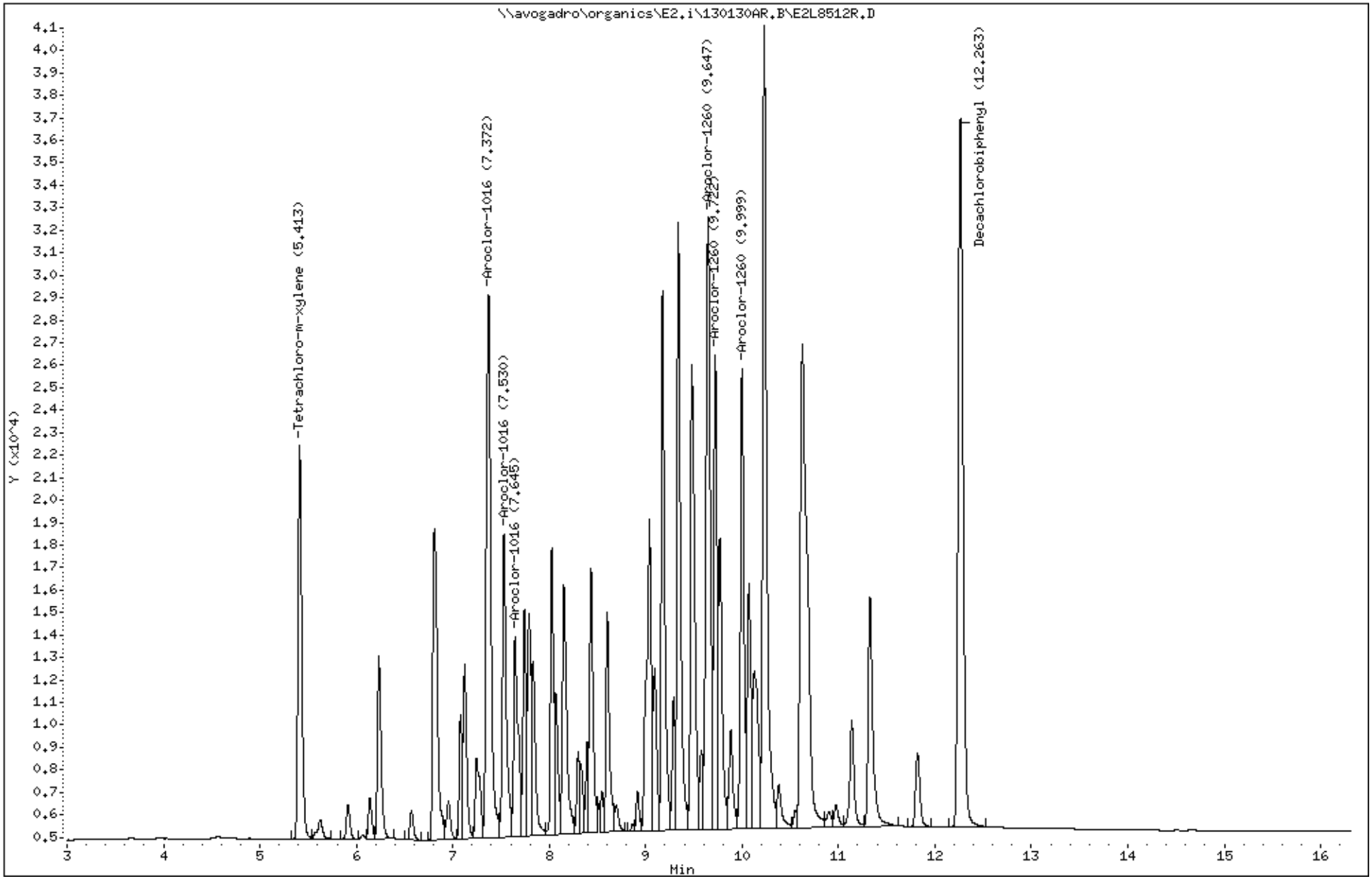
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.412	5.410	0.002	17491	0.04000	0.038			(a)
6 Aroclor-1016						CAS #: 12674-11-2		
7.372	7.371	0.001	24143	0.80000	0.70	80.00- 120.00	100.00	(a)
7.530	7.529	0.001	13456	0.80000	0.72	34.44- 74.44	55.73	
7.645	7.644	0.001	8878	0.80000	0.78	14.02- 54.02	36.77	
Average of Peak Amounts =					0.73333			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.262	12.262	0.000	31528	0.08000	0.073			
8 Aroclor-1260						CAS #: 11096-82-5		
9.646	9.646	0.000	27276	0.80000	0.72	80.00- 120.00	100.00	(a)
9.722	9.721	0.001	21102	0.80000	0.67	68.39- 108.39	77.36	
9.998	9.997	0.001	20500	0.80000	0.71	62.74- 102.74	75.16	
Average of Peak Amounts =					0.70000			

Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8512R.D
Report Date: 06-Feb-2013 10:31

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8512R.D
Date : 31-JAN-2013 08:54
Client ID: AR16604A2
Instrument: E2.i
Sample Info: AR16604A2,AR16604A2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8513F.D
Report Date: 06-Feb-2013 10:30

Spectrum Analytical, Inc. RI Division

Quantitation Report

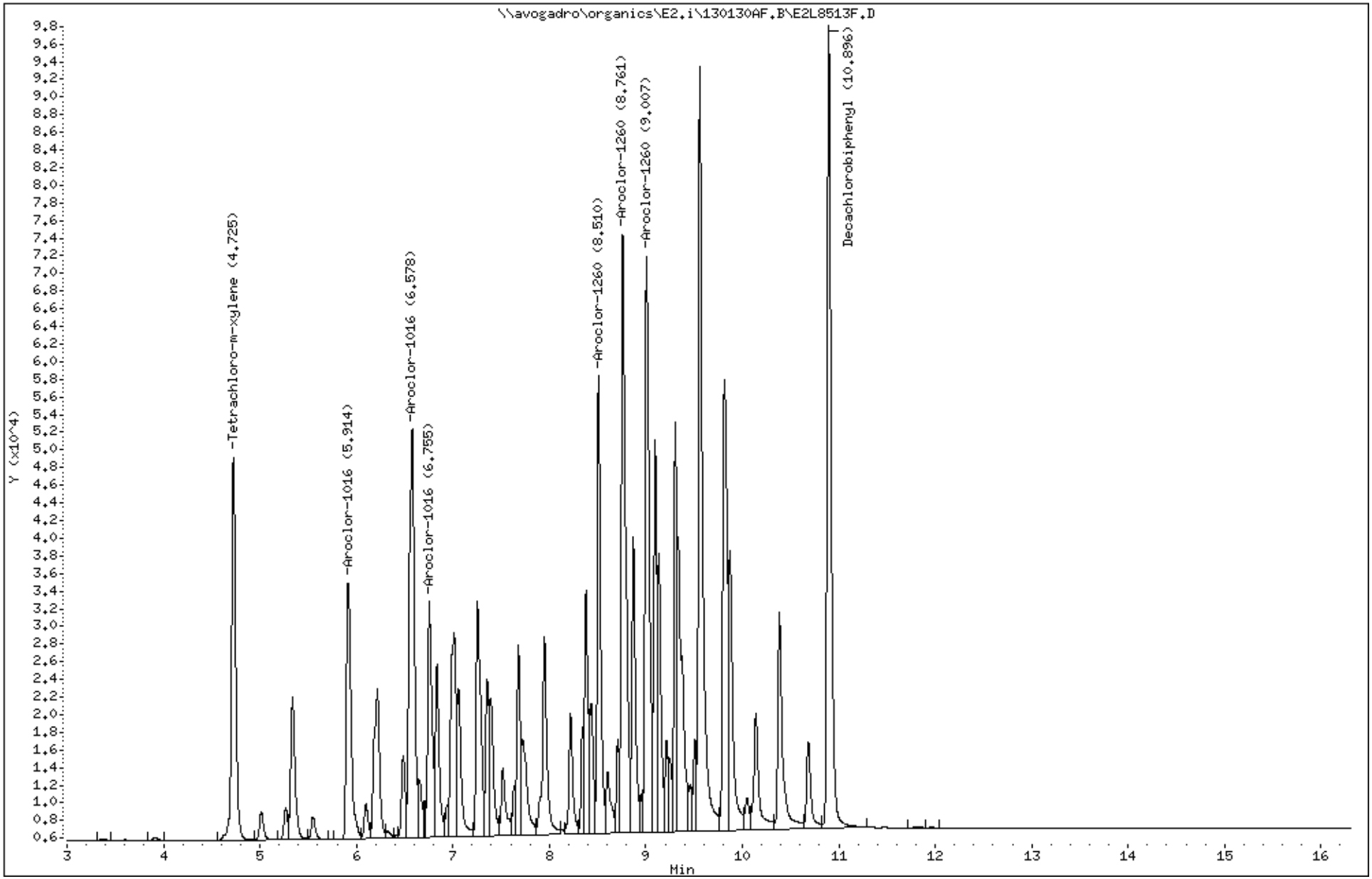
Data file : \\avogadro\organics\E2.i\130130AF.B\E2L8513F.D
Lab Smp Id: AR16605A2 Client Smp ID: AR16605A2
Inj Date : 31-JAN-2013 09:14
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR16605A2,AR16605A2,,ar1660.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AF.B\E2_LL_PCB_F.m
Meth Date : 06-Feb-2013 09:59 tmcdaniel Quant Type: ESTD
Cal Date : 31-JAN-2013 09:14 Cal File: E2L8513F.D
Als bottle: 28 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.725	4.725	0.000	43371	0.08000	0.077			
5 Aroclor-1016						CAS #: 12674-11-2		
5.914	5.914	0.000	29035	1.60000	1.2	80.00- 120.00		100.00
6.578	6.578	0.000	46403	1.60000	1.3	133.37- 173.37		159.82
6.754	6.754	0.000	26723	1.60000	1.4	66.42- 106.42		92.04
Average of Peak Amounts =					1.30000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.896	10.896	0.000	2663736	0.16000	0.13			
9 Aroclor-1260						CAS #: 11096-82-5		
8.509	8.509	0.000	51888	1.60000	1.3	80.00- 120.00		100.00
8.760	8.760	0.000	67845	1.60000	1.3	110.24- 150.24		130.75
9.007	9.007	0.000	65231	1.60000	1.4	96.04- 136.04		125.72
Average of Peak Amounts =					1.33333			

Data File: \\avogadro\organics\E2.i\130130AF.B\E2L8513F.D
Date : 31-JAN-2013 09:14
Client ID: AR16605A2
Instrument: E2.i
Sample Info: AR16605A2,AR16605A2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8513R.D
Report Date: 06-Feb-2013 10:31

Spectrum Analytical, Inc. RI Division

Quantitation Report

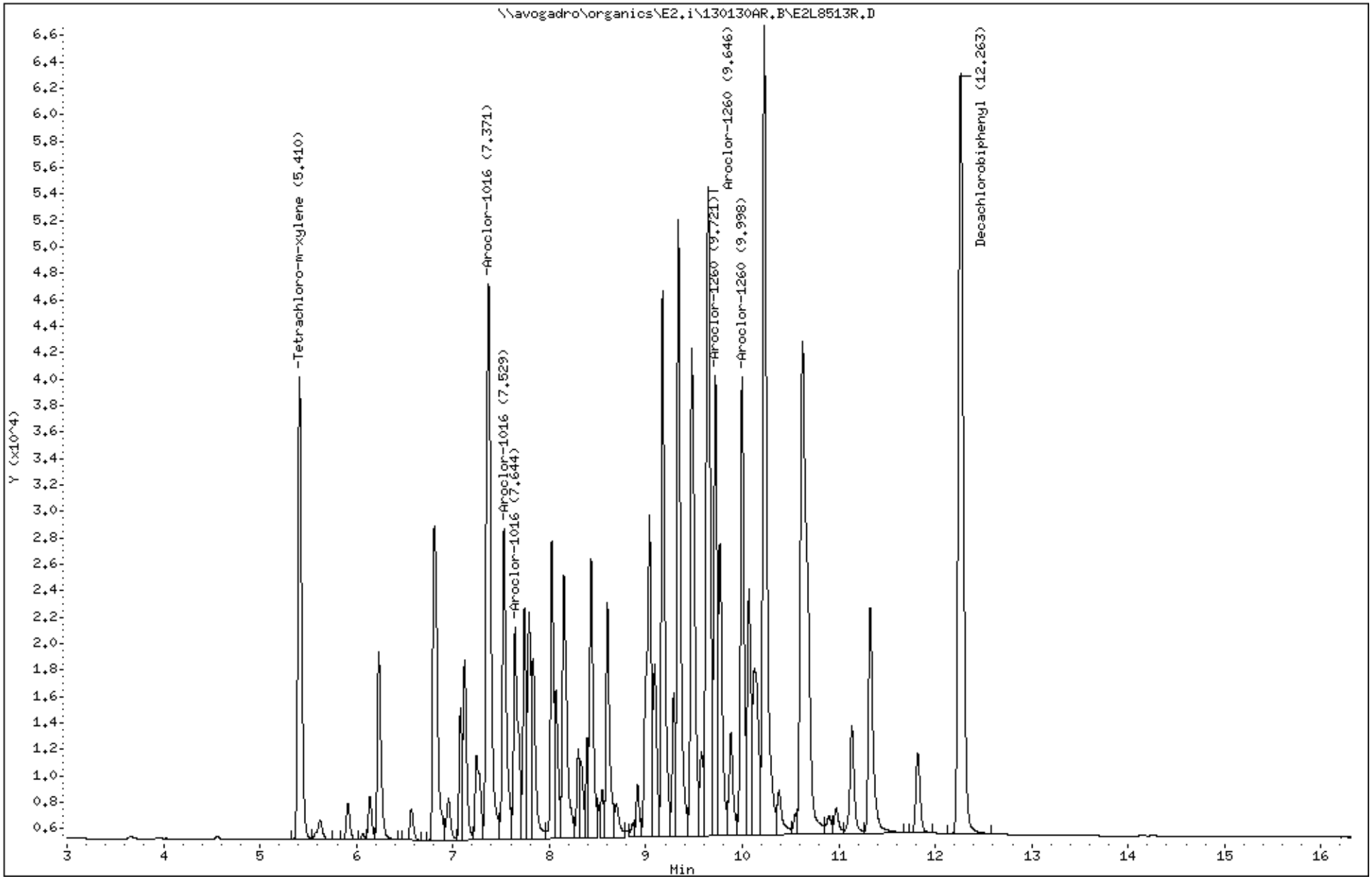
Data file : \\avogadro\organics\E2.i\130130AR.B\E2L8513R.D
Lab Smp Id: AR16605A2 Client Smp ID: AR16605A2
Inj Date : 31-JAN-2013 09:14
Operator : GMA/T   SRC: GMA/T Inst ID: E2.i
Smp Info : AR16605A2,AR16605A2,,ar1660.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130130AR.B\E2_LL_PCB_R.m
Meth Date : 04-Feb-2013 13:13 tmcdaniel Quant Type: ESTD
Cal Date : 31-JAN-2013 09:14 Cal File: E2L8513R.D
Als bottle: 28 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: GERMANIUM

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
5.410	5.410	0.000	35059	0.08000	0.076		
6 Aroclor-1016						CAS #: 12674-11-2	
7.371	7.371	0.000	42095	1.60000	1.3	80.00- 120.00	100.00
7.529	7.529	0.000	23482	1.60000	1.3	34.44- 74.44	55.78
7.644	7.644	0.000	16049	1.60000	1.4	14.02- 54.02	38.13
Average of Peak Amounts =					1.33333		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
12.262	12.262	0.000	57525	0.16000	0.13		
8 Aroclor-1260						CAS #: 11096-82-5	
9.646	9.646	0.000	49125	1.60000	1.3	80.00- 120.00	100.00
9.721	9.721	0.000	34862	1.60000	1.2	68.39- 108.39	70.97
9.997	9.997	0.000	34738	1.60000	1.2	62.74- 102.74	70.71
Average of Peak Amounts =					1.23333		

Data File: \\avogadro\organics\E2.i\130130AR.B\E2L8513R.D
Date : 31-JAN-2013 09:14
Client ID: AR16605A2
Instrument: E2.i
Sample Info: AR16605A2,AR16605A2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: GMA/T SRC: GMA/T
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130301F.B\E2L8864F.D
Report Date: 04-Mar-2013 12:49

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130301F.B\E2L8864F.D
Lab Smp Id: AR16603AD Client Smp ID: AR16603AD
Inj Date : 01-MAR-2013 13:24
Operator : TM   SRC: TM Inst ID: E2.i
Smp Info : AR16603AD,AR16603AD,,ar1660.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130301F.B\E2_LL_PCB_F.m
Meth Date : 04-Mar-2013 08:24 tmcdaniel Quant Type: ESTD
Cal Date : 31-JAN-2013 09:14 Cal File: E2L8513F.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

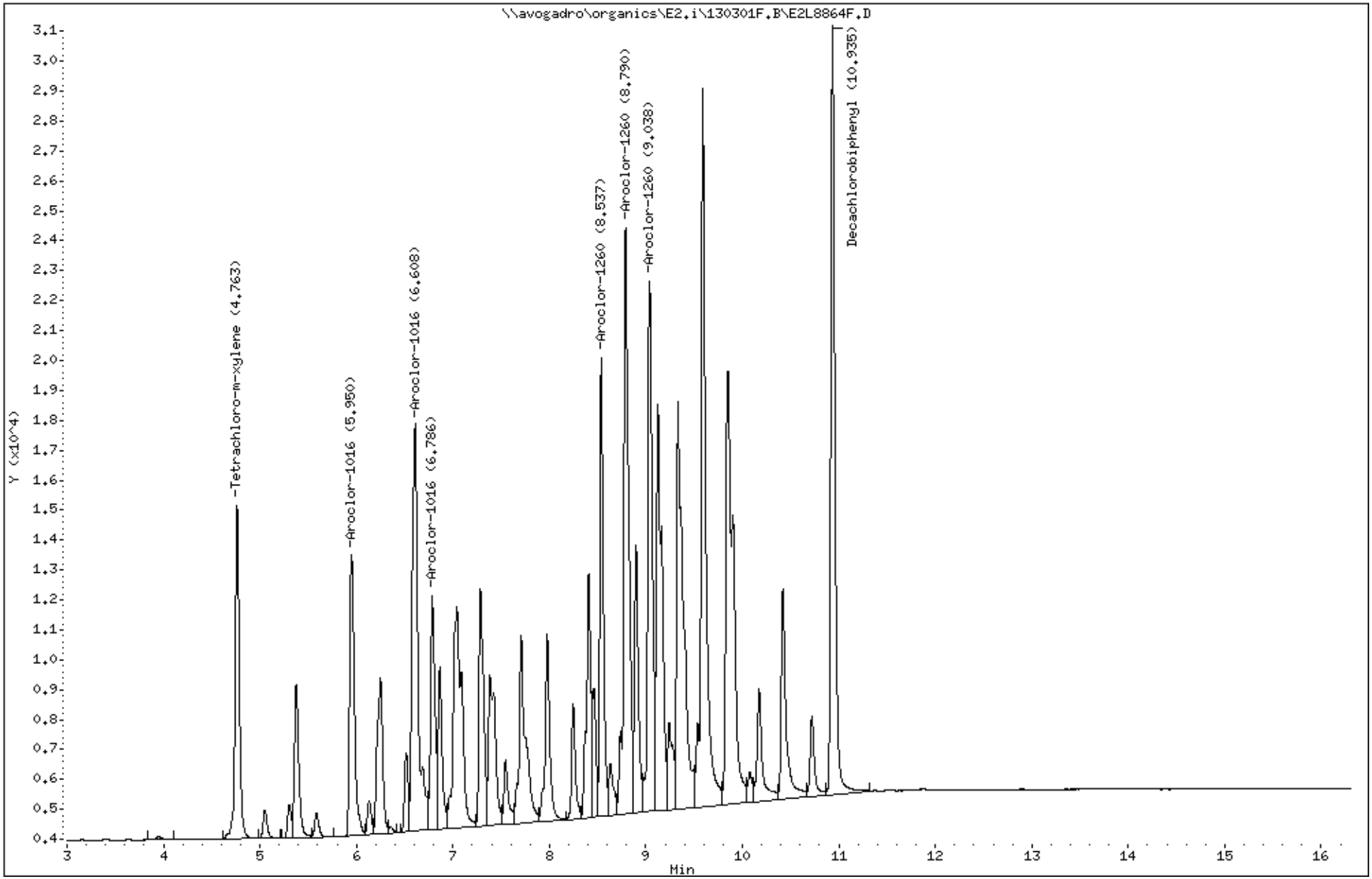
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.762	4.725	0.037	11111	0.02000	0.020			(a)
5 Aroclor-1016						CAS #: 12674-11-2		
5.949	5.914	0.035	9359	0.40000	0.40	80.00- 120.00	100.00	(a)
6.608	6.578	0.030	13613	0.40000	0.39	129.36- 169.36	145.45	
6.786	6.754	0.032	7745	0.40000	0.40	63.62- 103.62	82.75	
	Average of Peak Amounts =				0.39667			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.935	10.896	0.039	765935	0.04000	0.039			(a)
9 Aroclor-1260						CAS #: 11096-82-5		
8.537	8.509	0.028	15239	0.40000	0.38	80.00- 120.00	100.00	(a)
8.789	8.760	0.029	19455	0.40000	0.38	106.64- 146.64	127.67	
9.038	9.007	0.031	17705	0.40000	0.38	92.40- 132.40	116.18	
	Average of Peak Amounts =				0.38000			

Data File: \\avogadro\organics\E2.i\130301F.B\E2L8864F.D
Report Date: 04-Mar-2013 12:49

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130301F.B\E2L8864F.D
Date : 01-MAR-2013 13:24
Client ID: AR16603AD
Instrument: E2.i
Sample Info: AR16603AD,AR16603AD,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: TM SRC: TM
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130301R.B\E2L8864R.D
Report Date: 04-Mar-2013 12:49

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130301R.B\E2L8864R.D
Lab Smp Id: AR16603AD Client Smp ID: AR16603AD
Inj Date : 01-MAR-2013 13:24
Operator : TM   SRC: TM Inst ID: E2.i
Smp Info : AR16603AD,AR16603AD,,ar1660.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130301R.B\E2_LL_PCB_R.m
Meth Date : 04-Mar-2013 08:25 tmcdaniel Quant Type: ESTD
Cal Date : 31-JAN-2013 09:14 Cal File: E2L8513R.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

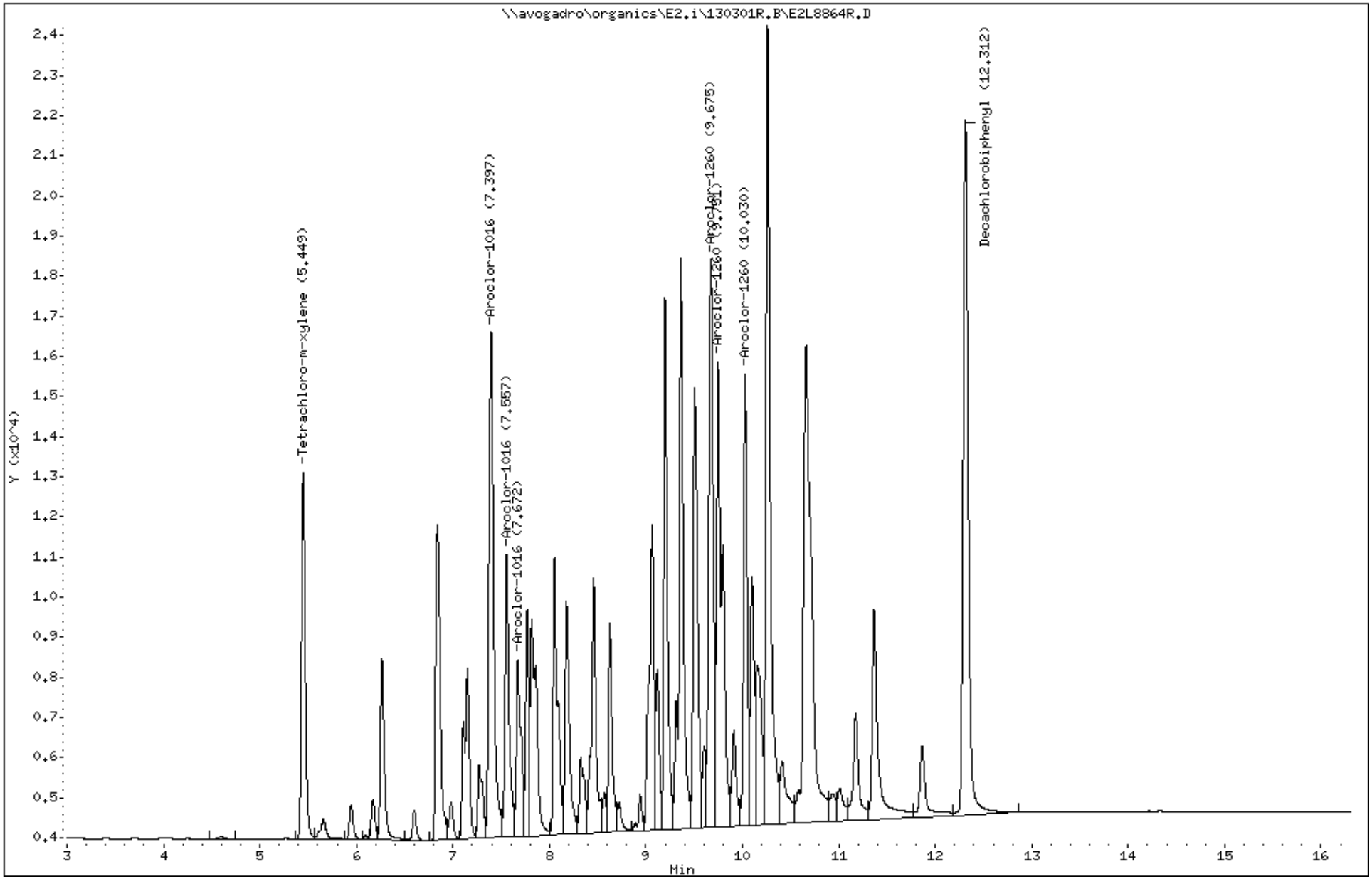
			AMOUNTS				
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
5.448	5.410	0.038	9108	0.02000	0.020		(a)
6 Aroclor-1016					CAS #: 12674-11-2		
7.397	7.371	0.026	12585	0.40000	0.38	80.00- 120.00	100.00(a)
7.556	7.529	0.027	7028	0.40000	0.39	35.42- 75.42	55.84
7.671	7.644	0.027	4410	0.40000	0.39	15.05- 55.05	35.04
Average of Peak Amounts =			0.38667				
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
12.312	12.262	0.050	17324	0.04000	0.040		(a)
8 Aroclor-1260					CAS #: 11096-82-5		
9.674	9.646	0.028	14175	0.40000	0.39	80.00- 120.00	100.00(a)
9.750	9.721	0.029	11585	0.40000	0.38	73.75- 113.75	81.73
10.029	9.997	0.032	11246	0.40000	0.41	67.65- 107.65	79.34
Average of Peak Amounts =			0.39333				

Data File: \\avogadro\organics\E2.i\130301R.B\E2L8864R.D
Report Date: 04-Mar-2013 12:49

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130301R.B\E2L8864R.D
Date : 01-MAR-2013 13:24
Client ID: AR16603AD
Instrument: E2.i
Sample Info: AR16603AD,AR16603AD,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: TM SRC: TM
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130301F.B\E2L8873F.D
Report Date: 04-Mar-2013 12:49

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130301F.B\E2L8873F.D
Lab Smp Id: AR16603AE Client Smp ID: AR16603AE
Inj Date : 01-MAR-2013 16:44
Operator : TM   SRC: TM Inst ID: E2.i
Smp Info : AR16603AE,AR16603AE,,ar1660.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130301F.B\E2_LL_PCB_F.m
Meth Date : 04-Mar-2013 08:24 tmcdaniel Quant Type: ESTD
Cal Date : 31-JAN-2013 09:14 Cal File: E2L8513F.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

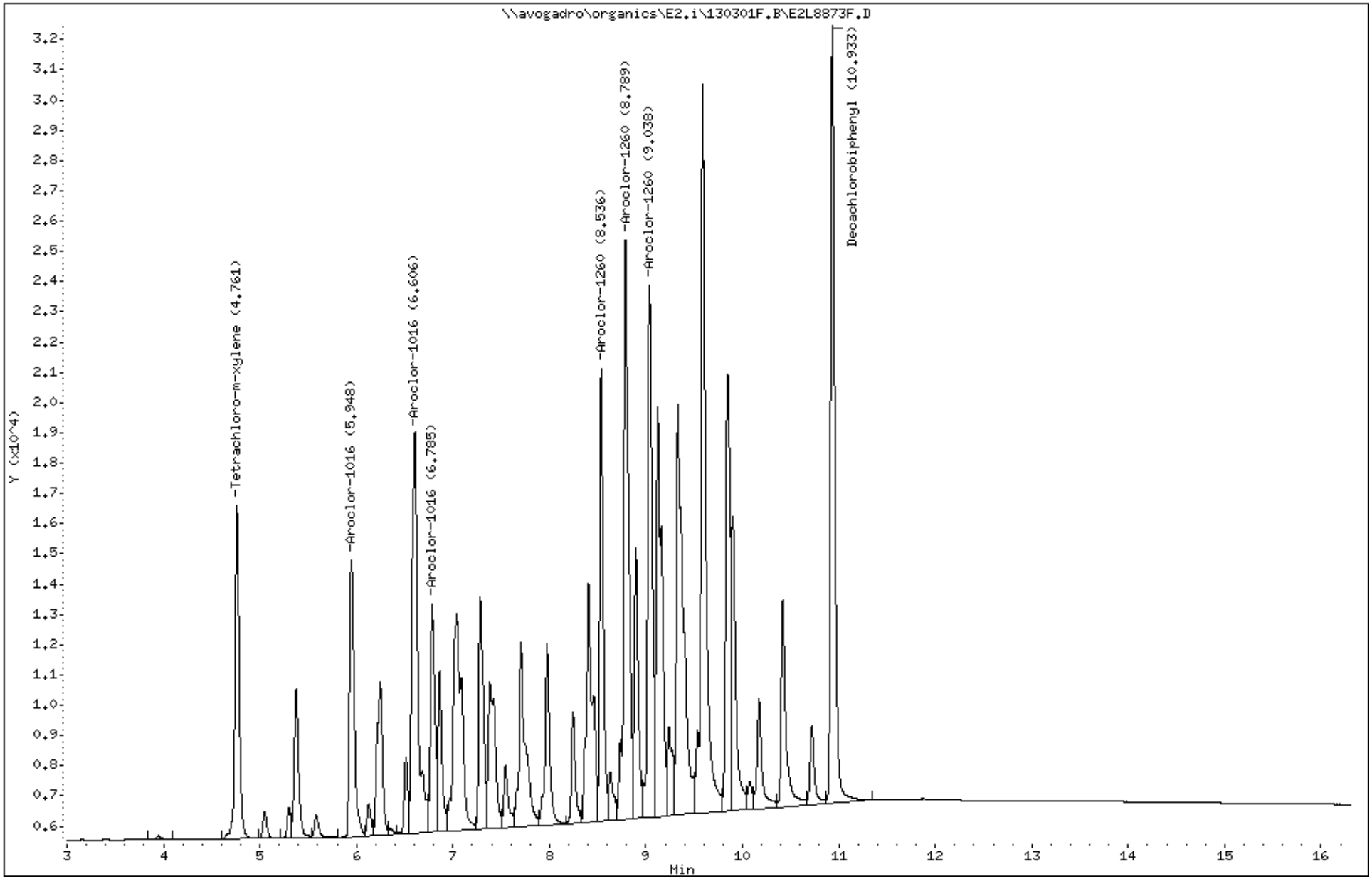
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.760	4.725	0.035	10995	0.02000	0.020			(a)
5 Aroclor-1016						CAS #: 12674-11-2		
5.947	5.914	0.033	9153	0.40000	0.39	80.00- 120.00	100.00	(a)
6.606	6.578	0.028	13298	0.40000	0.38	129.36- 169.36	145.29	
6.784	6.754	0.030	7508	0.40000	0.38	63.62- 103.62	82.03	
Average of Peak Amounts =					0.38333			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.933	10.896	0.037	776011	0.04000	0.039			(a)
9 Aroclor-1260						CAS #: 11096-82-5		
8.536	8.509	0.027	14819	0.40000	0.37	80.00- 120.00	100.00	(a)
8.788	8.760	0.028	19128	0.40000	0.37	106.64- 146.64	129.08	
9.037	9.007	0.030	17522	0.40000	0.38	92.40- 132.40	118.24	
Average of Peak Amounts =					0.37333			

Data File: \\avogadro\organics\E2.i\130301F.B\E2L8873F.D
Report Date: 04-Mar-2013 12:49

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130301F.B\E2L8873F.D
Date : 01-MAR-2013 16:44
Client ID: AR16603AE
Instrument: E2.i
Sample Info: AR16603AE,AR16603AE,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: TM SRC: TM
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130301R.B\E2L8873R.D
Report Date: 04-Mar-2013 12:50

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\130301R.B\E2L8873R.D
Lab Smp Id: AR16603AE Client Smp ID: AR16603AE
Inj Date : 01-MAR-2013 16:44
Operator : TM   SRC: TM Inst ID: E2.i
Smp Info : AR16603AE,AR16603AE,,ar1660.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130301R.B\E2_LL_PCB_R.m
Meth Date : 04-Mar-2013 08:25 tmcdaniel Quant Type: ESTD
Cal Date : 31-JAN-2013 09:14 Cal File: E2L8513R.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

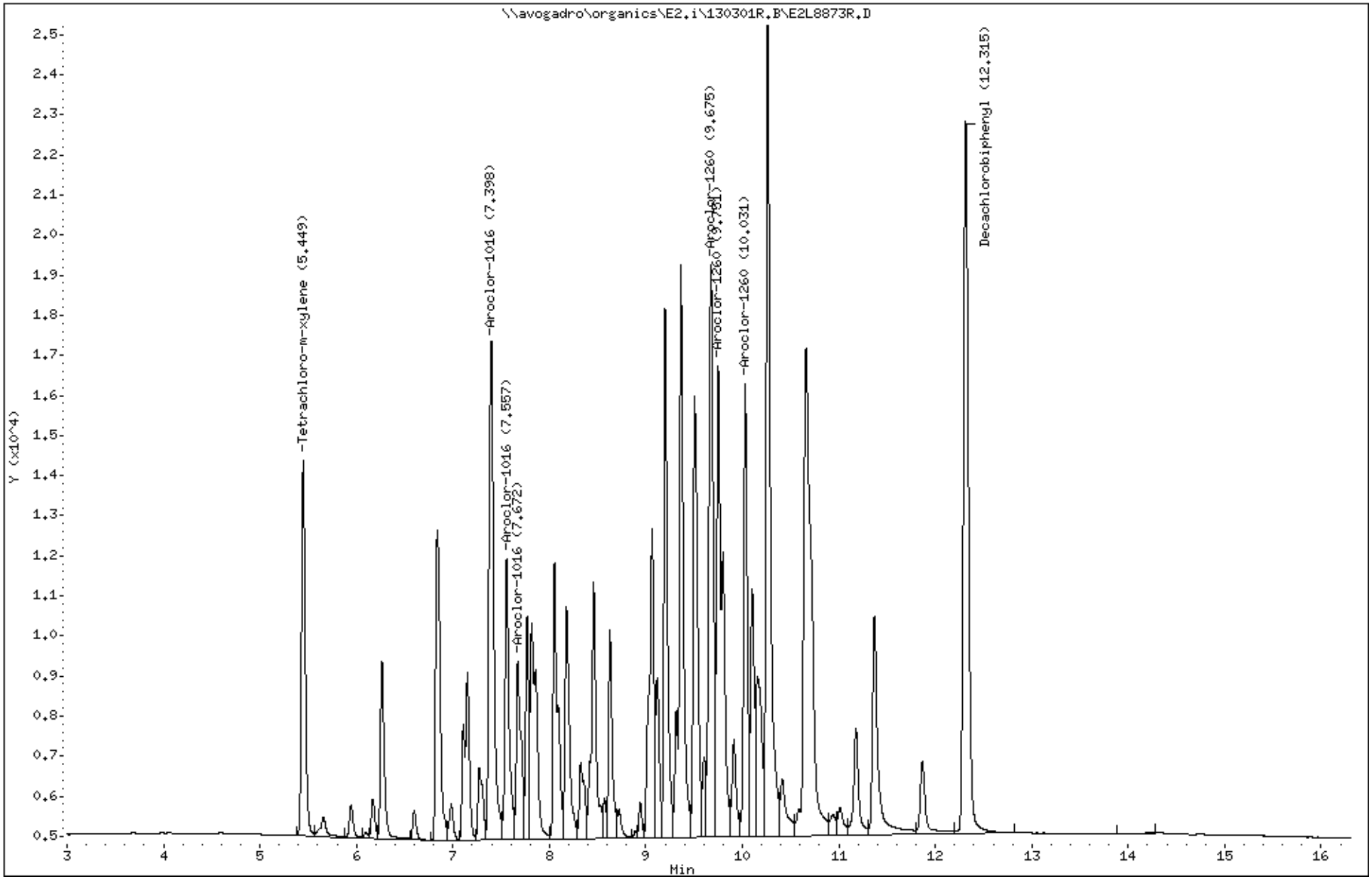
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.448	5.410	0.038	9347	0.02000	0.020			(a)
6 Aroclor-1016						CAS #: 12674-11-2		
7.397	7.371	0.026	12400	0.40000	0.38	80.00- 120.00	100.00	(a)
7.556	7.529	0.027	6985	0.40000	0.39	35.42- 75.42	56.33	
7.672	7.644	0.028	4441	0.40000	0.40	15.05- 55.05	35.81	
Average of Peak Amounts =					0.39000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.315	12.262	0.053	17754	0.04000	0.041			(a)
8 Aroclor-1260						CAS #: 11096-82-5		
9.675	9.646	0.029	14288	0.40000	0.39	80.00- 120.00	100.00	(a)
9.751	9.721	0.030	11742	0.40000	0.39	73.75- 113.75	82.18	
10.030	9.997	0.033	11275	0.40000	0.41	67.65- 107.65	78.91	
Average of Peak Amounts =					0.39667			

Data File: \\avogadro\organics\E2.i\130301R.B\E2L8873R.D
Report Date: 04-Mar-2013 12:50

QC Flag Legend

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

Data File: \\avogadro\organics\E2.i\130301R.B\E2L8873R.D
Date : 01-MAR-2013 16:44
Client ID: AR16603AE
Instrument: E2.i
Sample Info: AR16603AE,AR16603AE,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: TM SRC: TM
Column phase: CLPPestII
Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-70682

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-70682

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2L8868F.D/E2L8868R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 03/01/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/01/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

Data File: \\avogadro\organics\E2.i\130301F.B\E2L8868F.D
Report Date: 04-Mar-2013 12:49

Spectrum Analytical, Inc. RI Division

Quantitation Report

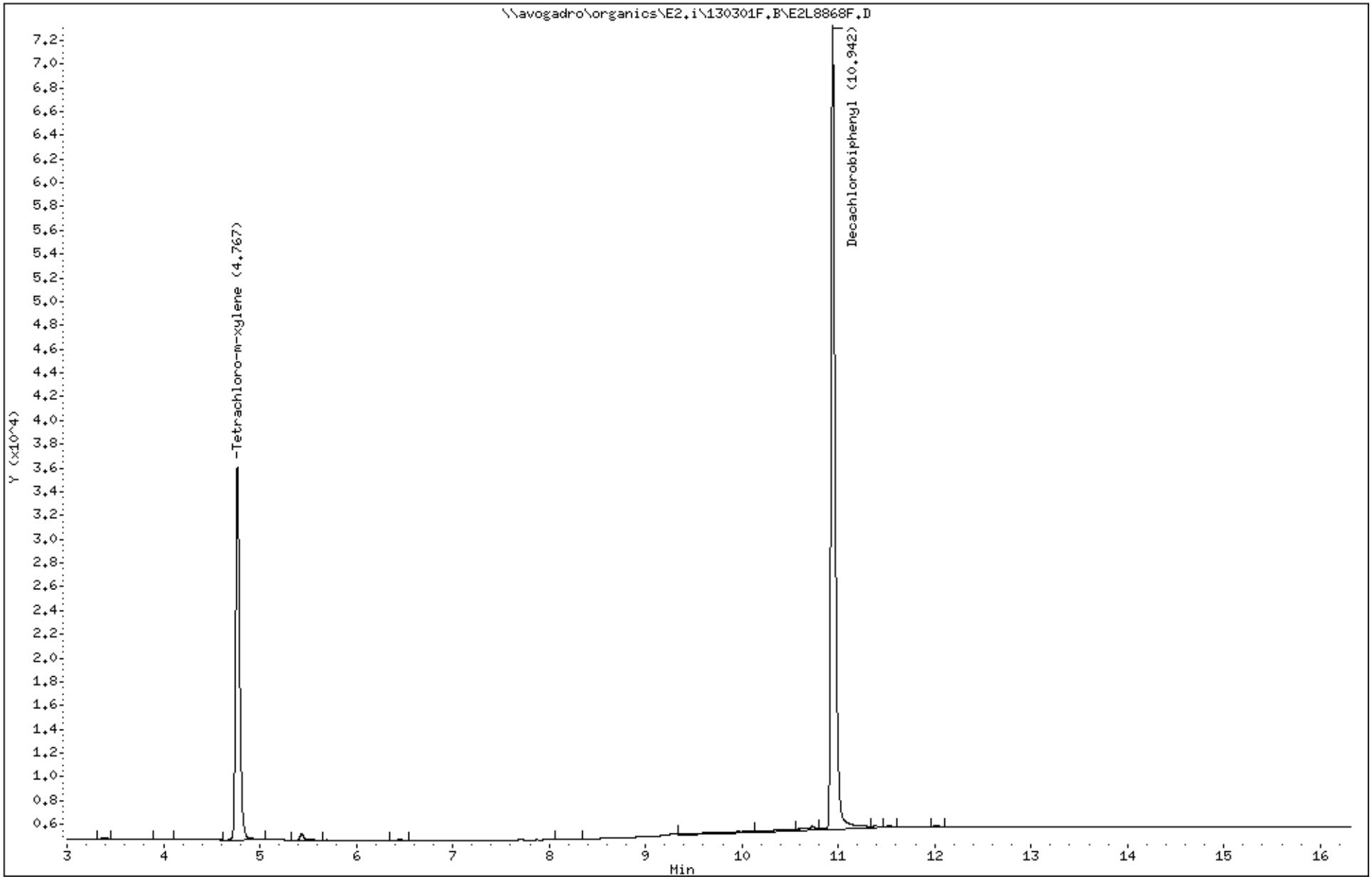
Data file : \\avogadro\organics\E2.i\130301F.B\E2L8868F.D
Lab Smp Id: MB-70682 Client Smp ID: MB-70682
Inj Date : 01-MAR-2013 15:05
Operator : TM   SRC: LIMS Inst ID: E2.i
Smp Info : MB-70682,MB-70682,70682,8082A.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130301F.B\E2_LL_PCB_F.m
Meth Date : 04-Mar-2013 08:24 tmcdaniel Quant Type: ESTD
Cal Date : 31-JAN-2013 09:14 Cal File: E2L8513F.D
Als bottle: 5 QC Sample: BLANK
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

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.767	4.725	0.042	31401	0.05587	0.56		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
10.942	10.896	0.046	2038995	0.10329	1.0		

Data File: \\avogadro\organics\E2.i\130301F.B\E2L8868F.D
Date : 01-MAR-2013 15:05
Client ID: MB-70682
Instrument: E2.i
Sample Info: MB-70682,MB-70682,70682,8082A.sub,,
Volume Injected (uL): 1.0
Operator: TM SRC: LIMS
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130301R.B\E2L8868R.D
Report Date: 04-Mar-2013 12:50

Spectrum Analytical, Inc. RI Division

Quantitation Report

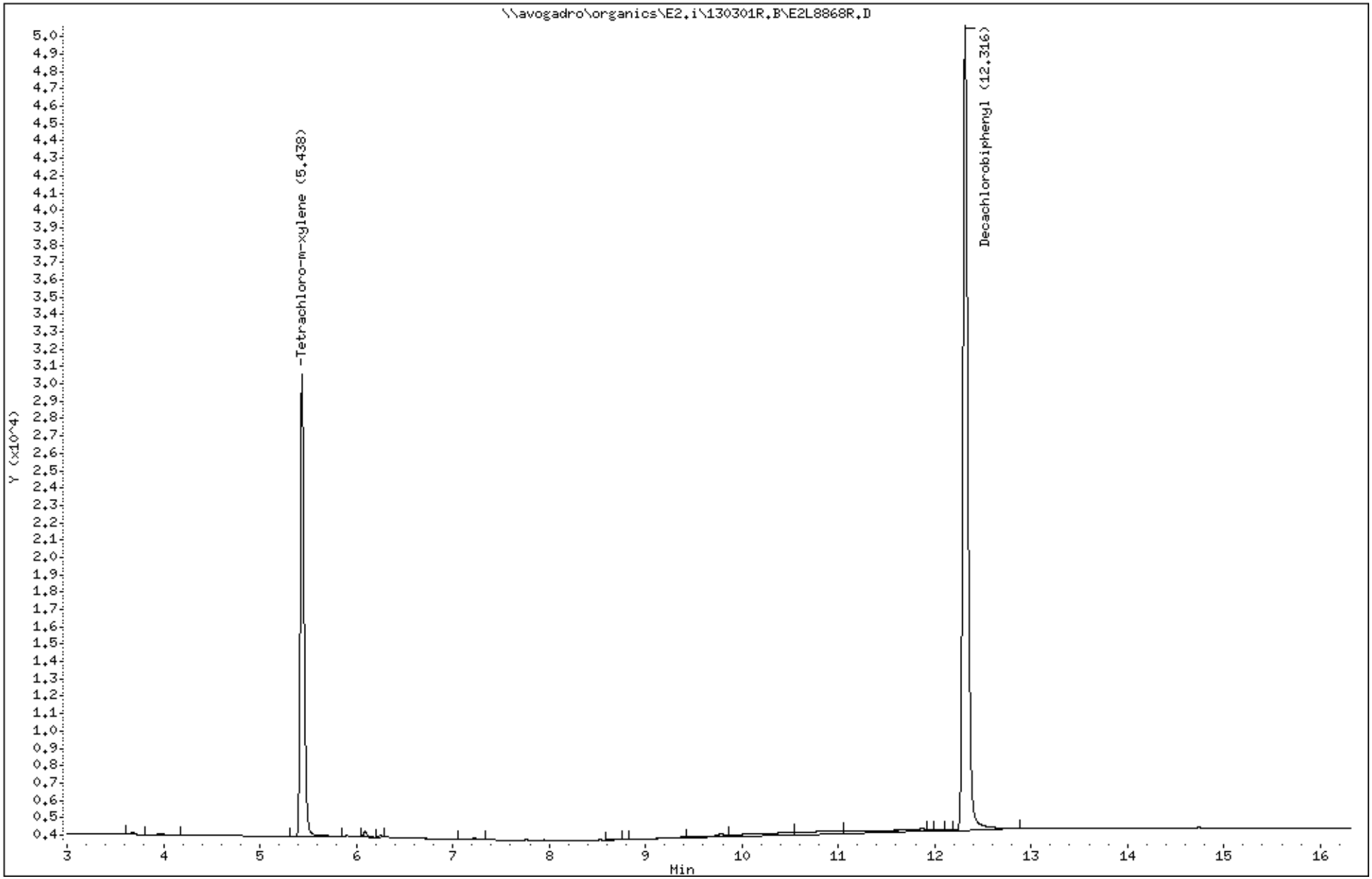
Data file : \\avogadro\organics\E2.i\130301R.B\E2L8868R.D
Lab Smp Id: MB-70682 Client Smp ID: MB-70682
Inj Date : 01-MAR-2013 15:05
Operator : TM   SRC: LIMS Inst ID: E2.i
Smp Info : MB-70682,MB-70682,70682,8082A.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130301R.B\E2_LL_PCB_R.m
Meth Date : 04-Mar-2013 08:25 tmcdaniel Quant Type: ESTD
Cal Date : 31-JAN-2013 09:14 Cal File: E2L8513R.D
Als bottle: 5 QC Sample: BLANK
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 ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
5.437	5.410	0.027	26661	0.05823	0.58		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
12.315	12.262	0.053	46373	0.10636	1.1		

Data File: \\avogadro\organics\E2.i\130301R.B\E2L8868R.D
Date : 01-MAR-2013 15:05
Client ID: MB-70682
Instrument: E2.i
Sample Info: MB-70682,MB-70682,70682,8082A.sub,,
Volume Injected (uL): 1.0
Operator: TM SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-70682(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-70682

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2L8869F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 03/01/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/01/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	3.5	
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	3.3	

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-70682(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-70682

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2L8869R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 03/01/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/01/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	3.5	
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	3.7	

Data File: \\avogadro\organics\E2.i\130301F.B\E2L8869F.D
Report Date: 04-Mar-2013 12:49

Spectrum Analytical, Inc. RI Division

Quantitation Report

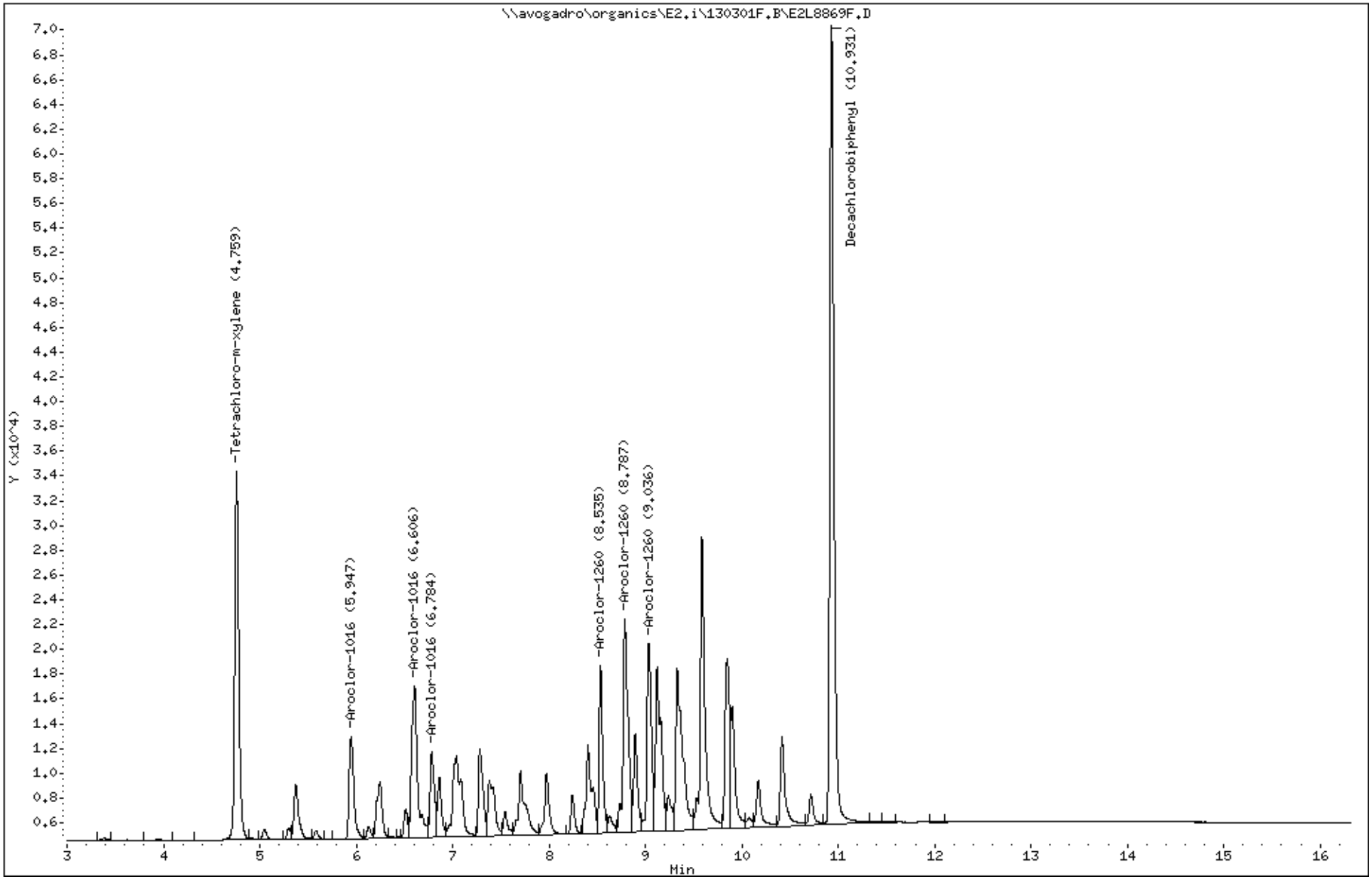
Data file : \\avogadro\organics\E2.i\130301F.B\E2L8869F.D
Lab Smp Id: LCS-70682 Client Smp ID: LCS-70682
Inj Date : 01-MAR-2013 15:25
Operator : TM SRC: LIMS Inst ID: E2.i
Smp Info : LCS-70682,LCS-70682,70682,8082A.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\130301F.B\E2_LL_PCB_F.m
Meth Date : 04-Mar-2013 08:24 tmcdaniel Quant Type: ESTD
Cal Date : 31-JAN-2013 09:14 Cal File: E2L8513F.D
Als bottle: 6 QC Sample: LCS
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 ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.758	4.725	0.033	29810	0.05304	0.53		
5 Aroclor-1016						CAS #: 12674-11-2	
5.947	5.914	0.033	8226	0.34759	3.5	80.00- 120.00	100.00
6.605	6.578	0.027	12257	0.34913	3.5	129.36- 169.36	149.00
6.784	6.754	0.030	6883	0.35369	3.5	63.62- 103.62	83.67
Average of Peak Concentrations =					3.5		
9 Aroclor-1260						CAS #: 11096-82-5	
8.534	8.509	0.025	13457	0.33592	3.4	80.00- 120.00	100.00
8.787	8.760	0.027	17144	0.33207	3.3	106.64- 146.64	127.40
9.036	9.007	0.029	15110	0.32942	3.3	92.40- 132.40	112.28
Average of Peak Concentrations =					3.3		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
10.931	10.896	0.035	1965771	0.09958	1.00		

Data File: \\avogadro\organics\E2.i\130301F.B\E2L8869F.D
Date : 01-MAR-2013 15:25
Client ID: LCS-70682
Instrument: E2.i
Sample Info: LCS-70682,LCS-70682,70682,8082A.sub,,
Volume Injected (uL): 1.0
Operator: TM SRC: LIMS
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130301R.B\E2L8869R.D
Report Date: 04-Mar-2013 12:50

Spectrum Analytical, Inc. RI Division

Quantitation Report

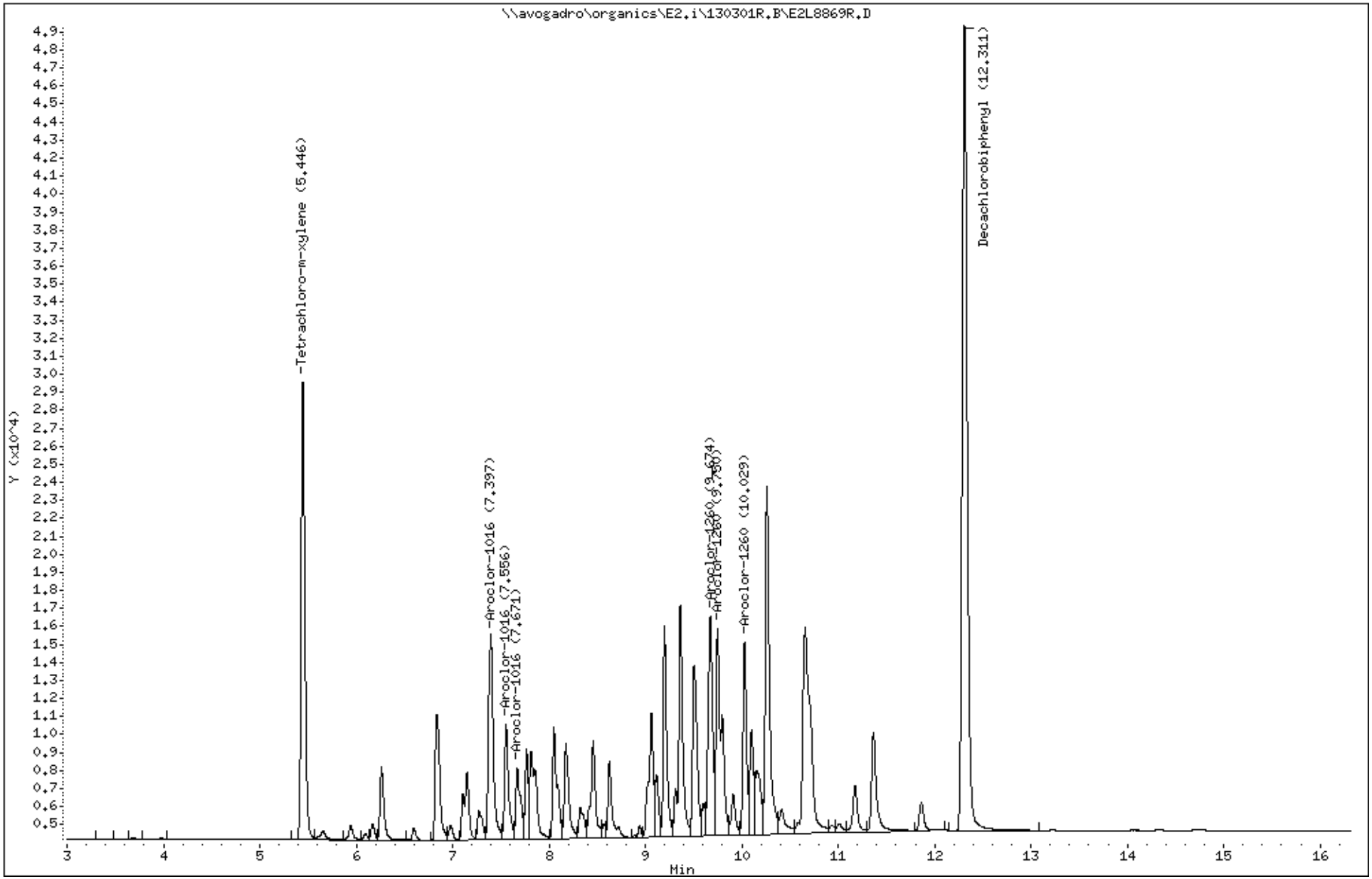
Data file : \\avogadro\organics\E2.i\130301R.B\E2L8869R.D
Lab Smp Id: LCS-70682 Client Smp ID: LCS-70682
Inj Date : 01-MAR-2013 15:25
Operator : TM   SRC: LIMS Inst ID: E2.i
Smp Info : LCS-70682,LCS-70682,70682,8082A.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130301R.B\E2_LL_PCB_R.m
Meth Date : 04-Mar-2013 08:25 tmcdaniel Quant Type: ESTD
Cal Date : 31-JAN-2013 09:14 Cal File: E2L8513R.D
Als bottle: 6 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: 8082A.sub
Target Version: 4.14 Sample Matrix: WATER

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL (ng)	FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
5.446	5.410	0.036	25260	0.05517	0.55		
6 Aroclor-1016					CAS #: 12674-11-2		
7.396	7.371	0.025	11385	0.34532	3.4	80.00- 120.00	100.00
7.556	7.529	0.027	6341	0.35342	3.5	35.42- 75.42	55.70
7.671	7.644	0.027	3977	0.35592	3.6	15.05- 55.05	34.93
	Average of Peak Concentrations =				3.5		
8 Aroclor-1260					CAS #: 11096-82-5		
9.673	9.646	0.027	12201	0.33443	3.3	80.00- 120.00	100.00
9.749	9.721	0.028	11444	0.38124	3.8	73.75- 113.75	93.80
10.028	9.997	0.031	10653	0.38616	3.9	67.65- 107.65	87.31
	Average of Peak Concentrations =				3.7		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
12.310	12.262	0.048	44708	0.10254	1.0		

Data File: \\avogadro\organics\E2.i\130301R.B\E2L8869R.D
Date : 01-MAR-2013 15:25
Client ID: LCS-70682
Instrument: E2.i
Sample Info: LCS-70682,LCS-70682,70682,8082A.sub,,
Volume Injected (uL): 1.0
Operator: TM SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
LCSD-70682(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-70682

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2L8870F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 03/01/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/01/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	3.4	
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	3.3	

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
LCSD-70682(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0262 Mod. Ref No.: SDG No.: SM0262

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-70682

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2L8870R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 03/01/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/01/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	3.5	
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	3.7	

Data File: \\avogadro\organics\E2.i\130301F.B\E2L8870F.D
Report Date: 04-Mar-2013 12:49

Spectrum Analytical, Inc. RI Division

Quantitation Report

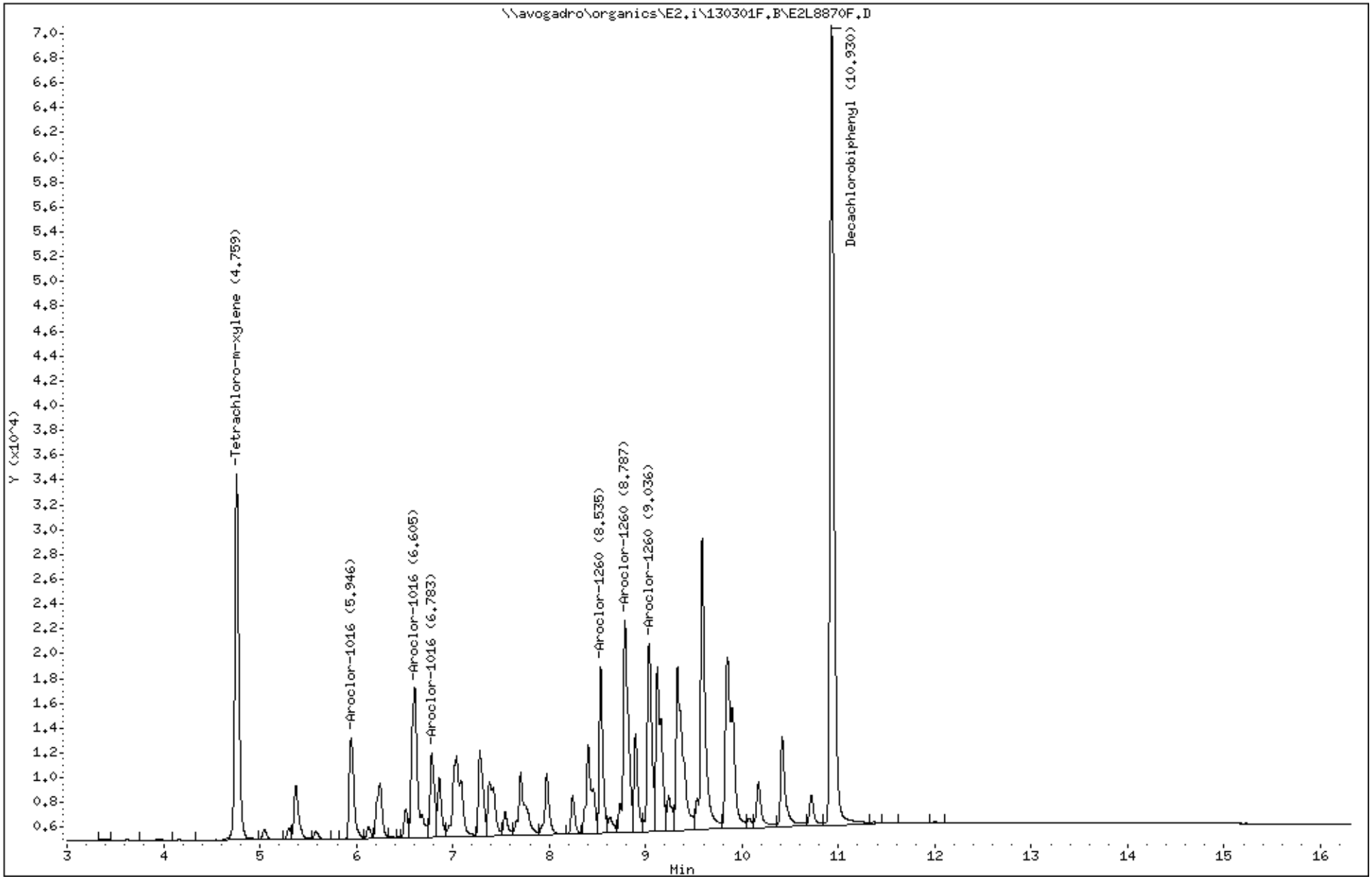
Data file : \\avogadro\organics\E2.i\130301F.B\E2L8870F.D
Lab Smp Id: LCSD-70682 Client Smp ID: LCSD-70682
Inj Date : 01-MAR-2013 15:44
Operator : TM   SRC: TM Inst ID: E2.i
Smp Info : LCSD-70682,LCSD-70682,70682,8082A.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130301F.B\E2_LL_PCB_F.m
Meth Date : 04-Mar-2013 08:24 tmcdaniel Quant Type: ESTD
Cal Date : 31-JAN-2013 09:14 Cal File: E2L8513F.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

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	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 (ng)	FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.758	4.725	0.033	29471	0.05244	0.52		
5 Aroclor-1016						CAS #: 12674-11-2	
5.946	5.914	0.032	8097	0.34213	3.4	80.00- 120.00	100.00
6.604	6.578	0.026	12094	0.34448	3.4	129.36- 169.36	149.36
6.783	6.754	0.029	6771	0.34793	3.5	63.62- 103.62	83.62
	Average of Peak Concentrations =				3.4		
9 Aroclor-1260						CAS #: 11096-82-5	
8.534	8.509	0.025	13392	0.33430	3.3	80.00- 120.00	100.00
8.787	8.760	0.027	16960	0.32851	3.3	106.64- 146.64	126.64
9.035	9.007	0.028	15052	0.32815	3.3	92.40- 132.40	112.40
	Average of Peak Concentrations =				3.3		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
10.930	10.896	0.034	1952217	0.09889	0.99		

Data File: \\avogadro\organics\E2.i\130301F.B\E2L8870F.D
Date : 01-MAR-2013 15:44
Client ID: LCSD-70682
Instrument: E2.i
Sample Info: LCSD-70682,LCSD-70682,70682,8082A.sub,,
Volume Injected (uL): 1.0
Operator: TM SRC: TM
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\130301R.B\E2L8870R.D
Report Date: 04-Mar-2013 12:50

Spectrum Analytical, Inc. RI Division

Quantitation Report

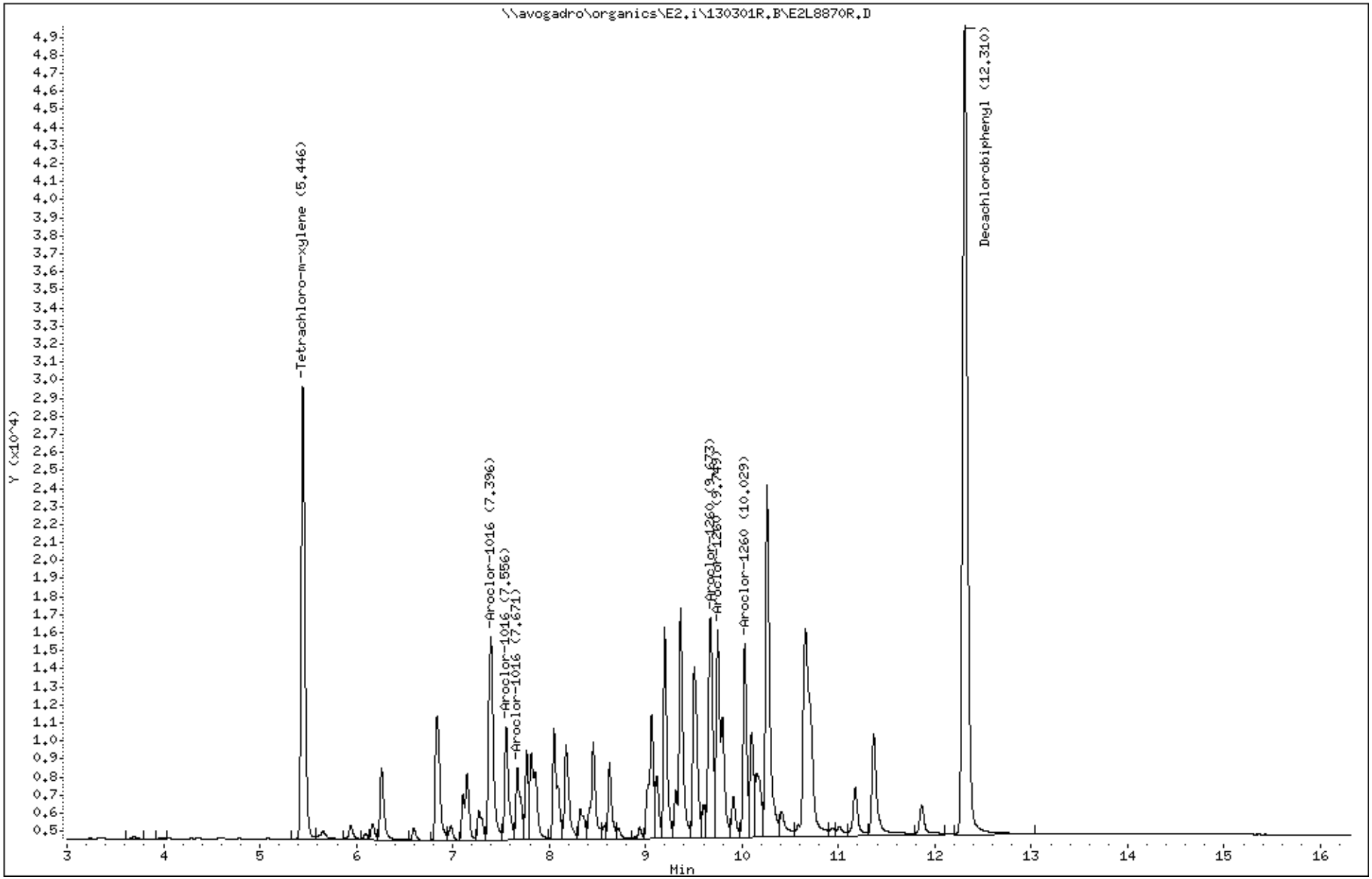
Data file : \\avogadro\organics\E2.i\130301R.B\E2L8870R.D
Lab Smp Id: LCSD-70682 Client Smp ID: LCSD-70682
Inj Date : 01-MAR-2013 15:44
Operator : TM   SRC: TM Inst ID: E2.i
Smp Info : LCSD-70682,LCSD-70682,70682,8082A.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\130301R.B\E2_LL_PCB_R.m
Meth Date : 04-Mar-2013 08:25 tmcdaniel Quant Type: ESTD
Cal Date : 31-JAN-2013 09:14 Cal File: E2L8513R.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

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	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 (ng)	FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
5.445	5.410	0.035	24911	0.05441	0.54		
6 Aroclor-1016					CAS #: 12674-11-2		
7.395	7.371	0.024	11295	0.34259	3.4	80.00- 120.00	100.00
7.555	7.529	0.026	6260	0.34890	3.5	35.42- 75.42	55.42
7.670	7.644	0.026	3959	0.35431	3.5	15.05- 55.05	35.05
		Average of Peak Concentrations =			3.5		
8 Aroclor-1260					CAS #: 11096-82-5		
9.672	9.646	0.026	12204	0.33451	3.3	80.00- 120.00	100.00
9.749	9.721	0.028	11441	0.38114	3.8	73.75- 113.75	93.75
10.028	9.997	0.031	10697	0.38775	3.9	67.65- 107.65	87.65
		Average of Peak Concentrations =			3.7		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
12.310	12.262	0.048	44833	0.10282	1.0		

Data File: \\avogadro\organics\E2.i\130301R.B\E2L8870R.D
Date : 01-MAR-2013 15:44
Client ID: LCSD-70682 Instrument: E2.i
Sample Info: LCSD-70682,LCSD-70682,70682,8082A.sub,,
Volume Injected (uL): 1.0 Operator: TM SRC: TM
Column phase: CLPPestII Column diameter: 0.32



Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

PREP BATCH REPORT

Prep Start Date: **03/01/2013 08:29**
Prep End Date: **03/01/2013 14:10**
Prep Code: **PCB_W_PR**
Prep Type: **SEPF/SW3510C**
Prep Factor Units: **mL / mL**
Prep Batch ID: **70682**
Technician: **Jodie B Warner**

QC Matrix: NA2SO4
QC Matrix Lot: 121756
Solvent (1): MECL2
Solvent (1) Lot: DH 299
Solvent (3): N/A
Solvent (3) Lot: N/A
Solvent (5): N/A
Solvent (5) Lot: N/A
Clean Up (1): N/A
Clean Up (1) Lot: N/A
Clean Up (3): N/A
Clean Up (1) Lot: N/A

Filter?: FILTER
Filter Lot: FC003203
Solvent (2): HEXANE
Solvent (2) Lot: DH 335
Solvent (4): N/A
Solvent (4) Lot: N/A
Solvent (6): N/A
Solvent (6) Lot: N/A
Clean Up (2): N/A
Clean Up (2) Lot: N/A
Clean Up (4): N/A
Clean Up (4) Lot: N/A

Start Time: N/A
End Time: N/A
Cycles/Hour 0
Sonicator Tuned? N/A
Bath Temp1 (C): N/A
Therm ID1: N/A

Mitkem Sample ID	Client Samp ID	M	Initial (mL/g)	Final (mL)	Surrogate Spike ID	Surr (mL)	LCS/D MS/D Spike ID	Spike (mL)	A* Init	W* Init	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11	pH <2	CNCNTR Unit
MB-70682	BatchQC		1000	10	OPW121010A	1			JBW	TM			03/01/13	JBW	R21	7.0	☐	☐	Turbo Vap 1
CLEAN UP (MB-70682): SW3665A/ACID_130301A (LOT: B00M5126) /jwarner, SW3660B/CU_130301A (LOT: MKBH2986V) /jwarner																			
LCS-70682	BatchQC		1000	10	OPW121010A	1	OPW121203B	1	JBW	TM			03/01/13	JBW	R21	7.0	☐	☐	Turbo Vap 1
CLEAN UP (LCS-70682): SW3665A/ACID_130301A (LOT: B00M5126) /jwarner, SW3660B/CU_130301A (LOT: MKBH2986V) /jwarner																			
LCSD-70682	BatchQC		1000	10	OPW121010A	1	OPW121203B	1	JBW	TM			03/01/13	JBW	R21	7.0	☐	☐	Turbo Vap 1
CLEAN UP (LCSD-70682): SW3665A/ACID_130301A (LOT: B00M5126) /jwarner, SW3660B/CU_130301A (LOT: MKBH2986V) /jwarner																			
M0262-01B	DIRECT DISCHARGE	A	1000	10	OPW121010A	1			JBW	TM	03/12/13	01	03/01/13	JBW	R21	7.0	☐	☐	Turbo Vap 1
CLEAN UP (M0262-01B): SW3665A/ACID_130301A (LOT: B00M5126) /jwarner, SW3660B/CU_130301A (LOT: MKBH2986V) /jwarner																			

Jodie B Warner — 03/01/2013
Analyst Reviewed — Date

Timothy McDaniel — 03/01/2013
Manager Reviewed — Date

Comments:

*A = Analyst (Spiked) *W = Witnessed (Spike) *T = Transferred

PEST LCS Spike Std ID: Vol. Spiked: Sulfuric Acid lot# Soxhlet Cycle/Hour:

PCB LCS Spike Std ID: Vol. Spiked: Sulfur cleanup Copper lot # Sonicator Tuned? Yes/No

Reviewed By:

VW 3/1/13

Logbook ID: 50.0149-02/13

Spectrum Analytical, Inc. RI Division - PEST/PCB RUN LOGBOOK: INSTRUMENT E2

Spectrum Analytical, Inc. RI Division E2 Injection Log
GC Semivolatiles Laboratory

METHOD: 8082
ICAL DATE: 1/31/13

ANALYST: TM/GMA

START BATCH: 130130AF.B
END BATCH: 130130AF.B

Start: 30-JAN-13 18:39
End: 31-JAN-13 09:14

8082 ICAL

Internal Standard:
Comments:

Inlet Maintenance By:
Liner :
Column :
Inlet Seal:
Septum :

Reviewed By: C 1/31/13

Manual Integration: NA

MI Review: NA

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	SURROGATES FRONT TCMX	SURROGATES FRONT DCB	SURROGATES REAR TCMX	SURROGATES REAR DCB	DILN	FLAGS F	FLAGS R	ANALYST CHECK F	ANALYST CHECK R	COMMENTS
E2L8485F/R	18:39	AIBLKAA	AIBLKAA		AQ	113	61	0*	0*	1					
E2L8486F/R	18:59	AR12213A2	AR12213A2		AQ					1					PW121221 A C
E2L8487F/R	19:19	AR12323A2	AR12323A2		AQ					1					Z
E2L8488F/R	19:38	AR12421A2	AR12421A2		AQ					1					K
E2L8489F/R	19:58	AR12426A2	AR12426A2		AQ					1					L
E2L8490F/R	20:18	AR12422A2	AR12422A2		AQ					1					H
E2L8491F/R	20:38	AR12423A2	AR12423A2		AQ					1					G
E2L8492F/R	20:57	AR12424A2	AR12424A2		AQ					1					Q
E2L8493F/R	21:17	AR12425A2	AR12425A2		AQ					1					P
E2L8494F/R	21:37	AR12481A2	AR12481A2		AQ					1					O
E2L8495F/R	21:57	AR12486A2	AR12486A2		AQ					1					N
E2L8496F/R	22:17	AR12482A2	AR12482A2		AQ					1					M
E2L8497F/R	22:36	AR12483A2	AR12483A2		AQ					1					C
E2L8498F/R	22:56	AR12484A2	AR12484A2		AQ					1					W
E2L8499F/R	23:15	AR12485A2	AR12485A2		AQ					1					V
E2L8500F/R	23:35	AR12541A2	AR12541A2		AQ					1					U
E2L8501F/R	23:55	AR12546A2	AR12546A2		AQ					1					T
E2L8502F/R	00:14	AR12542A2	AR12542A2		AQ					1					S
E2L8503F/R	00:34	AR12543A2	AR12543A2		AQ					1					R
E2L8504F/R	00:54	AR12544A2	AR12544A2		AQ					1					X
E2L8505F/R	01:14	AR12545A2	AR12545A2		AQ					1					Y
E2L8506F/R	01:33	AR12623A2	AR12623A2		AQ					1					E
E2L8507F/R	01:53	AR12683A2	AR12683A2		AQ					1					F
E2L8508F/R	02:13	AR16601A2	AR16601A2		AQ					1					G
E2L8509F/R	02:33	AR16606A2	AR16606A2		AQ					1					B
E2L8510F/R	02:52	AR16602A2	AR16602A2		AQ					1					A
E2L8511F/R	08:35	AR16603A2	AR16603A2		AQ					1					PW121221 — C

* power outage - restarted 1/31/13 am 1/31/13

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

TM 1/31/13

Spectrum Analytical, Inc. RI Division - PEST/PCB RUN LOGBOOK: INSTRUMENT E2

Spectrum Analytical, Inc. RI Division E2 Injection Log
GC Semivolatiles Laboratory

METHOD: 8082
ICAL DATE: 1/31/13

ANALYST: TM/SMA

START BATCH: 130130AF.B Start: 30-JAN-13 18:39
END BATCH: 130130AF.B End: 31-JAN-13 09:14

Internal Standard:
Comments:

Inlet Maintenance By:
Liner : NA
Column :
Inlet Seal:
Septum :

Reviewed By: 1/31/13 Manual Integration: NA MI Review: NA

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	SURROGATES FRONT TCMX	SURROGATES FRONT DCB	SURROGATES REAR TCMX	SURROGATES REAR DCB	DILN	FLAGS F	FLAGS R	ANALYST CHECK F	ANALYST CHECK R	COMMENTS
E2L8512F/R	08:54	AR16604A2	AR16604A2		AQ					1					
E2L8513F/R	09:14	AR16605A2	AR16605A2		AQ					1					
E2L8514F/R	09:34	AR1660ICVAY	AR1660ICVAY		AQ					1					

E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
* - Surrogate is outside of control limits
D - Surrogate is diluted

Comments

Reviewed

TM 1/31/13

Spectrum Analytical, Inc. RI Division - PEST/PCB RUN LOGBOOK: INSTRUMENT E2

M0262

Spectrum Analytical, Inc. RI Division E2 Injection Log
GC Semivolatiles Laboratory

METHOD: 8082
ICAL DATE: 1/31/13

ANALYST: TM/GA

START BATCH: 130130AF.B Start: 31-JAN-13 09:53
END BATCH: 130130AF.B End: 31-JAN-13 20:45

Internal Standard:
Comments:

STDS on Pg. 80

Inlet Maintenance By:
Liner :
Column :
Inlet Seal: I
Septum :

Reviewed By: _____ Manual Integration: NA MI Review: NA

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	SURROGATES FRONT TCMX	SURROGATES FRONT DCB	SURROGATES REAR TCMX	SURROGATES REAR DCB	DILN	FLAGS F	FLAGS R	ANALYST CHECK F	ANALYST CHECK R	COMMENTS
E2L8515F/R	09:53	AIBLKAA	AILBKAA		AQ					1			✓	✓	
E2L8516F/R	10:13	AR16603AA	AR16603AA		AQ					1			✓	✓	
E2L8517F/R	10:33	AR12423AA	AR12423AA		AQ					1			✓	✓	
E2L8518F/R	10:52	AR12483AA	AR12483AA		AQ					1			✓	✓	
E2L8519F/R	11:12	AR12543AA	AR12543AA		AQ					1			✓	✓	
E2L8520F/R	11:32	MB-70270	MB-70270	70270	AQ	84	83	84	81	1			✓		
E2L8521F/R	11:52	LCS-70270	LCS-70270	70270	AQ	92	88	92	87	1			✓		
E2L8522F/R	12:12	LCSD-70270	LCSD-70270	70270	AQ	83	81	83	80	1			✓		
E2L8523F/R	12:31	M0085-54A	40100305BXX	70270	AQ	39	43	39	43	1			✓	✓	
E2L8524F/R	12:51	AIBLKAA	AILBKAA		AQ					1			✓	✓	
E2L8525F/R	13:10	AR16603AB	AR16603AB		AQ					1			✓	✓	
E2L8526F/R	13:30	AR12423AB	AR12423AB		AQ					1			✓	✓	
E2L8527F/R	13:50	AR12483AB	AR12483AB		AQ					1			✓	✓	
E2L8528F/R	14:09	AR12543AB	AR12543AB		AQ					1			✓	✓	
E2L8529F/R	14:29	MB-70272	MB-70272		AQ					1			✓		
E2L8530F/R	14:49	LCS-70272	LCS-70272		AQ					1			✓		
E2L8531F/R	15:09	LCSD-70272	LCSD-70272		AQ					1			✓		
E2L8532F/R	15:28	M0079-01A	CWPOST-TRACK SA	70272	SL	57	55*	58	48*	1			✓		48/54
E2L8533F/R	15:48	AIBLKAA	AILBKAA		AQ					1			—	—	
E2L8534F/R	16:08	AIBLKAA	AILBKAA		AQ					1			—	—	
E2L8535F/R	16:27	AIBLKAA	AILBKAA		AQ					1			—	—	
E2L8536F/R	16:47	AIBLKAA	AILBKAA		AQ					1			—	—	
E2L8537F/R	17:07	AIBLKAA	AILBKAA		AQ					1			—	—	
E2L8538F/R	17:27	MB-70225	MB-70225	70225	AQ	94	69	95	72	1			✓	✓	
E2L8539F/R	17:47	M0035-01A	LOD AQ	70225	AQ	12*	11*	12*	12*	1			✓	✓	
E2L8540F/R	18:06	M0035-03A	LOQ AQ	70225	AQ	12*	11*	12*	12*	1			✓	✓	
E2L8541F/R	18:26	MB-70227	MB-70227	70227	SL	95	74	96	78	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

TM 2/1/13

Spectrum Analytical, Inc. RI Division - PEST/PCB RUN LOGBOOK: INSTRUMENT E2

M0262

Spectrum Analytical, Inc. RI Division E2 Injection Log
GC Semivolatiles Laboratory

METHOD: 8082
ICAL DATE: 1/31/13

ANALYST: TM/GA

START BATCH: 130130AF.B Start: 31-JAN-13 09:53
END BATCH: 130130AF.B End: 31-JAN-13 20:45

Inlet Maintenance By:
Liner :
Column :
Inlet Seal:
Septum :

Internal Standard:
Comments: STDS on Pg 80

Reviewed By: _____ Manual Integration: NA MI Review: NA

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	SURROGATES FRONT TCMX	SURROGATES FRONT DCB	SURROGATES REAR TCMX	SURROGATES REAR DCB	DILN	FLAGS F	FLAGS R	ANALYST CHECK F	ANALYST CHECK R	COMMENTS
E2L8542F/R	18:46	M0035-02A	LOD SOIL	70227	SL	10*	10*	10*	11*	1			✓		
E2L8543F/R	19:06	M0035-04A	LOQ SOIL	70227	SL	10*	11*	10*	11*	1			✓		
E2L8544F/R	19:26	AIBLKAC	AILBKAC		AQ					1			✓	✓	
E2L8545F/R	19:45	AR16603AC	AR16603AC		AQ					1			✓	✓	
E2L8546F/R	20:05	AR12423AC	AR12423AC		AQ					1			✓	✓	
E2L8547F/R	20:25	AR12483AC	AR12483AC		AQ					1			✓	✓	
E2L8548F/R	20:45	AR12543AC	AR12543AC		AQ					1			✓	✓	

E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
* - Surrogate is outside of control limits
D - Surrogate is diluted

Comments

TM 2/1/13

Reviewed_____

Spectrum Analytical, Inc. RI Division - PEST/PCB RUN LOGBOOK: INSTRUMENT E2

Spectrum Analytical, Inc. RI Division E2 Injection Log
GC Semivolatiles Laboratory

METHOD: E608_PCB ~~8082~~ TM 3/4/13
ICAL DATE: 1/31/13
ANALYST: TM

START BATCH: 130301F.B Start: 01-MAR-13 13:05
END BATCH: 130301F.B End: 01-MAR-13 17:43

Internal Standard:
Comments: STD's on Pg 80

Inlet Maintenance By:
Liner :
Column :
Inlet Seal: L
Septum :

Reviewed By: C 3/4/13 Manual Integration: NA MI Review: NA

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	SURROGATES FRONT TCMX	SURROGATES FRONT DCB	SURROGATES REAR TCMX	SURROGATES REAR DCB	DILN	FLAGS F	FLAGS R	ANALYST CHECK F	ANALYST CHECK R	COMMENTS
E2L8863F/R	13:05	AIBLKAD	AILBKAD		AQ					1				✓	
E2L8864F/R	13:24	AR16603AD	AR16603AD		AQ					1			✓	✓	
E2L8865F/R	13:44	AR12423AD	AR12423AD		AQ					1			✓	✓	
E2L8866F/R	14:04	AR12483AD	AR12483AD		AQ					1			✓	✓	
E2L8867F/R	14:24	AR12543AD	AR12543AD		AQ					1			✓	✓	
E2L8868F/R	15:05	MB-70682	MB-70682	70682	AQ	93	86	97	89	1				✓	
E2L8869F/R	15:25	LCS-70682	LCS-70682	70682	AQ	88	83	92	85	1				✓	
E2L8870F/R	15:44	LCSD-70682	LCSD-70682		AQ					1				✓	
E2L8871F/R	16:04	M0262-01B	DIRECT DISCHARG	70682	AQ	80	65	84	69	1				✓	
E2L8872F/R	16:24	AIBLKAE	AILBKAE		AQ					1				✓	
E2L8873F/R	16:44	AR16603AE	AR16603AE		AQ					1			✓	✓	
E2L8874F/R	17:03	AR12423AE	AR12423AE		AQ					1			✓	✓	
E2L8875F/R	17:23	AR12483AE	AR12483AE		AQ					1			✓	✓	
E2L8876F/R	17:43	AR12543AE	AR12543AE		AQ					1			✓	✓	

E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
* - Surrogate is outside of control limits
D - Surrogate is diluted

Reviewed

TM 3/4/13

* Metals *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Stand By-Monoco

Laboratory Workorder / SDG #: M0262

EPA 200.7, EPA 245.1

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: EPA 200.7, EPA 245.1

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: 200.7, and SW7470A.

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):

A matrix spike was not performed on any sample in this SDG.

D. Post Digestion Spike (PDS):

A post-digestion spike was not performed on any sample in this SDG.

E. Duplicate sample:

A duplicate analysis was not performed on any sample in this SDG.

F. Serial Dilution (SD):

A serial dilution was not performed on any sample in this SDG.

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: 03/12/13

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.

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: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0262

SOW No.: MCAWW

EPA Sample No.	Lab Sample ID
DIRECT DISCHARGE 2	M0262-01

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: Sharyn B Lawler Name: Sharyn B Lawler

Date: 3/12/13 Title: QAO

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

DIRECT DISCHARGE 2

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0262

Matrix (soil/water): WATER Lab Sample ID: M0262-01

Level (low/med): LOW Date Received: 02/28/2013

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	7.0	U		P
7440-38-2	Arsenic	5.2	U		P
7440-41-7	Beryllium	0.063	U		P
7440-43-9	Cadmium	0.19	U		P
7440-47-3	Chromium	1.3	B		P
7440-50-8	Copper	2.7	B		P
7439-92-1	Lead	5.3	B		P
7439-97-6	Mercury	0.032	B		CV
7440-02-0	Nickel	1.1	B		P
7782-49-2	Selenium	14.0	U		P
7440-22-4	Silver	0.75	U		P
7440-28-0	Thallium	7.0	U		P
7440-66-6	Zinc	15.5	B		P

Comments:

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0262

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
	03/04/13 14:57				03/04/13 15:15		03/04/13 15:33		
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Mercury	5.0	4.51	90.1	5.0	4.55	91.0	4.55	91.1	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: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0262

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
					03/04/13 15:52				
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Mercury				5.0	4.51	90.2			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: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0262

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
	03/01/13 13:08				03/01/13 13:26		03/01/13 13:54		
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Antimony	500.0	513.24	102.6	500.0	510.03	102.0	522.50	104.5	P
Arsenic	500.0	488.39	97.7	500.0	481.02	96.2	485.16	97.0	P
Beryllium	250.0	246.84	98.7	250.0	245.53	98.2	248.60	99.4	P
Cadmium	250.0	239.93	96.0	250.0	238.71	95.5	240.66	96.3	P
Chromium	1000.0	992.53	99.3	1000.0	992.24	99.2	997.87	99.8	P
Copper	1250.0	1213.02	97.0	1250.0	1207.05	96.6	1214.30	97.1	P
Lead	500.0	492.92	98.6	500.0	489.80	98.0	492.47	98.5	P
Nickel	2500.0	2467.58	98.7	2500.0	2459.66	98.4	2478.25	99.1	P
Selenium	500.0	479.43	95.9	500.0	479.03	95.8	476.00	95.2	P
Silver	1250.0	1247.10	99.8	1250.0	1241.51	99.3	1247.16	99.8	P
Thallium	500.0	472.58	94.5	500.0	467.98	93.6	472.72	94.5	P
Zinc	2500.0	2517.05	100.7	2500.0	2504.97	100.2	2522.19	100.9	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: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0262

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-70716**

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

FIMS2_130304B

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 03/04/13 15:17	C	03/04/13 15:35	C	03/04/13 15:53	C	Preparation Blank	C	M
Mercury	0.030	U	0.030	U	0.032	B	0.036	B	0.030	U	CV

U.S. EPA - CLP

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0262

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-70686**

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

OPTIMA3_130301B

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 03/01/13 13:30	C	03/01/13 13:58	C		C	Preparation Blank	C	M
Antimony	7.0	U	7.0	U	7.0	U			7.000	U	P
Arsenic	5.2	U	5.2	U	5.2	U			5.200	U	P
Beryllium	0.1	U	0.1	U	0.1	U			0.063	U	P
Cadmium	0.2	U	0.2	U	0.2	U			0.190	U	P
Chromium	0.4	U	0.4	U	0.4	U			0.390	U	P
Copper	1.1	U	1.1	U	1.1	U			1.100	U	P
Lead	2.4	U	2.4	U	2.4	U			2.400	U	P
Nickel	0.8	U	0.8	U	0.8	U			0.810	U	P
Selenium	14.0	U	14.0	U	14.0	U			14.000	U	P
Silver	0.8	U	0.8	U	0.8	U			0.750	U	P
Thallium	7.0	U	7.0	U	7.0	U			7.000	U	P
Zinc	1.0	U	1.0	U	1.0	U			1.000	U	P

U.S. EPA - CLP

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0262

ICP ID Number: OPTIMA3 ICS Source:

Concentration Units: ug/L

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	Initial Found %R	Final Found Sol. A	Final Found %R	Final Found Sol. AB	Final Found %R
Antimony	0	600	6	661.9	110.3				
Arsenic	0	100	-7	89	89.0				
Beryllium	0	500	0	511.7	102.3				
Cadmium	0	1000	-8	947.8	94.8				
Chromium	0	500	-1	500.4	100.1				
Copper	0	500	19	557	111.4				
Lead	0	500	2	483.1	96.6				
Nickel	0	1000	0	928.5	92.8				
Selenium	0	500	4	513	102.6				
Silver	0	200	-2	224.1	112.1				
Thallium	0	100	17	99.6	99.6				
Zinc	0	1000	7	977.2	97.7				

U.S. EPA - CLP

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LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0262

Solid LCS Source:

Aqueous LCS Source:

LCS(D) ID:
LCS-70686

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Antimony	100.0	93.48	93.5						
Arsenic	40.0	40.08	100.2						
Beryllium	50.0	49.16	98.3						
Cadmium	50.0	49.61	99.2						
Chromium	200.0	202.03	101.0						
Copper	250.0	241.59	96.6						
Lead	20.0	20.17	100.9						
Nickel	500.0	513.57	102.7						
Selenium	50.0	48.87	97.7						
Silver	50.0	50.20	100.4						
Thallium	50.0	49.77	99.5						
Zinc	500.0	504.96	101.0						

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LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0262

Solid LCS Source:

Aqueous LCS Source:

LCS(D) ID:
LCS-70716

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Mercury	4.6	4.31	93.7						

U.S. EPA - CLP

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LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0262

Solid LCS Source:

Aqueous LCS Source:

LCS(D) ID:
LCSD-70686

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Antimony	100.0	97.54	97.5						
Arsenic	40.0	39.45	98.6						
Beryllium	50.0	48.38	96.8						
Cadmium	50.0	49.65	99.3						
Chromium	200.0	199.54	99.8						
Copper	250.0	233.29	93.3						
Lead	20.0	20.55	102.8						
Nickel	500.0	506.04	101.2						
Selenium	50.0	56.94	113.9						
Silver	50.0	50.07	100.1						
Thallium	50.0	50.60	101.2						
Zinc	500.0	498.40	99.7						

U.S. EPA - CLP

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METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0262

Instrument Type: CV InstrumentID: FIMS2 Date: 11/21/2012

Preparation Method: 7470A

Concentration Units (ug/L or mg/kg): ug/L

Analyte	Wavelength /Mass	CRDL	MDL
Mercury	253.70	0.2	0.030

Comments:

U.S. EPA - CLP

10

METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0262

Instrument Type: P InstrumentID: OPTIMA3 Date: 11/08/2012

Preparation Method: 200.7

Concentration Units (ug/L or mg/kg): ug/L

Analyte	Wavelength /Mass	CRDL	MDL
Antimony	206.83	20	7.0
Arsenic	188.98	20	5.2
Beryllium	313.11	5.0	0.063
Cadmium	226.50	5.0	0.19
Chromium	267.72	20	0.39
Copper	324.75	30	1.1
Lead	220.35	10	2.4
Nickel	231.60	50	0.81
Selenium	196.03	30	14.0
Silver	328.07	30	0.75
Thallium	190.80	20	7.0
Zinc	206.20	50	1.0

Comments:

U.S. EPA - CLP

11A

ICP INTERELEMENT CORRECTION FACTORS (BIANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0262

ICP ID Number: OPTIMA3 Date: 11/7/2012

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	Co
Aluminum	308.21		0.0585331	0.0000000	0.0000000	-0.7027870
Antimony	206.83	0.0522943	0.0000000	0.0525467	0.0145567	0.0000000
Arsenic	188.97	0.0241171	-0.0077344	-0.0478283	-0.0039833	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	0.0040368	0.0744906	0.0000000	-0.0756648
Calcium	227.54	0.0000000		8.3821200	0.0000000	209.5650000
Chromium	267.71	0.0081667	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	-0.1872920	0.0000000	-0.4130330
Iron	273.95	0.0682328	0.0000000		0.0391966	0.0000000
Lead	220.35	-0.0821620	-0.0055228	0.0335782	0.0000000	-0.1096090
Magnesium	279.07	0.0000000	0.0000000	0.0000000		0.0000000
Manganese	257.61	0.0000000	0.0000000	-0.0413970	0.0352841	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.2556440
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	-0.0242802	0.0502104	-0.4325050	0.0000000	-0.3577810
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	0.0153318	-0.0250019	-0.0714984	-0.0086936	5.2953500
Titanium	334.94	0.0000000	-0.0153022	0.0000000	0.0341230	0.0000000
Vanadium	292.40	0.0000000	0.0000000	-0.0658048	0.0000000	0.0000000
Zinc	206.20	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Comments:

U.S. EPA - CLP

11B

ICP INTERELEMENT CORRECTION FACTORS (BIANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0262

ICP ID Number: OPTIMA3 Date: 11/7/2012

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	21.5747000	0.1303100	0.1684320	0.0443957	0.1148900
Arsenic	188.97	-7.7014200	0.2019220	0.2145950	0.0000000	0.1995490
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	-0.3441500	0.0000000
Calcium	227.54	0.0000000	0.0000000	0.0000000	15.0602000	0.0000000
Chromium	267.71		0.0000000	0.5781390	0.0000000	0.0000000
Cobalt	228.61	-0.3914380	0.0000000	0.0000000	0.2408380	0.0000000
Copper	324.75	0.0000000		0.0000000	0.0000000	0.0000000
Iron	273.95	-2.0394800	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.1149420	0.4621410	0.0947287	-0.1357850	0.0000000
Magnesium	279.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	-0.1052400	0.0000000		0.0378220	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000		0.7769590
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	0.0000000	0.0000000	0.7938440	0.0000000	0.3690520
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	0.2843500	0.0000000	1.0309800	0.0000000	
Titanium	334.94	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	-1.7001100	0.2083860	0.0000000	0.0000000	0.0000000
Zinc	206.20	-5.7314500	0.0000000	0.0000000	0.0000000	0.0000000

Comments:

U.S. EPA - CLP

11B

ICP INTERELEMENT CORRECTION FACTORS (BIANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0262

ICP ID Number: OPTIMA3 Date: 11/7/2012

Analyte	Wave-length (nm)	Interelement Correction Factors for: Ti	V	___	___	___
Aluminum	308.21	0.0000000	14.2071000			
Antimony	206.83	-0.2405290	-2.4680100			
Arsenic	188.97	0.0000000	0.1479080			
Barium	233.52	0.0000000	-1.3917200			
Beryllium	313.10	-2.5167800	-0.0413497			
Cadmium	226.50	0.0000000	0.0000000			
Calcium	227.54	0.0000000	27.7999000			
Chromium	267.71	0.0000000	-0.4798520			
Cobalt	228.61	1.2779000	0.0000000			
Copper	324.75	0.0000000	-0.2857860			
Iron	273.95	0.0000000	72.6664000			
Lead	220.35	-0.6420210	-0.0616236			
Magnesium	279.07	0.0000000	0.0000000			
Manganese	257.61	0.0000000	-0.0885484			
Nickel	231.60	0.6039130	0.0000000			
Potassium	766.49	0.0000000	0.0000000			
Selenium	196.02	0.0000000	0.4095350			
Silver	328.06	0.0000000	-0.9558910			
Sodium	589.59	0.0000000	0.0000000			
Thallium	190.80	0.7780200	3.9877300			
Titanium	334.94		0.0000000			
Vanadium	292.40	0.7592830				
Zinc	206.20	0.0000000	0.0000000			

Comments:

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ICP LINEAR RANGES (BIANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0262

ICP ID Number: OPTIMA3 Date: 11/7/2012

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Antimony	0.20	50000	P
Arsenic	0.20	50000	P
Beryllium	0.20	10000	P
Cadmium	0.20	50000	P
Chromium	0.20	50000	P
Copper	0.20	50000	P
Lead	0.20	100000	P
Nickel	0.20	100000	P
Selenium	0.20	50000	P
Silver	0.20	2500	P
Thallium	0.20	50000	P
Zinc	0.20	50000	P

Comments:

U.S. EPA - CLP

13

PREPARATION LOG

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0262

Preparation Method: 200.7 Batch ID: 70686

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
DIRECT DISCHARGE 2	03/01/2013		50
LCSW	03/01/2013		50
LCSW02	03/01/2013		50
PBW	03/01/2013		50

Comments:

U.S. EPA - CLP

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PREPARATION LOG

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0262

Preparation Method: 7470A Batch ID: 70716

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
CCB	03/04/2013		100
CCV	03/04/2013		100
ICB	03/04/2013		100
ICV	03/04/2013		100
S0	03/04/2013		100
S0.2	03/04/2013		100
S1.0	03/04/2013		100
S10.0	03/04/2013		100
S2.0	03/04/2013		100
S5.0	03/04/2013		100
DIRECT DISCHARGE 2	03/04/2013		100
LCSW	03/04/2013		100
PBW	03/04/2013		100

Comments:

U.S. EPA - CLP

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ANALYSIS RUN LOG

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0262

Instrument ID Number: FIMS2 Method: CV

Start Date: 03/04/2013 End Date: 03/04/2013

FIMS2_130304B

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CO	CR	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.0	1447																X									
S0.2	1.0	1448																X									
S1.0	1.0	1450																X									
S2.0	1.0	1452																X									
S5.0	1.0	1453																X									
S10.0	1.0	1455																X									
ICV	1.0	1457																X									
ICB	1.0	1458																X									
PBW	1.0	1500																X									
LCSW	1.0	1502																X									
ZZZZZZ	1.0	1503																									
ZZZZZZ	1.0	1505																									
ZZZZZZ	1.0	1507																									
ZZZZZZ	1.0	1508																									
ZZZZZZ	1.0	1510																									
ZZZZZZ	1.0	1512																									
ZZZZZZ	1.0	1513																									
CCV	1.0	1515																X									
CCB	1.0	1517																X									
ZZZZZZ	1.0	1518																									
ZZZZZZ	1.0	1520																									
ZZZZZZ	1.0	1522																									
ZZZZZZ	1.0	1523																									
ZZZZZZ	1.0	1525																									
ZZZZZZ	1.0	1527																									
ZZZZZZ	1.0	1528																									
ZZZZZZ	1.0	1530																									
ZZZZZZ	1.0	1532																									
CCV	1.0	1533																X									
CCB	1.0	1535																X									
ZZZZZZ	1.0	1537																									
ZZZZZZ	1.0	1538																									

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ANALYSIS RUN LOG

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0262

Instrument ID Number: FIMS2 Method: CV

Start Date: 03/04/2013 End Date: 03/04/2013

FIMS2_130304B

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CO	CR	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.0	1540																										
ZZZZZZ	1.0	1542																										
ZZZZZZ	1.0	1543																										
ZZZZZZ	1.0	1545																										
ZZZZZZ	1.0	1547																										
DIRECT DISCHARGE 2	1.0	1548																X										
ZZZZZZ	1.0	1550																										
CCV	1.0	1552																X										
CCB	1.0	1553																X										

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14

ANALYSIS RUN LOG

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0262

Instrument ID Number: OPTIMA3 Method: P

Start Date: 03/01/2013 End Date: 03/01/2013

OPTIMA3_130301B

EPA Sample No.	D/F	Time	% R	Analytes																									
				AL	SB	AS	BA	BE	CD	CA	CO	CR	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.0	1254			X	X		X	X			X	X		X				X		X	X		X		X	
S1	1.0	1258			X	X		X	X			X	X		X				X		X	X		X		X	
S2	1.0	1301			X	X		X	X			X	X		X				X		X	X		X		X	
S3	1.0	1305			X	X		X	X			X	X		X				X		X	X		X		X	
ICV	1.0	1308			X	X		X	X			X	X		X				X		X	X		X		X	
ICB	1.0	1312			X	X		X	X			X	X		X				X		X	X		X		X	
ZZZZZZ	1.0	1315																											
ICSA	1.0	1319			X	X		X	X			X	X		X				X		X	X		X		X	
ICSAB	1.0	1323			X	X		X	X			X	X		X				X		X	X		X		X	
CCV	1.0	1326			X	X		X	X			X	X		X				X		X	X		X		X	
CCB	1.0	1330			X	X		X	X			X	X		X				X		X	X		X		X	
PBW	1.0	1333			X	X		X	X			X	X		X				X		X	X		X		X	
LCSW	1.0	1337			X	X		X	X			X	X		X				X		X	X		X		X	
LCSW02	1.0	1340			X	X		X	X			X	X		X				X		X	X		X		X	
ZZZZZZ	1.0	1344																											
ZZZZZZ	1.0	1347																											
DIRECT DISCHARGE 2	1.0	1351			X	X		X	X			X	X		X				X		X	X		X		X	
CCV	1.0	1354			X	X		X	X			X	X		X				X		X	X		X		X	
CCB	1.0	1358			X	X		X	X			X	X		X				X		X	X		X		X	

Instrument Raw Data

==========

Reprocessing Begun
Logged In Analyst: mitOptima3 **Technique: ICP Continuous**

Results Data Set (original): B13030102
Results Library (original): C:\pe\Administrator\Results\Results.mdb
Results Data Set (reprocessed): B13030102A
Results Library (reprocessed): C:\pe\Administrator\Results\Results.mdb

==========

Sequence No.: 1 **Autosampler Location: 1**
Sample ID: S0 **Date Collected: 3/1/2013 12:54:46 PM**
Analyst: **Data Type: Reprocessed on 3/1/2013 3:24:08 PM**
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	1863668.9	7898.36	0.42%	100.00	%
Lu 261.542	1236248.9	5954.98	0.48%	100.0	%
Ag 328.068†	-5287.6	28.54	0.54%	[0.00]	mg/L
Al 308.215†	6902.8	109.86	1.59%	[0.00]	mg/L
As 188.979†	7.0	5.34	76.41%	[0.00]	mg/L
Ba 233.527†	-213.0	5.89	2.77%	[0.00]	mg/L
Be 313.107†	-1324.2	49.75	3.76%	[0.00]	mg/L
Co 228.616†	-91.5	6.91	7.55%	[0.00]	mg/L
Cr 267.716†	79.9	23.41	29.30%	[0.00]	mg/L
Cu 324.752†	3164.8	46.68	1.48%	[0.00]	mg/L
Fe 273.955†	-1141.4	26.83	2.35%	[0.00]	mg/L
Mg 279.077†	-1231.0	56.68	4.60%	[0.00]	mg/L
Mn 257.610†	-296.9	76.12	25.63%	[0.00]	mg/L
Ni 231.604†	-104.0	4.32	4.16%	[0.00]	mg/L
Pb 220.353†	9.7	4.06	41.64%	[0.00]	mg/L
Sb 206.836†	86.9	6.10	7.02%	[0.00]	mg/L
Se 196.026†	-14.5	3.81	26.24%	[0.00]	mg/L
Tl 190.801	0.2	4.90	>999.9%	[0.00]	mg/L
V 292.402†	-44.8	49.53	110.65%	[0.00]	mg/L
Zn 206.200†	59.5	2.51	4.21%	[0.00]	mg/L
Cd 226.502†	-132.6	4.59	3.46%	[0.00]	mg/L
Ti 334.940†	84.7	77.92	91.96%	[0.00]	mg/L
Ca 227.546†	140.1	7.89	5.63%	[0.00]	mg/L

==========

Sequence No.: 2 **Autosampler Location: 9**
Sample ID: S1 **Date Collected: 3/1/2013 12:58:15 PM**
Analyst: **Data Type: Reprocessed on 3/1/2013 3:24:10 PM**
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: S1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	1741345.4	12323.02	0.71%	93.436	%
Lu 261.542	1162488.0	7647.01	0.66%	94.03	%
Ag 328.068†	418951.3	2210.90	0.53%	[2.5]	mg/L
Al 308.215†	443439.2	2116.06	0.48%	[20]	mg/L
As 188.979†	1658.3	14.03	0.85%	[1]	mg/L
Ba 233.527†	2187617.6	11262.05	0.51%	[20]	mg/L
Be 313.107†	1171469.1	6690.00	0.57%	[0.5]	mg/L
Co 228.616†	202858.8	3058.91	1.51%	[5]	mg/L
Cr 267.716†	149387.4	2194.92	1.47%	[2]	mg/L
Cu 324.752†	611576.4	2786.47	0.46%	[2.5]	mg/L
Fe 273.955†	261486.9	4231.60	1.62%	[10]	mg/L
Mg 279.077†	895456.9	4289.14	0.48%	[50]	mg/L
Mn 257.610†	3161401.9	18075.48	0.57%	[5]	mg/L

Ni 231.604†	158808.8	2649.17	1.67%	[5]	mg/L
Pb 220.353†	6617.1	58.10	0.88%	[1]	mg/L
Sb 206.836†	2227.9	15.04	0.68%	[1]	mg/L
Se 196.026†	1052.5	13.08	1.24%	[1]	mg/L
Tl 190.801	1989.1	18.25	0.92%	[1]	mg/L
V 292.402†	616869.9	2360.99	0.38%	[5]	mg/L
Zn 206.200†	204752.0	3455.80	1.69%	[5]	mg/L
Cd 226.502†	27299.5	468.47	1.72%	[0.5]	mg/L
Ti 334.940†	631755.4	2433.96	0.39%	[1]	mg/L
Ca 227.546†	11062.5	108.89	0.98%	[50]	mg/L

Sequence No.: 3 **Autosampler Location: 10**
Sample ID: S2 **Date Collected: 3/1/2013 1:01:49 PM**
Analyst: **Data Type: Reprocessed on 3/1/2013 3:24:11 PM**
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: S2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	1760144.8	614.24	0.03%	94.445	%
Lu 261.542	1175046.6	1036.90	0.09%	95.05	%
Ag 328.068†	209385.5	2106.06	1.01%	[1.25]	mg/L
Al 308.215†	222110.4	2967.32	1.34%	[10]	mg/L
As 188.979†	835.4	3.22	0.39%	[0.5]	mg/L
Ba 233.527†	1120279.3	538.35	0.05%	[10]	mg/L
Be 313.107†	587239.9	116.43	0.02%	[0.25]	mg/L
Co 228.616†	104435.4	1336.56	1.28%	[2.5]	mg/L
Cr 267.716†	76432.0	1031.63	1.35%	[1]	mg/L
Cu 324.752†	303110.3	3839.04	1.27%	[1.25]	mg/L
Fe 273.955†	134119.8	1772.73	1.32%	[5]	mg/L
Mg 279.077†	451801.1	571.02	0.13%	[25]	mg/L
Mn 257.610†	1607569.8	1423.91	0.09%	[2.5]	mg/L
Ni 231.604†	81889.4	1121.48	1.37%	[2.5]	mg/L
Pb 220.353†	3402.0	8.61	0.25%	[0.5]	mg/L
Sb 206.836†	1139.6	6.51	0.57%	[0.5]	mg/L
Se 196.026†	535.2	1.54	0.29%	[0.5]	mg/L
Tl 190.801	1031.1	2.57	0.25%	[0.5]	mg/L
V 292.402†	309114.7	3439.65	1.11%	[2.5]	mg/L
Zn 206.200†	105475.7	1525.52	1.45%	[2.5]	mg/L
Cd 226.502†	13911.6	229.45	1.65%	[0.25]	mg/L
Ti 334.940†	316504.3	607.56	0.19%	[0.5]	mg/L
Ca 227.546†	5585.1	21.37	0.38%	[25]	mg/L

Sequence No.: 4 **Autosampler Location: 11**
Sample ID: S3 **Date Collected: 3/1/2013 1:05:22 PM**
Analyst: **Data Type: Reprocessed on 3/1/2013 3:24:12 PM**
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: S3

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	1877218.9	6631.87	0.35%	100.73	%
Lu 261.542	1245614.4	3692.28	0.30%	100.8	%
Ag 328.068†	4245.1	35.02	0.83%	[0.025]	mg/L
Al 308.215†	4201.4	72.54	1.73%	[0.2]	mg/L
As 188.979†	19.0	2.90	15.23%	[0.01]	mg/L
Ba 233.527†	22676.2	121.68	0.54%	[0.2]	mg/L
Be 313.107†	11142.2	71.71	0.64%	[0.005]	mg/L
Co 228.616†	2009.2	14.55	0.72%	[0.05]	mg/L
Cr 267.716†	1480.4	8.43	0.57%	[0.02]	mg/L
Cu 324.752†	5778.1	74.99	1.30%	[0.025]	mg/L
Fe 273.955†	2667.7	39.72	1.49%	[0.1]	mg/L
Mg 279.077†	9026.8	81.67	0.90%	[0.5]	mg/L

Mn 257.610†	32572.2	240.56	0.74%	[0.05] mg/L
Ni 231.604†	1568.6	9.66	0.62%	[0.05] mg/L
Pb 220.353†	68.3	2.25	3.29%	[0.01] mg/L
Sb 206.836†	34.7	7.27	20.91%	[0.01] mg/L
Se 196.026†	7.5	8.15	109.39%	[0.01] mg/L
Tl 190.801	17.8	7.86	44.12%	[0.01] mg/L
V 292.402†	6011.3	64.92	1.08%	[0.05] mg/L
Zn 206.200†	2013.1	8.52	0.42%	[0.05] mg/L
Cd 226.502†	266.1	1.57	0.59%	[0.005] mg/L
Ti 334.940†	6177.5	22.86	0.37%	[0.01] mg/L
Ca 227.546†	114.0	5.88	5.16%	[0.5] mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	167600	0.00000	1.000000	
Al 308.215	3	Lin Thru 0	0.0	22180	0.00000	1.000000	
As 188.979	3	Lin Thru 0	0.0	1661	0.00000	0.999995	
Ba 233.527	3	Lin Thru 0	0.0	109900	0.00000	0.999954	
Be 313.107	3	Lin Thru 0	0.0	2344000	0.00000	0.999999	
Co 228.616	3	Lin Thru 0	0.0	40810	0.00000	0.999931	
Cr 267.716	3	Lin Thru 0	0.0	75040	0.00000	0.999957	
Cu 324.752	3	Lin Thru 0	0.0	244200	0.00000	0.999994	
Fe 273.955	3	Lin Thru 0	0.0	26280	0.00000	0.999947	
Mg 279.077	3	Lin Thru 0	0.0	17940	0.00000	0.999993	
Mn 257.610	3	Lin Thru 0	0.0	634400	0.00000	0.999977	
Ni 231.604	3	Lin Thru 0	0.0	31960	0.00000	0.999923	
Pb 220.353	3	Lin Thru 0	0.0	6654	0.00000	0.999937	
Sb 206.836	3	Lin Thru 0	0.0	2238	0.00000	0.999946	
Se 196.026	3	Lin Thru 0	0.0	1056	0.00000	0.999973	
Tl 190.801	3	Lin Thru 0	0.0	2004	0.00000	0.999893	
V 292.402	3	Lin Thru 0	0.0	123400	0.00000	1.000000	
Zn 206.200	3	Lin Thru 0	0.0	41200	0.00000	0.999928	
Cd 226.502	3	Lin Thru 0	0.0	54810	0.00000	0.999971	
Ti 334.940	3	Lin Thru 0	0.0	632000	0.00000	1.000000	
Ca 227.546	3	Lin Thru 0	0.0	221.7	0.00000	0.999992	
Na 589.592	3	Lin Thru 0	0.0	3503	0.00000	0.999978	
K 766.490	3	Lin Thru 0	0.0	761.4	0.00000	0.999948	

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Sequence No.: 5 **Autosampler Location: 3**
Sample ID: ICV **Date Collected: 3/1/2013 1:08:53 PM**
Analyst: **Data Type: Reprocessed on 3/1/2013 3:24:12 PM**
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1770360.2	94.993	%	0.4646				0.49%
Lu 261.542	1180949.8	95.53	%	0.364				0.38%
Ag 328.068†	208571.5	1.2471	mg/L	0.01391	1.2471	mg/L	0.01391	1.12%
QC value within limits for Ag 328.068 Recovery = 99.77%								
Al 308.215†	222929.9	10.017	mg/L	0.1328	10.017	mg/L	0.1328	1.33%
QC value within limits for Al 308.215 Recovery = 100.17%								
As 188.979†	800.2	0.48839	mg/L	0.001680	0.48839	mg/L	0.001680	0.34%
QC value within limits for As 188.979 Recovery = 97.68%								
Ba 233.527†	1112412.7	10.124	mg/L	0.0140	10.124	mg/L	0.0140	0.14%
QC value within limits for Ba 233.527 Recovery = 101.24%								
Be 313.107†	575483.3	0.24684	mg/L	0.000653	0.24684	mg/L	0.000653	0.26%
QC value within limits for Be 313.107 Recovery = 98.74%								
Co 228.616†	100042.5	2.4505	mg/L	0.03689	2.4505	mg/L	0.03689	1.51%
QC value within limits for Co 228.616 Recovery = 98.02%								
Cr 267.716†	74507.2	0.99253	mg/L	0.013305	0.99253	mg/L	0.013305	1.34%
QC value within limits for Cr 267.716 Recovery = 99.25%								
Cu 324.752†	295573.5	1.2130	mg/L	0.01423	1.2130	mg/L	0.01423	1.17%
QC value within limits for Cu 324.752 Recovery = 97.04%								
Fe 273.955†	132415.6	4.8607	mg/L	0.06497	4.8607	mg/L	0.06497	1.34%

QC value within limits for Fe 273.955 Recovery = 97.21%
Mg 279.077† 445278.6 24.818 mg/L 0.0201 24.818 mg/L 0.0201 0.08%
QC value within limits for Mg 279.077 Recovery = 99.27%
Mn 257.610† 1580590.6 2.4909 mg/L 0.00322 2.4909 mg/L 0.00322 0.13%
QC value within limits for Mn 257.610 Recovery = 99.64%
Ni 231.604† 78906.9 2.4676 mg/L 0.03497 2.4676 mg/L 0.03497 1.42%
QC value within limits for Ni 231.604 Recovery = 98.70%
Pb 220.353† 3274.7 0.49292 mg/L 0.001382 0.49292 mg/L 0.001382 0.28%
QC value within limits for Pb 220.353 Recovery = 98.58%
Sb 206.836† 1187.2 0.51324 mg/L 0.000291 0.51324 mg/L 0.000291 0.06%
QC value within limits for Sb 206.836 Recovery = 102.65%
Se 196.026† 507.1 0.47943 mg/L 0.006847 0.47943 mg/L 0.006847 1.43%
QC value within limits for Se 196.026 Recovery = 95.89%
Tl 190.801 994.8 0.47258 mg/L 0.004156 0.47258 mg/L 0.004156 0.88%
QC value within limits for Tl 190.801 Recovery = 94.52%
V 292.402† 301636.5 2.4452 mg/L 0.02803 2.4452 mg/L 0.02803 1.15%
QC value within limits for V 292.402 Recovery = 97.81%
Zn 206.200† 103463.6 2.5170 mg/L 0.03128 2.5170 mg/L 0.03128 1.24%
QC value within limits for Zn 206.200 Recovery = 100.68%
Cd 226.502† 13113.9 0.23993 mg/L 0.002616 0.23993 mg/L 0.002616 1.09%
QC value within limits for Cd 226.502 Recovery = 95.97%
Ti 334.940† 312135.7 0.49342 mg/L 0.000512 0.49342 mg/L 0.000512 0.10%
QC value within limits for Ti 334.940 Recovery = Not calculated
Ca 227.546† 5517.3 24.234 mg/L 0.0215 24.234 mg/L 0.0215 0.09%
QC value within limits for Ca 227.546 Recovery = 96.94%
All analyte(s) passed QC.

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Sequence No.: 6 **Autosampler Location: 4**
Sample ID: ICB **Date Collected: 3/1/2013 1:12:26 PM**
Analyst: **Data Type: Reprocessed on 3/1/2013 3:24:13 PM**
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 360.073	1894208.4	101.64	%	1.494				1.47%
Lu 261.542	1254751.8	101.5	%	1.53				1.51%
Ag 328.068†	97.0	0.00058	mg/L	0.000481	0.00058	mg/L	0.000481	83.13%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-150.2	-0.00678	mg/L	0.001572	-0.00678	mg/L	0.001572	23.19%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	0.2	0.00011	mg/L	0.001700	0.00011	mg/L	0.001700	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	66.1	0.00060	mg/L	0.000201	0.00060	mg/L	0.000201	33.41%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	7.5	0.00000	mg/L	0.000015	0.00000	mg/L	0.000015	404.95%
QC value within limits for Be 313.107 Recovery = Not calculated								
Co 228.616†	7.9	0.00019	mg/L	0.000356	0.00019	mg/L	0.000356	183.12%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	11.2	0.00015	mg/L	0.000453	0.00015	mg/L	0.000453	304.07%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	131.8	0.00054	mg/L	0.000201	0.00054	mg/L	0.000201	37.28%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 273.955†	41.3	0.00153	mg/L	0.003415	0.00153	mg/L	0.003415	222.81%
QC value within limits for Fe 273.955 Recovery = Not calculated								
Mg 279.077†	59.2	0.00330	mg/L	0.004369	0.00330	mg/L	0.004369	132.46%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	106.3	0.00017	mg/L	0.000073	0.00017	mg/L	0.000073	43.59%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Ni 231.604†	0.8	0.00002	mg/L	0.000329	0.00002	mg/L	0.000329	>999.9%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	8.0	0.00119	mg/L	0.000879	0.00119	mg/L	0.000879	73.61%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	11.0	0.00493	mg/L	0.001628	0.00493	mg/L	0.001628	33.01%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	1.8	0.00175	mg/L	0.002294	0.00175	mg/L	0.002294	131.11%
QC value within limits for Se 196.026 Recovery = Not calculated								

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Tl 190.801                2.8     0.00138 mg/L      0.002546     0.00138 mg/L      0.002546 184.66%
   QC value within limits for Tl 190.801  Recovery = Not calculated
V 292.402†               64.3     0.00052 mg/L      0.000254     0.00052 mg/L      0.000254  48.69%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 206.200†              15.7     0.00038 mg/L      0.000119     0.00038 mg/L      0.000119  31.07%
   QC value within limits for Zn 206.200  Recovery = Not calculated
Cd 226.502†              -1.2    -0.00002 mg/L      0.000199    -0.00002 mg/L      0.000199 872.01%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Ti 334.940†             129.0     0.00020 mg/L      0.000026     0.00020 mg/L      0.000026  12.76%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Ca 227.546†               2.6     0.01186 mg/L      0.046655     0.01186 mg/L      0.046655 393.50%
   QC value within limits for Ca 227.546  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 7 **Autosampler Location: 2**
Sample ID: LLICV **Date Collected: 3/1/2013 1:15:57 PM**
Analyst: **Data Type: Reprocessed on 3/1/2013 3:24:14 PM**
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: LLICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 360.073	1860540.4	99.832	%	0.9524				0.95%
Lu 261.542	1235982.1	99.98	%	0.976				0.98%
Ag 328.068†	5157.5	0.03083	mg/L	0.000256	0.03083	mg/L	0.000256	0.83%
QC value within limits for Ag 328.068 Recovery = 102.76%								
Al 308.215†	4316.3	0.19389	mg/L	0.011275	0.19389	mg/L	0.011275	5.82%
QC value within limits for Al 308.215 Recovery = 96.95%								
As 188.979†	31.3	0.01899	mg/L	0.003507	0.01899	mg/L	0.003507	18.47%
QC value within limits for As 188.979 Recovery = 94.93%								
Ba 233.527†	23229.4	0.21142	mg/L	0.004050	0.21142	mg/L	0.004050	1.92%
QC value within limits for Ba 233.527 Recovery = 105.71%								
Be 313.107†	11670.9	0.00503	mg/L	0.000094	0.00503	mg/L	0.000094	1.88%
QC value within limits for Be 313.107 Recovery = 100.60%								
Co 228.616†	2141.3	0.05244	mg/L	0.000351	0.05244	mg/L	0.000351	0.67%
QC value within limits for Co 228.616 Recovery = 104.88%								
Cr 267.716†	1556.2	0.02073	mg/L	0.000687	0.02073	mg/L	0.000687	3.31%
QC value within limits for Cr 267.716 Recovery = 103.65%								
Cu 324.752†	7234.3	0.02970	mg/L	0.000428	0.02970	mg/L	0.000428	1.44%
QC value within limits for Cu 324.752 Recovery = 99.00%								
Fe 273.955†	5470.0	0.20452	mg/L	0.002769	0.20452	mg/L	0.002769	1.35%
QC value within limits for Fe 273.955 Recovery = 102.26%								
Mg 279.077†	9338.1	0.52047	mg/L	0.010661	0.52047	mg/L	0.010661	2.05%
QC value within limits for Mg 279.077 Recovery = 104.09%								
Mn 257.610†	33524.9	0.05284	mg/L	0.000963	0.05284	mg/L	0.000963	1.82%
QC value within limits for Mn 257.610 Recovery = 105.67%								
Ni 231.604†	1641.9	0.05133	mg/L	0.000755	0.05133	mg/L	0.000755	1.47%
QC value within limits for Ni 231.604 Recovery = 102.67%								
Pb 220.353†	72.0	0.01084	mg/L	0.001637	0.01084	mg/L	0.001637	15.10%
QC value within limits for Pb 220.353 Recovery = 108.40%								
Sb 206.836†	54.9	0.02416	mg/L	0.003137	0.02416	mg/L	0.003137	12.99%
QC value within limits for Sb 206.836 Recovery = 120.79%								
Se 196.026†	35.2	0.03334	mg/L	0.010211	0.03334	mg/L	0.010211	30.62%
QC value within limits for Se 196.026 Recovery = 111.14%								
Tl 190.801	35.7	0.01734	mg/L	0.001441	0.01734	mg/L	0.001441	8.31%
QC value within limits for Tl 190.801 Recovery = 86.72%								
V 292.402†	6119.4	0.04961	mg/L	0.000234	0.04961	mg/L	0.000234	0.47%
QC value within limits for V 292.402 Recovery = 99.21%								
Zn 206.200†	2099.3	0.05108	mg/L	0.000310	0.05108	mg/L	0.000310	0.61%
QC value within limits for Zn 206.200 Recovery = 102.15%								
Cd 226.502†	273.2	0.00499	mg/L	0.000016	0.00499	mg/L	0.000016	0.31%
QC value within limits for Cd 226.502 Recovery = 99.80%								
Ti 334.940†	12369.2	0.01957	mg/L	0.000411	0.01957	mg/L	0.000411	2.10%
QC value within limits for Ti 334.940 Recovery = 97.83%								
Ca 227.546†	182.8	0.81002	mg/L	0.053251	0.81002	mg/L	0.053251	6.57%
QC value within limits for Ca 227.546 Recovery = 101.25%								

All analyte(s) passed QC.

Sequence No.: 8 **Autosampler Location: 5**
Sample ID: ICSA **Date Collected: 3/1/2013 1:19:27 PM**
Analyst: **Data Type: Reprocessed on 3/1/2013 3:24:15 PM**
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 360.073	1595513.5	85.611	%	0.4806				0.56%
Lu 261.542	1061699.8	85.88	%	0.445				0.52%
Ag 328.068†	-632.6	-0.00188	mg/L	0.000526	-0.00188	mg/L	0.000526	27.91%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	11257861.8	507.54	mg/L	2.492	507.54	mg/L	2.492	0.49%
QC value within limits for Al 308.215 Recovery = 101.51%								
As 188.979†	-13.9	-0.00745	mg/L	0.006332	-0.00745	mg/L	0.006332	84.97%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	247.1	0.00226	mg/L	0.000134	0.00226	mg/L	0.000134	5.95%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-498.6	-0.00023	mg/L	0.000020	-0.00023	mg/L	0.000020	8.76%
QC value within limits for Be 313.107 Recovery = Not calculated								
Co 228.616†	23.9	0.00059	mg/L	0.000295	0.00059	mg/L	0.000295	49.66%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	206.0	-0.00140	mg/L	0.000113	-0.00140	mg/L	0.000113	8.10%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	-4062.1	0.01870	mg/L	0.000216	0.01870	mg/L	0.000216	1.15%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 273.955†	4958145.9	188.58	mg/L	0.987	188.58	mg/L	0.987	0.52%
QC value within limits for Fe 273.955 Recovery = 94.29%								
Mg 279.077†	8762348.0	488.38	mg/L	2.766	488.38	mg/L	2.766	0.57%
QC value within limits for Mg 279.077 Recovery = 97.68%								
Mn 257.610†	-358.6	-0.00999	mg/L	0.000106	-0.00999	mg/L	0.000106	1.06%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Ni 231.604†	-17.0	-0.00050	mg/L	0.000270	-0.00050	mg/L	0.000270	53.53%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-221.7	0.00205	mg/L	0.002398	0.00205	mg/L	0.002398	116.77%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	111.8	0.00632	mg/L	0.004220	0.00632	mg/L	0.004220	66.77%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-80.6	0.00377	mg/L	0.006597	0.00377	mg/L	0.006597	175.02%
QC value within limits for Se 196.026 Recovery = Not calculated								
Tl 190.801	-60.3	0.01695	mg/L	0.006287	0.01695	mg/L	0.006287	37.10%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	589.8	0.01721	mg/L	0.000170	0.01721	mg/L	0.000170	0.99%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	298.0	0.00725	mg/L	0.000122	0.00725	mg/L	0.000122	1.68%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Cd 226.502†	308.2	-0.00843	mg/L	0.000124	-0.00843	mg/L	0.000124	1.48%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Ti 334.940†	-4283.5	-0.01535	mg/L	0.000109	-0.01535	mg/L	0.000109	0.71%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Ca 227.546†	117290.3	527.77	mg/L	1.240	527.77	mg/L	1.240	0.23%
QC value within limits for Ca 227.546 Recovery = 105.55%								

All analyte(s) passed QC.

Sequence No.: 9 **Autosampler Location: 6**
Sample ID: ICSAB **Date Collected: 3/1/2013 1:23:05 PM**
Analyst: **Data Type: Reprocessed on 3/1/2013 3:24:15 PM**
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD

Y 360.073	1591051.8	85.372 %	0.6080				0.71%
Lu 261.542	1059504.4	85.70 %	0.606				0.71%
Ag 328.068†	37147.6	0.22409 mg/L	0.000621	0.22409 mg/L	0.000621		0.28%
QC value within limits for Ag 328.068 Recovery = 112.05%							
Al 308.215†	11410340.6	514.41 mg/L	1.671	514.41 mg/L	1.671		0.32%
QC value within limits for Al 308.215 Recovery = 102.88%							
As 188.979†	140.4	0.08899 mg/L	0.002433	0.08899 mg/L	0.002433		2.73%
QC value within limits for As 188.979 Recovery = 88.99%							
Ba 233.527†	58739.2	0.53514 mg/L	0.001340	0.53514 mg/L	0.001340		0.25%
QC value within limits for Ba 233.527 Recovery = 107.03%							
Be 313.107†	1199582.3	0.51174 mg/L	0.000427	0.51174 mg/L	0.000427		0.08%
QC value within limits for Be 313.107 Recovery = 102.35%							
Co 228.616†	19323.3	0.47345 mg/L	0.003651	0.47345 mg/L	0.003651		0.77%
QC value within limits for Co 228.616 Recovery = 94.69%							
Cr 267.716†	37869.1	0.50039 mg/L	0.001724	0.50039 mg/L	0.001724		0.34%
QC value within limits for Cr 267.716 Recovery = 100.08%							
Cu 324.752†	127187.8	0.55702 mg/L	0.001297	0.55702 mg/L	0.001297		0.23%
QC value within limits for Cu 324.752 Recovery = 111.40%							
Fe 273.955†	5030262.9	191.29 mg/L	0.726	191.29 mg/L	0.726		0.38%
QC value within limits for Fe 273.955 Recovery = 95.65%							
Mg 279.077†	8854548.9	493.52 mg/L	1.960	493.52 mg/L	1.960		0.40%
QC value within limits for Mg 279.077 Recovery = 98.70%							
Mn 257.610†	323922.0	0.50114 mg/L	0.000982	0.50114 mg/L	0.000982		0.20%
QC value within limits for Mn 257.610 Recovery = 100.23%							
Ni 231.604†	29680.9	0.92851 mg/L	0.007740	0.92851 mg/L	0.007740		0.83%
QC value within limits for Ni 231.604 Recovery = 92.85%							
Pb 220.353†	2977.0	0.48307 mg/L	0.005430	0.48307 mg/L	0.005430		1.12%
QC value within limits for Pb 220.353 Recovery = 96.61%							
Sb 206.836†	1602.3	0.66190 mg/L	0.005788	0.66190 mg/L	0.005788		0.87%
QC value within limits for Sb 206.836 Recovery = 110.32%							
Se 196.026†	456.4	0.51300 mg/L	0.008427	0.51300 mg/L	0.008427		1.64%
QC value within limits for Se 196.026 Recovery = 102.60%							
Tl 190.801	114.6	0.09960 mg/L	0.004018	0.09960 mg/L	0.004018		4.03%
QC value within limits for Tl 190.801 Recovery = 99.60%							
V 292.402†	63297.6	0.52618 mg/L	0.000817	0.52618 mg/L	0.000817		0.16%
QC value within limits for V 292.402 Recovery = 105.24%							
Zn 206.200†	40140.8	0.97722 mg/L	0.003737	0.97722 mg/L	0.003737		0.38%
QC value within limits for Zn 206.200 Recovery = 97.72%							
Cd 226.502†	52707.3	0.94777 mg/L	0.004597	0.94777 mg/L	0.004597		0.49%
QC value within limits for Cd 226.502 Recovery = 94.78%							
Ti 334.940†	-4279.0	-0.01543 mg/L	0.000033	-0.01543 mg/L	0.000033		0.22%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Ca 227.546†	118525.6	533.20 mg/L	0.742	533.20 mg/L	0.742		0.14%
QC value within limits for Ca 227.546 Recovery = 106.64%							

All analyte(s) passed QC.

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Sequence No.: 10 **Autosampler Location: 3**
Sample ID: CCV **Date Collected: 3/1/2013 1:26:41 PM**
Analyst: **Data Type: Reprocessed on 3/1/2013 3:24:16 PM**
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1778922.9	95.453 %		1.1077				1.16%
Lu 261.542	1188576.1	96.14 %		1.092				1.14%
Ag 328.068†	207637.2	1.2415 mg/L		0.00746	1.2415 mg/L		0.00746	0.60%
QC value within limits for Ag 328.068 Recovery = 99.32%								
Al 308.215†	222365.7	9.9913 mg/L		0.07853	9.9913 mg/L		0.07853	0.79%
QC value within limits for Al 308.215 Recovery = 99.91%								
As 188.979†	787.9	0.48102 mg/L		0.002656	0.48102 mg/L		0.002656	0.55%
QC value within limits for As 188.979 Recovery = 96.20%								
Ba 233.527†	1108429.7	10.088 mg/L		0.0315	10.088 mg/L		0.0315	0.31%
QC value within limits for Ba 233.527 Recovery = 100.88%								
Be 313.107†	572420.3	0.24553 mg/L		0.001074	0.24553 mg/L		0.001074	0.44%
QC value within limits for Be 313.107 Recovery = 98.21%								
Co 228.616†	99438.3	2.4357 mg/L		0.01909	2.4357 mg/L		0.01909	0.78%

QC value within limits for Co 228.616 Recovery = 97.43%

Cr 267.716†	74484.8	0.99224 mg/L	0.005823	0.99224 mg/L	0.005823	0.59%
QC value within limits for Cr 267.716 Recovery = 99.22%						
Cu 324.752†	294116.8	1.2071 mg/L	0.00891	1.2071 mg/L	0.00891	0.74%
QC value within limits for Cu 324.752 Recovery = 96.56%						
Fe 273.955†	132517.6	4.8651 mg/L	0.04295	4.8651 mg/L	0.04295	0.88%
QC value within limits for Fe 273.955 Recovery = 97.30%						
Mg 279.077†	443815.6	24.737 mg/L	0.0990	24.737 mg/L	0.0990	0.40%
QC value within limits for Mg 279.077 Recovery = 98.95%						
Mn 257.610†	1574664.9	2.4816 mg/L	0.00759	2.4816 mg/L	0.00759	0.31%
QC value within limits for Mn 257.610 Recovery = 99.26%						
Ni 231.604†	78653.5	2.4597 mg/L	0.01443	2.4597 mg/L	0.01443	0.59%
QC value within limits for Ni 231.604 Recovery = 98.39%						
Pb 220.353†	3253.9	0.48980 mg/L	0.005287	0.48980 mg/L	0.005287	1.08%
QC value within limits for Pb 220.353 Recovery = 97.96%						
Sb 206.836†	1180.0	0.51003 mg/L	0.003537	0.51003 mg/L	0.003537	0.69%
QC value within limits for Sb 206.836 Recovery = 102.01%						
Se 196.026†	506.7	0.47903 mg/L	0.004906	0.47903 mg/L	0.004906	1.02%
QC value within limits for Se 196.026 Recovery = 95.81%						
Tl 190.801	985.4	0.46798 mg/L	0.002451	0.46798 mg/L	0.002451	0.52%
QC value within limits for Tl 190.801 Recovery = 93.60%						
V 292.402†	300800.9	2.4384 mg/L	0.01263	2.4384 mg/L	0.01263	0.52%
QC value within limits for V 292.402 Recovery = 97.54%						
Zn 206.200†	102966.0	2.5050 mg/L	0.01940	2.5050 mg/L	0.01940	0.77%
QC value within limits for Zn 206.200 Recovery = 100.20%						
Cd 226.502†	13047.5	0.23871 mg/L	0.002082	0.23871 mg/L	0.002082	0.87%
QC value within limits for Cd 226.502 Recovery = 95.49%						
Ti 334.940†	310834.1	0.49136 mg/L	0.001767	0.49136 mg/L	0.001767	0.36%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Ca 227.546†	5488.4	24.107 mg/L	0.2932	24.107 mg/L	0.2932	1.22%
QC value within limits for Ca 227.546 Recovery = 96.43%						

All analyte(s) passed QC.

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Sequence No.: 11 **Autosampler Location: 4**
Sample ID: CCB **Date Collected: 3/1/2013 1:30:19 PM**
Analyst: **Data Type: Reprocessed on 3/1/2013 3:24:17 PM**
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1860347.8	99.822	%	1.9926				2.00%
Lu 261.542	1232810.2	99.72	%	2.041				2.05%
Ag 328.068†	40.7	0.00024	mg/L	0.001095	0.00024	mg/L	0.001095	449.70%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	74.7	0.00336	mg/L	0.008703	0.00336	mg/L	0.008703	258.68%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	1.0	0.00060	mg/L	0.001833	0.00060	mg/L	0.001833	305.11%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	57.4	0.00052	mg/L	0.000227	0.00052	mg/L	0.000227	43.46%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	14.1	0.00001	mg/L	0.000023	0.00001	mg/L	0.000023	360.23%
QC value within limits for Be 313.107 Recovery = Not calculated								
Co 228.616†	4.3	0.00011	mg/L	0.000126	0.00011	mg/L	0.000126	119.14%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	11.6	0.00015	mg/L	0.000239	0.00015	mg/L	0.000239	154.90%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	256.0	0.00105	mg/L	0.000411	0.00105	mg/L	0.000411	39.19%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 273.955†	74.3	0.00279	mg/L	0.001460	0.00279	mg/L	0.001460	52.31%
QC value within limits for Fe 273.955 Recovery = Not calculated								
Mg 279.077†	42.6	0.00237	mg/L	0.001542	0.00237	mg/L	0.001542	64.94%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	150.1	0.00024	mg/L	0.000027	0.00024	mg/L	0.000027	11.48%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Ni 231.604†	2.7	0.00009	mg/L	0.000507	0.00009	mg/L	0.000507	586.30%
QC value within limits for Ni 231.604 Recovery = Not calculated								

Pb 220.353†	-1.1	-0.00017	mg/L	0.000670	-0.00017	mg/L	0.000670 405.99%
QC value within limits for Pb 220.353 Recovery = Not calculated							
Sb 206.836†	8.1	0.00361	mg/L	0.000311	0.00361	mg/L	0.000311 8.60%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	0.9	0.00082	mg/L	0.003249	0.00082	mg/L	0.003249 396.08%
QC value within limits for Se 196.026 Recovery = Not calculated							
Tl 190.801	-6.6	-0.00330	mg/L	0.000610	-0.00330	mg/L	0.000610 18.45%
QC value within limits for Tl 190.801 Recovery = Not calculated							
V 292.402†	59.2	0.00048	mg/L	0.000618	0.00048	mg/L	0.000618 128.81%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 206.200†	12.4	0.00030	mg/L	0.000171	0.00030	mg/L	0.000171 56.81%
QC value within limits for Zn 206.200 Recovery = Not calculated							
Cd 226.502†	2.1	0.00004	mg/L	0.000222	0.00004	mg/L	0.000222 569.36%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Ti 334.940†	68.9	0.00011	mg/L	0.000078	0.00011	mg/L	0.000078 71.49%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Ca 227.546†	-4.3	-0.01955	mg/L	0.061023	-0.01955	mg/L	0.061023 312.21%
QC value within limits for Ca 227.546 Recovery = Not calculated							

All analyte(s) passed QC.

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Sequence No.: 12 **Autosampler Location: 38**
Sample ID: MB-70686~PBW **Date Collected: 3/1/2013 1:33:51 PM**
Analyst: **Data Type: Reprocessed on 3/1/2013 3:24:17 PM**
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: MB-70686~PBW

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1904425.0	102.19	%	1.346				1.32%
Lu 261.542	1264186.9	102.3	%	1.32				1.29%
Ag 328.068†	58.5	0.00035	mg/L	0.000508	0.00035	mg/L	0.000508	145.74%
Al 308.215†	-36.3	-0.00164	mg/L	0.003362	-0.00164	mg/L	0.003362	205.12%
As 188.979†	-0.6	-0.00038	mg/L	0.002335	-0.00038	mg/L	0.002335	615.52%
Ba 233.527†	14.6	0.00013	mg/L	0.000104	0.00013	mg/L	0.000104	78.24%
Be 313.107†	-22.8	-0.00001	mg/L	0.000017	-0.00001	mg/L	0.000017	185.34%
Co 228.616†	5.6	0.00014	mg/L	0.000047	0.00014	mg/L	0.000047	34.34%
Cr 267.716†	-1.0	-0.00001	mg/L	0.000220	-0.00001	mg/L	0.000220	>999.9%
Cu 324.752†	91.2	0.00037	mg/L	0.000386	0.00037	mg/L	0.000386	103.18%
Fe 273.955†	115.8	0.00440	mg/L	0.001268	0.00440	mg/L	0.001268	28.79%
Mg 279.077†	86.2	0.00480	mg/L	0.005256	0.00480	mg/L	0.005256	109.42%
Mn 257.610†	37.4	0.00006	mg/L	0.000123	0.00006	mg/L	0.000123	207.84%
Ni 231.604†	-0.2	0.00000	mg/L	0.000534	0.00000	mg/L	0.000534	>999.9%
Pb 220.353†	5.2	0.00079	mg/L	0.001109	0.00079	mg/L	0.001109	140.60%
Sb 206.836†	0.7	0.00029	mg/L	0.001021	0.00029	mg/L	0.001021	348.08%
Se 196.026†	-4.3	-0.00404	mg/L	0.006431	-0.00404	mg/L	0.006431	158.99%
Tl 190.801	-8.9	-0.00446	mg/L	0.001352	-0.00446	mg/L	0.001352	30.28%
V 292.402†	4.6	0.00004	mg/L	0.000267	0.00004	mg/L	0.000267	719.29%
Zn 206.200†	3.9	0.00010	mg/L	0.000025	0.00010	mg/L	0.000025	26.37%
Cd 226.502†	6.7	0.00012	mg/L	0.000160	0.00012	mg/L	0.000160	130.43%
Ti 334.940†	91.8	0.00015	mg/L	0.000055	0.00015	mg/L	0.000055	37.92%
Ca 227.546†	5.5	0.02473	mg/L	0.099480	0.02473	mg/L	0.099480	402.21%

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Sequence No.: 13 **Autosampler Location: 39**
Sample ID: LCS-70686~LCS **Date Collected: 3/1/2013 1:37:22 PM**
Analyst: **Data Type: Reprocessed on 3/1/2013 3:24:18 PM**
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: LCS-70686~LCS

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1900672.5	101.99	%	0.985				0.97%
Lu 261.542	1267221.0	102.5	%	1.02				1.00%
Ag 328.068†	8332.1	0.05020	mg/L	0.000189	0.05020	mg/L	0.000189	0.38%

Al 308.215†	43686.2	1.9628	mg/L	0.01101	1.9628	mg/L	0.01101	0.56%
As 188.979†	64.3	0.04008	mg/L	0.002064	0.04008	mg/L	0.002064	5.15%
Ba 233.527†	228657.7	2.0811	mg/L	0.00469	2.0811	mg/L	0.00469	0.23%
Be 313.107†	115183.2	0.04916	mg/L	0.000104	0.04916	mg/L	0.000104	0.21%
Co 228.616†	20863.5	0.51116	mg/L	0.001363	0.51116	mg/L	0.001363	0.27%
Cr 267.716†	15167.0	0.20203	mg/L	0.000587	0.20203	mg/L	0.000587	0.29%
Cu 324.752†	58864.8	0.24159	mg/L	0.001071	0.24159	mg/L	0.001071	0.44%
Fe 273.955†	27087.5	0.99523	mg/L	0.002400	0.99523	mg/L	0.002400	0.24%
Mg 279.077†	93081.6	5.1880	mg/L	0.01576	5.1880	mg/L	0.01576	0.30%
Mn 257.610†	328561.3	0.51779	mg/L	0.001699	0.51779	mg/L	0.001699	0.33%
Ni 231.604†	16419.4	0.51357	mg/L	0.000711	0.51357	mg/L	0.000711	0.14%
Pb 220.353†	133.6	0.02017	mg/L	0.000456	0.02017	mg/L	0.000456	2.26%
Sb 206.836†	217.2	0.09348	mg/L	0.001426	0.09348	mg/L	0.001426	1.52%
Se 196.026†	51.7	0.04887	mg/L	0.002637	0.04887	mg/L	0.002637	5.40%
Tl 190.801	109.4	0.04977	mg/L	0.001706	0.04977	mg/L	0.001706	3.43%
V 292.402†	60173.6	0.48788	mg/L	0.000590	0.48788	mg/L	0.000590	0.12%
Zn 206.200†	20755.9	0.50496	mg/L	0.001817	0.50496	mg/L	0.001817	0.36%
Cd 226.502†	2711.7	0.04961	mg/L	0.000231	0.04961	mg/L	0.000231	0.47%
Ti 334.940†	196.3	0.00021	mg/L	0.000037	0.00021	mg/L	0.000037	17.77%
Ca 227.546†	1095.5	4.8059	mg/L	0.08537	4.8059	mg/L	0.08537	1.78%

Sequence No.: 14 **Autosampler Location: 40**
Sample ID: LCSD-70686~LCSD **Date Collected: 3/1/2013 1:40:55 PM**
Analyst: **Data Type: Reprocessed on 3/1/2013 3:24:18 PM**
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: LCSD-70686~LCSD

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1896680.0	101.77	%	0.619				0.61%
Lu 261.542	1264347.6	102.3	%	0.68				0.66%
Ag 328.068†	8311.5	0.05007	mg/L	0.000762	0.05007	mg/L	0.000762	1.52%
Al 308.215†	43031.3	1.9334	mg/L	0.00478	1.9334	mg/L	0.00478	0.25%
As 188.979†	63.3	0.03945	mg/L	0.000421	0.03945	mg/L	0.000421	1.07%
Ba 233.527†	225641.3	2.0536	mg/L	0.00308	2.0536	mg/L	0.00308	0.15%
Be 313.107†	113354.2	0.04838	mg/L	0.000160	0.04838	mg/L	0.000160	0.33%
Co 228.616†	20620.7	0.50521	mg/L	0.001095	0.50521	mg/L	0.001095	0.22%
Cr 267.716†	14980.2	0.19954	mg/L	0.000161	0.19954	mg/L	0.000161	0.08%
Cu 324.752†	56837.9	0.23329	mg/L	0.000234	0.23329	mg/L	0.000234	0.10%
Fe 273.955†	26737.1	0.98258	mg/L	0.004325	0.98258	mg/L	0.004325	0.44%
Mg 279.077†	92584.5	5.1603	mg/L	0.02440	5.1603	mg/L	0.02440	0.47%
Mn 257.610†	324642.3	0.51161	mg/L	0.000811	0.51161	mg/L	0.000811	0.16%
Ni 231.604†	16178.8	0.50604	mg/L	0.001827	0.50604	mg/L	0.001827	0.36%
Pb 220.353†	136.1	0.02055	mg/L	0.001155	0.02055	mg/L	0.001155	5.62%
Sb 206.836†	226.2	0.09754	mg/L	0.002193	0.09754	mg/L	0.002193	2.25%
Se 196.026†	60.3	0.05694	mg/L	0.002170	0.05694	mg/L	0.002170	3.81%
Tl 190.801	110.9	0.05060	mg/L	0.002588	0.05060	mg/L	0.002588	5.12%
V 292.402†	59004.1	0.47840	mg/L	0.001306	0.47840	mg/L	0.001306	0.27%
Zn 206.200†	20485.9	0.49840	mg/L	0.000898	0.49840	mg/L	0.000898	0.18%
Cd 226.502†	2714.0	0.04965	mg/L	0.000338	0.04965	mg/L	0.000338	0.68%
Ti 334.940†	175.9	0.00018	mg/L	0.000072	0.00018	mg/L	0.000072	40.60%
Ca 227.546†	1099.2	4.8247	mg/L	0.05927	4.8247	mg/L	0.05927	1.23%

Sequence No.: 15 **Autosampler Location: 41**
Sample ID: M0253-01C~DIRECT DISCHAR **Date Collected: 3/1/2013 1:44:26 PM**
Analyst: **Data Type: Reprocessed on 3/1/2013 3:24:19 PM**
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: M0253-01C~DIRECT DISCHAR

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1733801.6	93.032	%	0.6804				0.73%
Lu 261.542	1158118.5	93.68	%	0.805				0.86%

Ag 328.068†	113.3	0.00068	mg/L	0.000348	0.00068	mg/L	0.000348 51.35%
Al 308.215†	4050.9	0.17393	mg/L	0.011563	0.17393	mg/L	0.011563 6.65%
As 188.979†	-0.0	0.00113	mg/L	0.002411	0.00113	mg/L	0.002411 214.31%
Ba 233.527†	26623.7	0.24223	mg/L	0.002359	0.24223	mg/L	0.002359 0.97%
Be 313.107†	-256.9	-0.00010	mg/L	0.000014	-0.00010	mg/L	0.000014 13.54%
Co 228.616†	4.5	0.00011	mg/L	0.000087	0.00011	mg/L	0.000087 81.20%
Cr 267.716†	41.8	0.00048	mg/L	0.000063	0.00048	mg/L	0.000063 13.21%
Cu 324.752†	491.7	0.00204	mg/L	0.000473	0.00204	mg/L	0.000473 23.18%
Fe 273.955†	3799.4	0.14284	mg/L	0.001680	0.14284	mg/L	0.001680 1.18%
Mg 279.077†	738063.3	41.137	mg/L	0.0922	41.137	mg/L	0.0922 0.22%
Mn 257.610†	86433.2	0.13479	mg/L	0.001299	0.13479	mg/L	0.001299 0.96%
Ni 231.604†	33.1	0.00105	mg/L	0.000317	0.00105	mg/L	0.000317 30.23%
Pb 220.353†	-2.8	-0.00042	mg/L	0.001306	-0.00042	mg/L	0.001306 310.42%
Sb 206.836†	9.2	0.00345	mg/L	0.002570	0.00345	mg/L	0.002570 74.57%
Se 196.026†	5.7	-0.00206	mg/L	0.005948	-0.00206	mg/L	0.005948 288.34%
Tl 190.801	-31.0	-0.00637	mg/L	0.002047	-0.00637	mg/L	0.002047 32.15%
V 292.402†	145.1	0.00118	mg/L	0.000499	0.00118	mg/L	0.000499 42.17%
Zn 206.200†	350.3	0.00851	mg/L	0.000298	0.00851	mg/L	0.000298 3.50%
Cd 226.502†	-15.8	-0.00030	mg/L	0.000138	-0.00030	mg/L	0.000138 46.09%
Ti 334.940†	1792.5	0.00370	mg/L	0.000721	0.00370	mg/L	0.000721 19.48%
Ca 227.546†	32904.4	148.43	mg/L	1.394	148.43	mg/L	1.394 0.94%

==========

Sequence No.: 16 **Autosampler Location: 42**
Sample ID: M0258-01A~#1 **Date Collected: 3/1/2013 1:47:57 PM**
Analyst: **Data Type: Reprocessed on 3/1/2013 3:24:20 PM**
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: M0258-01A~#1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1736534.2	93.178	%	0.4580				0.49%
Lu 261.542	1162438.0	94.03	%	0.335				0.36%
Ag 328.068†	174.1	0.00105	mg/L	0.000166	0.00105	mg/L	0.000166	15.74%
Al 308.215†	9011.3	0.40533	mg/L	0.015334	0.40533	mg/L	0.015334	3.78%
As 188.979†	4.2	0.00266	mg/L	0.002387	0.00266	mg/L	0.002387	89.84%
Ba 233.527†	9393.2	0.08546	mg/L	0.000162	0.08546	mg/L	0.000162	0.19%
Be 313.107†	-241.9	-0.00005	mg/L	0.000041	-0.00005	mg/L	0.000041	83.85%
Co 228.616†	53.4	0.00128	mg/L	0.000188	0.00128	mg/L	0.000188	14.66%
Cr 267.716†	282.7	0.00359	mg/L	0.000061	0.00359	mg/L	0.000061	1.70%
Cu 324.752†	20246.8	0.08317	mg/L	0.000313	0.08317	mg/L	0.000313	0.38%
Fe 273.955†	36924.0	1.4046	mg/L	0.00242	1.4046	mg/L	0.00242	0.17%
Mg 279.077†	54401.7	3.0321	mg/L	0.00888	3.0321	mg/L	0.00888	0.29%
Mn 257.610†	189643.1	0.29887	mg/L	0.001022	0.29887	mg/L	0.001022	0.34%
Ni 231.604†	213.1	0.00666	mg/L	0.000059	0.00666	mg/L	0.000059	0.89%
Pb 220.353†	17.9	0.00262	mg/L	0.000705	0.00262	mg/L	0.000705	26.90%
Sb 206.836†	14.7	0.00628	mg/L	0.000631	0.00628	mg/L	0.000631	10.04%
Se 196.026†	-1.4	-0.00165	mg/L	0.000873	-0.00165	mg/L	0.000873	52.79%
Tl 190.801	-10.5	-0.00445	mg/L	0.002739	-0.00445	mg/L	0.002739	61.58%
V 292.402†	166.9	0.00142	mg/L	0.000318	0.00142	mg/L	0.000318	22.46%
Zn 206.200†	3544.1	0.08605	mg/L	0.000167	0.08605	mg/L	0.000167	0.19%
Cd 226.502†	-0.2	-0.00011	mg/L	0.000138	-0.00011	mg/L	0.000138	129.09%
Ti 334.940†	13761.7	0.02192	mg/L	0.000556	0.02192	mg/L	0.000556	2.54%
Ca 227.546†	3572.2	16.104	mg/L	0.1205	16.104	mg/L	0.1205	0.75%

==========

Sequence No.: 17 **Autosampler Location: 43**
Sample ID: M0262-01C~DIRECT DISCHAR **Date Collected: 3/1/2013 1:51:27 PM**
Analyst: **Data Type: Reprocessed on 3/1/2013 3:24:20 PM**
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: M0262-01C~DIRECT DISCHAR

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1706561.5	91.570	%	0.7673				0.84%

Lu 261.542	1139895.3	92.21 %	0.820				0.89%
Ag 328.068†	-53.3	-0.00031 mg/L	0.000422	-0.00031 mg/L	0.000422	136.36%
Al 308.215†	17866.6	0.79717 mg/L	0.027177	0.79717 mg/L	0.027177	3.41%
As 188.979†	0.4	0.00135 mg/L	0.001078	0.00135 mg/L	0.001078	79.73%
Ba 233.527†	28382.7	0.25824 mg/L	0.002836	0.25824 mg/L	0.002836	1.10%
Be 313.107†	-212.9	-0.00003 mg/L	0.000027	-0.00003 mg/L	0.000027	107.92%
Co 228.616†	9.2	0.00019 mg/L	0.000204	0.00019 mg/L	0.000204	105.91%
Cr 267.716†	101.8	0.00127 mg/L	0.000138	0.00127 mg/L	0.000138	10.88%
Cu 324.752†	626.6	0.00269 mg/L	0.000397	0.00269 mg/L	0.000397	14.78%
Fe 273.955†	17046.3	0.64683 mg/L	0.016749	0.64683 mg/L	0.016749	2.59%
Mg 279.077†	704402.2	39.261 mg/L	0.1179	39.261 mg/L	0.1179	0.30%
Mn 257.610†	90812.6	0.14178 mg/L	0.001549	0.14178 mg/L	0.001549	1.09%
Ni 231.604†	36.7	0.00114 mg/L	0.000179	0.00114 mg/L	0.000179	15.69%
Pb 220.353†	34.9	0.00529 mg/L	0.001123	0.00529 mg/L	0.001123	21.23%
Sb 206.836†	16.9	0.00686 mg/L	0.005558	0.00686 mg/L	0.005558	81.06%
Se 196.026†	1.7	-0.00529 mg/L	0.003154	-0.00529 mg/L	0.003154	59.60%
Tl 190.801	-19.2	-0.00084 mg/L	0.002395	-0.00084 mg/L	0.002395	286.04%
V 292.402†	215.3	0.00177 mg/L	0.000072	0.00177 mg/L	0.000072	4.05%
Zn 206.200†	640.1	0.01554 mg/L	0.000138	0.01554 mg/L	0.000138	0.89%
Cd 226.502†	7.2	0.00008 mg/L	0.000174	0.00008 mg/L	0.000174	206.26%
Ti 334.940†	16394.8	0.02678 mg/L	0.003404	0.02678 mg/L	0.003404	12.71%
Ca 227.546†	31583.4	142.47 mg/L	2.041	142.47 mg/L	2.041	1.43%

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Sequence No.: 18 **Autosampler Location: 3**
Sample ID: CCV **Date Collected: 3/1/2013 1:54:58 PM**
Analyst: **Data Type: Reprocessed on 3/1/2013 3:24:21 PM**
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt: **Initial Sample Vol:**
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	1769358.2	94.940	%	1.0413				1.10%
Lu 261.542	1182048.7	95.62	%	1.062				1.11%
Ag 328.068†	208579.9	1.2472	mg/L	0.01097	1.2472	mg/L	0.01097	0.88%
QC value within limits for Ag 328.068 Recovery = 99.77%								
Al 308.215†	223344.5	10.035	mg/L	0.0929	10.035	mg/L	0.0929	0.93%
QC value within limits for Al 308.215 Recovery = 100.35%								
As 188.979†	794.8	0.48516	mg/L	0.006225	0.48516	mg/L	0.006225	1.28%
QC value within limits for As 188.979 Recovery = 97.03%								
Ba 233.527†	1121382.4	10.206	mg/L	0.0517	10.206	mg/L	0.0517	0.51%
QC value within limits for Ba 233.527 Recovery = 102.06%								
Be 313.107†	579583.2	0.24860	mg/L	0.000822	0.24860	mg/L	0.000822	0.33%
QC value within limits for Be 313.107 Recovery = 99.44%								
Co 228.616†	100292.9	2.4566	mg/L	0.02269	2.4566	mg/L	0.02269	0.92%
QC value within limits for Co 228.616 Recovery = 98.26%								
Cr 267.716†	74908.1	0.99787	mg/L	0.009180	0.99787	mg/L	0.009180	0.92%
QC value within limits for Cr 267.716 Recovery = 99.79%								
Cu 324.752†	295884.1	1.2143	mg/L	0.01066	1.2143	mg/L	0.01066	0.88%
QC value within limits for Cu 324.752 Recovery = 97.14%								
Fe 273.955†	132695.6	4.8706	mg/L	0.03943	4.8706	mg/L	0.03943	0.81%
QC value within limits for Fe 273.955 Recovery = 97.41%								
Mg 279.077†	449353.4	25.045	mg/L	0.0989	25.045	mg/L	0.0989	0.40%
QC value within limits for Mg 279.077 Recovery = 100.18%								
Mn 257.610†	1593706.2	2.5116	mg/L	0.01247	2.5116	mg/L	0.01247	0.50%
QC value within limits for Mn 257.610 Recovery = 100.46%								
Ni 231.604†	79248.2	2.4783	mg/L	0.02171	2.4783	mg/L	0.02171	0.88%
QC value within limits for Ni 231.604 Recovery = 99.13%								
Pb 220.353†	3271.6	0.49247	mg/L	0.005348	0.49247	mg/L	0.005348	1.09%
QC value within limits for Pb 220.353 Recovery = 98.49%								
Sb 206.836†	1208.1	0.52250	mg/L	0.007501	0.52250	mg/L	0.007501	1.44%
QC value within limits for Sb 206.836 Recovery = 104.50%								
Se 196.026†	503.5	0.47600	mg/L	0.002870	0.47600	mg/L	0.002870	0.60%
QC value within limits for Se 196.026 Recovery = 95.20%								
Tl 190.801	995.3	0.47272	mg/L	0.004029	0.47272	mg/L	0.004029	0.85%
QC value within limits for Tl 190.801 Recovery = 94.54%								
V 292.402†	302873.4	2.4552	mg/L	0.02673	2.4552	mg/L	0.02673	1.09%
QC value within limits for V 292.402 Recovery = 98.21%								

Zn 206.200†	103674.1	2.5222 mg/L	0.01410	2.5222 mg/L	0.01410	0.56%
QC value within limits for Zn 206.200 Recovery = 100.89%						
Cd 226.502†	13153.8	0.24066 mg/L	0.002567	0.24066 mg/L	0.002567	1.07%
QC value within limits for Cd 226.502 Recovery = 96.26%						
Ti 334.940†	314888.0	0.49776 mg/L	0.002821	0.49776 mg/L	0.002821	0.57%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Ca 227.546†	5509.9	24.199 mg/L	0.1476	24.199 mg/L	0.1476	0.61%
QC value within limits for Ca 227.546 Recovery = 96.80%						

All analyte(s) passed QC.

Sequence No.: 19 **Autosampler Location: 4**
Sample ID: CCB **Date Collected: 3/1/2013 1:58:31 PM**
Analyst: **Data Type: Reprocessed on 3/1/2013 3:24:22 PM**
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 360.073	1862738.0	99.950	%	0.3032				0.30%
Lu 261.542	1235371.2	99.93	%	0.238				0.24%
Ag 328.068†	-23.8	-0.00014	mg/L	0.000344	-0.00014	mg/L	0.000344	242.82%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	65.9	0.00296	mg/L	0.004337	0.00296	mg/L	0.004337	146.52%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	2.2	0.00132	mg/L	0.000609	0.00132	mg/L	0.000609	45.99%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	78.0	0.00071	mg/L	0.000031	0.00071	mg/L	0.000031	4.42%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-16.5	-0.00001	mg/L	0.000013	-0.00001	mg/L	0.000013	201.95%
QC value within limits for Be 313.107 Recovery = Not calculated								
Co 228.616†	2.5	0.00006	mg/L	0.000056	0.00006	mg/L	0.000056	91.42%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	8.2	0.00011	mg/L	0.000440	0.00011	mg/L	0.000440	403.45%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	74.5	0.00031	mg/L	0.000444	0.00031	mg/L	0.000444	145.26%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 273.955†	61.0	0.00227	mg/L	0.002439	0.00227	mg/L	0.002439	107.32%
QC value within limits for Fe 273.955 Recovery = Not calculated								
Mg 279.077†	89.6	0.00500	mg/L	0.003421	0.00500	mg/L	0.003421	68.47%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	105.3	0.00017	mg/L	0.000022	0.00017	mg/L	0.000022	13.08%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Ni 231.604†	2.2	0.00007	mg/L	0.000395	0.00007	mg/L	0.000395	588.79%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-1.2	-0.00018	mg/L	0.001219	-0.00018	mg/L	0.001219	662.55%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	1.6	0.00071	mg/L	0.002576	0.00071	mg/L	0.002576	364.77%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-0.6	-0.00059	mg/L	0.002595	-0.00059	mg/L	0.002595	438.48%
QC value within limits for Se 196.026 Recovery = Not calculated								
Tl 190.801	5.5	0.00274	mg/L	0.003032	0.00274	mg/L	0.003032	110.82%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	82.2	0.00067	mg/L	0.000023	0.00067	mg/L	0.000023	3.49%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	22.9	0.00056	mg/L	0.000045	0.00056	mg/L	0.000045	8.14%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Cd 226.502†	6.0	0.00011	mg/L	0.000063	0.00011	mg/L	0.000063	57.40%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Ti 334.940†	138.7	0.00022	mg/L	0.000220	0.00022	mg/L	0.000220	100.32%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Ca 227.546†	7.0	0.03161	mg/L	0.038393	0.03161	mg/L	0.038393	121.45%
QC value within limits for Ca 227.546 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 20 **Autosampler Location: 44**
Sample ID: MB-70653~PBW **Date Collected: 3/1/2013 2:02:02 PM**

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\0304A.sif
Batch ID: Null
Results Data Set: HG13030401
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 Anallysis 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: 3/4/2013 2:47:08 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: S0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0006	-0.0116	0.0006	14:48:09	Yes
2		[0.00]	0.0007	-0.0066	0.0007	14:48:49	Yes
Mean:		[0.00]	0.0006				
SD:		0.00	0.0001				
%RSD:		0.00	15.68				

Auto-zero performed.

Sequence No.: 2 Autosampler Location: 2
Sample ID: S0.20 Date Collected: 3/4/2013 2:48:51 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: S0.20

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0020	0.0027	0.0026	14:49:49	Yes
2		[0.2]	0.0019	0.0042	0.0026	14:50:29	Yes
Mean:		[0.2]	0.0020				
SD:		0.0	0.0000				
%RSD:		0.0	2.10				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.00979 Intercept: 0.00000

Sequence No.: 3 Autosampler Location: 3
Sample ID: S1.0 Date Collected: 3/4/2013 2:50:31 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: S1.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[1]	0.0118	0.0498	0.0124	14:51:28	Yes
2		[1]	0.0115	0.0495	0.0121	14:52:08	Yes
Mean:		[1]	0.0116				
SD:		0	0.0002				

%RSD: 0 1.74
Standard number 2 applied. [1]
Correlation Coef.: 0.998457 Slope: 0.01158 Intercept: 0.00000

Sequence No.: 4 **Autosampler Location: 4**
Sample ID: S2.0 **Date Collected: 3/4/2013 2:52:11 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S2.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2]	0.0234	0.1021	0.0240	14:53:08	Yes
2		[2]	0.0231	0.1044	0.0238	14:53:48	Yes
Mean:		[2]	0.0233				
SD:		0	0.0002				
%RSD:		0	0.84				

Standard number 3 applied. [2]
Correlation Coef.: 0.999692 Slope: 0.01162 Intercept: 0.00000

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: S5.0 **Date Collected: 3/4/2013 2:53:50 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S5.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5]	0.0609	0.2734	0.0616	14:54:48	Yes
2		[5]	0.0594	0.2694	0.0600	14:55:27	Yes
Mean:		[5]	0.0602				
SD:		0	0.0011				
%RSD:		0	1.84				

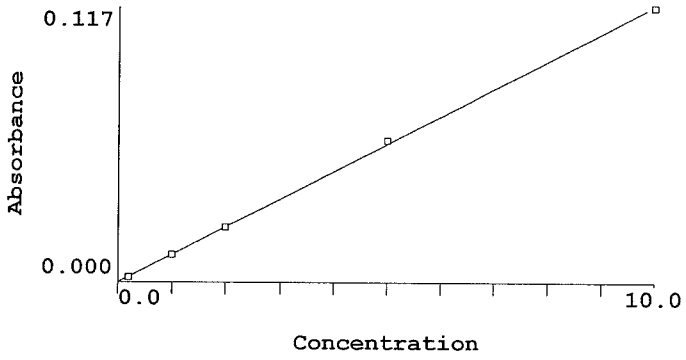
Standard number 4 applied. [5]
Correlation Coef.: 0.999775 Slope: 0.01196 Intercept: 0.00000

Sequence No.: 6 **Autosampler Location: 6**
Sample ID: S10.0 **Date Collected: 3/4/2013 2:55:29 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S10.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10]	0.1180	0.5336	0.1187	14:56:27	Yes
2		[10]	0.1153	0.5257	0.1159	14:57:07	Yes
Mean:		[10]	0.1167				
SD:		0	0.0019				
%RSD:		0	1.66				

Standard number 5 applied. [10]
Correlation Coef.: 0.999836 Slope: 0.01174 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	15.7
S0.20	0.0020	0.2	0.167	0.00	2.1
S1.0	0.0116	1.0	0.992	0.00	1.7
S2.0	0.0233	2.0	1.982	0.00	0.8
S5.0	0.0602	5.0	5.126	0.00	1.8
S10.0	0.1167	10.0	9.940	0.00	1.7

Correlation Coef.: 0.999836 Slope: 0.01174 Intercept: 0.00000

Sequence No.: 7
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 3/4/2013 2:57:09 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.576	4.576	0.0537	0.2425	0.0543	14:58:07	Yes
2	4.435	4.435	0.0520	0.2375	0.0527	14:58:47	Yes
Mean:	4.505	4.505	0.0529				
SD:	0.100	0.100	0.0012				
%RSD:	2.214	2.214	2.21				

QC value within limits for Hg 253.7 Recovery = 90.11%
All analyte(s) passed QC.

Sequence No.: 8
Sample ID: ICB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/4/2013 2:58:49 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.025	0.025	0.0003	0.0016	0.0009	14:59:49	Yes
2	0.024	0.024	0.0003	0.0012	0.0009	15:00:29	Yes
Mean:	0.024	0.024	0.0003				
SD:	0.000	0.000	0.0000				
%RSD:	1.083	1.083	1.08				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 9
Sample ID: MB-70716
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 17
Date Collected: 3/4/2013 3:00:31 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: MB-70716

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.034	-0.034	-0.0004	-0.0030	0.0002	15:01:29	Yes
2	-0.034	-0.034	-0.0004	-0.0007	0.0002	15:02:09	Yes
Mean:	-0.034	-0.034	-0.0004				
SD:	0.000	0.000	0.0000				
%RSD:	1.331	1.331	1.33				

Sequence No.: 10
Sample ID: LCS-70716
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 18
Date Collected: 3/4/2013 3:02:10 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LCS-70716

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.362	4.362	0.0512	0.2337	0.0518	15:03:09	Yes
2	4.264	4.264	0.0500	0.2282	0.0507	15:03:49	Yes
Mean:	4.313	4.313	0.0506				
SD:	0.070	0.070	0.0008				
%RSD:	1.619	1.619	1.62				

Sequence No.: 11
Sample ID: M0245-01C
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 19
Date Collected: 3/4/2013 3:03:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: M0245-01C

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000	0.000	0.0000	0.0005	0.0006	15:04:48	Yes
2	0.004	0.004	0.0000	0.0013	0.0007	15:05:28	Yes
Mean:	0.002	0.002	0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	135.5	135.5	135.54				

Sequence No.: 12
Sample ID: M0245-01CDUP
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 20
Date Collected: 3/4/2013 3:05:30 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: M0245-01CDUP

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000	0.000	-0.0000	0.0010	0.0006	15:06:28	Yes
2	-0.005	-0.005	-0.0001	0.0003	0.0006	15:07:08	Yes
Mean:	-0.003	-0.003	-0.0000				
SD:	0.004	0.004	0.0000				
%RSD:	136.9	136.9	136.94				

Sequence No.: 13
Sample ID: M0245-01CMS
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 21
Date Collected: 3/4/2013 3:07:09 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: M0245-01CMS

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak

#	ug/L	ug/L	Signal	Area	Height		Stored
1	4.178	4.178	0.0490	0.2275	0.0497	15:08:07	Yes
2	4.008	4.008	0.0470	0.2225	0.0477	15:08:47	Yes
Mean:	4.093	4.093	0.0480				
SD:	0.120	0.120	0.0014				
%RSD:	2.935	2.935	2.94				

Sequence No.: 14
Sample ID: M0245-02A
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 22
Date Collected: 3/4/2013 3:08:49 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: M0245-02A

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.023	-0.023	-0.0003	0.0006	0.0004	15:09:47	Yes
2	-0.023	-0.023	-0.0003	0.0001	0.0004	15:10:27	Yes
Mean:	-0.023	-0.023	-0.0003				
SD:	0.000	0.000	0.0000				
%RSD:	1.590	1.590	1.59				

Sequence No.: 15
Sample ID: M0245-02ADUP
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 23
Date Collected: 3/4/2013 3:10:28 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: M0245-02ADUP

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.028	-0.028	-0.0003	0.0008	0.0003	15:11:26	Yes
2	-0.029	-0.029	-0.0003	0.0003	0.0003	15:12:06	Yes
Mean:	-0.028	-0.028	-0.0003				
SD:	0.001	0.001	0.0000				
%RSD:	2.672	2.672	2.67				

Sequence No.: 16
Sample ID: M0245-02AMS
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 24
Date Collected: 3/4/2013 3:12:08 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: M0245-02AMS

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.099	4.099	0.0481	0.2253	0.0487	15:13:05	Yes
2	3.951	3.951	0.0464	0.2190	0.0470	15:13:45	Yes
Mean:	4.025	4.025	0.0472				
SD:	0.105	0.105	0.0012				
%RSD:	2.599	2.599	2.60				

Sequence No.: 17
Sample ID: M0245-03D
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 25
Date Collected: 3/4/2013 3:13:47 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: M0245-03D

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.597	4.597	0.0540	0.2533	0.0546	15:14:45	Yes
2	4.387	4.387	0.0515	0.2460	0.0521	15:15:25	Yes
Mean:	4.492	4.492	0.0527				

SD:	0.148	0.148	0.0017
%RSD:	3.305	3.305	3.31

Sequence No.: 18 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 3/4/2013 3:15:27 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	4.628	4.628	0.0543	0.2528	0.0549	15:16:26	Yes
2	4.469	4.469	0.0525	0.2444	0.0531	15:17:05	Yes
Mean:	4.549	4.549	0.0534				
SD:	0.112	0.112	0.0013				
%RSD:	2.469	2.469	2.47				

QC value within limits for Hg 253.7 Recovery = 90.98%
All analyte(s) passed QC.

Sequence No.: 19 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 3/4/2013 3:17:07 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	0.024	0.024	0.0003	0.0024	0.0009	15:18:08	Yes
2	0.027	0.027	0.0003	0.0030	0.0009	15:18:48	Yes
Mean:	0.026	0.026	0.0003				
SD:	0.002	0.002	0.0000				
%RSD:	7.227	7.227	7.23				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 20 **Autosampler Location: 26**
Sample ID: M0245-04A **Date Collected: 3/4/2013 3:18:50 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: M0245-04A

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.067	0.067	0.0008	0.0046	0.0014	15:19:50	Yes
2	0.059	0.059	0.0007	0.0046	0.0013	15:20:30	Yes
Mean:	0.063	0.063	0.0007				
SD:	0.005	0.005	0.0001				
%RSD:	8.607	8.607	8.61				

Sequence No.: 21 **Autosampler Location: 27**
Sample ID: M0245-05D **Date Collected: 3/4/2013 3:20:32 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: M0245-05D

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.018	-0.018	-0.0002	0.0002	0.0004	15:21:29	Yes
2	-0.017	-0.017	-0.0002	0.0006	0.0004	15:22:09	Yes
Mean:	-0.018	-0.018	-0.0002				

SD:	0.000	0.000	0.0000
%RSD:	1.729	1.729	1.73

Sequence No.: 22
Sample ID: M0245-06A
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 28
Date Collected: 3/4/2013 3:22:12 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: M0245-06A

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.030	-0.030	-0.0003	-0.0007	0.0003	15:23:09	Yes
2	-0.026	-0.026	-0.0003	0.0010	0.0003	15:23:49	Yes
Mean:	-0.028	-0.028	-0.0003				
SD:	0.002	0.002	0.0000				
%RSD:	8.439	8.439	8.44				

Sequence No.: 23
Sample ID: M0245-07D
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 29
Date Collected: 3/4/2013 3:23:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: M0245-07D

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.022	-0.022	-0.0003	0.0013	0.0004	15:24:49	Yes
2	-0.025	-0.025	-0.0003	0.0010	0.0003	15:25:29	Yes
Mean:	-0.023	-0.023	-0.0003				
SD:	0.002	0.002	0.0000				
%RSD:	8.305	8.305	8.30				

Sequence No.: 24
Sample ID: M0245-08A
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 30
Date Collected: 3/4/2013 3:25:31 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: M0245-08A

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.026	-0.026	-0.0003	0.0010	0.0003	15:26:28	Yes
2	-0.027	-0.027	-0.0003	0.0004	0.0003	15:27:08	Yes
Mean:	-0.026	-0.026	-0.0003				
SD:	0.001	0.001	0.0000				
%RSD:	4.657	4.657	4.66				

Sequence No.: 25
Sample ID: M0245-09D
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 31
Date Collected: 3/4/2013 3:27:10 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: M0245-09D

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.922	1.922	0.0226	0.1072	0.0232	15:28:07	Yes
2	1.874	1.874	0.0220	0.1057	0.0226	15:28:47	Yes
Mean:	1.898	1.898	0.0223				
SD:	0.034	0.034	0.0004				
%RSD:	1.796	1.796	1.80				

Sequence No.: 26
Sample ID: M0245-10A
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 32
Date Collected: 3/4/2013 3:28:49 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: M0245-10A

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.029	-0.029	-0.0003	0.0003	0.0003	15:29:51	Yes
2	-0.030	-0.030	-0.0004	0.0004	0.0003	15:30:31	Yes
Mean:	-0.029	-0.029	-0.0003				
SD:	0.001	0.001	0.0000				
%RSD:	3.599	3.599	3.60				

Sequence No.: 27
Sample ID: M0245-11D
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 33
Date Collected: 3/4/2013 3:30:33 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: M0245-11D

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.022	0.022	0.0003	0.0041	0.0009	15:31:31	Yes
2	0.017	0.017	0.0002	0.0035	0.0008	15:32:11	Yes
Mean:	0.019	0.019	0.0002				
SD:	0.004	0.004	0.0000				
%RSD:	20.19	20.19	20.19				

Sequence No.: 28
Sample ID: M0245-12A
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 34
Date Collected: 3/4/2013 3:32:13 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: M0245-12A

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.009	0.009	0.0001	0.0035	0.0007	15:33:10	Yes
2	0.007	0.007	0.0001	0.0039	0.0007	15:33:50	Yes
Mean:	0.008	0.008	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	16.98	16.98	16.98				

Sequence No.: 29
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 7
Date Collected: 3/4/2013 3:33:52 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	4.588	4.588	0.0538	0.2560	0.0545	15:34:53	Yes
2	4.520	4.520	0.0530	0.2536	0.0537	15:35:33	Yes
Mean:	4.554	4.554	0.0534				
SD:	0.048	0.048	0.0006				
%RSD:	1.057	1.057	1.06				

QC value within limits for Hg 253.7 Recovery = 91.08%
All analyte(s) passed QC.

Sequence No.: 30
Sample ID: CCB
Autosampler Location: 1
Date Collected: 3/4/2013 3:35:35 PM

Analyst:
Initial Sample Wt:
Dilution:
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	0.031	0.031	0.0004	0.0047	0.0010	15:36:35	Yes
2	0.034	0.034	0.0004	0.0054	0.0010	15:37:15	Yes
Mean:	0.032	0.032	0.0004				
SD:	0.002	0.002	0.0000				
%RSD:	6.875	6.875	6.88				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 31
Sample ID: M0245-13C
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 35
Date Collected: 3/4/2013 3:37:17 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: M0245-13C

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.016	-0.016	-0.0002	0.0021	0.0004	15:38:16	Yes
2	-0.013	-0.013	-0.0002	0.0028	0.0005	15:38:56	Yes
Mean:	-0.014	-0.014	-0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	12.89	12.89	12.89				

Sequence No.: 32
Sample ID: M0245-14A
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 36
Date Collected: 3/4/2013 3:38:58 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: M0245-14A

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.028	-0.028	-0.0003	0.0018	0.0003	15:39:56	Yes
2	-0.026	-0.026	-0.0003	0.0030	0.0003	15:40:36	Yes
Mean:	-0.027	-0.027	-0.0003				
SD:	0.001	0.001	0.0000				
%RSD:	5.265	5.265	5.26				

Sequence No.: 33
Sample ID: M0245-15D
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 37
Date Collected: 3/4/2013 3:40:38 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: M0245-15D

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.025	-0.025	-0.0003	0.0027	0.0003	15:41:36	Yes
2	-0.021	-0.021	-0.0003	0.0028	0.0004	15:42:15	Yes
Mean:	-0.023	-0.023	-0.0003				
SD:	0.002	0.002	0.0000				
%RSD:	10.28	10.28	10.28				

Sequence No.: 34
Sample ID: M0245-16A
Analyst:
Initial Sample Wt:
Autosampler Location: 38
Date Collected: 3/4/2013 3:42:17 PM
Data Type: Original
Initial Sample Vol:

Dilution: Sample Prep Vol:

Replicate Data: M0245-16A

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.014	-0.014	-0.0002	0.0025	0.0005	15:43:15	Yes
2	-0.013	-0.013	-0.0002	0.0033	0.0005	15:43:55	Yes
Mean:	-0.014	-0.014	-0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	6.875	6.875	6.88				

Sequence No.: 35 Autosampler Location: 39
Sample ID: M0245-17D Date Collected: 3/4/2013 3:43:57 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: M0245-17D

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.033	0.033	0.0004	0.0051	0.0010	15:44:55	Yes
2	0.031	0.031	0.0004	0.0048	0.0010	15:45:35	Yes
Mean:	0.032	0.032	0.0004				
SD:	0.002	0.002	0.0000				
%RSD:	4.754	4.754	4.75				

Sequence No.: 36 Autosampler Location: 40
Sample ID: M0245-18A Date Collected: 3/4/2013 3:45:37 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: M0245-18A

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.024	-0.024	-0.0003	0.0011	0.0003	15:46:34	Yes
2	-0.020	-0.020	-0.0002	0.0019	0.0004	15:47:14	Yes
Mean:	-0.022	-0.022	-0.0003				
SD:	0.003	0.003	0.0000				
%RSD:	12.84	12.84	12.84				

Sequence No.: 37 Autosampler Location: 41
Sample ID: M0253-01C Date Collected: 3/4/2013 3:47:16 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: M0253-01C

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.017	-0.017	-0.0002	0.0022	0.0004	15:48:13	Yes
2	-0.019	-0.019	-0.0002	0.0024	0.0004	15:48:53	Yes
Mean:	-0.018	-0.018	-0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	6.188	6.188	6.19				

Sequence No.: 38 Autosampler Location: 42
Sample ID: M0262-01C Date Collected: 3/4/2013 3:48:55 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: M0262-01C

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.033	0.033	0.0004	0.0053	0.0010	15:49:52	Yes
2	0.031	0.031	0.0004	0.0049	0.0010	15:50:33	Yes
Mean:	0.032	0.032	0.0004				
SD:	0.001	0.001	0.0000				
%RSD:	3.855	3.855	3.85				

Sequence No.: 39 **Autosampler Location: 43**
Sample ID: MB-70717 **Date Collected: 3/4/2013 3:50:35 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: MB-70717

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.009	-0.009	-0.0001	0.0033	0.0005	15:51:32	Yes
2	-0.011	-0.011	-0.0001	0.0028	0.0005	15:52:12	Yes
Mean:	-0.010	-0.010	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	18.79	18.79	18.79				

Sequence No.: 40 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 3/4/2013 3:52:14 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	4.541	4.541	0.0533	0.2561	0.0539	15:53:13	Yes
2	4.482	4.482	0.0526	0.2521	0.0532	15:53:53	Yes
Mean:	4.512	4.512	0.0530				
SD:	0.042	0.042	0.0005				
%RSD:	0.923	0.923	0.92				

QC value within limits for Hg 253.7 Recovery = 90.24%
All analyte(s) passed QC.

Sequence No.: 41 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 3/4/2013 3:53:55 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	0.035	0.035	0.0004	0.0050	0.0010	15:54:55	Yes
2	0.036	0.036	0.0004	0.0047	0.0011	15:55:35	Yes
Mean:	0.036	0.036	0.0004				
SD:	0.001	0.001	0.0000				
%RSD:	1.817	1.817	1.82				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 42 **Autosampler Location: 44**
Sample ID: LCS-70717 **Date Collected: 3/4/2013 3:55:37 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: LCS-70717

M0262

Friday, March 01, 2013 17:38

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division PREP BATCH REPORT

Prep Start Date: **03/01/2013 9:00**
Prep End Date: **03/01/2013 13:00** Prep Code: **E200.7_W_PR** Prep Type: **200.7/200.7** Prep Factor Units: **mL / mL**
Prep Batch ID: **70686** Technician: **David T Camara**

QC Matrix: N/A | 1:1 HNO3 1112080 | Reagent 3 Lot: N/A | Reagent 5 Lot: N/A
QC Matrix Lot: N/A | 1:1 HNO3 (mL): 1.0 | Reagent 3 (mL): N/A | Reagent 5 (mL): N/A

Filter?: N/A | 1:1 HCl 4112070 | Reagent 4 Lot: N/A | Reagent 6 Lot: N/A
Filter Lot: N/A | 1:1 HCl (mL): 0.5 | Reagent 4 (mL): N/A | Reagent 6 (mL): N/A

Digestion Start Time 1: 03/01/2013 09:00 | Digestion Start Time 2: N/A | Block Temp (C): 97 | Therm ID1: MT-120
Digestion End Time 1: 03/01/2013 13:00 | Digestion End Time 2: N/A | Corr Fac 0

Mitkem Sample ID	Client Samp ID		tial L/g)	Final (mL)	Sample Color	Sample Clarity	Extract Color	Extract Clarity			Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11	pH <2	HOT BLOCK
MB-70686			50	50	--	--	--	--					03/01/13	DTC	ICPLab	2	☐	☐	HB-5
LCS-70686			50	50	--	--	--	--					03/01/13	DTC	ICPLab	2	☐	☐	HB-5
50 uL II121128A, 500 uL II130129A, 250 uL II130206A, 50 uL IP120504A, 50 uL IP120504B																			
LCSD-70686			50	50	--	--	--	--					03/01/13	DTC	ICPLab	2	☐	☐	HB-5
50 uL II121128A, 500 uL II130129A, 250 uL II130206A, 50 uL IP120504A, 50 uL IP120504B																			
M0253-01C	DIRECT DISCHARGE-	A	50	50	--	--	--	--			03/11/13	01	03/01/13	DTC	ICPLab	2	☐	☐	HB-5
PP13_200																			
M0258-01A	#1	A	50	50	--	--	--	--			03/20/13	01	03/01/13	DTC	ICPLab	2	☐	☐	HB-5
Zn Only																			
M0262-01C	DIRECT DISCHARGE	A	50	50	--	--	--	--			03/12/13	01	03/01/13	DTC	ICPLab	2	☐	☐	HB-5
PP13_200																			

David T Camara 03/01/2013
Analyst Reviewed Date

NZA 3/4/13
Manager Reviewed Date

Comments:

DC 2 DC 3/1/13

Logbook ID 100.0130 -12/12

Prep Start Date: **03/04/2013 11:30**
Prep End Date: **03/04/2013 13:30** Prep Code: **SW7470A_PR** Prep Type: **7470A/METHOD** Prep Factor Units: **mL / mL**
Prep Batch ID: **70716** Technician: **David T Camara**

MD262

QC Matrix: N/A | Conc H2SO4 **3111071** | 5% KMnO4 **IR13030401** | Reagent 5 Lot: N/A
QC Matrix Lot: N/A | Conc H2SO4 (mL): **5.0** | 5% KMnO4 (mL): **15.0** | Reagent 5 (mL): N/A

Filter?: N/A | Conc HNO3 **1112080** | 5% K2S2O8 **IR13030402** | Reagent 6 Lot: N/A
Filter Lot: N/A | Conc HNO3 (mL): **2.5** | 5% K2S2O8 (mL): **8.0** | Reagent 6 (mL): N/A

Digestion Start Time 1: **03/04/2013 11:30** | Digestion Start Time 2: N/A | Block Temp (C): **97** | Therm ID1: **MT-47**
Digestion End Time 1: **03/04/2013 13:30** | Digestion End Time 2: N/A | Corr Fac **-3**

Mitkem Sample ID	Client Samp ID		tial L/g)	Final (mL)	Sample Color	Sample Clarity	Extract Color	Extract Clarity			Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11	pH <2	HOT BLOCK
S0			100	100	--	--	--	--					03/04/13	DTC	HgLab	2	☐	☐	HB-A
S0.2			100	100	--	--	--	--					03/04/13	DTC	HgLab	2	☐	☐	HB-A
40 uL II130304B																			
S1.0			100	100	--	--	--	--					03/04/13	DTC	HgLab	2	☐	☐	HB-A
200 uL II130304B																			
S2.0			100	100	--	--	--	--					03/04/13	DTC	HgLab	2	☐	☐	HB-A
400 uL II130304B																			
S5.0			100	100	--	--	--	--					03/04/13	DTC	HgLab	2	☐	☐	HB-A
1000 uL II130304B																			
S10.0			100	100	--	--	--	--					03/04/13	DTC	HgLab	2	☐	☐	HB-A
2000 uL II130304B																			
ICV			100	100	--	--	--	--					03/04/13	DTC	HgLab	2	☐	☐	HB-A
1000 uL II130207A																			
ICB			100	100	--	--	--	--					03/04/13	DTC	HgLab	2	☐	☐	HB-A
CCV			100	100	--	--	--	--					03/04/13	DTC	HgLab	2	☐	☐	HB-A
1000 uL II130207A																			
CCB			100	100	--	--	--	--					03/04/13	DTC	HgLab	2	☐	☐	HB-A
MB-70716			100	100	--	--	--	--					03/04/13	DTC	HgLab	2	☐	☐	HB-A
LCS-70716			100	100	--	--	--	--					03/04/13	DTC	HgLab	2	☐	☐	HB-A
1000 uL II130207B																			
M0245-01C	OU7-MW123	A	100	100	--	--	--	--			03/19/13	01	03/04/13	DTC	HgLab	2	☐	☐	HB-A
TOTAL																			
M0245-01CDUP	OU7-MW123	A	100	100	--	--	--	--			03/19/13	01	03/04/13	DTC	HgLab	2	☐	☐	HB-A
M0245-01CMS	OU7-MW123	A	100	100	--	--	--	--			03/19/13	01	03/04/13	DTC	HgLab	2	☐	☐	HB-A
1000 uL II130207B																			
M0245-02A	OU7-MW123-F	A	100	100	--	--	--	--			03/19/13	01	03/04/13	DTC	HgLab	2	☐	☐	HB-A
DISSOLVED																			
M0245-02ADUP	OU7-MW123-F	A	100	100	--	--	--	--			03/19/13	01	03/04/13	DTC	HgLab	2	☐	☐	HB-2
M0245-02AMS	OU7-MW123-F	A	100	100	--	--	--	--			03/19/13	01	03/04/13	DTC	HgLab	2	☐	☐	HB-2
1000 uL II130207B																			
M0245-03D	OU7-MW107	A	100	100	--	--	--	--			03/19/13	01	03/04/13	DTC	HgLab	2	☐	☐	HB-2
TOTAL																			

DC 3/4/13

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Logbook ID: 100.0128 -02/13

M2262

Prep Start Date: **03/04/2013 11:30**
Prep End Date: **03/04/2013 13:30**
Prep Batch ID: **70716**

Prep Code: **SW7470A_PR**
Technician: **David T Camara**

Prep Type: **7470A/METHOD**

Prep Factor Units: **mL / mL**

QC Matrix: N/A
QC Matrix Lot: N/A

Conc H2SO4 3111071
Conc H2SO4 (mL): 5.0

5% KMnO4 IR13030401
5% KMnO4 (mL): 15.0

Reagent 5 Lot: N/A
Reagent 5 (mL): N/A

Filter?: N/A
Filter Lot: N/A

Conc HNO3 1112080
Conc HNO3 (mL): 2.5

5% K2S2O8 IR13030402
5% K2S2O8 (mL): 8.0

Reagent 6 Lot: N/A
Reagent 6 (mL): N/A

Digestion Start Time 1: 03/04/2013 11:30
Digestion End Time 1: 03/04/2013 13:30

Digestion Start Time 2: N/A
Digestion End Time 2: N/A

Block Temp (C): 97

Therm ID1: MT-47
Corr Fac -3

Mitkem Sample ID	Client Samp ID		tial L/g)	Final (mL)	Sample Color	Sample Clarity	Extract Color	Extract Clarity			Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11	pH <2	HOT BLOCK
M0245-04A	OU7-MW107-F	A	100	100	--	--	--	--			03/19/13	01	03/04/13	DTC	HgLab	2	☐	☐	HB-2
DISSOLVED																			
M0245-05D	CEOU-MW02	A	100	100	--	--	--	--			03/19/13	01	03/04/13	DTC	HgLab	2	☐	☐	HB-2
TOTAL																			
M0245-06A	CEOU-MW02-F	A	100	100	--	--	--	--			03/19/13	01	03/04/13	DTC	HgLab	2	☐	☐	HB-2
DISSOLVED																			
M0245-07D	OU7-MW106	A	100	100	--	--	--	--			03/19/13	01	03/04/13	DTC	HgLab	2	☐	☐	HB-2
TOTAL																			
M0245-08A	OU7-MW106-F	A	100	100	--	--	--	--			03/19/13	01	03/04/13	DTC	HgLab	2	☐	☐	HB-2
DISSOLVED																			
M0245-09D	OU7-MW105	A	100	100	--	--	--	--			03/19/13	01	03/04/13	DTC	HgLab	2	☐	☐	HB-2
TOTAL																			
M0245-10A	OU7-MW105-F	A	100	100	--	--	--	--			03/19/13	01	03/04/13	DTC	HgLab	2	☐	☐	HB-2
DISSOLVED																			
M0245-11D	OU7-MW110	A	100	100	--	--	--	--			03/19/13	01	03/04/13	DTC	HgLab	2	☐	☐	HB-2
TOTAL																			
M0245-12A	OU7-MW110-F	A	100	100	--	--	--	--			03/19/13	01	03/04/13	DTC	HgLab	2	☐	☐	HB-2
DISSOLVED																			
M0245-13C	OU7-MW133	A	100	100	--	--	--	--			03/19/13	01	03/04/13	DTC	HgLab	2	☐	☐	HB-2
TOTAL																			
M0245-14A	OU7-MW133-F	A	100	100	--	--	--	--			03/19/13	01	03/04/13	DTC	HgLab	2	☐	☐	HB-2
DISSOLVED																			
M0245-15D	OU7-022113FB	A	100	100	--	--	--	--			03/19/13	01	03/04/13	DTC	HgLab	2	☐	☐	HB-2
TOTAL																			
M0245-16A	OU7-022113FB-F	A	100	100	--	--	--	--			03/19/13	01	03/04/13	DTC	HgLab	2	☐	☐	HB-2
DISSOLVED																			
M0245-17D	OU7-022213FB	A	100	100	--	--	--	--			03/19/13	01	03/04/13	DTC	HgLab	2	☐	☐	HB-C
TOTAL																			
M0245-18A	OU7-022213FB-F	A	100	100	--	--	--	--			03/19/13	01	03/04/13	DTC	HgLab	2	☐	☐	HB-C
DISSOLVED																			
M0253-01C	DIRECT DISCHARGE-	A	100	100	--	--	--	--			03/11/13	01	03/04/13	DTC	HgLab	2	☐	☐	HB-C

PP13_200

DC 3/4/13

Logbook ID: 100.0128 -02/13

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Monday, March 04, 2013 14:00

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

PREP BATCH REPORT

Prep Start Date: **03/04/2013 11:30**
Prep End Date: **03/04/2013 13:30**
Prep Batch ID: **70716**

Prep Code: **SW7470A_PR**
Technician: **David T Camara**

Prep Type: **7470A/METHOD**

Prep Factor Units: **mL / mL**

QC Matrix: N/A
QC Matrix Lot: N/A

Conc H2SO4 3111071
Conc H2SO4 (mL): 5.0

5% KMnO4 IR13030401
5% KMnO4 (mL): 15.0

Reagent 5 Lot: N/A
Reagent 5 (mL): N/A

Filter?: N/A
Filter Lot: N/A

Conc HNO3 1112080
Conc HNO3 (mL): 2.5

5% K2S2O8 IR13030402
5% K2S2O8 (mL): 8.0

Reagent 6 Lot: N/A
Reagent 6 (mL): N/A

Digestion Start Time 1: 03/04/2013 11:30
Digestion End Time 1: 03/04/2013 13:30

Digestion Start Time 2: N/A
Digestion End Time 2: N/A

Block Temp (C): 97

Therm ID1: MT-47
Corr Fac -3

Mitkem Sample ID	Client Samp ID		tial L/g)	Final (mL)	Sample Color	Sample Clarity	Extract Color	Extract Clarity			Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11	pH <2	HOT BLOCK
M0262-01C	DIRECT DISCHARGE	A	100	100	--	--	--	--			03/12/13	01	03/04/13	DTC	HgLab	2	☐	☐	HB-C

PP13_200

David T Camara — Analyst Reviewed — 03/04/2013 Date

NZA — Manager Reviewed — 3/4/13 Date

Comments:

DC 3/4/13

Logbook ID: 100.0128 -02/13

Internal Chain of Custody

Client: LABELLA

Work Order: M0262 **Profile Name:** LABELLA_STANDBY_CONTRACT

MATRIX **Aqueous**

Samp #	Bottle	Test	Status	Received	Date
01A	001	E624	In	LOGIN: vbrizard	2/28/2013 11:26:00 AM
01A	002	E624	In	LOGIN: vbrizard	2/28/2013 11:26:00 AM
01B	001	E608_PCB	In	LOGIN: vbrizard	2/28/2013 11:26:00 AM
01B	001	E625	In	LOGIN: vbrizard	2/28/2013 11:26:00 AM
01B	002	E608_PCB	In	LOGIN: vbrizard	2/28/2013 11:26:00 AM
01B	002	E608_PCB	Consumed	Jodie B Warner	3/1/2013 9:08:00 AM
01B	002	E625	In	LOGIN: vbrizard	2/28/2013 11:26:00 AM
01B	002	E625	Consumed	Jodie B Warner	3/1/2013 9:08:00 AM
01B	003	E608_PCB	In	LOGIN: vbrizard	2/28/2013 11:26:00 AM
01B	003	E608_PCB	Consumed	Jodie B Warner	3/1/2013 9:08:00 AM
01B	003	E625	In	LOGIN: vbrizard	2/28/2013 11:26:00 AM
01B	003	E625	Consumed	Jodie B Warner	3/1/2013 9:08:00 AM
01C	001	E200.7	In	LOGIN: vbrizard	2/28/2013 11:26:00 AM
01C	001	E245.1	In	LOGIN: vbrizard	2/28/2013 11:26:00 AM

Last Page of Data Report

Report Date:
19-Mar-13 16:44

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

LaBella Associates
300 State Street, Suite 201
Rochester, NY 14614

Work Order: M0299
Project : LaBella Monoco Oil
Project #:

Attn: Dan Noll

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M0299-01	DIR DISCHARGE-3	Aqueous	06-Mar-13 11:00	07-Mar-13 09:15

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 requirments have been meet.

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.

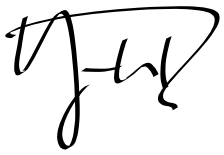
Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

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

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:



Yihai Ding
Laboratory Director

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* Data Summary Pack *

175 Metro Center Boulevard · Warwick, RI 02886-1755 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0299

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
DIR DISCHARGE-3	M0299-01	E624	E625	E608_PCB	E200.7	
DIR DISCHARGE-3	M0299-01				E245.1	

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0299

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
E624					
M0299-01A	AQ	3/6/2013	3/7/2013	NA	3/11/2013

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0299

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
E625					
M0299-01B	AQ	3/6/2013	3/7/2013	3/7/2013	3/12/2013

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0299

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
E608_PCB					
M0299-01B	AQ	3/6/2013	3/7/2013	3/11/2013	3/12/2013

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0299

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
E624					
M0299-01A	AQ	E624	NA	LOW	1

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0299

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
E625					
M0299-01B	AQ	E625	625	NA	1

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0299

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
E608_PCB					
M0299-01B	AQ	E608_PCB	608	acid/sulfur	1

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0299

Laboratory Sample ID	Matrix	Metals Requested	Date Received By Lab	Date Analyzed
E200.7				
M0299-01C	AQ	E200.7	3/7/2013	3/11/2013
E245.1				
M0299-01C	AQ	E245.1	3/7/2013	3/13/2013

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: M0299

Client ID: LABELLA
Project: LaBella Monoco Oil
WO Name: LaBella Monoco Oil
Location: LABELLA_MONOCO-OIL,

Case:
SDG:
PO: 210259

HC Due: 03/19/13
Fax Due: 03/14/13
Fax Report: ☑

Report Level: ASP-B
Special Program:
EDD: ENVIROINSITE_1
EQUIIS_4_NYSDEC

Comments: use this project for between 11-50 samples, no RUSH surcharge base on lab capacity, no charge for MS/MSD or a batch of 7 or more samples, no charge for TB. no hard copy

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M0299-01A	DIR DISCHARGE-3	03/06/2013 11:00	03/07/2013	Aqueous	E624	/					VOA
M0299-01B	DIR DISCHARGE-3	03/06/2013 11:00	03/07/2013	Aqueous	E608_PCB	/					V2
M0299-01B	DIR DISCHARGE-3	03/06/2013 11:00	03/07/2013	Aqueous	E625	/					V2
M0299-01C	DIR DISCHARGE-3	03/06/2013 11:00	03/07/2013	Aqueous	E200.7	/ PP13_200				Y	M1
M0299-01C	DIR DISCHARGE-3	03/06/2013 11:00	03/07/2013	Aqueous	E245.1	/ PP13_200					M1

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

HT = Test logged in but has been placed on hold

03/07/2013 13:38 Lab Client Rep: Agnes R Huntley

* Volatiles *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Monoco Oil

Laboratory Workorder / SDG #: M0299

EPA 624, VOC 624 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: EPA 624

IV. PREPARATION

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

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: V10
Instrument Type: GCMS-VOA

Description: HP7890A
Manufacturer: Agilent
Model: 7890A / 5975C

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 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-70808 in batch 70809, Percent Recovery is outside QC Limits, recovery is above criteria for Acrolein at 143% with criteria of (12-133).

LCSD-70808 in batch 70809, Percent Recovery is outside QC Limits, recovery is above criteria for Acrolein at 150% with criteria of (12-133).

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.

Signed: 

Date: 03/19/13

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.

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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DIR DISCHARGE-3

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0299-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B8630.D

Level: (TRACE/LOW/MED) LOW Date Received: 03/07/2013

% Moisture: not dec. Date Analyzed: 03/11/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	0.62	J
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
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	0.75	J
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-88-3	Toluene	2.4	J
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
124-48-1	Dibromochloromethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	1.8	J
95-47-6	o-Xylene	0.83	J
1330-20-7	Xylene (Total)	2.6	J
75-25-2	Bromoform	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
110-75-8	2-Chloroethyl vinyl ether	5.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DIR DISCHARGE-3

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0299-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B8630.D

Level: (TRACE/LOW/MED) LOW Date Received: 03/07/2013

% Moisture: not dec. Date Analyzed: 03/11/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
107-02-8	Acrolein	25	U
107-13-1	Acrylonitrile	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-70808

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-70808

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B8626.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 03/11/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
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
75-09-2	Methylene chloride	3.7	J
156-60-5	trans-1,2-Dichloroethene	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	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
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	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
127-18-4	Tetrachloroethene	5.0	U
124-48-1	Dibromochloromethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
75-25-2	Bromoform	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
110-75-8	2-Chloroethyl vinyl ether	5.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-70808

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-70808

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B8626.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 03/11/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
107-02-8	Acrolein	25	U
107-13-1	Acrylonitrile	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-70808

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-70808

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B8623.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 03/11/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	52	
75-01-4	Vinyl chloride	55	
74-83-9	Bromomethane	55	
75-00-3	Chloroethane	51	
75-69-4	Trichlorofluoromethane	59	
75-35-4	1,1-Dichloroethene	55	
75-09-2	Methylene chloride	53	B
156-60-5	trans-1,2-Dichloroethene	55	
75-34-3	1,1-Dichloroethane	55	
156-59-2	cis-1,2-Dichloroethene	55	
67-66-3	Chloroform	55	
71-55-6	1,1,1-Trichloroethane	56	
56-23-5	Carbon tetrachloride	59	
107-06-2	1,2-Dichloroethane	55	
71-43-2	Benzene	54	
79-01-6	Trichloroethene	55	
78-87-5	1,2-Dichloropropane	54	
75-27-4	Bromodichloromethane	56	
10061-01-5	cis-1,3-Dichloropropene	57	
108-88-3	Toluene	54	
10061-02-6	trans-1,3-Dichloropropene	57	
79-00-5	1,1,2-Trichloroethane	52	
127-18-4	Tetrachloroethene	54	
124-48-1	Dibromochloromethane	55	
108-90-7	Chlorobenzene	53	
100-41-4	Ethylbenzene	54	
179601-23-1	m,p-Xylene	110	
95-47-6	o-Xylene	54	
1330-20-7	Xylene (Total)	160	
75-25-2	Bromoform	55	
79-34-5	1,1,2,2-Tetrachloroethane	48	
541-73-1	1,3-Dichlorobenzene	52	
106-46-7	1,4-Dichlorobenzene	51	
95-50-1	1,2-Dichlorobenzene	51	
110-75-8	2-Chloroethyl vinyl ether	40	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-70808

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-70808

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B8623.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 03/11/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
107-02-8	Acrolein	360	
107-13-1	Acrylonitrile	52	

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-70808

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-70808

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B8624.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 03/11/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	48	
75-01-4	Vinyl chloride	49	
74-83-9	Bromomethane	48	
75-00-3	Chloroethane	47	
75-69-4	Trichlorofluoromethane	52	
75-35-4	1,1-Dichloroethene	49	
75-09-2	Methylene chloride	48	B
156-60-5	trans-1,2-Dichloroethene	49	
75-34-3	1,1-Dichloroethane	50	
156-59-2	cis-1,2-Dichloroethene	50	
67-66-3	Chloroform	50	
71-55-6	1,1,1-Trichloroethane	51	
56-23-5	Carbon tetrachloride	52	
107-06-2	1,2-Dichloroethane	52	
71-43-2	Benzene	49	
79-01-6	Trichloroethene	49	
78-87-5	1,2-Dichloropropane	50	
75-27-4	Bromodichloromethane	51	
10061-01-5	cis-1,3-Dichloropropene	52	
108-88-3	Toluene	49	
10061-02-6	trans-1,3-Dichloropropene	53	
79-00-5	1,1,2-Trichloroethane	51	
127-18-4	Tetrachloroethene	49	
124-48-1	Dibromochloromethane	53	
108-90-7	Chlorobenzene	49	
100-41-4	Ethylbenzene	49	
179601-23-1	m,p-Xylene	99	
95-47-6	o-Xylene	49	
1330-20-7	Xylene (Total)	150	
75-25-2	Bromoform	54	
79-34-5	1,1,2,2-Tetrachloroethane	49	
541-73-1	1,3-Dichlorobenzene	48	
106-46-7	1,4-Dichlorobenzene	47	
95-50-1	1,2-Dichlorobenzene	48	
110-75-8	2-Chloroethyl vinyl ether	41	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-70808

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-70808

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B8624.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 03/11/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
107-02-8	Acrolein	370	
107-13-1	Acrylonitrile	53	

2B - FORM II VOA-2

WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

Level: (TRACE or LOW) LOW

	EPA SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-70808	101	101	99	100				0
02	LCSD-70808	102	101	100	101				0
03	MB-70808	101	100	99	97				0
04	DIR DISCHARGE-3	104	102	100	99				0

		QC LIMITS
VDMC1	(DBFM) Dibromofluoromethane	(85-115)
VDMC2	(DCE) = 1,2-Dichloroethane-d4	(70-120)
VDMC3	(TOL) = Toluene-d8	(85-120)
VDMC4	(BFB) = Bromofluorobenzene	(75-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

som13.03.14.A

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-70808

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

Lab Sample ID: LCS-70808 LCS Lot No.:

Date Extracted: 03/11/2013 Date Analyzed (1): 03/11/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Chloromethane	50.0000	0.0000	52.3577	105		1 - 273
Vinyl chloride	50.0000	0.0000	55.1223	110		1 - 251
Bromomethane	50.0000	0.0000	54.7938	110		1 - 242
Chloroethane	50.0000	0.0000	50.9814	102		14 - 230
Trichlorofluoromethane	50.0000	0.0000	58.7319	117		17 - 181
1,1-Dichloroethene	50.0000	0.0000	55.3576	111		1 - 234
Methylene chloride	50.0000	0.0000	52.7611	106		1 - 221
trans-1,2-Dichloroethene	50.0000	0.0000	54.9485	110		54 - 156
1,1-Dichloroethane	50.0000	0.0000	55.2006	110		59 - 155
cis-1,2-Dichloroethene	50.0000	0.0000	55.3604	111		83 - 120
Chloroform	50.0000	0.0000	55.2411	110		51 - 138
1,1,1-Trichloroethane	50.0000	0.0000	56.4166	113		52 - 162
Carbon tetrachloride	50.0000	0.0000	58.6995	117		70 - 140
1,2-Dichloroethane	50.0000	0.0000	54.9743	110		49 - 155
Benzene	50.0000	0.0000	54.4500	109		37 - 151
Trichloroethene	50.0000	0.0000	55.0061	110		71 - 157
1,2-Dichloropropane	50.0000	0.0000	54.1562	108		1 - 210
Bromodichloromethane	50.0000	0.0000	56.1345	112		35 - 155
cis-1,3-Dichloropropene	50.0000	0.0000	56.9670	114		1 - 227
Toluene	50.0000	0.0000	54.3991	109		47 - 150
trans-1,3-Dichloropropene	50.0000	0.0000	56.6419	113		17 - 183
1,1,2-Trichloroethane	50.0000	0.0000	52.0113	104		52 - 150
Tetrachloroethene	50.0000	0.0000	53.6373	107		64 - 148
Dibromochloromethane	50.0000	0.0000	55.4870	111		53 - 149
Chlorobenzene	50.0000	0.0000	53.4010	107		37 - 150
Ethylbenzene	50.0000	0.0000	53.8911	108		37 - 162
m,p-Xylene	100.0000	0.0000	108.2243	108		70 - 130
o-Xylene	50.0000	0.0000	53.7626	108		70 - 130
Xylene (Total)	150.0000	0.0000	161.9869	108		81 - 121
Bromoform	50.0000	0.0000	55.3963	111		45 - 169
1,1,2,2-Tetrachloroethane	50.0000	0.0000	48.0460	96		46 - 157
1,3-Dichlorobenzene	50.0000	0.0000	52.2878	105		59 - 156
1,4-Dichlorobenzene	50.0000	0.0000	51.2643	103		18 - 190
1,2-Dichlorobenzene	50.0000	0.0000	51.1120	102		18 - 190
2-Chloroethyl vinyl ether	50.0000	0.0000	39.7258	79		1 - 305
Acrolein	250.0000	0.0000	356.9382	143	*	12 - 133
Acrylonitrile	50.0000	0.0000	51.6435	103		45 - 172

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

* Values outside of QC limits

Spike Recovery: 1 out of 37 outside limits

3 - FORM III

WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-70808

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

Lab Sample ID: LCS-70808 LCS Lot No.:

Date Extracted: 03/11/2013 Date Analyzed (1): 03/11/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.

COMMENTS:

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-70808

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

Lab Sample ID: LCSD-70808 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Chloromethane	50.0000	47.7100	95		10		40	1 - 273
Vinyl chloride	50.0000	49.3477	99		11		40	1 - 251
Bromomethane	50.0000	48.3530	97		13		40	1 - 242
Chloroethane	50.0000	46.7394	93		9		40	14 - 230
Trichlorofluoromethane	50.0000	51.9031	104		12		40	17 - 181
1,1-Dichloroethene	50.0000	49.0933	98		12		40	1 - 234
Methylene chloride	50.0000	48.3737	97		9		40	1 - 221
trans-1,2-Dichloroethene	50.0000	49.4180	99		11		40	54 - 156
1,1-Dichloroethane	50.0000	50.0941	100		10		40	59 - 155
cis-1,2-Dichloroethene	50.0000	50.0694	100		10		40	83 - 120
Chloroform	50.0000	50.0460	100		10		40	51 - 138
1,1,1-Trichloroethane	50.0000	50.7793	102		10		40	52 - 162
Carbon tetrachloride	50.0000	52.4268	105		11		40	70 - 140
1,2-Dichloroethane	50.0000	51.7456	103		7		40	49 - 155
Benzene	50.0000	49.3982	99		10		40	37 - 151
Trichloroethene	50.0000	48.7413	97		13		40	71 - 157
1,2-Dichloropropane	50.0000	49.8820	100		8		40	1 - 210
Bromodichloromethane	50.0000	51.4186	103		8		40	35 - 155
cis-1,3-Dichloropropene	50.0000	52.4863	105		8		40	1 - 227
Toluene	50.0000	49.2627	99		10		40	47 - 150
trans-1,3-Dichloropropene	50.0000	52.9574	106		6		40	17 - 183
1,1,2-Trichloroethane	50.0000	50.8090	102		2		40	52 - 150
Tetrachloroethene	50.0000	48.6496	97		10		40	64 - 148
Dibromochloromethane	50.0000	52.6152	105		6		40	53 - 149
Chlorobenzene	50.0000	48.7105	97		10		40	37 - 150
Ethylbenzene	50.0000	49.4955	99		9		40	37 - 162
m,p-Xylene	100.0000	98.6875	99		9		40	70 - 130
o-Xylene	50.0000	49.3635	99		9		40	70 - 130
Xylene (Total)	150.0000	148.0511	99		9		40	81 - 121
Bromoform	50.0000	54.2835	109		2		40	45 - 169
1,1,2,2-Tetrachloroethane	50.0000	49.2027	98		2		40	46 - 157
1,3-Dichlorobenzene	50.0000	47.9022	96		9		40	59 - 156
1,4-Dichlorobenzene	50.0000	47.3103	95		8		40	18 - 190
1,2-Dichlorobenzene	50.0000	48.3964	97		5		40	18 - 190
2-Chloroethyl vinyl ether	50.0000	40.6898	81		3		40	1 - 305
Acrolein	250.0000	373.9942	150	*	5		40	12 - 133
Acrylonitrile	50.0000	53.1767	106		3		40	45 - 172

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

* Values outside of QC limits

RPD: 0 out of 37 outside limits

Spike Recovery: 1 out of 37 outside limits

3 - FORM III

WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-70808

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

Lab Sample ID: LCSD-70808 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC #	%RPD #	QC LIMITS RPD	QC LIMITS REC.

COMMENTS:

4A - FORM IV VOA

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-70808

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

Lab File ID: V8B8626.D Lab Sample ID: MB-70808

Instrument ID: V10

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 03/11/2013

Level: (TRACE or LOW/MED) LOW Time Analyzed: 10:59

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-70808	LCS-70808	V8B8623.D	9:39
02	LCSD-70808	LCSD-70808	V8B8624.D	10:06
03	DIR DISCHARGE-3	M0299-01A	V8B8630.D	12:47

COMMENTS:

som13.03.14.A

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 03/07/2013 03/07/2013

EPA Sample No.(VSTD#####): VSTD05010K Date Analyzed: 03/11/2013

Lab File ID (Standard): V8B8622.D Time Analyzed: 8:55

Instrument ID: V10 Heated Purge: (Y/N) N

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	2137284		5.304		1689574		8.291		887065		10.783	
	UPPER LIMIT	4274568		5.804		3379148		8.791		1774130		11.283	
	LOWER LIMIT	1068642		4.804		844787		7.791		443533		10.283	
	EPA SAMPLE NO.												
01	LCS-70808	2153409		5.307		1686892		8.291		882654		10.783	
02	LCSD-70808	2179894		5.307		1692116		8.291		880868		10.783	
03	MB-70808	2101540		5.307		1622237		8.291		786413		10.786	
04	DIR DISCHARGE-3	1909725		5.307		1474561		8.291		725623		10.786	

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.

* Semivolatile Organics *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Monoco Oil

Laboratory Workorder / SDG #: M0299

EPA 625, 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: EPA 625

IV. PREPARATION

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

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: S3
Instrument Type: GCMS-SEMI

Description: HP6890 / HP5973
Manufacturer: Hewlett-Packard
Model: 6890 / 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 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.

LCSD-70784 in batch 70784, Percent Recovery is outside QC Limits, recovery is above criteria for Hexachlorocyclopentadiene at 115% with criteria of (34-103).

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

Where needed, manual integrations were performed to improve data quality. The corrections were reviewed and associated hardcopies generated and reported as required. Manual integrations are coded to provide the data reviewer justification for such action. The codes are labeled on the ion chromatogram signal (GC/MS signal) and chromatogram for GC based analysis as follows:

· M1 peak tailing or fronting
· M2 peak co-elution
· M3 rising or falling baseline
· M4 retention time shift
· M5 miscellaneous - under this category, the justification is explained
· M6 software did not integrate peak
· M7 partial peak integration

Manual integrations were performed on the following:

LCSD-70784 2,4,6-Trichlorophenol due to M2
LCSD-70784 2,4,5-Trichlorophenol 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: 03/19/13

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.

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

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DIR DISCHARGE-3

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0299-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I3995.D

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

% Moisture: Decanted: (Y/N) Date Received: 03/07/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/07/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/12/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
108-95-2	Phenol	10	U
111-44-4	Bis(2-chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
108-60-1	2,2´-oxybis(1-Chloropropane)	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
111-91-1	Bis(2-chloroethoxy)methane	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DIR DISCHARGE-3

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0299-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I3995.D

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

% Moisture: Decanted: (Y/N) Date Received: 03/07/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/07/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/12/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	1.9	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3´-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-ethylhexyl)phthalate	3.6	J
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-70784

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-70784

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I3992.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/07/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/12/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
108-95-2	Phenol	10	U
111-44-4	Bis(2-chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
108-60-1	2,2´-oxybis(1-Chloropropane)	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
111-91-1	Bis(2-chloroethoxy)methane	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-70784

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-70784

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I3992.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/07/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/12/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3´-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-70784

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-70784

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I4005.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/07/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/13/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
108-95-2	Phenol	39	
111-44-4	Bis(2-chloroethyl)ether	35	
95-57-8	2-Chlorophenol	44	
541-73-1	1,3-Dichlorobenzene	43	
106-46-7	1,4-Dichlorobenzene	43	
95-50-1	1,2-Dichlorobenzene	47	
108-60-1	2,2´-oxybis(1-Chloropropane)	35	
621-64-7	N-Nitroso-di-n-propylamine	33	
67-72-1	Hexachloroethane	41	
98-95-3	Nitrobenzene	35	
78-59-1	Isophorone	35	
88-75-5	2-Nitrophenol	46	
105-67-9	2,4-Dimethylphenol	31	
120-83-2	2,4-Dichlorophenol	44	
120-82-1	1,2,4-Trichlorobenzene	41	
91-20-3	Naphthalene	42	
111-91-1	Bis(2-chloroethoxy)methane	39	
87-68-3	Hexachlorobutadiene	40	
59-50-7	4-Chloro-3-methylphenol	40	
77-47-4	Hexachlorocyclopentadiene	41	
88-06-2	2,4,6-Trichlorophenol	45	
91-58-7	2-Chloronaphthalene	46	
131-11-3	Dimethylphthalate	39	
208-96-8	Acenaphthylene	40	
606-20-2	2,6-Dinitrotoluene	44	
83-32-9	Acenaphthene	44	
51-28-5	2,4-Dinitrophenol	37	
100-02-7	4-Nitrophenol	34	
121-14-2	2,4-Dinitrotoluene	44	
84-66-2	Diethylphthalate	39	
7005-72-3	4-Chlorophenyl-phenylether	46	
86-73-7	Fluorene	45	
534-52-1	4,6-Dinitro-2-methylphenol	48	
86-30-6	N-Nitrosodiphenylamine	48	
101-55-3	4-Bromophenyl-phenylether	51	
118-74-1	Hexachlorobenzene	50	

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-70784

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-70784

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I4005.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/07/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/13/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
87-86-5	Pentachlorophenol	38	
85-01-8	Phenanthrene	45	
120-12-7	Anthracene	46	
84-74-2	Di-n-butylphthalate	44	
206-44-0	Fluoranthene	42	
129-00-0	Pyrene	45	
85-68-7	Butylbenzylphthalate	52	
91-94-1	3,3´-Dichlorobenzidine	50	
56-55-3	Benzo(a)anthracene	47	
218-01-9	Chrysene	45	
117-81-7	Bis(2-ethylhexyl)phthalate	53	
117-84-0	Di-n-octylphthalate	47	
205-99-2	Benzo(b)fluoranthene	44	
207-08-9	Benzo(k)fluoranthene	40	
50-32-8	Benzo(a)pyrene	42	
193-39-5	Indeno(1,2,3-cd)pyrene	44	
53-70-3	Dibenzo(a,h)anthracene	42	
191-24-2	Benzo(g,h,i)perylene	42	

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-70784

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-70784

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I3994.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/07/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/12/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
108-95-2	Phenol	49	
111-44-4	Bis(2-chloroethyl)ether	41	
95-57-8	2-Chlorophenol	49	
541-73-1	1,3-Dichlorobenzene	48	
106-46-7	1,4-Dichlorobenzene	47	
95-50-1	1,2-Dichlorobenzene	50	
108-60-1	2,2´-oxybis(1-Chloropropane)	38	
621-64-7	N-Nitroso-di-n-propylamine	41	
67-72-1	Hexachloroethane	44	
98-95-3	Nitrobenzene	41	
78-59-1	Isophorone	40	
88-75-5	2-Nitrophenol	51	
105-67-9	2,4-Dimethylphenol	39	
120-83-2	2,4-Dichlorophenol	47	
120-82-1	1,2,4-Trichlorobenzene	47	
91-20-3	Naphthalene	49	
111-91-1	Bis(2-chloroethoxy)methane	43	
87-68-3	Hexachlorobutadiene	45	
59-50-7	4-Chloro-3-methylphenol	46	
77-47-4	Hexachlorocyclopentadiene	57	
88-06-2	2,4,6-Trichlorophenol	52	
91-58-7	2-Chloronaphthalene	55	
131-11-3	Dimethylphthalate	50	
208-96-8	Acenaphthylene	51	
606-20-2	2,6-Dinitrotoluene	53	
83-32-9	Acenaphthene	53	
51-28-5	2,4-Dinitrophenol	51	
100-02-7	4-Nitrophenol	43	
121-14-2	2,4-Dinitrotoluene	52	
84-66-2	Diethylphthalate	48	
7005-72-3	4-Chlorophenyl-phenylether	50	
86-73-7	Fluorene	52	
534-52-1	4,6-Dinitro-2-methylphenol	52	
86-30-6	N-Nitrosodiphenylamine	53	
101-55-3	4-Bromophenyl-phenylether	54	
118-74-1	Hexachlorobenzene	52	

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-70784

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-70784

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I3994.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/07/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/12/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
87-86-5	Pentachlorophenol	49	
85-01-8	Phenanthrene	52	
120-12-7	Anthracene	53	
84-74-2	Di-n-butylphthalate	53	
206-44-0	Fluoranthene	53	
129-00-0	Pyrene	54	
85-68-7	Butylbenzylphthalate	58	
91-94-1	3,3´-Dichlorobenzidine	54	
56-55-3	Benzo(a)anthracene	53	
218-01-9	Chrysene	56	
117-81-7	Bis(2-ethylhexyl)phthalate	61	
117-84-0	Di-n-octylphthalate	51	
205-99-2	Benzo(b)fluoranthene	45	
207-08-9	Benzo(k)fluoranthene	47	
50-32-8	Benzo(a)pyrene	47	
193-39-5	Indeno(1,2,3-cd)pyrene	47	
53-70-3	Dibenzo(a,h)anthracene	44	
191-24-2	Benzo(g,h,i)perylene	47	

2H - FORM II SV-2

WATER SEMIVOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

	EPA SAMPLE NO.	SDMC1 (NBZ) #	SDMC2 (FBP) #	SDMC3 (TPH) #	SDMC4 (PHL) #	SDMC5 (2FP) #	SDMC6 (TBP) #			TOT OUT
01	MB-70784	80	96	128	78	87	104			0
02	LCSD-70784	80	99	116	87	92	118			0
03	DIR DISCHARGE-3	67	79	94	19	34	96			0
04	LCS-70784	70	86	99	79	79	110			0

			QC LIMITS
SDMC1	(NBZ)	= Nitrobenzene-d5	(40-110)
SDMC2	(FBP)	= 2-Fluorobiphenyl	(50-110)
SDMC3	(TPH)	= Terphenyl-d14	(50-135)
SDMC4	(PHL)	= Phenol-d5	(10-115)
SDMC5	(2FP)	= 2-Fluorophenol	(20-110)
SDMC6	(TBP)	= 2,4,6-Tribromophenol	(40-125)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D DMC diluted out

som13.03.14.A

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-70784

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

Lab Sample ID: LCS-70784 LCS Lot No.: A090321

Date Extracted: 03/07/2013 Date Analyzed (1): 03/13/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Phenol	50.0000	0.0000	38.6982	77		5 - 112
Bis(2-chloroethyl)ether	50.0000	0.0000	35.2848	71		12 - 158
2-Chlorophenol	50.0000	0.0000	43.5323	87		23 - 134
1,3-Dichlorobenzene	50.0000	0.0000	42.9259	86		1 - 172
1,4-Dichlorobenzene	50.0000	0.0000	42.7836	86		20 - 124
1,2-Dichlorobenzene	50.0000	0.0000	46.7130	93		32 - 129
2,2´-oxybis(1-Chloropropan	50.0000	0.0000	35.2854	71		36 - 166
N-Nitroso-di-n-propylamine	50.0000	0.0000	33.3618	67		1 - 230
Hexachloroethane	50.0000	0.0000	40.9585	82		40 - 113
Nitrobenzene	50.0000	0.0000	35.1608	70		35 - 180
Isophorone	50.0000	0.0000	35.1182	70		21 - 196
2-Nitrophenol	50.0000	0.0000	45.6589	91		29 - 182
2,4-Dimethylphenol	50.0000	0.0000	30.8791	62		32 - 119
2,4-Dichlorophenol	50.0000	0.0000	43.9898	88		39 - 135
1,2,4-Trichlorobenzene	50.0000	0.0000	41.3280	83		44 - 142
Naphthalene	50.0000	0.0000	42.2545	85		21 - 133
Bis(2-chloroethoxy)methane	50.0000	0.0000	39.0281	78		33 - 184
Hexachlorobutadiene	50.0000	0.0000	40.4365	81		24 - 116
4-Chloro-3-methylphenol	50.0000	0.0000	40.3886	81		22 - 147
Hexachlorocyclopentadiene	50.0000	0.0000	40.9915	82		34 - 103
2,4,6-Trichlorophenol	50.0000	0.0000	44.9469	90		37 - 144
2-Chloronaphthalene	50.0000	0.0000	46.0468	92		60 - 118
Dimethylphthalate	50.0000	0.0000	38.8331	78		1 - 112
Acenaphthylene	50.0000	0.0000	40.1911	80		33 - 145
2,6-Dinitrotoluene	50.0000	0.0000	43.9404	88		50 - 158
Acenaphthene	50.0000	0.0000	43.7307	87		47 - 155
2,4-Dinitrophenol	50.0000	0.0000	37.4266	75		1 - 191
4-Nitrophenol	50.0000	0.0000	34.0512	68		1 - 132
2,4-Dinitrotoluene	50.0000	0.0000	44.0738	88		39 - 139
Diethylphthalate	50.0000	0.0000	38.9830	78		1 - 114
4-Chlorophenyl-phenylether	50.0000	0.0000	46.3577	93		25 - 158
Fluorene	50.0000	0.0000	44.8788	90		59 - 121
4,6-Dinitro-2-methylphenol	50.0000	0.0000	48.0596	96		1 - 181
N-Nitrosodiphenylamine	50.0000	0.0000	48.4174	97		48 - 121
4-Bromophenyl-phenylether	50.0000	0.0000	51.3588	103		53 - 127
Hexachlorobenzene	50.0000	0.0000	49.5885	99		1 - 152
Pentachlorophenol	50.0000	0.0000	38.0903	76		14 - 176
Phenanthrene	50.0000	0.0000	44.8790	90		54 - 120
Anthracene	50.0000	0.0000	45.6701	91		27 - 133
Di-n-butylphthalate	50.0000	0.0000	44.3268	89		1 - 118
Fluoranthene	50.0000	0.0000	42.1965	84		26 - 137
Pyrene	50.0000	0.0000	45.4602	91		52 - 115
Butylbenzylphthalate	50.0000	0.0000	52.2405	104		1 - 152
3,3´-Dichlorobenzidine	50.0000	0.0000	50.2736	101		1 - 262

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-70784

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

Lab Sample ID: LCS-70784 LCS Lot No.: A090321

Date Extracted: 03/07/2013 Date Analyzed (1): 03/13/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Benzo(a)anthracene	50.0000	0.0000	47.1978	94		33 - 143
Chrysene	50.0000	0.0000	44.6003	89		17 - 168
Bis(2-ethylhexyl)phthalate	50.0000	0.0000	52.9595	106		8 - 158
Di-n-octylphthalate	50.0000	0.0000	46.8837	94		4 - 146
Benzo(b)fluoranthene	50.0000	0.0000	44.4735	89		24 - 159
Benzo(k)fluoranthene	50.0000	0.0000	39.7822	80		11 - 162
Benzo(a)pyrene	50.0000	0.0000	42.1748	84		17 - 163
Indeno(1,2,3-cd)pyrene	50.0000	0.0000	43.8295	88		1 - 171
Dibenzo(a,h)anthracene	50.0000	0.0000	42.2066	84		1 - 227
Benzo(g,h,i)perylene	50.0000	0.0000	42.4977	85		1 - 219

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

* Values outside of QC limits

Spike Recovery: 0 out of 54 outside limits

COMMENTS:

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-70784

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

Lab Sample ID: LCSD-70784 LCS Lot No.: A090321

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Phenol	50.0000	48.9170	98		24		40	5 - 112
Bis(2-chloroethyl)ether	50.0000	40.8392	82		14		40	12 - 158
2-Chlorophenol	50.0000	49.0310	98		12		40	23 - 134
1,3-Dichlorobenzene	50.0000	47.6329	95		10		40	1 - 172
1,4-Dichlorobenzene	50.0000	47.3573	95		10		40	20 - 124
1,2-Dichlorobenzene	50.0000	49.6591	99		6		40	32 - 129
2,2´-oxybis(1-Chloropropan	50.0000	37.7579	76		7		40	36 - 166
N-Nitroso-di-n-propylamine	50.0000	41.3057	83		21		40	1 - 230
Hexachloroethane	50.0000	43.8745	88		7		40	40 - 113
Nitrobenzene	50.0000	40.5715	81		15		40	35 - 180
Isophorone	50.0000	40.1011	80		13		40	21 - 196
2-Nitrophenol	50.0000	50.5046	101		10		40	29 - 182
2,4-Dimethylphenol	50.0000	38.9053	78		23		40	32 - 119
2,4-Dichlorophenol	50.0000	47.1347	94		7		40	39 - 135
1,2,4-Trichlorobenzene	50.0000	46.8314	94		12		40	44 - 142
Naphthalene	50.0000	48.6845	97		13		40	21 - 133
Bis(2-chloroethoxy)methane	50.0000	42.9834	86		10		40	33 - 184
Hexachlorobutadiene	50.0000	44.6611	89		9		40	24 - 116
4-Chloro-3-methylphenol	50.0000	45.6117	91		12		40	22 - 147
Hexachlorocyclopentadiene	50.0000	57.4821	115	*	34		40	34 - 103
2,4,6-Trichlorophenol	50.0000	52.4340	105		15		40	37 - 144
2-Chloronaphthalene	50.0000	55.0799	110		18		40	60 - 118
Dimethylphthalate	50.0000	49.6532	99		24		40	1 - 112
Acenaphthylene	50.0000	51.4219	103		25		40	33 - 145
2,6-Dinitrotoluene	50.0000	52.6820	105		18		40	50 - 158
Acenaphthene	50.0000	52.7971	106		20		40	47 - 155
2,4-Dinitrophenol	50.0000	51.4959	103		31		40	1 - 191
4-Nitrophenol	50.0000	43.0663	86		23		40	1 - 132
2,4-Dinitrotoluene	50.0000	51.9770	104		17		40	39 - 139
Diethylphthalate	50.0000	48.3678	97		22		40	1 - 114
4-Chlorophenyl-phenylether	50.0000	50.2504	101		8		40	25 - 158
Fluorene	50.0000	51.9927	104		14		40	59 - 121
4,6-Dinitro-2-methylphenol	50.0000	52.2675	105		9		40	1 - 181
N-Nitrosodiphenylamine	50.0000	52.8254	106		9		40	48 - 121
4-Bromophenyl-phenylether	50.0000	54.4931	109		6		40	53 - 127
Hexachlorobenzene	50.0000	52.2574	105		6		40	1 - 152
Pentachlorophenol	50.0000	48.8428	98		25		40	14 - 176
Phenanthrene	50.0000	52.1115	104		14		40	54 - 120
Anthracene	50.0000	52.6114	105		14		40	27 - 133
Di-n-butylphthalate	50.0000	53.1853	106		17		40	1 - 118
Fluoranthene	50.0000	52.5248	105		22		40	26 - 137
Pyrene	50.0000	54.4810	109		18		40	52 - 115
Butylbenzylphthalate	50.0000	58.3425	117		12		40	1 - 152
3,3´-Dichlorobenzidine	50.0000	54.0368	108		7		40	1 - 262
Benzo(a)anthracene	50.0000	53.4506	107		13		40	33 - 143
Chrysene	50.0000	55.8379	112		23		40	17 - 168

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-70784

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

Lab Sample ID: LCSD-70784 LCS Lot No.: A090321

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Bis(2-ethylhexyl)phthalate	50.0000	60.5177	121		13		40	8 - 158
Di-n-octylphthalate	50.0000	50.5148	101		7		40	4 - 146
Benzo(b)fluoranthene	50.0000	45.3328	91		2		40	24 - 159
Benzo(k)fluoranthene	50.0000	46.8964	94		16		40	11 - 162
Benzo(a)pyrene	50.0000	46.5782	93		10		40	17 - 163
Indeno(1,2,3-cd)pyrene	50.0000	46.6146	93		6		40	1 - 171
Dibenzo(a,h)anthracene	50.0000	43.8962	88		5		40	1 - 227
Benzo(g,h,i)perylene	50.0000	47.4053	95		11		40	1 - 219

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

* Values outside of QC limits

RPD: 0 out of 54 outside limits

Spike Recovery: 1 out of 54 outside limits

COMMENTS:

4C - FORM IV SV

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-70784

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

Lab File ID: S3I3992.D Lab Sample ID: MB-70784

Instrument ID: S3 Date Extracted: 03/07/2013

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 03/12/2013

Level: (LOW/MED) LOW Time Analyzed: 17:03

Extraction: (Type) SEPF GPC Cleanup: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	LCSD-70784	LCSD-70784	S3I3994.D	03/12/2013
02	DIR DISCHARGE-3	M0299-01B	S3I3995.D	03/12/2013
03	LCS-70784	LCS-70784	S3I4005.D	03/13/2013

COMMENTS:

8C - FORM VIII SV-1

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 01/31/2013 01/31/2013

EPA Sample No.(SSTD020##) SSTD0253H Date Analyzed: 03/12/2013

Lab File ID (Standard): S3I3991B.D Time Analyzed: 16:27

Instrument ID: S3

		IS1 (DCB) AREA	#	IS1 (DCB) RT	#	IS2 (NPT) AREA	#	IS2 (NPT) RT	#	IS3 (ANT) AREA	#	IS3 (ANT) RT	#
	12 HOUR STD	247213		4.05		933512		5.834		682554		7.608	
	UPPER LIMIT	494426		4.55		1867024		6.334		1365108		8.108	
	LOWER LIMIT	123607		3.55		466756		5.334		341277		7.108	
	EPA SAMPLE NO.												
01	MB-70784	263552		4.049		961573		5.833		691555		7.602	
02	LCSD-70784	271529		4.055		1013122		5.840		730325		7.608	
03	DIR DISCHARGE-3	270736		4.049		992913		5.834		718511		7.602	

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.

8C - FORM VIII SV-1

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 01/31/2013 01/31/2013

EPA Sample No.(SSTD020##) SSTD0253I Date Analyzed: 03/13/2013

Lab File ID (Standard): S3I4001D.D Time Analyzed: 14:09

Instrument ID: S3

		IS1 (DCB) AREA	#	IS1 (DCB) RT	#	IS2 (NPT) AREA	#	IS2 (NPT) RT	#	IS3 (ANT) AREA	#	IS3 (ANT) RT	#
	12 HOUR STD	456816		4.065		1684017		5.849		1226745		7.623	
	UPPER LIMIT	913632		4.565		3368034		6.349		2453490		8.123	
	LOWER LIMIT	228408		3.565		842009		5.349		613373		7.123	
	EPA SAMPLE NO.												
01	LCS-70784	505564		4.070		1886104		5.854		1447179		7.622	

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

8D - FORM VIII SV-2

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

EPA Sample No.(SSTD020##) SSTD0253H Date Analyzed: 03/12/2013

Lab File ID (Standard): S3I3991B.D Time Analyzed: 16:27

Instrument ID: S3 GC Column: Rxi-5sil MS ID: 0.25 (mm)

		IS4 (PHN) AREA	#	RT	#	IS5 (CRY) AREA	#	RT	#	IS6 (PRY) AREA	#	RT	#
	12 HOUR STD	1396227		8.884		1810890		11.262		1486683		13.062	
	UPPER LIMIT	2792454		9.384		3621780		11.762		2973366		13.562	
	LOWER LIMIT	698114		8.384		905445		10.762		743342		12.562	
	EPA SAMPLE NO.												
01	MB-70784	1391394		8.884		1721362		11.277		1642996		13.083	
02	LCSD-70784	1502553		8.879		2051498		11.155		1774476		12.939	
03	DIR DISCHARGE-3	1411469		8.879		1711229		11.186		1649811		12.976	

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.

8D - FORM VIII SV-2

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

EPA Sample No.(SSTD020##) SSTD0253I Date Analyzed: 03/13/2013

Lab File ID (Standard): S3I4001D.D Time Analyzed: 14:09

Instrument ID: S3 GC Column: Rxi-5sil MS ID: 0.25 (mm)

		IS4 (PHN) AREA	#	RT	#	IS5 (CRY) AREA	#	RT	#	IS6 (PRY) AREA	#	RT	#
	12 HOUR STD	2341457		8.905		2836308		11.309		2504522		13.152	
	UPPER LIMIT	4682914		9.405		5672616		11.809		5009044		13.652	
	LOWER LIMIT	1170729		8.405		1418154		10.809		1252261		12.652	
	EPA SAMPLE NO.												
01	LCS-70784	2614062		8.899		3518117		11.218		2828064		13.034	

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.

* PCB Organics *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Monoco Oil

Laboratory Workorder / SDG #: M0299

EPA 608 PCB, 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: EPA 608 PCB

IV. PREPARATION

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

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

Manual integration was not performed on any sample in this SDG.

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: 03/19/13

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.

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

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DIR DISCHARGE-3

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0299-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2L9014F.D/E2L9014R.D

% Moisture: Decanted: (Y/N) Date Received: 03/07/2013

Extraction: (Type) SEPF Date Extracted: 03/11/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/12/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-70811

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-70811

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2L9011F.D/E2L9011R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 03/11/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/12/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-70811(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-70811

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2L9012F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 03/11/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/12/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	3.7	
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	3.5	

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-70811(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-70811

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2L9012R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 03/11/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/12/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	3.8	
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	4.0	

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
LCSD-70811(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-70811

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2L9013F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 03/11/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/12/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	3.7	
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	3.6	

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
LCSD-70811(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-70811

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2L9013R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 03/11/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/12/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	3.9	
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	4.0	

2Q - FORM II ARO-1

WATER AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	CLIENT SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-70811	90	96	86	89			0
02	LCS-70811	95	100	86	91			0
03	LCSD-70811	92	97	89	93			0
04	DIR DISCHARGE-3	76	80	61	64			0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(39-126)
DCB = Decachlorobiphenyl	(17-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.03.14.A

3N - FORM III ARO-3
WATER AROCLOR LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.
LCS-70811

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

Lab Sample ID: LCS-70811 LCS Lot No.: A086503

Date Extracted: 03/11/2013 Date Analyzed (1): 03/12/2013

Instrument ID (1): E2 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC #	QC LIMITS
Aroclor-1016	4.0000	3.6548	91	50-114
Aroclor-1260	4.0000	3.4981	87	8-127

Instrument ID (2): E2 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 03/12/2013

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC #	QC LIMITS
Aroclor-1016	4.0000	3.8102	95	50-114
Aroclor-1260	4.0000	3.9628	99	8-127

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:

som13.03.14.A

3N - FORM III ARO-3
WATER AROCLOR LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

CLIENT SAMPLE NO.
LCSD-70811

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

Lab Sample ID: LCSD-70811 LCS Lot No.: A086503

Date Extracted: 03/11/2013 Date Analyzed (1): 03/12/2013

Instrument ID (1): E2 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC	#	QC LIMITS	%RPD	#	RPD LIMIT
Aroclor-1016	4.0000	3.7193	93		50-114	2.0		40
Aroclor-1260	4.0000	3.5572	89		8-127	2.0		40

Instrument ID (2): E2 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 03/12/2013

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC	#	QC LIMITS	%RPD	#	RPD LIMIT
Aroclor-1016	4.0000	3.8679	97		50-114	2.0		40
Aroclor-1260	4.0000	4.0440	101		8-127	2.0		40

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:

som13.03.14.A

4F - FORM IV ARO

AROCLOR METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

MB-70811

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0299 Mod. Ref No.: SDG No.: SM0299

Lab File ID: E2L9011F.D / E2L9011R.D Lab Sample ID: MB-70811

Matrix: (SOIL/SED/WATER) WATER Extraction: (Type) SEPF Date Extracted: 03/11/2013

Sulfur Cleanup: (Y/N) Y GPC Cleanup:(Y/N) N

Acid Cleanup: (Y/N Y

Date Analyzed (1): 03/12/2013 Date Analyzed (2): 03/12/2013

Time Analyzed (1): 15:04 Time Analyzed (2): 15:04

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-70811	LCS-70811	03/12/2013	03/12/2013
02	LCSD-70811	LCSD-70811	03/12/2013	03/12/2013
03	DIR DISCHARGE-3	M0299-01B	03/12/2013	03/12/2013

COMMENTS:

* Metals *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Monoco Oil

Laboratory Workorder / SDG #: M0299

EPA 200.7, EPA 245.1

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: EPA 200.7, EPA 245.1

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: 200.7
Aqueous Samples were prepared following procedures in laboratory test code: 245.1

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):

A matrix spike was not performed on any sample in this SDG.

D. Post Digestion Spike (PDS):

A post-digestion spike was not performed on any sample in this SDG.

E. Duplicate sample:

A duplicate analysis was not performed on any sample in this SDG.

F. Serial Dilution (SD):

Serial Dilution analyses were performed on sample: DIR DISCHARGE-3 (M0299-01CSD).

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: 03/18/13

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.

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

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

DIR DISCHARGE-3

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0299

Matrix (soil/water): WATER Lab Sample ID: M0299-01

Level (low/med): LOW Date Received: 03/07/2013

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	7.0	U		P
7440-38-2	Arsenic	5.2	U		P
7440-41-7	Beryllium	0.063	U		P
7440-43-9	Cadmium	0.19	U		P
7440-47-3	Chromium	0.96	B		P
7440-50-8	Copper	2.4	B		P
7439-92-1	Lead	2.4	U		P
7439-97-6	Mercury	0.059	B		CV
7440-02-0	Nickel	2.8	B		P
7782-49-2	Selenium	14.0	U		P
7440-22-4	Silver	0.96	B		P
7440-28-0	Thallium	7.0	U		P
7440-66-6	Zinc	10.1	B		P

Comments:

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0299

Solid LCS Source: LCS(D) ID:

Aqueous LCS Source: **LCS-70791**

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Antimony	100.0	110.30	110.3						
Arsenic	40.0	45.66	114.2						
Beryllium	50.0	53.86	107.7						
Cadmium	50.0	56.29	112.6						
Chromium	200.0	221.43	110.7						
Copper	250.0	256.27	102.5						
Lead	20.0	20.89	104.5						
Nickel	500.0	553.70	110.7						
Selenium	50.0	50.91	101.8						
Silver	50.0	52.27	104.5						
Thallium	50.0	46.02	92.0						
Zinc	500.0	551.10	110.2						

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0299

Solid LCS Source: LCS(D) ID:

Aqueous LCS Source: **LCS-70818**

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Mercury	4.6	4.36	94.8						

7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0299

Solid LCS Source:

Aqueous LCS Source:

LCS(D) ID:
LCSD-70791

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Antimony	100.0	113.00	113.0						
Arsenic	40.0	44.18	110.5						
Beryllium	50.0	54.19	108.4						
Cadmium	50.0	57.04	114.1						
Chromium	200.0	228.44	114.2						
Copper	250.0	269.07	107.6						
Lead	20.0	21.98	109.9						
Nickel	500.0	567.38	113.5						
Selenium	50.0	57.36	114.7						
Silver	50.0	55.16	110.3						
Thallium	50.0	49.40	98.8						
Zinc	500.0	566.94	113.4						

7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0299

Solid LCS Source:

Aqueous LCS Source:

LCS(D) ID: **LCSD-70818**

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Mercury	4.6	4.49	97.6						

U.S. EPA - CLP

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0299

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-70818**

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

FIMS2_130313A

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
Analyte		C	03/13/13 10:58	C		C		C		C	M
Mercury	0.037	B	0.044	B					0.038	B	CV

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0299

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-70791**

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

OPTIMA3_130311B

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 03/11/13 9:13	C	03/11/13 9:39	C		C	Preparation Blank	C	M
Antimony	8.9	B	8.3	B	8.8	B			7.000	U	P
Arsenic	5.2	U	5.2	B	5.2	U			5.200	U	P
Beryllium	0.1	B	0.1	B	0.1	U			0.063	U	P
Cadmium	0.2	U	0.2	U	0.2	U			0.190	U	P
Chromium	0.4	U	0.6	B	0.5	B			0.390	U	P
Copper	1.1	U	1.1	U	1.1	U			1.100	U	P
Lead	2.4	U	2.4	U	2.4	U			2.400	U	P
Nickel	0.8	U	0.8	U	0.8	U			0.810	U	P
Selenium	14.0	U	14.0	U	14.0	U			14.000	U	P
Silver	0.8	U	0.8	U	0.8	U			0.750	U	P
Thallium	7.0	U	7.0	U	7.0	U			7.000	U	P
Zinc	1.7	B	1.7	B	1.3	B			1.000	U	P

Report Date:
27-Mar-13 11:27

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

LaBella Associates
300 State Street, Suite 201
Rochester, NY 14614

Work Order: M0343
Project : LaBella Monoco Oil
Project #:

Attn: Dan Noll

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M0343-01	DIRECT DISCHARGE 4	Aqueous	14-Mar-13 14:30	15-Mar-13 10:00

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

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and 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.

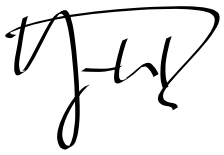
Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

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

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:



Yihai Ding
Laboratory Director

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* Data Summary Pack *

175 Metro Center Boulevard · Warwick, RI 02886-1755 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0343

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
DIRECT DISCHARGE 4	M0343-01	E624	E625	E608_PCB	E200.7	
DIRECT DISCHARGE 4	M0343-01				E245.1	

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0343

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
E624					
M0343-01A	AQ	3/14/2013	3/15/2013	NA	3/19/2013

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0343

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
E625					
M0343-01B	AQ	3/14/2013	3/15/2013	3/15/2013	3/15/2013

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0343

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
E608_PCB					
M0343-01B	AQ	3/14/2013	3/15/2013	3/15/2013	3/18/2013

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0343

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
E624					
M0343-01A	AQ	E624	NA	LOW	1

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0343

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
E625					
M0343-01B	AQ	E625	E625	NA	1

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0343

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
E608_PCB					
M0343-01B	AQ	E608_PCB	E608_PCB	acid/sulfur	1

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0343

Laboratory Sample ID	Matrix	Metals Requested	Date Received By Lab	Date Analyzed
E200.7				
M0343-01C	AQ	E200.7	3/15/2013	3/20/2013
E245.1				
M0343-01C	AQ	E245.1	3/15/2013	3/20/2013

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: M0343

Client ID: LABELLA
Project: LaBella Monoco Oil
WO Name: LaBella Monoco Oil
Location: LABELLA_MONOCO-OIL,

Case:
SDG:
PO: 210259

HC Due: 03/27/13
Fax Due: 03/22/13
Fax Report: ☑

Report Level: ASP-B
Special Program:
EDD: ENVIROINSITE_1
EQUIIS_4_NYSDEC

Comments: use this project for between 11-50 samples, no RUSH surcharge base on lab capacity, no charge for MS/MSD or a batch of 7 or more samples, no charge for TB. no hard copy

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M0343-01A	DIRECT DISCHARGE 4	03/14/2013 14:30	03/15/2013	Aqueous	E624	/					VOA
M0343-01B	DIRECT DISCHARGE 4	03/14/2013 14:30	03/15/2013	Aqueous	E608_PCB	/					I3
M0343-01B	DIRECT DISCHARGE 4	03/14/2013 14:30	03/15/2013	Aqueous	E625	/					I3
M0343-01C	DIRECT DISCHARGE 4	03/14/2013 14:30	03/15/2013	Aqueous	E200.7	/ PP13_200				Y	M2
M0343-01C	DIRECT DISCHARGE 4	03/14/2013 14:30	03/15/2013	Aqueous	E245.1	/ PP13_200					M2

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

HT = Test logged in but has been placed on hold

03/20/2013 11:03 Lab Client Rep: Agnes R Huntley

* Volatiles *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Monoco Oil

Laboratory Workorder / SDG #: M0343

EPA 624, VOC 624 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: EPA 624

IV. PREPARATION

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

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.

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:

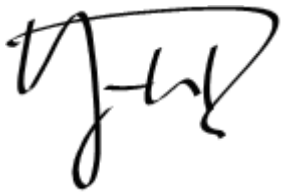
No other unusual occurrences were noted during sample analysis.

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.



Signed:_____ _____

Date:_____3/26/2013_____

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.

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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DIRECT DISCHARGE 4

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0343-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5O2307.D

Level: (TRACE/LOW/MED) LOW Date Received: 03/15/2013

% Moisture: not dec. Date Analyzed: 03/19/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
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
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	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
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	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
127-18-4	Tetrachloroethene	5.0	U
124-48-1	Dibromochloromethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
75-25-2	Bromoform	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
110-75-8	2-Chloroethyl vinyl ether	5.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DIRECT DISCHARGE 4

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0343-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5O2307.D

Level: (TRACE/LOW/MED) LOW Date Received: 03/15/2013

% Moisture: not dec. Date Analyzed: 03/19/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
107-02-8	Acrolein	25	U
107-13-1	Acrylonitrile	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-70889

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-70889

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5O2305.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 03/19/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
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
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	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
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	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
127-18-4	Tetrachloroethene	5.0	U
124-48-1	Dibromochloromethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
75-25-2	Bromoform	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
110-75-8	2-Chloroethyl vinyl ether	5.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-70889

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-70889

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5O2305.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 03/19/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
107-02-8	Acrolein	25	U
107-13-1	Acrylonitrile	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-70889

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-70889

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5O2302.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 03/19/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	46	
75-01-4	Vinyl chloride	45	
74-83-9	Bromomethane	47	
75-00-3	Chloroethane	48	
75-69-4	Trichlorofluoromethane	47	
75-35-4	1,1-Dichloroethene	51	
75-09-2	Methylene chloride	45	
156-60-5	trans-1,2-Dichloroethene	49	
75-34-3	1,1-Dichloroethane	53	
156-59-2	cis-1,2-Dichloroethene	50	
67-66-3	Chloroform	50	
71-55-6	1,1,1-Trichloroethane	53	
56-23-5	Carbon tetrachloride	52	
107-06-2	1,2-Dichloroethane	52	
71-43-2	Benzene	51	
79-01-6	Trichloroethene	51	
78-87-5	1,2-Dichloropropane	49	
75-27-4	Bromodichloromethane	52	
10061-01-5	cis-1,3-Dichloropropene	53	
108-88-3	Toluene	52	
10061-02-6	trans-1,3-Dichloropropene	53	
79-00-5	1,1,2-Trichloroethane	50	
127-18-4	Tetrachloroethene	52	
124-48-1	Dibromochloromethane	53	
108-90-7	Chlorobenzene	50	
100-41-4	Ethylbenzene	49	
179601-23-1	m,p-Xylene	110	
95-47-6	o-Xylene	52	
1330-20-7	Xylene (Total)	160	
75-25-2	Bromoform	63	
79-34-5	1,1,2,2-Tetrachloroethane	51	
541-73-1	1,3-Dichlorobenzene	50	
106-46-7	1,4-Dichlorobenzene	49	
95-50-1	1,2-Dichlorobenzene	53	
110-75-8	2-Chloroethyl vinyl ether	51	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-70889

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-70889

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5O2302.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 03/19/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
107-02-8	Acrolein	230	
107-13-1	Acrylonitrile	46	

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-70889

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-70889

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5O2303.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 03/19/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	44	
75-01-4	Vinyl chloride	45	
74-83-9	Bromomethane	44	
75-00-3	Chloroethane	47	
75-69-4	Trichlorofluoromethane	48	
75-35-4	1,1-Dichloroethene	49	
75-09-2	Methylene chloride	46	
156-60-5	trans-1,2-Dichloroethene	49	
75-34-3	1,1-Dichloroethane	50	
156-59-2	cis-1,2-Dichloroethene	51	
67-66-3	Chloroform	50	
71-55-6	1,1,1-Trichloroethane	52	
56-23-5	Carbon tetrachloride	50	
107-06-2	1,2-Dichloroethane	53	
71-43-2	Benzene	51	
79-01-6	Trichloroethene	50	
78-87-5	1,2-Dichloropropane	49	
75-27-4	Bromodichloromethane	51	
10061-01-5	cis-1,3-Dichloropropene	53	
108-88-3	Toluene	51	
10061-02-6	trans-1,3-Dichloropropene	51	
79-00-5	1,1,2-Trichloroethane	51	
127-18-4	Tetrachloroethene	50	
124-48-1	Dibromochloromethane	55	
108-90-7	Chlorobenzene	50	
100-41-4	Ethylbenzene	51	
179601-23-1	m,p-Xylene	100	
95-47-6	o-Xylene	52	
1330-20-7	Xylene (Total)	160	
75-25-2	Bromoform	65	
79-34-5	1,1,2,2-Tetrachloroethane	48	
541-73-1	1,3-Dichlorobenzene	51	
106-46-7	1,4-Dichlorobenzene	47	
95-50-1	1,2-Dichlorobenzene	51	
110-75-8	2-Chloroethyl vinyl ether	48	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-70889

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-70889

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5O2303.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 03/19/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
107-02-8	Acrolein	230	
107-13-1	Acrylonitrile	48	

2B - FORM II VOA-2

WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

Level: (TRACE or LOW) LOW

	EPA SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-70889	97	107	99	102				0
02	LCSD-70889	99	101	102	104				0
03	MB-70889	94	91	100	108				0
04	DIRECT DISCHARGE 4	99	96	100	103				0

		QC LIMITS
VDMC1	(DBFM) Dibromofluoromethane	(85-115)
VDMC2	(DCE) = 1,2-Dichloroethane-d4	(70-120)
VDMC3	(TOL) = Toluene-d8	(85-120)
VDMC4	(BFB) = Bromofluorobenzene	(75-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

som13.03.14.A

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-70889

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

Lab Sample ID: LCS-70889 LCS Lot No.:

Date Extracted: 03/19/2013 Date Analyzed (1): 03/19/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Chloromethane	50.0000	0.0000	45.6871	91		1 - 273
Vinyl chloride	50.0000	0.0000	44.8249	90		1 - 251
Bromomethane	50.0000	0.0000	46.5159	93		1 - 242
Chloroethane	50.0000	0.0000	48.3009	97		14 - 230
Trichlorofluoromethane	50.0000	0.0000	46.8347	94		17 - 181
1,1-Dichloroethene	50.0000	0.0000	50.9106	102		1 - 234
Methylene chloride	50.0000	0.0000	45.0396	90		1 - 221
trans-1,2-Dichloroethene	50.0000	0.0000	49.1421	98		54 - 156
1,1-Dichloroethane	50.0000	0.0000	53.0227	106		59 - 155
cis-1,2-Dichloroethene	50.0000	0.0000	50.3663	101		83 - 120
Chloroform	50.0000	0.0000	50.0365	100		51 - 138
1,1,1-Trichloroethane	50.0000	0.0000	53.2900	107		52 - 162
Carbon tetrachloride	50.0000	0.0000	52.2693	105		70 - 140
1,2-Dichloroethane	50.0000	0.0000	51.5663	103		49 - 155
Benzene	50.0000	0.0000	50.8894	102		37 - 151
Trichloroethene	50.0000	0.0000	50.9010	102		71 - 157
1,2-Dichloropropane	50.0000	0.0000	48.9458	98		1 - 210
Bromodichloromethane	50.0000	0.0000	52.2043	104		35 - 155
cis-1,3-Dichloropropene	50.0000	0.0000	53.3222	107		1 - 227
Toluene	50.0000	0.0000	51.7338	103		47 - 150
trans-1,3-Dichloropropene	50.0000	0.0000	53.0218	106		17 - 183
1,1,2-Trichloroethane	50.0000	0.0000	50.1955	100		52 - 150
Tetrachloroethene	50.0000	0.0000	51.8366	104		64 - 148
Dibromochloromethane	50.0000	0.0000	52.6249	105		53 - 149
Chlorobenzene	50.0000	0.0000	50.3156	101		37 - 150
Ethylbenzene	50.0000	0.0000	49.3684	99		37 - 162
m,p-Xylene	100.0000	0.0000	105.4515	105		70 - 130
o-Xylene	50.0000	0.0000	51.9981	104		70 - 130
Xylene (Total)	150.0000	0.0000	157.4496	105		81 - 121
Bromoform	50.0000	0.0000	62.6215	125		45 - 169
1,1,2,2-Tetrachloroethane	50.0000	0.0000	50.9287	102		46 - 157
1,3-Dichlorobenzene	50.0000	0.0000	50.4422	101		59 - 156
1,4-Dichlorobenzene	50.0000	0.0000	48.6880	97		18 - 190
1,2-Dichlorobenzene	50.0000	0.0000	52.5754	105		18 - 190
2-Chloroethyl vinyl ether	50.0000	0.0000	51.4707	103		1 - 305
Acrolein	250.0000	0.0000	229.5012	92		12 - 133
Acrylonitrile	50.0000	0.0000	46.3042	93		45 - 172

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

* Values outside of QC limits

Spike Recovery: 0 out of 37 outside limits

3 - FORM III

WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-70889

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

Lab Sample ID: LCS-70889 LCS Lot No.:

Date Extracted: 03/19/2013 Date Analyzed (1): 03/19/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.

COMMENTS:

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-70889

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

Lab Sample ID: LCSD-70889 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Chloromethane	50.0000	43.9632	88		3		40	1 - 273
Vinyl chloride	50.0000	44.6009	89		1		40	1 - 251
Bromomethane	50.0000	44.2498	88		6		40	1 - 242
Chloroethane	50.0000	47.1167	94		3		40	14 - 230
Trichlorofluoromethane	50.0000	47.5220	95		1		40	17 - 181
1,1-Dichloroethene	50.0000	48.7375	97		5		40	1 - 234
Methylene chloride	50.0000	45.7106	91		1		40	1 - 221
trans-1,2-Dichloroethene	50.0000	48.8452	98		0		40	54 - 156
1,1-Dichloroethane	50.0000	50.2220	100		6		40	59 - 155
cis-1,2-Dichloroethene	50.0000	50.5795	101		0		40	83 - 120
Chloroform	50.0000	49.8267	100		0		40	51 - 138
1,1,1-Trichloroethane	50.0000	52.2122	104		3		40	52 - 162
Carbon tetrachloride	50.0000	50.4212	101		4		40	70 - 140
1,2-Dichloroethane	50.0000	53.2647	107		4		40	49 - 155
Benzene	50.0000	50.7691	102		0		40	37 - 151
Trichloroethene	50.0000	49.5074	99		3		40	71 - 157
1,2-Dichloropropane	50.0000	48.7556	98		0		40	1 - 210
Bromodichloromethane	50.0000	51.0946	102		2		40	35 - 155
cis-1,3-Dichloropropene	50.0000	53.1790	106		1		40	1 - 227
Toluene	50.0000	51.1116	102		1		40	47 - 150
trans-1,3-Dichloropropene	50.0000	51.4345	103		3		40	17 - 183
1,1,2-Trichloroethane	50.0000	51.0172	102		2		40	52 - 150
Tetrachloroethene	50.0000	49.9723	100		4		40	64 - 148
Dibromochloromethane	50.0000	55.0462	110		5		40	53 - 149
Chlorobenzene	50.0000	50.4535	101		0		40	37 - 150
Ethylbenzene	50.0000	50.5099	101		2		40	37 - 162
m,p-Xylene	100.0000	104.3591	104		1		40	70 - 130
o-Xylene	50.0000	51.5896	103		1		40	70 - 130
Xylene (Total)	150.0000	155.9487	104		1		40	81 - 121
Bromoform	50.0000	64.5285	129		3		40	45 - 169
1,1,2,2-Tetrachloroethane	50.0000	47.7049	95		7		40	46 - 157
1,3-Dichlorobenzene	50.0000	50.7648	102		1		40	59 - 156
1,4-Dichlorobenzene	50.0000	47.2194	94		3		40	18 - 190
1,2-Dichlorobenzene	50.0000	50.9094	102		3		40	18 - 190
2-Chloroethyl vinyl ether	50.0000	48.1878	96		7		40	1 - 305
Acrolein	250.0000	228.4256	91		1		40	12 - 133
Acrylonitrile	50.0000	47.8379	96		3		40	45 - 172

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

* Values outside of QC limits

RPD: 0 out of 37 outside limits

Spike Recovery: 0 out of 37 outside limits

3 - FORM III

WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-70889

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

Lab Sample ID: LCSD-70889 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC #	%RPD #	QC LIMITS RPD	QC LIMITS REC.

COMMENTS:

4A - FORM IV VOA

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-70889

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

Lab File ID: V5O2305.D Lab Sample ID: MB-70889

Instrument ID: V5

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 03/19/2013

Level: (TRACE or LOW/MED) LOW Time Analyzed: 16:09

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-70889	LCS-70889	V5O2302.D	14:42
02	LCSD-70889	LCSD-70889	V5O2303.D	15:12
03	DIRECT DISCHARGE 4	M0343-01A	V5O2307.D	17:05

COMMENTS:

som13.03.14.A

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 03/19/2013 03/19/2013

EPA Sample No.(VSTD#####): VSTD0505X Date Analyzed: 03/19/2013

Lab File ID (Standard): V5O2301.D Time Analyzed: 13:43

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

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	407382		5.87		427351		9.516		231417		12.698	
	UPPER LIMIT	814764		6.37		854702		10.016		462834		13.198	
	LOWER LIMIT	203691		5.37		213676		9.016		115709		12.198	
	EPA SAMPLE NO.												
01	LCS-70889	419715		5.889		444294		9.512		235149		12.694	
02	LCSD-70889	423285		5.884		437842		9.507		236844		12.701	
03	MB-70889	415492		5.889		425728		9.513		230180		12.695	
04	DIRECT DISCHARGE 4	381053		5.881		401479		9.516		211082		12.698	

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.

* Semivolatile Organics *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Monoco Oil

Laboratory Workorder / SDG #: M0343

EPA 625, 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: EPA 625

IV. PREPARATION

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

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: S3
Instrument Type: GCMS-SEMI

Description: HP6890 / HP5973
Manufacturer: Hewlett-Packard
Model: 6890 / 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 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-70859 in batch 70859, Percent Recovery is outside QC Limits, recovery is below criteria for Hexachlorocyclopentadiene at 10% with criteria of (34-103).

LCSD-70859 in batch 70859, Percent Recovery is outside QC Limits, recovery is below criteria for Hexachlorocyclopentadiene at 14% with criteria of (34-103).

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.

Signed:_____ _____

Date:_____3/25/2013_____

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.

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

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DIRECT DISCHARGE 4

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0343-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I4045.D

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

% Moisture: Decanted: (Y/N) Date Received: 03/15/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/15/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/15/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
108-95-2	Phenol	10	U
111-44-4	Bis(2-chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
108-60-1	2,2´-oxybis(1-Chloropropane)	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
111-91-1	Bis(2-chloroethoxy)methane	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DIRECT DISCHARGE 4

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0343-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I4045.D

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

% Moisture: Decanted: (Y/N) Date Received: 03/15/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/15/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/15/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3´-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-70859

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-70859

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I4042.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/15/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/15/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
108-95-2	Phenol	10	U
111-44-4	Bis(2-chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
108-60-1	2,2´-oxybis(1-Chloropropane)	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
111-91-1	Bis(2-chloroethoxy)methane	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-70859

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-70859

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I4042.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/15/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/15/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3´-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-70859

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-70859

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I4043.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/15/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/15/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
108-95-2	Phenol	34	
111-44-4	Bis(2-chloroethyl)ether	34	
95-57-8	2-Chlorophenol	39	
541-73-1	1,3-Dichlorobenzene	39	
106-46-7	1,4-Dichlorobenzene	39	
95-50-1	1,2-Dichlorobenzene	42	
108-60-1	2,2´-oxybis(1-Chloropropane)	33	
621-64-7	N-Nitroso-di-n-propylamine	29	
67-72-1	Hexachloroethane	23	
98-95-3	Nitrobenzene	35	
78-59-1	Isophorone	33	
88-75-5	2-Nitrophenol	42	
105-67-9	2,4-Dimethylphenol	41	
120-83-2	2,4-Dichlorophenol	41	
120-82-1	1,2,4-Trichlorobenzene	40	
91-20-3	Naphthalene	38	
111-91-1	Bis(2-chloroethoxy)methane	37	
87-68-3	Hexachlorobutadiene	40	
59-50-7	4-Chloro-3-methylphenol	39	
77-47-4	Hexachlorocyclopentadiene	5.1	J
88-06-2	2,4,6-Trichlorophenol	41	
91-58-7	2-Chloronaphthalene	40	
131-11-3	Dimethylphthalate	35	
208-96-8	Acenaphthylene	35	
606-20-2	2,6-Dinitrotoluene	40	
83-32-9	Acenaphthene	39	
51-28-5	2,4-Dinitrophenol	6.1	J
100-02-7	4-Nitrophenol	26	
121-14-2	2,4-Dinitrotoluene	35	
84-66-2	Diethylphthalate	34	
7005-72-3	4-Chlorophenyl-phenylether	41	
86-73-7	Fluorene	37	
534-52-1	4,6-Dinitro-2-methylphenol	19	J
86-30-6	N-Nitrosodiphenylamine	47	
101-55-3	4-Bromophenyl-phenylether	51	
118-74-1	Hexachlorobenzene	49	

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-70859

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-70859

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I4043.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/15/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/15/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
87-86-5	Pentachlorophenol	32	
85-01-8	Phenanthrene	40	
120-12-7	Anthracene	41	
84-74-2	Di-n-butylphthalate	39	
206-44-0	Fluoranthene	38	
129-00-0	Pyrene	38	
85-68-7	Butylbenzylphthalate	47	
91-94-1	3,3´-Dichlorobenzidine	41	
56-55-3	Benzo(a)anthracene	43	
218-01-9	Chrysene	36	
117-81-7	Bis(2-ethylhexyl)phthalate	49	
117-84-0	Di-n-octylphthalate	43	
205-99-2	Benzo(b)fluoranthene	38	
207-08-9	Benzo(k)fluoranthene	37	
50-32-8	Benzo(a)pyrene	38	
193-39-5	Indeno(1,2,3-cd)pyrene	38	
53-70-3	Dibenzo(a,h)anthracene	39	
191-24-2	Benzo(g,h,i)perylene	37	

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-70859

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-70859

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I4044.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/15/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/15/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
108-95-2	Phenol	34	
111-44-4	Bis(2-chloroethyl)ether	35	
95-57-8	2-Chlorophenol	39	
541-73-1	1,3-Dichlorobenzene	39	
106-46-7	1,4-Dichlorobenzene	39	
95-50-1	1,2-Dichlorobenzene	43	
108-60-1	2,2´-oxybis(1-Chloropropane)	33	
621-64-7	N-Nitroso-di-n-propylamine	29	
67-72-1	Hexachloroethane	25	
98-95-3	Nitrobenzene	35	
78-59-1	Isophorone	34	
88-75-5	2-Nitrophenol	44	
105-67-9	2,4-Dimethylphenol	37	
120-83-2	2,4-Dichlorophenol	41	
120-82-1	1,2,4-Trichlorobenzene	42	
91-20-3	Naphthalene	39	
111-91-1	Bis(2-chloroethoxy)methane	38	
87-68-3	Hexachlorobutadiene	40	
59-50-7	4-Chloro-3-methylphenol	39	
77-47-4	Hexachlorocyclopentadiene	6.8	J
88-06-2	2,4,6-Trichlorophenol	43	
91-58-7	2-Chloronaphthalene	40	
131-11-3	Dimethylphthalate	35	
208-96-8	Acenaphthylene	35	
606-20-2	2,6-Dinitrotoluene	41	
83-32-9	Acenaphthene	39	
51-28-5	2,4-Dinitrophenol	7.5	J
100-02-7	4-Nitrophenol	27	
121-14-2	2,4-Dinitrotoluene	37	
84-66-2	Diethylphthalate	35	
7005-72-3	4-Chlorophenyl-phenylether	42	
86-73-7	Fluorene	39	
534-52-1	4,6-Dinitro-2-methylphenol	21	
86-30-6	N-Nitrosodiphenylamine	47	
101-55-3	4-Bromophenyl-phenylether	51	
118-74-1	Hexachlorobenzene	50	

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-70859

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-70859

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I4044.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/15/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/15/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
87-86-5	Pentachlorophenol	33	
85-01-8	Phenanthrene	41	
120-12-7	Anthracene	40	
84-74-2	Di-n-butylphthalate	39	
206-44-0	Fluoranthene	38	
129-00-0	Pyrene	38	
85-68-7	Butylbenzylphthalate	47	
91-94-1	3,3´-Dichlorobenzidine	40	
56-55-3	Benzo(a)anthracene	43	
218-01-9	Chrysene	34	
117-81-7	Bis(2-ethylhexyl)phthalate	49	
117-84-0	Di-n-octylphthalate	43	
205-99-2	Benzo(b)fluoranthene	40	
207-08-9	Benzo(k)fluoranthene	35	
50-32-8	Benzo(a)pyrene	37	
193-39-5	Indeno(1,2,3-cd)pyrene	39	
53-70-3	Dibenzo(a,h)anthracene	37	
191-24-2	Benzo(g,h,i)perylene	37	

2H - FORM II SV-2

WATER SEMIVOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

	EPA SAMPLE NO.	SDMC1 (NBZ) #	SDMC2 (FBP) #	SDMC3 (TPH) #	SDMC4 (PHL) #	SDMC5 (2FP) #	SDMC6 (TBP) #			TOT OUT
01	MB-70859	69	79	107	63	75	121			0
02	LCS-70859	70	78	86	69	73	122			0
03	LCSD-70859	72	80	86	69	73	117			0
04	DIRECT DISCHARGE 4	74	82	103	15	28	101			0

			QC LIMITS
SDMC1	(NBZ)	= Nitrobenzene-d5	(40-110)
SDMC2	(FBP)	= 2-Fluorobiphenyl	(50-110)
SDMC3	(TPH)	= Terphenyl-d14	(50-135)
SDMC4	(PHL)	= Phenol-d5	(10-115)
SDMC5	(2FP)	= 2-Fluorophenol	(20-110)
SDMC6	(TBP)	= 2,4,6-Tribromophenol	(40-125)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D DMC diluted out

som13.03.14.A

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-70859

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

Lab Sample ID: LCS-70859 LCS Lot No.: A090321

Date Extracted: 03/15/2013 Date Analyzed (1): 03/15/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Phenol	50.0000	0.0000	34.2831	69		5 - 112
Bis(2-chloroethyl)ether	50.0000	0.0000	34.3757	69		12 - 158
2-Chlorophenol	50.0000	0.0000	38.6552	77		23 - 134
1,3-Dichlorobenzene	50.0000	0.0000	38.9760	78		1 - 172
1,4-Dichlorobenzene	50.0000	0.0000	38.9485	78		20 - 124
1,2-Dichlorobenzene	50.0000	0.0000	42.2072	84		32 - 129
2,2´-oxybis(1-Chloropropan	50.0000	0.0000	32.6303	65		36 - 166
N-Nitroso-di-n-propylamine	50.0000	0.0000	28.9186	58		1 - 230
Hexachloroethane	50.0000	0.0000	22.6679	45		40 - 113
Nitrobenzene	50.0000	0.0000	34.8555	70		35 - 180
Isophorone	50.0000	0.0000	33.0029	66		21 - 196
2-Nitrophenol	50.0000	0.0000	42.3159	85		29 - 182
2,4-Dimethylphenol	50.0000	0.0000	41.1561	82		32 - 119
2,4-Dichlorophenol	50.0000	0.0000	40.9254	82		39 - 135
1,2,4-Trichlorobenzene	50.0000	0.0000	40.1159	80		44 - 142
Naphthalene	50.0000	0.0000	38.4692	77		21 - 133
Bis(2-chloroethoxy)methane	50.0000	0.0000	36.7164	73		33 - 184
Hexachlorobutadiene	50.0000	0.0000	39.7666	80		24 - 116
4-Chloro-3-methylphenol	50.0000	0.0000	38.9359	78		22 - 147
Hexachlorocyclopentadiene	50.0000	0.0000	5.1174	10	*	34 - 103
2,4,6-Trichlorophenol	50.0000	0.0000	41.3109	83		37 - 144
2-Chloronaphthalene	50.0000	0.0000	39.5217	79		60 - 118
Dimethylphthalate	50.0000	0.0000	34.9513	70		1 - 112
Acenaphthylene	50.0000	0.0000	34.8553	70		33 - 145
2,6-Dinitrotoluene	50.0000	0.0000	40.0043	80		50 - 158
Acenaphthene	50.0000	0.0000	38.5833	77		47 - 155
2,4-Dinitrophenol	50.0000	0.0000	6.0700	12		1 - 191
4-Nitrophenol	50.0000	0.0000	26.4576	53		1 - 132
2,4-Dinitrotoluene	50.0000	0.0000	35.4121	71		39 - 139
Diethylphthalate	50.0000	0.0000	34.4611	69		1 - 114
4-Chlorophenyl-phenylether	50.0000	0.0000	40.5770	81		25 - 158
Fluorene	50.0000	0.0000	37.1891	74		59 - 121
4,6-Dinitro-2-methylphenol	50.0000	0.0000	19.2194	38		1 - 181
N-Nitrosodiphenylamine	50.0000	0.0000	47.3210	95		48 - 121
4-Bromophenyl-phenylether	50.0000	0.0000	51.3905	103		53 - 127
Hexachlorobenzene	50.0000	0.0000	49.0234	98		1 - 152
Pentachlorophenol	50.0000	0.0000	32.2974	65		14 - 176
Phenanthrene	50.0000	0.0000	40.0590	80		54 - 120
Anthracene	50.0000	0.0000	40.7710	82		27 - 133
Di-n-butylphthalate	50.0000	0.0000	39.3585	79		1 - 118
Fluoranthene	50.0000	0.0000	37.6772	75		26 - 137
Pyrene	50.0000	0.0000	37.5045	75		52 - 115
Butylbenzylphthalate	50.0000	0.0000	46.7857	94		1 - 152
3,3´-Dichlorobenzidine	50.0000	0.0000	40.6400	81		1 - 262

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-70859

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

Lab Sample ID: LCS-70859 LCS Lot No.: A090321

Date Extracted: 03/15/2013 Date Analyzed (1): 03/15/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Benzo(a)anthracene	50.0000	0.0000	42.7018	85		33 - 143
Chrysene	50.0000	0.0000	36.1378	72		17 - 168
Bis(2-ethylhexyl)phthalate	50.0000	0.0000	49.4253	99		8 - 158
Di-n-octylphthalate	50.0000	0.0000	43.2647	87		4 - 146
Benzo(b)fluoranthene	50.0000	0.0000	38.2235	76		24 - 159
Benzo(k)fluoranthene	50.0000	0.0000	37.0659	74		11 - 162
Benzo(a)pyrene	50.0000	0.0000	37.5929	75		17 - 163
Indeno(1,2,3-cd)pyrene	50.0000	0.0000	38.4523	77		1 - 171
Dibenzo(a,h)anthracene	50.0000	0.0000	38.5364	77		1 - 227
Benzo(g,h,i)perylene	50.0000	0.0000	36.9775	74		1 - 219

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

* Values outside of QC limits

Spike Recovery: 1 out of 54 outside limits

COMMENTS:

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-70859

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

Lab Sample ID: LCSD-70859 LCS Lot No.: A090321

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Phenol	50.0000	34.4471	69		0		40	5 - 112
Bis(2-chloroethyl)ether	50.0000	35.3366	71		3		40	12 - 158
2-Chlorophenol	50.0000	39.3913	79		3		40	23 - 134
1,3-Dichlorobenzene	50.0000	39.3859	79		1		40	1 - 172
1,4-Dichlorobenzene	50.0000	38.9475	78		0		40	20 - 124
1,2-Dichlorobenzene	50.0000	42.9457	86		2		40	32 - 129
2,2´-oxybis(1-Chloropropan	50.0000	33.2554	67		3		40	36 - 166
N-Nitroso-di-n-propylamine	50.0000	28.8178	58		0		40	1 - 230
Hexachloroethane	50.0000	24.8772	50		11		40	40 - 113
Nitrobenzene	50.0000	34.5250	69		1		40	35 - 180
Isophorone	50.0000	33.5026	67		2		40	21 - 196
2-Nitrophenol	50.0000	44.0813	88		3		40	29 - 182
2,4-Dimethylphenol	50.0000	37.2086	74		10		40	32 - 119
2,4-Dichlorophenol	50.0000	40.5515	81		1		40	39 - 135
1,2,4-Trichlorobenzene	50.0000	41.7326	83		4		40	44 - 142
Naphthalene	50.0000	39.0059	78		1		40	21 - 133
Bis(2-chloroethoxy)methane	50.0000	38.3728	77		5		40	33 - 184
Hexachlorobutadiene	50.0000	40.2219	80		0		40	24 - 116
4-Chloro-3-methylphenol	50.0000	39.3533	79		1		40	22 - 147
Hexachlorocyclopentadiene	50.0000	6.8244	14	*	33		40	34 - 103
2,4,6-Trichlorophenol	50.0000	43.2164	86		4		40	37 - 144
2-Chloronaphthalene	50.0000	40.1538	80		1		40	60 - 118
Dimethylphthalate	50.0000	35.4902	71		1		40	1 - 112
Acenaphthylene	50.0000	34.6183	69		1		40	33 - 145
2,6-Dinitrotoluene	50.0000	40.8724	82		2		40	50 - 158
Acenaphthene	50.0000	38.8841	78		1		40	47 - 155
2,4-Dinitrophenol	50.0000	7.4963	15		22		40	1 - 191
4-Nitrophenol	50.0000	26.5634	53		0		40	1 - 132
2,4-Dinitrotoluene	50.0000	37.0939	74		4		40	39 - 139
Diethylphthalate	50.0000	34.7968	70		1		40	1 - 114
4-Chlorophenyl-phenylether	50.0000	41.7520	84		4		40	25 - 158
Fluorene	50.0000	38.5130	77		4		40	59 - 121
4,6-Dinitro-2-methylphenol	50.0000	21.2665	43		12		40	1 - 181
N-Nitrosodiphenylamine	50.0000	46.6886	93		2		40	48 - 121
4-Bromophenyl-phenylether	50.0000	50.6910	101		2		40	53 - 127
Hexachlorobenzene	50.0000	49.5973	99		1		40	1 - 152
Pentachlorophenol	50.0000	32.8129	66		2		40	14 - 176
Phenanthrene	50.0000	41.2992	83		4		40	54 - 120
Anthracene	50.0000	40.3776	81		1		40	27 - 133
Di-n-butylphthalate	50.0000	38.9650	78		1		40	1 - 118
Fluoranthene	50.0000	38.1454	76		1		40	26 - 137
Pyrene	50.0000	37.9717	76		1		40	52 - 115
Butylbenzylphthalate	50.0000	46.7319	93		1		40	1 - 152
3,3´-Dichlorobenzidine	50.0000	39.7135	79		3		40	1 - 262
Benzo(a)anthracene	50.0000	43.4074	87		2		40	33 - 143
Chrysene	50.0000	34.3094	69		4		40	17 - 168

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-70859

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

Lab Sample ID: LCSD-70859 LCS Lot No.: A090321

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Bis(2-ethylhexyl)phthalate	50.0000	49.4229	99		0		40	8 - 158
Di-n-octylphthalate	50.0000	42.7652	86		1		40	4 - 146
Benzo(b)fluoranthene	50.0000	39.9946	80		5		40	24 - 159
Benzo(k)fluoranthene	50.0000	35.1117	70		6		40	11 - 162
Benzo(a)pyrene	50.0000	37.2570	75		0		40	17 - 163
Indeno(1,2,3-cd)pyrene	50.0000	39.0355	78		1		40	1 - 171
Dibenzo(a,h)anthracene	50.0000	36.6695	73		5		40	1 - 227
Benzo(g,h,i)perylene	50.0000	37.1622	74		0		40	1 - 219

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

* Values outside of QC limits

RPD: 0 out of 54 outside limits

Spike Recovery: 1 out of 54 outside limits

COMMENTS:

4C - FORM IV SV

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-70859

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

Lab File ID: S3I4042.D Lab Sample ID: MB-70859

Instrument ID: S3 Date Extracted: 03/15/2013

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 03/15/2013

Level: (LOW/MED) LOW Time Analyzed: 15:34

Extraction: (Type) SEPF GPC Cleanup: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	LCS-70859	LCS-70859	S3I4043.D	03/15/2013
02	LCSD-70859	LCSD-70859	S3I4044.D	03/15/2013
03	DIRECT DISCHARGE 4	M0343-01B	S3I4045.D	03/15/2013

COMMENTS:

8C - FORM VIII SV-1

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 01/31/2013 01/31/2013

EPA Sample No.(SSTD020##) SSTD0253J Date Analyzed: 03/15/2013

Lab File ID (Standard): S3I4031A.D Time Analyzed: 10:15

Instrument ID: S3

		IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
	12 HOUR STD	676685		4.058		2411082		5.848		1835260		7.616	
	UPPER LIMIT	1353370		4.558		4822164		6.348		3670520		8.116	
	LOWER LIMIT	338343		3.558		1205541		5.348		917630		7.116	
	EPA SAMPLE NO.												
01	MB-70859	753389		4.082		2588783		5.861		1929573		7.624	
02	LCS-70859	763163		4.080		2713651		5.865		2161876		7.633	
03	LCSD-70859	774688		4.083		2711425		5.862		2161689		7.630	
04	DIRECT DISCHARGE 4	720982		4.079		2508136		5.858		1897435		7.626	

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

8D - FORM VIII SV-2

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

EPA Sample No.(SSTD020##) SSTD0253J Date Analyzed: 03/15/2013

Lab File ID (Standard): S3I4031A.D Time Analyzed: 10:15

Instrument ID: S3 GC Column: Rxi-5sil MS ID: 0.25 (mm)

		IS4 (PHN) AREA	#	RT	#	IS5 (CRY) AREA	#	RT	#	IS6 (PRY) AREA	#	RT	#
	12 HOUR STD	3300217		8.898		4308417		11.329		4135929		13.166	
	UPPER LIMIT	6600434		9.398		8616834		11.829		8271858		13.666	
	LOWER LIMIT	1650109		8.398		2154209		10.829		2067965		12.666	
	EPA SAMPLE NO.												
01	MB-70859	3404395		8.906		4171550		11.219		4013294		13.062	
02	LCS-70859	3583143		8.910		5020920		11.218		4015429		13.061	
03	LCSD-70859	3681284		8.907		5200183		11.225		4129839		13.063	
04	DIRECT DISCHARGE 4	3267324		8.903		4066903		11.216		3808642		13.059	

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.

* PCB Organics *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Monoco Oil

Laboratory Workorder / SDG #: M0343

EPA 608 PCB, 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: EPA 608 PCB

IV. PREPARATION

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

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

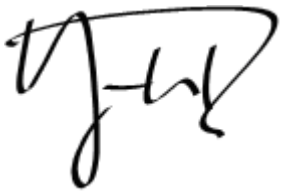
generated and reported as required. Manual integrations are coded to provide the data reviewer justification for such action. The codes are labeled on the ion chromatogram signal (GC/MS signal) and chromatogram for GC based analysis as follows:

· 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:

AR16603AU Aroclor-1260 on rear column , Tetrachloro-m-xylene on rear column due to M6
MB-70860 Tetrachloro-m-xylene 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:_____3/25/2013_____

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.

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

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DIRECT DISCHARGE 4

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0343-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2L9085F.D/E2L9085R.D

% Moisture: Decanted: (Y/N) Date Received: 03/15/2013

Extraction: (Type) SEPF Date Extracted: 03/15/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/18/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-70860

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-70860

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2L9082F.D/E2L9082R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 03/15/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/18/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-70860(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-70860

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2L9083F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 03/15/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/18/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	3.4	
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	3.3	

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-70860(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-70860

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2L9083R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 03/15/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/18/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	3.4	
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	3.6	

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
LCSD-70860(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-70860

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2L9084F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 03/15/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/18/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	3.7	
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	3.5	

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
LCSD-70860(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-70860

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2L9084R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 03/15/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/18/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	3.6	
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	3.8	

2Q - FORM II ARO-1

WATER AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	CLIENT SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-70860	92	94	83	85			0
02	LCS-70860	89	92	82	85			0
03	LCSD-70860	96	99	86	90			0
04	DIRECT DISCHARGE 4	85	88	60	63			0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(39-126)
DCB = Decachlorobiphenyl	(17-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.03.14.A

3N - FORM III ARO-3
WATER AROCLOR LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.
LCS-70860

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

Lab Sample ID: LCS-70860 LCS Lot No.: A086503

Date Extracted: 03/15/2013 Date Analyzed (1): 03/18/2013

Instrument ID (1): E2 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC #	QC LIMITS
Aroclor-1016	4.0000	3.4353	86	50-114
Aroclor-1260	4.0000	3.2596	81	8-127

Instrument ID (2): E2 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 03/18/2013

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC #	QC LIMITS
Aroclor-1016	4.0000	3.4004	85	50-114
Aroclor-1260	4.0000	3.6063	90	8-127

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:

som13.03.14.A

3N - FORM III ARO-3
WATER AROCLOR LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

CLIENT SAMPLE NO.
LCSD-70860

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

Lab Sample ID: LCSD-70860 LCS Lot No.: A086503

Date Extracted: 03/15/2013 Date Analyzed (1): 03/18/2013

Instrument ID (1): E2 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC	#	QC LIMITS	%RPD	#	RPD LIMIT
Aroclor-1016	4.0000	3.6592	91		50-114	6.0		40
Aroclor-1260	4.0000	3.4590	86		8-127	6.0		40

Instrument ID (2): E2 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 03/18/2013

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC	#	QC LIMITS	%RPD	#	RPD LIMIT
Aroclor-1016	4.0000	3.6296	91		50-114	7.0		40
Aroclor-1260	4.0000	3.7959	95		8-127	5.0		40

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:

som13.03.14.A

4F - FORM IV ARO

AROCLOR METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

MB-70860

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0343 Mod. Ref No.: SDG No.: SM0343

Lab File ID: E2L9082F.D / E2L9082R.D Lab Sample ID: MB-70860

Matrix: (SOIL/SED/WATER) WATER Extraction: (Type) SEPF Date Extracted: 03/15/2013

Sulfur Cleanup: (Y/N) Y GPC Cleanup:(Y/N) N

Acid Cleanup: (Y/N Y

Date Analyzed (1): 03/18/2013 Date Analyzed (2): 03/18/2013

Time Analyzed (1): 10:28 Time Analyzed (2): 10:28

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-70860	LCS-70860	03/18/2013	03/18/2013
02	LCSD-70860	LCSD-70860	03/18/2013	03/18/2013
03	DIRECT DISCHARGE 4	M0343-01B	03/18/2013	03/18/2013

COMMENTS:

* Metals *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Monoco Oil

Laboratory Workorder / SDG #: M0343

EPA 200.7, EPA 245.1

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: EPA 200.7, EPA 245.1

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: 200.7
Aqueous Samples were prepared following procedures in laboratory test code: 245.1

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):

A matrix spike was not performed on any sample in this SDG.

D. Post Digestion Spike (PDS):

A post-digestion spike was not performed on any sample in this SDG.

E. Duplicate sample:

A duplicate analysis was not performed on any sample in this SDG.

F. Serial Dilution (SD):

Serial Dilution analyses were performed on sample: DIRECT DISCHARGE 4 (M0343-01CSD).

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: 03/27/13

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.

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

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

DIRECT DISCHARGE 4

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0343

Matrix (soil/water): WATER Lab Sample ID: M0343-01

Level (low/med): LOW Date Received: 03/15/2013

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	7.0	U		P
7440-38-2	Arsenic	5.2	U		P
7440-41-7	Beryllium	0.063	U		P
7440-43-9	Cadmium	0.19	U		P
7440-47-3	Chromium	2.0	B		P
7440-50-8	Copper	3.4	B		P
7439-92-1	Lead	2.4	U		P
7439-97-6	Mercury	0.030	U		CV
7440-02-0	Nickel	3.8	B		P
7782-49-2	Selenium	14.0	U		P
7440-22-4	Silver	0.75	U		P
7440-28-0	Thallium	7.0	U		P
7440-66-6	Zinc	13.6	B		P

Comments:

7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0343

Solid LCS Source:

Aqueous LCS Source:

LCS(D) ID:
LCS-70884

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Antimony	100.0	111.59	111.6						
Arsenic	40.0	39.82	99.6						
Beryllium	50.0	53.55	107.1						
Cadmium	50.0	55.39	110.8						
Chromium	200.0	218.84	109.4						
Copper	250.0	257.35	102.9						
Lead	20.0	22.49	112.5						
Nickel	500.0	556.30	111.3						
Selenium	50.0	51.85	103.7						
Silver	50.0	53.32	106.6						
Thallium	50.0	53.63	107.3						
Zinc	500.0	539.87	108.0						

7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0343

Solid LCS Source:

Aqueous LCS Source:

LCS(D) ID:
LCS-70885

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Mercury	4.6	4.42	96.1						

7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0343

Solid LCS Source:

Aqueous LCS Source:

LCS(D) ID:
LCSD-70884

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Antimony	100.0	110.89	110.9						
Arsenic	40.0	42.10	105.3						
Beryllium	50.0	51.98	104.0						
Cadmium	50.0	54.34	108.7						
Chromium	200.0	216.05	108.0						
Copper	250.0	254.45	101.8						
Lead	20.0	20.95	104.8						
Nickel	500.0	546.69	109.3						
Selenium	50.0	54.82	109.6						
Silver	50.0	53.03	106.1						
Thallium	50.0	52.50	105.0						
Zinc	500.0	533.01	106.6						

U.S. EPA - CLP

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0343

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-70885**

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

FIMS2_130320B

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
Analyte		C	03/20/13 10:08	C	03/20/13 10:24	C		C		C	M
Mercury	0.030	U	0.030	U	0.030	U			0.030	U	CV

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0343

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-70884**

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

OPTIMA3_130320A

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 03/20/13 8:26	C	03/20/13 8:54	C		C	Preparation Blank	C	M
Antimony	7.0	U	7.0	U	7.0	U			7.000	U	P
Arsenic	5.2	U	5.2	U	5.2	U			5.200	U	P
Beryllium	0.1	B	0.1	B	0.1	U			0.063	U	P
Cadmium	0.2	U	0.2	U	0.2	U			0.190	U	P
Chromium	0.9	B	0.6	B	0.4	U			4.521	B	P
Copper	1.1	U	1.1	U	1.1	U			1.100	U	P
Lead	2.4	U	2.4	U	2.4	U			2.400	U	P
Nickel	0.8	U	0.8	U	0.8	U			0.810	U	P
Selenium	14.0	U	14.0	U	14.0	U			14.000	U	P
Silver	2.2	B	0.8	U	0.8	U			0.750	U	P
Thallium	7.0	U	7.0	U	7.0	U			7.000	U	P
Zinc	2.0	B	1.8	B	1.4	B			1.000	U	P

Report Date:
15-Apr-13 16:19

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

LaBella Associates
300 State Street, Suite 201
Rochester, NY 14614

Work Order: M0437
Project : LaBella Monoco Oil
Project #:

Attn: Dan Noll

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M0437-01	DIRECT DISCHARGE 5	Aqueous	29-Mar-13 08:00	01-Apr-13 09:12

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 requirments have been meet.

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.

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

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* Data Summary Pack *

175 Metro Center Boulevard · Warwick, RI 02886-1755 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0437

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
DIRECT DISCHARGE 5	M0437-01	E624	E625	E608_PCB	SW6010_W	
DIRECT DISCHARGE 5	M0437-01				SW7470	

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0437

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
E624					
M0437-01A	AQ	3/29/2013	4/1/2013	NA	4/3/2013

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0437

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
E625					
M0437-01B	AQ	3/29/2013	4/1/2013	4/2/2013	4/3/2013

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0437

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
E608_PCB					
M0437-01B	AQ	3/29/2013	4/1/2013	4/2/2013	4/2/2013

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0437

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
E624					
M0437-01A	AQ	E624	NA	LOW	1

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0437

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
E625					
M0437-01B	AQ	E625	3510C	NA	1

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0437

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
E608_PCB					
M0437-01B	AQ	E608_PCB	3510C	Acid/Sulfur	1

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0437

Laboratory Sample ID	Matrix	Metals Requested	Date Received By Lab	Date Analyzed
SW6010_W				
M0437-01C	AQ	SW6010_W	4/1/2013	4/8/2013
SW7470				
M0437-01C	AQ	SW7470	4/1/2013	4/11/2013

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: M0437

Client ID: LABELLA
Project: LaBella Monoco Oil
WO Name: LaBella Monoco Oil
Location: LABELLA_MONOCO-OIL,

Case:
SDG:
PO: 210259

HC Due: 04/11/13
Fax Due:
Fax Report: ☐

Report Level: ASP-B
Special Program:
EDD: ENVIROINSITE_1
EQUIIS_4_NYSDEC

Comments: use this project for between 11-50 samples, no RUSH surcharge base on lab capacity, no charge for MS/MSD or a batch of 7 or more samples, no charge for TB. no hard copy

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M0437-01A	DIRECT DISCHARGE 5	03/29/2013 08:00	04/01/2013	Aqueous	E624	/					VOA
M0437-01B	DIRECT DISCHARGE 5	03/29/2013 08:00	04/01/2013	Aqueous	E608_PCB	/					F2
M0437-01B	DIRECT DISCHARGE 5	03/29/2013 08:00	04/01/2013	Aqueous	E625	/					F2
M0437-01C	DIRECT DISCHARGE 5	03/29/2013 08:00	04/01/2013	Aqueous	SW6010_W	/ TAL				Y	M3
M0437-01C	DIRECT DISCHARGE 5	03/29/2013 08:00	04/01/2013	Aqueous	SW7470	/ TAL					M3

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

HT = Test logged in but has been placed on hold

Lab Client Rep: Agnes R Huntley

* Volatiles *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Monoco Oil

Laboratory Workorder / SDG #: M0437

EPA 624, VOC 624 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: EPA 624

IV. PREPARATION

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

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: V10
Instrument Type: GCMS-VOA

Description: HP7890A
Manufacturer: Agilent
Model: 7890A / 5975C

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.

Signed:_____ _____

Date:_____4/11/2013_____

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.

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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DIRECT DISCHARGE 5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0437-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9047.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/01/2013

% Moisture: not dec. Date Analyzed: 04/03/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	0.79	J
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
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	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
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	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
127-18-4	Tetrachloroethene	5.0	U
124-48-1	Dibromochloromethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
75-25-2	Bromoform	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
110-75-8	2-Chloroethyl vinyl ether	5.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DIRECT DISCHARGE 5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0437-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9047.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/01/2013

% Moisture: not dec. Date Analyzed: 04/03/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
107-02-8	Acrolein	25	U
107-13-1	Acrylonitrile	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-71089

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-71089

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9046.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 04/03/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
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
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	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
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	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
127-18-4	Tetrachloroethene	5.0	U
124-48-1	Dibromochloromethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
75-25-2	Bromoform	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
110-75-8	2-Chloroethyl vinyl ether	5.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-71089

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-71089

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9046.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 04/03/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
107-02-8	Acrolein	25	U
107-13-1	Acrylonitrile	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-71089

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-71089

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9043.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 04/03/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	43	
75-01-4	Vinyl chloride	44	
74-83-9	Bromomethane	44	
75-00-3	Chloroethane	46	
75-69-4	Trichlorofluoromethane	45	
75-35-4	1,1-Dichloroethene	44	
75-09-2	Methylene chloride	45	
156-60-5	trans-1,2-Dichloroethene	46	
75-34-3	1,1-Dichloroethane	47	
156-59-2	cis-1,2-Dichloroethene	47	
67-66-3	Chloroform	47	
71-55-6	1,1,1-Trichloroethane	46	
56-23-5	Carbon tetrachloride	46	
107-06-2	1,2-Dichloroethane	49	
71-43-2	Benzene	46	
79-01-6	Trichloroethene	47	
78-87-5	1,2-Dichloropropane	47	
75-27-4	Bromodichloromethane	50	
10061-01-5	cis-1,3-Dichloropropene	50	
108-88-3	Toluene	47	
10061-02-6	trans-1,3-Dichloropropene	51	
79-00-5	1,1,2-Trichloroethane	49	
127-18-4	Tetrachloroethene	46	
124-48-1	Dibromochloromethane	50	
108-90-7	Chlorobenzene	46	
100-41-4	Ethylbenzene	46	
179601-23-1	m,p-Xylene	93	
95-47-6	o-Xylene	47	
1330-20-7	Xylene (Total)	140	
75-25-2	Bromoform	50	
79-34-5	1,1,2,2-Tetrachloroethane	44	
541-73-1	1,3-Dichlorobenzene	47	
106-46-7	1,4-Dichlorobenzene	46	
95-50-1	1,2-Dichlorobenzene	47	
110-75-8	2-Chloroethyl vinyl ether	49	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-71089

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-71089

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9043.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 04/03/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
107-02-8	Acrolein	230	
107-13-1	Acrylonitrile	49	

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-71089

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-71089

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9044.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 04/03/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	44	
75-01-4	Vinyl chloride	46	
74-83-9	Bromomethane	44	
75-00-3	Chloroethane	47	
75-69-4	Trichlorofluoromethane	46	
75-35-4	1,1-Dichloroethene	46	
75-09-2	Methylene chloride	46	
156-60-5	trans-1,2-Dichloroethene	47	
75-34-3	1,1-Dichloroethane	48	
156-59-2	cis-1,2-Dichloroethene	49	
67-66-3	Chloroform	48	
71-55-6	1,1,1-Trichloroethane	47	
56-23-5	Carbon tetrachloride	48	
107-06-2	1,2-Dichloroethane	49	
71-43-2	Benzene	47	
79-01-6	Trichloroethene	47	
78-87-5	1,2-Dichloropropane	47	
75-27-4	Bromodichloromethane	50	
10061-01-5	cis-1,3-Dichloropropene	51	
108-88-3	Toluene	49	
10061-02-6	trans-1,3-Dichloropropene	52	
79-00-5	1,1,2-Trichloroethane	50	
127-18-4	Tetrachloroethene	46	
124-48-1	Dibromochloromethane	51	
108-90-7	Chlorobenzene	47	
100-41-4	Ethylbenzene	48	
179601-23-1	m,p-Xylene	94	
95-47-6	o-Xylene	48	
1330-20-7	Xylene (Total)	140	
75-25-2	Bromoform	52	
79-34-5	1,1,2,2-Tetrachloroethane	48	
541-73-1	1,3-Dichlorobenzene	47	
106-46-7	1,4-Dichlorobenzene	46	
95-50-1	1,2-Dichlorobenzene	47	
110-75-8	2-Chloroethyl vinyl ether	40	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-71089

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-71089

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9044.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 04/03/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
107-02-8	Acrolein	250	
107-13-1	Acrylonitrile	51	

2B - FORM II VOA-2

WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

Level: (TRACE or LOW) LOW

	EPA SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-71089	102	101	98	100				0
02	LCSD-71089	102	100	99	100				0
03	MB-71089	102	100	99	98				0
04	DIRECT DISCHARGE 5	103	101	99	99				0

		QC LIMITS
VDMC1	(DBFM) Dibromofluoromethane	(85-115)
VDMC2	(DCE) = 1,2-Dichloroethane-d4	(70-120)
VDMC3	(TOL) = Toluene-d8	(85-120)
VDMC4	(BFB) = Bromofluorobenzene	(75-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

som13.04.02.A

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-71089

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

Lab Sample ID: LCS-71089 LCS Lot No.:

Date Extracted: 04/03/2013 Date Analyzed (1): 04/03/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Chloromethane	50.0000	0.0000	42.9470	86		1 - 273
Vinyl chloride	50.0000	0.0000	44.2658	89		1 - 251
Bromomethane	50.0000	0.0000	43.6387	87		1 - 242
Chloroethane	50.0000	0.0000	45.7485	91		14 - 230
Trichlorofluoromethane	50.0000	0.0000	45.0258	90		17 - 181
1,1-Dichloroethene	50.0000	0.0000	44.4154	89		1 - 234
Methylene chloride	50.0000	0.0000	45.2870	91		1 - 221
trans-1,2-Dichloroethene	50.0000	0.0000	45.8411	92		54 - 156
1,1-Dichloroethane	50.0000	0.0000	46.8259	94		59 - 155
cis-1,2-Dichloroethene	50.0000	0.0000	47.2196	94		83 - 120
Chloroform	50.0000	0.0000	46.8195	94		51 - 138
1,1,1-Trichloroethane	50.0000	0.0000	46.0249	92		52 - 162
Carbon tetrachloride	50.0000	0.0000	46.4910	93		70 - 140
1,2-Dichloroethane	50.0000	0.0000	48.7483	97		49 - 155
Benzene	50.0000	0.0000	45.7890	92		37 - 151
Trichloroethene	50.0000	0.0000	46.8342	94		71 - 157
1,2-Dichloropropane	50.0000	0.0000	47.1516	94		1 - 210
Bromodichloromethane	50.0000	0.0000	49.8356	100		35 - 155
cis-1,3-Dichloropropene	50.0000	0.0000	50.3152	101		1 - 227
Toluene	50.0000	0.0000	47.3757	95		47 - 150
trans-1,3-Dichloropropene	50.0000	0.0000	51.2096	102		17 - 183
1,1,2-Trichloroethane	50.0000	0.0000	48.6970	97		52 - 150
Tetrachloroethene	50.0000	0.0000	46.0811	92		64 - 148
Dibromochloromethane	50.0000	0.0000	50.2603	101		53 - 149
Chlorobenzene	50.0000	0.0000	46.3497	93		37 - 150
Ethylbenzene	50.0000	0.0000	46.1440	92		37 - 162
m,p-Xylene	100.0000	0.0000	93.0385	93		70 - 130
o-Xylene	50.0000	0.0000	47.0467	94		70 - 130
Xylene (Total)	150.0000	0.0000	140.0852	93		81 - 121
Bromoform	50.0000	0.0000	50.2225	100		45 - 169
1,1,2,2-Tetrachloroethane	50.0000	0.0000	44.2788	89		46 - 157
1,3-Dichlorobenzene	50.0000	0.0000	47.2313	94		59 - 156
1,4-Dichlorobenzene	50.0000	0.0000	46.1680	92		18 - 190
1,2-Dichlorobenzene	50.0000	0.0000	47.3839	95		18 - 190
2-Chloroethyl vinyl ether	50.0000	0.0000	49.1443	98		1 - 305
Acrolein	250.0000	0.0000	230.3292	92		12 - 133
Acrylonitrile	50.0000	0.0000	49.3195	99		45 - 172

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

* Values outside of QC limits

Spike Recovery: 0 out of 37 outside limits

3 - FORM III

WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-71089

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

Lab Sample ID: LCS-71089 LCS Lot No.:

Date Extracted: 04/03/2013 Date Analyzed (1): 04/03/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.

COMMENTS:

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-71089

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

Lab Sample ID: LCSD-71089 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Chloromethane	50.0000	44.2834	89		3		40	1 - 273
Vinyl chloride	50.0000	45.9367	92		3		40	1 - 251
Bromomethane	50.0000	43.9184	88		1		40	1 - 242
Chloroethane	50.0000	47.4452	95		4		40	14 - 230
Trichlorofluoromethane	50.0000	46.0724	92		2		40	17 - 181
1,1-Dichloroethene	50.0000	45.7410	91		2		40	1 - 234
Methylene chloride	50.0000	45.7567	92		1		40	1 - 221
trans-1,2-Dichloroethene	50.0000	46.7967	94		2		40	54 - 156
1,1-Dichloroethane	50.0000	47.9412	96		2		40	59 - 155
cis-1,2-Dichloroethene	50.0000	48.5950	97		3		40	83 - 120
Chloroform	50.0000	47.8079	96		2		40	51 - 138
1,1,1-Trichloroethane	50.0000	47.4681	95		3		40	52 - 162
Carbon tetrachloride	50.0000	47.6675	95		2		40	70 - 140
1,2-Dichloroethane	50.0000	49.3648	99		2		40	49 - 155
Benzene	50.0000	47.0245	94		2		40	37 - 151
Trichloroethene	50.0000	47.1070	94		0		40	71 - 157
1,2-Dichloropropane	50.0000	47.4735	95		1		40	1 - 210
Bromodichloromethane	50.0000	50.0016	100		0		40	35 - 155
cis-1,3-Dichloropropene	50.0000	51.3994	103		2		40	1 - 227
Toluene	50.0000	48.5576	97		2		40	47 - 150
trans-1,3-Dichloropropene	50.0000	51.6743	103		1		40	17 - 183
1,1,2-Trichloroethane	50.0000	49.8955	100		3		40	52 - 150
Tetrachloroethene	50.0000	46.4641	93		1		40	64 - 148
Dibromochloromethane	50.0000	51.1417	102		1		40	53 - 149
Chlorobenzene	50.0000	47.0176	94		1		40	37 - 150
Ethylbenzene	50.0000	47.5071	95		3		40	37 - 162
m,p-Xylene	100.0000	93.9898	94		1		40	70 - 130
o-Xylene	50.0000	47.9193	96		2		40	70 - 130
Xylene (Total)	150.0000	141.9091	95		2		40	81 - 121
Bromoform	50.0000	51.7293	103		3		40	45 - 169
1,1,2,2-Tetrachloroethane	50.0000	47.6740	95		7		40	46 - 157
1,3-Dichlorobenzene	50.0000	46.8266	94		0		40	59 - 156
1,4-Dichlorobenzene	50.0000	45.9625	92		0		40	18 - 190
1,2-Dichlorobenzene	50.0000	47.1014	94		1		40	18 - 190
2-Chloroethyl vinyl ether	50.0000	40.4139	81		19		40	1 - 305
Acrolein	250.0000	245.7937	98		6		40	12 - 133
Acrylonitrile	50.0000	51.3659	103		4		40	45 - 172

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

* Values outside of QC limits

RPD: 0 out of 37 outside limits

Spike Recovery: 0 out of 37 outside limits

3 - FORM III

WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-71089

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

Lab Sample ID: LCSD-71089 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC #	%RPD #	QC LIMITS RPD	QC LIMITS REC.

COMMENTS:

4A - FORM IV VOA

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-71089

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

Lab File ID: V8B9046.D Lab Sample ID: MB-71089

Instrument ID: V10

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 04/03/2013

Level: (TRACE or LOW/MED) LOW Time Analyzed: 12:10

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-71089	LCS-71089	V8B9043.D	10:45
02	LCSD-71089	LCSD-71089	V8B9044.D	11:12
03	DIRECT DISCHARGE 5	M0437-01A	V8B9047.D	12:36

COMMENTS:

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 03/27/2013 03/27/2013

EPA Sample No.(VSTD#####): VSTD05010B Date Analyzed: 04/03/2013

Lab File ID (Standard): V8B9042.D Time Analyzed: 10:05

Instrument ID: V10 Heated Purge: (Y/N) N

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	2526024		5.304		2010574		8.291		1010662		10.783	
	UPPER LIMIT	5052048		5.804		4021148		8.791		2021324		11.283	
	LOWER LIMIT	1263012		4.804		1005287		7.791		505331		10.283	
	EPA SAMPLE NO.												
01	LCS-71089	2558021		5.304		2018318		8.291		1011410		10.783	
02	LCSD-71089	2550701		5.307		2008752		8.291		1004750		10.783	
03	MB-71089	2587425		5.307		2007744		8.294		944623		10.786	
04	DIRECT DISCHARGE 5	2533479		5.307		1973011		8.291		938090		10.783	

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.

* Semivolatile Organics *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Monoco Oil

Laboratory Workorder / SDG #: M0437

EPA 625, 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: EPA 625

IV. PREPARATION

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

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: S3
Instrument Type: GCMS-SEMI

Description: HP6890 / HP5973
Manufacturer: Hewlett-Packard
Model: 6890 / 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.

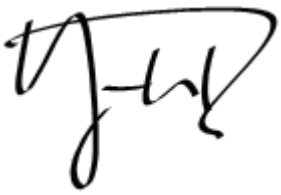
G. Samples:

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.



Signed:_____ _____

Date:_____4/11/2013_____

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.

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

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DIRECT DISCHARGE 5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0437-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I4301.D

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

% Moisture: Decanted: (Y/N) Date Received: 04/01/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 04/02/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 04/03/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
108-95-2	Phenol	10	U
111-44-4	Bis(2-chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
108-60-1	2,2´-oxybis(1-Chloropropane)	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
111-91-1	Bis(2-chloroethoxy)methane	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DIRECT DISCHARGE 5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0437-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I4301.D

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

% Moisture: Decanted: (Y/N) Date Received: 04/01/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 04/02/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 04/03/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3´-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-71068

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-71068

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I4282.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 04/02/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 04/02/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
108-95-2	Phenol	10	U
111-44-4	Bis(2-chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
108-60-1	2,2´-oxybis(1-Chloropropane)	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
111-91-1	Bis(2-chloroethoxy)methane	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-71068

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-71068

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I4282.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 04/02/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 04/02/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3´-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-71068

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-71068

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I4283.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 04/02/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 04/02/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
108-95-2	Phenol	37	
111-44-4	Bis(2-chloroethyl)ether	33	
95-57-8	2-Chlorophenol	40	
541-73-1	1,3-Dichlorobenzene	40	
106-46-7	1,4-Dichlorobenzene	40	
95-50-1	1,2-Dichlorobenzene	44	
108-60-1	2,2´-oxybis(1-Chloropropane)	31	
621-64-7	N-Nitroso-di-n-propylamine	27	
67-72-1	Hexachloroethane	40	
98-95-3	Nitrobenzene	35	
78-59-1	Isophorone	34	
88-75-5	2-Nitrophenol	44	
105-67-9	2,4-Dimethylphenol	27	
120-83-2	2,4-Dichlorophenol	41	
120-82-1	1,2,4-Trichlorobenzene	41	
91-20-3	Naphthalene	43	
111-91-1	Bis(2-chloroethoxy)methane	38	
87-68-3	Hexachlorobutadiene	41	
59-50-7	4-Chloro-3-methylphenol	38	
77-47-4	Hexachlorocyclopentadiene	36	
88-06-2	2,4,6-Trichlorophenol	42	
91-58-7	2-Chloronaphthalene	47	
131-11-3	Dimethylphthalate	41	
208-96-8	Acenaphthylene	37	
606-20-2	2,6-Dinitrotoluene	42	
83-32-9	Acenaphthene	44	
51-28-5	2,4-Dinitrophenol	34	
100-02-7	4-Nitrophenol	34	
121-14-2	2,4-Dinitrotoluene	43	
84-66-2	Diethylphthalate	41	
7005-72-3	4-Chlorophenyl-phenylether	47	
86-73-7	Fluorene	46	
534-52-1	4,6-Dinitro-2-methylphenol	42	
86-30-6	N-Nitrosodiphenylamine	44	
101-55-3	4-Bromophenyl-phenylether	48	
118-74-1	Hexachlorobenzene	47	

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-71068

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-71068

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I4283.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 04/02/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 04/02/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
87-86-5	Pentachlorophenol	34	
85-01-8	Phenanthrene	47	
120-12-7	Anthracene	45	
84-74-2	Di-n-butylphthalate	47	
206-44-0	Fluoranthene	46	
129-00-0	Pyrene	46	
85-68-7	Butylbenzylphthalate	48	
91-94-1	3,3´-Dichlorobenzidine	32	
56-55-3	Benzo(a)anthracene	44	
218-01-9	Chrysene	46	
117-81-7	Bis(2-ethylhexyl)phthalate	50	
117-84-0	Di-n-octylphthalate	49	
205-99-2	Benzo(b)fluoranthene	43	
207-08-9	Benzo(k)fluoranthene	45	
50-32-8	Benzo(a)pyrene	40	
193-39-5	Indeno(1,2,3-cd)pyrene	42	
53-70-3	Dibenzo(a,h)anthracene	43	
191-24-2	Benzo(g,h,i)perylene	41	

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCSD-71068

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-71068

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I4284.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 04/02/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 04/02/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
108-95-2	Phenol	37	
111-44-4	Bis(2-chloroethyl)ether	35	
95-57-8	2-Chlorophenol	42	
541-73-1	1,3-Dichlorobenzene	43	
106-46-7	1,4-Dichlorobenzene	42	
95-50-1	1,2-Dichlorobenzene	46	
108-60-1	2,2´-oxybis(1-Chloropropane)	34	
621-64-7	N-Nitroso-di-n-propylamine	28	
67-72-1	Hexachloroethane	41	
98-95-3	Nitrobenzene	37	
78-59-1	Isophorone	36	
88-75-5	2-Nitrophenol	45	
105-67-9	2,4-Dimethylphenol	28	
120-83-2	2,4-Dichlorophenol	43	
120-82-1	1,2,4-Trichlorobenzene	43	
91-20-3	Naphthalene	45	
111-91-1	Bis(2-chloroethoxy)methane	38	
87-68-3	Hexachlorobutadiene	42	
59-50-7	4-Chloro-3-methylphenol	40	
77-47-4	Hexachlorocyclopentadiene	35	
88-06-2	2,4,6-Trichlorophenol	45	
91-58-7	2-Chloronaphthalene	49	
131-11-3	Dimethylphthalate	42	
208-96-8	Acenaphthylene	38	
606-20-2	2,6-Dinitrotoluene	44	
83-32-9	Acenaphthene	46	
51-28-5	2,4-Dinitrophenol	38	
100-02-7	4-Nitrophenol	35	
121-14-2	2,4-Dinitrotoluene	44	
84-66-2	Diethylphthalate	42	
7005-72-3	4-Chlorophenyl-phenylether	48	
86-73-7	Fluorene	49	
534-52-1	4,6-Dinitro-2-methylphenol	44	
86-30-6	N-Nitrosodiphenylamine	46	
101-55-3	4-Bromophenyl-phenylether	50	
118-74-1	Hexachlorobenzene	49	

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCSD-71068

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-71068

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I4284.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 04/02/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 04/02/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
87-86-5	Pentachlorophenol	38	
85-01-8	Phenanthrene	48	
120-12-7	Anthracene	47	
84-74-2	Di-n-butylphthalate	50	
206-44-0	Fluoranthene	48	
129-00-0	Pyrene	47	
85-68-7	Butylbenzylphthalate	50	
91-94-1	3,3´-Dichlorobenzidine	33	
56-55-3	Benzo(a)anthracene	44	
218-01-9	Chrysene	45	
117-81-7	Bis(2-ethylhexyl)phthalate	50	
117-84-0	Di-n-octylphthalate	51	
205-99-2	Benzo(b)fluoranthene	45	
207-08-9	Benzo(k)fluoranthene	45	
50-32-8	Benzo(a)pyrene	42	
193-39-5	Indeno(1,2,3-cd)pyrene	45	
53-70-3	Dibenzo(a,h)anthracene	44	
191-24-2	Benzo(g,h,i)perylene	43	

2H - FORM II SV-2

WATER SEMIVOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

	CLIENT SAMPLE NO.	SDMC1 (NBZ) #	SDMC2 (FBP) #	SDMC3 (TPH) #	SDMC4 (PHL) #	SDMC5 (2FP) #	SDMC6 (TBP) #			TOT OUT
01	MB-71068	69	83	116	65	74	90			0
02	LCS-71068	70	86	100	73	71	99			0
03	LCSD-71068	75	91	102	78	78	103			0
04	DIRECT DISCHARGE 5	68	82	110	14	26	97			0

			QC LIMITS
SDMC1	(NBZ)	= Nitrobenzene-d5	(40-110)
SDMC2	(FBP)	= 2-Fluorobiphenyl	(50-110)
SDMC3	(TPH)	= Terphenyl-d14	(50-135)
SDMC4	(PHL)	= Phenol-d5	(10-115)
SDMC5	(2FP)	= 2-Fluorophenol	(20-110)
SDMC6	(TBP)	= 2,4,6-Tribromophenol	(40-125)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D DMC diluted out

som13.04.02.A

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.
LCS-71068

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

Lab Sample ID: LCS-71068 LCS Lot No.: A091525

Date Extracted: 04/02/2013 Date Analyzed (1): 04/02/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Phenol	50.0000	0.0000	36.5287	73		5 - 112
Bis(2-chloroethyl)ether	50.0000	0.0000	33.2228	66		12 - 158
2-Chlorophenol	50.0000	0.0000	39.5301	79		23 - 134
1,3-Dichlorobenzene	50.0000	0.0000	40.3946	81		1 - 172
1,4-Dichlorobenzene	50.0000	0.0000	40.2942	81		20 - 124
1,2-Dichlorobenzene	50.0000	0.0000	43.6016	87		32 - 129
2,2´-oxybis(1-Chloropropan	50.0000	0.0000	31.4972	63		36 - 166
N-Nitroso-di-n-propylamine	50.0000	0.0000	26.8421	54		1 - 230
Hexachloroethane	50.0000	0.0000	39.7630	80		40 - 113
Nitrobenzene	50.0000	0.0000	35.4517	71		35 - 180
Isophorone	50.0000	0.0000	34.3235	69		21 - 196
2-Nitrophenol	50.0000	0.0000	43.5617	87		29 - 182
2,4-Dimethylphenol	50.0000	0.0000	27.0966	54		32 - 119
2,4-Dichlorophenol	50.0000	0.0000	40.7738	82		39 - 135
1,2,4-Trichlorobenzene	50.0000	0.0000	40.8131	82		44 - 142
Naphthalene	50.0000	0.0000	43.1065	86		21 - 133
Bis(2-chloroethoxy)methane	50.0000	0.0000	37.8003	76		33 - 184
Hexachlorobutadiene	50.0000	0.0000	40.5046	81		24 - 116
4-Chloro-3-methylphenol	50.0000	0.0000	37.7636	76		22 - 147
Hexachlorocyclopentadiene	50.0000	0.0000	35.6121	71		34 - 103
2,4,6-Trichlorophenol	50.0000	0.0000	42.1677	84		37 - 144
2-Chloronaphthalene	50.0000	0.0000	47.2715	95		60 - 118
Dimethylphthalate	50.0000	0.0000	40.9320	82		1 - 112
Acenaphthylene	50.0000	0.0000	37.0679	74		33 - 145
2,6-Dinitrotoluene	50.0000	0.0000	42.2834	85		50 - 158
Acenaphthene	50.0000	0.0000	43.5524	87		47 - 155
2,4-Dinitrophenol	50.0000	0.0000	34.3170	69		1 - 191
4-Nitrophenol	50.0000	0.0000	34.3945	69		1 - 132
2,4-Dinitrotoluene	50.0000	0.0000	43.1451	86		39 - 139
Diethylphthalate	50.0000	0.0000	40.8579	82		1 - 114
4-Chlorophenyl-phenylether	50.0000	0.0000	46.5460	93		25 - 158
Fluorene	50.0000	0.0000	46.4640	93		59 - 121
4,6-Dinitro-2-methylphenol	50.0000	0.0000	42.4123	85		1 - 181
N-Nitrosodiphenylamine	50.0000	0.0000	43.8319	88		48 - 121
4-Bromophenyl-phenylether	50.0000	0.0000	48.1574	96		53 - 127
Hexachlorobenzene	50.0000	0.0000	47.0866	94		1 - 152
Pentachlorophenol	50.0000	0.0000	34.3776	69		14 - 176
Phenanthrene	50.0000	0.0000	46.5028	93		54 - 120
Anthracene	50.0000	0.0000	45.3659	91		27 - 133
Di-n-butylphthalate	50.0000	0.0000	46.7743	94		1 - 118
Fluoranthene	50.0000	0.0000	45.7766	92		26 - 137
Pyrene	50.0000	0.0000	46.3014	93		52 - 115
Butylbenzylphthalate	50.0000	0.0000	48.3426	97		1 - 152
3,3´-Dichlorobenzidine	50.0000	0.0000	32.4203	65		1 - 262

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.
LCS-71068

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

Lab Sample ID: LCS-71068 LCS Lot No.: A091525

Date Extracted: 04/02/2013 Date Analyzed (1): 04/02/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Benzo(a)anthracene	50.0000	0.0000	43.9180	88		33 - 143
Chrysene	50.0000	0.0000	45.7962	92		17 - 168
Bis(2-ethylhexyl)phthalate	50.0000	0.0000	49.9072	100		8 - 158
Di-n-octylphthalate	50.0000	0.0000	48.7048	97		4 - 146
Benzo(b)fluoranthene	50.0000	0.0000	42.6942	85		24 - 159
Benzo(k)fluoranthene	50.0000	0.0000	44.6230	89		11 - 162
Benzo(a)pyrene	50.0000	0.0000	40.4595	81		17 - 163
Indeno(1,2,3-cd)pyrene	50.0000	0.0000	41.8235	84		1 - 171
Dibenzo(a,h)anthracene	50.0000	0.0000	43.3147	87		1 - 227
Benzo(g,h,i)perylene	50.0000	0.0000	41.1033	82		1 - 219

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

* Values outside of QC limits

Spike Recovery: 0 out of 54 outside limits

COMMENTS:

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-71068

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

Lab Sample ID: LCSD-71068 LCS Lot No.: A091525

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Phenol	50.0000	36.9143	74		1		40	5 - 112
Bis(2-chloroethyl)ether	50.0000	35.0312	70		6		40	12 - 158
2-Chlorophenol	50.0000	42.0518	84		6		40	23 - 134
1,3-Dichlorobenzene	50.0000	42.5253	85		5		40	1 - 172
1,4-Dichlorobenzene	50.0000	42.2591	85		5		40	20 - 124
1,2-Dichlorobenzene	50.0000	45.7248	91		4		40	32 - 129
2,2´-oxybis(1-Chloropropan	50.0000	33.5675	67		6		40	36 - 166
N-Nitroso-di-n-propylamine	50.0000	27.8665	56		4		40	1 - 230
Hexachloroethane	50.0000	41.0246	82		2		40	40 - 113
Nitrobenzene	50.0000	36.5538	73		3		40	35 - 180
Isophorone	50.0000	35.9761	72		4		40	21 - 196
2-Nitrophenol	50.0000	44.8420	90		3		40	29 - 182
2,4-Dimethylphenol	50.0000	27.9560	56		4		40	32 - 119
2,4-Dichlorophenol	50.0000	42.5321	85		4		40	39 - 135
1,2,4-Trichlorobenzene	50.0000	43.0879	86		5		40	44 - 142
Naphthalene	50.0000	44.5597	89		3		40	21 - 133
Bis(2-chloroethoxy)methane	50.0000	38.4991	77		1		40	33 - 184
Hexachlorobutadiene	50.0000	41.7406	83		2		40	24 - 116
4-Chloro-3-methylphenol	50.0000	39.9674	80		5		40	22 - 147
Hexachlorocyclopentadiene	50.0000	34.6411	69		3		40	34 - 103
2,4,6-Trichlorophenol	50.0000	44.8314	90		7		40	37 - 144
2-Chloronaphthalene	50.0000	48.8016	98		3		40	60 - 118
Dimethylphthalate	50.0000	42.3087	85		4		40	1 - 112
Acenaphthylene	50.0000	38.1056	76		3		40	33 - 145
2,6-Dinitrotoluene	50.0000	43.8869	88		3		40	50 - 158
Acenaphthene	50.0000	46.1806	92		6		40	47 - 155
2,4-Dinitrophenol	50.0000	37.8575	76		10		40	1 - 191
4-Nitrophenol	50.0000	35.0837	70		1		40	1 - 132
2,4-Dinitrotoluene	50.0000	44.4989	89		3		40	39 - 139
Diethylphthalate	50.0000	42.1008	84		2		40	1 - 114
4-Chlorophenyl-phenylether	50.0000	47.5733	95		2		40	25 - 158
Fluorene	50.0000	48.8282	98		5		40	59 - 121
4,6-Dinitro-2-methylphenol	50.0000	44.1993	88		3		40	1 - 181
N-Nitrosodiphenylamine	50.0000	45.7931	92		4		40	48 - 121
4-Bromophenyl-phenylether	50.0000	49.6962	99		3		40	53 - 127
Hexachlorobenzene	50.0000	48.5034	97		3		40	1 - 152
Pentachlorophenol	50.0000	37.6734	75		8		40	14 - 176
Phenanthrene	50.0000	48.2608	97		4		40	54 - 120
Anthracene	50.0000	46.8827	94		3		40	27 - 133
Di-n-butylphthalate	50.0000	49.5916	99		5		40	1 - 118
Fluoranthene	50.0000	48.4864	97		5		40	26 - 137
Pyrene	50.0000	46.6140	93		0		40	52 - 115
Butylbenzylphthalate	50.0000	49.7365	99		2		40	1 - 152
3,3´-Dichlorobenzidine	50.0000	32.7775	66		2		40	1 - 262
Benzo(a)anthracene	50.0000	44.2305	88		0		40	33 - 143
Chrysene	50.0000	44.9426	90		2		40	17 - 168

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-71068

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

Lab Sample ID: LCSD-71068 LCS Lot No.: A091525

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Bis(2-ethylhexyl)phthalate	50.0000	50.2060	100		0		40	8 - 158
Di-n-octylphthalate	50.0000	50.7841	102		5		40	4 - 146
Benzo(b)fluoranthene	50.0000	45.3806	91		7		40	24 - 159
Benzo(k)fluoranthene	50.0000	45.1355	90		1		40	11 - 162
Benzo(a)pyrene	50.0000	42.3713	85		5		40	17 - 163
Indeno(1,2,3-cd)pyrene	50.0000	44.8616	90		7		40	1 - 171
Dibenzo(a,h)anthracene	50.0000	44.4407	89		2		40	1 - 227
Benzo(g,h,i)perylene	50.0000	43.2451	86		5		40	1 - 219

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

* Values outside of QC limits

RPD: 0 out of 54 outside limits

Spike Recovery: 0 out of 54 outside limits

COMMENTS:

4C - FORM IV SV

SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

MB-71068

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

Lab File ID: S3I4282.D Lab Sample ID: MB-71068

Instrument ID: S3 Date Extracted: 04/02/2013

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 04/02/2013

Level: (LOW/MED) LOW Time Analyzed: 16:32

Extraction: (Type) SEPF GPC Cleanup: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	LCS-71068	LCS-71068	S3I4283.D	04/02/2013
02	LCSD-71068	LCSD-71068	S3I4284.D	04/02/2013
03	DIRECT DISCHARGE 5	M0437-01B	S3I4301.D	04/03/2013

COMMENTS:

8C - FORM VIII SV-1

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 01/31/2013 01/31/2013

EPA Sample No.(SSTD020##) SSTD0253O Date Analyzed: 04/02/2013

Lab File ID (Standard): S3I4281.D Time Analyzed: 15:58

Instrument ID: S3

		IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	309917	4.01	1164546	5.81	892279	7.584
	UPPER LIMIT	619834	4.51	2329092	6.31	1784558	8.084
	LOWER LIMIT	154959	3.51	582273	5.31	446140	7.084
	SAMPLE NO.						
01	MB-71068	307239	4.008	1131373	5.808	812813	7.581
02	LCS-71068	297423	4.010	1086744	5.815	840534	7.589
03	LCSD-71068	289676	4.016	1084069	5.816	837234	7.590
04	DIRECT DISCHARGE 5	238384	4.010	882279	5.810	645038	7.584

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

8D - FORM VIII SV-2

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

EPA Sample No.(SSTD020##) SSTD02530 Date Analyzed: 04/02/2013

Lab File ID (Standard): S3I4281.D Time Analyzed: 15:58

Instrument ID: S3 GC Column: Rxi-5sil MS ID: 0.25 (mm)

		IS4 (PHN) AREA	#	RT	#	IS5 (CRY) AREA	#	RT	#	IS6 (PRY) AREA	#	RT	#
	12 HOUR STD	1750286		8.86		2247705		11.195		1872066		12.984	
	UPPER LIMIT	3500572		9.36		4495410		11.695		3744132		13.484	
	LOWER LIMIT	875143		8.36		1123853		10.695		936033		12.484	
	SAMPLE NO.												
01	MB-71068	1675884		8.858		2101789		11.187		1782165		12.982	
02	LCS-71068	1645099		8.860		2324810		11.152		1682394		12.931	
03	LCSD-71068	1642570		8.861		2405777		11.115		1691288		12.889	
04	DIRECT DISCHARGE 5	1276868		8.855		1532541		11.099		1230295		12.867	

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.

* PCB Organics *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Monoco Oil

Laboratory Workorder / SDG #: M0437

EPA 608 PCB, 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: EPA 608 PCB

IV. PREPARATION

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

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

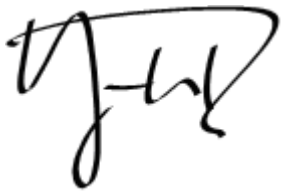
generated and reported as required. Manual integrations are coded to provide the data reviewer justification for such action. The codes are labeled on the ion chromatogram signal (GC/MS signal) and chromatogram for GC based analysis as follows:

· 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:

AR16603AT Aroclor-1260 on rear 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:_____4/11/2013_____

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.

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

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DIRECT DISCHARGE 5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0437-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2L9331F.D/E2L9331R.D

% Moisture: Decanted: (Y/N) Date Received: 04/01/2013

Extraction: (Type) SEPF Date Extracted: 04/02/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 04/02/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-71069

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-71069

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2L9328F.D/E2L9328R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 04/02/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 04/02/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-71069(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-71069

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2L9329F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 04/02/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 04/02/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	3.4	
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	3.2	

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-71069(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-71069

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2L9329R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 04/02/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 04/02/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	3.6	
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	3.9	

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
LCSD-71069(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-71069

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2L9330F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 04/02/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 04/02/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	3.4	
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	3.2	

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
LCSD-71069(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-71069

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2L9330R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 04/02/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 04/02/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	3.6	
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	2.9	

2Q - FORM II ARO-1

WATER AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

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-71069	90	96	86	86			0
02	LCS-71069	89	95	86	87			0
03	LCSD-71069	91	97	86	88			0
04	DIRECT DISCHARGE 5	79	85	72	73			0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(39-126)
DCB = Decachlorobiphenyl	(17-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.04.02.A

3N - FORM III ARO-3

WATER AROCLOR LABORATORY CONTROL SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-71069

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

Lab Sample ID: LCS-71069 LCS Lot No.: A086503

Date Extracted: 04/02/2013 Date Analyzed (1): 04/02/2013

Instrument ID (1): E2 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC #	QC LIMITS
Aroclor-1016	4.0000	3.4463	86	50-114
Aroclor-1260	4.0000	3.2392	81	8-127

Instrument ID (2): E2 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 04/02/2013

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC #	QC LIMITS
Aroclor-1016	4.0000	3.6431	91	50-114
Aroclor-1260	4.0000	3.8746	97	8-127

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:

som13.04.02.A

3N - FORM III ARO-3
WATER AROCLOR LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-71069

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

Lab Sample ID: LCSD-71069 LCS Lot No.: A086503

Date Extracted: 04/02/2013 Date Analyzed (1): 04/02/2013

Instrument ID (1): E2 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC	#	QC LIMITS	%RPD	#	RPD LIMIT
Aroclor-1016	4.0000	3.4265	86		50-114	0		40
Aroclor-1260	4.0000	3.2075	80		8-127	1.0		40

Instrument ID (2): E2 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 04/02/2013

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC	#	QC LIMITS	%RPD	#	RPD LIMIT
Aroclor-1016	4.0000	3.5861	90		50-114	1.0		40
Aroclor-1260	4.0000	2.9150	73		8-127	28		40

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:

som13.04.02.A

4F - FORM IV ARO

AROCLOR METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-71069

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0437 Mod. Ref No.: SDG No.: SM0437

Lab File ID: E2L9328F.D / E2L9328R.D Lab Sample ID: MB-71069

Matrix: (SOIL/SED/WATER) WATER Extraction: (Type) SEPF Date Extracted: 04/02/2013

Sulfur Cleanup: (Y/N) Y GPC Cleanup:(Y/N) N

Acid Cleanup: (Y/N Y

Date Analyzed (1): 04/02/2013 Date Analyzed (2): 04/02/2013

Time Analyzed (1): 15:49 Time Analyzed (2): 15:49

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-71069	LCS-71069	04/02/2013	04/02/2013
02	LCSD-71069	LCSD-71069	04/02/2013	04/02/2013
03	DIRECT DISCHARGE 5	M0437-01B	04/02/2013	04/02/2013

COMMENTS:

* Metals *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Monoco Oil

Laboratory Workorder / SDG #: M0437

SW846 6010C, SW846 7470A

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 7470A

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW3005A, SW7470A.

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):

A matrix spike was not performed on any sample in this SDG.

D. Post Digestion Spike (PDS):

A post-digestion spike was not performed on any sample in this SDG.

E. Duplicate sample:

A duplicate analysis was not performed on any sample in this SDG.

F. Serial Dilution (SD):

Serial Dilution analyses were performed on sample: DIRECT DISCHARGE 5 (M0437-01CSD).

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: 04/15/13

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.

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

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

DIRECT DISCHARGE 5

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0437

Matrix (soil/water): WATER Lab Sample ID: M0437-01

Level (low/med): MED Date Received: 04/01/2013

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	66.0	U		P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	279			P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	154000			P
7440-47-3	Chromium	1.3	B		P
7440-48-4	Cobalt	1.1	B		P
7440-50-8	Copper	3.6	U		P
7439-89-6	Iron	111	B		P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	40800			P
7439-96-5	Manganese	152			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	3.0	B		P
7440-09-7	Potassium	7270			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	387000			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	9.1	B		P

Comments:

7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0437

Solid LCS Source:

Aqueous LCS Source:

LCS(D) ID:
LCS-71080

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Aluminum	9100.0	8784.97	96.5						
Antimony	455.0	492.34	108.2						
Arsenic	455.0	466.46	102.5						
Barium	9100.0	8997.86	98.9						
Beryllium	227.0	223.98	98.7						
Cadmium	227.0	232.26	102.3						
Calcium	22700.0	21544.81	94.9						
Chromium	910.0	883.70	97.1						
Cobalt	2270.0	2225.87	98.1						
Copper	1130.0	1092.44	96.7						
Iron	4550.0	4564.93	100.3						
Lead	455.0	463.04	101.8						
Magnesium	22700.0	22374.80	98.6						
Manganese	2270.0	2187.28	96.4						
Nickel	2270.0	2214.75	97.6						
Potassium	22700.0	21875.61	96.4						
Selenium	455.0	454.82	100.0						
Silver	1130.0	1129.84	100.0						
Sodium	22700.0	22173.55	97.7						
Thallium	455.0	446.84	98.2						
Vanadium	2270.0	2202.49	97.0						
Zinc	2270.0	2191.06	96.5						

7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0437

Solid LCS Source:

Aqueous LCS Source:

LCS(D) ID:
LCS-71162

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Mercury	4.6	4.11	89.3						

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0437

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-71162**

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

FIMS2_130411A

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
Analyte		C	04/11/13 11:37	C		C		C		C	M
Mercury	0.028	U	0.028	U					0.028	U	CV

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0437

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-71080**

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

OPTIMA3_130408A

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 04/08/13 7:57	C	04/08/13 8:19	C		C	Preparation Blank	C	M
Aluminum	66.0	U	66.0	U	66.0	U			66.000	U	P
Antimony	9.3	U	9.3	U	9.3	U			9.300	U	P
Arsenic	4.3	U	4.3	U	4.3	U			4.300	U	P
Barium	1.1	U	1.1	B	1.4	B			1.100	U	P
Beryllium	0.3	U	0.3	U	0.3	U			0.260	U	P
Cadmium	0.9	U	0.9	U	0.9	U			0.890	U	P
Calcium	110.0	U	110.0	U	110.0	U			110.000	U	P
Chromium	0.6	U	0.7	B	0.6	U			0.640	U	P
Cobalt	0.7	U	0.7	U	0.7	U			0.670	U	P
Copper	3.6	U	3.6	U	3.6	U			3.600	U	P
Iron	31.0	U	31.0	U	31.0	U			31.000	U	P
Lead	4.2	U	4.2	U	4.2	U			4.200	U	P
Magnesium	76.0	U	76.0	U	76.0	U			76.000	U	P
Manganese	10.0	U	10.0	U	10.0	U			10.000	U	P
Nickel	0.9	U	0.9	B	0.8	U			0.850	U	P
Potassium	-87.6	B	76.0	U	76.0	U			76.000	U	P
Selenium	12.0	U	12.0	U	12.0	U			12.000	U	P
Silver	6.9	U	6.9	U	6.9	U			6.900	U	P
Sodium	29.0	U	29.0	U	112.8	B			29.000	U	P
Thallium	6.2	U	6.2	U	6.2	U			6.200	U	P
Vanadium	1.1	U	1.1	U	1.1	U			1.100	U	P
Zinc	4.9	U	4.9	U	4.9	U			4.900	U	P

Report Date:
07-May-13 12:44

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

LaBella Associates
300 State Street, Suite 201
Rochester, NY 14614

Work Order: M0587
Project : LaBella Monoco Oil
Project #:

Attn: Dan Noll

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M0587-01	DIRECT DISCHARGE 6	Aqueous	23-Apr-13 15:00	24-Apr-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 requirments have been meet.

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.

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

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* Data Summary Pack *

175 Metro Center Boulevard · Warwick, RI 02886-1755 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0587

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
DIRECT DISCHARGE 6	M0587-01	E624	E625	E608_PCB	E200.7	
DIRECT DISCHARGE 6	M0587-01				E245.1	

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0587

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
E624					
M0587-01A	AQ	4/23/2013	4/24/2013	NA	4/25/2013

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0587

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
E625					
M0587-01B	AQ	4/23/2013	4/24/2013	4/26/2013	4/29/2013

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0587

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
E608_PCB					
M0587-01B	AQ	4/23/2013	4/24/2013	4/26/2013	5/1/2013

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0587

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
E624					
M0587-01A	AQ	E624	NA	LOW	1

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0587

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
E625					
M0587-01B	AQ	E625	3510C	NA	1

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0587

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
E608_PCB					
M0587-01B	AQ	E608_PCB	3510C	Acid/Sulfur	1

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : LaBella Monoco Oil **SDG :** M0587

Laboratory Sample ID	Matrix	Metals Requested	Date Received By Lab	Date Analyzed
E200.7				
M0587-01C	AQ	E200.7	4/24/2013	4/26/2013
E245.1				
M0587-01C	AQ	E245.1	4/24/2013	5/1/2013

M0587

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: M0587

Client ID: LABELLA
Project: LaBella Monoco Oil
WO Name: LaBella Monoco Oil
Location: LABELLA_MONOCO-OIL,

Case:
SDG:
PO: 210259

HC Due: 05/06/13
Fax Due:
Fax Report: ☐

Report Level: ASP-B
Special Program:
EDD: ENVIROINSITE_1
EQUIIS_4_NYSDEC

Comments: use this project for between 11-50 samples, no RUSH surcharge base on lab capacity, no charge for MS/MSD or a batch of 7 or more samples, no charge for TB. no hard copy

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M0587-01A	DIRECT DISCHARGE 6	04/23/2013 15:00	04/24/2013	Aqueous	E624	/					VOA
M0587-01B	DIRECT DISCHARGE 6	04/23/2013 15:00	04/24/2013	Aqueous	E608_PCB	Only 1 bottle, please extract at reduced volume for both. Adjust spike amounts and final volume. /					J2
M0587-01B	DIRECT DISCHARGE 6	04/23/2013 15:00	04/24/2013	Aqueous	E625	Only 1 bottle, please extract at reduced volume for both. Adjust spike amounts and final volume. /					J2
M0587-01C	DIRECT DISCHARGE 6	04/23/2013 15:00	04/24/2013	Aqueous	E200.7	/ PP13_200				Y	M4
M0587-01C	DIRECT DISCHARGE 6	04/23/2013 15:00	04/24/2013	Aqueous	E245.1	/ PP13_200					M4

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

HT = Test logged in but has been placed on hold

04/25/2013 09:04 Lab Client Rep: Agnes R Huntley

* Volatiles *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Monoco Oil

Laboratory Workorder / SDG #: M0587

EPA 624, VOC 624 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: EPA 624

IV. PREPARATION

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

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.

D. Spikes:

1. Laboratory Control Spikes (LCS):

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

Replicate RPDs were within the advisory 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.

Signed: 

Date: 05/06/13

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.

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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DIRECT DISCHARGE 6

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0587-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5O2954.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/24/2013

% Moisture: not dec. Date Analyzed: 04/25/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
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
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-59-2	cis-1,2-Dichloroethene	2.3	J
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	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
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	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
127-18-4	Tetrachloroethene	5.0	U
124-48-1	Dibromochloromethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
75-25-2	Bromoform	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
110-75-8	2-Chloroethyl vinyl ether	5.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DIRECT DISCHARGE 6

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0587-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5O2954.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/24/2013

% Moisture: not dec. Date Analyzed: 04/25/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
107-02-8	Acrolein	25	U
107-13-1	Acrylonitrile	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-71350

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-71350

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5O2932.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 04/24/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
75-09-2	Methylene chloride	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
127-18-4	Tetrachloroethene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
179601-23-1	m,p-Xylene	1.0	U
95-47-6	o-Xylene	1.0	U
1330-20-7	Xylene (Total)	5.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
110-75-8	2-Chloroethyl vinyl ether	1.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-71350

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-71350

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5O2932.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 04/24/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
107-02-8	Acrolein	25	U
107-13-1	Acrylonitrile	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-71350

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-71350

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5O2930.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 04/24/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	46	
75-01-4	Vinyl chloride	48	
74-83-9	Bromomethane	46	
75-00-3	Chloroethane	49	
75-69-4	Trichlorofluoromethane	46	
75-35-4	1,1-Dichloroethene	51	
75-09-2	Methylene chloride	42	
156-60-5	trans-1,2-Dichloroethene	48	
75-34-3	1,1-Dichloroethane	46	
156-59-2	cis-1,2-Dichloroethene	45	
67-66-3	Chloroform	46	
71-55-6	1,1,1-Trichloroethane	47	
56-23-5	Carbon tetrachloride	48	
107-06-2	1,2-Dichloroethane	47	
71-43-2	Benzene	47	
79-01-6	Trichloroethene	45	
78-87-5	1,2-Dichloropropane	46	
75-27-4	Bromodichloromethane	47	
10061-01-5	cis-1,3-Dichloropropene	47	
108-88-3	Toluene	47	
10061-02-6	trans-1,3-Dichloropropene	48	
79-00-5	1,1,2-Trichloroethane	46	
127-18-4	Tetrachloroethene	43	
124-48-1	Dibromochloromethane	48	
108-90-7	Chlorobenzene	45	
100-41-4	Ethylbenzene	45	
179601-23-1	m,p-Xylene	92	
95-47-6	o-Xylene	46	
1330-20-7	Xylene (Total)	140	
75-25-2	Bromoform	48	
79-34-5	1,1,2,2-Tetrachloroethane	46	
541-73-1	1,3-Dichlorobenzene	46	
106-46-7	1,4-Dichlorobenzene	45	
95-50-1	1,2-Dichlorobenzene	46	
110-75-8	2-Chloroethyl vinyl ether	54	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-71350

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-71350

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5O2930.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 04/24/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
107-02-8	Acrolein	240	
107-13-1	Acrylonitrile	46	

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-71350

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-71350

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5O2931.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 04/24/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	47	
75-01-4	Vinyl chloride	47	
74-83-9	Bromomethane	45	
75-00-3	Chloroethane	48	
75-69-4	Trichlorofluoromethane	48	
75-35-4	1,1-Dichloroethene	51	
75-09-2	Methylene chloride	43	
156-60-5	trans-1,2-Dichloroethene	48	
75-34-3	1,1-Dichloroethane	47	
156-59-2	cis-1,2-Dichloroethene	47	
67-66-3	Chloroform	47	
71-55-6	1,1,1-Trichloroethane	47	
56-23-5	Carbon tetrachloride	48	
107-06-2	1,2-Dichloroethane	48	
71-43-2	Benzene	47	
79-01-6	Trichloroethene	46	
78-87-5	1,2-Dichloropropane	47	
75-27-4	Bromodichloromethane	47	
10061-01-5	cis-1,3-Dichloropropene	48	
108-88-3	Toluene	47	
10061-02-6	trans-1,3-Dichloropropene	48	
79-00-5	1,1,2-Trichloroethane	47	
127-18-4	Tetrachloroethene	45	
124-48-1	Dibromochloromethane	49	
108-90-7	Chlorobenzene	46	
100-41-4	Ethylbenzene	46	
179601-23-1	m,p-Xylene	94	
95-47-6	o-Xylene	47	
1330-20-7	Xylene (Total)	140	
75-25-2	Bromoform	48	
79-34-5	1,1,2,2-Tetrachloroethane	46	
541-73-1	1,3-Dichlorobenzene	46	
106-46-7	1,4-Dichlorobenzene	45	
95-50-1	1,2-Dichlorobenzene	46	
110-75-8	2-Chloroethyl vinyl ether	50	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-71350

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-71350

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5O2931.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 04/24/2013

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
107-02-8	Acrolein	240	
107-13-1	Acrylonitrile	48	

2B - FORM II VOA-2

WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

Level: (TRACE or LOW) LOW

	EPA SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-71350	102	96	99	100				0
02	LCSD-71350	100	95	101	100				0
03	MB-71350	101	94	101	102				0
04	DIRECT DISCHARGE 6	99	91	102	102				0

		QC LIMITS
VDMC1	(DBFM) Dibromofluoromethane	(85-115)
VDMC2	(DCE) = 1,2-Dichloroethane-d4	(70-120)
VDMC3	(TOL) = Toluene-d8	(85-120)
VDMC4	(BFB) = Bromofluorobenzene	(75-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

som13.04.24.A

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-71350

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

Lab Sample ID: LCS-71350 LCS Lot No.:

Date Extracted: 04/24/2013 Date Analyzed (1): 04/24/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Chloromethane	50.0000	0.0000	46.1886	92		1 - 273
Vinyl chloride	50.0000	0.0000	47.7359	95		1 - 251
Bromomethane	50.0000	0.0000	46.1985	92		1 - 242
Chloroethane	50.0000	0.0000	48.5159	97		14 - 230
Trichlorofluoromethane	50.0000	0.0000	46.3917	93		17 - 181
1,1-Dichloroethene	50.0000	0.0000	51.3784	103		1 - 234
Methylene chloride	50.0000	0.0000	42.2360	84		1 - 221
trans-1,2-Dichloroethene	50.0000	0.0000	47.7415	95		54 - 156
1,1-Dichloroethane	50.0000	0.0000	46.0265	92		59 - 155
cis-1,2-Dichloroethene	50.0000	0.0000	44.9900	90		83 - 120
Chloroform	50.0000	0.0000	46.0814	92		51 - 138
1,1,1-Trichloroethane	50.0000	0.0000	46.8514	94		52 - 162
Carbon tetrachloride	50.0000	0.0000	47.8511	96		70 - 140
1,2-Dichloroethane	50.0000	0.0000	47.3334	95		49 - 155
Benzene	50.0000	0.0000	46.7331	93		37 - 151
Trichloroethene	50.0000	0.0000	45.3673	91		71 - 157
1,2-Dichloropropane	50.0000	0.0000	45.9780	92		1 - 210
Bromodichloromethane	50.0000	0.0000	46.6083	93		35 - 155
cis-1,3-Dichloropropene	50.0000	0.0000	46.8909	94		1 - 227
Toluene	50.0000	0.0000	46.8852	94		47 - 150
trans-1,3-Dichloropropene	50.0000	0.0000	47.8300	96		17 - 183
1,1,2-Trichloroethane	50.0000	0.0000	46.4088	93		52 - 150
Tetrachloroethene	50.0000	0.0000	43.4934	87		64 - 148
Dibromochloromethane	50.0000	0.0000	48.1805	96		53 - 149
Chlorobenzene	50.0000	0.0000	45.0688	90		37 - 150
Ethylbenzene	50.0000	0.0000	45.0066	90		37 - 162
m,p-Xylene	100.0000	0.0000	92.4223	92		70 - 130
o-Xylene	50.0000	0.0000	46.4239	93		70 - 130
Xylene (Total)	150.0000	0.0000	138.8462	93		81 - 121
Bromoform	50.0000	0.0000	47.5461	95		45 - 169
1,1,2,2-Tetrachloroethane	50.0000	0.0000	45.9292	92		46 - 157
1,3-Dichlorobenzene	50.0000	0.0000	45.6761	91		59 - 156
1,4-Dichlorobenzene	50.0000	0.0000	45.2693	91		18 - 190
1,2-Dichlorobenzene	50.0000	0.0000	46.4536	93		18 - 190
2-Chloroethyl vinyl ether	50.0000	0.0000	53.8481	108		1 - 305
Acrolein	250.0000	0.0000	237.0800	95		12 - 133
Acrylonitrile	50.0000	0.0000	46.4475	93		45 - 172

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

* Values outside of QC limits

Spike Recovery: 0 out of 37 outside limits

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-71350

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

Lab Sample ID: LCS-71350 LCS Lot No.:

Date Extracted: 04/24/2013 Date Analyzed (1): 04/24/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.

COMMENTS:

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-71350

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

Lab Sample ID: LCSD-71350 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Chloromethane	50.0000	46.5993	93		1		40	1 - 273
Vinyl chloride	50.0000	47.2432	94		1		40	1 - 251
Bromomethane	50.0000	45.2137	90		2		40	1 - 242
Chloroethane	50.0000	48.3396	97		0		40	14 - 230
Trichlorofluoromethane	50.0000	48.3780	97		4		40	17 - 181
1,1-Dichloroethene	50.0000	51.0199	102		1		40	1 - 234
Methylene chloride	50.0000	43.4372	87		4		40	1 - 221
trans-1,2-Dichloroethene	50.0000	48.2575	97		2		40	54 - 156
1,1-Dichloroethane	50.0000	47.0902	94		2		40	59 - 155
cis-1,2-Dichloroethene	50.0000	46.5084	93		3		40	83 - 120
Chloroform	50.0000	47.1987	94		2		40	51 - 138
1,1,1-Trichloroethane	50.0000	46.8412	94		0		40	52 - 162
Carbon tetrachloride	50.0000	48.2954	97		1		40	70 - 140
1,2-Dichloroethane	50.0000	47.5284	95		0		40	49 - 155
Benzene	50.0000	47.2049	94		1		40	37 - 151
Trichloroethene	50.0000	46.3502	93		2		40	71 - 157
1,2-Dichloropropane	50.0000	47.2845	95		3		40	1 - 210
Bromodichloromethane	50.0000	47.2272	94		1		40	35 - 155
cis-1,3-Dichloropropene	50.0000	47.6437	95		1		40	1 - 227
Toluene	50.0000	46.8690	94		0		40	47 - 150
trans-1,3-Dichloropropene	50.0000	48.2137	96		0		40	17 - 183
1,1,2-Trichloroethane	50.0000	46.5692	93		0		40	52 - 150
Tetrachloroethene	50.0000	44.9771	90		3		40	64 - 148
Dibromochloromethane	50.0000	48.5806	97		1		40	53 - 149
Chlorobenzene	50.0000	46.2567	93		3		40	37 - 150
Ethylbenzene	50.0000	46.2532	93		3		40	37 - 162
m,p-Xylene	100.0000	93.9914	94		2		40	70 - 130
o-Xylene	50.0000	47.0340	94		1		40	70 - 130
Xylene (Total)	150.0000	141.0254	94		1		40	81 - 121
Bromoform	50.0000	47.6455	95		0		40	45 - 169
1,1,2,2-Tetrachloroethane	50.0000	46.4275	93		1		40	46 - 157
1,3-Dichlorobenzene	50.0000	45.8755	92		1		40	59 - 156
1,4-Dichlorobenzene	50.0000	45.2495	90		1		40	18 - 190
1,2-Dichlorobenzene	50.0000	46.0612	92		1		40	18 - 190
2-Chloroethyl vinyl ether	50.0000	50.4989	101		7		40	1 - 305
Acrolein	250.0000	242.2442	97		2		40	12 - 133
Acrylonitrile	50.0000	47.7818	96		3		40	45 - 172

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

* Values outside of QC limits

RPD: 0 out of 37 outside limits

Spike Recovery: 0 out of 37 outside limits

3 - FORM III

WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-71350

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

Lab Sample ID: LCSD-71350 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC #	%RPD #	QC LIMITS RPD	QC LIMITS REC.

COMMENTS:

4A - FORM IV VOA

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-71350

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

Lab File ID: V5O2932.D Lab Sample ID: MB-71350

Instrument ID: V5

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 04/24/2013

Level: (TRACE or LOW/MED) LOW Time Analyzed: 19:56

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-71350	LCS-71350	V5O2930.D	18:39
02	LCSD-71350	LCSD-71350	V5O2931.D	19:05
03	DIRECT DISCHARGE 6	M0587-01A	V5O2954.D	9:33

COMMENTS:

som13.04.24.A

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 04/24/2013 04/24/2013

EPA Sample No.(VSTD#####): VSTD0505F Date Analyzed: 04/24/2013

Lab File ID (Standard): V5O2929.D Time Analyzed: 18:13

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

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	1348758		5.605		943394		9.147		422469		12.305	
	UPPER LIMIT	2697516		6.105		1886788		9.647		844938		12.805	
	LOWER LIMIT	674379		5.105		471697		8.647		211235		11.805	
	EPA SAMPLE NO.												
01	LCS-71350	1351403		5.599		960515		9.141		427465		12.300	
02	LCSD-71350	1378308		5.592		962629		9.146		433512		12.305	
03	MB-71350	1507745		5.592		1035295		9.146		452934		12.304	
04	DIRECT DISCHARGE 6	1408063		5.587		968781		9.141		419948		12.299	

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.

* Semivolatile Organics *

REPORT NARRATIVE

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

Client : LaBella Associates

Project: LaBella Monoco Oil

Laboratory Workorder / SDG #: M0587

EPA 625, 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: EPA 625

IV. PREPARATION

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

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.

Replicate RPDs were within the advisory 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.

Signed: 

Date: 05/02/13

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.

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

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DIRECT DISCHARGE 6

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0587-01B

Sample wt/vol: 500 (g/mL) ML Lab File ID: S6B3517.D

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

% Moisture: Decanted: (Y/N) Date Received: 04/24/2013

Concentrated Extract Volume: 500 (uL) Date Extracted: 04/26/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 04/29/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
108-95-2	Phenol	10	U
111-44-4	Bis(2-chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
108-60-1	2,2´-oxybis(1-Chloropropane)	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
111-91-1	Bis(2-chloroethoxy)methane	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DIRECT DISCHARGE 6

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0587-01B

Sample wt/vol: 500 (g/mL) ML Lab File ID: S6B3517.D

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

% Moisture: Decanted: (Y/N) Date Received: 04/24/2013

Concentrated Extract Volume: 500 (uL) Date Extracted: 04/26/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 04/29/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3´-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-ethylhexyl)phthalate	1.2	J
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-71376

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-71376

Sample wt/vol: 500 (g/mL) ML Lab File ID: S6B3478.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 500 (uL) Date Extracted: 04/26/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 04/26/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
108-95-2	Phenol	10	U
111-44-4	Bis(2-chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
108-60-1	2,2´-oxybis(1-Chloropropane)	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
111-91-1	Bis(2-chloroethoxy)methane	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-71376

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-71376

Sample wt/vol: 500 (g/mL) ML Lab File ID: S6B3478.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 500 (uL) Date Extracted: 04/26/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 04/26/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3´-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-71376

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-71376

Sample wt/vol: 500 (g/mL) ML Lab File ID: S6B3479.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 500 (uL) Date Extracted: 04/26/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 04/26/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
108-95-2	Phenol	36	
111-44-4	Bis(2-chloroethyl)ether	34	
95-57-8	2-Chlorophenol	35	
541-73-1	1,3-Dichlorobenzene	37	
106-46-7	1,4-Dichlorobenzene	35	
95-50-1	1,2-Dichlorobenzene	36	
108-60-1	2,2´-oxybis(1-Chloropropane)	31	
621-64-7	N-Nitroso-di-n-propylamine	32	
67-72-1	Hexachloroethane	35	
98-95-3	Nitrobenzene	41	
78-59-1	Isophorone	39	
88-75-5	2-Nitrophenol	39	
105-67-9	2,4-Dimethylphenol	36	
120-83-2	2,4-Dichlorophenol	39	
120-82-1	1,2,4-Trichlorobenzene	39	
91-20-3	Naphthalene	39	
111-91-1	Bis(2-chloroethoxy)methane	38	
87-68-3	Hexachlorobutadiene	42	
59-50-7	4-Chloro-3-methylphenol	41	
77-47-4	Hexachlorocyclopentadiene	32	
88-06-2	2,4,6-Trichlorophenol	40	
91-58-7	2-Chloronaphthalene	39	
131-11-3	Dimethylphthalate	40	
208-96-8	Acenaphthylene	37	
606-20-2	2,6-Dinitrotoluene	41	
83-32-9	Acenaphthene	38	
51-28-5	2,4-Dinitrophenol	46	
100-02-7	4-Nitrophenol	43	
121-14-2	2,4-Dinitrotoluene	43	
84-66-2	Diethylphthalate	39	
7005-72-3	4-Chlorophenyl-phenylether	40	
86-73-7	Fluorene	40	
534-52-1	4,6-Dinitro-2-methylphenol	49	
86-30-6	N-Nitrosodiphenylamine	39	
101-55-3	4-Bromophenyl-phenylether	41	
118-74-1	Hexachlorobenzene	44	

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-71376

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-71376

Sample wt/vol: 500 (g/mL) ML Lab File ID: S6B3479.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 500 (uL) Date Extracted: 04/26/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 04/26/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
87-86-5	Pentachlorophenol	27	J
85-01-8	Phenanthrene	39	
120-12-7	Anthracene	39	
84-74-2	Di-n-butylphthalate	38	
206-44-0	Fluoranthene	39	
129-00-0	Pyrene	41	
85-68-7	Butylbenzylphthalate	41	
91-94-1	3,3´-Dichlorobenzidine	38	
56-55-3	Benzo(a)anthracene	41	
218-01-9	Chrysene	43	
117-81-7	Bis(2-ethylhexyl)phthalate	39	
117-84-0	Di-n-octylphthalate	36	
205-99-2	Benzo(b)fluoranthene	37	
207-08-9	Benzo(k)fluoranthene	41	
50-32-8	Benzo(a)pyrene	40	
193-39-5	Indeno(1,2,3-cd)pyrene	43	
53-70-3	Dibenzo(a,h)anthracene	44	
191-24-2	Benzo(g,h,i)perylene	44	

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCSD-71376

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-71376

Sample wt/vol: 500 (g/mL) ML Lab File ID: S6B3480.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 500 (uL) Date Extracted: 04/26/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 04/26/2013

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
108-95-2	Phenol	40	
111-44-4	Bis(2-chloroethyl)ether	36	
95-57-8	2-Chlorophenol	38	
541-73-1	1,3-Dichlorobenzene	39	
106-46-7	1,4-Dichlorobenzene	39	
95-50-1	1,2-Dichlorobenzene	39	
108-60-1	2,2´-oxybis(1-Chloropropane)	33	
621-64-7	N-Nitroso-di-n-propylamine	36	
67-72-1	Hexachloroethane	38	
98-95-3	Nitrobenzene	43	
78-59-1	Isophorone	39	
88-75-5	2-Nitrophenol	44	
105-67-9	2,4-Dimethylphenol	37	
120-83-2	2,4-Dichlorophenol	40	
120-82-1	1,2,4-Trichlorobenzene	40	
91-20-3	Naphthalene	41	
111-91-1	Bis(2-chloroethoxy)methane	39	
87-68-3	Hexachlorobutadiene	43	
59-50-7	4-Chloro-3-methylphenol	42	
77-47-4	Hexachlorocyclopentadiene	35	
88-06-2	2,4,6-Trichlorophenol	44	
91-58-7	2-Chloronaphthalene	41	
131-11-3	Dimethylphthalate	40	
208-96-8	Acenaphthylene	40	
606-20-2	2,6-Dinitrotoluene	42	
83-32-9	Acenaphthene	40	
51-28-5	2,4-Dinitrophenol	56	
100-02-7	4-Nitrophenol	44	
121-14-2	2,4-Dinitrotoluene	44	
84-66-2	Diethylphthalate	40	
7005-72-3	4-Chlorophenyl-phenylether	41	
86-73-7	Fluorene	41	
534-52-1	4,6-Dinitro-2-methylphenol	55	
86-30-6	N-Nitrosodiphenylamine	42	
101-55-3	4-Bromophenyl-phenylether	44	
118-74-1	Hexachlorobenzene	45	

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCSD-71376

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-71376

Sample wt/vol: 500 (g/mL) ML Lab File ID: S6B3480.D

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

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 500 (uL) Date Extracted: 04/26/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 04/26/2013

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
87-86-5	Pentachlorophenol	29	J
85-01-8	Phenanthrene	42	
120-12-7	Anthracene	41	
84-74-2	Di-n-butylphthalate	39	
206-44-0	Fluoranthene	42	
129-00-0	Pyrene	41	
85-68-7	Butylbenzylphthalate	40	
91-94-1	3,3´-Dichlorobenzidine	38	
56-55-3	Benzo(a)anthracene	42	
218-01-9	Chrysene	43	
117-81-7	Bis(2-ethylhexyl)phthalate	38	
117-84-0	Di-n-octylphthalate	33	
205-99-2	Benzo(b)fluoranthene	40	
207-08-9	Benzo(k)fluoranthene	39	
50-32-8	Benzo(a)pyrene	41	
193-39-5	Indeno(1,2,3-cd)pyrene	45	
53-70-3	Dibenzo(a,h)anthracene	45	
191-24-2	Benzo(g,h,i)perylene	46	

2H - FORM II SV-2

WATER SEMIVOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

	CLIENT SAMPLE NO.	SDMC1 (NBZ) #	SDMC2 (FBP) #	SDMC3 (TPH) #	SDMC4 (PHL) #	SDMC5 (2FP) #	SDMC6 (TBP) #			TOT OUT
01	MB-71376	81	70	83	64	66	85			0
02	LCS-71376	83	76	93	68	66	92			0
03	LCSD-71376	86	76	90	74	69	95			0
04	DIRECT DISCHARGE 6	85	77	97	28	40	92			0

			QC LIMITS
SDMC1	(NBZ)	= Nitrobenzene-d5	(40-110)
SDMC2	(FBP)	= 2-Fluorobiphenyl	(50-110)
SDMC3	(TPH)	= Terphenyl-d14	(50-135)
SDMC4	(PHL)	= Phenol-d5	(10-115)
SDMC5	(2FP)	= 2-Fluorophenol	(20-110)
SDMC6	(TBP)	= 2,4,6-Tribromophenol	(40-125)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D DMC diluted out

som13.04.24.A

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.
LCS-71376

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

Lab Sample ID: LCS-71376 LCS Lot No.: A091525

Date Extracted: 04/26/2013 Date Analyzed (1): 04/26/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Phenol	50.0000	0.0000	35.7547	72		5 - 112
Bis(2-chloroethyl)ether	50.0000	0.0000	33.8718	68		12 - 158
2-Chlorophenol	50.0000	0.0000	34.6984	69		23 - 134
1,3-Dichlorobenzene	50.0000	0.0000	36.5164	73		1 - 172
1,4-Dichlorobenzene	50.0000	0.0000	35.1351	70		20 - 124
1,2-Dichlorobenzene	50.0000	0.0000	35.5115	71		32 - 129
2,2´-oxybis(1-Chloropropan	50.0000	0.0000	31.0483	62		36 - 166
N-Nitroso-di-n-propylamine	50.0000	0.0000	31.5278	63		1 - 230
Hexachloroethane	50.0000	0.0000	35.1177	70		40 - 113
Nitrobenzene	50.0000	0.0000	40.7372	81		35 - 180
Isophorone	50.0000	0.0000	38.5273	77		21 - 196
2-Nitrophenol	50.0000	0.0000	39.4305	79		29 - 182
2,4-Dimethylphenol	50.0000	0.0000	36.4268	73		32 - 119
2,4-Dichlorophenol	50.0000	0.0000	39.0907	78		39 - 135
1,2,4-Trichlorobenzene	50.0000	0.0000	39.4632	79		44 - 142
Naphthalene	50.0000	0.0000	38.7816	78		21 - 133
Bis(2-chloroethoxy)methane	50.0000	0.0000	37.7795	76		33 - 184
Hexachlorobutadiene	50.0000	0.0000	41.8643	84		24 - 116
4-Chloro-3-methylphenol	50.0000	0.0000	40.9706	82		22 - 147
Hexachlorocyclopentadiene	50.0000	0.0000	31.6609	63		34 - 103
2,4,6-Trichlorophenol	50.0000	0.0000	39.9191	80		37 - 144
2-Chloronaphthalene	50.0000	0.0000	38.5646	77		60 - 118
Dimethylphthalate	50.0000	0.0000	39.9653	80		1 - 112
Acenaphthylene	50.0000	0.0000	37.2499	74		33 - 145
2,6-Dinitrotoluene	50.0000	0.0000	40.5583	81		50 - 158
Acenaphthene	50.0000	0.0000	38.2124	76		47 - 155
2,4-Dinitrophenol	50.0000	0.0000	46.2193	92		1 - 191
4-Nitrophenol	50.0000	0.0000	43.2113	86		1 - 132
2,4-Dinitrotoluene	50.0000	0.0000	43.2658	87		39 - 139
Diethylphthalate	50.0000	0.0000	39.4544	79		1 - 114
4-Chlorophenyl-phenylether	50.0000	0.0000	39.8272	80		25 - 158
Fluorene	50.0000	0.0000	40.0329	80		59 - 121
4,6-Dinitro-2-methylphenol	50.0000	0.0000	48.6300	97		1 - 181
N-Nitrosodiphenylamine	50.0000	0.0000	38.7572	78		48 - 121
4-Bromophenyl-phenylether	50.0000	0.0000	41.4038	83		53 - 127
Hexachlorobenzene	50.0000	0.0000	43.9118	88		1 - 152
Pentachlorophenol	50.0000	0.0000	27.1279	54		14 - 176
Phenanthrene	50.0000	0.0000	39.3463	79		54 - 120
Anthracene	50.0000	0.0000	39.1382	78		27 - 133
Di-n-butylphthalate	50.0000	0.0000	37.5564	75		1 - 118
Fluoranthene	50.0000	0.0000	39.0539	78		26 - 137
Pyrene	50.0000	0.0000	41.2196	82		52 - 115
Butylbenzylphthalate	50.0000	0.0000	40.6486	81		1 - 152
3,3´-Dichlorobenzidine	50.0000	0.0000	37.5248	75		1 - 262

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.
LCS-71376

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

Lab Sample ID: LCS-71376 LCS Lot No.: A091525

Date Extracted: 04/26/2013 Date Analyzed (1): 04/26/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Benzo(a)anthracene	50.0000	0.0000	41.4174	83		33 - 143
Chrysene	50.0000	0.0000	42.9393	86		17 - 168
Bis(2-ethylhexyl)phthalate	50.0000	0.0000	39.0621	78		8 - 158
Di-n-octylphthalate	50.0000	0.0000	35.8440	72		4 - 146
Benzo(b)fluoranthene	50.0000	0.0000	37.3360	75		24 - 159
Benzo(k)fluoranthene	50.0000	0.0000	41.1615	82		11 - 162
Benzo(a)pyrene	50.0000	0.0000	39.8102	80		17 - 163
Indeno(1,2,3-cd)pyrene	50.0000	0.0000	43.1389	86		1 - 171
Dibenzo(a,h)anthracene	50.0000	0.0000	43.7359	87		1 - 227
Benzo(g,h,i)perylene	50.0000	0.0000	43.6912	87		1 - 219

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 54 outside limits

COMMENTS:

3 - FORM III

WATER LABORATORY CONTROL

SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-71376

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

Lab Sample ID: LCSD-71376 LCS Lot No.: A091525

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Phenol	50.0000	40.2150	80		11		40	5 - 112
Bis(2-chloroethyl)ether	50.0000	36.0799	72		6		40	12 - 158
2-Chlorophenol	50.0000	37.5774	75		8		40	23 - 134
1,3-Dichlorobenzene	50.0000	38.5248	77		5		40	1 - 172
1,4-Dichlorobenzene	50.0000	39.0914	78		11		40	20 - 124
1,2-Dichlorobenzene	50.0000	38.9009	78		9		40	32 - 129
2,2´-oxybis(1-Chloropropan	50.0000	32.9554	66		6		40	36 - 166
N-Nitroso-di-n-propylamine	50.0000	35.7646	72		13		40	1 - 230
Hexachloroethane	50.0000	37.9469	76		8		40	40 - 113
Nitrobenzene	50.0000	42.9337	86		6		40	35 - 180
Isophorone	50.0000	39.1202	78		1		40	21 - 196
2-Nitrophenol	50.0000	43.7086	87		10		40	29 - 182
2,4-Dimethylphenol	50.0000	36.9289	74		1		40	32 - 119
2,4-Dichlorophenol	50.0000	40.0274	80		3		40	39 - 135
1,2,4-Trichlorobenzene	50.0000	39.6878	79		0		40	44 - 142
Naphthalene	50.0000	40.6817	81		4		40	21 - 133
Bis(2-chloroethoxy)methane	50.0000	38.6254	77		1		40	33 - 184
Hexachlorobutadiene	50.0000	42.8038	86		2		40	24 - 116
4-Chloro-3-methylphenol	50.0000	41.9562	84		2		40	22 - 147
Hexachlorocyclopentadiene	50.0000	35.0063	70		11		40	34 - 103
2,4,6-Trichlorophenol	50.0000	43.8578	88		10		40	37 - 144
2-Chloronaphthalene	50.0000	41.1202	82		6		40	60 - 118
Dimethylphthalate	50.0000	40.4323	81		1		40	1 - 112
Acenaphthylene	50.0000	40.0997	80		8		40	33 - 145
2,6-Dinitrotoluene	50.0000	41.9843	84		4		40	50 - 158
Acenaphthene	50.0000	40.2768	81		6		40	47 - 155
2,4-Dinitrophenol	50.0000	56.0384	112		20		40	1 - 191
4-Nitrophenol	50.0000	44.0105	88		2		40	1 - 132
2,4-Dinitrotoluene	50.0000	43.9306	88		1		40	39 - 139
Diethylphthalate	50.0000	39.6278	79		0		40	1 - 114
4-Chlorophenyl-phenylether	50.0000	41.2237	82		2		40	25 - 158
Fluorene	50.0000	41.0305	82		2		40	59 - 121
4,6-Dinitro-2-methylphenol	50.0000	54.8108	110		13		40	1 - 181
N-Nitrosodiphenylamine	50.0000	41.5007	83		6		40	48 - 121
4-Bromophenyl-phenylether	50.0000	43.6364	87		5		40	53 - 127
Hexachlorobenzene	50.0000	45.3617	91		3		40	1 - 152
Pentachlorophenol	50.0000	29.3139	59		9		40	14 - 176
Phenanthrene	50.0000	41.7493	83		5		40	54 - 120
Anthracene	50.0000	40.8794	82		5		40	27 - 133
Di-n-butylphthalate	50.0000	38.8156	78		4		40	1 - 118
Fluoranthene	50.0000	42.2936	85		9		40	26 - 137
Pyrene	50.0000	41.2621	83		1		40	52 - 115
Butylbenzylphthalate	50.0000	39.6553	79		3		40	1 - 152
3,3´-Dichlorobenzidine	50.0000	37.9818	76		1		40	1 - 262
Benzo(a)anthracene	50.0000	41.7462	83		0		40	33 - 143
Chrysene	50.0000	42.5938	85		1		40	17 - 168

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-71376

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

Lab Sample ID: LCSD-71376 LCS Lot No.: A091525

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Bis(2-ethylhexyl)phthalate	50.0000	38.0864	76		3		40	8 - 158
Di-n-octylphthalate	50.0000	32.7359	65		10		40	4 - 146
Benzo(b)fluoranthene	50.0000	39.9098	80		6		40	24 - 159
Benzo(k)fluoranthene	50.0000	39.2816	79		4		40	11 - 162
Benzo(a)pyrene	50.0000	41.0705	82		2		40	17 - 163
Indeno(1,2,3-cd)pyrene	50.0000	45.1432	90		5		40	1 - 171
Dibenzo(a,h)anthracene	50.0000	45.1472	90		3		40	1 - 227
Benzo(g,h,i)perylene	50.0000	45.8557	92		6		40	1 - 219

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 54 outside limits

Spike Recovery: 0 out of 54 outside limits

COMMENTS:

4C - FORM IV SV

SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

MB-71376

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

Lab File ID: S6B3478.D Lab Sample ID: MB-71376

Instrument ID: S6 Date Extracted: 04/26/2013

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 04/26/2013

Level: (LOW/MED) LOW Time Analyzed: 15:56

Extraction: (Type) SEPF GPC Cleanup: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	LCS-71376	LCS-71376	S6B3479.D	04/26/2013
02	LCSD-71376	LCSD-71376	S6B3480.D	04/26/2013
03	DIRECT DISCHARGE 6	M0587-01B	S6B3517.D	04/29/2013

COMMENTS:

8C - FORM VIII SV-1

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 04/17/2013 04/17/2013

EPA Sample No.(SSTD020##) SSTD0256J Date Analyzed: 04/26/2013

Lab File ID (Standard): S6B3471A.D Time Analyzed: 13:12

Instrument ID: S6

		IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
	12 HOUR STD	41052		5.254		181508		6.312		136499		7.769	
	UPPER LIMIT	82104		5.754		363016		6.812		272998		8.269	
	LOWER LIMIT	20526		4.754		90754		5.812		68250		7.269	
	SAMPLE NO.												
01	MB-71376	76876		5.255		319273		6.312		245681		7.769	
02	LCS-71376	71838		5.255		289565		6.312		221512		7.775	
03	LCSD-71376	77150		5.255		322238		6.312		230323		7.775	

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8D - FORM VIII SV-2

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

EPA Sample No.(SSTD020##) SSTD0256J Date Analyzed: 04/26/2013

Lab File ID (Standard): S6B3471A.D Time Analyzed: 13:12

Instrument ID: S6 GC Column: Rxi-5sil MS ID: 0.25 (mm)

		IS4 (PHN) AREA	#	RT	#	IS5 (CRY) AREA	#	RT	#	IS6 (PRY) AREA	#	RT	#
	12 HOUR STD	267170		9.015		361553		11.365		390181		12.975	
	UPPER LIMIT	534340		9.515		723106		11.865		780362		13.475	
	LOWER LIMIT	133585		8.515		180777		10.865		195091		12.475	
	SAMPLE NO.												
01	MB-71376	514133		9.009		699701		11.330		725253		12.928	
02	LCS-71376	480161		9.009		626484		11.324		647636		12.922	
03	LCSD-71376	478700		9.009		667473		11.318		728932		12.911	

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12
AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8C - FORM VIII SV-1

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 04/17/2013 04/17/2013

EPA Sample No.(SSTD020##) SSTD0256K Date Analyzed: 04/29/2013

Lab File ID (Standard): S6B3511.D Time Analyzed: 11:45

Instrument ID: S6

		IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
	12 HOUR STD	140330		5.186		590620		6.244		404667		7.707	
	UPPER LIMIT	280660		5.686		1181240		6.744		809334		8.207	
	LOWER LIMIT	70165		4.686		295310		5.744		202334		7.207	
	SAMPLE NO.												
01	DIRECT DISCHARGE 6	225483		5.186		907171		6.244		641609		7.707	

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8D - FORM VIII SV-2

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

EPA Sample No.(SSTD020##) SSTD0256K Date Analyzed: 04/29/2013

Lab File ID (Standard): S6B3511.D Time Analyzed: 11:45

Instrument ID: S6 GC Column: Rxi-5sil MS ID: 0.25 (mm)

		IS4 (PHN) AREA	#	RT	#	IS5 (CRY) AREA	#	RT	#	IS6 (PRY) AREA	#	RT	#
	12 HOUR STD	816417		8.94		1157227		11.273		1072573		12.848	
	UPPER LIMIT	1632834		9.44		2314454		11.773		2145146		13.348	
	LOWER LIMIT	408209		8.44		578614		10.773		536287		12.348	
	SAMPLE NO.												
01	DIRECT DISCHARGE 6	1322746		8.946		1717274		11.302		1540352		12.883	

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.

* PCB Organics *

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : LaBella Associates

Project: LaBella Monoco Oil

Laboratory Workorder / SDG #: M0587

EPA 608 PCB, 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: EPA 608 PCB

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW3510C

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.

Replicate RPDs were within the advisory 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 peaks were manually integrated:

AR16603BL 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: 05/07/13

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.

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

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DIRECT DISCHARGE 6

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0587-01B

Sample wt/vol: 500 (g/mL) ML Lab File ID: E2L9905F.D/E2L9905R.D

% Moisture: Decanted: (Y/N) Date Received: 04/24/2013

Extraction: (Type) SEPF Date Extracted: 04/26/2013

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 05/01/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-71377

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-71377

Sample wt/vol: 500 (g/mL) ML Lab File ID: E2L9902F.D/E2L9902R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 04/26/2013

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 05/01/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-71377(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-71377

Sample wt/vol: 500 (g/mL) ML Lab File ID: E2L9903F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 04/26/2013

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 05/01/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	3.4	
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	3.5	

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-71377(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-71377

Sample wt/vol: 500 (g/mL) ML Lab File ID: E2L9903R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 04/26/2013

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 05/01/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	3.3	
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	4.1	

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
LCSD-71377(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-71377

Sample wt/vol: 500 (g/mL) ML Lab File ID: E2L9904F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 04/26/2013

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 05/01/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	3.3	
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	3.5	

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
LCSD-71377(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-71377

Sample wt/vol: 500 (g/mL) ML Lab File ID: E2L9904R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 04/26/2013

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 05/01/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	3.2	
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	4.0	

2Q - FORM II ARO-1

WATER AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

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-71377	71	74	78	72			0
02	LCS-71377	73	77	79	76			0
03	LCSD-71377	73	76	79	75			0
04	DIRECT DISCHARGE 6	63	67	63	62			0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(39-126)
DCB = Decachlorobiphenyl	(17-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.04.24.A

3N - FORM III ARO-3

WATER AROCLOR LABORATORY CONTROL SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-71377

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

Lab Sample ID: LCS-71377 LCS Lot No.: A072217

Date Extracted: 04/26/2013 Date Analyzed (1): 05/01/2013

Instrument ID (1): E2 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC #	QC LIMITS
Aroclor-1016	4.0000	3.3998	85	50-114
Aroclor-1260	4.0000	3.5388	88	8-127

Instrument ID (2): E2 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 05/01/2013

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC #	QC LIMITS
Aroclor-1016	4.0000	3.2956	82	50-114
Aroclor-1260	4.0000	4.1127	103	8-127

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:

som13.04.24.A

3N - FORM III ARO-3
WATER AROCLOR LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-71377

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

Lab Sample ID: LCSD-71377 LCS Lot No.: A072217

Date Extracted: 04/26/2013 Date Analyzed (1): 05/01/2013

Instrument ID (1): E2 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC	#	QC LIMITS	%RPD	#	RPD LIMIT
Aroclor-1016	4.0000	3.2695	82		50-114	4.0		40
Aroclor-1260	4.0000	3.4540	86		8-127	2.0		40

Instrument ID (2): E2 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 05/01/2013

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC	#	QC LIMITS	%RPD	#	RPD LIMIT
Aroclor-1016	4.0000	3.1724	79		50-114	4.0		40
Aroclor-1260	4.0000	3.9926	100		8-127	3.0		40

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:

som13.04.24.A

4F - FORM IV ARO

AROCLOR METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-71377

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0587 Mod. Ref No.: SDG No.: SM0587

Lab File ID: E2L9902F.D / E2L9902R.D Lab Sample ID: MB-71377

Matrix: (SOIL/SED/WATER) WATER Extraction: (Type) SEPF Date Extracted: 04/26/2013

Sulfur Cleanup: (Y/N) Y GPC Cleanup:(Y/N) N

Acid Cleanup: (Y/N Y

Date Analyzed (1): 05/01/2013 Date Analyzed (2): 05/01/2013

Time Analyzed (1): 14:20 Time Analyzed (2): 14:20

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-71377	LCS-71377	05/01/2013	05/01/2013
02	LCSD-71377	LCSD-71377	05/01/2013	05/01/2013
03	DIRECT DISCHARGE 6	M0587-01B	05/01/2013	05/01/2013

COMMENTS:

* Metals *

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : LaBella Associates

Project: LaBella Monoco Oil

Laboratory Workorder / SDG #: M0587

EPA 200.7, EPA 245.1

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: EPA 200.7, EPA 245.1

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: 200.7
Aqueous Samples were prepared following procedures in laboratory test code: 245.1

V. INSTRUMENTATION

The following instrumentation was used:

Instrument Code: FIMS2
Instrument Type: CVAA
Description: FIMS
Manufacturer: Perkin-Elmer
Model: FIMS100

Instrument Code: OPTIMA2
Instrument Type: ICP
Description: Optima 3100 XL
Manufacturer: Perkin-Elmer
Model: 3100 XL

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):

A matrix spike was not performed on any sample in this SDG.

D. Post Digestion Spike (PDS):

A post-digestion spike was not performed on any sample in this SDG.

E. Duplicate sample:

A duplicate analysis was not performed on any sample in this SDG.

F. Serial Dilution (SD):

A serial dilution was not performed on any sample in this SDG.

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: 05/06/13

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.

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

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

DIRECT DISCHARGE 6

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0587

Matrix (soil/water): WATER Lab Sample ID: M0587-01

Level (low/med): LOW Date Received: 04/24/2013

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	7.0	U		P
7440-38-2	Arsenic	5.2	U		P
7440-41-7	Beryllium	0.063	U		P
7440-43-9	Cadmium	0.49	B		P
7440-47-3	Chromium	0.39	U		P
7440-50-8	Copper	3.6	B		P
7439-92-1	Lead	2.4	U		P
7439-97-6	Mercury	0.030	U		CV
7440-02-0	Nickel	2.0	B		P
7782-49-2	Selenium	14.0	U		P
7440-22-4	Silver	1.0	B		P
7440-28-0	Thallium	7.0	U		P
7440-66-6	Zinc	8.1	B		P

Comments:

7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0587

Solid LCS Source:

Aqueous LCS Source:

LCS(D) ID:
LCS-71360

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Antimony	100.0	89.87	89.9						
Arsenic	40.0	43.25	108.1						
Beryllium	50.0	50.68	101.4						
Cadmium	50.0	53.10	106.2						
Chromium	200.0	206.88	103.4						
Copper	250.0	247.38	99.0						
Lead	20.0	20.56	102.8						
Nickel	500.0	527.77	105.6						
Selenium	50.0	51.11	102.2						
Silver	50.0	49.65	99.3						
Thallium	50.0	49.39	98.8						
Zinc	500.0	522.07	104.4						

7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0587

Solid LCS Source:

Aqueous LCS Source:

LCS(D) ID:
LCS-71422

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Mercury	4.6	4.11	89.3						

7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0587

Solid LCS Source:

Aqueous LCS Source:

LCS(D) ID:
LCSD-71360

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Antimony	100.0	87.18	87.2						
Arsenic	40.0	42.31	105.8						
Beryllium	50.0	49.87	99.7						
Cadmium	50.0	52.45	104.9						
Chromium	200.0	203.83	101.9						
Copper	250.0	243.43	97.4						
Lead	20.0	20.14	100.7						
Nickel	500.0	520.81	104.2						
Selenium	50.0	51.10	102.2						
Silver	50.0	49.79	99.6						
Thallium	50.0	51.20	102.4						
Zinc	500.0	515.35	103.1						

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0587

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-71422**

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

FIMS2_130501B

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
Analyte		C	05/01/13 11:56	C	05/01/13 12:14	C		C		C	M
Mercury	0.030	U	0.030	U	0.030	U			0.030	U	CV

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0587

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-71360**

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

OPTIMA2_130426A

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 04/26/13 8:54	C	04/26/13 9:25	C		C	Preparation Blank	C	M
Antimony	7.0	U	7.0	U	7.0	U			7.000	U	P
Arsenic	5.2	U	5.2	U	5.2	U			5.200	U	P
Beryllium	0.1	B	0.1	B	0.1	B			0.063	U	P
Cadmium	0.2	U	0.2	U	0.2	U			0.190	U	P
Chromium	0.5	B	0.4	U	0.4	U			0.390	U	P
Copper	1.1	U	1.1	U	1.1	U			1.100	U	P
Lead	2.4	U	2.4	U	2.4	U			2.400	U	P
Nickel	1.2	B	0.8	B	1.1	B			0.810	U	P
Selenium	14.0	U	14.0	U	14.0	U			14.000	U	P
Silver	0.8	U	0.8	B	0.8	U			0.750	U	P
Zinc	1.4	B	1.1	B	1.2	B			1.000	U	P

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0587

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-71360**

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

OPTIMA3_130426B

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
Analyte		C	04/26/13 8:57	C	04/26/13 9:37	C	04/26/13 10:21	C		C	M
Thallium	6.2	U	6.2	U	6.2	U	6.2	U	7.000	U	P

U.S. EPA - CLP

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0587

Preparation Blank Matrix (soil/water): Method Blank ID:

Preparation Blank Concentration Units (ug/L or mg/kg):

OPTIMA3_130426B

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
Analyte		C	04/26/13 10:43	C		C		C		C	M
Thallium			6.2	U							P

Report Date:
04-Jun-13 16:22

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

LaBella Associates
300 State Street, Suite 201
Rochester, NY 14614

Work Order: M0801
Project : LaBella Monoco Oil
Project #:

Attn: Dan Noll

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M0801-01	DIR. DISCHARGE 7	Aqueous	21-May-13 11:00	22-May-13 10:40

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 requirments have been meet.

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.

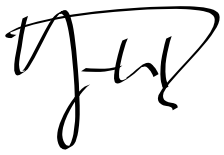
Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

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

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:



Yihai Ding
Laboratory Director

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* Data Summary Pack *

175 Metro Center Boulevard · Warwick, RI 02886-1755 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

New York State Department of Environmental Conservation
Sample Identification and Analytical Requirements Summary

Project Name : LaBella Monoco Oil **SDG :** M0801

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
DIR. DISCHARGE 7	M0801-01	E624	E625	E608_PCB	E200.7	
DIR. DISCHARGE 7	M0801-01				E245.1	

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

New York State Department of Environmental Conservation
Sample Preparation and Analysis Summary MSVOA

Project Name : LaBella Monoco Oil **SDG :** M0801

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
E624					
M0801-01A	AQ	5/21/2013	5/22/2013	NA	5/24/2013

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

New York State Department of Environmental Conservation
Sample Preparation and Analysis Summary MSSEMI

Project Name : LaBella Monoco Oil **SDG :** M0801

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
E625					
M0801-01B	AQ	5/21/2013	5/22/2013	5/28/2013	5/30/2013

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

New York State Department of Environmental Conservation
Sample Preparation and Analysis Summary GC*

Project Name : LaBella Monoco Oil **SDG :** M0801

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
E608_PCB					
M0801-01B	AQ	5/21/2013	5/22/2013	5/23/2013	5/25/2013

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

New York State Department of Environmental Conservation
Sample Preparation and Analysis Summary MSVOA

Project Name : LaBella Monoco Oil **SDG :** M0801

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
E624					
M0801-01A	AQ	E624	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 : LaBella Monoco Oil **SDG :** M0801

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
E625					
M0801-01B	AQ	E625	625	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 : LaBella Monoco Oil **SDG :** M0801

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
E608_PCB					
M0801-01B	AQ	E608_PCB	608	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 : LaBella Monoco Oil **SDG :** M0801

Laboratory Sample ID	Matrix	Metals Requested	Date Received By Lab	Date Analyzed
E200.7				
M0801-01C	AQ	E200.7	5/22/2013	5/29/2013
E245.1				
M0801-01C	AQ	E245.1	5/22/2013	5/31/2013

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

WorkOrder: M0801

Client ID: LABELLA
Project: LaBella Monoco Oil
WO Name: LaBella Monoco Oil
Location: LABELLA_MONOCO-OIL,

Case:
SDG:
PO: 210259

HC Due: 06/03/13
Fax Due:
Fax Report: ☐

Report Level: ASP-B
Special Program:
EDD: ENVIROINSITE_1
EQUIIS_4_NYSDEC

Comments: MDLs UPDATED and > PQL -- MDLs UPDATED and > PQL -- use this project for between 11-50 samples, no RUSH surcharge base on lab capacity, no charge for MS/MSD or a batch of 7 or more samples, no charge for TB. no hard copy

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M0801-01A	DIR. DISCHARGE 7	05/21/2013 11:00	05/22/2013	Aqueous	E624	/					VOA
M0801-01B	DIR. DISCHARGE 7	05/21/2013 11:00	05/22/2013	Aqueous	E608_PCB	/					D1
M0801-01B	DIR. DISCHARGE 7	05/21/2013 11:00	05/22/2013	Aqueous	E625	/					D1
M0801-01C	DIR. DISCHARGE 7	05/21/2013 11:00	05/22/2013	Aqueous	E200.7	/ PP13_200				Y	M3
M0801-01C	DIR. DISCHARGE 7	05/21/2013 11:00	05/22/2013	Aqueous	E245.1	/ PP13_200					M3

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

05/23/2013 13:06 Lab Client Rep: Agnes R Huntley

* Volatiles *

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : LaBella Associates

Project: LaBella Monoco Oil

Laboratory Workorder / SDG #: M0801

EPA 624, VOC 624 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: EPA 624

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW5030B

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: V10
Instrument Type: GCMS-VOA

Description: HP7890A
Manufacturer: Agilent
Model: 7890A / 5975C

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.

Replicate RPDs were within the advisory 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.

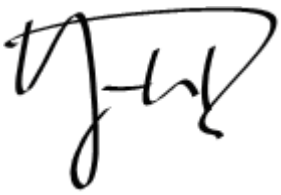
G. Samples:

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.



Signed:_____ _____

Date:_____6/3/2013_____

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

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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.

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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DIR. DISCHARGE 7

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0801 Mod. Ref No.: SDG No.: SM0801

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0801-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8C0012.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/22/2013

% Moisture: not dec. Date Analyzed: 05/24/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
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
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	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
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	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
127-18-4	Tetrachloroethene	5.0	U
124-48-1	Dibromochloromethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
75-25-2	Bromoform	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
110-75-8	2-Chloroethyl vinyl ether	5.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DIR. DISCHARGE 7

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0801 Mod. Ref No.: SDG No.: SM0801

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0801-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8C0012.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/22/2013

% Moisture: not dec. Date Analyzed: 05/24/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
107-02-8	Acrolein	25	U
107-13-1	Acrylonitrile	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-71881

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0801 Mod. Ref No.: SDG No.: SM0801

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-71881

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8C0002.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 05/24/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
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
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	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
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	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
127-18-4	Tetrachloroethene	5.0	U
124-48-1	Dibromochloromethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
75-25-2	Bromoform	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
110-75-8	2-Chloroethyl vinyl ether	5.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-71881

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0801 Mod. Ref No.: SDG No.: SM0801

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-71881

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8C0002.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 05/24/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
107-02-8	Acrolein	25	U
107-13-1	Acrylonitrile	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-71881

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0801 Mod. Ref No.: SDG No.: SM0801

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-71881

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8C0000.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 05/24/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	51	
75-01-4	Vinyl chloride	47	
74-83-9	Bromomethane	47	
75-00-3	Chloroethane	44	
75-69-4	Trichlorofluoromethane	46	
75-35-4	1,1-Dichloroethene	47	
75-09-2	Methylene chloride	47	
156-60-5	trans-1,2-Dichloroethene	47	
75-34-3	1,1-Dichloroethane	48	
156-59-2	cis-1,2-Dichloroethene	48	
67-66-3	Chloroform	49	
71-55-6	1,1,1-Trichloroethane	46	
56-23-5	Carbon tetrachloride	46	
107-06-2	1,2-Dichloroethane	48	
71-43-2	Benzene	51	
79-01-6	Trichloroethene	46	
78-87-5	1,2-Dichloropropane	48	
75-27-4	Bromodichloromethane	48	
10061-01-5	cis-1,3-Dichloropropene	49	
108-88-3	Toluene	49	
10061-02-6	trans-1,3-Dichloropropene	50	
79-00-5	1,1,2-Trichloroethane	49	
127-18-4	Tetrachloroethene	45	
124-48-1	Dibromochloromethane	48	
108-90-7	Chlorobenzene	48	
100-41-4	Ethylbenzene	47	
179601-23-1	m,p-Xylene	98	
95-47-6	o-Xylene	47	
1330-20-7	Xylene (Total)	150	
75-25-2	Bromoform	47	
79-34-5	1,1,2,2-Tetrachloroethane	46	
541-73-1	1,3-Dichlorobenzene	47	
106-46-7	1,4-Dichlorobenzene	47	
95-50-1	1,2-Dichlorobenzene	47	
110-75-8	2-Chloroethyl vinyl ether	43	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-71881

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0801 Mod. Ref No.: SDG No.: SM0801

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-71881

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8C0000.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 05/24/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
107-02-8	Acrolein	250	
107-13-1	Acrylonitrile	50	

2B - FORM II VOA-2

WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0801 Mod. Ref No.: SDG No.: SM0801

Level: (TRACE or LOW) LOW

	EPA SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-71881	100	99	100	100				0
02	MB-71881	100	100	101	98				0
03	DIR. DISCHARGE 7	100	99	101	100				0

		QC LIMITS
VDMC1	(DBFM) Dibromofluoromethane	(85-115)
VDMC2	(DCE) = 1,2-Dichloroethane-d4	(70-120)
VDMC3	(TOL) = Toluene-d8	(85-120)
VDMC4	(BFB) = Bromofluorobenzene	(75-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

som13.05.07.A

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-71881

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0801 Mod. Ref No.: SDG No.: SM0801

Lab Sample ID: LCS-71881 LCS Lot No.:

Date Extracted: 05/24/2013 Date Analyzed (1): 05/24/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Chloromethane	50.0000	0.0000	51.0670	102		1 - 273
Vinyl chloride	50.0000	0.0000	47.2893	95		1 - 251
Bromomethane	50.0000	0.0000	47.0259	94		1 - 242
Chloroethane	50.0000	0.0000	44.0732	88		14 - 230
Trichlorofluoromethane	50.0000	0.0000	45.9445	92		17 - 181
1,1-Dichloroethene	50.0000	0.0000	46.6132	93		1 - 234
Methylene chloride	50.0000	0.0000	46.8363	94		1 - 221
trans-1,2-Dichloroethene	50.0000	0.0000	46.7619	94		54 - 156
1,1-Dichloroethane	50.0000	0.0000	48.2213	96		59 - 155
cis-1,2-Dichloroethene	50.0000	0.0000	47.7756	96		83 - 120
Chloroform	50.0000	0.0000	48.5981	97		51 - 138
1,1,1-Trichloroethane	50.0000	0.0000	46.1436	92		52 - 162
Carbon tetrachloride	50.0000	0.0000	46.2310	92		70 - 140
1,2-Dichloroethane	50.0000	0.0000	48.3575	97		49 - 155
Benzene	50.0000	0.0000	50.7739	102		37 - 151
Trichloroethene	50.0000	0.0000	46.1692	92		71 - 157
1,2-Dichloropropane	50.0000	0.0000	48.4928	97		1 - 210
Bromodichloromethane	50.0000	0.0000	48.3576	97		35 - 155
cis-1,3-Dichloropropene	50.0000	0.0000	49.2007	98		1 - 227
Toluene	50.0000	0.0000	49.4578	99		47 - 150
trans-1,3-Dichloropropene	50.0000	0.0000	49.7015	99		17 - 183
1,1,2-Trichloroethane	50.0000	0.0000	48.6343	97		52 - 150
Tetrachloroethene	50.0000	0.0000	44.7583	90		64 - 148
Dibromochloromethane	50.0000	0.0000	47.9796	96		53 - 149
Chlorobenzene	50.0000	0.0000	47.7703	96		37 - 150
Ethylbenzene	50.0000	0.0000	46.5793	93		37 - 162
m,p-Xylene	100.0000	0.0000	97.7638	98		70 - 130
o-Xylene	50.0000	0.0000	47.4457	95		70 - 130
Xylene (Total)	150.0000	0.0000	145.2096	97		81 - 121
Bromoform	50.0000	0.0000	47.2637	95		45 - 169
1,1,2,2-Tetrachloroethane	50.0000	0.0000	45.9858	92		46 - 157
1,3-Dichlorobenzene	50.0000	0.0000	46.9577	94		59 - 156
1,4-Dichlorobenzene	50.0000	0.0000	46.5474	93		18 - 190
1,2-Dichlorobenzene	50.0000	0.0000	46.8355	94		18 - 190
2-Chloroethyl vinyl ether	50.0000	0.0000	43.2040	86		1 - 305
Acrolein	250.0000	0.0000	252.3708	101		12 - 133
Acrylonitrile	50.0000	0.0000	49.6730	99		45 - 172

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 37 outside limits

3 - FORM III

WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-71881

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0801 Mod. Ref No.: SDG No.: SM0801

Lab Sample ID: LCS-71881 LCS Lot No.:

Date Extracted: 05/24/2013 Date Analyzed (1): 05/24/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.

COMMENTS:

4A - FORM IV VOA

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-71881

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0801 Mod. Ref No.: SDG No.: SM0801

Lab File ID: V8C0002.D Lab Sample ID: MB-71881

Instrument ID: V10

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 05/24/2013

Level: (TRACE or LOW/MED) LOW Time Analyzed: 12:37

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-71881	LCS-71881	V8C0000.D	11:42
02	DIR. DISCHARGE 7	M0801-01A	V8C0012.D	17:10

COMMENTS:

som13.05.07.A

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0801 Mod. Ref No.: SDG No.: SM0801

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 05/24/2013 05/24/2013

EPA Sample No.(VSTD#####): VSTD05010K Date Analyzed: 05/24/2013

Lab File ID (Standard): V8B9992.D Time Analyzed: 8:01

Instrument ID: V10 Heated Purge: (Y/N) N

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	4935506		5.307		3890502		8.294		1970233		10.786	
	UPPER LIMIT	9871012		5.807		7781004		8.794		3940466		11.286	
	LOWER LIMIT	2467753		4.807		1945251		7.794		985117		10.286	
	EPA SAMPLE NO.												
01	LCS-71881	4973563		5.310		3934361		8.294		1944241		10.786	
02	MB-71881	4923480		5.310		3819485		8.294		1743546		10.789	
03	DIR. DISCHARGE 7	4738876		5.310		3699577		8.294		1733838		10.786	

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.

* Semivolatile Organics *

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : LaBella Associates

Project: LaBella Monoco Oil

Laboratory Workorder / SDG #: M0801

EPA 625, 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: EPA 625

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW3510C

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.

Replicate RPDs were within the advisory 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.

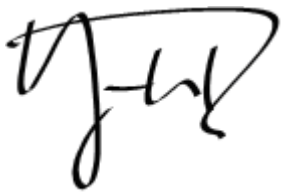
G. Samples:

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.



Signed:_____ _____

Date:_____6/3/2013_____

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.

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

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DIR. DISCHARGE 7

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0801 Mod. Ref No.: SDG No.: SM0801

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0801-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6B4158.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received: 05/22/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/28/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/30/2013

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
108-95-2	Phenol	10	U
111-44-4	Bis(2-chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
108-60-1	2,2´-oxybis(1-Chloropropane)	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
111-91-1	Bis(2-chloroethoxy)methane	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DIR. DISCHARGE 7

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0801 Mod. Ref No.: SDG No.: SM0801

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0801-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6B4158.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received: 05/22/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/28/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/30/2013

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3´-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-71896

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0801 Mod. Ref No.: SDG No.: SM0801

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-71896

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6B4155.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/28/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/30/2013

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
108-95-2	Phenol	10	U
111-44-4	Bis(2-chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
108-60-1	2,2´-oxybis(1-Chloropropane)	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
111-91-1	Bis(2-chloroethoxy)methane	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-71896

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0801 Mod. Ref No.: SDG No.: SM0801

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-71896

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6B4155.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/28/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/30/2013

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3´-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-71896

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0801 Mod. Ref No.: SDG No.: SM0801

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-71896

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6B4156.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/28/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/30/2013

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
108-95-2	Phenol	34	
111-44-4	Bis(2-chloroethyl)ether	36	
95-57-8	2-Chlorophenol	35	
541-73-1	1,3-Dichlorobenzene	37	
106-46-7	1,4-Dichlorobenzene	35	
95-50-1	1,2-Dichlorobenzene	36	
108-60-1	2,2´-oxybis(1-Chloropropane)	37	
621-64-7	N-Nitroso-di-n-propylamine	34	
67-72-1	Hexachloroethane	34	
98-95-3	Nitrobenzene	38	
78-59-1	Isophorone	36	
88-75-5	2-Nitrophenol	37	
105-67-9	2,4-Dimethylphenol	29	
120-83-2	2,4-Dichlorophenol	36	
120-82-1	1,2,4-Trichlorobenzene	36	
91-20-3	Naphthalene	36	
111-91-1	Bis(2-chloroethoxy)methane	36	
87-68-3	Hexachlorobutadiene	37	
59-50-7	4-Chloro-3-methylphenol	37	
77-47-4	Hexachlorocyclopentadiene	18	
88-06-2	2,4,6-Trichlorophenol	41	
91-58-7	2-Chloronaphthalene	40	
131-11-3	Dimethylphthalate	43	
208-96-8	Acenaphthylene	40	
606-20-2	2,6-Dinitrotoluene	43	
83-32-9	Acenaphthene	41	
51-28-5	2,4-Dinitrophenol	22	
100-02-7	4-Nitrophenol	44	
121-14-2	2,4-Dinitrotoluene	44	
84-66-2	Diethylphthalate	41	
7005-72-3	4-Chlorophenyl-phenylether	42	
86-73-7	Fluorene	41	
534-52-1	4,6-Dinitro-2-methylphenol	32	
86-30-6	N-Nitrosodiphenylamine	42	
101-55-3	4-Bromophenyl-phenylether	42	
118-74-1	Hexachlorobenzene	42	

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-71896

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0801 Mod. Ref No.: SDG No.: SM0801

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-71896

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6B4156.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/28/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/30/2013

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
87-86-5	Pentachlorophenol	42	
85-01-8	Phenanthrene	42	
120-12-7	Anthracene	41	
84-74-2	Di-n-butylphthalate	41	
206-44-0	Fluoranthene	43	
129-00-0	Pyrene	46	
85-68-7	Butylbenzylphthalate	44	
91-94-1	3,3´-Dichlorobenzidine	41	
56-55-3	Benzo(a)anthracene	45	
218-01-9	Chrysene	47	
117-81-7	Bis(2-ethylhexyl)phthalate	41	
117-84-0	Di-n-octylphthalate	38	
205-99-2	Benzo(b)fluoranthene	41	
207-08-9	Benzo(k)fluoranthene	44	
50-32-8	Benzo(a)pyrene	42	
193-39-5	Indeno(1,2,3-cd)pyrene	44	
53-70-3	Dibenzo(a,h)anthracene	44	
191-24-2	Benzo(g,h,i)perylene	45	

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCSD-71896

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0801 Mod. Ref No.: SDG No.: SM0801

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-71896

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6B4157.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/28/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/30/2013

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
108-95-2	Phenol	33	
111-44-4	Bis(2-chloroethyl)ether	34	
95-57-8	2-Chlorophenol	36	
541-73-1	1,3-Dichlorobenzene	36	
106-46-7	1,4-Dichlorobenzene	37	
95-50-1	1,2-Dichlorobenzene	37	
108-60-1	2,2´-oxybis(1-Chloropropane)	37	
621-64-7	N-Nitroso-di-n-propylamine	35	
67-72-1	Hexachloroethane	34	
98-95-3	Nitrobenzene	38	
78-59-1	Isophorone	35	
88-75-5	2-Nitrophenol	35	
105-67-9	2,4-Dimethylphenol	29	
120-83-2	2,4-Dichlorophenol	35	
120-82-1	1,2,4-Trichlorobenzene	36	
91-20-3	Naphthalene	35	
111-91-1	Bis(2-chloroethoxy)methane	35	
87-68-3	Hexachlorobutadiene	37	
59-50-7	4-Chloro-3-methylphenol	37	
77-47-4	Hexachlorocyclopentadiene	18	
88-06-2	2,4,6-Trichlorophenol	41	
91-58-7	2-Chloronaphthalene	40	
131-11-3	Dimethylphthalate	42	
208-96-8	Acenaphthylene	40	
606-20-2	2,6-Dinitrotoluene	41	
83-32-9	Acenaphthene	40	
51-28-5	2,4-Dinitrophenol	25	
100-02-7	4-Nitrophenol	45	
121-14-2	2,4-Dinitrotoluene	43	
84-66-2	Diethylphthalate	43	
7005-72-3	4-Chlorophenyl-phenylether	41	
86-73-7	Fluorene	41	
534-52-1	4,6-Dinitro-2-methylphenol	33	
86-30-6	N-Nitrosodiphenylamine	40	
101-55-3	4-Bromophenyl-phenylether	41	
118-74-1	Hexachlorobenzene	42	

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCSD-71896

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0801 Mod. Ref No.: SDG No.: SM0801

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-71896

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6B4157.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/28/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/30/2013

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
87-86-5	Pentachlorophenol	40	
85-01-8	Phenanthrene	41	
120-12-7	Anthracene	41	
84-74-2	Di-n-butylphthalate	41	
206-44-0	Fluoranthene	42	
129-00-0	Pyrene	43	
85-68-7	Butylbenzylphthalate	42	
91-94-1	3,3´-Dichlorobenzidine	41	
56-55-3	Benzo(a)anthracene	43	
218-01-9	Chrysene	46	
117-81-7	Bis(2-ethylhexyl)phthalate	40	
117-84-0	Di-n-octylphthalate	38	
205-99-2	Benzo(b)fluoranthene	37	
207-08-9	Benzo(k)fluoranthene	48	
50-32-8	Benzo(a)pyrene	42	
193-39-5	Indeno(1,2,3-cd)pyrene	44	
53-70-3	Dibenzo(a,h)anthracene	44	
191-24-2	Benzo(g,h,i)perylene	45	

2H - FORM II SV-2

WATER SEMIVOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0801 Mod. Ref No.: SDG No.: SM0801

	CLIENT SAMPLE NO.	SDMC1 (NBZ) #	SDMC2 (FBP) #	SDMC3 (TPH) #	SDMC4 (PHL) #	SDMC5 (2FP) #	SDMC6 (TBP) #			TOT OUT
01	MB-71896	78	84	117	73	79	92			0
02	LCS-71896	79	85	108	75	76	99			0
03	LCSD-71896	75	83	99	73	67	92			0
04	DIR. DISCHARGE 7	94	90	108	22	38	106			0

		QC LIMITS
SDMC1	(NBZ) = Nitrobenzene-d5	(40-110)
SDMC2	(FBP) = 2-Fluorobiphenyl	(50-110)
SDMC3	(TPH) = Terphenyl-d14	(50-135)
SDMC4	(PHL) = Phenol-d5	(10-115)
SDMC5	(2FP) = 2-Fluorophenol	(20-110)
SDMC6	(TBP) = 2,4,6-Tribromophenol	(40-125)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D DMC diluted out

som13.05.07.A

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.
LCS-71896

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0801 Mod. Ref No.: SDG No.: SM0801

Lab Sample ID: LCS-71896 LCS Lot No.: CG-3109

Date Extracted: 05/28/2013 Date Analyzed (1): 05/30/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Phenol	50.0000	0.0000	33.5646	67		5 - 112
Bis(2-chloroethyl)ether	50.0000	0.0000	36.4832	73		12 - 158
2-Chlorophenol	50.0000	0.0000	35.4715	71		23 - 134
1,3-Dichlorobenzene	50.0000	0.0000	37.1591	74		1 - 172
1,4-Dichlorobenzene	50.0000	0.0000	35.2315	70		20 - 124
1,2-Dichlorobenzene	50.0000	0.0000	36.4636	73		32 - 129
2,2´-oxybis(1-Chloropropan	50.0000	0.0000	36.8049	74		36 - 166
N-Nitroso-di-n-propylamine	50.0000	0.0000	33.5382	67		1 - 230
Hexachloroethane	50.0000	0.0000	33.8624	68		40 - 113
Nitrobenzene	50.0000	0.0000	38.1089	76		35 - 180
Isophorone	50.0000	0.0000	36.1574	72		21 - 196
2-Nitrophenol	50.0000	0.0000	37.2281	74		29 - 182
2,4-Dimethylphenol	50.0000	0.0000	29.4329	59		32 - 119
2,4-Dichlorophenol	50.0000	0.0000	36.4031	73		39 - 135
1,2,4-Trichlorobenzene	50.0000	0.0000	35.7577	72		44 - 142
Naphthalene	50.0000	0.0000	36.2797	73		21 - 133
Bis(2-chloroethoxy)methane	50.0000	0.0000	35.8781	72		33 - 184
Hexachlorobutadiene	50.0000	0.0000	37.0699	74		24 - 116
4-Chloro-3-methylphenol	50.0000	0.0000	37.3259	75		22 - 147
Hexachlorocyclopentadiene	50.0000	0.0000	18.1634	36		34 - 103
2,4,6-Trichlorophenol	50.0000	0.0000	41.3447	83		37 - 144
2-Chloronaphthalene	50.0000	0.0000	40.4483	81		60 - 118
Dimethylphthalate	50.0000	0.0000	43.0285	86		1 - 112
Acenaphthylene	50.0000	0.0000	40.1012	80		33 - 145
2,6-Dinitrotoluene	50.0000	0.0000	42.5091	85		50 - 158
Acenaphthene	50.0000	0.0000	40.9051	82		47 - 155
2,4-Dinitrophenol	50.0000	0.0000	22.0580	44		1 - 191
4-Nitrophenol	50.0000	0.0000	44.4274	89		1 - 132
2,4-Dinitrotoluene	50.0000	0.0000	44.3497	89		39 - 139
Diethylphthalate	50.0000	0.0000	41.4196	83		1 - 114
4-Chlorophenyl-phenylether	50.0000	0.0000	41.5277	83		25 - 158
Fluorene	50.0000	0.0000	41.4621	83		59 - 121
4,6-Dinitro-2-methylphenol	50.0000	0.0000	32.4866	65		1 - 181
N-Nitrosodiphenylamine	50.0000	0.0000	42.0659	84		48 - 121
4-Bromophenyl-phenylether	50.0000	0.0000	41.6624	83		53 - 127
Hexachlorobenzene	50.0000	0.0000	42.1585	84		1 - 152
Pentachlorophenol	50.0000	0.0000	42.4108	85		14 - 176
Phenanthrene	50.0000	0.0000	42.0960	84		54 - 120
Anthracene	50.0000	0.0000	41.0181	82		27 - 133
Di-n-butylphthalate	50.0000	0.0000	41.3343	83		1 - 118
Fluoranthene	50.0000	0.0000	42.8961	86		26 - 137
Pyrene	50.0000	0.0000	46.2417	92		52 - 115
Butylbenzylphthalate	50.0000	0.0000	44.1649	88		1 - 152
3,3´-Dichlorobenzidine	50.0000	0.0000	41.2075	82		1 - 262

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.
LCS-71896

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0801 Mod. Ref No.: SDG No.: SM0801

Lab Sample ID: LCS-71896 LCS Lot No.: CG-3109

Date Extracted: 05/28/2013 Date Analyzed (1): 05/30/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Benzo(a)anthracene	50.0000	0.0000	44.8341	90		33 - 143
Chrysene	50.0000	0.0000	47.1641	94		17 - 168
Bis(2-ethylhexyl)phthalate	50.0000	0.0000	40.7823	82		8 - 158
Di-n-octylphthalate	50.0000	0.0000	38.3882	77		4 - 146
Benzo(b)fluoranthene	50.0000	0.0000	40.7476	81		24 - 159
Benzo(k)fluoranthene	50.0000	0.0000	43.5357	87		11 - 162
Benzo(a)pyrene	50.0000	0.0000	42.1212	84		17 - 163
Indeno(1,2,3-cd)pyrene	50.0000	0.0000	44.4009	89		1 - 171
Dibenzo(a,h)anthracene	50.0000	0.0000	43.7212	87		1 - 227
Benzo(g,h,i)perylene	50.0000	0.0000	45.4499	91		1 - 219

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 54 outside limits

COMMENTS:

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-71896

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0801 Mod. Ref No.: SDG No.: SM0801

Lab Sample ID: LCSD-71896 LCS Lot No.: CG-3109

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Phenol	50.0000	33.3621	67		0		40	5 - 112
Bis(2-chloroethyl)ether	50.0000	34.2760	69		6		40	12 - 158
2-Chlorophenol	50.0000	35.6209	71		0		40	23 - 134
1,3-Dichlorobenzene	50.0000	36.4733	73		1		40	1 - 172
1,4-Dichlorobenzene	50.0000	37.2153	74		6		40	20 - 124
1,2-Dichlorobenzene	50.0000	36.7740	74		1		40	32 - 129
2,2´-oxybis(1-Chloropropan	50.0000	37.3590	75		1		40	36 - 166
N-Nitroso-di-n-propylamine	50.0000	34.8798	70		4		40	1 - 230
Hexachloroethane	50.0000	33.8565	68		0		40	40 - 113
Nitrobenzene	50.0000	38.0562	76		0		40	35 - 180
Isophorone	50.0000	34.7235	69		4		40	21 - 196
2-Nitrophenol	50.0000	35.1543	70		6		40	29 - 182
2,4-Dimethylphenol	50.0000	29.4337	59		0		40	32 - 119
2,4-Dichlorophenol	50.0000	35.4336	71		3		40	39 - 135
1,2,4-Trichlorobenzene	50.0000	35.6425	71		1		40	44 - 142
Naphthalene	50.0000	35.0230	70		4		40	21 - 133
Bis(2-chloroethoxy)methane	50.0000	34.5365	69		4		40	33 - 184
Hexachlorobutadiene	50.0000	36.5618	73		1		40	24 - 116
4-Chloro-3-methylphenol	50.0000	37.2141	74		1		40	22 - 147
Hexachlorocyclopentadiene	50.0000	17.8466	36		0		40	34 - 103
2,4,6-Trichlorophenol	50.0000	41.1093	82		1		40	37 - 144
2-Chloronaphthalene	50.0000	40.4607	81		0		40	60 - 118
Dimethylphthalate	50.0000	42.0135	84		2		40	1 - 112
Acenaphthylene	50.0000	39.8525	80		0		40	33 - 145
2,6-Dinitrotoluene	50.0000	40.8680	82		4		40	50 - 158
Acenaphthene	50.0000	39.8071	80		2		40	47 - 155
2,4-Dinitrophenol	50.0000	25.0510	50		13		40	1 - 191
4-Nitrophenol	50.0000	45.0137	90		1		40	1 - 132
2,4-Dinitrotoluene	50.0000	43.0956	86		3		40	39 - 139
Diethylphthalate	50.0000	42.8010	86		4		40	1 - 114
4-Chlorophenyl-phenylether	50.0000	40.6896	81		2		40	25 - 158
Fluorene	50.0000	40.8747	82		1		40	59 - 121
4,6-Dinitro-2-methylphenol	50.0000	33.1010	66		2		40	1 - 181
N-Nitrosodiphenylamine	50.0000	40.0073	80		5		40	48 - 121
4-Bromophenyl-phenylether	50.0000	41.1218	82		1		40	53 - 127
Hexachlorobenzene	50.0000	42.4084	85		1		40	1 - 152
Pentachlorophenol	50.0000	40.2453	80		6		40	14 - 176
Phenanthrene	50.0000	41.4060	83		1		40	54 - 120
Anthracene	50.0000	40.9479	82		0		40	27 - 133
Di-n-butylphthalate	50.0000	41.0827	82		1		40	1 - 118
Fluoranthene	50.0000	42.4465	85		1		40	26 - 137
Pyrene	50.0000	42.8054	86		7		40	52 - 115
Butylbenzylphthalate	50.0000	41.8136	84		5		40	1 - 152
3,3´-Dichlorobenzidine	50.0000	41.0548	82		0		40	1 - 262
Benzo(a)anthracene	50.0000	42.9691	86		5		40	33 - 143
Chrysene	50.0000	45.7897	92		2		40	17 - 168

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-71896

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0801 Mod. Ref No.: SDG No.: SM0801

Lab Sample ID: LCSD-71896 LCS Lot No.: CG-3109

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Bis(2-ethylhexyl)phthalate	50.0000	39.9889	80		2		40	8 - 158
Di-n-octylphthalate	50.0000	37.7898	76		1		40	4 - 146
Benzo(b)fluoranthene	50.0000	37.1369	74		9		40	24 - 159
Benzo(k)fluoranthene	50.0000	48.1268	96		10		40	11 - 162
Benzo(a)pyrene	50.0000	41.8586	84		0		40	17 - 163
Indeno(1,2,3-cd)pyrene	50.0000	44.2537	89		0		40	1 - 171
Dibenzo(a,h)anthracene	50.0000	44.0979	88		1		40	1 - 227
Benzo(g,h,i)perylene	50.0000	44.8281	90		1		40	1 - 219

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 54 outside limits

Spike Recovery: 0 out of 54 outside limits

COMMENTS:

4C - FORM IV SV

SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

MB-71896

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0801 Mod. Ref No.: SDG No.: SM0801

Lab File ID: S6B4155.D Lab Sample ID: MB-71896

Instrument ID: S6 Date Extracted: 05/28/2013

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 05/30/2013

Level: (LOW/MED) LOW Time Analyzed: 6:00

Extraction: (Type) SEPF GPC Cleanup: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	LCS-71896	LCS-71896	S6B4156.D	05/30/2013
02	LCSD-71896	LCSD-71896	S6B4157.D	05/30/2013
03	DIR. DISCHARGE 7	M0801-01B	S6B4158.D	05/30/2013

COMMENTS:

8C - FORM VIII SV-1

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0801 Mod. Ref No.: SDG No.: SM0801

GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 05/29/2013 05/29/2013

EPA Sample No.(SSTD020##) SSTD0256E Date Analyzed: 05/29/2013

Lab File ID (Standard): S6B4121A.D Time Analyzed: 18:16

Instrument ID: S6

		IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
	12 HOUR STD	30635		4.542		139063		5.594		119136		7.039	
	UPPER LIMIT	61270		5.042		278126		6.094		238272		7.539	
	LOWER LIMIT	15318		4.042		69532		5.094		59568		6.539	
	SAMPLE NO.												
01	MB-71896	46486		4.536		203601		5.594		161258		7.039	
02	LCS-71896	30988		4.542		138957		5.594		107782		7.045	
03	LCSD-71896	27425		4.536		124729		5.594		97863		7.039	
04	DIR. DISCHARGE 7	26905		4.536		121717		5.594		101805		7.039	

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8D - FORM VIII SV-2

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0801 Mod. Ref No.: SDG No.: SM0801

EPA Sample No.(SSTD020##) SSTD0256E Date Analyzed: 05/29/2013

Lab File ID (Standard): S6B4121A.D Time Analyzed: 18:16

Instrument ID: S6 GC Column: Rxi-5sil MS ID: 0.25 (mm)

		IS4 (PHN) AREA	#	RT	#	IS5 (CRY) AREA	#	RT	#	IS6 (PRY) AREA	#	RT	#
	12 HOUR STD	272619		8.267		407795		10.512		391308		11.799	
	UPPER LIMIT	545238		8.767		815590		11.012		782616		12.299	
	LOWER LIMIT	136310		7.767		203898		10.012		195654		11.299	
	SAMPLE NO.												
01	MB-71896	354596		8.267		500168		10.500		519903		11.775	
02	LCS-71896	241713		8.267		375364		10.512		393225		11.792	
03	LCSD-71896	224089		8.267		374663		10.506		393354		11.787	
04	DIR. DISCHARGE 7	239208		8.267		352938		10.512		375483		11.804	

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.

* PCB Organics *

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : LaBella Associates

Project: LaBella Monoco Oil

Laboratory Workorder / SDG #: M0801

EPA 608 PCB, 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: EPA 608 PCB

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW3510C

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 with the following exceptions. Please note that the acceptance criteria allow one surrogate recovery outside of the QC limits per column.

DIR. DISCHARGE 7 (M0801-01B), recovery is below criteria for Tetrachloro-m-xylene on rear column at 36% with criteria of (39-126) and Tetrachloro-m-xylene on front column at 36% with criteria of (39-126).

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

Replicate RPDs were within the advisory 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

No sample in this SDG were performed with manual integration.

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:_____6/3/2013_____

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.

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

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DIR. DISCHARGE 7

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0801 Mod. Ref No.: SDG No.: SM0801

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0801-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2M0377F.D/E2M0377R.D

% Moisture: Decanted: (Y/N) Date Received: 05/22/2013

Extraction: (Type) SEPF Date Extracted: 05/23/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/25/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-71844

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0801 Mod. Ref No.: SDG No.: SM0801

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-71844

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2M0372F.D/E2M0372R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 05/23/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/25/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-71844(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0801 Mod. Ref No.: SDG No.: SM0801

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-71844

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2M0373F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 05/23/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/25/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	3.8	
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	3.9	

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-71844(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0801 Mod. Ref No.: SDG No.: SM0801

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-71844

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2M0373R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 05/23/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/25/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	3.7	
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	3.7	

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
LCSD-71844(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0801 Mod. Ref No.: SDG No.: SM0801

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-71844

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2M0374F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 05/23/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/25/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	3.8	
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	4.0	

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
LCSD-71844(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0801 Mod. Ref No.: SDG No.: SM0801

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-71844

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2M0374R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 05/23/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/25/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	3.7	
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	3.7	

2Q - FORM II ARO-1

WATER AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0801 Mod. Ref No.: SDG No.: SM0801

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-71844	95		94		82		84				0
02	LCS-71844	95		92		86		89				0
03	LCSD-71844	95		92		82		91				0
04	DIR. DISCHARGE 7	36	*	36	*	33		35				2

	QC LIMITS
TCX = Tetrachloro-m-xylene	(39-126)
DCB = Decachlorobiphenyl	(17-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.05.07.A

3N - FORM III ARO-3

WATER AROCLOR LABORATORY CONTROL SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-71844

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0801 Mod. Ref No.: SDG No.: SM0801

Lab Sample ID: LCS-71844 LCS Lot No.: A072217

Date Extracted: 05/23/2013 Date Analyzed (1): 05/25/2013

Instrument ID (1): E2 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC #	QC LIMITS
Aroclor-1016	4.0000	3.7682	94	50-114
Aroclor-1260	4.0000	3.9279	98	8-127

Instrument ID (2): E2 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 05/25/2013

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC #	QC LIMITS
Aroclor-1016	4.0000	3.6735	92	50-114
Aroclor-1260	4.0000	3.6557	91	8-127

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:

som13.05.07.A

3N - FORM III ARO-3

WATER AROCLOR LABORATORY CONTROL

SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-71844

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0801 Mod. Ref No.: SDG No.: SM0801

Lab Sample ID: LCSD-71844 LCS Lot No.: A072217

Date Extracted: 05/23/2013 Date Analyzed (1): 05/25/2013

Instrument ID (1): E2 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC	#	QC LIMITS	%RPD	#	RPD LIMIT
Aroclor-1016	4.0000	3.7727	94		50-114	0		40
Aroclor-1260	4.0000	4.0059	100		8-127	2.0		40

Instrument ID (2): E2 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 05/25/2013

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC	#	QC LIMITS	%RPD	#	RPD LIMIT
Aroclor-1016	4.0000	3.7398	93		50-114	1.0		40
Aroclor-1260	4.0000	3.6987	92		8-127	1.0		40

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:

som13.05.07.A

4F - FORM IV ARO

AROCLOR METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-71844

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0801 Mod. Ref No.: SDG No.: SM0801

Lab File ID: E2M0372F.D / E2M0372R.D Lab Sample ID: MB-71844

Matrix: (SOIL/SED/WATER) WATER Extraction: (Type) SEPF Date Extracted: 05/23/2013

Sulfur Cleanup: (Y/N) Y GPC Cleanup:(Y/N) N

Acid Cleanup: (Y/N Y

Date Analyzed (1): 05/25/2013 Date Analyzed (2): 05/25/2013

Time Analyzed (1): 5:08 Time Analyzed (2): 5:08

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-71844	LCS-71844	05/25/2013	05/25/2013
02	LCSD-71844	LCSD-71844	05/25/2013	05/25/2013
03	DIR. DISCHARGE 7	M0801-01B	05/25/2013	05/25/2013

COMMENTS:

* Metals *

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : LaBella Associates

Project: LaBella Monoco Oil

Laboratory Workorder / SDG #: M0801

EPA 200.7, EPA 245.1

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: EPA 200.7, EPA 245.1

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: 200.7
Aqueous Samples were prepared following procedures in laboratory test code: SW7470A

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):

A matrix spike was not performed on any sample in this SDG.

D. Post Digestion Spike (PDS):

A post-digestion spike was not performed on any sample in this SDG.

E. Duplicate sample:

A duplicate analysis was not performed on any sample in this SDG.

F. Serial Dilution (SD):

A serial dilution was not performed on any sample in this SDG.

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: 06/04/13

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.

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

1 EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

DIR. DISCHARGE 7

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0801

Matrix (soil/water): WATER Lab Sample ID: M0801-01

Level (low/med): LOW Date Received: 05/22/2013

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	7.0	U		P
7440-38-2	Arsenic	5.2	U		P
7440-41-7	Beryllium	0.063	U		P
7440-43-9	Cadmium	0.57	B		P
7440-47-3	Chromium	1.7	B		P
7440-50-8	Copper	4.2	B		P
7439-92-1	Lead	6.8	B		P
7439-97-6	Mercury	0.030	U		CV
7440-02-0	Nickel	4.1	B		P
7782-49-2	Selenium	14.0	U		P
7440-22-4	Silver	0.75	U		P
7440-28-0	Thallium	7.0	U		P
7440-66-6	Zinc	11.4	B		P

Comments:

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LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0801

Solid LCS Source:

Aqueous LCS Source:

LCS(D) ID:
LCS-71903

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Antimony	100.0	94.40	94.4						
Arsenic	40.0	37.15	92.9						
Beryllium	50.0	52.18	104.4						
Cadmium	50.0	54.23	108.5						
Chromium	200.0	217.61	108.8						
Copper	250.0	254.09	101.6						
Lead	20.0	20.07	100.4						
Nickel	500.0	558.92	111.8						
Selenium	50.0	49.78	99.6						
Silver	50.0	55.70	111.4						
Thallium	50.0	50.94	101.9						
Zinc	500.0	552.48	110.5						

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LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0801

Solid LCS Source:

Aqueous LCS Source:

LCS(D) ID:
LCS-71947

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Mercury	4.6	4.14	90.0						

U.S. EPA - CLP

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LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0801

Solid LCS Source:

Aqueous LCS Source:

LCS(D) ID:
LCSD-71903

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Antimony	100.0	95.05	95.1						
Arsenic	40.0	41.24	103.1						
Beryllium	50.0	51.25	102.5						
Cadmium	50.0	54.00	108.0						
Chromium	200.0	212.01	106.0						
Copper	250.0	249.02	99.6						
Lead	20.0	19.81	99.1						
Nickel	500.0	542.67	108.5						
Selenium	50.0	53.68	107.4						
Silver	50.0	54.19	108.4						
Thallium	50.0	49.96	99.9						
Zinc	500.0	538.98	107.8						

U.S. EPA - CLP

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LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0801

Solid LCS Source:

Aqueous LCS Source:

LCS(D) ID:
LCSD-71947

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Mercury	4.6	4.19	91.1						

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0801

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-71947**

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

FIMS2_130531B

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
Analyte		C	05/31/13 12:11	C		C		C		C	M
Mercury	0.030	U	0.030	U					0.030	U	CV

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0801

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-71903**

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

OPTIMA3_130529C

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 05/29/13 11:13	C	05/29/13 11:46	C		C	Preparation Blank	C	M
Antimony	7.0	U	7.3	B	7.0	U			7.000	U	P
Arsenic	5.2	U	5.2	U	5.2	U			5.200	U	P
Beryllium	0.1	U	0.1	U	0.1	U			0.063	U	P
Cadmium	0.2	U	0.3	B	0.3	B			0.352	B	P
Chromium	0.4	U	0.4	U	0.4	U			0.390	U	P
Copper	1.1	U	1.1	U	1.1	U			1.100	U	P
Lead	2.4	U	2.4	U	2.4	U			2.400	U	P
Nickel	0.8	U	0.8	U	0.8	U			0.810	U	P
Selenium	14.0	U	14.0	U	14.0	U			14.000	U	P
Silver	1.3	B	1.4	B	1.3	B			0.750	U	P
Thallium	7.0	U	7.0	U	7.0	U			7.000	U	P
Zinc	2.0	B	2.8	B	1.7	B			1.000	U	P

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

06/26/2013

Client: LaBella Associates
Client Sample ID: DIR. DISCHARGE 8
Lab ID: M1027-01
Project: LaBella Monoco Oil
Collection Date: 06/21/13 14:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
EPA 200.7 -- Metals by ICP Analysis							**E200.7**
Antimony	ND		20	µg/L	1	06/25/2013 12:02	72403
Arsenic	ND		20	µg/L	1	06/25/2013 10:05	72403
Beryllium	ND		5.0	µg/L	1	06/25/2013 10:05	72403
Cadmium	1.2	J	5.0	µg/L	1	06/25/2013 10:05	72403
Chromium	0.45	J	20	µg/L	1	06/25/2013 10:05	72403
Copper	14	J	30	µg/L	1	06/25/2013 10:05	72403
Lead	2.7	J	10	µg/L	1	06/25/2013 10:05	72403
Nickel	1.7	J	50	µg/L	1	06/25/2013 10:05	72403
Selenium	ND		30	µg/L	1	06/25/2013 10:05	72403
Silver	ND		30	µg/L	1	06/25/2013 10:05	72403
Thallium	ND		20	µg/L	1	06/25/2013 10:05	72403
Zinc	20	J	50	µg/L	1	06/25/2013 10:05	72403
EPA 245.1 -- Mercury by FIMS							**E245.1**
Mercury	ND		0.20	µg/L	1	06/25/2013 12:27	72400

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

06/26/2013

Client: LaBella Associates
Client Sample ID: DIR. DISCHARGE 8
Lab ID: M1027-01
Project: LaBella Monoco Oil
Collection Date: 06/21/13 14:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
EPA 608 PCB -- PCB by GC-ECD							**E608_PCB**
Aroclor-1016	ND		1.0	µg/L	1	06/26/2013 5:55	72406
Aroclor-1221	ND		1.0	µg/L	1	06/26/2013 5:55	72406
Aroclor-1232	ND		1.0	µg/L	1	06/26/2013 5:55	72406
Aroclor-1242	ND		1.0	µg/L	1	06/26/2013 5:55	72406
Aroclor-1248	ND		1.0	µg/L	1	06/26/2013 5:55	72406
Aroclor-1254	ND		1.0	µg/L	1	06/26/2013 5:55	72406
Aroclor-1260	ND		1.0	µg/L	1	06/26/2013 5:55	72406
Surrogate: Tetrachloro-m-xylene	81.3		39-126	%REC	1	06/26/2013 5:55	72406
Surrogate: Decachlorobiphenyl	72.2		17-125	%REC	1	06/26/2013 5:55	72406

PRELIMINARY: Here are the preliminary results for your project submitted to Mitkem Laboratories. Please note: Data contained within this report have undergo preliminary review but may be subject to change pending final QA/QC review.

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

06/26/2013

Client: LaBella Associates
Client Sample ID: DIR. DISCHARGE 8
Lab ID: M1027-01
Project: LaBella Monoco Oil
Collection Date: 06/21/13 14:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
EPA 625 -- SVOA by GC-MS							**E625**
Phenol	ND		10	µg/L	1	06/25/2013 21:38	72395
Bis(2-chloroethyl)ether	ND		10	µg/L	1	06/25/2013 21:38	72395
2-Chlorophenol	ND		10	µg/L	1	06/25/2013 21:38	72395
1,3-Dichlorobenzene	ND		10	µg/L	1	06/25/2013 21:38	72395
1,4-Dichlorobenzene	ND		10	µg/L	1	06/25/2013 21:38	72395
1,2-Dichlorobenzene	ND		10	µg/L	1	06/25/2013 21:38	72395
2,2´-oxybis(1-Chloropropane)	ND		10	µg/L	1	06/25/2013 21:38	72395
N-Nitroso-di-n-propylamine	ND		10	µg/L	1	06/25/2013 21:38	72395
Hexachloroethane	ND		10	µg/L	1	06/25/2013 21:38	72395
Nitrobenzene	ND		10	µg/L	1	06/25/2013 21:38	72395
Isophorone	ND		10	µg/L	1	06/25/2013 21:38	72395
2-Nitrophenol	ND		10	µg/L	1	06/25/2013 21:38	72395
2,4-Dimethylphenol	ND		10	µg/L	1	06/25/2013 21:38	72395
2,4-Dichlorophenol	ND		10	µg/L	1	06/25/2013 21:38	72395
1,2,4-Trichlorobenzene	ND		10	µg/L	1	06/25/2013 21:38	72395
Naphthalene	ND		10	µg/L	1	06/25/2013 21:38	72395
Bis(2-chloroethoxy)methane	ND		10	µg/L	1	06/25/2013 21:38	72395
Hexachlorobutadiene	ND		10	µg/L	1	06/25/2013 21:38	72395
4-Chloro-3-methylphenol	ND		10	µg/L	1	06/25/2013 21:38	72395
Hexachlorocyclopentadiene	ND		10	µg/L	1	06/25/2013 21:38	72395
2,4,6-Trichlorophenol	ND		10	µg/L	1	06/25/2013 21:38	72395
2-Chloronaphthalene	ND		10	µg/L	1	06/25/2013 21:38	72395
Dimethylphthalate	ND		10	µg/L	1	06/25/2013 21:38	72395
Acenaphthylene	ND		10	µg/L	1	06/25/2013 21:38	72395
2,6-Dinitrotoluene	ND		10	µg/L	1	06/25/2013 21:38	72395
Acenaphthene	ND		10	µg/L	1	06/25/2013 21:38	72395
2,4-Dinitrophenol	ND		20	µg/L	1	06/25/2013 21:38	72395
4-Nitrophenol	ND		20	µg/L	1	06/25/2013 21:38	72395
2,4-Dinitrotoluene	ND		10	µg/L	1	06/25/2013 21:38	72395
Diethylphthalate	ND		10	µg/L	1	06/25/2013 21:38	72395
4-Chlorophenyl-phenylether	ND		10	µg/L	1	06/25/2013 21:38	72395
Fluorene	ND		10	µg/L	1	06/25/2013 21:38	72395
4,6-Dinitro-2-methylphenol	ND		20	µg/L	1	06/25/2013 21:38	72395
N-Nitrosodiphenylamine	ND		10	µg/L	1	06/25/2013 21:38	72395
4-Bromophenyl-phenylether	ND		10	µg/L	1	06/25/2013 21:38	72395
Hexachlorobenzene	ND		10	µg/L	1	06/25/2013 21:38	72395
Pentachlorophenol	ND		20	µg/L	1	06/25/2013 21:38	72395
Phenanthrene	ND		10	µg/L	1	06/25/2013 21:38	72395
Anthracene	ND		10	µg/L	1	06/25/2013 21:38	72395

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

06/26/2013

Client: LaBella Associates
Client Sample ID: DIR. DISCHARGE 8
Lab ID: M1027-01
Project: LaBella Monoco Oil
Collection Date: 06/21/13 14:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
EPA 625 -- SVOA by GC-MS							**E625**
Di-n-butylphthalate	ND		10	µg/L	1	06/25/2013 21:38	72395
Fluoranthene	ND		10	µg/L	1	06/25/2013 21:38	72395
Pyrene	ND		10	µg/L	1	06/25/2013 21:38	72395
Butylbenzylphthalate	ND		10	µg/L	1	06/25/2013 21:38	72395
3,3´-Dichlorobenzidine	ND		10	µg/L	1	06/25/2013 21:38	72395
Benzo(a)anthracene	ND		10	µg/L	1	06/25/2013 21:38	72395
Chrysene	ND		10	µg/L	1	06/25/2013 21:38	72395
Bis(2-ethylhexyl)phthalate	ND		10	µg/L	1	06/25/2013 21:38	72395
Di-n-octylphthalate	ND		10	µg/L	1	06/25/2013 21:38	72395
Benzo(b)fluoranthene	ND		10	µg/L	1	06/25/2013 21:38	72395
Benzo(k)fluoranthene	ND		10	µg/L	1	06/25/2013 21:38	72395
Benzo(a)pyrene	ND		10	µg/L	1	06/25/2013 21:38	72395
Indeno(1,2,3-cd)pyrene	ND		10	µg/L	1	06/25/2013 21:38	72395
Dibenzo(a,h)anthracene	ND		10	µg/L	1	06/25/2013 21:38	72395
Benzo(g,h,i)perylene	ND		10	µg/L	1	06/25/2013 21:38	72395
Surrogate: Nitrobenzene-d5	72.4		40-110	%REC	1	06/25/2013 21:38	72395
Surrogate: 2-Fluorobiphenyl	72.6		50-110	%REC	1	06/25/2013 21:38	72395
Surrogate: Terphenyl-d14	91.7		50-135	%REC	1	06/25/2013 21:38	72395
Surrogate: Phenol-d5	16.2		10-115	%REC	1	06/25/2013 21:38	72395
Surrogate: 2-Fluorophenol	24.4		20-110	%REC	1	06/25/2013 21:38	72395
Surrogate: 2,4,6-Tribromophenol	94.5		40-125	%REC	1	06/25/2013 21:38	72395

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

06/26/2013

Client: LaBella Associates
Client Sample ID: DIR. DISCHARGE 8
Lab ID: M1027-01
Project: LaBella Monoco Oil
Collection Date: 06/21/13 14:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
EPA 624 -- VOC 624 by GC-MS							**E624**
Chloromethane	ND		5.0	ug/L	1	06/25/2013 21:00	72441
Vinyl chloride	ND		5.0	ug/L	1	06/25/2013 21:00	72441
Bromomethane	ND		5.0	ug/L	1	06/25/2013 21:00	72441
Chloroethane	ND		5.0	ug/L	1	06/25/2013 21:00	72441
Trichlorofluoromethane	ND		5.0	ug/L	1	06/25/2013 21:00	72441
1,1-Dichloroethene	ND		5.0	ug/L	1	06/25/2013 21:00	72441
Methylene chloride	ND		5.0	ug/L	1	06/25/2013 21:00	72441
trans-1,2-Dichloroethene	ND		5.0	ug/L	1	06/25/2013 21:00	72441
1,1-Dichloroethane	ND		5.0	ug/L	1	06/25/2013 21:00	72441
cis-1,2-Dichloroethene	ND		5.0	ug/L	1	06/25/2013 21:00	72441
Chloroform	ND		5.0	ug/L	1	06/25/2013 21:00	72441
1,1,1-Trichloroethane	ND		5.0	ug/L	1	06/25/2013 21:00	72441
Carbon tetrachloride	ND		5.0	ug/L	1	06/25/2013 21:00	72441
1,2-Dichloroethane	ND		5.0	ug/L	1	06/25/2013 21:00	72441
Benzene	ND		5.0	ug/L	1	06/25/2013 21:00	72441
Trichloroethene	ND		5.0	ug/L	1	06/25/2013 21:00	72441
1,2-Dichloropropane	ND		5.0	ug/L	1	06/25/2013 21:00	72441
Bromodichloromethane	ND		5.0	ug/L	1	06/25/2013 21:00	72441
cis-1,3-Dichloropropene	ND		5.0	ug/L	1	06/25/2013 21:00	72441
Toluene	ND		5.0	ug/L	1	06/25/2013 21:00	72441
trans-1,3-Dichloropropene	ND		5.0	ug/L	1	06/25/2013 21:00	72441
1,1,2-Trichloroethane	ND		5.0	ug/L	1	06/25/2013 21:00	72441
Tetrachloroethene	ND		5.0	ug/L	1	06/25/2013 21:00	72441
Dibromochloromethane	ND		5.0	ug/L	1	06/25/2013 21:00	72441
Chlorobenzene	ND		5.0	ug/L	1	06/25/2013 21:00	72441
Ethylbenzene	ND		5.0	ug/L	1	06/25/2013 21:00	72441
m,p-Xylene	ND		5.0	ug/L	1	06/25/2013 21:00	72441
o-Xylene	ND		5.0	ug/L	1	06/25/2013 21:00	72441
Xylene (Total)	ND		5.0	ug/L	1	06/25/2013 21:00	72441
Bromoform	ND		5.0	ug/L	1	06/25/2013 21:00	72441
1,1,2,2-Tetrachloroethane	ND		5.0	ug/L	1	06/25/2013 21:00	72441
1,3-Dichlorobenzene	ND		5.0	ug/L	1	06/25/2013 21:00	72441
1,4-Dichlorobenzene	ND		5.0	ug/L	1	06/25/2013 21:00	72441
1,2-Dichlorobenzene	ND		5.0	ug/L	1	06/25/2013 21:00	72441
2-Chloroethyl vinyl ether	ND		5.0	ug/L	1	06/25/2013 21:00	72441
Acrolein	ND		25	ug/L	1	06/25/2013 21:00	72441
Acrylonitrile	ND		5.0	ug/L	1	06/25/2013 21:00	72441
Surrogate: Dibromofluoromethane	100		85-115	%REC	1	06/25/2013 21:00	72441
Surrogate: 1,2-Dichloroethane-d4	92.2		70-120	%REC	1	06/25/2013 21:00	72441

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

06/26/2013

Client: LaBella Associates
Client Sample ID: DIR. DISCHARGE 8
Lab ID: M1027-01
Project: LaBella Monoco Oil
Collection Date: 06/21/13 14:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
EPA 624 -- VOC 624 by GC-MS							**E624**
Surrogate: Toluene-d8	101		85-120	%REC	1	06/25/2013 21:00	72441
Surrogate: Bromofluorobenzene	95.6		75-120	%REC	1	06/25/2013 21:00	72441

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Report Date:
08-Aug-13 16:07

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

LaBella Associates
300 State Street, Suite 201
Rochester, NY 14614

Work Order: M1284
Project : LaBella Monoco Oil
Project #:

Attn: Dan Noll

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M1284-01	DIR DISCHARGE9	Aqueous	26-Jul-13 10:30	27-Jul-13 10:16

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 requirments have been meet.

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.

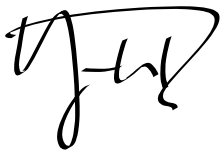
Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

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

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:



Yihai Ding
Laboratory Director

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* Data Summary Pack *

175 Metro Center Boulevard · Warwick, RI 02886-1755 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

New York State Department of Environmental Conservation
Sample Identification and Analytical Requirements Summary

Project Name : LaBella Monoco Oil **SDG :** M1284

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
DIR DISCHARGE9	M1284-01	E624	E625	E608_PCB	E200.7	
DIR DISCHARGE9	M1284-01				E245.1	

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

New York State Department of Environmental Conservation
Sample Preparation and Analysis Summary MSVOA

Project Name : LaBella Monoco Oil **SDG :** M1284

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
E624					
M1284-01A	AQ	7/26/2013	7/27/2013	NA	7/31/2013

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

New York State Department of Environmental Conservation
Sample Preparation and Analysis Summary MSSEMI

Project Name : LaBella Monoco Oil **SDG :** M1284

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
E625					
M1284-01B	AQ	7/26/2013	7/27/2013	8/1/2013	8/5/2013

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

New York State Department of Environmental Conservation
Sample Preparation and Analysis Summary GC*

Project Name : LaBella Monoco Oil **SDG :** M1284

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
E608_PCB					
M1284-01B	AQ	7/26/2013	7/27/2013	8/1/2013	8/7/2013

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

New York State Department of Environmental Conservation
Sample Preparation and Analysis Summary MSVOA

Project Name : LaBella Monoco Oil **SDG :** M1284

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
E624					
M1284-01A	AQ	E624	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 : LaBella Monoco Oil **SDG :** M1284

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
E625					
M1284-01B	AQ	E625	3510C	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 : LaBella Monoco Oil **SDG :** M1284

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
E608_PCB					
M1284-01B	AQ	E608_PCB	3510C	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 : LaBella Monoco Oil **SDG :** M1284

Laboratory Sample ID	Matrix	Metals Requested	Date Received By Lab	Date Analyzed
E200.7				
M1284-01C	AQ	E200.7	7/27/2013	8/1/2013
E245.1				
M1284-01C	AQ	E245.1	7/27/2013	8/2/2013

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

WorkOrder: M1284

Client ID: LABELLA
Project: LaBella Monoco Oil
WO Name: LaBella Monoco Oil
Location: LABELLA_MONOCO-OIL,
Comments: No hard copy

Case:
SDG:
PO: 210259

HC Due: 08/08/13
Fax Due:
Fax Report: ☐

Report Level: ASP-B
Special Program:
EDD: ENVIROINSITE_1
EQUIIS_4_NYSDEC

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M1284-01A	DIR DISCHARGE9	07/26/2013 10:30	07/27/2013	Aqueous	E624	/					VOA
M1284-01B	DIR DISCHARGE9	07/26/2013 10:30	07/27/2013	Aqueous	E608_PCB	/					E2
M1284-01B	DIR DISCHARGE9	07/26/2013 10:30	07/27/2013	Aqueous	E625	/					E2
M1284-01C	DIR DISCHARGE9	07/26/2013 10:30	07/27/2013	Aqueous	E200.7	/ PP13_200				Y	M3
M1284-01C	DIR DISCHARGE9	07/26/2013 10:30	07/27/2013	Aqueous	E245.1	/ PP13_200					M3

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

07/29/2013 10:10 Lab Client Rep: Agnes R Huntley

* Volatiles *

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : LaBella Associates

Project: LaBella Monoco Oil

Laboratory Workorder / SDG #: M1284

EPA 624, VOC 624 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: EPA 624

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW5030B

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: V1
Instrument Type: GCMS-VOA

Description: HP5890 II / HP5972
Manufacturer: Hewlett-Packard
Model: 5890 / 5972

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:

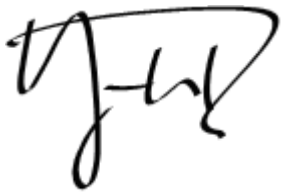
No other unusual occurrences were noted during sample analysis.

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.



Signed:_____ _____

Date:_____8/8/2013_____

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.

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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DIR DISCHARGE9

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1284 Mod. Ref No.: SDG No.: SM1284

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M1284-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M3278.D

Level: (TRACE/LOW/MED) LOW Date Received: 07/27/2013

% Moisture: not dec. Date Analyzed: 07/31/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
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
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	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
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	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
127-18-4	Tetrachloroethene	5.0	U
124-48-1	Dibromochloromethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	2.4	J
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	2.4	J
75-25-2	Bromoform	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
110-75-8	2-Chloroethyl vinyl ether	5.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DIR DISCHARGE9

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1284 Mod. Ref No.: SDG No.: SM1284

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M1284-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M3278.D

Level: (TRACE/LOW/MED) LOW Date Received: 07/27/2013

% Moisture: not dec. Date Analyzed: 07/31/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
107-02-8	Acrolein	25	U
107-13-1	Acrylonitrile	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-72987

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1284 Mod. Ref No.: SDG No.: SM1284

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-72987

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M3254.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 07/31/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
75-09-2	Methylene chloride	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
127-18-4	Tetrachloroethene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
179601-23-1	m,p-Xylene	1.0	U
95-47-6	o-Xylene	1.0	U
1330-20-7	Xylene (Total)	5.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
110-75-8	2-Chloroethyl vinyl ether	1.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-72987

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1284 Mod. Ref No.: SDG No.: SM1284

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-72987

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M3254.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 07/31/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
107-02-8	Acrolein	25	U
107-13-1	Acrylonitrile	1.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-72987

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1284 Mod. Ref No.: SDG No.: SM1284

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-72987

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M3252.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 07/31/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	48	
75-01-4	Vinyl chloride	39	
74-83-9	Bromomethane	47	
75-00-3	Chloroethane	41	
75-69-4	Trichlorofluoromethane	37	
75-35-4	1,1-Dichloroethene	36	
75-09-2	Methylene chloride	45	
156-60-5	trans-1,2-Dichloroethene	40	
75-34-3	1,1-Dichloroethane	47	
156-59-2	cis-1,2-Dichloroethene	43	
67-66-3	Chloroform	47	
71-55-6	1,1,1-Trichloroethane	44	
56-23-5	Carbon tetrachloride	41	
107-06-2	1,2-Dichloroethane	46	
71-43-2	Benzene	45	
79-01-6	Trichloroethene	43	
78-87-5	1,2-Dichloropropane	47	
75-27-4	Bromodichloromethane	48	
10061-01-5	cis-1,3-Dichloropropene	47	
108-88-3	Toluene	45	
10061-02-6	trans-1,3-Dichloropropene	48	
79-00-5	1,1,2-Trichloroethane	45	
127-18-4	Tetrachloroethene	48	
124-48-1	Dibromochloromethane	49	
108-90-7	Chlorobenzene	45	
100-41-4	Ethylbenzene	44	
179601-23-1	m,p-Xylene	90	
95-47-6	o-Xylene	45	
1330-20-7	Xylene (Total)	140	
75-25-2	Bromoform	47	
79-34-5	1,1,2,2-Tetrachloroethane	47	
541-73-1	1,3-Dichlorobenzene	45	
106-46-7	1,4-Dichlorobenzene	47	
95-50-1	1,2-Dichlorobenzene	47	
110-75-8	2-Chloroethyl vinyl ether	51	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-72987

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1284 Mod. Ref No.: SDG No.: SM1284

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-72987

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M3252.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 07/31/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
107-02-8	Acrolein	220	
107-13-1	Acrylonitrile	47	

2B - FORM II VOA-2

WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1284 Mod. Ref No.: SDG No.: SM1284

Level: (TRACE or LOW) LOW

	CLIENT SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-72987	105	105	99	102				0
02	MB-72987	101	95	99	101				0
03	DIR DISCHARGE9	100	99	101	98				0

		QC LIMITS
VDMC1	(DBFM) Dibromofluoromethane	(85-115)
VDMC2	(DCE) = 1,2-Dichloroethane-d4	(70-120)
VDMC3	(TOL) = Toluene-d8	(85-120)
VDMC4	(BFB) = Bromofluorobenzene	(75-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

som13.07.22.A

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.
LCS-72987

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1284 Mod. Ref No.: SDG No.: SM1284

Lab Sample ID: LCS-72987 LCS Lot No.:

Date Extracted: 07/31/2013 Date Analyzed (1): 07/31/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Chloromethane	50.0000	0.0000	48.1631	96		1 - 273
Vinyl chloride	50.0000	0.0000	38.7784	78		1 - 251
Bromomethane	50.0000	0.0000	46.8033	94		1 - 242
Chloroethane	50.0000	0.0000	41.1583	82		14 - 230
Trichlorofluoromethane	50.0000	0.0000	37.3756	75		17 - 181
1,1-Dichloroethene	50.0000	0.0000	36.4565	73		1 - 234
Methylene chloride	50.0000	0.0000	45.1236	90		1 - 221
trans-1,2-Dichloroethene	50.0000	0.0000	40.2522	81		54 - 156
1,1-Dichloroethane	50.0000	0.0000	46.7940	94		59 - 155
cis-1,2-Dichloroethene	50.0000	0.0000	43.3742	87		83 - 120
Chloroform	50.0000	0.0000	47.2949	95		51 - 138
1,1,1-Trichloroethane	50.0000	0.0000	44.1480	88		52 - 162
Carbon tetrachloride	50.0000	0.0000	40.9673	82		70 - 140
1,2-Dichloroethane	50.0000	0.0000	46.0654	92		49 - 155
Benzene	50.0000	0.0000	45.3607	91		37 - 151
Trichloroethene	50.0000	0.0000	43.2435	86		71 - 157
1,2-Dichloropropane	50.0000	0.0000	46.7640	94		1 - 210
Bromodichloromethane	50.0000	0.0000	47.5698	95		35 - 155
cis-1,3-Dichloropropene	50.0000	0.0000	47.3929	95		1 - 227
Toluene	50.0000	0.0000	45.3497	91		47 - 150
trans-1,3-Dichloropropene	50.0000	0.0000	48.1269	96		17 - 183
1,1,2-Trichloroethane	50.0000	0.0000	44.7147	89		52 - 150
Tetrachloroethene	50.0000	0.0000	48.2242	96		64 - 148
Dibromochloromethane	50.0000	0.0000	49.0226	98		53 - 149
Chlorobenzene	50.0000	0.0000	44.9377	90		37 - 150
Ethylbenzene	50.0000	0.0000	43.8569	88		37 - 162
m,p-Xylene	100.0000	0.0000	89.9621	90		70 - 130
o-Xylene	50.0000	0.0000	45.3349	91		70 - 130
Xylene (Total)	150.0000	0.0000	135.2969	90		81 - 121
Bromoform	50.0000	0.0000	47.1839	94		45 - 169
1,1,2,2-Tetrachloroethane	50.0000	0.0000	47.2143	94		46 - 157
1,3-Dichlorobenzene	50.0000	0.0000	45.3149	91		59 - 156
1,4-Dichlorobenzene	50.0000	0.0000	47.0592	94		18 - 190
1,2-Dichlorobenzene	50.0000	0.0000	47.1883	94		18 - 190
2-Chloroethyl vinyl ether	50.0000	0.0000	51.2459	102		1 - 305
Acrolein	250.0000	0.0000	215.9564	86		12 - 133
Acrylonitrile	50.0000	0.0000	47.4140	95		45 - 172

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 37 outside limits

3 - FORM III

WATER LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.

LCS-72987

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1284 Mod. Ref No.: SDG No.: SM1284

Lab Sample ID: LCS-72987 LCS Lot No.:

Date Extracted: 07/31/2013 Date Analyzed (1): 07/31/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.

COMMENTS:

4A - FORM IV VOA

VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

MB-72987

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1284 Mod. Ref No.: SDG No.: SM1284

Lab File ID: V1M3254.D Lab Sample ID: MB-72987

Instrument ID: V1

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 07/31/2013

Level: (TRACE or LOW/MED) LOW Time Analyzed: 13:41

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-72987	LCS-72987	V1M3252.D	12:54
02	DIR DISCHARGE9	M1284-01A	V1M3278.D	23:04

COMMENTS:

som13.07.22.A

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1284 Mod. Ref No.: SDG No.: SM1284

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 07/31/2013 07/31/2013

EPA Sample No.(VSTD#####): VSTD0501H Date Analyzed: 07/31/2013

Lab File ID (Standard): V1M3251.D Time Analyzed: 12:31

Instrument ID: V1 Heated Purge: (Y/N) N

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	115897		4.534		87498		7.409		41949		9.979	
	UPPER LIMIT	231794		5.034		174996		7.909		83898		10.479	
	LOWER LIMIT	57949		4.034		43749		6.909		20975		9.479	
	SAMPLE NO.												
01	LCS-72987	111643		4.540		86388		7.415		42209		9.975	
02	MB-72987	116306		4.533		86386		7.408		40172		9.978	
03	DIR DISCHARGE9	121021		4.529		88062		7.414		42691		9.974	

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.

* Semivolatile Organics *

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : LaBella Associates

Project: LaBella Monoco Oil

Laboratory Workorder / SDG #: M1284

EPA 625, 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: EPA 625

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW3510C

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: S3
Instrument Type: GCMS-SEMI

Description: HP6890 / HP5973
Manufacturer: Hewlett-Packard
Model: 6890 / 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.

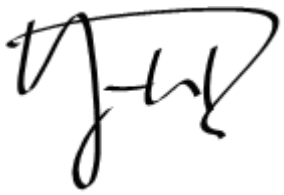
G. Samples:

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.



Signed:_____ _____

Date:_____8/8/2013_____

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.

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

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DIR DISCHARGE9

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1284 Mod. Ref No.: SDG No.: SM1284

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M1284-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I6074.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received: 07/27/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 08/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 08/05/2013

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
108-95-2	Phenol	10	U
111-44-4	Bis(2-chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
108-60-1	2,2´-oxybis(1-Chloropropane)	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
111-91-1	Bis(2-chloroethoxy)methane	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DIR DISCHARGE9

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1284 Mod. Ref No.: SDG No.: SM1284

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M1284-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I6074.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received: 07/27/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 08/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 08/05/2013

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3´-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-72993

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1284 Mod. Ref No.: SDG No.: SM1284

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-72993

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I6071.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 08/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 08/05/2013

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
108-95-2	Phenol	10	U
111-44-4	Bis(2-chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
108-60-1	2,2´-oxybis(1-Chloropropane)	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
111-91-1	Bis(2-chloroethoxy)methane	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-72993

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1284 Mod. Ref No.: SDG No.: SM1284

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-72993

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I6071.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 08/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 08/05/2013

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3´-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-72993

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1284 Mod. Ref No.: SDG No.: SM1284

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-72993

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I6072.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 08/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 08/05/2013

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
108-95-2	Phenol	44	
111-44-4	Bis(2-chloroethyl)ether	45	
95-57-8	2-Chlorophenol	44	
541-73-1	1,3-Dichlorobenzene	46	
106-46-7	1,4-Dichlorobenzene	45	
95-50-1	1,2-Dichlorobenzene	46	
108-60-1	2,2´-oxybis(1-Chloropropane)	43	
621-64-7	N-Nitroso-di-n-propylamine	45	
67-72-1	Hexachloroethane	43	
98-95-3	Nitrobenzene	44	
78-59-1	Isophorone	44	
88-75-5	2-Nitrophenol	45	
105-67-9	2,4-Dimethylphenol	47	
120-83-2	2,4-Dichlorophenol	44	
120-82-1	1,2,4-Trichlorobenzene	45	
91-20-3	Naphthalene	45	
111-91-1	Bis(2-chloroethoxy)methane	44	
87-68-3	Hexachlorobutadiene	46	
59-50-7	4-Chloro-3-methylphenol	44	
77-47-4	Hexachlorocyclopentadiene	50	
88-06-2	2,4,6-Trichlorophenol	49	
91-58-7	2-Chloronaphthalene	48	
131-11-3	Dimethylphthalate	47	
208-96-8	Acenaphthylene	47	
606-20-2	2,6-Dinitrotoluene	47	
83-32-9	Acenaphthene	47	
51-28-5	2,4-Dinitrophenol	49	
100-02-7	4-Nitrophenol	41	
121-14-2	2,4-Dinitrotoluene	47	
84-66-2	Diethylphthalate	47	
7005-72-3	4-Chlorophenyl-phenylether	48	
86-73-7	Fluorene	48	
534-52-1	4,6-Dinitro-2-methylphenol	50	
86-30-6	N-Nitrosodiphenylamine	47	
101-55-3	4-Bromophenyl-phenylether	48	
118-74-1	Hexachlorobenzene	50	

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-72993

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1284 Mod. Ref No.: SDG No.: SM1284

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-72993

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I6072.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 08/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 08/05/2013

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
87-86-5	Pentachlorophenol	54	
85-01-8	Phenanthrene	47	
120-12-7	Anthracene	47	
84-74-2	Di-n-butylphthalate	47	
206-44-0	Fluoranthene	47	
129-00-0	Pyrene	50	
85-68-7	Butylbenzylphthalate	48	
91-94-1	3,3´-Dichlorobenzidine	48	
56-55-3	Benzo(a)anthracene	49	
218-01-9	Chrysene	50	
117-81-7	Bis(2-ethylhexyl)phthalate	47	
117-84-0	Di-n-octylphthalate	45	
205-99-2	Benzo(b)fluoranthene	49	
207-08-9	Benzo(k)fluoranthene	48	
50-32-8	Benzo(a)pyrene	47	
193-39-5	Indeno(1,2,3-cd)pyrene	47	
53-70-3	Dibenzo(a,h)anthracene	48	
191-24-2	Benzo(g,h,i)perylene	48	

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCSD-72993

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1284 Mod. Ref No.: SDG No.: SM1284

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-72993

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I6073.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 08/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 08/05/2013

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
108-95-2	Phenol	43	
111-44-4	Bis(2-chloroethyl)ether	43	
95-57-8	2-Chlorophenol	43	
541-73-1	1,3-Dichlorobenzene	44	
106-46-7	1,4-Dichlorobenzene	44	
95-50-1	1,2-Dichlorobenzene	44	
108-60-1	2,2´-oxybis(1-Chloropropane)	41	
621-64-7	N-Nitroso-di-n-propylamine	43	
67-72-1	Hexachloroethane	42	
98-95-3	Nitrobenzene	43	
78-59-1	Isophorone	42	
88-75-5	2-Nitrophenol	43	
105-67-9	2,4-Dimethylphenol	46	
120-83-2	2,4-Dichlorophenol	43	
120-82-1	1,2,4-Trichlorobenzene	44	
91-20-3	Naphthalene	44	
111-91-1	Bis(2-chloroethoxy)methane	42	
87-68-3	Hexachlorobutadiene	45	
59-50-7	4-Chloro-3-methylphenol	42	
77-47-4	Hexachlorocyclopentadiene	48	
88-06-2	2,4,6-Trichlorophenol	45	
91-58-7	2-Chloronaphthalene	46	
131-11-3	Dimethylphthalate	45	
208-96-8	Acenaphthylene	44	
606-20-2	2,6-Dinitrotoluene	44	
83-32-9	Acenaphthene	45	
51-28-5	2,4-Dinitrophenol	45	
100-02-7	4-Nitrophenol	39	
121-14-2	2,4-Dinitrotoluene	46	
84-66-2	Diethylphthalate	46	
7005-72-3	4-Chlorophenyl-phenylether	46	
86-73-7	Fluorene	46	
534-52-1	4,6-Dinitro-2-methylphenol	49	
86-30-6	N-Nitrosodiphenylamine	45	
101-55-3	4-Bromophenyl-phenylether	47	
118-74-1	Hexachlorobenzene	48	

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCSD-72993

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1284 Mod. Ref No.: SDG No.: SM1284

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-72993

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I6073.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 08/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 08/05/2013

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
87-86-5	Pentachlorophenol	52	
85-01-8	Phenanthrene	46	
120-12-7	Anthracene	46	
84-74-2	Di-n-butylphthalate	45	
206-44-0	Fluoranthene	46	
129-00-0	Pyrene	49	
85-68-7	Butylbenzylphthalate	46	
91-94-1	3,3´-Dichlorobenzidine	46	
56-55-3	Benzo(a)anthracene	49	
218-01-9	Chrysene	48	
117-81-7	Bis(2-ethylhexyl)phthalate	46	
117-84-0	Di-n-octylphthalate	45	
205-99-2	Benzo(b)fluoranthene	48	
207-08-9	Benzo(k)fluoranthene	48	
50-32-8	Benzo(a)pyrene	46	
193-39-5	Indeno(1,2,3-cd)pyrene	46	
53-70-3	Dibenzo(a,h)anthracene	47	
191-24-2	Benzo(g,h,i)perylene	47	

2H - FORM II SV-2

WATER SEMIVOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1284 Mod. Ref No.: SDG No.: SM1284

	CLIENT SAMPLE NO.	SDMC1 (NBZ) #	SDMC2 (FBP) #	SDMC3 (TPH) #	SDMC4 (PHL) #	SDMC5 (2FP) #	SDMC6 (TBP) #			TOT OUT
01	MB-72993	83	88	110	83	84	100			0
02	LCS-72993	88	96	112	89	86	112			0
03	LCSD-72993	84	89	107	84	82	107			0
04	DIR DISCHARGE9	84	87	113	19	25	108			0

			QC LIMITS
SDMC1	(NBZ)	= Nitrobenzene-d5	(40-110)
SDMC2	(FBP)	= 2-Fluorobiphenyl	(50-110)
SDMC3	(TPH)	= Terphenyl-d14	(50-135)
SDMC4	(PHL)	= Phenol-d5	(10-115)
SDMC5	(2FP)	= 2-Fluorophenol	(20-110)
SDMC6	(TBP)	= 2,4,6-Tribromophenol	(40-125)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D DMC diluted out

som13.07.22.A

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.
LCS-72993

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1284 Mod. Ref No.: SDG No.: SM1284

Lab Sample ID: LCS-72993 LCS Lot No.: A092773

Date Extracted: 08/01/2013 Date Analyzed (1): 08/05/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Phenol	50.0000	0.0000	44.4308	89		5 - 112
Bis(2-chloroethyl)ether	50.0000	0.0000	44.8216	90		12 - 158
2-Chlorophenol	50.0000	0.0000	44.3152	89		23 - 134
1,3-Dichlorobenzene	50.0000	0.0000	45.7067	91		1 - 172
1,4-Dichlorobenzene	50.0000	0.0000	45.4417	91		20 - 124
1,2-Dichlorobenzene	50.0000	0.0000	46.3433	93		32 - 129
2,2´-oxybis(1-Chloropropan	50.0000	0.0000	42.8214	86		36 - 166
N-Nitroso-di-n-propylamine	50.0000	0.0000	45.2180	90		1 - 230
Hexachloroethane	50.0000	0.0000	42.9893	86		40 - 113
Nitrobenzene	50.0000	0.0000	43.6208	87		35 - 180
Isophorone	50.0000	0.0000	44.1687	88		21 - 196
2-Nitrophenol	50.0000	0.0000	44.7396	89		29 - 182
2,4-Dimethylphenol	50.0000	0.0000	46.6800	93		32 - 119
2,4-Dichlorophenol	50.0000	0.0000	44.3382	89		39 - 135
1,2,4-Trichlorobenzene	50.0000	0.0000	45.3976	91		44 - 142
Naphthalene	50.0000	0.0000	44.6872	89		21 - 133
Bis(2-chloroethoxy)methane	50.0000	0.0000	43.5805	87		33 - 184
Hexachlorobutadiene	50.0000	0.0000	45.7440	91		24 - 116
4-Chloro-3-methylphenol	50.0000	0.0000	43.8630	88		22 - 147
Hexachlorocyclopentadiene	50.0000	0.0000	50.2193	100		34 - 103
2,4,6-Trichlorophenol	50.0000	0.0000	49.3860	99		37 - 144
2-Chloronaphthalene	50.0000	0.0000	48.2234	96		60 - 118
Dimethylphthalate	50.0000	0.0000	47.3762	95		1 - 112
Acenaphthylene	50.0000	0.0000	47.0787	94		33 - 145
2,6-Dinitrotoluene	50.0000	0.0000	47.4262	95		50 - 158
Acenaphthene	50.0000	0.0000	46.9331	94		47 - 155
2,4-Dinitrophenol	50.0000	0.0000	48.7869	98		1 - 191
4-Nitrophenol	50.0000	0.0000	40.5055	81		1 - 132
2,4-Dinitrotoluene	50.0000	0.0000	47.0523	94		39 - 139
Diethylphthalate	50.0000	0.0000	46.7533	94		1 - 114
4-Chlorophenyl-phenylether	50.0000	0.0000	47.9396	96		25 - 158
Fluorene	50.0000	0.0000	47.7835	96		59 - 121
4,6-Dinitro-2-methylphenol	50.0000	0.0000	50.0935	100		1 - 181
N-Nitrosodiphenylamine	50.0000	0.0000	47.3865	95		48 - 121
4-Bromophenyl-phenylether	50.0000	0.0000	48.1444	96		53 - 127
Hexachlorobenzene	50.0000	0.0000	50.4558	101		1 - 152
Pentachlorophenol	50.0000	0.0000	54.1423	108		14 - 176
Phenanthrene	50.0000	0.0000	46.7573	94		54 - 120
Anthracene	50.0000	0.0000	47.3614	95		27 - 133
Di-n-butylphthalate	50.0000	0.0000	46.5929	93		1 - 118
Fluoranthene	50.0000	0.0000	47.2386	94		26 - 137
Pyrene	50.0000	0.0000	50.1070	100		52 - 115
Butylbenzylphthalate	50.0000	0.0000	48.2806	97		1 - 152
3,3´-Dichlorobenzidine	50.0000	0.0000	48.2459	96		1 - 262

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.
LCS-72993

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1284 Mod. Ref No.: SDG No.: SM1284

Lab Sample ID: LCS-72993 LCS Lot No.: A092773

Date Extracted: 08/01/2013 Date Analyzed (1): 08/05/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Benzo(a)anthracene	50.0000	0.0000	49.2865	99		33 - 143
Chrysene	50.0000	0.0000	50.2840	101		17 - 168
Bis(2-ethylhexyl)phthalate	50.0000	0.0000	47.4739	95		8 - 158
Di-n-octylphthalate	50.0000	0.0000	45.3033	91		4 - 146
Benzo(b)fluoranthene	50.0000	0.0000	48.6073	97		24 - 159
Benzo(k)fluoranthene	50.0000	0.0000	48.4947	97		11 - 162
Benzo(a)pyrene	50.0000	0.0000	46.9606	94		17 - 163
Indeno(1,2,3-cd)pyrene	50.0000	0.0000	46.7942	94		1 - 171
Dibenzo(a,h)anthracene	50.0000	0.0000	47.6990	95		1 - 227
Benzo(g,h,i)perylene	50.0000	0.0000	47.6844	95		1 - 219

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 54 outside limits

COMMENTS:

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-72993

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1284 Mod. Ref No.: SDG No.: SM1284

Lab Sample ID: LCSD-72993 LCS Lot No.: A092773

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Phenol	50.0000	42.8176	86		3		40	5 - 112
Bis(2-chloroethyl)ether	50.0000	42.7020	85		6		40	12 - 158
2-Chlorophenol	50.0000	42.6442	85		5		40	23 - 134
1,3-Dichlorobenzene	50.0000	43.8856	88		3		40	1 - 172
1,4-Dichlorobenzene	50.0000	43.8834	88		3		40	20 - 124
1,2-Dichlorobenzene	50.0000	44.0054	88		6		40	32 - 129
2,2´-oxybis(1-Chloropropan	50.0000	41.1122	82		5		40	36 - 166
N-Nitroso-di-n-propylamine	50.0000	42.5668	85		6		40	1 - 230
Hexachloroethane	50.0000	41.8271	84		2		40	40 - 113
Nitrobenzene	50.0000	43.3980	87		0		40	35 - 180
Isophorone	50.0000	42.2691	85		3		40	21 - 196
2-Nitrophenol	50.0000	42.8666	86		3		40	29 - 182
2,4-Dimethylphenol	50.0000	46.3535	93		0		40	32 - 119
2,4-Dichlorophenol	50.0000	43.1578	86		3		40	39 - 135
1,2,4-Trichlorobenzene	50.0000	43.7118	87		4		40	44 - 142
Naphthalene	50.0000	43.5054	87		2		40	21 - 133
Bis(2-chloroethoxy)methane	50.0000	41.8022	84		4		40	33 - 184
Hexachlorobutadiene	50.0000	44.6930	89		2		40	24 - 116
4-Chloro-3-methylphenol	50.0000	42.3334	85		3		40	22 - 147
Hexachlorocyclopentadiene	50.0000	48.0977	96		4		40	34 - 103
2,4,6-Trichlorophenol	50.0000	45.4972	91		8		40	37 - 144
2-Chloronaphthalene	50.0000	45.9245	92		4		40	60 - 118
Dimethylphthalate	50.0000	45.2878	91		4		40	1 - 112
Acenaphthylene	50.0000	44.2384	88		7		40	33 - 145
2,6-Dinitrotoluene	50.0000	44.4207	89		7		40	50 - 158
Acenaphthene	50.0000	45.1935	90		4		40	47 - 155
2,4-Dinitrophenol	50.0000	44.9933	90		9		40	1 - 191
4-Nitrophenol	50.0000	38.9950	78		4		40	1 - 132
2,4-Dinitrotoluene	50.0000	46.3488	93		1		40	39 - 139
Diethylphthalate	50.0000	45.5255	91		3		40	1 - 114
4-Chlorophenyl-phenylether	50.0000	46.1754	92		4		40	25 - 158
Fluorene	50.0000	45.5063	91		5		40	59 - 121
4,6-Dinitro-2-methylphenol	50.0000	49.1829	98		2		40	1 - 181
N-Nitrosodiphenylamine	50.0000	45.3660	91		4		40	48 - 121
4-Bromophenyl-phenylether	50.0000	46.7312	93		3		40	53 - 127
Hexachlorobenzene	50.0000	47.7615	96		5		40	1 - 152
Pentachlorophenol	50.0000	52.2486	104		4		40	14 - 176
Phenanthrene	50.0000	45.7898	92		2		40	54 - 120
Anthracene	50.0000	46.0116	92		3		40	27 - 133
Di-n-butylphthalate	50.0000	45.3142	91		2		40	1 - 118
Fluoranthene	50.0000	46.1093	92		2		40	26 - 137
Pyrene	50.0000	49.0149	98		2		40	52 - 115
Butylbenzylphthalate	50.0000	46.1792	92		5		40	1 - 152
3,3´-Dichlorobenzidine	50.0000	46.2374	92		4		40	1 - 262
Benzo(a)anthracene	50.0000	48.6755	97		2		40	33 - 143
Chrysene	50.0000	48.4865	97		4		40	17 - 168

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-72993

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1284 Mod. Ref No.: SDG No.: SM1284

Lab Sample ID: LCSD-72993 LCS Lot No.: A092773

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Bis(2-ethylhexyl)phthalate	50.0000	46.3283	93		2		40	8 - 158
Di-n-octylphthalate	50.0000	45.2494	90		1		40	4 - 146
Benzo(b)fluoranthene	50.0000	47.5270	95		2		40	24 - 159
Benzo(k)fluoranthene	50.0000	48.3133	97		0		40	11 - 162
Benzo(a)pyrene	50.0000	46.1135	92		2		40	17 - 163
Indeno(1,2,3-cd)pyrene	50.0000	45.8209	92		2		40	1 - 171
Dibenzo(a,h)anthracene	50.0000	47.0292	94		1		40	1 - 227
Benzo(g,h,i)perylene	50.0000	46.8424	94		1		40	1 - 219

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 54 outside limits

Spike Recovery: 0 out of 54 outside limits

COMMENTS:

4C - FORM IV SV
SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.
MB-72993

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1284 Mod. Ref No.: SDG No.: SM1284

Lab File ID: S3I6071.D Lab Sample ID: MB-72993

Instrument ID: S3 Date Extracted: 08/01/2013

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 08/05/2013

Level: (LOW/MED) LOW Time Analyzed: 13:49

Extraction: (Type) SEPF GPC Cleanup: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	LCS-72993	LCS-72993	S3I6072.D	08/05/2013
02	LCSD-72993	LCSD-72993	S3I6073.D	08/05/2013
03	DIR DISCHARGE9	M1284-01B	S3I6074.D	08/05/2013

COMMENTS:

8C - FORM VIII SV-1

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1284 Mod. Ref No.: SDG No.: SM1284

GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 07/09/2013 07/09/2013

EPA Sample No.(SSTD020##) SSTD0253T Date Analyzed: 08/05/2013

Lab File ID (Standard): S3I6061.D Time Analyzed: 9:27

Instrument ID: S3

		IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
	12 HOUR STD	4782		3.941		18268		5.768		12350		7.563	
	UPPER LIMIT	9564		4.441		36536		6.268		24700		8.063	
	LOWER LIMIT	2391		3.441		9134		5.268		6175		7.063	
	SAMPLE NO.												
01	MB-72993	4495		3.945		17334		5.766		11789		7.556	
02	LCS-72993	4220		3.942		16191		5.769		10777		7.559	
03	LCSD-72993	4263		3.942		16117		5.769		10861		7.559	
04	DIR DISCHARGE9	4503		3.939		17183		5.766		11612		7.555	

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8D - FORM VIII SV-2

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1284 Mod. Ref No.: SDG No.: SM1284

EPA Sample No.(SSTD020##) SSTD0253T Date Analyzed: 08/05/2013

Lab File ID (Standard): S3I6061.D Time Analyzed: 9:27

Instrument ID: S3 GC Column: Rxi-5sil MS ID: 0.25 (mm)

		IS4 (PHN) AREA	#	RT	#	IS5 (CRY) AREA	#	RT	#	IS6 (PRY) AREA	#	RT	#
	12 HOUR STD	25473		8.845		32432		11.158		31953		12.958	
	UPPER LIMIT	50946		9.345		64864		11.658		63906		13.458	
	LOWER LIMIT	12737		8.345		16216		10.658		15977		12.458	
	SAMPLE NO.												
01	MB-72993	24149		8.844		30655		11.231		30876		13.048	
02	LCS-72993	22155		8.846		28353		11.218		28554		13.029	
03	LCSD-72993	22211		8.846		28110		11.224		28085		13.035	
04	DIR DISCHARGE9	23816		8.843		30203		11.215		30321		13.020	

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.

* PCB Organics *

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : LaBella Associates

Project: LaBella Monoco Oil

Laboratory Workorder / SDG #: M1284

EPA 608 PCB, 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: EPA 608 PCB

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW3510C

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

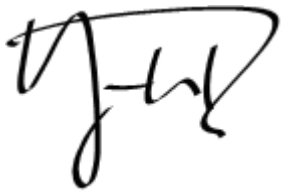
generated and reported as required. Manual integrations are coded to provide the data reviewer justification for such action. The codes are labeled on the ion chromatogram signal (GC/MS signal) and chromatogram for GC based analysis as follows:

· 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:

AR12213I2 Decachlorobiphenyl	on front column	due to M1
AR12323I2 Decachlorobiphenyl	on front column	due to M1
AR12421I2 Decachlorobiphenyl	on front column	due to M1
AR12422I2 Decachlorobiphenyl	on front column	due to M1
AR12426I2 Decachlorobiphenyl	on front column	due to M1
AR12481I2 Decachlorobiphenyl	on front column	due to M1
AR12486I2 Decachlorobiphenyl	on front column	due to M1
AR12546I2 Decachlorobiphenyl	on front column	due to M1
AR16601I2 Decachlorobiphenyl	on front column	due to M1
AR16602I2 Decachlorobiphenyl	on front column	due to M1

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:_____8/8/2013_____

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.

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

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DIR DISCHARGE9

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1284 Mod. Ref No.: SDG No.: SM1284

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M1284-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2M2400F.D/E2M2400F.D

% Moisture: Decanted: (Y/N) Date Received: 07/27/2013

Extraction: (Type) SEPF Date Extracted: 08/01/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/07/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-72994

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1284 Mod. Ref No.: SDG No.: SM1284

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-72994

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2M2397F.D/E2M2397F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 08/01/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/06/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-72994(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1284 Mod. Ref No.: SDG No.: SM1284

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-72994

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2M2398F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 08/01/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/06/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	3.8	
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	4.3	

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-72994(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1284 Mod. Ref No.: SDG No.: SM1284

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-72994

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2M2398R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 08/01/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/06/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	3.8	
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	4.2	

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
LCSD-72994(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1284 Mod. Ref No.: SDG No.: SM1284

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-72994

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2M2399F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 08/01/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/07/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	3.7	
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	4.2	

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
LCSD-72994(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1284 Mod. Ref No.: SDG No.: SM1284

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-72994

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2M2399R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 08/01/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/07/2013

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) µG/L	Q
12674-11-2	Aroclor-1016	3.7	
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	4.1	

2Q - FORM II ARO-1

WATER AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1284 Mod. Ref No.: SDG No.: SM1284

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPest 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-72994	85	85	85	85			0
02	LCS-72994	86	86	86	86			0
03	LCSD-72994	83	83	84	84			0
04	DIR DISCHARGE9	69	69	72	72			0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(39-126)
DCB = Decachlorobiphenyl	(17-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.07.22.A

3N - FORM III ARO-3

WATER AROCLOR LABORATORY CONTROL SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-72994

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1284 Mod. Ref No.: SDG No.: SM1284

Lab Sample ID: LCS-72994 LCS Lot No.: A072217

Date Extracted: 08/01/2013 Date Analyzed (1): 08/06/2013

Instrument ID (1): E2 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC	#	QC LIMITS
Aroclor-1016	4.0000	3.7969	95		50-114
Aroclor-1260	4.0000	4.3088	108		8-127

Instrument ID (2): E2 GC Column(2): CLPPest ID: 0.53 (mm)

Date Analyzed (2): 08/06/2013

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC	#	QC LIMITS
Aroclor-1016	4.0000	3.7969	95		50-114
Aroclor-1260	4.0000	4.3088	108		8-127

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:

som13.07.22.A

3N - FORM III ARO-3

WATER AROCLOR LABORATORY CONTROL

SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-72994

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1284 Mod. Ref No.: SDG No.: SM1284

Lab Sample ID: LCSD-72994 LCS Lot No.: A072217

Date Extracted: 08/01/2013 Date Analyzed (1): 08/07/2013

Instrument ID (1): E2 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC	#	QC LIMITS	%RPD	#	RPD LIMIT
Aroclor-1016	4.0000	3.7176	93		50-114	2.0		40
Aroclor-1260	4.0000	4.2294	106		8-127	2.0		40

Instrument ID (2): E2 GC Column(2): CLPPest ID: 0.53 (mm)

Date Analyzed (2): 08/07/2013

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC	#	QC LIMITS	%RPD	#	RPD LIMIT
Aroclor-1016	4.0000	3.7176	93		50-114	2.0		40
Aroclor-1260	4.0000	4.2294	106		8-127	2.0		40

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:

som13.07.22.A

4F - FORM IV ARO

AROCLOR METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-72994

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1284 Mod. Ref No.: SDG No.: SM1284

Lab File ID: E2M2397F.D / E2M2397F.D Lab Sample ID: MB-72994

Matrix: (SOIL/SED/WATER) WATER Extraction: (Type) SEPF Date Extracted: 08/01/2013

Sulfur Cleanup: (Y/N) Y GPC Cleanup:(Y/N) N

Acid Cleanup: (Y/N Y

Date Analyzed (1): 08/06/2013 Date Analyzed (2): 08/06/2013

Time Analyzed (1): 23:31 Time Analyzed (2): 23:31

Instrument ID (1): E2 Instrument ID (2): E2

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPest ID: 0.53 (mm)

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED (1)	DATE ANALYZED (2)
01	LCS-72994	LCS-72994	08/06/2013	08/06/2013
02	LCSD-72994	LCSD-72994	08/07/2013	08/07/2013
03	DIR DISCHARGE9	M1284-01B	08/07/2013	08/07/2013

COMMENTS:

* Metals *

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : LaBella Associates

Project: LaBella Monoco Oil

Laboratory Workorder / SDG #: M1284

EPA 200.7, EPA 245.1

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: EPA 200.7, EPA 245.1

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: 200.7
Aqueous Samples were prepared following procedures in laboratory test code: SW7470A

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):

A matrix spike was not performed on any sample in this SDG.

D. Post Digestion Spike (PDS):

A post-digestion spike was not performed on any sample in this SDG.

E. Duplicate sample:

A duplicate analysis was not performed on any sample in this SDG.

F. Serial Dilution (SD):

A serial dilution was not performed on any sample in this SDG.

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: 08/07/13

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.

Sample ID Suffixes

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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

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

DIR DISCHARGE9

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM1284

Matrix (soil/water): WATER Lab Sample ID: M1284-01

Level (low/med): LOW Date Received: 07/27/2013

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	7.0	U		P
7440-38-2	Arsenic	5.2	U		P
7440-41-7	Beryllium	0.064	B		P
7440-43-9	Cadmium	0.19	U		P
7440-47-3	Chromium	1.0	B		P
7440-50-8	Copper	20.6	B		P
7439-92-1	Lead	5.5	B		P
7439-97-6	Mercury	0.030	U		CV
7440-02-0	Nickel	4.3	B		P
7782-49-2	Selenium	14.0	U		P
7440-22-4	Silver	0.75	U		P
7440-28-0	Thallium	7.0	U		P
7440-66-6	Zinc	30.4	B		P

Comments:

7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM1284

Solid LCS Source:

Aqueous LCS Source:

LCS(D) ID:
LCS-72983

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Antimony	100.0	95.74	95.7						
Arsenic	40.0	40.30	100.8						
Beryllium	50.0	53.19	106.4						
Cadmium	50.0	53.72	107.4						
Chromium	200.0	215.56	107.8						
Copper	250.0	254.75	101.9						
Lead	20.0	19.54	97.7						
Nickel	500.0	554.48	110.9						
Selenium	50.0	52.31	104.6						
Silver	50.0	54.20	108.4						
Thallium	50.0	51.06	102.1						
Zinc	500.0	550.37	110.1						

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM1284

Solid LCS Source:

Aqueous LCS Source:

LCS(D) ID:
LCS-73001

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Mercury	4.6	4.03	87.6						

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM1284

Solid LCS Source: LCS(D) ID:

Aqueous LCS Source: **LCSD-72983**

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Antimony	100.0	95.80	95.8						
Arsenic	40.0	38.79	97.0						
Beryllium	50.0	53.29	106.6						
Cadmium	50.0	54.56	109.1						
Chromium	200.0	219.22	109.6						
Copper	250.0	258.22	103.3						
Lead	20.0	20.29	101.5						
Nickel	500.0	564.01	112.8						
Selenium	50.0	48.59	97.2						
Silver	50.0	54.39	108.8						
Thallium	50.0	53.16	106.3						
Zinc	500.0	563.94	112.8						

U.S. EPA - CLP

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM1284

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-73001**

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

FIMS2_130802B

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
Analyte		C	08/02/13 9:43	C	08/02/13 10:01	C		C		C	M
Mercury	0.030	U	0.030	U	0.030	U			0.030	U	CV

U.S. EPA - CLP

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM1284

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-72983**

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

OPTIMA3_130801A

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 08/01/13 11:22	C	08/01/13 11:51	C		C	Preparation Blank	C	M
Antimony	7.0	U	7.0	U	7.0	U			7.000	U	P
Arsenic	5.2	U	5.2	U	5.2	U			5.200	U	P
Beryllium	0.1	B	0.1	B	0.1	B			0.086	B	P
Cadmium	0.2	U	0.5	B	0.2	U			0.376	B	P
Chromium	0.4	B	0.4	U	0.4	U			0.390	U	P
Copper	1.1	U	1.1	U	1.1	U			1.100	U	P
Lead	2.4	U	2.4	U	2.4	U			2.400	U	P
Nickel	0.8	U	0.8	U	0.8	U			0.810	U	P
Selenium	14.0	U	14.0	U	14.0	U			14.000	U	P
Silver	0.8	U	1.0	B	1.2	B			0.750	U	P
Thallium	7.0	U	7.0	U	7.0	U			7.000	U	P
Zinc	2.3	B	1.8	B	1.8	B			1.000	U	P

Report Date:
02-Jan-13 15:38

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

LaBella Associates
300 State Street, Suite 201
Rochester, NY 14614

Work Order: L2570
Project : LaBella Stand By - Monoco
Project #: 210259

Attn: Dennis Porter

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
L2570-01	FORMER BLDG OIL	Oil	13-Dec-12 15:30	14-Dec-12 13:30

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 requirments have been meet.

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.

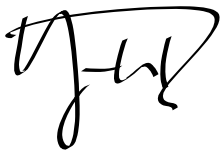
Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

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

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:



Yihai Ding
Laboratory Director

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation
Sample Identification and Analytical Requirements Summary

Project Name : LaBella Stand By -- 210259 **SDG :** L2570

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
FORMER BLDG OIL	L2570-01	SW8260_MED_S		SW8082_S	SW6010_S	
FORMER BLDG OIL	L2570-01			TPH_S	SW7471	

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation
Sample Preparation and Analysis Summary MSVOA

Project Name : LaBella Stand By -- 210259 **SDG :** L2570

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8260_MED_S					
L2570-01A	Oil	12/13/2012	12/14/2012	12/19/2012	12/17/2012
L2570-01ADL	Oil	12/13/2012	12/14/2012	12/19/2012	12/19/2012

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation
Sample Preparation and Analysis Summary GC*

Project Name : LaBella Stand By -- 210259 **SDG :** L2570

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8082_S					
L2570-01A	Oil	12/13/2012	12/14/2012	12/17/2012	12/17/2012
TPH_S					
L2570-01A	Oil	12/13/2012	12/14/2012	12/17/2012	12/17/2012

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation
Sample Preparation and Analysis Summary MSVOA

Project Name : LaBella Stand By -- 210259 **SDG :** L2570

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
SW8260_MED_S					
L2570-01A	Oil	SW8260_MED_S	Methanol	MED	1
L2570-01ADL	Oil	SW8260_MED_S	Methanol	MED	100

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation
Sample Preparation and Analysis Summary GC*

Project Name : LaBella Stand By -- 210259 **SDG :** L2570

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
SW8082_S					
L2570-01A	Oil	SW8082_S	3550B	Acid/Sulfur	1
TPH_S					
L2570-01A	Oil	TPH_S	3580	NA	20

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation
Sample Preparation and Analysis Summary ME

Project Name : LaBella Stand By -- 210259 **SDG :** L2570

Laboratory Sample ID	Matrix	Metals Requested	Date Received By Lab	Date Analyzed
SW6010_S				
L2570-01A	LOOOKUP	SW6010_S	12/14/2012	12/18/2012
SW7471				
L2570-01A	LOOOKUP	SW7471	12/14/2012	12/18/2012

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: L2570

Client ID: LABELLA
Project: LaBella Stand By
WO Name: LaBella Stand By - Monoco
Location: LABELLA_STANDBY_CONTRACT, 210259

Case:
SDG:
PO: 210259

HC Due: 12/28/12
Fax Due: 12/18/12
Fax Report: ☑

Report Level: ASP-B
Special Program:
EDD: ENVIROINSITE_1
EQUIIS_4_NYSDEC

Comments: use this project for between 11-50 samples, no RUSH surcharge base on lab capacity, no charge for MS/MSD or a batch of 7 or more samples, no charge for TB. no hard copy

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
L2570-01A	FORMER BLDG OIL	12/13/2012 15:30	12/14/2012	Oil	SW6010_S	/ TAL				Y	A4
L2570-01A	FORMER BLDG OIL	12/13/2012 15:30	12/14/2012	Oil	SW7471	/ TAL					A4
L2570-01A	FORMER BLDG OIL	12/13/2012 15:30	12/14/2012	Oil	SW8082_S	/					A4
L2570-01A	FORMER BLDG OIL	12/13/2012 15:30	12/14/2012	Oil	SW8260_MED_S	/ 2CVE+special+STARS_VOC+TICs for Cat B				Y	A4
L2570-01A	FORMER BLDG OIL	12/13/2012 15:30	12/14/2012	Oil	TPH_S	/ + Fuel ID					A4

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

Sample Transmittal Documentation

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 2-Day
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: LaBella Associates
300 State St, Suite 201
Rochester, NY 14614

Project Mgr.: D. NOLL

Invoice To: SAME

P.O. No.: _____ RQN: _____

Project No.: 210259
Site Name: Manoco
Location: Pittsford State: NY
Sampler(s): SRD

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 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= Oil X2=_____ X3=_____

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: TPH	TAL Metals	PCBs	TCL VOCs					QA/QC Reporting Level
	Former Bldg Oil	12-13-12	1530	C	x1		1			X	X	X	X					Identify Product

☒ E-mail to sdavis@labellape.com, dnoll@labellape.com
EDD Format _____

Condition upon receipt: ☒ Iced ☐ Ambient ☒ °C 4°

Relinquished by:	Received by:	Date:	Time:
Seth Davis	FEDEX	12-13-12	1630
FedEx		12/14/12	13:30

175 Metro Center Boulevard • Warwick, RI 02886-1755 • 401-732-3400 • Fax 401-732-3499 • www.spectrum-analytical.com

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

Received By: VRB	Page 01 of 00
Reviewed By:	Log-in Date 12/14/2012
Work Order: L2570	Client Name: LaBella Associates
Project Name/Event: LaBella Stand By / MONOCO	

Remarks: (1/2) Please see associated sample/extract transfer logbook pages submitted with this data package.

1. Custody Seal(s)	Present / Absent
	Intact / Broken
2. Custody Seal Nos.	N/A
3. Traffic Reports/ Chain of Custody Records (TR/COCs) or Packing Lists	Present / Absent
4. Airbill	AirBill / Sticker
	Present / Absent
5. Airbill No.	FedEx 8017 8828 6956
6. Sample Tags	Present / Absent
Sample Tag Numbers	Listed / Not Listed on Chain-of-Custody
7. Sample Condition	Intact / Broken / Leaking
8. Cooler Temperature Indicator Bottle	Present / Absent
9. Cooler Temperature	4 °C
10. Does information on TR/COCs and sample tags agree?	Yes / No
11. Date Received at Laboratory	12/14/2012
12. Time Received	13:30

Lab Sample ID	Preservation (pH) HNO3	H2SO4	HCl	NaOH	H3PO4	VOA Matrix	Soil HeadSpace or Air Bubble > or equal to 1/4"
L2570-01						OIL	

Sample Transfer

Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area #	Area #
By	By
On	On

IR Temp Gun ID:MT-1

CoolantCondition: ICE

Preservative Name/Lot No:

VOA Matrix Key:

US = Unpreserved Soil	A= Air
UA = Unpreserved Aqueous	H = HCl
M = MeOH	E = Encore
N = NaHSO4	F = Freeze

See Sample Condition Notification/Corrective Action Form Yes / No

Rad OK Yes / No

* Volatiles *

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : LaBella Associates

Project: LaBella Stand By - Monoco

Laboratory Workorder / SDG #: L2570

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: SW5030
Soil Samples were prepared following procedures in laboratory test code: SW5035

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: V1
Instrument Type: GCMS-VOA
Description: HP5890 II / HP5972
Manufacturer: Hewlett-Packard
Model: 5890 / 5972
GC Column used: 30 m X 0.25 mm ID [1.40 um thickness] DB-624 capillary column.

Instrument Code: V10
Instrument Type: GCMS-VOA
Description: HP7890A
Manufacturer: Agilent
Model: 7890A / 5975C
GC Column used: 30 m X 0.25 mm ID [1.40 um thickness] DB-624 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 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-69759 in batch 69759, Percent Recovery is outside QC Limits, recovery is below criteria for 2-Chloroethyl vinyl ether at

50% with criteria of (70-130).

LCS-69830 in batch 69830, Percent Recovery is outside QC Limits, recovery is above criteria for 2-Chloroethyl vinyl ether at 132% with criteria of (70-130).

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:

The following samples were analyzed at dilution:

FORMER BLDG OIL (L2570-01ADL) : Dilution Factor: 100

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:_____12/31/2012_____

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

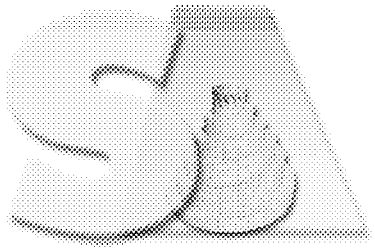
E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

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.



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.: L2570 Mod. Ref No.: SDG No.: SL2570

Level: (LOW/MED) MED

	EPA SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-69759	101	90	105	104				0
02	MB-69759	101	91	106	103				0
03	FORMER BLDG OIL	98	91	104	106				0
04	LCS-69830	101	98	98	101				0
05	MB-69830	100	99	99	98				0
06	FORMER BLDG OILDL	105	98	98	101				0

		QC LIMITS
VDMC1	(DBFM) Dibromofluoromethane	(76-128)
VDMC2	(DCE) = 1,2-Dichloroethane-d4	(88-110)
VDMC3	(TOL) = Toluene-d8	(85-115)
VDMC4	(BFB) = Bromofluorobenzene	(85-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

som12.12.17.A

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-69759

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Lab Sample ID: LCS-69759 LCS Lot No.:

Date Extracted: 12/17/2012 Date Analyzed (1): 12/17/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Chloromethane	2500.0000	0.0000	2907.4157	116		50 - 130
Vinyl chloride	2500.0000	0.0000	2641.7116	106		60 - 125
Bromomethane	2500.0000	0.0000	2242.4593	90		30 - 160
Chloroethane	2500.0000	0.0000	2549.9242	102		40 - 155
Trichlorofluoromethane	2500.0000	0.0000	2914.7482	117		25 - 185
1,1-Dichloroethene	2500.0000	0.0000	2465.0804	99		65 - 135
Acetone	2500.0000	0.0000	2651.5009	106		20 - 160
Carbon disulfide	2500.0000	0.0000	2363.7972	95		45 - 160
Methylene chloride	2500.0000	0.0000	2518.7259	101		55 - 140
trans-1,2-Dichloroethene	2500.0000	0.0000	2456.5477	98		65 - 135
Methyl tert-butyl ether	2500.0000	0.0000	2532.0740	101		75 - 126
1,1-Dichloroethane	2500.0000	0.0000	2358.9748	94		75 - 125
Vinyl acetate	2500.0000	0.0000	2556.7603	102		65 - 138
2-Butanone	2500.0000	0.0000	2456.9180	98		30 - 160
cis-1,2-Dichloroethene	2500.0000	0.0000	2424.1356	97		65 - 125
Chloroform	2500.0000	0.0000	2494.7006	100		70 - 125
1,1,1-Trichloroethane	2500.0000	0.0000	2519.0812	101		70 - 135
Carbon tetrachloride	2500.0000	0.0000	2594.5439	104		65 - 135
1,2-Dichloroethane	2500.0000	0.0000	2615.4806	105		70 - 135
Benzene	2500.0000	0.0000	2517.8771	101		75 - 125
Trichloroethene	2500.0000	0.0000	2372.4022	95		75 - 125
1,2-Dichloropropane	2500.0000	0.0000	2505.1186	100		70 - 120
Bromodichloromethane	2500.0000	0.0000	2475.7006	99		70 - 130
cis-1,3-Dichloropropene	2500.0000	0.0000	2537.2781	101		70 - 125
4-Methyl-2-pentanone	2500.0000	0.0000	2509.8151	100		45 - 145
Toluene	2500.0000	0.0000	2565.6006	103		70 - 125
trans-1,3-Dichloropropene	2500.0000	0.0000	2533.5710	101		65 - 125
1,1,2-Trichloroethane	2500.0000	0.0000	2358.1920	94		60 - 125
Tetrachloroethene	2500.0000	0.0000	2122.0584	85		65 - 140
2-Hexanone	2500.0000	0.0000	2716.8998	109		45 - 145
Dibromochloromethane	2500.0000	0.0000	2456.6708	98		65 - 130
Chlorobenzene	2500.0000	0.0000	2477.9100	99		75 - 125
Ethylbenzene	2500.0000	0.0000	2604.1197	104		75 - 125
m,p-Xylene	5000.0000	0.0000	5174.3819	103		80 - 125
o-Xylene	2500.0000	0.0000	2541.8425	102		75 - 125
Xylene (Total)	7500.0000	0.0000	7716.2244	103		75 - 125
Styrene	2500.0000	0.0000	2575.8359	103		75 - 125
Bromoform	2500.0000	0.0000	2359.1851	94		55 - 135
Isopropylbenzene	2500.0000	0.0000	2604.9457	104		75 - 130
1,1,2,2-Tetrachloroethane	2500.0000	0.0000	2553.0383	102		55 - 130
n-Propylbenzene	2500.0000	0.0000	2655.2257	106		65 - 135
1,3,5-Trimethylbenzene	2500.0000	0.0000	2755.9472	110		65 - 135
tert-Butylbenzene	2500.0000	0.0000	2754.4201	110		65 - 130
1,2,4-Trimethylbenzene	2500.0000	0.0000	2768.9708	111		65 - 135

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-69759

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Lab Sample ID: LCS-69759 LCS Lot No.:

Date Extracted: 12/17/2012 Date Analyzed (1): 12/17/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
sec-Butylbenzene	2500.0000	0.0000	2825.4735	113		65 - 130
4-Isopropyltoluene	2500.0000	0.0000	2725.2339	109		75 - 135
1,3-Dichlorobenzene	2500.0000	0.0000	2568.9127	103		70 - 125
1,4-Dichlorobenzene	2500.0000	0.0000	2527.2930	101		70 - 125
n-Butylbenzene	2500.0000	0.0000	2999.9423	120		65 - 140
1,2-Dichlorobenzene	2500.0000	0.0000	2545.0751	102		75 - 120
Naphthalene	2500.0000	0.0000	2558.0499	102		40 - 125
2-Chloroethyl vinyl ether	2500.0000	0.0000	1249.0387	50	*	70 - 130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 1 out of 52 outside limits

COMMENTS:

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-69830

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Lab Sample ID: LCS-69830 LCS Lot No.:

Date Extracted: 12/19/2012 Date Analyzed (1): 12/19/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Chloromethane	2500.0000	0.0000	2563.3990	103		50 - 130
Vinyl chloride	2500.0000	0.0000	2484.8515	99		60 - 125
Bromomethane	2500.0000	0.0000	3088.7431	124		30 - 160
Chloroethane	2500.0000	0.0000	2395.6088	96		40 - 155
Trichlorofluoromethane	2500.0000	0.0000	2692.4532	108		25 - 185
1,1-Dichloroethene	2500.0000	0.0000	2549.7358	102		65 - 135
Acetone	2500.0000	0.0000	2704.9419	108		20 - 160
Carbon disulfide	2500.0000	0.0000	2567.8859	103		45 - 160
Methylene chloride	2500.0000	0.0000	2363.4720	95		55 - 140
trans-1,2-Dichloroethene	2500.0000	0.0000	2598.3168	104		65 - 135
Methyl tert-butyl ether	2500.0000	0.0000	2671.3322	107		75 - 126
1,1-Dichloroethane	2500.0000	0.0000	2570.4892	103		75 - 125
Vinyl acetate	2500.0000	0.0000	2916.2574	117		65 - 138
2-Butanone	2500.0000	0.0000	3050.3880	122		30 - 160
cis-1,2-Dichloroethene	2500.0000	0.0000	2606.0056	104		65 - 125
Chloroform	2500.0000	0.0000	2527.5258	101		70 - 125
1,1,1-Trichloroethane	2500.0000	0.0000	2676.5216	107		70 - 135
Carbon tetrachloride	2500.0000	0.0000	2751.8409	110		65 - 135
1,2-Dichloroethane	2500.0000	0.0000	2669.5407	107		70 - 135
Benzene	2500.0000	0.0000	2616.1300	105		75 - 125
Trichloroethene	2500.0000	0.0000	2659.1363	106		75 - 125
1,2-Dichloropropane	2500.0000	0.0000	2612.0564	104		70 - 120
Bromodichloromethane	2500.0000	0.0000	2688.1348	108		70 - 130
cis-1,3-Dichloropropene	2500.0000	0.0000	2815.5397	113		70 - 125
4-Methyl-2-pentanone	2500.0000	0.0000	2729.7769	109		45 - 145
Toluene	2500.0000	0.0000	2656.2177	106		70 - 125
trans-1,3-Dichloropropene	2500.0000	0.0000	2914.5744	117		65 - 125
1,1,2-Trichloroethane	2500.0000	0.0000	2683.2764	107		60 - 125
Tetrachloroethene	2500.0000	0.0000	2267.4845	91		65 - 140
2-Hexanone	2500.0000	0.0000	2862.5180	115		45 - 145
Dibromochloromethane	2500.0000	0.0000	2700.0168	108		65 - 130
Chlorobenzene	2500.0000	0.0000	2617.1826	105		75 - 125
Ethylbenzene	2500.0000	0.0000	2618.8583	105		75 - 125
m,p-Xylene	5000.0000	0.0000	5292.3128	106		80 - 125
o-Xylene	2500.0000	0.0000	2629.5476	105		75 - 125
Xylene (Total)	7500.0000	0.0000	7921.8604	106		75 - 125
Styrene	2500.0000	0.0000	2591.6572	104		75 - 125
Bromoform	2500.0000	0.0000	2805.6755	112		55 - 135
Isopropylbenzene	2500.0000	0.0000	2641.1493	106		75 - 130
1,1,2,2-Tetrachloroethane	2500.0000	0.0000	2618.8250	105		55 - 130
n-Propylbenzene	2500.0000	0.0000	2644.1660	106		65 - 135
1,3,5-Trimethylbenzene	2500.0000	0.0000	2576.2354	103		65 - 135
tert-Butylbenzene	2500.0000	0.0000	2754.5037	110		65 - 130
1,2,4-Trimethylbenzene	2500.0000	0.0000	2679.9590	107		65 - 135

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-69830

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Lab Sample ID: LCS-69830 LCS Lot No.:

Date Extracted: 12/19/2012 Date Analyzed (1): 12/19/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
sec-Butylbenzene	2500.0000	0.0000	2626.6493	105		65 - 130
4-Isopropyltoluene	2500.0000	0.0000	2670.2213	107		75 - 135
1,3-Dichlorobenzene	2500.0000	0.0000	2611.6802	104		70 - 125
1,4-Dichlorobenzene	2500.0000	0.0000	2563.7104	103		70 - 125
n-Butylbenzene	2500.0000	0.0000	2737.4706	109		65 - 140
1,2-Dichlorobenzene	2500.0000	0.0000	2602.8191	104		75 - 120
Naphthalene	2500.0000	0.0000	2660.5266	106		40 - 125
2-Chloroethyl vinyl ether	2500.0000	0.0000	3295.1647	132	*	70 - 130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 1 out of 52 outside limits

COMMENTS:

4A - FORM IV VOA

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-69759

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Lab File ID: V1M9706.D Lab Sample ID: MB-69759

Instrument ID: V1

Matrix: (SOIL/SED/WATER) SOIL Date Analyzed: 12/17/2012

Level: (TRACE or LOW/MED) MED Time Analyzed: 11:54

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-69759	LCS-69759	V1M9704.D	11:07
02	FORMER BLDG OIL	L2570-01A	V1M9714A.D	15:28

COMMENTS:

4A - FORM IV VOA

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-69830

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Lab File ID: V8B7115.D Lab Sample ID: MB-69830

Instrument ID: V10

Matrix: (SOIL/SED/WATER) SOIL Date Analyzed: 12/19/2012

Level: (TRACE or LOW/MED) MED Time Analyzed: 17:05

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-69830	LCS-69830	V8B7113.D	16:11
02	FORMER BLDG OILDL	L2570-01ADL	V8B7122.D	20:16

COMMENTS:

5A - FORM V VOA

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.

BFB1Q

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Lab File ID: V1M9620.D BFB Injection Date: 12/13/2012

Instrument ID: V1 BFB Injection Time: 17:40

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.3
75	30.0 - 60.0% of mass 95	44.2
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.1
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	58.2
175	5.0 - 9.0% of mass 174	3.7 (6.4)1
176	95.0 - 101.0% of mass 174	55.3 (95.0)1
177	5.0 - 9.0% of mass 176	3.5 (6.3)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	VSTD0011Q	VSTD0011Q	V1M9622.D	12/13/2012	18:26
02	VSTD0051Q	VSTD0051Q	V1M9623.D	12/13/2012	18:50
03	VSTD0201Q	VSTD0201Q	V1M9624.D	12/13/2012	19:15
04	VSTD0501Q	VSTD0501Q	V1M9625.D	12/13/2012	19:38
05	VSTD1001Q	VSTD1001Q	V1M9627.D	12/13/2012	20:26
06	VSTD2001Q	VSTD2001Q	V1M9628.D	12/13/2012	20:50
07	VICV0501Q	VICV0501Q	V1M9630.D	12/13/2012	21:38

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.
BFB1T

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Lab File ID: V1M9701.D BFB Injection Date: 12/17/2012

Instrument ID: V1 BFB Injection Time: 9:42

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.0
75	30.0 - 60.0% of mass 95	45.2
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	0.4 (0.6)1
174	Greater than 50.0% of mass 95	57.6
175	5.0 - 9.0% of mass 174	3.5 (6.0)1
176	95.0 - 101.0% of mass 174	54.9 (95.4)1
177	5.0 - 9.0% of mass 176	3.2 (5.8)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	VSTD0501T	VSTD0501T	V1M9702.D	12/17/2012	10:06
02	LCS-69759	LCS-69759	V1M9704.D	12/17/2012	11:07
03	MB-69759	MB-69759	V1M9706.D	12/17/2012	11:54
04	FORMER BLDG OIL	L2570-01A	V1M9714A.D	12/17/2012	15:28

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.
BFB10K

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Lab File ID: V8B7064.D BFB Injection Date: 12/18/2012

Instrument ID: V10 BFB Injection Time: 20:52

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.2
75	30.0 - 80.0% of mass 95	46.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 -120% of mass 95	72.5
175	5.0 - 9.0% of mass 174	5.6 (7.8)1
176	95.0 - 101% of mass 174	70.7 (97.5)1
177	5.0 - 9.0% of mass 176	4.9 (6.9)2

1 - Value is % mass 174 2 - Value is % mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD00110K	VSTD00110K	V8B7066.D	12/18/2012	21:47
02	VSTD00510K	VSTD00510K	V8B7067.D	12/18/2012	22:14
03	VSTD02010K	VSTD02010K	V8B7068.D	12/18/2012	22:41
04	VSTD05010K	VSTD05010K	V8B7070.D	12/18/2012	23:35
05	VSTD10010K	VSTD10010K	V8B7071.D	12/19/2012	0:03
06	VSTD20010K	VSTD20010K	V8B7072.D	12/19/2012	0:30
07	VICV05010K	VICV05010K	V8B7073.D	12/19/2012	1:24

5A - FORM V VOA

VOLATILE ORGANIC INSTRUMENT

PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.

BFB10M

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Lab File ID: V8B7110.D BFB Injection Date: 12/19/2012

Instrument ID: V10 BFB Injection Time: 14:40

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.4
75	30.0 - 80.0% of mass 95	48.1
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 -120% of mass 95	71.4
175	5.0 - 9.0% of mass 174	5.2 (7.3)1
176	95.0 - 101% of mass 174	69.6 (97.5)1
177	5.0 - 9.0% of mass 176	4.7 (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	VSTD05010M	VSTD05010M	V8B7111.D	12/19/2012	15:01
02	LCS-69830	LCS-69830	V8B7113.D	12/19/2012	16:11
03	MB-69830	MB-69830	V8B7115.D	12/19/2012	17:05
04	FORMER BLDG OILDL	L2570-01ADL	V8B7122.D	12/19/2012	20:16

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 12/13/2012 12/13/2012

EPA Sample No.(VSTD#####): VSTD0501T Date Analyzed: 12/17/2012

Lab File ID (Standard): V1M9702.D Time Analyzed: 10:06

Instrument ID: V1 Heated Purge: (Y/N) N

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	1782405		4.612		1143755		7.488		439722		10.058	
	UPPER LIMIT	3564810		5.112		2287510		7.988		879444		10.558	
	LOWER LIMIT	891203		4.112		571878		6.988		219861		9.558	
	EPA SAMPLE NO.												
01	LCS-69759	1757482		4.615		1135357		7.491		428827		10.052	
02	MB-69759	1740008		4.606		1100715		7.502		407678		10.053	
03	FORMER BLDG OIL	1826927		4.620		1172252		7.506		409011		10.057	

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.

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 12/18/2012 12/19/2012

EPA Sample No.(VSTD#####): VSTD05010M Date Analyzed: 12/19/2012

Lab File ID (Standard): V8B7111.D Time Analyzed: 15:01

Instrument ID: V10 Heated Purge: (Y/N) N

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	605051		5.3		541492		8.291		281489		10.782	
	UPPER LIMIT	1210102		5.8		1082984		8.791		562978		11.282	
	LOWER LIMIT	302526		4.8		270746		7.791		140745		10.282	
	EPA SAMPLE NO.												
01	LCS-69830	610435		5.304		541792		8.291		278619		10.782	
02	MB-69830	581127		5.304		507299		8.291		251537		10.782	
03	FORMER BLDG OILDL	514984		5.304		462551		8.291		237540		10.783	

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.

FORMER BLDG OIL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2570-01A

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M9714A.D

Level: (TRACE/LOW/MED) MED Date Received: 12/14/2012

% Moisture: not dec. 0.0 Date Analyzed: 12/17/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 100.00 (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	250	U
75-01-4	Vinyl chloride	250	U
74-83-9	Bromomethane	250	U
75-00-3	Chloroethane	250	U
75-69-4	Trichlorofluoromethane	250	U
75-35-4	1,1-Dichloroethene	250	U
67-64-1	Acetone	250	U
75-15-0	Carbon disulfide	250	U
75-09-2	Methylene chloride	250	U
156-60-5	trans-1,2-Dichloroethene	250	U
1634-04-4	Methyl tert-butyl ether	250	U
75-34-3	1,1-Dichloroethane	250	U
108-05-4	Vinyl acetate	250	U
78-93-3	2-Butanone	250	U
156-59-2	cis-1,2-Dichloroethene	250	U
67-66-3	Chloroform	250	U
71-55-6	1,1,1-Trichloroethane	250	U
56-23-5	Carbon tetrachloride	250	U
107-06-2	1,2-Dichloroethane	250	U
71-43-2	Benzene	36	J
79-01-6	Trichloroethene	32	J
78-87-5	1,2-Dichloropropane	250	U
75-27-4	Bromodichloromethane	250	U
10061-01-5	cis-1,3-Dichloropropene	250	U
108-10-1	4-Methyl-2-pentanone	250	U
108-88-3	Toluene	1400	
10061-02-6	trans-1,3-Dichloropropene	250	U
79-00-5	1,1,2-Trichloroethane	250	U
127-18-4	Tetrachloroethene	160	J
591-78-6	2-Hexanone	250	U
124-48-1	Dibromochloromethane	250	U
108-90-7	Chlorobenzene	250	U
100-41-4	Ethylbenzene	1500	
179601-23-1	m,p-Xylene	7000	
95-47-6	o-Xylene	3900	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FORMER BLDG OIL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2570-01A

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M9714A.D

Level: (TRACE/LOW/MED) MED Date Received: 12/14/2012

% Moisture: not dec. 0.0 Date Analyzed: 12/17/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 100.00 (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
1330-20-7	Xylene (Total)	11000	
100-42-5	Styrene	250	U
75-25-2	Bromoform	250	U
98-82-8	Isopropylbenzene	610	
79-34-5	1,1,2,2-Tetrachloroethane	250	U
103-65-1	n-Propylbenzene	2600	
108-67-8	1,3,5-Trimethylbenzene	7800	
98-06-6	tert-Butylbenzene	250	U
95-63-6	1,2,4-Trimethylbenzene	25000	E
135-98-8	sec-Butylbenzene	1500	
99-87-6	4-Isopropyltoluene	14000	E
541-73-1	1,3-Dichlorobenzene	250	U
106-46-7	1,4-Dichlorobenzene	250	U
104-51-8	n-Butylbenzene	7000	
95-50-1	1,2-Dichlorobenzene	57	J
91-20-3	Naphthalene	71000	E
110-75-8	2-Chloroethyl vinyl ether	250	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FORMER BLDG OIL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2570-01A

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M9714A.D

Level: (TRACE or LOW/MED) MED Date Received: 12/14/2012

% Moisture: not dec. 0.0 Date Analyzed: 12/17/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 100.00 (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	611-14-3	Benzene, 1-ethyl-2-methyl-	9.210	11000	NJ
02		Unknown (10.34303)	10.343	7700	J
03	95-13-6	Indene	10.560	35000	NJ
04	535-77-3	Benzene, 1-methyl-3-(1-methy	11.180	6000	NJ
05	95-93-2	Benzene, 1,2,4,5-tetramethyl	11.230	13000	NJ
06		Unknown (11.46590)	11.466	11000	J
07		Unknown (11.61363)	11.614	19000	J
08	2177-47-1	2-Methylindene	11.663	6000	NJ
09	17059-48-2	1H-Indene, 2,3-dihydro-1,6-d	11.958	8200	NJ
10	97664-19-2	Benzene, 1-methyl-2-(1-methy	12.057	7100	NJ
11	95-15-8	Benzo[b]thiophene	12.254	6900	NJ

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V1.I\121217.B\V1M9714A.D
Report Date: 18-Dec-2012 16:51

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V1.I\121217.B\V1M9714A.D
Lab Smp Id: L2570-01A Client Smp ID: FORMER BLDG OIL
Inj Date : 17-DEC-2012 15:28
Operator : AM   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,L2570-01A,,69759
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\121217.B\v18260Gadd.m
Meth Date : 18-Dec-2012 16:51 canderson Quant Type: ISTD
Cal Date : 13-DEC-2012 18:50 Cal File: V1M9623.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2CVE_Labella.sub
Target Version: 4.14
Processing Host: TARGET115

Concentration Formula:
   Amt * DF * Uf*((Vt+(Ws*M/100))*5000)/(Va*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)
Vt	5.000	Methanol extract volume (mL)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)	
$	36 Dibromofluoromethane	113	4.059	4.040	(0.878)	416653	48.8974	2400	
$	42 1,2-Dichloroethane-d4	102	4.334	4.316	(0.938)	142431	45.5075	2300	
	43 Benzene	78	4.384	4.375	(0.949)	27107	0.72948	36(a)	
*	46 Fluorobenzene	96	4.620	4.611	(1.000)	1826927	50.0000		
	47 Trichloroethene	130	4.935	4.926	(1.068)	4726	0.64649	32(aQ)	
$	58 Toluene-d8	98	6.048	6.039	(0.806)	1641929	52.2234	2600	
	59 Toluene	91	6.117	6.098	(1.324)	952176	28.4235	1400	
	63 Tetrachloroethene	164	6.659	6.650	(0.887)	15492	3.29217	160(a)	
*	68 Chlorobenzene-d5	117	7.506	7.487	(1.000)	1172252	50.0000		
	72 Ethylbenzene	106	7.663	7.655	(1.021)	309793	30.7121	1500	
	73 m,p-Xylene	106	7.792	7.783	(1.038)	1831673	139.536	7000	
	74 o-Xylene	106	8.225	8.206	(1.096)	1000618	77.6113	3900	
	77 Isopropylbenzene	105	8.639	8.630	(1.151)	379010	12.2521	610	
$	79 Bromofluorobenzene	95	8.796	8.787	(1.172)	708643	53.0674	2600	
	83 n-Propylbenzene	120	9.102	9.103	(0.905)	329787	51.1776	2600(QMH)M6 CJA 12/18	
	85 1,3,5-Trimethylbenzene	105	9.308	9.309	(0.926)	3363697	155.129	7800(QMH)M6 CJA 12/18	
M	94 Xylene (Total)	106				2832291	217.148	11000	
	88 1,2,4-Trimethylbenzene	105	9.722	9.713	(0.967)	10782079	498.316	25000(AQM)M6 CJA 12/18	

Data File: \\avogadro\organics\V1.I\121217.B\V1M9714A.D
Report Date: 18-Dec-2012 16:51

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
89	sec-Butylbenzene	105	9.899	9.891	(0.984)	800007	30.3120	1500(QM)M6 CJA 12/18
91	4-Isopropyltoluene	119	10.815	10.048	(0.987)	5547912	275.841	14000(A)
* 92	1,4-Dichlorobenzene-d4	152	10.057	10.058	(1.000)	409011	50.0000	(QM)M6 CJA 12/18
95	n-Butylbenzene	91	10.471	10.462	(1.041)	2832018	140.738	7000(QM)M6 CJA 12/18
96	1,2-Dichlorobenzene	146	10.451	10.452	(1.039)	10966	1.13301	57(aQM)M6 CJA 12/18
101	Naphthalene	128	12.175	12.156	(1.211)	22641541	1427.29	71000(AM)M6 CJA 12/18

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.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\V1.I\121217.B\V1M9714A.D
Report Date: 18-Dec-2012 16:51

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V1.I\121217.B\V1M9714A.D
Lab Smp Id: L2570-01A Client Smp ID: FORMER BLDG OIL
Inj Date : 17-DEC-2012 15:28
Operator : AM   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,L2570-01A,,69759
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\121217.B\v18260Gadd.m
Meth Date : 18-Dec-2012 16:51 canderson Quant Type: ISTD
Cal Date : 13-DEC-2012 18:50 Cal File: V1M9623.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2CVE_Labella.sub
Target Version: 4.14
Processing Host: TARGET115

Concentration Formula:
   Amt * DF * Uf*((Vt+(Ws*M/100))*5000)/(Va*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)
Vt	5.000	Methanol extract volume (mL)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 92 1,4-Dichlorobenzene-d4	10.057	4860564	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Benzene, 1-ethyl-2-methyl-				CAS #: 611-14-3			
9.210	20426355	210.123261	10000	95	NIST2002.L	9130	92
Unknown				CAS #:			
10.343	15059458	154.914694	7700	0		0	92(L)
Indene				CAS #: 95-13-6			
10.560	68951018	709.290182	35000	96	NIST2002.L	8166	92
Benzene, 1-methyl-3-(1-methylethyl)-				CAS #: 535-77-3			
11.180	11682776	120.179199	6000	87	NIST2002.L	14403	92

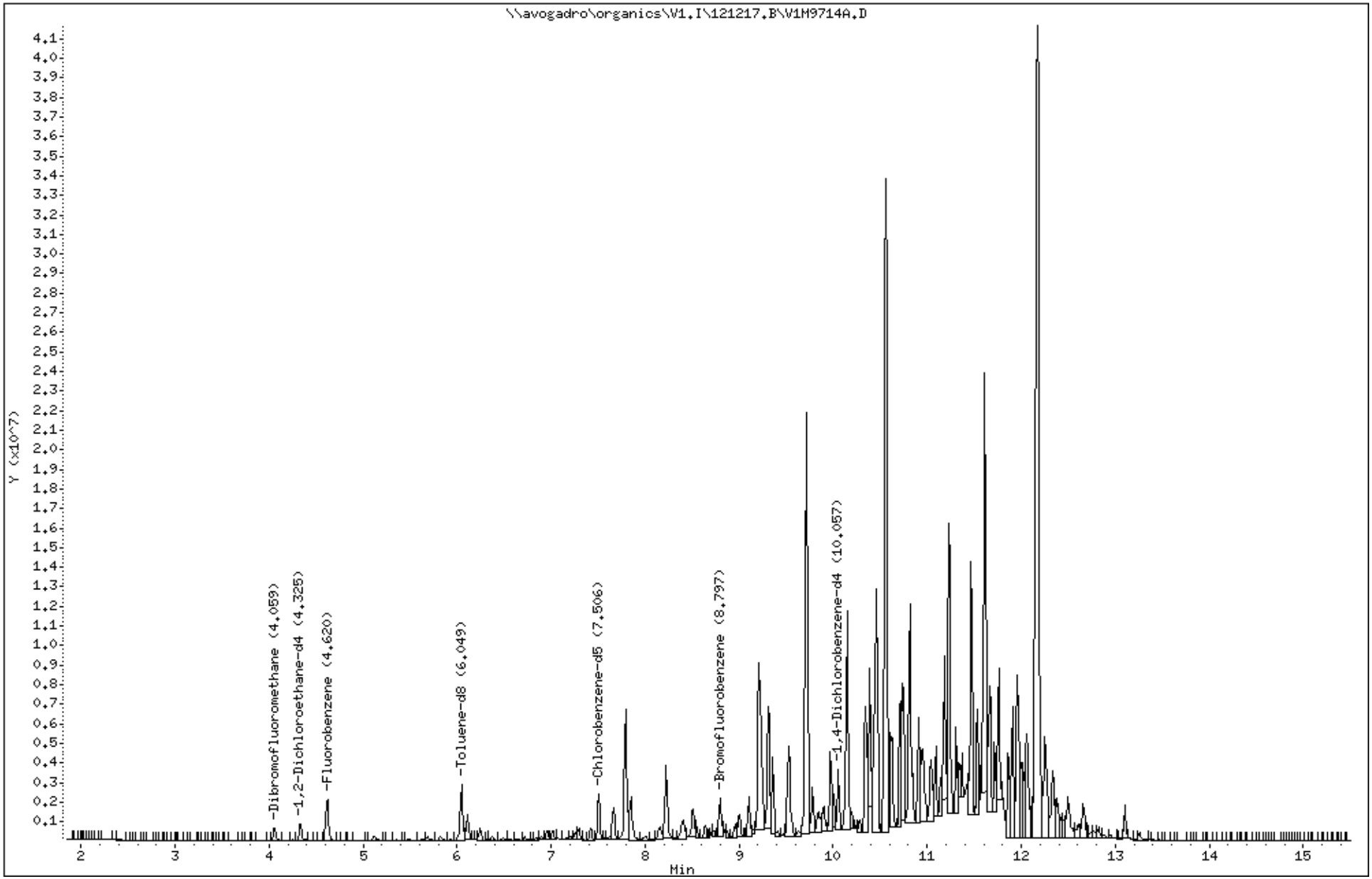
Data File: \\avogadro\organics\V1.I\121217.B\V1M9714A.D
Report Date: 18-Dec-2012 16:51

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Benzene, 1,2,4,5-tetramethyl-					CAS #: 95-93-2		
11.230	25114014	258.344607	13000	95	NIST2002.L	14361	92
Unknown					CAS #:		
11.466	20524178	211.129559	10000	0		0	92
Unknown					CAS #:		
11.614	37168984	382.352514	19000	0		0	92
2-Methylindene					CAS #: 2177-47-1		
11.663	11722541	120.588254	6000	95	NIST2002.L	12660	92
1H-Indene, 2,3-dihydro-1,6-dimethyl-					CAS #: 17059-48-2		
11.958	15965850	164.238624	8200	94	NIST2002.L	20743	92
Benzene, 1-methyl-2-(1-methyl-2-propenyl					CAS #: 97664-19-2		
12.057	13731450	141.253645	7100	87	NIST2002.L	20774	92
Benzo[b]thiophene					CAS #: 95-15-8		
12.254	13403925	137.884437	6900	91	NIST2002.L	14746	92

QC Flag Legend

L - Operator selected an alternate library search match.

Data File: \\avogadro\organics\V1.I\121217.B\V1M9714A.D
Date : 17-DEC-2012 15:28
Client ID: FORMER BLDG OIL
Instrument: V1.i
Sample Info: 5ML,L2570-01A,,69759
Operator: AM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V1.I\121217.B\V1M9714A.D

Date : 17-DEC-2012 15:28

Client ID: FORMER BLDG OIL

Instrument: V1.i

Sample Info: 5ML,L2570-01A,,69759

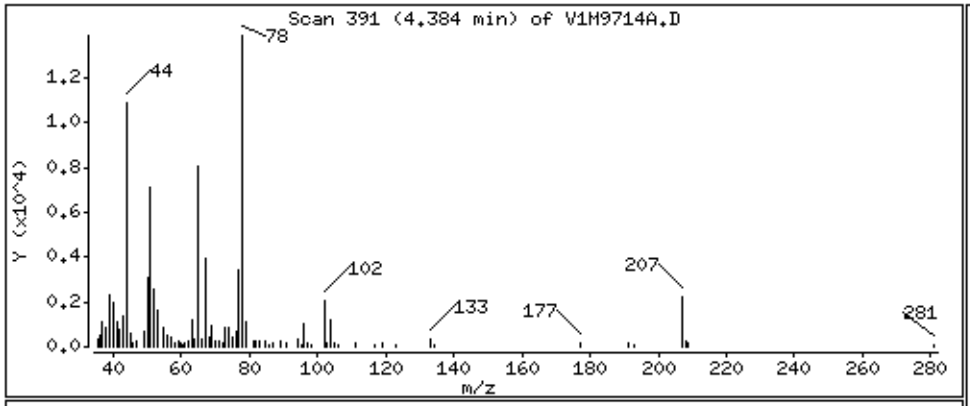
Operator: AM SRC: LIMS

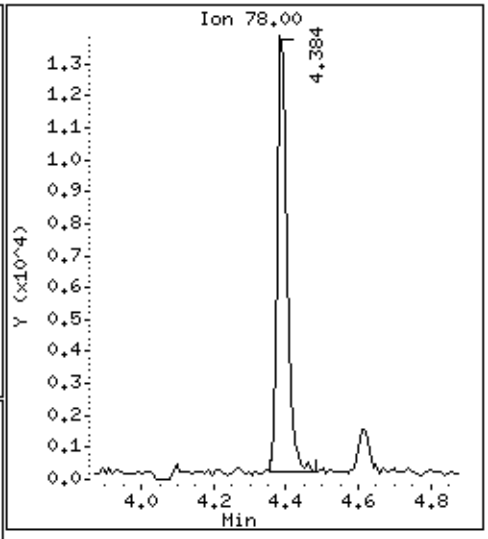
Column phase: DB-624

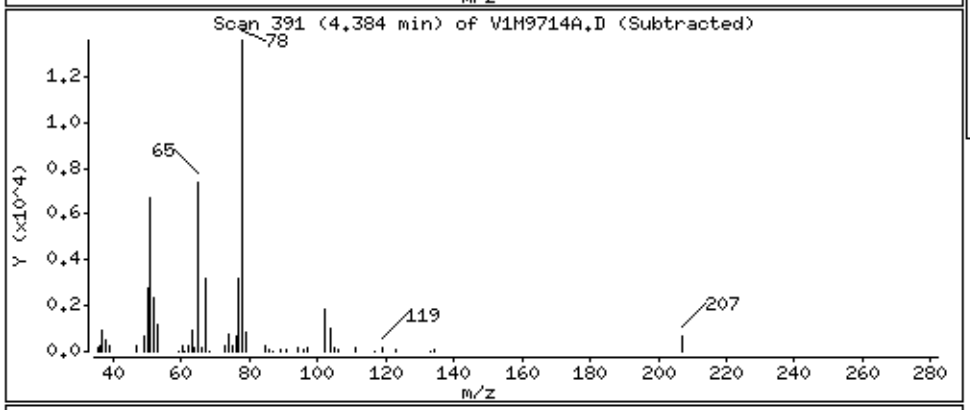
Column diameter: 0.25

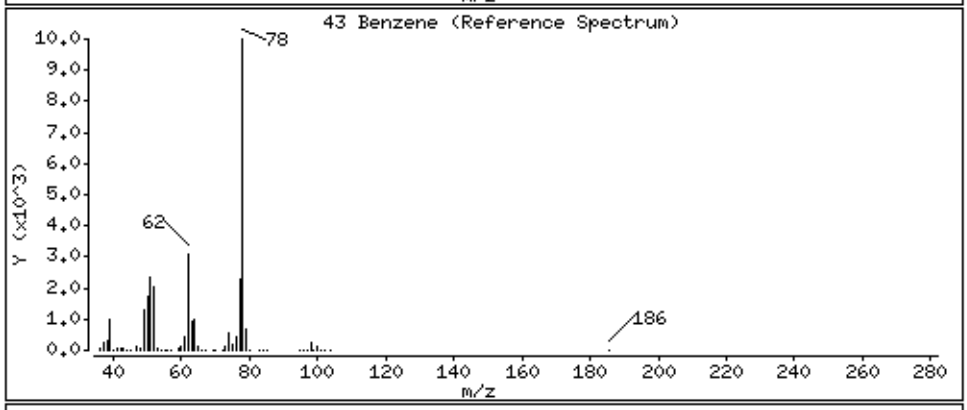
43 Benzene

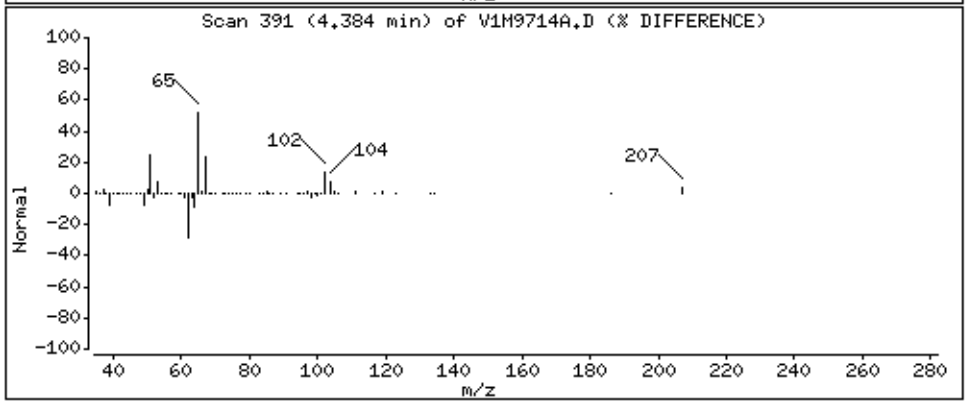
Concentration: 36 ug/Kg











Data File: \\avogadro\organics\V1.I\121217.B\V1M9714A.D

Date : 17-DEC-2012 15:28

Client ID: FORMER BLDG OIL

Instrument: V1.i

Sample Info: 5ML,L2570-01A,,69759

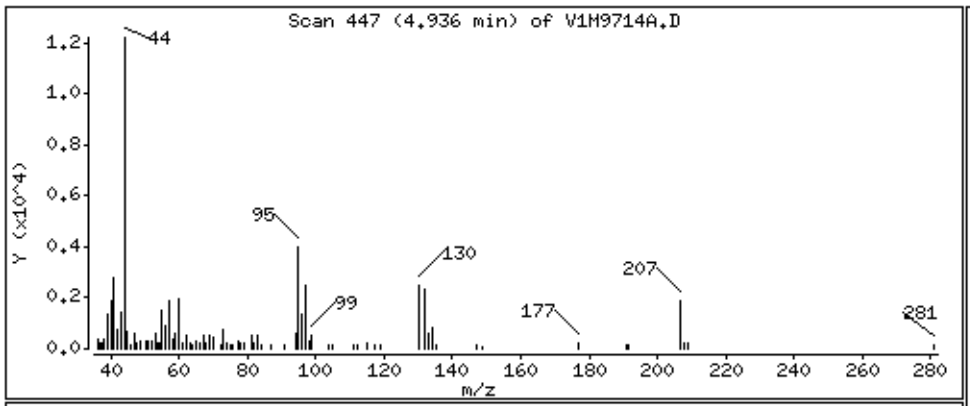
Operator: AM SRC: LIMS

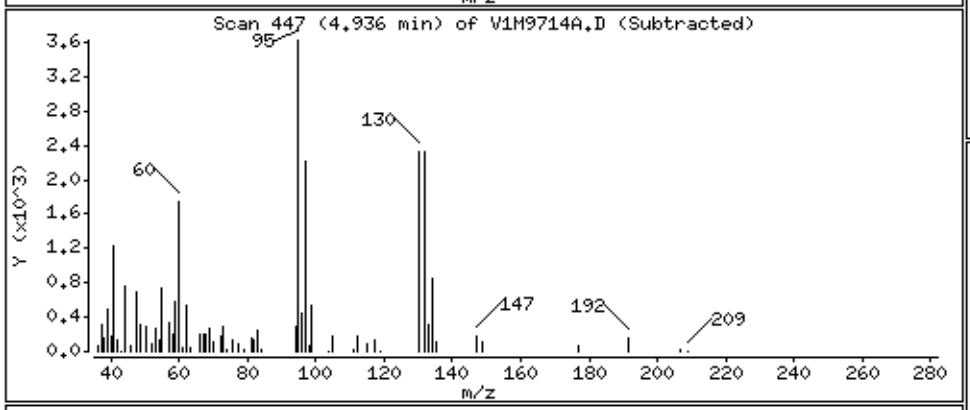
Column phase: DB-624

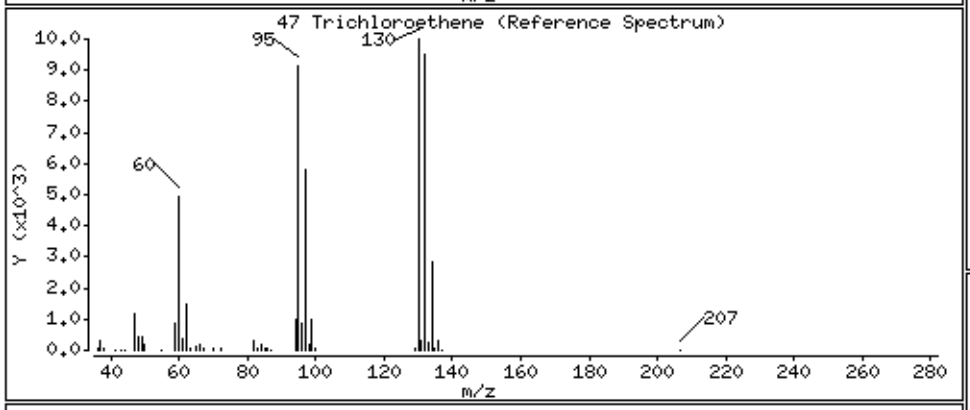
Column diameter: 0.25

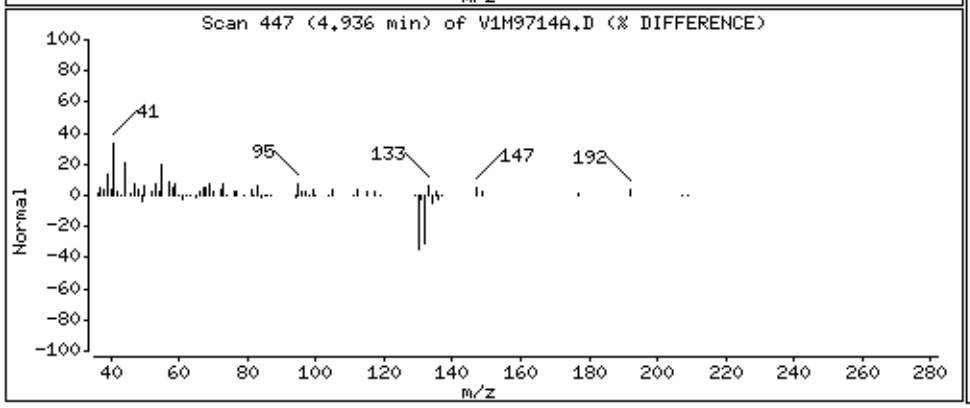
47 Trichloroethene

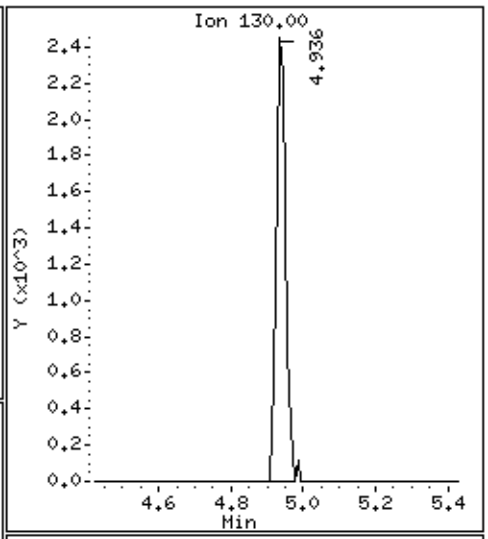
Concentration: 32 ug/Kg

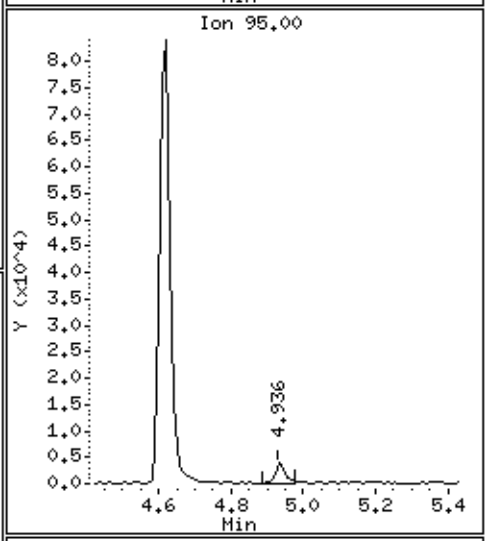


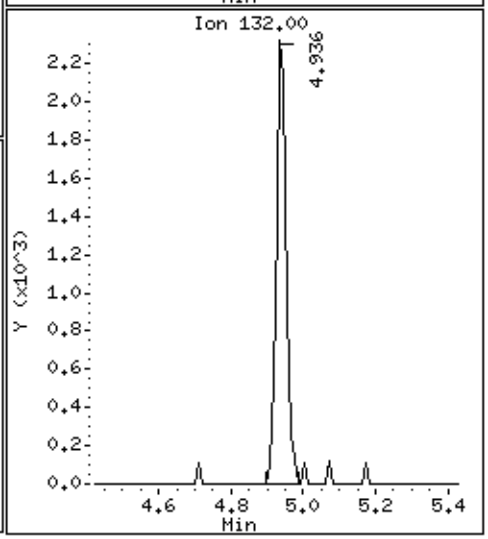












Data File: \\avogadro\organics\V1.I\121217.B\V1M9714A.D

Date : 17-DEC-2012 15:28

Client ID: FORMER BLDG OIL

Instrument: V1.i

Sample Info: 5ML,L2570-01A,,69759

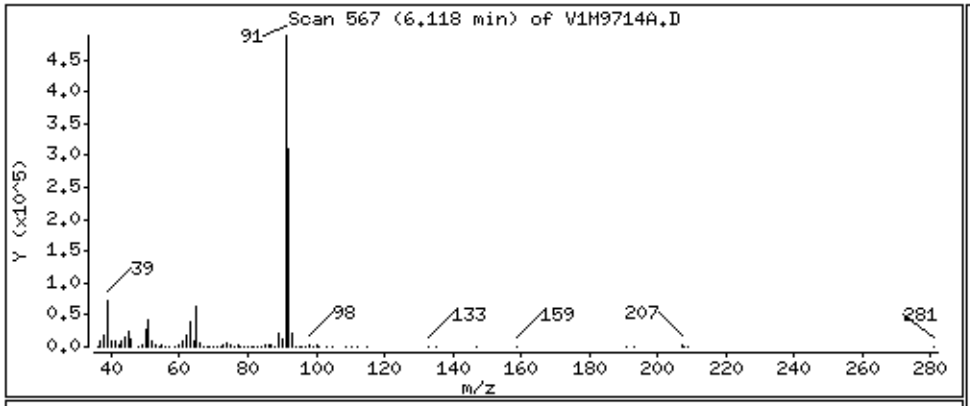
Operator: AM SRC: LIMS

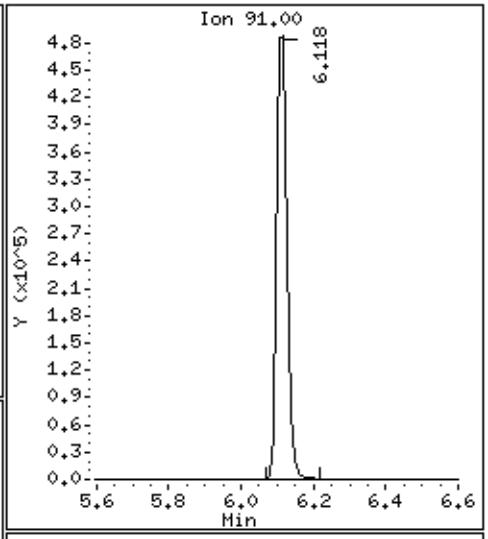
Column phase: DB-624

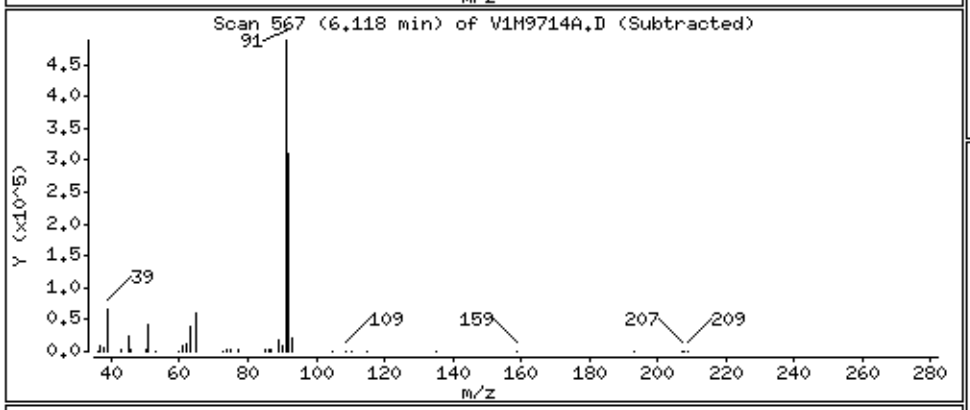
Column diameter: 0.25

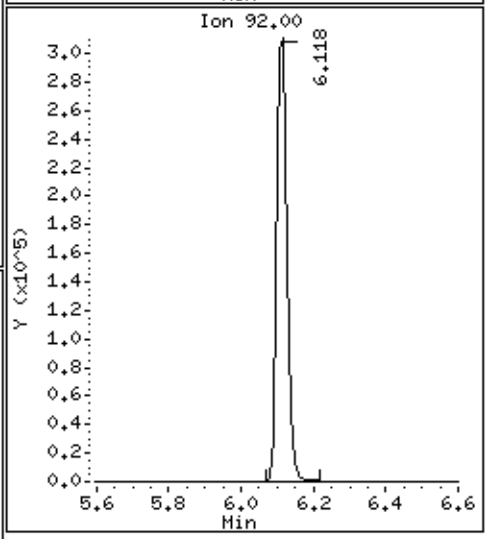
59 Toluene

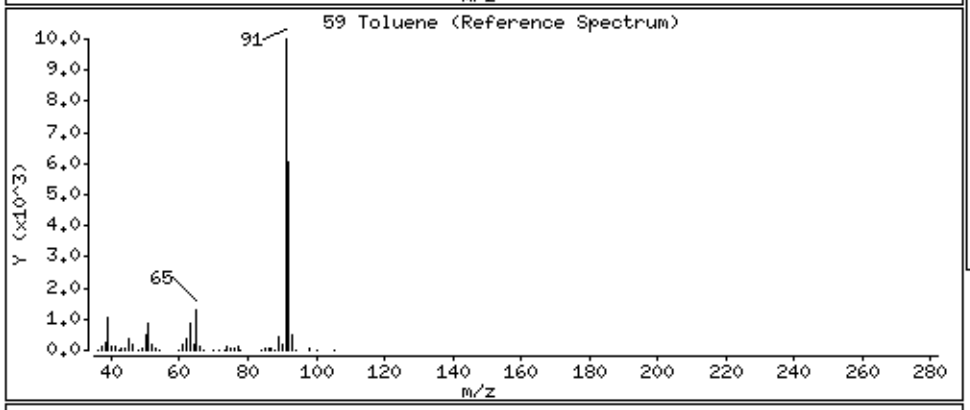
Concentration: 1400 ug/Kg

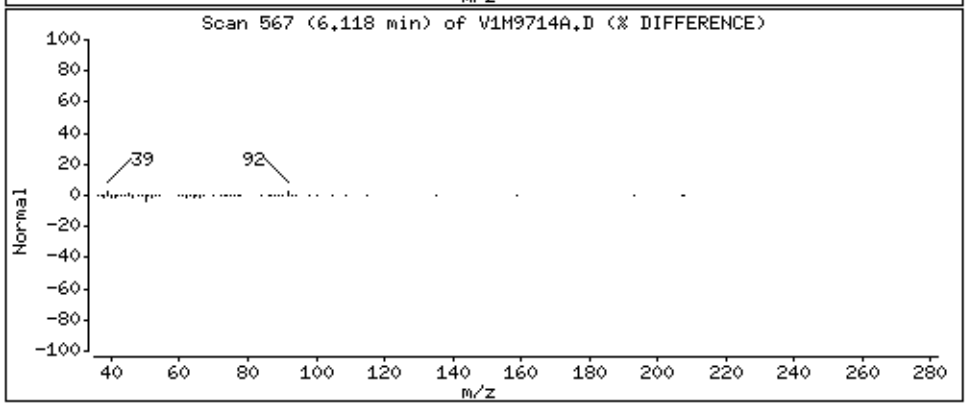












Data File: \\avogadro\organics\V1.I\121217.B\V1M9714A.D

Date : 17-DEC-2012 15:28

Client ID: FORMER BLDG OIL

Instrument: V1.i

Sample Info: 5ML,L2570-01A,,69759

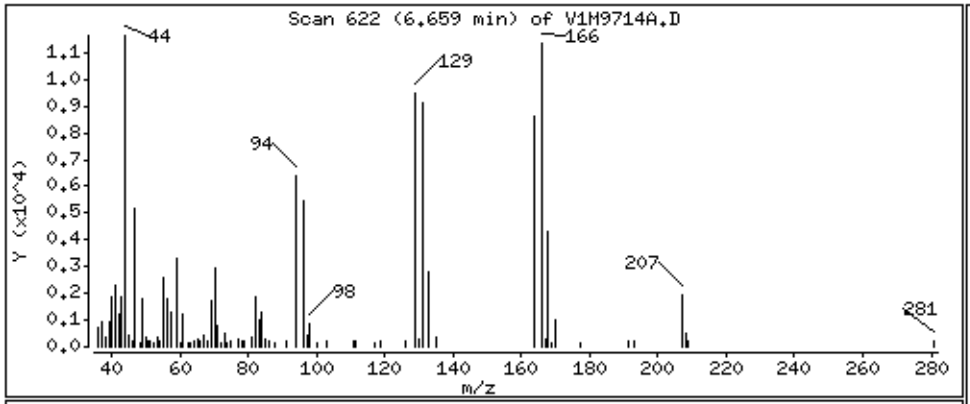
Operator: AM SRC: LIMS

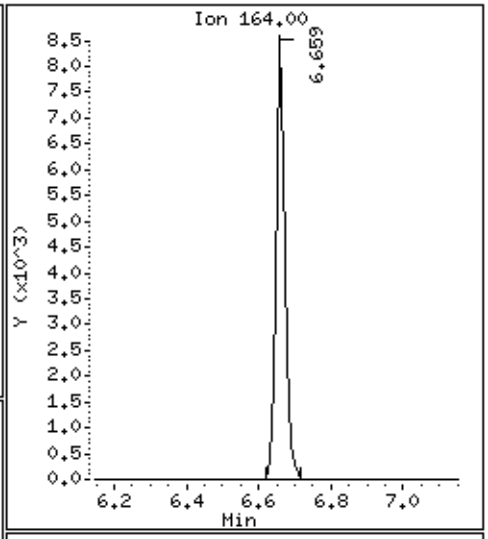
Column phase: DB-624

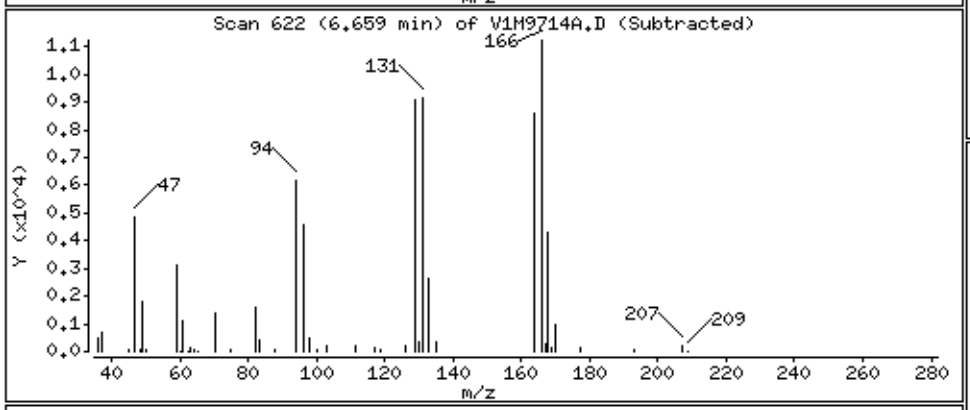
Column diameter: 0.25

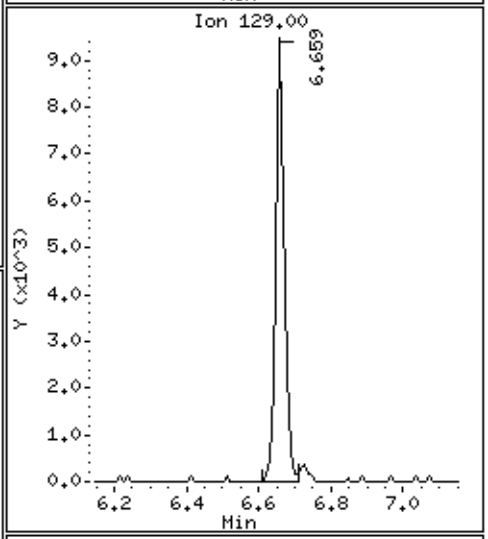
63 Tetrachloroethene

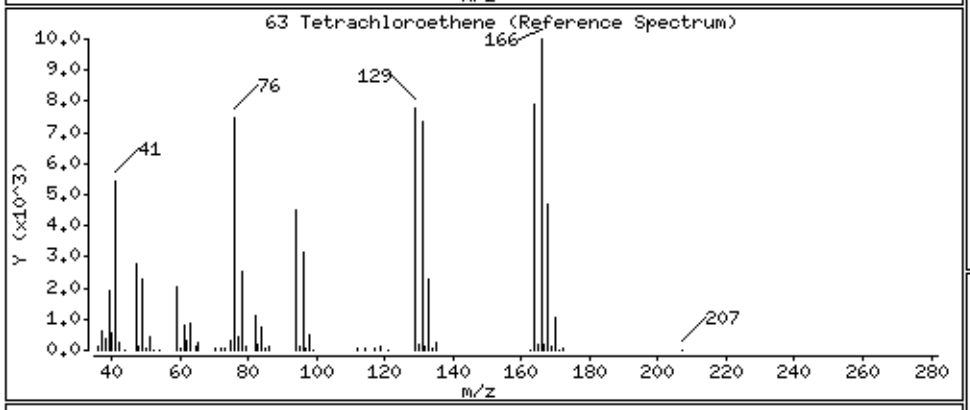
Concentration: 160 ug/Kg

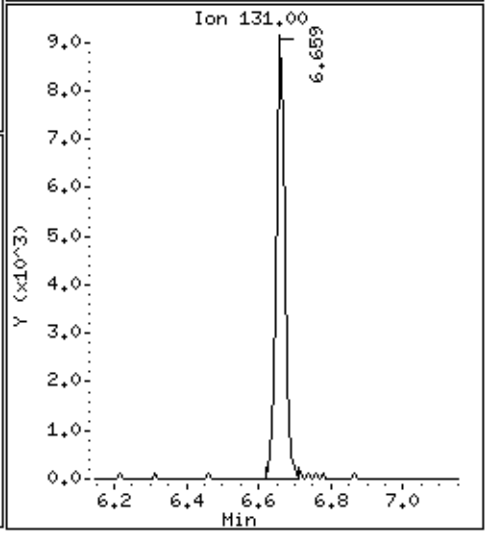


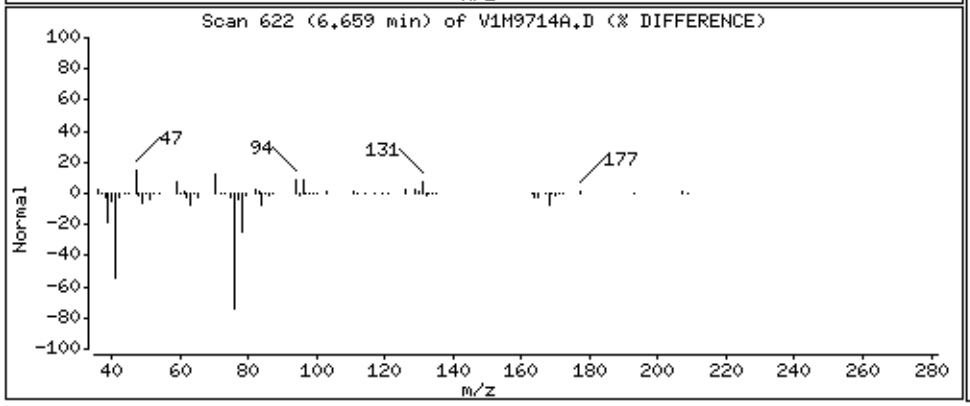












Data File: \\avogadro\organics\V1.I\121217.B\V1M9714A.D

Date : 17-DEC-2012 15:28

Client ID: FORMER BLDG OIL

Instrument: V1.i

Sample Info: 5ML,L2570-01A,,69759

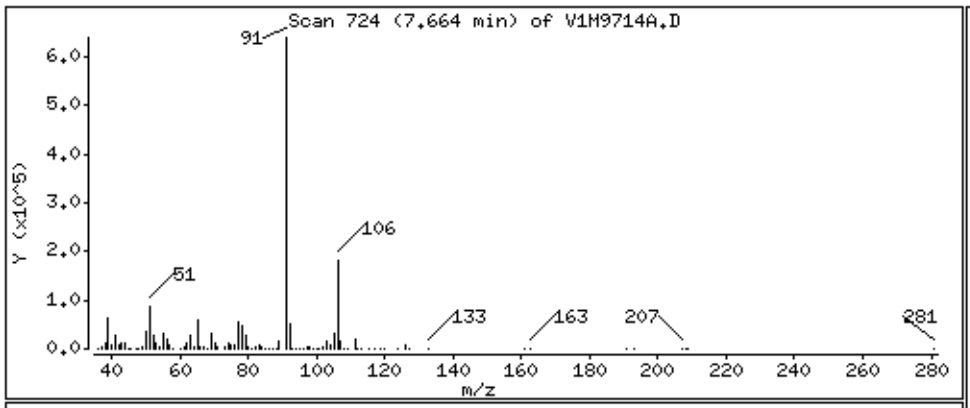
Operator: AM SRC: LIMS

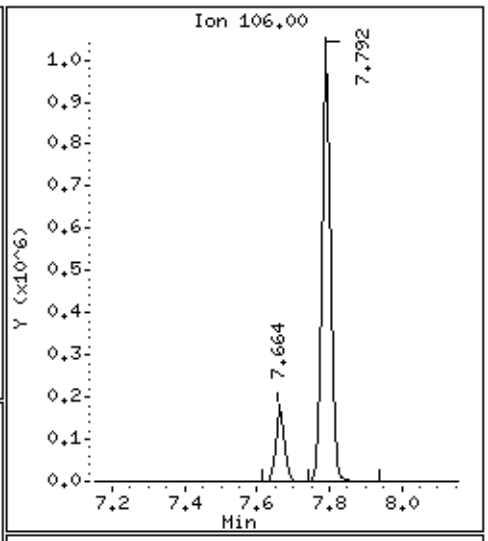
Column phase: DB-624

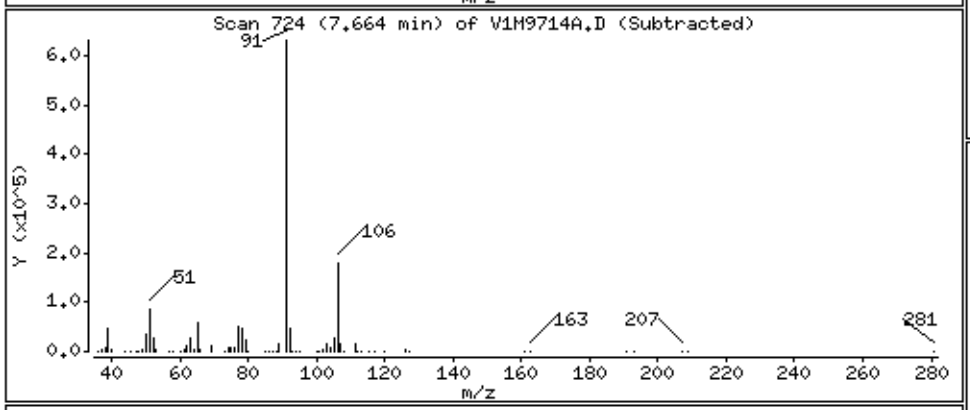
Column diameter: 0.25

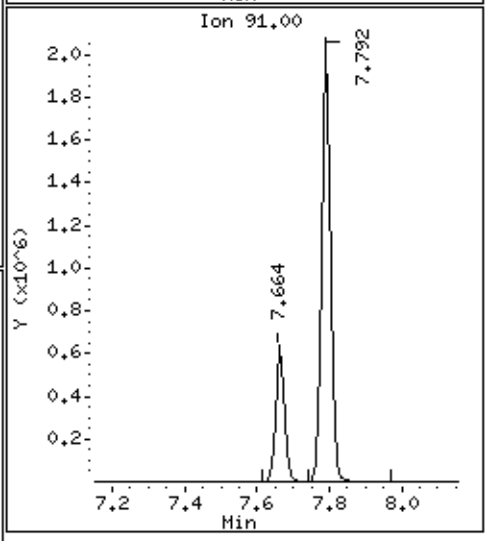
72 Ethylbenzene

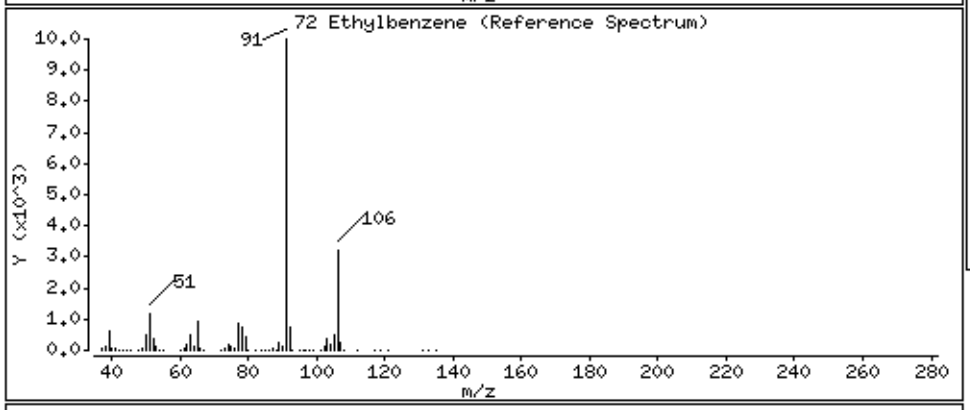
Concentration: 1500 ug/Kg

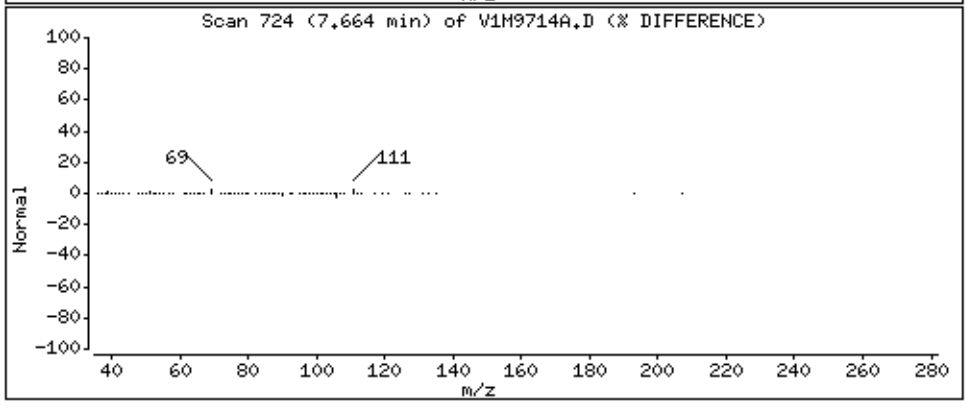












Data File: \\avogadro\organics\V1.I\121217.B\V1M9714A.D

Date : 17-DEC-2012 15:28

Client ID: FORMER BLDG OIL

Instrument: V1.i

Sample Info: 5ML,L2570-01A,,69759

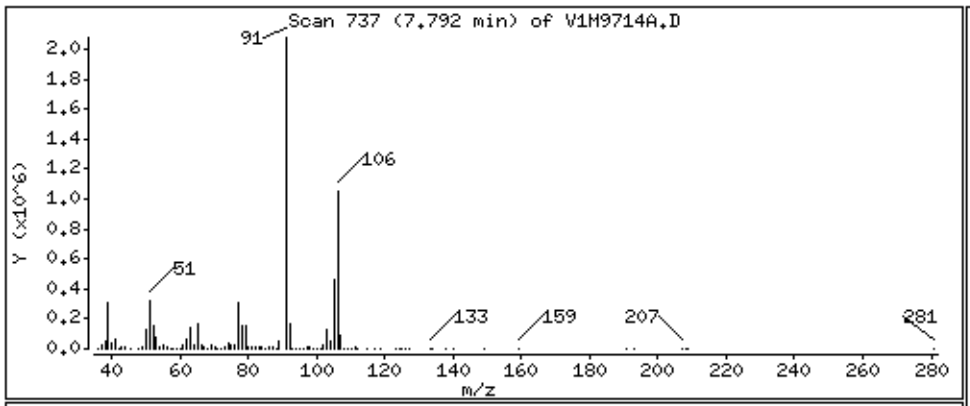
Operator: AM SRC: LIMS

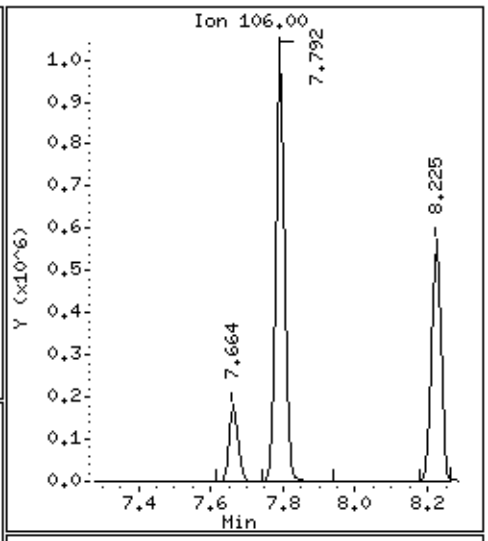
Column phase: DB-624

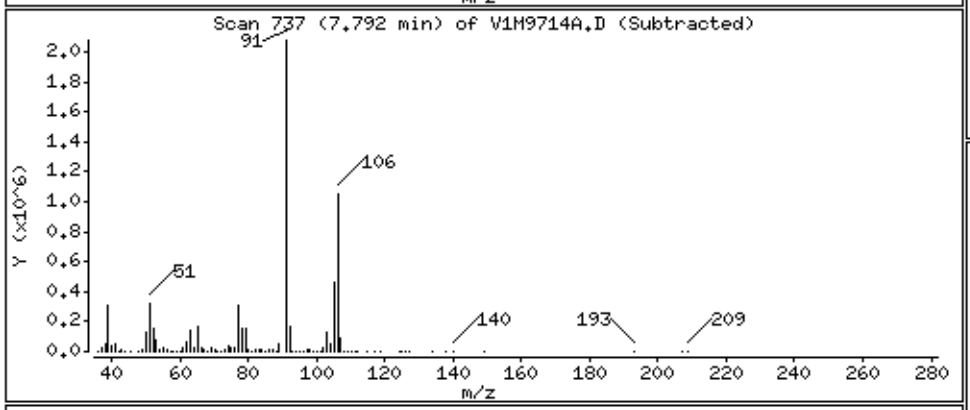
Column diameter: 0.25

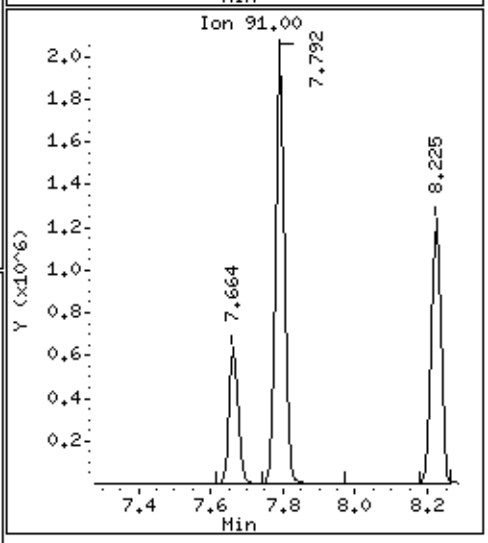
73 m,p-Xylene

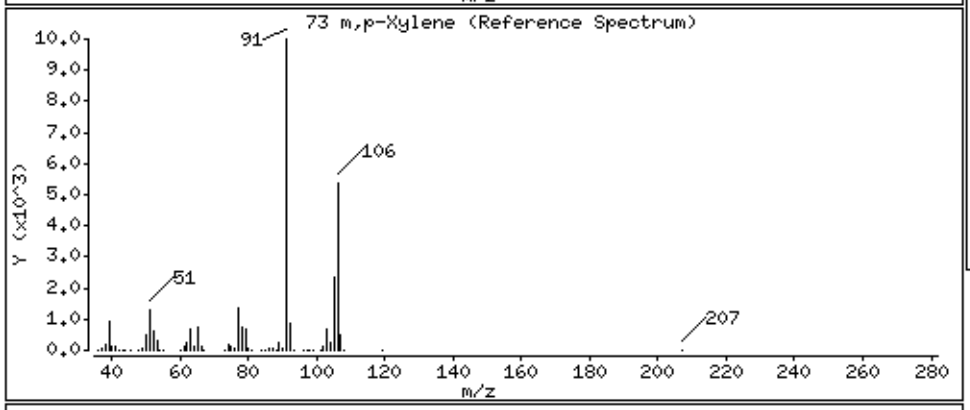
Concentration: 7000 ug/Kg

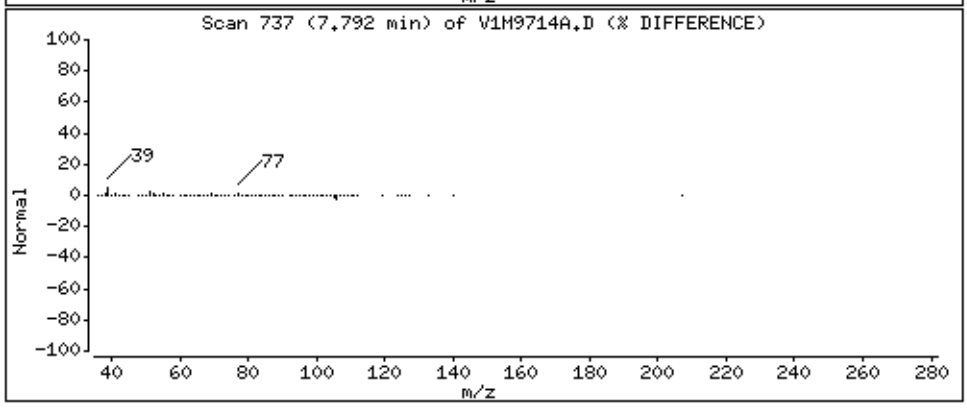












Data File: \\avogadro\organics\V1.I\121217.B\V1M9714A.D

Date : 17-DEC-2012 15:28

Client ID: FORMER BLDG OIL

Instrument: V1.i

Sample Info: 5ML,L2570-01A,,69759

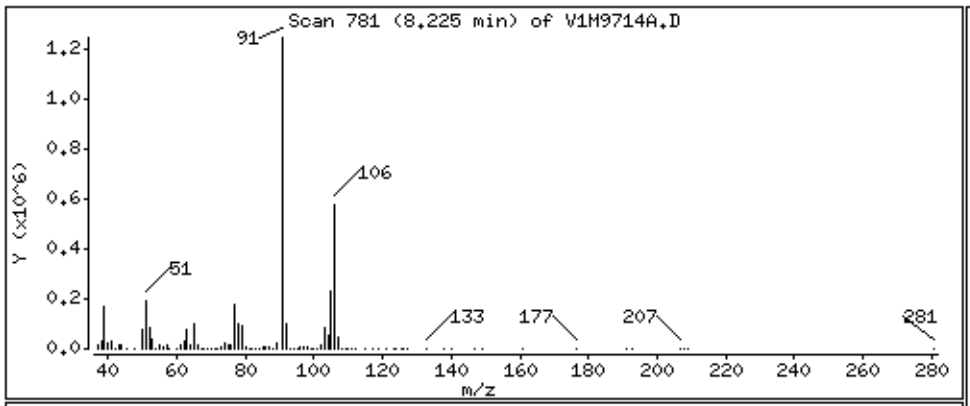
Operator: AM SRC: LIMS

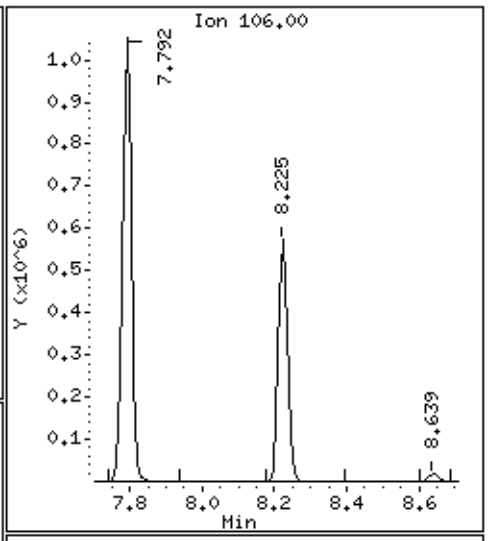
Column phase: DB-624

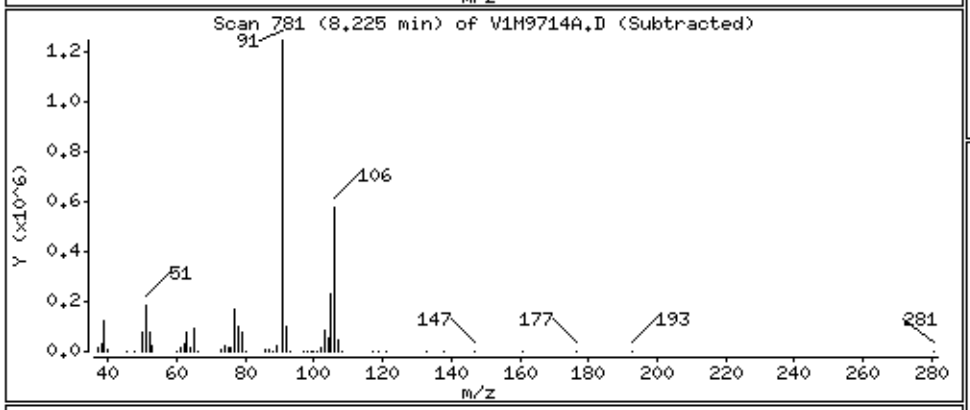
Column diameter: 0.25

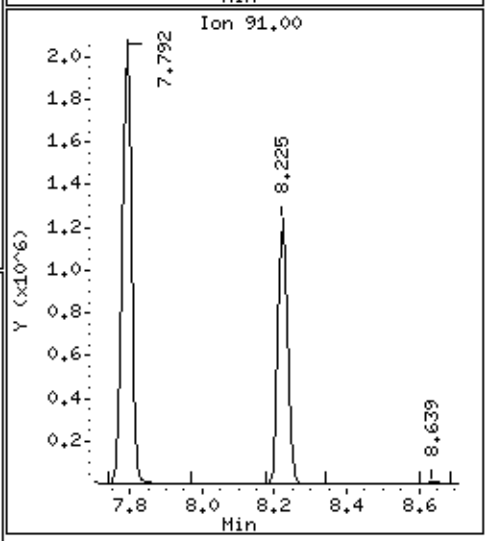
74 o-Xylene

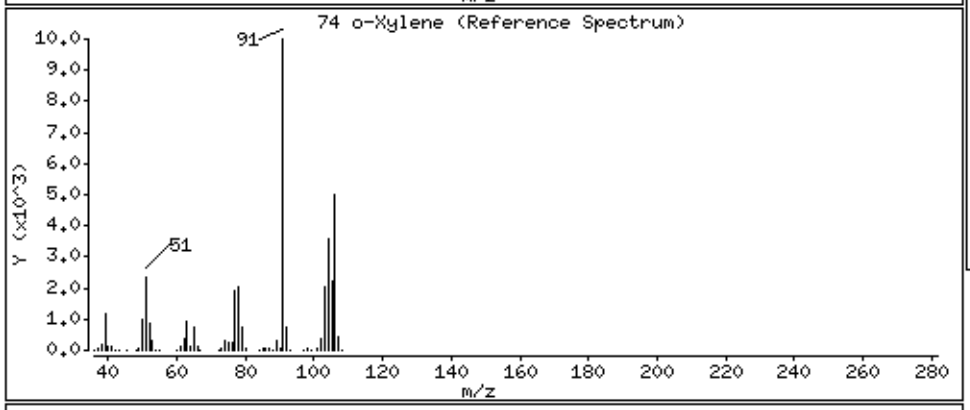
Concentration: 3900 ug/Kg

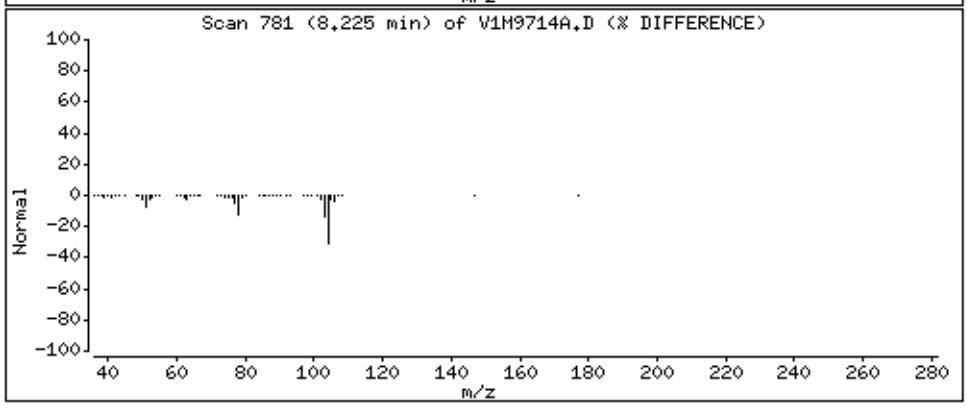












Data File: \\avogadro\organics\V1.I\121217.B\V1M9714A.D

Date : 17-DEC-2012 15:28

Client ID: FORMER BLDG OIL

Instrument: V1.i

Sample Info: 5ML,L2570-01A,,69759

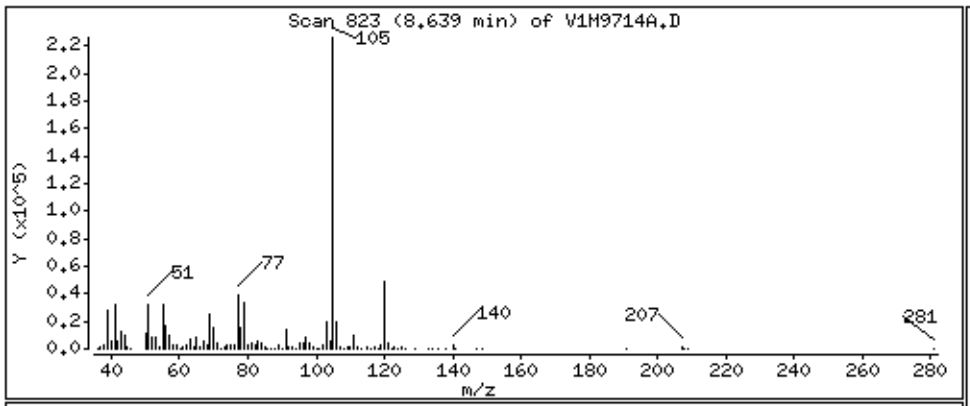
Operator: AM SRC: LIMS

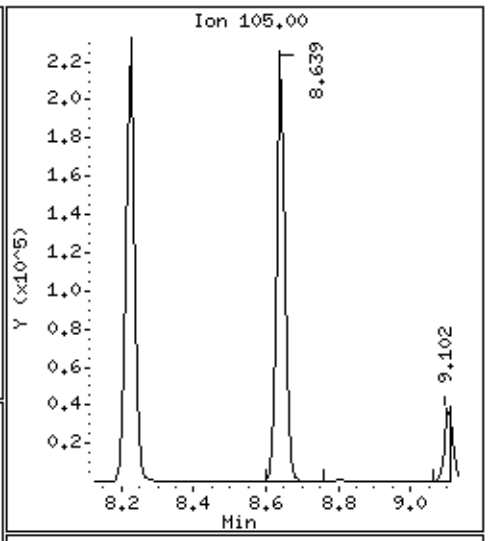
Column phase: DB-624

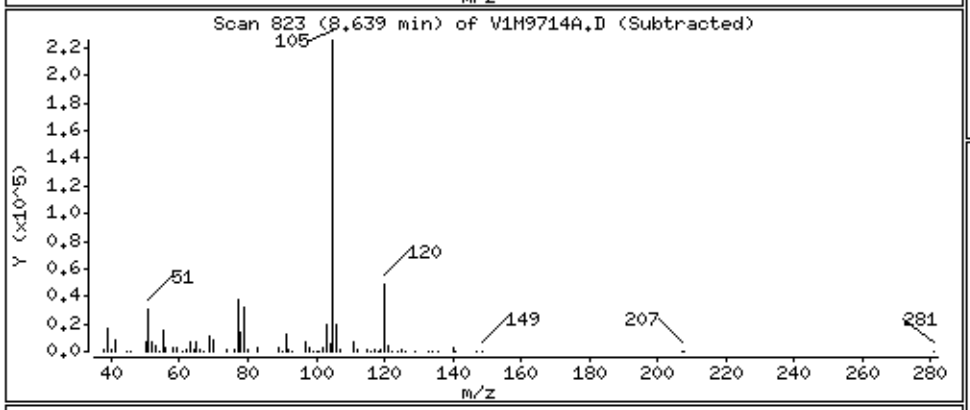
Column diameter: 0.25

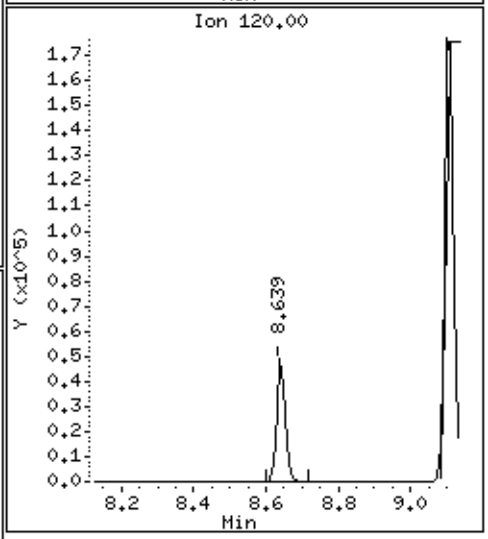
77 Isopropylbenzene

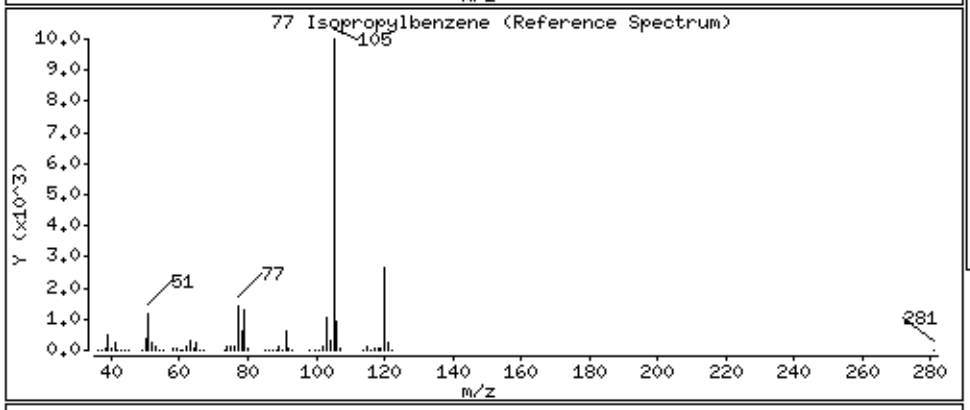
Concentration: 610 ug/Kg

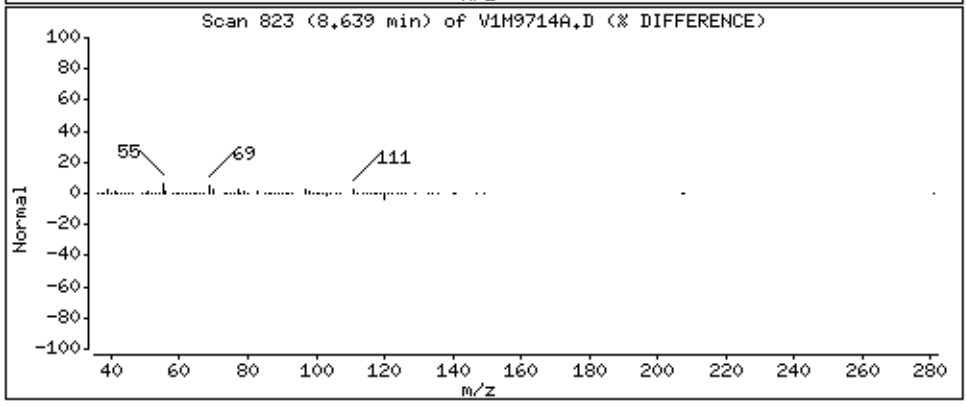












Data File: \\avogadro\organics\V1.I\121217.B\V1M9714A.D

Date : 17-DEC-2012 15:28

Client ID: FORMER BLDG OIL

Instrument: V1.i

Sample Info: 5ML,L2570-01A,,69759

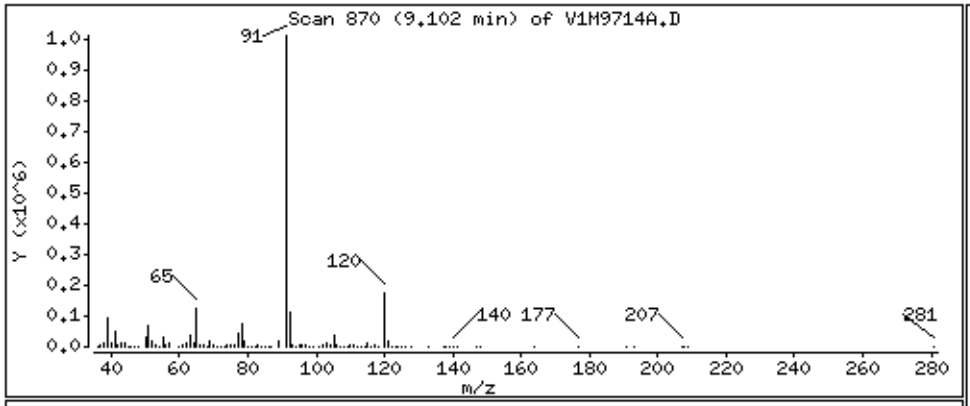
Operator: AM SRC: LIMS

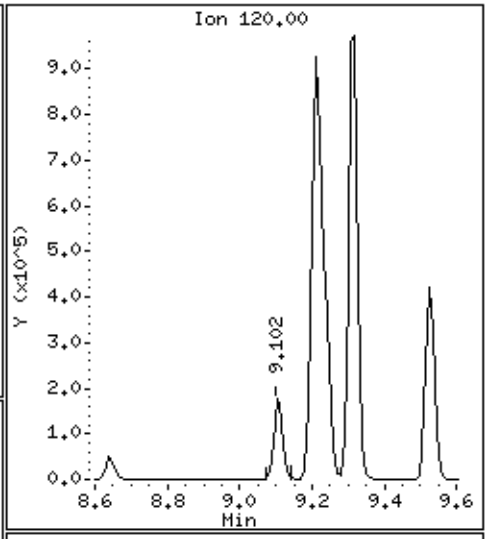
Column phase: DB-624

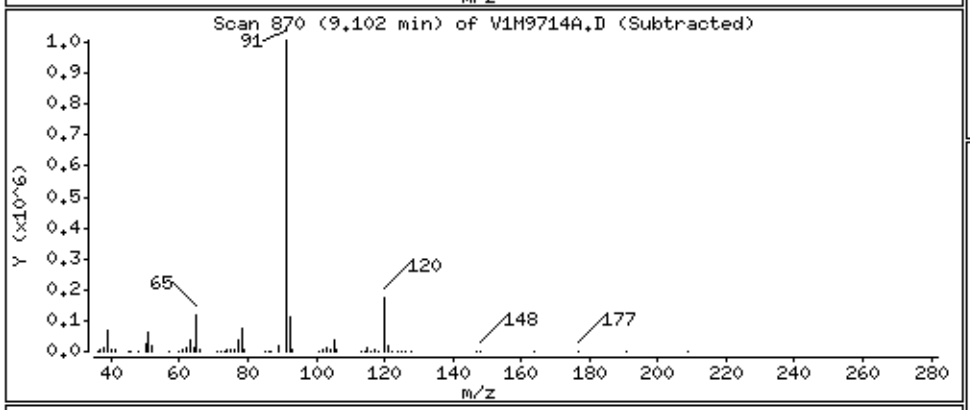
Column diameter: 0.25

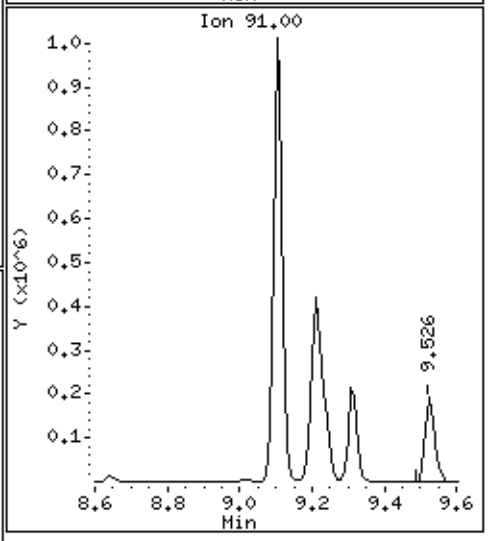
83 n-Propylbenzene

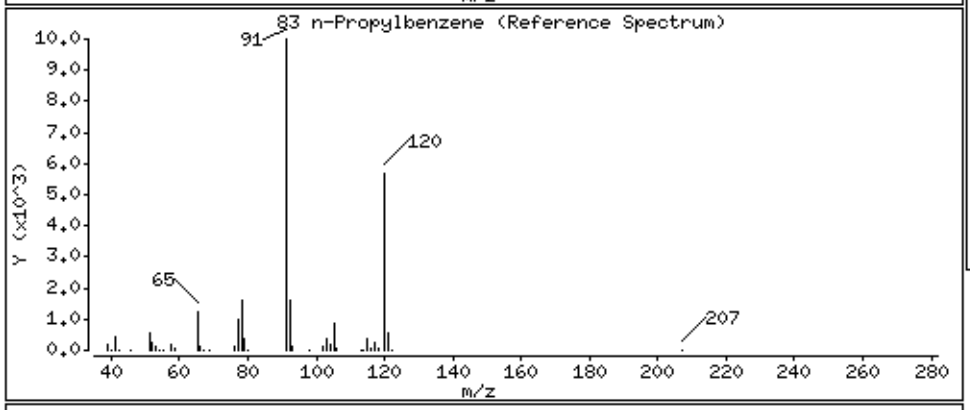
Concentration: 2600 ug/Kg

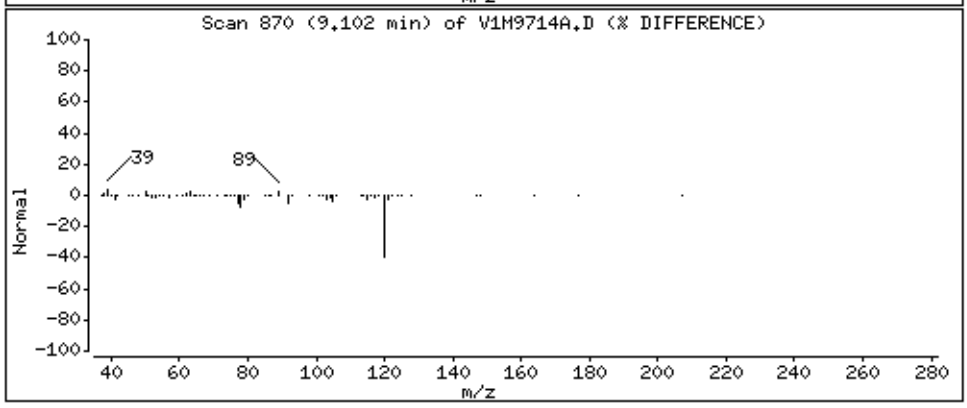












Data File: \\avogadro\organics\V1.I\121217.B\V1M9714A.D

Date : 17-DEC-2012 15:28

Client ID: FORMER BLDG OIL

Instrument: V1.i

Sample Info: 5ML,L2570-01A,,69759

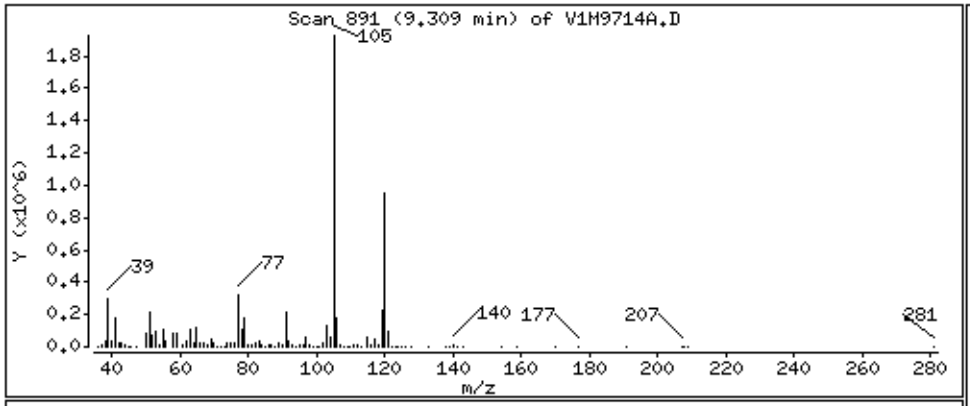
Operator: AM SRC: LIMS

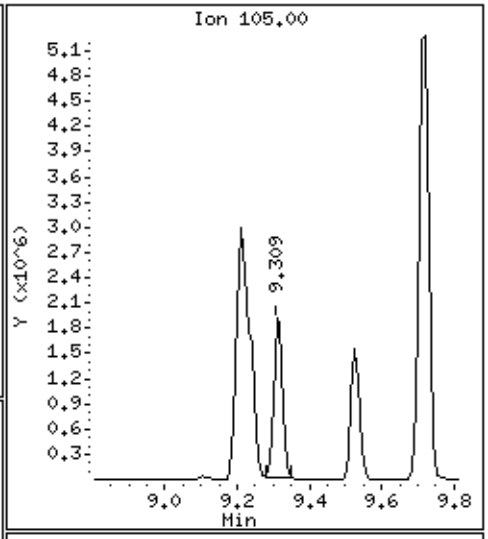
Column phase: DB-624

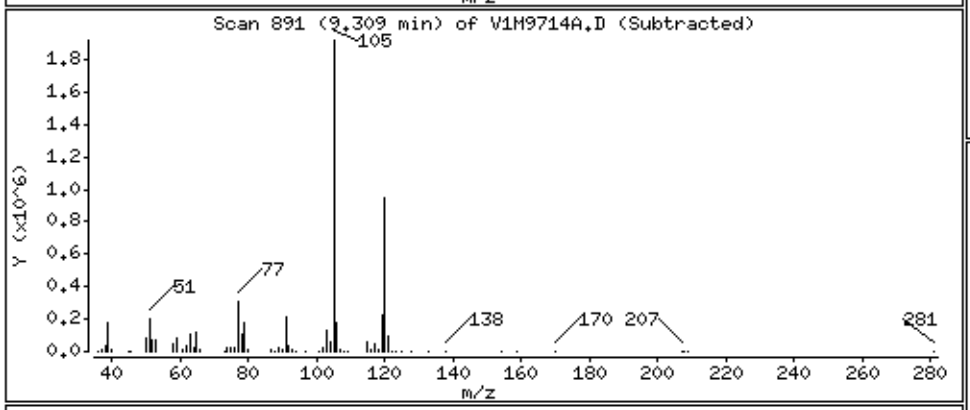
Column diameter: 0.25

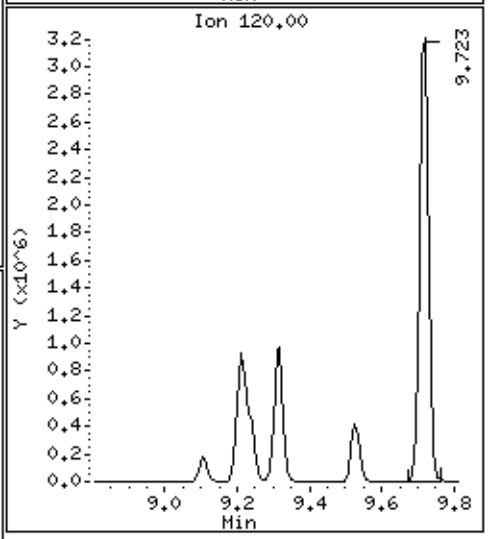
85 1,3,5-Trimethylbenzene

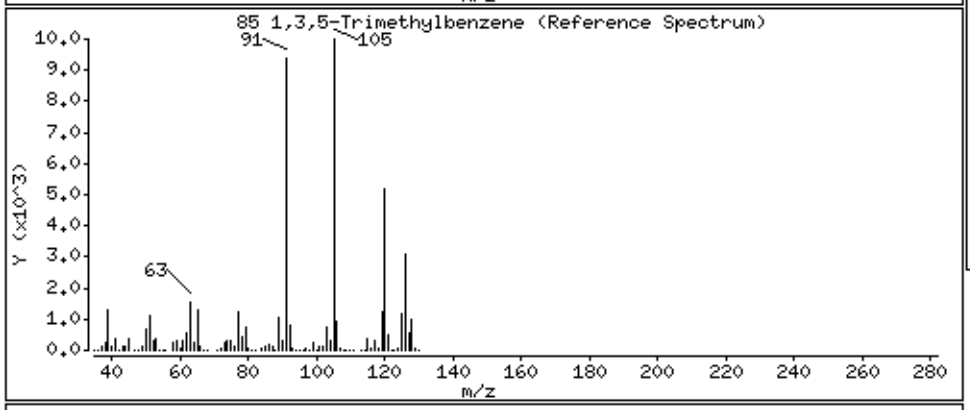
Concentration: 7800 ug/Kg

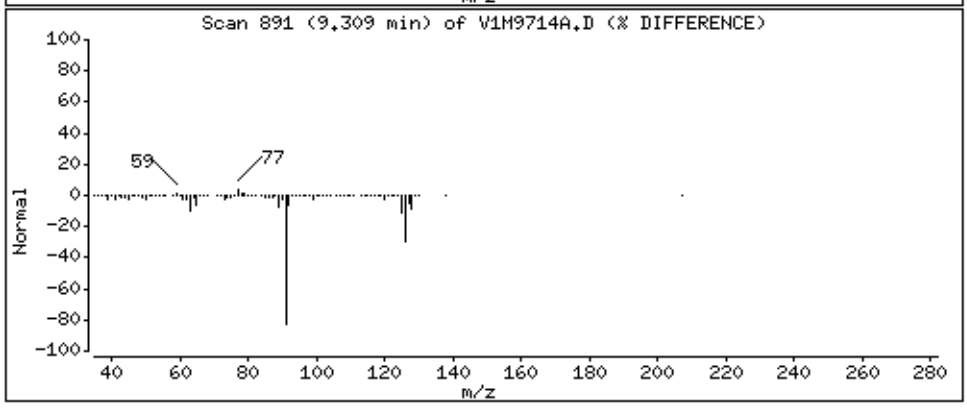












Data File: \\avogadro\organics\V1.I\121217.B\V1M9714A.D

Date : 17-DEC-2012 15:28

Client ID: FORMER BLDG OIL

Instrument: V1.i

Sample Info: 5ML,L2570-01A,,69759

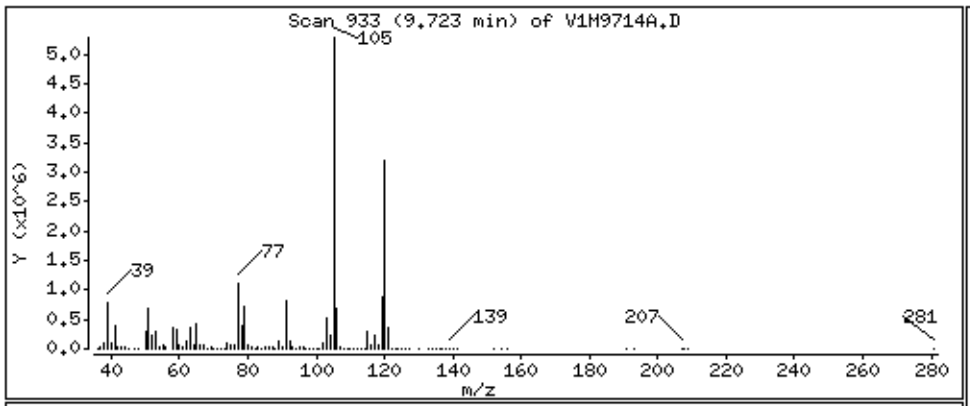
Operator: AM SRC: LIMS

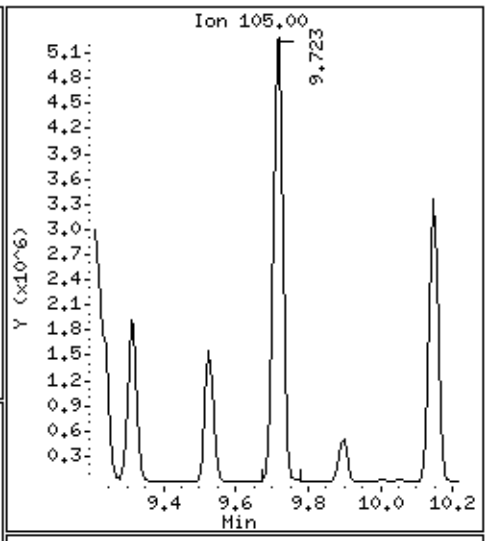
Column phase: DB-624

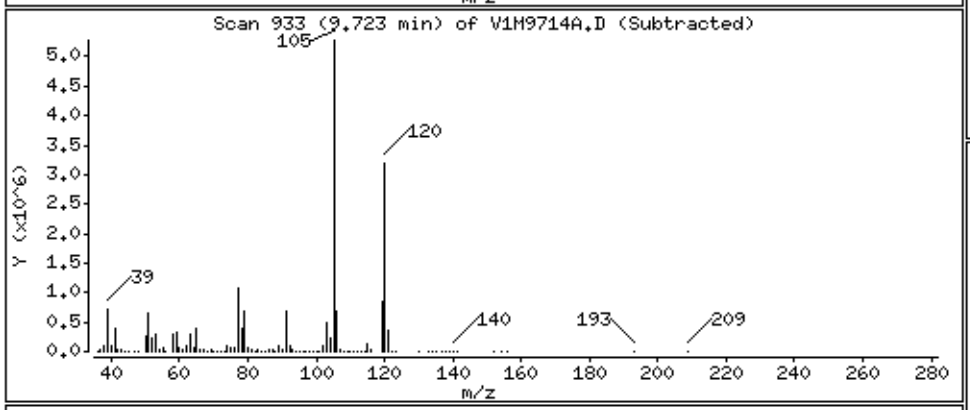
Column diameter: 0.25

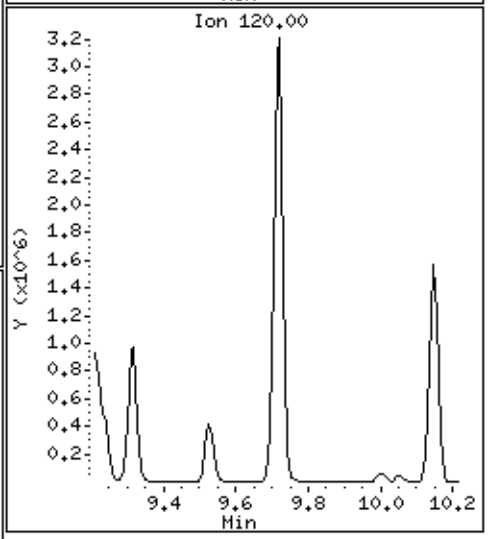
88 1,2,4-Trimethylbenzene

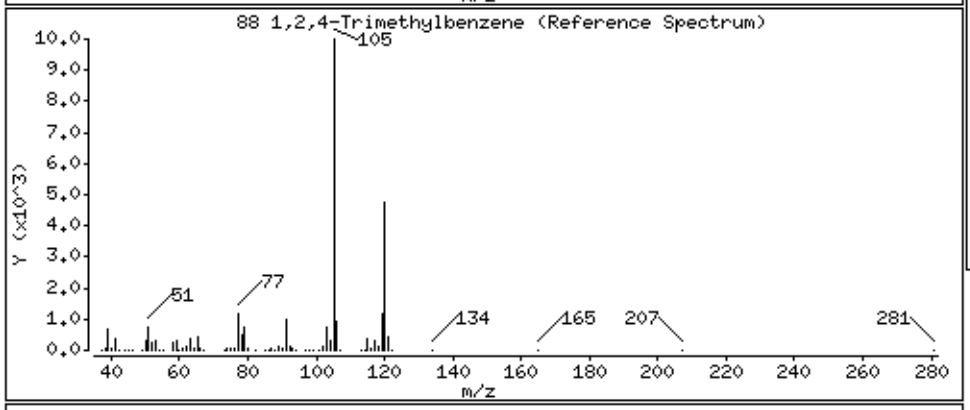
Concentration: 25000 ug/Kg

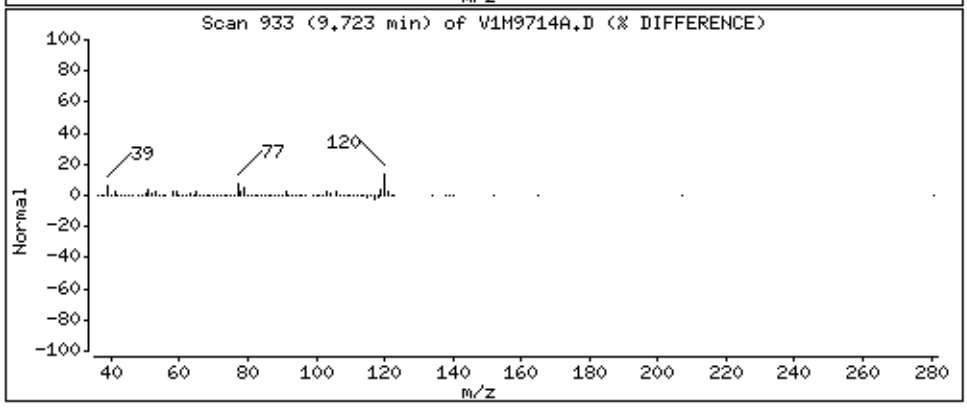












Data File: \\avogadro\organics\V1.I\121217.B\V1M9714A.D

Date : 17-DEC-2012 15:28

Client ID: FORMER BLDG OIL

Instrument: V1.i

Sample Info: 5ML,L2570-01A,,69759

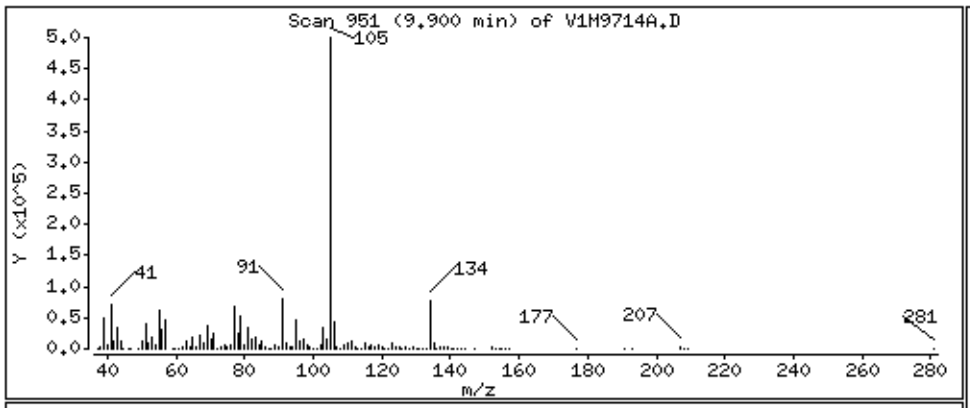
Operator: AM SRC: LIMS

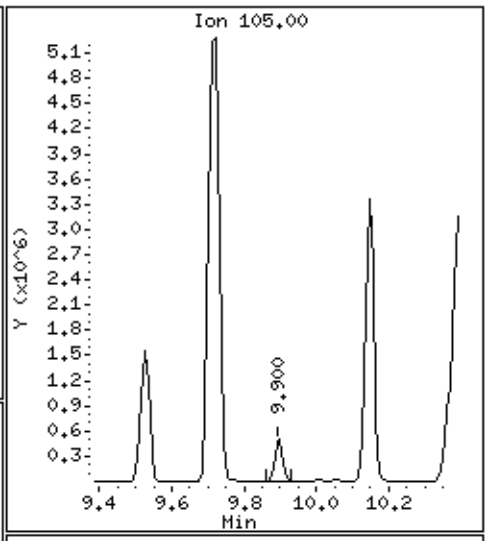
Column phase: DB-624

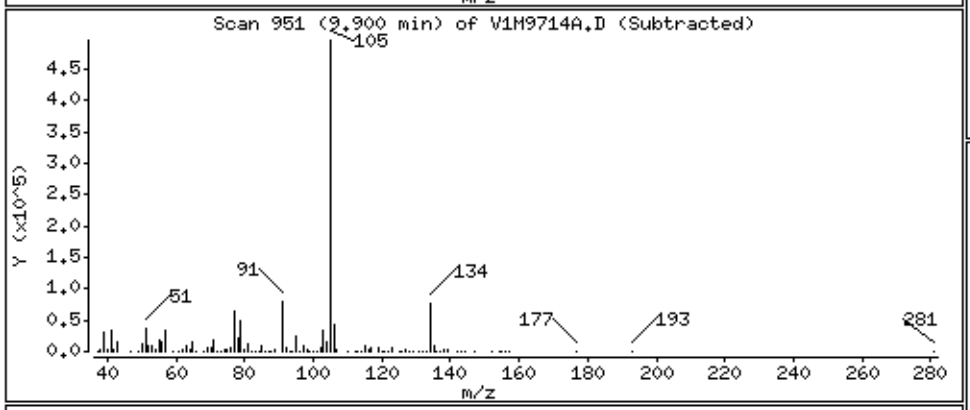
Column diameter: 0.25

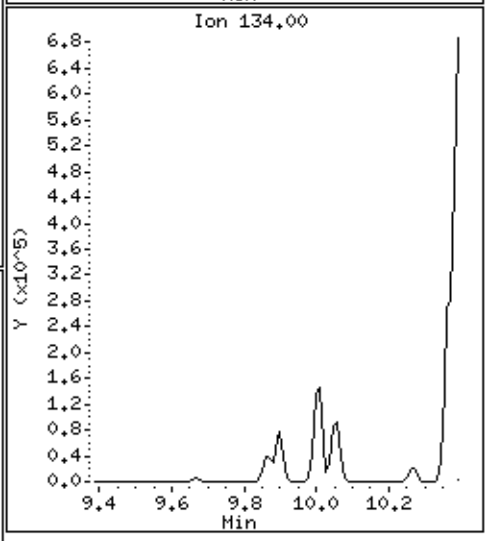
89 sec-Butylbenzene

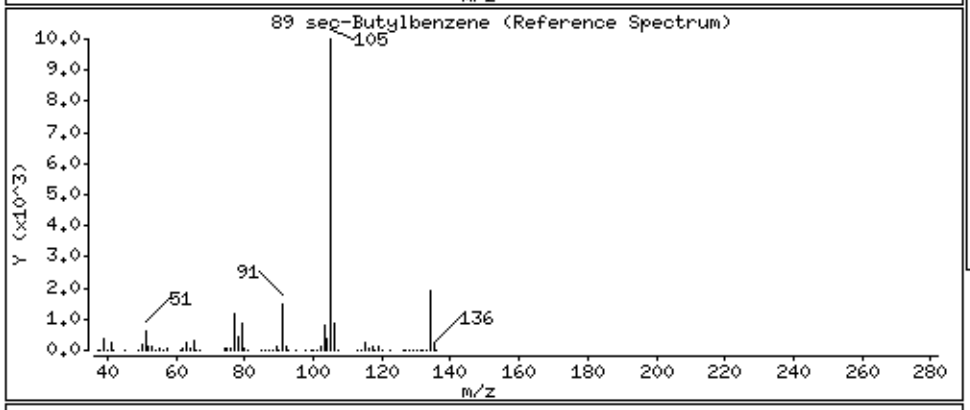
Concentration: 1500 ug/Kg

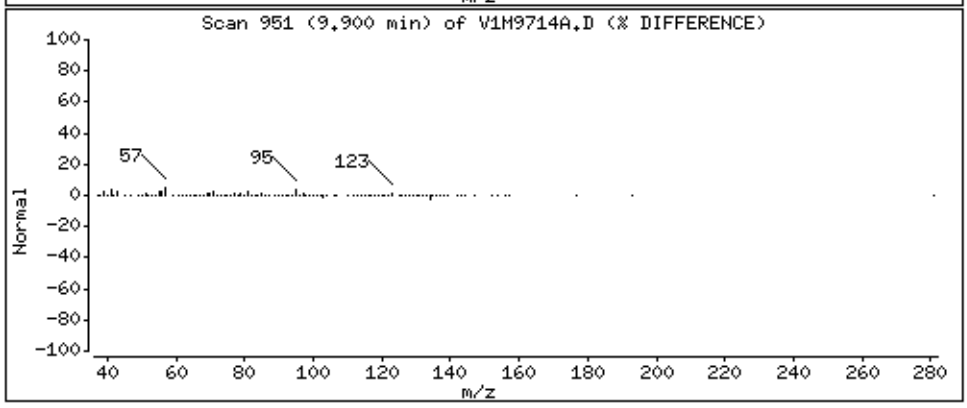












Data File: \\avogadro\organics\V1.I\121217.B\V1M9714A.D

Date : 17-DEC-2012 15:28

Client ID: FORMER BLDG OIL

Instrument: V1.i

Sample Info: 5ML,L2570-01A,,69759

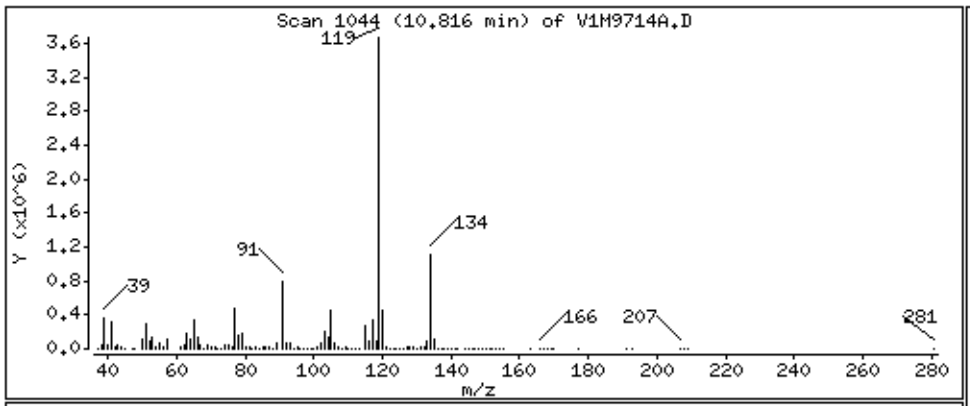
Operator: AM SRC: LIMS

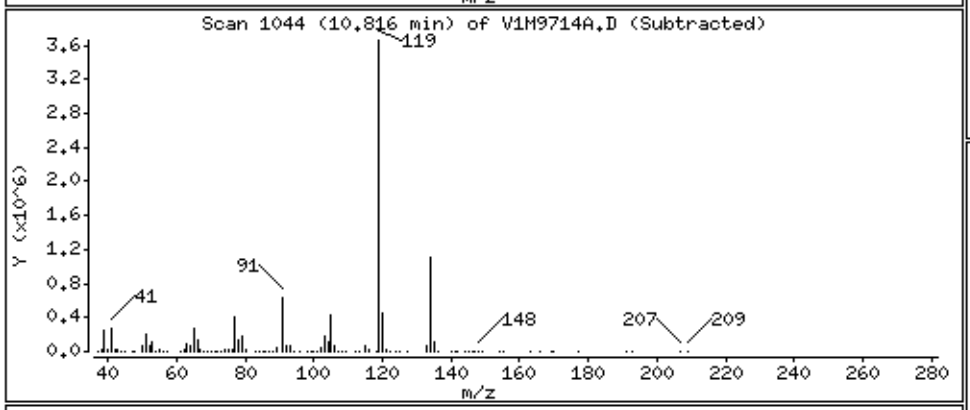
Column phase: DB-624

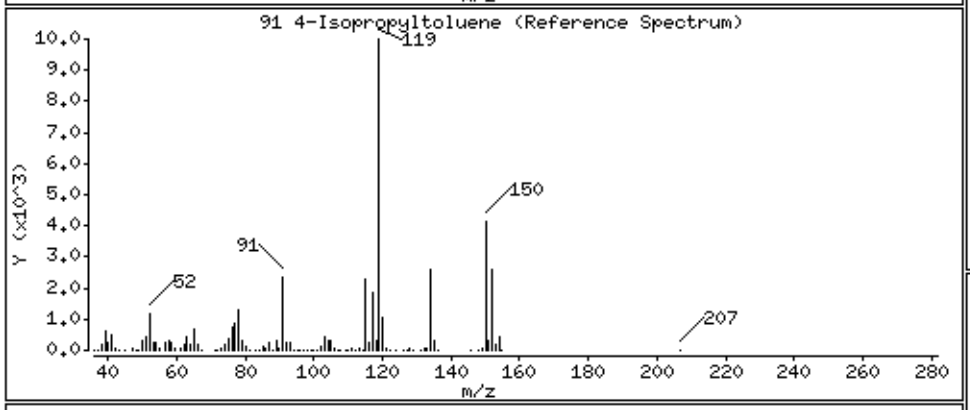
Column diameter: 0.25

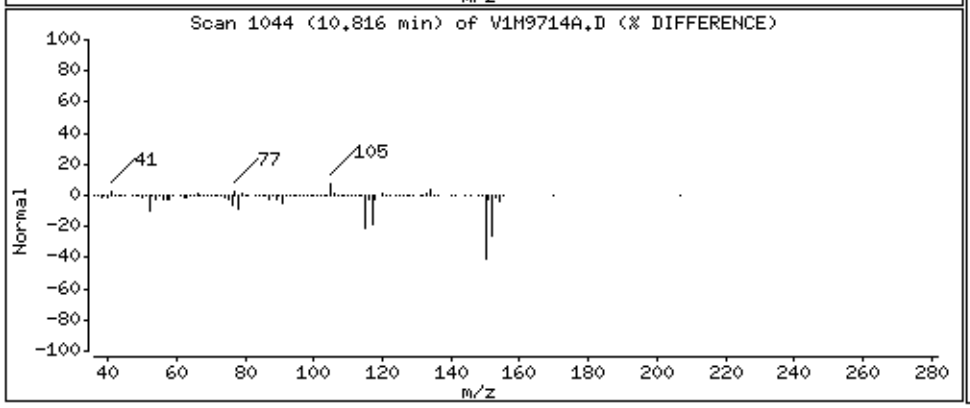
91 4-Isopropyltoluene

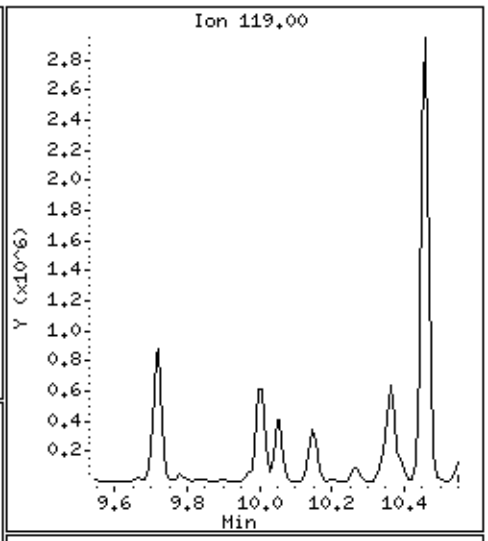
Concentration: 14000 ug/Kg

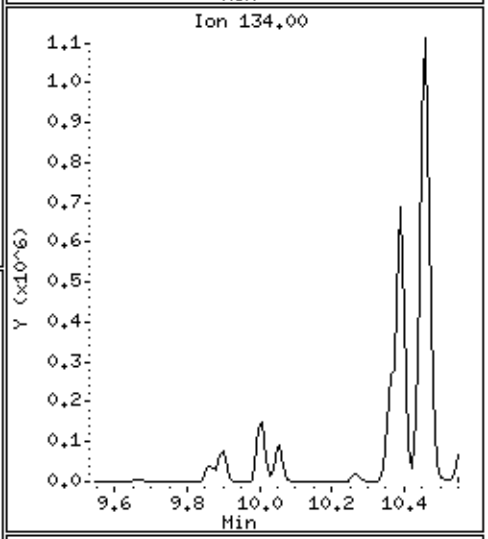


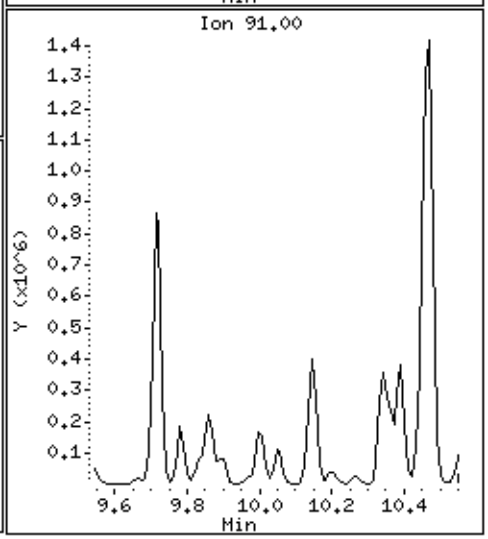












Data File: \\avogadro\organics\V1.I\121217.B\V1M9714A.D

Date : 17-DEC-2012 15:28

Client ID: FORMER BLDG OIL

Instrument: V1.i

Sample Info: 5ML,L2570-01A,,69759

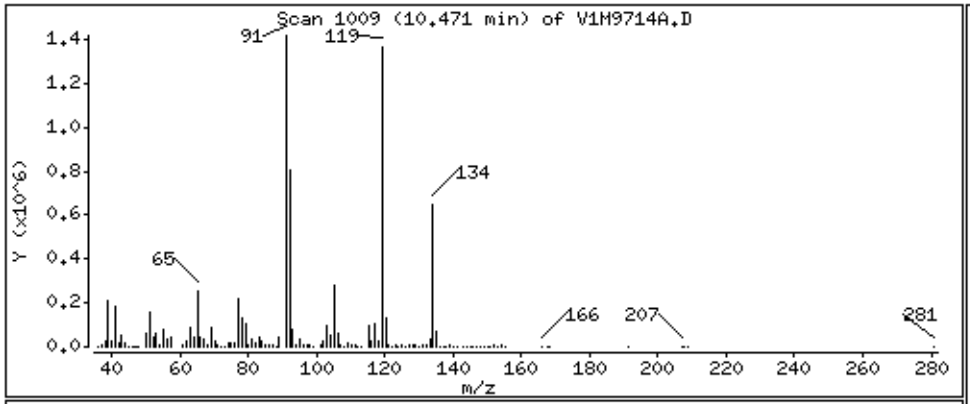
Operator: AM SRC: LIMS

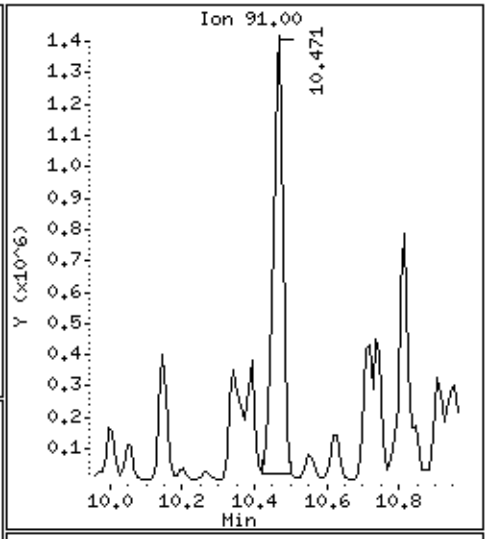
Column phase: DB-624

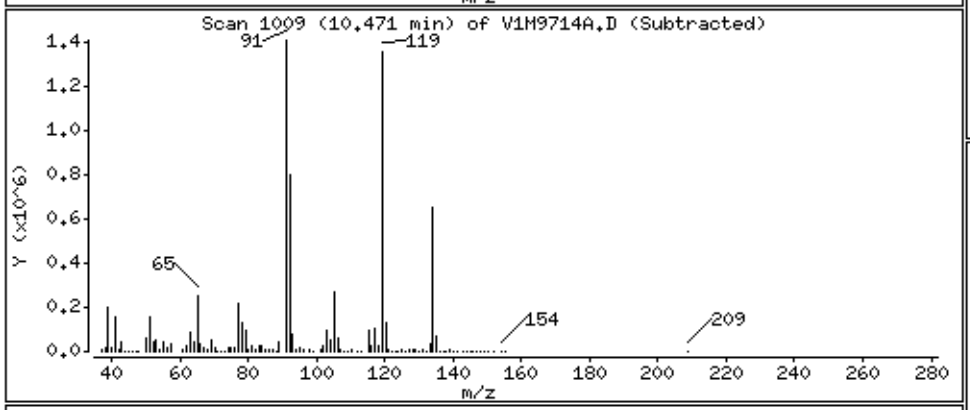
Column diameter: 0.25

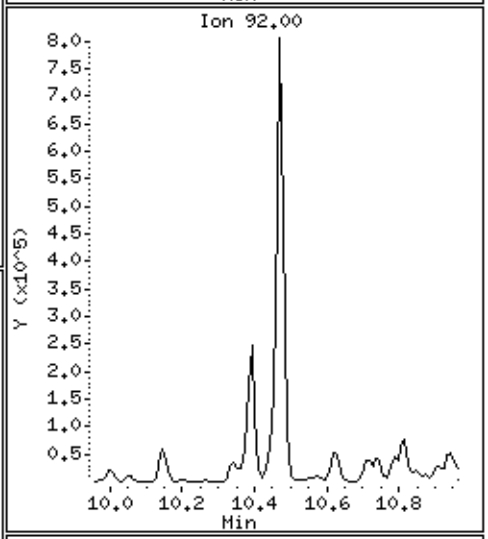
95 n-Butylbenzene

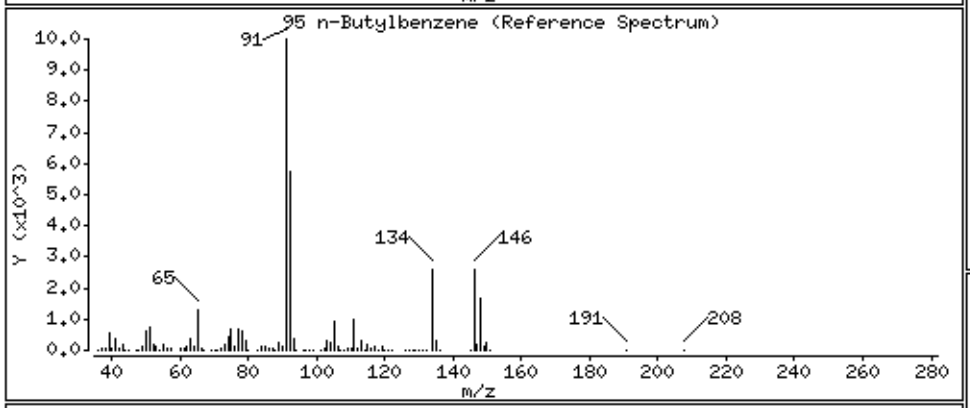
Concentration: 7000 ug/Kg

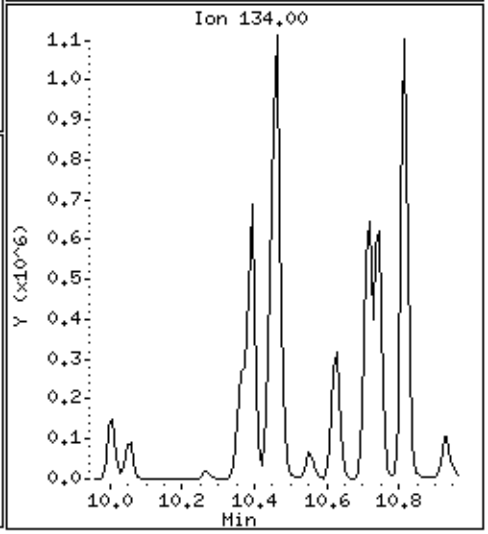


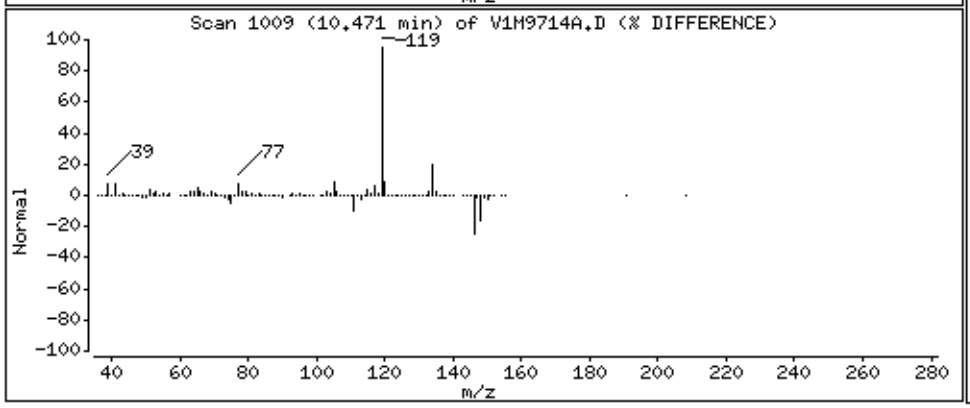












Data File: \\avogadro\organics\V1.I\121217.B\V1M9714A.D

Date : 17-DEC-2012 15:28

Client ID: FORMER BLDG OIL

Instrument: V1.i

Sample Info: 5ML,L2570-01A,,69759

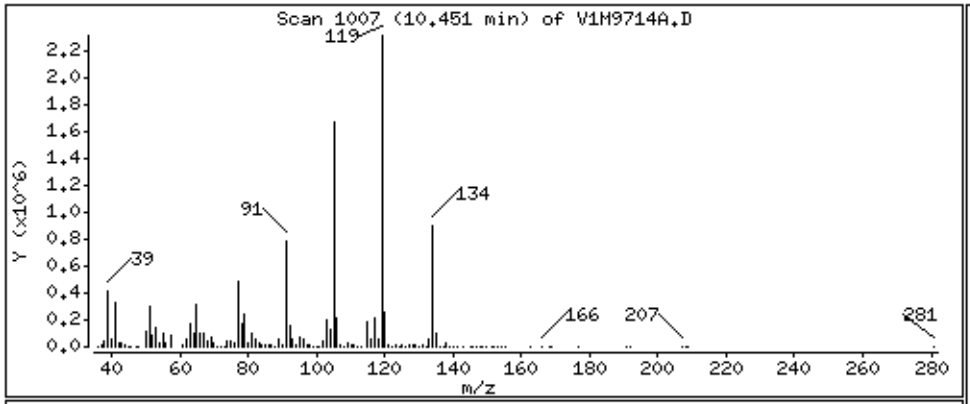
Operator: AM SRC: LIMS

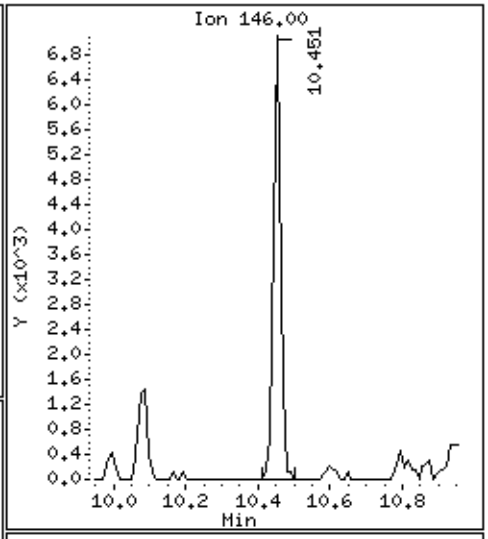
Column phase: DB-624

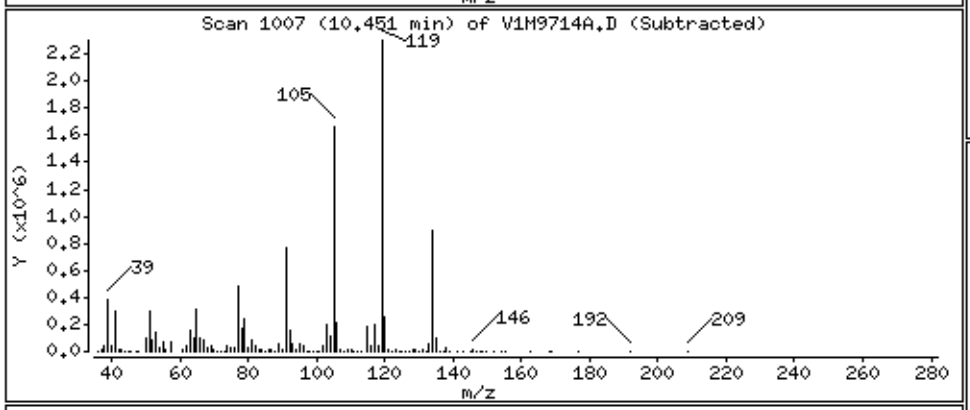
Column diameter: 0.25

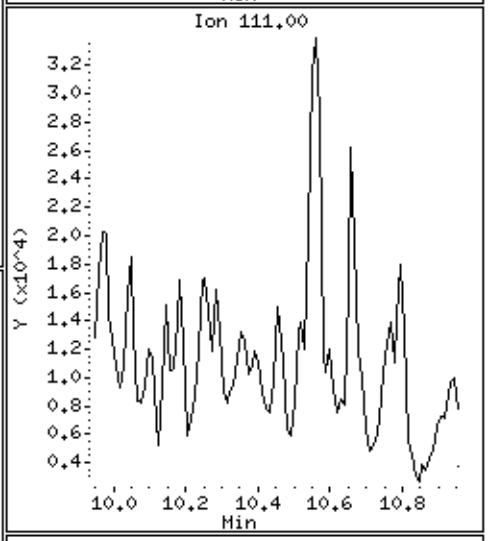
96 1,2-Dichlorobenzene

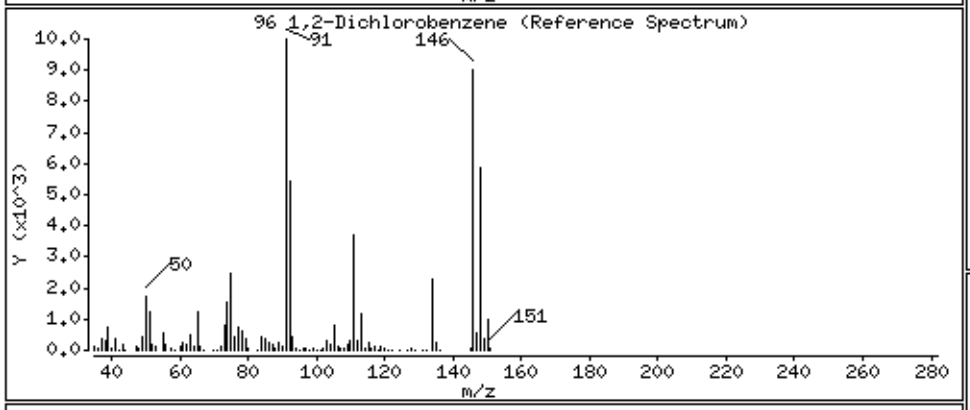
Concentration: 57 ug/Kg

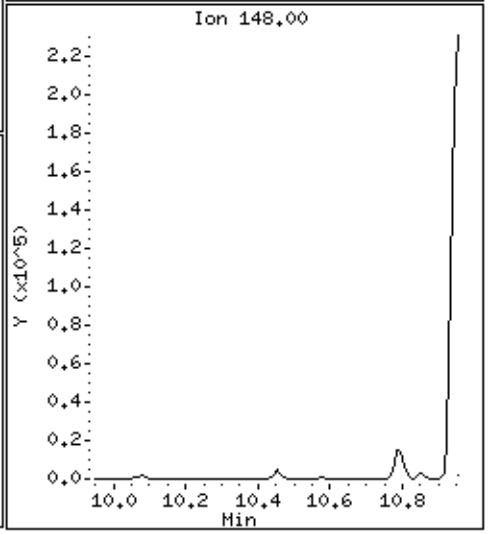


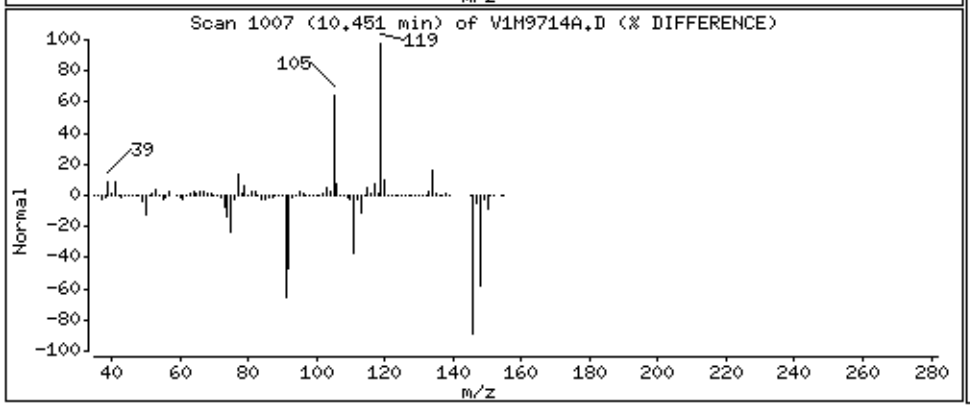












Data File: \\avogadro\organics\V1.I\121217.B\V1M9714A.D

Date : 17-DEC-2012 15:28

Client ID: FORMER BLDG OIL

Instrument: V1.i

Sample Info: 5ML,L2570-01A,,69759

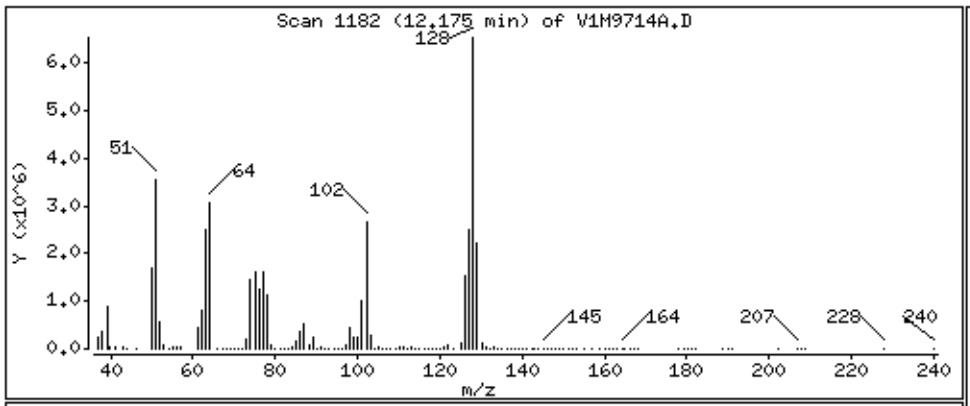
Operator: AM SRC: LIMS

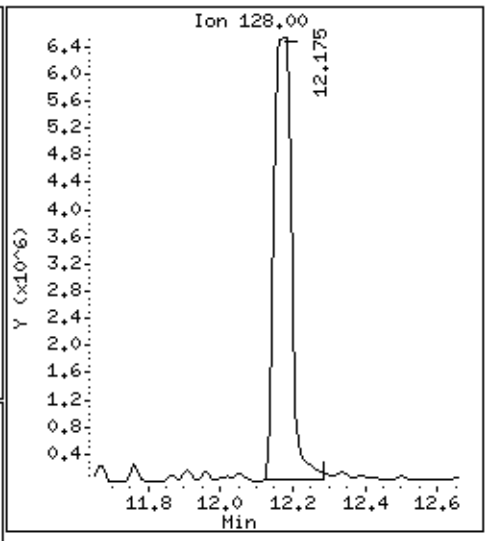
Column phase: DB-624

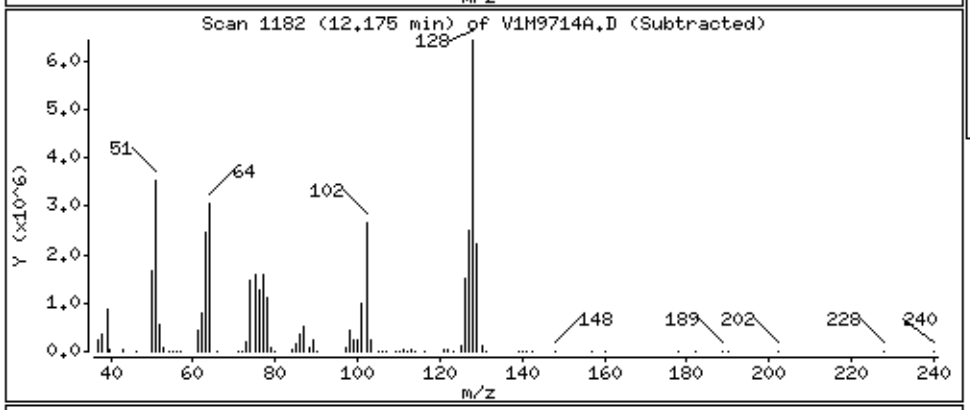
Column diameter: 0.25

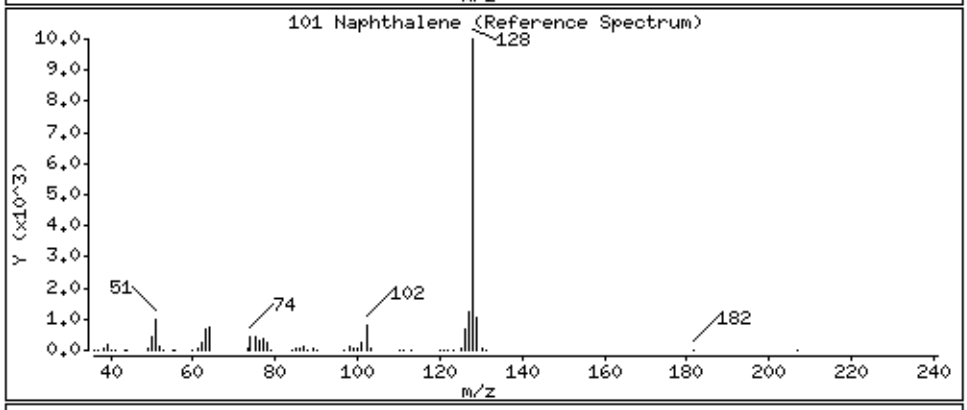
101 Naphthalene

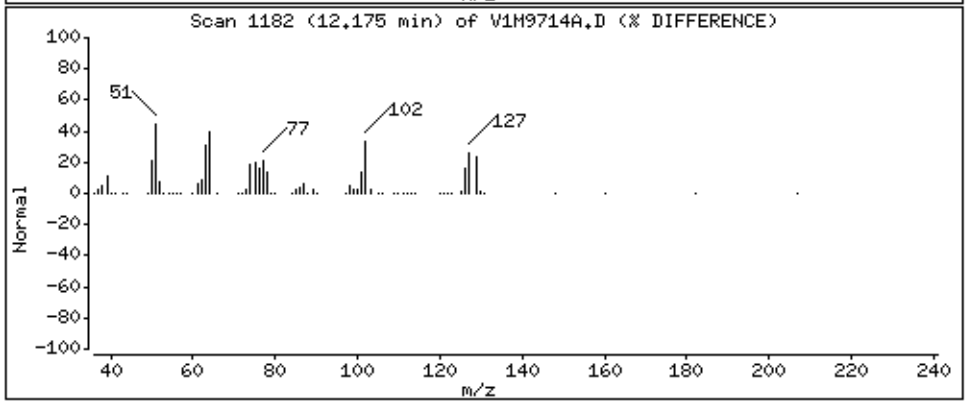
Concentration: 71000 ug/Kg











Data File: \\avogadro\organics\V1.I\121217.B\V1M9714A.D

Date : 17-DEC-2012 15:28

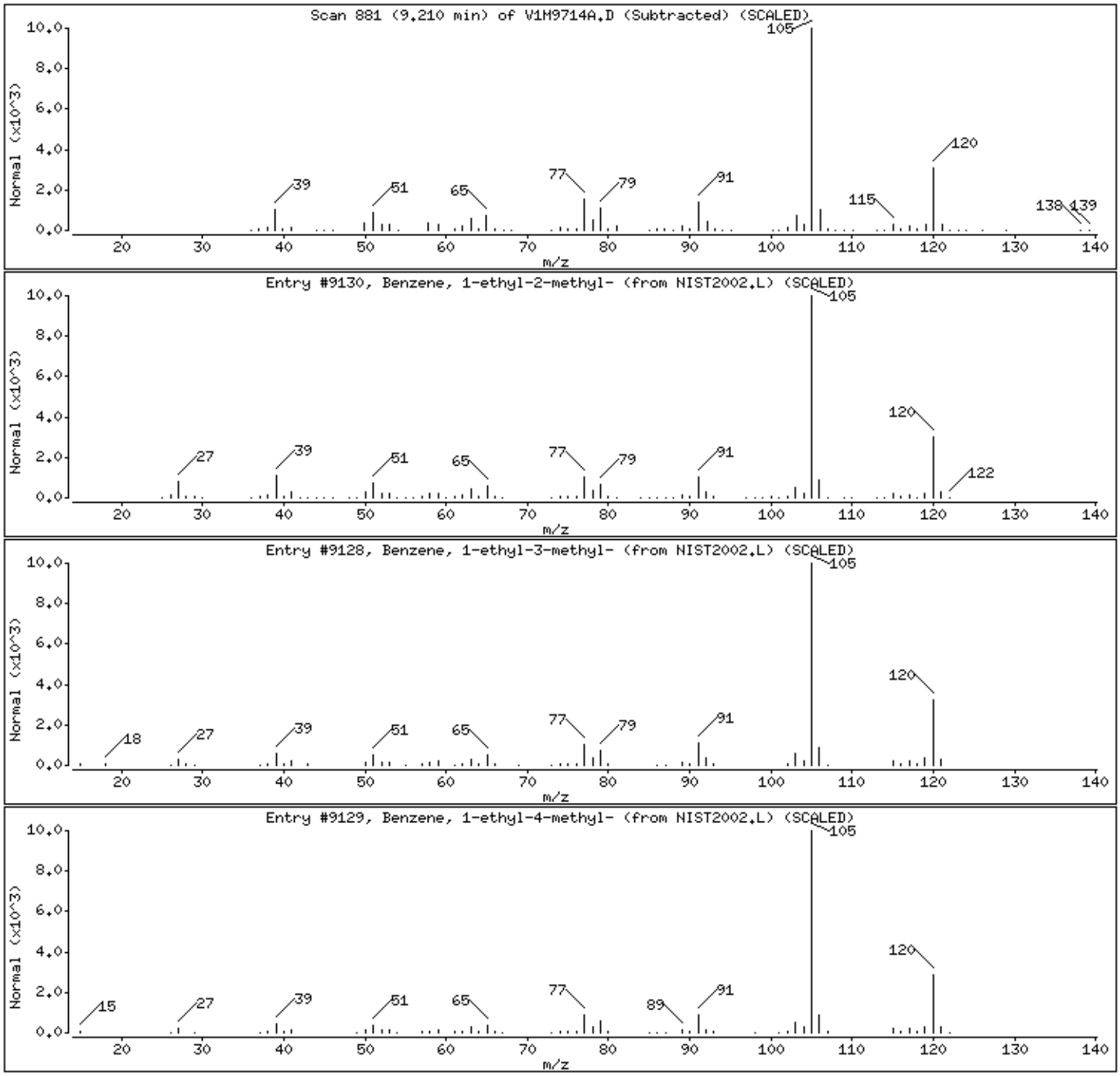
Client ID: FORMER BLDG OIL Instrument: V1.i

Sample Info: 5ML,L2570-01A,,69759

Operator: AM SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1-ethyl-2-methyl-	611-14-3	NIST2002.L	9130	95	C9H12	120
Benzene, 1-ethyl-3-methyl-	620-14-4	NIST2002.L	9128	95	C9H12	120
Benzene, 1-ethyl-4-methyl-	622-96-8	NIST2002.L	9129	94	C9H12	120



Data File: \\avogadro\organics\V1.I\121217.B\V1M9714A.D

Date : 17-DEC-2012 15:28

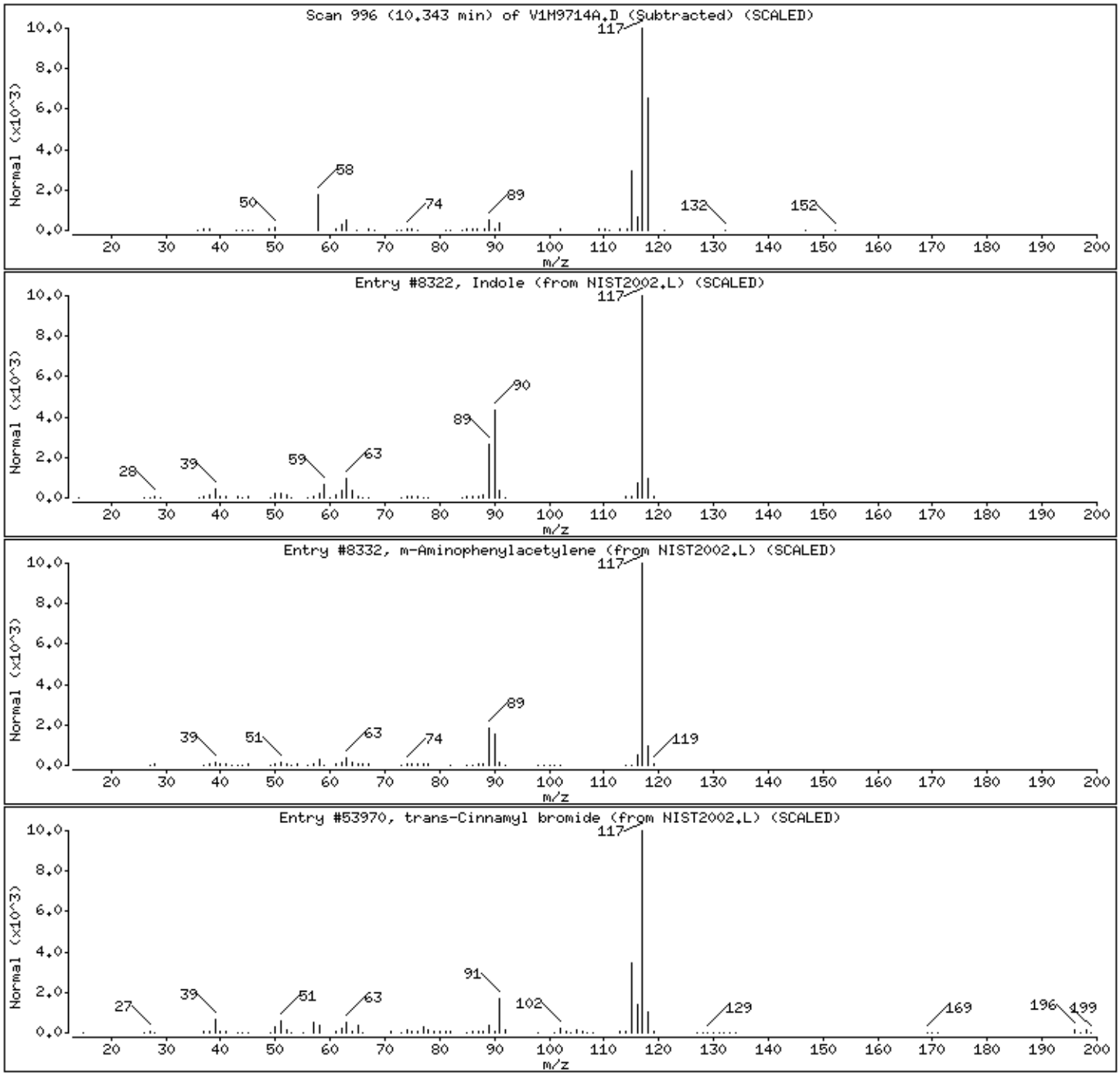
Client ID: FORMER BLDG OIL Instrument: V1.i

Sample Info: 5ML,L2570-01A,,69759

Operator: AM SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Indole	120-72-9	NIST2002.L	8322	49	C8H7N	117
m-Aminophenylacetylene	54060-30-9	NIST2002.L	8332	47	C8H7N	117
trans-Cinnamyl bromide	26146-77-0	NIST2002.L	53970	33	C9H9Br	196



Data File: \\avogadro\organics\V1.I\121217.B\V1M9714A.D

Date : 17-DEC-2012 15:28

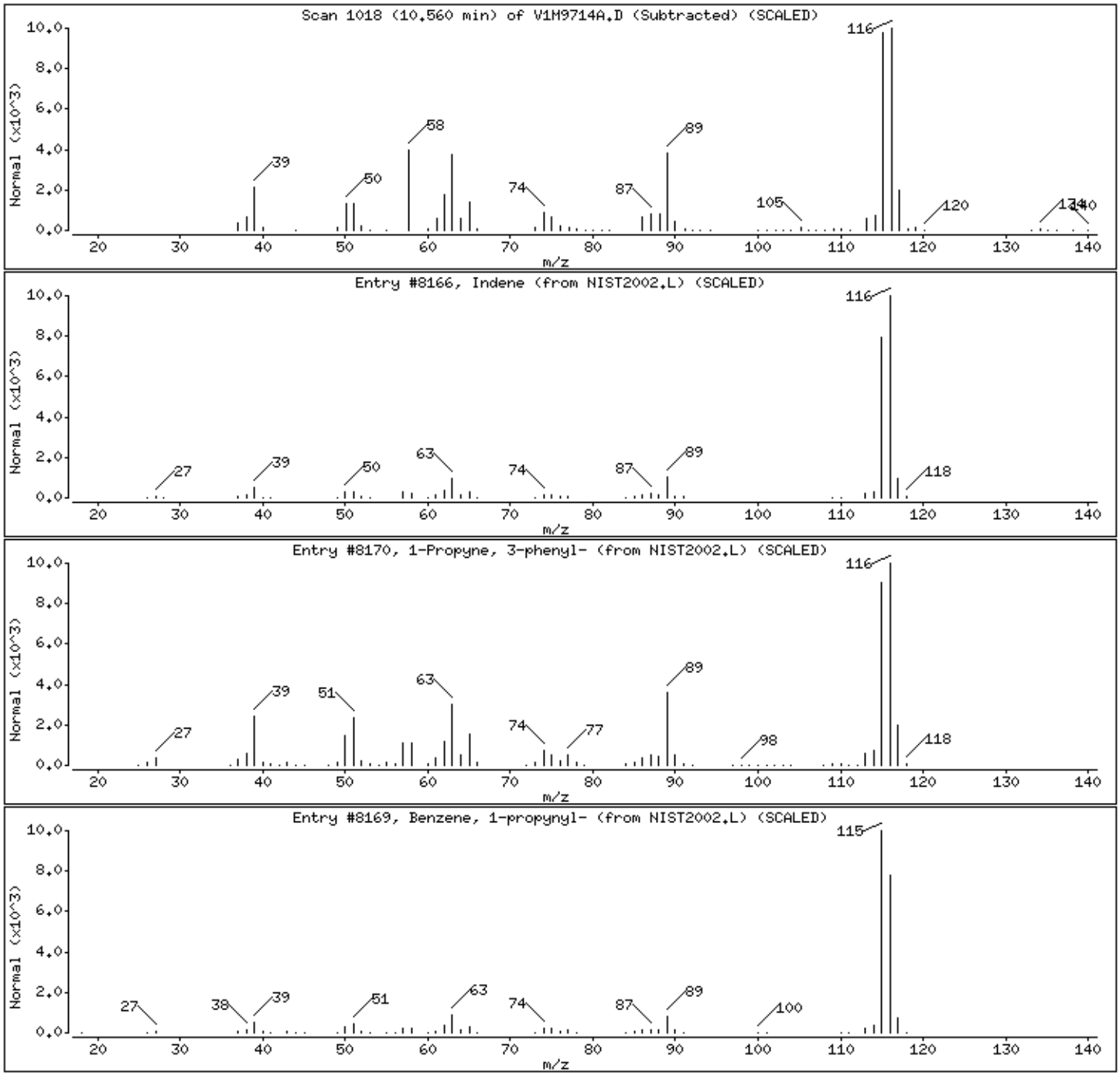
Client ID: FORMER BLDG OIL Instrument: V1.i

Sample Info: 5ML,L2570-01A,,69759

Operator: AM SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Indene	95-13-6	NIST2002.L	8166	96	C9H8	116
1-Propyne, 3-phenyl-	10147-11-2	NIST2002.L	8170	91	C9H8	116
Benzene, 1-propynyl-	673-32-5	NIST2002.L	8169	81	C9H8	116



Data File: \\avogadro\organics\V1.I\121217.B\V1M9714A.D

Date : 17-DEC-2012 15:28

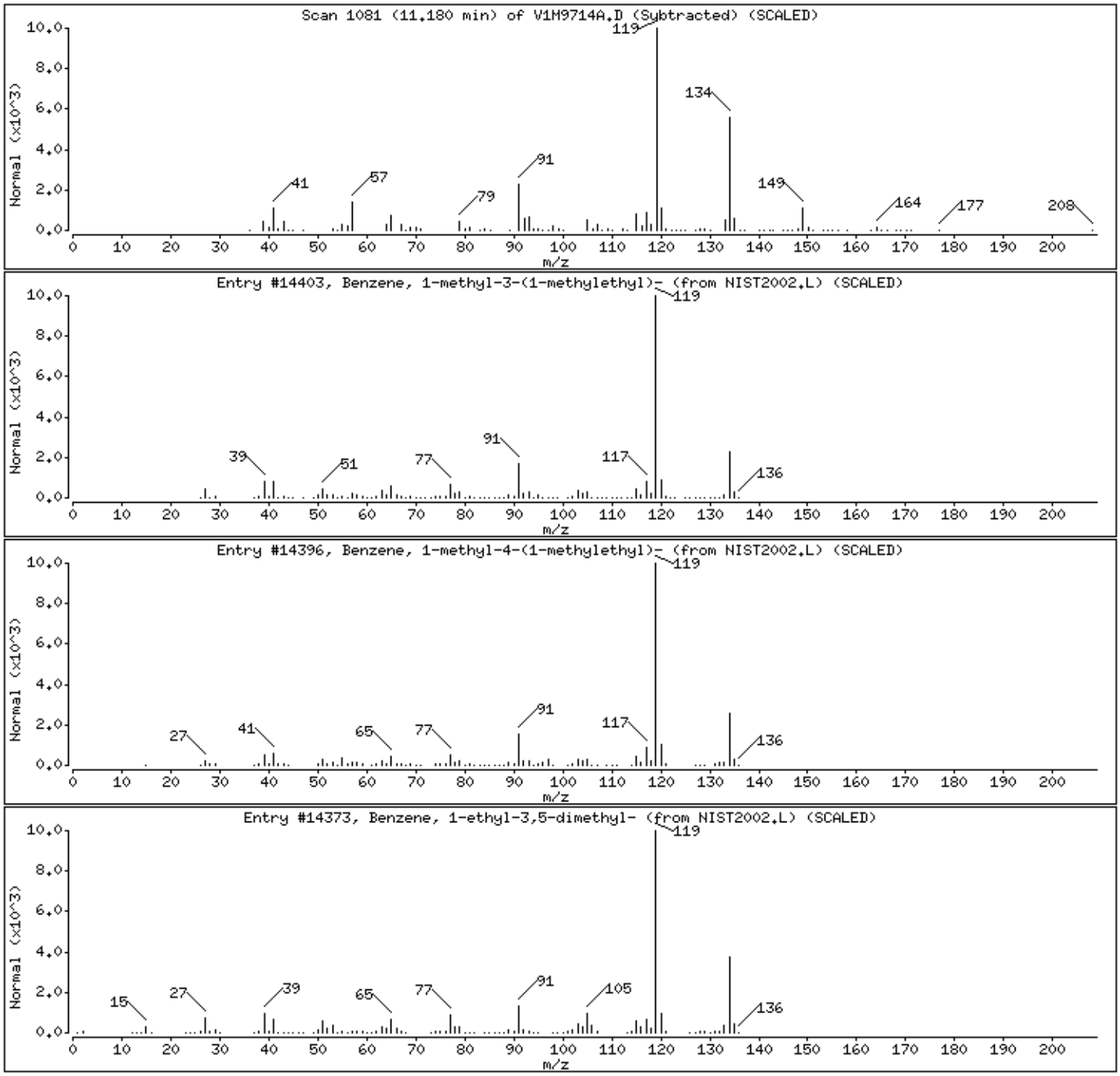
Client ID: FORMER BLDG OIL Instrument: V1.i

Sample Info: 5ML,L2570-01A,,69759

Operator: AM SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	NIST2002.L	14403	87	C10H14	134
Benzene, 1-methyl-4-(1-methylethyl)-	99-87-6	NIST2002.L	14396	87	C10H14	134
Benzene, 1-ethyl-3,5-dimethyl-	934-74-7	NIST2002.L	14373	87	C10H14	134



Data File: \\avogadro\organics\V1.I\121217.B\V1M9714A.D

Date : 17-DEC-2012 15:28

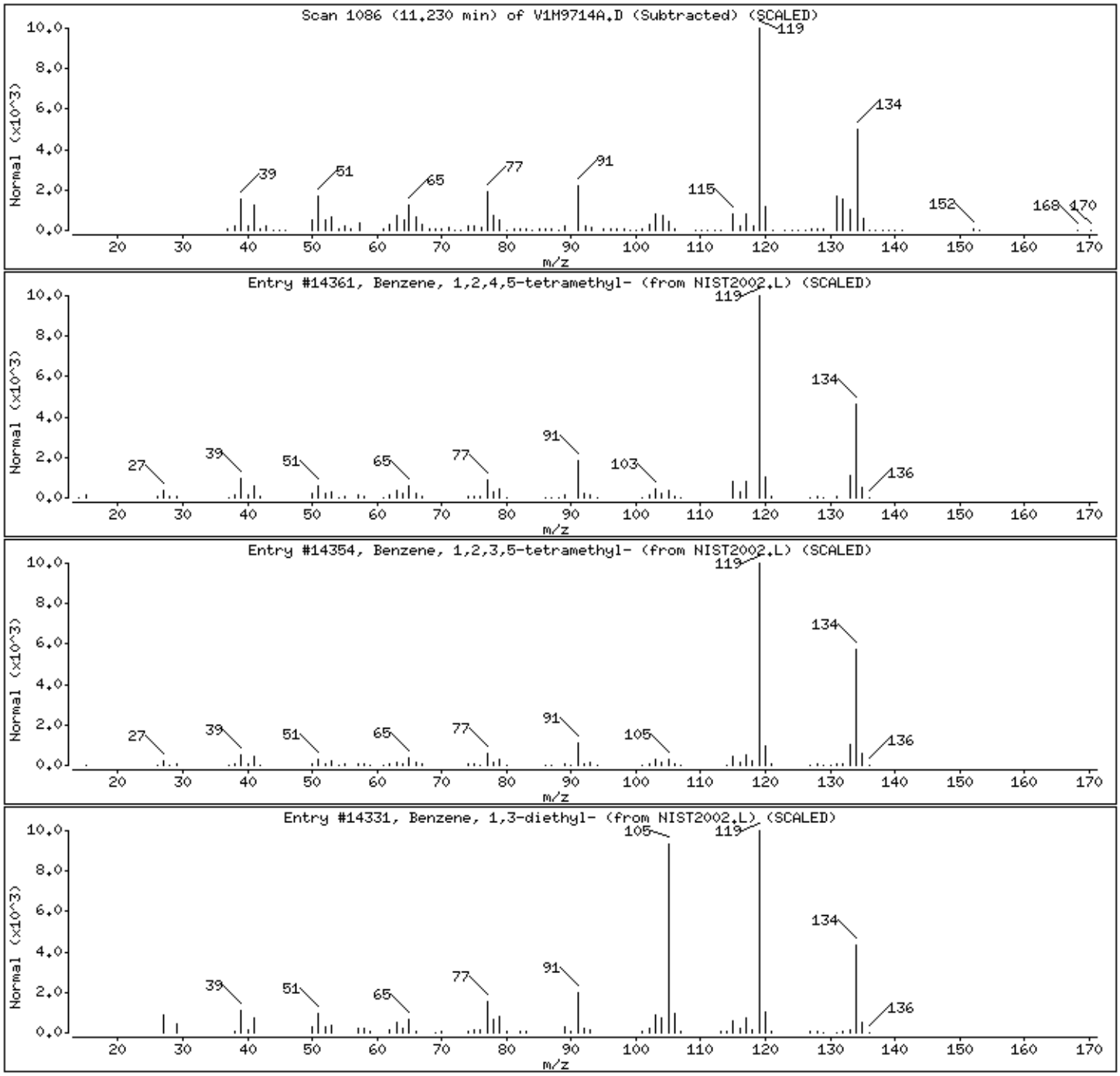
Client ID: FORMER BLDG OIL Instrument: V1.i

Sample Info: 5ML,L2570-01A,,69759

Operator: AM SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1,2,4,5-tetramethyl-	95-93-2	NIST2002.L	14361	95	C10H14	134
Benzene, 1,2,3,5-tetramethyl-	527-53-7	NIST2002.L	14354	95	C10H14	134
Benzene, 1,3-diethyl-	141-93-5	NIST2002.L	14331	93	C10H14	134



Data File: \\avogadro\organics\V1.I\121217.B\V1M9714A.D

Date : 17-DEC-2012 15:28

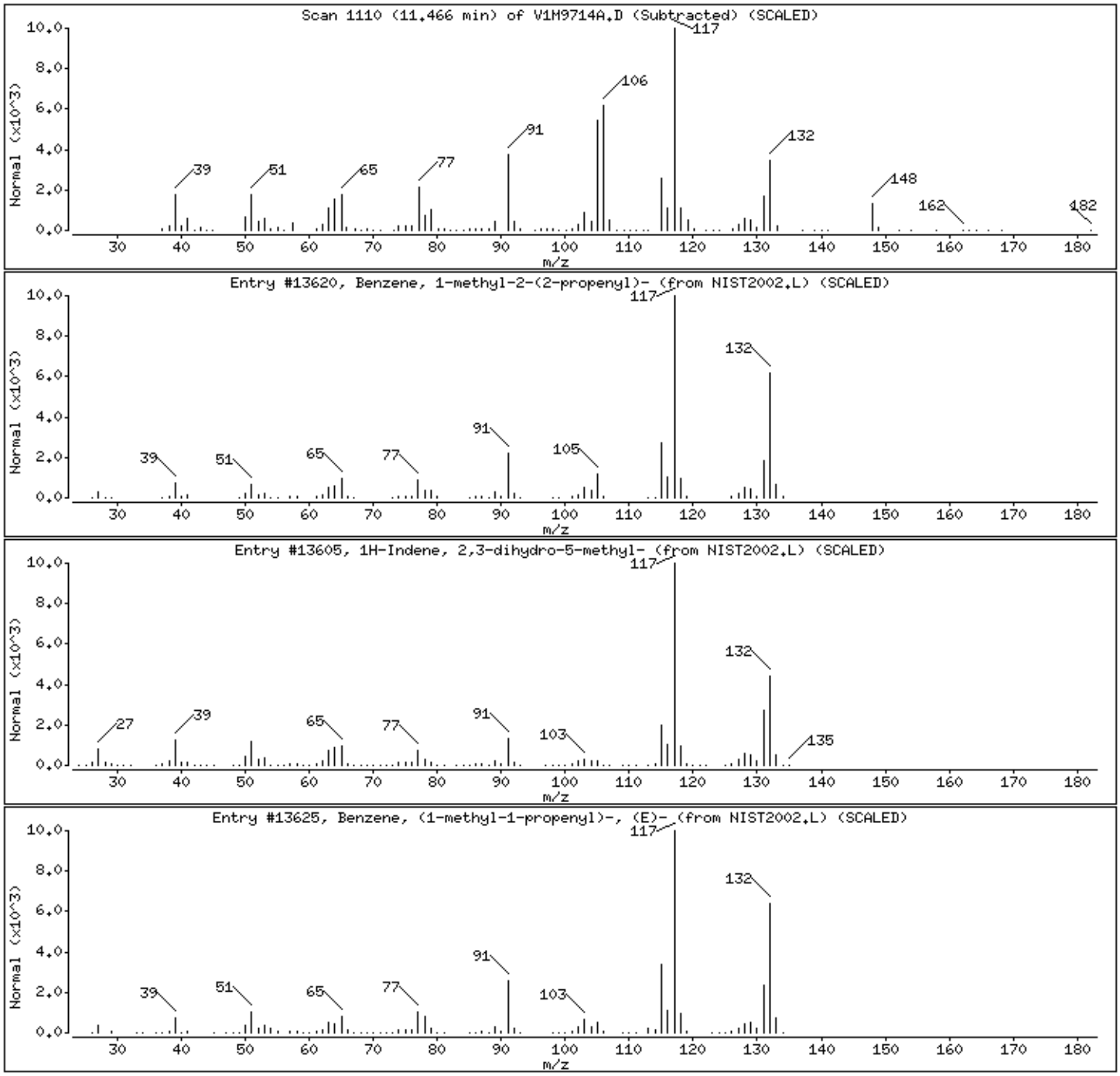
Client ID: FORMER BLDG OIL Instrument: V1.i

Sample Info: 5ML,L2570-01A,,69759

Operator: AM SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzene, 1-methyl-2-(2-propenyl)-	1587-04-8	NIST2002.L	13620	76	C10H12	132
1H-Indene, 2,3-dihydro-5-methyl-	874-35-1	NIST2002.L	13605	70	C10H12	132
Benzene, (1-methyl-1-propenyl)-, (E)-	768-00-3	NIST2002.L	13625	70	C10H12	132



Data File: \\avogadro\organics\V1.I\121217.B\V1M9714A.D

Date : 17-DEC-2012 15:28

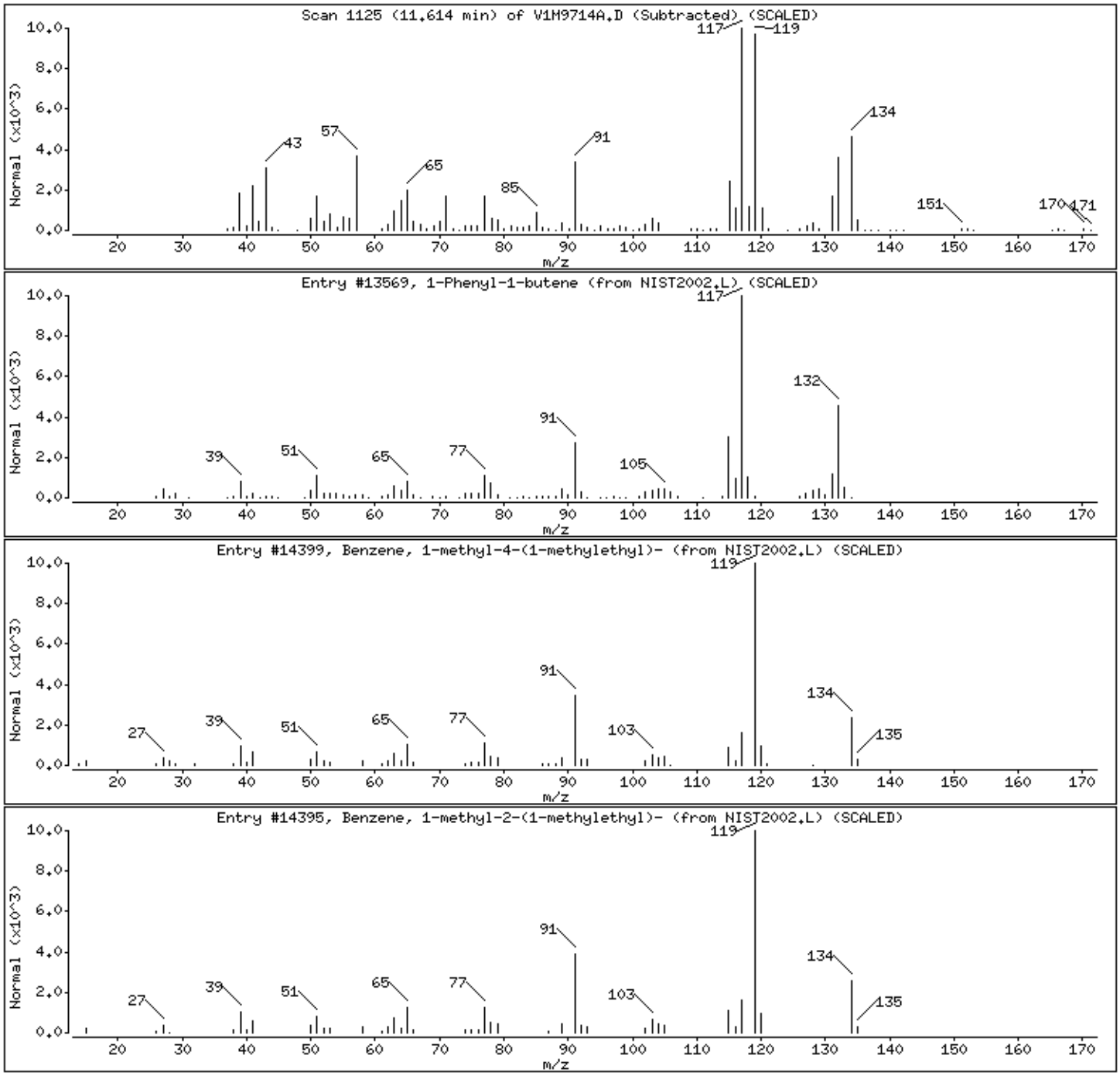
Client ID: FORMER BLDG OIL Instrument: V1.i

Sample Info: 5ML,L2570-01A,,69759

Operator: AM SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Phenyl-1-butene	824-90-8	NIST2002.L	13569	64	C10H12	132
Benzene, 1-methyl-4-(1-methylethyl)-	99-87-6	NIST2002.L	14399	55	C10H14	134
Benzene, 1-methyl-2-(1-methylethyl)-	527-84-4	NIST2002.L	14395	55	C10H14	134



Data File: \\avogadro\organics\V1.I\121217.B\V1M9714A.D

Date : 17-DEC-2012 15:28

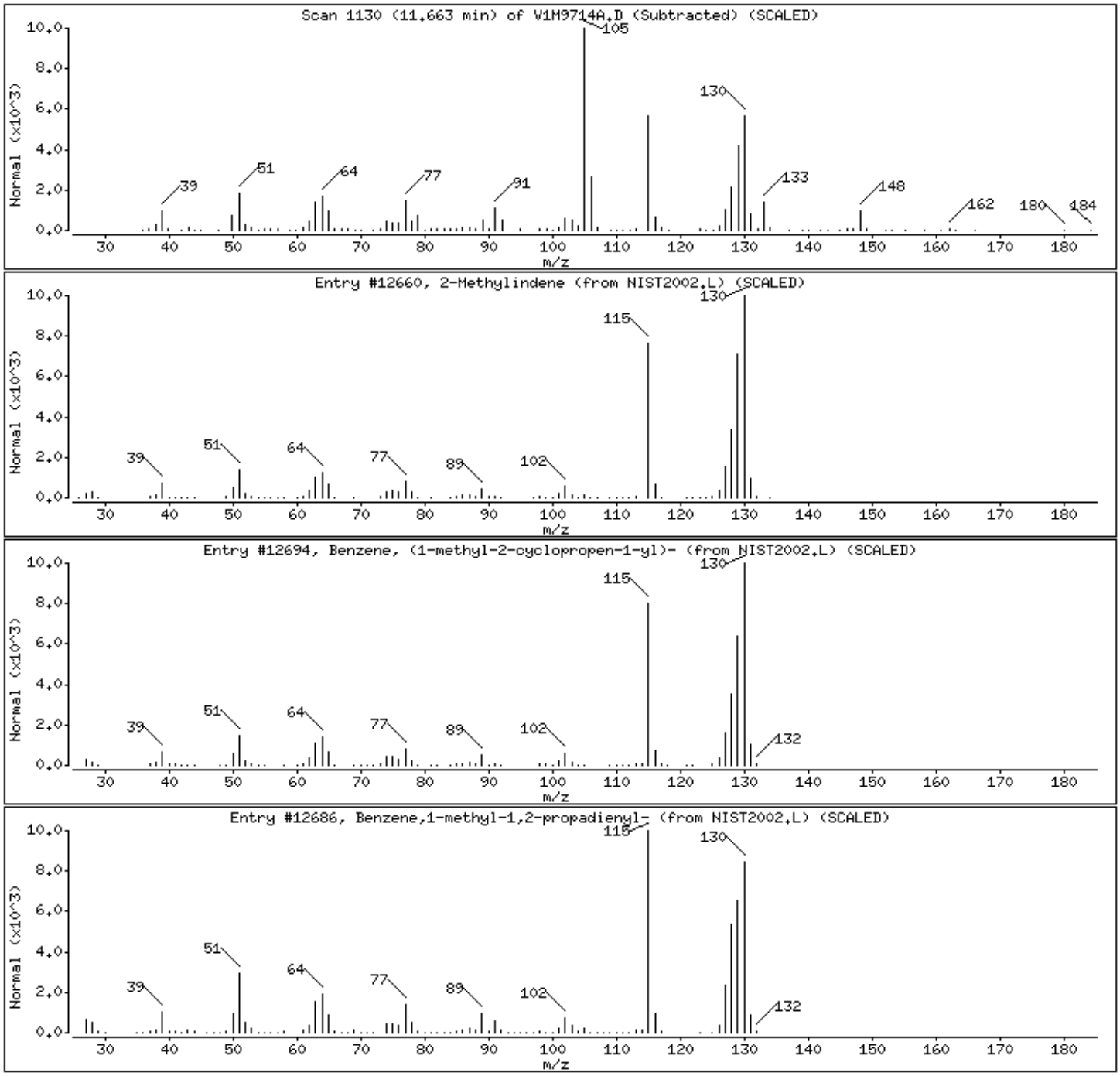
Client ID: FORMER BLDG OIL Instrument: V1.i

Sample Info: 5ML,L2570-01A,,69759

Operator: AM SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Methylindene	2177-47-1	NIST2002.L	12660	95	C10H10	130
Benzene, (1-methyl-2-cyclopropen-1-yl)-	65051-83-4	NIST2002.L	12694	91	C10H10	130
Benzene,1-methyl-1,2-propadienyl-	22433-39-2	NIST2002.L	12686	91	C10H10	130



Data File: \\avogadro\organics\V1.I\121217.B\V1M9714A.D

Date : 17-DEC-2012 15:28

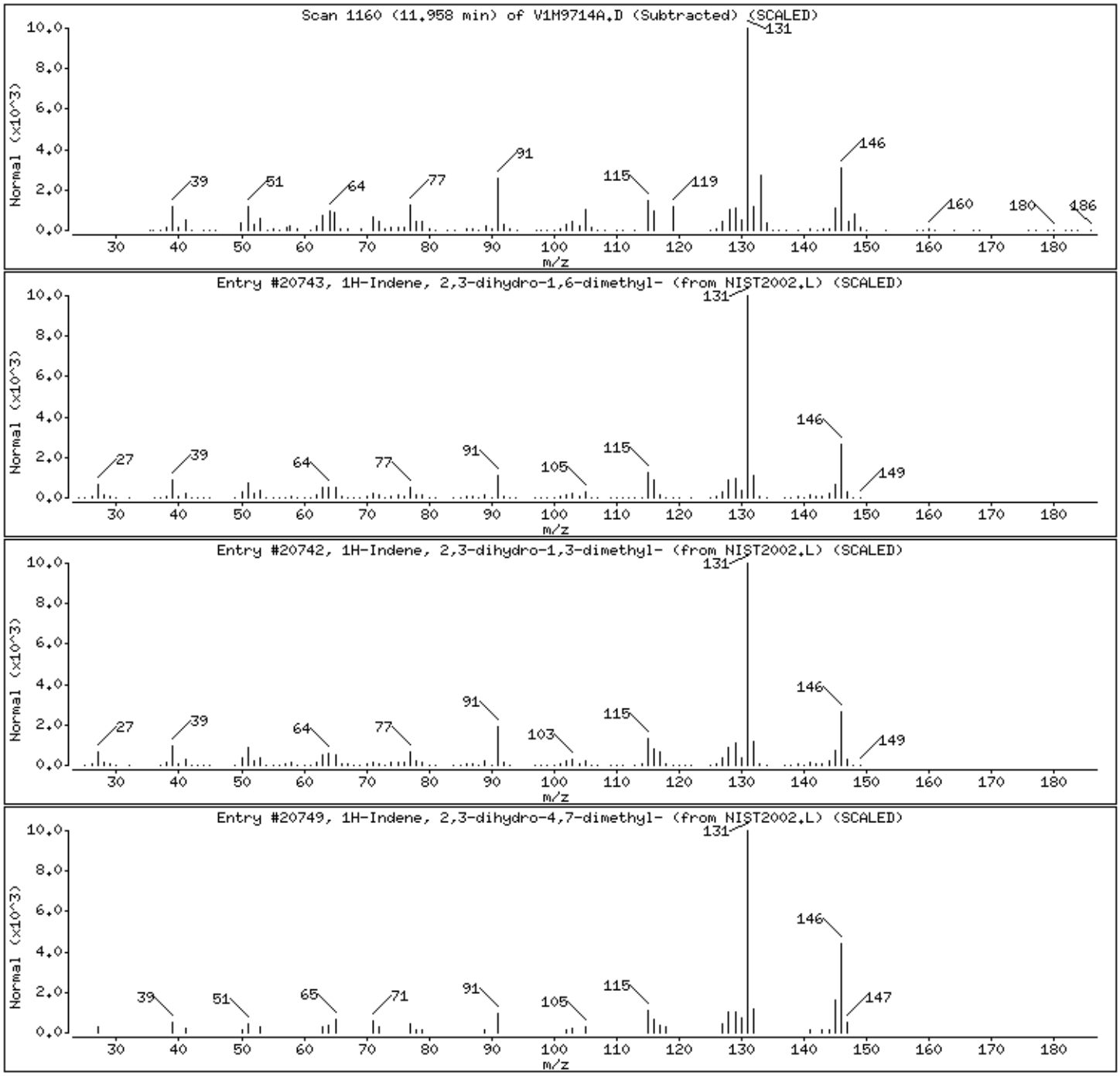
Client ID: FORMER BLDG OIL Instrument: V1.i

Sample Info: 5ML,L2570-01A,,69759

Operator: AM SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1H-Indene, 2,3-dihydro-1,6-dimethyl-	17059-48-2	NIST2002.L	20743	94	C11H14	146
1H-Indene, 2,3-dihydro-1,3-dimethyl-	4175-53-5	NIST2002.L	20742	94	C11H14	146
1H-Indene, 2,3-dihydro-4,7-dimethyl-	6682-71-9	NIST2002.L	20749	93	C11H14	146



Data File: \\avogadro\organics\V1.I\121217.B\V1M9714A.D

Date : 17-DEC-2012 15:28

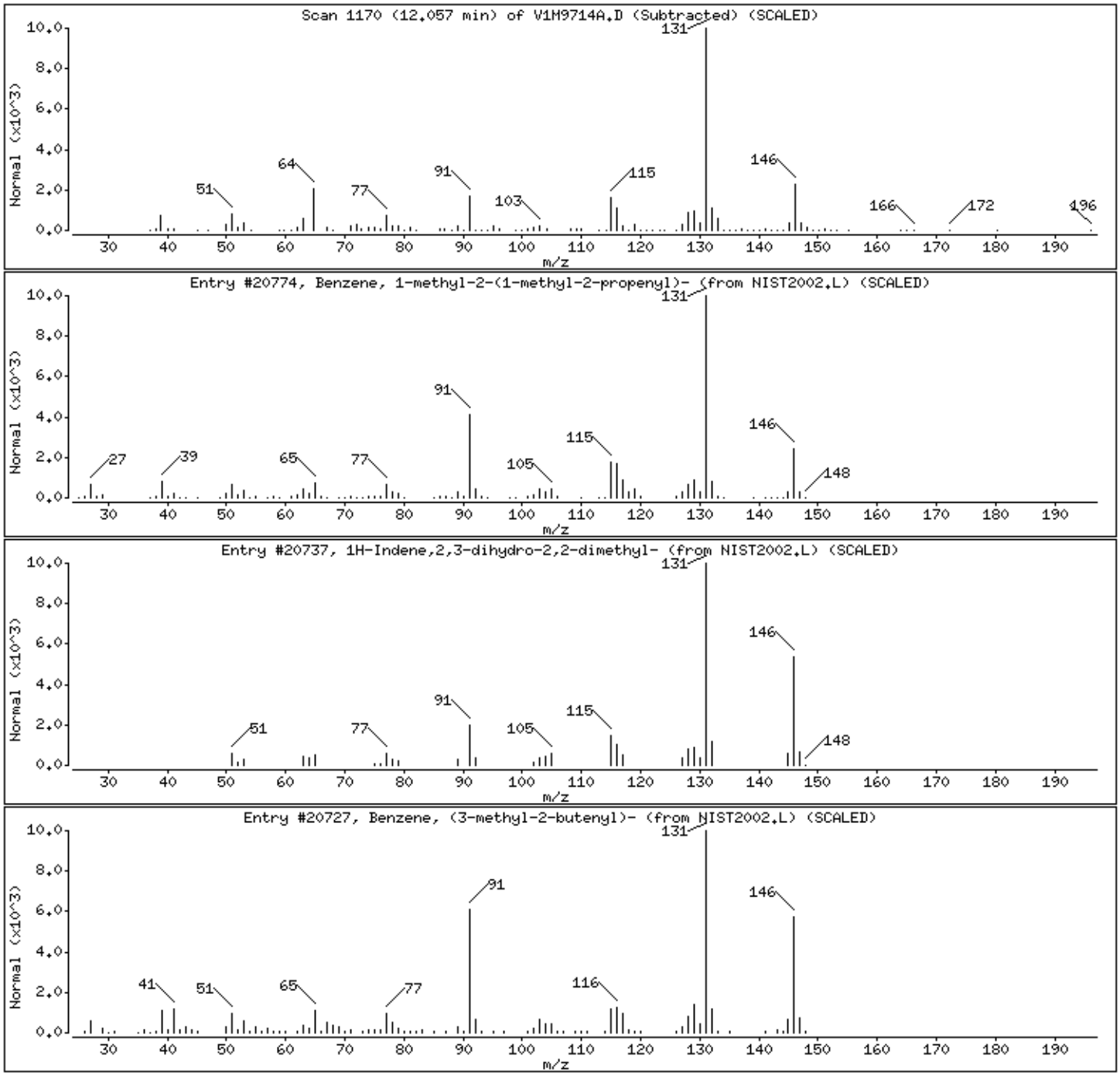
Client ID: FORMER BLDG OIL Instrument: V1.i

Sample Info: 5ML,L2570-01A,,69759

Operator: AM SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1-methyl-2-(1-methyl-2-propenyl	97664-19-2	NIST2002.L	20774	87	C11H14	146
1H-Indene,2,3-dihydro-2,2-dimethyl-	20836-11-7	NIST2002.L	20737	87	C11H14	146
Benzene, (3-methyl-2-butenyl)-	4489-84-3	NIST2002.L	20727	87	C11H14	146



Data File: \\avogadro\organics\V1.I\121217.B\V1M9714A.D

Date : 17-DEC-2012 15:28

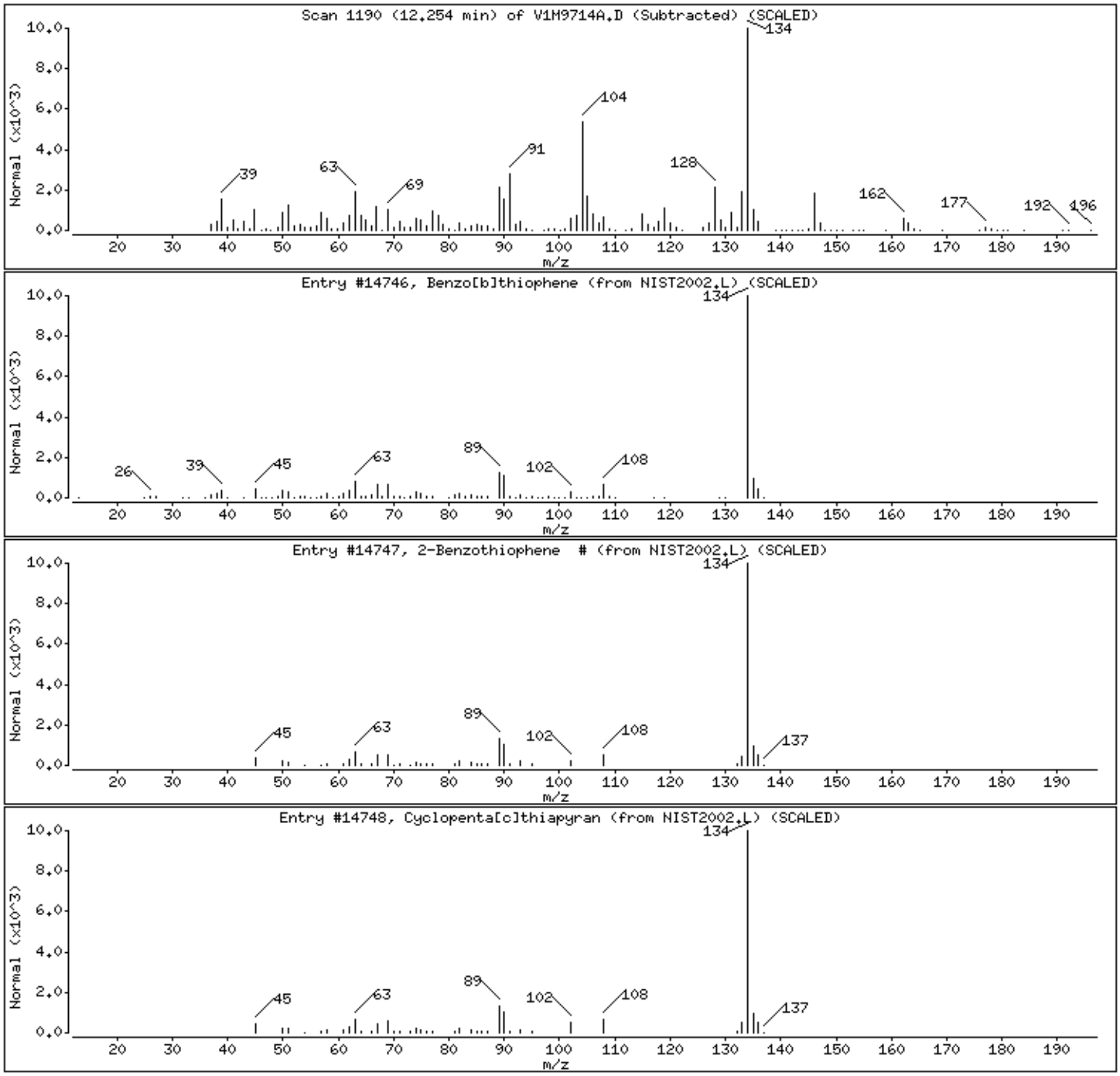
Client ID: FORMER BLDG OIL Instrument: V1.i

Sample Info: 5ML,L2570-01A,,69759

Operator: AM SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzo[b]thiophene	95-15-8	NIST2002.L	14746	91	C8H6S	134
2-Benzothiophene #	270-82-6	NIST2002.L	14747	90	C8H6S	134
Cyclopenta[c]thiapyran	270-63-3	NIST2002.L	14748	55	C8H6S	134



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FORMER BLDG OILDL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2570-01ADL

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V8B7122.D

Level: (TRACE/LOW/MED) MED Date Received: 12/14/2012

% Moisture: not dec. 0.0 Date Analyzed: 12/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 100.0

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 100.00 (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	25000	U
75-01-4	Vinyl chloride	25000	U
74-83-9	Bromomethane	25000	U
75-00-3	Chloroethane	25000	U
75-69-4	Trichlorofluoromethane	25000	U
75-35-4	1,1-Dichloroethene	25000	U
67-64-1	Acetone	25000	U
75-15-0	Carbon disulfide	25000	U
75-09-2	Methylene chloride	25000	U
156-60-5	trans-1,2-Dichloroethene	25000	U
1634-04-4	Methyl tert-butyl ether	25000	U
75-34-3	1,1-Dichloroethane	25000	U
108-05-4	Vinyl acetate	25000	U
78-93-3	2-Butanone	25000	U
156-59-2	cis-1,2-Dichloroethene	25000	U
67-66-3	Chloroform	25000	U
71-55-6	1,1,1-Trichloroethane	25000	U
56-23-5	Carbon tetrachloride	25000	U
107-06-2	1,2-Dichloroethane	25000	U
71-43-2	Benzene	25000	U
79-01-6	Trichloroethene	25000	U
78-87-5	1,2-Dichloropropane	25000	U
75-27-4	Bromodichloromethane	25000	U
10061-01-5	cis-1,3-Dichloropropene	25000	U
108-10-1	4-Methyl-2-pentanone	25000	U
108-88-3	Toluene	25000	U
10061-02-6	trans-1,3-Dichloropropene	25000	U
79-00-5	1,1,2-Trichloroethane	25000	U
127-18-4	Tetrachloroethene	25000	U
591-78-6	2-Hexanone	25000	U
124-48-1	Dibromochloromethane	25000	U
108-90-7	Chlorobenzene	25000	U
100-41-4	Ethylbenzene	25000	U
179601-23-1	m,p-Xylene	9200	DJ
95-47-6	o-Xylene	5000	DJ

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FORMER BLDG OILDL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2570-01ADL

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V8B7122.D

Level: (TRACE/LOW/MED) MED Date Received: 12/14/2012

% Moisture: not dec. 0.0 Date Analyzed: 12/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 100.0

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 100.00 (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
1330-20-7	Xylene (Total)	14000	DJ
100-42-5	Styrene	25000	U
75-25-2	Bromoform	25000	U
98-82-8	Isopropylbenzene	25000	U
79-34-5	1,1,2,2-Tetrachloroethane	25000	U
103-65-1	n-Propylbenzene	25000	U
108-67-8	1,3,5-Trimethylbenzene	9200	DJ
98-06-6	tert-Butylbenzene	25000	U
95-63-6	1,2,4-Trimethylbenzene	39000	D
135-98-8	sec-Butylbenzene	25000	U
99-87-6	4-Isopropyltoluene	25000	U
541-73-1	1,3-Dichlorobenzene	25000	U
106-46-7	1,4-Dichlorobenzene	25000	U
104-51-8	n-Butylbenzene	25000	U
95-50-1	1,2-Dichlorobenzene	25000	U
91-20-3	Naphthalene	960000	D
110-75-8	2-Chloroethyl vinyl ether	25000	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FORMER BLDG OILDL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2570-01ADL

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V8B7122.D

Level: (TRACE or LOW/MED) MED Date Received: 12/14/2012

% Moisture: not dec. 0.0 Date Analyzed: 12/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 100.0

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 100.00 (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	95-13-6	Indene	11.262	190000	DNJ
02	112-40-3	Dodecane	12.242	46000	DNJ
03		Unknown	12.291	76000	DJ
04	629-50-5	Tridecane	13.111	44000	DNJ
05	6682-71-9	1H-Indene, 2,3-dihydro-4,7-d	13.329	60000	DNJ
06	91-57-6	Naphthalene, 2-methyl-	13.844	360000	DNJ
07	90-12-0	Naphthalene, 1-methyl-	14.024	190000	DNJ
08	939-27-5	Naphthalene, 2-ethyl-	14.808	95000	DNJ
09	581-42-0	Naphthalene, 2,6-dimethyl-	14.943	210000	DNJ
10	582-16-1	Naphthalene, 2,7-dimethyl-	15.127	220000	DNJ
11	575-37-1	Naphthalene, 1,7-dimethyl-	15.175	120000	DNJ
12	581-40-8	Naphthalene, 2,3-dimethyl-	15.429	87000	DNJ

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V8.I\121219.B\V8B7122.d
Report Date: 20-Dec-2012 13:24

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V8.I\121219.B\V8B7122.d
Lab Smp Id: L2570-01ADL Client Smp ID: FORMER BLDG OILDL
Inj Date : 19-DEC-2012 20:16
Operator : V10   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,L2570-01ADL,,69830,100
Misc Info :
Comment   :
Method   : \\avogadro\organics\V8.I\121219.B\v108260Gadd-6lvl.m
Meth Date : 20-Dec-2012 13:22 adatta Quant Type: ISTD
Cal Date : 19-DEC-2012 00:30 Cal File: V8B7072.d
Als bottle: 100
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: 2CVE_Labella.sub
Target Version: 4.14

Concentration Formula:
   Amt * DF * Uf*((Vt+(Ws*M/100))*5000)/(Va*Ws*((100-M)/100))) * CpndVariable

Name	Value	Description
DF	100.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Methanol extract volume (mL)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$	36 Dibromofluoromethane	113	4.712	4.708	(0.888)	161800	52.6755	53
$	42 1,2-Dichloroethane-d4	102	5.007	5.010	(0.944)	30341	48.9273	49
*	46 Fluorobenzene	96	5.303	5.303	(1.000)	514984	50.0000	(Q)
$	58 Toluene-d8	98	6.782	6.782	(0.818)	565668	49.1269	49
*	68 Chlorobenzene-d5	117	8.290	8.290	(1.000)	462551	50.0000	
$	79 Bromofluorobenzene	95	9.586	9.586	(1.156)	248334	50.6153	51
M	94 Xylene (Total)	106				15540	2.84344	280(a)
	88 1,2,4-Trimethylbenzene	105	10.435	10.431	(0.968)	97518	7.75949	780
*	92 1,4-Dichlorobenzene-d4	152	10.782	10.782	(1.000)	237540	50.0000	
	101 Naphthalene	128	12.853	12.856	(1.192)	2349253	192.429	19000

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V8.I\121219.B\V8B7122.d
Report Date: 20-Dec-2012 13:24

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V8.I\121219.B\V8B7122.d
Lab Smp Id: L2570-01ADL Client Smp ID: FORMER BLDG OILDL
Inj Date : 19-DEC-2012 20:16
Operator : V10   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,L2570-01ADL,,69830,100
Misc Info :
Comment   :
Method   : \\avogadro\organics\V8.I\121219.B\v108260Gadd-6lvl.m
Meth Date : 20-Dec-2012 13:22 adatta Quant Type: ISTD
Cal Date : 19-DEC-2012 00:30 Cal File: V8B7072.d
Als bottle: 100
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: 2CVE_Labella.sub
Target Version: 4.14

Concentration Formula:
   Amt * DF * Uf*((Vt+(Ws*M/100))*5000)/(Va*Ws*((100-M)/100))) * CpndVariable

Name	Value	Description
DF	100.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Methanol extract volume (mL)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 92 1,4-Dichlorobenzene-d4	10.783	1469835	50.000

	CONCENTRATIONS			QUANT			
RT	AREA	ON-COL(ug/L)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Indene				CAS #: 95-13-6			
11.262	1096728	37.3078601	3700	96	NIST2002.L	8166	92
Dodecane				CAS #: 112-40-3			
12.242	270962	9.21744118	920	93	NIST2002.L	36159	92
Unknown				CAS #:			
12.291	446354	15.1838081	1500	0		0	92
Tridecane				CAS #: 629-50-5			
13.111	259043	8.81198830	880	95	NIST2002.L	45543	92

Data File: \\avogadro\organics\V8.I\121219.B\V8B7122.d
Report Date: 20-Dec-2012 13:24

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
1H-Indene, 2,3-dihydro-4,7-dimethyl-					CAS #: 6682-71-9		
13.329	353757	12.0339169	1200	93	NIST2002.L	20748	92
Naphthalene, 2-methyl-					CAS #: 91-57-6		
13.844	2134271	72.6024030	7300	96	NIST2002.L	18501	92
Naphthalene, 1-methyl-					CAS #: 90-12-0		
14.024	1136080	38.6465055	3900	96	NIST2002.L	18499	92(L)
Naphthalene, 2-ethyl-					CAS #: 939-27-5		
14.808	557983	18.9811415	1900	96	NIST2002.L	27159	92
Naphthalene, 2,6-dimethyl-					CAS #: 581-42-0		
14.943	1223251	41.6118499	4200	97	NIST2002.L	27167	92
Naphthalene, 2,7-dimethyl-					CAS #: 582-16-1		
15.127	1290128	43.8868302	4400	97	NIST2002.L	27175	92
Naphthalene, 1,7-dimethyl-					CAS #: 575-37-1		
15.175	722599	24.5809370	2400	97	NIST2002.L	27189	92
Naphthalene, 2,3-dimethyl-					CAS #: 581-40-8		
15.429	514225	17.4926157	1700	97	NIST2002.L	27179	92

QC Flag Legend

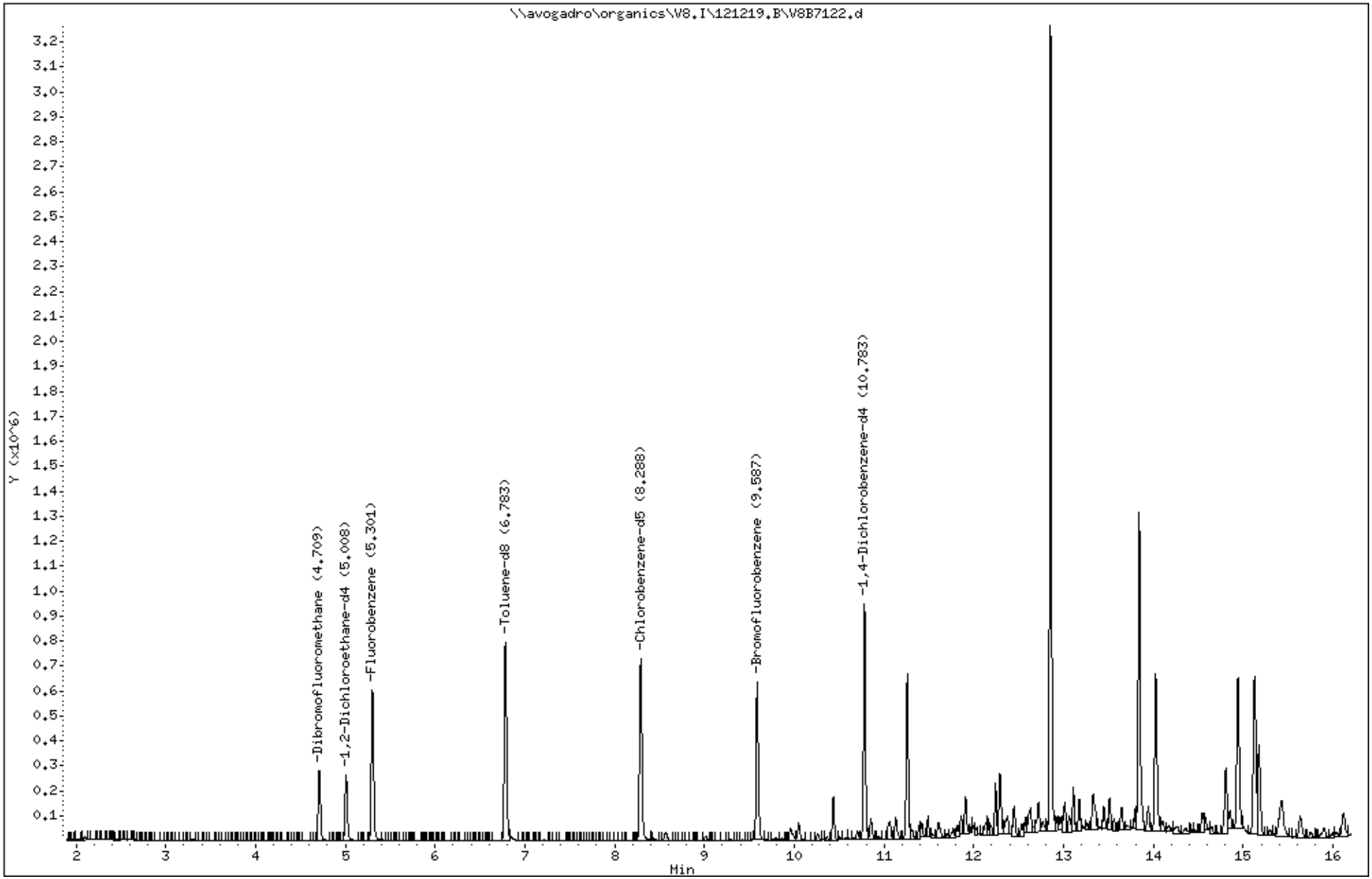
L - Operator selected an alternate library search match.

Data File: \\avogadro\organics\V8.I\121219.B\V8B7122.d
Date : 19-DEC-2012 20:16
Client ID: FORMER BLDG OILDL
Sample Info: 5ML,L2570-01ADL,,69830,100

Instrument: V8.i

Operator: V10 SRC: LIMS
Column diameter: 0.25

Column phase: DB-624



Data File: \\avogadro\organics\V8.I\121219.B\V8B7122.d

Date : 19-DEC-2012 20:16

Client ID: FORMER BLDG OILDL

Instrument: V8.i

Sample Info: 5ML,L2570-01ADL,,69830,100

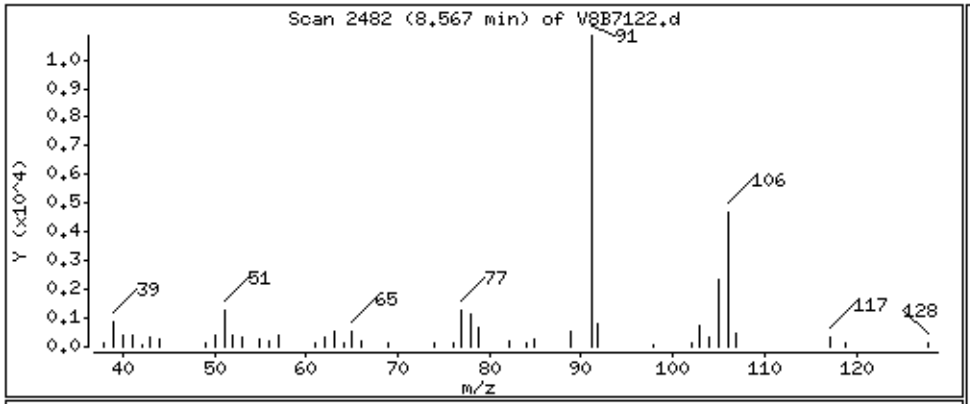
Operator: V10 SRC: LIMS

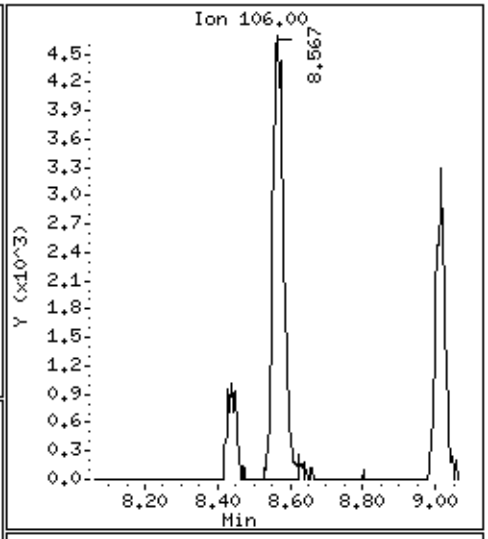
Column phase: DB-624

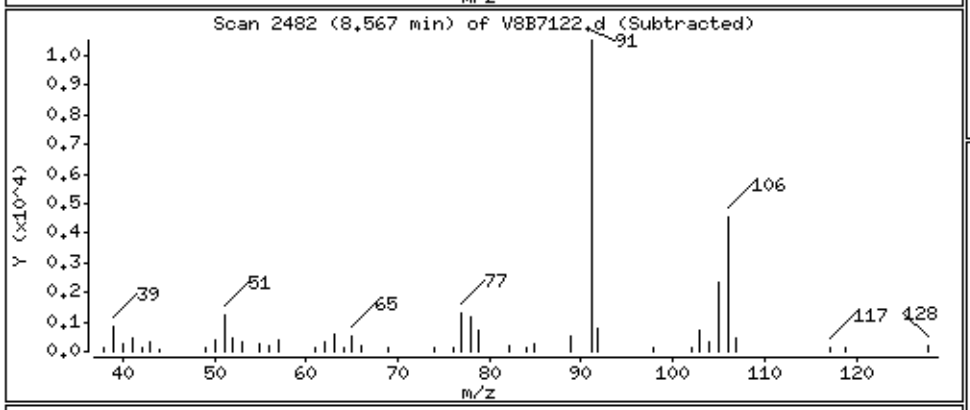
Column diameter: 0.25

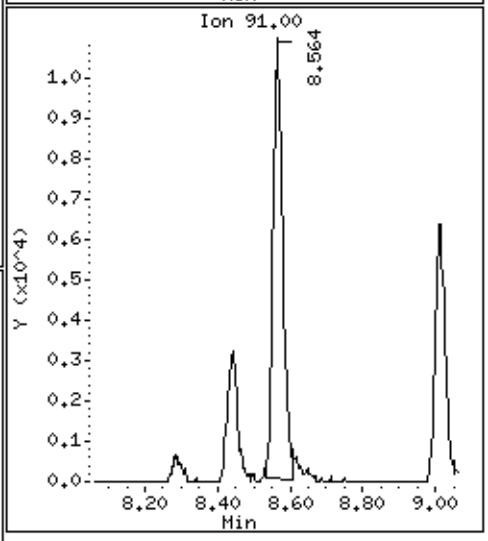
73 m,p-Xylene

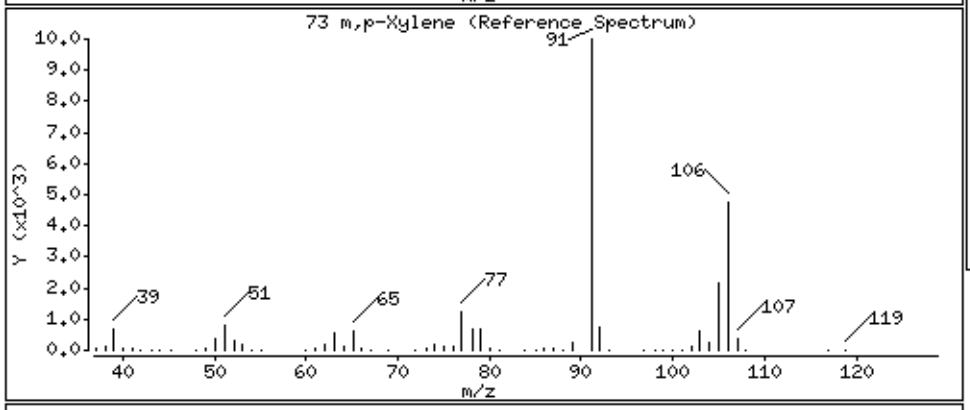
Concentration: 180 ug/Kg

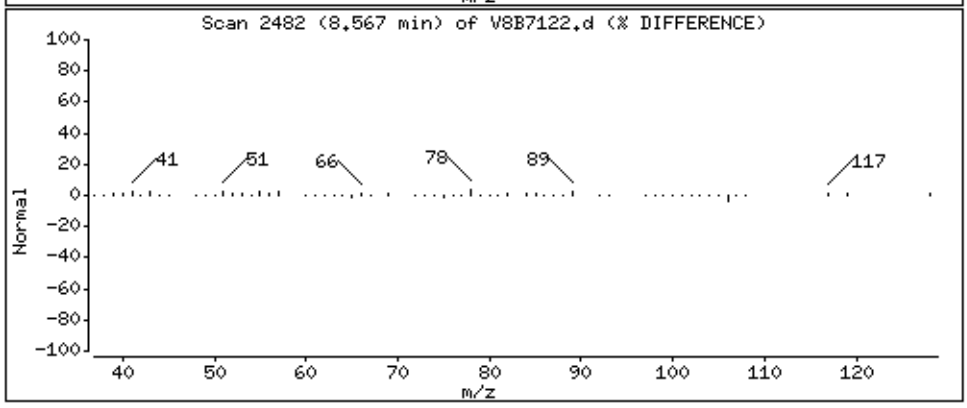












Data File: \\avogadro\organics\V8.I\121219.B\V8B7122.d

Date : 19-DEC-2012 20:16

Client ID: FORMER BLDG OILDL

Instrument: V8.i

Sample Info: 5ML,L2570-01ADL,,69830,100

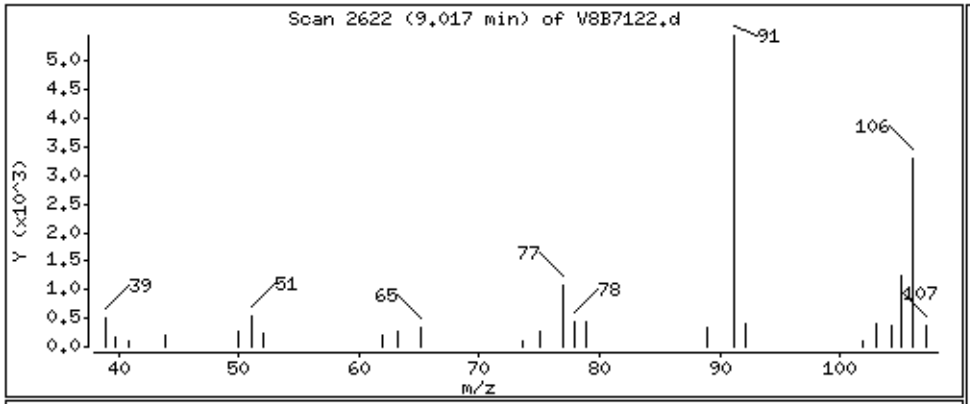
Operator: V10 SRC: LIMS

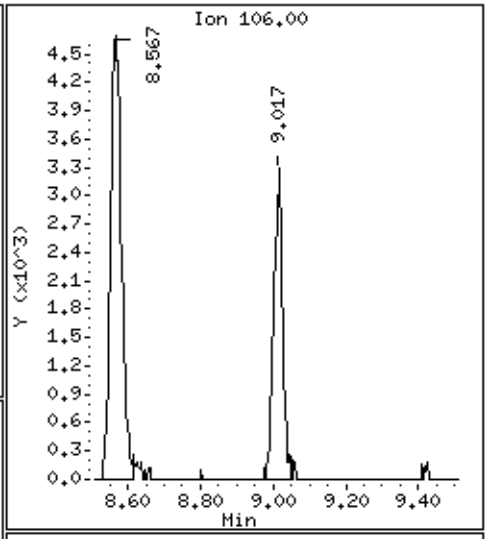
Column phase: DB-624

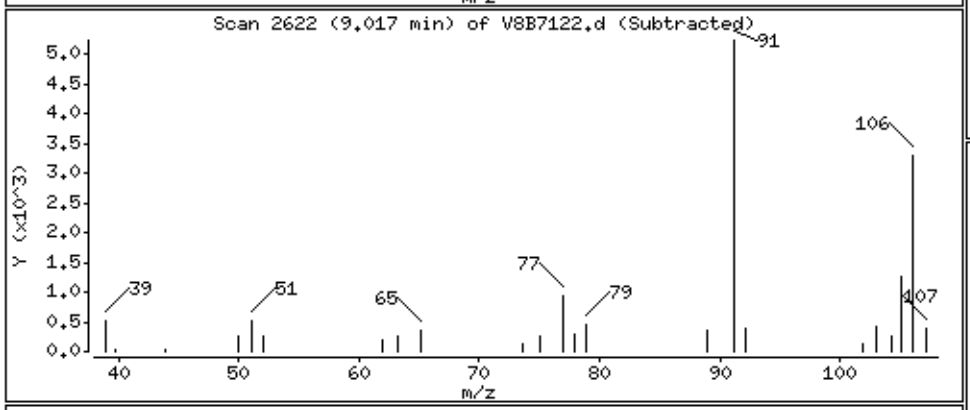
Column diameter: 0.25

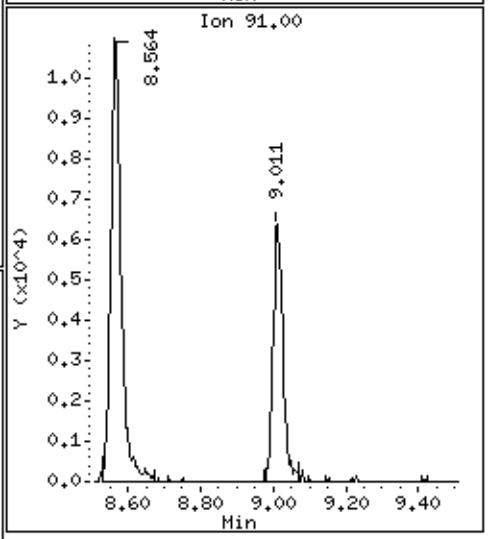
74 o-Xylene

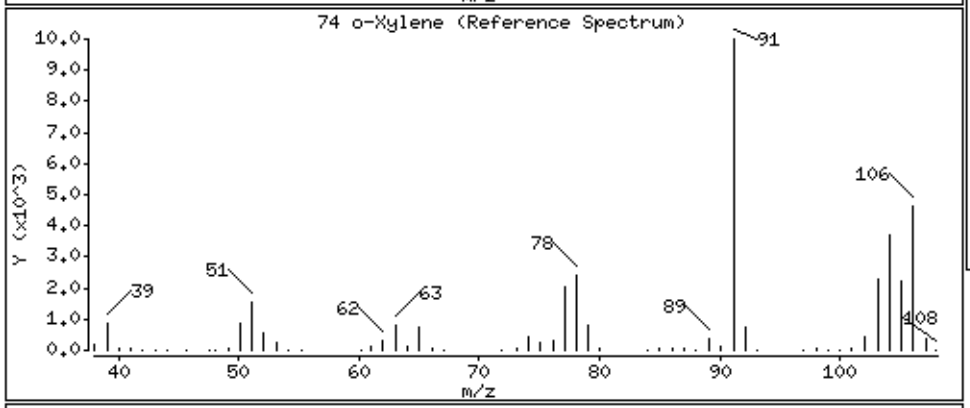
Concentration: 100 ug/Kg

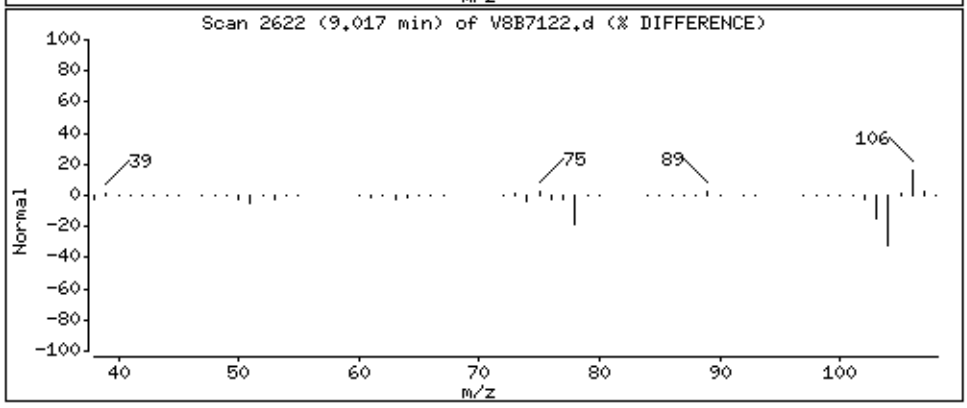












Data File: \\avogadro\organics\V8.I\121219.B\V8B7122.d

Date : 19-DEC-2012 20:16

Client ID: FORMER BLDG OILDL

Instrument: V8.i

Sample Info: 5ML,L2570-01ADL,,69830,100

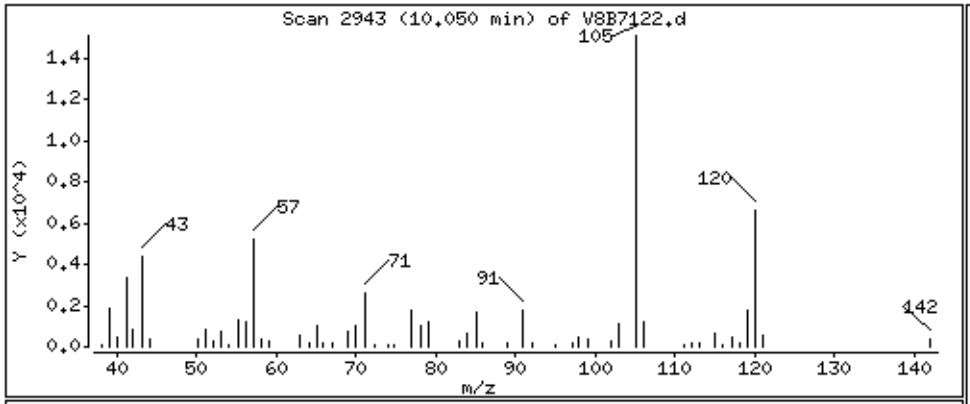
Operator: V10 SRC: LIMS

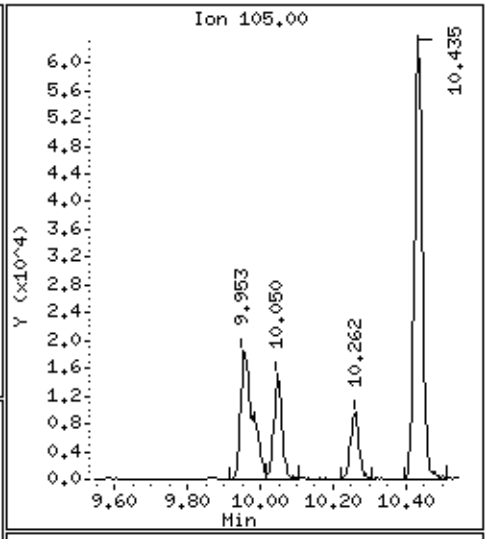
Column phase: DB-624

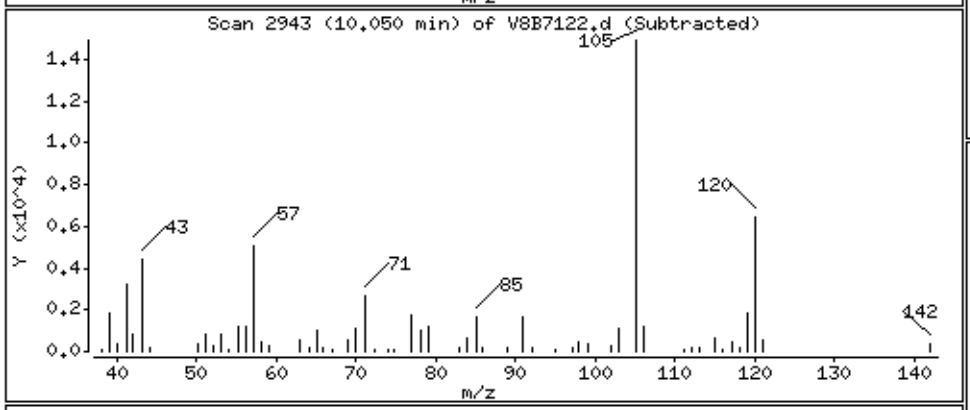
Column diameter: 0.25

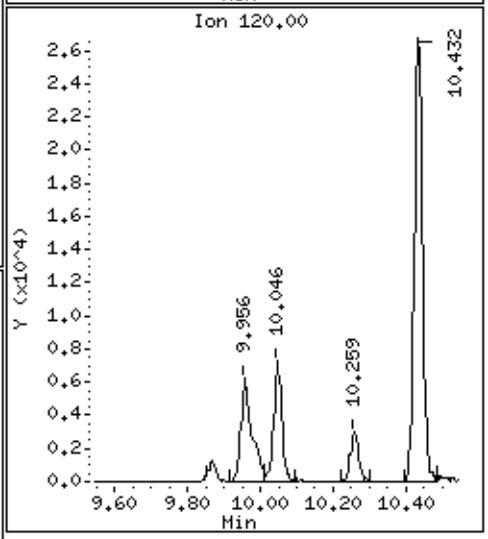
85 1,3,5-Trimethylbenzene

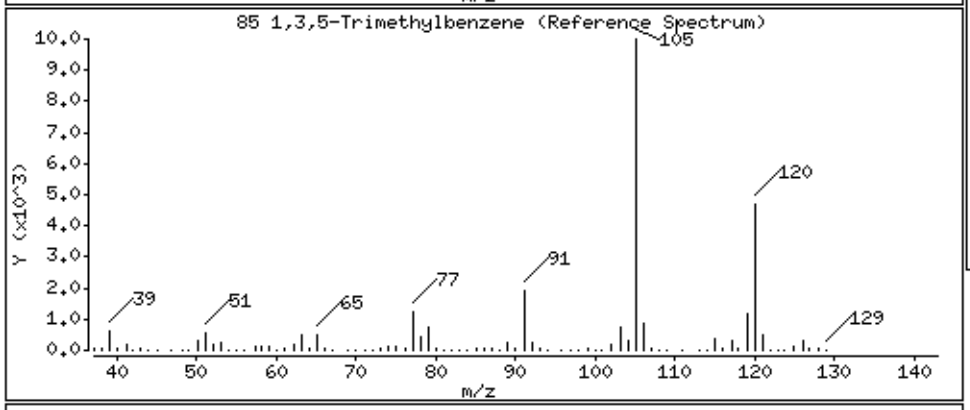
Concentration: 180 ug/Kg

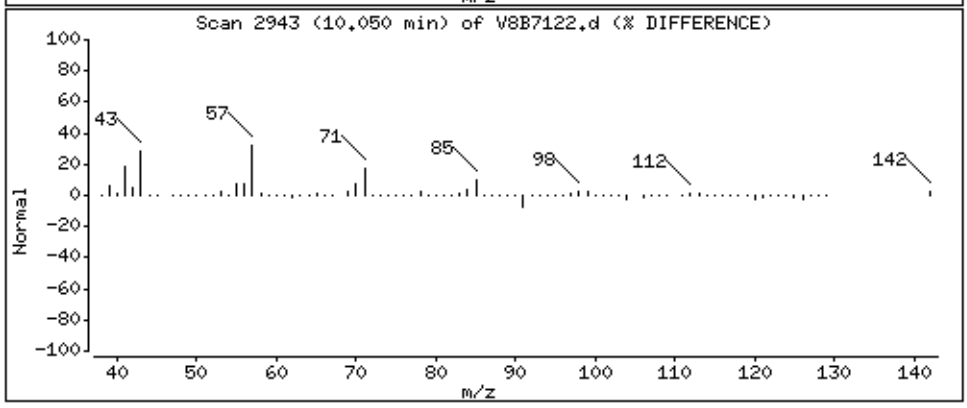












Data File: \\avogadro\organics\V8.I\121219.B\V8B7122.d

Date : 19-DEC-2012 20:16

Client ID: FORMER BLDG OILDL

Instrument: V8.i

Sample Info: 5ML,L2570-01ADL,,69830,100

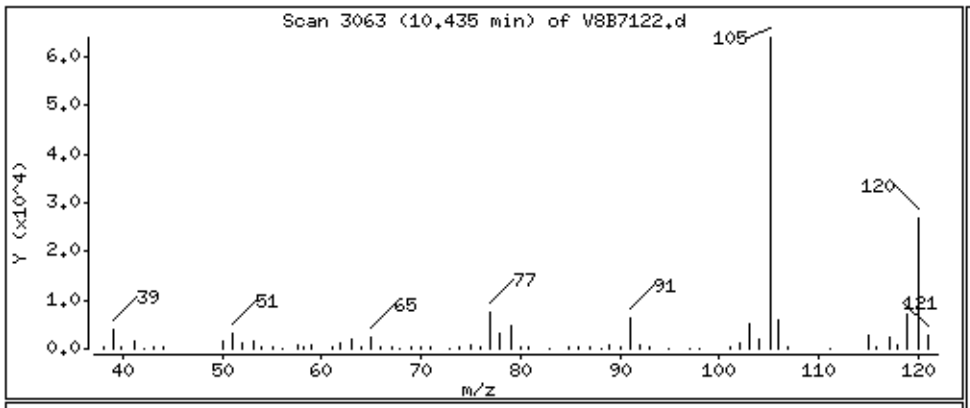
Operator: V10 SRC: LIMS

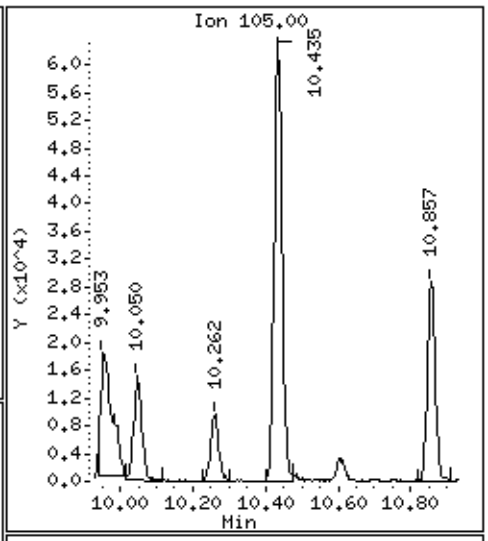
Column phase: DB-624

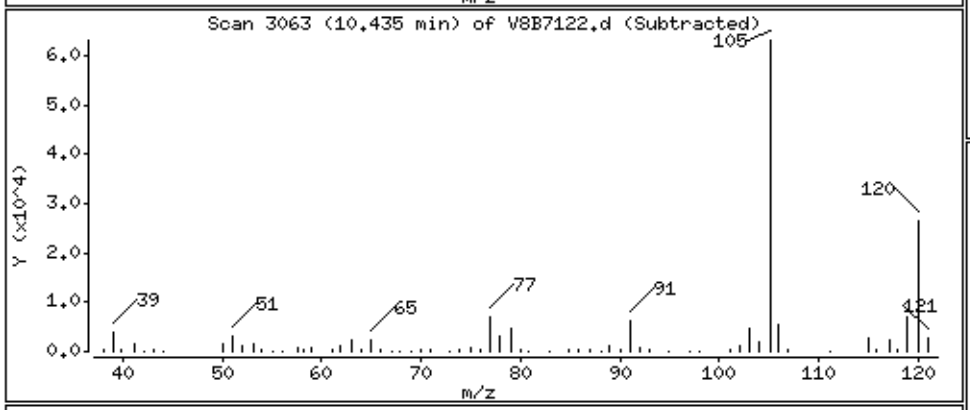
Column diameter: 0.25

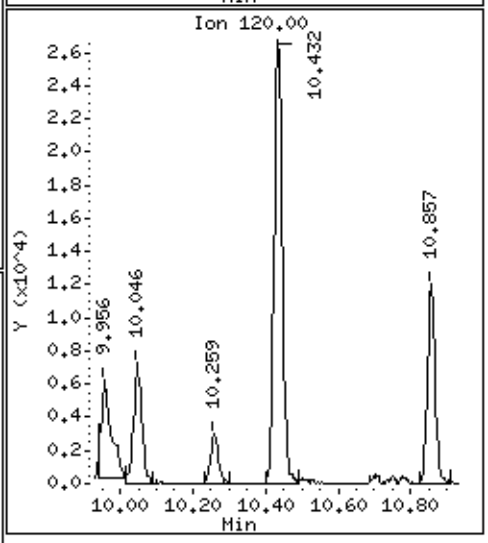
88 1,2,4-Trimethylbenzene

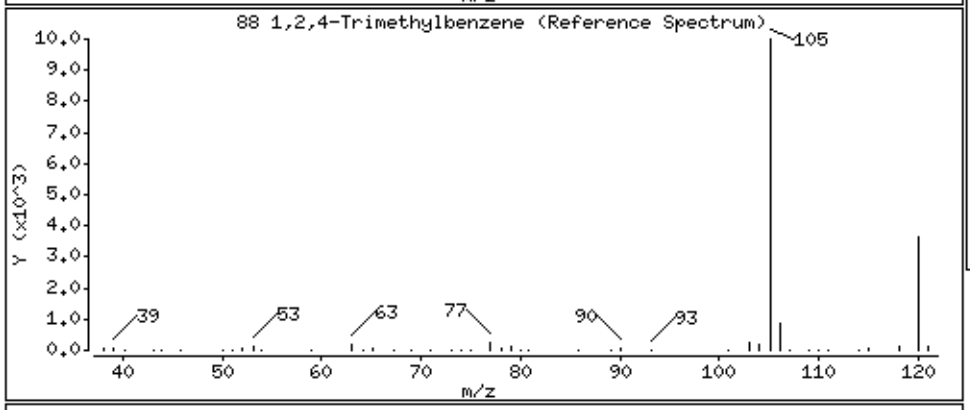
Concentration: 780 ug/Kg

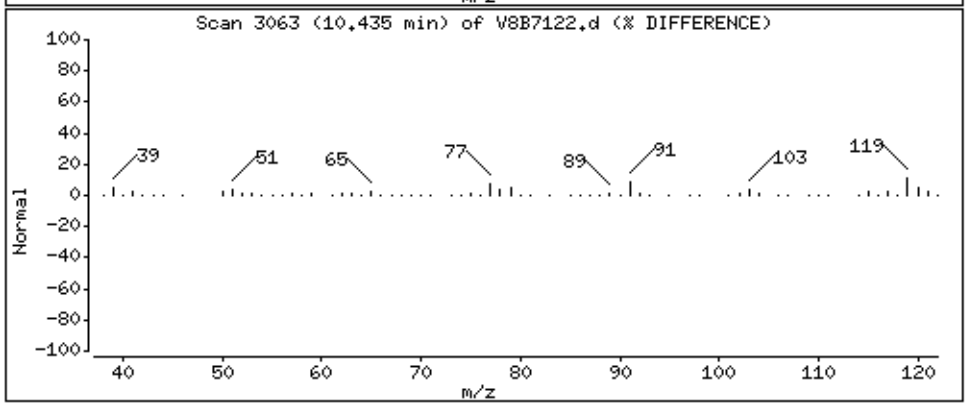












Data File: \\avogadro\organics\V8.I\121219.B\V8B7122.d

Date : 19-DEC-2012 20:16

Client ID: FORMER BLDG OILDL

Instrument: V8.i

Sample Info: 5ML,L2570-01ADL,,69830,100

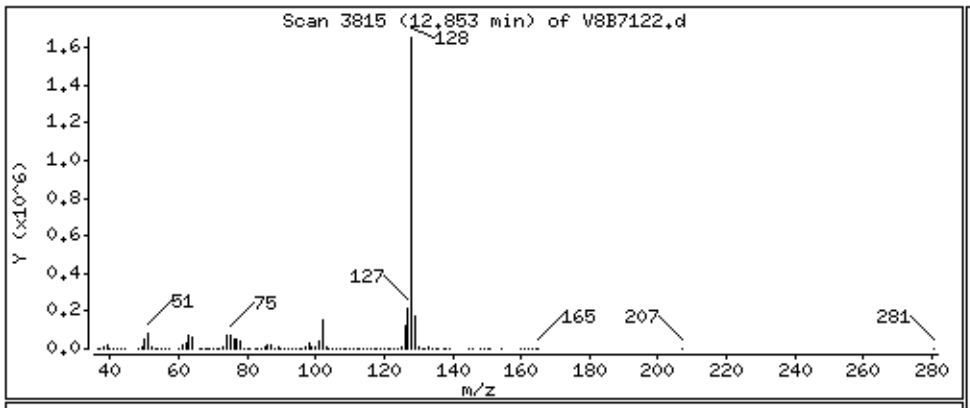
Operator: V10 SRC: LIMS

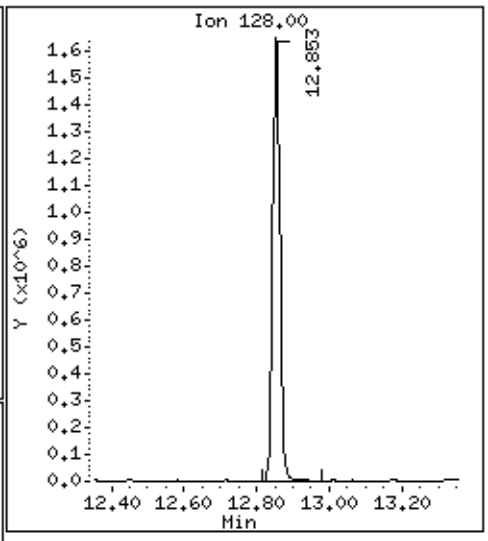
Column phase: DB-624

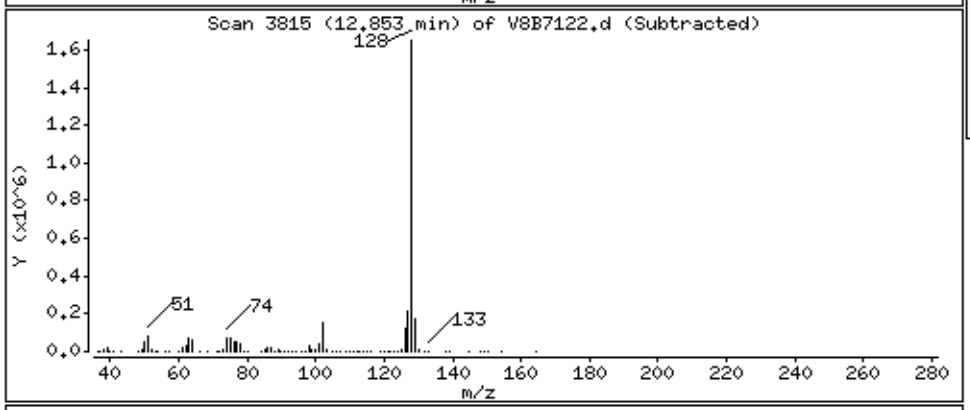
Column diameter: 0.25

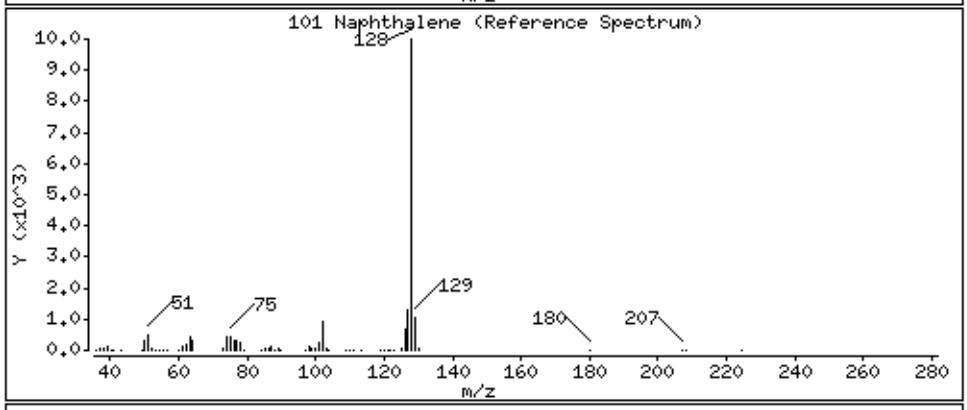
101 Naphthalene

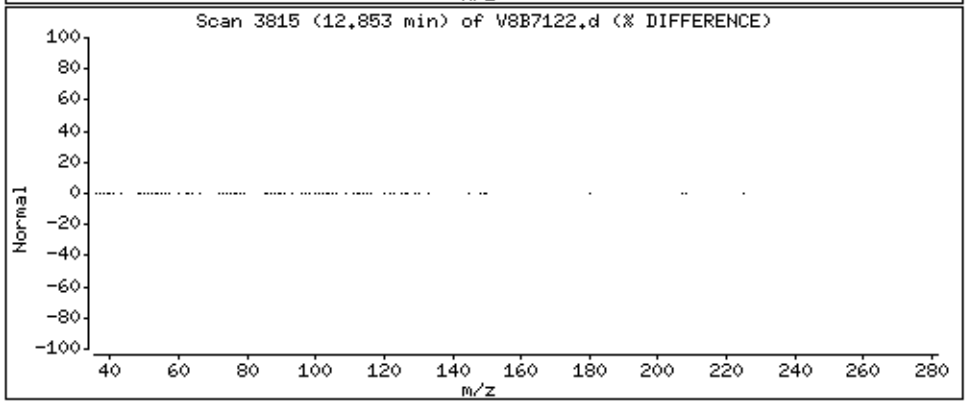
Concentration: 19000 ug/Kg











Data File: \\avogadro\organics\V8.I\121219.B\V8B7122.d

Date : 19-DEC-2012 20:16

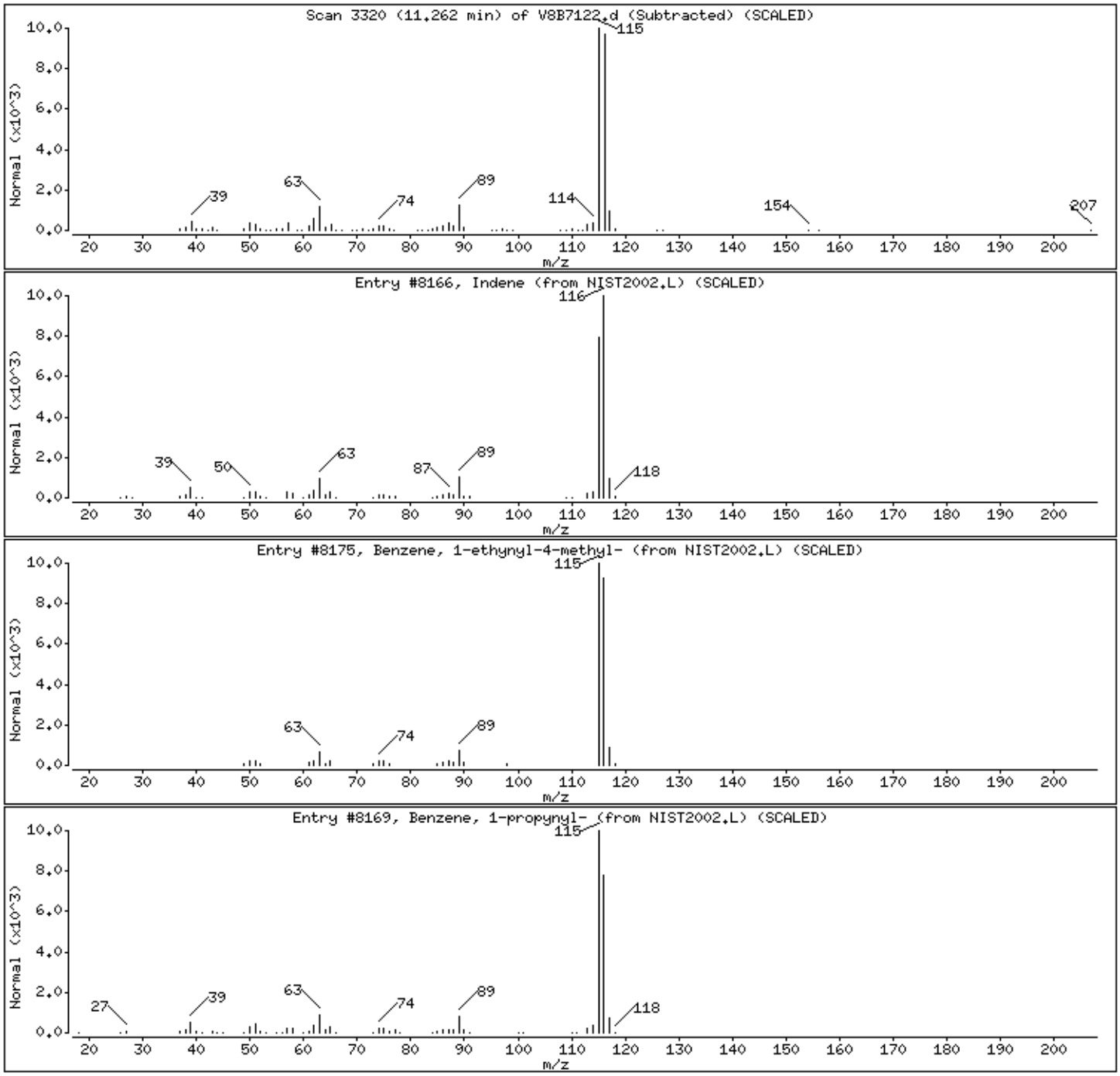
Client ID: FORMER BLDG OILDL Instrument: V8.i

Sample Info: 5ML,L2570-01ADL,,69830,100

Operator: V10 SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Indene	95-13-6	NIST2002.L	8166	96	C9H8	116
Benzene, 1-ethynyl-4-methyl-	766-97-2	NIST2002.L	8175	91	C9H8	116
Benzene, 1-propynyl-	673-32-5	NIST2002.L	8169	91	C9H8	116



Data File: \\avogadro\organics\V8.I\121219.B\V8B7122.d

Date : 19-DEC-2012 20:16

Client ID: FORMER BLDG OILDL

Instrument: V8.i

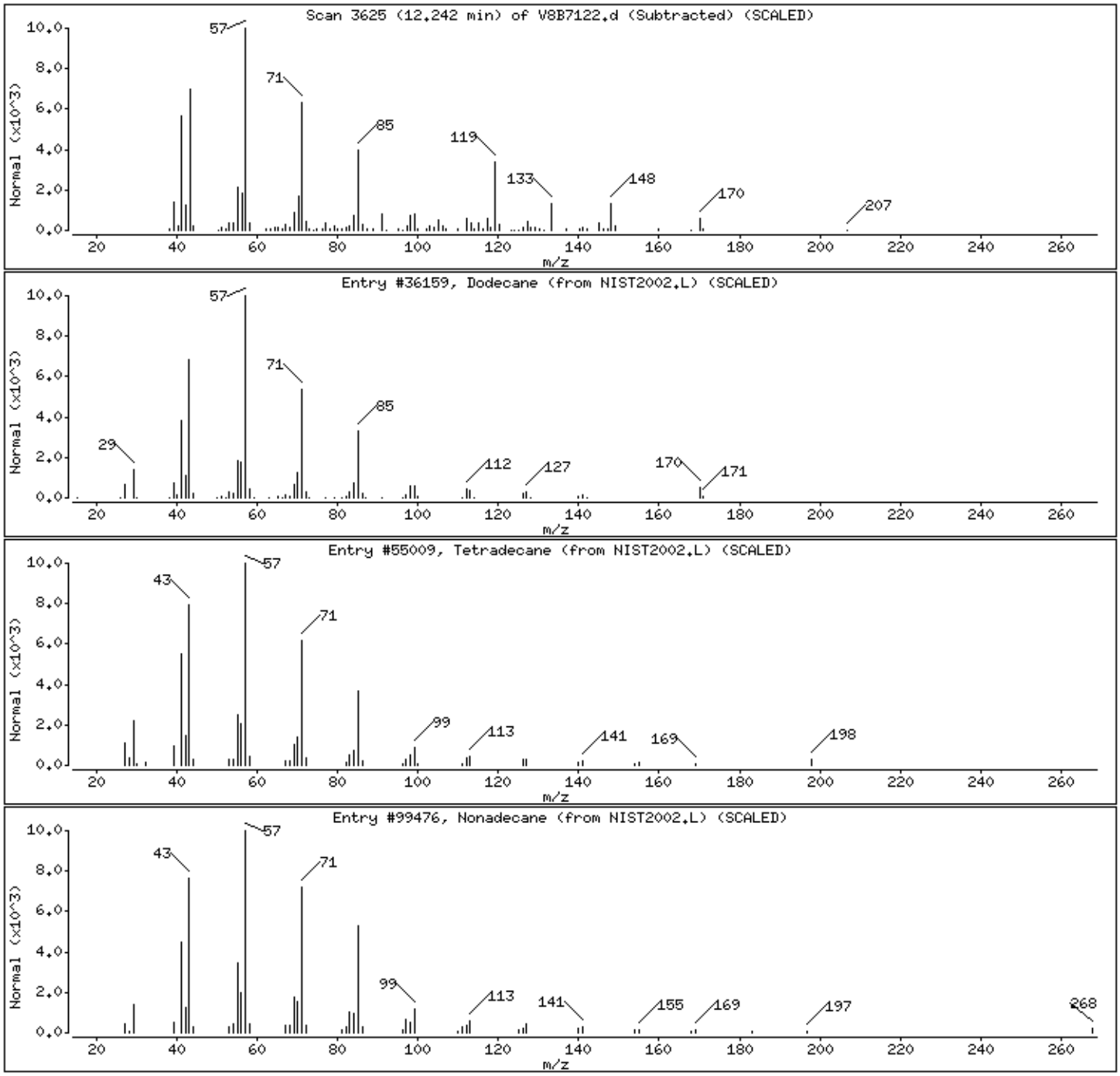
Sample Info: 5ML,L2570-01ADL,,69830,100

Operator: V10 SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Dodecane	112-40-3	NIST2002.L	36159	93	C12H26	170
Tetradecane	629-59-4	NIST2002.L	55009	58	C14H30	198
Nonadecane	629-92-5	NIST2002.L	99476	50	C19H40	268



Data File: \\avogadro\organics\V8.I\121219.B\V8B7122.d

Date : 19-DEC-2012 20:16

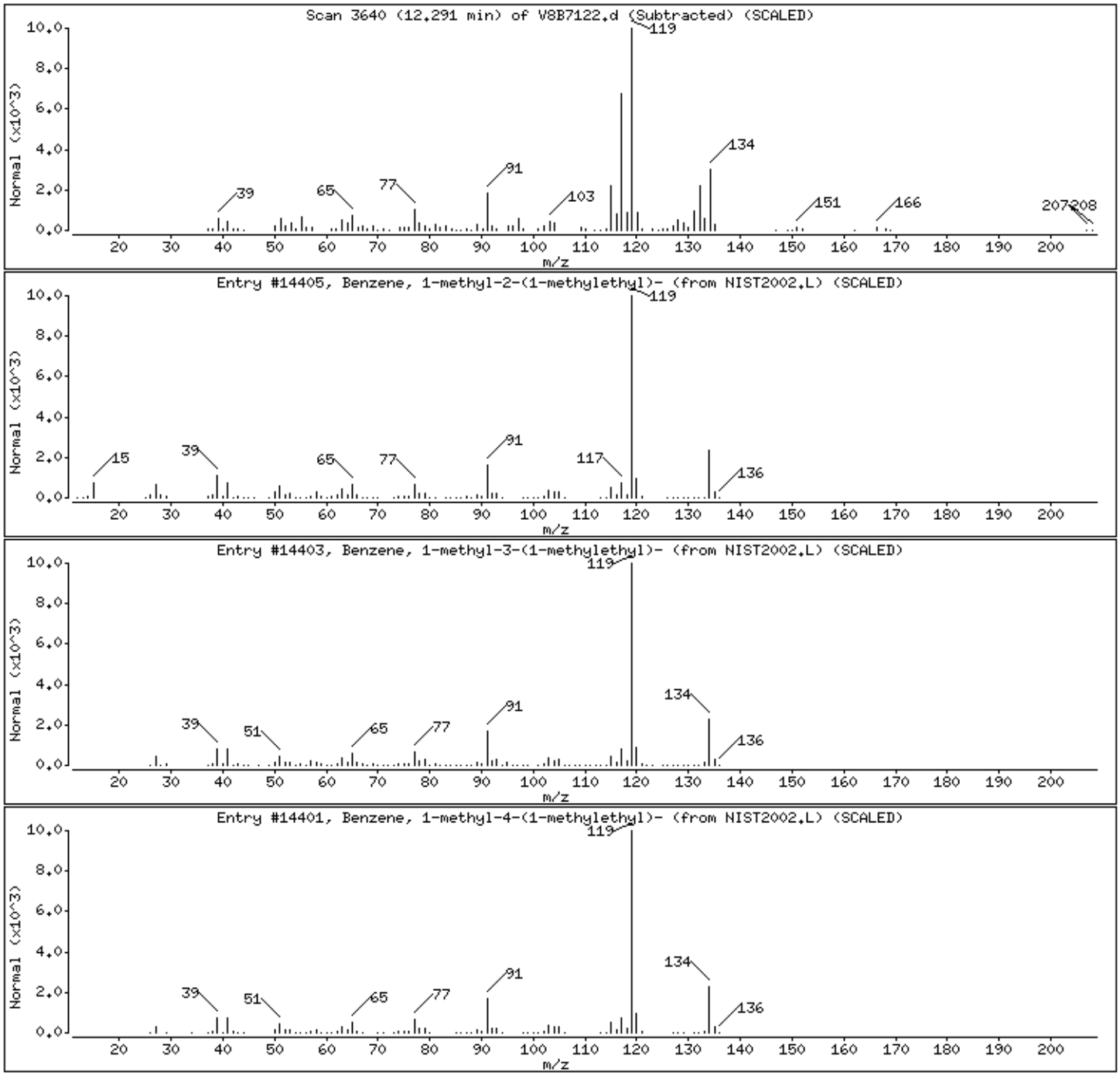
Client ID: FORMER BLDG OILDL Instrument: V8.i

Sample Info: 5ML,L2570-01ADL,,69830,100

Operator: V10 SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzene, 1-methyl-2-(1-methylethyl)-	527-84-4	NIST2002.L	14405	55	C10H14	134
Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	NIST2002.L	14403	55	C10H14	134
Benzene, 1-methyl-4-(1-methylethyl)-	99-87-6	NIST2002.L	14401	55	C10H14	134



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Date : 19-DEC-2012 20:16

Client ID: FORMER BLDG OILDL

Instrument: V8.i

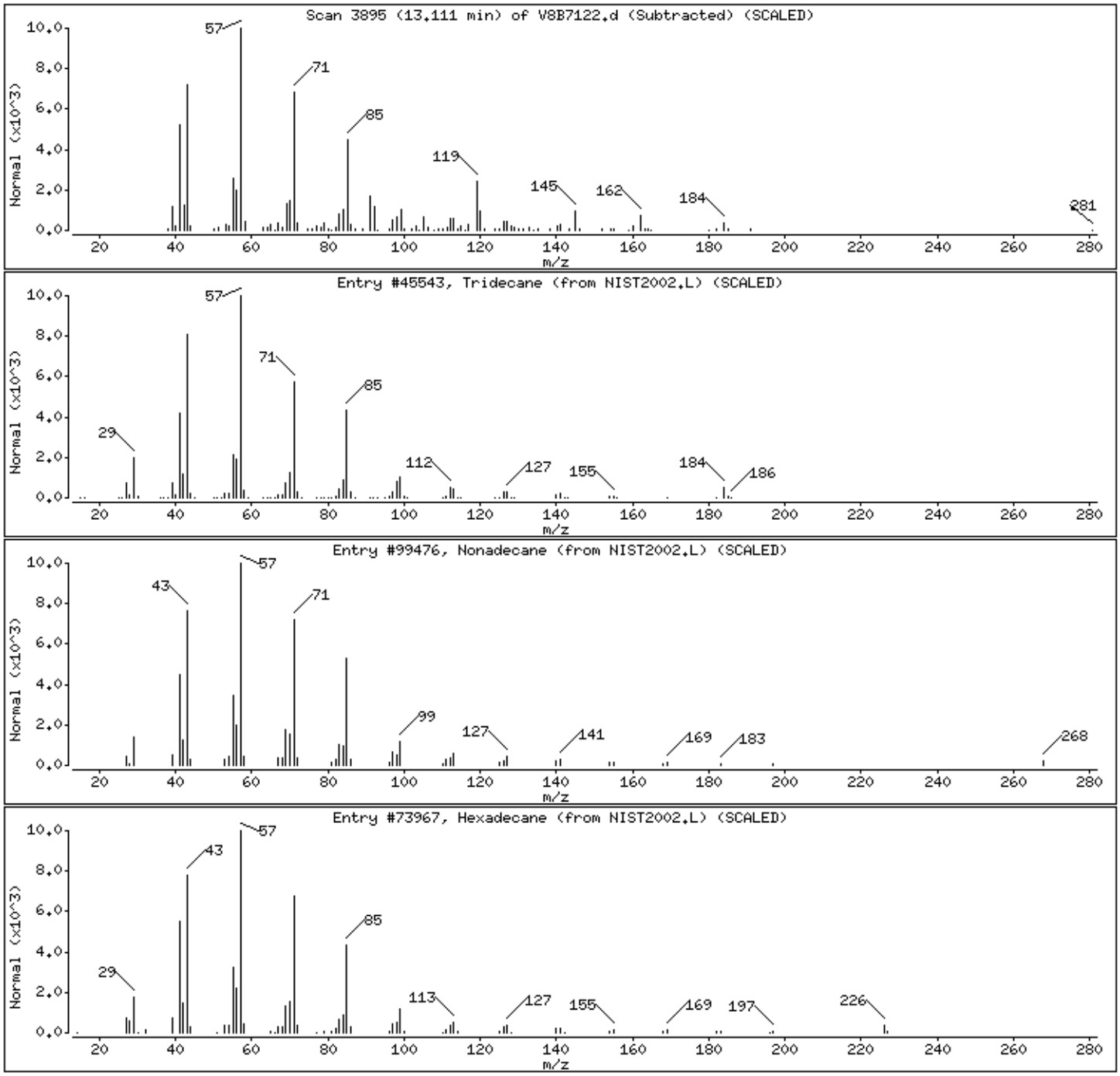
Sample Info: 5ML,L2570-01ADL,,69830,100

Operator: V10 SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Tridecane	629-50-5	NIST2002.L	45543	95	C13H28	184
Nonadecane	629-92-5	NIST2002.L	99476	64	C19H40	268
Hexadecane	544-76-3	NIST2002.L	73967	64	C16H34	226



Data File: \\avogadro\organics\V8.I\121219.B\V8B7122.d

Date : 19-DEC-2012 20:16

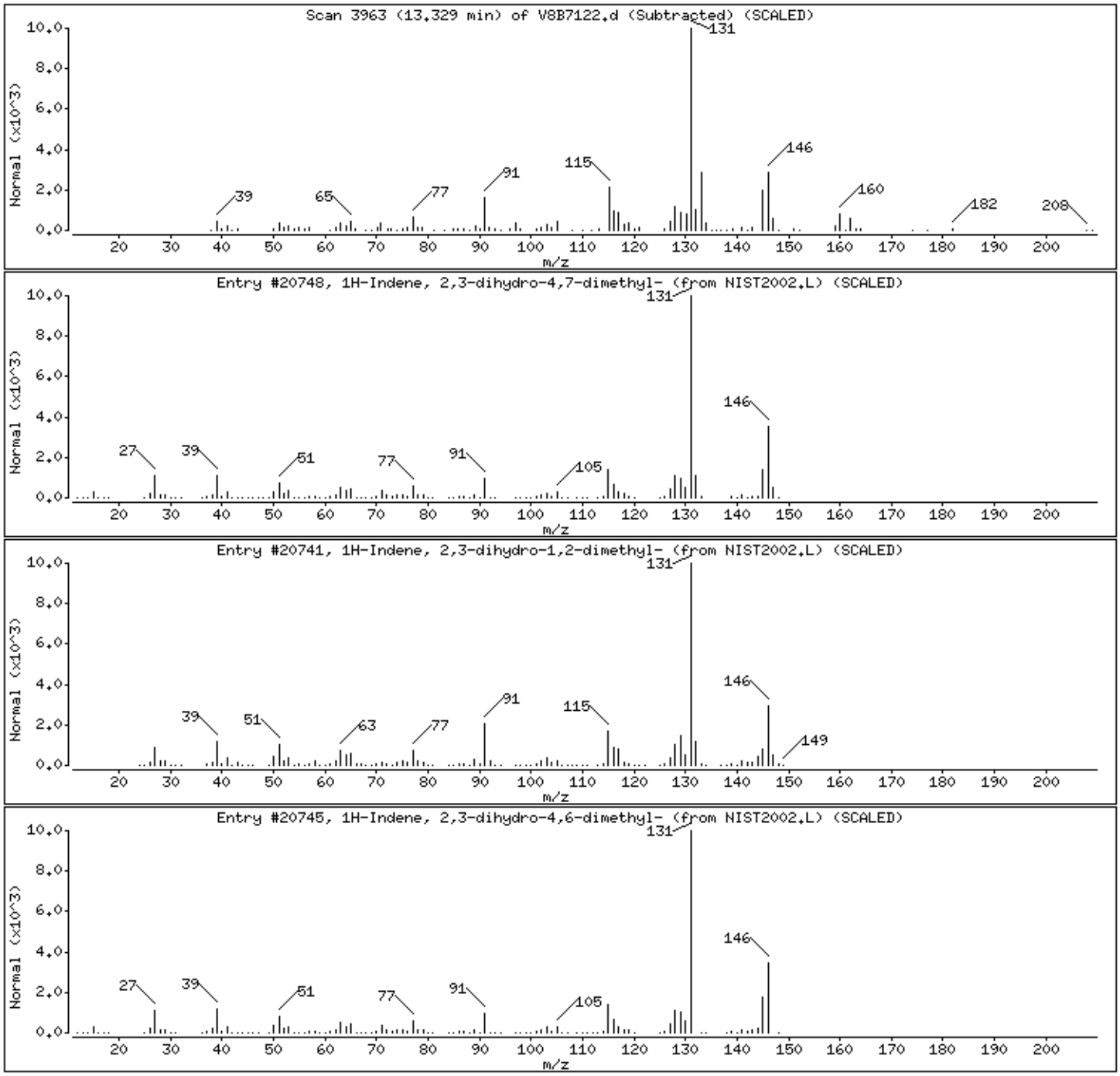
Client ID: FORMER BLDG OILDL Instrument: V8.i

Sample Info: 5ML,L2570-01ADL,,69830,100

Operator: V10 SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1H-Indene, 2,3-dihydro-4,7-dimethyl-	6682-71-9	NIST2002.L	20748	93	C11H14	146
1H-Indene, 2,3-dihydro-1,2-dimethyl-	17057-82-8	NIST2002.L	20741	76	C11H14	146
1H-Indene, 2,3-dihydro-4,6-dimethyl-	1685-82-1	NIST2002.L	20745	76	C11H14	146



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Date : 19-DEC-2012 20:16

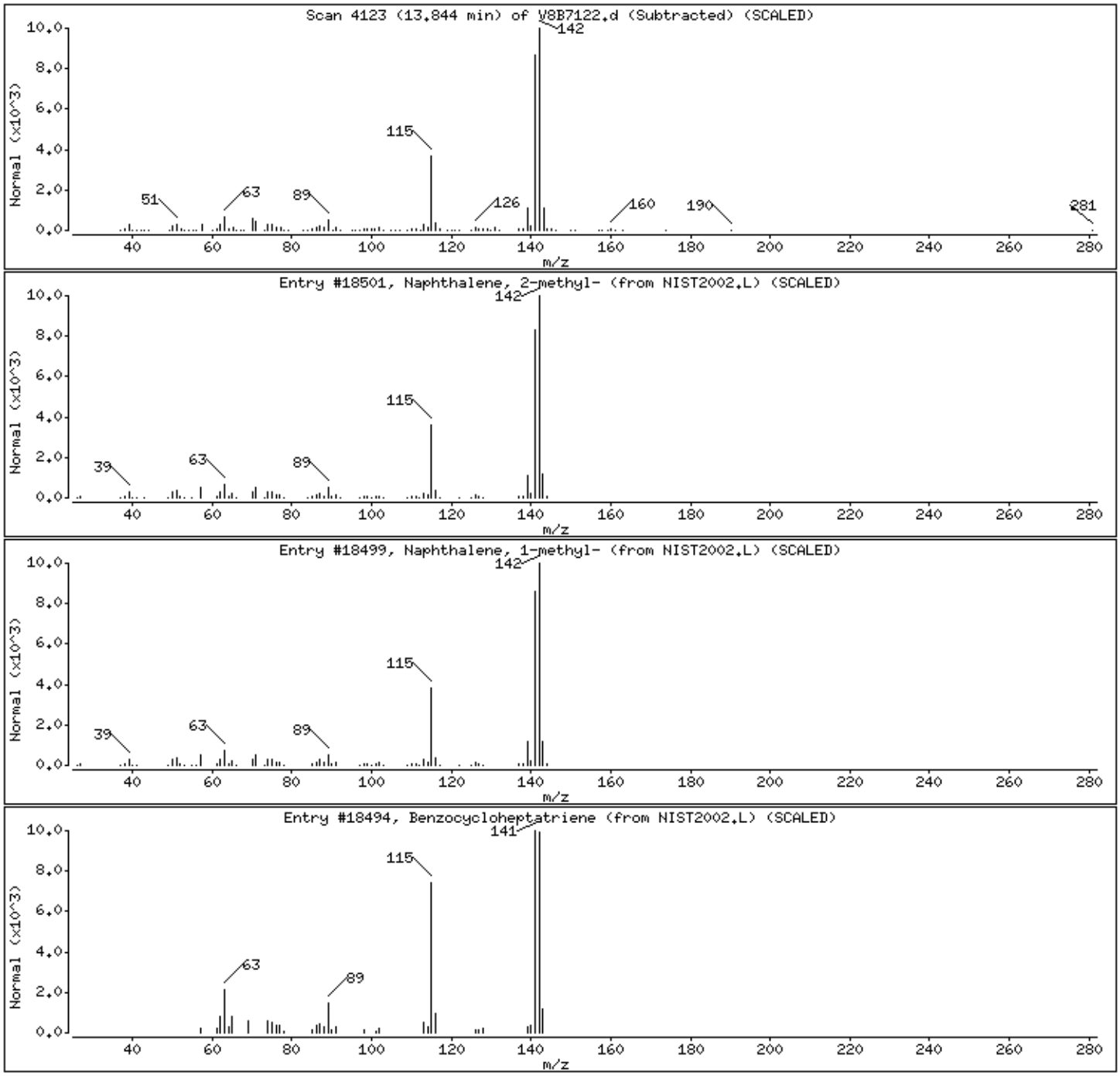
Client ID: FORMER BLDG OILDL Instrument: V8.i

Sample Info: 5ML,L2570-01ADL,,69830,100

Operator: V10 SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Naphthalene, 2-methyl-	91-57-6	NIST2002.L	18501	96	C11H10	142
Naphthalene, 1-methyl-	90-12-0	NIST2002.L	18499	96	C11H10	142
Benzocycloheptatriene	264-09-5	NIST2002.L	18494	94	C11H10	142



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Date : 19-DEC-2012 20:16

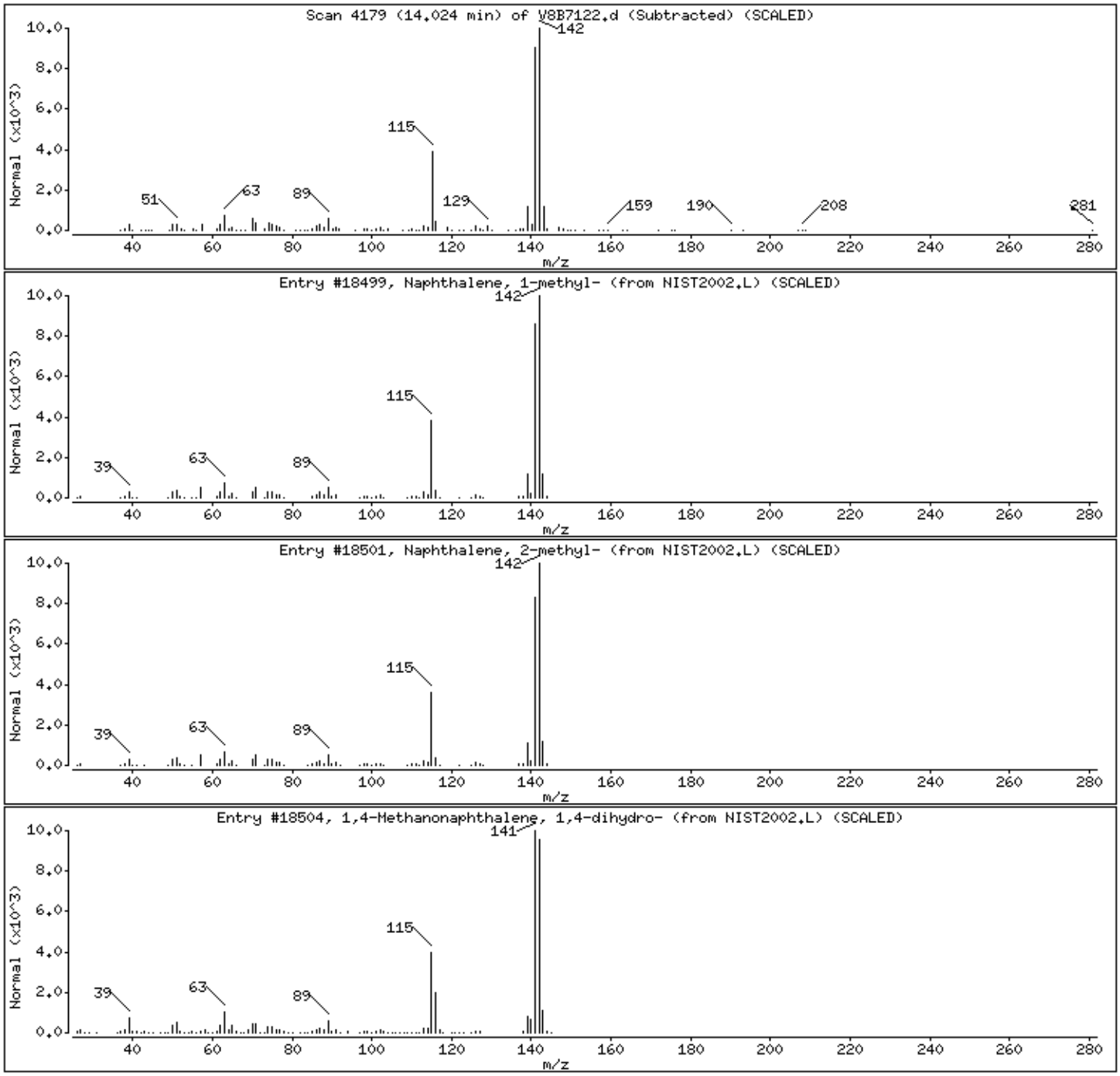
Client ID: FORMER BLDG OILDL Instrument: V8.i

Sample Info: 5ML,L2570-01ADL,,69830,100

Operator: V10 SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Naphthalene, 1-methyl-	90-12-0	NIST2002.L	18499	96	C11H10	142
Naphthalene, 2-methyl-	91-57-6	NIST2002.L	18501	96	C11H10	142
1,4-Methanonaphthalene, 1,4-dihydro-	4453-90-1	NIST2002.L	18504	94	C11H10	142



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Date : 19-DEC-2012 20:16

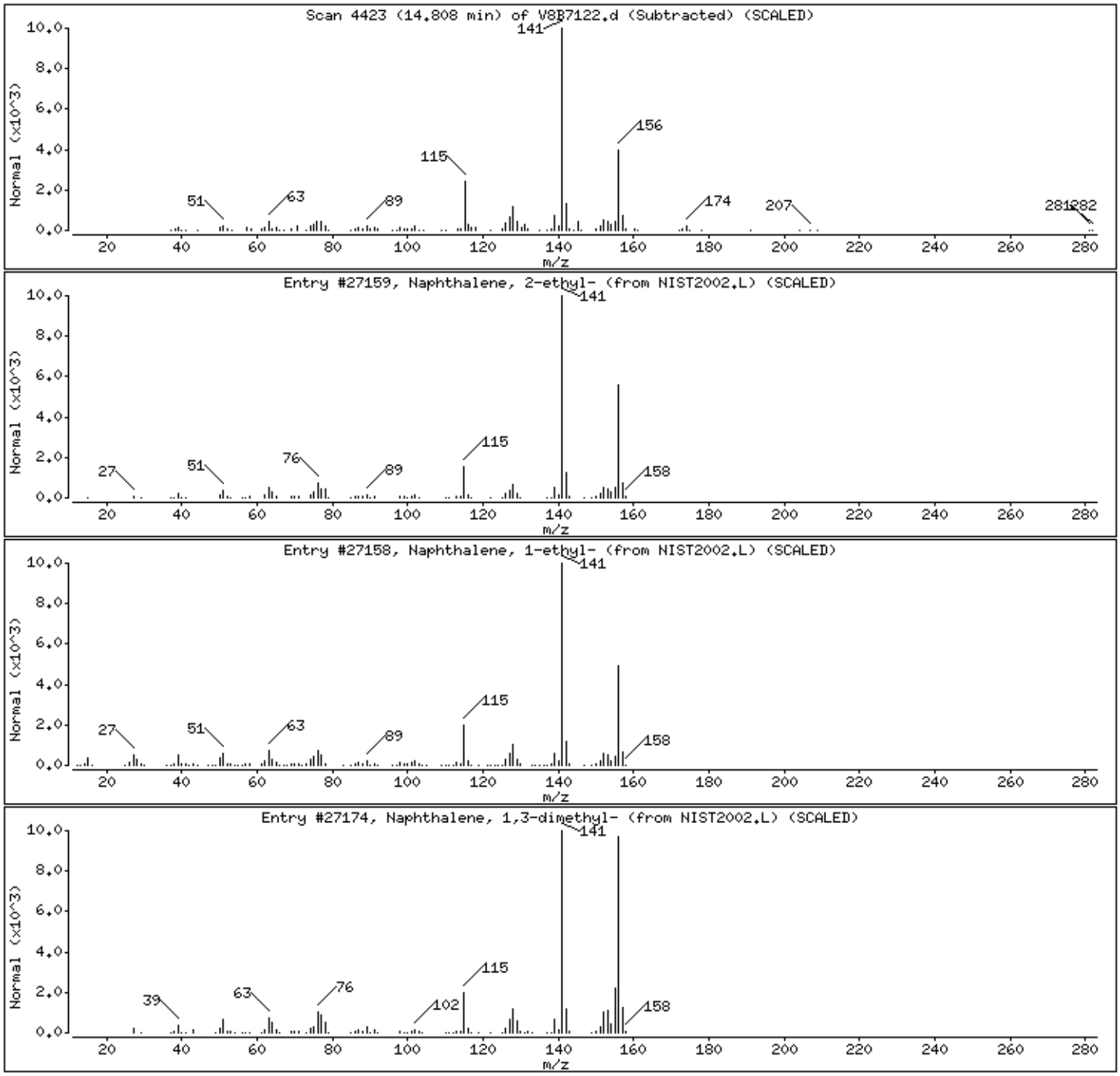
Client ID: FORMER BLDG OILDL Instrument: V8.i

Sample Info: 5ML,L2570-01ADL,,69830,100

Operator: V10 SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Naphthalene, 2-ethyl-	939-27-5	NIST2002.L	27159	96	C12H12	156
Naphthalene, 1-ethyl-	1127-76-0	NIST2002.L	27158	95	C12H12	156
Naphthalene, 1,3-dimethyl-	575-41-7	NIST2002.L	27174	90	C12H12	156



Data File: \\avogadro\organics\V8.I\121219.B\V8B7122.d

Date : 19-DEC-2012 20:16

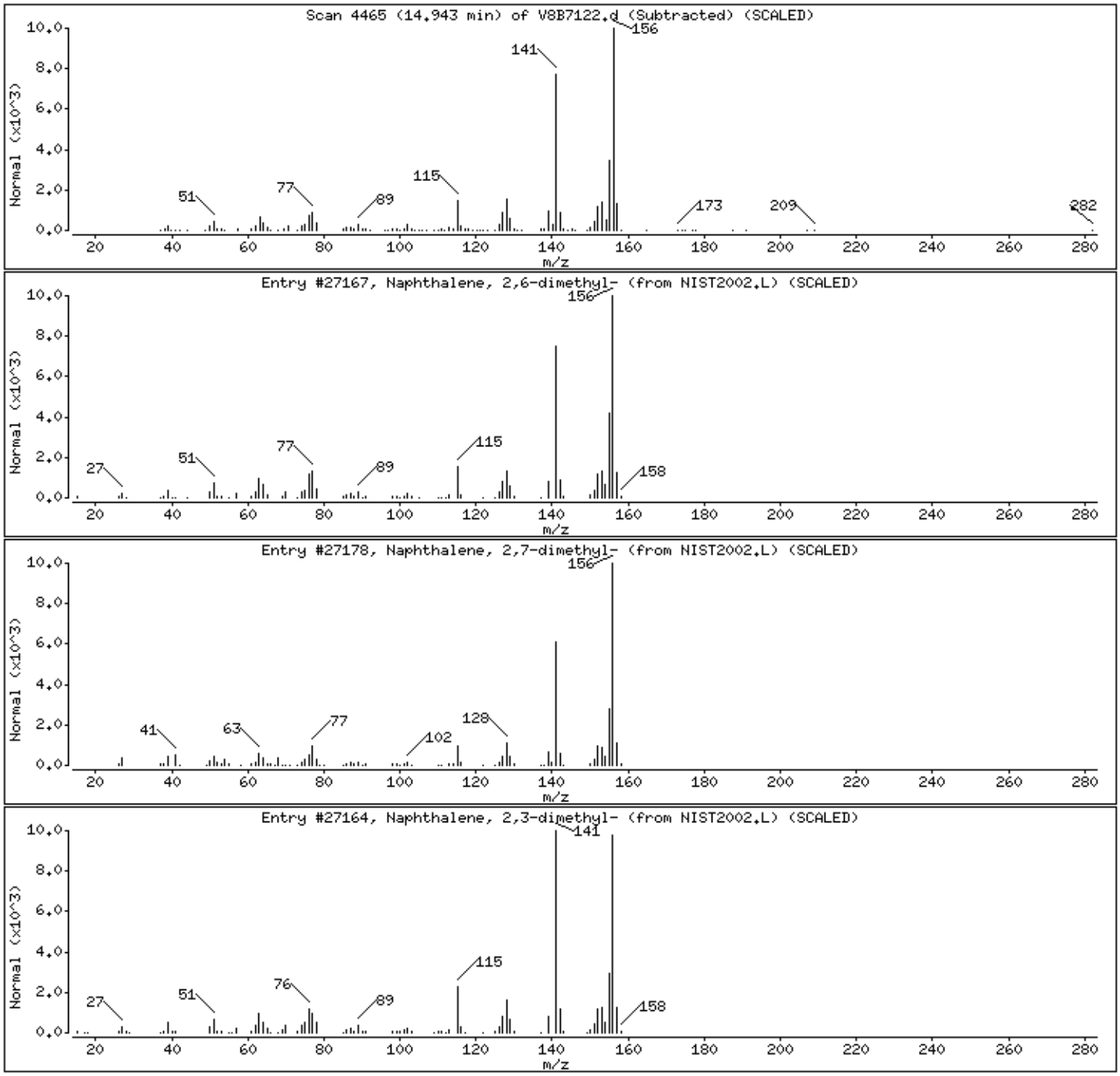
Client ID: FORMER BLDG OILDL Instrument: V8.i

Sample Info: 5ML,L2570-01ADL,,69830,100

Operator: V10 SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Naphthalene, 2,6-dimethyl-	581-42-0	NIST2002.L	27167	97	C12H12	156
Naphthalene, 2,7-dimethyl-	582-16-1	NIST2002.L	27178	97	C12H12	156
Naphthalene, 2,3-dimethyl-	581-40-8	NIST2002.L	27164	97	C12H12	156



Data File: \\avogadro\organics\V8.I\121219.B\V8B7122.d

Date : 19-DEC-2012 20:16

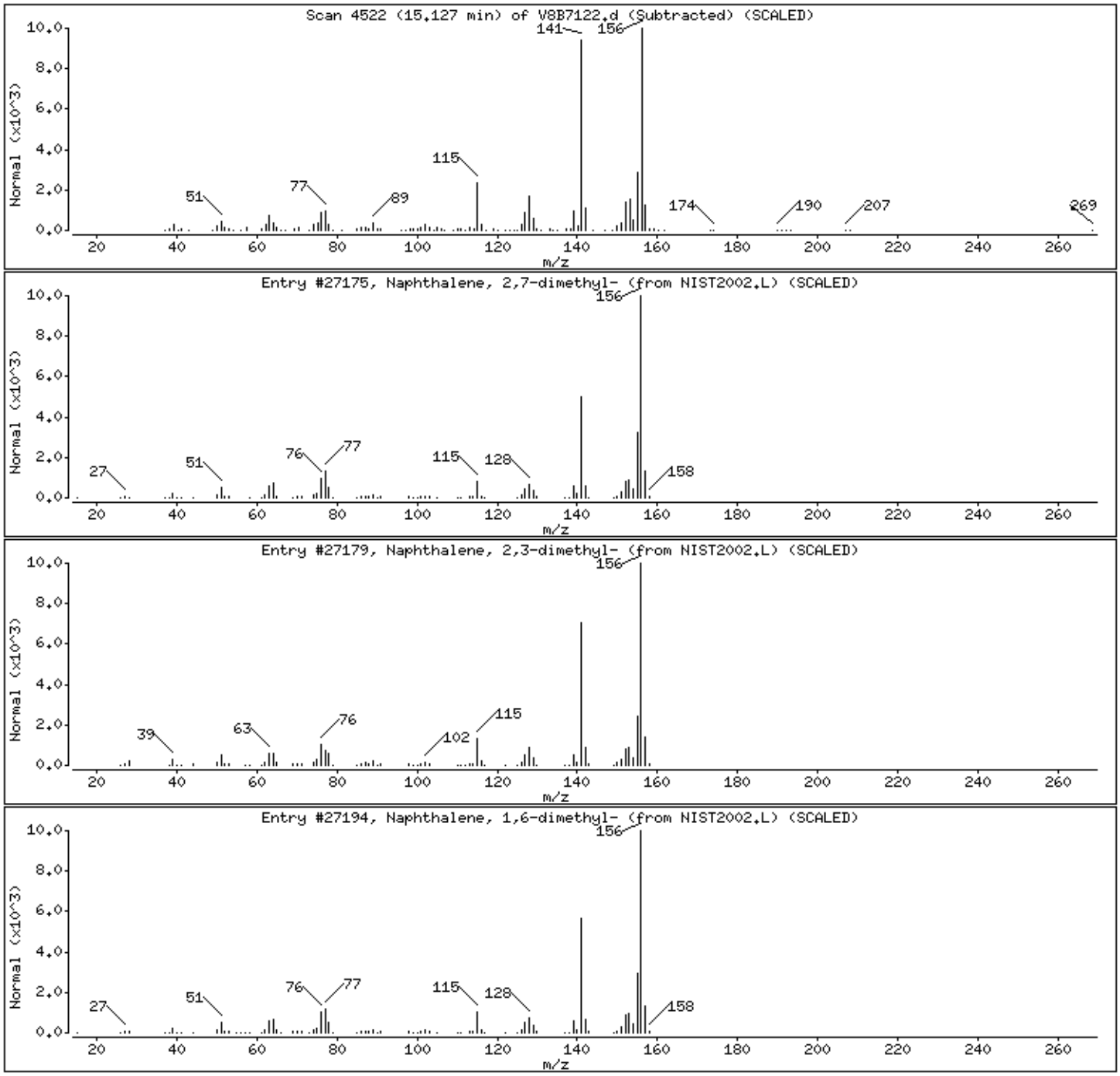
Client ID: FORMER BLDG OILDL Instrument: V8.i

Sample Info: 5ML,L2570-01ADL,,69830,100

Operator: V10 SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Naphthalene, 2,7-dimethyl-	582-16-1	NIST2002.L	27175	97	C12H12	156
Naphthalene, 2,3-dimethyl-	581-40-8	NIST2002.L	27179	97	C12H12	156
Naphthalene, 1,6-dimethyl-	575-43-9	NIST2002.L	27194	97	C12H12	156



Data File: \\avogadro\organics\V8.I\121219.B\V8B7122.d

Date : 19-DEC-2012 20:16

Client ID: FORMER BLDG OILDL

Instrument: V8.i

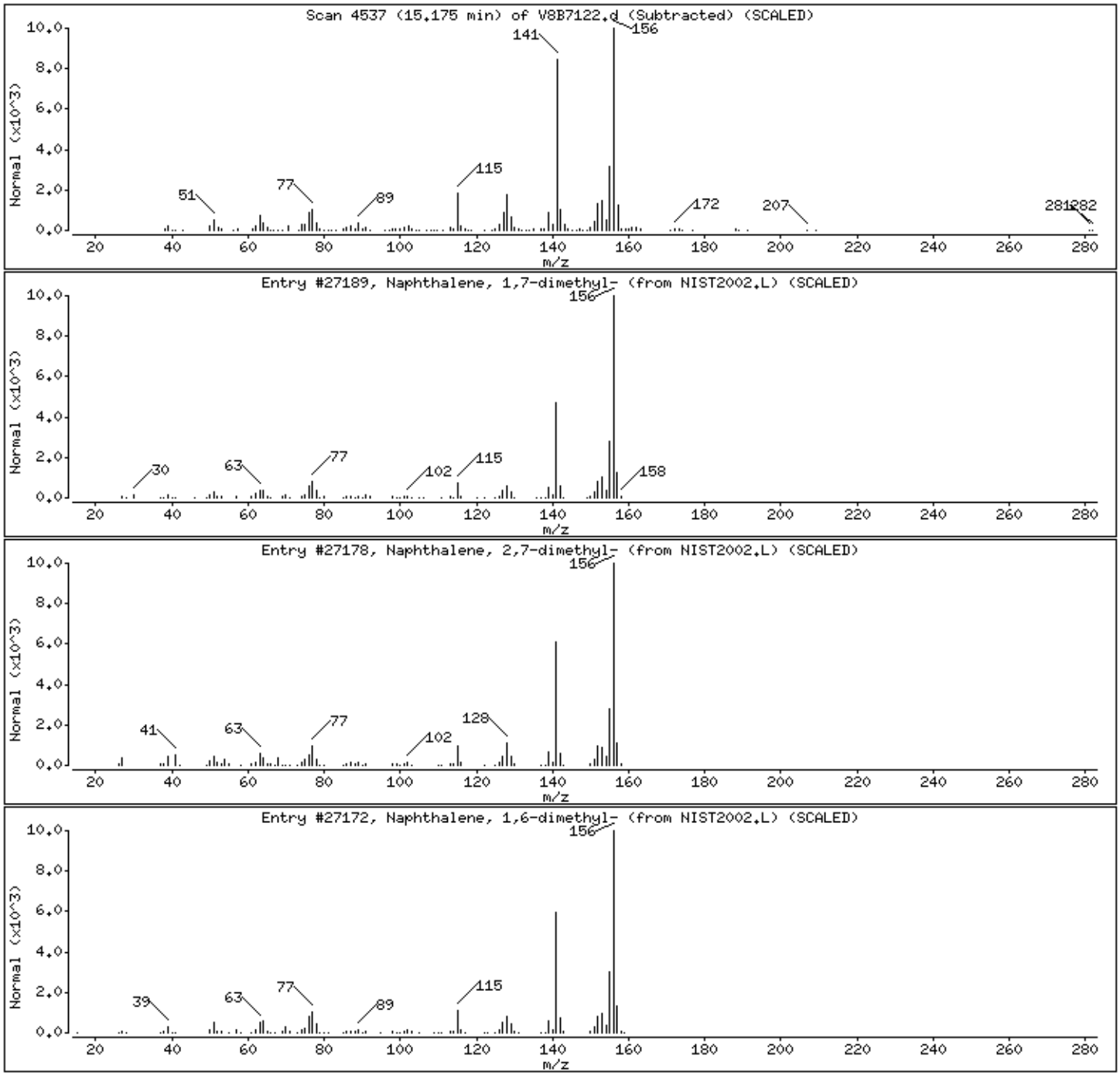
Sample Info: 5ML,L2570-01ADL,,69830,100

Operator: V10 SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Naphthalene, 1,7-dimethyl-	575-37-1	NIST2002.L	27189	97	C12H12	156
Naphthalene, 2,7-dimethyl-	582-16-1	NIST2002.L	27178	97	C12H12	156
Naphthalene, 1,6-dimethyl-	575-43-9	NIST2002.L	27172	97	C12H12	156



Data File: \\avogadro\organics\V8.I\121219.B\V8B7122.d

Date : 19-DEC-2012 20:16

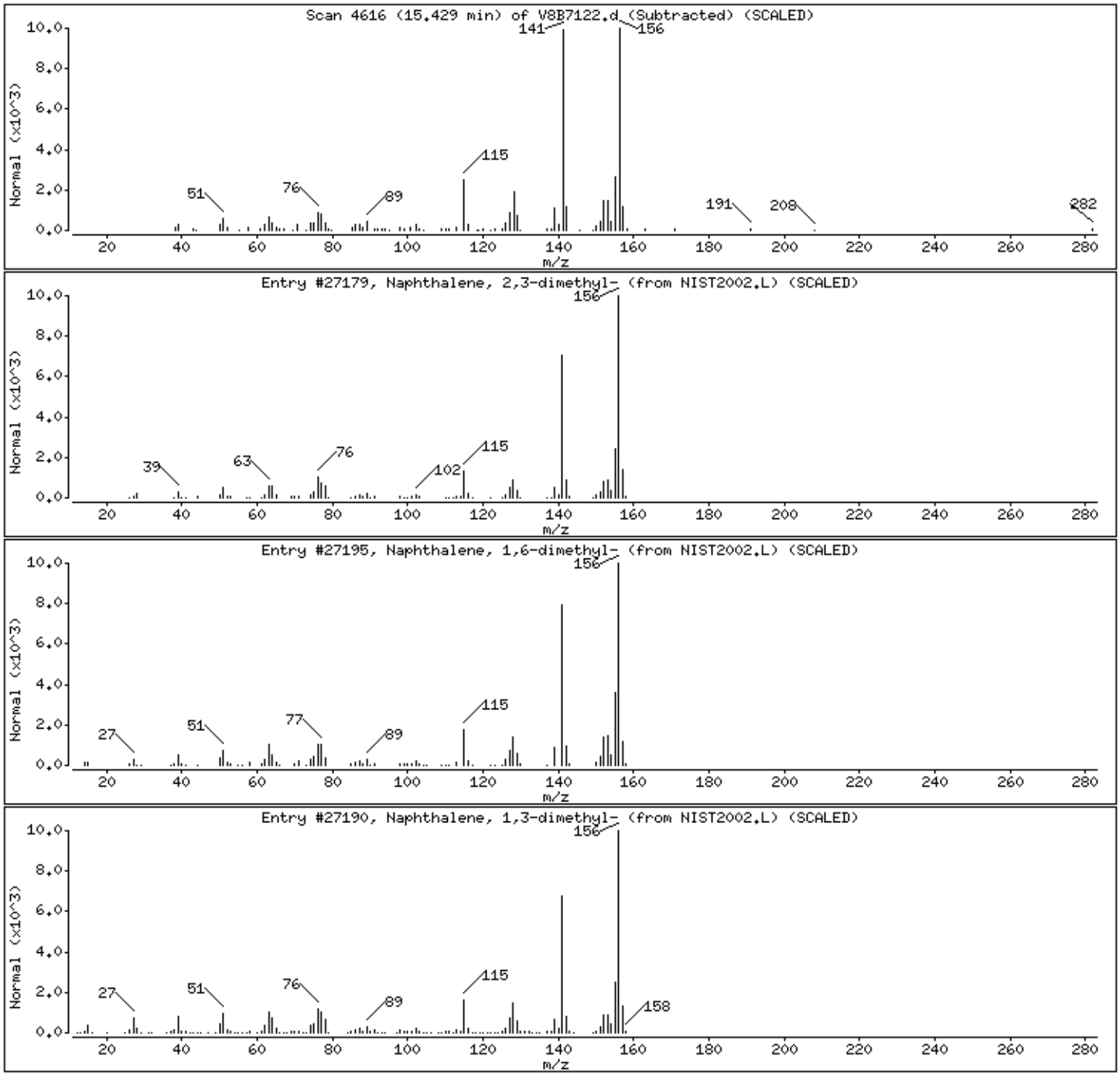
Client ID: FORMER BLDG OILDL Instrument: V8.i

Sample Info: 5ML,L2570-01ADL,,69830,100

Operator: V10 SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Naphthalene, 2,3-dimethyl-	581-40-8	NIST2002.L	27179	97	C12H12	156
Naphthalene, 1,6-dimethyl-	575-43-9	NIST2002.L	27195	97	C12H12	156
Naphthalene, 1,3-dimethyl-	575-41-7	NIST2002.L	27190	97	C12H12	156



6A - FORM VI VOA-1

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Instrument ID: V1 Calibration Date(s): 12/13/2012 12/13/2012

Heated Purge: (Y/N) N Calibration Time(s): 18:26 20:50

Purge Volume: 5.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: RRF005 = V1M9623.D RRF020 = V1M9624.D

RRF050 = V1M9625.D RRF100 = V1M9627.D RRF200 = V1M9628.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	$\overline{RRF}$	%RSD
Chloromethane	0.547	0.551	0.567	0.592	0.617	0.558	8.9
Vinyl chloride	0.467	0.436	0.445	0.446	0.459	0.444	4.2
Bromomethane	0.281	0.263	0.266	0.262	0.272	0.286	15.1
Chloroethane	0.324	0.317	0.325	0.316	0.326	0.315	4.9
Trichlorofluoromethane	0.200	0.213	0.237	0.226	0.258	0.223	9.7
1,1-Dichloroethene	0.261	0.244	0.255	0.246	0.257	0.255	3.6
Acetone	0.046	0.031	0.035	0.033	0.033	0.036	17.0
Carbon disulfide	0.979	0.922	0.926	0.873	0.889	0.909	4.7
Methylene chloride	0.183	0.162	0.162	0.174	0.189	0.181	11.8
trans-1,2-Dichloroethene	0.285	0.263	0.264	0.258	0.270	0.266	4.3
Methyl tert-butyl ether	0.829	0.763	0.795	0.779	0.791	0.773	6.4
1,1-Dichloroethane	0.566	0.524	0.530	0.519	0.530	0.526	4.8
Vinyl acetate	1.596	1.358	1.384	1.331	1.316	1.421	8.3
2-Butanone	0.036	0.031	0.033	0.031	0.033	0.033	6.1
cis-1,2-Dichloroethene	0.318	0.276	0.286	0.275	0.282	0.288	5.6
Chloroform	0.478	0.434	0.439	0.430	0.439	0.438	5.3
1,1,1-Trichloroethane	0.302	0.226	0.274	0.284	0.290	0.277	9.6
Carbon tetrachloride	0.210	0.210	0.216	0.224	0.234	0.215	6.3
1,2-Dichloroethane	0.343	0.325	0.331	0.333	0.334	0.329	3.3
Benzene	1.114	1.038	1.052	1.007	1.011	1.017	7.6
Trichloroethene	0.216	0.197	0.204	0.200	0.207	0.200	6.9
1,2-Dichloropropane	0.315	0.284	0.292	0.287	0.299	0.291	5.2
Bromodichloromethane	0.368	0.337	0.351	0.350	0.357	0.345	6.2
cis-1,3-Dichloropropene	0.474	0.457	0.471	0.462	0.469	0.458	4.8
4-Methyl-2-pentanone	0.396	0.336	0.358	0.358	0.381	0.366	6.4
Toluene	1.008	0.949	0.943	0.895	0.869	0.917	6.8
trans-1,3-Dichloropropene	0.427	0.393	0.412	0.410	0.419	0.402	7.0
1,1,2-Trichloroethane	0.215	0.206	0.206	0.204	0.209	0.210	3.2
Tetrachloroethene	0.216	0.188	0.196	0.195	0.196	0.201	5.7
2-Hexanone	0.399	0.341	0.388	0.368	0.393	0.378	6.2
Dibromochloromethane	0.315	0.294	0.313	0.309	0.319	0.299	9.5
Chlorobenzene	0.926	0.838	0.868	0.828	0.832	0.845	5.7
Ethylbenzene	0.469	0.425	0.445	0.428	0.442	0.430	7.6
m,p-Xylene	0.612	0.556	0.576	0.549	0.551	0.560	5.8
o-Xylene	0.598	0.540	0.564	0.544	0.565	0.550	6.6
Xylene (Total)	0.608	0.551	0.572	0.547	0.556	0.557	6.0
Styrene	1.043	0.983	1.016	0.978	0.974	0.974	6.8
Bromoform	0.163	0.149	0.159	0.155	0.167	0.152	11.8
Isopropylbenzene	1.438	1.327	1.368	1.302	1.282	1.319	6.1

6B - FORM VI VOA-2

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Instrument ID: V1 Calibration Date(s): 12/13/2012 12/13/2012

Heated Purge: (Y/N) N Calibration Time(s): 18:26 20:50

Purge Volume: 5.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: RRF005 = V1M9623.D RRF020 = V1M9624.D

RRF050 = V1M9625.D RRF100 = V1M9627.D RRF200 = V1M9628.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	$\overline{RRF}$	%RSD
1,1,2,2-Tetrachloroethane	1.359	1.199	1.245	1.186	1.206	1.221	6.3
n-Propylbenzene	0.845	0.788	0.804	0.787	0.806	0.788	6.3
1,3,5-Trimethylbenzene	2.890	2.661	2.728	2.650	2.579	2.651	6.2
tert-Butylbenzene	2.589	2.427	2.494	2.400	2.387	2.415	5.5
1,2,4-Trimethylbenzene	2.811	2.634	2.783	2.652	2.593	2.645	5.6
sec-Butylbenzene	3.471	3.280	3.377	3.227	3.083	3.226	6.2
4-Isopropyltoluene	2.616	2.438	2.589	2.480	2.424	2.459	6.0
1,3-Dichlorobenzene	1.327	1.180	1.243	1.210	1.219	1.222	5.0
1,4-Dichlorobenzene	1.412	1.242	1.298	1.248	1.263	1.278	5.7
n-Butylbenzene	2.594	2.470	2.618	2.481	2.385	2.460	6.1
1,2-Dichlorobenzene	1.288	1.160	1.202	1.176	1.186	1.183	5.5
Naphthalene	2.031	1.879	2.063	1.941	1.823	1.939	4.8
2-Chloroethyl vinyl ether	0.189	0.176	0.187	0.186	0.198	0.183	6.9

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Instrument ID: V1 Calibration Date(s): 12/13/2012 12/13/2012

Heated Purge: (Y/N) N Calibration Time(s): 18:26 20:50

Purge Volume: 5.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: RRF005 = V1M9623.D RRF020 = V1M9624.D

RRF050 = V1M9625.D RRF100 = V1M9627.D RRF200 = V1M9628.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	$\overline{RRF}$	%RSD
Dibromofluoromethane	0.230	0.229	0.229	0.238	0.239	0.232	2.1
1,2-Dichloroethane-d4	0.086	0.088	0.089	0.083	0.081	0.086	3.4
Toluene-d8	1.350	1.350	1.342	1.339	1.324	1.343	0.8
Bromofluorobenzene	0.568	0.566	0.565	0.572	0.577	0.569	0.8

6A - FORM VI VOA-1

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Instrument ID: V10 Calibration Date(s): 12/18/2012 12/19/2012

Heated Purge: (Y/N) N Calibration Time(s): 21:47 0:30

Purge Volume: 5.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: RRF005 = V8B7067.D RRF020 = V8B7068.D

RRF050 = V8B7070.D RRF100 = V8B7071.D RRF200 = V8B7072.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	$\overline{RRF}$	%RSD
Chloromethane	0.169	0.202	0.174	0.182	0.182	0.186	8.2
Vinyl chloride	0.190	0.231	0.198	0.198	0.199	0.204	7.1
Bromomethane	0.142	0.152	0.137	0.145	0.149	0.136	16.6
Chloroethane	0.116	0.138	0.113	0.110	0.111	0.124	15.5
Trichlorofluoromethane	0.415	0.498	0.436	0.430	0.448	0.440	7.0
1,1-Dichloroethene	0.247	0.287	0.244	0.243	0.241	0.254	7.0
Acetone	0.023	0.024	0.021	0.021	0.021	0.022	6.8
Carbon disulfide	0.695	0.834	0.729	0.723	0.730	0.748	6.6
Methylene chloride	0.275	0.309	0.264	0.264	0.257	0.301	22.9
trans-1,2-Dichloroethene	0.271	0.313	0.266	0.265	0.261	0.276	7.0
Methyl tert-butyl ether	0.813	0.964	0.852	0.849	0.819	0.847	7.3
1,1-Dichloroethane	0.449	0.523	0.445	0.449	0.431	0.455	7.6
Vinyl acetate	0.583	0.743	0.661	0.667	0.649	0.627	15.3
2-Butanone	0.023	0.030	0.028	0.029	0.028	0.028	10.0
cis-1,2-Dichloroethene	0.296	0.355	0.297	0.295	0.288	0.302	8.9
Chloroform	0.551	0.643	0.551	0.552	0.542	0.579	8.0
1,1,1-Trichloroethane	0.511	0.611	0.532	0.536	0.536	0.538	7.1
Carbon tetrachloride	0.429	0.534	0.461	0.471	0.480	0.465	9.2
1,2-Dichloroethane	0.446	0.545	0.470	0.476	0.459	0.473	7.9
Benzene	1.007	1.157	0.986	0.991	0.950	1.015	7.1
Trichloroethene	0.323	0.388	0.336	0.334	0.336	0.341	6.9
1,2-Dichloropropane	0.223	0.269	0.230	0.228	0.222	0.232	7.8
Bromodichloromethane	0.396	0.494	0.432	0.442	0.438	0.429	9.8
cis-1,3-Dichloropropene	0.384	0.481	0.432	0.444	0.438	0.422	10.8
4-Methyl-2-pentanone	0.160	0.196	0.171	0.180	0.177	0.177	7.5
Toluene	1.138	1.390	1.198	1.193	1.176	1.203	8.0
trans-1,3-Dichloropropene	0.354	0.466	0.427	0.439	0.433	0.407	13.9
1,1,2-Trichloroethane	0.248	0.304	0.263	0.266	0.257	0.262	9.1
Tetrachloroethene	0.311	0.368	0.330	0.317	0.324	0.323	8.2
2-Hexanone	0.102	0.160	0.142	0.146	0.149	0.140	15.8
Dibromochloromethane	0.370	0.473	0.434	0.447	0.450	0.419	12.2
Chlorobenzene	0.919	1.104	0.964	0.969	0.968	0.973	7.0
Ethylbenzene	0.463	0.561	0.497	0.494	0.498	0.494	7.8
m,p-Xylene	0.548	0.693	0.606	0.594	0.595	0.593	9.9
o-Xylene	0.548	0.679	0.599	0.588	0.577	0.587	8.9
Xylene (Total)	0.548	0.689	0.603	0.592	0.589	0.591	9.5
Styrene	0.860	1.113	0.994	0.996	0.989	0.954	12.6
Bromoform	0.187	0.252	0.239	0.252	0.257	0.227	16.3
Isopropylbenzene	1.440	1.791	1.583	1.585	1.597	1.559	9.6

6B - FORM VI VOA-2

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Instrument ID: V10 Calibration Date(s): 12/18/2012 12/19/2012

Heated Purge: (Y/N) N Calibration Time(s): 21:47 0:30

Purge Volume: 5.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: RRF005 = V8B7067.D RRF020 = V8B7068.D

RRF050 = V8B7070.D RRF100 = V8B7071.D RRF200 = V8B7072.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	$\overline{RRF}$	%RSD
1,1,2,2-Tetrachloroethane	0.720	0.843	0.744	0.737	0.720	0.753	6.1
n-Propylbenzene	0.773	0.939	0.830	0.819	0.824	0.816	9.3
1,3,5-Trimethylbenzene	2.536	3.056	2.699	2.655	2.646	2.639	10.0
tert-Butylbenzene	2.452	2.984	2.672	2.598	2.563	2.603	8.4
1,2,4-Trimethylbenzene	2.477	3.085	2.724	2.686	2.691	2.645	11.0
sec-Butylbenzene	2.908	3.574	3.193	3.092	3.126	3.087	10.2
4-Isopropyltoluene	2.525	3.147	2.798	2.740	2.753	2.715	10.2
1,3-Dichlorobenzene	1.396	1.641	1.445	1.412	1.415	1.443	7.1
1,4-Dichlorobenzene	1.418	1.693	1.483	1.470	1.449	1.503	6.5
n-Butylbenzene	1.972	2.525	2.304	2.230	2.255	2.184	11.5
1,2-Dichlorobenzene	1.344	1.617	1.416	1.375	1.344	1.407	7.6
Naphthalene	2.163	2.765	2.609	2.610	2.593	2.570	8.1
2-Chloroethyl vinyl ether	0.000	0.002	0.002	0.002	0.002	0.002	47.3

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Instrument ID: V10 Calibration Date(s): 12/18/2012 12/19/2012

Heated Purge: (Y/N) N Calibration Time(s): 21:47 0:30

Purge Volume: 5.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: RRF005 = V8B7067.D RRF020 = V8B7068.D

RRF050 = V8B7070.D RRF100 = V8B7071.D RRF200 = V8B7072.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	$\overline{RRF}$	%RSD
Dibromofluoromethane	0.297	0.300	0.298	0.299	0.297	0.298	0.5
1,2-Dichloroethane-d4	0.060	0.061	0.060	0.060	0.060	0.060	0.8
Toluene-d8	1.228	1.240	1.240	1.258	1.257	1.244	0.9
Bromofluorobenzene	0.519	0.524	0.527	0.536	0.545	0.528	2.1

Data File: \\avogadro\organics\V1.I\121213A.B\V1M9622.D
Report Date: 14-Dec-2012 13:19

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V1.I\121213A.B\V1M9622.D
Lab Smp Id: VSTD0011Q Client Smp ID: VSTD0011Q
Inj Date : 13-DEC-2012 18:26
Operator : AM   SRC: AM Inst ID: V1.i
Smp Info : 5ML,VSTD0011Q,VSTD0011Q
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\121213A.B\v18260Gadd.m
Meth Date : 14-Dec-2012 13:15 canderson Quant Type: ISTD
Cal Date : 13-DEC-2012 18:26 Cal File: V1M9622.D
Als bottle: 3 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.319	1.305	(0.287)	3259	1.00000	0.8(aQ)
2	Freon114	85	1.388	1.393	(0.302)	1379	1.00000	0.2(aQ)
3	Chloromethane	50	1.417	1.423	(0.309)	14873	1.00000	0.8(a)
4	Vinyl Chloride	62	1.526	1.531	(0.333)	13018	1.00000	0.9(a)
5	Bromomethane	94	1.762	1.758	(0.384)	11758	1.00000	1(a)
6	Chloroethane	64	1.841	1.846	(0.401)	8989	1.00000	0.9(a)
7	Trichlorofluoromethane	101	2.412	2.408	(0.526)	6493	1.00000	0.9(a)
126	Ethanol	46	2.117	2.122	(0.461)	12109	500.000	280(aAQ)
8	Ether	59	2.195	2.201	(0.478)	8451	1.00000	0.8(aQ)
9	Acrolein	56	2.284	2.280	(0.498)	9284	1.00000	6(aQ)
10	1,1-Dichloroethene	96	2.402	2.398	(0.524)	8443	1.00000	1(aQ)
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.412	2.408	(0.526)	6493	1.00000	0.9(a)
12	Acetone	58	2.392	2.388	(0.521)	1241	1.00000	1(aQ)
13	Iodomethane	142	2.520	2.516	(0.549)	6617	1.00000	0.8(a)
14	Carbon Disulfide	76	2.550	2.546	(0.556)	27259	1.00000	1.0(a)
15	Acetonitrile	41	2.619	2.614	(0.571)	28626	1.00000	8(a)
16	Allyl Chloride	39	2.619	2.614	(0.571)	9617	1.00000	0.7(aQ)
17	Methyl Acetate	43	2.629	2.634	(0.573)	8844	1.00000	0.9(a)
19	tert-Butanol	59	2.786	2.782	(0.607)	2357	1.00000	4(a)
18	Methylene Chloride	84	2.747	2.752	(0.599)	6894	1.00000	1(a)
20	Acrylonitrile	53	2.875	2.871	(0.627)	4516	1.00000	1(a)
21	trans-1,2-Dichloroethene	96	2.914	2.910	(0.635)	7951	1.00000	1.0(aQ)
22	Methyl tert-butyl ether	73	2.914	2.910	(0.635)	21531	1.00000	0.9(a)

Data File: \\avogadro\organics\V1.I\121213A.B\V1M9622.D
Report Date: 14-Dec-2012 13:19

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	23 1,1-Dichloroethane	63	3.220	3.215	(0.702)	15375	1.00000	0.9(a)
	24 Vinyl acetate	43	3.249	3.245	(0.708)	48461	1.00000	1(a)
	25 Diisopropyl Ether	45	3.279	3.274	(0.715)	40403	1.00000	0.9(a)
	26 2-Chloro-1,3-Butadiene	53	3.289	3.284	(0.717)	12498	1.00000	0.9(a)
	27 Ethyl tert-butyl ether	59	3.545	3.550	(0.773)	30299	1.00000	0.9(a)
	28 cis-1,2-Dichloroethene	96	3.663	3.659	(0.798)	9216	1.00000	1(a)
	29 2,2-Dichloropropane	77	3.663	3.659	(0.798)	4187	1.00000	0.9(a)
	30 2-Butanone	72	3.653	3.659	(0.796)	1031	1.00000	1(TaQ)
	32 Propionitrile	54	3.693	3.698	(0.805)	11598	1.00000	8(a)
	33 Methacrylonitrile	41	3.821	3.816	(0.833)	12641	1.00000	2(a)
	34 Bromochloromethane	128	3.840	3.836	(0.837)	3336	1.00000	0.9(a)
	31 Tetrahydrofuran	72	3.890	3.885	(0.848)	4957	1.00000	4(a)
	35 Chloroform	83	3.899	3.905	(0.850)	12778	1.00000	0.9(a)
$	36 Dibromofluoromethane	113	4.027	4.023	(0.878)	359136	1.00000	49
	37 1,1,1-Trichloroethane	97	4.057	4.062	(0.884)	9058	1.00000	1(a)
	38 Cyclohexane	56	4.116	4.121	(0.897)	15014	1.00000	0.9(a)
	39 1,1-Dichloropropene	110	4.195	4.190	(0.914)	2872	1.00000	0.9(a)
	40 Carbon Tetrachloride	117	4.205	4.200	(0.916)	6141	1.00000	0.9(a)
	41 Isobutyl Alcohol	43	4.264	4.259	(0.929)	19232	1.00000	49(a)
$	42 1,2-Dichloroethane-d4	102	4.303	4.299	(0.938)	135013	1.00000	50
	43 Benzene	78	4.362	4.358	(0.951)	27747	1.00000	0.9(aH)
	44 1,2-Dichloroethane	62	4.362	4.368	(0.951)	9775	1.00000	0.9(a)
	45 tert-Amyl methyl ether	73	4.461	4.456	(0.972)	23967	1.00000	0.9(a)
*	46 Fluorobenzene	96	4.589	4.594	(1.000)	1575261	50.0000	
M	50 1,2-Dichloroethene (Total)	96				17167	1.00000	(a)
	47 Trichloroethene	130	4.914	4.909	(1.071)	5535	1.00000	0.9(a)
	48 Methylcyclohexane	83	5.091	5.087	(1.109)	11105	1.00000	1(a)
	49 1,2-Dichloropropane	63	5.091	5.097	(1.109)	8490	1.00000	0.9(a)
	51 Methyl Methacrylate	69	5.200	5.195	(1.133)	6323	1.00000	0.8(a)
	52 Dibromomethane	93	5.200	5.195	(1.133)	4202	1.00000	0.8(aQ)
	53 1,4-Dioxane	88	5.219	5.215	(1.137)	1787	1.00000	39(aQ)
	54 Bromodichloromethane	83	5.337	5.343	(1.163)	9654	1.00000	0.9(a)
	55 2-Chloroethyl vinyl ether	63	5.623	5.619	(1.225)	5073	1.00000	0.9(a)
	56 cis-1,3-Dichloropropene	75	5.761	5.757	(1.255)	13062	1.00000	0.9(a)
	57 4-Methyl-2-pentanone	43	5.899	5.904	(1.285)	13707	1.00000	1(a)
$	58 Toluene-d8	98	6.027	6.022	(0.806)	1388094	1.00000	50
	59 Toluene	91	6.086	6.082	(1.326)	26379	1.00000	0.9(a)
	60 trans-1,3-Dichloropropene	75	6.293	6.288	(1.371)	10997	1.00000	0.9(a)
	61 Ethyl Methacrylate	69	6.391	6.397	(1.393)	8670	1.00000	0.8(a)
	62 1,1,2-Trichloroethane	97	6.470	6.466	(1.410)	6956	1.00000	1(a)
	63 Tetrachloroethene	164	6.638	6.633	(0.888)	4390	1.00000	1(a)
	64 1,3-Dichloropropane	76	6.638	6.643	(0.888)	11895	1.00000	0.9(a)
	65 2-Hexanone	43	6.726	6.732	(0.900)	8863	1.00000	1(a)
	66 Dibromochloromethane	129	6.864	6.870	(0.918)	4989	1.00000	0.8(Ta)
	67 1,2-Dibromoethane	107	6.982	6.988	(0.934)	5624	1.00000	0.8(Ta)
*	68 Chlorobenzene-d5	117	7.475	7.480	(1.000)	1025993	50.0000	
	69 1-Chlorohexane	91	7.494	7.500	(1.003)	13487	1.00000	1(aQ)
	70 Chlorobenzene	112	7.504	7.510	(1.004)	16030	1.00000	0.9(aQ)
	71 1,1,1,2-Tetrachloroethane	131	7.593	7.598	(1.016)	5086	1.00000	0.9(a)
	72 Ethylbenzene	106	7.632	7.638	(1.021)	7623	1.00000	0.9(aQ)
	73 m,p-Xylene	106	7.760	7.766	(1.038)	21127	2.00000	2(a)
	74 o-Xylene	106	8.194	8.199	(1.096)	10025	1.00000	0.9(a)
	75 Styrene	104	8.204	8.209	(1.098)	17438	1.00000	0.9(a)
	76 Bromoform	173	8.391	8.396	(1.123)	2408	1.00000	0.8(Ta)

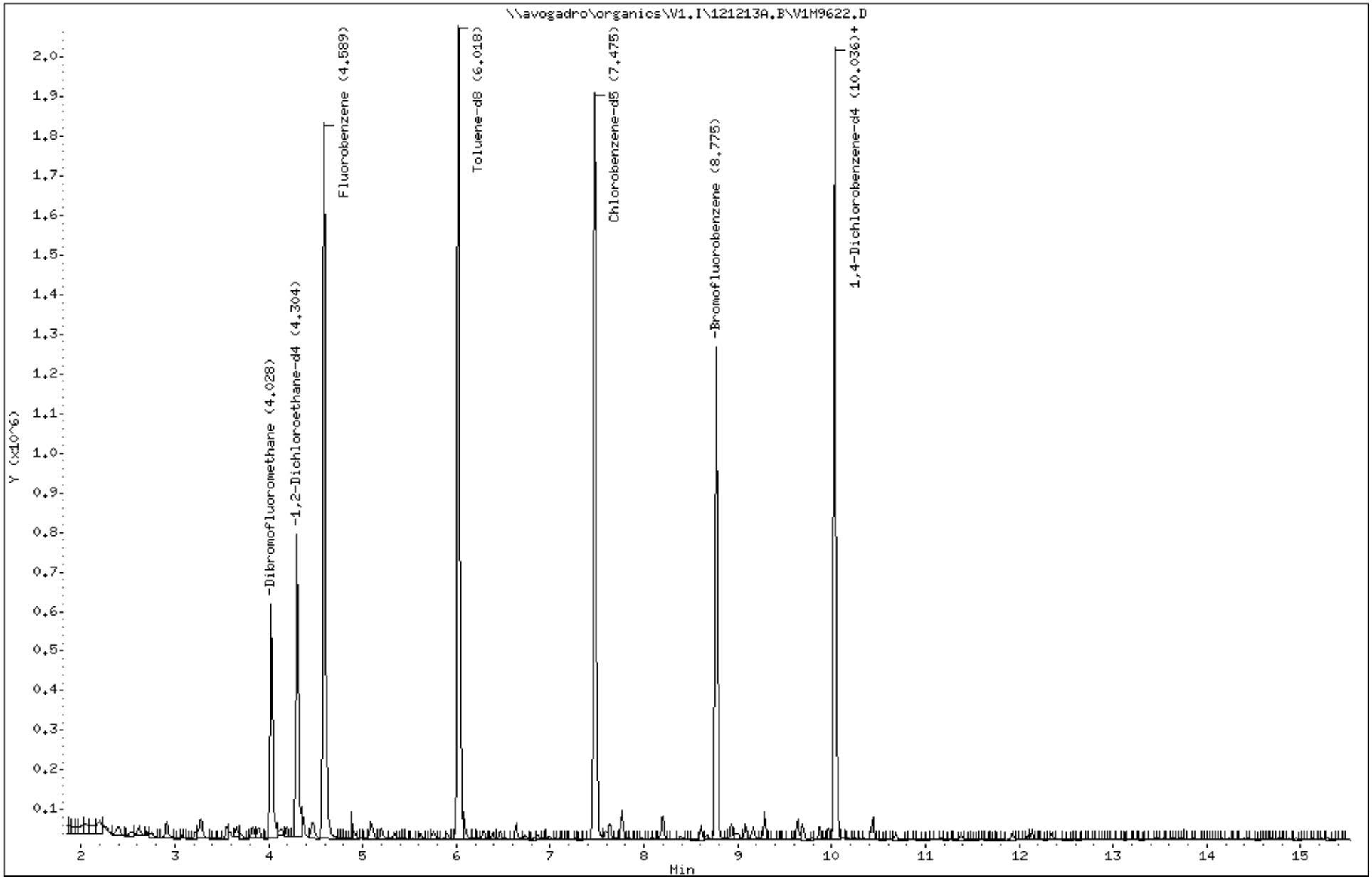
Data File: \\avogadro\organics\V1.I\121213A.B\V1M9622.D
Report Date: 14-Dec-2012 13:19

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	77 Isopropylbenzene	105	8.608	8.613	(1.152)	24616	1.00000	0.9(a)
	78 trans-1,4-Dichloro-2-butene	75	8.676	8.672	(1.161)	2564	1.00000	0.7(a)
$	79 Bromofluorobenzene	95	8.775	8.770	(1.174)	580695	1.00000	50
	80 1,1,2,2-Tetrachloroethane	83	8.942	8.938	(0.891)	9167	1.00000	0.9(Ta)
	81 Bromobenzene	156	8.933	8.938	(0.890)	4678	1.00000	0.9(a)
	82 1,2,3-Trichloropropane	75	8.982	8.977	(0.895)	10125	1.00000	0.9(a)
	83 n-Propylbenzene	120	9.080	9.086	(0.905)	5644	1.00000	0.9(a)
	84 2-Chlorotoluene	126	9.169	9.164	(0.914)	5312	1.00000	0.9(a)
	85 1,3,5-Trimethylbenzene	105	9.287	9.283	(0.925)	19412	1.00000	0.9(a)
	86 4-Chlorotoluene	126	9.287	9.283	(0.925)	5531	1.00000	0.9(a)
	87 tert-Butylbenzene	119	9.642	9.637	(0.961)	17766	1.00000	0.9(a)
	88 1,2,4-Trimethylbenzene	105	9.691	9.687	(0.966)	19427	1.00000	0.9(a)
	89 sec-Butylbenzene	105	9.868	9.874	(0.983)	23665	1.00000	0.9(a)
M	94 Xylene (Total)	106				31152	1.00000	(a)
	90 1,3-Dichlorobenzene	146	9.967	9.962	(0.993)	9333	1.00000	0.9(a)
	91 4-Isopropyltoluene	119	10.036	10.031	(1.000)	17871	1.00000	0.9(a)
*	92 1,4-Dichlorobenzene-d4	152	10.036	10.031	(1.000)	405161	50.0000	
	93 1,4-Dichlorobenzene	146	10.055	10.061	(1.002)	9762	1.00000	0.9(aQ)
	95 n-Butylbenzene	91	10.440	10.445	(1.040)	17916	1.00000	0.9(a)
	96 1,2-Dichlorobenzene	146	10.430	10.425	(1.039)	8800	1.00000	0.9(a)
	97 Hexachloroethane	117	10.686	10.681	(1.065)	4851	1.00000	0.9(a)
	98 1,2-Dibromo-3-chloropropane	75	11.168	11.174	(1.113)	1158	1.00000	0.8(a)
	141 1,3,5-Trichlorobenzene	182	11.385	11.381	(2.481)	3765	1.00000	0.9
	99 1,2,4-Trichlorobenzene	180	11.927	11.932	(1.188)	4681	1.00000	1.0(a)
	100 Hexachlorobutadiene	225	12.094	12.090	(1.205)	1094	1.00000	1.0(a)
	101 Naphthalene	128	12.134	12.139	(1.209)	15388	1.00000	1.0(a)
	102 1,2,3-Trichlorobenzene	180	12.350	12.346	(1.231)	3803	1.00000	0.9(a)

QC Flag Legend

T - Target compound detected outside RT window.
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.
H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\V1.I\121213A.B\V1M9622.D
Date : 13-DEC-2012 18:26
Client ID: VSTD0011Q
Instrument: V1.i
Sample Info: 5ML,VSTD0011Q,VSTD0011Q
Purge Volume: 5.0
Operator: AM SRC: AM
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V1.I\121213A.B\V1M9623.D
Report Date: 14-Dec-2012 13:19

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V1.I\121213A.B\V1M9623.D
Lab Smp Id: VSTD0051Q Client Smp ID: VSTD0051Q
Inj Date : 13-DEC-2012 18:50
Operator : AM   SRC: AM Inst ID: V1.i
Smp Info : 5ML,VSTD0051Q,VSTD0051Q
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\121213A.B\v18260Gadd.m
Meth Date : 14-Dec-2012 13:15 canderson Quant Type: ISTD
Cal Date : 13-DEC-2012 18:50 Cal File: V1M9623.D
Als bottle: 4 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/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.306	1.305	(0.284)	16585	5.00000	4(a)
2	Freon114	85	1.395	1.393	(0.304)	13804	5.00000	2(a)
3	Chloromethane	50	1.414	1.423	(0.308)	75142	5.00000	5
4	Vinyl Chloride	62	1.523	1.531	(0.331)	64167	5.00000	5
5	Bromomethane	94	1.759	1.758	(0.383)	38662	5.00000	5
6	Chloroethane	64	1.848	1.846	(0.402)	44473	5.00000	5
7	Trichlorofluoromethane	101	2.409	2.408	(0.524)	27491	5.00000	4(a)
126	Ethanol	46	2.124	2.122	(0.462)	17843	500.000	480(aA)
8	Ether	59	2.202	2.201	(0.479)	47792	5.00000	5
9	Acrolein	56	2.281	2.280	(0.496)	37266	25.0000	30
10	1,1-Dichloroethene	96	2.390	2.398	(0.520)	35894	5.00000	5
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.409	2.408	(0.524)	27491	5.00000	4(a)
12	Acetone	58	2.390	2.388	(0.520)	6384	5.00000	6
13	Iodomethane	142	2.518	2.516	(0.548)	37488	5.00000	5
14	Carbon Disulfide	76	2.547	2.546	(0.554)	134578	5.00000	5
15	Acetonitrile	41	2.616	2.614	(0.569)	145735	50.0000	48(a)
16	Allyl Chloride	39	2.616	2.614	(0.569)	60813	5.00000	5
17	Methyl Acetate	43	2.636	2.634	(0.574)	47631	5.00000	5
19	tert-Butanol	59	2.784	2.782	(0.606)	5150	10.0000	10
18	Methylene Chloride	84	2.744	2.752	(0.597)	25080	5.00000	5
20	Acrylonitrile	53	2.872	2.871	(0.625)	19546	5.00000	5
21	trans-1,2-Dichloroethene	96	2.912	2.910	(0.634)	39201	5.00000	5
22	Methyl tert-butyl ether	73	2.912	2.910	(0.634)	113903	5.00000	5

Data File: \\avogadro\organics\V1.I\121213A.B\V1M9623.D
Report Date: 14-Dec-2012 13:19

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	23	1,1-Dichloroethane	63	3.217	3.215	(0.700)	77820	5.00000	5
	24	Vinyl acetate	43	3.256	3.245	(0.709)	219368	5.00000	6
	25	Diisopropyl Ether	45	3.276	3.274	(0.713)	206755	5.00000	5
	26	2-Chloro-1,3-Butadiene	53	3.296	3.284	(0.717)	63802	5.00000	5
	27	Ethyl tert-butyl ether	59	3.552	3.550	(0.773)	159508	5.00000	6
	28	cis-1,2-Dichloroethene	96	3.660	3.659	(0.796)	43706	5.00000	6
	29	2,2-Dichloropropane	77	3.660	3.659	(0.796)	23938	5.00000	6
	30	2-Butanone	72	3.660	3.659	(0.796)	4887	5.00000	5
	32	Propionitrile	54	3.700	3.698	(0.805)	63331	50.0000	54
	33	Methacrylonitrile	41	3.828	3.816	(0.833)	71586	10.0000	10
	34	Bromochloromethane	128	3.847	3.836	(0.837)	17113	5.00000	6
	31	Tetrahydrofuran	72	3.887	3.885	(0.846)	13712	10.0000	13
	35	Chloroform	83	3.906	3.905	(0.850)	65674	5.00000	5
$	36	Dibromofluoromethane	113	4.025	4.023	(0.876)	316246	50.0000	49
	37	1,1,1-Trichloroethane	97	4.064	4.062	(0.884)	41458	5.00000	5
	38	Cyclohexane	56	4.123	4.121	(0.897)	63777	5.00000	5
	39	1,1-Dichloropropene	110	4.192	4.190	(0.912)	15721	5.00000	5
	40	Carbon Tetrachloride	117	4.202	4.200	(0.914)	28790	5.00000	5
	41	Isobutyl Alcohol	43	4.271	4.259	(0.929)	42564	100.000	120
$	42	1,2-Dichloroethane-d4	102	4.300	4.299	(0.936)	118587	50.0000	50
	43	Benzene	78	4.359	4.358	(0.949)	153025	5.00000	5
	44	1,2-Dichloroethane	62	4.369	4.368	(0.951)	47121	5.00000	5
	45	tert-Amyl methyl ether	73	4.458	4.456	(0.970)	123248	5.00000	5
*	46	Fluorobenzene	96	4.596	4.594	(1.000)	1374127	50.0000	
M	50	1,2-Dichloroethene (Total)	96				82907	10.0000	(a)
	47	Trichloroethene	130	4.911	4.909	(1.069)	29735	5.00000	5
	48	Methylcyclohexane	83	5.088	5.087	(1.107)	41382	5.00000	4(a)
	49	1,2-Dichloropropane	63	5.098	5.097	(1.109)	43229	5.00000	5
	51	Methyl Methacrylate	69	5.197	5.195	(1.131)	33644	5.00000	5
	52	Dibromomethane	93	5.197	5.195	(1.131)	23310	5.00000	5
	53	1,4-Dioxane	88	5.226	5.215	(1.137)	2913	100.000	73(a)
	54	Bromodichloromethane	83	5.335	5.343	(1.161)	50592	5.00000	5
	55	2-Chloroethyl vinyl ether	63	5.610	5.619	(1.221)	25940	5.00000	5
	56	cis-1,3-Dichloropropene	75	5.758	5.757	(1.253)	65109	5.00000	5
	57	4-Methyl-2-pentanone	43	5.896	5.904	(1.283)	54409	5.00000	5
$	58	Toluene-d8	98	6.014	6.022	(0.805)	1208827	50.0000	50
	59	Toluene	91	6.083	6.082	(1.324)	138540	5.00000	5
	60	trans-1,3-Dichloropropene	75	6.280	6.288	(1.366)	58678	5.00000	5
	61	Ethyl Methacrylate	69	6.388	6.397	(1.390)	43757	5.00000	5
	62	1,1,2-Trichloroethane	97	6.467	6.466	(1.407)	29607	5.00000	5
	63	Tetrachloroethene	164	6.635	6.633	(0.888)	19320	5.00000	5
	64	1,3-Dichloropropane	76	6.635	6.643	(0.888)	63004	5.00000	5
	65	2-Hexanone	43	6.723	6.732	(0.900)	35737	5.00000	5
	66	Dibromochloromethane	129	6.861	6.870	(0.918)	28207	5.00000	5(T)
	67	1,2-Dibromoethane	107	6.979	6.988	(0.934)	31236	5.00000	5
*	68	Chlorobenzene-d5	117	7.472	7.480	(1.000)	895107	50.0000	
	69	1-Chlorohexane	91	7.492	7.500	(1.003)	53844	5.00000	5
	70	Chlorobenzene	112	7.501	7.510	(1.004)	82910	5.00000	5
	71	1,1,1,2-Tetrachloroethane	131	7.590	7.598	(1.016)	25733	5.00000	5
	72	Ethylbenzene	106	7.630	7.638	(1.021)	42011	5.00000	5
	73	m,p-Xylene	106	7.758	7.766	(1.038)	109589	10.0000	11
	74	o-Xylene	106	8.191	8.199	(1.096)	53554	5.00000	5
	75	Styrene	104	8.201	8.209	(1.098)	93389	5.00000	5
	76	Bromoform	173	8.388	8.396	(1.123)	14620	5.00000	5(T)

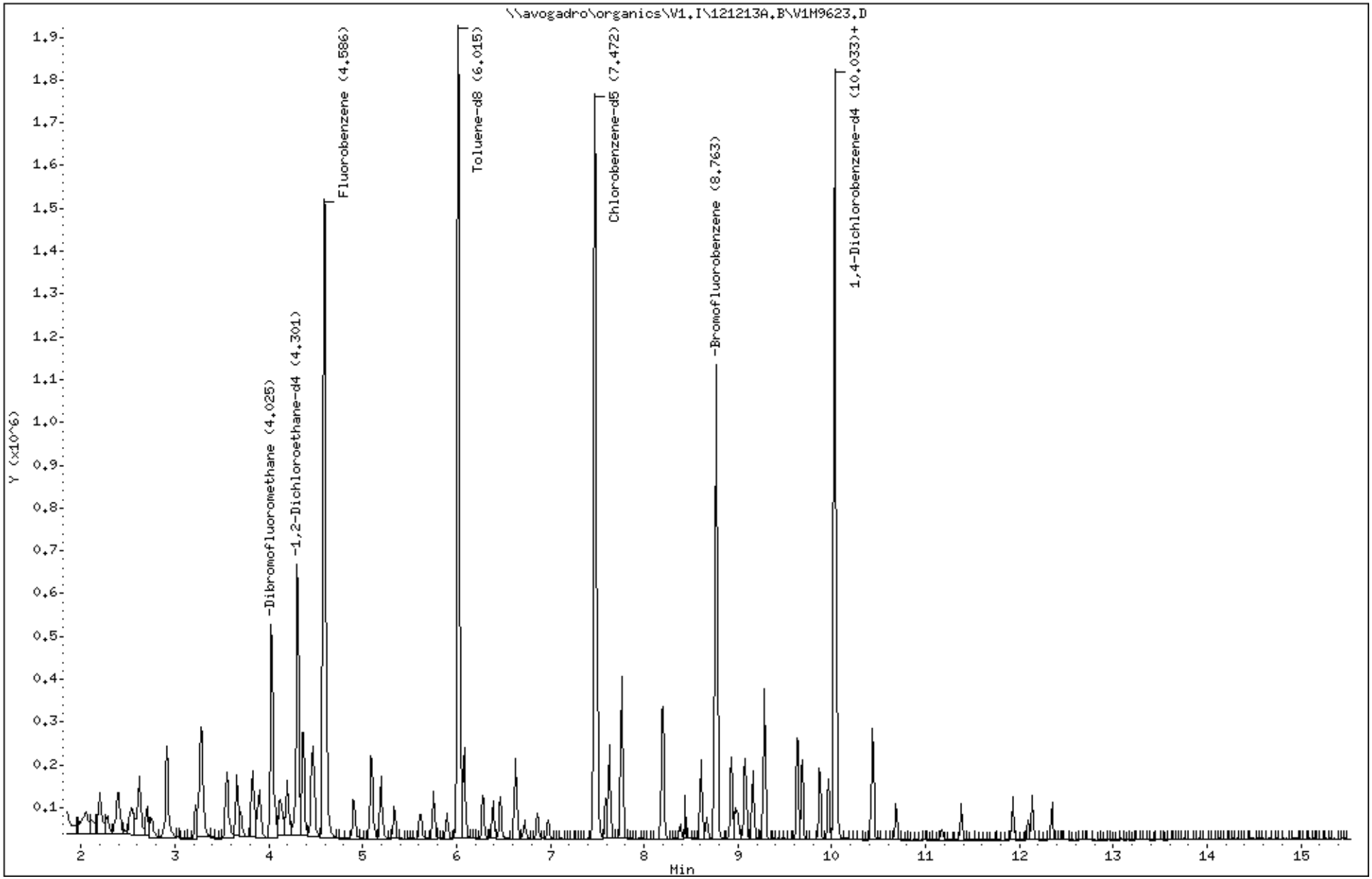
Data File: \\avogadro\organics\V1.I\121213A.B\V1M9623.D
Report Date: 14-Dec-2012 13:19

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	77 Isopropylbenzene	105	8.605	8.613	(1.152)	128712	5.00000	5
	78 trans-1,4-Dichloro-2-butene	75	8.674	8.672	(1.161)	14511	5.00000	5
$	79 Bromofluorobenzene	95	8.762	8.770	(1.173)	508279	50.0000	50
	80 1,1,2,2-Tetrachloroethane	83	8.930	8.938	(0.890)	47072	5.00000	6
	81 Bromobenzene	156	8.930	8.938	(0.890)	23842	5.00000	5
	82 1,2,3-Trichloropropane	75	8.979	8.977	(0.895)	49963	5.00000	5
	83 n-Propylbenzene	120	9.077	9.086	(0.905)	29252	5.00000	5
	84 2-Chlorotoluene	126	9.156	9.164	(0.913)	26324	5.00000	5
	85 1,3,5-Trimethylbenzene	105	9.284	9.283	(0.925)	100076	5.00000	5
	86 4-Chlorotoluene	126	9.284	9.283	(0.925)	27185	5.00000	5
	87 tert-Butylbenzene	119	9.639	9.637	(0.961)	89650	5.00000	5
	88 1,2,4-Trimethylbenzene	105	9.688	9.687	(0.966)	97343	5.00000	5
	89 sec-Butylbenzene	105	9.865	9.874	(0.983)	120192	5.00000	5
M	94 Xylene (Total)	106				163143	15.0000	(a)
	90 1,3-Dichlorobenzene	146	9.964	9.962	(0.993)	45956	5.00000	5
	91 4-Isopropyltoluene	119	10.023	10.031	(0.999)	90588	5.00000	5
*	92 1,4-Dichlorobenzene-d4	152	10.033	10.031	(1.000)	346293	50.0000	
	93 1,4-Dichlorobenzene	146	10.062	10.061	(1.003)	48909	5.00000	6
	95 n-Butylbenzene	91	10.447	10.445	(1.041)	89833	5.00000	5
	96 1,2-Dichlorobenzene	146	10.427	10.425	(1.039)	44597	5.00000	5
	97 Hexachloroethane	117	10.683	10.681	(1.065)	22804	5.00000	5
	98 1,2-Dibromo-3-chloropropane	75	11.175	11.174	(1.114)	7180	5.00000	6
	141 1,3,5-Trichlorobenzene	182	11.382	11.381	(2.476)	18940	5.00000	5
	99 1,2,4-Trichlorobenzene	180	11.934	11.932	(1.189)	22158	5.00000	5
	100 Hexachlorobutadiene	225	12.091	12.090	(1.205)	5222	5.00000	5
	101 Naphthalene	128	12.141	12.139	(1.210)	70318	5.00000	5
	102 1,2,3-Trichlorobenzene	180	12.347	12.346	(1.231)	19392	5.00000	6

QC Flag Legend

T - Target compound detected outside RT window.
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\organics\V1.I\121213A.B\V1M9623.D
Date : 13-DEC-2012 18:50
Client ID: VSTD0051Q
Instrument: V1.i
Sample Info: 5ML,VSTD0051Q,VSTD0051Q
Purge Volume: 5.0
Operator: AM SRC: AM
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V1.I\121213A.B\V1M9624.D
Report Date: 14-Dec-2012 13:19

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V1.I\121213A.B\V1M9624.D
Lab Smp Id: VSTD0201Q Client Smp ID: VSTD0201Q
Inj Date : 13-DEC-2012 19:15
Operator : AM   SRC: AM Inst ID: V1.i
Smp Info : 5ML,VSTD0201Q,VSTD0201Q
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\121213A.B\v18260Gadd.m
Meth Date : 14-Dec-2012 13:15 canderson Quant Type: ISTD
Cal Date : 13-DEC-2012 19:15 Cal File: V1M9624.D
Als bottle: 5 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/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.305	1.305	(0.284)	84632	20.0000	20
2	Freon114	85	1.404	1.393	(0.306)	145865	20.0000	17
3	Chloromethane	50	1.424	1.423	(0.310)	346104	20.0000	20
4	Vinyl Chloride	62	1.532	1.531	(0.333)	273990	20.0000	20
5	Bromomethane	94	1.768	1.758	(0.385)	164978	20.0000	18
6	Chloroethane	64	1.857	1.846	(0.404)	199044	20.0000	20
7	Trichlorofluoromethane	101	2.418	2.408	(0.526)	133636	20.0000	19
126	Ethanol	46	2.123	2.122	(0.462)	64397	2000.00	1500(aA)
8	Ether	59	2.202	2.201	(0.479)	207553	20.0000	20
9	Acrolein	56	2.290	2.280	(0.498)	133999	100.000	95
10	1,1-Dichloroethene	96	2.399	2.398	(0.522)	153416	20.0000	19
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.418	2.408	(0.526)	133636	20.0000	19
12	Acetone	58	2.399	2.388	(0.522)	19436	20.0000	17(Q)
13	Iodomethane	142	2.527	2.516	(0.550)	150348	20.0000	19
14	Carbon Disulfide	76	2.547	2.546	(0.554)	578920	20.0000	20
15	Acetonitrile	41	2.625	2.614	(0.571)	658706	200.000	190
16	Allyl Chloride	39	2.625	2.614	(0.571)	256223	20.0000	20
17	Methyl Acetate	43	2.635	2.634	(0.574)	194748	20.0000	19
19	tert-Butanol	59	2.793	2.782	(0.608)	20195	40.0000	34
18	Methylene Chloride	84	2.753	2.752	(0.599)	101671	20.0000	18
20	Acrylonitrile	53	2.881	2.871	(0.627)	84914	20.0000	19
21	trans-1,2-Dichloroethene	96	2.921	2.910	(0.636)	165414	20.0000	20
22	Methyl tert-butyl ether	73	2.921	2.910	(0.636)	479204	20.0000	20

Data File: \\avogadro\organics\V1.I\121213A.B\V1M9624.D
Report Date: 14-Dec-2012 13:19

								AMOUNTS	
			QUANT SIG					CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	23	1,1-Dichloroethane	63	3.216	3.215	(0.700)	329220	20.0000	20
	24	Vinyl acetate	43	3.256	3.245	(0.709)	853189	20.0000	19
	25	Diisopropyl Ether	45	3.275	3.274	(0.713)	879905	20.0000	20
	26	2-Chloro-1,3-Butadiene	53	3.295	3.284	(0.717)	278301	20.0000	19
	27	Ethyl tert-butyl ether	59	3.561	3.550	(0.775)	652414	20.0000	20
	28	cis-1,2-Dichloroethene	96	3.660	3.659	(0.796)	173527	20.0000	19
	29	2,2-Dichloropropane	77	3.669	3.659	(0.799)	98631	20.0000	21
	30	2-Butanone	72	3.669	3.659	(0.799)	19400	20.0000	19(Q)
	32	Propionitrile	54	3.709	3.698	(0.807)	253102	200.000	190
	33	Methacrylonitrile	41	3.827	3.816	(0.833)	304038	40.0000	38
	34	Bromochloromethane	128	3.847	3.836	(0.837)	68952	20.0000	19(Q)
	31	Tetrahydrofuran	72	3.896	3.885	(0.848)	45471	40.0000	38
	35	Chloroform	83	3.906	3.905	(0.850)	272644	20.0000	20
$	36	Dibromofluoromethane	113	4.034	4.023	(0.878)	360175	50.0000	49
	37	1,1,1-Trichloroethane	97	4.073	4.062	(0.886)	141948	20.0000	16
	38	Cyclohexane	56	4.122	4.121	(0.897)	302403	20.0000	19
	39	1,1-Dichloropropene	110	4.201	4.190	(0.914)	63913	20.0000	20(Q)
	40	Carbon Tetrachloride	117	4.211	4.200	(0.916)	132031	20.0000	20
	41	Isobutyl Alcohol	43	4.270	4.259	(0.929)	136531	400.000	350(A)
$	42	1,2-Dichloroethane-d4	102	4.310	4.299	(0.938)	137818	50.0000	51
	43	Benzene	78	4.369	4.358	(0.951)	652014	20.0000	20(H)
	44	1,2-Dichloroethane	62	4.369	4.368	(0.951)	203917	20.0000	20
	45	tert-Amyl methyl ether	73	4.467	4.456	(0.972)	520831	20.0000	19
*	46	Fluorobenzene	96	4.595	4.594	(1.000)	1570191	50.0000	
M	50	1,2-Dichloroethene (Total)	96				338941	40.0000	(a)
	47	Trichloroethene	130	4.910	4.909	(1.069)	123562	20.0000	20
	48	Methylcyclohexane	83	5.098	5.087	(1.109)	197195	20.0000	18
	49	1,2-Dichloropropane	63	5.107	5.097	(1.111)	178179	20.0000	19
	51	Methyl Methacrylate	69	5.206	5.195	(1.133)	139785	20.0000	18
	52	Dibromomethane	93	5.206	5.195	(1.133)	98736	20.0000	20
	53	1,4-Dioxane	88	5.226	5.215	(1.137)	13787	400.000	300(A)
	54	Bromodichloromethane	83	5.344	5.343	(1.163)	211452	20.0000	20
	55	2-Chloroethyl vinyl ether	63	5.620	5.619	(1.223)	110606	20.0000	19(H)
	56	cis-1,3-Dichloropropene	75	5.758	5.757	(1.253)	286905	20.0000	20
	57	4-Methyl-2-pentanone	43	5.905	5.904	(1.285)	210802	20.0000	18
$	58	Toluene-d8	98	6.023	6.022	(0.805)	1391174	50.0000	50
	59	Toluene	91	6.092	6.082	(1.326)	595743	20.0000	21
	60	trans-1,3-Dichloropropene	75	6.289	6.288	(1.369)	246954	20.0000	20
	61	Ethyl Methacrylate	69	6.398	6.397	(1.392)	197277	20.0000	19
	62	1,1,2-Trichloroethane	97	6.477	6.466	(1.409)	129102	20.0000	20
	63	Tetrachloroethene	164	6.634	6.633	(0.887)	77410	20.0000	19
	64	1,3-Dichloropropane	76	6.644	6.643	(0.888)	268013	20.0000	20
	65	2-Hexanone	43	6.733	6.732	(0.900)	140696	20.0000	18
	66	Dibromochloromethane	129	6.871	6.870	(0.918)	121351	20.0000	20
	67	1,2-Dibromoethane	107	6.989	6.988	(0.934)	133554	20.0000	20
*	68	Chlorobenzene-d5	117	7.481	7.480	(1.000)	1030662	50.0000	
	69	1-Chlorohexane	91	7.501	7.500	(1.003)	226780	20.0000	19(Q)
	70	Chlorobenzene	112	7.511	7.510	(1.004)	345598	20.0000	20
	71	1,1,1,2-Tetrachloroethane	131	7.599	7.598	(1.016)	110145	20.0000	20
	72	Ethylbenzene	106	7.639	7.638	(1.021)	175336	20.0000	20
	73	m,p-Xylene	106	7.767	7.766	(1.038)	458613	40.0000	40
	74	o-Xylene	106	8.200	8.199	(1.096)	222762	20.0000	20
	75	Styrene	104	8.210	8.209	(1.097)	405279	20.0000	20
	76	Bromoform	173	8.397	8.396	(1.122)	61237	20.0000	20

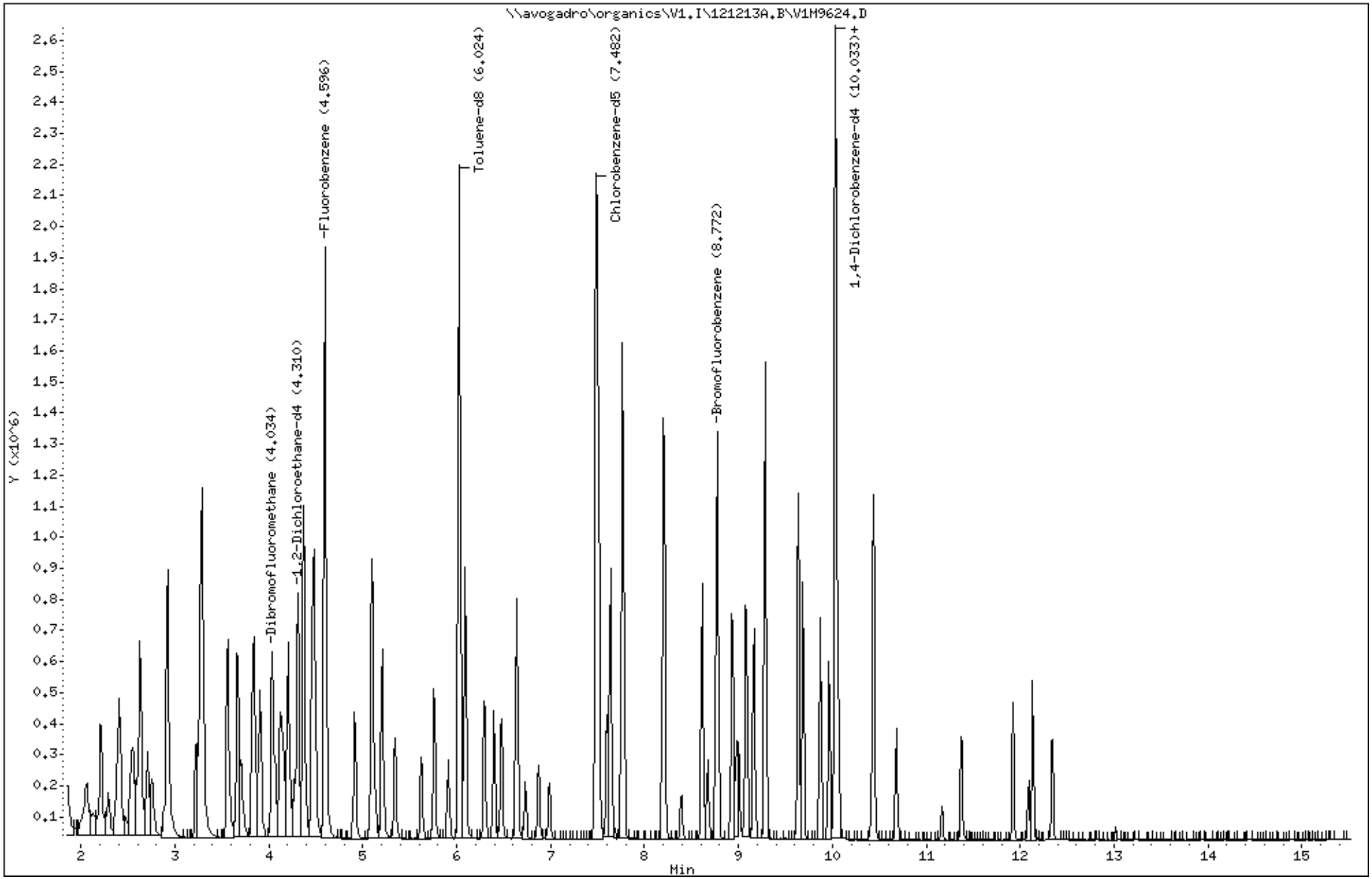
Data File: \\avogadro\organics\V1.I\121213A.B\V1M9624.D
Report Date: 14-Dec-2012 13:19

							AMOUNTS	
			QUANT SIG				CAL-AMT	ON-COL
	Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	77	Isopropylbenzene	105	8.614	8.613	(1.151)	546981	20.0000	20
	78	trans-1,4-Dichloro-2-butene	75	8.673	8.672	(1.159)	65678	20.0000	18
$	79	Bromofluorobenzene	95	8.771	8.770	(1.172)	583451	50.0000	50
	80	1,1,2,2-Tetrachloroethane	83	8.939	8.938	(0.891)	190841	20.0000	20
	81	Bromobenzene	156	8.929	8.938	(0.890)	102620	20.0000	20
	82	1,2,3-Trichloropropane	75	8.978	8.977	(0.895)	212218	20.0000	20
	83	n-Propylbenzene	120	9.087	9.086	(0.906)	125452	20.0000	20
	84	2-Chlorotoluene	126	9.165	9.164	(0.914)	113258	20.0000	20
	85	1,3,5-Trimethylbenzene	105	9.284	9.283	(0.925)	423655	20.0000	20
	86	4-Chlorotoluene	126	9.284	9.283	(0.925)	116705	20.0000	20
	87	tert-Butylbenzene	119	9.638	9.637	(0.961)	386448	20.0000	20
	88	1,2,4-Trimethylbenzene	105	9.687	9.687	(0.966)	419363	20.0000	20
	89	sec-Butylbenzene	105	9.875	9.874	(0.984)	522237	20.0000	20
M	94	Xylene (Total)	106				681375	60.0000	(a)
	90	1,3-Dichlorobenzene	146	9.963	9.962	(0.993)	187848	20.0000	19
	91	4-Isopropyltoluene	119	10.032	10.031	(1.000)	388097	20.0000	20
*	92	1,4-Dichlorobenzene-d4	152	10.032	10.031	(1.000)	398027	50.0000	
	93	1,4-Dichlorobenzene	146	10.062	10.061	(1.003)	197728	20.0000	19
	95	n-Butylbenzene	91	10.436	10.445	(1.040)	393300	20.0000	20
	96	1,2-Dichlorobenzene	146	10.426	10.425	(1.039)	184725	20.0000	20
	97	Hexachloroethane	117	10.682	10.681	(1.065)	96789	20.0000	19
	98	1,2-Dibromo-3-chloropropane	75	11.165	11.174	(1.113)	25163	20.0000	18
	141	1,3,5-Trichlorobenzene	182	11.382	11.381	(2.477)	76637	20.0000	19
	99	1,2,4-Trichlorobenzene	180	11.923	11.932	(1.188)	93233	20.0000	19
	100	Hexachlorobutadiene	225	12.091	12.090	(1.205)	22566	20.0000	20
	101	Naphthalene	128	12.130	12.139	(1.209)	299091	20.0000	19
	102	1,2,3-Trichlorobenzene	180	12.347	12.346	(1.231)	80957	20.0000	20

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.
H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\V1.I\121213A.B\V1M9624.D
Date : 13-DEC-2012 19:15
Client ID: VSTD0201Q
Instrument: V1.i
Sample Info: 5ML,VSTD0201Q,VSTD0201Q
Purge Volume: 5.0
Operator: AM SRC: AM
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V1.I\121213A.B\V1M9625.D
Report Date: 14-Dec-2012 13:19

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V1.I\121213A.B\V1M9625.D
Lab Smp Id: VSTD0501Q Client Smp ID: VSTD0501Q
Inj Date : 13-DEC-2012 19:38
Operator : AM   SRC: AM Inst ID: V1.i
Smp Info : 5ML,VSTD0501Q,VSTD0501Q
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\121213A.B\v18260Gadd.m
Meth Date : 14-Dec-2012 13:15 canderson Quant Type: ISTD
Cal Date : 13-DEC-2012 19:38 Cal File: V1M9625.D
Als bottle: 6 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/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.300	1.305	(0.283)	238419	50.0000	56
2	Freon114	85	1.398	1.393	(0.305)	507050	50.0000	60
3	Chloromethane	50	1.418	1.423	(0.309)	869868	50.0000	51
4	Vinyl Chloride	62	1.536	1.531	(0.335)	682814	50.0000	50
5	Bromomethane	94	1.763	1.758	(0.384)	408043	50.0000	46
6	Chloroethane	64	1.852	1.846	(0.403)	499266	50.0000	52
7	Trichlorofluoromethane	101	2.403	2.408	(0.524)	363354	50.0000	53
126	Ethanol	46	2.117	2.122	(0.461)	211175	5000.00	5100(A)
8	Ether	59	2.196	2.201	(0.479)	520329	50.0000	52
9	Acrolein	56	2.275	2.280	(0.496)	337143	250.000	240(A)
10	1,1-Dichloroethene	96	2.393	2.398	(0.521)	391984	50.0000	50
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.403	2.408	(0.524)	363354	50.0000	53
12	Acetone	58	2.393	2.388	(0.521)	53889	50.0000	49(Q)
13	Iodomethane	142	2.511	2.516	(0.547)	390334	50.0000	49
14	Carbon Disulfide	76	2.541	2.546	(0.554)	1421752	50.0000	51
15	Acetonitrile	41	2.620	2.614	(0.571)	1756134	500.000	520(A)
16	Allyl Chloride	39	2.620	2.614	(0.571)	640426	50.0000	51
17	Methyl Acetate	43	2.630	2.634	(0.573)	500812	50.0000	51
19	tert-Butanol	59	2.777	2.782	(0.605)	58908	100.000	100
18	Methylene Chloride	84	2.748	2.752	(0.599)	248639	50.0000	45
20	Acrylonitrile	53	2.866	2.871	(0.624)	219665	50.0000	51
21	trans-1,2-Dichloroethene	96	2.905	2.910	(0.633)	405367	50.0000	50
22	Methyl tert-butyl ether	73	2.915	2.910	(0.635)	1219750	50.0000	51

Data File: \\avogadro\organics\V1.I\121213A.B\V1M9625.D
Report Date: 14-Dec-2012 13:19

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	23	1,1-Dichloroethane	63	3.211	3.215	(0.700)	813107	50.0000	50
	24	Vinyl acetate	43	3.250	3.245	(0.708)	2124925	50.0000	49
	25	Diisopropyl Ether	45	3.270	3.274	(0.712)	2168240	50.0000	51
	26	2-Chloro-1,3-Butadiene	53	3.290	3.284	(0.717)	699828	50.0000	50
	27	Ethyl tert-butyl ether	59	3.546	3.550	(0.773)	1644234	50.0000	51
	28	cis-1,2-Dichloroethene	96	3.654	3.659	(0.796)	438653	50.0000	50
	29	2,2-Dichloropropane	77	3.654	3.659	(0.796)	231408	50.0000	50
	30	2-Butanone	72	3.654	3.659	(0.796)	50463	50.0000	50
	32	Propionitrile	54	3.693	3.698	(0.805)	666096	500.000	500(A)
	33	Methacrylonitrile	41	3.821	3.816	(0.833)	784557	100.000	100
	34	Bromochloromethane	128	3.841	3.836	(0.837)	171756	50.0000	50
	31	Tetrahydrofuran	72	3.881	3.885	(0.846)	111232	100.000	94
	35	Chloroform	83	3.900	3.905	(0.850)	673241	50.0000	50
$	36	Dibromofluoromethane	113	4.028	4.023	(0.878)	351739	50.0000	49
	37	1,1,1-Trichloroethane	97	4.058	4.062	(0.884)	420982	50.0000	49
	38	Cyclohexane	56	4.117	4.121	(0.897)	807739	50.0000	52
	39	1,1-Dichloropropene	110	4.196	4.190	(0.914)	161757	50.0000	51
	40	Carbon Tetrachloride	117	4.196	4.200	(0.914)	331349	50.0000	50
	41	Isobutyl Alcohol	43	4.265	4.259	(0.929)	355822	1000.00	930(A)
$	42	1,2-Dichloroethane-d4	102	4.304	4.299	(0.938)	137155	50.0000	52
	43	Benzene	78	4.363	4.358	(0.951)	1615237	50.0000	52
	44	1,2-Dichloroethane	62	4.363	4.368	(0.951)	508221	50.0000	50
	45	tert-Amyl methyl ether	73	4.462	4.456	(0.972)	1323576	50.0000	50
*	46	Fluorobenzene	96	4.590	4.594	(1.000)	1534828	50.0000	
M	50	1,2-Dichloroethene (Total)	96				844020	100.000	(a)
	47	Trichloroethene	130	4.915	4.909	(1.071)	313460	50.0000	51
	48	Methylcyclohexane	83	5.092	5.087	(1.109)	548432	50.0000	52
	49	1,2-Dichloropropane	63	5.102	5.097	(1.112)	448684	50.0000	50
	51	Methyl Methacrylate	69	5.200	5.195	(1.133)	377230	50.0000	51
	52	Dibromomethane	93	5.200	5.195	(1.133)	246699	50.0000	51
	53	1,4-Dioxane	88	5.220	5.215	(1.137)	48006	1000.00	1100(A)
	54	Bromodichloromethane	83	5.338	5.343	(1.163)	538569	50.0000	51
	55	2-Chloroethyl vinyl ether	63	5.614	5.619	(1.223)	286810	50.0000	51
	56	cis-1,3-Dichloropropene	75	5.752	5.757	(1.253)	722140	50.0000	51
	57	4-Methyl-2-pentanone	43	5.900	5.904	(1.285)	548856	50.0000	49
$	58	Toluene-d8	98	6.028	6.022	(0.805)	1352788	50.0000	50
	59	Toluene	91	6.087	6.082	(1.326)	1448010	50.0000	51
	60	trans-1,3-Dichloropropene	75	6.294	6.288	(1.371)	631766	50.0000	51
	61	Ethyl Methacrylate	69	6.392	6.397	(1.393)	510888	50.0000	50
	62	1,1,2-Trichloroethane	97	6.471	6.466	(1.410)	315825	50.0000	49
	63	Tetrachloroethene	164	6.629	6.633	(0.886)	197392	50.0000	49
	64	1,3-Dichloropropane	76	6.638	6.643	(0.887)	678288	50.0000	52
	65	2-Hexanone	43	6.727	6.732	(0.899)	390919	50.0000	51
	66	Dibromochloromethane	129	6.865	6.870	(0.917)	315336	50.0000	52
	67	1,2-Dibromoethane	107	6.983	6.988	(0.933)	332660	50.0000	51
*	68	Chlorobenzene-d5	117	7.486	7.480	(1.000)	1008297	50.0000	
	69	1-Chlorohexane	91	7.505	7.500	(1.003)	586683	50.0000	51(Q)
	70	Chlorobenzene	112	7.515	7.510	(1.004)	875032	50.0000	51
	71	1,1,1,2-Tetrachloroethane	131	7.604	7.598	(1.016)	274927	50.0000	50
	72	Ethylbenzene	106	7.643	7.638	(1.021)	448982	50.0000	52
	73	m,p-Xylene	106	7.771	7.766	(1.038)	1162274	100.000	100
	74	o-Xylene	106	8.195	8.199	(1.095)	568433	50.0000	51
	75	Styrene	104	8.214	8.209	(1.097)	1024844	50.0000	52
	76	Bromoform	173	8.392	8.396	(1.121)	160068	50.0000	52

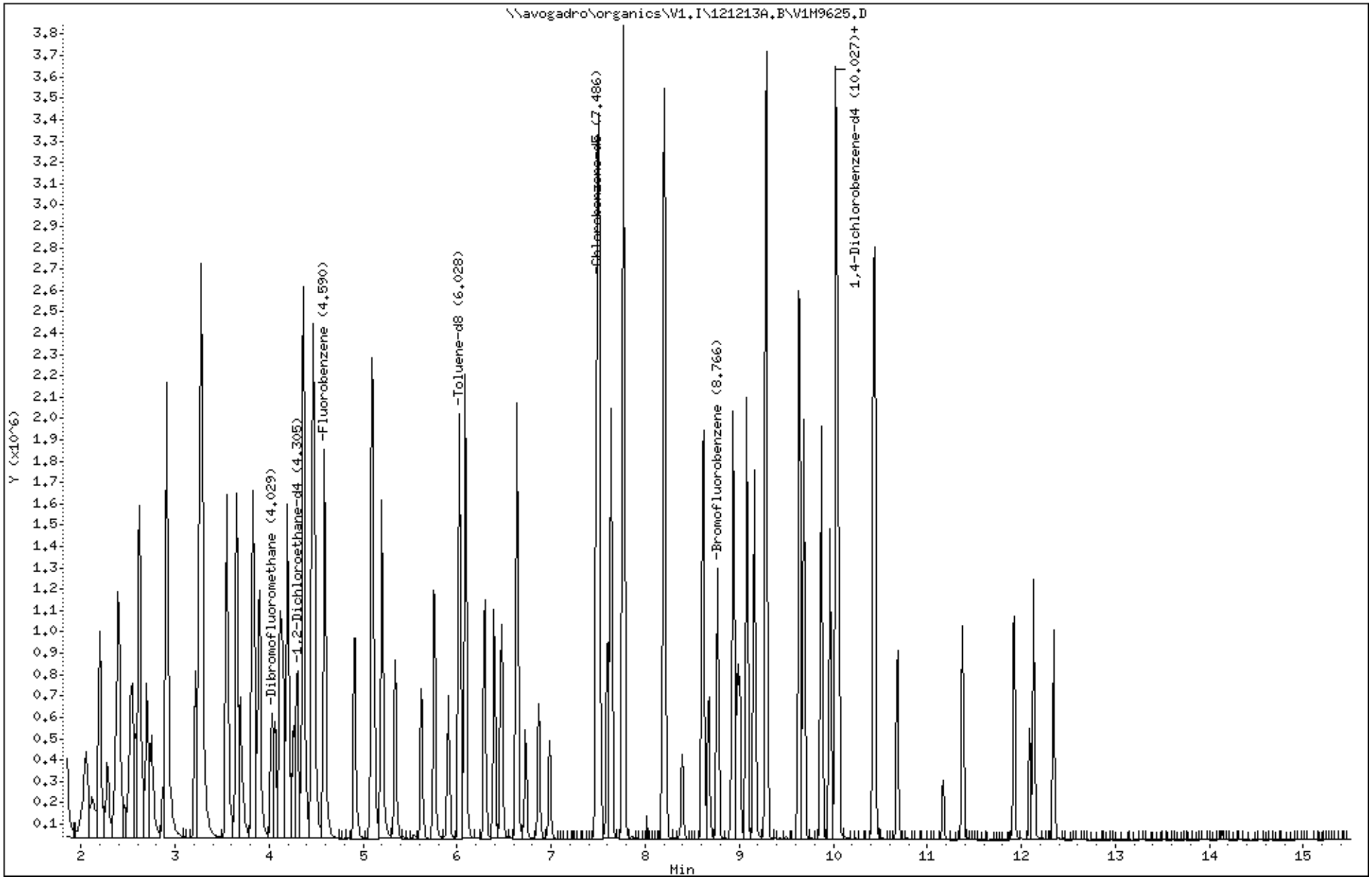
Data File: \\avogadro\organics\V1.I\121213A.B\V1M9625.D
Report Date: 14-Dec-2012 13:19

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	77 Isopropylbenzene	105	8.618	8.613	(1.151)	1379563	50.0000	52
	78 trans-1,4-Dichloro-2-butene	75	8.677	8.672	(1.159)	183874	50.0000	53
$	79 Bromofluorobenzene	95	8.766	8.770	(1.171)	569697	50.0000	50
	80 1,1,2,2-Tetrachloroethane	83	8.933	8.938	(0.890)	494349	50.0000	51
	81 Bromobenzene	156	8.933	8.938	(0.890)	262902	50.0000	51
	82 1,2,3-Trichloropropane	75	8.983	8.977	(0.895)	565272	50.0000	52
	83 n-Propylbenzene	120	9.081	9.086	(0.905)	319283	50.0000	51
	84 2-Chlorotoluene	126	9.160	9.164	(0.913)	290136	50.0000	51
	85 1,3,5-Trimethylbenzene	105	9.288	9.283	(0.925)	1083128	50.0000	51
	86 4-Chlorotoluene	126	9.288	9.283	(0.925)	307235	50.0000	52
	87 tert-Butylbenzene	119	9.643	9.637	(0.961)	989956	50.0000	52
	88 1,2,4-Trimethylbenzene	105	9.692	9.687	(0.966)	1104789	50.0000	53
	89 sec-Butylbenzene	105	9.869	9.874	(0.983)	1340785	50.0000	52
M	94 Xylene (Total)	106				1730707	150.000	(a)
	90 1,3-Dichlorobenzene	146	9.968	9.962	(0.993)	493640	50.0000	51
	91 4-Isopropyltoluene	119	10.027	10.031	(0.999)	1027889	50.0000	53
*	92 1,4-Dichlorobenzene-d4	152	10.037	10.031	(1.000)	396995	50.0000	
	93 1,4-Dichlorobenzene	146	10.056	10.061	(1.002)	515161	50.0000	51
	95 n-Butylbenzene	91	10.440	10.445	(1.040)	1039163	50.0000	53
	96 1,2-Dichlorobenzene	146	10.431	10.425	(1.039)	477243	50.0000	51
	97 Hexachloroethane	117	10.687	10.681	(1.065)	254559	50.0000	51
	98 1,2-Dibromo-3-chloropropane	75	11.169	11.174	(1.113)	70265	50.0000	52
	141 1,3,5-Trichlorobenzene	182	11.376	11.381	(2.478)	205818	50.0000	51
	99 1,2,4-Trichlorobenzene	180	11.928	11.932	(1.188)	252792	50.0000	53
	100 Hexachlorobutadiene	225	12.085	12.090	(1.204)	59146	50.0000	52
	101 Naphthalene	128	12.135	12.139	(1.209)	819151	50.0000	53
	102 1,2,3-Trichlorobenzene	180	12.341	12.346	(1.230)	205672	50.0000	51

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.

Data File: \\avogadro\organics\V1.I\121213A.B\V1M9625.D
Date : 13-DEC-2012 19:38
Client ID: VSTD0501Q
Instrument: V1.i
Sample Info: 5ML,VSTD0501Q,VSTD0501Q
Purge Volume: 5.0
Operator: AM SRC: AM
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V1.I\121213A.B\V1M9627.D
Report Date: 14-Dec-2012 13:19

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V1.I\121213A.B\V1M9627.D
Lab Smp Id: VSTD1001Q Client Smp ID: VSTD1001Q
Inj Date : 13-DEC-2012 20:26
Operator : AM   SRC: AM Inst ID: V1.i
Smp Info : 5ML,VSTD1001Q,VSTD1001Q
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\121213A.B\v18260Gadd.m
Meth Date : 14-Dec-2012 13:15 canderson Quant Type: ISTD
Cal Date : 13-DEC-2012 20:26 Cal File: V1M9627.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/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.305	1.305	(0.284)	475813	100.000	120
2	Freon114	85	1.403	1.393	(0.305)	982726	100.000	120
3	Chloromethane	50	1.433	1.423	(0.312)	1782732	100.000	110
4	Vinyl Chloride	62	1.531	1.531	(0.333)	1342042	100.000	100
5	Bromomethane	94	1.758	1.758	(0.383)	789978	100.000	92
6	Chloroethane	64	1.846	1.846	(0.402)	949693	100.000	100
7	Trichlorofluoromethane	101	2.408	2.408	(0.524)	679805	100.000	100
126	Ethanol	46	2.122	2.122	(0.462)	442644	10000.0	11000(A)
8	Ether	59	2.201	2.201	(0.479)	997240	100.000	100
9	Acrolein	56	2.280	2.280	(0.496)	608094	500.000	450(A)
10	1,1-Dichloroethene	96	2.398	2.398	(0.522)	739652	100.000	96
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.408	2.408	(0.524)	679805	100.000	100
12	Acetone	58	2.398	2.388	(0.522)	100282	100.000	93(Q)
13	Iodomethane	142	2.516	2.516	(0.548)	766269	100.000	99
14	Carbon Disulfide	76	2.546	2.546	(0.554)	2626421	100.000	96
15	Acetonitrile	41	2.615	2.614	(0.569)	3381410	1000.00	1000(A)
16	Allyl Chloride	39	2.615	2.614	(0.569)	1240671	100.000	100
17	Methyl Acetate	43	2.634	2.634	(0.573)	976777	100.000	100
19	tert-Butanol	59	2.782	2.782	(0.606)	113869	200.000	200
18	Methylene Chloride	84	2.753	2.752	(0.599)	523434	100.000	96
20	Acrylonitrile	53	2.871	2.871	(0.625)	413700	100.000	97
21	trans-1,2-Dichloroethene	96	2.910	2.910	(0.633)	777015	100.000	97
22	Methyl tert-butyl ether	73	2.910	2.910	(0.633)	2343233	100.000	100

Data File: \\avogadro\organics\V1.I\121213A.B\V1M9627.D
Report Date: 14-Dec-2012 13:19

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	23 1,1-Dichloroethane	63	3.216	3.215	(0.700)	1563540	100.000	99
	24 Vinyl acetate	43	3.255	3.245	(0.708)	4005405	100.000	94
	25 Diisopropyl Ether	45	3.275	3.274	(0.713)	4080832	100.000	98
	26 2-Chloro-1,3-Butadiene	53	3.294	3.284	(0.717)	1364455	100.000	99
	27 Ethyl tert-butyl ether	59	3.550	3.550	(0.773)	3141583	100.000	99
	28 cis-1,2-Dichloroethene	96	3.659	3.659	(0.796)	826321	100.000	95
	29 2,2-Dichloropropane	77	3.659	3.659	(0.796)	435772	100.000	97
	30 2-Butanone	72	3.659	3.659	(0.796)	92101	100.000	94
	32 Propionitrile	54	3.698	3.698	(0.805)	1250574	1000.00	970(A)
	33 Methacrylonitrile	41	3.826	3.816	(0.833)	1464109	200.000	190
	34 Bromochloromethane	128	3.836	3.836	(0.835)	330129	100.000	97
	31 Tetrahydrofuran	72	3.885	3.885	(0.846)	203487	200.000	180
	35 Chloroform	83	3.905	3.905	(0.850)	1295155	100.000	98
$	36 Dibromofluoromethane	113	4.023	4.023	(0.876)	358051	50.0000	51
	37 1,1,1-Trichloroethane	97	4.063	4.062	(0.884)	854908	100.000	100
	38 Cyclohexane	56	4.141	4.121	(0.901)	1550732	100.000	100
	39 1,1-Dichloropropene	110	4.191	4.190	(0.912)	312508	100.000	100
	40 Carbon Tetrachloride	117	4.200	4.200	(0.914)	673434	100.000	100
	41 Isobutyl Alcohol	43	4.260	4.259	(0.927)	702769	2000.00	1900(A)
$	42 1,2-Dichloroethane-d4	102	4.299	4.299	(0.936)	125475	50.0000	49
	43 Benzene	78	4.358	4.358	(0.949)	3029843	100.000	99(H)
	44 1,2-Dichloroethane	62	4.368	4.368	(0.951)	1000926	100.000	100
	45 tert-Amyl methyl ether	73	4.457	4.456	(0.970)	2521405	100.000	98
*	46 Fluorobenzene	96	4.594	4.594	(1.000)	1504952	50.0000	
M	50 1,2-Dichloroethene (Total)	96				1603336	200.000	(a)
	47 Trichloroethene	130	4.910	4.909	(1.069)	602681	100.000	100
	48 Methylcyclohexane	83	5.087	5.087	(1.107)	1033209	100.000	100
	49 1,2-Dichloropropane	63	5.097	5.097	(1.109)	864527	100.000	99
	51 Methyl Methacrylate	69	5.195	5.195	(1.131)	720845	100.000	99
	52 Dibromomethane	93	5.195	5.195	(1.131)	471561	100.000	100
	53 1,4-Dioxane	88	5.215	5.215	(1.135)	106124	2000.00	2400(A)
	54 Bromodichloromethane	83	5.333	5.343	(1.161)	1053891	100.000	100
	55 2-Chloroethyl vinyl ether	63	5.619	5.619	(1.223)	561332	100.000	100(H)
	56 cis-1,3-Dichloropropene	75	5.757	5.757	(1.253)	1391172	100.000	100
	57 4-Methyl-2-pentanone	43	5.904	5.904	(1.285)	1077650	100.000	98
$	58 Toluene-d8	98	6.023	6.022	(0.805)	1356516	50.0000	50
	59 Toluene	91	6.082	6.082	(1.324)	2693451	100.000	98
	60 trans-1,3-Dichloropropene	75	6.289	6.288	(1.369)	1233820	100.000	100
	61 Ethyl Methacrylate	69	6.387	6.397	(1.390)	995887	100.000	100
	62 1,1,2-Trichloroethane	97	6.466	6.466	(1.407)	613124	100.000	97
	63 Tetrachloroethene	164	6.633	6.633	(0.887)	394997	100.000	97
	64 1,3-Dichloropropane	76	6.633	6.643	(0.887)	1305925	100.000	99
	65 2-Hexanone	43	6.722	6.732	(0.899)	746258	100.000	97
	66 Dibromochloromethane	129	6.870	6.870	(0.918)	625168	100.000	100
	67 1,2-Dibromoethane	107	6.978	6.988	(0.933)	640783	100.000	99
*	68 Chlorobenzene-d5	117	7.480	7.480	(1.000)	1013041	50.0000	
	69 1-Chlorohexane	91	7.500	7.500	(1.003)	1136992	100.000	98
	70 Chlorobenzene	112	7.510	7.510	(1.004)	1676936	100.000	98
	71 1,1,1,2-Tetrachloroethane	131	7.599	7.598	(1.016)	543550	100.000	100
	72 Ethylbenzene	106	7.638	7.638	(1.021)	866211	100.000	99
	73 m,p-Xylene	106	7.766	7.766	(1.038)	2223390	200.000	200
	74 o-Xylene	106	8.190	8.199	(1.095)	1101387	100.000	99
	75 Styrene	104	8.209	8.209	(1.097)	1981582	100.000	100
	76 Bromoform	173	8.387	8.396	(1.121)	313834	100.000	100

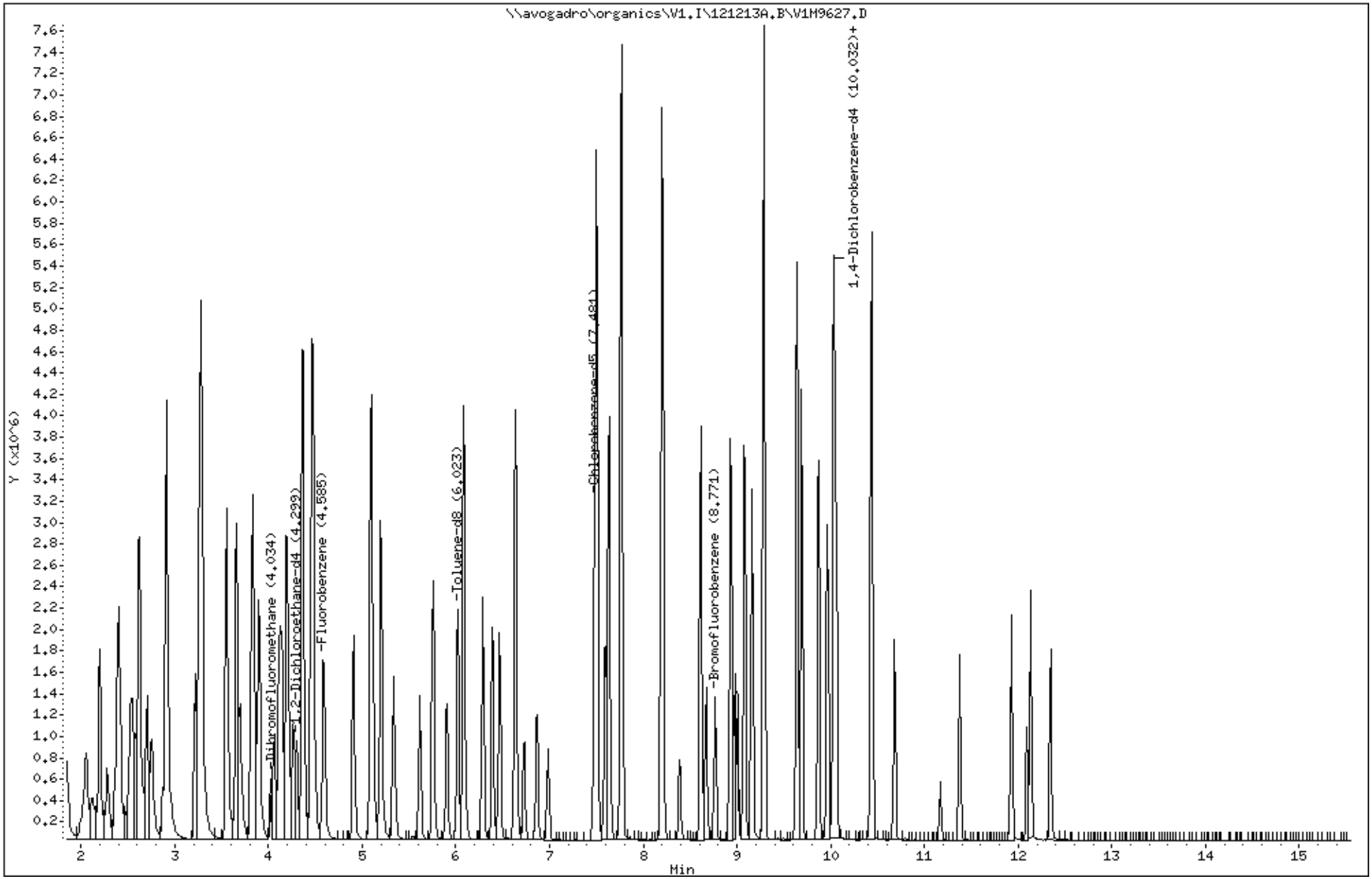
Data File: \\avogadro\organics\V1.I\121213A.B\V1M9627.D
Report Date: 14-Dec-2012 13:19

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	77 Isopropylbenzene	105	8.613	8.613	(1.151)	2638690	100.000	99
	78 trans-1,4-Dichloro-2-butene	75	8.672	8.672	(1.159)	352661	100.000	100
$	79 Bromofluorobenzene	95	8.771	8.770	(1.172)	578968	50.0000	50
	80 1,1,2,2-Tetrachloroethane	83	8.928	8.938	(0.890)	940533	100.000	97
	81 Bromobenzene	156	8.928	8.938	(0.890)	514137	100.000	100
	82 1,2,3-Trichloropropane	75	8.978	8.977	(0.895)	1068950	100.000	99
	83 n-Propylbenzene	120	9.086	9.086	(0.906)	624220	100.000	100
	84 2-Chlorotoluene	126	9.165	9.164	(0.914)	561559	100.000	99
	85 1,3,5-Trimethylbenzene	105	9.283	9.283	(0.925)	2102037	100.000	100
	86 4-Chlorotoluene	126	9.283	9.283	(0.925)	590721	100.000	100
	87 tert-Butylbenzene	119	9.637	9.637	(0.961)	1903668	100.000	99
	88 1,2,4-Trimethylbenzene	105	9.687	9.687	(0.966)	2103242	100.000	100
	89 sec-Butylbenzene	105	9.874	9.874	(0.984)	2559193	100.000	100
M	94 Xylene (Total)	106				3324777	300.000	(a)
	90 1,3-Dichlorobenzene	146	9.963	9.962	(0.993)	959978	100.000	99
	91 4-Isopropyltoluene	119	10.031	10.031	(1.000)	1967251	100.000	100
*	92 1,4-Dichlorobenzene-d4	152	10.031	10.031	(1.000)	396559	50.0000	
	93 1,4-Dichlorobenzene	146	10.061	10.061	(1.003)	989790	100.000	98
	95 n-Butylbenzene	91	10.435	10.445	(1.040)	1967915	100.000	100
	96 1,2-Dichlorobenzene	146	10.425	10.425	(1.039)	933064	100.000	99
	97 Hexachloroethane	117	10.682	10.681	(1.065)	504982	100.000	100
	98 1,2-Dibromo-3-chloropropane	75	11.164	11.174	(1.113)	136048	100.000	100
	141 1,3,5-Trichlorobenzene	182	11.381	11.381	(2.477)	407272	100.000	100
	99 1,2,4-Trichlorobenzene	180	11.932	11.932	(1.189)	482118	100.000	100
	100 Hexachlorobutadiene	225	12.090	12.090	(1.205)	116941	100.000	100
	101 Naphthalene	128	12.129	12.139	(1.209)	1539191	100.000	100
	102 1,2,3-Trichlorobenzene	180	12.346	12.346	(1.231)	394994	100.000	99

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.
H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\V1.I\121213A.B\V1M9627.D
Date : 13-DEC-2012 20:26
Client ID: VSTD1001Q
Instrument: V1.i
Sample Info: 5ML,VSTD1001Q,VSTD1001Q
Purge Volume: 5.0
Operator: AM SRC: AM
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V1.I\121213A.B\V1M9628.D
Report Date: 14-Dec-2012 13:19

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V1.I\121213A.B\V1M9628.D
Lab Smp Id: VSTD2001Q Client Smp ID: VSTD2001Q
Inj Date : 13-DEC-2012 20:50
Operator : AM   SRC: AM Inst ID: V1.i
Smp Info : 5ML,VSTD2001Q,VSTD2001Q
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\121213A.B\v18260Gadd.m
Meth Date : 14-Dec-2012 13:15 canderson Quant Type: ISTD
Cal Date : 13-DEC-2012 20:50 Cal File: V1M9628.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/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.306	1.305	(0.284)	1029035	200.000	270(A)
2	Freon114	85	1.394	1.393	(0.303)	2118908	200.000	280(A)
3	Chloromethane	50	1.434	1.423	(0.312)	3435156	200.000	220(A)
4	Vinyl Chloride	62	1.532	1.531	(0.333)	2555570	200.000	210(A)
5	Bromomethane	94	1.759	1.758	(0.383)	1516241	200.000	190
6	Chloroethane	64	1.847	1.846	(0.402)	1816606	200.000	210(A)
7	Trichlorofluoromethane	101	2.409	2.408	(0.524)	1436671	200.000	230(A)
126	Ethanol	46	2.123	2.122	(0.462)	880237	20000.0	23000(A)
8	Ether	59	2.202	2.201	(0.479)	1937250	200.000	210(A)
9	Acrolein	56	2.281	2.280	(0.496)	1181863	1000.00	950(A)
10	1,1-Dichloroethene	96	2.399	2.398	(0.522)	1432565	200.000	200
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.409	2.408	(0.524)	1436671	200.000	230(A)
12	Acetone	58	2.389	2.388	(0.520)	186306	200.000	190(Q)
13	Iodomethane	142	2.517	2.516	(0.548)	1467300	200.000	200(A)
14	Carbon Disulfide	76	2.547	2.546	(0.554)	4949913	200.000	200
15	Acetonitrile	41	2.616	2.614	(0.569)	6347931	2000.00	2100(A)
16	Allyl Chloride	39	2.616	2.614	(0.569)	2122058	200.000	180(TQ)
17	Methyl Acetate	43	2.635	2.634	(0.574)	1878256	200.000	210(A)
19	tert-Butanol	59	2.783	2.782	(0.606)	242740	400.000	460(A)
18	Methylene Chloride	84	2.753	2.752	(0.599)	1053152	200.000	210(A)
20	Acrylonitrile	53	2.872	2.871	(0.625)	810267	200.000	210(A)
21	trans-1,2-Dichloroethene	96	2.911	2.910	(0.634)	1503435	200.000	200
22	Methyl tert-butyl ether	73	2.911	2.910	(0.634)	4404088	200.000	200(A)

Data File: \\avogadro\organics\V1.I\121213A.B\V1M9628.D
Report Date: 14-Dec-2012 13:19

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23	1,1-Dichloroethane	63	3.216	3.215	(0.700)	2950880	200.000	200
24	Vinyl acetate	43	3.256	3.245	(0.709)	7328267	200.000	180
25	Diisopropyl Ether	45	3.275	3.274	(0.713)	7253857	200.000	190
26	2-Chloro-1,3-Butadiene	53	3.285	3.284	(0.715)	2578112	200.000	200
27	Ethyl tert-butyl ether	59	3.551	3.550	(0.773)	5829237	200.000	200
28	cis-1,2-Dichloroethene	96	3.660	3.659	(0.796)	1571896	200.000	200
29	2,2-Dichloropropane	77	3.660	3.659	(0.796)	769804	200.000	180
30	2-Butanone	72	3.660	3.659	(0.796)	182807	200.000	200
32	Propionitrile	54	3.699	3.698	(0.805)	2412298	2000.00	2000(A)
33	Methacrylonitrile	41	3.827	3.816	(0.833)	2857476	400.000	410(A)
34	Bromochloromethane	128	3.847	3.836	(0.837)	640495	200.000	200
31	Tetrahydrofuran	72	3.886	3.885	(0.846)	402294	400.000	380(A)
35	Chloroform	83	3.906	3.905	(0.850)	2446989	200.000	200
$ 36	Dibromofluoromethane	113	4.034	4.023	(0.878)	333330	50.0000	51
37	1,1,1-Trichloroethane	97	4.063	4.062	(0.884)	1612584	200.000	210(A)
38	Cyclohexane	56	4.142	4.121	(0.901)	3108014	200.000	220(A)
39	1,1-Dichloropropene	110	4.201	4.190	(0.914)	602496	200.000	210(A)
40	Carbon Tetrachloride	117	4.201	4.200	(0.914)	1305433	200.000	220(A)
41	Isobutyl Alcohol	43	4.270	4.259	(0.929)	1411920	4000.00	4100(A)
$ 42	1,2-Dichloroethane-d4	102	4.310	4.299	(0.938)	113450	50.0000	48
43	Benzene	78	4.369	4.358	(0.951)	5627755	200.000	200(H)
44	1,2-Dichloroethane	62	4.369	4.368	(0.951)	1859308	200.000	200
45	tert-Amyl methyl ether	73	4.457	4.456	(0.970)	4761714	200.000	200
* 46	Fluorobenzene	96	4.595	4.594	(1.000)	1392290	50.0000	(TQ)
M 50	1,2-Dichloroethene (Total)	96				3075331	400.000	(a)
47	Trichloroethene	130	4.911	4.909	(1.069)	1153599	200.000	210(A)
48	Methylcyclohexane	83	5.098	5.087	(1.109)	2163337	200.000	230(A)
49	1,2-Dichloropropane	63	5.098	5.097	(1.109)	1662475	200.000	200(A)
51	Methyl Methacrylate	69	5.206	5.195	(1.133)	1424094	200.000	210(A)
52	Dibromomethane	93	5.196	5.195	(1.131)	913415	200.000	210(A)
53	1,4-Dioxane	88	5.216	5.215	(1.135)	193978	4000.00	4800(A)
54	Bromodichloromethane	83	5.344	5.343	(1.163)	1990786	200.000	210(A)
55	2-Chloroethyl vinyl ether	63	5.620	5.619	(1.223)	1099924	200.000	220(AH)
56	cis-1,3-Dichloropropene	75	5.758	5.757	(1.253)	2612259	200.000	200(A)
57	4-Methyl-2-pentanone	43	5.905	5.904	(1.285)	2119409	200.000	210(A)
$ 58	Toluene-d8	98	6.024	6.022	(0.805)	1258028	50.0000	49
59	Toluene	91	6.083	6.082	(1.324)	4837748	200.000	190
60	trans-1,3-Dichloropropene	75	6.289	6.288	(1.369)	2334091	200.000	210(A)
61	Ethyl Methacrylate	69	6.398	6.397	(1.392)	1993185	200.000	220(A)
62	1,1,2-Trichloroethane	97	6.467	6.466	(1.407)	1166145	200.000	200
63	Tetrachloroethene	164	6.634	6.633	(0.887)	744852	200.000	200
64	1,3-Dichloropropane	76	6.644	6.643	(0.888)	2476087	200.000	200
65	2-Hexanone	43	6.733	6.732	(0.900)	1493144	200.000	210(A)
66	Dibromochloromethane	129	6.871	6.870	(0.918)	1211036	200.000	210(A)
67	1,2-Dibromoethane	107	6.979	6.988	(0.933)	1249775	200.000	200(A)
* 68	Chlorobenzene-d5	117	7.481	7.480	(1.000)	950050	50.0000	
69	1-Chlorohexane	91	7.501	7.500	(1.003)	2179451	200.000	200
70	Chlorobenzene	112	7.511	7.510	(1.004)	3160691	200.000	200
71	1,1,1,2-Tetrachloroethane	131	7.599	7.598	(1.016)	1040917	200.000	200
72	Ethylbenzene	106	7.639	7.638	(1.021)	1681546	200.000	200(A)
73	m,p-Xylene	106	7.767	7.766	(1.038)	4189205	400.000	390(A)
74	o-Xylene	106	8.200	8.199	(1.096)	2146812	200.000	200(A)
75	Styrene	104	8.210	8.209	(1.097)	3701579	200.000	200
76	Bromoform	173	8.397	8.396	(1.122)	632800	200.000	220(A)

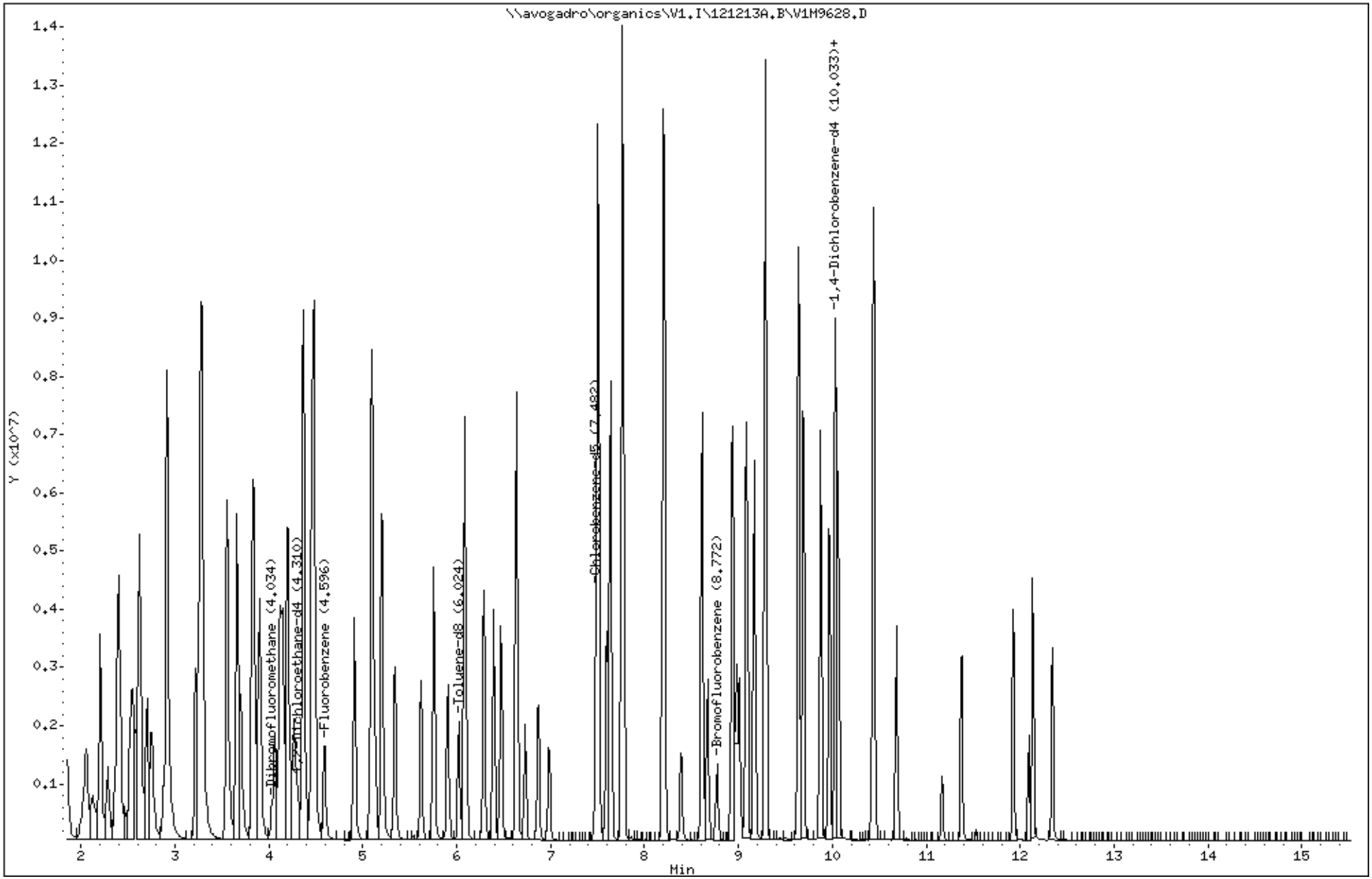
Data File: \\avogadro\organics\V1.I\121213A.B\V1M9628.D
Report Date: 14-Dec-2012 13:19

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	77 Isopropylbenzene	105	8.614	8.613	(1.151)	4870757	200.000	190
	78 trans-1,4-Dichloro-2-butene	75	8.673	8.672	(1.159)	712936	200.000	220(A)
$	79 Bromofluorobenzene	95	8.772	8.770	(1.172)	548560	50.0000	51
	80 1,1,2,2-Tetrachloroethane	83	8.939	8.938	(0.891)	1843662	200.000	200
	81 Bromobenzene	156	8.939	8.938	(0.891)	1003235	200.000	200
	82 1,2,3-Trichloropropane	75	8.978	8.977	(0.895)	2126288	200.000	200
	83 n-Propylbenzene	120	9.087	9.086	(0.906)	1232026	200.000	200(AQ)
	84 2-Chlorotoluene	126	9.166	9.164	(0.914)	1110478	200.000	200
	85 1,3,5-Trimethylbenzene	105	9.294	9.283	(0.926)	3942152	200.000	190
	86 4-Chlorotoluene	126	9.284	9.283	(0.925)	1169980	200.000	200(A)
	87 tert-Butylbenzene	119	9.638	9.637	(0.961)	3648591	200.000	200
	88 1,2,4-Trimethylbenzene	105	9.697	9.687	(0.967)	3963624	200.000	200
	89 sec-Butylbenzene	105	9.875	9.874	(0.984)	4712062	200.000	190
M	94 Xylene (Total)	106				6336017	600.000	(a)
	90 1,3-Dichlorobenzene	146	9.973	9.962	(0.994)	1863238	200.000	200
	91 4-Isopropyltoluene	119	10.032	10.031	(1.000)	3704656	200.000	200
*	92 1,4-Dichlorobenzene-d4	152	10.032	10.031	(1.000)	382137	50.0000	(Q)
	93 1,4-Dichlorobenzene	146	10.062	10.061	(1.003)	1930912	200.000	200
	95 n-Butylbenzene	91	10.446	10.445	(1.041)	3645933	200.000	190
	96 1,2-Dichlorobenzene	146	10.426	10.425	(1.039)	1813449	200.000	200
	97 Hexachloroethane	117	10.682	10.681	(1.065)	977194	200.000	200
	98 1,2-Dibromo-3-chloropropane	75	11.165	11.174	(1.113)	266105	200.000	200
	141 1,3,5-Trichlorobenzene	182	11.382	11.381	(2.477)	746570	200.000	200(A)
	99 1,2,4-Trichlorobenzene	180	11.933	11.932	(1.189)	870073	200.000	190
	100 Hexachlorobutadiene	225	12.091	12.090	(1.205)	195764	200.000	180
	101 Naphthalene	128	12.130	12.139	(1.209)	2786786	200.000	190
	102 1,2,3-Trichlorobenzene	180	12.347	12.346	(1.231)	727718	200.000	190

QC Flag Legend

T - Target compound detected outside RT window.
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.
H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\V1.I\121213A.B\V1M9628.D
Date : 13-DEC-2012 20:50
Client ID: VSTD2001Q
Instrument: V1.i
Sample Info: 5ML,VSTD2001Q,VSTD2001Q
Purge Volume: 5.0
Operator: AM SRC: AM
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V8.I\121218A.B\V8B7066.d
Report Date: 19-Dec-2012 09:57

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V8.I\121218A.B\V8B7066.d
Lab Smp Id: VSTD00110K Client Smp ID: VSTD00110K
Inj Date : 18-DEC-2012 21:47
Operator : V10   SRC: V10 Inst ID: V8.i
Smp Info : 5ML,VSTD00110K,VSTD00110K
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\121218A.B\v108260Gadd-6lvl.m
Meth Date : 19-Dec-2012 09:56 adatta Quant Type: ISTD
Cal Date : 18-DEC-2012 21:47 Cal File: V8B7070.d
Als bottle: 13 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.651	1.647	(0.311)	2753	1.00000	0.8
2	Freon114	85	1.766	1.763	(0.333)	2429	1.00000	0.8(H)
3	Chloromethane	50	1.815	1.815	(0.342)	2702	1.00000	1
4	Vinyl Chloride	62	1.914	1.914	(0.361)	2685	1.00000	1
5	Bromomethane	94	2.207	2.204	(0.416)	1191	1.00000	0.7(Q)
6	Chloroethane	64	2.294	2.290	(0.433)	2063	1.00000	1
7	Trichlorofluoromethane	101	2.506	2.506	(0.473)	5423	1.00000	0.9
126	Ethanol	46	2.631	2.634	(0.496)	949	500.000	130(Q)
8	Ether	59	2.734	2.731	(0.516)	2204	1.00000	0.9
9	Acrolein	56	2.834	2.834	(0.534)	2682	5.00000	5
10	1,1-Dichloroethene	96	2.924	2.924	(0.551)	3439	1.00000	1
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.917	2.917	(0.550)	3400	1.00000	1.0
12	Acetone	58	2.959	2.953	(0.558)	411	1.00000	1(Q)
13	Iodomethane	142	3.049	3.052	(0.575)	3199	1.00000	0.8
14	Carbon Disulfide	76	3.120	3.114	(0.588)	10163	1.00000	1
15	Acetonitrile	41	3.204	3.207	(0.604)	4032	1.00000	11(Q)
16	Allyl Chloride	39	3.207	3.207	(0.605)	3883	1.00000	1
17	Methyl Acetate	43	3.217	3.210	(0.607)	1758	1.00000	0.9
18	Methylene Chloride	84	3.300	3.300	(0.622)	5710	1.00000	1(Q)
19	tert-Butanol	59	3.358	3.364	(0.633)	858	1.00000	3
20	Acrylonitrile	53	3.522	3.490	(0.664)	665	1.00000	0.7
21	trans-1,2-Dichloroethene	96	3.525	3.522	(0.665)	3629	1.00000	1
22	Methyl tert-butyl ether	73	3.512	3.512	(0.662)	10286	1.00000	0.9

Data File: \\avogadro\organics\V8.I\121218A.B\V8B7066.d
Report Date: 19-Dec-2012 09:57

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23	1,1-Dichloroethane	63	3.853	3.853	(0.727)	5640	1.00000	0.9
24	Vinyl acetate	43	3.892	3.882	(0.734)	6040	1.00000	0.7(T)
25	Diisopropyl Ether	45	3.892	3.888	(0.734)	7586	1.00000	0.9
26	2-Chloro-1,3-Butadiene	53	3.930	3.930	(0.741)	4304	1.00000	0.8
27	Ethyl tert-butyl ether	59	4.188	4.181	(0.790)	10132	1.00000	1.0
29	2,2-Dichloropropane	77	4.326	4.326	(0.816)	4977	1.00000	1.0
28	cis-1,2-Dichloroethene	96	4.323	4.319	(0.815)	3644	1.00000	0.9
30	2-Butanone	72	4.567	4.319	(0.861)	935	1.00000	2(TQ)
32	Propionitrile	54	4.387	4.367	(0.827)	1116	1.00000	3
33	Methacrylonitrile	41	4.499	4.499	(0.848)	1428	1.00000	1.0(Q)
34	Bromochloromethane	128	4.532	4.522	(0.855)	2265	1.00000	1
31	Tetrahydrofuran	72	4.567	4.564	(0.861)	1014	1.00000	2(Q)
35	Chloroform	83	4.577	4.573	(0.863)	8277	1.00000	1
$ 36	Dibromofluoromethane	113	4.712	4.708	(0.888)	194136	1.00000	50
37	1,1,1-Trichloroethane	97	4.747	4.750	(0.895)	6559	1.00000	0.9
38	Cyclohexane	56	4.805	4.808	(0.906)	4401	1.00000	1.0
39	1,1-Dichloropropene	110	4.892	4.888	(0.922)	1854	1.00000	1.0
40	Carbon Tetrachloride	117	4.892	4.895	(0.922)	5396	1.00000	0.9
41	Isobutyl Alcohol	43	4.921	4.927	(0.928)	206	1.00000	2(Q)
$ 42	1,2-Dichloroethane-d4	102	5.007	5.011	(0.944)	38810	1.00000	49
43	Benzene	78	5.072	5.068	(0.956)	13088	1.00000	1.0
44	1,2-Dichloroethane	62	5.078	5.075	(0.958)	5800	1.00000	0.9
45	tert-Amyl methyl ether	73	5.142	5.142	(0.970)	9556	1.00000	0.9
M 50	1,2-Dichloroethene (Total)	96				7273	2.00000	(a)
* 46	Fluorobenzene	96	5.303	5.303	(1.000)	653979	50.0000	
47	Trichloroethene	130	5.631	5.631	(1.062)	4293	1.00000	1.0
48	Methylcyclohexane	83	5.821	5.818	(1.098)	4542	1.00000	0.9
49	1,2-Dichloropropane	63	5.840	5.837	(1.101)	2923	1.00000	1.0
51	Methyl Methacrylate	69	5.969	5.911	(1.125)	96	1.00000	0.04(aQ)
52	Dibromomethane	93	5.950	5.946	(1.122)	2338	1.00000	0.9
53	1,4-Dioxane	88	5.953	5.943	(1.122)	647	1.00000	17
54	Bromodichloromethane	83	6.085	6.078	(1.147)	4865	1.00000	0.9
55	2-Chloroethyl vinyl ether	63	6.769	6.512	(1.276)	224	1.00000	9(TQ)
56	cis-1,3-Dichloropropene	75	6.512	6.509	(1.228)	4631	1.00000	0.8
57	4-Methyl-2-pentanone	43	6.654	6.644	(1.255)	1433	1.00000	0.6(TQ)
$ 58	Toluene-d8	98	6.782	6.782	(0.818)	703776	1.00000	50
59	Toluene	91	6.850	6.850	(1.292)	14680	1.00000	0.9
60	trans-1,3-Dichloropropene	75	7.059	7.049	(1.331)	4192	1.00000	0.8
61	Ethyl Methacrylate	69	7.136	7.129	(1.346)	2480	1.00000	0.7
62	1,1,2-Trichloroethane	97	7.248	7.239	(1.367)	3052	1.00000	0.9
63	Tetrachloroethene	164	7.412	7.412	(0.894)	3258	1.00000	0.9
64	1,3-Dichloropropane	76	7.429	7.422	(0.896)	4924	1.00000	0.9
65	2-Hexanone	43	7.493	7.493	(0.904)	138	1.00000	0.09(TaQ)
66	Dibromochloromethane	129	7.666	7.660	(0.925)	3873	1.00000	0.8(T)
67	1,2-Dibromoethane	107	7.805	7.795	(0.941)	3394	1.00000	0.9(T)
69	1-Chlorohexane	91	8.284	8.281	(0.999)	5140	1.00000	1(Q)
* 68	Chlorobenzene-d5	117	8.290	8.290	(1.000)	566249	50.0000	
70	Chlorobenzene	112	8.319	8.319	(1.003)	10371	1.00000	0.9
71	1,1,1,2-Tetrachloroethane	131	8.400	8.403	(1.013)	3560	1.00000	0.8(Q)
72	Ethylbenzene	106	8.438	8.435	(1.018)	5086	1.00000	0.9
73	m,p-Xylene	106	8.570	8.563	(1.034)	11837	2.00000	2
74	o-Xylene	106	9.010	9.010	(1.087)	6001	1.00000	0.9
75	Styrene	104	9.030	9.023	(1.089)	8725	1.00000	0.8
76	Bromoform	173	9.232	9.229	(1.114)	1953	1.00000	0.8(T)

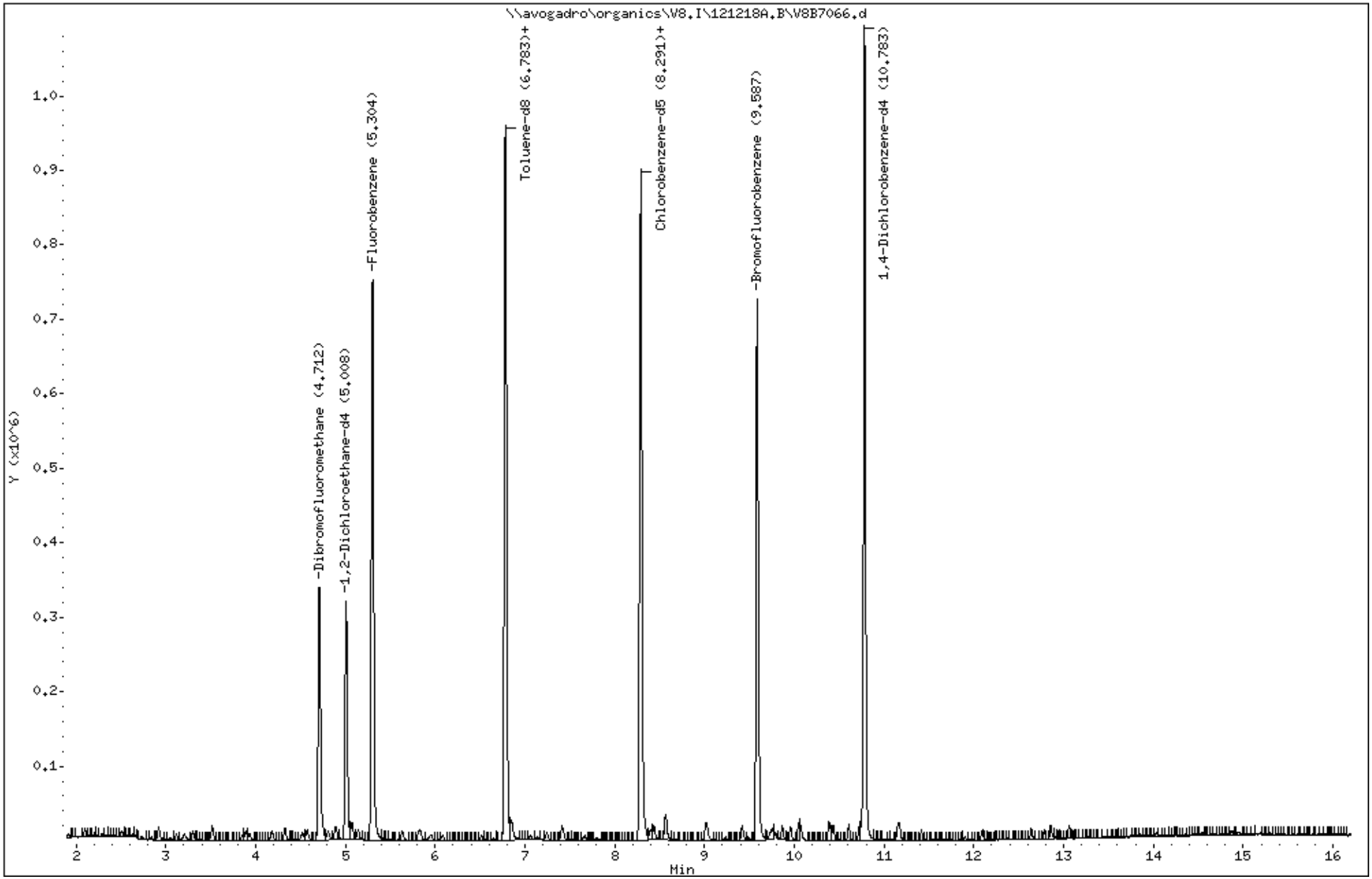
Data File: \\avogadro\organics\V8.I\121218A.B\V8B7066.d
Report Date: 19-Dec-2012 09:57

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	77	Isopropylbenzene	105	9.422	9.419	(1.137)	15360	1.00000	0.9
	78	trans-1,4-Dichloro-2-butene	75	9.486	9.483	(1.144)	771	1.00000	0.6
$	79	Bromofluorobenzene	95	9.586	9.586	(1.156)	291199	1.00000	48
	80	1,1,2,2-Tetrachloroethane	83	9.731	9.727	(0.902)	4303	1.00000	1
	81	Bromobenzene	156	9.760	9.753	(0.905)	4113	1.00000	0.9
	82	1,2,3-Trichloropropane	75	9.792	9.782	(0.908)	5666	1.00000	1
	83	n-Propylbenzene	120	9.863	9.862	(0.915)	4039	1.00000	0.9
	84	2-Chlorotoluene	126	9.959	9.956	(0.924)	3913	1.00000	0.9(Q)
	85	1,3,5-Trimethylbenzene	105	10.049	10.046	(0.932)	12774	1.00000	0.8
	86	4-Chlorotoluene	126	10.075	10.068	(0.934)	4309	1.00000	0.9
M	94	Xylene (Total)	106				17838	3.00000	(a)
	87	tert-Butylbenzene	119	10.383	10.387	(0.963)	13367	1.00000	0.9
	88	1,2,4-Trimethylbenzene	105	10.438	10.435	(0.968)	12580	1.00000	0.8
	89	sec-Butylbenzene	105	10.608	10.608	(0.984)	14963	1.00000	0.8
	90	1,3-Dichlorobenzene	146	10.721	10.718	(0.994)	7678	1.00000	0.9
	91	4-Isopropyltoluene	119	10.753	10.750	(0.997)	13252	1.00000	0.8
*	92	1,4-Dichlorobenzene-d4	152	10.782	10.782	(1.000)	284747	50.0000	
	93	1,4-Dichlorobenzene	146	10.808	10.805	(1.002)	8591	1.00000	1
	95	n-Butylbenzene	91	11.155	11.152	(1.035)	10361	1.00000	0.8
	96	1,2-Dichlorobenzene	146	11.174	11.168	(1.036)	7654	1.00000	1.0
	97	Hexachloroethane	117	11.416	11.415	(1.059)	2348	1.00000	0.8
	98	1,2-Dibromo-3-chloropropane	75	11.898	11.895	(1.103)	1026	1.00000	1
	141	1,3,5-Trichlorobenzene	182	12.094	12.091	(2.280)	3742	1.00000	0.9(A)
	99	1,2,4-Trichlorobenzene	180	12.637	12.637	(1.172)	4188	1.00000	0.9
	100	Hexachlorobutadiene	225	12.779	12.782	(1.185)	1313	1.00000	0.6(Q)
	101	Naphthalene	128	12.859	12.856	(1.193)	15250	1.00000	1
	102	1,2,3-Trichlorobenzene	180	13.062	13.058	(1.211)	4573	1.00000	1.0

QC Flag Legend

T - Target compound detected outside RT window.
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.
H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\V8.I\121218A.B\V8B7066.d
Date : 18-DEC-2012 21:47
Client ID: VSTD00110K
Instrument: V8.i
Sample Info: 5ML,VSTD00110K,VSTD00110K
Purge Volume: 5.0
Operator: V10 SRC: V10
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V8.I\121218A.B\V8B7067.d
Report Date: 19-Dec-2012 09:57

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V8.I\121218A.B\V8B7067.d
Lab Smp Id: VSTD00510K Client Smp ID: VSTD00510K
Inj Date : 18-DEC-2012 22:14
Operator : V10   SRC: V10 Inst ID: V8.i
Smp Info : 5ML,VSTD00510K,VSTD00510K
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\121218A.B\v108260Gadd-6lvl.m
Meth Date : 19-Dec-2012 09:56 adatta Quant Type: ISTD
Cal Date : 18-DEC-2012 22:14 Cal File: V8B7067.d
Als bottle: 14 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/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.644	1.647	(0.310)	16864	5.00000	5
2	Freon114	85	1.766	1.763	(0.333)	13524	5.00000	5
3	Chloromethane	50	1.814	1.815	(0.342)	11140	5.00000	4
4	Vinyl Chloride	62	1.914	1.914	(0.361)	12515	5.00000	5
5	Bromomethane	94	2.207	2.204	(0.416)	9353	5.00000	5(Q)
6	Chloroethane	64	2.294	2.290	(0.433)	7658	5.00000	5
7	Trichlorofluoromethane	101	2.509	2.506	(0.473)	27373	5.00000	5
126	Ethanol	46	2.628	2.634	(0.496)	3698	500.000	510(AQ)
8	Ether	59	2.734	2.731	(0.516)	11170	5.00000	5
9	Acrolein	56	2.837	2.834	(0.535)	13113	25.0000	23
10	1,1-Dichloroethene	96	2.924	2.924	(0.552)	16302	5.00000	5
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.917	2.917	(0.550)	17332	5.00000	5
12	Acetone	58	2.956	2.953	(0.558)	1504	5.00000	5(Q)
13	Iodomethane	142	3.049	3.052	(0.575)	15639	5.00000	4
14	Carbon Disulfide	76	3.117	3.114	(0.588)	45862	5.00000	5
15	Acetonitrile	41	3.207	3.207	(0.605)	12985	50.0000	34(Q)
16	Allyl Chloride	39	3.207	3.207	(0.605)	18650	5.00000	5
17	Methyl Acetate	43	3.216	3.210	(0.607)	8195	5.00000	4
18	Methylene Chloride	84	3.303	3.300	(0.623)	18115	5.00000	4(Q)
19	tert-Butanol	59	3.355	3.364	(0.633)	2889	10.0000	10
20	Acrylonitrile	53	3.503	3.490	(0.661)	4536	5.00000	5
21	trans-1,2-Dichloroethene	96	3.522	3.522	(0.665)	17894	5.00000	5
22	Methyl tert-butyl ether	73	3.515	3.512	(0.663)	53640	5.00000	5

Data File: \\avogadro\organics\V8.I\121218A.B\V8B7067.d
Report Date: 19-Dec-2012 09:57

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23	1,1-Dichloroethane	63	3.856	3.853	(0.728)	29617	5.00000	5
24	Vinyl acetate	43	3.888	3.882	(0.734)	38461	5.00000	5
25	Diisopropyl Ether	45	3.888	3.888	(0.734)	39440	5.00000	5
26	2-Chloro-1,3-Butadiene	53	3.927	3.930	(0.741)	24547	5.00000	4
27	Ethyl tert-butyl ether	59	4.184	4.181	(0.790)	50599	5.00000	5
29	2,2-Dichloropropane	77	4.326	4.326	(0.816)	24427	5.00000	5
28	cis-1,2-Dichloroethene	96	4.319	4.319	(0.815)	19502	5.00000	5
30	2-Butanone	72	4.329	4.319	(0.817)	1515	5.00000	4(Q)
32	Propionitrile	54	4.377	4.367	(0.826)	16344	50.0000	44
33	Methacrylonitrile	41	4.506	4.499	(0.850)	12958	10.0000	9(Q)
34	Bromochloromethane	128	4.522	4.522	(0.853)	11042	5.00000	5
31	Tetrahydrofuran	72	4.564	4.564	(0.861)	3888	10.0000	9(Q)
35	Chloroform	83	4.576	4.573	(0.864)	36328	5.00000	5
$ 36	Dibromofluoromethane	113	4.711	4.708	(0.889)	195920	50.0000	50
37	1,1,1-Trichloroethane	97	4.750	4.750	(0.896)	33726	5.00000	5
38	Cyclohexane	56	4.808	4.808	(0.907)	21452	5.00000	5
39	1,1-Dichloropropene	110	4.888	4.888	(0.922)	9032	5.00000	5
40	Carbon Tetrachloride	117	4.898	4.895	(0.924)	28302	5.00000	5
41	Isobutyl Alcohol	43	4.930	4.927	(0.930)	7734	100.000	85(Q)
$ 42	1,2-Dichloroethane-d4	102	5.007	5.011	(0.945)	39596	50.0000	50
43	Benzene	78	5.068	5.068	(0.956)	66417	5.00000	5
44	1,2-Dichloroethane	62	5.075	5.075	(0.958)	29405	5.00000	5
45	tert-Amyl methyl ether	73	5.146	5.142	(0.971)	48505	5.00000	5
M 50	1,2-Dichloroethene (Total)	96				37396	10.0000	(a)
* 46	Fluorobenzene	96	5.300	5.303	(1.000)	659451	50.0000	
47	Trichloroethene	130	5.634	5.631	(1.063)	21292	5.00000	5
48	Methylcyclohexane	83	5.821	5.818	(1.098)	24457	5.00000	5
49	1,2-Dichloropropane	63	5.837	5.837	(1.101)	14720	5.00000	5
51	Methyl Methacrylate	69	5.924	5.911	(1.118)	10625	5.00000	4(QH)
52	Dibromomethane	93	5.953	5.946	(1.123)	12661	5.00000	5
53	1,4-Dioxane	88	5.949	5.943	(1.123)	3734	100.000	96
54	Bromodichloromethane	83	6.081	6.078	(1.147)	26143	5.00000	5
55	2-Chloroethyl vinyl ether	63	6.525	6.512	(1.231)	20	5.00000	0.8(TQM)M6 AED 12/19
56	cis-1,3-Dichloropropene	75	6.512	6.509	(1.229)	25326	5.00000	4
57	4-Methyl-2-pentanone	43	6.644	6.644	(1.254)	10523	5.00000	4(Q)
$ 58	Toluene-d8	98	6.782	6.782	(0.818)	703413	50.0000	49
59	Toluene	91	6.853	6.850	(1.293)	75046	5.00000	5
60	trans-1,3-Dichloropropene	75	7.062	7.049	(1.332)	23332	5.00000	4
61	Ethyl Methacrylate	69	7.133	7.129	(1.346)	16016	5.00000	4
62	1,1,2-Trichloroethane	97	7.242	7.239	(1.366)	16334	5.00000	5
63	Tetrachloroethene	164	7.412	7.412	(0.894)	17830	5.00000	5
64	1,3-Dichloropropane	76	7.422	7.422	(0.895)	25182	5.00000	5
65	2-Hexanone	43	7.506	7.493	(0.905)	5850	5.00000	4(Q)
66	Dibromochloromethane	129	7.663	7.660	(0.924)	21192	5.00000	4
67	1,2-Dibromoethane	107	7.795	7.795	(0.940)	17939	5.00000	4
69	1-Chlorohexane	91	8.280	8.281	(0.999)	23585	5.00000	5(Q)
* 68	Chlorobenzene-d5	117	8.290	8.290	(1.000)	572957	50.0000	
70	Chlorobenzene	112	8.319	8.319	(1.003)	52647	5.00000	5
71	1,1,1,2-Tetrachloroethane	131	8.396	8.403	(1.013)	19750	5.00000	4(Q)
72	Ethylbenzene	106	8.435	8.435	(1.017)	26523	5.00000	5
73	m,p-Xylene	106	8.567	8.563	(1.033)	62751	10.0000	9
74	o-Xylene	106	9.010	9.010	(1.087)	31381	5.00000	5
75	Styrene	104	9.023	9.023	(1.088)	49284	5.00000	4
76	Bromoform	173	9.229	9.229	(1.113)	10736	5.00000	4

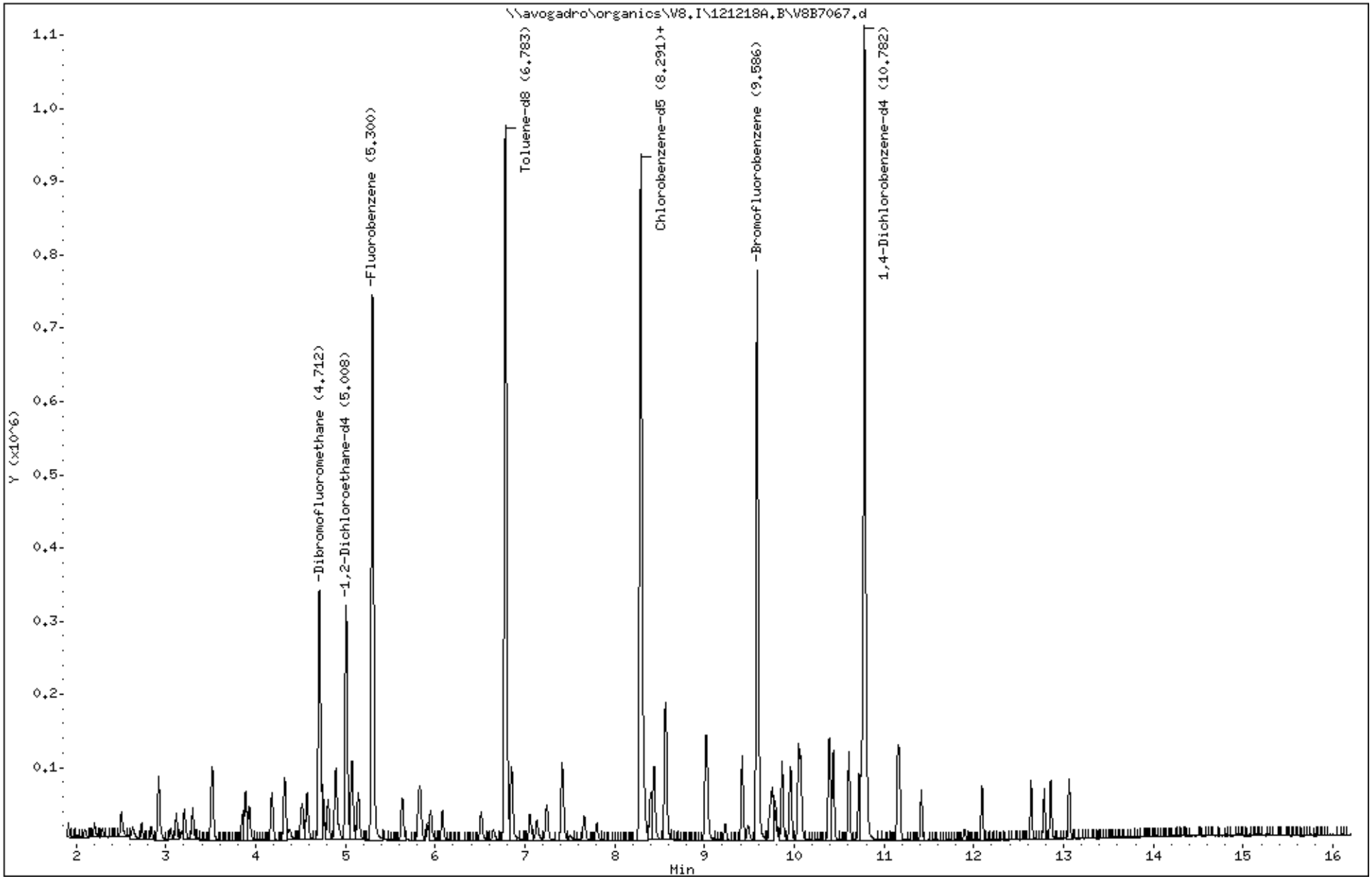
Data File: \\avogadro\organics\V8.I\121218A.B\V8B7067.d
Report Date: 19-Dec-2012 09:57

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	77	Isopropylbenzene	105	9.419	9.419	(1.136)	82515	5.00000	5
	78	trans-1,4-Dichloro-2-butene	75	9.489	9.483	(1.145)	5026	5.00000	4
$	79	Bromofluorobenzene	95	9.586	9.586	(1.156)	297620	50.0000	49
	80	1,1,2,2-Tetrachloroethane	83	9.727	9.727	(0.902)	20545	5.00000	5
	81	Bromobenzene	156	9.753	9.753	(0.905)	21599	5.00000	5
	82	1,2,3-Trichloropropane	75	9.782	9.782	(0.907)	25651	5.00000	5
	83	n-Propylbenzene	120	9.866	9.862	(0.915)	22067	5.00000	5
	84	2-Chlorotoluene	126	9.959	9.956	(0.924)	21610	5.00000	5(Q)
	85	1,3,5-Trimethylbenzene	105	10.049	10.046	(0.932)	72366	5.00000	5
	86	4-Chlorotoluene	126	10.071	10.068	(0.934)	21537	5.00000	5
M	94	Xylene (Total)	106				94132	15.0000	(a)
	87	tert-Butylbenzene	119	10.383	10.387	(0.963)	69961	5.00000	5
	88	1,2,4-Trimethylbenzene	105	10.435	10.435	(0.968)	70680	5.00000	5
	89	sec-Butylbenzene	105	10.605	10.608	(0.984)	82979	5.00000	5
	90	1,3-Dichlorobenzene	146	10.724	10.718	(0.995)	39831	5.00000	5
	91	4-Isopropyltoluene	119	10.750	10.750	(0.997)	72055	5.00000	5
*	92	1,4-Dichlorobenzene-d4	152	10.782	10.782	(1.000)	285325	50.0000	
	93	1,4-Dichlorobenzene	146	10.808	10.805	(1.002)	40451	5.00000	5
	95	n-Butylbenzene	91	11.152	11.152	(1.034)	56261	5.00000	4
	96	1,2-Dichlorobenzene	146	11.168	11.168	(1.036)	38356	5.00000	5
	97	Hexachloroethane	117	11.412	11.415	(1.058)	12799	5.00000	4
	98	1,2-Dibromo-3-chloropropane	75	11.891	11.895	(1.103)	4157	5.00000	4
	141	1,3,5-Trichlorobenzene	182	12.091	12.091	(2.281)	19285	5.00000	4(A)
	99	1,2,4-Trichlorobenzene	180	12.640	12.637	(1.172)	21614	5.00000	4
	100	Hexachlorobutadiene	225	12.782	12.782	(1.185)	10834	5.00000	5(Q)
	101	Naphthalene	128	12.853	12.856	(1.192)	61727	5.00000	4
	102	1,2,3-Trichlorobenzene	180	13.062	13.058	(1.211)	20785	5.00000	4

QC Flag Legend

T - Target compound detected outside RT window.
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.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\V8.I\121218A.B\V8B7067.d
Date : 18-DEC-2012 22:14
Client ID: VSTD00510K
Instrument: V8.i
Sample Info: 5ML,VSTD00510K,VSTD00510K
Purge Volume: 5.0
Operator: V10 SRC: V10
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V8.I\121218A.B\V8B7068.d
Report Date: 19-Dec-2012 09:57

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V8.I\121218A.B\V8B7068.d
Lab Smp Id: VSTD02010K Client Smp ID: VSTD02010K
Inj Date : 18-DEC-2012 22:41
Operator : V10   SRC: V10 Inst ID: V8.i
Smp Info : 5ML,VSTD02010K,VSTD02010K
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\121218A.B\v108260Gadd-6lvl.m
Meth Date : 19-Dec-2012 09:56 adatta Quant Type: ISTD
Cal Date : 18-DEC-2012 22:41 Cal File: V8B7067.d
Als bottle: 15 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/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.647	1.647	(0.311)	73973	20.0000	23
2	Freon114	85	1.766	1.763	(0.333)	63973	20.0000	23
3	Chloromethane	50	1.815	1.815	(0.342)	51593	20.0000	22
4	Vinyl Chloride	62	1.914	1.914	(0.361)	59042	20.0000	23
5	Bromomethane	94	2.204	2.204	(0.416)	38662	20.0000	22
6	Chloroethane	64	2.294	2.290	(0.433)	35180	20.0000	22
7	Trichlorofluoromethane	101	2.506	2.506	(0.473)	127045	20.0000	23
126	Ethanol	46	2.631	2.634	(0.496)	15758	2000.00	2300(A)
8	Ether	59	2.731	2.731	(0.515)	52611	20.0000	23
9	Acrolein	56	2.837	2.834	(0.535)	62586	100.000	110
10	1,1-Dichloroethene	96	2.924	2.924	(0.551)	73148	20.0000	22
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.918	2.917	(0.550)	75210	20.0000	22
12	Acetone	58	2.956	2.953	(0.557)	6050	20.0000	22
13	Iodomethane	142	3.049	3.052	(0.575)	84163	20.0000	22
14	Carbon Disulfide	76	3.117	3.114	(0.588)	212733	20.0000	22
15	Acetonitrile	41	3.207	3.207	(0.605)	94067	200.000	260(AQ)
16	Allyl Chloride	39	3.207	3.207	(0.605)	78853	20.0000	23
17	Methyl Acetate	43	3.213	3.210	(0.606)	40374	20.0000	22
18	Methylene Chloride	84	3.300	3.300	(0.622)	78792	20.0000	20(Q)
19	tert-Butanol	59	3.361	3.364	(0.634)	12498	40.0000	43
20	Acrylonitrile	53	3.493	3.490	(0.659)	20002	20.0000	22
21	trans-1,2-Dichloroethene	96	3.519	3.522	(0.664)	79974	20.0000	23
22	Methyl tert-butyl ether	73	3.512	3.512	(0.662)	246011	20.0000	23

Data File: \\avogadro\organics\V8.I\121218A.B\V8B7068.d
Report Date: 19-Dec-2012 09:57

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 1,1-Dichloroethane	63	3.853	3.853	(0.727)	133484	20.0000	23
	24 Vinyl acetate	43	3.882	3.882	(0.732)	189545	20.0000	24
	25 Diisopropyl Ether	45	3.889	3.888	(0.733)	180427	20.0000	23
	26 2-Chloro-1,3-Butadiene	53	3.927	3.930	(0.741)	117990	20.0000	22
	27 Ethyl tert-butyl ether	59	4.181	4.181	(0.788)	236148	20.0000	23
	29 2,2-Dichloropropane	77	4.326	4.326	(0.816)	113030	20.0000	23
	28 cis-1,2-Dichloroethene	96	4.323	4.319	(0.815)	90502	20.0000	24
	30 2-Butanone	72	4.329	4.319	(0.816)	7739	20.0000	22(Q)
	32 Propionitrile	54	4.368	4.367	(0.824)	77270	200.000	220(A)
	33 Methacrylonitrile	41	4.499	4.499	(0.848)	63368	40.0000	44
	34 Bromochloromethane	128	4.522	4.522	(0.853)	49487	20.0000	23
	31 Tetrahydrofuran	72	4.567	4.564	(0.861)	18080	40.0000	46
	35 Chloroform	83	4.573	4.573	(0.862)	163963	20.0000	22
$	36 Dibromofluoromethane	113	4.712	4.708	(0.888)	191524	50.0000	50
	37 1,1,1-Trichloroethane	97	4.750	4.750	(0.896)	155869	20.0000	23
	38 Cyclohexane	56	4.805	4.808	(0.906)	95616	20.0000	22
	39 1,1-Dichloropropene	110	4.889	4.888	(0.922)	43662	20.0000	23
	40 Carbon Tetrachloride	117	4.898	4.895	(0.924)	136179	20.0000	23
	41 Isobutyl Alcohol	43	4.927	4.927	(0.929)	39501	400.000	450(A)
$	42 1,2-Dichloroethane-d4	102	5.014	5.011	(0.945)	38853	50.0000	50
	43 Benzene	78	5.072	5.068	(0.956)	295261	20.0000	23
	44 1,2-Dichloroethane	62	5.072	5.075	(0.956)	138986	20.0000	23
	45 tert-Amyl methyl ether	73	5.143	5.142	(0.970)	225698	20.0000	23
M	50 1,2-Dichloroethene (Total)	96				170476	40.0000	(a)
*	46 Fluorobenzene	96	5.303	5.303	(1.000)	637851	50.0000	
	47 Trichloroethene	130	5.634	5.631	(1.062)	98876	20.0000	23
	48 Methylcyclohexane	83	5.818	5.818	(1.097)	108070	20.0000	22
	49 1,2-Dichloropropane	63	5.837	5.837	(1.101)	68594	20.0000	23
	51 Methyl Methacrylate	69	5.917	5.911	(1.116)	52421	20.0000	22(H)
	52 Dibromomethane	93	5.946	5.946	(1.121)	56962	20.0000	23
	53 1,4-Dioxane	88	5.950	5.943	(1.122)	16748	400.000	440(A)
	54 Bromodichloromethane	83	6.078	6.078	(1.146)	125999	20.0000	23
	55 2-Chloroethyl vinyl ether	63	6.509	6.512	(1.227)	626	20.0000	26(Q)
	56 cis-1,3-Dichloropropene	75	6.509	6.509	(1.227)	122665	20.0000	23
	57 4-Methyl-2-pentanone	43	6.647	6.644	(1.253)	49914	20.0000	22
$	58 Toluene-d8	98	6.782	6.782	(0.818)	690287	50.0000	50
	59 Toluene	91	6.850	6.850	(1.292)	354738	20.0000	23
	60 trans-1,3-Dichloropropene	75	7.052	7.049	(1.330)	118786	20.0000	23
	61 Ethyl Methacrylate	69	7.133	7.129	(1.345)	80310	20.0000	22
	62 1,1,2-Trichloroethane	97	7.242	7.239	(1.366)	77550	20.0000	23
	63 Tetrachloroethene	164	7.413	7.412	(0.894)	81924	20.0000	23
	64 1,3-Dichloropropane	76	7.422	7.422	(0.895)	118694	20.0000	23
	65 2-Hexanone	43	7.499	7.493	(0.905)	35634	20.0000	23
	66 Dibromochloromethane	129	7.660	7.660	(0.924)	105231	20.0000	22
	67 1,2-Dibromoethane	107	7.795	7.795	(0.940)	88805	20.0000	23
	69 1-Chlorohexane	91	8.281	8.281	(0.999)	109850	20.0000	22(Q)
*	68 Chlorobenzene-d5	117	8.290	8.290	(1.000)	556540	50.0000	
	70 Chlorobenzene	112	8.322	8.319	(1.004)	245707	20.0000	23
	71 1,1,1,2-Tetrachloroethane	131	8.403	8.403	(1.014)	95610	20.0000	23
	72 Ethylbenzene	106	8.438	8.435	(1.018)	124793	20.0000	23
	73 m,p-Xylene	106	8.564	8.563	(1.033)	308669	40.0000	47
	74 o-Xylene	106	9.011	9.010	(1.087)	151182	20.0000	23
	75 Styrene	104	9.027	9.023	(1.089)	247730	20.0000	22
	76 Bromoform	173	9.232	9.229	(1.114)	56166	20.0000	22

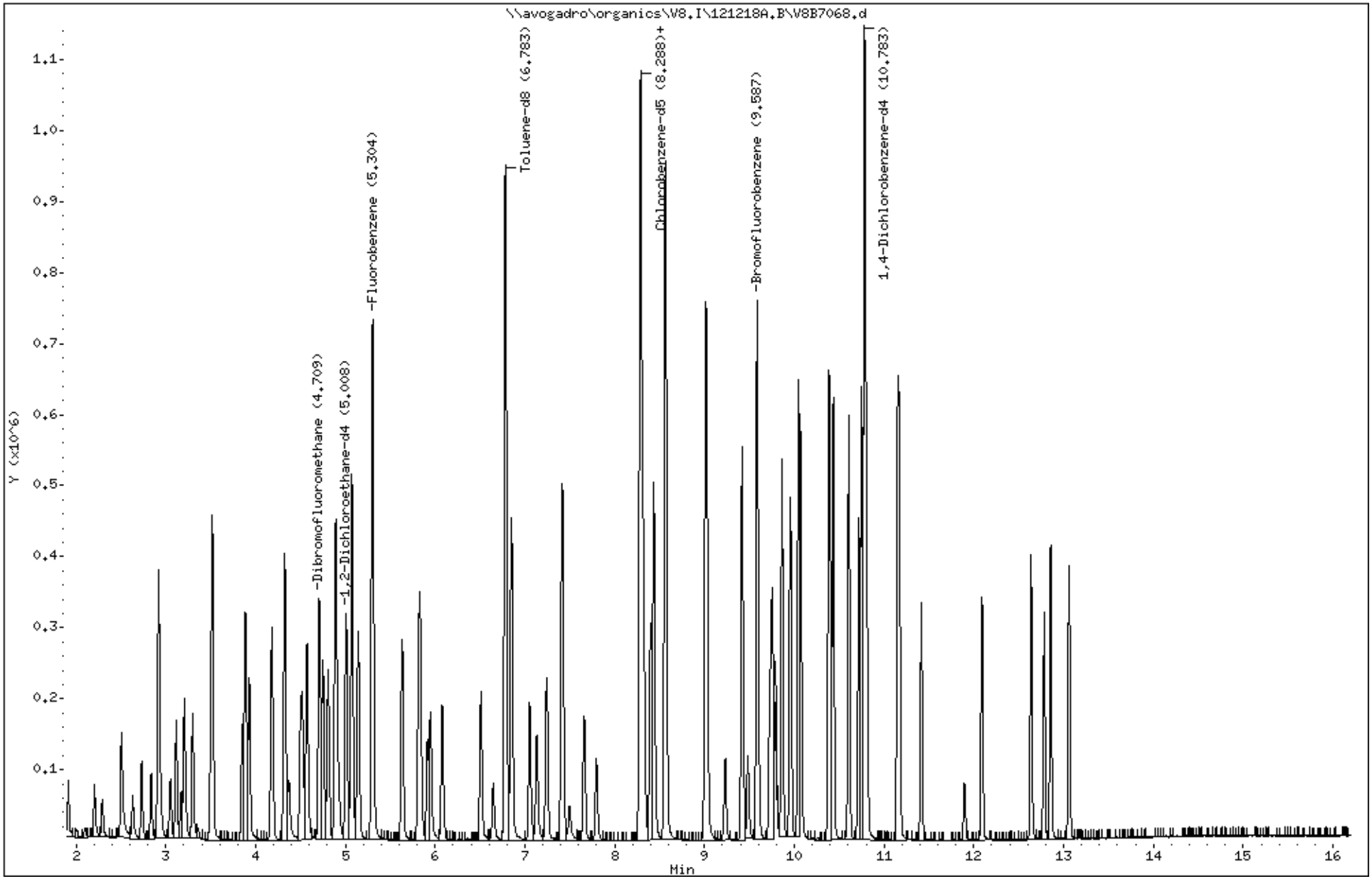
Data File: \\avogadro\organics\V8.I\121218A.B\V8B7068.d
Report Date: 19-Dec-2012 09:57

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	77	Isopropylbenzene	105	9.419	9.419	(1.136)	398730	20.0000	23
	78	trans-1,4-Dichloro-2-butene	75	9.480	9.483	(1.143)	26225	20.0000	21
$	79	Bromofluorobenzene	95	9.586	9.586	(1.156)	291790	50.0000	49
	80	1,1,2,2-Tetrachloroethane	83	9.731	9.727	(0.902)	95774	20.0000	22
	81	Bromobenzene	156	9.753	9.753	(0.905)	101459	20.0000	23
	82	1,2,3-Trichloropropane	75	9.782	9.782	(0.907)	120436	20.0000	22
	83	n-Propylbenzene	120	9.863	9.862	(0.915)	106596	20.0000	23
	84	2-Chlorotoluene	126	9.956	9.956	(0.923)	102458	20.0000	23
	85	1,3,5-Trimethylbenzene	105	10.046	10.046	(0.932)	347036	20.0000	22
	86	4-Chlorotoluene	126	10.068	10.068	(0.934)	105048	20.0000	23
M	94	Xylene (Total)	106				459851	60.0000	(a)
	87	tert-Butylbenzene	119	10.383	10.387	(0.963)	338860	20.0000	23
	88	1,2,4-Trimethylbenzene	105	10.435	10.435	(0.968)	350280	20.0000	23
	89	sec-Butylbenzene	105	10.605	10.608	(0.984)	405854	20.0000	23
	90	1,3-Dichlorobenzene	146	10.718	10.718	(0.994)	186346	20.0000	23
	91	4-Isopropyltoluene	119	10.750	10.750	(0.997)	357360	20.0000	23
*	92	1,4-Dichlorobenzene-d4	152	10.782	10.782	(1.000)	283881	50.0000	
	93	1,4-Dichlorobenzene	146	10.805	10.805	(1.002)	192197	20.0000	22
	95	n-Butylbenzene	91	11.149	11.152	(1.034)	286739	20.0000	23
	96	1,2-Dichlorobenzene	146	11.171	11.168	(1.036)	183585	20.0000	23
	97	Hexachloroethane	117	11.416	11.415	(1.059)	66590	20.0000	23
	98	1,2-Dibromo-3-chloropropane	75	11.895	11.895	(1.103)	20305	20.0000	21
	141	1,3,5-Trichlorobenzene	182	12.091	12.091	(2.280)	93147	20.0000	23(A)
	99	1,2,4-Trichlorobenzene	180	12.637	12.637	(1.172)	109318	20.0000	23
	100	Hexachlorobutadiene	225	12.782	12.782	(1.185)	49753	20.0000	24
	101	Naphthalene	128	12.856	12.856	(1.192)	313987	20.0000	22
	102	1,2,3-Trichlorobenzene	180	13.062	13.058	(1.211)	101668	20.0000	22

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.
H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\V8.I\121218A.B\V8B7068.d
Date : 18-DEC-2012 22:41
Client ID: VSTD02010K
Instrument: V8.i
Sample Info: 5ML,VSTD02010K,VSTD02010K
Purge Volume: 5.0
Operator: V10 SRC: V10
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V8.I\121218A.B\V8B7070.d
Report Date: 19-Dec-2012 09:57

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V8.I\121218A.B\V8B7070.d
Lab Smp Id: VSTD05010K Client Smp ID: VSTD05010K
Inj Date : 18-DEC-2012 23:35
Operator : V10   SRC: V10 Inst ID: V8.i
Smp Info : 5ML,VSTD05010K,VSTD05010K
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\121218A.B\v108260Gadd-6lvl.m
Meth Date : 19-Dec-2012 09:56 adatta Quant Type: ISTD
Cal Date : 07-DEC-2012 10:36 Cal File: V8B5985.d
Als bottle: 17 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/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.647	1.647	(0.311)	163214	50.0000	50
2	Freon114	85	1.766	1.763	(0.333)	138319	50.0000	49
3	Chloromethane	50	1.815	1.815	(0.342)	111414	50.0000	47
4	Vinyl Chloride	62	1.914	1.914	(0.361)	126993	50.0000	49
5	Bromomethane	94	2.204	2.204	(0.416)	87683	50.0000	50
6	Chloroethane	64	2.290	2.290	(0.432)	72453	50.0000	45
7	Trichlorofluoromethane	101	2.506	2.506	(0.473)	279227	50.0000	50
126	Ethanol	46	2.634	2.634	(0.497)	32479	5000.00	4600(A)
8	Ether	59	2.731	2.731	(0.515)	115207	50.0000	50
9	Acrolein	56	2.837	2.834	(0.535)	142788	250.000	260(A)
10	1,1-Dichloroethene	96	2.924	2.924	(0.551)	156194	50.0000	48
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.917	2.917	(0.550)	166999	50.0000	49
12	Acetone	58	2.956	2.953	(0.557)	13417	50.0000	48
13	Iodomethane	142	3.052	3.052	(0.576)	203326	50.0000	53
14	Carbon Disulfide	76	3.117	3.114	(0.588)	466611	50.0000	49
15	Acetonitrile	41	3.207	3.207	(0.605)	187771	500.000	510(A)
16	Allyl Chloride	39	3.207	3.207	(0.605)	170220	50.0000	49
17	Methyl Acetate	43	3.210	3.210	(0.605)	93327	50.0000	51
18	Methylene Chloride	84	3.297	3.300	(0.622)	169099	50.0000	44
19	tert-Butanol	59	3.358	3.364	(0.633)	28315	100.000	96
20	Acrylonitrile	53	3.486	3.490	(0.657)	49750	50.0000	54
21	trans-1,2-Dichloroethene	96	3.519	3.522	(0.664)	170306	50.0000	48
22	Methyl tert-butyl ether	73	3.512	3.512	(0.662)	545363	50.0000	50

Data File: \\avogadro\organics\V8.I\121218A.B\V8B7070.d
Report Date: 19-Dec-2012 09:57

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 1,1-Dichloroethane	63	3.853	3.853	(0.727)	284501	50.0000	49
	24 Vinyl acetate	43	3.882	3.882	(0.732)	423010	50.0000	53
	25 Diisopropyl Ether	45	3.888	3.888	(0.733)	394492	50.0000	50
	26 2-Chloro-1,3-Butadiene	53	3.927	3.930	(0.741)	257394	50.0000	49
	27 Ethyl tert-butyl ether	59	4.181	4.181	(0.788)	514891	50.0000	50
	29 2,2-Dichloropropane	77	4.326	4.326	(0.816)	240255	50.0000	49
	28 cis-1,2-Dichloroethene	96	4.322	4.319	(0.815)	190053	50.0000	49
	30 2-Butanone	72	4.322	4.319	(0.815)	17920	50.0000	51
	32 Propionitrile	54	4.367	4.367	(0.824)	181356	500.000	510(A)
	33 Methacrylonitrile	41	4.499	4.499	(0.848)	147077	100.000	100
	34 Bromochloromethane	128	4.525	4.522	(0.853)	107054	50.0000	49
	31 Tetrahydrofuran	72	4.564	4.564	(0.861)	38632	100.000	97
	35 Chloroform	83	4.573	4.573	(0.862)	352858	50.0000	48
$	36 Dibromofluoromethane	113	4.708	4.708	(0.888)	190695	50.0000	50
	37 1,1,1-Trichloroethane	97	4.750	4.750	(0.896)	340651	50.0000	49
	38 Cyclohexane	56	4.808	4.808	(0.907)	214397	50.0000	49
	39 1,1-Dichloropropene	110	4.888	4.888	(0.922)	94205	50.0000	50
	40 Carbon Tetrachloride	117	4.895	4.895	(0.923)	295003	50.0000	50
	41 Isobutyl Alcohol	43	4.924	4.927	(0.928)	83342	1000.00	950(A)
$	42 1,2-Dichloroethane-d4	102	5.011	5.011	(0.945)	38423	50.0000	50
	43 Benzene	78	5.072	5.068	(0.956)	630922	50.0000	48
	44 1,2-Dichloroethane	62	5.075	5.075	(0.957)	300626	50.0000	50
	45 tert-Amyl methyl ether	73	5.142	5.142	(0.970)	501440	50.0000	50
M	50 1,2-Dichloroethene (Total)	96				360359	100.000	(a)
*	46 Fluorobenzene	96	5.303	5.303	(1.000)	640042	50.0000	
	47 Trichloroethene	130	5.631	5.631	(1.062)	215075	50.0000	49
	48 Methylcyclohexane	83	5.818	5.818	(1.097)	250954	50.0000	51
	49 1,2-Dichloropropane	63	5.837	5.837	(1.101)	147061	50.0000	49
	51 Methyl Methacrylate	69	5.914	5.911	(1.115)	124476	50.0000	51(H)
	52 Dibromomethane	93	5.946	5.946	(1.121)	126192	50.0000	50
	53 1,4-Dioxane	88	5.946	5.943	(1.121)	34444	1000.00	910(A)
	54 Bromodichloromethane	83	6.081	6.078	(1.147)	276415	50.0000	50
	55 2-Chloroethyl vinyl ether	63	6.509	6.512	(1.227)	1490	50.0000	61(Q)
	56 cis-1,3-Dichloropropene	75	6.506	6.509	(1.227)	276498	50.0000	51
	57 4-Methyl-2-pentanone	43	6.644	6.644	(1.253)	109410	50.0000	48
$	58 Toluene-d8	98	6.782	6.782	(0.818)	690644	50.0000	50
	59 Toluene	91	6.850	6.850	(1.292)	767054	50.0000	50
	60 trans-1,3-Dichloropropene	75	7.049	7.049	(1.329)	273478	50.0000	52
	61 Ethyl Methacrylate	69	7.129	7.129	(1.344)	183827	50.0000	50
	62 1,1,2-Trichloroethane	97	7.242	7.239	(1.366)	168030	50.0000	50
	63 Tetrachloroethene	164	7.409	7.412	(0.894)	183489	50.0000	51
	64 1,3-Dichloropropane	76	7.419	7.422	(0.895)	263341	50.0000	50
	65 2-Hexanone	43	7.493	7.493	(0.904)	79312	50.0000	51
	66 Dibromochloromethane	129	7.660	7.660	(0.924)	241595	50.0000	52
	67 1,2-Dibromoethane	107	7.795	7.795	(0.940)	198635	50.0000	51
	69 1-Chlorohexane	91	8.281	8.281	(0.999)	244003	50.0000	49(Q)
*	68 Chlorobenzene-d5	117	8.290	8.290	(1.000)	556818	50.0000	
	70 Chlorobenzene	112	8.319	8.319	(1.003)	536807	50.0000	50
	71 1,1,1,2-Tetrachloroethane	131	8.403	8.403	(1.014)	211140	50.0000	50
	72 Ethylbenzene	106	8.435	8.435	(1.017)	276988	50.0000	50
	73 m,p-Xylene	106	8.563	8.563	(1.033)	674550	100.000	100
	74 o-Xylene	106	9.010	9.010	(1.087)	333468	50.0000	51
	75 Styrene	104	9.026	9.023	(1.089)	553326	50.0000	50
	76 Bromoform	173	9.229	9.229	(1.113)	132991	50.0000	53

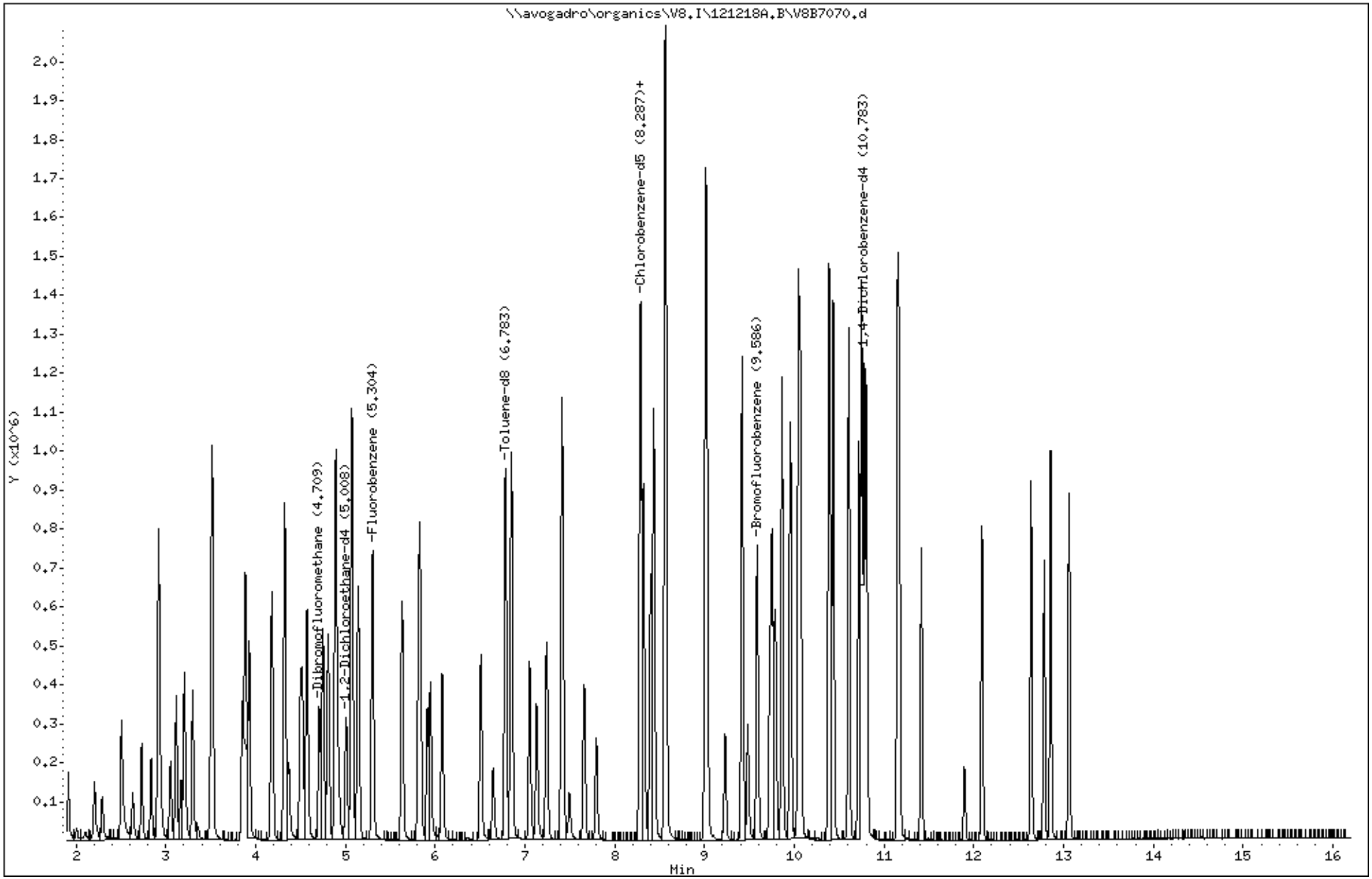
Data File: \\avogadro\organics\V8.I\121218A.B\V8B7070.d
Report Date: 19-Dec-2012 09:57

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	77	Isopropylbenzene	105	9.419	9.419	(1.136)	881376	50.0000	51
	78	trans-1,4-Dichloro-2-butene	75	9.483	9.483	(1.144)	63207	50.0000	50
$	79	Bromofluorobenzene	95	9.586	9.586	(1.156)	293657	50.0000	50
	80	1,1,2,2-Tetrachloroethane	83	9.731	9.727	(0.902)	212119	50.0000	49
	81	Bromobenzene	156	9.750	9.753	(0.904)	222945	50.0000	50
	82	1,2,3-Trichloropropane	75	9.785	9.782	(0.908)	276669	50.0000	50
	83	n-Propylbenzene	120	9.862	9.862	(0.915)	236580	50.0000	51
	84	2-Chlorotoluene	126	9.956	9.956	(0.923)	225085	50.0000	51
	85	1,3,5-Trimethylbenzene	105	10.049	10.046	(0.932)	769387	50.0000	50
	86	4-Chlorotoluene	126	10.071	10.068	(0.934)	232192	50.0000	50
M	94	Xylene (Total)	106				1008018	150.000	(a)
	87	tert-Butylbenzene	119	10.387	10.387	(0.963)	761780	50.0000	51
	88	1,2,4-Trimethylbenzene	105	10.435	10.435	(0.968)	776691	50.0000	51
	89	sec-Butylbenzene	105	10.605	10.608	(0.984)	910330	50.0000	52
	90	1,3-Dichlorobenzene	146	10.718	10.718	(0.994)	411864	50.0000	50
	91	4-Isopropyltoluene	119	10.750	10.750	(0.997)	797833	50.0000	52
*	92	1,4-Dichlorobenzene-d4	152	10.782	10.782	(1.000)	285109	50.0000	
	93	1,4-Dichlorobenzene	146	10.805	10.805	(1.002)	422843	50.0000	49
	95	n-Butylbenzene	91	11.152	11.152	(1.034)	656993	50.0000	53
	96	1,2-Dichlorobenzene	146	11.168	11.168	(1.036)	403808	50.0000	50
	97	Hexachloroethane	117	11.412	11.415	(1.058)	154900	50.0000	52
	98	1,2-Dibromo-3-chloropropane	75	11.895	11.895	(1.103)	46777	50.0000	49
	141	1,3,5-Trichlorobenzene	182	12.091	12.091	(2.280)	206600	50.0000	51(A)
	99	1,2,4-Trichlorobenzene	180	12.637	12.637	(1.172)	250473	50.0000	52
	100	Hexachlorobutadiene	225	12.782	12.782	(1.185)	114701	50.0000	54
	101	Naphthalene	128	12.856	12.856	(1.192)	743726	50.0000	51
	102	1,2,3-Trichlorobenzene	180	13.062	13.058	(1.211)	235287	50.0000	51

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.
H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\V8.I\121218A.B\V8B7070.d
Date : 18-DEC-2012 23:35
Client ID: VSTD05010K
Instrument: V8.i
Sample Info: 5ML,VSTD05010K,VSTD05010K
Purge Volume: 5.0
Operator: V10 SRC: V10
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V8.I\121218A.B\V8B7071.d
Report Date: 19-Dec-2012 09:57

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V8.I\121218A.B\V8B7071.d
Lab Smp Id: VSTD10010K Client Smp ID: VSTD10010K
Inj Date : 19-DEC-2012 00:03
Operator : V10   SRC: V10 Inst ID: V8.i
Smp Info : 5ML,VSTD10010K,VSTD10010K
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\121218A.B\v108260Gadd-6lvl.m
Meth Date : 19-Dec-2012 09:56 adatta Quant Type: ISTD
Cal Date : 19-DEC-2012 00:03 Cal File: V8B7072.d
Als bottle: 18 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/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.644	1.647	(0.310)	311600	100.000	97
2	Freon114	85	1.766	1.763	(0.333)	272455	100.000	97
3	Chloromethane	50	1.814	1.815	(0.342)	229753	100.000	98
4	Vinyl Chloride	62	1.914	1.914	(0.361)	250185	100.000	97
5	Bromomethane	94	2.200	2.204	(0.415)	182946	100.000	110
6	Chloroethane	64	2.290	2.290	(0.432)	139551	100.000	89
7	Trichlorofluoromethane	101	2.506	2.506	(0.473)	543551	100.000	98
126	Ethanol	46	2.634	2.634	(0.497)	67297	10000.0	9800(A)
8	Ether	59	2.731	2.731	(0.515)	224019	100.000	99
9	Acrolein	56	2.834	2.834	(0.534)	277254	500.000	510(A)
10	1,1-Dichloroethene	96	2.924	2.924	(0.551)	307145	100.000	96
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.917	2.917	(0.550)	318670	100.000	95
12	Acetone	58	2.953	2.953	(0.557)	25922	100.000	94
13	Iodomethane	142	3.052	3.052	(0.576)	420798	100.000	110
14	Carbon Disulfide	76	3.113	3.114	(0.587)	913145	100.000	97
15	Acetonitrile	41	3.207	3.207	(0.605)	378094	1000.00	1000(A)
16	Allyl Chloride	39	3.207	3.207	(0.605)	320204	100.000	93
17	Methyl Acetate	43	3.210	3.210	(0.605)	186301	100.000	100
18	Methylene Chloride	84	3.300	3.300	(0.622)	334202	100.000	88
19	tert-Butanol	59	3.361	3.364	(0.634)	59084	200.000	200
20	Acrylonitrile	53	3.486	3.490	(0.657)	96473	100.000	110
21	trans-1,2-Dichloroethene	96	3.519	3.522	(0.664)	335231	100.000	96
22	Methyl tert-butyl ether	73	3.512	3.512	(0.662)	1072715	100.000	100

Data File: \\avogadro\organics\V8.I\121218A.B\V8B7071.d
Report Date: 19-Dec-2012 09:57

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	23	1,1-Dichloroethane	63	3.853	3.853	(0.727)	567351	100.000	99
	24	Vinyl acetate	43	3.879	3.882	(0.731)	843255	100.000	110
	25	Diisopropyl Ether	45	3.888	3.888	(0.733)	775029	100.000	99
	26	2-Chloro-1,3-Butadiene	53	3.930	3.930	(0.741)	516211	100.000	99
	27	Ethyl tert-butyl ether	59	4.181	4.181	(0.788)	1022674	100.000	100
	29	2,2-Dichloropropane	77	4.326	4.326	(0.816)	475822	100.000	98
	28	cis-1,2-Dichloroethene	96	4.322	4.319	(0.815)	373315	100.000	98
	30	2-Butanone	72	4.319	4.319	(0.814)	36195	100.000	100
	32	Propionitrile	54	4.367	4.367	(0.824)	361976	1000.00	1000(A)
	33	Methacrylonitrile	41	4.496	4.499	(0.848)	291673	200.000	200(A)
	34	Bromochloromethane	128	4.519	4.522	(0.852)	210230	100.000	97
	31	Tetrahydrofuran	72	4.564	4.564	(0.861)	77555	200.000	200
	35	Chloroform	83	4.573	4.573	(0.862)	697810	100.000	95
$	36	Dibromofluoromethane	113	4.711	4.708	(0.888)	189012	50.0000	50
	37	1,1,1-Trichloroethane	97	4.750	4.750	(0.896)	677478	100.000	100
	38	Cyclohexane	56	4.808	4.808	(0.907)	406294	100.000	95
	39	1,1-Dichloropropene	110	4.888	4.888	(0.922)	185164	100.000	99
	40	Carbon Tetrachloride	117	4.895	4.895	(0.923)	594985	100.000	100
	41	Isobutyl Alcohol	43	4.924	4.927	(0.928)	180983	2000.00	2100(A)
$	42	1,2-Dichloroethane-d4	102	5.007	5.011	(0.944)	37862	50.0000	50
	43	Benzene	78	5.072	5.068	(0.956)	1252408	100.000	98
	44	1,2-Dichloroethane	62	5.072	5.075	(0.956)	600954	100.000	100
	45	tert-Amyl methyl ether	73	5.142	5.142	(0.970)	987825	100.000	100
M	50	1,2-Dichloroethene (Total)	96				708546	200.000	(a)
*	46	Fluorobenzene	96	5.303	5.303	(1.000)	631763	50.0000	
	47	Trichloroethene	130	5.631	5.631	(1.062)	422644	100.000	98
	48	Methylcyclohexane	83	5.821	5.818	(1.098)	467188	100.000	97
	49	1,2-Dichloropropane	63	5.837	5.837	(1.101)	288195	100.000	97
	51	Methyl Methacrylate	69	5.914	5.911	(1.115)	248760	100.000	100(H)
	52	Dibromomethane	93	5.946	5.946	(1.121)	250985	100.000	100
	53	1,4-Dioxane	88	5.946	5.943	(1.121)	77467	2000.00	2100(A)
	54	Bromodichloromethane	83	6.078	6.078	(1.146)	557956	100.000	100
	55	2-Chloroethyl vinyl ether	63	6.506	6.512	(1.227)	2816	100.000	120(TQ)
	56	cis-1,3-Dichloropropene	75	6.506	6.509	(1.227)	561147	100.000	100
	57	4-Methyl-2-pentanone	43	6.647	6.644	(1.253)	227868	100.000	100
$	58	Toluene-d8	98	6.782	6.782	(0.818)	689812	50.0000	50
	59	Toluene	91	6.850	6.850	(1.292)	1507458	100.000	99
	60	trans-1,3-Dichloropropene	75	7.049	7.049	(1.329)	554327	100.000	110
	61	Ethyl Methacrylate	69	7.129	7.129	(1.344)	371474	100.000	100
	62	1,1,2-Trichloroethane	97	7.239	7.239	(1.365)	336325	100.000	100
	63	Tetrachloroethene	164	7.412	7.412	(0.894)	347348	100.000	98
	64	1,3-Dichloropropane	76	7.422	7.422	(0.895)	515767	100.000	100
	65	2-Hexanone	43	7.493	7.493	(0.904)	160395	100.000	100
	66	Dibromochloromethane	129	7.660	7.660	(0.924)	489882	100.000	110
	67	1,2-Dibromoethane	107	7.795	7.795	(0.940)	394870	100.000	100
	69	1-Chlorohexane	91	8.280	8.281	(0.999)	471985	100.000	96
*	68	Chlorobenzene-d5	117	8.290	8.290	(1.000)	548538	50.0000	
	70	Chlorobenzene	112	8.322	8.319	(1.004)	1063274	100.000	100
	71	1,1,1,2-Tetrachloroethane	131	8.403	8.403	(1.014)	427469	100.000	100
	72	Ethylbenzene	106	8.435	8.435	(1.017)	541495	100.000	100
	73	m,p-Xylene	106	8.563	8.563	(1.033)	1303717	200.000	200
	74	o-Xylene	106	9.010	9.010	(1.087)	644628	100.000	100
	75	Styrene	104	9.023	9.023	(1.088)	1092202	100.000	100
	76	Bromoform	173	9.229	9.229	(1.113)	276755	100.000	110

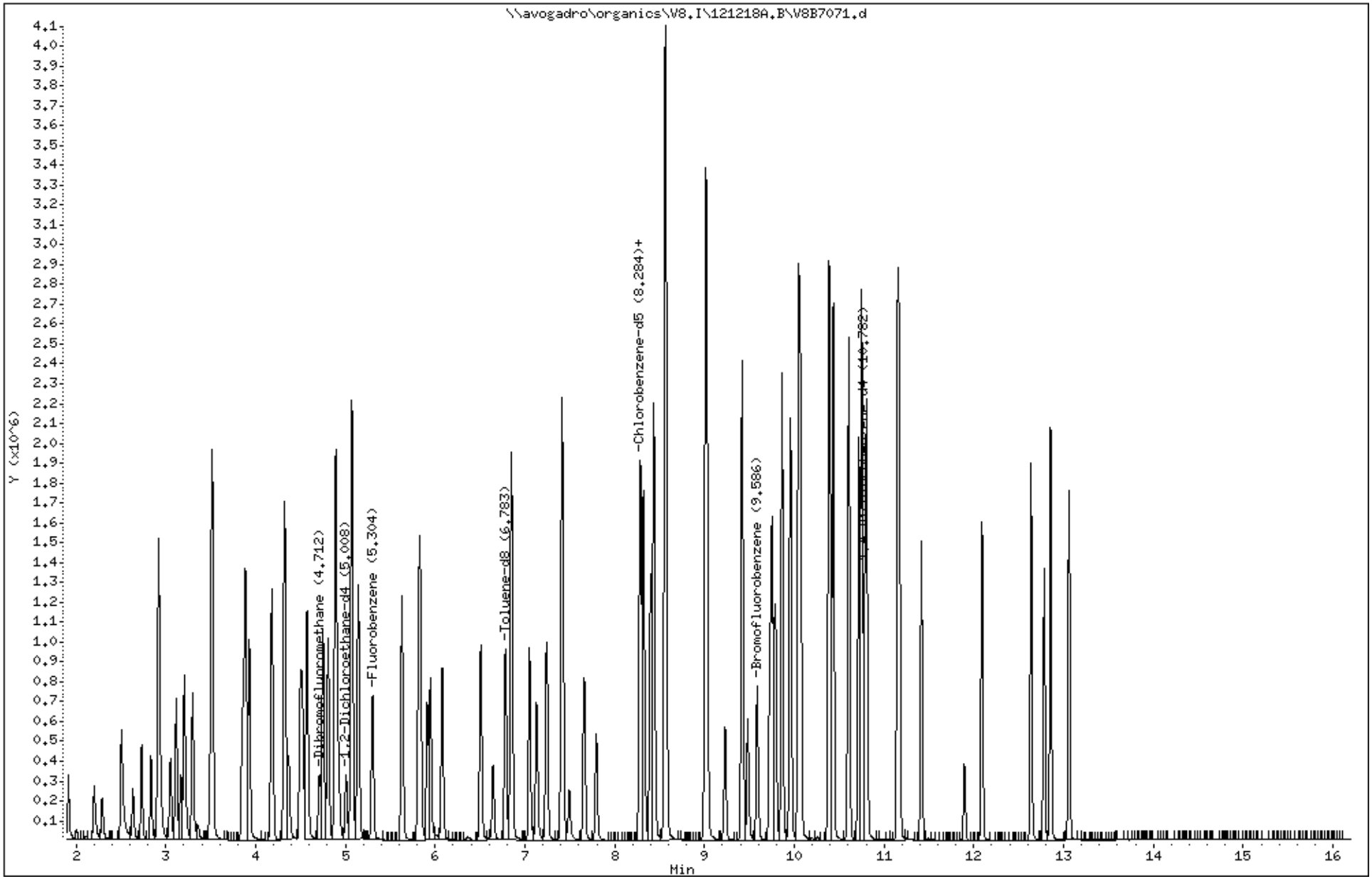
Data File: \\avogadro\organics\V8.I\121218A.B\V8B7071.d
Report Date: 19-Dec-2012 09:57

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
	Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	77	Isopropylbenzene	105	9.419	9.419	(1.136)	1739139	100.000	100
	78	trans-1,4-Dichloro-2-butene	75	9.483	9.483	(1.144)	132944	100.000	110
$	79	Bromofluorobenzene	95	9.586	9.586	(1.156)	293844	50.0000	50
	80	1,1,2,2-Tetrachloroethane	83	9.731	9.727	(0.902)	423755	100.000	98
	81	Bromobenzene	156	9.753	9.753	(0.905)	449604	100.000	100
	82	1,2,3-Trichloropropane	75	9.785	9.782	(0.908)	555970	100.000	99
	83	n-Propylbenzene	120	9.862	9.862	(0.915)	470855	100.000	100
	84	2-Chlorotoluene	126	9.956	9.956	(0.923)	442594	100.000	99
	85	1,3,5-Trimethylbenzene	105	10.049	10.046	(0.932)	1526715	100.000	98
	86	4-Chlorotoluene	126	10.068	10.068	(0.934)	456865	100.000	99
M	94	Xylene (Total)	106				1948345	300.000	(a)
	87	tert-Butylbenzene	119	10.386	10.387	(0.963)	1494254	100.000	100
	88	1,2,4-Trimethylbenzene	105	10.435	10.435	(0.968)	1544613	100.000	100
	89	sec-Butylbenzene	105	10.608	10.608	(0.984)	1778518	100.000	100
	90	1,3-Dichlorobenzene	146	10.718	10.718	(0.994)	811970	100.000	98
	91	4-Isopropyltoluene	119	10.750	10.750	(0.997)	1575594	100.000	100
*	92	1,4-Dichlorobenzene-d4	152	10.782	10.782	(1.000)	287566	50.0000	
	93	1,4-Dichlorobenzene	146	10.804	10.805	(1.002)	845233	100.000	98
	95	n-Butylbenzene	91	11.148	11.152	(1.034)	1282578	100.000	100
	96	1,2-Dichlorobenzene	146	11.171	11.168	(1.036)	790813	100.000	98
	97	Hexachloroethane	117	11.415	11.415	(1.059)	315286	100.000	100
	98	1,2-Dibromo-3-chloropropane	75	11.894	11.895	(1.103)	96238	100.000	100
	141	1,3,5-Trichlorobenzene	182	12.091	12.091	(2.280)	412921	100.000	100(A)
	99	1,2,4-Trichlorobenzene	180	12.637	12.637	(1.172)	495354	100.000	100
	100	Hexachlorobutadiene	225	12.782	12.782	(1.185)	221178	100.000	100
	101	Naphthalene	128	12.853	12.856	(1.192)	1501333	100.000	100
	102	1,2,3-Trichlorobenzene	180	13.062	13.058	(1.211)	463412	100.000	99

QC Flag Legend

T - Target compound detected outside RT window.
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.
H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\V8.I\121218A.B\V8B7071.d
Date : 19-DEC-2012 00:03
Client ID: VSTD10010K
Instrument: V8.i
Sample Info: 5ML,VSTD10010K,VSTD10010K
Purge Volume: 5.0
Operator: V10 SRC: V10
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V8.I\121218A.B\V8B7072.d
Report Date: 19-Dec-2012 09:57

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V8.I\121218A.B\V8B7072.d
Lab Smp Id: VSTD20010K Client Smp ID: VSTD20010K
Inj Date : 19-DEC-2012 00:30
Operator : V10   SRC: V10 Inst ID: V8.i
Smp Info : 5ML,VSTD20010K,VSTD20010K
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\121218A.B\v108260Gadd-6lvl.m
Meth Date : 19-Dec-2012 09:56 adatta Quant Type: ISTD
Cal Date : 19-DEC-2012 00:30 Cal File: V8B7071.d
Als bottle: 19 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/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.644	1.647	(0.310)	689744	200.000	210(A)
2	Freon114	85	1.766	1.763	(0.333)	577107	200.000	200
3	Chloromethane	50	1.815	1.815	(0.342)	476675	200.000	200
4	Vinyl Chloride	62	1.914	1.914	(0.361)	520825	200.000	200
5	Bromomethane	94	2.197	2.204	(0.415)	389622	200.000	220(A)
6	Chloroethane	64	2.287	2.290	(0.432)	291025	200.000	180
7	Trichlorofluoromethane	101	2.506	2.506	(0.473)	1171373	200.000	200
126	Ethanol	46	2.641	2.634	(0.498)	132327	20000.0	18000(A)
8	Ether	59	2.731	2.731	(0.515)	448846	200.000	190
9	Acrolein	56	2.834	2.834	(0.535)	543351	1000.00	960(A)
10	1,1-Dichloroethene	96	2.924	2.924	(0.552)	629221	200.000	190
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.914	2.917	(0.550)	687939	200.000	200
12	Acetone	58	2.953	2.953	(0.557)	53637	200.000	190(Q)
13	Iodomethane	142	3.049	3.052	(0.575)	861729	200.000	220(A)
14	Carbon Disulfide	76	3.114	3.114	(0.588)	1909041	200.000	200
15	Acetonitrile	41	3.204	3.207	(0.604)	741929	2000.00	2000(A)
16	Allyl Chloride	39	3.204	3.207	(0.604)	648583	200.000	180
17	Methyl Acetate	43	3.210	3.210	(0.606)	373151	200.000	200
18	Methylene Chloride	84	3.297	3.300	(0.622)	672701	200.000	170
19	tert-Butanol	59	3.361	3.364	(0.634)	120403	400.000	400(A)
20	Acrylonitrile	53	3.483	3.490	(0.657)	197834	200.000	210(A)
21	trans-1,2-Dichloroethene	96	3.519	3.522	(0.664)	682461	200.000	190
22	Methyl tert-butyl ether	73	3.509	3.512	(0.662)	2141399	200.000	190

Data File: \\avogadro\organics\V8.I\121218A.B\V8B7072.d
Report Date: 19-Dec-2012 09:57

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 1,1-Dichloroethane	63	3.853	3.853	(0.727)	1127932	200.000	190
	24 Vinyl acetate	43	3.879	3.882	(0.732)	1696576	200.000	210(A)
	25 Diisopropyl Ether	45	3.888	3.888	(0.734)	1541588	200.000	190
	26 2-Chloro-1,3-Butadiene	53	3.927	3.930	(0.741)	1066899	200.000	200
	27 Ethyl tert-butyl ether	59	4.181	4.181	(0.789)	2062073	200.000	190
	29 2,2-Dichloropropane	77	4.326	4.326	(0.816)	970362	200.000	190
	28 cis-1,2-Dichloroethene	96	4.323	4.319	(0.816)	753758	200.000	190
	30 2-Butanone	72	4.319	4.319	(0.815)	72167	200.000	200
	32 Propionitrile	54	4.368	4.367	(0.824)	722598	2000.00	2000(A)
	33 Methacrylonitrile	41	4.496	4.499	(0.848)	583758	400.000	400(A)
	34 Bromochloromethane	128	4.522	4.522	(0.853)	422617	200.000	190
	31 Tetrahydrofuran	72	4.564	4.564	(0.861)	154982	400.000	380(A)
	35 Chloroform	83	4.573	4.573	(0.863)	1417419	200.000	190
$	36 Dibromofluoromethane	113	4.712	4.708	(0.889)	193971	50.0000	50
	37 1,1,1-Trichloroethane	97	4.750	4.750	(0.896)	1401759	200.000	200
	38 Cyclohexane	56	4.808	4.808	(0.907)	889521	200.000	200
	39 1,1-Dichloropropene	110	4.888	4.888	(0.922)	378038	200.000	200
	40 Carbon Tetrachloride	117	4.895	4.895	(0.924)	1255551	200.000	210(A)
	41 Isobutyl Alcohol	43	4.927	4.927	(0.930)	367962	4000.00	4100(A)
$	42 1,2-Dichloroethane-d4	102	5.007	5.011	(0.945)	39312	50.0000	50
	43 Benzene	78	5.068	5.068	(0.956)	2484772	200.000	190
	44 1,2-Dichloroethane	62	5.072	5.075	(0.957)	1201403	200.000	190
	45 tert-Amyl methyl ether	73	5.142	5.142	(0.970)	2015687	200.000	200
M	50 1,2-Dichloroethene (Total)	96				1436219	400.000	(a)
*	46 Fluorobenzene	96	5.300	5.303	(1.000)	653873	50.0000	(TQ)
	47 Trichloroethene	130	5.631	5.631	(1.062)	877774	200.000	200
	48 Methylcyclohexane	83	5.821	5.818	(1.098)	1027482	200.000	200(A)
	49 1,2-Dichloropropane	63	5.837	5.837	(1.101)	579405	200.000	190
	51 Methyl Methacrylate	69	5.911	5.911	(1.115)	508994	200.000	200(H)
	52 Dibromomethane	93	5.946	5.946	(1.122)	498941	200.000	190
	53 1,4-Dioxane	88	5.946	5.943	(1.122)	154243	4000.00	4000(A)
	54 Bromodichloromethane	83	6.078	6.078	(1.147)	1145544	200.000	200
	55 2-Chloroethyl vinyl ether	63	6.503	6.512	(1.227)	5837	200.000	230(TA)
	56 cis-1,3-Dichloropropene	75	6.506	6.509	(1.227)	1145257	200.000	210(A)
	57 4-Methyl-2-pentanone	43	6.644	6.644	(1.254)	463836	200.000	200
$	58 Toluene-d8	98	6.782	6.782	(0.818)	706623	50.0000	50
	59 Toluene	91	6.850	6.850	(1.292)	3074999	200.000	200
	60 trans-1,3-Dichloropropene	75	7.049	7.049	(1.330)	1133712	200.000	210(A)
	61 Ethyl Methacrylate	69	7.129	7.129	(1.345)	758845	200.000	200
	62 1,1,2-Trichloroethane	97	7.242	7.239	(1.366)	671896	200.000	200
	63 Tetrachloroethene	164	7.412	7.412	(0.894)	727558	200.000	200
	64 1,3-Dichloropropane	76	7.422	7.422	(0.895)	1038756	200.000	200
	65 2-Hexanone	43	7.493	7.493	(0.904)	334286	200.000	210(A)
	66 Dibromochloromethane	129	7.660	7.660	(0.924)	1011371	200.000	210(A)
	67 1,2-Dibromoethane	107	7.792	7.795	(0.940)	806390	200.000	210(A)
	69 1-Chlorohexane	91	8.281	8.281	(0.999)	1007673	200.000	200
*	68 Chlorobenzene-d5	117	8.290	8.290	(1.000)	561959	50.0000	
	70 Chlorobenzene	112	8.319	8.319	(1.003)	2176736	200.000	200
	71 1,1,1,2-Tetrachloroethane	131	8.403	8.403	(1.014)	885469	200.000	210(A)
	72 Ethylbenzene	106	8.435	8.435	(1.017)	1120296	200.000	200
	73 m,p-Xylene	106	8.564	8.563	(1.033)	2674265	400.000	400(A)
	74 o-Xylene	106	9.010	9.010	(1.087)	1296317	200.000	200
	75 Styrene	104	9.023	9.023	(1.088)	2223759	200.000	200
	76 Bromoform	173	9.229	9.229	(1.113)	577479	200.000	230(A)

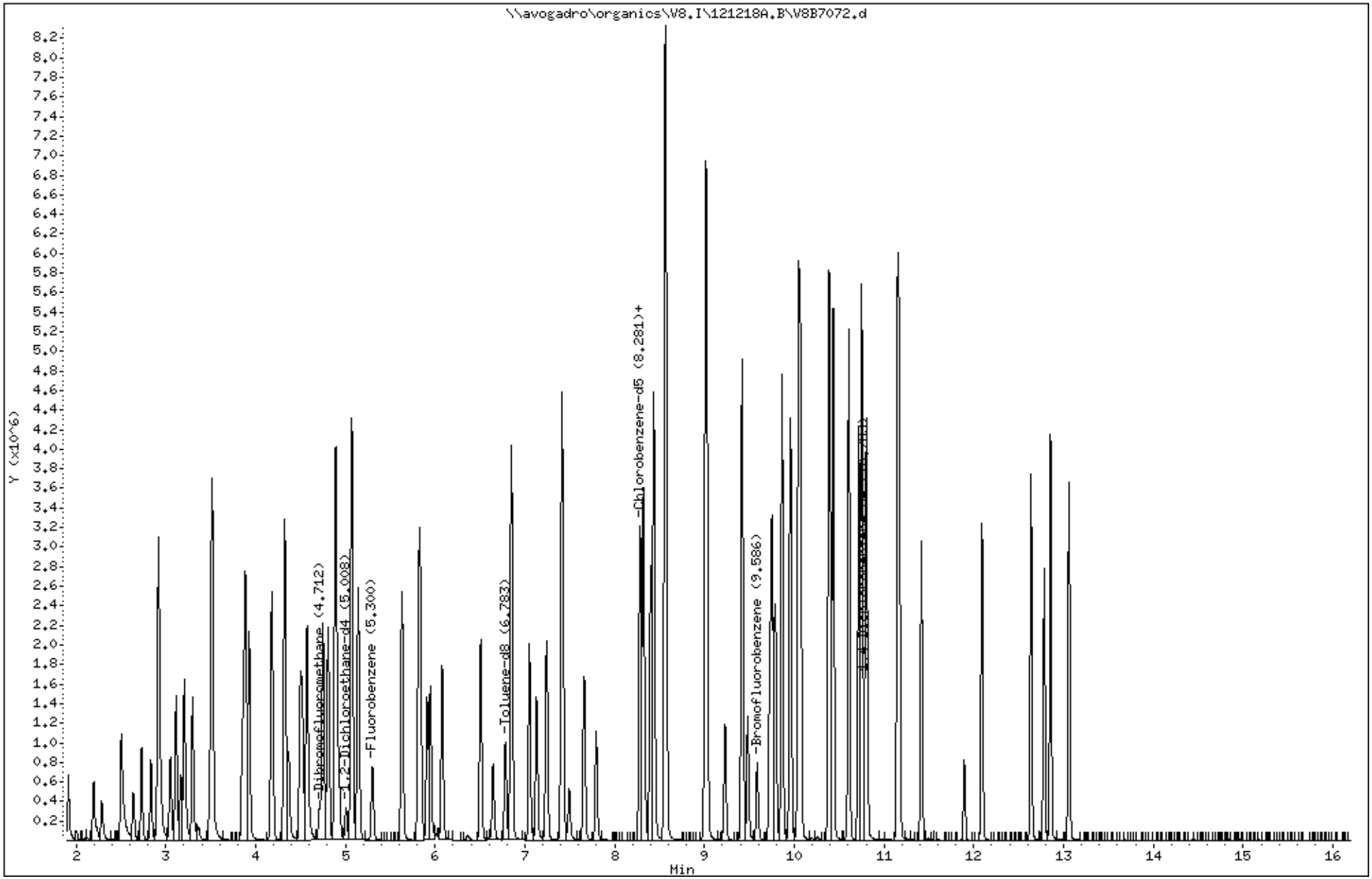
Data File: \\avogadro\organics\V8.I\121218A.B\V8B7072.d
Report Date: 19-Dec-2012 09:57

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	77	Isopropylbenzene	105	9.419	9.419	(1.136)	3590734	200.000	200(A)
	78	trans-1,4-Dichloro-2-butene	75	9.483	9.483	(1.144)	280586	200.000	220(A)
$	79	Bromofluorobenzene	95	9.586	9.586	(1.156)	306242	50.0000	51
	80	1,1,2,2-Tetrachloroethane	83	9.727	9.727	(0.902)	842080	200.000	190
	81	Bromobenzene	156	9.753	9.753	(0.905)	902072	200.000	200
	82	1,2,3-Trichloropropane	75	9.785	9.782	(0.908)	1125483	200.000	200
	83	n-Propylbenzene	120	9.866	9.862	(0.915)	963916	200.000	200
	84	2-Chlorotoluene	126	9.956	9.956	(0.923)	905646	200.000	200
	85	1,3,5-Trimethylbenzene	105	10.046	10.046	(0.932)	3096684	200.000	190
	86	4-Chlorotoluene	126	10.068	10.068	(0.934)	921456	200.000	200
M	94	Xylene (Total)	106				3970582	600.000	(a)
	87	tert-Butylbenzene	119	10.387	10.387	(0.963)	2998562	200.000	200
	88	1,2,4-Trimethylbenzene	105	10.435	10.435	(0.968)	3149325	200.000	200
	89	sec-Butylbenzene	105	10.608	10.608	(0.984)	3657555	200.000	200
	90	1,3-Dichlorobenzene	146	10.718	10.718	(0.994)	1655252	200.000	200
	91	4-Isopropyltoluene	119	10.750	10.750	(0.997)	3221376	200.000	200
*	92	1,4-Dichlorobenzene-d4	152	10.782	10.782	(1.000)	292535	50.0000	(Q)
	93	1,4-Dichlorobenzene	146	10.805	10.805	(1.002)	1695114	200.000	190
	95	n-Butylbenzene	91	11.149	11.152	(1.034)	2639169	200.000	210(A)
	96	1,2-Dichlorobenzene	146	11.168	11.168	(1.036)	1572207	200.000	190
	97	Hexachloroethane	117	11.415	11.415	(1.059)	660304	200.000	220(A)
	98	1,2-Dibromo-3-chloropropane	75	11.895	11.895	(1.103)	198188	200.000	200
	141	1,3,5-Trichlorobenzene	182	12.091	12.091	(2.281)	837070	200.000	200(A)
	99	1,2,4-Trichlorobenzene	180	12.637	12.637	(1.172)	1009918	200.000	200(A)
	100	Hexachlorobutadiene	225	12.785	12.782	(1.186)	451108	200.000	210(A)
	101	Naphthalene	128	12.853	12.856	(1.192)	3034461	200.000	200
	102	1,2,3-Trichlorobenzene	180	13.059	13.058	(1.211)	939898	200.000	200

QC Flag Legend

T - Target compound detected outside RT window.
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.
H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\V8.I\121218A.B\V8B7072.d
Date : 19-DEC-2012 00:30
Client ID: VSTD20010K
Instrument: V8.i
Sample Info: 5ML,VSTD20010K,VSTD20010K
Purge Volume: 5.0
Operator: V10 SRC: V10
Column phase: DB-624
Column diameter: 0.25



7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Instrument ID: V1 Calibration Date: 12/13/2012 Time: 21:38

Lab File ID: V1M9630.D Init. Calib. Date(s): 12/13/2012 12/13/2012

EPA Sample No.(VSTD#####) VICV0501Q Init. Calib. Time(s): 18:26 20:50

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Chloromethane	0.558	0.612	0.010	9.7	20.0
Vinyl chloride	0.444	0.464	0.010	4.5	20.0
Bromomethane	0.286	0.267	0.010	-6.7	20.0
Chloroethane	0.315	0.326	0.010	3.4	20.0
Trichlorofluoromethane	0.223	0.253	0.010	13.5	20.0
1,1-Dichloroethene	0.255	0.263	0.100	2.9	20.0
Acetone	0.036	0.035	0.010	-3.0	20.0
Carbon disulfide	0.909	0.916	0.010	0.8	20.0
Methylene chloride	0.181	0.179	0.010	-1.4	20.0
trans-1,2-Dichloroethene	0.266	0.267	0.010	0.4	20.0
Methyl tert-butyl ether	0.773	0.802	0.010	3.7	20.0
1,1-Dichloroethane	0.526	0.542	0.010	3.0	20.0
Vinyl acetate	1.421	1.412	0.010	-0.6	20.0
2-Butanone	0.033	0.032	0.010	-1.4	20.0
cis-1,2-Dichloroethene	0.288	0.280	0.010	-2.8	20.0
Chloroform	0.438	0.446	0.010	1.8	20.0
1,1,1-Trichloroethane	0.277	0.287	0.010	3.5	20.0
Carbon tetrachloride	0.215	0.233	0.010	8.6	20.0
1,2-Dichloroethane	0.329	0.348	0.010	5.6	20.0
Benzene	1.017	1.068	0.010	5.0	20.0
Trichloroethene	0.200	0.209	0.010	4.5	20.0
1,2-Dichloropropane	0.291	0.300	0.010	2.9	20.0
Bromodichloromethane	0.345	0.353	0.010	2.3	20.0
cis-1,3-Dichloropropene	0.458	0.475	0.010	3.9	20.0
4-Methyl-2-pentanone	0.366	0.359	0.010	-1.7	20.0
Toluene	0.917	0.954	0.010	4.0	20.0
trans-1,3-Dichloropropene	0.402	0.422	0.010	5.0	20.0
1,1,2-Trichloroethane	0.210	0.206	0.010	-1.8	20.0
Tetrachloroethene	0.201	0.197	0.010	-1.6	20.0
2-Hexanone	0.378	0.386	0.010	2.1	20.0
Dibromochloromethane	0.299	0.314	0.010	5.0	20.0
Chlorobenzene	0.845	0.874	0.010	3.4	20.0
Ethylbenzene	0.430	0.450	0.010	4.6	20.0
m,p-Xylene	0.560	0.576	0.010	2.9	20.0
o-Xylene	0.550	0.565	0.010	2.8	20.0
Xylene (Total)	0.557	0.572	0.010	2.9	20.0
Styrene	0.974	1.030	0.010	5.7	20.0
Bromoform	0.152	0.158	0.010	4.4	20.0
Isopropylbenzene	1.319	1.395	0.300	5.8	20.0
1,1,2,2-Tetrachloroethane	1.221	1.211	0.300	-0.8	20.0

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Instrument ID: V1 Calibration Date: 12/13/2012 Time: 21:38

Lab File ID: V1M9630.D Init. Calib. Date(s): 12/13/2012 12/13/2012

EPA Sample No.(VSTD#####) VICV0501Q Init. Calib. Time(s): 18:26 20:50

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
n-Propylbenzene	0.788	0.822	0.010	4.3	20.0
1,3,5-Trimethylbenzene	2.651	2.824	0.010	6.5	20.0
tert-Butylbenzene	2.415	2.553	0.010	5.7	20.0
1,2,4-Trimethylbenzene	2.645	2.837	0.010	7.2	20.0
sec-Butylbenzene	3.226	3.473	0.010	7.6	20.0
4-Isopropyltoluene	2.459	2.619	0.010	6.5	20.0
1,3-Dichlorobenzene	1.222	1.277	0.010	4.5	20.0
1,4-Dichlorobenzene	1.278	1.315	0.010	2.9	20.0
n-Butylbenzene	2.460	2.684	0.100	9.1	20.0
1,2-Dichlorobenzene	1.183	1.238	0.010	4.7	20.0
Naphthalene	1.939	2.022	0.010	4.3	20.0
2-Chloroethyl vinyl ether	0.183	0.180	0.010	-1.3	20.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Instrument ID: V1 Calibration Date: 12/13/2012 Time: 21:38

Lab File ID: V1M9630.D Init. Calib. Date(s): 12/13/2012 12/13/2012

EPA Sample No.(VSTD#####) VICV0501Q Init. Calib. Time(s): 18:26 20:50

Heated Purge: (Y/N) N 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	0.232	0.240	0.010	3.1	20.0
1,2-Dichloroethane-d4	0.086	0.088	0.010	3.3	20.0
Toluene-d8	1.343	1.345	0.010	0.1	20.0
Bromofluorobenzene	0.569	0.571	0.010	0.4	20.0

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Instrument ID: V1 Calibration Date: 12/17/2012 Time: 10:06

Lab File ID: V1M9702.D Init. Calib. Date(s): 12/13/2012 12/13/2012

EPA Sample No.(VSTD#####) VSTD0501T Init. Calib. Time(s): 18:26 20:50

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Chloromethane	0.558	0.670	0.010	20.1	20.0
Vinyl chloride	0.444	0.474	0.010	6.7	20.0
Bromomethane	0.286	0.268	0.010	-6.4	20.0
Chloroethane	0.315	0.331	0.010	5.1	20.0
Trichlorofluoromethane	0.223	0.255	0.010	14.4	20.0
1,1-Dichloroethene	0.255	0.258	0.100	1.1	20.0
Acetone	0.036	0.039	0.010	7.9	20.0
Carbon disulfide	0.909	0.898	0.010	-1.3	20.0
Methylene chloride	0.181	0.204	0.010	12.4	20.0
trans-1,2-Dichloroethene	0.266	0.270	0.010	1.5	20.0
Methyl tert-butyl ether	0.773	0.824	0.010	6.5	20.0
1,1-Dichloroethane	0.526	0.542	0.010	3.1	20.0
Vinyl acetate	1.421	1.521	0.010	7.0	20.0
2-Butanone	0.033	0.033	0.010	2.3	20.0
cis-1,2-Dichloroethene	0.288	0.289	0.010	0.3	20.0
Chloroform	0.438	0.454	0.010	3.8	20.0
1,1,1-Trichloroethane	0.277	0.282	0.010	1.6	20.0
Carbon tetrachloride	0.215	0.225	0.010	4.6	20.0
1,2-Dichloroethane	0.329	0.362	0.010	9.9	20.0
Benzene	1.017	1.055	0.010	3.7	20.0
Trichloroethene	0.200	0.198	0.010	-1.1	20.0
1,2-Dichloropropane	0.291	0.300	0.010	3.0	20.0
Bromodichloromethane	0.345	0.355	0.010	2.9	20.0
cis-1,3-Dichloropropene	0.458	0.484	0.010	5.8	20.0
4-Methyl-2-pentanone	0.366	0.394	0.010	7.7	20.0
Toluene	0.917	0.964	0.010	5.2	20.0
trans-1,3-Dichloropropene	0.402	0.430	0.010	7.0	20.0
1,1,2-Trichloroethane	0.210	0.210	0.010	-0.2	20.0
Tetrachloroethene	0.201	0.177	0.010	-12.0	20.0
2-Hexanone	0.378	0.441	0.010	16.8	20.0
Dibromochloromethane	0.299	0.314	0.010	4.9	20.0
Chlorobenzene	0.845	0.866	0.010	2.4	20.0
Ethylbenzene	0.430	0.461	0.010	7.1	20.0
m,p-Xylene	0.560	0.592	0.010	5.8	20.0
o-Xylene	0.550	0.578	0.010	5.2	20.0
Xylene (Total)	0.557	0.588	0.010	5.6	20.0
Styrene	0.974	1.028	0.010	5.5	20.0
Bromoform	0.152	0.153	0.010	1.2	20.0
Isopropylbenzene	1.319	1.416	0.300	7.3	20.0
1,1,2,2-Tetrachloroethane	1.221	1.296	0.300	6.2	20.0

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Instrument ID: V1 Calibration Date: 12/17/2012 Time: 10:06

Lab File ID: V1M9702.D Init. Calib. Date(s): 12/13/2012 12/13/2012

EPA Sample No.(VSTD#####) VSTD0501T Init. Calib. Time(s): 18:26 20:50

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
n-Propylbenzene	0.788	0.833	0.010	5.8	20.0
1,3,5-Trimethylbenzene	2.651	2.958	0.010	11.6	20.0
tert-Butylbenzene	2.415	2.693	0.010	11.5	20.0
1,2,4-Trimethylbenzene	2.645	2.981	0.010	12.7	20.0
sec-Butylbenzene	3.226	3.650	0.010	13.1	20.0
4-Isopropyltoluene	2.459	2.702	0.010	9.9	20.0
1,3-Dichlorobenzene	1.222	1.277	0.010	4.5	20.0
1,4-Dichlorobenzene	1.278	1.332	0.010	4.2	20.0
n-Butylbenzene	2.460	2.976	0.100	21.0	20.0
1,2-Dichlorobenzene	1.183	1.242	0.010	4.9	20.0
Naphthalene	1.939	2.045	0.010	5.5	20.0
2-Chloroethyl vinyl ether	0.183	0.098	0.010	-46.3	20.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Instrument ID: V1 Calibration Date: 12/17/2012 Time: 10:06

Lab File ID: V1M9702.D Init. Calib. Date(s): 12/13/2012 12/13/2012

EPA Sample No.(VSTD#####) VSTD0501T Init. Calib. Time(s): 18:26 20:50

Heated Purge: (Y/N) N 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	0.232	0.234	0.010	0.8	20.0
1,2-Dichloroethane-d4	0.086	0.082	0.010	-3.8	20.0
Toluene-d8	1.343	1.415	0.010	5.4	20.0
Bromofluorobenzene	0.569	0.597	0.010	5.0	20.0

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Instrument ID: V10 Calibration Date: 12/19/2012 Time: 1:24

Lab File ID: V8B7073.D Init. Calib. Date(s): 12/18/2012 12/19/2012

EPA Sample No.(VSTD#####) VICV05010K Init. Calib. Time(s): 21:47 0:30

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	$\overline{RRF}$	RRF050	MIN RRF	%D	MAX %D
Chloromethane	0.186	0.185	0.010	-0.6	20.0
Vinyl chloride	0.204	0.206	0.010	1.1	20.0
Bromomethane	0.136	0.163	0.010	19.6	20.0
Chloroethane	0.124	0.115	0.010	-8.0	20.0
Trichlorofluoromethane	0.440	0.451	0.010	2.5	20.0
1,1-Dichloroethene	0.254	0.254	0.100	-0.2	20.0
Acetone	0.022	0.021	0.010	-1.2	20.0
Carbon disulfide	0.748	0.758	0.010	1.3	20.0
Methylene chloride	0.301	0.272	0.010	-9.5	20.0
trans-1,2-Dichloroethene	0.276	0.275	0.010	-0.1	20.0
Methyl tert-butyl ether	0.847	0.843	0.010	-0.5	20.0
1,1-Dichloroethane	0.455	0.454	0.010	-0.1	20.0
Vinyl acetate	0.627	0.648	0.010	3.3	20.0
2-Butanone	0.028	0.027	0.010	-0.2	20.0
cis-1,2-Dichloroethene	0.302	0.306	0.010	1.5	20.0
Chloroform	0.579	0.565	0.010	-2.4	20.0
1,1,1-Trichloroethane	0.538	0.549	0.010	2.0	20.0
Carbon tetrachloride	0.465	0.486	0.010	4.7	20.0
1,2-Dichloroethane	0.473	0.482	0.010	1.9	20.0
Benzene	1.015	1.031	0.010	1.6	20.0
Trichloroethene	0.341	0.347	0.010	1.9	20.0
1,2-Dichloropropane	0.232	0.236	0.010	1.3	20.0
Bromodichloromethane	0.429	0.445	0.010	3.8	20.0
cis-1,3-Dichloropropene	0.422	0.436	0.010	3.4	20.0
4-Methyl-2-pentanone	0.177	0.174	0.010	-1.6	20.0
Toluene	1.203	1.216	0.010	1.1	20.0
trans-1,3-Dichloropropene	0.407	0.429	0.010	5.6	20.0
1,1,2-Trichloroethane	0.262	0.266	0.010	1.6	20.0
Tetrachloroethene	0.323	0.340	0.010	5.2	20.0
2-Hexanone	0.140	0.142	0.010	1.2	20.0
Dibromochloromethane	0.419	0.436	0.010	4.1	20.0
Chlorobenzene	0.973	0.997	0.010	2.4	20.0
Ethylbenzene	0.494	0.504	0.010	2.1	20.0
m,p-Xylene	0.593	0.615	0.010	3.7	20.0
o-Xylene	0.587	0.613	0.010	4.5	20.0
Xylene (Total)	0.591	0.615	0.010	4.0	20.0
Styrene	0.954	1.023	0.010	7.2	20.0
Bromoform	0.227	0.243	0.010	7.2	20.0
Isopropylbenzene	1.559	1.632	0.300	4.7	20.0
1,1,2,2-Tetrachloroethane	0.753	0.740	0.300	-1.8	20.0

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Instrument ID: V10 Calibration Date: 12/19/2012 Time: 1:24

Lab File ID: V8B7073.D Init. Calib. Date(s): 12/18/2012 12/19/2012

EPA Sample No.(VSTD#####) VICV05010K Init. Calib. Time(s): 21:47 0:30

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
n-Propylbenzene	0.816	0.843	0.010	3.4	20.0
1,3,5-Trimethylbenzene	2.639	2.737	0.010	3.7	20.0
tert-Butylbenzene	2.603	2.658	0.010	2.1	20.0
1,2,4-Trimethylbenzene	2.645	2.753	0.010	4.1	20.0
sec-Butylbenzene	3.087	3.201	0.010	3.7	20.0
4-Isopropyltoluene	2.715	2.804	0.010	3.3	20.0
1,3-Dichlorobenzene	1.443	1.458	0.010	1.1	20.0
1,4-Dichlorobenzene	1.503	1.496	0.010	-0.5	20.0
n-Butylbenzene	2.184	2.321	0.100	6.2	20.0
1,2-Dichlorobenzene	1.407	1.428	0.010	1.5	20.0
Naphthalene	2.570	2.500	0.010	-2.7	20.0
2-Chloroethyl vinyl ether	0.002	0.002	0.010	13.3	20.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Instrument ID: V10 Calibration Date: 12/19/2012 Time: 1:24

Lab File ID: V8B7073.D Init. Calib. Date(s): 12/18/2012 12/19/2012

EPA Sample No.(VSTD#####) VICV05010K Init. Calib. Time(s): 21:47 0:30

Heated Purge: (Y/N) N 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	0.298	0.297	0.010	-0.4	20.0
1,2-Dichloroethane-d4	0.060	0.060	0.010	0.4	20.0
Toluene-d8	1.244	1.238	0.010	-0.5	20.0
Bromofluorobenzene	0.528	0.530	0.010	0.4	20.0

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Instrument ID: V10 Calibration Date: 12/19/2012 Time: 15:01

Lab File ID: V8B7111.D Init. Calib. Date(s): 12/18/2012 12/19/2012

EPA Sample No.(VSTD#####) VSTD05010M Init. Calib. Time(s): 21:47 0:30

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	$\overline{RRF}$	RRF050	MIN RRF	%D	MAX %D
Chloromethane	0.186	0.193	0.010	4.0	20.0
Vinyl chloride	0.204	0.214	0.010	5.1	20.0
Bromomethane	0.136	0.177	0.010	29.9	20.0
Chloroethane	0.124	0.121	0.010	-2.9	20.0
Trichlorofluoromethane	0.440	0.481	0.010	9.3	20.0
1,1-Dichloroethene	0.254	0.265	0.100	4.2	20.0
Acetone	0.022	0.024	0.010	9.9	20.0
Carbon disulfide	0.748	0.818	0.010	9.4	20.0
Methylene chloride	0.301	0.283	0.010	-5.8	20.0
trans-1,2-Dichloroethene	0.276	0.297	0.010	7.8	20.0
Methyl tert-butyl ether	0.847	0.909	0.010	7.3	20.0
1,1-Dichloroethane	0.455	0.477	0.010	5.0	20.0
Vinyl acetate	0.627	0.728	0.010	16.0	20.0
2-Butanone	0.028	0.033	0.010	18.5	20.0
cis-1,2-Dichloroethene	0.302	0.324	0.010	7.3	20.0
Chloroform	0.579	0.601	0.010	3.8	20.0
1,1,1-Trichloroethane	0.538	0.589	0.010	9.4	20.0
Carbon tetrachloride	0.465	0.528	0.010	13.7	20.0
1,2-Dichloroethane	0.473	0.514	0.010	8.6	20.0
Benzene	1.015	1.067	0.010	5.1	20.0
Trichloroethene	0.341	0.370	0.010	8.7	20.0
1,2-Dichloropropane	0.232	0.247	0.010	6.2	20.0
Bromodichloromethane	0.429	0.467	0.010	8.8	20.0
cis-1,3-Dichloropropene	0.422	0.485	0.010	14.8	20.0
4-Methyl-2-pentanone	0.177	0.190	0.010	7.5	20.0
Toluene	1.203	1.283	0.010	6.7	20.0
trans-1,3-Dichloropropene	0.407	0.477	0.010	17.2	20.0
1,1,2-Trichloroethane	0.262	0.282	0.010	7.8	20.0
Tetrachloroethene	0.323	0.301	0.010	-6.7	20.0
2-Hexanone	0.140	0.156	0.010	11.6	20.0
Dibromochloromethane	0.419	0.457	0.010	9.0	20.0
Chlorobenzene	0.973	1.037	0.010	6.6	20.0
Ethylbenzene	0.494	0.531	0.010	7.6	20.0
m,p-Xylene	0.593	0.654	0.010	10.3	20.0
o-Xylene	0.587	0.631	0.010	7.5	20.0
Xylene (Total)	0.591	0.646	0.010	9.4	20.0
Styrene	0.954	1.065	0.010	11.7	20.0
Bromoform	0.227	0.249	0.010	10.0	20.0
Isopropylbenzene	1.559	1.730	0.300	11.0	20.0
1,1,2,2-Tetrachloroethane	0.753	0.769	0.300	2.1	20.0

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Instrument ID: V10 Calibration Date: 12/19/2012 Time: 15:01

Lab File ID: V8B7111.D Init. Calib. Date(s): 12/18/2012 12/19/2012

EPA Sample No.(VSTD#####) VSTD05010M Init. Calib. Time(s): 21:47 0:30

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
n-Propylbenzene	0.816	0.892	0.010	9.3	20.0
1,3,5-Trimethylbenzene	2.639	2.909	0.010	10.2	20.0
tert-Butylbenzene	2.603	2.917	0.010	12.1	20.0
1,2,4-Trimethylbenzene	2.645	2.942	0.010	11.2	20.0
sec-Butylbenzene	3.087	3.422	0.010	10.9	20.0
4-Isopropyltoluene	2.715	3.065	0.010	12.9	20.0
1,3-Dichlorobenzene	1.443	1.551	0.010	7.5	20.0
1,4-Dichlorobenzene	1.503	1.596	0.010	6.2	20.0
n-Butylbenzene	2.184	2.569	0.100	17.6	20.0
1,2-Dichlorobenzene	1.407	1.501	0.010	6.7	20.0
Naphthalene	2.570	2.755	0.010	7.2	20.0
2-Chloroethyl vinyl ether	0.002	0.002	0.010	30.1	20.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Instrument ID: V10 Calibration Date: 12/19/2012 Time: 15:01

Lab File ID: V8B7111.D Init. Calib. Date(s): 12/18/2012 12/19/2012

EPA Sample No.(VSTD#####) VSTD05010M Init. Calib. Time(s): 21:47 0:30

Heated Purge: (Y/N) N 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	0.298	0.306	0.010	2.8	20.0
1,2-Dichloroethane-d4	0.060	0.060	0.010	0.5	20.0
Toluene-d8	1.244	1.221	0.010	-1.9	20.0
Bromofluorobenzene	0.528	0.537	0.010	1.9	20.0

Data File: \\avogadro\organics\V1.I\121213A.B\V1M9630.D
Report Date: 14-Dec-2012 13:19

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V1.I\121213A.B\V1M9630.D
Lab Smp Id: VICV0501Q Client Smp ID: VICV0501Q
Inj Date : 13-DEC-2012 21:38
Operator : AM   SRC: AM Inst ID: V1.i
Smp Info : 5ML,VICV0501Q,VICV0501Q
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\121213A.B\v18260Gadd.m
Meth Date : 14-Dec-2012 13:15 canderson Quant Type: ISTD
Cal Date : 13-DEC-2012 18:50 Cal File: V1M9623.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/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.305	1.305	(0.284)	245192	50.0000	59
2	Freon114	85	1.393	1.393	(0.303)	516258	50.0000	65
3	Chloromethane	50	1.423	1.423	(0.310)	884277	50.0000	55
4	Vinyl Chloride	62	1.531	1.531	(0.333)	671674	50.0000	52
5	Bromomethane	94	1.758	1.758	(0.383)	386194	50.0000	47
6	Chloroethane	64	1.846	1.846	(0.402)	471795	50.0000	52
7	Trichlorofluoromethane	101	2.408	2.408	(0.524)	366382	50.0000	57
126	Ethanol	46	2.122	2.122	(0.462)	265964	5000.00	6800(A)
8	Ether	59	2.201	2.201	(0.479)	492064	50.0000	52
9	Acrolein	56	2.280	2.280	(0.496)	280789	250.000	220(A)
10	1,1-Dichloroethene	96	2.398	2.398	(0.522)	379967	50.0000	51
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.408	2.408	(0.524)	366382	50.0000	57
12	Acetone	58	2.388	2.388	(0.520)	50309	50.0000	48
13	Iodomethane	142	2.516	2.516	(0.548)	384683	50.0000	52
14	Carbon Disulfide	76	2.546	2.546	(0.554)	1324874	50.0000	50
15	Acetonitrile	41	2.614	2.614	(0.569)	1685852	500.000	530(A)
16	Allyl Chloride	39	2.614	2.614	(0.569)	632322	50.0000	53(TQ)
17	Methyl Acetate	43	2.634	2.634	(0.573)	478078	50.0000	52
19	tert-Butanol	59	2.782	2.782	(0.606)	51715	100.000	94
18	Methylene Chloride	84	2.752	2.752	(0.599)	258601	50.0000	49
20	Acrylonitrile	53	2.871	2.871	(0.625)	205316	50.0000	50
21	trans-1,2-Dichloroethene	96	2.910	2.910	(0.633)	385445	50.0000	50
22	Methyl tert-butyl ether	73	2.910	2.910	(0.633)	1159396	50.0000	52

Data File: \\avogadro\organics\V1.I\121213A.B\V1M9630.D
Report Date: 14-Dec-2012 13:19

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	23 1,1-Dichloroethane	63	3.215	3.215	(0.700)	783614	50.0000	51
	24 Vinyl acetate	43	3.245	3.245	(0.706)	2042398	50.0000	50
	25 Diisopropyl Ether	45	3.274	3.274	(0.713)	2101434	50.0000	53
	26 2-Chloro-1,3-Butadiene	53	3.284	3.284	(0.715)	693443	50.0000	52
	27 Ethyl tert-butyl ether	59	3.550	3.550	(0.773)	1581755	50.0000	52
	28 cis-1,2-Dichloroethene	96	3.659	3.659	(0.796)	405281	50.0000	49
	29 2,2-Dichloropropane	77	3.659	3.659	(0.796)	234748	50.0000	54
	30 2-Butanone	72	3.659	3.659	(0.796)	46423	50.0000	49
	32 Propionitrile	54	3.698	3.698	(0.805)	607787	500.000	490(A)
	33 Methacrylonitrile	41	3.816	3.816	(0.831)	728207	100.000	100
	34 Bromochloromethane	128	3.836	3.836	(0.835)	164597	50.0000	50
	31 Tetrahydrofuran	72	3.885	3.885	(0.846)	101165	100.000	91
	35 Chloroform	83	3.905	3.905	(0.850)	644513	50.0000	51
$	36 Dibromofluoromethane	113	4.023	4.023	(0.876)	346514	50.0000	51
	37 1,1,1-Trichloroethane	97	4.062	4.062	(0.884)	414761	50.0000	52
	38 Cyclohexane	56	4.121	4.121	(0.897)	802689	50.0000	55
	39 1,1-Dichloropropene	110	4.190	4.190	(0.912)	155502	50.0000	52
	40 Carbon Tetrachloride	117	4.200	4.200	(0.914)	337375	50.0000	54
	41 Isobutyl Alcohol	43	4.259	4.259	(0.927)	317550	1000.00	880(A)
$	42 1,2-Dichloroethane-d4	102	4.299	4.299	(0.936)	127930	50.0000	52
	43 Benzene	78	4.358	4.358	(0.949)	1543903	50.0000	52
	44 1,2-Dichloroethane	62	4.368	4.368	(0.951)	502974	50.0000	53
	45 tert-Amyl methyl ether	73	4.456	4.456	(0.970)	1257781	50.0000	51
*	46 Fluorobenzene	96	4.594	4.594	(1.000)	1446044	50.0000	
M	50 1,2-Dichloroethene (Total)	96				790726	100.000	99
	47 Trichloroethene	130	4.909	4.909	(1.069)	302383	50.0000	52
	48 Methylcyclohexane	83	5.087	5.087	(1.107)	539856	50.0000	54
	49 1,2-Dichloropropane	63	5.097	5.097	(1.109)	433135	50.0000	51
	51 Methyl Methacrylate	69	5.195	5.195	(1.131)	351388	50.0000	50
	52 Dibromomethane	93	5.195	5.195	(1.131)	231910	50.0000	51
	53 1,4-Dioxane	88	5.215	5.215	(1.135)	61417	1000.00	1500(A)
	54 Bromodichloromethane	83	5.343	5.343	(1.163)	510166	50.0000	51
	55 2-Chloroethyl vinyl ether	63	5.619	5.619	(1.223)	260891	50.0000	49
	56 cis-1,3-Dichloropropene	75	5.757	5.757	(1.253)	687532	50.0000	52
	57 4-Methyl-2-pentanone	43	5.904	5.904	(1.285)	519473	50.0000	49
$	58 Toluene-d8	98	6.022	6.022	(0.805)	1295682	50.0000	50
	59 Toluene	91	6.082	6.082	(1.324)	1379246	50.0000	52
	60 trans-1,3-Dichloropropene	75	6.288	6.288	(1.369)	609788	50.0000	52
	61 Ethyl Methacrylate	69	6.397	6.397	(1.392)	484676	50.0000	51
	62 1,1,2-Trichloroethane	97	6.466	6.466	(1.407)	298368	50.0000	49
	63 Tetrachloroethene	164	6.633	6.633	(0.887)	190216	50.0000	49
	64 1,3-Dichloropropane	76	6.643	6.643	(0.888)	642538	50.0000	51
	65 2-Hexanone	43	6.732	6.732	(0.900)	371667	50.0000	51
	66 Dibromochloromethane	129	6.870	6.870	(0.918)	302295	50.0000	52
	67 1,2-Dibromoethane	107	6.988	6.988	(0.934)	318387	50.0000	52
*	68 Chlorobenzene-d5	117	7.480	7.480	(1.000)	963386	50.0000	
	69 1-Chlorohexane	91	7.500	7.500	(1.003)	558658	50.0000	50
	70 Chlorobenzene	112	7.510	7.510	(1.004)	842119	50.0000	52
	71 1,1,1,2-Tetrachloroethane	131	7.598	7.598	(1.016)	265604	50.0000	51
	72 Ethylbenzene	106	7.638	7.638	(1.021)	433492	50.0000	52
	73 m,p-Xylene	106	7.766	7.766	(1.038)	1110113	100.000	100
	74 o-Xylene	106	8.199	8.199	(1.096)	544361	50.0000	51
	75 Styrene	104	8.209	8.209	(1.097)	992076	50.0000	53
	76 Bromoform	173	8.396	8.396	(1.122)	152442	50.0000	52

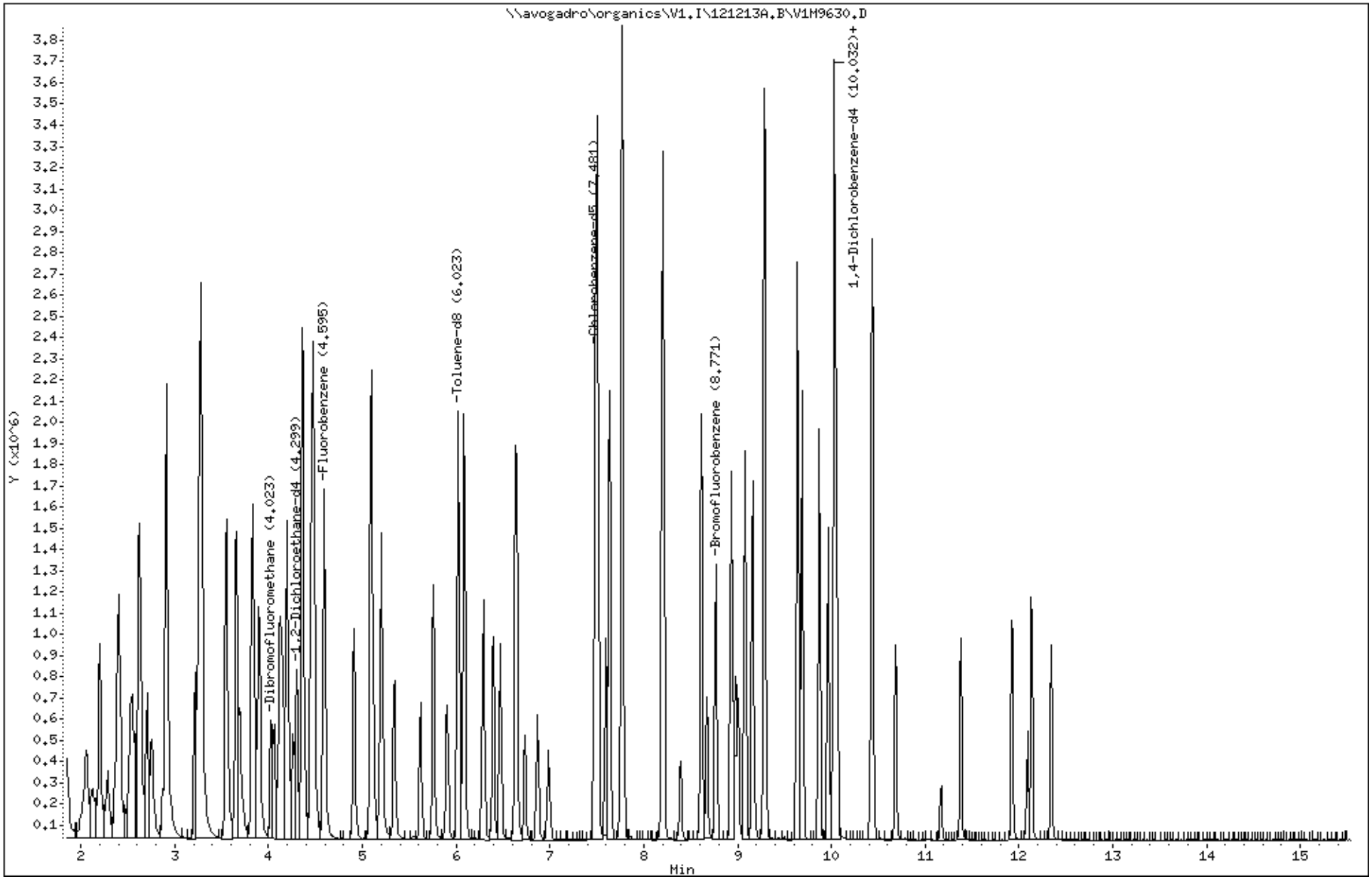
Data File: \\avogadro\organics\V1.I\121213A.B\V1M9630.D
Report Date: 14-Dec-2012 13:19

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	77 Isopropylbenzene	105	8.613	8.613	(1.151)	1344320	50.0000	53
	78 trans-1,4-Dichloro-2-butene	75	8.672	8.672	(1.159)	168740	50.0000	50
$	79 Bromofluorobenzene	95	8.770	8.770	(1.172)	550094	50.0000	50
	80 1,1,2,2-Tetrachloroethane	83	8.938	8.938	(0.891)	456442	50.0000	50
	81 Bromobenzene	156	8.938	8.938	(0.891)	252831	50.0000	52
	82 1,2,3-Trichloropropane	75	8.977	8.977	(0.895)	525996	50.0000	51
	83 n-Propylbenzene	120	9.086	9.086	(0.906)	309643	50.0000	52
	84 2-Chlorotoluene	126	9.164	9.164	(0.914)	278708	50.0000	52
	85 1,3,5-Trimethylbenzene	105	9.283	9.283	(0.925)	1063999	50.0000	53
	86 4-Chlorotoluene	126	9.283	9.283	(0.925)	290886	50.0000	52
	87 tert-Butylbenzene	119	9.637	9.637	(0.961)	961863	50.0000	53
	88 1,2,4-Trimethylbenzene	105	9.687	9.687	(0.966)	1068813	50.0000	54
	89 sec-Butylbenzene	105	9.874	9.874	(0.984)	1308450	50.0000	54
M	94 Xylene (Total)	106				1654474	150.000	150
	90 1,3-Dichlorobenzene	146	9.962	9.962	(0.993)	481225	50.0000	52
	91 4-Isopropyltoluene	119	10.031	10.031	(1.000)	986720	50.0000	53
*	92 1,4-Dichlorobenzene-d4	152	10.031	10.031	(1.000)	376789	50.0000	
	93 1,4-Dichlorobenzene	146	10.061	10.061	(1.003)	495584	50.0000	51
	95 n-Butylbenzene	91	10.445	10.445	(1.041)	1011320	50.0000	54
	96 1,2-Dichlorobenzene	146	10.425	10.425	(1.039)	466577	50.0000	52
	97 Hexachloroethane	117	10.681	10.681	(1.065)	249941	50.0000	53
	98 1,2-Dibromo-3-chloropropane	75	11.174	11.174	(1.114)	64055	50.0000	49
	141 1,3,5-Trichlorobenzene	182	11.381	11.381	(2.477)	201846	50.0000	53
	99 1,2,4-Trichlorobenzene	180	11.932	11.932	(1.189)	240583	50.0000	53
	100 Hexachlorobutadiene	225	12.090	12.090	(1.205)	56277	50.0000	52
	101 Naphthalene	128	12.139	12.139	(1.210)	762020	50.0000	52
	102 1,2,3-Trichlorobenzene	180	12.346	12.346	(1.231)	195401	50.0000	51

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\V1.I\121213A.B\V1M9630.D
Date : 13-DEC-2012 21:38
Client ID: VICV0501Q
Instrument: V1.i
Sample Info: 5ML,VICV0501Q,VICV0501Q
Purge Volume: 5.0
Operator: AM SRC: AM
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V1.I\121217.B\V1M9702.D
Report Date: 18-Dec-2012 16:48

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V1.I\121217.B\V1M9702.D
Lab Smp Id: VSTD0501T Client Smp ID: VSTD0501T
Inj Date : 17-DEC-2012 10:06
Operator : AM   SRC: AM Inst ID: V1.i
Smp Info : 5ML,VSTD0501T,VSTD0501T
Misc Info :
Comment   :
Method   : \\avogadro\organics\V1.I\121217.B\v18260Gadd.m
Meth Date : 18-Dec-2012 16:26 canderson Quant Type: ISTD
Cal Date : 13-DEC-2012 18:50 Cal File: V1M9623.D
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET102

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.312	1.312	(0.284)	339540	50.0000	67
2	Freon114	85	1.400	1.400	(0.304)	625524	50.0000	64
3	Chloromethane	50	1.440	1.440	(0.312)	1193792	50.0000	60
4	Vinyl Chloride	62	1.538	1.538	(0.334)	844895	50.0000	53
5	Bromomethane	94	1.765	1.765	(0.383)	477587	50.0000	47
6	Chloroethane	64	1.853	1.853	(0.402)	590758	50.0000	52
7	Trichlorofluoromethane	101	2.415	2.415	(0.524)	455026	50.0000	57
126	Ethanol	46	2.129	2.129	(0.462)	378159	5000.00	7800(A)
8	Ether	59	2.208	2.208	(0.479)	634419	50.0000	54
9	Acrolein	56	2.296	2.296	(0.498)	485450	250.000	300(A)
10	1,1-Dichloroethene	96	2.405	2.405	(0.522)	459953	50.0000	50
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.415	2.415	(0.524)	455026	50.0000	57
12	Acetone	58	2.405	2.405	(0.522)	68936	50.0000	54
13	Iodomethane	142	2.523	2.523	(0.547)	474032	50.0000	52
14	Carbon Disulfide	76	2.553	2.553	(0.554)	1599888	50.0000	49
15	Acetonitrile	41	2.631	2.631	(0.571)	2296800	500.000	580(A)
16	Allyl Chloride	39	2.631	2.631	(0.571)	855880	50.0000	58(Q)
17	Methyl Acetate	43	2.641	2.641	(0.573)	622373	50.0000	54
19	tert-Butanol	59	2.799	2.799	(0.607)	86569	100.000	130
18	Methylene Chloride	84	2.759	2.759	(0.598)	363431	50.0000	56
20	Acrylonitrile	53	2.887	2.887	(0.626)	260116	50.0000	52
21	trans-1,2-Dichloroethene	96	2.927	2.927	(0.635)	480635	50.0000	51

Data File: \\avogadro\organics\V1.I\121217.B\V1M9702.D
Report Date: 18-Dec-2012 16:48

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	22 Methyl tert-butyl ether	73	2.927	2.927	(0.635)	1468139	50.0000	53
	23 1,1-Dichloroethane	63	3.232	3.232	(0.701)	966813	50.0000	52
	24 Vinyl acetate	43	3.262	3.262	(0.707)	2710193	50.0000	54
	25 Diisopropyl Ether	45	3.281	3.281	(0.712)	2651050	50.0000	54
	26 2-Chloro-1,3-Butadiene	53	3.301	3.301	(0.716)	878819	50.0000	54
	27 Ethyl tert-butyl ether	59	3.567	3.567	(0.774)	1979346	50.0000	53
	28 cis-1,2-Dichloroethene	96	3.666	3.666	(0.795)	515246	50.0000	50
	29 2,2-Dichloropropane	77	3.675	3.675	(0.797)	305310	50.0000	57
	30 2-Butanone	72	3.675	3.675	(0.797)	59371	50.0000	51
	32 Propionitrile	54	3.705	3.705	(0.803)	840142	500.000	550(A)
	33 Methacrylonitrile	41	3.833	3.833	(0.831)	939655	100.000	100
	34 Bromochloromethane	128	3.853	3.853	(0.836)	197009	50.0000	49
	31 Tetrahydrofuran	72	3.902	3.902	(0.846)	130781	100.000	95
	35 Chloroform	83	3.912	3.912	(0.848)	809784	50.0000	52
$	36 Dibromofluoromethane	113	4.040	4.040	(0.876)	417503	50.0000	50
	37 1,1,1-Trichloroethane	97	4.079	4.079	(0.885)	501986	50.0000	51
	38 Cyclohexane	56	4.138	4.138	(0.897)	1030104	50.0000	57
	39 1,1-Dichloropropene	110	4.207	4.207	(0.912)	187710	50.0000	50
	40 Carbon Tetrachloride	117	4.217	4.217	(0.915)	400248	50.0000	52
	41 Isobutyl Alcohol	43	4.276	4.276	(0.927)	532189	1000.00	1200(A)
$	42 1,2-Dichloroethane-d4	102	4.316	4.316	(0.936)	146844	50.0000	48
	43 Benzene	78	4.375	4.375	(0.949)	1880166	50.0000	52
	44 1,2-Dichloroethane	62	4.375	4.375	(0.949)	644750	50.0000	55
	45 tert-Amyl methyl ether	73	4.473	4.473	(0.970)	1551875	50.0000	51
*	46 Fluorobenzene	96	4.611	4.611	(1.000)	1782405	50.0000	
M	50 1,2-Dichloroethene (Total)	96				995881	100.000	100
	47 Trichloroethene	130	4.926	4.926	(1.068)	352732	50.0000	49
	48 Methylcyclohexane	83	5.104	5.104	(1.107)	707114	50.0000	58
	49 1,2-Dichloropropane	63	5.113	5.113	(1.109)	534388	50.0000	52
	51 Methyl Methacrylate	69	5.212	5.212	(1.130)	437979	50.0000	51
	52 Dibromomethane	93	5.212	5.212	(1.130)	293883	50.0000	52
	53 1,4-Dioxane	88	5.232	5.232	(1.135)	76295	1000.00	1500(A)
	54 Bromodichloromethane	83	5.350	5.350	(1.160)	632601	50.0000	51
	55 2-Chloroethyl vinyl ether	63	5.635	5.635	(1.222)	174812	50.0000	27
	56 cis-1,3-Dichloropropene	75	5.773	5.773	(1.252)	862995	50.0000	53
	57 4-Methyl-2-pentanone	43	5.921	5.921	(1.284)	701472	50.0000	54
$	58 Toluene-d8	98	6.039	6.039	(0.807)	1618493	50.0000	53
	59 Toluene	91	6.098	6.098	(1.323)	1719005	50.0000	52
	60 trans-1,3-Dichloropropene	75	6.305	6.305	(1.367)	766190	50.0000	54
	61 Ethyl Methacrylate	69	6.404	6.404	(1.389)	617162	50.0000	52
	62 1,1,2-Trichloroethane	97	6.483	6.483	(1.406)	373724	50.0000	50
	63 Tetrachloroethene	164	6.650	6.650	(0.888)	201930	50.0000	44
	64 1,3-Dichloropropane	76	6.650	6.650	(0.888)	794803	50.0000	53
	65 2-Hexanone	43	6.748	6.748	(0.901)	504933	50.0000	58
	66 Dibromochloromethane	129	6.886	6.886	(0.920)	358586	50.0000	52
	67 1,2-Dibromoethane	107	6.995	6.995	(0.934)	387311	50.0000	53
*	68 Chlorobenzene-d5	117	7.487	7.487	(1.000)	1143755	50.0000	
	69 1-Chlorohexane	91	7.517	7.517	(1.004)	696745	50.0000	53
	70 Chlorobenzene	112	7.527	7.527	(1.005)	990056	50.0000	51
	71 1,1,1,2-Tetrachloroethane	131	7.605	7.605	(1.016)	315235	50.0000	51
	72 Ethylbenzene	106	7.655	7.655	(1.022)	527232	50.0000	54
	73 m,p-Xylene	106	7.783	7.783	(1.039)	1355163	100.000	100
	74 o-Xylene	106	8.206	8.206	(1.096)	661428	50.0000	52
	75 Styrene	104	8.226	8.226	(1.099)	1175958	50.0000	53

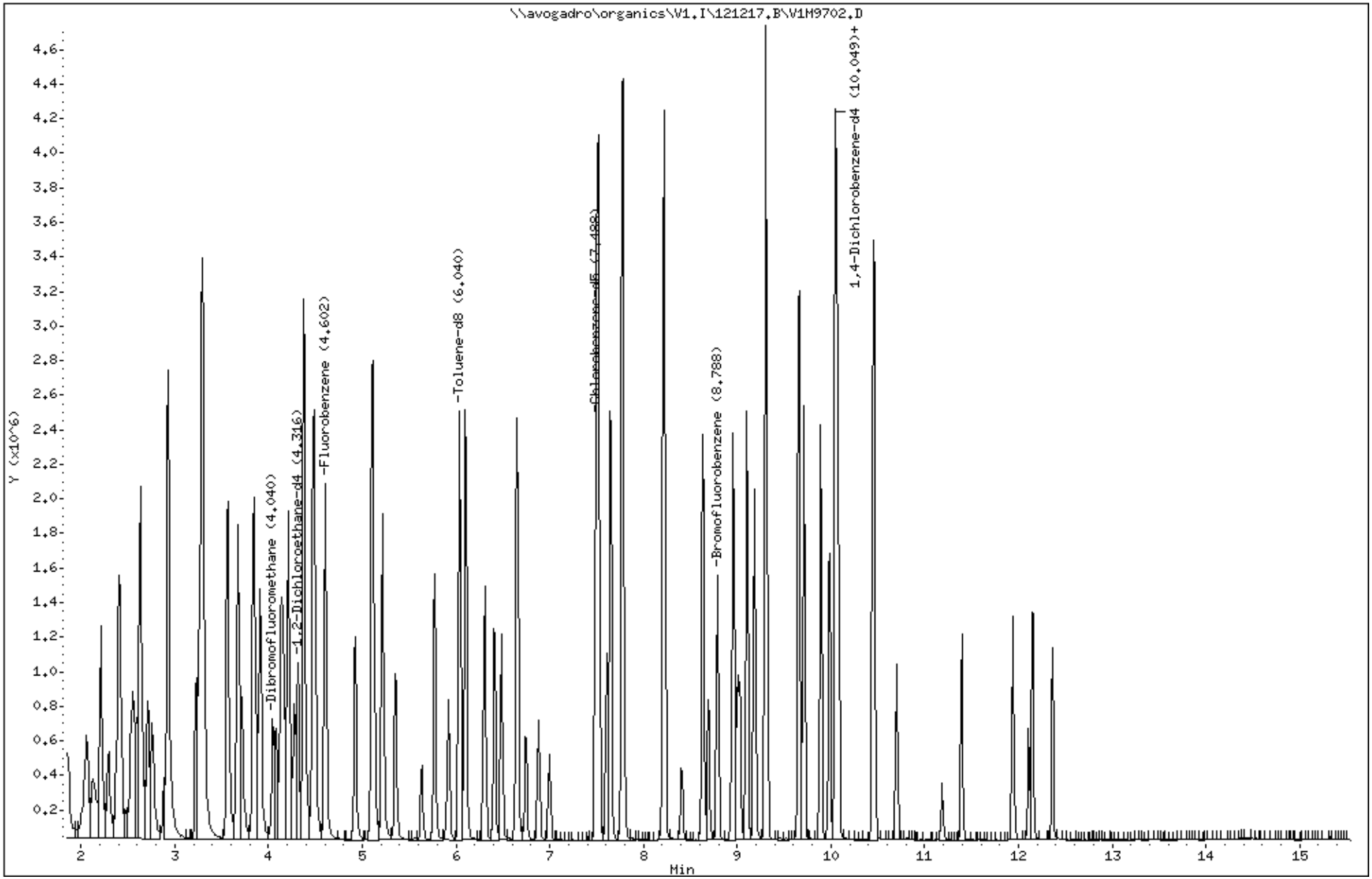
Data File: \\avogadro\organics\V1.I\121217.B\V1M9702.D
Report Date: 18-Dec-2012 16:48

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	76	Bromoform	173	8.413	8.413	(1.124)	175395	50.0000	50
	77	Isopropylbenzene	105	8.630	8.630	(1.153)	1619480	50.0000	54
	78	trans-1,4-Dichloro-2-butene	75	8.689	8.689	(1.160)	210534	50.0000	53
$	79	Bromofluorobenzene	95	8.787	8.787	(1.174)	683090	50.0000	52
	80	1,1,2,2-Tetrachloroethane	83	8.955	8.955	(0.890)	569964	50.0000	53
	81	Bromobenzene	156	8.955	8.955	(0.890)	290282	50.0000	51
	82	1,2,3-Trichloropropane	75	9.004	9.004	(0.895)	665145	50.0000	55
	83	n-Propylbenzene	120	9.103	9.103	(0.905)	366499	50.0000	53
	84	2-Chlorotoluene	126	9.191	9.191	(0.914)	333154	50.0000	53
	85	1,3,5-Trimethylbenzene	105	9.309	9.309	(0.926)	1300856	50.0000	56
	86	4-Chlorotoluene	126	9.309	9.309	(0.926)	357857	50.0000	54
	87	tert-Butylbenzene	119	9.664	9.664	(0.961)	1184095	50.0000	56
	88	1,2,4-Trimethylbenzene	105	9.713	9.713	(0.966)	1310668	50.0000	56
	89	sec-Butylbenzene	105	9.891	9.891	(0.983)	1604971	50.0000	56
M	94	Xylene (Total)	106				2016591	150.000	160
	90	1,3-Dichlorobenzene	146	9.989	9.989	(0.993)	561612	50.0000	52
	91	4-Isopropyltoluene	119	10.048	10.048	(0.999)	1187956	50.0000	55
*	92	1,4-Dichlorobenzene-d4	152	10.058	10.058	(1.000)	439722	50.0000	
	93	1,4-Dichlorobenzene	146	10.078	10.078	(1.002)	585529	50.0000	52
	95	n-Butylbenzene	91	10.462	10.462	(1.040)	1308679	50.0000	60
	96	1,2-Dichlorobenzene	146	10.452	10.452	(1.039)	546009	50.0000	52
	97	Hexachloroethane	117	10.698	10.698	(1.064)	290926	50.0000	52
	98	1,2-Dibromo-3-chloropropane	75	11.191	11.191	(1.113)	82509	50.0000	55
	141	1,3,5-Trichlorobenzene	182	11.397	11.397	(2.472)	240125	50.0000	52
	99	1,2,4-Trichlorobenzene	180	11.949	11.949	(1.188)	281080	50.0000	53
	100	Hexachlorobutadiene	225	12.107	12.107	(1.204)	66213	50.0000	53
	101	Naphthalene	128	12.156	12.156	(1.209)	899212	50.0000	53
	102	1,2,3-Trichlorobenzene	180	12.363	12.363	(1.229)	224206	50.0000	50

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V1.I\121217.B\V1M9702.D
Date : 17-DEC-2012 10:06
Client ID: VSTD0501T
Instrument: V1.i
Sample Info: 5ML,VSTD0501T,VSTD0501T
Purge Volume: 5.0
Operator: AM SRC: AM
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V8.I\121218A.B\V8B7073.d
Report Date: 19-Dec-2012 09:57

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V8.I\121218A.B\V8B7073.d
Lab Smp Id: VICV05010K Client Smp ID: VICV05010K
Inj Date : 19-DEC-2012 01:24
Operator : V10   SRC: V10 Inst ID: V8.i
Smp Info : 5ML,VICV05010K,VICV05010K
Misc Info :
Comment   :
Method   : \\avogadro\organics\V8.I\121218A.B\v108260Gadd-6lvl.m
Meth Date : 19-Dec-2012 09:56 adatta Quant Type: ISTD
Cal Date : 19-DEC-2012 00:30 Cal File: V8B7072.d
Als bottle: 20 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/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.647	1.647	(0.311)	167120	50.0000	51
2	Freon114	85	1.763	1.763	(0.333)	144092	50.0000	50
3	Chloromethane	50	1.815	1.815	(0.342)	119716	50.0000	50
4	Vinyl Chloride	62	1.914	1.914	(0.361)	133438	50.0000	50
5	Bromomethane	94	2.204	2.204	(0.416)	105273	50.0000	60
6	Chloroethane	64	2.290	2.290	(0.432)	74177	50.0000	46
7	Trichlorofluoromethane	101	2.506	2.506	(0.473)	292265	50.0000	51
126	Ethanol	46	2.634	2.634	(0.497)	32776	5000.00	4600(A)
8	Ether	59	2.731	2.731	(0.515)	116650	50.0000	50
9	Acrolein	56	2.834	2.834	(0.534)	140744	250.000	250(A)
10	1,1-Dichloroethene	96	2.924	2.924	(0.551)	164345	50.0000	50
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.917	2.917	(0.550)	171270	50.0000	50
12	Acetone	58	2.953	2.953	(0.557)	13888	50.0000	49
13	Iodomethane	142	3.052	3.052	(0.576)	184046	50.0000	48
14	Carbon Disulfide	76	3.114	3.114	(0.587)	490980	50.0000	51
15	Acetonitrile	41	3.207	3.207	(0.605)	200393	500.000	540(A)
16	Allyl Chloride	39	3.207	3.207	(0.605)	168107	50.0000	48
17	Methyl Acetate	43	3.210	3.210	(0.605)	94076	50.0000	51
18	Methylene Chloride	84	3.300	3.300	(0.622)	176394	50.0000	45
19	tert-Butanol	59	3.364	3.364	(0.634)	28444	100.000	96
20	Acrylonitrile	53	3.490	3.490	(0.658)	49942	50.0000	54
21	trans-1,2-Dichloroethene	96	3.522	3.522	(0.664)	178434	50.0000	50
22	Methyl tert-butyl ether	73	3.512	3.512	(0.662)	545999	50.0000	50

Data File: \\avogadro\organics\V8.I\121218A.B\V8B7073.d
Report Date: 19-Dec-2012 09:57

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 1,1-Dichloroethane	63	3.853	3.853	(0.727)	294395	50.0000	50
	24 Vinyl acetate	43	3.882	3.882	(0.732)	420045	50.0000	52
	25 Diisopropyl Ether	45	3.888	3.888	(0.733)	403224	50.0000	50
	26 2-Chloro-1,3-Butadiene	53	3.930	3.930	(0.741)	270545	50.0000	51
	27 Ethyl tert-butyl ether	59	4.181	4.181	(0.788)	528894	50.0000	50
	29 2,2-Dichloropropane	77	4.326	4.326	(0.816)	239290	50.0000	48
	28 cis-1,2-Dichloroethene	96	4.319	4.319	(0.814)	198234	50.0000	51
	30 2-Butanone	72	4.319	4.319	(0.814)	17789	50.0000	50
	32 Propionitrile	54	4.367	4.367	(0.824)	182399	500.000	500(A)
	33 Methacrylonitrile	41	4.499	4.499	(0.848)	145224	100.000	99
	34 Bromochloromethane	128	4.522	4.522	(0.853)	109793	50.0000	49
	31 Tetrahydrofuran	72	4.564	4.564	(0.861)	39720	100.000	99
	35 Chloroform	83	4.573	4.573	(0.862)	365753	50.0000	49
$	36 Dibromofluoromethane	113	4.708	4.708	(0.888)	192341	50.0000	50
	37 1,1,1-Trichloroethane	97	4.750	4.750	(0.896)	355510	50.0000	51
	38 Cyclohexane	56	4.808	4.808	(0.907)	222745	50.0000	51
	39 1,1-Dichloropropene	110	4.888	4.888	(0.922)	99898	50.0000	52
	40 Carbon Tetrachloride	117	4.895	4.895	(0.923)	315149	50.0000	52
	41 Isobutyl Alcohol	43	4.927	4.927	(0.929)	88120	1000.00	990(A)
$	42 1,2-Dichloroethane-d4	102	5.011	5.011	(0.945)	39075	50.0000	50
	43 Benzene	78	5.068	5.068	(0.956)	668006	50.0000	51
	44 1,2-Dichloroethane	62	5.075	5.075	(0.957)	312461	50.0000	51
	45 tert-Amyl methyl ether	73	5.142	5.142	(0.970)	516098	50.0000	51
M	50 1,2-Dichloroethene (Total)	96				376668	100.000	100
*	46 Fluorobenzene	96	5.303	5.303	(1.000)	647809	50.0000	(Q)
	47 Trichloroethene	130	5.631	5.631	(1.062)	224996	50.0000	51
	48 Methylcyclohexane	83	5.818	5.818	(1.097)	253313	50.0000	51
	49 1,2-Dichloropropane	63	5.837	5.837	(1.101)	152569	50.0000	50
	51 Methyl Methacrylate	69	5.911	5.911	(1.115)	128780	50.0000	52
	52 Dibromomethane	93	5.946	5.946	(1.121)	129829	50.0000	51
	53 1,4-Dioxane	88	5.943	5.943	(1.121)	36950	1000.00	960(A)
	54 Bromodichloromethane	83	6.078	6.078	(1.146)	288382	50.0000	52
	55 2-Chloroethyl vinyl ether	63	6.512	6.512	(1.228)	1401	50.0000	57(TQ)
	56 cis-1,3-Dichloropropene	75	6.509	6.509	(1.227)	282754	50.0000	52
	57 4-Methyl-2-pentanone	43	6.644	6.644	(1.253)	112657	50.0000	49
$	58 Toluene-d8	98	6.782	6.782	(0.818)	691220	50.0000	50
	59 Toluene	91	6.850	6.850	(1.292)	787660	50.0000	50
	60 trans-1,3-Dichloropropene	75	7.049	7.049	(1.329)	278155	50.0000	53
	61 Ethyl Methacrylate	69	7.129	7.129	(1.344)	187696	50.0000	51
	62 1,1,2-Trichloroethane	97	7.239	7.239	(1.365)	172228	50.0000	51
	63 Tetrachloroethene	164	7.412	7.412	(0.894)	189624	50.0000	53
	64 1,3-Dichloropropane	76	7.422	7.422	(0.895)	269176	50.0000	51
	65 2-Hexanone	43	7.493	7.493	(0.904)	79020	50.0000	50
	66 Dibromochloromethane	129	7.660	7.660	(0.924)	243625	50.0000	52
	67 1,2-Dibromoethane	107	7.795	7.795	(0.940)	199016	50.0000	51
	69 1-Chlorohexane	91	8.281	8.281	(0.999)	252118	50.0000	51
*	68 Chlorobenzene-d5	117	8.290	8.290	(1.000)	558385	50.0000	
	70 Chlorobenzene	112	8.319	8.319	(1.003)	556733	50.0000	51
	71 1,1,1,2-Tetrachloroethane	131	8.403	8.403	(1.014)	217205	50.0000	52
	72 Ethylbenzene	106	8.435	8.435	(1.017)	281373	50.0000	51
	73 m,p-Xylene	106	8.563	8.563	(1.033)	687093	100.000	100
	74 o-Xylene	106	9.010	9.010	(1.087)	342415	50.0000	52
	75 Styrene	104	9.023	9.023	(1.088)	570995	50.0000	52
	76 Bromoform	173	9.229	9.229	(1.113)	135736	50.0000	54

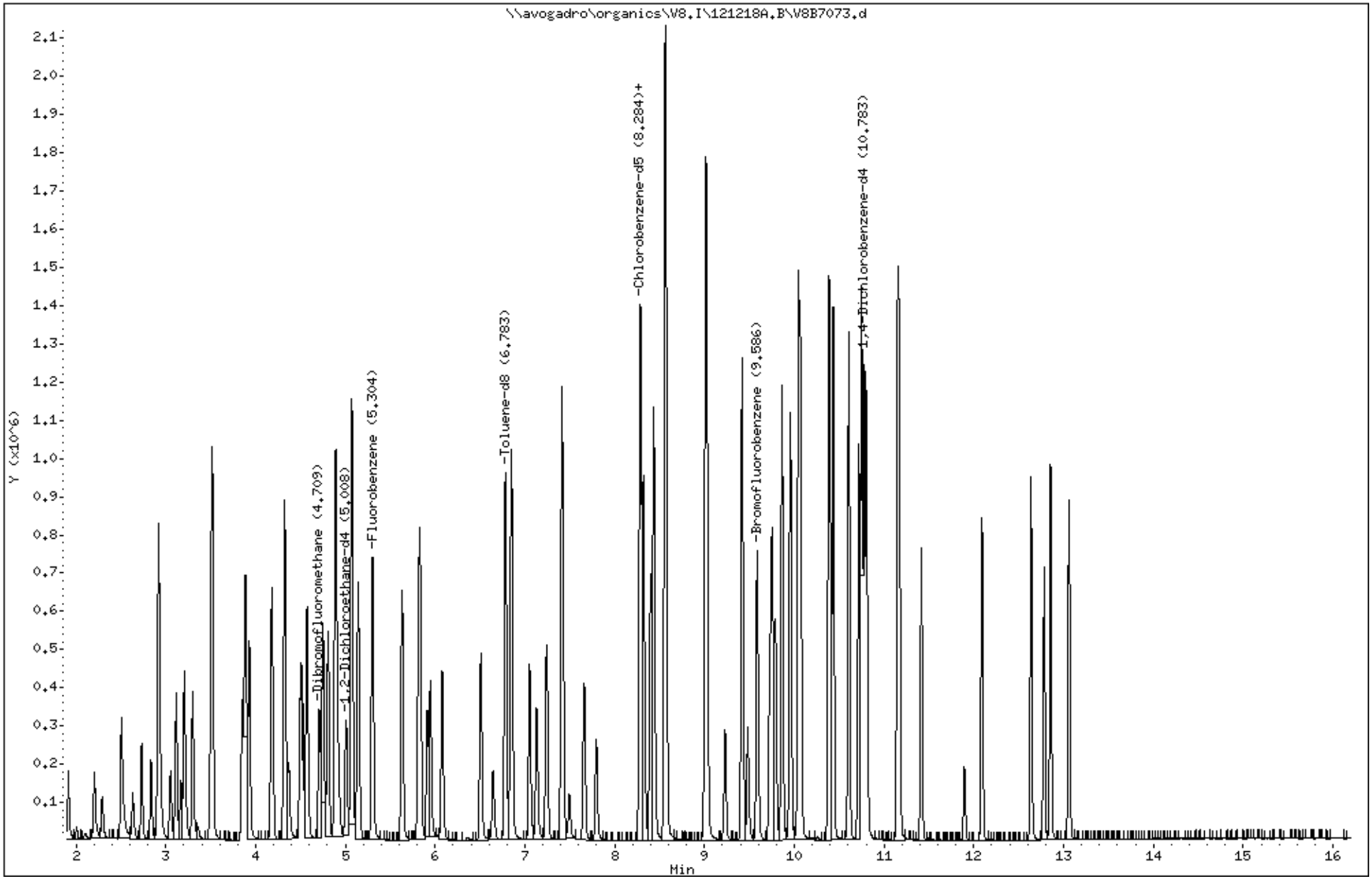
Data File: \\avogadro\organics\V8.I\121218A.B\V8B7073.d
Report Date: 19-Dec-2012 09:57

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	77 Isopropylbenzene	105	9.419	9.419	(1.136)	911250	50.0000	52
	78 trans-1,4-Dichloro-2-butene	75	9.483	9.483	(1.144)	62356	50.0000	49
$	79 Bromofluorobenzene	95	9.586	9.586	(1.156)	295823	50.0000	50
	80 1,1,2,2-Tetrachloroethane	83	9.727	9.727	(0.902)	213261	50.0000	49
	81 Bromobenzene	156	9.753	9.753	(0.905)	229231	50.0000	51
	82 1,2,3-Trichloropropane	75	9.782	9.782	(0.907)	275844	50.0000	49
	83 n-Propylbenzene	120	9.862	9.862	(0.915)	242919	50.0000	52
	84 2-Chlorotoluene	126	9.956	9.956	(0.923)	231409	50.0000	51
	85 1,3,5-Trimethylbenzene	105	10.046	10.046	(0.932)	788673	50.0000	50
	86 4-Chlorotoluene	126	10.068	10.068	(0.934)	237490	50.0000	51
M	94 Xylene (Total)	106				1029508	150.000	160
	87 tert-Butylbenzene	119	10.387	10.387	(0.963)	765936	50.0000	51
	88 1,2,4-Trimethylbenzene	105	10.435	10.435	(0.968)	793394	50.0000	52
	89 sec-Butylbenzene	105	10.608	10.608	(0.984)	922337	50.0000	52
	90 1,3-Dichlorobenzene	146	10.718	10.718	(0.994)	420295	50.0000	50
	91 4-Isopropyltoluene	119	10.750	10.750	(0.997)	808026	50.0000	52
*	92 1,4-Dichlorobenzene-d4	152	10.782	10.782	(1.000)	288178	50.0000	
	93 1,4-Dichlorobenzene	146	10.805	10.805	(1.002)	431175	50.0000	50
	95 n-Butylbenzene	91	11.152	11.152	(1.034)	668794	50.0000	53
	96 1,2-Dichlorobenzene	146	11.168	11.168	(1.036)	411548	50.0000	51
	97 Hexachloroethane	117	11.415	11.415	(1.059)	158528	50.0000	53
	98 1,2-Dibromo-3-chloropropane	75	11.895	11.895	(1.103)	47657	50.0000	49
	141 1,3,5-Trichlorobenzene	182	12.091	12.091	(2.280)	214106	50.0000	52(A)
	99 1,2,4-Trichlorobenzene	180	12.637	12.637	(1.172)	252139	50.0000	52
	100 Hexachlorobutadiene	225	12.782	12.782	(1.185)	114967	50.0000	54
	101 Naphthalene	128	12.856	12.856	(1.192)	720571	50.0000	49
	102 1,2,3-Trichlorobenzene	180	13.058	13.058	(1.211)	234362	50.0000	50

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\V8.I\121218A.B\V8B7073.d
Date : 19-DEC-2012 01:24
Client ID: VICV05010K
Instrument: V8.i
Sample Info: 5ML,VICV05010K,VICV05010K
Purge Volume: 5.0
Operator: V10 SRC: V10
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V8.I\121219.B\V8B7111.d
Report Date: 20-Dec-2012 13:23

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V8.I\121219.B\V8B7111.d
Lab Smp Id: VSTD05010M Client Smp ID: VSTD05010M
Inj Date : 19-DEC-2012 15:01
Operator : V10 Inst ID: V8.i
Smp Info : 5ML,VSTD05010M,VSTD05010M
Misc Info :
Comment   :
Method   : \\avogadro\organics\V8.I\121219.B\v108260Gadd-6lvl.m
Meth Date : 20-Dec-2012 13:22 adatta Quant Type: ISTD
Cal Date : 19-DEC-2012 00:30 Cal File: V8B7072.d
Als bottle: 100 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET105

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.644	1.647	(0.310)	171634	50.0000	56
2	Freon114	85	1.766	1.763	(0.333)	160487	50.0000	60
3	Chloromethane	50	1.814	1.814	(0.342)	117068	50.0000	52
4	Vinyl Chloride	62	1.914	1.914	(0.361)	129535	50.0000	52
5	Bromomethane	94	2.200	2.203	(0.415)	106799	50.0000	65
6	Chloroethane	64	2.294	2.290	(0.433)	73088	50.0000	48
7	Trichlorofluoromethane	101	2.506	2.506	(0.473)	291288	50.0000	55
126	Ethanol	46	2.634	2.631	(0.497)	36287	5000.00	5500(A)
8	Ether	59	2.731	2.731	(0.515)	114105	50.0000	53
9	Acrolein	56	2.834	2.834	(0.535)	138200	250.000	260(A)
10	1,1-Dichloroethene	96	2.924	2.924	(0.552)	160159	50.0000	52
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.917	2.917	(0.550)	184206	50.0000	57
12	Acetone	58	2.953	2.949	(0.557)	14434	50.0000	55
13	Iodomethane	142	3.052	3.052	(0.576)	159389	50.0000	44
14	Carbon Disulfide	76	3.113	3.117	(0.587)	495136	50.0000	55
15	Acetonitrile	41	3.207	3.203	(0.605)	190529	500.000	540(A)
16	Allyl Chloride	39	3.203	3.203	(0.604)	173306	50.0000	53
17	Methyl Acetate	43	3.213	3.213	(0.606)	93560	50.0000	54
18	Methylene Chloride	84	3.300	3.300	(0.623)	171526	50.0000	47
19	tert-Butanol	59	3.361	3.361	(0.634)	31836	100.000	110
20	Acrylonitrile	53	3.486	3.490	(0.658)	47386	50.0000	55
21	trans-1,2-Dichloroethene	96	3.519	3.519	(0.664)	179827	50.0000	54

Data File: \\avogadro\organics\V8.I\121219.B\V8B7111.d
Report Date: 20-Dec-2012 13:23

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	22 Methyl tert-butyl ether	73	3.509	3.512	(0.662)	549841	50.0000	54
	23 1,1-Dichloroethane	63	3.853	3.853	(0.727)	288781	50.0000	52
	24 Vinyl acetate	43	3.879	3.879	(0.732)	440497	50.0000	58
	25 Diisopropyl Ether	45	3.888	3.888	(0.734)	393070	50.0000	53
	26 2-Chloro-1,3-Butadiene	53	3.927	3.927	(0.741)	270183	50.0000	54
	27 Ethyl tert-butyl ether	59	4.181	4.181	(0.789)	525277	50.0000	53
	29 2,2-Dichloropropane	77	4.326	4.326	(0.816)	329705	50.0000	70
	28 cis-1,2-Dichloroethene	96	4.322	4.322	(0.816)	195819	50.0000	54
	30 2-Butanone	72	4.322	4.319	(0.816)	19715	50.0000	59
	32 Propionitrile	54	4.367	4.367	(0.824)	181793	500.000	540(A)
	33 Methacrylonitrile	41	4.499	4.496	(0.849)	145406	100.000	110
	34 Bromochloromethane	128	4.519	4.522	(0.853)	105467	50.0000	51
	31 Tetrahydrofuran	72	4.564	4.560	(0.861)	40356	100.000	110
	35 Chloroform	83	4.573	4.573	(0.863)	363570	50.0000	52
$	36 Dibromofluoromethane	113	4.711	4.708	(0.889)	185281	50.0000	51
	37 1,1,1-Trichloroethane	97	4.750	4.750	(0.896)	356193	50.0000	55
	38 Cyclohexane	56	4.808	4.808	(0.907)	224405	50.0000	55
	39 1,1-Dichloropropene	110	4.888	4.888	(0.922)	97926	50.0000	55
	40 Carbon Tetrachloride	117	4.895	4.895	(0.924)	319659	50.0000	57
	41 Isobutyl Alcohol	43	4.924	4.924	(0.929)	89395	1000.00	1100(A)
$	42 1,2-Dichloroethane-d4	102	5.007	5.010	(0.945)	36527	50.0000	50
	43 Benzene	78	5.072	5.068	(0.957)	645394	50.0000	52
	44 1,2-Dichloroethane	62	5.072	5.072	(0.957)	310991	50.0000	54
	45 tert-Amyl methyl ether	73	5.146	5.142	(0.971)	507269	50.0000	54
M	50 1,2-Dichloroethene (Total)	96				375646	100.000	110
*	46 Fluorobenzene	96	5.300	5.303	(1.000)	605051	50.0000	(Q)
	47 Trichloroethene	130	5.631	5.631	(1.062)	224058	50.0000	54
	48 Methylcyclohexane	83	5.821	5.821	(1.098)	274073	50.0000	59
	49 1,2-Dichloropropane	63	5.834	5.837	(1.101)	149378	50.0000	53
	51 Methyl Methacrylate	69	5.911	5.911	(1.115)	126683	50.0000	55
	52 Dibromomethane	93	5.946	5.946	(1.122)	128992	50.0000	54
	53 1,4-Dioxane	88	5.946	5.946	(1.122)	41101	1000.00	1100(A)
	54 Bromodichloromethane	83	6.078	6.078	(1.147)	282345	50.0000	54
	55 2-Chloroethyl vinyl ether	63	6.512	6.502	(1.229)	1503	50.0000	65(TQ)
	56 cis-1,3-Dichloropropene	75	6.509	6.506	(1.228)	293200	50.0000	57
	57 4-Methyl-2-pentanone	43	6.644	6.647	(1.254)	115000	50.0000	54
$	58 Toluene-d8	98	6.782	6.782	(0.818)	661331	50.0000	49
	59 Toluene	91	6.850	6.850	(1.292)	776415	50.0000	53
	60 trans-1,3-Dichloropropene	75	7.049	7.052	(1.330)	288399	50.0000	59
	61 Ethyl Methacrylate	69	7.129	7.129	(1.345)	186671	50.0000	54
	62 1,1,2-Trichloroethane	97	7.242	7.245	(1.366)	170806	50.0000	54
	63 Tetrachloroethene	164	7.412	7.412	(0.894)	163128	50.0000	47
	64 1,3-Dichloropropane	76	7.419	7.422	(0.895)	264059	50.0000	52
	65 2-Hexanone	43	7.493	7.493	(0.904)	84579	50.0000	56
	66 Dibromochloromethane	129	7.660	7.660	(0.924)	247490	50.0000	54
	67 1,2-Dibromoethane	107	7.795	7.795	(0.940)	200975	50.0000	53
	69 1-Chlorohexane	91	8.277	8.280	(0.998)	258475	50.0000	54
*	68 Chlorobenzene-d5	117	8.290	8.290	(1.000)	541492	50.0000	
	70 Chlorobenzene	112	8.322	8.319	(1.004)	561748	50.0000	53
	71 1,1,1,2-Tetrachloroethane	131	8.403	8.403	(1.014)	220262	50.0000	54
	72 Ethylbenzene	106	8.435	8.435	(1.017)	287548	50.0000	54
	73 m,p-Xylene	106	8.563	8.563	(1.033)	708170	100.000	110
	74 o-Xylene	106	9.010	9.010	(1.087)	341505	50.0000	54
	75 Styrene	104	9.023	9.023	(1.088)	576949	50.0000	54

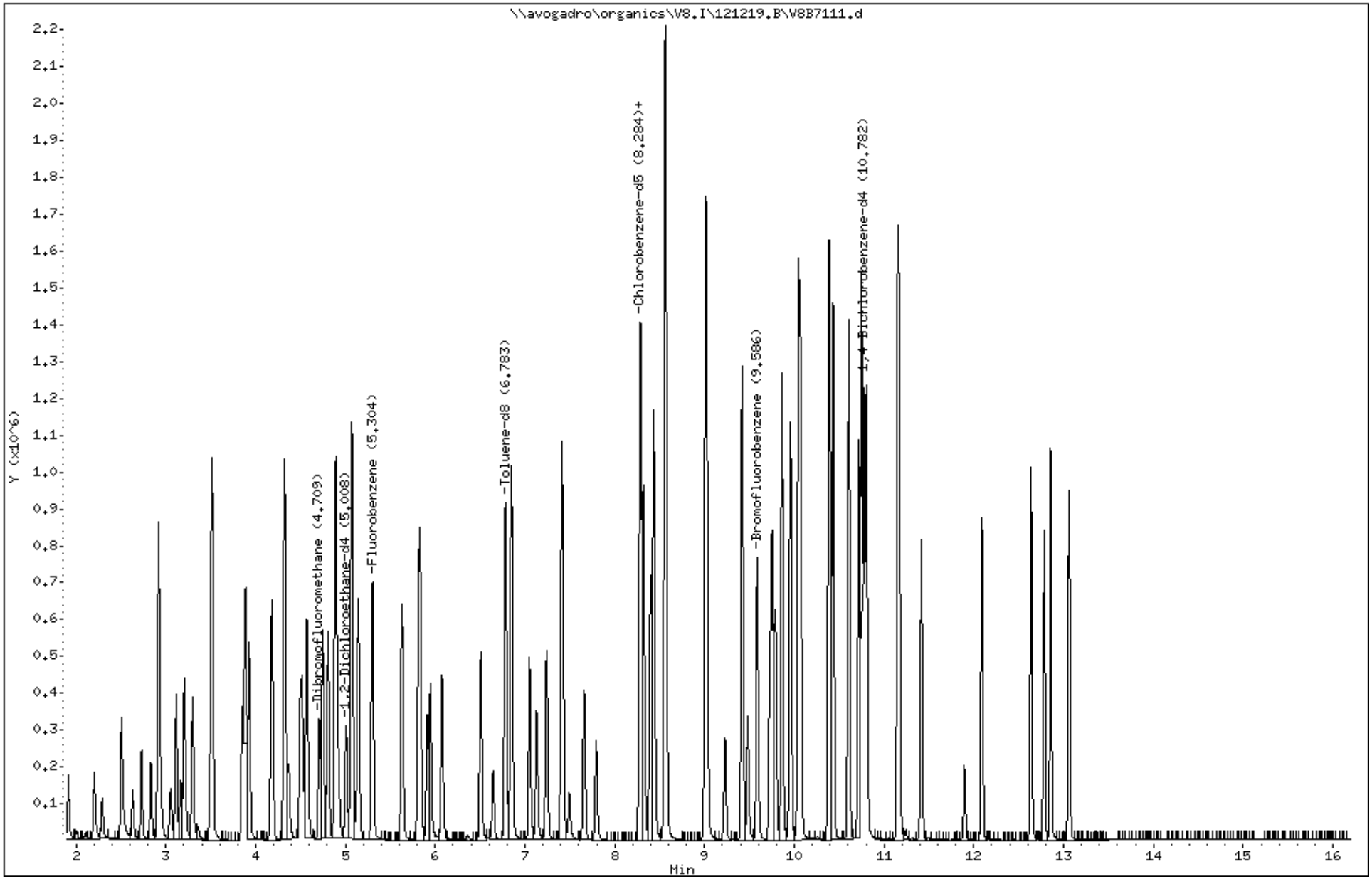
Data File: \\avogadro\organics\V8.I\121219.B\V8B7111.d
Report Date: 20-Dec-2012 13:23

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	76	Bromoform	173	9.229	9.229	(1.113)	135066	50.0000	55
	77	Isopropylbenzene	105	9.419	9.419	(1.136)	936707	50.0000	55
	78	trans-1,4-Dichloro-2-butene	75	9.483	9.483	(1.144)	69861	50.0000	57
$	79	Bromofluorobenzene	95	9.586	9.586	(1.156)	291016	50.0000	51
	80	1,1,2,2-Tetrachloroethane	83	9.727	9.727	(0.902)	216506	50.0000	51
	81	Bromobenzene	156	9.753	9.753	(0.905)	235764	50.0000	53
	82	1,2,3-Trichloropropane	75	9.785	9.785	(0.908)	290447	50.0000	53
	83	n-Propylbenzene	120	9.862	9.862	(0.915)	250971	50.0000	55
	84	2-Chlorotoluene	126	9.959	9.959	(0.924)	235780	50.0000	54
	85	1,3,5-Trimethylbenzene	105	10.049	10.046	(0.932)	818794	50.0000	54
	86	4-Chlorotoluene	126	10.071	10.071	(0.934)	244667	50.0000	54
M	94	Xylene (Total)	106				1049675	150.000	160
	87	tert-Butylbenzene	119	10.386	10.386	(0.963)	821014	50.0000	56
	88	1,2,4-Trimethylbenzene	105	10.431	10.431	(0.967)	828153	50.0000	56
	89	sec-Butylbenzene	105	10.605	10.608	(0.984)	963366	50.0000	55
	90	1,3-Dichlorobenzene	146	10.718	10.718	(0.994)	436551	50.0000	54
	91	4-Isopropyltoluene	119	10.750	10.750	(0.997)	862641	50.0000	56
*	92	1,4-Dichlorobenzene-d4	152	10.782	10.782	(1.000)	281489	50.0000	
	93	1,4-Dichlorobenzene	146	10.804	10.804	(1.002)	449271	50.0000	53
	95	n-Butylbenzene	91	11.152	11.152	(1.034)	723173	50.0000	59
	96	1,2-Dichlorobenzene	146	11.168	11.171	(1.036)	422576	50.0000	53
	97	Hexachloroethane	117	11.415	11.415	(1.059)	163844	50.0000	56
	98	1,2-Dibromo-3-chloropropane	75	11.894	11.894	(1.103)	49393	50.0000	52
	141	1,3,5-Trichlorobenzene	182	12.091	12.091	(2.281)	230465	50.0000	60(A)
	99	1,2,4-Trichlorobenzene	180	12.637	12.637	(1.172)	270556	50.0000	57
	100	Hexachlorobutadiene	225	12.785	12.782	(1.186)	130879	50.0000	63
	101	Naphthalene	128	12.853	12.856	(1.192)	775490	50.0000	54
	102	1,2,3-Trichlorobenzene	180	13.058	13.058	(1.211)	253077	50.0000	55

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\V8.I\121219.B\V8B7111.d
Date : 19-DEC-2012 15:01
Client ID: VSTD05010M
Instrument: V8.i
Sample Info: 5ML,VSTD05010M,VSTD05010M
Purge Volume: 5.0
Operator: V10
Column phase: DB-624
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\V1.I\121213A.B\V1M9620.D
Lab Smp Id: BFB1Q Client Smp ID: BFB1Q
Inj Date : 13-DEC-2012 17:40
Operator : AM SRC: AM Inst ID: V1.i
Smp Info : 5ML,BFB1Q,BFB1Q
Misc Info :
Comment :
Method : \\avogadro\organics\V1.I\121213A.B\bfb8260.m
Meth Date : 14-Dec-2012 13:15 canderson 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: SOIL
Processing Host: TARGET102

Concentration Formula: Amt * DF * Uf * Vf * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	REL RT	MASS	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.767	8.760	(0.000)	95	139672			0.00- 100.00	100.00
8.767	8.760	(0.000)	50	26993			15.00- 40.00	19.33
8.767	8.760	(0.000)	75	61764			30.00- 60.00	44.22
8.767	8.760	(0.000)	96	9849			5.00- 9.00	7.05
8.767	8.760	(0.000)	173	0	0.0	0.0	0.00- 2.00	0.00
8.767	8.760	(0.000)	174	81346			50.00- 0.00	58.24
8.767	8.760	(0.000)	175	5186			5.00- 9.00	6.38
8.767	8.760	(0.000)	176	77290			95.00- 101.00	95.01
8.767	8.760	(0.000)	177	4903			5.00- 9.00	6.34

Data File: \\avogadro\organics\V1.I\121213A.B\V1M9620.D

Date : 13-DEC-2012 17:40

Client ID: BFB1Q

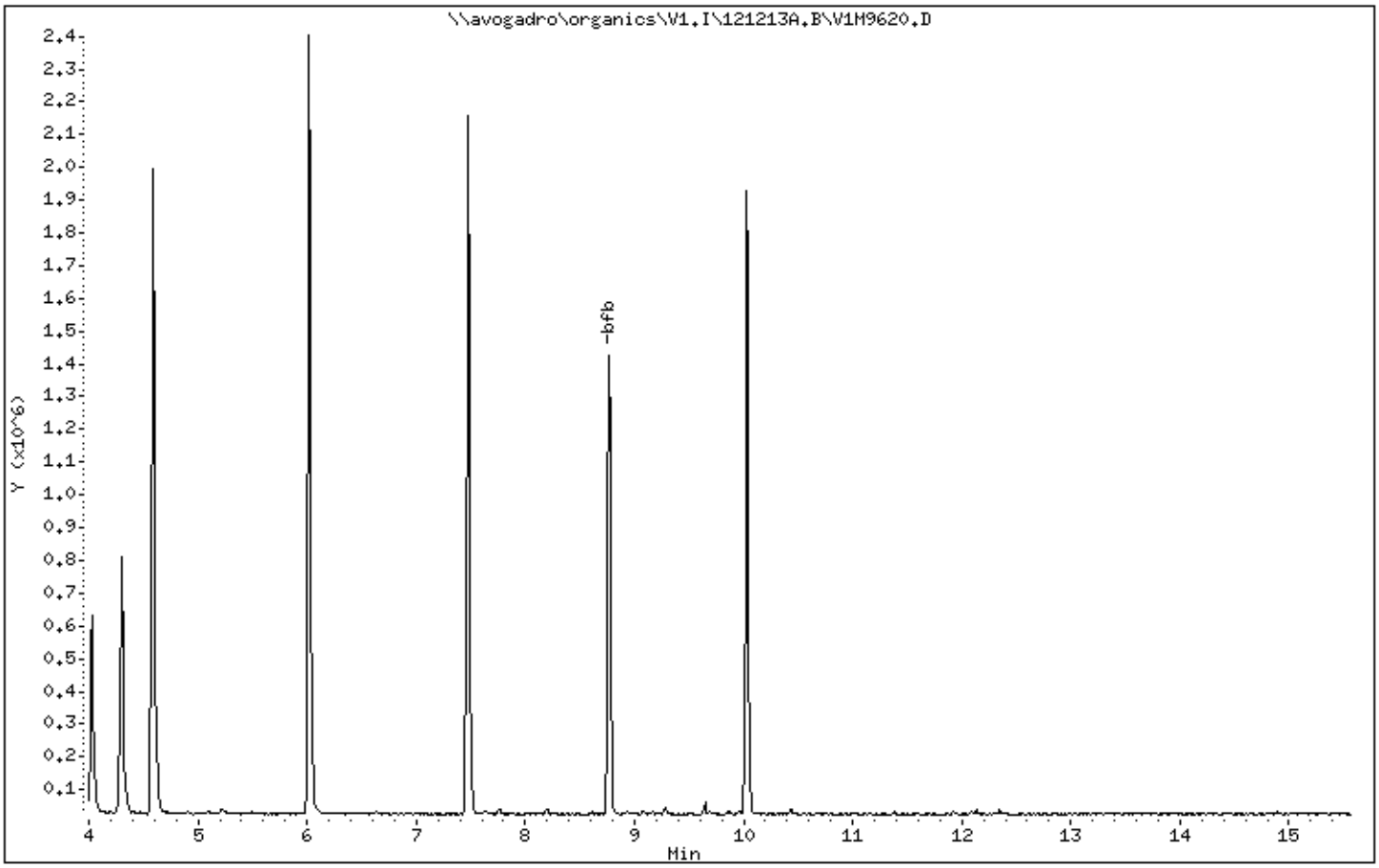
Instrument: V1.i

Sample Info: 5ML,BFB1Q,BFB1Q

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25



Data File: \\avogadro\organics\V1.I\121213A.B\V1M9620.D

Date : 13-DEC-2012 17:40

Client ID: BFB1Q

Instrument: V1.i

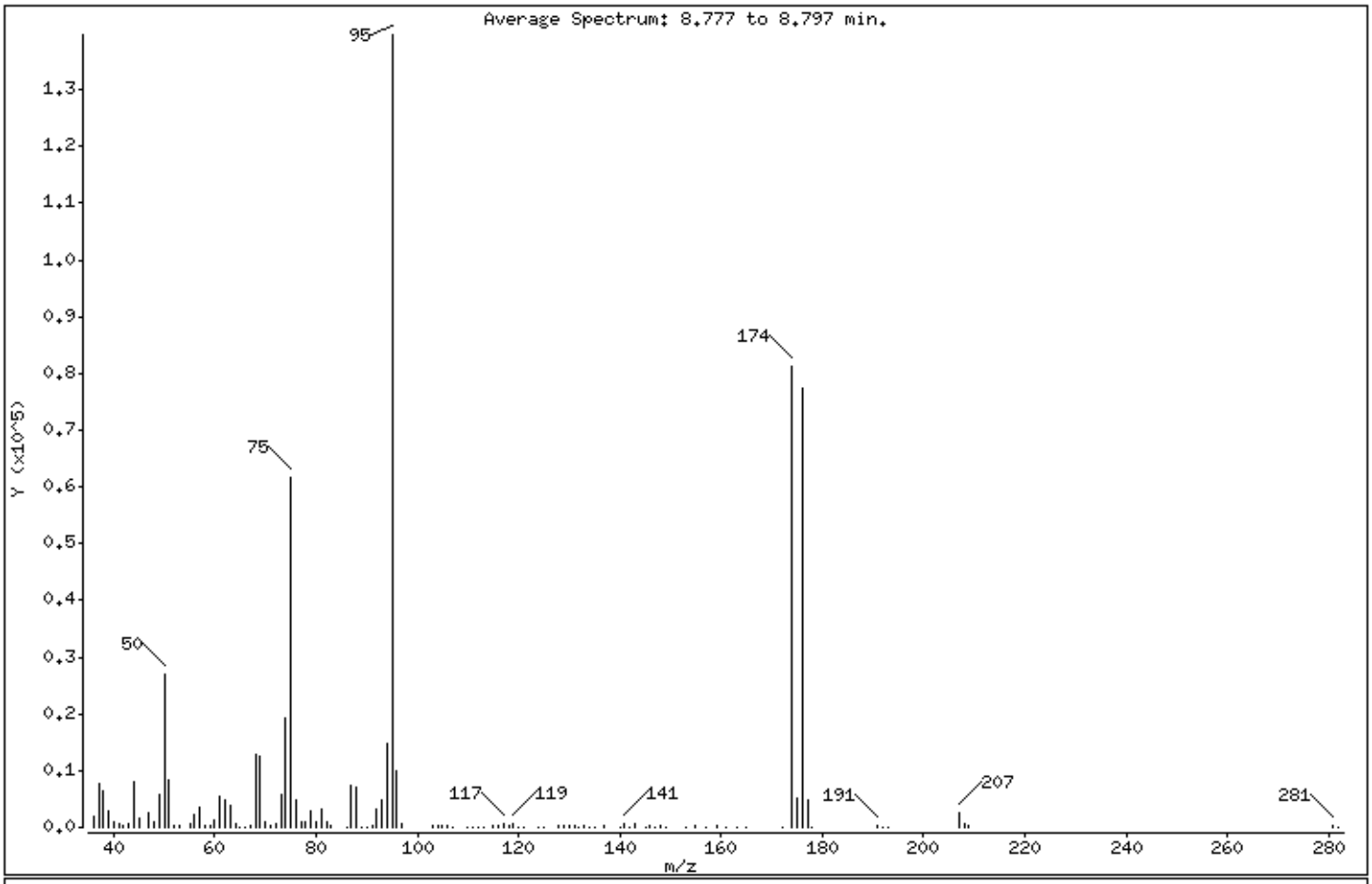
Sample Info: 5ML,BFB1Q,BFB1Q

Operator: AM SRC: AM

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	19.33
75	30.00 - 60.00% of mass 95	44.22
96	5.00 - 9.00% of mass 95	7.05
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	58.24
175	5.00 - 9.00% of mass 174	3.71 (6.38)
176	95.00 - 101.00% of mass 174	55.34 (95.01)
177	5.00 - 9.00% of mass 176	3.51 (6.34)

Date : 13-DEC-2012 17:40

Client ID: BFB1Q Instrument: V1.i

Sample Info: 5ML,BFB1Q,BFB1Q

Operator: AM SRC: AM

Column phase: DB-624 Column diameter: 0.25

Data File: V1M9620.D
Spectrum: Average Spectrum: 8.777 to 8.797 min.
Location of Maximum: 95.00
Number of points: 115

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1851	67.00	209	103.00	277	142.00	51
37.00	7743	68.00	12825	104.00	393	143.00	608
38.00	6456	69.00	12390	105.00	260	145.00	45
39.00	2843	70.00	1075	106.00	379	146.00	175
40.00	1055	71.00	180	107.00	55	147.00	144
41.00	782	72.00	758	110.00	47	148.00	285
42.00	407	73.00	5726	111.00	50	149.00	134
43.00	529	74.00	19192	112.00	42	153.00	81
44.00	7900	75.00	61760	113.00	35	155.00	225
45.00	1734	76.00	4655	115.00	198	157.00	81
47.00	2490	77.00	960	116.00	356	159.00	173
48.00	902	78.00	933	117.00	630	161.00	142
49.00	5930	79.00	2978	118.00	282	163.00	71
50.00	26992	80.00	1017	119.00	554	165.00	34
51.00	8337	81.00	3194	120.00	34	172.00	37
52.00	286	82.00	941	121.00	35	174.00	81344
53.00	203	83.00	194	124.00	91	175.00	5186
55.00	700	86.00	39	125.00	85	176.00	77288
56.00	2097	87.00	7518	128.00	370	177.00	4903
57.00	3566	88.00	7025	129.00	171	178.00	136
58.00	213	89.00	51	130.00	426	191.00	331
59.00	197	90.00	38	131.00	205	192.00	130
60.00	1358	91.00	463	132.00	35	193.00	110
61.00	5399	92.00	3177	133.00	361	207.00	2636
62.00	4944	93.00	4697	134.00	50	208.00	586
63.00	3827	94.00	14716	135.00	157	209.00	335
64.00	496	95.00	139648	137.00	176	281.00	268
65.00	54	96.00	9849	140.00	42	282.00	47
66.00	110	97.00	512	141.00	664		

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\V1.I\121217.B\V1M9701.D
Lab Smp Id: BFB1T Client Smp ID: BFB1T
Inj Date : 17-DEC-2012 09:42
Operator : AM SRC: AM Inst ID: V1.i
Smp Info : 5ML,BFB1T,BFB1T
Misc Info :
Comment :
Method : \\avogadro\organics\V1.I\121217.B\bfb8260.m
Meth Date : 17-Dec-2012 09:14 canderson 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

Concentration Formula: Amt * DF * Uf * Vf / Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	REL RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.787	8.800	(0.000)	95	185536			0.00- 100.00	100.00
8.787	8.800	(0.000)	50	35184			15.00- 40.00	18.96
8.787	8.800	(0.000)	75	83912			30.00- 60.00	45.23
8.787	8.800	(0.000)	96	11880			5.00- 9.00	6.40
8.787	8.800	(0.000)	173	689			0.00- 2.00	0.64
8.787	8.800	(0.000)	174	106856			50.00- 0.00	57.59
8.787	8.800	(0.000)	175	6464			5.00- 9.00	6.05
8.787	8.800	(0.000)	176	101944			95.00- 101.00	95.40
8.787	8.800	(0.000)	177	5959			5.00- 9.00	5.85

Data File: \\avogadro\organics\V1.I\121217.B\V1M9701.D

Date : 17-DEC-2012 09:42

Client ID: BFB1T

Instrument: V1.i

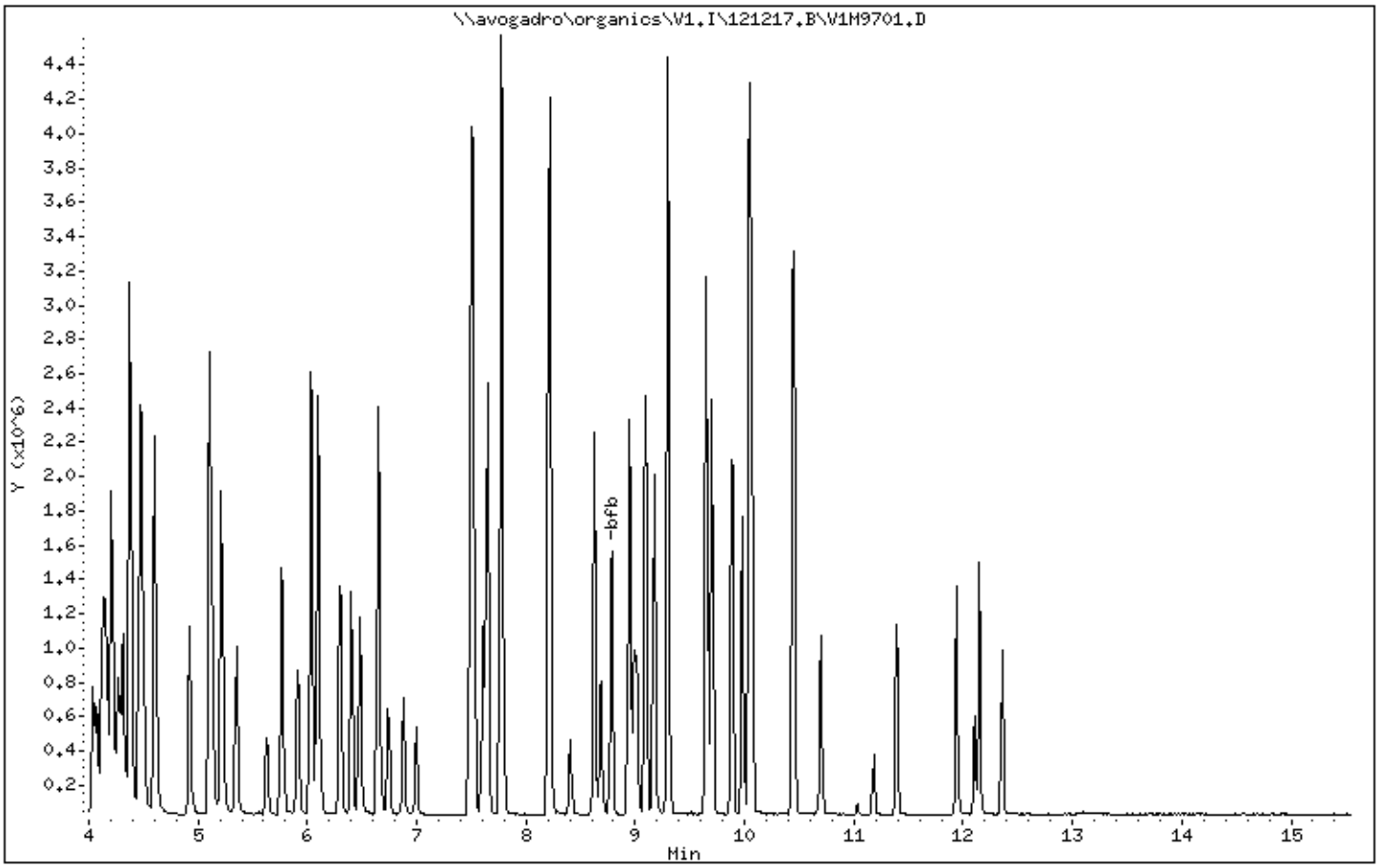
Sample Info: 5ML,BFB1T,BFB1T

Volume Injected (uL): 2.0

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25



Data File: \\avogadro\organics\V1.I\121217.B\V1M9701.D

Date : 17-DEC-2012 09:42

Client ID: BFB1T

Instrument: V1.i

Sample Info: 5ML,BFB1T,BFB1T

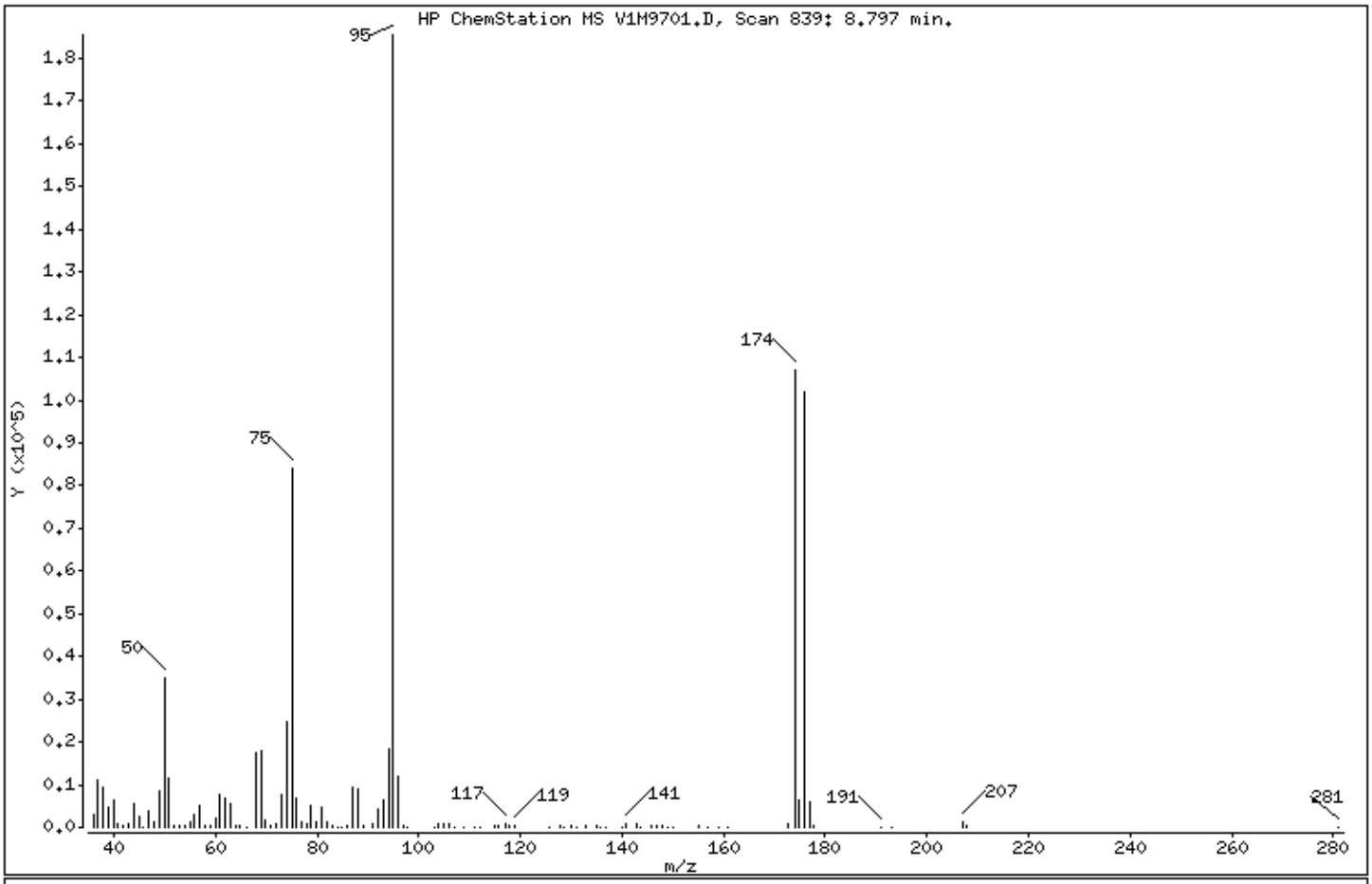
Volume Injected (uL): 2.0

Operator: AM SRC: AM

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	18.96
75	30.00 - 60.00% of mass 95	45.23
96	5.00 - 9.00% of mass 95	6.40
173	Less than 2.00% of mass 174	0.37 (0.64)
174	Greater than 50.00% of mass 95	57.59
175	5.00 - 9.00% of mass 174	3.48 (6.05)
176	95.00 - 101.00% of mass 174	54.95 (95.40)
177	5.00 - 9.00% of mass 176	3.21 (5.85)

Date : 17-DEC-2012 09:42

Client ID: BFB1T Instrument: V1.i

Sample Info: 5ML,BFB1T,BFB1T

Volume Injected (uL): 2.0 Operator: AM SRC: AM

Column phase: DB-624 Column diameter: 0.25

Data File: V1M9701.D
Spectrum: HP ChemStation MS V1M9701.D, Scan 839: 8.797 min.
Location of Maximum: 95.05
Number of points: 107

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2907	63.00	5340	92.00	4160	135.90	104
36.85	11288	64.10	453	92.95	6580	137.00	136
37.95	9388	64.85	241	94.05	18496	140.05	159
38.95	4630	66.05	155	95.05	185536	140.90	931
39.90	6514	68.00	17600	96.00	11880	142.90	701
40.90	1011	69.00	17752	96.90	433	143.65	143
41.95	550	69.95	1547	97.90	111	145.85	257
43.05	1040	70.85	237	103.10	190	146.90	326
43.95	5630	71.95	972	103.95	655	148.00	216
44.90	2533	73.00	7497	104.95	825	148.85	100
45.80	178	74.00	24928	105.95	658	149.95	124
46.90	3935	75.00	83912	106.90	131	154.95	271
47.95	1319	75.95	6902	109.00	147	156.85	174
48.95	8431	76.85	1422	110.95	212	159.00	101
49.95	35184	77.95	1035	111.95	164	160.75	172
50.90	11399	78.90	5039	115.00	229	172.85	689
51.90	573	79.90	1454	115.85	485	173.95	106856
53.00	322	80.90	4622	116.95	899	174.90	6464
53.95	215	81.95	1283	117.85	432	175.90	101944
55.05	1105	82.95	406	118.80	565	176.90	5959
55.90	2790	84.05	141	125.70	101	177.85	249
57.00	5058	85.00	144	127.85	482	190.95	186
57.90	272	86.00	398	128.75	165	193.00	119
58.95	248	86.95	9429	129.90	503	206.95	1153
60.05	1946	87.95	8939	131.10	132	208.00	394
60.95	7682	89.15	244	132.95	318	281.05	111
62.00	7008	91.00	1019	134.90	269		

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\V8.I\121218A.B\V8B7064.d
Lab Smp Id: BFB10K Client Smp ID: BFB10K
Inj Date : 18-DEC-2012 20:52
Operator : V10 SRC: V10 Inst ID: V8.i
Smp Info : 5ML,BFB10K,BFB10K
Misc Info :
Comment :
Method : \\avogadro\organics\V8.I\121218A.B\BFBSOM_V10.m
Meth Date : 19-Dec-2012 09:56 adatta Quant Type: ISTD
Cal Date : 25-JAN-2006 16:13 Cal File: V5G4422.D
Als bottle: 2 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET105

Concentration Formula: Amt * DF * Uf * Vf * VI * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
VI	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

RT	EXP RT	REL RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
9.586	9.580	(0.000)	95	178048			0.00- 100.00	100.00
9.586	9.580	(0.000)	50	28840			15.00- 40.00	16.20
9.586	9.580	(0.000)	75	82432			30.00- 80.00	46.30
9.586	9.580	(0.000)	96	12005			5.00- 9.00	6.74
9.586	9.580	(0.000)	173	0	0.0	0.0	0.00- 2.00	0.00
9.586	9.580	(0.000)	174	129064			50.00- 120.00	72.49
9.586	9.580	(0.000)	175	10041			5.00- 9.00	7.78
9.586	9.580	(0.000)	176	125880			95.00- 101.00	97.53
9.586	9.580	(0.000)	177	8643			5.00- 9.00	6.87

Data File: \\avogadro\organics\V8.I\121218A.B\V8B7064.d

Date : 18-DEC-2012 20:52

Client ID: BFB10K

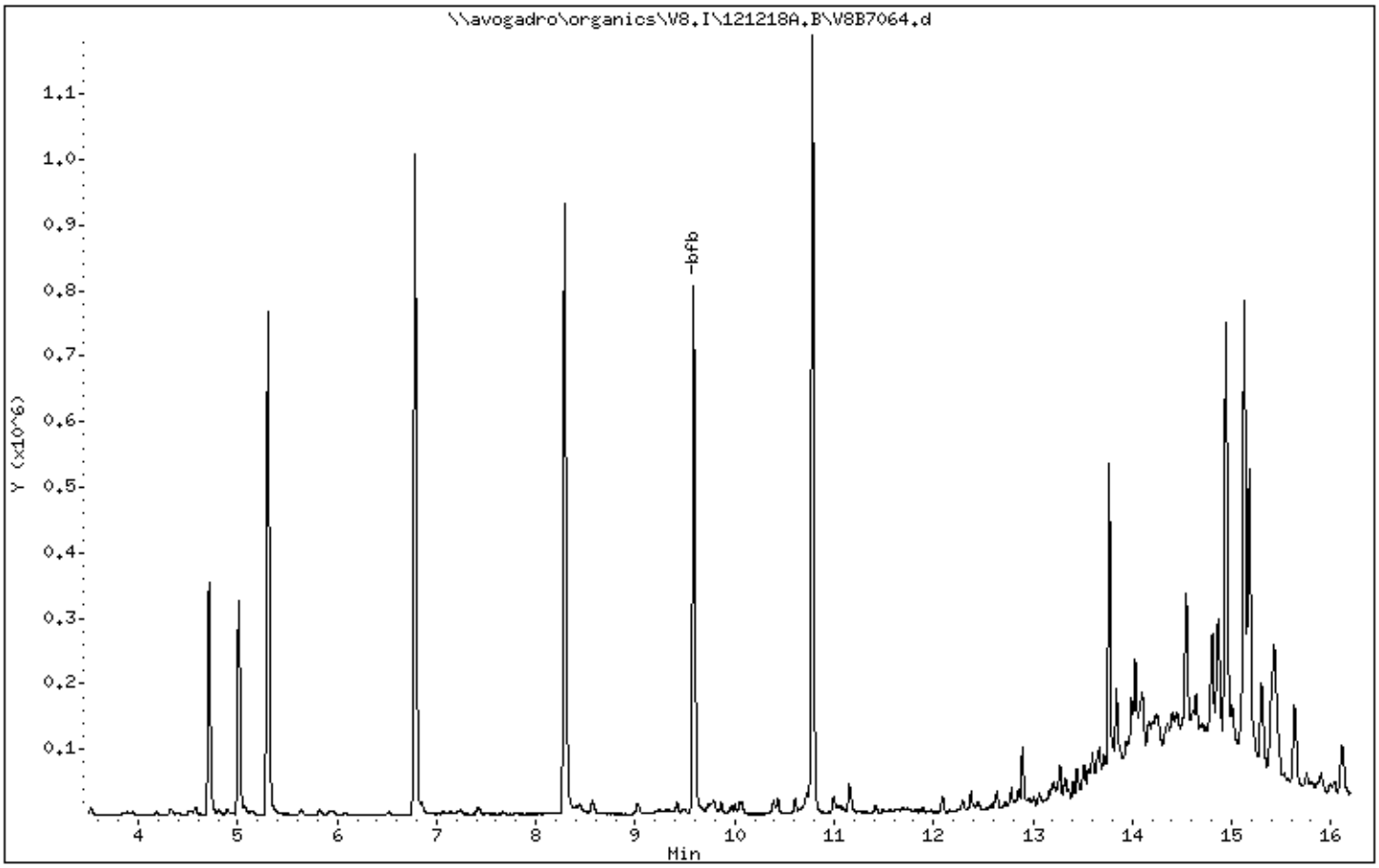
Instrument: V8.i

Sample Info: 5ML,BFB10K,BFB10K

Operator: V10 SRC: V10

Column phase: DB-624

Column diameter: 0.25



Data File: \\avogadro\organics\V8.I\121218A.B\V8B7064.d

Date : 18-DEC-2012 20:52

Client ID: BFB10K

Instrument: V8.i

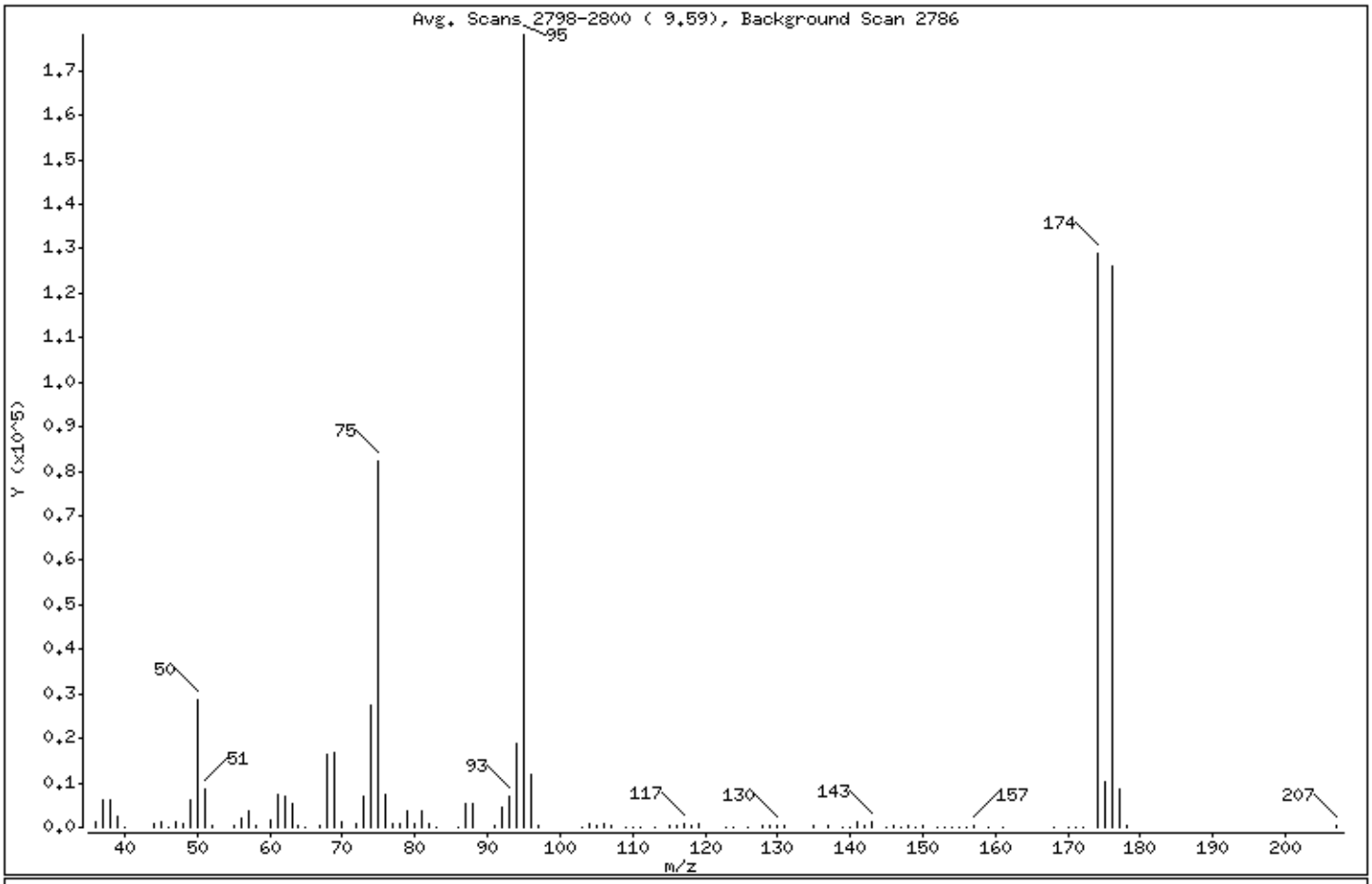
Sample Info: 5ML,BFB10K,BFB10K

Operator: V10 SRC: V10

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	16.20
75	30.00 - 80.00% of mass 95	46.30
96	5.00 - 9.00% of mass 95	6.74
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 120.00% of mass 95	72.49
175	5.00 - 9.00% of mass 174	5.64 (7.78)
176	95.00 - 101.00% of mass 174	70.70 (97.53)
177	5.00 - 9.00% of mass 176	4.85 (6.87)

Date : 18-DEC-2012 20:52

Client ID: BFB10K Instrument: V8.i

Sample Info: 5ML,BFB10K,BFB10K

Operator: V10 SRC: V10

Column phase: DB-624 Column diameter: 0.25

Data File: V8B7064.d
Spectrum: Avg. Scans 2798-2800 (9.59), Background Scan 2786
Location of Maximum: 95.00
Number of points: 102

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1231	69.00	16592	105.00	291	145.00	130
37.00	6278	70.00	1118	106.00	621	146.00	268
38.00	5943	72.00	919	107.00	260	147.00	127
39.00	2286	73.00	6760	109.00	126	148.00	375
40.00	75	74.00	27312	110.00	48	149.00	70
44.00	624	75.00	82432	111.00	124	150.00	214
45.00	1261	76.00	7198	113.00	119	152.00	84
46.00	34	77.00	961	115.00	241	153.00	118
47.00	1207	78.00	632	116.00	551	154.00	182
48.00	872	79.00	3724	117.00	933	155.00	155
49.00	6133	80.00	927	118.00	532	156.00	166
50.00	28840	81.00	3794	119.00	756	157.00	287
51.00	8557	82.00	841	123.00	110	159.00	202
52.00	362	83.00	4	124.00	96	161.00	164
55.00	336	86.00	189	126.00	35	168.00	68
56.00	2133	87.00	5471	128.00	294	170.00	7
57.00	3798	88.00	5321	129.00	315	171.00	34
58.00	244	91.00	501	130.00	594	172.00	84
60.00	1486	92.00	4461	131.00	330	174.00	129064
61.00	7539	93.00	6938	135.00	349	175.00	10041
62.00	7106	94.00	18632	137.00	337	176.00	125880
63.00	5401	95.00	178048	139.00	131	177.00	8643
64.00	528	96.00	12005	140.00	174	178.00	223
65.00	90	97.00	393	141.00	1413	207.00	207
67.00	491	103.00	34	142.00	234		
68.00	16313	104.00	690	143.00	1419		

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\V8.I\121219.B\V8B7110.d
Lab Smp Id: BFB10M Client Smp ID: BFB10M
Inj Date : 19-DEC-2012 14:40
Operator : V10 SRC: V10 Inst ID: V8.i
Smp Info : 5ML,BFB10M,BFB10M
Misc Info :
Comment :
Method : \\avogadro\organics\V8.I\121219.B\BFBSOM_V10.m
Meth Date : 20-Dec-2012 13:21 adatta Quant Type: ISTD
Cal Date : 25-JAN-2006 16:13 Cal File: V5G4422.D
Als bottle: 2 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET105

Concentration Formula: Amt * DF * Uf * Vf * VI * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
VI	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

RT	EXP RT	REL RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
4.874	4.800	(0.000)	95	382144			0.00- 100.00	100.00
4.874	4.800	(0.000)	50	62856			15.00- 40.00	16.45
4.874	4.800	(0.000)	75	184000			30.00- 80.00	48.15
4.874	4.800	(0.000)	96	25872			5.00- 9.00	6.77
4.874	4.800	(0.000)	173	0	0.0	0.0	0.00- 2.00	0.00
4.874	4.800	(0.000)	174	272960			50.00- 120.00	71.43
4.874	4.800	(0.000)	175	19840			5.00- 9.00	7.27
4.874	4.800	(0.000)	176	266112			95.00- 101.00	97.49
4.874	4.800	(0.000)	177	17992			5.00- 9.00	6.76

Data File: \\avogadro\organics\V8.I\121219.B\V8B7110.d

Date : 19-DEC-2012 14:40

Client ID: BFB10M

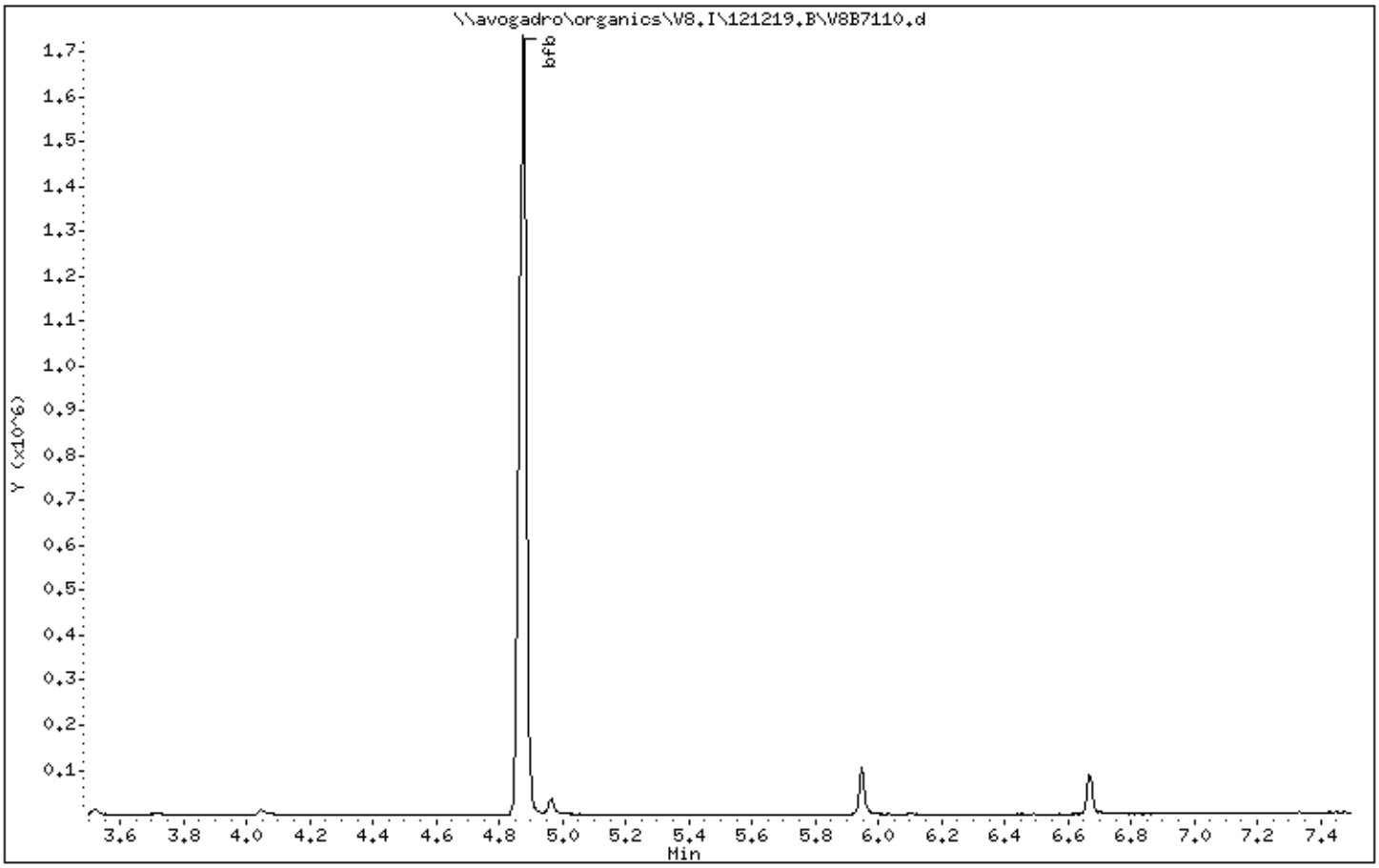
Instrument: V8.i

Sample Info: 5ML,BFB10M,BFB10M

Operator: V10 SRC: V10

Column phase: DB-624

Column diameter: 0.25



Data File: \\avogadro\organics\V8.I\121219.B\V8B7110.d

Date : 19-DEC-2012 14:40

Client ID: BFB10M

Instrument: V8.i

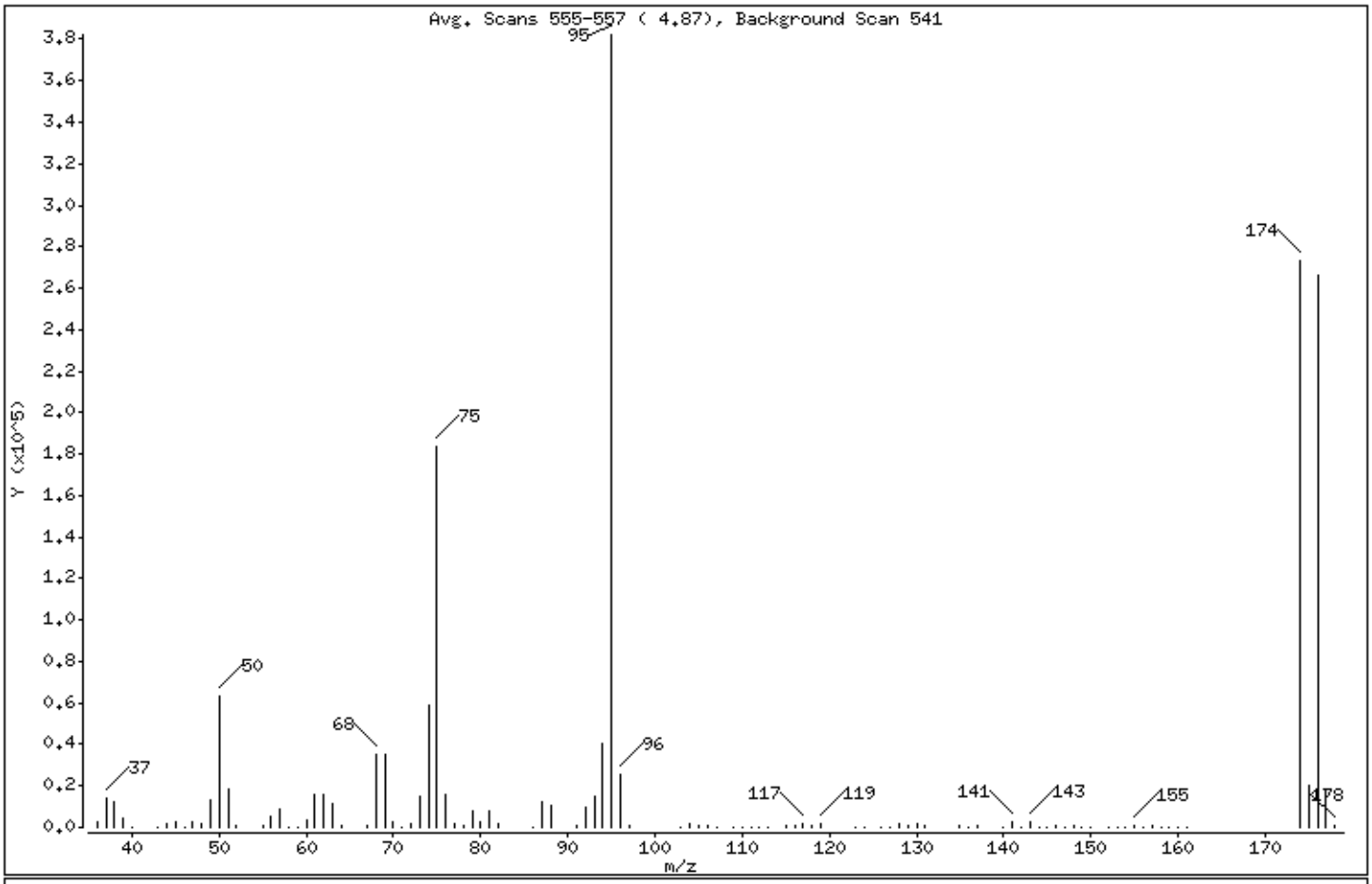
Sample Info: 5ML,BFB10M,BFB10M

Operator: V10 SRC: V10

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	16.45
75	30.00 - 80.00% of mass 95	48.15
96	5.00 - 9.00% of mass 95	6.77
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 120.00% of mass 95	71.43
175	5.00 - 9.00% of mass 174	5.19 (7.27)
176	95.00 - 101.00% of mass 174	69.64 (97.49)
177	5.00 - 9.00% of mass 176	4.71 (6.76)

Date : 19-DEC-2012 14:40

Client ID: BFB10M Instrument: V8.i

Sample Info: 5ML,BFB10M,BFB10M

Operator: V10 SRC: V10

Column phase: DB-624 Column diameter: 0.25

Data File: V8B7110.d
Spectrum: Avg. Scans 555-557 (4.87), Background Scan 541
Location of Maximum: 95.00
Number of points: 103

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2830	68.00	35168	104.00	1380	141.00	2641
37.00	14052	69.00	35144	105.00	489	142.00	431
38.00	12378	70.00	2545	106.00	1219	143.00	2834
39.00	4579	71.00	54	107.00	297	144.00	124
40.00	157	72.00	1794	109.00	52	145.00	279
43.00	106	73.00	14667	110.00	55	146.00	549
44.00	1399	74.00	59088	111.00	164	147.00	336
45.00	2537	75.00	184000	112.00	163	148.00	849
46.00	228	76.00	15887	113.00	69	149.00	233
47.00	2205	77.00	1571	115.00	443	150.00	362
48.00	1908	78.00	1292	116.00	1189	152.00	203
49.00	13573	79.00	8004	117.00	2103	153.00	225
50.00	62856	80.00	2364	118.00	1243	154.00	271
51.00	18680	81.00	8150	119.00	1715	155.00	928
52.00	784	82.00	1643	123.00	58	156.00	72
55.00	990	86.00	288	124.00	170	157.00	738
56.00	4863	87.00	11942	126.00	115	158.00	158
57.00	8648	88.00	10576	127.00	52	159.00	248
58.00	378	91.00	1236	128.00	1471	160.00	91
59.00	51	92.00	9824	129.00	661	161.00	309
60.00	3439	93.00	14909	130.00	1468	174.00	272960
61.00	15858	94.00	40128	131.00	489	175.00	19840
62.00	16219	95.00	382144	135.00	672	176.00	266112
63.00	11746	96.00	25872	136.00	50	177.00	17992
64.00	1054	97.00	717	137.00	564	178.00	535
67.00	809	103.00	118	140.00	312		

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-69759

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-69759

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M9706.D

Level: (TRACE/LOW/MED) MED Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 12/17/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 100.00 (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	250	U
75-01-4	Vinyl chloride	250	U
74-83-9	Bromomethane	250	U
75-00-3	Chloroethane	250	U
75-69-4	Trichlorofluoromethane	250	U
75-35-4	1,1-Dichloroethene	250	U
67-64-1	Acetone	250	U
75-15-0	Carbon disulfide	250	U
75-09-2	Methylene chloride	250	U
156-60-5	trans-1,2-Dichloroethene	250	U
1634-04-4	Methyl tert-butyl ether	250	U
75-34-3	1,1-Dichloroethane	250	U
108-05-4	Vinyl acetate	250	U
78-93-3	2-Butanone	250	U
156-59-2	cis-1,2-Dichloroethene	250	U
67-66-3	Chloroform	250	U
71-55-6	1,1,1-Trichloroethane	250	U
56-23-5	Carbon tetrachloride	250	U
107-06-2	1,2-Dichloroethane	250	U
71-43-2	Benzene	250	U
79-01-6	Trichloroethene	250	U
78-87-5	1,2-Dichloropropane	250	U
75-27-4	Bromodichloromethane	250	U
10061-01-5	cis-1,3-Dichloropropene	250	U
108-10-1	4-Methyl-2-pentanone	250	U
108-88-3	Toluene	250	U
10061-02-6	trans-1,3-Dichloropropene	250	U
79-00-5	1,1,2-Trichloroethane	250	U
127-18-4	Tetrachloroethene	250	U
591-78-6	2-Hexanone	250	U
124-48-1	Dibromochloromethane	250	U
108-90-7	Chlorobenzene	250	U
100-41-4	Ethylbenzene	250	U
179601-23-1	m,p-Xylene	250	U
95-47-6	o-Xylene	250	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-69759

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-69759

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M9706.D

Level: (TRACE/LOW/MED) MED Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 12/17/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 100.00 (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
1330-20-7	Xylene (Total)	250	U
100-42-5	Styrene	250	U
75-25-2	Bromoform	250	U
98-82-8	Isopropylbenzene	250	U
79-34-5	1,1,2,2-Tetrachloroethane	250	U
103-65-1	n-Propylbenzene	250	U
108-67-8	1,3,5-Trimethylbenzene	250	U
98-06-6	tert-Butylbenzene	250	U
95-63-6	1,2,4-Trimethylbenzene	250	U
135-98-8	sec-Butylbenzene	250	U
99-87-6	4-Isopropyltoluene	250	U
541-73-1	1,3-Dichlorobenzene	250	U
106-46-7	1,4-Dichlorobenzene	250	U
104-51-8	n-Butylbenzene	250	U
95-50-1	1,2-Dichlorobenzene	250	U
91-20-3	Naphthalene	250	U
110-75-8	2-Chloroethyl vinyl ether	250	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MB-69759

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-69759

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M9706.D

Level: (TRACE or LOW/MED) MED Date Received:

% Moisture: not dec. Date Analyzed: 12/17/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 100.00 (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V1.I\121217.B\V1M9706.D
Report Date: 18-Dec-2012 16:51

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V1.I\121217.B\V1M9706.D
Lab Smp Id: MB-69759 Client Smp ID: MB-69759
Inj Date : 17-DEC-2012 11:54
Operator : AM   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,MB-69759,MB-69759,69759
Misc Info :
Comment   :
Method   : \\avogadro\organics\V1.I\121217.B\v18260Gadd.m
Meth Date : 18-Dec-2012 16:51 canderson Quant Type: ISTD
Cal Date : 13-DEC-2012 18:50 Cal File: V1M9623.D
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula:
   Amt * DF * Uf*((Vt+(Ws*M/100))*5000)/(Va*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)
Vt	5.000	Methanol extract volume (mL)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$	36 Dibromofluoromethane	113	4.044	4.040	(0.878)	411858	50.7491	2500
$	42 1,2-Dichloroethane-d4	102	4.320	4.316	(0.938)	135180	45.3483	2300
*	46 Fluorobenzene	96	4.606	4.611	(1.000)	1740008	50.0000	
$	58 Toluene-d8	98	6.044	6.039	(0.806)	1559088	52.8113	2600
*	68 Chlorobenzene-d5	117	7.501	7.487	(1.000)	1100715	50.0000	
$	79 Bromofluorobenzene	95	8.792	8.787	(1.172)	646747	51.5799	2600
*	92 1,4-Dichlorobenzene-d4	152	10.052	10.058	(1.000)	407678	50.0000	

Data File: \\avogadro\organics\V1.I\121217.B\V1M9706.D
Report Date: 18-Dec-2012 16:51

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V1.I\121217.B\V1M9706.D
Lab Smp Id: MB-69759 Client Smp ID: MB-69759
Inj Date : 17-DEC-2012 11:54
Operator : AM   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,MB-69759,MB-69759,69759
Misc Info :
Comment   :
Method   : \\avogadro\organics\V1.I\121217.B\v18260Gadd.m
Meth Date : 18-Dec-2012 16:51 canderson Quant Type: ISTD
Cal Date : 13-DEC-2012 18:50 Cal File: V1M9623.D
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

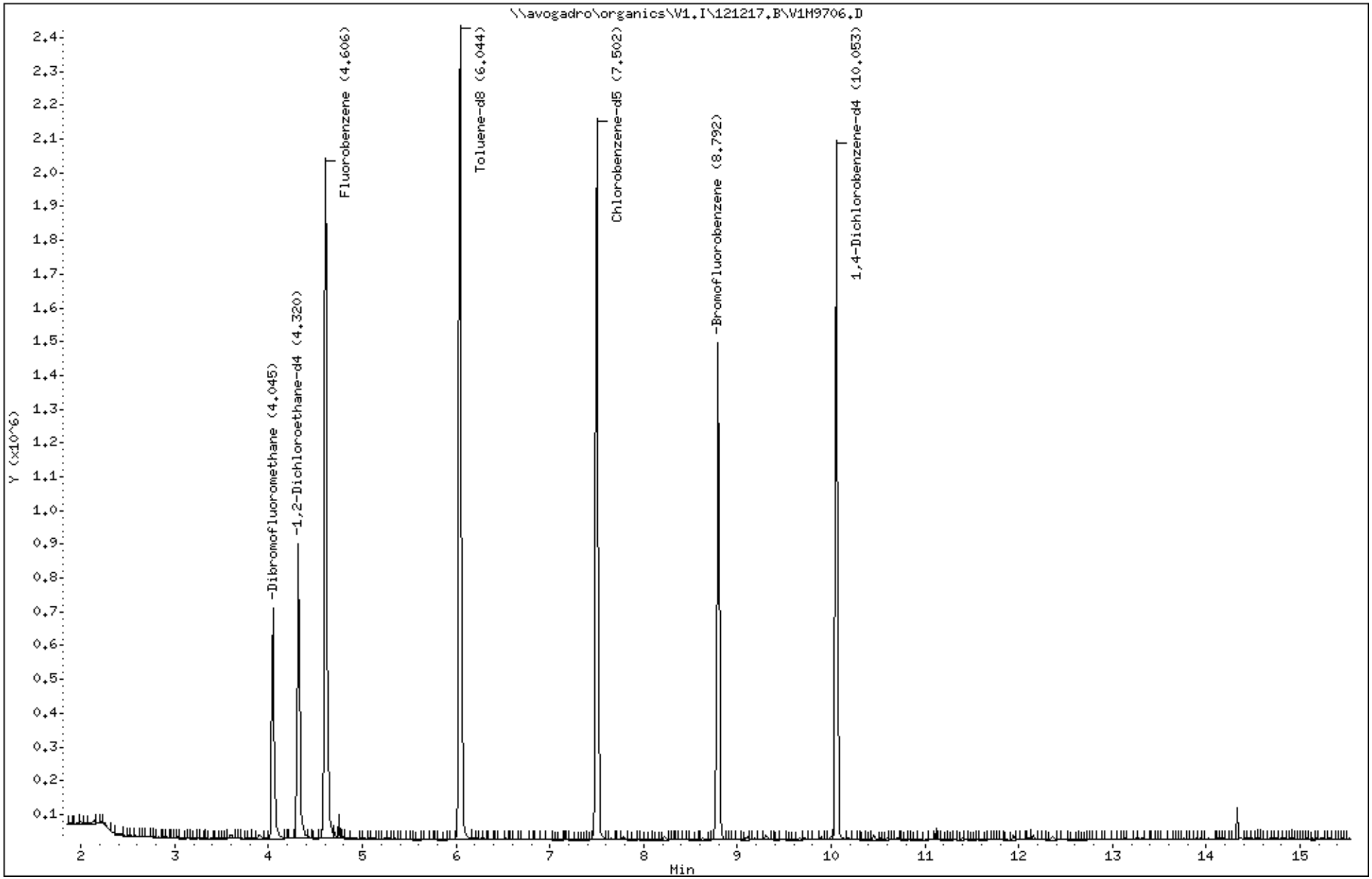
- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V1.I\121217.B\V1M9706.D
Date : 17-DEC-2012 11:54
Client ID: MB-69759
Sample Info: 5ML,MB-69759,MB-69759,69759

Instrument: V1.i

Operator: AM SRC: LIMS
Column diameter: 0.25

Column phase: DB-624



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-69830

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-69830

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V8B7115.D

Level: (TRACE/LOW/MED) MED Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 12/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 100.00 (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	250	U
75-01-4	Vinyl chloride	250	U
74-83-9	Bromomethane	250	U
75-00-3	Chloroethane	250	U
75-69-4	Trichlorofluoromethane	250	U
75-35-4	1,1-Dichloroethene	250	U
67-64-1	Acetone	250	U
75-15-0	Carbon disulfide	250	U
75-09-2	Methylene chloride	250	U
156-60-5	trans-1,2-Dichloroethene	250	U
1634-04-4	Methyl tert-butyl ether	250	U
75-34-3	1,1-Dichloroethane	250	U
108-05-4	Vinyl acetate	250	U
78-93-3	2-Butanone	250	U
156-59-2	cis-1,2-Dichloroethene	250	U
67-66-3	Chloroform	250	U
71-55-6	1,1,1-Trichloroethane	250	U
56-23-5	Carbon tetrachloride	250	U
107-06-2	1,2-Dichloroethane	250	U
71-43-2	Benzene	250	U
79-01-6	Trichloroethene	250	U
78-87-5	1,2-Dichloropropane	250	U
75-27-4	Bromodichloromethane	250	U
10061-01-5	cis-1,3-Dichloropropene	250	U
108-10-1	4-Methyl-2-pentanone	250	U
108-88-3	Toluene	250	U
10061-02-6	trans-1,3-Dichloropropene	250	U
79-00-5	1,1,2-Trichloroethane	250	U
127-18-4	Tetrachloroethene	250	U
591-78-6	2-Hexanone	250	U
124-48-1	Dibromochloromethane	250	U
108-90-7	Chlorobenzene	250	U
100-41-4	Ethylbenzene	250	U
179601-23-1	m,p-Xylene	250	U
95-47-6	o-Xylene	250	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-69830

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-69830

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V8B7115.D

Level: (TRACE/LOW/MED) MED Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 12/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 100.00 (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
1330-20-7	Xylene (Total)	250	U
100-42-5	Styrene	250	U
75-25-2	Bromoform	250	U
98-82-8	Isopropylbenzene	250	U
79-34-5	1,1,2,2-Tetrachloroethane	250	U
103-65-1	n-Propylbenzene	250	U
108-67-8	1,3,5-Trimethylbenzene	250	U
98-06-6	tert-Butylbenzene	250	U
95-63-6	1,2,4-Trimethylbenzene	250	U
135-98-8	sec-Butylbenzene	250	U
99-87-6	4-Isopropyltoluene	250	U
541-73-1	1,3-Dichlorobenzene	250	U
106-46-7	1,4-Dichlorobenzene	250	U
104-51-8	n-Butylbenzene	250	U
95-50-1	1,2-Dichlorobenzene	250	U
91-20-3	Naphthalene	250	U
110-75-8	2-Chloroethyl vinyl ether	250	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MB-69830

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-69830

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V8B7115.D

Level: (TRACE or LOW/MED) MED Date Received:

% Moisture: not dec. Date Analyzed: 12/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 100.00 (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

[1]EPA-designated Registry Number.

Data File: \\avogadro\organics\V8.I\121219.B\V8B7115.d
Report Date: 20-Dec-2012 13:24

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V8.I\121219.B\V8B7115.d
Lab Smp Id: MB-69830 Client Smp ID: MB-69830
Inj Date : 19-DEC-2012 17:05
Operator : V10 Inst ID: V8.i
Smp Info : 5ML,MB-69830,MB-69830,69830
Misc Info :
Comment   :
Method   : \\avogadro\organics\V8.I\121219.B\v108260Gadd-6lvl.m
Meth Date : 20-Dec-2012 13:22 adatta Quant Type: ISTD
Cal Date : 19-DEC-2012 00:30 Cal File: V8B7072.d
Als bottle: 100 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
$	36 Dibromofluoromethane	113	4.711	4.708	(0.888)	173715	50.1176	50	
$	42 1,2-Dichloroethane-d4	102	5.007	5.010	(0.944)	34556	49.3818	49	
*	46 Fluorobenzene	96	5.303	5.303	(1.000)	581127	50.0000		(Q)
$	58 Toluene-d8	98	6.782	6.782	(0.818)	622054	49.2586	49	
*	68 Chlorobenzene-d5	117	8.290	8.290	(1.000)	507299	50.0000		
$	79 Bromofluorobenzene	95	9.586	9.586	(1.156)	263703	49.0068	49	
*	92 1,4-Dichlorobenzene-d4	152	10.782	10.782	(1.000)	251537	50.0000		

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V8.I\121219.B\V8B7115.d
Report Date: 20-Dec-2012 13:24

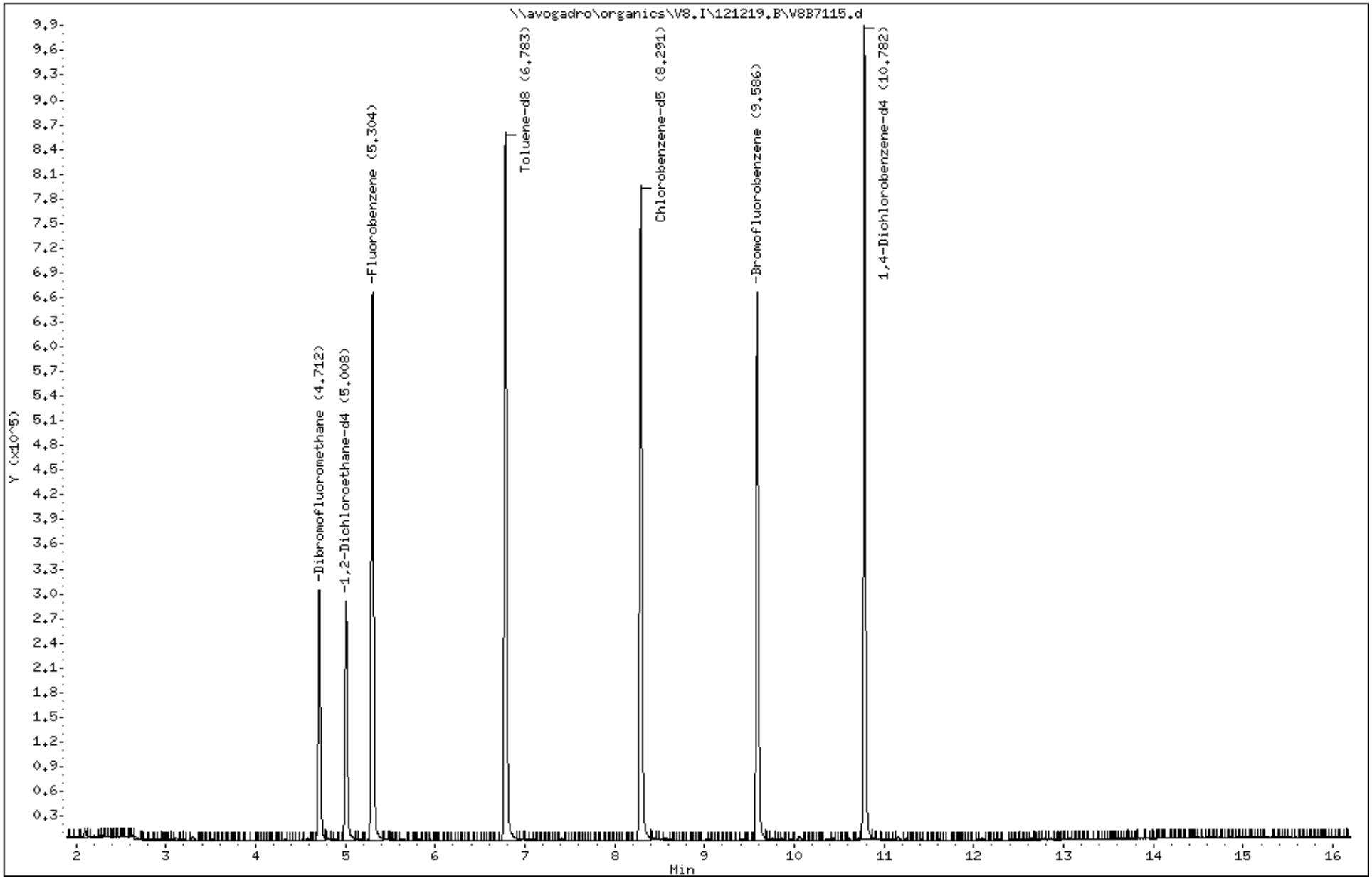
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V8.I\121219.B\V8B7115.d
Lab Smp Id: MB-69830 Client Smp ID: MB-69830
Inj Date : 19-DEC-2012 17:05
Operator : V10 Inst ID: V8.i
Smp Info : 5ML,MB-69830,MB-69830,69830
Misc Info :
Comment   :
Method   : \\avogadro\organics\V8.I\121219.B\v108260Gadd-6lvl.m
Meth Date : 20-Dec-2012 13:22 adatta Quant Type: ISTD
Cal Date : 19-DEC-2012 00:30 Cal File: V8B7072.d
Als bottle: 100 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\V8.I\121219.B\V8B7115.d
Date : 19-DEC-2012 17:05
Client ID: MB-69830
Instrument: V8.i
Sample Info: 5ML,MB-69830,MB-69830,69830
Purge Volume: 5.0
Operator: V10
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-69759

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-69759

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M9704.D

Level: (TRACE/LOW/MED) MED Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 12/17/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 100.00 (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	2900	
75-01-4	Vinyl chloride	2600	
74-83-9	Bromomethane	2200	
75-00-3	Chloroethane	2500	
75-69-4	Trichlorofluoromethane	2900	
75-35-4	1,1-Dichloroethene	2500	
67-64-1	Acetone	2700	
75-15-0	Carbon disulfide	2400	
75-09-2	Methylene chloride	2500	
156-60-5	trans-1,2-Dichloroethene	2500	
1634-04-4	Methyl tert-butyl ether	2500	
75-34-3	1,1-Dichloroethane	2400	
108-05-4	Vinyl acetate	2600	
78-93-3	2-Butanone	2500	
156-59-2	cis-1,2-Dichloroethene	2400	
67-66-3	Chloroform	2500	
71-55-6	1,1,1-Trichloroethane	2500	
56-23-5	Carbon tetrachloride	2600	
107-06-2	1,2-Dichloroethane	2600	
71-43-2	Benzene	2500	
79-01-6	Trichloroethene	2400	
78-87-5	1,2-Dichloropropane	2500	
75-27-4	Bromodichloromethane	2500	
10061-01-5	cis-1,3-Dichloropropene	2500	
108-10-1	4-Methyl-2-pentanone	2500	
108-88-3	Toluene	2600	
10061-02-6	trans-1,3-Dichloropropene	2500	
79-00-5	1,1,2-Trichloroethane	2400	
127-18-4	Tetrachloroethene	2100	
591-78-6	2-Hexanone	2700	
124-48-1	Dibromochloromethane	2500	
108-90-7	Chlorobenzene	2500	
100-41-4	Ethylbenzene	2600	
179601-23-1	m,p-Xylene	5200	
95-47-6	o-Xylene	2500	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-69759

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-69759

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M9704.D

Level: (TRACE/LOW/MED) MED Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 12/17/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 100.00 (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
1330-20-7	Xylene (Total)	7700	
100-42-5	Styrene	2600	
75-25-2	Bromoform	2400	
98-82-8	Isopropylbenzene	2600	
79-34-5	1,1,2,2-Tetrachloroethane	2600	
103-65-1	n-Propylbenzene	2700	
108-67-8	1,3,5-Trimethylbenzene	2800	
98-06-6	tert-Butylbenzene	2800	
95-63-6	1,2,4-Trimethylbenzene	2800	
135-98-8	sec-Butylbenzene	2800	
99-87-6	4-Isopropyltoluene	2700	
541-73-1	1,3-Dichlorobenzene	2600	
106-46-7	1,4-Dichlorobenzene	2500	
104-51-8	n-Butylbenzene	3000	
95-50-1	1,2-Dichlorobenzene	2500	
91-20-3	Naphthalene	2600	
110-75-8	2-Chloroethyl vinyl ether	1200	

Data File: \\avogadro\organics\V1.I\121217.B\V1M9704.D
Report Date: 18-Dec-2012 17:07

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V1.I\121217.B\V1M9704.D
Lab Smp Id: LCS-69759 Client Smp ID: LCS-69759
Inj Date : 17-DEC-2012 11:07
Operator : AM SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,LCS-69759,LCS-69759,69759
Misc Info :
Comment   :
Method   : \\avogadro\organics\V1.I\121217.B\v18260Gadd.m
Meth Date : 18-Dec-2012 16:51 canderson Quant Type: ISTD
Cal Date : 13-DEC-2012 18:50 Cal File: V1M9623.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*((Vt+(Ws*M/100))*5000)/(Va*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)
Vt	5.000	Methanol extract volume (mL)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.305	1.305	(0.283)	327103	50.0000	65(Q)
2	Freon114	85	1.403	1.394	(0.304)	702568	50.0000	73
3	Chloromethane	50	1.433	1.433	(0.311)	1139752	50.0000	58
4	Vinyl Chloride	62	1.541	1.542	(0.334)	825185	50.0000	53
5	Bromomethane	94	1.768	1.758	(0.383)	451335	50.0000	45
6	Chloroethane	64	1.856	1.847	(0.402)	565522	50.0000	51
7	Trichlorofluoromethane	101	2.418	2.418	(0.524)	457446	50.0000	58
126	Ethanol	46	2.132	2.152	(0.462)	353248	5000.00	7400(A)
8	Ether	59	2.211	2.211	(0.479)	593244	50.0000	52
9	Acrolein	56	2.300	2.300	(0.498)	435864	250.000	280(A)
10	1,1-Dichloroethene	96	2.408	2.408	(0.522)	442426	50.0000	49
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.418	2.418	(0.524)	457446	50.0000	58
12	Acetone	58	2.408	2.408	(0.522)	66837	50.0000	53
13	Iodomethane	142	2.526	2.527	(0.548)	472919	50.0000	52
14	Carbon Disulfide	76	2.556	2.556	(0.554)	1510530	50.0000	47
15	Acetonitrile	41	2.635	2.625	(0.571)	2163149	500.000	560(A)
16	Allyl Chloride	39	2.635	2.625	(0.571)	890132	50.0000	61(Q)
17	Methyl Acetate	43	2.644	2.645	(0.573)	604783	50.0000	54
19	tert-Butanol	59	2.802	2.812	(0.607)	76509	100.000	110

Data File: \\avogadro\organics\V1.I\121217.B\V1M9704.D
Report Date: 18-Dec-2012 17:07

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	18 Methylene Chloride	84	2.763	2.763	(0.599)	321142	50.0000	50
	20 Acrylonitrile	53	2.891	2.891	(0.626)	237063	50.0000	48
	21 trans-1,2-Dichloroethene	96	2.930	2.930	(0.635)	458570	50.0000	49
	22 Methyl tert-butyl ether	73	2.930	2.930	(0.635)	1376353	50.0000	51
	23 1,1-Dichloroethane	63	3.235	3.236	(0.701)	872732	50.0000	47
	24 Vinyl acetate	43	3.265	3.275	(0.708)	2553514	50.0000	51
	25 Diisopropyl Ether	45	3.295	3.295	(0.714)	2519217	50.0000	52
	26 2-Chloro-1,3-Butadiene	53	3.304	3.305	(0.716)	855890	50.0000	53
	27 Ethyl tert-butyl ether	59	3.570	3.571	(0.774)	1888437	50.0000	51
	28 cis-1,2-Dichloroethene	96	3.679	3.679	(0.797)	491208	50.0000	48
	29 2,2-Dichloropropane	77	3.679	3.679	(0.797)	295978	50.0000	56
	30 2-Butanone	72	3.679	3.679	(0.797)	56222	50.0000	49
	32 Propionitrile	54	3.718	3.718	(0.806)	776664	500.000	510(A)
	33 Methacrylonitrile	41	3.836	3.846	(0.831)	874201	100.000	99
	34 Bromochloromethane	128	3.856	3.866	(0.836)	185574	50.0000	47
	31 Tetrahydrofuran	72	3.905	3.915	(0.846)	118132	100.000	87
	35 Chloroform	83	3.925	3.925	(0.851)	767541	50.0000	50
$	36 Dibromofluoromethane	113	4.053	4.053	(0.878)	415756	50.0000	51
	37 1,1,1-Trichloroethane	97	4.082	4.083	(0.885)	490860	50.0000	50
	38 Cyclohexane	56	4.161	4.162	(0.902)	1026684	50.0000	58
	39 1,1-Dichloropropene	110	4.220	4.221	(0.915)	182154	50.0000	50
	40 Carbon Tetrachloride	117	4.220	4.221	(0.915)	391747	50.0000	52
	41 Isobutyl Alcohol	43	4.279	4.299	(0.927)	478395	1000.00	1100(A)
$	42 1,2-Dichloroethane-d4	102	4.319	4.329	(0.936)	134919	50.0000	45
	43 Benzene	78	4.388	4.388	(0.951)	1800133	50.0000	50
	44 1,2-Dichloroethane	62	4.388	4.388	(0.951)	605343	50.0000	52
	45 tert-Amyl methyl ether	73	4.476	4.487	(0.970)	1462544	50.0000	48
*	46 Fluorobenzene	96	4.614	4.615	(1.000)	1757482	50.0000	
M	50 1,2-Dichloroethene (Total)	96				949778	100.000	98
	47 Trichloroethene	130	4.930	4.940	(1.068)	333671	50.0000	47
	48 Methylcyclohexane	83	5.117	5.117	(1.109)	708055	50.0000	59
	49 1,2-Dichloropropane	63	5.117	5.127	(1.109)	512427	50.0000	50
	51 Methyl Methacrylate	69	5.215	5.225	(1.130)	409096	50.0000	48
	52 Dibromomethane	93	5.215	5.225	(1.130)	277388	50.0000	50
	53 1,4-Dioxane	88	5.235	5.245	(1.134)	67543	1000.00	1300(A)
	54 Bromodichloromethane	83	5.363	5.363	(1.162)	600372	50.0000	50
	55 2-Chloroethyl vinyl ether	63	5.639	5.649	(1.222)	160505	50.0000	25
	56 cis-1,3-Dichloropropene	75	5.777	5.787	(1.252)	816625	50.0000	51
	57 4-Methyl-2-pentanone	43	5.924	5.935	(1.284)	644981	50.0000	50
$	58 Toluene-d8	98	6.043	6.053	(0.807)	1596436	50.0000	52
	59 Toluene	91	6.111	6.112	(1.324)	1653593	50.0000	51
	60 trans-1,3-Dichloropropene	75	6.308	6.319	(1.367)	715376	50.0000	51
	61 Ethyl Methacrylate	69	6.407	6.417	(1.388)	579294	50.0000	50
	62 1,1,2-Trichloroethane	97	6.486	6.496	(1.406)	348321	50.0000	47
	63 Tetrachloroethene	164	6.653	6.663	(0.888)	193430	50.0000	42
	64 1,3-Dichloropropane	76	6.653	6.663	(0.888)	752475	50.0000	51
	65 2-Hexanone	43	6.742	6.752	(0.900)	466267	50.0000	54
	66 Dibromochloromethane	129	6.880	6.890	(0.918)	333325	50.0000	49
	67 1,2-Dibromoethane	107	6.998	7.008	(0.934)	370753	50.0000	51
*	68 Chlorobenzene-d5	117	7.490	7.510	(1.000)	1135357	50.0000	
	69 1-Chlorohexane	91	7.510	7.530	(1.003)	671917	50.0000	52
	70 Chlorobenzene	112	7.520	7.540	(1.004)	951456	50.0000	50
	71 1,1,1,2-Tetrachloroethane	131	7.609	7.619	(1.016)	298546	50.0000	49
	72 Ethylbenzene	106	7.658	7.668	(1.022)	508820	50.0000	52

Data File: \\avogadro\organics\V1.I\121217.B\V1M9704.D
Report Date: 18-Dec-2012 17:07

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	73	m,p-Xylene	106	7.786	7.786	(1.039)	1315710	100.000	100
	74	o-Xylene	106	8.209	8.220	(1.096)	634795	50.0000	51
	75	Styrene	104	8.219	8.239	(1.097)	1139517	50.0000	52
	76	Bromoform	173	8.406	8.417	(1.122)	162387	50.0000	47
	77	Isopropylbenzene	105	8.623	8.633	(1.151)	1560917	50.0000	52
	78	trans-1,4-Dichloro-2-butene	75	8.682	8.702	(1.159)	197055	50.0000	50
$	79	Bromofluorobenzene	95	8.781	8.801	(1.172)	671943	50.0000	52
	80	1,1,2,2-Tetrachloroethane	83	8.948	8.958	(0.890)	534743	50.0000	51
	81	Bromobenzene	156	8.948	8.958	(0.890)	276556	50.0000	50
	82	1,2,3-Trichloropropane	75	8.988	9.008	(0.894)	613168	50.0000	52
	83	n-Propylbenzene	120	9.096	9.106	(0.905)	358783	50.0000	53
	84	2-Chlorotoluene	126	9.175	9.195	(0.913)	316929	50.0000	52
	85	1,3,5-Trimethylbenzene	105	9.293	9.313	(0.925)	1253062	50.0000	55
	86	4-Chlorotoluene	126	9.303	9.313	(0.926)	334006	50.0000	52
	87	tert-Butylbenzene	119	9.657	9.658	(0.961)	1140963	50.0000	55
	88	1,2,4-Trimethylbenzene	105	9.707	9.717	(0.966)	1256300	50.0000	55
	89	sec-Butylbenzene	105	9.884	9.894	(0.983)	1563678	50.0000	56
M	94	Xylene (Total)	106				1950505	150.000	150
	90	1,3-Dichlorobenzene	146	9.982	9.993	(0.993)	538435	50.0000	51
	91	4-Isopropyltoluene	119	10.041	10.052	(0.999)	1149348	50.0000	54
*	92	1,4-Dichlorobenzene-d4	152	10.051	10.061	(1.000)	428827	50.0000	
	93	1,4-Dichlorobenzene	146	10.071	10.081	(1.002)	554013	50.0000	50
	95	n-Butylbenzene	91	10.455	10.455	(1.040)	1265826	50.0000	60
	96	1,2-Dichlorobenzene	146	10.445	10.446	(1.039)	516526	50.0000	51
	97	Hexachloroethane	117	10.692	10.702	(1.064)	279200	50.0000	52
	98	1,2-Dibromo-3-chloropropane	75	11.184	11.184	(1.113)	77759	50.0000	53
	141	1,3,5-Trichlorobenzene	182	11.391	11.401	(2.468)	229972	50.0000	50
	99	1,2,4-Trichlorobenzene	180	11.942	11.943	(1.188)	268972	50.0000	52
	100	Hexachlorobutadiene	225	12.110	12.110	(1.205)	66472	50.0000	54
	101	Naphthalene	128	12.149	12.159	(1.209)	850905	50.0000	51
	102	1,2,3-Trichlorobenzene	180	12.356	12.366	(1.229)	213761	50.0000	49

QC Flag Legend

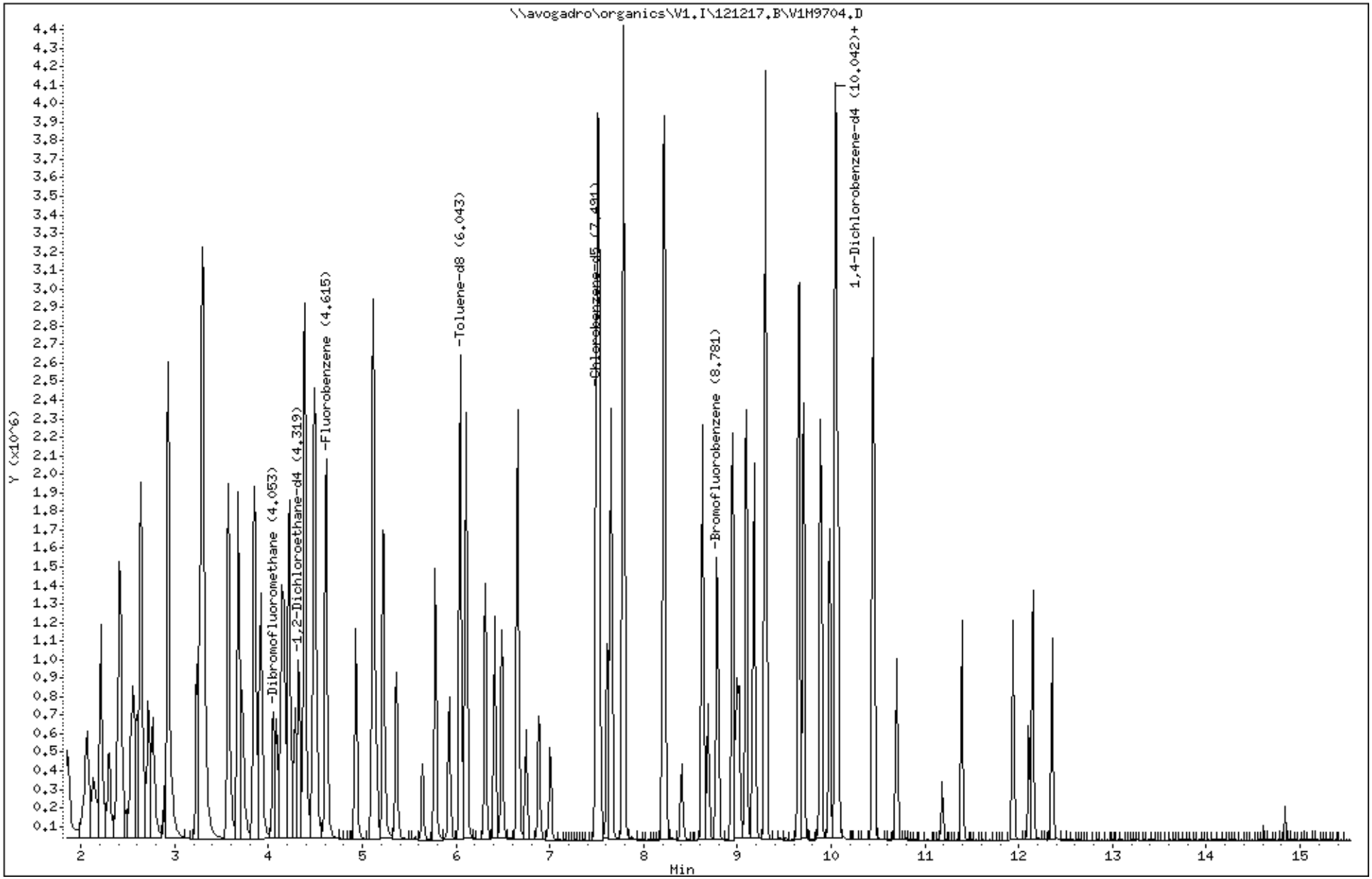
A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V1.I\121217.B\V1M9704.D
Date : 17-DEC-2012 11:07
Client ID: LCS-69759
Sample Info: 5ML,LCS-69759,LCS-69759,69759

Instrument: V1.i

Operator: AM SRC: LIMS
Column diameter: 0.25

Column phase: DB-624



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-69830

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-69830

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V8B7113.D

Level: (TRACE/LOW/MED) MED Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 12/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 100.00 (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	2600	
75-01-4	Vinyl chloride	2500	
74-83-9	Bromomethane	3100	
75-00-3	Chloroethane	2400	
75-69-4	Trichlorofluoromethane	2700	
75-35-4	1,1-Dichloroethene	2500	
67-64-1	Acetone	2700	
75-15-0	Carbon disulfide	2600	
75-09-2	Methylene chloride	2400	
156-60-5	trans-1,2-Dichloroethene	2600	
1634-04-4	Methyl tert-butyl ether	2700	
75-34-3	1,1-Dichloroethane	2600	
108-05-4	Vinyl acetate	2900	
78-93-3	2-Butanone	3100	
156-59-2	cis-1,2-Dichloroethene	2600	
67-66-3	Chloroform	2500	
71-55-6	1,1,1-Trichloroethane	2700	
56-23-5	Carbon tetrachloride	2800	
107-06-2	1,2-Dichloroethane	2700	
71-43-2	Benzene	2600	
79-01-6	Trichloroethene	2700	
78-87-5	1,2-Dichloropropane	2600	
75-27-4	Bromodichloromethane	2700	
10061-01-5	cis-1,3-Dichloropropene	2800	
108-10-1	4-Methyl-2-pentanone	2700	
108-88-3	Toluene	2700	
10061-02-6	trans-1,3-Dichloropropene	2900	
79-00-5	1,1,2-Trichloroethane	2700	
127-18-4	Tetrachloroethene	2300	
591-78-6	2-Hexanone	2900	
124-48-1	Dibromochloromethane	2700	
108-90-7	Chlorobenzene	2600	
100-41-4	Ethylbenzene	2600	
179601-23-1	m,p-Xylene	5300	
95-47-6	o-Xylene	2600	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-69830

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-69830

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V8B7113.D

Level: (TRACE/LOW/MED) MED Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 12/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 100.00 (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
1330-20-7	Xylene (Total)	7900	
100-42-5	Styrene	2600	
75-25-2	Bromoform	2800	
98-82-8	Isopropylbenzene	2600	
79-34-5	1,1,2,2-Tetrachloroethane	2600	
103-65-1	n-Propylbenzene	2600	
108-67-8	1,3,5-Trimethylbenzene	2600	
98-06-6	tert-Butylbenzene	2800	
95-63-6	1,2,4-Trimethylbenzene	2700	
135-98-8	sec-Butylbenzene	2600	
99-87-6	4-Isopropyltoluene	2700	
541-73-1	1,3-Dichlorobenzene	2600	
106-46-7	1,4-Dichlorobenzene	2600	
104-51-8	n-Butylbenzene	2700	
95-50-1	1,2-Dichlorobenzene	2600	
91-20-3	Naphthalene	2700	
110-75-8	2-Chloroethyl vinyl ether	3300	

Data File: \\avogadro\organics\V8.I\121219.B\V8B7113.d
Report Date: 20-Dec-2012 13:24

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V8.I\121219.B\V8B7113.d
Lab Smp Id: LCS-69830 Client Smp ID: LCS-69830
Inj Date : 19-DEC-2012 16:11
Operator : V10   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,LCS-69830,LCS-69830,69830
Misc Info :
Comment   :
Method   : \\avogadro\organics\V8.I\121219.B\v108260Gadd-6lvl.m
Meth Date : 20-Dec-2012 13:22 adatta Quant Type: ISTD
Cal Date : 19-DEC-2012 00:30 Cal File: V8B7072.d
Als bottle: 100 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula:
   Amt * DF * Uf*((Vt+(Ws*M/100))*5000)/(Va*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)
Vt	5.000	Methanol extract volume (mL)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.647	1.647	(0.311)	165963	50.0000	54
2	Freon114	85	1.763	1.763	(0.333)	152689	50.0000	56
3	Chloromethane	50	1.814	1.814	(0.342)	116408	50.0000	51
4	Vinyl Chloride	62	1.914	1.914	(0.361)	123574	50.0000	50
5	Bromomethane	94	2.203	2.203	(0.416)	102466	50.0000	62
6	Chloroethane	64	2.290	2.290	(0.432)	72792	50.0000	48
7	Trichlorofluoromethane	101	2.506	2.506	(0.473)	289482	50.0000	54
126	Ethanol	46	2.631	2.631	(0.496)	37988	5000.00	5700(A)
8	Ether	59	2.731	2.731	(0.515)	115510	50.0000	53
9	Acrolein	56	2.834	2.834	(0.534)	145853	250.000	280(A)
10	1,1-Dichloroethene	96	2.924	2.924	(0.551)	158190	50.0000	51
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.917	2.917	(0.550)	180591	50.0000	56
12	Acetone	58	2.949	2.949	(0.556)	14333	50.0000	54
13	Iodomethane	142	3.052	3.052	(0.576)	187727	50.0000	51
14	Carbon Disulfide	76	3.117	3.117	(0.588)	468992	50.0000	51
15	Acetonitrile	41	3.203	3.203	(0.604)	198009	500.000	560(A)
16	Allyl Chloride	39	3.203	3.203	(0.604)	174720	50.0000	53
17	Methyl Acetate	43	3.213	3.213	(0.606)	94651	50.0000	54
18	Methylene Chloride	84	3.300	3.300	(0.622)	173704	50.0000	47

Data File: \\avogadro\organics\V8.I\121219.B\V8B7113.d
Report Date: 20-Dec-2012 13:24

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	19 tert-Butanol	59	3.361	3.361	(0.634)	32002	100.000	110
	20 Acrylonitrile	53	3.490	3.490	(0.658)	51000	50.0000	58
	21 trans-1,2-Dichloroethene	96	3.519	3.519	(0.664)	174956	50.0000	52
	22 Methyl tert-butyl ether	73	3.512	3.512	(0.662)	552672	50.0000	53
	23 1,1-Dichloroethane	63	3.853	3.853	(0.727)	285399	50.0000	51
	24 Vinyl acetate	43	3.879	3.879	(0.731)	446812	50.0000	58
	25 Diisopropyl Ether	45	3.888	3.888	(0.733)	393535	50.0000	52
	26 2-Chloro-1,3-Butadiene	53	3.927	3.927	(0.741)	263850	50.0000	53
	27 Ethyl tert-butyl ether	59	4.181	4.181	(0.788)	522180	50.0000	53
	29 2,2-Dichloropropane	77	4.326	4.326	(0.816)	320293	50.0000	68
	28 cis-1,2-Dichloroethene	96	4.322	4.322	(0.815)	191917	50.0000	52
	30 2-Butanone	72	4.319	4.319	(0.814)	20489	50.0000	61
	32 Propionitrile	54	4.367	4.367	(0.824)	186876	500.000	550(A)
	33 Methacrylonitrile	41	4.496	4.496	(0.848)	147241	100.000	110
	34 Bromochloromethane	128	4.522	4.522	(0.853)	105406	50.0000	50
	31 Tetrahydrofuran	72	4.560	4.560	(0.860)	40669	100.000	110
	35 Chloroform	83	4.573	4.573	(0.862)	357112	50.0000	50
$	36 Dibromofluoromethane	113	4.708	4.708	(0.888)	183431	50.0000	50
	37 1,1,1-Trichloroethane	97	4.750	4.750	(0.896)	351621	50.0000	54
	38 Cyclohexane	56	4.808	4.808	(0.907)	218815	50.0000	53
	39 1,1-Dichloropropene	110	4.888	4.888	(0.922)	95538	50.0000	53
	40 Carbon Tetrachloride	117	4.895	4.895	(0.923)	312146	50.0000	55
	41 Isobutyl Alcohol	43	4.924	4.924	(0.928)	97687	1000.00	1200(A)
$	42 1,2-Dichloroethane-d4	102	5.010	5.010	(0.945)	36190	50.0000	49
	43 Benzene	78	5.068	5.068	(0.956)	648588	50.0000	52
	44 1,2-Dichloroethane	62	5.072	5.072	(0.956)	308397	50.0000	53
	45 tert-Amyl methyl ether	73	5.142	5.142	(0.970)	508064	50.0000	53
M	50 1,2-Dichloroethene (Total)	96				366873	100.000	100
*	46 Fluorobenzene	96	5.303	5.303	(1.000)	610435	50.0000	(Q)
	47 Trichloroethene	130	5.631	5.631	(1.062)	221275	50.0000	53
	48 Methylcyclohexane	83	5.821	5.821	(1.098)	260268	50.0000	56
	49 1,2-Dichloropropane	63	5.837	5.837	(1.101)	149429	50.0000	52
	51 Methyl Methacrylate	69	5.911	5.911	(1.115)	129697	50.0000	56
	52 Dibromomethane	93	5.946	5.946	(1.121)	128544	50.0000	54
	53 1,4-Dioxane	88	5.946	5.946	(1.121)	43237	1000.00	1200(A)
	54 Bromodichloromethane	83	6.078	6.078	(1.146)	281548	50.0000	54
	55 2-Chloroethyl vinyl ether	63	6.502	6.502	(1.226)	1536	50.0000	66(TQ)
	56 cis-1,3-Dichloropropene	75	6.506	6.506	(1.227)	290217	50.0000	56
	57 4-Methyl-2-pentanone	43	6.647	6.647	(1.253)	117822	50.0000	54
$	58 Toluene-d8	98	6.782	6.782	(0.818)	662946	50.0000	49
	59 Toluene	91	6.850	6.850	(1.292)	780232	50.0000	53
	60 trans-1,3-Dichloropropene	75	7.052	7.052	(1.330)	289331	50.0000	58
	61 Ethyl Methacrylate	69	7.129	7.129	(1.344)	189993	50.0000	54
	62 1,1,2-Trichloroethane	97	7.245	7.245	(1.366)	171504	50.0000	54
	63 Tetrachloroethene	164	7.412	7.412	(0.894)	158616	50.0000	45
	64 1,3-Dichloropropane	76	7.422	7.422	(0.895)	265343	50.0000	52
	65 2-Hexanone	43	7.493	7.493	(0.904)	86791	50.0000	57
	66 Dibromochloromethane	129	7.660	7.660	(0.924)	245262	50.0000	54
	67 1,2-Dibromoethane	107	7.795	7.795	(0.940)	202100	50.0000	54
	69 1-Chlorohexane	91	8.280	8.280	(0.999)	248023	50.0000	51
*	68 Chlorobenzene-d5	117	8.290	8.290	(1.000)	541792	50.0000	
	70 Chlorobenzene	112	8.319	8.319	(1.003)	552060	50.0000	52
	71 1,1,1,2-Tetrachloroethane	131	8.403	8.403	(1.014)	219342	50.0000	54
	72 Ethylbenzene	106	8.435	8.435	(1.017)	280181	50.0000	52

Data File: \\avogadro\organics\V8.I\121219.B\V8B7113.d
Report Date: 20-Dec-2012 13:24

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	73	m,p-Xylene	106	8.563	8.563	(1.033)	680177	100.000	100
	74	o-Xylene	106	9.010	9.010	(1.087)	334310	50.0000	52
	75	Styrene	104	9.023	9.023	(1.088)	556214	50.0000	52
	76	Bromoform	173	9.229	9.229	(1.113)	137836	50.0000	56
	77	Isopropylbenzene	105	9.419	9.419	(1.136)	892258	50.0000	53
	78	trans-1,4-Dichloro-2-butene	75	9.483	9.483	(1.144)	70996	50.0000	58
$	79	Bromofluorobenzene	95	9.586	9.586	(1.156)	290583	50.0000	50
	80	1,1,2,2-Tetrachloroethane	83	9.727	9.727	(0.902)	219845	50.0000	52
	81	Bromobenzene	156	9.753	9.753	(0.905)	228610	50.0000	52
	82	1,2,3-Trichloropropane	75	9.785	9.785	(0.908)	291622	50.0000	54
	83	n-Propylbenzene	120	9.862	9.862	(0.915)	240346	50.0000	53
	84	2-Chlorotoluene	126	9.959	9.959	(0.924)	225960	50.0000	52
	85	1,3,5-Trimethylbenzene	105	10.046	10.046	(0.932)	780493	50.0000	52
	86	4-Chlorotoluene	126	10.071	10.071	(0.934)	235776	50.0000	52
M	94	Xylene (Total)	106				1014487	150.000	160
	87	tert-Butylbenzene	119	10.386	10.386	(0.963)	798968	50.0000	55
	88	1,2,4-Trimethylbenzene	105	10.431	10.431	(0.967)	790103	50.0000	54
	89	sec-Butylbenzene	105	10.608	10.608	(0.984)	903612	50.0000	52
	90	1,3-Dichlorobenzene	146	10.718	10.718	(0.994)	419921	50.0000	52
	91	4-Isopropyltoluene	119	10.750	10.750	(0.997)	807971	50.0000	53
*	92	1,4-Dichlorobenzene-d4	152	10.782	10.782	(1.000)	278619	50.0000	
	93	1,4-Dichlorobenzene	146	10.804	10.804	(1.002)	429541	50.0000	51
	95	n-Butylbenzene	91	11.152	11.152	(1.034)	666415	50.0000	55
	96	1,2-Dichlorobenzene	146	11.171	11.171	(1.036)	408042	50.0000	52
	97	Hexachloroethane	117	11.415	11.415	(1.059)	158037	50.0000	55
	98	1,2-Dibromo-3-chloropropane	75	11.894	11.894	(1.103)	49555	50.0000	53
	141	1,3,5-Trichlorobenzene	182	12.091	12.091	(2.280)	214823	50.0000	55(A)
	99	1,2,4-Trichlorobenzene	180	12.637	12.637	(1.172)	253231	50.0000	54
	100	Hexachlorobutadiene	225	12.782	12.782	(1.185)	117637	50.0000	57
	101	Naphthalene	128	12.856	12.856	(1.192)	761958	50.0000	53
	102	1,2,3-Trichlorobenzene	180	13.058	13.058	(1.211)	239221	50.0000	53

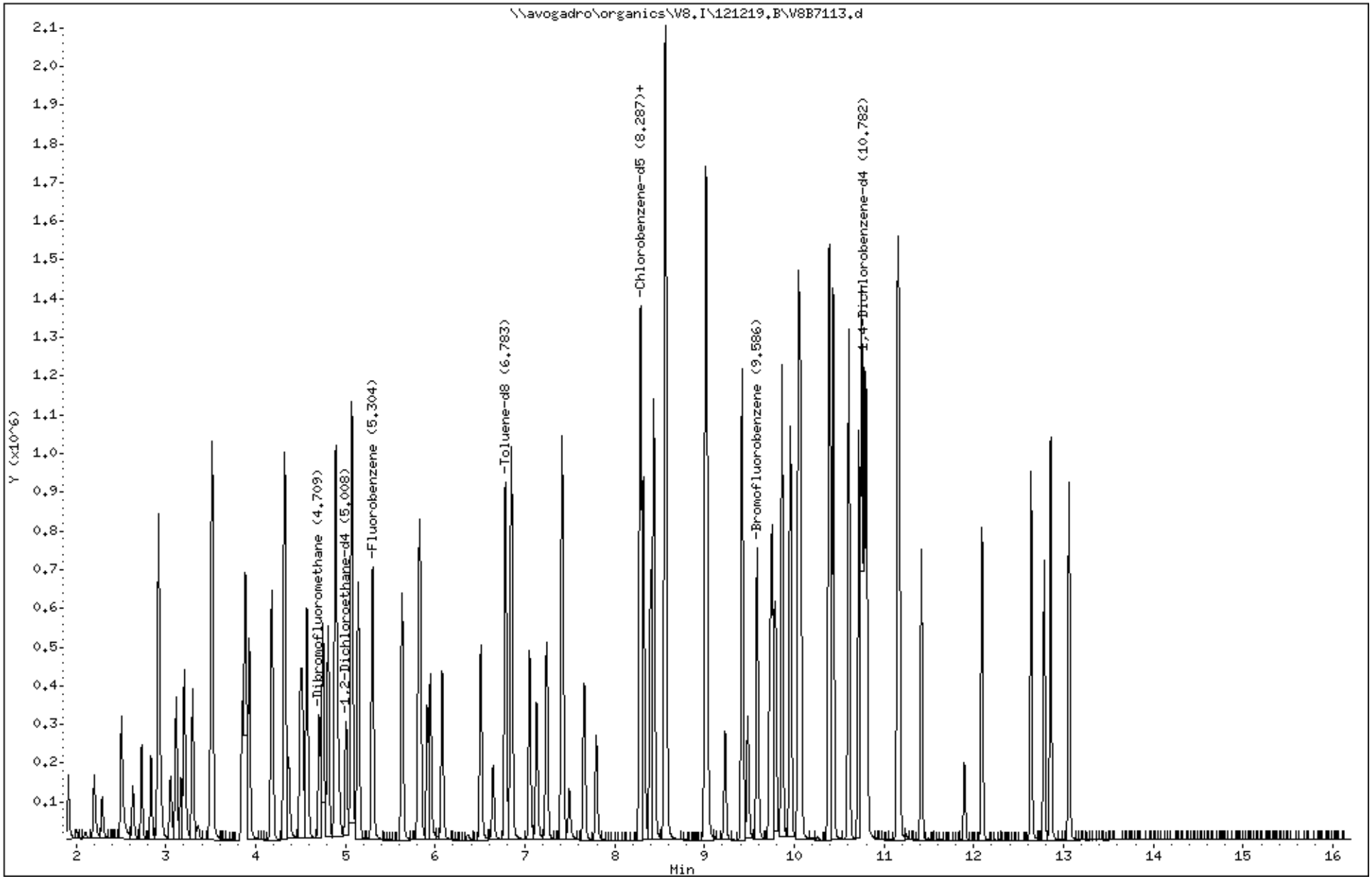
QC Flag Legend

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\V8.I\121219.B\V8B7113.d
Date : 19-DEC-2012 16:11
Client ID: LCS-69830
Sample Info: 5ML,LCS-69830,LCS-69830,69830

Instrument: V8.i

Operator: V10 SRC: LIMS
Column phase: DB-624
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
12/18/12	L2583	08C	8260L	N/A	N/A	5.9	5	E	DI		AED
12/18/12	L2583	02CMSD	8260L	N/A	N/A	5.5	5	E	DI		AED
12/17/12	MB 69759 ~~64776~~		8260m	↓	↓	5.0	5.0		51182 MEOH		CJP
	LCS 69759 ~~64776~~			↓	↓	5.0			↓		
	L2570-	01A		N/A	N/A	5.0		B	51182 MEOH		
	L2554-	01D		29.22	37.09	7.9		A	MeOH		
		01D MS		29.22	37.09	7.9					
		01D MSD		29.22	37.09	7.9					
12/17/12	L2554-	02D	8260m	29.05	37.25	8.0	5.0	A	MeOH		CJP
12/18/12	MB-	69786	8260	NA	NA	5.0	5.0	E	DI H_2O		WL
	LCS-	69786				5.0		E			
	L2593	-01C1				5.1		D			
		-01C2				4.8					
		-02C1				4.6					
12/18/12	L2593	-02C2	8260	NA	NA	5.0	5.0	D	DI H_2O		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

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Spectrum Analytical, Inc. RI Division V1 Injection Log
Volatiles Laboratory

METHOD: 8260 (W) ANALYST: CJA
ICAL DATE: 12/13/12

BATCH: 121213A.B

Start: 13-DEC-12 17:40
End: 13-DEC-12 21:38

Comments:

Standards: BFB VW121005A 5 uL
IS/SS VW121120A AUTO uL
STD VW121212A 20 uL
ICV VW121212B 20 uL

Reviewed By: 12-14-12 Manual Integration: _____ MI Review: _____

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS FBZ	CBZ	DCB	SURROGATES DFM	DCE	TOL	BFB	DILN	FLG	COMMENTS	pH
V1M9620	17:40	BFB1Q	BFB1Q		SL									1		OK	
V1M9622	18:26	VSTD0011Q	VSTD0011Q		AQ		103	102	102					1		OK	
V1M9623	18:50	VSTD0051Q	VSTD0051Q		AQ		90	89	87					1		OK	
V1M9624	19:15	VSTD0201Q	VSTD0201Q		AQ		102	102	100					1		OK	
V1M9625	19:38	VSTD0501Q	VSTD0501Q		AQ		100	100	100					1		OK	
V1M9627	20:26	VSTD1001Q	VSTD1001Q		AQ		98	100	100					1		OK	
V1M9628	20:50	VSTD2001Q	VSTD2001Q		AQ		91	94	96					1		OK	
V1M9630	21:38	VICV0501Q	VICV0501Q		AQ		94	96	95	103	103	100	100	1	E	OK	

* - 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

12/14/12 CJA

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NST ENT Spec Anal , Inc Div.

INJECTION LOG VOLATILES LABORATORY

Spectrum Analytical, Inc. RI Division V1 Injection Log
Volatiles Laboratory

METHOD: 8260 w/med S ANALYST: CJA

ICAL DATE: 12/13/12

BATCH: 121217.B

Start: 17-DEC-12 09:42
End: 17-DEC-12 21:00

Comments:

Standards: BFBWW121005A 2 uL
IYSSWW121120A ANTO uL
STDWW12121R1 20 uL
_____ ___ uL

Reviewed By: 12/18/12 Manual Integration: CJA MI Review: [signature]

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS FBZ	CBZ	DCB	SURROGATES DFM	DCE	TOL	BFB	DILN	FLG	COMMENTS	pH
V1M9701	09:42	BFB1T	BFB1T		AQ									1		OK	
V1M9702	10:06	VSTD0501T	VSTD0501T		AQ		100	100	100					1		OK	
V1M9703	10:43	LCS-69758	LCS-69758	69758	AQ		98	98	97	102	93	104	104	1	ER	OK	
V1M9704	11:07	LCS-69759	LCS-69759	69759	SL		99	99	98	101	90	105	104	1	ER	OK	
V1M9705	11:30	MB-69759	MB-69759	69759	SL		99	98	94	102	92	105	104	1	E	NOT USED	
V1M9706	11:54	MB-69759	MB-69759	69759	SL		98	96	93	101	91	106	103	1		OK	
V1M9707	12:18	MB-69758	MB-69758	69758	AQ		99	98	93	99	92	104	103	1		OK	
V1M9708	12:42	L2552-05AMS	SB48-GGW1-0812M	69758	AQ		99	98	95	100	93	104	103	2	ER	NOT USED	7
V1M9709	13:05	L2552-06A	SB49-GGW1-0812	69758	AQ	1	102	99	95	99	91	106	103	1	E	OK	7
V1M9710	13:29	L2552-05ADL	SB48-GGW1-0812D	69758	AQ	2	104	103	99	100	92	106	103	2		OK CIS 1,2 DCE = 130	7
V1M9711	13:53	VBLK	VBLK		AQ		102	99	95	98	91	107	104	1		NOT Needed	
V1M9712	14:17	L2573-01A	OU6-121412TBGW	69758	AQ	1	103	101	96	99	91	106	103	1		OK	7
V1M9713	14:40	L2573-02A	OU6-121412FBGW	69758	AQ	1	104	101	97	100	90	106	103	1		OK	
V1M9714	15:04	L2565-12C	CS-C1(4)-12/13/	69759	SL	1	101	98	95	97	88	107	104	1		RL @ LOW	
V1M9714A	15:28	L2570-01A	FORMER BLDG OIL	69759	SL	1	102	102	94	98	91	104	106	1	E	MI_101 ~~NO PASSING CCV~~ Weight 1427 RL @ 20X	
V1M9714B	15:51	L2552-05AMS	SB48-GGW1-0812M	69758	AQ	2	97	97	97	101	91	105	106	1	ER	OK	7
V1M9715	16:15	VBLK	VBLK		AQ		99	97	95	101	90	106	105	1	E	NOT Needed	
V1M9716	16:39	L2489-31A	WGL-GW-MW43-121	69758	AQ	1	105	103	102	102	92	107	105	1		OK	7
V1M9717	17:03	L2512-09A	GZ-8	69758	AQ	1	99	96	93	101	90	106	105	1		~~OK~~ RL @ 1X - NAPA C.O.	
V1M9718	17:26	L2573-03A	SS31-GW218(25-3	69758	AQ	1	101	99	95	101	91	106	105	1	E	ACETONE = 152 RL @ 20X	
V1M9719	17:50	L2573-04A	SS31-GW216(45-5	69758	AQ	1	103	99	95	99	92	107	105	1		C/O RL @ 1X	
V1M9720	18:14	L2573-05A	SS31-GW216(35-4	69758	AQ	1	94	91	87	100	91	107	105	1		OK	
V1M9721	18:38	L2573-06A	SS31-GW218(5-20	69758	AQ	1	102	99	95	101	91	107	105	1	E	ACETONE = 6756, RL @ 100X	
V1M9722	19:01	L2573-07A	SS31-GW218(35-4	69758	AQ	1	102	100	96	102	88	106	105	1		C/O	
V1M9723	19:25	L2573-08A	SS31-GW216(25-3	69758	AQ	1	103	100	94	100	90	108	105	1		C/O	
V1M9724	19:49	L2573-09A	SS31-GW216(5-20	69758	AQ	1	104	101	96	100	90	107	105	1		OK	
V1M9725	20:12	L2489-31AMS	WGL-GW-MW43-121	69758	AQ	2	95	92	88	99	93	108	107	1	R	} RL @ 1X	
V1M9726	20:36	L2489-31AMSD	WGL-GW-MW43-121	69758	AQ	3	103	101	97	101	90	107	105	1	R		7
V1M9727	21:00	VBLK	VBLK		AQ		102	99	93	99	89	106	106	1	E	NOT Needed	

* - 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

12/18/12 CJA

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Logbook ID 90.0204-10/12

Spectrum Analytical, Inc. RI Division V10 Injection Log
Volatiles Laboratory

METHOD: 8260W
ICAL DATE: 12/18/12

ANALYST: AED

BATCH: 121218A.B

Start: 18-DEC-12 20:52
End: 19-DEC-12 01:24

Comments:

Standards: BFB VW121205A 2 uL
IS/SS VW121217A AUTO uL
STD VW121212A 20 uL
ICV VW121218A 20 uL

Reviewed By: [signature] 12/19/12 Manual Integration: AED 12/19/12 MI Review: [signature]

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS FBZ	INTERNAL STDS CBZ	INTERNAL STDS DCB	SURROGATES DFM	SURROGATES DCE	SURROGATES TOL	SURROGATES BFB	DILN	FLG	COMMENTS	pH
V8B7064	20:52	BFB10K	BFB10K		AQ									1		OK	
V8B7066	21:47	VSTD00110K	VSTD00110K		AQ		102	102	100					1		OK	
V8B7067	22:14	VSTD00510K	VSTD00510K		AQ		103	103	100					1		OK MI_55	
V8B7068	22:41	VSTD02010K	VSTD02010K		AQ		100	100	100					1		OK	
V8B7070	23:35	VSTD05010K	VSTD05010K		AQ		100	100	100					1		OK	
V8B7071	00:03	VSTD10010K	VSTD10010K		AQ		99	99	101					1		OK	
V8B7072	00:30	VSTD20010K	VSTD20010K		AQ		102	101	103					1		OK	
V8B7073	01:24	VICV05010K	VICV05010K		AQ		101	100	101	100	100	99	100	1	E	OK	

* - 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

AED 12/19/12

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Spectrum Analytical, Inc. RI Division V10 Injection Log
Volatiles Laboratory

METHOD: 8260W/SIM ANALYST: AED
ICAL DATE: 12/18/12

BATCH: 121219.B

Start: 19-DEC-12 14:40
End: 20-DEC-12 03:28

Comments:

Standards: BFB VW121005A 2 uL
IS/SS VW121218A AUTO uL
STD VW121212A 20 uL
_____ ___ uL

Reviewed By: [signature] Manual Integration: N/A MI Review: N/A

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS FBZ	CBZ	DCB	SURROGATES DFM	DCE	TOL	BFB	DILN	FLG	COMMENTS	pH
V8B7110	14:40	BFB10M	BFB10M		AQ									1		OK	
V8B7111	15:01	VSTD05010M	VSTD05010M		AQ		100	100	100					1		OK	
V8B7112	15:43	LCS-69829	LCS-69829	69829	AQ		101	101	100	102	100	98	101	1	E	OK	
V8B7113	16:11	LCS-69830	LCS-69830	69830	AQ		101	100	99	101	98	98	101	1	ER	OK	
V8B7114	16:38	MB-69830	MB-69830	69830	AQ		98	97	91	101	101	98	97	1	E	NOT USED	
V8B7115	17:05	MB-69830	MB-69830	69830	AQ		96	94	89	100	99	98	98	1		OK	
V8B7116	17:32	MB-69829	MB-69829	69829	AQ		95	93	88	102	98	98	98	1		OK	Z
V8B7117	18:00	L2542-12A	FIELD BLANK	69829	AQ	1	94	93	86	102	100	97	98	1		OK	
V8B7118	18:27	L2574-10A	TRIP BLANK	69829	AQ	1	92	91	85	102	101	98	98	1		OK	
V8B7119	18:54	L2576-04A	SS-EB	69829	AQ	1	90	89	83	103	100	98	98	1		OK	
V8B7120	19:21	L2576-05A	TP-EB	69829	AQ	1	88	88	81	103	100	98	98	1		OK	Z
V8B7121	19:48	L2576-06A	TRIP BLANK	69829	AQ	1	86	86	80	104	101	98	98	1		OK	
V8B7122	20:16	L2570-01ADL	FORMER BLDG OIL	69830	SL	2	85	85	84	105	98	98	101	100		OK, Naphthalene = 192	Z
V8B7123	20:43	L2542-06A	BD-1.5	69829	AQ	1	93	94	91	104	98	98	98	1		RR @ 1x	
V8B7124	21:10	L2542-11A	FORGE RIVER	69829	AQ	1	93	93	88	102	96	97	97	1		OK	
V8B7125	21:37	L2574-01A	POND-5-SW 12141	69829	AQ	1	93	95	90	104	102	96	96	1	E	PCE = 2000, Run @ 40X	
V8B7126	22:04	L2574-02A	CB2-SW 121412	69829	AQ	1	91	92	86	103	98	97	98	1		RR @ 1x	
V8B7127	22:31	L2574-03A	CB1-SW 121412	69829	AQ	1	90	90	84	104	100	98	97	1		RR @ 1x	
V8B7128	22:58	L2574-04A	CB3-SW 121412	69829	AQ	1	87	88	83	106	102	98	99	1		RR @ 1x	
V8B7129	23:25	L2574-05A	CB4-SW 121412	69829	AQ	1	87	87	82	106	100	98	99	1		OK	
V8B7130	23:52	L2574-06A	CB6-SW 121412	69829	AQ	1	86	90	85	107	102	95	98	1	E	PCE = 2485, Run @ 50x	
V8B7131	00:19	L2574-07A	CB5-SW 121412	69829	AQ	1	87	89	83	105	99	95	99	1	E	PCE = 1729, Run @ 40X	
V8B7132	00:46	L2574-08A	CB7-SW 121412	69829	AQ	1	86	86	79	104	100	96	98	1		RR @ 1x	
V8B7133	01:14	L2542-06AMS	BD-1.5MS	69829	AQ	2	87	89	89	106	100	97	102	1	ER	OK	
V8B7134	01:40	L2542-06AMSD	BD-1.5MSD	69829	AQ	3	89	91	91	105	99	97	102	1	E	OK	
V8B7135	02:07	L2574-06AMS	CB6-SW 121412MS	69829	AQ	2	90	93	93	105	101	95	102	1	ER	OK	Z
V8B7136	02:34	L2574-06AMSD	CB6-SW 121412MS	69829	AQ	3	92	96	94	104	100	94	101	1	ER	OK	
V8B7137	03:01	VBLK	VBLK		AQ		89	90	85	104	100	98	98	1	E T	NOT USED	
V8B7138	03:28	VBLK	VBLK		AQ		88	88	81	104	99	97	98	1	E T	NOT USED	

* - 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

AED 12/20/12

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Spectrum Analytical, Inc. RI Division : VOLATILE SAMPLES RECEIVING LOGBOOK

VOA Log-In Date	Workorder	Client ID	Sample Numbers	Relinquished by:	Received by:	Pres. Used	F/R	Returned to R1
12/13/12	L2558	SAIC	01 – 11	AED	CM	H	R10	
12/13/12	L2560	D+B	01 – 03, 4	AED	↓	E		
12/14/12	L2565	D+B	01 – 06, 12 – 24	AED		E		
12/14/12	L2552	EARTH	10	AED	↓	H	R10	
12/14/12	L2567	D+B	01 – 05	AED	CM	E		
12/17/12	L2570	Labella	01	JV	AED	oil	R3	
12/17/12	L2573	SAIC	01-09	JV	↓	H	R10	
12/17/12	L2574	AECOM	01 – 10	JV	↓	H	R10	
12/17/12	L2574	AECOM	11-19	JV	↓	US	R9	
12/17/12	L2571	LABELLA	01-05	JV	AED	US	R9	
12/17/12	L2583	BRMNY	01 – 09	AED	CM	US	R9	
12/18/12	L2581	SHAW	01, 02	AED	CM	US	R9	
↓	L2576	CT-MALE	03, 07 - 20	CM	AED	US	R10	
12/18/12	L2576	CT-MALE	04 – 06	CM	AED	H	R10	

Logbook ID 90.0191-04/12

Reviewed By: AED 12/19/12

"Preservative Used" Key

UA = Unpreserved Aqueous	**H** = HCL	**A** = Air	**M** = MeOH	**E** = Encore
US = Unpreserved Soil	**N** = $NaHSO_4$		**F** = Freeze	**T** = Trace, HCL

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* PCB Organics *

175 Metro Center Boulevard · Warwick, RI 02886-1755 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : LaBella Associates

Project: LaBella Stand By - Monoco

Laboratory Workorder / SDG #: L2570

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: SW3580

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:

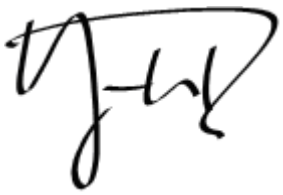
No sample in this SDG required analysis at dilution.

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.

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:_____12/30/2012_____

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

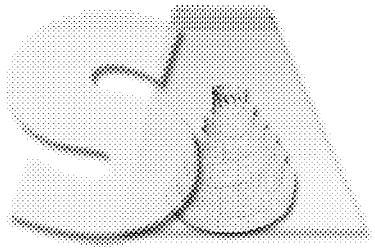
E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

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.



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.: L2570 Mod. Ref No.: SDG No.: SL2570

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-69762	109		114		94		96				0
02	LCS-69762	121		128		105		107				0
03	LCSD-69762	121		128		106		107				0
04	FORMER BLDG OIL	81		91		94		83				0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som12.12.17.A

SW846

3P - FORM III ARO-4

SOIL AROCLOR LABORATORY CONTROL SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-69762

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Lab Sample ID: LCS-69762 LCS Lot No.: A082781

Date Extracted: 12/17/2012 Date Analyzed (1): 12/17/2012

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	3999.9900	4358.1080	109	40-140
Aroclor-1260	3999.9900	4218.9080	105	60-130

Instrument ID (2): E2 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 12/17/2012

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC #	QC LIMITS
Aroclor-1016	3999.9900	4442.9043	111	40-140
Aroclor-1260	3999.9900	4548.5489	114	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:

som12.12.17.A

3P - FORM III ARO-4

SOIL AROCLOR LABORATORY CONTROL

SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-69762

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Lab Sample ID: LCSD-69762 LCS Lot No.: A082781

Date Extracted: 12/17/2012 Date Analyzed (1): 12/17/2012

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	3999.9900	4441.1526	111		40-140	2.0		30
Aroclor-1260	3999.9900	4289.4421	107		60-130	2.0		30

Instrument ID (2): E2 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 12/17/2012

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS	%RPD	#	RPD LIMIT
Aroclor-1016	3999.9900	4537.7609	113		40-140	2.0		30
Aroclor-1260	3999.9900	4609.0914	115		60-130	1.0		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:

som12.12.17.A

4F - FORM IV ARO

AROCLOR METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-69762

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Lab File ID: E2L7850F.D / E2L7850R.D Lab Sample ID: MB-69762

Matrix: (SOIL/SED/WATER) SOIL Extraction: (Type) WASTE DI Date Extracted: 12/17/2012

Sulfur Cleanup: (Y/N) Y GPC Cleanup:(Y/N) N

Acid Cleanup: (Y/N) Y

Date Analyzed (1): 12/17/2012 Date Analyzed (2): 12/17/2012

Time Analyzed (1): 22:21 Time Analyzed (2): 22:21

Instrument ID (1): E2 Instrument ID (2): E2

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED (1)	DATE ANALYZED (2)
01	LCS-69762	LCS-69762	12/17/2012	12/17/2012
02	LCSD-69762	LCSD-69762	12/17/2012	12/17/2012
03	FORMER BLDG OIL	L2570-01A	12/17/2012	12/17/2012

COMMENTS:

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FORMER BLDG OIL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2570-01A

Sample wt/vol: 1.0 (g/mL) G Lab File ID: E2L7853F.D/E2L7853R.D

% Moisture: 0.0 Decanted: (Y/N) N Date Received: 12/14/2012

Extraction: (Type) WASTE DIL Date Extracted: 12/17/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/17/2012

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	Q
12674-11-2	Aroclor-1016	990	U
11104-28-2	Aroclor-1221	990	U
11141-16-5	Aroclor-1232	990	U
53469-21-9	Aroclor-1242	990	U
12672-29-6	Aroclor-1248	990	U
11097-69-1	Aroclor-1254	990	U
11096-82-5	Aroclor-1260	2300	

Data File: \\avogadro\organics\E2.i\121217F.B\E2L7853F.D
Report Date: 26-Dec-2012 15:44

Spectrum Analytical, Inc. RI Division

Quantitation Report

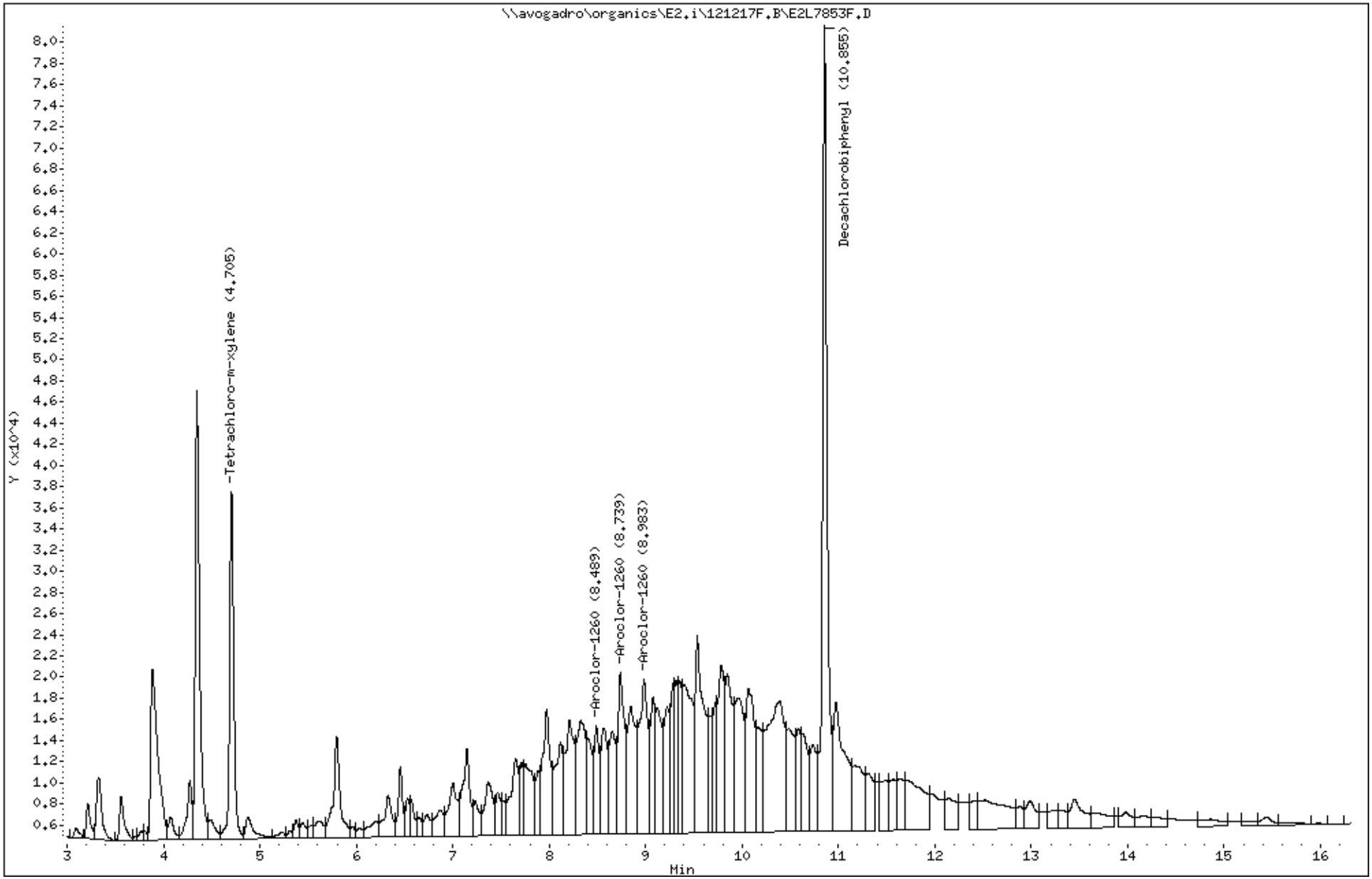
Data file : \\avogadro\organics\E2.i\121217F.B\E2L7853F.D
Lab Smp Id: L2570-01A Client Smp ID: FORMER BLDG OIL
Inj Date : 17-DEC-2012 23:20
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : L2570-01A,,69762,8082A.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121217F.B\E2_LL_PCB_F.m
Meth Date : 18-Dec-2012 09:16 gappolonia Quant Type: ESTD
Cal Date : 14-DEC-2012 00:59 Cal File: E2L7081F.D
Als bottle: 36
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: 8082A.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	1.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.705	4.663	0.042	32882	0.04851	480		
9 Aroclor-1260					CAS #: 11096-82-5		
8.489	8.462	0.027	10240	0.21578	2200	80.00- 120.00	100.00
8.738	8.712	0.026	15257	0.23090	2300	119.20- 159.20	148.99
8.983	8.958	0.025	14539	0.24105	2400	105.02- 145.02	141.98
Average of Peak Concentrations =					2300		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
10.855	10.828	0.027	2570774	0.11338	1100		

Data File: \\avogadro\organics\E2.i\121217F.B\E2L7853F.D
Date : 17-DEC-2012 23:20
Client ID: FORMER BLDG OIL
Instrument: E2.i
Sample Info: L2570-01A,,69762,8082A,sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121217R.B\E2L7853R.D
Report Date: 26-Dec-2012 15:45

Spectrum Analytical, Inc. RI Division

Quantitation Report

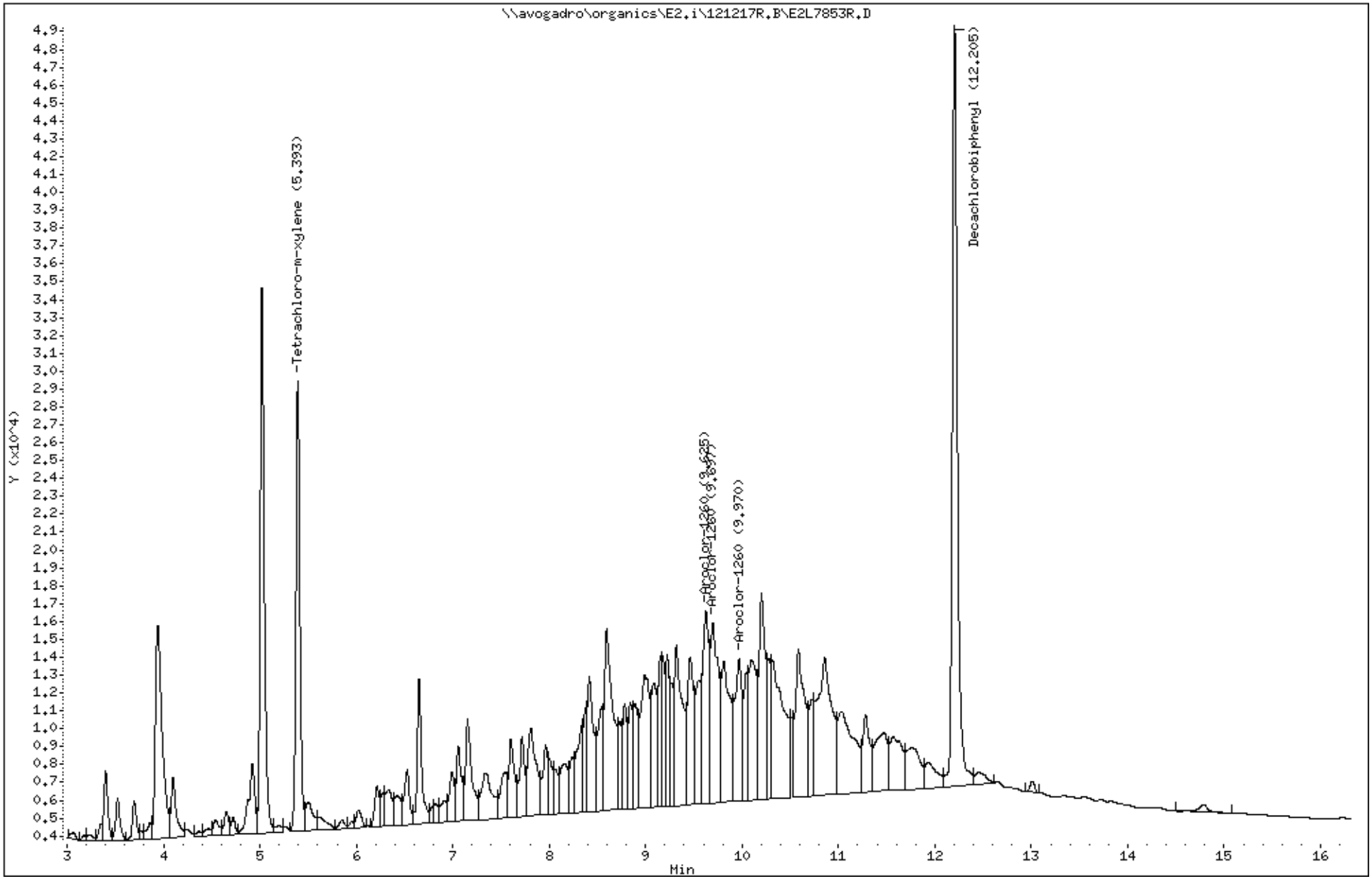
Data file : \\avogadro\organics\E2.i\121217R.B\E2L7853R.D
Lab Smp Id: L2570-01A Client Smp ID: FORMER BLDG OIL
Inj Date : 17-DEC-2012 23:20
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : L2570-01A,,69762,8082A.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121217R.B\E2_LL_PCB_R.m
Meth Date : 18-Dec-2012 09:21 gappolonia Quant Type: ESTD
Cal Date : 14-DEC-2012 00:59 Cal File: E2L7081R.D
Als bottle: 36
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: 8082A.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	1.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
5.393	5.355	0.038	25216	0.05450	540		
8 Aroclor-1260					CAS #: 11096-82-5		
9.624	9.604	0.020	10778	0.26339	2600	80.00- 120.00	100.00
9.696	9.680	0.016	10078	0.33910	3400	49.02- 89.02	93.51
9.969	9.953	0.016	7966	0.28624	2900	46.90- 86.90	73.91
Average of Peak Concentrations =					3000		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
12.204	12.186	0.018	42542	0.09938	990		

Data File: \\avogadro\organics\E2.i\121217R.B\E2L7853R.D
Date : 17-DEC-2012 23:20
Client ID: FORMER BLDG OIL
Instrument: E2.i
Sample Info: L2570-01A,,69762,8082A.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.32



6N - FORM VI ARO-1

AROCLORS INITIAL CALIBRATION (MULTIPOINT)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

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: CLPPest ID: 0.53 (mm) Date(s) Analyzed (1): 12/13/2012 12/14/2012

COMPOUND	PEAK*	RT OF STANDARDS									__	RT WINDOW **	
		CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8	CS9	RT	FROM	TO
AR1016	1	6.528	6.527	6.526	6.524	6.524	6.527				6.526	6.456	6.596
	2	6.706	6.705	6.704	6.702	6.702	6.705				6.704	6.634	6.774
	3	6.786	6.785	6.784	6.782	6.782	6.785				6.784	6.714	6.854
AR1260	1	8.466	8.465	8.464	8.462	8.463	8.466				8.464	8.394	8.534
	2	8.716	8.715	8.713	8.712	8.713	8.716				8.714	8.644	8.784
	3	8.961	8.960	8.959	8.958	8.958	8.962				8.960	8.890	9.030
AR1221	1	4.452	4.451	4.451	4.449	4.448	4.452				4.451	4.381	4.521
	2	4.954	4.953	4.953	4.951	4.950	4.954				4.953	4.883	5.023
	3	5.205	5.204	5.205	5.203	5.202	5.206				5.204	5.134	5.274
AR1242	1	5.860	5.860	5.860	5.860	5.859	5.861				5.860	5.790	5.930
	2	6.164	6.164	6.164	6.164	6.164	6.164				6.164	6.094	6.234
	3	6.527	6.528	6.527	6.527	6.527	6.528				6.527	6.457	6.597
AR1248	1	6.963	6.963	6.962	6.963	6.961	6.963				6.963	6.893	7.033
	2	7.210	7.209	7.208	7.207	7.206	7.210				7.208	7.138	7.278
	3	7.308	7.308	7.307	7.307	7.305	7.308				7.307	7.237	7.377
AR1254	1	7.635	7.634	7.633	7.632	7.632	7.635				7.634	7.564	7.704
	2	7.903	7.902	7.901	7.901	7.900	7.903				7.902	7.832	7.972
	3	8.179	8.177	8.177	8.177	8.176	8.179				8.177	8.107	8.247
TCX (A)		4.666	4.666	4.665	4.665	4.664					4.665	4.615	4.715
DCB (A)		10.832	10.831	10.829	10.827	10.828					10.829	10.729	10.929

* At least three peaks for each column are required for identification of Aroclors.

**Retention Time windows are ± 0.07 minutes for each Aroclor peak; 0.05 minutes for tetrachloro-m-xylene; ± 0.10 minutes for decachlorobiphenyl.

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

6N - FORM VI ARO-1

AROCLORS INITIAL CALIBRATION (MULTIPOINT)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

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): 12/13/2012 12/14/2012

COMPOUND	PEAK*	RT OF STANDARDS									__	RT WINDOW **	
		CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8	CS9	RT	FROM	TO
AR1016	1	7.334	7.334	7.333	7.332	7.332	7.334				7.333	7.263	7.403
	2	7.494	7.494	7.492	7.491	7.490	7.494				7.492	7.422	7.562
	3	7.608	7.609	7.608	7.607	7.606	7.608				7.608	7.538	7.678
AR1260	1	9.607	9.607	9.605	9.604	9.605	9.607				9.606	9.536	9.676
	2	9.684	9.683	9.682	9.681	9.680	9.685				9.682	9.612	9.752
	3	9.956	9.956	9.954	9.953	9.953	9.957				9.955	9.885	10.025
AR1221	1	4.512	4.512	4.512	4.510	4.509	4.513				4.511	4.441	4.581
	2	5.177	5.177	5.178	5.176	5.175	5.177				5.176	5.106	5.246
	3	5.867	5.867	5.867	5.865	5.864	5.867				5.866	5.796	5.936
AR1242	1	6.772	6.773	6.771	6.770	6.769	6.773				6.771	6.701	6.841
	2	7.085	7.086	7.085	7.085	7.084	7.085				7.085	7.015	7.155
	3	7.334	7.335	7.334	7.334	7.334	7.336				7.335	7.265	7.405
AR1248	1	8.116	8.116	8.115	8.115	8.114	8.116				8.115	8.045	8.185
	2	8.298	8.297	8.296	8.296	8.295	8.297				8.297	8.227	8.367
	3	8.358	8.357	8.356	8.356	8.355	8.358				8.357	8.287	8.427
AR1254	1	8.568	8.567	8.566	8.566	8.565	8.569				8.567	8.497	8.637
	2	8.878	8.878	8.877	8.877	8.876	8.878				8.877	8.807	8.947
	3	8.979	8.978	8.977	8.977	8.976	8.979				8.978	8.908	9.048
TCX (A)		5.357	5.357	5.356	5.358	5.355					5.357	5.307	5.407
DCB (A)		12.190	12.189	12.188	12.185	12.186					12.188	12.088	12.288

* At least three peaks for each column are required for identification of Aroclors.

**Retention Time windows are ± 0.07 minutes for each Aroclor peak; 0.05 minutes for tetrachloro-m-xylene; ± 0.10 minutes for decachlorobiphenyl.

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

6P - FORM VI ARO-2

AROCLOR INITIAL CALIBRATION (MULTIPOINT)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Instrument ID: E2 Date(s) Analyzed: 12/13/2012 12/14/2012

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 [1]	CALIBRATION FACTORS (CFs)									% RSD
		CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8	CS9	
AR1016	1	56250	52215	47448	44100	37040	55460				15.2
	2	29520	28025	25990	24391	20536	28780				12.8
	3	20120	19680	18678	17951	15312	19420				9.5
AR1260	1	54040	51570	46153	42904	35992	54080				15.1
	2	75810	71945	64160	59660	50059	74820				15.2
	3	67620	65640	60128	56998	49249	62260				11.0
AR1221	1	2420	2330	2218	2145	1955	2420				8.0
	2	9540	9005	8518	8191	7425	9720				9.9
	3	6600	6265	5878	5618	5092	6800				10.6
AR1242	1	23860	21980	19995	18289	16858	24940				15.1
	2	12430	11655	10898	10150	9651	12420				10.4
	3	43120	39410	36050	32953	30471	44320				14.7
AR1248	1	31710	28760	25688	23075	20791	34140				18.7
	2	34780	32000	29405	27080	25012	36500				14.5
	3	21710	20410	19388	18241	17229	22420				10.1
AR1254	1	36530	33220	30525	28041	25781	40100				16.5
	2	54030	48830	44420	40440	37083	60160				18.2
	3	36680	34445	32560	30420	28657	39380				11.8
DCB (A)	l	26383900	24520800	22686050	20808425	18965788					12.9
TCX (A)	e	701000	692900	677650	670750	647163					3.1

[1] At least three peaks for each column are required for identification of Aroclors.

6P - FORM VI ARO-2

AROCLOR INITIAL CALIBRATION (MULTIPOINT)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Instrument ID: E2 Date(s) Analyzed: 12/13/2012 12/14/2012

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 [1]	CALIBRATION FACTORS (CFs)									
		CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8	CS9	% RSD
AR1016	1	44220	41810	38308	35801	30069	43640				13.9
	2	22500	21580	20105	18876	15992	21800				12.0
	3	13750	13615	13030	12815	11147	13140				7.3
AR1260	1	46430	43835	41058	38689	33214	42300				11.2
	2	33390	31275	28780	26774	21780	36320				17.3
	3	31030	29270	27698	26133	21689	31160				12.9
AR1221	1	6150	5825	5403	5095	4547	6280				12.0
	2	1950	1900	1795	1725	1552	1980				8.9
	3	7200	6860	6473	6268	5739	7300				9.0
AR1242	1	17430	15940	14743	13521	12552	17600				13.5
	2	8760	8215	7733	7339	7037	8860				9.4
	3	33910	31335	29050	26718	24794	35340				13.6
AR1248	1	20560	19465	18653	17626	16719	21080				8.9
	2	15450	14365	13633	12776	11992	16040				11.1
	3	28970	26635	24850	22814	21159	30520				13.9
AR1254	1	33600	30790	28433	25921	23864	37020				16.3
	2	22810	21690	20815	19706	18798	24280				9.4
	3	43420	40940	38583	35583	33578	46860				12.4
DCB (A)	l	503200	465200	424850	389888	357213					13.6
TCX (A)	e	464800	465200	461600	465975	455825					0.9

[1] At least three peaks for each column are required for identification of Aroclors.

7N - FORM VII ARO

AROCLOR CALIBRATION VERIFICATION SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

GC Column: CLPPest ID: 0.53 (mm) Calibration Date(s): 12/13/2012 12/14/2012

EPA Sample No. (AR####3##): AR16603YE Date Analyzed: 12/17/2012

Lab Sample ID: AR16603YE Time Analyzed: 21:01

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

AROCLOR COMPOUND	PEAK	RETENTION RT	RT WINDOW FROM	RT WINDOW TO	__ CF	CF	%D
AR1016	1	6.520	6.456	6.596	48752.08333	47560	-2.4
	2	6.698	6.634	6.774	26206.97917	26050	-0.6
	3	6.778	6.714	6.854	18526.77083	18795	1.4
AR1260	1	8.459	8.394	8.534	47456.35417	46605	-1.8
	2	8.709	8.644	8.784	66075.72917	64607.5	-2.2
	3	8.955	8.890	9.030	60315.72917	60772.5	0.8
TCX		4.658	4.615	4.715	677892.5	686950	1.3
DCB		10.823	10.729	10.929	22672992.5	22834200	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.: L2570 Mod. Ref No.: SDG No.: SL2570

GC Column: CLPPest ID: 0.53 (mm) Calibration Date(s): 12/13/2012 12/14/2012

EPA Sample No. (AR####3##): AR16603YG Date Analyzed: 12/18/2012

Lab Sample ID: AR16603YG Time Analyzed: 2:19

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

AROCLOR COMPOUND	PEAK	RETENTION RT	RT WINDOW FROM	RT WINDOW TO	__ CF	CF	%D
AR1016	1	6.518	6.456	6.596	48752.08333	49607.5	1.8
	2	6.697	6.634	6.774	26206.97917	27197.5	3.8
	3	6.777	6.714	6.854	18526.77083	19597.5	5.8
AR1260	1	8.459	8.394	8.534	47456.35417	48105	1.4
	2	8.709	8.644	8.784	66075.72917	66960	1.3
	3	8.954	8.890	9.030	60315.72917	60142.5	-0.3
TCX		4.656	4.615	4.715	677892.5	701150	3.4
DCB		10.823	10.729	10.929	22672992.5	20282900	-10.5

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.: L2570 Mod. Ref No.: SDG No.: SL2570

GC Column: CLPPestII ID: 0.53 (mm) Calibration Date(s): 12/13/2012 12/14/2012

EPA Sample No. (AR####3##): AR16603YE Date Analyzed: 12/17/2012

Lab Sample ID: AR16603YE Time Analyzed: 21:01

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

AROCLOR COMPOUND	PEAK	RETENTION RT	RT WINDOW FROM	RT WINDOW TO	__ CF	CF	%D
AR1016	1	7.327	7.263	7.403	38974.6875	38437.5	-1.4
	2	7.487	7.422	7.562	20142.1875	20202.5	0.3
	3	7.602	7.538	7.678	12916.14583	13307.5	3.0
AR1260	1	9.601	9.536	9.676	40920.9375	41315	1.0
	2	9.677	9.612	9.752	29719.79167	29145	-1.9
	3	9.950	9.885	10.025	27829.89583	28175	1.2
TCX		5.349	5.307	5.407	462680	478100	3.3
DCB		12.180	12.088	12.288	428070	434775	1.6

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.: L2570 Mod. Ref No.: SDG No.: SL2570

GC Column: CLPPestII ID: 0.53 (mm) Calibration Date(s): 12/13/2012 12/14/2012

EPA Sample No. (AR####3##): AR16603YG Date Analyzed: 12/18/2012

Lab Sample ID: AR16603YG Time Analyzed: 2:19

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

EPA Sample No. (AR####3##): Date Analyzed:

Lab Sample ID: Time Analyzed:

AROCLOR COMPOUND	PEAK	RETENTION RT	RT WINDOW FROM	RT WINDOW TO	__ CF	CF	%D
AR1016	1	7.327	7.263	7.403	38974.6875	40445	3.8
	2	7.486	7.422	7.562	20142.1875	21157.5	5.0
	3	7.602	7.538	7.678	12916.14583	14180	9.8
AR1260	1	9.601	9.536	9.676	40920.9375	39280	-4.0
	2	9.678	9.612	9.752	29719.79167	27112.5	-8.8
	3	9.950	9.885	10.025	27829.89583	26280	-5.6
TCX		5.347	5.307	5.407	462680	486650	5.2
DCB		12.178	12.088	12.288	428070	424500	-0.8

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 12/13/2012 12/14/2012

Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 4.665 DCB: 10.829

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12216Y2	E2L7049F.D	12/13/2012	14:26	4.668	10.833
02	AR12211Y2	E2L7050F.D	12/13/2012	14:46	4.667	10.832
03	AR12212Y2	E2L7051F.D	12/13/2012	15:06	4.667	10.832
04	AR12213Y2	E2L7052F.D	12/13/2012	15:25	4.667	10.831
05	AR12214Y2	E2L7053F.D	12/13/2012	15:45	4.665	10.829
06	AR12215Y2	E2L7054F.D	12/13/2012	16:05	4.664	10.829
07	AR12323Y2	E2L7055F.D	12/13/2012	16:25	4.666	10.830
08	AR12421Y2	E2L7056F.D	12/13/2012	16:44	4.666	10.831
09	AR12426Y2	E2L7057F.D	12/13/2012	17:04	4.667	10.833
10	AR12422Y2	E2L7058F.D	12/13/2012	17:24	4.667	10.831
11	AR12423Y2	E2L7059F.D	12/13/2012	17:44	4.666	10.830
12	AR12424Y2	E2L7060F.D	12/13/2012	18:03	4.666	10.831
13	AR12425Y2	E2L7061F.D	12/13/2012	18:23	4.666	10.830
14	AR12481Y2	E2L7062F.D	12/13/2012	18:43	4.667	10.832
15	AR12486Y2	E2L7063F.D	12/13/2012	19:03	4.667	10.832
16	AR12482Y2	E2L7064F.D	12/13/2012	19:23	4.667	10.831
17	AR12483Y2	E2L7065F.D	12/13/2012	19:43	4.666	10.830
18	AR12484Y2	E2L7066F.D	12/13/2012	20:02	4.666	10.830
19	AR12485Y2	E2L7067F.D	12/13/2012	20:22	4.664	10.829
20	AR12541Y2	E2L7068F.D	12/13/2012	20:42	4.667	10.832
21	AR12546Y2	E2L7069F.D	12/13/2012	21:02	4.667	10.832
22	AR12542Y2	E2L7070F.D	12/13/2012	21:22	4.666	10.831
23	AR12543Y2	E2L7071F.D	12/13/2012	21:41	4.666	10.830
24	AR12544Y2	E2L7072F.D	12/13/2012	22:01	4.665	10.830
25	AR12545Y2	E2L7073F.D	12/13/2012	22:21	4.665	10.828
26	AR12623Y2	E2L7074F.D	12/13/2012	22:41	4.665	10.830
27	AR12683Y2	E2L7075F.D	12/13/2012	23:01	4.665	10.829

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.: L2570 Mod. Ref No.: SDG No.: SL2570

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 12/13/2012 12/14/2012

Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 4.665 DCB: 10.829

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR16601Y2	E2L7076F.D	12/13/2012	23:21	4.666	10.832
29	AR16606Y2	E2L7077F.D	12/13/2012	23:41	4.666	10.832
30	AR16602Y2	E2L7078F.D	12/14/2012	0:00	4.666	10.831
31	AR16603Y2	E2L7079F.D	12/14/2012	0:20	4.665	10.829
32	AR16604Y2	E2L7080F.D	12/14/2012	0:40	4.665	10.827
33	AR16605Y2	E2L7081F.D	12/14/2012	0:59	4.664	10.828
34	AR16603YE	E2L7846F.D	12/17/2012	21:01	4.658	10.823
35	MB-69762	E2L7850F.D	12/17/2012	22:21	4.657	10.821
36	LCS-69762	E2L7851F.D	12/17/2012	22:40	4.656	10.821
37	LCSD-69762	E2L7852F.D	12/17/2012	23:00	4.655	10.820
38	FORMER BLDG OIL	E2L7853F.D	12/17/2012	23:20	4.705	10.855
39	AR16603YG	E2L7862F.D	12/18/2012	2:19	4.656	10.823

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.: L2570 Mod. Ref No.: SDG No.: SL2570

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 12/13/2012 12/14/2012

Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 5.357 DCB: 12.188

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12216Y2	E2L7049R.D	12/13/2012	14:26	5.360	12.192
02	AR12211Y2	E2L7050R.D	12/13/2012	14:46	5.358	12.191
03	AR12212Y2	E2L7051R.D	12/13/2012	15:06	5.358	12.190
04	AR12213Y2	E2L7052R.D	12/13/2012	15:25	5.359	12.189
05	AR12214Y2	E2L7053R.D	12/13/2012	15:45	5.357	12.188
06	AR12215Y2	E2L7054R.D	12/13/2012	16:05	5.356	12.187
07	AR12323Y2	E2L7055R.D	12/13/2012	16:25	5.357	12.189
08	AR12421Y2	E2L7056R.D	12/13/2012	16:44	5.358	12.189
09	AR12426Y2	E2L7057R.D	12/13/2012	17:04	5.359	12.191
10	AR12422Y2	E2L7058R.D	12/13/2012	17:24	5.359	12.191
11	AR12423Y2	E2L7059R.D	12/13/2012	17:44	5.358	12.188
12	AR12424Y2	E2L7060R.D	12/13/2012	18:03	5.358	12.191
13	AR12425Y2	E2L7061R.D	12/13/2012	18:23	5.357	12.190
14	AR12481Y2	E2L7062R.D	12/13/2012	18:43	5.359	12.191
15	AR12486Y2	E2L7063R.D	12/13/2012	19:03	5.359	12.190
16	AR12482Y2	E2L7064R.D	12/13/2012	19:23	5.358	12.190
17	AR12483Y2	E2L7065R.D	12/13/2012	19:43	5.358	12.189
18	AR12484Y2	E2L7066R.D	12/13/2012	20:02	5.358	12.190
19	AR12485Y2	E2L7067R.D	12/13/2012	20:22	5.357	12.189
20	AR12541Y2	E2L7068R.D	12/13/2012	20:42	5.359	12.190
21	AR12546Y2	E2L7069R.D	12/13/2012	21:02	5.358	12.190
22	AR12542Y2	E2L7070R.D	12/13/2012	21:22	5.358	12.190
23	AR12543Y2	E2L7071R.D	12/13/2012	21:41	5.358	12.189
24	AR12544Y2	E2L7072R.D	12/13/2012	22:01	5.356	12.188
25	AR12545Y2	E2L7073R.D	12/13/2012	22:21	5.356	12.188
26	AR12623Y2	E2L7074R.D	12/13/2012	22:41	5.357	12.189
27	AR12683Y2	E2L7075R.D	12/13/2012	23:01	5.357	12.189

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.: L2570 Mod. Ref No.: SDG No.: SL2570

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 12/13/2012 12/14/2012

Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 5.357 DCB: 12.188

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR16601Y2	E2L7076R.D	12/13/2012	23:21	5.357	12.190
29	AR16606Y2	E2L7077R.D	12/13/2012	23:41	5.358	12.190
30	AR16602Y2	E2L7078R.D	12/14/2012	0:00	5.357	12.189
31	AR16603Y2	E2L7079R.D	12/14/2012	0:20	5.356	12.188
32	AR16604Y2	E2L7080R.D	12/14/2012	0:40	5.358	12.185
33	AR16605Y2	E2L7081R.D	12/14/2012	0:59	5.355	12.186
34	AR16603YE	E2L7846R.D	12/17/2012	21:01	5.349	12.180
35	MB-69762	E2L7850R.D	12/17/2012	22:21	5.348	12.176
36	LCS-69762	E2L7851R.D	12/17/2012	22:40	5.347	12.176
37	LCSD-69762	E2L7852R.D	12/17/2012	23:00	5.347	12.175
38	FORMER BLDG OIL	E2L7853R.D	12/17/2012	23:20	5.393	12.205
39	AR16603YG	E2L7862R.D	12/18/2012	2:19	5.347	12.178

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.
FORMER BLDG OIL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Lab Sample ID: L2570-01A Date(s) Analyzed: 12/17/2012 12/17/2012

Instrument ID (1): E2 Instrument ID (2): E2

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (MM)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION PEAK	CONCENTRATION MEAN	%D
Aroclor-1260	1	8.489	8.394	8.534	2157.7722		
	2	8.739	8.644	8.784	2309.0173		
COLUMN 1	3	8.983	8.890	9.030	2410.4823		
	4						
	5					2292.423926	
	1	9.625	9.536	9.676	2633.8595		
	2	9.697	9.612	9.752	3391.0063		
COLUMN 2	3	9.970	9.885	10.025	2862.3894		
	4						
	5					2962.418405	29.2

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.
LCS-69762

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Lab Sample ID: LCS-69762 Date(s) Analyzed: 12/17/2012 12/17/2012

Instrument ID (1): E2 Instrument ID (2): E2

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (MM)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION PEAK	CONCENTRATION MEAN	%D
Aroclor-1016	1	6.519	6.456	6.596	4275.3045		
	2	6.697	6.634	6.774	4362.1968		
COLUMN 1	3	6.777	6.714	6.854	4436.8228		
	4						
	5					4358.108030	
	1	7.327	7.263	7.403	4340.5095		
	2	7.486	7.422	7.562	4428.0195		
COLUMN 2	3	7.602	7.538	7.678	4560.1839		
	4						
	5					4442.904297	1.9
Aroclor-1260	1	8.459	8.394	8.534	4246.2175		
	2	8.708	8.644	8.784	4217.7363		
COLUMN 1	3	8.954	8.890	9.030	4192.7703		
	4						
	5					4218.908027	
	1	9.599	9.536	9.676	4191.2529		
	2	9.676	9.612	9.752	4712.0115		
COLUMN 2	3	9.949	9.885	10.025	4742.3821		
	4						
	5					4548.548851	7.8

At least 3 peaks for each column are required for identification of multicomponent analytes

10C - FORM X ARO
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.
LCSD-69762

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Lab Sample ID: LCSD-69762 Date(s) Analyzed: 12/17/2012 12/17/2012

Instrument ID (1): E2 Instrument ID (2): E2

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (MM)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION PEAK	CONCENTRATION MEAN	%D
Aroclor-1016	1	6.519	6.456	6.596	4371.0953		
	2	6.696	6.634	6.774	4438.8939		
COLUMN 1	3	6.777	6.714	6.854	4513.4687		
	4						
	5					4441.152613	
	1	7.326	7.263	7.403	4439.8047		
	2	7.485	7.422	7.562	4532.7748		
COLUMN 2	3	7.601	7.538	7.678	4640.7033		
	4						
	5					4537.760913	2.2
Aroclor-1260	1	8.458	8.394	8.534	4337.0378		
	2	8.708	8.644	8.784	4289.7748		
COLUMN 1	3	8.954	8.890	9.030	4241.5138		
	4						
	5					4289.442144	
	1	9.599	9.536	9.676	4259.1888		
	2	9.675	9.612	9.752	4799.8318		
COLUMN 2	3	9.948	9.885	10.025	4768.2536		
	4						
	5					4609.091386	7.5

At least 3 peaks for each column are required for identification of multicomponent analytes

Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7049F.D
Report Date: 21-Dec-2012 12:27

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BF.B\E2L7049F.D
Lab Smp Id: AR12216Y2 Client Smp ID: AR12216Y2
Inj Date : 13-DEC-2012 14:26
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12216Y2,AR12216Y2,,ar1221.sub,,
Misc Info : 1,6,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BF.B\E2_LL_PCB_F.m
Meth Date : 18-Dec-2012 16:42 gappolonia Quant Type: ESTD
Cal Date : 14-DEC-2012 00:59 Cal File: E2L7081F.D
Als bottle: 1 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1221.sub
Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

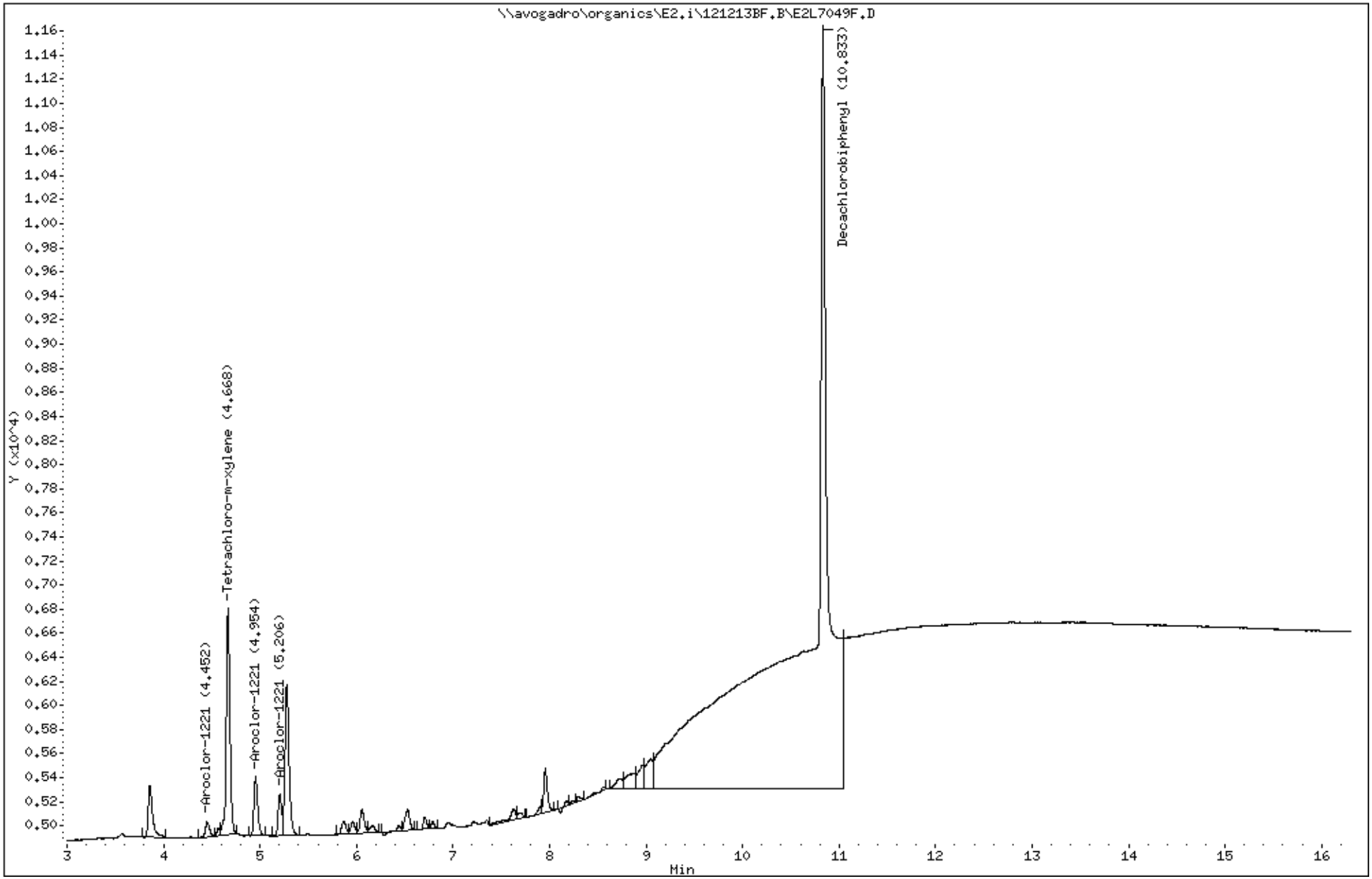
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.668	4.663	0.005	1879	0.00000	0.0027			(a)
3 Aroclor-1221						CAS #: 11104-28-2		
4.452	4.448	0.004	121	0.05000	0.054	80.00- 120.00	100.00	(aM)
4.954	4.950	0.004	486	0.05000	0.056	359.80- 399.80	401.65	
5.205	5.202	0.003	340	0.05000	0.056	240.45- 280.45	280.99	
Average of Peak Amounts =				0.05533				
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.832	10.828	0.004	1157230	0.00000	0.040			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7049F.D
Date : 13-DEC-2012 14:26
Client ID: AR12216Y2 Instrument: E2.i
Sample Info: AR12216Y2,AR12216Y2,,ar1221.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPest Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7049R.D
Report Date: 21-Dec-2012 12:28

Spectrum Analytical, Inc. RI Division

Quantitation Report
Data file : \\avogadro\organics\E2.i\121213BR.B\E2L7049R.D
Lab Smp Id: AR12216Y2 Client Smp ID: AR12216Y2
Inj Date : 13-DEC-2012 14:26
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12216Y2,AR12216Y2,,ar1221.sub,,
Misc Info : 1,6,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BR.B\E2_LL_PCB_R.m
Meth Date : 18-Dec-2012 16:41 gappolonia Quant Type: ESTD
Cal Date : 14-DEC-2012 00:59 Cal File: E2L7081R.D
Als bottle: 1 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1221.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

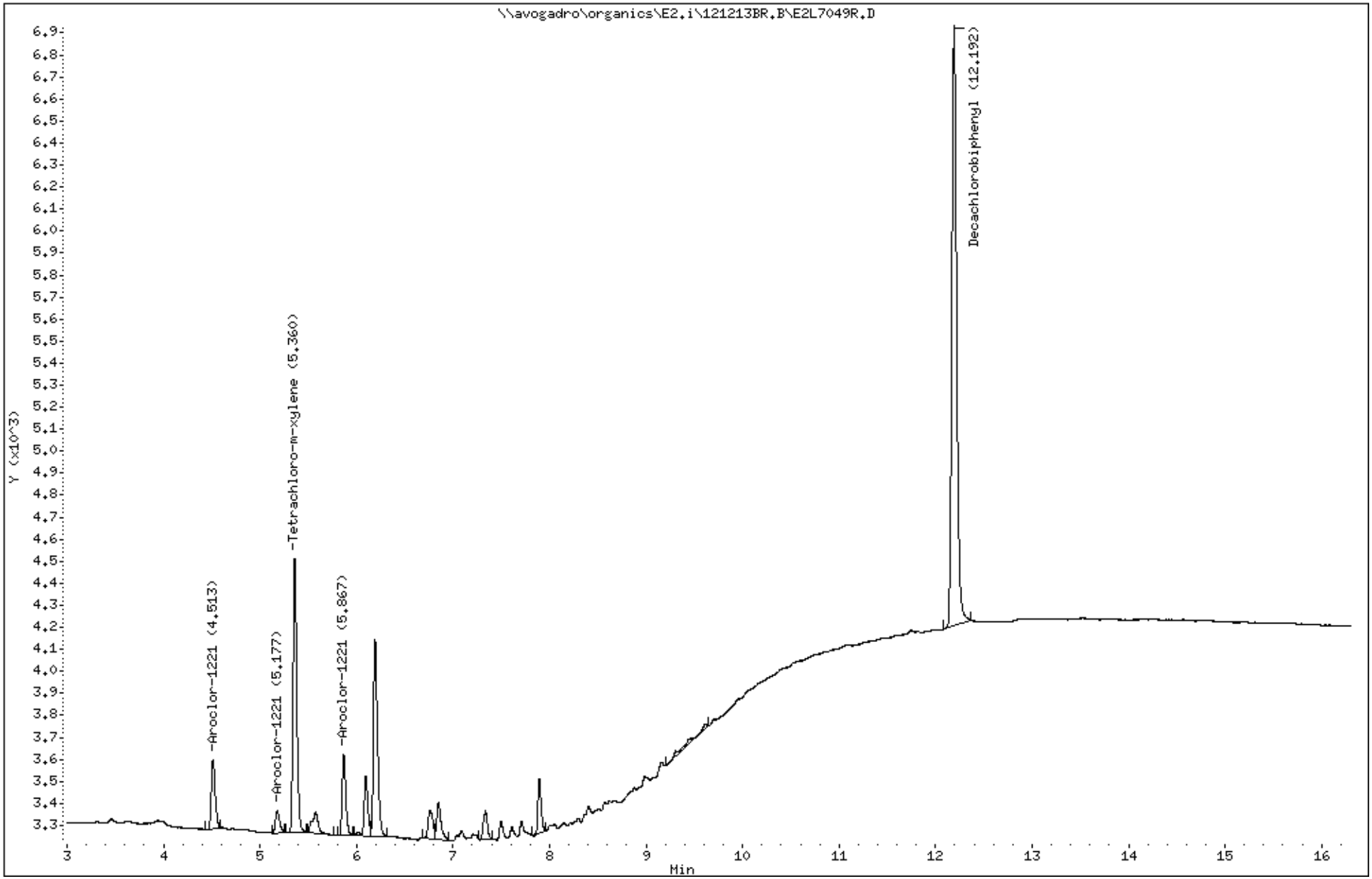
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.359	5.355	0.004	1246	0.00000	0.0027			(a)
2 Aroclor-1221						CAS #: 11104-28-2		
4.512	4.508	0.004	314	0.05000	0.056	80.00- 120.00	100.00	(aM)
5.176	5.174	0.002	99	0.05000	0.054	14.13- 54.13	31.53	
5.867	5.864	0.003	365	0.05000	0.055	106.23- 146.23	116.24	
		Average of Peak Amounts =		0.05500				
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.191	12.186	0.005	2726	0.00000	0.0064			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7049R.D
Date : 13-DEC-2012 14:26
Client ID: AR12216Y2 Instrument: E2.i
Sample Info: AR12216Y2,AR12216Y2,,ar1221.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPestII Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7050F.D
Report Date: 21-Dec-2012 12:27

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BF.B\E2L7050F.D
Lab Smp Id: AR12211Y2 Client Smp ID: AR12211Y2
Inj Date : 13-DEC-2012 14:46
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12211Y2,AR12211Y2,,ar1221.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BF.B\E2_LL_PCB_F.m
Meth Date : 18-Dec-2012 16:42 gappolonia Quant Type: ESTD
Cal Date : 14-DEC-2012 00:59 Cal File: E2L7081F.D
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1221.sub
Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

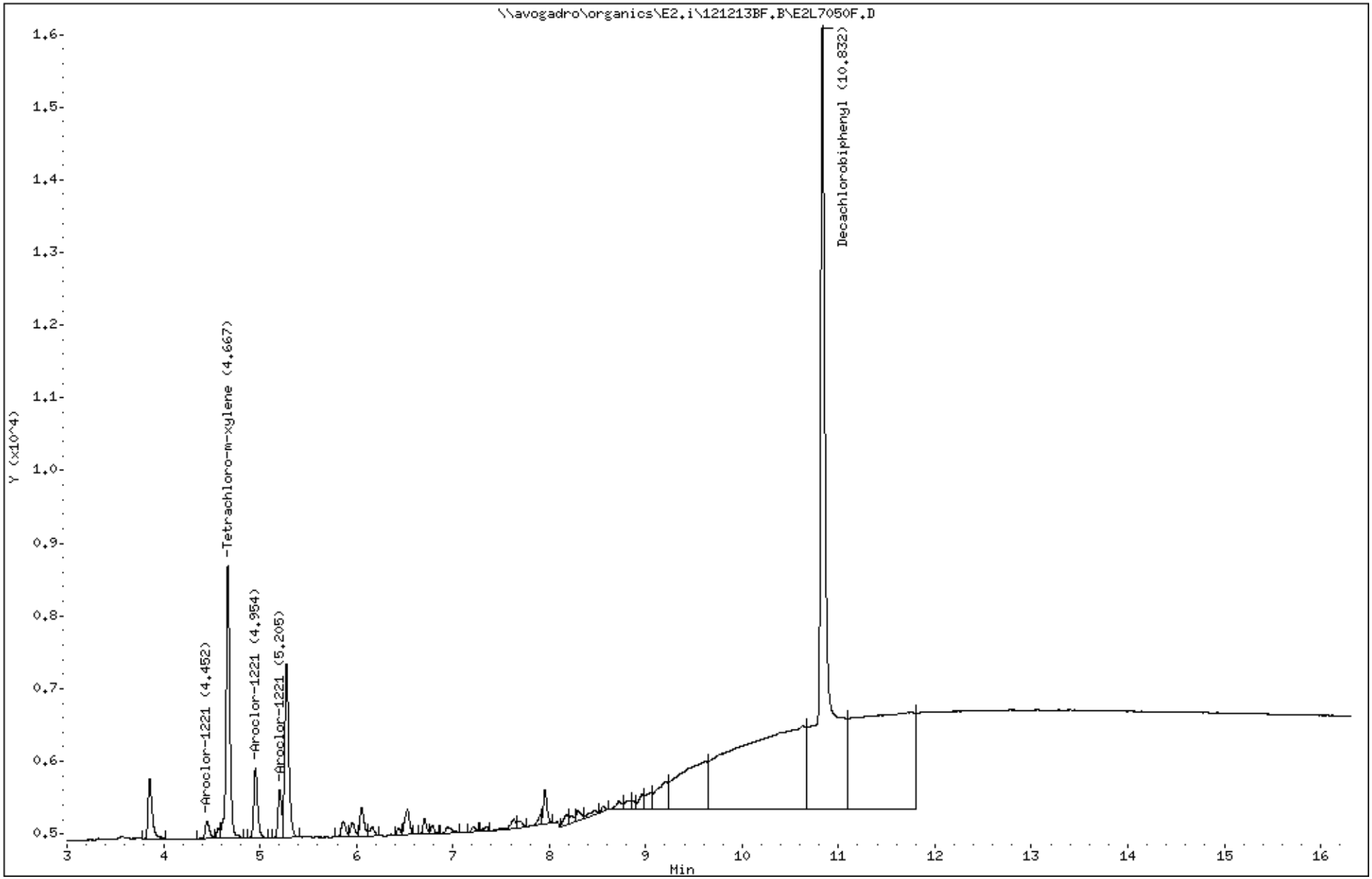
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.667	4.663	0.004	3745	0.00500	0.0054			(a)
3 Aroclor-1221						CAS #: 11104-28-2		
4.451	4.448	0.003	242	0.10000	0.11	80.00- 120.00	100.00	(a)
4.953	4.950	0.003	954	0.10000	0.11	359.80- 399.80	394.21	
5.205	5.202	0.003	660	0.10000	0.11	240.45- 280.45	272.73	
Average of Peak Amounts =					0.11000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.832	10.828	0.004	582951	0.01000	0.020			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7050F.D
Date : 13-DEC-2012 14:46
Client ID: AR12211Y2 Instrument: E2.i
Sample Info: AR12211Y2,AR12211Y2,,ar1221.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPest Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7050R.D
Report Date: 21-Dec-2012 12:28

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BR.B\E2L7050R.D
Lab Smp Id: AR12211Y2 Client Smp ID: AR12211Y2
Inj Date : 13-DEC-2012 14:46
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12211Y2,AR12211Y2,,ar1221.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BR.B\E2_LL_PCB_R.m
Meth Date : 18-Dec-2012 16:41 gappolonia Quant Type: ESTD
Cal Date : 14-DEC-2012 00:59 Cal File: E2L7081R.D
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1221.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

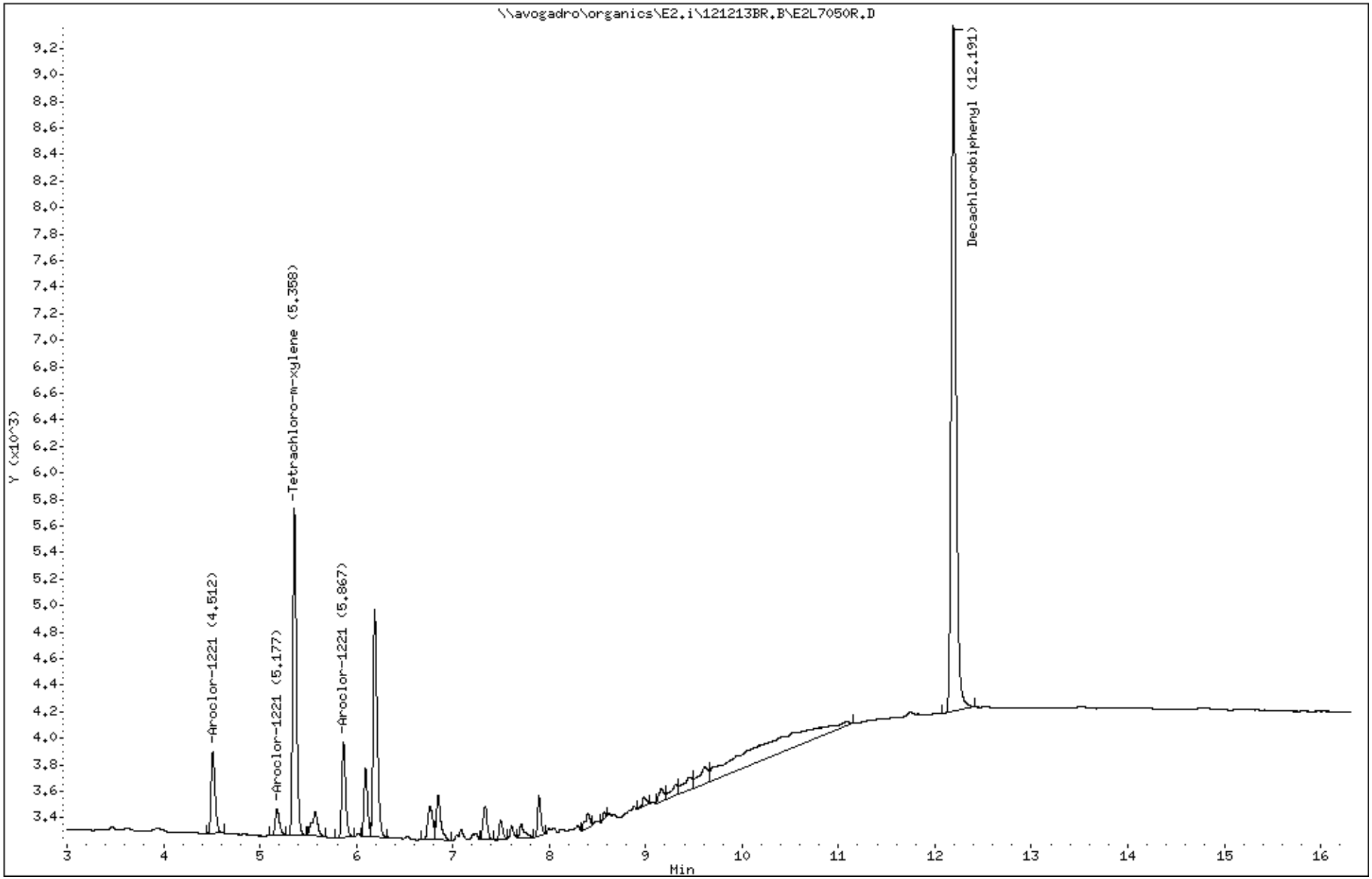
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
5.358	5.355	0.003	2462	0.00500	0.0053			(a)
2 Aroclor-1221					CAS #: 11104-28-2			
4.511	4.508	0.003	615	0.10000	0.11	80.00- 120.00	100.00	(a)
5.177	5.174	0.003	195	0.10000	0.11	14.13- 54.13	31.71	
5.866	5.864	0.002	720	0.10000	0.11	106.23- 146.23	117.07	
		Average of Peak Amounts =		0.11000				
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
12.191	12.186	0.005	5172	0.01000	0.012			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7050R.D
Date : 13-DEC-2012 14:46
Client ID: AR12211Y2 Instrument: E2.i
Sample Info: AR12211Y2,AR12211Y2,,ar1221.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPestII Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7051F.D
Report Date: 21-Dec-2012 12:27

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BF.B\E2L7051F.D
Lab Smp Id: AR12212Y2 Client Smp ID: AR12212Y2
Inj Date : 13-DEC-2012 15:06
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12212Y2,AR12212Y2,,ar1221.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BF.B\E2_LL_PCB_F.m
Meth Date : 18-Dec-2012 16:42 gappolonia Quant Type: ESTD
Cal Date : 14-DEC-2012 00:59 Cal File: E2L7081F.D
Als bottle: 3 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1221.sub
Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

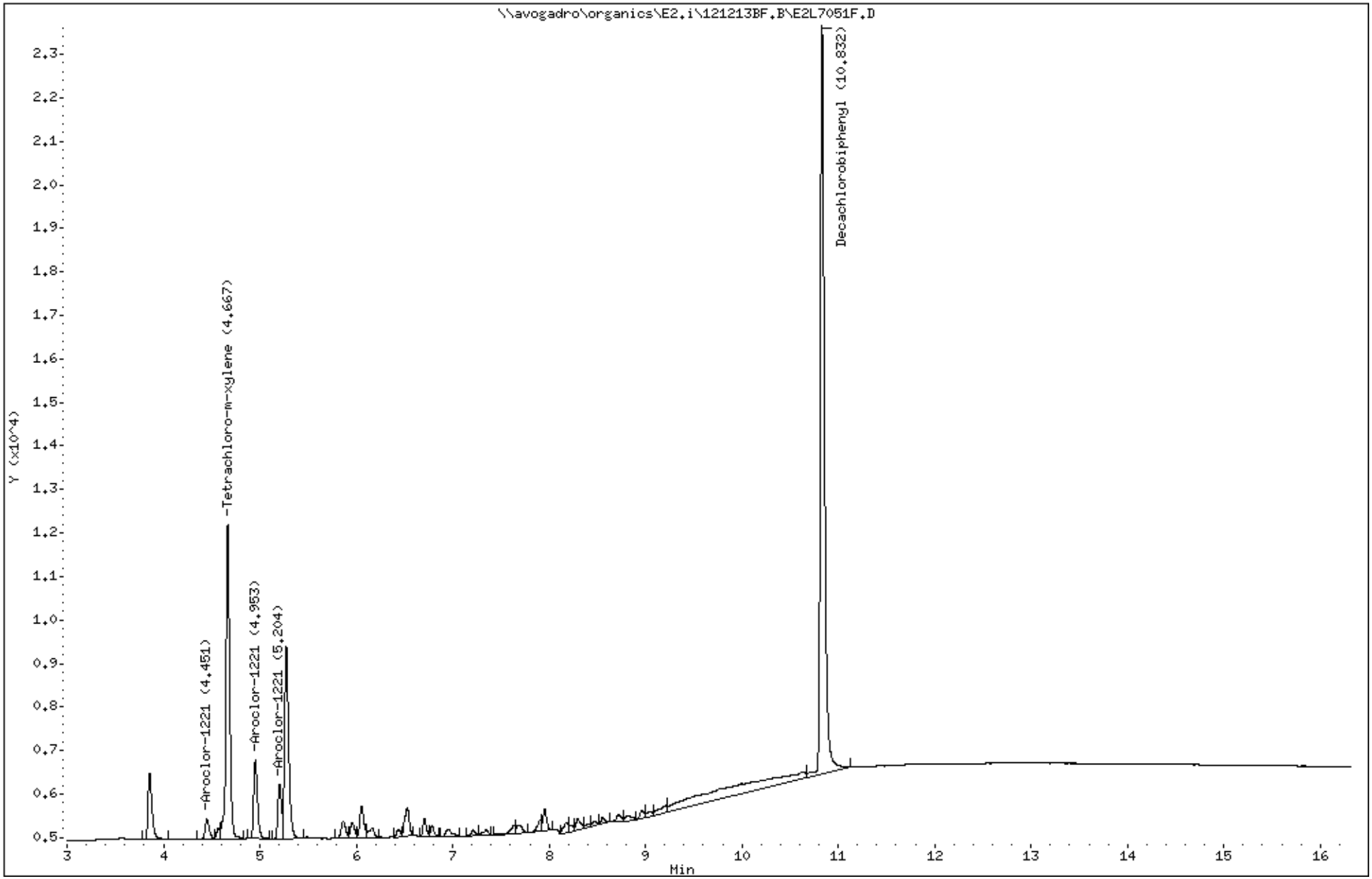
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.666	4.663	0.003	7228	0.01000	0.010			(a)
3 Aroclor-1221					CAS #: 11104-28-2			
4.450	4.448	0.002	466	0.20000	0.21	80.00- 120.00	100.00	(a)
4.953	4.950	0.003	1801	0.20000	0.21	359.80- 399.80	386.48	
5.204	5.202	0.002	1253	0.20000	0.21	240.45- 280.45	268.88	
Average of Peak Amounts =					0.21000			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.831	10.828	0.003	512743	0.02000	0.018			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7051F.D
Date : 13-DEC-2012 15:06
Client ID: AR12212Y2
Instrument: E2.i
Sample Info: AR12212Y2,AR12212Y2,,ar1221.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7051R.D
Report Date: 21-Dec-2012 12:28

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BR.B\E2L7051R.D
Lab Smp Id: AR12212Y2 Client Smp ID: AR12212Y2
Inj Date : 13-DEC-2012 15:06
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12212Y2,AR12212Y2,,ar1221.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BR.B\E2_LL_PCB_R.m
Meth Date : 18-Dec-2012 16:41 gappolonia Quant Type: ESTD
Cal Date : 14-DEC-2012 00:59 Cal File: E2L7081R.D
Als bottle: 3 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1221.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

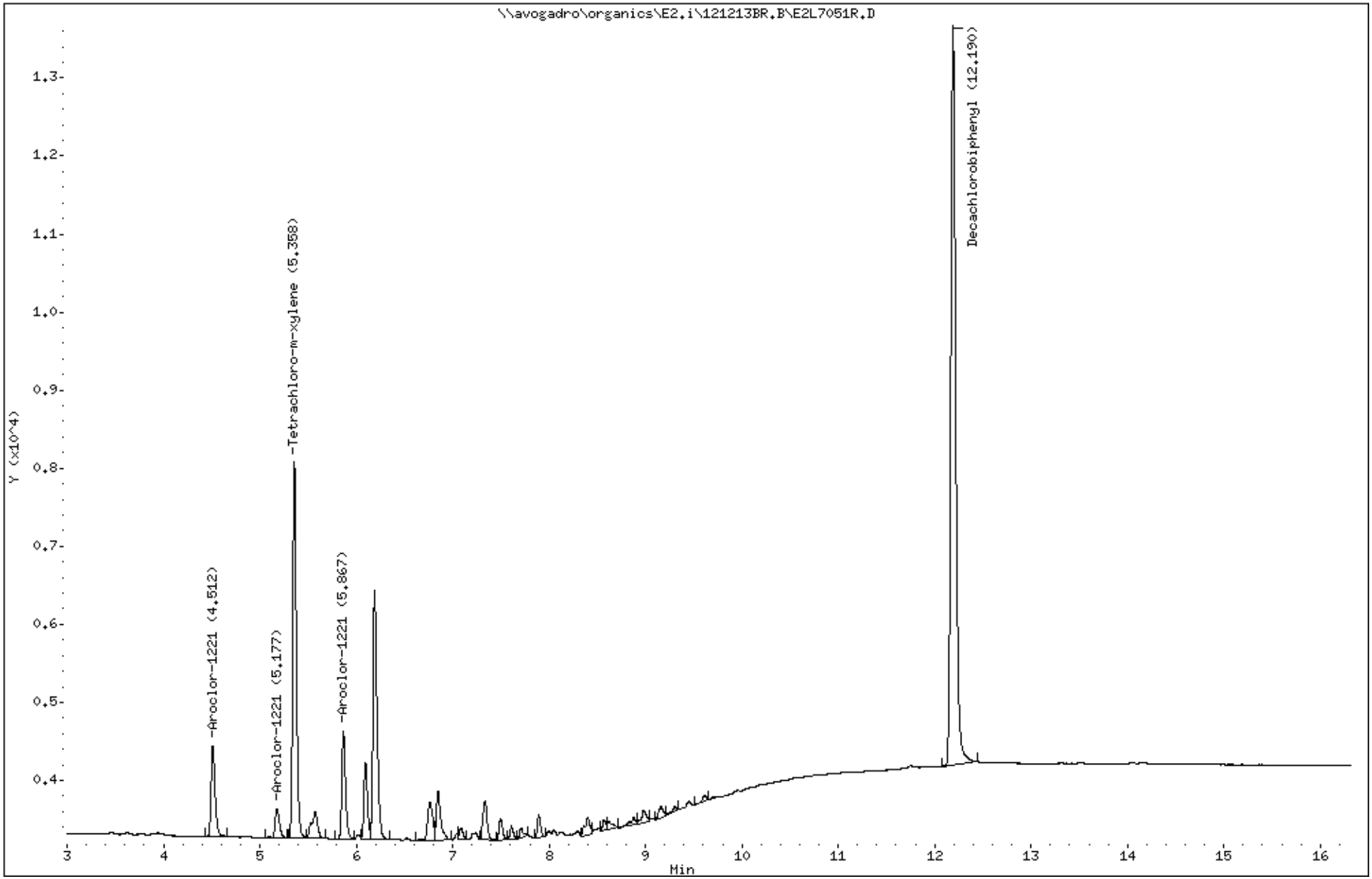
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.358	5.355	0.003	4828	0.01000	0.010			(a)
2 Aroclor-1221						CAS #: 11104-28-2		
4.511	4.508	0.003	1165	0.20000	0.21	80.00- 120.00	100.00	(a)
5.176	5.174	0.002	380	0.20000	0.21	14.13- 54.13	32.62	
5.866	5.864	0.002	1372	0.20000	0.21	106.23- 146.23	117.77	
		Average of Peak Amounts =			0.21000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.190	12.186	0.004	9473	0.02000	0.022			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7051R.D
Date : 13-DEC-2012 15:06
Client ID: AR12212Y2
Instrument: E2.i
Sample Info: AR12212Y2,AR12212Y2,,ar1221.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7052F.D
Report Date: 21-Dec-2012 12:27

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BF.B\E2L7052F.D
Lab Smp Id: AR12213Y2 Client Smp ID: AR12213Y2
Inj Date : 13-DEC-2012 15:25
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12213Y2,AR12213Y2,,ar1221.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BF.B\E2_LL_PCB_F.m
Meth Date : 18-Dec-2012 16:42 gappolonia Quant Type: ESTD
Cal Date : 14-DEC-2012 00:59 Cal File: E2L7081F.D
Als bottle: 4 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1221.sub
Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

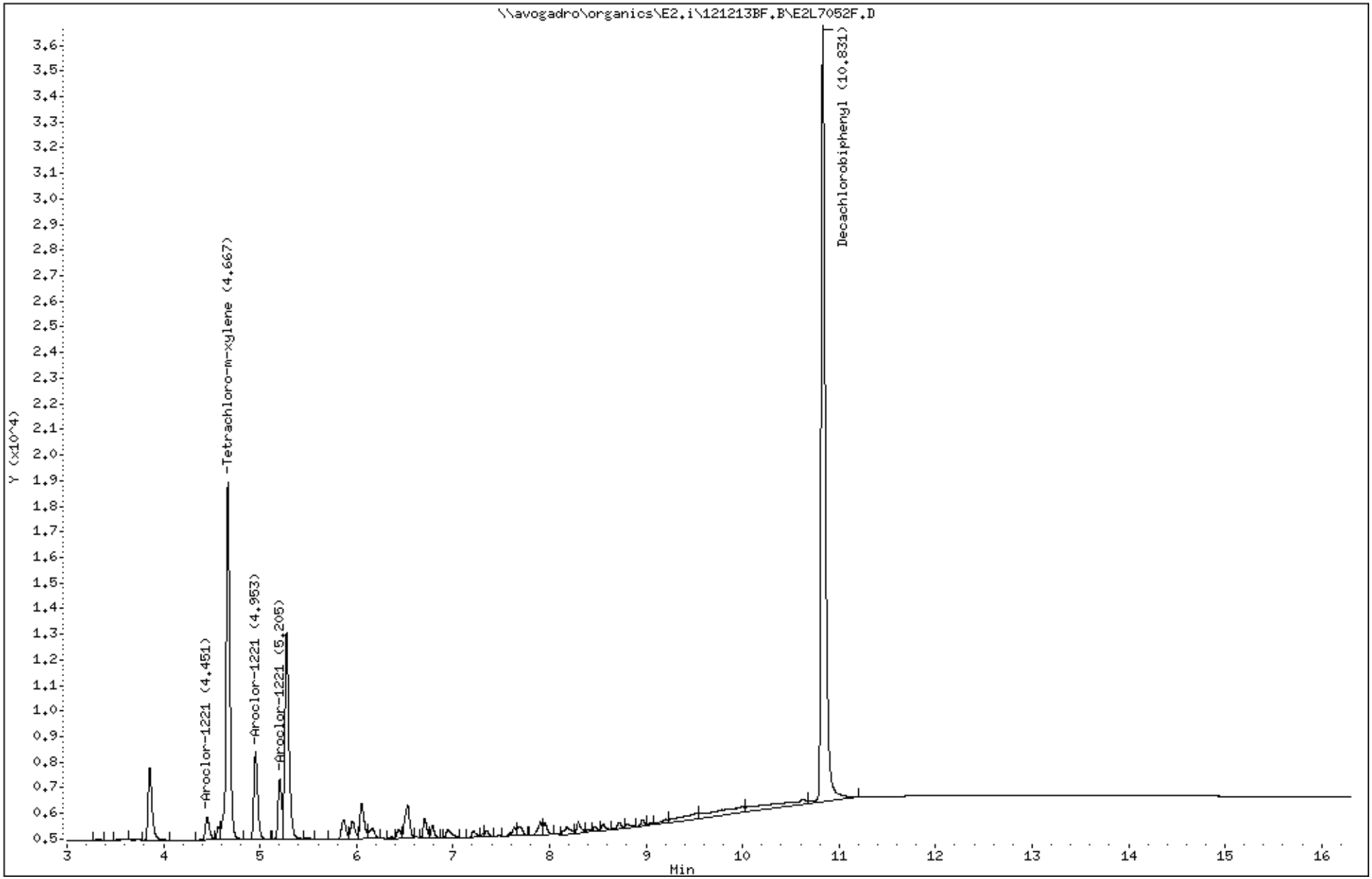
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.666	4.663	0.003	13981	0.02000	0.020			(a)
3 Aroclor-1221					CAS #: 11104-28-2			
4.451	4.448	0.003	887	0.40000	0.39	80.00- 120.00	100.00	(a)
4.953	4.950	0.003	3407	0.40000	0.39	359.80- 399.80	384.10	
5.204	5.202	0.002	2351	0.40000	0.39	240.45- 280.45	265.05	
Average of Peak Amounts =					0.39000			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.831	10.828	0.003	914790	0.04000	0.031			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7052F.D
Date : 13-DEC-2012 15:25
Client ID: AR12213Y2
Instrument: E2.i
Sample Info: AR12213Y2,AR12213Y2,,ar1221.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7052R.D
Report Date: 21-Dec-2012 12:28

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BR.B\E2L7052R.D
Lab Smp Id: AR12213Y2 Client Smp ID: AR12213Y2
Inj Date : 13-DEC-2012 15:25
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12213Y2,AR12213Y2,,ar1221.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BR.B\E2_LL_PCB_R.m
Meth Date : 18-Dec-2012 16:41 gappolonia Quant Type: ESTD
Cal Date : 14-DEC-2012 00:59 Cal File: E2L7081R.D
Als bottle: 4 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1221.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

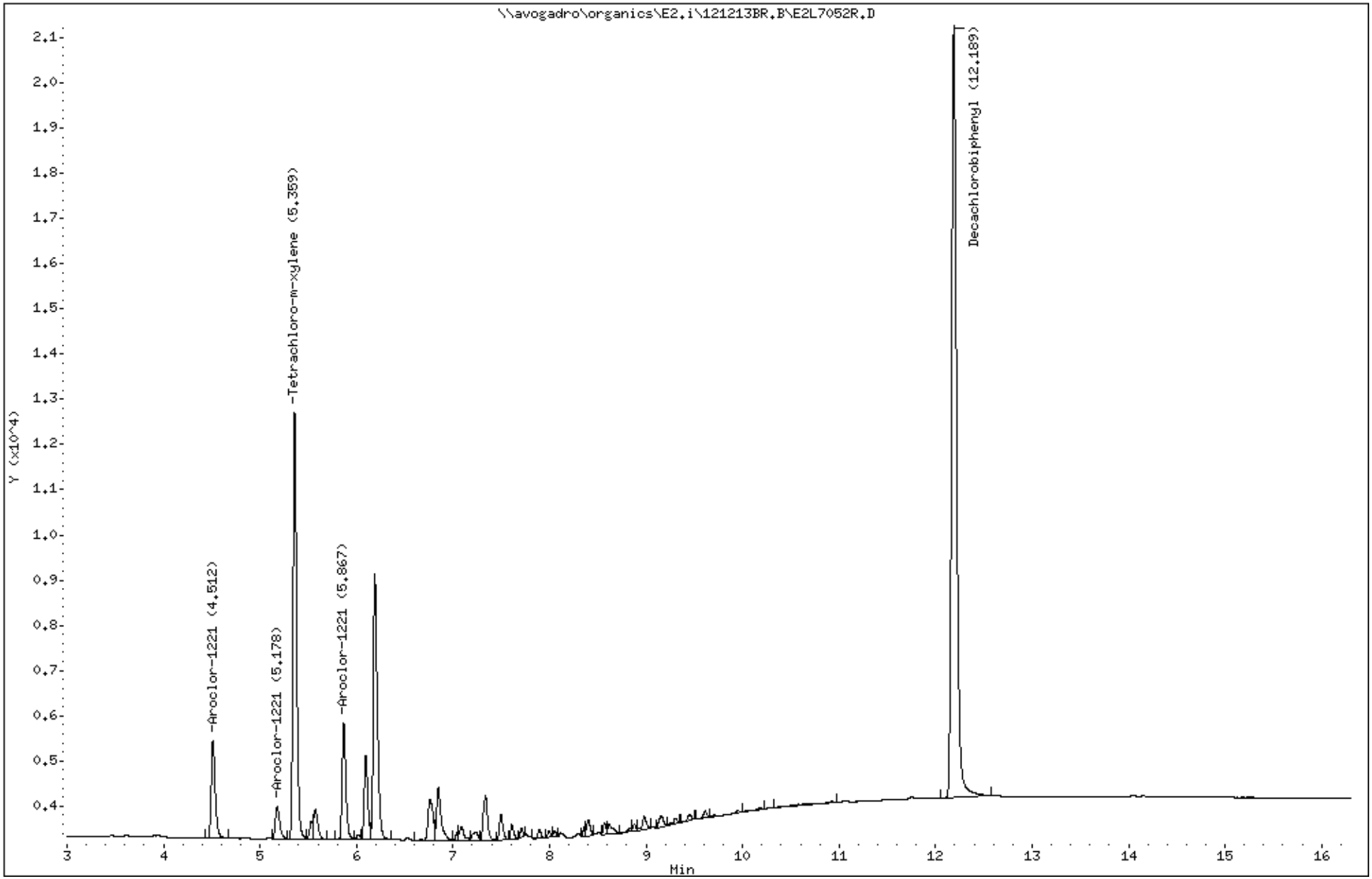
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
5.358	5.355	0.003	9447	0.02000	0.020			(a)
2 Aroclor-1221					CAS #: 11104-28-2			
4.511	4.508	0.003	2161	0.40000	0.39	80.00- 120.00	100.00	(a)
5.177	5.174	0.003	718	0.40000	0.40	14.13- 54.13	33.23	
5.867	5.864	0.003	2589	0.40000	0.39	106.23- 146.23	119.81	
		Average of Peak Amounts =			0.39333			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
12.189	12.186	0.003	17086	0.04000	0.040			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7052R.D
Date : 13-DEC-2012 15:25
Client ID: AR12213Y2
Instrument: E2.i
Sample Info: AR12213Y2,AR12213Y2,,ar1221.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7053F.D
Report Date: 21-Dec-2012 12:27

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BF.B\E2L7053F.D
Lab Smp Id: AR12214Y2 Client Smp ID: AR12214Y2
Inj Date : 13-DEC-2012 15:45
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12214Y2,AR12214Y2,,ar1221.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BF.B\E2_LL_PCB_F.m
Meth Date : 18-Dec-2012 16:42 gappolonia Quant Type: ESTD
Cal Date : 14-DEC-2012 00:59 Cal File: E2L7081F.D
Als bottle: 5 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1221.sub
Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

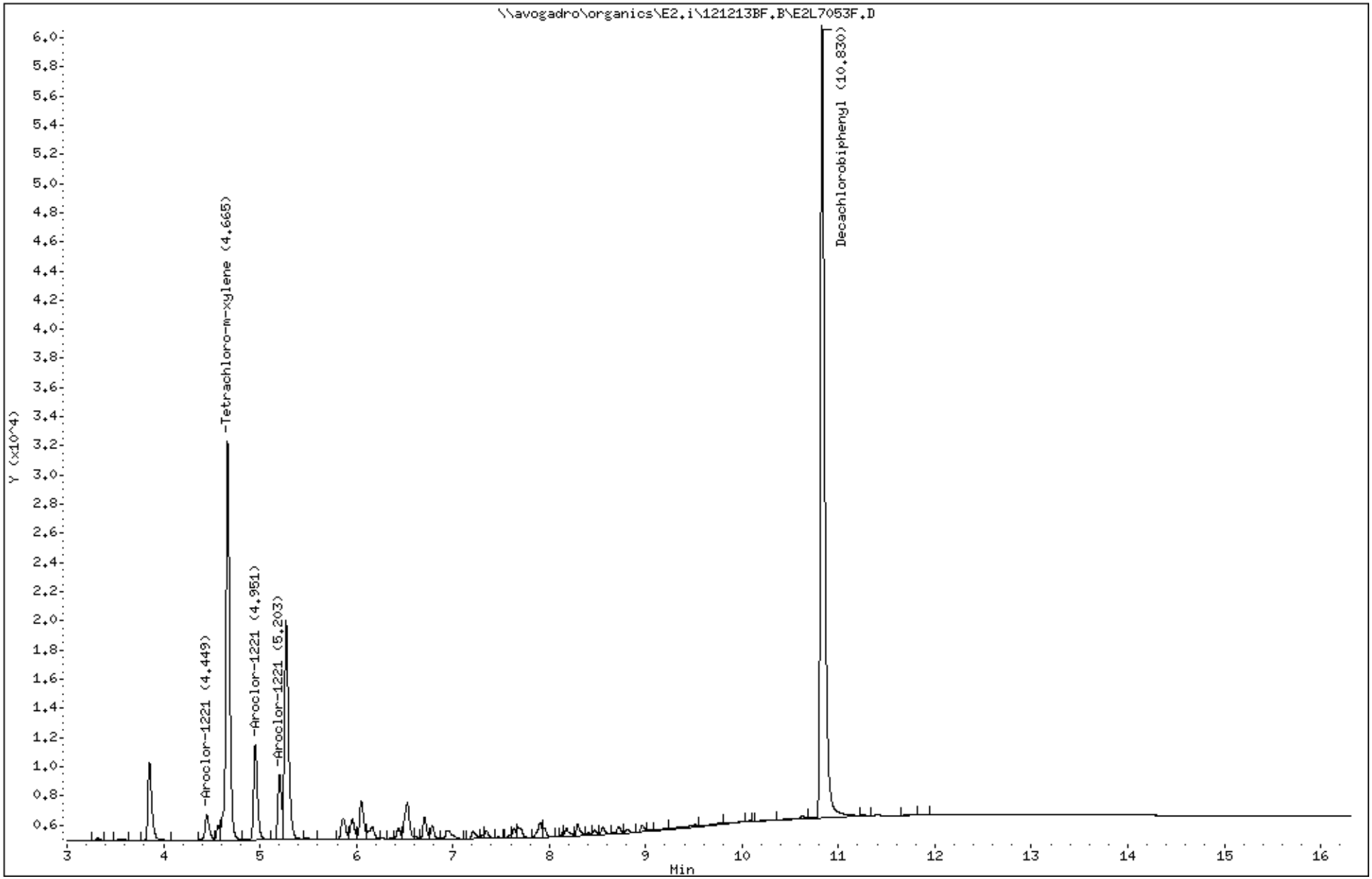
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.665	4.663	0.002	27346	0.04000	0.039			(a)
3 Aroclor-1221						CAS #: 11104-28-2		
4.449	4.448	0.001	1716	0.80000	0.76	80.00- 120.00	100.00	(a)
4.951	4.950	0.001	6553	0.80000	0.75	359.80- 399.80	381.88	
5.202	5.202	0.000	4494	0.80000	0.74	240.45- 280.45	261.89	
Average of Peak Amounts =					0.75000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.829	10.828	0.001	1646468	0.08000	0.057			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7053F.D
Date : 13-DEC-2012 15:45
Client ID: AR12214Y2 Instrument: E2.i
Sample Info: AR12214Y2,AR12214Y2,,ar1221.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPest Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7053R.D
Report Date: 21-Dec-2012 12:28

Spectrum Analytical, Inc. RI Division

Quantitation Report
Data file : \\avogadro\organics\E2.i\121213BR.B\E2L7053R.D
Lab Smp Id: AR12214Y2 Client Smp ID: AR12214Y2
Inj Date : 13-DEC-2012 15:45
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12214Y2,AR12214Y2,,ar1221.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BR.B\E2_LL_PCB_R.m
Meth Date : 18-Dec-2012 16:41 gappolonia Quant Type: ESTD
Cal Date : 14-DEC-2012 00:59 Cal File: E2L7081R.D
Als bottle: 5 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1221.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

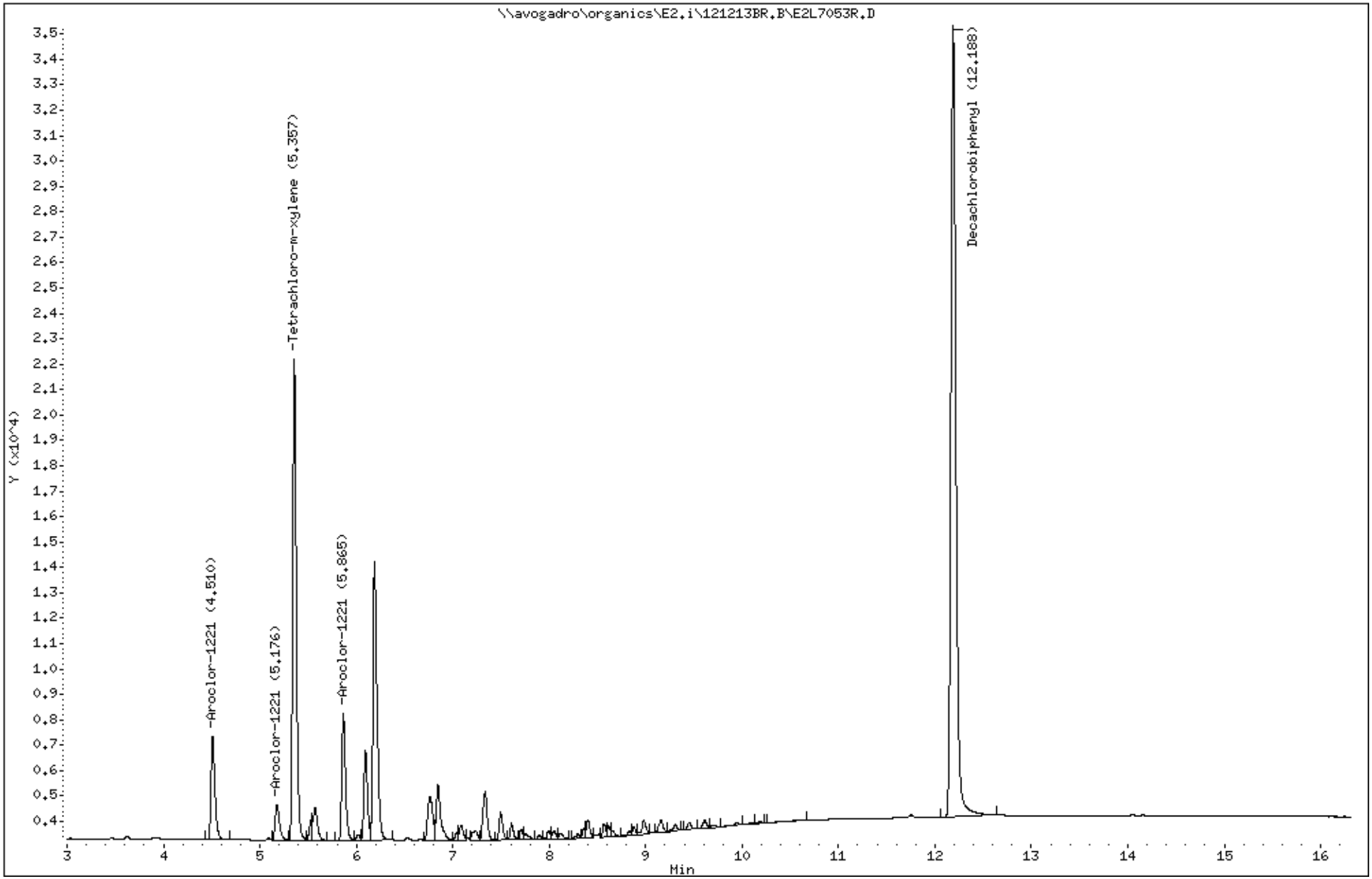
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.356	5.355	0.001	18955	0.04000	0.041			(a)
2 Aroclor-1221						CAS #: 11104-28-2		
4.509	4.508	0.001	4076	0.80000	0.73	80.00- 120.00	100.00	(a)
5.175	5.174	0.001	1380	0.80000	0.76	14.13- 54.13	33.86	
5.865	5.864	0.001	5014	0.80000	0.76	106.23- 146.23	123.01	
Average of Peak Amounts =					0.75000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.187	12.186	0.001	31155	0.08000	0.073			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7053R.D
Date : 13-DEC-2012 15:45
Client ID: AR12214Y2 Instrument: E2.i
Sample Info: AR12214Y2,AR12214Y2,,ar1221.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPestII Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7054F.D
Report Date: 21-Dec-2012 12:27

Spectrum Analytical, Inc. RI Division

Quantitation Report

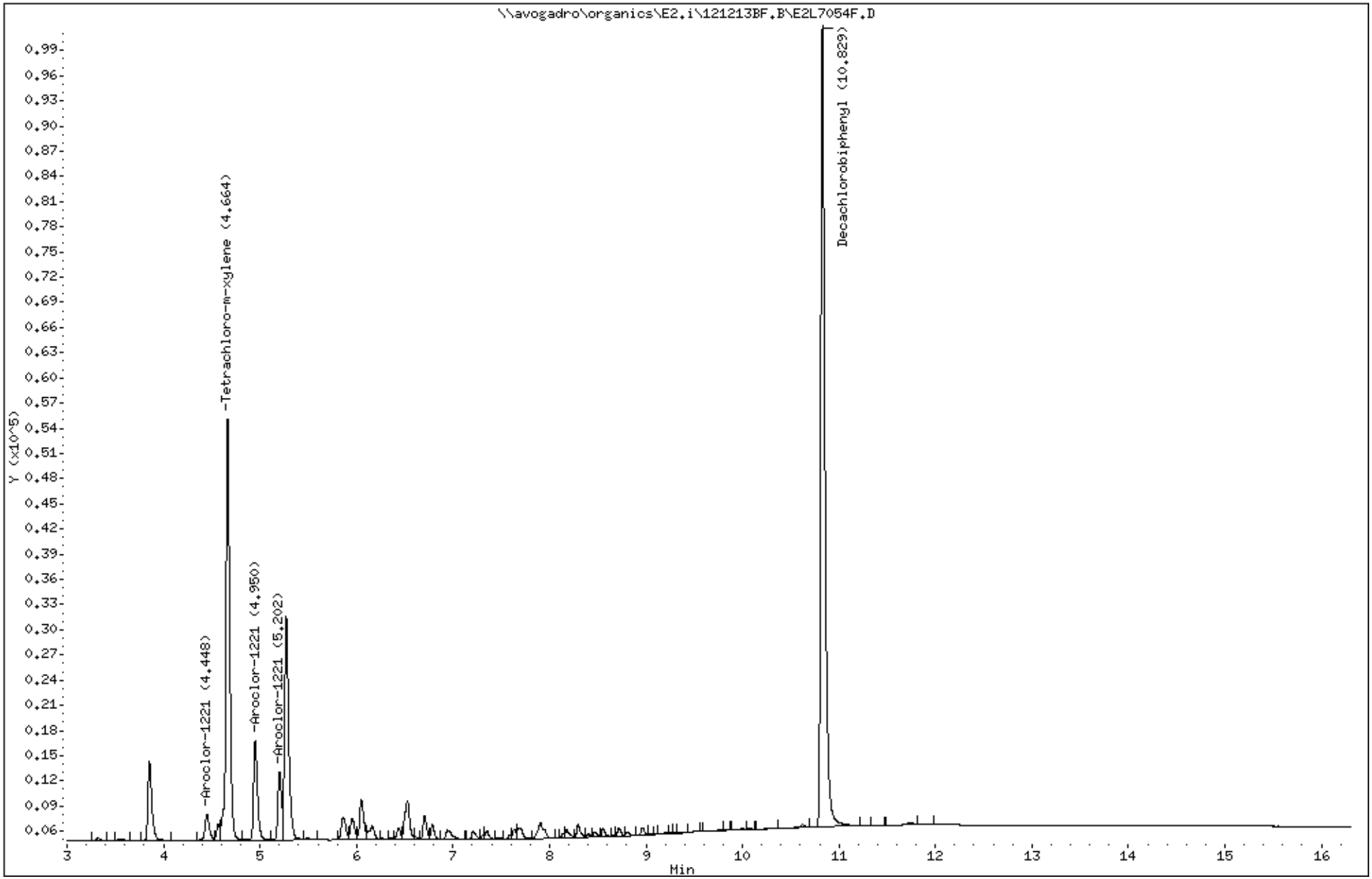
Data file : \\avogadro\organics\E2.i\121213BF.B\E2L7054F.D
Lab Smp Id: AR12215Y2 Client Smp ID: AR12215Y2
Inj Date : 13-DEC-2012 16:05
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12215Y2,AR12215Y2,,ar1221.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BF.B\E2_LL_PCB_F.m
Meth Date : 18-Dec-2012 16:42 gappolonia Quant Type: ESTD
Cal Date : 14-DEC-2012 00:59 Cal File: E2L7081F.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1221.sub
Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.664	4.663	0.001	50232	0.08000	0.072			
3 Aroclor-1221						CAS #: 11104-28-2		
4.448	4.448	0.000	3128	1.60000	1.4	80.00- 120.00		100.00
4.950	4.950	0.000	11880	1.60000	1.4	359.80- 399.80		379.80
5.202	5.202	0.000	8147	1.60000	1.3	240.45- 280.45		260.45
Average of Peak Amounts =					1.36667			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.829	10.828	0.001	2852305	0.16000	0.098			

Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7054F.D
Date : 13-DEC-2012 16:05
Client ID: AR12215Y2 Instrument: E2.i
Sample Info: AR12215Y2,AR12215Y2,,ar1221.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPest Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7054R.D
Report Date: 21-Dec-2012 12:28

Spectrum Analytical, Inc. RI Division

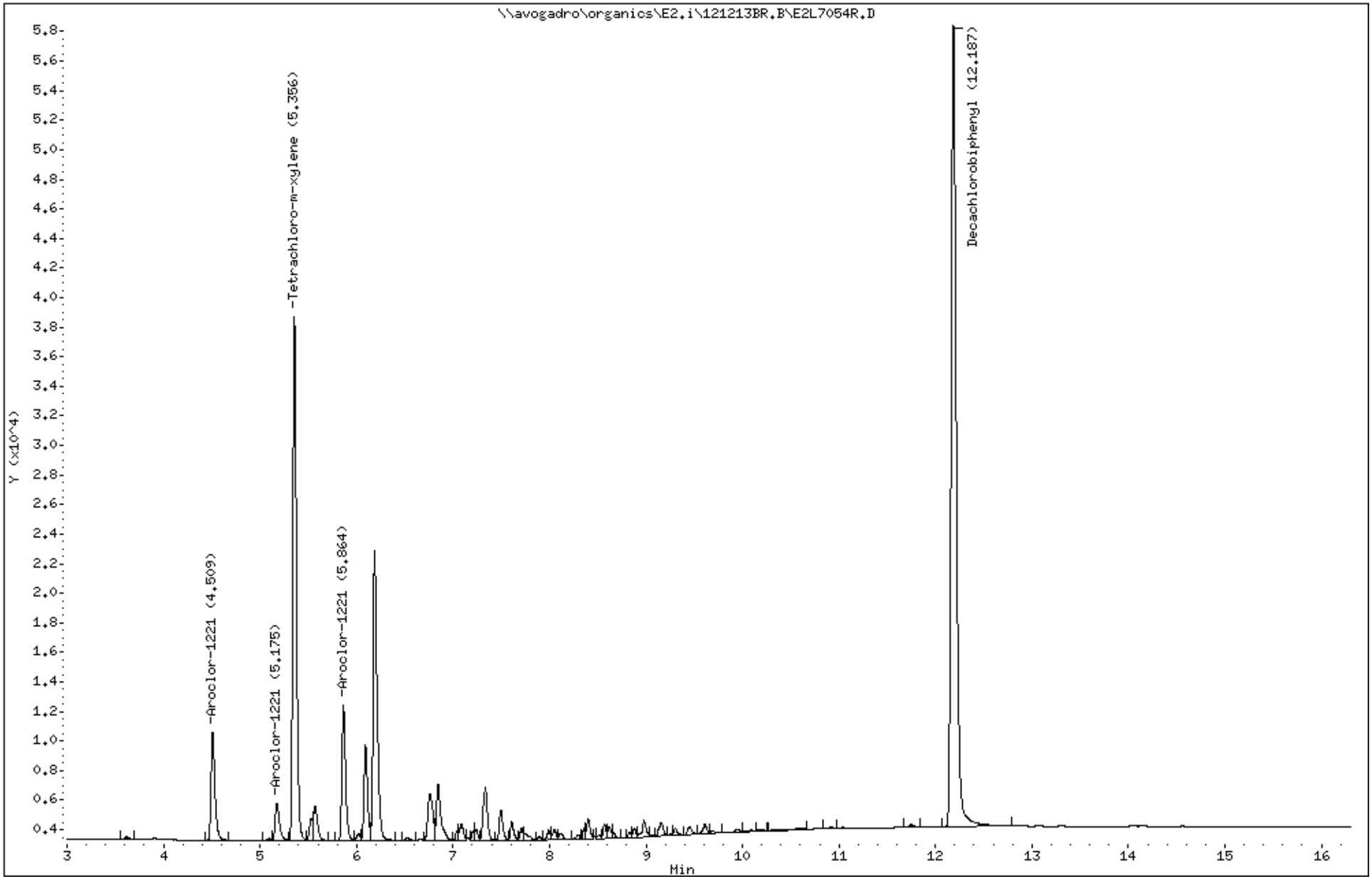
Quantitation Report
Data file : \\avogadro\organics\E2.i\121213BR.B\E2L7054R.D
Lab Smp Id: AR12215Y2 Client Smp ID: AR12215Y2
Inj Date : 13-DEC-2012 16:05
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12215Y2,AR12215Y2,,ar1221.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BR.B\E2_LL_PCB_R.m
Meth Date : 18-Dec-2012 16:41 gappolonia Quant Type: ESTD
Cal Date : 14-DEC-2012 00:59 Cal File: E2L7081R.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1221.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.356	5.355	0.001	35451	0.08000	0.077			
2 Aroclor-1221						CAS #: 11104-28-2		
4.508	4.508	0.000	7275	1.60000	1.3	80.00- 120.00		100.00
5.174	5.174	0.000	2483	1.60000	1.4	14.13- 54.13		34.13
5.864	5.864	0.000	9183	1.60000	1.4	106.23- 146.23		126.23
Average of Peak Amounts =					1.36667			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.186	12.186	0.000	54214	0.16000	0.13			

Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7054R.D
Date : 13-DEC-2012 16:05
Client ID: AR12215Y2
Instrument: E2.i
Sample Info: AR12215Y2,AR12215Y2,,ar1221.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7055F.D
Report Date: 21-Dec-2012 12:27

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BF.B\E2L7055F.D
Lab Smp Id: AR12323Y2 Client Smp ID: AR12323Y2
Inj Date : 13-DEC-2012 16:25
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12323Y2,AR12323Y2,,ar1232.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BF.B\E2_LL_PCB_F.m
Meth Date : 18-Dec-2012 16:42 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 16:25 Cal File: E2L7055F.D
Als bottle: 7 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1232.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

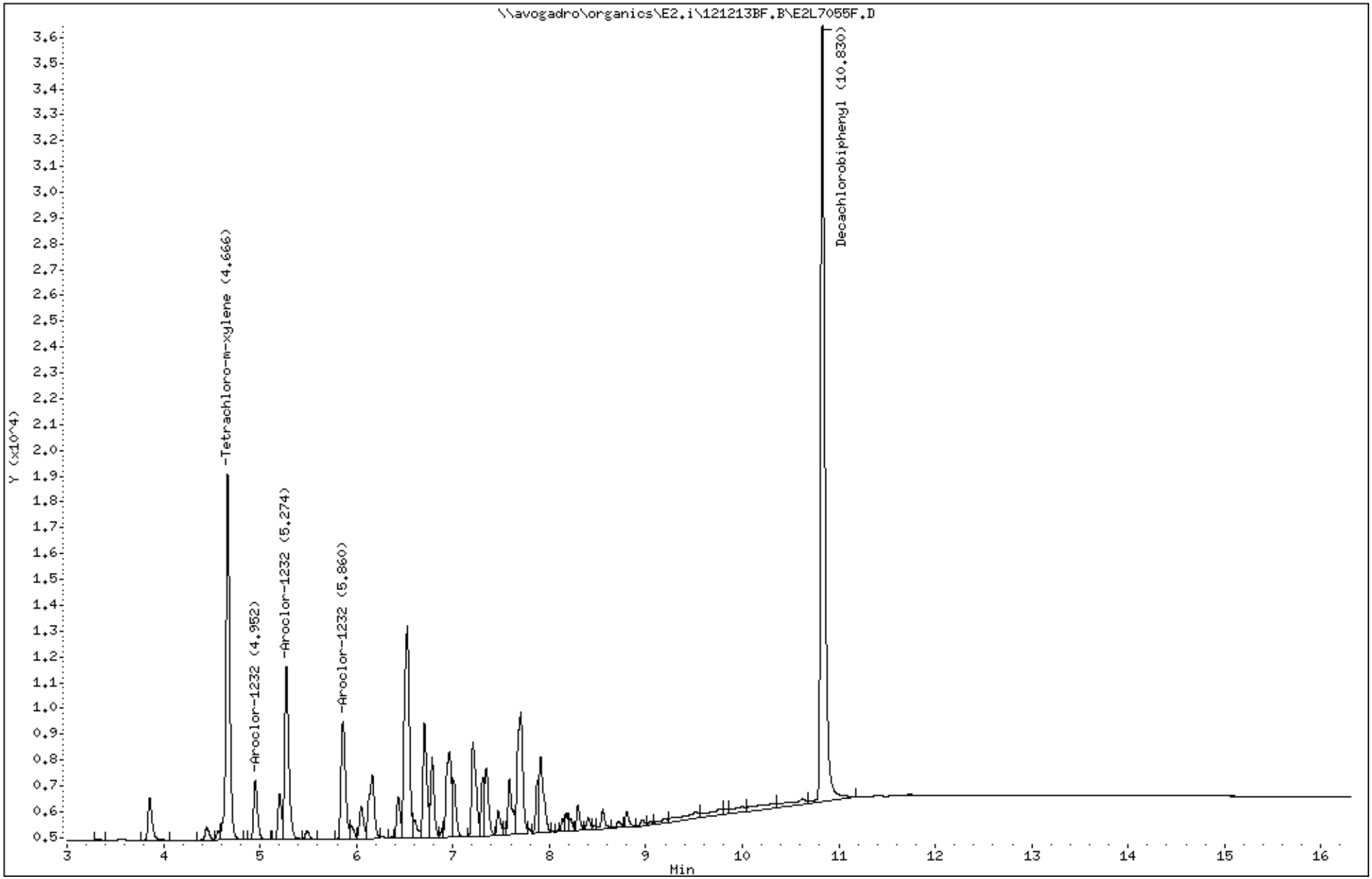
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.665	4.663	0.002	14165	0.02000	0.020			(a)
4 Aroclor-1232					CAS #: 11141-16-5			
4.952	4.952	0.000	2286	0.40000	0.40	80.00- 120.00	100.00	(a)
5.273	5.273	0.000	6692	0.40000	0.40	272.74- 312.74	292.74	
5.859	5.859	0.000	4545	0.40000	0.40	178.82- 218.82	198.82	
Average of Peak Amounts =				0.40000				
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.829	10.828	0.001	903982	0.04000	0.031			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7055F.D
Date : 13-DEC-2012 16:25
Client ID: AR12323Y2
Instrument: E2.i
Sample Info: AR12323Y2,AR12323Y2,,ar1232.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7055R.D
Report Date: 21-Dec-2012 12:28

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BR.B\E2L7055R.D
Lab Smp Id: AR12323Y2 Client Smp ID: AR12323Y2
Inj Date : 13-DEC-2012 16:25
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12323Y2,AR12323Y2,,ar1232.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BR.B\E2_LL_PCB_R.m
Meth Date : 18-Dec-2012 16:41 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 16:25 Cal File: E2L7055R.D
Als bottle: 7 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1232.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

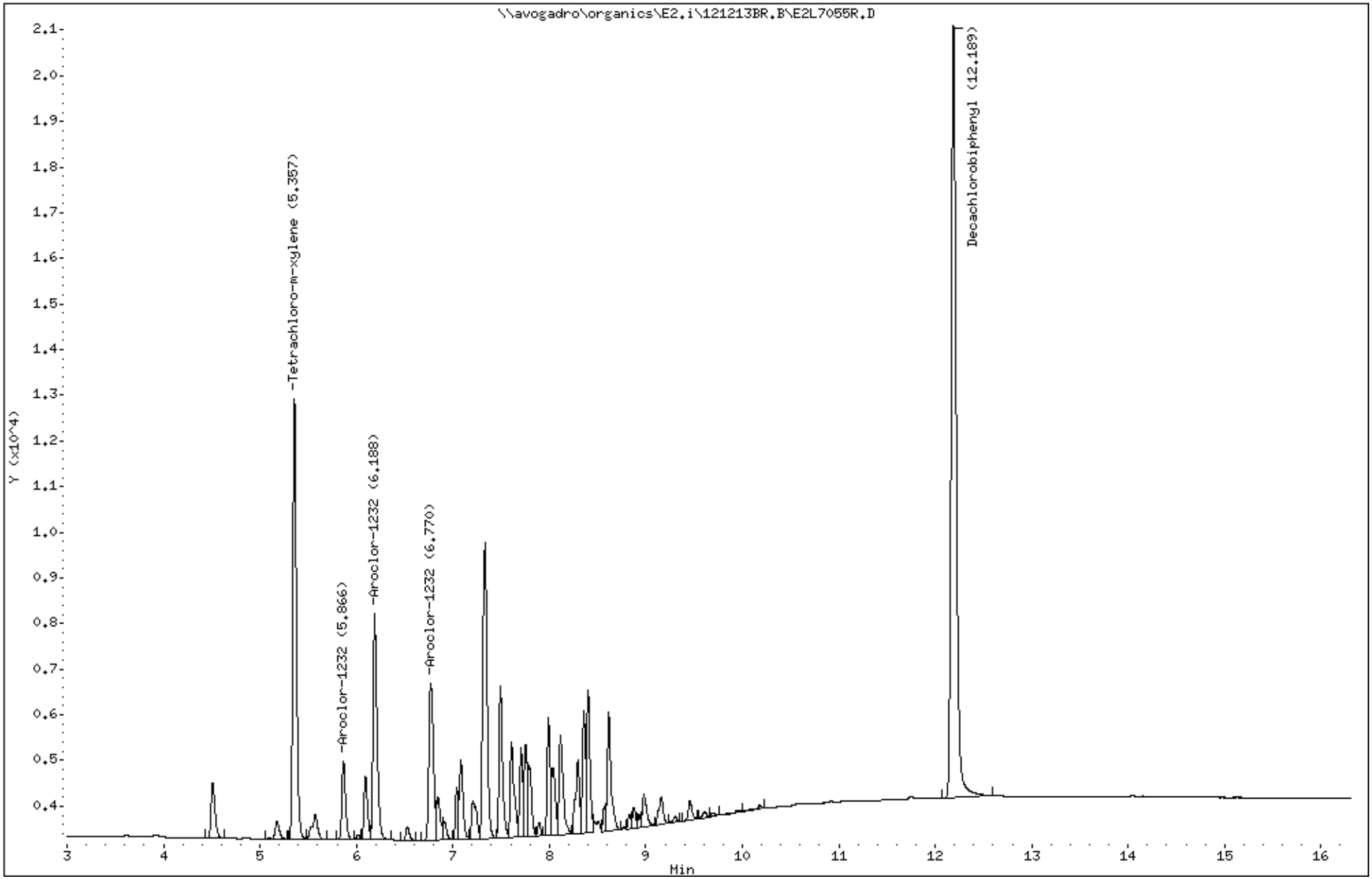
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.357	5.355	0.002	9651	0.02000	0.020			(a)
3 Aroclor-1232						CAS #: 11141-16-5		
5.865	5.865	0.000	1724	0.40000	0.40	80.00- 120.00	100.00	(a)
6.188	6.188	0.000	4954	0.40000	0.40	267.35- 307.35	287.35	
6.769	6.769	0.000	3425	0.40000	0.40	178.67- 218.67	198.67	
Average of Peak Amounts =				0.40000				
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.188	12.186	0.002	16913	0.04000	0.039			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7055R.D
Date : 13-DEC-2012 16:25
Client ID: AR12323Y2 Instrument: E2.i
Sample Info: AR12323Y2,AR12323Y2,,ar1232.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPestII Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7056F.D
Report Date: 21-Dec-2012 12:27

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BF.B\E2L7056F.D
Lab Smp Id: AR12421Y2 Client Smp ID: AR12421Y2
Inj Date : 13-DEC-2012 16:44
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12421Y2,AR12421Y2,,ar1242.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BF.B\E2_LL_PCB_F.m
Meth Date : 18-Dec-2012 16:42 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 16:44 Cal File: E2L7056F.D
Als bottle: 8 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

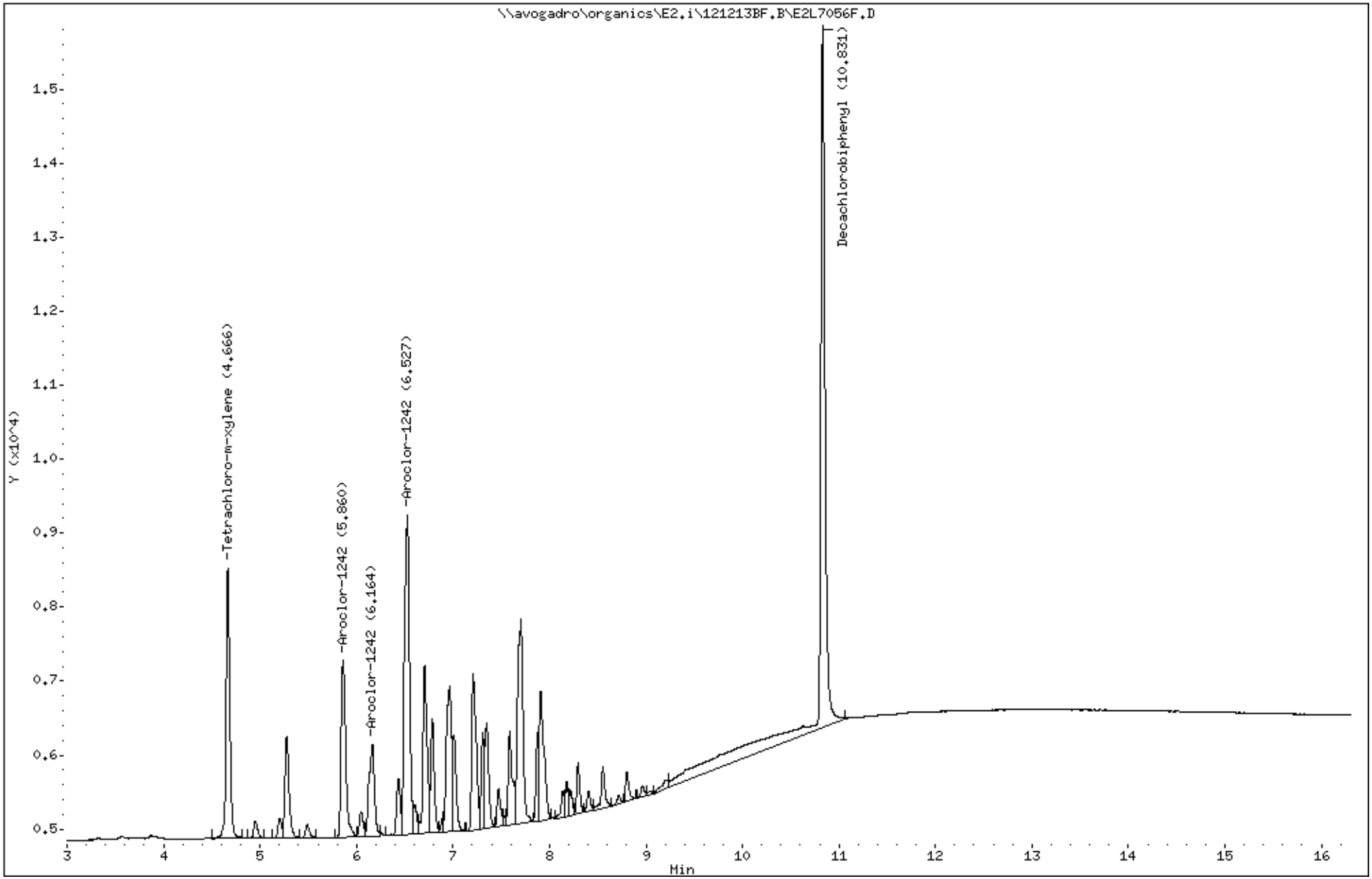
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.666	4.663	0.003	3657	0.00500	0.0053			(a)
6 Aroclor-1242					CAS #: 53469-21-9			
5.859	5.858	0.001	2386	0.10000	0.10	80.00- 120.00	100.00	(a)
6.163	6.163	0.000	1243	0.10000	0.10	34.94- 74.94	52.10	
6.526	6.527	-0.001	4312	0.10000	0.10	162.37- 202.37	180.72	
Average of Peak Amounts =					0.10000			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.831	10.828	0.003	403363	0.01000	0.016			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7056F.D
Date : 13-DEC-2012 16:44
Client ID: AR12421Y2
Instrument: E2.i
Sample Info: AR12421Y2,AR12421Y2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7056R.D
Report Date: 21-Dec-2012 12:28

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BR.B\E2L7056R.D
Lab Smp Id: AR12421Y2 Client Smp ID: AR12421Y2
Inj Date : 13-DEC-2012 16:44
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12421Y2,AR12421Y2,,ar1242.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BR.B\E2_LL_PCB_R.m
Meth Date : 18-Dec-2012 16:41 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 16:44 Cal File: E2L7056R.D
Als bottle: 8 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

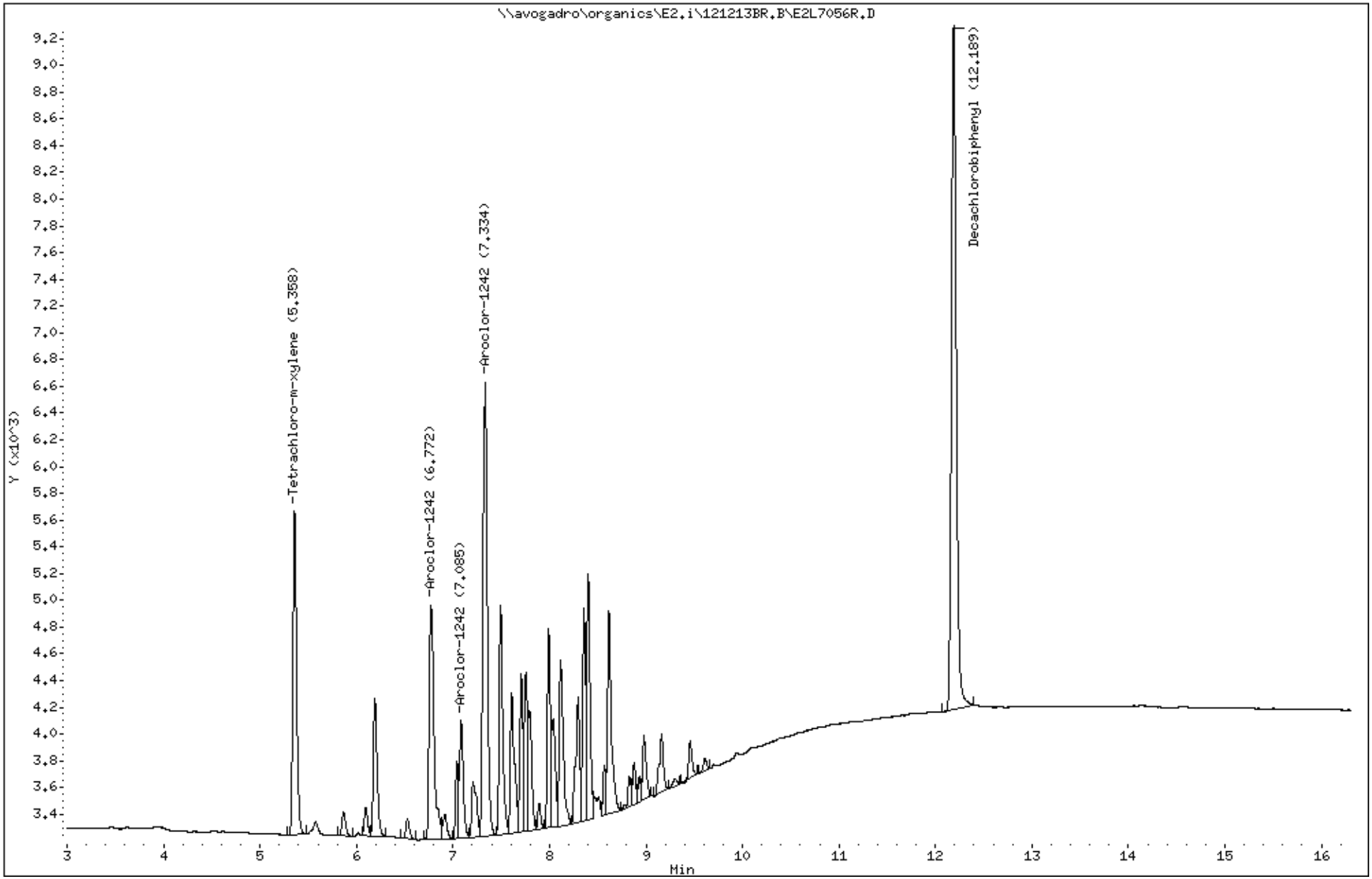
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
5.357	5.355	0.002	2417	0.00500	0.0051			(a)
4 Aroclor-1242					CAS #: 53469-21-9			
6.772	6.769	0.003	1743	0.10000	0.10	80.00- 120.00	100.00	(a)
7.084	7.083	0.001	876	0.10000	0.10	32.83- 72.83	50.26	
7.333	7.334	-0.001	3391	0.10000	0.10	176.28- 216.28	194.55	
Average of Peak Amounts =					0.10000			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
12.189	12.186	0.003	5118	0.01000	0.012			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7056R.D
Date : 13-DEC-2012 16:44
Client ID: AR12421Y2
Instrument: E2.i
Sample Info: AR12421Y2,AR12421Y2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7057F.D
Report Date: 21-Dec-2012 12:27

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BF.B\E2L7057F.D
Lab Smp Id: AR12426Y2 Client Smp ID: AR12426Y2
Inj Date : 13-DEC-2012 17:04
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12426Y2,AR12426Y2,,ar1242.sub,,
Misc Info : 1,6,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BF.B\E2_LL_PCB_F.m
Meth Date : 18-Dec-2012 16:42 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 17:04 Cal File: E2L7057F.D
Als bottle: 9 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

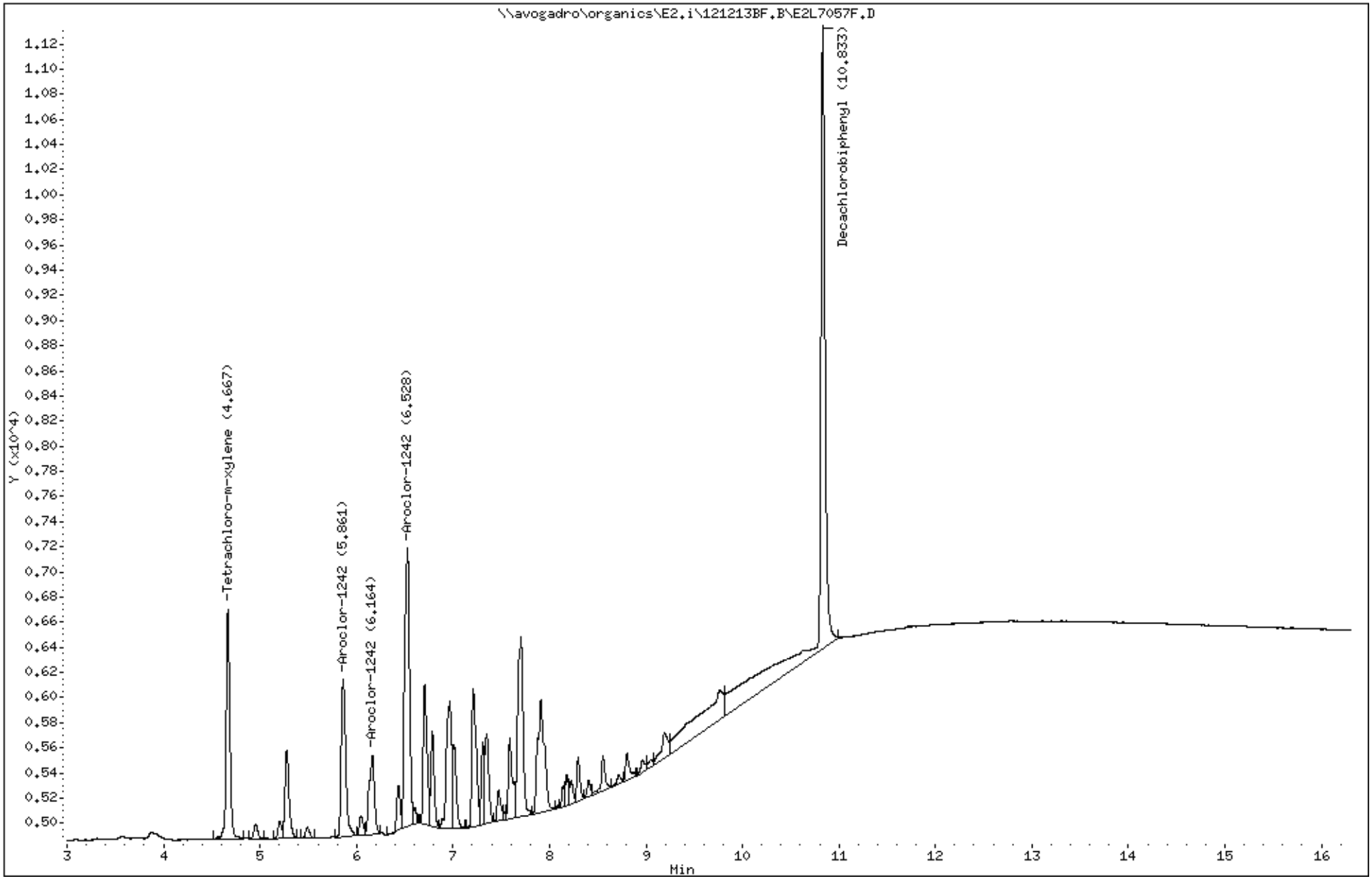
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.667	4.663	0.004	1828	0.00000	0.0026			(a)
6 Aroclor-1242					CAS #: 53469-21-9			
5.860	5.858	0.002	1247	0.05000	0.051	80.00- 120.00	100.00	(a)
6.164	6.163	0.001	621	0.05000	0.050	34.94- 74.94	49.80	
6.528	6.527	0.001	2216	0.05000	0.051	162.37- 202.37	177.71	
Average of Peak Amounts =				0.05067				
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.832	10.828	0.004	212476	0.00000	0.0084			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7057F.D
Date : 13-DEC-2012 17:04
Client ID: AR12426Y2
Instrument: E2.i
Sample Info: AR12426Y2,AR12426Y2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7057R.D
Report Date: 21-Dec-2012 12:28

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BR.B\E2L7057R.D
Lab Smp Id: AR12426Y2 Client Smp ID: AR12426Y2
Inj Date : 13-DEC-2012 17:04
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12426Y2,AR12426Y2,,ar1242.sub,,
Misc Info : 1,6,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BR.B\E2_LL_PCB_R.m
Meth Date : 18-Dec-2012 16:41 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 17:04 Cal File: E2L7057R.D
Als bottle: 9 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

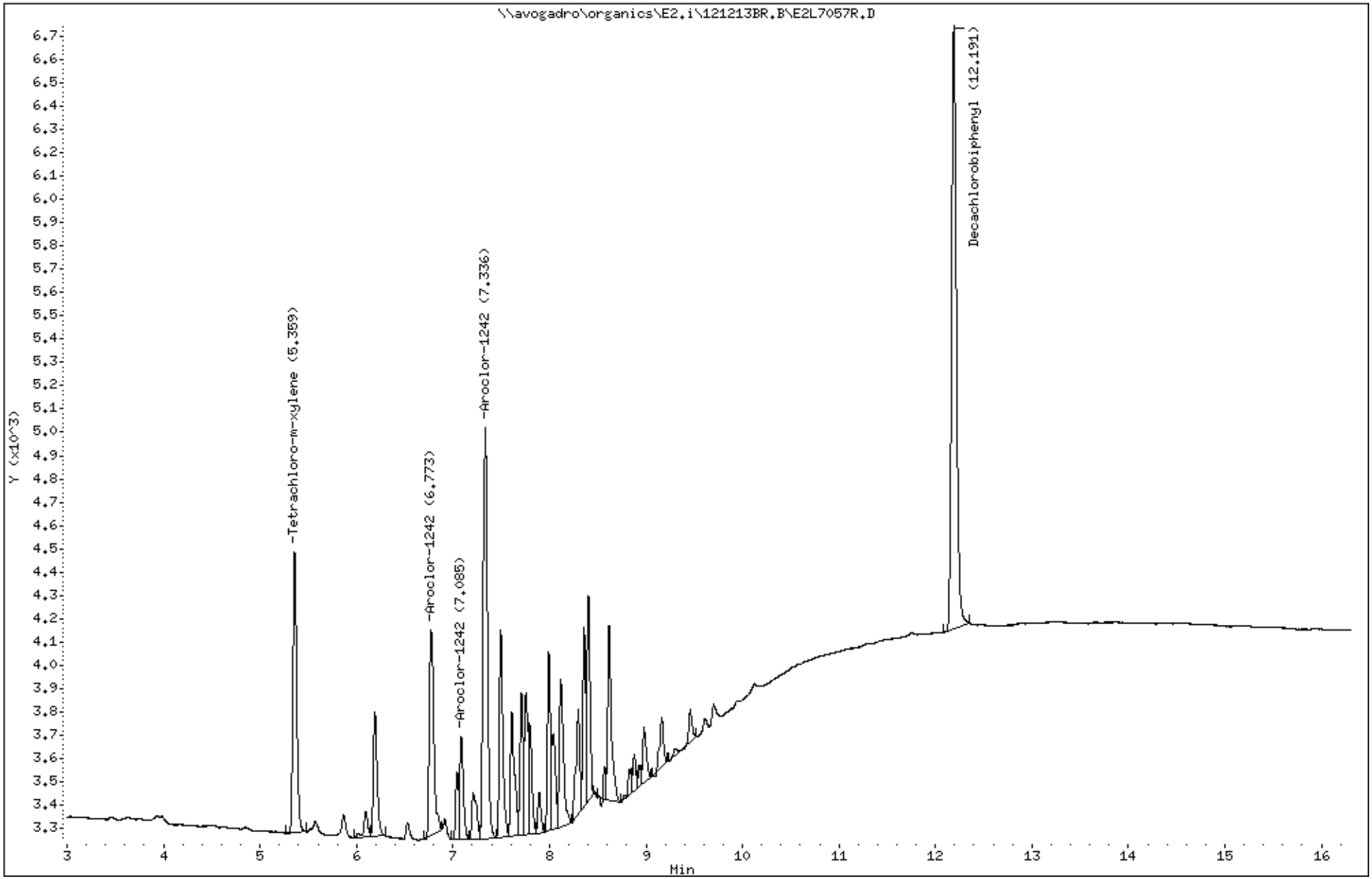
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
5.358	5.355	0.003	1203	0.00000	0.0025			(a)
4 Aroclor-1242					CAS #: 53469-21-9			
6.773	6.769	0.004	880	0.05000	0.050	80.00- 120.00	100.00	(a)
7.085	7.083	0.002	443	0.05000	0.050	32.83- 72.83	50.34	
7.335	7.334	0.001	1767	0.05000	0.051	176.28- 216.28	200.80	
Average of Peak Amounts =					0.05033			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
12.190	12.186	0.004	2589	0.00000	0.0060			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7057R.D
Date : 13-DEC-2012 17:04
Client ID: AR12426Y2
Instrument: E2.i
Sample Info: AR12426Y2,AR12426Y2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7058F.D
Report Date: 21-Dec-2012 12:27

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BF.B\E2L7058F.D
Lab Smp Id: AR12422Y2 Client Smp ID: AR12422Y2
Inj Date : 13-DEC-2012 17:24
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12422Y2,AR12422Y2,,ar1242.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BF.B\E2_LL_PCB_F.m
Meth Date : 18-Dec-2012 16:42 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 17:24 Cal File: E2L7058F.D
Als bottle: 10 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

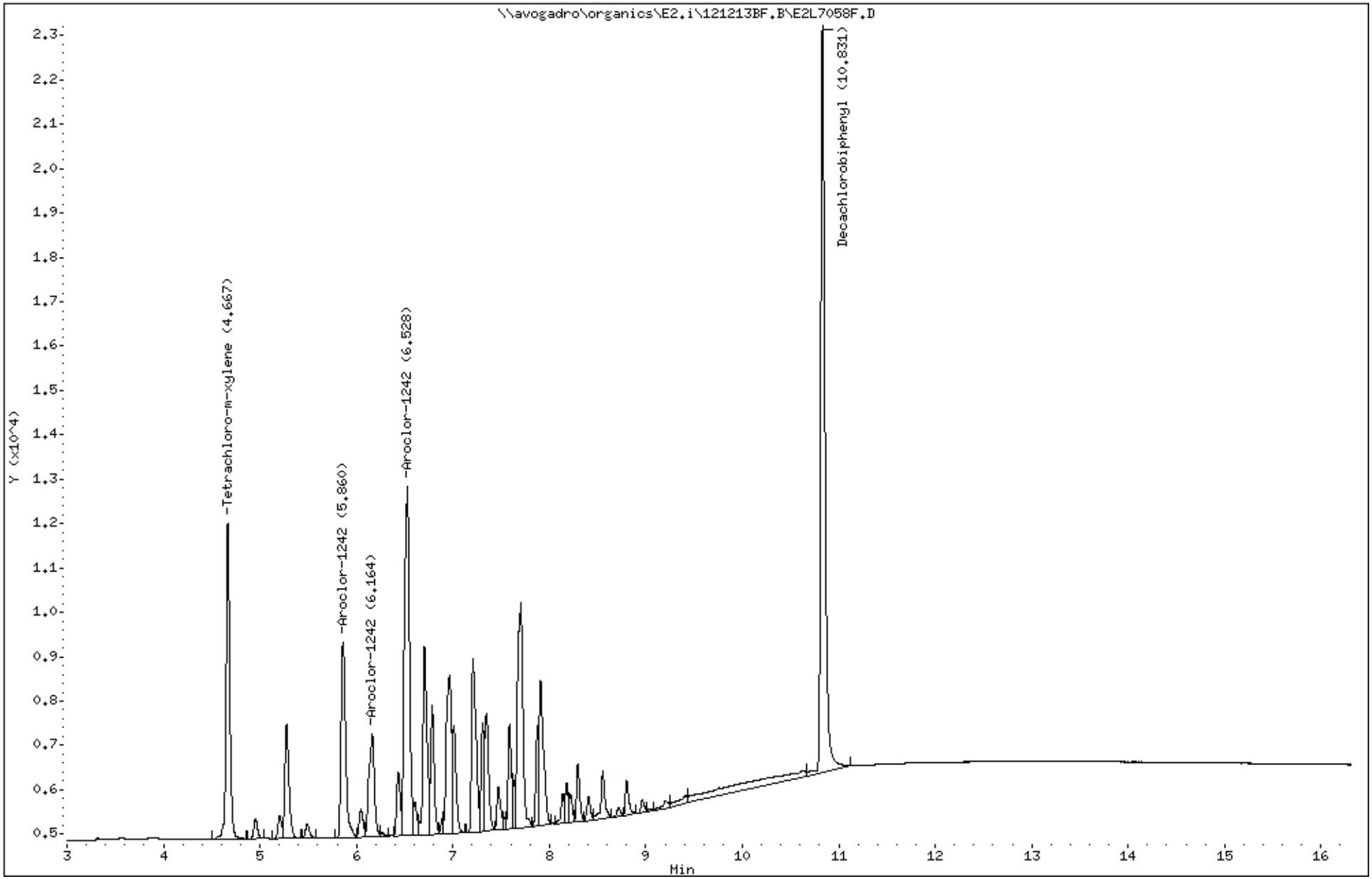
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.666	4.663	0.003	7125	0.01000	0.010			(a)
6 Aroclor-1242					CAS #: 53469-21-9			
5.860	5.858	0.002	4396	0.20000	0.19	80.00- 120.00	100.00	(a)
6.163	6.163	0.000	2331	0.20000	0.19	34.94- 74.94	53.03	
6.527	6.527	0.000	7882	0.20000	0.19	162.37- 202.37	179.30	
Average of Peak Amounts =					0.19000			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.831	10.828	0.003	505805	0.02000	0.020			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7058F.D
Date : 13-DEC-2012 17:24
Client ID: AR12422Y2
Instrument: E2.i
Sample Info: AR12422Y2,AR12422Y2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7058R.D
Report Date: 21-Dec-2012 12:28

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BR.B\E2L7058R.D
Lab Smp Id: AR12422Y2 Client Smp ID: AR12422Y2
Inj Date : 13-DEC-2012 17:24
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12422Y2,AR12422Y2,,ar1242.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BR.B\E2_LL_PCB_R.m
Meth Date : 18-Dec-2012 16:41 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 17:24 Cal File: E2L7058R.D
Als bottle: 10 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

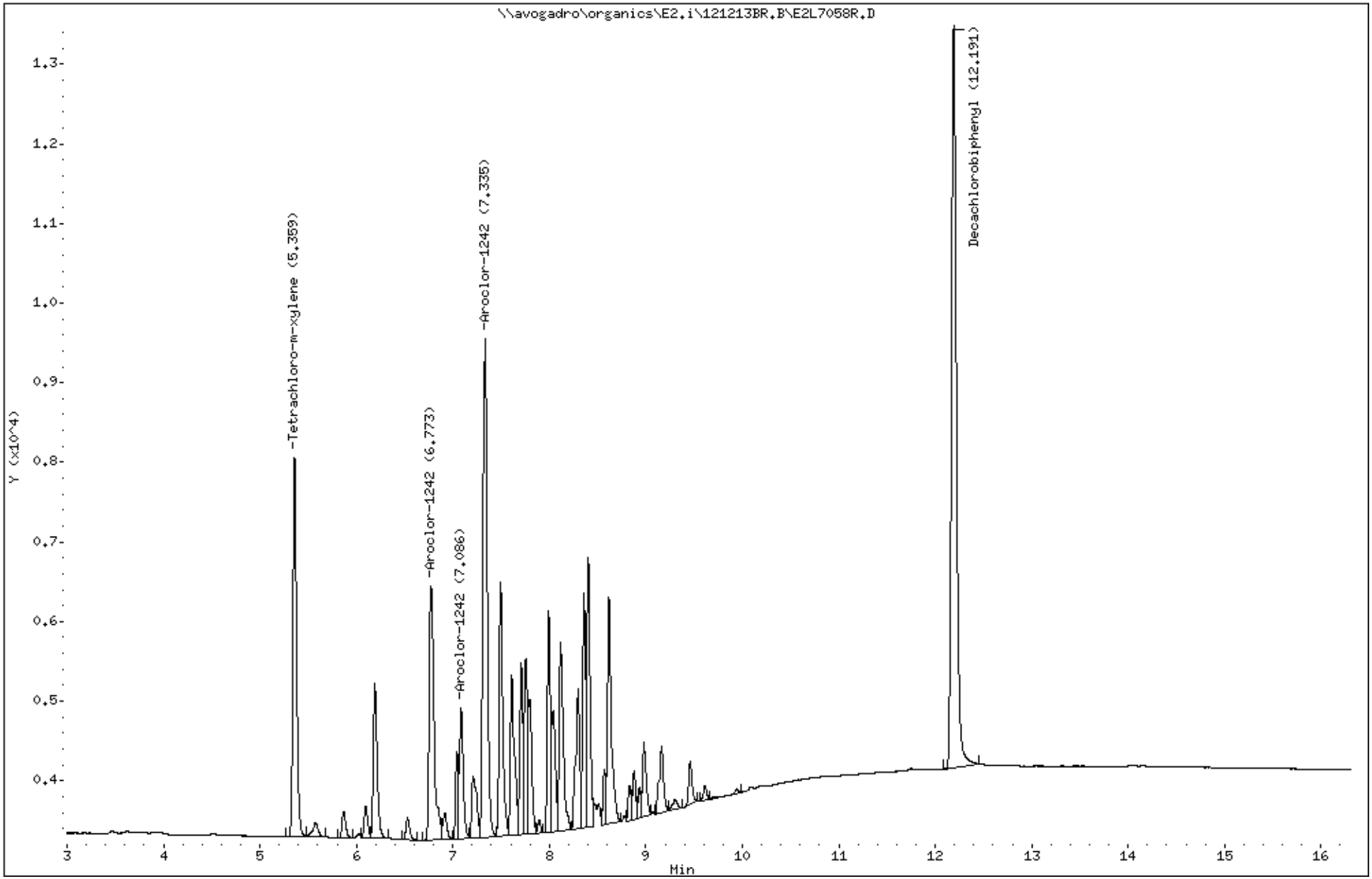
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.358	5.355	0.003	4766	0.01000	0.010			(a)
4 Aroclor-1242						CAS #: 53469-21-9		
6.772	6.769	0.003	3188	0.20000	0.19	80.00- 120.00	100.00	(a)
7.085	7.083	0.002	1643	0.20000	0.19	32.83- 72.83	51.54	
7.335	7.334	0.001	6267	0.20000	0.19	176.28- 216.28	196.58	
		Average of Peak Amounts =			0.19000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.191	12.186	0.005	9324	0.02000	0.022			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7058R.D
Date : 13-DEC-2012 17:24
Client ID: AR12422Y2
Instrument: E2.i
Sample Info: AR12422Y2,AR12422Y2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7059F.D
Report Date: 21-Dec-2012 12:27

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BF.B\E2L7059F.D
Lab Smp Id: AR12423Y2 Client Smp ID: AR12423Y2
Inj Date : 13-DEC-2012 17:44
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12423Y2,AR12423Y2,,ar1242.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BF.B\E2_LL_PCB_F.m
Meth Date : 18-Dec-2012 16:42 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 17:44 Cal File: E2L7059F.D
Als bottle: 11 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

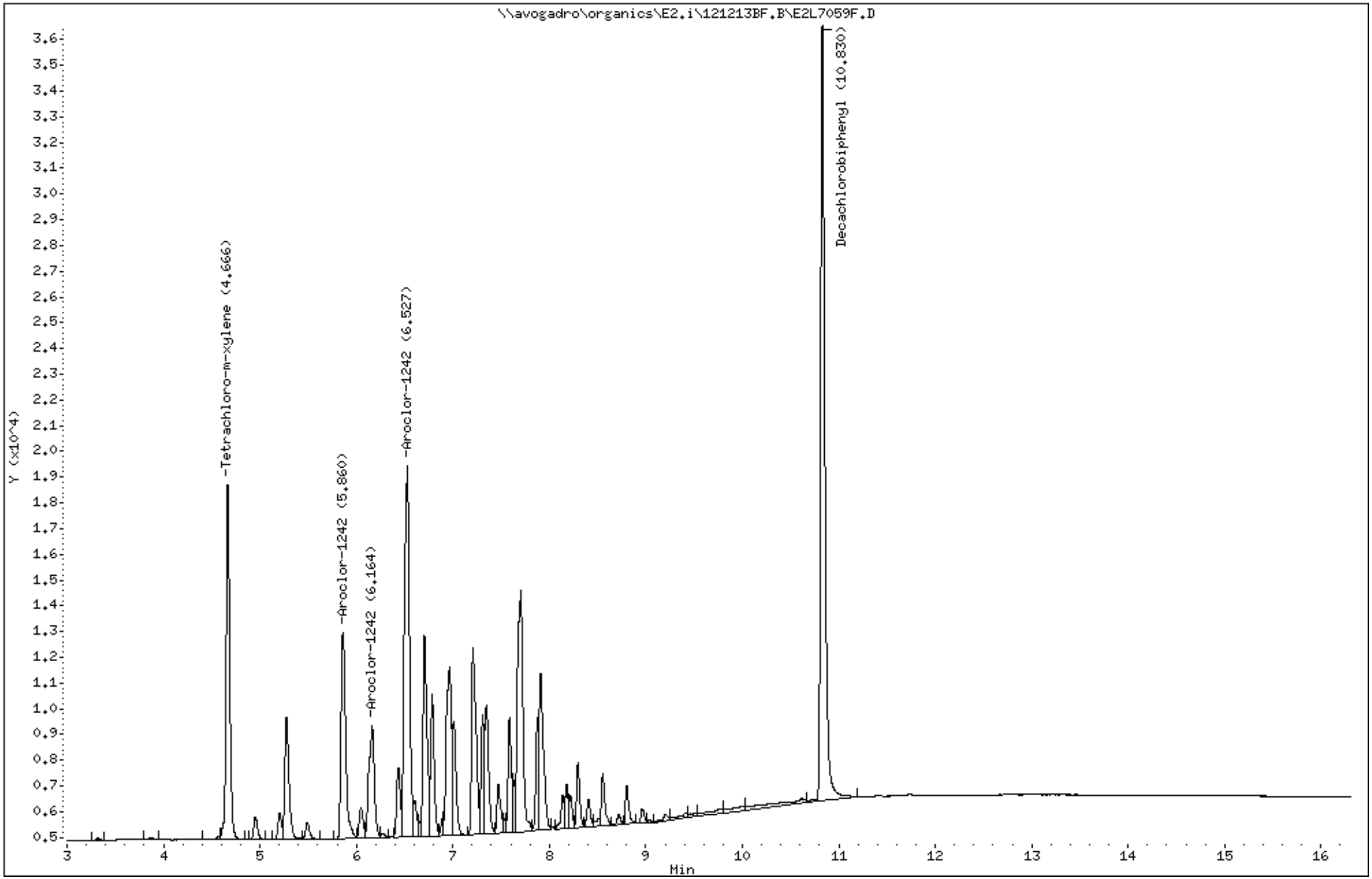
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.666	4.663	0.003	13802	0.02000	0.020			(a)
6 Aroclor-1242					CAS #: 53469-21-9			
5.859	5.858	0.001	7998	0.40000	0.35	80.00- 120.00	100.00	(a)
6.163	6.163	0.000	4359	0.40000	0.37	34.94- 74.94	54.50	
6.527	6.527	0.000	14420	0.40000	0.35	162.37- 202.37	180.30	
Average of Peak Amounts =					0.35667			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.829	10.828	0.001	908752	0.04000	0.036			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7059F.D
Date : 13-DEC-2012 17:44
Client ID: AR12423Y2
Instrument: E2.i
Sample Info: AR12423Y2,AR12423Y2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7059R.D
Report Date: 21-Dec-2012 12:28

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BR.B\E2L7059R.D
Lab Smp Id: AR12423Y2 Client Smp ID: AR12423Y2
Inj Date : 13-DEC-2012 17:44
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12423Y2,AR12423Y2,,ar1242.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BR.B\E2_LL_PCB_R.m
Meth Date : 18-Dec-2012 16:41 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 17:44 Cal File: E2L7059R.D
Als bottle: 11 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

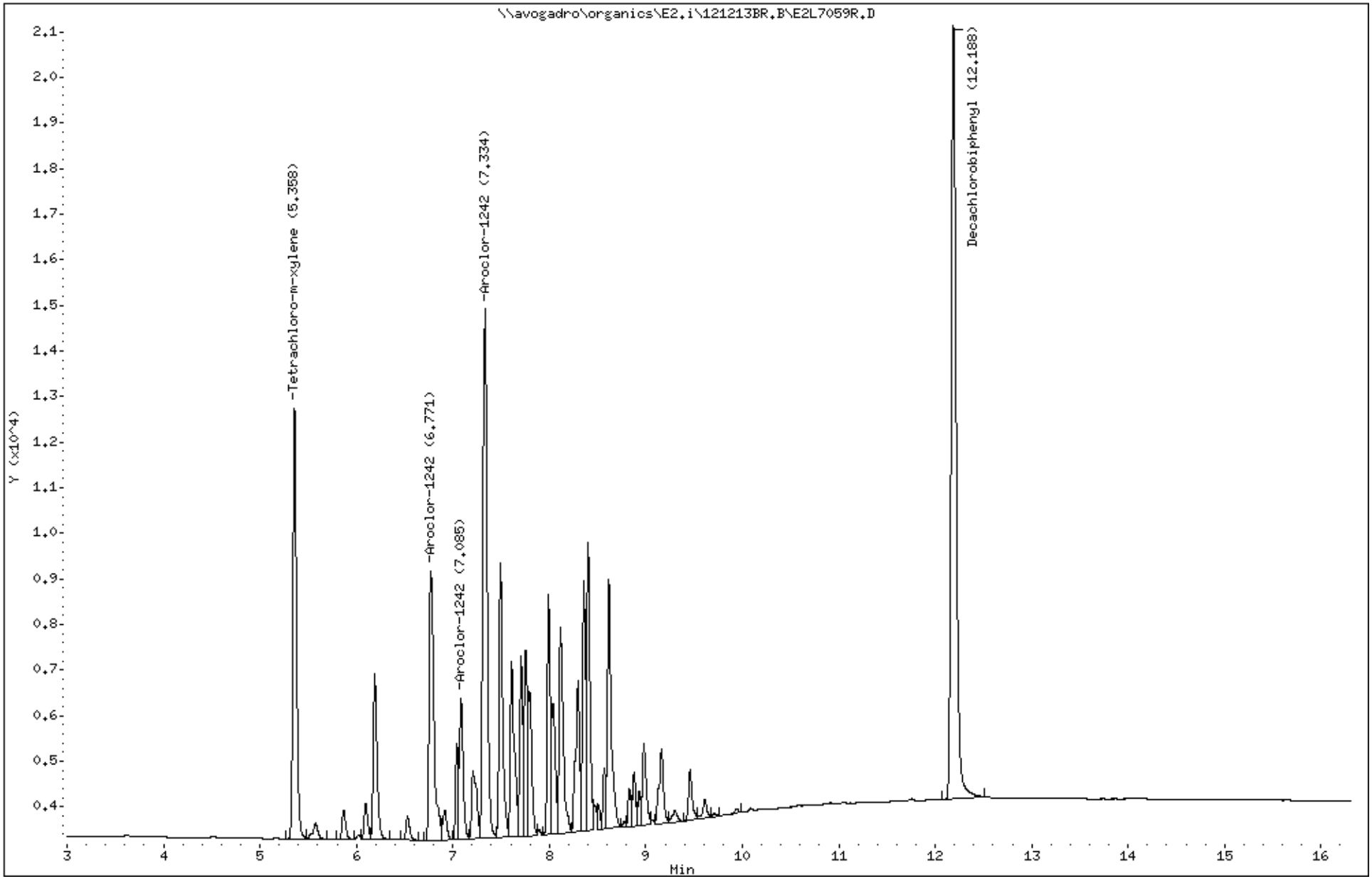
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
5.358	5.355	0.003	9453	0.02000	0.020			(a)
4 Aroclor-1242					CAS #: 53469-21-9			
6.770	6.769	0.001	5897	0.40000	0.36	80.00- 120.00	100.00	(a)
7.085	7.083	0.002	3093	0.40000	0.37	32.83- 72.83	52.45	
7.334	7.334	0.000	11620	0.40000	0.36	176.28- 216.28	197.05	
Average of Peak Amounts =					0.36333			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
12.188	12.186	0.002	16978	0.04000	0.040			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7059R.D
Date : 13-DEC-2012 17:44
Client ID: AR12423Y2 Instrument: E2.i
Sample Info: AR12423Y2,AR12423Y2,,ar1242.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPestII Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7060F.D
Report Date: 21-Dec-2012 12:27

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BF.B\E2L7060F.D
Lab Smp Id: AR12424Y2 Client Smp ID: AR12424Y2
Inj Date : 13-DEC-2012 18:03
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12424Y2,AR12424Y2,,ar1242.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BF.B\E2_LL_PCB_F.m
Meth Date : 18-Dec-2012 16:42 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 18:03 Cal File: E2L7060F.D
Als bottle: 12 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

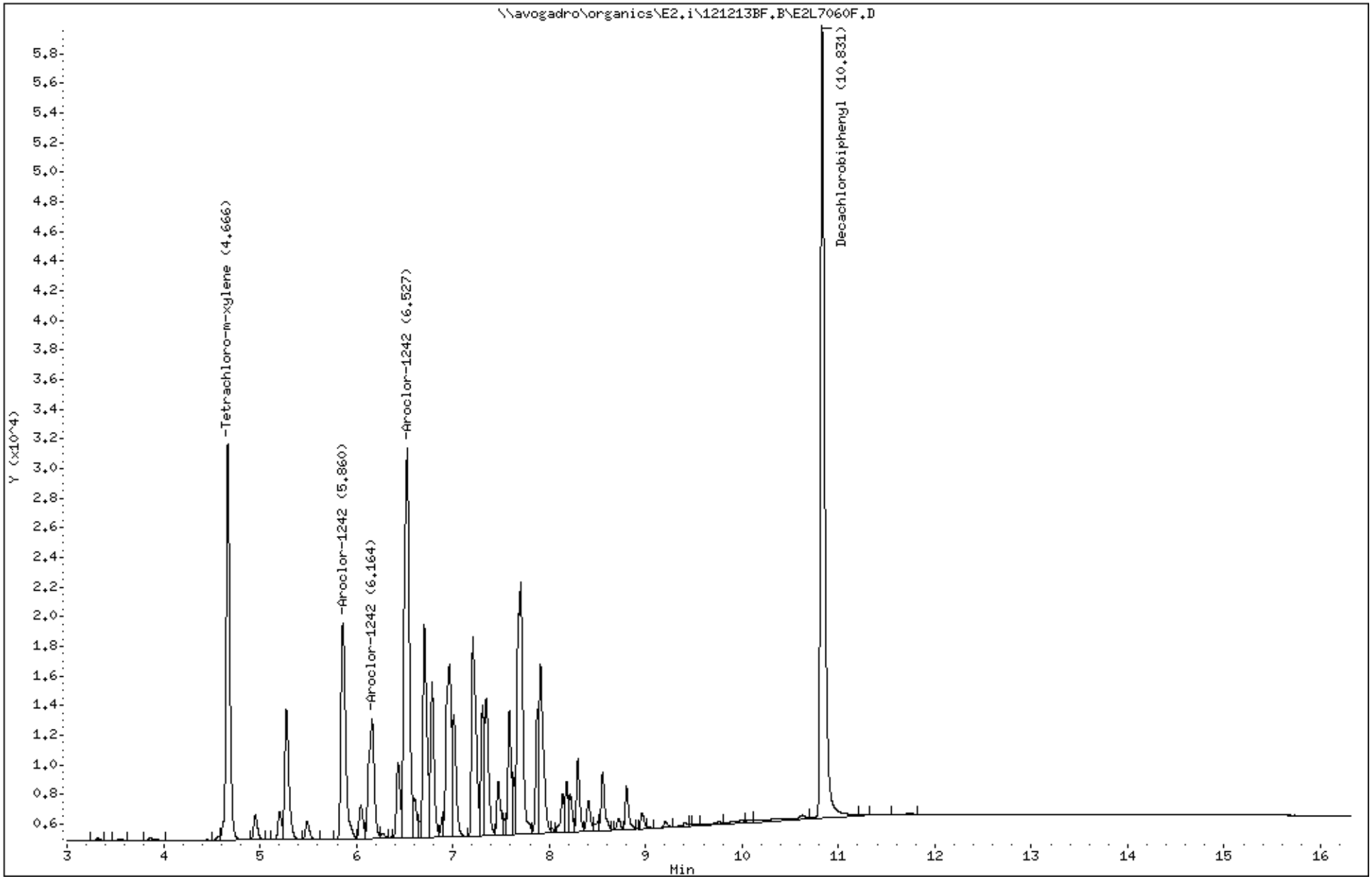
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.666	4.663	0.003	26778	0.04000	0.039			(a)
6 Aroclor-1242						CAS #: 53469-21-9		
5.859	5.858	0.001	14631	0.80000	0.67	80.00- 120.00	100.00	(a)
6.163	6.163	0.000	8120	0.80000	0.70	34.94- 74.94	55.50	
6.527	6.527	0.000	26362	0.80000	0.67	162.37- 202.37	180.18	
Average of Peak Amounts =					0.68000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.830	10.828	0.002	1631675	0.08000	0.064			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7060F.D
Date : 13-DEC-2012 18:03
Client ID: AR12424Y2
Instrument: E2.i
Sample Info: AR12424Y2,AR12424Y2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7060R.D
Report Date: 21-Dec-2012 12:28

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BR.B\E2L7060R.D
Lab Smp Id: AR12424Y2 Client Smp ID: AR12424Y2
Inj Date : 13-DEC-2012 18:03
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12424Y2,AR12424Y2,,ar1242.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BR.B\E2_LL_PCB_R.m
Meth Date : 18-Dec-2012 16:41 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 18:03 Cal File: E2L7060R.D
Als bottle: 12 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

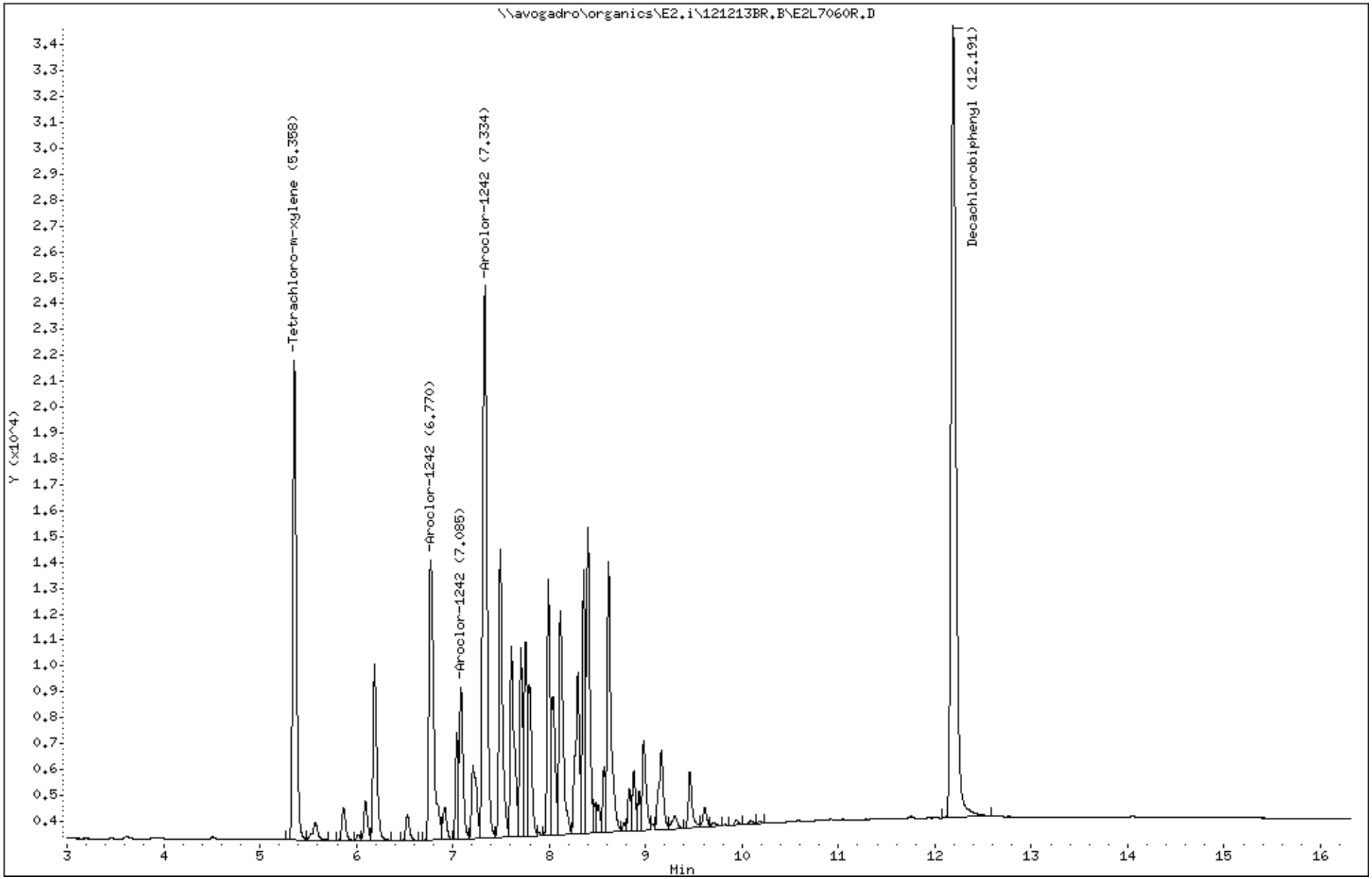
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.357	5.355	0.002	18544	0.04000	0.040			(a)
4 Aroclor-1242						CAS #: 53469-21-9		
6.770	6.769	0.001	10817	0.80000	0.68	80.00- 120.00	100.00	(a)
7.085	7.083	0.002	5871	0.80000	0.72	32.83- 72.83	54.28	
7.334	7.334	0.000	21374	0.80000	0.68	176.28- 216.28	197.60	
		Average of Peak Amounts =			0.69333			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.190	12.186	0.004	30616	0.08000	0.072			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7060R.D
Date : 13-DEC-2012 18:03
Client ID: AR12424Y2
Instrument: E2.i
Sample Info: AR12424Y2,AR12424Y2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7061F.D
Report Date: 21-Dec-2012 12:27

Spectrum Analytical, Inc. RI Division

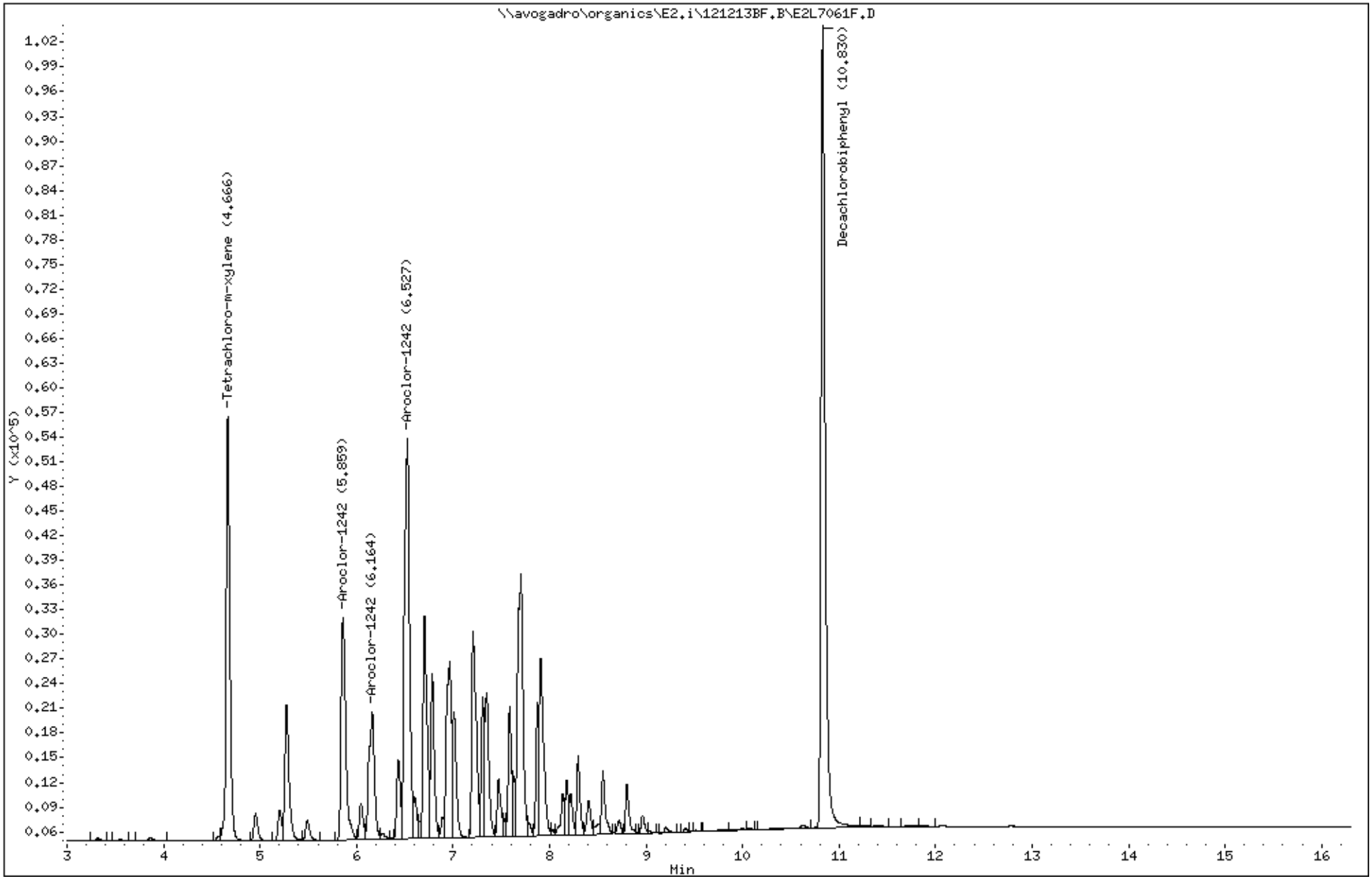
Quantitation Report
Data file : \\avogadro\organics\E2.i\121213BF.B\E2L7061F.D
Lab Smp Id: AR12425Y2 Client Smp ID: AR12425Y2
Inj Date : 13-DEC-2012 18:23
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12425Y2,AR12425Y2,,ar1242.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BF.B\E2_LL_PCB_F.m
Meth Date : 18-Dec-2012 16:42 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 18:23 Cal File: E2L7061F.D
Als bottle: 13 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.665	4.663	0.002	51637	0.08000	0.075			
6 Aroclor-1242						CAS #: 53469-21-9		
5.858	5.858	0.000	26973	1.60000	1.3	80.00- 120.00		100.00
6.163	6.163	0.000	15442	1.60000	1.4	34.94- 74.94		57.25
6.527	6.527	0.000	48754	1.60000	1.3	162.37- 202.37		180.75
Average of Peak Amounts =					1.33333			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.830	10.828	0.002	2958671	0.16000	0.12			

Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7061F.D
Date : 13-DEC-2012 18:23
Client ID: AR12425Y2
Instrument: E2.i
Sample Info: AR12425Y2,AR12425Y2,,ar1242.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7061R.D
Report Date: 21-Dec-2012 12:28

Spectrum Analytical, Inc. RI Division

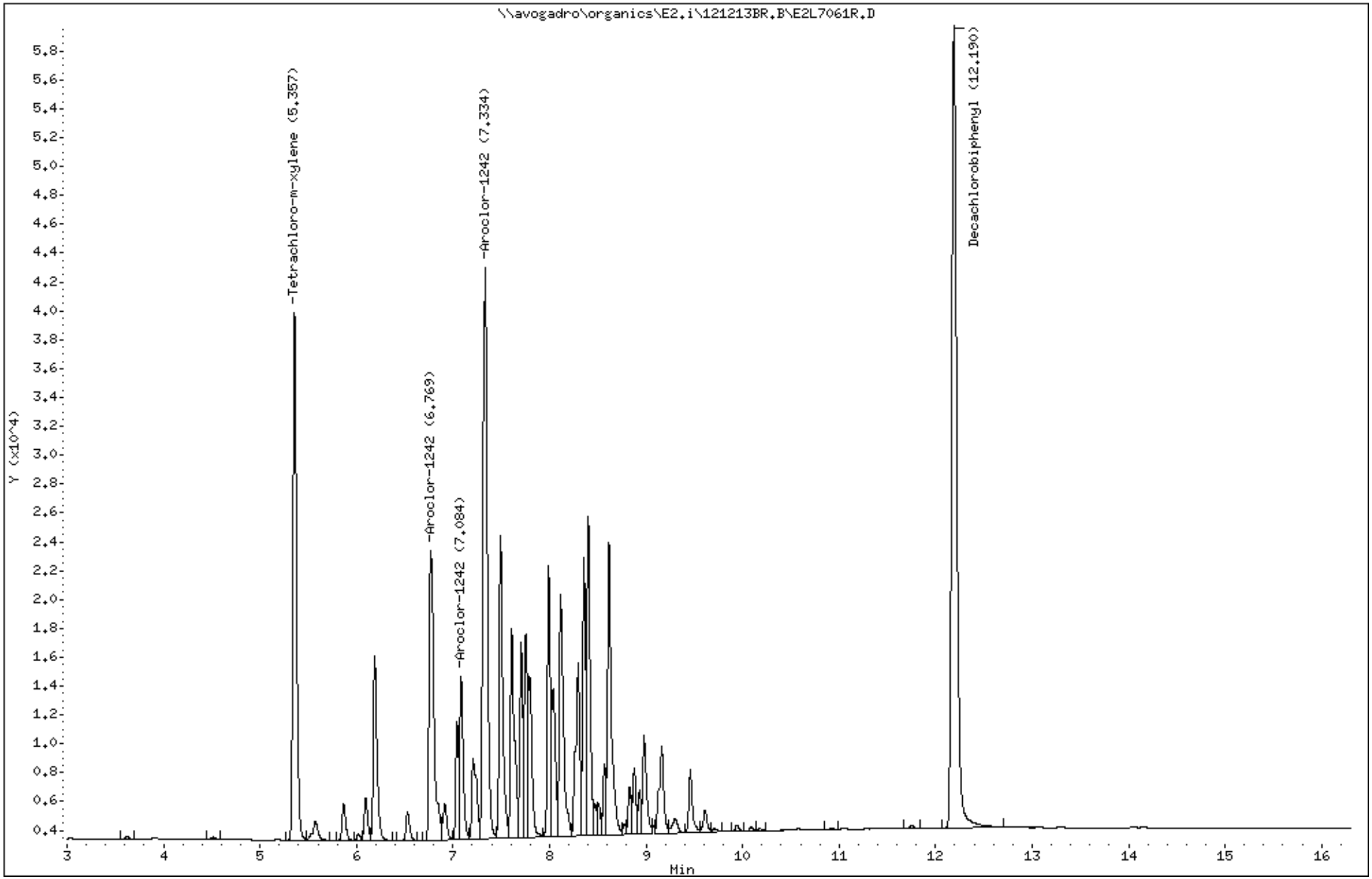
Quantitation Report
Data file : \\avogadro\organics\E2.i\121213BR.B\E2L7061R.D
Lab Smp Id: AR12425Y2 Client Smp ID: AR12425Y2
Inj Date : 13-DEC-2012 18:23
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12425Y2,AR12425Y2,,ar1242.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BR.B\E2_LL_PCB_R.m
Meth Date : 18-Dec-2012 16:41 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 18:23 Cal File: E2L7061R.D
Als bottle: 13 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

			AMOUNTS				
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
5.357	5.355	0.002	36634	0.08000	0.078		
4 Aroclor-1242						CAS #: 53469-21-9	
6.769	6.769	0.000	20083	1.60000	1.3	80.00- 120.00	100.00
7.083	7.083	0.000	11259	1.60000	1.4	32.83- 72.83	56.06
7.334	7.334	0.000	39670	1.60000	1.3	176.28- 216.28	197.53
		Average of Peak Amounts =			1.33333		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
12.190	12.186	0.004	55600	0.16000	0.13		

Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7061R.D
Date : 13-DEC-2012 18:23
Client ID: AR12425Y2 Instrument: E2.i
Sample Info: AR12425Y2,AR12425Y2,,ar1242.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPestII Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7062F.D
Report Date: 21-Dec-2012 12:27

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BF.B\E2L7062F.D
Lab Smp Id: AR12481Y2 Client Smp ID: AR12481Y2
Inj Date : 13-DEC-2012 18:43
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12481Y2,AR12481Y2,,ar1248.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BF.B\E2_LL_PCB_F.m
Meth Date : 18-Dec-2012 16:42 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 18:43 Cal File: E2L7062F.D
Als bottle: 14 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

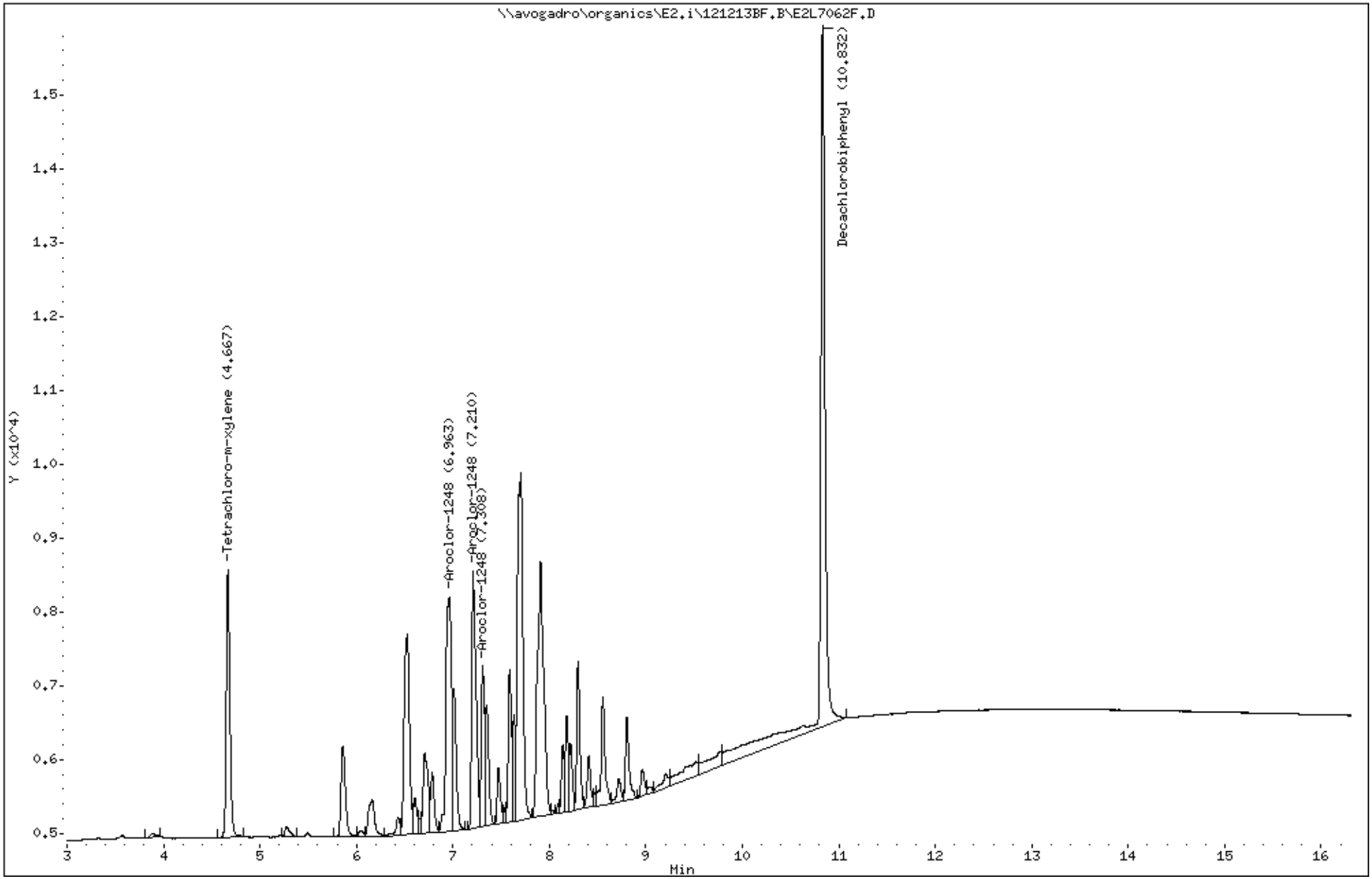
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.667	4.663	0.004	3619	0.00500	0.0052			(a)
7 Aroclor-1248						CAS #: 12672-29-6		
6.963	6.961	0.002	3171	0.10000	0.10	80.00- 120.00	100.00	(a)
7.209	7.205	0.004	3478	0.10000	0.10	94.39- 134.39	109.68	
7.308	7.305	0.003	2171	0.10000	0.10	55.13- 95.13	68.46	
Average of Peak Amounts =					0.10000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.831	10.828	0.003	359414	0.01000	0.015			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7062F.D
Date : 13-DEC-2012 18:43
Client ID: AR12481Y2
Instrument: E2.i
Sample Info: AR12481Y2,AR12481Y2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7062R.D
Report Date: 21-Dec-2012 12:28

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BR.B\E2L7062R.D
Lab Smp Id: AR12481Y2 Client Smp ID: AR12481Y2
Inj Date : 13-DEC-2012 18:43
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12481Y2,AR12481Y2,,ar1248.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BR.B\E2_LL_PCB_R.m
Meth Date : 18-Dec-2012 16:41 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 18:43 Cal File: E2L7062R.D
Als bottle: 14 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

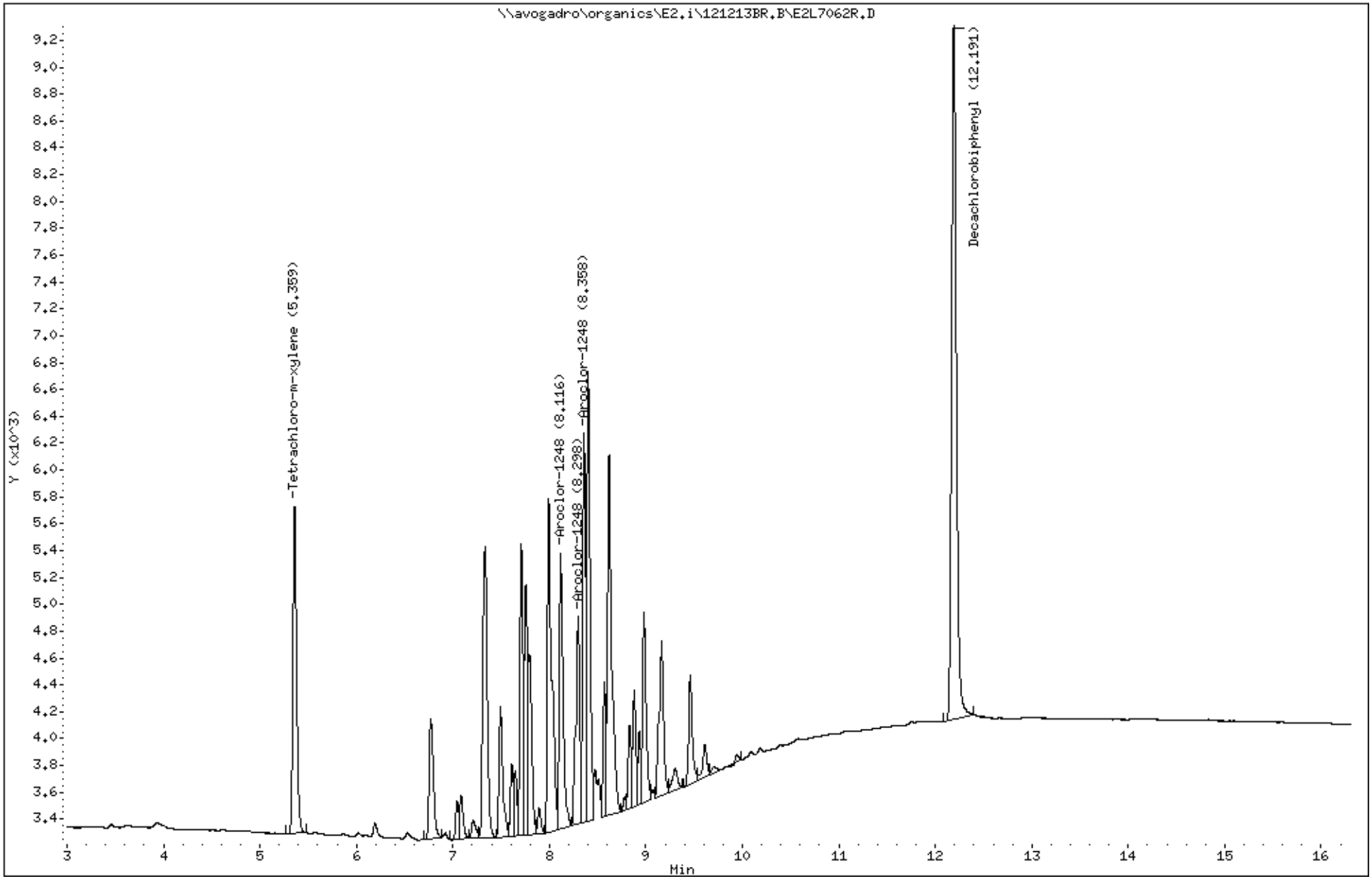
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.358	5.355	0.003	2432	0.00500	0.0052			(a)
5 Aroclor-1248						CAS #: 12672-29-6		
8.116	8.114	0.002	2056	0.10000	0.10	80.00- 120.00	100.00	(a)
8.297	8.295	0.002	1545	0.10000	0.10	53.49- 93.49	75.15	
8.358	8.355	0.003	2897	0.10000	0.10	113.25- 153.25	140.90	
Average of Peak Amounts =				0.10000				
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.191	12.186	0.005	5170	0.01000	0.012			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7062R.D
Date : 13-DEC-2012 18:43
Client ID: AR12481Y2
Instrument: E2.i
Sample Info: AR12481Y2,AR12481Y2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7063F.D
Report Date: 21-Dec-2012 12:27

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BF.B\E2L7063F.D
Lab Smp Id: AR12486Y2 Client Smp ID: AR12486Y2
Inj Date : 13-DEC-2012 19:03
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12486Y2,AR12486Y2,,ar1248.sub,,
Misc Info : 1,6,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BF.B\E2_LL_PCB_F.m
Meth Date : 18-Dec-2012 16:42 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 19:03 Cal File: E2L7063F.D
Als bottle: 15 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

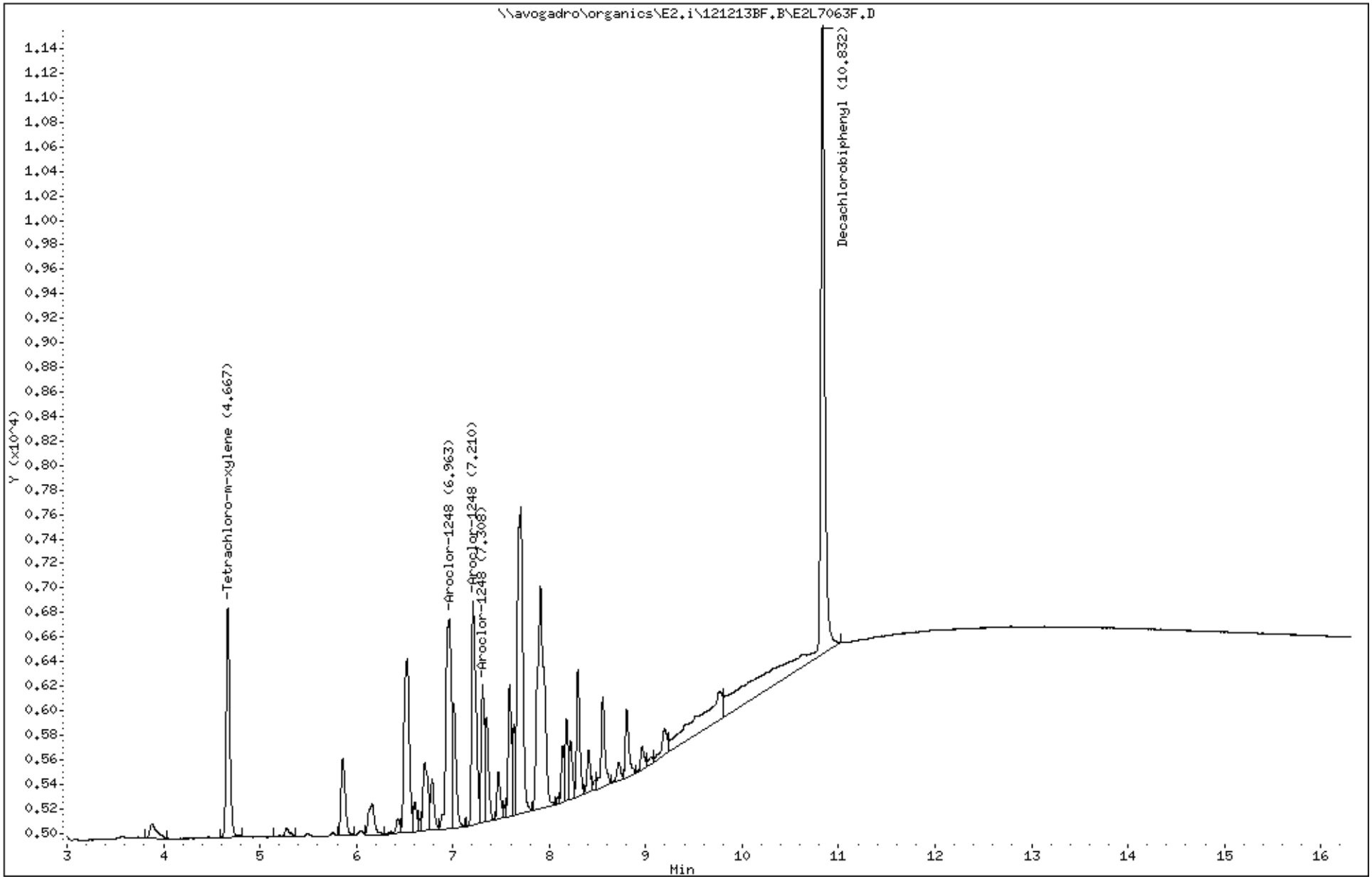
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.667	4.663	0.004	1876	0.00000	0.0027			(a)
7 Aroclor-1248						CAS #: 12672-29-6		
6.962	6.961	0.001	1707	0.05000	0.052	80.00- 120.00	100.00	(a)
7.209	7.205	0.004	1825	0.05000	0.051	94.39- 134.39	106.91	
7.308	7.305	0.003	1121	0.05000	0.051	55.13- 95.13	65.67	
		Average of Peak Amounts =			0.05133			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.832	10.828	0.004	219536	0.00000	0.0089			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7063F.D
Date : 13-DEC-2012 19:03
Client ID: AR12486Y2
Instrument: E2.i
Sample Info: AR12486Y2,AR12486Y2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7063R.D
Report Date: 21-Dec-2012 12:28

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BR.B\E2L7063R.D
Lab Smp Id: AR12486Y2 Client Smp ID: AR12486Y2
Inj Date : 13-DEC-2012 19:03
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12486Y2,AR12486Y2,,ar1248.sub,,
Misc Info : 1,6,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BR.B\E2_LL_PCB_R.m
Meth Date : 18-Dec-2012 16:41 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 19:03 Cal File: E2L7063R.D
Als bottle: 15 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

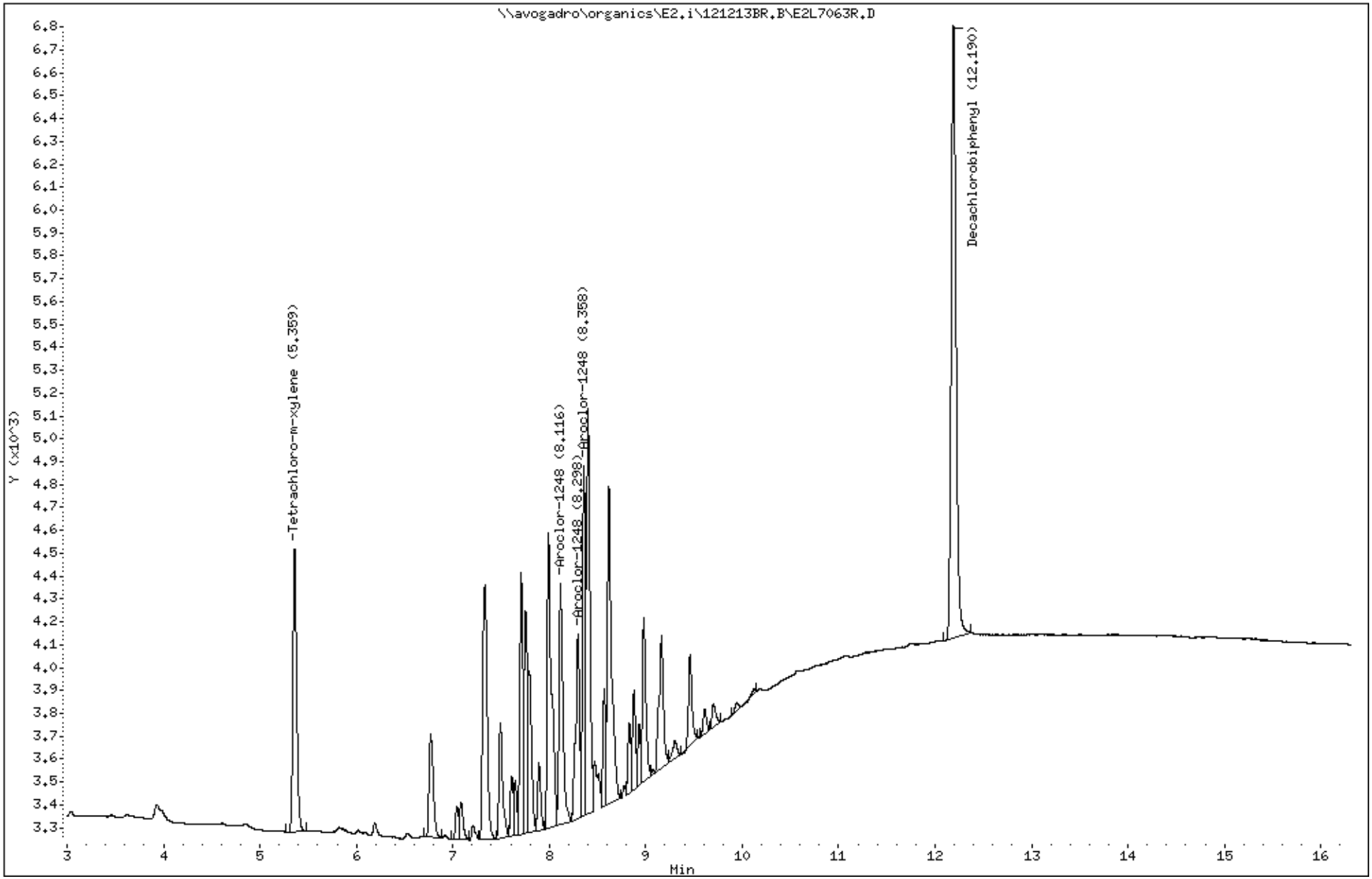
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.359	5.355	0.004	1235	0.00000	0.0026			(a)
5 Aroclor-1248						CAS #: 12672-29-6		
8.116	8.114	0.002	1054	0.05000	0.051	80.00- 120.00	100.00	(a)
8.297	8.295	0.002	802	0.05000	0.051	53.49- 93.49	76.09	
8.358	8.355	0.003	1526	0.05000	0.051	113.25- 153.25	144.78	
Average of Peak Amounts =				0.05100				
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.190	12.186	0.004	2676	0.00000	0.0062			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7063R.D
Date : 13-DEC-2012 19:03
Client ID: AR12486Y2
Instrument: E2.i
Sample Info: AR12486Y2,AR12486Y2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7064F.D
Report Date: 21-Dec-2012 12:27

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BF.B\E2L7064F.D
Lab Smp Id: AR12482Y2 Client Smp ID: AR12482Y2
Inj Date : 13-DEC-2012 19:23
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12482Y2,AR12482Y2,,ar1248.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BF.B\E2_LL_PCB_F.m
Meth Date : 18-Dec-2012 16:42 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 19:23 Cal File: E2L7064F.D
Als bottle: 16 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

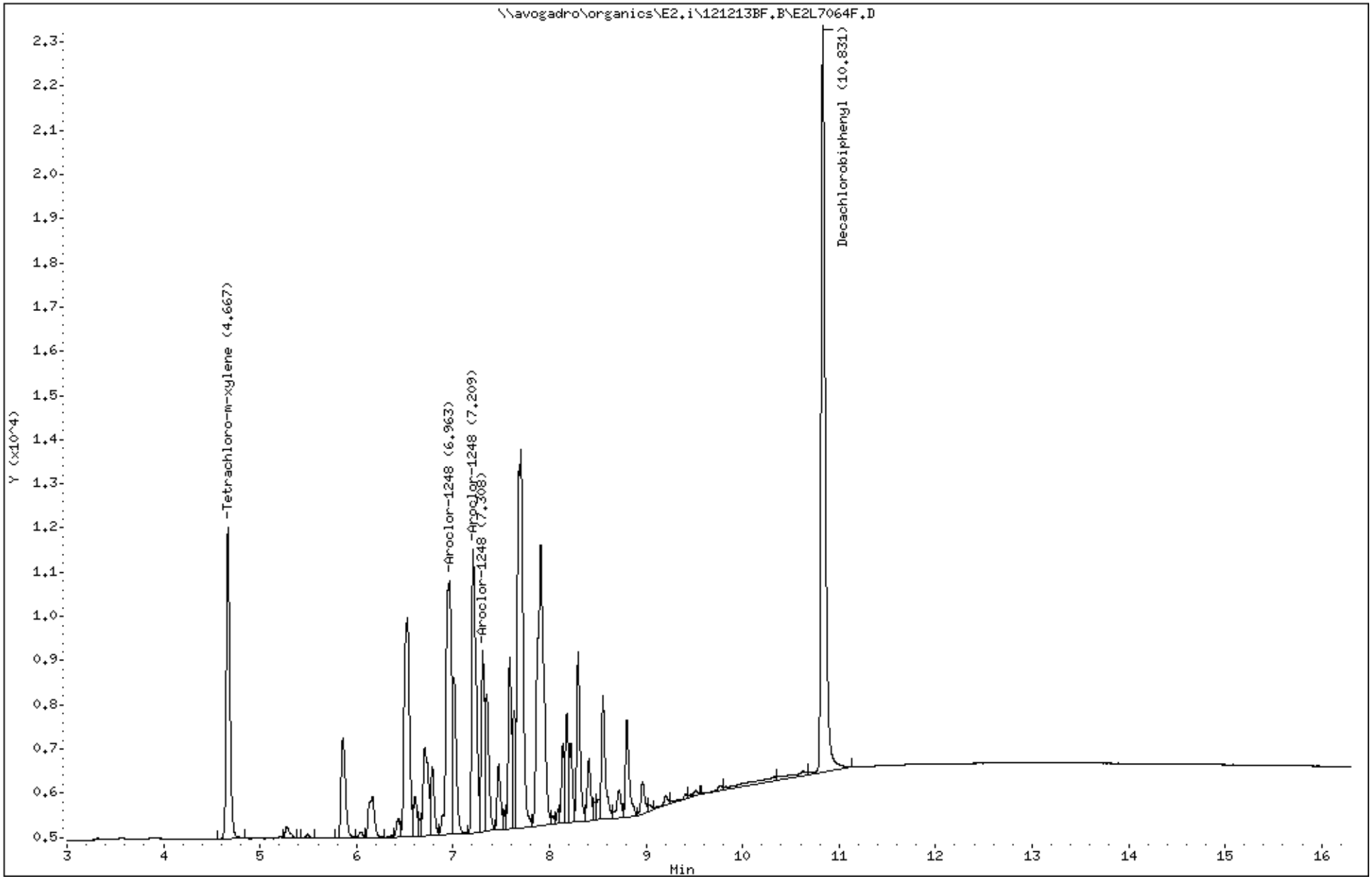
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.667	4.663	0.004	7033	0.01000	0.010			(a)
7 Aroclor-1248						CAS #: 12672-29-6		
6.962	6.961	0.001	5752	0.20000	0.18	80.00- 120.00	100.00	(a)
7.208	7.205	0.003	6400	0.20000	0.18	94.39- 134.39	111.27	
7.308	7.305	0.003	4082	0.20000	0.19	55.13- 95.13	70.97	
Average of Peak Amounts =					0.18333			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.831	10.828	0.003	499607	0.02000	0.020			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7064F.D
Date : 13-DEC-2012 19:23
Client ID: AR12482Y2
Instrument: E2.i
Sample Info: AR12482Y2,AR12482Y2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7064R.D
Report Date: 21-Dec-2012 12:28

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BR.B\E2L7064R.D
Lab Smp Id: AR12482Y2 Client Smp ID: AR12482Y2
Inj Date : 13-DEC-2012 19:23
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12482Y2,AR12482Y2,,ar1248.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BR.B\E2_LL_PCB_R.m
Meth Date : 18-Dec-2012 16:41 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 19:23 Cal File: E2L7064R.D
Als bottle: 16 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

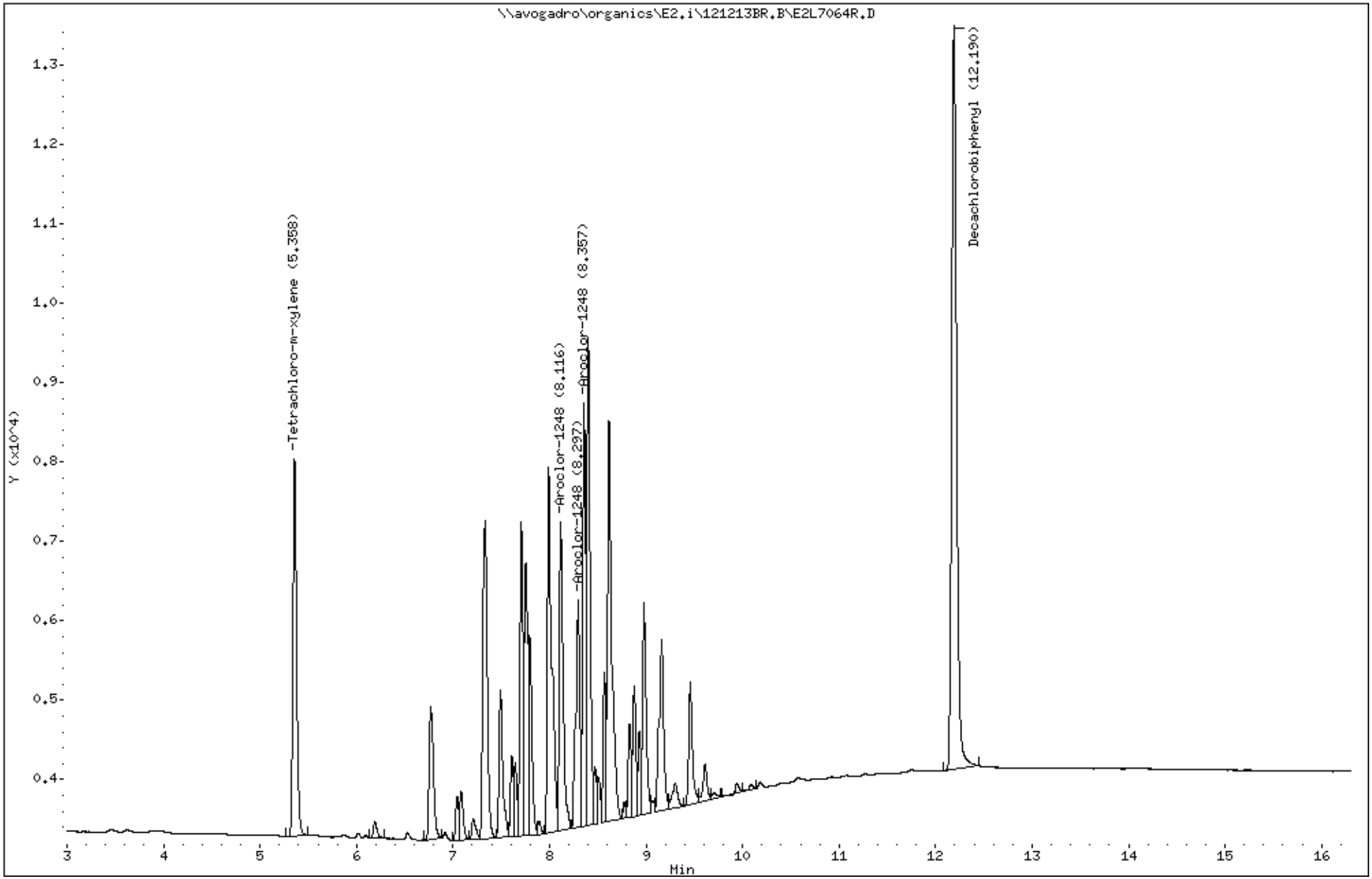
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

			AMOUNTS				
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
5.358	5.355	0.003	4749	0.01000	0.010		(a)
5 Aroclor-1248					CAS #: 12672-29-6		
8.115	8.114	0.001	3893	0.20000	0.19	80.00- 120.00	100.00(a)
8.297	8.295	0.002	2873	0.20000	0.19	53.49- 93.49	73.80
8.357	8.355	0.002	5327	0.20000	0.18	113.25- 153.25	136.84
		Average of Peak Amounts =			0.18667		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
12.190	12.186	0.004	9361	0.02000	0.022		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7064R.D
Date : 13-DEC-2012 19:23
Client ID: AR12482Y2
Instrument: E2.i
Sample Info: AR12482Y2,AR12482Y2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7065F.D
Report Date: 21-Dec-2012 12:27

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BF.B\E2L7065F.D
Lab Smp Id: AR12483Y2 Client Smp ID: AR12483Y2
Inj Date : 13-DEC-2012 19:43
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12483Y2,AR12483Y2,,ar1248.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BF.B\E2_LL_PCB_F.m
Meth Date : 18-Dec-2012 16:42 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 19:43 Cal File: E2L7065F.D
Als bottle: 17 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

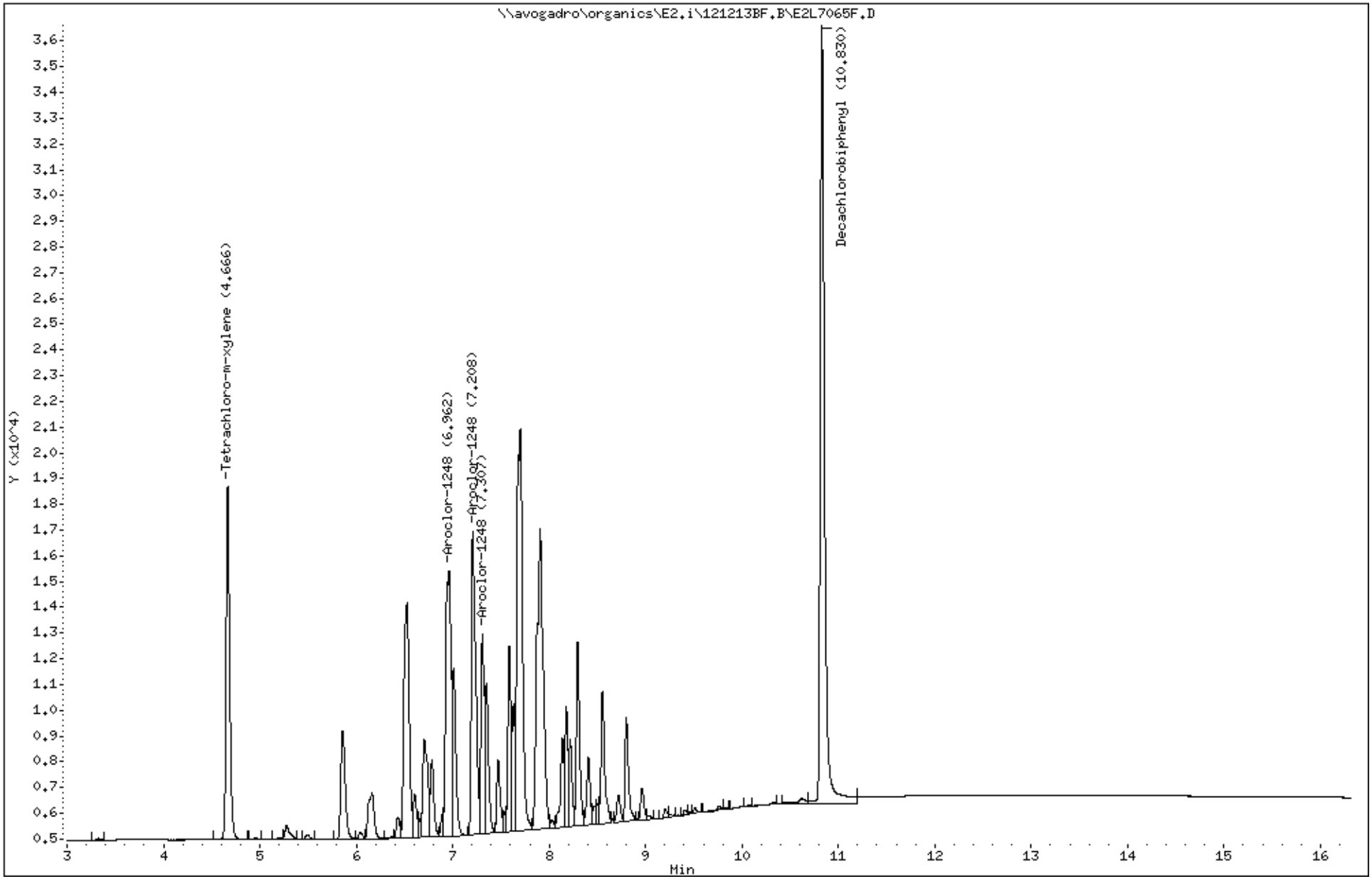
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.666	4.663	0.003	13727	0.02000	0.020			(a)
7 Aroclor-1248					CAS #: 12672-29-6			
6.962	6.961	0.001	10275	0.40000	0.34	80.00- 120.00	100.00	(a)
7.207	7.205	0.002	11762	0.40000	0.35	94.39- 134.39	114.47	
7.307	7.305	0.002	7755	0.40000	0.37	55.13- 95.13	75.47	
		Average of Peak Amounts =			0.35333			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.830	10.828	0.002	945631	0.04000	0.038			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7065F.D
Date : 13-DEC-2012 19:43
Client ID: AR12483Y2
Instrument: E2.i
Sample Info: AR12483Y2,AR12483Y2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7065R.D
Report Date: 21-Dec-2012 12:28

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BR.B\E2L7065R.D
Lab Smp Id: AR12483Y2 Client Smp ID: AR12483Y2
Inj Date : 13-DEC-2012 19:43
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12483Y2,AR12483Y2,,ar1248.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BR.B\E2_LL_PCB_R.m
Meth Date : 18-Dec-2012 16:41 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 19:43 Cal File: E2L7065R.D
Als bottle: 17 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

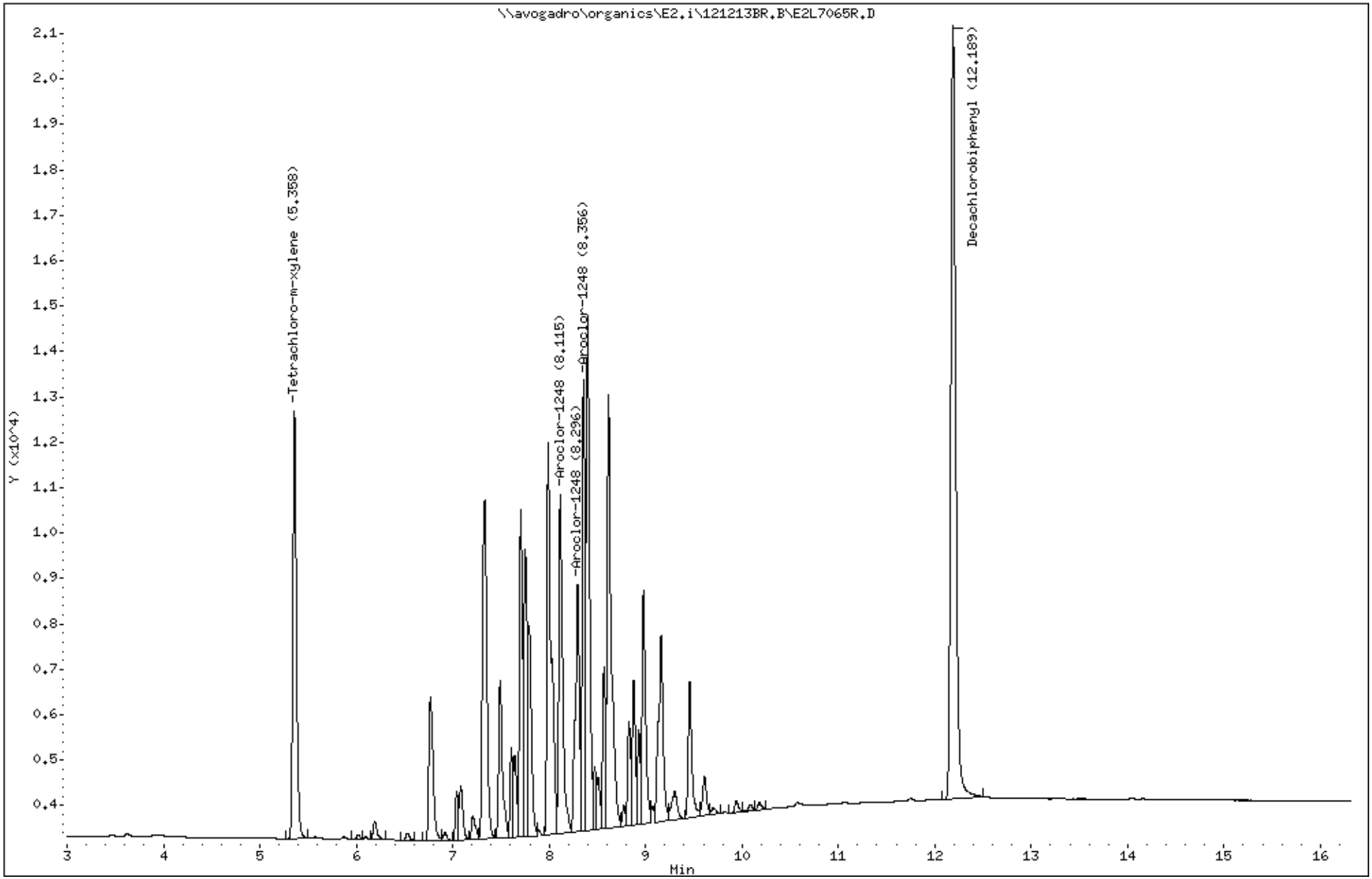
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.358	5.355	0.003	9410	0.02000	0.020			(a)
5 Aroclor-1248						CAS #: 12672-29-6		
8.115	8.114	0.001	7461	0.40000	0.37	80.00- 120.00	100.00	(a)
8.296	8.295	0.001	5453	0.40000	0.37	53.49- 93.49	73.09	
8.356	8.355	0.001	9940	0.40000	0.36	113.25- 153.25	133.23	
Average of Peak Amounts =					0.36667			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.188	12.186	0.002	17048	0.04000	0.040			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7065R.D
Date : 13-DEC-2012 19:43
Client ID: AR12483Y2
Instrument: E2.i
Sample Info: AR12483Y2,AR12483Y2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7066F.D
Report Date: 21-Dec-2012 12:27

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BF.B\E2L7066F.D
Lab Smp Id: AR12484Y2 Client Smp ID: AR12484Y2
Inj Date : 13-DEC-2012 20:02
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12484Y2,AR12484Y2,,ar1248.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BF.B\E2_LL_PCB_F.m
Meth Date : 18-Dec-2012 16:42 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 20:02 Cal File: E2L7066F.D
Als bottle: 18 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

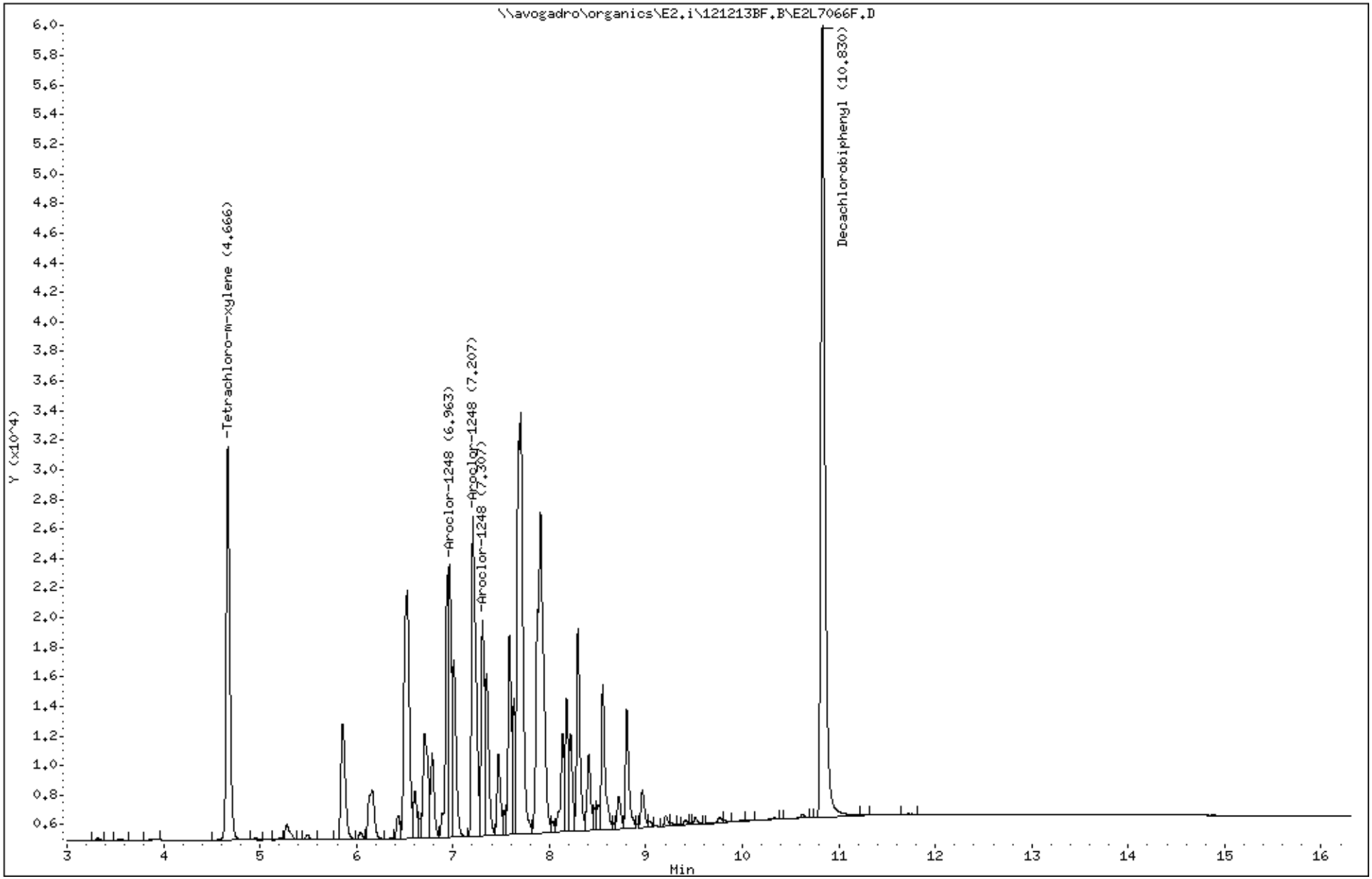
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.666	4.663	0.003	26600	0.04000	0.039			(a)
7 Aroclor-1248					CAS #: 12672-29-6			
6.962	6.961	0.001	18460	0.80000	0.64	80.00- 120.00	100.00	(a)
7.206	7.205	0.001	21664	0.80000	0.68	94.39- 134.39	117.36	
7.306	7.305	0.001	14593	0.80000	0.71	55.13- 95.13	79.05	
Average of Peak Amounts =					0.67667			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.830	10.828	0.002	1619899	0.08000	0.066			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7066F.D
Date : 13-DEC-2012 20:02
Client ID: AR12484Y2
Instrument: E2.i
Sample Info: AR12484Y2,AR12484Y2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7066R.D
Report Date: 21-Dec-2012 12:28

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BR.B\E2L7066R.D
Lab Smp Id: AR12484Y2 Client Smp ID: AR12484Y2
Inj Date : 13-DEC-2012 20:02
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12484Y2,AR12484Y2,,ar1248.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BR.B\E2_LL_PCB_R.m
Meth Date : 18-Dec-2012 16:41 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 20:02 Cal File: E2L7066R.D
Als bottle: 18 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

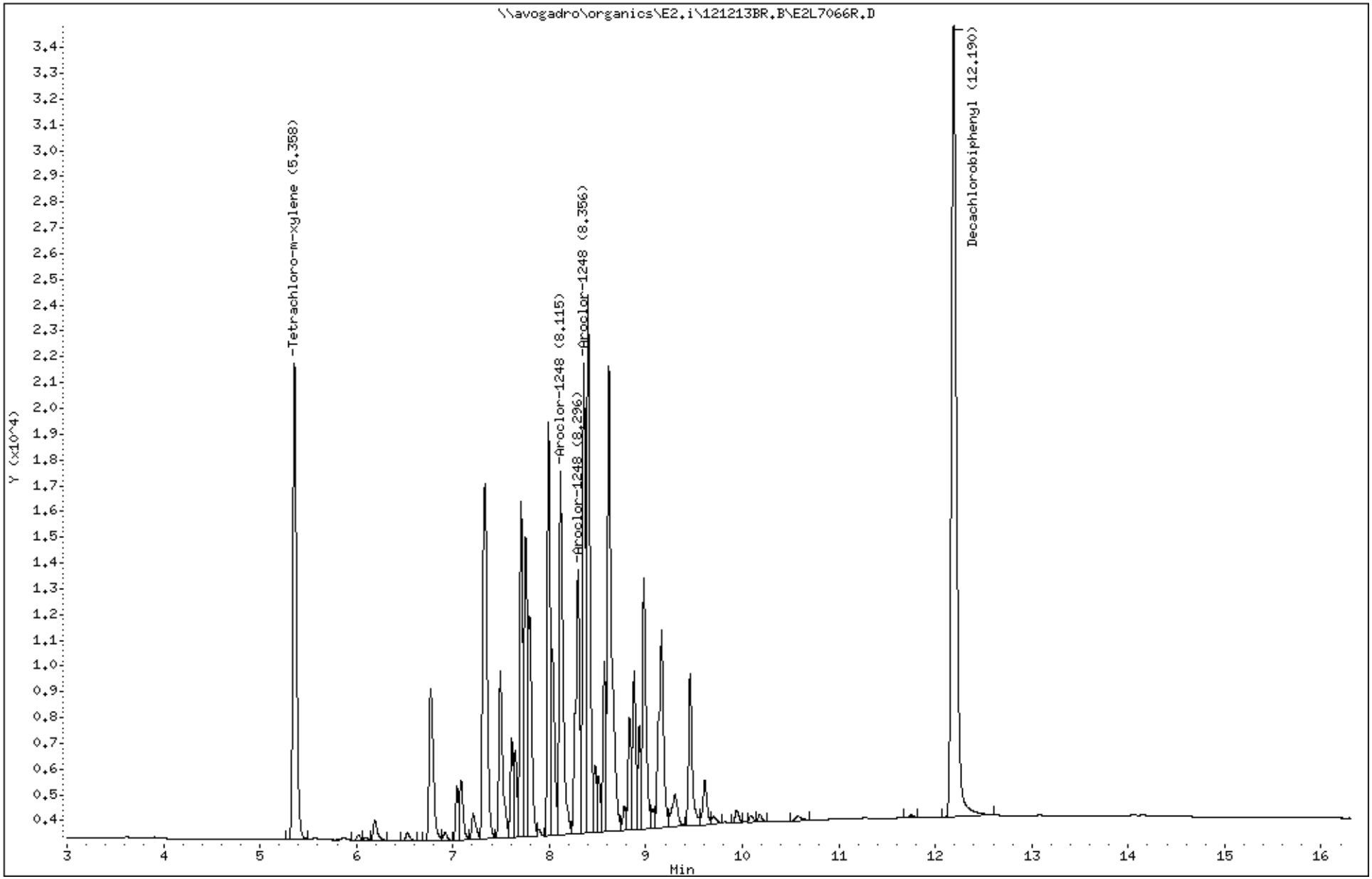
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.357	5.355	0.002	18478	0.04000	0.039			(a)
5 Aroclor-1248						CAS #: 12672-29-6		
8.114	8.114	0.000	14101	0.80000	0.72	80.00- 120.00	100.00	(a)
8.296	8.295	0.001	10221	0.80000	0.71	53.49- 93.49	72.48	
8.356	8.355	0.001	18251	0.80000	0.68	113.25- 153.25	129.43	
Average of Peak Amounts =					0.70333			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.189	12.186	0.003	30708	0.08000	0.072			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7066R.D
Date : 13-DEC-2012 20:02
Client ID: AR12484Y2
Instrument: E2.i
Sample Info: AR12484Y2,AR12484Y2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7067F.D
Report Date: 21-Dec-2012 12:27

Spectrum Analytical, Inc. RI Division

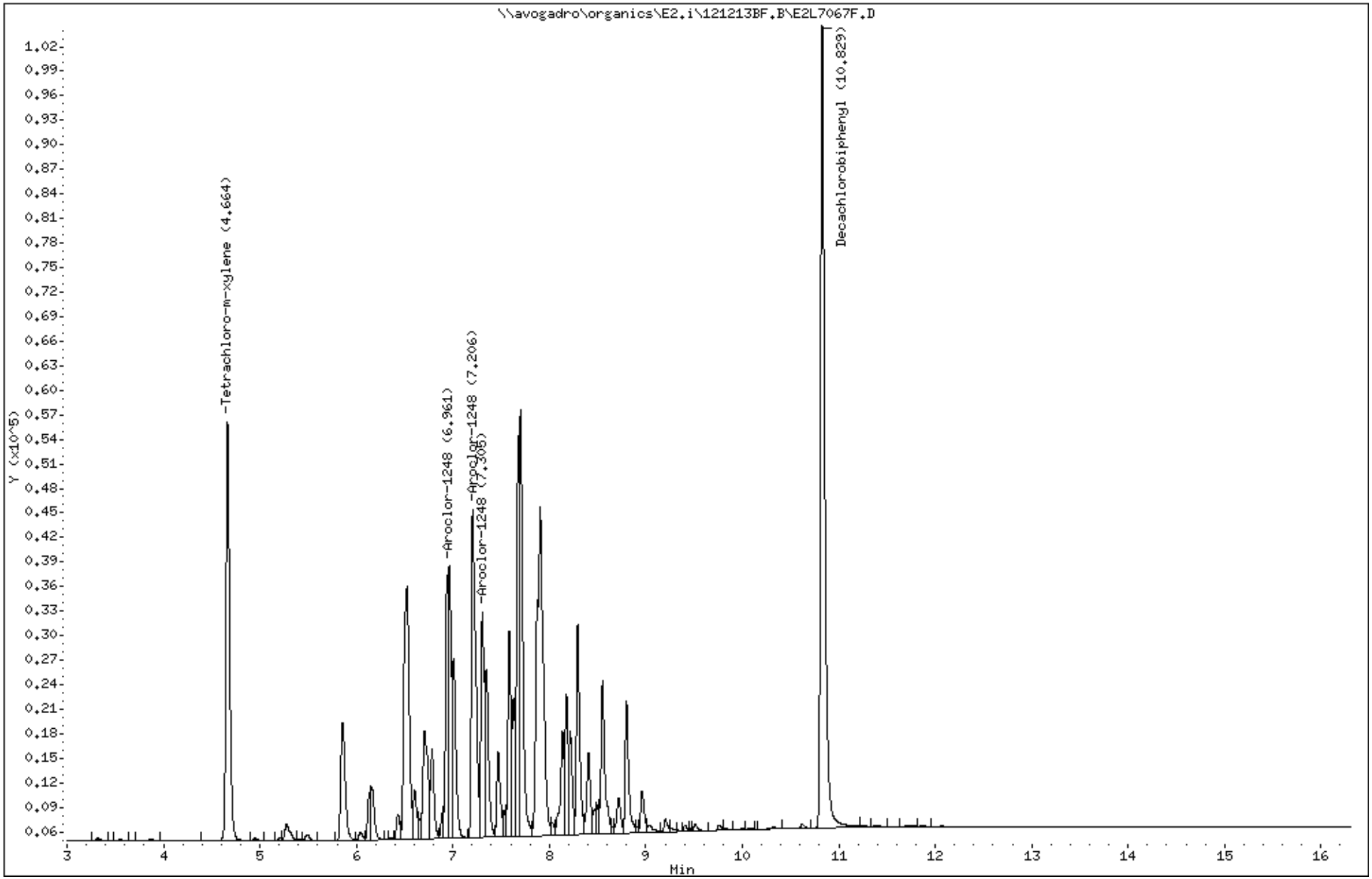
Quantitation Report
Data file : \\avogadro\organics\E2.i\121213BF.B\E2L7067F.D
Lab Smp Id: AR12485Y2 Client Smp ID: AR12485Y2
Inj Date : 13-DEC-2012 20:22
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12485Y2,AR12485Y2,,ar1248.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BF.B\E2_LL_PCB_F.m
Meth Date : 18-Dec-2012 16:42 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 20:22 Cal File: E2L7067F.D
Als bottle: 19 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)		
RT	EXP RT	DLT RT	RESPONSE			TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.664	4.663	0.001	51180	0.08000	0.075		
7 Aroclor-1248						CAS #: 12672-29-6	
6.961	6.961	0.000	33266	1.60000	1.2	80.00- 120.00	100.00
7.205	7.205	0.000	40019	1.60000	1.3	94.39- 134.39	120.30
7.305	7.305	0.000	27566	1.60000	1.4	55.13- 95.13	82.87
Average of Peak Amounts =					1.30000		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
10.828	10.828	0.000	2937765	0.16000	0.12		

Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7067F.D
Date : 13-DEC-2012 20:22
Client ID: AR12485Y2
Instrument: E2.i
Sample Info: AR12485Y2,AR12485Y2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7067R.D
Report Date: 21-Dec-2012 12:28

Spectrum Analytical, Inc. RI Division

Quantitation Report

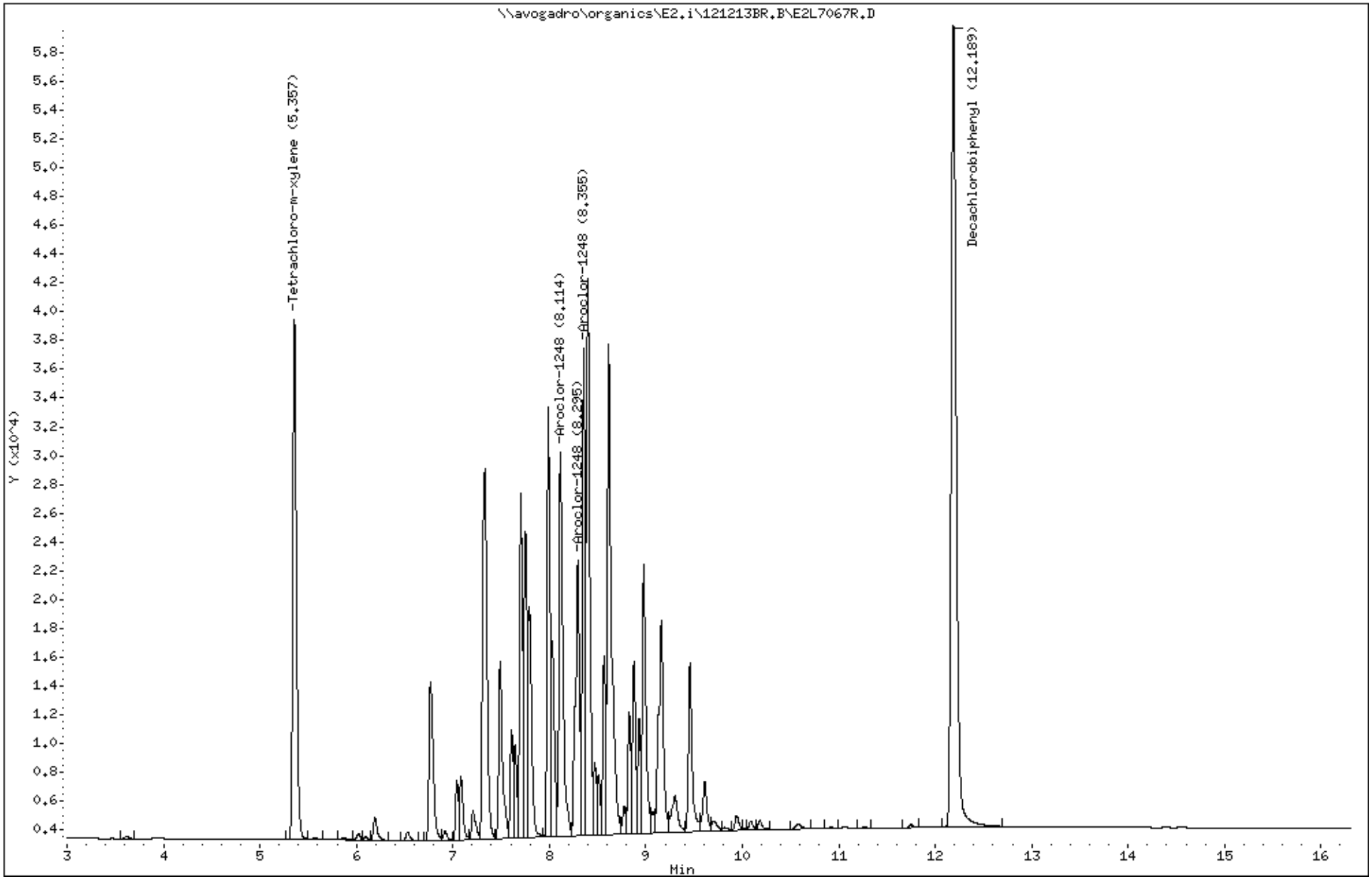
Data file : \\avogadro\organics\E2.i\121213BR.B\E2L7067R.D
Lab Smp Id: AR12485Y2 Client Smp ID: AR12485Y2
Inj Date : 13-DEC-2012 20:22
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12485Y2,AR12485Y2,,ar1248.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BR.B\E2_LL_PCB_R.m
Meth Date : 18-Dec-2012 16:41 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 20:22 Cal File: E2L7067R.D
Als bottle: 19 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.356	5.355	0.001	36208	0.08000	0.077			
5 Aroclor-1248						CAS #: 12672-29-6		
8.114	8.114	0.000	26750	1.60000	1.4	80.00- 120.00		100.00
8.295	8.295	0.000	19187	1.60000	1.4	53.49- 93.49		71.73
8.355	8.355	0.000	33855	1.60000	1.3	113.25- 153.25		126.56
Average of Peak Amounts =					1.36667			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.188	12.186	0.002	55734	0.16000	0.13			

Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7067R.D
Date : 13-DEC-2012 20:22
Client ID: AR12485Y2
Instrument: E2.i
Sample Info: AR12485Y2,AR12485Y2,,ar1248.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7068F.D
Report Date: 21-Dec-2012 12:27

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BF.B\E2L7068F.D
Lab Smp Id: AR12541Y2 Client Smp ID: AR12541Y2
Inj Date : 13-DEC-2012 20:42
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12541Y2,AR12541Y2,,ar1254.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BF.B\E2_LL_PCB_F.m
Meth Date : 18-Dec-2012 16:42 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 20:42 Cal File: E2L7068F.D
Als bottle: 20 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

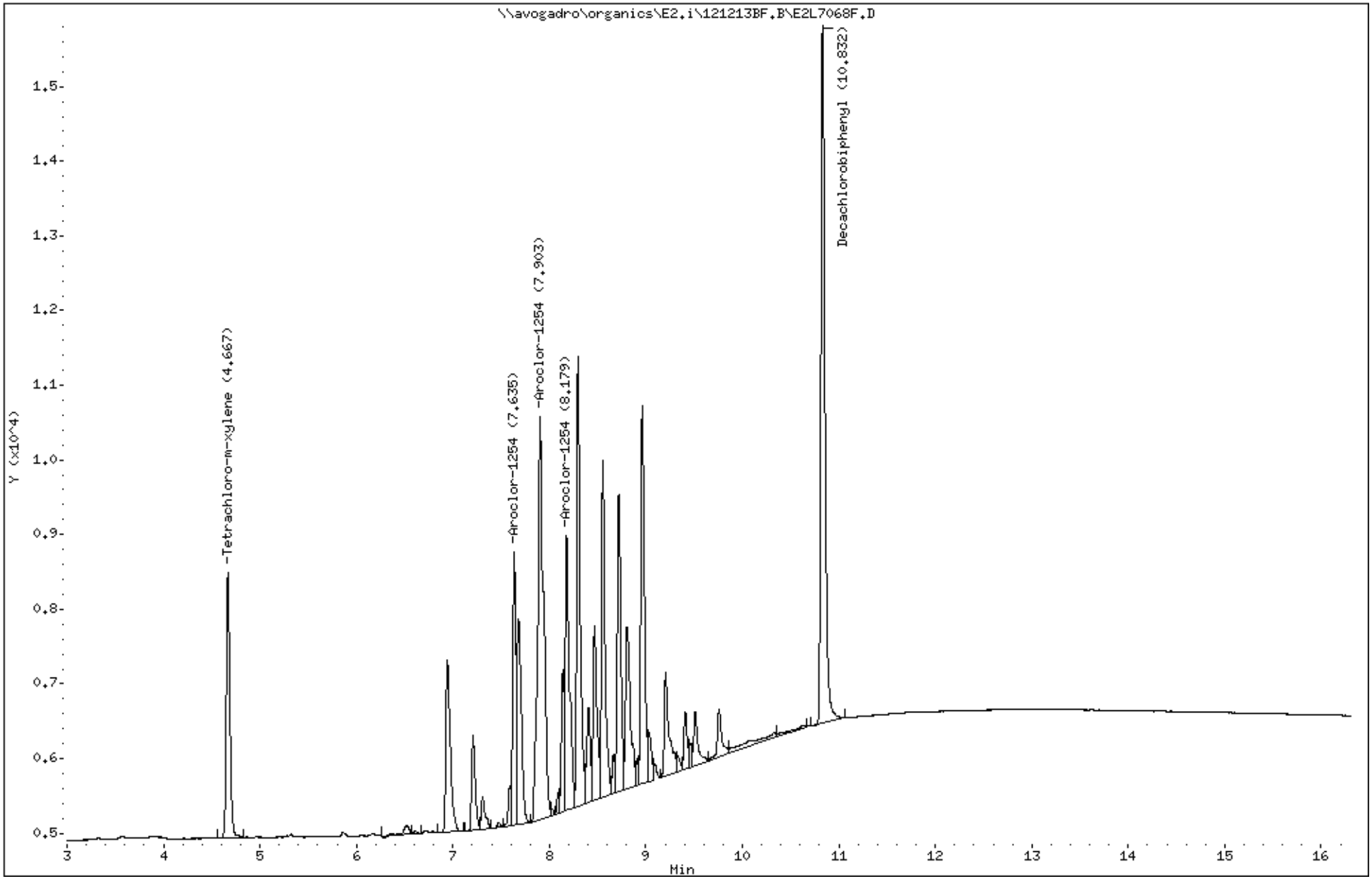
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.667	4.663	0.004	3558	0.00500	0.0052			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.831	10.828	0.003	266772	0.01000	0.012			(a)
8 Aroclor-1254						CAS #: 11097-69-1		
7.635	7.631	0.004	3653	0.10000	0.11	80.00- 120.00	100.00	(aM)
7.903	7.900	0.003	5403	0.10000	0.11	740.87- 780.87	147.91	
8.178	8.176	0.002	3668	0.10000	0.11	232.17- 272.17	100.41	
Average of Peak Amounts =					0.11000			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7068F.D
Date : 13-DEC-2012 20:42
Client ID: AR12541Y2
Instrument: E2.i
Sample Info: AR12541Y2,AR12541Y2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7068R.D
Report Date: 21-Dec-2012 12:28

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BR.B\E2L7068R.D
Lab Smp Id: AR12541Y2 Client Smp ID: AR12541Y2
Inj Date : 13-DEC-2012 20:42
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12541Y2,AR12541Y2,,ar1254.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BR.B\E2_LL_PCB_R.m
Meth Date : 18-Dec-2012 16:41 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 20:42 Cal File: E2L7068R.D
Als bottle: 20 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

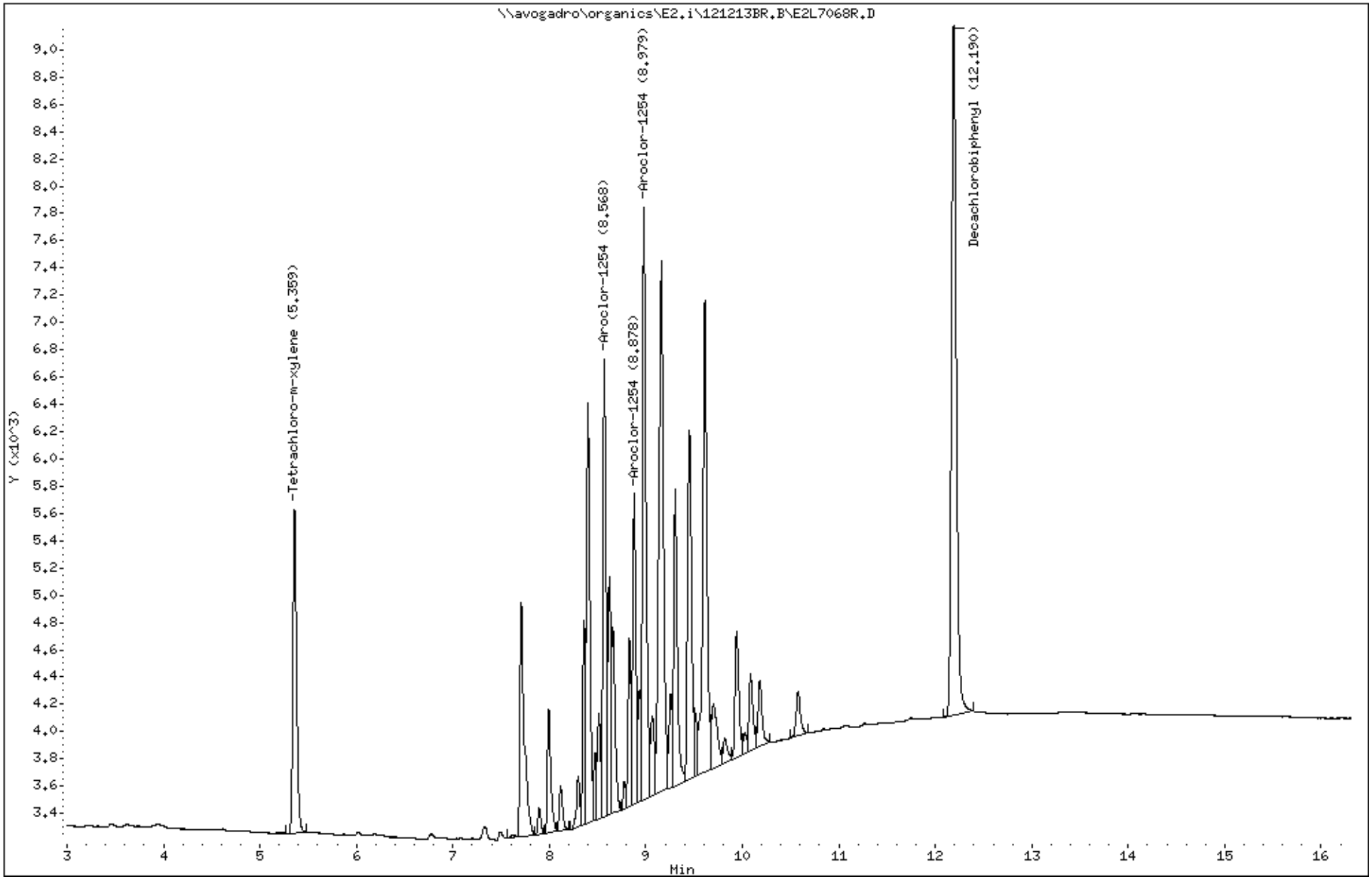
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.358	5.355	0.003	2369	0.00500	0.0051			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.190	12.186	0.004	5058	0.01000	0.012			(a)
7 Aroclor-1254						CAS #: 11097-69-1		
8.568	8.565	0.003	3360	0.10000	0.10	80.00- 120.00	100.00	(a)
8.878	8.876	0.002	2281	0.10000	0.10	53.49- 93.49	67.89	
8.978	8.976	0.002	4342	0.10000	0.10	115.68- 155.68	129.23	
Average of Peak Amounts =				0.10000				

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7068R.D
Date : 13-DEC-2012 20:42
Client ID: AR12541Y2
Instrument: E2.i
Sample Info: AR12541Y2,AR12541Y2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7069F.D
Report Date: 21-Dec-2012 12:27

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BF.B\E2L7069F.D
Lab Smp Id: AR12546Y2 Client Smp ID: AR12546Y2
Inj Date : 13-DEC-2012 21:02
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12546Y2,AR12546Y2,,ar1254.sub,,
Misc Info : 1,6,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BF.B\E2_LL_PCB_F.m
Meth Date : 18-Dec-2012 16:42 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 21:02 Cal File: E2L7069F.D
Als bottle: 21 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

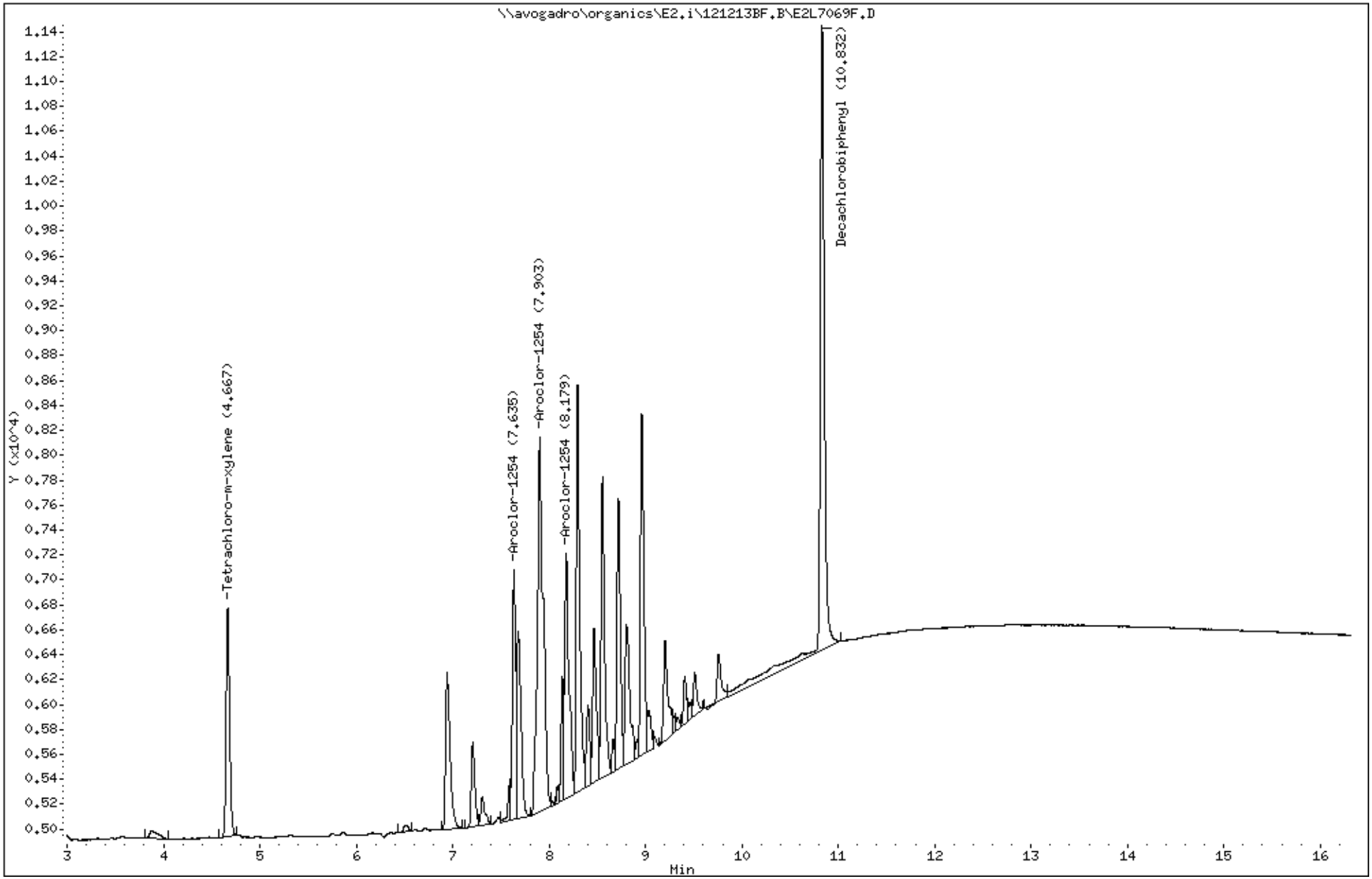
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.666	4.663	0.003	1831	0.00000	0.0027			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.832	10.828	0.004	167231	0.00000	0.0074			(a)
8 Aroclor-1254						CAS #: 11097-69-1		
7.635	7.631	0.004	2005	0.05000	0.062	80.00- 120.00	100.00	(aM)
7.903	7.900	0.003	3008	0.05000	0.063	740.87- 780.87	150.02	
8.178	8.176	0.002	1969	0.05000	0.058	232.17- 272.17	98.20	
Average of Peak Amounts =					0.06100			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7069F.D
Date : 13-DEC-2012 21:02
Client ID: AR12546Y2
Instrument: E2.i
Sample Info: AR12546Y2,AR12546Y2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7069R.D
Report Date: 21-Dec-2012 12:28

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BR.B\E2L7069R.D
Lab Smp Id: AR12546Y2 Client Smp ID: AR12546Y2
Inj Date : 13-DEC-2012 21:02
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12546Y2,AR12546Y2,,ar1254.sub,,
Misc Info : 1,6,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BR.B\E2_LL_PCB_R.m
Meth Date : 18-Dec-2012 16:41 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 21:02 Cal File: E2L7069R.D
Als bottle: 21 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

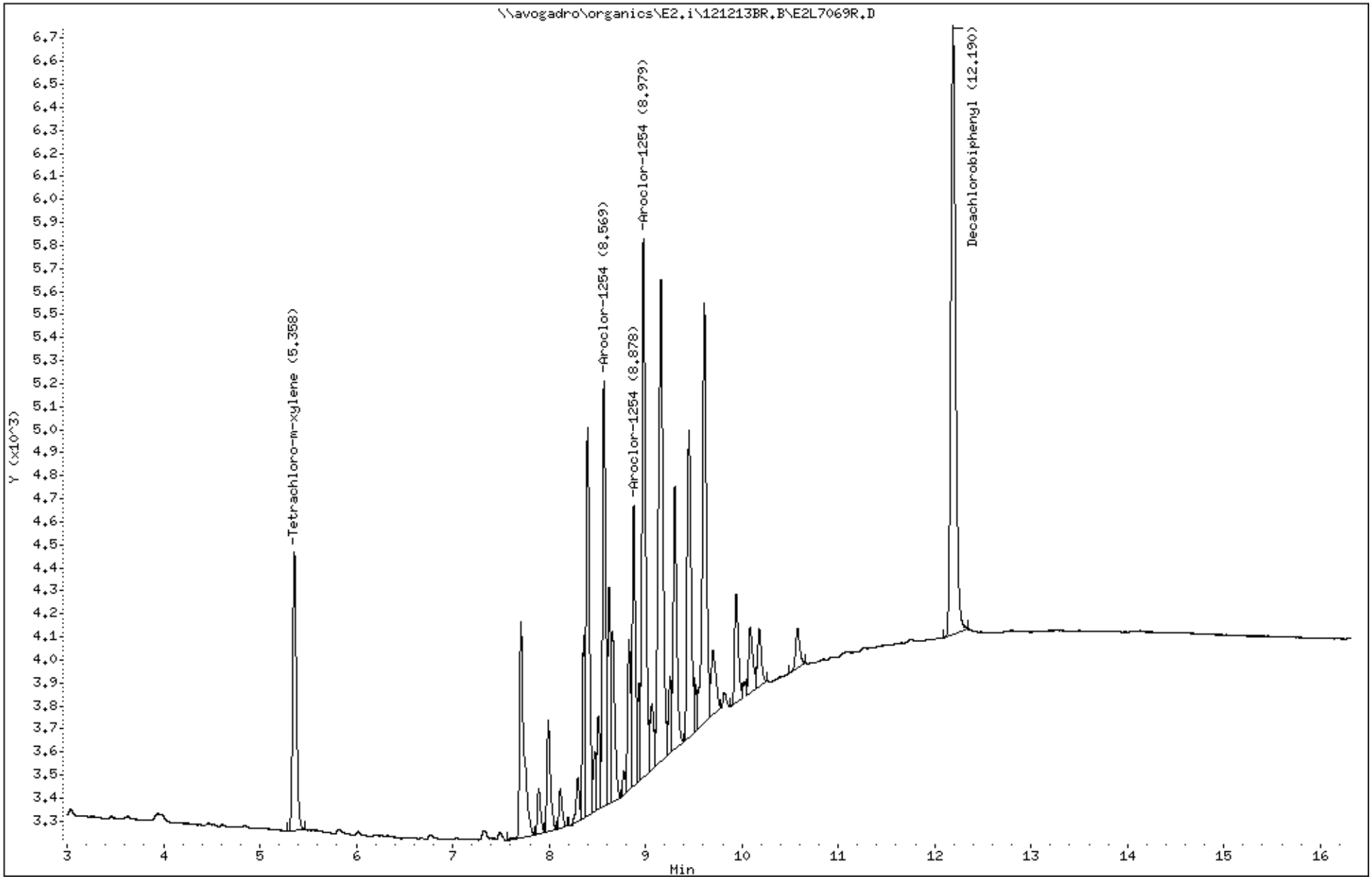
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.358	5.355	0.003	1209	0.00000	0.0026			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.190	12.186	0.004	2646	0.00000	0.0062			(a)
7 Aroclor-1254						CAS #: 11097-69-1		
8.568	8.565	0.003	1851	0.05000	0.052	80.00- 120.00	100.00	(a)
8.878	8.876	0.002	1214	0.05000	0.052	53.49- 93.49	65.59	
8.979	8.976	0.003	2343	0.05000	0.052	115.68- 155.68	126.58	
Average of Peak Amounts =					0.05200			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7069R.D
Date : 13-DEC-2012 21:02
Client ID: AR12546Y2
Instrument: E2.i
Sample Info: AR12546Y2,AR12546Y2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7070F.D
Report Date: 21-Dec-2012 12:27

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BF.B\E2L7070F.D
Lab Smp Id: AR12542Y2 Client Smp ID: AR12542Y2
Inj Date : 13-DEC-2012 21:22
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12542Y2,AR12542Y2,,ar1254.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BF.B\E2_LL_PCB_F.m
Meth Date : 18-Dec-2012 16:42 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 21:22 Cal File: E2L7070F.D
Als bottle: 22 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

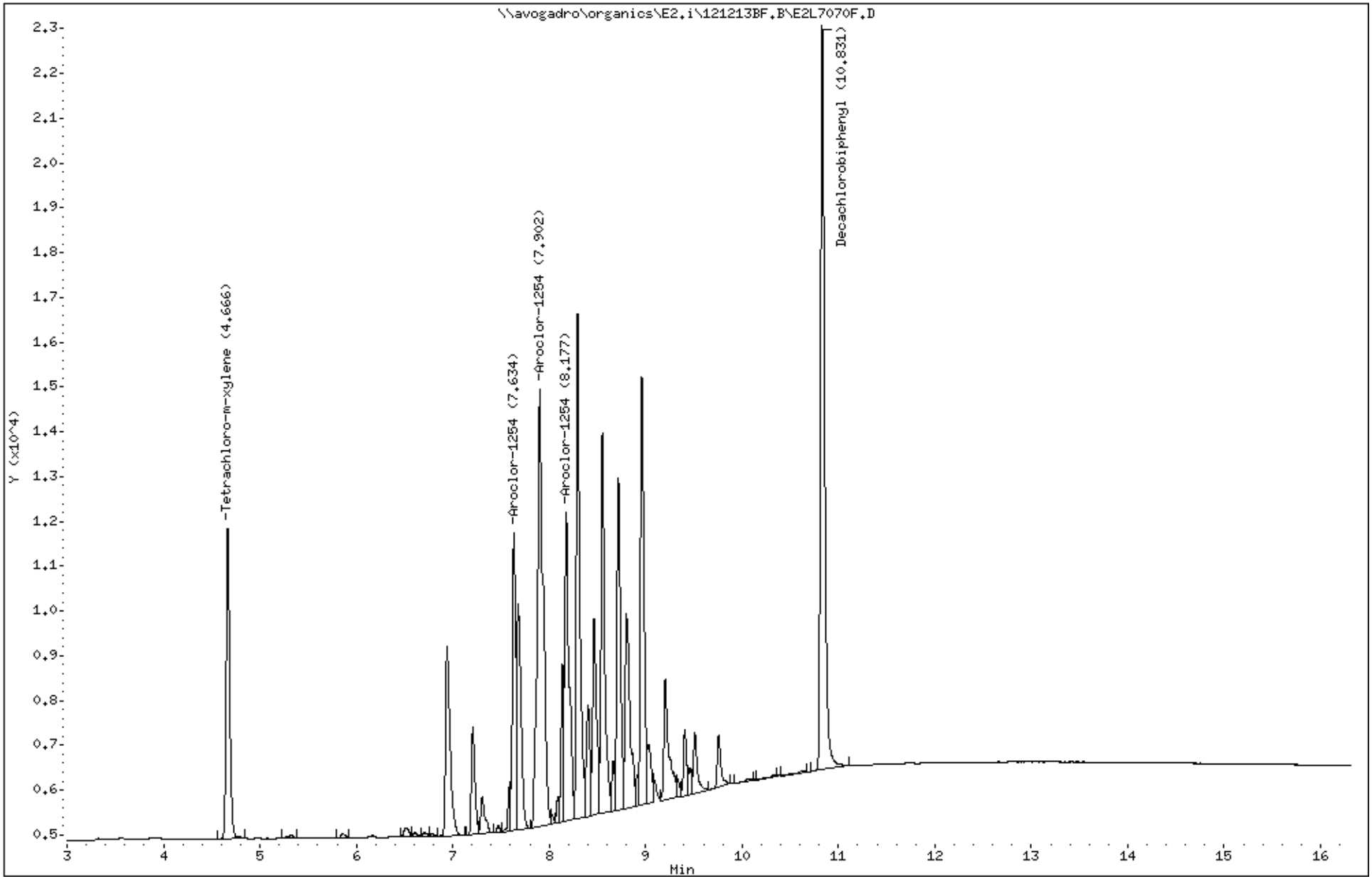
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.666	4.663	0.003	6938	0.01000	0.010			(a)
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.831	10.828	0.003	487596	0.02000	0.021			(a)
8 Aroclor-1254					CAS #: 11097-69-1			
7.633	7.631	0.002	6644	0.20000	0.20	80.00- 120.00	100.00	(a)
7.902	7.900	0.002	9766	0.20000	0.20	740.87- 780.87	146.99	
8.177	8.176	0.001	6889	0.20000	0.20	232.17- 272.17	103.69	
Average of Peak Amounts =					0.20000			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7070F.D
Date : 13-DEC-2012 21:22
Client ID: AR12542Y2
Instrument: E2.i
Sample Info: AR12542Y2,AR12542Y2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7070R.D
Report Date: 21-Dec-2012 12:28

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BR.B\E2L7070R.D
Lab Smp Id: AR12542Y2 Client Smp ID: AR12542Y2
Inj Date : 13-DEC-2012 21:22
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12542Y2,AR12542Y2,,ar1254.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BR.B\E2_LL_PCB_R.m
Meth Date : 18-Dec-2012 16:41 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 21:22 Cal File: E2L7070R.D
Als bottle: 22 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

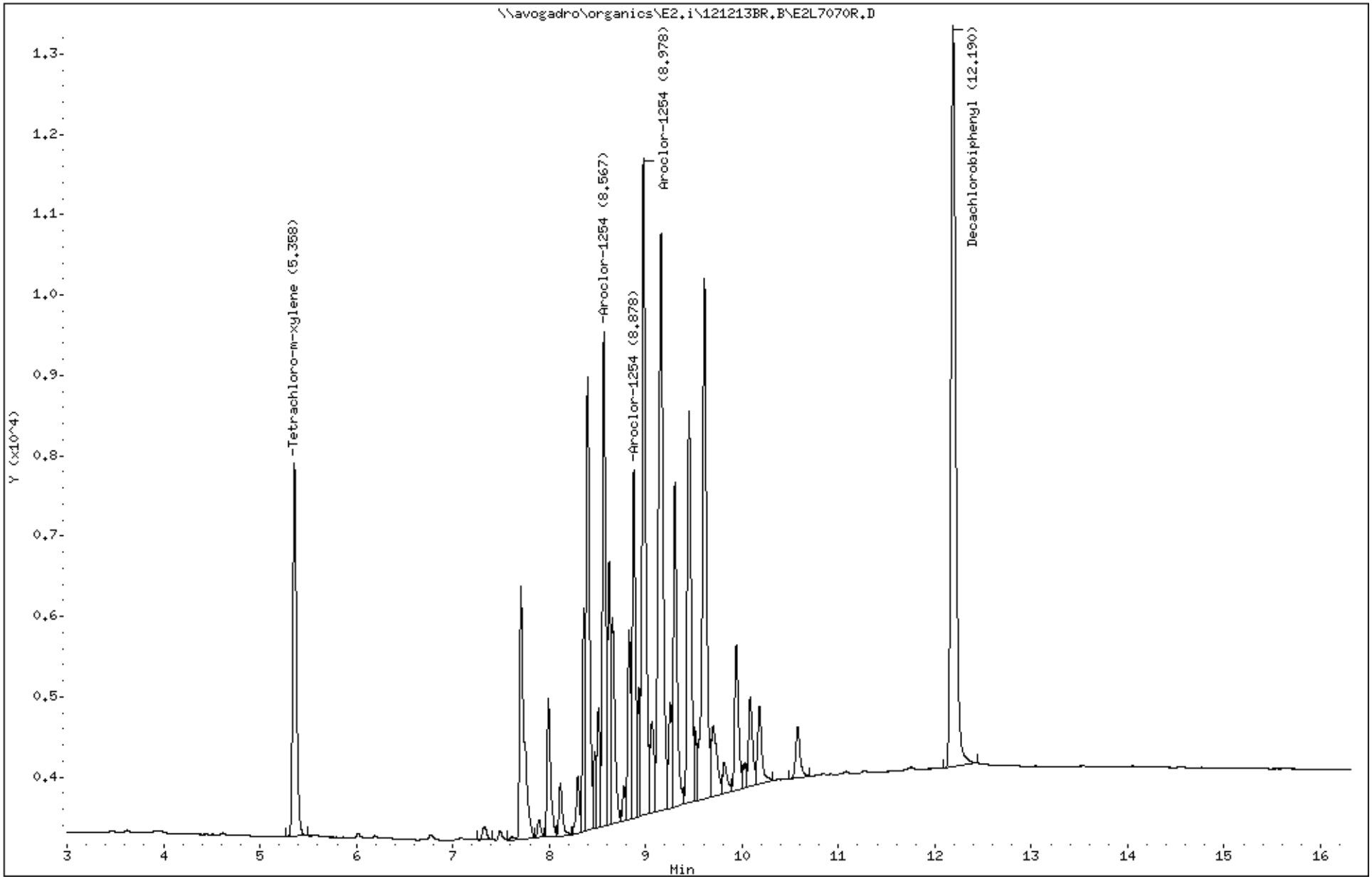
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.358	5.355	0.003	4642	0.01000	0.0100			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.189	12.186	0.003	9229	0.02000	0.022			(a)
7 Aroclor-1254						CAS #: 11097-69-1		
8.567	8.565	0.002	6158	0.20000	0.18	80.00- 120.00	100.00	(a)
8.877	8.876	0.001	4338	0.20000	0.19	53.49- 93.49	70.44	
8.977	8.976	0.001	8188	0.20000	0.19	115.68- 155.68	132.97	
Average of Peak Amounts =					0.18667			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7070R.D
Date : 13-DEC-2012 21:22
Client ID: AR12542Y2
Instrument: E2.i
Sample Info: AR12542Y2,AR12542Y2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7071F.D
Report Date: 21-Dec-2012 12:27

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BF.B\E2L7071F.D
Lab Smp Id: AR12543Y2 Client Smp ID: AR12543Y2
Inj Date : 13-DEC-2012 21:41
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12543Y2,AR12543Y2,,ar1254.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BF.B\E2_LL_PCB_F.m
Meth Date : 18-Dec-2012 16:42 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 21:41 Cal File: E2L7071F.D
Als bottle: 23 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

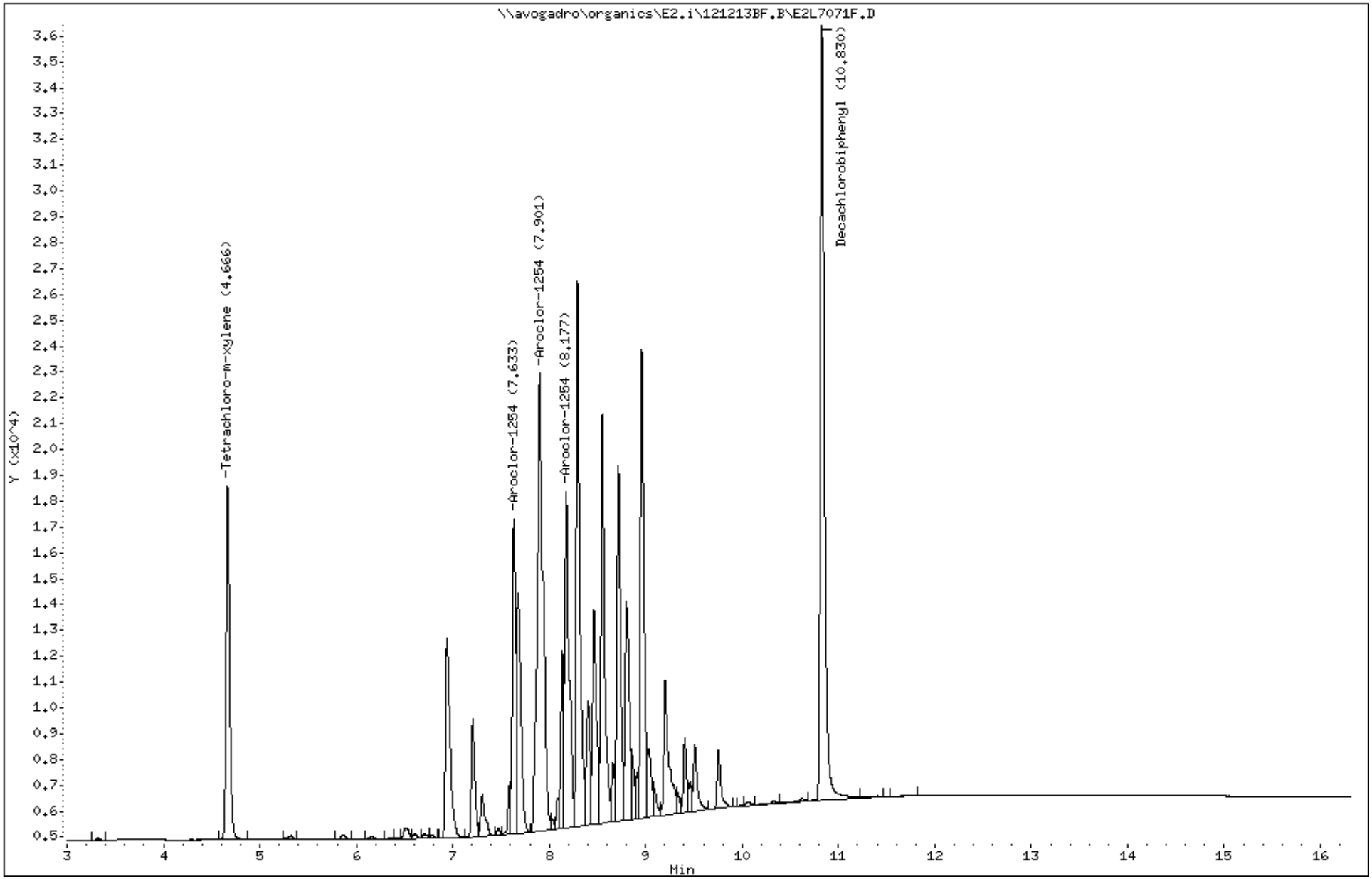
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.665	4.663	0.002	13668	0.02000	0.020			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.829	10.828	0.001	908823	0.04000	0.040			(a)
8 Aroclor-1254						CAS #: 11097-69-1		
7.632	7.631	0.001	12210	0.40000	0.38	80.00- 120.00	100.00	(a)
7.901	7.900	0.001	17768	0.40000	0.37	740.87- 780.87	145.52	
8.176	8.176	0.000	13024	0.40000	0.39	232.17- 272.17	106.67	
Average of Peak Amounts =					0.38000			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7071F.D
Date : 13-DEC-2012 21:41
Client ID: AR12543Y2
Instrument: E2.i
Sample Info: AR12543Y2,AR12543Y2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7071R.D
Report Date: 21-Dec-2012 12:28

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BR.B\E2L7071R.D
Lab Smp Id: AR12543Y2 Client Smp ID: AR12543Y2
Inj Date : 13-DEC-2012 21:41
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12543Y2,AR12543Y2,,ar1254.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BR.B\E2_LL_PCB_R.m
Meth Date : 18-Dec-2012 16:41 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 21:41 Cal File: E2L7071R.D
Als bottle: 23 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

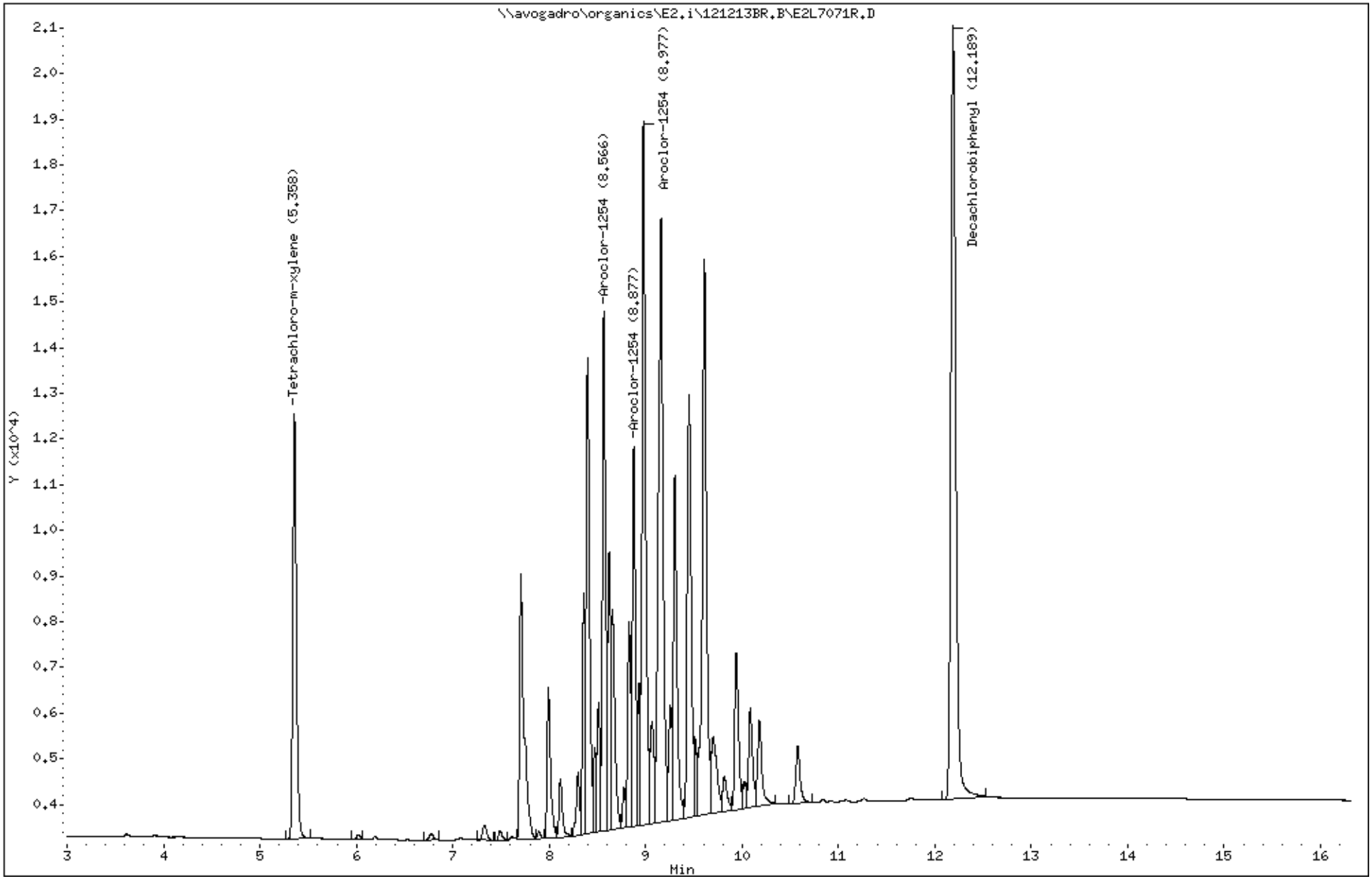
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.357	5.355	0.002	9314	0.02000	0.020			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.188	12.186	0.002	16928	0.04000	0.040			(a)
7 Aroclor-1254						CAS #: 11097-69-1		
8.566	8.565	0.001	11373	0.40000	0.35	80.00- 120.00	100.00	(a)
8.877	8.876	0.001	8326	0.40000	0.37	53.49- 93.49	73.21	
8.977	8.976	0.001	15433	0.40000	0.36	115.68- 155.68	135.70	
Average of Peak Amounts =					0.36000			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7071R.D
Date : 13-DEC-2012 21:41
Client ID: AR12543Y2
Instrument: E2.i
Sample Info: AR12543Y2,AR12543Y2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7072F.D
Report Date: 21-Dec-2012 12:27

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BF.B\E2L7072F.D
Lab Smp Id: AR12544Y2 Client Smp ID: AR12544Y2
Inj Date : 13-DEC-2012 22:01
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12544Y2,AR12544Y2,,ar1254.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BF.B\E2_LL_PCB_F.m
Meth Date : 18-Dec-2012 16:42 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 22:01 Cal File: E2L7072F.D
Als bottle: 24 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

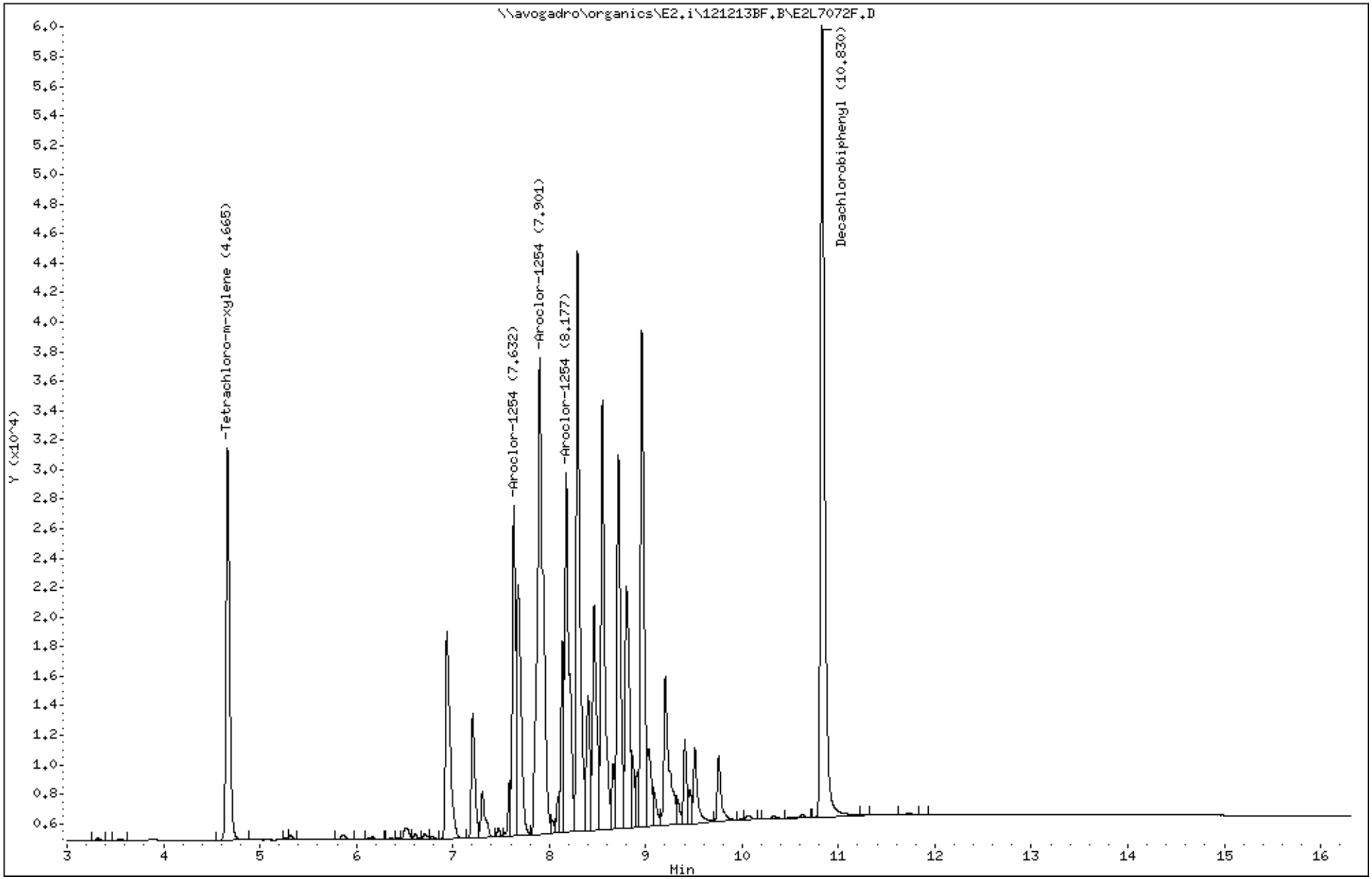
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.665	4.663	0.002	26562	0.04000	0.039			(a)
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.829	10.828	0.001	1614036	0.08000	0.071			
8 Aroclor-1254					CAS #: 11097-69-1			
7.632	7.631	0.001	22433	0.80000	0.69	80.00- 120.00	100.00	(a)
7.901	7.900	0.001	32352	0.80000	0.68	740.87- 780.87	144.22	
8.176	8.176	0.000	24336	0.80000	0.72	232.17- 272.17	108.48	
Average of Peak Amounts =					0.69667			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7072F.D
Date : 13-DEC-2012 22:01
Client ID: AR12544Y2
Instrument: E2.i
Sample Info: AR12544Y2,AR12544Y2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7072R.D
Report Date: 21-Dec-2012 12:29

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BR.B\E2L7072R.D
Lab Smp Id: AR12544Y2 Client Smp ID: AR12544Y2
Inj Date : 13-DEC-2012 22:01
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12544Y2,AR12544Y2,,ar1254.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BR.B\E2_LL_PCB_R.m
Meth Date : 18-Dec-2012 16:41 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 22:01 Cal File: E2L7072R.D
Als bottle: 24 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

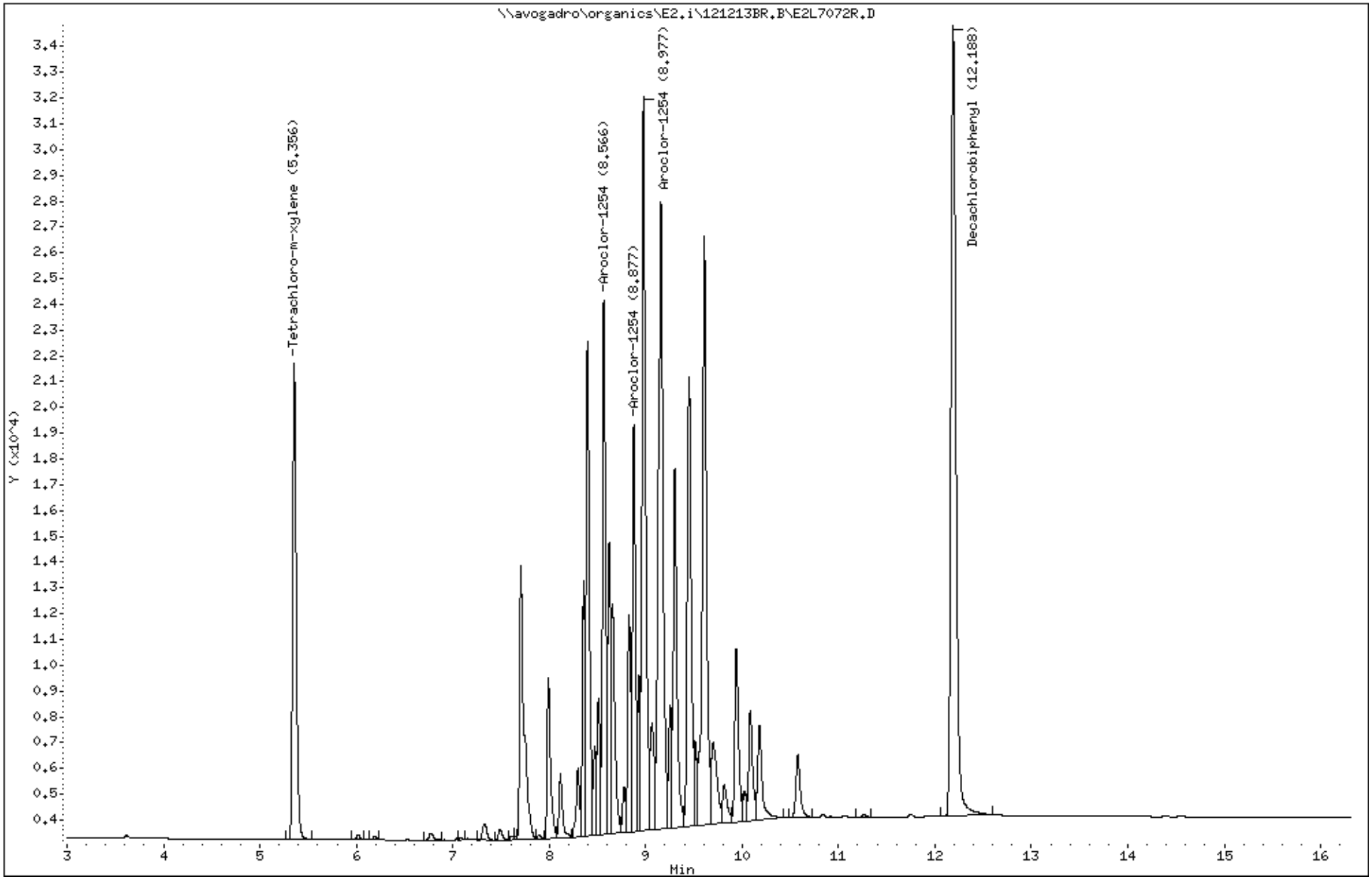
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT	AMOUNTS ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.356	5.355	0.001	18453	0.04000	0.040			(a)
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.188	12.186	0.002	30677	0.08000	0.072			
7 Aroclor-1254						CAS #: 11097-69-1		
8.565	8.565	0.000	20737	0.80000	0.66	80.00- 120.00	100.00	(a)
8.876	8.876	0.000	15765	0.80000	0.72	53.49- 93.49	76.02	
8.976	8.976	0.000	28466	0.80000	0.69	115.68- 155.68	137.27	
Average of Peak Amounts =					0.69000			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7072R.D
Date : 13-DEC-2012 22:01
Client ID: AR12544Y2
Instrument: E2.i
Sample Info: AR12544Y2,AR12544Y2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7073F.D
Report Date: 21-Dec-2012 12:27

Spectrum Analytical, Inc. RI Division

Quantitation Report

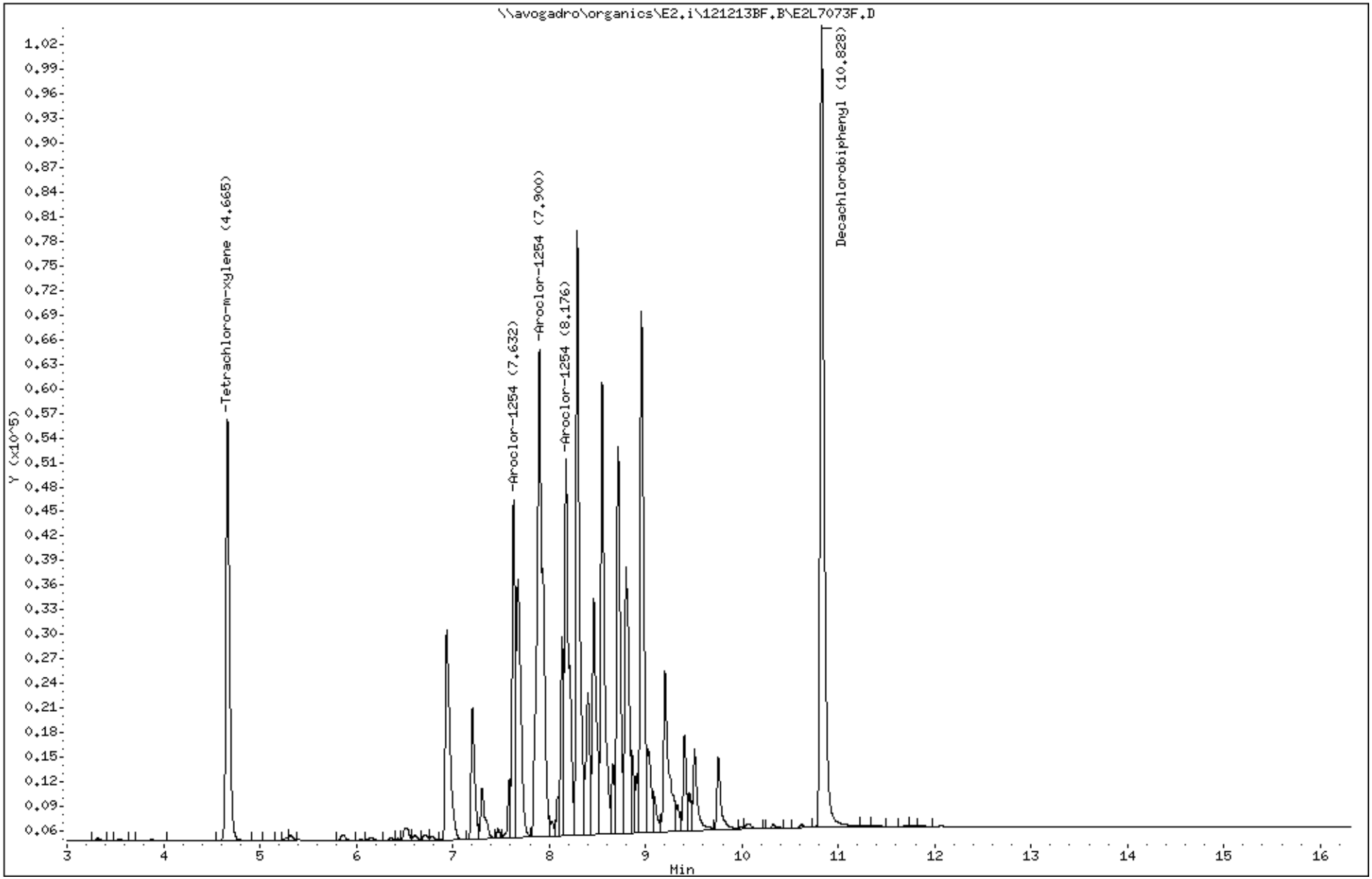
Data file : \\avogadro\organics\E2.i\121213BF.B\E2L7073F.D
Lab Smp Id: AR12545Y2 Client Smp ID: AR12545Y2
Inj Date : 13-DEC-2012 22:21
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12545Y2,AR12545Y2,,ar1254.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BF.B\E2_LL_PCB_F.m
Meth Date : 18-Dec-2012 16:42 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 22:21 Cal File: E2L7073F.D
Als bottle: 25 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.664	4.663	0.001	51348	0.08000	0.076			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.828	10.828	0.000	2945504	0.16000	0.13			
8 Aroclor-1254						CAS #: 11097-69-1		
7.631	7.631	0.000	41249	1.60000	1.3	80.00- 120.00		100.00
7.900	7.900	0.000	59332	1.60000	1.2	740.87- 780.87		143.84
8.176	8.176	0.000	45851	1.60000	1.4	232.17- 272.17		111.16
Average of Peak Amounts =					1.30000			

Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7073F.D
Date : 13-DEC-2012 22:21
Client ID: AR12545Y2 Instrument: E2.i
Sample Info: AR12545Y2,AR12545Y2,,ar1254.sub,,
Volume Injected (uL): 1.0 Operator: DL SRC: DL
Column phase: CLPPest Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7073R.D
Report Date: 21-Dec-2012 12:29

Spectrum Analytical, Inc. RI Division

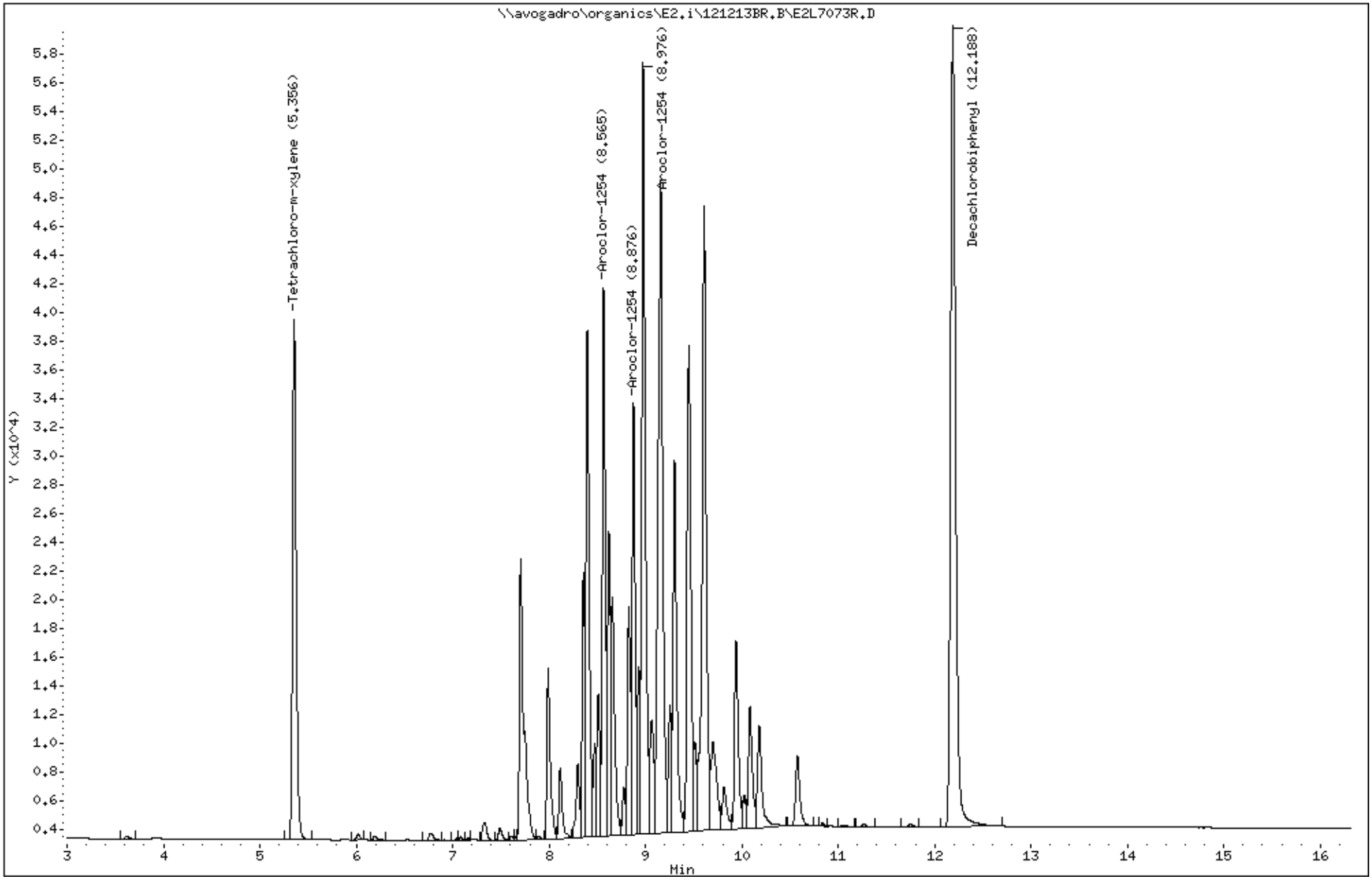
Quantitation Report
Data file : \\avogadro\organics\E2.i\121213BR.B\E2L7073R.D
Lab Smp Id: AR12545Y2 Client Smp ID: AR12545Y2
Inj Date : 13-DEC-2012 22:21
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12545Y2,AR12545Y2,,ar1254.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BR.B\E2_LL_PCB_R.m
Meth Date : 18-Dec-2012 16:41 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 22:21 Cal File: E2L7073R.D
Als bottle: 25 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.356	5.355	0.001	36254	0.08000	0.078			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.187	12.186	0.001	55806	0.16000	0.13			
7 Aroclor-1254						CAS #: 11097-69-1		
8.565	8.565	0.000	38182	1.60000	1.3	80.00- 120.00		100.00
8.876	8.876	0.000	30076	1.60000	1.4	53.49- 93.49		78.77
8.976	8.976	0.000	53725	1.60000	1.3	115.68- 155.68		140.71
Average of Peak Amounts =					1.33333			

Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7073R.D
Date : 13-DEC-2012 22:21
Client ID: AR12545Y2
Instrument: E2.i
Sample Info: AR12545Y2,AR12545Y2,,ar1254.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7074F.D
Report Date: 21-Dec-2012 12:27

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BF.B\E2L7074F.D
Lab Smp Id: AR12623Y2 Client Smp ID: AR12623Y2
Inj Date : 13-DEC-2012 22:41
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12623Y2,AR12623Y2,,ar1262.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BF.B\E2_LL_PCB_F.m
Meth Date : 18-Dec-2012 16:42 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 22:41 Cal File: E2L7074F.D
Als bottle: 26 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1262.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

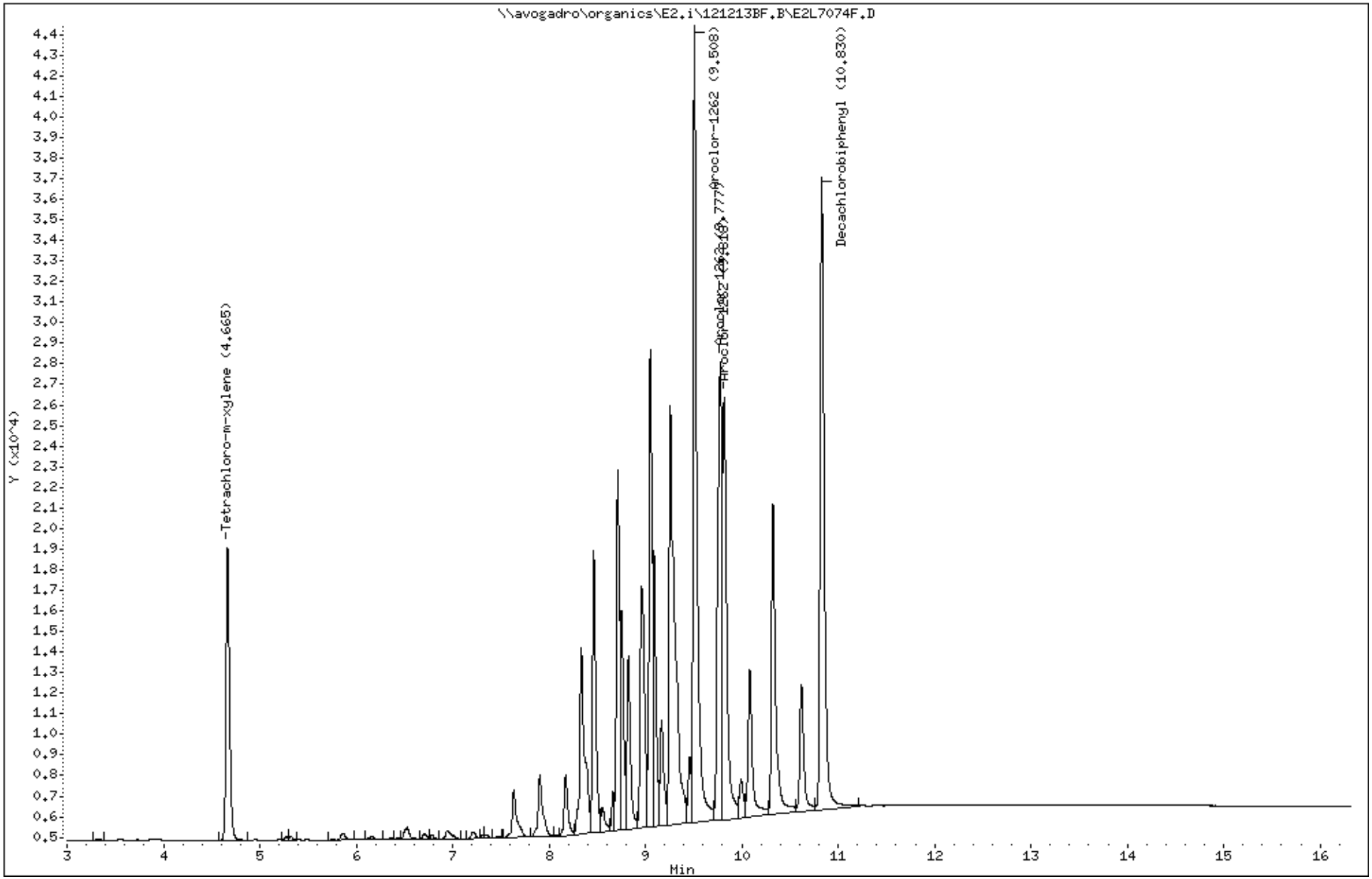
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.665	4.663	0.002	14195	0.02000	0.021			(a)
2 Aroclor-1262						CAS #: 37324-23-5		
9.508	9.508	0.000	38713	0.40000	0.40	80.00- 120.00	100.00	
9.777	9.777	0.000	22254	0.40000	0.40	37.48- 77.48	57.48	
9.817	9.817	0.000	20516	0.40000	0.40	33.00- 73.00	53.00	
Average of Peak Amounts =					0.40000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.829	10.828	0.001	927946	0.04000	0.041			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7074F.D
Date : 13-DEC-2012 22:41
Client ID: AR12623Y2
Instrument: E2.i
Sample Info: AR12623Y2,AR12623Y2,,ar1262.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7074R.D
Report Date: 21-Dec-2012 12:29

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BR.B\E2L7074R.D
Lab Smp Id: AR12623Y2 Client Smp ID: AR12623Y2
Inj Date : 13-DEC-2012 22:41
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12623Y2,AR12623Y2,,ar1262.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BR.B\E2_LL_PCB_R.m
Meth Date : 18-Dec-2012 16:41 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 22:41 Cal File: E2L7074R.D
Als bottle: 26 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1262.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

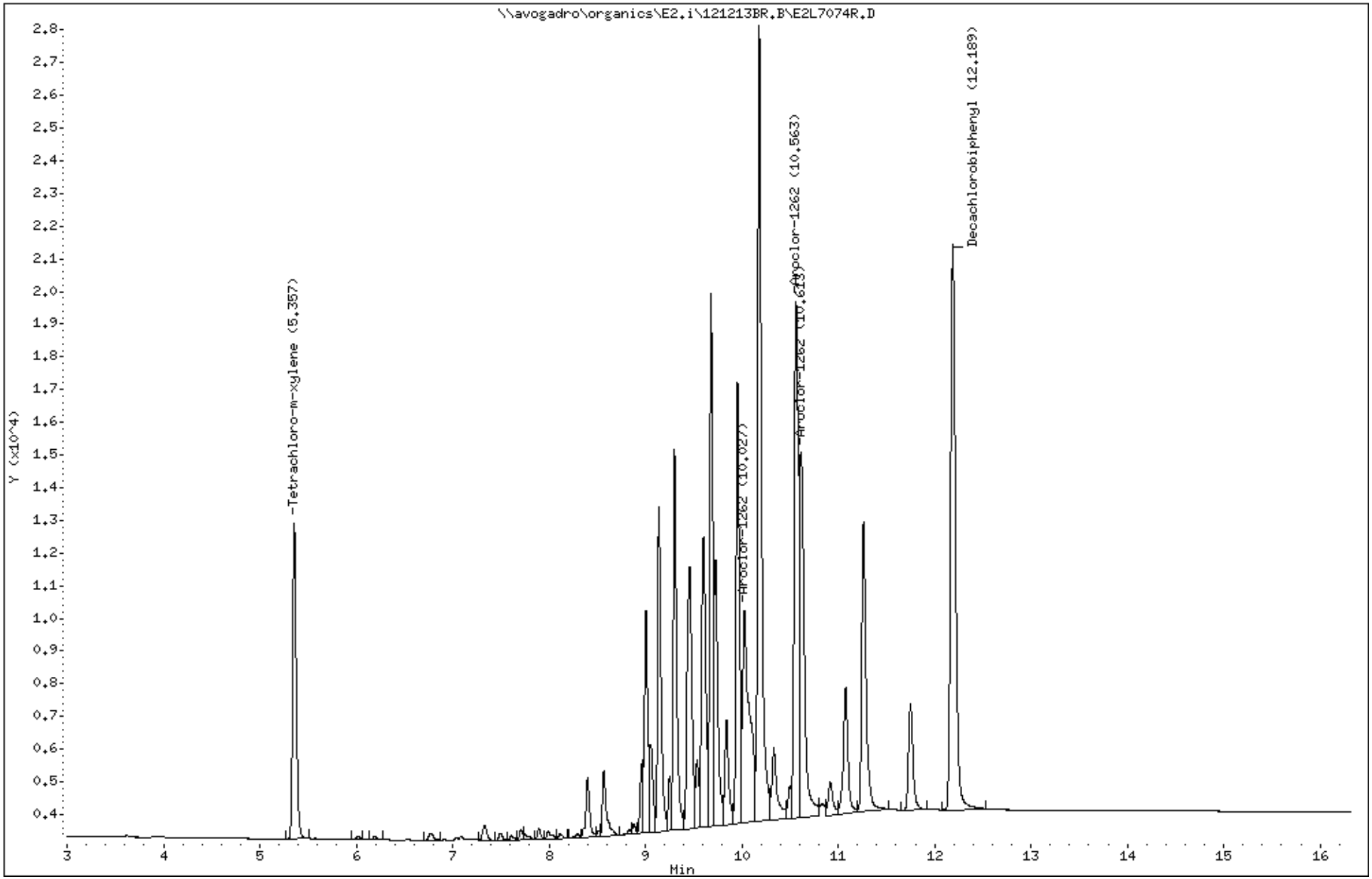
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.357	5.355	0.002	9640	0.02000	0.021			(a)
10 Aroclor-1262						CAS #: 37324-23-5		
10.026	10.026	0.000	6506	0.40000	0.40	80.00- 120.00	100.00	(a)
10.563	10.563	0.000	15802	0.40000	0.40	222.88- 262.88	242.88	
10.613	10.613	0.000	11164	0.40000	0.40	151.60- 191.60	171.60	
Average of Peak Amounts =				0.40000				
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.189	12.186	0.003	17321	0.04000	0.041			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7074R.D
Date : 13-DEC-2012 22:41
Client ID: AR12623Y2
Instrument: E2.i
Sample Info: AR12623Y2,AR12623Y2,,ar1262.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7075F.D
Report Date: 21-Dec-2012 12:27

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BF.B\E2L7075F.D
Lab Smp Id: AR12683Y2 Client Smp ID: AR12683Y2
Inj Date : 13-DEC-2012 23:01
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12683Y2,AR12683Y2,,ar1268.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BF.B\E2_LL_PCB_F.m
Meth Date : 18-Dec-2012 16:42 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 23:01 Cal File: E2L7075F.D
Als bottle: 27 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1268.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

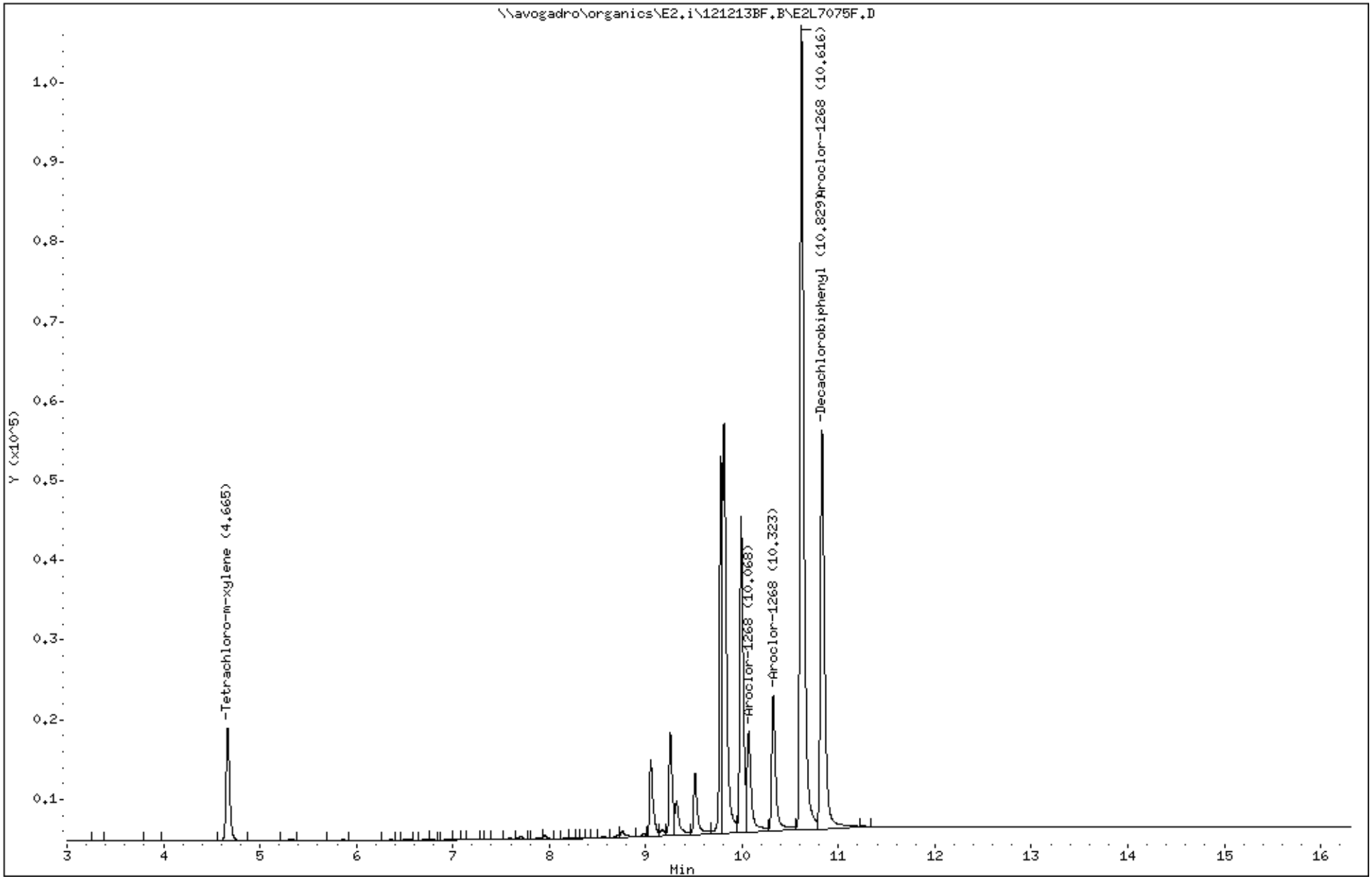
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.665	4.663	0.002	14130	0.02000	0.021			(a)
10 Aroclor-1268					CAS #: 11100-14-4			
10.068	10.068	0.000	12618	0.40000	0.40	80.00- 120.00	100.00	(a)
10.322	10.322	0.000	17037	0.40000	0.40	115.02- 155.02	135.02	
10.616	10.616	0.000	101118	0.40000	0.40	781.38- 821.38	801.38	
		Average of Peak Amounts =		0.40000				
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.828	10.828	0.000	1557747	0.04000	0.060			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7075F.D
Date : 13-DEC-2012 23:01
Client ID: AR12683Y2
Instrument: E2.i
Sample Info: AR12683Y2,AR12683Y2,,ar1268.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7075R.D
Report Date: 21-Dec-2012 12:29

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BR.B\E2L7075R.D
Lab Smp Id: AR12683Y2 Client Smp ID: AR12683Y2
Inj Date : 13-DEC-2012 23:01
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR12683Y2,AR12683Y2,,ar1268.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BR.B\E2_LL_PCB_R.m
Meth Date : 18-Dec-2012 16:41 gappolonia Quant Type: ESTD
Cal Date : 13-DEC-2012 23:01 Cal File: E2L7075R.D
Als bottle: 27 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1268.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

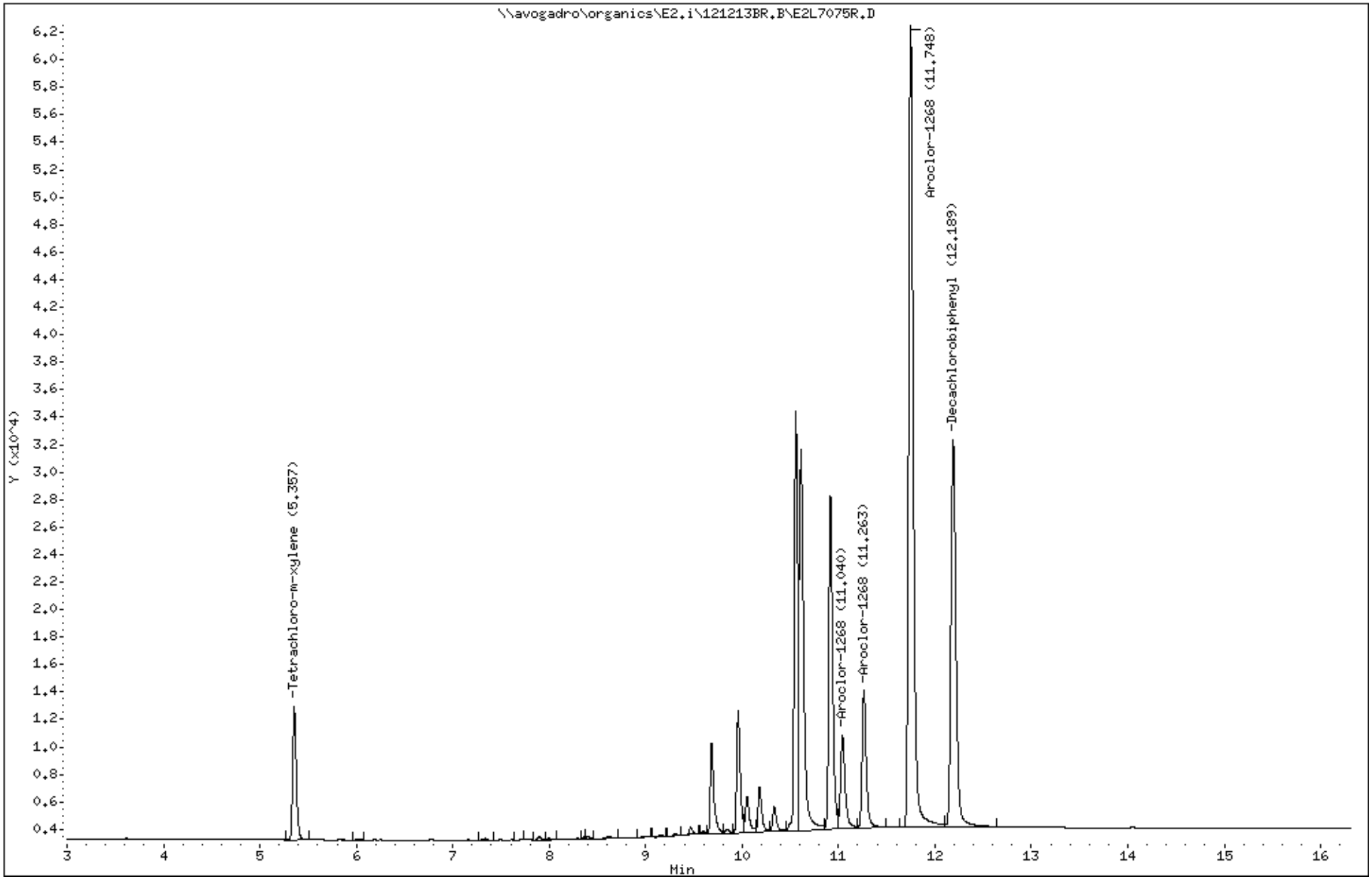
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.356	5.355	0.001	9654	0.02000	0.021			(a)
9 Aroclor-1268						CAS #: 11100-14-4		
11.040	11.040	0.000	6814	0.40000	0.40	80.00- 120.00	100.00	(a)
11.263	11.263	0.000	9986	0.40000	0.40	126.55- 166.55	146.55	
11.747	11.747	0.000	58370	0.40000	0.40	836.62- 876.62	856.62	
Average of Peak Amounts =					0.40000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.188	12.186	0.002	28176	0.04000	0.059			

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7075R.D
Date : 13-DEC-2012 23:01
Client ID: AR12683Y2
Instrument: E2.i
Sample Info: AR12683Y2,AR12683Y2,,ar1268.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7076F.D
Report Date: 21-Dec-2012 12:27

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BF.B\E2L7076F.D
Lab Smp Id: AR16601Y2 Client Smp ID: AR16601Y2
Inj Date : 13-DEC-2012 23:21
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16601Y2,AR16601Y2,,ar1660.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BF.B\E2_LL_PCB_F.m
Meth Date : 18-Dec-2012 16:42 gappolonia Quant Type: ESTD
Cal Date : 14-DEC-2012 00:59 Cal File: E2L7081F.D
Als bottle: 28 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

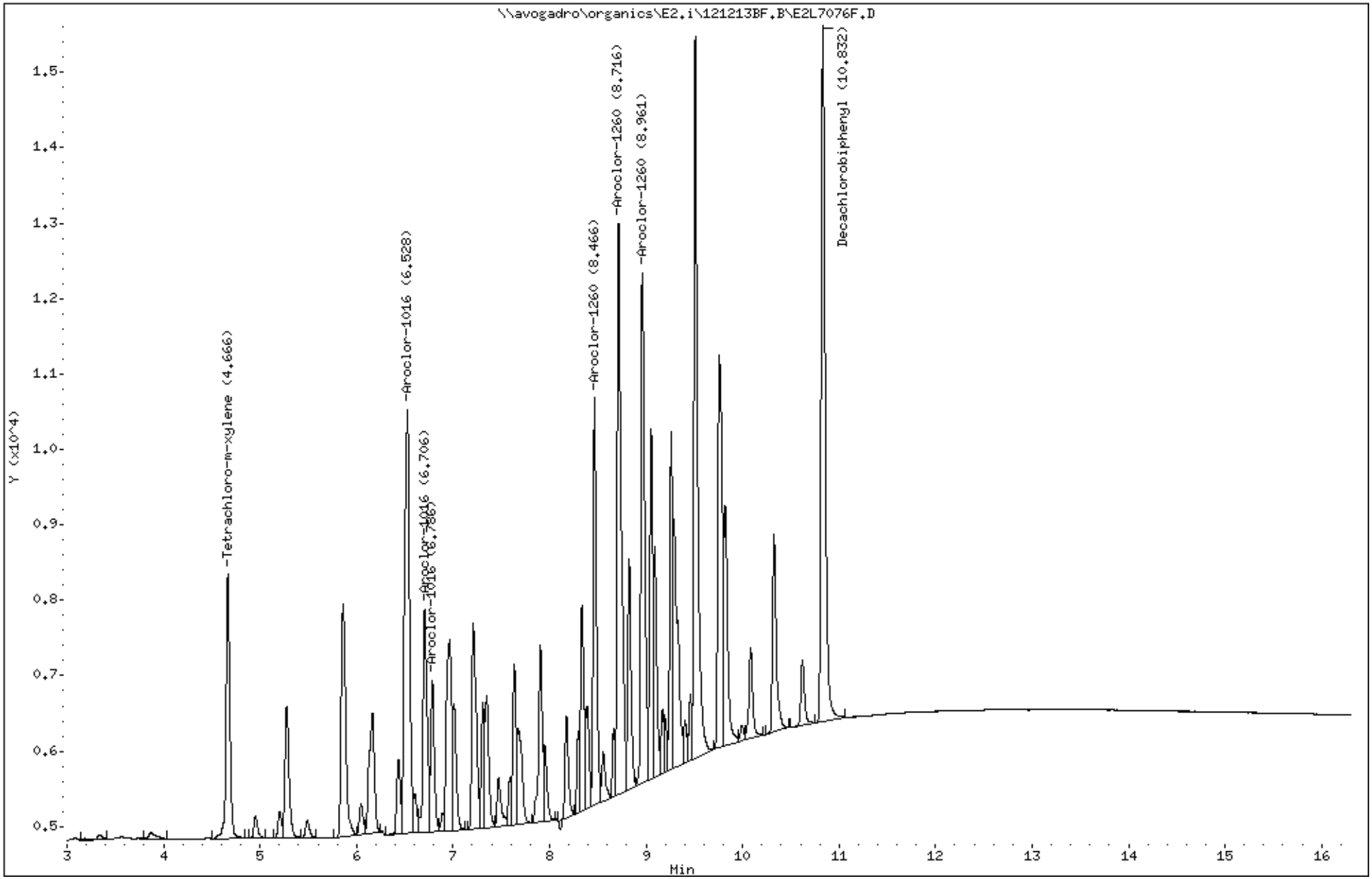
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.666	4.663	0.003	3505	0.00500	0.0050			(a)
5 Aroclor-1016						CAS #: 12674-11-2		
6.527	6.524	0.003	5625	0.10000	0.12	80.00- 120.00	100.00	(a)
6.705	6.701	0.004	2952	0.10000	0.11	35.44- 75.44	52.48	
6.785	6.782	0.003	2012	0.10000	0.11	21.34- 61.34	35.77	
Average of Peak Amounts =					0.11333			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.831	10.828	0.003	263839	0.01000	0.0091			(a)
9 Aroclor-1260						CAS #: 11096-82-5		
8.466	8.462	0.004	5404	0.10000	0.11	80.00- 120.00	100.00	(a)
8.715	8.712	0.003	7581	0.10000	0.11	119.09- 159.09	140.28	
8.961	8.958	0.003	6762	0.10000	0.11	116.83- 156.83	125.13	
Average of Peak Amounts =					0.11000			

Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7076F.D
Report Date: 21-Dec-2012 12:27

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7076F.D
Date : 13-DEC-2012 23:21
Client ID: AR16601Y2
Instrument: E2.i
Sample Info: AR16601Y2,AR16601Y2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7076R.D
Report Date: 21-Dec-2012 12:29

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BR.B\E2L7076R.D
Lab Smp Id: AR16601Y2 Client Smp ID: AR16601Y2
Inj Date : 13-DEC-2012 23:21
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16601Y2,AR16601Y2,,ar1660.sub,,
Misc Info : 1,1,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BR.B\E2_LL_PCB_R.m
Meth Date : 18-Dec-2012 16:41 gappolonia Quant Type: ESTD
Cal Date : 14-DEC-2012 00:59 Cal File: E2L7081R.D
Als bottle: 28 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

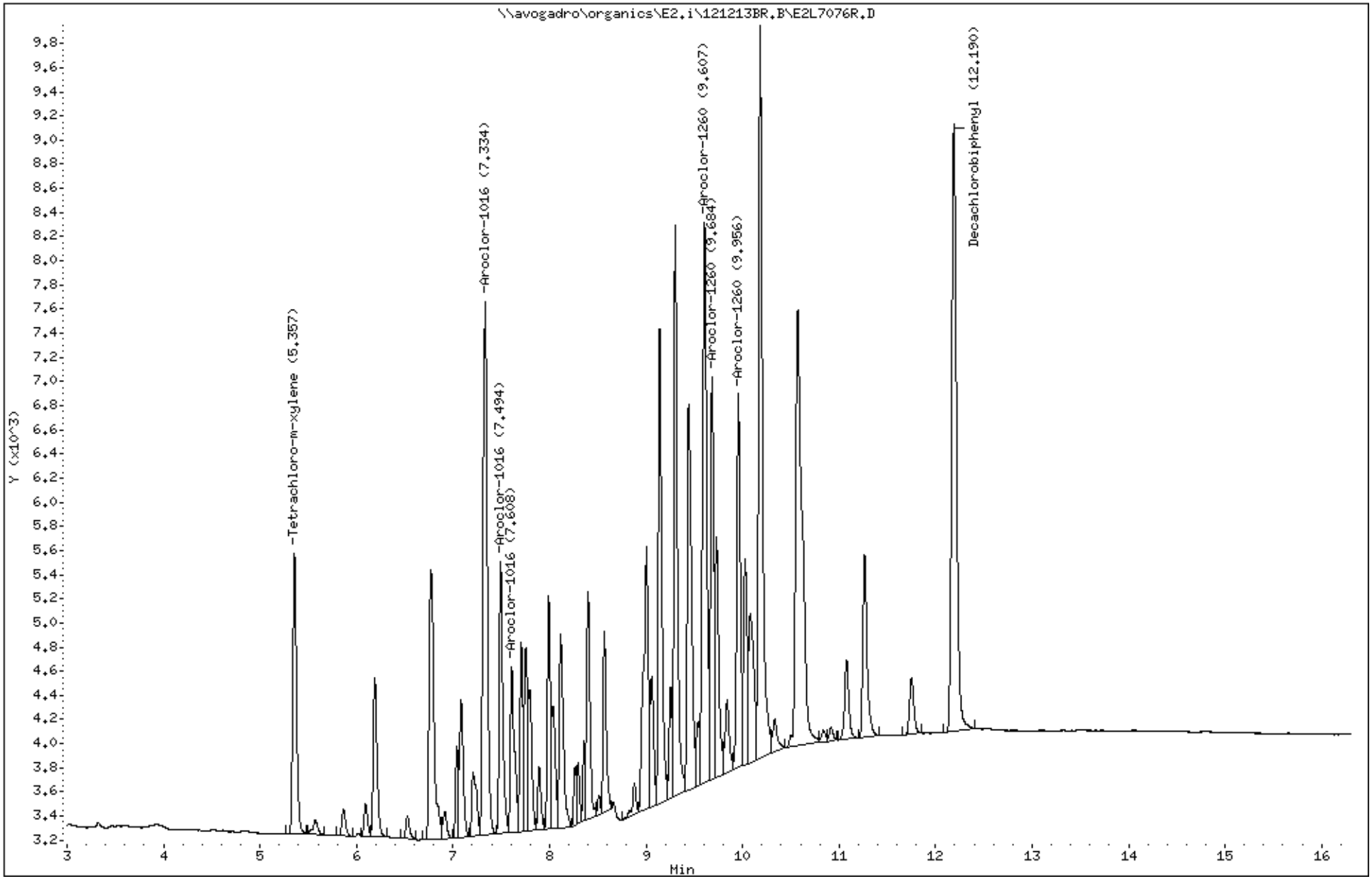
			AMOUNTS				
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
5.356	5.355	0.001	2324	0.00500	0.0050		(a)
6 Aroclor-1016					CAS #: 12674-11-2		
7.333	7.332	0.001	4422	0.10000	0.11	80.00- 120.00	100.00(a)
7.493	7.490	0.003	2250	0.10000	0.11	33.18- 73.18	50.88
7.608	7.605	0.003	1375	0.10000	0.11	17.07- 57.07	31.09
Average of Peak Amounts =					0.11000		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
12.189	12.186	0.003	5032	0.01000	0.012		(a)
8 Aroclor-1260					CAS #: 11096-82-5		
9.607	9.604	0.003	4643	0.10000	0.11	80.00- 120.00	100.00(a)
9.683	9.680	0.003	3339	0.10000	0.11	45.57- 85.57	71.91
9.956	9.953	0.003	3103	0.10000	0.11	45.30- 85.30	66.83
Average of Peak Amounts =					0.11000		

Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7076R.D
Report Date: 21-Dec-2012 12:29

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7076R.D
Date : 13-DEC-2012 23:21
Client ID: AR16601Y2
Instrument: E2.i
Sample Info: AR16601Y2,AR16601Y2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7077F.D
Report Date: 21-Dec-2012 12:27

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BF.B\E2L7077F.D
Lab Smp Id: AR16606Y2 Client Smp ID: AR16606Y2
Inj Date : 13-DEC-2012 23:41
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16606Y2,AR16606Y2,,ar1660.sub,,
Misc Info : 1,6,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BF.B\E2_LL_PCB_F.m
Meth Date : 18-Dec-2012 16:42 gappolonia Quant Type: ESTD
Cal Date : 14-DEC-2012 00:59 Cal File: E2L7081F.D
Als bottle: 29 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

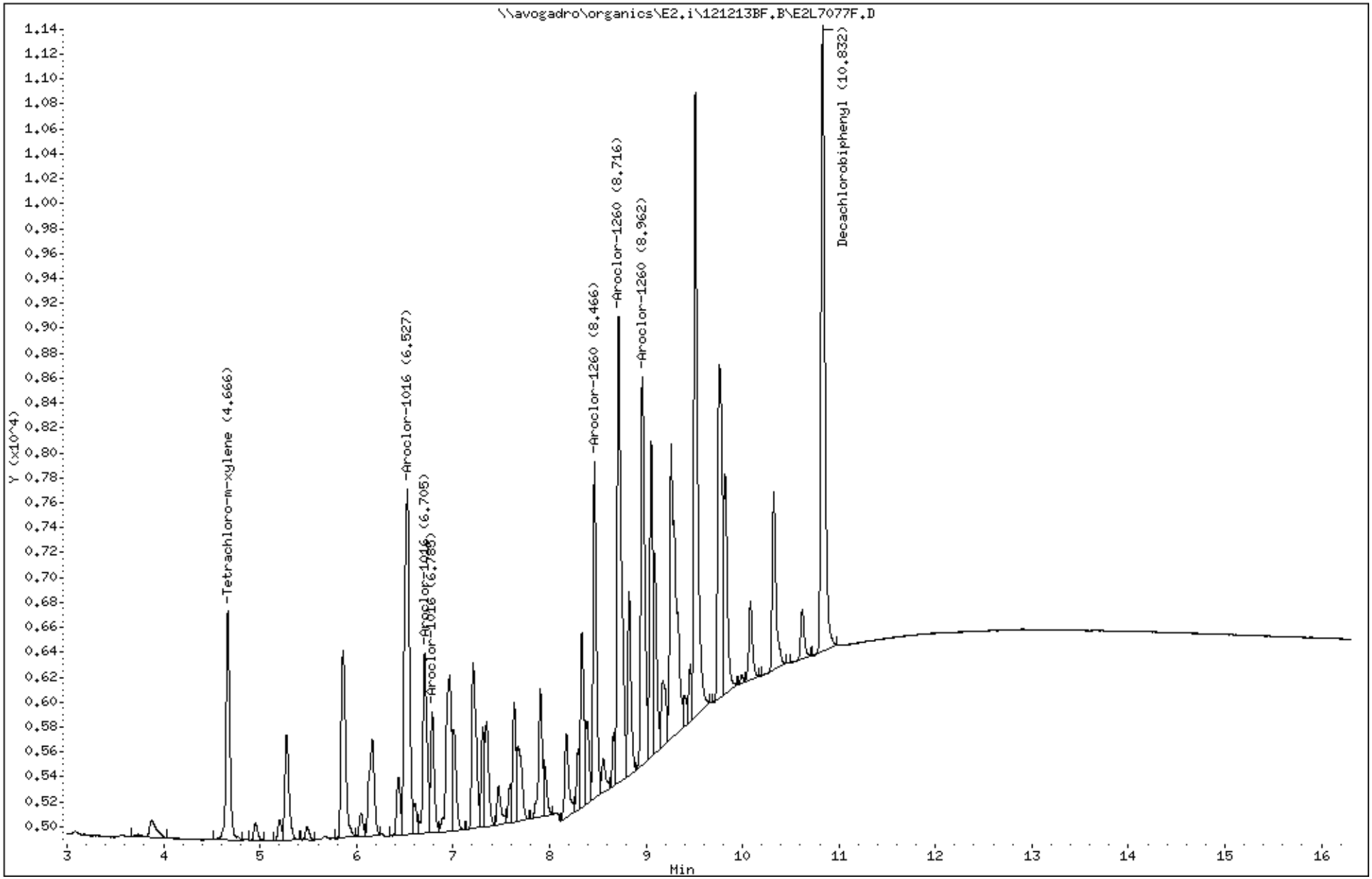
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.666	4.663	0.003	1831	0.00000	0.0027		(a)	
5 Aroclor-1016						CAS #: 12674-11-2		
6.527	6.524	0.003	2773	0.05000	0.057	80.00- 120.00	100.00	(a)
6.705	6.701	0.004	1439	0.05000	0.055	35.44- 75.44	51.89	
6.784	6.782	0.002	971	0.05000	0.052	21.34- 61.34	35.02	
Average of Peak Amounts =					0.05467			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.831	10.828	0.003	139738	0.00000	0.0062		(a)	
9 Aroclor-1260						CAS #: 11096-82-5		
8.466	8.462	0.004	2704	0.05000	0.057	80.00- 120.00	100.00	(a)
8.715	8.712	0.003	3741	0.05000	0.057	119.09- 159.09	138.35	
8.961	8.958	0.003	3113	0.05000	0.052	116.83- 156.83	115.13	
Average of Peak Amounts =					0.05533			

Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7077F.D
Report Date: 21-Dec-2012 12:27

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7077F.D
Date : 13-DEC-2012 23:41
Client ID: AR16606Y2
Instrument: E2.i
Sample Info: AR16606Y2,AR16606Y2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7077R.D
Report Date: 21-Dec-2012 12:29

Spectrum Analytical, Inc. RI Division

Quantitation Report
Data file : \\avogadro\organics\E2.i\121213BR.B\E2L7077R.D
Lab Smp Id: AR16606Y2 Client Smp ID: AR16606Y2
Inj Date : 13-DEC-2012 23:41
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16606Y2,AR16606Y2,,ar1660.sub,,
Misc Info : 1,6,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BR.B\E2_LL_PCB_R.m
Meth Date : 18-Dec-2012 16:41 gappolonia Quant Type: ESTD
Cal Date : 14-DEC-2012 00:59 Cal File: E2L7081R.D
Als bottle: 29 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

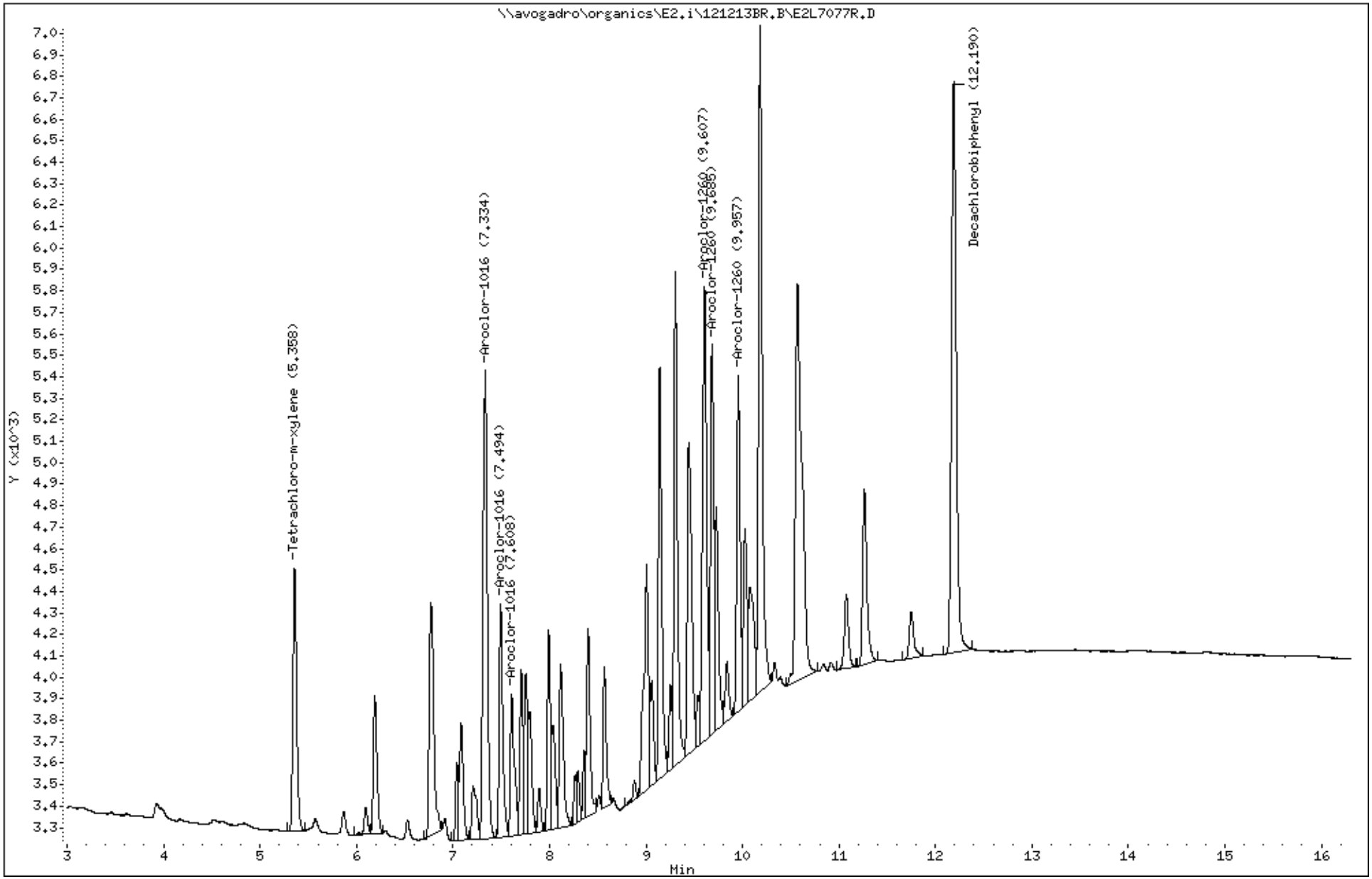
			AMOUNTS				
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
5.358	5.355	0.003	1221	0.00000	0.0026		(a)
6 Aroclor-1016					CAS #: 12674-11-2		
7.334	7.332	0.002	2182	0.05000	0.056	80.00- 120.00	100.00(a)
7.493	7.490	0.003	1090	0.05000	0.054	33.18- 73.18	49.95
7.608	7.605	0.003	657	0.05000	0.051	17.07- 57.07	30.11
Average of Peak Amounts =					0.05367		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
12.189	12.186	0.003	2661	0.00000	0.0062		(a)
8 Aroclor-1260					CAS #: 11096-82-5		
9.607	9.604	0.003	2115	0.05000	0.052	80.00- 120.00	100.00(a)
9.684	9.680	0.004	1816	0.05000	0.061	45.57- 85.57	85.86
9.957	9.953	0.004	1558	0.05000	0.056	45.30- 85.30	73.66
Average of Peak Amounts =					0.05633		

Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7077R.D
Report Date: 21-Dec-2012 12:29

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7077R.D
Date : 13-DEC-2012 23:41
Client ID: AR16606Y2
Instrument: E2.i
Sample Info: AR16606Y2,AR16606Y2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7078F.D
Report Date: 21-Dec-2012 12:27

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BF.B\E2L7078F.D
Lab Smp Id: AR16602Y2 Client Smp ID: AR16602Y2
Inj Date : 14-DEC-2012 00:00
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16602Y2,AR16602Y2,,ar1660.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BF.B\E2_LL_PCB_F.m
Meth Date : 18-Dec-2012 16:42 gappolonia Quant Type: ESTD
Cal Date : 14-DEC-2012 00:59 Cal File: E2L7081F.D
Als bottle: 30 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

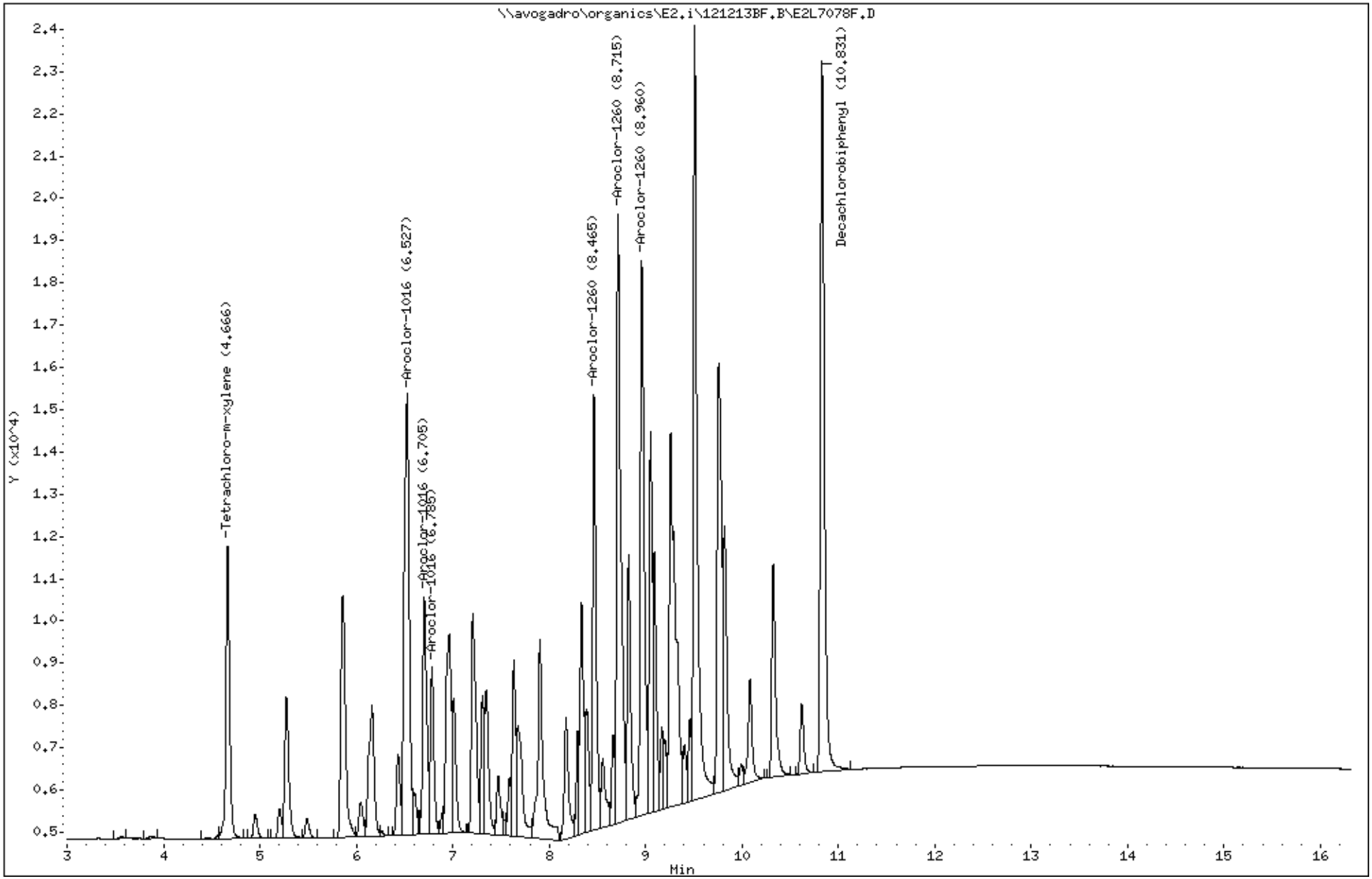
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.666	4.663	0.003	6929	0.01000	0.010			(a)
5 Aroclor-1016						CAS #: 12674-11-2		
6.526	6.524	0.002	10443	0.20000	0.21	80.00- 120.00	100.00	(a)
6.705	6.701	0.004	5605	0.20000	0.21	35.44- 75.44	53.67	
6.784	6.782	0.002	3936	0.20000	0.21	21.34- 61.34	37.69	
Average of Peak Amounts =				0.21000				
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.830	10.828	0.002	490416	0.02000	0.022			(a)
9 Aroclor-1260						CAS #: 11096-82-5		
8.465	8.462	0.003	10314	0.20000	0.22	80.00- 120.00	100.00	(a)
8.715	8.712	0.003	14389	0.20000	0.22	119.09- 159.09	139.51	
8.960	8.958	0.002	13128	0.20000	0.22	116.83- 156.83	127.28	
Average of Peak Amounts =				0.22000				

Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7078F.D
Report Date: 21-Dec-2012 12:27

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7078F.D
Date : 14-DEC-2012 00:00
Client ID: AR16602Y2
Instrument: E2.i
Sample Info: AR16602Y2,AR16602Y2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7078R.D
Report Date: 21-Dec-2012 12:29

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BR.B\E2L7078R.D
Lab Smp Id: AR16602Y2 Client Smp ID: AR16602Y2
Inj Date : 14-DEC-2012 00:00
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16602Y2,AR16602Y2,,ar1660.sub,,
Misc Info : 1,2,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BR.B\E2_LL_PCB_R.m
Meth Date : 18-Dec-2012 16:41 gappolonia Quant Type: ESTD
Cal Date : 14-DEC-2012 00:59 Cal File: E2L7081R.D
Als bottle: 30 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

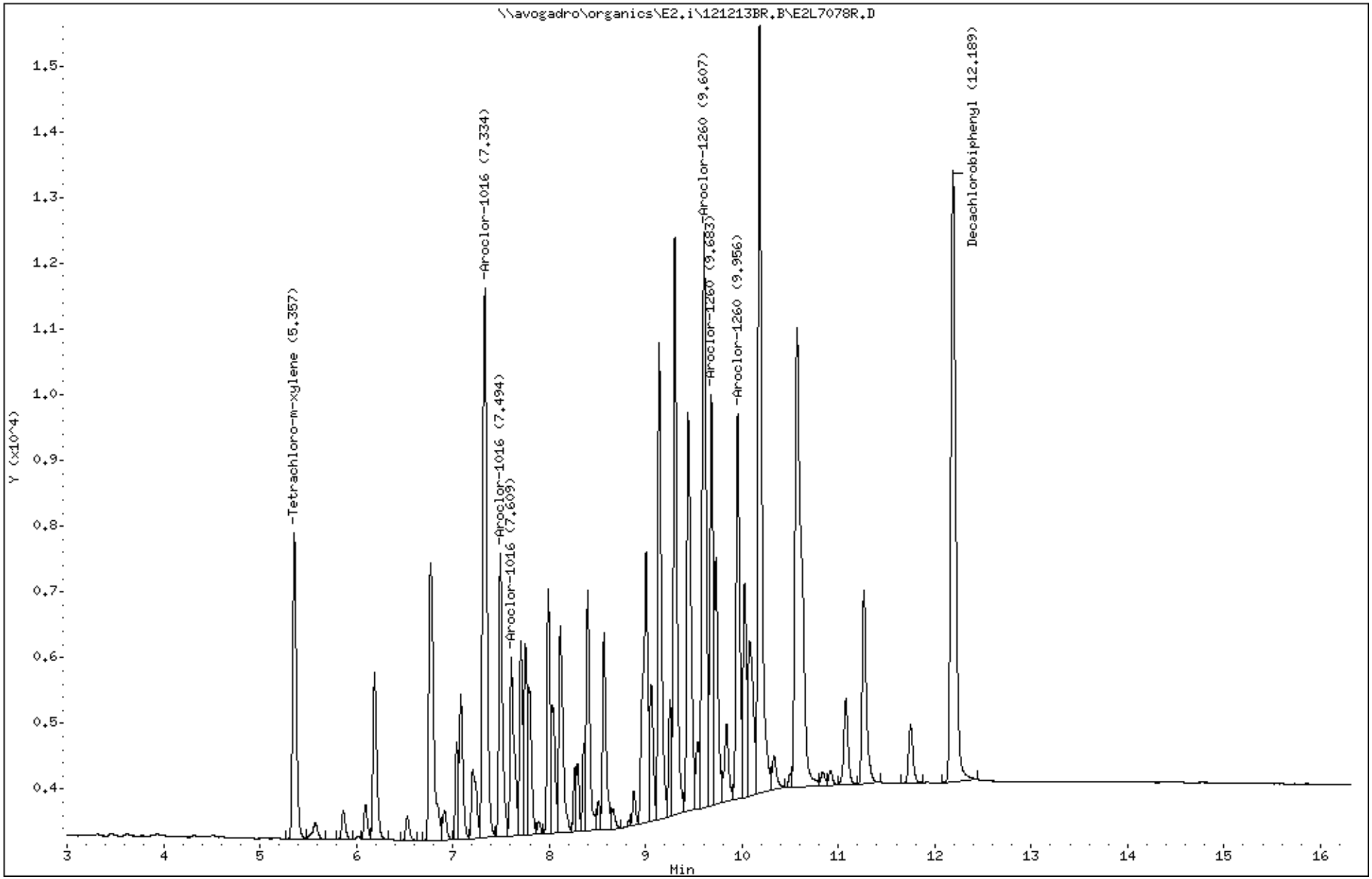
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.356	5.355	0.001	4652	0.01000	0.010			(a)
6 Aroclor-1016						CAS #: 12674-11-2		
7.333	7.332	0.001	8362	0.20000	0.21	80.00- 120.00	100.00	(a)
7.493	7.490	0.003	4316	0.20000	0.21	33.18- 73.18	51.61	
7.608	7.605	0.003	2723	0.20000	0.21	17.07- 57.07	32.56	
Average of Peak Amounts =					0.21000			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.189	12.186	0.003	9304	0.02000	0.022			(a)
8 Aroclor-1260						CAS #: 11096-82-5		
9.607	9.604	0.003	8767	0.20000	0.21	80.00- 120.00	100.00	(a)
9.683	9.680	0.003	6255	0.20000	0.21	45.57- 85.57	71.35	
9.956	9.953	0.003	5854	0.20000	0.21	45.30- 85.30	66.77	
Average of Peak Amounts =					0.21000			

Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7078R.D
Report Date: 21-Dec-2012 12:29

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7078R.D
Date : 14-DEC-2012 00:00
Client ID: AR16602Y2
Instrument: E2.i
Sample Info: AR16602Y2,AR16602Y2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7079F.D
Report Date: 21-Dec-2012 12:27

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BF.B\E2L7079F.D
Lab Smp Id: AR16603Y2 Client Smp ID: AR16603Y2
Inj Date : 14-DEC-2012 00:20
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16603Y2,AR16603Y2,,ar1660.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BF.B\E2_LL_PCB_F.m
Meth Date : 18-Dec-2012 16:42 gappolonia Quant Type: ESTD
Cal Date : 14-DEC-2012 00:59 Cal File: E2L7081F.D
Als bottle: 31 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

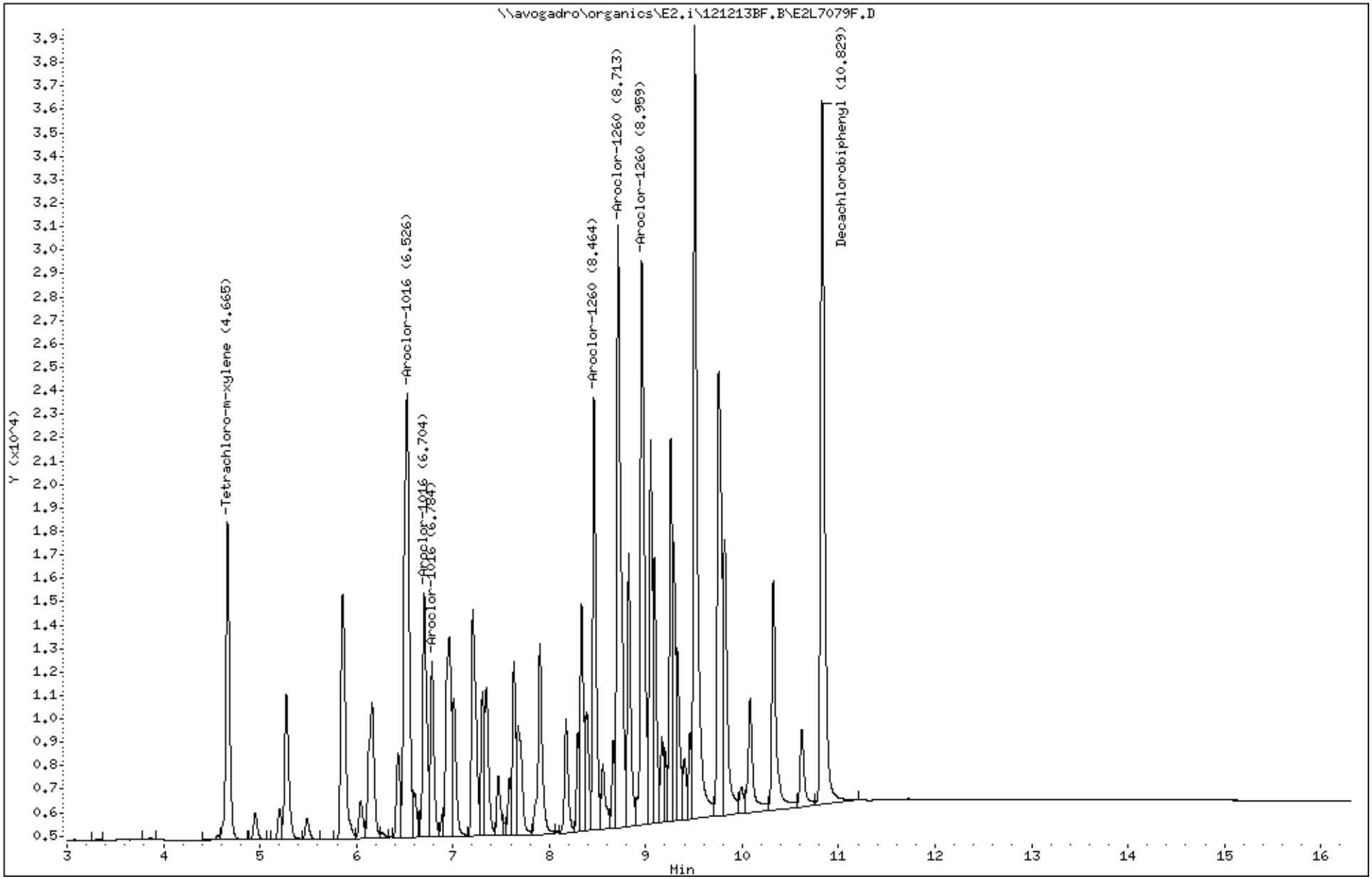
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.664	4.663	0.001	13553	0.02000	0.020			(a)
5 Aroclor-1016					CAS #: 12674-11-2			
6.525	6.524	0.001	18979	0.40000	0.39	80.00- 120.00	100.00	(a)
6.703	6.701	0.002	10396	0.40000	0.40	35.44- 75.44	54.78	
6.783	6.782	0.001	7471	0.40000	0.40	21.34- 61.34	39.36	
Average of Peak Amounts =					0.39667			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.829	10.828	0.001	907442	0.04000	0.040			(a)
9 Aroclor-1260					CAS #: 11096-82-5			
8.463	8.462	0.001	18461	0.40000	0.39	80.00- 120.00	100.00	(a)
8.713	8.712	0.001	25664	0.40000	0.39	119.09- 159.09	139.02	
8.958	8.958	0.000	24051	0.40000	0.40	116.83- 156.83	130.28	
Average of Peak Amounts =					0.39333			

Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7079F.D
Report Date: 21-Dec-2012 12:27

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7079F.D
Date : 14-DEC-2012 00:20
Client ID: AR16603Y2
Instrument: E2.i
Sample Info: AR16603Y2,AR16603Y2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7079R.D
Report Date: 21-Dec-2012 12:29

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BR.B\E2L7079R.D
Lab Smp Id: AR16603Y2 Client Smp ID: AR16603Y2
Inj Date : 14-DEC-2012 00:20
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16603Y2,AR16603Y2,,ar1660.sub,,
Misc Info : 1,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BR.B\E2_LL_PCB_R.m
Meth Date : 18-Dec-2012 16:41 gappolonia Quant Type: ESTD
Cal Date : 14-DEC-2012 00:59 Cal File: E2L7081R.D
Als bottle: 31 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

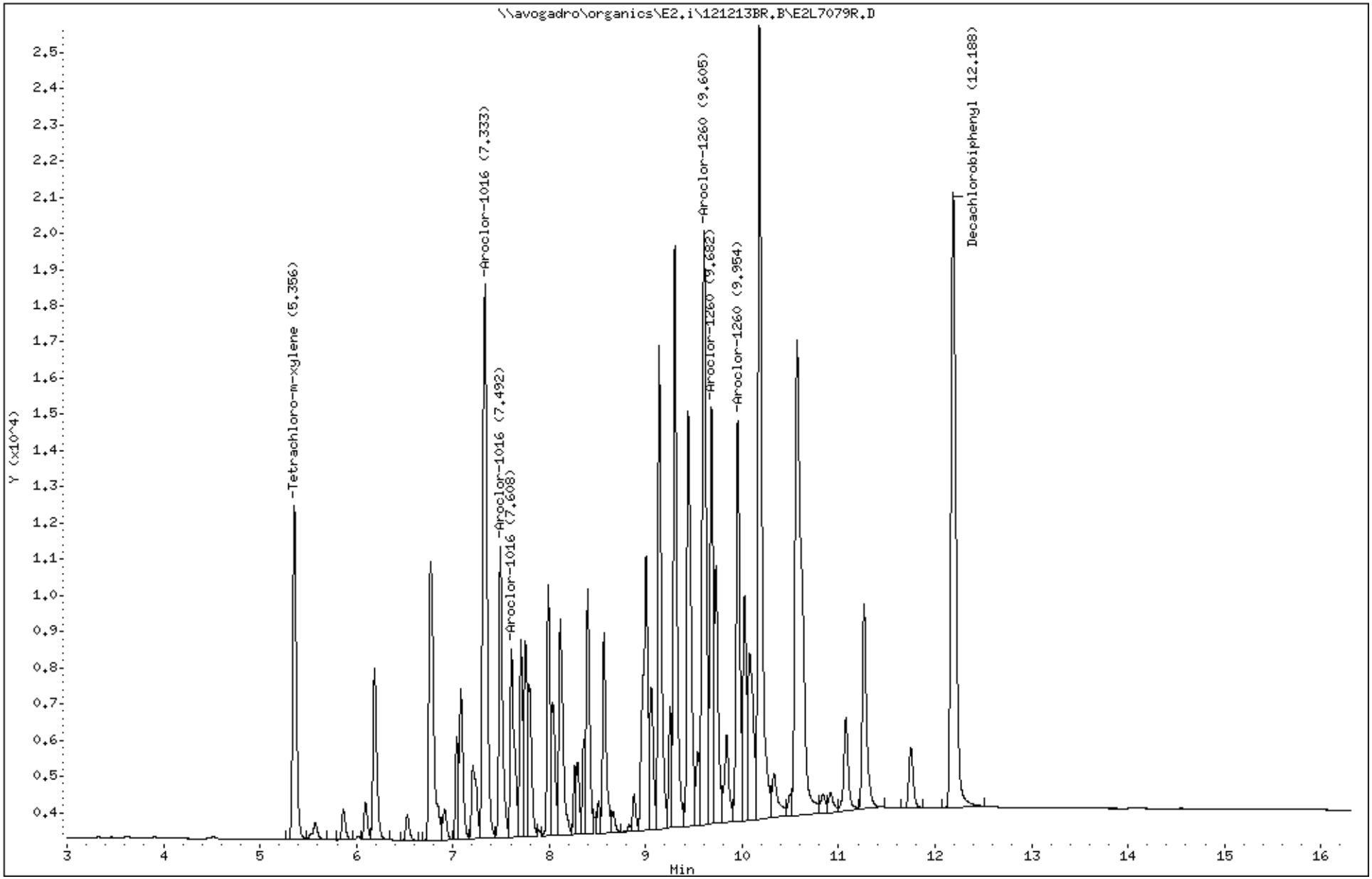
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.356	5.355	0.001	9232	0.02000	0.020			(a)
6 Aroclor-1016						CAS #: 12674-11-2		
7.332	7.332	0.000	15323	0.40000	0.39	80.00- 120.00	100.00	(a)
7.491	7.490	0.001	8042	0.40000	0.40	33.18- 73.18	52.48	
7.607	7.605	0.002	5212	0.40000	0.40	17.07- 57.07	34.01	
Average of Peak Amounts =					0.39667			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.187	12.186	0.001	16994	0.04000	0.040			(a)
8 Aroclor-1260						CAS #: 11096-82-5		
9.604	9.604	0.000	16423	0.40000	0.40	80.00- 120.00	100.00	(a)
9.681	9.680	0.001	11512	0.40000	0.39	45.57- 85.57	70.10	
9.954	9.953	0.001	11079	0.40000	0.40	45.30- 85.30	67.46	
Average of Peak Amounts =					0.39667			

Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7079R.D
Report Date: 21-Dec-2012 12:29

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7079R.D
Date : 14-DEC-2012 00:20
Client ID: AR16603Y2
Instrument: E2.i
Sample Info: AR16603Y2,AR16603Y2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7080F.D
Report Date: 21-Dec-2012 12:27

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BF.B\E2L7080F.D
Lab Smp Id: AR16604Y2 Client Smp ID: AR16604Y2
Inj Date : 14-DEC-2012 00:40
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16604Y2,AR16604Y2,,ar1660.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BF.B\E2_LL_PCB_F.m
Meth Date : 18-Dec-2012 16:42 gappolonia Quant Type: ESTD
Cal Date : 14-DEC-2012 00:59 Cal File: E2L7081F.D
Als bottle: 32 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

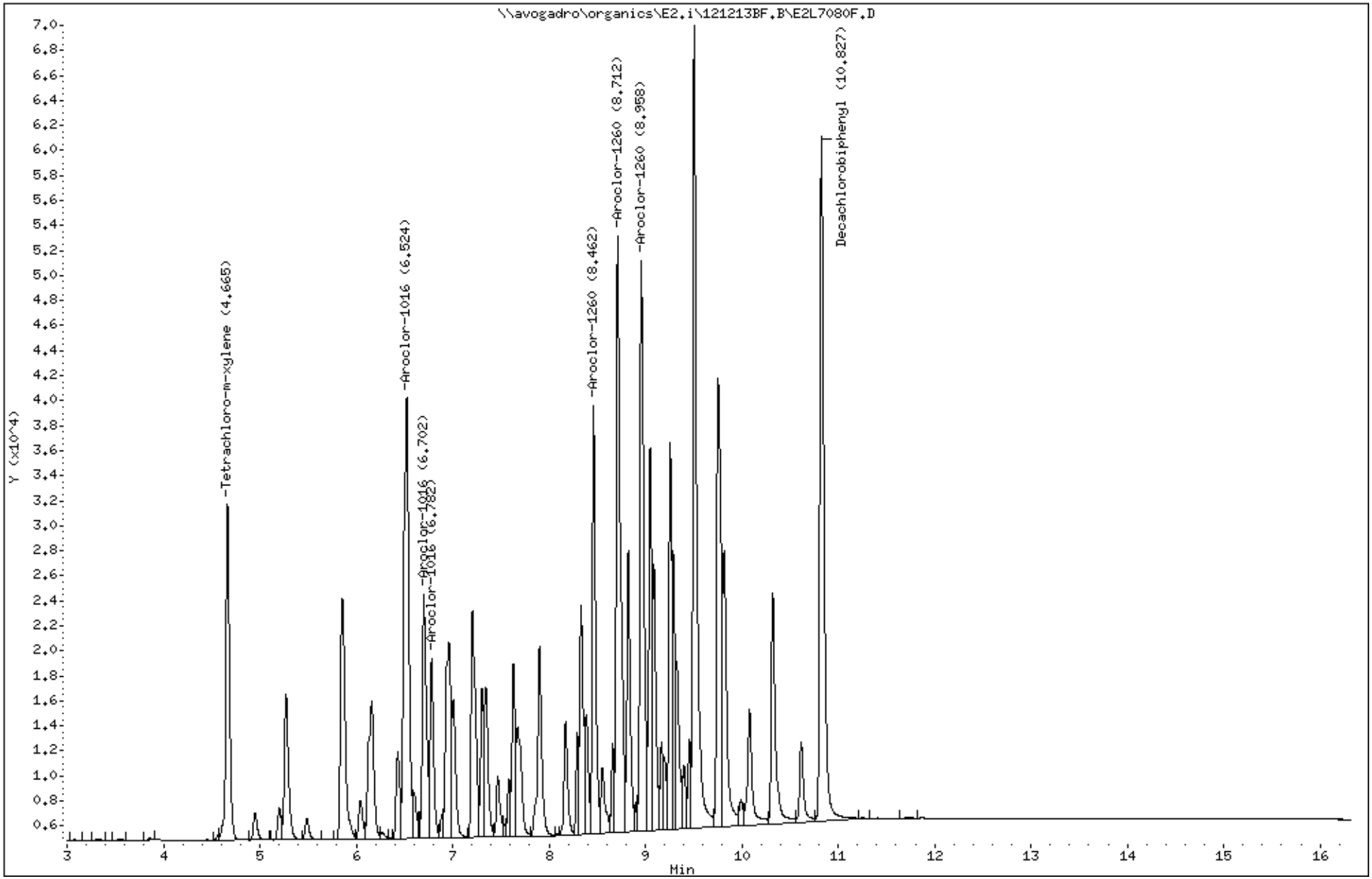
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.664	4.663	0.001	26830	0.04000	0.040			(a)
5 Aroclor-1016						CAS #: 12674-11-2		
6.524	6.524	0.000	35280	0.80000	0.72	80.00- 120.00		100.00(a)
6.702	6.701	0.001	19513	0.80000	0.74	35.44- 75.44		55.31
6.782	6.782	0.000	14361	0.80000	0.78	21.34- 61.34		40.71
Average of Peak Amounts =					0.74667			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.826	10.828	-0.002	1664674	0.08000	0.074			
9 Aroclor-1260						CAS #: 11096-82-5		
8.462	8.462	0.000	34323	0.80000	0.72	80.00- 120.00		100.00(a)
8.712	8.712	0.000	47728	0.80000	0.72	119.09- 159.09		139.06
8.957	8.958	-0.001	45598	0.80000	0.76	116.83- 156.83		132.85
Average of Peak Amounts =					0.73333			

Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7080F.D
Report Date: 21-Dec-2012 12:27

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7080F.D
Date : 14-DEC-2012 00:40
Client ID: AR16604Y2
Instrument: E2.i
Sample Info: AR16604Y2,AR16604Y2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7080R.D
Report Date: 21-Dec-2012 12:29

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121213BR.B\E2L7080R.D
Lab Smp Id: AR16604Y2 Client Smp ID: AR16604Y2
Inj Date : 14-DEC-2012 00:40
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16604Y2,AR16604Y2,,ar1660.sub,,
Misc Info : 1,4,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BR.B\E2_LL_PCB_R.m
Meth Date : 18-Dec-2012 16:41 gappolonia Quant Type: ESTD
Cal Date : 14-DEC-2012 00:59 Cal File: E2L7081R.D
Als bottle: 32 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

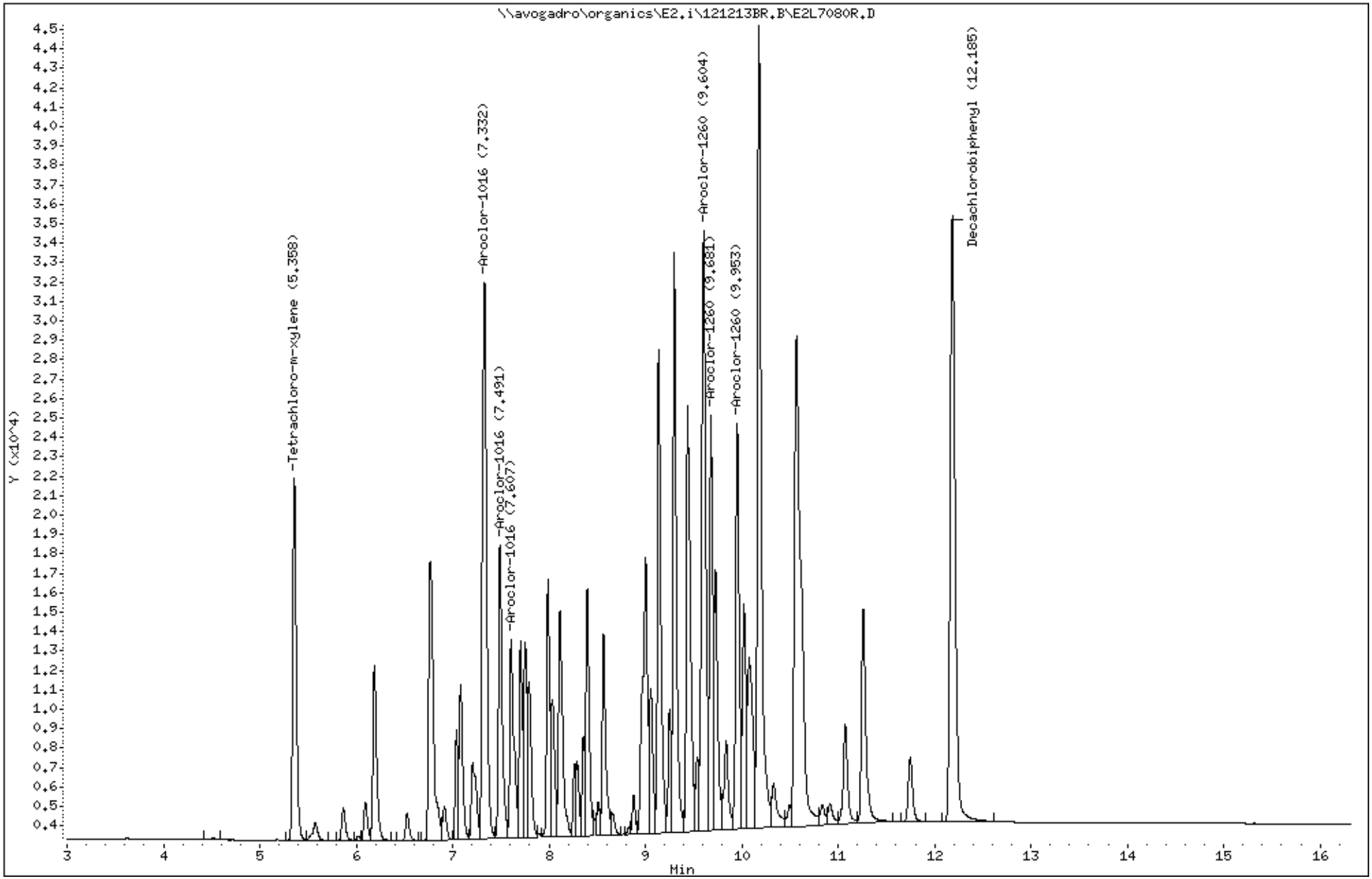
				AMOUNTS CAL-AMT	AMOUNTS ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
5.357	5.355	0.002	18639	0.04000	0.040			(a)
6 Aroclor-1016					CAS #: 12674-11-2			
7.332	7.332	0.000	28641	0.80000	0.73	80.00- 120.00		100.00(a)
7.491	7.490	0.001	15101	0.80000	0.75	33.18- 73.18		52.73
7.606	7.605	0.001	10252	0.80000	0.79	17.07- 57.07		35.79
Average of Peak Amounts =					0.75667			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
12.184	12.186	-0.002	31191	0.08000	0.073			
8 Aroclor-1260					CAS #: 11096-82-5			
9.604	9.604	0.000	30951	0.80000	0.76	80.00- 120.00		100.00(a)
9.680	9.680	0.000	21419	0.80000	0.72	45.57- 85.57		69.20
9.952	9.953	-0.001	20906	0.80000	0.75	45.30- 85.30		67.55
Average of Peak Amounts =					0.74333			

Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7080R.D
Report Date: 21-Dec-2012 12:29

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7080R.D
Date : 14-DEC-2012 00:40
Client ID: AR16604Y2
Instrument: E2.i
Sample Info: AR16604Y2,AR16604Y2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7081F.D
Report Date: 21-Dec-2012 12:27

Spectrum Analytical, Inc. RI Division

Quantitation Report

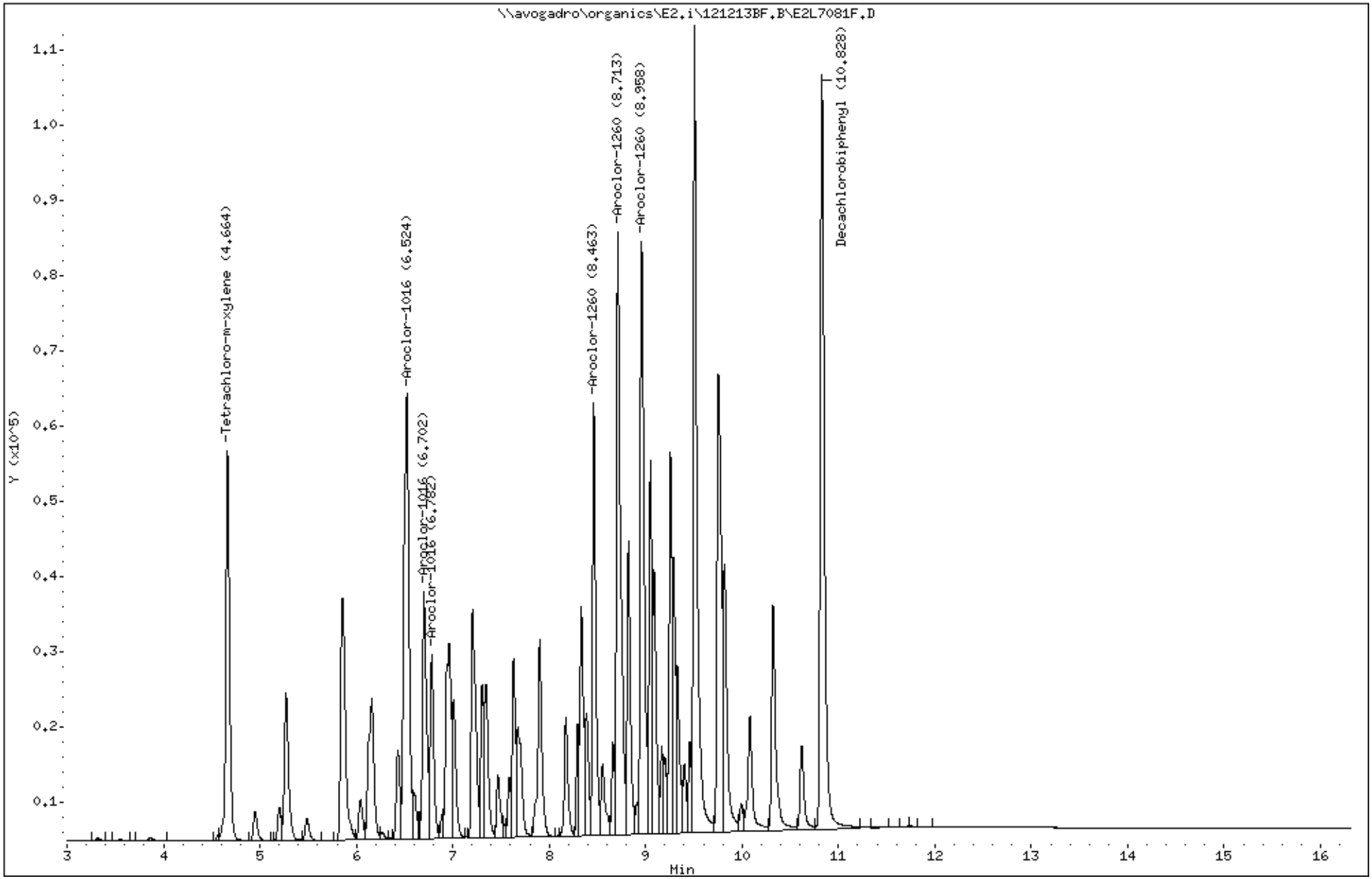
Data file : \\avogadro\organics\E2.i\121213BF.B\E2L7081F.D
Lab Smp Id: AR16605Y2 Client Smp ID: AR16605Y2
Inj Date : 14-DEC-2012 00:59
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16605Y2,AR16605Y2,,ar1660.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BF.B\E2_LL_PCB_F.m
Meth Date : 18-Dec-2012 16:42 gappolonia Quant Type: ESTD
Cal Date : 14-DEC-2012 00:59 Cal File: E2L7081F.D
Als bottle: 33 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				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.663	4.663	0.000	51773	0.08000	0.077			
5 Aroclor-1016						CAS #: 12674-11-2		
6.524	6.524	0.000	59264	1.60000	1.2	80.00- 120.00		100.00
6.701	6.701	0.000	32857	1.60000	1.2	35.44- 75.44		55.44
6.782	6.782	0.000	24499	1.60000	1.3	21.34- 61.34		41.34
Average of Peak Amounts =				1.23333				
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.828	10.828	0.000	3034526	0.16000	0.14			
9 Aroclor-1260						CAS #: 11096-82-5		
8.462	8.462	0.000	57587	1.60000	1.2	80.00- 120.00		100.00
8.712	8.712	0.000	80095	1.60000	1.2	119.09- 159.09		139.09
8.958	8.958	0.000	78799	1.60000	1.3	116.83- 156.83		136.83
Average of Peak Amounts =				1.23333				

Data File: \\avogadro\organics\E2.i\121213BF.B\E2L7081F.D
Date : 14-DEC-2012 00:59
Client ID: AR16605Y2
Instrument: E2.i
Sample Info: AR16605Y2,AR16605Y2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7081R.D
Report Date: 21-Dec-2012 12:29

Spectrum Analytical, Inc. RI Division

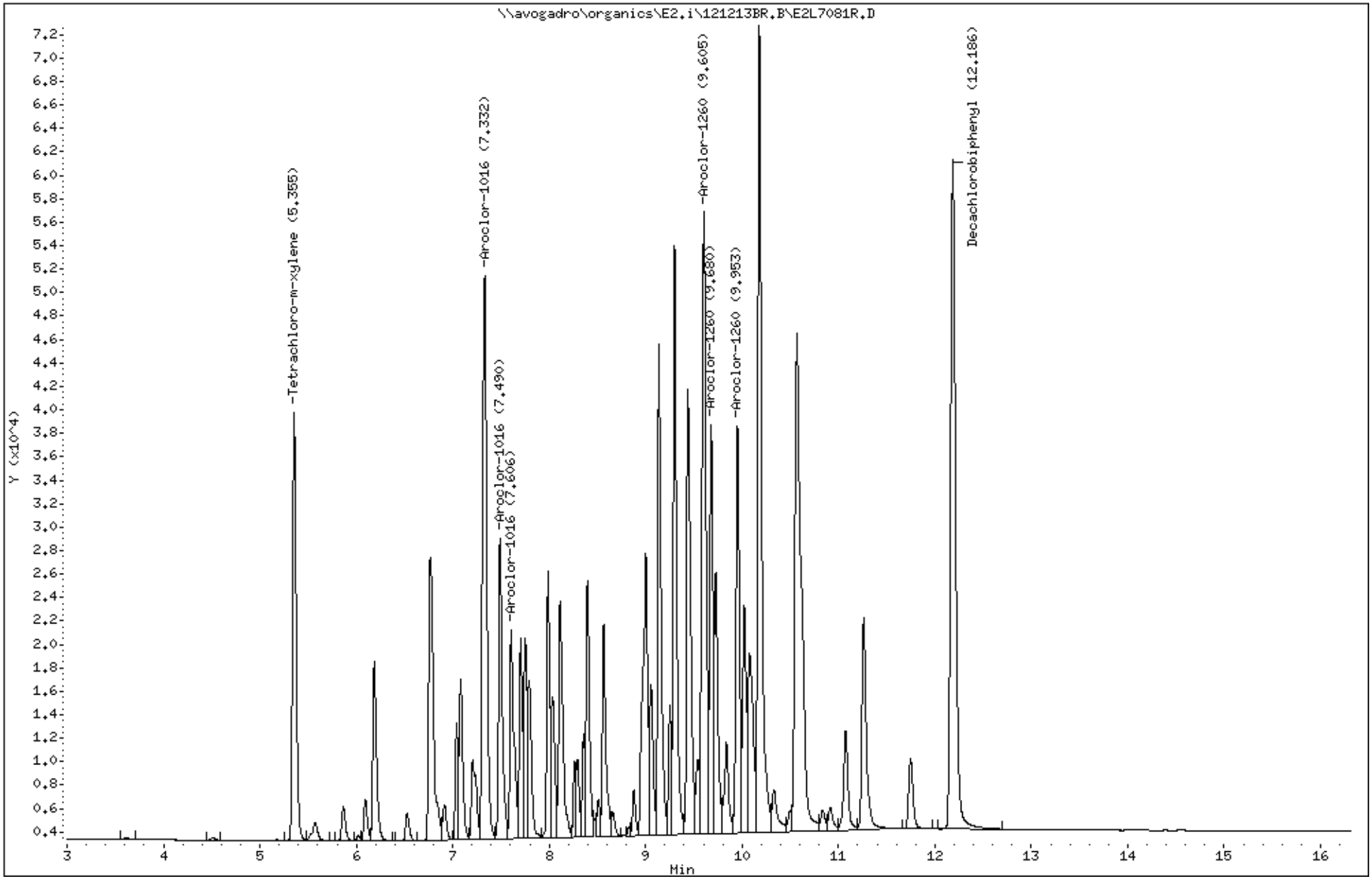
Quantitation Report
Data file : \\avogadro\organics\E2.i\121213BR.B\E2L7081R.D
Lab Smp Id: AR16605Y2 Client Smp ID: AR16605Y2
Inj Date : 14-DEC-2012 00:59
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16605Y2,AR16605Y2,,ar1660.sub,,
Misc Info : 1,5,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121213BR.B\E2_LL_PCB_R.m
Meth Date : 18-Dec-2012 16:41 gappolonia Quant Type: ESTD
Cal Date : 14-DEC-2012 00:59 Cal File: E2L7081R.D
Als bottle: 33 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

				AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
5.355	5.355	0.000	36466	0.08000	0.079		
6 Aroclor-1016						CAS #: 12674-11-2	
7.332	7.332	0.000	48111	1.60000	1.2	80.00- 120.00	100.00
7.490	7.490	0.000	25587	1.60000	1.3	33.18- 73.18	53.18
7.605	7.605	0.000	17835	1.60000	1.4	17.07- 57.07	37.07
Average of Peak Amounts =					1.30000		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
12.186	12.186	0.000	57154	0.16000	0.13		
8 Aroclor-1260						CAS #: 11096-82-5	
9.604	9.604	0.000	53143	1.60000	1.3	80.00- 120.00	100.00
9.680	9.680	0.000	34848	1.60000	1.2	45.57- 85.57	65.57
9.953	9.953	0.000	34703	1.60000	1.2	45.30- 85.30	65.30
Average of Peak Amounts =					1.23333		

Data File: \\avogadro\organics\E2.i\121213BR.B\E2L7081R.D
Date : 14-DEC-2012 00:59
Client ID: AR16605Y2
Instrument: E2.i
Sample Info: AR16605Y2,AR16605Y2,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121217F.B\E2L7846F.D
Report Date: 26-Dec-2012 15:44

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121217F.B\E2L7846F.D
Lab Smp Id: AR16603YE Client Smp ID: AR16603YE
Inj Date : 17-DEC-2012 21:01
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16603YE,AR16603YE,,ar1660.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121217F.B\E2_LL_PCB_F.m
Meth Date : 18-Dec-2012 09:16 gappolonia Quant Type: ESTD
Cal Date : 14-DEC-2012 00:59 Cal File: E2L7081F.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

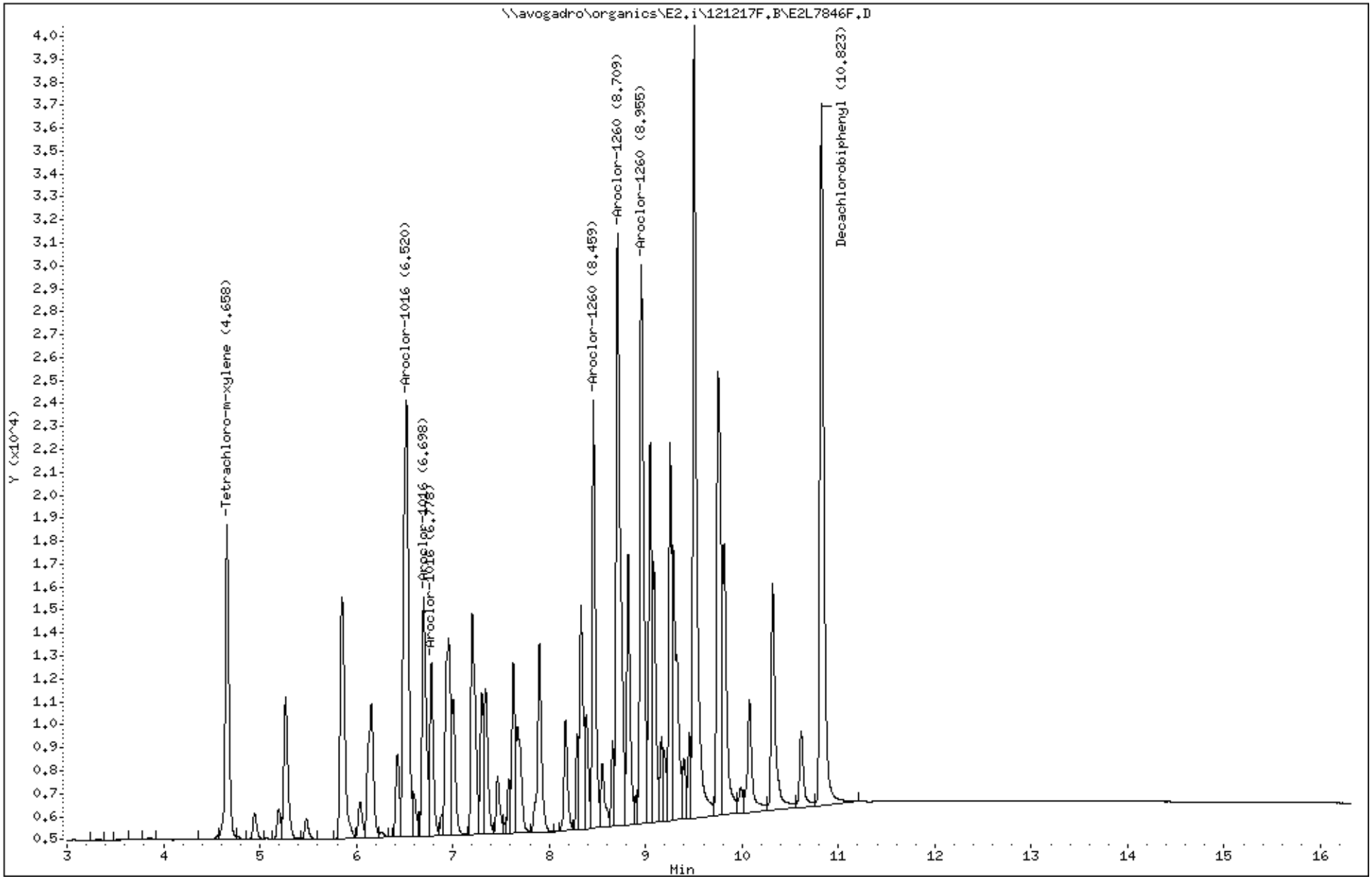
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
4.658	4.663	-0.005	13739	0.02000	0.020			(a)
5 Aroclor-1016					CAS #: 12674-11-2			
6.519	6.524	-0.005	19024	0.40000	0.39	80.00- 120.00	100.00	(a)
6.697	6.701	-0.004	10420	0.40000	0.40	34.83- 74.83	54.77	
6.777	6.782	-0.005	7518	0.40000	0.40	19.51- 59.51	39.52	
Average of Peak Amounts =					0.39667			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.823	10.828	-0.005	913368	0.04000	0.040			(a)
9 Aroclor-1260					CAS #: 11096-82-5			
8.459	8.462	-0.003	18642	0.40000	0.39	80.00- 120.00	100.00	(a)
8.709	8.712	-0.003	25843	0.40000	0.39	119.20- 159.20	138.63	
8.954	8.958	-0.004	24309	0.40000	0.40	105.02- 145.02	130.40	
Average of Peak Amounts =					0.39333			

Data File: \\avogadro\organics\E2.i\121217F.B\E2L7846F.D
Report Date: 26-Dec-2012 15:44

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121217F.B\E2L7846F.D
Date : 17-DEC-2012 21:01
Client ID: AR16603YE
Instrument: E2.i
Sample Info: AR16603YE,AR16603YE,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121217R.B\E2L7846R.D
Report Date: 26-Dec-2012 15:45

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\121217R.B\E2L7846R.D
Lab Smp Id: AR16603YE Client Smp ID: AR16603YE
Inj Date : 17-DEC-2012 21:01
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16603YE,AR16603YE,,ar1660.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121217R.B\E2_LL_PCB_R.m
Meth Date : 18-Dec-2012 09:21 gappolonia Quant Type: ESTD
Cal Date : 14-DEC-2012 00:59 Cal File: E2L7081R.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

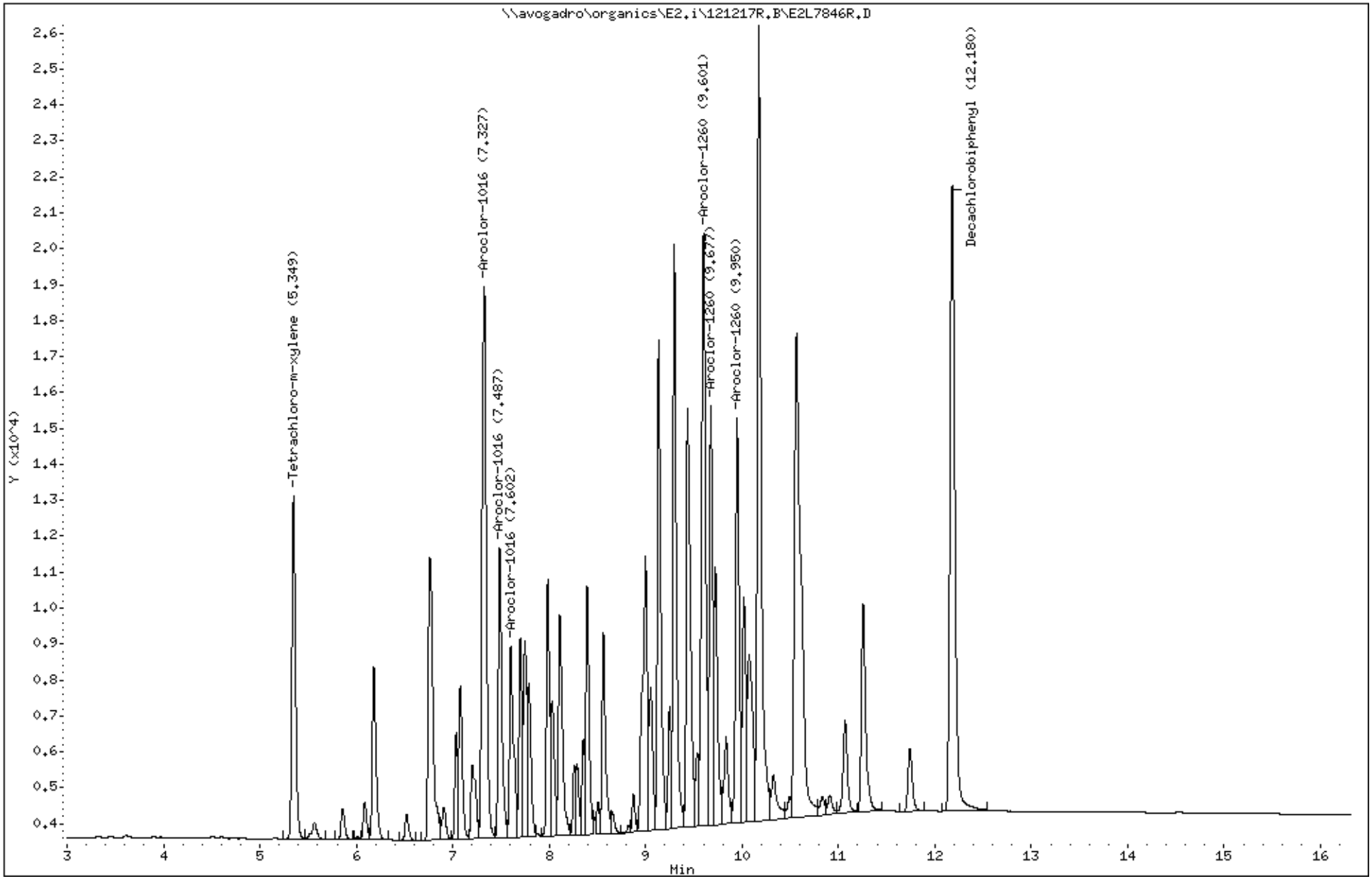
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
5.348	5.355	-0.007	9562	0.02000	0.021			(a)
6 Aroclor-1016						CAS #: 12674-11-2		
7.327	7.332	-0.005	15375	0.40000	0.39	80.00- 120.00	100.00	(a)
7.486	7.490	-0.004	8081	0.40000	0.40	32.31- 72.31	52.56	
7.602	7.605	-0.003	5323	0.40000	0.41	15.06- 55.06	34.62	
Average of Peak Amounts =				0.40000				
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
12.179	12.186	-0.007	17391	0.04000	0.041			(a)
8 Aroclor-1260						CAS #: 11096-82-5		
9.600	9.604	-0.004	16526	0.40000	0.40	80.00- 120.00	100.00	(a)
9.677	9.680	-0.003	11658	0.40000	0.39	49.02- 89.02	70.54	
9.949	9.953	-0.004	11270	0.40000	0.40	46.90- 86.90	68.20	
Average of Peak Amounts =				0.39667				

Data File: \\avogadro\organics\E2.i\121217R.B\E2L7846R.D
Report Date: 26-Dec-2012 15:45

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121217R.B\E2L7846R.D
Date : 17-DEC-2012 21:01
Client ID: AR16603YE
Instrument: E2.i
Sample Info: AR16603YE,AR16603YE,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121217F.B\E2L7862F.D
Report Date: 26-Dec-2012 15:44

Spectrum Analytical, Inc. RI Division

Quantitation Report
Data file : \\avogadro\organics\E2.i\121217F.B\E2L7862F.D
Lab Smp Id: AR16603YG Client Smp ID: AR16603YG
Inj Date : 18-DEC-2012 02:19
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16603YG,AR16603YG,,ar1660.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121217F.B\E2_LL_PCB_F.m
Meth Date : 18-Dec-2012 09:16 gappolonia Quant Type: ESTD
Cal Date : 14-DEC-2012 00:59 Cal File: E2L7081F.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

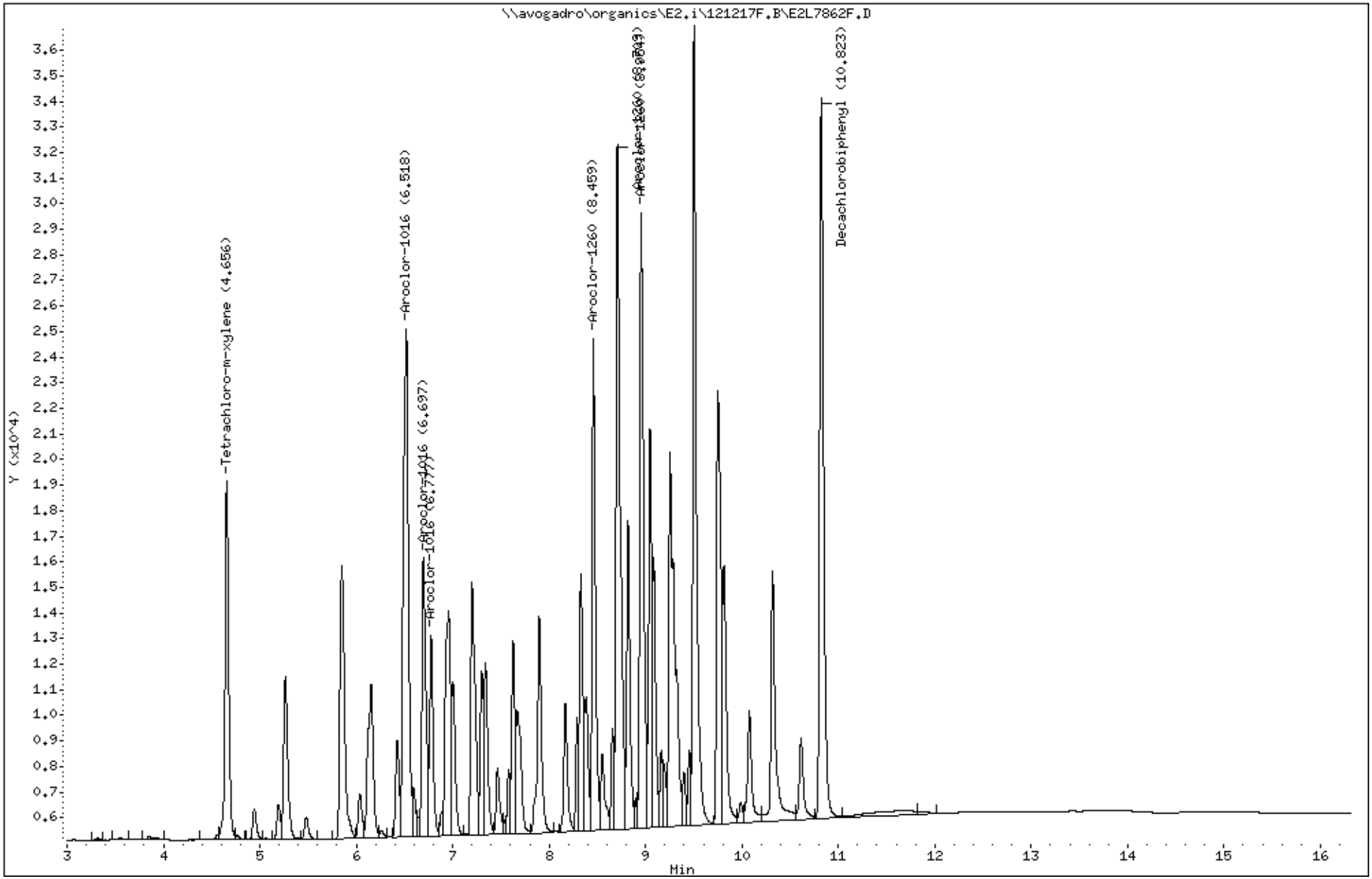
				AMOUNTS CAL-AMT	AMOUNTS ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8		
4.656	4.663	-0.007	14023	0.02000	0.021			(a)
5 Aroclor-1016						CAS #: 12674-11-2		
6.518	6.524	-0.006	19843	0.40000	0.41	80.00- 120.00		100.00(a)
6.696	6.701	-0.005	10879	0.40000	0.42	34.83- 74.83		54.83
6.776	6.782	-0.006	7839	0.40000	0.42	19.51- 59.51		39.51
Average of Peak Amounts =					0.41667			
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3		
10.823	10.828	-0.005	811316	0.04000	0.036			(a)
9 Aroclor-1260						CAS #: 11096-82-5		
8.458	8.462	-0.004	19242	0.40000	0.40	80.00- 120.00		100.00(a)
8.708	8.712	-0.004	26784	0.40000	0.40	119.20- 159.20		139.20
8.954	8.958	-0.004	24057	0.40000	0.40	105.02- 145.02		125.02
Average of Peak Amounts =					0.40000			

Data File: \\avogadro\organics\E2.i\121217F.B\E2L7862F.D
Report Date: 26-Dec-2012 15:44

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121217F.B\E2L7862F.D
Date : 18-DEC-2012 02:19
Client ID: AR16603YG
Instrument: E2.i
Sample Info: AR16603YG,AR16603YG,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121217R.B\E2L7862R.D
Report Date: 26-Dec-2012 15:45

Spectrum Analytical, Inc. RI Division

Quantitation Report
Data file : \\avogadro\organics\E2.i\121217R.B\E2L7862R.D
Lab Smp Id: AR16603YG Client Smp ID: AR16603YG
Inj Date : 18-DEC-2012 02:19
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : AR16603YG,AR16603YG,,ar1660.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121217R.B\E2_LL_PCB_R.m
Meth Date : 18-Dec-2012 09:21 gappolonia Quant Type: ESTD
Cal Date : 14-DEC-2012 00:59 Cal File: E2L7081R.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

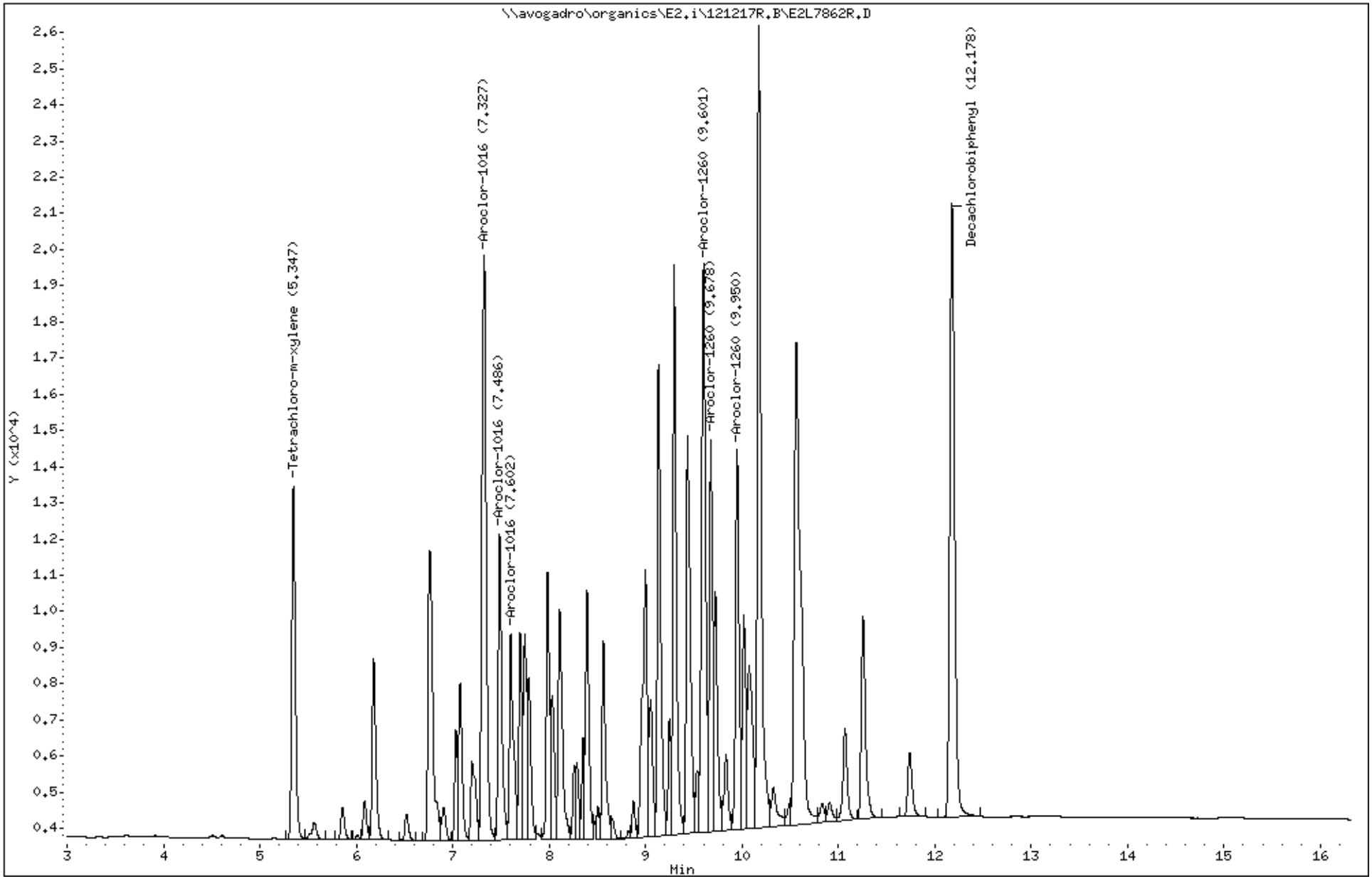
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
5.347	5.355	-0.008	9733	0.02000	0.021			(a)
6 Aroclor-1016					CAS #: 12674-11-2			
7.326	7.332	-0.006	16178	0.40000	0.42	80.00- 120.00	100.00	(a)
7.485	7.490	-0.005	8463	0.40000	0.42	32.31- 72.31	52.31	
7.601	7.605	-0.004	5672	0.40000	0.44	15.06- 55.06	35.06	
Average of Peak Amounts =					0.42667			
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
12.178	12.186	-0.008	16980	0.04000	0.040			(a)
8 Aroclor-1260					CAS #: 11096-82-5			
9.601	9.604	-0.003	15712	0.40000	0.38	80.00- 120.00	100.00	(a)
9.677	9.680	-0.003	10845	0.40000	0.36	49.02- 89.02	69.02	
9.949	9.953	-0.004	10512	0.40000	0.38	46.90- 86.90	66.90	
Average of Peak Amounts =					0.37333			

Data File: \\avogadro\organics\E2.i\121217R.B\E2L7862R.D
Report Date: 26-Dec-2012 15:45

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\121217R.B\E2L7862R.D
Date : 18-DEC-2012 02:19
Client ID: AR16603YG
Instrument: E2.i
Sample Info: AR16603YG,AR16603YG,,ar1660.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-69762

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-69762

Sample wt/vol: 1.0 (g/mL) G Lab File ID: E2L7850F.D/E2L7850R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) WASTE DIL Date Extracted: 12/17/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/17/2012

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	Q
12674-11-2	Aroclor-1016	990	U
11104-28-2	Aroclor-1221	990	U
11141-16-5	Aroclor-1232	990	U
53469-21-9	Aroclor-1242	990	U
12672-29-6	Aroclor-1248	990	U
11097-69-1	Aroclor-1254	990	U
11096-82-5	Aroclor-1260	990	U

Data File: \\avogadro\organics\E2.i\121217F.B\E2L7850F.D
Report Date: 26-Dec-2012 15:44

Spectrum Analytical, Inc. RI Division

Quantitation Report

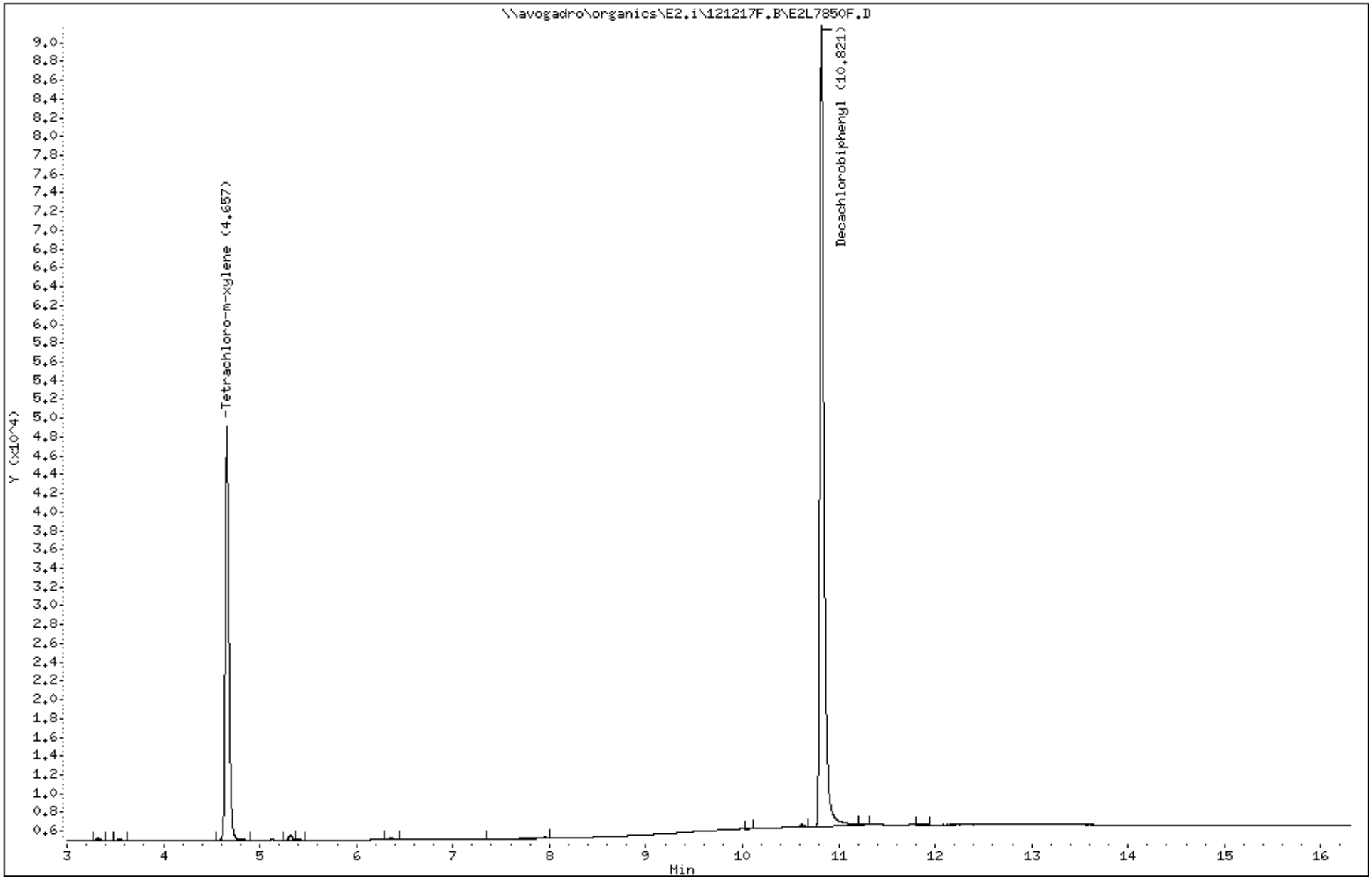
Data file : \\avogadro\organics\E2.i\121217F.B\E2L7850F.D
Lab Smp Id: MB-69762 Client Smp ID: MB-69762
Inj Date : 17-DEC-2012 22:21
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : MB-69762,MB-69762,69762,8082A.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121217F.B\E2_LL_PCB_F.m
Meth Date : 18-Dec-2012 09:16 gappolonia Quant Type: ESTD
Cal Date : 14-DEC-2012 00:59 Cal File: E2L7081F.D
Als bottle: 33 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: 8082A.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	1.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
4.656	4.663	-0.007	44154	0.06513	650		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
10.821	10.828	-0.007	2561231	0.11296	1100		

Data File: \\avogadro\organics\E2.i\121217F.B\E2L7850F.D
Date : 17-DEC-2012 22:21
Client ID: MB-69762
Instrument: E2.i
Sample Info: MB-69762,MB-69762,69762,8082A.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121217R.B\E2L7850R.D
Report Date: 26-Dec-2012 15:45

Spectrum Analytical, Inc. RI Division

Quantitation Report

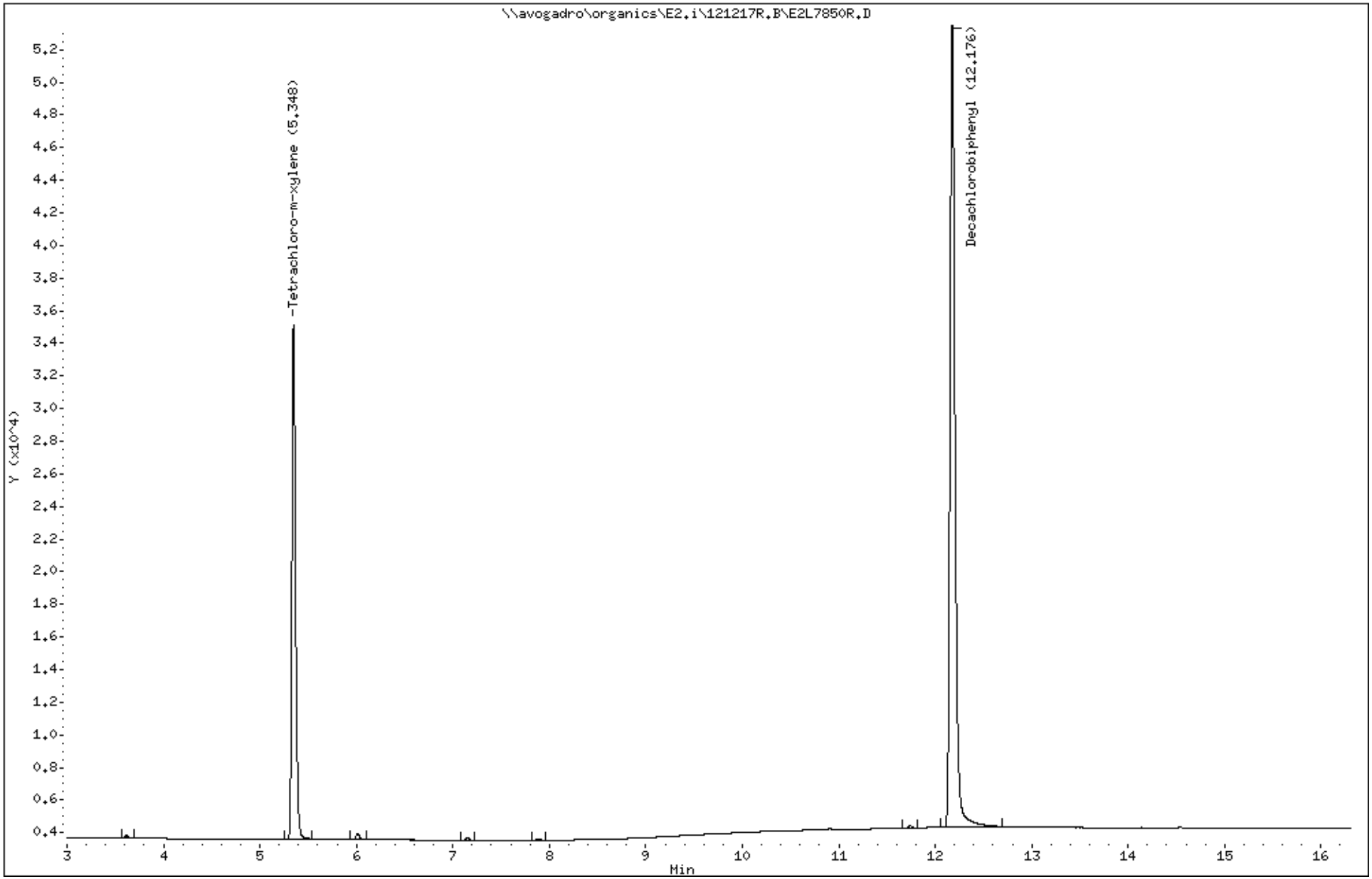
Data file : \\avogadro\organics\E2.i\121217R.B\E2L7850R.D
Lab Smp Id: MB-69762 Client Smp ID: MB-69762
Inj Date : 17-DEC-2012 22:21
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : MB-69762,MB-69762,69762,8082A.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121217R.B\E2_LL_PCB_R.m
Meth Date : 18-Dec-2012 09:21 gappolonia Quant Type: ESTD
Cal Date : 14-DEC-2012 00:59 Cal File: E2L7081R.D
Als bottle: 33 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: 8082A.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	1.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
5.347	5.355	-0.008	31547	0.06818	680		
$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
12.175	12.186	-0.011	49177	0.11488	1100		

Data File: \\avogadro\organics\E2.i\121217R.B\E2L7850R.D
Date : 17-DEC-2012 22:21
Client ID: MB-69762
Instrument: E2.i
Sample Info: MB-69762,MB-69762,69762,8082A.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-69762(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-69762

Sample wt/vol: 1 (g/mL) G Lab File ID: E2L7851F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) WASTE DIL Date Extracted: 12/17/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/17/2012

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	Q
12674-11-2	Aroclor-1016	4400	
11104-28-2	Aroclor-1221	990	U
11141-16-5	Aroclor-1232	990	U
53469-21-9	Aroclor-1242	990	U
12672-29-6	Aroclor-1248	990	U
11097-69-1	Aroclor-1254	990	U
11096-82-5	Aroclor-1260	4200	

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-69762(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-69762

Sample wt/vol: 1 (g/mL) G Lab File ID: E2L7851R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) WASTE DIL Date Extracted: 12/17/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/17/2012

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	Q
12674-11-2	Aroclor-1016	4400	
11104-28-2	Aroclor-1221	990	U
11141-16-5	Aroclor-1232	990	U
53469-21-9	Aroclor-1242	990	U
12672-29-6	Aroclor-1248	990	U
11097-69-1	Aroclor-1254	990	U
11096-82-5	Aroclor-1260	4500	

Data File: \\avogadro\organics\E2.i\121217F.B\E2L7851F.D
Report Date: 26-Dec-2012 15:44

Spectrum Analytical, Inc. RI Division

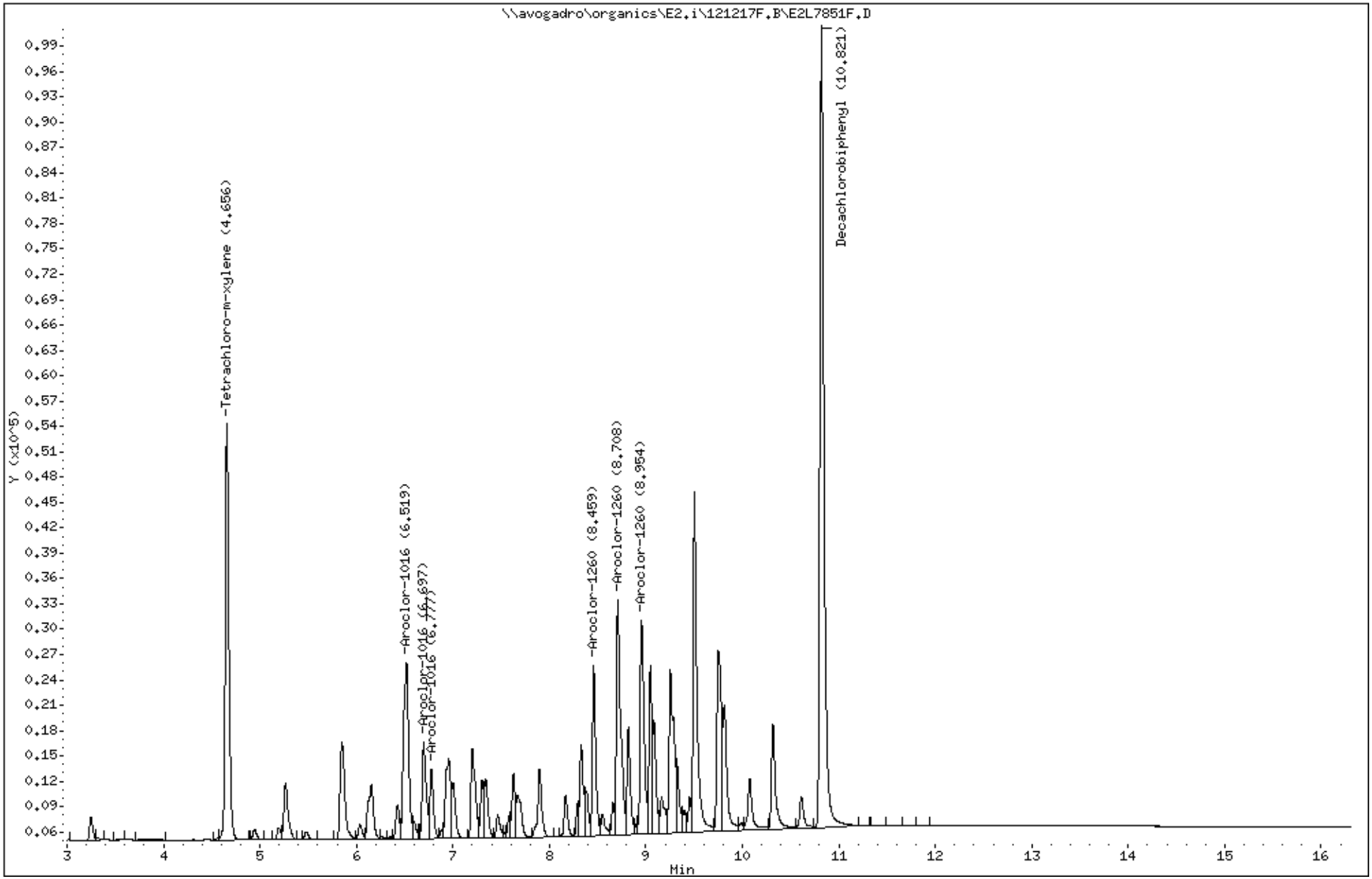
Quantitation Report
Data file : \\avogadro\organics\E2.i\121217F.B\E2L7851F.D
Lab Smp Id: LCS-69762 Client Smp ID: LCS-69762
Inj Date : 17-DEC-2012 22:40
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : LCS-69762,LCS-69762,69762,8082A.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121217F.B\E2_LL_PCB_F.m
Meth Date : 18-Dec-2012 09:16 gappolonia Quant Type: ESTD
Cal Date : 14-DEC-2012 00:59 Cal File: E2L7081F.D
Als bottle: 34 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: 8082A.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	1.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.656	4.663	-0.007	49272	0.07268	730		
5 Aroclor-1016					CAS #: 12674-11-2		
6.518	6.524	-0.006	20843	0.42753	4300	80.00- 120.00	100.00
6.696	6.701	-0.005	11432	0.43622	4400	34.83- 74.83	54.85
6.777	6.782	-0.005	8220	0.44368	4400	19.51- 59.51	39.44
Average of Peak Concentrations =					4400		
9 Aroclor-1260					CAS #: 11096-82-5		
8.458	8.462	-0.004	20151	0.42462	4200	80.00- 120.00	100.00
8.708	8.712	-0.004	27869	0.42177	4200	119.20- 159.20	138.30
8.954	8.958	-0.004	25289	0.41928	4200	105.02- 145.02	125.50
Average of Peak Concentrations =					4200		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
10.820	10.828	-0.008	2863135	0.12628	1300		

Data File: \\avogadro\organics\E2.i\121217F.B\E2L7851F.D
Date : 17-DEC-2012 22:40
Client ID: LCS-69762
Instrument: E2.i
Sample Info: LCS-69762,LCS-69762,69762,8082A.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121217R.B\E2L7851R.D
Report Date: 26-Dec-2012 15:45

Spectrum Analytical, Inc. RI Division

Quantitation Report

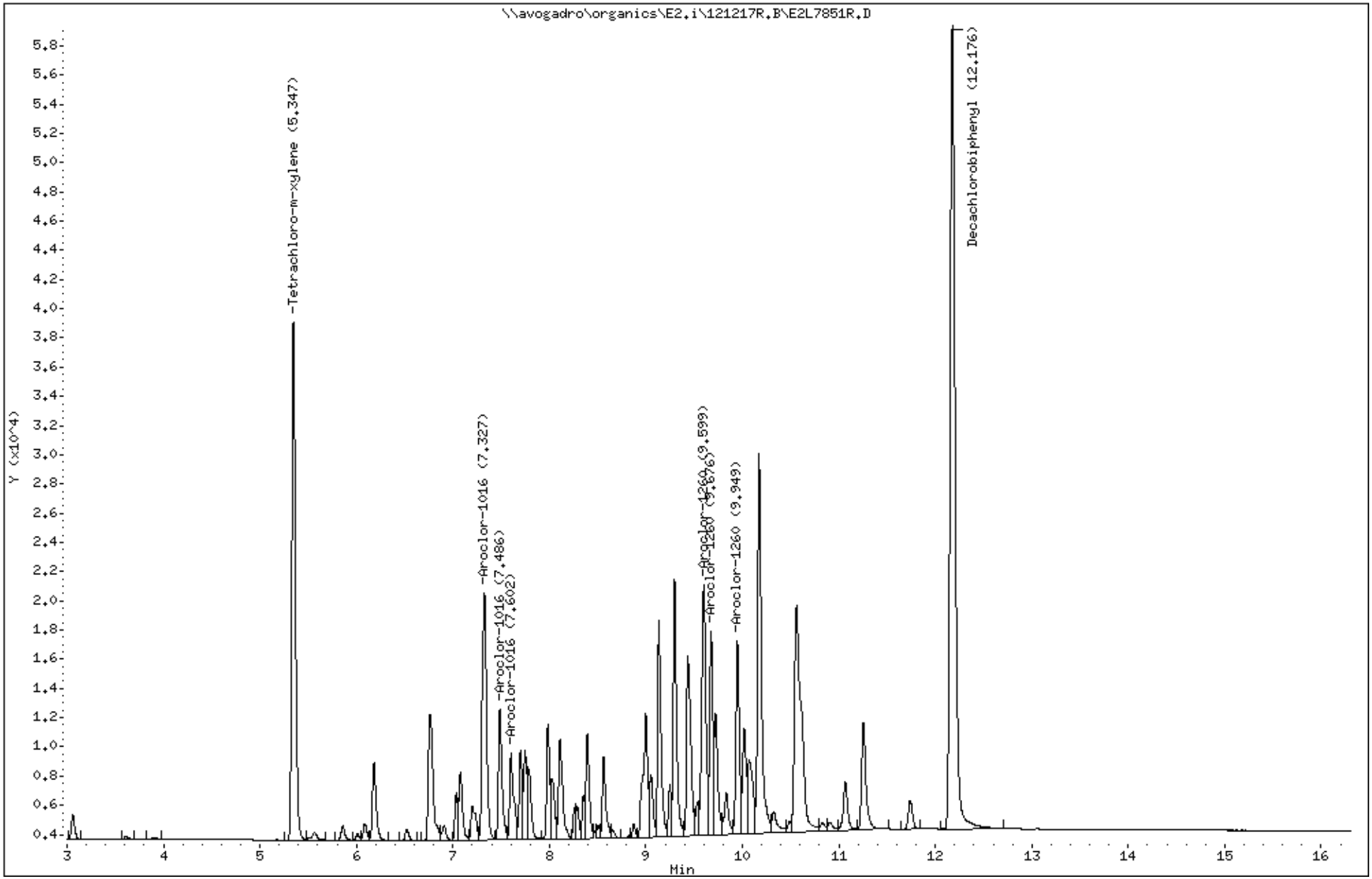
Data file : \\avogadro\organics\E2.i\121217R.B\E2L7851R.D
Lab Smp Id: LCS-69762 Client Smp ID: LCS-69762
Inj Date : 17-DEC-2012 22:40
Operator : DL   SRC: LIMS Inst ID: E2.i
Smp Info : LCS-69762,LCS-69762,69762,8082A.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121217R.B\E2_LL_PCB_R.m
Meth Date : 18-Dec-2012 09:21 gappolonia Quant Type: ESTD
Cal Date : 14-DEC-2012 00:59 Cal File: E2L7081R.D
Als bottle: 34 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: 8082A.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	1.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
5.346	5.355	-0.009	35489	0.07670	770		
6 Aroclor-1016					CAS #: 12674-11-2		
7.327	7.332	-0.005	16917	0.43405	4300	80.00- 120.00	100.00
7.486	7.490	-0.004	8919	0.44280	4400	32.31- 72.31	52.72
7.601	7.605	-0.004	5890	0.45602	4600	15.06- 55.06	34.82
Average of Peak Concentrations =					4400		
8 Aroclor-1260					CAS #: 11096-82-5		
9.599	9.604	-0.005	17151	0.41913	4200	80.00- 120.00	100.00
9.675	9.680	-0.005	14004	0.47120	4700	49.02- 89.02	81.65
9.948	9.953	-0.005	13198	0.47424	4700	46.90- 86.90	76.95
Average of Peak Concentrations =					4500		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
12.176	12.186	-0.010	55030	0.12855	1300		

Data File: \\avogadro\organics\E2.i\121217R.B\E2L7851R.D
Date : 17-DEC-2012 22:40
Client ID: LCS-69762
Instrument: E2.i
Sample Info: LCS-69762,LCS-69762,69762,8082A.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: LIMS
Column phase: CLPPestII
Column diameter: 0.32



1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
LCSD-69762(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-69762

Sample wt/vol: 1 (g/mL) G Lab File ID: E2L7852F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) WASTE DIL Date Extracted: 12/17/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/17/2012

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	Q
12674-11-2	Aroclor-1016	4400	
11104-28-2	Aroclor-1221	990	U
11141-16-5	Aroclor-1232	990	U
53469-21-9	Aroclor-1242	990	U
12672-29-6	Aroclor-1248	990	U
11097-69-1	Aroclor-1254	990	U
11096-82-5	Aroclor-1260	4300	

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
LCSD-69762(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2570 Mod. Ref No.: SDG No.: SL2570

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-69762

Sample wt/vol: 1 (g/mL) G Lab File ID: E2L7852R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) WASTE DIL Date Extracted: 12/17/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/17/2012

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	Q
12674-11-2	Aroclor-1016	4500	
11104-28-2	Aroclor-1221	990	U
11141-16-5	Aroclor-1232	990	U
53469-21-9	Aroclor-1242	990	U
12672-29-6	Aroclor-1248	990	U
11097-69-1	Aroclor-1254	990	U
11096-82-5	Aroclor-1260	4600	

Data File: \\avogadro\organics\E2.i\121217F.B\E2L7852F.D
Report Date: 26-Dec-2012 15:44

Spectrum Analytical, Inc. RI Division

Quantitation Report

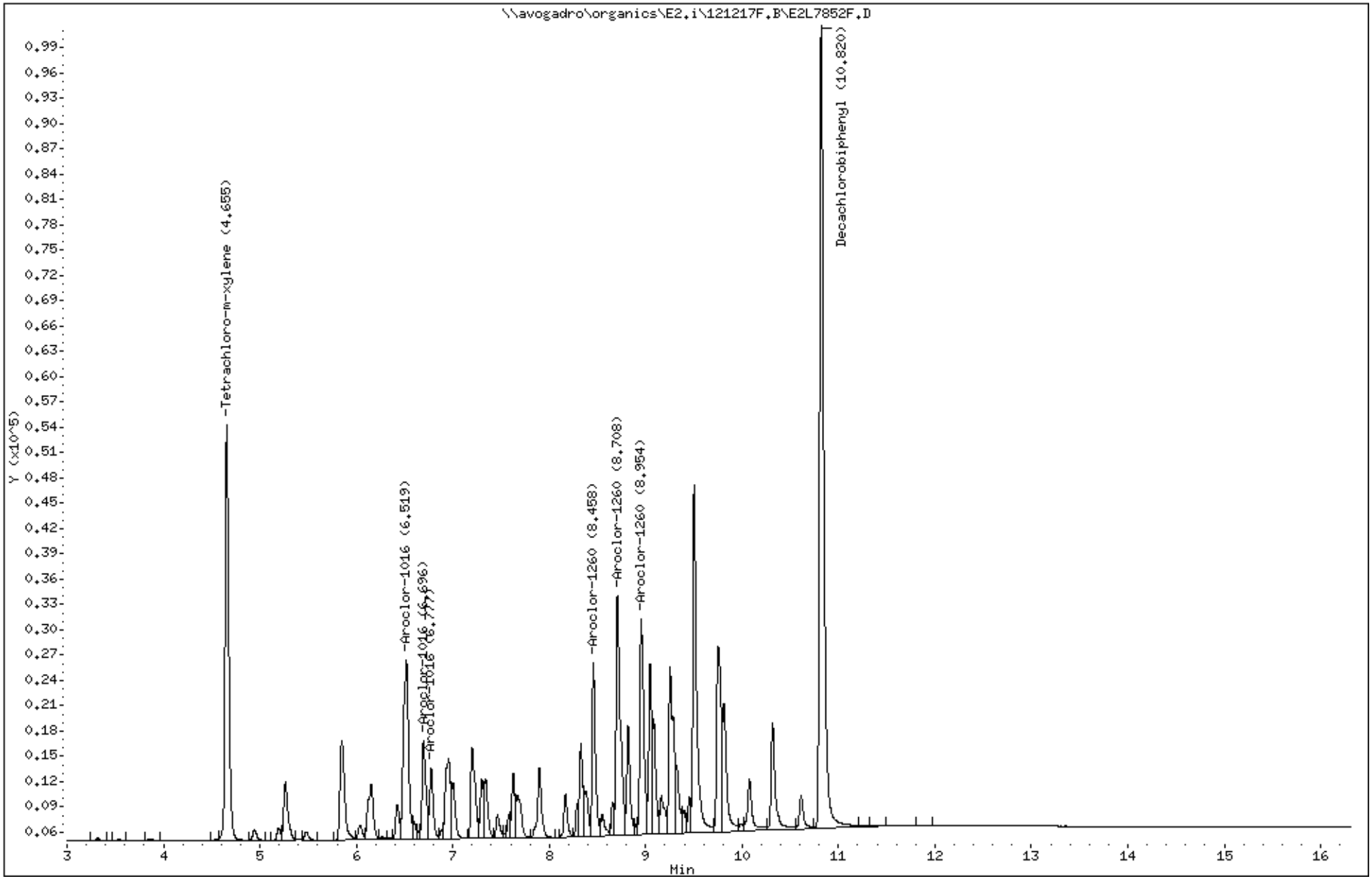
Data file : \\avogadro\organics\E2.i\121217F.B\E2L7852F.D
Lab Smp Id: LCSD-69762 Client Smp ID: LCSD-69762
Inj Date : 17-DEC-2012 23:00
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : LCSD-69762,LCSD-69762,69762,8082A.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121217F.B\E2_LL_PCB_F.m
Meth Date : 18-Dec-2012 09:16 gappolonia Quant Type: ESTD
Cal Date : 14-DEC-2012 00:59 Cal File: E2L7081F.D
Als bottle: 35 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: 8082A.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
4.655	4.663	-0.008	49320	0.07275	24		
5 Aroclor-1016					CAS #: 12674-11-2		
6.518	6.524	-0.006	21310	0.43711	140	80.00- 120.00	100.00
6.696	6.701	-0.005	11633	0.44389	150	34.83- 74.83	54.59
6.776	6.782	-0.006	8362	0.45135	150	19.51- 59.51	39.24
Average of Peak Concentrations =					150		
9 Aroclor-1260					CAS #: 11096-82-5		
8.458	8.462	-0.004	20582	0.43370	140	80.00- 120.00	100.00
8.707	8.712	-0.005	28345	0.42898	140	119.20- 159.20	137.72
8.953	8.958	-0.005	25583	0.42415	140	105.02- 145.02	124.30
Average of Peak Concentrations =					140		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
10.820	10.828	-0.008	2882301	0.12712	42		

Data File: \\avogadro\organics\E2.i\121217F.B\E2L7852F.D
Date : 17-DEC-2012 23:00
Client ID: LCSD-69762
Instrument: E2.i
Sample Info: LCSD-69762,LCSD-69762,69762,8082A.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPest
Column diameter: 0.32



Data File: \\avogadro\organics\E2.i\121217R.B\E2L7852R.D
Report Date: 26-Dec-2012 15:45

Spectrum Analytical, Inc. RI Division

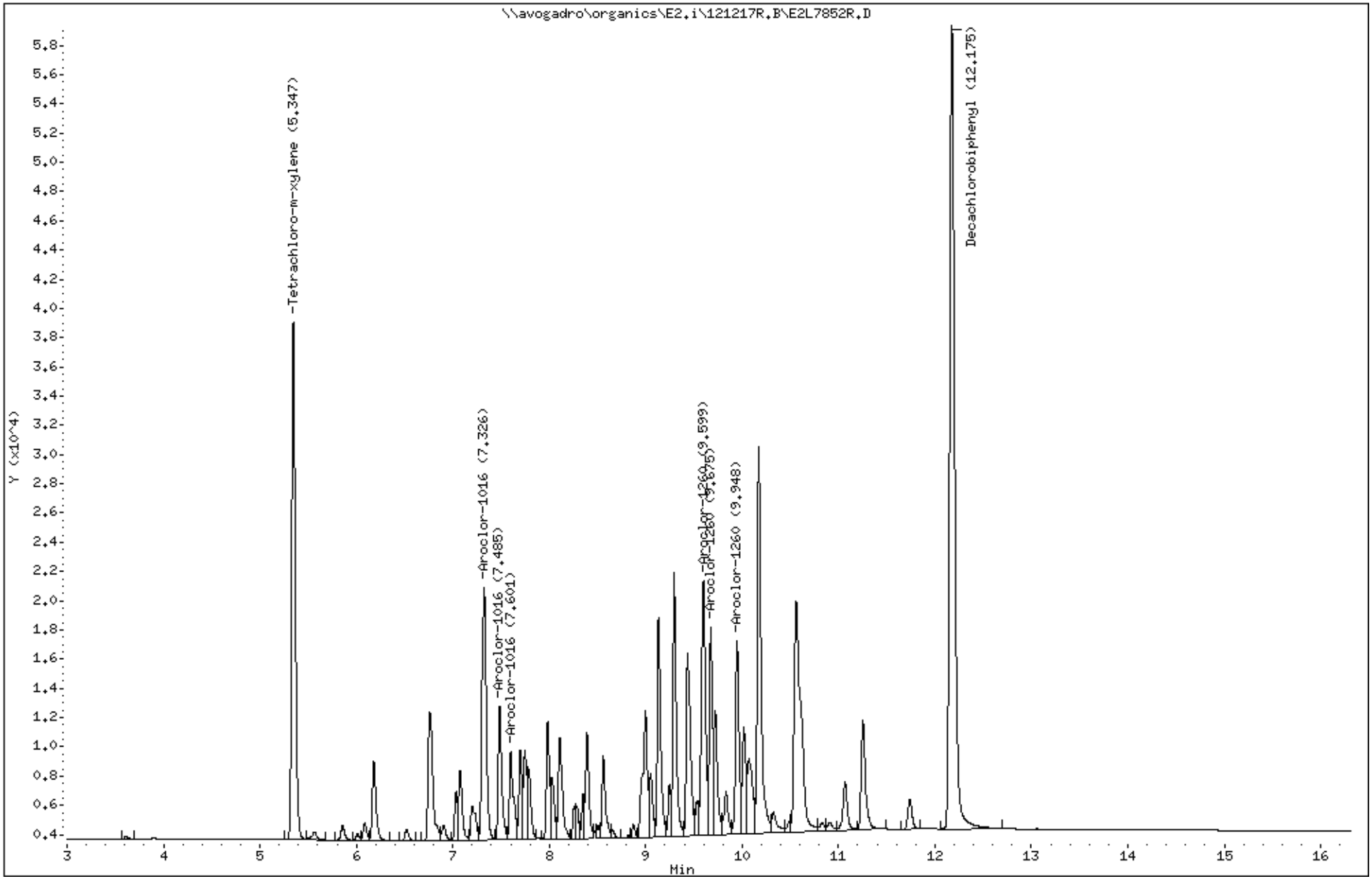
Quantitation Report
Data file : \\avogadro\organics\E2.i\121217R.B\E2L7852R.D
Lab Smp Id: LCSD-69762 Client Smp ID: LCSD-69762
Inj Date : 17-DEC-2012 23:00
Operator : DL   SRC: DL Inst ID: E2.i
Smp Info : LCSD-69762,LCSD-69762,69762,8082A.sub,,
Misc Info : 2,3,,1
Comment   :
Method   : \\avogadro\organics\E2.i\121217R.B\E2_LL_PCB_R.m
Meth Date : 18-Dec-2012 09:21 gappolonia Quant Type: ESTD
Cal Date : 14-DEC-2012 00:59 Cal File: E2L7081R.D
Als bottle: 35 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: 8082A.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET106

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVaria

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
5.346	5.355	-0.009	35407	0.07653	26		
6 Aroclor-1016					CAS #: 12674-11-2		
7.326	7.332	-0.006	17304	0.44398	150	80.00- 120.00	100.00
7.485	7.490	-0.005	9130	0.45328	150	32.31- 72.31	52.76
7.600	7.605	-0.005	5994	0.46407	150	15.06- 55.06	34.64
Average of Peak Concentrations =					150		
8 Aroclor-1260					CAS #: 11096-82-5		
9.598	9.604	-0.006	17429	0.42592	140	80.00- 120.00	100.00
9.674	9.680	-0.006	14265	0.47998	160	49.02- 89.02	81.85
9.947	9.953	-0.006	13270	0.47683	160	46.90- 86.90	76.14
Average of Peak Concentrations =					150		
$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
12.174	12.186	-0.012	54992	0.12846	43		

Data File: \\avogadro\organics\E2.i\121217R.B\E2L7852R.D
Date : 17-DEC-2012 23:00
Client ID: LCSD-69762
Instrument: E2.i
Sample Info: LCSD-69762,LCSD-69762,69762,8082A.sub,,
Volume Injected (uL): 1.0
Operator: DL SRC: DL
Column phase: CLPPestII
Column diameter: 0.32



Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

PREP BATCH REPORT

Prep Start Date: **12/17/2012 11:21**
Prep End Date: **12/17/2012 14:00**
Prep Batch ID: **69762**

Prep Code: **PCB_S_PR**
Technician: **Timothy McDaniel**

Prep Type: **WASTE DIL/SW3580A**

Prep Factor Units: **mL / g**

QC Matrix: NA2SO4
QC Matrix Lot: 121756

Solvent (1): MECL2
Solvent (1) Lot: DH 299

Solvent (3): HEXANE
Solvent (3) Lot: DH 335

Solvent (5): N/A
Solvent (5) Lot: N/A

Clean Up (1): N/A
Clean Up (1) Lot: N/A

Clean Up (3): N/A
Clean Up (1) Lot: N/A

Filter?: FILTER
Filter Lot: FC003203

Solvent (2): ACE
Solvent (2) Lot: 125597

Solvent (4): N/A
Solvent (4) Lot: N/A

Solvent (6): N/A
Solvent (6) Lot: N/A

Clean Up (2): N/A
Clean Up (2) Lot: N/A

Clean Up (4): N/A
Clean Up (4) Lot: N/A

Start Time: N/A
End Time: N/A

Cycles/Hour 0

Sonicator Tuned? Yes

Bath Temp1 (C): N/A

Therm ID1: N/A

Mitkem Sample ID	Client Samp ID	M	Initial (mL/g)	Final (mL)	Surrogate Spike ID	Surr (mL)	LCS/D MS/D Spike ID	Spike (mL)	A* Init	W* Init	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11	pH <2	CNCNTR Unit
MB-69762	BatchQC		1	10	OPW121010A	1			TM	JBW			12/17/12	JBW	R7		☐	☐	Turbo Vap 1
CLEAN UP (MB-69762): SW3665A/ACID_121217A (LOT: B00M5126) /tmcdaniel, SW3660B/CU_121217A (LOT: MKBH2986V) /tmcdaniel																			
LCS-69762	BatchQC		1	10	OPW121010A	1	OPW120810A	1	TM	JBW			12/17/12	JBW	R7		☐	☐	Turbo Vap 1
CLEAN UP (LCS-69762): SW3665A/ACID_121217A (LOT: B00M5126) /tmcdaniel, SW3660B/CU_121217A (LOT: MKBH2986V) /tmcdaniel																			
LCSD-69762	BatchQC		1	10	OPW121010A	1	OPW120810A	1	TM	JBW			12/17/12	JBW	R7		☐	☐	Turbo Vap 1
CLEAN UP (LCSD-69762): SW3665A/ACID_121217A (LOT: B00M5126) /tmcdaniel, SW3660B/CU_121217A (LOT: MKBH2986V) /tmcdaniel																			
L2570-01A	FORMER BLDG OIL	O	1	10	OPW121010A	1			TM	JBW	12/28/12	01	12/17/12	JBW	R7		☐	☐	Turbo Vap 1
CLEAN UP (L2570-01A): SW3665A/ACID_121217A (LOT: B00M5126) /tmcdaniel, SW3660B/CU_121217A (LOT: MKBH2986V) /tmcdaniel																			

Jodie B Warner — Analyst Reviewed — 12/17/2012 Date

Timothy McDaniel — Manager Reviewed — 12/17/2012 Date

Comments:

*A = Analyst (Spiked) *W = Witnessed (Spike) *T = Transferred

12/17/12

412

Logbook ID: 50.0149-12/12

Spectrum Analytical, Inc. RI Division - PEST/PCB RUN LOGBOOK: INSTRUMENT E2

Spectrum Analytical, Inc. RI Division E2 Injection Log
GC Semivolatiles Laboratory

METHOD: 8081B
ICAL DATE: 12/4/12
ANALYST: CMO

START BATCH: 121213BF.B
END BATCH: 121213BF.B

Start: 13-DEC-12 14:06
End: 14-DEC-12 09:34

Internal Standard:
Comments: STDs Page 39

Inlet Maintenance By:
Liner :
Column :
Inlet Seal: 6
Septum :

Reviewed By: [illegible] Manual Integration: CMO 12/14/12 MI Review: ~~MA~~ DL 12/14/12

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	SURROGATES FRONT TCMX	SURROGATES FRONT DCB	SURROGATES REAR TCMX	SURROGATES REAR DCB	DILN	FLAGS F	FLAGS R	ANALYST CHECK F	ANALYST CHECK R	COMMENTS
E2L7048F/R	14:06	AIBLKYA	AIBLKYA		AQ	124	257*	131	84	1			✓		
E2L7049F/R	14:26	AR12216Y2	AR12216Y2		AQ					1			✓		
E2L7050F/R	14:46	AR12211Y2	AR12211Y2		AQ					1			✓		
E2L7051F/R	15:06	AR12212Y2	AR12212Y2		AQ					1			✓		
E2L7052F/R	15:25	AR12213Y2	AR12213Y2		AQ					1			✓		
E2L7053F/R	15:45	AR12214Y2	AR12214Y2		AQ					1			✓		
E2L7054F/R	16:05	AR12215Y2	AR12215Y2		AQ					1			✓		
E2L7055F/R	16:25	AR12323Y2	AR12323Y2		AQ					1			✓		
E2L7056F/R	16:44	AR12421Y2	AR12421Y2		AQ					1			✓		
E2L7057F/R	17:04	AR12426Y2	AR12426Y2		AQ					1			✓		
E2L7058F/R	17:24	AR12422Y2	AR12422Y2		AQ					1			✓		
E2L7059F/R	17:44	AR12423Y2	AR12423Y2		AQ					1			✓		
E2L7060F/R	18:03	AR12424Y2	AR12424Y2		AQ					1			✓		
E2L7061F/R	18:23	AR12425Y2	AR12425Y2		AQ					1			✓		
E2L7062F/R	18:43	AR12481Y2	AR12481Y2		AQ					1			✓		
E2L7063F/R	19:03	AR12486Y2	AR12486Y2		AQ					1			✓		
E2L7064F/R	19:23	AR12482Y2	AR12482Y2		AQ					1			✓		
E2L7065F/R	19:43	AR12483Y2	AR12483Y2		AQ					1			✓		
E2L7066F/R	20:02	AR12484Y2	AR12484Y2		AQ					1			✓		
E2L7067F/R	20:22	AR12485Y2	AR12485Y2		AQ					1			✓		
E2L7068F/R	20:42	AR12541Y2	AR12541Y2		AQ					1			✓		MI_F8
E2L7069F/R	21:02	AR12546Y2	AR12546Y2		AQ					1			✓		MI_F8
E2L7070F/R	21:22	AR12542Y2	AR12542Y2		AQ					1			✓		
E2L7071F/R	21:41	AR12543Y2	AR12543Y2		AQ					1			✓		
E2L7072F/R	22:01	AR12544Y2	AR12544Y2		AQ					1			✓		
E2L7073F/R	22:21	AR12545Y2	AR12545Y2		AQ					1			✓		
E2L7074F/R	22:41	AR12623Y2	AR12623Y2		AQ					1			✓		

E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
* - Surrogate is outside of control limits
D - Surrogate is diluted

CMO 12/14/12

Logbook ID 60.0176-11/12

Spectrum Analytical, Inc. RI Division - PEST/PCB RUN LOGBOOK: INSTRUMENT E2

Spectrum Analytical, Inc. RI Division E2 Injection Log
GC Semivolatiles Laboratory

METHOD: ~~8082~~ 8082A
ICAL DATE: 12/14/12
ANALYST: QUAN

START BATCH: 121213BF.B
END BATCH: 121213BF.B

Start: 13-DEC-12 14:06
End: 14-DEC-12 09:34

Internal Standard:
Comments:

STDs Page 39

Inlet Maintenance By:
Liner : —
Column :
Inlet Seal: 5
Septum :

Reviewed By: DLR 12/19/12
Manual Integration: N/A
MI Review: na

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	SURROGATES FRONT TCMX	SURROGATES FRONT DCB	SURROGATES REAR TCMX	SURROGATES REAR DCB	DILN	FLAGS F	FLAGS R	ANALYST CHECK F	ANALYST CHECK R	COMMENTS
E2L7075F/R	23:01	AR12683Y2	AR12683Y2		AQ					1			✓		
E2L7076F/R	23:21	AR16601Y2	AR16601Y2		AQ					1			✓		
E2L7077F/R	23:41	AR16606Y2	AR16606Y2		AQ					1			✓		
E2L7078F/R	00:00	AR16602Y2	AR16602Y2		AQ					1			✓		
E2L7079F/R	00:20	AR16603Y2	AR16603Y2		AQ					1			✓		
E2L7080F/R	00:40	AR16604Y2	AR16604Y2		AQ					1			✓		
E2L7081F/R	00:59	AR16605Y2	AR16605Y2		AQ					1			✓		
E2L7082F/R	01:19	AR1660ICV2Y	AR1660ICV2Y		AQ					1			✓		
E2L7083F/R	01:39	AIBLKYA	AIBLKYA		AQ					1			✓		
E2L7084F/R	01:59	AR16603YA	AR16603YA		AQ					1			✓		
E2L7085F/R	02:19	AR12213Y2	AR12213Y2		AQ					1			✓		
E2L7086F/R	02:38	AR12483YA	AR12483YA		AQ					1			✓		
E2L7087F/R	02:58	AR12423YA	AR12423YA		AQ					1			✓		
E2L7088F/R	03:18	AR12543YA	AR12543YA		AQ					1			✓		
E2L7089F/R	03:38	MB-69649	ABLK2A	69649	AQ	95	86	98	87	1			—		
E2L7090F/R	03:57	LCS-69649	ALCS2A	69649	AQ	92	83	94	83	1			—		
E2L7091F/R	04:17	L2529-06A	X0Z44	69649	AQ	75	64	76	65	1			—		
E2L7092F/R	04:37	MB-69656	ABLK2B	69656	SL	89	84	92	84	1			—		
E2L7093F/R	04:57	LCS-69656	ALCS2B	69656	SL	88	84	90	85	1			—		
E2L7094F/R	05:16	L2529-11A	X0Z49	69656	SL	75	74	77	76	1			—		
E2L7095F/R	05:36	AIBLKYB	AIBLKYB		AQ					1			✓		
E2L7096F/R	05:56	AR16603YB	AR16603YB		AQ					1			✓		
E2L7097F/R	06:16	AR12213YB	AR12213YB 12/14/12		AQ					1			✓		
E2L7098F/R	06:36	AR12423YB	AR12423YB		AQ					1			✓		
E2L7099F/R	06:56	AR12543YB	AR12543YB		AQ					1			✓		
E2L7800F/R	07:15	AR12483YB	AR12483YB		AQ					1			✓		
E2L7801F/R	07:35	MB-69722	MB-69722	69722	SL	94	90	97	89	1			✓		

sam only

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

lamp 12/14/12

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: CEMD
ICAL DATE: 12/13/12

START BATCH: 121213BF.B Start: 13-DEC-12 14:
END BATCH: 121213BF.B End: 14-DEC-12 09:3

Internal Standard:
Comments:

STDs Page 39

Inlet Maintenance By:
Liner :
Column :
Inlet Seal:
Septum :

Reviewed By: DLM/MP Manual Integration: N/A MI Review: na

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	SURROGATES FRONT TCMX	SURROGATES FRONT DCB	SURROGATES REAR TCMX	SURROGATES REAR DCB	DILN	FLAGS F	FLAGS R	ANALYST CHECK F	ANALYST CHECK R	COMMENTS
E2L7802F/R	07:55	LCS-69722	LCS-69722	69722	SL	93	89	95	88	1			✓		
E2L7803F/R	08:15	LCSD-69722	LCSD-69722	69722	SL	96	91	100	91	1			✓		
E2L7804F/R	08:35	L2548-01A	MW7-CS-BOT1	69722	SL	66	75	68	77	1			✓		
E2L7805F/R	08:55	AIBLKYC	AILBKYC		AQ					1			✓		
E2L7806F/R	09:14	AR16603YC	AR16603YC		AQ					1			✓		
E2L7808F/R	09:34	AR12423YC	AR12423YC		AQ					1			✓	✓	
										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

CEMD 12/14/12

Comments

Reviewed

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: CWM
ICAL DATE: 12/13/12

START BATCH: 121217F.B Start: 17-DEC-12 09:31
END BATCH: 121217F.B End: 18-DEC-12 03:18

Internal Standard:
Comments: STDs Peak 39

Inlet Maintenance By:
Liner :
Column : J
Inlet Seal:
Septum :

Reviewed By: CWM 12/18/12 Manual Integration: N/A MI Review: NA

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	SURROGATES FRONT TCMX	SURROGATES FRONT DCB	SURROGATES REAR TCMX	SURROGATES REAR DCB	DILN	FLAGS F	FLAGS R	ANALYST CHECK F	ANALYST CHECK R	COMMENTS
E2L7812F/R	09:31	AIBLKYD	AILBKYD		AQ					1			✓		
E2L7813F/R	09:51	AR16603YD	AR16603YD		AQ					1			✓	✓	
E2L7814F/R	10:11	AR12423YD	AR12423YD		AQ					1			✓	✓	
E2L7815F/R	10:31	AR12483YD	AR12483YD		AQ					1			✓	✓	
E2L7816F/R	10:51	AR1254YD	AR12543YD		AQ					1			✓	✓	
E2L7817F/R	11:10	MB-69737	MB-69737	69737	SL	89	82	93	82	1			✓		
E2L7818F/R	11:30	LCS-69737	LCS-69737	69737	SL	92	85	96	86	1			✓		
E2L7819F/R	11:50	L2560-01A	CS-K1(2)_12/12/	69737	SL	74	67	76	72	1			✓		
E2L7820F/R	12:09	L2560-02A	CS-K2(2)_12/12/	69737	SL	70	67	72	70	1			✓		
E2L7821F/R	12:29	L2560-03A	CS-J1(12)_12/12	69737	SL	70	68	72	71	1			✓		
E2L7822F/R	12:49	L2560-04A	CS-J2(12)_12/12	69737	SL	74	68	77	73	1			✓		
E2L7823F/R	13:08	L2560-05A	CS-J3(12)_12/12	69737	SL	73	66	76	72	1			✓		
E2L7824F/R	13:28	L2560-06A	CS-J4(12)_12/12	69737	SL	73	68	76	71	1			✓		
E2L7825F/R	13:48	L2560-07A	CS-J5(12)_12/12	69737	SL	71	68	74	69	1			✓		
E2L7826F/R	14:08	L2560-08A	CS-L1(3)_12/12/	69737	SL	77	77	81	76	1			✓		TC.
E2L7827F/R	14:27	L2560-14A	CS-N1(3)_12/12/	69737	SL	68	63	70	66	1			✓		
E2L7828F/R	15:06	L2560-14AMS	CS-N1(3)_12/12/	69737	SL	72	69	75	72	1			✓		
E2L7829F/R	15:26	L2560-14AMSD	CS-N1(3)_12/12/	69737	SL	71	66	73	70	1			✓		
E2L7830F/R	15:45	MB-69748	MB-69748	69748	SL	88	83	92	86	1			✓		
E2L7831F/R	16:05	LCS-69748	LCS-69748	69748	SL	84	83	87	86	1			✓		
E2L7832F/R	16:24	L2565-01A	CS-B1(2)_12/13/	69748	SL	72	71	74	74	1			✓		TC
E2L7833F/R	16:44	L2565-02A	CS-B2(2)_12/13/	69748	SL	71	71	74	75	1			✓		
E2L7834F/R	17:04	L2565-03A	CS-B3(2)_12/13/	69748	SL	67	76	70	73	1			✓		
E2L7835F/R	17:23	L2565-04A	CS-B4(2)_12/13/	69748	SL	64	78	67	72	1			✓		
E2L7836F/R	17:43	L2565-05A	CS-B5(2)_12/13/	69748	SL	74	83	77	77	1			✓		
E2L7837F/R	18:03	L2565-05AMS	CS-B5(2)_12/13/	69748	SL	71	77	74	74	1			✓		
E2L7838F/R	18:23	L2565-05AMSD	CS-B5(2)_12/13/	69748	SL	73	76	76	76	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

CWM 12/18/12

Spectrum Analytical, Inc. RI Division - PEST/PCB RUN LOGBOOK: INSTRUMENT E2

Spectrum Analytical, Inc. RI Division E2 Injection Log
GC Semivolatiles Laboratory

METHOD: 8082A
ICAL DATE: 12/13/12
ANALYST: [illegible]

START BATCH: 121217F.B
END BATCH: 121217F.B

Start: 17-DEC-12 09:31
End: 18-DEC-12 03:18

Internal Standard:
Comments: STDS Page 39

Inlet Maintenance By:
Liner :
Column :
Inlet Seal: b
Septum :

Reviewed By: 12/18/12
Manual Integration: N/D
MI Review: 12/18/12

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	SURROGATES FRONT TCMX	SURROGATES FRONT DCB	SURROGATES REAR TCMX	SURROGATES REAR DCB	DILN	FLAGS F	FLAGS R	ANALYST CHECK F	ANALYST CHECK R	COMMENTS
E2L7839F/R	18:43	L2565-06A	CS-B6(2)_12/13/	69748	SL	70	77	72	76	1			✓		
E2L7840F/R	19:02	L2567-01A	CS-I1(11)_12/13	69748	SL	71	70	73	71	1			✓		
E2L7841F/R	19:22	L2567-02A	CS-I2(11)_12/13	69748	SL	72	74	74	75	1			✓		
E2L7842F/R	19:42	L2567-03A	CS-I3(11)_12/13	69748	SL	77	77	80	77	1			✓		
E2L7843F/R	20:02	L2567-04A	CS-I4(11)_12/13	69748	SL	71	72	74	73	1			✓		
E2L7844F/R	20:22	L2567-05A	CS-I5(11)_12/13	69748	SL	75	78	78	78	1			✓		
E2L7845F/R	20:41	AIBLKYE	AILBKYE		AQ					1			✓		
E2L7846F/R	21:01	AR16603YE	AR16603YE		AQ					1			✓	✓	
E2L7847F/R	21:21	AR12423YE	AR12423YE		AQ					1			✓	✓	
E2L7848F/R	21:41	AR12543YE	AR12543YE		AQ					1			✓	✓	
E2L7849F/R	22:01	AR12483YE	AR12483YE		AQ					1			✓	✓	
E2L7850F/R	22:21	MB-69762	MB-69762	69762	SL	108	94	114	96	1			✓	✓	
E2L7851F/R	22:40	LCS-69762	LCS-69762	69762	SL	121	105	128	107	1			✓		
E2L7852F/R	23:00	LCSD-69762	LCSD-69762	69762	SL	121	106	128	107	1			✓		
E2L7853F/R	23:20	L2570-01A	FORMER BLDG OIL	69762	SL	81	94	91	83	1			✓		
E2L7854F/R	23:40	AIBLKYD	AILBKYD		AQ					1			✓		LCD
E2L7855F/R	00:00	AIBLKYD	AILBKYD		AQ					1			—		
E2L7856F/R	00:20	AIBLKYD	AILBKYD		AQ					1			—		
E2L7857F/R	00:39	AIBLKYD	AILBKYD		AQ					1			—		
E2L7858F/R	00:59	AIBLKYD	AILBKYD		AQ					1			—		
E2L7859F/R	01:19	AIBLKYD	AILBKYD		AQ					1			—		
E2L7860F/R	01:39	AIBLKYD	AILBKYD		AQ					1			—		
E2L7861F/R	01:59	AIBLKYG	AILBKYG		AQ					1			—		
E2L7862F/R	02:19	AR16603YG	AR16603YG		AQ					1			✓		
E2L7863F/R	02:39	AR12423YG	AR12423YG		AQ					1			✓	✓	
E2L7864F/R	02:58	AR12483YG	AR12483YG		AQ					1			✓	✓	
E2L7865F/R	03:18	AR12543YG	AR12543YG		AQ					1			✓	✓	

E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
* - Surrogate is outside of control limits
D - Surrogate is diluted

[illegible] 12/18/12

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* Total Petroleum Hydrocarbons *

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : LaBella Associates

Project: LaBella Stand By - Monoco

Laboratory Workorder / SDG #: L2570

SW846 8015D TPH, Total Petroleum Hydrocarbons (TPH) by GC-FID

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 8015D TPH

IV. PREPARATION

Soil Samples were prepared following procedures in laboratory test code: SW3580

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: F1
Instrument Type: GC-FID
Description: HP6890
Manufacturer: Hewlett-Packard
Model: 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.

FORMER BLDG OIL (L2570-01A) Surrogate outside of QC limit due to dilution, recovery is below criteria for ortho-Terphenyl at 0% with criteria of (50-150).

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

No client-requested MS/MSD analyses were included in this SDG.

E. Dilutions:

The following samples were analyzed at dilution:

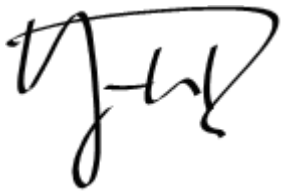
FORMER BLDG OIL (L2570-01A) : Dilution Factor: 20

F. Samples:

Sample resembles #6 fuel oil.

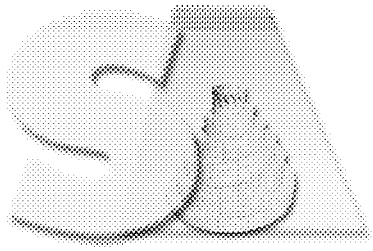
No other unusual occurrences were noted during sample analysis.

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:_____12/30/2012_____



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

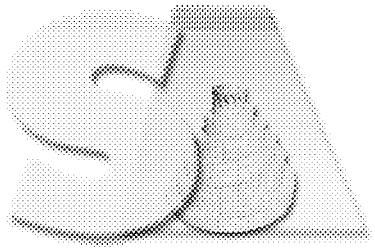
E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

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

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

12/28/2012

Client: LaBella Associates
Client Sample ID: FORMER BLDG OIL
Lab ID: L2570-01
Project: LaBella Stand By - Monoco
Collection Date: 12/13/12 15:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8015D TPH -- Total Petroleum Hydrocarbons (TPH) by GC-FID							**TPH_S**
Extractable Total Petroleum Hydrocarbon	340000		42000	mg/Kg	20	12/17/2012 21:38	69761
Surrogate: ortho-Terphenyl	0	S	50-150	%REC	20	12/17/2012 21:38	69761

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Analysis Report: Fuel Identification

Client: LABELLA

Project: Labella Stand By

Analysis: Fuel ID

Lab ID	Client ID	Result
L2570-01A	FORMER BLDG OIL	Resembles #6 Fuel Oil

(*) Lab reference standards included:

Diesel Fuel/ #2 Fuel Oil
Motor Oil
#4 Fuel Oil
#5 Fuel Oil
#6 Fuel Oil
Unleaded Gasoline
Aviation Gasoline
Jet Fuel A
Kerosene
Creosote
Mineral Spirits
Hydraulic Oil
JP-4
JP-5
Transmission Fluid
Coal Tar
Transformer Oil

Data File: \\Avogadro\Organics\F1.I\121217.B\F1J0139.D
Lab Smp Id: L2570-01A BN: 69761 Client Smp ID: FORMER BLDG OIL
Misc : | TPH 20X DIL Inst ID: F1.I
Signal(s) : FID1A.CH
Inj Date : 17 Dec 2012 21:38 Operator: TM
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Dec 18 06:45:23 2012
Quant Method : O:\F1.I\QMETHODS\TPH1113.M
Quant Title : TPH, ETPH, DRO, Fuel ID, ORO
Response via : Initial Calibration
Volume Inj. : 2 uL
Signal Phase : DB-5MS
Signal Info : 0.32

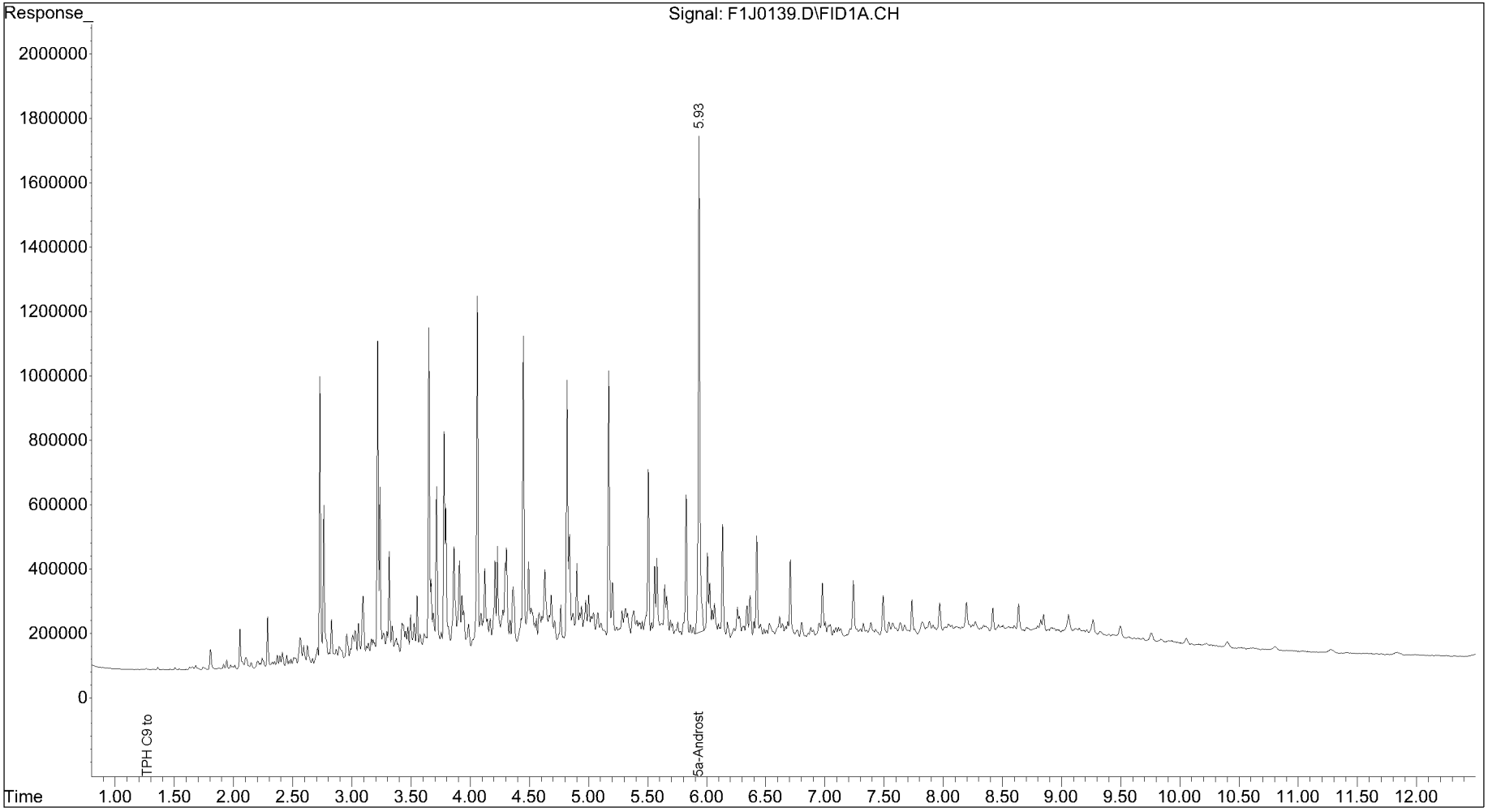
	Compound	R.T.	Response	Conc Units
	Internal Standards			
11) I	5a-Androstane	5.93	14600869	40.000 ug/mL
	System Monitoring Compounds			
	Target Compounds			
4) H	TPH C9 to C36	1.28	664139207	1678.770 ug/mL
	Integration Range:		1.28 to 10.05 minutes	
	Raw Range Area:		693982831	
	Corrected Range Area (IS,SS):		679251430	
	Instrument Blank Area (F1J0135):		15112223	

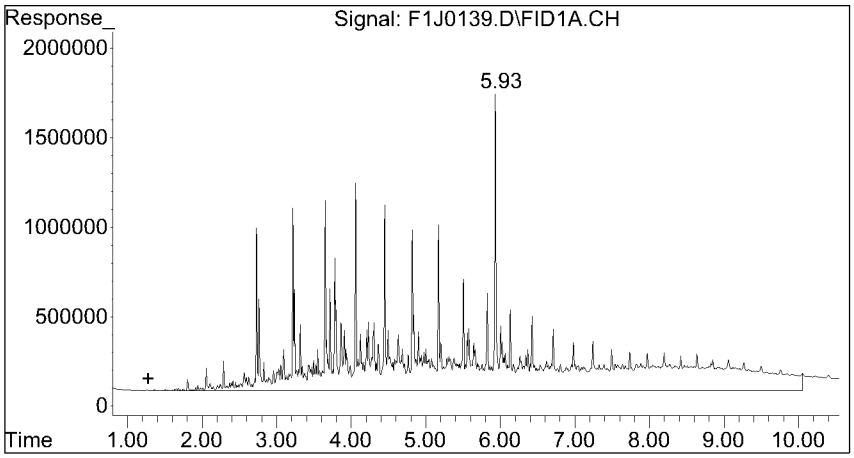
Corrected Range Area = Raw Range Area - Internal and Surrogate Area
Reported Area = Corrected Range Area - Instrument Blank Area

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: \\Avogadro\Organics\F1.I\121217.B\F1J0139.D
Lab Smp Id: L2570-01A BN: 69761 Client Smp ID: FORMER BLDG OIL
Misc : | TPH 20X DIL Inst ID: F1.I
Signal(s) : FID1A.CH
Inj Date : 17 Dec 2012 21:38 Operator: TM
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Dec 18 06:45:23 2012
Quant Method : O:\F1.I\QMETHODS\TPH1113.M
Quant Title : TPH, ETPH, DRO, Fuel ID, ORO
Response via : Initial Calibration
Volume Inj. : 2 uL
Signal Phase : DB-5MS
Signal Info : 0.32





#4 TPH C9 to C36

R.T.: 1.280 min
Delta R.T.: 0.000 min
Response: 664139207
Conc: 1678.77 ug/mL m

Response Factor Report FID1

Method Path : O:\F1.I\QMETHODS\
Method File : TPH1113.M
Title : TPH, ETPH, DRO, Fuel ID, ORO
Last Update : Wed Nov 21 10:41:51 2012
Response Via : Initial Calibration

Calibration Files
5 =F1H9712.D 20 =F1H9714.D 50 =F1H9716.D
80 =F1H9717.D 100 =F1H9718.D 120 =F1H9719.D

		Compound	5	20	50	80	100	120	Avg		%RSD
1)	S	1-Chlorooctadeca							0.000		-1.00
2)	S	ortho-Terphenyl	4.364	4.513	4.560	4.565	5.116	4.452	4.597	E5	4.90
3)	H	DRO C10 to C28	3.752	3.828	3.962	3.996	4.472	3.790	3.980	E5	5.67
4)	H	TPH C9 to C36	3.752	3.812	3.934	3.971	4.449	3.762	3.956	E5	5.62
5)	H	Gasoline							0.000		-1.00
6)	H	Jet Fuel							0.000		-1.00
7)	H	Motor Oil/Other							0.000		-1.00
8)	H	Number 2 Fuel							0.000		-1.00
9)	H	Number 4 Fuel							0.000		-1.00
10)	H	Number 6 Fuel							0.000		-1.00
11)	I	5a-Androstane	----------ISTD----------								
12)	S	1-Chlorooctadeca							0.000		-1.00
13)	S	ortho-Terphenyl	1.015	1.089	1.031	1.032	1.059	1.079	1.057		2.80
14)	T	C9 Nonane	0.669	0.710	0.702	0.716	0.730	0.733	0.724		4.71
15)	TD	C10 Decane	0.686	0.738	0.734	0.748	0.763	0.766	0.755		5.15
16)	TD	C12 Dodecane	0.728	0.795	0.793	0.804	0.817	0.827	0.810		5.29
17)	TD	C14 Tetradecane	0.792	0.862	0.853	0.856	0.870	0.878	0.866		4.33
18)	TD	C16 Hexadecane	0.860	0.911	0.896	0.898	0.916	0.917	0.911		3.14
19)	TD	C18 Octadecane	0.910	0.949	0.923	0.927	0.948	0.943	0.942		2.31
20)	T	C19 Nonadecane	0.894	0.954	0.930	0.936	0.961	0.953	0.948		3.07
21)	TD	C20 Eicosane	0.913	0.973	0.939	0.944	0.969	0.958	0.957		2.57
22)	TD	C22 Docosane	0.950	0.996	0.958	0.965	0.993	0.977	0.979		2.13
23)	TD	C24 Tetracosane	0.953	0.997	0.950	0.958	0.988	0.969	0.973		2.01
24)	TD	C26 Hexacosane	0.969	1.012	0.960	0.969	1.000	0.977	0.984		1.99
25)	TD	C28 Octacosane	0.964	1.005	0.952	0.962	0.994	0.968	0.975		1.99
26)	T	C30 Triacontane	0.958	1.002	0.949	0.958	0.991	0.964	0.971		2.04
27)	T	C36 Hexatriacon	0.967	0.976	0.916	0.921	0.955	0.927	0.940		2.61
28)	H	DRO C10 to C28	0.873	0.924	0.896	0.903	0.926	0.918	0.915		2.72
29)	H	TPH C8 to C40 I	0.872	0.920	0.890	0.897	0.921	0.911	0.910		2.54
30)	H	TPH C9 to C36 I	0.872	0.920	0.890	0.897	0.921	0.911	0.910		2.54
31)		----------							0.000		-1.00

(#) = Out of Range ### Number of calibration levels exceeded format ###

Data File: \\Avogadro\Organics\F1.I\121113A.B\F1H9712.D
Lab Smp Id: FSTD0051A Client Smp ID: FSTD0051A
Misc : TPH ICAL L1 5 PPM Inst ID: F1.I
Signal(s) : FID1A.CH
Inj Date : 13 Nov 2012 12:04 Operator: TM
ALS Vial : 1 Sample Multiplier: 1

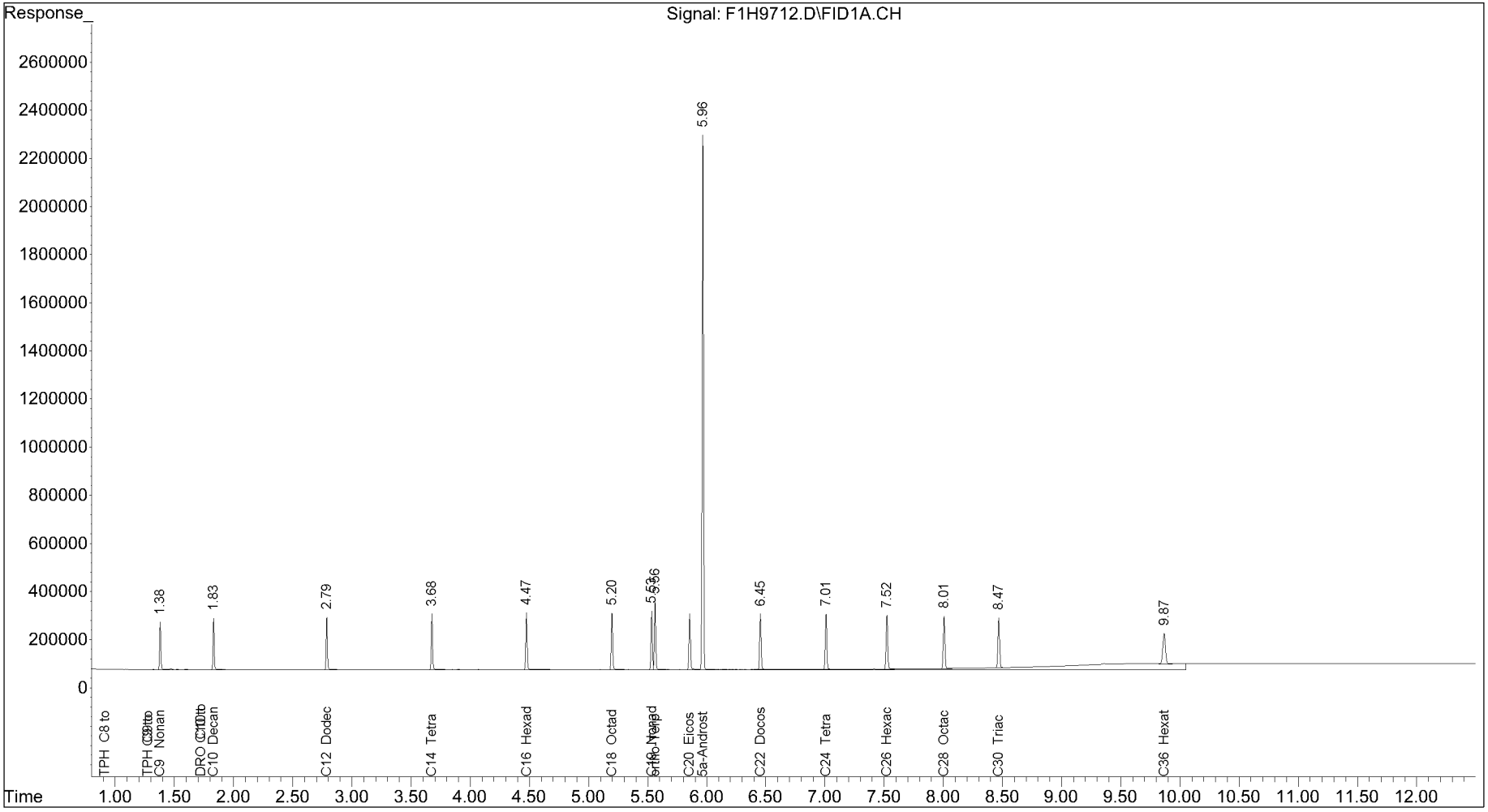
Quant Time: Nov 13 16:35:25 2012
Quant Method : O:\F1.I\QMETHODS\TPH1113.M
Quant Title : TPH, ETPH, DRO, Fuel ID, ORO
Response via : Continuing Cal File: O:\F1.I\121113A.B\F1H9718.D
Volume Inj. : 2 uL
Signal Phase : DB-5MS
Signal Info : 0.32

	Compound	R.T.	Response	Conc Units
	Internal Standards			
11) I	5a-Androstane	5.96	17201997	40.000 ug/mL
	System Monitoring Compounds			
2) S	ortho-Terphenyl	5.56	2182232	4.265 ug/mL
Spiked Amount	100.000		Recovery =	4.26%
13) S	ortho-Terphenyl ISTD	5.56	2182232	4.791 ug/mL
Spiked Amount	100.000		Recovery =	4.79%
	Target Compounds			
3) H	DRO C10 to C28	1.73	18761763	41.953 ug/mL
	Integration Range:		1.73 to	8.13 minutes
	Raw Range Area:		43930503	
4) H	TPH C9 to C36	1.28	26262174	59.025 ug/mL
	Integration Range:		1.28 to	10.05 minutes
	Raw Range Area:		69030672	
14) T	C9 Nonane	1.38	1439177	4.586 ug/mL
15) TD	C10 Decane	1.83	1474299	4.491 ug/mL
16) TD	C12 Dodecane	2.79	1565624	4.453 ug/mL
17) TD	C14 Tetradecane	3.68	1703251	4.555 ug/mL
18) TD	C16 Hexadecane	4.47	1849266	4.697 ug/mL
19) TD	C18 Octadecane	5.20	1957475	4.801 ug/mL
20) T	C19 Nonadecane	5.53	1922062	4.652 ug/mL
21) TD	C20 Eicosane	5.85	1962700	4.712 ug/mL
22) TD	C22 Docosane	6.45	2042331	4.783 ug/mL
23) TD	C24 Tetracosane	7.01	2049620	4.823 ug/mL
24) TD	C26 Hexacosane	7.52	2084086	4.846 ug/mL
25) TD	C28 Octacosane	8.01	2073110	4.852 ug/mL
26) T	C30 Triacontane	8.47	2059884	4.832 ug/mL
27) T	C36 Hexatriacontane	9.87	2079288	5.061 ug/mL
28) H	DRO C10 to C28 ISTD	1.73	18761763	47.127 ug/mL
	Integration Range:		1.73 to	8.13 minutes
	Raw Range Area:		43930503	
29) H	TPH C8 to C40 ISTD	0.92	26262174	66.304 ug/mL
	Integration Range:		0.92 to	11.64 minutes
	Raw Range Area:		93900049	
30) H	TPH C9 to C36 ISTD	1.28	26262174	66.304 ug/mL
	Integration Range:		1.28 to	10.05 minutes
	Raw Range Area:		69030672	

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: \\Avogadro\Organics\F1.I\121113A.B\F1H9712.D
Lab Smp Id: FSTD0051A Client Smp ID: FSTD0051A
Misc : TPH ICAL L1 5 PPM Inst ID: F1.I
Signal(s) : FID1A.CH
Inj Date : 13 Nov 2012 12:04 Operator: TM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Nov 13 16:35:25 2012
Quant Method : O:\F1.I\QMETHODS\TPH1113.M
Quant Title : TPH, ETPH, DRO, Fuel ID, ORO
Response via : Continuing Cal File: O:\F1.I\121113A.B\F1H9718.D
Volume Inj. : 2 uL
Signal Phase : DB-5MS
Signal Info : 0.32



Data File: \\Avogadro\Organics\F1.I\121113A.B\F1H9714.D
Lab Smp Id: FSTD0201A Client Smp ID: FSTD0201A
Misc : TPH ICAL L2 20 PPM Inst ID: F1.I
Signal(s) : FID1A.CH
Inj Date : 13 Nov 2012 12:43 Operator: TM
ALS Vial : 3 Sample Multiplier: 1

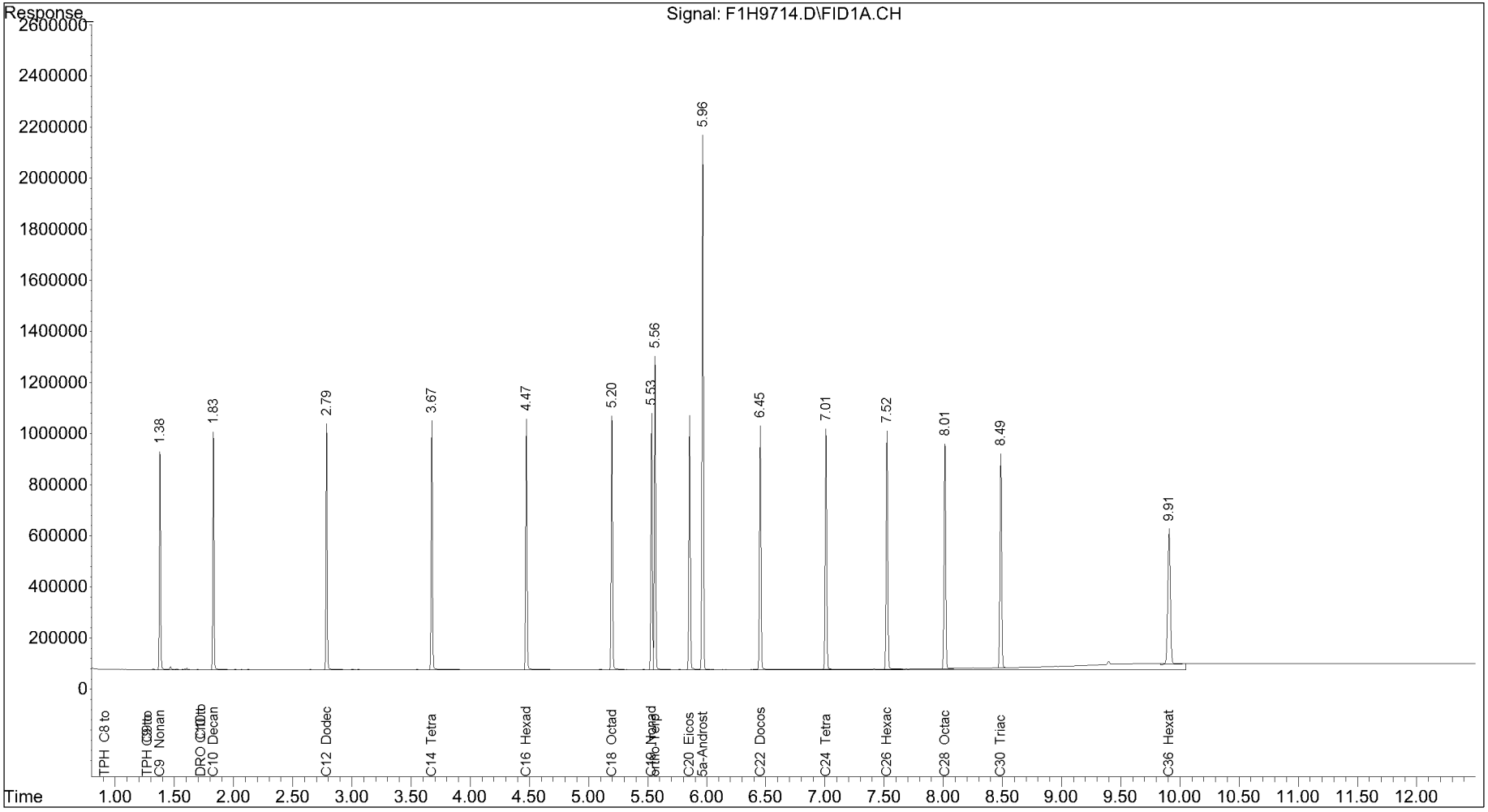
Quant Time: Nov 13 16:35:59 2012
Quant Method : O:\F1.I\QMETHODS\TPH1113.M
Quant Title : TPH, ETPH, DRO, Fuel ID, ORO
Response via : Continuing Cal File: O:\F1.I\121113A.B\F1H9718.D
Volume Inj. : 2 uL
Signal Phase : DB-5MS
Signal Info : 0.32

	Compound	R.T.	Response	Conc Units
	Internal Standards			
11) I	5a-Androstane	5.96	16574779	40.000 ug/mL
	System Monitoring Compounds			
2) S	ortho-Terphenyl	5.56	9026694	17.644 ug/mL
Spiked Amount	100.000		Recovery =	17.64%
13) S	ortho-Terphenyl ISTD	5.56	9026694	20.570 ug/mL
Spiked Amount	100.000		Recovery =	20.57%
	Target Compounds			
3) H	DRO C10 to C28	1.73	76562560	171.202 ug/mL
	Integration Range:		1.73 to	8.13 minutes
	Raw Range Area:		113804590	
4) H	TPH C9 to C36	1.28	106737829	239.896 ug/mL
	Integration Range:		1.28 to	10.05 minutes
	Raw Range Area:		154047978	
14) T	C9 Nonane	1.38	5881116	19.450 ug/mL
15) TD	C10 Decane	1.83	6119693	19.347 ug/mL
16) TD	C12 Dodecane	2.79	6592211	19.461 ug/mL
17) TD	C14 Tetradecane	3.67	7145251	19.830 ug/mL
18) TD	C16 Hexadecane	4.47	7552704	19.907 ug/mL
19) TD	C18 Octadecane	5.20	7861851	20.012 ug/mL
20) T	C19 Nonadecane	5.53	7902780	19.851 ug/mL
21) TD	C20 Eicosane	5.85	8060373	20.083 ug/mL
22) TD	C22 Docosane	6.45	8253831	20.062 ug/mL
23) TD	C24 Tetracosane	7.01	8264605	20.185 ug/mL
24) TD	C26 Hexacosane	7.52	8387029	20.239 ug/mL
25) TD	C28 Octacosane	8.01	8325011	20.220 ug/mL
26) T	C30 Triacontane	8.49	8300435	20.208 ug/mL
27) T	C36 Hexatriacontane	9.91	8090938	20.437 ug/mL
28) H	DRO C10 to C28 ISTD	1.73	76562560	199.593 ug/mL
	Integration Range:		1.73 to	8.13 minutes
	Raw Range Area:		113804590	
29) H	TPH C8 to C40 ISTD	0.92	106737829	279.677 ug/mL
	Integration Range:		0.92 to	11.64 minutes
	Raw Range Area:		177623645	
30) H	TPH C9 to C36 ISTD	1.28	106737829	279.677 ug/mL
	Integration Range:		1.28 to	10.05 minutes
	Raw Range Area:		154047978	

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: \\Avogadro\Organics\F1.I\121113A.B\F1H9714.D
Lab Smp Id: FSTD0201A Client Smp ID: FSTD0201A
Misc : TPH ICAL L2 20 PPM Inst ID: F1.I
Signal(s) : FID1A.CH
Inj Date : 13 Nov 2012 12:43 Operator: TM
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 13 16:35:59 2012
Quant Method : O:\F1.I\QMETHODS\TPH1113.M
Quant Title : TPH, ETPH, DRO, Fuel ID, ORO
Response via : Continuing Cal File: O:\F1.I\121113A.B\F1H9718.D
Volume Inj. : 2 uL
Signal Phase : DB-5MS
Signal Info : 0.32



Data File: \\Avogadro\Organics\F1.I\121113A.B\F1H9716.D
Lab Smp Id: FSTD0501A Client Smp ID: FSTD0501A
Misc : TPH ICAL L3 50 PPM Inst ID: F1.I
Signal(s) : FID1A.CH
Inj Date : 13 Nov 2012 13:23 Operator: TM
ALS Vial : 5 Sample Multiplier: 1

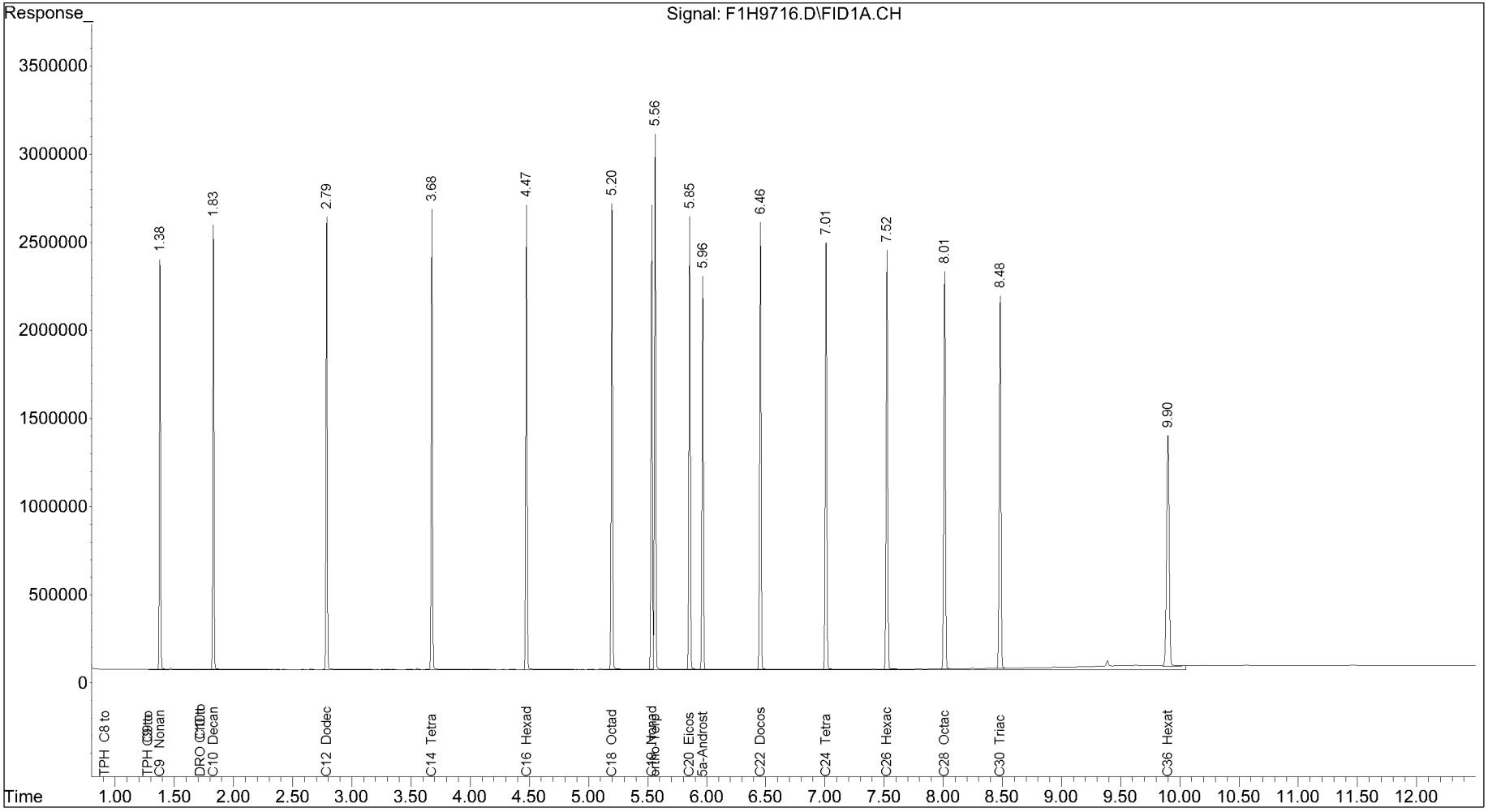
Quant Time: Nov 13 16:37:23 2012
Quant Method : O:\F1.I\QMETHODS\TPH1113.M
Quant Title : TPH, ETPH, DRO, Fuel ID, ORO
Response via : Continuing Cal File: O:\F1.I\121113A.B\F1H9718.D
Volume Inj. : 2 uL
Signal Phase : DB-5MS
Signal Info : 0.32

	Compound	R.T.	Response	Conc Units
	Internal Standards			
11) I	5a-Androstane	5.96	17686268	40.000 ug/mL
	System Monitoring Compounds			
2) S	ortho-Terphenyl	5.56	22799221	44.564 ug/mL
Spiked Amount	100.000		Recovery =	44.56%
13) S	ortho-Terphenyl ISTD	5.56	22799221	48.689 ug/mL
Spiked Amount	100.000		Recovery =	48.69%
	Target Compounds			
3) H	DRO C10 to C28	1.73	198101382	442.976 ug/mL
	Integration Range:		1.73 to	8.13 minutes
	Raw Range Area:		263201709	
4) H	TPH C9 to C36	1.28	275394282	618.955 ug/mL
	Integration Range:		1.28 to	10.05 minutes
	Raw Range Area:		337505097	
14) T	C9 Nonane	1.38	15519722	48.102 ug/mL
15) TD	C10 Decane	1.83	16230453	48.088 ug/mL
16) TD	C12 Dodecane	2.79	17534561	48.510 ug/mL
17) TD	C14 Tetradecane	3.68	18861346	49.056 ug/mL
18) TD	C16 Hexadecane	4.47	19816252	48.949 ug/mL
19) TD	C18 Octadecane	5.20	20413038	48.695 ug/mL
20) T	C19 Nonadecane	5.53	20554927	48.388 ug/mL
21) TD	C20 Eicosane	5.85	20765845	48.487 ug/mL
22) TD	C22 Docosane	6.46	21186531	48.261 ug/mL
23) TD	C24 Tetracosane	7.01	21012954	48.096 ug/mL
24) TD	C26 Hexacosane	7.53	21231555	48.015 ug/mL
25) TD	C28 Octacosane	8.01	21048847	47.911 ug/mL
26) T	C30 Triacontane	8.48	20972512	47.851 ug/mL
27) T	C36 Hexatriacontane	9.90	20245740	47.925 ug/mL
28) H	DRO C10 to C28 ISTD	1.73	198101382	483.980 ug/mL
	Integration Range:		1.73 to	8.13 minutes
	Raw Range Area:		263201709	
29) H	TPH C8 to C40 ISTD	0.92	275394282	676.247 ug/mL
	Integration Range:		0.92 to	11.64 minutes
	Raw Range Area:		360170929	
30) H	TPH C9 to C36 ISTD	1.28	275394282	676.247 ug/mL
	Integration Range:		1.28 to	10.05 minutes
	Raw Range Area:		337505097	

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: \\Avogadro\Organics\F1.I\121113A.B\F1H9716.D
Lab Smp Id: FSTD0501A Client Smp ID: FSTD0501A
Misc : TPH ICAL L3 50 PPM Inst ID: F1.I
Signal(s) : FID1A.CH
Inj Date : 13 Nov 2012 13:23 Operator: TM
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 13 16:37:23 2012
Quant Method : O:\F1.I\QMETHODS\TPH1113.M
Quant Title : TPH, ETPH, DRO, Fuel ID, ORO
Response via : Continuing Cal File: O:\F1.I\121113A.B\F1H9718.D
Volume Inj. : 2 uL
Signal Phase : DB-5MS
Signal Info : 0.32



Data File: \\Avogadro\Organics\F1.I\121113A.B\F1H9717.D
Lab Smp Id: FSTD0801A Client Smp ID: FSTD0801A
Misc : TPH ICAL L4 80 PPM Inst ID: F1.I
Signal(s) : FID1A.CH
Inj Date : 13 Nov 2012 13:43 Operator: TM
ALS Vial : 6 Sample Multiplier: 1

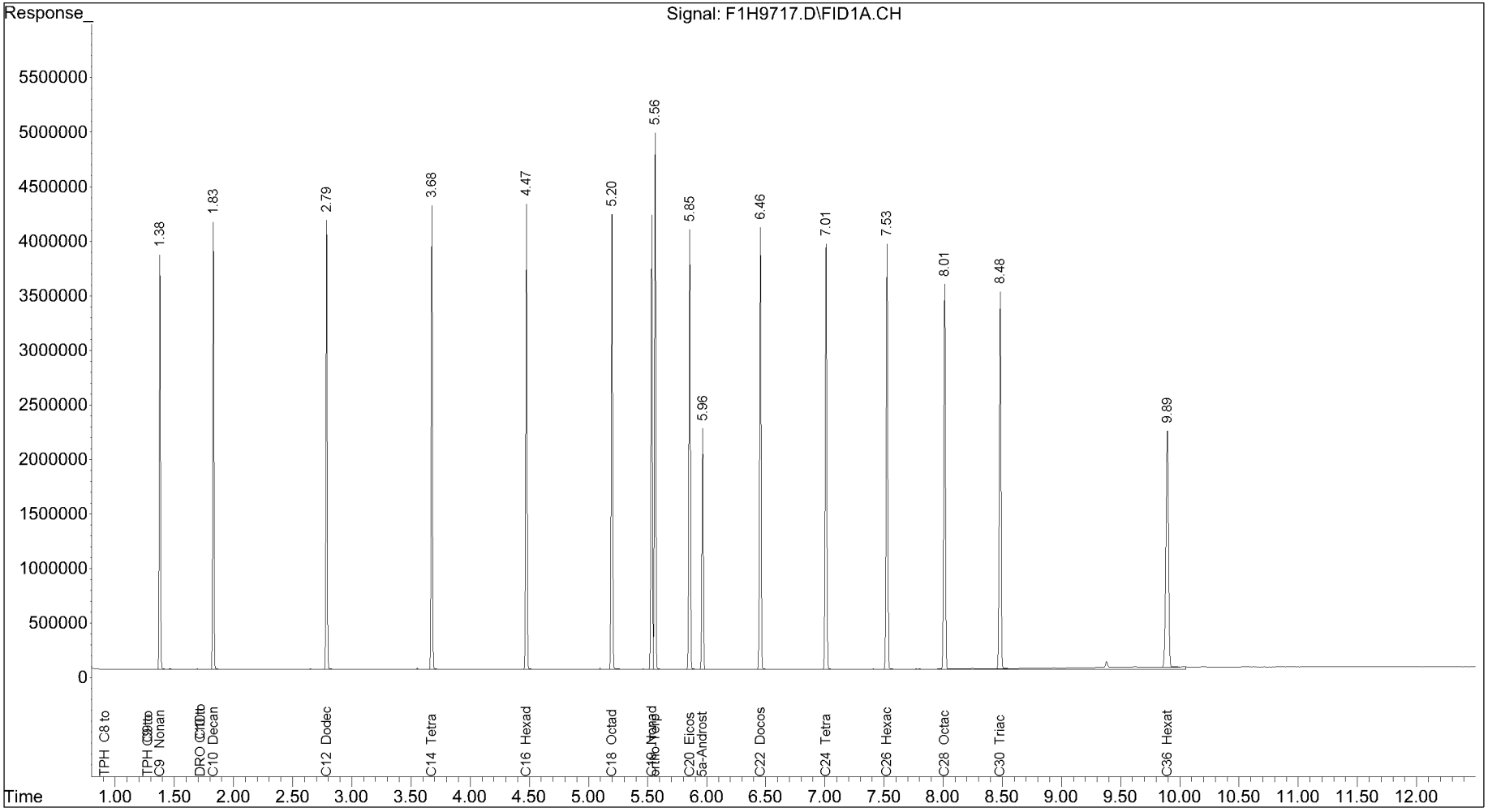
Quant Time: Nov 13 16:37:34 2012
Quant Method : O:\F1.I\QMETHODS\TPH1113.M
Quant Title : TPH, ETPH, DRO, Fuel ID, ORO
Response via : Continuing Cal File: O:\F1.I\121113A.B\F1H9718.D
Volume Inj. : 2 uL
Signal Phase : DB-5MS
Signal Info : 0.32

	Compound	R.T.	Response	Conc Units
	Internal Standards			
11) I	5a-Androstane	5.96	17698394	40.000 ug/mL
	System Monitoring Compounds			
2) S	ortho-Terphenyl	5.56	36522228	71.387 ug/mL
Spiked Amount	100.000		Recovery =	71.39%
13) S	ortho-Terphenyl ISTD	5.56	36522228	77.942 ug/mL
Spiked Amount	100.000		Recovery =	77.94%
	Target Compounds			
3) H	DRO C10 to C28	1.73	319704345	714.894 ug/mL
	Integration Range:		1.73 to 8.13 minutes	
	Raw Range Area:		411207210	
4) H	TPH C9 to C36	1.28	444732961	999.547 ug/mL
	Integration Range:		1.28 to 10.05 minutes	
	Raw Range Area:		520953512	
14) T	C9 Nonane	1.38	25358894	78.543 ug/mL
15) TD	C10 Decane	1.83	26476621	78.391 ug/mL
16) TD	C12 Dodecane	2.79	28473044	78.718 ug/mL
17) TD	C14 Tetradecane	3.68	30316555	78.796 ug/mL
18) TD	C16 Hexadecane	4.48	31799671	78.496 ug/mL
19) TD	C18 Octadecane	5.20	32818369	78.235 ug/mL
20) T	C19 Nonadecane	5.53	33140753	77.962 ug/mL
21) TD	C20 Eicosane	5.85	33423190	77.988 ug/mL
22) TD	C22 Docosane	6.46	34146482	77.730 ug/mL
23) TD	C24 Tetracosane	7.01	33926015	77.600 ug/mL
24) TD	C26 Hexacosane	7.53	34289715	77.493 ug/mL
25) TD	C28 Octacosane	8.01	34034684	77.417 ug/mL
26) T	C30 Triacontane	8.48	33926635	77.354 ug/mL
27) T	C36 Hexatriacontane	9.89	32602333	77.123 ug/mL
28) H	DRO C10 to C28 ISTD	1.73	319704345	780.532 ug/mL
	Integration Range:		1.73 to 8.13 minutes	
	Raw Range Area:		411207210	
29) H	TPH C8 to C40 ISTD	0.92	444732961	1091.320 ug/mL
	Integration Range:		0.92 to 11.64 minutes	
	Raw Range Area:		543187286	
30) H	TPH C9 to C36 ISTD	1.28	444732961	1091.320 ug/mL
	Integration Range:		1.28 to 10.05 minutes	
	Raw Range Area:		520953512	

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: \\Avogadro\Organics\F1.I\121113A.B\F1H9717.D
Lab Smp Id: FSTD0801A Client Smp ID: FSTD0801A
Misc : TPH ICAL L4 80 PPM Inst ID: F1.I
Signal(s) : FID1A.CH
Inj Date : 13 Nov 2012 13:43 Operator: TM
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 13 16:37:34 2012
Quant Method : O:\F1.I\QMETHODS\TPH1113.M
Quant Title : TPH, ETPH, DRO, Fuel ID, ORO
Response via : Continuing Cal File: O:\F1.I\121113A.B\F1H9718.D
Volume Inj. : 2 uL
Signal Phase : DB-5MS
Signal Info : 0.32



Data File: \\Avogadro\Organics\F1.I\121113A.B\F1H9718.D
Lab Smp Id: FSTD1001A Client Smp ID: FSTD1001A
Misc : TPH ICAL L5 100 PPM Inst ID: F1.I
Signal(s) : FID1A.CH
Inj Date : 13 Nov 2012 14:03 Operator: TM
ALS Vial : 7 Sample Multiplier: 1

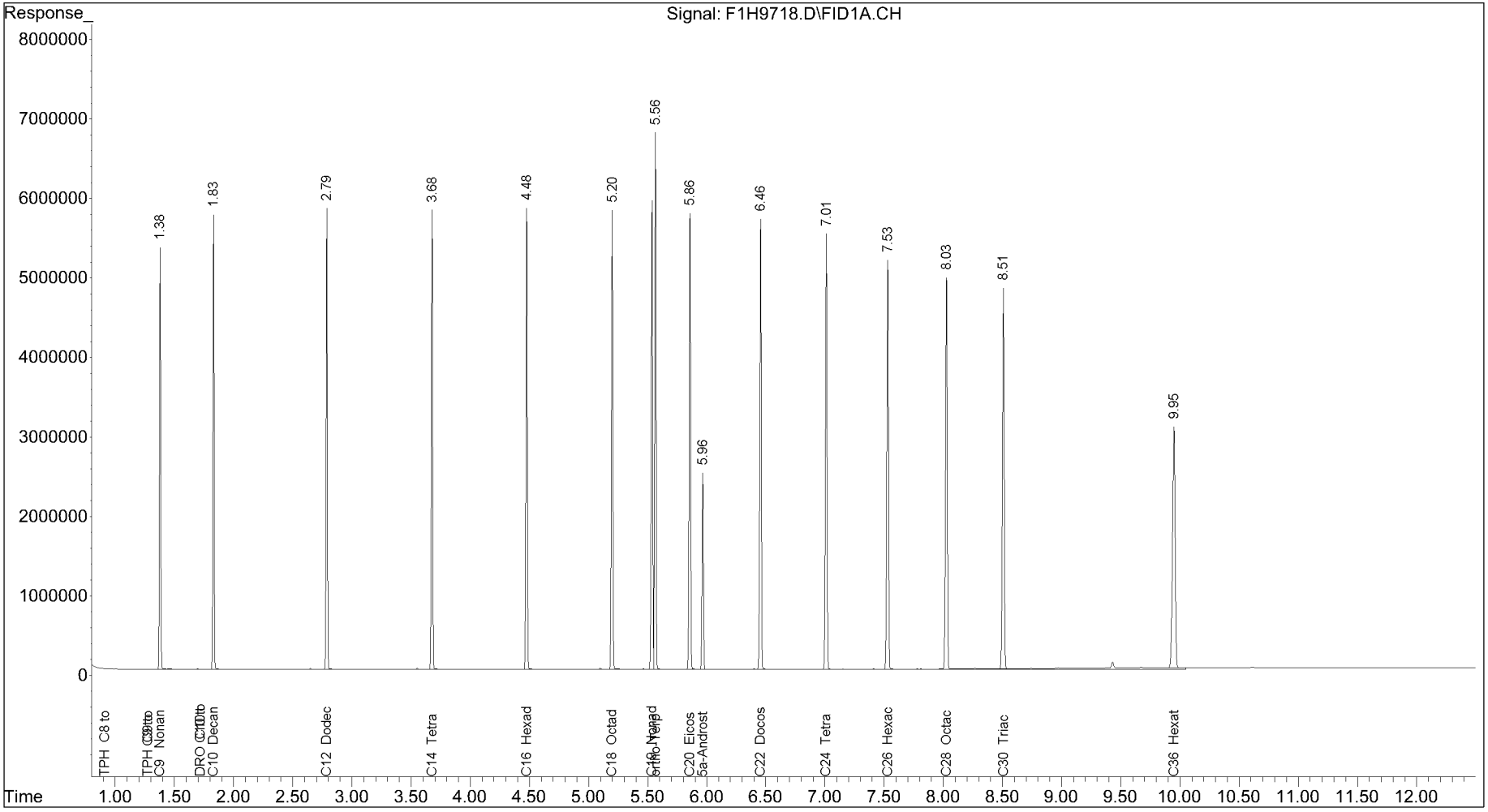
Quant Time: Nov 13 16:33:54 2012
Quant Method : O:\F1.I\QMETHODS\TPH1113.M
Quant Title : TPH, ETPH, DRO, Fuel ID, ORO
Response via : Continuing Cal File: O:\F1.I\121113A.B\F1H9718.D
Volume Inj. : 2 uL
Signal Phase : DB-5MS
Signal Info : 0.32

	Compound	R.T.	Response	Conc	Units
	Internal Standards				
11) I	5a-Androstane	5.96	19323370	40.000	ug/mL
	System Monitoring Compounds				
2) S	ortho-Terphenyl	5.56	51160634	100.000	ug/mL
Spiked Amount	100.000		Recovery =	100.00%	
13) S	ortho-Terphenyl ISTD	5.56	51160634	100.000	ug/mL
Spiked Amount	100.000		Recovery =	100.00%	
	Target Compounds				
3) H	DRO C10 to C28	1.73	447205209	1000.000	ug/mL
	Integration Range:		1.73 to 8.13 minutes		
	Raw Range Area:		568876734		
4) H	TPH C9 to C36	1.28	622908219	1400.000	ug/mL
	Integration Range:		1.28 to 10.05 minutes		
	Raw Range Area:		715458890		
14) T	C9 Nonane	1.38	35250896	100.000	ug/mL
15) TD	C10 Decane	1.83	36875974	100.000	ug/mL
16) TD	C12 Dodecane	2.79	39492129	100.000	ug/mL
17) TD	C14 Tetradecane	3.68	42007198	100.000	ug/mL
18) TD	C16 Hexadecane	4.48	44230530	100.000	ug/mL
19) TD	C18 Octadecane	5.20	45800229	100.000	ug/mL
20) T	C19 Nonadecane	5.54	46411647	100.000	ug/mL
21) TD	C20 Eicosane	5.86	46791714	100.000	ug/mL
22) TD	C22 Docosane	6.46	47962940	100.000	ug/mL
23) TD	C24 Tetracosane	7.01	47733439	100.000	ug/mL
24) TD	C26 Hexacosane	7.53	48311544	100.000	ug/mL
25) TD	C28 Octacosane	8.03	47999513	100.000	ug/mL
26) T	C30 Triacontane	8.51	47885791	100.000	ug/mL
27) T	C36 Hexatriacontane	9.95	46154676	100.000	ug/mL
28) H	DRO C10 to C28 ISTD	1.73	447205209	1000.000	ug/mL
	Integration Range:		1.73 to 8.13 minutes		
	Raw Range Area:		568876734		
29) H	TPH C8 to C40 ISTD	0.92	622908219	1400.000	ug/mL
	Integration Range:		0.92 to 11.64 minutes		
	Raw Range Area:		737816974		
30) H	TPH C9 to C36 ISTD	1.28	622908219	1400.000	ug/mL
	Integration Range:		1.28 to 10.05 minutes		
	Raw Range Area:		715458890		

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: \\Avogadro\Organics\F1.I\121113A.B\F1H9718.D
Lab Smp Id: FSTD1001A Client Smp ID: FSTD1001A
Misc : TPH ICAL L5 100 PPM Inst ID: F1.I
Signal(s) : FID1A.CH
Inj Date : 13 Nov 2012 14:03 Operator: TM
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Nov 13 16:33:54 2012
Quant Method : O:\F1.I\QMETHODS\TPH1113.M
Quant Title : TPH, ETPH, DRO, Fuel ID, ORO
Response via : Continuing Cal File: O:\F1.I\121113A.B\F1H9718.D
Volume Inj. : 2 uL
Signal Phase : DB-5MS
Signal Info : 0.32



Data File: \\Avogadro\Organics\F1.I\121113A.B\F1H9719.D
Lab Smp Id: FSTD1201A Client Smp ID: FSTD1201A
Misc : TPH ICAL L6 120 PPM Inst ID: F1.I
Signal(s) : FID1A.CH
Inj Date : 13 Nov 2012 14:22 Operator: TM
ALS Vial : 8 Sample Multiplier: 1

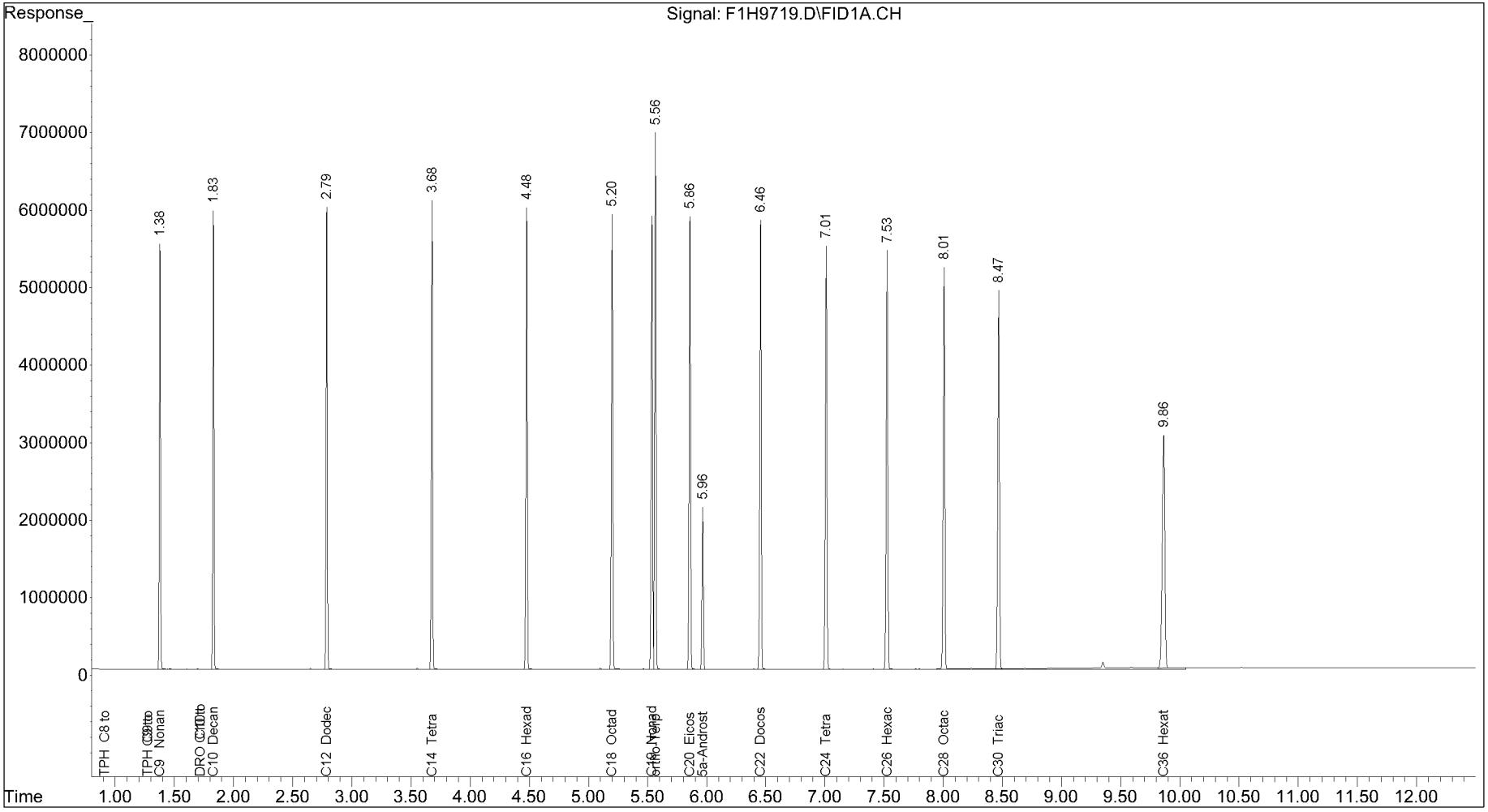
Quant Time: Nov 13 16:37:57 2012
Quant Method : O:\F1.I\QMETHODS\TPH1113.M
Quant Title : TPH, ETPH, DRO, Fuel ID, ORO
Response via : Continuing Cal File: O:\F1.I\121113A.B\F1H9718.D
Volume Inj. : 2 uL
Signal Phase : DB-5MS
Signal Info : 0.32

	Compound	R.T.	Response	Conc Units
	Internal Standards			
11) I	5a-Androstane	5.96	16510795	40.000 ug/mL
	System Monitoring Compounds			
2) S	ortho-Terphenyl	5.56	53423788	104.424 ug/mL
Spiked Amount	100.000		Recovery =	104.42%
13) S	ortho-Terphenyl ISTD	5.56	53423788	122.212 ug/mL
Spiked Amount	100.000		Recovery =	122.21%
	Target Compounds			
3) H	DRO C10 to C28	1.73	454812794	1017.011 ug/mL
	Integration Range:		1.73 to 8.13 minutes	
	Raw Range Area:		576724519	
4) H	TPH C9 to C36	1.28	631995048	1420.423 ug/mL
	Integration Range:		1.28 to 10.05 minutes	
	Raw Range Area:		724931928	
14) T	C9 Nonane	1.38	36328367	120.612 ug/mL
15) TD	C10 Decane	1.83	37961533	120.480 ug/mL
16) TD	C12 Dodecane	2.79	40982009	121.450 ug/mL
17) TD	C14 Tetradecane	3.68	43498150	121.189 ug/mL
18) TD	C16 Hexadecane	4.48	45437845	120.229 ug/mL
19) TD	C18 Octadecane	5.20	46710168	119.360 ug/mL
20) T	C19 Nonadecane	5.54	47204293	119.034 ug/mL
21) TD	C20 Eicosane	5.86	47456671	118.698 ug/mL
22) TD	C22 Docosane	6.46	48402778	118.108 ug/mL
23) TD	C24 Tetracosane	7.01	47996121	117.679 ug/mL
24) TD	C26 Hexacosane	7.53	48404028	117.259 ug/mL
25) TD	C28 Octacosane	8.01	47963491	116.947 ug/mL
26) T	C30 Triacontane	8.47	47756468	116.719 ug/mL
27) T	C36 Hexatriacontane	9.86	45893127	116.372 ug/mL
28) H	DRO C10 to C28 ISTD	1.73	454812794	1190.257 ug/mL
	Integration Range:		1.73 to 8.13 minutes	
	Raw Range Area:		576724519	
29) H	TPH C8 to C40 ISTD	0.92	631995048	1662.389 ug/mL
	Integration Range:		0.92 to 11.64 minutes	
	Raw Range Area:		746571517	
30) H	TPH C9 to C36 ISTD	1.28	631995048	1662.389 ug/mL
	Integration Range:		1.28 to 10.05 minutes	
	Raw Range Area:		724931928	

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: \\Avogadro\Organics\F1.I\121113A.B\F1H9719.D
Lab Smp Id: FSTD1201A Client Smp ID: FSTD1201A
Misc : TPH ICAL L6 120 PPM Inst ID: F1.I
Signal(s) : FID1A.CH
Inj Date : 13 Nov 2012 14:22 Operator: TM
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Nov 13 16:37:57 2012
Quant Method : O:\F1.I\QMETHODS\TPH1113.M
Quant Title : TPH, ETPH, DRO, Fuel ID, ORO
Response via : Continuing Cal File: O:\F1.I\121113A.B\F1H9718.D
Volume Inj. : 2 uL
Signal Phase : DB-5MS
Signal Info : 0.32



Data File: \\Avogadro\Organics\F1.I\121113A.B\F1H9720.D
Lab Smp Id: FSTD1501A Client Smp ID: FSTD1501A
Misc : TPH ICAL L7 150 PPM Inst ID: F1.I
Signal(s) : FID1A.CH
Inj Date : 13 Nov 2012 14:42 Operator: TM
ALS Vial : 9 Sample Multiplier: 1

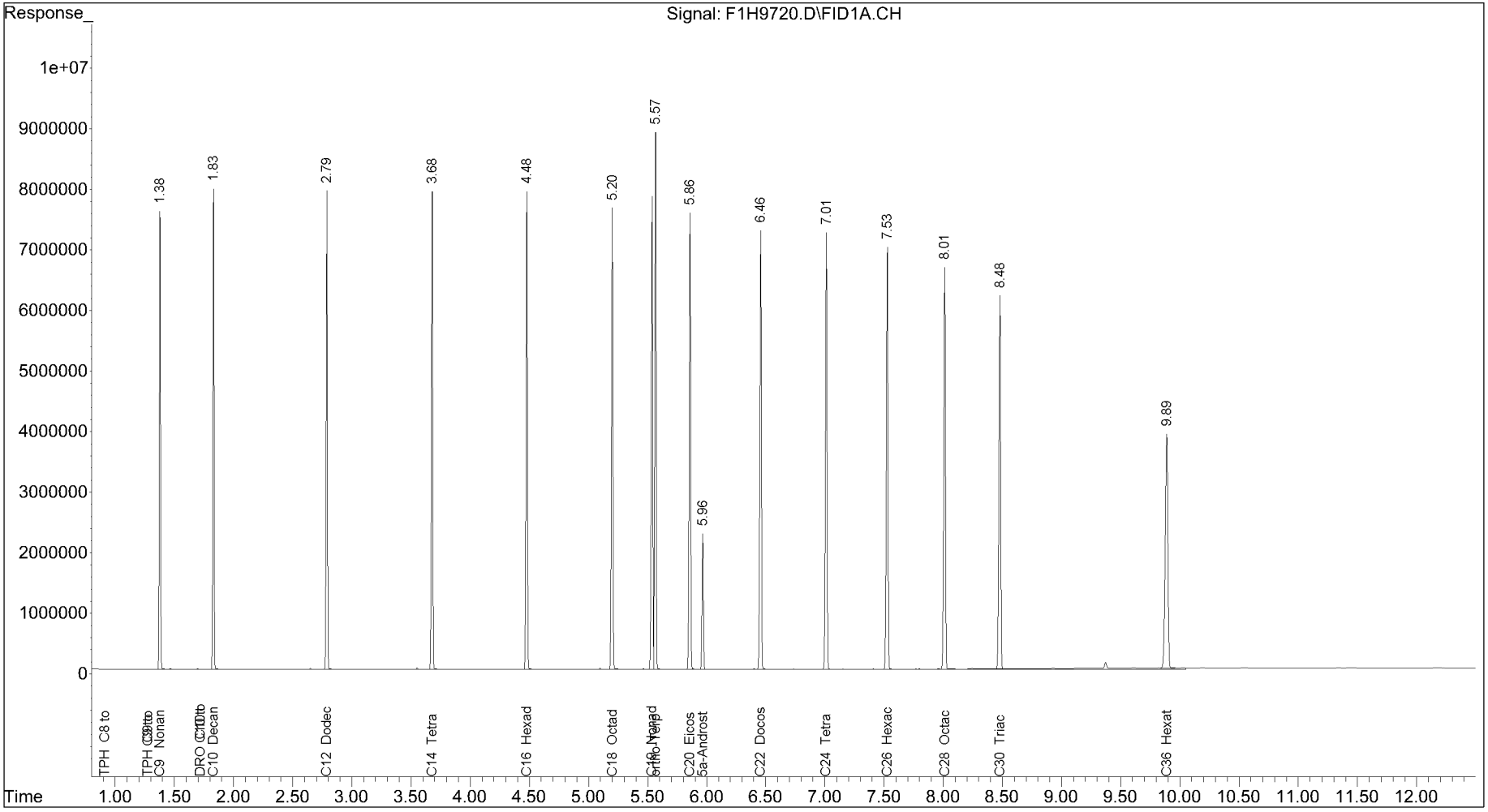
Quant Time: Nov 13 16:38:00 2012
Quant Method : O:\F1.I\QMETHODS\TPH1113.M
Quant Title : TPH, ETPH, DRO, Fuel ID, ORO
Response via : Continuing Cal File: O:\F1.I\121113A.B\F1H9718.D
Volume Inj. : 2 uL
Signal Phase : DB-5MS
Signal Info : 0.32

	Compound	R.T.	Response	Conc Units
	Internal Standards			
11) I	5a-Androstane	5.96	17361553	40.000 ug/mL
	System Monitoring Compounds			
2) S	ortho-Terphenyl	5.57	68779075	134.437 ug/mL
Spiked Amount	100.000		Recovery =	134.44%
13) S	ortho-Terphenyl ISTD	5.57	68779075	149.629 ug/mL
Spiked Amount	100.000		Recovery =	149.63%
	Target Compounds			
3) H	DRO C10 to C28	1.73	601581491	1345.202 ug/mL
	Integration Range:		1.73 to 8.13	minutes
	Raw Range Area:		755354863	
4) H	TPH C9 to C36	1.28	834559149	1875.690 ug/mL
	Integration Range:		1.28 to 10.05	minutes
	Raw Range Area:		944094750	
14) T	C9 Nonane	1.38	48589681	153.415 ug/mL
15) TD	C10 Decane	1.83	50841991	153.452 ug/mL
16) TD	C12 Dodecane	2.79	54699970	154.160 ug/mL
17) TD	C14 Tetradecane	3.68	57899945	153.408 ug/mL
18) TD	C16 Hexadecane	4.48	60346873	151.854 ug/mL
19) TD	C18 Octadecane	5.20	61930921	150.499 ug/mL
20) T	C19 Nonadecane	5.54	62581000	150.076 ug/mL
21) TD	C20 Eicosane	5.86	62751416	149.262 ug/mL
22) TD	C22 Docosane	6.46	63818171	148.092 ug/mL
23) TD	C24 Tetracosane	7.01	63058652	147.033 ug/mL
24) TD	C26 Hexacosane	7.53	63458502	146.195 ug/mL
25) TD	C28 Octacosane	8.01	62775049	145.561 ug/mL
26) T	C30 Triacontane	8.48	62395352	145.024 ug/mL
27) T	C36 Hexatriacontane	9.89	59411624	143.268 ug/mL
28) H	DRO C10 to C28 ISTD	1.73	601581491	1497.207 ug/mL
	Integration Range:		1.73 to 8.13	minutes
	Raw Range Area:		755354863	
29) H	TPH C8 to C40 ISTD	0.92	834559149	2087.639 ug/mL
	Integration Range:		0.92 to 11.64	minutes
	Raw Range Area:		965496990	
30) H	TPH C9 to C36 ISTD	1.28	834559149	2087.639 ug/mL
	Integration Range:		1.28 to 10.05	minutes
	Raw Range Area:		944094750	

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: \\Avogadro\Organics\F1.I\121113A.B\F1H9720.D
Lab Smp Id: FSTD1501A Client Smp ID: FSTD1501A
Misc : TPH ICAL L7 150 PPM Inst ID: F1.I
Signal(s) : FID1A.CH
Inj Date : 13 Nov 2012 14:42 Operator: TM
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Nov 13 16:38:00 2012
Quant Method : O:\F1.I\QMETHODS\TPH1113.M
Quant Title : TPH, ETPH, DRO, Fuel ID, ORO
Response via : Continuing Cal File: O:\F1.I\121113A.B\F1H9718.D
Volume Inj. : 2 uL
Signal Phase : DB-5MS
Signal Info : 0.32



Data File: \\Avogadro\Organics\F1.I\121113A.B\F1H9721.D
Lab Smp Id: FSTD2001A Client Smp ID: FSTD2001A
Misc : TPH ICAL L8 200 PPM Inst ID: F1.I
Signal(s) : FID1A.CH
Inj Date : 13 Nov 2012 15:02 Operator: TM
ALS Vial : 10 Sample Multiplier: 1

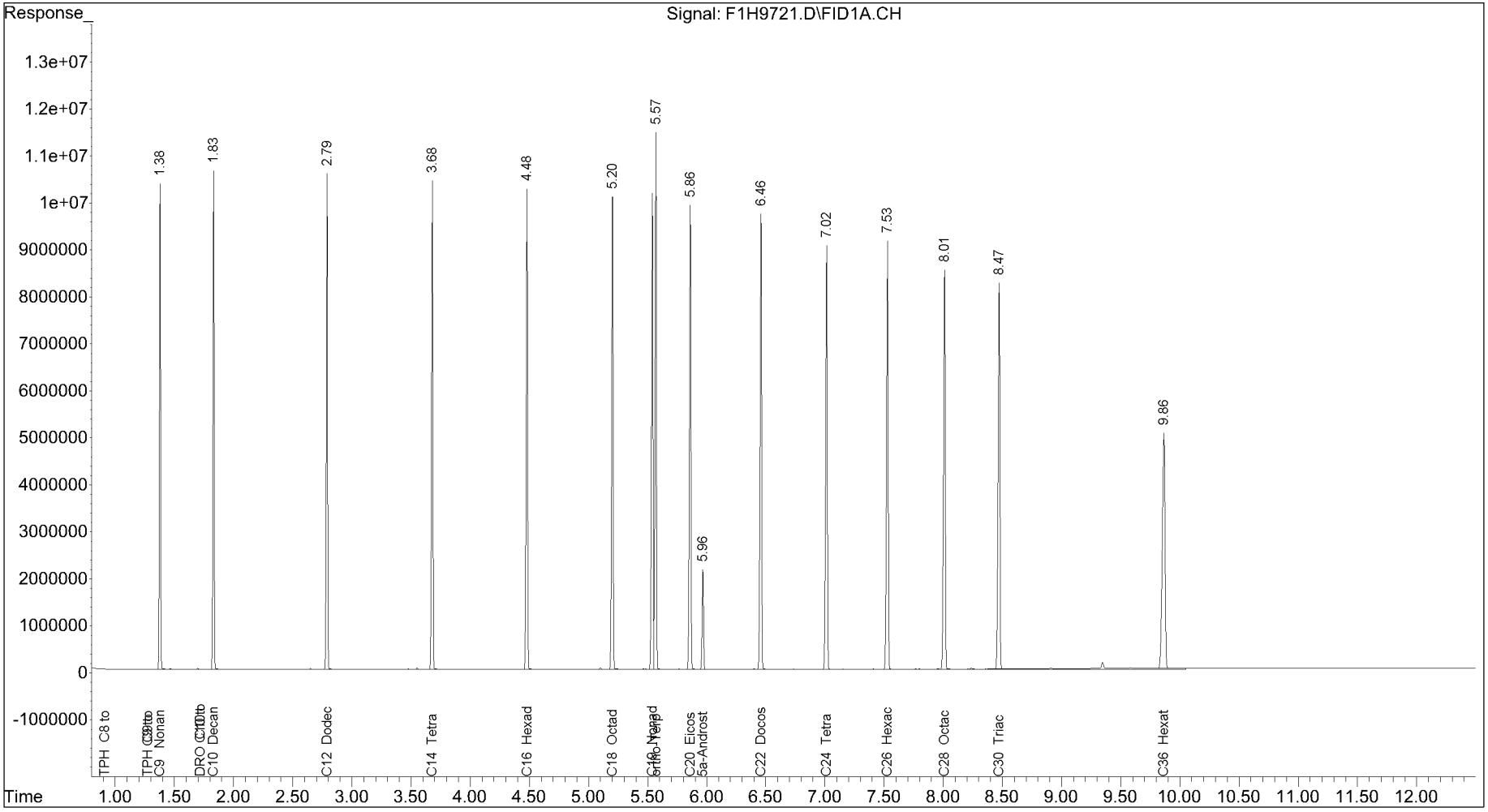
Quant Time: Nov 13 16:38:43 2012
Quant Method : O:\F1.I\QMETHODS\TPH1113.M
Quant Title : TPH, ETPH, DRO, Fuel ID, ORO
Response via : Continuing Cal File: O:\F1.I\121113A.B\F1H9718.D
Volume Inj. : 2 uL
Signal Phase : DB-5MS
Signal Info : 0.32

	Compound	R.T.	Response	Conc Units
	Internal Standards			
11) I	5a-Androstane	5.97	16839620	40.000 ug/mL
	System Monitoring Compounds			
2) S	ortho-Terphenyl	5.57	92330322	180.471 ug/mL
Spiked Amount	100.000		Recovery =	180.47%
13) S	ortho-Terphenyl ISTD	5.57	92330322	207.090 ug/mL
Spiked Amount	100.000		Recovery =	207.09%
	Target Compounds			
3) H	DRO C10 to C28	1.73	805692725	1801.617 ug/mL
	Integration Range:		1.73 to 8.13	minutes
	Raw Range Area:		1004436814	
4) H	TPH C9 to C36	1.28	1118514375	2513.886 ug/mL
	Integration Range:		1.28 to 10.05	minutes
	Raw Range Area:		1252581464	
14) T	C9 Nonane	1.38	66131680	215.273 ug/mL
15) TD	C10 Decane	1.83	68988932	214.677 ug/mL
16) TD	C12 Dodecane	2.79	73763332	214.329 ug/mL
17) TD	C14 Tetradecane	3.68	77816951	212.570 ug/mL
18) TD	C16 Hexadecane	4.48	80862872	209.787 ug/mL
19) TD	C18 Octadecane	5.20	82660889	207.101 ug/mL
20) T	C19 Nonadecane	5.54	83709424	206.965 ug/mL
21) TD	C20 Eicosane	5.86	83711761	205.290 ug/mL
22) TD	C22 Docosane	6.46	85179333	203.788 ug/mL
23) TD	C24 Tetracosane	7.02	84166735	202.334 ug/mL
24) TD	C26 Hexacosane	7.53	84717576	201.221 ug/mL
25) TD	C28 Octacosane	8.01	83824344	200.394 ug/mL
26) T	C30 Triacontane	8.47	83350362	199.734 ug/mL
27) T	C36 Hexatriacontane	9.87	79630184	197.976 ug/mL
28) H	DRO C10 to C28 ISTD	1.73	805692725	2067.346 ug/mL
	Integration Range:		1.73 to 8.13	minutes
	Raw Range Area:		1004436814	
29) H	TPH C8 to C40 ISTD	0.92	1118514375	2884.670 ug/mL
	Integration Range:		0.92 to 11.64	minutes
	Raw Range Area:		1273843663	
30) H	TPH C9 to C36 ISTD	1.28	1118514375	2884.670 ug/mL
	Integration Range:		1.28 to 10.05	minutes
	Raw Range Area:		1252581464	

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: \\Avogadro\Organics\F1.I\121113A.B\F1H9721.D
Lab Smp Id: FSTD2001A Client Smp ID: FSTD2001A
Misc : TPH ICAL L8 200 PPM Inst ID: F1.I
Signal(s) : FID1A.CH
Inj Date : 13 Nov 2012 15:02 Operator: TM
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 13 16:38:43 2012
Quant Method : O:\F1.I\QMETHODS\TPH1113.M
Quant Title : TPH, ETPH, DRO, Fuel ID, ORO
Response via : Continuing Cal File: O:\F1.I\121113A.B\F1H9718.D
Volume Inj. : 2 uL
Signal Phase : DB-5MS
Signal Info : 0.32



Data File: \\Avogadro\Organics\F1.I\121217.B\F1J0134.D
Lab Smp Id: FSTD1001F Client Smp ID: FSTD1001F
Misc : | TPH Inst ID: F1.I
Signal(s) : FID1A.CH
Inj Date : 17 Dec 2012 19:58 Operator: TM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Dec 18 06:39:31 2012
Quant Method : O:\F1.I\QMETHODS\TPH1113.M
Quant Title : TPH, ETPH, DRO, Fuel ID, ORO
Response via : Initial Calibration
Volume Inj. : 2 uL
Signal Phase : DB-5MS
Signal Info : 0.32

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF		%Dev	Area%	Dev(Min)
2	S	ortho-Terphenyl	459.660	487.551	E3	-6.1	100	0.00
3	H	DRO C10 to C28	398.000	419.803	E3	-5.5	100	0.00
4	H	TPH C9 to C36	395.611	423.380	E3	-7.0	100	0.00
11	I	5a-Androstane	1.000	1.000		0.0	100	0.00
13	S	ortho-Terphenyl ISTD	1.057	1.056		0.1	100	0.00
14		C9 Nonane	0.724	0.743		-2.6	100	0.00
15		C10 Decane	0.755	0.772		-2.3	100	0.00
16		C12 Dodecane	0.810	0.805		0.6	100	0.00
17		C14 Tetradecane	0.866	0.839		3.1	100	0.00
18		C16 Hexadecane	0.911	0.874		4.1	100	0.00
19		C18 Octadecane	0.942	0.901		4.4	100	0.00
20		C19 Nonadecane	0.948	0.902		4.9	100	0.00
21		C20 Eicosane	0.957	0.928		3.0	100	0.00
22		C22 Docosane	0.979	0.966		1.3	100	0.00
23		C24 Tetracosane	0.973	0.977		-0.4	100	0.00
24		C26 Hexacosane	0.984	1.009		-2.5	100	0.00
25		C28 Octacosane	0.975	1.024		-5.0	100	0.00
26		C30 Triacontane	0.971	1.045		-7.6	100	0.00
27		C36 Hexatriacontane	0.940	1.057		-12.4	100	0.00
28	H	DRO C10 to C28 ISTD	0.915	0.909		0.7	100	0.00
29	H	TPH C8 to C40 ISTD	0.910	0.917		-0.8	100	0.00
30	H	TPH C9 to C36 ISTD	0.910	0.917		-0.8	100	0.00

Evaluate Continuing Calibration Report - Not Founds

1	S	1-Chlorooctadecane	0.000	0.000		0.0	0#	-6.44#
5	H	Gasoline	0.000	0.000		0.0	0#	0.00
6	H	Jet Fuel	0.000	0.000		0.0	0#	0.00
7	H	Motor Oil/Other	0.000	0.000		0.0	0#	0.00
8	H	Number 2 Fuel	0.000	0.000		0.0	0#	0.00
9	H	Number 4 Fuel	0.000	0.000		0.0	0#	0.00
10	H	Number 6 Fuel	0.000	0.000		0.0	0#	0.00
12	S	1-Chlorooctadecane ISTD	0.000	0.000		0.0	0#	-6.63#
31		----------	0.000	0.000		0.0	0#	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data File: \\Avogadro\Organics\F1.I\121217.B\F1J0134.D
Lab Smp Id: FSTD1001F Client Smp ID: FSTD1001F
Misc : | TPH Inst ID: F1.I
Signal(s) : FID1A.CH
Inj Date : 17 Dec 2012 19:58 Operator: TM
ALS Vial : 1 Sample Multiplier: 1

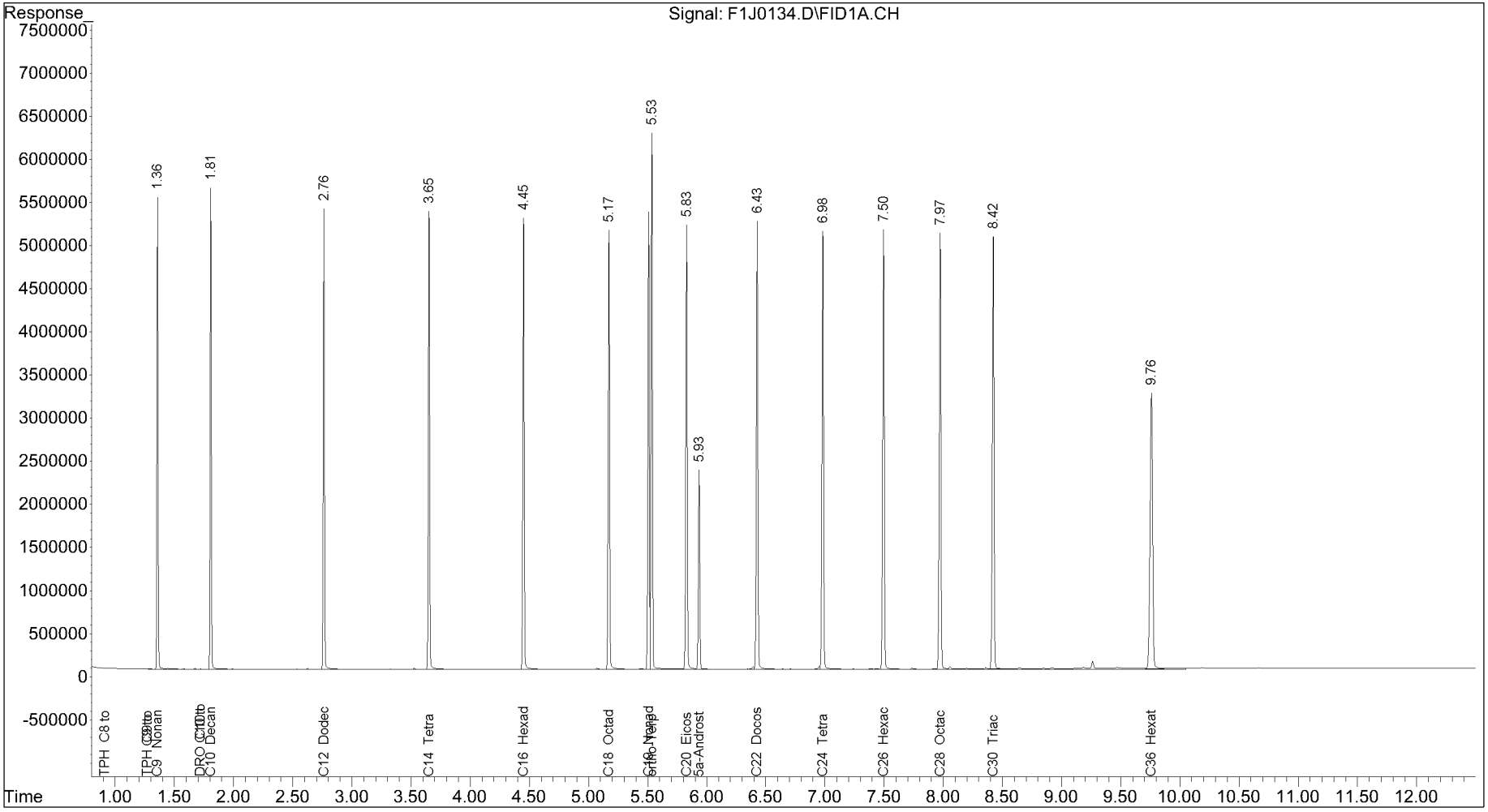
Quant Time: Dec 18 06:39:31 2012
Quant Method : O:\F1.I\QMETHODS\TPH1113.M
Quant Title : TPH, ETPH, DRO, Fuel ID, ORO
Response via : Initial Calibration
Volume Inj. : 2 uL
Signal Phase : DB-5MS
Signal Info : 0.32

	Compound	R.T.	Response	Conc Units
	Internal Standards			
11) I	5a-Androstane	5.93	18463366	40.000 ug/mL
	System Monitoring Compounds			
2) S	ortho-Terphenyl	5.53	48755114	106.068 ug/mL
Spiked Amount	100.000		Recovery =	106.07%
13) S	ortho-Terphenyl ISTD	5.53	48755114	99.909 ug/mL
Spiked Amount	100.000		Recovery =	99.91%
	Target Compounds			
3) H	DRO C10 to C28	1.73	419803312	1054.783 ug/mL
	Integration Range:		1.73 to 8.13 minutes	
	Raw Range Area:		538664215	
4) H	TPH C9 to C36	1.28	592732450	1498.273 ug/mL
	Integration Range:		1.28 to 10.05 minutes	
	Raw Range Area:		684402763	
14) T	C9 Nonane	1.36	34276047	102.561 ug/mL
15) TD	C10 Decane	1.81	35630148	102.303 ug/mL
16) TD	C12 Dodecane	2.76	37147140	99.321 ug/mL
17) TD	C14 Tetradecane	3.65	38747017	96.972 ug/mL
18) TD	C16 Hexadecane	4.45	40325882	95.921 ug/mL
19) TD	C18 Octadecane	5.17	41608504	95.724 ug/mL
20) T	C19 Nonadecane	5.51	41638299	95.173 ug/mL
21) TD	C20 Eicosane	5.83	42836055	97.001 ug/mL
22) TD	C22 Docosane	6.43	44577564	98.663 ug/mL
23) TD	C24 Tetracosane	6.98	45102876	100.416 ug/mL
24) TD	C26 Hexacosane	7.50	46570311	102.579 ug/mL
25) TD	C28 Octacosane	7.97	47257815	104.953 ug/mL
26) T	C30 Triacontane	8.42	48223994	107.563 ug/mL
27) T	C36 Hexatriacontane	9.76	48790799	112.445 ug/mL
28) H	DRO C10 to C28 ISTD	1.73	419803312	993.903 ug/mL
	Integration Range:		1.73 to 8.13 minutes	
	Raw Range Area:		538664215	
29) H	TPH C8 to C40 ISTD	0.92	592732450	1411.812 ug/mL
	Integration Range:		0.92 to 11.64 minutes	
	Raw Range Area:		698543943	
30) H	TPH C9 to C36 ISTD	1.28	592732450	1411.812 ug/mL
	Integration Range:		1.28 to 10.05 minutes	
	Raw Range Area:		684402763	

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: \\Avogadro\Organics\F1.I\121217.B\F1J0134.D
Lab Smp Id: FSTD1001F Client Smp ID: FSTD1001F
Misc : | TPH Inst ID: F1.I
Signal(s) : FID1A.CH
Inj Date : 17 Dec 2012 19:58 Operator: TM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Dec 18 06:39:31 2012
Quant Method : O:\F1.I\QMETHODS\TPH1113.M
Quant Title : TPH, ETPH, DRO, Fuel ID, ORO
Response via : Initial Calibration
Volume Inj. : 2 uL
Signal Phase : DB-5MS
Signal Info : 0.32



Data File: \\Avogadro\Organics\F1.I\121217.B\F1J0142.D
Lab Smp Id: FSTD1001G Client Smp ID: FSTD1001G
Misc : | TPH Inst ID: F1.I
Signal(s) : FID1A.CH
Inj Date : 17 Dec 2012 22:07 Operator: TM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Dec 18 06:41:42 2012
Quant Method : O:\F1.I\QMETHODS\TPH1113.M
Quant Title : TPH, ETPH, DRO, Fuel ID, ORO
Response via : Initial Calibration
Volume Inj. : 2 uL
Signal Phase : DB-5MS
Signal Info : 0.32

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
2	S	ortho-Terphenyl	459.660	513.981 E3	-11.8	105	0.00
3	H	DRO C10 to C28	398.000	439.169 E3	-10.3	105	0.00
4	H	TPH C9 to C36	395.611	442.140 E3	-11.8	104	0.00
11	I	5a-Androstane	1.000	1.000	0.0	105	0.00
13	S	ortho-Terphenyl ISTD	1.057	1.056	0.1	105	0.00
14		C9 Nonane	0.724	0.740	-2.2	105	0.00
15		C10 Decane	0.755	0.768	-1.7	105	0.00
16		C12 Dodecane	0.810	0.800	1.2	105	0.00
17		C14 Tetradecane	0.866	0.833	3.8	105	0.00
18		C16 Hexadecane	0.911	0.871	4.4	105	0.00
19		C18 Octadecane	0.942	0.899	4.6	105	0.00
20		C19 Nonadecane	0.948	0.900	5.1	105	0.00
21		C20 Eicosane	0.957	0.924	3.4	105	0.00
22		C22 Docosane	0.979	0.959	2.0	105	0.00
23		C24 Tetracosane	0.973	0.967	0.6	104	0.00
24		C26 Hexacosane	0.984	0.994	-1.0	104	0.00
25		C28 Octacosane	0.975	1.008	-3.4	104	0.00
26		C30 Triacontane	0.971	1.025	-5.6	103	0.00
27		C36 Hexatriacontane	0.940	1.029	-9.5	103	0.00
28	H	DRO C10 to C28 ISTD	0.915	0.902	1.4	105	0.00
29	H	TPH C8 to C40 ISTD	0.910	0.908	0.2	104	0.00
30	H	TPH C9 to C36 ISTD	0.910	0.908	0.2	104	0.00

Evaluate Continuing Calibration Report - Not Founds

1	S	1-Chlorooctadecane	0.000	0.000	0.0	0#	-6.44#
5	H	Gasoline	0.000	0.000	0.0	0#	0.00
6	H	Jet Fuel	0.000	0.000	0.0	0#	0.00
7	H	Motor Oil/Other	0.000	0.000	0.0	0#	0.00
8	H	Number 2 Fuel	0.000	0.000	0.0	0#	0.00
9	H	Number 4 Fuel	0.000	0.000	0.0	0#	0.00
10	H	Number 6 Fuel	0.000	0.000	0.0	0#	0.00
12	S	1-Chlorooctadecane ISTD	0.000	0.000	0.0	0#	-6.63#
31		----------	0.000	0.000	0.0	0#	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data File: \\Avogadro\Organics\F1.I\121217.B\F1J0142.D
Lab Smp Id: FSTD1001G Client Smp ID: FSTD1001G
Misc : | TPH Inst ID: F1.I
Signal(s) : FID1A.CH
Inj Date : 17 Dec 2012 22:07 Operator: TM
ALS Vial : 1 Sample Multiplier: 1

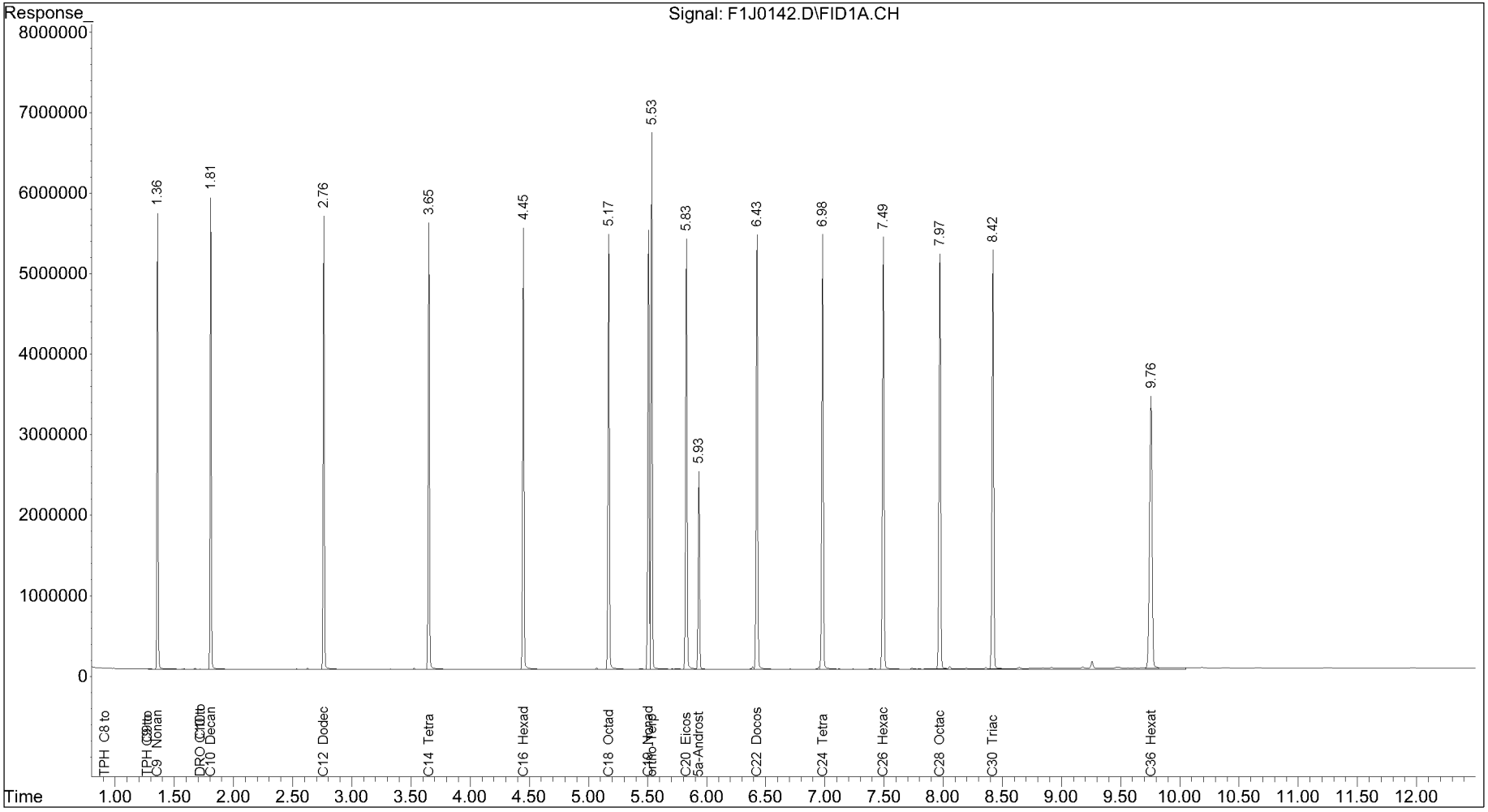
Quant Time: Dec 18 06:41:42 2012
Quant Method : O:\F1.I\QMETHODS\TPH1113.M
Quant Title : TPH, ETPH, DRO, Fuel ID, ORO
Response via : Initial Calibration
Volume Inj. : 2 uL
Signal Phase : DB-5MS
Signal Info : 0.32

	Compound	R.T.	Response	Conc Units
	Internal Standards			
11) I	5a-Androstane	5.93	19471925	40.000 ug/mL
	System Monitoring Compounds			
2) S	ortho-Terphenyl	5.53	51398127	111.818 ug/mL
Spiked Amount	100.000		Recovery =	111.82%
13) S	ortho-Terphenyl ISTD	5.53	51398127	99.870 ug/mL
Spiked Amount	100.000		Recovery =	99.87%
	Target Compounds			
3) H	DRO C10 to C28	1.73	439169377	1103.441 ug/mL
	Integration Range:		1.73 to 8.13 minutes	
	Raw Range Area:		563417445	
4) H	TPH C9 to C36	1.28	618996199	1564.661 ug/mL
	Integration Range:		1.28 to 10.05 minutes	
	Raw Range Area:		718708394	
14) T	C9 Nonane	1.36	36014325	102.181 ug/mL
15) TD	C10 Decane	1.81	37396238	101.813 ug/mL
16) TD	C12 Dodecane	2.76	38924239	98.682 ug/mL
17) TD	C14 Tetradecane	3.65	40528599	96.177 ug/mL
18) TD	C16 Hexadecane	4.45	42381502	95.589 ug/mL
19) TD	C18 Octadecane	5.17	43741874	95.420 ug/mL
20) T	C19 Nonadecane	5.51	43826798	94.986 ug/mL
21) TD	C20 Eicosane	5.83	44991426	96.605 ug/mL
22) TD	C22 Docosane	6.43	46672821	97.950 ug/mL
23) TD	C24 Tetracosane	6.98	47077507	99.384 ug/mL
24) TD	C26 Hexacosane	7.49	48409835	101.107 ug/mL
25) TD	C28 Octacosane	7.97	49045337	103.282 ug/mL
26) T	C30 Triacontane	8.42	49893332	105.522 ug/mL
27) T	C36 Hexatriacontane	9.76	50092366	109.465 ug/mL
28) H	DRO C10 to C28 ISTD	1.73	439169377	985.899 ug/mL
	Integration Range:		1.73 to 8.13 minutes	
	Raw Range Area:		563417445	
29) H	TPH C8 to C40 ISTD	0.92	618996199	1398.003 ug/mL
	Integration Range:		0.92 to 11.64 minutes	
	Raw Range Area:		737107392	
30) H	TPH C9 to C36 ISTD	1.28	618996199	1398.003 ug/mL
	Integration Range:		1.28 to 10.05 minutes	
	Raw Range Area:		718708394	

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: \\Avogadro\Organics\F1.I\121217.B\F1J0142.D
Lab Smp Id: FSTD1001G Client Smp ID: FSTD1001G
Misc : | TPH Inst ID: F1.I
Signal(s) : FID1A.CH
Inj Date : 17 Dec 2012 22:07 Operator: TM
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Dec 18 06:41:42 2012
Quant Method : O:\F1.I\QMETHODS\TPH1113.M
Quant Title : TPH, ETPH, DRO, Fuel ID, ORO
Response via : Initial Calibration
Volume Inj. : 2 uL
Signal Phase : DB-5MS
Signal Info : 0.32



Data File: \\Avogadro\Organics\F1.I\121217.B\F1J0135.D
Lab Smp Id: IBLK Client Smp ID: IBLK
Misc : | TPH Inst ID: F1.I
Signal(s) : FID1A.CH
Inj Date : 17 Dec 2012 20:18 Operator: TM
ALS Vial : 100 Sample Multiplier: 1

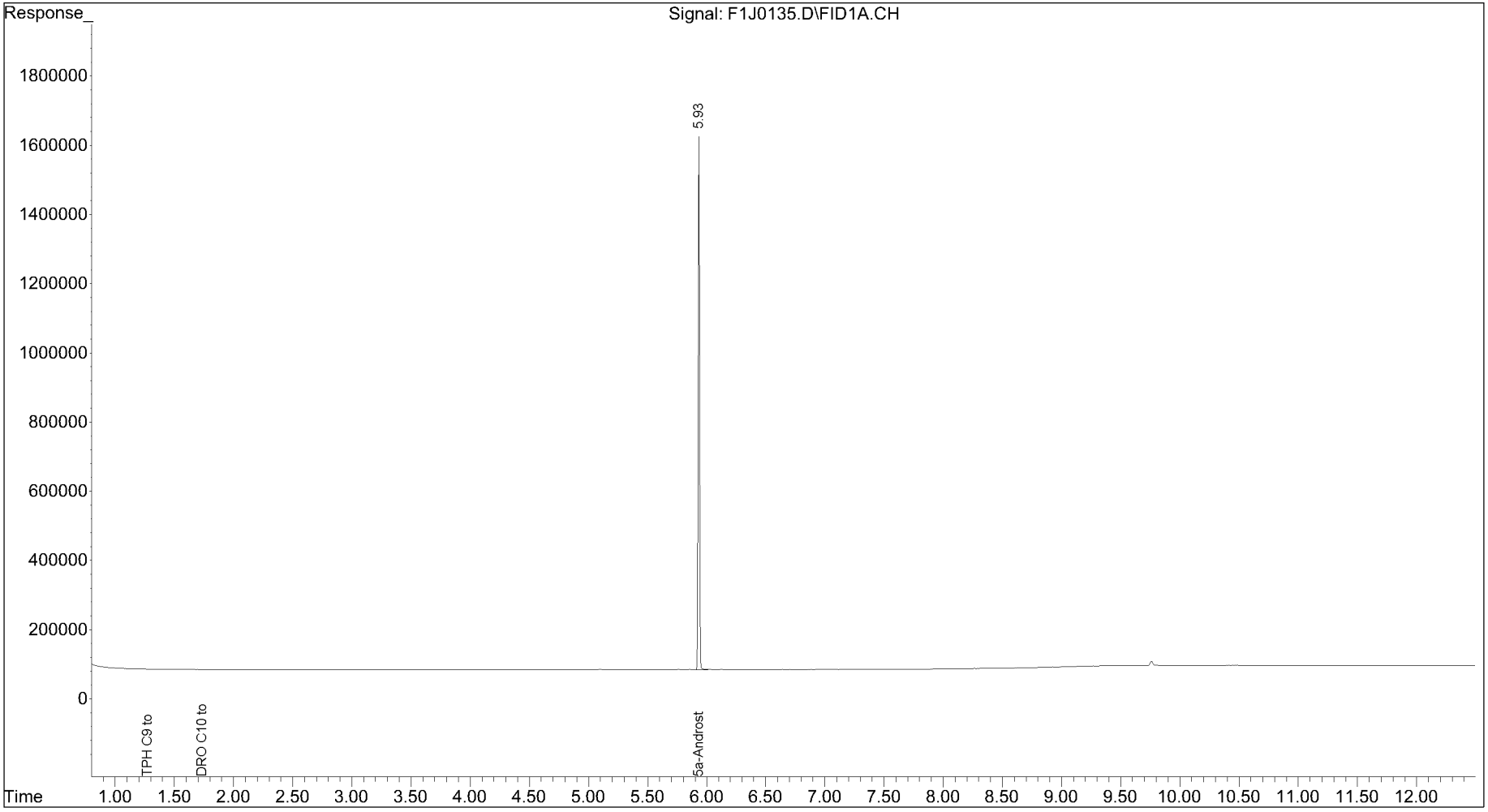
Quant Time: Dec 18 06:40:38 2012
Quant Method : O:\F1.I\QMETHODS\TPH1113.M
Quant Title : TPH, ETPH, DRO, Fuel ID, ORO
Response via : Initial Calibration
Volume Inj. : 2 uL
Signal Phase : DB-5MS
Signal Info : 0.32

	Compound	R.T.	Response	Conc Units
	Internal Standards			
11) I	5a-Androstane	5.93	12291163	40.000 ug/mL
	System Monitoring Compounds			
	Target Compounds			
3) H	DRO C10 to C28	1.73	3574910	8.982 ug/mL
	Integration Range:		1.73 to	8.13 minutes
	Raw Range Area:		15866073	
4) H	TPH C9 to C36	1.28	15112223	38.200 ug/mL
	Integration Range:		1.28 to	10.05 minutes
	Raw Range Area:		27403386	

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: \\Avogadro\Organics\F1.I\121217.B\F1J0135.D
Lab Smp Id: IBLK Client Smp ID: IBLK
Misc : | TPH Inst ID: F1.I
Signal(s) : FID1A.CH
Inj Date : 17 Dec 2012 20:18 Operator: TM
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Dec 18 06:40:38 2012
Quant Method : O:\F1.I\QMETHODS\TPH1113.M
Quant Title : TPH, ETPH, DRO, Fuel ID, ORO
Response via : Initial Calibration
Volume Inj. : 2 uL
Signal Phase : DB-5MS
Signal Info : 0.32



CLIENT: LaBella Associates
Work Order: L2570
Project: LaBella Stand By - Monoco

ANALYTICAL QC SUMMARY REPORT

TPH_S

SW846 8015D TPH -- Total Petroleum Hydrocarbons (TPH) by GC-FID

Sample ID: **MB-69761** SampType: **MBLK** TestCode: **TPH_S** Prep Date: **12/17/12 11:20** Run ID: **F1_121217A**
Client ID: **MB-69761** Batch ID: **69761** Units: **mg/Kg** Analysis Date: **12/17/12 20:38** SeqNo: **1845875**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Extractable Total Petroleum Hydrocarbon	ND	390	2100									
Surrogate: ortho-Terphenyl	78.56		250	99.99	0	78.6	50	150	0			

Sample ID: **LCS-69761** SampType: **LCS** TestCode: **TPH_S** Prep Date: **12/17/12 11:20** Run ID: **F1_121217A**
Client ID: **LCS-69761** Batch ID: **69761** Units: **mg/Kg** Analysis Date: **12/17/12 20:58** SeqNo: **1845876**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Extractable Total Petroleum Hydrocarbon	3345	390	2100	5000	0	66.9	60	140	0			
Surrogate: ortho-Terphenyl	70.93		250	99.99	0	70.9	50	150	0			

Sample ID: **LCSD-69761** SampType: **LCSD** TestCode: **TPH_S** Prep Date: **12/17/12 11:20** Run ID: **F1_121217A**
Client ID: **LCSD-69761** Batch ID: **69761** Units: **mg/Kg** Analysis Date: **12/17/12 21:18** SeqNo: **1845877**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Extractable Total Petroleum Hydrocarbon	3819	390	2100	5000	0	76.4	60	140	3345	13.2	20	
Surrogate: ortho-Terphenyl	78.23		250	99.99	0	78.2	50	150	0			

Qualifiers:
ND - Not Detected at the MDL
J - Analyte detected below quanititation limits
S - Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
MDL - Method Detection Limit
RL - Reporting Limit
B - Analyte detected in the associated Method Blank

Data File: \\Avogadro\Organics\F1.I\121217.B\F1J0136.D
Lab Smp Id: MB-69761 BN: 69761 Client Smp ID: MB-69761
Misc : | TPH Inst ID: F1.I
Signal(s) : FID1A.CH
Inj Date : 17 Dec 2012 20:38 Operator: TM
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 18 06:45:20 2012
Quant Method : O:\F1.I\QMETHODS\TPH1113.M
Quant Title : TPH, ETPH, DRO, Fuel ID, ORO
Response via : Initial Calibration
Volume Inj. : 2 uL
Signal Phase : DB-5MS
Signal Info : 0.32

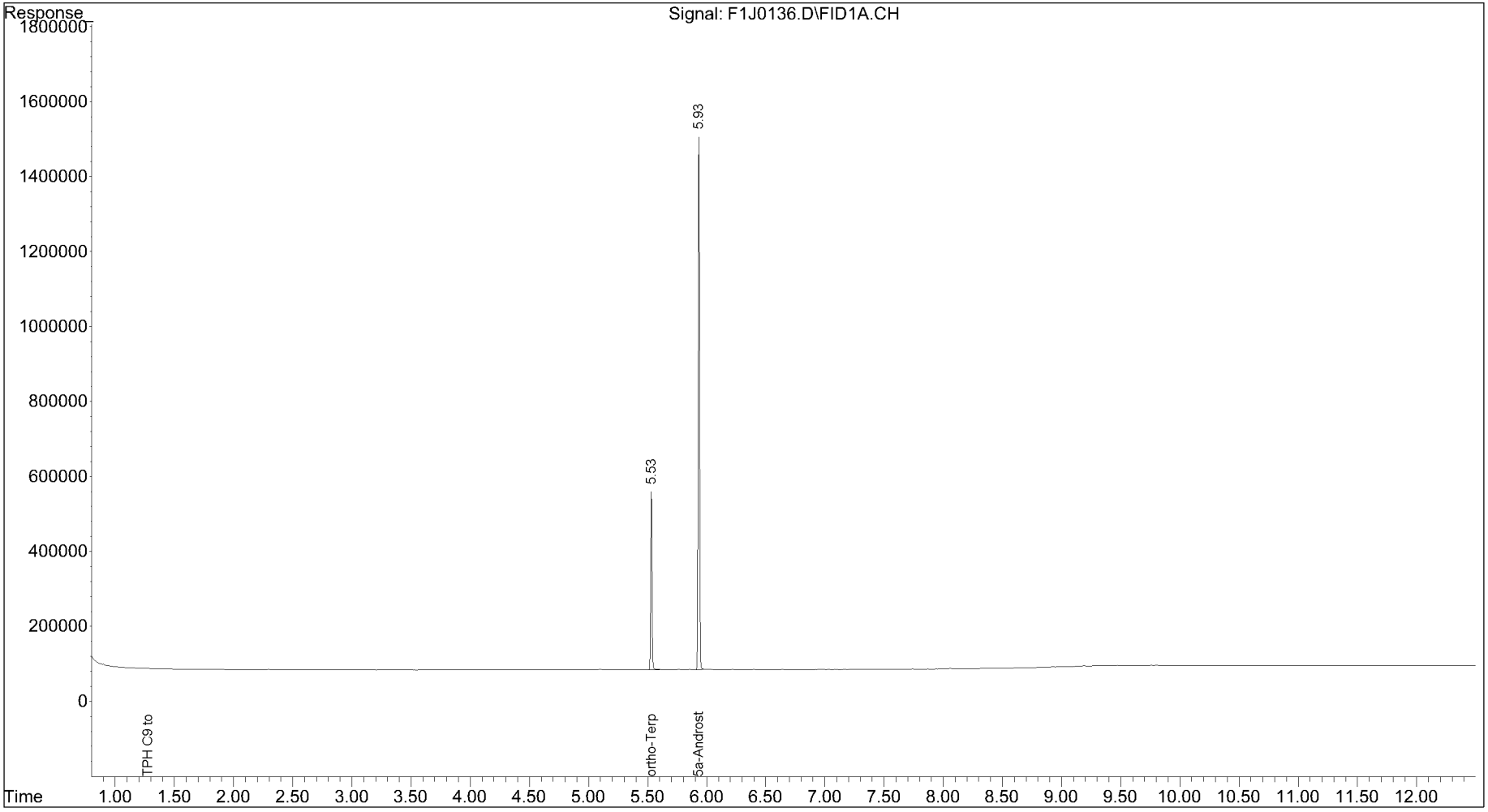
	Compound	R.T.	Response	Conc Units
	Internal Standards			
11) I	5a-Androstane	5.93	11597509	40.000 ug/mL
	System Monitoring Compounds			
2) S	ortho-Terphenyl	5.53	3611000	7.856 ug/mL
Spiked Amount	100.000		Recovery =	7.86%
	Target Compounds			
4) H	TPH C9 to C36	1.28	70723	0.179 ug/mL
	Integration Range:		1.28 to 10.05 minutes	
	Raw Range Area:		30391455	
	Corrected Range Area (IS,SS):		15182946	
	Instrument Blank Area (F1J0135):		15112223	

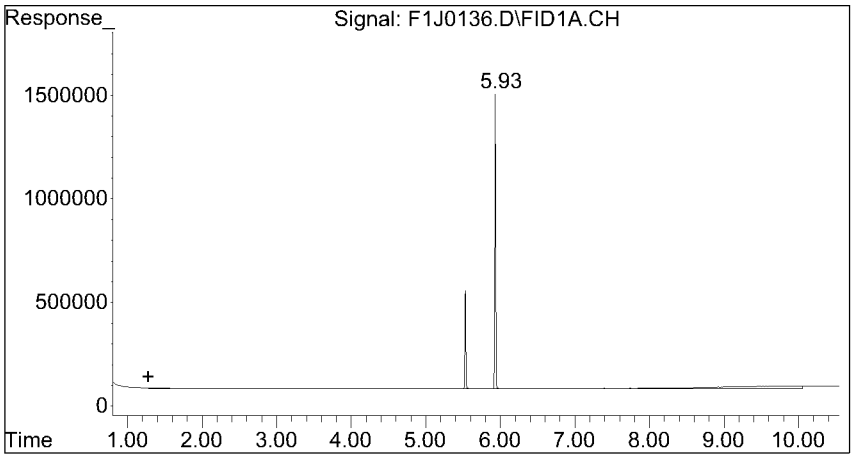
Corrected Range Area = Raw Range Area - Internal and Surrogate Area
Reported Area = Corrected Range Area - Instrument Blank Area

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: \\Avogadro\Organics\F1.I\121217.B\F1J0136.D
Lab Smp Id: MB-69761 BN: 69761 Client Smp ID: MB-69761
Misc : | TPH Inst ID: F1.I
Signal(s) : FID1A.CH
Inj Date : 17 Dec 2012 20:38 Operator: TM
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 18 06:45:20 2012
Quant Method : O:\F1.I\QMETHODS\TPH1113.M
Quant Title : TPH, ETPH, DRO, Fuel ID, ORO
Response via : Initial Calibration
Volume Inj. : 2 uL
Signal Phase : DB-5MS
Signal Info : 0.32





#4 TPH C9 to C36

R.T.:	1.280 min
Delta R.T.:	0.000 min
Response:	70723
Conc:	0.18 ug/mL m

Data File: \\Avogadro\Organics\F1.I\121217.B\F1J0137.D
Lab Smp Id: LCS-69761 BN: 69761 Client Smp ID: LCS-69761
Misc : | TPH Inst ID: F1.I
Signal(s) : FID1A.CH
Inj Date : 17 Dec 2012 20:58 Operator: TM
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Dec 18 06:45:21 2012
Quant Method : O:\F1.I\QMETHODS\TPH1113.M
Quant Title : TPH, ETPH, DRO, Fuel ID, ORO
Response via : Initial Calibration
Volume Inj. : 2 uL
Signal Phase : DB-5MS
Signal Info : 0.32

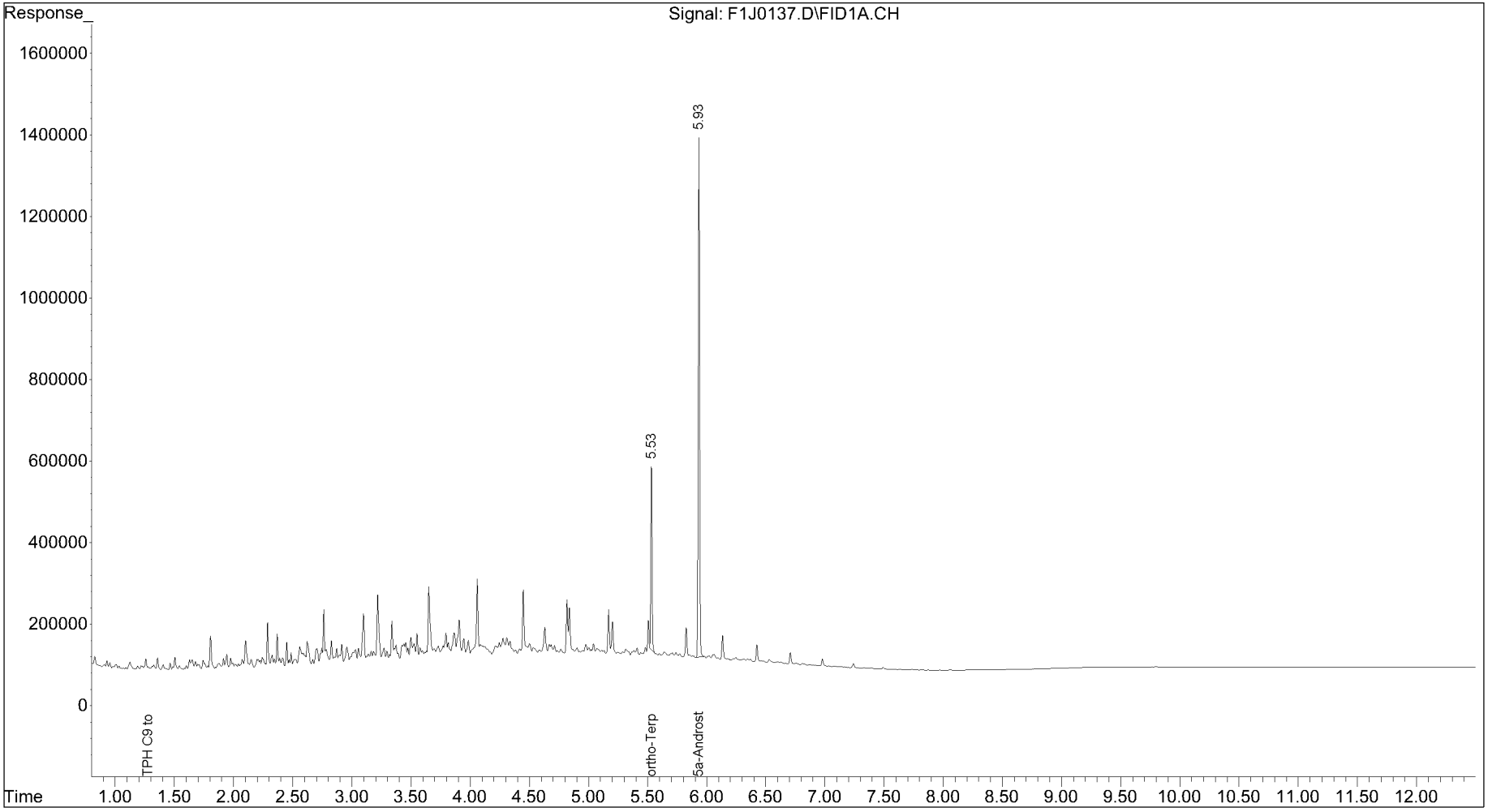
	Compound	R.T.	Response	Conc Units
	Internal Standards			
11) I	5a-Androstane	5.93	10218977	40.000 ug/mL
	System Monitoring Compounds			
2) S	ortho-Terphenyl	5.53	3260450	7.093 ug/mL
Spiked Amount	100.000		Recovery =	7.09%
	Target Compounds			
4) H	TPH C9 to C36	1.28	132323536	334.479 ug/mL
	Integration Range:		1.28 to 10.05 minutes	
	Raw Range Area:		160915187	
	Corrected Range Area (IS,SS):		147435759	
	Instrument Blank Area (F1J0135):		15112223	

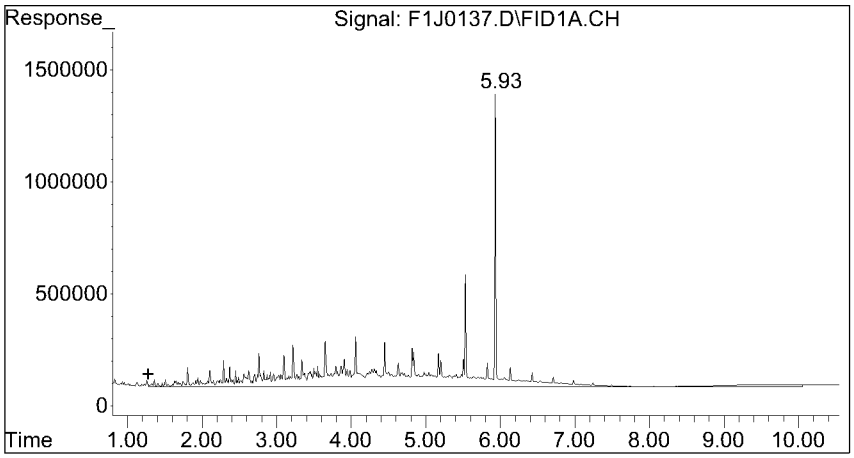
Corrected Range Area = Raw Range Area - Internal and Surrogate Area
Reported Area = Corrected Range Area - Instrument Blank Area

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: \\Avogadro\Organics\F1.I\121217.B\F1J0137.D
Lab Smp Id: LCS-69761 BN: 69761 Client Smp ID: LCS-69761
Misc : | TPH Inst ID: F1.I
Signal(s) : FID1A.CH
Inj Date : 17 Dec 2012 20:58 Operator: TM
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Dec 18 06:45:21 2012
Quant Method : O:\F1.I\QMETHODS\TPH1113.M
Quant Title : TPH, ETPH, DRO, Fuel ID, ORO
Response via : Initial Calibration
Volume Inj. : 2 uL
Signal Phase : DB-5MS
Signal Info : 0.32





#4 TPH C9 to C36

R.T.: 1.280 min
Delta R.T.: 0.000 min
Response: 132323536
Conc: 334.48 ug/mL m

Data File: \\Avogadro\Organics\F1.I\121217.B\F1J0138.D
Lab Smp Id: LCSD-69761 BN: 69761 Client Smp ID: LCSD-69761
Misc : | TPH Inst ID: F1.I
Signal(s) : FID1A.CH
Inj Date : 17 Dec 2012 21:18 Operator: TM
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Dec 18 06:45:22 2012
Quant Method : O:\F1.I\QMETHODS\TPH1113.M
Quant Title : TPH, ETPH, DRO, Fuel ID, ORO
Response via : Initial Calibration
Volume Inj. : 2 uL
Signal Phase : DB-5MS
Signal Info : 0.32

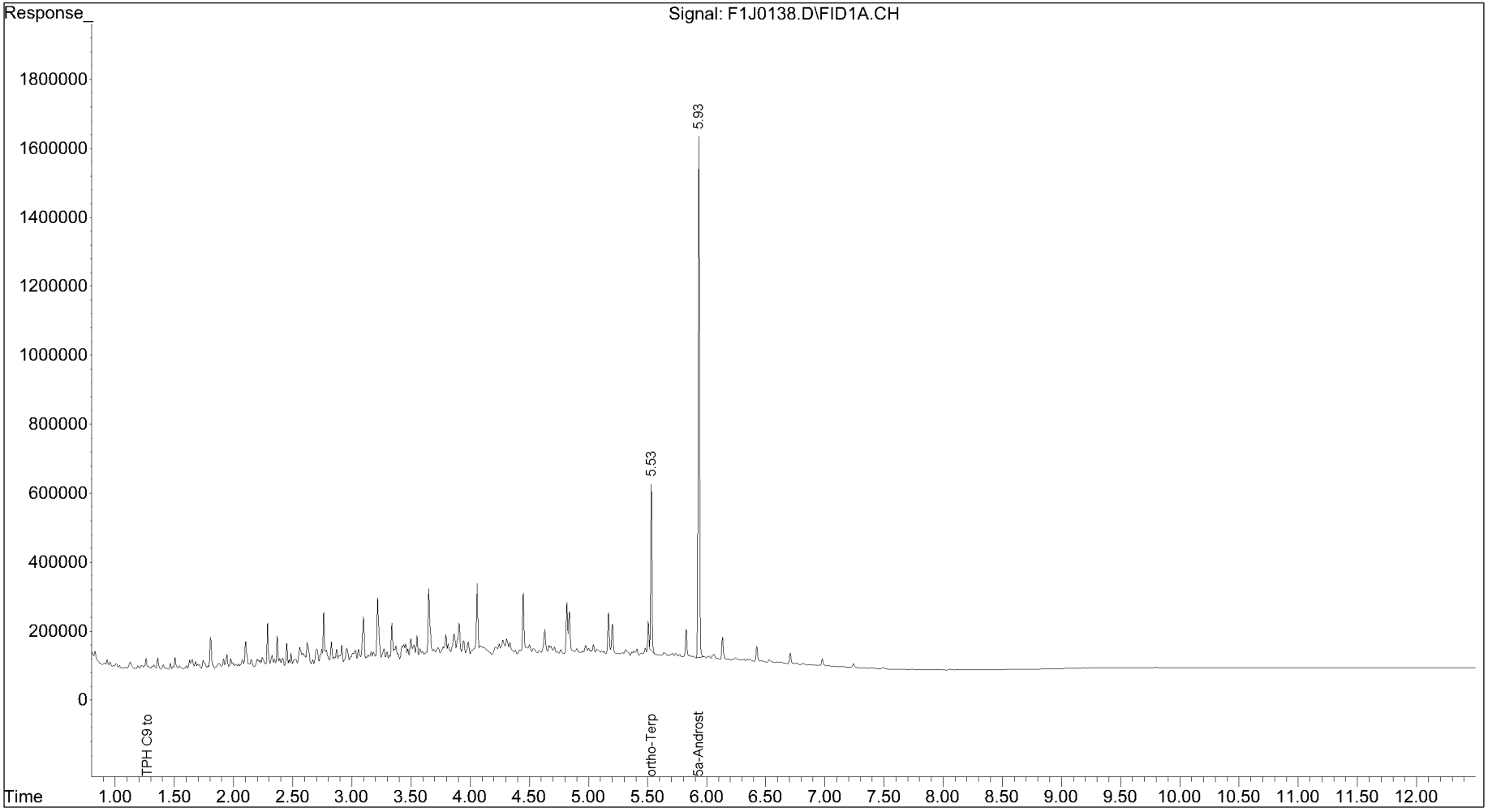
	Compound	R.T.	Response	Conc Units
	Internal Standards			
11) I	5a-Androstane	5.93	12182615	40.000 ug/mL
	System Monitoring Compounds			
2) S	ortho-Terphenyl	5.53	3595717	7.823 ug/mL
Spiked Amount	100.000		Recovery =	7.82%
	Target Compounds			
4) H	TPH C9 to C36	1.28	151079000	381.888 ug/mL
	Integration Range:		1.28 to 10.05 minutes	
	Raw Range Area:		181969555	
	Corrected Range Area (IS,SS):		166191223	
	Instrument Blank Area (F1J0135):		15112223	

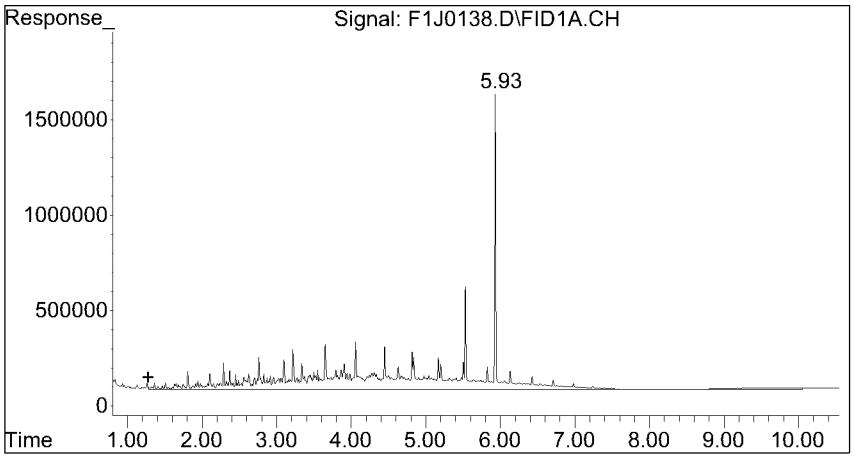
Corrected Range Area = Raw Range Area - Internal and Surrogate Area
Reported Area = Corrected Range Area - Instrument Blank Area

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: \\Avogadro\Organics\F1.I\121217.B\F1J0138.D
Lab Smp Id: LCSD-69761 BN: 69761 Client Smp ID: LCSD-69761
Misc : | TPH Inst ID: F1.I
Signal(s) : FID1A.CH
Inj Date : 17 Dec 2012 21:18 Operator: TM
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Dec 18 06:45:22 2012
Quant Method : O:\F1.I\QMETHODS\TPH1113.M
Quant Title : TPH, ETPH, DRO, Fuel ID, ORO
Response via : Initial Calibration
Volume Inj. : 2 uL
Signal Phase : DB-5MS
Signal Info : 0.32





#4 TPH C9 to C36

R.T.: 1.280 min
Delta R.T.: 0.000 min
Response: 151079000
Conc: 381.89 ug/mL m

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division PREP BATCH REPORT

Prep Start Date: **12/17/2012 11:20**
Prep End Date: **12/17/2012 14:00** Prep Code: **TPH_S_PR** Prep Type: **WASTE DIL/SW3580A** Prep Factor Units: **mL / g**
Prep Batch ID: **69761** Technician: **Timothy McDaniel**

QC Matrix: NA2SO4 | Solvent (1): MECL2 | Solvent (3): N/A | Solvent (5): N/A | Clean Up (1): N/A | Clean Up (3): N/A
QC Matrix Lot: 121756 | Solvent (1) Lot: DH 299 | Solvent (3) Lot: N/A | Solvent (5) Lot: N/A | Clean Up (1) Lot: N/A | Clean Up (1) Lot: N/A

Filter?: FILTER | Solvent (2): N/A | Solvent (4): N/A | Solvent (6): N/A | Clean Up (2): N/A | Clean Up (4): N/A
Filter Lot: FC003203 | Solvent (2) Lot: N/A | Solvent (4) Lot: N/A | Solvent (6) Lot: N/A | Clean Up (2) Lot: N/A | Clean Up (4) Lot: N/A

Start Time: N/A | Cycles/Hour 0 | Sonicator Tuned?Yes | Bath Temp1 (C): N/A | Therm ID1: N/A
End Time: N/A

Mitkem Sample ID	Client Samp ID	M	Initial (mL/g)	Final (mL)	Surrogate Spike ID	Surr (mL)	LCS/D MS/D Spike ID	Spike (mL)	A* Init	W* Init	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11	pH <2	CNCNTR Unit
MB-69761	BatchQC		1	10	OFW121010A	1			TM	JBW			12/17/12	JBW	R7		☐	☐	Turbo Vap 1
LCS-69761	BatchQC		1	10	OFW121010A	1	OFW121010B	1	TM	JBW			12/17/12	JBW	R7		☐	☐	Turbo Vap 1
LCSD-69761	BatchQC		1	10	OFW121010A	1	OFW121010B	1	TM	JBW			12/17/12	JBW	R7		☐	☐	Turbo Vap 1
L2570-01A	FORMER BLDG OIL	O	1	10	OFW121010A	1			TM	JBW	12/28/12	01	12/17/12	JBW	R7		☐	☐	Turbo Vap 1

Jodie B Warner 12/17/2012
Analyst Reviewed Date

Timothy McDaniel 12/17/2012
Manager Reviewed Date

Comments:

*A = Analyst (Spiked) *W = Witnessed (Spike) *T = Transferred

TM 12/17/12

Logbook ID: 50.0147-11/12

464

Date	Lab ID	Client	Method	Filename	Dilution	yes/no	Comments	Analyst

Injection Log

AQ : TPH_ACoF
QT : TPH 1113

Directory: O:\F1.I\121113A.B

INLET MAINT: YES

ICAL 9637

Line	Vial	FileName	Multiplier	SampleName		Misc Info	Injected
1	96	F1h9710.d	1.			NEW TPH/DRO ICAL	
2	99	F1h9711.d	1.	IBLK ✓			13 Nov 2012 11:24
3	1	F1h9712.d	1. L1	FSTD0051A ✓	FW12 1113A	TPH F	13 Nov 2012 11:44
4	2	F1h9713.d	1.	FSTD0101A ✓	B	TPH ICAL L1 5 PPM	13 Nov 2012 12:04
5	3	F1h9714.d	1. L2	FSTD0201A ✓	C	TPH ICAL L1A 10 PPM	13 Nov 2012 12:24
6	4	F1h9715.d	1.	FSTD0251A ✓	D	TPH ICAL L2 20 PPM	13 Nov 2012 12:43
7	5	F1h9716.d	1. L3	FSTD0501A ✓	E	TPH ICAL L2A 25 PPM	13 Nov 2012 13:03
8	6	F1h9717.d	1. L4	FSTD0801A ✓	F	TPH ICAL L3 50 PPM	13 Nov 2012 13:23
9	7	F1h9718.d	1. L4.5	FSTD1001A ✓ (CCV)	G	TPH ICAL L4 80 PPM	13 Nov 2012 13:43
10	8	F1h9719.d	1. L6	FSTD1201A ✓	H	TPH ICAL L5 100 PPM	13 Nov 2012 14:03
11	9	F1h9720.d	1. L7	FSTD1501A ✓	I	TPH ICAL L6 120 PPM	13 Nov 2012 14:22
12	10	F1h9721.d	1. L8	FSTD2001A ✓	J	TPH ICAL L7 150 PPM	13 Nov 2012 14:42
13	100	F1h9722.d	1.	IBLK ✓		TPH ICAL L8 200 PPM	13 Nov 2012 15:02
14	11	F1h9723.d	1. *	FICV0501A	FW12 1113K	TPH F	13 Nov 2012 15:22
15	12	F1h9724.d	1. **	FICV50001A ✓	L	TPH ICV 50 PPM C8...	13 Nov 2012 15:41
16	96	F1h9725.d	1. ***	DIESEL FUEL, ~20000 ppm	-PRIME	TPH ICV 5000 PPM ...	13 Nov 2012 16:01
17	100	F1h9726.d	1.	IBLK ✓			13 Nov 2012 16:21
						TPH F	13 Nov 2012 16:41

* Second source aliphatics, C_8 to C_{40} 99.9% REC

Ger 11/14/12

~~** Shell home heating oil, #2 DIESEL FUEL~~ Ger 11/14/12

GK 11/14/12

** Restek Diesel Fuel Composite 100% REC

*** Shell home heating oil, #2 Fuel 99.8% REC

Ger 11/14/12

Logbook ID: 60.0177-10/11

Injection Log

AQ: YK14-AGF
GT: TPH1113

Directory: O:\F1.I\121217.B

INLET MAINT: NONE

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	96	F1j0100.d	1.	NA		17 Dec 2012 11:48
2	96	F1j0101.d	1.	↓		17 Dec 2012 11:52
3	96	F1j0102.d	1.			17 Dec 2012 12:01
4	1	F1j0103.d	1.	FSTD1001E ✓ FW12111360	| TPH	17 Dec 2012 12:21
5	100	F1j0104.d	1.	IBLK ✓	| TPH	17 Dec 2012 12:41
6	2	F1j0105.d	1.	DIESEL / #2 FUEL OIL ✓	| TPH	17 Dec 2012 13:01
7	99	F1j0106.d	1.			17 Dec 2012 13:18
8	3	F1j0107.d	1.	#4 FUEL OIL ✓	| TPH	17 Dec 2012 13:27
9	99	F1j0108.d	1.			17 Dec 2012 13:43
10	4	F1j0109.d	1.	#5 FUEL OIL ✓	| TPH	17 Dec 2012 13:52
11	99	F1j0110.d	1.	✓		17 Dec 2012 14:08
12	5	F1j0111.d	1.	#6 FUEL OIL	| TPH	17 Dec 2012 14:17
13	99	F1j0112.d	1.			17 Dec 2012 14:33
14	6	F1j0113.d	1.	GAS ✓	| TPH	17 Dec 2012 14:42
15	7	F1j0114.d	1.	AV GAS ✓	| TPH	17 Dec 2012 15:02
16	8	F1j0115.d	1.	JET FUEL A ✓	| TPH	17 Dec 2012 15:22
17	9	F1j0116.d	1.	KEROSENE ✓	| TPH	17 Dec 2012 15:42
18	10	F1j0117.d	1.	MOTOR OIL ✓	| TPH	17 Dec 2012 16:03
19	99	F1j0118.d	1.			17 Dec 2012 16:19
20	11	F1j0119.d	1.	MINERAL SPIRITS ✓	| TPH	17 Dec 2012 16:28
21	12	F1j0120.d	1.	HYDRAULIC OIL ✓	| TPH	17 Dec 2012 16:48
22	99	F1j0121.d	1.			17 Dec 2012 17:04
23	13	F1j0122.d	1.	JP-4 ✓	| TPH	17 Dec 2012 17:13
24	14	F1j0123.d	1.	JP-5 ✓	| TPH	17 Dec 2012 17:33
25	15	F1j0124.d	1.	TRANSMISSION FLUID ✓	| TPH	17 Dec 2012 17:53
26	99	F1j0125.d	1.			17 Dec 2012 18:09
27	16	F1j0126.d	1.	TRANSFORMER OIL ✓	| TPH	17 Dec 2012 18:18
28	99	F1j0127.d	1.			17 Dec 2012 18:35
29	17	F1j0128.d	1.	COAL TAR ✓	| TPH	17 Dec 2012 18:43
30	99	F1j0129.d	1.			17 Dec 2012 19:00
31	18	F1j0130.d	1.	CREOSOTE ✓	| TPH	17 Dec 2012 19:09
32	99	F1j0131.d	1.			17 Dec 2012 19:25
33	99	F1j0132.d	1.			17 Dec 2012 19:28
34	96	F1j0133.d	1.			17 Dec 2012 19:37
35	1	F1j0134.d	1.	FSTD1001F ✓ FW12111360	| TPH	17 Dec 2012 19:58
36	100	F1j0135.d	1.	IBLK ✓	| TPH	17 Dec 2012 20:18
37	21	F1j0136.d	1.	MB-69761,,69761 ✓	| TPH	17 Dec 2012 20:38
38	22	F1j0137.d	1.	LCS-69761,,69761 ✓	| TPH	17 Dec 2012 20:58
39	23	F1j0138.d	1.	LCSD-69761,,69761 ✓	| TPH	17 Dec 2012 21:18
40	24	F1j0139.d	1.	L2570-01A,,69761,,20 ✓ 040 DL OUT	| TPH 20X DIL	17 Dec 2012 21:38
41	99	F1j0140.d	1.	↑ Fuel ID => #6 Fuel Oil		17 Dec 2012 21:54
42	99	F1j0141.d	1.			17 Dec 2012 21:58
43	1	F1j0142.d	1.	FSTD1001G ✓	| TPH	17 Dec 2012 22:07
44	100	F1j0143.d	1.	IBLK ✓	| TPH	17 Dec 2012 22:27
45	99	F1j0144.d	1.			17 Dec 2012 22:44
46	99	F1j0145.d	1.	DX		17 Dec 2012 22:47
47	99	F1j0146.d	1.	|		17 Dec 2012 22:51
48	99	F1j0147.d	1.	|		17 Dec 2012 22:55
49	99	F1j0148.d	1.	✓		17 Dec 2012 22:58

Qej 12/18/12

* Metals *

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : LaBella Associates

Project: LaBella Stand By - Monoco

Laboratory Workorder / SDG #: L2570

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, and SW846 7471B.

IV. PREPARATION

Oil Samples were prepared following procedures in laboratory test code: SW846 3050B, and SW846 7471B.

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):

A matrix spike was not performed on any sample in this SDG.

D. Post Digestion Spike (PDS):

A post-digestion spike was not performed on any sample in this SDG.

E. Duplicate sample:

A duplicate analysis was not performed on any sample in this SDG.

F. Serial Dilution (SD):

A serial dilution was not performed on any sample in this SDG.

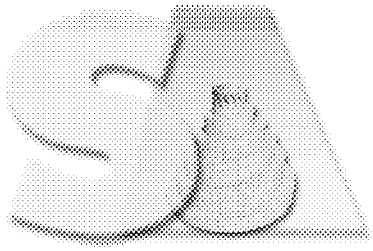
G. Samples:

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: 01/02/13



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

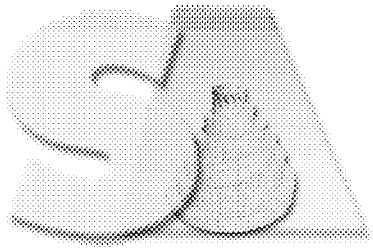
E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

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: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2570

SOW No.: SW846

EPA Sample No.	Lab Sample ID
FORMER BLDG OIL	L2570-01

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: Shanyn B Lawler Name: Shanyn B. Lawler

Date: 1/2/13 Title: QAO

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

FORMER BLDG OIL

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2570

Matrix (soil/water): SOIL Lab Sample ID: L2570-01

Level (low/med): MED Date Received: 12/14/2012

% Solids: 100.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7.3	B		P
7440-36-0	Antimony	0.56	B		P
7440-38-2	Arsenic	0.40	U		P
7440-39-3	Barium	2.3	B		P
7440-41-7	Beryllium	0.0015	U		P
7440-43-9	Cadmium	0.037	B		P
7440-70-2	Calcium	27.7	B		P
7440-47-3	Chromium	0.41	B		P
7440-48-4	Cobalt	0.20	B		P
7440-50-8	Copper	3.5			P
7439-89-6	Iron	62.4			P
7439-92-1	Lead	27.1			P
7439-95-4	Magnesium	10.0	B		P
7439-96-5	Manganese	0.72	B		P
7439-97-6	Mercury	0.062			CV
7440-02-0	Nickel	4.4			P
7440-09-7	Potassium	4.2	B		P
7782-49-2	Selenium	0.63	U		P
7440-22-4	Silver	0.063	U		P
7440-23-5	Sodium	9.4	B		P
7440-28-0	Thallium	0.22	U		P
7440-62-2	Vanadium	8.2			P
7440-66-6	Zinc	15.4			P

Comments:

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2570

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
	12/18/12 15:29				12/18/12 15:47		12/18/12 16:06		
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Mercury	5.0	5.27	105.4	5.0	5.35	107.0	5.36	107.3	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: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2570

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
	12/18/12 13:05				12/18/12 13:24		12/18/12 13:57		
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Aluminum	10000.0	9671.60	96.7	10000.0	9730.28	97.3	9944.02	99.4	P
Antimony	500.0	522.98	104.6	500.0	521.21	104.2	533.10	106.6	P
Arsenic	500.0	491.11	98.2	500.0	487.35	97.5	503.52	100.7	P
Barium	10000.0	10148.78	101.5	10000.0	10165.97	101.7	10333.09	103.3	P
Beryllium	250.0	243.84	97.5	250.0	244.21	97.7	247.34	98.9	P
Cadmium	250.0	242.94	97.2	250.0	244.48	97.8	250.22	100.1	P
Calcium	25000.0	23380.67	93.5	25000.0	23294.64	93.2	23806.62	95.2	P
Chromium	1000.0	963.13	96.3	1000.0	966.22	96.6	987.04	98.7	P
Cobalt	2500.0	2528.13	101.1	2500.0	2534.57	101.4	2589.60	103.6	P
Copper	1250.0	1248.96	99.9	1250.0	1255.06	100.4	1274.42	102.0	P
Iron	5000.0	4811.00	96.2	5000.0	4845.35	96.9	4928.20	98.6	P
Lead	500.0	485.78	97.2	500.0	483.52	96.7	490.98	98.2	P
Magnesium	25000.0	25237.74	101.0	25000.0	25258.87	101.0	25549.01	102.2	P
Manganese	2500.0	2494.19	99.8	2500.0	2497.44	99.9	2533.17	101.3	P
Nickel	2500.0	2495.33	99.8	2500.0	2501.92	100.1	2555.39	102.2	P
Potassium	25000.0	25329.06	101.3	25000.0	25056.16	100.2	25319.94	101.3	P
Selenium	500.0	487.01	97.4	500.0	486.52	97.3	496.40	99.3	P
Silver	1250.0	1222.08	97.8	1250.0	1222.92	97.8	1247.39	99.8	P
Thallium	500.0	460.69	92.1	500.0	464.41	92.9	469.30	93.9	P
Vanadium	2500.0	2450.30	98.0	2500.0	2456.73	98.3	2510.30	100.4	P
Zinc	2500.0	2505.86	100.2	2500.0	2513.79	100.6	2564.27	102.6	P

(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: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2570

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
					12/18/12 14:35		12/18/12 15:16		
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Aluminum				10000.0	9856.58	98.6	9839.08	98.4	P
Antimony				500.0	535.98	107.2	530.64	106.1	P
Arsenic				500.0	501.10	100.2	496.04	99.2	P
Barium				10000.0	10420.47	104.2	10243.37	102.4	P
Beryllium				250.0	249.59	99.8	244.19	97.7	P
Cadmium				250.0	246.34	98.5	245.31	98.1	P
Calcium				25000.0	23859.77	95.4	23459.22	93.8	P
Chromium				1000.0	976.32	97.6	970.24	97.0	P
Cobalt				2500.0	2557.91	102.3	2553.40	102.1	P
Copper				1250.0	1289.50	103.2	1264.51	101.2	P
Iron				5000.0	4858.88	97.2	4846.55	96.9	P
Lead				500.0	489.71	97.9	483.83	96.8	P
Magnesium				25000.0	25601.12	102.4	25117.90	100.5	P
Manganese				2500.0	2552.76	102.1	2504.95	100.2	P
Nickel				2500.0	2527.36	101.1	2517.98	100.7	P
Potassium				25000.0	24916.40	99.7	24888.40	99.6	P
Selenium				500.0	498.00	99.6	484.81	97.0	P
Silver				1250.0	1236.58	98.9	1230.96	98.5	P
Thallium				500.0	469.17	93.8	464.14	92.8	P
Vanadium				2500.0	2484.56	99.4	2469.93	98.8	P
Zinc				2500.0	2526.76	101.1	2526.38	101.1	P

(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: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2570

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
	12/18/12 15:39				12/18/12 15:53		12/18/12 16:16		
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Sodium	25000.0	25717.17	102.9	25000.0	25148.20	100.6	25389.00	101.6	P

(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: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2570

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
					12/18/12 16:43		12/18/12 17:04		
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Sodium				25000.0	25191.80	100.8	25469.37	101.9	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: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2570

Preparation Blank Matrix (soil/water): SOIL

Method Blank ID: **MB-69757**

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

FIMS2_121218B

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
Analyte		C	12/18/12 15:49	C	12/18/12 16:07	C		C		C	M
Mercury	0.028	U	0.028	U	0.028	U			0.015	B	CV

U.S. EPA - CLP

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2570

Preparation Blank Matrix (soil/water): SOIL

Method Blank ID: **MB-69753**

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

OPTIMA3_121218B

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 12/18/12 13:28	C	12/18/12 14:01	C	12/18/12 14:38	C	Preparation Blank	C	M
Aluminum	66.0	U	66.0	U	66.0	U	66.0	U	1.200	U	P
Antimony	9.3	U	9.3	U	9.3	U	9.3	U	0.662	B	P
Arsenic	4.3	U	4.3	U	4.3	U	4.3	U	0.410	U	P
Barium	1.1	U	1.1	U	1.1	U	1.1	U	0.088	B	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	110.0	U	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	0.494	B	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	197.5	B	145.9	B	127.5	B	76.0	U	3.824	B	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	0.107	B	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	0.437	B	P

U.S. EPA - CLP

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2570

Preparation Blank Matrix (soil/water): Method Blank ID:

Preparation Blank Concentration Units (ug/L or mg/kg):

OPTIMA3_121218B

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 12/18/12 15:20	C		C		C	Preparation Blank	C	M
Aluminum			66.0	U							P
Antimony			9.3	U							P
Arsenic			4.3	U							P
Barium			1.1	B							P
Beryllium			0.3	U							P
Cadmium			0.9	U							P
Calcium			110.0	U							P
Chromium			0.6	U							P
Cobalt			0.7	U							P
Copper			3.6	U							P
Iron			31.0	U							P
Lead			4.2	U							P
Magnesium			76.0	U							P
Manganese			10.0	U							P
Nickel			0.8	U							P
Potassium			76.0	U							P
Selenium			12.0	U							P
Silver			6.9	U							P
Thallium			6.2	U							P
Vanadium			1.1	U							P
Zinc			4.9	U							P

U.S. EPA - CLP

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2570

Preparation Blank Matrix (soil/water): SOIL

Method Blank ID: **MB-69753**

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

OPTIMA3_121218C

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 12/18/12 15:55	C	12/18/12 16:19	C	12/18/12 16:45	C	Preparation Blank	C	M
Sodium	-31.5	B	-117.9	B	-250.7	B	-299.6	B	1.100	U	P

U.S. EPA - CLP

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2570

Preparation Blank Matrix (soil/water): Method Blank ID:

Preparation Blank Concentration Units (ug/L or mg/kg):

OPTIMA3_121218C

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
Analyte		C	12/18/12 17:06	C		C		C		C	M
Sodium			-348.7	B							P

U.S. EPA - CLP

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2570

ICP ID Number: OPTIMA3 ICS Source:

Concentration Units: ug/L

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	Initial Found %R	Final Found Sol. A	Final Found %R	Final Found Sol. AB	Final Found %R
Aluminum	500000	500000	527237	531317.9	106.3				
Antimony	0	600	15	684.1	114.0				
Arsenic	0	100	-18	91.2	91.2				
Barium	0	500	9	545.5	109.1				
Beryllium	0	500	0	523.5	104.7				
Cadmium	0	1000	-4	979.6	98.0				
Calcium	500000	500000	537848	549494.8	109.9				
Chromium	0	500	-3	500.9	100.2				
Cobalt	0	500	1	479.4	95.9				
Copper	0	500	-6	520.2	104.0				
Iron	200000	200000	184942	188409.2	94.2				
Lead	0	500	-2	502.7	100.5				
Magnesium	500000	500000	501025	503438.4	100.7				
Manganese	0	500	-16	496.8	99.4				
Nickel	0	1000	0	940	94.0				
Potassium	0	25000	109	26579.5	106.3				
Selenium	0	500	1	543	108.6				
Silver	0	200	2	224.2	112.1				
Thallium	0	100	8	98	98.0				
Vanadium	0	500	5	521	104.2				
Zinc	0	1000	5	995.6	99.6				

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2570

ICP ID Number: OPTIMA3 ICS Source:

Concentration Units: ug/L

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	Initial Found %R	Final Found Sol. A	Final Found %R	Final Found Sol. AB	Final Found %R
Sodium	0	25000	214	26600.9	106.4				

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LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2570

Solid LCS Source:

Aqueous LCS Source:

LCS(D) ID:
LCS-69753

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Aluminum				455.0	437.3		364	546.0	96.1
Antimony				22.8	23.2		18.2	27.3	101.8
Arsenic				22.8	22.4		18.2	27.3	98.2
Barium				455.0	445.3		364	546.0	97.9
Beryllium				11.4	11.0		9.1	13.6	96.5
Cadmium				11.4	11.1		9.1	13.6	97.4
Calcium				1135.0	1072.3		908	1362.0	94.5
Chromium				45.5	43.4		36.4	54.6	95.4
Cobalt				113.5	109.0		90.8	136.2	96.0
Copper				56.5	54.0		45.2	67.8	95.6
Iron				227.5	215.7		182	273.0	94.8
Lead				22.8	21.9		18.2	27.3	96.1
Magnesium				1135.0	1112.1		908	1362.0	98.0
Manganese				113.5	109.8		90.8	136.2	96.7
Nickel				113.5	109.3		90.8	136.2	96.3
Potassium				1135.0	1123.1		908	1362.0	99.0
Selenium				22.8	22.2		18.2	27.3	97.4
Silver				56.5	54.1		42.4	67.8	95.8
Sodium				1135.0	1118.3		908	1362.0	98.5
Thallium				22.8	20.8		18.2	27.3	91.2
Vanadium				113.5	107.5		90.8	136.2	94.7
Zinc				113.5	110.0		90.8	136.2	96.9

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2570

Solid LCS Source:

Aqueous LCS Source:

LCS(D) ID:
LCS-69757

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Mercury				0.8	0.8		0.6	0.9	100.0

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METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2570

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:

U.S. EPA - CLP

10

METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2570

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:

U.S. EPA - CLP

10

METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2570

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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METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2570

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:

U.S. EPA - CLP

11A

ICP INTERELEMENT CORRECTION FACTORS (BIANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2570

ICP ID Number: OPTIMA3 Date: 11/7/2012

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	Co
Aluminum	308.21		0.0585331	0.0000000	0.0000000	-0.7027870
Antimony	206.83	0.0522943	0.0000000	0.0525467	0.0145567	0.0000000
Arsenic	188.97	0.0241171	-0.0077344	-0.0478283	-0.0039833	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	0.0040368	0.0744906	0.0000000	-0.0756648
Calcium	227.54	0.0000000		8.3821200	0.0000000	209.5650000
Chromium	267.71	0.0081667	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	-0.1872920	0.0000000	-0.4130330
Iron	273.95	0.0682328	0.0000000		0.0391966	0.0000000
Lead	220.35	-0.0821620	-0.0055228	0.0335782	0.0000000	-0.1096090
Magnesium	279.07	0.0000000	0.0000000	0.0000000		0.0000000
Manganese	257.61	0.0000000	0.0000000	-0.0413970	0.0352841	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.2556440
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	-0.0242802	0.0502104	-0.4325050	0.0000000	-0.3577810
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	0.0153318	-0.0250019	-0.0714984	-0.0086936	5.2953500
Titanium	334.94	0.0000000	-0.0153022	0.0000000	0.0341230	0.0000000
Vanadium	292.40	0.0000000	0.0000000	-0.0658048	0.0000000	0.0000000
Zinc	206.20	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Comments:

U.S. EPA - CLP

11B

ICP INTERELEMENT CORRECTION FACTORS (BIANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2570

ICP ID Number: OPTIMA3 Date: 11/7/2012

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	21.5747000	0.1303100	0.1684320	0.0443957	0.1148900
Arsenic	188.97	-7.7014200	0.2019220	0.2145950	0.0000000	0.1995490
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	-0.3441500	0.0000000
Calcium	227.54	0.0000000	0.0000000	0.0000000	15.0602000	0.0000000
Chromium	267.71		0.0000000	0.5781390	0.0000000	0.0000000
Cobalt	228.61	-0.3914380	0.0000000	0.0000000	0.2408380	0.0000000
Copper	324.75	0.0000000		0.0000000	0.0000000	0.0000000
Iron	273.95	-2.0394800	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.1149420	0.4621410	0.0947287	-0.1357850	0.0000000
Magnesium	279.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	-0.1052400	0.0000000		0.0378220	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000		0.7769590
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	0.0000000	0.0000000	0.7938440	0.0000000	0.3690520
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	0.2843500	0.0000000	1.0309800	0.0000000	
Titanium	334.94	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	-1.7001100	0.2083860	0.0000000	0.0000000	0.0000000
Zinc	206.20	-5.7314500	0.0000000	0.0000000	0.0000000	0.0000000

Comments:

U.S. EPA - CLP

11B

ICP INTERELEMENT CORRECTION FACTORS (BIANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2570

ICP ID Number: OPTIMA3 Date: 11/7/2012

Analyte	Wave-length (nm)	Interelement Correction Factors for: Ti	V	___	___	___
Aluminum	308.21	0.0000000	14.2071000			
Antimony	206.83	-0.2405290	-2.4680100			
Arsenic	188.97	0.0000000	0.1479080			
Barium	233.52	0.0000000	-1.3917200			
Beryllium	313.10	-2.5167800	-0.0413497			
Cadmium	226.50	0.0000000	0.0000000			
Calcium	227.54	0.0000000	27.7999000			
Chromium	267.71	0.0000000	-0.4798520			
Cobalt	228.61	1.2779000	0.0000000			
Copper	324.75	0.0000000	-0.2857860			
Iron	273.95	0.0000000	72.6664000			
Lead	220.35	-0.6420210	-0.0616236			
Magnesium	279.07	0.0000000	0.0000000			
Manganese	257.61	0.0000000	-0.0885484			
Nickel	231.60	0.6039130	0.0000000			
Potassium	766.49	0.0000000	0.0000000			
Selenium	196.02	0.0000000	0.4095350			
Silver	328.06	0.0000000	-0.9558910			
Sodium	589.59	0.0000000	0.0000000			
Thallium	190.80	0.7780200	3.9877300			
Titanium	334.94		0.0000000			
Vanadium	292.40	0.7592830				
Zinc	206.20	0.0000000	0.0000000			

Comments:

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ICP LINEAR RANGES (BIANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2570

ICP ID Number: OPTIMA3 Date: 11/7/2012

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:

U.S. EPA - CLP

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PREPARATION LOG

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2570

Preparation Method: 3050B Batch ID: 69753

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
FORMER BLDG OIL	12/17/2012	1.02	50
LCSS	12/17/2012	1.00	50
PBS	12/17/2012	1.00	50

Comments:

U.S. EPA - CLP

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PREPARATION LOG

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2570

Preparation Method: 7471B Batch ID: 69757

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
CCB	12/17/2012	0.60	100
CCV	12/17/2012	0.60	100
ICB	12/17/2012	0.60	100
ICV	12/17/2012	0.60	100
S0	12/17/2012	0.60	100
S0.2	12/17/2012	0.60	100
S1.0	12/17/2012	0.60	100
S10.0	12/17/2012	0.60	100
S2.0	12/17/2012	0.60	100
S5.0	12/17/2012	0.60	100
FORMER BLDG OIL	12/17/2012	0.53	100
LCSS	12/17/2012	0.60	100
PBS	12/17/2012	0.60	100

Comments:

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PREPARATION LOG

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2570

Preparation Method: 7471B Batch ID: 69757

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
CCB	12/17/2012	0.60	100
CCV	12/17/2012	0.60	100
ICB	12/17/2012	0.60	100
ICV	12/17/2012	0.60	100
S0	12/17/2012	0.60	100
S0.2	12/17/2012	0.60	100
S1.0	12/17/2012	0.60	100
S10.0	12/17/2012	0.60	100
S2.0	12/17/2012	0.60	100
S5.0	12/17/2012	0.60	100
FORMER BLDG OIL	12/17/2012	0.53	100
LCSS	12/17/2012	0.60	100
PBS	12/17/2012	0.60	100

Comments:

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ANALYSIS RUN LOG

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2570

Instrument ID Number: FIMS2 Method: CV

Start Date: 12/18/2012 End Date: 12/18/2012

FIMS2_121218B

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CO	CR	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.0	1519																X									
S0.2	1.0	1521																X									
S1.0	1.0	1522																X									
S2.0	1.0	1524																X									
S5.0	1.0	1526																X									
S10.0	1.0	1527																X									
ICV	1.0	1529																X									
ICB	1.0	1531																X									
PBS	1.0	1532																X									
LCSS	1.0	1534																X									
ZZZZZZ	1.0	1536																									
ZZZZZZ	1.0	1537																									
ZZZZZZ	1.0	1539																									
ZZZZZZ	1.0	1541																									
ZZZZZZ	1.0	1542																									
ZZZZZZ	1.0	1544																									
ZZZZZZ	1.0	1546																									
CCV	1.0	1547																X									
CCB	1.0	1549																X									
ZZZZZZ	1.0	1551																									
ZZZZZZ	1.0	1552																									
ZZZZZZ	1.0	1554																									
ZZZZZZ	1.0	1556																									
ZZZZZZ	1.0	1557																									
ZZZZZZ	1.0	1559																									
FORMER BLDG OIL	1.0	1601																X									
ZZZZZZ	1.0	1602																									
ZZZZZZ	1.0	1604																									
CCV	1.0	1606																X									
CCB	1.0	1607																X									

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ANALYSIS RUN LOG

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2570

Instrument ID Number: OPTIMA3 Method: P

Start Date: 12/18/2012 End Date: 12/18/2012

OPTIMA3_121218B

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CO	CR	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.0	1250		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	
S1	1.0	1254		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	
S2	1.0	1258		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	
S3	1.0	1302		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	
ICV	1.0	1305		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	
ICB	1.0	1309		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	
ZZZZZZ	1.0	1313																									
ICSA	1.0	1316		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	
ICSAB	1.0	1320		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	
CCV	1.0	1324		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	
CCB	1.0	1328		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	
PBS	1.0	1331		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	
LCSS	1.0	1335		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	
ZZZZZZ	1.0	1339																									
ZZZZZZ	1.0	1342																									
ZZZZZZ	1.0	1346																									
ZZZZZZ	1.0	1350																									
ZZZZZZ	1.0	1354																									
CCV	1.0	1357		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	
CCB	1.0	1401		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	
ZZZZZZ	1.0	1405																									
ZZZZZZ	1.0	1408																									
ZZZZZZ	1.0	1412																									
ZZZZZZ	1.0	1416																									
ZZZZZZ	1.0	1420																									
ZZZZZZ	1.0	1423																									
ZZZZZZ	1.0	1427																									
ZZZZZZ	5.0	1431																									
CCV	1.0	1435		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	
CCB	1.0	1438		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	
ZZZZZZ	1.0	1442																									
ZZZZZZ	1.0	1446																									

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ANALYSIS RUN LOG

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2570

Instrument ID Number: OPTIMA3 Method: P

Start Date: 12/18/2012 End Date: 12/18/2012

OPTIMA3_121218B

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CO	CR	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
FORMER BLDG OIL	1.0	1449		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	
ZZZZZZ	1.0	1453																									
ZZZZZZ	1.0	1457																									
ZZZZZZ	1.0	1501																									
ZZZZZZ	20.0	1505																									
ZZZZZZ	20.0	1509																									
ZZZZZZ	20.0	1512																									
CCV	1.0	1516		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	
CCB	1.0	1520		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	

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ANALYSIS RUN LOG

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2570

Instrument ID Number: OPTIMA3 Method: P

Start Date: 12/18/2012 End Date: 12/18/2012

OPTIMA3_121218C

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CO	CR	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.0	1528																				X				
S1	1.0	1531																				X				
S2	1.0	1534																				X				
S3	1.0	1536																				X				
ICV	1.0	1539																				X				
ICB	1.0	1541																				X				
ZZZZZZ	1.0	1544																								
ICSA	1.0	1547																				X				
ICSAB	1.0	1550																				X				
CCV	1.0	1553																				X				
CCB	1.0	1555																				X				
PBS	1.0	1558																				X				
LCSS	1.0	1600																				X				
ZZZZZZ	1.0	1603																								
ZZZZZZ	1.0	1606																								
ZZZZZZ	1.0	1608																								
ZZZZZZ	1.0	1611																								
ZZZZZZ	1.0	1614																								
CCV	1.0	1616																				X				
CCB	1.0	1619																				X				
ZZZZZZ	1.0	1621																								
ZZZZZZ	1.0	1624																								
ZZZZZZ	1.0	1627																								
ZZZZZZ	1.0	1629																								
ZZZZZZ	1.0	1632																								
ZZZZZZ	1.0	1635																								
ZZZZZZ	1.0	1637																								
ZZZZZZ	5.0	1640																								
CCV	1.0	1643																				X				
CCB	1.0	1645																				X				
ZZZZZZ	1.0	1648																								
ZZZZZZ	1.0	1650																								

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ANALYSIS RUN LOG

Lab Name: Spectrum Analytical, Inc. Contract: 210259

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2570

Instrument ID Number: OPTIMA3 Method: P

Start Date: 12/18/2012 End Date: 12/18/2012

OPTIMA3_121218C

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CO	CR	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
FORMER BLDG OIL	1.0	1653																				X				
ZZZZZZ	1.0	1656																								
ZZZZZZ	1.0	1658																								
ZZZZZZ	1.0	1701																								
CCV	1.0	1704																				X				
CCB	1.0	1706																				X				

Instrument Raw Data

==========

Analysis Begun

Start Time: 12/18/2012 12:50:53 PM **Plasma On Time: 12/18/2012 6:41:29 AM**
Logged In Analyst: mitOptima3 **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N3102302 **Autosampler Model: AS-93plus**

Sample Information File: C:\pe\Administrator\Sample Information\1218B.sif
Batch ID: Null
Results Data Set: B12121804
Results Library: C:\pe\Administrator\Results\Results.mdb

==========

Sequence No.: 1 **Autosampler Location: 1**
Sample ID: S0 **Date Collected: 12/18/2012 12:50:53 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	2332340.8	8976.81	0.38%	100.00	%
Lu 261.542	1555483.7	5580.22	0.36%	100.0	%
Ag 328.068†	-5012.8	160.89	3.21%	[0.00]	mg/L
Al 308.215†	8117.2	78.86	0.97%	[0.00]	mg/L
As 188.979†	0.0	0.49	>999.9%	[0.00]	mg/L
Ba 233.527†	-248.5	1.54	0.62%	[0.00]	mg/L
Be 313.107†	-1249.2	74.76	5.98%	[0.00]	mg/L
Co 228.616†	-85.3	4.62	5.42%	[0.00]	mg/L
Cr 267.716†	95.5	16.07	16.82%	[0.00]	mg/L
Cu 324.752†	2661.8	79.36	2.98%	[0.00]	mg/L
Fe 273.955†	-1220.2	17.76	1.46%	[0.00]	mg/L
Mg 279.077†	-1652.9	98.45	5.96%	[0.00]	mg/L
Mn 257.610†	-232.8	13.21	5.68%	[0.00]	mg/L
Ni 231.604†	-80.3	13.44	16.74%	[0.00]	mg/L
Pb 220.353†	107.3	5.29	4.93%	[0.00]	mg/L
Sb 206.836†	117.6	5.59	4.75%	[0.00]	mg/L
Se 196.026†	19.5	3.75	19.23%	[0.00]	mg/L
Tl 190.801†	-5.3	9.14	173.60%	[0.00]	mg/L
V 292.402†	36.6	21.32	58.19%	[0.00]	mg/L
Zn 206.200†	79.6	6.23	7.82%	[0.00]	mg/L
Cd 226.502†	-97.2	3.27	3.36%	[0.00]	mg/L
Ti 334.940†	620.1	21.57	3.48%	[0.00]	mg/L
Ca 227.546†	-28.3	11.98	42.27%	[0.00]	mg/L
Na 589.592	10008.2	17.31	0.17%	[0.00]	mg/L
K 766.490	1887.2	31.06	1.65%	[0.00]	mg/L

==========

Sequence No.: 2 **Autosampler Location: 9**
Sample ID: S1 **Date Collected: 12/18/2012 12:54:32 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: S1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	2249347.7	23481.86	1.04%	96.442	%
Lu 261.542	1490176.5	15396.85	1.03%	95.80	%
Ag 328.068†	442548.8	5979.47	1.35%	[2.5]	mg/L
Al 308.215†	464629.5	4451.31	0.96%	[20]	mg/L
As 188.979†	1250.6	11.22	0.90%	[1]	mg/L
Ba 233.527†	2221797.3	20377.49	0.92%	[20]	mg/L
Be 313.107†	1342868.1	13252.07	0.99%	[0.5]	mg/L
Co 228.616†	246545.5	2605.88	1.06%	[5]	mg/L
Cr 267.716†	171439.5	1751.49	1.02%	[2]	mg/L
Cu 324.752†	540385.9	5203.32	0.96%	[2.5]	mg/L

Fe 273.955†	291890.3	2855.97	0.98%	[10]	mg/L
Mg 279.077†	1056650.9	8903.27	0.84%	[50]	mg/L
Mn 257.610†	3473715.9	32155.95	0.93%	[5]	mg/L
Ni 231.604†	186525.7	1874.68	1.01%	[5]	mg/L
Pb 220.353†	8352.6	86.28	1.03%	[1]	mg/L
Sb 206.836†	2438.6	26.32	1.08%	[1]	mg/L
Se 196.026†	1089.1	4.71	0.43%	[1]	mg/L
Tl 190.801†	2220.4	20.90	0.94%	[1]	mg/L
V 292.402†	712455.2	7159.52	1.00%	[5]	mg/L
Zn 206.200†	237697.6	2401.00	1.01%	[5]	mg/L
Cd 226.502†	38391.1	387.10	1.01%	[0.5]	mg/L
Ti 334.940†	665545.3	5663.73	0.85%	[1]	mg/L
Ca 227.546†	10959.7	129.72	1.18%	[50]	mg/L
Na 589.592	166321.9	1769.92	1.06%	[50]	mg/L
K 766.490	48028.6	550.22	1.15%	[50]	mg/L

==========

Sequence No.: 3 **Autosampler Location: 10**
Sample ID: S2 **Date Collected: 12/18/2012 12:58:18 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: S2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	2258973.2	18039.48	0.80%	96.854	%
Lu 261.542	1506709.1	14166.01	0.94%	96.86	%
Ag 328.068†	217735.3	546.58	0.25%	[1.25]	mg/L
Al 308.215†	229425.4	3478.27	1.52%	[10]	mg/L
As 188.979†	624.7	7.86	1.26%	[0.5]	mg/L
Ba 233.527†	1130506.0	3700.74	0.33%	[10]	mg/L
Be 313.107†	667089.2	1840.28	0.28%	[0.25]	mg/L
Co 228.616†	124897.5	1574.29	1.26%	[2.5]	mg/L
Cr 267.716†	86209.3	1159.93	1.35%	[1]	mg/L
Cu 324.752†	276817.5	660.06	0.24%	[1.25]	mg/L
Fe 273.955†	147084.0	1873.26	1.27%	[5]	mg/L
Mg 279.077†	534015.8	1541.37	0.29%	[25]	mg/L
Mn 257.610†	1759430.2	4955.21	0.28%	[2.5]	mg/L
Ni 231.604†	94535.7	1162.97	1.23%	[2.5]	mg/L
Pb 220.353†	4182.4	34.33	0.82%	[0.5]	mg/L
Sb 206.836†	1241.6	12.64	1.02%	[0.5]	mg/L
Se 196.026†	545.5	7.13	1.31%	[0.5]	mg/L
Tl 190.801†	1119.8	3.61	0.32%	[0.5]	mg/L
V 292.402†	356239.2	4713.97	1.32%	[2.5]	mg/L
Zn 206.200†	119828.9	1527.02	1.27%	[2.5]	mg/L
Cd 226.502†	19303.1	271.68	1.41%	[0.25]	mg/L
Ti 334.940†	332593.6	983.08	0.30%	[0.5]	mg/L
Ca 227.546†	5329.6	19.95	0.37%	[25]	mg/L
Na 589.592	83797.2	368.60	0.44%	[25]	mg/L
K 766.490	24519.8	150.09	0.61%	[25]	mg/L

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Sequence No.: 4 **Autosampler Location: 11**
Sample ID: S3 **Date Collected: 12/18/2012 1:02:03 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: S3

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	2315035.2	15208.68	0.66%	99.258	%
Lu 261.542	1544111.4	8939.00	0.58%	99.27	%
Ag 328.068†	4975.2	93.02	1.87%	[0.025]	mg/L
Al 308.215†	4295.2	161.19	3.75%	[0.2]	mg/L
As 188.979†	12.9	4.01	31.05%	[0.01]	mg/L
Ba 233.527†	23437.3	151.05	0.64%	[0.2]	mg/L
Be 313.107†	13153.7	70.46	0.54%	[0.005]	mg/L

Co 228.616†	2507.0	11.26	0.45%	[0.05] mg/L
Cr 267.716†	1712.0	5.46	0.32%	[0.02] mg/L
Cu 324.752†	5505.7	51.87	0.94%	[0.025] mg/L
Fe 273.955†	2928.3	31.82	1.09%	[0.1] mg/L
Mg 279.077†	10867.7	105.32	0.97%	[0.5] mg/L
Mn 257.610†	36300.4	234.49	0.65%	[0.05] mg/L
Ni 231.604†	1871.8	13.87	0.74%	[0.05] mg/L
Pb 220.353†	86.8	5.19	5.97%	[0.01] mg/L
Sb 206.836†	36.7	2.78	7.57%	[0.01] mg/L
Se 196.026†	14.5	4.61	31.70%	[0.01] mg/L
Tl 190.801†	17.1	1.53	8.90%	[0.01] mg/L
V 292.402†	7212.9	51.49	0.71%	[0.05] mg/L
Zn 206.200†	2445.6	27.70	1.13%	[0.05] mg/L
Cd 226.502†	387.3	10.71	2.77%	[0.005] mg/L
Ti 334.940†	6691.1	45.76	0.68%	[0.01] mg/L
Ca 227.546†	109.1	14.54	13.33%	[0.5] mg/L
Na 589.592	825.5	192.24	23.29%	[0.5] mg/L
K 766.490	630.1	11.44	1.82%	[0.5] mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	176500	0.00000	0.999979	
Al 308.215	3	Lin Thru 0	0.0	23170	0.00000	0.999987	
As 188.979	3	Lin Thru 0	0.0	1250	0.00000	1.000000	
Ba 233.527	3	Lin Thru 0	0.0	111500	0.00000	0.999975	
Be 313.107	3	Lin Thru 0	0.0	2682000	0.00000	0.999997	
Co 228.616	3	Lin Thru 0	0.0	49440	0.00000	0.999986	
Cr 267.716	3	Lin Thru 0	0.0	85820	0.00000	0.999997	
Cu 324.752	3	Lin Thru 0	0.0	217200	0.00000	0.999952	
Fe 273.955	3	Lin Thru 0	0.0	29230	0.00000	0.999995	
Mg 279.077	3	Lin Thru 0	0.0	21180	0.00000	0.999991	
Mn 257.610	3	Lin Thru 0	0.0	696600	0.00000	0.999986	
Ni 231.604	3	Lin Thru 0	0.0	37410	0.00000	0.999985	
Pb 220.353	3	Lin Thru 0	0.0	8355	0.00000	1.000000	
Sb 206.836	3	Lin Thru 0	0.0	2448	0.00000	0.999963	
Se 196.026	3	Lin Thru 0	0.0	1090	0.00000	0.999995	
Tl 190.801	3	Lin Thru 0	0.0	2224	0.00000	0.999992	
V 292.402	3	Lin Thru 0	0.0	142500	0.00000	1.000000	
Zn 206.200	3	Lin Thru 0	0.0	47620	0.00000	0.999995	
Cd 226.502	3	Lin Thru 0	0.0	76870	0.00000	0.999997	
Ti 334.940	3	Lin Thru 0	0.0	665500	0.00000	1.000000	
Ca 227.546	3	Lin Thru 0	0.0	218.0	0.00000	0.999939	
Na 589.592	3	Lin Thru 0	0.0	3331	0.00000	0.999985	
K 766.490	3	Lin Thru 0	0.0	964.6	0.00000	0.999961	

==========

Sequence No.: 5 **Autosampler Location: 3**
Sample ID: ICV **Date Collected: 12/18/2012 1:05:44 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	2300221.9	98.623	%	0.1727				0.18%
Lu 261.542	1538175.3	98.89	%	0.213				0.22%
Ag 328.068†	215229.1	1.2221	mg/L	0.00213	1.2221	mg/L	0.00213	0.17%
QC value within limits for Ag 328.068 Recovery = 97.77%								
Al 308.215†	224923.0	9.6716	mg/L	0.02687	9.6716	mg/L	0.02687	0.28%
QC value within limits for Al 308.215 Recovery = 96.72%								
As 188.979†	606.0	0.49111	mg/L	0.003057	0.49111	mg/L	0.003057	0.62%
QC value within limits for As 188.979 Recovery = 98.22%								
Ba 233.527†	1131031.3	10.149	mg/L	0.0239	10.149	mg/L	0.0239	0.24%
QC value within limits for Ba 233.527 Recovery = 101.49%								
Be 313.107†	650481.0	0.24384	mg/L	0.000582	0.24384	mg/L	0.000582	0.24%
QC value within limits for Be 313.107 Recovery = 97.54%								
Co 228.616†	125030.2	2.5281	mg/L	0.00423	2.5281	mg/L	0.00423	0.17%

QC value within limits for Co 228.616 Recovery = 101.13%

Cr 267.716†	82683.0	0.96313 mg/L	0.001559	0.96313 mg/L	0.001559	0.16%

QC value within limits for Cr 267.716 Recovery = 96.31%

Cu 324.752†	270664.0	1.2490 mg/L	0.00560	1.2490 mg/L	0.00560	0.45%

QC value within limits for Cu 324.752 Recovery = 99.92%

Fe 273.955†	145841.0	4.8110 mg/L	0.01360	4.8110 mg/L	0.01360	0.28%

QC value within limits for Fe 273.955 Recovery = 96.22%

Mg 279.077†	534499.7	25.238 mg/L	0.0255	25.238 mg/L	0.0255	0.10%

QC value within limits for Mg 279.077 Recovery = 100.95%

Mn 257.610†	1737648.5	2.4942 mg/L	0.00578	2.4942 mg/L	0.00578	0.23%

QC value within limits for Mn 257.610 Recovery = 99.77%

Ni 231.604†	93392.0	2.4953 mg/L	0.00286	2.4953 mg/L	0.00286	0.11%

QC value within limits for Ni 231.604 Recovery = 99.81%

Pb 220.353†	4051.1	0.48578 mg/L	0.002196	0.48578 mg/L	0.002196	0.45%

QC value within limits for Pb 220.353 Recovery = 97.16%

Sb 206.836†	1320.5	0.52298 mg/L	0.001890	0.52298 mg/L	0.001890	0.36%

QC value within limits for Sb 206.836 Recovery = 104.60%

Se 196.026†	532.1	0.48701 mg/L	0.000766	0.48701 mg/L	0.000766	0.16%

QC value within limits for Se 196.026 Recovery = 97.40%

Tl 190.801†	1081.0	0.46069 mg/L	0.004153	0.46069 mg/L	0.004153	0.90%

QC value within limits for Tl 190.801 Recovery = 92.14%

V 292.402†	348957.4	2.4503 mg/L	0.00185	2.4503 mg/L	0.00185	0.08%

QC value within limits for V 292.402 Recovery = 98.01%

Zn 206.200†	119061.4	2.5059 mg/L	0.00506	2.5059 mg/L	0.00506	0.20%

QC value within limits for Zn 206.200 Recovery = 100.23%

Cd 226.502†	18622.0	0.24294 mg/L	0.000542	0.24294 mg/L	0.000542	0.22%

QC value within limits for Cd 226.502 Recovery = 97.18%

Ti 334.940†	324221.5	0.48671 mg/L	0.000696	0.48671 mg/L	0.000696	0.14%

QC value within limits for Ti 334.940 Recovery = Not calculated

Ca 227.546†	5244.5	23.381 mg/L	0.0894	23.381 mg/L	0.0894	0.38%

QC value within limits for Ca 227.546 Recovery = 93.52%

Na 589.592	83935.1	25.195 mg/L	0.2033	25.195 mg/L	0.2033	0.81%

QC value within limits for Na 589.592 Recovery = 100.78%

K 766.490	24433.4	25.329 mg/L	0.1784	25.329 mg/L	0.1784	0.70%

QC value within limits for K 766.490 Recovery = 101.32%

All analyte(s) passed QC.

==========

Sequence No.: 6 **Autosampler Location: 4**
Sample ID: ICB **Date Collected: 12/18/2012 1:09:27 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	2335708.1	100.14	%	0.302				0.30%
Lu 261.542	1560249.4	100.3	%	0.26				0.26%
Ag 328.068†	578.4	0.00328	mg/L	0.000451	0.00328	mg/L	0.000451	13.76%

QC value within limits for Ag 328.068 Recovery = Not calculated

Al 308.215†	24.4	0.00105 mg/L	0.004461	0.00105 mg/L	0.004461	425.82%

QC value within limits for Al 308.215 Recovery = Not calculated

As 188.979†	0.7	0.00054 mg/L	0.003843	0.00054 mg/L	0.003843	705.82%

QC value within limits for As 188.979 Recovery = Not calculated

Ba 233.527†	111.2	0.00100 mg/L	0.000195	0.00100 mg/L	0.000195	19.57%

QC value within limits for Ba 233.527 Recovery = Not calculated

Be 313.107†	113.0	0.00004 mg/L	0.000005	0.00004 mg/L	0.000005	12.21%

QC value within limits for Be 313.107 Recovery = Not calculated

Co 228.616†	4.4	0.00009 mg/L	0.000032	0.00009 mg/L	0.000032	36.08%

QC value within limits for Co 228.616 Recovery = Not calculated

Cr 267.716†	5.1	0.00006 mg/L	0.000051	0.00006 mg/L	0.000051	85.03%

QC value within limits for Cr 267.716 Recovery = Not calculated

Cu 324.752†	248.2	0.00114 mg/L	0.000648	0.00114 mg/L	0.000648	56.68%

QC value within limits for Cu 324.752 Recovery = Not calculated

Fe 273.955†	29.5	0.00099 mg/L	0.000792	0.00099 mg/L	0.000792	79.95%

QC value within limits for Fe 273.955 Recovery = Not calculated

Mg 279.077†	17.5	0.00083 mg/L	0.006910	0.00083 mg/L	0.006910	836.09%

QC value within limits for Mg 279.077 Recovery = Not calculated

Mn 257.610†	165.7	0.00024 mg/L	0.000027	0.00024 mg/L	0.000027	11.49%

QC value within limits for Mn 257.610 Recovery = Not calculated
Ni 231.604† -3.8 -0.00010 mg/L 0.000320 -0.00010 mg/L 0.000320 310.58%
QC value within limits for Ni 231.604 Recovery = Not calculated
Pb 220.353† 0.2 0.00003 mg/L 0.001352 0.00003 mg/L 0.001352 >999.9%
QC value within limits for Pb 220.353 Recovery = Not calculated
Sb 206.836† 5.8 0.00237 mg/L 0.002737 0.00237 mg/L 0.002737 115.36%
QC value within limits for Sb 206.836 Recovery = Not calculated
Se 196.026† 9.5 0.00872 mg/L 0.005088 0.00872 mg/L 0.005088 58.35%
QC value within limits for Se 196.026 Recovery = Not calculated
Tl 190.801† 3.8 0.00169 mg/L 0.002131 0.00169 mg/L 0.002131 125.76%
QC value within limits for Tl 190.801 Recovery = Not calculated
V 292.402† 35.2 0.00025 mg/L 0.000435 0.00025 mg/L 0.000435 176.18%
QC value within limits for V 292.402 Recovery = Not calculated
Zn 206.200† 89.5 0.00188 mg/L 0.000362 0.00188 mg/L 0.000362 19.24%
QC value within limits for Zn 206.200 Recovery = Not calculated
Cd 226.502† 8.1 0.00011 mg/L 0.000150 0.00011 mg/L 0.000150 142.10%
QC value within limits for Cd 226.502 Recovery = Not calculated
Ti 334.940† 117.6 0.00018 mg/L 0.000153 0.00018 mg/L 0.000153 86.79%
QC value within limits for Ti 334.940 Recovery = Not calculated
Ca 227.546† 0.1 0.00047 mg/L 0.069839 0.00047 mg/L 0.069839 >999.9%
QC value within limits for Ca 227.546 Recovery = Not calculated
Na 589.592 -1218.7 -0.36583 mg/L 0.032668 -0.36583 mg/L 0.032668 8.93%
QC value within limits for Na 589.592 Recovery = Not calculated
K 766.490 190.6 0.19755 mg/L 0.043891 0.19755 mg/L 0.043891 22.22%
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: 12/18/2012 1:13:09 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: LLICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 360.073	2348277.3	100.68	%	0.813				0.81%
Lu 261.542	1569626.3	100.9	%	0.74				0.73%
Ag 328.068†	5936.5	0.03369	mg/L	0.000921	0.03369	mg/L	0.000921	2.73%
QC value within limits for Ag 328.068 Recovery = 112.31%								
Al 308.215†	4446.9	0.19116	mg/L	0.005713	0.19116	mg/L	0.005713	2.99%
QC value within limits for Al 308.215 Recovery = 95.58%								
As 188.979†	23.8	0.01914	mg/L	0.001357	0.01914	mg/L	0.001357	7.09%
QC value within limits for As 188.979 Recovery = 95.72%								
Ba 233.527†	23729.4	0.21292	mg/L	0.003799	0.21292	mg/L	0.003799	1.78%
QC value within limits for Ba 233.527 Recovery = 106.46%								
Be 313.107†	13259.2	0.00499	mg/L	0.000092	0.00499	mg/L	0.000092	1.85%
QC value within limits for Be 313.107 Recovery = 99.89%								
Co 228.616†	2576.4	0.05208	mg/L	0.000270	0.05208	mg/L	0.000270	0.52%
QC value within limits for Co 228.616 Recovery = 104.17%								
Cr 267.716†	1701.3	0.01982	mg/L	0.000127	0.01982	mg/L	0.000127	0.64%
QC value within limits for Cr 267.716 Recovery = 99.08%								
Cu 324.752†	6664.0	0.03076	mg/L	0.000949	0.03076	mg/L	0.000949	3.08%
QC value within limits for Cu 324.752 Recovery = 102.54%								
Fe 273.955†	5870.4	0.19710	mg/L	0.005059	0.19710	mg/L	0.005059	2.57%
QC value within limits for Fe 273.955 Recovery = 98.55%								
Mg 279.077†	11256.4	0.53150	mg/L	0.005920	0.53150	mg/L	0.005920	1.11%
QC value within limits for Mg 279.077 Recovery = 106.30%								
Mn 257.610†	36622.8	0.05257	mg/L	0.000812	0.05257	mg/L	0.000812	1.54%
QC value within limits for Mn 257.610 Recovery = 105.14%								
Ni 231.604†	1938.8	0.05179	mg/L	0.000187	0.05179	mg/L	0.000187	0.36%
QC value within limits for Ni 231.604 Recovery = 103.58%								
Pb 220.353†	88.7	0.01064	mg/L	0.000443	0.01064	mg/L	0.000443	4.16%
QC value within limits for Pb 220.353 Recovery = 106.38%								
Sb 206.836†	53.5	0.02152	mg/L	0.002683	0.02152	mg/L	0.002683	12.47%
QC value within limits for Sb 206.836 Recovery = 107.62%								
Se 196.026†	32.0	0.02936	mg/L	0.004982	0.02936	mg/L	0.004982	16.97%
QC value within limits for Se 196.026 Recovery = 97.88%								
Tl 190.801†	42.4	0.01856	mg/L	0.001369	0.01856	mg/L	0.001369	7.38%

QC value within limits for Tl 190.801 Recovery = 92.78%

V 292.402†	7274.8	0.05108 mg/L	0.000422	0.05108 mg/L	0.000422	0.83%
QC value within limits for V 292.402 Recovery = 102.16%						
Zn 206.200†	2454.1	0.05165 mg/L	0.000292	0.05165 mg/L	0.000292	0.56%
QC value within limits for Zn 206.200 Recovery = 103.30%						
Cd 226.502†	397.2	0.00517 mg/L	0.000087	0.00517 mg/L	0.000087	1.68%
QC value within limits for Cd 226.502 Recovery = 103.48%						
Ti 334.940†	12916.8	0.01940 mg/L	0.000310	0.01940 mg/L	0.000310	1.60%
QC value within limits for Ti 334.940 Recovery = 97.02%						
Ca 227.546†	165.4	0.74390 mg/L	0.105075	0.74390 mg/L	0.105075	14.12%
QC value within limits for Ca 227.546 Recovery = 92.99%						
Na 589.592	1972.2	0.59199 mg/L	0.050547	0.59199 mg/L	0.050547	8.54%
QC value less than the lower limit for Na 589.592 Recovery = 59.20%						
K 766.490	1164.8	1.2075 mg/L	0.07952	1.2075 mg/L	0.07952	6.59%
QC value within limits for K 766.490 Recovery = 120.75%						

QC Failed. Continue with analysis.

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Sequence No.: 8 **Autosampler Location: 5**
Sample ID: ICSA **Date Collected: 12/18/2012 1:16:48 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 360.073	2070099.2	88.756	%	0.2411				0.27%
Lu 261.542	1377557.2	88.56	%	0.240				0.27%
Ag 328.068†	347.8	0.00196	mg/L	0.000061	0.00196	mg/L	0.000061	3.09%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	12218675.0	527.24	mg/L	2.206	527.24	mg/L	2.206	0.42%
QC value within limits for Al 308.215 Recovery = 105.45%								
As 188.979†	-24.9	-0.01760	mg/L	0.004158	-0.01760	mg/L	0.004158	23.62%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	1053.7	0.00944	mg/L	0.000107	0.00944	mg/L	0.000107	1.14%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-80.8	-0.00005	mg/L	0.000020	-0.00005	mg/L	0.000020	44.88%
QC value within limits for Be 313.107 Recovery = Not calculated								
Co 228.616†	68.0	0.00138	mg/L	0.000223	0.00138	mg/L	0.000223	16.14%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	137.5	-0.00270	mg/L	0.000095	-0.00270	mg/L	0.000095	3.52%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	-10593.1	-0.00622	mg/L	0.000497	-0.00622	mg/L	0.000497	8.00%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 273.955†	5408314.2	184.94	mg/L	0.359	184.94	mg/L	0.359	0.19%
QC value within limits for Fe 273.955 Recovery = 92.47%								
Mg 279.077†	10610994.6	501.02	mg/L	2.380	501.02	mg/L	2.380	0.48%
QC value within limits for Mg 279.077 Recovery = 100.20%								
Mn 257.610†	-4004.2	-0.01577	mg/L	0.000123	-0.01577	mg/L	0.000123	0.78%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Ni 231.604†	-7.4	-0.00018	mg/L	0.000196	-0.00018	mg/L	0.000196	107.39%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-354.3	-0.00230	mg/L	0.000875	-0.00230	mg/L	0.000875	38.11%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	145.1	0.01464	mg/L	0.003384	0.01464	mg/L	0.003384	23.12%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-58.5	0.00137	mg/L	0.000830	0.00137	mg/L	0.000830	60.64%
QC value within limits for Se 196.026 Recovery = Not calculated								
Tl 190.801†	-34.0	0.00772	mg/L	0.003550	0.00772	mg/L	0.003550	45.98%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	-1007.9	0.00512	mg/L	0.000217	0.00512	mg/L	0.000217	4.24%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	223.6	0.00471	mg/L	0.000121	0.00471	mg/L	0.000121	2.58%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Cd 226.502†	731.2	-0.00427	mg/L	0.000081	-0.00427	mg/L	0.000081	1.91%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Ti 334.940†	-4016.2	-0.01488	mg/L	0.000058	-0.01488	mg/L	0.000058	0.39%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Ca 227.546†	117584.9	537.85	mg/L	1.635	537.85	mg/L	1.635	0.30%

QC value within limits for Ca 227.546 Recovery = 107.57%

Na 589.592	1300.8	0.39046	mg/L	0.031500	0.39046	mg/L	0.031500 8.07%

QC value within limits for Na 589.592 Recovery = Not calculated

K 766.490	105.6	0.10947	mg/L	0.044198	0.10947	mg/L	0.044198 40.38%

QC value within limits for K 766.490 Recovery = Not calculated

All analyte(s) passed QC.

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Sequence No.: 9 **Autosampler Location: 6**
Sample ID: ICSAB **Date Collected: 12/18/2012 1:20:35 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 360.073	2058909.2	88.277	%	0.6043				0.68%
Lu 261.542	1371210.5	88.15	%	0.640				0.73%
Ag 328.068†	39467.9	0.22416	mg/L	0.000997	0.22416	mg/L	0.000997	0.44%
QC value within limits for Ag 328.068 Recovery = 112.08%								
Al 308.215†	12313431.4	531.32	mg/L	7.188	531.32	mg/L	7.188	1.35%
QC value within limits for Al 308.215 Recovery = 106.26%								
As 188.979†	106.4	0.09120	mg/L	0.006122	0.09120	mg/L	0.006122	6.71%
QC value within limits for As 188.979 Recovery = 91.20%								
Ba 233.527†	60733.8	0.54549	mg/L	0.004280	0.54549	mg/L	0.004280	0.78%
QC value within limits for Ba 233.527 Recovery = 109.10%								
Be 313.107†	1404157.5	0.52350	mg/L	0.002806	0.52350	mg/L	0.002806	0.54%
QC value within limits for Be 313.107 Recovery = 104.70%								
Co 228.616†	23700.5	0.47937	mg/L	0.004948	0.47937	mg/L	0.004948	1.03%
QC value within limits for Co 228.616 Recovery = 95.87%								
Cr 267.716†	43364.4	0.50092	mg/L	0.001925	0.50092	mg/L	0.001925	0.38%
QC value within limits for Cr 267.716 Recovery = 100.18%								
Cu 324.752†	103504.9	0.52021	mg/L	0.002916	0.52021	mg/L	0.002916	0.56%
QC value within limits for Cu 324.752 Recovery = 104.04%								
Fe 273.955†	5510750.8	188.41	mg/L	0.906	188.41	mg/L	0.906	0.48%
QC value within limits for Fe 273.955 Recovery = 94.20%								
Mg 279.077†	10662113.6	503.44	mg/L	7.139	503.44	mg/L	7.139	1.42%
QC value within limits for Mg 279.077 Recovery = 100.69%								
Mn 257.610†	352922.3	0.49677	mg/L	0.003059	0.49677	mg/L	0.003059	0.62%
QC value within limits for Mn 257.610 Recovery = 99.35%								
Ni 231.604†	35170.6	0.94003	mg/L	0.009362	0.94003	mg/L	0.009362	1.00%
QC value within limits for Ni 231.604 Recovery = 94.00%								
Pb 220.353†	3863.5	0.50266	mg/L	0.008300	0.50266	mg/L	0.008300	1.65%
QC value within limits for Pb 220.353 Recovery = 100.53%								
Sb 206.836†	1808.8	0.68412	mg/L	0.006997	0.68412	mg/L	0.006997	1.02%
QC value within limits for Sb 206.836 Recovery = 114.02%								
Se 196.026†	531.2	0.54303	mg/L	0.009209	0.54303	mg/L	0.009209	1.70%
QC value within limits for Se 196.026 Recovery = 108.61%								
Tl 190.801†	177.4	0.09801	mg/L	0.000408	0.09801	mg/L	0.000408	0.42%
QC value within limits for Tl 190.801 Recovery = 98.01%								
V 292.402†	72363.3	0.52101	mg/L	0.002423	0.52101	mg/L	0.002423	0.46%
QC value within limits for V 292.402 Recovery = 104.20%								
Zn 206.200†	47268.4	0.99555	mg/L	0.007510	0.99555	mg/L	0.007510	0.75%
QC value within limits for Zn 206.200 Recovery = 99.56%								
Cd 226.502†	76355.7	0.97965	mg/L	0.006583	0.97965	mg/L	0.006583	0.67%
QC value within limits for Cd 226.502 Recovery = 97.96%								
Ti 334.940†	-4107.5	-0.01492	mg/L	0.000299	-0.01492	mg/L	0.000299	2.00%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Ca 227.546†	120158.3	549.49	mg/L	2.670	549.49	mg/L	2.670	0.49%
QC value within limits for Ca 227.546 Recovery = 109.90%								
Na 589.592	89539.3	26.877	mg/L	0.1156	26.877	mg/L	0.1156	0.43%
QC value within limits for Na 589.592 Recovery = 107.51%								
K 766.490	25639.7	26.580	mg/L	0.0692	26.580	mg/L	0.0692	0.26%
QC value within limits for K 766.490 Recovery = 106.32%								

All analyte(s) passed QC.

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Sequence No.: 10 **Autosampler Location: 3**
Sample ID: CCV **Date Collected: 12/18/2012 1:24:22 PM**

Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	2288642.9	98.126	%	0.7954				0.81%
Lu 261.542	1529938.8	98.36	%	0.815				0.83%
Ag 328.068†	215376.8	1.2229	mg/L	0.01844	1.2229	mg/L	0.01844	1.51%
QC value within limits for Ag 328.068 Recovery = 97.83%								
Al 308.215†	226284.7	9.7303	mg/L	0.14883	9.7303	mg/L	0.14883	1.53%
QC value within limits for Al 308.215 Recovery = 97.30%								
As 188.979†	601.3	0.48735	mg/L	0.005404	0.48735	mg/L	0.005404	1.11%
QC value within limits for As 188.979 Recovery = 97.47%								
Ba 233.527†	1132946.8	10.166	mg/L	0.0318	10.166	mg/L	0.0318	0.31%
QC value within limits for Ba 233.527 Recovery = 101.66%								
Be 313.107†	651473.9	0.24421	mg/L	0.000572	0.24421	mg/L	0.000572	0.23%
QC value within limits for Be 313.107 Recovery = 97.68%								
Co 228.616†	125348.9	2.5346	mg/L	0.03988	2.5346	mg/L	0.03988	1.57%
QC value within limits for Co 228.616 Recovery = 101.38%								
Cr 267.716†	82948.1	0.96622	mg/L	0.013338	0.96622	mg/L	0.013338	1.38%
QC value within limits for Cr 267.716 Recovery = 96.62%								
Cu 324.752†	271987.1	1.2551	mg/L	0.00424	1.2551	mg/L	0.00424	0.34%
QC value within limits for Cu 324.752 Recovery = 100.41%								
Fe 273.955†	146858.8	4.8454	mg/L	0.07093	4.8454	mg/L	0.07093	1.46%
QC value within limits for Fe 273.955 Recovery = 96.91%								
Mg 279.077†	534947.1	25.259	mg/L	0.0402	25.259	mg/L	0.0402	0.16%
QC value within limits for Mg 279.077 Recovery = 101.04%								
Mn 257.610†	1739915.4	2.4974	mg/L	0.00733	2.4974	mg/L	0.00733	0.29%
QC value within limits for Mn 257.610 Recovery = 99.90%								
Ni 231.604†	93638.9	2.5019	mg/L	0.03465	2.5019	mg/L	0.03465	1.39%
QC value within limits for Ni 231.604 Recovery = 100.08%								
Pb 220.353†	4032.2	0.48352	mg/L	0.004910	0.48352	mg/L	0.004910	1.02%
QC value within limits for Pb 220.353 Recovery = 96.70%								
Sb 206.836†	1316.3	0.52121	mg/L	0.009140	0.52121	mg/L	0.009140	1.75%
QC value within limits for Sb 206.836 Recovery = 104.24%								
Se 196.026†	531.5	0.48652	mg/L	0.000784	0.48652	mg/L	0.000784	0.16%
QC value within limits for Se 196.026 Recovery = 97.30%								
Tl 190.801†	1089.5	0.46441	mg/L	0.007971	0.46441	mg/L	0.007971	1.72%
QC value within limits for Tl 190.801 Recovery = 92.88%								
V 292.402†	349873.8	2.4567	mg/L	0.03377	2.4567	mg/L	0.03377	1.37%
QC value within limits for V 292.402 Recovery = 98.27%								
Zn 206.200†	119438.0	2.5138	mg/L	0.04091	2.5138	mg/L	0.04091	1.63%
QC value within limits for Zn 206.200 Recovery = 100.55%								
Cd 226.502†	18740.9	0.24448	mg/L	0.003250	0.24448	mg/L	0.003250	1.33%
QC value within limits for Cd 226.502 Recovery = 97.79%								
Ti 334.940†	324446.3	0.48705	mg/L	0.000322	0.48705	mg/L	0.000322	0.07%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Ca 227.546†	5226.2	23.295	mg/L	0.3366	23.295	mg/L	0.3366	1.44%
QC value within limits for Ca 227.546 Recovery = 93.18%								
Na 589.592	81896.3	24.583	mg/L	0.1451	24.583	mg/L	0.1451	0.59%
QC value within limits for Na 589.592 Recovery = 98.33%								
K 766.490	24170.2	25.056	mg/L	0.1083	25.056	mg/L	0.1083	0.43%
QC value within limits for K 766.490 Recovery = 100.22%								

All analyte(s) passed QC.

Sequence No.: 11 **Autosampler Location: 4**
Sample ID: CCB **Date Collected: 12/18/2012 1:28:04 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	2297985.7	98.527	%	1.2075				1.23%
Lu 261.542	1535047.8	98.69	%	1.245				1.26%

Ag 328.068†	342.4	0.00194 mg/L	0.000358	0.00194 mg/L	0.000358	18.46%	
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 308.215†	181.0	0.00781 mg/L	0.004313	0.00781 mg/L	0.004313	55.20%	
QC value within limits for Al 308.215 Recovery = Not calculated							
As 188.979†	-0.5	-0.00037 mg/L	0.000665	-0.00037 mg/L	0.000665	178.79%	
QC value within limits for As 188.979 Recovery = Not calculated							
Ba 233.527†	75.4	0.00068 mg/L	0.000195	0.00068 mg/L	0.000195	28.80%	
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	118.9	0.00004 mg/L	0.000019	0.00004 mg/L	0.000019	41.60%	
QC value within limits for Be 313.107 Recovery = Not calculated							
Co 228.616†	7.8	0.00016 mg/L	0.000073	0.00016 mg/L	0.000073	45.79%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	2.7	0.00003 mg/L	0.000123	0.00003 mg/L	0.000123	386.81%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	380.9	0.00175 mg/L	0.000499	0.00175 mg/L	0.000499	28.42%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 273.955†	95.2	0.00325 mg/L	0.001655	0.00325 mg/L	0.001655	50.93%	
QC value within limits for Fe 273.955 Recovery = Not calculated							
Mg 279.077†	42.4	0.00200 mg/L	0.003993	0.00200 mg/L	0.003993	199.61%	
QC value within limits for Mg 279.077 Recovery = Not calculated							
Mn 257.610†	106.6	0.00015 mg/L	0.000048	0.00015 mg/L	0.000048	31.42%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Ni 231.604†	-4.0	-0.00011 mg/L	0.000397	-0.00011 mg/L	0.000397	371.63%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
Pb 220.353†	9.6	0.00115 mg/L	0.001533	0.00115 mg/L	0.001533	133.45%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
Sb 206.836†	6.9	0.00281 mg/L	0.001838	0.00281 mg/L	0.001838	65.49%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	4.2	0.00390 mg/L	0.003378	0.00390 mg/L	0.003378	86.64%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Tl 190.801†	3.3	0.00149 mg/L	0.003053	0.00149 mg/L	0.003053	205.52%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
V 292.402†	15.9	0.00011 mg/L	0.000337	0.00011 mg/L	0.000337	303.12%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 206.200†	109.4	0.00230 mg/L	0.000240	0.00230 mg/L	0.000240	10.44%	
QC value within limits for Zn 206.200 Recovery = Not calculated							
Cd 226.502†	1.9	0.00002 mg/L	0.000233	0.00002 mg/L	0.000233	970.25%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Ti 334.940†	110.8	0.00017 mg/L	0.000042	0.00017 mg/L	0.000042	25.65%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Ca 227.546†	-11.8	-0.05398 mg/L	0.013665	-0.05398 mg/L	0.013665	25.32%	
QC value within limits for Ca 227.546 Recovery = Not calculated							
Na 589.592	-2460.5	-0.73858 mg/L	0.038523	-0.73858 mg/L	0.038523	5.22%	
QC value within limits for Na 589.592 Recovery = Not calculated							
K 766.490	140.8	0.14593 mg/L	0.080258	0.14593 mg/L	0.080258	55.00%	
QC value within limits for K 766.490 Recovery = Not calculated							

All analyte(s) passed QC.

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Sequence No.: 12 **Autosampler Location: 98**
Sample ID: MB-69753~PBS **Date Collected: 12/18/2012 1:31:46 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: MB-69753~PBS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 360.073	2370689.9	101.64	%	1.221				1.20%
Lu 261.542	1584511.1	101.9	%	1.12				1.10%
Ag 328.068†	377.8	0.00214	mg/L	0.000958	0.00214	mg/L	0.000958	44.73%
Al 308.215†	-115.3	-0.00498	mg/L	0.005901	-0.00498	mg/L	0.005901	118.53%
As 188.979†	0.8	0.00067	mg/L	0.002424	0.00067	mg/L	0.002424	359.59%
Ba 233.527†	195.3	0.00175	mg/L	0.000108	0.00175	mg/L	0.000108	6.19%
Be 313.107†	72.6	0.00003	mg/L	0.000047	0.00003	mg/L	0.000047	169.21%
Co 228.616†	-1.7	-0.00004	mg/L	0.000116	-0.00004	mg/L	0.000116	331.20%
Cr 267.716†	29.1	0.00034	mg/L	0.000044	0.00034	mg/L	0.000044	13.04%
Cu 324.752†	2146.3	0.00989	mg/L	0.001443	0.00989	mg/L	0.001443	14.59%
Fe 273.955†	764.2	0.02613	mg/L	0.001358	0.02613	mg/L	0.001358	5.20%
Mg 279.077†	144.6	0.00683	mg/L	0.005243	0.00683	mg/L	0.005243	76.79%

Mn 257.610†	1743.4	0.00250	mg/L	0.000027	0.00250	mg/L	0.000027	1.09%
Ni 231.604†	15.7	0.00042	mg/L	0.000060	0.00042	mg/L	0.000060	14.15%
Pb 220.353†	10.5	0.00125	mg/L	0.001345	0.00125	mg/L	0.001345	107.80%
Sb 206.836†	32.4	0.01324	mg/L	0.001770	0.01324	mg/L	0.001770	13.37%
Se 196.026†	7.7	0.00709	mg/L	0.004621	0.00709	mg/L	0.004621	65.13%
Tl 190.801†	-1.0	-0.00046	mg/L	0.001132	-0.00046	mg/L	0.001132	246.83%
V 292.402†	23.2	0.00016	mg/L	0.000321	0.00016	mg/L	0.000321	196.83%
Zn 206.200†	415.7	0.00873	mg/L	0.001125	0.00873	mg/L	0.001125	12.89%
Cd 226.502†	11.6	0.00015	mg/L	0.000129	0.00015	mg/L	0.000129	86.85%
Ti 334.940†	144.0	0.00022	mg/L	0.000043	0.00022	mg/L	0.000043	20.06%
Ca 227.546†	1.4	0.00628	mg/L	0.017649	0.00628	mg/L	0.017649	280.97%
Na 589.592	-3194.3	-0.95884	mg/L	0.033296	-0.95884	mg/L	0.033296	3.47%
K 766.490	73.8	0.07648	mg/L	0.055615	0.07648	mg/L	0.055615	72.72%

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Sequence No.: 13 **Autosampler Location: 99**
Sample ID: LCS-69753~LCS **Date Collected: 12/18/2012 1:35:28 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: LCS-69753~LCS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 360.073	2324449.3	99.662	%	1.6537				1.66%
Lu 261.542	1554553.7	99.94	%	1.652				1.65%
Ag 328.068†	190445.9	1.0813	mg/L	0.02691	1.0813	mg/L	0.02691	2.49%
Al 308.215†	203356.7	8.7451	mg/L	0.24516	8.7451	mg/L	0.24516	2.80%
As 188.979†	552.3	0.44760	mg/L	0.007972	0.44760	mg/L	0.007972	1.78%
Ba 233.527†	992542.0	8.9061	mg/L	0.07804	8.9061	mg/L	0.07804	0.88%
Be 313.107†	587699.8	0.21922	mg/L	0.002007	0.21922	mg/L	0.002007	0.92%
Co 228.616†	107743.4	2.1791	mg/L	0.05949	2.1791	mg/L	0.05949	2.73%
Cr 267.716†	74506.1	0.86788	mg/L	0.024970	0.86788	mg/L	0.024970	2.88%
Cu 324.752†	233903.9	1.0794	mg/L	0.02864	1.0794	mg/L	0.02864	2.65%
Fe 273.955†	130648.4	4.3131	mg/L	0.11622	4.3131	mg/L	0.11622	2.69%
Mg 279.077†	471070.5	22.243	mg/L	0.1892	22.243	mg/L	0.1892	0.85%
Mn 257.610†	1529968.2	2.1961	mg/L	0.01833	2.1961	mg/L	0.01833	0.83%
Ni 231.604†	81817.8	2.1863	mg/L	0.06231	2.1863	mg/L	0.06231	2.85%
Pb 220.353†	3659.8	0.43859	mg/L	0.005657	0.43859	mg/L	0.005657	1.29%
Sb 206.836†	1173.2	0.46420	mg/L	0.009813	0.46420	mg/L	0.009813	2.11%
Se 196.026†	486.2	0.44500	mg/L	0.010164	0.44500	mg/L	0.010164	2.28%
Tl 190.801†	971.8	0.41525	mg/L	0.005514	0.41525	mg/L	0.005514	1.33%
V 292.402†	306155.2	2.1501	mg/L	0.05815	2.1501	mg/L	0.05815	2.70%
Zn 206.200†	104484.6	2.1992	mg/L	0.06069	2.1992	mg/L	0.06069	2.76%
Cd 226.502†	17062.7	0.22256	mg/L	0.006283	0.22256	mg/L	0.006283	2.82%
Ti 334.940†	5890.7	0.00843	mg/L	0.000445	0.00843	mg/L	0.000445	5.28%
Ca 227.546†	4803.0	21.446	mg/L	0.1471	21.446	mg/L	0.1471	0.69%
Na 589.592	71468.5	21.453	mg/L	0.1429	21.453	mg/L	0.1429	0.67%
K 766.490	21668.1	22.462	mg/L	0.1601	22.462	mg/L	0.1601	0.71%

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Sequence No.: 14 **Autosampler Location: 100**
Sample ID: L2567-01B~CS-I1(11)_12/1 **Date Collected: 12/18/2012 1:39:12 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: L2567-01B~CS-I1(11)_12/1

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 360.073	2300346.8	98.628	%	0.5119				0.52%
Lu 261.542	1528219.5	98.25	%	0.562				0.57%
Ag 328.068†	804.2	0.00459	mg/L	0.000345	0.00459	mg/L	0.000345	7.50%
Al 308.215†	201745.2	8.7052	mg/L	0.06988	8.7052	mg/L	0.06988	0.80%
As 188.979†	25.6	0.02216	mg/L	0.001685	0.02216	mg/L	0.001685	7.61%
Ba 233.527†	9242.9	0.08296	mg/L	0.000879	0.08296	mg/L	0.000879	1.06%
Be 313.107†	-748.6	0.00069	mg/L	0.000012	0.00069	mg/L	0.000012	1.68%
Co 228.616†	1210.0	0.02402	mg/L	0.000061	0.02402	mg/L	0.000061	0.26%
Cr 267.716†	9360.0	0.10872	mg/L	0.000320	0.10872	mg/L	0.000320	0.29%

Cu 324.752†	65002.9	0.30527	mg/L	0.001954	0.30527	mg/L	0.001954	0.64%
Fe 273.955†	761785.4	26.054	mg/L	0.1133	26.054	mg/L	0.1133	0.43%
Mg 279.077†	43245.8	2.0420	mg/L	0.01816	2.0420	mg/L	0.01816	0.89%
Mn 257.610†	353232.6	0.50814	mg/L	0.002175	0.50814	mg/L	0.002175	0.43%
Ni 231.604†	1318.6	0.03501	mg/L	0.000263	0.03501	mg/L	0.000263	0.75%
Pb 220.353†	813.5	0.09727	mg/L	0.000281	0.09727	mg/L	0.000281	0.29%
Sb 206.836†	24.7	0.00595	mg/L	0.000927	0.00595	mg/L	0.000927	15.59%
Se 196.026†	-5.5	0.00443	mg/L	0.000636	0.00443	mg/L	0.000636	14.36%
Tl 190.801†	-1.4	0.00002	mg/L	0.001196	0.00002	mg/L	0.001196	>999.9%
V 292.402†	5558.9	0.04056	mg/L	0.000199	0.04056	mg/L	0.000199	0.49%
Zn 206.200†	9132.1	0.19240	mg/L	0.001341	0.19240	mg/L	0.001341	0.70%
Cd 226.502†	331.2	0.00238	mg/L	0.000129	0.00238	mg/L	0.000129	5.40%
Ti 334.940†	256045.0	0.38470	mg/L	0.002017	0.38470	mg/L	0.002017	0.52%
Ca 227.546†	251.6	0.92905	mg/L	0.120479	0.92905	mg/L	0.120479	12.97%
Na 589.592	-3460.2	-1.0387	mg/L	0.02276	-1.0387	mg/L	0.02276	2.19%
K 766.490	997.0	1.0336	mg/L	0.03689	1.0336	mg/L	0.03689	3.57%

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Sequence No.: 15 **Autosampler Location: 101**
Sample ID: L2567-02B~CS-I2(11)_12/1 **Date Collected: 12/18/2012 1:42:57 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: L2567-02B~CS-I2(11)_12/1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 360.073	2346060.2	100.59	%	0.816				0.81%
Lu 261.542	1556085.1	100.0	%	0.84				0.84%
Ag 328.068†	1204.7	0.00686	mg/L	0.000464	0.00686	mg/L	0.000464	6.76%
Al 308.215†	214349.5	9.2491	mg/L	0.12756	9.2491	mg/L	0.12756	1.38%
As 188.979†	9.4	0.00989	mg/L	0.001906	0.00989	mg/L	0.001906	19.27%
Ba 233.527†	9585.6	0.08604	mg/L	0.001020	0.08604	mg/L	0.001020	1.19%
Be 313.107†	518.7	0.00096	mg/L	0.000039	0.00096	mg/L	0.000039	4.06%
Co 228.616†	555.4	0.01087	mg/L	0.000193	0.01087	mg/L	0.000193	1.77%
Cr 267.716†	9678.8	0.11236	mg/L	0.001381	0.11236	mg/L	0.001381	1.23%
Cu 324.752†	53965.8	0.25745	mg/L	0.003362	0.25745	mg/L	0.003362	1.31%
Fe 273.955†	1143140.1	39.099	mg/L	0.0865	39.099	mg/L	0.0865	0.22%
Mg 279.077†	29749.4	1.4047	mg/L	0.01976	1.4047	mg/L	0.01976	1.41%
Mn 257.610†	441215.6	0.63501	mg/L	0.001116	0.63501	mg/L	0.001116	0.18%
Ni 231.604†	2187.0	0.05828	mg/L	0.000663	0.05828	mg/L	0.000663	1.14%
Pb 220.353†	864.2	0.10291	mg/L	0.001000	0.10291	mg/L	0.001000	0.97%
Sb 206.836†	23.6	0.00467	mg/L	0.000586	0.00467	mg/L	0.000586	12.54%
Se 196.026†	-13.1	0.00232	mg/L	0.004271	0.00232	mg/L	0.004271	184.25%
Tl 190.801†	2.4	0.00264	mg/L	0.002212	0.00264	mg/L	0.002212	83.90%
V 292.402†	5382.3	0.04025	mg/L	0.000506	0.04025	mg/L	0.000506	1.26%
Zn 206.200†	7189.9	0.15164	mg/L	0.001309	0.15164	mg/L	0.001309	0.86%
Cd 226.502†	318.6	0.00125	mg/L	0.000117	0.00125	mg/L	0.000117	9.30%
Ti 334.940†	202680.4	0.30454	mg/L	0.005877	0.30454	mg/L	0.005877	1.93%
Ca 227.546†	283.5	0.96863	mg/L	0.073789	0.96863	mg/L	0.073789	7.62%
Na 589.592	-4097.8	-1.2300	mg/L	0.02374	-1.2300	mg/L	0.02374	1.93%
K 766.490	898.6	0.93158	mg/L	0.060727	0.93158	mg/L	0.060727	6.52%

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Sequence No.: 16 **Autosampler Location: 102**
Sample ID: L2567-03B~CS-I3(11)_12/1 **Date Collected: 12/18/2012 1:46:40 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: L2567-03B~CS-I3(11)_12/1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 360.073	2399663.2	102.89	%	0.848				0.82%
Lu 261.542	1570833.7	101.0	%	0.71				0.70%
Ag 328.068†	17.4	0.00018	mg/L	0.000811	0.00018	mg/L	0.000811	448.65%
Al 308.215†	469205.9	20.246	mg/L	0.0515	20.246	mg/L	0.0515	0.25%
As 188.979†	16.5	0.01576	mg/L	0.001363	0.01576	mg/L	0.001363	8.65%
Ba 233.527†	7395.3	0.06646	mg/L	0.000558	0.06646	mg/L	0.000558	0.84%

Be 313.107†	-3207.3	0.00201	mg/L	0.000042	0.00201	mg/L	0.000042	2.09%
Co 228.616†	899.9	0.01660	mg/L	0.000116	0.01660	mg/L	0.000116	0.70%
Cr 267.716†	7542.7	0.08725	mg/L	0.000756	0.08725	mg/L	0.000756	0.87%
Cu 324.752†	36558.3	0.18072	mg/L	0.001551	0.18072	mg/L	0.001551	0.86%
Fe 273.955†	1574068.1	53.835	mg/L	0.1685	53.835	mg/L	0.1685	0.31%
Mg 279.077†	75878.2	3.5828	mg/L	0.02815	3.5828	mg/L	0.02815	0.79%
Mn 257.610†	624965.6	0.89935	mg/L	0.002716	0.89935	mg/L	0.002716	0.30%
Ni 231.604†	1928.4	0.05078	mg/L	0.000388	0.05078	mg/L	0.000388	0.76%
Pb 220.353†	265.6	0.03231	mg/L	0.001371	0.03231	mg/L	0.001371	4.24%
Sb 206.836†	10.7	-0.00112	mg/L	0.004057	-0.00112	mg/L	0.004057	361.33%
Se 196.026†	-21.4	0.00021	mg/L	0.006701	0.00021	mg/L	0.006701	>999.9%
Tl 190.801†	-0.9	0.00081	mg/L	0.001840	0.00081	mg/L	0.001840	227.60%
V 292.402†	12242.0	0.08861	mg/L	0.001143	0.08861	mg/L	0.001143	1.29%
Zn 206.200†	7339.9	0.15465	mg/L	0.001072	0.15465	mg/L	0.001072	0.69%
Cd 226.502†	427.5	0.00157	mg/L	0.000055	0.00157	mg/L	0.000055	3.47%
Ti 334.940†	845703.9	1.2707	mg/L	0.00455	1.2707	mg/L	0.00455	0.36%
Ca 227.546†	356.5	1.1770	mg/L	0.03869	1.1770	mg/L	0.03869	3.29%
Na 589.592	-4176.6	-1.2537	mg/L	0.01518	-1.2537	mg/L	0.01518	1.21%
K 766.490	1769.9	1.8348	mg/L	0.11144	1.8348	mg/L	0.11144	6.07%

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Sequence No.: 17 **Autosampler Location: 103**
Sample ID: L2567-04B~CS-I4(11)_12/1 **Date Collected: 12/18/2012 1:50:24 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: L2567-04B~CS-I4(11)_12/1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	2367160.8	101.49	%	0.804				0.79%
Lu 261.542	1564363.7	100.6	%	0.77				0.77%
Ag 328.068†	699.0	0.00401	mg/L	0.000314	0.00401	mg/L	0.000314	7.84%
Al 308.215†	369861.2	15.960	mg/L	0.0560	15.960	mg/L	0.0560	0.35%
As 188.979†	9.6	0.00954	mg/L	0.001256	0.00954	mg/L	0.001256	13.17%
Ba 233.527†	31252.5	0.28040	mg/L	0.001235	0.28040	mg/L	0.001235	0.44%
Be 313.107†	-2100.7	0.00135	mg/L	0.000038	0.00135	mg/L	0.000038	2.82%
Co 228.616†	765.3	0.01441	mg/L	0.000095	0.01441	mg/L	0.000095	0.66%
Cr 267.716†	6244.9	0.07253	mg/L	0.000263	0.07253	mg/L	0.000263	0.36%
Cu 324.752†	43907.6	0.21053	mg/L	0.001460	0.21053	mg/L	0.001460	0.69%
Fe 273.955†	1064502.1	36.408	mg/L	0.0335	36.408	mg/L	0.0335	0.09%
Mg 279.077†	54627.6	2.5794	mg/L	0.01039	2.5794	mg/L	0.01039	0.40%
Mn 257.610†	159445.9	0.23033	mg/L	0.001012	0.23033	mg/L	0.001012	0.44%
Ni 231.604†	2471.3	0.06555	mg/L	0.000659	0.06555	mg/L	0.000659	1.01%
Pb 220.353†	368.1	0.04459	mg/L	0.001220	0.04459	mg/L	0.001220	2.74%
Sb 206.836†	16.7	0.00273	mg/L	0.001922	0.00273	mg/L	0.001922	70.48%
Se 196.026†	-3.3	0.01074	mg/L	0.005741	0.01074	mg/L	0.005741	53.47%
Tl 190.801†	-0.7	0.00091	mg/L	0.001559	0.00091	mg/L	0.001559	171.62%
V 292.402†	7031.5	0.05118	mg/L	0.000648	0.05118	mg/L	0.000648	1.27%
Zn 206.200†	12798.8	0.26920	mg/L	0.002070	0.26920	mg/L	0.002070	0.77%
Cd 226.502†	463.2	0.00334	mg/L	0.000039	0.00334	mg/L	0.000039	1.16%
Ti 334.940†	562449.6	0.84512	mg/L	0.001563	0.84512	mg/L	0.001563	0.18%
Ca 227.546†	354.9	1.3173	mg/L	0.08143	1.3173	mg/L	0.08143	6.18%
Na 589.592	-2801.4	-0.84092	mg/L	0.009374	-0.84092	mg/L	0.009374	1.11%
K 766.490	1687.3	1.7492	mg/L	0.08538	1.7492	mg/L	0.08538	4.88%

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Sequence No.: 18 **Autosampler Location: 104**
Sample ID: L2567-05B~CS-I5(11)_12/1 **Date Collected: 12/18/2012 1:54:07 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: L2567-05B~CS-I5(11)_12/1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	2326399.5	99.745	%	1.0661				1.07%
Lu 261.542	1546753.1	99.44	%	1.147				1.15%
Ag 328.068†	244.0	0.00141	mg/L	0.000290	0.00141	mg/L	0.000290	20.60%

Al 308.215†	142167.7	6.1345	mg/L	0.05400	6.1345	mg/L	0.05400	0.88%
As 188.979†	9.7	0.00916	mg/L	0.002464	0.00916	mg/L	0.002464	26.92%
Ba 233.527†	5455.6	0.04897	mg/L	0.000662	0.04897	mg/L	0.000662	1.35%
Be 313.107†	570.9	0.00084	mg/L	0.000022	0.00084	mg/L	0.000022	2.64%
Co 228.616†	216.7	0.00409	mg/L	0.000080	0.00409	mg/L	0.000080	1.95%
Cr 267.716†	6544.9	0.07616	mg/L	0.000781	0.07616	mg/L	0.000781	1.03%
Cu 324.752†	20493.2	0.09914	mg/L	0.001001	0.09914	mg/L	0.001001	1.01%
Fe 273.955†	608557.2	20.814	mg/L	0.2236	20.814	mg/L	0.2236	1.07%
Mg 279.077†	18211.2	0.85989	mg/L	0.008924	0.85989	mg/L	0.008924	1.04%
Mn 257.610†	76307.9	0.11039	mg/L	0.001127	0.11039	mg/L	0.001127	1.02%
Ni 231.604†	550.9	0.01458	mg/L	0.000473	0.01458	mg/L	0.000473	3.25%
Pb 220.353†	216.8	0.02586	mg/L	0.001583	0.02586	mg/L	0.001583	6.12%
Sb 206.836†	16.1	0.00361	mg/L	0.001329	0.00361	mg/L	0.001329	36.82%
Se 196.026†	-3.9	0.00426	mg/L	0.001057	0.00426	mg/L	0.001057	24.83%
Tl 190.801†	-1.5	0.00030	mg/L	0.002214	0.00030	mg/L	0.002214	747.63%
V 292.402†	3533.6	0.02609	mg/L	0.000427	0.02609	mg/L	0.000427	1.64%
Zn 206.200†	5372.6	0.11326	mg/L	0.001668	0.11326	mg/L	0.001668	1.47%
Cd 226.502†	237.4	0.00154	mg/L	0.000202	0.00154	mg/L	0.000202	13.09%
Ti 334.940†	164347.0	0.24694	mg/L	0.003797	0.24694	mg/L	0.003797	1.54%
Ca 227.546†	129.6	0.41820	mg/L	0.016008	0.41820	mg/L	0.016008	3.83%
Na 589.592	-4737.8	-1.4222	mg/L	0.01679	-1.4222	mg/L	0.01679	1.18%
K 766.490	621.7	0.64450	mg/L	0.060349	0.64450	mg/L	0.060349	9.36%

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Sequence No.: 19 **Autosampler Location: 3**
Sample ID: CCV **Date Collected: 12/18/2012 1:57:50 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	2276030.7	97.586	%	0.5313				0.54%
Lu 261.542	1521697.2	97.83	%	0.588				0.60%
Ag 328.068†	219685.6	1.2474	mg/L	0.01481	1.2474	mg/L	0.01481	1.19%
QC value within limits for Ag 328.068 Recovery = 99.79%								
Al 308.215†	231255.4	9.9440	mg/L	0.11164	9.9440	mg/L	0.11164	1.12%
QC value within limits for Al 308.215 Recovery = 99.44%								
As 188.979†	621.3	0.50352	mg/L	0.004902	0.50352	mg/L	0.004902	0.97%
QC value within limits for As 188.979 Recovery = 100.70%								
Ba 233.527†	1151569.2	10.333	mg/L	0.0481	10.333	mg/L	0.0481	0.47%
QC value within limits for Ba 233.527 Recovery = 103.33%								
Be 313.107†	659839.6	0.24734	mg/L	0.001049	0.24734	mg/L	0.001049	0.42%
QC value within limits for Be 313.107 Recovery = 98.94%								
Co 228.616†	128069.8	2.5896	mg/L	0.02988	2.5896	mg/L	0.02988	1.15%
QC value within limits for Co 228.616 Recovery = 103.58%								
Cr 267.716†	84734.8	0.98704	mg/L	0.009776	0.98704	mg/L	0.009776	0.99%
QC value within limits for Cr 267.716 Recovery = 98.70%								
Cu 324.752†	276178.8	1.2744	mg/L	0.00823	1.2744	mg/L	0.00823	0.65%
QC value within limits for Cu 324.752 Recovery = 101.95%								
Fe 273.955†	149394.0	4.9282	mg/L	0.05381	4.9282	mg/L	0.05381	1.09%
QC value within limits for Fe 273.955 Recovery = 98.56%								
Mg 279.077†	541092.0	25.549	mg/L	0.0928	25.549	mg/L	0.0928	0.36%
QC value within limits for Mg 279.077 Recovery = 102.20%								
Mn 257.610†	1764804.8	2.5332	mg/L	0.01143	2.5332	mg/L	0.01143	0.45%
QC value within limits for Mn 257.610 Recovery = 101.33%								
Ni 231.604†	95639.8	2.5554	mg/L	0.03341	2.5554	mg/L	0.03341	1.31%
QC value within limits for Ni 231.604 Recovery = 102.22%								
Pb 220.353†	4094.3	0.49098	mg/L	0.005214	0.49098	mg/L	0.005214	1.06%
QC value within limits for Pb 220.353 Recovery = 98.20%								
Sb 206.836†	1346.3	0.53310	mg/L	0.004534	0.53310	mg/L	0.004534	0.85%
QC value within limits for Sb 206.836 Recovery = 106.62%								
Se 196.026†	542.3	0.49640	mg/L	0.007503	0.49640	mg/L	0.007503	1.51%
QC value within limits for Se 196.026 Recovery = 99.28%								
Tl 190.801†	1101.5	0.46930	mg/L	0.007459	0.46930	mg/L	0.007459	1.59%
QC value within limits for Tl 190.801 Recovery = 93.86%								
V 292.402†	357501.2	2.5103	mg/L	0.02982	2.5103	mg/L	0.02982	1.19%
QC value within limits for V 292.402 Recovery = 100.41%								
Zn 206.200†	121836.0	2.5643	mg/L	0.03200	2.5643	mg/L	0.03200	1.25%

QC value within limits for Zn 206.200 Recovery = 102.57%
Cd 226.502† 19180.8 0.25022 mg/L 0.003639 0.25022 mg/L 0.003639 1.45%
QC value within limits for Cd 226.502 Recovery = 100.09%
Ti 334.940† 326544.5 0.49020 mg/L 0.001950 0.49020 mg/L 0.001950 0.40%
QC value within limits for Ti 334.940 Recovery = Not calculated
Ca 227.546† 5340.9 23.807 mg/L 0.3740 23.807 mg/L 0.3740 1.57%
QC value within limits for Ca 227.546 Recovery = 95.23%
Na 589.592 80226.3 24.082 mg/L 0.1895 24.082 mg/L 0.1895 0.79%
QC value within limits for Na 589.592 Recovery = 96.33%
K 766.490 24424.6 25.320 mg/L 0.2115 25.320 mg/L 0.2115 0.84%
QC value within limits for K 766.490 Recovery = 101.28%
All analyte(s) passed QC.

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Sequence No.: 20 **Autosampler Location: 4**
Sample ID: CCB **Date Collected: 12/18/2012 2:01:33 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 360.073	2299450.7	98.590	%	0.0932				0.09%
Lu 261.542	1537135.6	98.82	%	0.087				0.09%
Ag 328.068†	146.8	0.00083	mg/L	0.000149	0.00083	mg/L	0.000149	17.90%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	23.1	0.00099	mg/L	0.001588	0.00099	mg/L	0.001588	160.28%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	3.6	0.00286	mg/L	0.001508	0.00286	mg/L	0.001508	52.78%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	70.3	0.00063	mg/L	0.000321	0.00063	mg/L	0.000321	50.89%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	56.2	0.00002	mg/L	0.000011	0.00002	mg/L	0.000011	53.05%
QC value within limits for Be 313.107 Recovery = Not calculated								
Co 228.616†	3.2	0.00007	mg/L	0.000095	0.00007	mg/L	0.000095	146.74%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	6.9	0.00008	mg/L	0.000116	0.00008	mg/L	0.000116	143.69%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	396.1	0.00182	mg/L	0.000332	0.00182	mg/L	0.000332	18.18%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 273.955†	24.1	0.00082	mg/L	0.000804	0.00082	mg/L	0.000804	98.30%
QC value within limits for Fe 273.955 Recovery = Not calculated								
Mg 279.077†	-56.6	-0.00267	mg/L	0.001657	-0.00267	mg/L	0.001657	62.03%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	151.2	0.00022	mg/L	0.000066	0.00022	mg/L	0.000066	30.29%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Ni 231.604†	3.1	0.00008	mg/L	0.000462	0.00008	mg/L	0.000462	560.51%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	0.7	0.00009	mg/L	0.001109	0.00009	mg/L	0.001109	>999.9%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	3.6	0.00146	mg/L	0.003122	0.00146	mg/L	0.003122	213.91%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-0.2	-0.00015	mg/L	0.001720	-0.00015	mg/L	0.001720	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated								
Tl 190.801†	-1.4	-0.00065	mg/L	0.002377	-0.00065	mg/L	0.002377	368.38%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	11.8	0.00008	mg/L	0.000575	0.00008	mg/L	0.000575	699.43%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	24.6	0.00052	mg/L	0.000250	0.00052	mg/L	0.000250	48.28%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Cd 226.502†	1.7	0.00002	mg/L	0.000182	0.00002	mg/L	0.000182	824.59%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Ti 334.940†	118.0	0.00018	mg/L	0.000137	0.00018	mg/L	0.000137	76.72%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Ca 227.546†	14.7	0.06758	mg/L	0.034766	0.06758	mg/L	0.034766	51.45%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Na 589.592	-4679.8	-1.4048	mg/L	0.03222	-1.4048	mg/L	0.03222	2.29%
QC value less than the lower limit for Na 589.592 Recovery = Not calculated								
K 766.490	123.0	0.12749	mg/L	0.021755	0.12749	mg/L	0.021755	17.06%

QC value within limits for K 766.490 Recovery = Not calculated
QC Failed. Continue with analysis.

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Sequence No.: 21 **Autosampler Location: 105**
Sample ID: L2565-01B~CS-B1(2)_12/13 **Date Collected: 12/18/2012 2:05:15 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: L2565-01B~CS-B1(2)_12/13

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	2334357.2	100.09	%	1.271				1.27%
Lu 261.542	1537256.8	98.83	%	1.266				1.28%
Ag 328.068†	299.2	0.00183	mg/L	0.000217	0.00183	mg/L	0.000217	11.82%
Al 308.215†	1736459.2	74.930	mg/L	0.4599	74.930	mg/L	0.4599	0.61%
As 188.979†	27.9	0.02635	mg/L	0.000175	0.02635	mg/L	0.000175	0.67%
Ba 233.527†	24577.4	0.22066	mg/L	0.000760	0.22066	mg/L	0.000760	0.34%
Be 313.107†	-12734.3	0.00173	mg/L	0.000035	0.00173	mg/L	0.000035	2.03%
Co 228.616†	1920.3	0.03559	mg/L	0.001047	0.03559	mg/L	0.001047	2.94%
Cr 267.716†	10576.1	0.12168	mg/L	0.002443	0.12168	mg/L	0.002443	2.01%
Cu 324.752†	12601.3	0.08285	mg/L	0.000825	0.08285	mg/L	0.000825	1.00%
Fe 273.955†	3150067.0	107.74	mg/L	0.677	107.74	mg/L	0.677	0.63%
Mg 279.077†	243608.1	11.503	mg/L	0.0685	11.503	mg/L	0.0685	0.60%
Mn 257.610†	1220752.4	1.7566	mg/L	0.00912	1.7566	mg/L	0.00912	0.52%
Ni 231.604†	2425.2	0.06327	mg/L	0.001126	0.06327	mg/L	0.001126	1.78%
Pb 220.353†	1134.0	0.13980	mg/L	0.000862	0.13980	mg/L	0.000862	0.62%
Sb 206.836†	42.3	0.00552	mg/L	0.002356	0.00552	mg/L	0.002356	42.65%
Se 196.026†	-30.2	0.01239	mg/L	0.003117	0.01239	mg/L	0.003117	25.16%
Tl 190.801†	-1.7	0.00159	mg/L	0.002513	0.00159	mg/L	0.002513	158.02%
V 292.402†	20458.4	0.14891	mg/L	0.001071	0.14891	mg/L	0.001071	0.72%
Zn 206.200†	15191.0	0.31972	mg/L	0.005878	0.31972	mg/L	0.005878	1.84%
Cd 226.502†	576.0	-0.00051	mg/L	0.000171	-0.00051	mg/L	0.000171	33.62%
Ti 334.940†	1711639.2	2.5719	mg/L	0.01165	2.5719	mg/L	0.01165	0.45%
Ca 227.546†	2945.6	12.596	mg/L	0.3472	12.596	mg/L	0.3472	2.76%
Na 589.592	-3209.9	-0.96353	mg/L	0.034945	-0.96353	mg/L	0.034945	3.63%
K 766.490	3949.3	4.0941	mg/L	0.13124	4.0941	mg/L	0.13124	3.21%

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Sequence No.: 22 **Autosampler Location: 106**
Sample ID: L2565-02B~CS-B2(2)_12/13 **Date Collected: 12/18/2012 2:08:55 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: L2565-02B~CS-B2(2)_12/13

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	2358433.3	101.12	%	0.292				0.29%
Lu 261.542	1535974.3	98.75	%	0.339				0.34%
Ag 328.068†	510.2	0.00312	mg/L	0.000346	0.00312	mg/L	0.000346	11.08%
Al 308.215†	2874361.0	124.03	mg/L	0.992	124.03	mg/L	0.992	0.80%
As 188.979†	71.8	0.06352	mg/L	0.002422	0.06352	mg/L	0.002422	3.81%
Ba 233.527†	42995.1	0.38600	mg/L	0.001146	0.38600	mg/L	0.001146	0.30%
Be 313.107†	-17960.9	0.00211	mg/L	0.000057	0.00211	mg/L	0.000057	2.71%
Co 228.616†	2165.9	0.03943	mg/L	0.000223	0.03943	mg/L	0.000223	0.57%
Cr 267.716†	24757.4	0.28688	mg/L	0.001102	0.28688	mg/L	0.001102	0.38%
Cu 324.752†	51132.9	0.26893	mg/L	0.001498	0.26893	mg/L	0.001498	0.56%
Fe 273.955†	4250754.3	145.38	mg/L	1.294	145.38	mg/L	1.294	0.89%
Mg 279.077†	319283.4	15.076	mg/L	0.1014	15.076	mg/L	0.1014	0.67%
Mn 257.610†	861162.2	1.2419	mg/L	0.00993	1.2419	mg/L	0.00993	0.80%
Ni 231.604†	3626.2	0.09482	mg/L	0.000214	0.09482	mg/L	0.000214	0.23%
Pb 220.353†	4544.3	0.55137	mg/L	0.003186	0.55137	mg/L	0.003186	0.58%
Sb 206.836†	70.4	0.00937	mg/L	0.003429	0.00937	mg/L	0.003429	36.62%
Se 196.026†	-43.6	0.01500	mg/L	0.007069	0.01500	mg/L	0.007069	47.14%
Tl 190.801†	-14.6	-0.00250	mg/L	0.004481	-0.00250	mg/L	0.004481	179.56%
V 292.402†	34145.1	0.24699	mg/L	0.001538	0.24699	mg/L	0.001538	0.62%
Zn 206.200†	56261.7	1.1832	mg/L	0.00917	1.1832	mg/L	0.00917	0.77%

Cd 226.502†	5398.0	0.05943	mg/L	0.000176	0.05943	mg/L	0.000176	0.30%
Ti 334.940†	2324801.9	3.4934	mg/L	0.02566	3.4934	mg/L	0.02566	0.73%
Ca 227.546†	6167.8	27.058	mg/L	0.1171	27.058	mg/L	0.1171	0.43%
Na 589.592	-2183.2	-0.65535	mg/L	0.019186	-0.65535	mg/L	0.019186	2.93%
K 766.490	5443.3	5.6428	mg/L	0.12633	5.6428	mg/L	0.12633	2.24%

Sequence No.: 23 **Autosampler Location: 107**
Sample ID: L2565-03B~CS-B3(2)_12/13 **Date Collected: 12/18/2012 2:12:42 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: L2565-03B~CS-B3(2)_12/13

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	2365555.7	101.42	%	0.846				0.83%
Lu 261.542	1558908.5	100.2	%	0.85				0.84%
Ag 328.068†	269.9	0.00172	mg/L	0.000462	0.00172	mg/L	0.000462	26.92%
Al 308.215†	1727843.8	74.558	mg/L	0.8421	74.558	mg/L	0.8421	1.13%
As 188.979†	36.8	0.03413	mg/L	0.001008	0.03413	mg/L	0.001008	2.95%
Ba 233.527†	19946.9	0.17920	mg/L	0.002044	0.17920	mg/L	0.002044	1.14%
Be 313.107†	-10916.1	0.00176	mg/L	0.000035	0.00176	mg/L	0.000035	2.00%
Co 228.616†	1978.2	0.03712	mg/L	0.000270	0.03712	mg/L	0.000270	0.73%
Cr 267.716†	16500.5	0.19094	mg/L	0.002433	0.19094	mg/L	0.002433	1.27%
Cu 324.752†	12459.4	0.08281	mg/L	0.001092	0.08281	mg/L	0.001092	1.32%
Fe 273.955†	3225495.5	110.31	mg/L	1.338	110.31	mg/L	1.338	1.21%
Mg 279.077†	210424.5	9.9357	mg/L	0.11321	9.9357	mg/L	0.11321	1.14%
Mn 257.610†	990032.4	1.4256	mg/L	0.01513	1.4256	mg/L	0.01513	1.06%
Ni 231.604†	2740.2	0.07185	mg/L	0.000902	0.07185	mg/L	0.000902	1.25%
Pb 220.353†	719.5	0.08989	mg/L	0.001863	0.08989	mg/L	0.001863	2.07%
Sb 206.836†	50.1	0.00727	mg/L	0.001877	0.00727	mg/L	0.001877	25.80%
Se 196.026†	-28.0	0.01603	mg/L	0.007004	0.01603	mg/L	0.007004	43.70%
Tl 190.801†	1.2	0.00315	mg/L	0.003047	0.00315	mg/L	0.003047	96.76%
V 292.402†	27869.2	0.20140	mg/L	0.001927	0.20140	mg/L	0.001927	0.96%
Zn 206.200†	71094.9	1.4941	mg/L	0.01770	1.4941	mg/L	0.01770	1.18%
Cd 226.502†	44342.0	0.56867	mg/L	0.005637	0.56867	mg/L	0.005637	0.99%
Ti 334.940†	1538336.6	2.3114	mg/L	0.02752	2.3114	mg/L	0.02752	1.19%
Ca 227.546†	950.1	3.4186	mg/L	0.06114	3.4186	mg/L	0.06114	1.79%
Na 589.592	-3517.5	-1.0559	mg/L	0.00753	-1.0559	mg/L	0.00753	0.71%
K 766.490	3621.0	3.7538	mg/L	0.05177	3.7538	mg/L	0.05177	1.38%

Sequence No.: 24 **Autosampler Location: 108**
Sample ID: L2565-04B~CS-B4(2)_12/13 **Date Collected: 12/18/2012 2:16:22 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: L2565-04B~CS-B4(2)_12/13

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	2332461.7	100.01	%	0.761				0.76%
Lu 261.542	1549922.0	99.64	%	0.720				0.72%
Ag 328.068†	87.5	0.00054	mg/L	0.000477	0.00054	mg/L	0.000477	87.92%
Al 308.215†	421095.5	18.171	mg/L	0.3294	18.171	mg/L	0.3294	1.81%
As 188.979†	12.2	0.01111	mg/L	0.001362	0.01111	mg/L	0.001362	12.25%
Ba 233.527†	7313.7	0.06567	mg/L	0.001109	0.06567	mg/L	0.001109	1.69%
Be 313.107†	-1825.6	0.00111	mg/L	0.000007	0.00111	mg/L	0.000007	0.63%
Co 228.616†	1557.3	0.03061	mg/L	0.000283	0.03061	mg/L	0.000283	0.93%
Cr 267.716†	4646.8	0.05325	mg/L	0.000983	0.05325	mg/L	0.000983	1.85%
Cu 324.752†	7863.3	0.04410	mg/L	0.000676	0.04410	mg/L	0.000676	1.53%
Fe 273.955†	1000666.2	34.224	mg/L	0.6079	34.224	mg/L	0.6079	1.78%
Mg 279.077†	64394.9	3.0406	mg/L	0.05938	3.0406	mg/L	0.05938	1.95%
Mn 257.610†	927360.5	1.3327	mg/L	0.02336	1.3327	mg/L	0.02336	1.75%
Ni 231.604†	986.9	0.02595	mg/L	0.000228	0.02595	mg/L	0.000228	0.88%
Pb 220.353†	156.5	0.01939	mg/L	0.000223	0.01939	mg/L	0.000223	1.15%
Sb 206.836†	14.1	0.00186	mg/L	0.002503	0.00186	mg/L	0.002503	134.34%
Se 196.026†	-8.4	0.00446	mg/L	0.004449	0.00446	mg/L	0.004449	99.65%

Tl 190.801†	3.7	0.00159	mg/L	0.001656	0.00159	mg/L	0.001656	103.96%
V 292.402†	6864.4	0.04997	mg/L	0.001309	0.04997	mg/L	0.001309	2.62%
Zn 206.200†	3025.3	0.06384	mg/L	0.000857	0.06384	mg/L	0.000857	1.34%
Cd 226.502†	150.6	-0.00058	mg/L	0.000103	-0.00058	mg/L	0.000103	17.70%
Ti 334.940†	471813.8	0.70891	mg/L	0.013750	0.70891	mg/L	0.013750	1.94%
Ca 227.546†	283.0	1.0030	mg/L	0.07022	1.0030	mg/L	0.07022	7.00%
Na 589.592	-5476.2	-1.6438	mg/L	0.04207	-1.6438	mg/L	0.04207	2.56%
K 766.490	1543.1	1.5997	mg/L	0.07912	1.5997	mg/L	0.07912	4.95%

Sequence No.: 25 **Autosampler Location: 109**
Sample ID: L2565-05B~CS-B5(2)_12/13 **Date Collected: 12/18/2012 2:20:06 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: L2565-05B~CS-B5(2)_12/13

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 360.073	2305973.4	98.869	%	0.2643				0.27%
Lu 261.542	1529246.4	98.31	%	0.220				0.22%
Ag 328.068†	108.7	0.00068	mg/L	0.000303	0.00068	mg/L	0.000303	44.61%
Al 308.215†	591565.3	25.527	mg/L	0.2111	25.527	mg/L	0.2111	0.83%
As 188.979†	10.5	0.01067	mg/L	0.003954	0.01067	mg/L	0.003954	37.04%
Ba 233.527†	7550.0	0.06782	mg/L	0.000528	0.06782	mg/L	0.000528	0.78%
Be 313.107†	-1485.6	0.00147	mg/L	0.000053	0.00147	mg/L	0.000053	3.61%
Co 228.616†	838.2	0.01594	mg/L	0.000416	0.01594	mg/L	0.000416	2.61%
Cr 267.716†	3754.0	0.04310	mg/L	0.000229	0.04310	mg/L	0.000229	0.53%
Cu 324.752†	7906.5	0.04941	mg/L	0.000373	0.04941	mg/L	0.000373	0.76%
Fe 273.955†	1650466.1	56.449	mg/L	0.4236	56.449	mg/L	0.4236	0.75%
Mg 279.077†	174929.5	8.2597	mg/L	0.06576	8.2597	mg/L	0.06576	0.80%
Mn 257.610†	560357.5	0.80653	mg/L	0.006009	0.80653	mg/L	0.006009	0.75%
Ni 231.604†	1036.4	0.02722	mg/L	0.000372	0.02722	mg/L	0.000372	1.37%
Pb 220.353†	268.9	0.03282	mg/L	0.000908	0.03282	mg/L	0.000908	2.77%
Sb 206.836†	13.9	0.00052	mg/L	0.001922	0.00052	mg/L	0.001922	370.30%
Se 196.026†	-16.7	0.00568	mg/L	0.006280	0.00568	mg/L	0.006280	110.57%
Tl 190.801†	-4.6	-0.00010	mg/L	0.000815	-0.00010	mg/L	0.000815	803.09%
V 292.402†	9436.1	0.06939	mg/L	0.000556	0.06939	mg/L	0.000556	0.80%
Zn 206.200†	12662.1	0.26616	mg/L	0.002610	0.26616	mg/L	0.002610	0.98%
Cd 226.502†	226.2	-0.00125	mg/L	0.000092	-0.00125	mg/L	0.000092	7.32%
Ti 334.940†	533835.8	0.80194	mg/L	0.006280	0.80194	mg/L	0.006280	0.78%
Ca 227.546†	471.3	1.6832	mg/L	0.06611	1.6832	mg/L	0.06611	3.93%
Na 589.592	-6054.4	-1.8174	mg/L	0.01544	-1.8174	mg/L	0.01544	0.85%
K 766.490	2094.7	2.1715	mg/L	0.03869	2.1715	mg/L	0.03869	1.78%

Sequence No.: 26 **Autosampler Location: 110**
Sample ID: L2565-05BDUP~CS-B5(2)_12 **Date Collected: 12/18/2012 2:23:50 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: L2565-05BDUP~CS-B5(2)_12

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 360.073	2294468.0	98.376	%	1.2790				1.30%
Lu 261.542	1519375.9	97.68	%	1.251				1.28%
Ag 328.068†	654.2	0.00378	mg/L	0.000295	0.00378	mg/L	0.000295	7.82%
Al 308.215†	703258.8	30.346	mg/L	0.1052	30.346	mg/L	0.1052	0.35%
As 188.979†	9.3	0.01108	mg/L	0.002159	0.01108	mg/L	0.002159	19.48%
Ba 233.527†	19152.4	0.17190	mg/L	0.002735	0.17190	mg/L	0.002735	1.59%
Be 313.107†	-1857.0	0.00195	mg/L	0.000048	0.00195	mg/L	0.000048	2.44%
Co 228.616†	1976.5	0.03865	mg/L	0.000464	0.03865	mg/L	0.000464	1.20%
Cr 267.716†	5871.5	0.06673	mg/L	0.001025	0.06673	mg/L	0.001025	1.54%
Cu 324.752†	7658.8	0.05617	mg/L	0.000781	0.05617	mg/L	0.000781	1.39%
Fe 273.955†	2653521.7	90.759	mg/L	0.3504	90.759	mg/L	0.3504	0.39%
Mg 279.077†	180844.0	8.5390	mg/L	0.15423	8.5390	mg/L	0.15423	1.81%
Mn 257.610†	1771518.7	2.5467	mg/L	0.01058	2.5467	mg/L	0.01058	0.42%
Ni 231.604†	1648.8	0.04343	mg/L	0.000524	0.04343	mg/L	0.000524	1.21%

Pb 220.353†	506.3	0.06048	mg/L	0.000736	0.06048	mg/L	0.000736	1.22%
Sb 206.836†	29.9	0.00424	mg/L	0.002632	0.00424	mg/L	0.002632	62.13%
Se 196.026†	-33.7	0.00172	mg/L	0.009738	0.00172	mg/L	0.009738	564.97%
Tl 190.801†	-0.6	0.00192	mg/L	0.002184	0.00192	mg/L	0.002184	113.57%
V 292.402†	10184.0	0.07676	mg/L	0.002011	0.07676	mg/L	0.002011	2.62%
Zn 206.200†	21154.0	0.44464	mg/L	0.007121	0.44464	mg/L	0.007121	1.60%
Cd 226.502†	407.5	-0.00144	mg/L	0.000170	-0.00144	mg/L	0.000170	11.78%
Ti 334.940†	698376.1	1.0492	mg/L	0.00282	1.0492	mg/L	0.00282	0.27%
Ca 227.546†	480.6	1.4328	mg/L	0.05448	1.4328	mg/L	0.05448	3.80%
Na 589.592	-5625.6	-1.6886	mg/L	0.02769	-1.6886	mg/L	0.02769	1.64%
K 766.490	2618.3	2.7143	mg/L	0.04413	2.7143	mg/L	0.04413	1.63%

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Sequence No.: 27 **Autosampler Location: 111**
Sample ID: L2565-05BMS~CS-B5(2)_12/ **Date Collected: 12/18/2012 2:27:34 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: L2565-05BMS~CS-B5(2)_12/

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 360.073	2246885.4	96.336	%	0.8507				0.88%
Lu 261.542	1494740.9	96.09	%	0.771				0.80%
Ag 328.068†	195066.3	1.1076	mg/L	0.00543	1.1076	mg/L	0.00543	0.49%
Al 308.215†	685529.9	29.551	mg/L	0.0602	29.551	mg/L	0.0602	0.20%
As 188.979†	575.0	0.46698	mg/L	0.003039	0.46698	mg/L	0.003039	0.65%
Ba 233.527†	1038071.1	9.3146	mg/L	0.01862	9.3146	mg/L	0.01862	0.20%
Be 313.107†	595200.6	0.22407	mg/L	0.000894	0.22407	mg/L	0.000894	0.40%
Co 228.616†	111923.3	2.2626	mg/L	0.00949	2.2626	mg/L	0.00949	0.42%
Cr 267.716†	78197.8	0.91042	mg/L	0.003883	0.91042	mg/L	0.003883	0.43%
Cu 324.752†	247094.3	1.1477	mg/L	0.00666	1.1477	mg/L	0.00666	0.58%
Fe 273.955†	1093404.7	37.240	mg/L	0.1018	37.240	mg/L	0.1018	0.27%
Mg 279.077†	573411.1	27.075	mg/L	0.0782	27.075	mg/L	0.0782	0.29%
Mn 257.610†	1933453.5	2.7765	mg/L	0.00615	2.7765	mg/L	0.00615	0.22%
Ni 231.604†	85314.1	2.2793	mg/L	0.01050	2.2793	mg/L	0.01050	0.46%
Pb 220.353†	3913.5	0.47003	mg/L	0.003149	0.47003	mg/L	0.003149	0.67%
Sb 206.836†	1019.7	0.39790	mg/L	0.004284	0.39790	mg/L	0.004284	1.08%
Se 196.026†	470.8	0.44323	mg/L	0.007093	0.44323	mg/L	0.007093	1.60%
Tl 190.801†	984.2	0.42103	mg/L	0.002823	0.42103	mg/L	0.002823	0.67%
V 292.402†	312988.7	2.1997	mg/L	0.00913	2.1997	mg/L	0.00913	0.42%
Zn 206.200†	116899.0	2.4602	mg/L	0.01392	2.4602	mg/L	0.01392	0.57%
Cd 226.502†	17509.3	0.22595	mg/L	0.000625	0.22595	mg/L	0.000625	0.28%
Ti 334.940†	548741.9	0.82403	mg/L	0.004046	0.82403	mg/L	0.004046	0.49%
Ca 227.546†	5148.7	22.735	mg/L	0.1337	22.735	mg/L	0.1337	0.59%
Na 589.592	67173.6	20.164	mg/L	0.1471	20.164	mg/L	0.1471	0.73%
K 766.490	22628.3	23.458	mg/L	0.1752	23.458	mg/L	0.1752	0.75%

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Sequence No.: 28 **Autosampler Location: 112**
Sample ID: L2565-05BSD~CS-B5(2)_12/ **Date Collected: 12/18/2012 2:31:20 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: L2565-05BSD~CS-B5(2)_12/

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 360.073	2324120.5	99.648	%	1.4445				1.45%
Lu 261.542	1551793.0	99.76	%	1.505				1.51%
Ag 328.068†	88.6	0.00051	mg/L	0.000901	0.00051	mg/L	0.000901	175.22%
Al 308.215†	115911.5	5.0017	mg/L	0.08089	5.0017	mg/L	0.08089	1.62%
As 188.979†	5.4	0.00477	mg/L	0.003123	0.00477	mg/L	0.003123	65.50%
Ba 233.527†	1563.7	0.01404	mg/L	0.000250	0.01404	mg/L	0.000250	1.78%
Be 313.107†	-281.3	0.00029	mg/L	0.000011	0.00029	mg/L	0.000011	3.89%
Co 228.616†	171.2	0.00326	mg/L	0.000121	0.00326	mg/L	0.000121	3.71%
Cr 267.716†	750.7	0.00862	mg/L	0.000200	0.00862	mg/L	0.000200	2.33%
Cu 324.752†	1708.8	0.01051	mg/L	0.000546	0.01051	mg/L	0.000546	5.20%
Fe 273.955†	334710.3	11.448	mg/L	0.1646	11.448	mg/L	0.1646	1.44%

Mg 279.077†	35856.6	1.6931	mg/L	0.02049	1.6931	mg/L	0.02049	1.21%
Mn 257.610†	113088.1	0.16277	mg/L	0.002065	0.16277	mg/L	0.002065	1.27%
Ni 231.604†	211.4	0.00555	mg/L	0.000225	0.00555	mg/L	0.000225	4.06%
Pb 220.353†	45.8	0.00559	mg/L	0.001469	0.00559	mg/L	0.001469	26.26%
Sb 206.836†	1.7	-0.00035	mg/L	0.000883	-0.00035	mg/L	0.000883	250.20%
Se 196.026†	-1.5	0.00284	mg/L	0.005666	0.00284	mg/L	0.005666	199.42%
Tl 190.801†	5.3	0.00277	mg/L	0.000335	0.00277	mg/L	0.000335	12.09%
V 292.402†	1857.1	0.01368	mg/L	0.000634	0.01368	mg/L	0.000634	4.63%
Zn 206.200†	2522.7	0.05303	mg/L	0.000796	0.05303	mg/L	0.000796	1.50%
Cd 226.502†	53.1	-0.00016	mg/L	0.000091	-0.00016	mg/L	0.000091	56.69%
Ti 334.940†	104112.9	0.15640	mg/L	0.002648	0.15640	mg/L	0.002648	1.69%
Ca 227.546†	100.3	0.36303	mg/L	0.120983	0.36303	mg/L	0.120983	33.33%
Na 589.592	-6585.1	-1.9767	mg/L	0.01388	-1.9767	mg/L	0.01388	0.70%
K 766.490	441.9	0.45807	mg/L	0.027022	0.45807	mg/L	0.027022	5.90%

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Sequence No.: 29 **Autosampler Location: 3**
Sample ID: CCV **Date Collected: 12/18/2012 2:35:03 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	2253592.9	96.624	%	1.0332				1.07%
Lu 261.542	1507183.0	96.89	%	1.037				1.07%
Ag 328.068†	217781.9	1.2366	mg/L	0.01109	1.2366	mg/L	0.01109	0.90%
QC value within limits for Ag 328.068 Recovery = 98.93%								
Al 308.215†	229221.1	9.8566	mg/L	0.09645	9.8566	mg/L	0.09645	0.98%
QC value within limits for Al 308.215 Recovery = 98.57%								
As 188.979†	618.4	0.50110	mg/L	0.004567	0.50110	mg/L	0.004567	0.91%
QC value within limits for As 188.979 Recovery = 100.22%								
Ba 233.527†	1161313.9	10.420	mg/L	0.0406	10.420	mg/L	0.0406	0.39%
QC value within limits for Ba 233.527 Recovery = 104.20%								
Be 313.107†	665868.4	0.24959	mg/L	0.000561	0.24959	mg/L	0.000561	0.22%
QC value within limits for Be 313.107 Recovery = 99.84%								
Co 228.616†	126503.4	2.5579	mg/L	0.02239	2.5579	mg/L	0.02239	0.88%
QC value within limits for Co 228.616 Recovery = 102.32%								
Cr 267.716†	83817.1	0.97632	mg/L	0.007334	0.97632	mg/L	0.007334	0.75%
QC value within limits for Cr 267.716 Recovery = 97.63%								
Cu 324.752†	279463.7	1.2895	mg/L	0.00408	1.2895	mg/L	0.00408	0.32%
QC value within limits for Cu 324.752 Recovery = 103.16%								
Fe 273.955†	147313.5	4.8589	mg/L	0.03830	4.8589	mg/L	0.03830	0.79%
QC value within limits for Fe 273.955 Recovery = 97.18%								
Mg 279.077†	542195.6	25.601	mg/L	0.0974	25.601	mg/L	0.0974	0.38%
QC value within limits for Mg 279.077 Recovery = 102.40%								
Mn 257.610†	1778456.8	2.5528	mg/L	0.00967	2.5528	mg/L	0.00967	0.38%
QC value within limits for Mn 257.610 Recovery = 102.11%								
Ni 231.604†	94590.8	2.5274	mg/L	0.02225	2.5274	mg/L	0.02225	0.88%
QC value within limits for Ni 231.604 Recovery = 101.09%								
Pb 220.353†	4083.9	0.48971	mg/L	0.004125	0.48971	mg/L	0.004125	0.84%
QC value within limits for Pb 220.353 Recovery = 97.94%								
Sb 206.836†	1352.9	0.53598	mg/L	0.004088	0.53598	mg/L	0.004088	0.76%
QC value within limits for Sb 206.836 Recovery = 107.20%								
Se 196.026†	544.1	0.49800	mg/L	0.005424	0.49800	mg/L	0.005424	1.09%
QC value within limits for Se 196.026 Recovery = 99.60%								
Tl 190.801†	1100.7	0.46917	mg/L	0.001580	0.46917	mg/L	0.001580	0.34%
QC value within limits for Tl 190.801 Recovery = 93.83%								
V 292.402†	353838.0	2.4846	mg/L	0.01959	2.4846	mg/L	0.01959	0.79%
QC value within limits for V 292.402 Recovery = 99.38%								
Zn 206.200†	120052.6	2.5268	mg/L	0.01859	2.5268	mg/L	0.01859	0.74%
QC value within limits for Zn 206.200 Recovery = 101.07%								
Cd 226.502†	18883.1	0.24634	mg/L	0.001866	0.24634	mg/L	0.001866	0.76%
QC value within limits for Cd 226.502 Recovery = 98.54%								
Ti 334.940†	328371.5	0.49294	mg/L	0.002069	0.49294	mg/L	0.002069	0.42%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Ca 227.546†	5350.7	23.860	mg/L	0.3009	23.860	mg/L	0.3009	1.26%
QC value within limits for Ca 227.546 Recovery = 95.44%								
Na 589.592	77392.7	23.231	mg/L	0.0951	23.231	mg/L	0.0951	0.41%

QC value within limits for Na 589.592 Recovery = 92.93%

K 766.490	24035.4	24.916 mg/L	0.1073	24.916 mg/L	0.1073	0.43%

QC value within limits for K 766.490 Recovery = 99.67%

All analyte(s) passed QC.

Sequence No.: 30 **Autosampler Location: 4**
Sample ID: CCB **Date Collected: 12/18/2012 2:38:46 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	2303163.9	98.749	%	0.6599				0.67%
Lu 261.542	1540390.9	99.03	%	0.643				0.65%
Ag 328.068†	248.4	0.00141	mg/L	0.000651	0.00141	mg/L	0.000651	46.26%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-142.4	-0.00615	mg/L	0.007457	-0.00615	mg/L	0.007457	121.25%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	2.3	0.00185	mg/L	0.001455	0.00185	mg/L	0.001455	78.67%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	85.8	0.00077	mg/L	0.000177	0.00077	mg/L	0.000177	22.98%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	107.3	0.00004	mg/L	0.000002	0.00004	mg/L	0.000002	5.51%
QC value within limits for Be 313.107 Recovery = Not calculated								
Co 228.616†	0.9	0.00002	mg/L	0.000204	0.00002	mg/L	0.000204	>999.9%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	12.2	0.00014	mg/L	0.000191	0.00014	mg/L	0.000191	134.39%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	427.8	0.00197	mg/L	0.000498	0.00197	mg/L	0.000498	25.27%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 273.955†	51.3	0.00174	mg/L	0.001152	0.00174	mg/L	0.001152	66.27%
QC value within limits for Fe 273.955 Recovery = Not calculated								
Mg 279.077†	-5.1	-0.00024	mg/L	0.002968	-0.00024	mg/L	0.002968	>999.9%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	140.9	0.00020	mg/L	0.000045	0.00020	mg/L	0.000045	22.14%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Ni 231.604†	-3.4	-0.00009	mg/L	0.000360	-0.00009	mg/L	0.000360	403.94%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	1.0	0.00012	mg/L	0.001224	0.00012	mg/L	0.001224	>999.9%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	3.7	0.00150	mg/L	0.001702	0.00150	mg/L	0.001702	113.68%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	5.0	0.00458	mg/L	0.003659	0.00458	mg/L	0.003659	79.93%
QC value within limits for Se 196.026 Recovery = Not calculated								
Tl 190.801†	-5.4	-0.00241	mg/L	0.003617	-0.00241	mg/L	0.003617	150.04%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	31.2	0.00022	mg/L	0.000261	0.00022	mg/L	0.000261	119.10%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	19.2	0.00040	mg/L	0.000317	0.00040	mg/L	0.000317	78.57%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Cd 226.502†	1.0	0.00001	mg/L	0.000043	0.00001	mg/L	0.000043	327.90%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Ti 334.940†	96.2	0.00015	mg/L	0.000073	0.00015	mg/L	0.000073	50.34%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Ca 227.546†	7.8	0.03567	mg/L	0.122660	0.03567	mg/L	0.122660	343.90%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Na 589.592	-6591.9	-1.9787	mg/L	0.01236	-1.9787	mg/L	0.01236	0.62%
QC value less than the lower limit for Na 589.592 Recovery = Not calculated								
K 766.490	15.9	0.01652	mg/L	0.046223	0.01652	mg/L	0.046223	279.88%
QC value within limits for K 766.490 Recovery = Not calculated								

QC Failed. Continue with analysis.

Sequence No.: 31 **Autosampler Location: 113**
Sample ID: L2565-05BPDS~CS-B5(2)_12/ **Date Collected: 12/18/2012 2:42:28 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**

Dilution: **Sample Prep Vol:**

Mean Data: L2565-05BPDS~CS-B5(2)_12/

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	2259087.8	96.859	%	3.6907				3.81%
Lu 261.542	1503089.0	96.63	%	3.698				3.83%
Ag 328.068†	181225.3	1.0293	mg/L	0.04505	1.0293	mg/L	0.04505	4.38%
Al 308.215†	814575.2	35.117	mg/L	1.8559	35.117	mg/L	1.8559	5.28%
As 188.979†	606.4	0.49352	mg/L	0.018240	0.49352	mg/L	0.018240	3.70%
Ba 233.527†	1099497.0	9.8658	mg/L	0.50394	9.8658	mg/L	0.50394	5.11%
Be 313.107†	633672.7	0.23838	mg/L	0.012695	0.23838	mg/L	0.012695	5.33%
Co 228.616†	120158.0	2.4292	mg/L	0.11500	2.4292	mg/L	0.11500	4.73%
Cr 267.716†	84139.9	0.97949	mg/L	0.047424	0.97949	mg/L	0.047424	4.84%
Cu 324.752†	274449.5	1.2789	mg/L	0.06679	1.2789	mg/L	0.06679	5.22%
Fe 273.955†	1750030.1	59.686	mg/L	3.1742	59.686	mg/L	3.1742	5.32%
Mg 279.077†	680336.1	32.124	mg/L	1.6365	32.124	mg/L	1.6365	5.09%
Mn 257.610†	2188538.2	3.1435	mg/L	0.16378	3.1435	mg/L	0.16378	5.21%
Ni 231.604†	91757.4	2.4515	mg/L	0.11689	2.4515	mg/L	0.11689	4.77%
Pb 220.353†	4163.4	0.49959	mg/L	0.022153	0.49959	mg/L	0.022153	4.43%
Sb 206.836†	1227.8	0.48025	mg/L	0.023291	0.48025	mg/L	0.023291	4.85%
Se 196.026†	496.8	0.47523	mg/L	0.021806	0.47523	mg/L	0.021806	4.59%
Tl 190.801†	1037.2	0.44444	mg/L	0.018407	0.44444	mg/L	0.018407	4.14%
V 292.402†	340225.6	2.3924	mg/L	0.11178	2.3924	mg/L	0.11178	4.67%
Zn 206.200†	127609.5	2.6855	mg/L	0.12667	2.6855	mg/L	0.12667	4.72%
Cd 226.502†	18597.4	0.23851	mg/L	0.011620	0.23851	mg/L	0.011620	4.87%
Ti 334.940†	538852.7	0.80902	mg/L	0.043722	0.80902	mg/L	0.043722	5.40%
Ca 227.546†	5527.0	24.239	mg/L	1.0866	24.239	mg/L	1.0866	4.48%
Na 589.592	70909.5	21.285	mg/L	0.1646	21.285	mg/L	0.1646	0.77%
K 766.490	23979.9	24.859	mg/L	0.1418	24.859	mg/L	0.1418	0.57%

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Sequence No.: 32 **Autosampler Location: 114**
Sample ID: L2565-06B~CS-B6(2)_12/13 **Date Collected: 12/18/2012 2:46:13 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: L2565-06B~CS-B6(2)_12/13

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	2359257.3	101.15	%	0.368				0.36%
Lu 261.542	1567421.8	100.8	%	0.35				0.35%
Ag 328.068†	67.2	0.00047	mg/L	0.000235	0.00047	mg/L	0.000235	49.89%
Al 308.215†	531670.5	22.941	mg/L	0.0245	22.941	mg/L	0.0245	0.11%
As 188.979†	10.1	0.01126	mg/L	0.003747	0.01126	mg/L	0.003747	33.29%
Ba 233.527†	6582.7	0.05918	mg/L	0.001051	0.05918	mg/L	0.001051	1.78%
Be 313.107†	-10786.0	0.00067	mg/L	0.000063	0.00067	mg/L	0.000063	9.29%
Co 228.616†	1086.1	0.01966	mg/L	0.000167	0.01966	mg/L	0.000167	0.85%
Cr 267.716†	17946.6	0.20847	mg/L	0.002669	0.20847	mg/L	0.002669	1.28%
Cu 324.752†	17341.4	0.09080	mg/L	0.001565	0.09080	mg/L	0.001565	1.72%
Fe 273.955†	1389048.9	47.506	mg/L	0.0756	47.506	mg/L	0.0756	0.16%
Mg 279.077†	155373.9	7.3364	mg/L	0.09724	7.3364	mg/L	0.09724	1.33%
Mn 257.610†	616099.5	0.88624	mg/L	0.001398	0.88624	mg/L	0.001398	0.16%
Ni 231.604†	1195.4	0.03083	mg/L	0.000432	0.03083	mg/L	0.000432	1.40%
Pb 220.353†	171.2	0.02187	mg/L	0.000720	0.02187	mg/L	0.000720	3.29%
Sb 206.836†	34.3	0.00620	mg/L	0.004679	0.00620	mg/L	0.004679	75.42%
Se 196.026†	-13.0	0.00552	mg/L	0.006447	0.00552	mg/L	0.006447	116.89%
Tl 190.801†	-4.1	-0.00156	mg/L	0.001286	-0.00156	mg/L	0.001286	82.18%
V 292.402†	13605.3	0.09753	mg/L	0.000617	0.09753	mg/L	0.000617	0.63%
Zn 206.200†	5639.5	0.11963	mg/L	0.001175	0.11963	mg/L	0.001175	0.98%
Cd 226.502†	206.9	-0.00083	mg/L	0.000063	-0.00083	mg/L	0.000063	7.57%
Ti 334.940†	1240549.5	1.8640	mg/L	0.00278	1.8640	mg/L	0.00278	0.15%
Ca 227.546†	945.1	3.9297	mg/L	0.03917	3.9297	mg/L	0.03917	1.00%
Na 589.592	-5297.9	-1.5903	mg/L	0.02684	-1.5903	mg/L	0.02684	1.69%
K 766.490	1788.1	1.8536	mg/L	0.07389	1.8536	mg/L	0.07389	3.99%

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Sequence No.: 33 **Autosampler Location: 115**

Sample ID: L2570-01A~FORMER BLDG OI **Date Collected: 12/18/2012 2:49:57 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: L2570-01A~FORMER BLDG OI

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	2198624.8	94.267	%	0.6496				0.69%
Lu 261.542	1467741.4	94.36	%	0.636				0.67%
Ag 328.068†	92.7	0.00068	mg/L	0.000504	0.00068	mg/L	0.000504	73.58%
Al 308.215†	3504.2	0.14882	mg/L	0.004915	0.14882	mg/L	0.004915	3.30%
As 188.979†	7.4	0.00602	mg/L	0.002833	0.00602	mg/L	0.002833	47.05%
Ba 233.527†	5298.9	0.04776	mg/L	0.000178	0.04776	mg/L	0.000178	0.37%
Be 313.107†	-45.9	0.00001	mg/L	0.000005	0.00001	mg/L	0.000005	90.79%
Co 228.616†	205.3	0.00413	mg/L	0.000145	0.00413	mg/L	0.000145	3.52%
Cr 267.716†	708.4	0.00832	mg/L	0.000108	0.00832	mg/L	0.000108	1.30%
Cu 324.752†	15268.3	0.07064	mg/L	0.000295	0.07064	mg/L	0.000295	0.42%
Fe 273.955†	37583.2	1.2735	mg/L	0.00773	1.2735	mg/L	0.00773	0.61%
Mg 279.077†	4327.1	0.20432	mg/L	0.001597	0.20432	mg/L	0.001597	0.78%
Mn 257.610†	10195.5	0.01470	mg/L	0.000097	0.01470	mg/L	0.000097	0.66%
Ni 231.604†	3392.7	0.09069	mg/L	0.000548	0.09069	mg/L	0.000548	0.60%
Pb 220.353†	4623.0	0.55328	mg/L	0.002192	0.55328	mg/L	0.002192	0.40%
Sb 206.836†	27.4	0.01135	mg/L	0.003828	0.01135	mg/L	0.003828	33.73%
Se 196.026†	11.7	0.01115	mg/L	0.003451	0.01115	mg/L	0.003451	30.96%
Tl 190.801†	0.2	-0.00053	mg/L	0.002625	-0.00053	mg/L	0.002625	494.00%
V 292.402†	23689.9	0.16633	mg/L	0.000389	0.16633	mg/L	0.000389	0.23%
Zn 206.200†	14917.6	0.31332	mg/L	0.000577	0.31332	mg/L	0.000577	0.18%
Cd 226.502†	63.2	0.00076	mg/L	0.000009	0.00076	mg/L	0.000009	1.21%
Ti 334.940†	4060.5	0.00610	mg/L	0.000114	0.00610	mg/L	0.000114	1.87%
Ca 227.546†	126.8	0.56422	mg/L	0.062465	0.56422	mg/L	0.062465	11.07%
Na 589.592	-5352.6	-1.6067	mg/L	0.01280	-1.6067	mg/L	0.01280	0.80%
K 766.490	83.5	0.08654	mg/L	0.071463	0.08654	mg/L	0.071463	82.58%

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Sequence No.: 34 **Autosampler Location: 116**
Sample ID: L2571-06A~MW7-CLASS1-C1 **Date Collected: 12/18/2012 2:53:40 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: L2571-06A~MW7-CLASS1-C1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	2161923.9	92.693	%	0.7909				0.85%
Lu 261.542	1324425.9	85.15	%	0.773				0.91%
Ag 328.068†	-532.1	-0.00268	mg/L	0.000674	-0.00268	mg/L	0.000674	25.19%
Al 308.215†	4177077.7	180.16	mg/L	0.450	180.16	mg/L	0.450	0.25%
As 188.979†	627.2	0.53179	mg/L	0.003436	0.53179	mg/L	0.003436	0.65%
Ba 233.527†	329268.1	2.9540	mg/L	0.00805	2.9540	mg/L	0.00805	0.27%
Be 313.107†	11758.6	0.00917	mg/L	0.000042	0.00917	mg/L	0.000042	0.45%
Co 228.616†	10561.2	0.21121	mg/L	0.002493	0.21121	mg/L	0.002493	1.18%
Cr 267.716†	24006.8	0.27351	mg/L	0.000467	0.27351	mg/L	0.000467	0.17%
Cu 324.752†	52814.5	0.33842	mg/L	0.000441	0.33842	mg/L	0.000441	0.13%
Fe 273.955†	12086184.8	413.36	mg/L	1.009	413.36	mg/L	1.009	0.24%
Mg 279.077†	13040232.2	615.73	mg/L	1.349	615.73	mg/L	1.349	0.22%
Concentration greater than upper limit for Mg 279.077.								
Mn 257.610†	5935483.6	8.5167	mg/L	0.01981	8.5167	mg/L	0.01981	0.23%
Ni 231.604†	14854.7	0.39593	mg/L	0.004222	0.39593	mg/L	0.004222	1.07%
Pb 220.353†	3115.2	0.38275	mg/L	0.006708	0.38275	mg/L	0.006708	1.75%
Sb 206.836†	151.9	0.01575	mg/L	0.003763	0.01575	mg/L	0.003763	23.90%
Se 196.026†	-165.3	-0.07731	mg/L	0.001336	-0.07731	mg/L	0.001336	1.73%
Tl 190.801†	-50.0	0.03571	mg/L	0.008003	0.03571	mg/L	0.008003	22.41%
V 292.402†	50632.5	0.38153	mg/L	0.000679	0.38153	mg/L	0.000679	0.18%
Zn 206.200†	78207.3	1.6440	mg/L	0.00476	1.6440	mg/L	0.00476	0.29%
Cd 226.502†	2052.9	-0.00394	mg/L	0.000372	-0.00394	mg/L	0.000372	9.44%
Ti 334.940†	1260890.3	1.8975	mg/L	0.01517	1.8975	mg/L	0.01517	0.80%
Ca 227.546†	339414.4	1553.5	mg/L	3.52	1553.5	mg/L	3.52	0.23%
Concentration greater than upper limit for Ca 227.546.								

Na 589.592	5424.3	1.6282	mg/L	0.05781	1.6282	mg/L	0.05781	3.55%
K 766.490	58381.5	60.522	mg/L	0.2239	60.522	mg/L	0.2239	0.37%

Sequence No.: 35 **Autosampler Location: 117**
Sample ID: L2571-07A~MW7-CLASS1-C2 **Date Collected: 12/18/2012 2:57:33 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: L2571-07A~MW7-CLASS1-C2

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 360.073	2206142.8	94.589	%	0.7885				0.83%
Lu 261.542	1364263.0	87.71	%	0.592				0.67%
Ag 328.068†	-381.3	-0.00192	mg/L	0.001006	-0.00192	mg/L	0.001006	52.47%
Al 308.215†	3232129.6	139.40	mg/L	2.429	139.40	mg/L	2.429	1.74%
As 188.979†	389.1	0.33557	mg/L	0.005556	0.33557	mg/L	0.005556	1.66%
Ba 233.527†	241020.1	2.1623	mg/L	0.03395	2.1623	mg/L	0.03395	1.57%
Be 313.107†	8952.7	0.00704	mg/L	0.000092	0.00704	mg/L	0.000092	1.31%
Co 228.616†	7969.0	0.15932	mg/L	0.001748	0.15932	mg/L	0.001748	1.10%
Cr 267.716†	17290.1	0.19673	mg/L	0.002515	0.19673	mg/L	0.002515	1.28%
Cu 324.752†	29855.6	0.21297	mg/L	0.003867	0.21297	mg/L	0.003867	1.82%
Fe 273.955†	9581640.0	327.70	mg/L	4.175	327.70	mg/L	4.175	1.27%
Mg 279.077†	10921134.9	515.67	mg/L	6.714	515.67	mg/L	6.714	1.30%
Concentration greater than upper limit for Mg 279.077.								
Mn 257.610†	4486190.3	6.4360	mg/L	0.08293	6.4360	mg/L	0.08293	1.29%
Ni 231.604†	11895.7	0.31710	mg/L	0.004443	0.31710	mg/L	0.004443	1.40%
Pb 220.353†	2406.6	0.29591	mg/L	0.004310	0.29591	mg/L	0.004310	1.46%
Sb 206.836†	111.8	0.00919	mg/L	0.003409	0.00919	mg/L	0.003409	37.08%
Se 196.026†	-122.5	-0.05582	mg/L	0.003805	-0.05582	mg/L	0.003805	6.82%
Tl 190.801†	-42.6	0.02903	mg/L	0.002644	0.02903	mg/L	0.002644	9.11%
V 292.402†	36297.2	0.27550	mg/L	0.004155	0.27550	mg/L	0.004155	1.51%
Zn 206.200†	35951.3	0.75615	mg/L	0.011956	0.75615	mg/L	0.011956	1.58%
Cd 226.502†	1492.6	-0.00487	mg/L	0.000135	-0.00487	mg/L	0.000135	2.76%
Ti 334.940†	975562.5	1.4680	mg/L	0.02880	1.4680	mg/L	0.02880	1.96%
Ca 227.546†	279988.5	1281.6	mg/L	21.52	1281.6	mg/L	21.52	1.68%
Concentration greater than upper limit for Ca 227.546.								
Na 589.592	3889.6	1.1675	mg/L	0.04477	1.1675	mg/L	0.04477	3.83%
K 766.490	44064.9	45.680	mg/L	0.2233	45.680	mg/L	0.2233	0.49%

Sequence No.: 36 **Autosampler Location: 118**
Sample ID: L2571-08A~MW7-CLASS1-G1- **Date Collected: 12/18/2012 3:01:25 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: L2571-08A~MW7-CLASS1-G1-

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 360.073	2131209.0	91.376	%	0.5793				0.63%
Lu 261.542	1326869.0	85.30	%	0.116				0.14%
Ag 328.068†	-160.1	-0.00062	mg/L	0.000574	-0.00062	mg/L	0.000574	92.86%
Al 308.215†	2690836.7	116.02	mg/L	0.939	116.02	mg/L	0.939	0.81%
As 188.979†	803.1	0.66906	mg/L	0.003280	0.66906	mg/L	0.003280	0.49%
Ba 233.527†	202452.5	1.8164	mg/L	0.01560	1.8164	mg/L	0.01560	0.86%
Be 313.107†	8549.8	0.00621	mg/L	0.000106	0.00621	mg/L	0.000106	1.71%
Co 228.616†	10833.8	0.21761	mg/L	0.000157	0.21761	mg/L	0.000157	0.07%
Cr 267.716†	16376.7	0.18629	mg/L	0.000297	0.18629	mg/L	0.000297	0.16%
Cu 324.752†	58754.2	0.34331	mg/L	0.003322	0.34331	mg/L	0.003322	0.97%
Fe 273.955†	9233265.5	315.78	mg/L	0.534	315.78	mg/L	0.534	0.17%
Mg 279.077†	13733298.6	648.45	mg/L	1.076	648.45	mg/L	1.076	0.17%
Concentration greater than upper limit for Mg 279.077.								
Mn 257.610†	4506432.7	6.4599	mg/L	0.01356	6.4599	mg/L	0.01356	0.21%
Ni 231.604†	11368.5	0.30315	mg/L	0.000168	0.30315	mg/L	0.000168	0.06%
Pb 220.353†	9045.1	1.0901	mg/L	0.00240	1.0901	mg/L	0.00240	0.22%
Sb 206.836†	108.9	0.00816	mg/L	0.004191	0.00816	mg/L	0.004191	51.34%
Se 196.026†	-120.6	-0.07150	mg/L	0.001714	-0.07150	mg/L	0.001714	2.40%

Tl 190.801†	-47.5	0.03336 mg/L	0.005526	0.03336 mg/L	0.005526	16.57%
V 292.402†	43114.2	0.32271 mg/L	0.002868	0.32271 mg/L	0.002868	0.89%
Zn 206.200†	58229.7	1.2239 mg/L	0.01066	1.2239 mg/L	0.01066	0.87%
Cd 226.502†	1678.8	-0.00157 mg/L	0.000103	-0.00157 mg/L	0.000103	6.60%
Ti 334.940†	796928.7	1.1988 mg/L	0.00683	1.1988 mg/L	0.00683	0.57%
Ca 227.546†	333926.1	1529.1 mg/L	13.48	1529.1 mg/L	13.48	0.88%

Concentration greater than upper limit for Ca 227.546.

Na 589.592	2317.7	0.69570 mg/L	0.010314	0.69570 mg/L	0.010314	1.48%
K 766.490	38195.5	39.596 mg/L	0.0496	39.596 mg/L	0.0496	0.13%

User canceled analysis.

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Analysis Begun

Start Time: 12/18/2012 3:05:17 PM **Plasma On Time: 12/18/2012 6:41:29 AM**
Logged In Analyst: mitOptima3 **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N3102302 **Autosampler Model: AS-93plus**

Sample Information File: C:\pe\Administrator\Sample Information\1218B.sif
Batch ID: Null
Results Data Set: B12121804
Results Library: C:\pe\Administrator\Results\Results.mdb

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Sequence No.: 1 **Autosampler Location: 119**
Sample ID: L2571-06A~MW7-CLASS1 20x **Date Collected: 12/18/2012 3:05:19 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: L2571-06A~MW7-CLASS1 20x

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	2291137.5	98.233	%	1.3681				1.39%
Lu 261.542	1522163.7	97.86	%	1.312				1.34%
Ag 328.068†	139.2	0.00081	mg/L	0.000338	0.00081	mg/L	0.000338	41.85%
Al 308.215†	203228.0	8.7653	mg/L	0.17376	8.7653	mg/L	0.17376	1.98%
As 188.979†	30.7	0.02614	mg/L	0.001445	0.02614	mg/L	0.001445	5.53%
Ba 233.527†	17536.7	0.15733	mg/L	0.003142	0.15733	mg/L	0.003142	2.00%
Be 313.107†	554.4	0.00045	mg/L	0.000013	0.00045	mg/L	0.000013	2.97%
Co 228.616†	571.1	0.01143	mg/L	0.000353	0.01143	mg/L	0.000353	3.09%
Cr 267.716†	1240.7	0.01413	mg/L	0.000153	0.01413	mg/L	0.000153	1.08%
Cu 324.752†	2946.6	0.01900	mg/L	0.000894	0.01900	mg/L	0.000894	4.71%
Fe 273.955†	689118.9	23.569	mg/L	0.4919	23.569	mg/L	0.4919	2.09%
Mg 279.077†	711612.3	33.601	mg/L	0.7139	33.601	mg/L	0.7139	2.12%
Mn 257.610†	319219.1	0.45808	mg/L	0.009285	0.45808	mg/L	0.009285	2.03%
Ni 231.604†	828.7	0.02210	mg/L	0.000432	0.02210	mg/L	0.000432	1.95%
Pb 220.353†	178.8	0.02174	mg/L	0.001621	0.02174	mg/L	0.001621	7.46%
Sb 206.836†	12.9	0.00277	mg/L	0.005420	0.00277	mg/L	0.005420	195.40%
Se 196.026†	2.8	0.00764	mg/L	0.009019	0.00764	mg/L	0.009019	118.03%
Tl 190.801†	-7.9	-0.00060	mg/L	0.001641	-0.00060	mg/L	0.001641	274.46%
V 292.402†	2650.8	0.02010	mg/L	0.000160	0.02010	mg/L	0.000160	0.79%
Zn 206.200†	4159.8	0.08744	mg/L	0.001472	0.08744	mg/L	0.001472	1.68%
Cd 226.502†	95.5	-0.00051	mg/L	0.000137	-0.00051	mg/L	0.000137	27.00%
Ti 334.940†	63765.2	0.09578	mg/L	0.001517	0.09578	mg/L	0.001517	1.58%
Ca 227.546†	15722.0	71.921	mg/L	1.1681	71.921	mg/L	1.1681	1.62%
Na 589.592	-6614.2	-1.9854	mg/L	0.00954	-1.9854	mg/L	0.00954	0.48%
K 766.490	3331.4	3.4535	mg/L	0.06031	3.4535	mg/L	0.06031	1.75%

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Sequence No.: 2 **Autosampler Location: 120**
Sample ID: L2571-07A~MW7-CLASS1 20x **Date Collected: 12/18/2012 3:09:02 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: L2571-07A~MW7-CLASS1 20x

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	2308817.9	98.991	%	0.7340				0.74%
Lu 261.542	1535342.9	98.71	%	0.730				0.74%
Ag 328.068†	97.5	0.00056	mg/L	0.000795	0.00056	mg/L	0.000795	140.86%
Al 308.215†	156275.3	6.7400	mg/L	0.03783	6.7400	mg/L	0.03783	0.56%
As 188.979†	18.5	0.01609	mg/L	0.001456	0.01609	mg/L	0.001456	9.05%
Ba 233.527†	12743.2	0.11432	mg/L	0.000289	0.11432	mg/L	0.000289	0.25%
Be 313.107†	396.9	0.00034	mg/L	0.000019	0.00034	mg/L	0.000019	5.53%
Co 228.616†	421.2	0.00842	mg/L	0.000124	0.00842	mg/L	0.000124	1.47%
Cr 267.716†	904.3	0.01029	mg/L	0.000249	0.01029	mg/L	0.000249	2.42%
Cu 324.752†	1581.7	0.01152	mg/L	0.000590	0.01152	mg/L	0.000590	5.12%

Fe 273.955†	537493.0	18.383	mg/L	0.0197	18.383	mg/L	0.0197	0.11%
Mg 279.077†	593537.1	28.025	mg/L	0.0154	28.025	mg/L	0.0154	0.05%
Mn 257.610†	239332.8	0.34337	mg/L	0.001388	0.34337	mg/L	0.001388	0.40%
Ni 231.604†	649.1	0.01731	mg/L	0.000285	0.01731	mg/L	0.000285	1.65%
Pb 220.353†	122.3	0.01492	mg/L	0.001448	0.01492	mg/L	0.001448	9.70%
Sb 206.836†	9.8	0.00203	mg/L	0.002143	0.00203	mg/L	0.002143	105.53%
Se 196.026†	-1.7	0.00221	mg/L	0.003164	0.00221	mg/L	0.003164	143.19%
Tl 190.801†	-18.3	-0.00580	mg/L	0.002890	-0.00580	mg/L	0.002890	49.84%
V 292.402†	1814.9	0.01391	mg/L	0.000140	0.01391	mg/L	0.000140	1.01%
Zn 206.200†	1868.5	0.03930	mg/L	0.000356	0.03930	mg/L	0.000356	0.91%
Cd 226.502†	66.0	-0.00050	mg/L	0.000169	-0.00050	mg/L	0.000169	33.43%
Ti 334.940†	50162.6	0.07533	mg/L	0.001267	0.07533	mg/L	0.001267	1.68%
Ca 227.546†	12924.3	59.131	mg/L	0.4356	59.131	mg/L	0.4356	0.74%
Na 589.592	-6996.8	-2.1003	mg/L	0.00846	-2.1003	mg/L	0.00846	0.40%
K 766.490	2404.4	2.4926	mg/L	0.04669	2.4926	mg/L	0.04669	1.87%

Sequence No.: 3 **Autosampler Location: 121**
Sample ID: L2571-08A~MW7-CLASS1 20x **Date Collected: 12/18/2012 3:12:46 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: L2571-08A~MW7-CLASS1 20x

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 360.073	2298289.6	98.540	%	0.4407				0.45%
Lu 261.542	1529198.3	98.31	%	0.389				0.40%
Ag 328.068†	169.3	0.00097	mg/L	0.000611	0.00097	mg/L	0.000611	62.75%
Al 308.215†	126198.5	5.4416	mg/L	0.02702	5.4416	mg/L	0.02702	0.50%
As 188.979†	41.1	0.03419	mg/L	0.001773	0.03419	mg/L	0.001773	5.19%
Ba 233.527†	10459.5	0.09384	mg/L	0.000964	0.09384	mg/L	0.000964	1.03%
Be 313.107†	424.8	0.00031	mg/L	0.000019	0.00031	mg/L	0.000019	6.33%
Co 228.616†	583.7	0.01173	mg/L	0.000127	0.01173	mg/L	0.000127	1.08%
Cr 267.716†	840.4	0.00956	mg/L	0.000284	0.00956	mg/L	0.000284	2.97%
Cu 324.752†	2632.8	0.01607	mg/L	0.000230	0.01607	mg/L	0.000230	1.43%
Fe 273.955†	501003.4	17.134	mg/L	0.0679	17.134	mg/L	0.0679	0.40%
Mg 279.077†	744789.7	35.167	mg/L	0.1112	35.167	mg/L	0.1112	0.32%
Mn 257.610†	235960.9	0.33823	mg/L	0.000997	0.33823	mg/L	0.000997	0.29%
Ni 231.604†	603.1	0.01609	mg/L	0.000276	0.01609	mg/L	0.000276	1.72%
Pb 220.353†	484.5	0.05824	mg/L	0.000622	0.05824	mg/L	0.000622	1.07%
Sb 206.836†	6.6	0.00077	mg/L	0.000756	0.00077	mg/L	0.000756	97.97%
Se 196.026†	-3.9	-0.00070	mg/L	0.002078	-0.00070	mg/L	0.002078	297.80%
Tl 190.801†	-14.7	-0.00398	mg/L	0.001966	-0.00398	mg/L	0.001966	49.35%
V 292.402†	2206.1	0.01658	mg/L	0.000257	0.01658	mg/L	0.000257	1.55%
Zn 206.200†	3015.9	0.06339	mg/L	0.000361	0.06339	mg/L	0.000361	0.57%
Cd 226.502†	69.9	-0.00036	mg/L	0.000162	-0.00036	mg/L	0.000162	44.92%
Ti 334.940†	39081.8	0.05857	mg/L	0.000260	0.05857	mg/L	0.000260	0.44%
Ca 227.546†	14861.2	68.026	mg/L	0.4473	68.026	mg/L	0.4473	0.66%
Na 589.592	-7082.7	-2.1260	mg/L	0.03817	-2.1260	mg/L	0.03817	1.80%
K 766.490	2088.4	2.1649	mg/L	0.04481	2.1649	mg/L	0.04481	2.07%

Sequence No.: 4 **Autosampler Location: 3**
Sample ID: CCV **Date Collected: 12/18/2012 3:16:29 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 360.073	2280208.1	97.765	%	1.0994				1.12%
Lu 261.542	1523925.8	97.97	%	1.231				1.26%
Ag 328.068†	216791.9	1.2310	mg/L	0.01042	1.2310	mg/L	0.01042	0.85%
QC value within limits for Ag 328.068 Recovery = 98.48%								
Al 308.215†	228810.4	9.8391	mg/L	0.07192	9.8391	mg/L	0.07192	0.73%
QC value within limits for Al 308.215 Recovery = 98.39%								
As 188.979†	612.1	0.49604	mg/L	0.003709	0.49604	mg/L	0.003709	0.75%

QC value within limits for As 188.979 Recovery = 99.21%

Ba 233.527†	1141573.3	10.243 mg/L	0.0353	10.243 mg/L	0.0353	0.34%
QC value within limits for Ba 233.527 Recovery = 102.43%							
Be 313.107†	651457.8	0.24419 mg/L	0.000840	0.24419 mg/L	0.000840	0.34%
QC value within limits for Be 313.107 Recovery = 97.68%							
Co 228.616†	126279.7	2.5534 mg/L	0.01949	2.5534 mg/L	0.01949	0.76%
QC value within limits for Co 228.616 Recovery = 102.14%							
Cr 267.716†	83293.5	0.97024 mg/L	0.007292	0.97024 mg/L	0.007292	0.75%
QC value within limits for Cr 267.716 Recovery = 97.02%							
Cu 324.752†	274035.9	1.2645 mg/L	0.00455	1.2645 mg/L	0.00455	0.36%
QC value within limits for Cu 324.752 Recovery = 101.16%							
Fe 273.955†	146921.6	4.8465 mg/L	0.03720	4.8465 mg/L	0.03720	0.77%
QC value within limits for Fe 273.955 Recovery = 96.93%							
Mg 279.077†	531961.6	25.118 mg/L	0.0997	25.118 mg/L	0.0997	0.40%
QC value within limits for Mg 279.077 Recovery = 100.47%							
Mn 257.610†	1745143.9	2.5050 mg/L	0.00877	2.5050 mg/L	0.00877	0.35%
QC value within limits for Mn 257.610 Recovery = 100.20%							
Ni 231.604†	94239.4	2.5180 mg/L	0.01864	2.5180 mg/L	0.01864	0.74%
QC value within limits for Ni 231.604 Recovery = 100.72%							
Pb 220.353†	4034.7	0.48383 mg/L	0.007091	0.48383 mg/L	0.007091	1.47%
QC value within limits for Pb 220.353 Recovery = 96.77%							
Sb 206.836†	1339.5	0.53064 mg/L	0.006709	0.53064 mg/L	0.006709	1.26%
QC value within limits for Sb 206.836 Recovery = 106.13%							
Se 196.026†	529.7	0.48481 mg/L	0.002727	0.48481 mg/L	0.002727	0.56%
QC value within limits for Se 196.026 Recovery = 96.96%							
Tl 190.801†	1089.2	0.46414 mg/L	0.003028	0.46414 mg/L	0.003028	0.65%
QC value within limits for Tl 190.801 Recovery = 92.83%							
V 292.402†	351752.8	2.4699 mg/L	0.01835	2.4699 mg/L	0.01835	0.74%
QC value within limits for V 292.402 Recovery = 98.80%							
Zn 206.200†	120036.4	2.5264 mg/L	0.01977	2.5264 mg/L	0.01977	0.78%
QC value within limits for Zn 206.200 Recovery = 101.06%							
Cd 226.502†	18804.0	0.24531 mg/L	0.001157	0.24531 mg/L	0.001157	0.47%
QC value within limits for Cd 226.502 Recovery = 98.12%							
Ti 334.940†	321467.8	0.48258 mg/L	0.001761	0.48258 mg/L	0.001761	0.36%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Ca 227.546†	5263.0	23.459 mg/L	0.3902	23.459 mg/L	0.3902	1.66%
QC value within limits for Ca 227.546 Recovery = 93.84%							
Na 589.592	76429.1	22.942 mg/L	0.0925	22.942 mg/L	0.0925	0.40%
QC value within limits for Na 589.592 Recovery = 91.77%							
K 766.490	24008.4	24.888 mg/L	0.0652	24.888 mg/L	0.0652	0.26%
QC value within limits for K 766.490 Recovery = 99.55%							

All analyte(s) passed QC.

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Sequence No.: 5 **Autosampler Location: 4**
Sample ID: CCB **Date Collected: 12/18/2012 3:20:12 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 360.073	2350556.7	100.78	%	0.729				0.72%
Lu 261.542	1571616.7	101.0	%	0.74				0.73%
Ag 328.068†	344.7	0.00195 mg/L		0.000328	0.00195 mg/L		0.000328	16.77%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-284.1	-0.01227 mg/L		0.003185	-0.01227 mg/L		0.003185	25.95%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	0.5	0.00044 mg/L		0.000965	0.00044 mg/L		0.000965	219.32%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	124.9	0.00112 mg/L		0.000213	0.00112 mg/L		0.000213	18.97%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	129.3	0.00005 mg/L		0.000002	0.00005 mg/L		0.000002	3.52%
QC value within limits for Be 313.107 Recovery = Not calculated								
Co 228.616†	12.4	0.00025 mg/L		0.000102	0.00025 mg/L		0.000102	40.76%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	0.0	0.00000 mg/L		0.000067	0.00000 mg/L		0.000067	>999.9%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	-290.5	-0.00134 mg/L		0.000203	-0.00134 mg/L		0.000203	15.18%

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   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 273.955†               74.1     0.00250 mg/L      0.000742     0.00250 mg/L      0.000742  29.64%
   QC value within limits for Fe 273.955  Recovery = Not calculated
Mg 279.077†               81.4     0.00384 mg/L      0.002400     0.00384 mg/L      0.002400  62.43%
   QC value within limits for Mg 279.077  Recovery = Not calculated
Mn 257.610†              226.2     0.00032 mg/L      0.000069     0.00032 mg/L      0.000069  21.32%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Ni 231.604†                6.8     0.00018 mg/L      0.000231     0.00018 mg/L      0.000231 126.67%
   QC value within limits for Ni 231.604  Recovery = Not calculated
Pb 220.353†               -9.5    -0.00114 mg/L      0.001372    -0.00114 mg/L      0.001372 120.24%
   QC value within limits for Pb 220.353  Recovery = Not calculated
Sb 206.836†               -2.6    -0.00106 mg/L      0.004150    -0.00106 mg/L      0.004150 392.44%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                2.3     0.00207 mg/L      0.004471     0.00207 mg/L      0.004471 215.55%
   QC value within limits for Se 196.026  Recovery = Not calculated
Tl 190.801†                0.7     0.00029 mg/L      0.004203     0.00029 mg/L      0.004203 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
V 292.402†                65.8     0.00046 mg/L      0.000621     0.00046 mg/L      0.000621 134.46%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 206.200†                7.7     0.00016 mg/L      0.000235     0.00016 mg/L      0.000235 144.94%
   QC value within limits for Zn 206.200  Recovery = Not calculated
Cd 226.502†               -4.3    -0.00006 mg/L      0.000079    -0.00006 mg/L      0.000079 139.87%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Ti 334.940†               57.1     0.00009 mg/L      0.000116     0.00009 mg/L      0.000116 133.50%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Ca 227.546†               13.8     0.06301 mg/L      0.069253     0.06301 mg/L      0.069253 109.91%
   QC value within limits for Ca 227.546  Recovery = Not calculated
Na 589.592             -7685.0     -2.3068 mg/L       0.01857     -2.3068 mg/L       0.01857   0.81%
   QC value less than the lower limit for Na 589.592  Recovery = Not calculated
K 766.490                 54.2     0.05624 mg/L      0.062153     0.05624 mg/L      0.062153 110.52%
   QC value within limits for K 766.490  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

==========

Analysis Begun

Start Time: 12/18/2012 3:28:55 PM **Plasma On Time: 12/18/2012 6:41:29 AM**
Logged In Analyst: mitOptima3 **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N3102302 **Autosampler Model: AS-93plus**

Sample Information File: C:\pe\Administrator\Sample Information\1218B.sif
Batch ID: Null
Results Data Set: B12121806
Results Library: C:\pe\Administrator\Results\Results.mdb

==========

Sequence No.: 1 **Autosampler Location: 1**
Sample ID: S0 **Date Collected: 12/18/2012 3:28:56 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	2229266.6	7929.89	0.36%	100.00	%
Lu 261.542	1473225.1	5649.53	0.38%	100.0	%
Na 589.592	2081.8	89.66	4.31%	[0.00]	mg/L

==========

Sequence No.: 2 **Autosampler Location: 9**
Sample ID: S1 **Date Collected: 12/18/2012 3:31:30 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: S1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	2173111.0	7279.97	0.34%	97.481	%
Lu 261.542	1439707.4	3685.31	0.26%	97.72	%
Na 589.592	158221.0	319.55	0.20%	[50]	mg/L

==========

Sequence No.: 3 **Autosampler Location: 10**
Sample ID: S2 **Date Collected: 12/18/2012 3:34:06 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: S2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	2208866.1	17370.02	0.79%	99.085	%
Lu 261.542	1460609.6	11661.60	0.80%	99.14	%
Na 589.592	81012.7	415.49	0.51%	[25]	mg/L

==========

Sequence No.: 4 **Autosampler Location: 11**
Sample ID: S3 **Date Collected: 12/18/2012 3:36:43 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: S3

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	2202712.5	5891.10	0.27%	98.809	%
Lu 261.542	1456705.6	4729.72	0.32%	98.88	%

Na 589.592 1788.6 61.32 3.43% [0.5] mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	176500	0.00000	0.999979	
Al 308.215	3	Lin Thru 0	0.0	23170	0.00000	0.999987	
As 188.979	3	Lin Thru 0	0.0	1250	0.00000	1.000000	
Ba 233.527	3	Lin Thru 0	0.0	111500	0.00000	0.999975	
Be 313.107	3	Lin Thru 0	0.0	2682000	0.00000	0.999997	
Co 228.616	3	Lin Thru 0	0.0	49440	0.00000	0.999986	
Cr 267.716	3	Lin Thru 0	0.0	85820	0.00000	0.999997	
Cu 324.752	3	Lin Thru 0	0.0	217200	0.00000	0.999952	
Fe 273.955	3	Lin Thru 0	0.0	29230	0.00000	0.999995	
Mg 279.077	3	Lin Thru 0	0.0	21180	0.00000	0.999991	
Mn 257.610	3	Lin Thru 0	0.0	696600	0.00000	0.999986	
Ni 231.604	3	Lin Thru 0	0.0	37410	0.00000	0.999985	
Pb 220.353	3	Lin Thru 0	0.0	8355	0.00000	1.000000	
Sb 206.836	3	Lin Thru 0	0.0	2448	0.00000	0.999963	
Se 196.026	3	Lin Thru 0	0.0	1090	0.00000	0.999995	
Tl 190.801	3	Lin Thru 0	0.0	2224	0.00000	0.999992	
V 292.402	3	Lin Thru 0	0.0	142500	0.00000	1.000000	
Zn 206.200	3	Lin Thru 0	0.0	47620	0.00000	0.999995	
Cd 226.502	3	Lin Thru 0	0.0	76870	0.00000	0.999997	
Ti 334.940	3	Lin Thru 0	0.0	665500	0.00000	1.000000	
Ca 227.546	3	Lin Thru 0	0.0	218.0	0.00000	0.999939	
Na 589.592	3	Lin Thru 0	0.0	3180	0.00000	0.999954	
K 766.490	3	Lin Thru 0	0.0	964.6	0.00000	0.999961	

==========

Sequence No.: 5 **Autosampler Location: 3**
Sample ID: ICV **Date Collected: 12/18/2012 3:39:19 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: ICV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 360.073	2187554.9	98.129	%	0.5955				0.61%
Lu 261.542	1447594.0	98.26	%	0.638				0.65%
Na 589.592	81772.1	25.717	mg/L	0.0938	25.717	mg/L	0.0938	0.36%

QC value within limits for Na 589.592 Recovery = 102.87%
All analyte(s) passed QC.

==========

Sequence No.: 6 **Autosampler Location: 4**
Sample ID: ICB **Date Collected: 12/18/2012 3:41:54 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 360.073	2230732.2	100.07	%	0.626				0.63%
Lu 261.542	1473800.2	100.0	%	0.62				0.62%
Na 589.592	-100.1	-0.03147	mg/L	0.004027	-0.03147	mg/L	0.004027	12.80%

QC value within limits for Na 589.592 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 7 **Autosampler Location: 2**
Sample ID: LLICV **Date Collected: 12/18/2012 3:44:31 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: LLICV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 360.073	2226811.6	99.890	%	0.1569				0.16%
Lu 261.542	1473038.7	99.99	%	0.164				0.16%
Na 589.592	3134.0	0.98564	mg/L	0.024327	0.98564	mg/L	0.024327	2.47%

QC value within limits for Na 589.592 Recovery = 98.56%

All analyte(s) passed QC.

==========

Sequence No.: 8 **Autosampler Location: 5**
Sample ID: ICSA **Date Collected: 12/18/2012 3:47:05 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 360.073	1931343.0	86.636	%	0.1230				0.14%
Lu 261.542	1273737.8	86.46	%	0.102				0.12%
Na 589.592	679.8	0.21380	mg/L	0.007236	0.21380	mg/L	0.007236	3.38%

QC value within limits for Na 589.592 Recovery = Not calculated

All analyte(s) passed QC.

==========

Sequence No.: 9 **Autosampler Location: 6**
Sample ID: ICSAB **Date Collected: 12/18/2012 3:49:47 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

User canceled analysis.

==========

Analysis Begun

Start Time: 12/18/2012 3:50:29 PM **Plasma On Time: 12/18/2012 6:41:29 AM**
Logged In Analyst: mitOptima3 **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N3102302 **Autosampler Model: AS-93plus**

Sample Information File: C:\pe\Administrator\Sample Information\1218B.sif
Batch ID: Null
Results Data Set: B12121806
Results Library: C:\pe\Administrator\Results\Results.mdb

==========

Sequence No.: 1 **Autosampler Location: 6**
Sample ID: ICSAB **Date Collected: 12/18/2012 3:50:29 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 360.073	1946078.4	87.297	%	0.4465				0.51%
Lu 261.542	1284101.8	87.16	%	0.417				0.48%
Na 589.592	84581.9	26.601	mg/L	0.2372	26.601	mg/L	0.2372	0.89%

QC value within limits for Na 589.592 Recovery = 106.40%
All analyte(s) passed QC.

==========

Sequence No.: 2 **Autosampler Location: 3**
Sample ID: CCV **Date Collected: 12/18/2012 3:53:09 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
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	2199524.2	98.666	%	0.7106				0.72%
Lu 261.542	1454986.7	98.76	%	0.717				0.73%
Na 589.592	79963.0	25.148	mg/L	0.1354	25.148	mg/L	0.1354	0.54%

QC value within limits for Na 589.592 Recovery = 100.59%
All analyte(s) passed QC.

==========

Sequence No.: 3 **Autosampler Location: 4**
Sample ID: CCB **Date Collected: 12/18/2012 3:55:44 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 360.073	2271418.2	101.89	%	0.589				0.58%
Lu 261.542	1501380.0	101.9	%	0.64				0.63%
Na 589.592	-374.9	-0.11792	mg/L	0.020849	-0.11792	mg/L	0.020849	17.68%

QC value within limits for Na 589.592 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 4 **Autosampler Location: 98**
Sample ID: MB-69753~PBS **Date Collected: 12/18/2012 3:58:20 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: MB-69753~PBS

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	2182655.4	97.909	%	0.9972				1.02%
Lu 261.542	1444586.7	98.06	%	0.970				0.99%
Na 589.592	-671.2	-0.21110	mg/L	0.006907	-0.21110	mg/L	0.006907	3.27%

==========

Sequence No.: 5 **Autosampler Location: 99**
Sample ID: LCS-69753~LCS **Date Collected: 12/18/2012 4:00:56 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: LCS-69753~LCS

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	2190780.3	98.274	%	0.3756				0.38%
Lu 261.542	1449316.5	98.38	%	0.362				0.37%
Na 589.592	71119.1	22.367	mg/L	0.1684	22.367	mg/L	0.1684	0.75%

==========

Sequence No.: 6 **Autosampler Location: 100**
Sample ID: L2567-01B~CS-I1(11)_12/1 **Date Collected: 12/18/2012 4:03:33 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: L2567-01B~CS-I1(11)_12/1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	2212697.1	99.257	%	0.7246				0.73%
Lu 261.542	1455988.4	98.83	%	0.732				0.74%
Na 589.592	-215.1	-0.06766	mg/L	0.017700	-0.06766	mg/L	0.017700	26.16%

==========

Sequence No.: 7 **Autosampler Location: 101**
Sample ID: L2567-02B~CS-I2(11)_12/1 **Date Collected: 12/18/2012 4:06:10 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: L2567-02B~CS-I2(11)_12/1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	2229217.6	99.998	%	0.8118				0.81%
Lu 261.542	1462790.1	99.29	%	0.804				0.81%
Na 589.592	-491.8	-0.15468	mg/L	0.013715	-0.15468	mg/L	0.013715	8.87%

==========

Sequence No.: 8 **Autosampler Location: 102**
Sample ID: L2567-03B~CS-I3(11)_12/1 **Date Collected: 12/18/2012 4:08:47 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: L2567-03B~CS-I3(11)_12/1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	2272783.8	101.95	%	1.041				1.02%
Lu 261.542	1468173.2	99.66	%	1.029				1.03%
Na 589.592	-461.1	-0.14502	mg/L	0.007769	-0.14502	mg/L	0.007769	5.36%

==========

Sequence No.: 9 **Autosampler Location: 103**
Sample ID: L2567-04B~CS-I4(11)_12/1 **Date Collected: 12/18/2012 4:11:24 PM**

Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: L2567-04B~CS-I4(11)_12/1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 360.073	2245109.7	100.71	%	0.190				0.19%
Lu 261.542	1464086.1	99.38	%	0.249				0.25%
Na 589.592	899.0	0.28272	mg/L	0.024251	0.28272	mg/L	0.024251	8.58%

==========

Sequence No.: 10 **Autosampler Location: 104**
Sample ID: L2567-05B~CS-I5(11)_12/1 **Date Collected: 12/18/2012 4:14:01 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: L2567-05B~CS-I5(11)_12/1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 360.073	2299981.6	103.17	%	0.660				0.64%
Lu 261.542	1511597.1	102.6	%	0.67				0.65%
Na 589.592	-725.5	-0.22816	mg/L	0.032476	-0.22816	mg/L	0.032476	14.23%

==========

Sequence No.: 11 **Autosampler Location: 3**
Sample ID: CCV **Date Collected: 12/18/2012 4:16:38 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 360.073	2193497.7	98.395	%	0.3248				0.33%
Lu 261.542	1450419.2	98.45	%	0.278				0.28%
Na 589.592	80728.6	25.389	mg/L	0.0837	25.389	mg/L	0.0837	0.33%

QC value within limits for Na 589.592 Recovery = 101.56%
All analyte(s) passed QC.

==========

Sequence No.: 12 **Autosampler Location: 4**
Sample ID: CCB **Date Collected: 12/18/2012 4:19:13 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 360.073	2209898.9	99.131	%	1.0822				1.09%
Lu 261.542	1460311.4	99.12	%	1.060				1.07%
Na 589.592	-797.0	-0.25067	mg/L	0.023302	-0.25067	mg/L	0.023302	9.30%

QC value within limits for Na 589.592 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 13 **Autosampler Location: 105**
Sample ID: L2565-01B~CS-B1(2)_12/13 **Date Collected: 12/18/2012 4:21:49 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: L2565-01B~CS-B1(2)_12/13

Analyte	Mean Corrected	Calib.	Sample

Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Y 360.073	2222747.2	99.708	%	0.4185				0.42%
Lu 261.542	1447130.1	98.23	%	0.429				0.44%
Na 589.592	1102.3	0.34667	mg/L	0.038309	0.34667	mg/L	0.038309	11.05%

Sequence No.: 14 **Autosampler Location: 106**
Sample ID: L2565-02B~CS-B2(2)_12/13 **Date Collected: 12/18/2012 4:24:31 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: L2565-02B~CS-B2(2)_12/13

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 360.073	2214728.4	99.348	%	0.4830				0.49%
Lu 261.542	1434724.7	97.39	%	0.417				0.43%
Na 589.592	2450.2	0.77057	mg/L	0.025906	0.77057	mg/L	0.025906	3.36%

Sequence No.: 15 **Autosampler Location: 107**
Sample ID: L2565-03B~CS-B3(2)_12/13 **Date Collected: 12/18/2012 4:27:14 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: L2565-03B~CS-B3(2)_12/13

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 360.073	2232688.6	100.15	%	0.699				0.70%
Lu 261.542	1450848.2	98.48	%	0.739				0.75%
Na 589.592	1501.0	0.47206	mg/L	0.024302	0.47206	mg/L	0.024302	5.15%

Sequence No.: 16 **Autosampler Location: 108**
Sample ID: L2565-04B~CS-B4(2)_12/13 **Date Collected: 12/18/2012 4:29:57 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: L2565-04B~CS-B4(2)_12/13

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 360.073	2245148.7	100.71	%	0.682				0.68%
Lu 261.542	1473254.5	100.0	%	0.65				0.65%
Na 589.592	-448.0	-0.14090	mg/L	0.016509	-0.14090	mg/L	0.016509	11.72%

Sequence No.: 17 **Autosampler Location: 109**
Sample ID: L2565-05B~CS-B5(2)_12/13 **Date Collected: 12/18/2012 4:32:34 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: L2565-05B~CS-B5(2)_12/13

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 360.073	2250246.7	100.94	%	0.471				0.47%
Lu 261.542	1476835.9	100.2	%	0.50				0.50%
Na 589.592	-603.1	-0.18968	mg/L	0.006999	-0.18968	mg/L	0.006999	3.69%

Sequence No.: 18 **Autosampler Location: 110**
Sample ID: L2565-05BDUP~CS-B5(2)_12 **Date Collected: 12/18/2012 4:35:11 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: L2565-05BDUP~CS-B5(2)_12

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 360.073	2202555.5	98.802	%	0.3681				0.37%
Lu 261.542	1441433.9	97.84	%	0.391				0.40%
Na 589.592	-213.4	-0.06712	mg/L	0.018552	-0.06712	mg/L	0.018552	27.64%

==========

Sequence No.: 19 **Autosampler Location: 111**
Sample ID: L2565-05BMS~CS-B5(2)_12/ **Date Collected: 12/18/2012 4:37:54 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: L2565-05BMS~CS-B5(2)_12/

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 360.073	2224116.8	99.769	%	0.3430				0.34%
Lu 261.542	1462689.4	99.28	%	0.363				0.37%
Na 589.592	70194.0	22.076	mg/L	0.0949	22.076	mg/L	0.0949	0.43%

==========

Sequence No.: 20 **Autosampler Location: 112**
Sample ID: L2565-05BSD~CS-B5(2)_12/ **Date Collected: 12/18/2012 4:40:32 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: L2565-05BSD~CS-B5(2)_12/

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 360.073	2303475.5	103.33	%	0.312				0.30%
Lu 261.542	1521548.9	103.3	%	0.36				0.35%
Na 589.592	-939.4	-0.29544	mg/L	0.016974	-0.29544	mg/L	0.016974	5.75%

==========

Sequence No.: 21 **Autosampler Location: 3**
Sample ID: CCV **Date Collected: 12/18/2012 4:43:09 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 360.073	2173974.7	97.520	%	0.7663				0.79%
Lu 261.542	1438581.6	97.65	%	0.721				0.74%
Na 589.592	80101.6	25.192	mg/L	0.2460	25.192	mg/L	0.2460	0.98%

QC value within limits for Na 589.592 Recovery = 100.77%
All analyte(s) passed QC.

==========

Sequence No.: 22 **Autosampler Location: 4**
Sample ID: CCB **Date Collected: 12/18/2012 4:45:45 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 360.073	2093055.1	93.890	%	1.3543				1.44%
Lu 261.542	1384390.9	93.97	%	1.272				1.35%
Na 589.592	-952.6	-0.29960	mg/L	0.005450	-0.29960	mg/L	0.005450	1.82%

QC value within limits for Na 589.592 Recovery = Not calculated

All analyte(s) passed QC.

==========

Sequence No.: 23 **Autosampler Location: 113**
Sample ID: L2565-05BPDS~CS-B5(2)_12/ **Date Collected: 12/18/2012 4:48:22 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: L2565-05BPDS~CS-B5(2)_12/

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	2234871.9	100.25	%	0.765				0.76%
Lu 261.542	1469878.4	99.77	%	0.788				0.79%
Na 589.592	75203.3	23.651	mg/L	0.0961	23.651	mg/L	0.0961	0.41%

==========

Sequence No.: 24 **Autosampler Location: 114**
Sample ID: L2565-06B~CS-B6(2)_12/13 **Date Collected: 12/18/2012 4:50:59 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: L2565-06B~CS-B6(2)_12/13

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	2276445.7	102.12	%	0.668				0.65%
Lu 261.542	1494347.2	101.4	%	0.65				0.64%
Na 589.592	644.5	0.20270	mg/L	0.014299	0.20270	mg/L	0.014299	7.05%

==========

Sequence No.: 25 **Autosampler Location: 115**
Sample ID: L2570-01A~FORMER BLDG OI **Date Collected: 12/18/2012 4:53:36 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: L2570-01A~FORMER BLDG OI

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	2212805.5	99.262	%	0.2899				0.29%
Lu 261.542	1459208.3	99.05	%	0.308				0.31%
Na 589.592	608.5	0.19138	mg/L	0.026892	0.19138	mg/L	0.026892	14.05%

==========

Sequence No.: 26 **Autosampler Location: 116**
Sample ID: L2571-06A~MW7-CLASS1-C1 **Date Collected: 12/18/2012 4:56:13 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: L2571-06A~MW7-CLASS1-C1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	2101277.1	94.259	%	1.1870				1.26%
Lu 261.542	1263435.0	85.76	%	1.178				1.37%
Na 589.592	10780.3	3.3904	mg/L	0.02329	3.3904	mg/L	0.02329	0.69%

==========

Sequence No.: 27 **Autosampler Location: 117**
Sample ID: L2571-07A~MW7-CLASS1-C2 **Date Collected: 12/18/2012 4:58:56 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: L2571-07A~MW7-CLASS1-C2

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 360.073	2125260.2	95.334	%	1.0515				1.10%
Lu 261.542	1297019.8	88.04	%	1.078				1.22%
Na 589.592	9045.0	2.8446	mg/L	0.08320	2.8446	mg/L	0.08320	2.92%

==========

Sequence No.: 28 **Autosampler Location: 118**
Sample ID: L2571-08A~MW7-CLASS1-G1- **Date Collected: 12/18/2012 5:01:39 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: L2571-08A~MW7-CLASS1-G1-

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 360.073	2046058.4	91.782	%	0.3124				0.34%
Lu 261.542	1255850.1	85.24	%	0.318				0.37%
Na 589.592	7915.1	2.4893	mg/L	0.02097	2.4893	mg/L	0.02097	0.84%

==========

Sequence No.: 29 **Autosampler Location: 3**
Sample ID: CCV **Date Collected: 12/18/2012 5:04:22 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 360.073	2259435.6	101.35	%	0.732				0.72%
Lu 261.542	1495166.7	101.5	%	0.69				0.68%
Na 589.592	80984.2	25.469	mg/L	0.1281	25.469	mg/L	0.1281	0.50%

QC value within limits for Na 589.592 Recovery = 101.88%
All analyte(s) passed QC.

==========

Sequence No.: 30 **Autosampler Location: 4**
Sample ID: CCB **Date Collected: 12/18/2012 5:06:58 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 360.073	2242035.3	100.57	%	0.442				0.44%
Lu 261.542	1481484.1	100.6	%	0.41				0.40%
Na 589.592	-1108.7	-0.34869	mg/L	0.009662	-0.34869	mg/L	0.009662	2.77%

QC value within limits for Na 589.592 Recovery = Not calculated
All analyte(s) passed QC.

==========

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\1218C.sif
Batch ID: Null
Results Data Set: HG12121803
Results Library: C:\data-AA\mitFIMS2\Results\Results.mdb

==========

Method Loaded
Method Name: Comm Hg **Method Last Saved: 7/27/2011 10:10:28 AM**
Method Description: Hg Anallysis 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: 12/18/2012 3:19:39 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0002	-0.0003	0.0002	15:20:36	Yes
2		[0.00]	0.0001	-0.0007	0.0001	15:21:16	Yes
Mean:		[0.00]	0.0002				
SD:		0.00	0.0000				
%RSD:		0.00	25.81				

Auto-zero performed.

==========

Sequence No.: 2 **Autosampler Location: 2**
Sample ID: S0.20 **Date Collected: 12/18/2012 3:21:18 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0.20

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0033	0.0146	0.0035	15:22:15	Yes
2		[0.2]	0.0034	0.0135	0.0035	15:22:56	Yes
Mean:		[0.2]	0.0033				
SD:		0.0	0.0000				
%RSD:		0.0	1.33				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.01670 Intercept: 0.00000

==========

Sequence No.: 3 **Autosampler Location: 3**
Sample ID: S1.0 **Date Collected: 12/18/2012 3:22:57 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S1.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[1]	0.0149	0.0674	0.0151	15:23:55	Yes
2		[1]	0.0152	0.0693	0.0154	15:24:35	Yes
Mean:		[1]	0.0151				

SD: 0 0.0002
%RSD: 0 1.35
Standard number 2 applied. [1]
Correlation Coef.: 0.999320 Slope: 0.01516 Intercept: 0.00000

==========

Sequence No.: 4 **Autosampler Location: 4**
Sample ID: S2.0 **Date Collected: 12/18/2012 3:24:37 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S2.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2]	0.0296	0.1307	0.0298	15:25:35	Yes
2		[2]	0.0298	0.1340	0.0300	15:26:15	Yes
Mean:		[2]	0.0297				
SD:		0	0.0002				
%RSD:		0	0.56				

Standard number 3 applied. [2]
Correlation Coef.: 0.999768 Slope: 0.01492 Intercept: 0.00000

==========

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: S5.0 **Date Collected: 12/18/2012 3:26:17 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S5.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5]	0.0721	0.3266	0.0723	15:27:15	Yes
2		[5]	0.0726	0.3260	0.0728	15:27:55	Yes
Mean:		[5]	0.0724				
SD:		0	0.0004				
%RSD:		0	0.52				

Standard number 4 applied. [5]
Correlation Coef.: 0.999818 Slope: 0.01455 Intercept: 0.00000

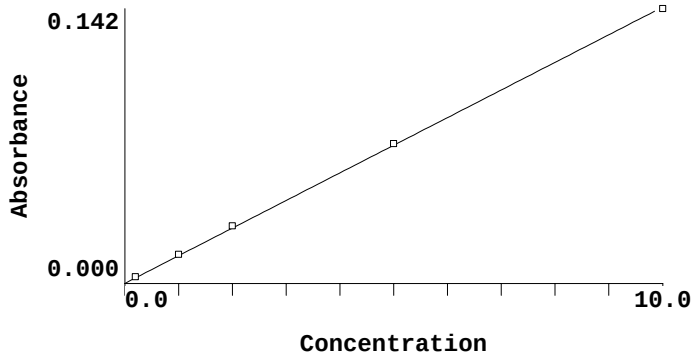
==========

Sequence No.: 6 **Autosampler Location: 6**
Sample ID: S10.0 **Date Collected: 12/18/2012 3:27:57 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S10.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10]	0.1418	0.6409	0.1420	15:28:54	Yes
2		[10]	0.1430	0.6445	0.1432	15:29:35	Yes
Mean:		[10]	0.1424				
SD:		0	0.0009				
%RSD:		0	0.61				

Standard number 5 applied. [10]
Correlation Coef.: 0.999880 Slope: 0.01431 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	25.8
S0.20	0.0033	0.2	0.233	0.00	1.3
S1.0	0.0151	1.0	1.054	0.00	1.3
S2.0	0.0297	2.0	2.076	0.00	0.6
S5.0	0.0724	5.0	5.054	0.00	0.5
S10.0	0.1424	10.0	9.950	0.00	0.6

Correlation Coef.: 0.999880 Slope: 0.01431 Intercept: 0.00000

==========

Sequence No.: 7 **Autosampler Location: 7**
Sample ID: ICV **Date Collected: 12/18/2012 3:29:37 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: ICV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.248	5.248	0.0751	0.3365	0.0753	15:30:35	Yes
2	5.293	5.293	0.0758	0.3376	0.0759	15:31:15	Yes
Mean:	5.271	5.271	0.0754				
SD:	0.032	0.032	0.0005				
%RSD:	0.601	0.601	0.60				

QC value within limits for Hg 253.7 Recovery = 105.41%
All analyte(s) passed QC.

==========

Sequence No.: 8 **Autosampler Location: 1**
Sample ID: ICB **Date Collected: 12/18/2012 3:31:17 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: ICB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.001	-0.001	-0.0000	-0.0031	0.0002	15:32:17	Yes
2	0.005	0.005	0.0001	-0.0011	0.0002	15:32:57	Yes
Mean:	0.002	0.002	0.0000				
SD:	0.004	0.004	0.0001				
%RSD:	211.3	211.3	211.28				

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-69757 **Date Collected: 12/18/2012 3:32:59 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: MB-69757

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.093	0.093	0.0013	0.0051	0.0015	15:33:57	Yes
2	0.091	0.091	0.0013	0.0056	0.0015	15:34:37	Yes
Mean:	0.092	0.092	0.0013				
SD:	0.001	0.001	0.0000				
%RSD:	1.378	1.378	1.38				

==========

Sequence No.: 10 **Autosampler Location: 18**
Sample ID: LCS-69757 **Date Collected: 12/18/2012 3:34:39 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: LCS-69757

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.744	4.744	0.0679	0.3034	0.0681	15:35:37	Yes
2	4.790	4.790	0.0686	0.3020	0.0687	15:36:17	Yes
Mean:	4.767	4.767	0.0682				
SD:	0.033	0.033	0.0005				
%RSD:	0.690	0.690	0.69				

==========

Sequence No.: 11 **Autosampler Location: 19**
Sample ID: L2565-01B **Date Collected: 12/18/2012 3:36:19 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: L2565-01B

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.105	0.105	0.0015	0.0069	0.0017	15:37:16	Yes
2	0.100	0.100	0.0014	0.0039	0.0016	15:37:56	Yes
Mean:	0.103	0.103	0.0015				
SD:	0.003	0.003	0.0000				
%RSD:	3.157	3.157	3.16				

==========

Sequence No.: 12 **Autosampler Location: 20**
Sample ID: L2565-02B **Date Collected: 12/18/2012 3:37:58 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: L2565-02B

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.153	0.153	0.0022	0.0084	0.0024	15:38:55	Yes
2	0.169	0.169	0.0024	0.0108	0.0026	15:39:35	Yes
Mean:	0.161	0.161	0.0023				
SD:	0.011	0.011	0.0002				
%RSD:	7.075	7.075	7.08				

==========

Sequence No.: 13 **Autosampler Location: 21**
Sample ID: L2565-03B **Date Collected: 12/18/2012 3:39:37 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: L2565-03B

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.382	0.382	0.0055	0.0249	0.0056	15:40:34	Yes
2	0.370	0.370	0.0053	0.0240	0.0055	15:41:14	Yes
Mean:	0.376	0.376	0.0054				
SD:	0.008	0.008	0.0001				
%RSD:	2.131	2.131	2.13				

Sequence No.: 14 **Autosampler Location: 22**
Sample ID: L2565-04B **Date Collected: 12/18/2012 3:41:16 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: L2565-04B

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.018	0.018	0.0003	0.0013	0.0004	15:42:14	Yes
2	0.017	0.017	0.0002	0.0000	0.0004	15:42:54	Yes
Mean:	0.018	0.018	0.0003				
SD:	0.000	0.000	0.0000				
%RSD:	0.953	0.953	0.95				

Sequence No.: 15 **Autosampler Location: 23**
Sample ID: L2565-05B **Date Collected: 12/18/2012 3:42:56 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: L2565-05B

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.063	0.063	0.0009	0.0030	0.0011	15:43:53	Yes
2	0.056	0.056	0.0008	0.0011	0.0010	15:44:33	Yes
Mean:	0.060	0.060	0.0009				
SD:	0.005	0.005	0.0001				
%RSD:	8.736	8.736	8.74				

Sequence No.: 16 **Autosampler Location: 24**
Sample ID: L2565-05BDUP **Date Collected: 12/18/2012 3:44:35 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: L2565-05BDUP

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.071	0.071	0.0010	0.0048	0.0012	15:45:32	Yes
2	0.074	0.074	0.0011	0.0024	0.0012	15:46:11	Yes
Mean:	0.073	0.073	0.0010				
SD:	0.003	0.003	0.0000				
%RSD:	3.645	3.645	3.65				

Sequence No.: 17 **Autosampler Location: 25**
Sample ID: L2565-05BMS **Date Collected: 12/18/2012 3:46:13 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: L2565-05BMS

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.011	5.011	0.0717	0.3220	0.0719	15:47:11	Yes

2	5.117	5.117	0.0733	0.3249	0.0734	15:47:51	Yes
Mean:	5.064	5.064	0.0725				
SD:	0.075	0.075	0.0011				
%RSD:	1.487	1.487	1.49				

==========

Sequence No.: 18 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/18/2012 3:47:53 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	5.341	5.341	0.0764	0.3433	0.0766	15:48:51	Yes
2	5.359	5.359	0.0767	0.3443	0.0769	15:49:31	Yes
Mean:	5.350	5.350	0.0766				
SD:	0.013	0.013	0.0002				
%RSD:	0.242	0.242	0.24				

QC value within limits for Hg 253.7 Recovery = 106.99%
All analyte(s) passed QC.

==========

Sequence No.: 19 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 12/18/2012 3:49:33 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	0.000	0.000	0.0000	-0.0009	0.0002	15:50:33	Yes
2	0.006	0.006	0.0001	-0.0011	0.0003	15:51:13	Yes
Mean:	0.003	0.003	0.0000				
SD:	0.004	0.004	0.0001				
%RSD:	121.8	121.8	121.81				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 20 **Autosampler Location: 26**
Sample ID: L2565-06B **Date Collected: 12/18/2012 3:51:15 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: L2565-06B

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.038	0.038	0.0005	0.0003	0.0007	15:52:15	Yes
2	0.052	0.052	0.0007	0.0019	0.0009	15:52:55	Yes
Mean:	0.045	0.045	0.0006				
SD:	0.010	0.010	0.0001				
%RSD:	22.62	22.62	22.62				

==========

Sequence No.: 21 **Autosampler Location: 27**
Sample ID: L2567-01B **Date Collected: 12/18/2012 3:52:57 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: L2567-01B

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	0.074	0.074	0.0011	0.0048	0.0012	15:53:54	Yes
2	0.078	0.078	0.0011	0.0046	0.0013	15:54:34	Yes
Mean:	0.076	0.076	0.0011				
SD:	0.003	0.003	0.0000				
%RSD:	3.935	3.935	3.93				

==========

Sequence No.: 22 **Autosampler Location: 28**
Sample ID: L2567-02B **Date Collected: 12/18/2012 3:54:36 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: L2567-02B

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.065	0.065	0.0009	0.0043	0.0011	15:55:34	Yes
2	0.072	0.072	0.0010	0.0047	0.0012	15:56:14	Yes
Mean:	0.068	0.068	0.0010				
SD:	0.005	0.005	0.0001				
%RSD:	8.001	8.001	8.00				

==========

Sequence No.: 23 **Autosampler Location: 29**
Sample ID: L2567-03B **Date Collected: 12/18/2012 3:56:15 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: L2567-03B

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.027	0.027	0.0004	-0.0001	0.0006	15:57:13	Yes
2	0.019	0.019	0.0003	0.0010	0.0004	15:57:53	Yes
Mean:	0.023	0.023	0.0003				
SD:	0.006	0.006	0.0001				
%RSD:	25.06	25.06	25.06				

==========

Sequence No.: 24 **Autosampler Location: 30**
Sample ID: L2567-04B **Date Collected: 12/18/2012 3:57:55 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: L2567-04B

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.033	0.033	0.0005	0.0019	0.0006	15:58:52	Yes
2	0.041	0.041	0.0006	0.0039	0.0008	15:59:32	Yes
Mean:	0.037	0.037	0.0005				
SD:	0.006	0.006	0.0001				
%RSD:	14.94	14.94	14.94				

==========

Sequence No.: 25 **Autosampler Location: 31**
Sample ID: L2567-05B **Date Collected: 12/18/2012 3:59:34 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: L2567-05B

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.044	0.044	0.0006	0.0029	0.0008	16:00:32	Yes
2	0.048	0.048	0.0007	0.0039	0.0009	16:01:12	Yes
Mean:	0.046	0.046	0.0007				

SD:	0.003	0.003	0.0000
%RSD:	6.065	6.065	6.06

==========

Sequence No.: 26 **Autosampler Location: 32**
Sample ID: L2570-01A **Date Collected: 12/18/2012 4:01:14 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: L2570-01A

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.333	0.333	0.0048	0.0223	0.0049	16:02:16	Yes
2	0.326	0.326	0.0047	0.0215	0.0048	16:02:56	Yes
Mean:	0.329	0.329	0.0047				
SD:	0.005	0.005	0.0001				
%RSD:	1.586	1.586	1.59				

==========

Sequence No.: 27 **Autosampler Location: 33**
Sample ID: L2571-06A **Date Collected: 12/18/2012 4:02:57 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: L2571-06A

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.145	0.145	0.0021	0.0132	0.0022	16:03:55	Yes
2	0.134	0.134	0.0019	0.0077	0.0021	16:04:35	Yes
Mean:	0.139	0.139	0.0020				
SD:	0.008	0.008	0.0001				
%RSD:	5.677	5.677	5.68				

==========

Sequence No.: 28 **Autosampler Location: 34**
Sample ID: L2571-07A **Date Collected: 12/18/2012 4:04:37 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: L2571-07A

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.144	0.144	0.0021	0.0101	0.0022	16:05:35	Yes
2	0.141	0.141	0.0020	0.0052	0.0022	16:06:14	Yes
Mean:	0.143	0.143	0.0020				
SD:	0.002	0.002	0.0000				
%RSD:	1.305	1.305	1.31				

==========

Sequence No.: 29 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/18/2012 4:06:16 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	5.316	5.316	0.0761	0.3421	0.0763	16:07:16	Yes
2	5.412	5.412	0.0775	0.3553	0.0776	16:07:56	Yes
Mean:	5.364	5.364	0.0768				
SD:	0.068	0.068	0.0010				
%RSD:	1.269	1.269	1.27				

QC value within limits for Hg 253.7 Recovery = 107.27%

All analyte(s) passed QC.

==========

Sequence No.: 30 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 12/18/2012 4:07:58 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	0.008	0.008	0.0001	0.0004	0.0003	16:08:58	Yes
2	0.007	0.007	0.0001	0.0015	0.0003	16:09:38	Yes
Mean:	0.008	0.008	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	13.65	13.65	13.65				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 31 **Autosampler Location: 35**
Sample ID: L2571-08A **Date Collected: 12/18/2012 4:09:40 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: L2571-08A

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.124	1.124	0.0161	0.0725	0.0163	16:10:39	Yes
2	1.129	1.129	0.0162	0.0735	0.0163	16:11:19	Yes
Mean:	1.126	1.126	0.0161				
SD:	0.004	0.004	0.0001				
%RSD:	0.345	0.345	0.35				

==========

Sequence No.: 32 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/18/2012 4:11:21 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	5.364	5.364	0.0768	0.3433	0.0770	16:12:22	Yes
2	5.379	5.379	0.0770	0.3459	0.0772	16:13:02	Yes
Mean:	5.371	5.371	0.0769				
SD:	0.011	0.011	0.0002				
%RSD:	0.197	0.197	0.20				

QC value within limits for Hg 253.7 Recovery = 107.42%
All analyte(s) passed QC.

==========

Sequence No.: 33 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 12/18/2012 4:13:04 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	0.008	0.008	0.0001	0.0002	0.0003	16:14:03	Yes
2	0.012	0.012	0.0002	0.0011	0.0003	16:14:44	Yes
Mean:	0.010	0.010	0.0001				

```
SD:    0.003       0.003     0.0000
%RSD:  26.38       26.38     26.38
   QC value within limits for Hg 253.7  Recovery = Not calculated
All analyte(s) passed QC.
```

Prep Start Date: **12/17/2012 14:00**
Prep End Date: **12/17/2012 17:15** Prep Code: **ICP_S_PR** Prep Type: **3050B/SW3050B** Prep Factor Units: **mL / g**
Prep Batch ID: **69753** Technician: **David T Camara**

QC Matrix: N/A | 1:1 HNO3 **1112080** | 30% H2O2 **121254** | Reagent 5 Lot: N/A
QC Matrix Lot: N/A | 1:1 HNO3 (mL): **5.0** | 30% H2O2 (mL): **5.0** | Reagent 5 (mL): N/A

Filter?: N/A | Conc HNO3 **1112080** | Conc HCl **4112070** | Reagent 6 Lot: N/A
Filter Lot: N/A | Conc HNO3 (mL): **2.5** | Conc HCl (mL): **5.0** | Reagent 6 (mL): N/A

Digestion Start Time 1: **12/17/2012 14:00** Digestion Start Time 2: **12/17/2012 17:00** Block Temp (C): **97** Therm ID1: **MT-102**
Digestion End Time 1: **12/17/2012 14:45** Digestion End Time 2: **12/17/2012 17:15** Corr Fac **-2**

Mitkem Sample ID	Client Samp ID		tial L/g)	Final (mL)	Sample Color	Sample Clarity	Extract Color	Extract Clarity			Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11	pH <2	HOT BLOCK
MB-69753			1	50	--	--	--	--					12/17/12	DTC	ICPLab		☐	☐	HB-B
LCS-69753			1	50	--	--	--	--					12/17/12	DTC	ICPLab		☐	☐	HB-B
455 uL II121106B, 455 uL IP120321A, 45.5 uL IP120608A, 45.5 uL IP120608B																			
L2565-01B	CS-B1(2)_12/13/12	S	1.02	50	--	--	--	--			12/28/12	01	12/17/12	DTC	ICPLab		☐	☐	HB-B
TAL																			
L2565-02B	CS-B2(2)_12/13/12	S	1.14	50	--	--	--	--			12/28/12	01	12/17/12	DTC	ICPLab		☐	☐	HB-B
TAL																			
L2565-03B	CS-B3(2)_12/13/12	S	1.39	50	--	--	--	--			12/28/12	01	12/17/12	DTC	ICPLab		☐	☐	HB-B
TAL																			
L2565-04B	CS-B4(2)_12/13/12	S	1.05	50	--	--	--	--			12/28/12	01	12/17/12	DTC	ICPLab		☐	☐	HB-B
TAL																			
L2565-05B	CS-B5(2)_12/13/12	S	1.31	50	--	--	--	--			12/28/12	01	12/17/12	DTC	ICPLab		☐	☐	HB-B
TAL																			
L2565-05BDUP	CS-B5(2)_12/13/12	S	1.31	50	--	--	--	--			12/28/12	01	12/17/12	DTC	ICPLab		☐	☐	HB-B
L2565-05BMS	CS-B5(2)_12/13/12	S	1.31	50	--	--	--	--			12/28/12	01	12/17/12	DTC	ICPLab		☐	☐	HB-B
455 uL II121106B, 455 uL IP120321A, 45.5 uL IP120608A, 45.5 uL IP120608B																			
L2565-06B	CS-B6(2)_12/13/12	S	1.07	50	--	--	--	--			12/28/12	01	12/17/12	DTC	ICPLab		☐	☐	HB-B
TAL																			
L2567-01B	CS-I1(11)_12/13/12	S	1.1	50	--	--	--	--			12/28/12	01	12/17/12	DTC	ICPLab		☐	☐	HB-B
TAL																			
L2567-02B	CS-I2(11)_12/13/12	S	1.11	50	--	--	--	--			12/28/12	01	12/17/12	DTC	ICPLab		☐	☐	HB-B
TAL																			
L2567-03B	CS-I3(11)_12/13/12	S	1.11	50	--	--	--	--			12/28/12	01	12/17/12	DTC	ICPLab		☐	☐	HB-B
TAL																			
L2567-04B	CS-I4(11)_12/13/12	S	1.3	50	--	--	--	--			12/28/12	01	12/17/12	DTC	ICPLab		☐	☐	HB-B
TAL																			
L2567-05B	CS-I5(11)_12/13/12	S	1.01	50	--	--	--	--			12/28/12	01	12/17/12	DTC	ICPLab		☐	☐	HB-B
TAL																			
L2570-01A	FORMER BLDG OIL	O	1.02	50	--	--	--	--			12/28/12	01	12/17/12	DTC	ICPLab		☐	☐	HB-B
TAL																			
L2571-06A	MW7-CLASS1-C1	S	1.19	50	--	--	--				12/28/12	01	12/17/12	DTC	ICPLab		☐	☐	HB-B
TAL																			

12/18/12

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Logbook ID 100.0124-11/12

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division PREP BATCH REPORT

Prep Start Date: **12/17/2012 14:00**
Prep End Date: **12/17/2012 17:15**
Prep Code: **ICP_S_PR**
Prep Type: **3050B/SW3050B**
Prep Batch ID: **69753**
Technician: **David T Camara**
Prep Factor Units: **mL / g**

QC Matrix: N/A
QC Matrix Lot: N/A
1:1 HNO3 **1112080**
1:1 HNO3 (mL): **5.0**
30% H2O2 **121254**
30% H2O2 (mL): **5.0**
Reagent 5 Lot: **N/A**
Reagent 5 (mL): **N/A**

Filter?: N/A
Filter Lot: N/A
Conc HNO3 **1112080**
Conc HNO3 (mL): **2.5**
Conc HCl **4112070**
Conc HCl (mL): **5.0**
Reagent 6 Lot: **N/A**
Reagent 6 (mL): **N/A**

Digestion Start Time 1: **12/17/2012 14:00**
Digestion End Time 1: **12/17/2012 14:45**
Digestion Start Time 2: **12/17/2012 17:00**
Digestion End Time 2: **12/17/2012 17:15**
Block Temp (C): **97**
Therm ID1: **MT-102**
Corr Fac **-2**

Mitkem Sample ID	Client Samp ID		tial L/g)	Final (mL)	Sample Color	Sample Clarity	Extract Color	Extract Clarity			Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11	pH <2	HOT BLOCK
L2571-07A	MW7-CLASS1-C2	S	1.07	50	--	--	--	--			12/28/12	01	12/17/12	DTC	ICPLab		☐	☐	HB-B
TAL																			
L2571-08A	MW7-CLASS1-G1-G3	S	1.03	50	--	--	--	--			12/28/12	01	12/17/12	DTC	ICPLab		☐	☐	HB-B
TAL																			

David T Camara 12/17/2012
Analyst Reviewed Date

By 12/18/12
Manager Reviewed Date

Comments:

DC 12/18/12

Prep Start Date: 12/17/2012 9:30 (15 DC 12/18/12)
Prep End Date: 12/18/2012 10:30 | Prep Code: SW7471A_PR | Prep Type: 7471B/METHOD | Prep Factor Units: mL / g
Prep Batch ID: 69757 | Technician: David T Camara

QC Matrix: N/A | Conc HNO3: 1112080 | 5% KMnO4: IR12121704 | 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: 4112070 | 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: 12/18/2012 09:30 | Digestion Start Time 2: 12/18/2012 10:00 | Block Temp (C): 97 | Therm ID1: MT-111
Digestion End Time 1: 12/18/2012 09:32 | Digestion End Time 2: 12/18/2012 10:30 | Corr Fac -2

Mitkem Sample ID	Client Samp ID		tial L/g)	Final (mL)	Sample Color	Sample Clarity	Extract Color	Extract Clarity			Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11	pH <2	HOT BLOCK
S0			0.6	100	--	--	--	--					12/18/12	DTC	HgLab		☐	☐	HB-A
S0.2			0.6	100	--	--	--	--					12/18/12	DTC	HgLab		☐	☐	HB-A
40 uL II121210A																			
S1.0			0.6	100	--	--	--	--					12/18/12	DTC	HgLab		☐	☐	HB-A
200 uL II121210A																			
S2.0			0.6	100	--	--	--	--					12/18/12	DTC	HgLab		☐	☐	HB-A
400 uL II121210A																			
S5.0			0.6	100	--	--	--	--					12/18/12	DTC	HgLab		☐	☐	HB-A
1000 uL II121210A																			
S10.0			0.6	100	--	--	--	--					12/18/12	DTC	HgLab		☐	☐	HB-A
2000 uL II121210A																			
ICV			0.6	100	--	--	--	--					12/18/12	DTC	HgLab		☐	☐	HB-A
1000 uL II121210B																			
ICB			0.6	100	--	--	--	--					12/18/12	DTC	HgLab		☐	☐	HB-A
CCV			0.6	100	--	--	--	--					12/18/12	DTC	HgLab		☐	☐	HB-A
1000 uL II121210B																			
CCB			0.6	100	--	--	--	--					12/18/12	DTC	HgLab		☐	☐	HB-A
MB-69757			0.6	100	--	--	--	--					12/18/12	DTC	HgLab		☐	☐	HB-A
LCS-69757			0.6	100	--	--	--	--					12/18/12	DTC	HgLab		☐	☐	HB-A
1000 uL II121210C																			
L2565-01B	CS-B1(2)_12/13/12	S	0.56	100	--	--	--	--			12/28/12	01	12/18/12	DTC	HgLab		☐	☐	HB-A
TAL																			
L2565-02B	CS-B2(2)_12/13/12	S	0.52	100	--	--	--	--			12/28/12	01	12/18/12	DTC	HgLab		☐	☐	HB-A
TAL																			
L2565-03B	CS-B3(2)_12/13/12	S	0.53	100	--	--	--	--			12/28/12	01	12/18/12	DTC	HgLab		☐	☐	HB-A
TAL																			
L2565-04B	CS-B4(2)_12/13/12	S	0.56	100	--	--	--	--			12/28/12	01	12/18/12	DTC	HgLab		☐	☐	HB-2
TAL																			
L2565-05B	CS-B5(2)_12/13/12	S	0.56	100	--	--	--	--			12/28/12	01	12/18/12	DTC	HgLab		☐	☐	HB-2
TAL																			
L2565-05BDUP	CS-B5(2)_12/13/12	S	0.55	100	--	--	(DC 12/18/12	--			12/28/12	01	12/18/12	DTC	HgLab		☐	☐	HB-2

Logbook ID: 100.0128 -12/12

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Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

PREP BATCH REPORT

Prep Start Date: **12/17/2012 9:30** JB DC 12/18/12

Prep End Date: **12/18/2012 10:30**

Prep Code: **SW7471A_PR**

Prep Type: **7471B/METHOD**

Prep Factor Units: **mL / g**

Prep Batch ID: **69757**

Technician: **David T Camara**

QC Matrix: N/A
QC Matrix Lot: N/A

Conc HNO3 1112080
Conc HNO3 (mL): 1.25

5% KMnO4 IR12121704
5% KMnO4 (mL): 15.0

Reagent 5 Lot: N/A
Reagent 5 (mL): N/A

Filter?: N/A
Filter Lot: N/A

Conc HCl 4112070
Conc HCl (mL): 3.75

Reagent 4 Lot: N/A
Reagent 4 (mL): N/A

Reagent 6 Lot: N/A
Reagent 6 (mL): N/A

Digestion Start Time 1: 12/18/2012 09:30
Digestion End Time 1: 12/18/2012 09:32

Digestion Start Time 2: 12/18/2012 10:00
Digestion End Time 2: 12/18/2012 10:30

Block Temp (C): 97

Therm ID1: MT-111
Corr Fac -2

Mitkem Sample ID	Client Samp ID		tial L/g)	Final (mL)	Sample Color	Sample Clarity	Extract Color	Extract Clarity			Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11	pH <2	HOT BLOCK
L2565-05BMS	CS-B5(2)_12/13/12	S	0.56	100	--	--	--	--			12/28/12	01	12/18/12	DTC	HgLab		☐	☐	HB-2
1000 uL II121210C																			
L2565-06B	CS-B6(2)_12/13/12	S	0.52	100	--	--	--	--			12/28/12	01	12/18/12	DTC	HgLab		☐	☐	HB-2
TAL																			
L2567-01B	CS-I1(11)_12/13/12	S	0.51	100	--	--	--	--			12/28/12	01	12/18/12	DTC	HgLab		☐	☐	HB-2
TAL																			
L2567-02B	CS-I2(11)_12/13/12	S	0.57	100	--	--	--	--			12/28/12	01	12/18/12	DTC	HgLab		☐	☐	HB-2
TAL																			
L2567-03B	CS-I3(11)_12/13/12	S	0.59	100	--	--	--	--			12/28/12	01	12/18/12	DTC	HgLab		☐	☐	HB-2
TAL																			
L2567-04B	CS-I4(11)_12/13/12	S	0.58	100	--	--	--	--			12/28/12	01	12/18/12	DTC	HgLab		☐	☐	HB-2
TAL																			
L2567-05B	CS-I5(11)_12/13/12	S	0.57	100	--	--	--	--			12/28/12	01	12/18/12	DTC	HgLab		☐	☐	HB-2
TAL																			
L2570-01A	FORMER BLDG OIL	O	0.53	100	--	--	--	--			12/28/12	01	12/18/12	DTC	HgLab		☐	☐	HB-2
TAL																			
L2571-06A	MW7-CLASS1-C1	S	0.5	100	--	--	--	--			12/28/12	01	12/18/12	DTC	HgLab		☐	☐	HB-2
TAL																			
L2571-07A	MW7-CLASS1-C2	S	0.56	100	--	--	--	--			12/28/12	01	12/18/12	DTC	HgLab		☐	☐	HB-2
TAL																			
L2571-08A	MW7-CLASS1-G1-G3	S	0.54	100	--	--	--	--			12/28/12	01	12/18/12	DTC	HgLab		☐	☐	HB-2
TAL																			

David T Camara 12/18/2012

JDC 12/18/12

557

Logbook ID: 100.0128 -12/12

Internal Chain of Custody

Client: LABELLA

Work Order: L2570 **Profile Name:** LABELLA_STANDBY_CONTRACT

MATRIX **Oil**

Samp #	Bottle	Test	Status	Received	Date
01A	001	SW6010_S	In	LOGIN: jvales	12/17/2012 8:35:00 AM
01A	001	SW6010_S	Out	David T Camara	12/17/2012 1:11:34 PM
01A	001	SW6010_S	In	David T Camara	12/17/2012 4:55:12 PM
01A	001	SW7471	In	LOGIN: jvales	12/17/2012 8:35:00 AM
01A	001	SW7471	Out	David T Camara	12/18/2012 8:53:58 AM
01A	001	SW7471	In	David T Camara	12/18/2012 10:06:24 AM
01A	001	SW8082_S	In	LOGIN: jvales	12/17/2012 8:35:00 AM
01A	001	SW8260_MED_S	In	LOGIN: jvales	12/17/2012 8:35:00 AM
01A	001	TPH_S	In	LOGIN: jvales	12/17/2012 8:35:00 AM

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